

SEL

PROJECT ID: 3729-00-74
WITH: N/A

COUNTY: KENOSHA

FEB 2015
ORDER OF SHEETS

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

TOTAL SHEETS = 174



DESIGN DESIGNATION

	NORTH OF SPRINGBROOK ROAD	SOUTH OF SPRINGBROOK ROAD
A.A.D.T. 2014	= 5900	6400
A.A.D.T. 2034	= 6500	7000
D.H.V.	= 832-896	
D.D.	= 58/42	
T.	= 5.9%	
DESIGN SPEED	= 35 MPH	
ESALS	= 1,350,500-1,460,000	

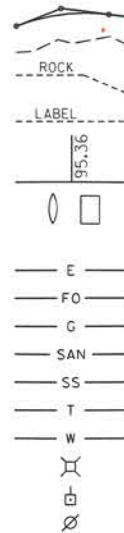
CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	



LAYOUT

SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.582 MI.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

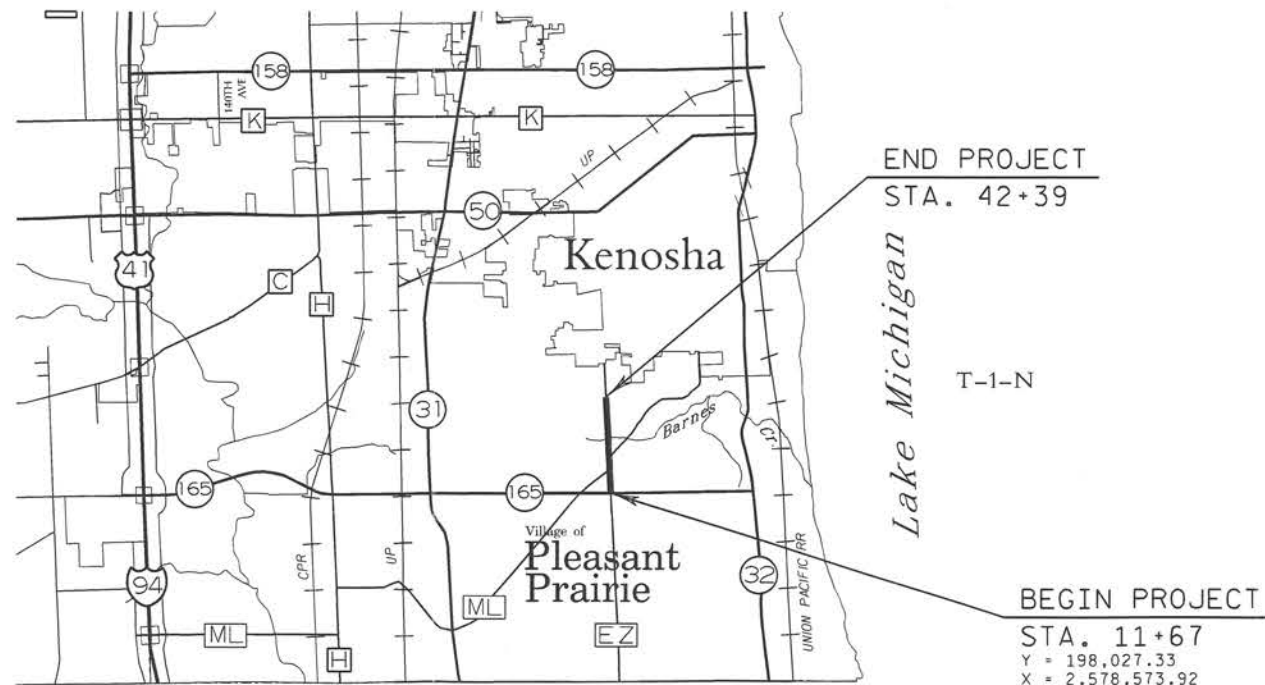
39TH AVENUE

STH 165 TO 97TH STREET

LOCAL STREET

KENOSHA COUNTY

STATE PROJECT NUMBER
3729-00-74



END PROJECT
STA. 42+39

BEGIN PROJECT
STA. 11+67
Y = 198,027.33
X = 2,578,573.92

STATE PROJECT

3729-00-74

FEDERAL PROJECT

PROJECT

WISC 2015092

CONTRACT

1

ACCEPTED FOR

VILLAGE of PLEASANT PRAIRIE

8/27/14

(Date)

Michael R. ...
Village Engineer
(Signature & Title of Official)

ORIGINAL PLANS PREPARED BY



9-14/14

(Date)

(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	GAI CONSULTANTS
Designer	GAI CONSULTANTS
Management Consultant	DAAR
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

9/29/14

DATE:

Davidlsen
(Management Consultant Signature)

E

GENERAL NOTES

1. NO SHRUBS OR TREES ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.
2. ALL CURB & GUTTER RADIARE MEASURED TO THE FLANGE OF CURB.
3. CURB AND GUTTER PLAN GRADES ARE AT THE FLANGE LINE UNLESS OTHERWISE NOTED.
4. PIPE AND INLET ELEVATIONS AS SHOWN ON THE PLANS MAY BE ADJUSTED BY THE ENGINEER.
5. EROSION CONTROL DEVICES AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
6. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.
7. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK.
8. ALL OPENINGS OF HOLES BELOW SUBGRADE RESULTING FROM REMOVALS OR ABANDONMENTS SHALL BE BACKFILLED WITH GRANULAR MATERIAL. GRANULAR MATERIAL IS INCIDENTAL TO THE REMOVAL ITEM.
9. THE EXACT LOCATION OF PRIVATE ENTRANCES AND DRIVEWAYS IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
10. STATIONING, DISTANCES, AND OFFSETS FOR SIGNS SHOWN ON THE PLANS ARE APPROXIMATE AND THE LOCATIONS OF SIGNS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
11. DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE AREAS WHERE GRAVEL OR BASE MATERIAL HAVE BEEN APPLIED, SHALL BE TOPSOILED, FERTILIZED, MULCHED AND SEEDED OR TEMPORARILY SEEDED AND MULCHED WITHIN 7 CALENDAR DAYS.
12. PAVEMENT REMOVAL WILL BE TO THE NEAREST JOINT, OR AS DIRECTED BY THE ENGINEER.
13. THE FOLLOWING ENTITIES HAVE PREPARED PLANS FOR THIS PROJECT:
MICHAEL BAKER CORPORATION: STREET LIGHTING
14. HMA PAVEMENT TYPE E-3 SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYERS & GRADATIONS:

THICKNESS	LAYERS	NOM. MAX. SIZE GRADATION
1¾-INCHES	1.75" UPPER LAYER (PG 64-28)	12.5MM

PAVEMENT BORING LOG

BORE NO.	STATION	OFFSET FROM CL	ASPHALT DEPTH IN INCHES	UNDERLYING MATERIAL
1	16+58	32'LT	4	BASE
2	21+56	2'RT	6.5	BASE
7	33+08	18'LT	7	BASE
10	42+10	24'RT	8	BASE

STANDARD ABBREVIATIONS

ADT	AVERAGE DAILY TRAFFIC
AH	AHEAD
ASPH	ASPHALTIC
AVG	AVERAGE
BAD	BASE AGGREGATE DENSE
BK	BACK
BM	BENCH MARK
BOC	BACK OF CURB
C&G	CURB AND GUTTER
CB	CATCH BASIN
CE	COMMERCIAL ENTRANCE
CL	CENTER LINE
CONC	CONCRETE
CTH	COUNTY TRUNK HIGHWAY
CY	CUBIC YARDS
DHV	DESIGN HOUR VOLUME
DIA	DIAMETER
DWY	DRIVEWAY
EL	ELEVATION
EW	ENDWALL
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXIST	EXISTING
FO	FIBEROPTIC
FT	FOOT
CWT	HUNDRED WEIGHT
HYD	HYDRANT
INL	INLET
INV	INVERT
LT	LEFT
LF	LINEAR FOOT
MH	MANHOLE
NC	NORMAL CROWN
PLE	PERMANENT LIMITED EASEMENT
PL	PROPERTY LINE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
LB	POUNDS
R	RADIUS
RL	REFERENCE LINE
RT	RIGHT
R/W	RIGHT-OF-WAY
SF	SQUARE FEET
SY	SQUARE YARDS
SDD	STANDARD DETAIL DRAWINGS
STA	STATION
STH	STATE TRUNK HIGHWAY
SS	STORM SEWER
TEL	TELEPHONE
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL

UTILITIES

WE ENERGIES (ELECTRIC) MR. LA TROY BRUMFIELD 333 W EVERETT STREET - A299 MILWAUKEE, WI 53203 PHONE: (414) 221-5617 LATROY.BRUMFIELD@WE-ENERGIES.COM	WE ENERGIES (GAS) MR. CHRIS DEGRAVE 7815 NORTHWESTERN AVE RACINE, WI 53406 PHONE: (262) 886-7018 CHRIS.DEGRAVE@WE-ENERGIES.COM
TIME WARNER CABLE (UTILITY COORD.) MR. STEVE CRAMER 1320 N MARTIN LUTHER KING JR DR MILWAUKEE, WI 53212 PHONE: (414) 277-4045 STEVE.CRAMER@TWCABLE.COM	AT&T WISCONSIN MR. MICHAEL TOYEK 411 7TH STREET RACINE, WI 53403 PHONE: (262) 636-0549 MT1734@ATT.COM
TDS TELECOM MR. MATTHEW SCHULTZ 20875 CROSSROAD CIRCLE, SUITE 800 WAUKESHA, WI 53186 PHONE: (262) 754-3063 MATT.SCHULTZ@TDSTELECOM.COM	MIDWEST FIBER NETWORKS (MWFN) MR. RICHARD TRGOVEC 3701 W. BUMHAM STREET, SUITE C MILWAUKEE, WI 53215 PHONE: (414) 459-3554 CELL: (414) 349-2979 RTRGOVEC@MIDWESTFIBERNETWORKS.COM
COUNTY OF KENOSHA (DIR. DIV. OF HIGHWAYS) MR. GARY SIP SMA 19600 75TH STREET PO BOX 609 BRISTOL, WI 53102 PHONE: (262) 857-1870 GSIP SMA@CO.KENOSHA.WI.US	VILLAGE OF PLEASANT PRAIRIE MR. MICHAEL SPENCE (ENGINEER) 9915 39TH AVENUE PLEASANT PRAIRIE, WI 53158 PHONE: (262) 948-8931 MSPENCE@PLPRAIRIEWI.COM

DIGGERSHOTLINE

Dial 811 or (800)242-8511

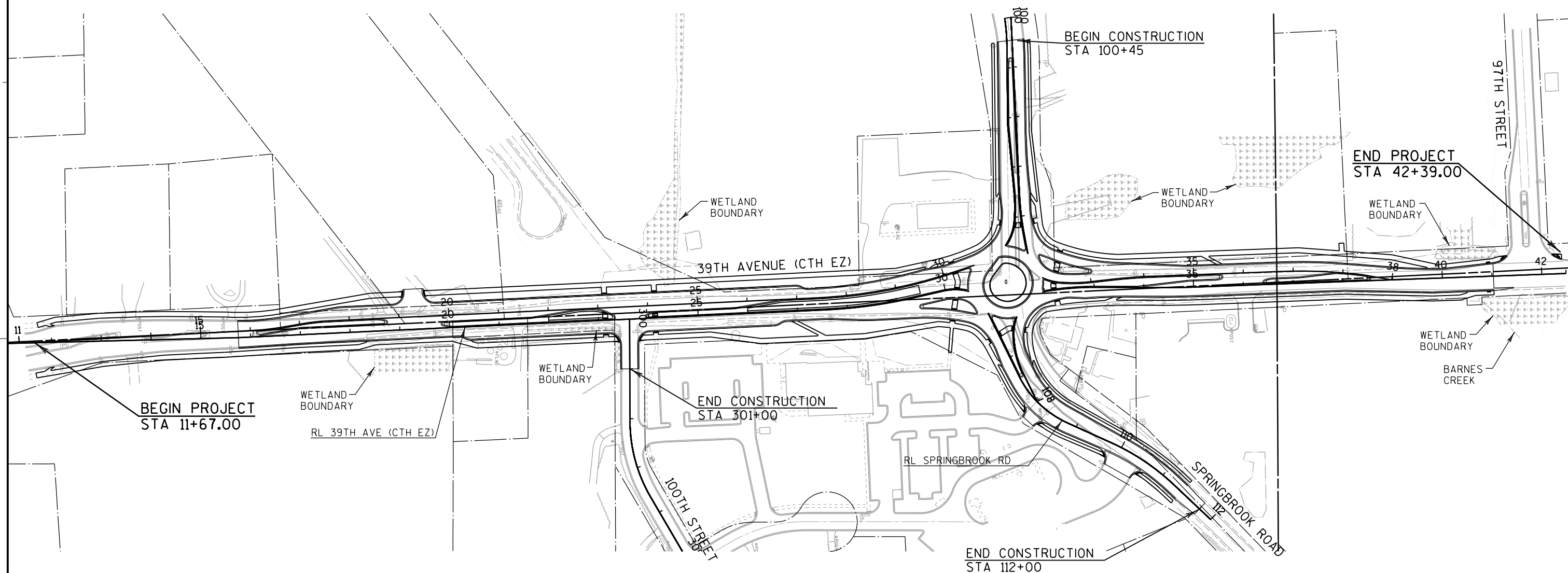
www.DiggersHotline.com

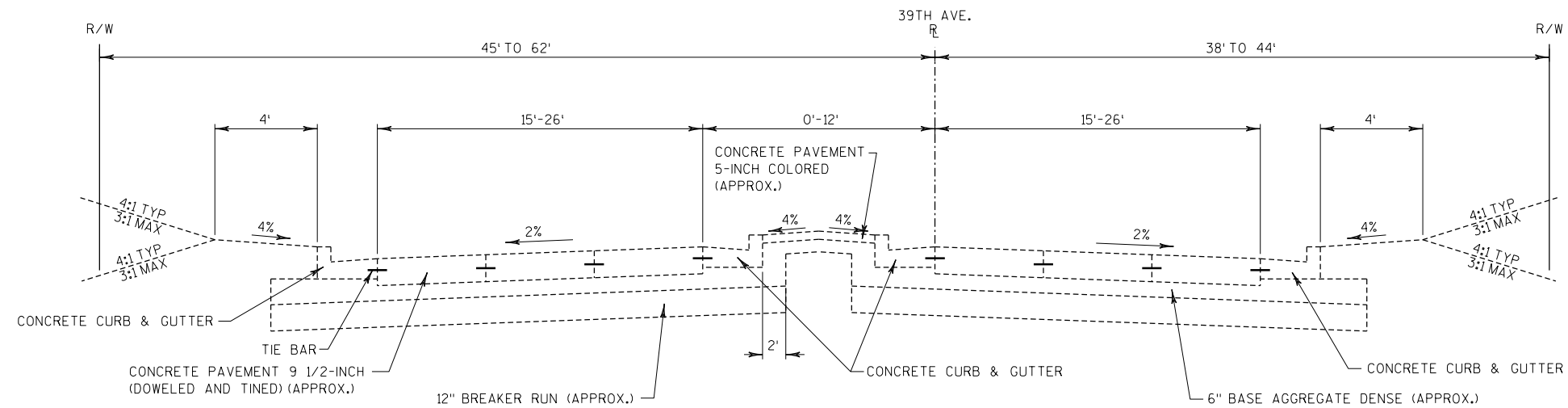
WISCONSIN STATUTE 182.0175 (1974)
REQUIRES MIN. OF 3 WORK DAYS
NOTICE BEFORE YOU EXCAVATE.

WISDOT CONTACT KATHLEEN MCGINNIS KRAMER 141 NW BARSTOW ST WAUKESHA, WI 53187 PHONE: (262) 548-8772 KATHLEEN.KRAMER@DOT.WI.GOV	DNR LIAISON DEPARTMENT OF NATURAL RESOURCES MS. CRAIG WEBSTER 141 NW BARSTOW ST, ROOM 180 WAUKESHA, WI 53188 PHONE: (262) 574-2141 CRAIG.WEBSTER@WISCONSIN.GOV	DESIGN CONTACT GAI CONSULTANTS MR. KURT DAVIDSEN 700 GENEVA PARKWAY LAKE GENEVA, WI 53147 PHONE: (262) 348-5600
--	--	--

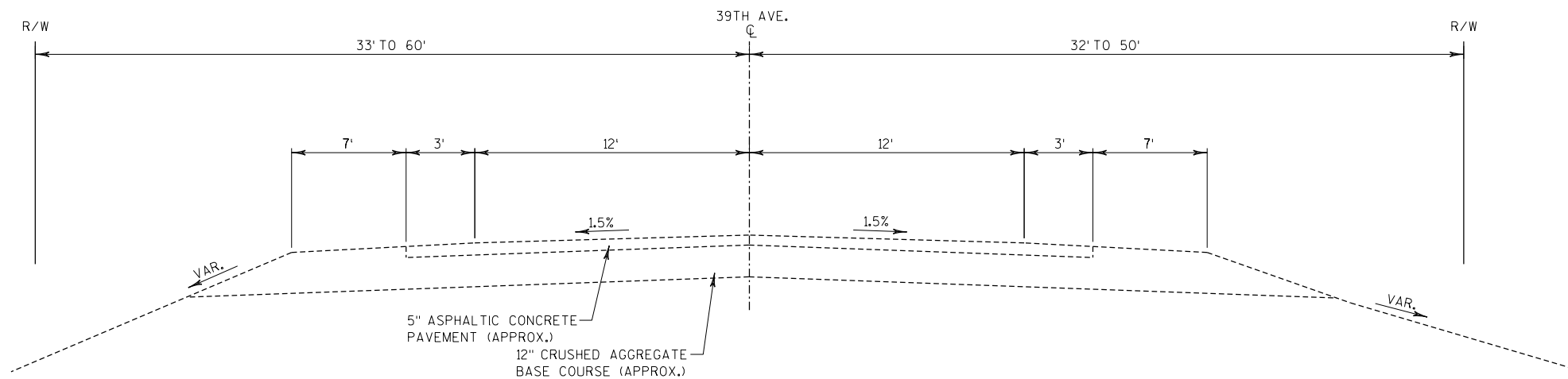
INDEX OF TYPICAL SECTION & DETAIL SHEETS

- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- INTERSECTION DETAILS
- PAVING DETAILS
- EROSION CONTROL
- STORM SEWER PLAN
- UTILITY PLAN
- LANDSCAPE PLAN
- PERMANENT SIGNING & PAVEMENT MARKING
- LIGHTING PLAN
- DETOUR PLAN
- ALIGNMENT

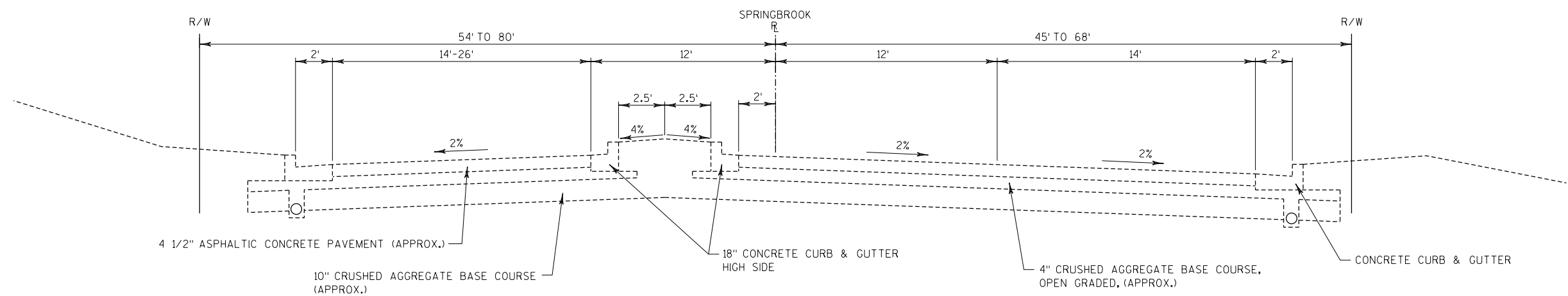




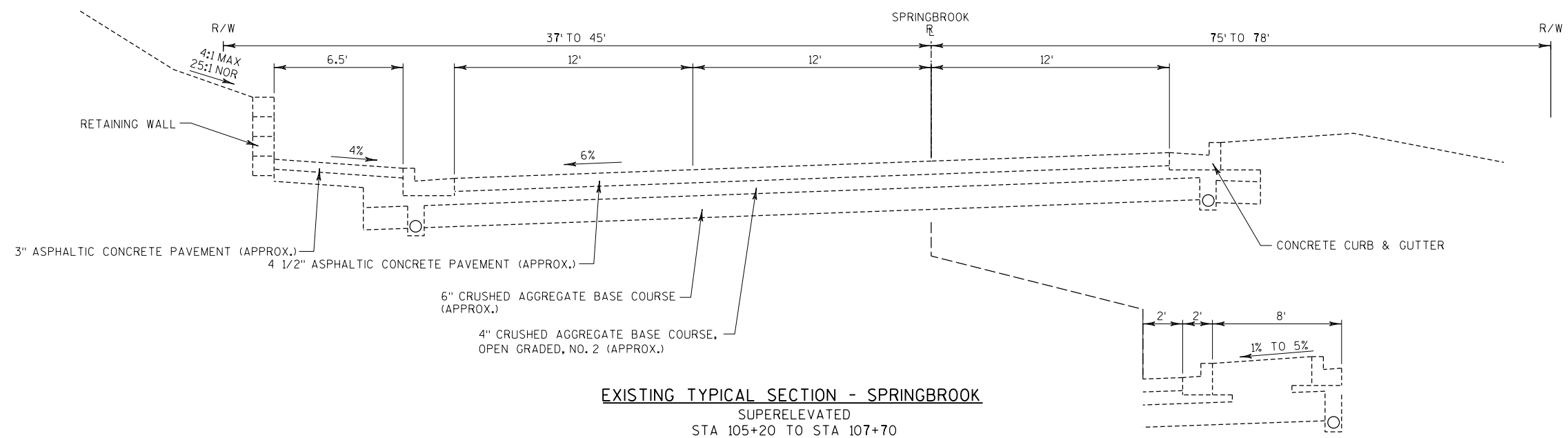
EXISTING TYPICAL SECTION - 39TH AVE.
STA 11+67 TO STA 19+38



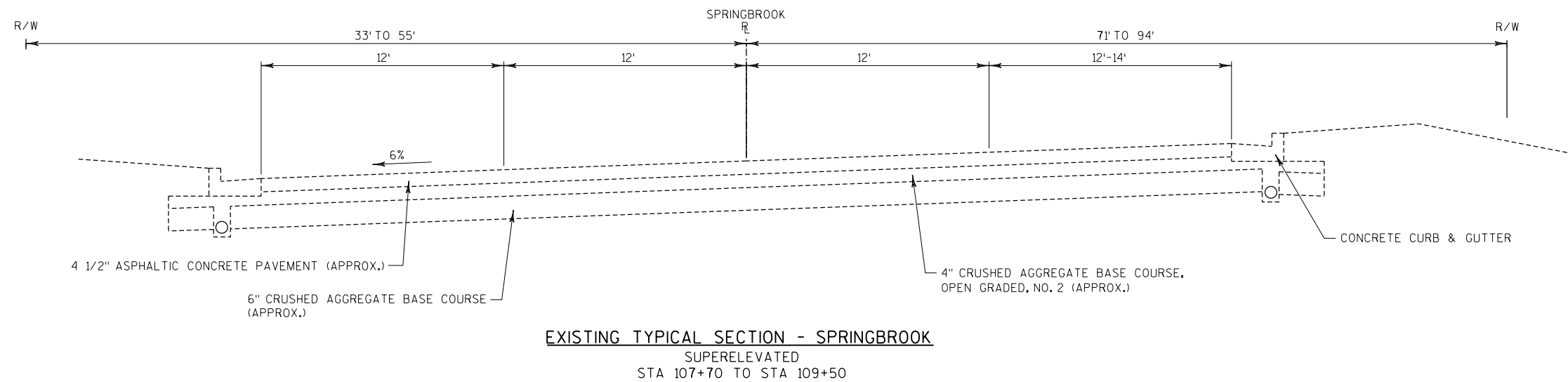
EXISTING TYPICAL SECTION - 39TH AVE.
STA 19+38 TO STA 42+39



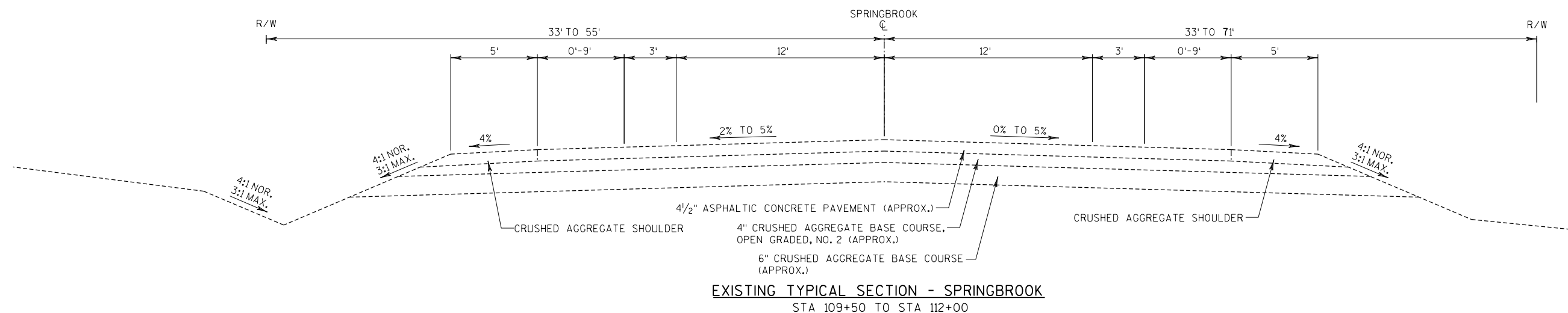
EXISTING TYPICAL SECTION - SPRINGBROOK
STA 100+45 TO STA 105+00



EXISTING TYPICAL SECTION - SPRINGBROOK
SUPERELEVATED
STA 105+20 TO STA 107+70



EXISTING TYPICAL SECTION - SPRINGBROOK
SUPERELEVATED
STA 107+70 TO STA 109+50

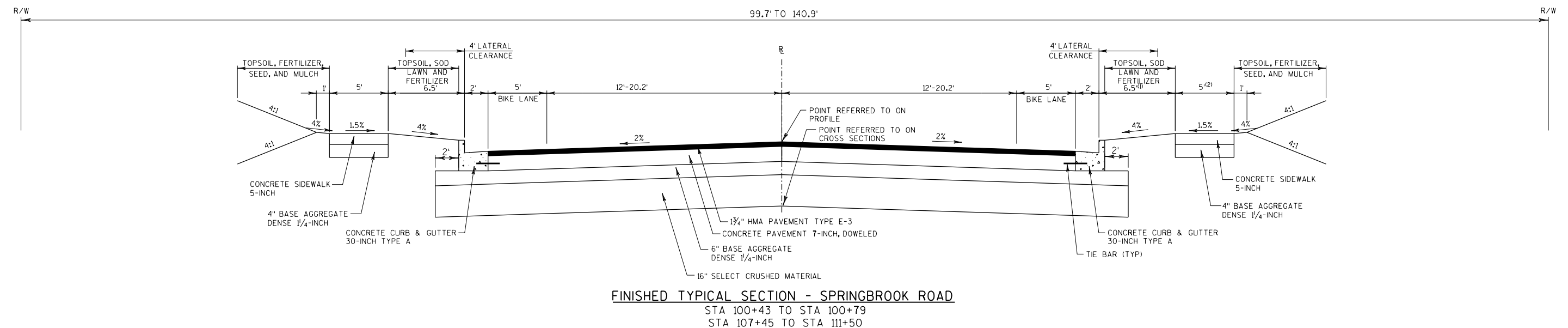


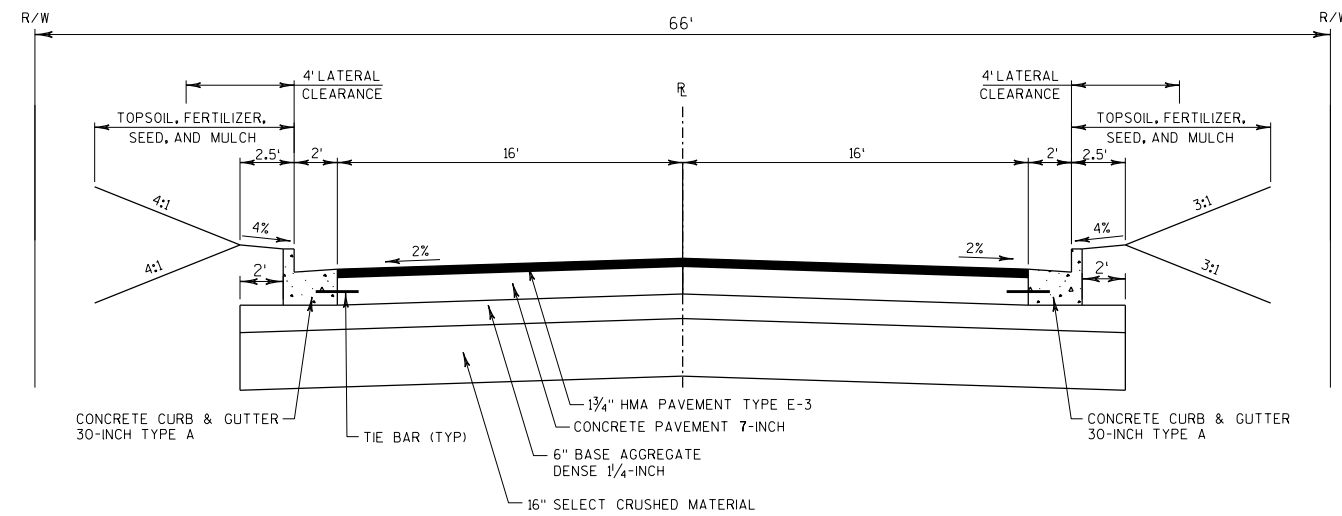
EXISTING TYPICAL SECTION - SPRINGBROOK
STA 109+50 TO STA 112+00

2

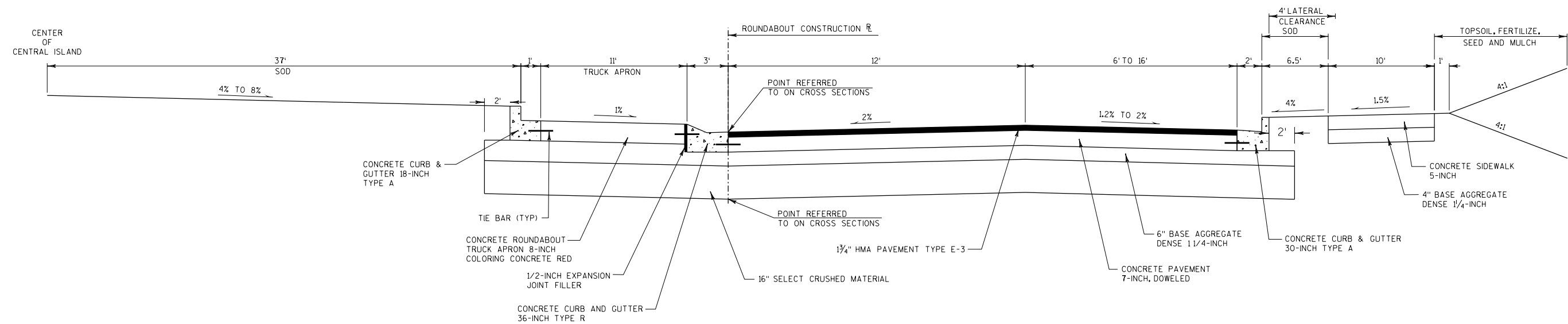


2



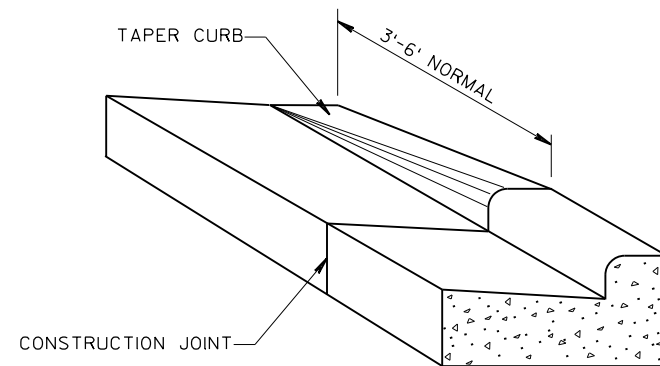


FINISHED TYPICAL SECTION - 100TH STREET
STA 300+23 TO STA 301+00



ROUNDABOUT - TYPICAL HALF-SECTION FOR 39TH AVE & SPRINGBROOK RD

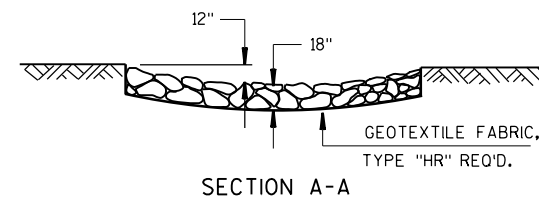
2



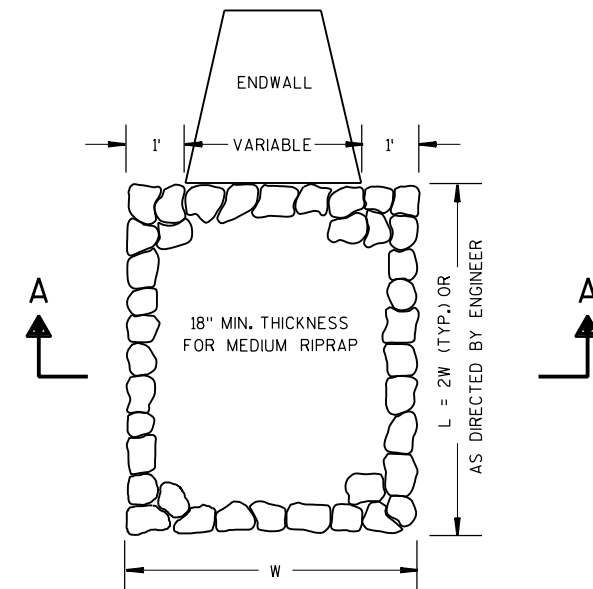
DETAIL OF CURB & GUTTER TERMINI

STA 41+03 RT
STA 111+50 LT
STA 111+50 RT

2



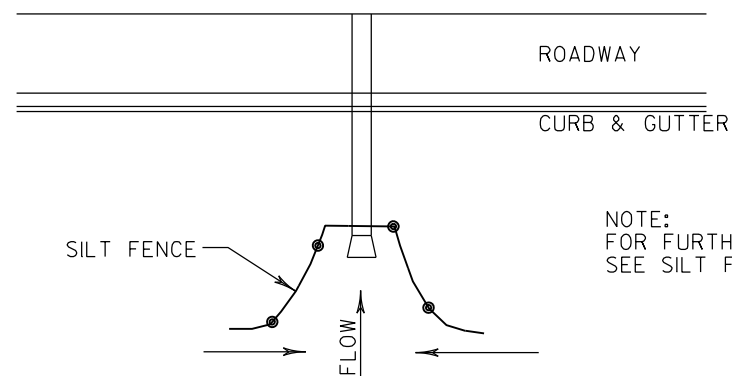
MEDIUM RIPRAP TREATMENT AT CULVERTS



GENERAL NOTES

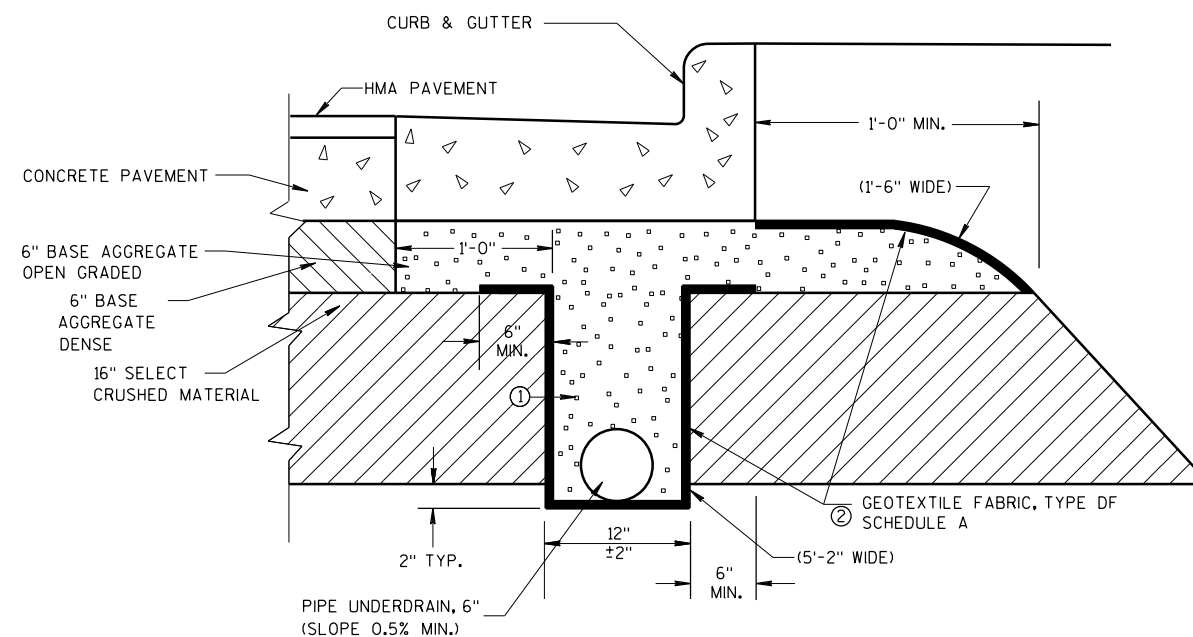
THE DIMENSIONS SHOWN ON THE TYPICAL CROSS SECTIONS WILL GOVERN IN THE EVENT THERE IS A CONFLICT WITH THE DETAILS SHOWN ON THIS DRAWING.

- ① TRENCH BACKFILL WILL BE PAID FOR AS BASE AGGREGATE OPEN GRADED.
- ② TOTAL FABRIC WIDTH IS 6'-8" FOR PAYMENT.
- ③ EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



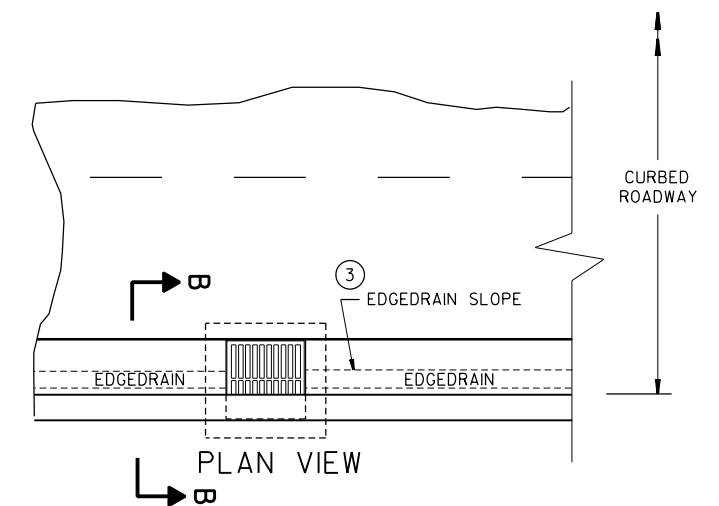
TYPICAL SILT FENCE DETAIL AT PIPE INLET

NOTE:
FOR FURTHER DETAIL
SEE SILT FENCE SDD



EDGEDRAIN IN URBAN ROADWAY SECTION B-B

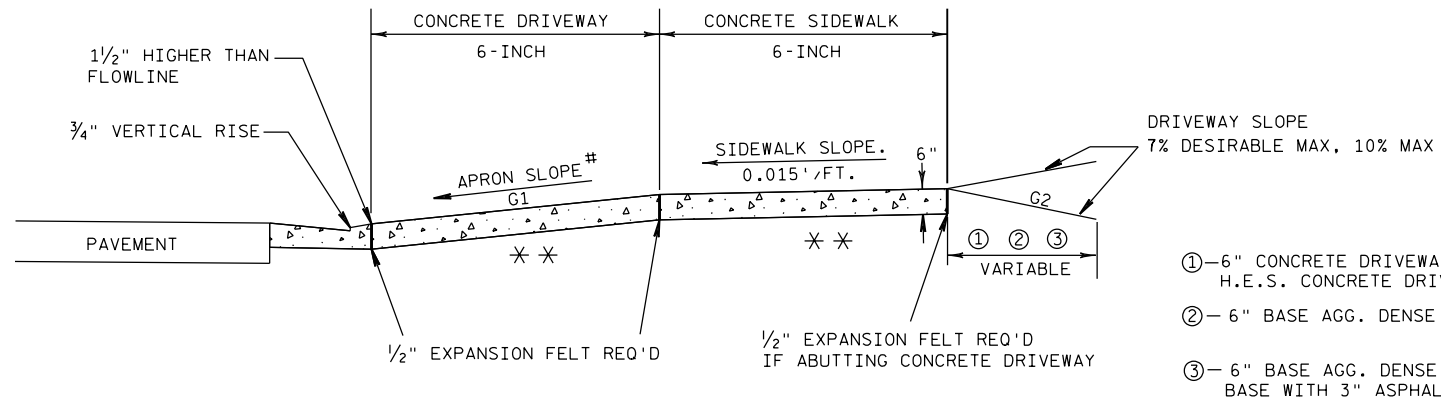
EDGEDRAIN DETAIL



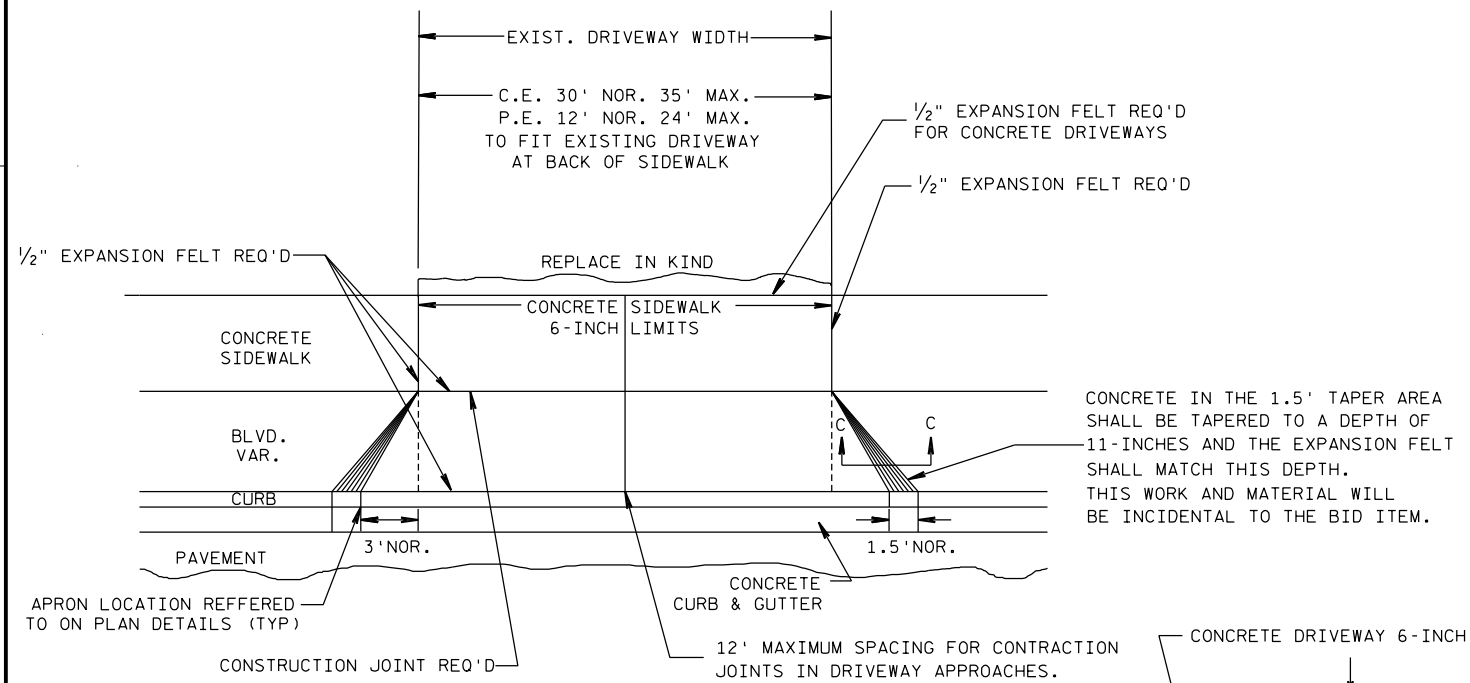
ROADWAY WITH CURBS (EDGEDRAIN CONNECTS INTO INLET STRUCTURE)

NOTE:
SEE TYPICAL SECTIONS, STORM
SEWER PLANS & MISC QUANTITIES
FOR LOCATIONS.

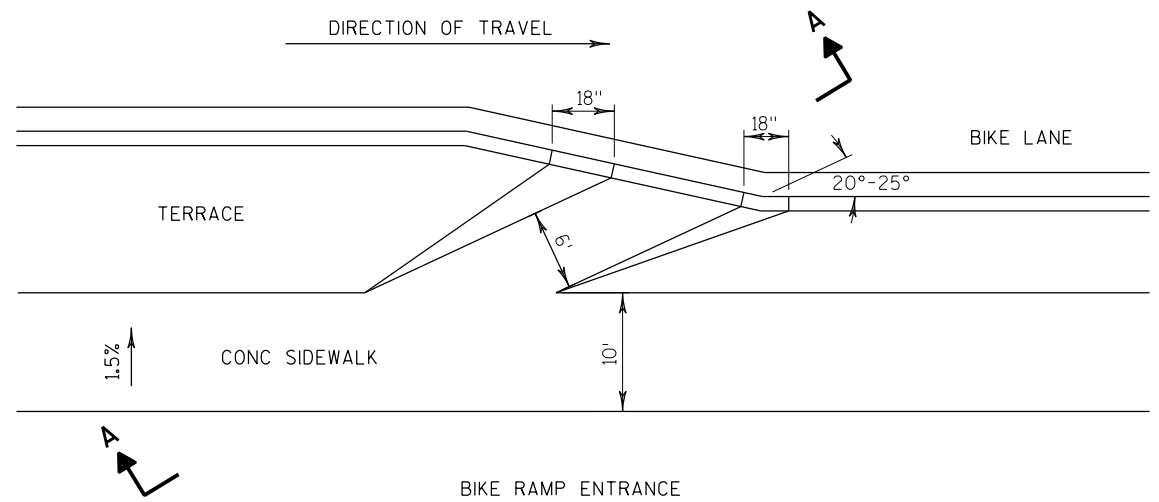
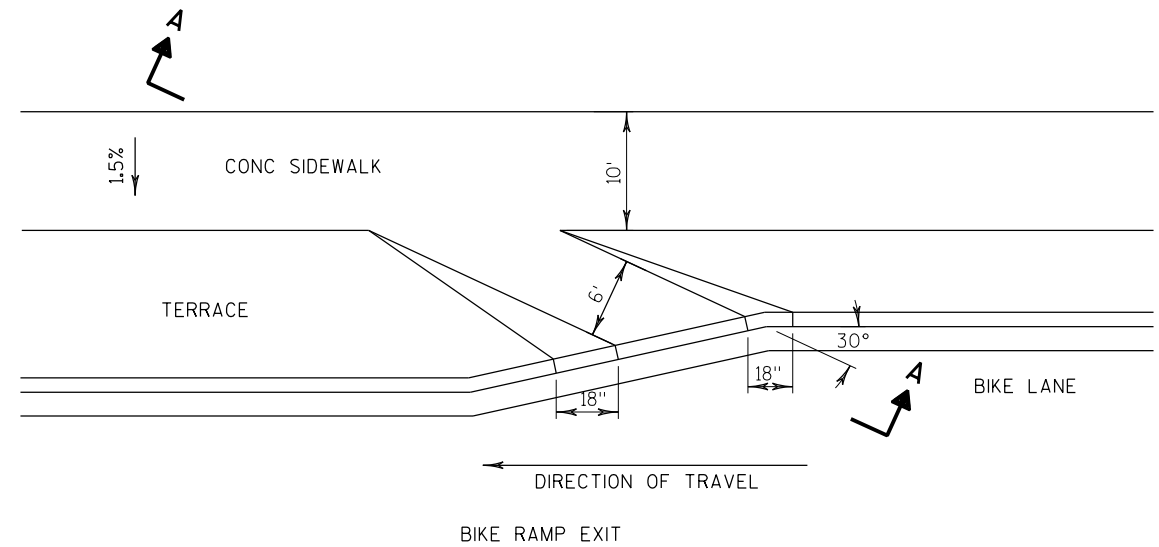
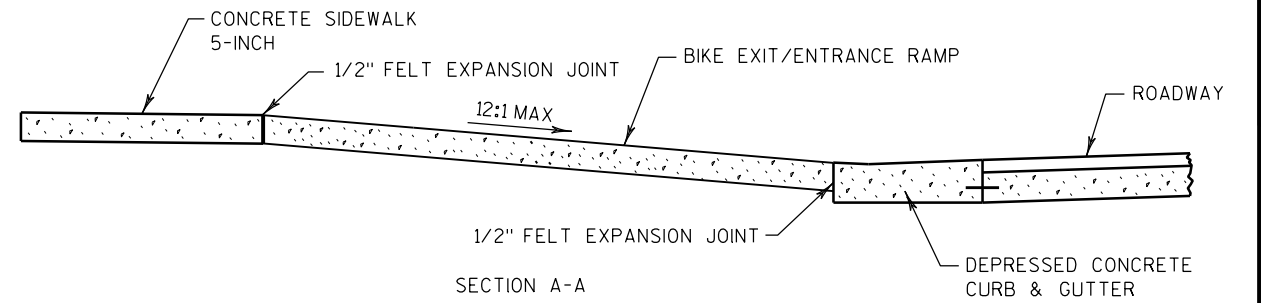
2



TYPICAL SIDEWALK SECTION



DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER



TYPICAL BIKE RAMP ENTRANCE AND EXIT DETAIL
(SEE PLAN DETAIL FOR LOCATIONS)

PROJECT NO:3729-00-74

HWY: 39TH AVENUE

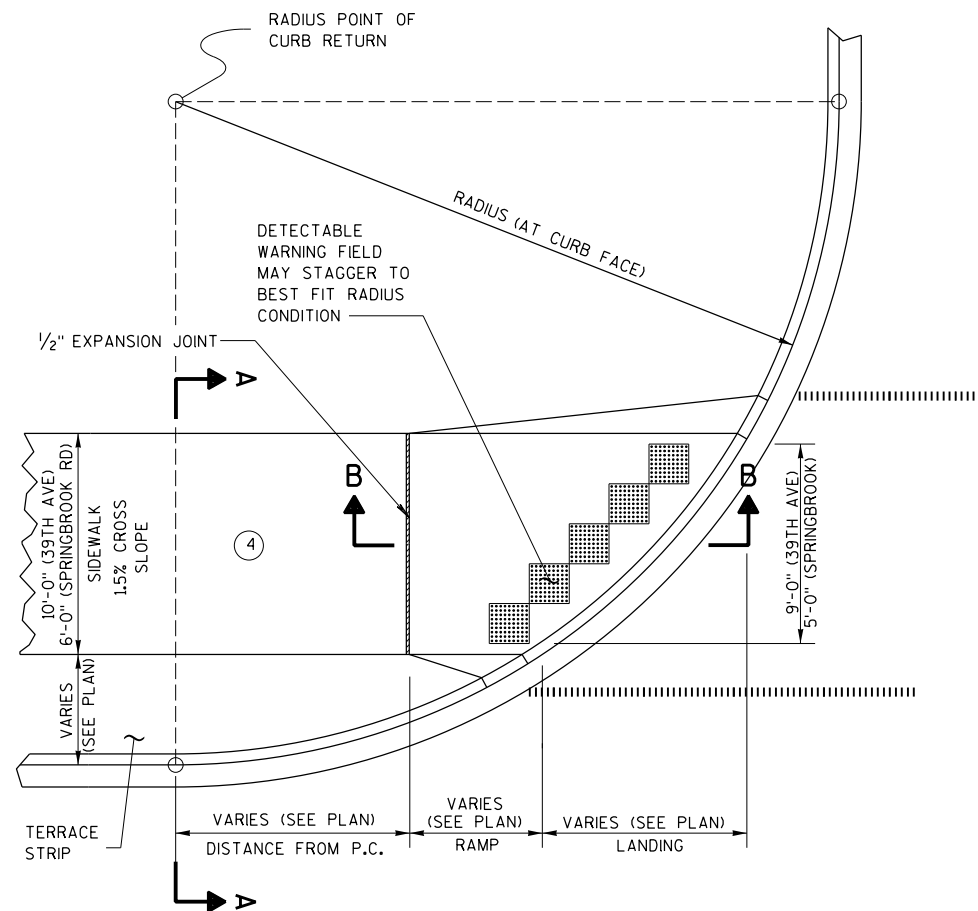
COUNTY:KENOSHA

CONSTRUCTION DETAILS

SHEET

1

2



CURB RAMP TYPE 4B1 MODIFIED
PLAN VIEW

GENERAL NOTES

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

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

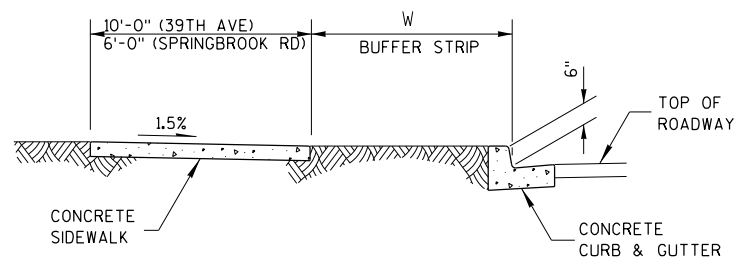
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

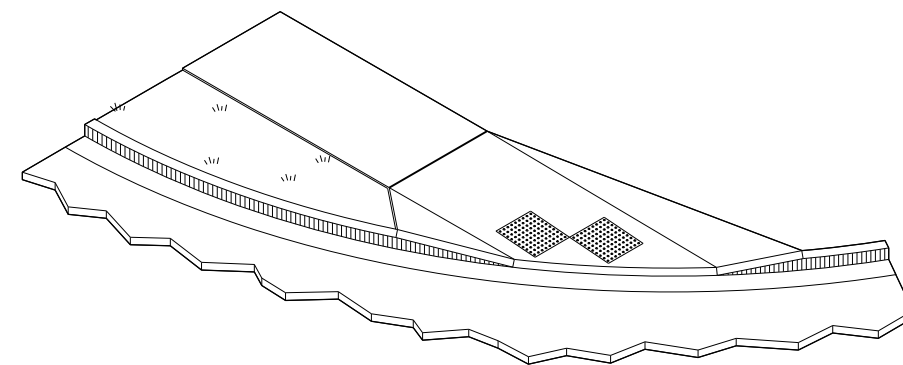
- ① SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NOT TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK NOSE.
- ④ 0.5%± CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

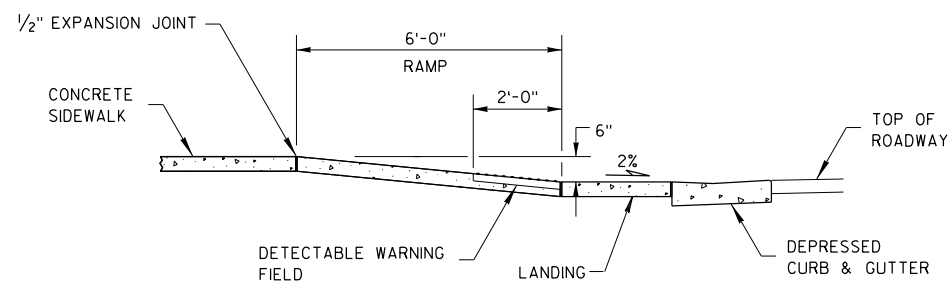
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- ||||||| PAVEMENT MARKING CROSSWALK (WHITE)



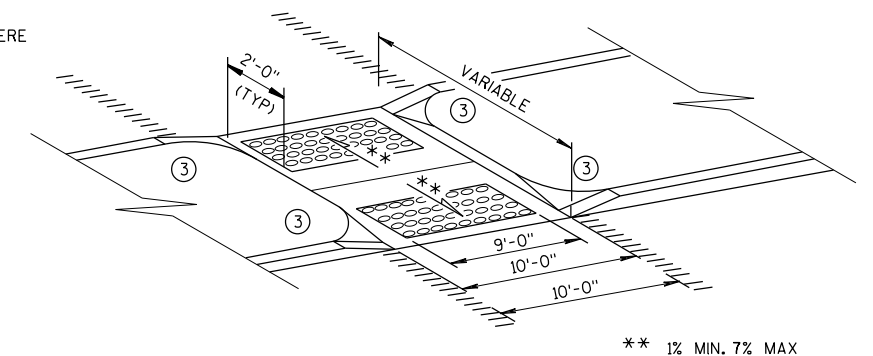
SECTION A-A



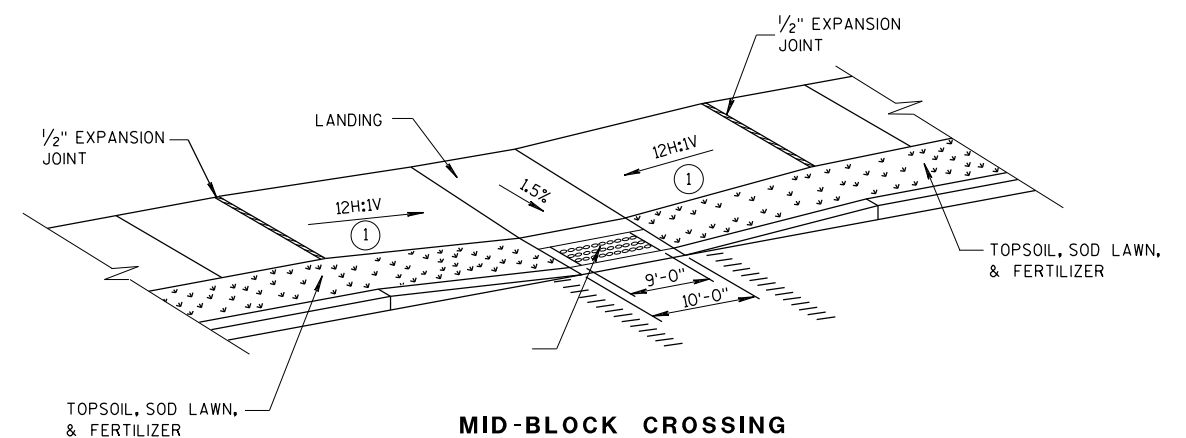
ISOMETRIC VIEW FOR TYPE 4B1 MODIFIED



SECTION B-B



**MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5 MODIFIED**



**MID-BLOCK CROSSING
TYPE 7B MODIFIED**

RUNOFF COEFFICIENT TABLE

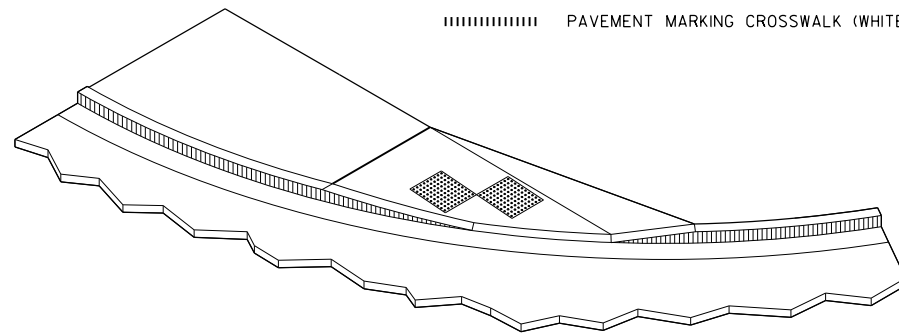
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIP-TURF	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPE-TURF			.25			.27			.28			.30
			.32			.34			.36			.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 = 14.8 ACRES

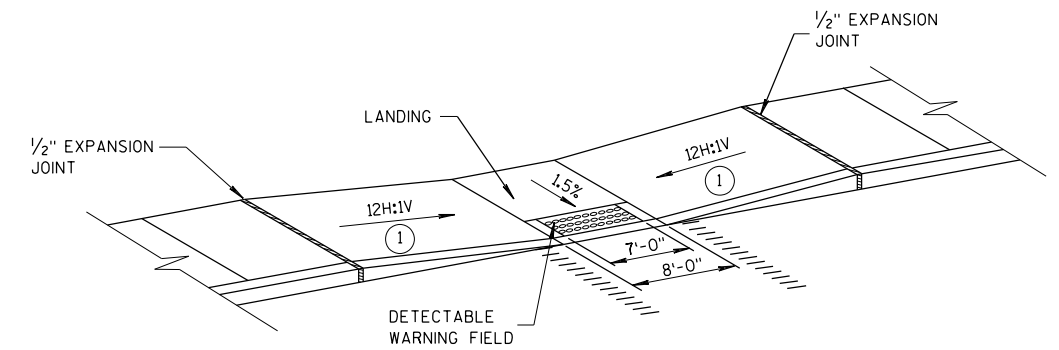
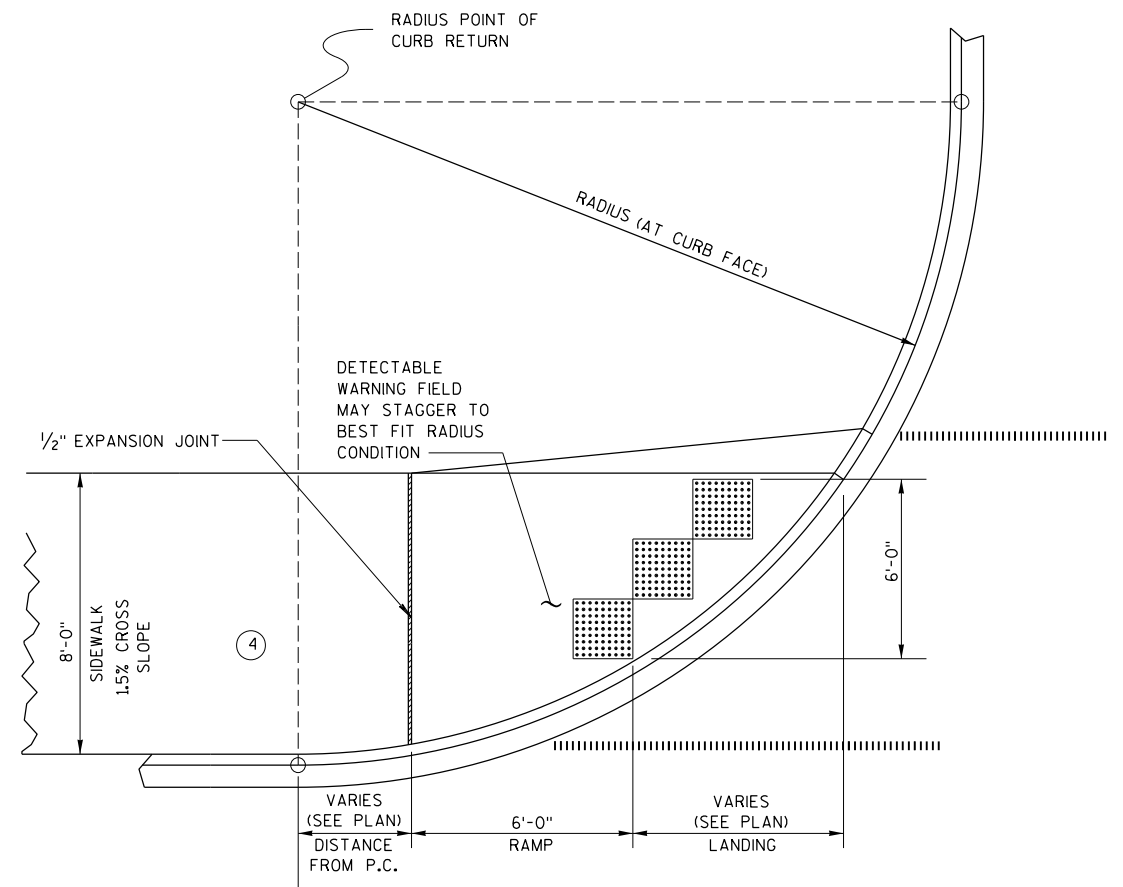
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 11.2 ACRES

LEGEND

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



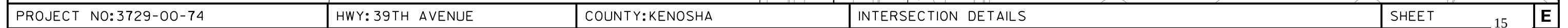
ISOMETRIC VIEW FOR TYPE 4A1 MODIFIED

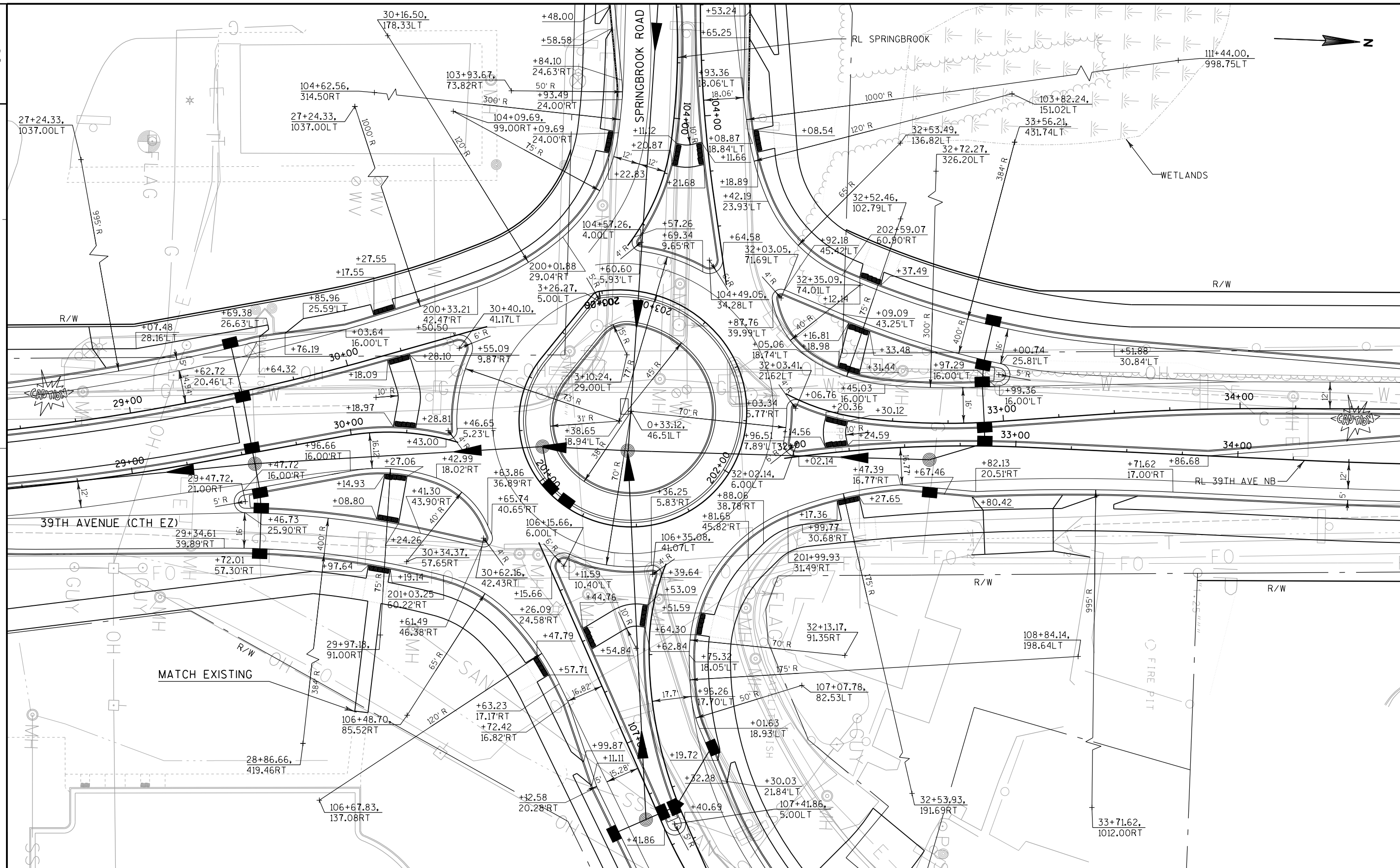
MID-BLOCK CROSSING
CURB RAMP TYPE 7A MODIFIEDCURB RAMP TYPE 4A1 MODIFIED
PLAN VIEW

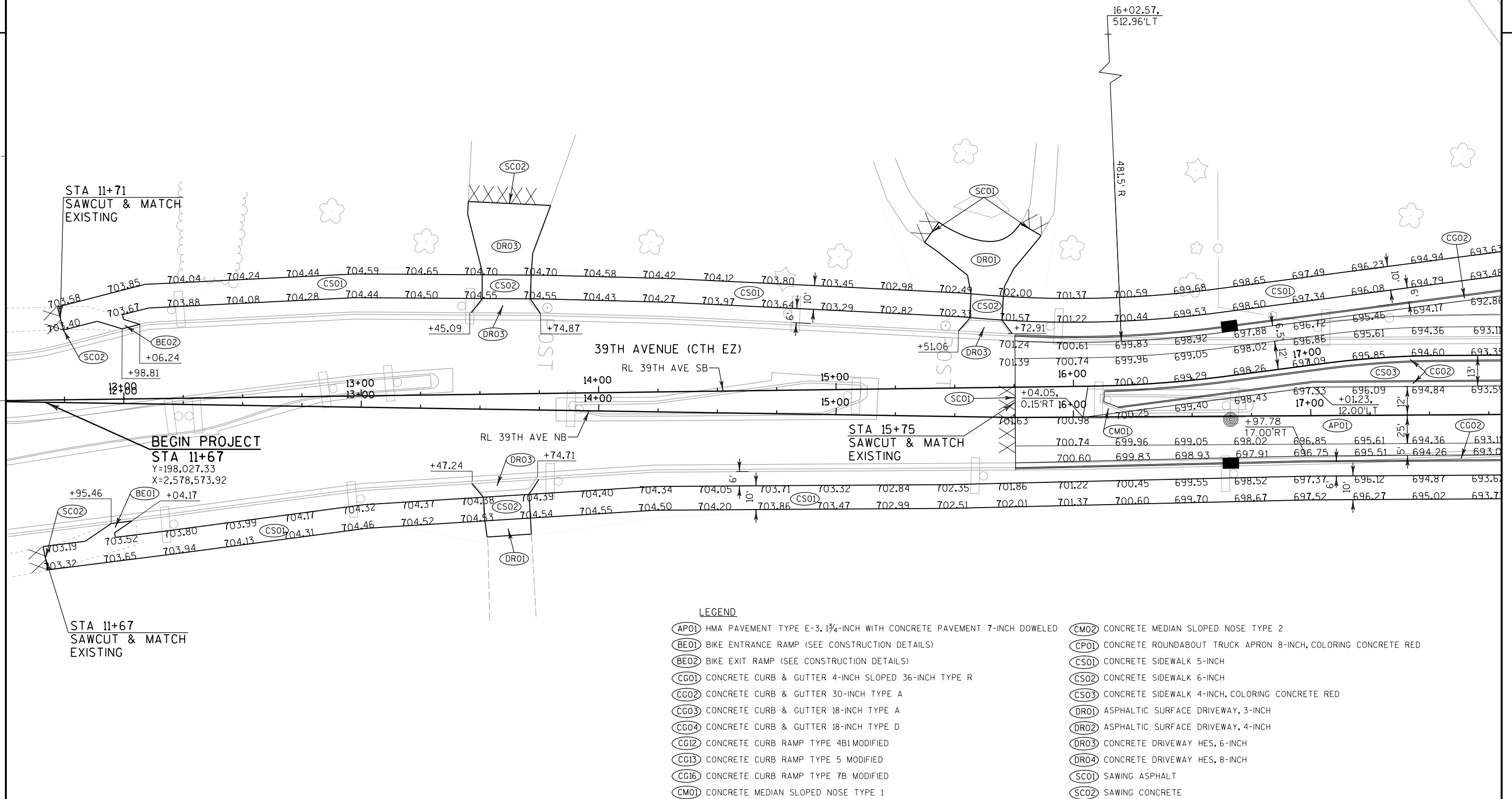
2

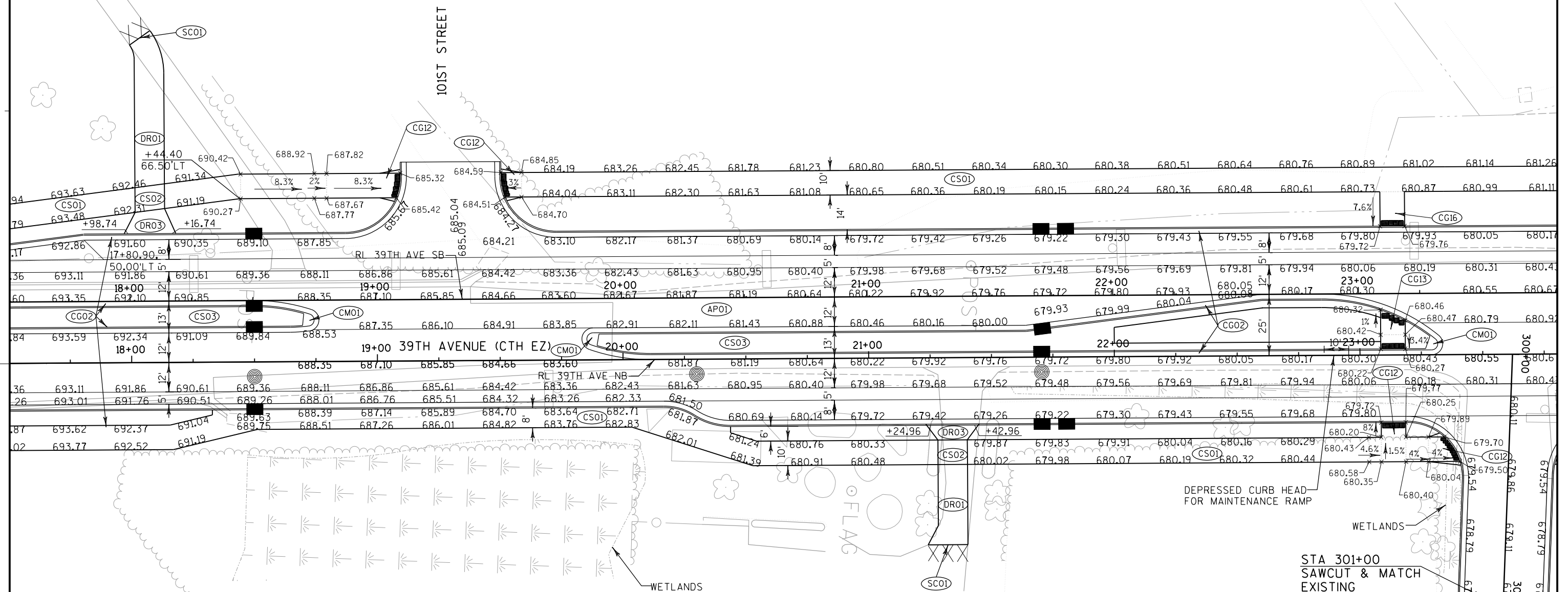


2



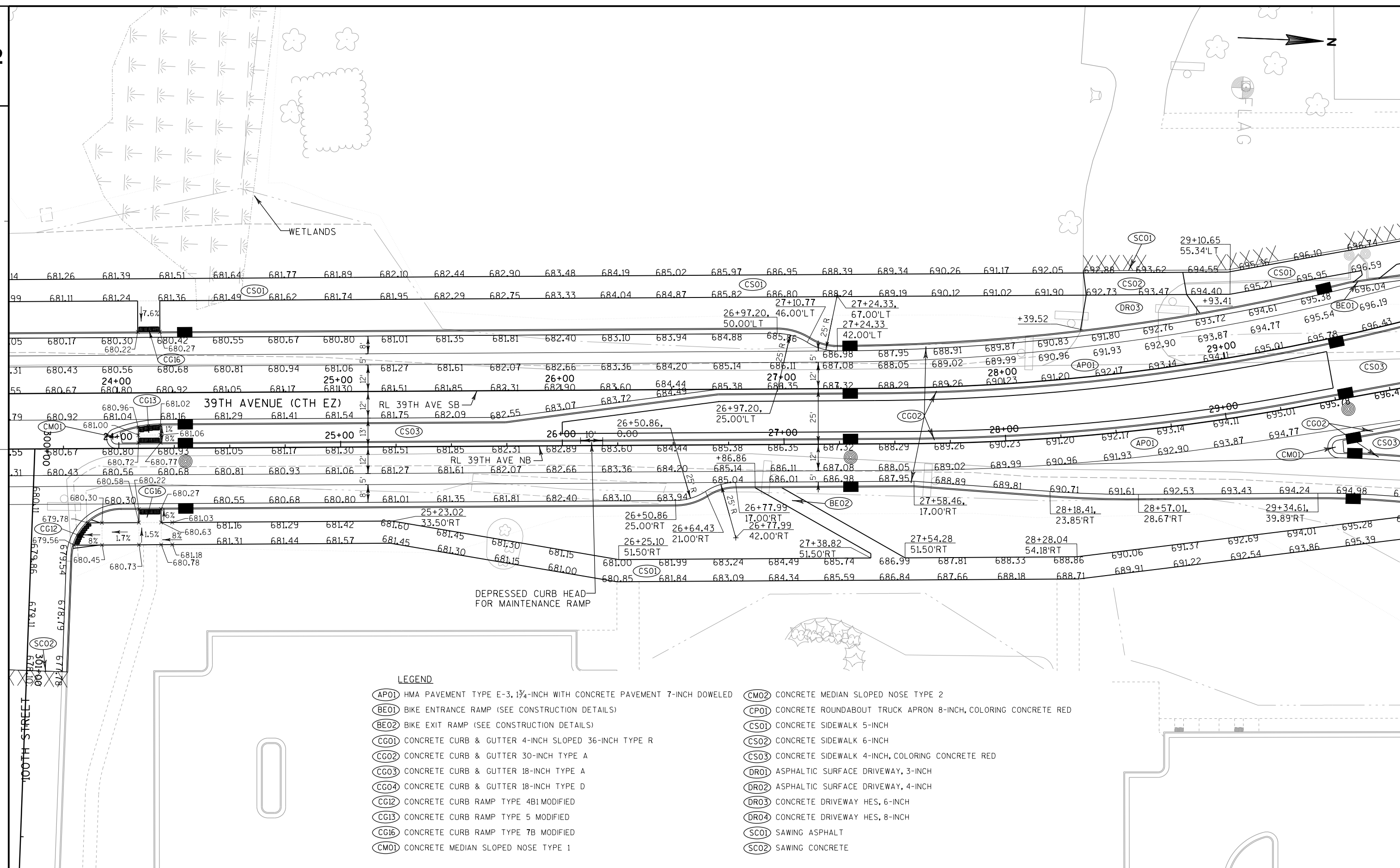


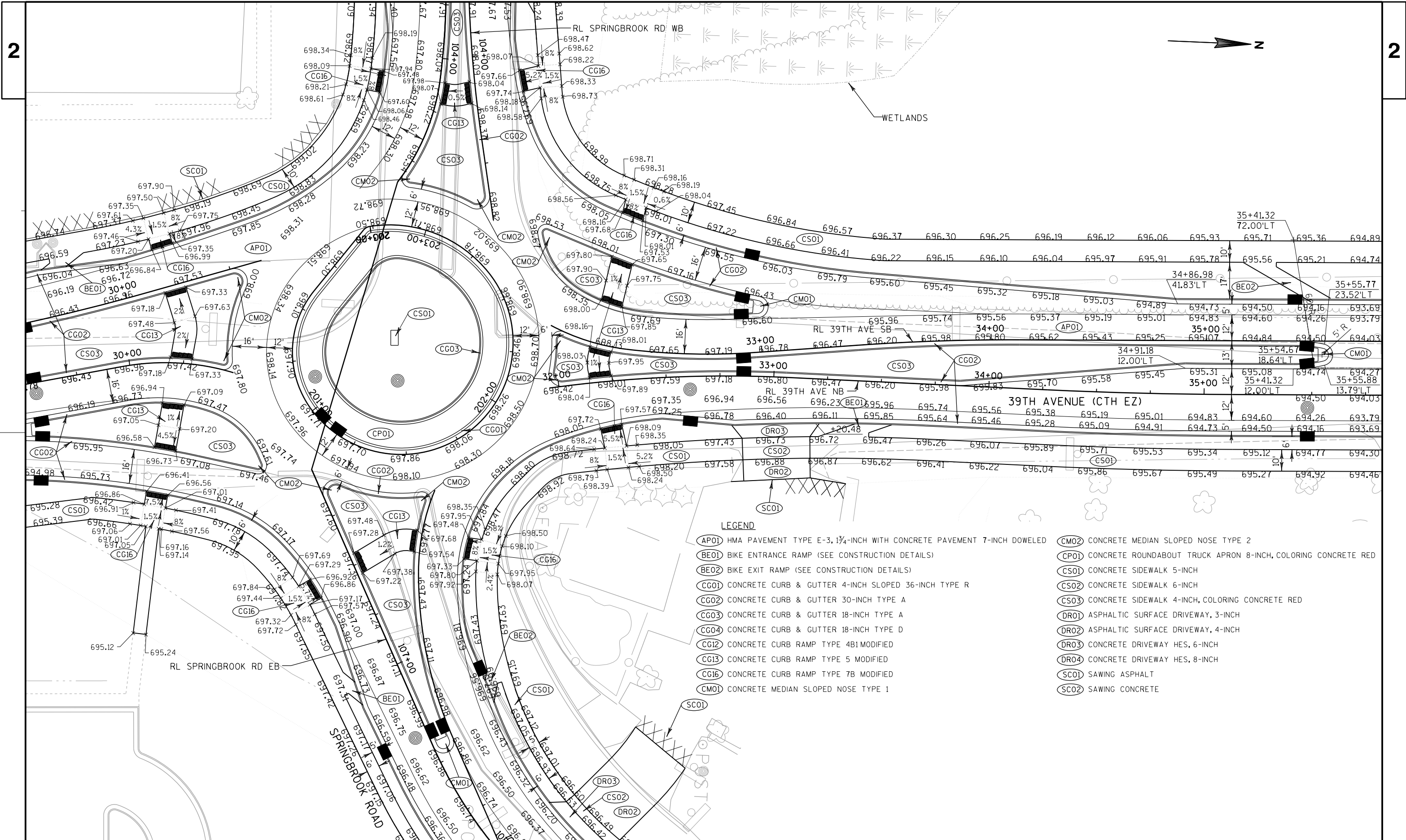




LEGEND

- | | |
|--|--|
| (AP01) HMA PAVEMENT TYPE E-3, 1 1/4-INCH WITH CONCRETE PAVEMENT 7-INCH DOWELED | (CM02) CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| (BE01) BIKE ENTRANCE RAMP (SEE CONSTRUCTION DETAILS) | (CP01) CONCRETE ROUNDABOUT TRUCK APRON 8-INCH, COLORING CONCRETE RED |
| (BE02) BIKE EXIT RAMP (SEE CONSTRUCTION DETAILS) | (CS01) CONCRETE SIDEWALK 5-INCH |
| (CG01) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R | (CS02) CONCRETE SIDEWALK 6-INCH |
| (CG02) CONCRETE CURB & GUTTER 30-INCH TYPE A | (CS03) CONCRETE SIDEWALK 4-INCH, COLORING CONCRETE RED |
| (CG03) CONCRETE CURB & GUTTER 18-INCH TYPE A | (DR01) ASPHALTIC SURFACE DRIVEWAY, 3-INCH |
| (CG04) CONCRETE CURB & GUTTER 18-INCH TYPE D | (DR02) ASPHALTIC SURFACE DRIVEWAY, 4-INCH |
| (CG12) CONCRETE CURB RAMP TYPE 4B1 MODIFIED | (DR03) CONCRETE DRIVEWAY HES, 6-INCH |
| (CG13) CONCRETE CURB RAMP TYPE 5 MODIFIED | (DR04) CONCRETE DRIVEWAY HES, 8-INCH |
| (CG16) CONCRETE CURB RAMP TYPE 7B MODIFIED | (SC01) SAWING ASPHALT |
| (CM01) CONCRETE MEDIAN SLOPED NOSE TYPE 1 | (SC02) SAWING CONCRETE |





PROJECT NO:3729-00-74

HWY:39TH AVENUE

COUNTY:KENOSHA

PAVING DETAILS

SHEET

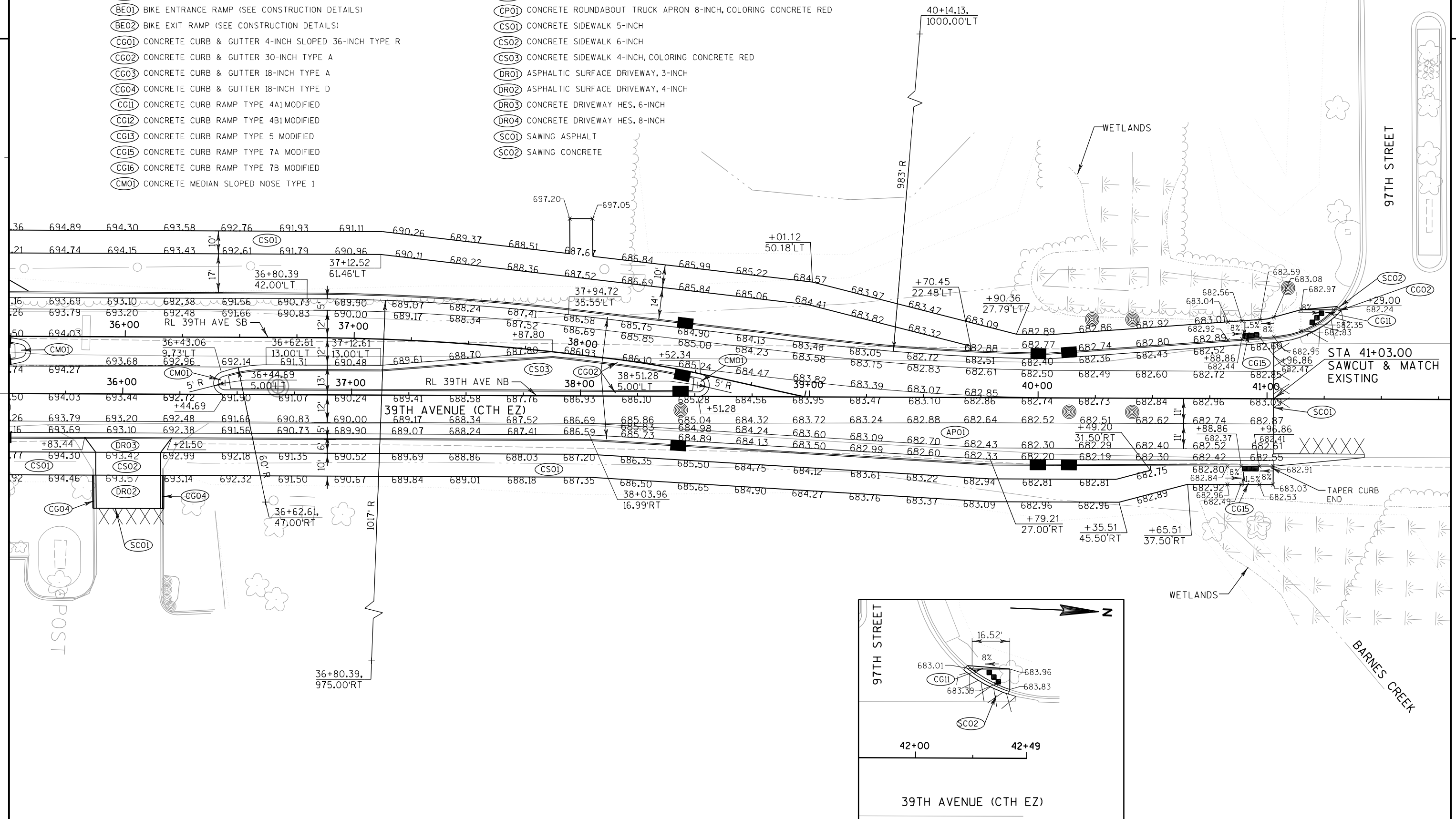
20

E

2

AP01	HMA PAVEMENT TYPE E-3, 1¾-INCH WITH CONCRETE PAVEMENT 7-INCH DOWELED
BE01	BIKE ENTRANCE RAMP (SEE CONSTRUCTION DETAILS)
BE02	BIKE EXIT RAMP (SEE CONSTRUCTION DETAILS)
CG01	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R
CG02	CONCRETE CURB & GUTTER 30-INCH TYPE A
CG03	CONCRETE CURB & GUTTER 18-INCH TYPE A
CG04	CONCRETE CURB & GUTTER 18-INCH TYPE D
CG11	CONCRETE CURB RAMP TYPE 4A1 MODIFIED
CG12	CONCRETE CURB RAMP TYPE 4B1 MODIFIED
CG13	CONCRETE CURB RAMP TYPE 5 MODIFIED
CG15	CONCRETE CURB RAMP TYPE 7A MODIFIED
CG16	CONCRETE CURB RAMP TYPE 7B MODIFIED
CM01	CONCRETE MEDIAN SLOPED NOSE TYPE 1

- (CM02) CONCRETE MEDIAN SLOPED NOSE TYPE 2
- (CP01) CONCRETE ROUNDABOUT TRUCK APRON 8-INCH, COLORING CONCRETE RED
- (CS01) CONCRETE SIDEWALK 5-INCH
- (CS02) CONCRETE SIDEWALK 6-INCH
- (CS03) CONCRETE SIDEWALK 4-INCH, COLORING CONCRETE RED
- (DR01) ASPHALTIC SURFACE DRIVEWAY, 3-INCH
- (DR02) ASPHALTIC SURFACE DRIVEWAY, 4-INCH
- (DR03) CONCRETE DRIVEWAY HES, 6-INCH
- (DR04) CONCRETE DRIVEWAY HES, 8-INCH
- (SC01) SAWING ASPHALT
- (SC02) SAWING CONCRETE



LEGEND

- AP01 HMA PAVEMENT TYPE E-3, 1 1/4-INCH WITH CONCRETE PAVEMENT 7-INCH DOWELED

BE01 BIKE ENTRANCE RAMP (SEE CONSTRUCTION DETAILS)

BE02 BIKE EXIT RAMP (SEE CONSTRUCTION DETAILS)

CG01 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R

CG02 CONCRETE CURB & GUTTER 30-INCH TYPE A

CG03 CONCRETE CURB & GUTTER 18-INCH TYPE A

CG04 CONCRETE CURB & GUTTER 18-INCH TYPE D

CG12 CONCRETE CURB RAMP TYPE 4B1 MODIFIED

CG13 CONCRETE CURB RAMP TYPE 5 MODIFIED

CG16 CONCRETE CURB RAMP TYPE 7B MODIFIED

CM01 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CM02 CONCRETE MEDIAN SLOPED NOSE TYPE 2

CP01 CONCRETE ROUNDABOUT TRUCK APRON 8-INCH, COLORING CONCRETE RED

CS01 CONCRETE SIDEWALK 5-INCH

CS02 CONCRETE SIDEWALK 6-INCH

CS03 CONCRETE SIDEWALK 4-INCH, COLORING CONCRETE RED

DR01 ASPHALTIC SURFACE DRIVEWAY, 3-INCH

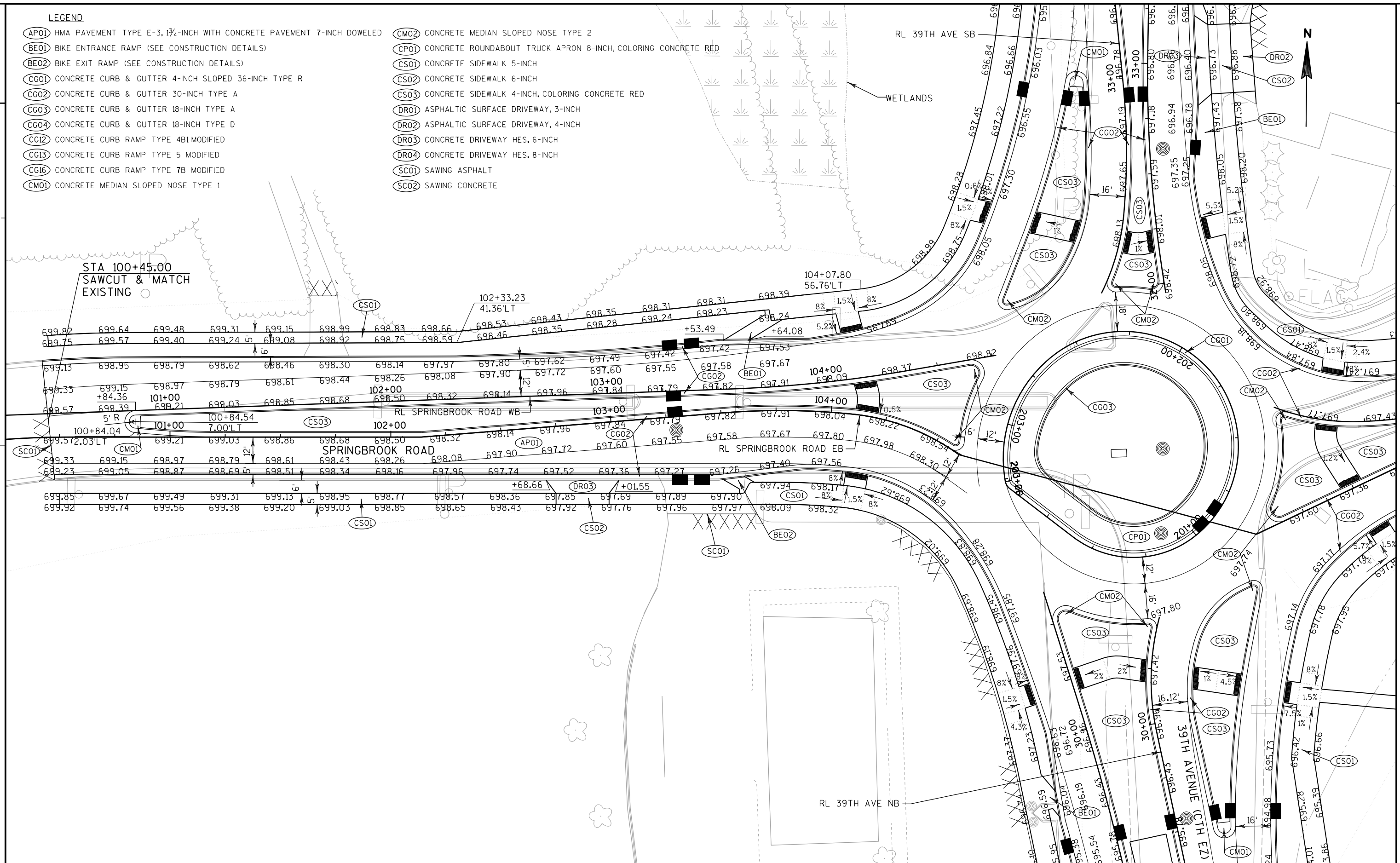
DR02 ASPHALTIC SURFACE DRIVEWAY, 4-INCH

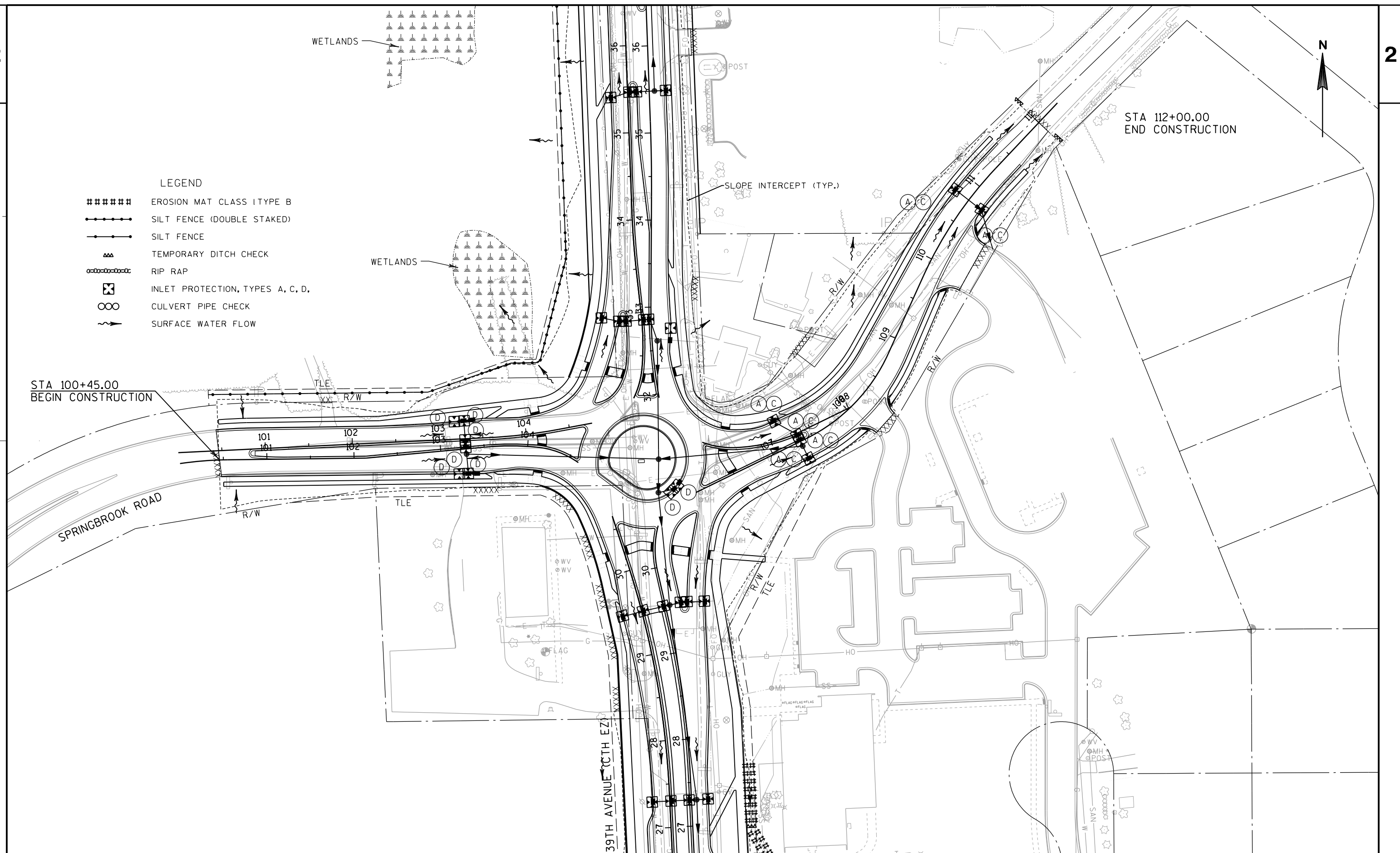
DR03 CONCRETE DRIVEWAY HES, 6-INCH

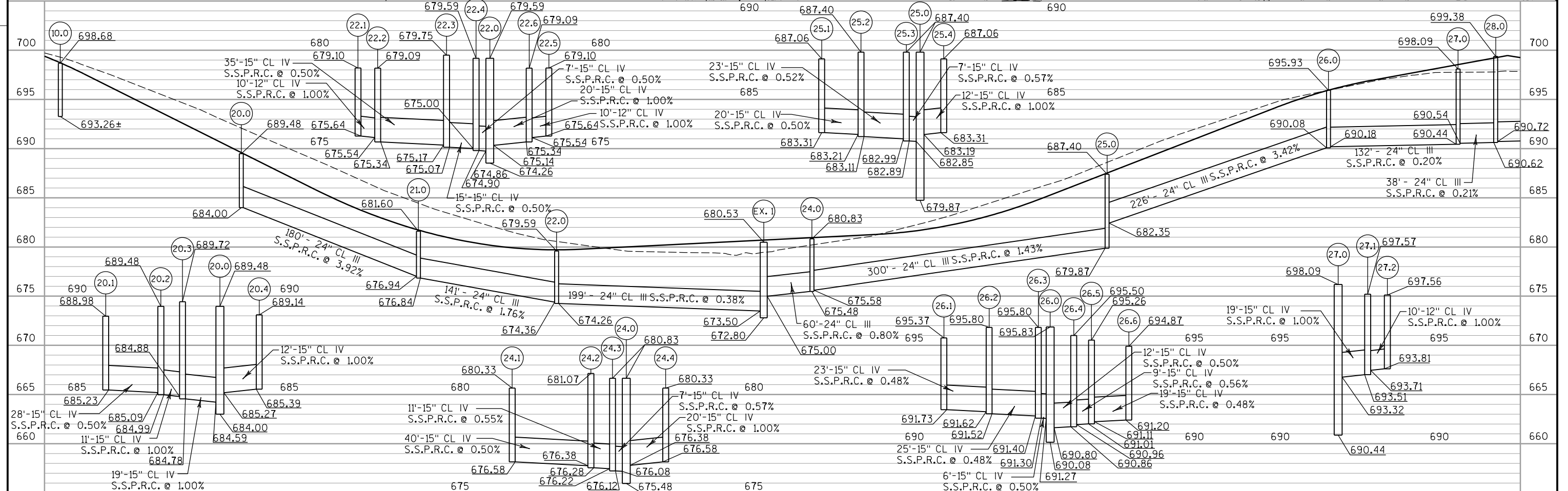
DR04 CONCRETE DRIVEWAY HES, 8-INCH

SC01 SAWING ASPHALT

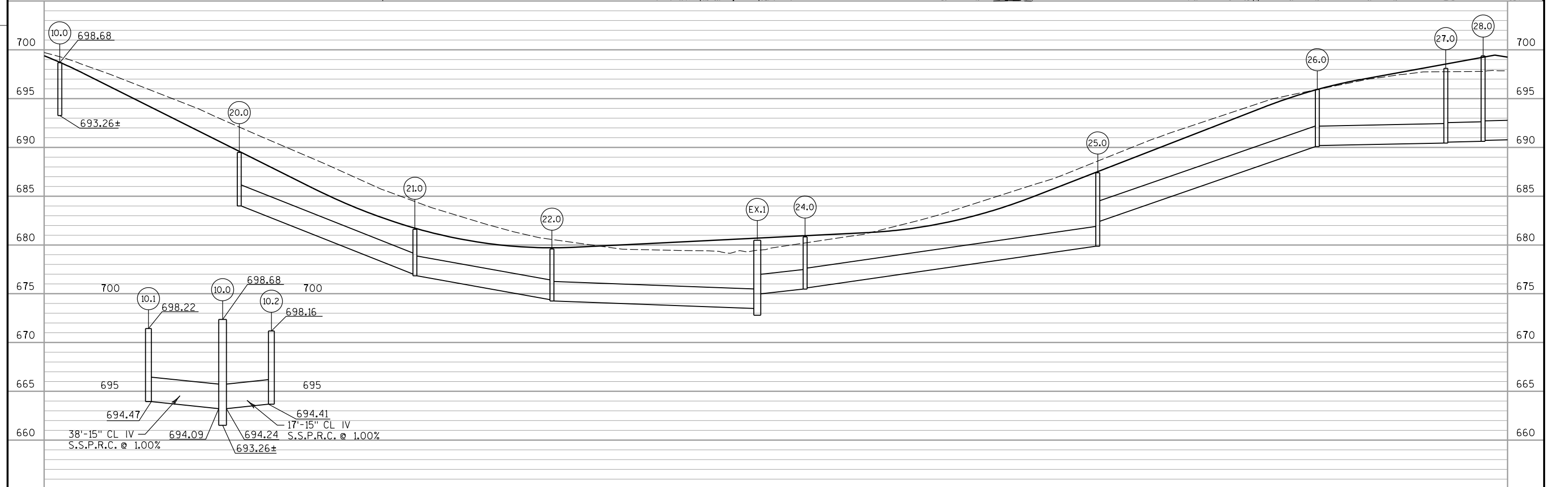
SC02 SAWING CONCRETE





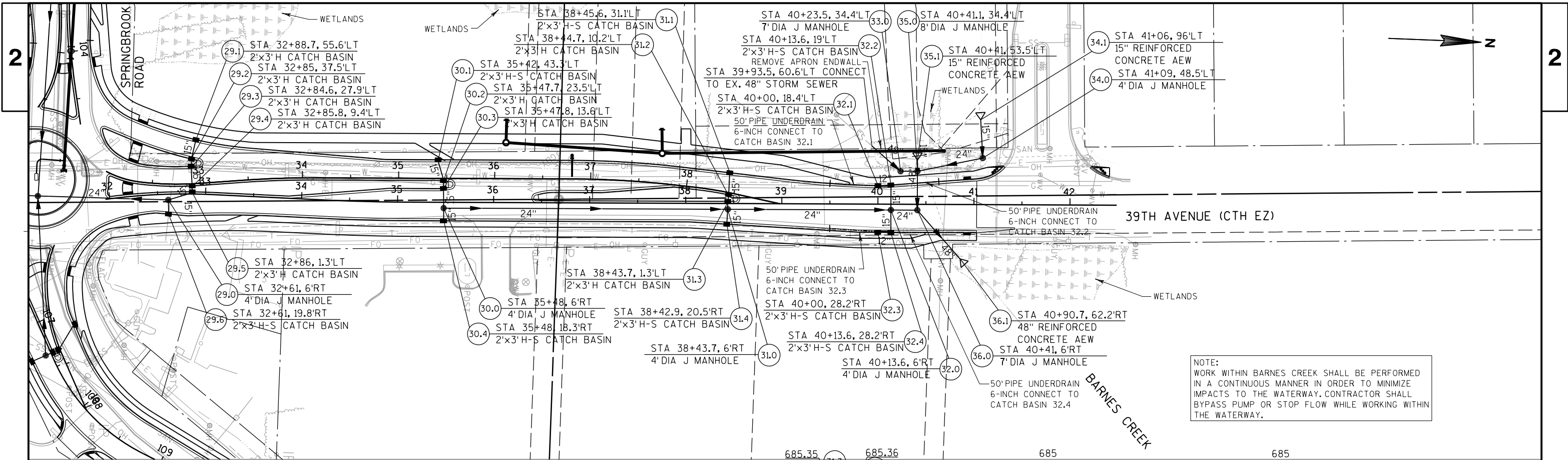


2

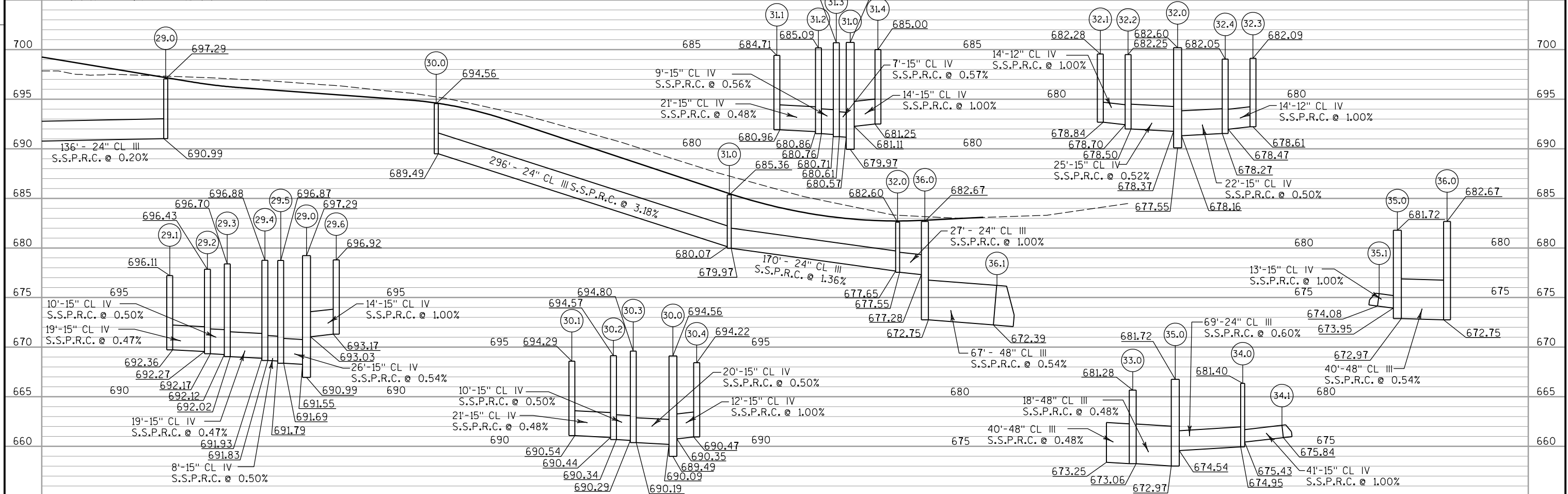


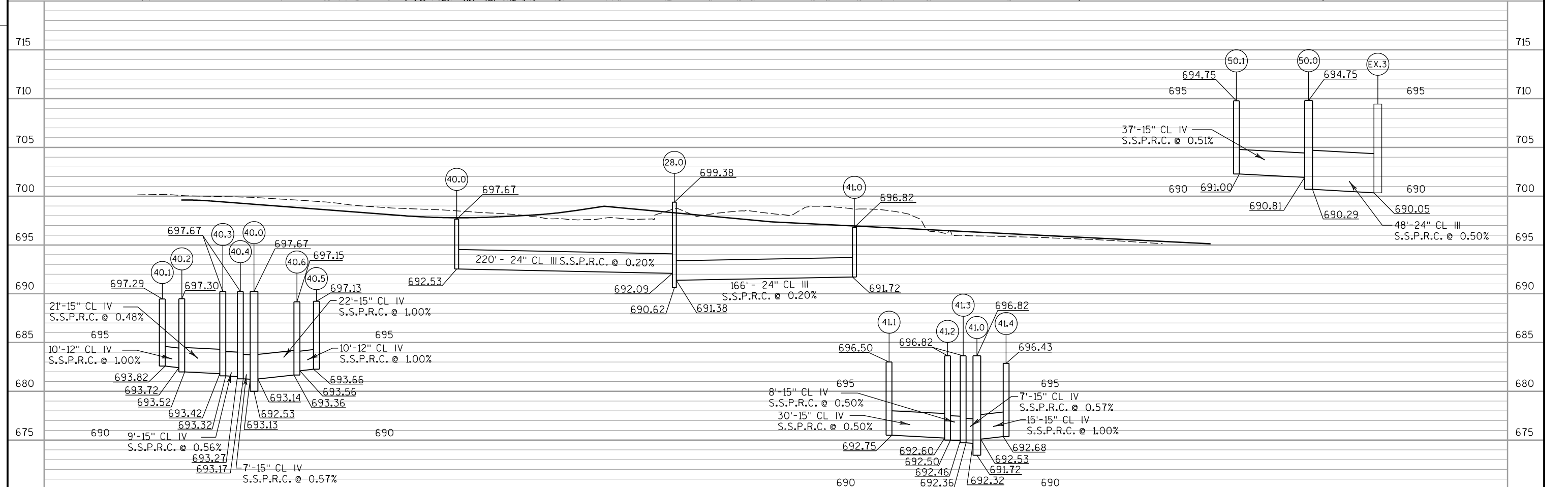
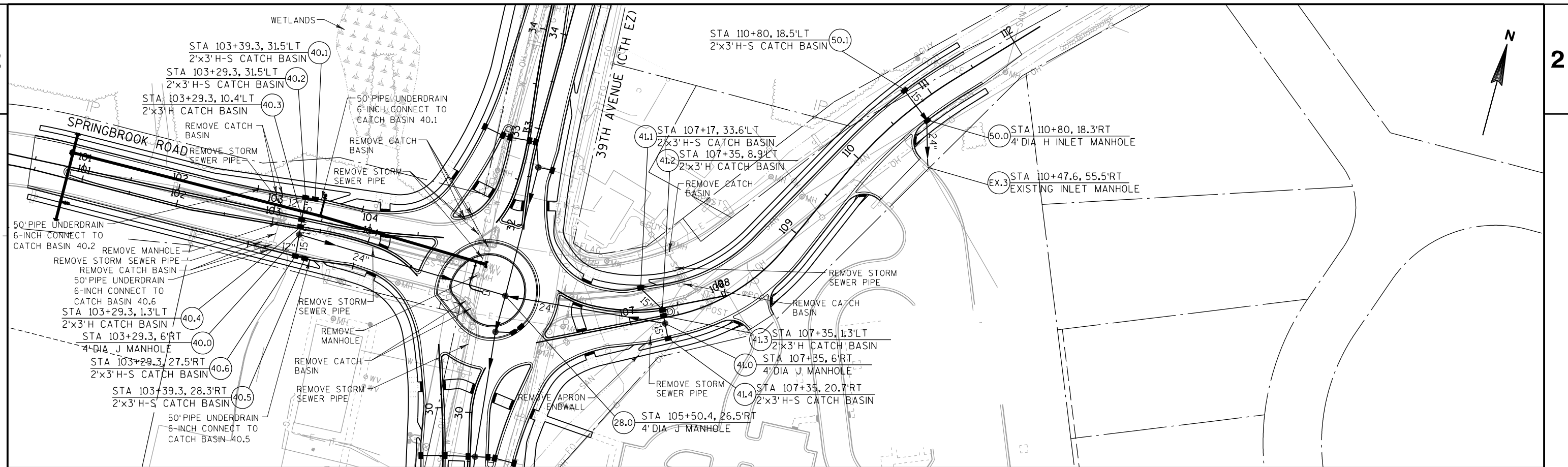
SHEET 26

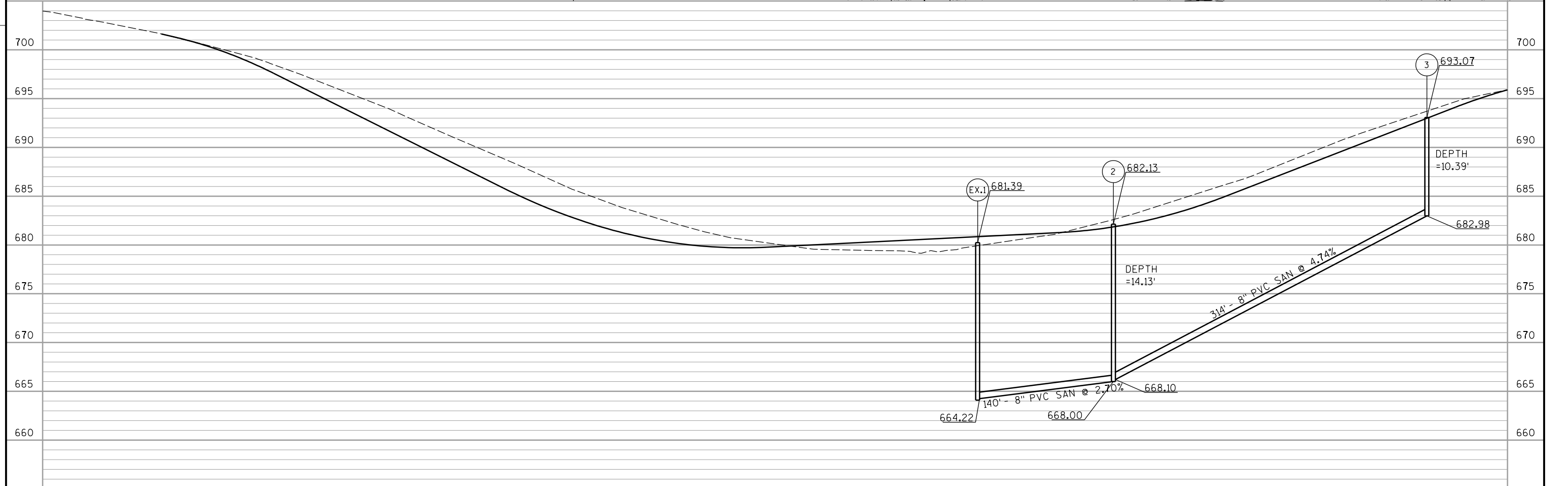
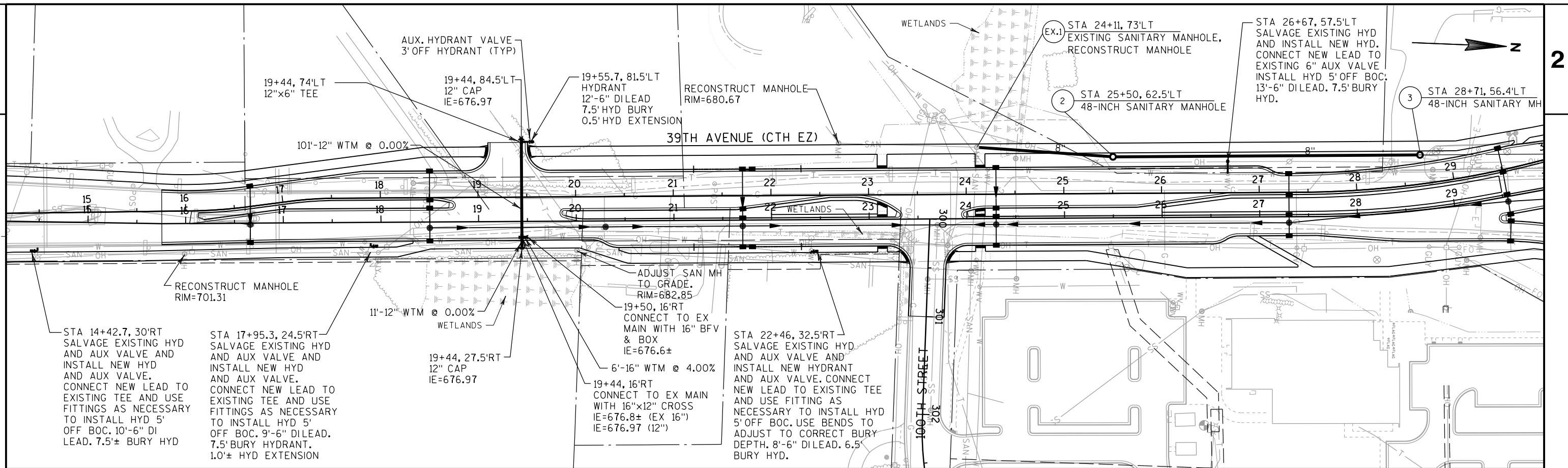
WISDOT/CADDS SHEET 41



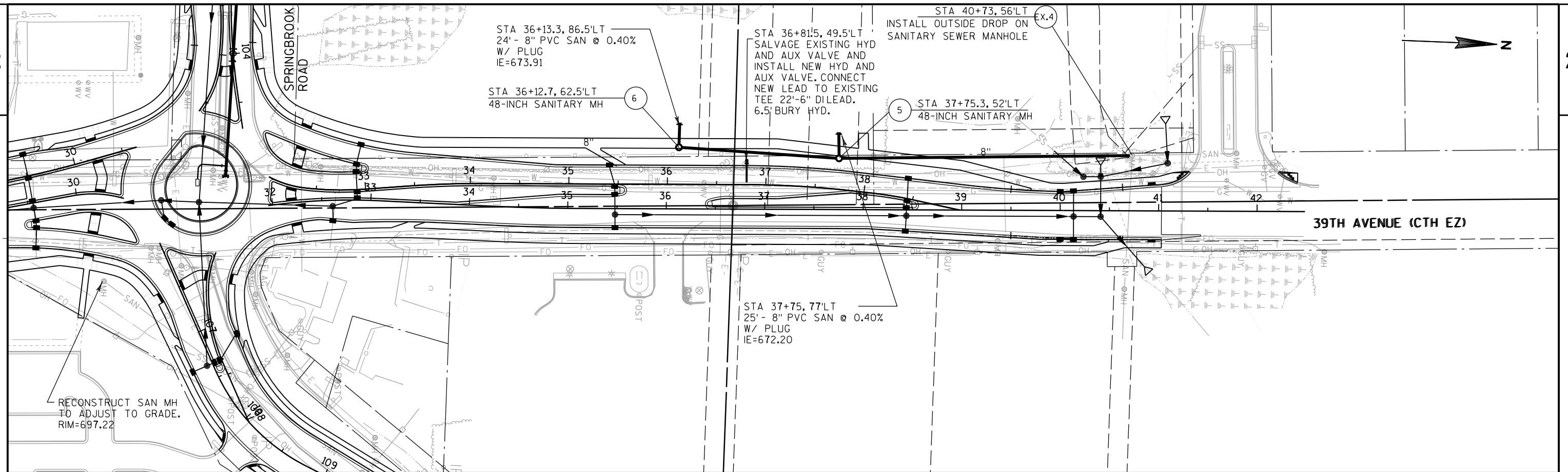
NOTE:
WORK WITHIN BARNES CREEK SHALL BE PERFORMED
IN A CONTINUOUS MANNER IN ORDER TO MINIMIZE
IMPACTS TO THE WATERWAY. CONTRACTOR SHALL
BYPASS PUMP OR STOP FLOW WHILE WORKING WITHIN
THE WATERWAY.



