WKE

PROJECT ID: **2025-03-73**

WITH: N/A

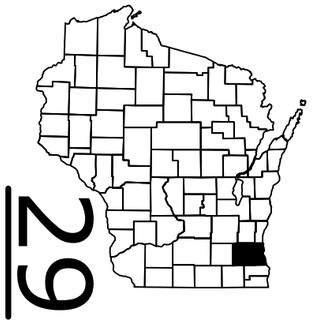
COUNTY: **WAUKESHA**

OCTOBER 2025

ORDER OF SHEETS

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

TOTAL SHEETS = 698



DESIGN DESIGNATION

			BROOKFIELD RD - 145TH ST	145TH ST - 124TH ST
A.A.D.T.	2027	=	44,790	33,700
A.A.D.T.	2047	=	48,600	34,300
D.H.V.		=	4,330	3,050
D.D.		=	0.5	0.5
T.		=	7.3	5.2
DESIGN SPEED		=	55 MPH	50 MPH
ESALS		=	3,700,000	1,600,000

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

C BROOKFIELD, CAPITOL DR

BROOKFIELD RD TO 124TH ST

STH 190

WAUKESHA COUNTY

STATE PROJECT NUMBER
2025-03-73

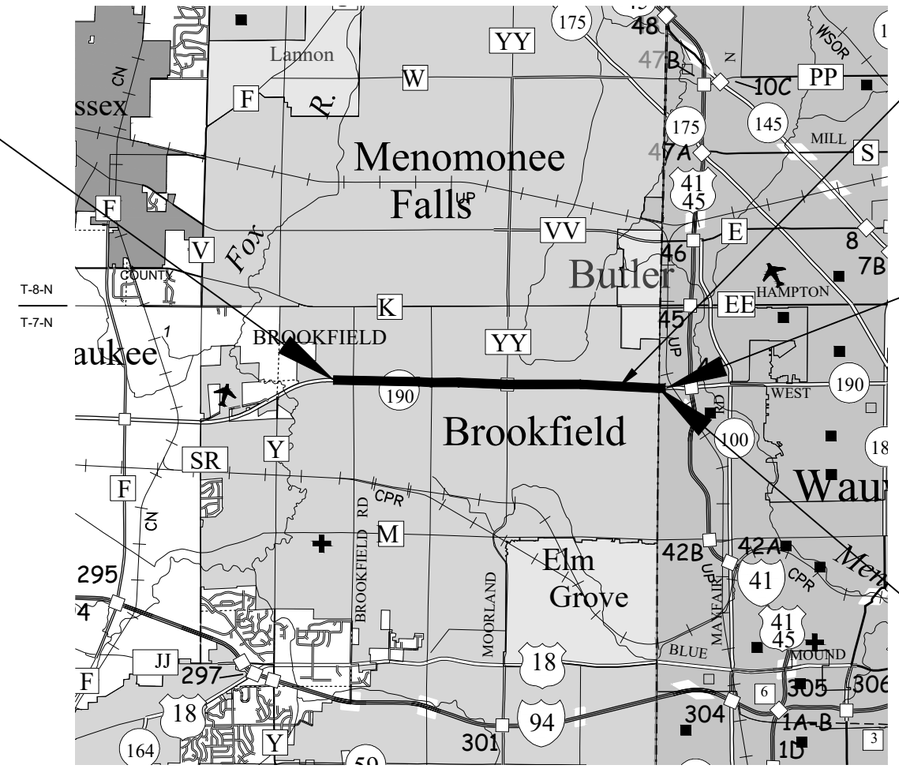
STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2025-03-73	WISC 20256000	1

BEGIN PROJECT
STA. 291+00
X= 705214.94
Y= 189915.03

STRUCTURE
C-67-35

END PROJECT
STA. 107+08

EQUATION
STA. 512+96.89 BACK
STA. 99+00.00 AHEAD



LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 4.357 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), WAUKESHA COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88(2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ORIGINAL PLANS PREPARED BY

GRAEF-USA, INC.

WISCONSIN ☆ ROBERT J. STEUCK E-41177 GERMANTOWN WIS. ☆ PROFESSIONAL ENGINEER

DATE: 4/23/2025 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	GRAEF
Project Manager	MARTIN VILLACA
Regional Examiner	
Regional Supervisor	JOSH LEVEQUE

APPROVED FOR THE DEPARTMENT

APPROVED FOR THE DEPARTMENT

DATE: 4/24/25 (Signature)

E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\010101_TI.DWG PLOT DATE : 4/23/2025 10:21 AM PLOT BY : NIQUETTE, MATT PLOT NAME :

GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE. ANY LOCAL MUNICIPALITY UTILITY WHICH IS NOT A MEMBER OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

ANY REINFORCEMENT LOCATED IN EXISTING CONCRETE PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE REMOVING PAVEMENT ITEM, AND NO ADDITIONAL COMPENSATION WILL BE GRANTED.

SAWCUT EXISTING ASPHALT AND CONCRETE PAVEMENT AT THE MATCHLINE AS INDICATED ON THE PLAN OR AS DIRECTED BY THE ENGINEER.

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

ALL SIGN LOCATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION.

EXISTING DRIVEWAYS AND FIELD ENTRANCES SHALL BE RESTORED IN KIND AS DIRECTED BY THE ENGINEER IN THE FIELD AND AT THE LOCATION DETERMINED BY THE ENGINEER.

ASPHALT AND CONCRETE DRIVEWAYS SHALL BE SAWCUT AT THE MATCH LINE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES AND PIPES SHOWN ON THE PLANS MAY BE ADJUSTED BY THE ENGINEER TO FIT EXISTING FIELD CONDITIONS.

VERIFY THE EXISTING STORM SEWER SYSTEM CONNECTION LOCATIONS AND ELEVATIONS BEFORE ORDERING DRAINAGE STRUCTURES AND PIPES. NOTIFY THE ENGINEER OF ANY DEVIATIONS FROM THE INFORMATION SHOWN ON THE PLANS BEFORE INSTALLING THE PROPOSED STORM SEWER.

ALL HOLES OR OPENINGS BELOW SUBGRADE RESULTING FROM THE ABANDONMENT OR REMOVAL OF EXISTING STRUCTURES OR FROM GRUBBING OF TREES OR STUMPS SHALL BE BACKFILLED WITH GRANULAR BACKFILL.

ALL RADIUS DIMENSIONS FOR CURB & GUTTER ARE GIVEN TO THE FLANGE. ALL ELEVATIONS ALONG CURB & GUTTER ARE GIVEN TO THE FLANGE. OFFSETS NOTED ARE TO THE FLANGE OR EDGE OF LANE IF NO CURB, UNLESS OTHERWISE NOTED.

CONSTRUCT INSIDE EDGE OF SIDEWALK 1/2 INCH HIGHER THAN TOP OF CURB WHEN THEY ARE ADJACENT TO EACH OTHER.

CONTRACTOR SHALL CONTACT SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION (SEWRPC) 10 BUSINESS DAYS BEFORE DISTURBING ANY PUBLIC SURVEY MONUMENTS.

ALL EROSION CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND SHALL BE INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON THE SITE.

DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE TOPSOILED, FERTILIZED, SEEDED, AND E-MATTED, MULCHED OR SODDED AS DIRECTED BY THE ENGINEER.

PLACE TOPSOIL 1-INCH BELOW THE TOP OF ADJACENT CONCRETE CURBS OR SIDEWALKS IN SOD AREAS.

LOCATE LONGITUDINAL JOINTS IN ASPHALT PAVEMENT OUTSIDE OF DRIVING, TURNING, BIKE, OR PARKING LANE. THE LOCATIONS OF LONGITUDINAL JOINTS IN HMA PAVEMENT SHALL BE APPROVED BY THE ENGINEER.

FINAL BASE PATCH LOCATIONS TO BE VERIFIED IN FIELD AND APPROVED BY THE ENGINEER PRIOR TO PERFORMING WORK.

HMA PAVEMENT, WHERE INDICATED ON THE PLANS, SHALL CONSIST OF LAYERS AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.

4" DEPTH	2 ¼" OF HMA PAVEMENT, 3 MT 58-28 S, AS THE LOWER LAYER
	1 ¾" OF HMA PAVEMENT, 4 MT 58-28 S, AS THE UPPER LAYER
5" DEPTH	3 ¼" OF HMA PAVEMENT, 3 MT 58-28 S, AS THE LOWER LAYER
	1 ¾" OF HMA PAVEMENT, 4 MT 58-28 S, AS THE UPPER LAYER

STANDARD ABBREVIATIONS

AEW	APRON END WALL
AGG	AGGREGATE
BAD	BASE AGGREGATE DENSE
BM	BENCH MARK
C&G	CURB AND GUTTER
C/L	CENTER OR CONSTRUCTION LINE
CONC	CONCRETE
CP	CULVERT PIPE
CPCM	CULVERT PIPE CORRUGATED METAL
CPRC	CULVERT PIPE REINFORCED CONCRETE
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
CSCP	CORRUGATED STEEL CULVERT PIPE
CSPA	CORRUGATED STEEL PIPE ARCH
CSD	CONCRETE SURFACE DRAIN
CY	CUBIC-YARD
D	DEGREE OF CURVE
	DELTA
DISCH	DISCHARGE
FE	FIELD ENTRANCE
HERCP	HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE
HMA	HOT MIX ASPHALT
INV	INVERT
L	LENGTH OF CURVE
LHF	LEFT HAND FORWARD
LT	LEFT
MIN	MINIMUM
M/L	MATCHLINE
NB	NORTHBOUND
NC	NORMAL CROWN
NTS	NOT TO SCALE
PAVT	PAVEMENT
PB	PULL BOX
PC	POINT-OF-CURVE
PCC	POINT OF COMPOUND CURVE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PLE	PERMANENT LIMITED EASMENT
PT	POINT OF TANGENT
PVC	POINT OF VERTICAL CURVE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENT
R	RADIUS OF CURVE
R/L	REFERENCE LINE
R/W	RIGHT OF WAY
RAD	RADIUS
RC	REVERSE CROWN
RCAEW	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE
RCHESS	REINFORCED CONCRETE HORIZONTAL ELLIPTICAL STORM SEWER
RCPSS	REINFORCED CONCRETE PIPE - STORM SEWER
REQD	REQUIRED
RHF	RIGHT HAND FORWARD
RO	RUN OFF LENGTH
RT	RIGHT
SALV	SALVAGED
SB	SIGNAL BASE
SDD	STANDARD DETAIL DRAWING
SE	SUPER ELEVATION
SF	SQUARE FOOT
STA	STATION
SY	SQUARE YARD
T	TANGENT LENGTH
TC	TOP OF CURB
TLE	TEMPORARY LIMITED EASEMENT

DEPT. OF NATURAL RESOURCES

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INDEX OF TYPICAL SECTION AND DETAIL SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
REMOVAL PLAN
PLAN DETAILS
CURB RAMP DETAILS
EROSION CONTROL
STORM SEWER PLAN
PERMANENT SIGNING
TRAFFIC SIGNAL PLANS
PAVEMENT MARKING
TRAFFIC CONTROL PLAN
ALIGNMENT PLAN

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www.DiggersHotline.com

2

2

N

VILLAGE OF MENOMONEE FALLS

VILLAGE OF BUTLER

CITY OF MILWAUKEE

CITY OF WAUWATOSA

TOWN OF BROOKFIELD

CITY OF BROOKFIELD

K

LISBON ROAD

LISBON ROAD

WAUKESHA COUNTY

MILWAUKEE COUNTY

UNION PACIFIC RAILWAY

IMPERIAL DR

190

CAPITOL DRIVE

CONCRETE REPAIR FOR STRUCTURE C-67-35

128TH ST

190

CAPITOL DRIVE

250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 100 110 120 130 138

BEGIN PROJECT
STA. 291+00

BROOKFIELD RD

CALHOUN RD

PILGRIM RD

YY

LILLY RD

STA. AHEAD = 99+00.00
STA. BACK = 512+96.89

124TH ST

END PROJECT
STA. 107+08

IH 41

BURLEIGH ROAD

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PROJECT OVERVIEW	SHEET 3	E

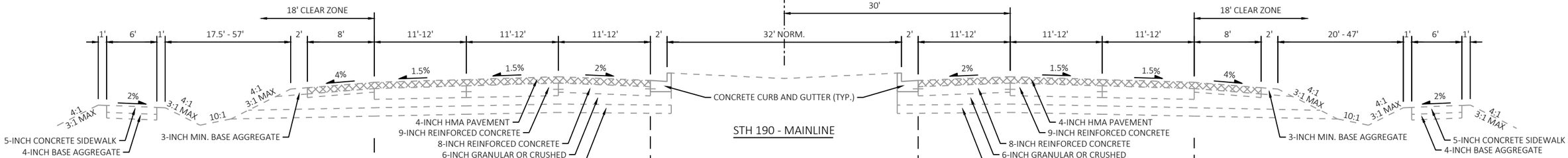
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LAYOUT NAME - 020201

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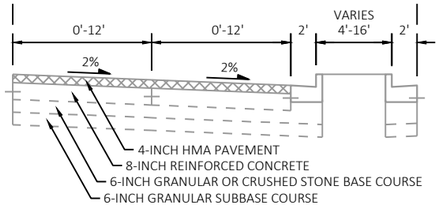
WISDOT/CADDS SHEET 42

2

STH 190
RL

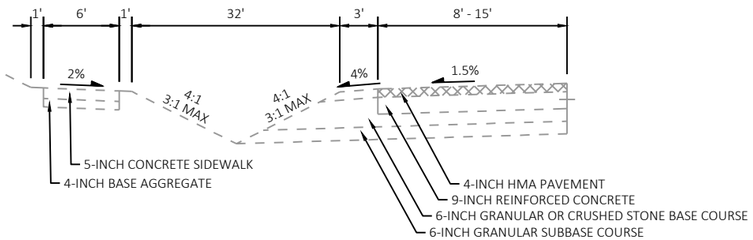


STH 190 - MAINLINE



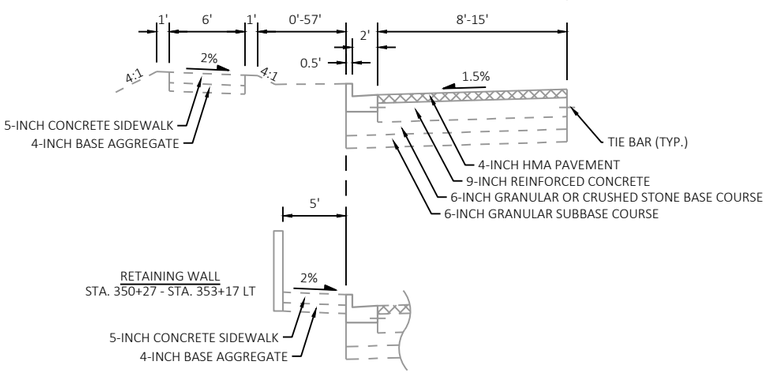
LEFT TURN LANE

WESTBOUND STH 190		EASTBOUND STH 190	
STA. 300+48 - STA. 306+56	STA. 375+42 - STA. 379+22	STA. 291+25 - STA. 293+95	STA. 378+74 - STA. 380+74
STA. 308+40 - STA. 312+20	STA. 381+56 - STA. 383+55	STA. 304+40 - STA. 307+56	STA. 382+97 - STA. 386+84
STA. 316+40 - STA. 319+55	STA. 387+65 - STA. 391+46	STA. 311+75 - STA. 315+57	STA. 392+15 - STA. 395+95
STA. 325+18 - STA. 328+08	STA. 396+81 - STA. 399+69	STA. 316+95 - STA. 318+99	STA. 398+23 - STA. 400+20
STA. 332+68 - STA. 334+48	STA. 401+05 - STA. 403+10	STA. 329+90 - STA. 331+86	STA. 415+14 - STA. 417+05
STA. 343+58 - STA. 346+73	STA. 418+12 - STA. 420+17	STA. 334+22 - STA. 337+32	STA. 420+71 - STA. 424+50
STA. 348+98 - STA. 350+95	STA. 425+33 - STA. 429+22	STA. 349+35 - STA. 352+08	STA. 427+74 - STA. 431+91
STA. 358+80 - STA. 361+65	STA. 432+70 - STA. 436+60	STA. 359+49 - STA. 363+08	STA. 435+50 - STA. 437+50
STA. 363+88 - STA. 367+69	STA. 439+15 - STA. 441+80	STA. 370+77 - STA. 374+60	STA. 339+99 - STA. 442+00



RIGHT TURN LANE - RURAL

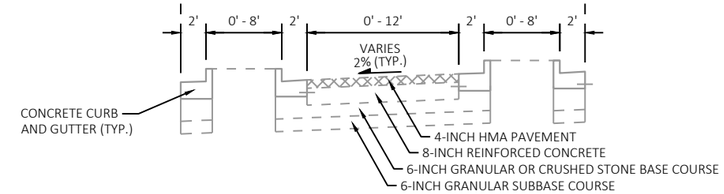
WESTBOUND STH 190	EASTBOUND STH 190
STA. 298+00 - STA. 298+77	STA. 297+00 - STA. 298+87
STA. 300+76 - STA. 303+00	STA. 300+75 - STA. 301+68
STA. 320+03 - STA. 321+17	STA. 304+99 - STA. 307+29
STA. 338+87 - STA. 339+78	STA. 308+51 - STA. 309+45
STA. 387+88 - STA. 391+28	STA. 312+74 - STA. 315+24
STA. 397+30 - STA. 400+11	STA. 316+55 - STA. 321+43
	STA. 400+50 - STA. 405+00



RIGHT TURN LANE - URBAN

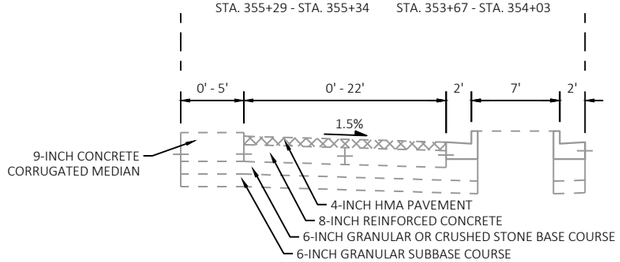
WESTBOUND STH 190

STA. 341+19 - STA. 353+31
STA. 356+00 - STA. 362+87
STA. 400+11 - STA. 406+45
STA. 407+45 - STA. 412+96
STA. 416+54 - STA. 437+50



SLOTTED LEFT TURN

WESTBOUND STH 190	EASTBOUND STH 190
STA. 322+40 - STA. 325+18	STA. 293+95 - STA. 299+19
STA. 340+98 - STA. 343+58	STA. 318+99 - STA. 321+43
STA. 347+62 - STA. 348+98	STA. 337+32 - STA. 339+94
STA. 355+29 - STA. 355+34	STA. 353+67 - STA. 354+03



SLOTTED LEFT TURN

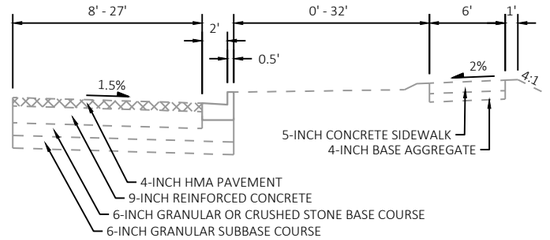
WESTBOUND STH 190	EASTBOUND STH 190
STA. 355+34 - STA. 358+80	STA. 352+08 - STA. 353+51

TYPICAL EXISTING SECTION

STA. 291+00 - STA. 442+00

NOTES:
ORIGINAL CONCRETE BASE SLOPE WAS 1%. ASPHALTIC WEDGING WAS PREVIOUSLY CONSTRUCTED TO OBTAIN A 1.5% SURFACE CROSS SLOPE, WITH ASPHALT DEPTHS VARYING FROM 3" TO 4.5". WITH THE LAST REHAB, 4" OF PAVEMENT WAS REMOVED, WHICH MAY OR MAY NOT HAVE INCLUDED REMOVING APPROXIMATELY 1"CONCRETE SURFACE PARTIAL DEPTH.

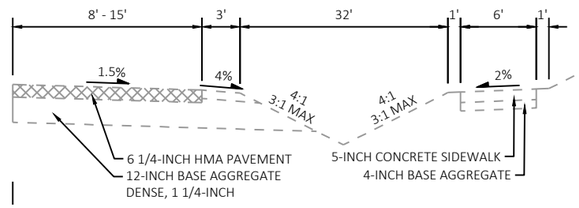
ALL MEDIANS ARE EITHER 5-INCH CONCRETE SIDEWALK OVER 4-INCH BASE OR SOD.



RIGHT TURN LANE - URBAN

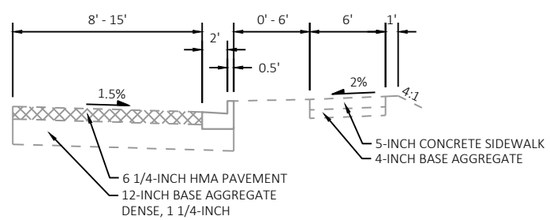
EASTBOUND STH 190

STA. 322+45 - STA. 323+50
STA. 336+31 - STA. 337+32
STA. 347+58 - STA. 353+45
STA. 355+63 - STA. 363+12
STA. 405+35 - STA. 407+03



RIGHT TURN LANE - RURAL

WESTBOUND STH 190	EASTBOUND STH 190
STA. 303+00 - STA. 305+96	STA. 294+15 - STA. 297+00

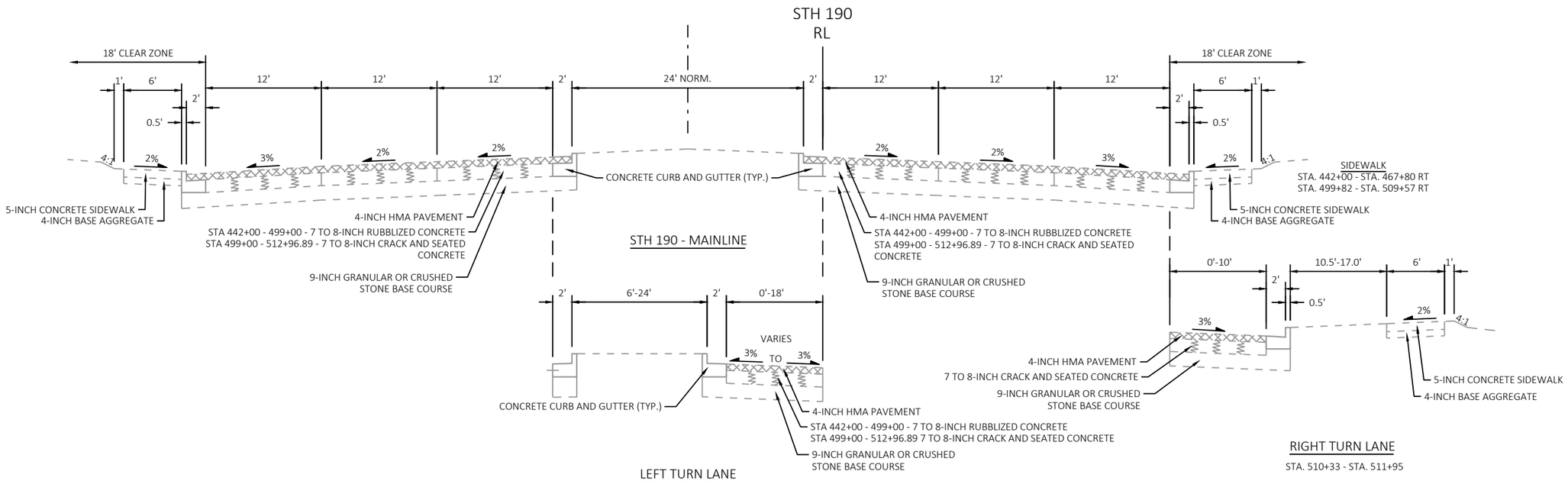


RIGHT TURN LANE - URBAN

WESTBOUND STH 190	EASTBOUND STH 190
STA. 322+42 - STA. 328+00	STA. 337+32 - STA. 339+60
	STA. 341+15 - STA. 346+44

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 4	E

2

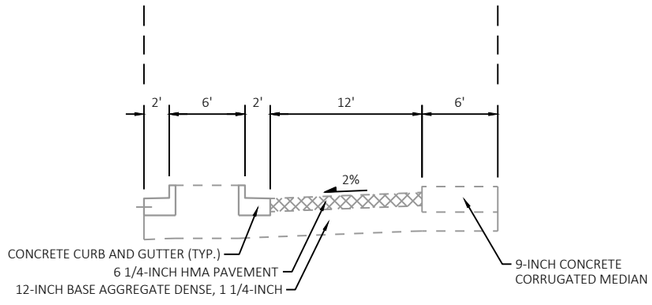


RIGHT TURN LANE

STA. 510+33 - STA. 511+95

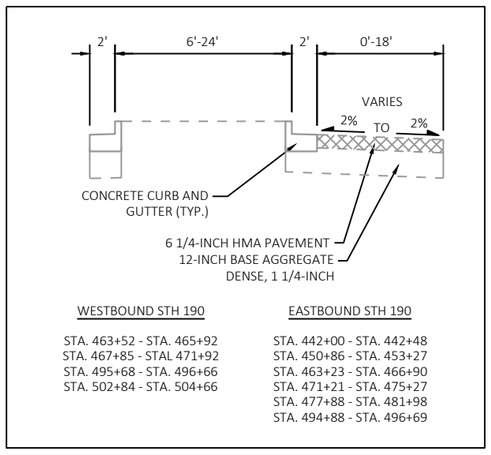
LEFT TURN LANE

WESTBOUND STH 190	EASTBOUND STH 190
STA. 444+15 - STA. 446+20	STA. 447+23 - STA. 449+27
STA. 449+80 - STA. 451+76	STA. 489+28 - STA. 492+26
STA. 485+65 - STA. 489+00	STA. 502+93 - STA. 505+00
STA. 493+04 - STA. 495+68	STA. 506+02 - STA. 512+31
STA. 505+49 - STA. 507+53	



LEFT TURN W/ RUMBLE STRIP

WESTBOUND STH 190	EASTBOUND STH 190
STA. 459+26 - STA. 463+52	STA. 453+27 - STA. 458+16
STA. 500+02 - STA. 502+84	STA. 496+69 - STA. 498+90

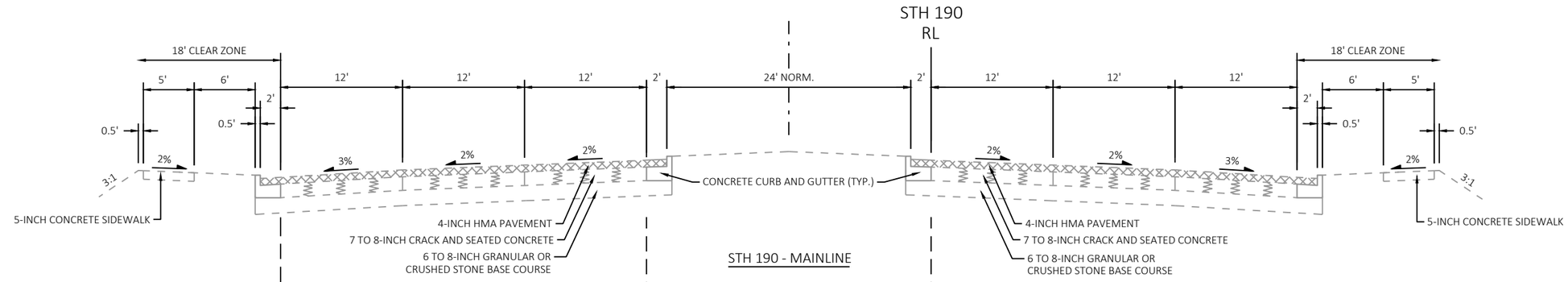


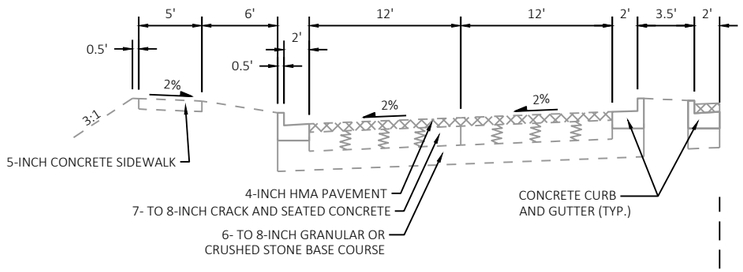
WESTBOUND STH 190	EASTBOUND STH 190
STA. 463+52 - STA. 465+92	STA. 442+00 - STA. 442+48
STA. 467+85 - STAL 471+92	STA. 450+86 - STA. 453+27
STA. 495+68 - STA. 496+66	STA. 463+23 - STA. 466+90
STA. 502+84 - STA. 504+66	STA. 471+21 - STA. 475+27
	STA. 477+88 - STA. 481+98
	STA. 494+88 - STA. 496+69

TYPICAL EXISTING SECTION

STA. 442+00 - STA. 512+96.89

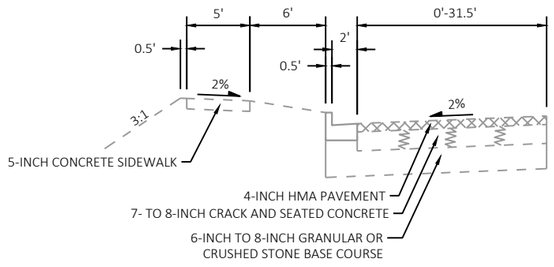
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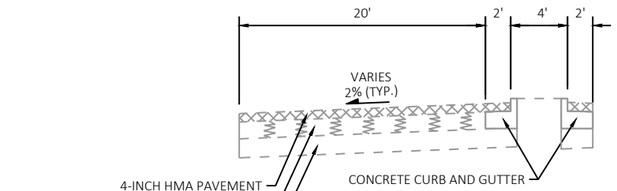
SLOTTED RIGHT TURN LANE

STA 99+75 - STA 102+74



RIGHT TURN LANE

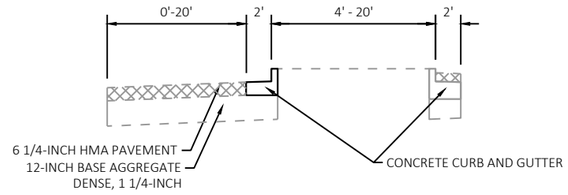
STA. 102+74 - STA. 105+11



LEFT TURN LANE

WESTBOUND STH 190

STA. 99+83 - STA. 102+55



LEFT TURN LANE

WESTBOUND STH 190

STA. 102+55 - STA. 106+87

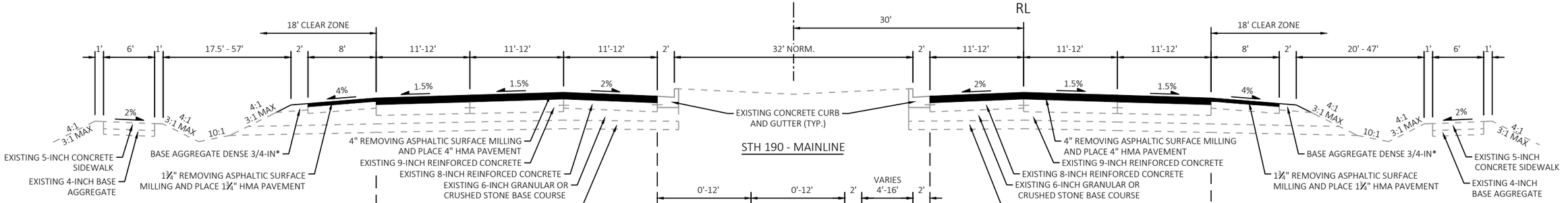
TYPICAL EXISTING SECTION

STA. 99+00 - STA. 107+08

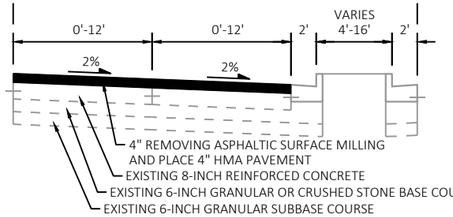
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 6	E

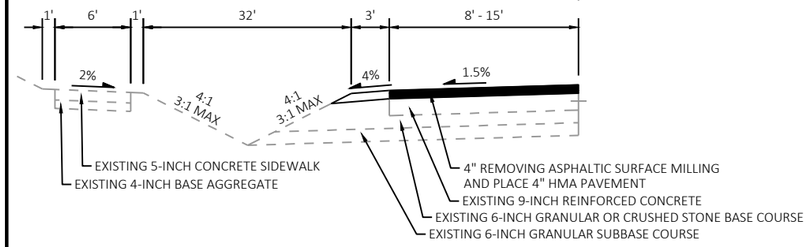
2

STH 190
RL



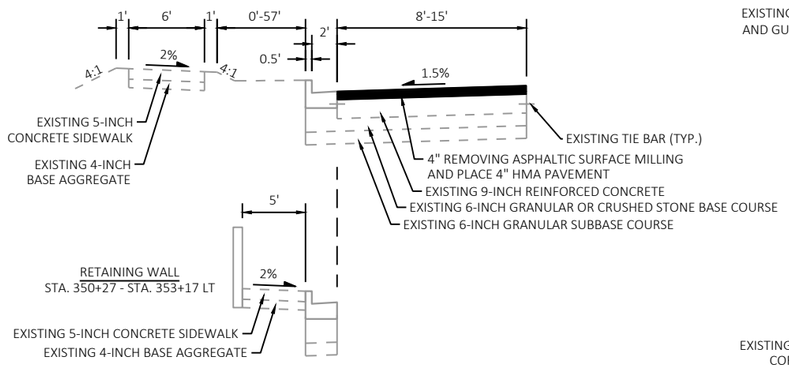
STH 190 - MAINLINE





RIGHT TURN LANE - RURAL

WESTBOUND STH 190	EASTBOUND STH 190
STA. 298+00 - STA. 298+77	STA. 297+00 - STA. 298+87
STA. 300+76 - STA. 303+00	STA. 300+75 - STA. 301+68
STA. 320+03 - STA. 321+17	STA. 304+99 - STA. 307+29
STA. 338+87 - STA. 339+78	STA. 308+51 - STA. 309+45
STA. 387+88 - STA. 391+28	STA. 312+74 - STA. 315+24
STA. 397+30 - STA. 400+11	STA. 316+55 - STA. 321+43
	STA. 400+50 - STA. 405+00

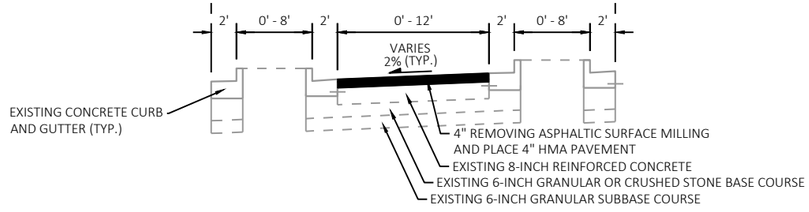


RIGHT TURN LANE - URBAN

WESTBOUND STH 190
STA. 341+19 - STA. 353+31
STA. 356+00 - STA. 362+87
STA. 400+11 - STA. 406+45
STA. 407+45 - STA. 412+96
STA. 416+54 - STA. 437+50

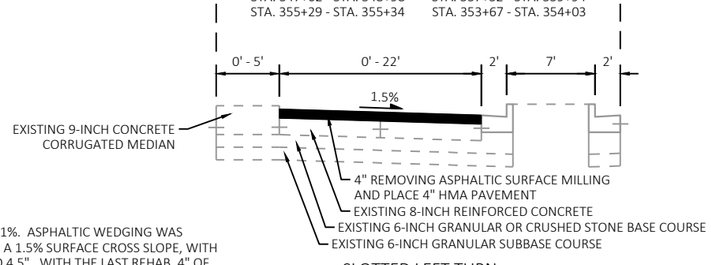
LEFT TURN LANE

WESTBOUND STH 190		EASTBOUND STH 190	
STA. 300+48 - STA. 306+56	STA. 375+42 - STA. 379+22	STA. 291+25 - STA. 293+95	STA. 378+74 - STA. 380+74
STA. 308+40 - STA. 312+20	STA. 381+56 - STA. 383+55	STA. 304+40 - STA. 307+56	STA. 382+97 - STA. 386+84
STA. 316+40 - STA. 319+55	STA. 387+65 - STA. 391+46	STA. 311+75 - STA. 315+57	STA. 392+15 - STA. 395+95
STA. 325+18 - STA. 328+08	STA. 396+81 - STA. 399+69	STA. 316+95 - STA. 318+99	STA. 398+23 - STA. 400+20
STA. 332+68 - STA. 334+48	STA. 401+05 - STA. 403+10	STA. 329+90 - STA. 331+86	STA. 415+14 - STA. 417+05
STA. 343+58 - STA. 346+73	STA. 418+12 - STA. 420+17	STA. 334+22 - STA. 337+32	STA. 420+71 - STA. 424+50
STA. 348+98 - STA. 350+95	STA. 425+33 - STA. 429+22	STA. 349+35 - STA. 352+08	STA. 427+74 - STA. 431+91
STA. 358+80 - STA. 361+65	STA. 432+70 - STA. 436+60	STA. 359+49 - STA. 363+08	STA. 435+50 - STA. 437+50
STA. 363+88 - STA. 367+69	STA. 439+15 - STA. 441+80	STA. 370+77 - STA. 374+60	STA. 339+99 - STA. 442+00



SLOTTED LEFT TURN

WESTBOUND STH 190	EASTBOUND STH 190
STA. 322+40 - STA. 325+18	STA. 293+95 - STA. 299+19
STA. 340+98 - STA. 343+58	STA. 318+99 - STA. 321+43
STA. 347+62 - STA. 348+98	STA. 337+32 - STA. 339+94
STA. 355+29 - STA. 355+34	STA. 353+67 - STA. 354+03



SLOTTED LEFT TURN

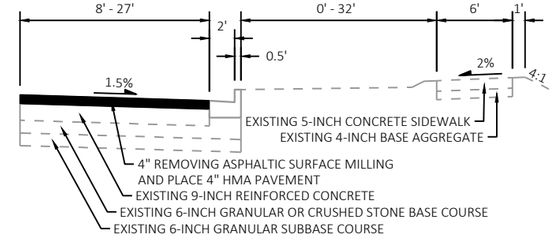
WESTBOUND STH 190	EASTBOUND STH 190
STA. 355+34 - STA. 358+80	STA. 352+08 - STA. 353+51

NOTES:
ORIGINAL CONCRETE BASE SLOPE WAS 1%. ASPHALTIC WEDGING WAS PREVIOUSLY CONSTRUCTED TO OBTAIN A 1.5% SURFACE CROSS SLOPE, WITH ASPHALT DEPTHS VARYING FROM 3" TO 4.5". WITH THE LAST REHAB, 4" OF PAVEMENT WAS REMOVED, WHICH MAY OR MAY NOT HAVE INCLUDED REMOVING APPROXIMATELY 1"CONCRETE SURFACE PARTIAL DEPTH.

ALL MEDIANS ARE EITHER 5-INCH CONCRETE SIDEWALK OVER 4-INCH BASE OR SOD.

*DEPTH VARIES, MATCH PAVEMENT ELEVATION INTO EXISTING SHOULDER, 6% MAX GRADE.