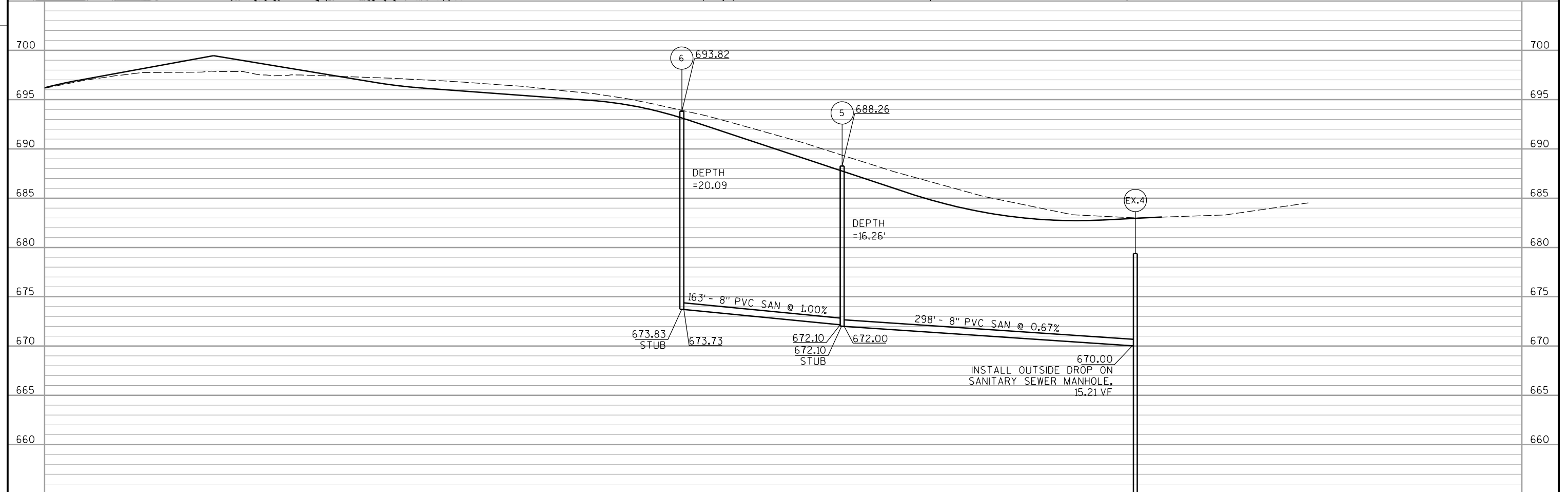


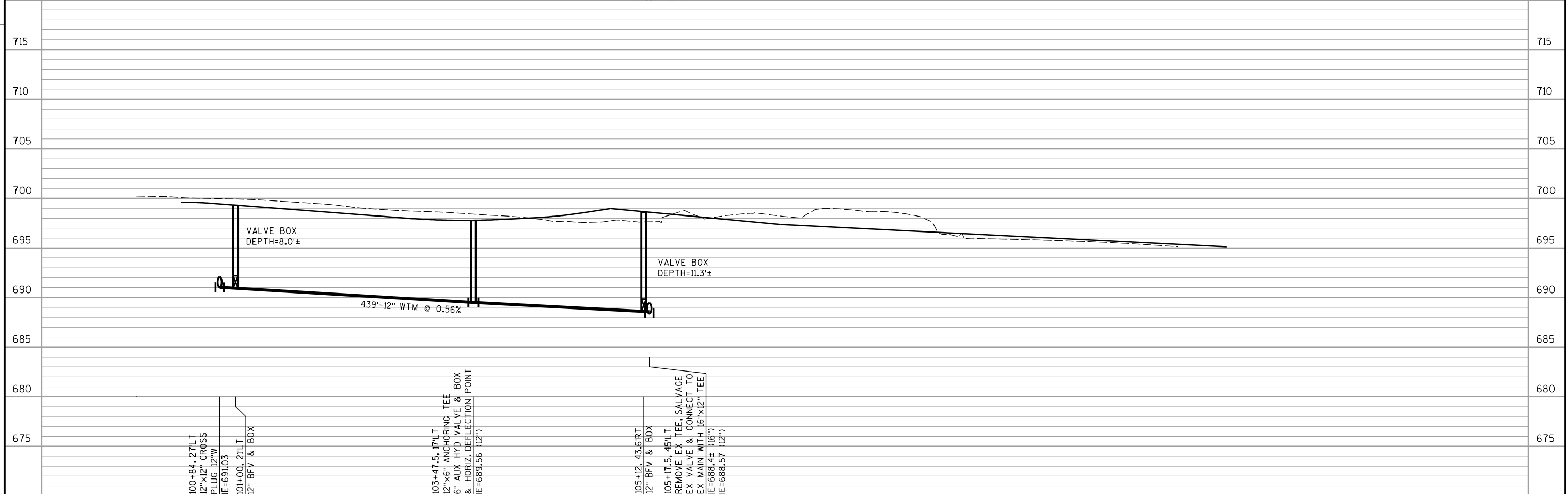
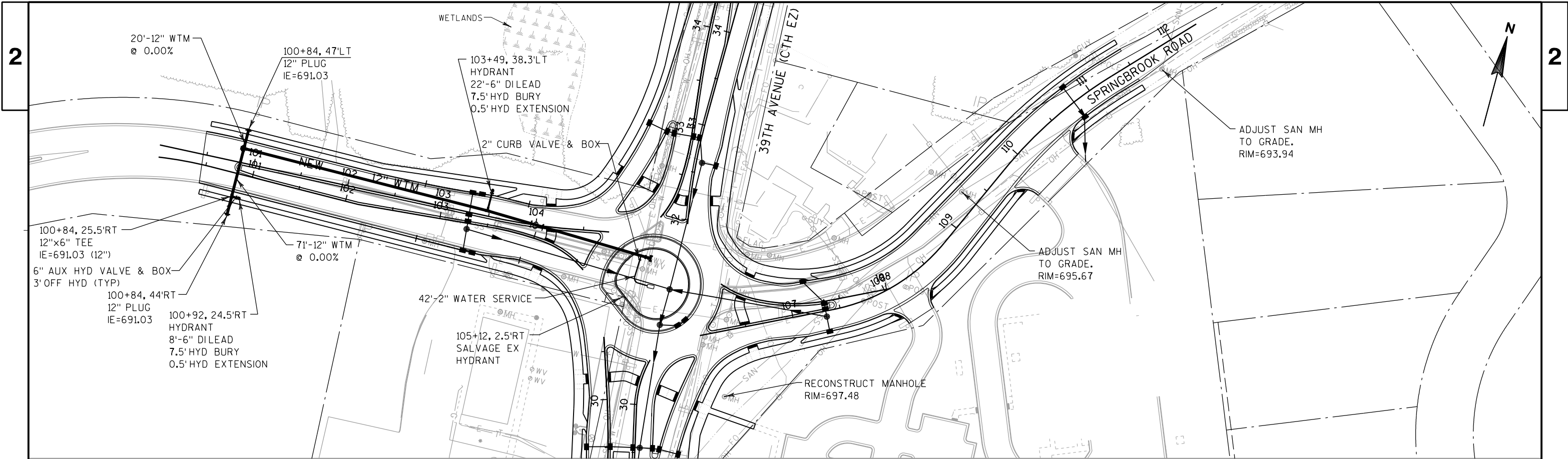


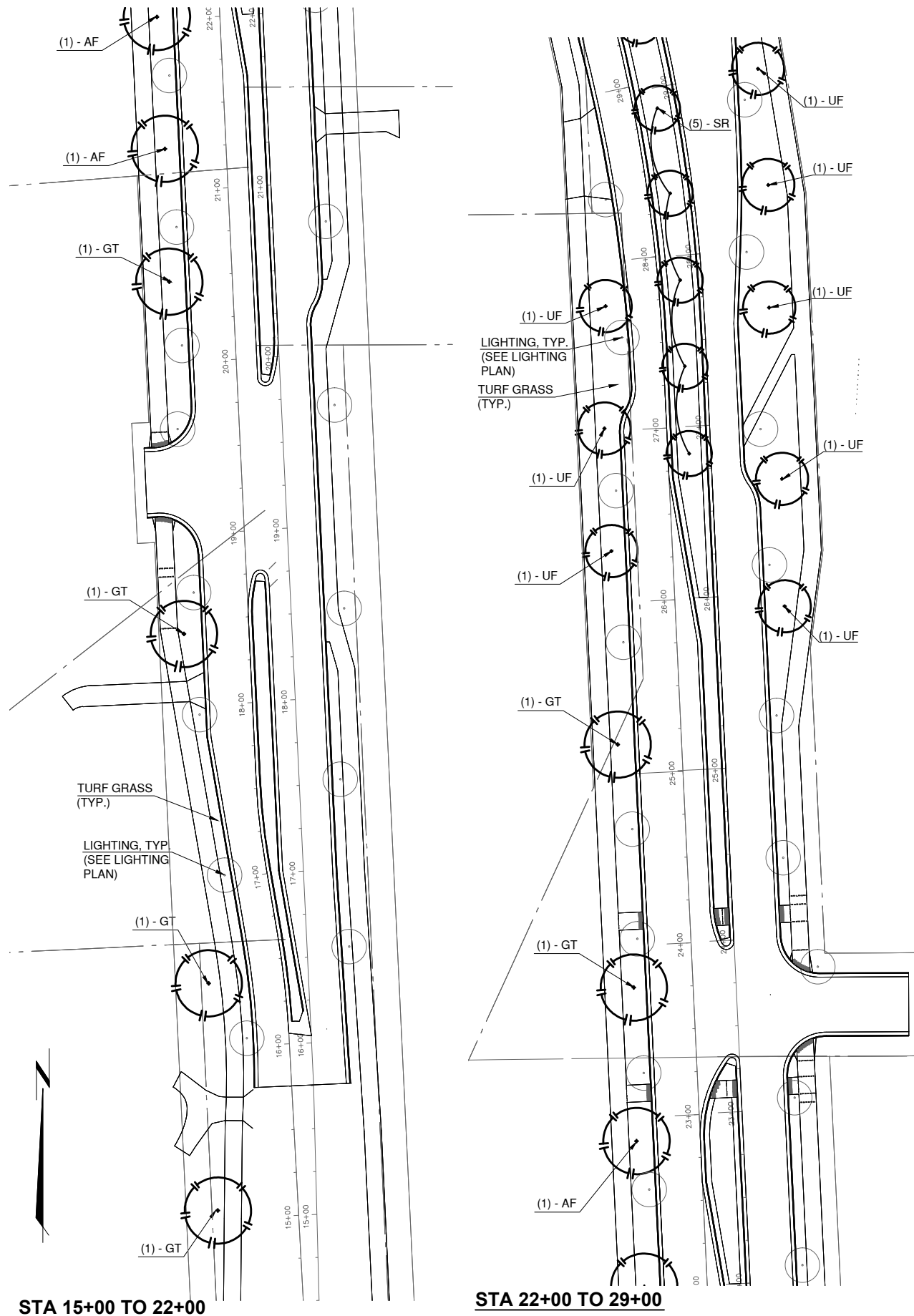
2



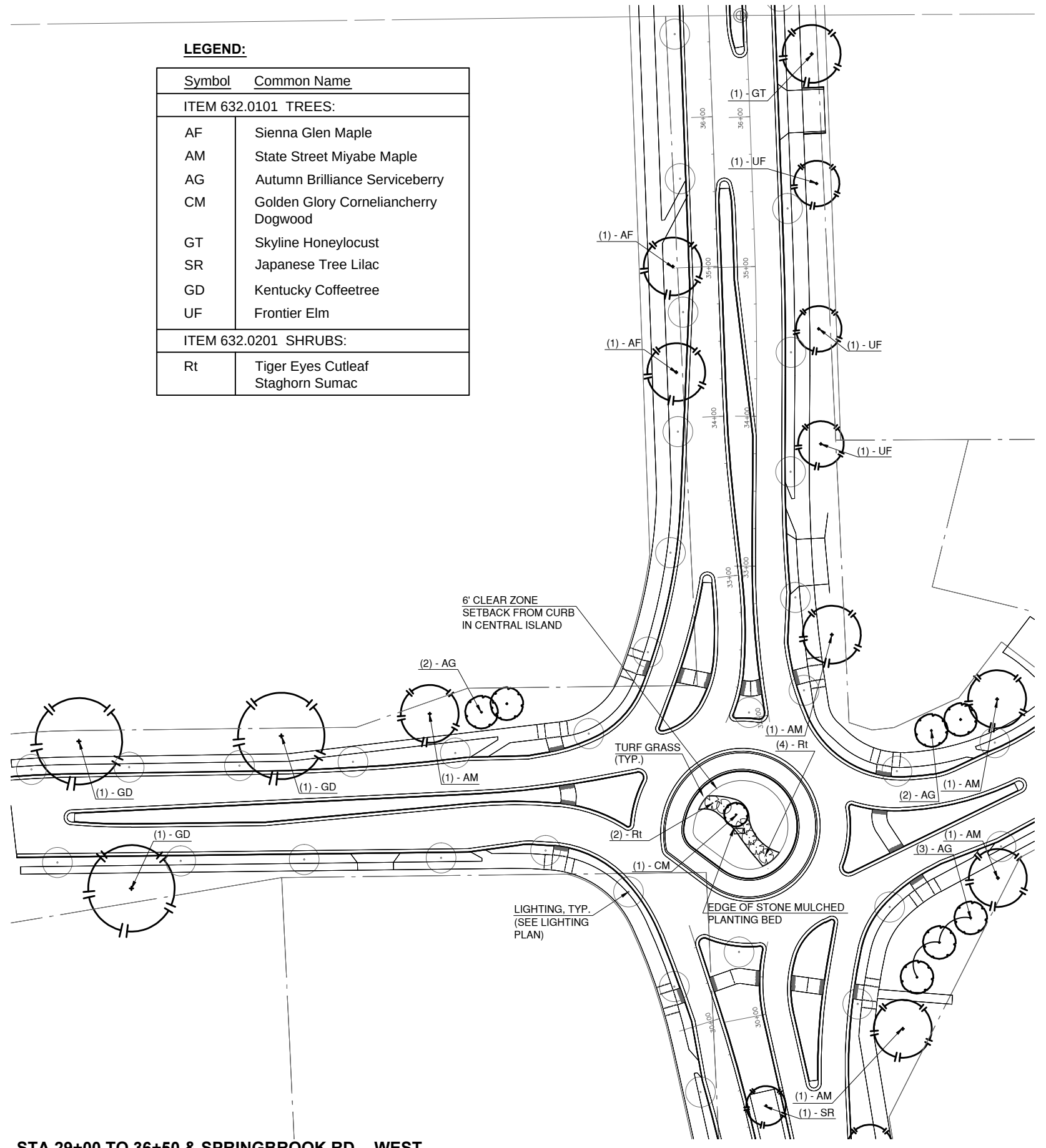
2

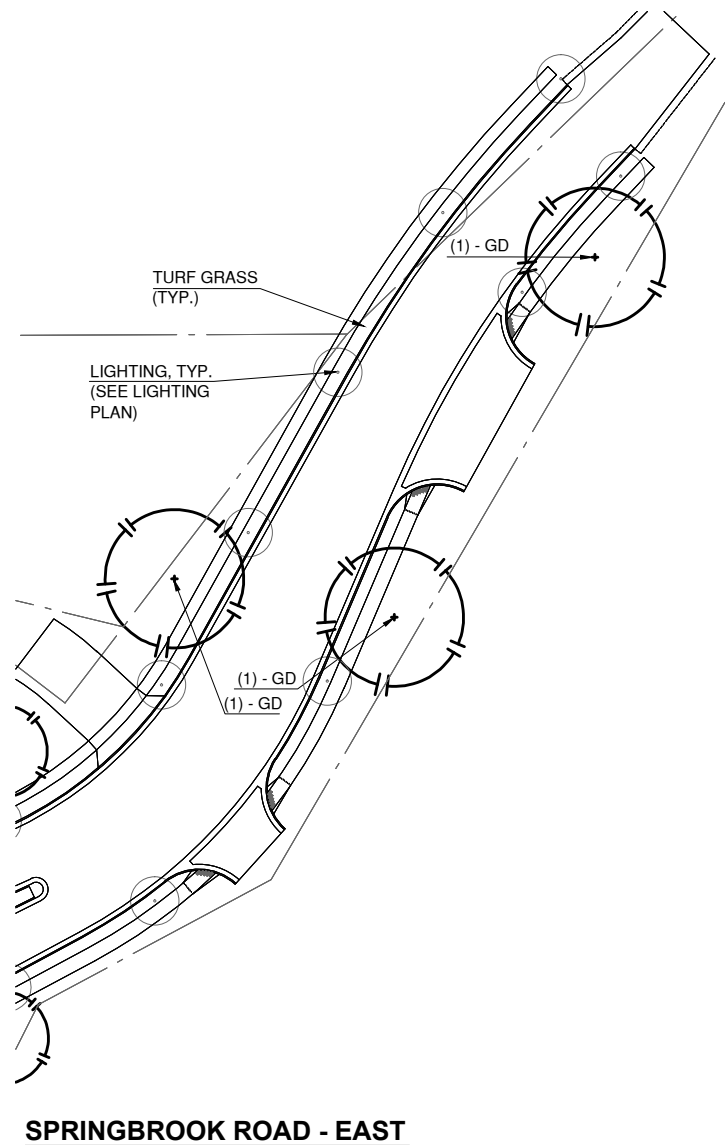
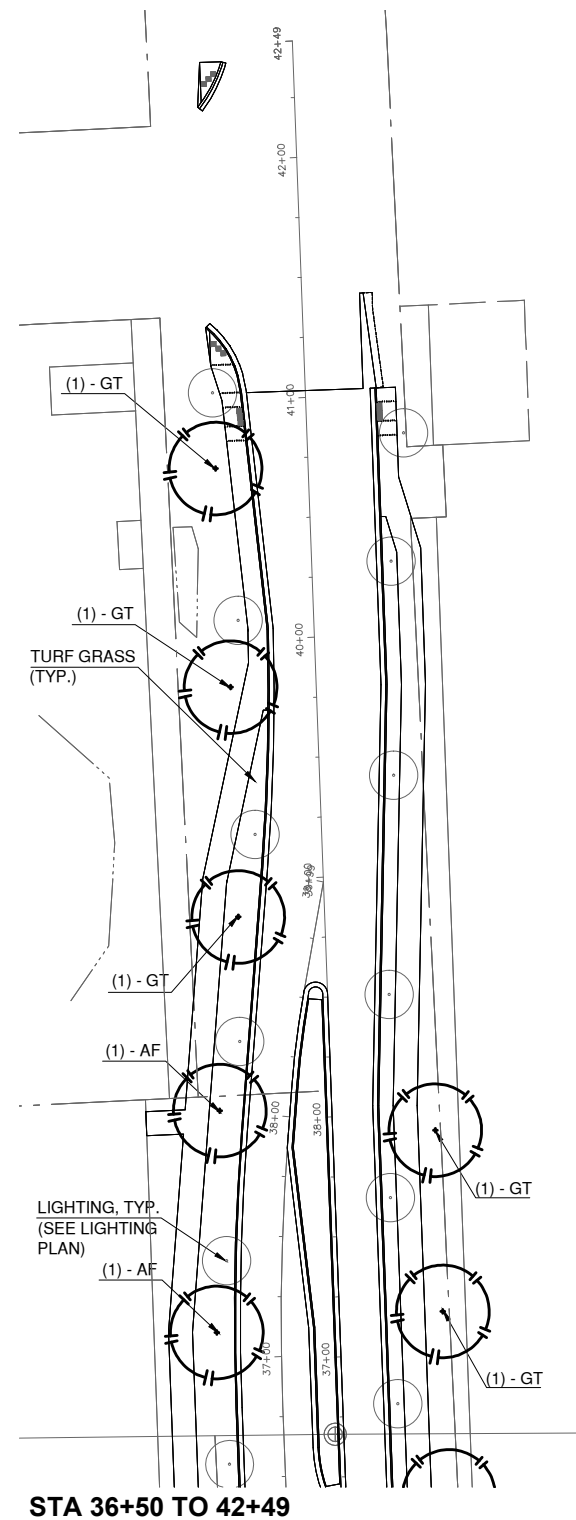




**LEGEND:**

Symbol	Common Name
ITEM 632.0101 TREES:	
AF	Sienna Glen Maple
AM	State Street Miyabe Maple
AG	Autumn Brilliance Serviceberry
CM	Golden Glory Corneliancherry Dogwood
GT	Skyline Honeylocust
SR	Japanese Tree Lilac
GD	Kentucky Coffeetree
UF	Frontier Elm
ITEM 632.0201 SHRUBS:	
Rt	Tiger Eyes Cutleaf Staghorn Sumac



**LEGEND:**

Symbol	Common Name
ITEM 632.0101 TREES:	
AF	Sienna Glen Maple
AM	State Street Miyabe Maple
AG	Autumn Brilliance Serviceberry
CM	Golden Glory Corneliancherry Dogwood
GT	Skyline Honeylocust
SR	Japanese Tree Lilac
GD	Kentucky Coffeetree
UF	Frontier Elm
ITEM 632.0201 SHRUBS:	
Rt	Tiger Eyes Cutleaf Staghorn Sumac

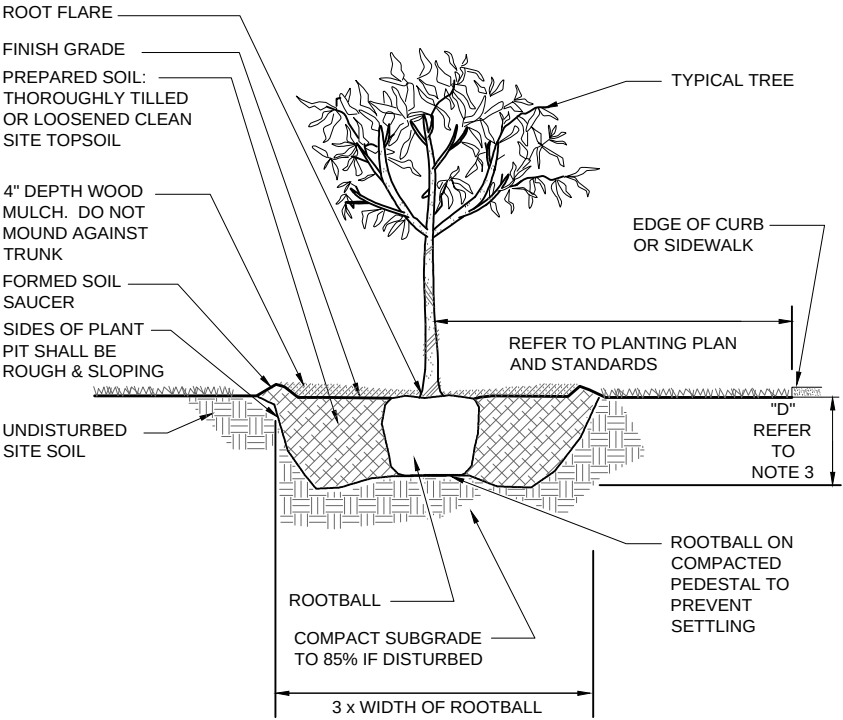
GENERAL NOTES:

1. The contractor is to review all site engineering documents prior to installation. Any conflicts must be reported to the engineer. These landscape drawings are for the installation of plant materials unless otherwise stated.
2. Stake and layout all plant locations for approval of engineer prior to installation.
3. The contractor is responsible for all permits, fees and licenses necessary for the installation of this plan.
4. Any deviations or modifications to this plan require approval of the engineer.
5. Verify all existing utilities including irrigation lines prior to digging. Consult Digger's Hotline.
6. All individual trees planted singly are to receive 4" shredded hardwood mulch.
7. Planting bed located in the central roundabout island is to receive 4.5" of 1-1/2" size decorative river rock stone mulch. Provide sample to engineer for approval before installing.
8. All plant material is subject to availability and proper seasonal planting procedures.
9. Amended topsoil in planting beds to consist of topsoil mixed with two inches of organic compost roto-tilled into the top six inches of topsoil. Remove all rocks or foreign matter over 1" in diameter. Refer to Wisconsin Department of Natural Resources Specification S100 for compost requirements.
10. Refer to engineering plans and specifications for turf sod or seeding applications.
11. Street trees to be planted between curb and sidewalk are a minimum of 4' from back of curb and 3' from sidewalk.

PLANT DATA TABLE:

Symbol	Botanical Name	Common Name	ANZI Z60.1 -2004 Type	Mature Height	Size when Planted	Root Zone Mode	Min. Ball or Pot Diameter	Min. Ball or Pot Depth	Min. Root Spread	Min. Plant Hole Diameter	Plant Hole Depth	Brace or Guy	Fert. Units Req'd.	Rodent. Protection Req'd.	Mulch Ring Diameter	Planting Detail
ITEM 632.0101 TREES:																
AF	Acer x freemanii 'Sienna' PP11322	Sienna Glen Maple	1	50'	2.5" cal.	B.B.	28"	17"	-	84"	17"	no	0	none	84"	tree
AM	Acer miyabei 'State Street'	State Street Miyabe Maple	1	50'	3.0" cal.	B.B.	32"	20"	-	96"	20"	no	0	none	96"	tree
AG	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	3	25'	2.0" cal.	B.B.	14"	9"	-	42"	9"	no	0	none	42"	tree
CM	Cornus mas 'Golden Glory'	Golden Glory Corneliancherry Dogwood	4	25'	6' multi -stem	B.B.	16"	10"	-	48"	10"	no	0	none	plant bed	tree
GT	Gleditsia triacanthos 'Skycole' PP1619	Skyline Honeylocust	1	60'	3.0" cal.	B.B.	32"	20"	-	96"	20"	no	0	none	96"	tree
GD	Gymnocladus dioica	Kentucky Coffeetree	1	60'	2.5" cal.	B.B.	28"	17"	-	84"	17"	no	0	none	84"	tree
SR	Syringa reticulata	Japanese Tree Lilac	1	45'	2.5" cal.	B.B.	28"	17"	-	84"	17"	no	0	none	84"	tree
UF	Ulmus 'Frontier'	Frontier Elm	1	50'	2.5" cal.	B.B.	28"	17"	-	84"	17"	no	0	none	84"	tree
ITEM 632.0201 SHRUBS:																
Rt	Rhus typhina 'Bailtiger' PPAF	Tiger Eyes Cutleaf Staghorn Sumac	3	12'	24" min.	# 5 cont.	-	-	-	-	-	-	0	none	bed	shrub

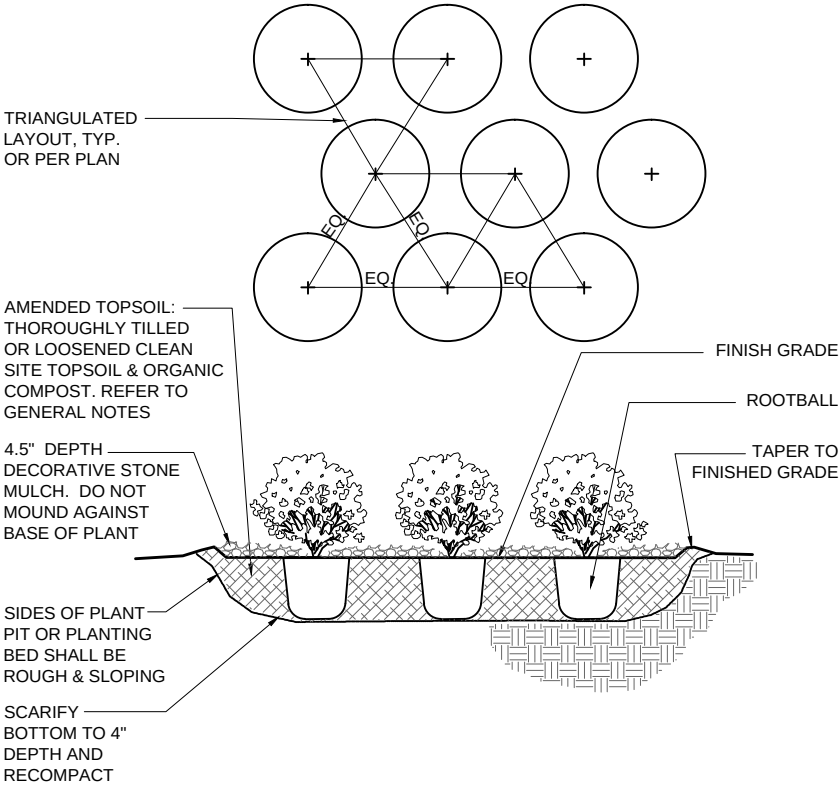
B.B.: balled & burlapped cont.: container grown



- NOTES:
- 1) NO PLANTS SHALL BE PRUNED EXCEPT AT THE DIRECTION OF ENGINEER OR ARCHITECT.
 - 2) STAKE TREE ONLY IF NEEDED, PER DIRECTION OF ENGINEER OR ARCHITECT.
 - 3) DEPTH ("D") OF PLANT TO BE EQUAL TO DEPTH OF ROOT BALL. TOP OF ROOT FLARE TO BE VISIBLE ABOVE LEVEL OF SOIL, REMOVE EXCESS SOIL AROUND ROOT FLARE IF NECESSARY.
 - 4) REMOVE ALL TWINE, ROPE, WIRE, BURLAP, AND PLASTIC WRAP FROM TOP HALF OF ROOTBALL. IF PLANT HAS WIRE BASKET CUT WIRE IN FOUR PLACES AND FOLD DOWN 8" INTO PLANTING HOLE.

TREE PLANTING DETAIL

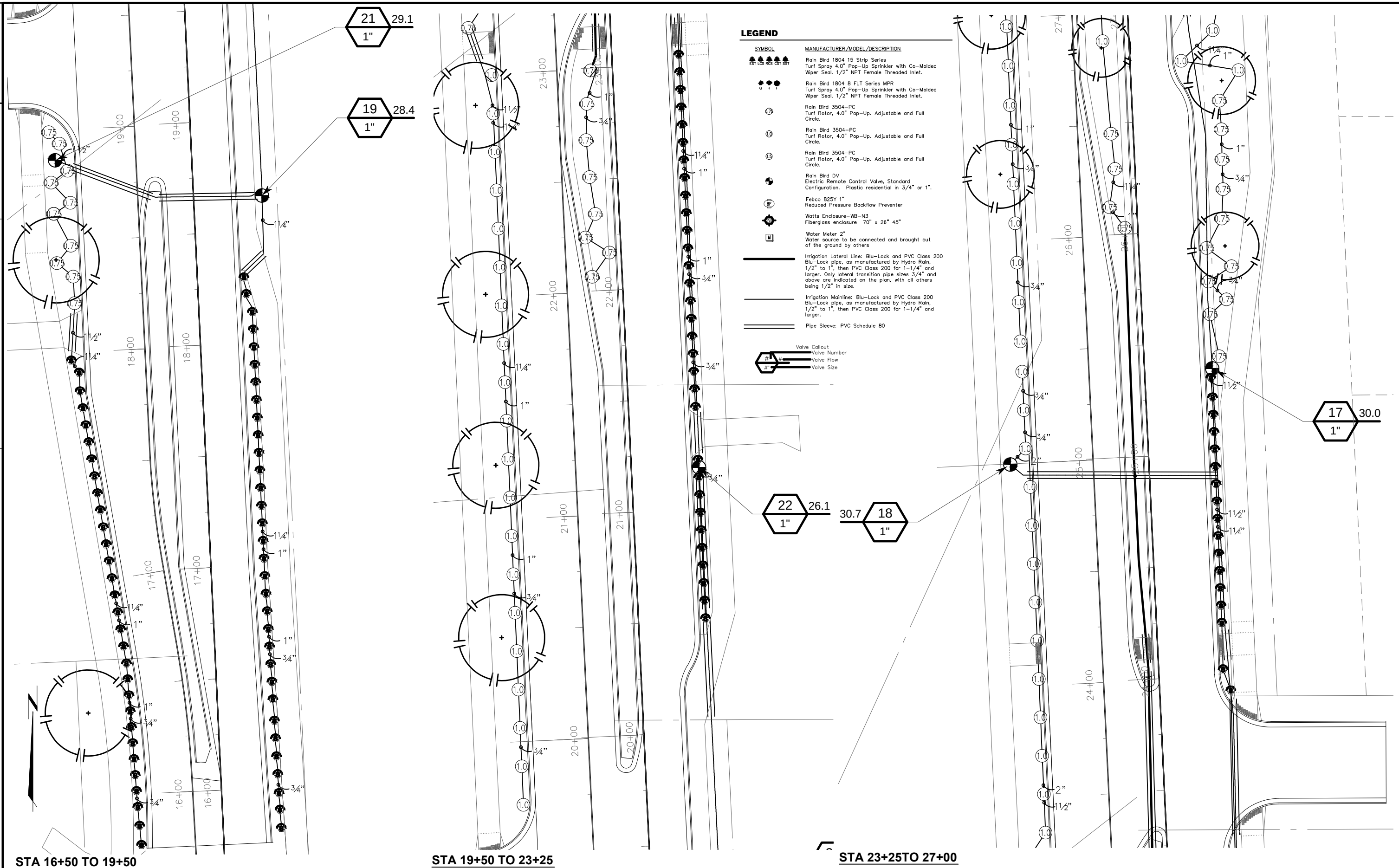
not to scale



SHRUB PLANTING DETAIL

not to scale

2



2

STA 16+50 TO 19+50

STA 19+50 TO 23+25

STA 23+25 TO 27+00

PROJECT NO: 3729-00-74

HWY: 39TH AVENUE (CTH EZ)

COUNTY: KENOSHA

IRRIGATION PLAN

SHEET

35

E

FILE NAME : 023105_pi

PLOT DATE : 07/14/2014

PLOT BY : JAO

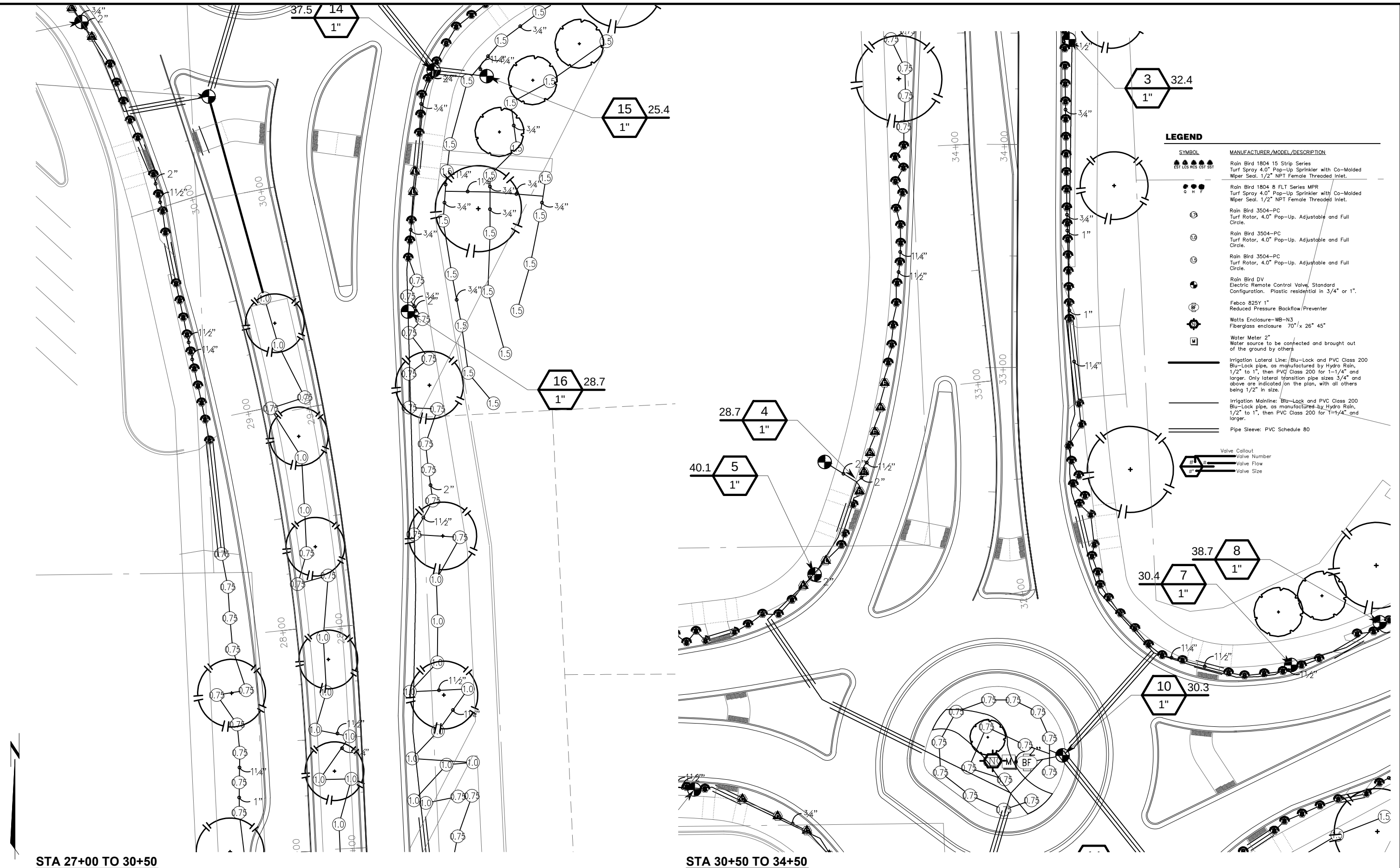
PLOT NAME : 023105_pi

PLOT SCALE : 1" = 20'

WISDOT/CADDs SHEET 42

2

2



PROJECT NO: 3729-00-74

HWY: 39TH AVENUE (CTH EZ)

COUNTY: KENOSHA

IRRIGATION PLAN

SHEET

36

E

FILE NAME : 023106_pi

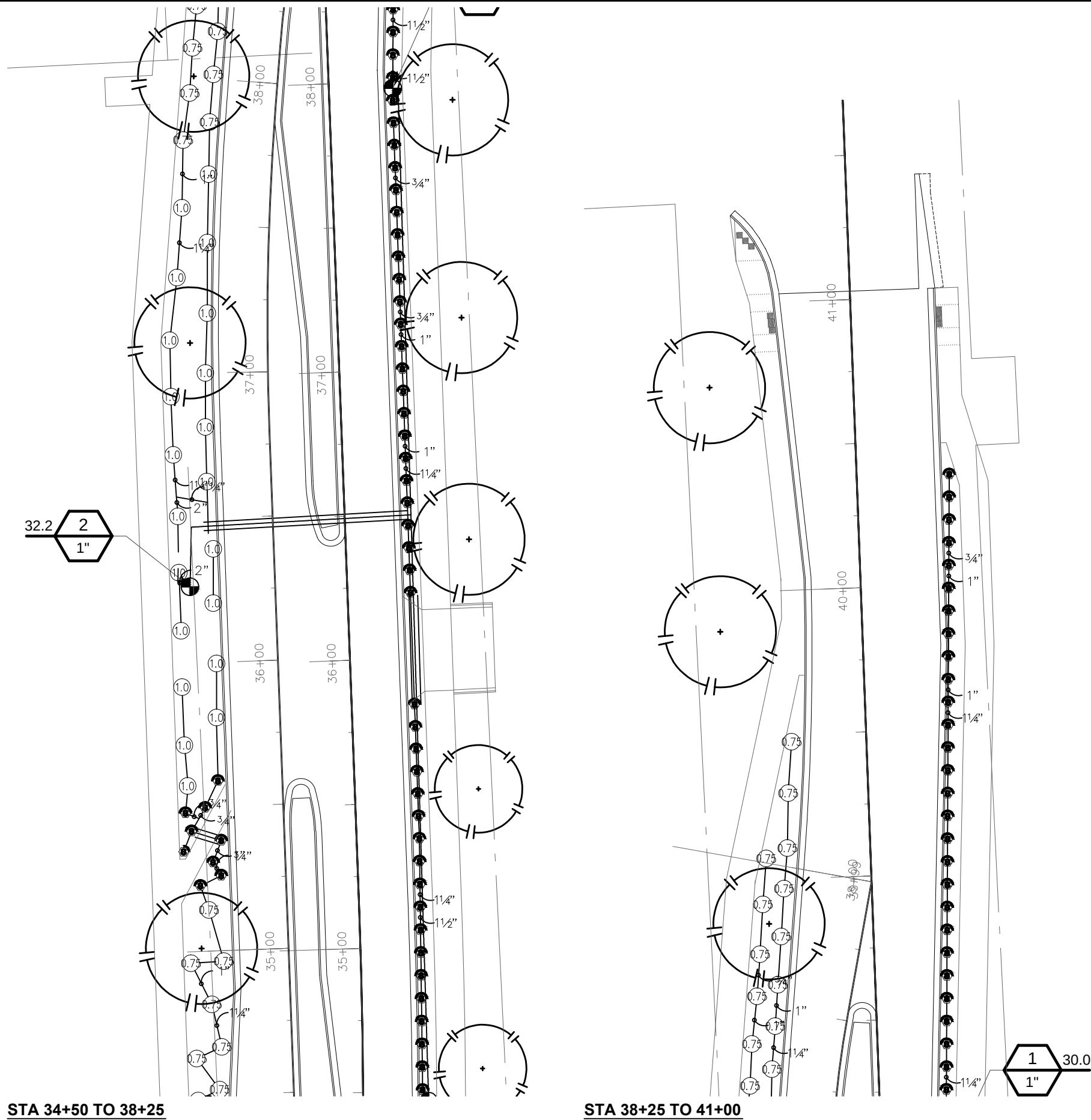
PLOT DATE : 07/14/2014

PLOT BY : JAO

PLOT NAME : 023106_pi

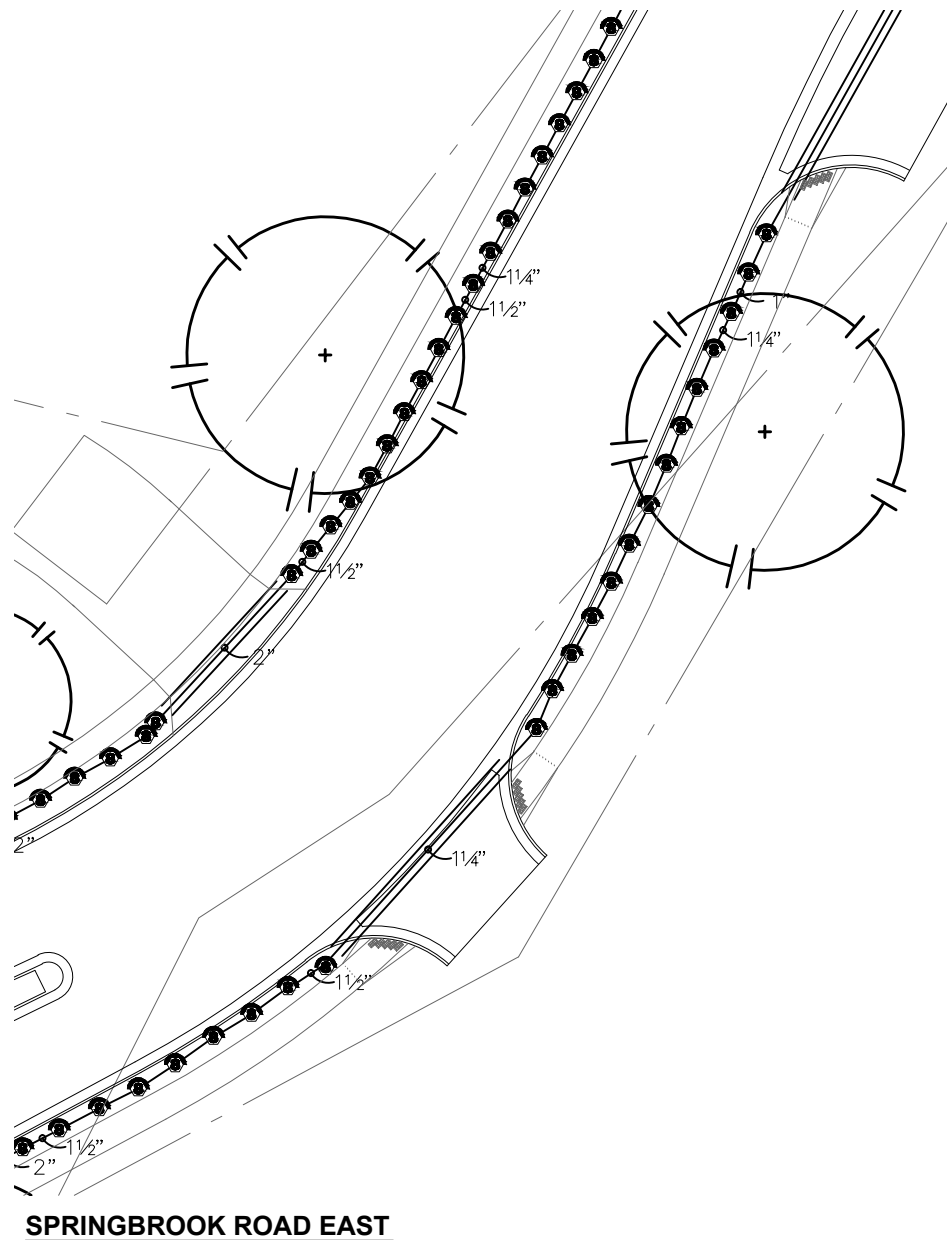
PLOT SCALE : 1" = 20'

WISDOT/CADDs SHEET 42

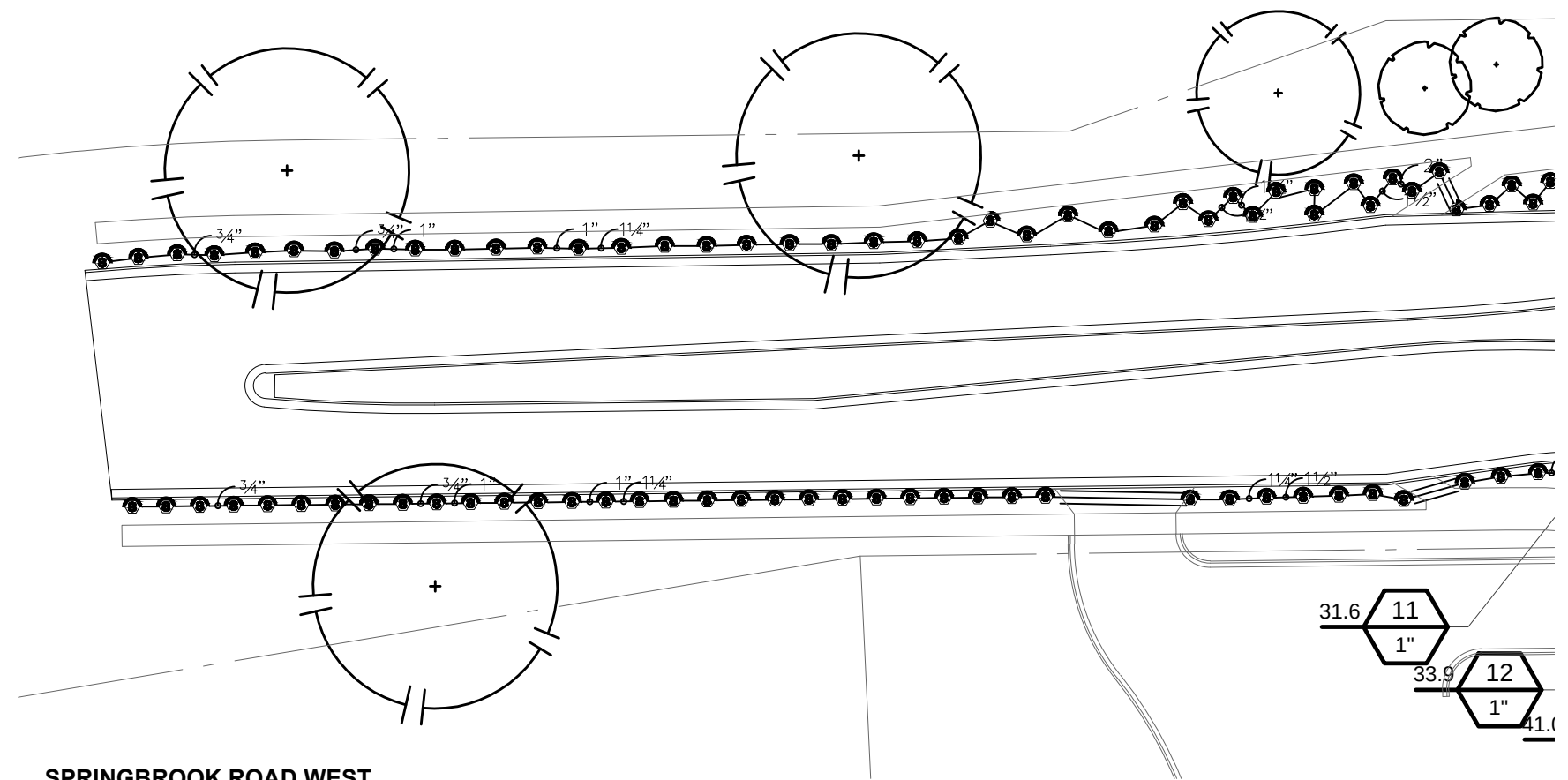
**LEGEND**

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	Rain Bird 1804 15 Strip Series Turf Spray 4.0\" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2\" NPT Female Threaded Inlet.
	Rain Bird 1804 8 FLT Series MPR Turf Spray 4.0\" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2\" NPT Female Threaded Inlet.
	Rain Bird 3504-PC Turf Rotor, 4.0\" Pop-Up. Adjustable and Full Circle.
	Rain Bird 3504-PC Turf Rotor, 4.0\" Pop-Up. Adjustable and Full Circle.
	Rain Bird 3504-PC Turf Rotor, 4.0\" Pop-Up. Adjustable and Full Circle.
	Rain Bird DV Electric Remote Control Valve, Standard Configuration. Plastic residential in 3/4\" or 1\".
	Febco 825Y 1\" Reduced Pressure Backflow Preventer
	Watts Enclosure-WB-N3 Fiberglass enclosure 70\" x 26\" 45\"
	Water Meter 2\" Water source to be connected and brought out of the ground by others
	Irrigation Lateral Line: Blu-Lock and PVC Class 200 Blu-Lock pipe, as manufactured by Hydro Rain, 1/2\" to 1\", then PVC Class 200 for 1-1/4\" and larger. Only lateral transition pipe sizes 3/4\" and above are indicated on the plan, with all others being 1/2\" in size.
	Irrigation Mainline: Blu-Lock and PVC Class 200 Blu-Lock pipe, as manufactured by Hydro Rain, 1/2\" to 1\", then PVC Class 200 for 1-1/4\" and larger.
	Pipe Sleeve: PVC Schedule 80

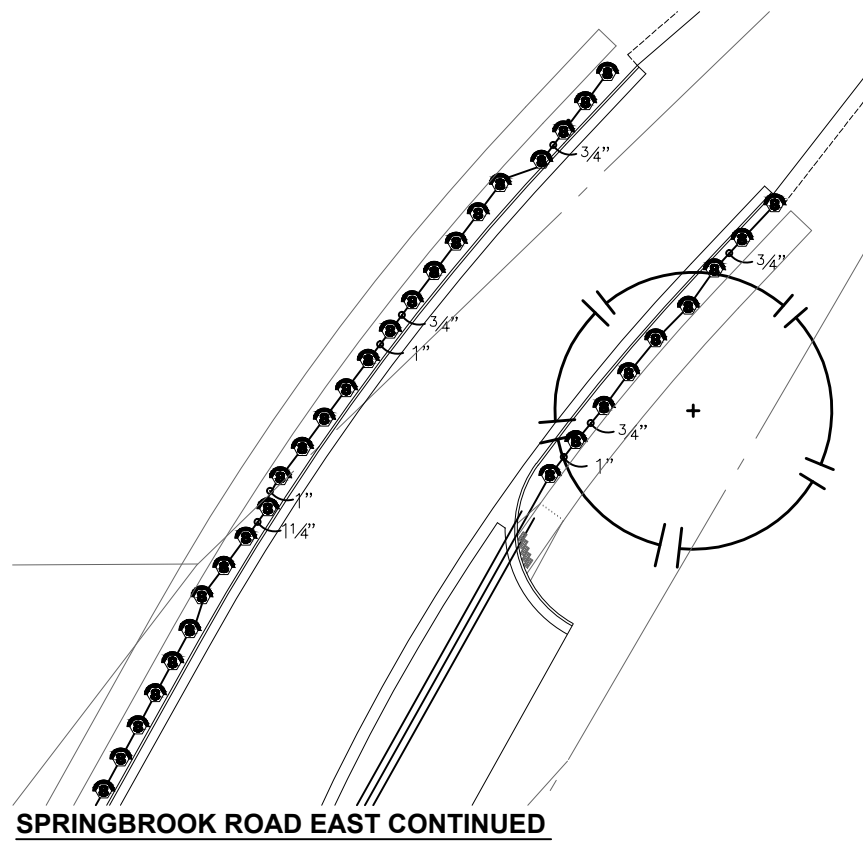




SPRINGBROOK ROAD EAST



SPRINGBROOK ROAD WEST



SPRINGBROOK ROAD EAST CONTINUED

LEGEND

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
▲▲▲▲▲	Rain Bird 1804 15 Strip Series
▲▲▲▲▲	Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal, 1/2" NPT Female Threaded Inlet.
●●●●●	Rain Bird 1804 8 FLT Series MPR
●●●●●	Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal, 1/2" NPT Female Threaded Inlet.
17	Rain Bird 3504-PC
17	Turf Rotor, 4.0" Pop-Up, Adjustable and Full Circle.
18	Rain Bird 3504-PC
18	Turf Rotor, 4.0" Pop-Up, Adjustable and Full Circle.
19	Rain Bird 3504-PC
19	Turf Rotor, 4.0" Pop-Up, Adjustable and Full Circle.
20	Rain Bird DV
20	Electric Remote Control Valve, Standard Configuration, Plastic residential in 3/4" or 1".
21	Febco 825Y 1"
21	Reduced Pressure Backflow Preventer
22	Watts Enclosure-WB-N3
22	Fiberglass enclosure 70" x 26" 45"
23	Water Meter 2"
23	Water source to be connected and brought out of the ground by others
24	Irrigation Lateral Line: Blu-Lock and PVC Class 200
24	Blu-Lock pipe, as manufactured by Hydro Rain, 1/2" to 1", then PVC Class 200 for 1-1/4" and larger. Only lateral transition pipe sizes 3/4" and above are indicated on the plan, with all others being 1/2" in size.
25	Irrigation Mainline: Blu-Lock and PVC Class 200
25	Blu-Lock pipe, as manufactured by Hydro Rain, 1/2" to 1", then PVC Class 200 for 1-1/4" and larger.
26	Pipe Sleeve: PVC Schedule 80



VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	WIRE	PSI	PSI @ POC	GPM	HEAD ELEV	VALVE ELEV	PRECIP
1	Rain Bird DV	1"	Turf Spray		44.66	60.44	30.02	4.00 ft	0.00 ft	1.21 in/h
2	Rain Bird DV	1"	Turf Rotor		44.84	60.91	32.19	4.00 ft	0.00 ft	0.49 in/h
3	Rain Bird DV	1"	Turf Spray		44.37	58.37	32.39	2.00 ft	0.00 ft	1.19 in/h
4	Rain Bird DV	1"	Turf Spray		43.37	56.12	28.66	2.00 ft	0.00 ft	0.50 in/h
5	Rain Bird DV	1"	Turf Spray		45.87	59.92	40.06	2.00 ft	0.00 ft	1.21 in/h
7	Rain Bird DV	1"	Turf Spray		43.46	55.72	30.39	1.00 ft	0.00 ft	1.20 in/h
8	Rain Bird DV	1"	Turf Spray		45.74	59.44	38.71	2.00 ft	0.00 ft	1.23 in/h
10	Rain Bird DV	1"	Turf Rotor		37.19	48.65	30.29	1.00 ft	0.00 ft	0.56 in/h
11	Rain Bird DV	1"	Turf Spray		43.57	56.72	31.60	1.00 ft	0.00 ft	1.15 in/h
12	Rain Bird DV	1"	Turf Spray		38.08	50.93	33.93	1.00 ft	0.00 ft	0.48 in/h
13	Rain Bird DV	1"	Turf Rotor		38.74	52.00	41.02	1.00 ft	0.00 ft	0.49 in/h
14	Rain Bird DV	1"	Turf Spray		44.62	57.38	37.52	1.00 ft	0.00 ft	1.06 in/h
15	Rain Bird DV	1"	Turf Rotor		36.67	48.53	25.44	1.00 ft	0.00 ft	0.48 in/h
16	Rain Bird DV	1"	Turf Rotor		36.70	49.27	28.71	1.00 ft	0.00 ft	0.49 in/h
17	Rain Bird DV	1"	Turf Spray		42.80	57.99	30.02	0.00 ft	0.00 ft	1.17 in/h
18	Rain Bird DV	1"	Turf Spray		36.88	53.15	30.66	0.00 ft	0.00 ft	0.58 in/h
19	Rain Bird DV	1"	Turf Spray		42.77	61.30	28.44	0.00 ft	0.00 ft	1.21 in/h
21	Rain Bird DV	1"			42.42	61.85	29.10	0.00 ft	0.00 ft	0.62 in/h
22	Rain Bird DV	1"	Turf Spray		41.99	58.20	26.07	0.00 ft	0.00 ft	1.22 in/h

WATERING SCHEDULE

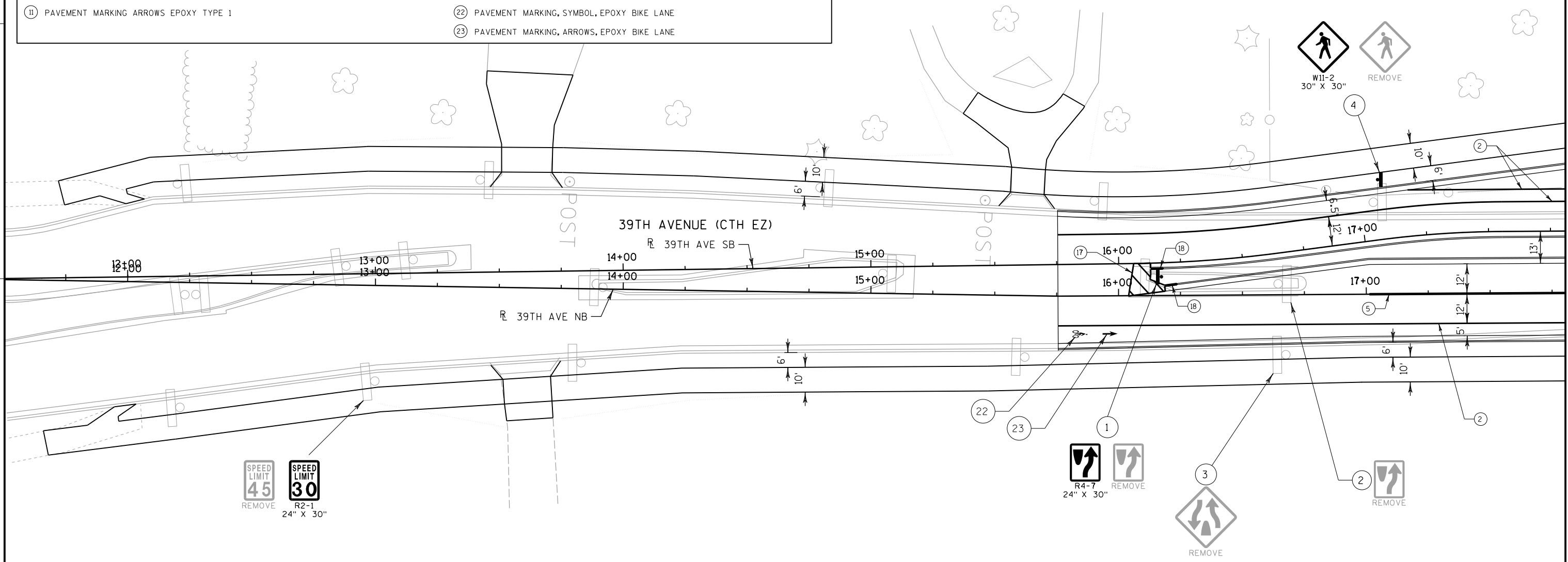
NUMBER	MODEL	TYPE	PRECIP	IN/WEEK	MIN/WEEK	GAL/WEEK	GAL/DAY
1	Rain Bird DV	Turf Spray	1.21 in/h				
2	Rain Bird DV	Turf Rotor	0.49 in/h				
3	Rain Bird DV	Turf Spray	1.19 in/h				
4	Rain Bird DV	Turf Spray	0.50 in/h				
5	Rain Bird DV	Turf Spray	1.21 in/h				
7	Rain Bird DV	Turf Spray	1.20 in/h				
8	Rain Bird DV	Turf Spray	1.23 in/h				
10	Rain Bird DV	Turf Rotor	0.56 in/h				
11	Rain Bird DV	Turf Spray	1.15 in/h				
12	Rain Bird DV	Turf Spray	0.48 in/h				
13	Rain Bird DV	Turf Rotor	0.49 in/h				
14	Rain Bird DV	Turf Spray	1.06 in/h				
15	Rain Bird DV	Turf Rotor	0.48 in/h				
16	Rain Bird DV	Turf Rotor	0.49 in/h				
17	Rain Bird DV	Turf Spray	1.17 in/h				
18	Rain Bird DV	Turf Spray	0.58 in/h				
19	Rain Bird DV	Turf Spray	1.21 in/h				
21	Rain Bird DV		0.62 in/h				
22	Rain Bird DV	Turf Spray	1.22 in/h				
TOTALS:							

NOTE:
Sleeves to be buried at depth below the pavement base course.
Electrical service to be coordinated with WE Energies.

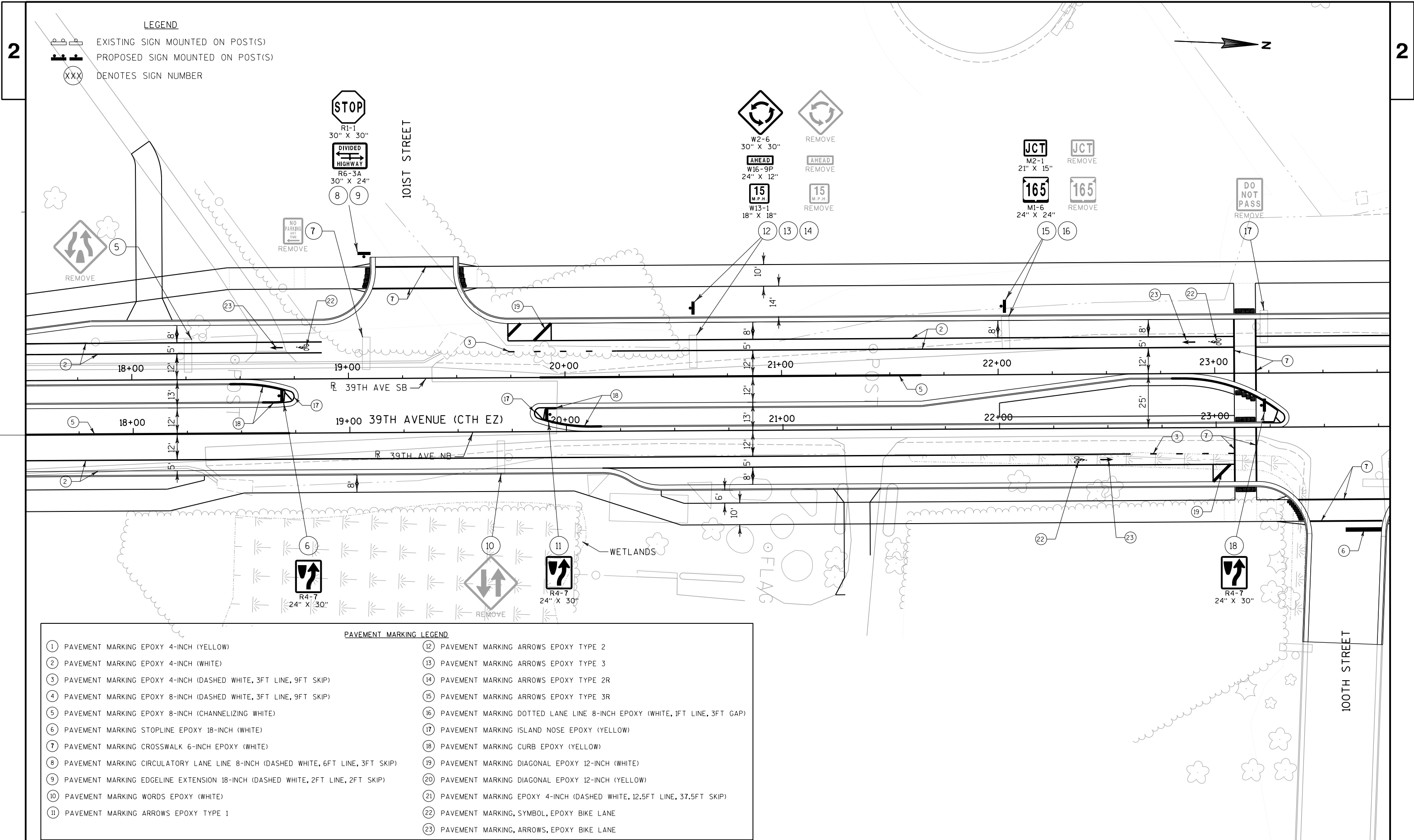
IRRIGATION_SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI				DETAIL
	Rain Bird 1804 15 Strip Series Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet.	15	30				
	Rain Bird 1804 8 FLT Series MPR Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet.	457	30				
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS	DETAIL	
	Rain Bird 3504-PC Turf Rotor, 4.0" Pop-Up. Adjustable and Full Circle.	109	25	0.54	13'		
	Rain Bird 3504-PC Turf Rotor, 4.0" Pop-Up. Adjustable and Full Circle.	91	25	0.77	18'		
	Rain Bird 3504-PC Turf Rotor, 4.0" Pop-Up. Adjustable and Full Circle.	24	25	1.06	20'		
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY				DETAIL	
	Rain Bird DV Electric Remote Control Valve, Standard Configuration. Plastic residential in 3/4" or 1".	19					
	Febco 825Y 1" Reduced Pressure Backflow Preventer	1					
	Watts Enclosure-WB-N3 Fiberglass enclosure 70" x 26" 45"	1					
	Water Meter 2" Water source to be connected and brought out of the ground by others	1					
	Irrigation Pipe	12,700 lf					
	Irrigation Pipe						
	Pipe Sleeve: PVC Schedule 80	1,400 lf					

PAVEMENT MARKING LEGEND					
①	PAVEMENT MARKING EPOXY 4-INCH (YELLOW)	⑫	PAVEMENT MARKING ARROWS EPOXY TYPE 2		
②	PAVEMENT MARKING EPOXY 4-INCH (WHITE)	⑬	PAVEMENT MARKING ARROWS EPOXY TYPE 3		
③	PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE, 3FT LINE, 9FT SKIP)	⑭	PAVEMENT MARKING ARROWS EPOXY TYPE 2R		
④	PAVEMENT MARKING EPOXY 8-INCH (DASHED WHITE, 3FT LINE, 9FT SKIP)	⑮	PAVEMENT MARKING ARROWS EPOXY TYPE 3R		
⑤	PAVEMENT MARKING EPOXY 8-INCH (CHANNELIZING WHITE)	⑯	PAVEMENT MARKING DOTTED LANE LINE 8-INCH EPOXY (WHITE, 1FT LINE, 3FT GAP)		
⑥	PAVEMENT MARKING STOPLINE EPOXY 18-INCH (WHITE)	⑰	PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)		
⑦	PAVEMENT MARKING CROSSWALK 6-INCH EPOXY (WHITE)	⑱	PAVEMENT MARKING CURB EPOXY (YELLOW)		
⑧	PAVEMENT MARKING CIRCULATORY LANE LINE 8-INCH (DASHED WHITE, 6FT LINE, 3FT SKIP)	⑲	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE)		
⑨	PAVEMENT MARKING EDGE LINE EXTENSION 18-INCH (DASHED WHITE, 2FT LINE, 2FT SKIP)	⑳	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)		
⑩	PAVEMENT MARKING WORDS EPOXY (WHITE)	㉑	PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE, 12.5FT LINE, 37.5FT SKIP)		
⑪	PAVEMENT MARKING ARROWS EPOXY TYPE 1	㉒	PAVEMENT MARKING, SYMBOL, EPOXY BIKE LANE		
		㉓	PAVEMENT MARKING, ARROWS, EPOXY BIKE LANE		



LEGEND	
	EXISTING SIGN MOUNTED ON POST(S)
	PROPOSED SIGN MOUNTED ON POST(S)
ⓧ	DENOTES SIGN NUMBER



LEGEND

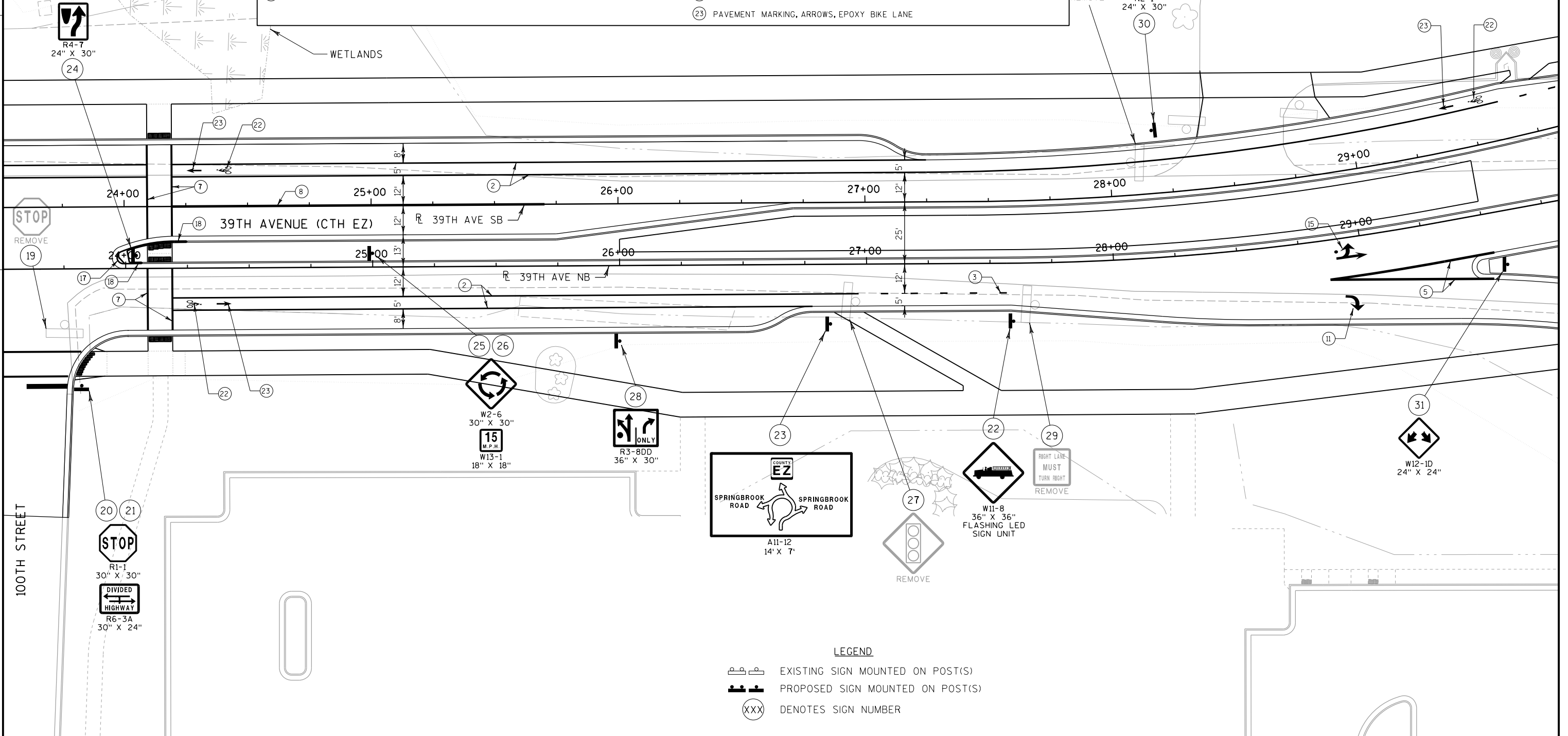
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- DENOTES SIGN NUMBER

PAVEMENT MARKING LEGEND

- | | |
|--|---|
| ① PAVEMENT MARKING EPOXY 4-INCH (YELLOW) | ⑫ PAVEMENT MARKING ARROWS EPOXY TYPE 2 |
| ② PAVEMENT MARKING EPOXY 4-INCH (WHITE) | ⑬ PAVEMENT MARKING ARROWS EPOXY TYPE 3 |
| ③ PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE, 3FT LINE, 9FT SKIP) | ⑭ PAVEMENT MARKING ARROWS EPOXY TYPE 2R |
| ④ PAVEMENT MARKING EPOXY 8-INCH (DASHED WHITE, 3FT LINE, 9FT SKIP) | ⑮ PAVEMENT MARKING ARROWS EPOXY TYPE 3R |
| ⑤ PAVEMENT MARKING EPOXY 8-INCH (CHANNELIZING WHITE) | ⑯ PAVEMENT MARKING DOTTED LANE LINE 8-INCH EPOXY (WHITE, 1FT LINE, 3FT GAP) |
| ⑥ PAVEMENT MARKING STOPLINE EPOXY 18-INCH (WHITE) | ⑰ PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW) |
| ⑦ PAVEMENT MARKING CROSSWALK 6-INCH EPOXY (WHITE) | ⑱ PAVEMENT MARKING CURB EPOXY (YELLOW) |
| ⑧ PAVEMENT MARKING CIRCULATORY LANE LINE 8-INCH (DASHED WHITE, 6FT LINE, 3FT SKIP) | ⑲ PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) |
| ⑨ PAVEMENT MARKING EDGE LINE EXTENSION 18-INCH (DASHED WHITE, 2FT LINE, 2FT SKIP) | ⑳ PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
| ⑩ PAVEMENT MARKING WORDS EPOXY (WHITE) | ㉑ PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE, 12.5FT LINE, 37.5FT SKIP) |
| ⑪ PAVEMENT MARKING ARROWS EPOXY TYPE 1 | ㉒ PAVEMENT MARKING, SYMBOL, EPOXY BIKE LANE |
| | ㉓ PAVEMENT MARKING, ARROWS, EPOXY BIKE LANE |

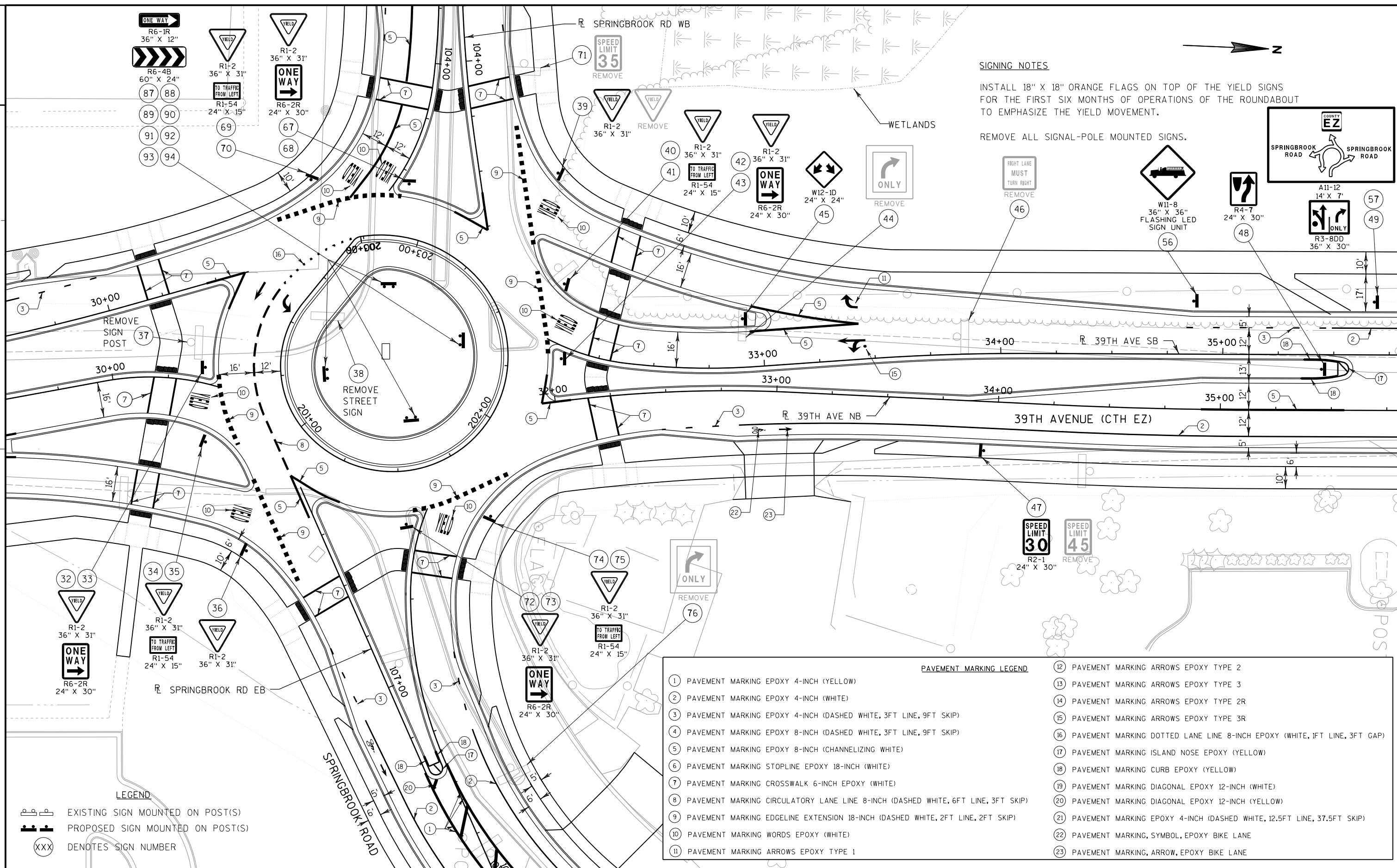
PAVEMENT MARKING LEGEND

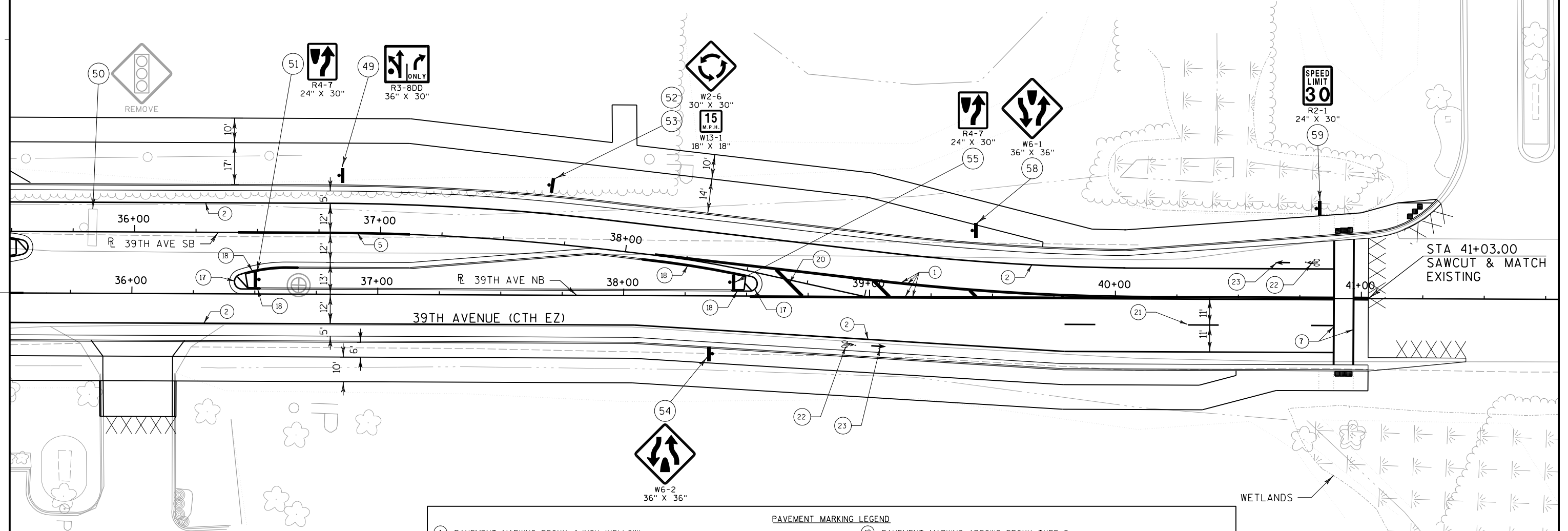
- | | |
|--|---|
| ① PAVEMENT MARKING EPOXY 4-INCH (YELLOW) | ⑫ PAVEMENT MARKING ARROWS EPOXY TYPE 2 |
| ② PAVEMENT MARKING EPOXY 4-INCH (WHITE) | ⑬ PAVEMENT MARKING ARROWS EPOXY TYPE 3 |
| ③ PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE, 3FT LINE, 9FT SKIP) | ⑭ PAVEMENT MARKING ARROWS EPOXY TYPE 2R |
| ④ PAVEMENT MARKING EPOXY 8-INCH (DASHED WHITE, 3FT LINE, 9FT SKIP) | ⑮ PAVEMENT MARKING ARROWS EPOXY TYPE 3R |
| ⑤ PAVEMENT MARKING EPOXY 8-INCH (CHANNELIZING WHITE) | ⑯ PAVEMENT MARKING DOTTED LANE LINE 8-INCH EPOXY (WHITE, 1FT LINE, 3FT GAP) |
| ⑥ PAVEMENT MARKING STOPLINE EPOXY 18-INCH (WHITE) | ⑰ PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW) |
| ⑦ PAVEMENT MARKING CROSSWALK 6-INCH EPOXY (WHITE) | ⑱ PAVEMENT MARKING CURB EPOXY (YELLOW) |
| ⑧ PAVEMENT MARKING CIRCULATORY LANE LINE 8-INCH (DASHED WHITE, 6FT LINE, 3FT SKIP) | ⑲ PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) |
| ⑨ PAVEMENT MARKING EDGE LINE EXTENSION 18-INCH (DASHED WHITE, 2FT LINE, 2FT SKIP) | ⑳ PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
| ⑩ PAVEMENT MARKING WORDS EPOXY (WHITE) | ㉑ PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE, 12.5FT LINE, 37.5FT SKIP) |
| ㉒ PAVEMENT MARKING ARROWS EPOXY TYPE 1 | ㉒ PAVEMENT MARKING, SYMBOL, EPOXY BIKE LANE |
| | ㉓ PAVEMENT MARKING, ARROWS, EPOXY BIKE LANE |



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
PROPOSED SIGN MOUNTED ON POST(S)
XXX DENOTES SIGN NUMBER

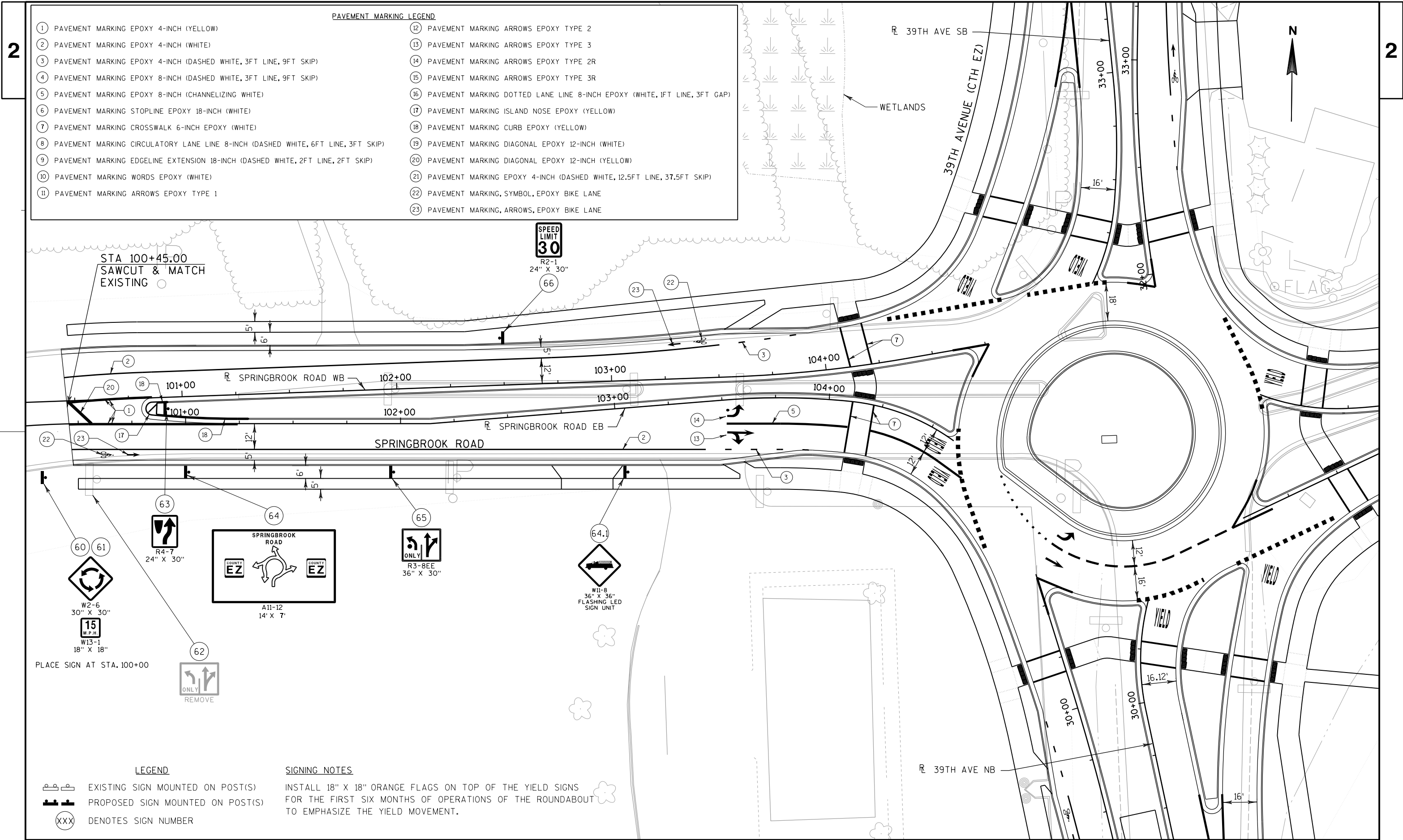


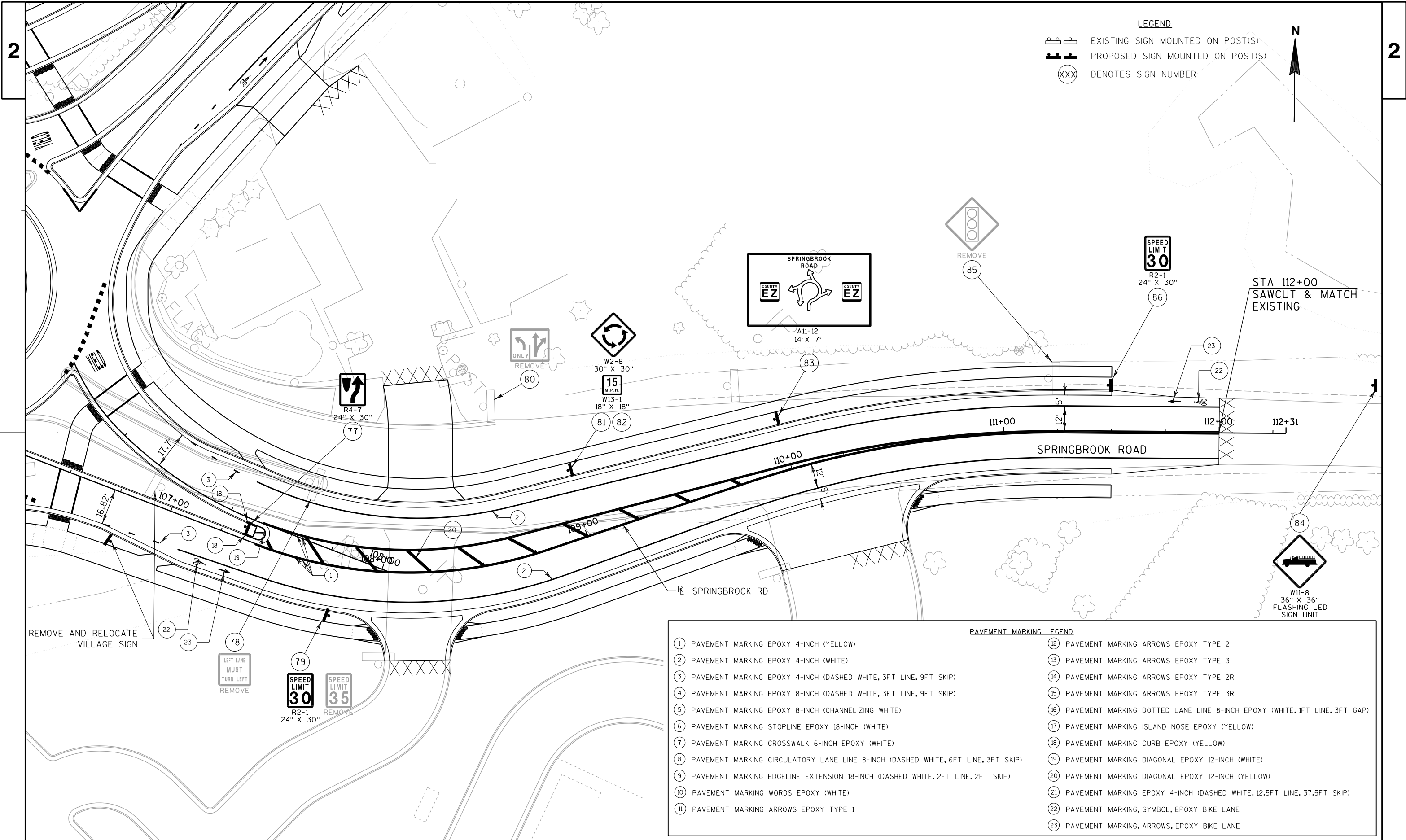
**LEGEND**

- EXISTING SIGN MOUNTED ON POST(S)
 PROPOSED SIGN MOUNTED ON POST(S)
 DENOTES SIGN NUMBER

PAVEMENT MARKING LEGEND

- | | |
|--|--|
| (1) PAVEMENT MARKING EPOXY 4-INCH (YELLOW) | (12) PAVEMENT MARKING ARROWS EPOXY TYPE 2 |
| (2) PAVEMENT MARKING EPOXY 4-INCH (WHITE) | (13) PAVEMENT MARKING ARROWS EPOXY TYPE 3 |
| (3) PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE, 3FT LINE, 9FT SKIP) | (14) PAVEMENT MARKING ARROWS EPOXY TYPE 2R |
| (4) PAVEMENT MARKING EPOXY 8-INCH (DASHED WHITE, 3FT LINE, 9FT SKIP) | (15) PAVEMENT MARKING ARROWS EPOXY TYPE 3R |
| (5) PAVEMENT MARKING EPOXY 8-INCH (CHANNELIZING WHITE) | (16) PAVEMENT MARKING DOTTED LANE LINE 8-INCH EPOXY (WHITE, 1FT LINE, 3FT GAP) |
| (6) PAVEMENT MARKING STOPLINE EPOXY 18-INCH (WHITE) | (17) PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW) |
| (7) PAVEMENT MARKING CROSSWALK 6-INCH EPOXY (WHITE) | (18) PAVEMENT MARKING CURB EPOXY (YELLOW) |
| (8) PAVEMENT MARKING CIRCULATORY LANE LINE 8-INCH (DASHED WHITE, 6FT LINE, 3FT SKIP) | (19) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) |
| (9) PAVEMENT MARKING EDGETLINE EXTENSION 18-INCH (DASHED WHITE, 2FT LINE, 2FT SKIP) | (20) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
| (10) PAVEMENT MARKING WORDS EPOXY (WHITE) | (21) PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE, 12.5FT LINE, 37.5FT SKIP) |
| (11) PAVEMENT MARKING ARROWS EPOXY TYPE 1 | (22) PAVEMENT MARKING, SYMBOL, EPOXY BIKE LANE |
| | (23) PAVEMENT MARKING, ARROWS, EPOXY BIKE LANE |





LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- DENOTES SIGN NUMBER

PAVEMENT MARKING LEGEND

- | | |
|--|--|
| (1) PAVEMENT MARKING EPOXY 4-INCH (YELLOW) | (12) PAVEMENT MARKING ARROWS EPOXY TYPE 2 |
| (2) PAVEMENT MARKING EPOXY 4-INCH (WHITE) | (13) PAVEMENT MARKING ARROWS EPOXY TYPE 3 |
| (3) PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE, 3FT LINE, 9FT SKIP) | (14) PAVEMENT MARKING ARROWS EPOXY TYPE 2R |
| (4) PAVEMENT MARKING EPOXY 8-INCH (DASHED WHITE, 3FT LINE, 9FT SKIP) | (15) PAVEMENT MARKING ARROWS EPOXY TYPE 3R |
| (5) PAVEMENT MARKING EPOXY 8-INCH (CHANNELIZING WHITE) | (16) PAVEMENT MARKING DOTTED LANE LINE 8-INCH EPOXY (WHITE, 1FT LINE, 3FT GAP) |
| (6) PAVEMENT MARKING STOPLINE EPOXY 18-INCH (WHITE) | (17) PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW) |
| (7) PAVEMENT MARKING CROSSWALK 6-INCH EPOXY (WHITE) | (18) PAVEMENT MARKING CURB EPOXY (YELLOW) |
| (8) PAVEMENT MARKING CIRCULATORY LANE LINE 8-INCH (DASHED WHITE, 6FT LINE, 3FT SKIP) | (19) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) |
| (9) PAVEMENT MARKING EDGETIME EXTENSION 18-INCH (DASHED WHITE, 2FT LINE, 2FT SKIP) | (20) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
| (10) PAVEMENT MARKING WORDS EPOXY (WHITE) | (21) PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE, 12.5FT LINE, 37.5FT SKIP) |
| (11) PAVEMENT MARKING ARROWS EPOXY TYPE 1 | (22) PAVEMENT MARKING, SYMBOL, EPOXY BIKE LANE |
| | (23) PAVEMENT MARKING, ARROWS, EPOXY BIKE LANE |

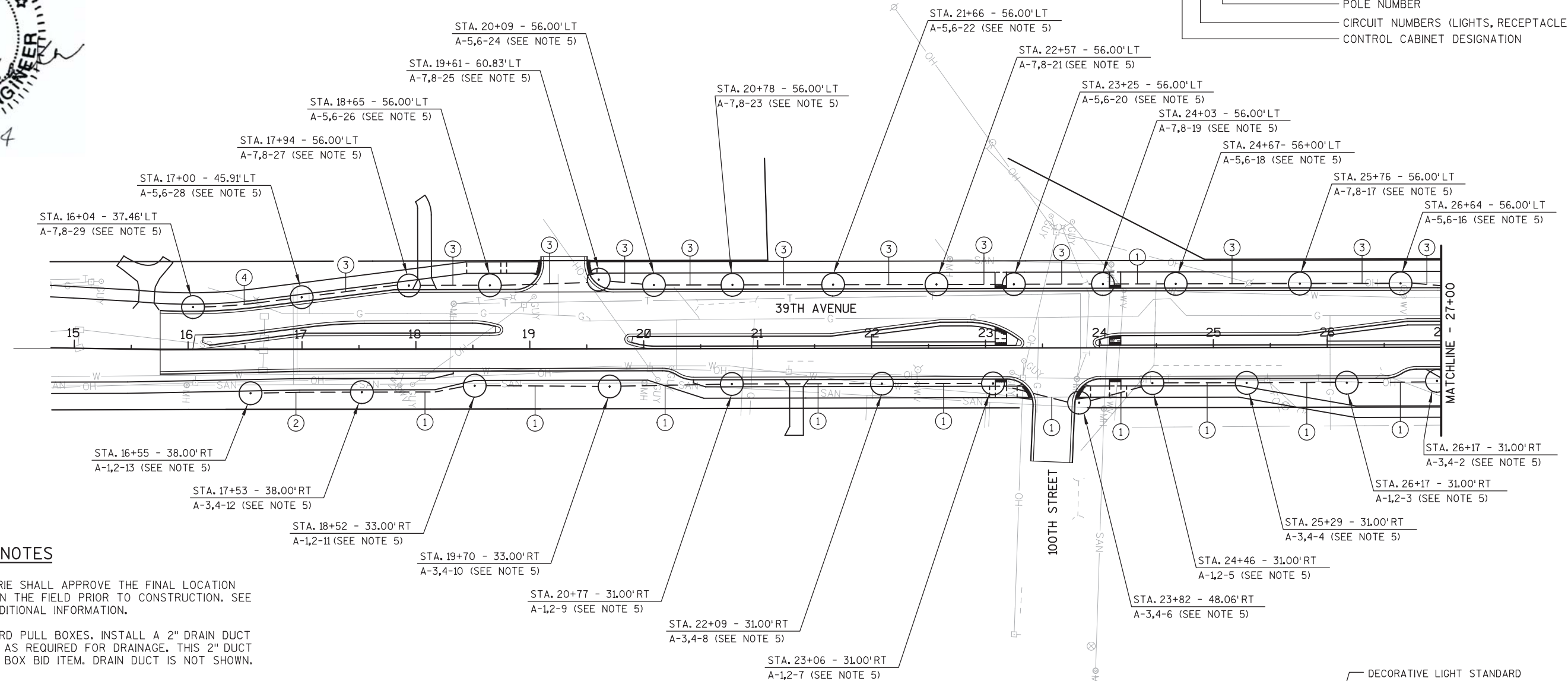
CONDUIT AND CABLE LEGEND

- ① CKTS. 1, 2, 3, 4 - 3*4, (LIGHTS) 4*6 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
- ② CKTS. 1, 2 - 2*4, (LIGHTS) 2*6 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
- ③ CKTS. 5, 6, 7, 8 - 3*2, (LIGHTS) 2*2, 2*4 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
- ④ CKTS. 7, 8 - 2*2, (LIGHTS) 2*2 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT



LEGEND

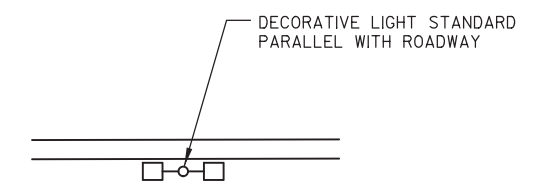
- DECORATIVE LIGHTING STANDARD WITH STERNBERG DUAL 95 WATT LANTERN STYLE "1230 LED PRAIRIE SERIES" LUMINAIRES, TWIN ARM MOUNT ON ROUND DECORATIVE STYLE POLE, WITH CONVENIENCE RECEPTACLE, AT 20'-0" MOUNTING HEIGHT
- ⊠ LIGHTING, CONTROL CABINET AND ELECTRICAL SERVICE METER BREAKER PEDESTAL ON CONCRETE CONTROL CABINET BASE - 120/240V, 1PH, 3W
- PULLBOX (SIZE SHOWN ON PLANS)
- 2" RIGID NON-METALLIC SCHEDULE 40 PVC CONDUIT
- STA. XX+XX - XX.XX'XT — LOCATION TO CENTER OF POLE
X-X,X-XX (SEE NOTE 5)
- POLE NUMBER
- CIRCUIT NUMBERS (LIGHTS, RECEPTACLE)
- CONTROL CABINET DESIGNATION

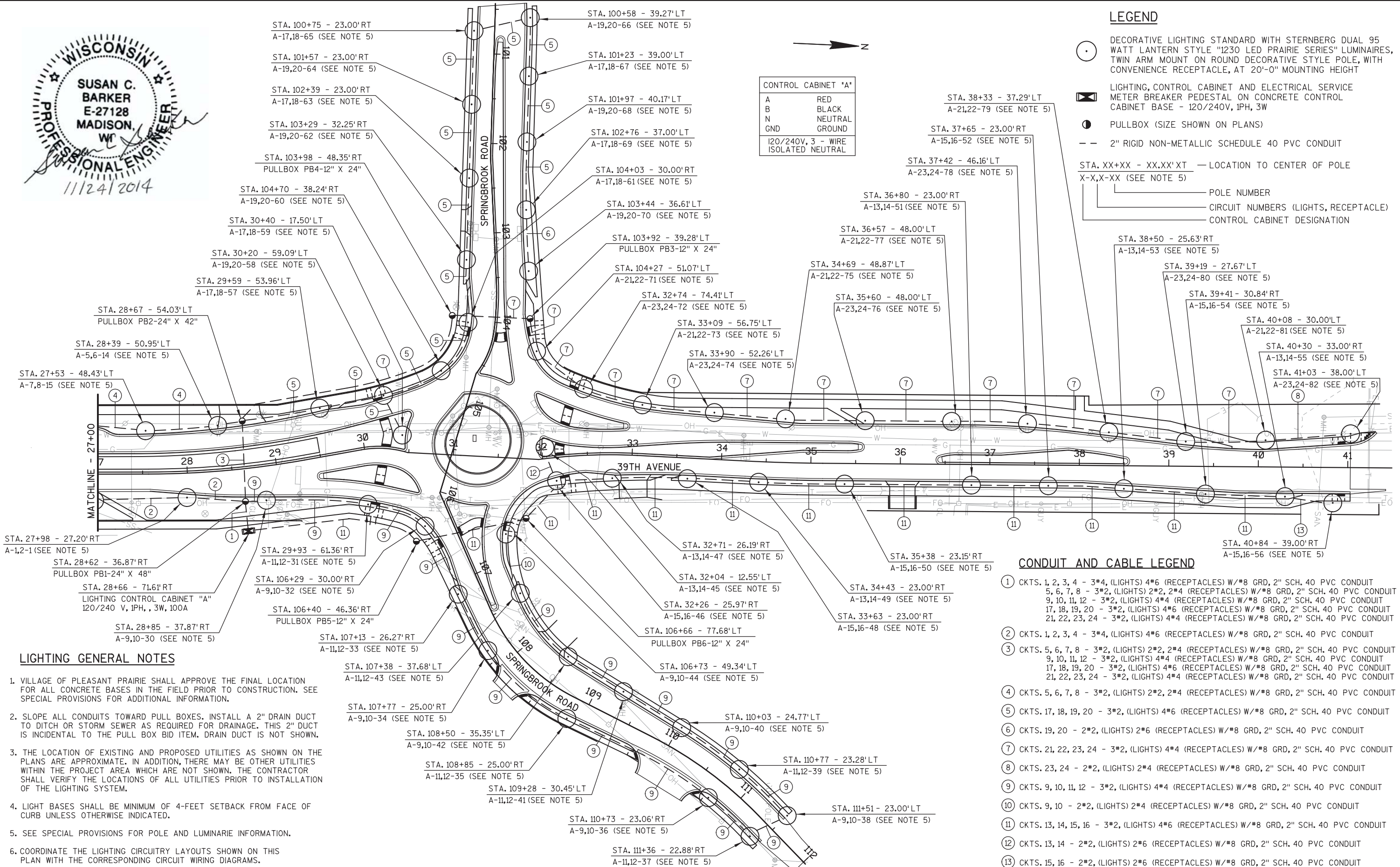


LIGHTING GENERAL NOTES

- VILLAGE OF PLEASANT PRAIRIE SHALL APPROVE THE FINAL LOCATION FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
- SLOPE ALL CONDUITS TOWARD PULL BOXES. INSTALL A 2" DRAIN DUCT TO DITCH OR STORM SEWER AS REQUIRED FOR DRAINAGE. THIS 2" DUCT IS INCIDENTAL TO THE PULL BOX BID ITEM. DRAIN DUCT IS NOT SHOWN.
- THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO INSTALLATION OF THE LIGHTING SYSTEM.
- LIGHT BASES SHALL BE MINIMUM OF 4-FEET SETBACK FROM FACE OF CURB UNLESS OTHERWISE INDICATED.
- SEE SPECIAL PROVISIONS FOR POLE AND LUMINARIE INFORMATION.
- COORDINATE THE LIGHTING CIRCUITRY LAYOUTS SHOWN ON THIS PLAN WITH THE CORRESPONDING CIRCUIT WIRING DIAGRAMS.

CONTROL CABINET "A"	
A	RED
B	BLACK
N	NEUTRAL
GND	GROUND
120/240V, 3 - WIRE ISOLATED NEUTRAL	

LIGHT POLE ORIENTATION
39TH AVENUE



LIGHTING GENERAL NOTES

- VILLAGE OF PLEASANT PRAIRIE SHALL APPROVE THE FINAL LOCATION FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
- SLOPE ALL CONDUITS TOWARD PULL BOXES. INSTALL A 2" DRAIN DUCT TO DITCH OR STORM SEWER AS REQUIRED FOR DRAINAGE. THIS 2" DUCT IS INCIDENTAL TO THE PULL BOX BID ITEM. DRAIN DUCT IS NOT SHOWN.
- THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO INSTALLATION OF THE LIGHTING SYSTEM.
- LIGHT BASES SHALL BE MINIMUM OF 4-FEET SETBACK FROM FACE OF CURB UNLESS OTHERWISE INDICATED.
- SEE SPECIAL PROVISIONS FOR POLE AND LUMINARIE INFORMATION.
- COORDINATE THE LIGHTING CIRCUITRY LAYOUTS SHOWN ON THIS PLAN WITH THE CORRESPONDING CIRCUIT WIRING DIAGRAMS.

LEGEND

- DECORATIVE LIGHTING STANDARD WITH STERNBERG DUAL 95 WATT LANTERN STYLE "1230 LED PRAIRIE SERIES" LUMINAIRES, TWIN ARM MOUNT ON ROUND DECORATIVE STYLE POLE, WITH CONVENIENCE RECEPTACLE, AT 20'-0" MOUNTING HEIGHT
- LIGHTING, CONTROL CABINET AND ELECTRICAL SERVICE METER BREAKER PEDESTAL ON CONCRETE CONTROL CABINET BASE - 120/240V, 1PH, 3W
- PULLBOX (SIZE SHOWN ON PLANS)
- 2" RIGID NON-METALLIC SCHEDULE 40 PVC CONDUIT
- LOCATION TO CENTER OF POLE
- POLE NUMBER
- CIRCUIT NUMBERS (LIGHTS, RECEPTACLE)
- CONTROL CABINET DESIGNATION

CONDUIT AND CABLE LEGEND

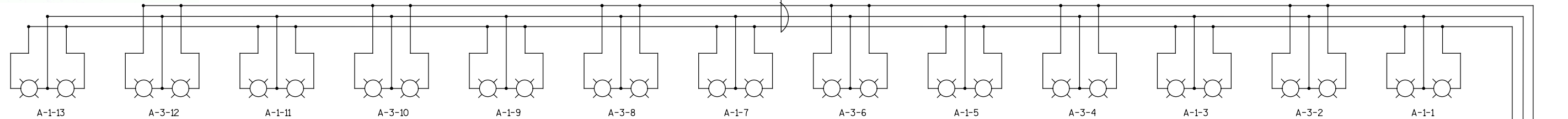
- CKTS. 1, 2, 3, 4 - 3*4, (LIGHTS) 4*6 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
5, 6, 7, 8 - 3*2, (LIGHTS) 2*2, 2*4 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
9, 10, 11, 12 - 3*2, (LIGHTS) 4*4 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
17, 18, 19, 20 - 3*2, (LIGHTS) 4*6 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
21, 22, 23, 24 - 3*2, (LIGHTS) 4*4 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
- CKTS. 1, 2, 3, 4 - 3*4, (LIGHTS) 4*6 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
- CKTS. 5, 6, 7, 8 - 3*2, (LIGHTS) 2*2, 2*4 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
9, 10, 11, 12 - 3*2, (LIGHTS) 4*4 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
17, 18, 19, 20 - 3*2, (LIGHTS) 4*6 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
21, 22, 23, 24 - 3*2, (LIGHTS) 4*4 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
- CKTS. 5, 6, 7, 8 - 3*2, (LIGHTS) 2*2, 2*4 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
- CKTS. 17, 18, 19, 20 - 3*2, (LIGHTS) 4*6 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
- CKTS. 19, 20 - 2*2, (LIGHTS) 2*6 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
- CKTS. 21, 22, 23, 24 - 3*2, (LIGHTS) 4*4 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
- CKTS. 23, 24 - 2*2, (LIGHTS) 2*4 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
- CKTS. 9, 10, 11, 12 - 3*2, (LIGHTS) 4*4 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
- CKTS. 9, 10 - 2*2, (LIGHTS) 2*4 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
- CKTS. 13, 14, 15, 16 - 3*2, (LIGHTS) 4*6 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
- CKTS. 13, 14 - 2*2, (LIGHTS) 2*6 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT
- CKTS. 15, 16 - 2*2, (LIGHTS) 2*6 (RECEPTACLES) W/*8 GRD, 2" SCH. 40 PVC CONDUIT



SCHEMATIC LEGEND	
	95 WATT LED LUMINAIRE (EACH)
	PULLBOX

→ Z

3#4 AWG



CIRCUITS 1,3
N.T.S.

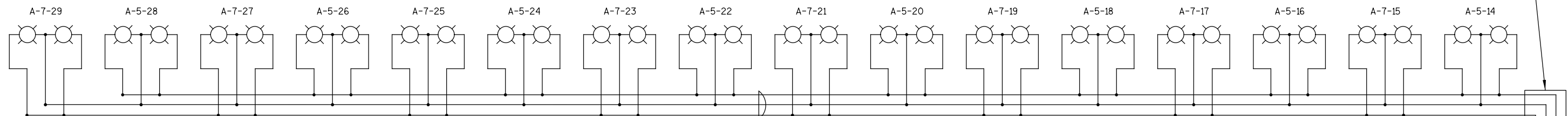
STA. 28+62 - 36.87' RT
PULLBOX 24" X 48"

1 N 3

120/240 VOLT
1 PHASE, 3W,
FROM CONTROL
CABINET "A"

→ Z

3#2 AWG



CIRCUITS 5,7
N.T.S.

STA. 28+67 - 54.03' LT
PULLBOX 24" X 42"

STA. 28+62 - 36.87' RT
PULLBOX 24" X 48"

7 N 5

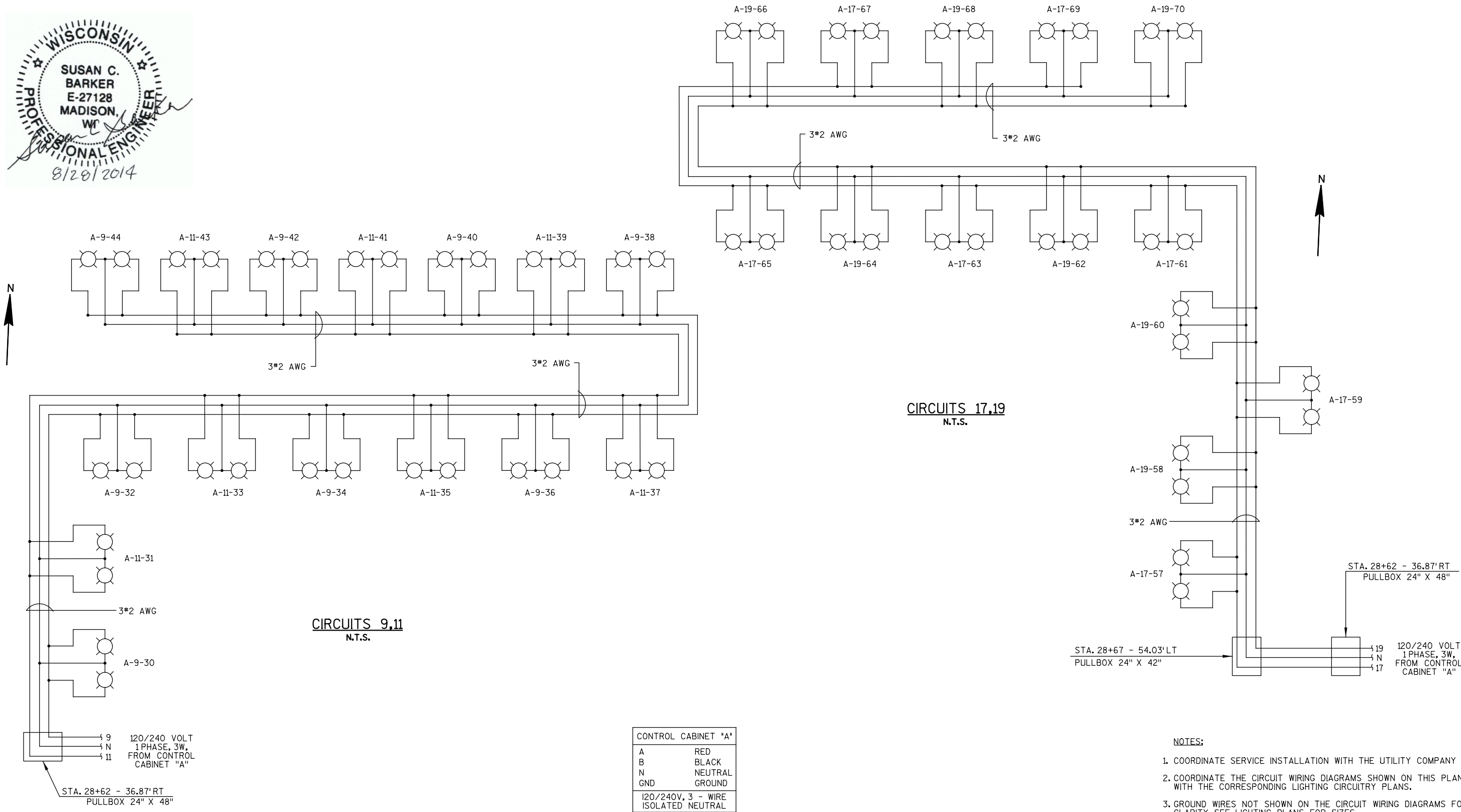
120/240 VOLT
1 PHASE, 3W,
FROM CONTROL
CABINET "A"

NOTES:

- COORDINATE SERVICE INSTALLATION WITH THE UTILITY COMPANY
- COORDINATE THE CIRCUIT WIRING DIAGRAMS SHOWN ON THIS PLAN WITH THE CORRESPONDING LIGHTING CIRCUITRY PLANS.
- GROUND WIRES NOT SHOWN ON THE CIRCUIT WIRING DIAGRAMS FOR CLARITY. SEE LIGHTING PLANS FOR SIZES.

CONTROL CABINET "A"	
A	RED
B	BLACK
N	NEUTRAL
GND	GROUND
120/240V, 3 - WIRE ISOLATED NEUTRAL	

SCHEMATIC LEGEND	
	95 WATT LED LUMINAIRE (EACH)
	PULLBOX

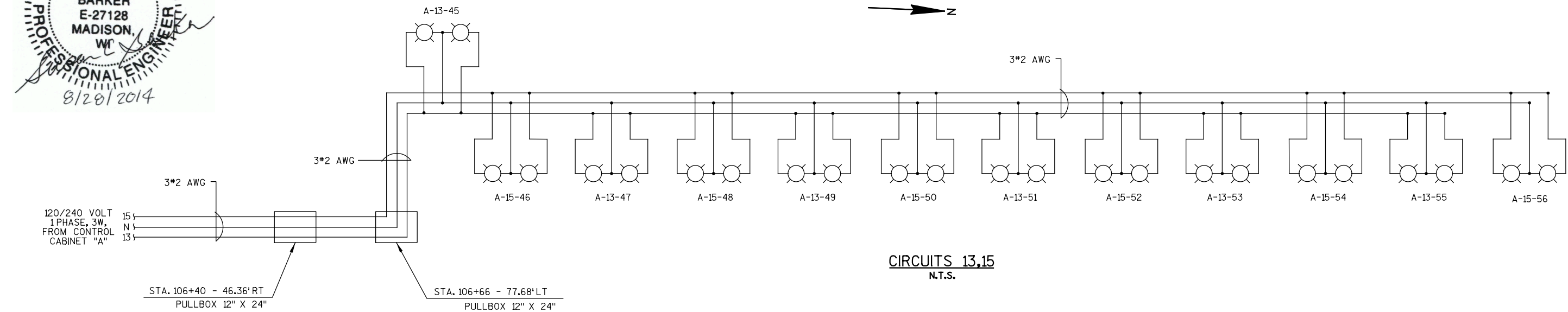


CONTROL CABINET "A"	
A	RED
B	BLACK
N	NEUTRAL
GND	GROUND
120/240V, 3 - WIRE ISOLATED NEUTRAL	

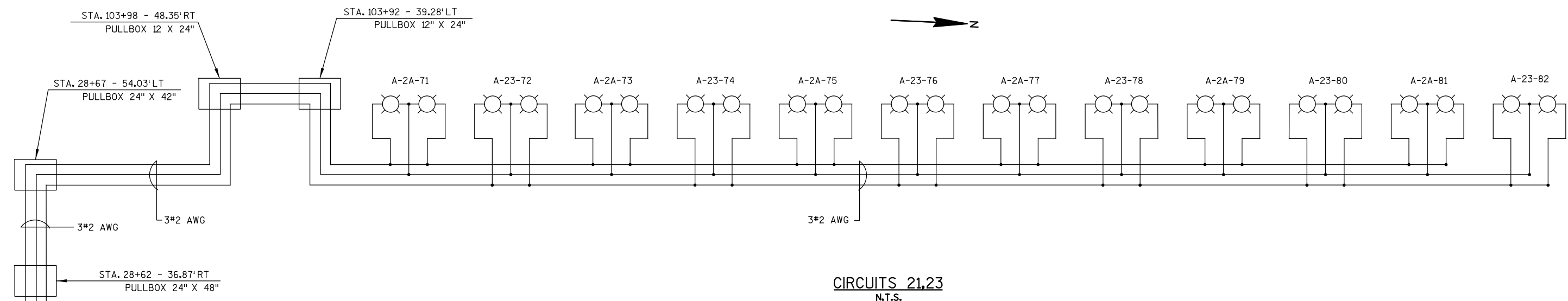
- NOTES:
- COORDINATE SERVICE INSTALLATION WITH THE UTILITY COMPANY
 - COORDINATE THE CIRCUIT WIRING DIAGRAMS SHOWN ON THIS PLAN WITH THE CORRESPONDING LIGHTING CIRCUITRY PLANS.
 - GROUND WIRES NOT SHOWN ON THE CIRCUIT WIRING DIAGRAMS FOR CLARITY. SEE LIGHTING PLANS FOR SIZES.



SCHEMATIC LEGEND	
	95 WATT LED LUMINAIRE (EACH)
	PULLBOX



CIRCUITS 13,15
N.T.S.

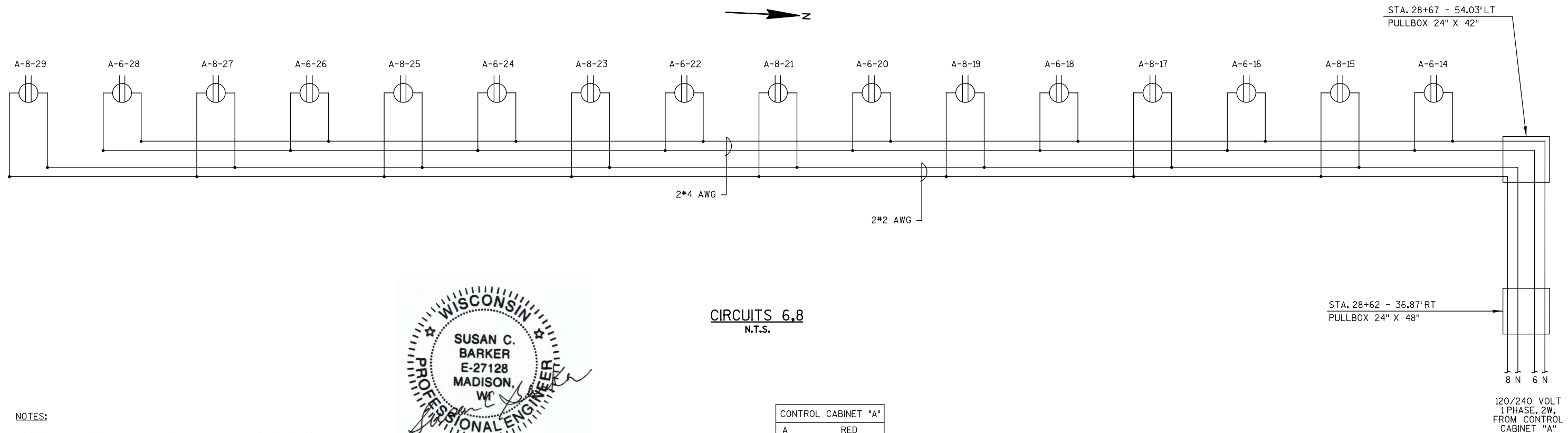
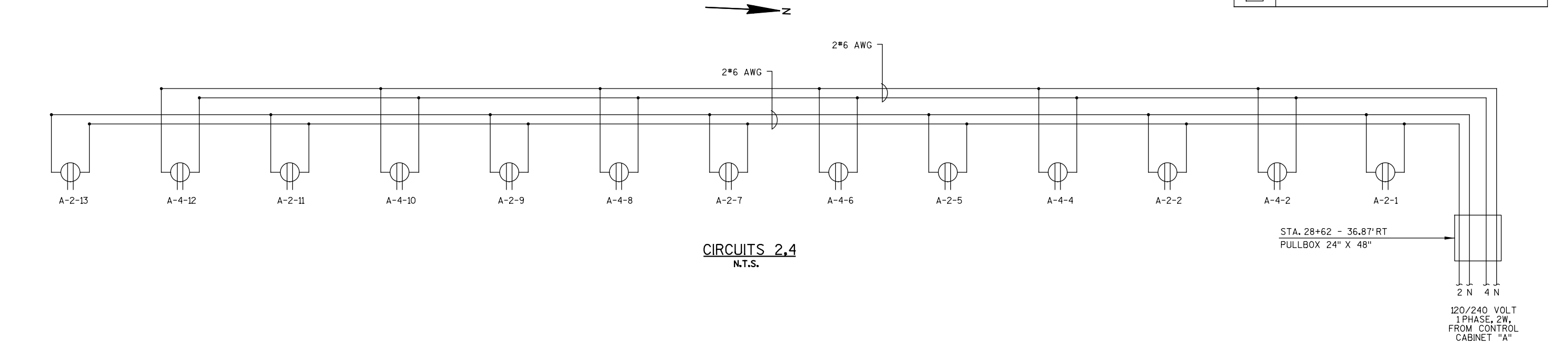


CIRCUITS 21,23
N.T.S.

CONTROL CABINET "A"	
A	RED
B	BLACK
N	NEUTRAL
GND	GROUND
120/240V, 3 - WIRE ISOLATED NEUTRAL	

- NOTES:
- COORDINATE SERVICE INSTALLATION WITH THE UTILITY COMPANY
 - COORDINATE THE CIRCUIT WIRING DIAGRAMS SHOWN ON THIS PLAN WITH THE CORRESPONDING LIGHTING CIRCUITRY PLANS.
 - GROUND WIRES NOT SHOWN ON THE CIRCUIT WIRING DIAGRAMS FOR CLARITY, SEE LIGHTING PLANS FOR SIZES.

SCHEMATIC LEGEND	
	15 AMP CONVENIENCE RECEPTACLE
	PULLBOX



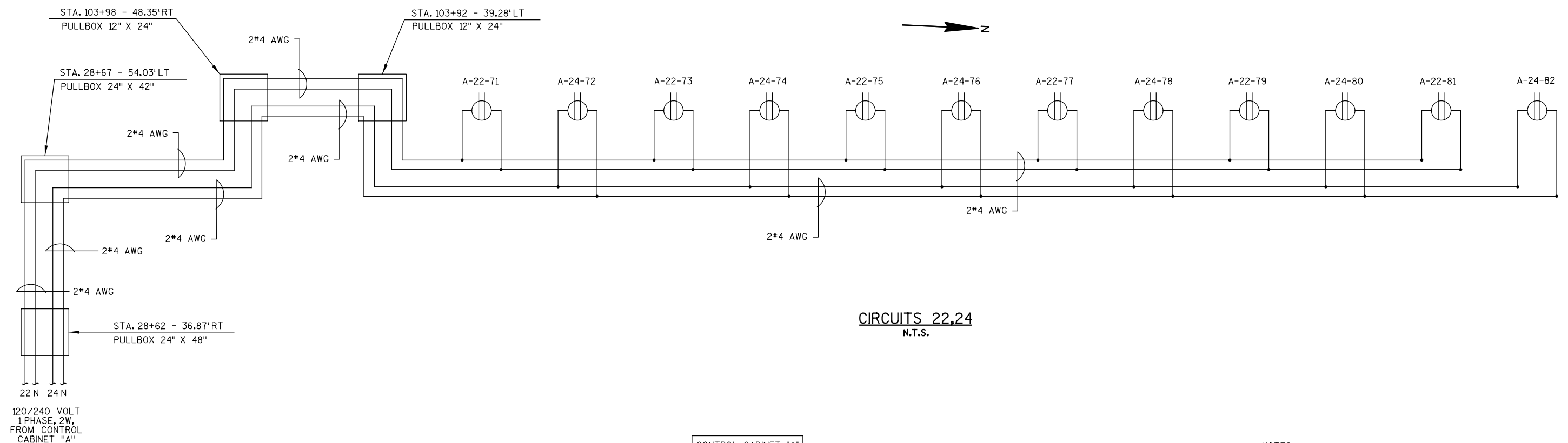
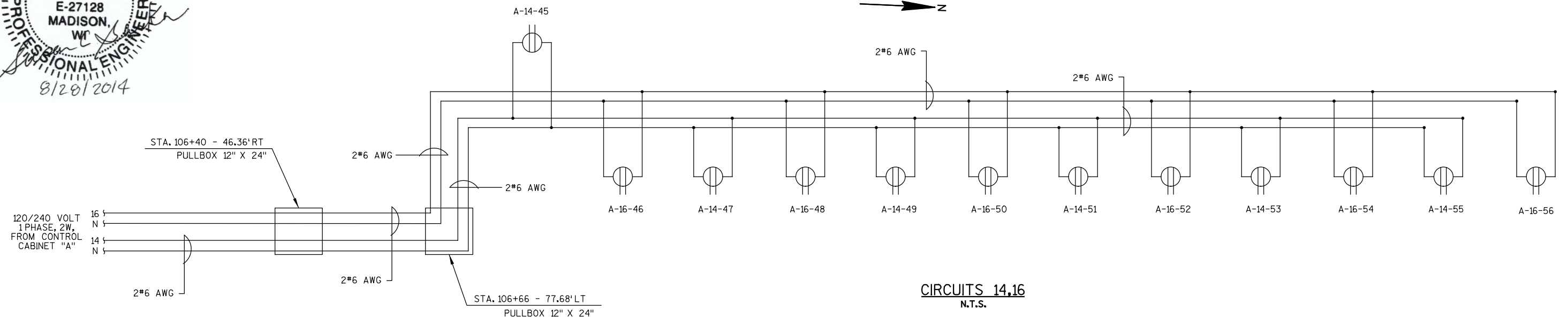
NOTES:

- COORDINATE SERVICE INSTALLATION WITH THE UTILITY COMPANY
- COORDINATE THE CIRCUIT WIRING DIAGRAMS SHOWN ON THIS PLAN WITH THE CORRESPONDING LIGHTING CIRCUITRY PLANS.
- GROUND WIRES NOT SHOWN ON THE CIRCUIT WIRING DIAGRAMS FOR CLARITY. SEE LIGHTING PLANS FOR SIZES.



CONTROL CABINET "A"	
A	RED
B	BLACK
N	NEUTRAL
GND	GROUND
120/240V, 3 - WIRE ISOLATED NEUTRAL	

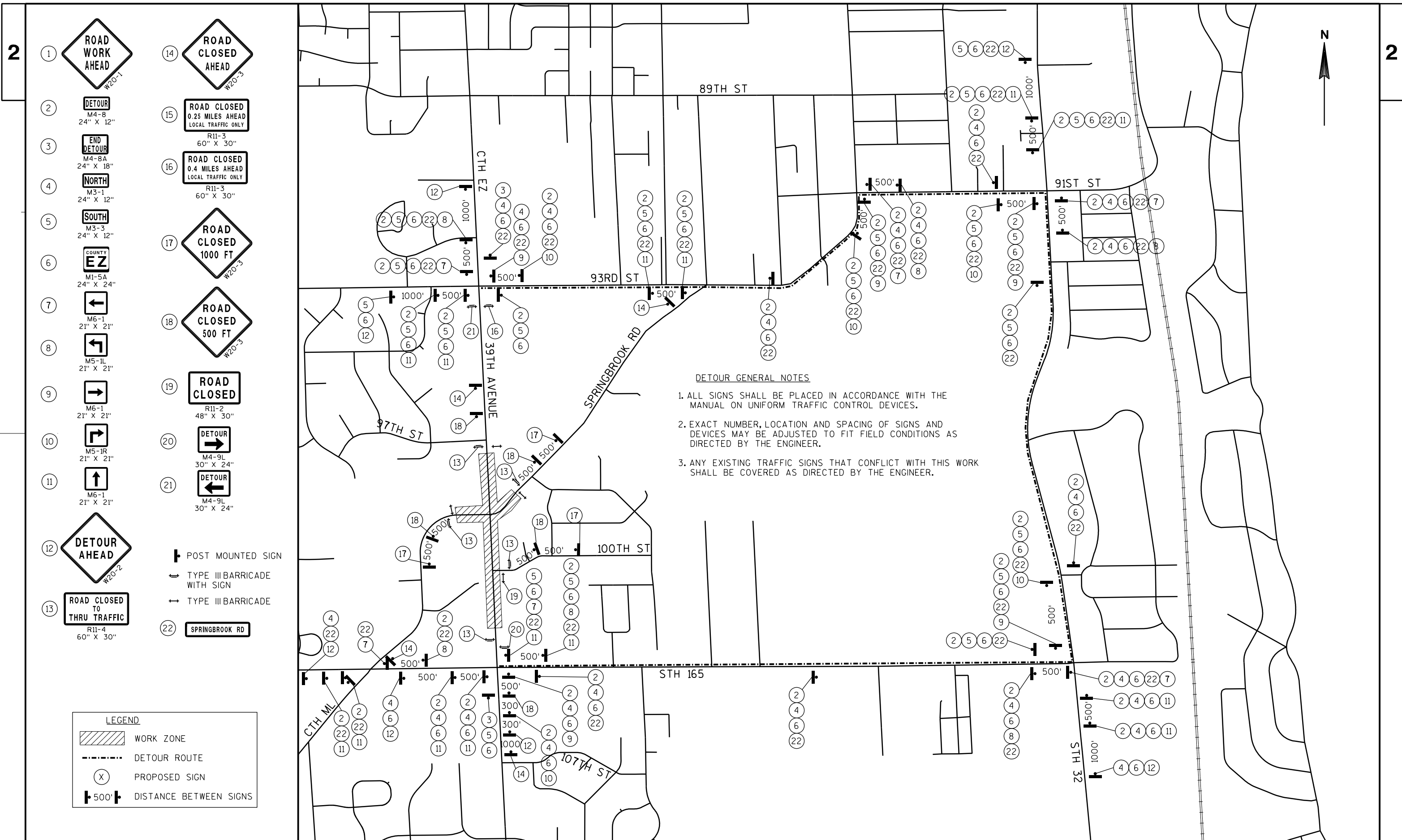
2



CONTROL CABINET "A"	
A	RED
B	BLACK
N	NEUTRAL
GND	GROUND
120/240V, 3 - WIRE ISOLATED NEUTRAL	

NOTES:

1. COORDINATE SERVICE INSTALLATION WITH THE UTILITY COMPANY
2. COORDINATE THE CIRCUIT WIRING DIAGRAMS SHOWN ON THIS PLAN WITH THE CORRESPONDING LIGHTING CIRCUITRY PLANS.
3. GROUND WIRES NOT SHOWN ON THE CIRCUIT WIRING DIAGRAMS FOR CLARITY. SEE LIGHTING PLANS FOR SIZES.



PROJECT NO: 3729-00-74

HWY: 39TH AVENUE

COUNTY: KENOSHA

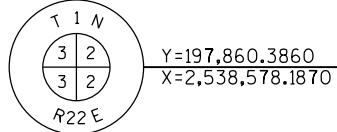
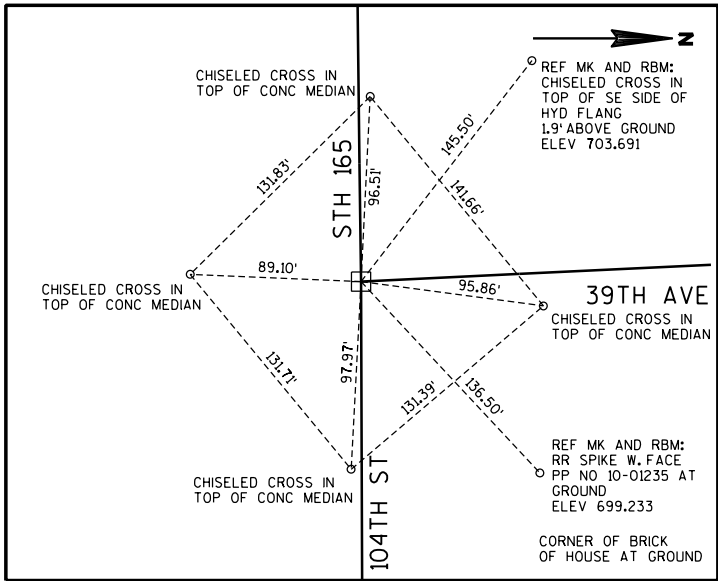
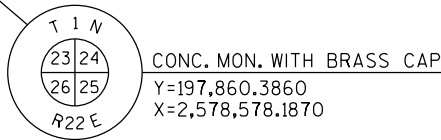
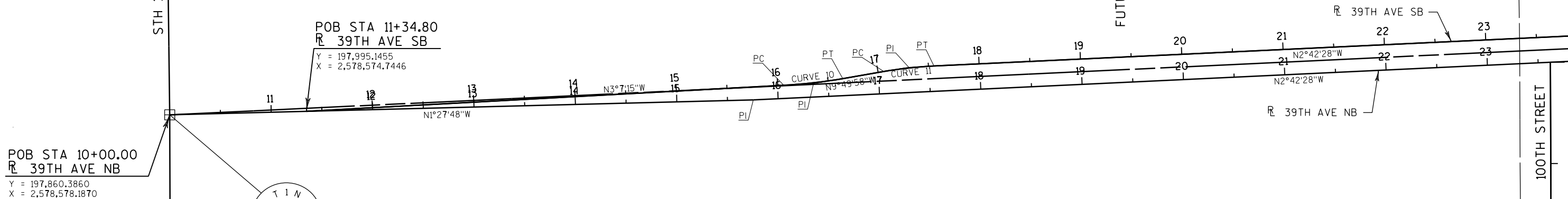
DETOUR PLAN

SHEET

55

E

CURVE 10	CURVE 11
PISTA 16+35.40	PISTA 17+30.62
Y = 198,495.0038	Y = 198,588.8932
X = 2,578,547.4908	X = 2,578,531.2179
DELTA = 6°42'43.13" LT	DELTA = 7°07'30.06" RT
D = 11°27'32.96"	D = 14°19'26.20"
T = 29.32	T = 24.90
L = 58.57	L = 49.74
R = 500.00	R = 400.00
PC STA 16+06.08	PC STA 17+05.72
Y = 198,465.7272	Y = 198,564.3559
X = 2,578,549.0871	X = 2,578,535.4707
PT STA 16+64.65	PT STA 17+55.46
Y = 198,523.8932	Y = 198,613.7685
X = 2,578,542.4837	X = 2,578,530.0414
BK = 356°52'44.93"	BK = 350°10'01.80"
AH = 350°10'01.80"	AH = 357°17'31.86"



CURVE 1
PISTA 28+44.71
Y = 199,703.4929
X = 2,578,503.5303
DELTA = 10°03'17.00" LT
D = 5°43'46.48"
T = 87.97
L = 175.49
R = 1000.00
PC STA 27+56.74
Y = 199,615.6212
X = 2,578,507.6862
PT STA 29+32.23
Y = 199,789.2894
X = 2,578,484.0968
BK = 357°17'31.86"
AH = 347°14'14.86"

CURVE 2
PISTA 30+23.11
Y = 199,877.9200
X = 2,578,464.0213
DELTA = 27°09'41.85" RT
D = 52°05'13.46"
T = 26.57
L = 52.15
R = 110.00
PC STA 29+96.53
Y = 199,852.0037
X = 2,578,469.8915
PT STA 30+48.68
Y = 199,903.6581
X = 2,578,470.6293
BK = 347°14'14.86"
AH = 14°23'56.71"

CURVE 3
PISTA 32+50.82
Y = 200,104.9229
X = 2,578,461.9467
DELTA = 10°31'58.44" RT
D = 9°32'57.47"
T = 55.31
L = 110.30
R = 600.00
PC STA 31+95.51
Y = 200,050.4890
X = 2,578,471.7292
PT STA 33+05.81
Y = 200,160.2279
X = 2,578,462.2795
BK = 349°48'42.76"
AH = 0°20'41.20"

CURVE 4
PISTA 34+70.28
Y = 200,324.6905
X = 2,578,463.2691
DELTA = 2°27'45.02" LT
D = 2°51'53.24"
T = 42.99
L = 85.95
R = 2000.00
PC STA 34+27.29
Y = 200,281.7058
X = 2,578,463.0105
PT STA 35+13.25
Y = 200,367.6465
X = 2,578,461.6807
BK = 0°20'41.20"
AH = 357°52'56.18"

POB STA 100+00.00
R SPRINGBROOK RD EB
Y = 199,974.9499
X = 2,577,921.7155

POB STA 100+00.00
R SPRINGBROOK RD WB
Y = 199,987.5494
X = 2,577,919.8275

CURVE 18
PISTA 103+96.72
Y = 200,006.6424
X = 2,578,316.0885
DELTA = 7°47'32.08" LT
D = 9°32'57.47"
T = 40.86
L = 81.60
R = 600.00
PC STA 103+55.86
Y = 200,004.6758
X = 2,578,275.2728
PT STA 104+37.46
Y = 200,014.1247
X = 2,578,356.2608
BK = 87°14'29.24"
AH = 79°26'57.16"

CURVE 19
PISTA 106+52.83
Y = 199,992.5548
X = 2,578,539.7854
DELTA = 22°19'43.24" LT
D = 57°17'44.81"
T = 19.74
L = 38.97
R = 100.00
PC STA 106+33.10
Y = 199,999.3688
X = 2,578,521.2632
PCC STA 106+72.07
Y = 199,993.2887
X = 2,578,559.5076
BK = 110°11'51.46"
AH = 87°52'08.22"

CURVE 20
PISTA 107+01.59
Y = 199,994.7860
X = 2,578,599.7457
DELTA = 23°55'50.97" LT
D = 30°09'20.42"
T = 40.27
L = 79.36
R = 190.00
PCC STA 106+72.07
Y = 199,993.2887
X = 2,578,559.5076
PT STA 107+40.69
Y = 200,012.4765
X = 2,578,635.9173
BK = 87°52'08.22"
AH = 63°56'17.25"

CURVE 5
PISTA 100+27.41
Y = 199,979.0114
X = 2,577,948.8193
DELTA = 7°50'20.69" RT
D = 14°19'26.20"
T = 27.41
L = 54.73
R = 400.00
PC STA 100+00.00
Y = 199,974.9499
X = 2,577,921.7155
PT STA 100+54.73
Y = 199,979.3382
X = 2,577,976.2236
BK = 81°28'39.50"
AH = 89°19'00.20"

CURVE 6
PISTA 103+80.63
Y = 199,996.5162
X = 2,578,301.4092
DELTA = 10°18'32.61" RT
D = 17°41'01.98"
T = 29.23
L = 58.30
R = 324.00
PC STA 103+51.40
Y = 199,993.8382
X = 2,578,272.3050
PCC STA 104+09.69
Y = 199,993.9425
X = 2,578,330.5227
BK = 84°44'34.16"
AH = 95°03'06.77"

CURVE 7
PISTA 104+36.45
Y = 199,991.5867
X = 2,578,357.1715
DELTA = 30°14'37.30" RT
D = 57°52'28.29"
T = 26.75
L = 52.26
R = 99.00
PCC STA 104+09.69
Y = 199,993.9425
X = 2,578,330.5227
PT STA 104+61.95
Y = 199,976.1291
X = 2,578,379.0066
BK = 95°03'06.77"
AH = 125°17'44.07"

CURVE 8
PISTA 108+13.83
Y = 200,035.1130
X = 2,578,704.9633
DELTA = 39°34'58.11" LT
D = 28°38'52.40"
T = 71.97
L = 138.17
R = 200.00
PC STA 107+41.86
Y = 200,003.4933
X = 2,578,640.3108
PT STA 108+80.03
Y = 200,100.6785
X = 2,578,734.6436
BK = 63°56'17.23"
AH = 24°21'19.12"

200+00.00 "ROUNDABOUT"=
104+85.35, 6.35'RT "SPRINGBROOK RD EB"=
31+08.69, 70.97'LT "39TH AVE NB"

PISTA 30+65.23
Y = 199,914.5023
X = 2,578,417.9898
30+97.73 "39TH AVE" =
105+56.88 "SPRINGBROOK RD"

PISTA 106+01.30
Y = 199,941.7422
X = 2,578,514.0486

PISTA 104+76.76
Y = 200,021.3204
X = 2,578,394.8940
PC STA 32+02.96 BK =
STA 31+99.98 AH

CONC. MON. WITH ALUM. CAP
Y=200,521.9695
X=2,578,452.2949

STA 33+82.26 BK =
STA 33+75.64 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31+99.98 AH

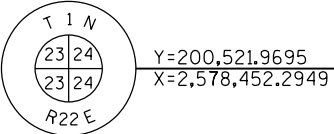
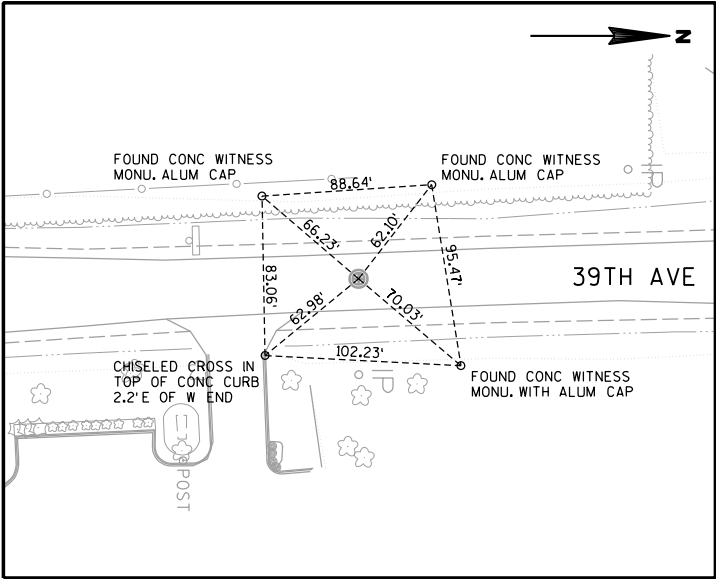
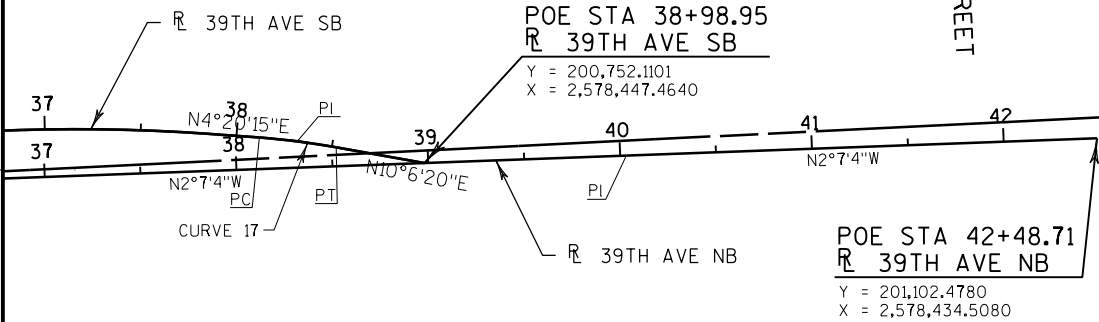
PC STA 32+02.96 BK =
STA 31+99.98 AH

PC STA 32+02.96 BK =
STA 31

CURVE 17
PI STA 38+32.14
Y = 200,686.2993
X = 2,578,435.7346
DELTA = 5°46'05.39" RT
D = 14°19'26.20"
T = 20.15
L = 40.27
R = 400.00
PC STA 38+11.99
Y = 200,666.2053
X = 2,578,434.2105
PT STA 38+52.26
Y = 200,706.1384
X = 2,578,439.2705
BK = 4°20'14.80"
AH = 10°06'20.18"



97TH STREET



3

DATE 04DEC14		E S T I M A T E O F Q U A N T I T I E S			
LINE		3729-00-74			
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	201.0105	CLEARING	STA	23.000	23.000
0020	201.0120	CLEARING	ID	100.000	100.000
0030	201.0205	GRUBBING	STA	23.000	23.000
0040	201.0220	GRUBBING	ID	100.000	100.000
0050	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	7.000	7.000
0060	204.0100	REMOVING PAVEMENT	SY	2,373.000	2,373.000
0070	204.0150	REMOVING CURB & GUTTER	LF	3,960.000	3,960.000
0080	204.0170	REMOVING FENCE	LF	730.000	730.000
0090	204.0180	REMOVING DELINEATORS AND MARKERS	EACH	3.000	3.000
0100	204.0195	REMOVING CONCRETE BASES	EACH	9.000	9.000
0110	204.0210	REMOVING MANHOLES	EACH	2.000	2.000
0120	204.0215	REMOVING CATCH BASINS	EACH	15.000	15.000
0130	204.0220	REMOVING INLETS	EACH	1.000	1.000
0140	204.0245	REMOVING STORM SEWER (SIZE) 01. 12-INCH	LF	196.000	196.000
0150	204.0245	REMOVING STORM SEWER (SIZE) 02. 15-INCH	LF	404.000	404.000
0160	204.0245	REMOVING STORM SEWER (SIZE) 03. 18-INCH	LF	310.000	310.000
0170	204.9035.S	REMOVING (ITEM DESCRIPTION) 01. RIPRAP	CY	50.000	50.000
0180	204.9060.S	REMOVING (ITEM DESCRIPTION) 01. APRON	EACH	5.000	5.000
0190	204.9090.S	REMOVING (ITEM DESCRIPTION) 01. LANDSCAPING BRICKS	LF	158.000	158.000
0200	205.0100	EXCAVATION COMMON	CY	34,400.000	34,400.000
0210	205.0400	EXCAVATION MARSH	CY	5.000	5.000
0220	208.1100	SELECT BORROW	CY	527.000	527.000
0230	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	13.000	13.000
0240	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	11,947.000	11,947.000
0250	310.0110	BASE AGGREGATE OPEN GRADED	TON	150.000	150.000
0260	312.0110	SELECT CRUSHED MATERIAL	TON	23,200.000	23,200.000
0270	405.0100	COLORING CONCRETE RED	CY	370.000	370.000
0280	415.0070	CONCRETE PAVEMENT 7-INCH	SY	20,160.000	20,160.000
0290	416.0260	CONCRETE DRIVEWAY HES 6-INCH	SY	329.000	329.000
0300	416.0280	CONCRETE DRIVEWAY HES 8-INCH	SY	190.000	190.000
0310	416.0508	CONCRETE ROUNDABOUT TRUCK APRON 8-INCH	SY	340.000	340.000
0320	440.4410.S	INCENTIVE IRI RIDE	DOL	1,430.000	1,430.000
0330	455.0120	ASPHALTIC MATERIAL PG64-28	TON	120.000	120.000
0340	455.0605	TACK COAT	GAL	1,245.000	1,245.000
0350	460.1103	HMA PAVEMENT TYPE E-3	TON	2,232.000	2,232.000
0360	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	1,400.000	1,400.000
0370	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	105.000	105.000
0380	522.1015	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH	EACH	2.000	2.000
0390	522.1048	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH	EACH	1.000	1.000
0400	601.0205	CONCRETE GUTTER 24-INCH	LF	180.000	180.000
0410	601.0405	CONCRETE CURB & GUTTER 18-INCH TYPE A	LF	240.000	240.000
0420	601.0407	CONCRETE CURB & GUTTER 18-INCH TYPE D	LF	29.000	29.000
0430	601.0409	CONCRETE CURB & GUTTER 30-INCH TYPE A	LF	12,200.000	12,200.000
0440	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	65.000	65.000
0450	601.0580	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	LF	320.000	320.000
0460	602.0405	CONCRETE SIDEWALK 4-INCH	SF	24,600.000	24,600.000
0470	602.0410	CONCRETE SIDEWALK 5-INCH	SF	68,725.000	68,725.000
0480	602.0415	CONCRETE SIDEWALK 6-INCH	SF	2,160.000	2,160.000

3

3

DATE 04DEC14		E S T I M A T E O F Q U A N T I T I E S			
LINE				3729-00-74	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0490	602.0505	CURB RAMP DETECTABLE WARNING FIELD	SF	668.000	668.000
		YELLOW			
0500	606.0200	RIPRAP MEDIUM	CY	11.000	11.000
0510	608.0324	STORM SEWER PIPE REINFORCED CONCRETE	LF	2,409.000	2,409.000
		CLASS III 24-INCH			
0520	608.0348	STORM SEWER PIPE REINFORCED CONCRETE	LF	165.000	165.000
		CLASS III 48-INCH			
0530	608.0412	STORM SEWER PIPE REINFORCED CONCRETE	LF	78.000	78.000
		CLASS IV 12-INCH			
0540	608.0415	STORM SEWER PIPE REINFORCED CONCRETE	LF	922.000	922.000
		CLASS IV 15-INCH			
0550	611.0420	RECONSTRUCTING MANHOLES	EACH	6.000	6.000
0560	611.0530	MANHOLE COVERS TYPE J	EACH	18.000	18.000
0570	611.0624	INLET COVERS TYPE H	EACH	39.000	39.000
0580	611.0639	INLET COVERS TYPE H-S	EACH	19.000	19.000
0590	611.1230	CATCH BASINS 2X3-FT	EACH	57.000	57.000
0600	611.2004	MANHOLES 4-FT DIAMETER	EACH	16.000	16.000
0610	611.2007	MANHOLES 7-FT DIAMETER	EACH	2.000	2.000
0620	611.2008	MANHOLES 8-FT DIAMETER	EACH	1.000	1.000
0630	611.8110	ADJUSTING MANHOLE COVERS	EACH	4.000	4.000
0640	611.8120.S	COVER PLATES TEMPORARY	EACH	10.000	10.000
0650	612.0106	PIPE UNDERDRAIN 6-INCH	LF	600.000	600.000
0660	612.0600	UNDERDRAIN TRENCH	LF	600.000	600.000
0670	619.1000	MOBILIZATION	EACH	1.000	1.000
0680	620.0200	CONCRETE MEDIAN BLUNT NOSE	SF	240.000	240.000
0690	620.0300	CONCRETE MEDIAN SLOPED NOSE	SF	750.000	750.000
0700	621.0100	LANDMARK REFERENCE MONUMENTS	EACH	1.000	1.000
0710	623.0200	DUST CONTROL SURFACE TREATMENT	SY	27,400.000	27,400.000
0720	624.0100	WATER	MGAL	598.100	598.100
0730	625.0100	TOPSOIL	SY	23,260.000	23,260.000
0740	627.0200	MULCHING	SY	36,160.000	36,160.000
0750	628.1504	SILT FENCE	LF	2,960.000	2,960.000
0760	628.1520	SILT FENCE MAINTENANCE	LF	2,960.000	2,960.000
0770	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	10.000	10.000
0780	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	6.000	6.000
0790	628.2004	EROSION MAT CLASS I TYPE B	SY	1,550.000	1,550.000
0800	628.7005	INLET PROTECTION TYPE A	EACH	41.000	41.000
0810	628.7015	INLET PROTECTION TYPE C	EACH	40.000	40.000
0820	628.7020	INLET PROTECTION TYPE D	EACH	18.000	18.000
0830	628.7504	TEMPORARY DITCH CHECKS	LF	113.000	113.000
0840	628.7555	CULVERT PIPE CHECKS	EACH	4.000	4.000
0850	629.0210	FERTILIZER TYPE B	CWT	7.500	7.500
0860	630.0140	SEEDING MIXTURE NO. 40	LB	236.000	236.000
0870	630.0160	SEEDING MIXTURE NO. 60	LB	2.000	2.000
0880	630.0200	SEEDING TEMPORARY	LB	630.000	630.000
0890	631.0300	SOD WATER	MGAL	88.200	88.200
0900	631.1000	SOD LAWN	SY	7,800.000	7,800.000
0910	632.0101	TREES (SPECIES, ROOT, SIZE) 01. SIENNA	EACH	7.000	7.000
		GLEN MAPLE B&B 2.5"CAL			
0920	632.0101	TREES (SPECIES, ROOT, SIZE) 02. STATE	EACH	5.000	5.000
		STREET MIYABE MAPLE B&B 3.0" CAL			
0930	632.0101	TREES (SPECIES, ROOT, SIZE) 03. AUTUMN	EACH	7.000	7.000
		BRILLIANCE SERVICEBERRY B&B 2.0" CAL			
0940	632.0101	TREES (SPECIES, ROOT, SIZE) 04.	EACH	6.000	6.000
		JAPANESE TREE LILAC B&B 2.5" CAL			

3

3

DATE 04DEC14		E S T I M A T E O F Q U A N T I T I E S			
LINE					3729-00-74
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0950	632.0101	TREES (SPECIES, ROOT, SIZE) 05. GOLDEN GLORY CORNELIANCHERRY DOGWOOD B&B 6' MULTI-STEM	EACH	1.000	1.000
0960	632.0101	TREES (SPECIES, ROOT, SIZE) 06. SKYLINE HONEYLOCUST B&B 3.0" CAL BURLAPPED, 3.0" CAL	EACH	12.000	12.000
0970	632.0101	TREES (SPECIES, ROOT, SIZE) 07. KENTUCKY COFFEETREE B&B 2.5" CAL	EACH	6.000	6.000
0980	632.0101	TREES (SPECIES, ROOT, SIZE) 08. FRONTIER ELM B&B 2.5" CAL 2.5" CAL	EACH	11.000	11.000
0990	632.0201	SHRUBS (SPECIES, ROOT, SIZE) 01. TIGER EYES CUTLEAF STAGHORN SUMAC #5 CONT 24" MIN HT	EACH	6.000	6.000
1000	632.9101	LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES	EACH	20.000	20.000
1010	637.2210	SIGNS TYPE II REFLECTIVE H	SF	723.610	723.610
1020	638.2602	REMOVING SIGNS TYPE II	EACH	31.000	31.000
1030	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	27.000	27.000
1040	642.5401	FIELD OFFICE TYPE D	EACH	1.000	1.000
1050	643.0100	TRAFFIC CONTROL (PROJECT) 01. 3729-00-04	EACH	1.000	1.000
1060	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	2,016.000	2,016.000
1070	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	4,032.000	4,032.000
1080	643.0900	TRAFFIC CONTROL SIGNS	DAY	1,344.000	1,344.000
1090	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. 3729-00-04	EACH	1.000	1.000
1100	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	39,648.000	39,648.000
1110	645.0111	GEOTEXTILE FABRIC TYPE DF SCHEDULE A	SY	450.000	450.000
1120	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	23.000	23.000
1130	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	9,638.000	9,638.000
1140	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	1,190.000	1,190.000
1150	646.0156	PAVEMENT MARKING EPOXY 18-INCH	LF	140.000	140.000
1160	647.0156	PAVEMENT MARKING ARROWS EPOXY TYPE 1	EACH	3.000	3.000
1170	647.0160	PAVEMENT MARKING ARROWS EPOXY TYPE 2R	EACH	1.000	1.000
1180	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	1.000	1.000
1190	647.0170	PAVEMENT MARKING ARROWS EPOXY TYPE 3R	EACH	2.000	2.000
1200	647.0176	PAVEMENT MARKING ARROWS EPOXY TYPE 3	EACH	1.000	1.000
1210	647.0206	PAVEMENT MARKING ARROWS BIKE LANE EPOXY	EACH	14.000	14.000
1220	647.0306	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY	EACH	14.000	14.000
1230	647.0356	PAVEMENT MARKING WORDS EPOXY	EACH	7.000	7.000
1240	647.0456	PAVEMENT MARKING CURB EPOXY	LF	583.000	583.000
1250	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	16.000	16.000
1260	647.0606	PAVEMENT MARKING ISLAND NOSE EPOXY	EACH	10.000	10.000
1270	647.0726	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	LF	194.000	194.000
1280	647.0766	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH	LF	861.000	861.000
1290	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	80.000	80.000
1300	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	7,170.000	7,170.000
1310	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	100.000	100.000
1320	650.7000	CONSTRUCTION STAKING CONCRETE PAVEMENT	LF	7,170.000	7,170.000
1330	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 3729-00-04	LS	1.000	1.000
1340	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	6,840.000	6,840.000
1350	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	8,025.000	8,025.000
1360	653.0105	PULL BOXES STEEL 12X24-INCH	EACH	4.000	4.000

3

3

DATE 04DEC14		E S T I M A T E O F Q U A N T I T I E S			
LINE				3729-00-74	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
1370	653.0140	PULL BOXES STEEL 24X42-INCH	EACH	1.000	1.000
1380	653.0145	PULL BOXES STEEL 24X48-INCH	EACH	1.000	1.000
1390	653.0905	REMOVING PULL BOXES	EACH	15.000	15.000
1400	654.0101	CONCRETE BASES TYPE 1	EACH	82.000	82.000
1410	654.0217	CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL	EACH	1.000	1.000
1420	655.0620	ELECTRICAL WIRE LIGHTING 8 AWG	LF	8,025.000	8,025.000
1430	655.0625	ELECTRICAL WIRE LIGHTING 6 AWG	LF	14,350.000	14,350.000
1440	655.0630	ELECTRICAL WIRE LIGHTING 4 AWG	LF	17,560.000	17,560.000
1450	655.0635	ELECTRICAL WIRE LIGHTING 2 AWG	LF	22,434.000	22,434.000
1460	655.0640	ELECTRICAL WIRE LIGHTING 1 AWG	LF	18.000	18.000
1470	656.0400	ELECTRICAL SERVICE MAIN LUGS ONLY METER PEDESTAL (LOCATION) CONTROL CABINET A	LS	1.000	1.000
1480	659.0802	PLAQUES SEQUENCE IDENTIFICATION	EACH	83.000	83.000
1490	659.2130	LIGHTING CONTROL CABINETS 120/240 30-INCH	EACH	1.000	1.000
1500	690.0150	SAWING ASPHALT	LF	750.000	750.000
1510	690.0250	SAWING CONCRETE	LF	290.000	290.000
1520	715.0415	INCENTIVE STRENGTH CONCRETE PAVEMENT	DOL	1,180.000	1,180.000
1530	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT \$5.00/HR	HRS	1,200.000	1,200.000
1540	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT \$5.00/HR	HRS	1,200.000	1,200.000
1550	SPV.0060	SPECIAL 01. DECORATIVE 20-FT LIGHT POLE WITH DUAL 95-WATT LED LUMINAIRES	EACH	82.000	82.000
1560	SPV.0060	SPECIAL 02. CONSTRUCTION STAKING IRRIGATION SYSTEM	EACH	761.000	761.000
1570	SPV.0060	SPECIAL 03. STEEL SIGN POSTS 9-FT	EACH	2.000	2.000
1580	SPV.0060	SPECIAL 04. STEEL SIGN POSTS 11-FT	EACH	14.000	14.000
1590	SPV.0060	SPECIAL 05. STEEL SIGN POSTS 13-FT	EACH	19.000	19.000
1600	SPV.0060	SPECIAL 06. STEEL SIGN POSTS 15-FT	EACH	35.000	35.000
1610	SPV.0060	SPECIAL 07. BUTTERFLY VALVE AND BOX 16-INCH	EACH	1.000	1.000
1620	SPV.0060	SPECIAL 08. BUTTERFLY VALVE AND BOX 12-INCH	EACH	2.000	2.000
1630	SPV.0060	SPECIAL 09. AUXILIARY HYDRANT VALVE & BOX 6-INCH	EACH	7.000	7.000
1640	SPV.0060	SPECIAL 10. HYDRANT	EACH	8.000	8.000
1650	SPV.0060	SPECIAL 11. WATER SERVICE FITTINGS 2-INCH	EACH	1.000	1.000
1660	SPV.0060	SPECIAL 12. INSTALL OUTSIDE DROP ON SANITARY SEWER MANHOLE	EACH	1.000	1.000
1670	SPV.0060	SPECIAL 13. CONSTRUCTION STAKING SANITARY SEWER	EACH	4.000	4.000
1680	SPV.0060	SPECIAL 14. CONSTRUCTION STAKING WATER MAIN	EACH	19.000	19.000
1690	SPV.0060	SPECIAL 15. EXTERNAL MANHOLE SEAL	EACH	32.000	32.000
1700	SPV.0060	SPECIAL 16. CONSTRUCTION STAKING ADA CURB RAMP	EACH	32.000	32.000
1710	SPV.0090	SPECIAL 01. CONSTRUCTION STAKING CONCRETE SIDEWALK	LF	6,840.000	6,840.000
1720	SPV.0090	SPECIAL 02. WATER MAIN 16-INCH	LF	6.000	6.000
1730	SPV.0090	SPECIAL 03. WATER MAIN 12-INCH	LF	642.000	642.000
1740	SPV.0090	SPECIAL 04. HYDRANT LEAD 6-INCH	LF	104.000	104.000
1750	SPV.0090	SPECIAL 05. WATER SERVICE 2-INCH	LF	42.000	42.000
1760	SPV.0090	SPECIAL 06. SANITARY SEWER 8-INCH	LF	964.000	964.000
1770	SPV.0090	SPECIAL 07. TEST ROLLING	LF	7,170.000	7,170.000

3

3

DATE 04DEC14			E S T I M A T E O F Q U A N T I T I E S		
LINE			3729-00-74		
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
1780	SPV.0105	SPECIAL 01. IRRIGATION SYSTEM	LS	1.000	1.000
1790	SPV.0105	SPECIAL 02. REMOVING TRAFFIC SIGNALS	LS	1.000	1.000
1800	SPV.0105	SPECIAL 03. ACTIVATED FLASHING LED SIGN	LS	1.000	1.000
UNIT STA 27+50					
1810	SPV.0105	SPECIAL 04. ACTIVATED FLASHING LED SIGN	LS	1.000	1.000
UNIT STA 35+00					
1820	SPV.0105	SPECIAL 05. ACTIVATED FLASHING LED SIGN	LS	1.000	1.000
UNIT STA 103+00					
1830	SPV.0105	SPECIAL 06. ACTIVATED FLASHING LED SIGN	LS	1.000	1.000
UNIT STA 112+70					
1840	SPV.0105	SPECIAL 07. BASE STATION CONTROL UNIT	LS	1.000	1.000
1850	SPV.0105	SPECIAL 08. CONSTRUCTION STAKING	LS	1.000	1.000
LIGHTING SYSTEM					
1860	SPV.0200	SPECIAL 01. SANITARY MANHOLE 48-INCH	VF	61.000	61.000

3

3

CLEARING AND GRUBBING					
STATION - STATION	LOCATION	CLEARING		GRUBBING	
		201.0105 (STA)	201.0120 (ID)	201.0205 (STA)	201.0220 (ID)
12+00 - 13+00		1	-	1	-
13+26		-	20	-	20
14+20		-	15	-	15
14+77		-	15	-	15
15+00		-	15	-	15
16+49		-	12	-	12
18+00 - 24+00		6	-	6	-
25+73		-	5	-	5
25+73		-	5	-	5
25+73		-	5	-	5
32+00 - 41+00		9	-	9	-
101+00 - 105+00		4	-	4	-
107+00 - 110+00		3	-	3	-
PROJECT TOTAL		23	100	23	100

REMOVING SMALL PIPE CULVERTS	
STATION	203.0100 (EACH)
20+65	1
21+45	1
33+00	1
36+00	1
40+50	1
40+55	1
110+00	1
PROJECT TOTAL	7

REMOVING PAVEMENT			
STATION - STATION	LOCATION		204.0100 (SY)
15+75 - 30+45	39TH		2100
32+00 - 42+37	39TH		-
100+45 - 104+60	SPRINGBROOK		160
106+10 - 112+00	SPRINGBROOK		70
200+00 - 203+26	ROUNDAABOUT		43
PROJECT TOTAL			2373

REMOVING CURB & GUTTER AND FENCE					
STATION - STATION	LOCATION	204.0150 CURB & GUTTER		204.0170 FENCE	
		(LF)		(LF)	
15+75 - 30+45	39TH	1100		290	
32+00 - 42+37	39TH	210		440	
100+45 - 104+60	SPRINGBROOK	1600		-	
106+10 - 112+00	SPRINGBROOK	810		-	
200+00 - 203+26	ROUNDAABOUT	240		-	
PROJECT TOTAL		3960		730	

3

REMOVALS								
STATION	204.0180 DELINEATORS AND MARKERS (EACH)	204.0195 CONCRETE BASES (EACH)	204.0210 MANHOLES (EACH)	204.0215 CATCH BASINS (EACH)	204.0220 INLETS (EACH)	204.9035.S RIPRAP (CY)	204.9060.S APRON ENDWALLS (EACH)	204.9090.S LANDSCAPING BRICK (LF)
16+66	-	-	-	4	-	-	-	-
18+40	1	-	-	-	-	5	-	-
19+50	-	-	-	-	-	5	-	-
20+85	-	-	-	-	-	-	-	51
21+25	-	-	-	-	-	-	-	53
21+50	1	-	-	-	-	-	-	54
23+24	-	-	-	-	-	-	1	-
23+40	-	-	-	-	-	-	-	-
23+85	-	-	-	-	-	-	1	-
26+00	-	-	-	-	-	40	-	-
28+30	-	-	-	-	-	-	1	-
28+80	-	-	-	-	1	-	-	-
40+00	-	-	-	-	-	-	1	-
103+00	-	-	1	4	-	-	-	-
104+90	-	1	-	-	-	-	-	-
105+00	-	1	-	-	-	-	-	-
105+10	-	1	-	-	-	-	-	-
105+15	-	-	1	5	-	-	-	-
105+35	-	1	-	-	-	-	-	-
106+15	-	1	-	-	-	-	-	-
106+35	-	2	-	-	-	-	-	-
106+45	-	1	-	-	-	-	-	-
106+60	-	1	-	-	-	-	-	-
107+04	-	-	-	-	-	-	1	-
107+50	-	-	-	2	-	-	-	-
107+75	1	-	-	-	-	-	-	-
PROJECT TOTAL	3	9	2	15	1	50	5	158

REMOVING TRAFFIC SIGNALS	
	SPV.0105.02 REMOVING TRAFFIC SIGNALS (LS)
	1
PROJECT TOTAL	1

REMOVING STORM SEWER					
STATION - STATION	LOCATION	204.0245.01 12-INCH	204.0245.02 15-INCH	204.0245.03 18-INCH	
		(LF)	(LF)	(LF)	
15+75 - 30+45	39TH	47	68	220	
32+00 - 42+37	39TH	-	-	-	
100+45 - 104+60	SPRINGBROOK	69	160	-	
106+10 - 112+00	SPRINGBROOK	-	120	-	
200+00 - 203+26	ROUNDAABOUT	80	56	90	
PROJECT TOTAL		196	404	310	

EARTHWORK SUMMARY

Category	From / To Station	Location	205.0100 Common Excavation (CY) (1)		Salvaged / Unusable Pavement Material (2)	Available Material (5)	205.0400 Marsh Excavation (CY) (6)	Reduced Marsh in Fill (8)	Reduced EBS in Fill (9)	208.1100 Select Borrow Expanded Marsh Backfill (CY) (10)	208.1100 Select Borrow Expanded EBS Backfill (11)	Unexpanded Fill	Expanded Fill	Mass Ordinate +/- (14)	Waste
			Cut	EBS (3)				Factor 0.60	Factor 0.80	Factor 1.50	Factor 1.30		Factor 1.30		
0010	11+67 to 41+63	39TH	22,000	400	1,272	20,728	5	3	320	7	520	5,585	7,261	14,739	14739
0010	100+45 TO 112+00	SPRINGBROOK	7,600	0	599	7,001	0	0	0	0	0	1,302	1,693	5,907	5907
0010	200+00 TO 203+26	ROUNDAABOUT	4,400	0	249	4,151	0	0	0	0	0	2,648	3,443	957	957
Grand Total			34,000	400	2,120	31,880	5	3	320	7	520	9,536	12,397	21,603	21,603

34,400

527

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Select Borrow material.
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
6) Marsh Excavation - to be backfilled with Select Borrow Material. 205.0500

- 8) Reduced Marsh in Fill - Excavated Marsh material is usable in Fills outside the 1:1 slope.
9) Reduced EBS in Fill - Excavated EBS material is usable in Fills outside the 1:1 slope.
10) Expanded Marsh Backfill - This is to be filled with Select Borrow material.
11) Expanded EBS Backfill - This is to be filled with Select Borrow material.
14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

BASE

STATION - STATION		LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON)	312.0110 SELECT CRUSHED MATERIAL (TON)	623.0200 DUST CONTROL SURFACE TREATMENT (SY)	624.0100* WATER* (MGAL)
11+67 - 30+45		39TH ROADWAY	-	4300	11000	13000	150
11+67 - 30+45		ASPHALT DRIVEWAYS	-	75	-	-	0.8
11+67 - 30+45		CONCRETE DRIVEWAYS	-	79	-	-	0.8
11+67 - 30+45		4" SIDEWALKS	-	280	-	-	2.7
11+67 - 30+45		5" SIDEWALKS	-	940	-	-	9.0
11+67 - 30+45		6" SIDEWALKS	-	46	-	-	0.5
32+00 - 42+40		39TH ROADWAY	5	2300	5600	6700	75
32+00 - 42+40		ASPHALT DRIVEWAYS	-	27	-	-	0.3
32+00 - 42+40		CONCRETE DRIVEWAYS	-	16	-	-	0.2
32+00 - 42+40		4" SIDEWALKS	-	170	-	-	1.7
32+00 - 42+40		5" SIDEWALKS	-	470	-	-	4.5
32+00 - 42+40		6" SIDEWALKS	-	23	-	-	0.3
100+45 - 104+60		SPRINGBROOK ROADWAY	-	950	2500	2900	33
100+45 - 104+60		CONCRETE DRIVEWAYS	-	7	-	-	0.1
100+45 - 104+60		4" SIDEWALKS	-	100	-	-	0.9
100+45 - 104+60		5" SIDEWALKS	-	140	-	-	1.3
100+45 - 104+60		6" SIDEWALKS	-	5	-	-	0.1
106+10 - 112+00		SPRINGBROOK ROADWAY	8	1200	2900	3400	38
106+10 - 112+00		ASPHALT DRIVEWAYS	-	73	-	-	0.7
106+10 - 112+00		CONCRETE DRIVEWAYS	-	69	-	-	0.7
106+10 - 112+00		4" SIDEWALKS	-	50	-	-	0.5
106+10 - 112+00		5" SIDEWALKS	-	160	-	-	1.5
106+10 - 112+00		6" SIDEWALKS	-	6	-	-	0.1
200+00 - 203+26		ROUNDAABOUT	-	460	1200	1400	16
200+00 - 203+26		5" SIDEWALKS	-	1	-	-	0.1

PROJECT TOTAL

13

11947

23200

27400

339

*ADDITIONAL QUANTITY SHOWN ELSEWHERE

3

PIPE UNDERDRAIN					
STATION - STATION	LOCATION	310.0110 BASE AGGREGATE OPEN GRADED	612.0106 6-INCH (LF)	612.0600 TRENCH (LF)	645.0111 GEOTEXTILE FABRIC TYPE DF SCHEDULE A (SY)
		(TON)	(LF)	(LF)	(SY)
21+75	39TH	50	200	200	150
40+00	39TH	50	200	200	150
103+30	SPRINGBROOK	50	200	200	150
PROJECT TOTAL		150	600	600	450

CONCRETE

STATION - STATION	LOCATION	405.0100* COLORING CONCRETE RED* (CY)	415.0070 PAVEMENT 7-INCH (SY)	416.0260 DRIVEWAY HES 6-INCH (SY)	416.0280 DRIVEWAY HES 8-INCH (SY)	416.0508 ROUNDAABOUT TRUCK APRON 8-INCH (SY)	715.0415 INCENTIVE STRENGTH CONCRETE PAVEMENT (DOL)
		(CY)	(SY)	(SY)	(SY)	(SY)	(DOL)
13+50 - 30+45	39TH	-	9600	240	-	-	560
32+00 - 42+37	39TH	-	4900	46	-	-	290
100+45 - 104+60	SPRINGBROOK	-	2100	20	-	-	120
106+10 - 112+00	SPRINGBROOK	-	2700	23	190	-	160
200+00 - 203+26	ROUNDAABOUT	75	860	-	-	340	50
PROJECT TOTAL		75	20160	329	190	340	1180
*ADDITIONAL QUANTITY SHOWN ELSEWHERE							

3

ASPHALTIC ITEMS

STATION - STATION	LOCATION	440.4410.S INCENTIVE IRI RIDE (DOL)	455.0120 MATERIAL PG64-28 (TON)	455.0605 TACK COAT (GAL)	460.1103 HMA PAVEMENT TYPE E-3 (TON)	460.2000 INCENTIVE DENSITY HMA PAVEMENT (DOL)	465.0120 DRIVEWAYS AND FIELD ENTRANCES (TON)
		(DOL)	(TON)	(GAL)	(TON)	(DOL)	(TON)
15+75 - 30+45	39TH ROADWAY	560	57	580	1100	670	-
13+50 - 30+45	DRIVEWAYS 3-INCH	-	-	14	-	-	38
32+00 - 41+03	39TH ROADWAY	350	29	300	530	340	-
32+00 - 41+03	DRIVEWAYS 4-INCH	-	-	5	-	-	18
100+45 - 104+60	SPRINGBROOK	160	12	122	220	140	-
106+10 - 112+00	SPRINGBROOK	230	16	158	290	190	-
106+10 - 112+00	DRIVEWAYS 4-INCH	-	-	14	-	-	49
200+00 - 203+26	ROUNDAABOUT	130	6	52	92	60	-
PROJECT TOTAL		1430	120	1245	2232	1400	105

CONCRETE CURB AND GUTTER

STATION - STATION	LOCATION	601.0205 GUTTER 18-INCH 24-INCH (LF)	601.0405 18-INCH TYPE A (LF)	601.0407 18-INCH TYPE D (LF)	601.0409 30-INCH TYPE A (LF)	601.0411 30-INCH TYPE D (LF)	601.0580 4-INCH SLOPED 36-INCH TYPE R (LF)
		(LF)	(LF)	(LF)	(LF)	(LF)	(LF)
11+67 - 30+45	39TH	-	-	-	5900	-	-
32+00 - 42+37	39TH	-	-	29	3300	-	-
100+45 - 104+60	SPRINGBROOK	-	-	-	1700	-	-
106+10 - 112+00	SPRINGBROOK	180	-	-	1300	65	-
200+00 - 203+26	ROUNDAABOUT	-	240	-	-	-	320
PROJECT TOTAL		180	240	29	12200	65	320

CONCRETE SIDEWALK

STATION - STATION	LOCATION	405.0100* COLORING CONCRETE RED* (CY)	602.0405 4-INCH (SF)	602.0410 5-INCH (SF)	602.0415 6-INCH (SF)	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW (SF)
		(CY)	(SF)	(SF)	(SF)	(SF)
11+67 - 30+45	39TH	140	12000	38000	1300	324
32+00 - 42+37	39TH	85	6900	19000	600	160
100+45 - 104+60	SPRINGBROOK	47	3800	5400	120	72
106+10 - 112+00	SPRINGBROOK	23	1900	6300	140	112
200+00 - 203+26	ROUNDAABOUT	-	-	25	-	-
PROJECT TOTAL		295	24600	68725	2160	668

*ADDITIONAL QUANTITY SHOWN ELSEWHERE

LAWN RESTORATION

STATION - STATION	LOCATION	624.0100* WATER* (MGAL)	625.0100 TOPSOIL (SY)	627.0200 MULCHING (SY)	629.0210 FERTILIZER TYPE B (CWT)	630.0140 SEEDING MIXTURE NO.40 (LB)	630.0160 SEEDING MIXTURE NO.60 (LB)	630.0200 SEEDING TEMPORARY (LB)	631.0300 SOD WATER (MGAL)	631.1000 SOD LAWN (SY)
		(MGAL)	(SY)	(SY)	(CWT)	(LB)	(LB)	(LB)	(MGAL)	(SY)
11+67 - 30+45	39TH	100	9000	13000	2.8	74	-	240	51	4500
32+00 - 42+37	39TH	54	4800	7900	1.5	57	2	130	19	1700
100+45 - 104+60	SPRINGBROOK	22	2000	3300	0.7	24	-	52	7.0	600
106+10 - 112+00	SPRINGBROOK	27	2400	4300	0.8	34	-	65	6.1	540
200+00 - 203+26	ROUNDAABOUT	5.1	460	460	0.2	-	-	13	5.1	460
UNDISTRIBUTED (25%)		51	4600	7200	1.5	47	-	130	-	-
PROJECT TOTAL		259.1	23260	36160	7.5	236	2	630	88.2	7800

*ADDITIONAL QUANTITY SHOWN ELSEWHERE

RIPRAP

STATION	LOCATION	606.0200 MEDIUM (CY)	645.0120 GEOTEXTILE FABRIC TYPE HR (SY)
		(CY)	(SY)
40+95	70'RT	11	23
PROJECT TOTAL		11	23

CONCRETE MEDIAN

STATION - STATION	LOCATION	620.0200 BLUNT NOSE (SF)	620.0300 SLOPED NOSE (SF)
		(SF)	(SF)
15+75 - 30+45	39TH	71	390
32+00 - 42+37	39TH	71	240
100+45 - 104+60	SPRINGBROOK	49	60
106+10 - 112+00	SPRINGBROOK	49	60
PROJECT TOTAL		240	750

LANDMARK REFERENCE
MONUMENT

STATION	OFFSET	621.0100 (EA)
		(EA)
36+68	4'LT	1
PROJECT TOTAL		1

EROSION CONTROL SCHEDULE

STATION - STATION	LOCATION	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)	MOBILIZATIONS		628.2004 EROSION MAT CLASS I TYPE B (SY)	628.7504 TEMPORARY DITCH CHECKS (LF)	628.7555 CULVERT PIPE CHECKS (EACH)
				628.1905	628.1910			
13+50 - 30+45	39TH	900	900	10	6	620	70	-
32+00 - 42+37	39TH	1100	1100	-	-	620	-	3
100+45 - 104+60	SPRINGBROOK	390	390	-	-	-	-	-
106+10 - 112+00	SPRINGBROOK	-	-	-	-	-	20	-
UNDISTRIBUTED (25%)		570	570	-	-	310	23	1
PROJECT TOTAL		2960	2960	10	6	1550	113	4

PROJECT NO:3729-00-74

HWY:39 AVENUE

COUNTY:KENOSHA

MISCELLANEOUS QUANTITIES

SHEET

66

E

3

3

STORM SEWER																									
STRUCTURE NUMBER	STATION	LOCATION	COVER ELEV	REINF. CONC. PIPE, CL. III, STORM SEWER		REINF. CONC. PIPE, CL. IV, STORM SEWER		% SLOPE	* PIPE TIES REQ'D (EACH)	522.1015 REINF. CONC. AEW 15-INCH (EACH)	522.1048 REINF. CONC. AEW 48-INCH (EACH)	611.1230 CB 2x3 (EACH)	611.2004 MH 4' DIA (EACH)	611.2007 MH 7' DIA (EACH)	611.2008 MH 8' DIA (EACH)	611.0530 MH COVERS TYPE J (EACH)	SPV.0060.15** EXTERNAL MANHOLE SEAL (EA)	611.0624 INLET COVERS TYPE H (EACH)	611.0639 INLET COVERS TYPE H-S (EACH)	*** DEPTH (FT)	FROM STRUCTURE	TO STRUCTURE	INLET ELEV	DISCH ELEV	
				608.0324 24-INCH (LF)	608.0348 48-INCH (LF)	608.0412 12-INCH (LF)	608.0415 15-INCH (LF)																		
10.0	16+66	1.4'RT	698.68	-	-	-	-	-	-	-	-	-	1	-	-	1	1	-	-	4.17	-	-	693.26	-	
10.1	16+66	36.9'LT	698.22	-	-	-	38	1.00%	-	-	-	1	-	-	-	-	-	-	1	2.50	10.1	10.0	694.47	694.09	
10.2	16+66	18.8'RT	698.16	-	-	-	17	1.00%	-	-	-	1	-	-	-	-	-	1	-	2.50	10.2	10.0	694.41	694.24	
20.0	18+50	6'RT	689.48	180	-	-	-	3.92%	-	-	-	-	1	-	-	1	1	-	-	4.23	20.0	21.0	684.00	676.94	
20.1	18+50	51.3'LT	688.98	-	-	-	28	0.50%	-	-	-	1	-	-	-	-	-	1	-	2.50	20.1	20.2	685.23	685.09	
20.2	18+50	23.8'LT	689.48	-	-	-	11	1.00%	-	-	-	1	-	-	-	-	-	1	-	3.58	20.2	20.3	684.99	684.88	
20.3	18+50	13.3LT	689.72	-	-	-	19	1.00%	-	-	-	1	-	-	-	-	-	1	-	4.03	20.3	20.0	684.78	684.59	
20.4	18+50	18.3'RT	698.14	-	-	-	12	1.00%	-	-	-	1	-	-	-	-	-	1	-	11.84	20.4	20.0	685.39	685.27	
21.0	20+30	6'RT	681.60	141	-	-	-	1.76%	-	-	-	-	1	-	-	1	1	-	-	3.85	21.0	22.0	676.84	674.36	
22.0	21+70.5	6'RT	679.59	199	-	-	-	0.38%	-	-	-	-	1	-	-	1	1	-	-	4.08	22.0	EX	674.26	673.50	
22.1	21+80.5	51.3'LT	679.10	-	-	10	-	1.00%	-	-	-	1	-	-	-	-	-	1	-	2.55	22.1	22.2	675.64	675.54	
22.2	21+70.5	51.3'LT	679.09	-	-	-	35	0.50%	-	-	-	1	-	-	-	-	-	1	-	2.84	22.2	22.3	675.34	675.17	
22.3	21+70.5	15.8'LT	679.75	-	-	-	15	0.50%	-	-	-	1	-	-	-	-	-	1	-	3.43	22.3	22.4	675.07	675.00	
22.4	21+70.5	1.3'LT	679.59	-	-	-	7	0.50%	-	-	-	1	-	-	-	-	-	1	-	3.78	22.4	22.0	674.90	674.86	
22.5	21+80.5	26.3'RT	679.10	-	-	10	-	1.00%	-	-	-	1	-	-	-	-	-	1	-	2.55	22.5	22.6	675.64	675.54	
22.6	21+70.5	26.3'RT	679.09	-	-	-	20	1.00%	-	-	-	1	-	-	-	-	-	1	-	2.50	22.6	22.0	675.34	675.14	
24.0	24+30	6'RT	680.83	60	-	-	-	0.80%	-	-	-	-	1	-	-	1	1	-	-	4.10	24.0	EX	675.48	675.00	
24.1	24+30	51.3'LT	680.33	-	-	-	40	0.50%	-	-	-	1	-	-	-	-	-	1	-	2.84	24.1	24.2	676.58	676.38	
24.2	24+30	11.8'LT	681.07	-	-	-	11	0.55%	-	-	-	1	-	-	-	-	-	1	-	3.88	24.2	24.3	676.28	676.22	
24.3	24+30	1.3'LT	680.83	-	-	-	7	0.57%	-	-	-	1	-	-	-	-	-	1	-	3.80	24.3	24.0	676.12	676.08	
24.4	24+30	26.3'RT	680.33	-	-	-	20	1.00%	-	-	-	1	-	-	-	-	-	1	-	2.84	24.4	24.0	676.58	676.38	
25.0	27+30	6'RT	687.40	300	-	-	-	1.43%	-	-	-	-	1	-	-	1	1	-	-	6.62	25.0	24.0	679.87	675.58	
25.1	27+30	43.3'LT	687.06	-	-	-	20	0.50%	-	-	-	1	-	-	-	-	-	-	1	-	-	25.1	25.2	683.31	683.21
25.2	27+30	23.8'LT	687.40	-	-	-	23	0.52%	-	-	-	1	-	-	-	-	-	1	-	3.04	25.2	25.3	683.11	682.99	
25.3	27+30	1.3'LT	687.40	-	-	-	7	0.57%	-	-	-	1	-	-	-	-	-	1	-	3.60	25.3	25.0	682.89	682.85	
25.4	27+30	18.3'RT	687.06	-	-	-	12	1.00%	-	-	-	1	-	-	-	-	-	1	-	2.84	25.4	25.0	683.31	683.19	
26.0	29+55	5'RT	695.83	226	-	-	-	3.42%	-	-	-	-	1	-	-	1	1	-	-	4.84	26.0	25.0	690.08	682.35	
26.1	29+54	49.5'LT	695.37	-	-	-	23	0.48%	-	-	-	1	-	-	-	-	-	-	1	2.73	26.1	26.2	691.73	691.62	
26.2	29+55	26.7'LT	695.80	-	-	-	25	0.48%	-	-	-	1	-	-	-	-	-	1	-	3.37	26.2	26.3	691.52	691.4	
26.3	29+55	1.3'LT	695.80	-	-	-	6	0.50%	-	-	-	1	-	-	-	-	-	1	-	3.25	26.3	26.0	691.30	691.27	
26.4	29+55	17.3'RT	695.50	-	-	-	12	0.50%	-	-	-	1	-	-	-	-	-	1	-	3.39	26.4	26.0	690.86	690.8	
26.5	29+54	26.2'RT	695.26	-	-	-	9	0.56%	-	-	-	1	-	-	-	-	-	1	-	3.34	26.5	26.4	691.01	690.96	
26.6	29+50	44.2'RT	694.87	-	-	-	19	0.48%	-	-	-	1	-	-	-	-	-	1	-	2.76	26.6	26.5	691.20	691.11	
27.0	30+86.7	-	698.09	132	-	-	-	0.20%	-	-	-	-	1	-	-	1	1	-	-	6.74	27.0	26.0	690.44	690.18	
27.1	30+90.6	18.5'RT	697.57	-	-	-	19	1.00%	-	-	-	1	-	-	-	-	-	1	-	3.15	27.1	27.0	693.51	693.32	
27.2	30+98.2	24.5'RT	697.56	-	-	10	-	1.00%	-	-	-	1	-	-	-	-	-	1	-	2.84	27.2	27.1	693.81	693.71	
28.0	31+25	-	699.38	39	-	-	-	0.20%	-	-	-	-	1	-	-	1	1	-	-	7.85	28.0	27.0	690.62	690.54	
29.0	32+61	6'RT	697.29	136	-	-	-	0.20%	-	-	-	-	1	-	-	1	1	-	-	5.39	29.0	28.0	690.99	690.72	
29.1	32+88.7	55.6'LT	696.11	-	-	-	19	0.47%	-	-	-	1	-	-	-	-	-	1	-	2.84	29.1	29.2	692.36	692.27	
29.2	32+85	37.5'LT	696.43	-	-	-	10	0.50%	-	-	-	1	-	-	-	-	-	1	-	3.35	29.2	29.3	692.17	692.12	
29.3	32+84.6	27.9'LT	696.70	-	-	-	19	0.47%	-	-	-	1	-	-	-	-	-	1	-	3.77	29.3	29.4	692.02	691.93	
29.4	32+85.8	9.4'LT	696.88	-	-	-	8	0.50%	-	-	-	1	-	-	-	-	-	1	-	4.14	29.4	29.5	691.83	691.79	
29.5	32+86	1.3'LT	696.87	-	-	-	26	0.54%	-	-	-	1	-	-	-	-	-	1	-	4.27	29.5	29.0	691.69	691.55	
29.6	32+61	19.8'RT	696.92	-	-	-	14	1.00%	-	-	-	1	-	-	-	-	-	-	1	2.84	29.6	29.0	693.17	693.03	
30.0	35+48	6'RT	694.56	296	-	-	-	3.18%	-	-	-	-	1	-	-	1	1	-	-	4.16	30.0	31.0	689.49	680.07	
30.1	25+42	43.3'LT	694.29	-	-	-	21	0.48%	-	-	-	1	-	-	-	-	-	-	1	2.84	30.1	30.2	690.54	690.44	
30.2	35+47.7	23.5'LT	694.57	-	-	-	10	0.50%	-	-	-														

3

3

STORM SEWER																								
STRUCTURE NUMBER	STATION	LOCATION	COVER ELEV	REINF. CONC. PIPE, CL. III, STORM SEWER		REINF. CONC. PIPE, CL. IV, STORM SEWER		% SLOPE	* PIPE TIES REQ'D (EACH)	522.1015 REINF. CONC. AEW 15-INCH (EACH)	522.1048 REINF. CONC. AEW 48-INCH (EACH)	611.1230 CB 2x3 (EACH)	611.2004 MH 4' DIA (EACH)	611.2007 MH 7' DIA (EACH)	611.2008 MH 8' DIA (EACH)	611.0530 MH COVERS TYPE J (EACH)	SPV.0060.15** EXTERNAL MANHOLE SEAL (EA)	611.0624 INLET COVERS TYPE H (EACH)	611.0639 INLET COVERS TYPE H-S (EACH)	*** DEPTH (FT)	FROM STRUCTURE	TO STRUCTURE	INLET ELEV	DISCH ELEV
				608.0324 24-INCH (LF)	608.0348 48-INCH (LF)	608.0412 12-INCH (LF)	608.0415 15-INCH (LF)		15-INCH (EACH)	48-INCH (EACH)	2x3 (EACH)	4' DIA (EACH)	7' DIA (EACH)	8' DIA (EACH)	COVERS TYPE J (EACH)	MANHOLE SEAL (EA)	COVERS TYPE H (EACH)	COVERS TYPE H-S (EACH)	DEPTH (FT)	FROM STRUCTURE	TO STRUCTURE	INLET ELEV	DISCH ELEV	
EX	39+93.5	60.6'LT		-	40	-	-	0.48%	-	-	-	-	-	-	-			-	-	-	EX	33.0	673.25	673.06
33.0	40+23.5	34.4'LT	681.28	-	18	-	-	0.48%	-	-	-	-	-	1	-	1	1	-	-	7.31	33.0	35.0	673.06	672.97
34.0	41+09	48.5'LT	681.4	69	-	-	-	0.60%	-	-	-	-	1	-	-	1	1	-	-	5.54	34.0	35.0	674.95	674.54
34.1	41+06	96'LT		-	-	-	41	1.00%	2	1	-	-	-	-	-	-	-	-	-	-	34.1	34.0	675.84	675.43
35.0	40+41.1	34.4'LT	681.72	-	40	-	-	0.54%	-	-	-	-	-	-	1	1	1	-	-	7.84	35.0	36.0	672.97	672.75
35.1	40+41	53.5'LT		-	-	-	13	1.00%	2	1	-	-	-	-	-	-	-	-	-	-	35.1	35.0	674.08	673.95
36.0	40+41	6'RT	682.67	-	67	-	-	0.54%	-	-	-	-	-	1	-	1	1	-	-	9.01	36.0	36.1	672.75	672.39
36.1	40+90.7	62.2'RT		-	-	-	-		-	-	1	-	-	-	-	-	-	-	-		36.1	CON AEW	692.39	-
40.0	103+29.3	6'RT	697.67	220	-	-	-	0.20%	-	-	-	-	1	-	-	1	1	-	-	4.23	40.0	28.0	692.53	692.09
40.1	103+39.3	31.5'LT	697.29	-	-	10	-	1.00%	-	-	-	1	-	-	-	-	-	-	1	2.56	40.1	40.2	693.82	693.72
40.2	103+29.3	31.5'LT	697.30	-	-	-	21	0.48%	-	-	-	1	-	-	-	-	-	-	1	2.87	40.2	40.3	693.52	693.42
40.3	103+29.3	10.4'LT	697.67	-	-	-	9	0.56%	-	-	-	1	-	-	-	-	-	1	-	3.44	40.3	40.4	693.32	693.27
40.4	103+29.3	1.3'LT	697.67	-	-	-	7	0.57%	-	-	-	1	-	-	-	-	-	1	-	3.59	40.4	40.0	693.17	693.13
40.5	103+39.3	28.3'RT	697.13	-	-	10	-	1.00%	-	-	-	1	-	-	-	-	-	-	1	2.56	40.5	40.6	693.66	693.56
40.6	103+29.3	27.5'RT	697.15	-	-	-	22	1.00%	-	-	-	1	-	-	-	-	-	-	1	2.88	40.6	40.0	693.36	693.14
41.0	107+35	6'RT	696.82	166	-	-	-	0.20%	-	-	-	-	1	-	-	1	1	-	-	4.19	41.0	28.0	691.72	691.38
41.1	107+17	33.6'LT	696.5	-	-	-	30	0.50%	-	-	-	1	-	-	-	-	-	-	1	2.84	41.1	41.2	692.75	692.60
41.2	107+35	8.9'LT	696.82	-	-	-	8	0.50%	-	-	-	1	-	-	-	-	-	1	-	3.41	41.2	41.3	692.50	692.46
41.3	107+35	1.3'LT	696.82	-	-	-	7	0.57%	-	-	-	1	-	-	-	-	-	1	-	3.55	41.3	41.0	692.36	692.32
41.4	107+35	20.7'RT	696.43	-	-	-	15	1.00%	-	-	-	1	-	-	-	-	-	-	1	2.84	41.4	41.0	692.68	692.53
50.0	110+80	18.3'RT	694.75	48	-	-	-	0.50%	-	-	-	-	1	-	-	-	-	1	-	3.55	50	EX	690.29	690.05
50.1	110+80	18.5'LT	694.75	-	-	-	37	0.51%	-	-	-	1	-	-	-	-	-	-	1	2.84	50.1	50.0	691.00	690.81
PROJECT TOTAL				2409	165	78	922		4	2	1	57	16	2	1	18	18	39	19					

*FOR INFORMATION ONLY **ADDITIONAL QUANTITIES SHOWN ELSEWHERE

RECONSTRUCTING AND ADJUSTING MANHOLES

CATEGORY	STATION	OFFSET	611.8120.S	611.8110	611.0420	SPV.0060.15*
			COVER PLATES TEMPORARY (EA)	ADJUST MANHOLE COVER (EA)	RECONSTRUCT MANHOLE (EA)	EXTERNAL MANHOLE SEAL* (EA)
0010	23+70	6'RT	1	-	1	1
0010	24+50	62'LT	1	-	1	1
0010	23+59	62'RT	1	1	-	1
SUBTOTAL			3	1	2	3
0020	16+00	31'RT	1	-	1	1
0020	20+00	30'RT	1	1	-	1
0020	22+69	78'LT	1	-	1	1
0020	24+11	73'LT	1	-	1	1
0020	106+15	67'RT	1	-	1	1
0020	109+33	20'LT	1	1	-	1
0020	111+76	21'RT	1	1	-	1
SUBTOTAL			7	3	4	7
PROJECT TOTAL			10	4	6	10

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

INLET PROTECTION

	628.7005	628.7015	628.7020
STATION	TYPE A (EACH)	TYPE C (EACH)	TYPE D (EACH)
16+66	2	2	-
18+50	4	4	-
21+70	-	-	6
24+30	4	4	-
26+40	1	-	-
27+30	4	4	-
29+50	6	6	-
30+90	-	-	2
32+80	6	6	-
35+50	4	4	-
38+50	4	4	-
40+15	-	-	4
103+30	-	-	6
107+35	4	4	-
110+80	2	2	-
PROJECT TOTAL	41	40	18

PLANTS

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE WHEN PLANTED	ROOT ZONE MODE	TOTAL QUANTITY
ITEM 632.0101 TREES:					
AF	ACER X FREEMANII 'SIENNA' PP11322	SIENNA GLEN MAPLE	2.5" CAL	B.B.	7
AM	ACER MIYABEI 'STATE STREET'	STATE STREET MIYABE MAPLE	3.0" CAL	B.B.	5
AG	AMELANCHIER X GRAND. 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	2.0" CAL	B.B.	7
CM	CORNUS MAS 'GOLDEN GLORY'	GOLDEN GLORY CORNELIANCHERRY DOGWOOD	6' MULTI- STEM	B.B.	1
GT	GLEDITSIA TRIACANTHOS 'SKYLINE' PP1619	SKYLINE HONEYLOCUST	3.0" CAL	B.B.	12
GD	GYMNOCLADUS DIOICA	KENTUCKY COFFEETREE	2.5" CAL	B.B.	6
SR	SYRINGA RETICULATA	JAPANESE TREE LILAC	2.5" CAL	B.B.	6
UF	ULMUS 'FRONTIER'	FRONTIER ELM	2.5" CAL	B.B.	11
ITEM 632.0201 SHRUBS:					
RT	RHUS TYPHINA 'BAILTIGER' PPAF	TIGER EYES CUTLEAF STAGHORN SUMAC	24" MIN	#5 CONT.	6
ITEM 632.9101 LANDSCAPING PLANTING SURVEILLANCE AND CARE CYCLES:			-	-	20
B.B.: BALLED & BURLAPPED		CONT.: CONTAINER GROWN			

SIGNING QUANTITIES

SIGN NO.	OFFSET DIST. (FT)	SIGN CODE	SIGN MESSAGE	SIGN SIZE (W X H)	637.2210 SIGNS TYPE II REFLECTIVE H	638.2602 REMOVING SIGNS TYPE II	638.3000 REMOVING SMALL SIGN SUPPORTS	SPV.0060.03 STEEL SIGN POST 9-FT	SPV.0060.04 STEEL SIGN POST 11-FT	SPV.0060.05 STEEL SIGN POST 13-FT	SPV.0060.06 STEEL SIGN POST 15-FT	SPV.0105.03 ACTVATED FLASHING LED SIGN UNITS, STATION 27+50	SPV.0105.04 ACTMATED FLASHING LED SIGN UNITS, STATION 35+00	SPV.0105.05 ACTVATED FLASHING LED SIGN UNITS, STATION 103+00	SPV.0105.06 ACTVATED FLASHING LED SIGN UNITS, STATION 112+70	SPV.0105.07 BASE STATION CONTROL UNIT	REMARKS/NEW SIGNS LOCATION
				(IN)	(SF)	(EACH)	(EACH)	(EACH)	(EACH)	(EACH)	(EACH)	(LS)	(LS)	(LS)	(LS)	(LS)	
0	39.0	R2-1	SPEED LIMIT 30	24 X 30	5.00	1	-	-	-	-	-	-	-	-	-	-	INSTALL NEW SIGN ON EXISTING POST
1	MEDIAN	R4-7	KEEP RIGHT SYMBOL	24 X 30	5.00	1	1	-	-	1	-	-	-	-	-	-	
2	MEDIAN	R4-7	KEEP RIGHT SYMBOL	24 X 30	-	1	1	-	-	-	-	-	-	-	-	-	
3	24.0	-	DIVIDED HIGHWAY SYMBOL	-	-	1	1	-	-	-	-	-	-	-	-	-	
4	24.0	W11-2	PEDESTRIAN CROSSING	30 X 30	6.25	1	1	-	-	-	1	-	-	-	-	-	
5	11.0	-	DIVIDED HIGHWAY SYMBOL	-	-	1	1	-	-	-	-	-	-	-	-	-	
6	MEDIAN	R4-7	KEEP RIGHT SYMBOL	24 X 30	5.00	-	-	-	-	1	-	-	-	-	-	-	
7	12.0	-	NO PARKING ANY TIME	-	-	1	1	-	-	-	-	-	-	-	-	-	
8	56.0	R1-1	STOP	30	5.18	-	-	-	-	-	1	-	-	-	-	-	
9	56.0	R6-3A	DIVIDED HIGHWAY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #8
10	12.0	-	TWO WAY TRAFFIC SYMBOL	-	-	1	1	-	-	-	-	-	-	-	-	-	
11	MEDIAN	R4-7	KEEP RIGHT SYMBOL	24 X 30	5.00	-	-	-	-	1	-	-	-	-	-	-	
12	32.0	W2-6	ROUNDAABOUT SYMBOL	30 X 30	6.25	3	1	-	-	-	1	-	-	-	-	-	
13	32.0	W16-9P	AHEAD	24 X 12	2.00	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #12
14	32.0	W13-1	15 MPH	18 X 18	2.25	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #13
15	32.0	M2-1	JUNCTION	21 X 15	2.20	2	1	-	-	-	1	-	-	-	-	-	
16	32.0	M1-6	STH 165	24 X 24	4.00	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #15
17	21.5	-	DO NOT PASS	-	-	1	1	-	-	-	-	-	-	-	-	-	
18	MEDIAN	R4-7	KEEP RIGHT SYMBOL	24 X 30	5.00	-	-	-	-	1	-	-	-	-	-	-	
19	22.5	-	STOP	-	-	1	1	-	-	-	-	-	-	-	-	-	
20	47.5	R1-1	STOP	30	5.18	-	-	-	-	-	1	-	-	-	-	-	
21	47.5	R6-3A	DIVIDED HIGHWAY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #20
22	24.0	W11-8	FLASHING LED SIGN UNIT	36X36	-	-	-	-	1	-	-	1	-	-	-	1	
23	24.0	A11-12	ROUNDAABOUT GUIDE	168X84	98.00	-	-	-	-	-	4	-	-	-	-	-	
24	MEDIAN	R4-7	KEEP RIGHT SYMBOL	24 X 30	5.00	-	-	-	-	1	-	-	-	-	-	-	
25	MEDIAN	W2-6	ROUNDAABOUT SYMBOL	30 X 30	6.25	-	-	-	-	-	1	-	-	-	-	-	
26	MEDIAN	W13-1	15 MPH	18 X 18	2.25	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #25
27	15.0	-	SIGNAL AHEAD SYMBOL	-	-	1	1	-	-	-	-	-	-	-	-	-	
28	30.5	R3-8DD	LANE CONTROL	36 X 30	7.50	-	-	-	1	-	-	-	-	-	-	-	
29	17.0	-	RIGHT LANE MUST TURN RIGHT	-	-	1	1	-	-	-	-	-	-	-	-	-	
30	25.5	R2-1	SPEED LIMIT 30	24 X 30	5.00	1	1	-	-	1	-	-	-	-	-	-	
31	22.0	W12-1D	DOUBLE DIAGONAL ARROW	24 X 24	4.00	-	-	1	-	-	-	-	-	-	-	-	
32	7.0	R1-2	YIELD	36 X 31	3.88	-	-	-	-	-	1	-	-	-	-	-	
33	7.0	R6-2R	ONE WAY	24 X 30	5.00	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #32
34	25.5	R1-2	YIELD	36 X 31	3.88	-	-	-	-	-	1	-	-	-	-	-	
35	25.5	R1-54	TO TRAFFIC FROM LEFT	24 X 15	2.50	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #34
36	73.0	R1-2	YIELD	36 X 31	3.88	-	-	-	-	1	-	-	-	-	-	-	
37	17.0	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	
38	31.0	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	
39	74.0	R1-2	YIELD	36 X 31	3.88	1	1	-	-	1	-	-	-	-	-	-	
40	25.0	R1-2	YIELD	36 X 31	3.88	-	-	-	-	-	1	-	-	-	-	-	
41	25.0	R1-54	TO TRAFFIC FROM LEFT	24 X 15	2.50	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #40
42	5.5	R1-2	YIELD	36 X 31	3.88	-	-	-	-	-	1	-	-	-	-	-	
43	5.5	R6-2R	ONE WAY	24 X 30	5.00	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #42
44	20.0	-	RIGHT TURN ONLY SYMBOL	-	-	1	1	-	-	-	-	-	-	-	-	-	
45	22.0	W12-1D	DOUBLE DIAGONAL ARROW	24 X 24	4.00	-	-	1	-	-	-	-	-	-	-	-	
46	8.0	-	RIGHT LANE MUST TURN RIGHT	-	-	1	1	-	-	-	-	-	-	-	-	-	
47	22.0	R2-1	SPEED LIMIT 30	24 X 30	5.00	1	1	-	-	1	-	-	-	-	-	-	
48	MEDIAN	R4-7	KEEP RIGHT SYMBOL	24 X 30	5.00	-	-	-	-	1	-	-	-	-	-	-	
49	24.0	R3-8DD	LANE CONTROL	36 X 30	7.50	-	-	-	1	-	-	-	-	-	-	-	
50	2.0	-	SIGNAL AHEAD SYMBOL	-	-	1	1	-	-	-	-	-	-	-	-	-	
51	MEDIAN	R4-7	KEEP RIGHT SYMBOL	24 X 30	5.00	-	-	-	-	1	-	-	-	-	-	-	
52	24.0	W2-6	ROUNDAABOUT SYMBOL	30 X 30	6.25	-	-	-	-	-	1	-	-	-	-	-	
53	24.0	W13-1	15 MPH	18 X 18	2.25	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #52
54	23.5	W6-2	DIVIDED HIGHWAY SYMBOL	36 X 36	9.00	-	-	-	-	-	1	-	-	-	-	-	
55	MEDIAN	R4-7	KEEP RIGHT SYMBOL	24 X 30	5.00	-	-	-	-	1	-	-	-	-	-	-	
56	24.0	W11-8	FLASHING LED SIGN UNIT	36X36	-	-	-	-	1	-	-	-	1	-	-	-	
57	24.0	A11-12	ROUNDAABOUT GUIDE	168X84	98.00	-	-	-	-	-	4	-	-	-	-	-	
58	24.0	W6-1	DIVIDED HIGHWAY SYMBOL	36 X 36	9.00	-	-	-	-	-	1	-	-	-	-	-	
59	35.5	R2-1	SPEED LIMIT 30	24 X 30	5.00	-	-	-	-	1	-	-	-	-	-	-	

SIGNING QUANTITIES

SIGN NO.	OFFSET DIST. (FT)	SIGN CODE	SIGN MESSAGE	SIGN SIZE (W X H) (IN)	637.2210 SIGNS TYPE II REFLECTIVE H (SF)	638.2602 REMOVING SIGNS TYPE II (EACH)	638.3000 REMOVING SMALL SIGN SUPPORTS (EACH)	SPV.0060.03 STEEL SIGN POST 9-FT (EACH)	SPV.0060.04 STEEL SIGN POST 11-FT (EACH)	SPV.0060.05 STEEL SIGN POST 13-FT (EACH)	SPV.0060.06 STEEL SIGN POST 15-FT (EACH)	SPV.0105.03 ACTVATED FLASHING LED SIGN UNITS, STATION 27+50 (LS)	SPV.0105.04 ACTVATED FLASHING LED SIGN UNITS, STATION 35+00 (LS)	SPV.0105.05 ACTVATED FLASHING LED SIGN UNITS, STATION 103+00 (LS)	SPV.0105.06 ACTVATED FLASHING LED SIGN UNITS, STATION 112+70 (LS)	SPV.0105.07 BASE STATION CONTROL UNIT (LS)	REMARKS/NEW SIGNS LOCATION
60	24.5	W2-6	ROUNDAABOUT SYMBOL	30 X 30	6.25	-	-	-	-	-	1	-	-	-	-	-	
61	24.5	W13-1	15 MPH	18 X 18	2.25	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #60
62	26.0	-	LANE CONTROL	-	-	1	1	-	-	-	-	-	-	-	-	-	
63	MEDIAN	R4-7	KEEP RIGHT SYMBOL	24 X 30	5.00	-	-	-	-	1	-	-	-	-	-	-	
64	22.5	A11-12	ROUNDAABOUT GUIDE	168X84	98.00	-	-	-	-	-	4	-	-	-	-	-	
64.1	22.5	W11-8	FLASHING LED SIGN UNIT	36X36	-	-	-	-	1	-	-	-	-	1	-	-	
65	22.5	R3-8EE	LANE CONTROL	36 X 30	7.50	-	-	-	-	1	-	-	-	-	-	-	
66	22.0	R2-1	SPEED LIMIT 30	24 X 30	5.00	-	-	-	-	1	-	-	-	-	-	-	
67	6.0	R1-2	YIELD	36 X 31	3.88	-	-	-	-	-	1	-	-	-	-	-	
68	6.0	R6-2R	ONE WAY	24 X 30	5.00	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #67
69	35.0	R1-2	YIELD	36 X 31	3.88	-	-	-	-	-	1	-	-	-	-	-	
70	35.0	R1-54	TO TRAFFIC FROM LEFT	24 X 15	2.50	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #69
71	26.0	-	SPEED LIMIT 35	-	-	1	1	-	-	-	-	-	-	-	-	-	
72	7.0	R1-2	YIELD	36 X 31	3.88	-	-	-	-	-	1	-	-	-	-	-	
73	7.0	R6-2R	ONE WAY	24 X 30	5.00	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #72
74	28.5	R1-2	YIELD	36 X 31	3.88	-	-	-	-	-	1	-	-	-	-	-	
75	28.5	R1-54	TO TRAFFIC FROM LEFT	24 X 15	2.50	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #74
76	26.0	-	RIGHT TURN ONLY SYMBOL	-	-	1	1	-	-	-	-	-	-	-	-	-	
77	MEDIAN	R4-7	KEEP RIGHT SYMBOL	24 X 30	5.00	-	-	-	-	1	-	-	-	-	-	-	
78	26.0	-	LEFT LANE MUST TURN LEFT	-	-	1	1	-	-	-	-	-	-	-	-	-	
79	23.5	R2-1	SPEED LIMIT 30	24 X 30	5.00	-	-	-	-	1	-	-	-	-	-	-	
80	72.0	-	LANE CONTROL	-	-	1	1	-	-	-	-	-	-	-	-	-	
81	32.0	W2-6	ROUNDAABOUT SYMBOL	30 X 30	6.25	-	-	-	-	-	1	-	-	-	-	-	
82	32.0	W13-1	15 MPH	18 X 18	2.25	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #81
83	24.0	A11-12	ROUNDAABOUT GUIDE	168X84	98.00	-	-	-	-	-	4	-	-	-	-	-	
84	24.0	W11-8	FLASHING LED SIGN UNIT	36X36	-	-	-	-	1	-	-	-	-	-	1	-	
85	25.0	-	SIGNAL AHEAD SYMBOL	-	-	1	1	-	-	-	-	-	-	-	-	-	
86	22.0	R2-1	SPEED LIMIT 30	24 X 30	5.00	-	-	-	-	1	-	-	-	-	-	-	
87	20.0	R6-1R	ONE WAY	36 X 12	3.00	-	-	-	2	-	-	-	-	-	-	-	
88	20.0	R6-4B	CHEVRON FOR ROUNDAABOUT	60 X 24	10.00	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #87
89	20.0	R6-1R	ONE WAY	36 X 12	3.00	-	-	-	2	-	-	-	-	-	-	-	
90	20.0	R6-4B	CHEVRON FOR ROUNDAABOUT	60 X 24	10.00	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #89
91	20.0	R6-1R	ONE WAY	36 X 12	3.00	-	-	-	2	-	-	-	-	-	-	-	
92	20.0	R6-4B	CHEVRON FOR ROUNDAABOUT	60 X 24	10.00	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #91
93	20.0	R6-1R	ONE WAY	36 X 12	3.00	-	-	-	2	-	-	-	-	-	-	-	
94	20.0	R6-4B	CHEVRON FOR ROUNDAABOUT	60 X 24	10.00	-	-	-	-	-	-	-	-	-	-	-	MOUNT UNDER SIGN #93
PROJECT TOTAL					723.61	31	27	2	14	19	35	1	1	1	1	1	

TRAFFIC CONTROL, DRUMS, BARRICADES, WARNING LIGHTS, AND SIGNS

STATION - STATION		643.0100 PROJECT (EACH)	643.0420 BARRICADES TYPE III (DAYS)	643.0705 WARNING LIGHTS TYPE A (DAYS)	643.0900 SIGNS (DAYS)	643.2000 DETOUR (EACH)	643.3000 DETOUR SIGNS (DAYS)
11+67	- 42+39	1	2016	4032	1344	1	39648
PROJECT TOTAL		1	2016	4032	1344	1	39648

PAVEMENT MARKING, EPOXY

STATION - STATION		LOCATION		646.0106 (LANE LINE) (DASHED) (EDGE LINE) (CENTERLINE) 4-INCH (LF) 4-INCH (LF) 4-INCH WHITE (LF) 4-INCH YELLOW (LF)				646.0126 (DASHED) (CHANNELIZING) 8-INCH (LF) 8-INCH (LF)		646.0156 (DASHED) 18-INCH WHITE (LF)	647.0156 ARROWS TYPE 1 (EACH)	647.0160 ARROWS TYPE 2R (EACH)	647.0166 ARROWS TYPE 2 (EACH)	647.0170 ARROWS TYPE 3R (EACH)	647.0176 ARROWS TYPE 3 (EACH)	647.0206 ARROWS BIKE LANE (EACH)	647.0306 SYMBOLS BIKE LANE (EACH)	647.0356 WORDS (EACH)	647.0456 CURB (LF)	647.0566 STOP LINE 18-INCH (LF)	647.0606 ISLAND NOSE (EACH)	647.0726 DIAGONAL 12-INCH (LF)	647.0766 CROSSWALK 6-INCH (LF)
15+75	- 30+45	39TH		-	48	3700	-	-	650	-	1	-	-	1	-	7	7	2	210	16	5	31	490
32+00	- 42+37	39TH		34	27	1400	900	-	250	-	1	-	-	1	-	3	3	2	150	-	3	29	210
100+45	- 104+60	SPRINGBROOK		-	21	600	240	-	140	-	-	1	-	-	1	2	2	2	170	-	1	14	87
106+10	- 112+00	SPRINGBROOK		-	18	950	1700	-	20	-	-	-	-	-	-	2	2	1	53	-	1	120	74
200+00	- 203+26	ROUNDAABOUT		-	-	-	-	70	60	140	1	-	1	-	-	-	-	-	-	-	-	-	-
PROJECT TOTAL				34	114	6650	2840	70	1120	140	3	1	1	2	1	14	14	7	583	16	10	194	861
				9638				1190															

3

CONSTRUCTION STAKING													CATEGORY 0020	
STATION - STATION	LOCATION	650.4000	650.4500	650.5500	650.7000	650.9910	650.9920	SPV.0060.02	SPV.0060.16	SPV.0090.01	SPV.0105.08	SPV.0060.13	SPV.0060.14	
		STORM SEWER SYSTEM (EACH)	SUBGRADE (LF)	CURB GUTTER AND CURB & GUTTER (LF)	CONCRETE PAVEMENT (LF)	SUPPLEMENTAL CONTROL (LS)	SLOPE STAKES (LF)	IRRIGATION SYSTEM (EACH)	ADA CURB RAMP (EACH)	CONCRETE SIDEWALK (LF)	LIGHTING SYSTEM (LS)	SANITARY SEWER (EACH)	WATER MAIN (EACH)	
15+75 - 30+45	39TH RT	16	1500	-	1500	-	1500	165	6	1500	-	-	7	
15+75 - 30+45	39TH LT	17	1500	-	1500	-	1500	153	8	1500	-	2	3	
32+00 - 41+03	39TH RT	11	910	30	910	-	910	112	2	910	-	-	-	
32+00 - 41+03	39TH LT	18	910	-	910	-	910	90	6	910	-	2	2	
100+45 - 104+60	SPRINGBROOK RT	3	420	-	420	-	420	48	1	420	-	-	2	
100+45 - 104+60	SPRINGBROOK LT	4	420	-	420	-	420	56	2	420	-	-	3	
106+10 - 112+00	SPRINGBROOK RT	3	590	70	590	-	590	51	5	590	-	-	-	
106+10 - 112+00	SPRINGBROOK LT	4	590	-	590	-	590	63	2	590	-	-	-	
200+00 - 203+26	ROUNDBOUT	4	330	-	330	-	-	23	-	-	-	-	2	
PROJECT TOTAL		80	7170	100	7170	1	6840	761	32	6840	1	4	19	

3

CONDUIT									
652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH (LF)				652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH (LF)					
SYSTEM	NETWORK	LOCATION TO LOCATION		SYSTEM	NETWORK	LOCATION TO LOCATION			
CONTROL CABINET "A"	CKTS. 1 THRU 12, 17 THRU 24	CONTROL CABINET "A" TO PB1	175		CKTS. 13,14,15,16	CONTROL CABINET "A" TO PB5	195		
	CKTS. 5 THRU 8, 17 THRU 24	PB1 TO PB2	360		CKTS. 13,14,15,16	PB5 TO PB6	130		
					CKTS. 13,14,15,16	PB6 TO A-15,16-46	55		
	CKTS. 1,2,3,4	PB1 TO A-1,2-1	70		CKTS. 13,14	A-15,16-46 TO A-13,14-45	40		
	CKTS. 1,2,3,4	A-1,2-1 TO A-3,4-2	105		CKTS. 13,14,15,16	A-15,16-46 TO A-13,14-47	65		
	CKTS. 1,2,3,4	A-3,4-2 TO A-1,2-3	80		CKTS. 13,14,15,16	A-13,14-47 TO A-15,16-48	85		
	CKTS. 1,2,3,4	A-1,2-3 TO A-3,4-4	90		CKTS. 13,14,15,16	A-15,16-48 TO A-13,14-49	80		
	CKTS. 1,2,3,4	A-3,4-4 TO A-1,2-5	85		CKTS. 13,14,15,16	A-13,14-49 TO A-15,16-50	95		
	CKTS. 1,2,3,4	A-1,2-5 TO A-3,4-6	70		CKTS. 13,14,15,16	A-15,16-50 TO A-13,14-51	145		
	CKTS. 1,2,3,4	A-3,4-6 TO A-1,2-7	80		CKTS. 13,14,15,16	A-13,14-51 TO A-15,16-52	90		
	CKTS. 1,2,3,4	A-1,2-7 TO A-3,4-8	100		CKTS. 13,14,15,16	A-15,16-52 TO A-13,14-53	85		
	CKTS. 1,2,3,4	A-3,4-8 TO A-1,2-9	135		CKTS. 13,14,15,16	A-13,14-53 TO A-15,16-54	95		
	CKTS. 1,2,3,4	A-1,2-9 TO A-3,4-10	110		CKTS. 13,14,15,16	A-15,16-54 TO A-13,14-55	90		
	CKTS. 1,2,3,4	A-3,4-10 TO A-1,2-11	120		CKTS. 15,16	A-13,14-55 TO A-15,16-56	55		
	CKTS. 1,2,3,4	A-1,2-11 TO A-3,4-12	100						
	CKTS. 1,2	A-3,4-12 TO A-1,2-13	100						
						CKTS. 17,18,19,20	PB-2 TO A-17,18-57	90	
	CKTS. 5,6,7,8	PB-2 TO A-5,6-14	30			CKTS. 17,18,19,20	A-17,18-57 TO A-19,20-58	75	
	CKTS. 5,6,7,8	A-5,6-14 TO A-7,8-15	80			CKTS. 17,18	A-19,20-58 TO A-17,18-59	50	
	CKTS. 5,6,7,8	A-7,8-15 TO A-5,6-16	90			CKTS. 17,18,19,20	A-19,20-58 TO A-19,20-60	70	
	CKTS. 5,6,7,8	A-5,6-16 TO A-7,8-17	90			CKTS. 17,18,19,20	A-19,20-60 TO A-17,18-61	65	
	CKTS. 5,6,7,8	A-7,8-17 TO A-5,6-18	110			CKTS. 17,18,19,20	A-17,18-61 TO A-19,20-62	70	
	CKTS. 5,6,7,8	A-5,6-18 TO A-7,8-19	65			CKTS. 17,18,19,20	A-19,20-62 TO A-17,18-63	90	
	CKTS. 5,6,7,8	A-7,8-19 TO A-5,6-20	80			CKTS. 17,18,19,20	A-17,18-63 TO A-19,20-64	85	
	CKTS. 5,6,7,8	A-5,6-20 TO A-7,8-21	70			CKTS. 17,18,19,20	A-19,20-64 TO A-17,18-65	80	
	CKTS. 5,6,7,8	A-7,8-21 TO A-5,6-22	90			CKTS. 17,18,19,20	A-17,18-65 TO A-19,20-66	70	
	CKTS. 5,6,7,8	A-5,6-22 TO A-7,8-23	90			CKTS. 17,18,19,20	A-19,20-66 TO A-17,18-67	65	
	CKTS. 5,6,7,8	A-7,8-23 TO A-5,6-24	70			CKTS. 17,18,19,20	A-17,18-67 TO A-19,20-68	75	
	CKTS. 5,6,7,8	A-5,6-24 TO A-7,8-25	50			CKTS. 17,18,19,20	A-19,20-68 TO A-17,18-69	80	
	CKTS. 5,6,7,8	A-7,8-25 TO A-5,6-26	100			CKTS. 19,20	A-17,18-69 TO A-19,20-70	70	
	CKTS. 5,6,7,8	A-5,6-26 TO A-7,8-27	70						
	CKTS. 5,6,7,8	A-7,8-27 TO A-5,6-28	95			CKTS. 21,22,23,24	PB-2 TO PB4	285	
	CKTS. 7,8	A-5,6-28 TO A-7,8-29	100			CKTS. 21,22,23,24	PB4 TO PB3	90	
						CKTS. 21,22,23,24	PB3 TO A-21,22-71	40	
	CKTS. 9,10,11,12	PB1 TO A-9,10-30	25			CKTS. 21,22,23,24	A-21,22-71 TO A-23,24-72	70	
	CKTS. 9,10,11,12	A-9,10-30 TO A-11,12-31	115			CKTS. 21,22,23,24	A-23,24-72 TO A-21,22-73	70	
	CKTS. 9,10,11,12	A-11,12-31 TO A-9,10-32	70			CKTS. 21,22,23,24	A-21,22-73 TO A-23,24-74	85	
	CKTS. 9,10,11,12	A-9,10-32 TO A-11,12-33	85			CKTS. 21,22,23,24	A-23,24-74 TO A-21,22-75	80	
	CKTS. 9,10,11,12	A-11,12-33 TO A-9,10-34	75			CKTS. 21,22,23,24	A-21,22-75 TO A-23,24-76	90	
	CKTS. 9,10,11,12	A-9,10-34 TO A-11,12-35	120			CKTS. 21,22,23,24	A-23,24-76 TO A-21,22-77	100	
	CKTS. 9,10,11,12	A-11,12-35 TO A-9,10-36	185			CKTS. 21,22,23,24	A-21,22-77 TO A-23,24-78	85	
	CKTS. 9,10,11,12	A-9,10-36 TO A-11,12-37	65			CKTS. 21,22,23,24	A-23,24-78 TO A-21,22-79	90	
	CKTS. 9,10,11,12	A-11,12-37 TO A-9,10-38	50			CKTS. 21,22,23,24	A-21,22-79 TO A-23,24-80	90	
	CKTS. 9,10,11,12	A-9,10-38 TO A-11,12-39	80			CKTS. 21,22,23,24	A-23,24-80 TO A-21,22-81	90	
	CKTS. 9,10,11,12	A-11,12-39 TO A-9,10-40	80			CKTS. 23,24	A-21,22-81 TO A-23,24-82	95	
	CKTS. 9,10,11,12	A-9,10-40 TO A-11,12-41	80						
	CKTS. 9,10,11,12	A-11,12-41 TO A-9,10-42	75						
	CKTS. 9,10,11,12	A-9,10-42 TO A-11,12-43	90						
	CKTS. 9,10	A-11,12-43 TO A-9,10-44	70						
					PROJECT TOTAL	8025			

PULL BOXES				653.0105	653.0140	653.0145	653.0905
				PULL	PULL	PULL	REMOVING
				BOXES	BOXES	BOXES	PULL
				STEEL	STEEL	STEEL	BOXES
				12X24-INCH	24X42-INCH	24X48-INCH	(EACH)
SYSTEM	DESCRIPTION	STATION	OFFSET	(EACH)	(EACH)	(EACH)	(EACH)
CONTROL CABINET "A"	PB-1	28+62 39TH AVE	36.87' RT	-	-	1	-
	PB-2	28+67 39TH AVE	54.03' LT	-	1	-	-
	PB-3	103+92 SPRINGBROOK RD	39.28' LT	1	-	-	-
	PB-4	103+98 SPRINGBROOK RD	48.35' RT	1	-	-	-
	PB-5	106+40 SPRINGBROOK RD	46.36 RT	1	-	-	-
	PB-6	106+66 SPRINGBROOK RD	77.68' LT	1	-	-	-
		29+20 39TH AVE	36' RT	-	-	-	1
		32+51 39TH AVE	34' LT	-	-	-	1
		34+24 39TH AVE	38' LT	-	-	-	1
		102+88 SPRINGBROOK RD	26' RT	-	-	-	1
		104+53 SPRINGBROOK RD	20' RT	-	-	-	1
		104+72 SPRINGBROOK RD	28' LT	-	-	-	1
		105+02 SPRINGBROOK RD	63' LT	-	-	-	1
		105+15 SPRINGBROOK RD	11' RT	-	-	-	1
		106+02 SPRINGBROOK RD	10' RT	-	-	-	1
		106+31 SPRINGBROOK RD	11' LT	-	-	-	1
		106+46 SPRINGBROOK RD	39' LT	-	-	-	1
		106+66 SPRINGBROOK RD	73' LT	-	-	-	1
		106+88 SPRINGBROOK RD	68' LT	-	-	-	1
		107+67 SPRINGBROOK RD	72' LT	-	-	-	1
		109+29 SPRINGBROOK RD	57' LT	-	-	-	1
PROJECT TOTAL				4	1	1	15

DECORATIVE LIGHTING STANDARD											
SYSTEM	LABEL	LUMINAIRE/ RECEPTACLE VOLTAGE	654.0101	659.0802*	SPV.0060.01	SYSTEM	LABEL	LUMINAIRE/ RECEPTACLE VOLTAGE	654.0101	659.0802*	SPV.0060.01
			CONCRETE BASES TYPE 1 (EACH)	PLAQUES SEQUENCE IDENTIFICATION* (EACH)	DECORATIVE 20-FT LIGHT POLE WITH DUAL 95 WATT LED LUMINAIRES (EACH)				CONCRETE BASES TYPE 1 (EACH)	PLAQUES SEQUENCE IDENTIFICATION* (EACH)	DECORATIVE 20-FT LIGHT POLE WITH DUAL 95 WATT LED LUMINAIRES (EACH)
CONTROL CABINET "A" - CKTS. 1,2	A-1,2-1	120	1	1	1	CONTROL CABINET "A" - CKTS. 13,14	A-13,14-45	120	1	1	1
CONTROL CABINET "A" - CKTS. 3,4	A-3,4-2	120	1	1	1	CONTROL CABINET "A" - CKTS. 15,16	A-15,16-46	120	1	1	1
CONTROL CABINET "A" - CKTS. 1,2	A-1,2-3	120	1	1	1	CONTROL CABINET "A" - CKTS. 13,14	A-13,14-47	120	1	1	1
CONTROL CABINET "A" - CKTS. 3,4	A-3,4-4	120	1	1	1	CONTROL CABINET "A" - CKTS. 15,16	A-15,16-48	120	1	1	1
CONTROL CABINET "A" - CKTS. 1,2	A-1,2-5	120	1	1	1	CONTROL CABINET "A" - CKTS. 13,14	A-13,14-49	120	1	1	1
CONTROL CABINET "A" - CKTS. 3,4	A-3,4-6	120	1	1	1	CONTROL CABINET "A" - CKTS. 15,16	A-15,16-50	120	1	1	1
CONTROL CABINET "A" - CKTS. 1,2	A-1,2-7	120	1	1	1	CONTROL CABINET "A" - CKTS. 13,14	A-13,14-51	120	1	1	1
CONTROL CABINET "A" - CKTS. 3,4	A-3,4-8	120	1	1	1	CONTROL CABINET "A" - CKTS. 15,16	A-15,16-52	120	1	1	1
CONTROL CABINET "A" - CKTS. 1,2	A-1,2-9	120	1	1	1	CONTROL CABINET "A" - CKTS. 13,14	A-13,14-53	120	1	1	1
CONTROL CABINET "A" - CKTS. 3,4	A-3,4-10	120	1	1	1	CONTROL CABINET "A" - CKTS. 15,16	A-15,16-54	120	1	1	1
CONTROL CABINET "A" - CKTS. 1,2	A-1,2-11	120	1	1	1	CONTROL CABINET "A" - CKTS. 13,14	A-13,14-55	120	1	1	1
CONTROL CABINET "A" - CKTS. 3,4	A-3,4-12	120	1	1	1	CONTROL CABINET "A" - CKTS. 15,16	A-15,16-56	120	1	1	1
CONTROL CABINET "A" - CKTS. 1,2	A-1,2-13	120	1	1	1						
CONTROL CABINET "A" - CKTS. 5,6	A-5,6-14	120	1	1	1	CONTROL CABINET "A" - CKTS. 17,18	A-17,18-57	120	1	1	1
CONTROL CABINET "A" - CKTS. 7,8	A-7,8-15	120	1	1	1	CONTROL CABINET "A" - CKTS. 19,20	A-19,20-58	120	1	1	1
CONTROL CABINET "A" - CKTS. 5,6	A-5,6-16	120	1	1	1	CONTROL CABINET "A" - CKTS. 17,18	A-17,18-59	120	1	1	1
CONTROL CABINET "A" - CKTS. 7,8	A-7,8-17	120	1	1	1	CONTROL CABINET "A" - CKTS. 19,20	A-19,20-60	120	1	1	1
CONTROL CABINET "A" - CKTS. 5,6	A-5,6-18	120	1	1	1	CONTROL CABINET "A" - CKTS. 17,18	A-17,18-61	120	1	1	1
CONTROL CABINET "A" - CKTS. 7,8	A-7,8-19	120	1	1	1	CONTROL CABINET "A" - CKTS. 19,20	A-19,20-62	120	1	1	1
CONTROL CABINET "A" - CKTS. 5,6	A-5,6-20	120	1	1	1	CONTROL CABINET "A" - CKTS. 17,18	A-17,18-63	120	1	1	1
CONTROL CABINET "A" - CKTS. 7,8	A-7,8-21	120	1	1	1	CONTROL CABINET "A" - CKTS. 19,20	A-19,20-64	120	1	1	1
CONTROL CABINET "A" - CKTS. 5,6	A-5,6-22	120	1	1	1	CONTROL CABINET "A" - CKTS. 17,18	A-17,18-65	120	1	1	1
CONTROL CABINET "A" - CKTS. 7,8	A-7,8-23	120	1	1	1	CONTROL CABINET "A" - CKTS. 19,20	A-19,20-66	120	1	1	1
CONTROL CABINET "A" - CKTS. 5,6	A-5,6-24	120	1	1	1	CONTROL CABINET "A" - CKTS. 17,18	A-17,18-67	120	1	1	1
CONTROL CABINET "A" - CKTS. 7,8	A-7,8-25	120	1	1	1	CONTROL CABINET "A" - CKTS. 19,20	A-19,20-68	120	1	1	1
CONTROL CABINET "A" - CKTS. 5,6	A-5,6-26	120	1	1	1	CONTROL CABINET "A" - CKTS. 17,18	A-17,18-69	120	1	1	1
CONTROL CABINET "A" - CKTS. 7,8	A-7,8-27	120	1	1	1	CONTROL CABINET "A" - CKTS. 19,20	A-19,20-70	120	1	1	1
CONTROL CABINET "A" - CKTS. 5,6	A-5,6-28	120	1	1	1						
CONTROL CABINET "A" - CKTS. 7,8	A-7,8-29	120	1	1	1						
						CONTROL CABINET "A" - CKTS. 21,22	A-21,22-71	120	1	1	1
CONTROL CABINET "A" - CKTS. 9,10	A-9,10-30	120	1	1	1	CONTROL CABINET "A" - CKTS. 23,24	A-23,24-72	120	1	1	1
CONTROL CABINET "A" - CKTS. 11,12	A-11,12-31	120	1	1	1	CONTROL CABINET "A" - CKTS. 21,22	A-21,22-73	120	1	1	1
CONTROL CABINET "A" - CKTS. 9,10	A-9,10-32	120	1	1	1	CONTROL CABINET "A" - CKTS. 23,24	A-23,24-74	120	1	1	1
CONTROL CABINET "A" - CKTS. 11,12	A-11,12-33	120	1	1	1	CONTROL CABINET "A" - CKTS. 21,22	A-21,22-75	120	1	1	1
CONTROL CABINET "A" - CKTS. 9,10	A-9,10-34	120	1	1	1	CONTROL CABINET "A" - CKTS. 23,24	A-23,24-76	120	1	1	1
CONTROL CABINET "A" - CKTS. 11,12	A-11,12-35	120	1	1	1	CONTROL CABINET "A" - CKTS. 21,22	A-21,22-77	120	1	1	1
CONTROL CABINET "A" - CKTS. 9,10	A-9,10-36	120	1	1	1	CONTROL CABINET "A" - CKTS. 23,24	A-23,24-78	120	1	1	1
CONTROL CABINET "A" - CKTS. 11,12	A-11,12-37	120	1	1	1	CONTROL CABINET "A" - CKTS. 21,22	A-21,22-79	120	1	1	1
CONTROL CABINET "A" - CKTS. 9,10	A-9,10-38	120	1	1	1	CONTROL CABINET "A" - CKTS. 23,24	A-23,24-80	120	1	1	1
CONTROL CABINET "A" - CKTS. 11,12	A-11,12-39	120	1	1	1	CONTROL CABINET "A" - CKTS. 21,22	A-21,22-81	120	1	1	1
CONTROL CABINET "A" - CKTS. 9,10	A-9,10-40	120	1	1	1	CONTROL CABINET "A" - CKTS. 23,24	A-23,24-82	120	1	1	1
CONTROL CABINET "A" - CKTS. 11,12	A-11,12-41	120	1	1	1	SUBTOTAL			38	38	38
CONTROL CABINET "A" - CKTS. 9,10	A-9,10-42	120	1	1	1						
CONTROL CABINET "A" - CKTS. 11,12	A-11,12-43	120	1	1	1	PROJECT TOTAL			82	82	82
CONTROL CABINET "A" - CKTS. 9,10	A-9,10-44	120	1	1	1	* ADDITIONAL QUANTITY SHOWN ELSEWHERE					
SUBTOTAL			44	44	44						

3

3

SAWING				
			690.0150 ASPHALT	690.0250 CONCRETE
STATION - STATION		LOCATION	(LF)	(LF)
11+67 - 30+45		39TH	330	150
32+00 - 42+37		39TH	200	69
100+45 - 104+60		SPRINGBROOK	130	5
106+10 - 112+00		SPRINGBROOK	90	66
PROJECT TOTAL			750	290

PROJECT NO:3729-00-74	HWY:39 AVENUE	COUNTY:KENOSHA	MISCELLANEOUS QUANTITIES	SHEET 73	E
-----------------------	---------------	----------------	--------------------------	----------	----------

SANITARY SEWER							
CATEGORY	STATION - STATION	LOCATION	SPV.0060.12	SPV.0060.15*	SPV.0090.06	SPV.0200.01	
			INSTALL OUTSIDE DROP ON SANITARY SEWER MANHOLE (EA)	EXTERNAL MANHOLE SEAL (EA)	SANITARY SEWER 8-INCH (LF)	SANTIARY MANHOLE 48-INCH (VF)	
0020	15+75 - 41+03	39TH	1	4	964	61	
0020	100+43 - 112+00	SPRINGBROOK	-	-	-	-	
PROJECT TOTAL			1	4	964	61	
*ADDITIONAL QUANTITIES SHOWN ELSEWHERE							

IRRIGATION SYSTEM	
SPV.0105.01	
IRRIGATION	
SYSTEM	
(LS)	
1	
PROJECT TOTAL	1

TEST ROLLING			
STATION - STATION	LOCATION	SPV.0090.07	
		TEST ROLLING	(LF)
15+75 - 30+45	39TH RT	1500	
15+75 - 30+45	39TH LT	1500	
32+00 - 41+03	39TH RT	910	
32+00 - 41+03	39TH LT	910	
100+45 - 104+60	SPRINGBROOK RT	420	
100+45 - 104+60	SPRINGBROOK LT	420	
106+10 - 112+00	SPRINGBROOK RT	590	
106+10 - 112+00	SPRINGBROOK LT	590	
200+00 - 203+26	ROUNDABOUT	330	
PROJECT TOTAL		7170	

CONVENTIONAL ABBREVIATIONS			
ACCESS RIGHTS	AR	LAND CONTRACT	LC
ACRES	AC.	MONUMENT	MON.
ASPHALT	ASPH.	PAGE	P.
BUILDING	BLD.	PERMANENT LIMITED EASEMENT	PLE
CERTIFIED SURVEY MAP	CSM	PROPERTY LINE	PL
CHORD BEARING	CB	RECORDED AS	(XX')
CHORD LENGTH	CL	REFERENCE LINE	R
CONCRETE	CONC.	RELEASE OF RIGHTS	ROR
CORNER	COR.	REMAINING	REM.
DOCUMENT	DOC.	RIGHT-OF-WAY	R/W
DRIVEWAY	DR.	SECTION	SEC.
EASEMENT	EASE.	STATION	STA.
GRAVEL	GR.	TEMPORARY LIMITED EASEMENT	TLE
HIGHWAY EASEMENT	HE	VOLUME	V.

CONVENTIONAL SYMBOLS			
FOUND IRON PIPE/PIN	IP	PROPOSED R/W LINE	—
R/W POINT (MONUMENTED)	•	EXISTING H.E. LINE	- - - -
SECTION CORNER MONUMENT	⊙	PROPERTY LINE	- - - -
SECTION CORNER SYMBOL	⊙	LOT & TIE LINES	- - - -
FEE (HATCH VARIES)		SLOPE INTERCEPTS	- - - -
PERMANENT LIMITED EASEMENT		SECTION LINE	- - - -
TEMPORARY LIMITED EASEMENT		QUARTER LINE	- - - -
R/W POINT NUMBER	100	PROPOSED REFERENCE LINE	—
PARCEL NUMBER	1	NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	
UTILITY PARCEL NUMBER	80	NO ACCESS (BY ACQUISITION)	
BUILDING	—	NO ACCESS	

CONVENTIONAL UTILITY SYMBOLS			
WATER	—W—	POWER POLE	⊙
GAS	—G—	TELEPHONE POLE	⊙
TELEPHONE	—T—	TELEPHONE PEDESTAL	⊙
OVERHEAD	—OH—		
TRANSMISSION LINES	—E—		
ELECTRIC	—TV—		
CABLE TELEVISION	—FO—		
FIBER OPTIC	—SAN—		
SANITARY SEWER	—SS—		
STORM SEWER			

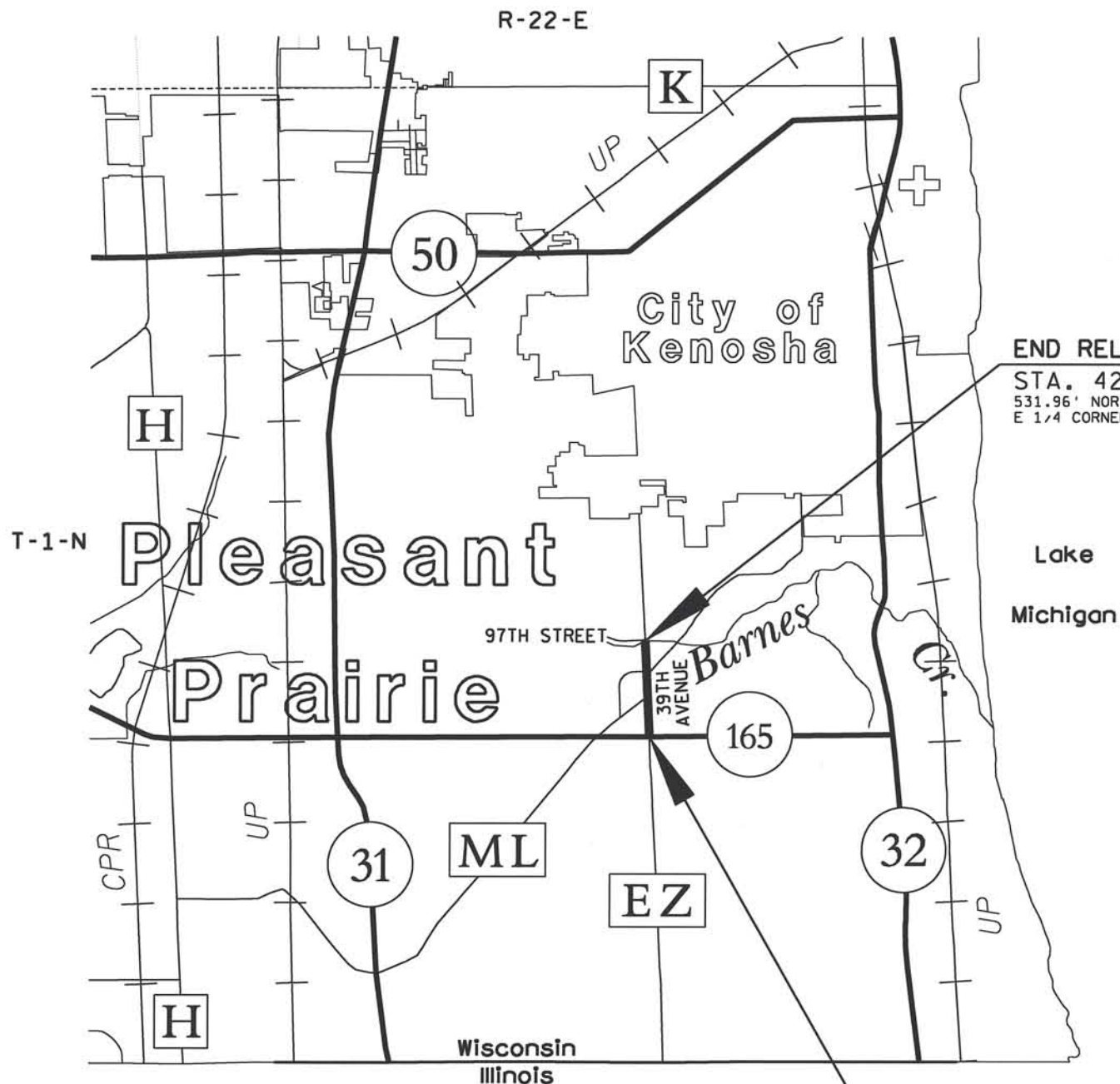
NOTES

COORDINATES AND BEARINGS ON THIS PLAT ARE ORIENTED TO THE WISCONSIN COORDINATE SYSTEM, SOUTH ZONE, NAD 27, PUBLISHED SEWRPC COORDINATES. ALL PLAT DISTANCES ARE GROUND LENGTH AND MAY BE CONVERTED TO GRID LENGTH BY MULTIPLYING THE DISTANCE BY THE GRID FACTOR PROVIDED ON THE DETAIL SHEETS.

RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (3/4"x24" REBAR W/PLASTIC CAP), UNLESS OTHERWISE NOTED, AND PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.