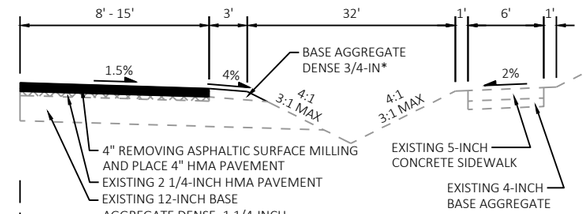
TYPICAL FINISHED SECTION
STA. 291+00 - STA. 442+00



RIGHT TURN LANE - URBAN

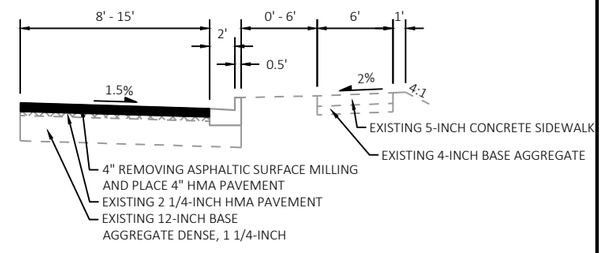
EASTBOUND STH 190

STA. 322+45 - STA. 323+50
STA. 336+31 - STA. 337+32
STA. 347+58 - STA. 353+45
STA. 355+63 - STA. 363+12
STA. 405+35 - STA. 407+03



RIGHT TURN LANE - RURAL

WESTBOUND STH 190	EASTBOUND STH 190
STA. 303+00 - STA. 305+96	STA. 294+15 - STA. 297+00

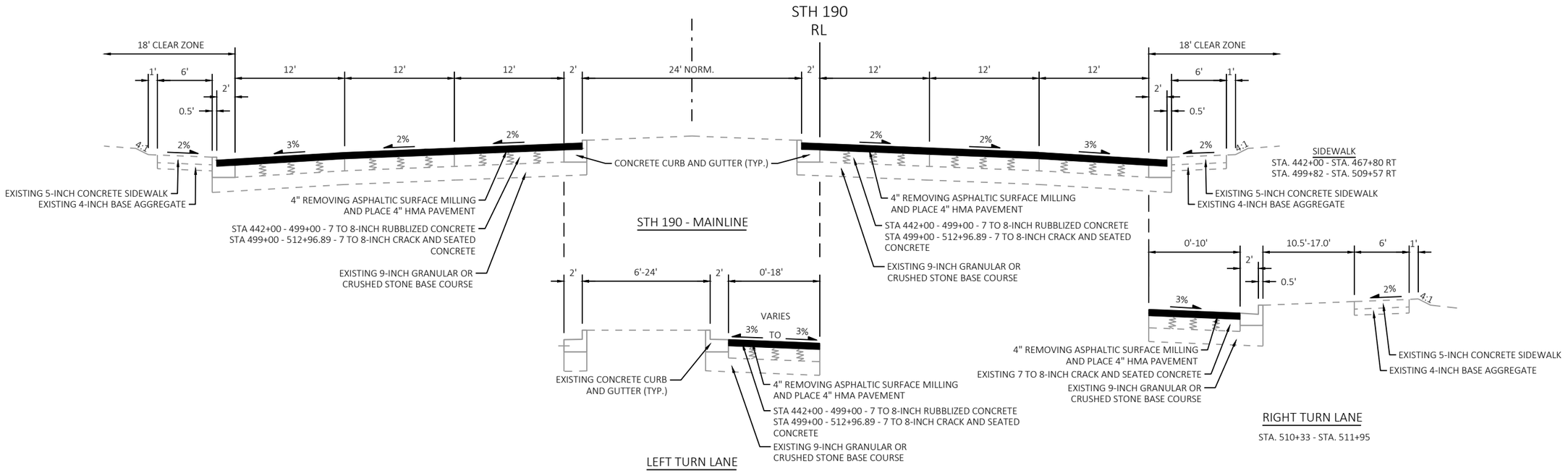


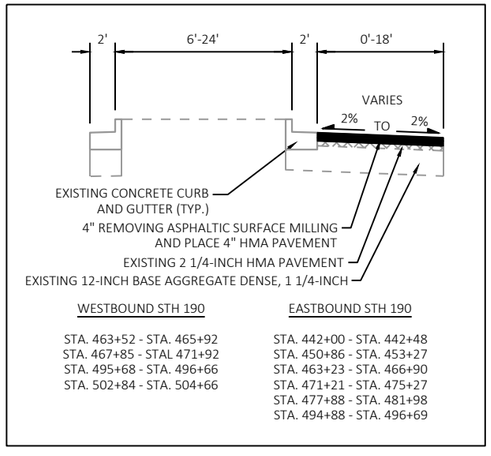
RIGHT TURN LANE - URBAN

WESTBOUND STH 190	EASTBOUND STH 190
STA. 322+42 - STA. 328+00	STA. 337+32 - STA. 339+60
	STA. 341+15 - STA. 346+44

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 7	E

2



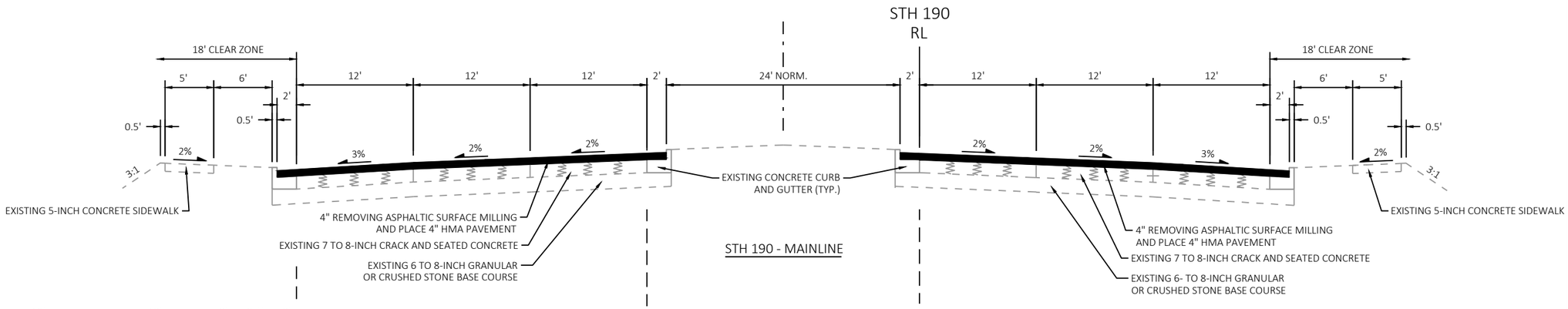


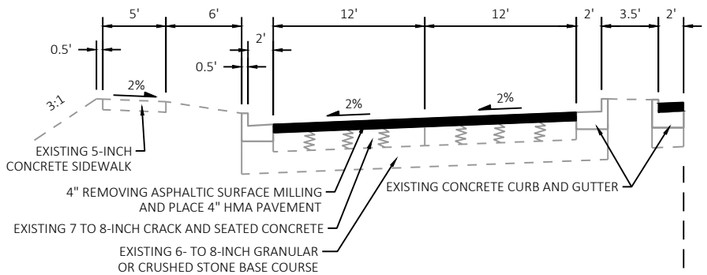
TYPICAL FINISHED SECTION

STA. 442+00 - STA. 512+96.87

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 8	E

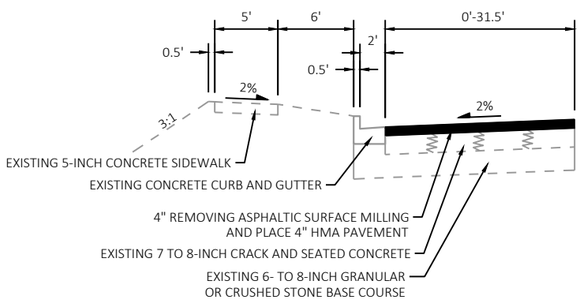
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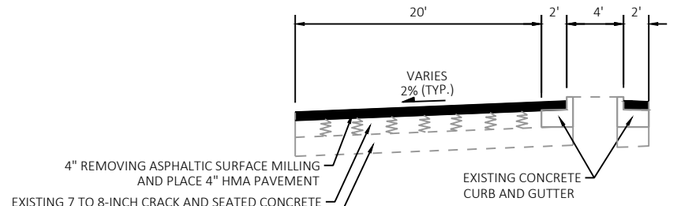
SLOTTED RIGHT TURN LANE

STA 99+75 - STA 102+74



RIGHT TURN LANE

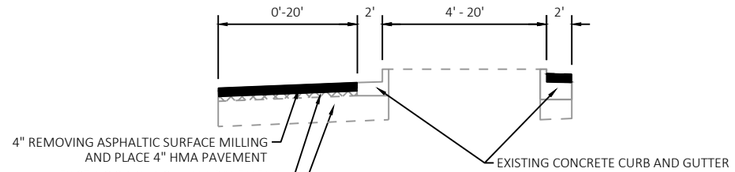
STA 102+74 - STA 105+11



LEFT TURN LANE

WESTBOUND STH 190

STA. 99+83 - STA. 102+55



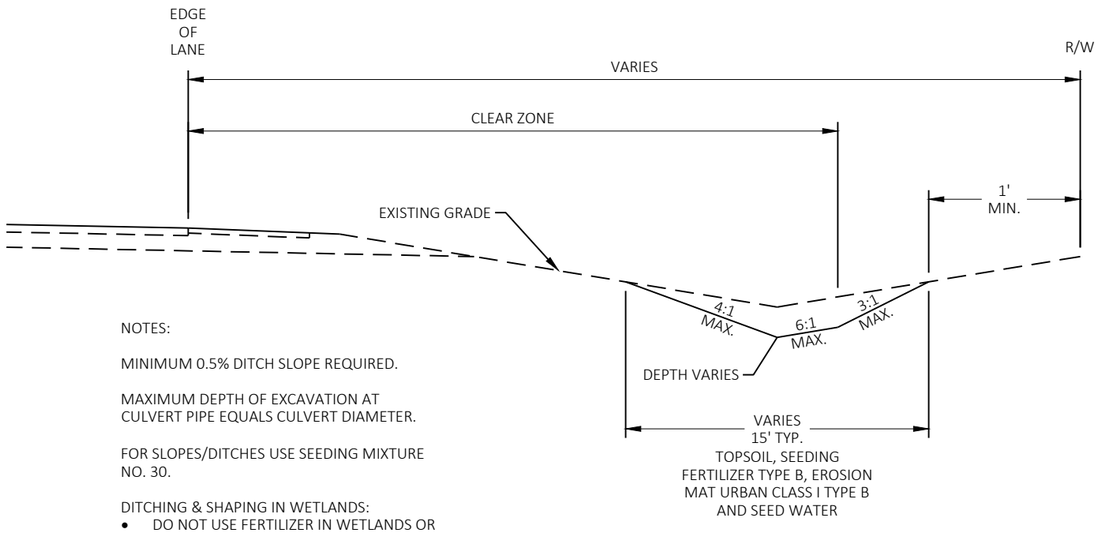
LEFT TURN LANE

WESTBOUND STH 190

STA. 102+55 - STA. 106+87

TYPICAL FINISHED SECTION

STA. 99+00 - STA. 107+08



NOTES:

MINIMUM 0.5% DITCH SLOPE REQUIRED.

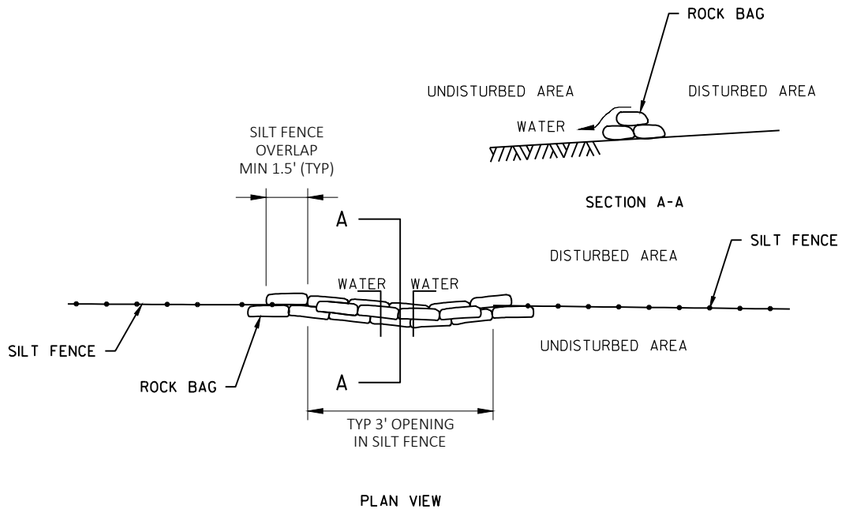
MAXIMUM DEPTH OF EXCAVATION AT CULVERT PIPE EQUALS CULVERT DIAMETER.

FOR SLOPES/DITCHES USE SEEDING MIXTURE NO. 30.

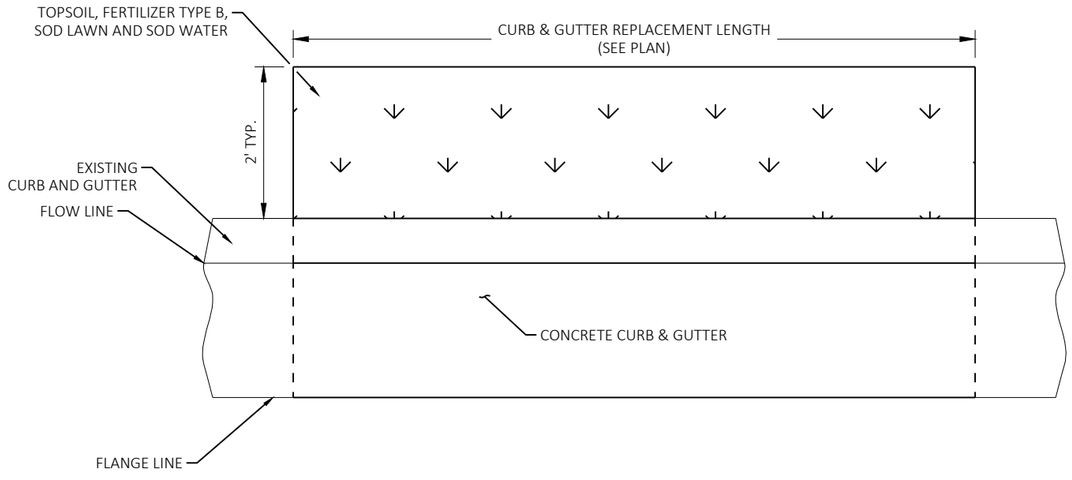
DITCHING & SHAPING IN WETLANDS:

- DO NOT USE FERTILIZER IN WETLANDS OR WITHIN 20' OF WETLANDS.
- SPREAD FULL APPLICATION OF BOTH SEEDING MIXTURES NO. 30 & NO. 60.

DITCHING AND SHAPING

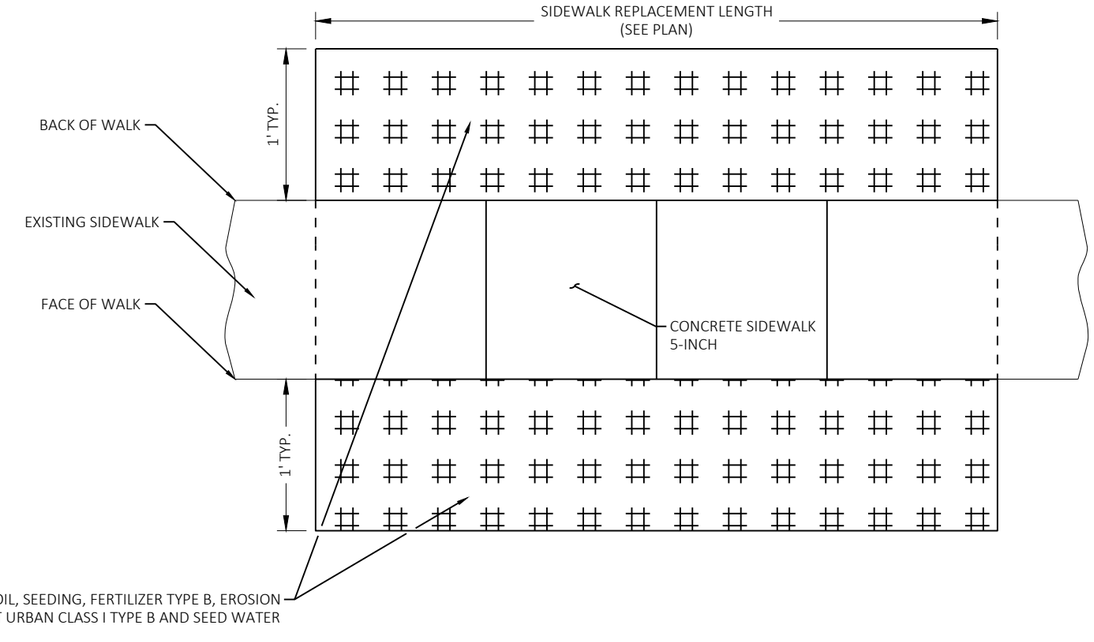


ROCK BAGS USED FOR SILT FENCE RELIEF POINT



PERMANENT EROSION CONTROL AT CURB & GUTTER REPLACEMENT

SEE PLAN FOR LOCATIONS

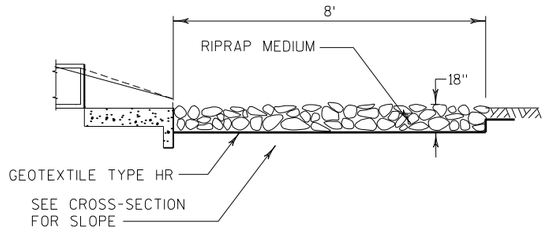


FOR SLOPES/DITCHES USE SEEDING MIXTURE NO. 30
FOR LAWN TURF USE SEEDING MIXTURE NO. 40

PERMANENT EROSION CONTROL AT SIDEWALK REPLACEMENT

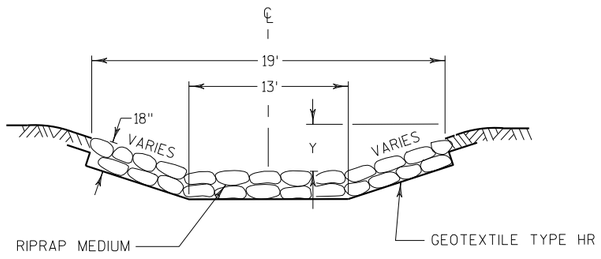
SEE PLAN FOR LOCATIONS

2



ELEVATION

Y = 0' FOR TYPICAL CULVERT
DISCHARGE INTO DITCH
6" FOR CULVERT DISCHARGE
DOWN EMBANKMENT SLOPE



CROSS-SECTION

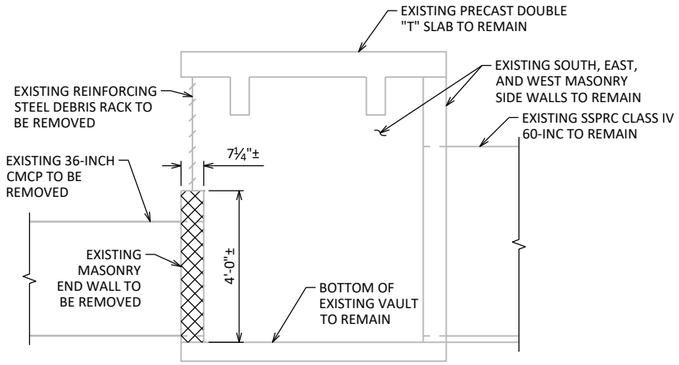
CONSTRUCTION NOTES:

1. GEOTEXTILE FABRIC SHALL EXTEND BENEATH THE ENTIRE LENGTH OF THE APRON ENDWALL SECTION. INSTALL ON PREPAVED FOUNDATION. GRADE PRIOR TO END WALL INSTALLATION.

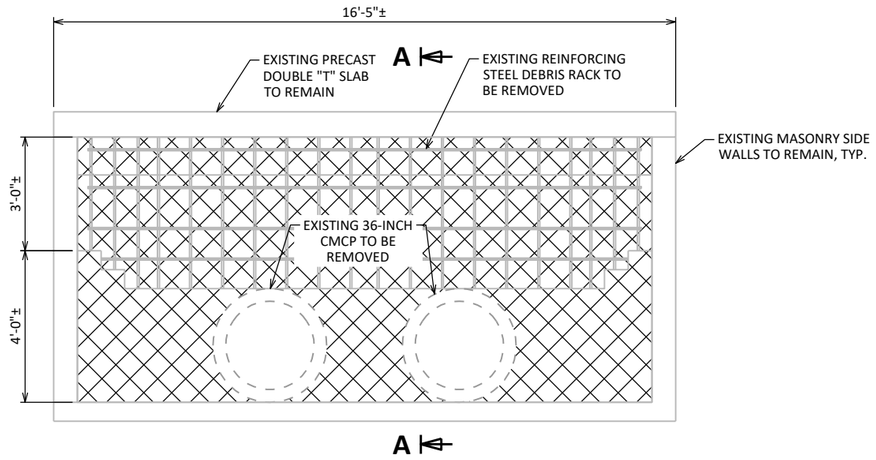
2. COMPLETE GEOTEXTILE FABRIC AND RIPRAP SECTION INSTALLATION PRIOR TO STORM WATER FLOW.

RIPRAP AND GEOTEXTILE FABRIC DETAIL AT 138TH STREET OUTFALL

SEE EROSION CONTROL PLAN FOR LOCATIONS



SECTION A-A REMOVAL



ELEVATION REMOVAL

LOOKING SOUTH

NOTES

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

MATERIAL PROPERTIES:

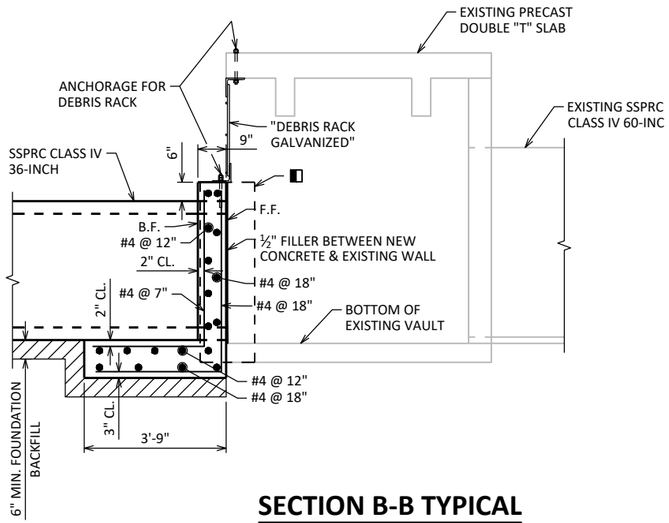
CONCRETE MASONRY:
ALL OTHER ——— f'_c = 3,500 PSI

BAR STEEL REINFORCEMENT
GRADE 60 ——— f_y = 60,000 PSI

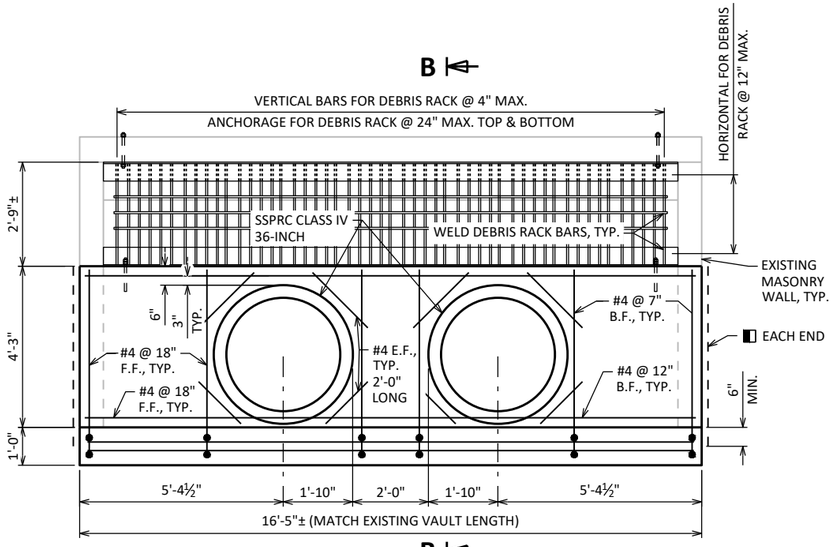
LEGEND

LIMITS OF EXISTING MASONRY ENDWALL REMOVAL

18" RUBBERIZED MEMBRANE WATERPROOFING

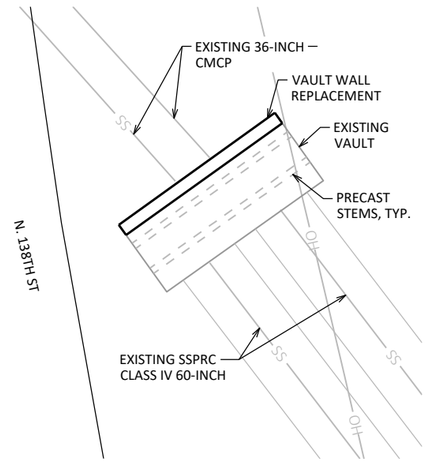


SECTION B-B TYPICAL



ELEVATION

LOOKING SOUTH

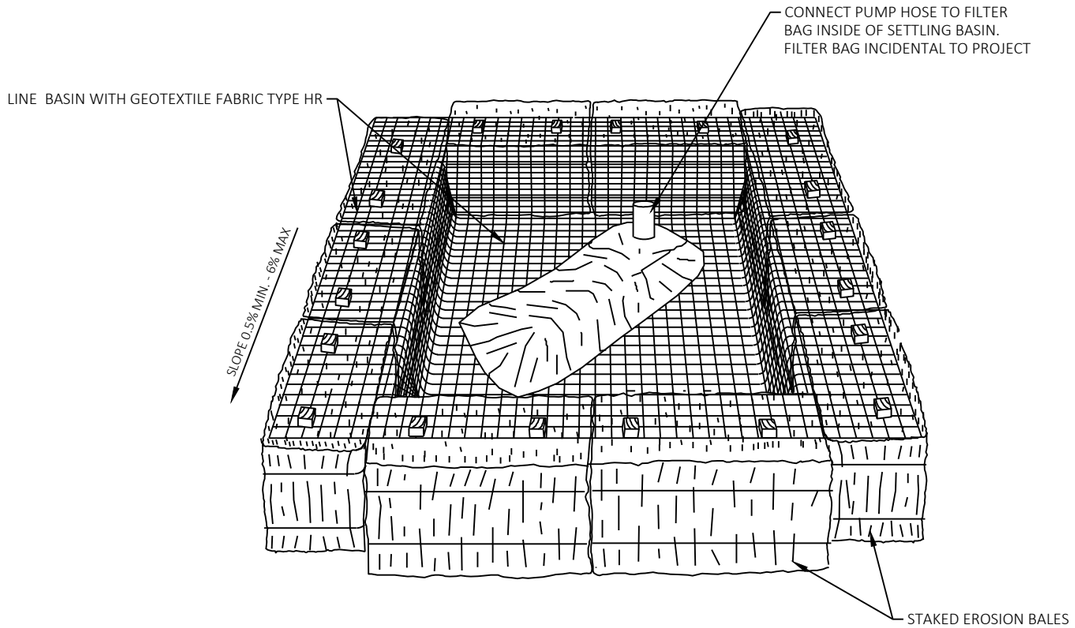


PLAN

2

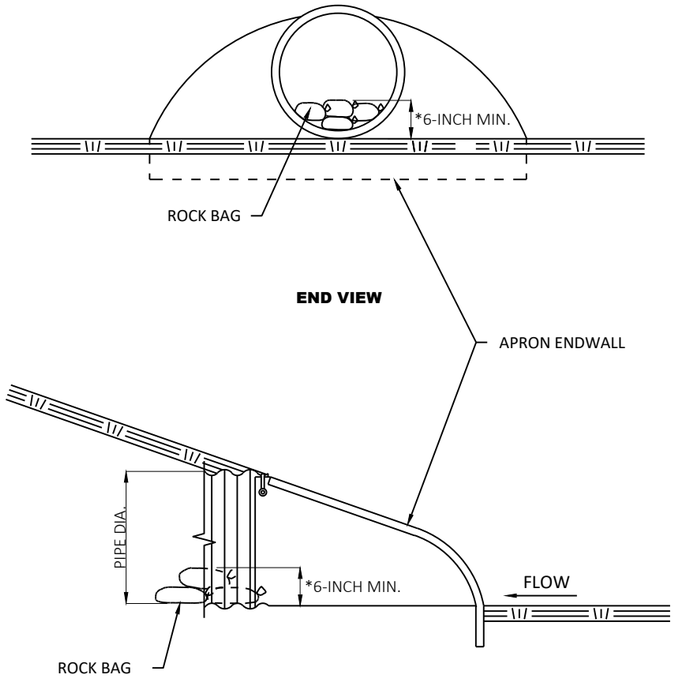
NOTES:

1. PUMP FROM DEWATERING OPERATIONS INTO TEMPORARY SETTLING BASINS PRIOR TO DISCHARGING INTO ROADSIDE DITCHES.
2. BASIN SHALL BE KEPT LESS THAN 10% FULL OF SEDIMENT. GEOTEXTILE FABRIC AND SEDIMENTS SHALL BE DISPOSED BY THE CONTRACTOR OFF THE PROJECT SITE.
3. SETTLING BASIN SHALL BE PLACED IN AN UPLAND,FLAT, VEGETATED AREA OR EQUIVALENT LOCATION APPROVED BY THE ENGINEER.
4. SIZE OF SETTLING BASIN AND FILTER BAG SHALL BE DETERMINED BY THE CONTRACTOR AS PART OF THE EROSION CONTROL IMPLEMENTATION PLAN.
5. ONLY ONE HOSE PER BAG ALLOWED AT A TIME. SIZE BASIN APPROPRIATELY FOR ADDITIONAL BAGS IF MORE THAN ONE HOSE IS NEEDED.
6. THE NECK OF THE BAG WHERE THE HOSE ATTACHES SHALL BE PLACED ON THE UPSTREAM CORNER OF THE SETTLING BASIN.
4. REPLACE SEDIMENT BAG, BALES, AND FABRIC AS NECESSARY OR AS DIRECTED BY THE ENGINEER. REMOVE SPENT BAGS PRIOR TO REPLACING. DO NOT STACK NEW BAG ON TOP OF SPENT BAG.
5. ALL ITEMS ARE INCIDENTAL TO THE CONTRACT. INCLUDING DISPOSAL AND REPLACEMENT OF BAGS AND BASIN MATERIALS



TEMPORARY SETTLING BASIN WITH SEDIMENT BAG

SER (20240905)

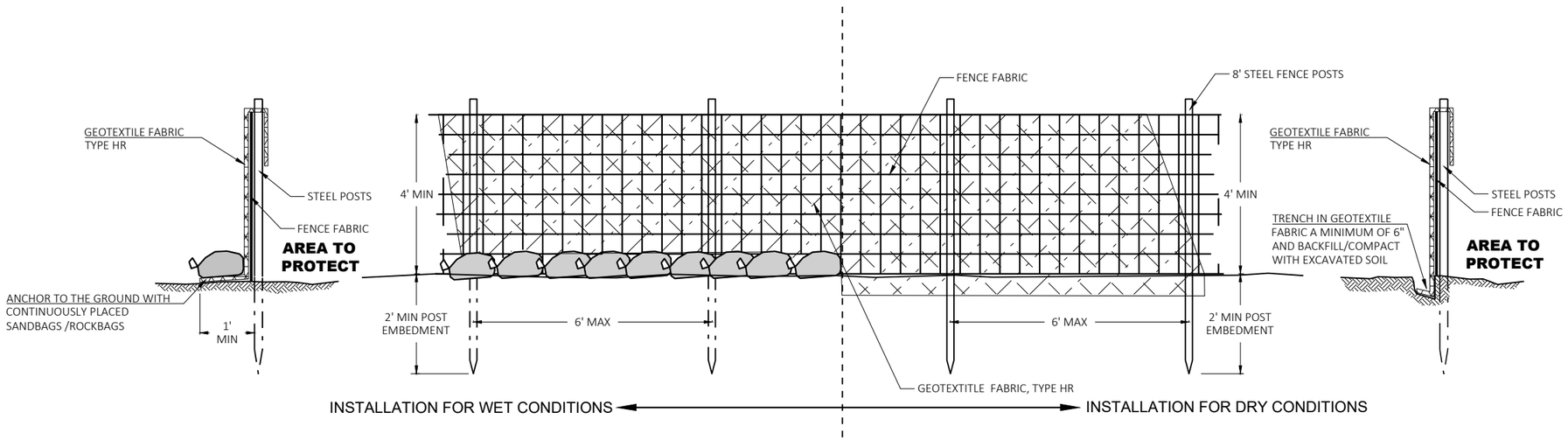


CULVERT PIPE CHECKS

*OR AS DIRECTED BY THE ENGINEER

ESTIMATED BAG SIZE 18" X 12" X 6"	
PIPE SIZE	**ESTIMATED NUMBER OF BAGS**
12"	1
15"	2
18"	2
24"	3
30"	5
36"	7
42"	7
48"	10
54"	10
60"	13
66"	14
72"	16
17"X13"	2
30"X19"	5
38"X24"	7
45"X29"	10
53"X34"	10
60"X38"	13
76"X48"	18
27' WIDE BOX CULVERT	36

2

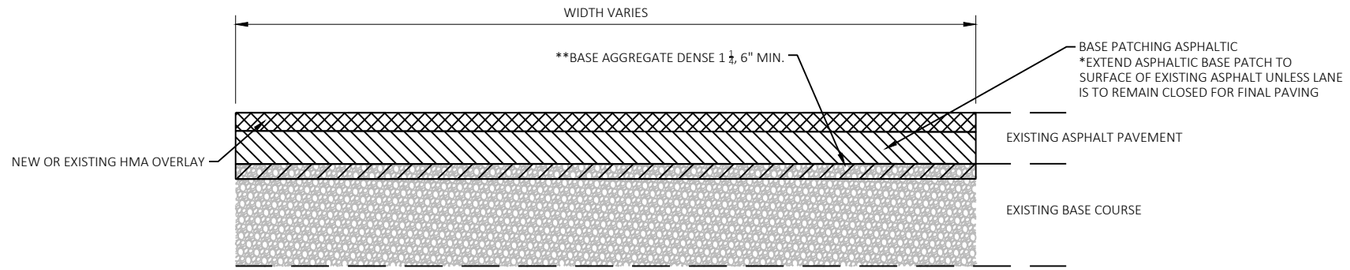


SILT FENCE HEAVY DUTY

GENERAL NOTES:

1. ATTACH FENCE FABRIC TO POSTS A MINIMUM OF 3 TIES PER POST (TOP, MIDDLE, BOTTOM)
2. ATTACH GEOTEXTILE FABRIC TO FENCE FABRIC AND/OR POSTS AT A MAXIMUM SPACING OF EVERY 2 FEET ALONG THE TOP AND ADDITIONALLY AS NECESSARY TO PREVENT DISPLACEMENT BY WIND AND WAVE ACTIONS.

2



BASE PATCHING ASPHALTIC ***

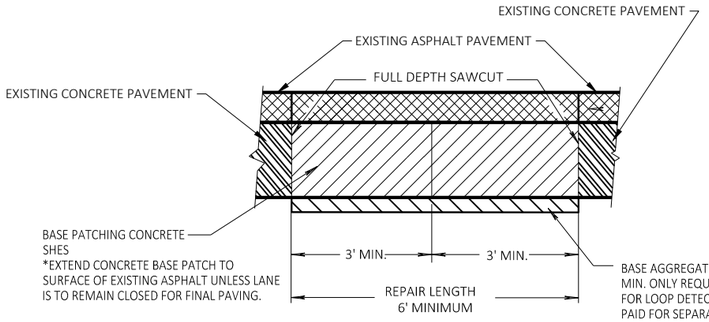
NOTE:

* UPPER LAYER 4MT 58-28 S IS INCIDENTAL TO THE BASE PATCHING ASPHALTIC ITEM

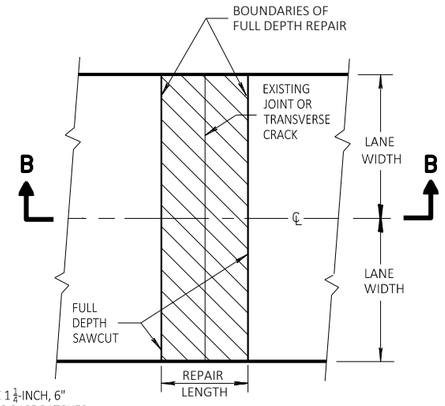
** BASE AGGREGATE DENSE 1 ¼" PAID UNDER SEPARATE BID ITEM. ONLY REQUIRED FOR BASE PATCHES FOR LOOP DETECTOR INSTALLATION.

*** THE ADDITIONAL 6 INCHES OF AGGREGATE BASE REMOVAL REQUIRED FOR LOOP DETECTOR INSTALLATION SHALL BE CONSIDERED INCIDENTAL TO THE BASE PATCHING ASPHALTIC ITEM.

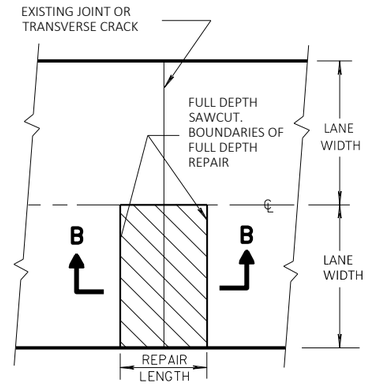
2



SECTION B-B



PLAN VIEW
(DOUBLE LANE REPAIR)



PLAN VIEW
(SINGLE LANE REPAIR)

NOTES:

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. ANY ADDITIONAL SAW CUTS THE CONTRACTOR MAKES INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES SHALL BE CONSIDERED INCIDENTAL.

PROVIDE 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK.

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

TIE STEEL NOT REQUIRED TO TIE INTO AN EXISTING PAVEMENT.

THE ADDITIONAL 6 INCHES OF AGGREGATE BASE REMOVAL REQUIRED FOR LOOP DETECTOR INSTALLATION SHALL BE CONSIDERED INCIDENTAL TO THE BASE PATCHING CONCRETE SHES ITEM.

FULL DEPTH PATCHING OF EXISTING RUBBLIZED OR CRACKED & SEATED CONCRETE

EXCAVATING, PREPARING THE FOUNDATION AND SHIMMING ARE INCIDENTAL TO THE ADJUSTING OR RECONSTRUCTING BID ITEMS.

THE DEPARTMENT WILL PAY SEPARATELY FOR SAWING CONCRETE, REMOVING CURB & GUTTER, CONCRETE CURB & GUTTER AND DRILLED TIE BARS.

PAVEMENT REMOVAL FOR THE MONOLITHIC SHIM IS INCIDENTAL TO THE REMOVING CURB & GUTTER BID ITEM.

MONOLITHIC SHIM CONCRETE, CONCRETE PLACEMENT AND FINISHING IS INCIDENTAL TO THE CONCRETE CURB & GUTTER BID ITEM.