END RELOCATION ORDER

STA. 42+00.00
531.96' NORTH AND 15.99' WEST OF THE
E 1/4 CORNER OF SECTION 23, T-1-N, R-22-E

BEGIN RELOCATION ORDER

STA. 10+00.00
0.00' NORTH AND 0.00' EAST OF THE
SE CORNER OF SECTION 23, T-1-N, R-22-E

R/W PROJECT NUMBER	3729-00-04	SHEET NUMBER	4.01	TOTAL SHEETS	5
CONSULTANT PROJECT NUMBER	W120071.00				
PLAT OF RIGHT-OF-WAY REQUIRED FOR					
39TH AVENUE					
STH 165 TO 97TH STREET					
VILLAGE OF PLEASANT PRAIRIE, KENOSHA COUNTY					
CONSTRUCTION PROJECT NUMBER	3729-00-74				

ORIGINAL PLAT PREPARED BY:



gai consultants

W175 N11081 STONEWOOD DR, SUITE 103
GERMANTOWN, WI 53022
262.250.8000 • Fax 262.250.8011

SURVEYOR'S



SEAL

4/26/2014 (Date) (Signature)

TERRANCE E. PISAREK S-1930

REVISION DATE:

VILLAGE OF PLEASANT PRAIRIE

APPROVED:

5/12/14 (Date) (Signature)

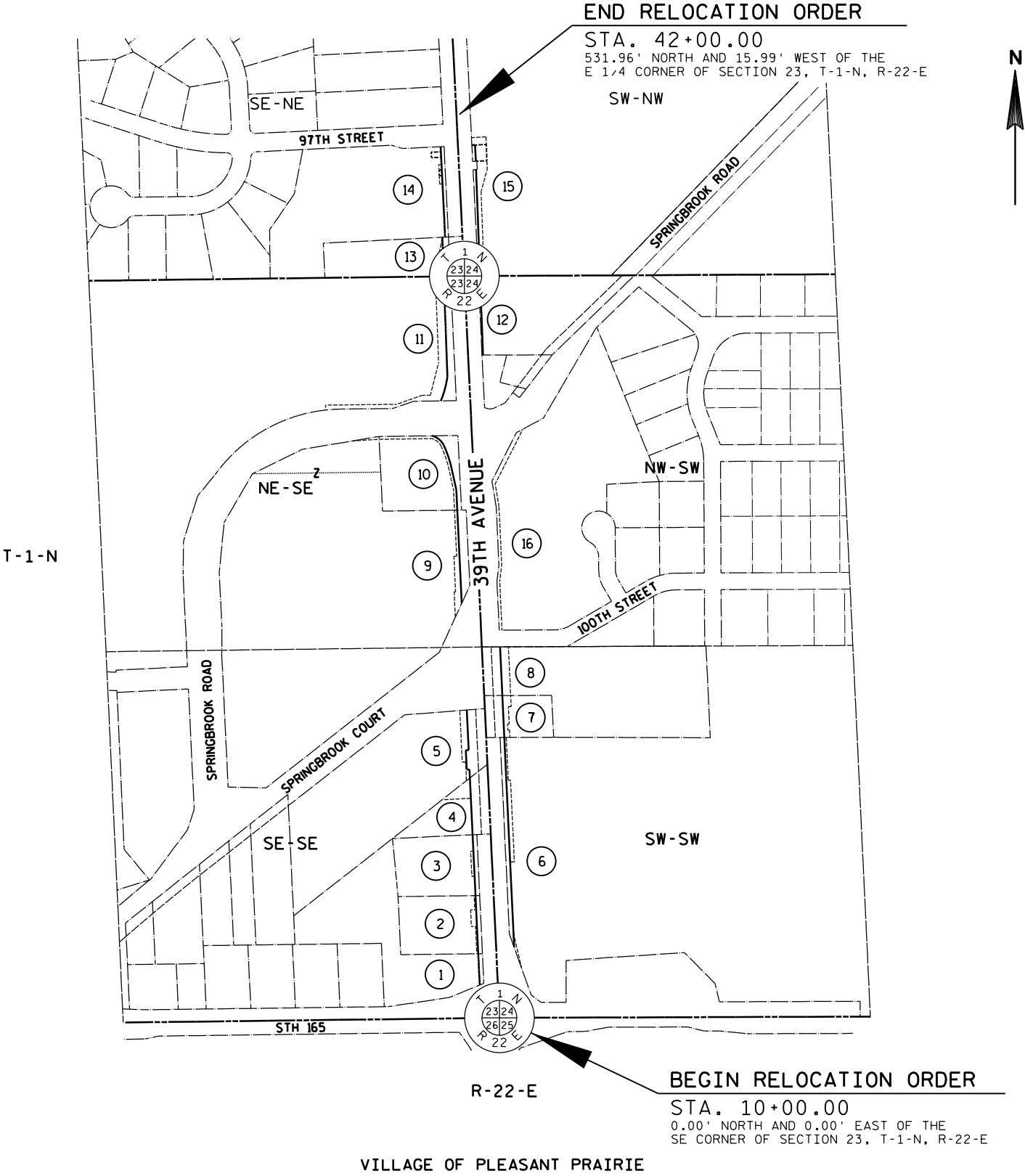
JOHN P. STEINBRINK
VILLAGE PRESIDENT

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PLAT LAYOUT

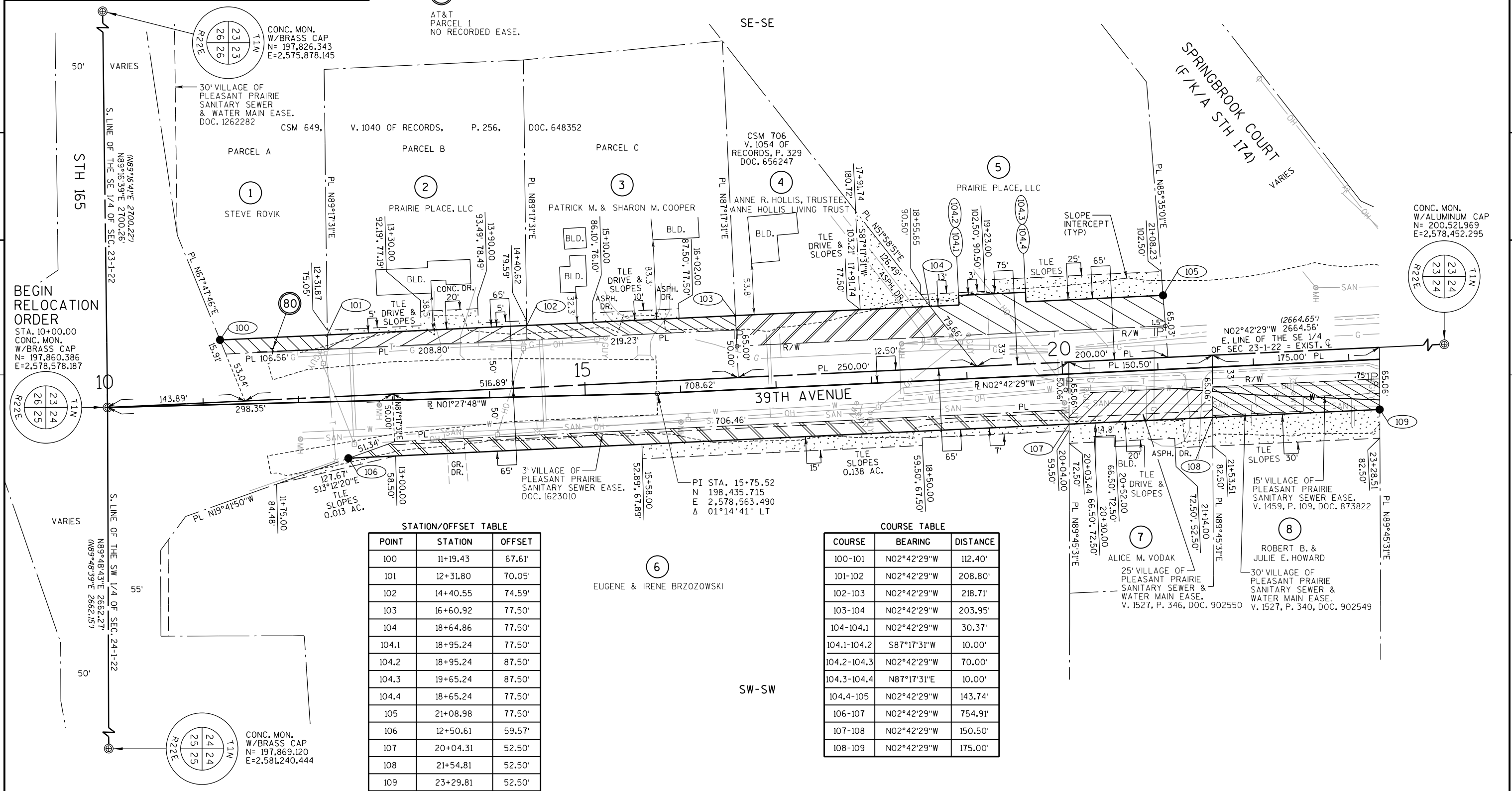
PARCEL NUMBER	SHEET NUMBER(S)	OWNER(S)	INTEREST REQUIRED	R/W NEW	ACRES REQUIRED EXISTING	TOTAL	PLE	TLE
1	4.03	STEVE ROVIK	FEE	0.038 AC	-----	0.038 AC	-----	-----
2	4.03	PRAIRIE PLACE, LLC	FEE/TLE	0.072 AC	-----	0.072 AC	-----	0.045 AC
3	4.03	PATRICK M. COOPER & SHARON M. COOPER	FEE/TLE	0.075 AC	-----	0.075 AC	-----	0.021 AC
4	4.03	ANNE R. QUIMBY, SOLE TRUSTEE OR HER SUCCESSORS IN TRUST UNDER THE ANNE QUIMBY LIVING TRUST, DATED NOVEMBER 3, 1999 AND ANY AMENDMENTS THERETO AND ANN R. HOLLIS; AS THEIR INTEREST MAY APPEAR	FEE/TLE	0.158 AC	0.181 AC	0.339 AC	-----	0.087 AC
5	4.03	PRAIRIE PLACE, LLC	FEE/TLE	0.187 AC	0.160 AC	0.347 AC	-----	0.109 AC
6	4.03	IRENE BRZOWSKI OR EUGENE BRZOWSKI, TRUSTEE, THE IRENE AND EUGENE BRZOWSKI TRUST	FEE/TLE	0.252 AC	-----	0.252 AC	-----	0.139 AC
7	4.03	ALICE M. VODAK	FEE/TLE	0.111 AC	0.114 AC	0.225 AC	-----	0.075 AC
8	4.03	ROBERT B. HOWARD & JULIE E. HOWARD	FEE/TLE	0.129 AC	0.133 AC	0.262 AC	-----	0.121 AC
9	4.04	PRAIRIE PLACE, LLC	FEE/TLE	0.223 AC	-----	0.223 AC	-----	0.146 AC
10	4.04	FIRST NATIONAL BANK OF KENOSHA, N/K/A BANK ONE KENOSHA	FEE/TLE	0.190 AC	-----	0.190 AC	-----	0.110 AC
11	4.04	PRAIRIE PLACE, LLC	FEE/TLE	0.291 AC	-----	0.291 AC	-----	0.474 AC
12	4.04	OLD OAKS, LLC	FEE	0.031 AC	-----	0.031 AC	-----	-----
13	4.05	STANICH & STANICH, LLC	FEE/TLE	0.074 AC	0.163 AC	0.237 AC	-----	0.037 AC
14	4.05	MEADOWDALE ESTATES HOMEOWNERS ASSOCIATION, INC.	FEE/PLE/TLE	0.090 AC	-----	0.090 AC	0.021 AC	0.012 AC
15	4.05	ARCHDIOCESE OF MILWAUKEE	FEE/PLE/TLE	0.090 AC	-----	0.090 AC	0.054 AC	0.212 AC
16	4.04	VILLAGE OF PLEASANT PRAIRIE	TLE	-----	-----	-----	-----	0.193 AC
80	4.03, 4.04, 4.05	AT&T	ROR	-----	-----	-----	-----	-----
81	4.04, 4.05	WE ENERGIES - ELECTRIC	ROR	-----	-----	-----	-----	-----
82	4.04, 4.05	TIME WARNER CABLE	ROR	-----	-----	-----	-----	-----



REVISION DATE	DATE: MAY 12, 2014	SCALE, FEET 0 500'	HWY: 39TH AVENUE	STATE R/W PROJECT NUMBER: 3729-00-04	PLAT SHEET 4.02	E
			COUNTY: KENOSHA	CONSTRUCTION PROJECT NUMBER: 3729-00-74	PS&E SHEET 76	

HIGHWAY	BASIS OF EXISTING R/W	YEAR	WIDTH
39TH AVENUE	STATE STATUTE 82.18		66'
39TH AVENUE	PROJECT 3994-1-13	1981	66'
39TH AVENUE	PROJECT 3738-06-20	2009	100' / 83'
STH 165	PROJECT 3738-06-20	2009	VARIES
SPRINGBROOK COURT (F/K/A STH 174)	PROJECT T0844(2)	1955	VARIES

VILLAGE OF PLEASANT PRAIRIE



BEGIN
RELOCATION
ORDER

STA. 10+00.00
CONC. MON.
W/BRASS CAP
N= 197,860.386
E=2,578,578.187

STATION/OFFSET TABLE

POINT	STATION	OFFSET
100	11+19.43	67.61'
101	12+31.80	70.05'
102	14+40.55	74.59'
103	16+60.92	77.50'
104	18+64.86	77.50'
104.1	18+95.24	77.50'
104.2	18+95.24	87.50'
104.3	19+65.24	87.50'
104.4	18+65.24	77.50'
105	21+08.98	77.50'
106	12+50.61	59.57'
107	20+04.31	52.50'
108	21+54.81	52.50'
109	23+29.81	52.50'

COURSE TABLE

COURSE	BEARING	DISTANCE
100-101	N02°42'29"W	112.40'
101-102	N02°42'29"W	208.80'
102-103	N02°42'29"W	218.71'
103-104	N02°42'29"W	203.95'
104-104.1	N02°42'29"W	30.37'
104.1-104.2	S87°17'31"W	10.00'
104.2-104.3	N02°42'29"W	70.00'
104.3-104.4	N87°17'31"E	10.00'
104.4-105	N02°42'29"W	143.74'
106-107	N02°42'29"W	754.91'
107-108	N02°42'29"W	150.50'
108-109	N02°42'29"W	175.00'

REVISION DATE

DATE: MAY 12, 2014

SCALE: FEET



HWY: 39TH AVENUE

STATE R/W PROJECT NUMBER: 3729-00-04

PLAT SHEET 4.03

GRID FACTOR: 1.00001191

COUNTY: KENOSHA

CONSTRUCTION PROJECT NUMBER: 3729-00-74

PS&E SHEET 77

HIGHWAY	BASIS OF EXISTING R/W	YEAR	WIDTH
39TH AVENUE	PROJECT 3994-1-13	1981	78' / 95' / 100'
39TH AVENUE	PROJECT 3738-06-20	2009	100' / 83'
39TH AVENUE	CSM 2750	2014	VARIES
100TH STREET	ROLLING MEADOWS SUBD	1962	60'
SPRINGBROOK ROAD (CTH ML)	PROJECT 3250-22-22	1994	125' / VARIES

39TH AVENUE R CURVE DATA

PI STA. 28+44.71	PI STA. 30+23.11	PI STA. 32+50.82	PI STA. 34+70.28
N 199,703.493	N 199,877.920	N 200,104.923	N 200,324.690
E 2,578,503.530	E 2,578,464.021	E 2,578,461.947	E 2,578,463.269
PC STA. 27+56.74	PC STA. 29+96.53	PC STA. 31+95.51	PC STA. 34+27.29
PT STA. 29+32.23	PT STA. 30+48.68	PT STA. 33+05.81	PT STA. 35+13.25
DELTA 10°03'16"	DELTA 27°09'42"	DELTA 10°31'58"	DELTA 02°27'45"
D 05°43'46"	D 52°05'13"	D 09°32'57"	D 02°51'53"
L 175.49'	L 52.15'	L 52.15'	L 85.96'
R 1000.00'	R 110.00'	R 600.00'	R 2000.00'
LCH 175.26'	LCH 51.66'	LCH 110.15'	LCH 85.95'
LCB N07°44'07"W	LCB N00°49'06"E	LCB N04°55'18"E	LCB N00°53'11"W

SPRINGBROOK ROAD R CURVE DATA

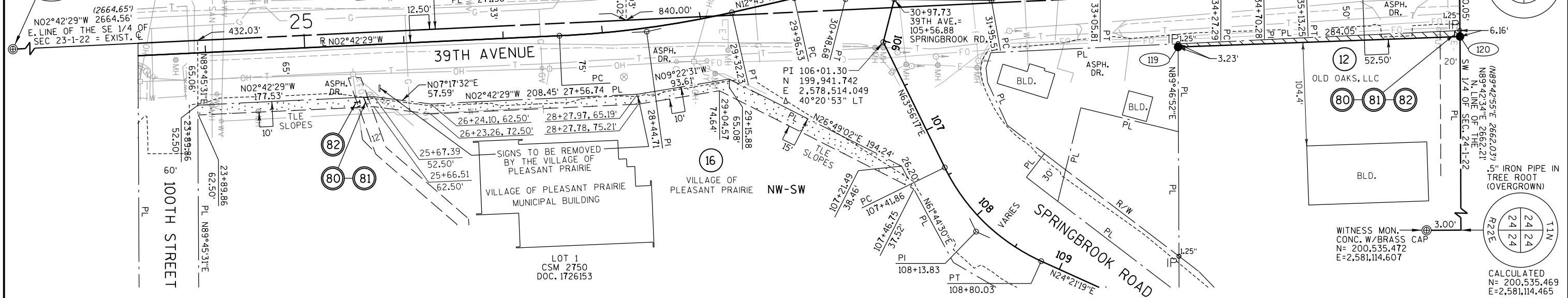
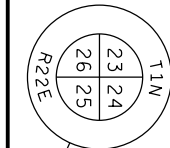
PI STA. 100+27.41	PI STA. 103+80.63	PI STA. 104+36.45	PI STA. 108+13.83
N 199,974.950	N 199,996.516	N 199,991.587	N 199,996.516
E 2,577,921.716	E 2,578,301.409	E 2,578,357.172	E 2,578,301.409
PC STA. 100+00.00	PC STA. 103+51.40	PCC STA. 104+09.69	PC STA. 107+41.86
PT STA. 100+54.73	PCC STA. 104+09.69	PT STA. 104+61.95	PT STA. 108+80.03
DELTA 07°50'21"	DELTA 10°18'33"	DELTA 30°14'37"	DELTA 39°34'58"
D 14°19'26"	D 17°41'02"	D 57°52'28"	D 28°38'52"
L 54.73'	L 58.30'	L 52.26'	L 138.17'
R 1000.00'	R 324.00'	R 99.00'	R 200.00'
LCH 54.68'	LCH 58.22'	LCH 51.65'	LCH 135.44'
LCB N85°23'50"E	LCB N89°53'50"E	LCB S69°49'35"E	LCB N44°08'48"E

39TH AVENUE R/W CURVE DATA

113-114	114-115	116-117	T1	T2	T3
L 84.83'	L 56.39'	L 91.34'	L 82.65'	L 46.30'	L 54.71'
R 389.00'	R 64.00'	R 364.50'	R 379.00'	R 54.00'	R 563.77'
LCH 84.66'	LCH 54.58'	LCH 91.10'	LCH 82.48'	LCH 44.90'	LCH 54.69'
LCB N18°47'01"W	LCB N50°16'21"W	LCB N15°15'32"E	LCB N18°47'01"W	LCB N49°35'41"W	LCB S86°33'24"W

TLE CURVE DATA

STA. 10+00.00
CONC. MON.
W/BRASS CAP
N= 197,860.386
E=2,578,578.187



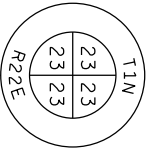
STATION/OFFSET TABLE

POINT	STATION	OFFSET
110	24+92.35	77.50'
111	28+32.70	74.84'
112	29+11.45	66.36'
113	29+92.88	66.24'
114	104+77.12	60.29'
115	104+28.10	43.41'
116	104+25.87	85.58'
117	33+07.14	70.56'
118	36+69.62	77.50'
119	33+84.43	56.24'
120	36+66.02	52.50'

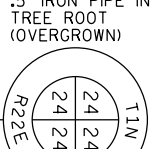
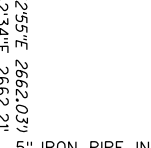
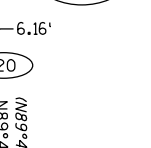
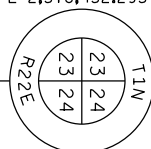
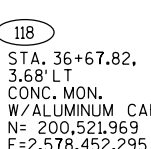
COURSE TABLE

COURSE	BEARING	DISTANCE
110-111	N02°42'29"W	334.61'
111-112	N02°42'29"W	73.66'
112-113	N12°32'12"W	80.05'
117-118	N02°07'04"W	359.31'
119-120	N02°07'04"W	283.95'

CONC. MON.
W/BRASS CAP
N= 200,488,232
E=2,575,757.424



STA. 36+67.82,
3.68' LT
CONC. MON.
W/ALUMINUM CAP
N= 200,521,969
E=2,578,452.295



WITNESS MON.
CONC. W/BRASS CAP
N= 200,535,472
E=2,581,114.607

CALCULATED
N= 200,535,469
E=2,581,114.465

REVISION DATE	DATE: MAY 12, 2014	SCALE: FEET	HWY: 39TH AVENUE	STATE R/W PROJECT NUMBER: 3729-00-04	PLAT SHEET 4.04
	GRID FACTOR: 1.00001191		COUNTY: KENOSHA	CONSTRUCTION PROJECT NUMBER: 3729-00-74	PS&E SHEET 78

HIGHWAY	BASIS OF EXISTING R/W	YEAR	WIDTH
39TH AVENUE	PROJECT 3994-1-13	1981	100'
97TH STREET	MEADOWDALE ESTATES SUBD	2001	80'
EXISTING ACCESS RESTRICTION:			
NO DIRECT VEHICULAR ACCESS TO 39TH AVENUE PER MEADOWDALE ESTATES PLAT			

80

AT&T, 12' WIDE EASE.
PARCEL 14
DOC. 1204143

81

WE ENERGIES-ELECTRIC
PARCEL 13
DOC. 326966, 90' WIDE EASE.
DOC. 1182407, 75' WIDE EASE.
DOC. 1469669, 75' WIDE EASE. RESERVATION

PARCEL 14
DOC. 1204143, 12' WIDE EASE.

WE ENERGIES - ELECTRIC
PARCEL 15
V. 501, P. 458, DOC. 399788, 210' WIDE EASE.
V. 1016, P. 754, DOC. 634084, 10' WIDE EASE.

82

TIME WARNER CABLE, 12' WIDE EASE.
PARCEL 14
DOC. 1204143

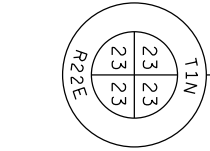
STATION/OFFSET TABLE

POINT	STATION	OFFSET
118	36+69.62	77.50'
120	36+66.02	52.50'
121	40+48.09	52.50'
122	40+48.14	56.71'
123	40+78.14	56.34'
124	40+78.09	52.50'
125	41+36.59	52.50'
126	41+36.45	40.63'
127	38+09.99	77.50'
128	38+10.11	67.41'
129	41+35.09	71.36'

COURSE TABLE

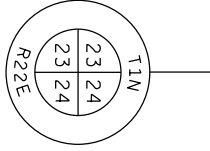
COURSE	BEARING	DISTANCE
120-121	N02°07'04"W	382.06'
121-122	N87°11'09"E	4.20'
122-123	N02°48'51"W	30.00'
123-124	S87°11'09"W	3.84'
124-125	N02°07'04"W	58.51'
125-126	S87°11'09"W	11.87'
118-127	N02°07'04"W	140.37'
127-128	N87°11'09"E	10.09'
128-129	N02°48'51"W	325.00'

CONC. MON.
W/BRASS CAP
N= 200,488,232
E=2,575,757.424



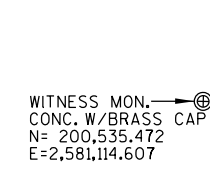
S. LINE OF THE NE 1/4 OF SEC. 23-1-22
N89°16'58"E 2695.08'
(N89°16'52"E 2695.07')

STA. 36+67.82, 3.68' LT
CONC. MON.
W/ALUMINUM CAP
N= 200,521,969
E=2,578,452.295



S. LINE OF THE
NW 1/4 OF SEC. 24-1-22
N89°42'34"E 2662.21'
(N89°42'55"E 2662.03')

WITNESS MON.
CONC. W/BRASS CAP
N= 200,535,472
E=2,581,114.607



CALCULATED
N= 200,535,469
E=2,581,114.465

VILLAGE OF PLEASANT PRAIRIE

SE-NE

OUTLOT 1
MEADOWDALE ESTATES SUBD.
DOC. 1204143

MEADOWDALE HOMEOWNERS ASSOCIATION
STORMWATER DETENTION,
ACCESS & MAINTENANCE EASE.
OVER ALL OF OUTLOT 1

WETLAND CONSERVANCY,
ACCESS & MAINTENANCE EASE.
PER MEADOWDALE ESTATES PLAT

MEADOWDALE ESTATES
HOMEOWNERS ASSOCIATION, INC.

25' LANDSCAPING, SIGNAGE,
ACCESS & MAINTENANCE
EASE. PER MEADOWDALE
ESTATES PLAT

VISION TRIANGLE
EASE. PER
MEADOWDALE
ESTATES PLAT

ENTRY MONUMENT, ACCESS,
MAINTENANCE & LANDSCAPING
EASE. PER MEADOWDALE
ESTATES PLAT

97TH STREET

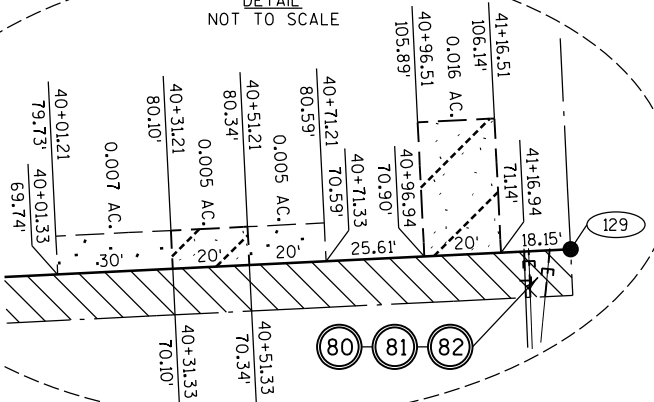
80 81 82

80 81 82

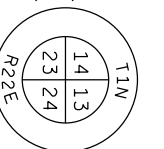
39TH AVENUE

STA. 42+00.00
END RELOCATION ORDER

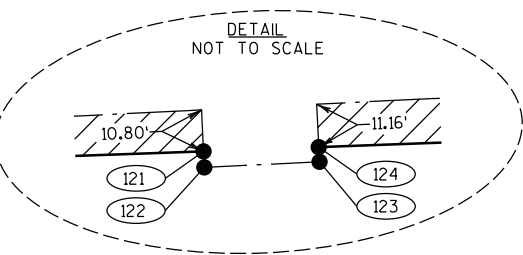
DETAIL
NOT TO SCALE



CONC. MON.
W/ALUMINUM CAP
N= 203,187,001
E=2,578,321.293



DETAIL
NOT TO SCALE



REVISION DATE: JUNE 16, 2014

DATE: MAY 12, 2014

SCALE: FEET

HWY: 39TH AVENUE

STATE R/W PROJECT NUMBER: 3729-00-04

PLAT SHEET 4.05

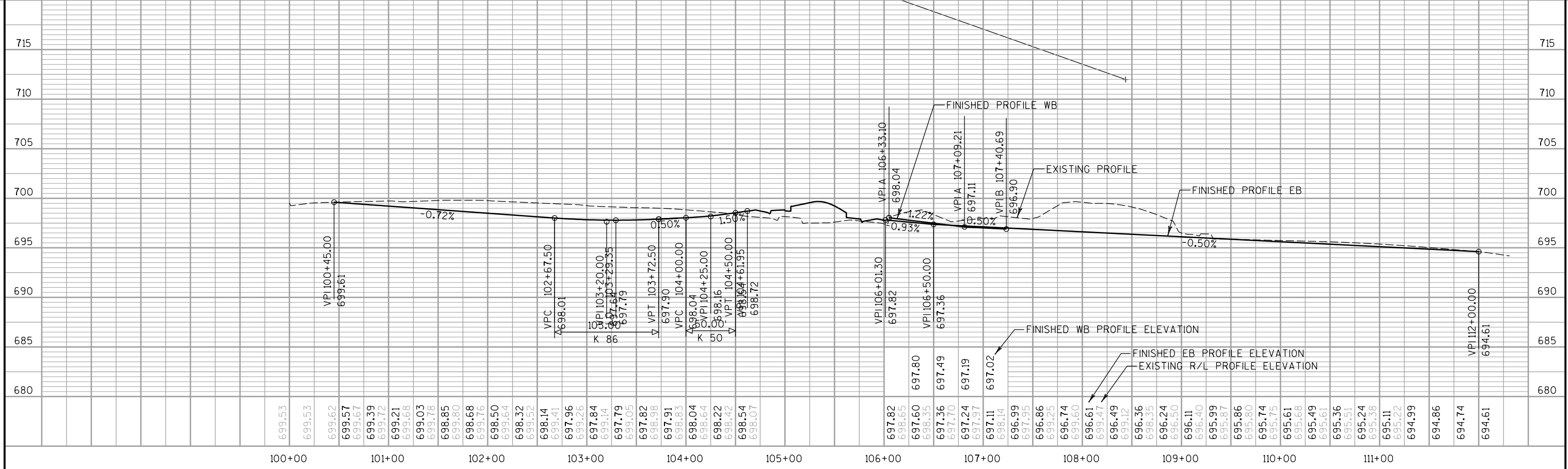
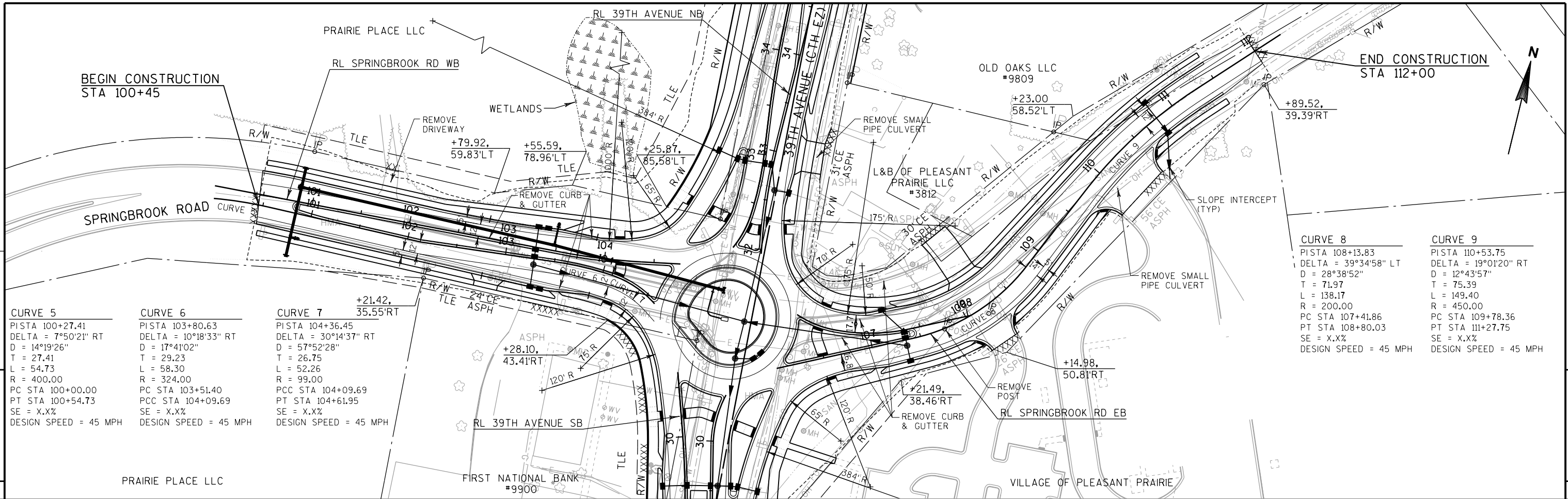
GRID FACTOR: 1.00001191

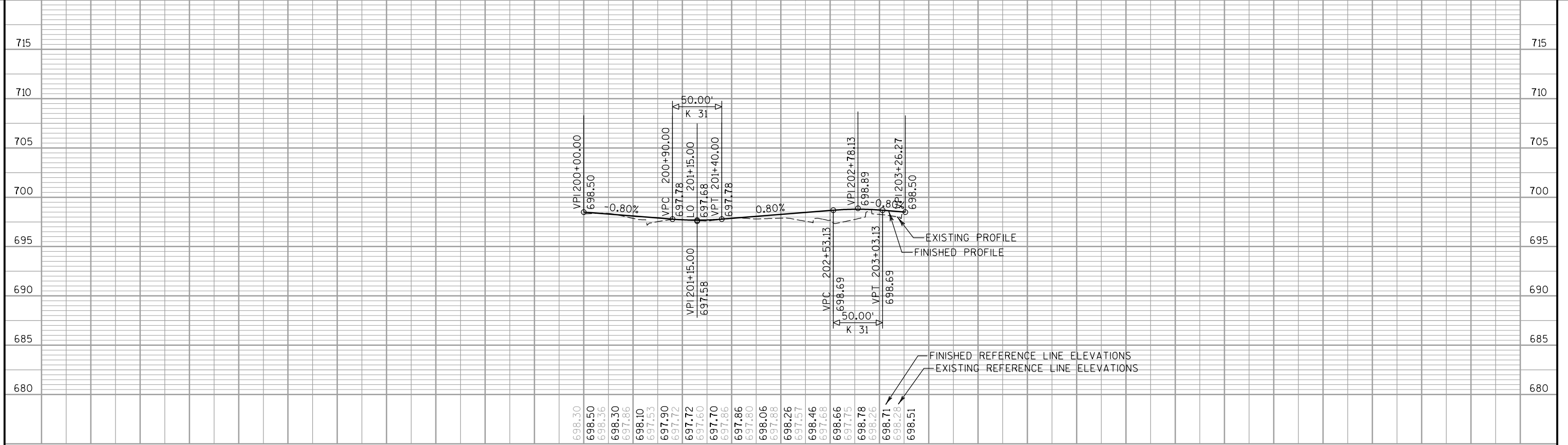
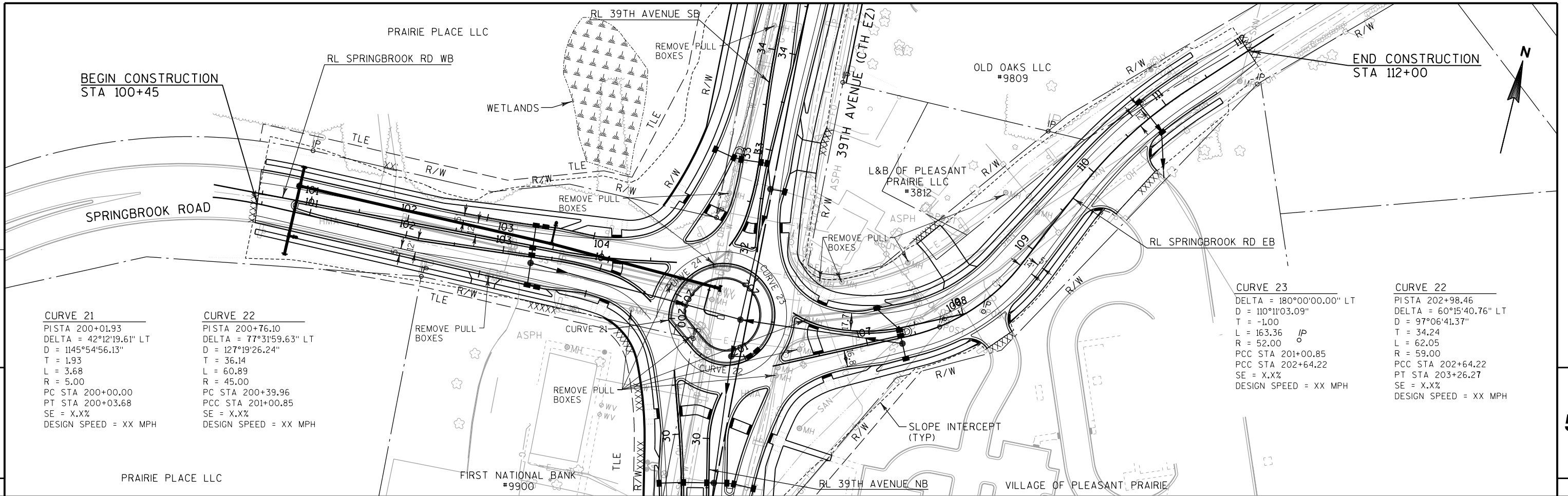
COUNTY: KENOSHA

CONSTRUCTION PROJECT NUMBER: 3729-00-74

PS&E SHEET 79

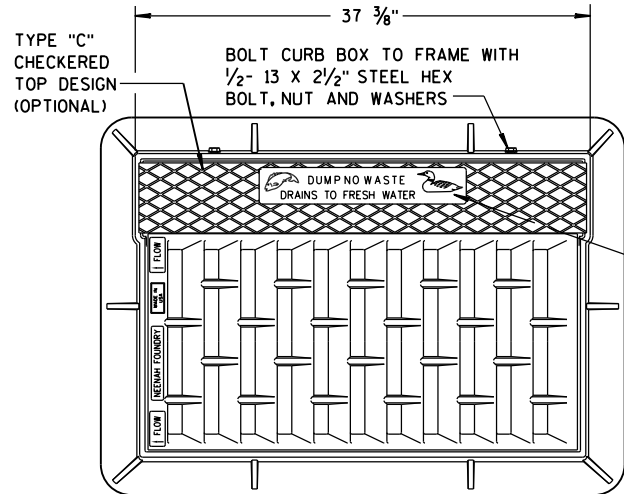
E



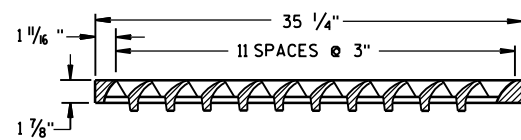
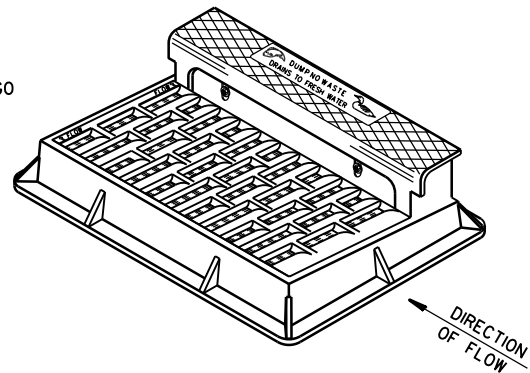


Standard Detail Drawing List

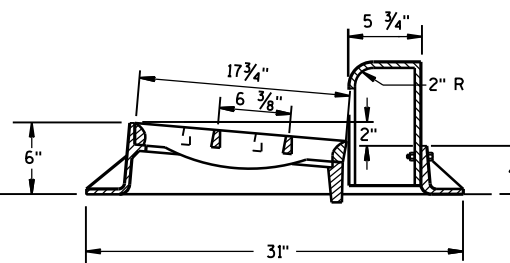
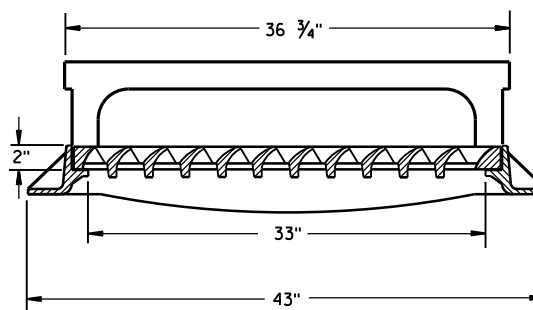
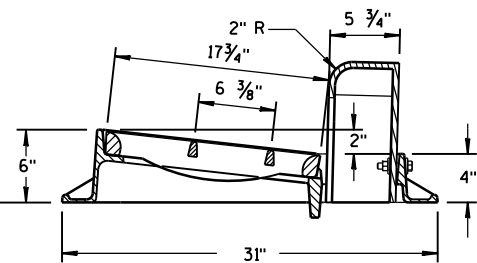
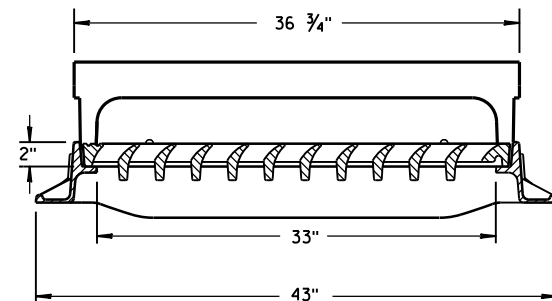
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A09-01	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-15A	CURB RAMPS TYPES 1 AND 1-A
08D05-15B	CURB RAMPS TYPES 2 AND 3
08D05-15C	CURB RAMPS TYPES 4A AND 4A1
08D05-15D	CURB RAMPS TYPE 4B AND 4B1
08D05-15E	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
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F05-01	CLASS "B" BEDDING FOR CULVERT PIPE OR STORM SEWER
09B02-08	CONDUIT UNDER PAVED HIGHWAYS
09B04-11	PULL BOX
09C02-06	CONCRETE BASES, TYPES 1, 2 & 5
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09D04-01	LIGHTING CONTROL CABINET
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
11B02-02	CONCRETE MEDIAN NOSE
13C01-16	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C18-02A	CONCRETE PAVEMENT JOINTING
13C18-02B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-02C	CONCRETE PAVEMENT JOINT TIES
13C18-02D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
13C18-02E	CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
14A02-01	TREE PLANTING DETAIL
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C07-12D	ROUNDABOUT ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C18-03	MEDIAN ISLAND MARKING
15C27-01	DOUBLE ARROW WARNING SIGN PLACEMENT
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
16A01-06	LANDMARK REFERENCE MONUMENTS AND COVERS



NOTE:
GRATE IS REVERSIBLE.

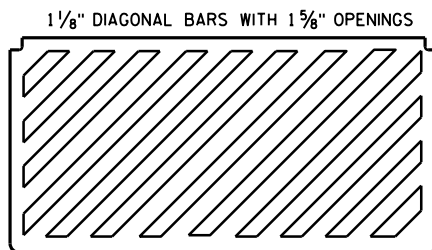


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

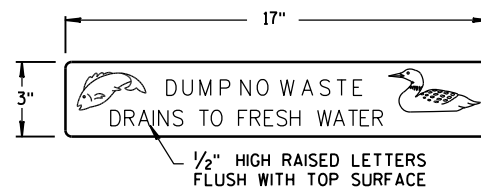


TYPE "H"

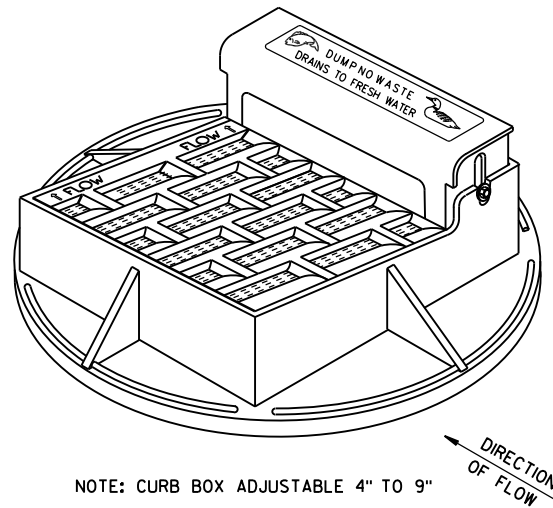
NOTE: EITHER CASTING IS ACCEPTABLE



SPECIAL GRATE FOR
TYPE "H" COVER
(MEASURES 35 1/4" X 17 3/4" X 2")
(NOTED AS TYPE H-S ON DRAINAGE TABLE)

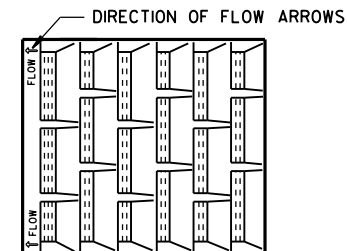


LOGO DETAIL

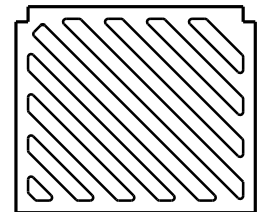


NOTE: CURB BOX ADJUSTABLE 4" TO 9"

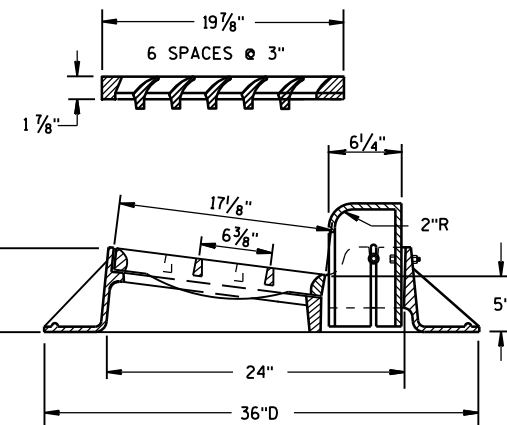
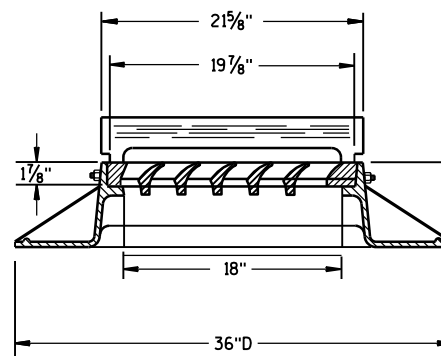
NOTE:
GRATE IS REVERSIBLE.



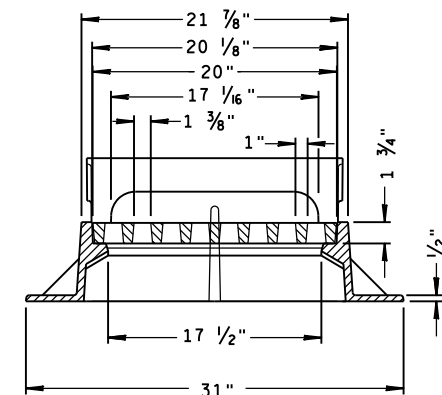
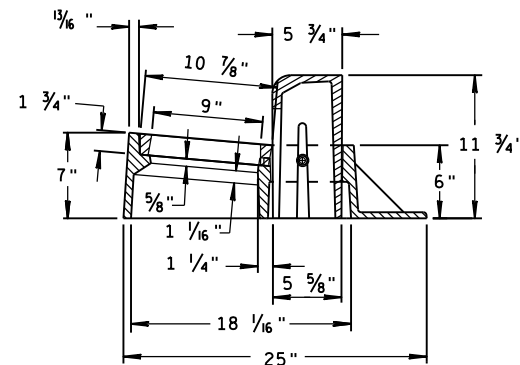
1" DIAGONAL BARS
WITH 1 1/2" OPENINGS



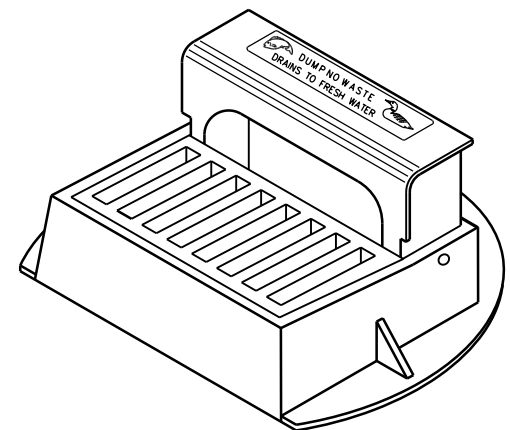
SPECIAL GRATE FOR
TYPE "A" COVER
(MEASURES 19 3/4" X 17" X 1 1/8")
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"



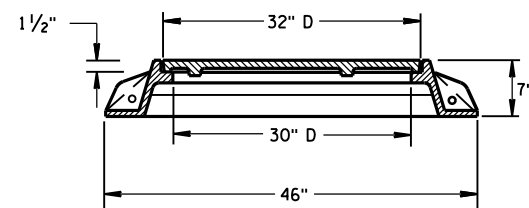
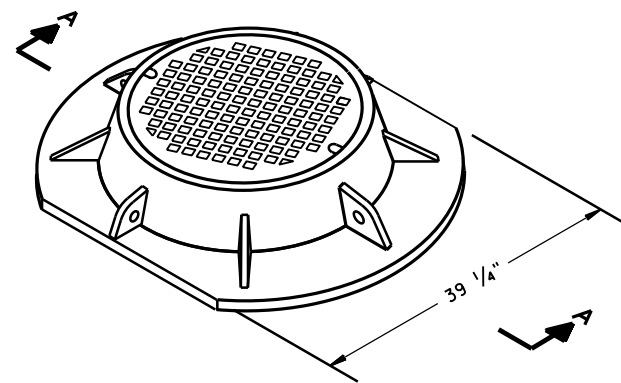
TYPE "Z"



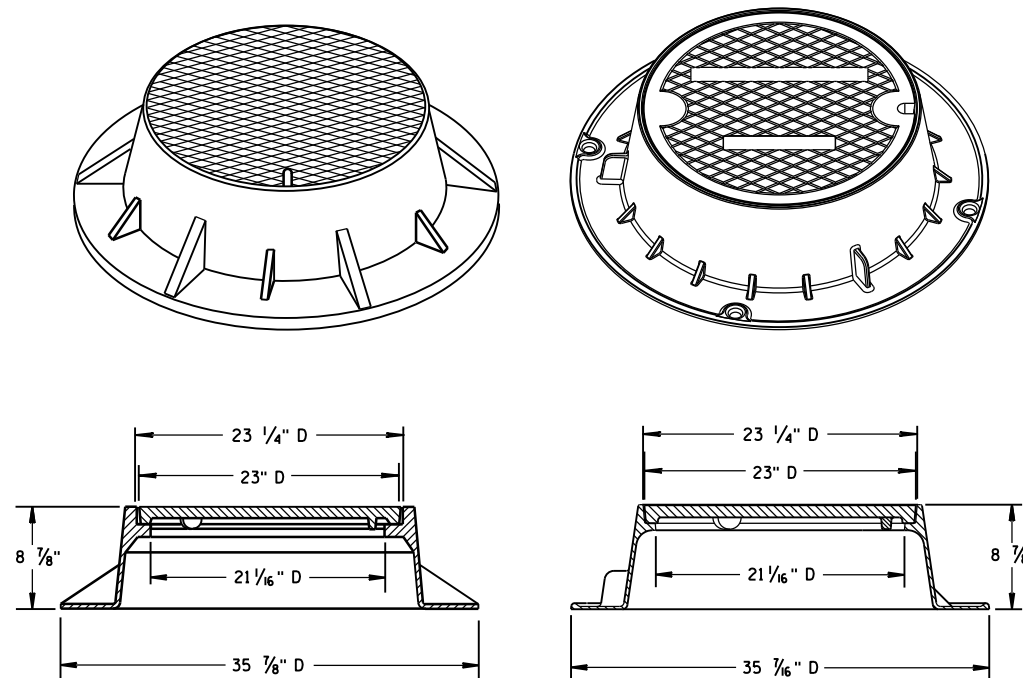
INLET COVERS
TYPE A, H, A-S, H-S & Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
II-27-13
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
ENT

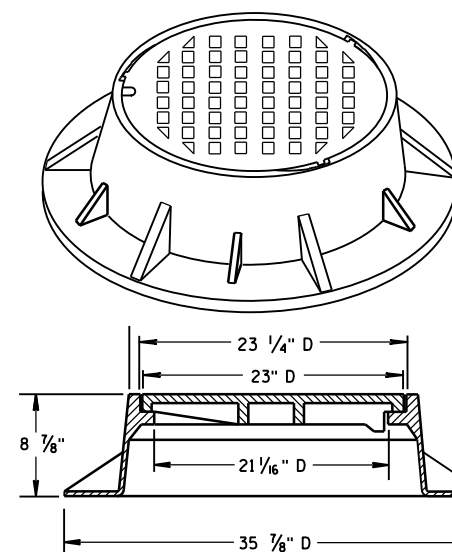
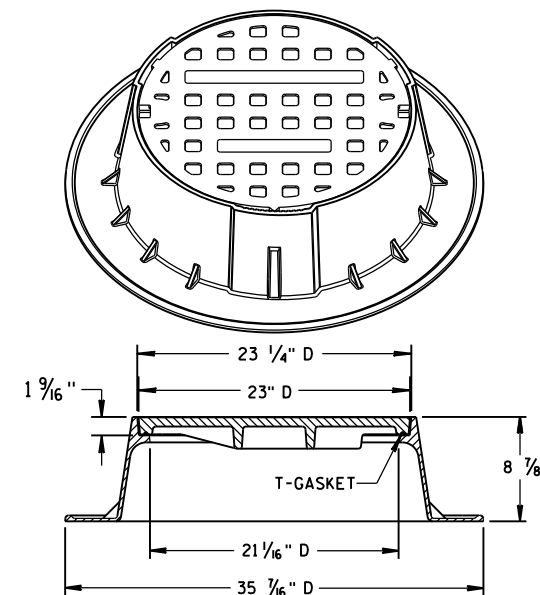


SECTION A-A
TYPE "K"



TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

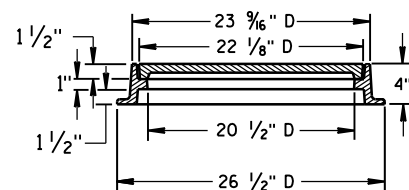
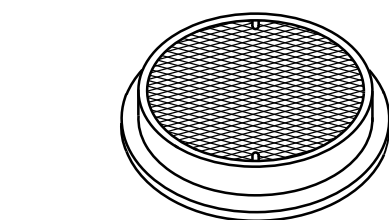


TYPE "J" SPECIAL

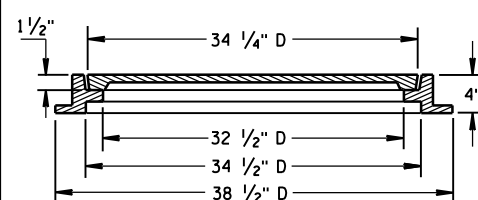
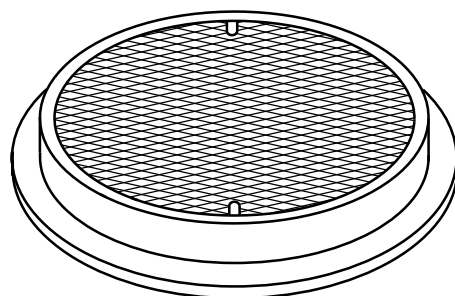
TYPE "B" NON-ROCKING SELF-SEAL LID

(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

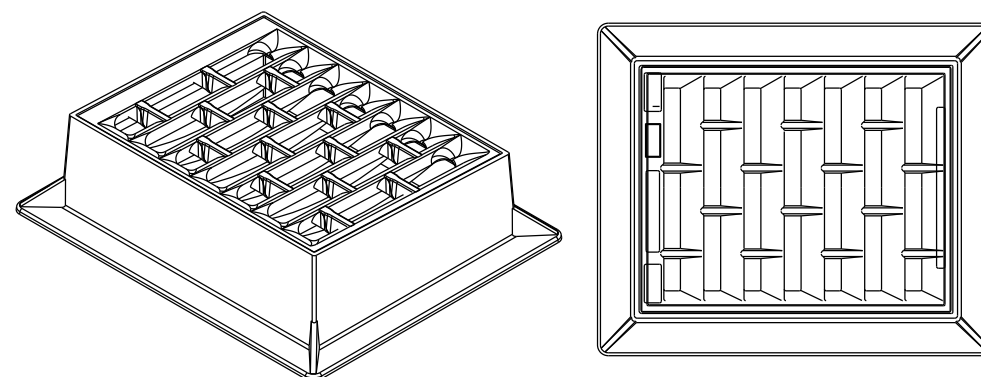
NOTE: EITHER CASTING IS ACCEPTABLE



TYPE "L"



TYPE "M"



INLET COVER TYPE "BW"

GENERAL NOTES

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

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

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

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K,
J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/27/2013

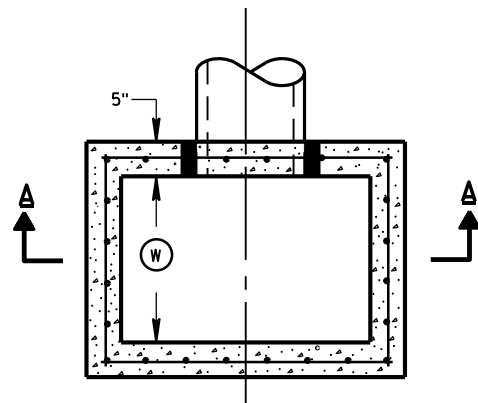
DATE

FHWA

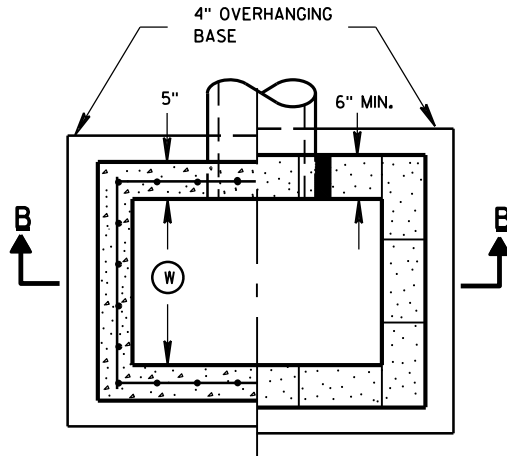
/S/ Jerry H. Zogg

ROADWAY STANDARDS 86

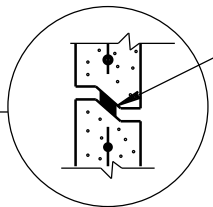
ENGINEER



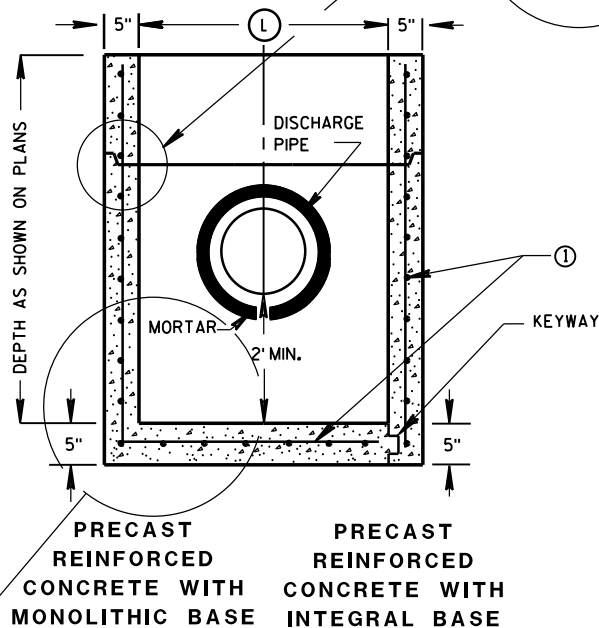
PLAN VIEW



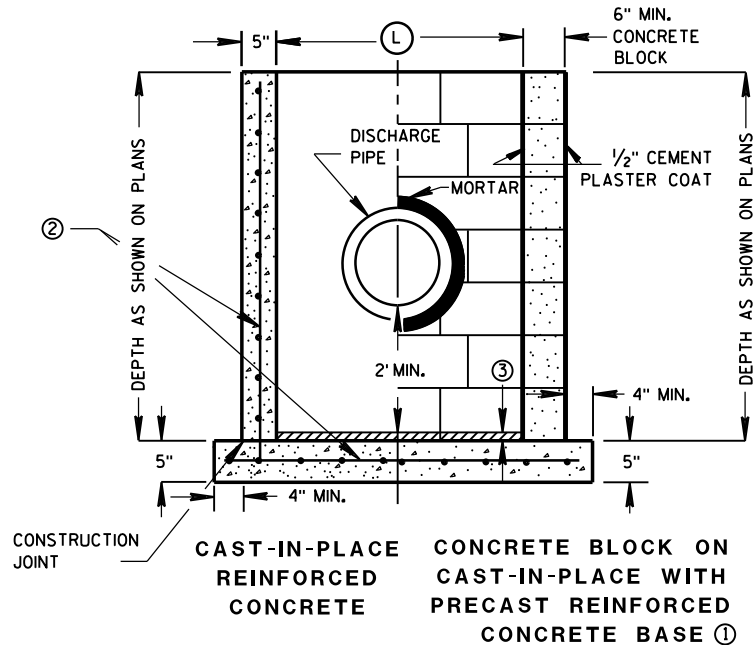
PLAN VIEW



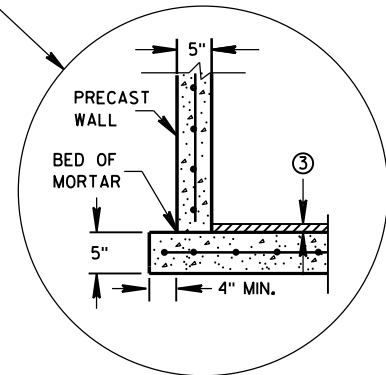
RISER JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

CATCH BASINS 2X3-FT AND 2.5X3-FT

GENERAL NOTES

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

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

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

ALL PRECAST CATCH BASIN UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

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

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF 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.

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

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

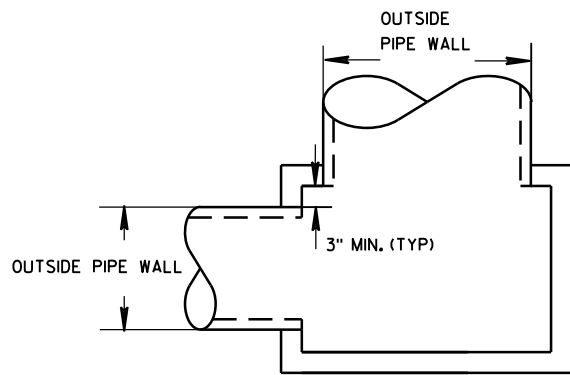
- ① FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- ② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.
- ③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE	WIDTH (W) (FT)	LENGTH (L) (FT)	F	ALL H'S
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24

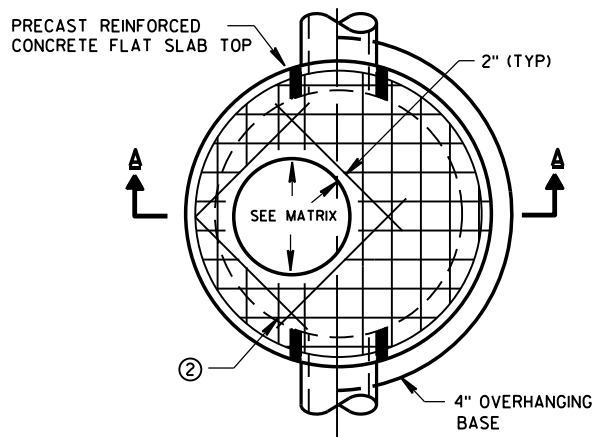


DETAIL "A"

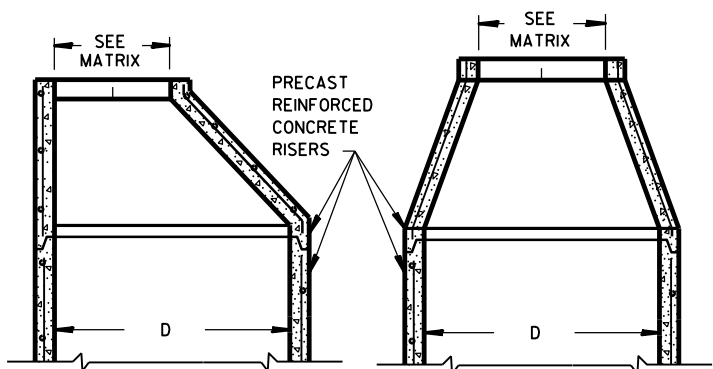
CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 DATE /S/ Jerry H. Zogg
FHWA ROADWAY STANDARDS 187 ENGINEER NT

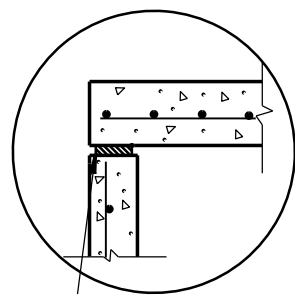


PLAN VIEW CIRCULAR OPENING

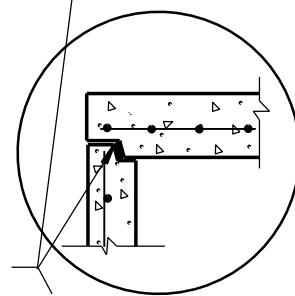


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

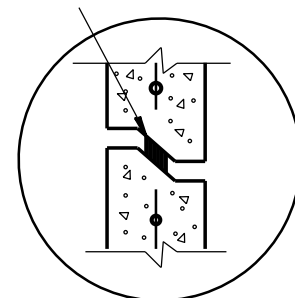
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



TOP WITH PLAIN END JOINT



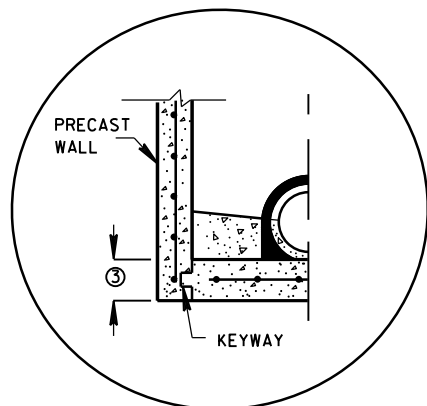
TOP WITH TONGUE AND GROOVE JOINT



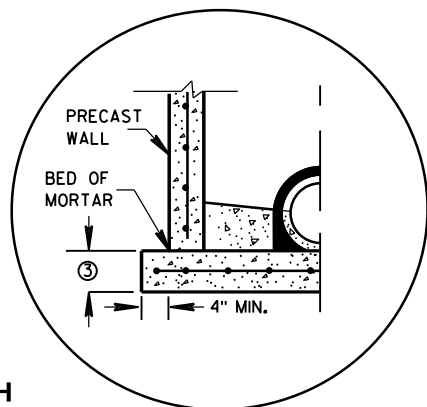
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

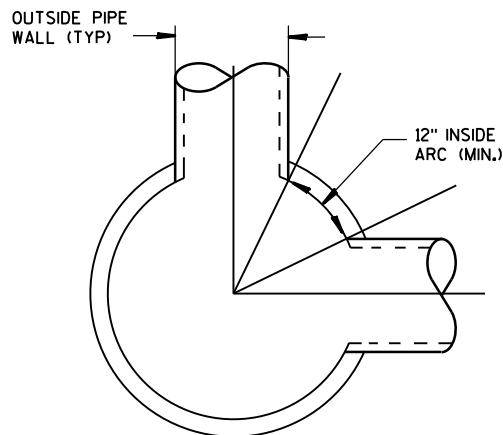


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

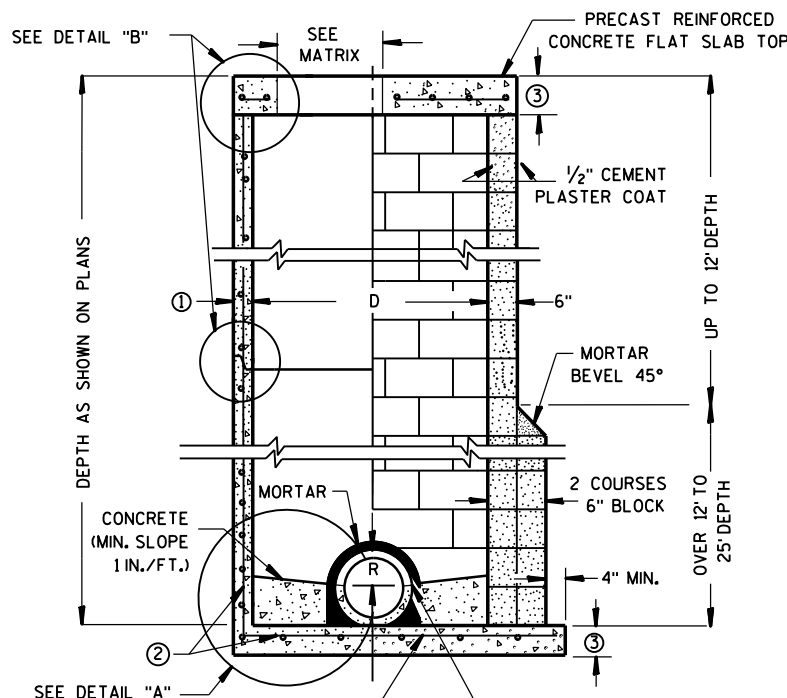


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"



CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES

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

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

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 MANHOLE 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.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF 1/2" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED. CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

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

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

- ① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.
- ② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.
- ③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

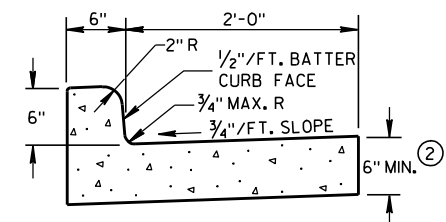
PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

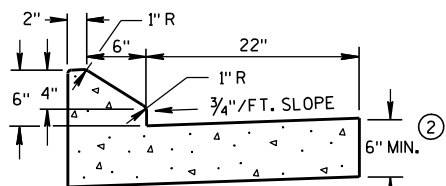
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

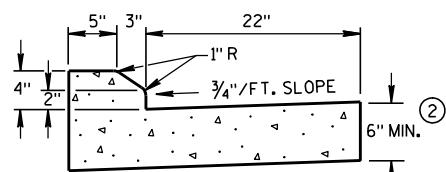
APPROVED
6/5/2012 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER 88
FHWA



TYPES A & D ①



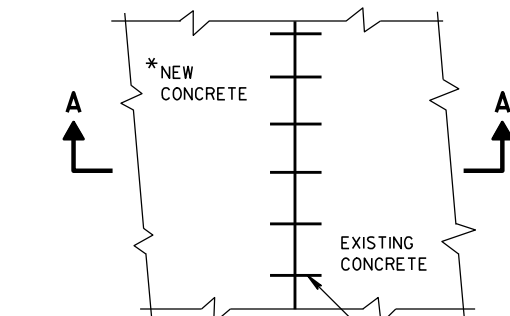
6" SLOPED CURB TYPES G & J ①



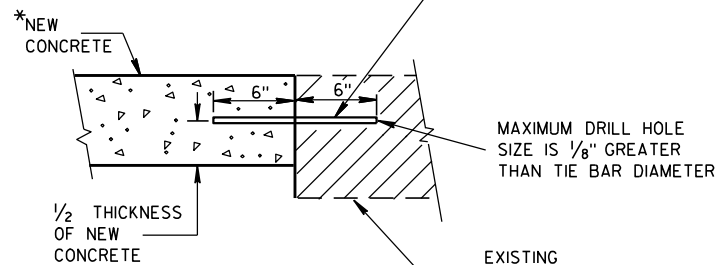
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

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



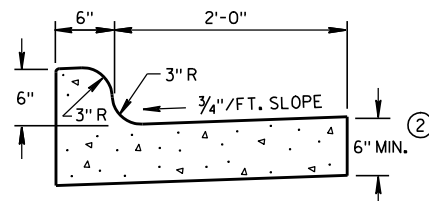
PLAN VIEW

SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

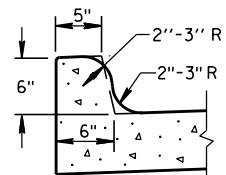
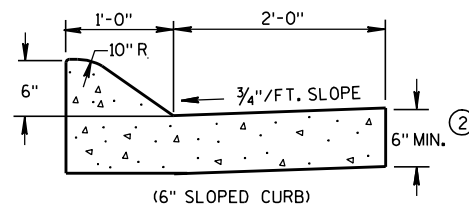
NO. 6 TIE BARS SPACED 2'-6" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT.

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

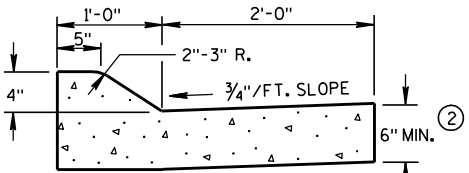
EXISTING
CONCRETE



TYPES K & L ①

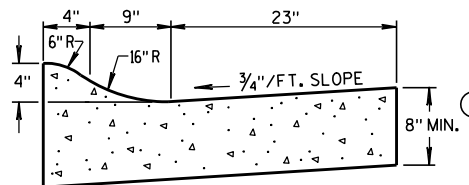
OPTIONAL CURB SHAPE
FOR TYPES K & L ①

(6" SLOPED CURB)

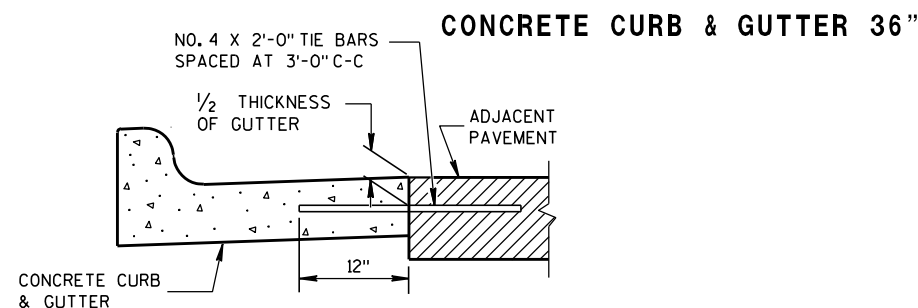


(4" SLOPED CURB)

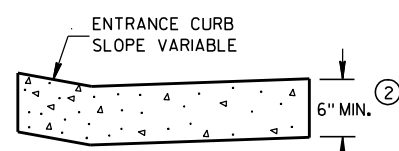
TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ④

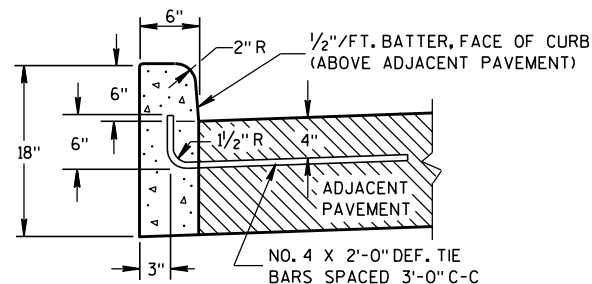


TYPICAL TIE BAR LOCATION ①



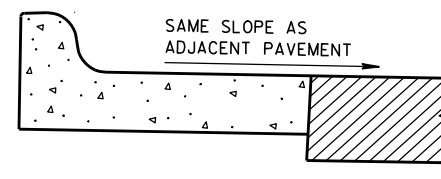
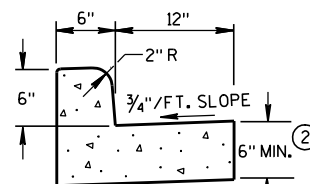
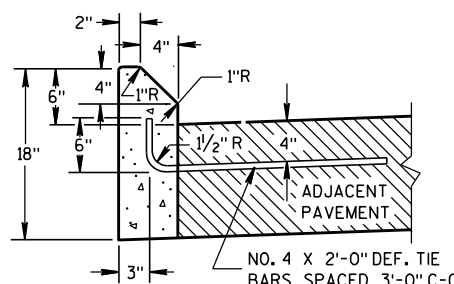
DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)



TYPES A & D ①

CONCRETE CURB

REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)TYPES A & D
CONCRETE CURB & GUTTER 18"

TYPES G & J ①

GENERAL NOTES

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

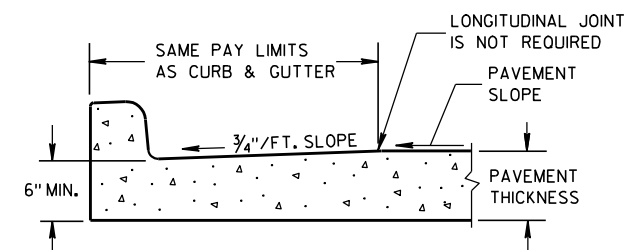
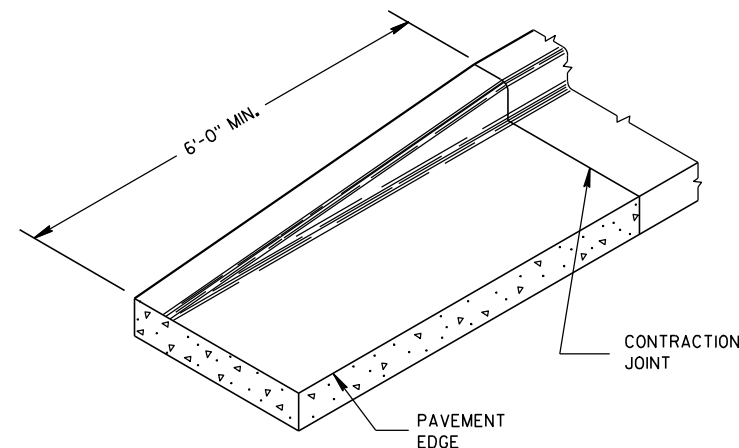
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

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

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

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER

END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/4/08

DATE

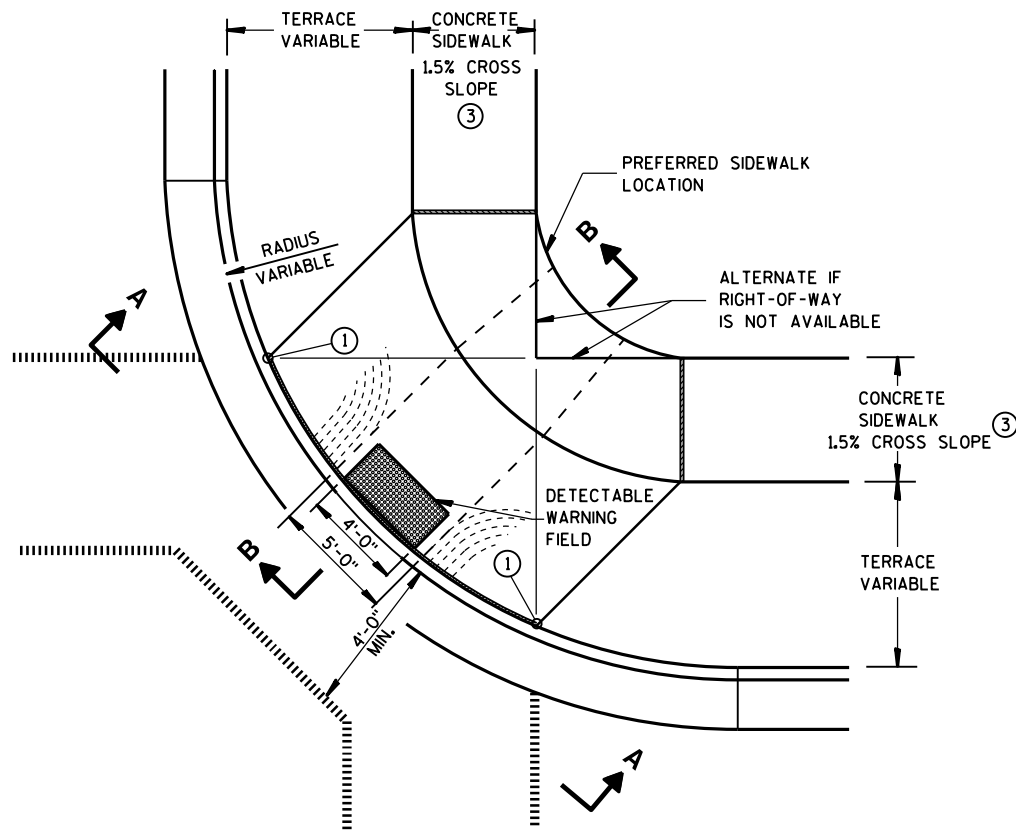
FHWA

/S/ Jerry H. 7

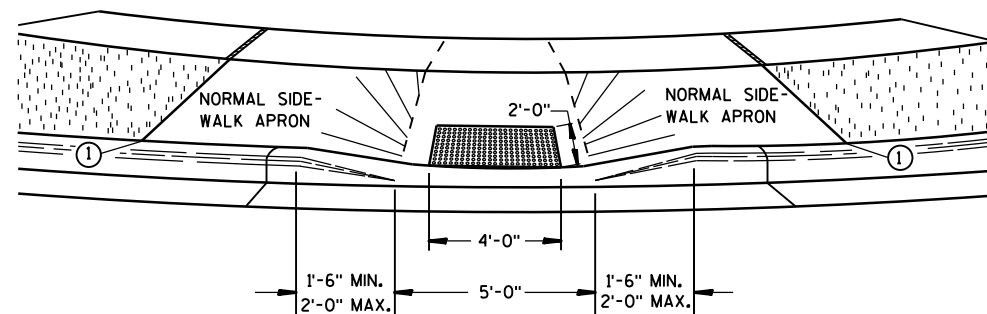
ROADWAY STANDARDS 89

ENGINEER

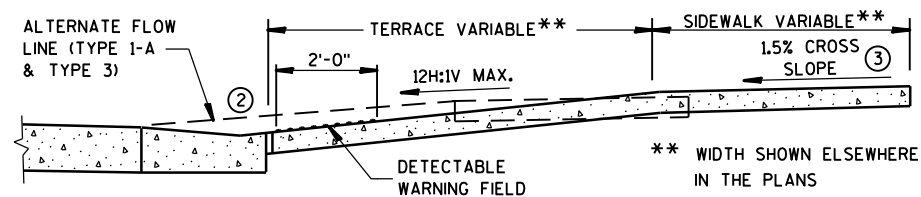
ENT



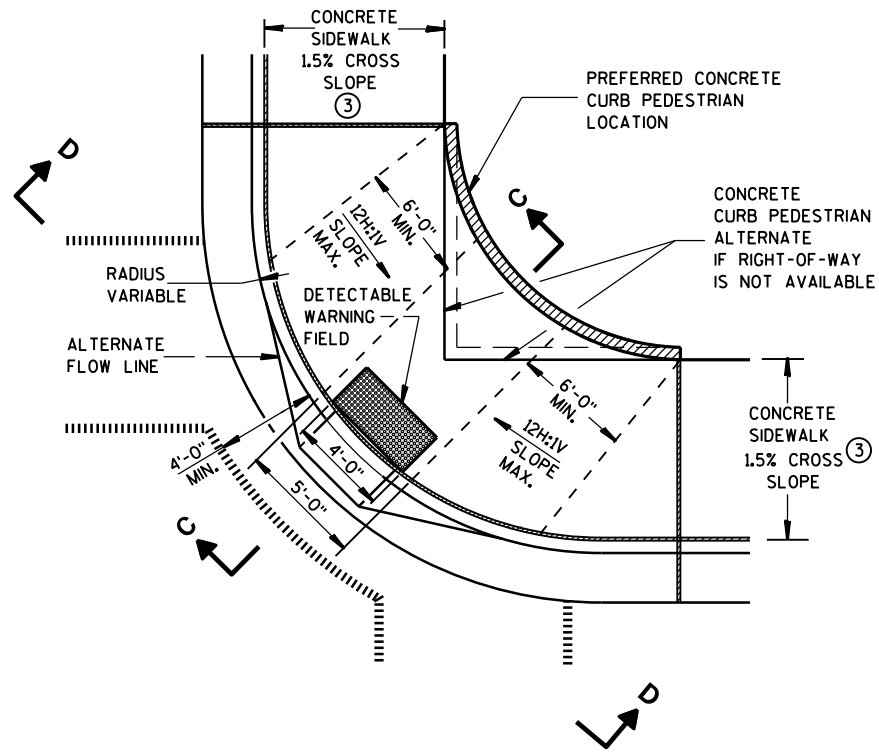
**PLAN VIEW
TYPE 1 RAMP**
(CENTER OF CORNER RADIUS)



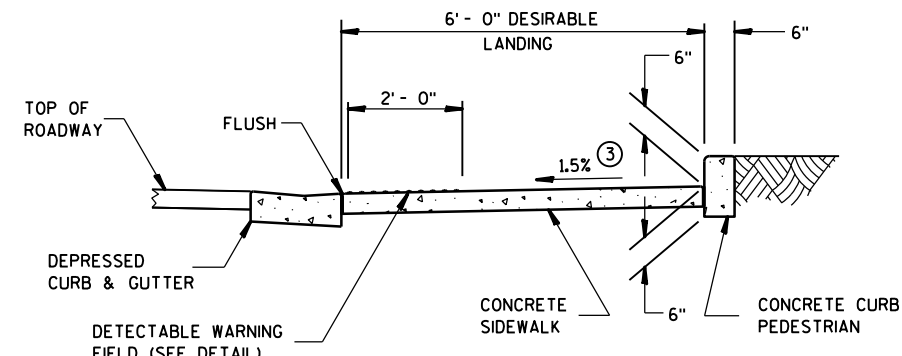
VIEW A-A



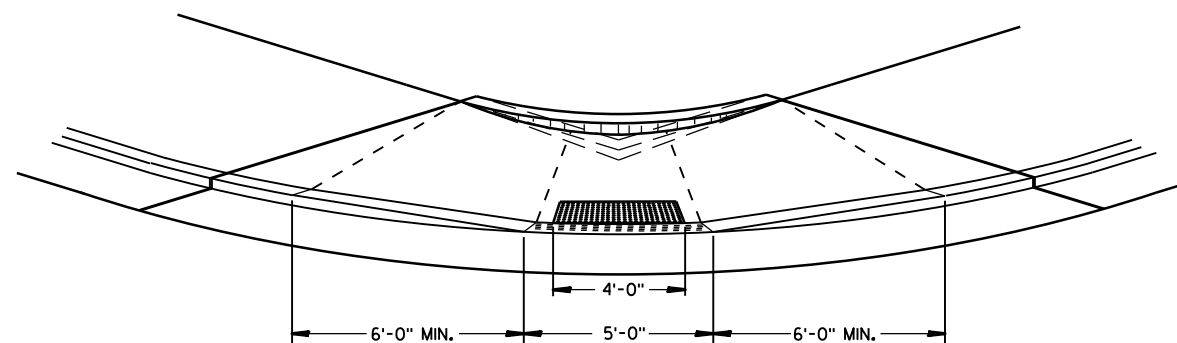
SECTION B-B



**PLAN VIEW
TYPE 1-A RAMP**
(NO TERRACE)



SECTION C-C



VIEW D-D

GENERAL NOTES

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

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

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

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

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

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.

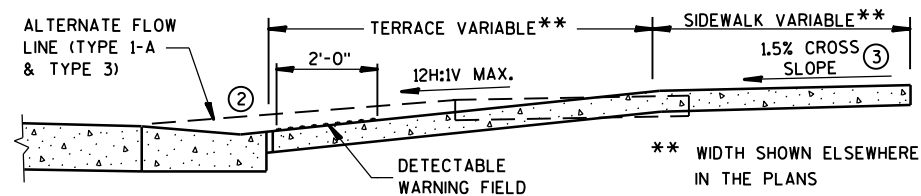
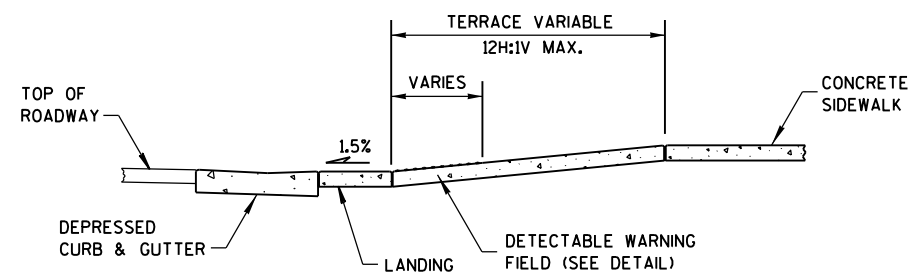
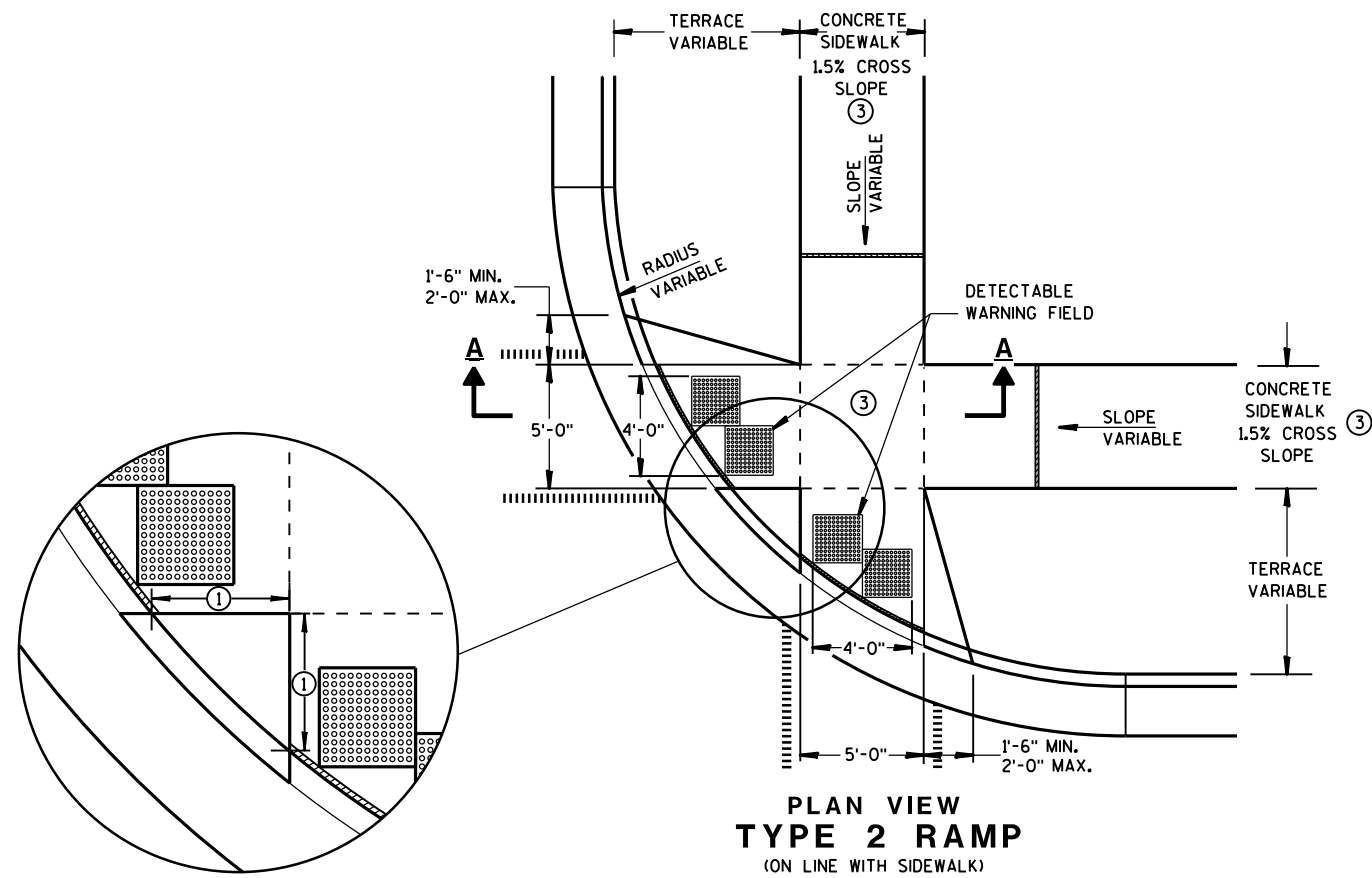
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ $\pm 0.5\%$ CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

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

**CURB RAMPS
TYPES 1 AND 1-A**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



GENERAL NOTES

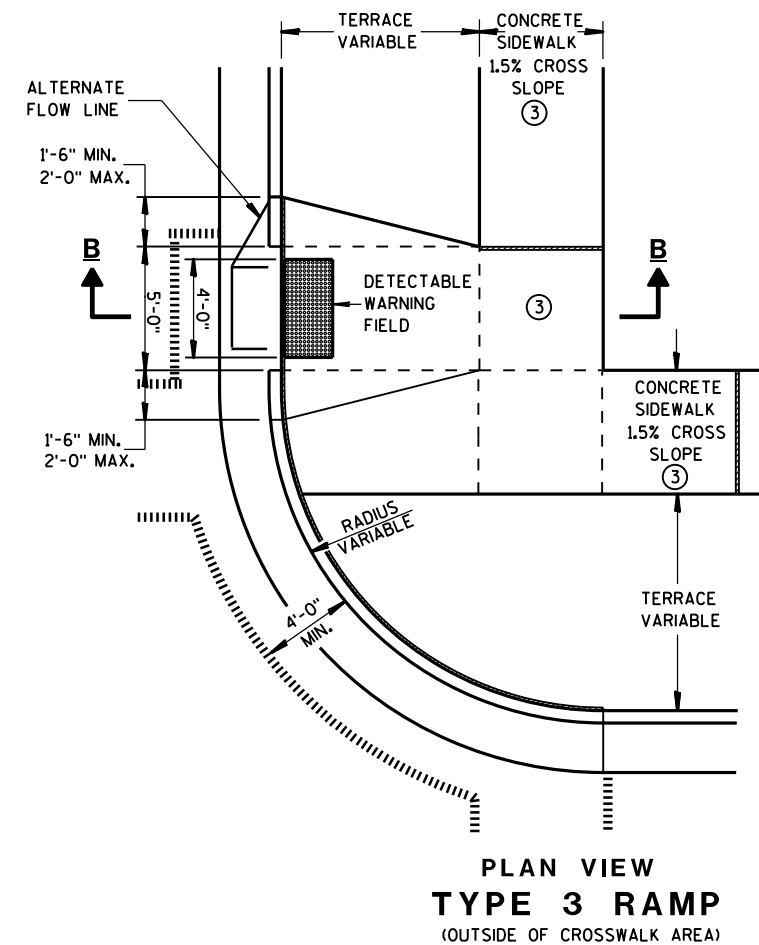
USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- ① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ $\pm 0.5\%$ CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

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

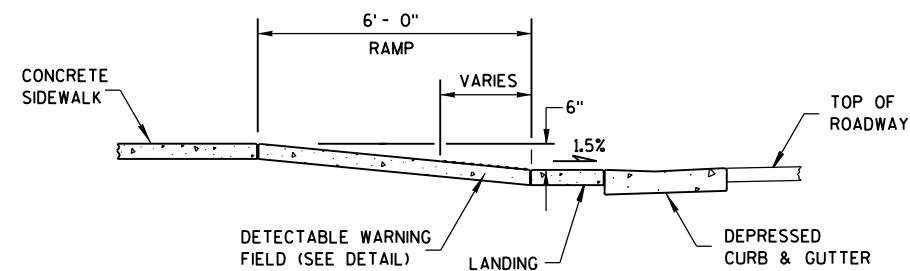
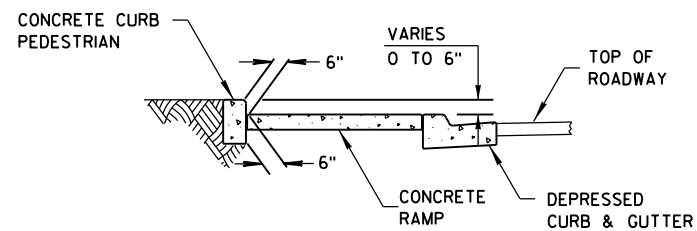


**CURB RAMPS
TYPES 2 AND 3**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

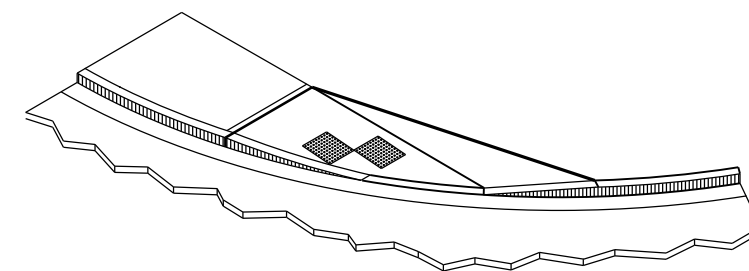
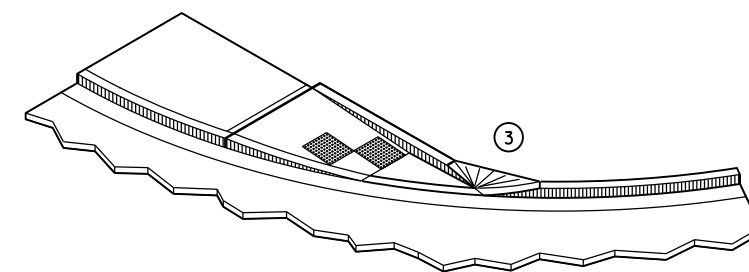
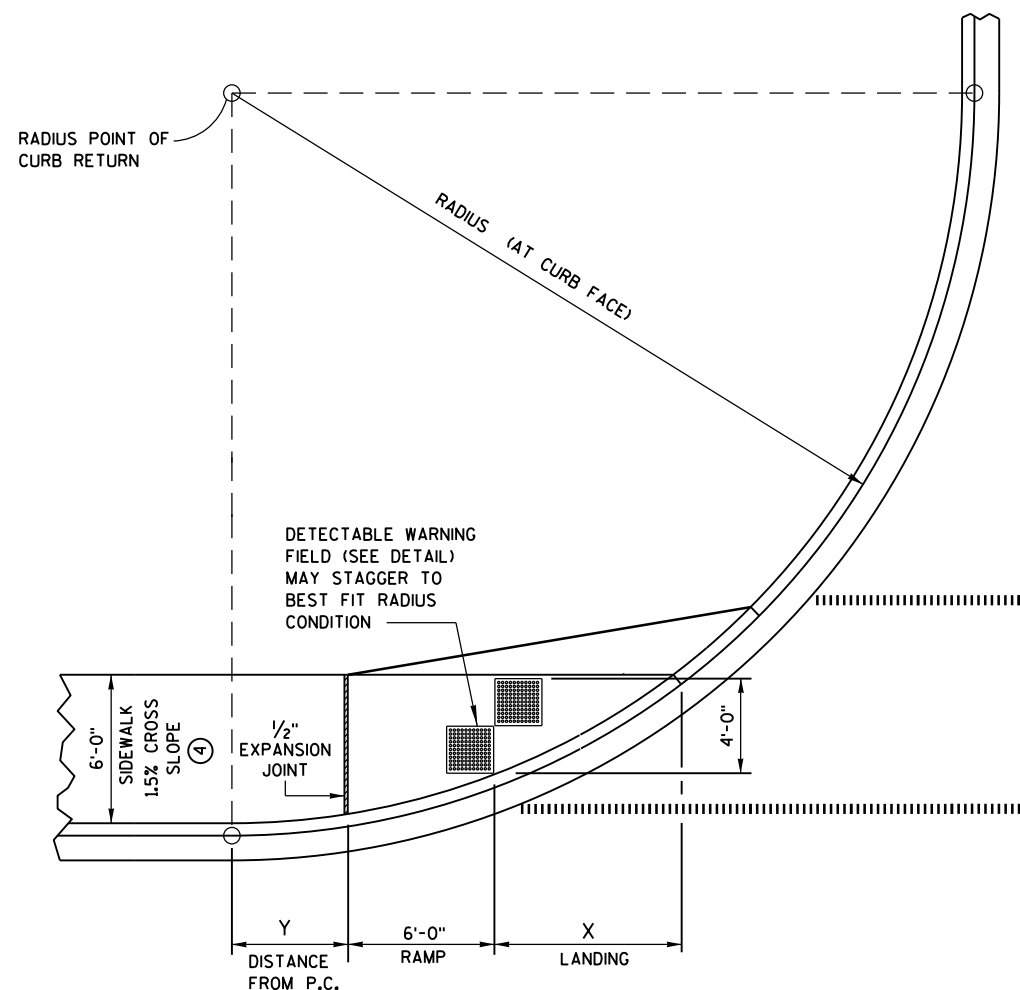
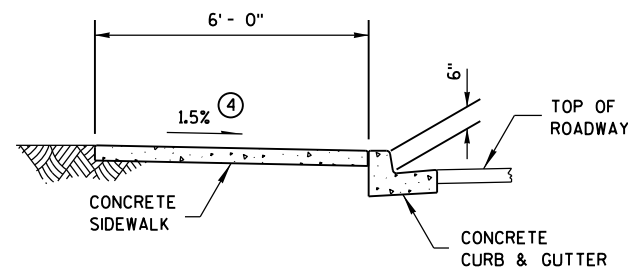


CURB RAMP TYPE 4A
PLAN VIEW



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

INTERMEDIATE RADII CAN BE INTERPOLATED



- ## GENERAL NOTES

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

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

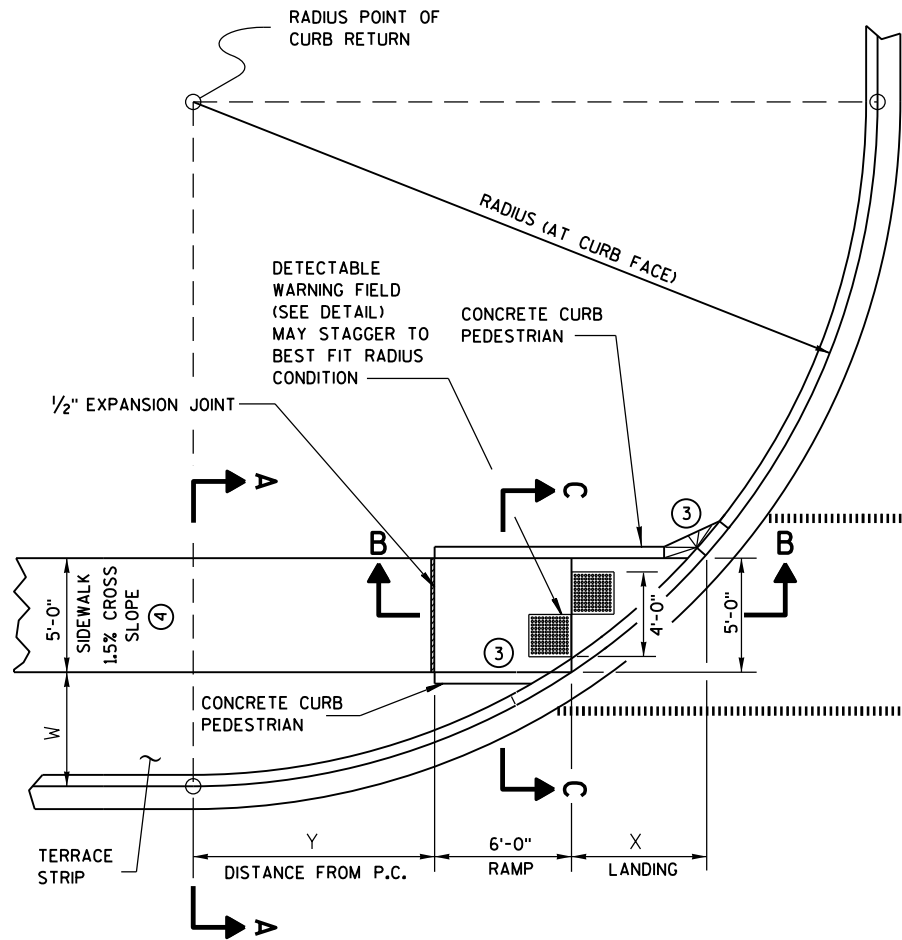
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.)
DO NOT MARK TRANSITION NOSE.
- ④ $\pm 0.5\%$ CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

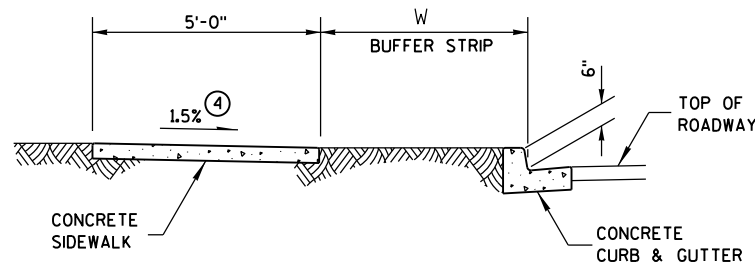
- ### LEGEND
- | | |
|---|------------------------------------|
|  | 1/2" EXPANSION JOINT-SIDEWALK |
| | CONTRACTION JOINT FIELD LOCATED |
|  | PAVEMENT MARKING CROSSWALK (WHITE) |

CURB RAMPS TYPES 4A AND 4A1

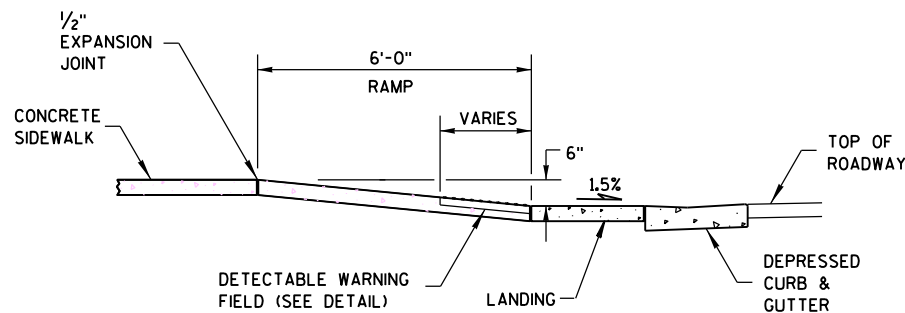
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION⁹²



**CURB RAMP TYPE 4B
PLAN VIEW**



SECTION A-A FOR TYPE 4B

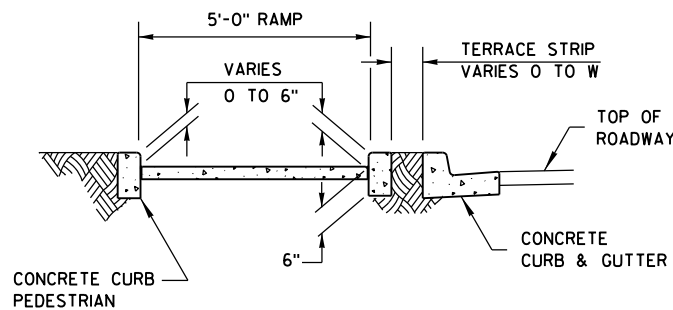


SECTION B-B FOR TYPE 4B

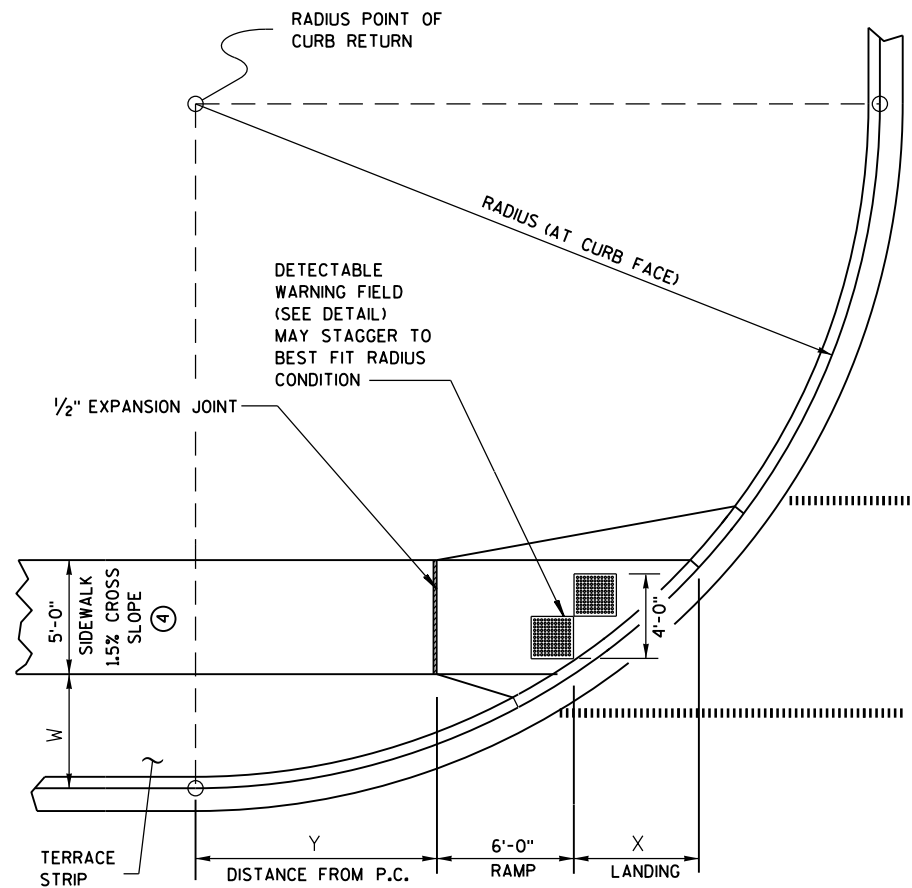
- LEGEND**
- 1/2" EXPANSION JOINT-SIDEWALK
 - CONTRACTION JOINT FIELD LOCATED
 - PAVEMENT MARKING CROSSWALK (WHITE)

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5 1/2"	4'-6 1/2"	4'-8 1/2"	6'-0"	4'-1"	7'-2 3/4"	3'-7"	8'-3 1/2"	3'-1 1/2"	9'-2 1/2"
30 FEET	7'-3 3/4"	7'-1"	6'-5 1/2"	8'-11 1/2"	5'-9 1/4"	10'-7"	5'-2 1/2"	12'-0"	4'-8 3/4"	13'-3 1/4"
40 FEET	8'-9 1/2"	9'-2 1/2"	7'-10"	11'-5 1/4"	7'-1"	13'-4 1/2"	6'-5 3/4"	15'-3/4"	5'-11 1/2"	16'-7 1/4"
50 FEET	10'-3/4"	11'-3/4"	9'-1/4"	13'-7 1/4"	8'-2 1/2"	15'-9 1/2"	7'-6 1/2"	17'-9"	6'-11 3/4"	19'-6 1/4"
60 FEET	11'-2 1/2"	12'-8 3/4"	10'-3/4"	15'-6 1/2"	9'-2 1/4"	17'-11 3/4"	8'-5 3/4"	20'-1 3/4"	7'-10 1/2"	22'-1 1/2"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION C-C FOR TYPE 4B



**CURB RAMP TYPE 4B1
PLAN VIEW**

GENERAL NOTES

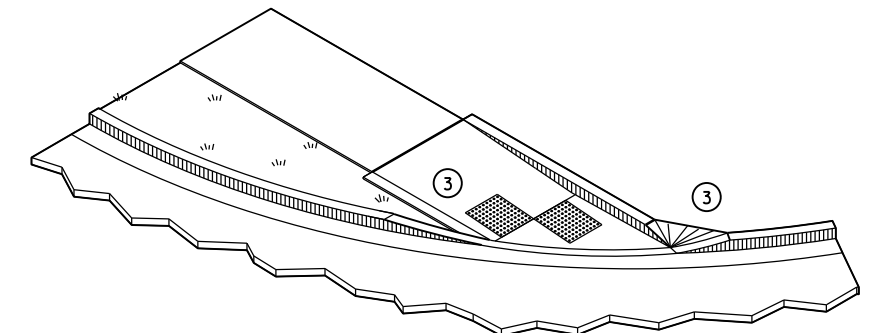
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

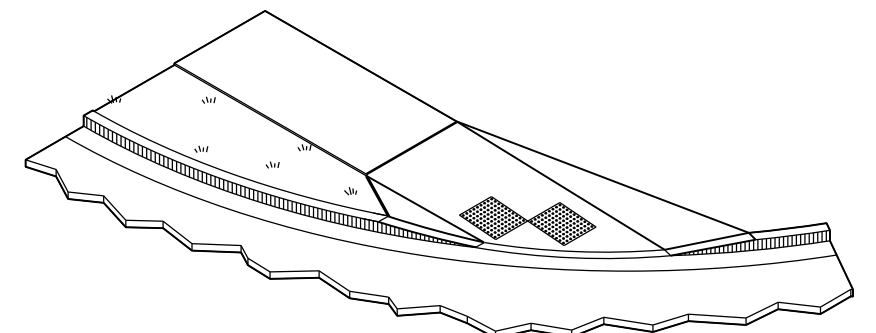
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

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



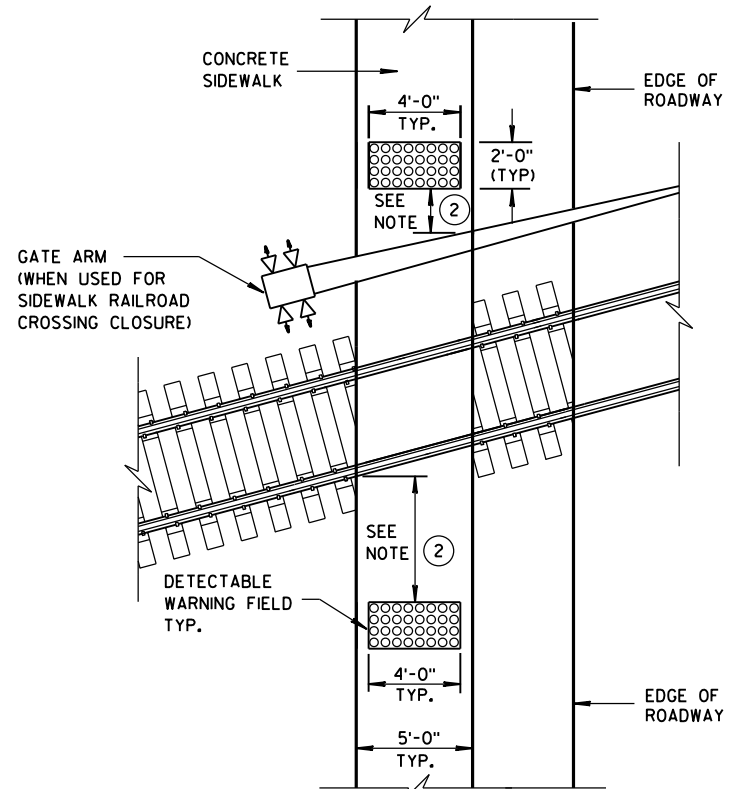
ISOMETRIC VIEW FOR TYPE 4B



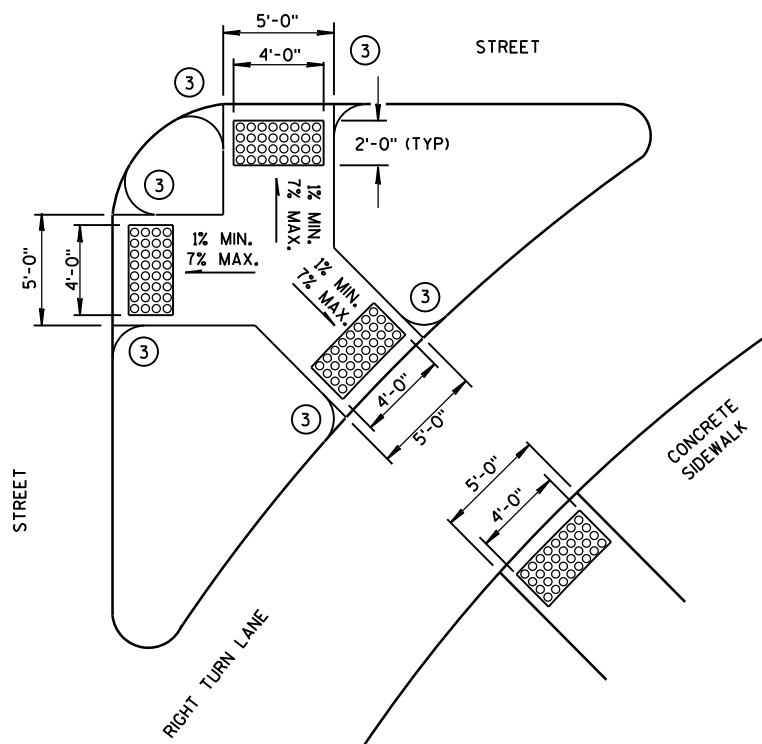
ISOMETRIC VIEW FOR TYPE 4B1

**CURB RAMPS
TYPE 4B AND 4B1**

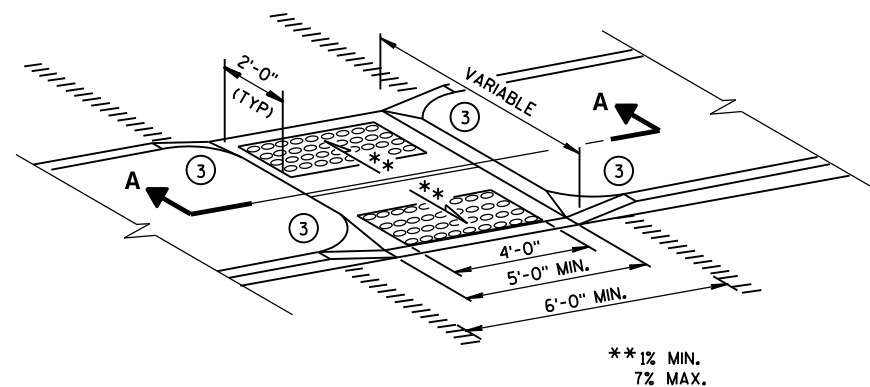
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



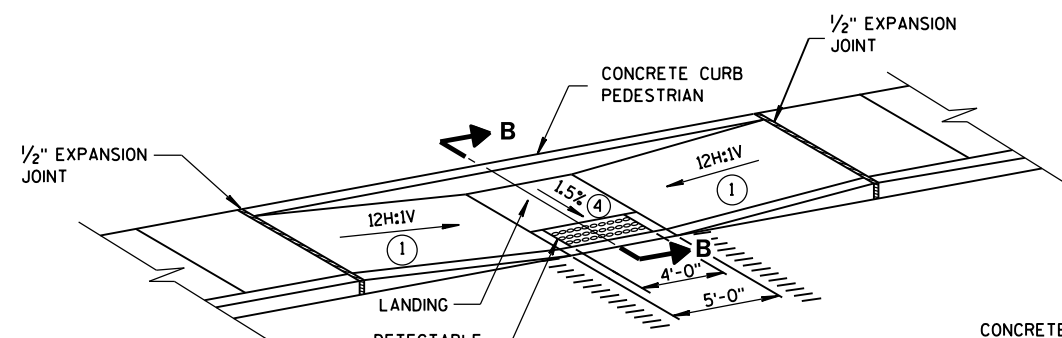
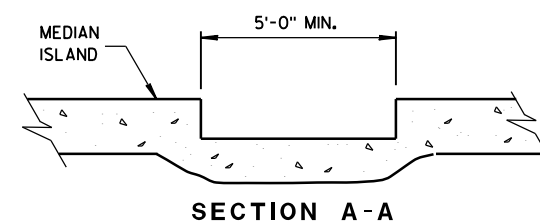
TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING



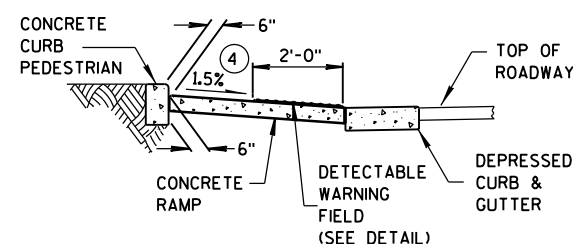
TYPE 6
DETECTABLE WARNING AT ISLANDS



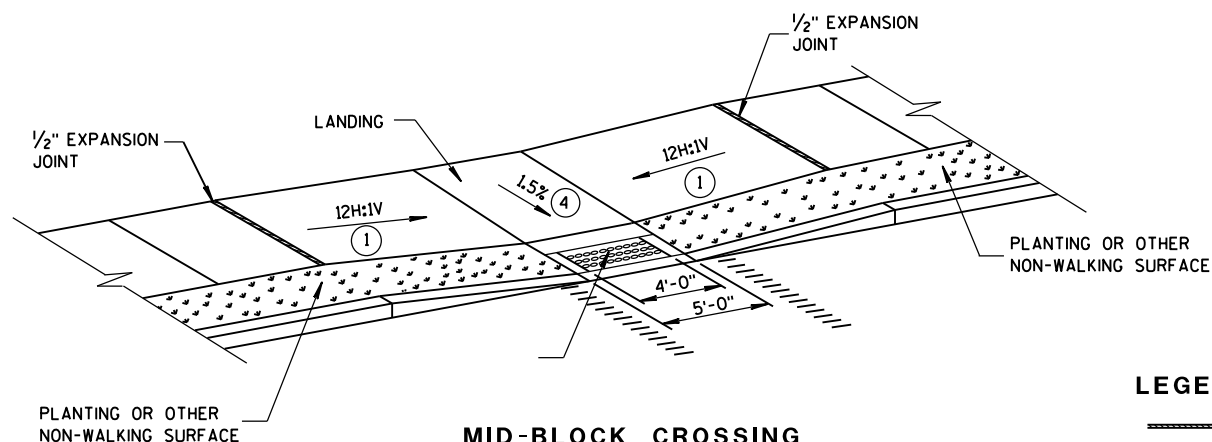
MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



MID-BLOCK CROSSING
TYPE 7B

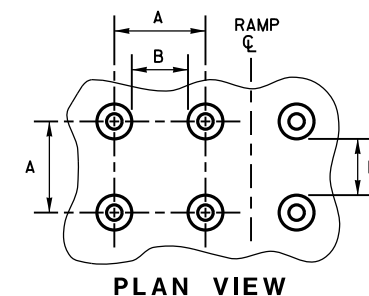
NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

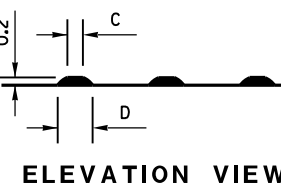
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- ① SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- ② THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET $\pm$ 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.
- ④ $\pm$ 0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



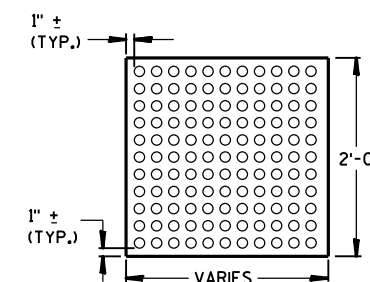
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

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



TRUNCATED DOMES

DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING
FIELD (TYPICAL)

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

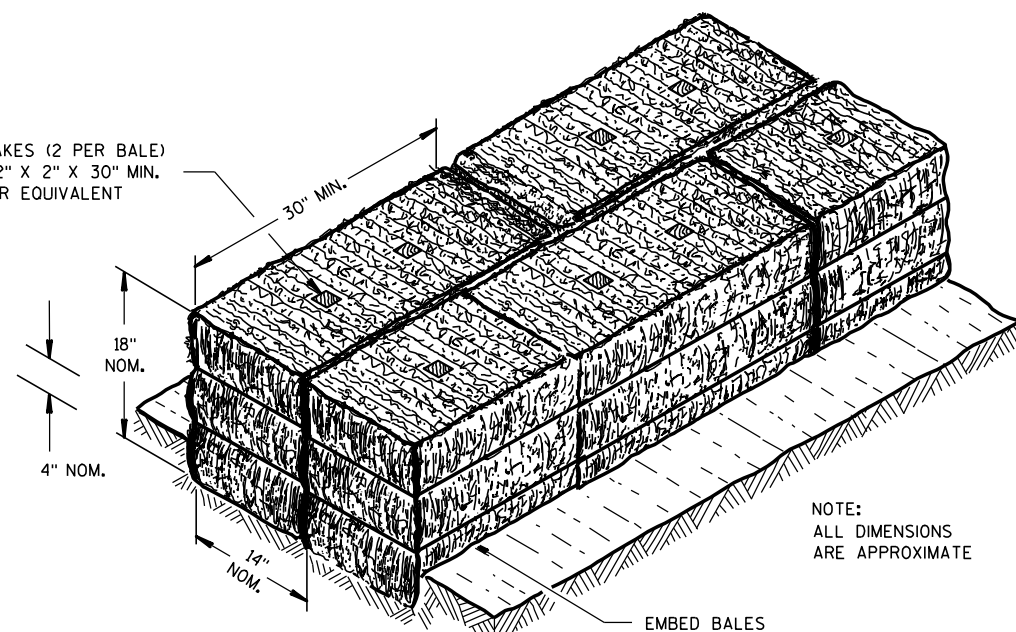
APPROVED

2-6-2013
DATE

FHWA

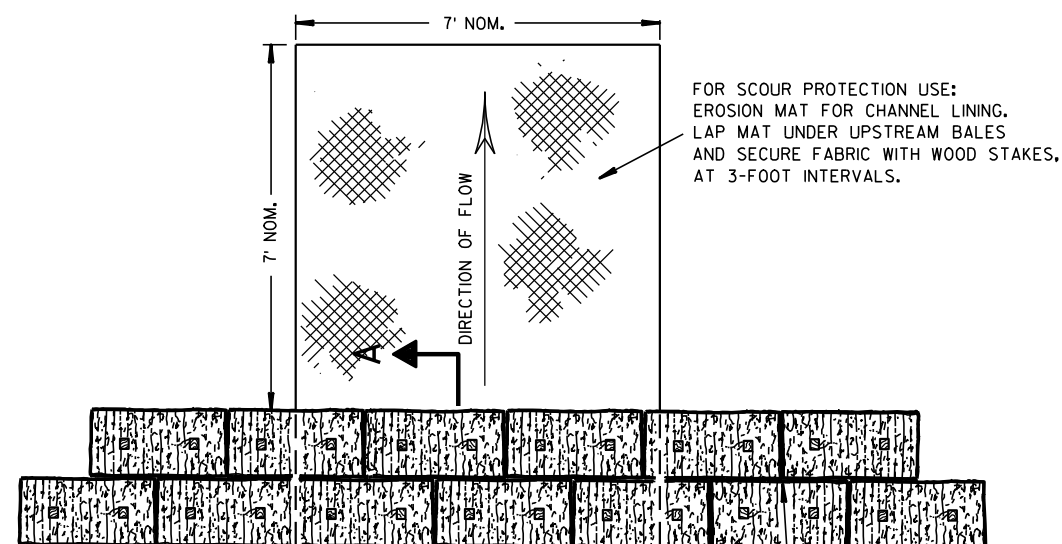
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

WOOD STAKES (2 PER BALE)
NOMINAL 2" X 2" X 30" MIN.
LENGTH OR EQUIVALENT



SECTION A-A

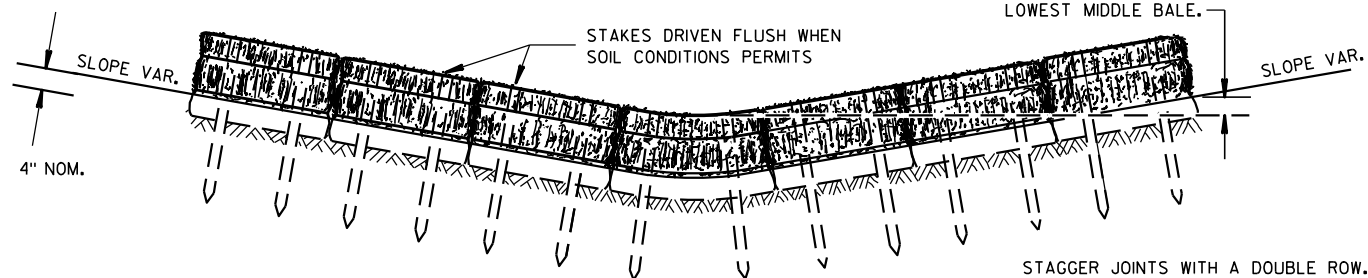
NOTE:
ALL DIMENSIONS
ARE APPROXIMATE



PLAN VIEW

STAGGER JOINTS BETWEEN ADJACENT
ROWS OF BALES.