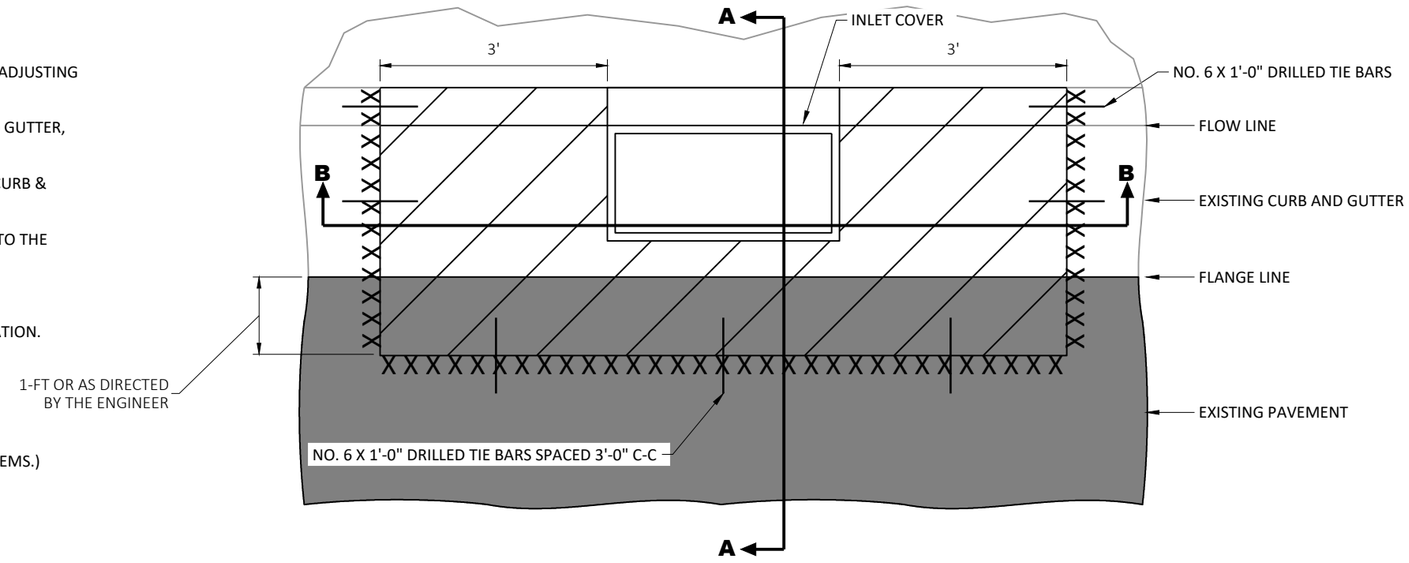
PREVENT CONCRETE AND OTHER DEBRIS FROM FALLING INTO STRUCTURE.

REFER TO PLAN DETAILS AND MISCELLANEOUS QUANTITIES FOR ADDITIONAL INFORMATION.

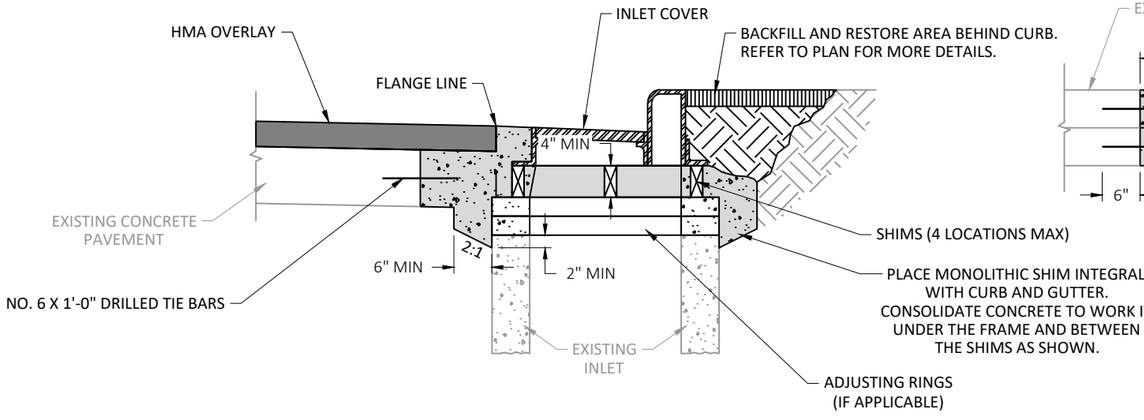
X X X SAWING CONCRETE

REMOVING CURB & GUTTER AND PAVEMENT.
(REMOVING PAVEMENT INCIDENTAL TO REMOVING CURB & GUTTER BID ITEMS.)

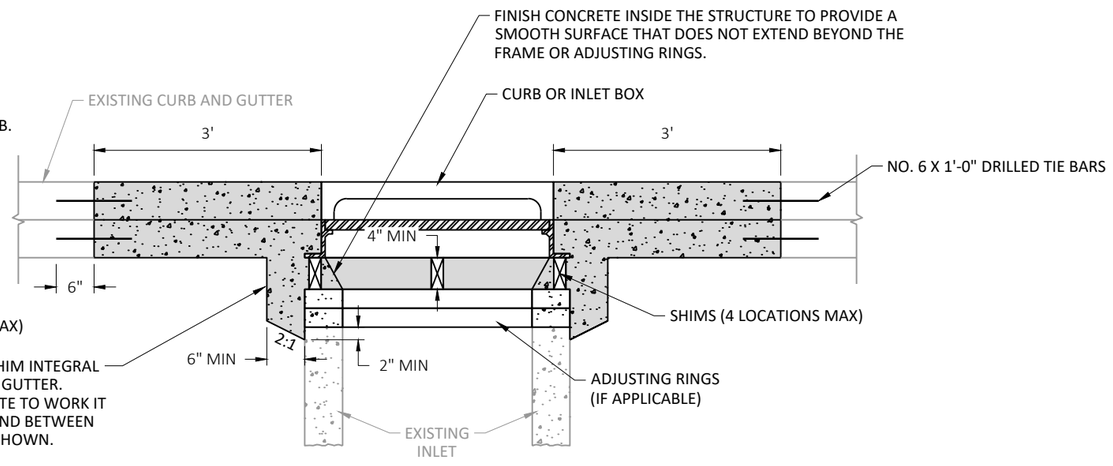
MONOLITHIC CONCRETE



PLAN VIEW



SECTION A-A



SECTION B-B

ADJUSTING / RECONSTRUCTING CATCH BASINS & INLETS - MONOLITHIC SHIM (CONCRETE PAVEMENT)

EXCAVATING, PREPARING THE FOUNDATION AND SHIMMING ARE INCIDENTAL TO THE ADJUSTING OR RECONSTRUCTING BID ITEMS.

THE DEPARTMENT WILL PAY SEPARATELY FOR SAWING ASPHALT, SAWING CONCRETE, REMOVING CURB & GUTTER, CONCRETE CURB & GUTTER AND DRILLED TIE BARS.

PAVEMENT REMOVAL FOR THE MONOLITHIC SHIM IS INCIDENTAL TO THE REMOVING CURB & GUTTER BID ITEM.

MONOLITHIC SHIM CONCRETE, CONCRETE PLACEMENT AND FINISHING IS INCIDENTAL TO THE CONCRETE CURB & GUTTER BID ITEM.

PREVENT CONCRETE AND OTHER DEBRIS FROM FALLING INTO STRUCTURE.

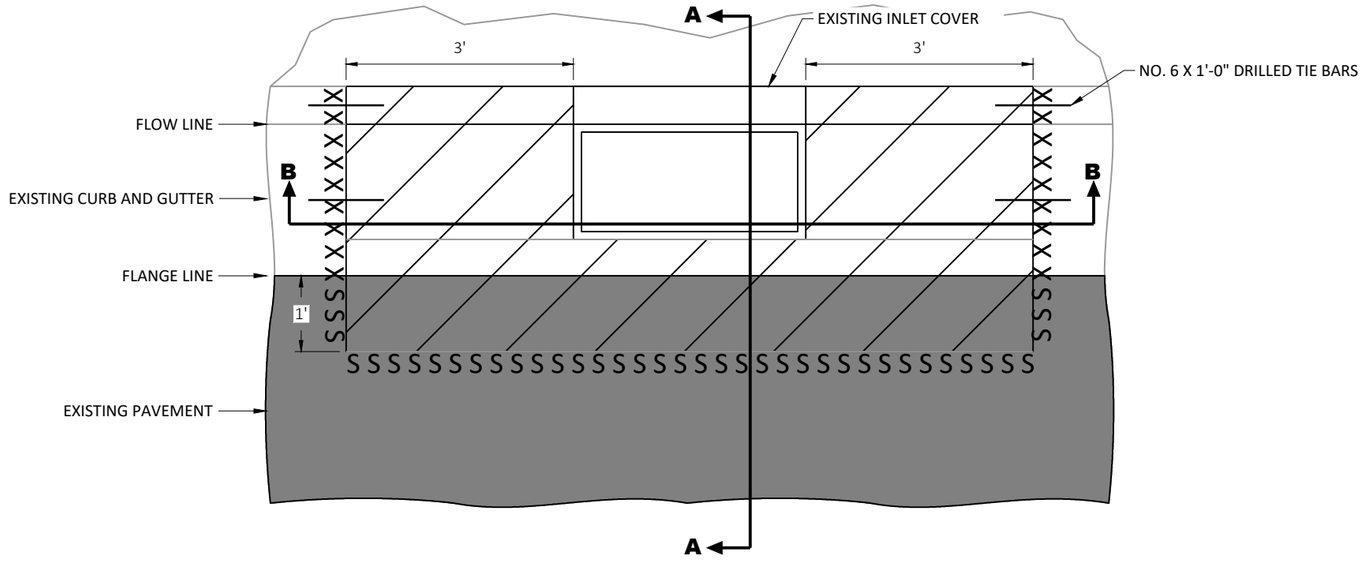
REFER TO PLAN DETAILS AND MISCELLANEOUS QUANTITIES FOR ADDITIONAL INFORMATION.

S S S SAWING ASPHALT

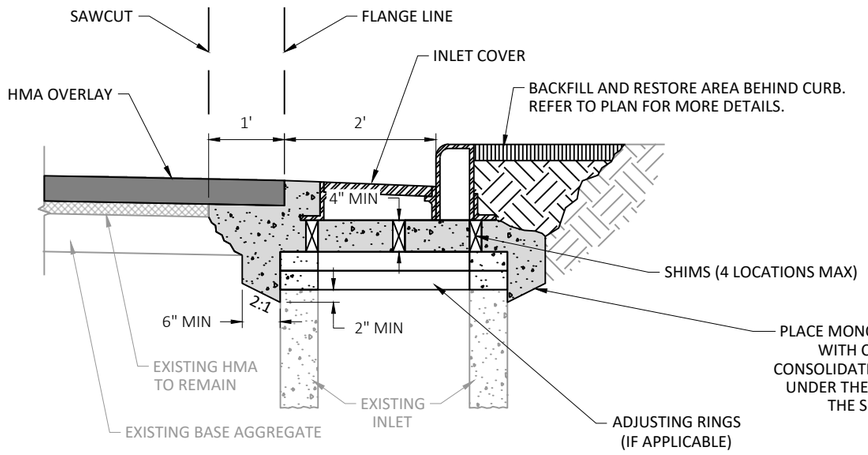
X X X SAWING CONCRETE

REMOVING CURB & GUTTER AND PAVEMENT.
(REMOVING PAVEMENT INCIDENTAL TO REMOVING CURB & GUTTER BID ITEMS.)

MONOLITHIC CONCRETE

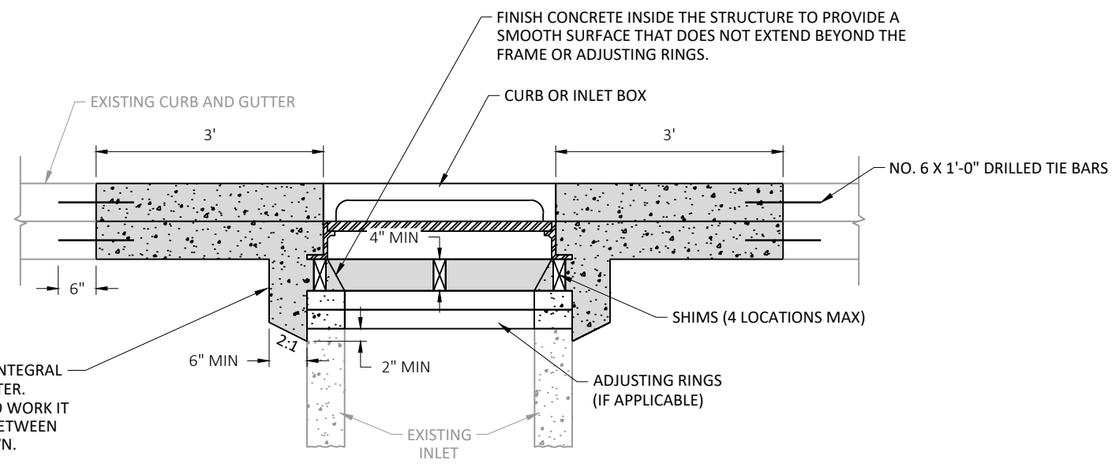


PLAN VIEW



SECTION A-A

PLACE MONOLITHIC SHIM INTEGRAL WITH CURB AND GUTTER. CONSOLIDATE CONCRETE TO WORK IT UNDER THE FRAME AND BETWEEN THE SHIMS AS SHOWN.



SECTION B-B

ADJUSTING / RECONSTRUCTING CATCH BASINS & INLETS - MONOLITHIC SHIM (ASPHALT PAVEMENT)

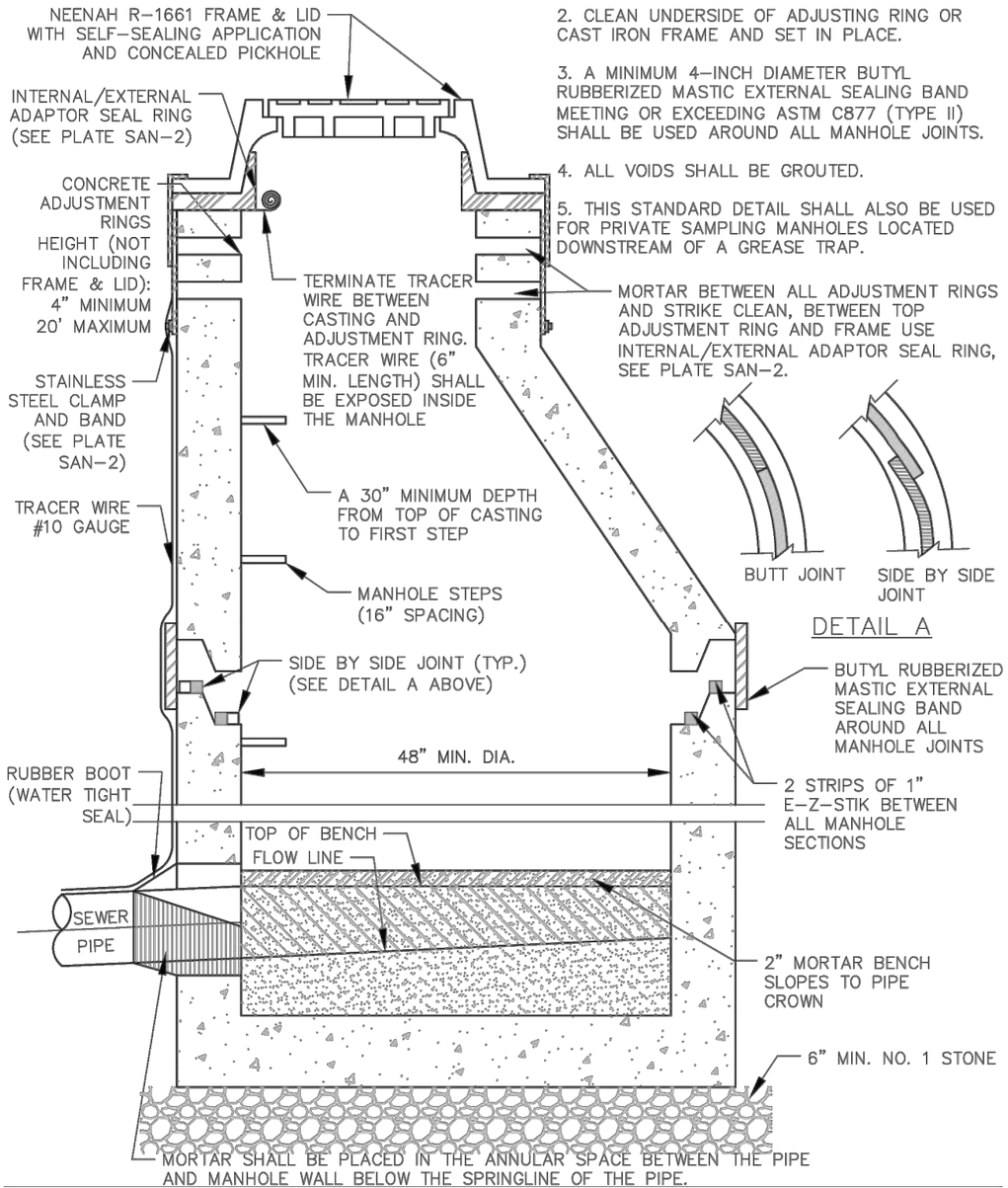
NOTES:
1. PLACE E–Z–STIK ON THE CLEANED LOWER SURFACE WITH ENDS ALIGNED HORIZONTALLY (SEE DETAIL ABOVE)

2. CLEAN UNDERSIDE OF ADJUSTING RING OR CAST IRON FRAME AND SET IN PLACE.

3. A MINIMUM 4–INCH DIAMETER BUTYL RUBBERIZED MASTIC EXTERNAL SEALING BAND MEETING OR EXCEEDING ASTM C877 (TYPE II) SHALL BE USED AROUND ALL MANHOLE JOINTS.

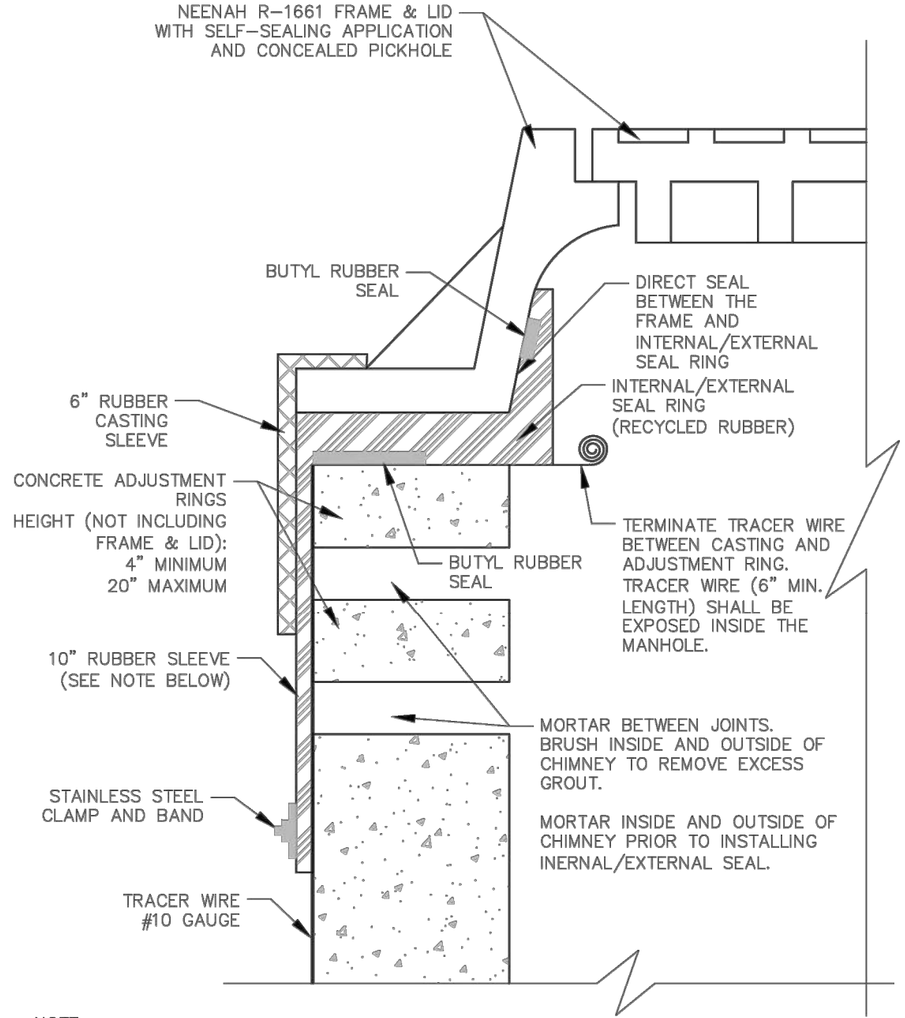
4. ALL VOIDS SHALL BE GROUTED.

5. THIS STANDARD DETAIL SHALL ALSO BE USED FOR PRIVATE SAMPLING MANHOLES LOCATED DOWNSTREAM OF A GREASE TRAP.



SANITARY MANHOLE

CITY OF BROOKFIELD DETAIL PLATE NO. SAN-1



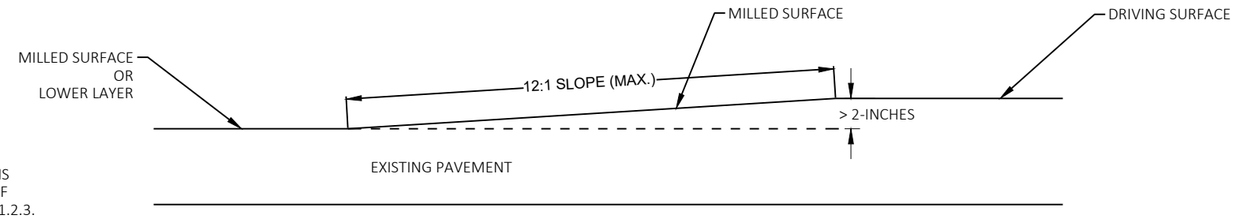
NOTE:
OPTIONAL 4", 6", 12", 16", 20", 22" RUBBER SLEEVE LENGTHS

SANITARY MANHOLE SEALS

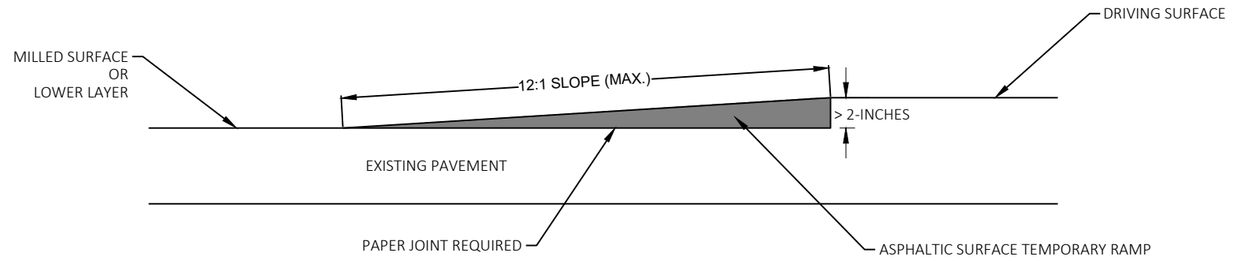
CITY OF BROOKFIELD DETAIL PLATE NO. SAN-2

2

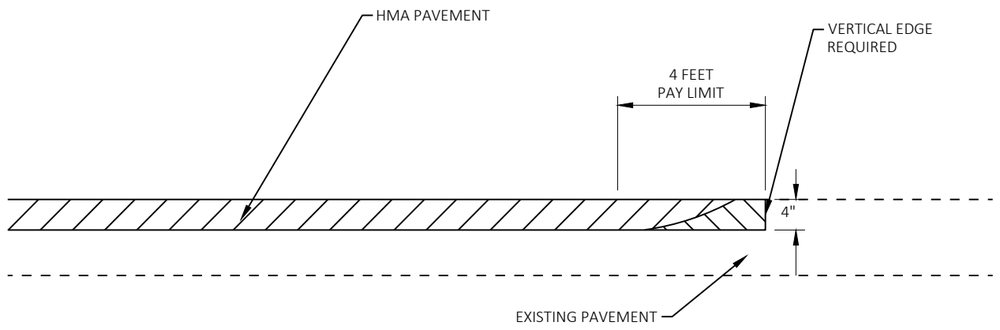
NOTES:
- THESE CONSTRUCTION DETAILS AND THE SPECIAL PROVISIONS SUPPLEMENT THE REQUIREMENTS FOR PROVIDING DROP-OFF PROTECTION AS STATED IN STANDARD SPECIFICATION 104.6.1.2.3.
- ASPHALTIC SURFACE TEMPORARY RAMP PAID FOR AS 'ASPHALTIC SURFACE TEMPORARY'
- INSTALLATION, REMOVAL, AND DISPOSAL OF RAMP IS INCIDENTAL TO ASPHALTIC SURFACE TEMPORARY BID ITEM.



MILLED RAMP

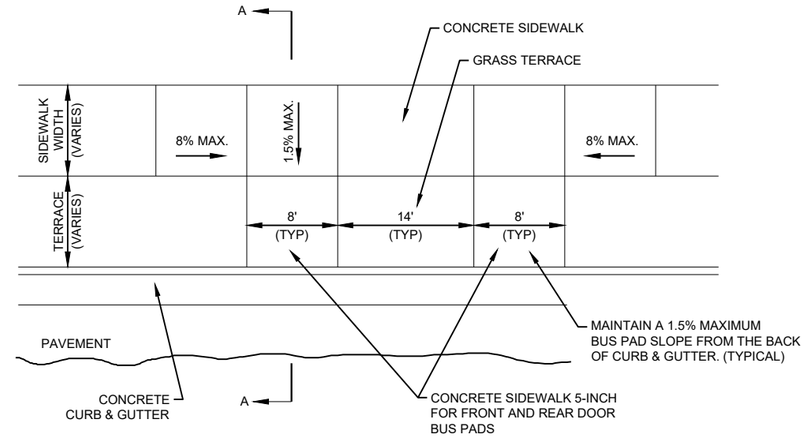


ASPHALTIC SURFACE TEMPORARY RAMP



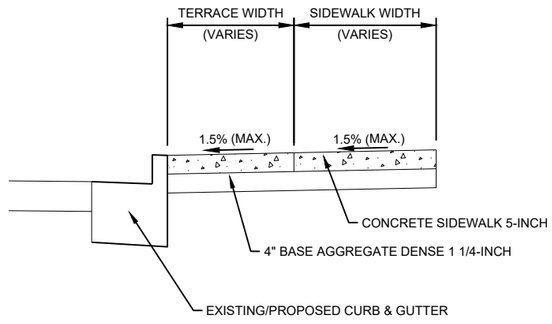
BUTT JOINT - NO CHANGE IN PROFILE

2



PLAN VIEW - SIDEWALK WITH TERRACE

NOTE: DEPRESS SIDEWALK AS NEEDED TO MAINTAIN 1.5% MAXIMUM CROSS SLOPE IN TERRACE AREA.



SECTION A-A

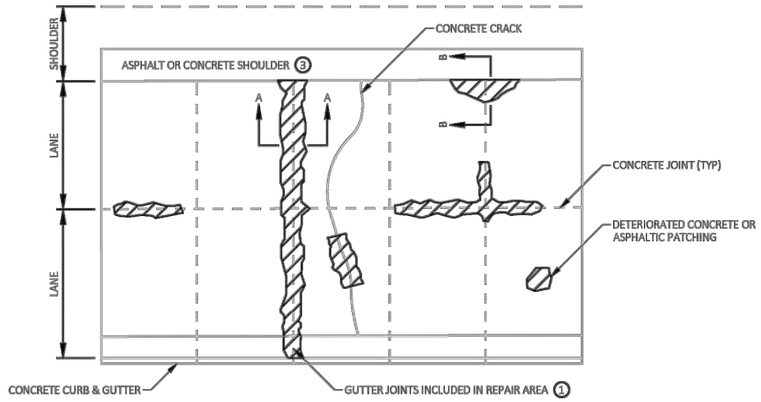
CONCRETE BUS PAD DETAIL

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION DETAILS	SHEET 21	E

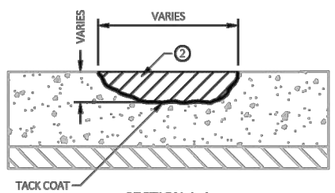
NOTES:

1. PERFORM CONCRETE JOINT AND CRACK CLEANING AND REPAIR IF ASPHALT OVERLAY WILL BE PLACED ON CONCRETE GUTTER
2. REMOVE UNSOUND AND DETERIORATED MATERIAL INCLUDING EXISTING ASPHALTIC PATCHING
3. EXISTING CONCRETE SHOULDER 5-FOOT OR LESS INCLUDED IN REPAIR AREA OF ADJACENT LANE

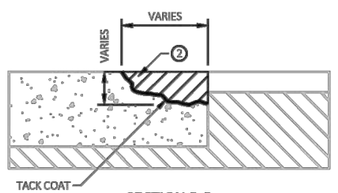
ASPHALTIC SURFACE
EXISTING CONCRETE PAVEMENT
EXISTING BASE COURSE



PLAN VIEW

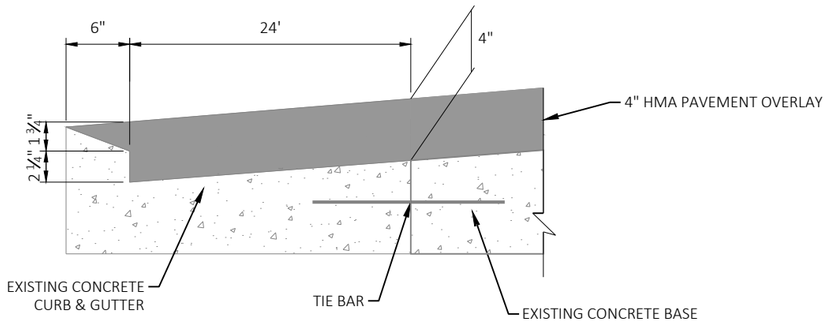


SECTION A-A



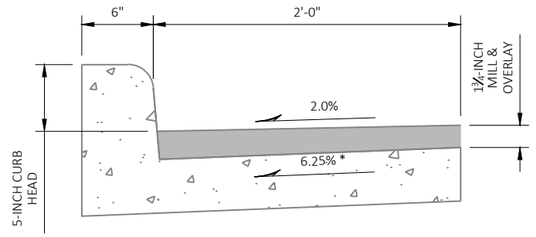
SECTION B-B

CONCRETE JOINT AND CRACK CLEANING AND REPAIR



MILL & PAVE ASPHALT OVERLAID CURB & GUTTER AT DRIVEWAYS - FULL DEPTH

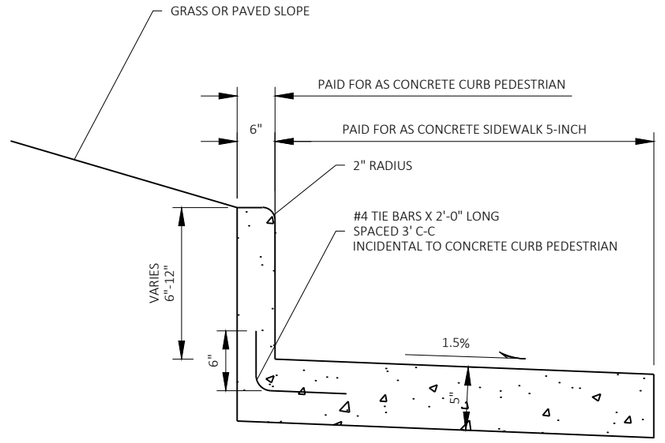
VARIOUS LOCATIONS



MILL & PAVE ASPHALT OVERLAID CURB & GUTTER - SURFACE LAYER

* ASSUMED EXISTING CROSS SLOPE. FINISHED CURB HEAD HEIGHT MAY VARY.

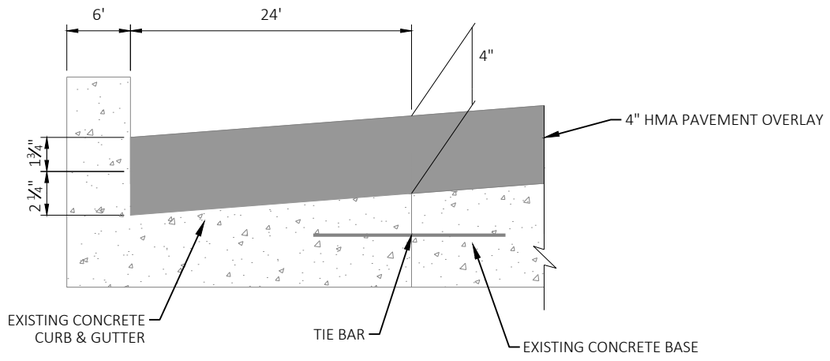
444+25 - 447+10 EASTBOUND OUTSIDE CURB



CONCRETE CURB PEDESTRIAN 6-INCH TO 12-INCH HEIGHT

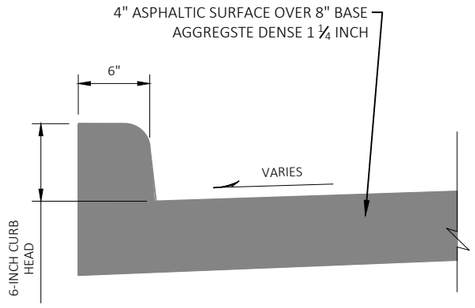
PAID FOR AS CONCRETE CURB PEDESTRIAN

SEE PLAN DETAILS FOR LOCATIONS



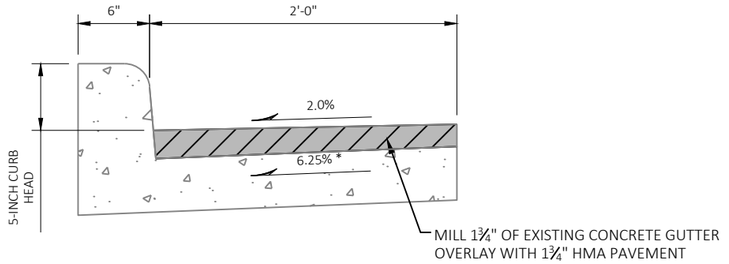
MILL & PAVE ASPHALT OVERLAID CURB & GUTTER - FULL DEPTH

VARIOUS LOCATIONS



ASPHALT CURB

PARKING LOT ON 138TH STREET

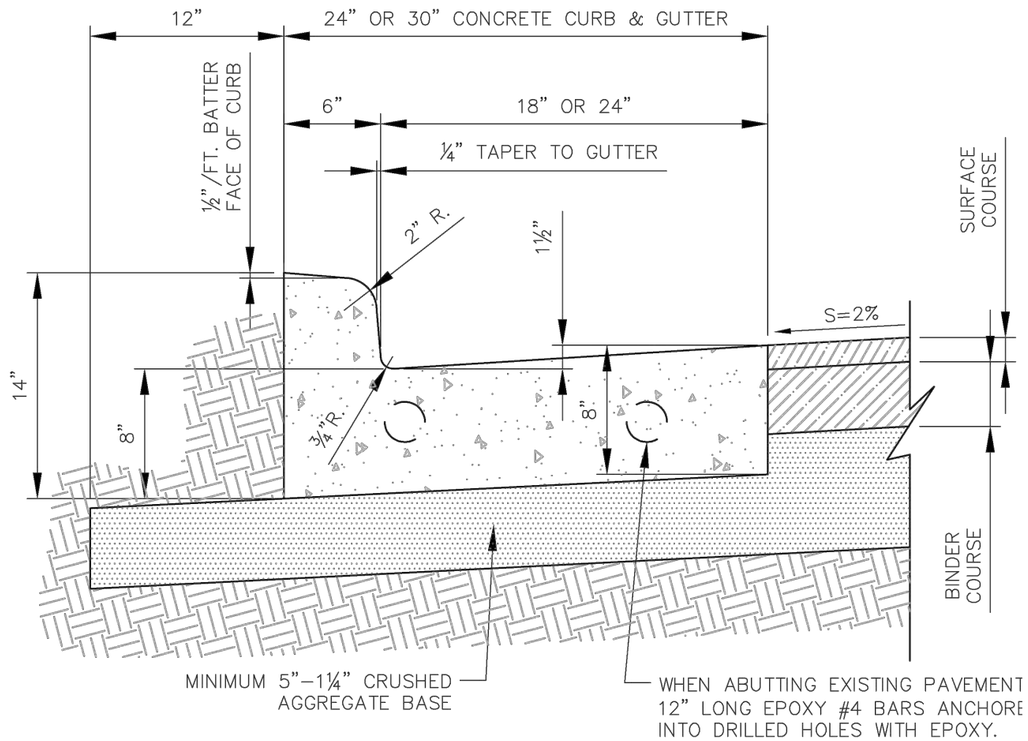


30-INCH CURB & GUTTER, MILL & OVERLAY

* ASSUMED EXISTING CROSS SLOPE. FINISHED CURB HEAD HEIGHT MAY VARY.

435+12 - 438+00 EASTBOUND OUTSIDE CURB
439+00 - 444+25 EASTBOUND OUTSIDE CURB
447+10 - 457+40 EASTBOUND OUTSIDE CURB

2



NOTES:

1. CONTRACTION JOINT 10.0 FT. O.C., JOINT SHALL BE ¼" WIDE.

2. A ¾" TO 1" EXPANSION JOINT (FELT) SHALL BE CONSTRUCTED NOT MORE THAN 300' APART, AT P.C. POINTS AND 5.0 FT. EITHER SIDE OF INLET STRUCTURES.

3. WHERE NEW CONCRETE MEETS EXISTING CONCRETE: DRILL AND EPOXY ANCHOR IN PLACE 2–12" LONG #4 EPOXY COATED BARS.

4. VERTICAL FACE CURB REQUIRED AROUND ALL INTERSECTIONS TO THE PC AND PT AND AT CATCH BASIN LOCATIONS, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

5. ROADWAYS IN COMMERCIAL AREAS SHALL BE VERTICAL FACE CURB UNLESS OTHERWISE APPROVED BY THE ENGINEER.

6. THE BOTTOM OF THE CURB AND GUTTER MAY BE CONSTRUCTED LEVEL OR PARALLEL TO THE SLOPE OF THE CRUSHED AGGREGATE BASE.

CONCRETE CURB & GUTTER 24-INCH TYPE D

CITY OF BROOKFIELD STANDARD DETAIL NO. RDY-5

2

2

N

STH 190 (W. CAPITOL DR)

282+00 283+00 284+00 285+00 286+00 287+00 288+00 289+00 290+00 291+00 292+00 293+00 294+00 295

MATCHLINE STA.295+00

SLOPE INTERCEPT (TYP.)

R/W

SIGN

MH

SAN

SIGNS

TV

FO

G

T

W

E

LEGEND

- REMOVING ASPHALTIC SURFACE MILLING, 4-INCH
- REMOVING ASPHALTIC SURFACE
- REMOVING PAVEMENT FOR BASE PATCHING
- REMOVING CONCRETE PAVEMENT
- REMOVING CONCRETE SIDEWALK
- SAWING ASPHALT
- SAWING CONCRETE
- REMOVING CURB & GUTTER
- X CLEARING AND GRUBBING (I.D.)

*BASE PATCHES FOR LOOP DETECTOR INSTALLATION REQUIRE REMOVAL OF 6" MIN. OF BASE COURSE

MATCH LINE A-A

N BROOKFIELD RD

PVOC CONTAMINATED SOILS - AREA 1
6' BELOW GROUND SURFACE TO MAXIMUM EXCAVATION LIMITS

SLOPE INTERCEPT (TYP.)