BOTTOM ELEVATION OF END BALE SHALL
BE EQUAL TO OR GREATER THAN TOP OF
LOWEST MIDDLE BALE.



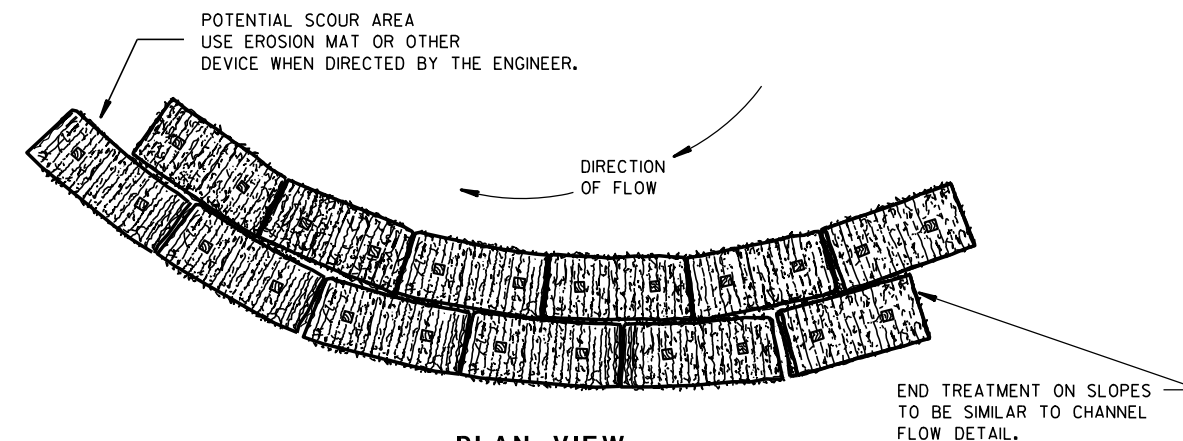
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

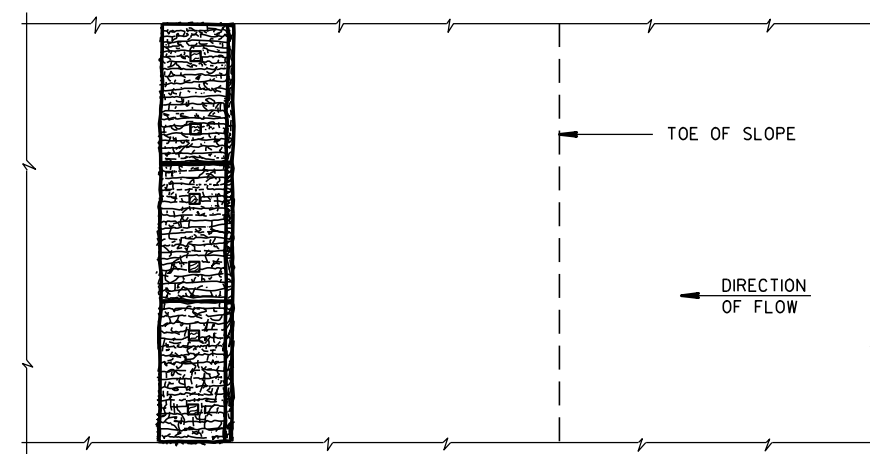
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- 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.

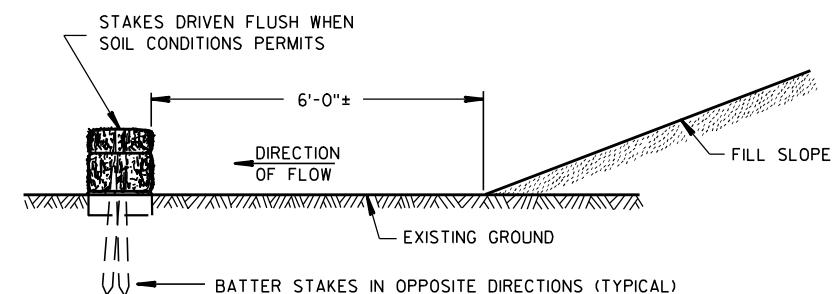


PLAN VIEW

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

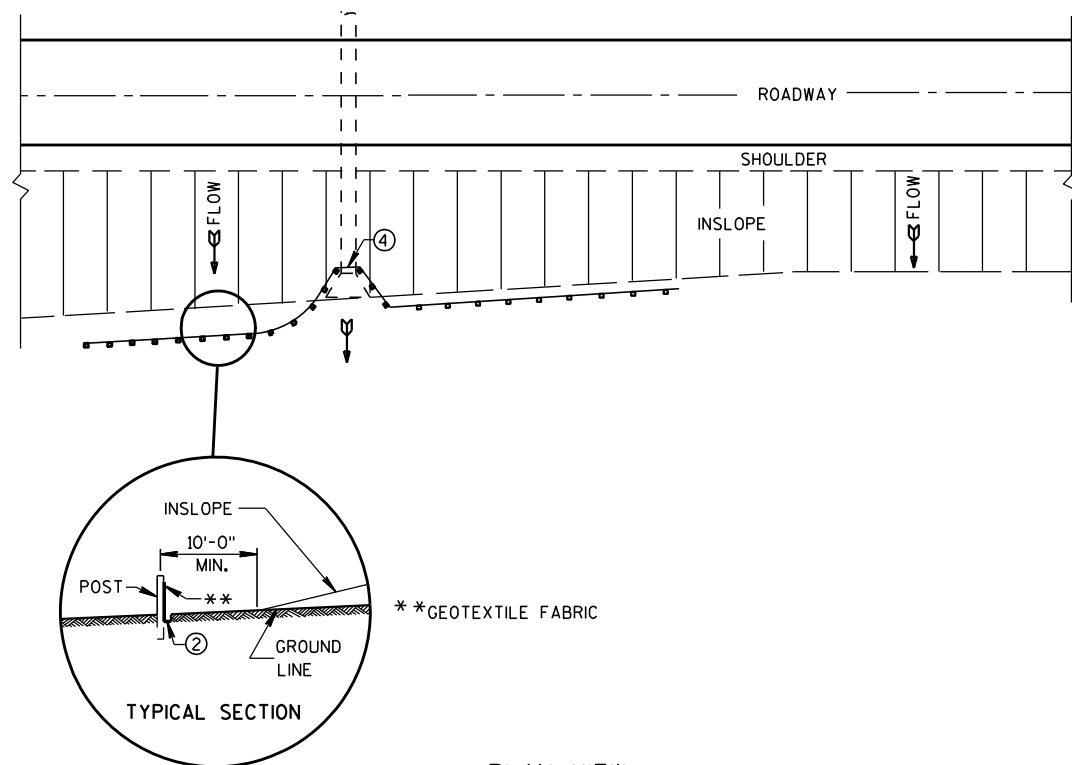
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

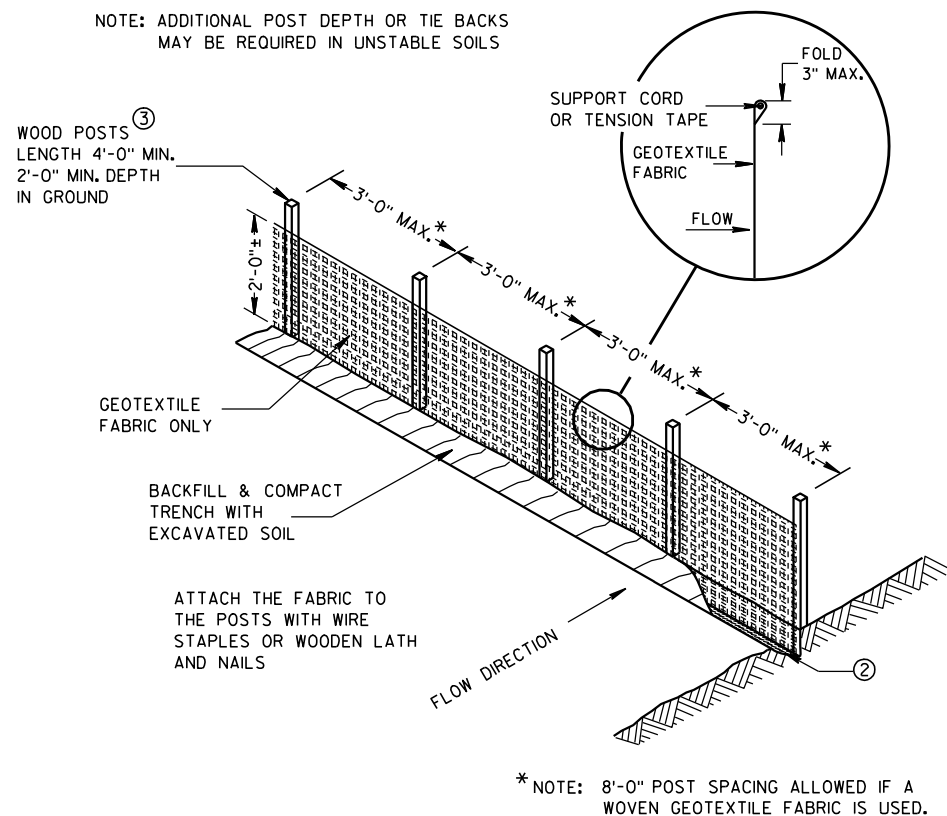
6/04/02
DATE

/S/ Beth Connors
CHIEF ROADWAY DEVELOPER 95
ENGINEER

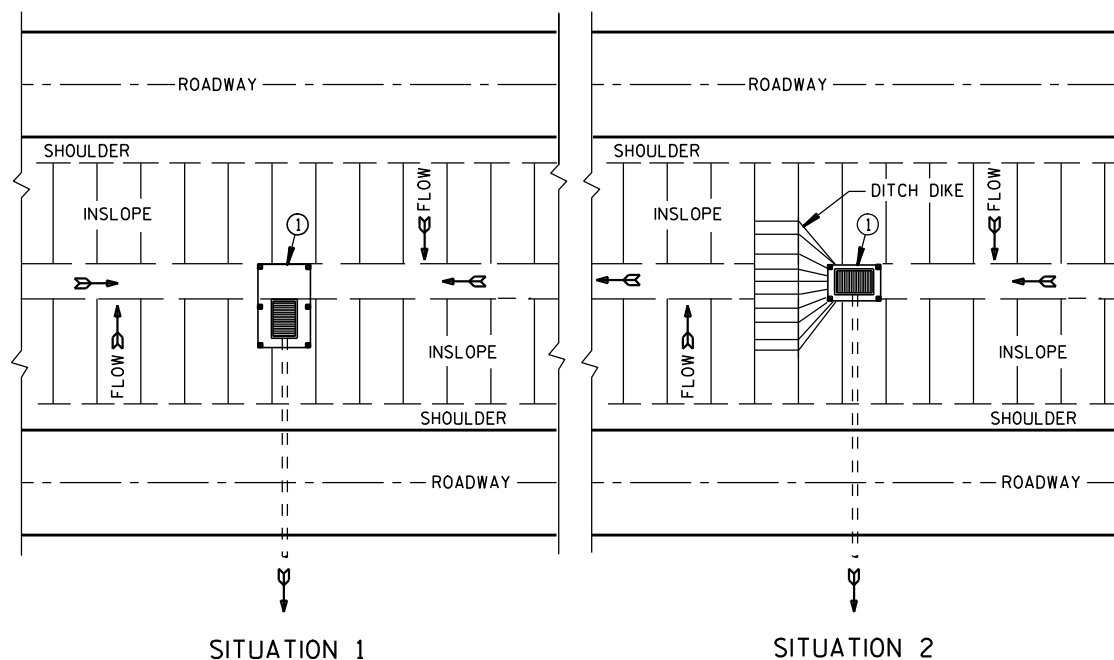
FHWA



TYPICAL APPLICATION OF SILT FENCE

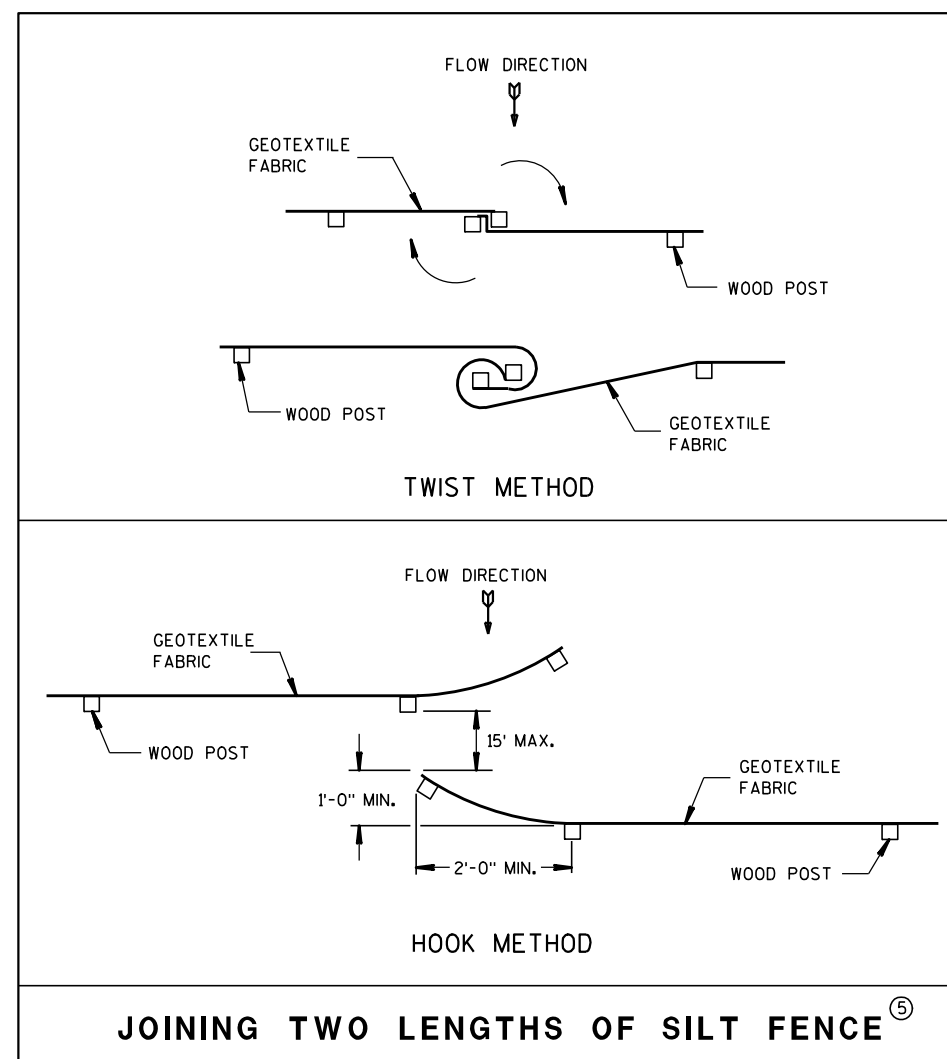


SILT FENCE



PLAN VIEW

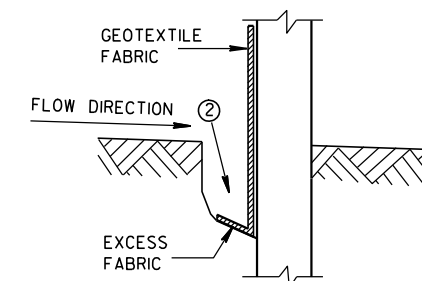
SILT FENCE AT MEDIAN SURFACE DRAINS



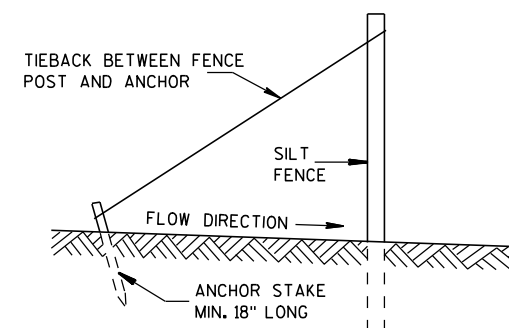
GENERAL NOTES

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 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



TRENCH DETAIL



SILT FENCE TIE BACK (WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-29-05

DATE

/S/ Beth Conn

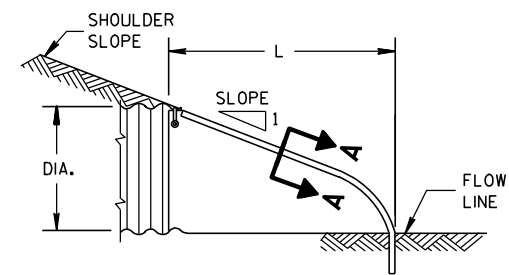
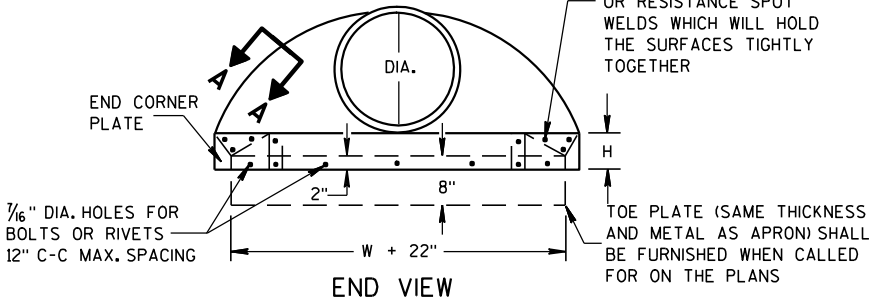
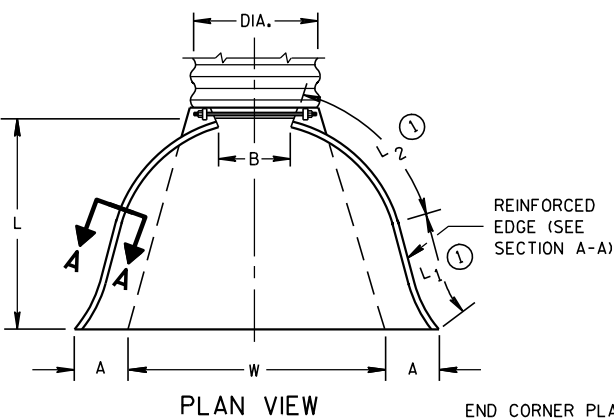
CHIEF ROADWAY DEVELOPER

FHWA

ENGINEER

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

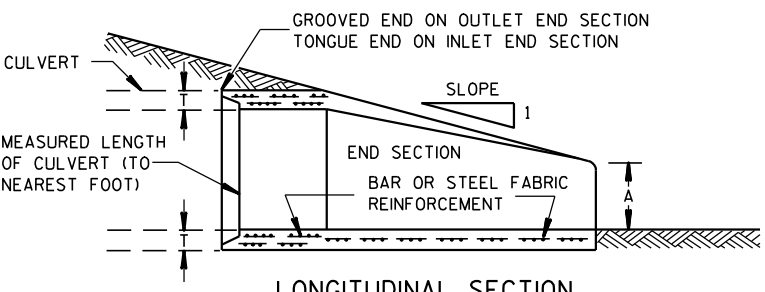
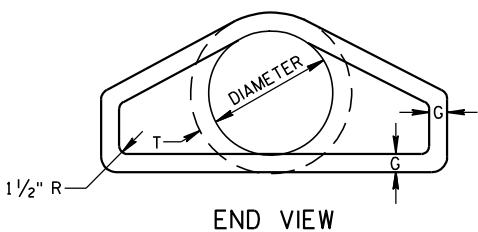
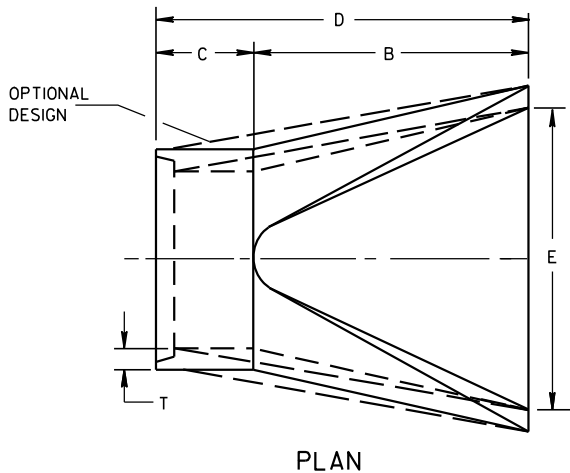
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



SIDE ELEVATION
METAL ENDWALLS

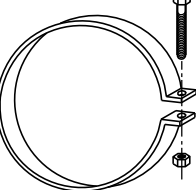
REINFORCED CONCRETE APRON ENDWALLS												
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE				
	T	A	B	C	D	E	G					
12	2	4	24	48 1/8	72 1/8	24	2	3 to 1				
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1				
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1				
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1				
24	3	9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

* MINIMUM
** MAXIMUM

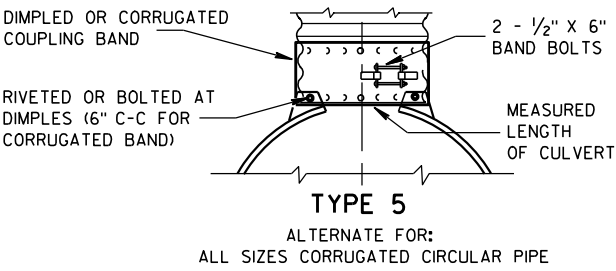
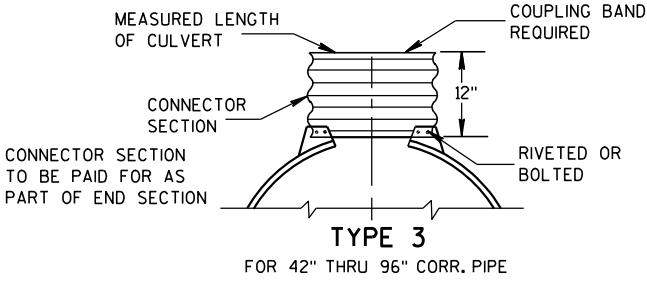
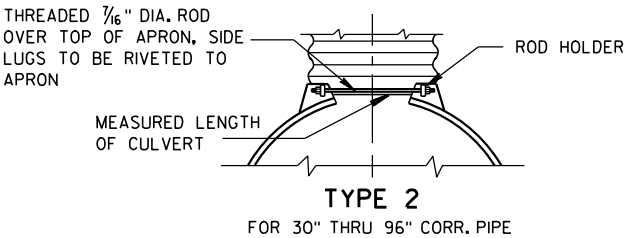
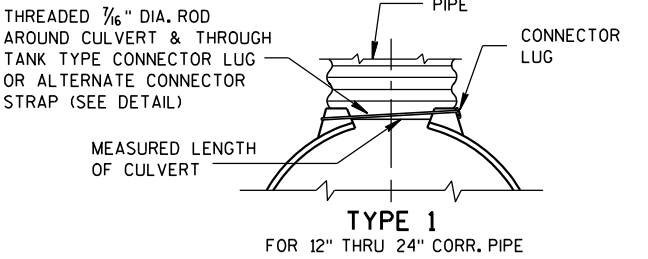


LONGITUDINAL SECTION
CONCRETE ENDWALLS

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



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



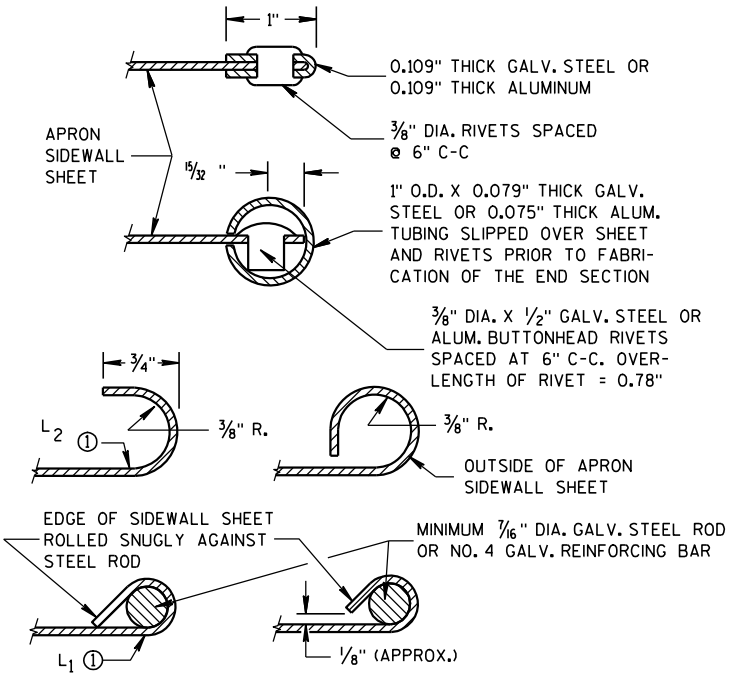
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

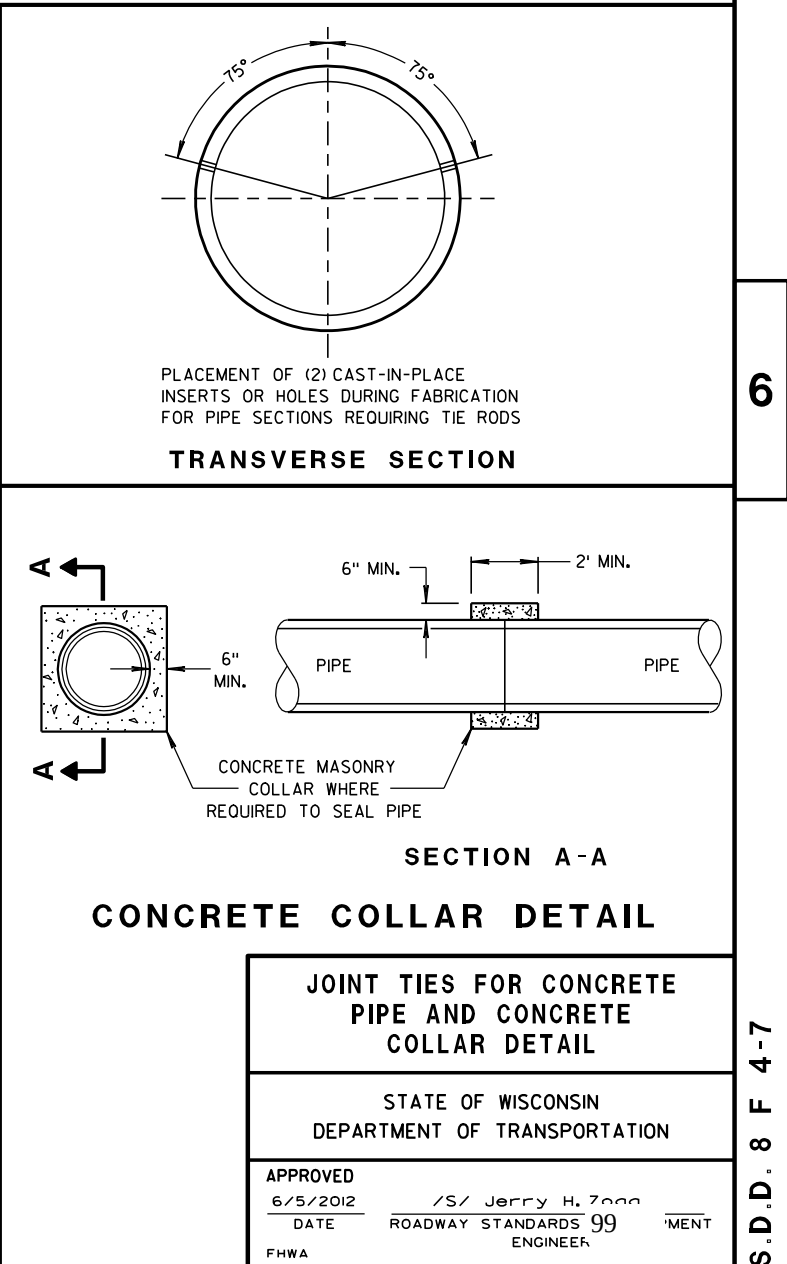
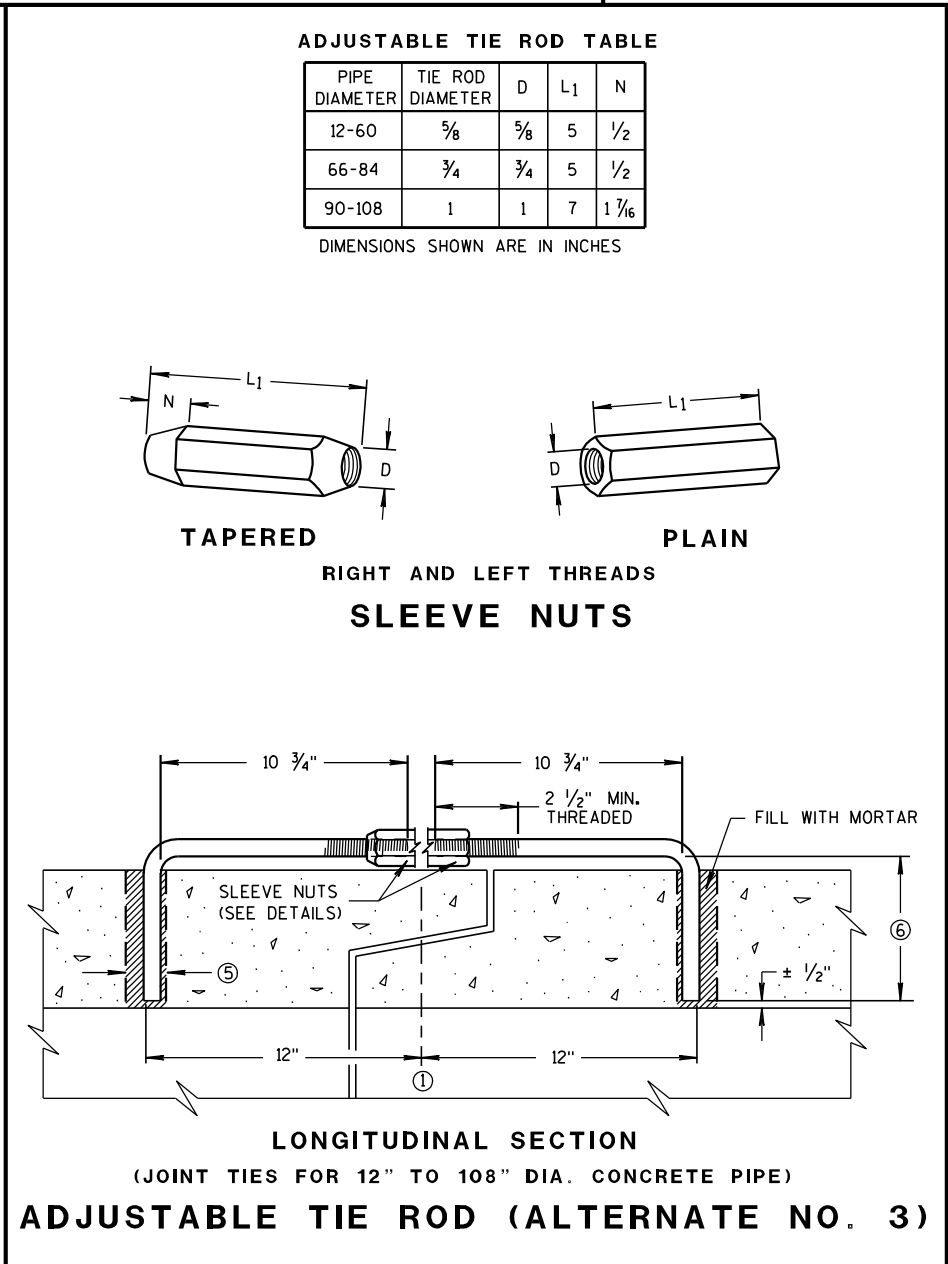
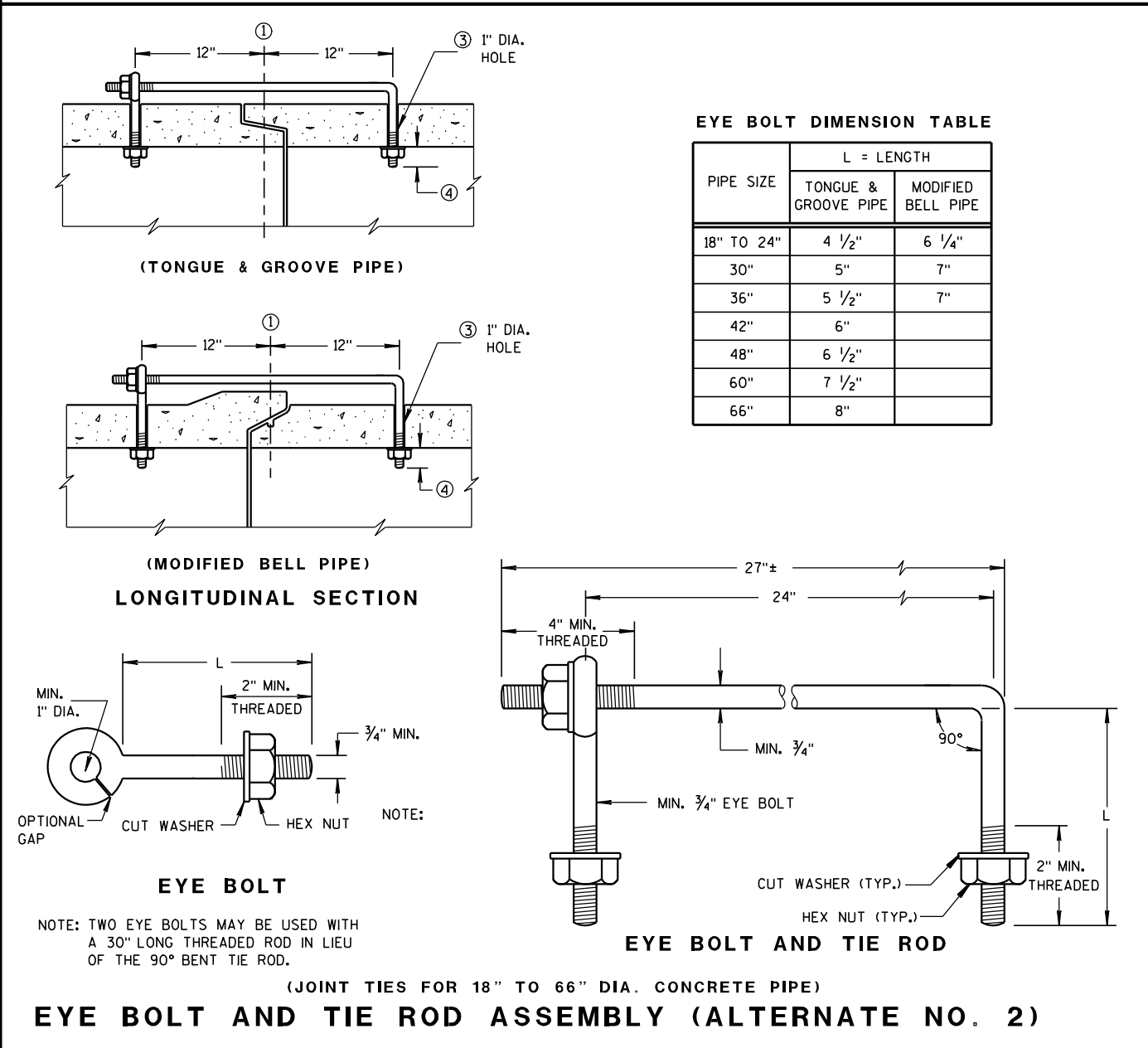
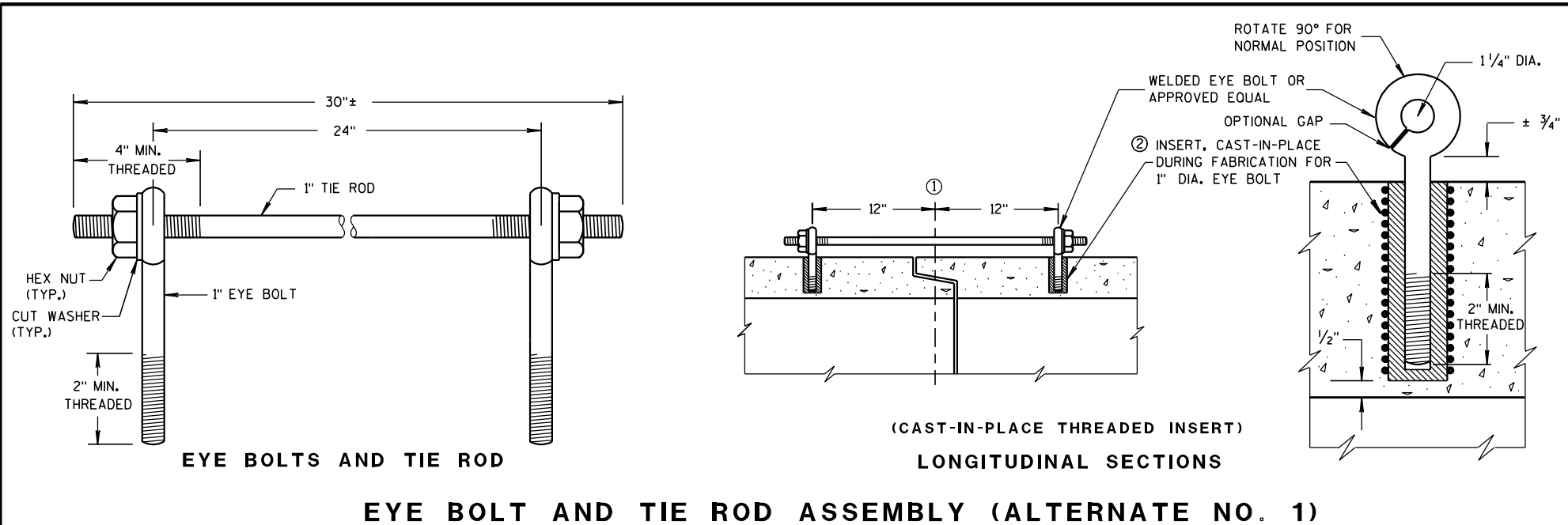
ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT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

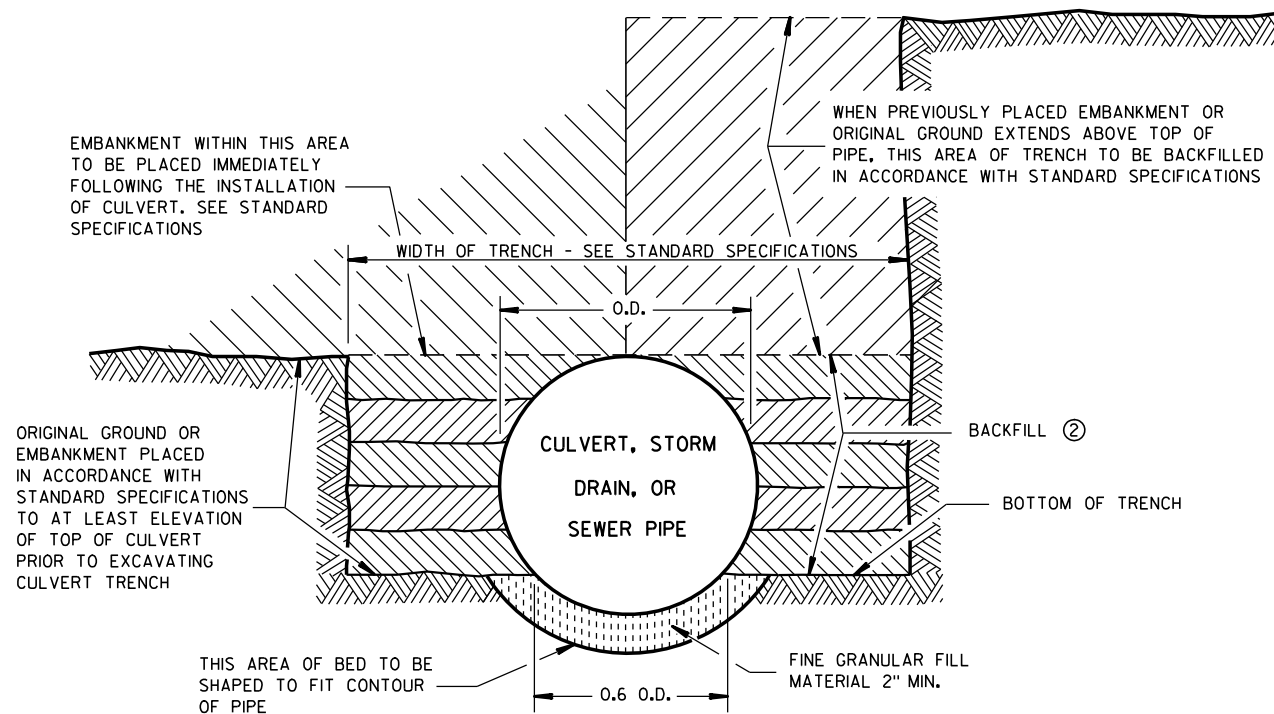
LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES.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

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

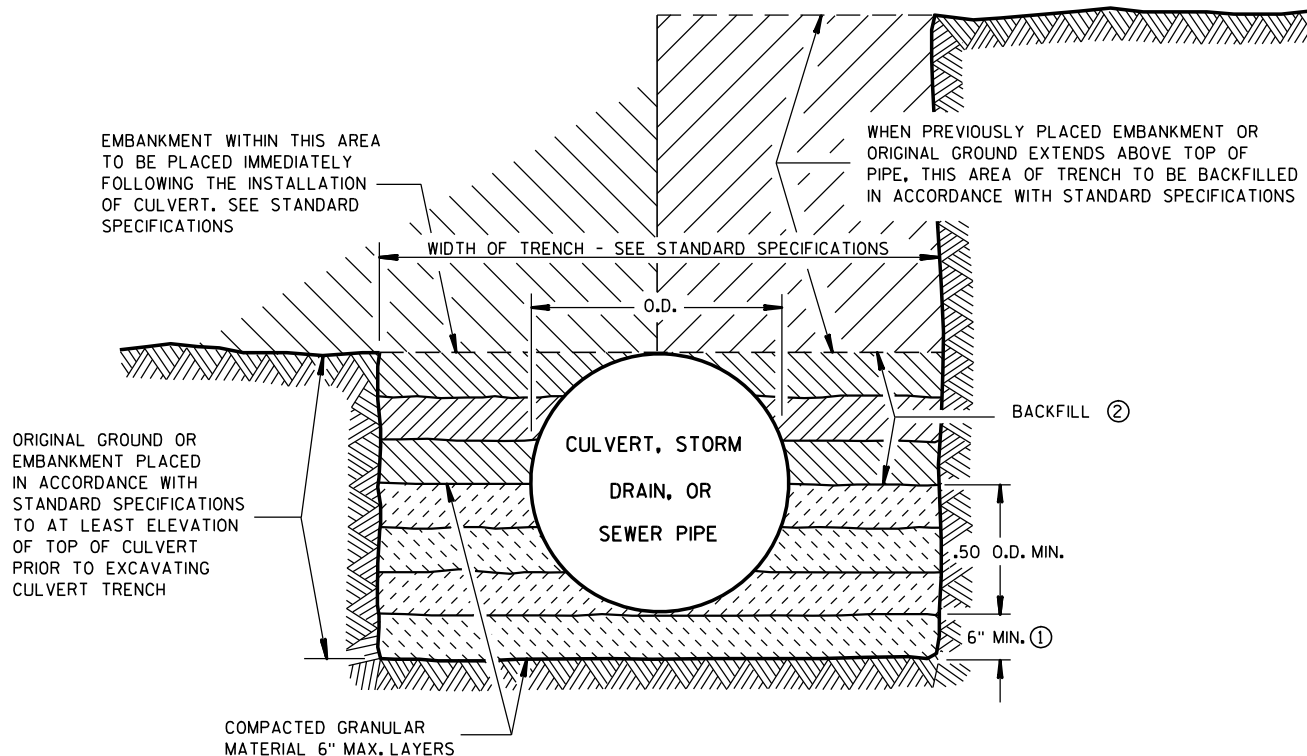
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 11/30/94 DATE	/S/ Rory L. Rhin... CHIEF ROADWAY DEVELOP 98 NEER
FHWA	





SHAPED SUBGRADE WITH GRANULAR FOUNDATION



GRANULAR FOUNDATION

GENERAL NOTES

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

THE SHAPED SUBGRADE WITH GRANULAR FOUNDATION IS AN EQUAL ALTERNATE TO THE GRANULAR FOUNDATION EXCEPT WHERE ROCK IS ENCOUNTERED.

- ① WHERE ROCK, HARD PAN OR FRAGMENTED MATERIAL IS ENCOUNTERED, THE TRENCH SHALL BE EXCAVATED BELOW THE BOTTOM OF THE PIPE AN AMOUNT EQUAL TO $\frac{1}{2}$ INCH PER FOOT OF PROPOSED EMBANKMENT ABOVE THE TOP OF THE PIPE, BUT NOT LESS THAN 6 INCHES.
- ② TRENCH SHALL BE BACKFILLED AS REQUIRED BY STANDARD SPECIFICATIONS; SECTION 520 FOR PIPE CULVERTS AND SECTION 607 FOR STORM SEWERS.

CLASS "B" BEDDING

CLASS "B" BEDDING FOR
CULVERT PIPE OR STORM SEWER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

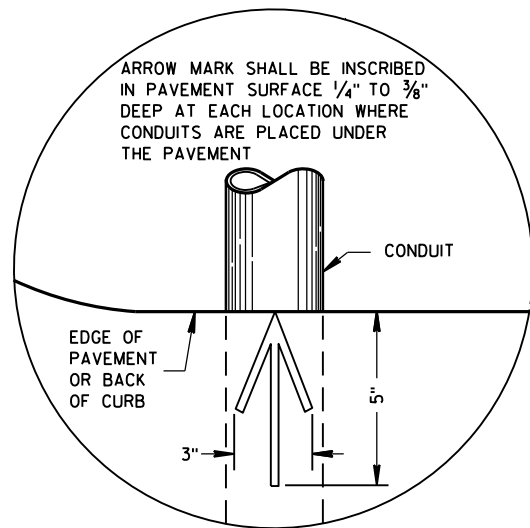
APPROVED

4/7/83
DATE

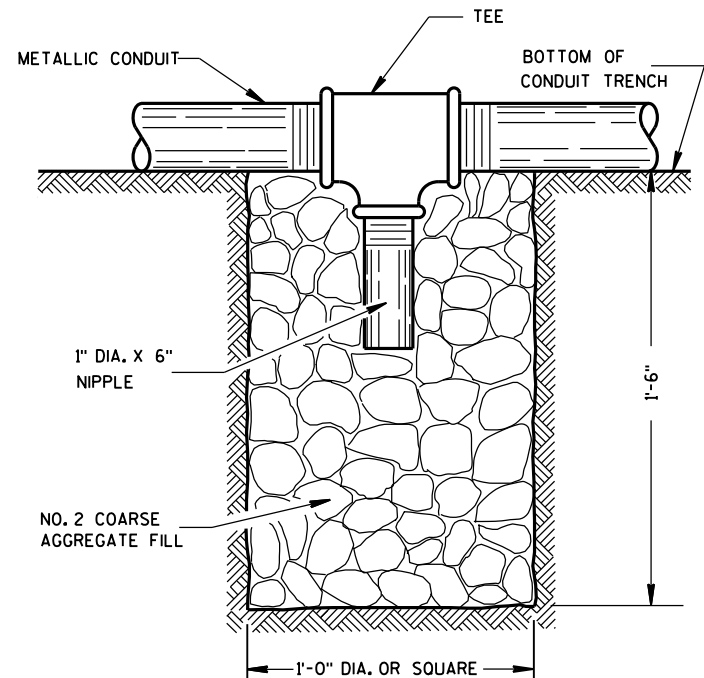
/S/ D.L. Str...
STATE DESIGN ENGINE 100

HWYS

FHWA

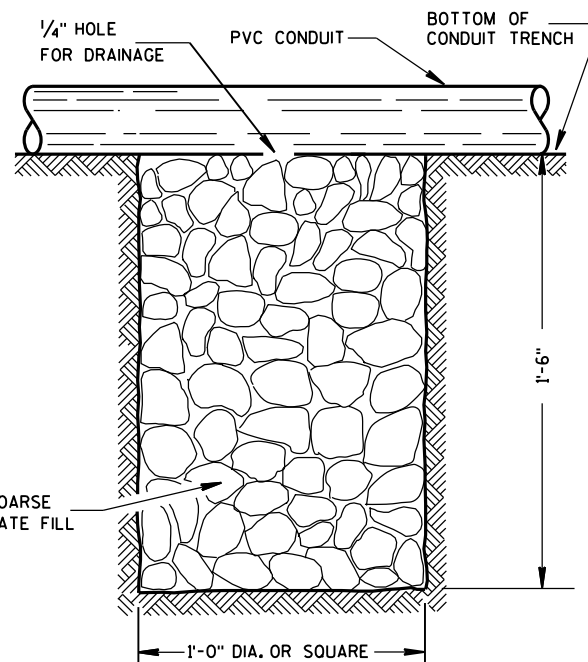


PLAN VIEW
ARROW MARK



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.

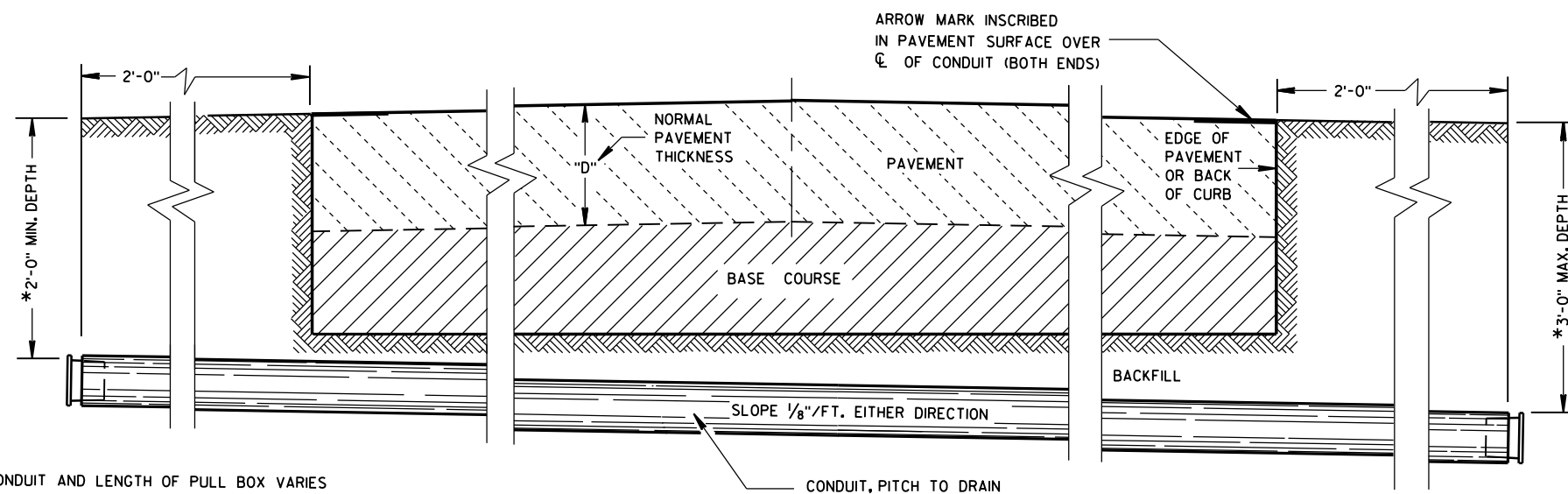
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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.).

POLY ROPE OR A PULL 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 UNDER PAVED HIGHWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2014

DATE

FHWA

/S/ Ahmet Demirbilek

STATE ELECTRICAL 101

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

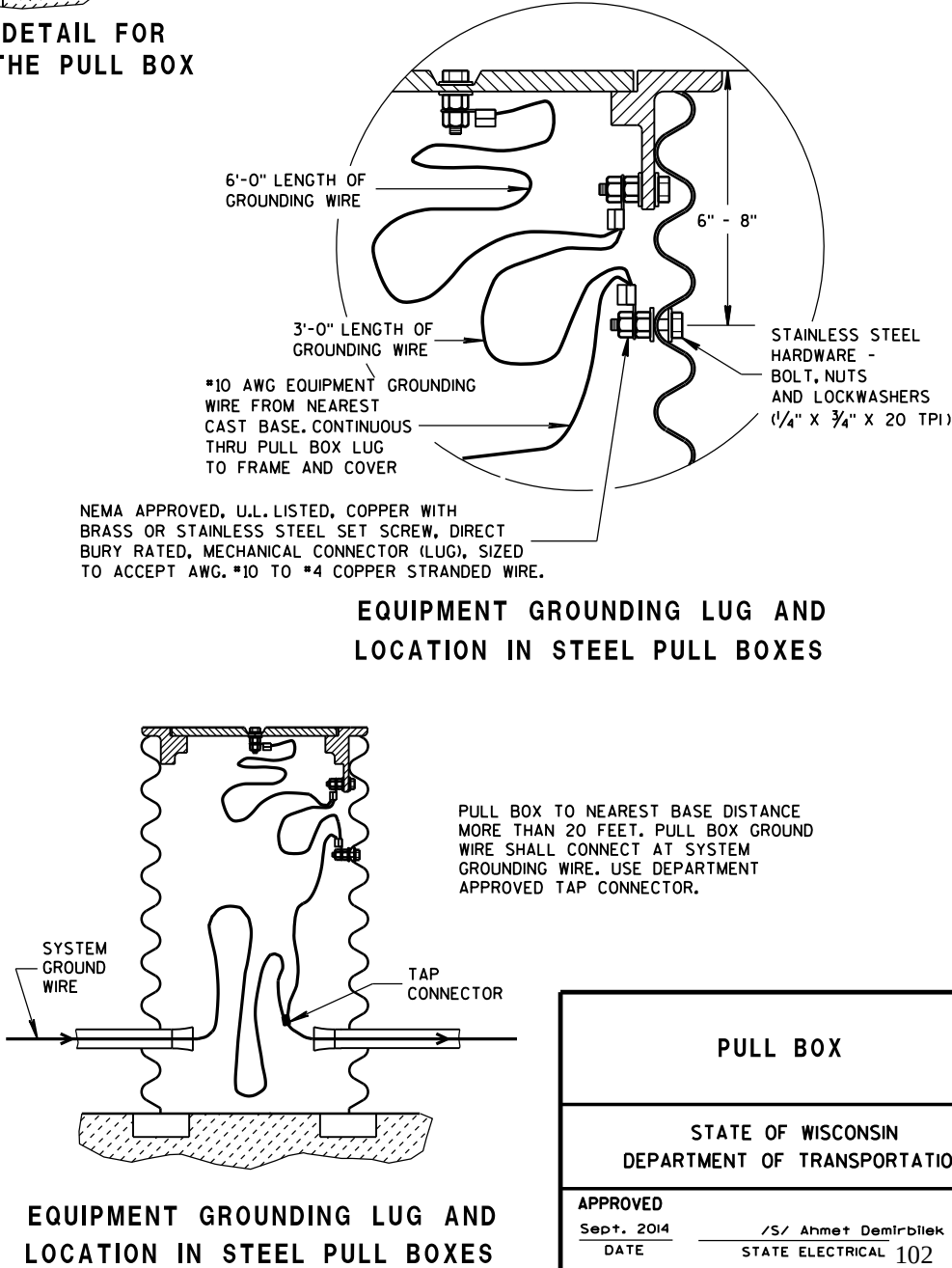
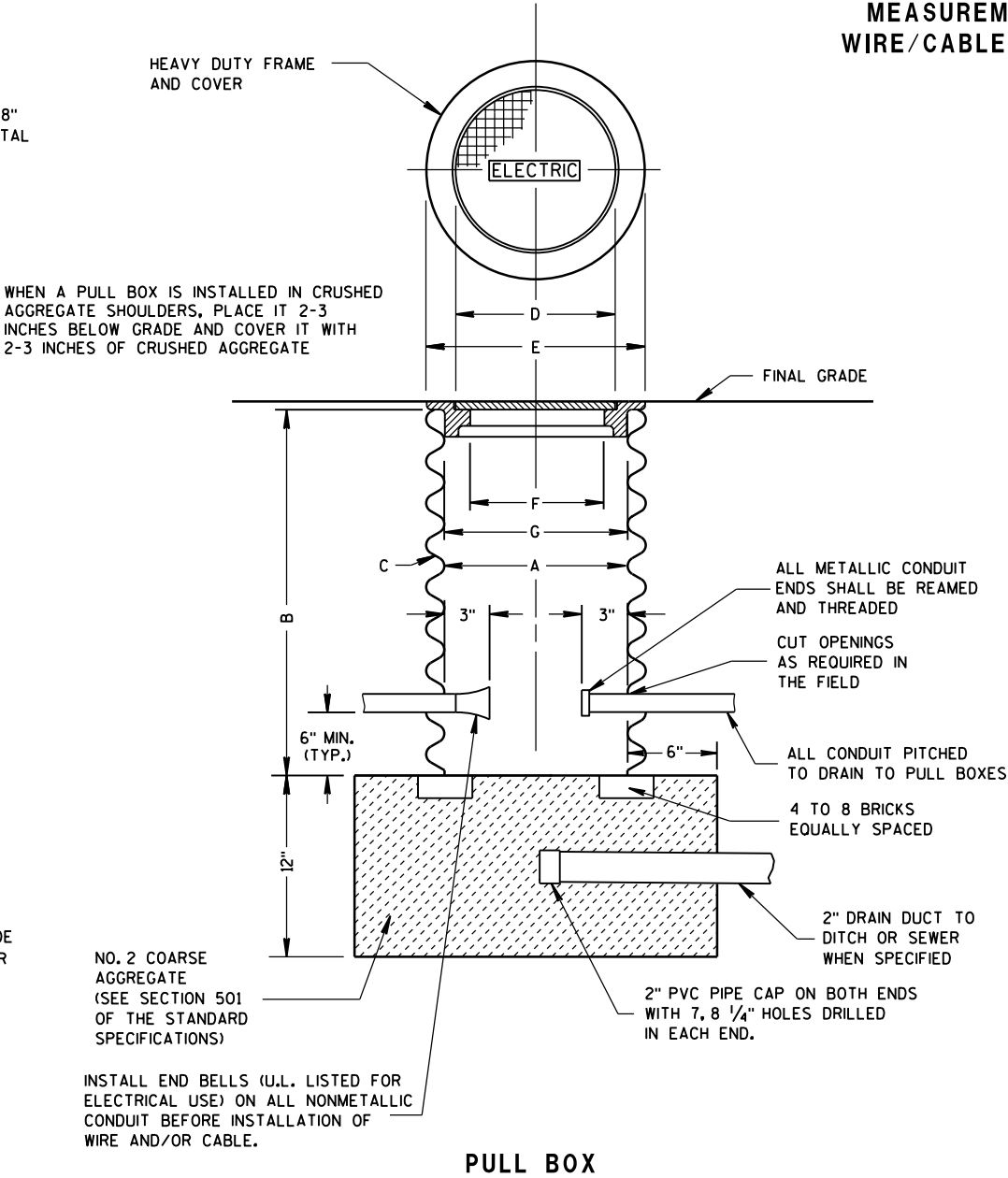
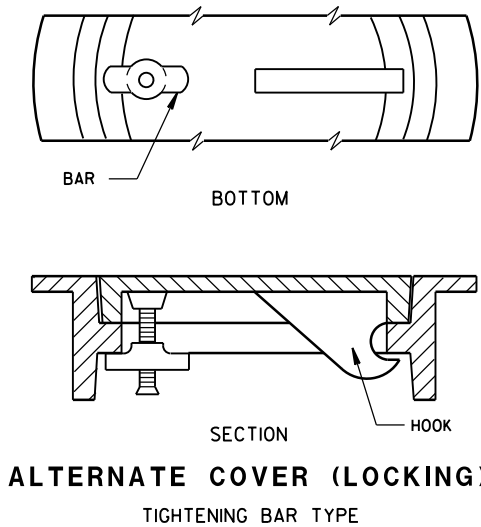
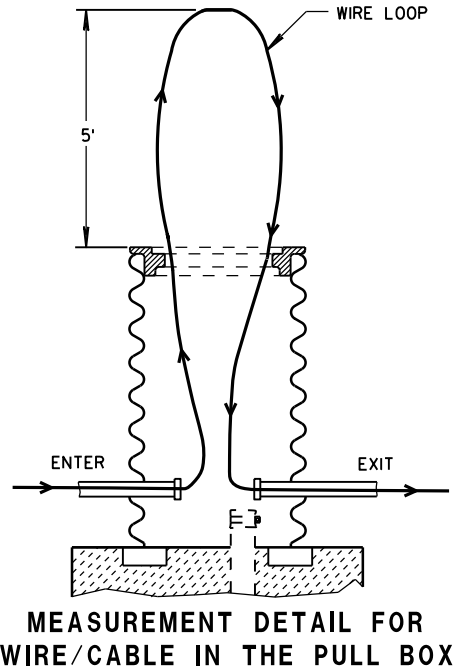
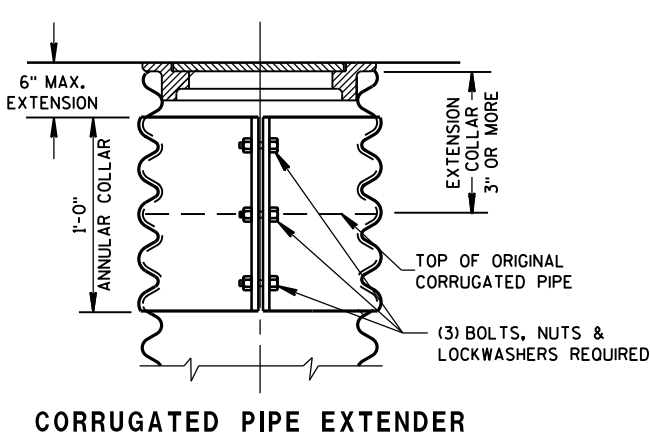
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

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

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

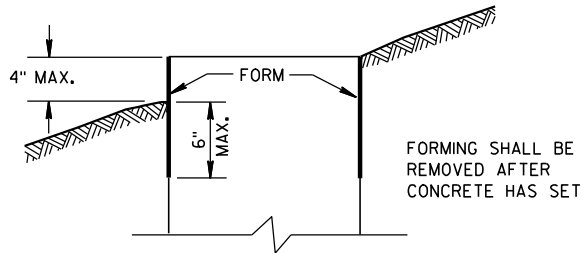
ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept. 2014 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL 102
FHWA	

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5
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 2 AND TYPE 5 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 AND 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-449, OR ASTM A-687 (GRADE 105).

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.

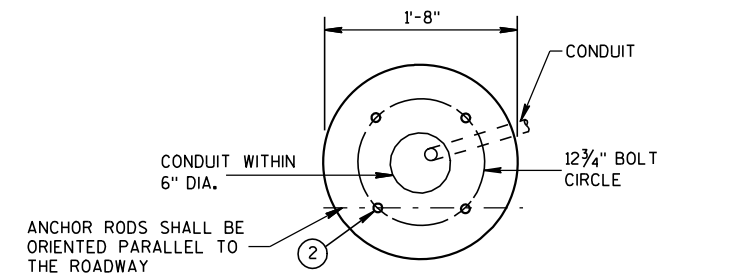
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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).

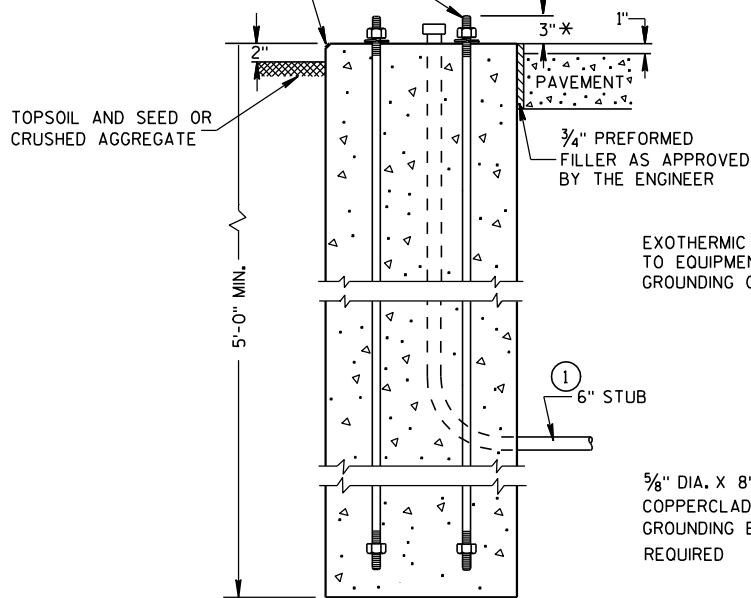
1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN 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.

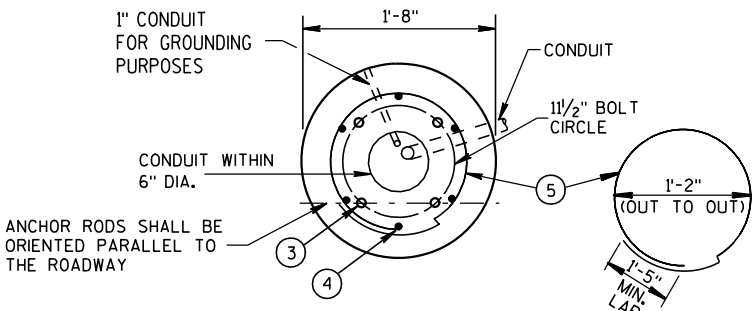


FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND

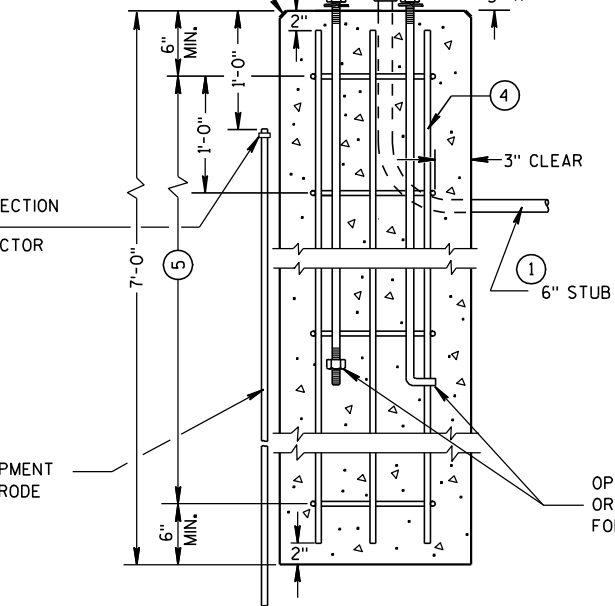
HALF SECTION IN UNPAVED AREA (TYPICAL FOR TYPES 1, 2 & 5)



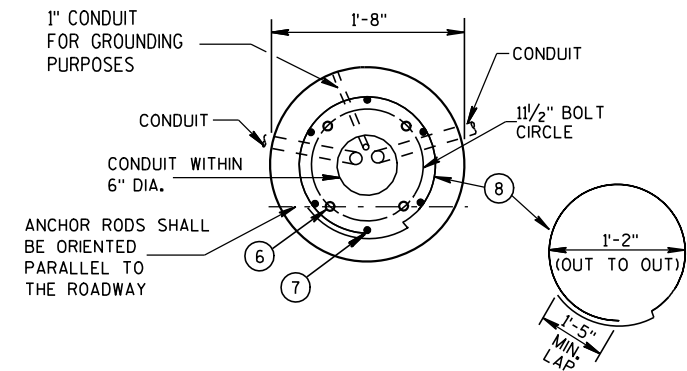
TYPE 1



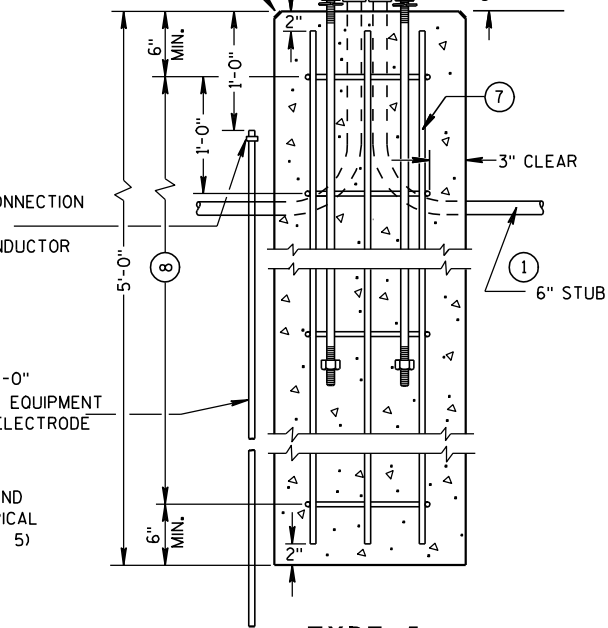
FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND



TYPE 2



FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND



TYPE 5

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2 3/4" OR LONGER THAN 3 1/4" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4 1/2" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2 & 5

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/3/10

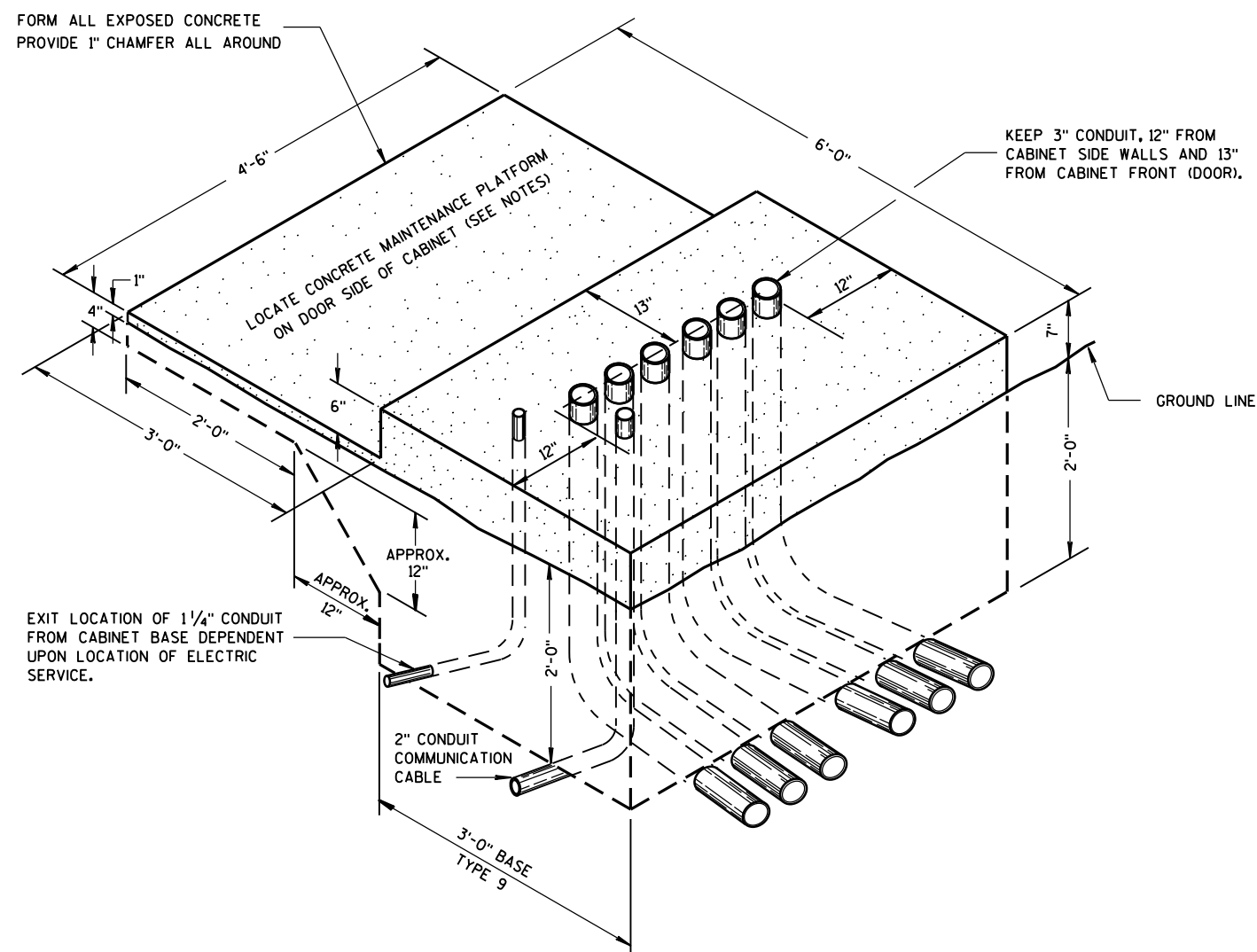
DATE

FHWA

/S/ Joanna L. Bush

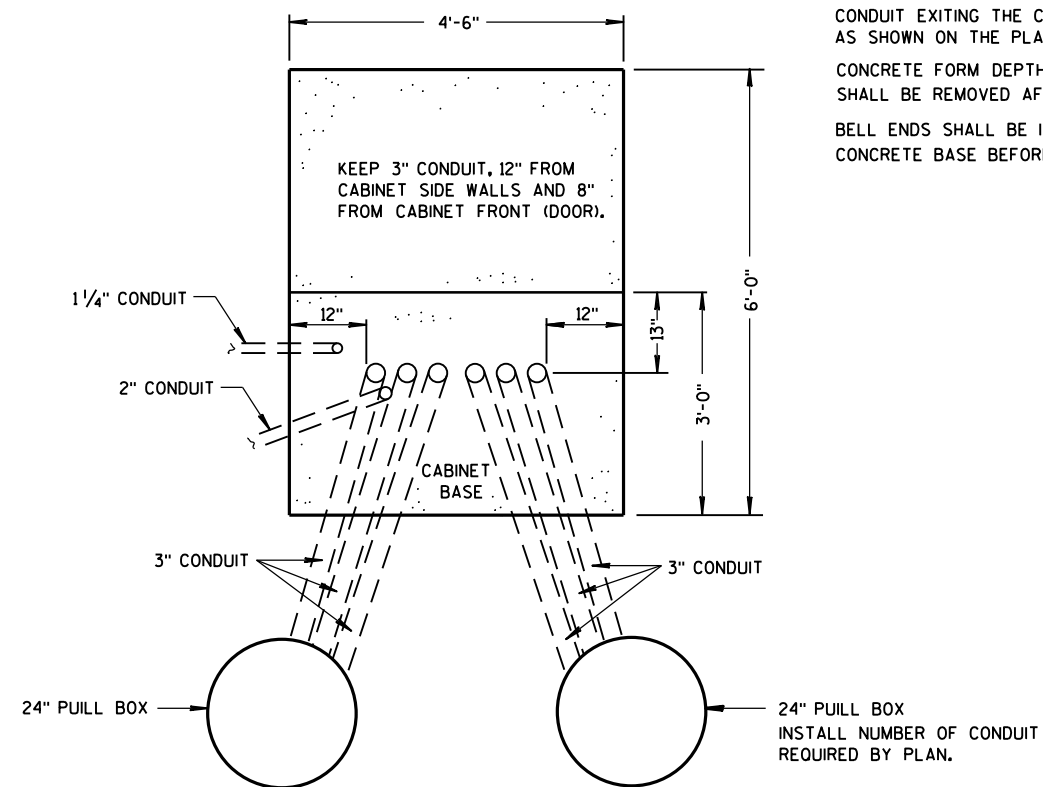
STATE ELECTRICAL ENGI 103

HWYS



ISOMETRIC VIEW
TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

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

INSTALL FOUR 1/2 INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET
BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL 104

FHWA

FRONT INTERIOR
ELEVATION

SIDE VIEW

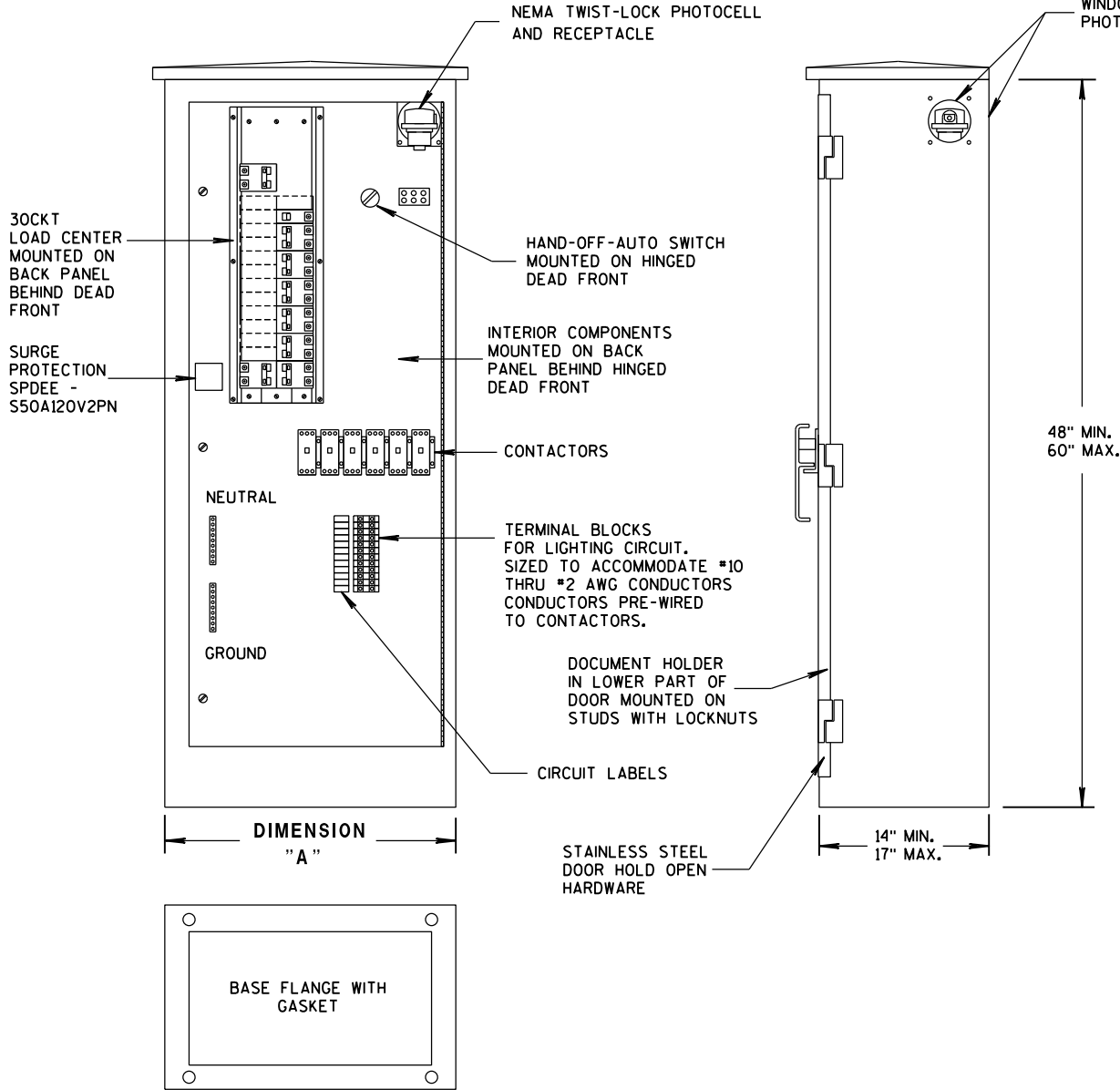


TABLE OF DIMENSIONS (INCHES)		
CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

LIGHTING CONTROL CABINET

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.

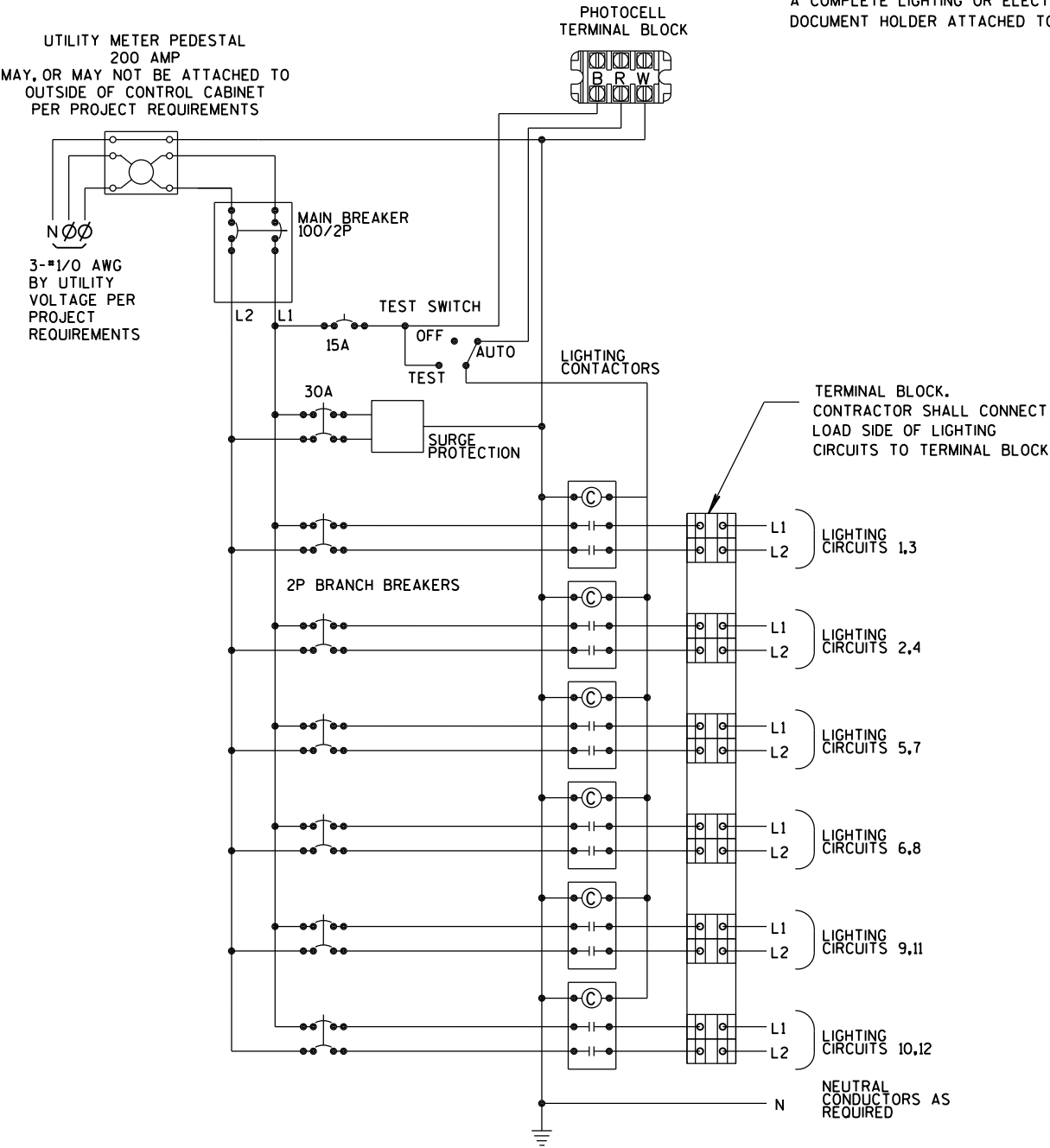
ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

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.

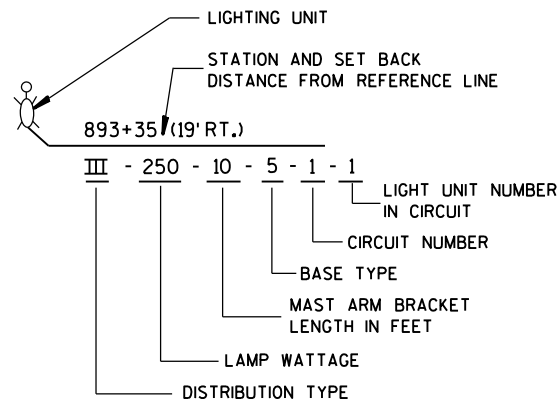


CONTROL CABINET SCHEMATIC

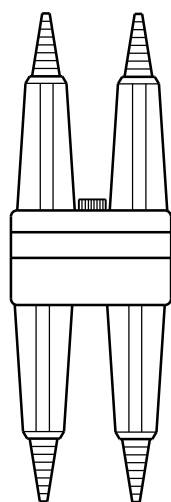
LIGHTING CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

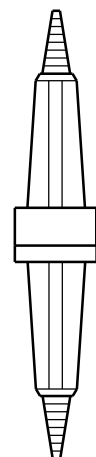
APPROVED
June 2014 /S/ Thomas Gorring
DATE STATE LIGHTING ENGINEER 105 NYS.
FHWA



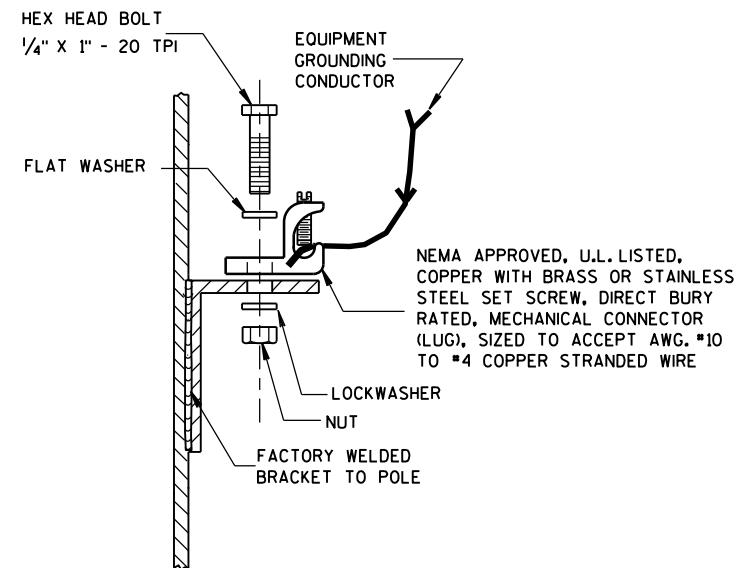
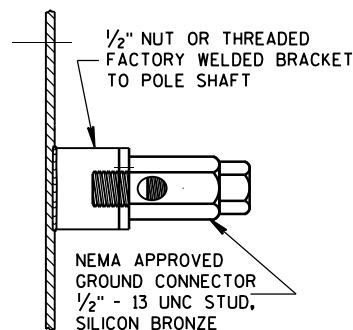
**LIGHTING UNIT CODE
(TYPICAL)**



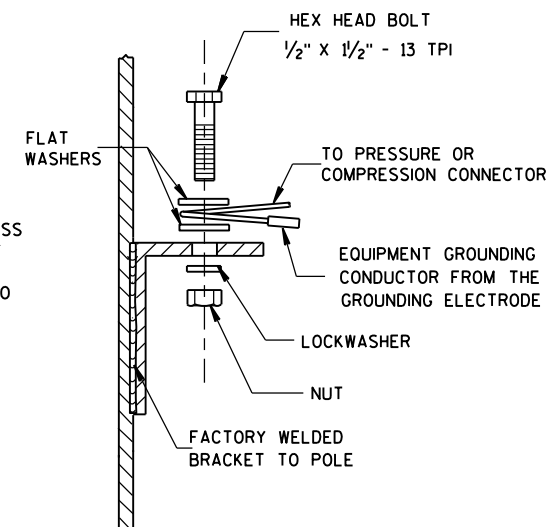
**DETAIL "A"
BREAKAWAY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT**



**DETAIL "B"
BREAKAWAY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT**

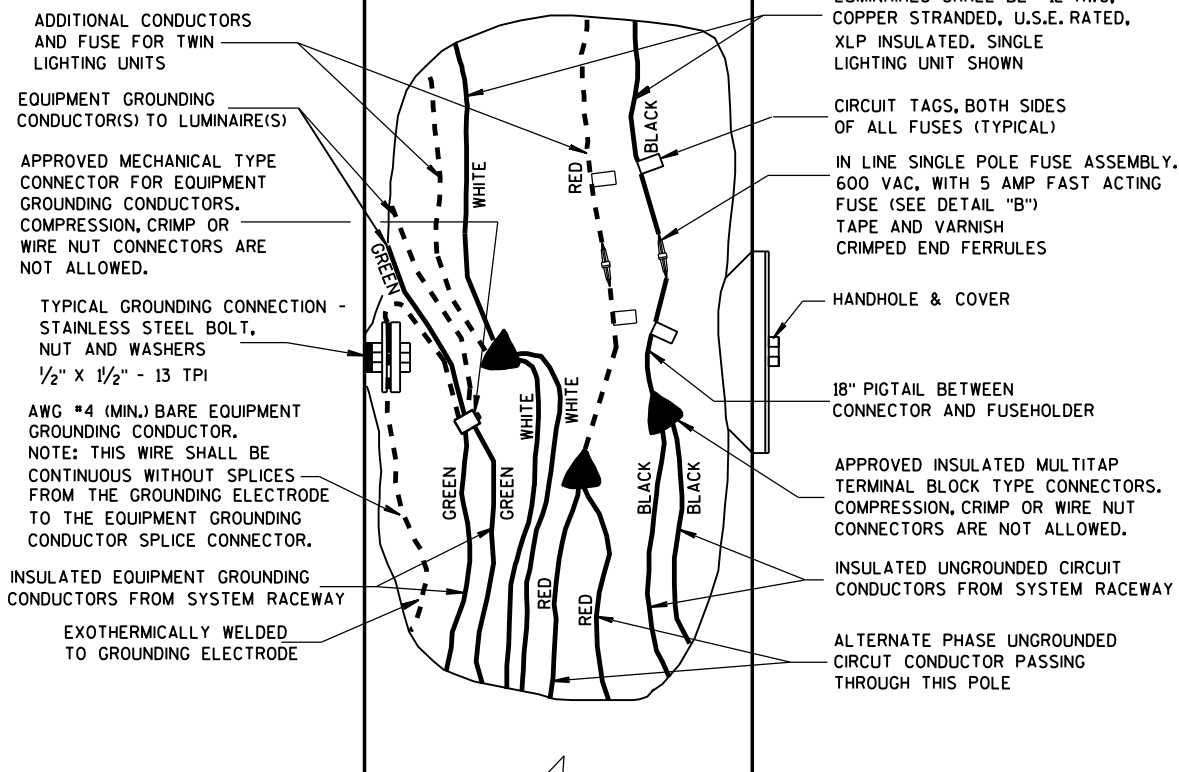


TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL

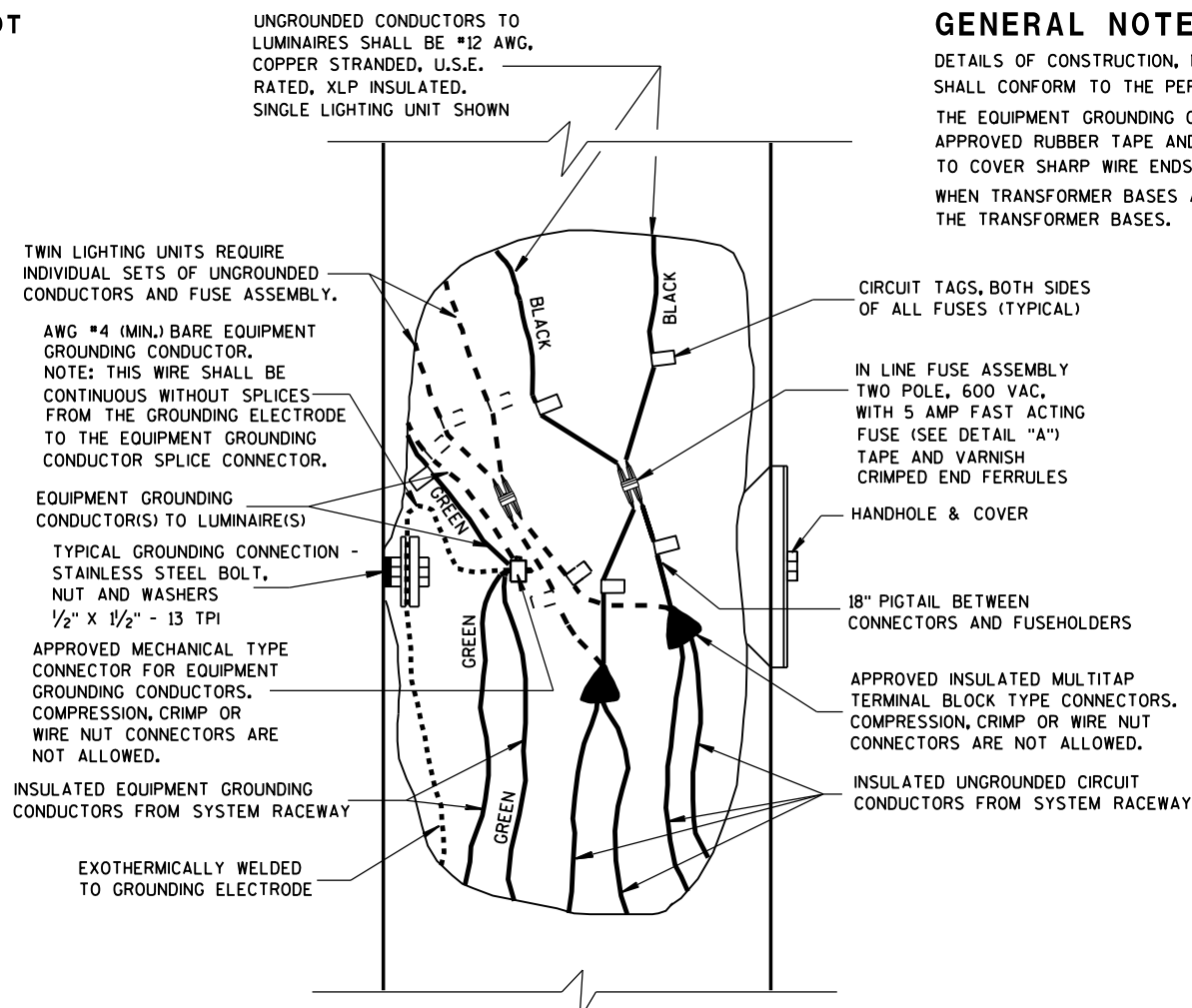


GENERAL NOTES

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.



**3 WIRE - 120, 240 OR 480 VAC (UNGROUNDING CONDUCTOR)
WITH GROUNDED CONDUCTOR AND
WITH EQUIPMENT GROUNDING CONDUCTOR**

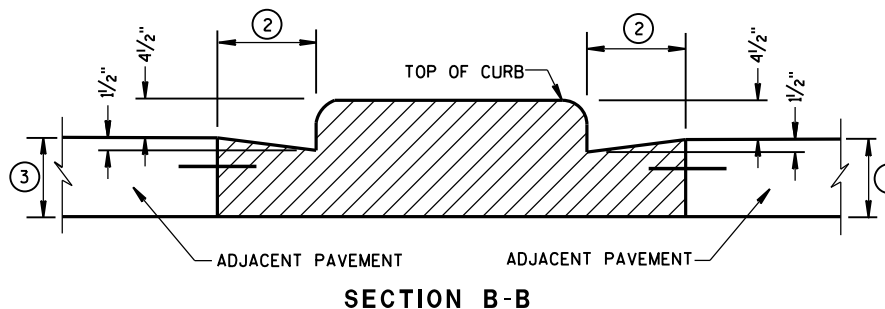
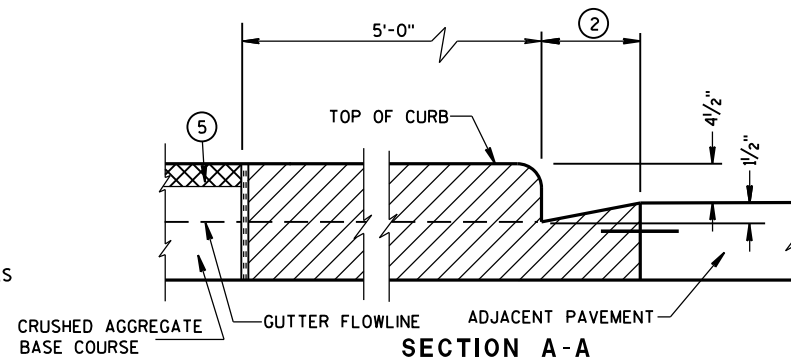
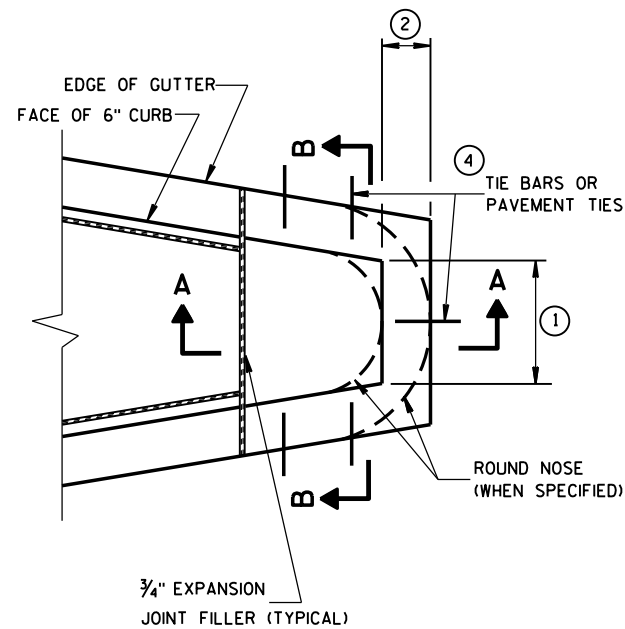
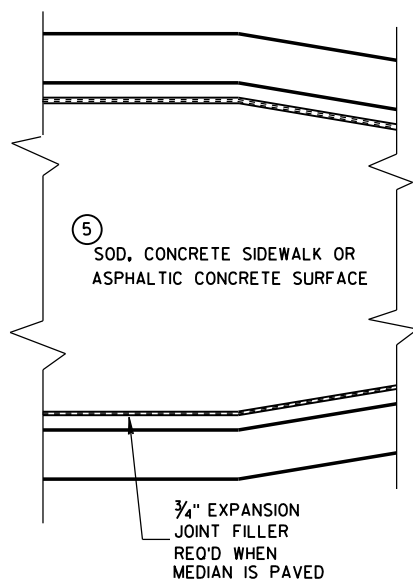


**2 WIRE - 240 OR 480 VAC (UNGROUNDING CONDUCTORS)
WITH EQUIPMENT GROUNDING CONDUCTOR**

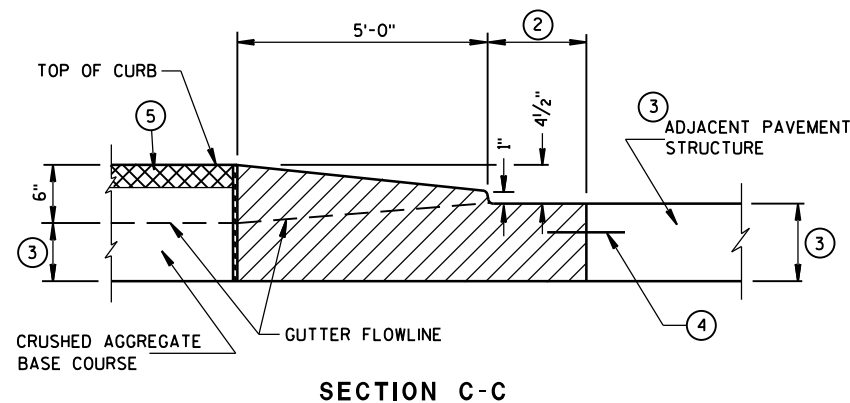
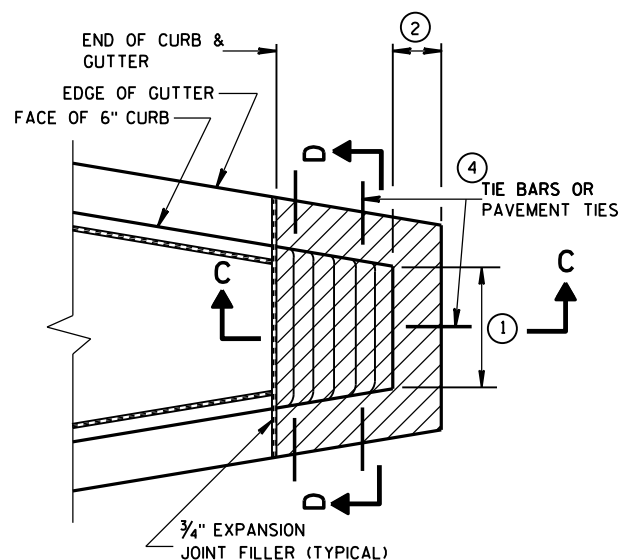
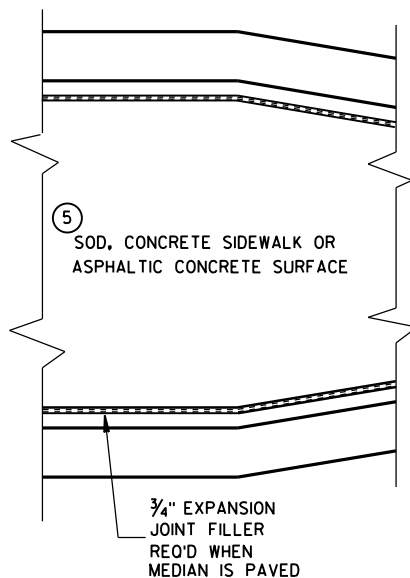
**NON-FREWAY LIGHTING UNIT
POLE WIRING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

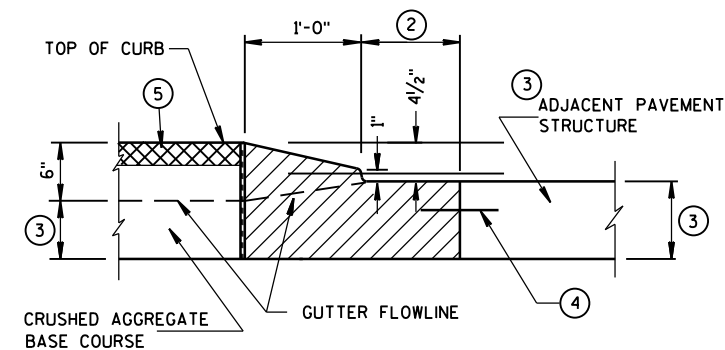
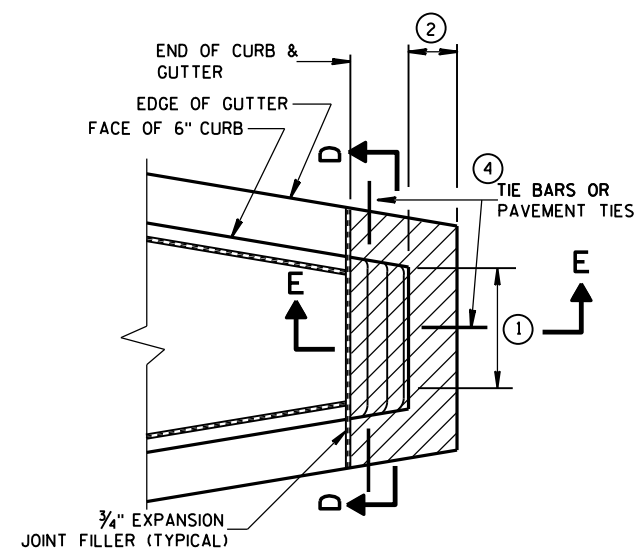
APPROVED
Sept. 2014 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL 106
FHWA



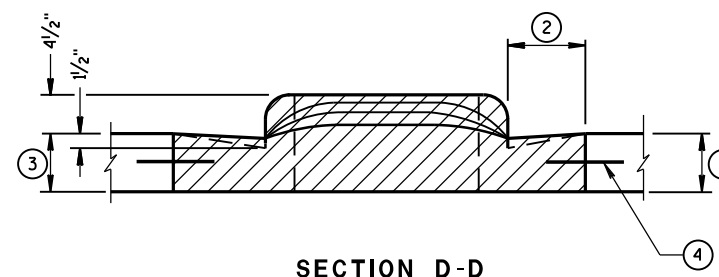
CONCRETE MEDIAN BLUNT NOSE DETAIL



CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN SLOPED NOSE TYPE 2



GENERAL NOTES

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

- ① SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).
- ② WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.
- ③ DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:
 - (1) NEW OR EXISTING CONCRETE PAVEMENT.
 - (2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.
 - (3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

- ④ TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

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

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006

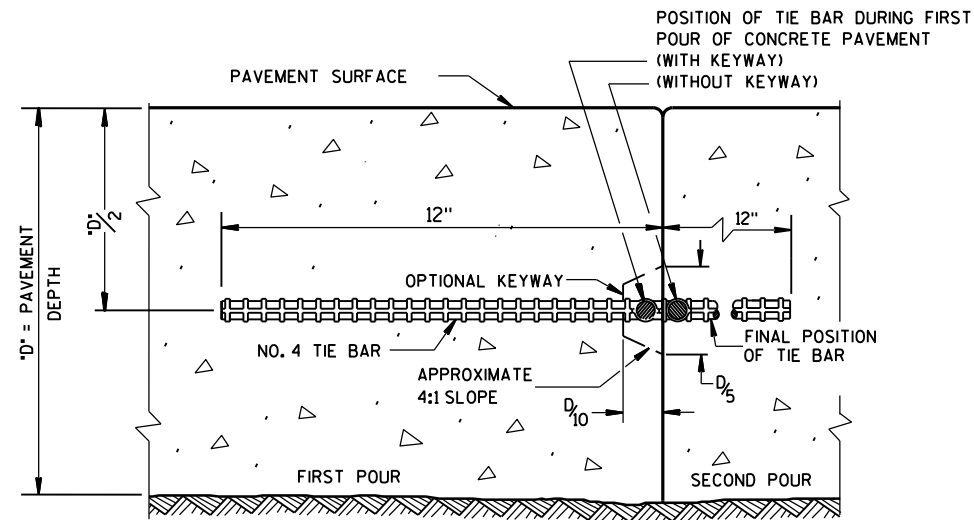
DATE

FHWA

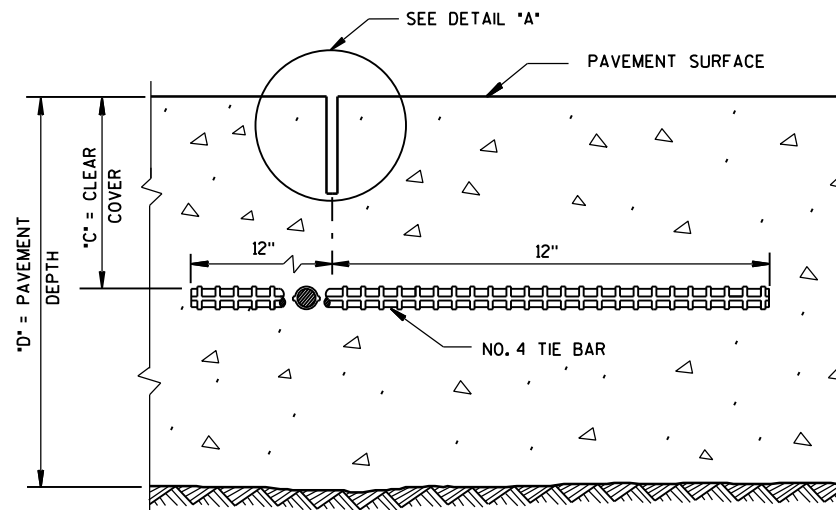
/S/ Jerry H. Zoag
ROADWAY STANDARDS & ENGINEER

107

4T



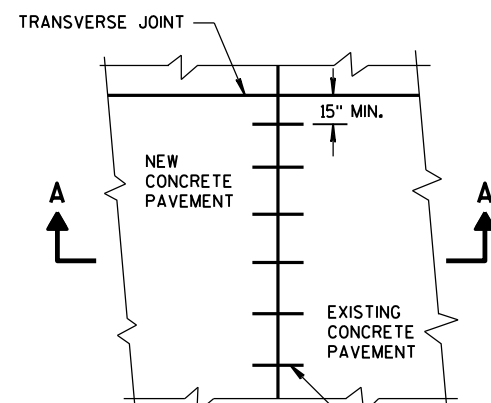
CONSTRUCTION JOINT



SAWED JOINT

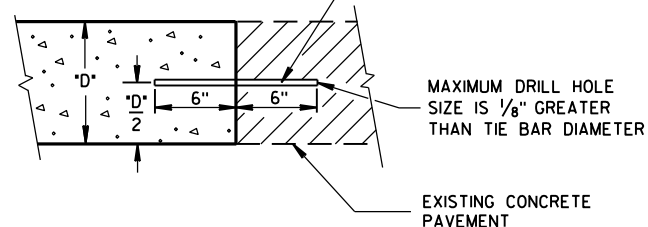
GENERAL NOTES

- 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.

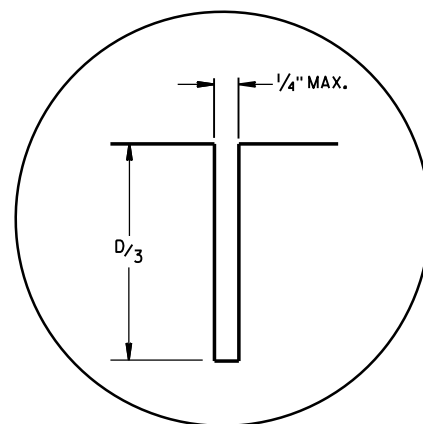


PLAN VIEW

NO. 6 TIE BARS SPACED 30" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT. ①



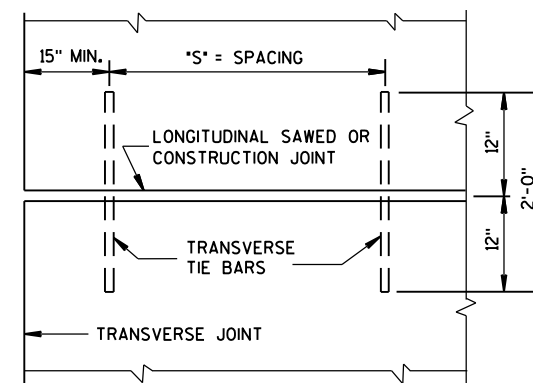
**SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT**



DETAIL "A"

TIE BAR TABLE

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH 24' OR 26'	≥ 30'
6, 6 1/2"	3" ± 1/2"	48"	42"
7, 7 1/2"	3 1/4" ± 1"	45"	36"
8, 8 1/2"	3 3/4" ± 1"	39"	30"
9, 9 1/2"	4 1/4" ± 1"	33"	27"
10, 10 1/2"	4 3/4" ± 1"	30"	24"
11, 11 1/2"	5 1/4" ± 1"	27"	21"
12"	5 3/4" ± 1"	24"	21"



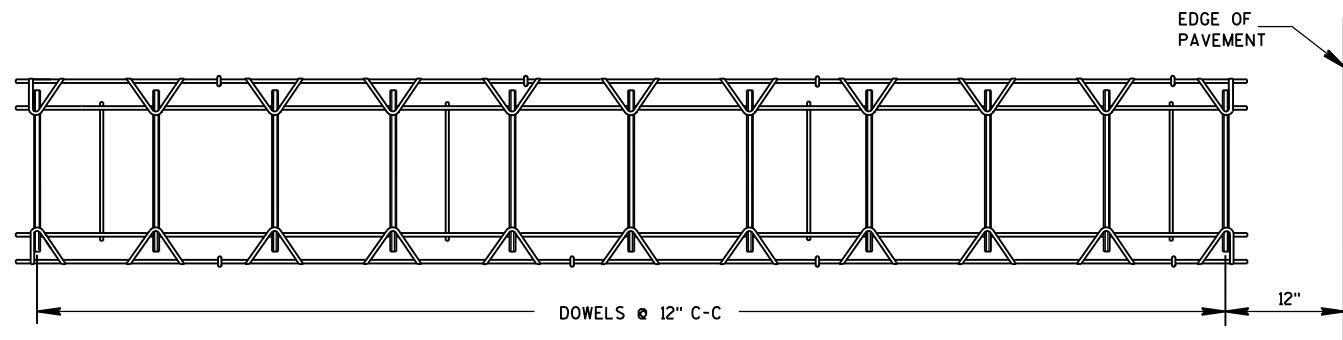
**PLAN VIEW
SHOWING LOCATION OF TIE BARS**

**CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES**

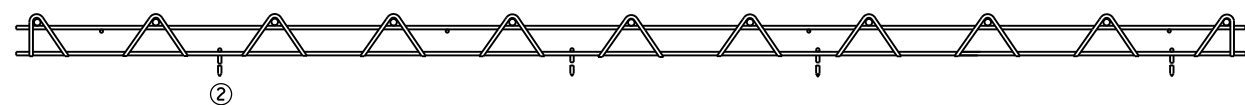
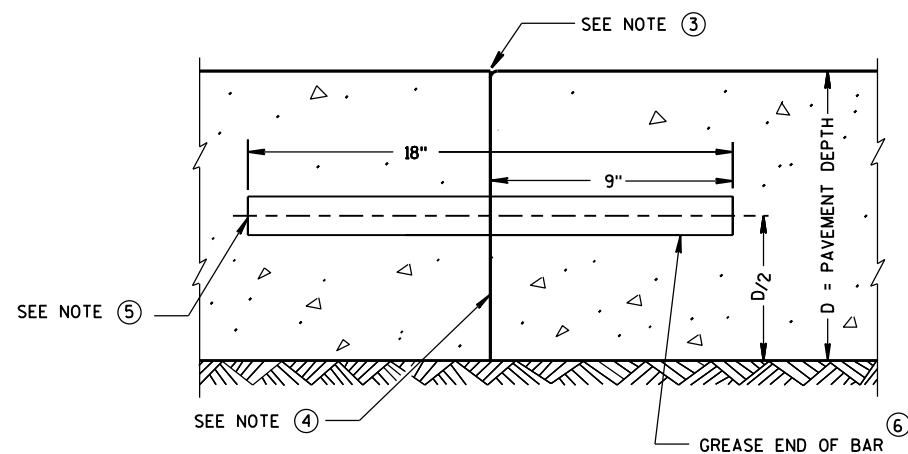
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

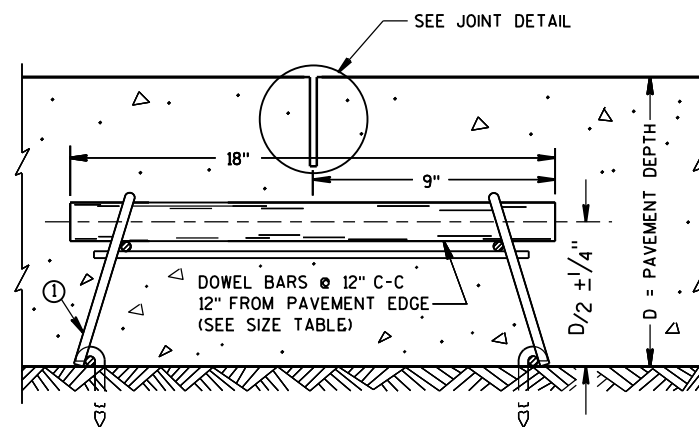
5-3-2013 /S/ Deb Bischoff
DATE PAVEMENT POLICY & DE 108
FHWA VEER



PLAN VIEW

SIDE VIEW
CONTRACTION JOINT DOWEL ASSEMBLY (1)

TRANSVERSE CONSTRUCTION JOINT



DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE
AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	12'
7", 7 1/2"	1"	14'
8", 8 1/2"	1 1/4"	15'
9", 9 1/2"	1 1/4"	15'
10" & ABOVE	1 1/2"	15'

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.

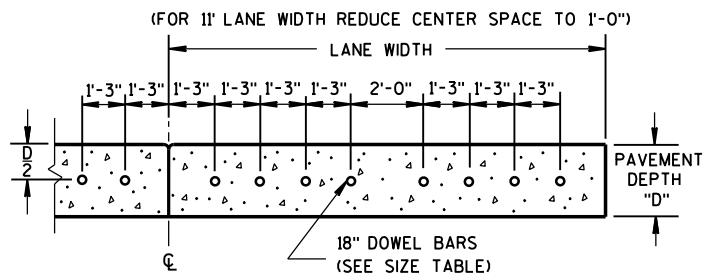
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

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 LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

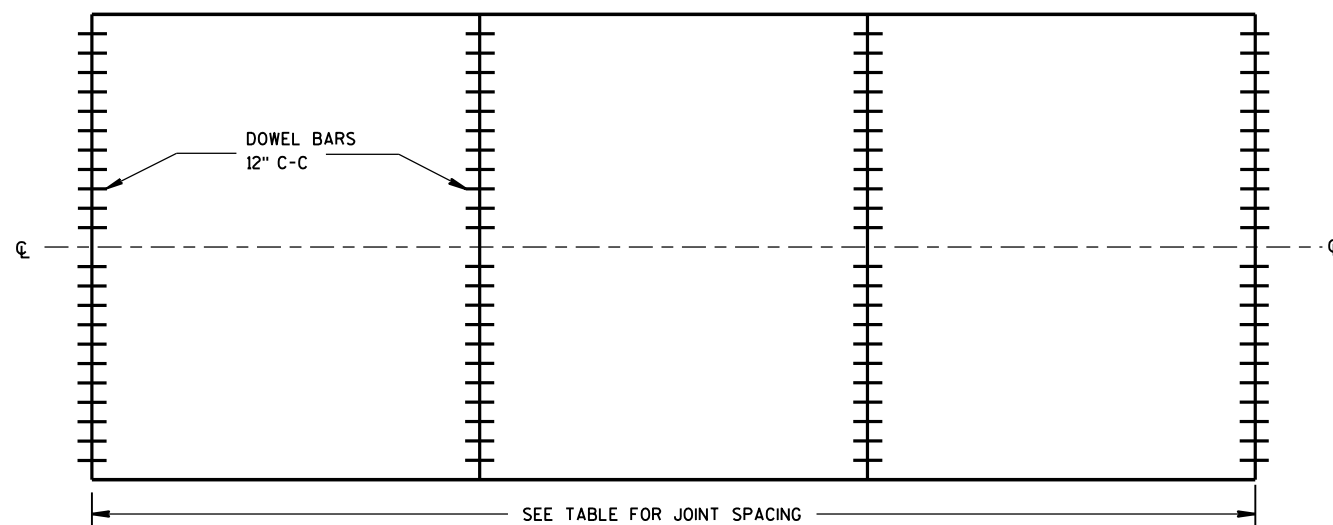
CONSTRUCTION JOINTS

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

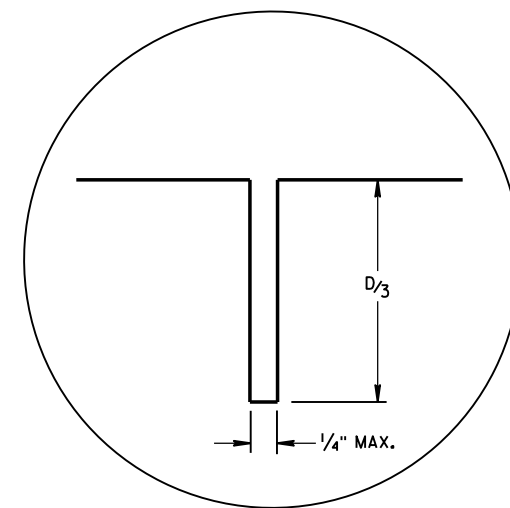
- (1) OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.
- (2) SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER 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.



DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



CONTRACTION JOINT LOCATIONS



JOINT DETAIL

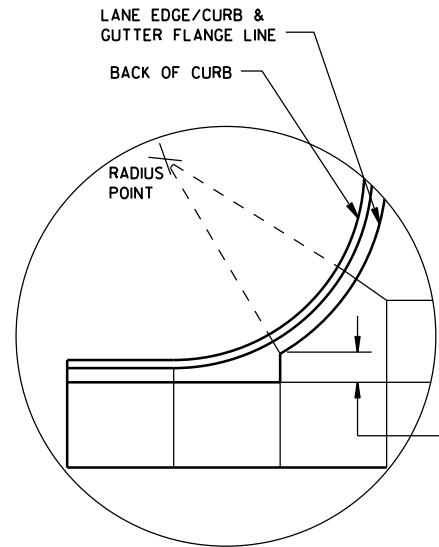
URBAN DOWELED
CONCRETE PAVEMENTSTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

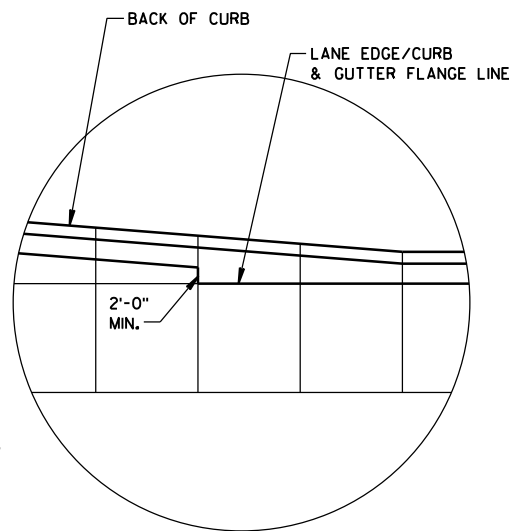
5/3/2013
DATE/S/ Deb Bischoff
PAVEMENT POLICY & DE 109

JEER

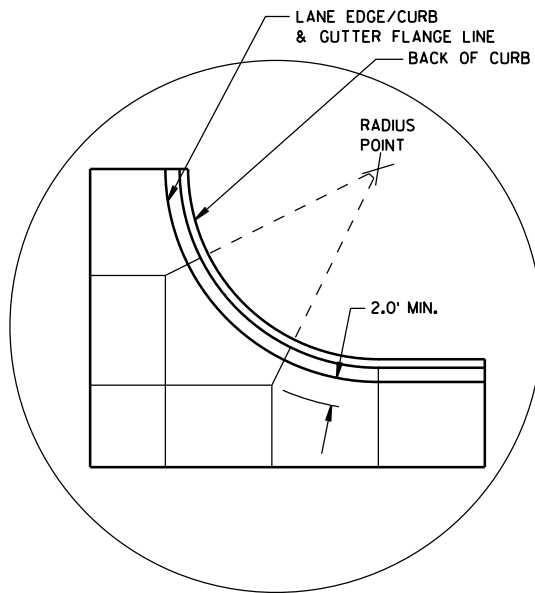
FHWA



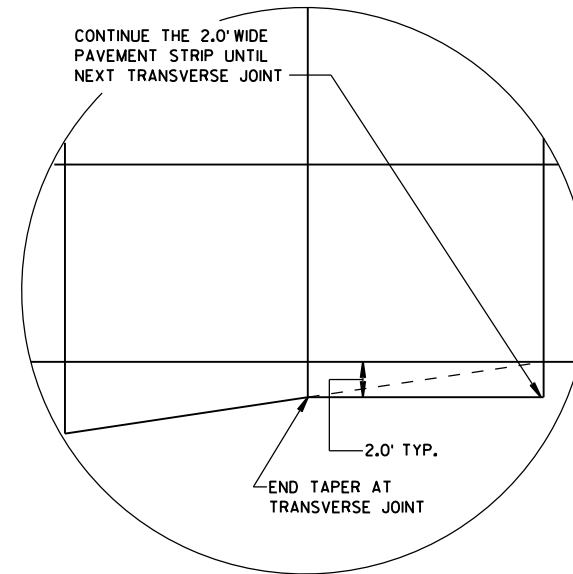
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

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

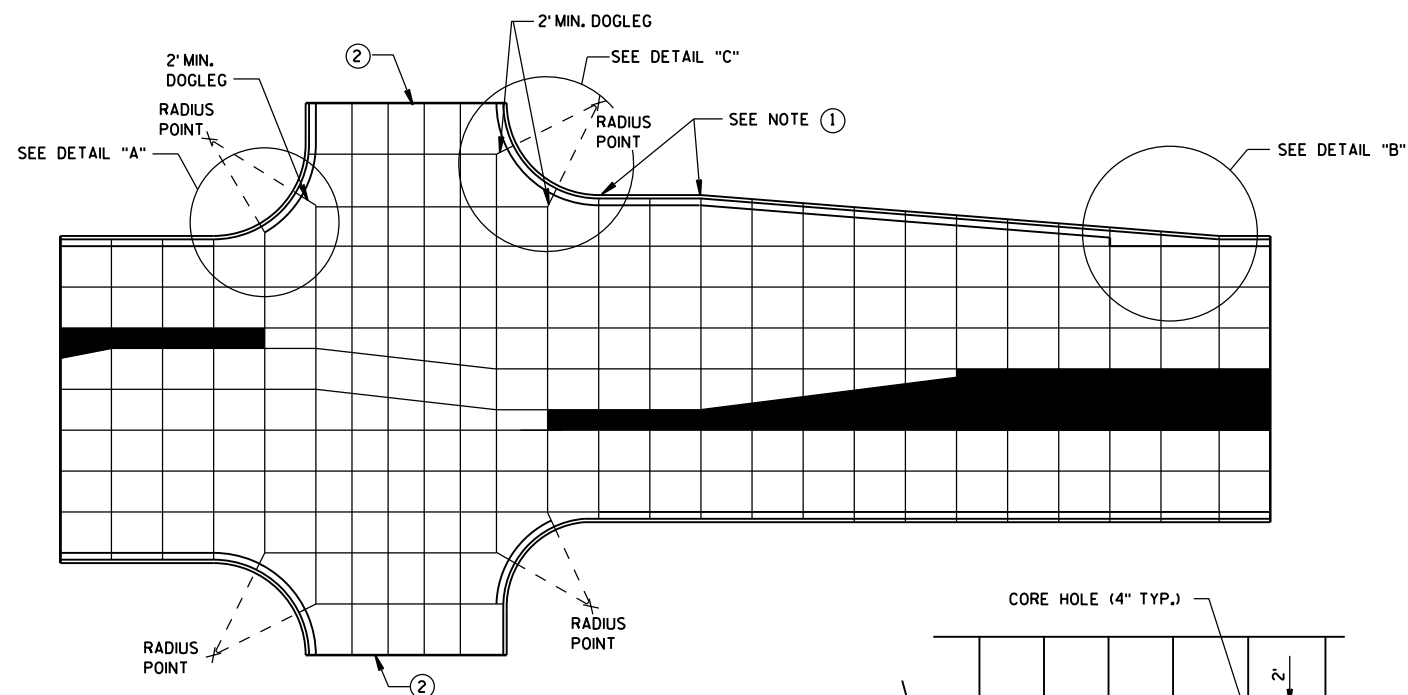
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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

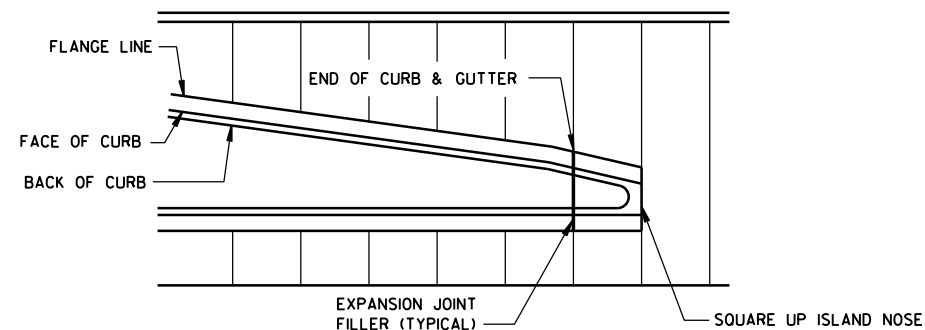
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

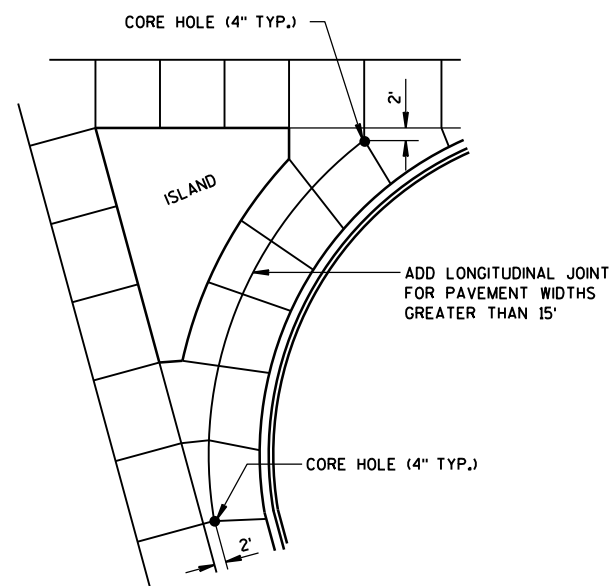
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM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



STANDARD INTERSECTION



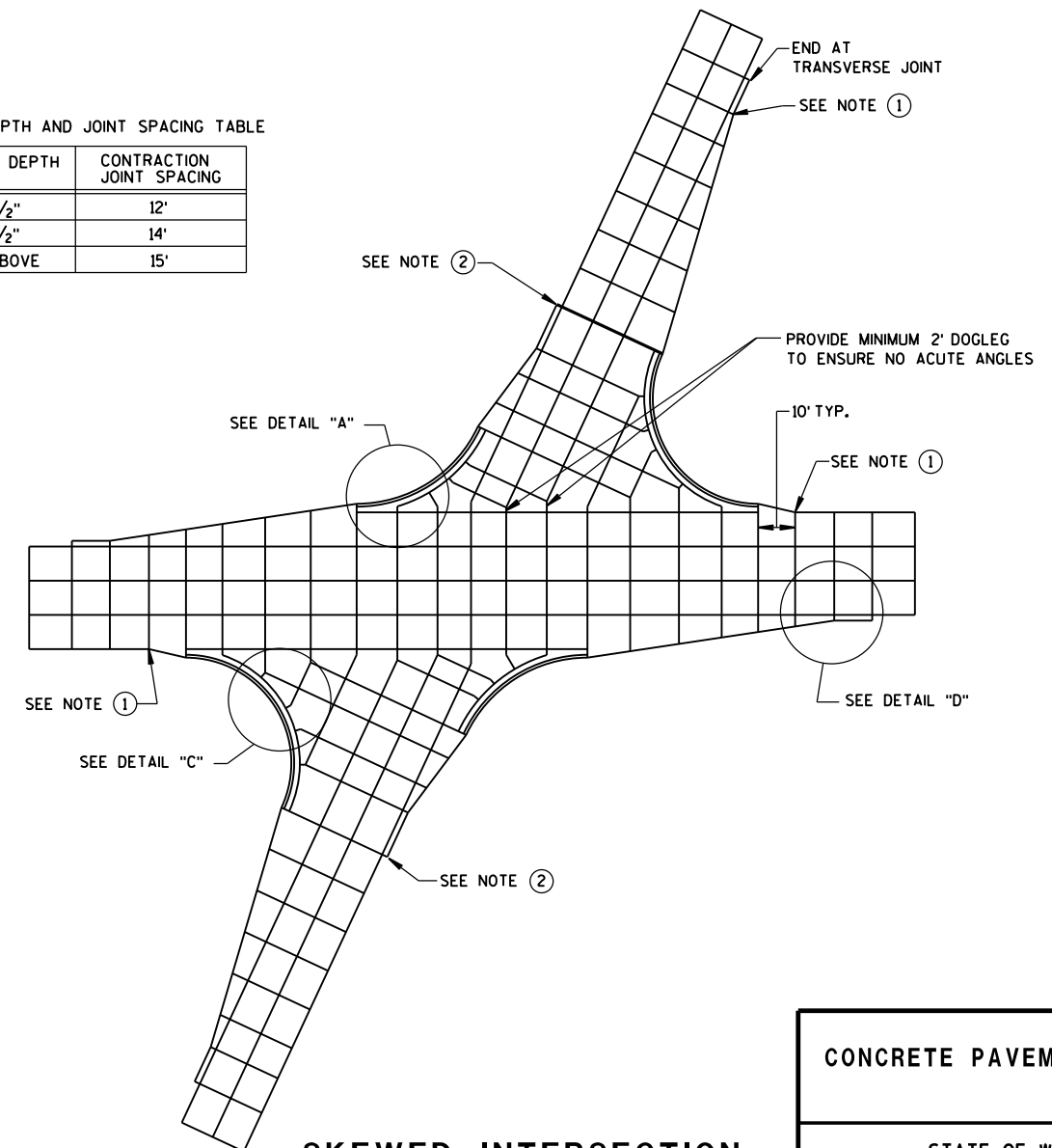
APPROACH TO MEDIAN



LARGE RIGHT TURN

PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 1/2"	12'
7", 7 1/2"	14'
8" & ABOVE	15'



SKewed INTERSECTION

CONCRETE PAVEMENT JOINTING

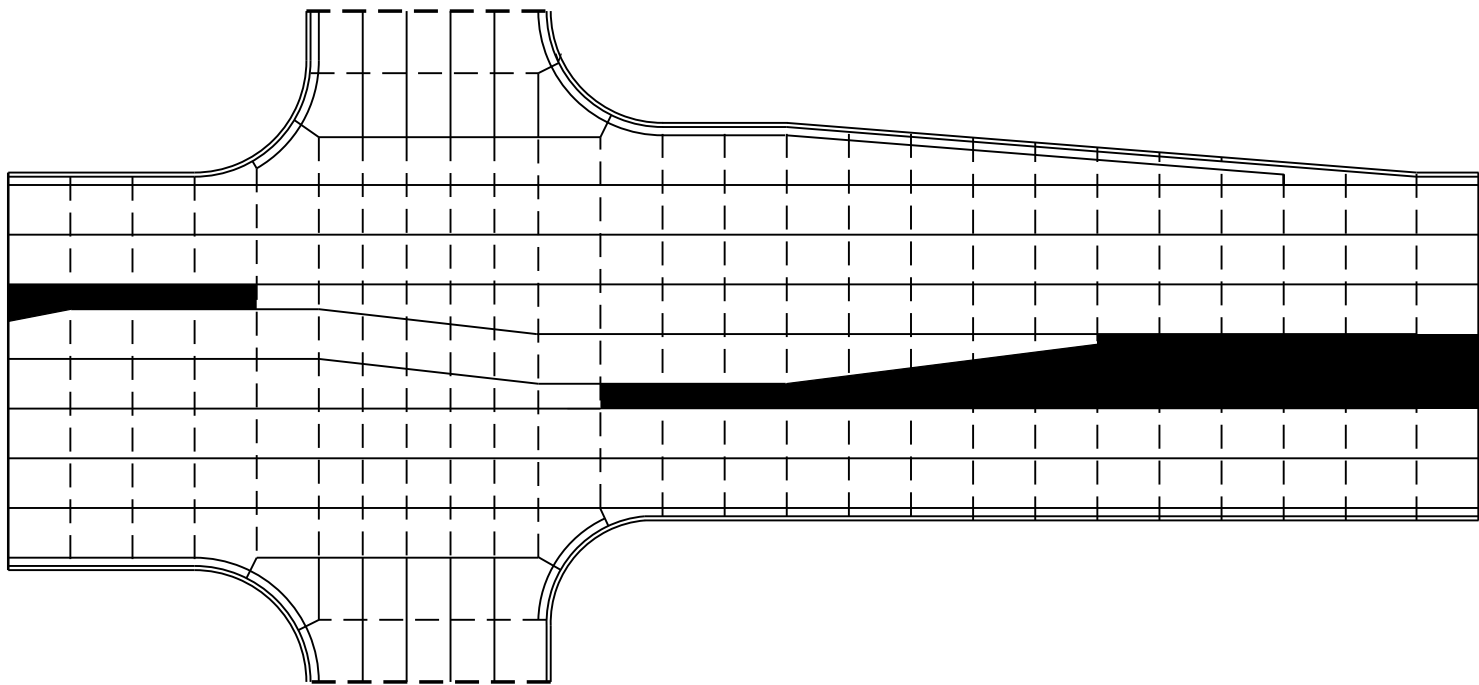
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

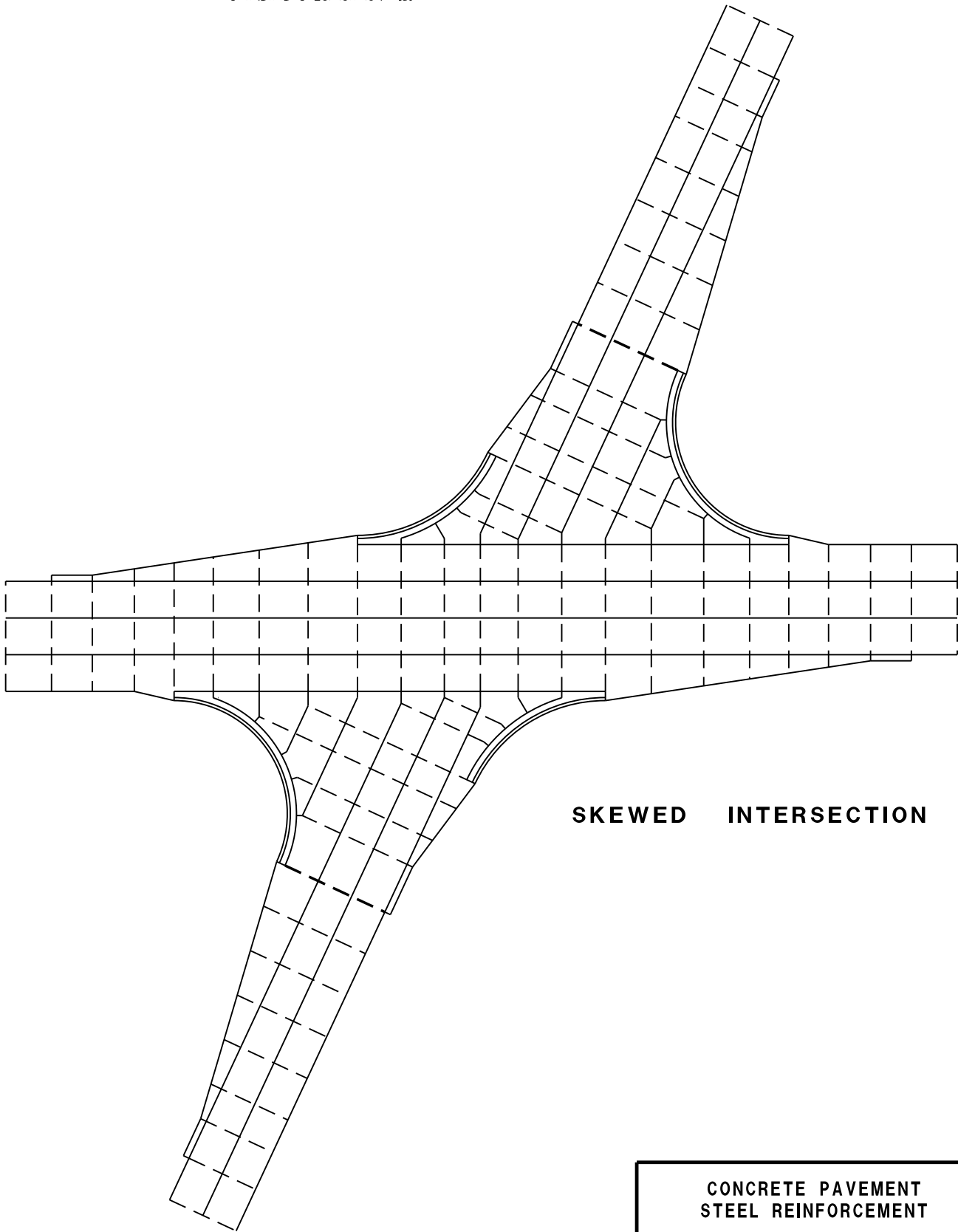
- POTENTIAL DOWELED EXPANSION JOINT
- DOWELED JOINT
- TIED JOINT

GENERAL NOTES

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



STANDARD INTERSECTION

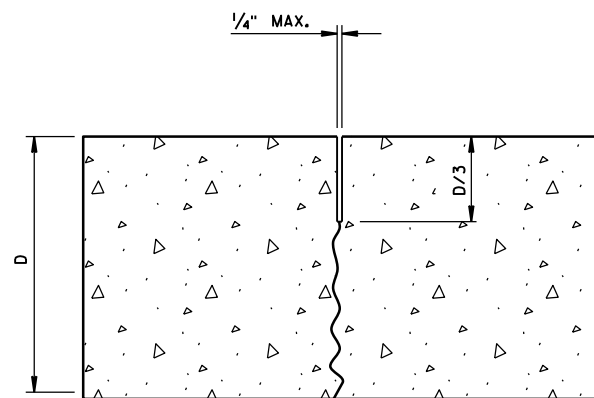


SKEWED INTERSECTION

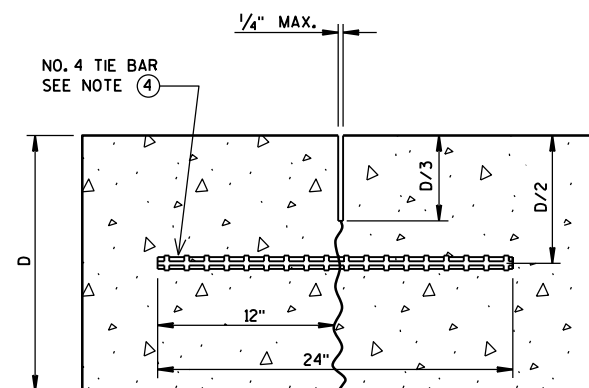
CONCRETE PAVEMENT
STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

111

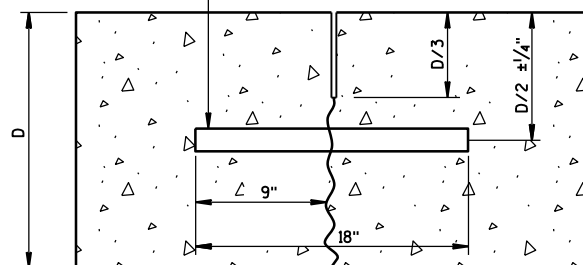


UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

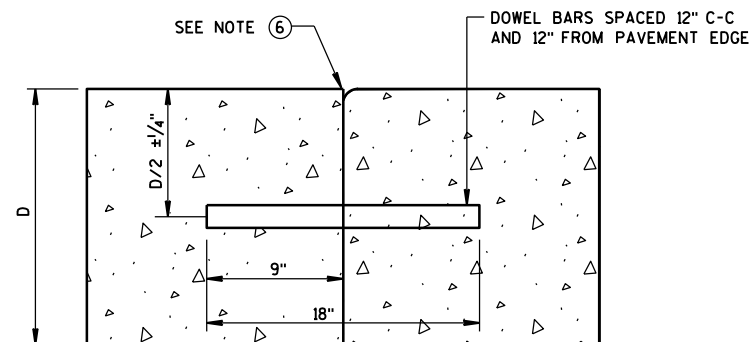
DOWEL BARS AT 12" C-C
12" FROM PAVEMENT EDGE



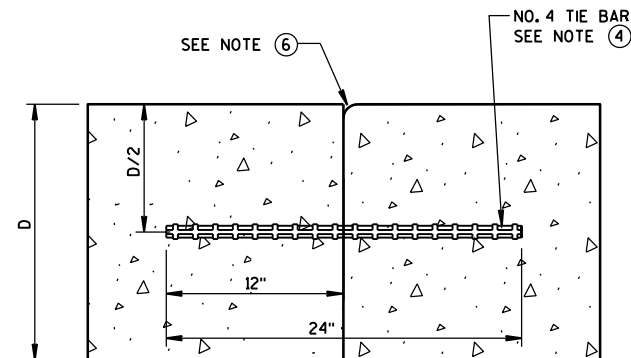
DOWELED-TRANSVERSE

CONTRACTION JOINTS

SEE NOTE ②

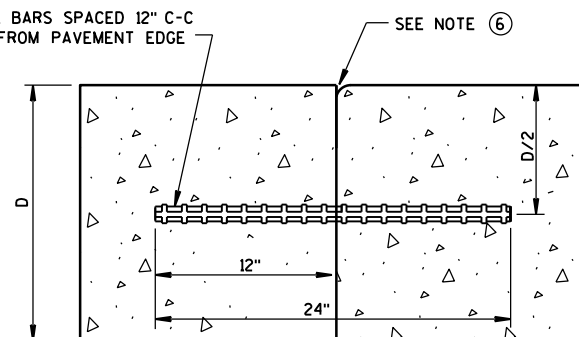
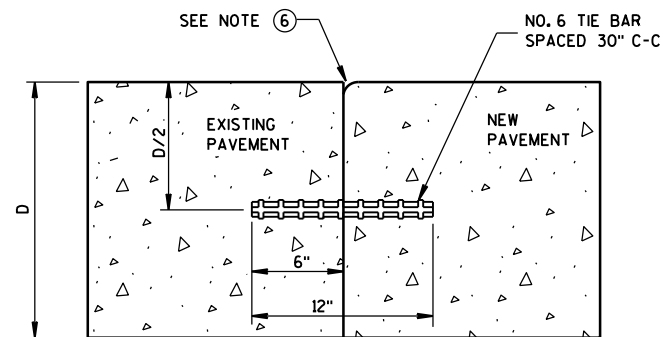


DOWELED TRANSVERSE



TIED LONGITUDINAL

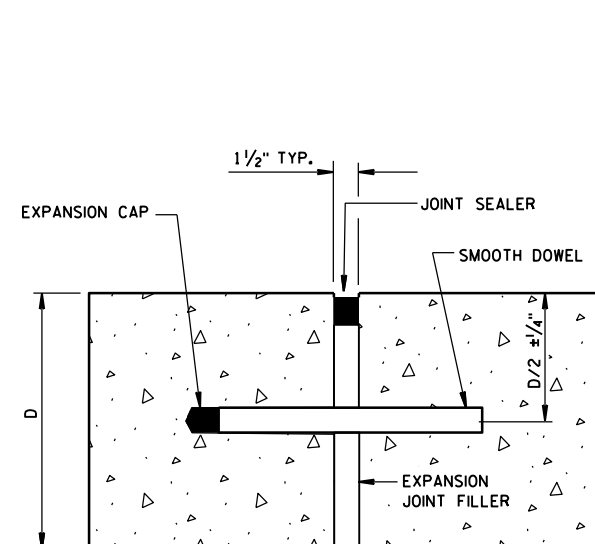
NO. 6 TIE BARS SPACED 12" C-C
AND 12" FROM PAVEMENT EDGE

TIED TRANSVERSE
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)

TIED LONGITUDINAL TO EXISTING

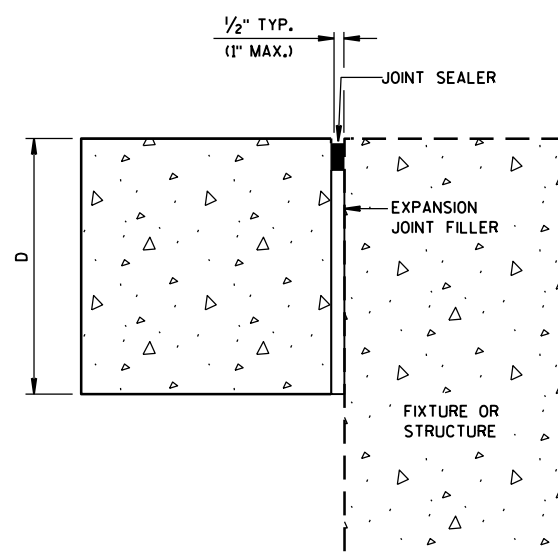
CONSTRUCTION JOINTS

SEE NOTE ⑤



DOWELED-TRANSVERSE

SEE NOTE ①



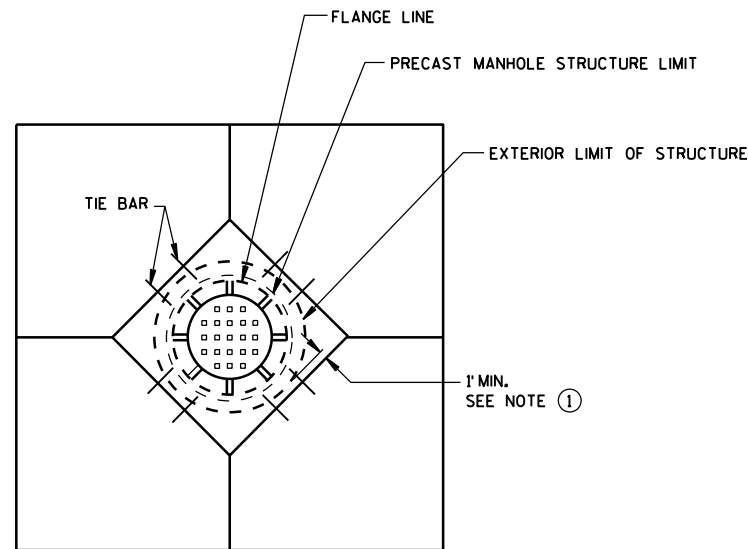
UNTIED-LONGITUDINAL

EXPANSION JOINTS

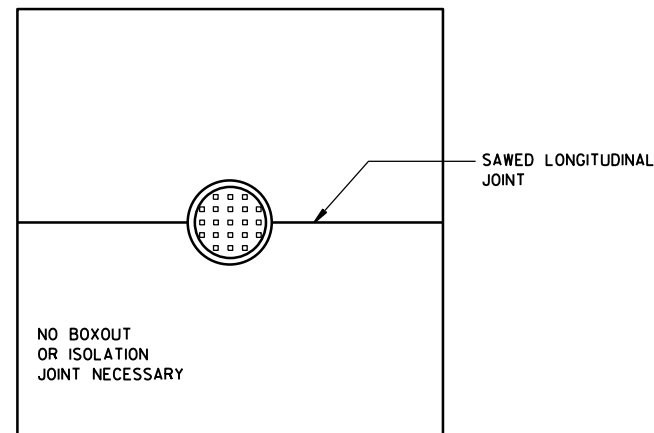
GENERAL NOTES

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. SPACE TIE BARS AT LONGITUDINAL CONSTRUCTION OR CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C1.
5. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
6. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.

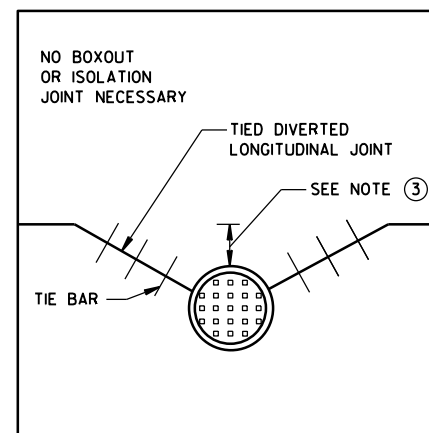
CONCRETE PAVEMENT
JOINT TYPESSTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 112



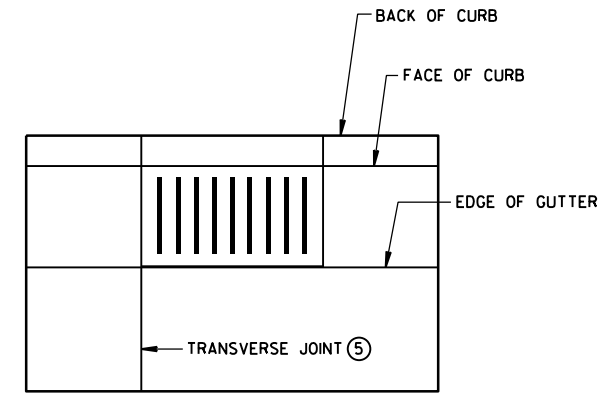
**DIAGONAL MANHOLE BOXOUT
FOR CONSTRUCTION JOINTS**



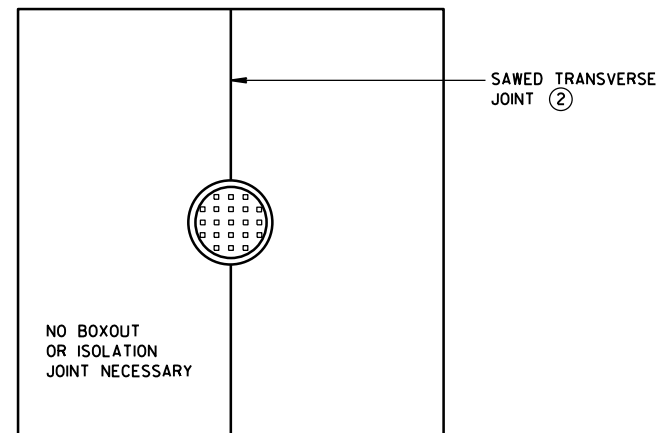
**MANHOLE WITH
LONGITUDINAL JOINT**



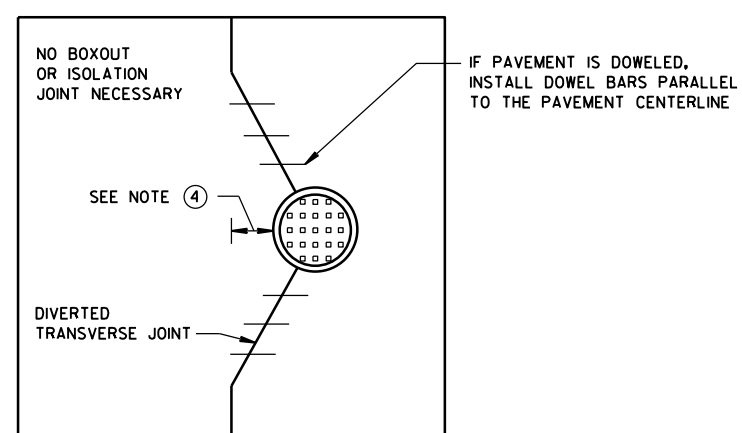
**MANHOLE WITH DIVERTED
LONGITUDINAL CONTRACTION JOINT**



**INLET WITH
TRANSVERSE JOINT**



**MANHOLE WITH
TRANSVERSE 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 LONGITUDINAL 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

5-3-2013
DATE

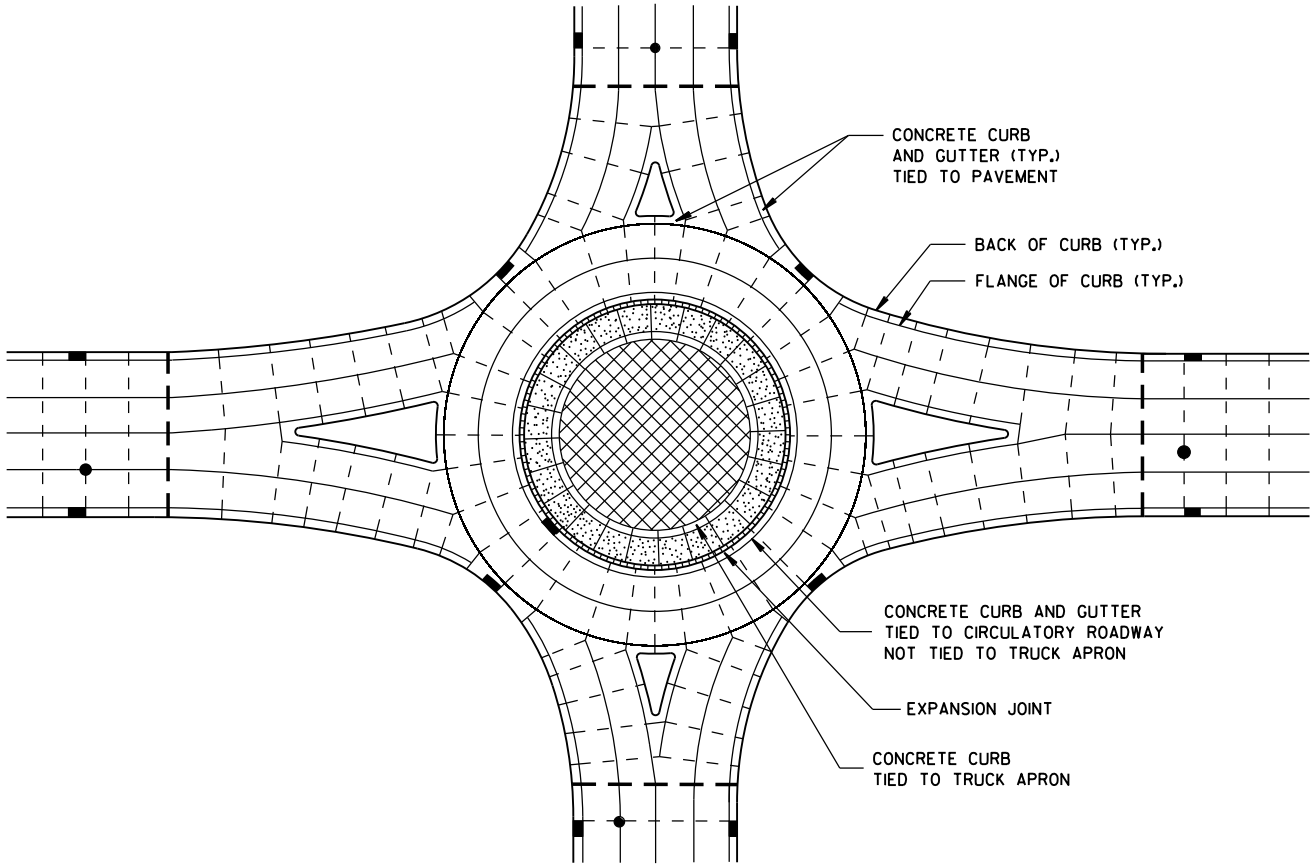
/S/ Deb Bischoff
PAVEMENT POLICY & DE 113

NEER

FHWA

LEGEND

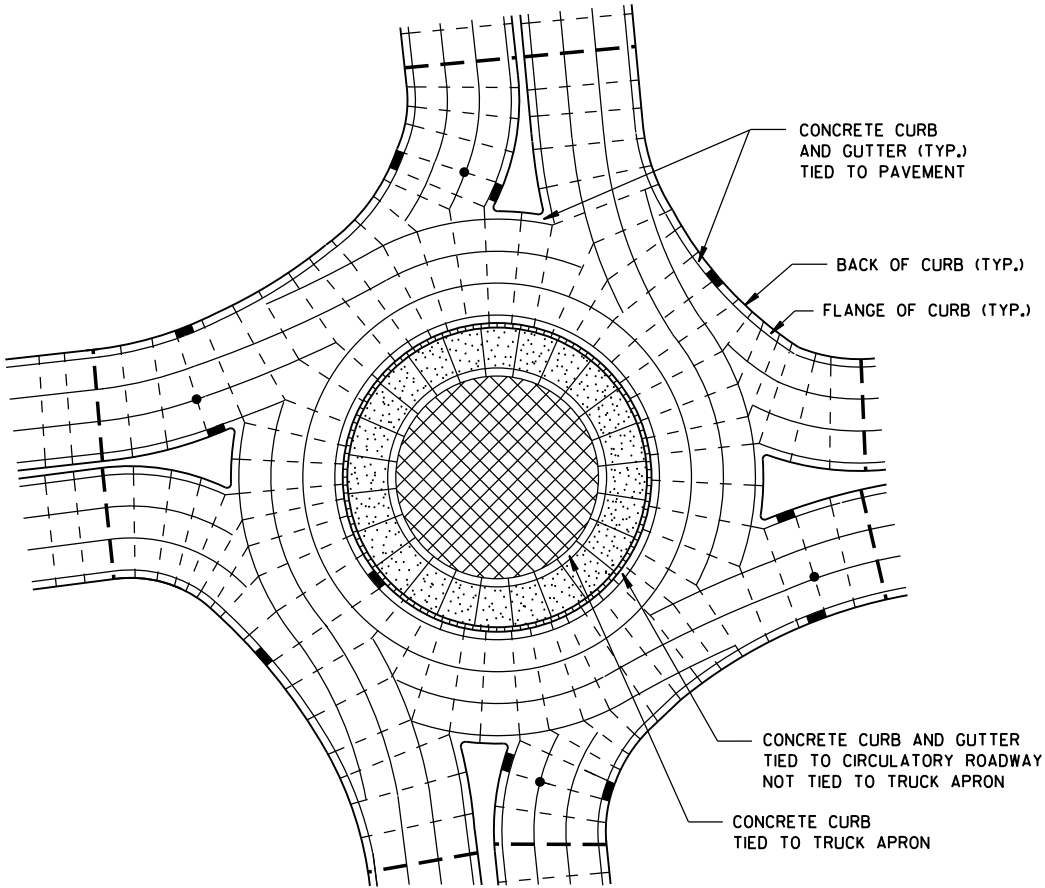
- — DOWELED JOINT
- — TIED JOINT
- — EXPANSION JOINT
- — POTENTIAL DOWELED EXPANSION JOINT
- ▨ TRUCK APRON
- ▩ CENTRAL ISLAND
- • UTILITY STRUCTURES



ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS

GENERAL NOTES

- MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18 SHEET "a".
- USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.
- DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.

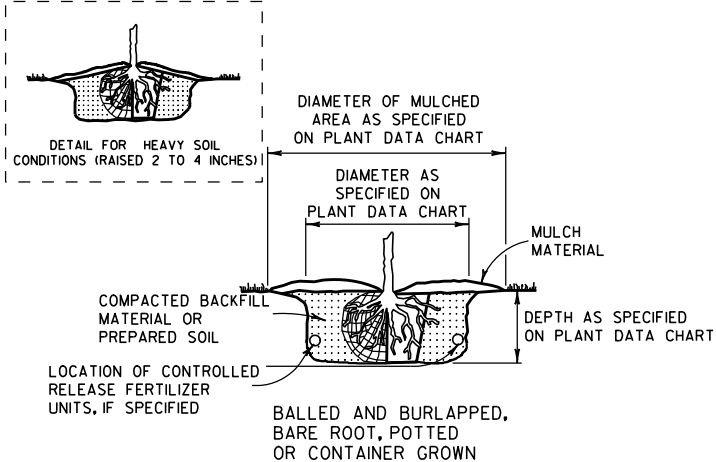
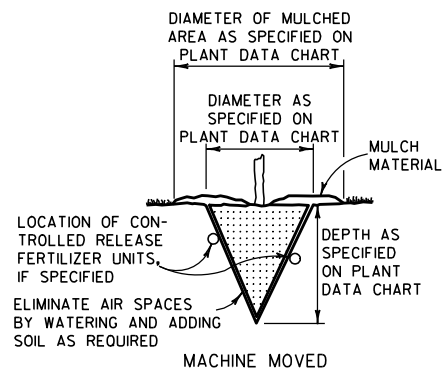


PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS

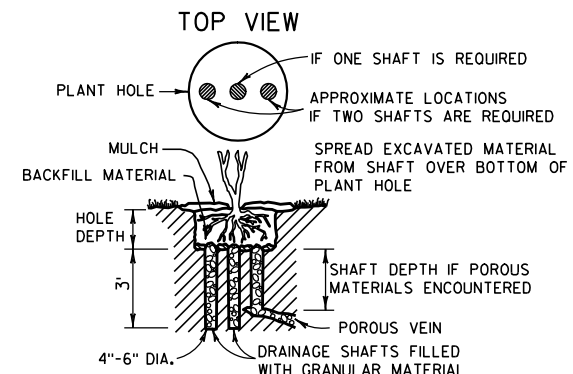
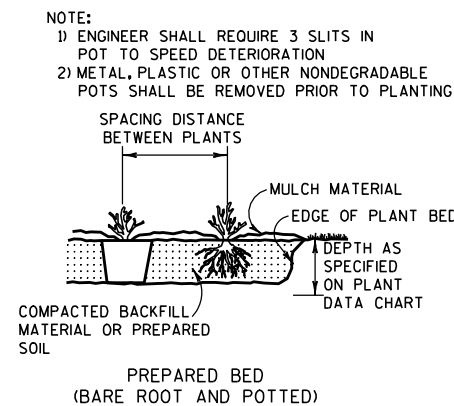
**CONCRETE PAVEMENT JOINTING
AND STEEL REINFORCEMENT
IN ROUNDABOUTS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-3-2013 /S/ Deb Bischoff
DATE PAVEMENT POLICY & DE 114 VEER
FHWA



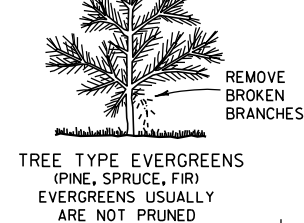
ACCOMMODATE ROOTS
(SMOOTH AND STAGHORN SUMAC)



NOTE:
DRAINAGE SHAFT AS SPECIFIED ON
PLANT DATA CHART

DRAINING

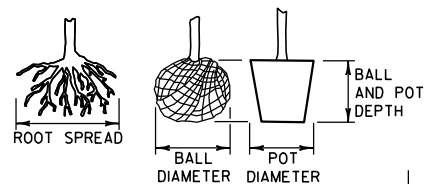
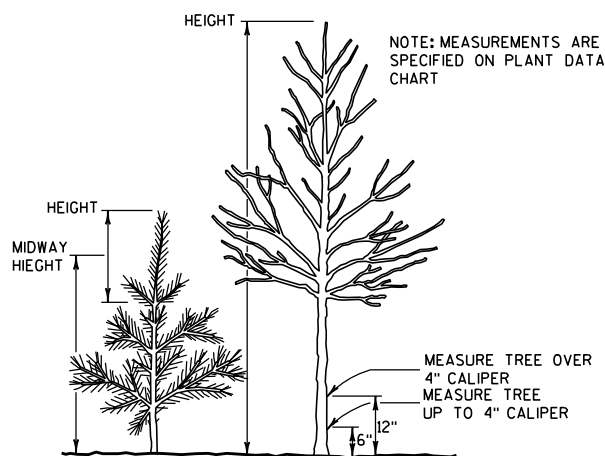
NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES



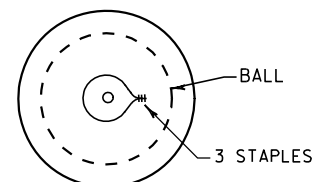
PRUNE LEAST VIGOROUS OF TWO LEADERS BACK TO MAIN TRUNK

REMOVE BROKEN BRANCHES

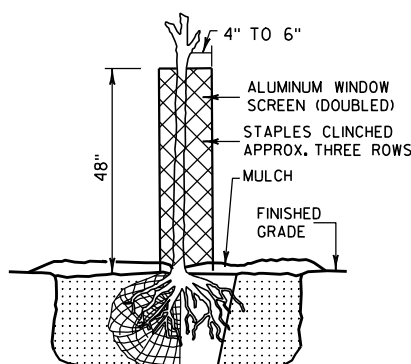
PRUNING



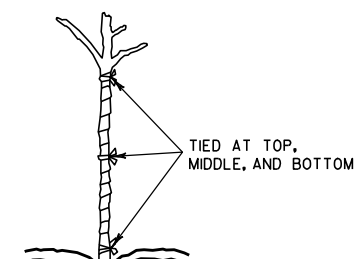
MEASURING



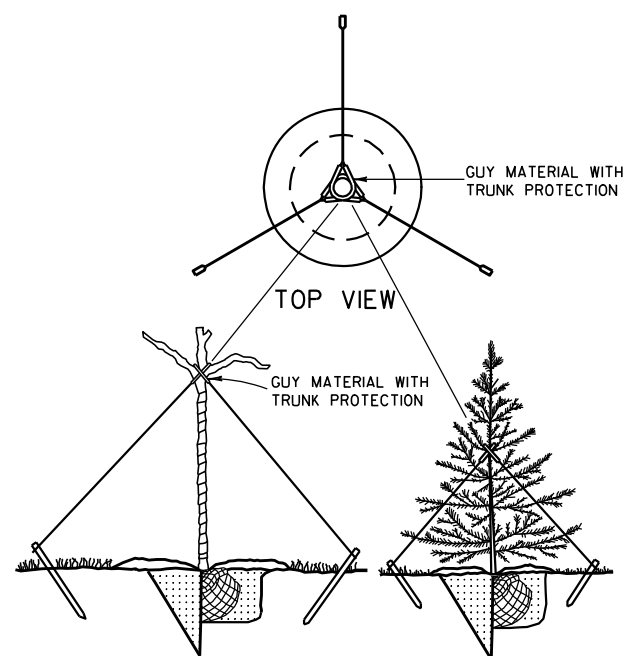
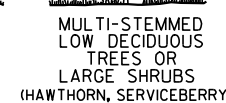
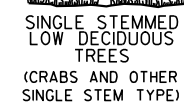
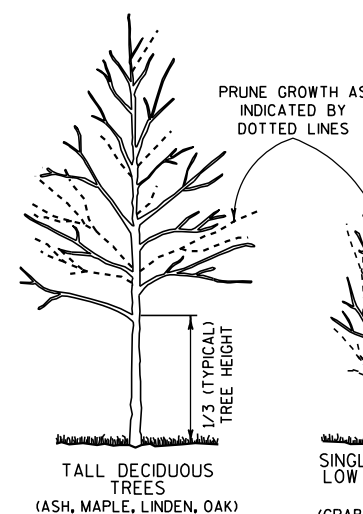
TOP VIEW



RODENT PROTECTION

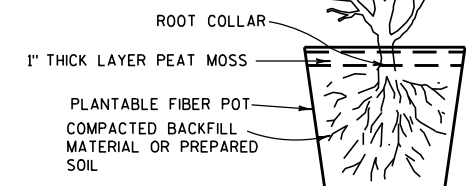


WRAPPING

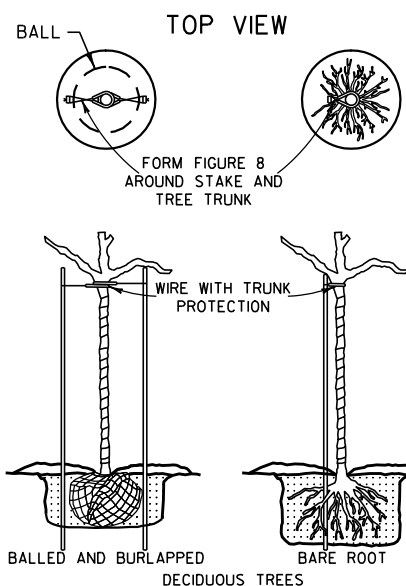


GUYING

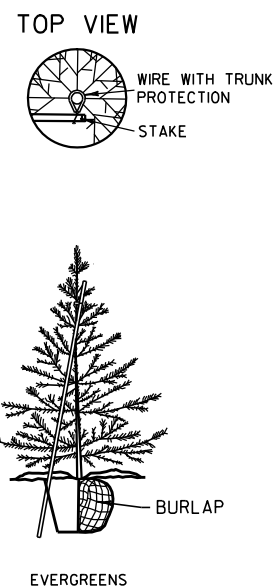
PRUNE LARGER SHRUBS BY REMOVING FROM ONE-THIRD TO ONE-HALF TOP GROWTH AS INDICATED BY DOTTED LINE



POTTING



BRACING



NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

NOTES

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

BRACING, WRAPPING, GUYING, RODENT PROTECTION, FERTILIZER AND MULCH SHALL BE USED ONLY WHEN SPECIFIED ON THE PLANT DATA CHART (PART OF PLAN) OR SPECIAL PROVISIONS.

TREE PLANTING DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/11/94

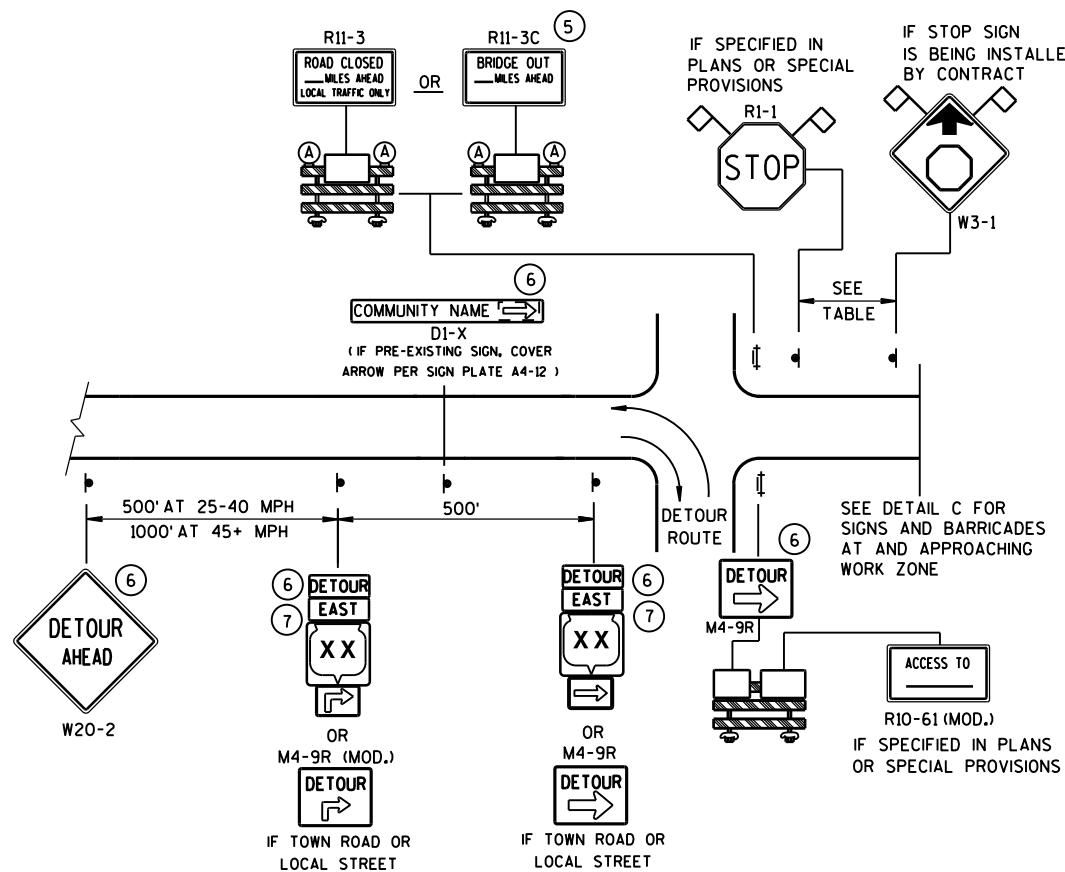
DATE

/S/ Rory L. Rhinehart

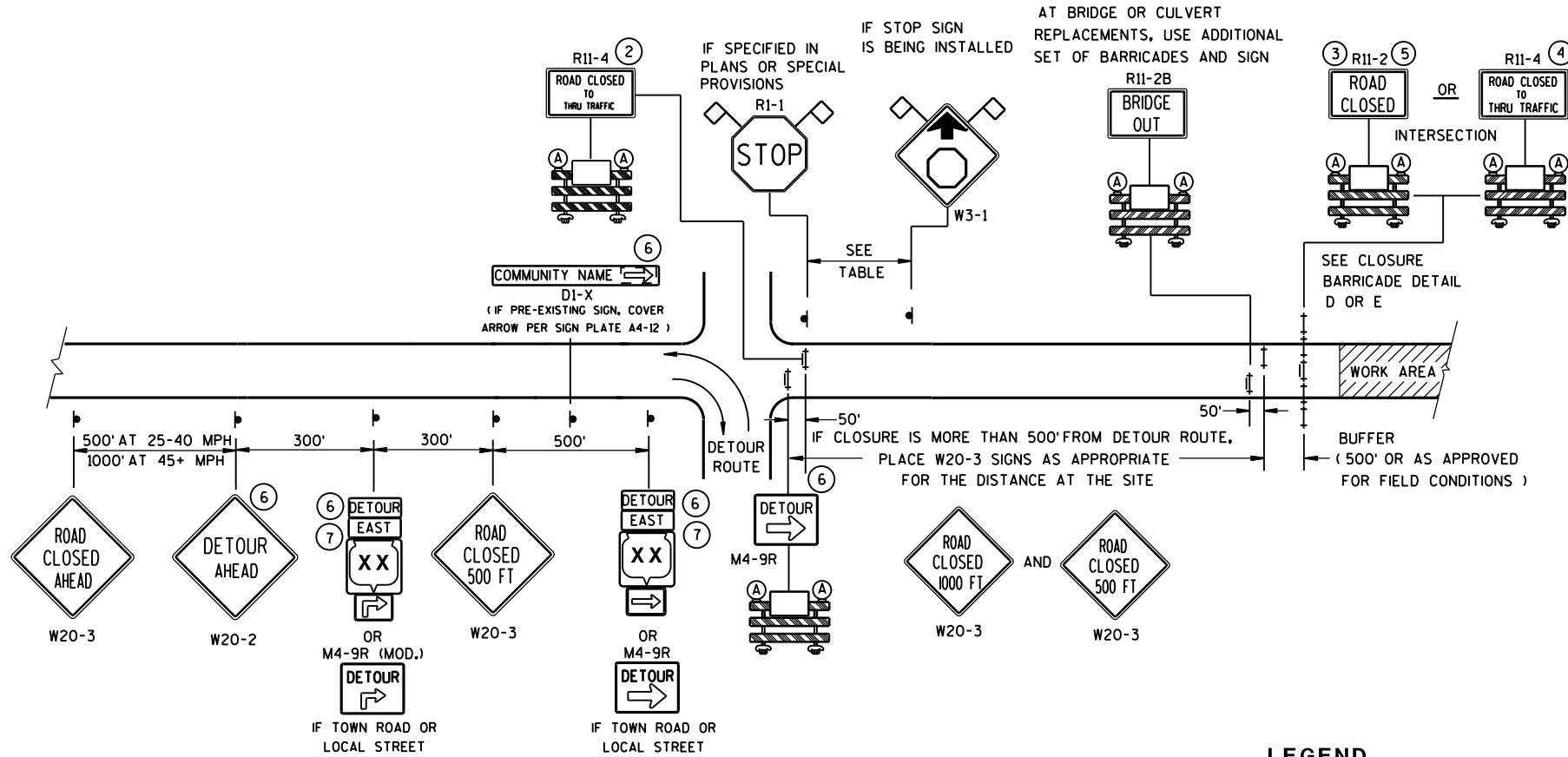
CHIEF METHODS DEVELOPER

FHWA

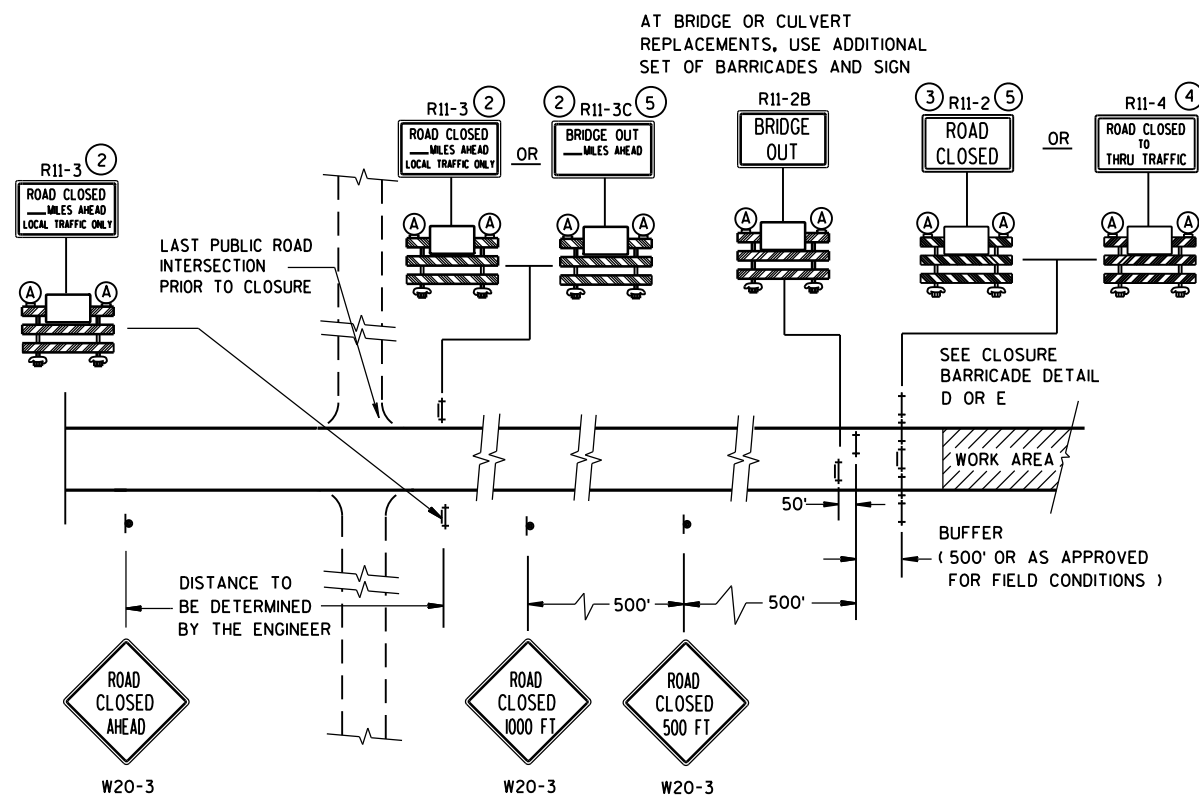
SINER



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

LEGEND

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

WORK AREA

DETOUR EAST
M4-8
M3-X
XX OR XX OR XX
M1-4 M1-5A M1-6

M05-1 OR M06-1

FLAGS, 16" X 16" MIN., (ORANGE)

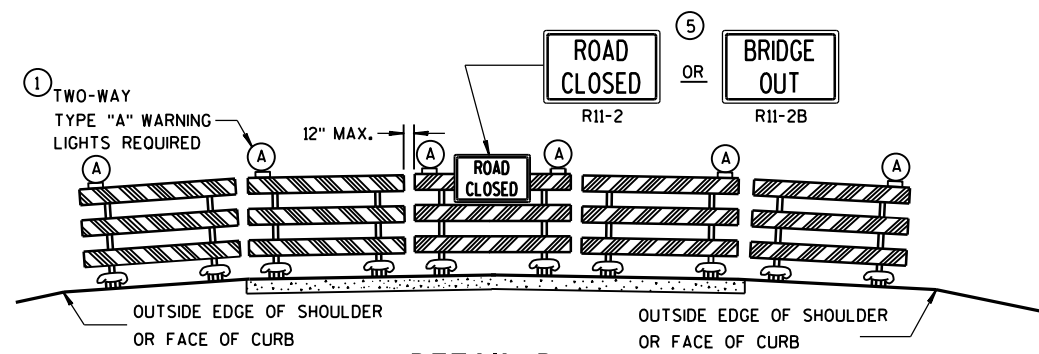
SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

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

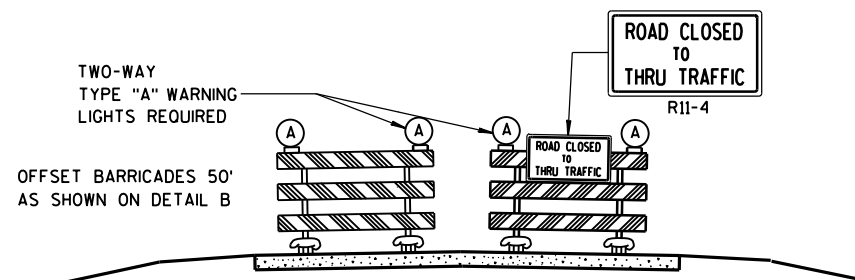
BARRICADES AND SIGNS
FOR
MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 DATE /S/ Travis Feltes
STATE TRAFFIC ENGINE 116 EIGN
FHWA



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

R11-2 SHALL BE 48" X 30".

R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".

M4-9 SHALL BE 30" X 24".

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

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

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

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

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

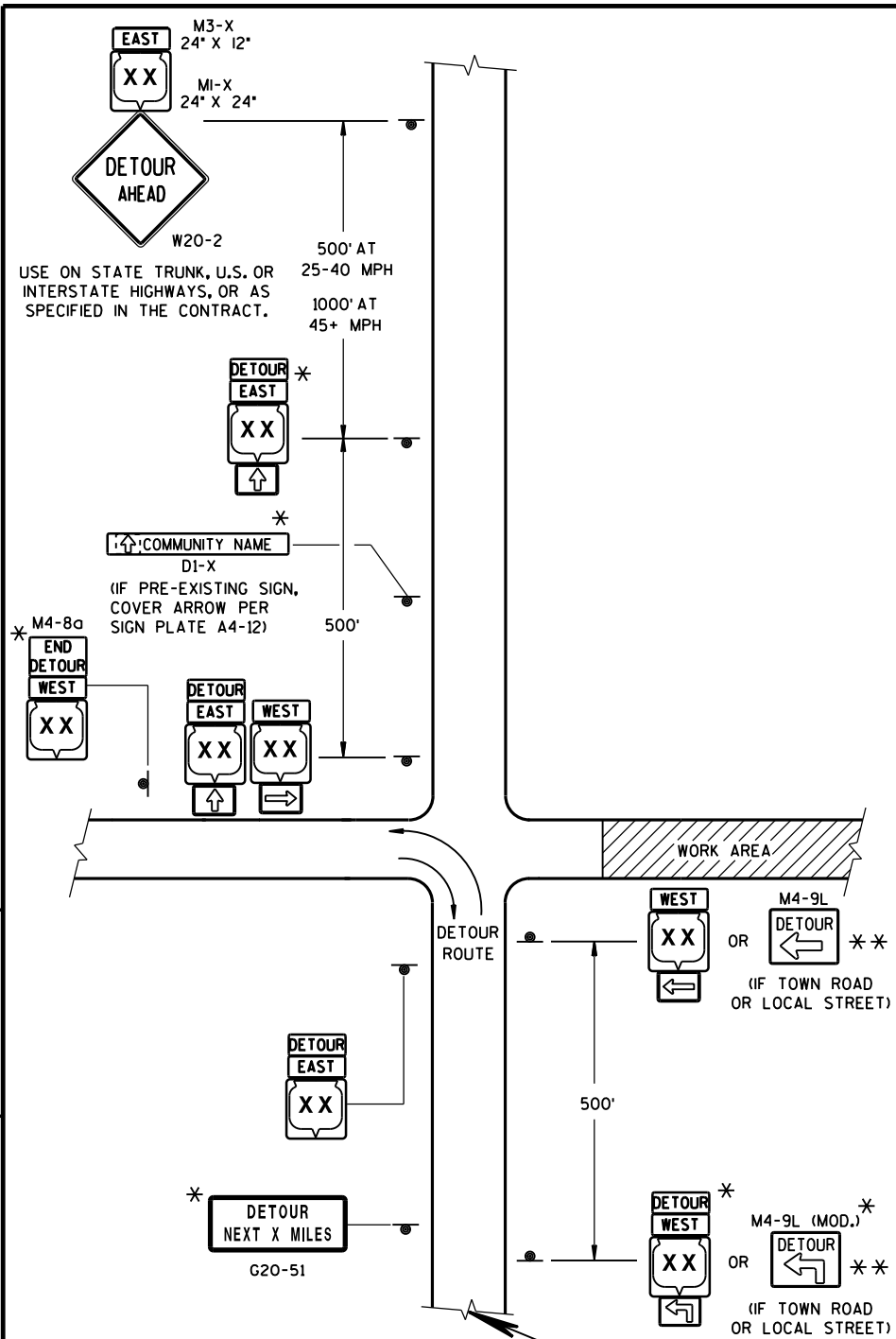
R1-1 SHALL BE 36" X 36".

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINE 117 ESIGN
FHWA



LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST M4-8 M3-X
- M1-4 OR COUNTY M1-5A OR M1-6
- M05-1 OR M06-1 OR M06-1

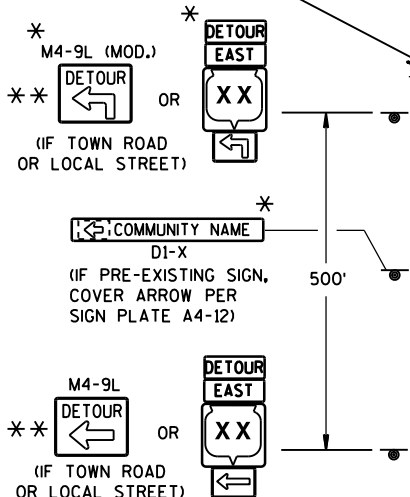
SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

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

MATCH POINT

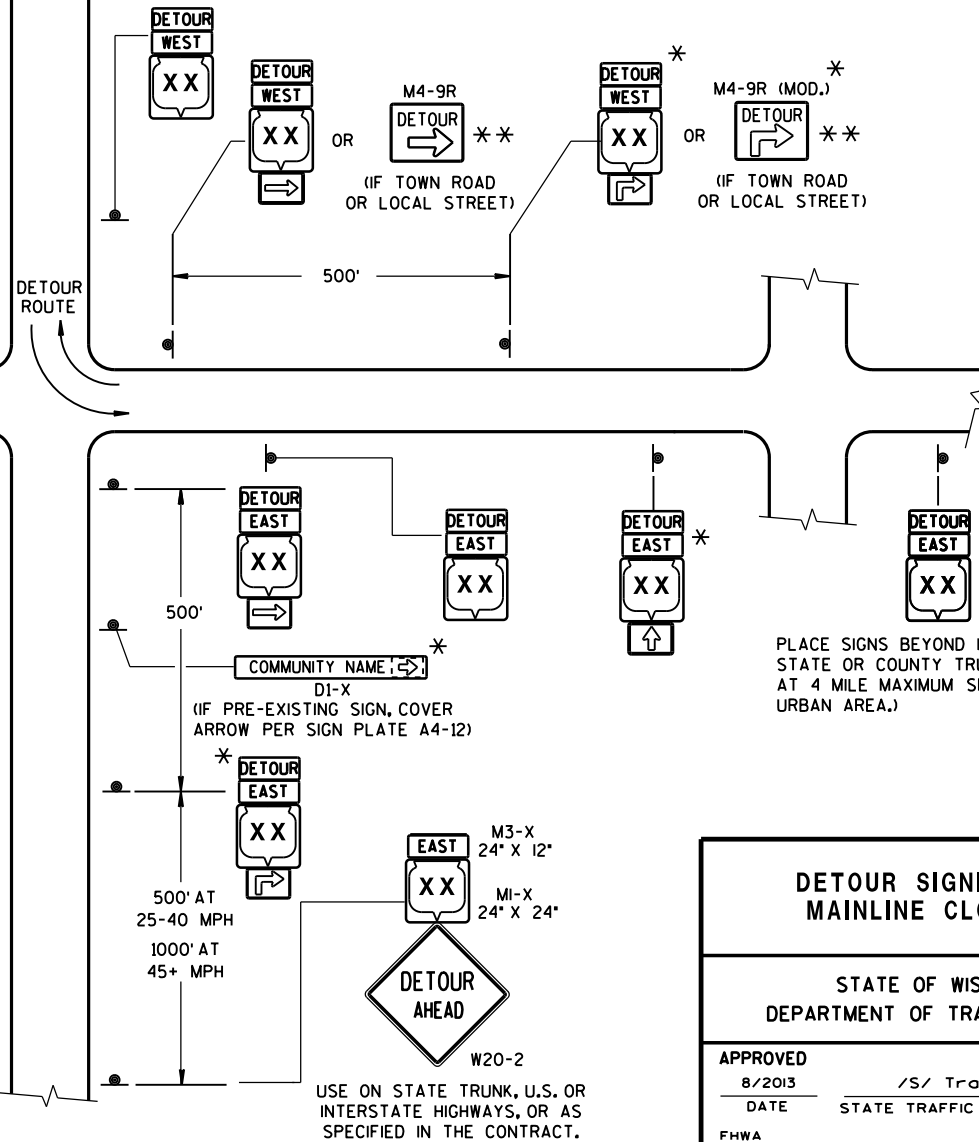
DETAIL F
DETOUR SIGNING

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



GENERAL NOTES

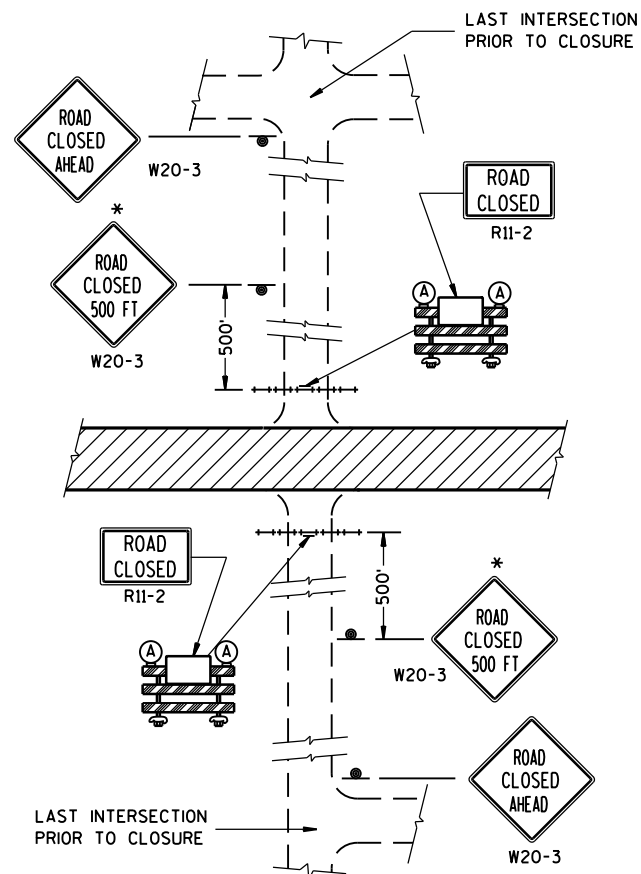
- THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS, MODIFY EXISTING SIGNS WHERE POSSIBLE.
- THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.
- ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.
- SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- SIGN SIZES SHALL BE AS FOLLOWS:
 - M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M4-9 SHALL BE 30" X 24".
 - M4-8a SHALL BE 24" X 18".
 - G20-51 SHALL BE 60" X 24".
 - W20-2 SHALL BE 48" X 48".
 - D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- * OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.
- ** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



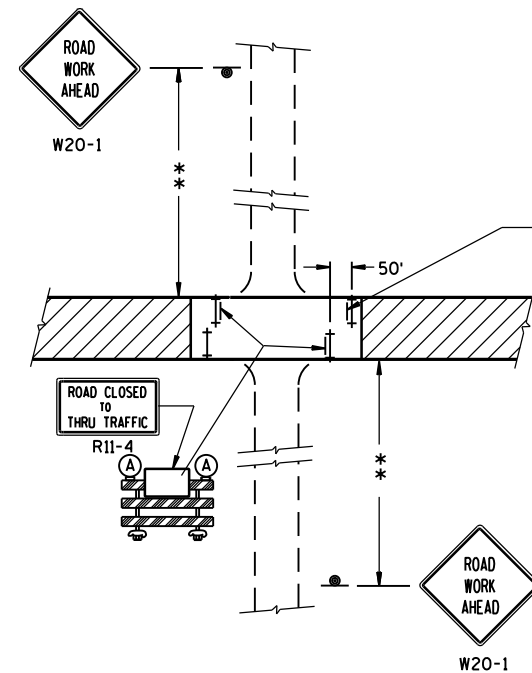
DETOUR SIGNING FOR
MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

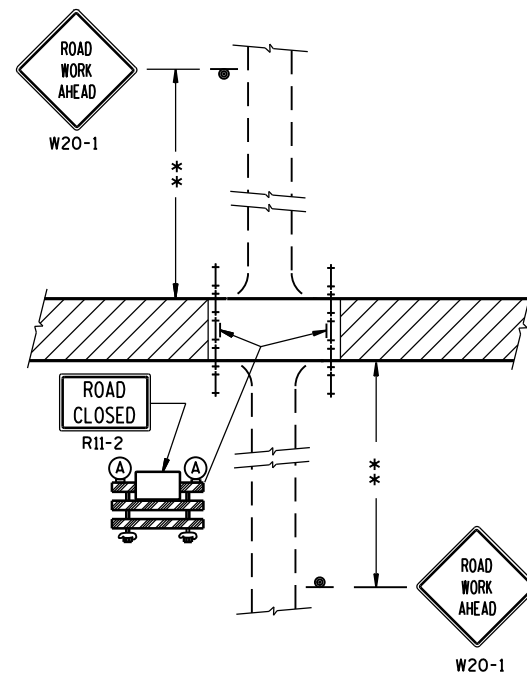
APPROVED
8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINE 118
FWHA SIGN



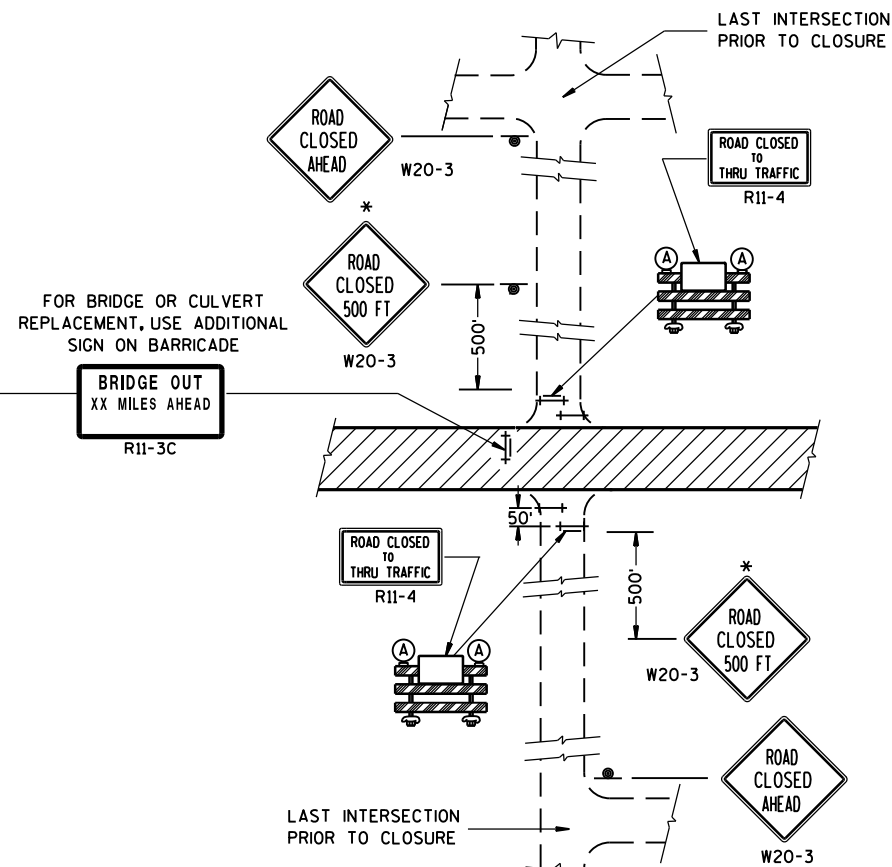
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

R11-2 SHALL BE 48" X 30".

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

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

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

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 /S/ Travis Feltes

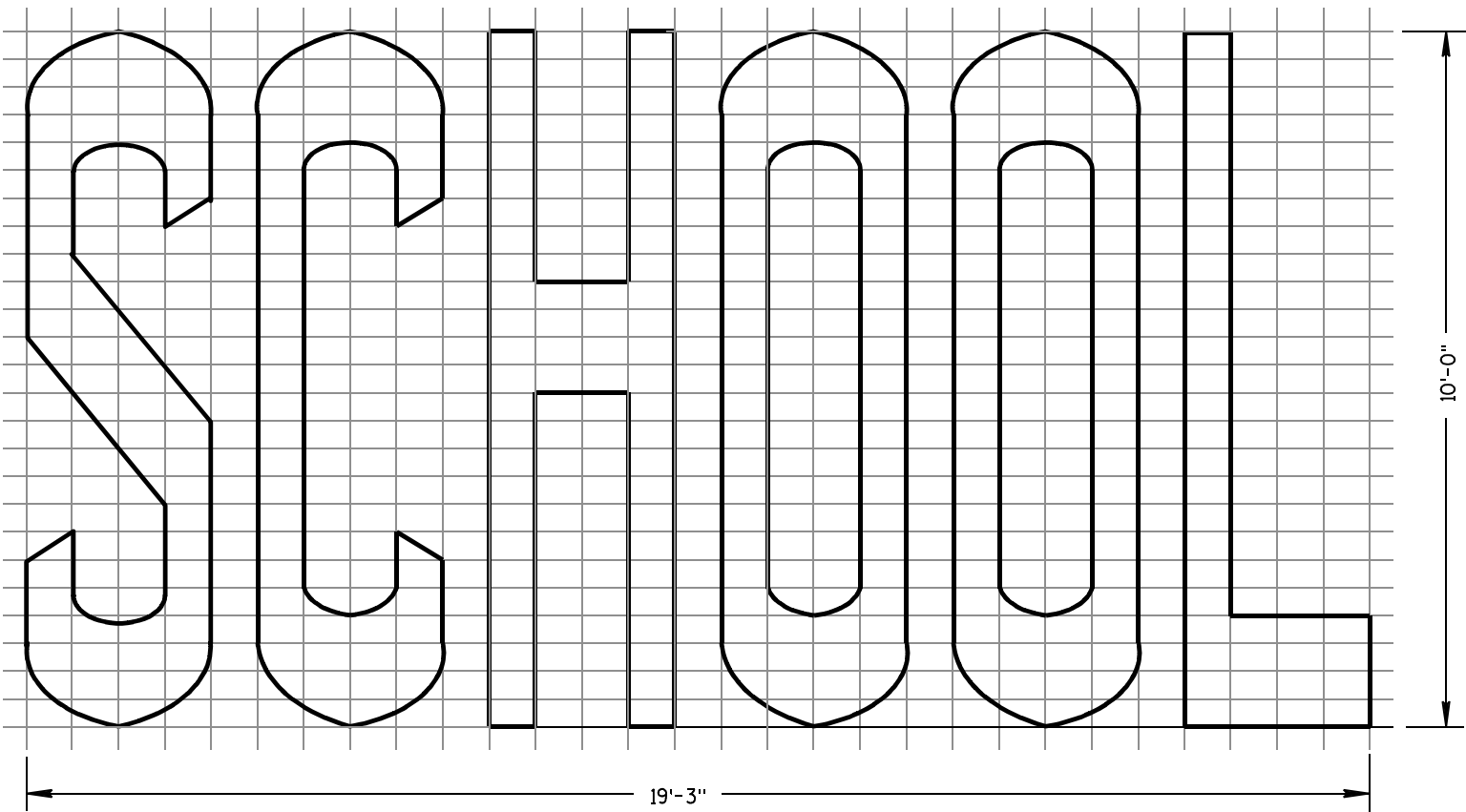
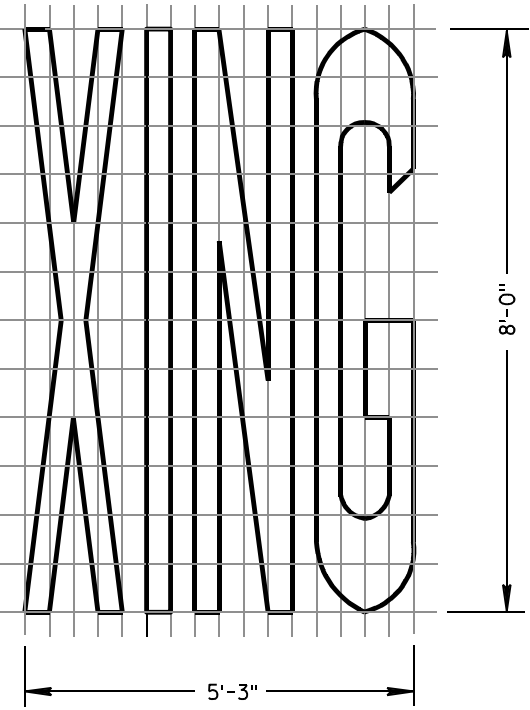
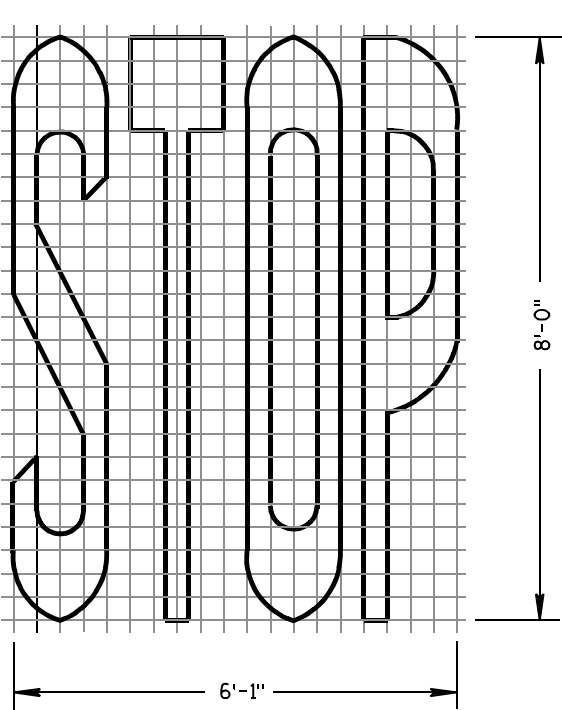
DATE STATE TRAFFIC ENGINE 119 SIGN

FHWA

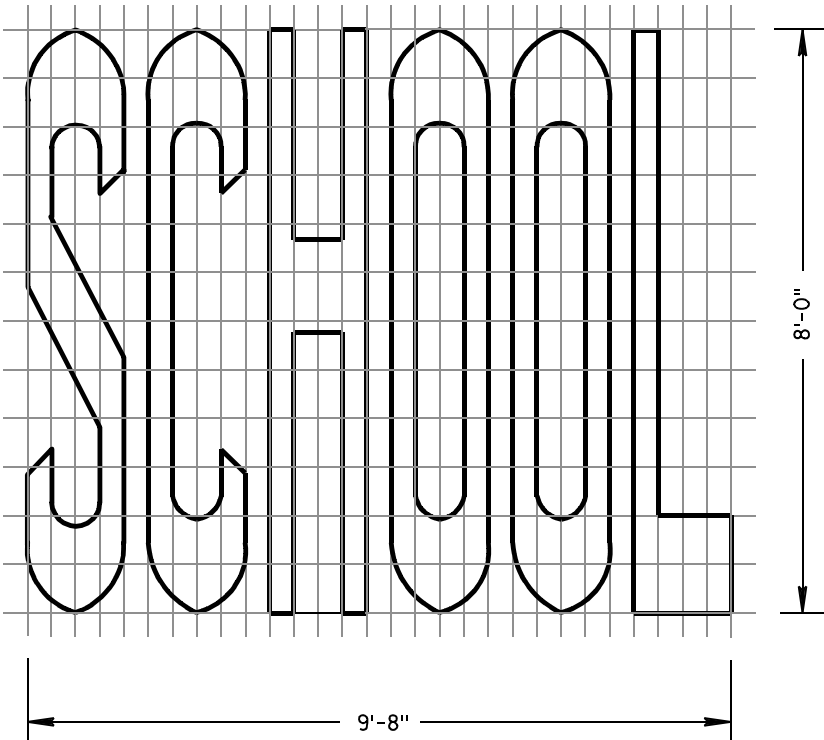
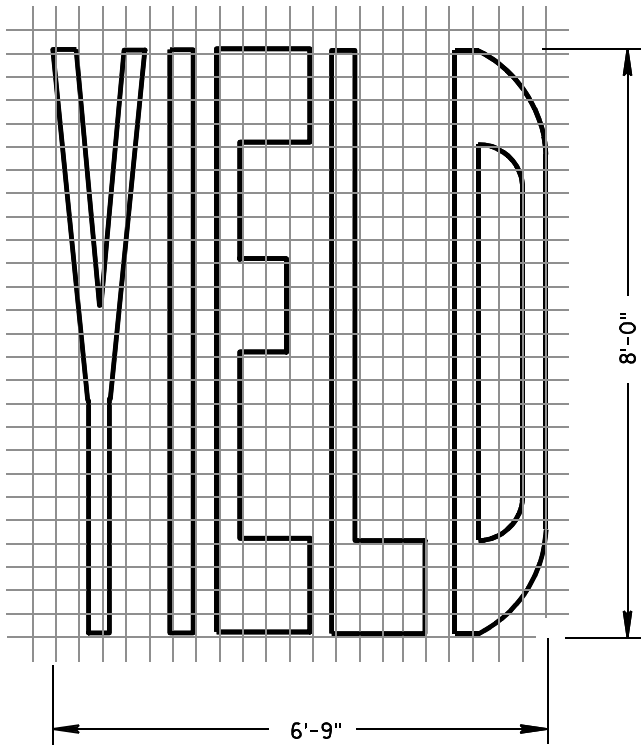
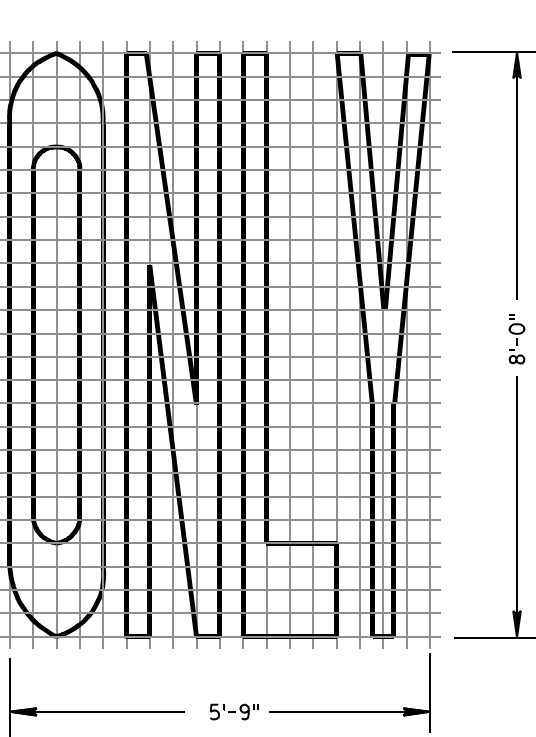
GENERAL NOTES

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

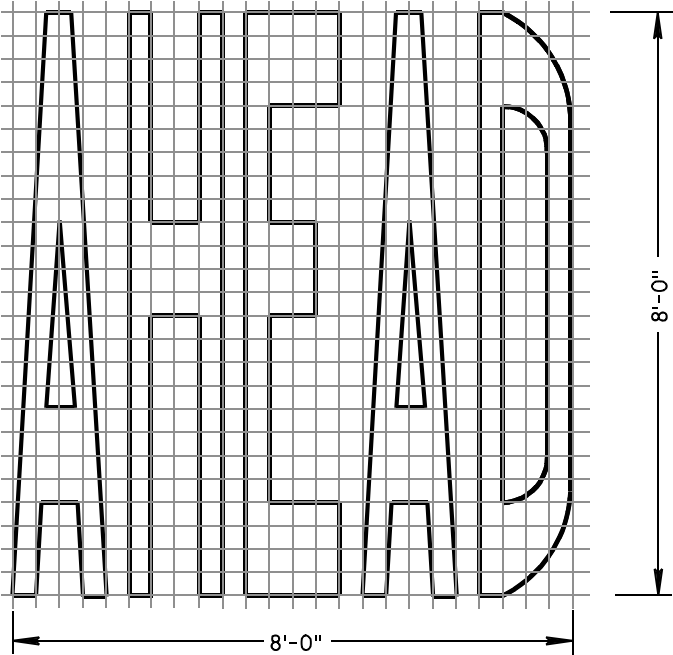
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES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



TWO-LANE



SINGLE-LANE



PAVEMENT MARKING WORDS

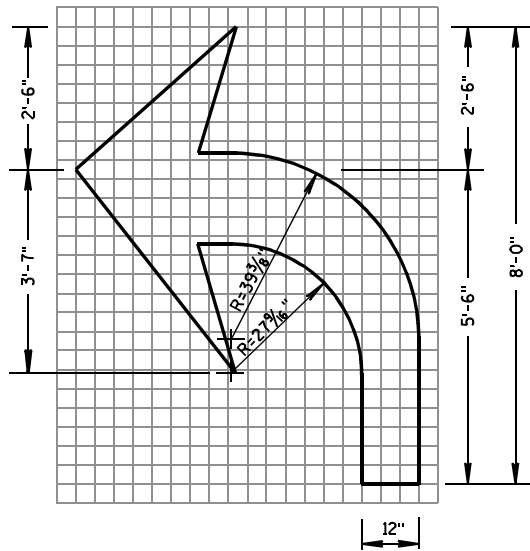
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

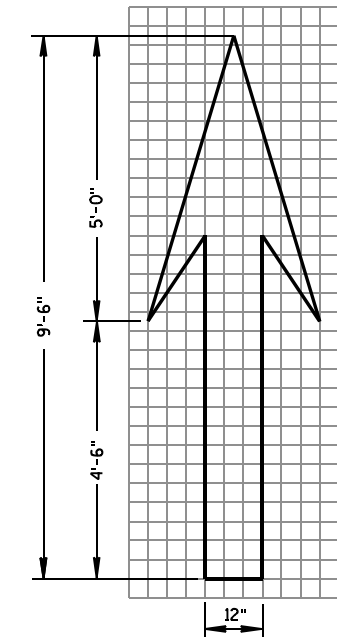
7-1-11
DATE

/S/ Thomas N. Nothmann
STATE TRAFFIC ENGINEER 120 IGN

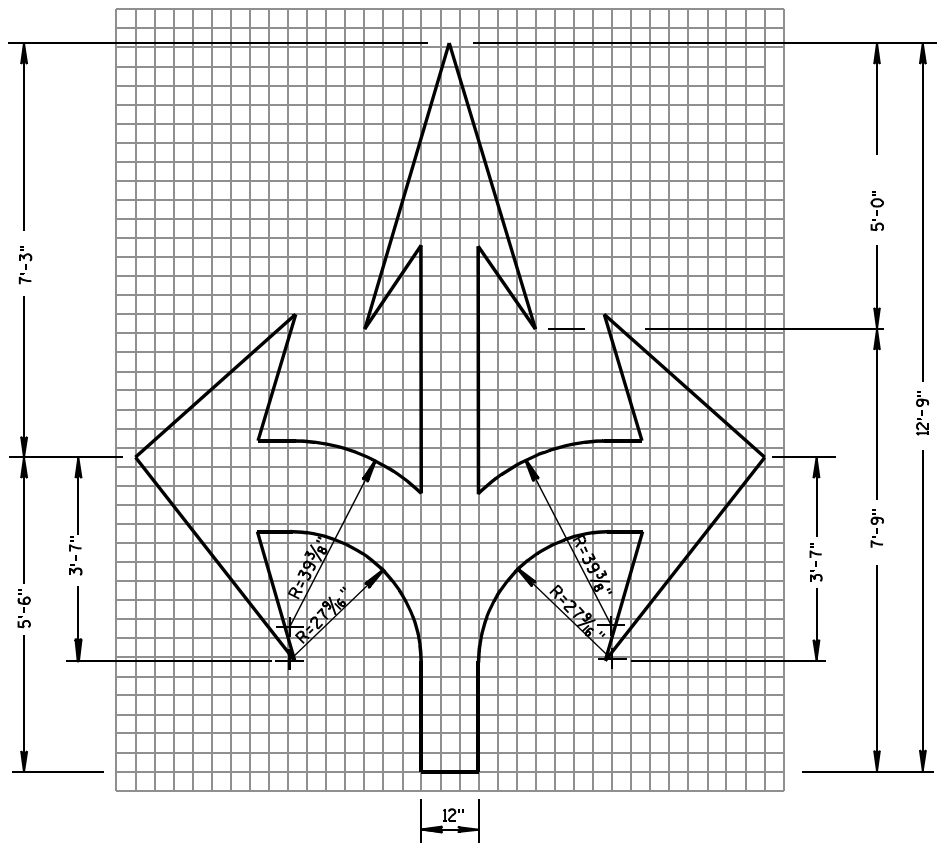
FHWA



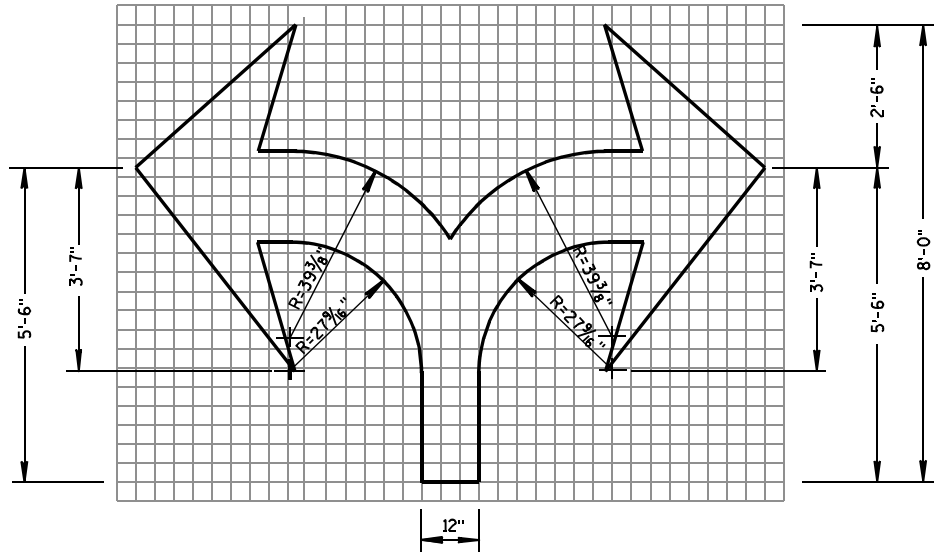
TYPE 2



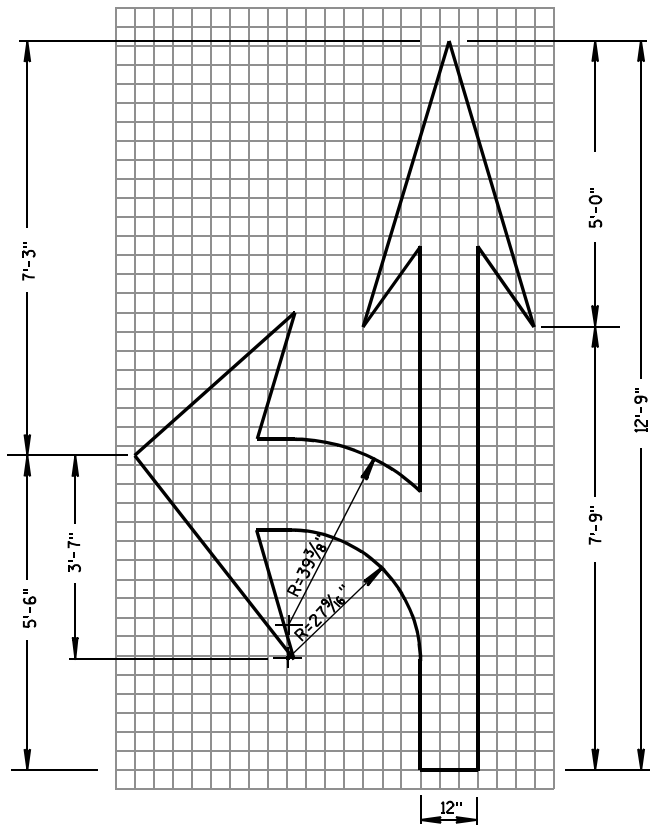
TYPE 1



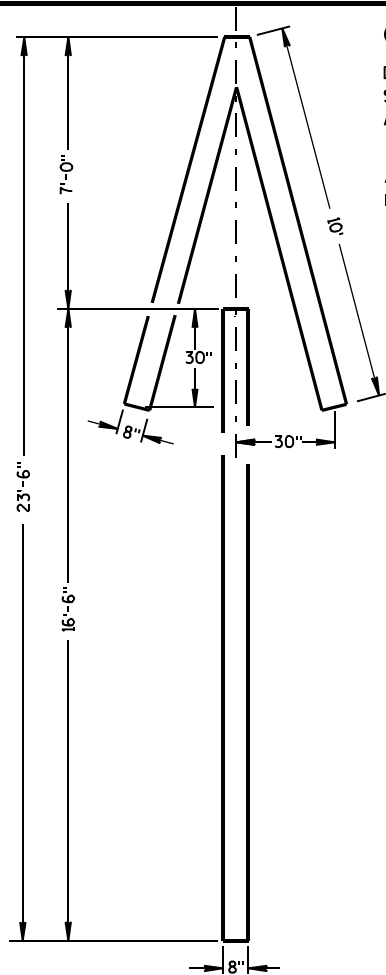
TYPE 6



TYPE 7



TYPE 3

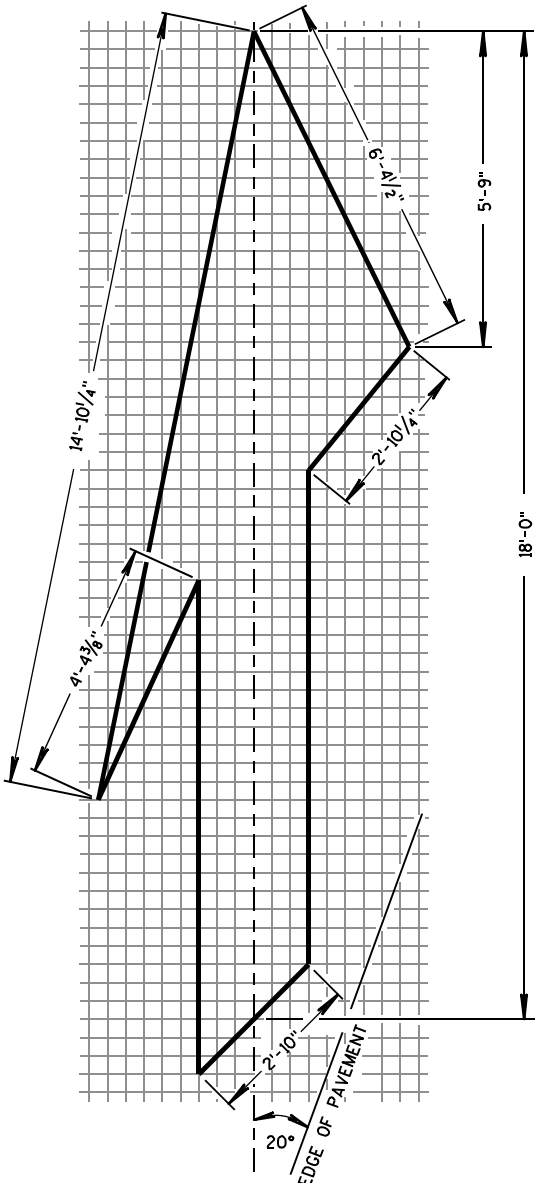


TYPE 4

GENERAL NOTES

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

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

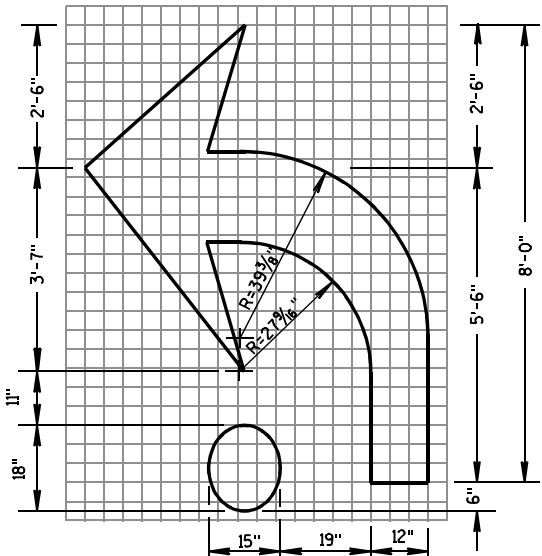


TYPE 5 LANE DROP ARROW

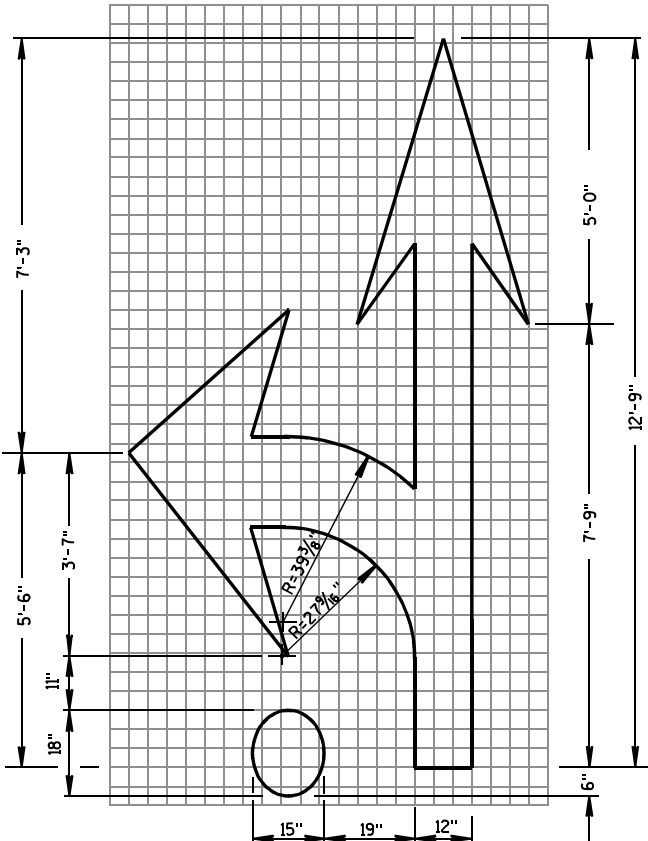
PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

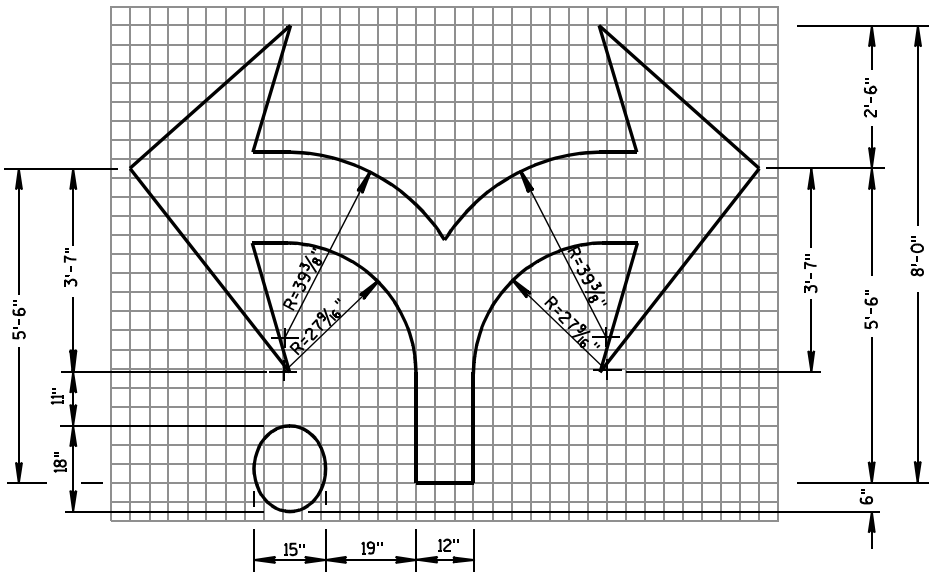
APPROVED
DATE 7/1/11
/S/ Thomas N. Nathahn
STATE TRAFFIC ENGINEER 121 SIGN
FHWA



TYPE 2R



TYPE 3R

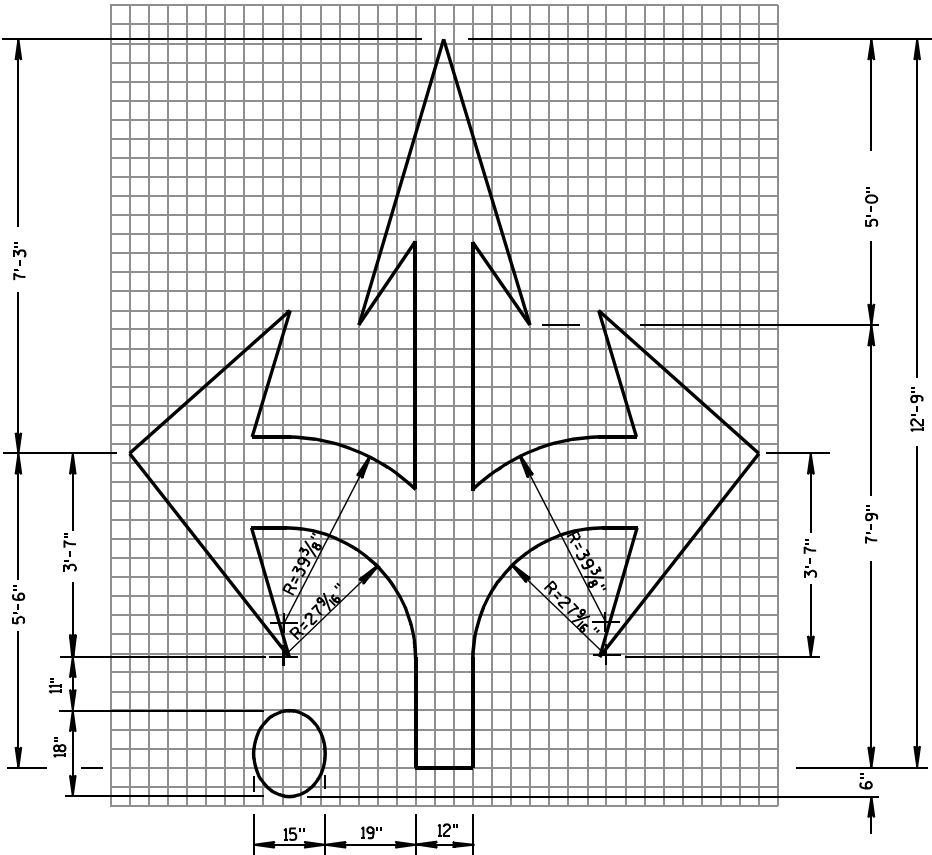


TYPE 7R

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 6R

ROUNDABOUT ARROWS

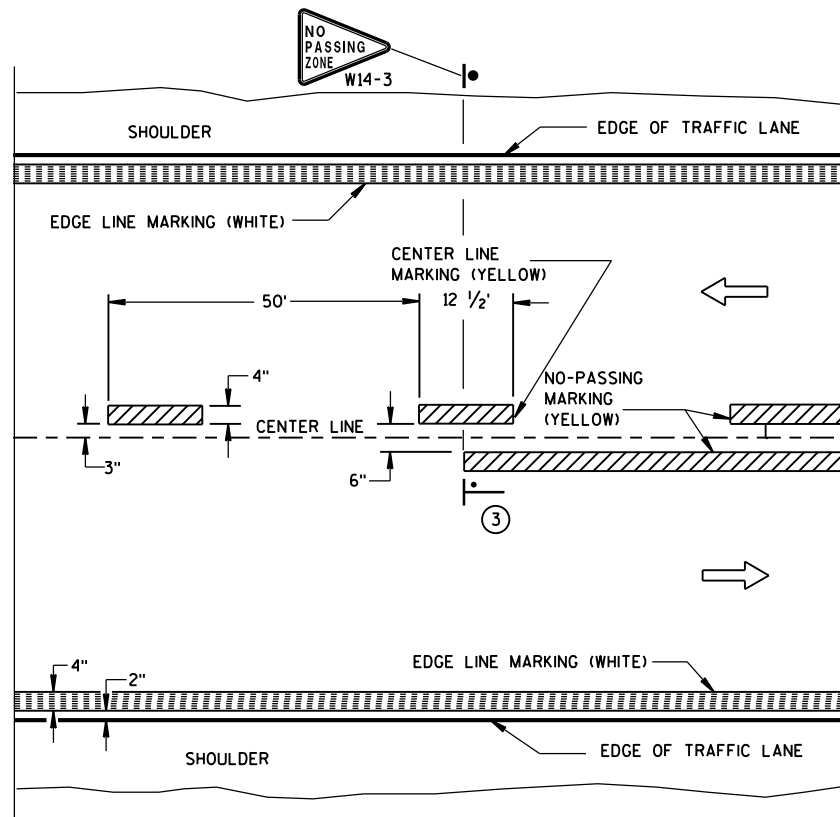
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

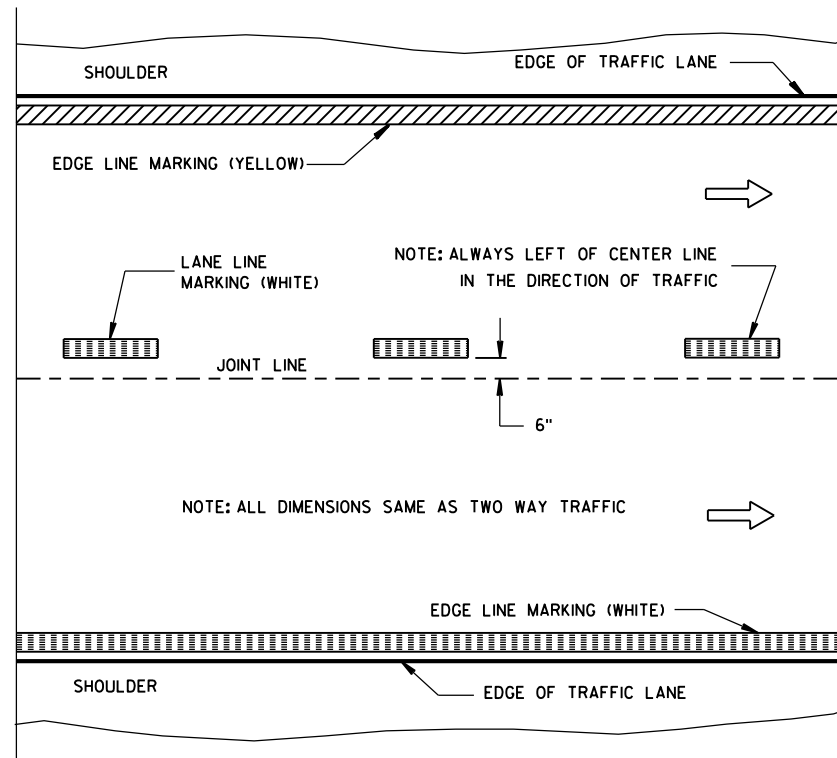
7/1/11
DATE

/S/ Thomas N. Neumann
STATE TRAFFIC ENGINE 122 SIGN

FHWA

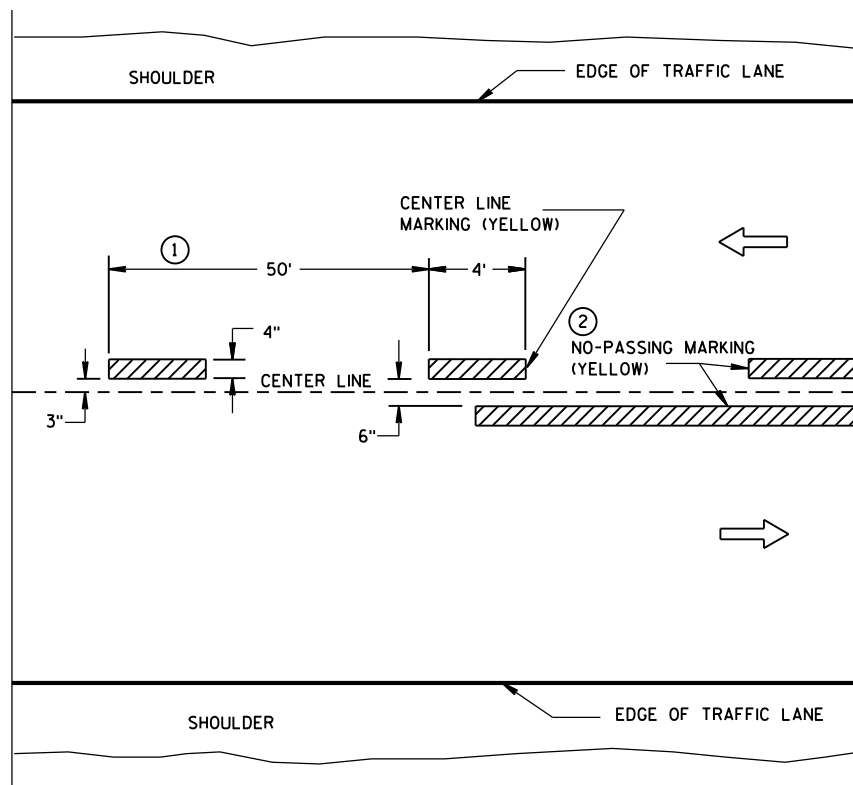


TWO WAY TRAFFIC

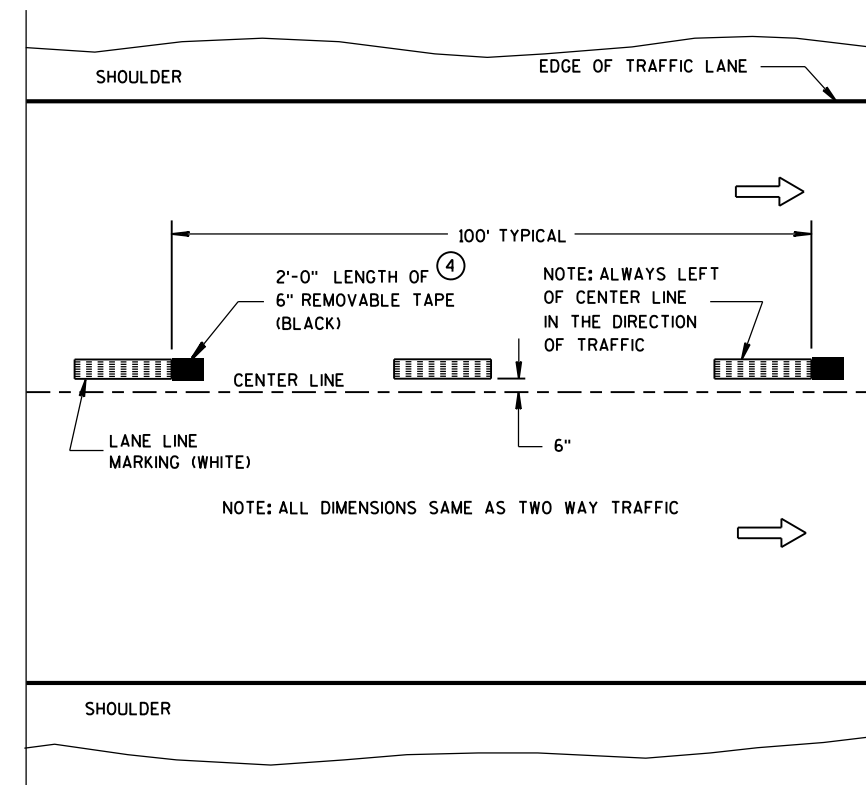


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

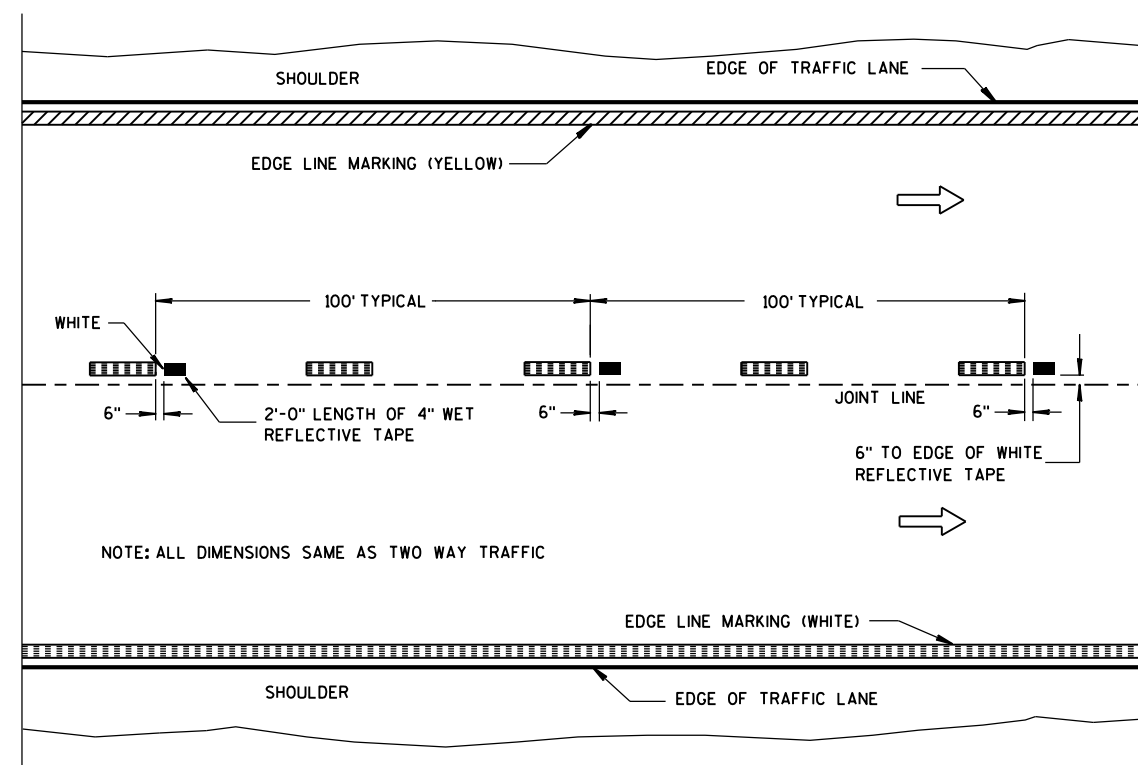
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