STH 190 (W. CAPITOL DR)

296+00 297+00 298+00 299+00 300+00 301+00 302+00 303+00 304+00 305+00 306+00 307+00 308+00 309+00 310

MATCHLINE STA. 295+00

MATCHLINE STA.310+00

PAH & ARSENIC CONTAMINATED SOILS - AREA 1
1' - 6' BELOW GROUND SURFACE

MATCH LINE B-B

PAH & ARSENIC CONTAMINATED SOILS - AREA 2
1' BELOW GROUND SURFACE TO MAXIMUM EXCAVATION LIMITS

ST ANDREW LN

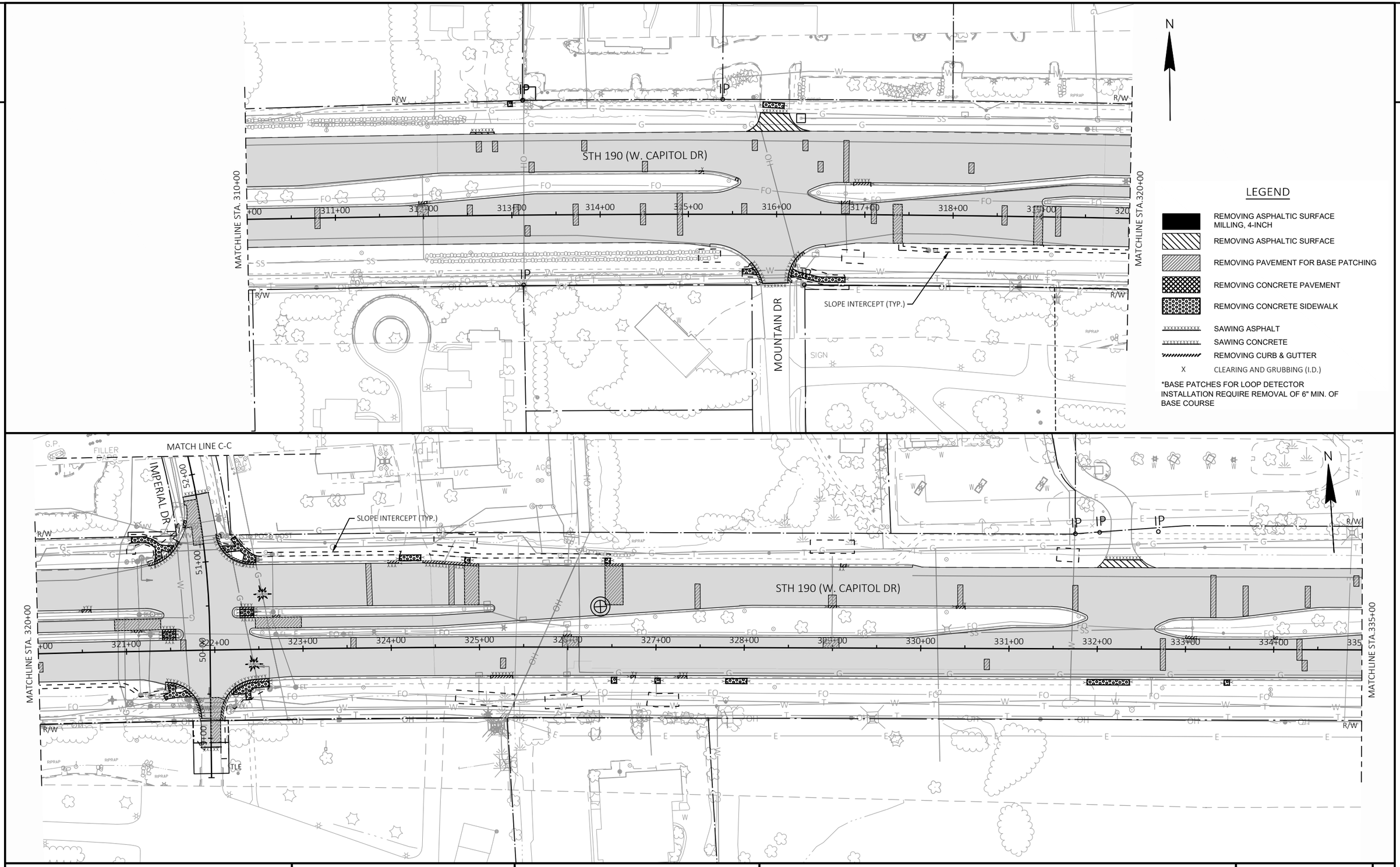
TLE

RIPRAP

A/C

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	REMOVAL PLAN	SHEET 25	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021101_rm
PLOT DATE : 8/20/2025 10:49 AM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	REMOVAL PLAN	SHEET 26	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021102_rm
PLOT DATE : 8/20/2025 10:50 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

BEAUFORT DR

STH 190 (W. CAPITOL DR)

MATCHLINE STA. 335+00

MATCHLINE STA.350+00

SLOPE INTERCEPT (TYP.)

YUKON RD

LEGEND

- REMOVING ASPHALTIC SURFACE MILLING, 4-INCH
- REMOVING ASPHALTIC SURFACE
- REMOVING PAVEMENT FOR BASE PATCHING
- REMOVING CONCRETE PAVEMENT
- REMOVING CONCRETE SIDEWALK
- SAWING ASPHALT
- SAWING CONCRETE
- REMOVING CURB & GUTTER
- X CLEARING AND GRUBBING (I.D.)

*BASE PATCHES FOR LOOP DETECTOR INSTALLATION REQUIRE REMOVAL OF 6" MIN. OF BASE COURSE

MATCH LINE D-D

N. CALHOUN RD

SLOPE INTERCEPT (TYP.)

STH 190 (W. CAPITOL DR)

MATCHLINE STA. 350+00

MATCHLINE STA.365+00

N. CALHOUN RD

N. 169TH ST

MATCH LINE E-E

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	REMOVAL PLAN	SHEET 27	E

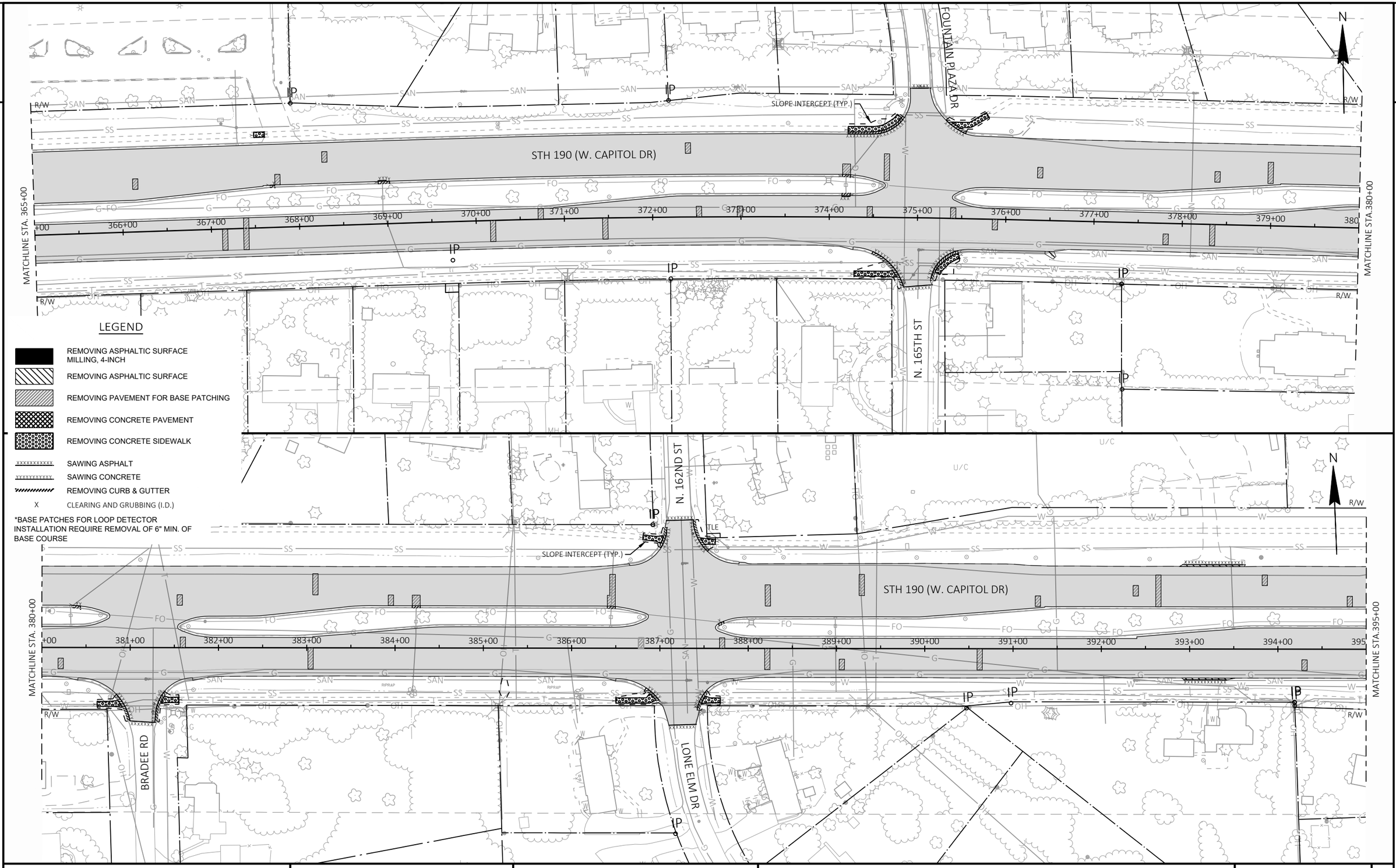
FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021103_rm

PLOT DATE : 8/20/2025 10:51 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2



LEGEND

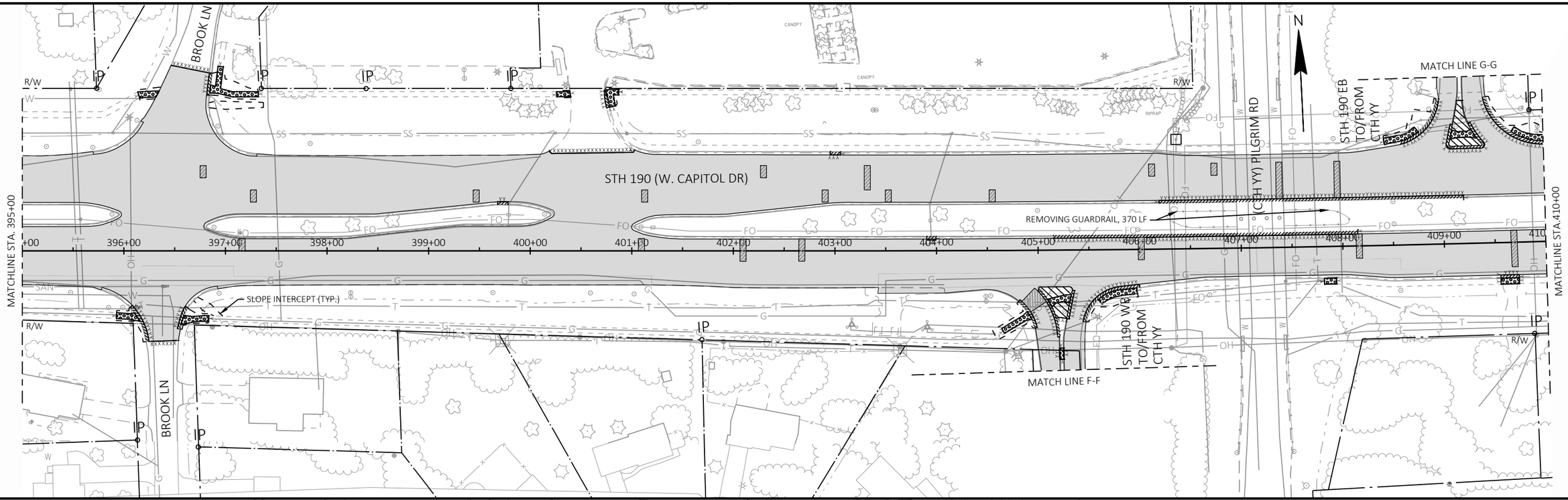
- REMOVING ASPHALTIC SURFACE MILLING, 4-INCH
- REMOVING ASPHALTIC SURFACE
- REMOVING PAVEMENT FOR BASE PATCHING
- REMOVING CONCRETE PAVEMENT
- REMOVING CONCRETE SIDEWALK
- xxxxxxxxxx SAWING ASPHALT
- xxxxxxxxxx SAWING CONCRETE
- REMOVING CURB & GUTTER
- X CLEARING AND GRUBBING (I.D.)

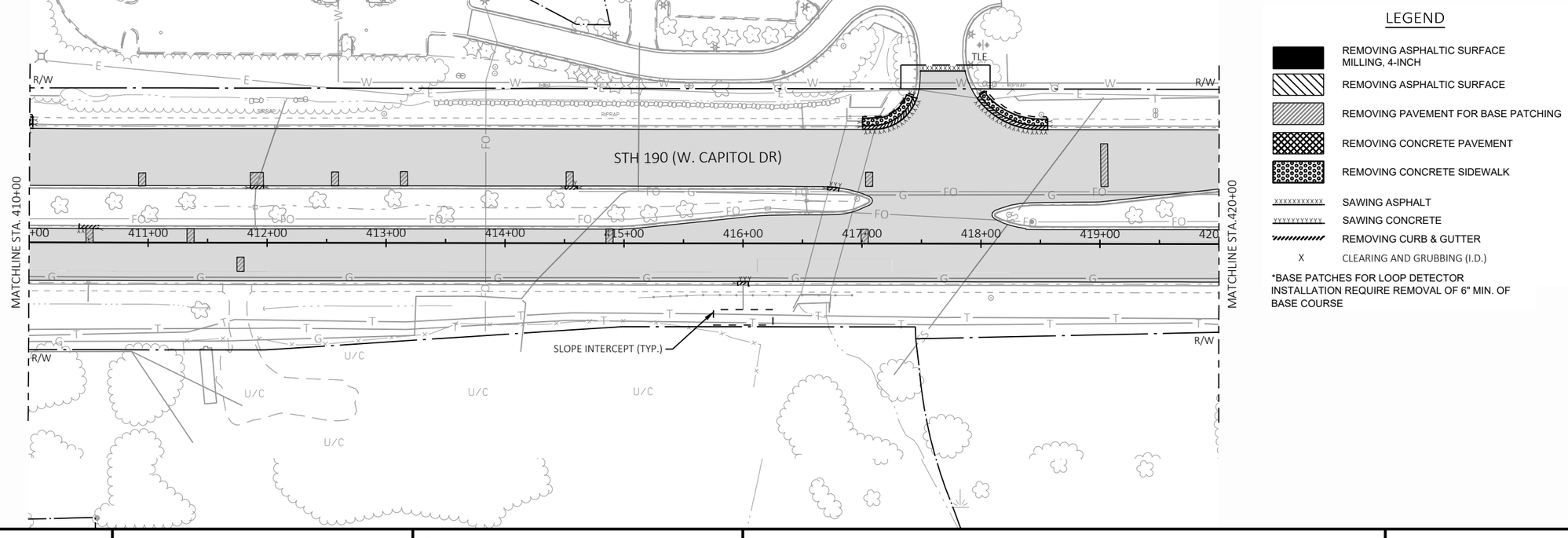
*BASE PATCHES FOR LOOP DETECTOR INSTALLATION REQUIRE REMOVAL OF 6" MIN. OF BASE COURSE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	REMOVAL PLAN	SHEET 28	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021104_rm
PLOT DATE : 8/20/2025 10:52 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2





LEGEND

- REMOVING ASPHALTIC SURFACE MILLING, 4-INCH
- REMOVING ASPHALTIC SURFACE
- REMOVING PAVEMENT FOR BASE PATCHING
- REMOVING CONCRETE PAVEMENT
- REMOVING CONCRETE SIDEWALK
- SAWING ASPHALT
- SAWING CONCRETE
- REMOVING CURB & GUTTER
- X CLEARING AND GRUBBING (I.D.)

*BASE PATCHES FOR LOOP DETECTOR INSTALLATION REQUIRE REMOVAL OF 6" MIN. OF BASE COURSE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	REMOVAL PLAN	SHEET 29	E

2

LEGEND

- REMOVING ASPHALTIC SURFACE MILLING, 4-INCH
- REMOVING ASPHALTIC SURFACE
- REMOVING PAVEMENT FOR BASE PATCHING
- REMOVING CONCRETE PAVEMENT
- REMOVING CONCRETE SIDEWALK
- SAWING ASPHALT
- SAWING CONCRETE
- REMOVING CURB & GUTTER
- X CLEARING AND GRUBBING (I.D.)

*BASE PATCHES FOR LOOP DETECTOR INSTALLATION REQUIRE REMOVAL OF 6" MIN. OF BASE COURSE

N

MATCH LINE F-F

STH 190 WB TO/FROM CTH YY

(CTH YY) PILGRIM RD

MH

RIPRAP

FO

W

T

N

2

(CTH YY) PILGRIM RD

STH 190 EB TO/FROM CTH YY

POOL

MH

W

G

FO

RAW

MATCH LINE G-G

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	REMOVAL PLAN	SHEET 30	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021106_rm

PLOT DATE : 8/20/2025 10:54 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

2

2

CLARE-BRIDGE LN

STH 190 (W. CAPITOL DR)

MATCHLINE STA. 420+00

MATCHLINE STA.435+00

SLOPE INTERCEPT (TYP.)

R/W

TLE

LEGEND

- REMOVING ASPHALTIC SURFACE MILLING, 4-INCH
- REMOVING ASPHALTIC SURFACE
- REMOVING PAVEMENT FOR BASE PATCHING
- REMOVING CONCRETE PAVEMENT
- REMOVING CONCRETE SIDEWALK
- SAWING ASPHALT
- SAWING CONCRETE
- REMOVING CURB & GUTTER
- X CLEARING AND GRUBBING (I.D.)

*BASE PATCHES FOR LOOP DETECTOR INSTALLATION REQUIRE REMOVAL OF 6" MIN. OF BASE COURSE

WYNDHAM POINTE CIR.

N. 145TH ST

N. 144TH ST

MATCHLINE STA. 435+00

MATCHLINE STA. 450+00

SLOPE INTERCEPT (TYP.)

PVOC CONTAMINATED SOILS - AREA 2
1' BELOW GROUND SURFACE TO MAXIMUM EXCAVATION LIMITS

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	REMOVAL PLAN	SHEET 31	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021107_rm

PLOT DATE : 8/20/2025 10:54 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

MATCH LINE H-H

MATCH LINE I-I

STH 190 (W. CAPITOL DR)

MATCHLINE STA. 450+00

MATCHLINE STA.465+00

MATCHLINE STA. 465+00

MATCHLINE STA.480+00

LILLY RD

SLOPE INTERCEPT (TYP.)

PVOC CONTAMINATED SOILS - AREA 3
4' - 8' BELOW GROUND SURFACE

CVOC & PVOC CONTAMINATED SOILS - AREA 5
1' BELOW GROUND SURFACE TO MAXIMUM EXCAVATION DEPTH

PVOC CONTAMINATED SOILS - AREA 4
1' BELOW GROUND SURFACE TO MAXIMUM EXCAVATION DEPTH -

CVOC & PVOC CONTAMINATED SOILS - AREA 6
1' BELOW GROUND SURFACE TO MAXIMUM EXCAVATION DEPTH

SEE REMOVAL PLAN SHEET
FOR 138TH STREET

N. 138TH ST

N. 135TH ST

FIEBRANTZ DR

CEMETERY

LEGEND

- REMOVING ASPHALTIC SURFACE MILLING, 4-INCH
- REMOVING ASPHALTIC SURFACE
- REMOVING PAVEMENT FOR BASE PATCHING
- REMOVING CONCRETE PAVEMENT
- REMOVING CONCRETE SIDEWALK
- SAWING ASPHALT
- SAWING CONCRETE
- REMOVING CURB & GUTTER
- X CLEARING AND GRUBBING (I.D.)

*BASE PATCHES FOR LOOP DETECTOR INSTALLATION REQUIRE REMOVAL OF 6" MIN. OF BASE COURSE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	REMOVAL PLAN	SHEET 32	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021108_rm

PLOT DATE : 8/20/2025 10:55 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

N. 133RD ST

SLOPE INTERCEPT (TYP.)

TLE

STH 190 (W. CAPITOL DR)

MATCHLINE STA. 480+00

480+00 481+00 482+00 483+00 484+00 485+00 486+00 487+00 488+00 489+00 490+00 491+00 492+00 493+00 494+00 495

R/W

CEMETERY

LEGEND

- REMOVING ASPHALTIC SURFACE MILLING, 4-INCH
- REMOVING ASPHALTIC SURFACE
- REMOVING PAVEMENT FOR BASE PATCHING
- REMOVING CONCRETE PAVEMENT
- REMOVING CONCRETE SIDEWALK
- SAWING ASPHALT
- SAWING CONCRETE
- REMOVING CURB & GUTTER
- X CLEARING AND GRUBBING (I.D.)

*BASE PATCHES FOR LOOP DETECTOR INSTALLATION REQUIRE REMOVAL OF 6" MIN. OF BASE COURSE

N. 128TH ST

52+00

PR. R/W

TLE

STH 190 (W. CAPITOL DR)

MATCHLINE STA. 495+00

496+00 497+00 498+00 499+00 500+00 501+00 502+00 503+00 504+00 505+00 506+00 507+00 508+00 509+00 510

MATCHLINE STA.510+00

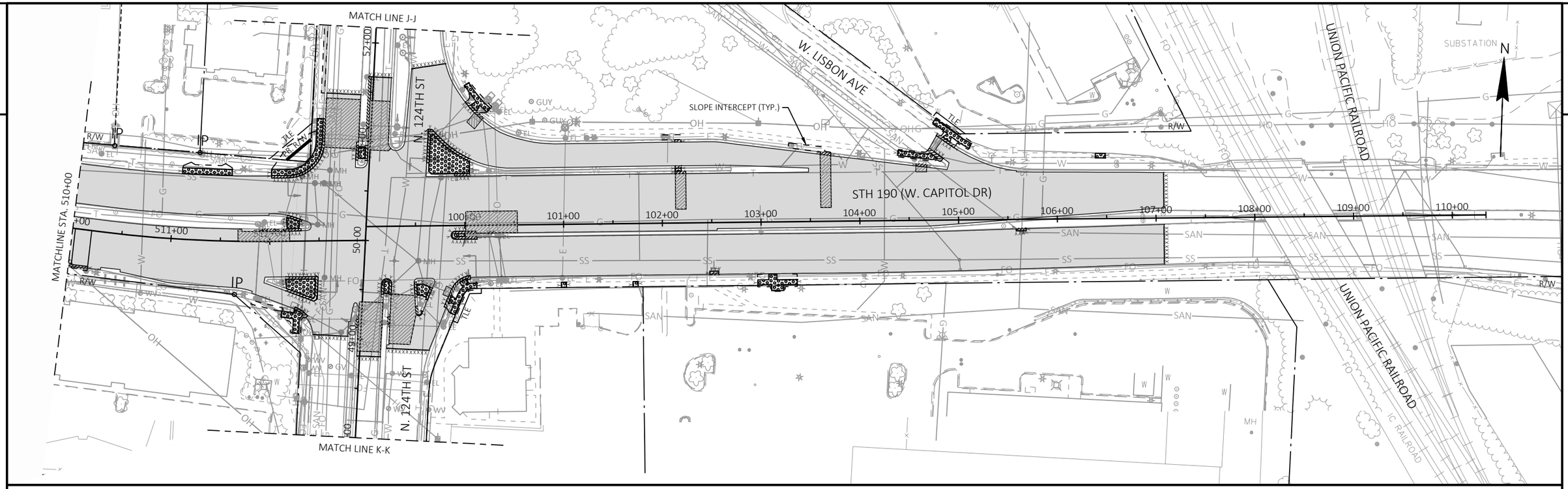
SLOPE INTERCEPT (TYP.)

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	REMOVAL PLAN	SHEET 33	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021109_rm

PLOT DATE : 8/20/2025 10:56 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

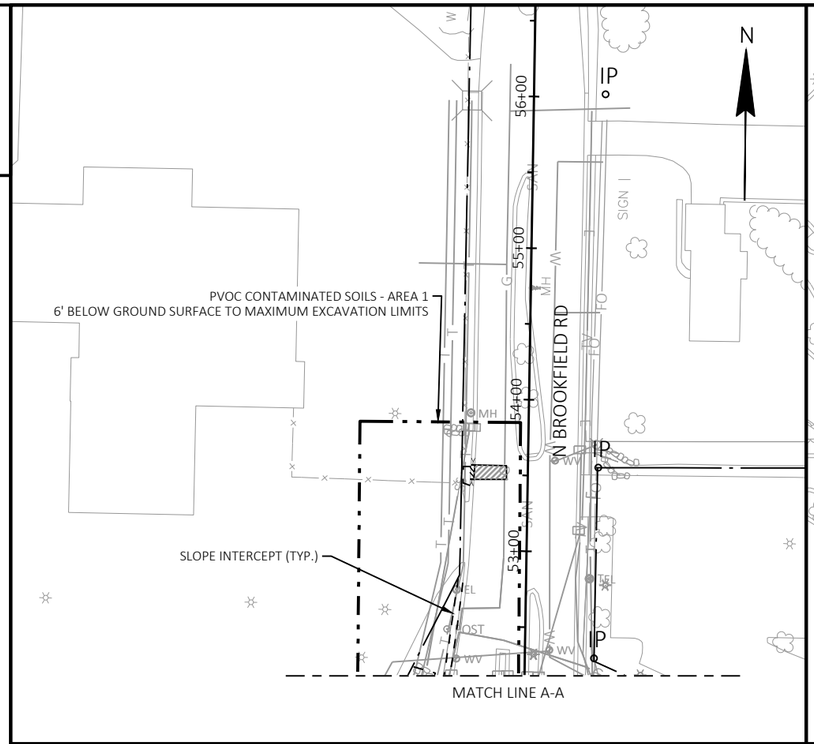


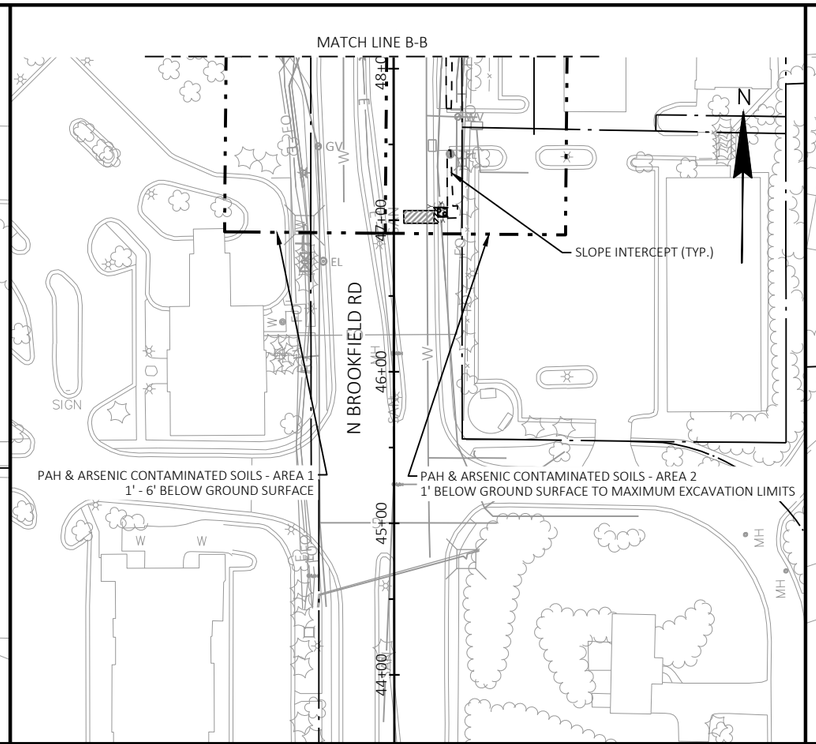
LEGEND

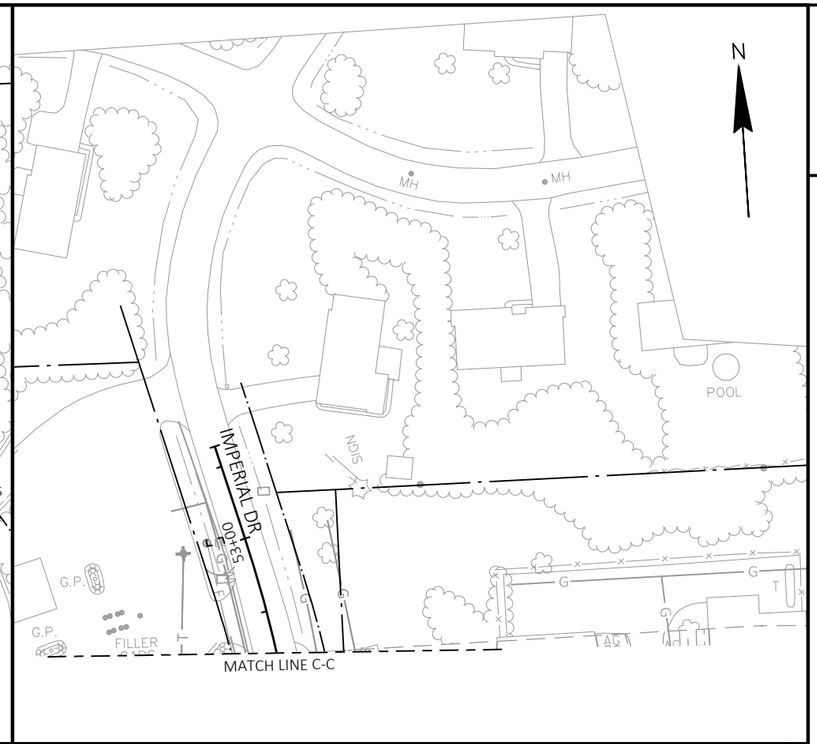
- REMOVING ASPHALTIC SURFACE MILLING, 4-INCH
- REMOVING ASPHALTIC SURFACE
- REMOVING PAVEMENT FOR BASE PATCHING
- REMOVING CONCRETE PAVEMENT
- REMOVING CONCRETE SIDEWALK
- xxxxxxxxxx SAWING ASPHALT
- xxxxxxxxxx SAWING CONCRETE
- REMOVING CURB & GUTTER
- X CLEARING AND GRUBBING (I.D.)

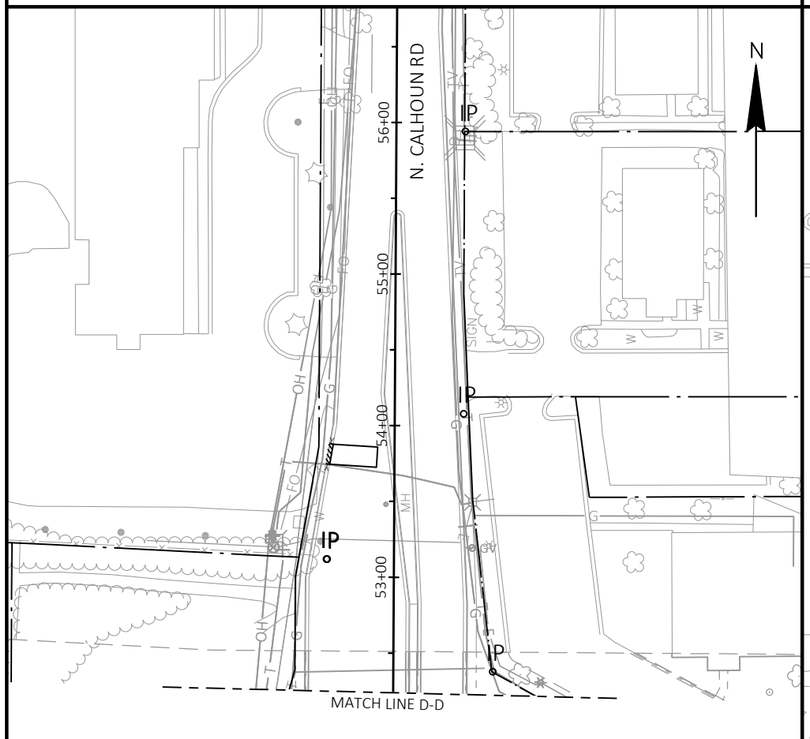
*BASE PATCHES FOR LOOP DETECTOR INSTALLATION REQUIRE REMOVAL OF 6" MIN. OF BASE COURSE

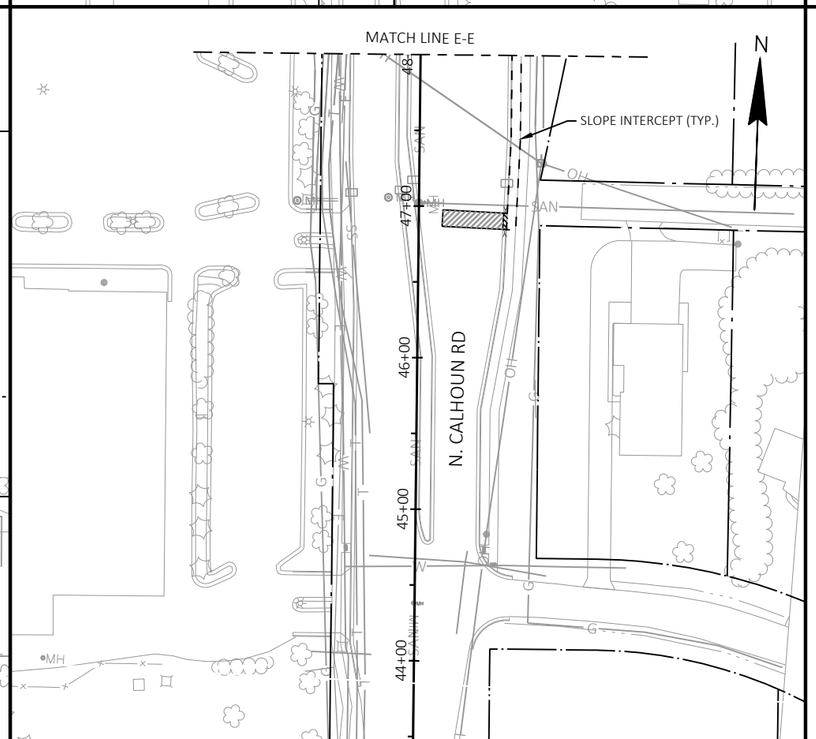
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	REMOVAL PLAN	SHEET 34	E









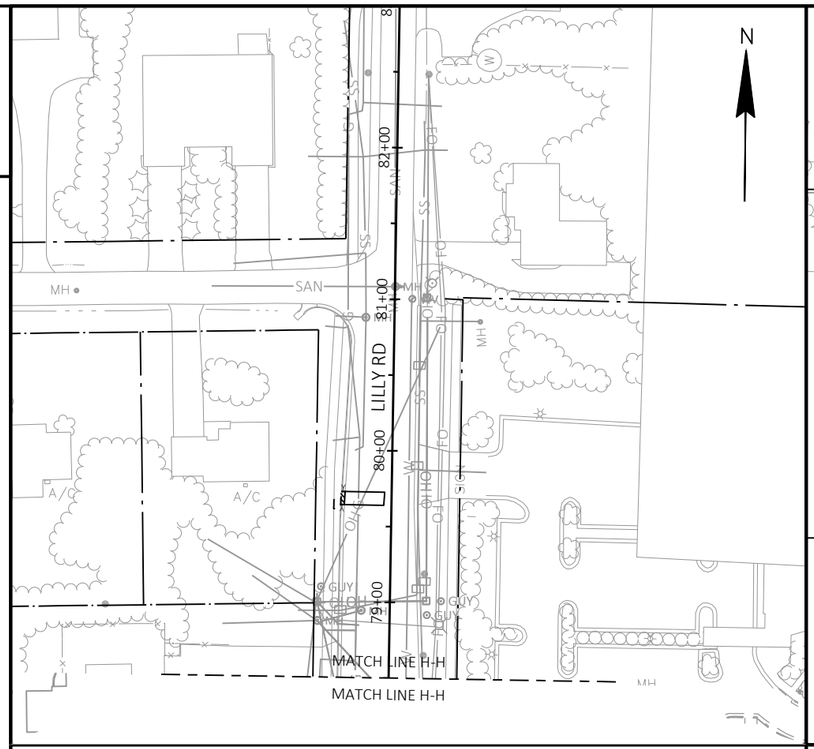


LEGEND

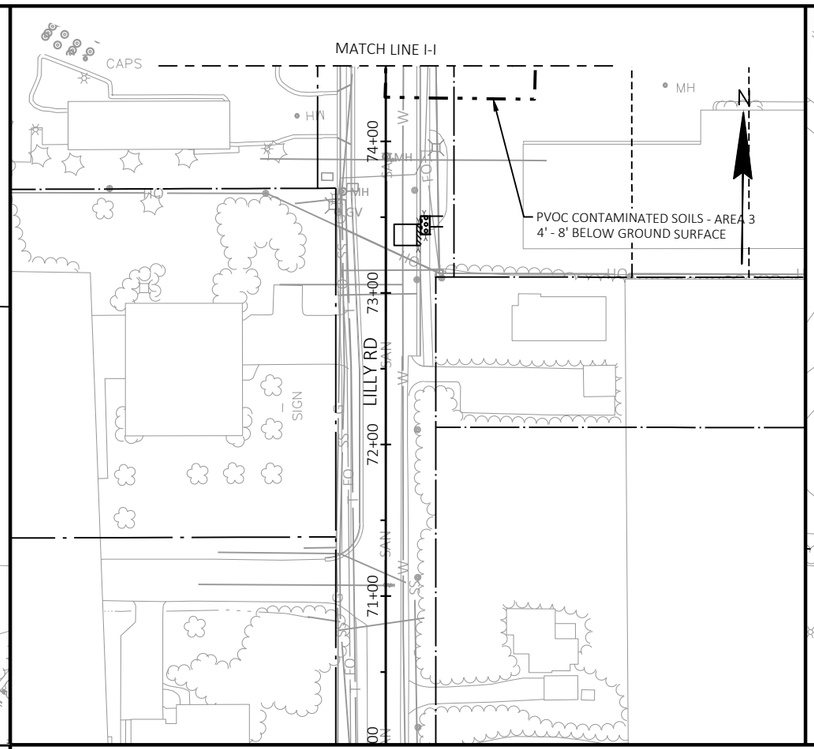
- REMOVING ASPHALTIC SURFACE MILLING, 4-INCH
- REMOVING ASPHALTIC SURFACE
- REMOVING PAVEMENT FOR BASE PATCHING
- REMOVING CONCRETE PAVEMENT
- REMOVING CONCRETE SIDEWALK
- SAWING ASPHALT
- SAWING CONCRETE
- REMOVING CURB & GUTTER
- X — CLEARING AND GRUBBING (I.D.)