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

LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

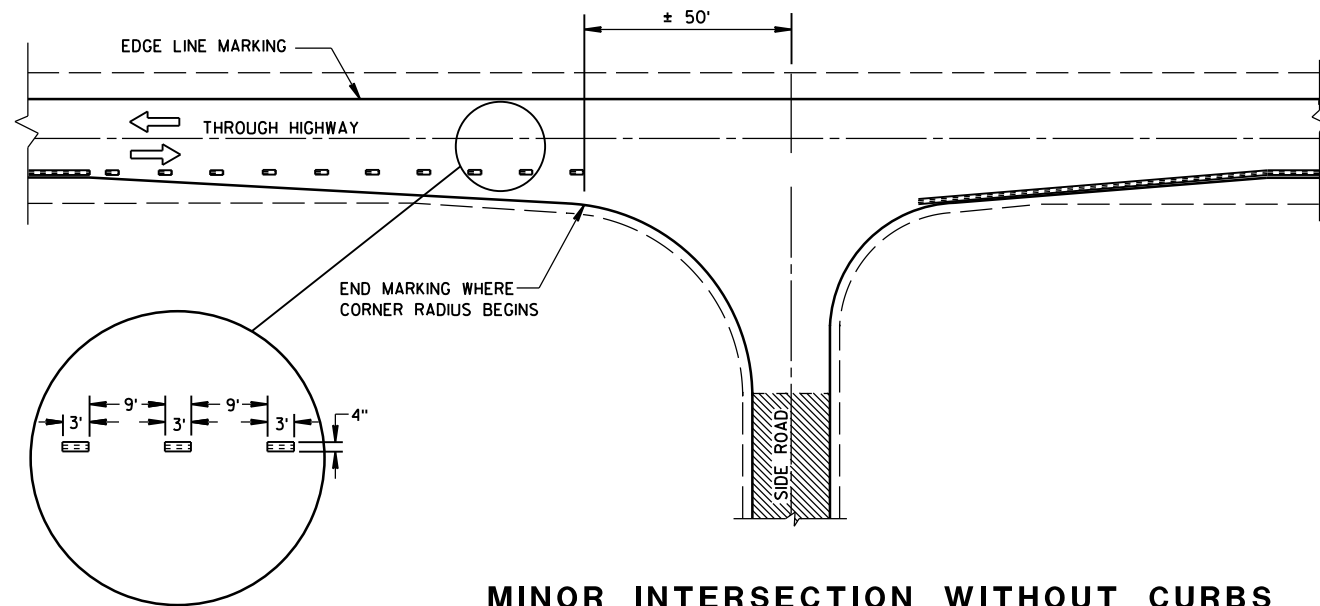
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013
DATE

FHWA

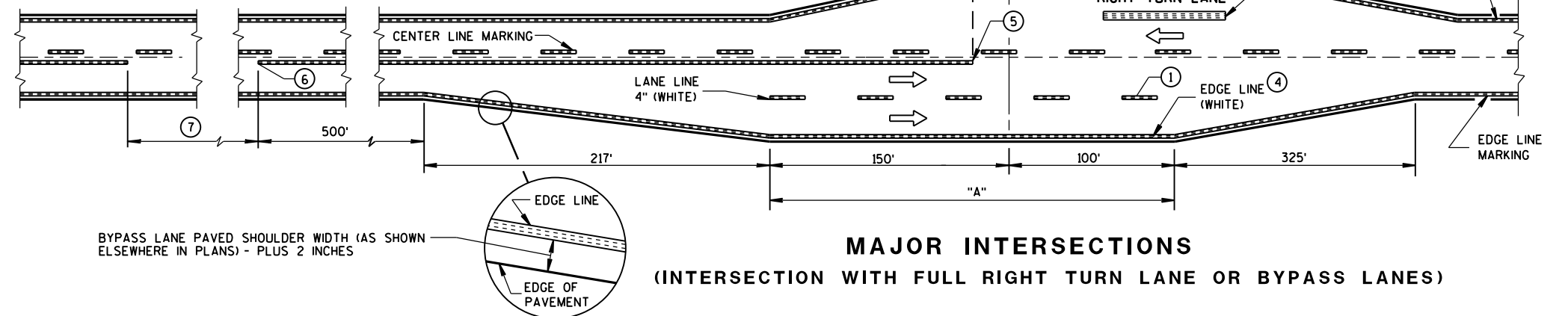
/S/ Travis Feltes
STATE TRAFFIC E 123



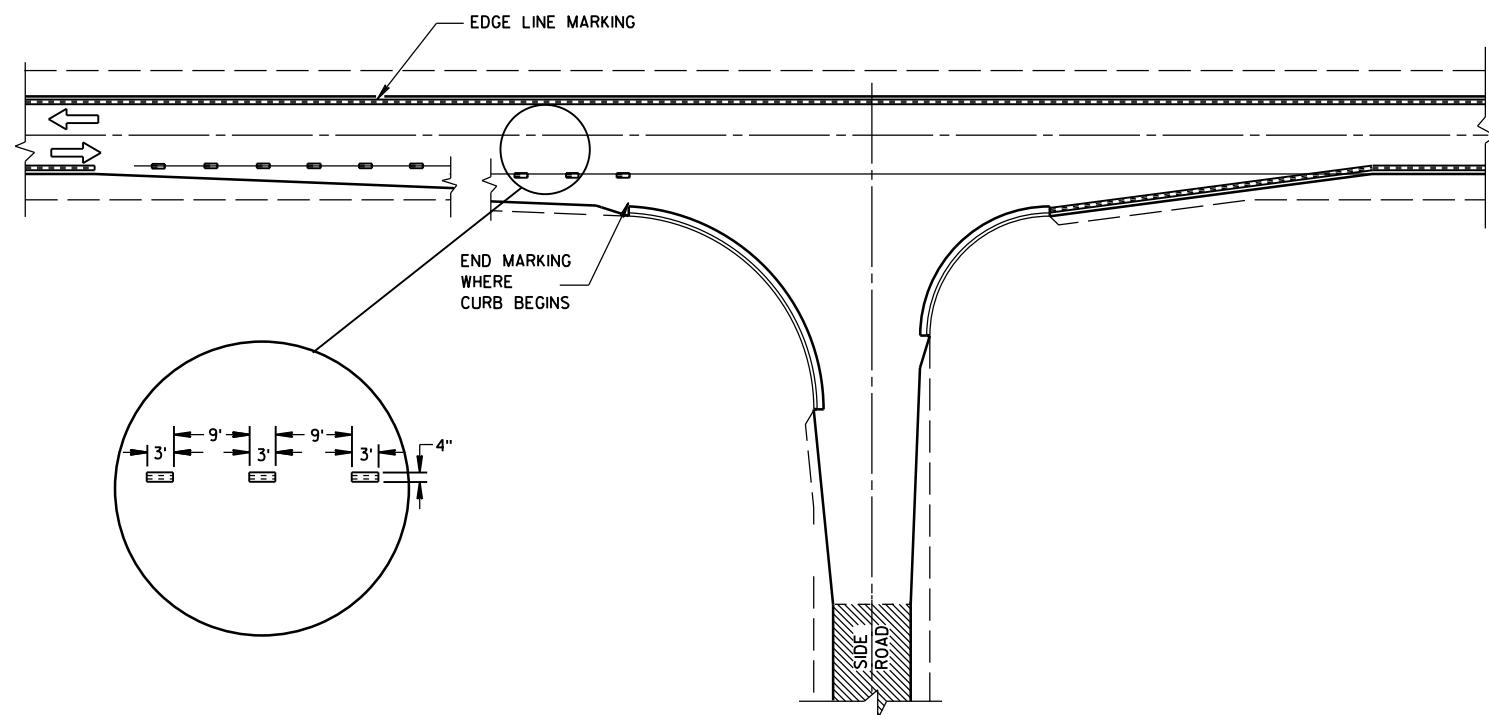
MINOR INTERSECTION WITHOUT CURBS

⑦

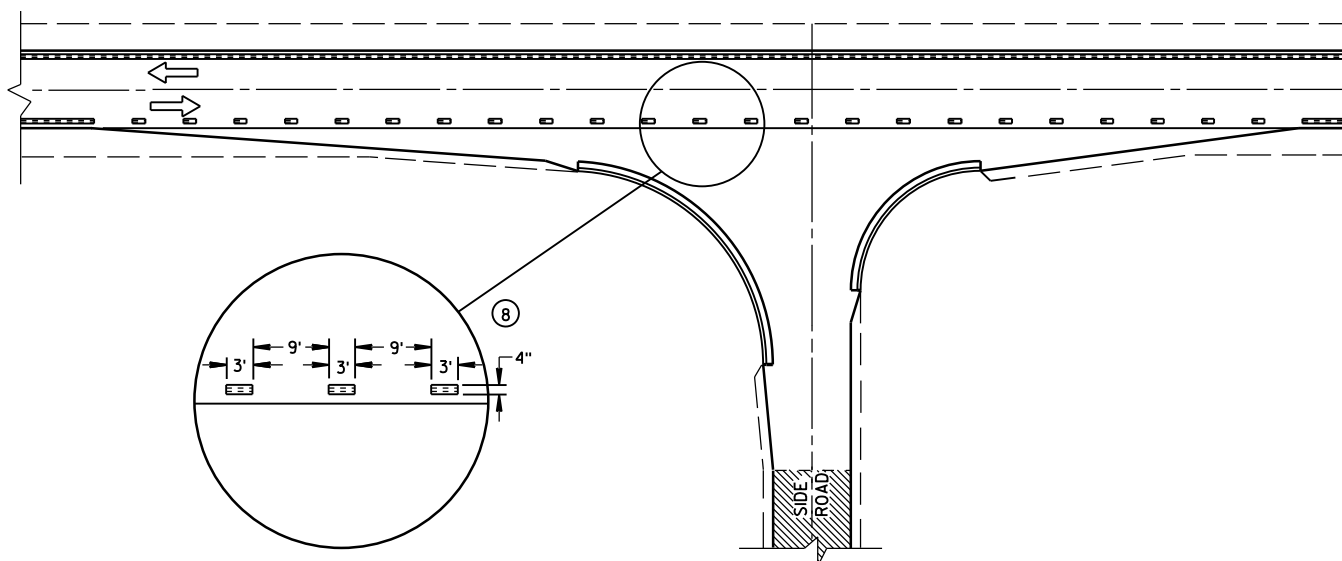
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



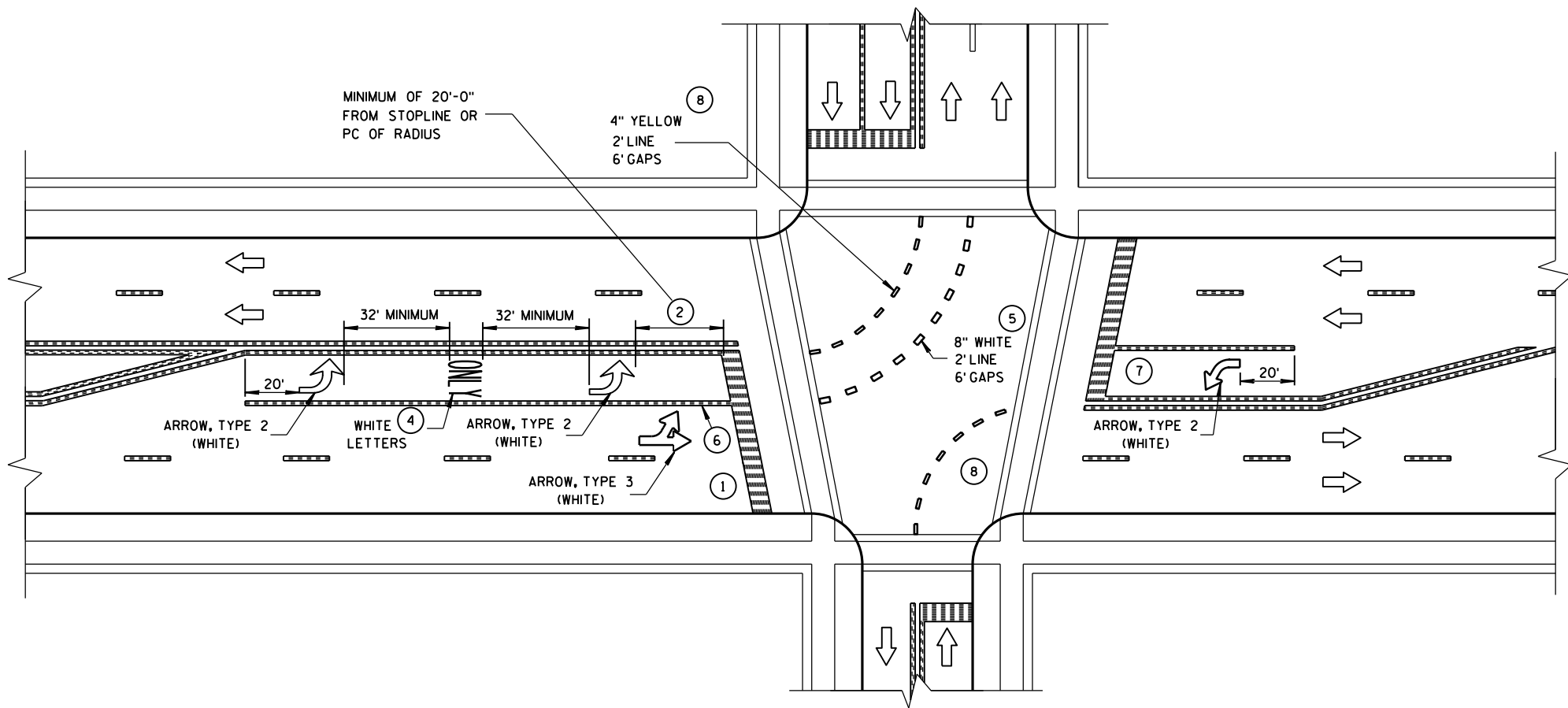
MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

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

PAVEMENT MARKING
(INTERSECTIONS)

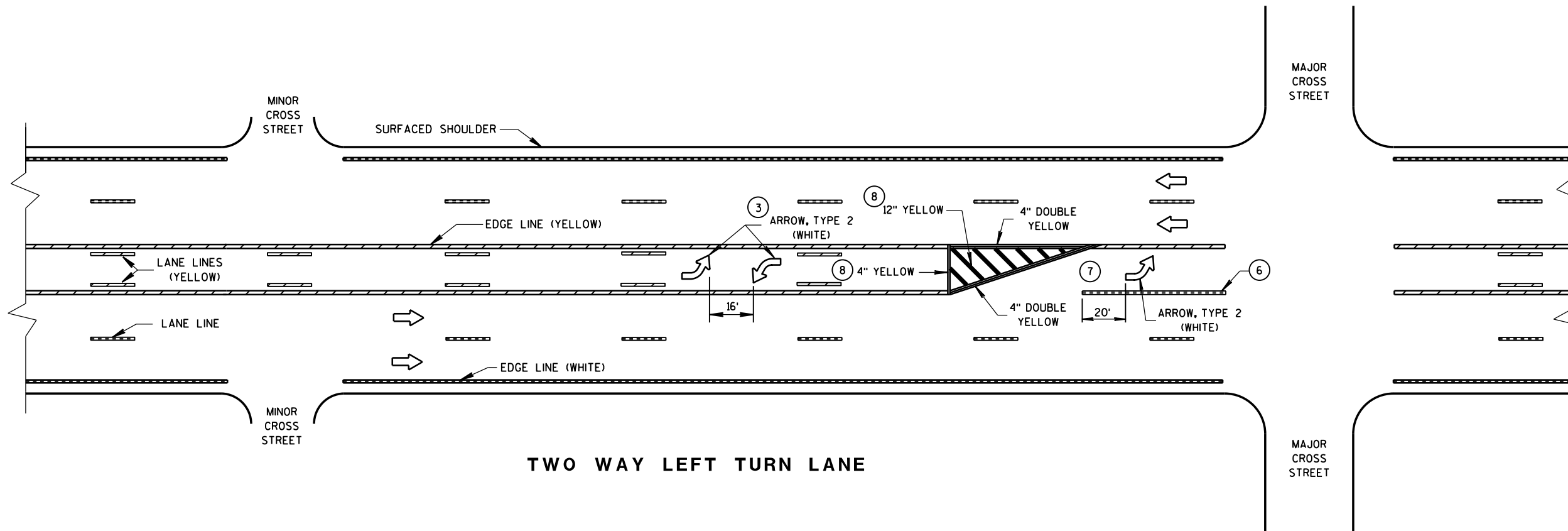
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 124



GENERAL NOTES

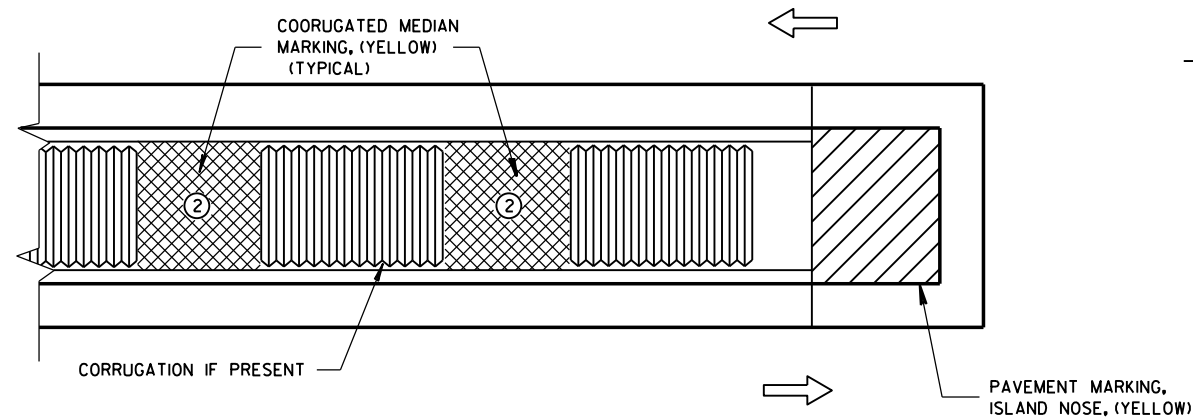
- 1 STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- 2 DISTANCE MAY BE ADJUSTED TO ACCOMMODATE SHORT LEFT TURN LANES, AS APPROVED BY THE ENGINEER.
- 3 A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
- 4 ADD EXTRA SETS OF ONE ARROW AND ONE 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

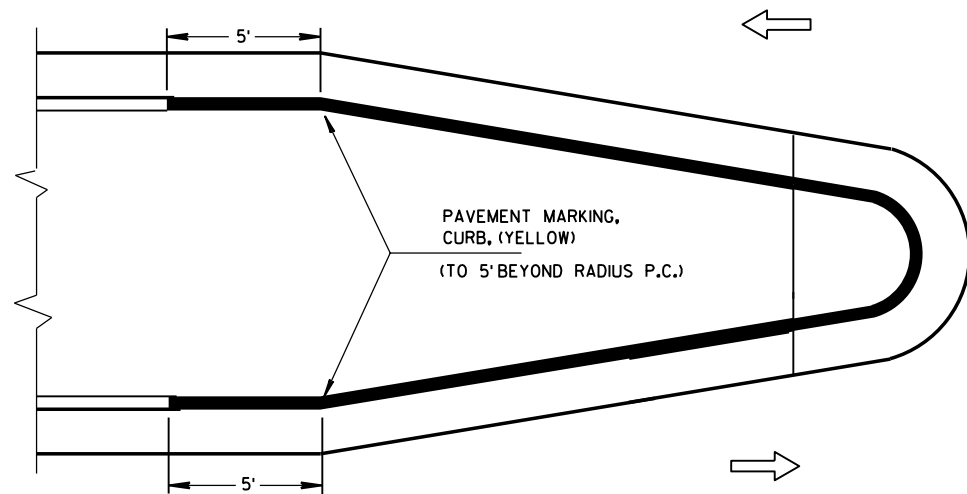


PAVEMENT MARKING
(LEFT TURN LANE)

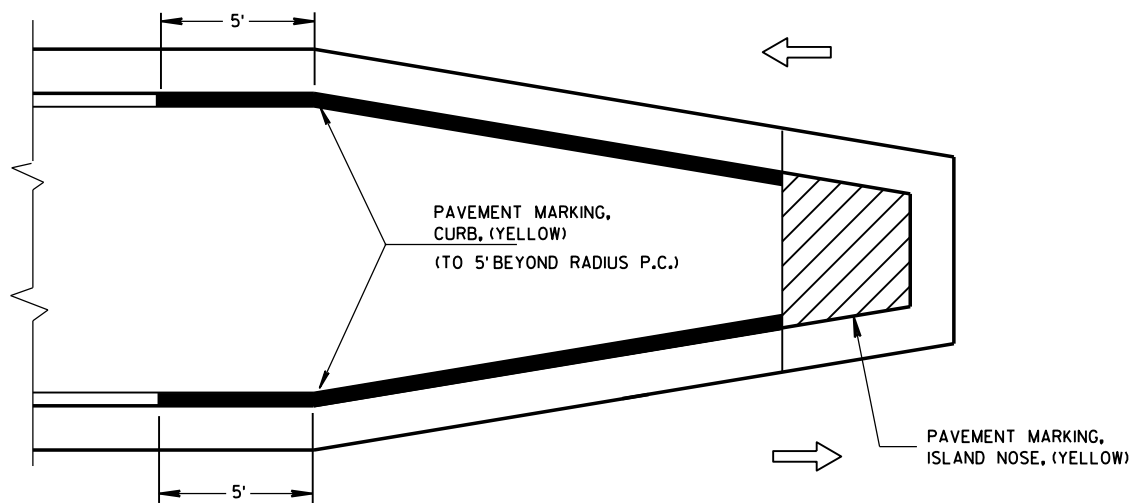
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

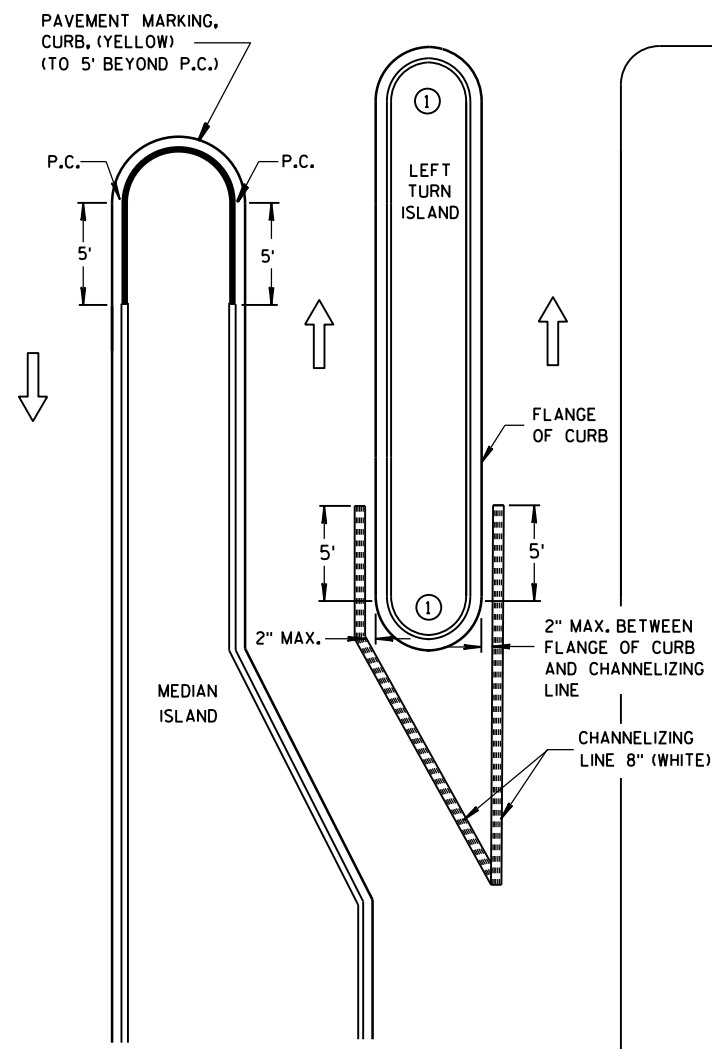


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

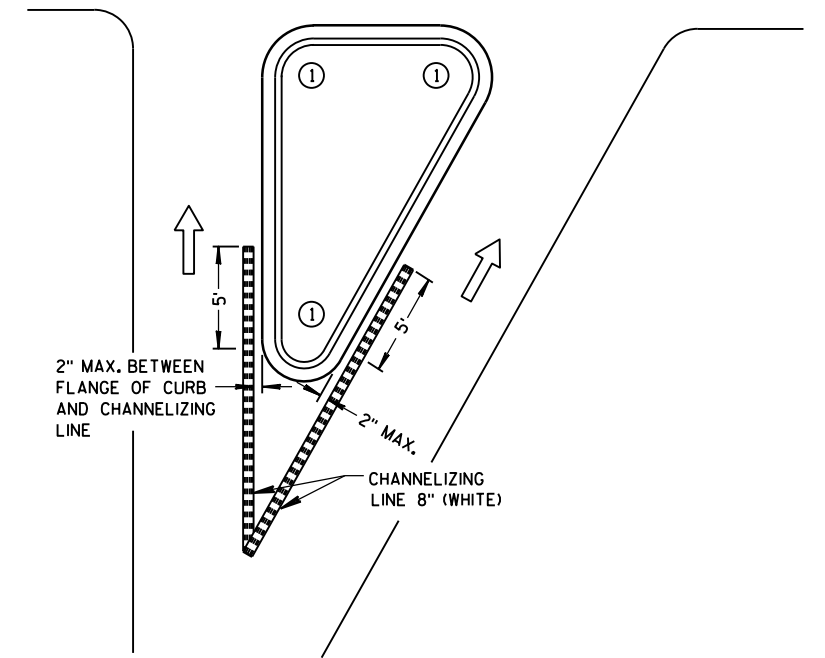
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



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 ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



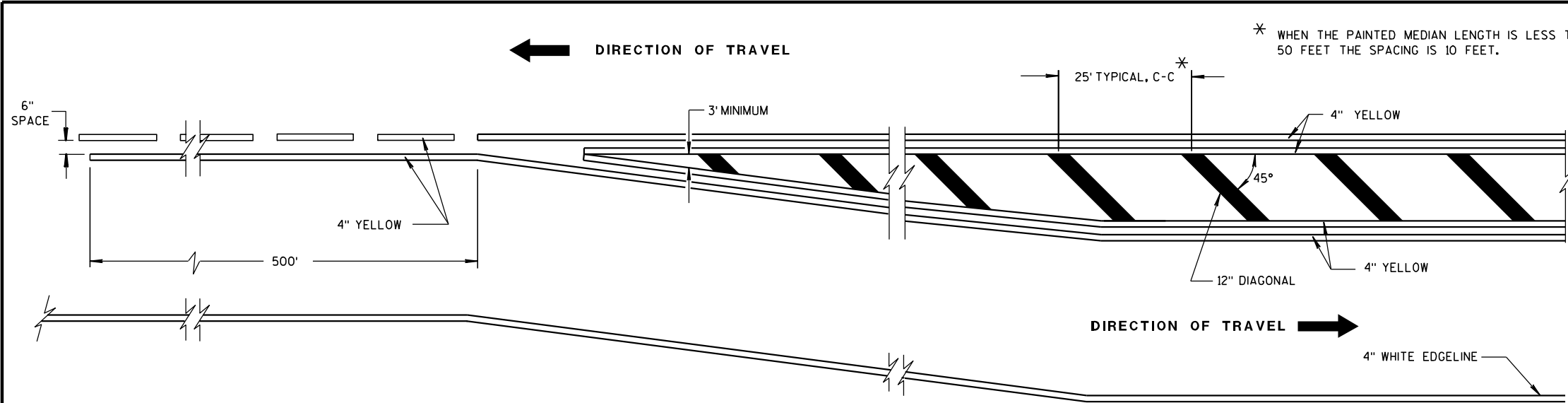
RIGHT TURN ISLAND

LEGEND

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

PAVEMENT MARKING (ISLANDS)

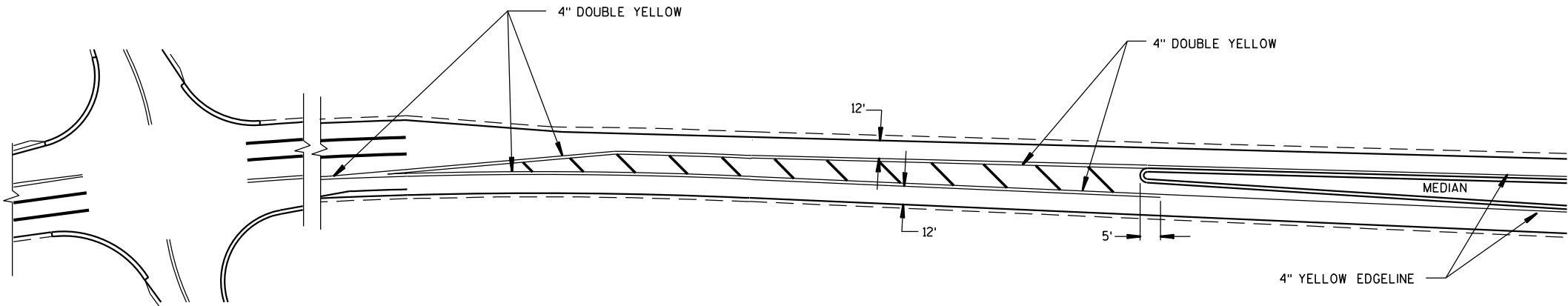
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 126



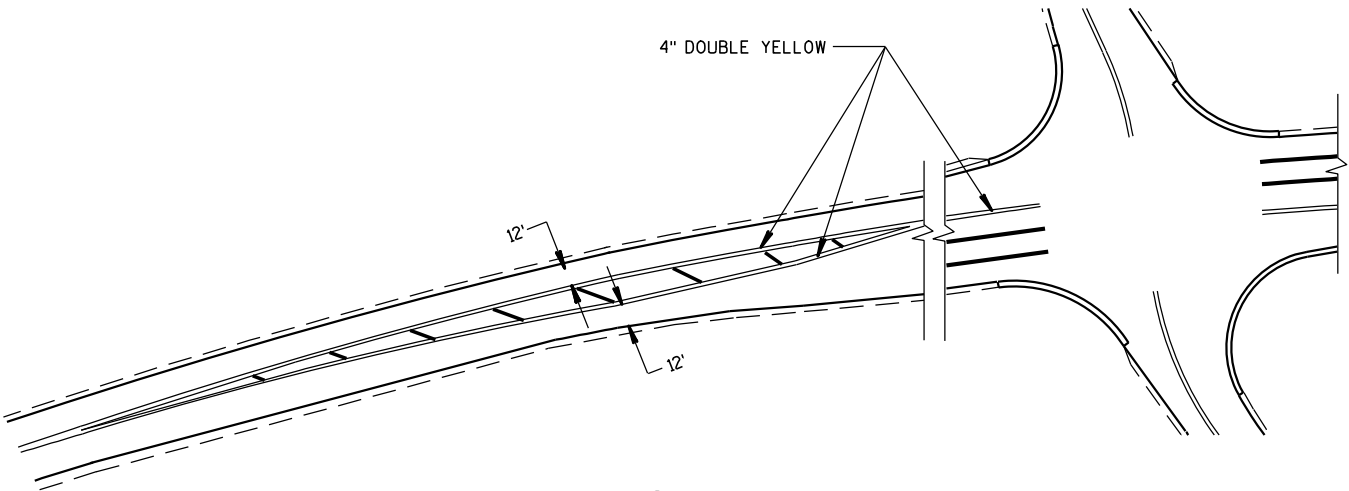
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

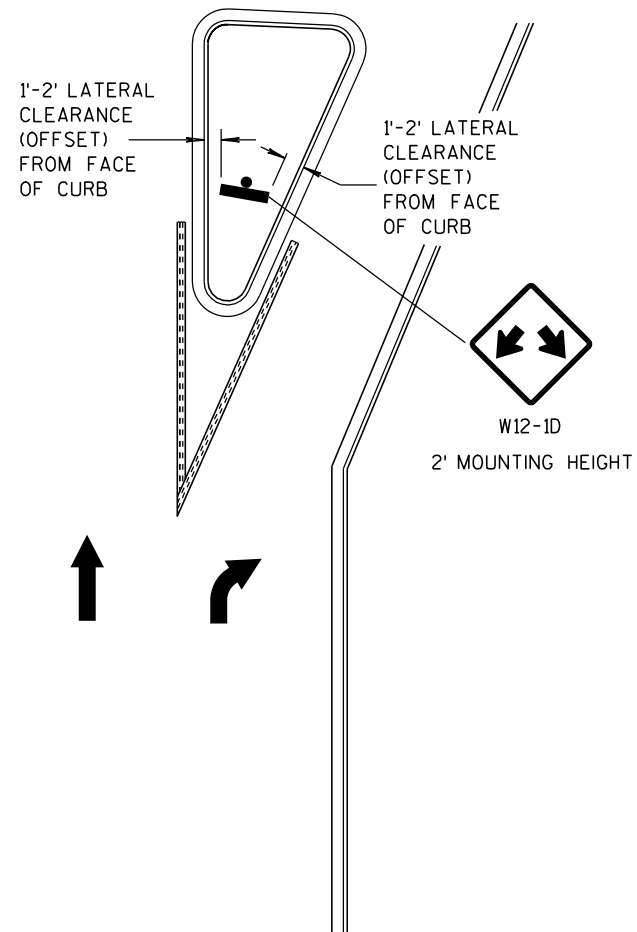


APPROACH MARKINGS FOR OTHER MEDIAN TYPES

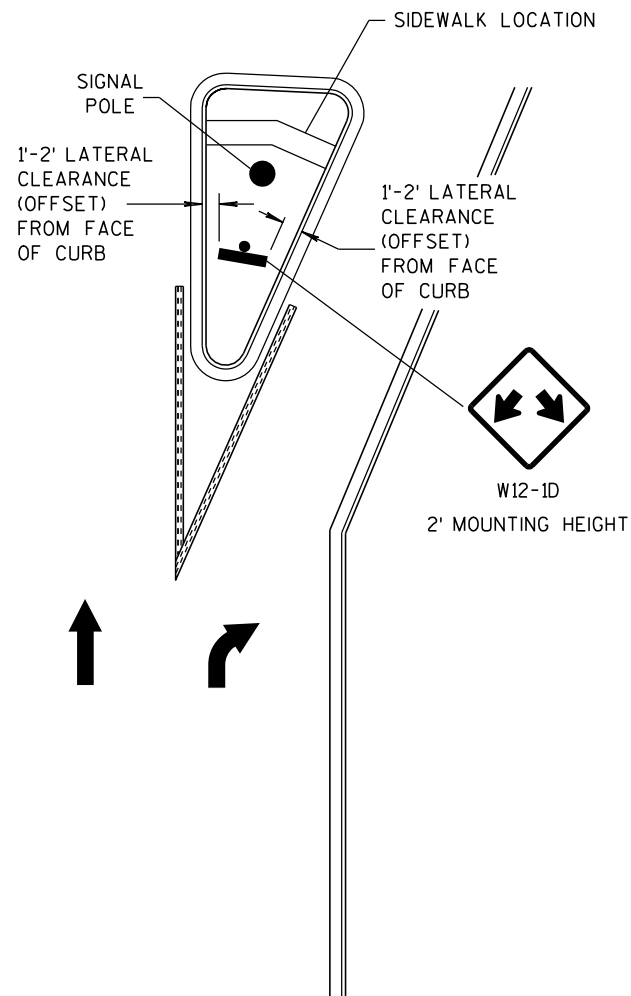
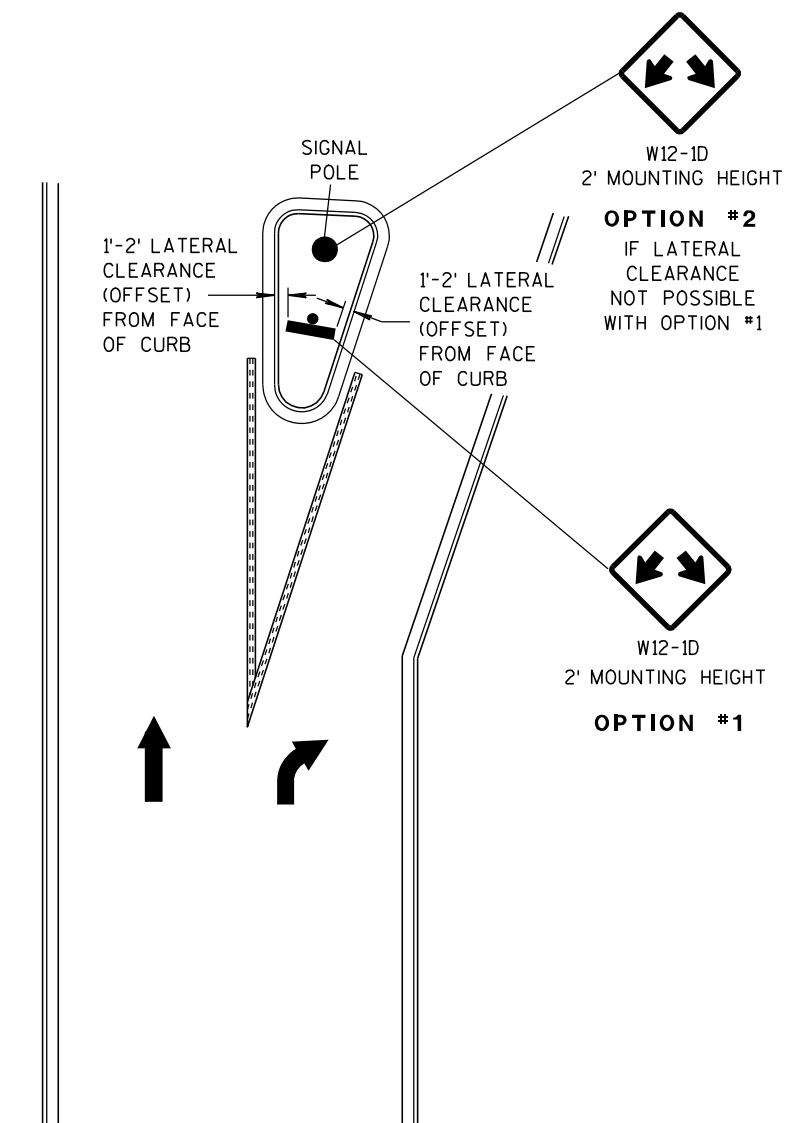


NON APPROACH MARKINGS

MEDIAN ISLAND MARKING			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED	/S/ Thomas N. Nothohm		
2-5-09	DATE	STATE TRAFFIC ENGINEE 127	IGN
FHWA			



LARGE RIGHT TURN ISLAND

LARGE RIGHT TURN ISLAND
WITH SIGNAL POLE

SMALL RIGHT TURN ISLAND

GENERAL NOTE

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

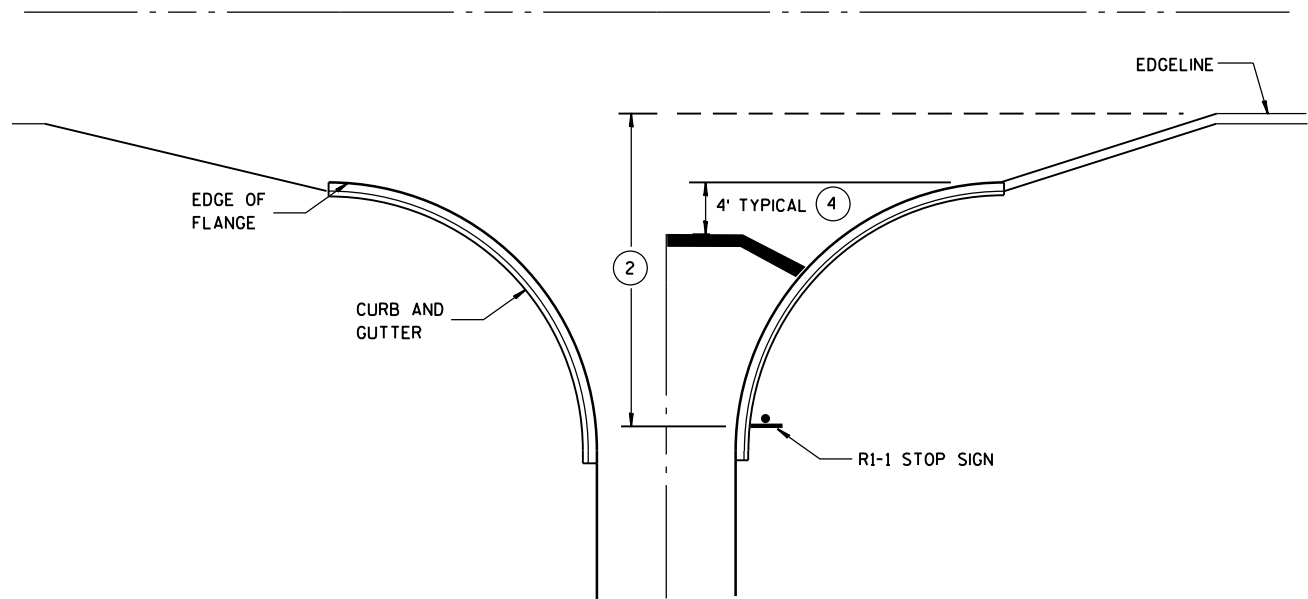
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

DOUBLE ARROW WARNING SIGN PLACEMENT**DOUBLE ARROW
WARNING SIGN PLACEMENT**STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

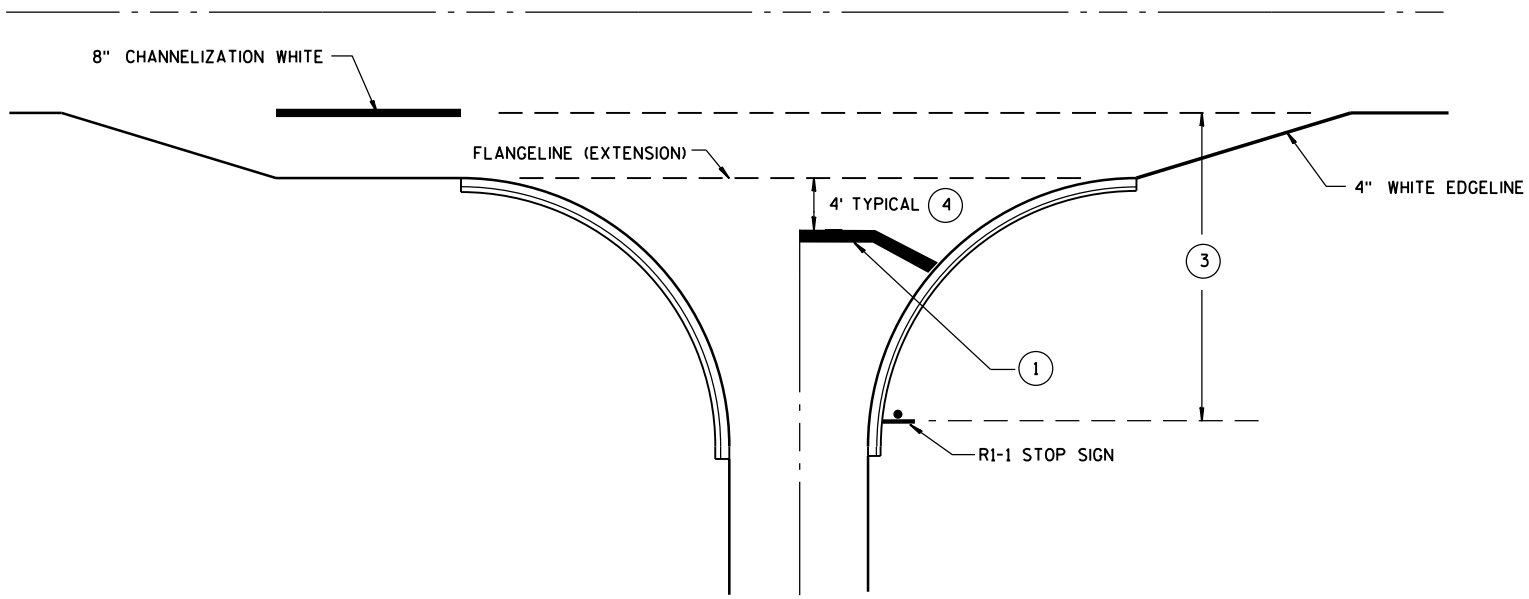
APPROVED

10-22-08
DATE/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER 128 IGN

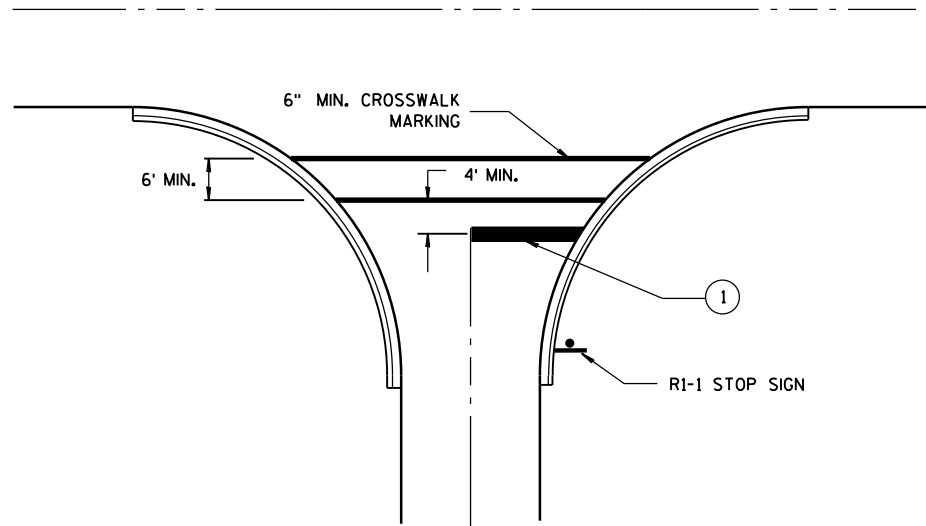
FHWA



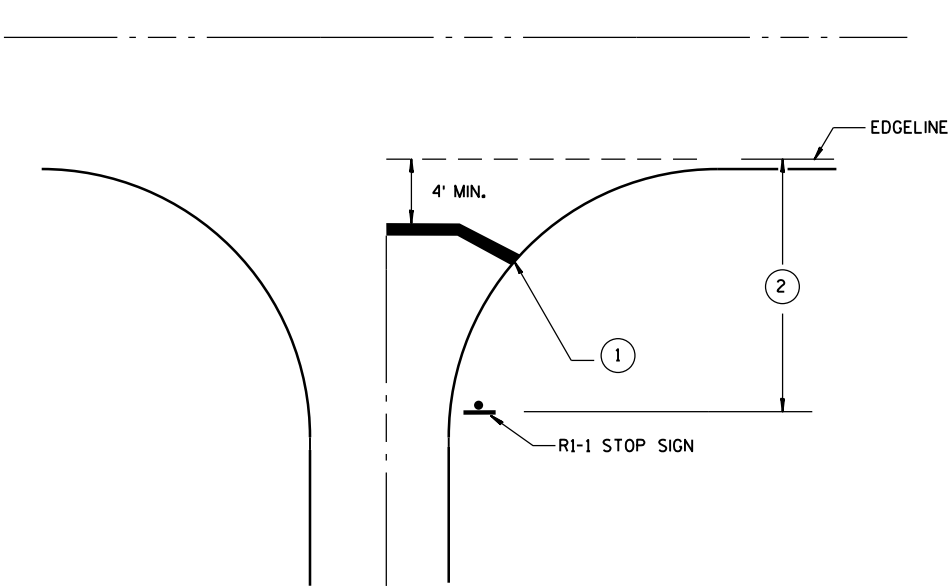
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



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

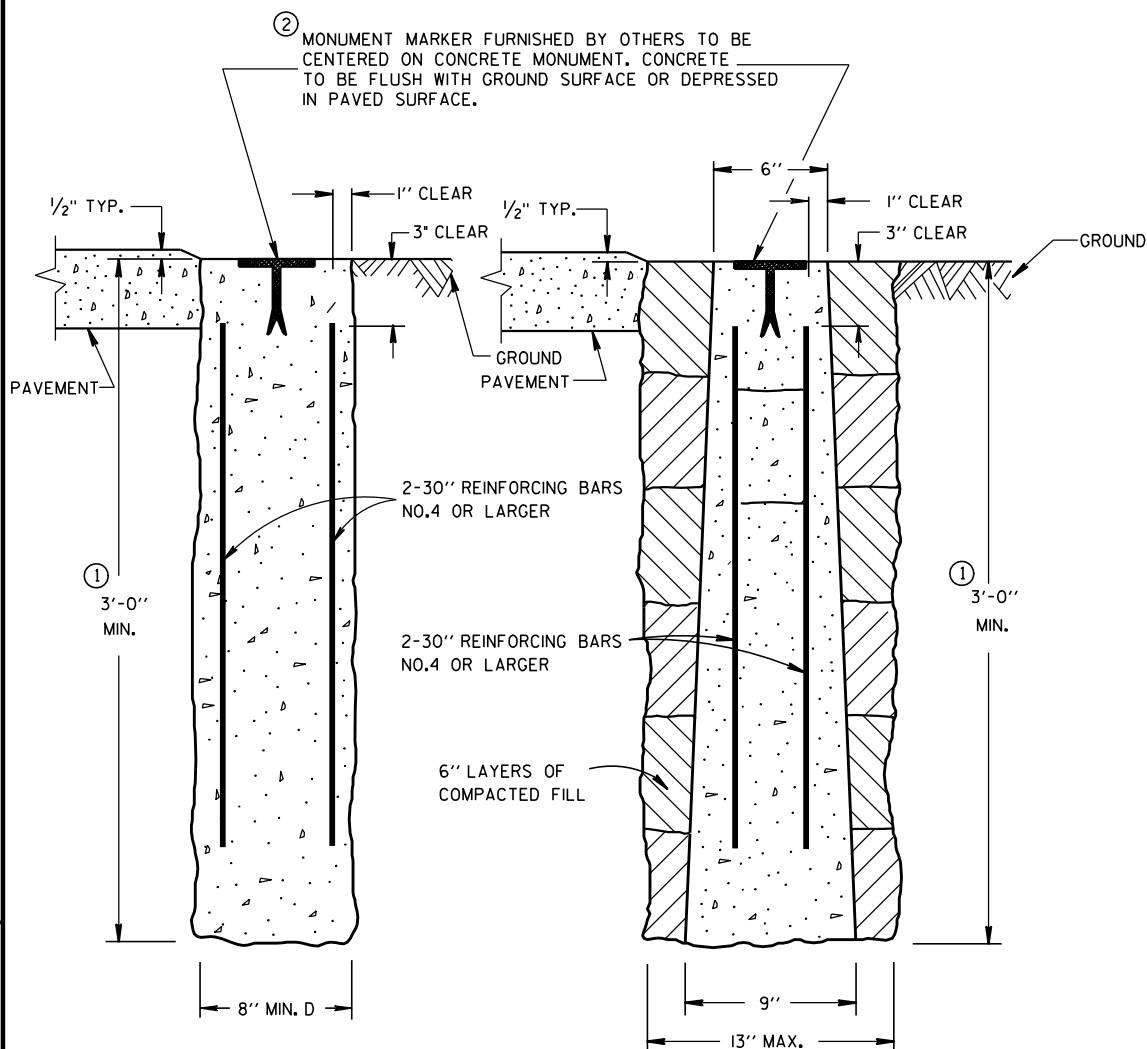
GENERAL NOTES

- 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 EDGE LINE 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
DATE 4/30/2013 /S/ Travis Feltes
STATE TRAFFIC ENGINEER 129
FHWA

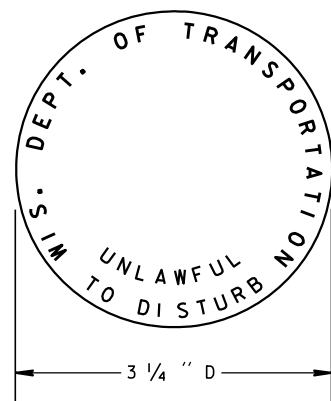


CAST-IN-PLACE

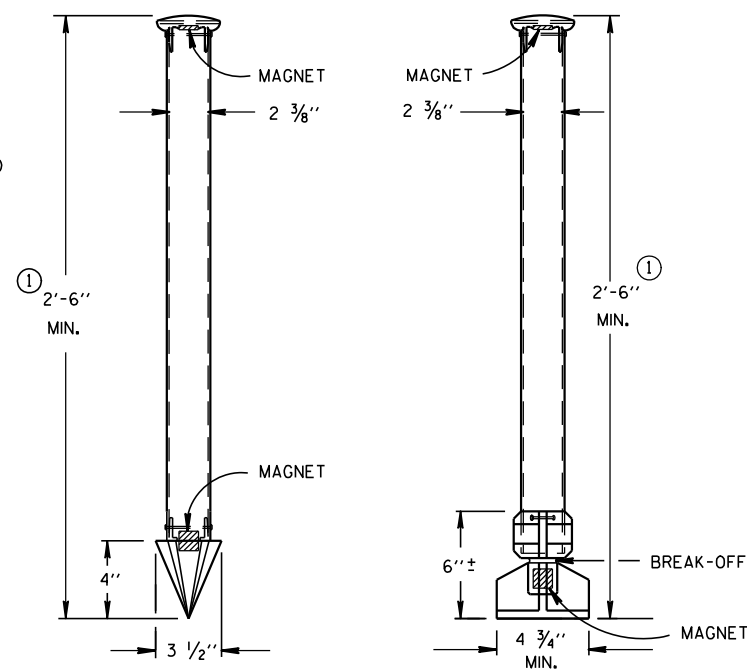
PRECAST

CONCRETE MONUMENTS

TYPE A



② WIS DOT MONUMENT MARKER LOGO
FOR TYPES "A", "C" & "D"



TYPE C

TYPE D

DRIVE-IN MONUMENT

BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

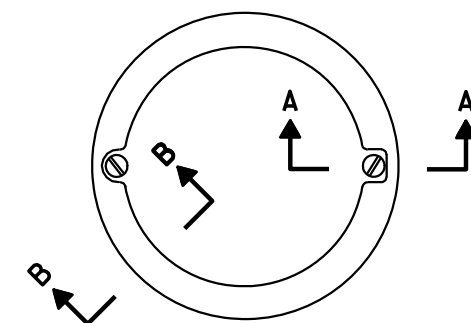
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

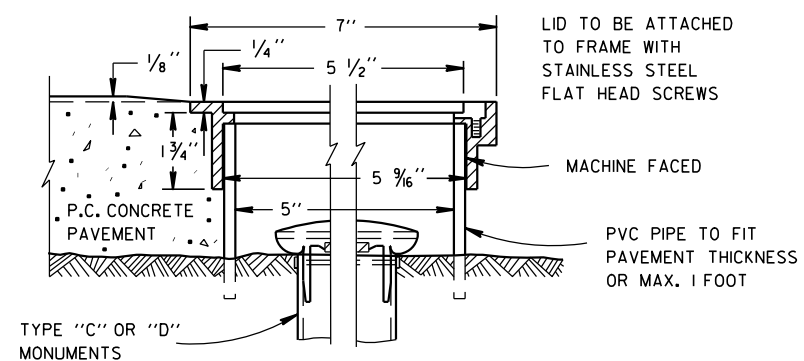
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

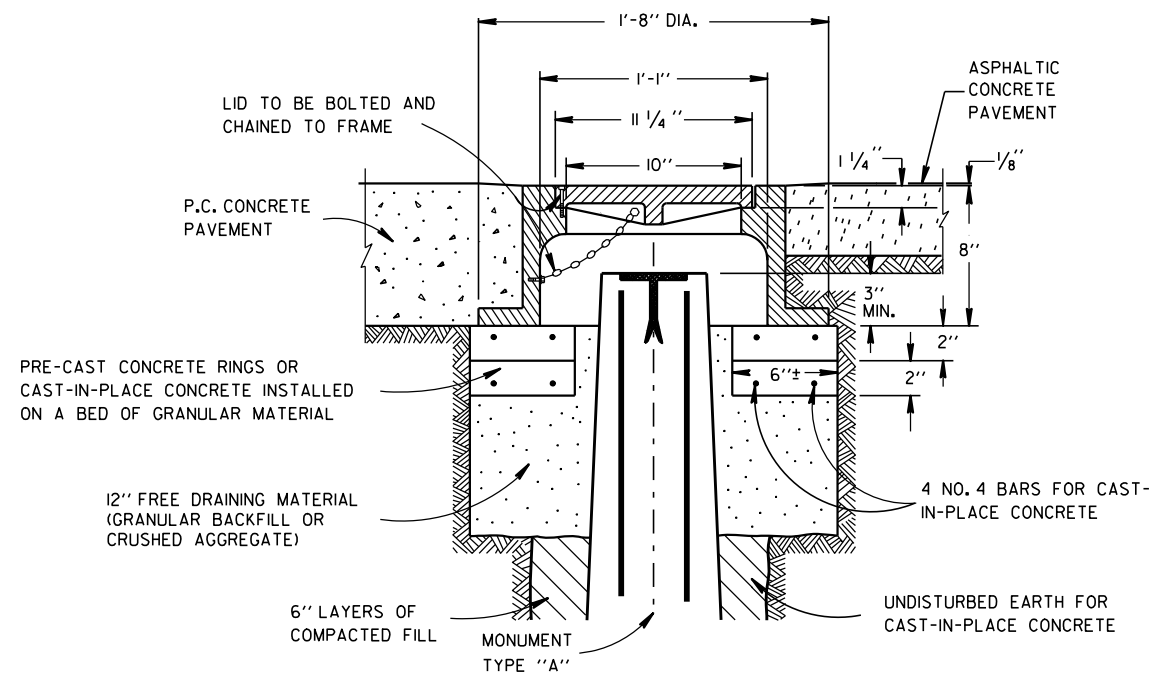
② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW

SECTION B-B SECTION A-A
ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)

LANDMARK REFERENCE
MONUMENTS AND COVERS

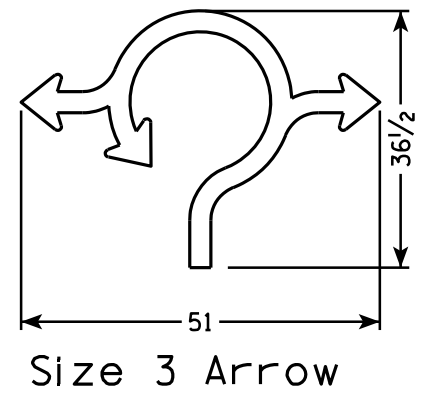
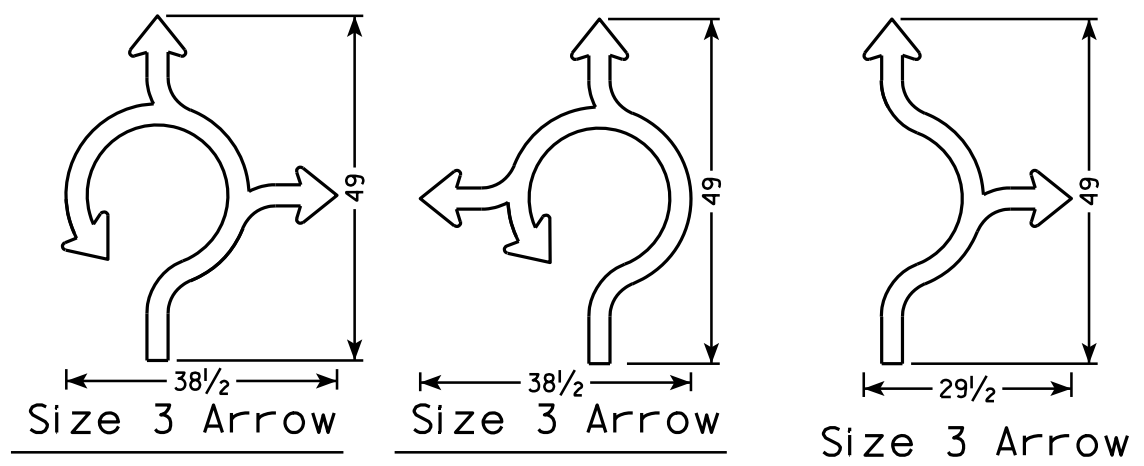
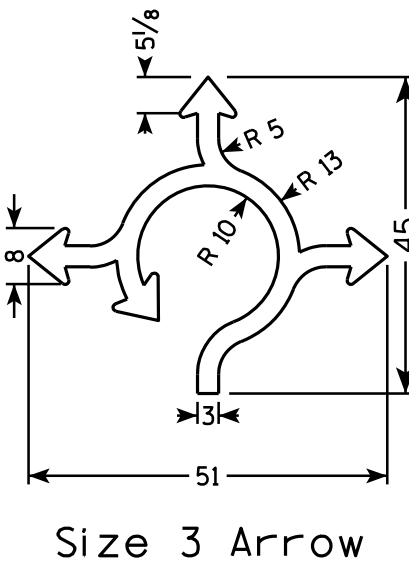
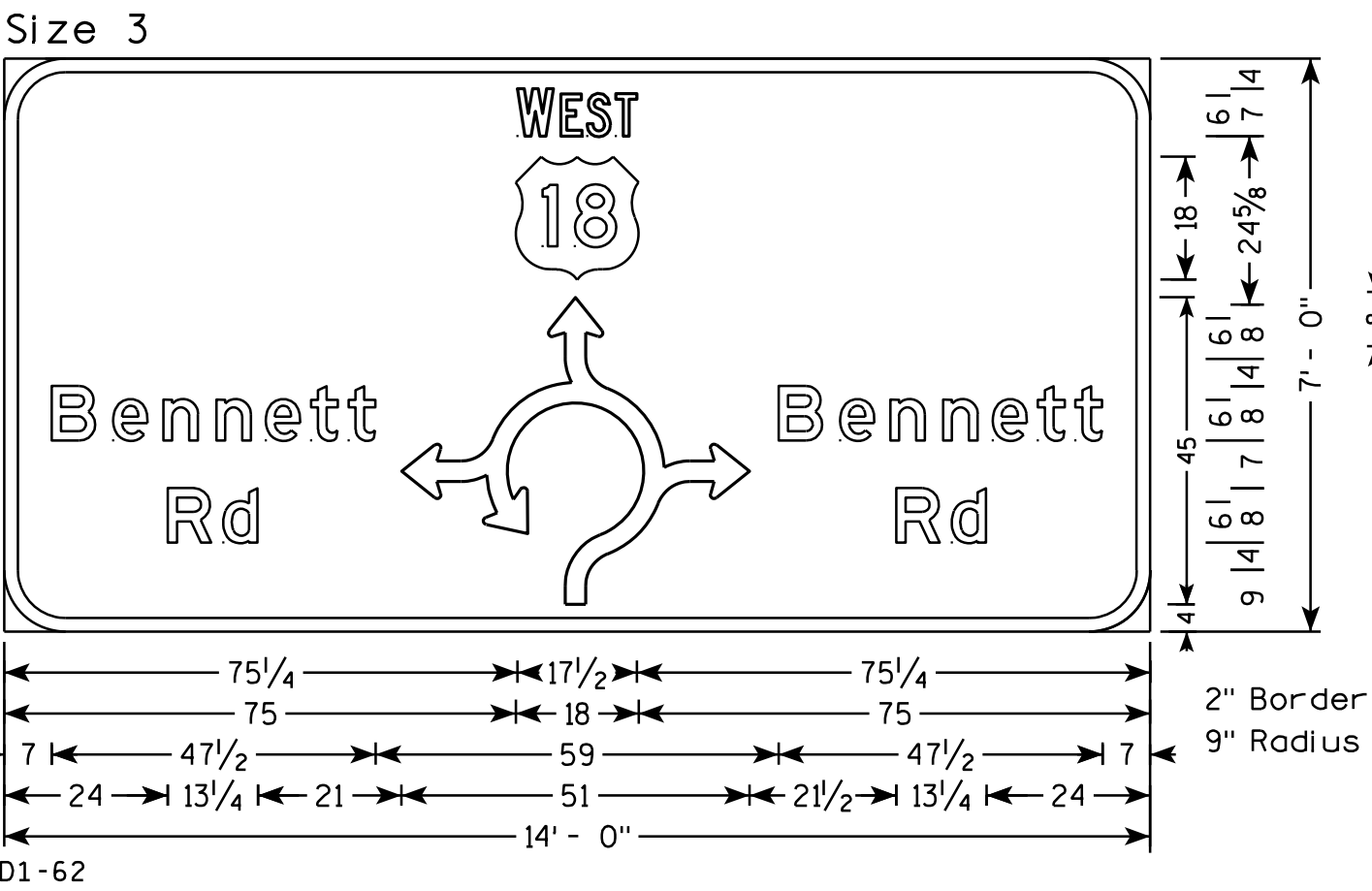
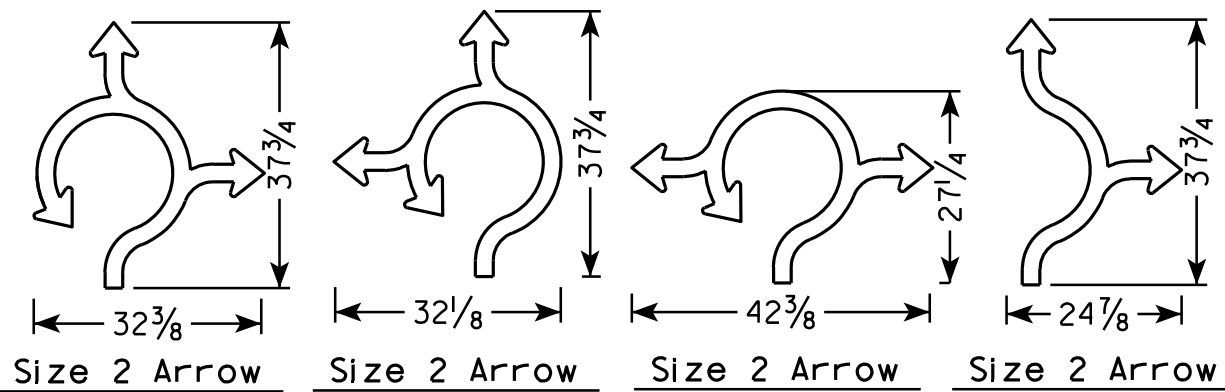
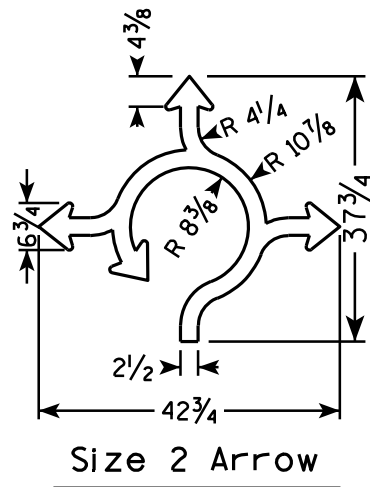
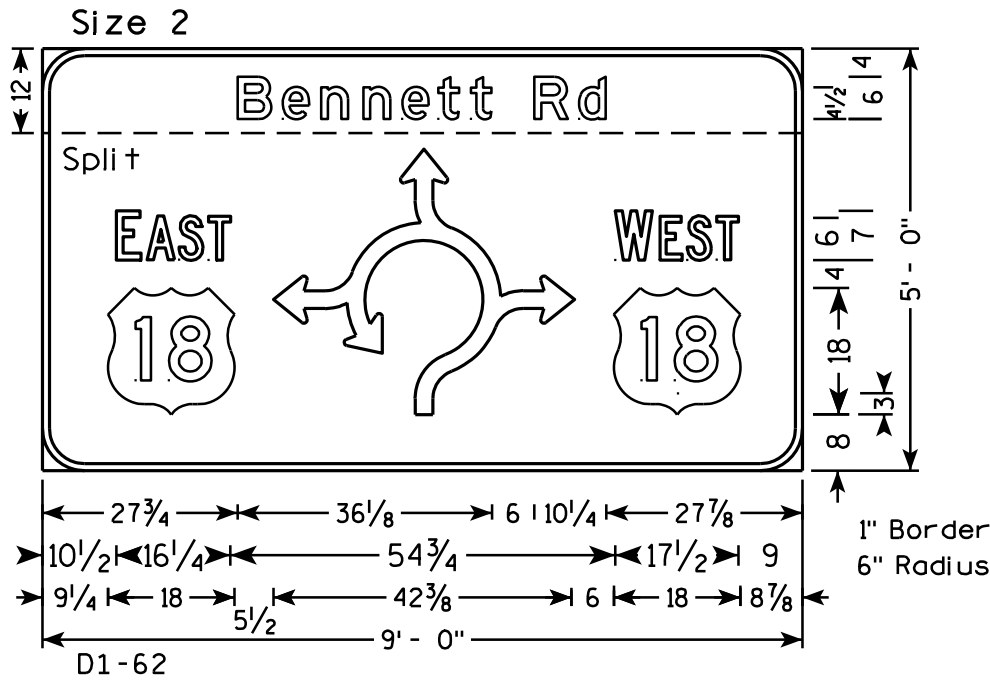
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/22/1999 /S/ Rory L. Rhin...
DATE CHIEF ROADWAY DEVELOP 130 NEER
FHWA

TYPICAL EXAMPLES

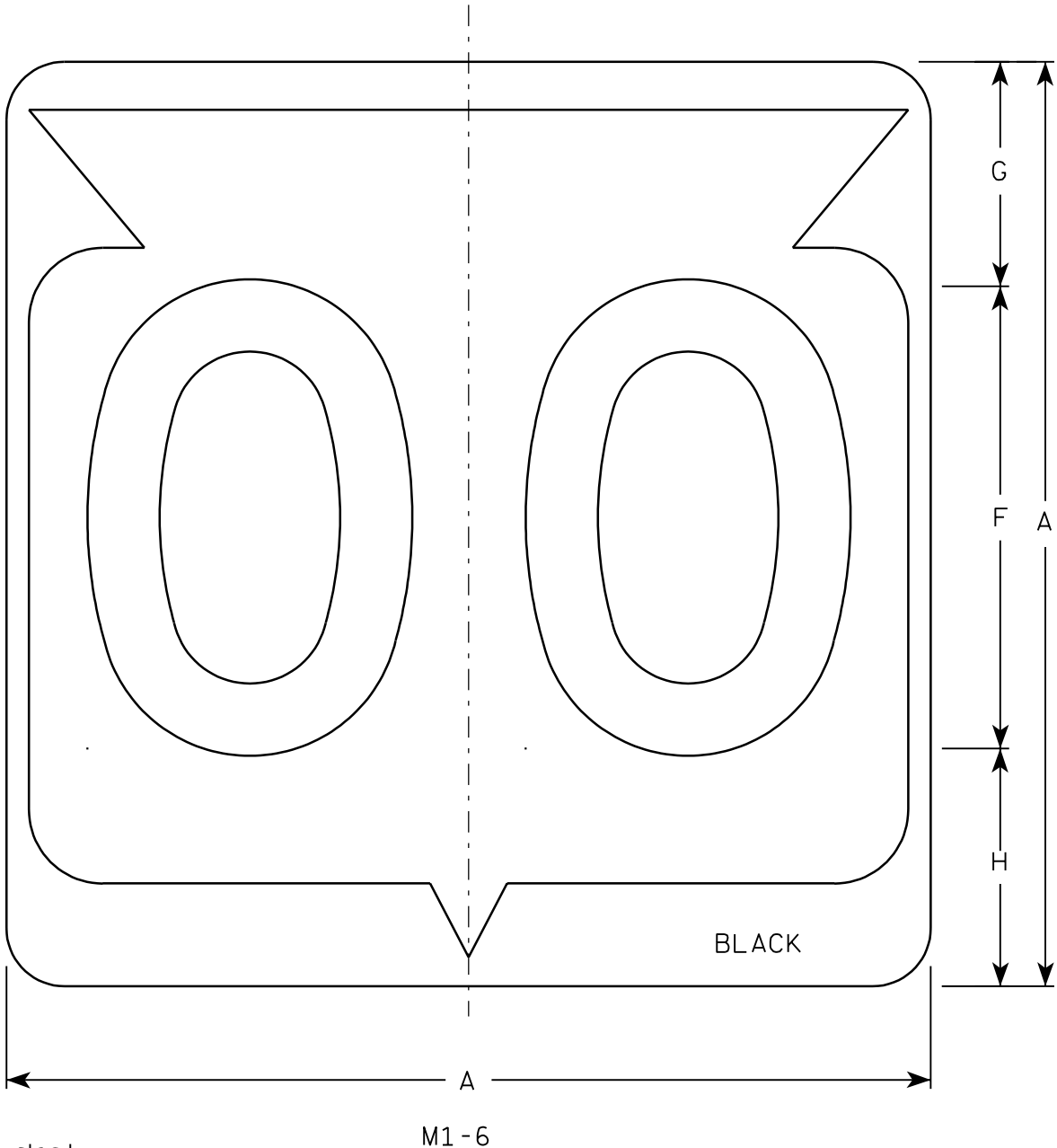
NOTES

- 1. All signs are Type II - Type H Reflective
Signs over 12' wide shall be Type I - Type SH Reflective
- 2. Color:
Background - Green
Message - White
- 3. Message Series - E
- 4. Colors for shields shall be according to the applicable route marker specifications.
- 5. Splits shown are for Type II Only
- 6. Shield size is 18" except for M1-55 size shall be 15"
- 7. Cardinals are Series C, see plate M3-1 thru M3-4 Size 2.



ROUNDBOUT GUIDE SIGNS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 3/13/13	PLATE NO. A11-12.5

7



Metric equivalent
for this sign is:

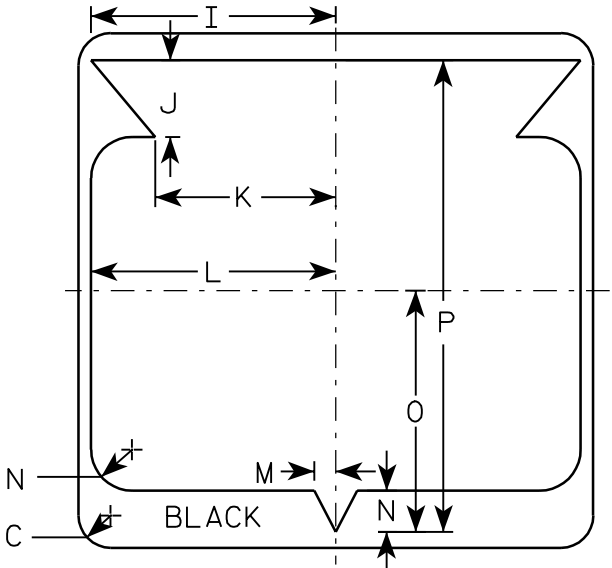
SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

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

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

NOTES

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

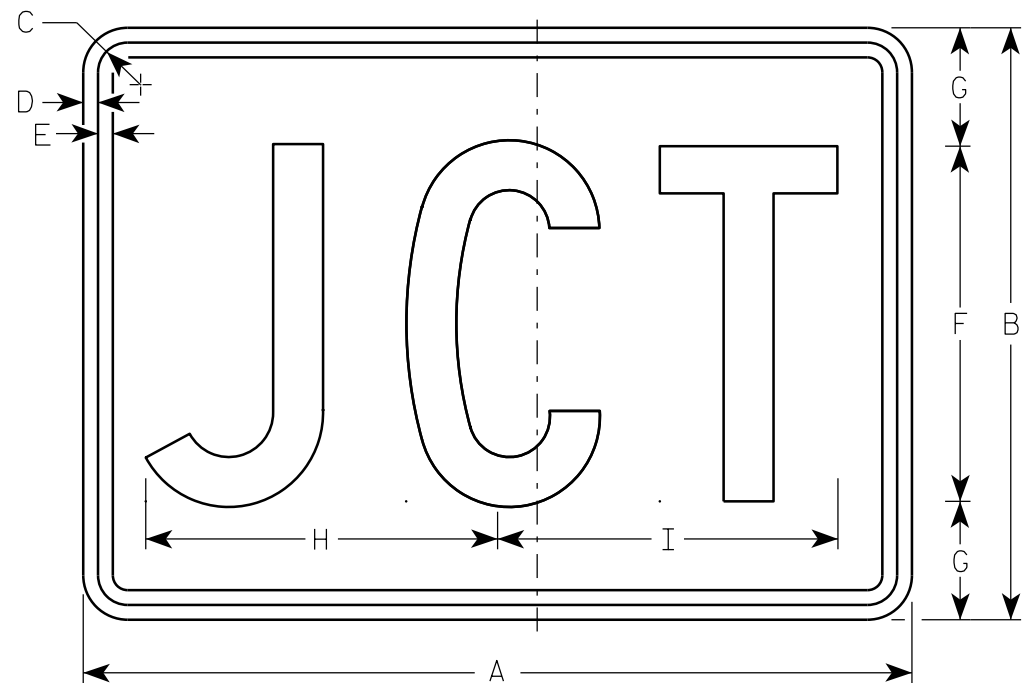


STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

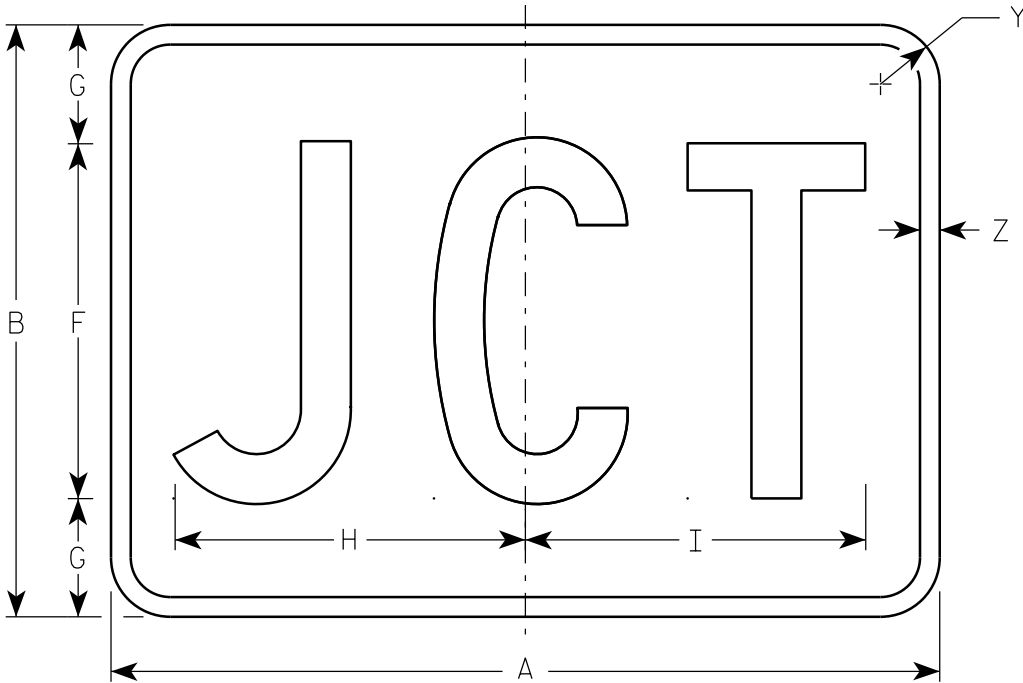
WISCONSIN DEPT OF TRANSPORTATION

APPROVED 
for State Traffic Engineer

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



M2-1
MK2-1
MM2-1
MN2-1
MR2-1



MB2-1

NOTES

- 1. Sign is Type II - Type H
- 2. Color:
 - Background - See note 5
 - Message - See note 5
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. M2-1 Background - White
Message - Black
MB2-1 Background - Blue
Message - White
MK2-1 Background - Green
Message - White
MM2-1 Background - White
Message - Green
MN2-1 Background - Brown
Message - White
MR2-1 Background - Brown
Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN

M2 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

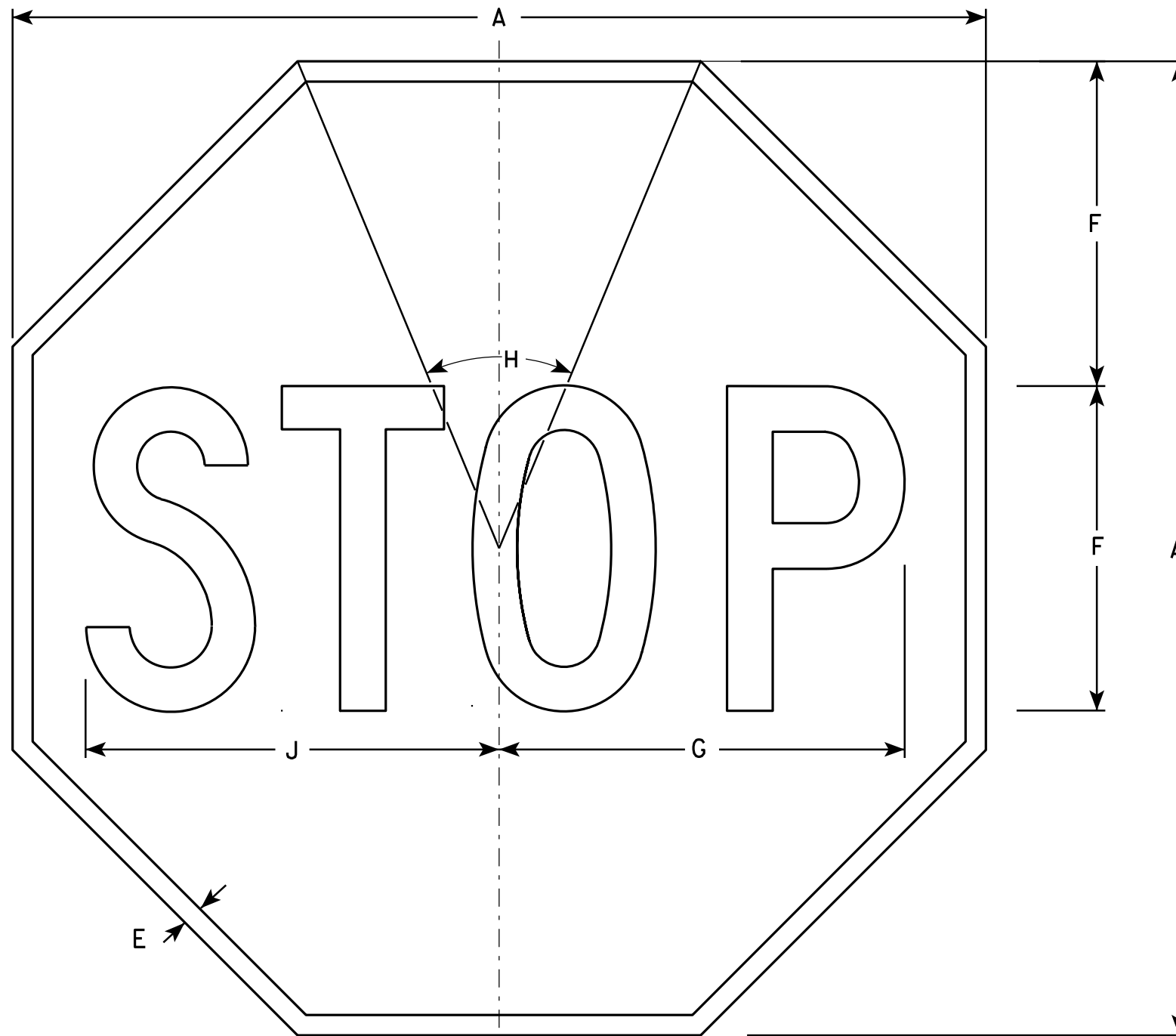
Matthew R. Rauch

For State Traffic Engineer

DATE 6/30/14

PLATE 133

'2-1.11



NOTES

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

R1-1

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

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

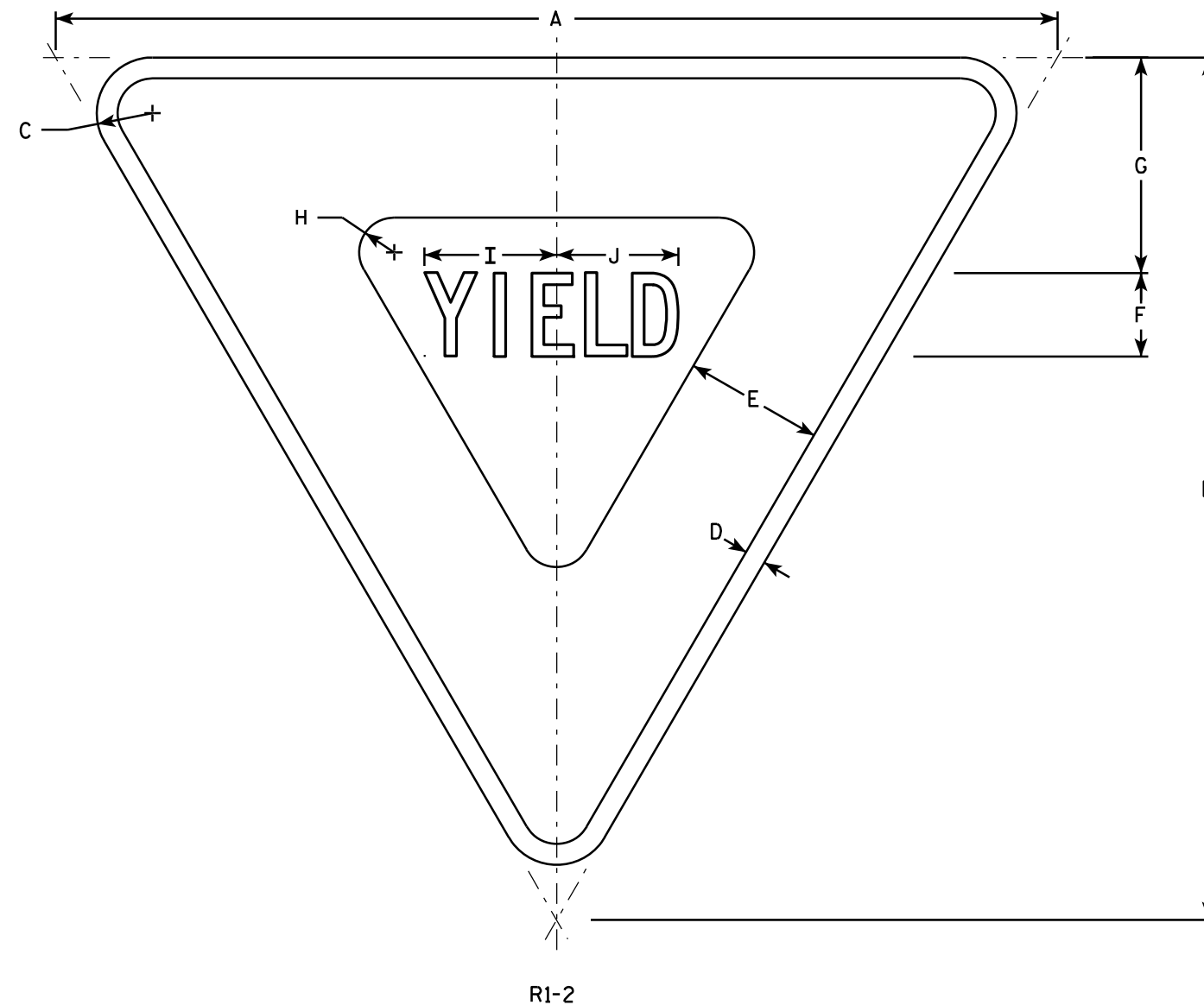
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 134

E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - See note 5
3. Message Series - 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	24	21	1 1/2	3/8	3	2	4 3/4	7/8	3 1/4	3																	1.75
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

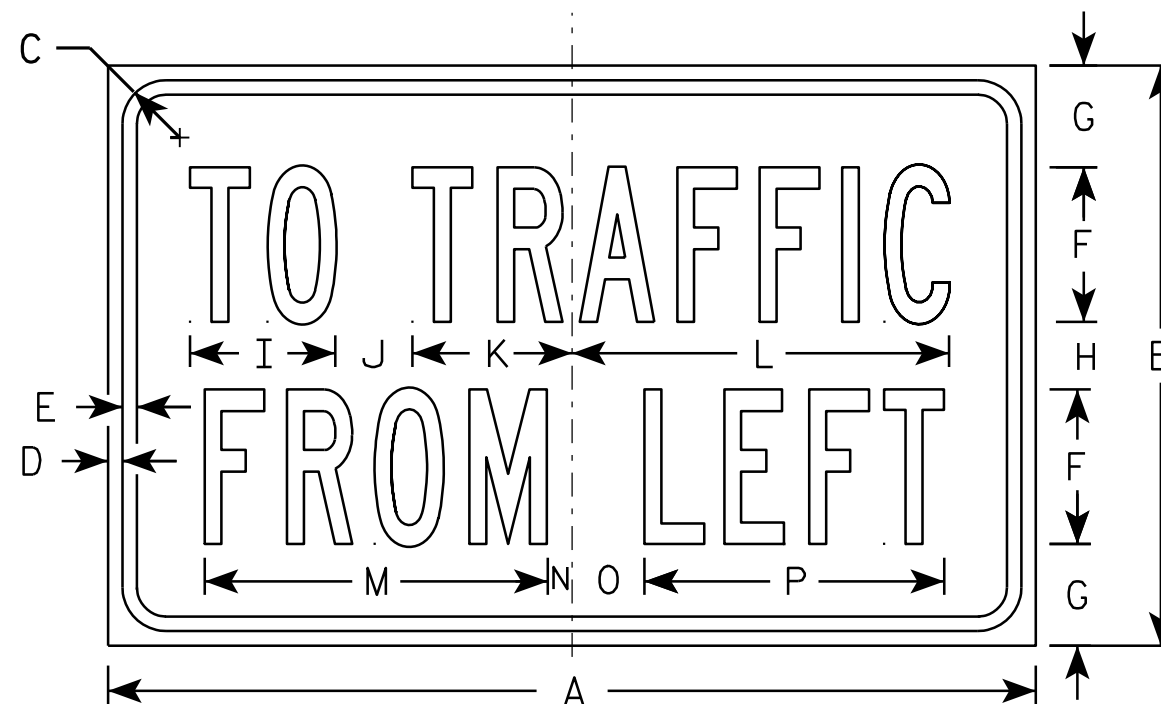
STANDARD SIGN
R1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/02/10 PLATE NO. R1-2.11

PROJECT NO: HWY: COUNTY: SHEET NO: 135 E



R1-54

NOTES

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

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	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
2M	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
3																											
4																											
5																											

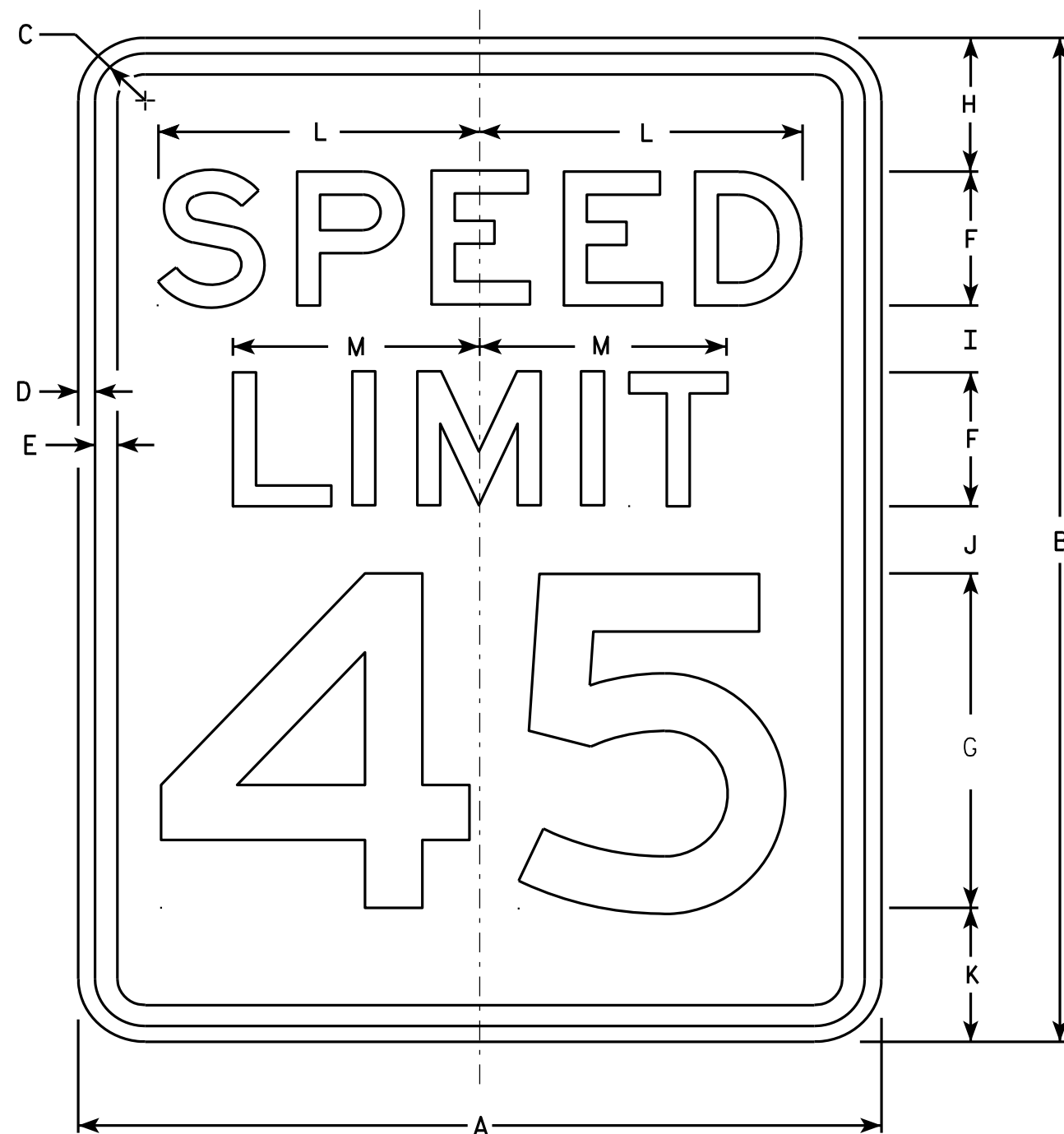
STANDARD SIGN
R1-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-54.2

PROJECT NO: HWY: COUNTY: SHEET NO: 136 E



R2-1

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

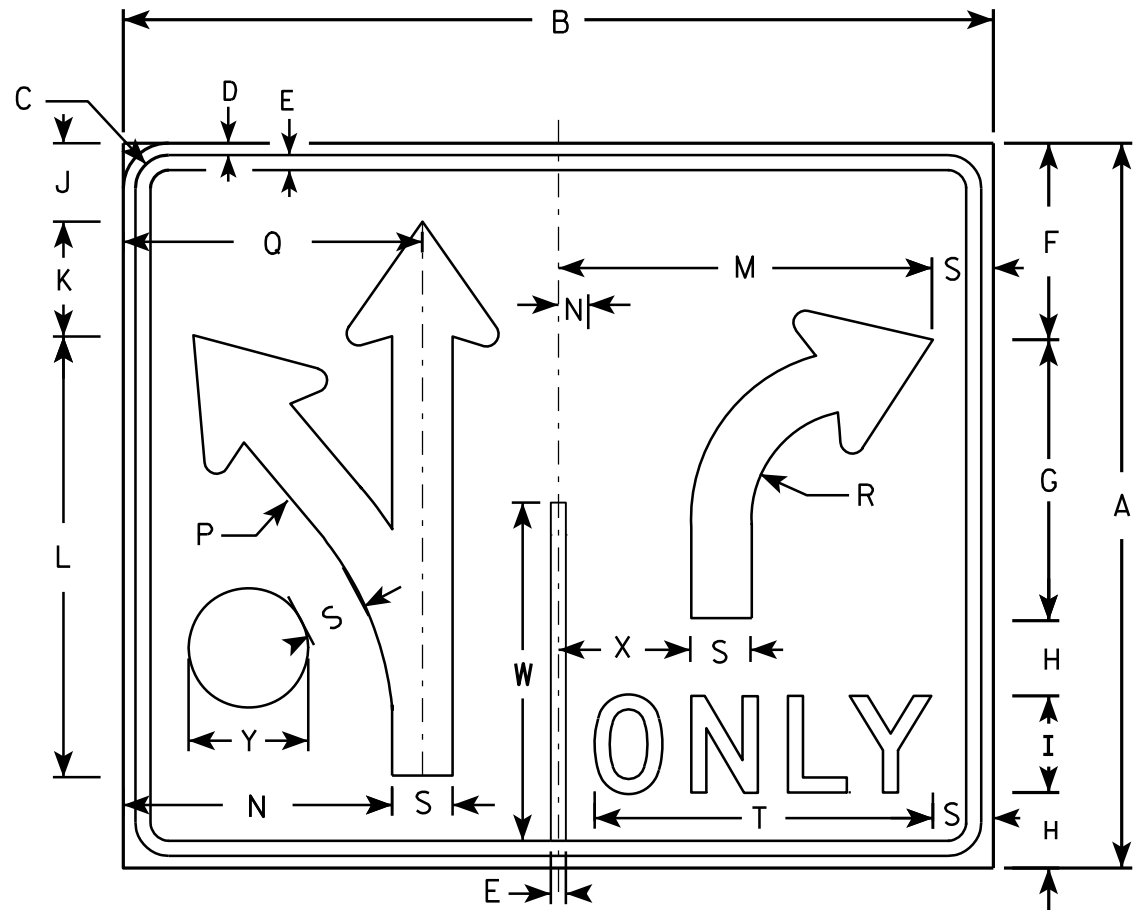
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

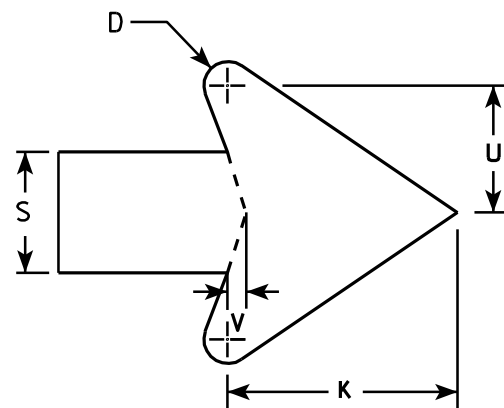
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: 137 E



R3-8DD



ARROW DETAIL

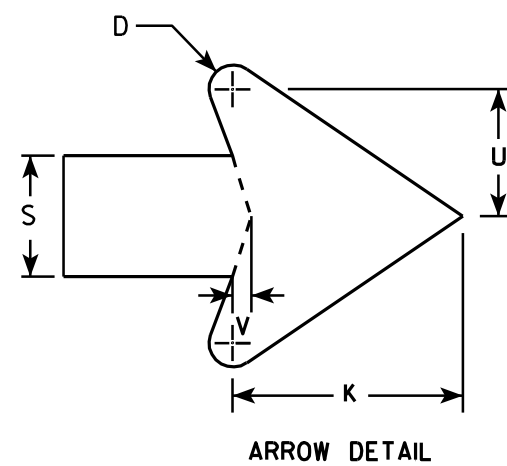
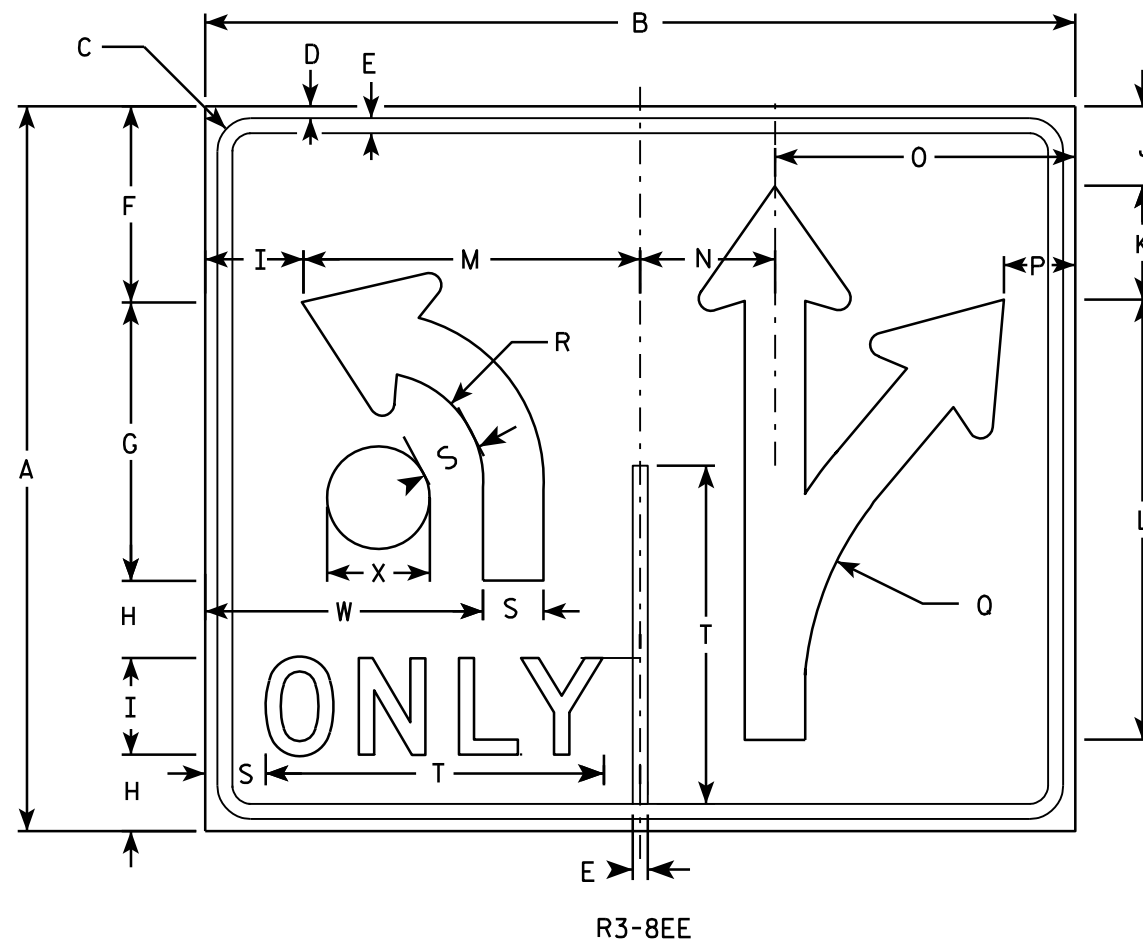
NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - 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. R3-8B & R3-8C is the same but reversed.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3⁄8	1⁄2	5⁄8	8 1⁄8	11 5⁄8	3 1⁄8	4	3 1⁄4	4 3⁄4	18 1⁄4	15 1⁄2	1 1⁄4		13 1⁄4	12 3⁄8	4 1⁄2	2 1⁄2	14	2 5⁄8	3⁄8	14	5 1⁄4	4 1⁄4		7.5
2M	30	36	1 3⁄8	1⁄2	5⁄8	8 1⁄8	11 5⁄8	3 1⁄8	4	3 1⁄4	4 3⁄4	18 1⁄4	15 1⁄2	1 1⁄4		13 1⁄4	12 3⁄8	4 1⁄2	2 1⁄2	14	2 5⁄8	3⁄8	14	5 1⁄4	4 1⁄4		7.5
3																											

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 138	E
-------------	------	---------	---------------	---

STANDARD SIGN R3-8DD	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 3/18/2011	PLATE NO. R3-8DD.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.

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3⁄8	½	5⁄8	8 1⁄8	11 5⁄8	3 1⁄8	4	3 1⁄4	4 3⁄4	18 1⁄4	14	5 5⁄8	12 3⁄8	3	13 1⁄4	4 1⁄2	2 1⁄2	14	2 5⁄8	3⁄8	11 1⁄2	4 1⁄4			7.5
2M	30	36	1 3⁄8	½	5⁄8	8 1⁄8	11 5⁄8	3 1⁄8	4	3 1⁄4	4 3⁄4	18 1⁄4	14	5 5⁄8	12 3⁄8	3	13 1⁄4	4 1⁄2	2 1⁄2	14	2 5⁄8	3⁄8	11 1⁄2	4 1⁄4			7.5
3																											
4																											
5																											

PROJECT NO:	HWY:	COUNTY:	DATE: 3/18/2011	PLATE NO. R3-8EE.2	SHEET NO: 139	E
-------------	------	---------	-----------------	--------------------	---------------	---

STANDARD SIGN

R3-8EE

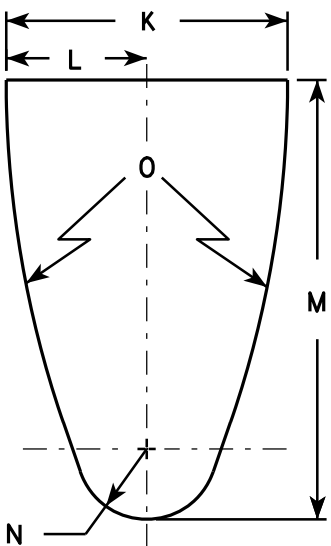
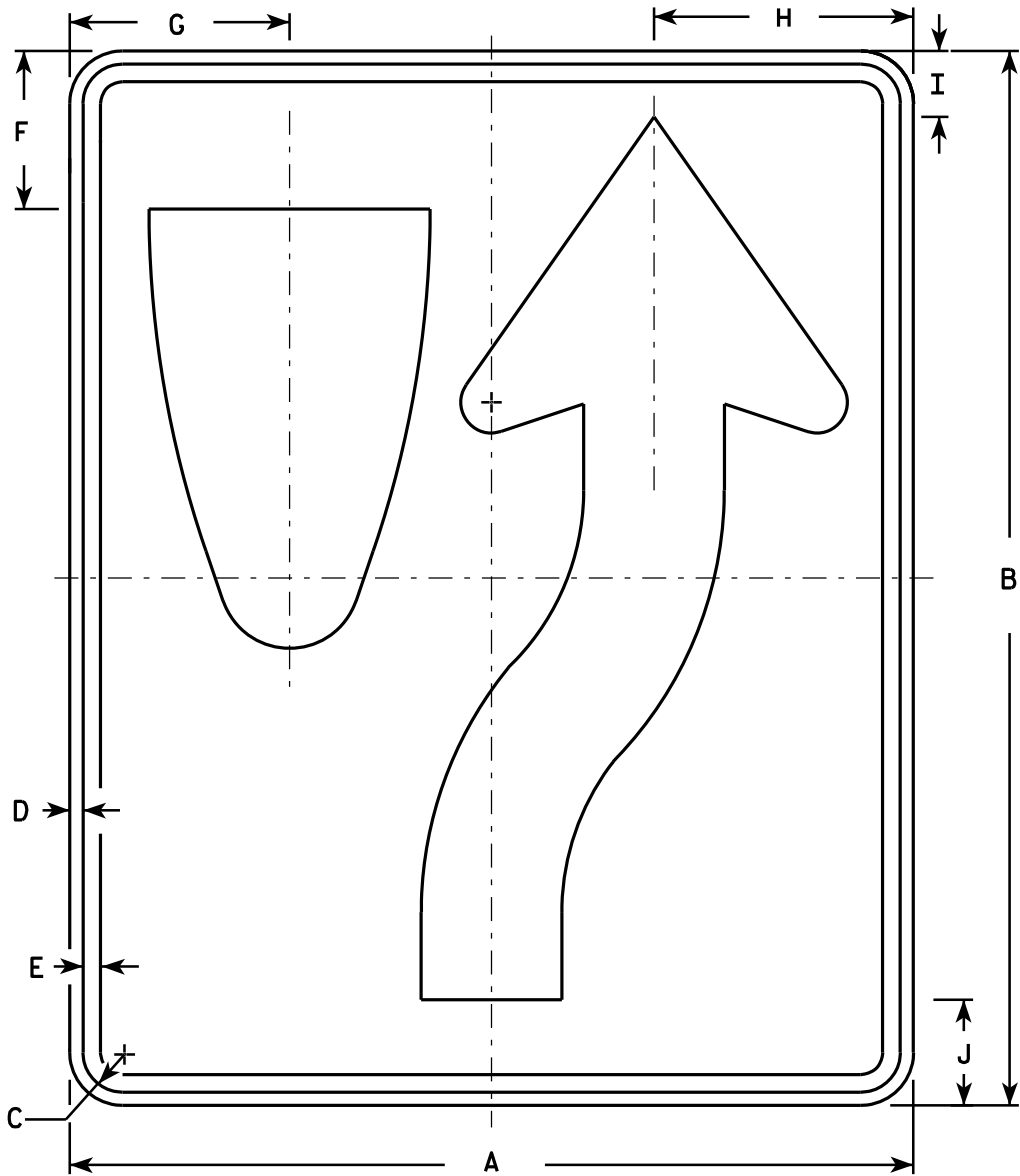
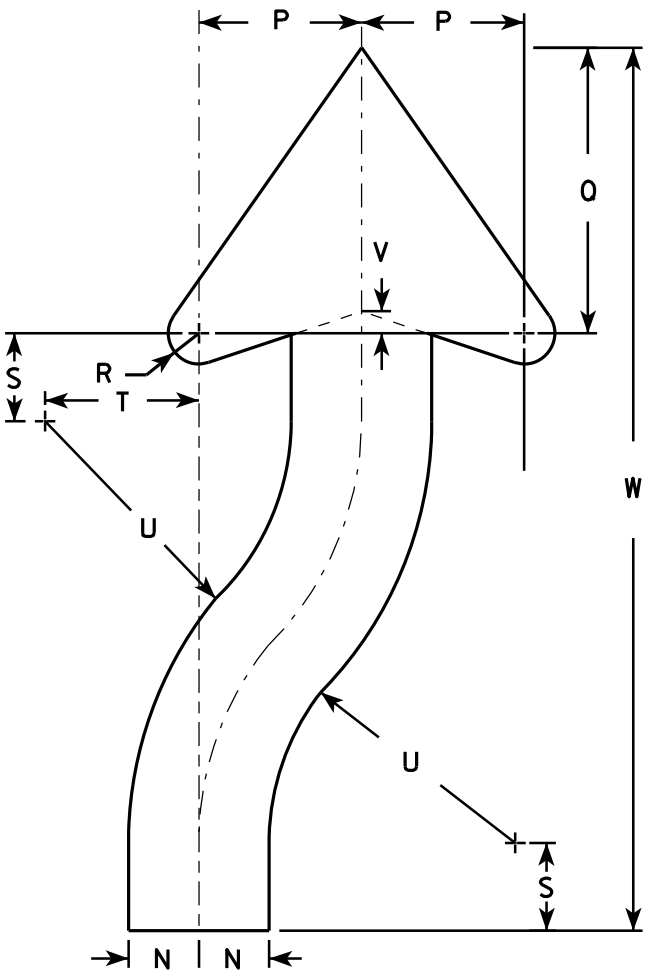
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/18/2011

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.



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

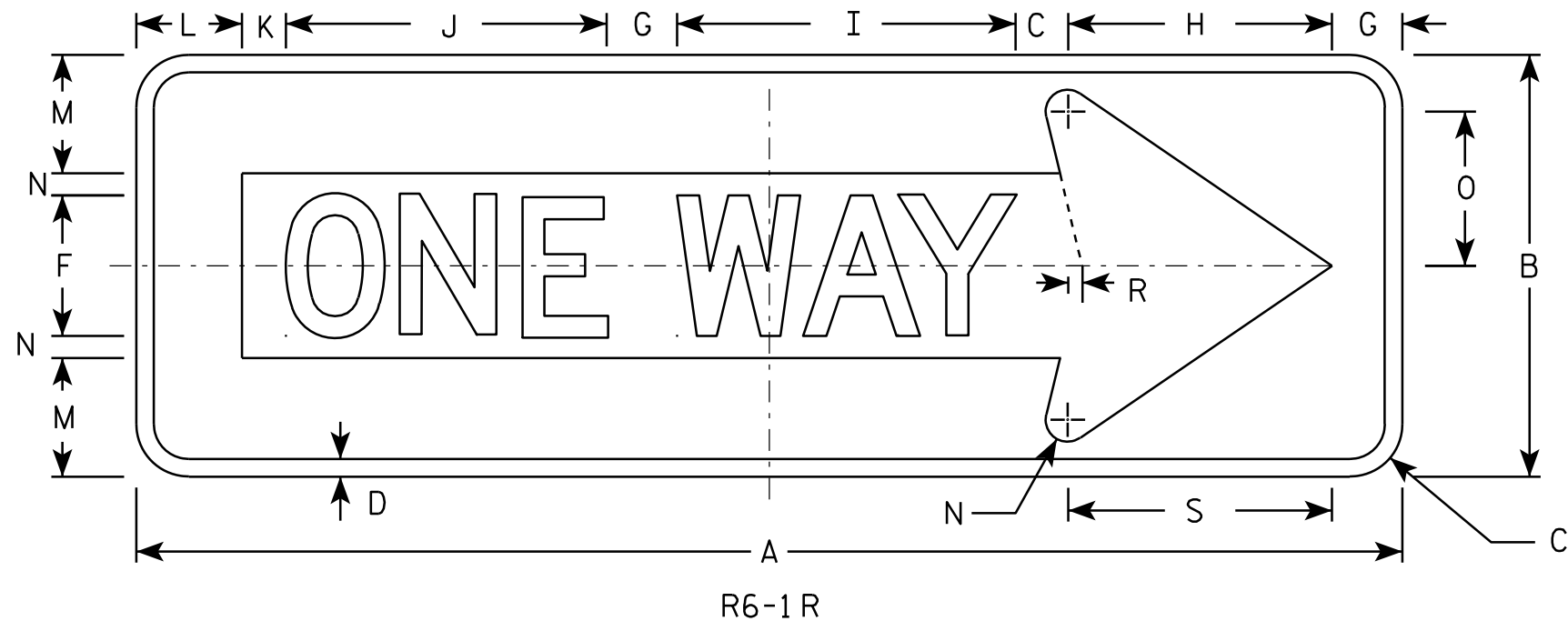
STANDARD SIGN

R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

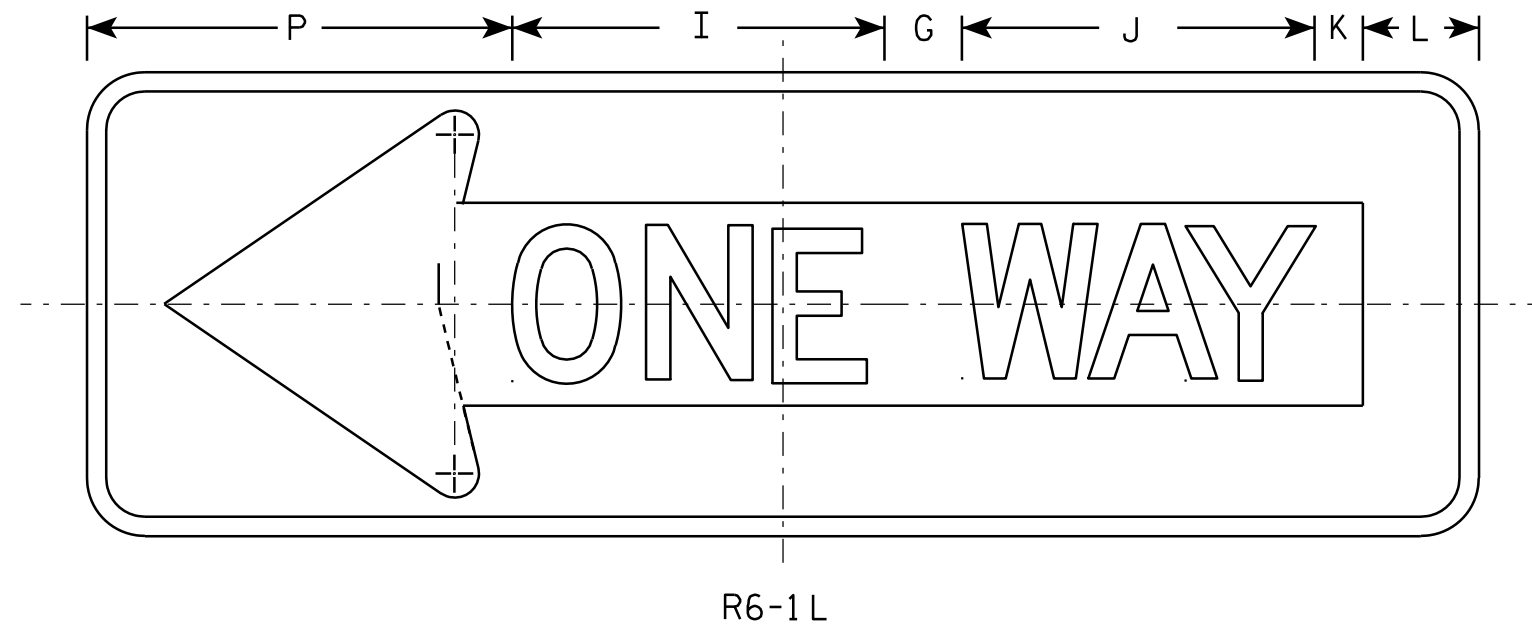
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8



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.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	12	1 1/2	1/2		4	2	7 1/2	9 5/8	9 1/8	1 1/4	3	3 3/8	5/8	4 3/8	11		3/8	7 1/2								3.0
2M	54	18	2 1/4	3/4		6	3	11 1/4	14 1/2	13 5/8	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
3	54	18	2 1/4	3/4		6	3	11 1/4	14 1/2	13 5/8	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
4	54	18	2 1/4	3/4		6	3	11 1/4	14 1/2	13 5/8	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
5																											

STANDARD SIGN R6-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

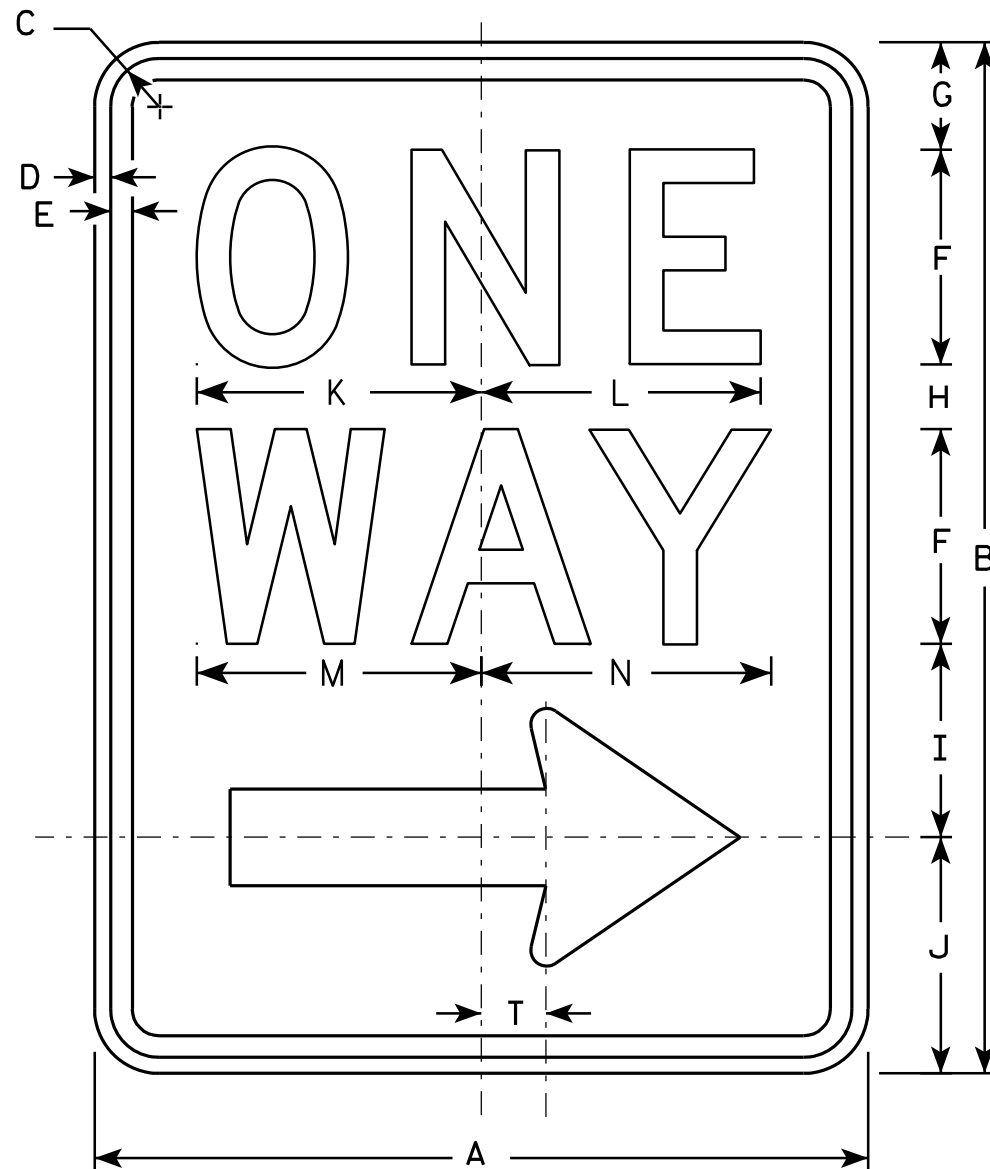
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 12/17/10 PLATE NO. R6-1.2

PROJECT NO:

SHEET NO: 141

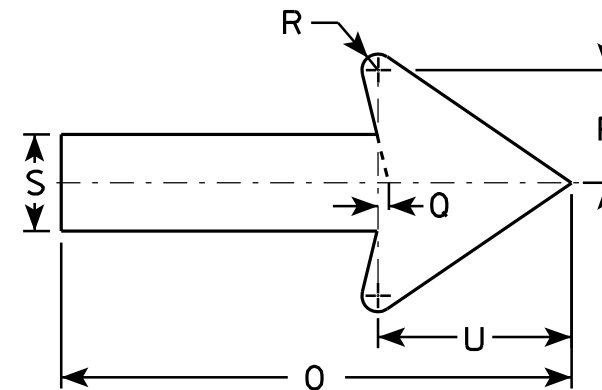
E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

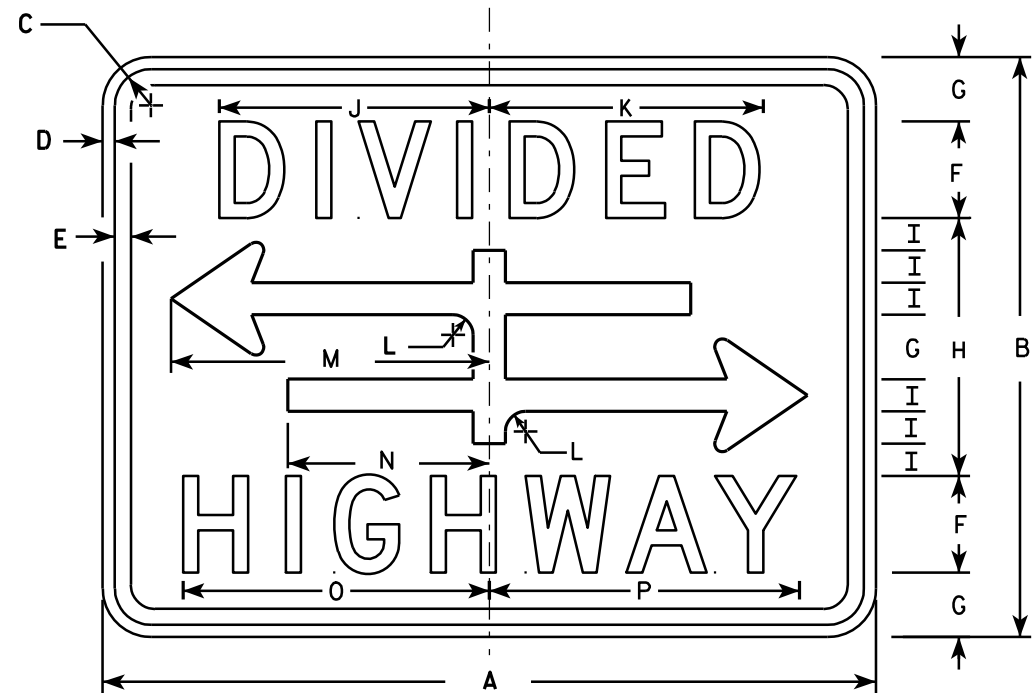
STANDARD SIGN R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

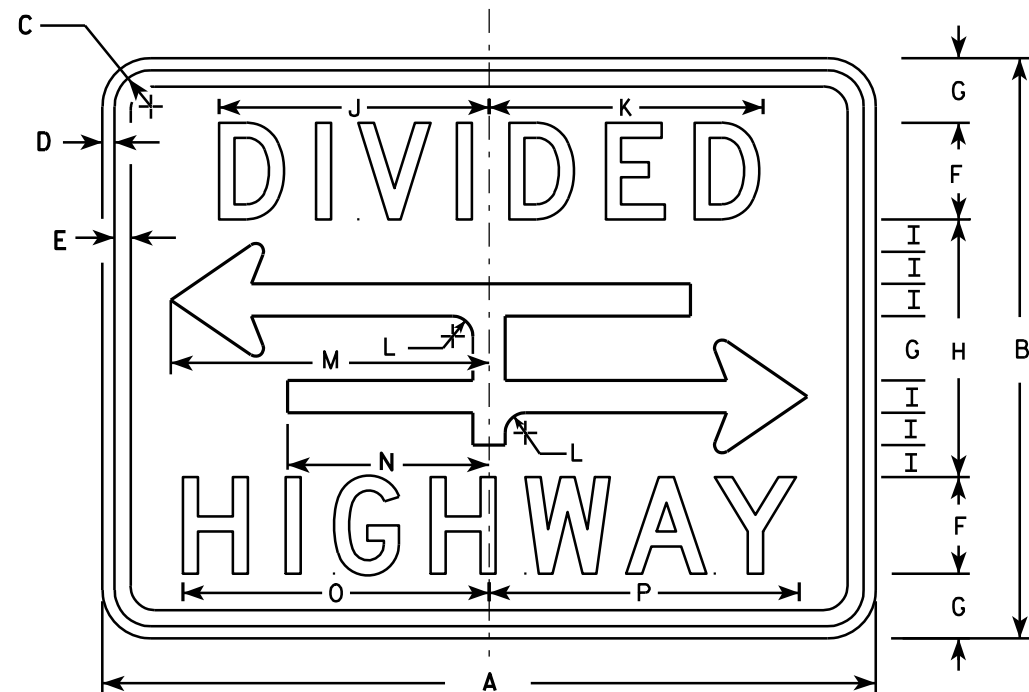
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

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



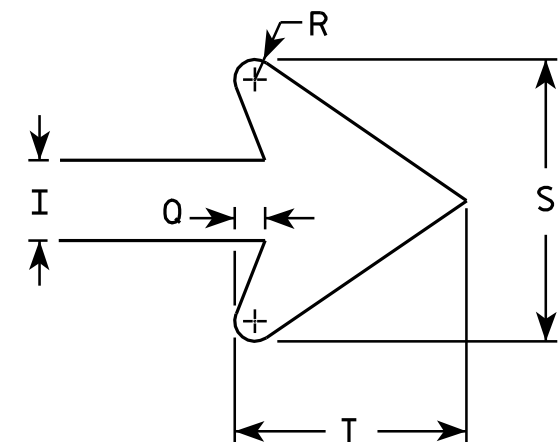
R6-3



R6-3A

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.