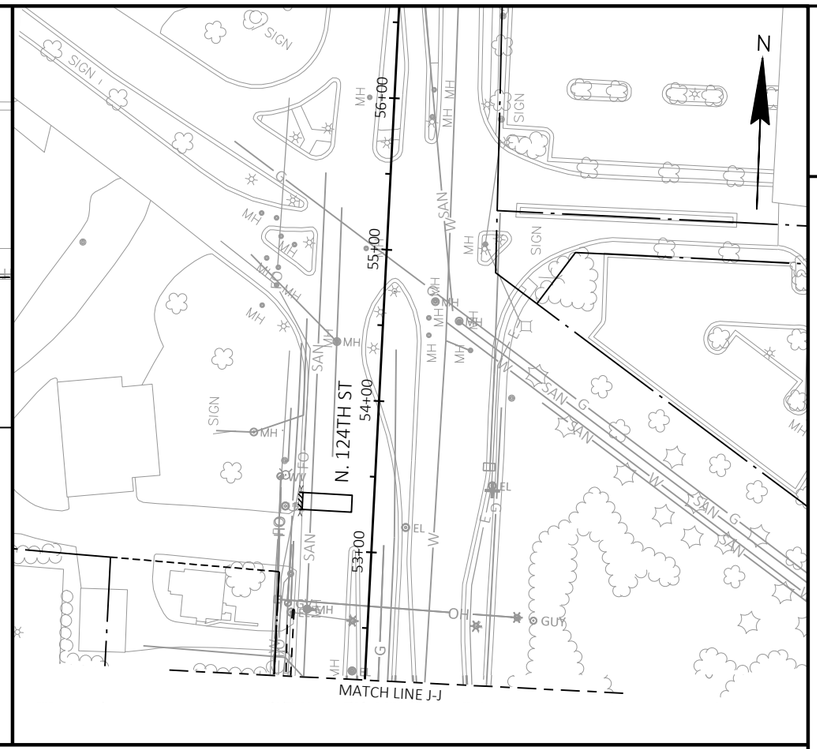
*BASE PATCHES FOR LOOP DETECTOR INSTALLATION REQUIRE REMOVAL OF 6" MIN. OF BASE COURSE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	REMOVAL PLAN	SHEET 35	E

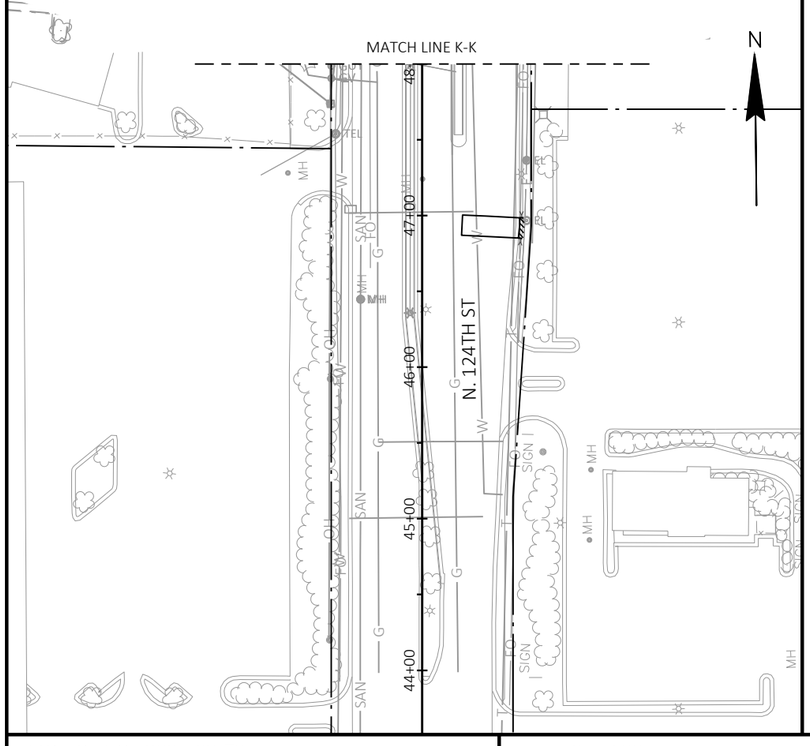


MATCH LINE H-H





2



LEGEND

- REMOVING ASPHALTIC SURFACE MILLING, 4-INCH
- REMOVING ASPHALTIC SURFACE
- REMOVING PAVEMENT FOR BASE PATCHING
- REMOVING CONCRETE PAVEMENT
- REMOVING CONCRETE SIDEWALK
- SAWING ASPHALT
- SAWING CONCRETE
- REMOVING CURB & GUTTER
- X CLEARING AND GRUBBING (I.D.)

*BASE PATCHES FOR LOOP DETECTOR INSTALLATION REQUIRE REMOVAL OF 6" MIN. OF BASE COURSE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	REMOVAL PLAN	SHEET 36	E

2

LEGEND

- REMOVING ASPHALTIC SURFACE MILLING, 4-INCH
- REMOVING ASPHALTIC SURFACE
- REMOVING PAVEMENT FOR BASE PATCHING
- REMOVING CONCRETE PAVEMENT
- REMOVING CONCRETE SIDEWALK
- SAWING ASPHALT
- SAWING CONCRETE
- REMOVING CURB & GUTTER
- X CLEARING AND GRUBBING (I.D.)

*BASE PATCHES FOR LOOP DETECTOR INSTALLATION REQUIRE REMOVAL OF 6" MIN. OF BASE COURSE

N

GUY POLE

MH

SLOPE INTERCEPT (TYP.)

CLEARING & GRUBBING, 5 I.D.

CLEARING & GRUBBING, 6 I.D.

CLEARING & GRUBBING, 5 I.D.

CLEARING & GRUBBING, 24 I.D.

CLEARING & GRUBBING, 5 I.D.

R/W

N. 138TH ST

TLE

STH 190 (W. CAPITOL DR)

464+00 465+00 466+00 467+00 468+00 469+00

2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	REMOVAL PLAN - 138TH STREET	SHEET 37	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021102_RM.DWG
LAYOUT NAME - 021102_rm
PLOT DATE : 8/20/2025 11:01 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : #######
WISDOT/CADDS SHEET 42

LEGEND

- 30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE

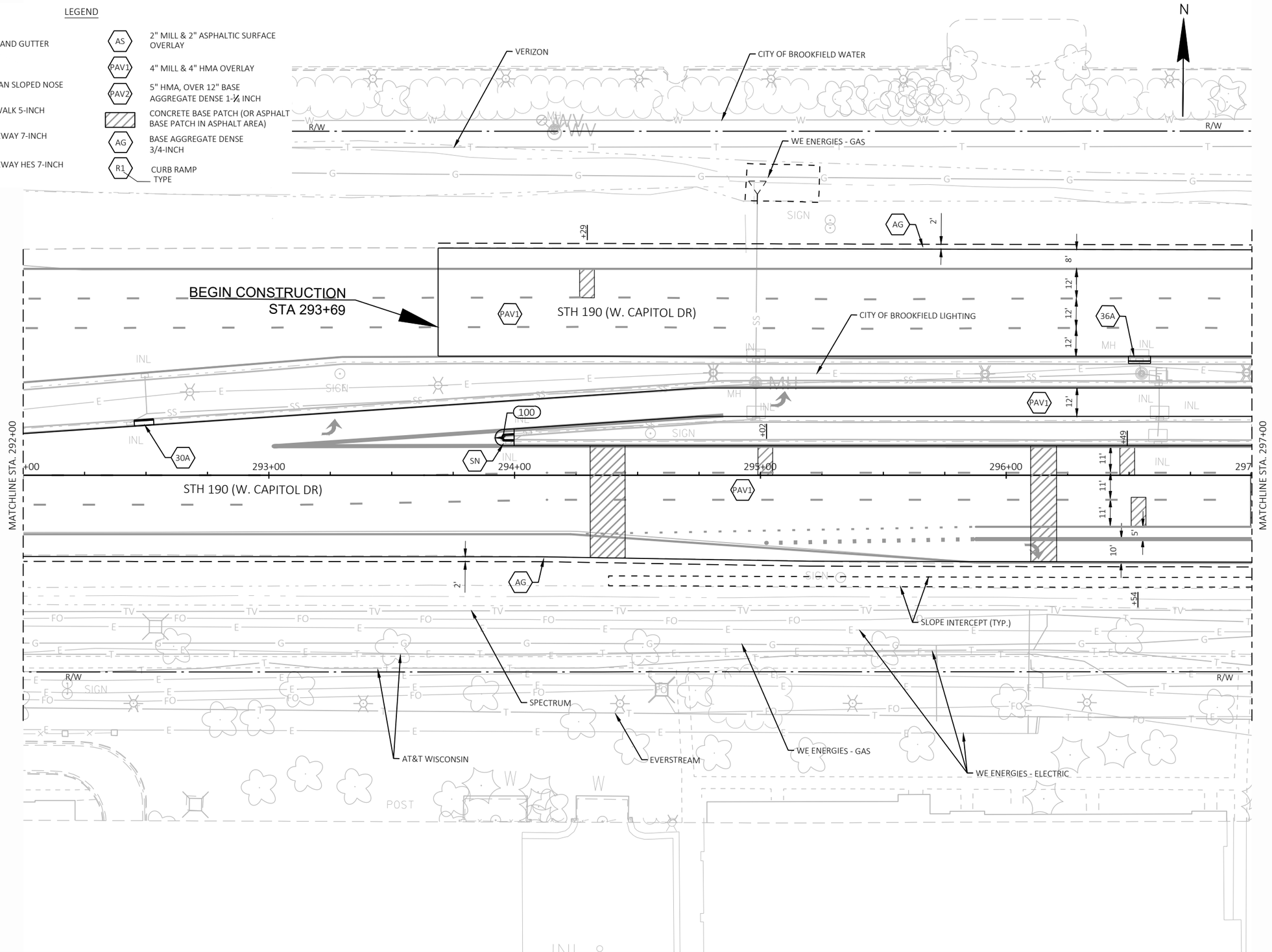
VERIZON
CITY OF BROOKFIELD WATER
WE ENERGIES - GAS
R/W
N
STH 190 (W. CAPITOL DR)
CITY OF BROOKFIELD LIGHTING
BEGIN PROJECT
STA 291+00
MATCHLINE STA. 292+00
287+00
288+00
289+00
290+00
291+00
292
12'
12'
12'
9'
PAV1
AG
AT&T WISCONSIN
WE ENERGIES - GAS
WE ENERGIES - ELECTRIC
SPECTRUM

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 38	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021201_pd
PLOT DATE : 8/20/2025 11:26 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- 30A — CONCRETE CURB AND GUTTER TYPE SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 39	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021202_pd
PLOT DATE : 8/20/2025 11:27 AM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

MATCH LINE A-A

MATCH EXISTING STA. 299+59.35

MATCH EXISTING STA. 299+40.71

MATCH EXISTING STA. 300+07.97

N BROOKFIELD RD

CITY OF BROOKFIELD WATER

VERIZON

R/W

SLOPE INTERCEPT (TYP.)

WE ENERGIES - GAS

CITY OF BROOKFIELD SANITARY

SECTION CORNER MONUMENTS

CITY OF BROOKFIELD LIGHTING

STH 190 (W. CAPITOL DR)

WISDOT INTERCONNECT

ADJUSTING WATER VALVES

SPECTRUM

WE ENERGIES - ELECTRIC

EVERSTREAM

AT&T WISCONSIN

STA 302+17.1 42.0' RT
40.0' DRW

MATCH EXISTING STA. 299+46.61

MATCH EXISTING STA. 299+73.40

MATCH EXISTING STA. 300+11.89

MATCH EXISTING STA. 299+95.62

LEVEL 3 COMMUNICATIONS (LUMEN)

MATCHLINE STA. 297+00

MATCHLINE STA. 303+00

MATCH LINE B-B

LEGEND

30A	CONCRETE CURB AND GUTTER TYPE SIZE (INCHES)
SN	CONCRETE MEDIAN SLOPED NOSE
SW	CONCRETE SIDEWALK 5-INCH
DRW	CONCRETE DRIVEWAY 7-INCH
HES	CONCRETE DRIVEWAY HES 7-INCH
AS	2" MILL & 2" ASPHALTIC SURFACE OVERLAY
PAV1	4" MILL & 4" HMA OVERLAY
PAV2	5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
AG	BASE AGGREGATE DENSE 3/4-INCH
R1	CURB RAMP TYPE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 40	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021203_pd

PLOT DATE : 8/20/2025 11:27 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- 30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE

N

55+00

54+00

53+00

52+00

AT&T WISCONSIN

WE ENERGIES - GAS

WE ENERGIES - ELECTRIC

AT&T WISCONSIN

SPECTRUM

CITY OF BROOKFIELD WATER

36A

N BROOKFIELD RD

R/W

MATCH EXISTING STA. 299+81.41

ADJUST SANITARY SEWER MANHOLE

MATCH LINE A-A

MATCH LINE B-B

48+00

47+00

46+00

45+00

WE ENERGIES - ELECTRIC

WE ENERGIES - GAS

AT&T WISCONSIN

SPECTRUM

36A

SW5

EVERSTREAM

LEVEL 3 COMMUNICATIONS (LUMEN)

CITY OF BROOKFIELD WATER

2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 41	E

2

2

N

STA 304+62.2, -114.4' LT
26.5' DRW

STA 307+86, -100.1' LT
43.1' DRW

CITY OF BROOKFIELD WATER

WE ENERGIES - GAS

VERIZON

R/W

SIGN

POST

RIPRAP

STH 190 (W. CAPITOL DR)

WISDOT INTERCONNECT

MATCHLINE STA. 303+00

MATCHLINE STA. 309+00

304+00

305+00

306+00

307+00

308+00

SPECTRUM

AT&T WISCONSIN

WE ENERGIES - ELECTRIC

CITY OF BROOKFIELD WATER

EVERSTREAM

ADJUSTING WATER VALVES

ASPHALTIC FLUME

ASPHALTIC FLUME

SLOPE INTERCEPT (TYP.)

LANDSCAPING AND TREE TO REMAIN

LANDSCAPING TO REMAIN

MATCH EXISTING
STA. 307+99.47

ST ANDREW LN

TLE

TLE

LEGEND

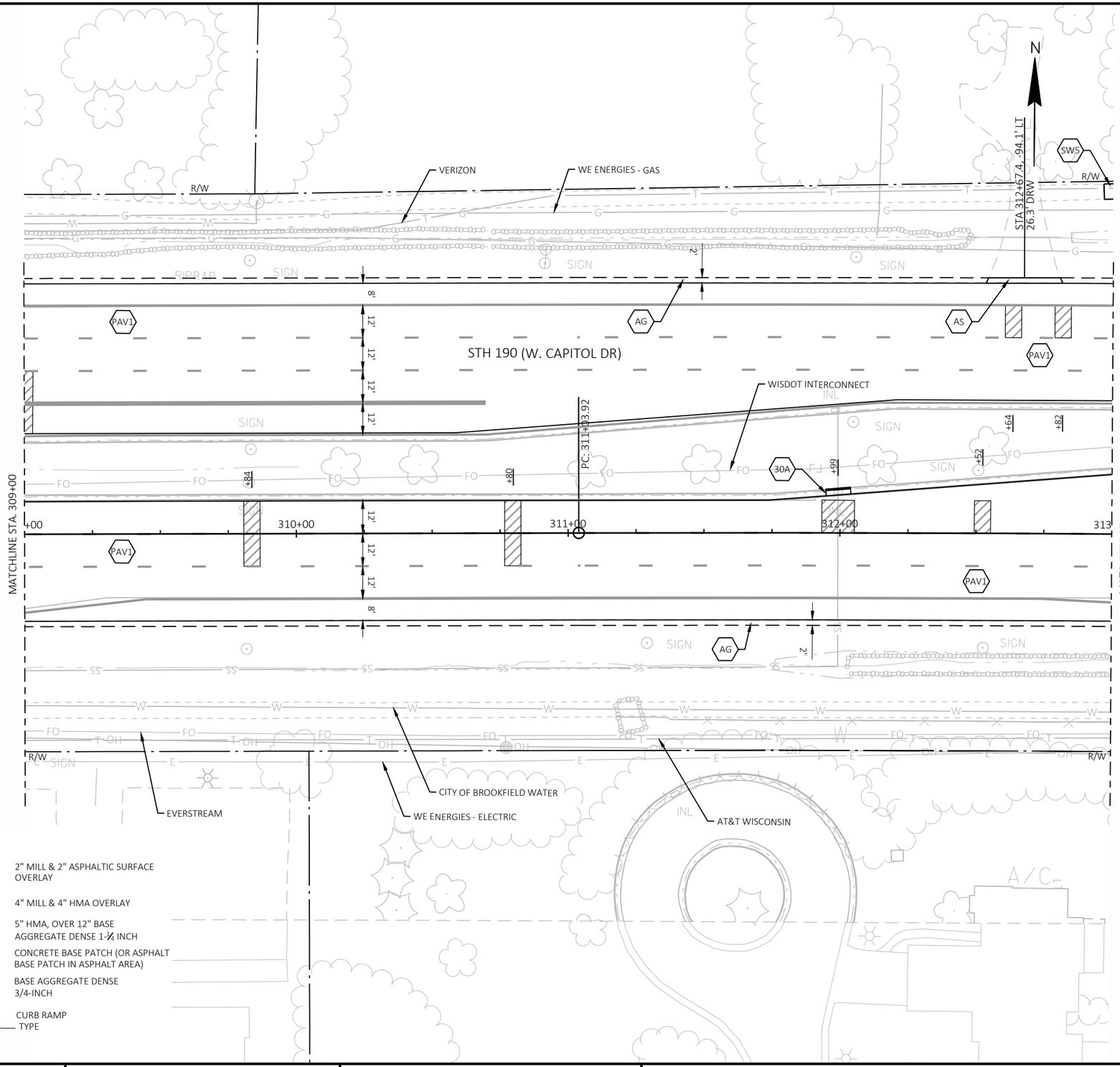
30A — CONCRETE CURB AND GUTTER, TYPE, SIZE (INCHES)	AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
SN — CONCRETE MEDIAN SLOPED NOSE	PAV1 — 4" MILL & 4" HMA OVERLAY
SW — CONCRETE SIDEWALK 5-INCH	PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
DRW — CONCRETE DRIVEWAY 7-INCH	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
HES — CONCRETE DRIVEWAY HES 7-INCH	AG — BASE AGGREGATE DENSE 3/4-INCH
	R1 — CURB RAMP, TYPE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 42	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021205_pd

PLOT DATE : 8/20/2025 11:29 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



LEGEND

30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)	AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
SN — CONCRETE MEDIAN SLOPED NOSE	PAV1 — 4" MILL & 4" HMA OVERLAY
SW — CONCRETE SIDEWALK 5-INCH	PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
DRW — CONCRETE DRIVEWAY 7-INCH	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
HES — CONCRETE DRIVEWAY HES 7-INCH	AG — BASE AGGREGATE DENSE 3/4-INCH
	R1 — CURB RAMP TYPE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 43	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021206_pd

PLOT DATE : 8/20/2025 11:29 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

STH 190 (W. CAPITOL DR)

STA 315+97.5, -114.5' LT
32.7' DRW

MATCHLINE STA. 313+00

MATCHLINE STA. 319+00

314+00 315+00 316+00 317+00 318+00

WISDOT INTERCONNECT

CITY OF BROOKFIELD WATER

ASPHALTIC FLUME

ADJUSTING WATER VALVES

SLOPE INTERCEPT (TYP.)

MATCH EXISTING
STA. 315+99.47

MOUNTAIN DR

TLE

EVERSTREAM

AT&T WISCONSIN

WE ENERGIES - ELECTRIC

VERIZON

WE ENERGIES - GAS

LEGEND

30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)	AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
SN — CONCRETE MEDIAN SLOPED NOSE	PAV1 — 4" MILL & 4" HMA OVERLAY
SW — CONCRETE SIDEWALK 5-INCH	PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
DRW — CONCRETE DRIVEWAY 7-INCH	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
HES — CONCRETE DRIVEWAY HES 7-INCH	AG — BASE AGGREGATE DENSE 3/4-INCH
	R1 — CURB RAMP TYPE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 44	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021207_pd

PLOT DATE : 8/20/2025 11:30 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

MATCH LINE C-C

CITY OF BROOKFIELD WATER

MATCH EXISTING STA. 321+81.78

IMPERIAL DR

ANR PIPELINE

147' FENCE SAFETY

WE ENERGIES - GAS

VERIZON

SLOPE INTERCEPT (TYP.)

R/W

RIPRAP

STH 190 (W. CAPITOL DR)

WISDOT INTERCONNECT

MATCHLINE STA. 319+00

MATCHLINE STA. 325+00

320+00

321+00

322+00

323+00

324+00

50+00

51+00

ADJUSTING WATER VALVES

AT&T WISCONSIN

SLOPE INTERCEPT (TYP.)

EVERSTREAM

100' FENCE SAFETY

ASPHALTIC FLUME

EXISTING PLE

MATCH EXISTING STA. 321+94.08

CITY OF BROOKFIELD WATER

WE ENERGIES - ELECTRIC

LEGEND

30A — TYPE / SIZE (INCHES)	CONCRETE CURB AND GUTTER
SN	CONCRETE MEDIAN SLOPED NOSE
SW	CONCRETE SIDEWALK 5-INCH
DRW	CONCRETE DRIVEWAY 7-INCH
HES	CONCRETE DRIVEWAY HES 7-INCH
AS	2" MILL & 2" ASPHALTIC SURFACE OVERLAY
PAV1	4" MILL & 4" HMA OVERLAY
PAV2	5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
AG	BASE AGGREGATE DENSE 3/4-INCH
R1 — TYPE	CURB RAMP

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 45	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021208_pd
PLOT DATE : 8/20/2025 11:30 AM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- 30A — CONCRETE CURB AND GUTTER (TYPE / SIZE (INCHES))
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP (TYPE)

N

MH
MH
INL
SIGN
POOL
CITY OF BROOKFIELD WATER
WE ENERGIES - GAS
SLOPE INTERCEPT (TYP.)
ANR PIPELINE
IMPERIAL DR
R/W
R/W
53+00
52+00
G.P.
G.P.
FILLER CAPS
MH
POST
AG
AG
AG
AG
U/C
MATCH LINE C-C

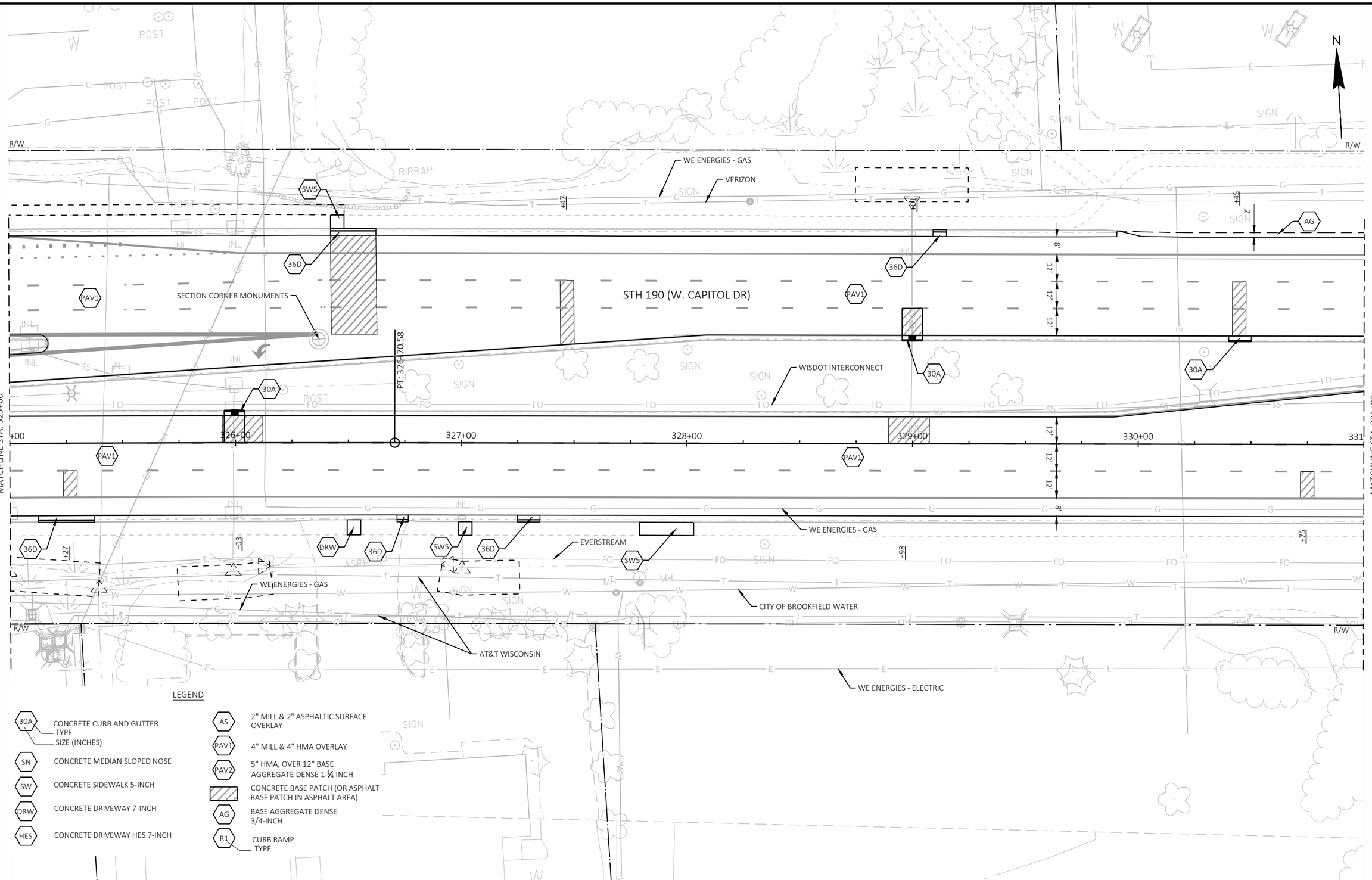
2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 46	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021209_pd

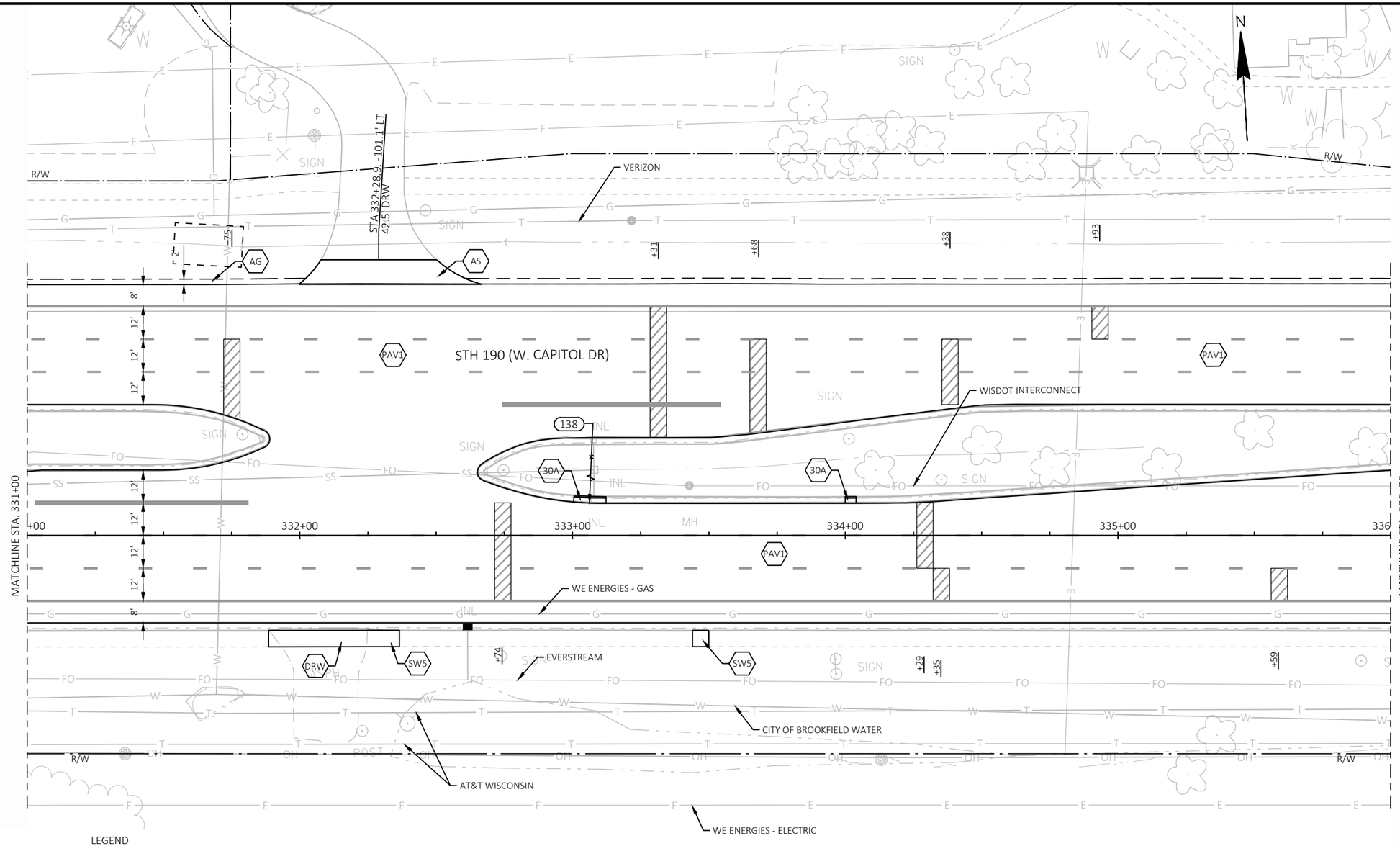
PLOT DATE : 8/20/2025 11:31 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 47	E

2



LEGEND

- 30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 48	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021211_pd

PLOT DATE : 8/20/2025 11:32 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

STH 190 (W. CAPITOL DR)

BEAUFORT DR

MATCHLINE STA. 336+00

MATCHLINE STA. 341+50

+00 337+00 338+00 339+00 340+00 341+00

SLOPE INTERCEPT (TYP.)

MATCH EXISTING STA. 340+40.19

VERIZON

WISDOT INTERCONNECT

WE ENERGIES - GAS

EVERSTREAM

CITY OF BROOKFIELD WATER

WE ENERGIES - ELECTRIC

AT&T WISCONSIN

SLOPE INTERCEPT (TYP.)

MATCH EXISTING STA. 340+67.10

MATCH EXISTING STA. 340+31.67

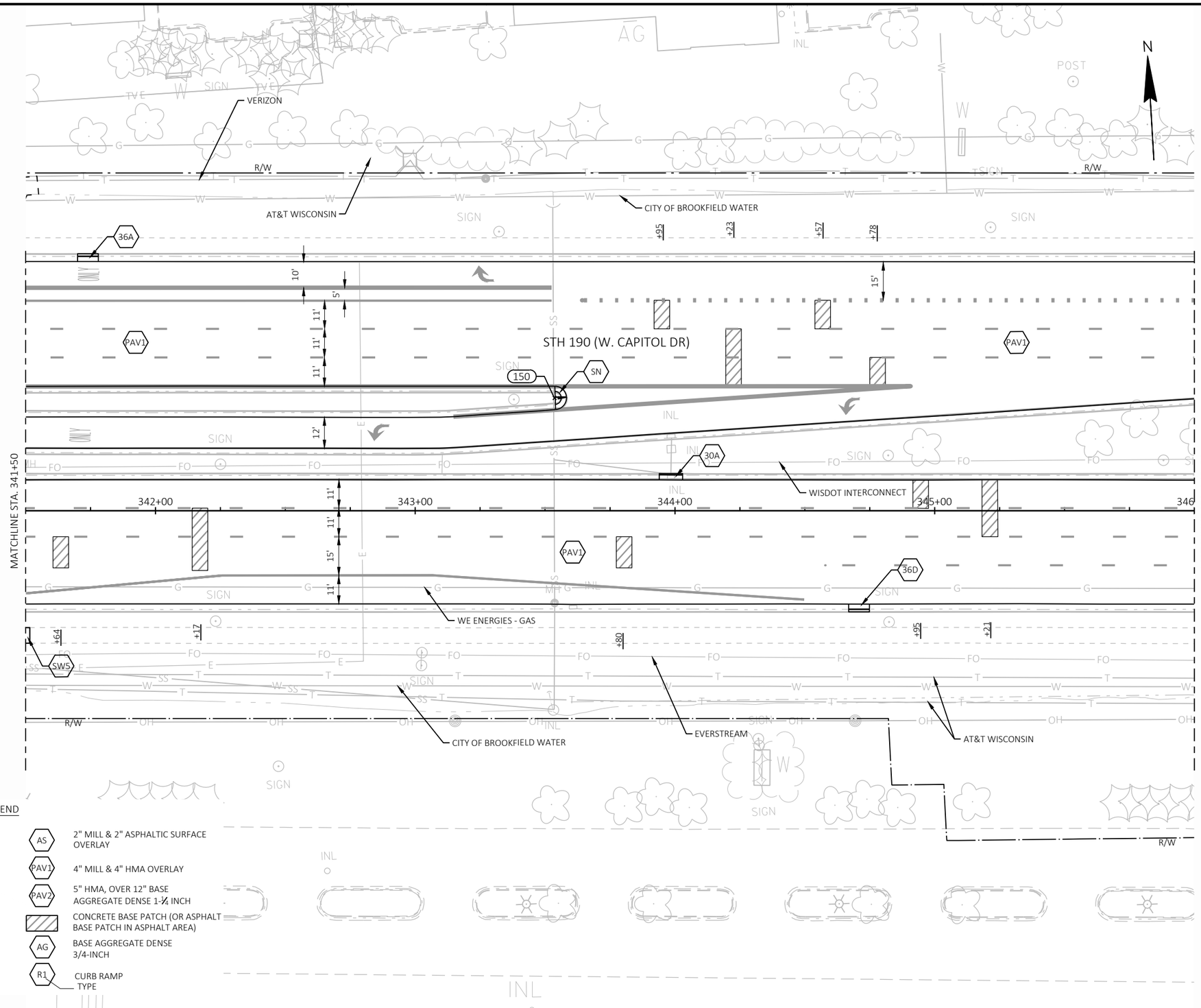
YUKON RD

LEGEND

30A — TYPE, SIZE (INCHES)	CONCRETE CURB AND GUTTER
SN	CONCRETE MEDIAN SLOPED NOSE
SW	CONCRETE SIDEWALK 5-INCH
DRW	CONCRETE DRIVEWAY 7-INCH
HES	CONCRETE DRIVEWAY HES 7-INCH
AS	2" MILL & 2" ASPHALTIC SURFACE OVERLAY
PAV1	4" MILL & 4" HMA OVERLAY
PAV2	5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
AG	BASE AGGREGATE DENSE 3/4-INCH
R1 — TYPE	CURB RAMP

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 49	E

2

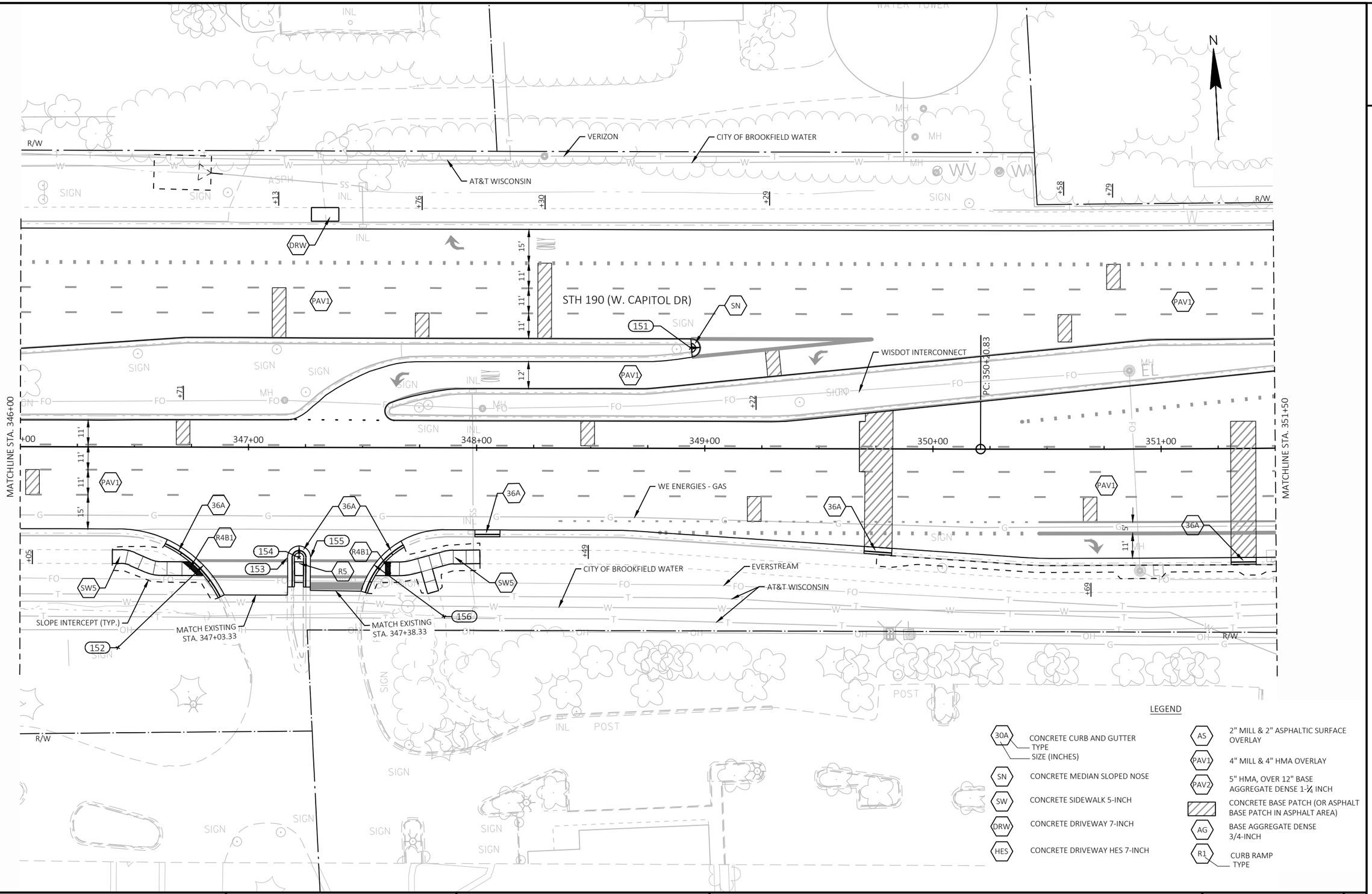


LEGEND

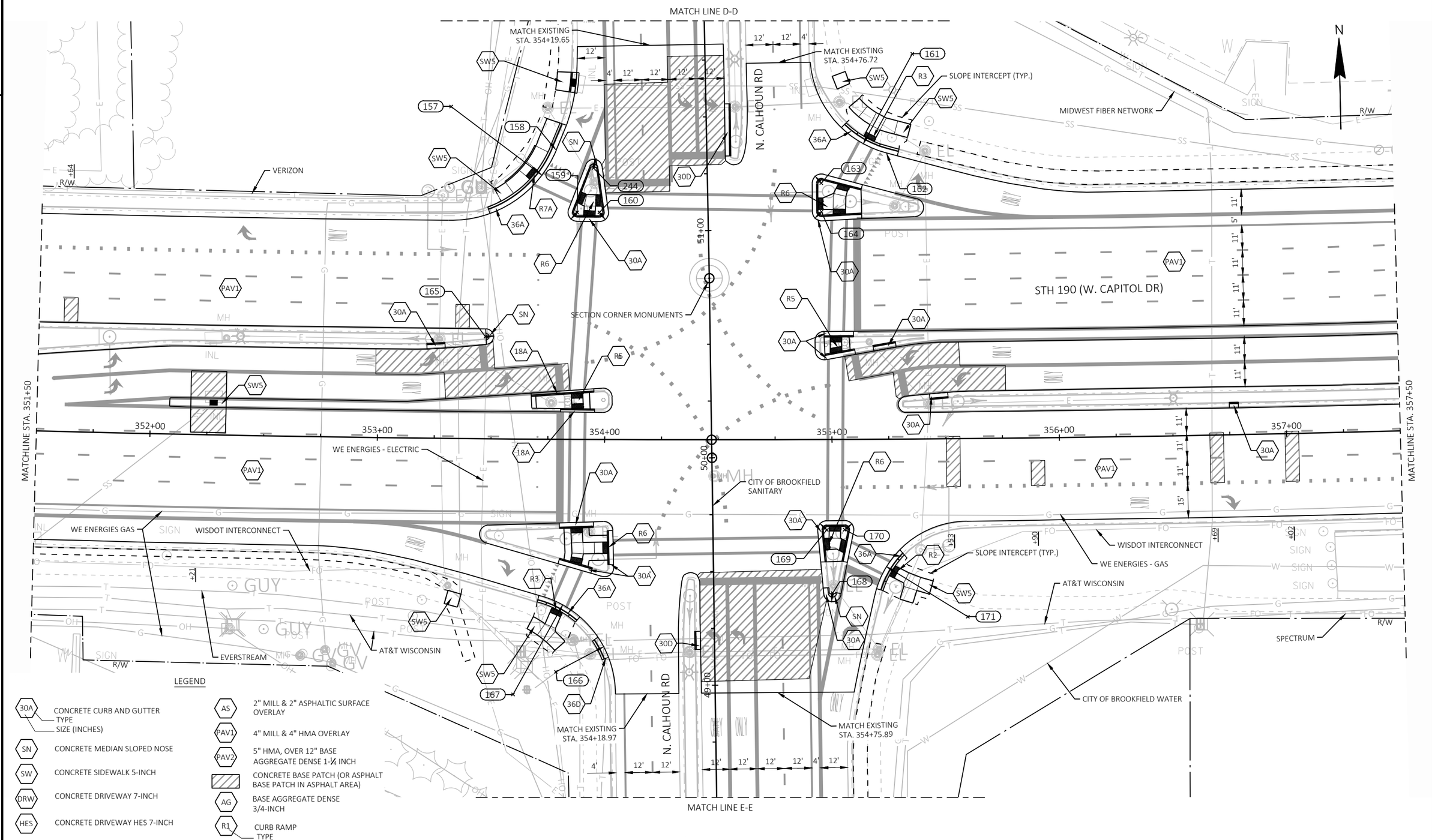
- 30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-½ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 50	E

2



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 51	E



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 52	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021215_pd
PLOT DATE : 8/20/2025 11:34 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

30A — TYPE / SIZE (INCHES)	CONCRETE CURB AND GUTTER
SN	CONCRETE MEDIAN SLOPED NOSE
SW	CONCRETE SIDEWALK 5-INCH
DRW	CONCRETE DRIVEWAY 7-INCH
HES	CONCRETE DRIVEWAY HES 7-INCH
AS	2" MILL & 2" ASPHALTIC SURFACE OVERLAY
PAV1	4" MILL & 4" HMA OVERLAY
PAV2	5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
AG	BASE AGGREGATE DENSE 3/4-INCH
R1 — TYPE	CURB RAMP

N

MATCH LINE E-E

N. CALHOUN RD

54+00

53+00

52+00

48+00

47+00

46+00

45+00

30D

R/W

CITY OF BROOKFIELD WATER

AT&T WISCONSIN

WE ENERGIES - GAS

WE ENERGIES - ELECTRIC

MIDWEST FIBER NETWORK

VERIZON

MATCH LINE D-D

2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 53	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021216_pd

PLOT DATE : 8/20/2025 11:35 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

STA 358+76.4, 115.4' LT
33.0' DRW

CITY OF BROOKFIELD SANITARY

R/W

WE ENERGIES - GAS

DRW

36A

30D

SW5

PAV1

STH 190 (W. CAPITOL DR)

WISDOT INTERCONNECT

30A

PT: 358+71.4'

MATCHLINE STA. 357+50

MATCHLINE STA. 363+00

358+00

359+00

360+00

361+00

362+00

363

R7A

PEDESTRIAN CURB (TYP.)

R4B1

175

174

173

176

SLOPE INTERCEPT
(TYP.)

R3

CITY OF BROOKFIELD WATER

AT&T WISCONSIN

SPECTRUM

FLAG

POST

A/C

LEGEND

30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)	AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
SN — CONCRETE MEDIAN SLOPED NOSE	PAV1 — 4" MILL & 4" HMA OVERLAY
SW — CONCRETE SIDEWALK 5-INCH	PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
DRW — CONCRETE DRIVEWAY 7-INCH	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
HES — CONCRETE DRIVEWAY HES 7-INCH	AG — BASE AGGREGATE DENSE 3/4-INCH
	R1 — CURB RAMP TYPE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 54	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021217_pd

PLOT DATE : 8/20/2025 11:35 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

MATCHLINE STA. 363+00

MATCHLINE STA. 369+00

CITY OF BROOKFIELD SANITARY

MATCH EXISTING
STA. 363+35.86

MATCH EXISTING
STA. 363+68.47

SLOPE INTERCEPT (TYP.)

STH 190 (W. CAPITOL DR)

WISDOT INTERCONNECT

364+00

365+00

366+00

367+00

368+00

N. 169TH ST

MATCH EXISTING
STA. 363+43.41

SLOPE INTERCEPT (TYP.)

WE ENERGIES - GAS

AT&T WISCONSIN

R/W

LEGEND

30A	CONCRETE CURB AND GUTTER TYPE SIZE (INCHES)
SN	CONCRETE MEDIAN SLOPED NOSE
SW	CONCRETE SIDEWALK 5-INCH
DRW	CONCRETE DRIVEWAY 7-INCH
HES	CONCRETE DRIVEWAY HES 7-INCH
AS	2" MILL & 2" ASPHALTIC SURFACE OVERLAY
PAV1	4" MILL & 4" HMA OVERLAY
PAV2	5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
AG	BASE AGGREGATE DENSE 3/4-INCH
R1	CURB RAMP TYPE

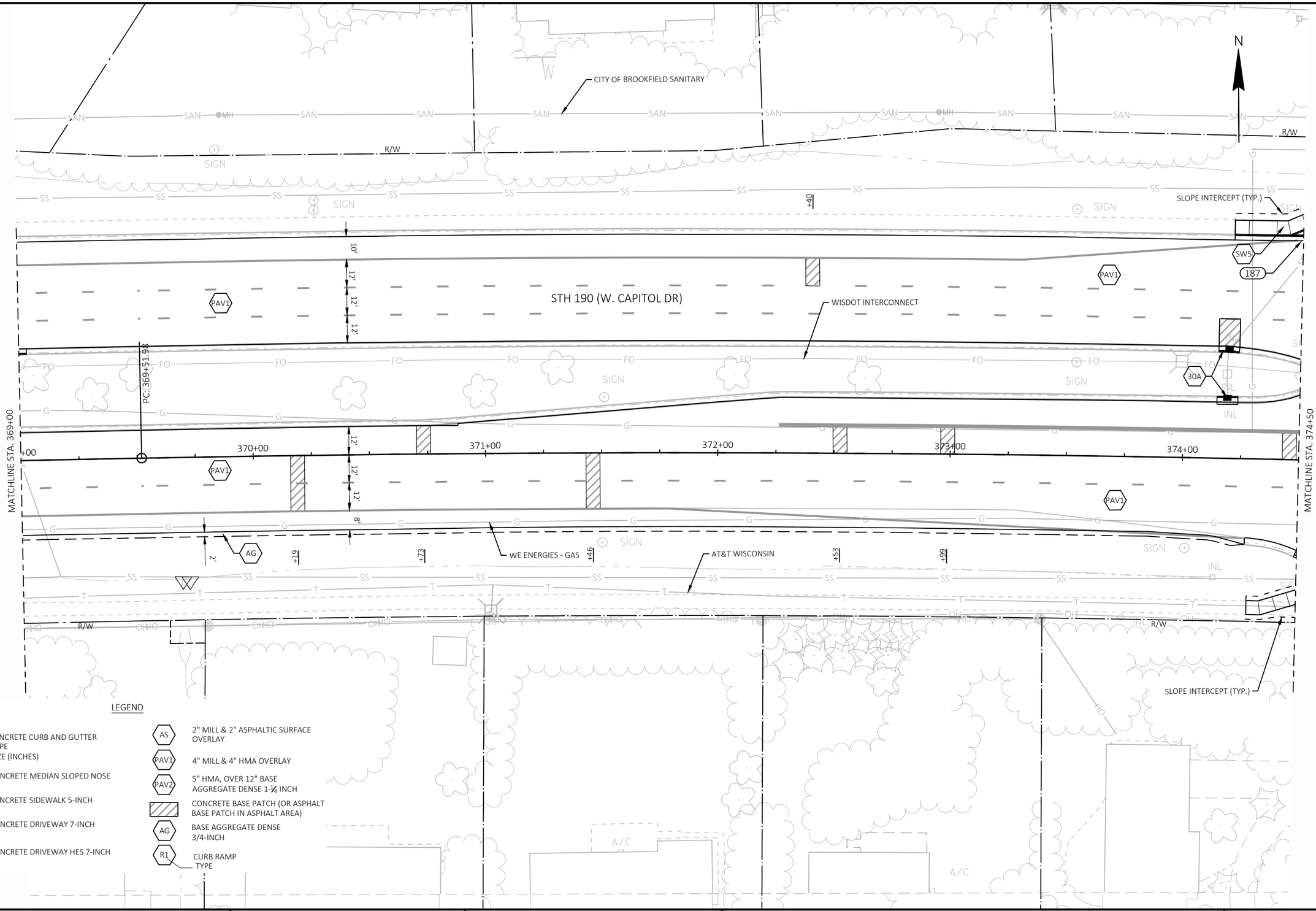
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 55	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021218_pd

PLOT DATE : 8/20/2025 11:36 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 56	E

2

2

FOUNTAIN PLAZA DR

MATCH EXISTING STA. 375+01.08

189

CITY OF BROOKFIELD SANITARY

N

R/W

ADJUSTING WATER VALVES

188

SW5

R4B1

30D

36D

SLOPE INTERCEPT (TYP.)

+38

+39

+99

2'

AG

8'

12'

+65

PAV1

STH 190 (W. CAPITOL DR)

13'

11'

WISDOT INTERCONNECT

30A

PT: 376+05.0

+40

MATCHLINE STA. 374+50

375+00

376+00

377+00

378+00

379+00

380+00

MATCHLINE STA. 380+50

WE ENERGIES - GAS

190

R4M

192

191

193

+88

+82

+34

+21

ASPHALTIC FLUME

CITY OF BROOKFIELD WATER

CITY OF BROOKFIELD SANITARY

AT&T WISCONSIN

ADJUSTING WATER VALVES

MATCH EXISTING STA. 375+01.53

N. 165TH ST

LEGEND

- 30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE

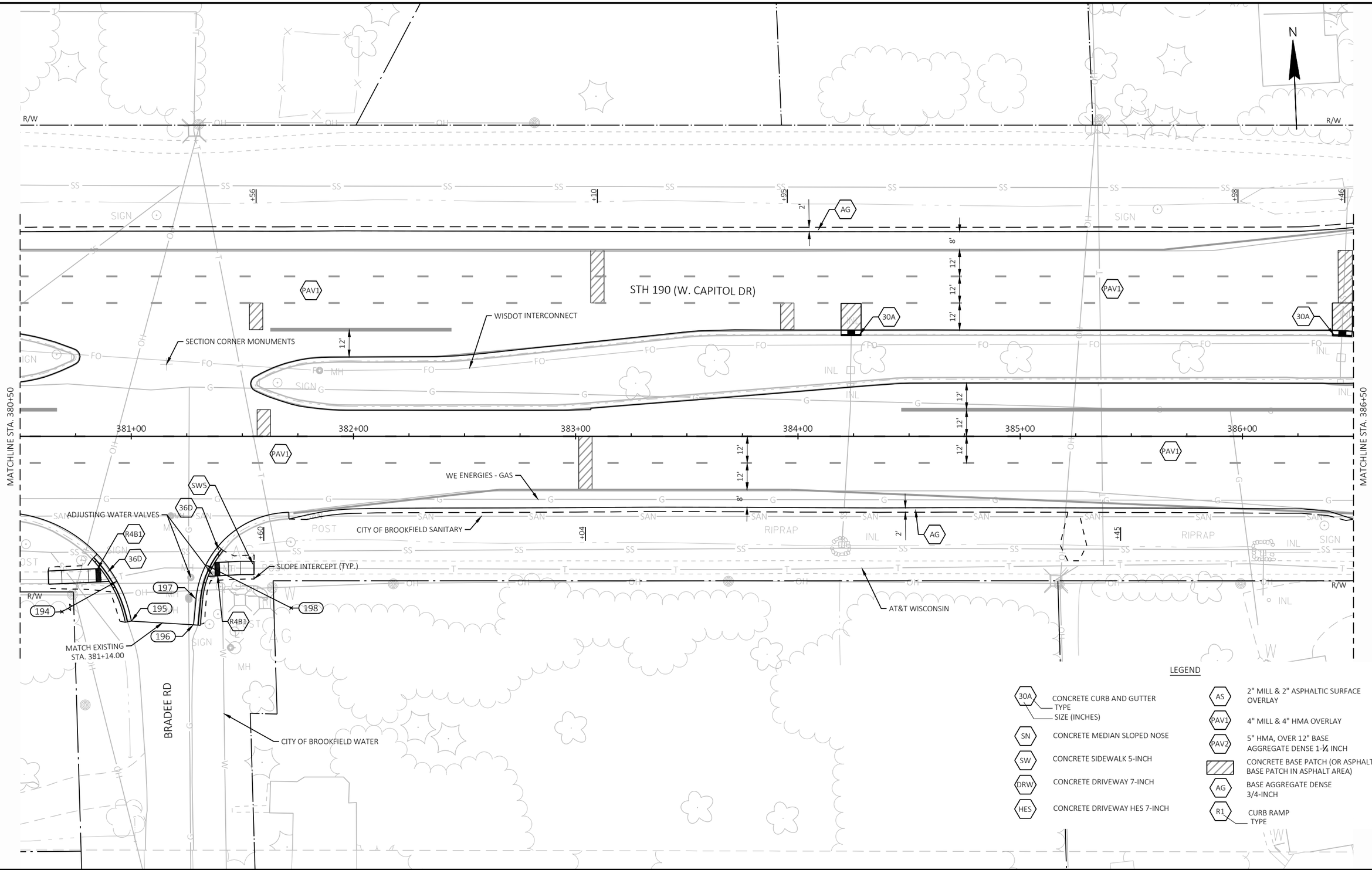
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 57	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021220_pd

PLOT DATE : 8/20/2025 11:37 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



LEGEND

30A — CONCRETE CURB AND GUTTER TYPE, SIZE (INCHES)	AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
SN — CONCRETE MEDIAN SLOPED NOSE	PAV1 — 4" MILL & 4" HMA OVERLAY
SW — CONCRETE SIDEWALK 5-INCH	PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
DRW — CONCRETE DRIVEWAY 7-INCH	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
HES — CONCRETE DRIVEWAY HES 7-INCH	AG — BASE AGGREGATE DENSE 3/4-INCH
	R1 — CURB RAMP TYPE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 58	E

2

N

N. 162ND ST

MATCH EXISTING
STA. 387+22.26

SLOPE INTERCEPT (TYP.)

LANDSCAPING TO REMAIN

36A

R/W

199

201

200

202

TLE

SW5

CITY OF BROOKFIELD WATER

ADJUSTING
WATER VALVES

R4B1

36A

SW5

R4B1

ADJUST SANITARY
SEWER MANHOLE

CITY OF BROOKFIELD SANITARY

PAV1

STH 190 (W. CAPITOL DR)

PAV1

WISDOT INTERCONNECT

30A

MATCHLINE STA. 386+50

387+00

388+00

389+00

390+00

391+00

MATCHLINE STA. 391+50

+79

+70

+22

+29

+28

+06

+62

2'

AG

12'

9'

WE ENERGIES - GAS

ADJUSTING
WATER VALVES

36A

R4B1

36A

SW5

R4B1

SW5

203

204

ADJUSTING
WATER VALVES

SLOPE INTERCEPT (TYP.)

CITY OF BROOKFIELD WATER

AT&T WISCONSIN

MATCH EXISTING
STA. 387+25.57

LONE ELM DR

LEGEND

30A	CONCRETE CURB AND GUTTER TYPE SIZE (INCHES)
SN	CONCRETE MEDIAN SLOPED NOSE
SW	CONCRETE SIDEWALK 5-INCH
DRW	CONCRETE DRIVEWAY 7-INCH
HES	CONCRETE DRIVEWAY HES 7-INCH
AS	2" MILL & 2" ASPHALTIC SURFACE OVERLAY
PAV1	4" MILL & 4" HMA OVERLAY
PAV2	5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
AG	BASE AGGREGATE DENSE 3/4-INCH
R1	CURB RAMP TYPE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 59	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021222_pd
PLOT DATE : 8/20/2025 11:38 AM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

2

MATCHLINE STA. 391+50

MATCHLINE STA. 397+50

R/W

CITY OF BROOKFIELD WATER

AT&T WISCONSIN

MATCH EXISTING
STA. 396+65.33

SLOPE INTERCEPT
(TYP.)

PEDESTRIAN CURB (TYP.)

BROOK LN

STA 393+27.1, 95.5' LT
70.4' DRW

STH 190 (W. CAPITOL DR)

WISDOT INTERCONNECT

392+00 393+00 394+00 395+00 396+00 397+00

WE ENERGIES - GAS

STA 393+18, 34.8' RT
49.0' DRW

ADJUST SANITARY SEWER MANHOLE

CITY OF BROOKFIELD SANITARY

MATCH EXISTING
STA. 396+39.13

SEPTIC

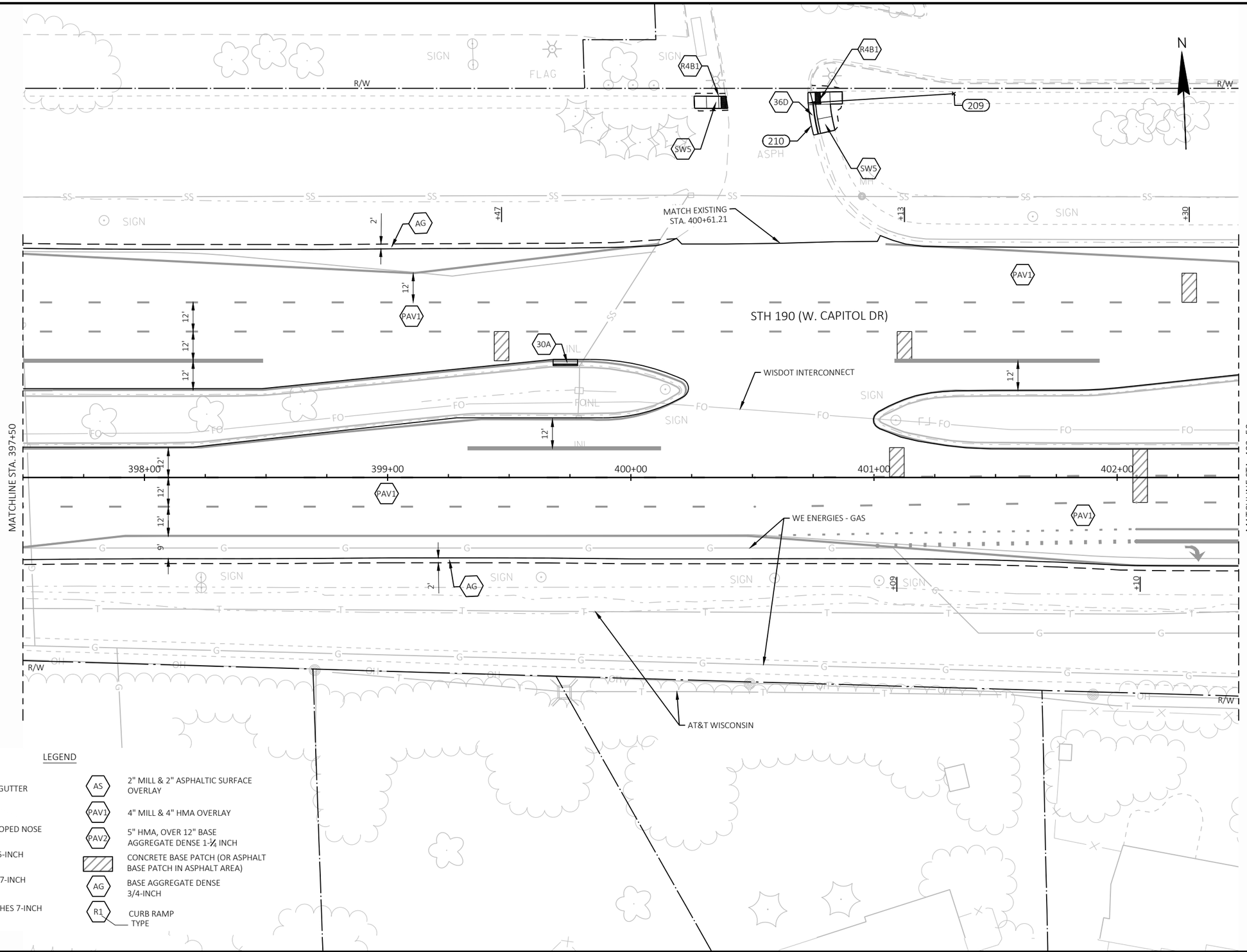
LEGEND

30A — CONCRETE CURB AND GUTTER TYPE, SIZE (INCHES)	AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
SN — CONCRETE MEDIAN SLOPED NOSE	PAV1 — 4" MILL & 4" HMA OVERLAY
SW — CONCRETE SIDEWALK 5-INCH	PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
DRW — CONCRETE DRIVEWAY 7-INCH	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
HES — CONCRETE DRIVEWAY HES 7-INCH	AG — BASE AGGREGATE DENSE 3/4-INCH
	R1 — CURB RAMP TYPE

N

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 60	E

2

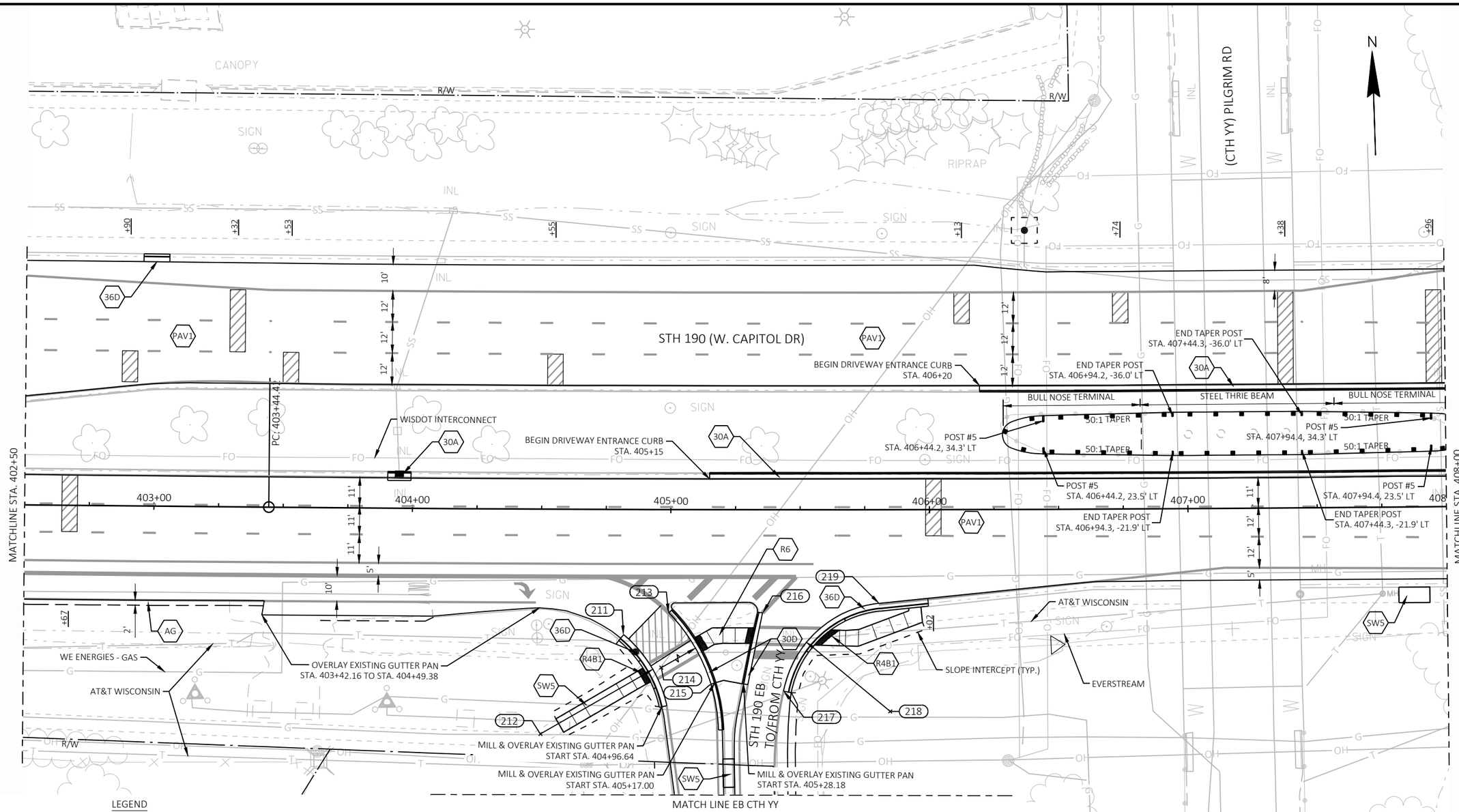


LEGEND

- 30A — CONCRETE CURB AND GUTTER (TYPE / SIZE (INCHES))
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP (TYPE)

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 61	E

2



LEGEND

- 30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 62	E

2

LEGEND

- 30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE

N

STH 190 EB
TO/FROM CTH YY

MATCH LINE EB CTH YY

R/W

2'
13'
8'
14'
5'
3'

30D
PAV1
AG

MILL & OVERLAY EXISTING GUTTER PAN
STA. 405+46.18 TO STA. 406+50.27

MILL & OVERLAY
EXISTING GUTTER PAN
END STA. 407+00.93

MILL & OVERLAY
EXISTING GUTTER PAN
END STA. 406+91.98

MATCH EXISTING
AT PAVEMENT JOINT

MILL & OVERLAY
EXISTING GUTTER PAN
END STA. 406+93.22

CTH YY (PILGRIM ROAD)

RIPRAP
SIGN
POST
MH
FO
T
G

2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 63	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021226_pd

PLOT DATE : 8/20/2025 11:40 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ######

2

MATCH LINE WB CTH YY

MILL & OVERLAY
EXISTING GUTTER PAN
START STA. 409+10.33

MILL & OVERLAY
EXISTING GUTTER PAN
START STA. 409+26.39

STH 190 WB
TO/FROM CTH YY

SLOPE INTERCEPT (TYP.)

WE ENERGIES - ELECTRIC

CITY OF BROOKFIELD WATER

LEVEL 3 COMMUNICATIONS (LUMEN)

R/W

STH 190 (W. CAPITOL DR)

END DRIVEWAY ENTRANCE CURB
STA. 409+20

BULL NOSE TERMINAL

END DRIVEWAY ENTRANCE CURB
STA. 408+15

PT: 410+88.40

WISDOT INTERCONNECT

WE ENERGIES - GAS

SPECTRUM

AT&T WISCONSIN

MATCHLINE STA. 408+00

MATCHLINE STA. 414+00

408+00 409+00 410+00 411+00 412+00 413+00 414

N

RIPRAP

SIGN

U/C

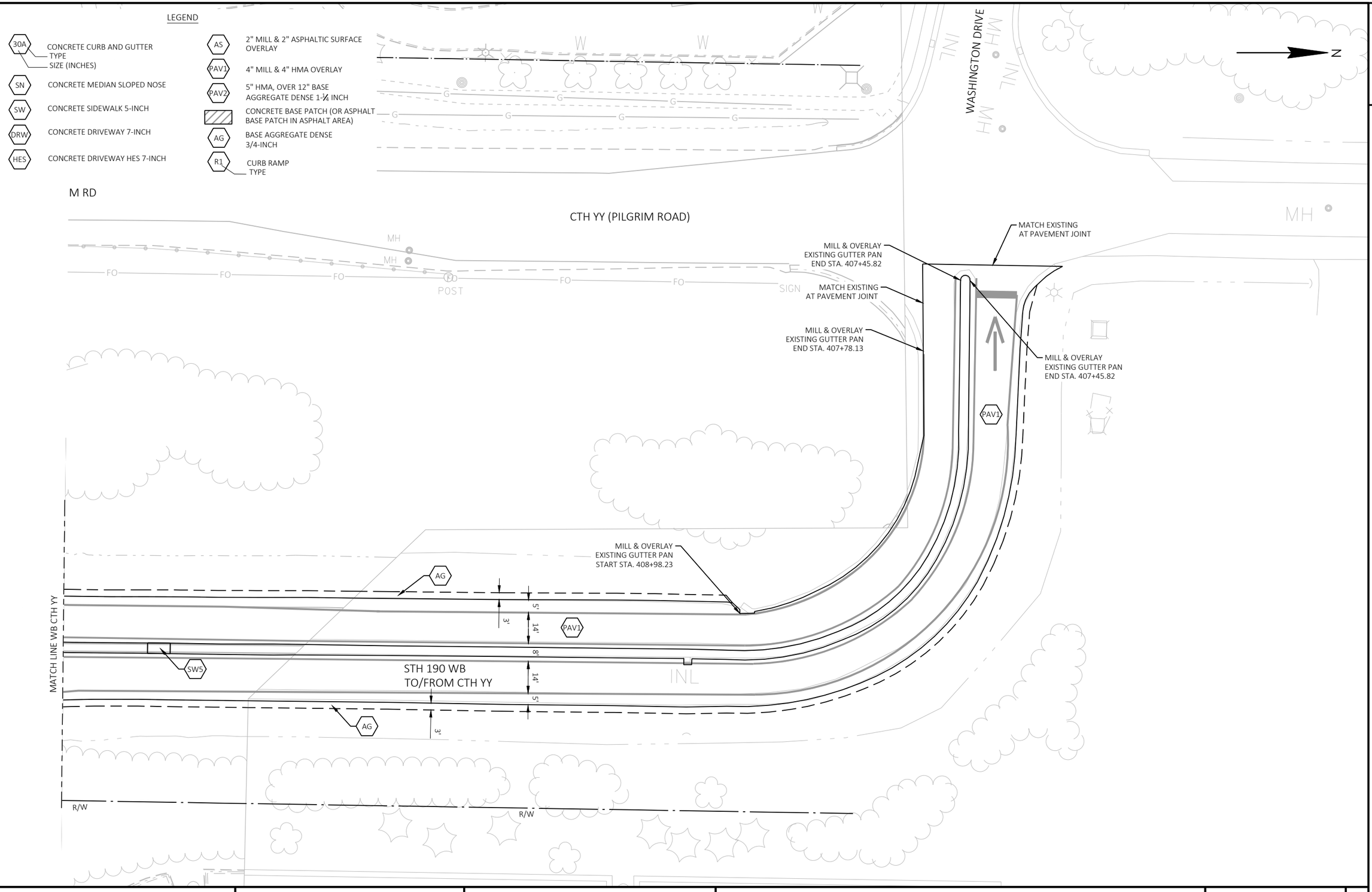
LEGEND

30A	CONCRETE CURB AND GUTTER TYPE SIZE (INCHES)
SN	CONCRETE MEDIAN SLOPED NOSE
SW	CONCRETE SIDEWALK 5-INCH
DRW	CONCRETE DRIVEWAY 7-INCH
HES	CONCRETE DRIVEWAY HES 7-INCH
AS	2" MILL & 2" ASPHALTIC SURFACE OVERLAY
PAV1	4" MILL & 4" HMA OVERLAY
PAV2	5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
AG	BASE AGGREGATE DENSE 3/4-INCH
R1	CURB RAMP TYPE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 64	E

LEGEND

- 30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE



2

2

N

MATCH EXISTING
STA. 417+67.54

LANDSCAPING TO REMAIN

LANDSCAPING TO REMAIN

CITY OF BROOKFIELD WATER

WE ENERGIES - ELECTRIC

SLOPE INTERCEPT (TYP.)

STH 190 (W. CAPITOL DR)

WISDOT INTERCONNECT

WE ENERGIES - GAS

SPECTRUM

AT&T WISCONSIN

MATCHLINE STA. 414+00

MATCHLINE STA. 420+00

415+00 416+00 417+00 418+00 419+00

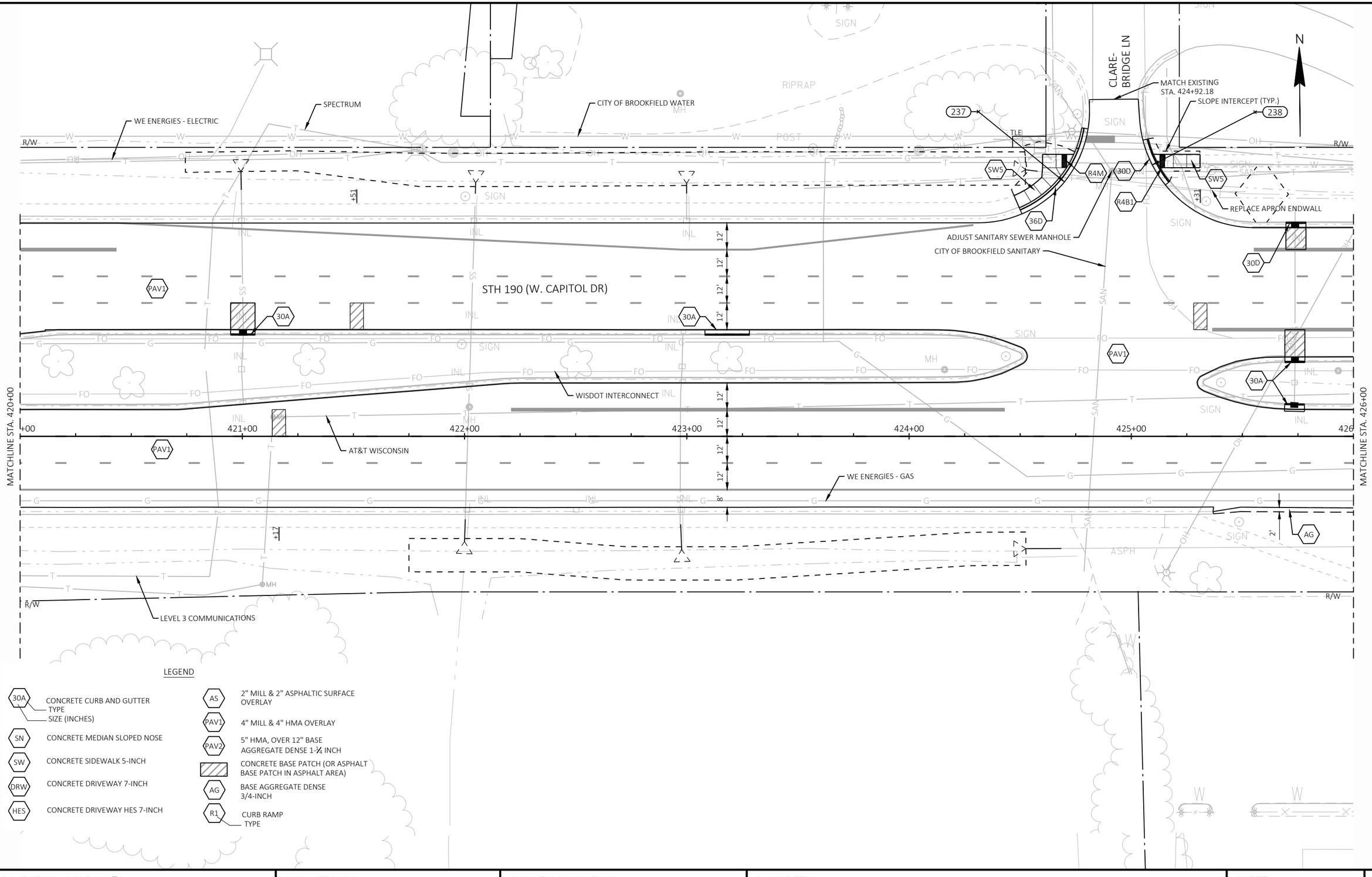
R/W

LEGEND

30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)	AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
SN — CONCRETE MEDIAN SLOPED NOSE	PAV1 — 4" MILL & 4" HMA OVERLAY
SW — CONCRETE SIDEWALK 5-INCH	PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
DRW — CONCRETE DRIVEWAY 7-INCH	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
HES — CONCRETE DRIVEWAY HES 7-INCH	AG — BASE AGGREGATE DENSE 3/4-INCH
	R1 — CURB RAMP TYPE

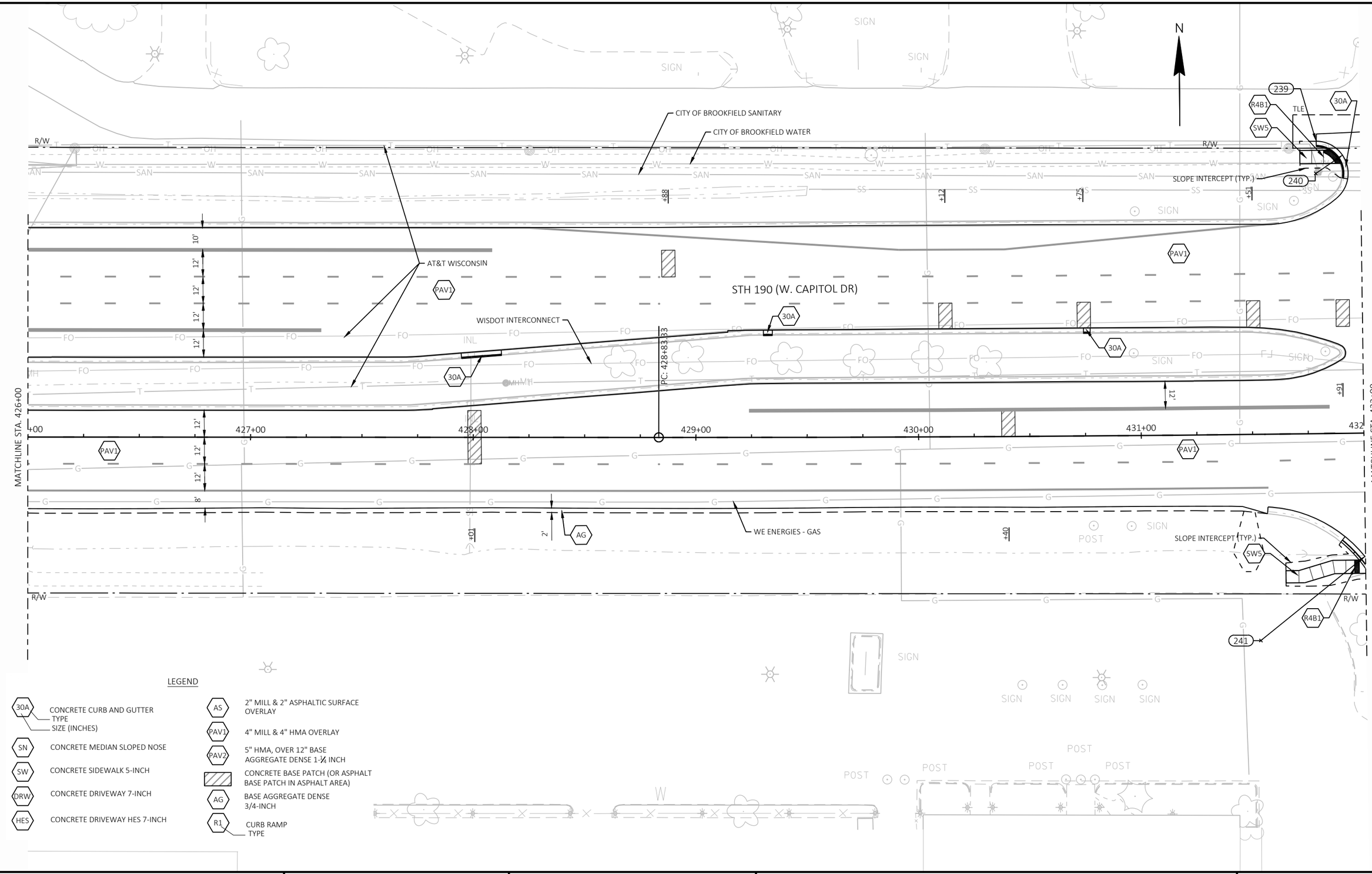
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 66	E

2



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 67	E

2



LEGEND

- 30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 68	E

2

N

MATCH EXISTING
STA. 432+02.52

TLE

LANDSCAPING TO REMAIN

SLOPE INTERCEPT (TYP.)