ARROW DETAIL

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

STANDARD SIGN R6-3 & R6-3A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R6-3.5

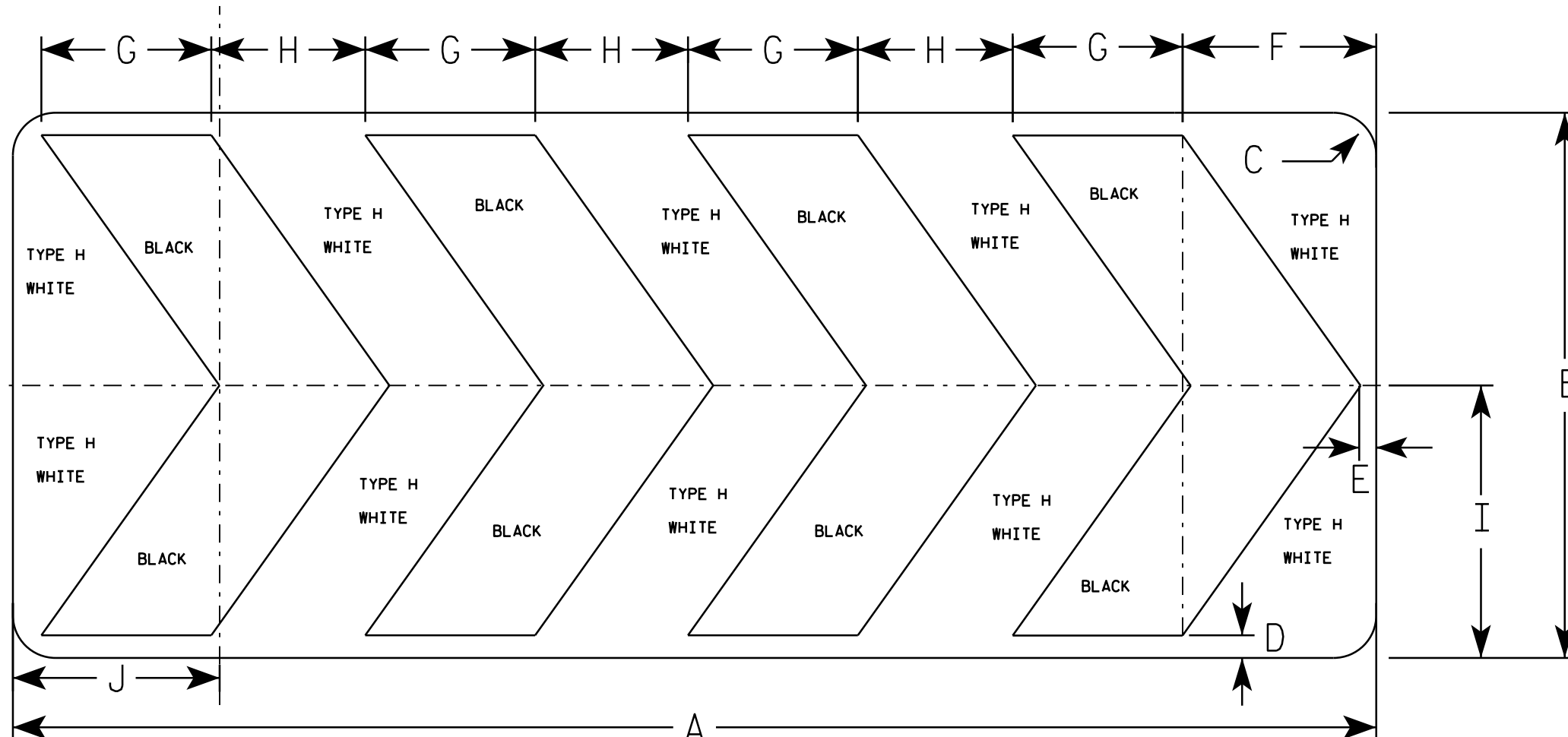
PROJECT NO:

SHEET NO: 143

E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - WHITE
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.



R6-4B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	24	1 7⁄8	1	¾	8 ½	7 ½	6 ¾	12	9 ⅛																	10.0
2M	60	24	1 7⁄8	1	¾	8 ½	7 ½	6 ¾	12	9 ⅛																	10.0
3																											
4																											
5																											

STANDARD SIGN R6-4B

WISCONSIN DEPT OF TRANSPORTATION

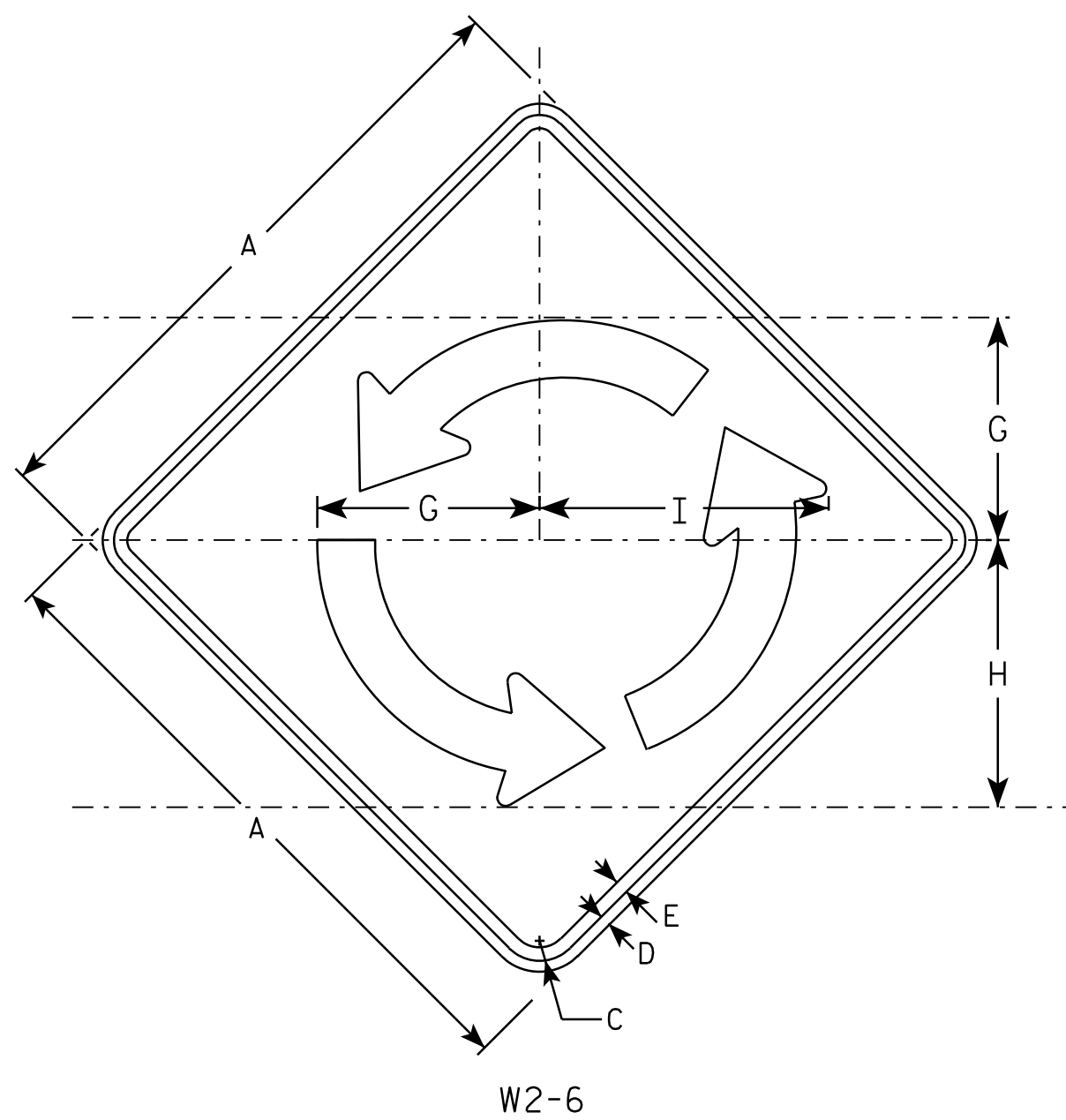
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/21/14 PLATE NO. 144 P6-4.3

PROJECT NO:

SHEET NO:

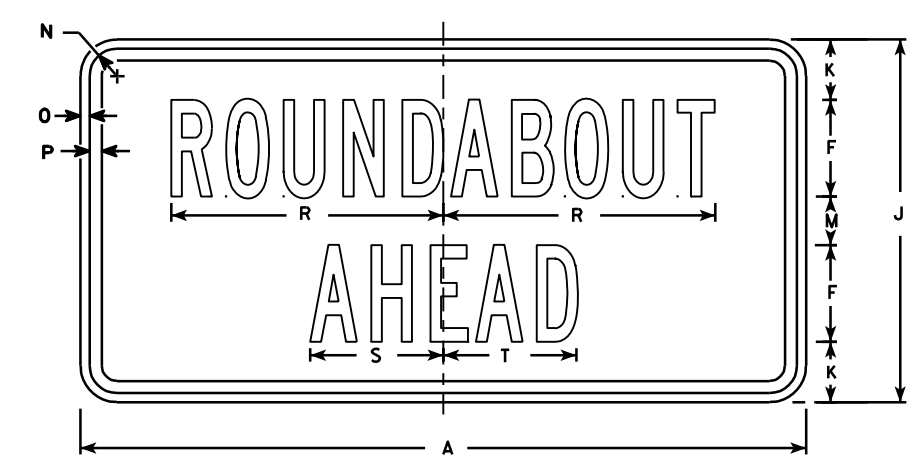
E



W2-6

NOTES

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



W2-6P

																								W2-6	W2-6P	
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	Area sq. ft.	Area sq. ft.
1																										
2S	30		1 3⁄8	½	5⁄8	4	10 3⁄8	12 ½	13 ½	15	2 ½		2	1 ⅛	3⁄8	½		11 ¼	5 ½	5 ½					6.25	3.12
2M	30		1 3⁄8	½	5⁄8	4	10 3⁄8	12 ½	13 ½	15	2 ½		2	1 ⅛	3⁄8	½		11 ¼	5 ½	5 ½					6.25	3.12
3	36		1 5⁄8	5⁄8	¾	5	12 ½	15	16 ¼	18	2 5⁄8		2 ¾	1 ⅛	3⁄8	½		14	7	6 ¾					9.00	4.50
4	48		2 ¼	¾	1	6	16 5⁄8	20	16 ¼	24	4 3⁄8		3 5⁄8	1 3⁄8	½	5⁄8		17	8 ¼	8 ¼					16.0	8.0
5																										

STANDARD SIGN

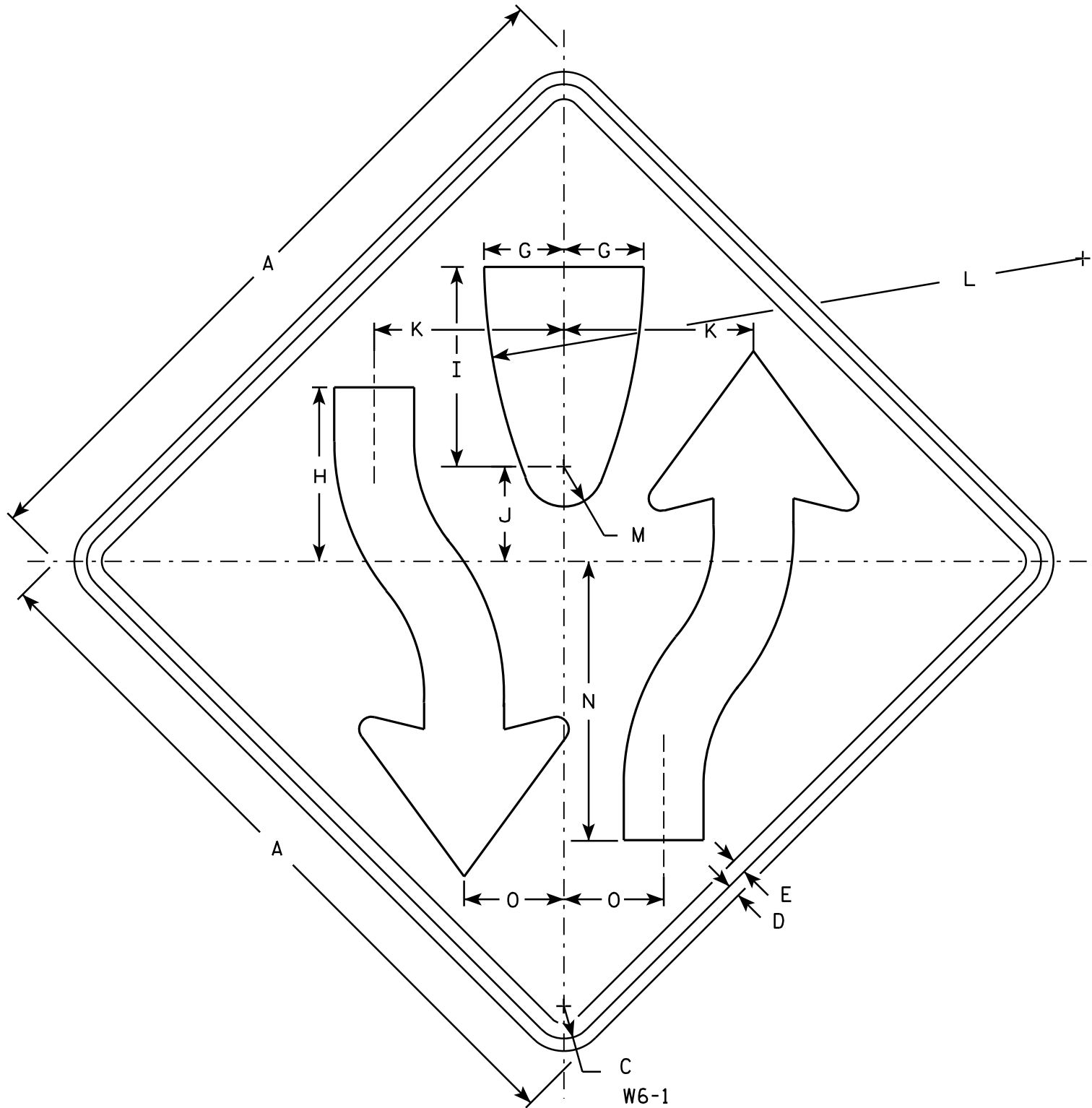
W2-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

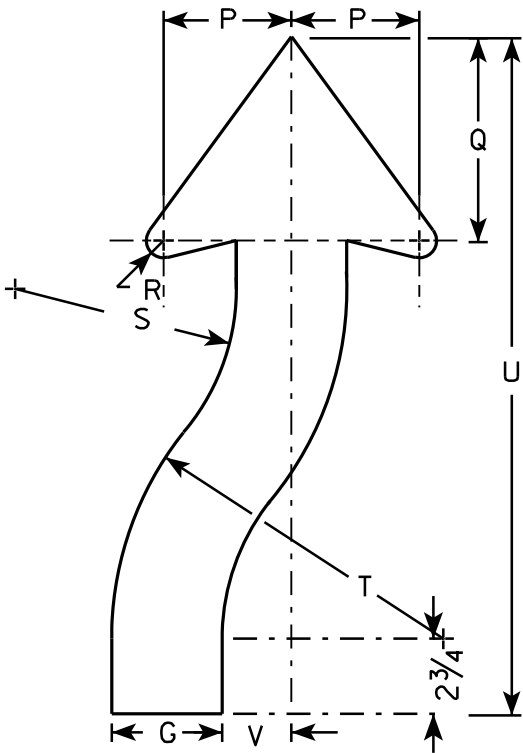
for State Traffic Engineer

DATE 6/29/12 PLATE NO. W2-6.5



NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Yellow
Message - Black
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

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

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

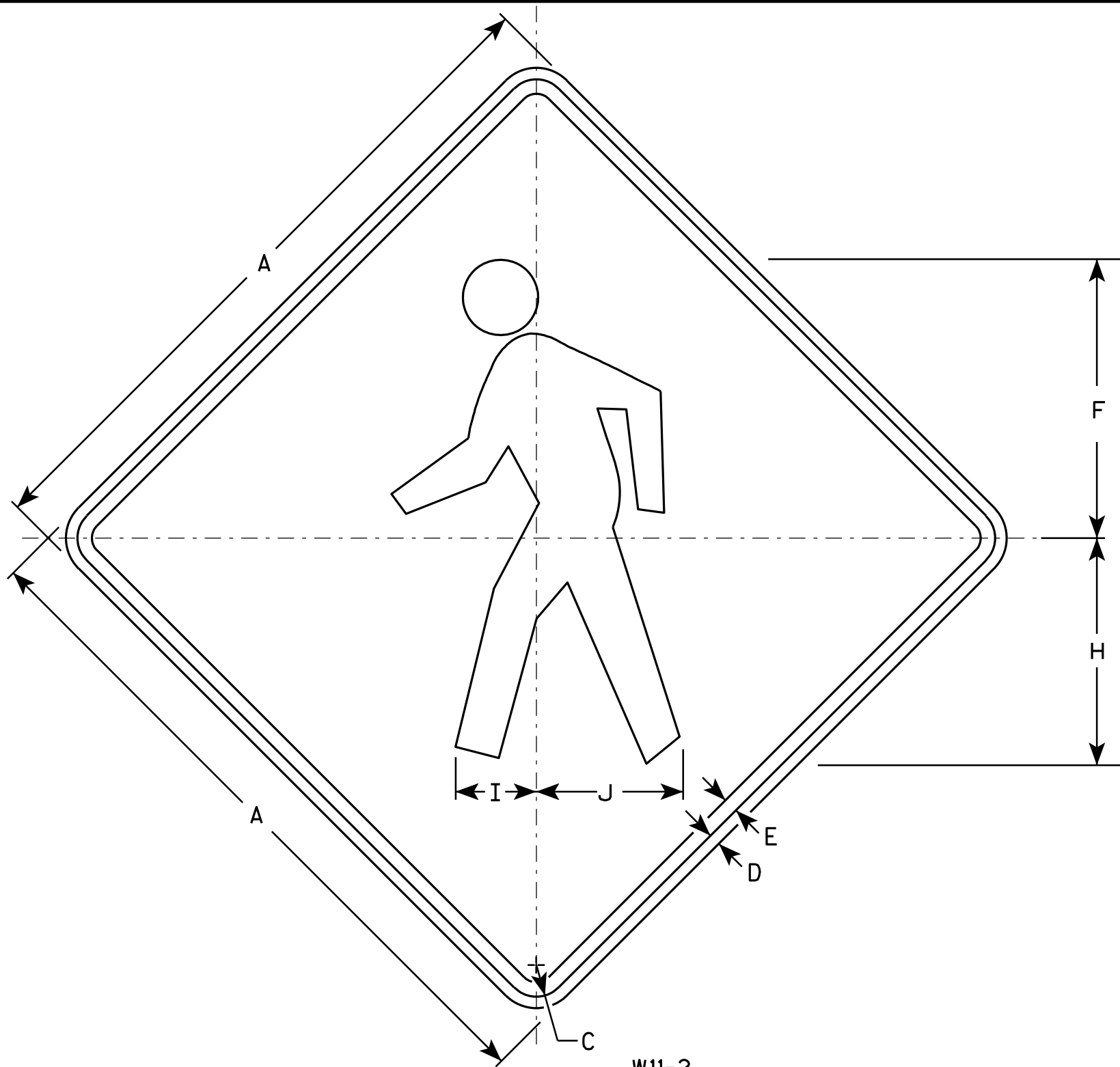
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 146

E



W11-2

NOTES

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

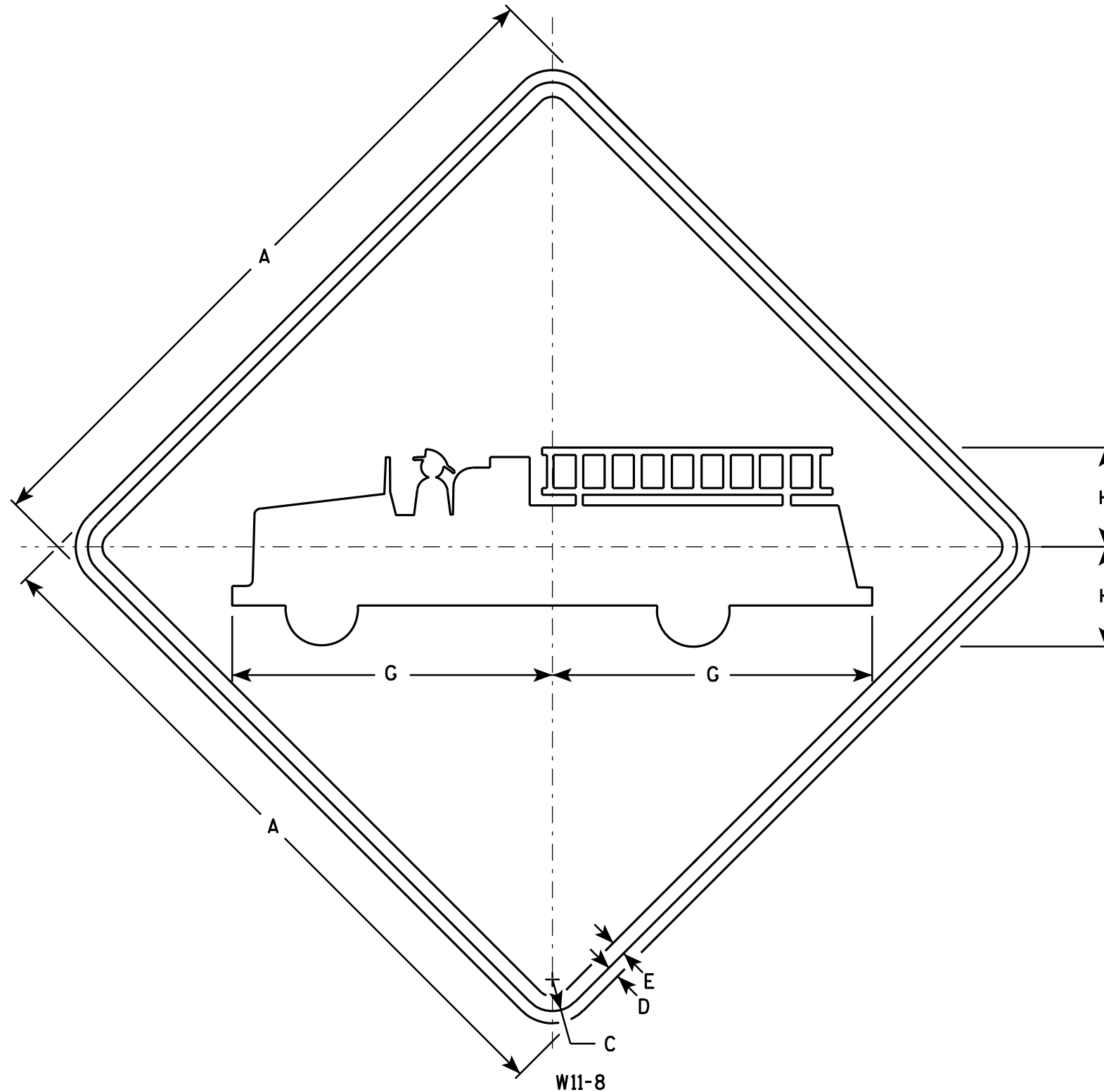
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W11-2.7



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.

W11-8

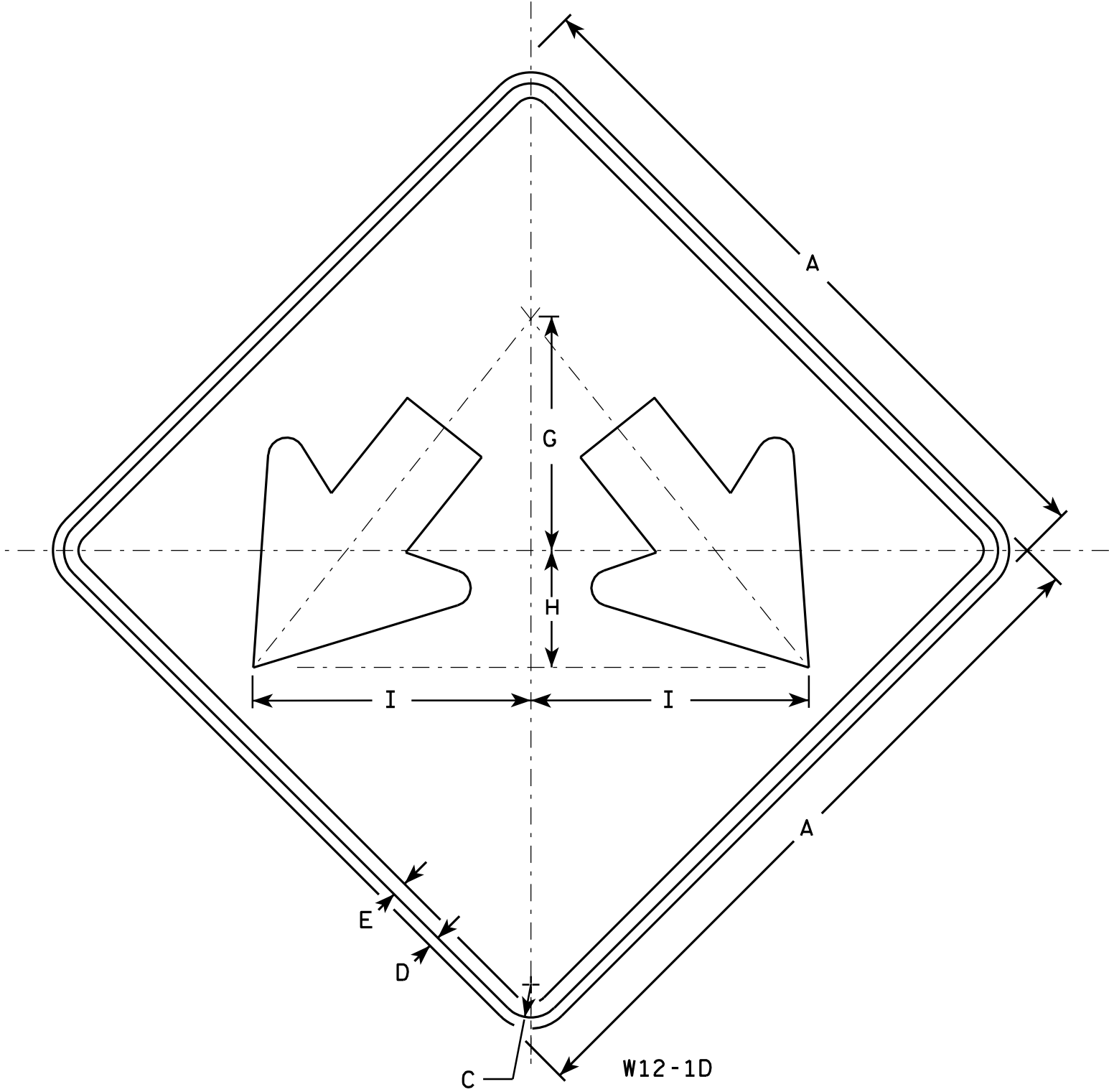
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		11	3 3/8																			4.0
2S	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
2M	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
3	36		1 5/8	5/8	3/4		16 1/2	5 1/4																			9.0
4	48		2 1/4	3/4	1		22	7																			16.0
5																											

STANDARD SIGN W11-8

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 3/13/13 PLATE NO. W11-8.7

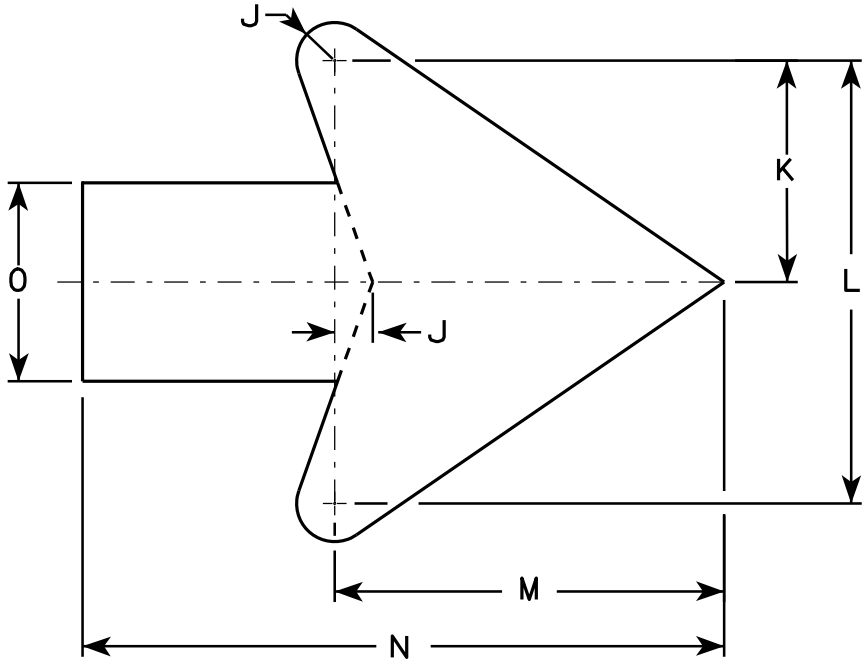
PROJECT NO:

SHEET NO: 148



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

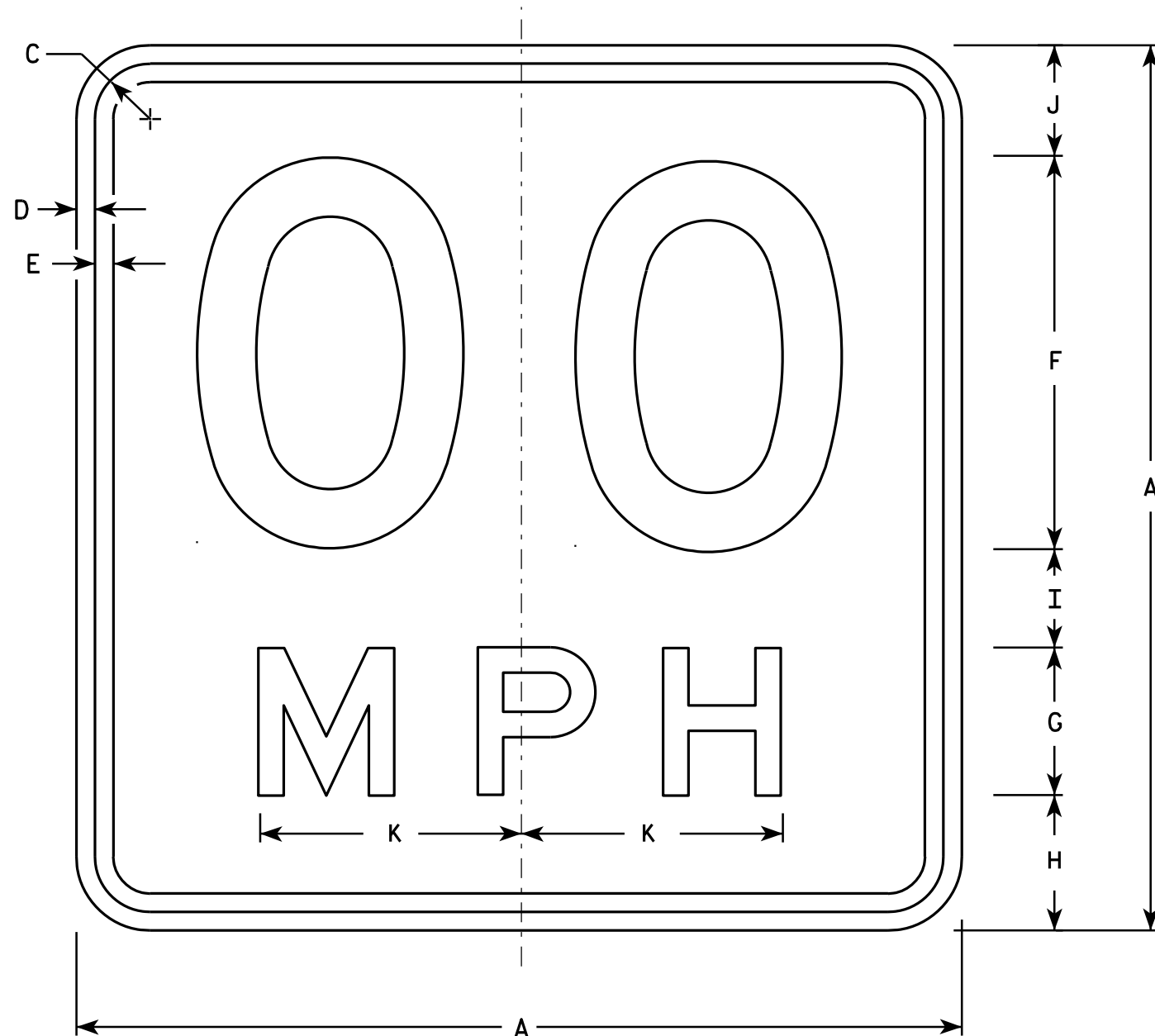
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 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



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
Line 2 is Series E

W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN

W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO:

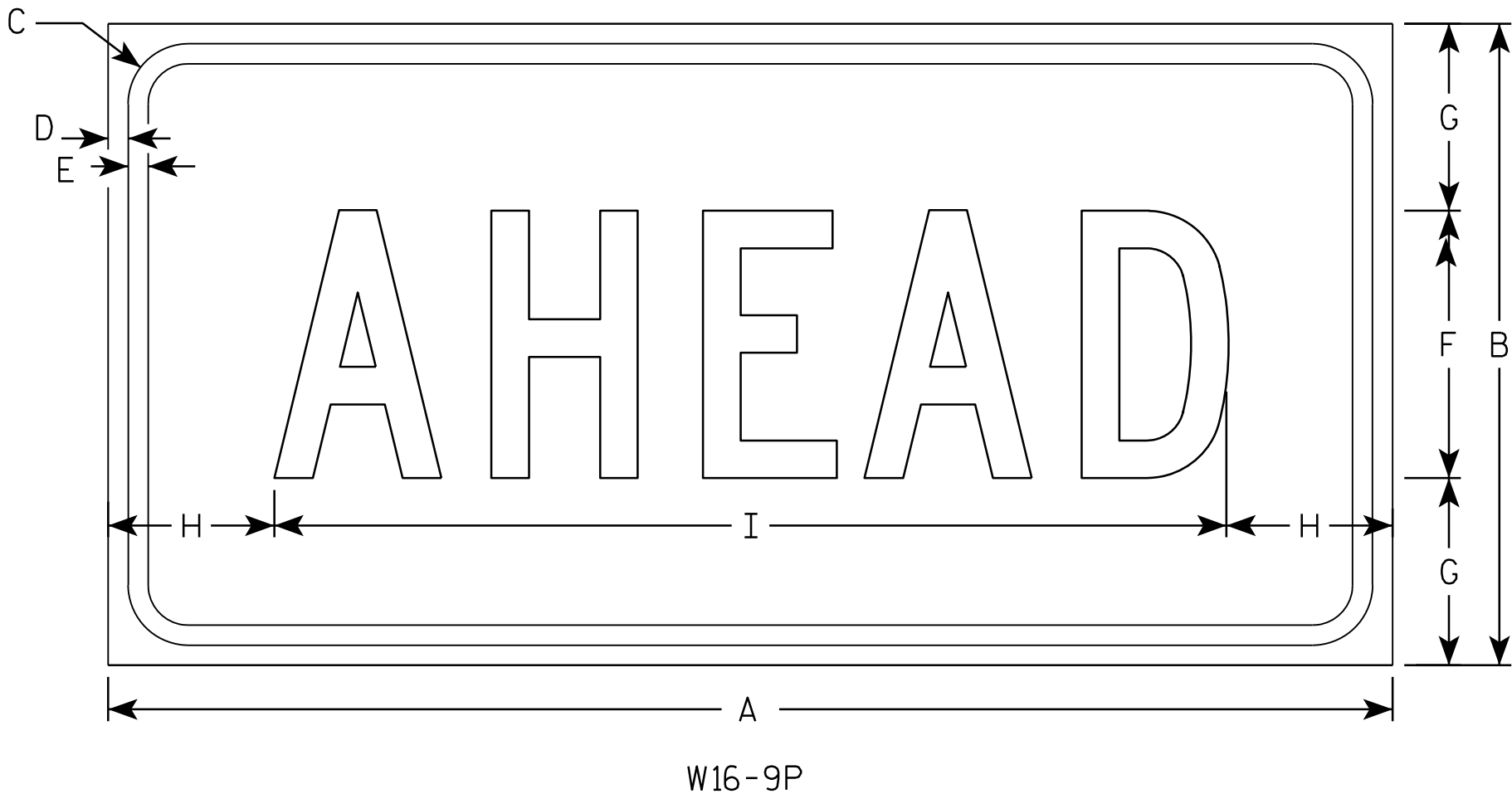
HWY:

COUNTY:

SHEET NO: 150

E

7



NOTES

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

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN

W16-9P

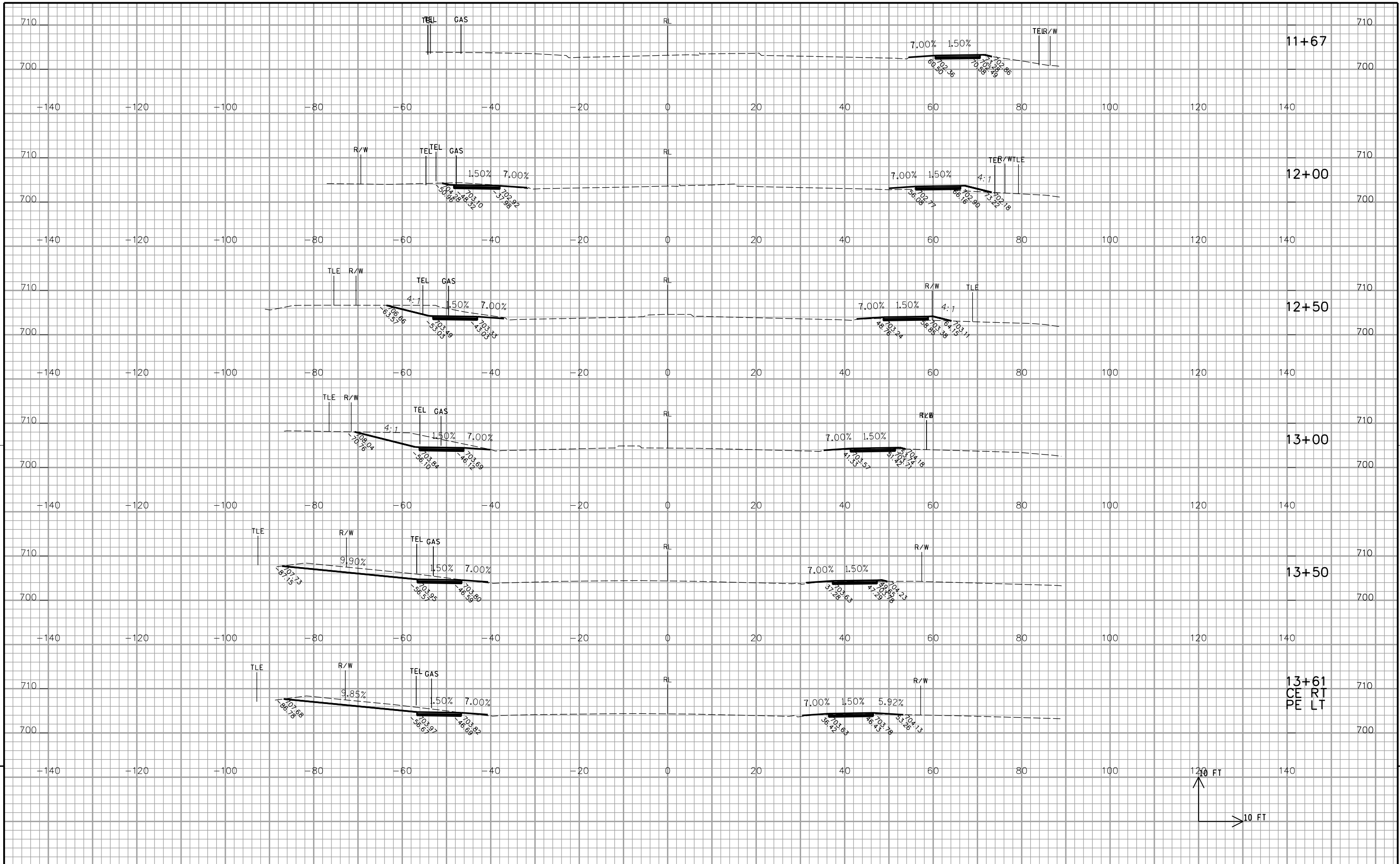
WISCONSIN DEPT OF TRANSPORTATION

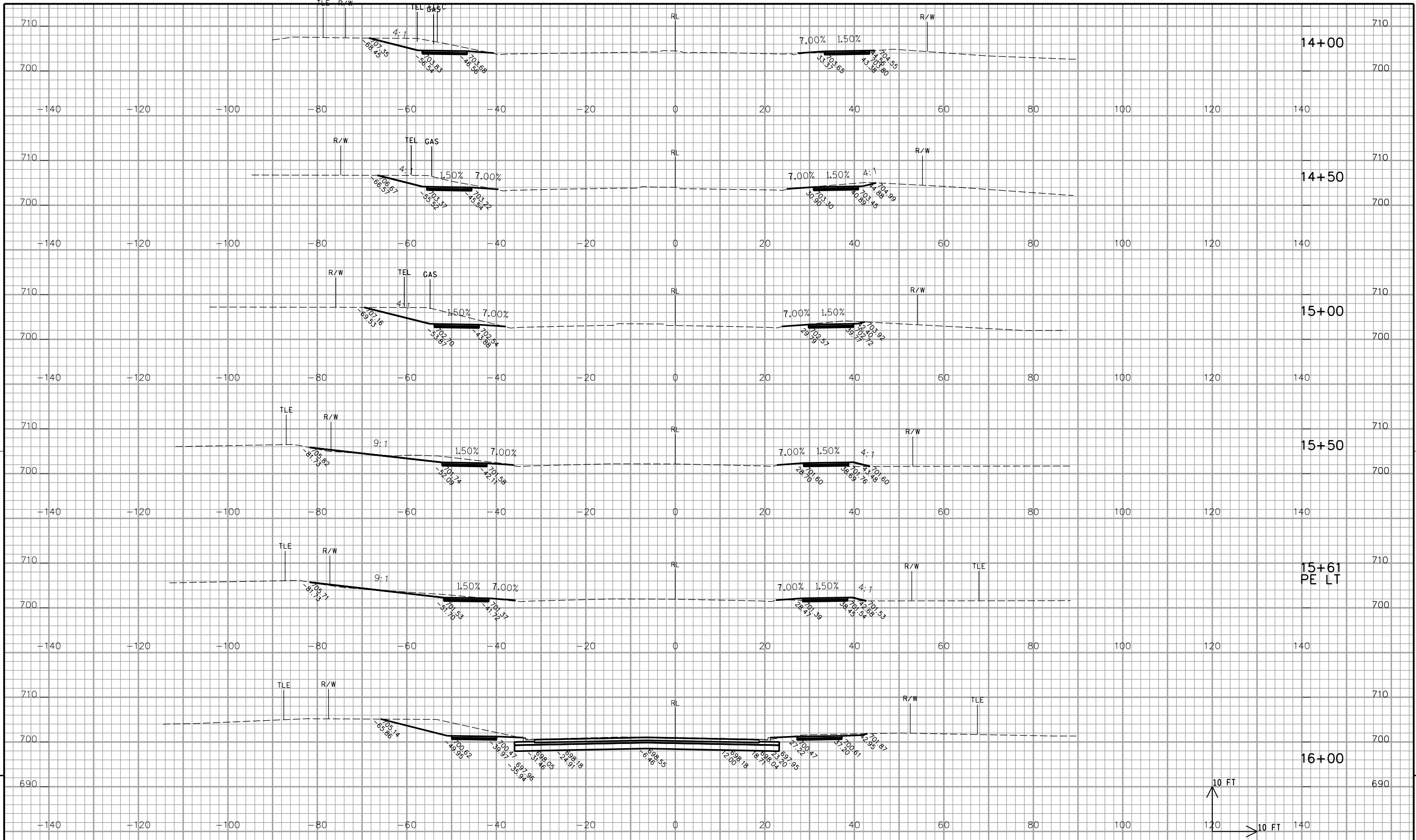
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

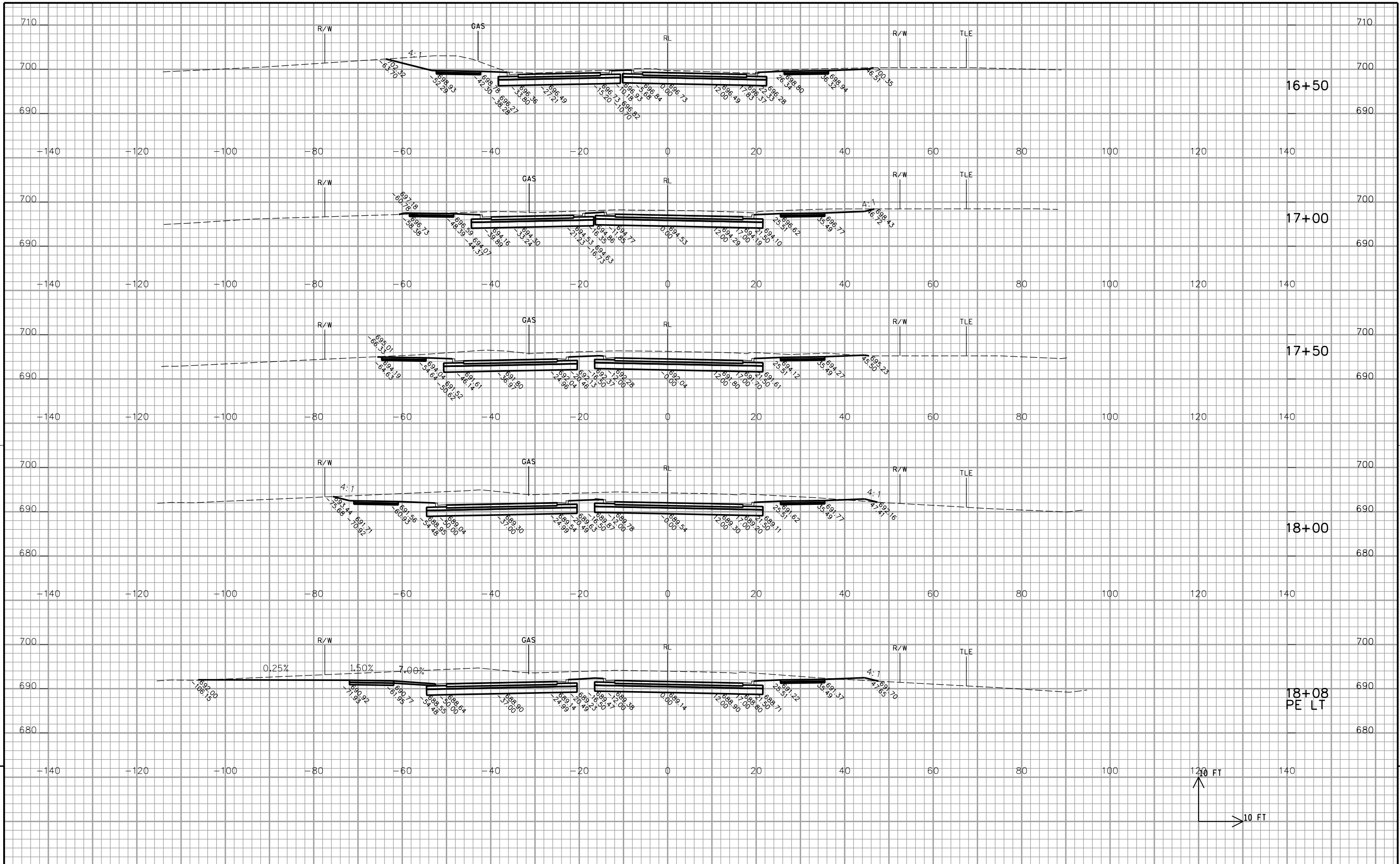
DATE 12/28/10 PLATE NO. W16-9P.6

Station	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)					Cumulative Vol (CY)				Mass Ordinate
			Salvaged/Unusable		Marsh		Salvaged/Unusable		Marsh		Expanded		Expanded		Reduced	
			Cut	Pavement	Fill	Exc	Cut	Pavement	Material	Fill	Exc	Cut	Fill	Marsh Backfill	Marsh in Fill	
11+67.00	1167	0	7.62	0	0.1	0	0	0	0	0	0	0	0	0	0	0
12+00.00	1200	33	13.75	990	8.8	0	13	15	5	0	13	7	0	0	0	-9
12+50.00	1250	50	40.12	1500	4.09	0	50	23	12	0	63	23	0	0	0	2
13+00.00	1300	50	59.31	1500	1.28	0	92	23	5	0	155	29	0	0	0	64
13+50.00	1350	50	31.58	1500	2.05	0	84	23	3	0	239	33	0	0	0	121
13+61.00	1361	11	50.14	330	2.35	0	17	5	1	0	256	34	0	0	0	131
14+00.00	1400	39	47.21	1170	1.27	0	70	18	3	0	326	38	0	0	0	180
14+50.00	1450	50	52.34	1500	0.23	0	92	23	1	0	418	39	0	0	0	247
15+00.00	1500	50	74.9	1500	0.14	0	118	23	0	0	536	40	0	0	0	341
15+50.00	1550	50	29.31	1500	7.36	0	96	23	7	0	633	49	0	0	0	405
15+61.00	1561	11	16.37	330	6.71	0	9	5	3	0	642	53	0	0	0	405
16+00.00	1600	39	226.3	1170	0.17	0	175	18	5	0	817	59	0	0	0	556
16+50.00	1650	50	258.7	1500	0	0	449	23	0	0	1266	59	0	0	0	981
17+00.00	1700	50	263.6	1500	0.48	0	484	23	0	0	1750	60	0	0	0	1441
17+50.00	1750	50	329	1500	0.16	0	549	23	1	0	2298	61	0	0	0	1966
18+00.00	1800	50	419.8	1500	1.92	0	693	23	2	0	2992	63	0	0	0	2633
18+08.00	1808	8	436.6	240	5.01	0	127	4	1	0	3118	64	0	0	0	2755
18+50.00	1850	42	470.4	1260	0.03	0	705	20	4	0	3824	70	0	0	0	3436
19+00.00	1900	50	464	1500	0	0	865	23	0	0	4689	70	0	0	0	4277
19+30.00	1930	30	516	900	0	0	544	14	0	0	5234	70	0	0	0	4808
19+50.00	1950	20	464.4	600	0.25	0	363	9	0	0	5597	70	0	0	0	5161
20+00.00	2000	50	383.3	1500	0.25	0	785	23	0	0	6381	70	0	0	0	5922
20+50.00	2050	50	424.3	1500	11.33	0	748	23	11	0	7129	84	0	0	0	6633
21+00.00	2100	50	372.2	1500	22.65	0	738	23	31	0	7867	125	0	0	0	7306
21+34.00	2134	34	303	1020	29.63	0	425	16	33	0	8292	168	0	0	0	7673
21+50.00	2150	16	267.9	480	65.32	0	169	7	28	0	8461	205	0	0	0	7798
22+00.00	2200	50	166.2	1500	138.8	2.5	402	23	189	2	8863	448	3	1	0	7932
22+50.00	2250	50	103.6	1500	226.2	0	250	23	338	2	9113	886	7	3	0	7721
23+00.00	2300	50	91.73	1500	289.2	0	181	23	477	0	9294	1506	7	3	0	7259
23+50.00	2350	50	265.4	1500	114.8	0	331	23	374	0	9624	1993	7	3	0	7080
23+60.00	2360	10	269.1	300	121	0	99	5	44	0	9723	2049	7	3	0	7117
24+00.00	2400	40	89.19	1200	132.9	0	265	19	188	0	9989	2294	7	3	0	7119
24+50.00	2450	50	124.9	1500	78.1	0	198	23	195	0	10187	2548	7	3	0	7040
25+00.00	2500	50	159.1	1500	101.2	0	263	23	166	0	10450	2764	7	3	0	7064
25+50.00	2550	50	201.7	1500	107.1	0	334	23	193	0	10784	3014	7	3	0	7124
26+00.00	2600	50	259.9	1500	66	0	427	23	160	0	11211	3223	7	3	0	7320
26+50.00	2650	50	281.7	1500	17.6	0	501	23	77	0	11713	3323	7	3	0	7697
27+00.00	2700	50	252	1500	4.09	0	494	23	20	0	12207	3349	7	3	0	8142
27+50.00	2750	50	211.1	1500	15.75	0	429	23	18	0	12636	3373	7	3	0	8523
28+00.00	2800	50	220.5	1500	9.78	0	400	23	24	0	13035	3404	7	3	0	8869
28+50.00	2850	50	296.3	1500	2.93	0	479	23	12	0	13514	3419	7	3	0	9309
28+70.00	2870	20	277.8	600	3.24	0	213	9	2	0	13726	3422	7	3	0	9509
29+00.00	2900	30	245	900	13.38	0	290	14	9	0	14017	3434	7	3	0	9774
29+50.00	2950	50	250.3	1500	98.84	0	459	23	104	0	14475	3569	7	3	0	10074
30+00.00	3000	50	272.7	1500	237.6	0	484	23	312	0	14960	3974	7	3	0	10130
32+50.00	3250	0	120.6	0	275.7	0	0	0	0	0	14960	3974	7	3	0	10130
33+00.00	3300	50	165.8	1500	135.3	0	265	23	381	0	15225	4469	7	3	0	9877
33+50.00	3350	50	150	1500	175.3	0	292	23	288	0	15517	4843	7	3	0	9772
34+00.00	3400	50	162.3	1500	132.9	0	289	23	285	0	15806	5214	7	3	0	9667
34+50.00	3450	50	228.9	1500	13.38	0	362	23	135	0	16168	5390	7	3	0	9830
35+00.00	3500	50	207.5	1500	23.12	0	404	23	34	0	16572	5434	7	3	0	10166
35+50.00	3550	50	192.8	1500	40.37	0	371	23	59	0	16943	5510	7	3	0	10437
36+00.00	3600	50	230.7	1500	44.5	0	392	23	79	0	17335	5613	7	3	0	10704
36+50.00	3650	50	233.1	1500	30.81	0	429	23	70	0	17765	5703	7	3	0	11019
37+00.00	3700	50	269.8	1500	12.21	0	466	23	40	0	18230	5755	7	3	0	11410
37+50.00	3750	50	301.9	1500	0.26	0	529	23	12	0	18760	5770	7	3	0	11901
38+00.00	3800	50	286.5	1500	2.22	0	545	23	2	0	19304	5773	7	3	0	12419
38+50.00	3850	50	308.4	1500	24.28	0	551	23	25	0	19855	5805	7	3	0	12915
39+00.00	3900	50	255.4	1500	47.76	0	522	23	67	0	20377	5892	7	3	0	13327
39+50.00	3950	50	210.4	1500	69.06	0	431	23	108	0	20808	6032	7	3	0	13594
40+00.00	4000	50	174.2	1500	180	0	356	23	231	0	21165	6332	7	3	0	13627
40+50.00	4050	50	153	1500	174.8	0	303	23	328	0	21467	6759	7	3	0	13480
41+00.00	4100	50	148.6	1500	130	0	279	23	282	0	21747	7126	7	3	0	13369
41+42.00	4142	42	15.47	1260	0	0	128	20	101	0	21874	7257	7	3	0	13345
Column Totals							21874	1272	5585	5	21874	7257	7	3		

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate	
			Cut	Salvaged/ Unusable Pavement	Fill	Cut	Salvaged/Unusable Pavement	Material	Fill	Expanded		
										1.00		1.3
100+45.00	10045	0	263.67	0	25.31	0	0	0	0	0	0	
100+50.00	10050	5	267.70	240	21.68	49	3	4	49	6	40	
101+00.00	10100	50	286.11	2400	0.00	513	34	20	562	32	493	
101+50.00	10150	50	275.39	2400	0.00	520	34	0	1082	32	979	
102+00.00	10200	50	284.80	2400	0.00	519	34	0	1601	32	1464	
102+50.00	10250	50	272.53	2400	0.00	516	34	0	2117	32	1946	
102+85.00	10285	35	280.22	1680	9.69	358	24	6	2475	40	2273	
103+00.00	10300	15	277.40	720	14.47	155	10	7	2630	49	2409	
103+50.00	10350	50	267.71	2400	48.92	505	34	59	3135	125	2804	
104+00.00	10400	50	217.22	2400	151.94	449	34	186	3584	367	2977	
104+50.00	10450	50	235.32	2400	36.36	419	34	174	4003	593	3136	
106+50.00	10650	0	200.42	0	226.15	0	0	0	4003	593	3136	
107+00.00	10700	50	205.92	1800	115.73	376	25	317	4379	1005	3075	
107+50.00	10750	50	238.76	1800	43.81	412	25	148	4791	1197	3269	
108+00.00	10800	50	225.52	2450	26.37	430	34	65	5220	1281	3580	
108+19.00	10819	19	211.68	931	33.56	154	13	21	5374	1309	3694	
108+50.00	10850	31	196.57	1519	19.80	234	21	31	5609	1349	3867	
109+00.00	10900	50	181.85	2450	5.37	350	34	23	5959	1379	4152	
109+50.00	10950	50	165.61	2450	8.51	322	34	13	6281	1396	4423	
110+00.00	11000	50	162.74	1950	12.47	304	27	19	6585	1421	4674	
110+14.25	11014	14	161.99	546	13.57	84	8	7	6669	1430	4742	
110+50.00	11050	36	149.23	1404	14.21	207	20	19	6876	1454	4906	
111+00.00	11100	50	127.32	1950	46.21	256	27	56	7132	1526	5061	
111+50.00	11150	50	118.70	1950	45.97	228	27	85	7360	1637	5151	
111+99.90	11200	50	117.92	1950	0.00	219	27	43	7579	1693	5287	
Column Totals						7579	599	1302	7579	1693		

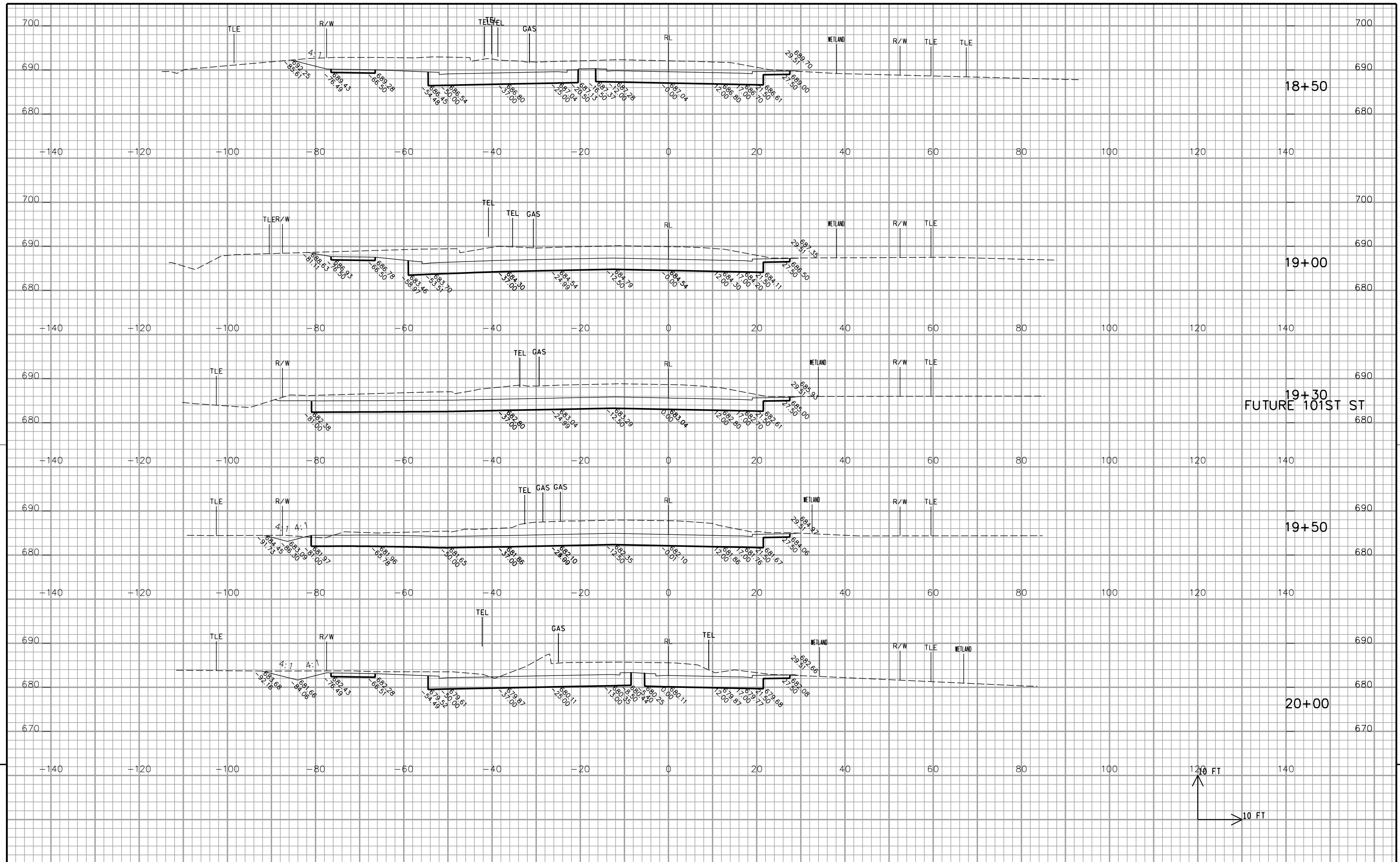


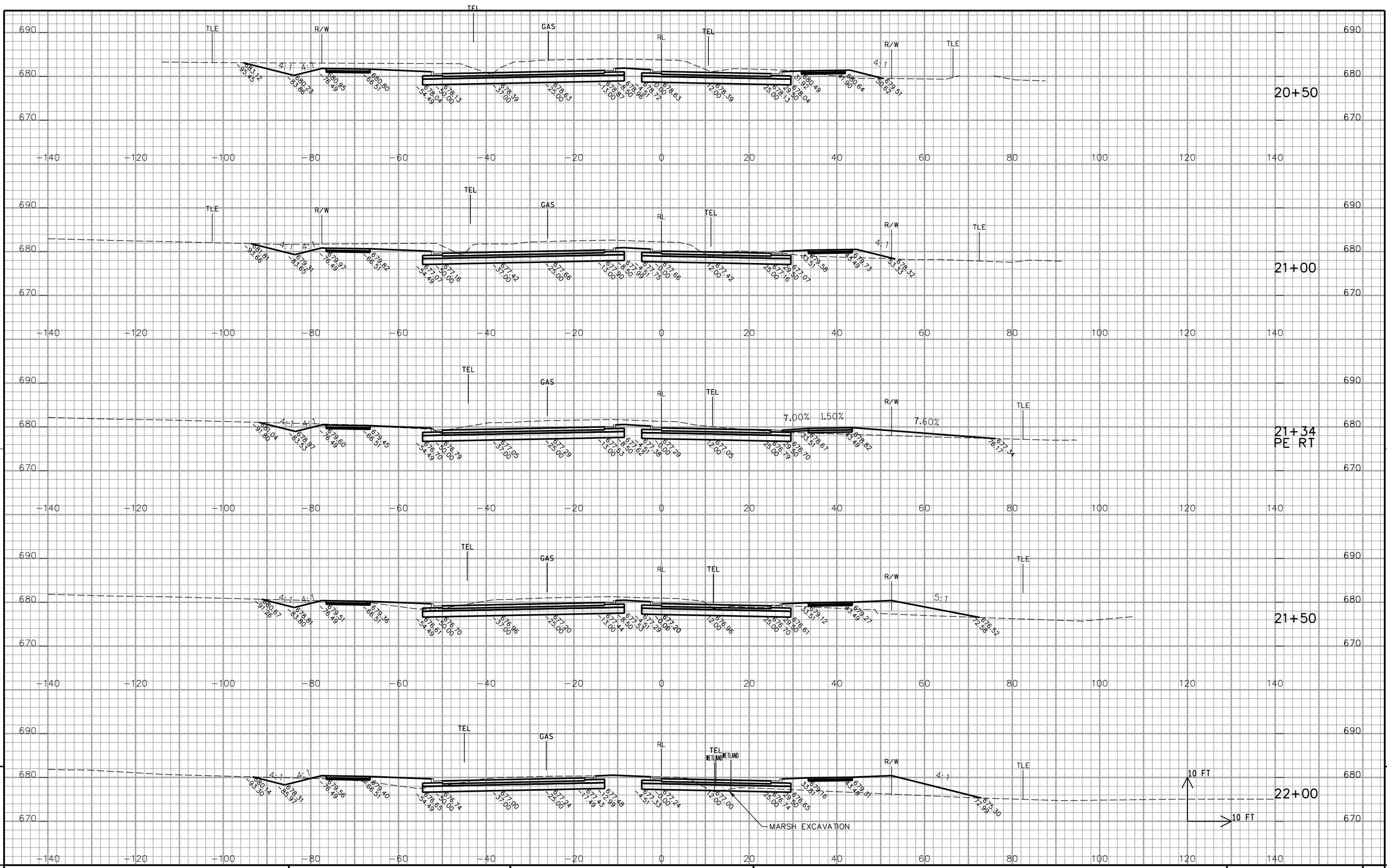


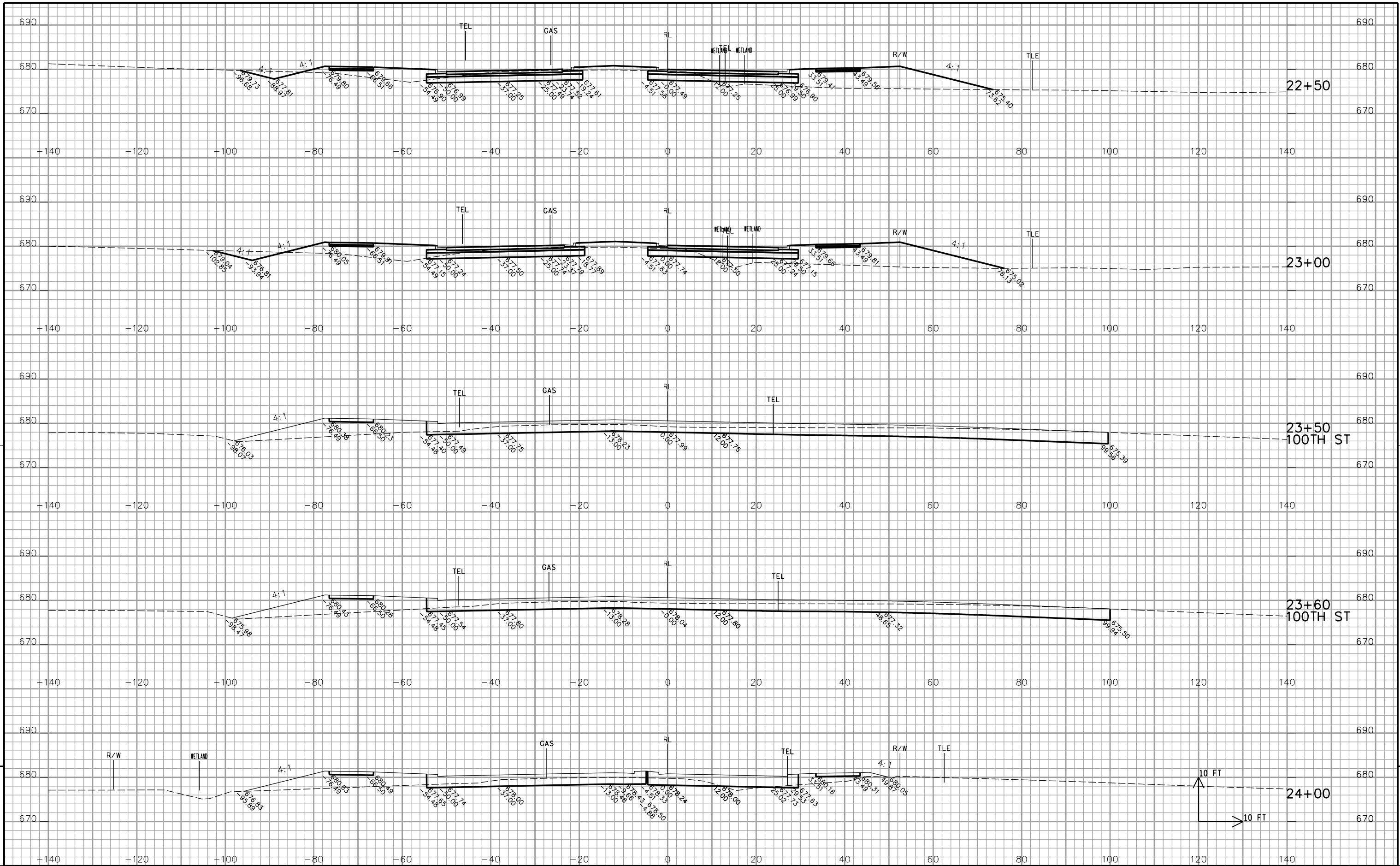


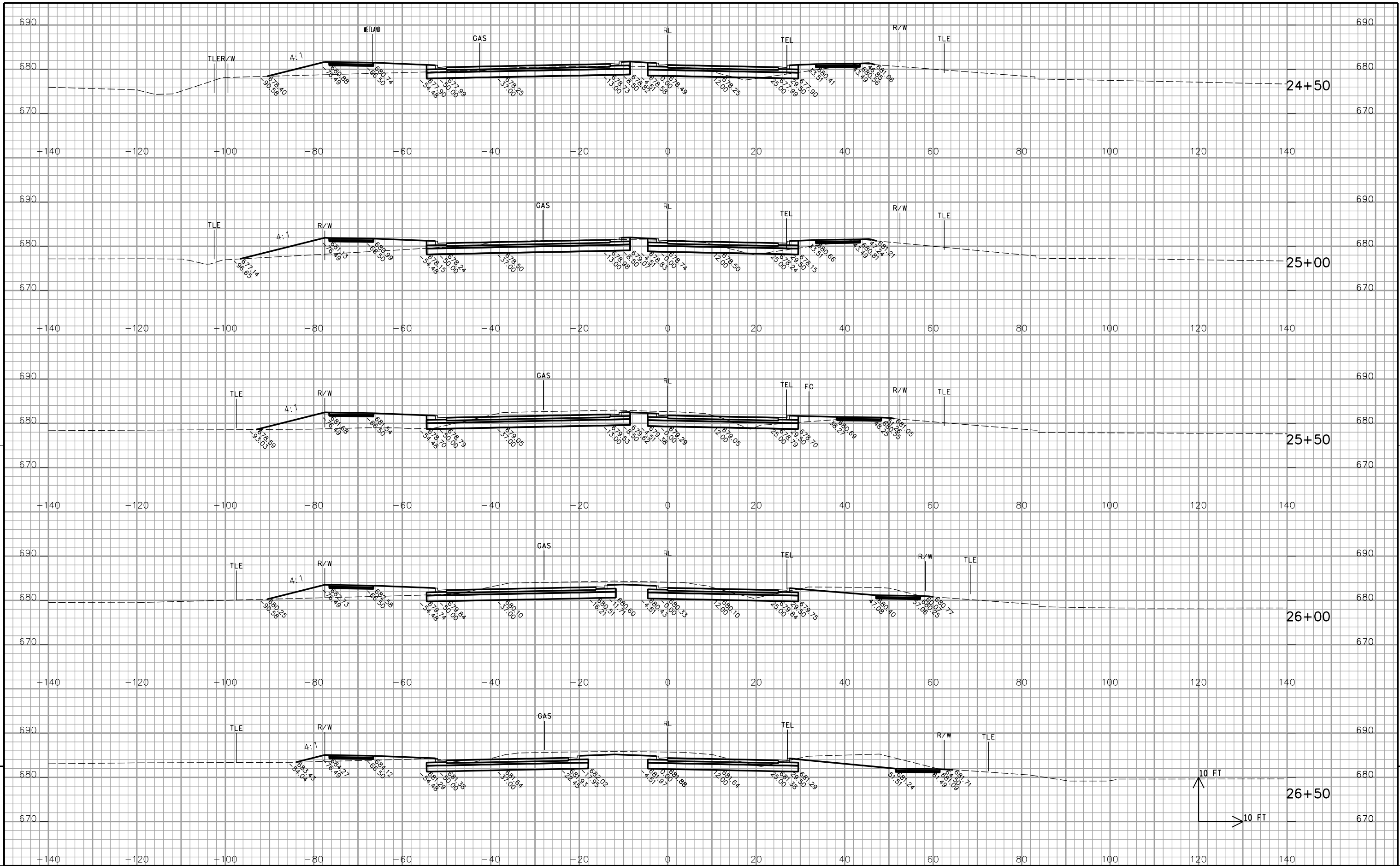
9

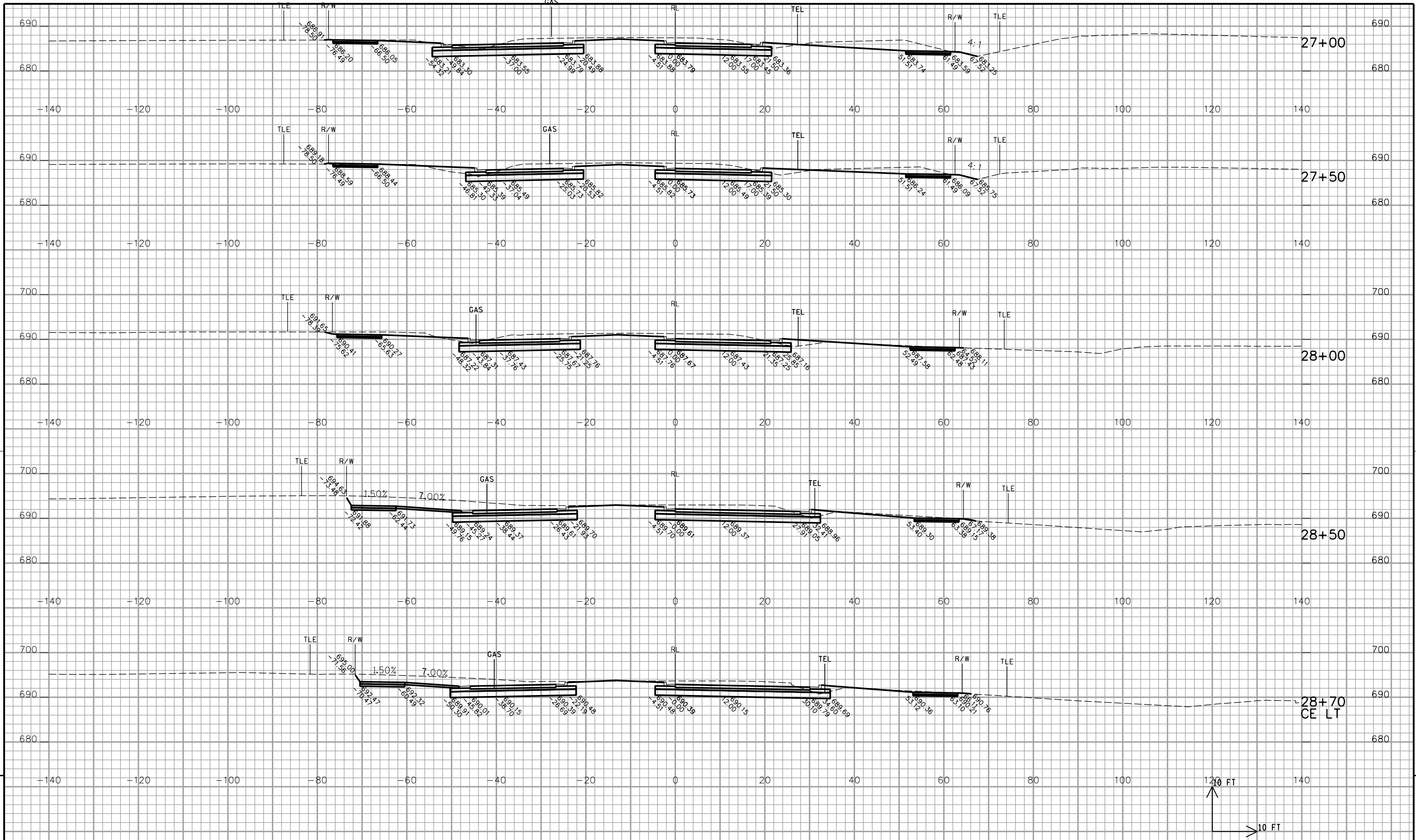
9





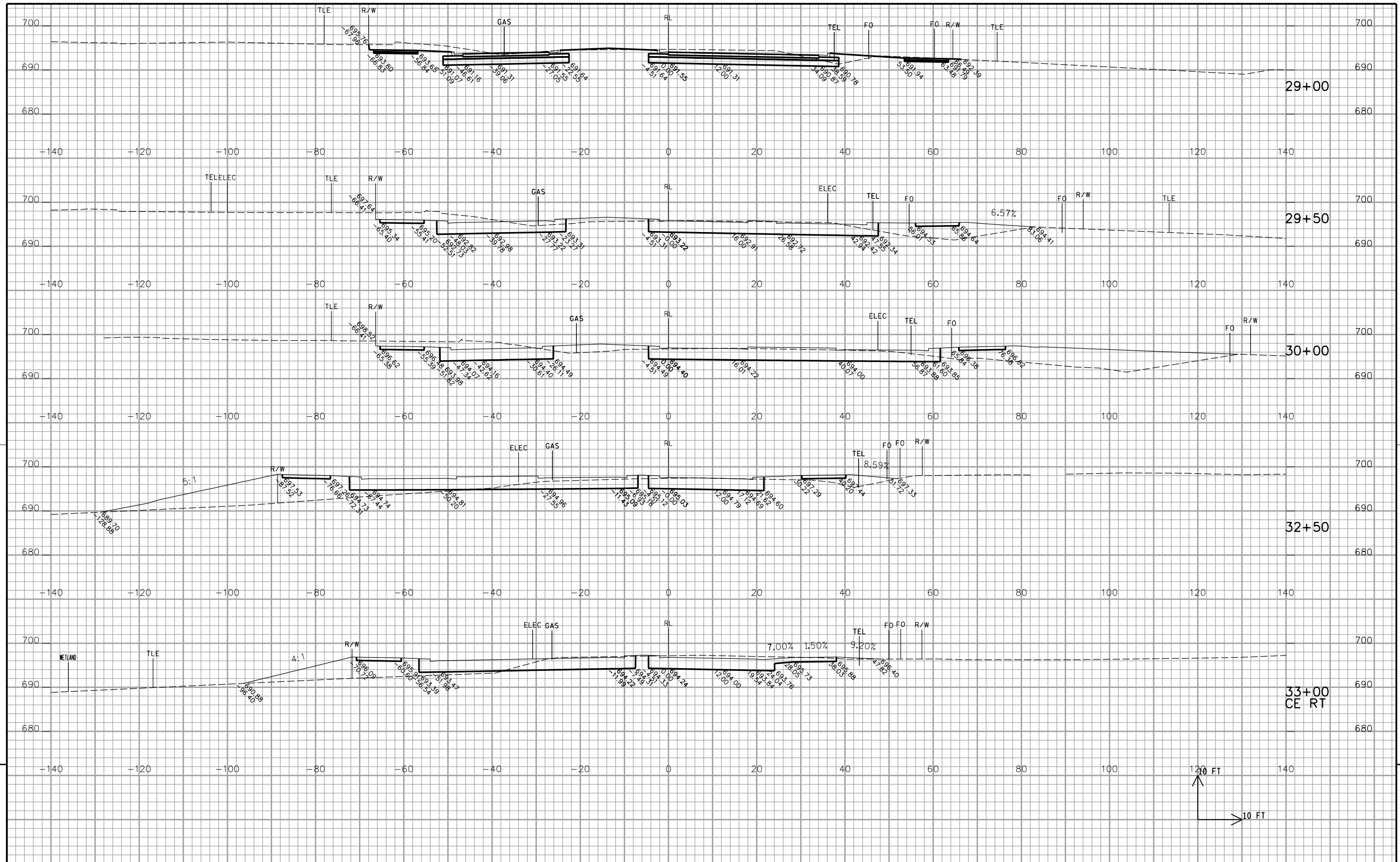


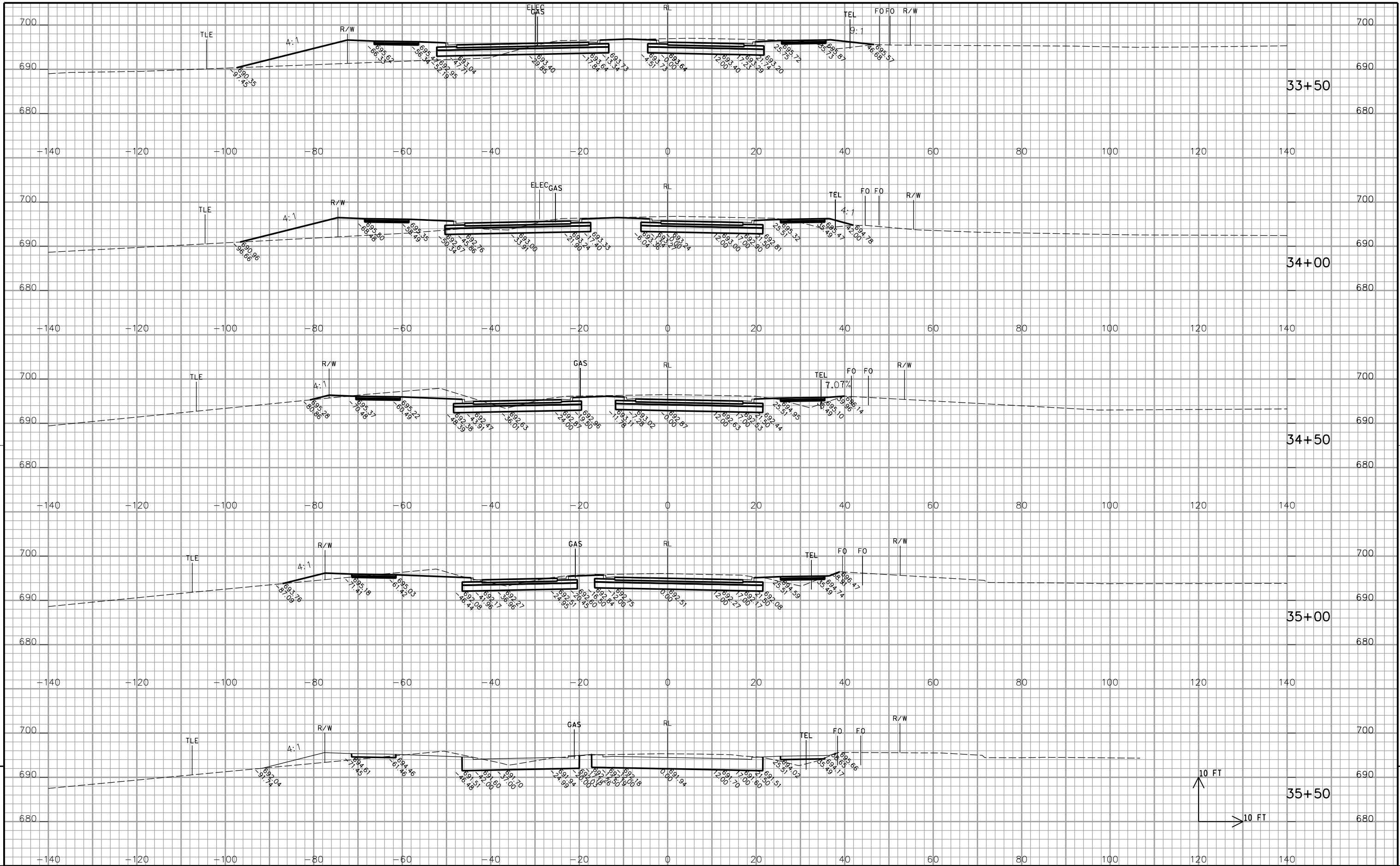


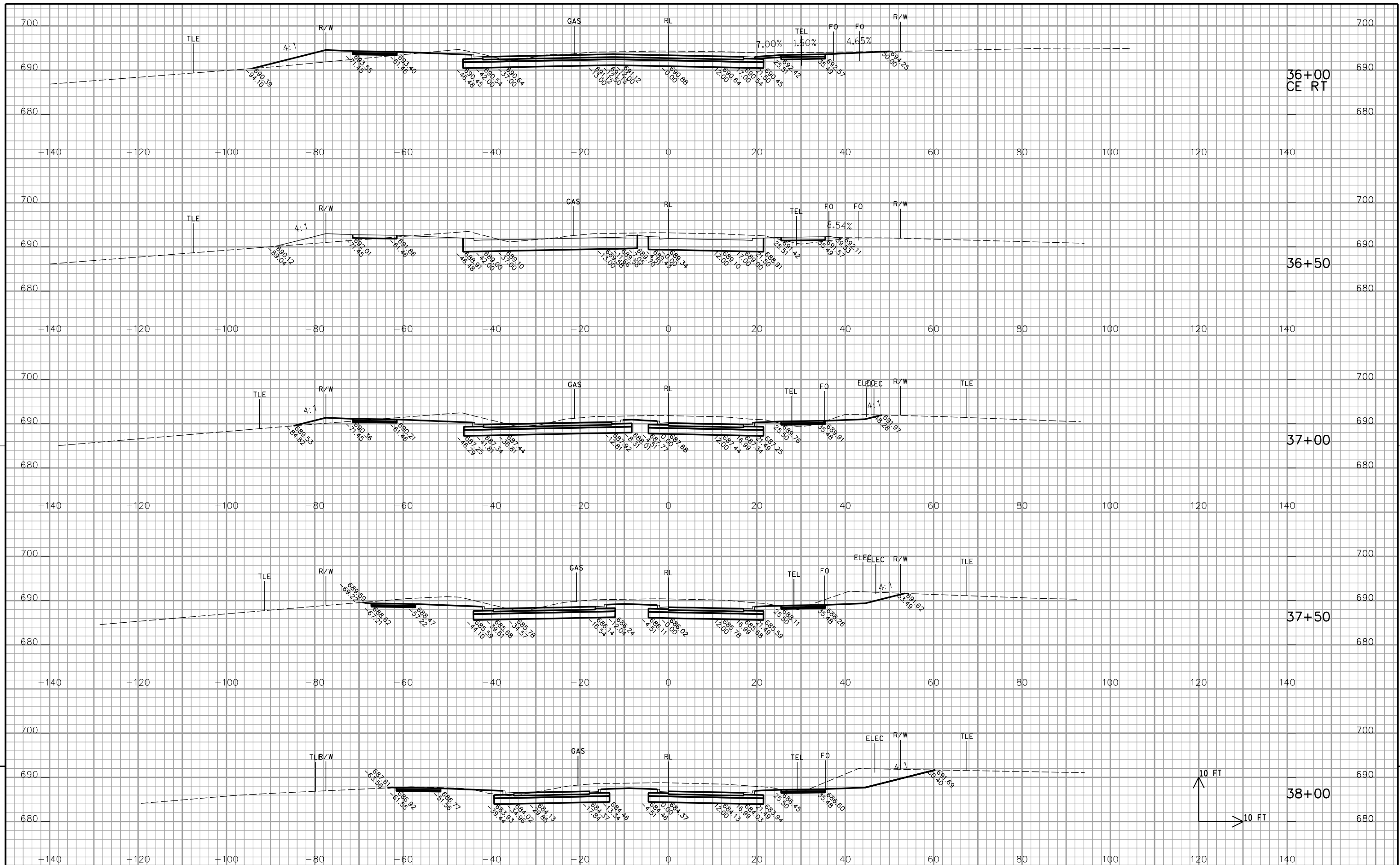


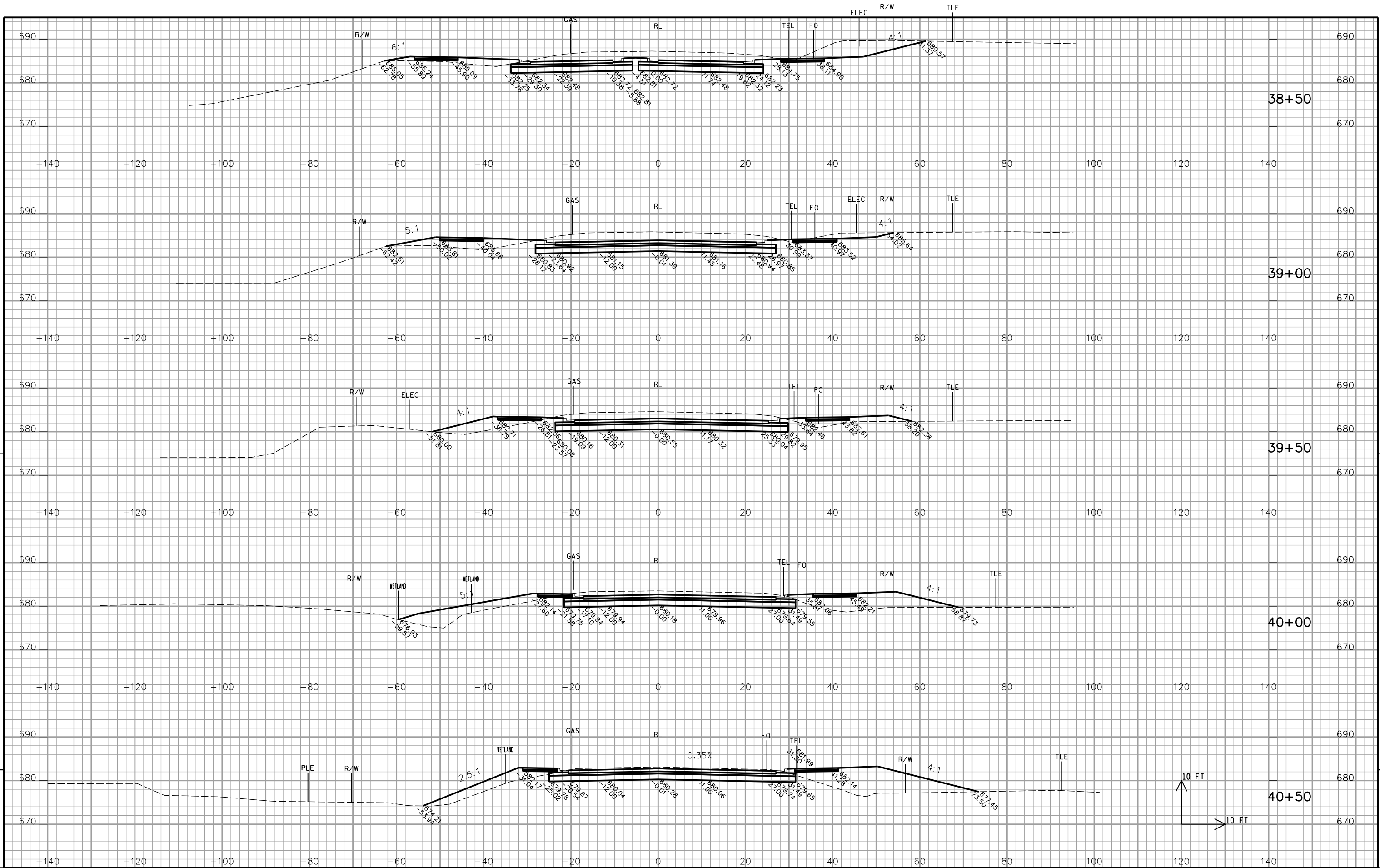
9

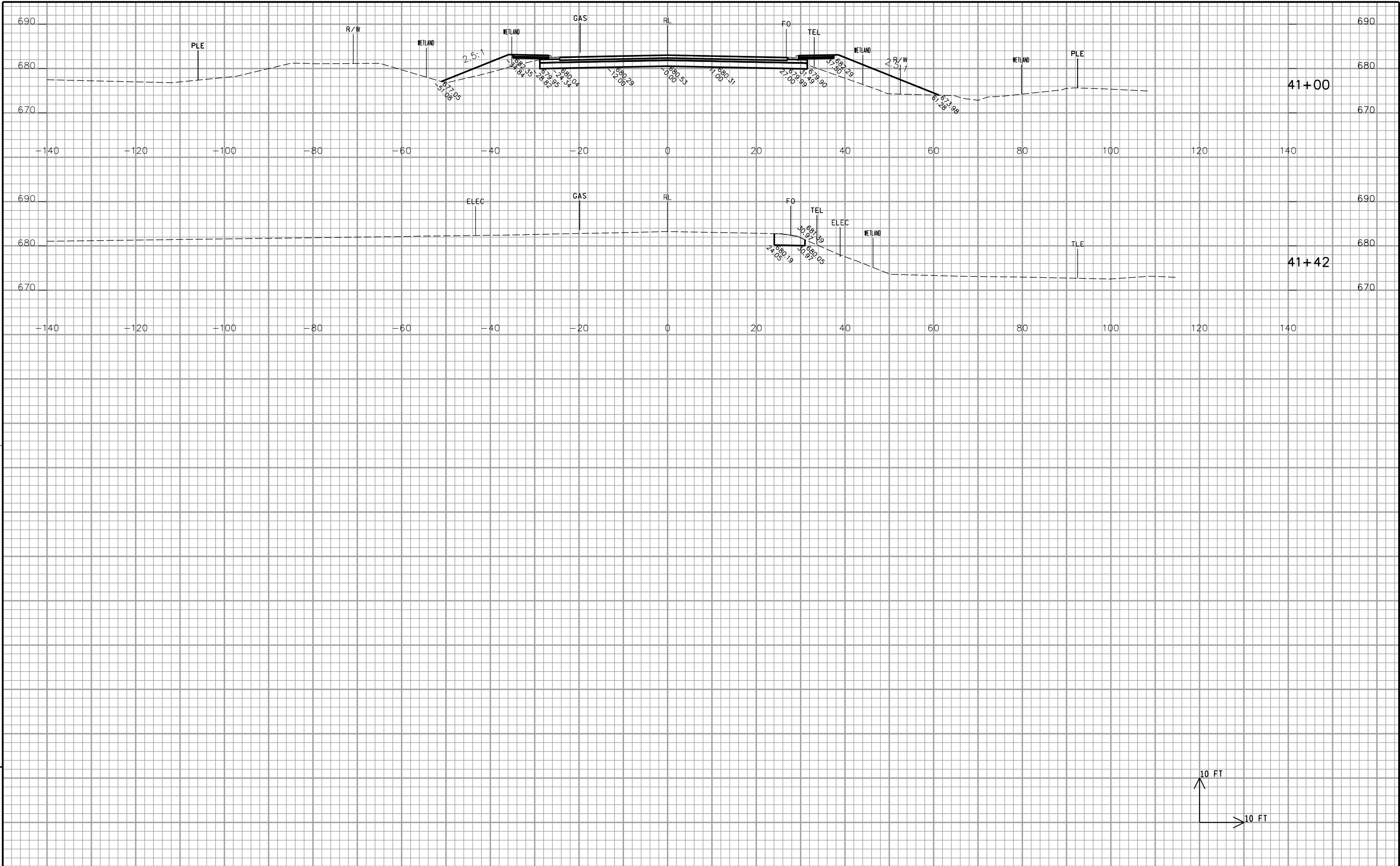
9

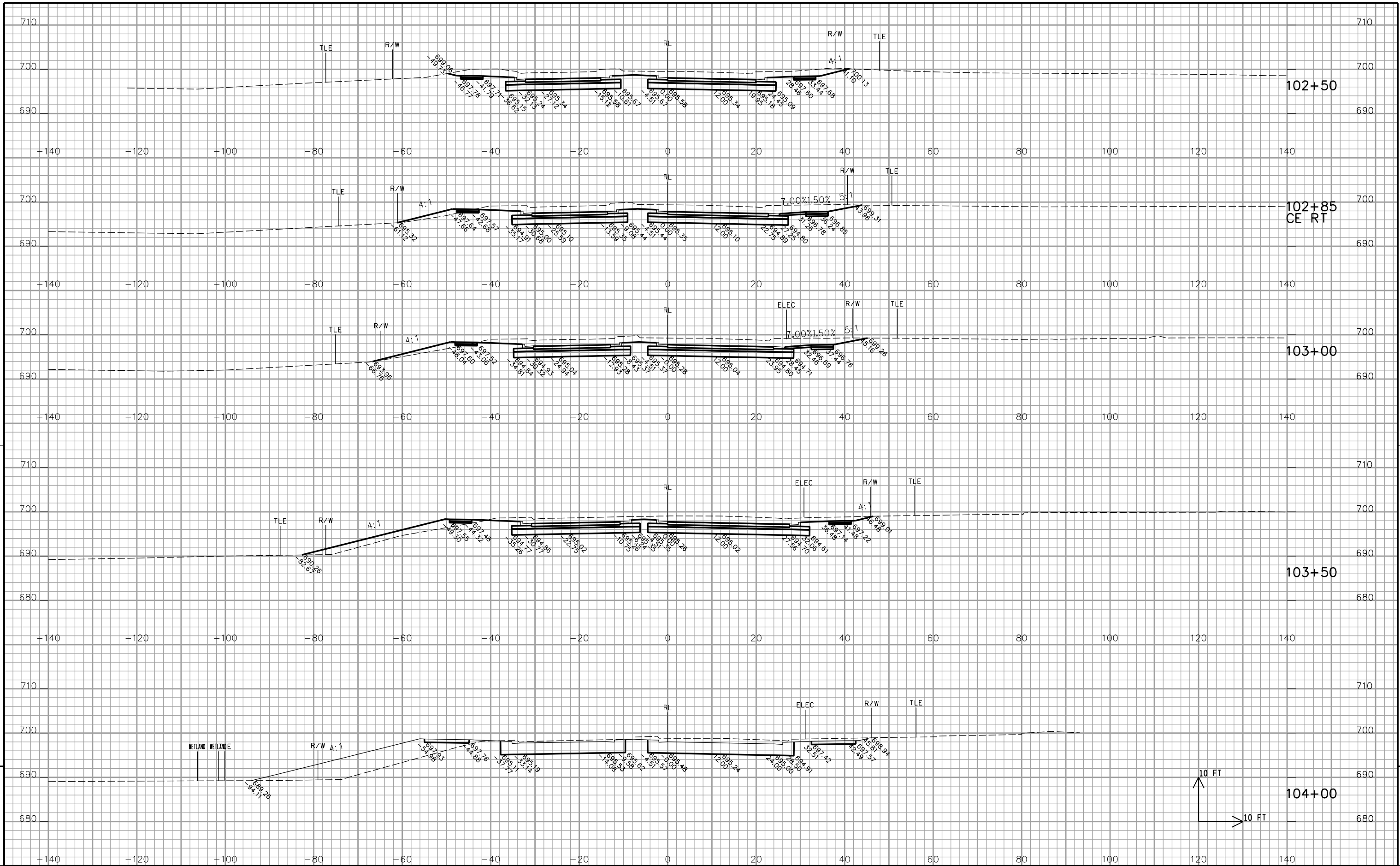




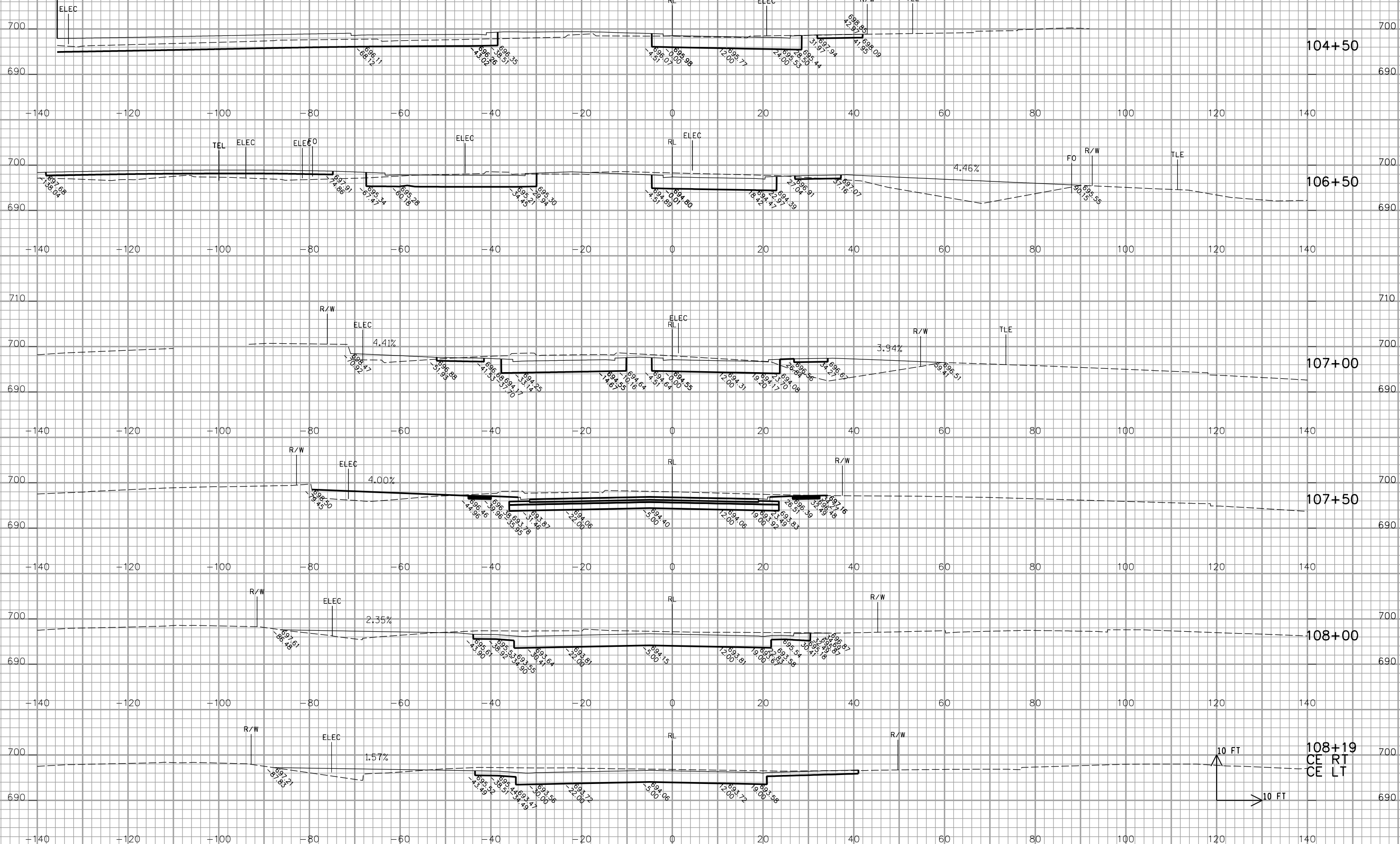








MATCH 32+50
39TH AVE



PROJECT NO: 3729-00-74

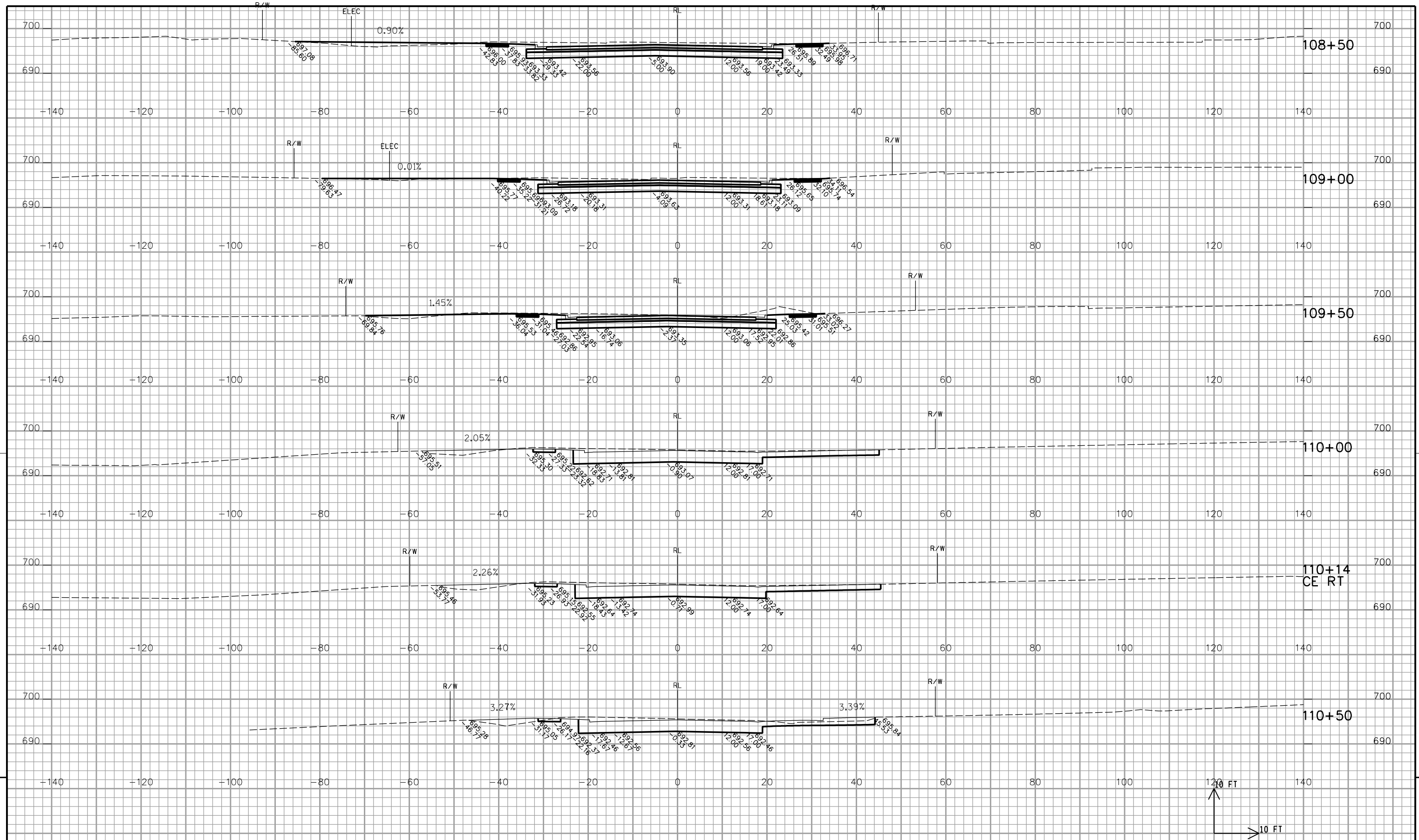
HWY: 39TH AVENUE

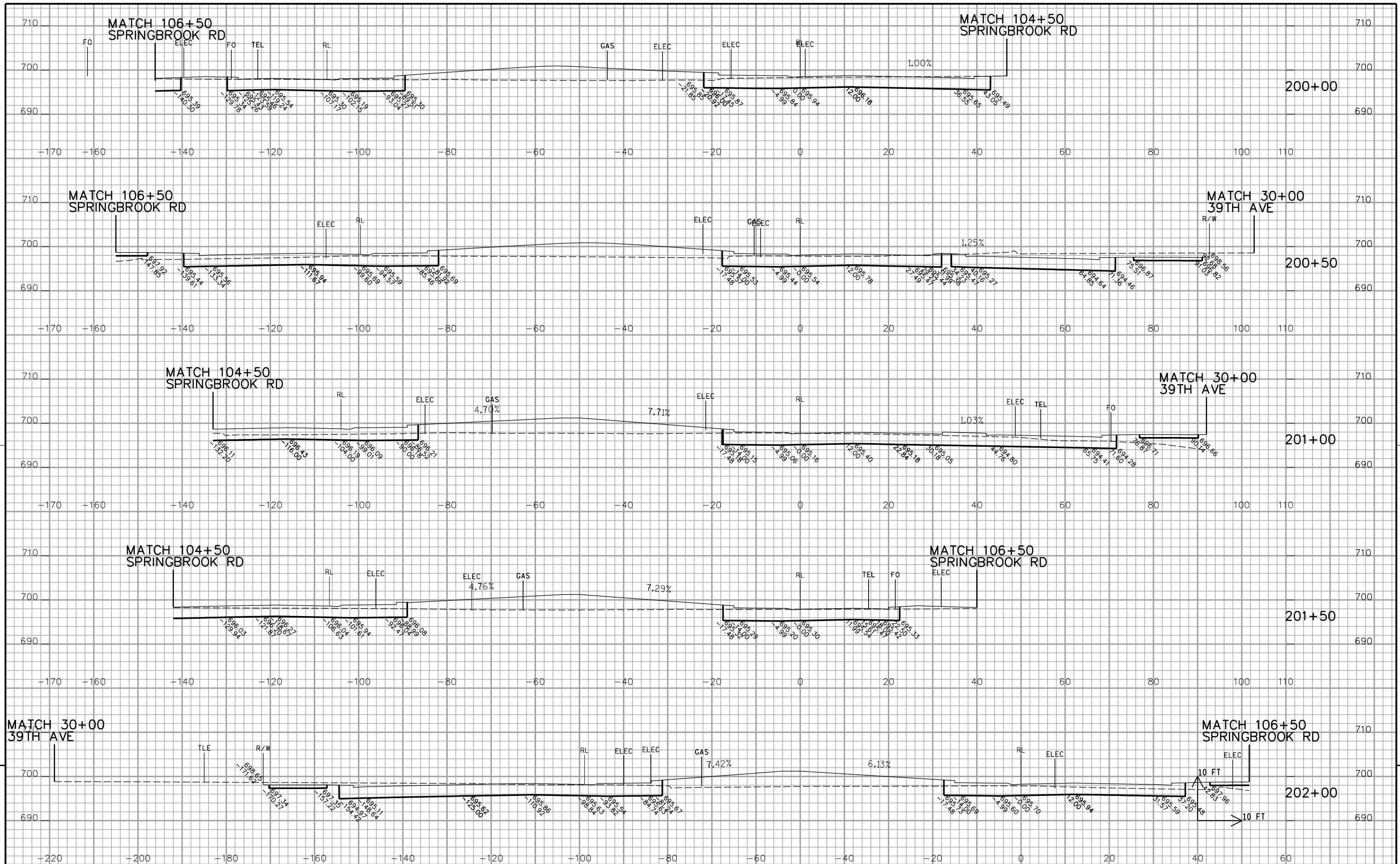
COUNTY: KENOSHA

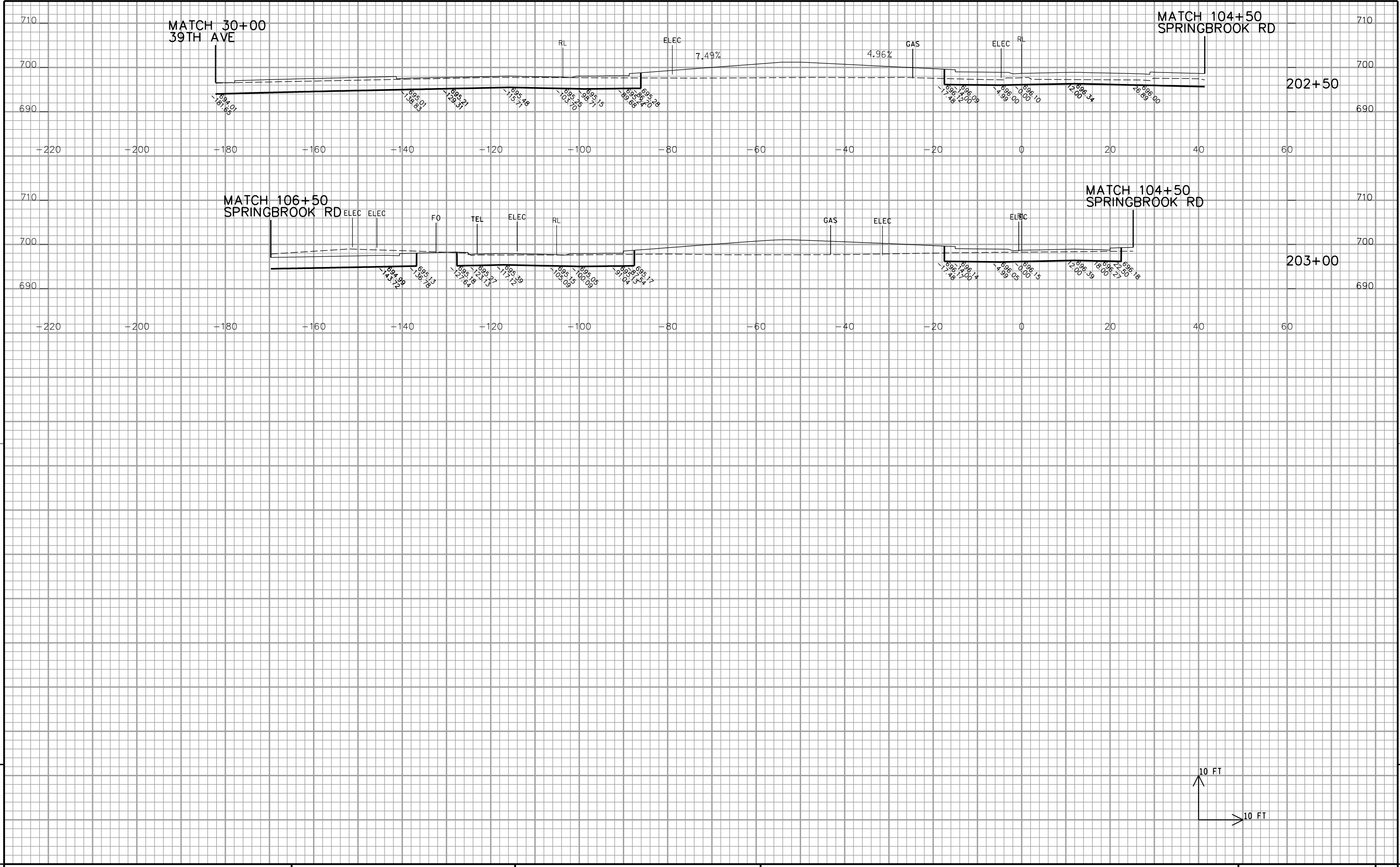
CROSS SECTIONS: SPRINGBROOK ROAD

SHEET 168

E



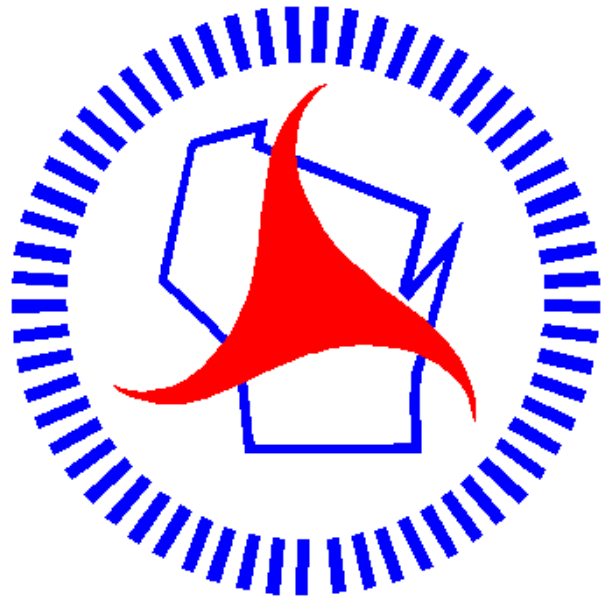




9

9

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

<http://www.dot.wisconsin.gov>