242

R/W

R4B1

30A

SW5

30A

SW5

CITY OF BROOKFIELD SANITARY

CITY OF BROOKFIELD WATER

MILL & OVERLAY EXISTING GUTTER
START STA. 437+52.37

R/W

STH 190 (W. CAPITOL DR)

AT&T WISCONSIN

PAV1

30A

WISDOT INTERCONNECT

PT: 435+79.79

PAV1

30A

MATCHLINE STA. 432+00

+00

433+00

434+00

435+00

436+00

437+00

438

MATCHLINE STA. 438+00

SECTION CORNER MONUMENTS

R6

36A

36A

R4M

SW5

R/W

243

TLE

SLOPE INTERCEPT
(TYP.)

ADJUSTING
WATER VALVES

MATCH EXISTING
STA. 432+17.18

MATCH EXISTING
STA. 432+46.84

WE ENERGIES - GAS

CITY OF BROOKFIELD WATER

MILL & OVERLAY EXISTING GUTTER
STA. 435+11.89 TO STA. 437+98.59

PAV1

R/W

CANOPY

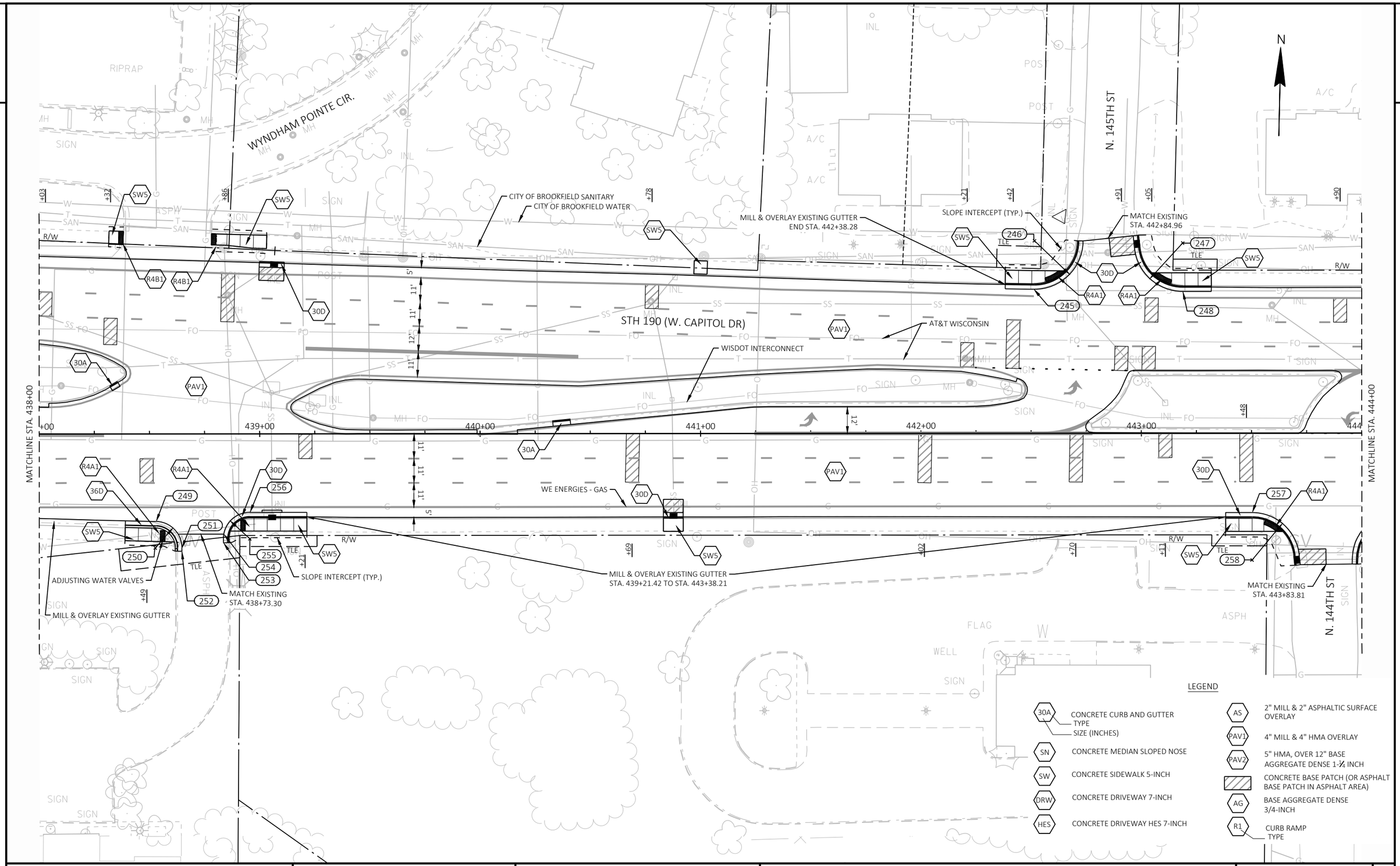
CANOPY

LEGEND

30A — TYPE / SIZE (INCHES)	CONCRETE CURB AND GUTTER
SN	CONCRETE MEDIAN SLOPED NOSE
SW	CONCRETE SIDEWALK 5-INCH
DRW	CONCRETE DRIVEWAY 7-INCH
HES	CONCRETE DRIVEWAY HES 7-INCH
AS	2" MILL & 2" ASPHALTIC SURFACE OVERLAY
PAV1	4" MILL & 4" HMA OVERLAY
PAV2	5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
AG	BASE AGGREGATE DENSE 3/4-INCH
R1 — TYPE	CURB RAMP

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 69	E

2



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 70	E

2

2

N

CITY OF BROOKFIELD WATER

CITY OF BROOKFIELD SANITARY

R/W

STH 190 (W. CAPITOL DR)

AT&T WISCONSIN

WISDOT INTERCONNECT

MATCHLINE STA. 444+00

MATCHLINE STA. 450+00

+00 445+00 446+00 447+00 448+00 449+00 450

30A

259

261

260

R4A1

30D

SW5

PAV1

TLE

MILL & OVERLAY EXISTING GUTTER
START STA. 444+29.30

SLOPE INTERCEPT (TYP.)

WE ENERGIES - GAS

CITY OF BROOKFIELD SANITARY

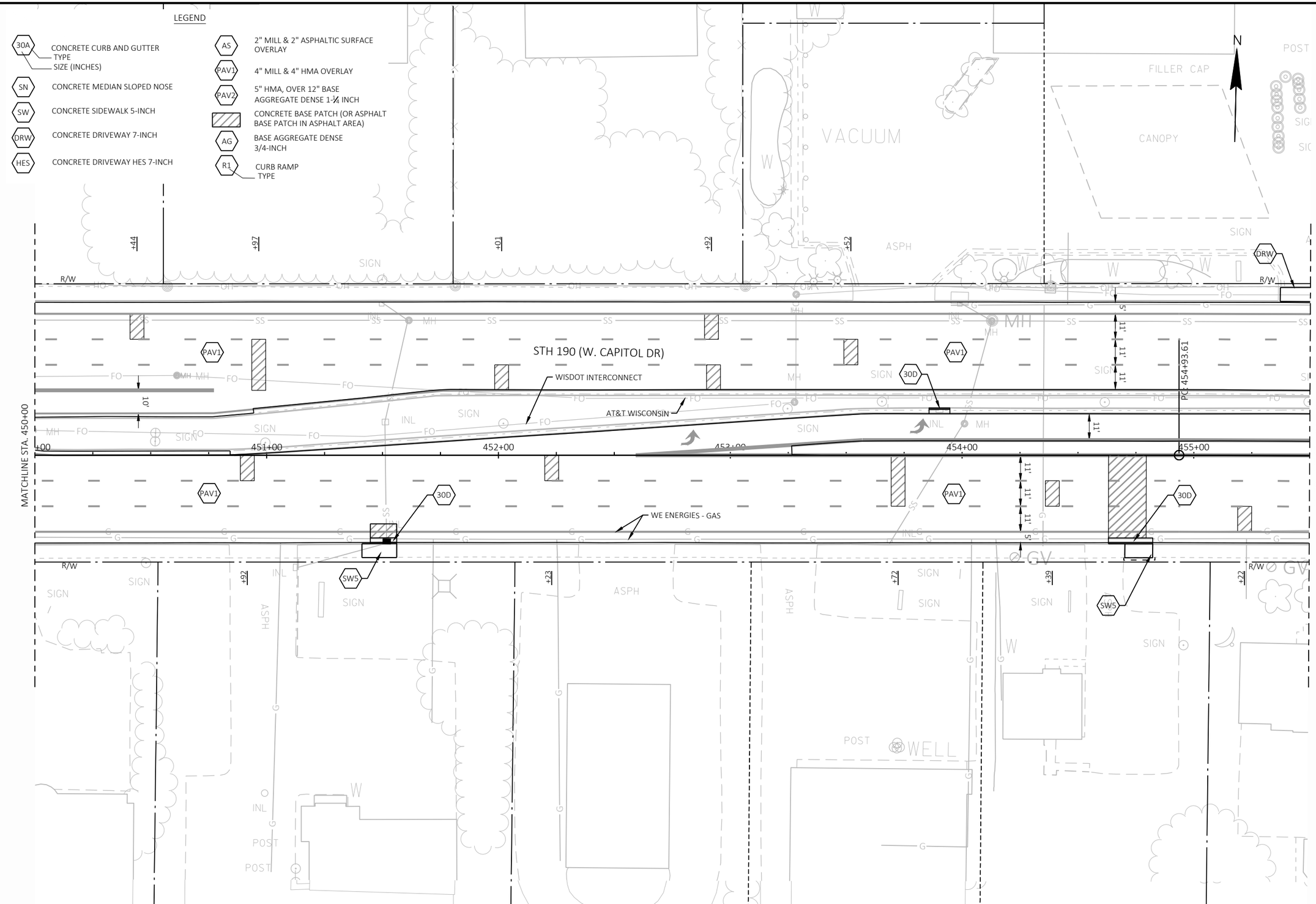
LEGEND

30A	CONCRETE CURB AND GUTTER TYPE SIZE (INCHES)
SN	CONCRETE MEDIAN SLOPED NOSE
SW	CONCRETE SIDEWALK 5-INCH
DRW	CONCRETE DRIVEWAY 7-INCH
HES	CONCRETE DRIVEWAY HES 7-INCH
AS	2" MILL & 2" ASPHALTIC SURFACE OVERLAY
PAV1	4" MILL & 4" HMA OVERLAY
PAV2	5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
AG	BASE AGGREGATE DENSE 3/4-INCH
R1	CURB RAMP TYPE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 71	E

LEGEND

- 30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 72	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021235_pd
PLOT DATE : 8/20/2025 11:44 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- 30A — CONCRETE CURB AND GUTTER (TYPE, SIZE (INCHES))
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE

N

MATCH LINE F-F

MATCH EXISTING STA. 458+64.65

ADJUSTING WATER VALVES

CITY OF BROOKFIELD WATER

ADJUSTING WATER VALVES

CITY OF BROOKFIELD SANITARY

SLOPE INTERCEPT (TYP.)

CITY OF BROOKFIELD WATER

WISDOT INTERCONNECT

AT&T WISCONSIN

LILLY RD

AT&T WISCONSIN

WISDOT INTERCONNECT

STH 190 (W. CAPITOL DR)

MATCHLINE STA. 455+50

MATCHLINE STA. 461+50

SECTION CORNER MONUMENTS

WE ENERGIES - GAS

MILL & OVERLAY EXISTING GUTTER END STA. 457+38.55

CITY OF BROOKFIELD WATER

SLOPE INTERCEPT (TYP.)

LANDSCAPING TO REMAIN

ADJUSTING WATER VALVES

MATCH EXISTING STA. 458+72.64

LILLY RD

MATCH LINE I-I

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 73	E

2

LEGEND

- 30A — CONCRETE CURB AND GUTTER (TYPE, SIZE (INCHES))
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE

MATCH LINE I-I

N

81+00
80+00
79+00
78+00
77+00
76+00
75+00
74+00
73+00
72+00
71+00

30D
SW5
30D

LILLY RD

CITY OF BROOKFIELD SANITARY

WE ENERGIES - GAS

AT&T WISCONSIN

R/W

MATCH LINE F-F

2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 74	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021237_pd

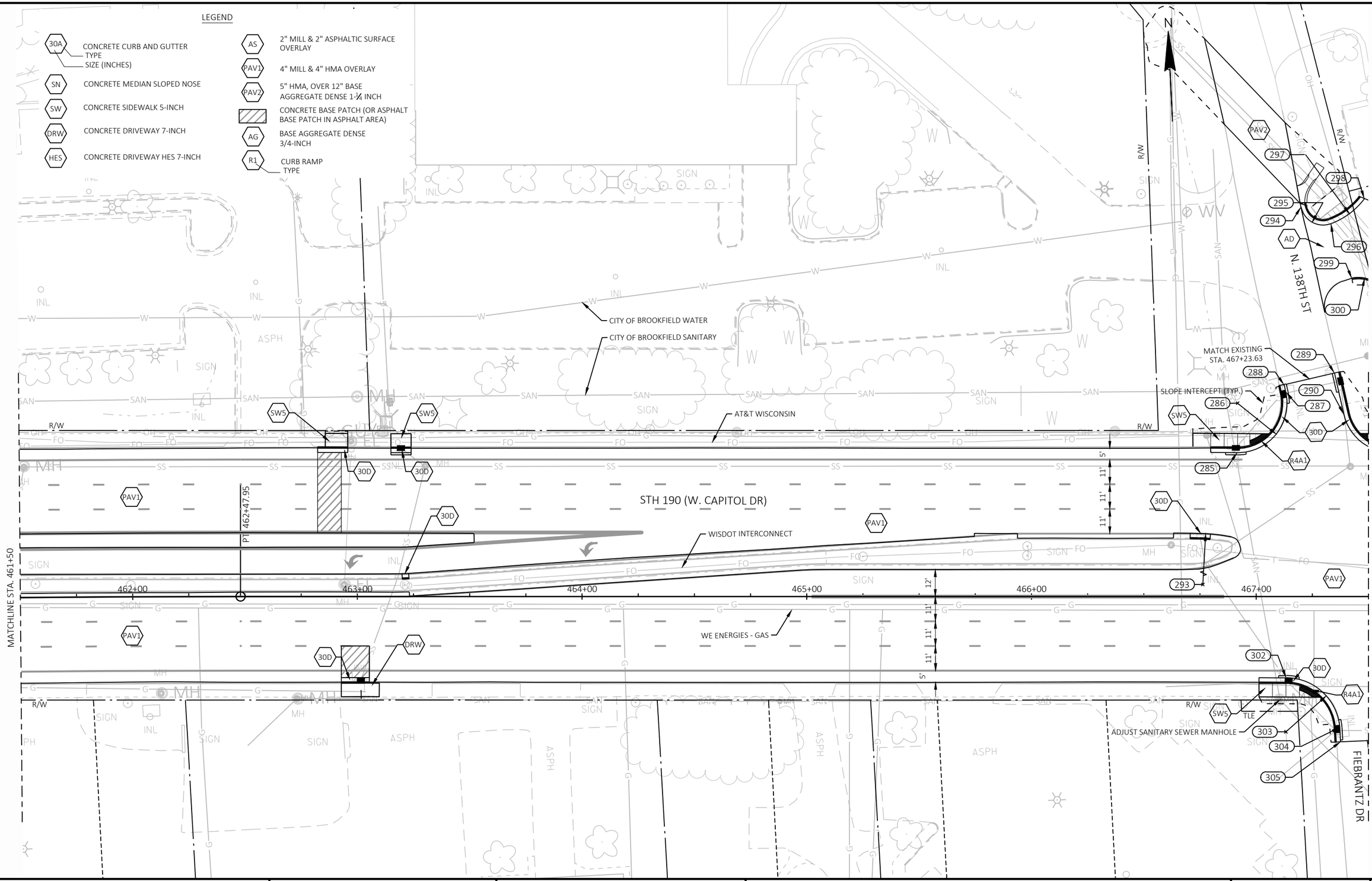
PLOT DATE : 8/20/2025 11:46 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

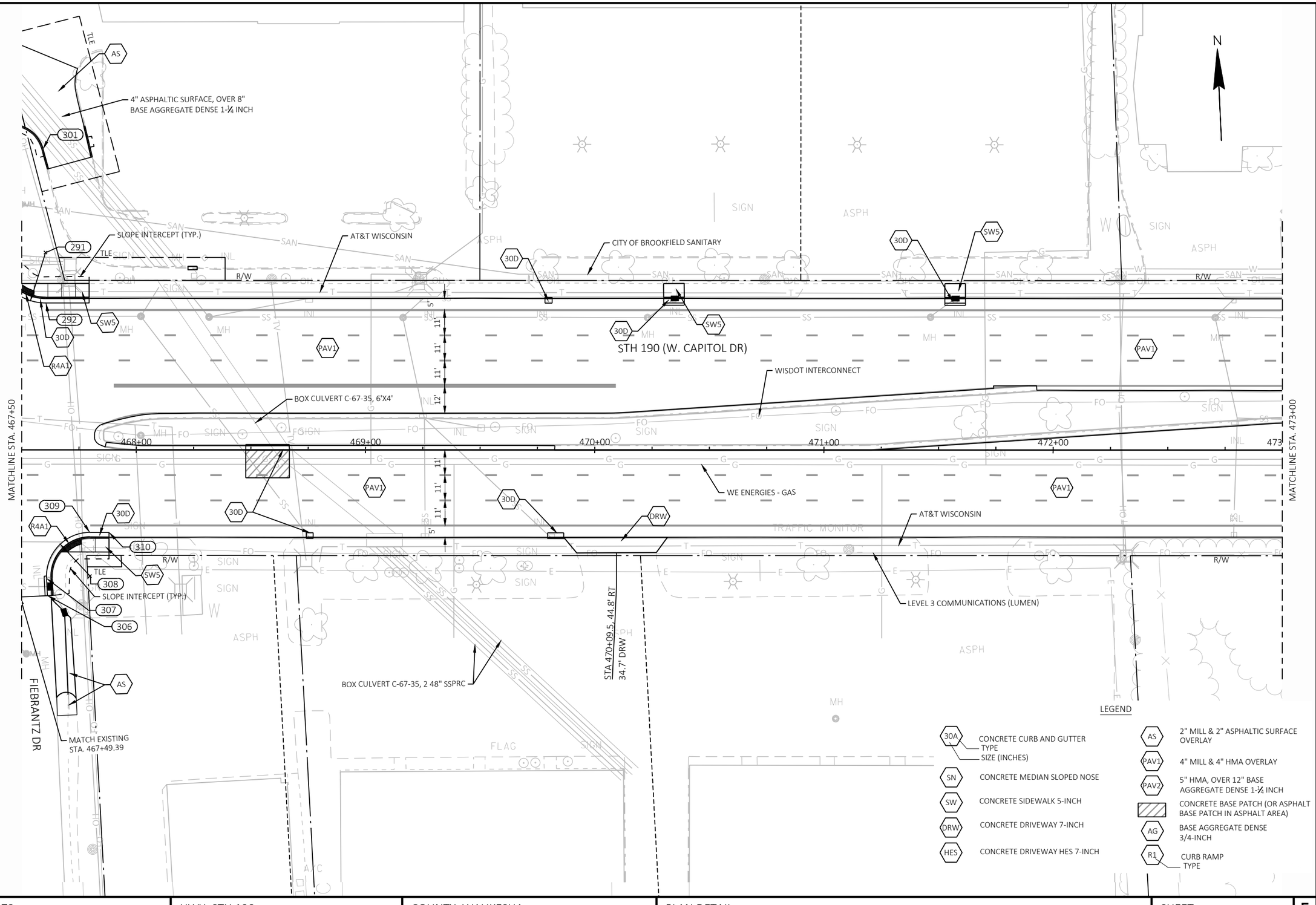
LEGEND

- 30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 75	E

2

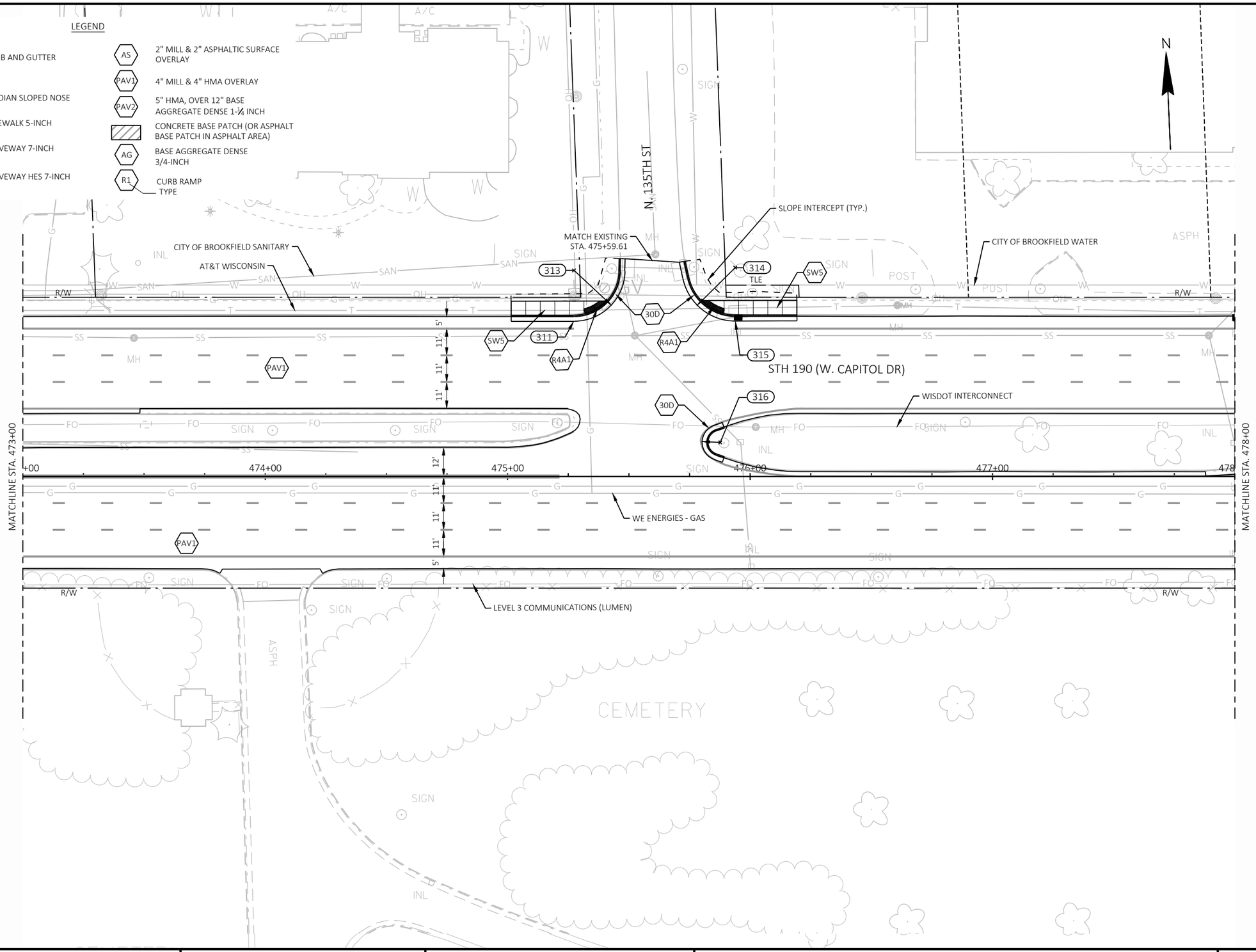


PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 76	E

2

LEGEND

- 30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 77	E

2

LEGEND

- 30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE

N

N. 133RD ST

STH 190 (W. CAPITOL DR)

CITY OF BROOKFIELD WATER

AT&T WISCONSIN

WISDOT INTERCONNECT

WE ENERGIES - GAS

LEVEL 3 COMMUNICATIONS (LUMEN)

CITY OF BROOKFIELD SANITARY

MATCH EXISTING STA. 482+32.49

SLOPE INTERCEPT (TYP.)

CEMETERY

MATCHLINE STA. 478+00

MATCHLINE STA. 484+00

478+00 479+00 480+00 481+00 482+00 483+00

R/W

5' 11' 11' 11' 12' 11' 11' 11' 5'

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 78	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
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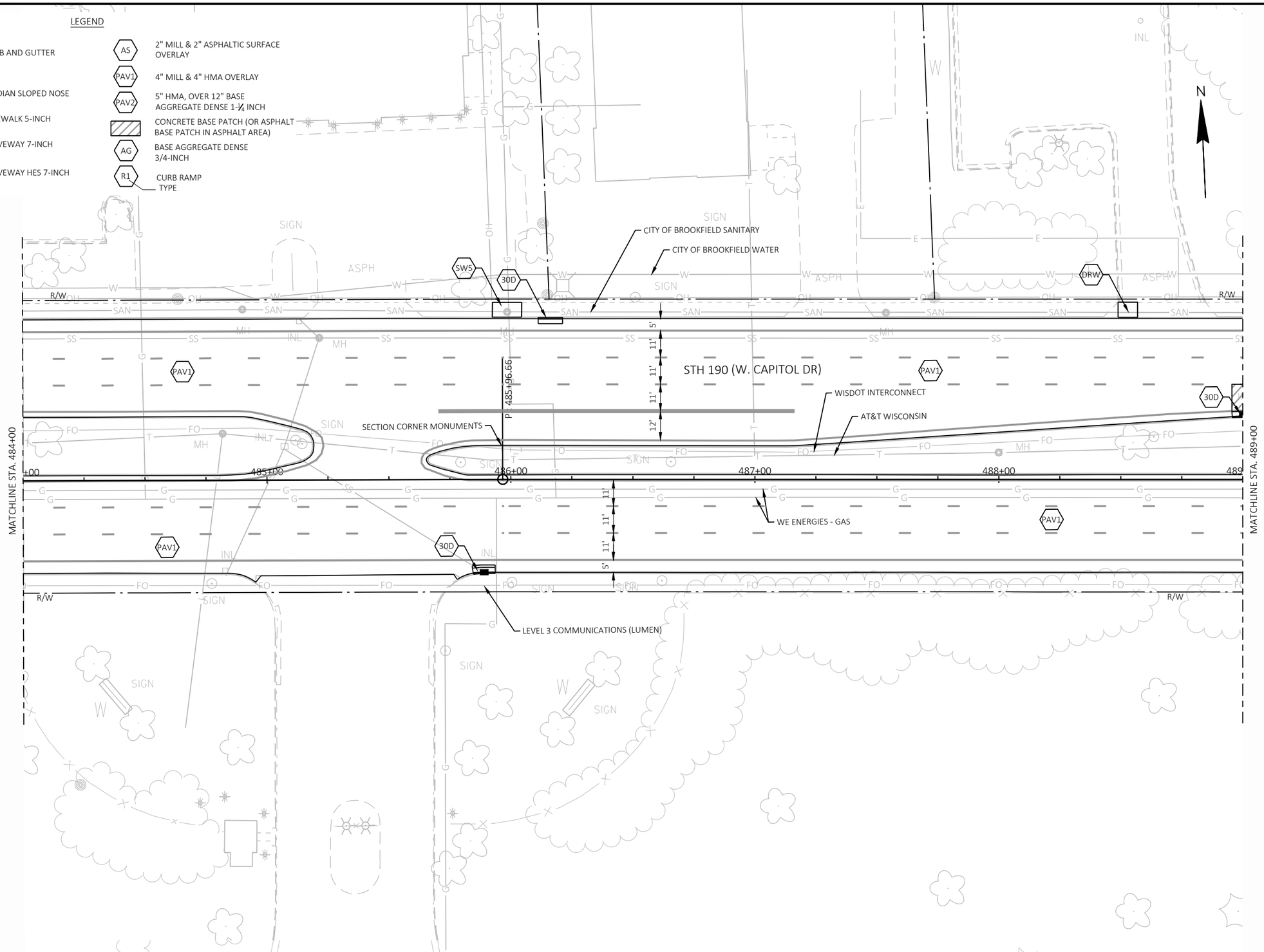
WISDOT/CADDS SHEET 42

2

2

LEGEND

- 30A — CONCRETE CURB AND GUTTER (TYPE / SIZE (INCHES))
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP (TYPE)



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 79	E

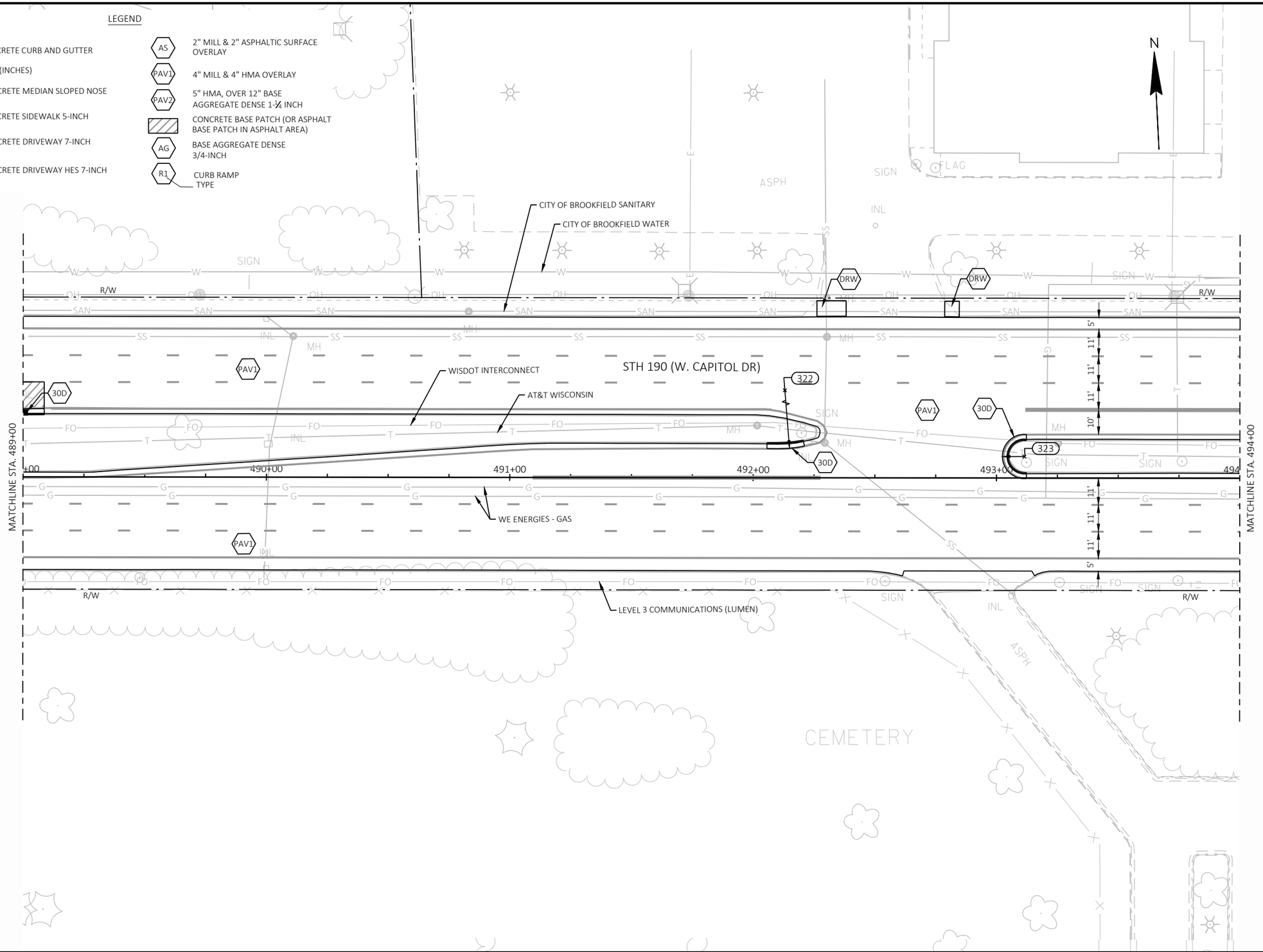
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LAYOUT NAME - 021242_pd

PLOT DATE : 8/20/2025 11:48 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- 30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 80	E

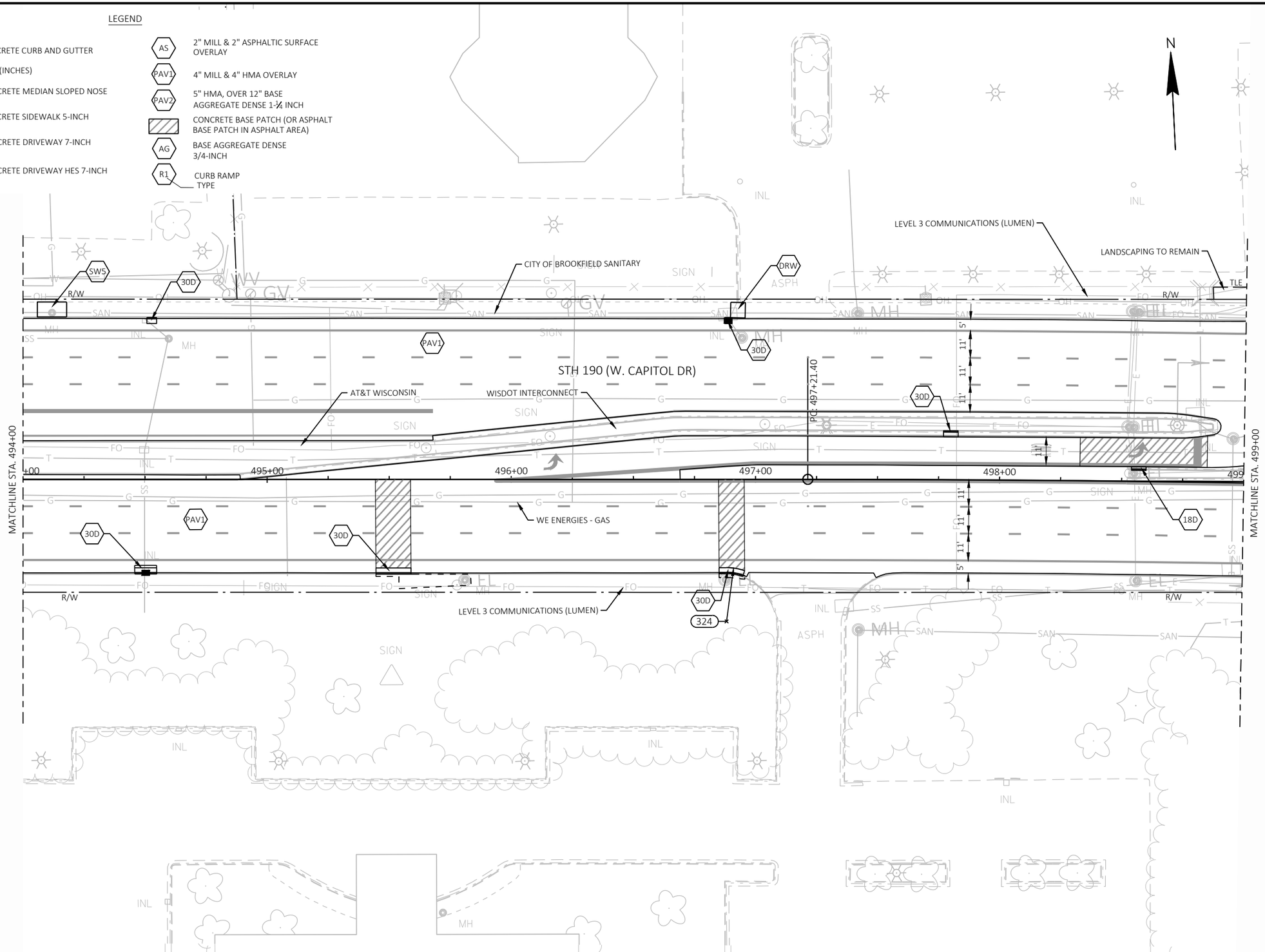
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LAYOUT NAME - 021243_pd

PLOT DATE : 8/20/2025 11:49 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- 30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 81	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021244_pd

PLOT DATE : 8/20/2025 11:49 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEVEL 3 COMMUNICATIONS (LUMEN)

N. 128TH ST

MATCH EXISTING
STA. 499+36.91

R/W

9'
11'
13'

PR. R/W

REPLACE DISTURBED
ASPHALT PAVEMENT
WITHIN PARKING LOT

CITY OF BROOKFIELD SANITARY

WISDOT INTERCONNECT

SLOPE INTERCEPT (TYP.)

STH 190 (W. CAPITOL DR)

PT 501+63.53

AT&T WISCONSIN

WE ENERGIES - GAS

LEVEL 3 COMMUNICATIONS (LUMEN)

CITY OF BROOKFIELD WATER

EXISTING PLE

MATCH EXISTING
STA. 499+55.74

MATCHLINE STA. 499+00

MATCHLINE STA. 504+00

500+00
501+00
502+00
503+00

328 327 326 329 330 331 332 333 334 335 336 337 338 339 325

SW5 R7A R7BM 30D 18D R5 PAV1 R2M

11' 11' 11' 5' 12' 11' 11' 11' 5'

N

LEGEND

30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)	AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
SN — CONCRETE MEDIAN SLOPED NOSE	PAV1 — 4" MILL & 4" HMA OVERLAY
SW — CONCRETE SIDEWALK 5-INCH	PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
DRW — CONCRETE DRIVEWAY 7-INCH	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
HES — CONCRETE DRIVEWAY HES 7-INCH	AG — BASE AGGREGATE DENSE 3/4-INCH
	R1 — CURB RAMP TYPE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 82	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021245_pd
PLOT DATE : 8/20/2025 11:50 AM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- 30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE

N

STH 190 (W. CAPITOL DR)

CITY OF BROOKFIELD SANITARY

LEVEL 3 COMMUNICATIONS (LUMEN)

WE ENERGIES - GAS

WISDOT INTERCONNECT

AT&T WISCONSIN

LEVEL 3 COMMUNICATIONS (LUMEN)

CITY OF BROOKFIELD WATER

MATCH EXISTING STA. 505+36.21

SLOPE INTERCEPT (TYP.)

MATCHLINE STA. 504+00

MATCHLINE STA. 510+00

505+00 506+00 507+00 508+00 509+00

5' 11' 11' 11' 11' 11' 5'

2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 83	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021246_pd
PLOT DATE : 8/20/2025 11:50 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

MATCH LINE G-G

N

CITY OF BROOKFIELD SANITARY

MATCH EXISTING STA. 512+76.66

MATCH EXISTING STA. 99+17.10

MATCH EXISTING STA. 99+65.13

N. 124TH ST

EVERSTREAM

LEVEL 3 COMMUNICATIONS (LUMEN)

CITY OF BROOKFIELD WATER

CITY OF BROOKFIELD SANITARY

PR. R/W

SLOPE INTERCEPT (TYP.)

TLE

R/W

CITY OF WAUWATOSA LIGHTING

ADJUST SANITARY SEWER MANHOLE

AT&T WISCONSIN

CITY OF WAUWATOSA WATER

STH 190 (W. CAPITOL DR)

PC: 510+28.20

MATCHLINE STA. 510+00

WISDOT INTERCONNECT

PT: 512+00.79

BP: 99+00.00

SECTION CORNER MONUMENTS

511+00

512+00

50.00

EP: 512+96.89

99+00

WE ENERGIES - GAS

CITY OF WAUWATOSA LIGHTING

CITY OF BROOKFIELD WATER

LEVEL 3 COMMUNICATIONS (LUMEN)

MATCH EXISTING STA. 512+60.51

MATCH EXISTING STA. 99+00.88

MATCH EXISTING STA. 99+40.77

CITY OF WAUWATOSA WATER

WEST SHORE PIPELINE

WISDOT INTERCONNECT

CITY OF WAUWATOSA LIGHTING

SLOPE INTERCEPT (TYP.)

MATCH LINE H-H

MATCH LINE 101+50

LEGEND

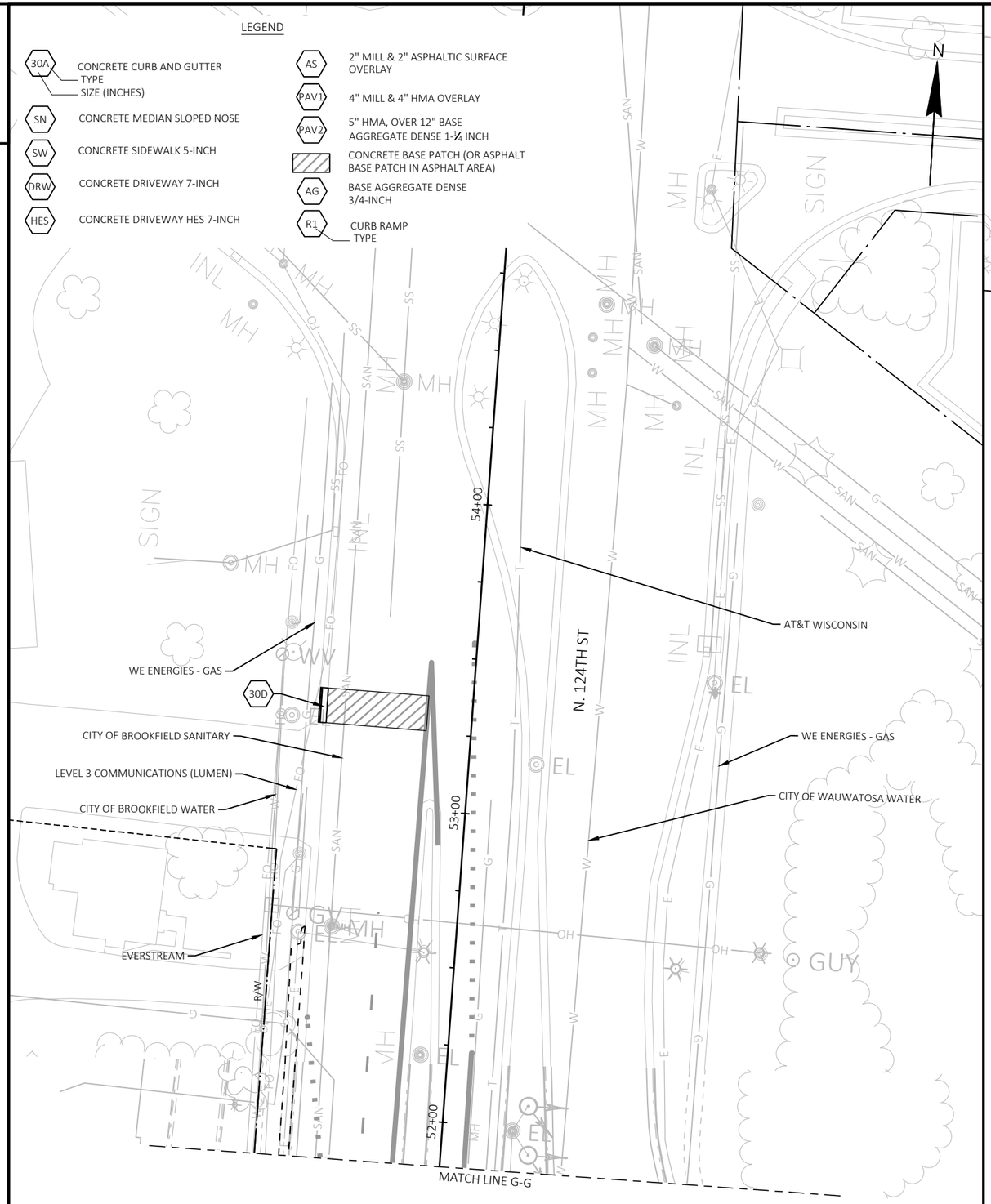
30A — TYPE / SIZE (INCHES)	CONCRETE CURB AND GUTTER
SN	CONCRETE MEDIAN SLOPED NOSE
SW	CONCRETE SIDEWALK 5-INCH
DRW	CONCRETE DRIVEWAY 7-INCH
HES	CONCRETE DRIVEWAY HES 7-INCH
AS	2" MILL & 2" ASPHALTIC SURFACE OVERLAY
PAV1	4" MILL & 4" HMA OVERLAY
PAV2	5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
AG	BASE AGGREGATE DENSE 3/4-INCH
R1 — TYPE	CURB RAMP

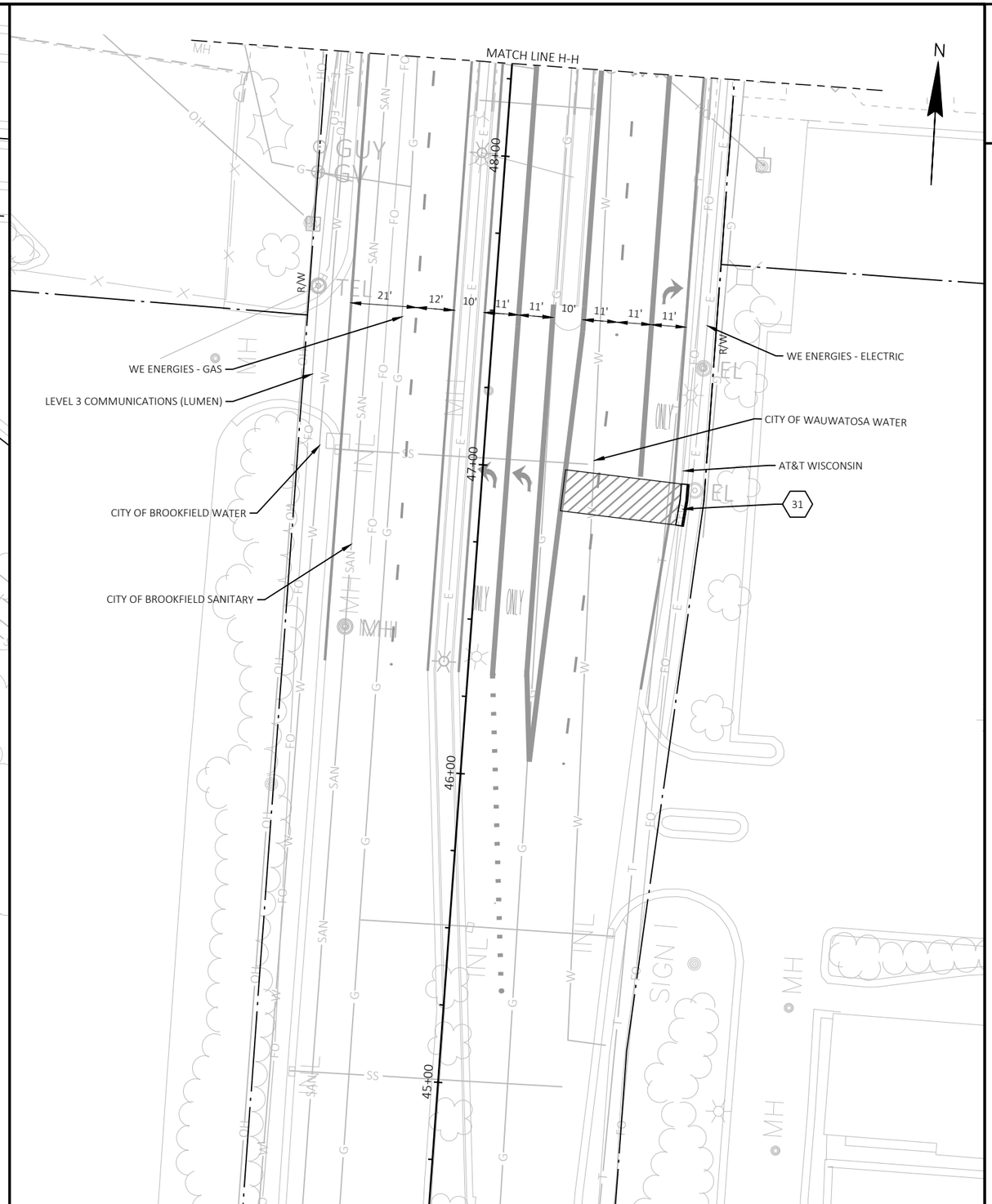
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 84	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021247_pd
PLOT DATE : 8/20/2025 11:51 AM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- 30A — CONCRETE CURB AND GUTTER TYPE / SIZE (INCHES)
- SN — CONCRETE MEDIAN SLOPED NOSE
- SW — CONCRETE SIDEWALK 5-INCH
- DRW — CONCRETE DRIVEWAY 7-INCH
- HES — CONCRETE DRIVEWAY HES 7-INCH
- AS — 2" MILL & 2" ASPHALTIC SURFACE OVERLAY
- PAV1 — 4" MILL & 4" HMA OVERLAY
- PAV2 — 5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
- CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
- AG — BASE AGGREGATE DENSE 3/4-INCH
- R1 — CURB RAMP TYPE

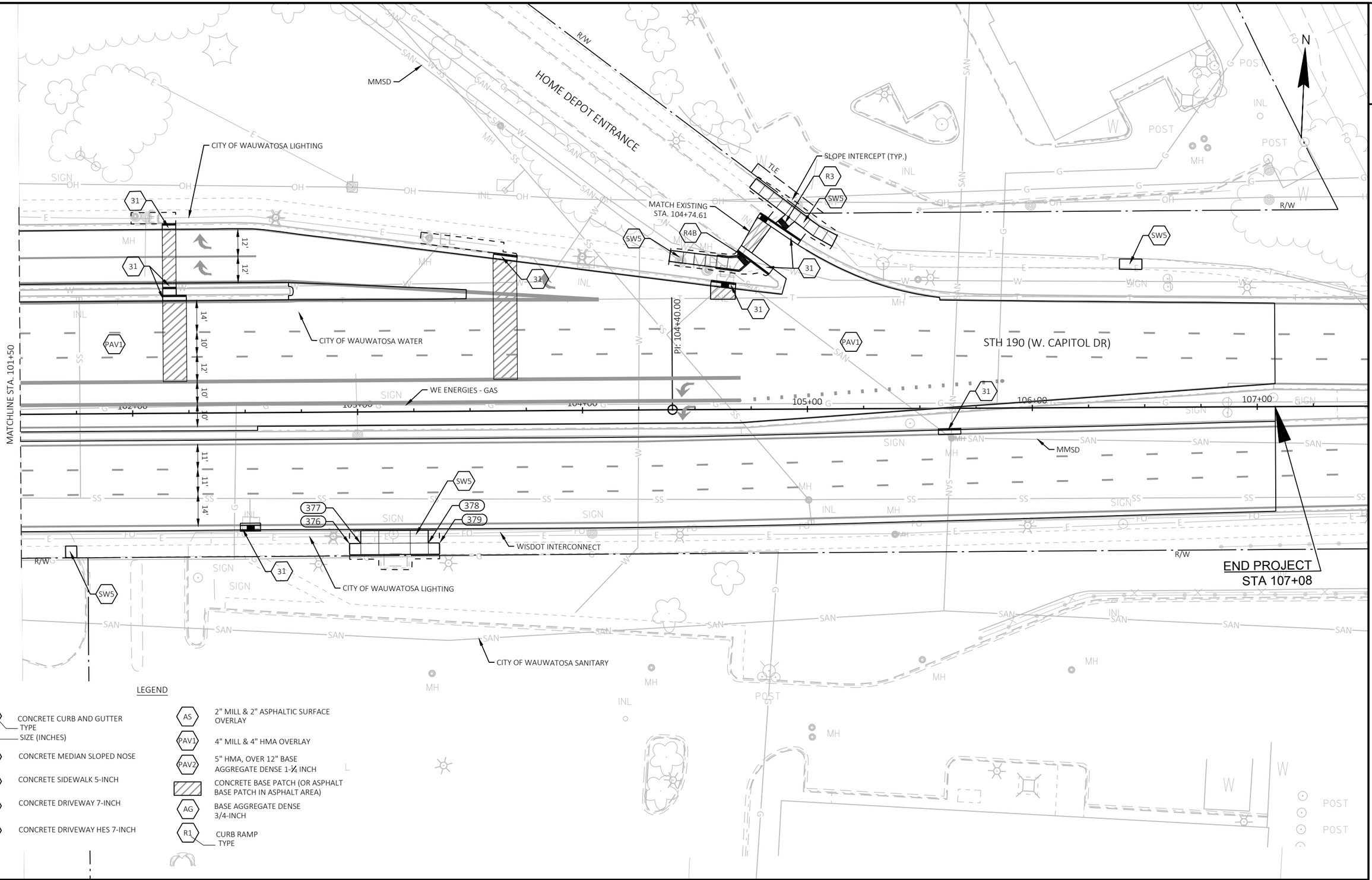




2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 85	E

2



LEGEND

30A — TYPE / SIZE (INCHES)	CONCRETE CURB AND GUTTER
SN	CONCRETE MEDIAN SLOPED NOSE
SW	CONCRETE SIDEWALK 5-INCH
DRW	CONCRETE DRIVEWAY 7-INCH
HES	CONCRETE DRIVEWAY HES 7-INCH
AS	2" MILL & 2" ASPHALTIC SURFACE OVERLAY
PAV1	4" MILL & 4" HMA OVERLAY
PAV2	5" HMA, OVER 12" BASE AGGREGATE DENSE 1-¼ INCH
	CONCRETE BASE PATCH (OR ASPHALT BASE PATCH IN ASPHALT AREA)
AG	BASE AGGREGATE DENSE 3/4-INCH
R1 — TYPE	CURB RAMP

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAIL	SHEET 86	E

POINT NUMBER	STATION	OFFSET	DESCRIPTION
100	293+91.99	15.17' LT	3' RADIUS
101	298+45.37	153.94' LT	100' RADIUS
102	298+73.27	148.81' LT	56' RADIUS
103	51+53.68	32.61' RT	BEGIN 55' RADIUS
104	300+73.36	151.54' LT	55' RADIUS
105	300+27.87	120.63' LT	END 55' RADIUS, BEGIN 57' RADIUS
106	300+75.01	152.66' LT	57' RADIUS
107	300+76.56	95.66' LT	SAWCUT, MATCH EXISTING, END CURB & GUTTER, END 57' RADIUS
108	299+26.47	17.96' LT	6' RADIUS
109	298+79.30	91.68' RT	56.5' RADIUS
110	298+79.30	91.68' RT	56.5' RADIUS
111	300+08.18	32.78' RT	5.4' RADIUS
112	301+41.37	98.11' RT	135' RADIUS
113	300+79.18	91.93' RT	57' RADIUS
114	307+28.11	95.90' RT	62' RADIUS
115	308+49.74	74.13' RT	40' RADIUS
116	315+24.57	95.74' RT	62' RADIUS
117	316+55.12	76.20' RT	42' RADIUS
118	51+55.45	68.97' LT	50' RADIUS
119	51+23.75	29.02' LT	END 50' RADIUS
120	51+67.73	72.72' LT	60' RADIUS
121	322+47.87	156.00' LT	60' RADIUS
122	50+96.51	36.65' RT	END 37' RADIUS, BEGIN 60' RADIUS
123	324+36.59	95.71' LT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER
124	324+45.99	95.52' LT	CURB & GUTTER PI
125	324+93.85	92.00' LT	CURB & GUTTER PI
126	324+99.42	91.89' LT	SAWCUT, MATCH EXISTING, END CURB & GUTTER
127	321+43.67	35.52' RT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER, BEGIN 39' RADIUS
128	49+24.93	49.95' LT	39' RADIUS
129	49+35.55	12.42' LT	END 39' RADIUS, BEGIN 62' RADIUS
130	49+18.73	71.85' LT	62' RADIUS
131	49+22.49	10.20' LT	END 62' RADIUS, END CURB & GUTTER
132	48+97.99	11.03' RT	BEGIN CURB AND GUTTER
133	49+20.81	10.86' RT	BEGIN 82' RADIUS
134	49+15.94	92.67' RT	82' RADIUS
135	49+32.76	12.46' RT	END 82' RADIUS, BEGIN 42' RADIUS
136	49+24.14	53.56' RT	42' RADIUS
137	322+44.97	34.18' RT	END 42' RADIUS
138	333+11.29	131.79' LT	120' RADIUS
139	339+79.16	92.47' LT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER, BEGIN 40' RADIUS

POINT NUMBER	STATION	OFFSET	DESCRIPTION
140	339+78.51	132.46' LT	40' RADIUS
141	341+18.89	155.94' LT	60' RADIUS
142	341+18.87	95.94' LT	END 60' RADIUS
143	341+29.30	95.94' LT	SAWCUT, MATCH EXISTING, END CURB & GUTTER
144	339+60.78	35.79' RT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER, BEGIN 60' RADIUS
145	339+60.23	95.79' RT	60' RADIUS
146	340+20.11	92.06' RT	END 60' RADIUS
147	340+79.16	72.53' RT	BEGIN 38' RADIUS
148	341+17.13	73.99' RT	38' RADIUS
149	341+14.94	36.06' RT	SAWCUT, MATCH EXISTING, END CURB & GUTTER, END 38' RADIUS
150	343+53.68	43.40' LT	4.5' RADIUS
151	348+93.76	43.99' LT	4' RADIUS
152	346+42.95	87.99' RT	52' RADIUS
153	347+17.26	48.35' RT	BEGIN 5' RADIUS
154	347+22.26	48.33' RT	5' RADIUS
155	347+27.26	48.35' RT	END 5' RADIUS
156	347+85.83	73.97' RT	38' RADIUS
157	353+30.95	145.97' LT	50' RADIUS
158	353+77.88	127.28' LT	END 50' RADIUS
159	353+87.34	99.91' LT	4' RADIUS
160	353+97.24	99.92' LT	4' RADIUS
161	355+36.57	169.43' LT	45' RADIUS
162	355+24.65	125.99' LT	END 45' RADIUS
163	354+95.72	112.84' LT	4' RADIUS
164	354+95.75	100.23' LT	4' RADIUS
165	353+47.20	44.91' LT	3.5' RADIUS
166	353+60.60	112.33' RT	45' RADIUS
167	353+60.60	112.33' RT	45' RADIUS
168	354+99.86	67.50' RT	4' RADIUS
169	354+97.52	39.71' RT	4' RADIUS
170	355+05.39	39.71' RT	4' RADIUS
171	355+59.04	78.33' RT	42' RADIUS
172	51+28.50	52.42' RT	37' RADIUS
173	359+25.96	86.05' RT	5' RADIUS
174	359+22.38	82.56' RT	BEGIN 4' RADIUS
175	359+24.10	80.80' RT	END 37' RADIUS, BEGIN 5' RADIUS
176	359+50.57	106.65' RT	37' RADIUS
177	362+85.51	135.43' LT	40' RADIUS
178	363+47.46	105.59' LT	END 6' RADIUS
179	363+53.46	105.59' LT	6' RADIUS

POINT NUMBER	STATION	OFFSET	DESCRIPTION
180	363+59.46	105.60' LT	BEGIN 6' RADIUS
181	364+27.98	149.96' LT	56' RADIUS
182	363+10.52	58.32' RT	22' RADIUS
183	363+08.88	80.26' RT	BEGIN 22' RADIUS
184	363+57.75	71.89' RT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER, BEGIN 45' RADIUS
185	364+02.25	78.62' RT	45' RADIUS
186	363+94.35	34.32' RT	SAWCUT, MATCH EXISTING, END CURB & GUTTER, END 45' RADIUS
187	374+49.24	94.25' LT	BEGIN 42' RADIUS
188	374+48.69	136.25' LT	42' RADIUS
189	375+82.93	166.72' LT	77' RADIUS
190	374+63.99	47.33' RT	SAWCUT, MATCH EXISTING, END CURB & GUTTER, END 62' RADIUS
191	374+25.32	95.98' RT	62' RADIUS
192	375+15.56	70.54' RT	SAWCUT, MATCH EXISTING, END CURB & GUTTER, END 42' RADIUS
193	375+57.34	76.92' RT	42' RADIUS
194	380+41.01	94.30' RT	60' RADIUS
195	380+99.96	83.11' RT	END 60' RADIUS, END CURB & GUTTER
196	381+28.05	84.77' RT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER
197	381+29.15	73.15' RT	BEGIN 40' RADIUS
198	381+71.96	77.20' RT	40' RADIUS
199	386+64.70	136.77' LT	43' RADIUS
200	387+07.70	136.70' LT	BEGIN CURB & GUTTER, BEGIN 43' RADIUS
201	387+37.37	145.61' LT	SAWCUT, MATCH EXISTING, END CURB & GUTTER, END 52' RADIUS
202	387+89.33	147.78' LT	52' RADIUS
203	386+49.44	97.29' RT	63' RADIUS
204	387+83.74	76.26' RT	42' RADIUS
205	395+62.98	96.08' RT	62' RADIUS
206	396+52.69	76.39' RT	BEGIN CURB & GUTTER
207	396+55.50	65.72' RT	BEGIN 42' RADIUS
208	396+96.12	76.42' RT	42' RADIUS
209	401+32.84	157.77' LT	60' RADIUS
210	400+74.32	144.54' LT	END 60' RADIUS
211	404+81.84	48.44' RT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER, BEGIN 50' RADIUS
212	404+49.99	86.90' RT	50' RADIUS
213	404+99.27	39.91' RT	SAWCUT, MATCH EXISTING, END CURB & GUTTER, END 68' RADIUS
214	404+50.80	87.46' RT	68' RADIUS
215	405+15.57	67.46' RT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER, BEGIN 68' RADIUS
216	405+35.50	39.86' RT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER
217	405+43.63	70.14' RT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER, BEGIN 42' RADIUS
218	405+84.76	77.96' RT	42' RADIUS
219	405+80.54	36.17' RT	END 42' RADIUS

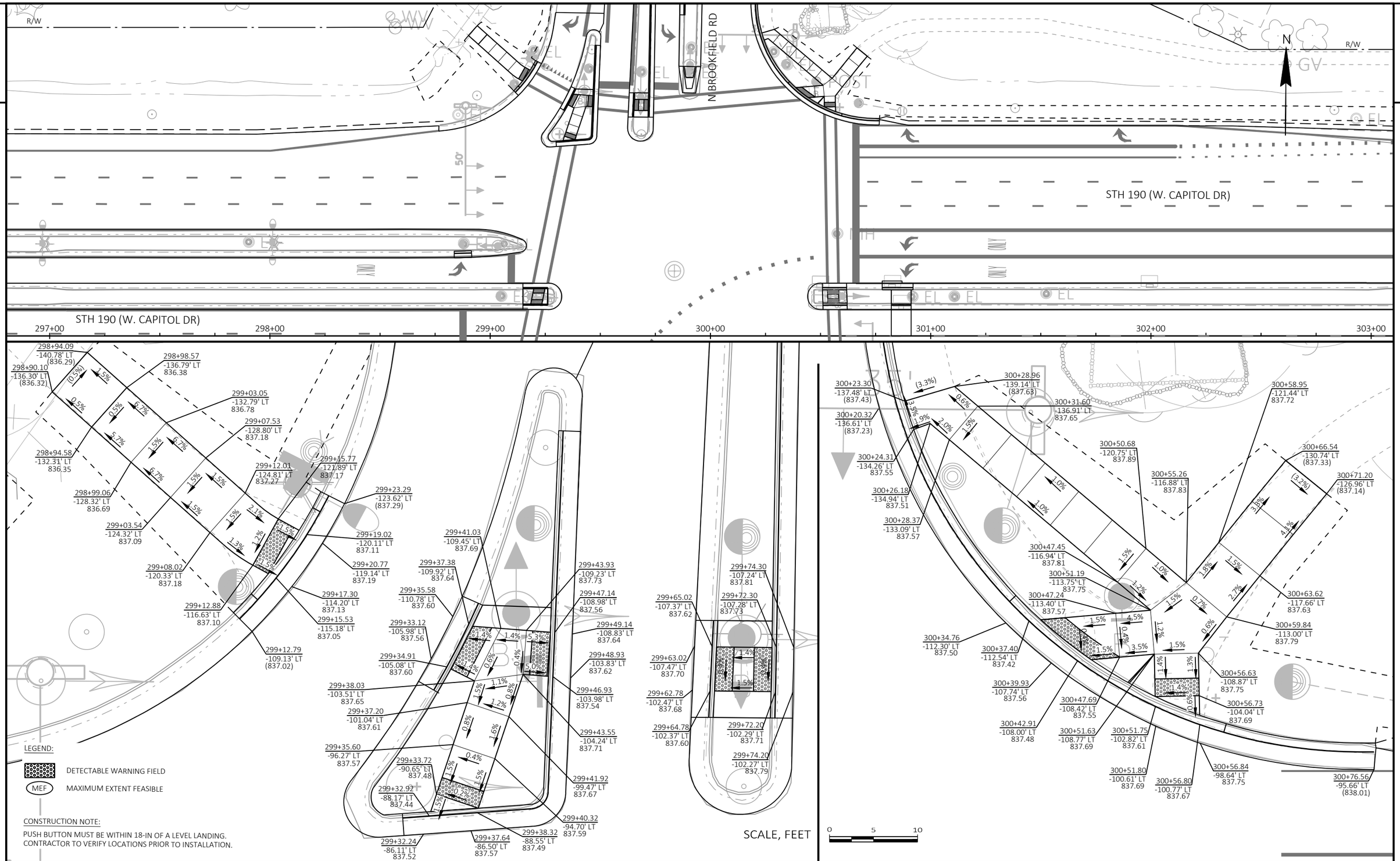
POINT NUMBER	STATION	OFFSET	DESCRIPTION
220	408+47.53	147.85' LT	50' RADIUS
221	408+97.61	142.97' LT	END CURB & GUTTER, END 50' RADIUS
222	409+04.10	98.38' LT	BEGIN 4' RADIUS
223	409+08.03	97.53' LT	4' RADIUS
224	409+08.11	93.53' LT	END 4' RADIUS
225	409+38.52	93.61' LT	BEGIN 4' RADIUS
226	409+38.52	97.11' LT	4' RADIUS
227	409+41.13	99.44' LT	END 4' RADIUS, BEGIN 76' RADIUS
228	409+98.08	150.12' LT	76' RADIUS
229	409+40.93	143.55' LT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER, BEGIN 60' RADIUS
230	410+00.01	156.00' LT	60' RADIUS
231	409+99.21	96.01' LT	END 60' RADIUS
232	417+10.46	96.05' LT	BEGIN 37' RADIUS
233	417+10.41	133.05' LT	37' RADIUS
234	418+48.83	160.89' LT	65' RADIUS
235	418+48.85	95.89' LT	END 65' RADIUS
236	416+68.88	22.94' RT	71' RADIUS
237	424+31.20	146.04' LT	50' RADIUS
238	425+55.69	145.85' LT	52' RADIUS
239	431+80.18	131.24' LT	SAWCUT, MATCH EXISTING, END CURB & GUTTER, END 14.5' RADIUS
240	431+79.79	116.75' LT	14.5' RADIUS
241	431+52.72	92.52' RT	60' RADIUS
242	432+67.99	137.86' LT	43' RADIUS
243	432+97.75	73.66' RT	42' RADIUS
244	353+94.60	119.42' LT	4' RADIUS
245	442+51.22	65.31' LT	END 22' RADIUS
246	442+51.54	87.31' LT	22' RADIUS
247	443+18.80	86.26' LT	22' RADIUS
248	443+18.80	64.26' LT	BEGIN 22' RADIUS
249	438+52.95	39.75' RT	BEGIN 12' RADIUS
250	438+52.64	51.75' RT	12' RADIUS
251	438+64.64	51.70' RT	END 12' RADIUS
252	438+64.65	53.20' RT	SAWCUT, MATCH EXISTING, END CURB & GUTTER
253	438+83.55	49.38' RT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER, BEGIN 12' RADIUS
254	438+83.73	45.48' RT	SAWCUT, MATCH EXISTING
255	438+95.54	47.60' RT	12' RADIUS
256	438+95.54	35.60' RT	END 12' RADIUS
257	443+50.21	36.01' RT	BEGIN 21.5' RADIUS
258	443+50.18	57.51' RT	21.5' RADIUS
259	444+17.07	9.93' LT	4.5' RADIUS

POINT NUMBER	STATION	OFFSET	DESCRIPTION
260	444+17.18	57.12' RT	21.5' RADIUS
261	444+17.30	35.62' RT	END 21.5' RADIUS
262	457+98.43	64.27' LT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER
263	458+00.93	64.31' LT	BEGIN 24' RADIUS
264	458+00.50	88.31' LT	24' RADIUS
265	458+23.13	80.80' LT	END 24' RADIUS
266	77+82.97	111.26' LT	80' RADIUS
267	458+34.19	67.33' LT	3' RADIUS
268	458+46.32	67.54' LT	3' RADIUS
269	458+93.07	77.39' LT	3' RADIUS
270	458+93.16	67.35' LT	3' RADIUS
271	459+20.19	117.12' LT	30' RADIUS
272	459+09.59	89.09' LT	END 30' RADIUS
273	458+39.00	8.73' LT	3' RADIUS
274	458+45.24	2.74' LT	2.75' RADIUS
275	458+98.45	24.98' LT	3.25' RADIUS
276	459+02.58	22.97' LT	5' RADIUS
277	458+48.16	38.97' RT	3' RADIUS
278	458+48.76	48.95' RT	3' RADIUS
279	457+70.71	119.60' RT	75' RADIUS
280	458+97.25	59.81' RT	3' RADIUS
281	458+95.37	39.22' RT	3' RADIUS
282	459+06.24	39.16' RT	3' RADIUS
283	75+07.84	128.18' RT	107' RADIUS
284	459+49.05	70.90' RT	35' RADIUS
285	466+91.54	64.07' LT	BEGIN 22' RADIUS
286	466+91.73	86.07' LT	22' RADIUS
287	467+13.20	90.89' LT	END 24' RADIUS
288	467+12.42	94.31' LT	SAWCUT, MATCH EXISTING, END CURB & GUTTER
289	467+34.84	99.50' LT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER
290	467+38.94	81.25' LT	BEGIN 22' RADIUS
291	467+60.40	86.07' LT	22' RADIUS
292	467+60.43	64.07' LT	END 22' RADIUS
293	466+72.74	56.89' RT	85' RADIUS
294	467+19.93	173.31' LT	BEGIN 10' RADIUS
295	467+29.71	175.38' LT	10' RADIUS
296	467+33.15	165.99' LT	END 10' RADIUS, BEGIN 33' RADIUS
297	467+21.88	196.79' LT	33' RADIUS
298	467+48.16	177.17' LT	END 33' RADIUS
299	467+42.58	141.68' LT	BEGIN 14' RADIUS

POINT NUMBER	STATION	OFFSET	DESCRIPTION
300	467+45.37	127.60' LT	14' RADIUS
301	467+59.24	131.32' LT	END 14' RADIUS
302	467+13.36	36.21' RT	BEGIN 24' RADIUS
303	467+13.22	60.21' RT	24' RADIUS
304	467+37.14	58.26' RT	END 24' RADIUS
305	467+37.52	64.68' RT	SAWCUT, MATCH EXISTING, END CURB & GUTTER
306	467+61.25	63.61' RT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER
307	467+60.84	56.08' RT	BEGIN 19' RADIUS
308	467+79.82	55.05' RT	19' RADIUS
309	467+79.82	36.05' RT	END 19' RADIUS
310	467+88.12	36.07' RT	SAWCUT, MATCH EXISTING, END CURB & GUTTER
311	475+27.35	64.02' LT	BEGIN 21' RADIUS
312	???	???' ???	Detail Sheets
313	475+27.34	85.02' LT	21' RADIUS
314	475+93.84	86.14' LT	22' RADIUS
315	475+93.87	64.14' LT	END 22' RADIUS
316	475+87.70	14.05' LT	7.5' RADIUS
317	481+98.79	64.11' LT	BEGIN 22' RADIUS
318	481+98.79	86.11' LT	22' RADIUS
319	482+66.07	86.16' LT	22' RADIUS
320	482+66.07	64.16' LT	END 22' RADIUS
321	482+59.41	13.99' LT	7.1' RADIUS
322	492+10.72	63.92' LT	52' RADIUS
323	493+11.46	8.79' LT	9.1' RADIUS
324	496+88.19	58.11' RT	22' RADIUS
325	499+07.56	64.15' LT	BEGIN 22' RADIUS
326	499+07.43	86.15' LT	22' RADIUS
327	499+29.25	85.17' LT	END 22' RADIUS
328	499+29.47	90.30' LT	MATCH EXISTING, END CURB & GUTTER
329	499+61.08	90.07' LT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER, BEGIN 27' RADIUS
330	499+87.85	91.15' LT	27' RADIUS
331	499+87.80	64.15' LT	END 27' RADIUS
332	499+79.35	24.12' LT	6' RADIUS
333	499+98.39	23.19' RT	45' RADIUS
334	499+13.18	36.39' RT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER, BEGIN 22' RADIUS
335	499+12.83	58.39' RT	22' RADIUS
336	499+34.84	56.27' RT	MATCH EXISTING, END CURB & GUTTER
337	499+67.22	64.19' RT	BEGIN 27' RADIUS
338	499+94.36	63.18' RT	27' RADIUS
339	499+94.43	36.18' RT	END 27' RADIUS

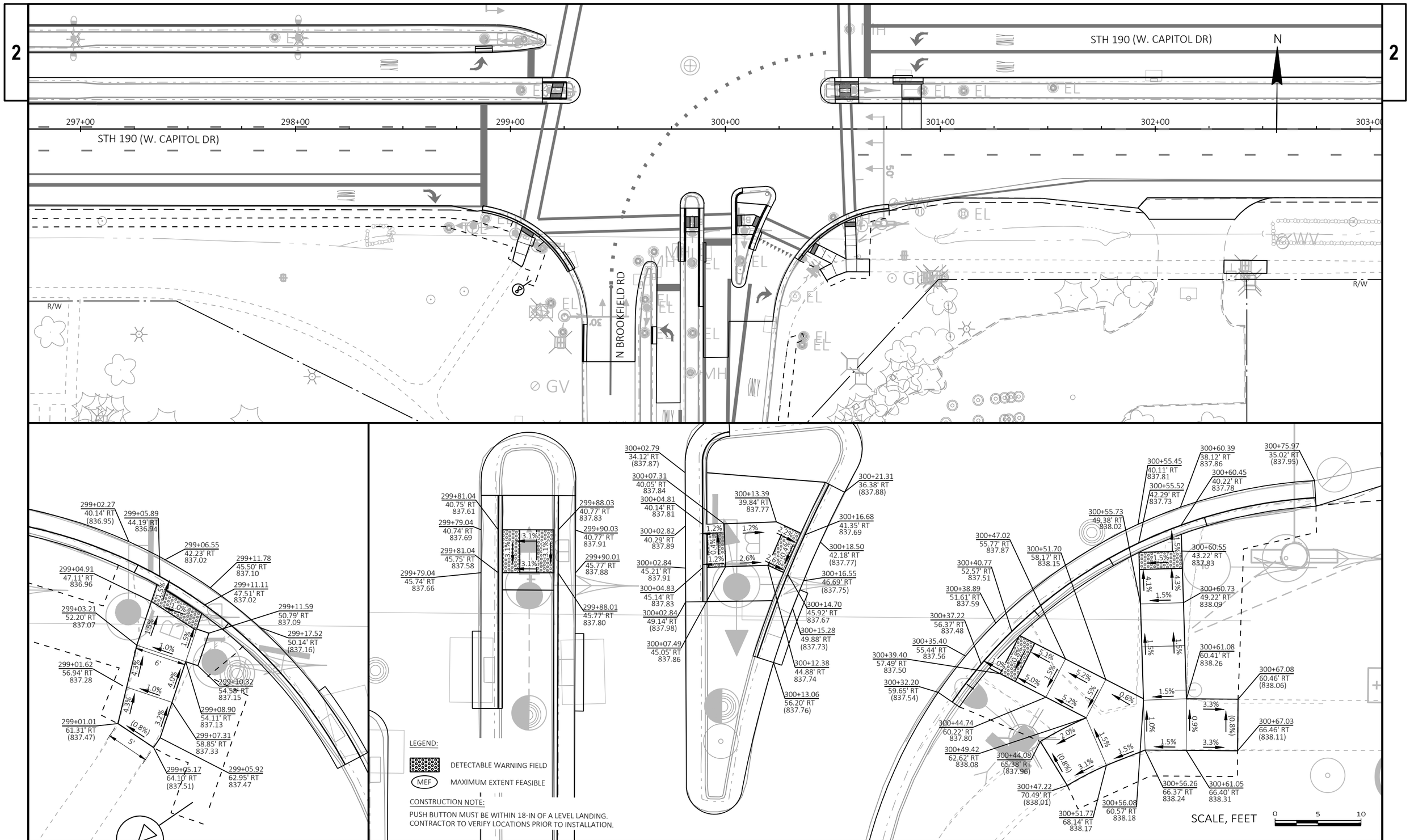
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POINT NUMBER	STATION	OFFSET	DESCRIPTION
340	504+87.14	36.77' RT	BEGIN 28' RADIUS
341	504+86.73	64.77' RT	28' RADIUS
342	505+83.00	59.41' RT	23' RADIUS
343	505+83.00	36.41' RT	END 23' RADIUS
344	508+62.90	38.84' RT	SAWCUT, MATCH EXISTING
345	508+70.32	36.33' RT	BEGIN 32' RADIUS
346	508+70.31	68.33' RT	32' RADIUS
347	509+01.45	60.92' RT	SAWCUT, MATCH EXISTING, END 32' RADIUS
348	509+21.78	61.54' RT	SAWCUT, MATCH EXISTING
349	509+20.67	40.37' RT	CURB & GUTTER PI
350	509+40.80	40.37' RT	BEGIN 30' RADIUS
351	509+63.18	60.66' RT	30' RADIUS
352	509+32.35	62.00' RT	SAWCUT, MATCH EXISTING, END 30' RADIUS
353	509+48.75	64.18' RT	SAWCUT, MATCH EXISTING
354	509+48.41	69.16' RT	SAWCUT, MATCH EXISTING, BEGIN CURB & GUTTER, BEGIN 30' RADIUS
355	509+78.48	68.15' RT	30' RADIUS
356	512+19.26	64.05' LT	END 37.5' RADIUS
357	511+07.48	72.62' LT	SIDEWALK PI
358	511+18.08	74.69' LT	SIDEWALK PI
359	511+49.95	74.74' LT	SIDEWALK PI
360	511+60.57	72.71' LT	SIDEWALK PI
361	512+19.35	101.55' LT	37.5' RADIUS
362	512+56.80	98.45' LT	BEGIN 37.5' RADIUS
363	99+68.35	90.21' LT	4.5' RADIUS
364	100+47.44	156.06' LT	98' RADIUS
365	512+00.88	52.06' RT	80' RADIUS
366	99+90.12	9.88' RT	4' RADIUS
367	512+48.63	36.12' RT	CURB & GUTTER PI
368	512+47.51	58.86' RT	CURB & GUTTER PI
369	512+44.06	60.98' RT	CURB & GUTTER PI
370	512+13.29	95.91' RT	31.5' RADIUS
371	99+20.25	58.09' RT	5' RADIUS
372	99+52.48	87.52' RT	3.25' RADIUS
373	99+85.20	65.66' RT	BEGIN 25' RADIUS
374	100+08.18	75.51' RT	25' RADIUS
375	100+90.25	190.03' LT	110' RADIUS
376	???	???' ???	SIDEWALK PI
377	???	???' ???	SIDEWALK PI
378	???	???' ???	SIDEWALK PI
379	???	???' ???	SIDEWALK PI



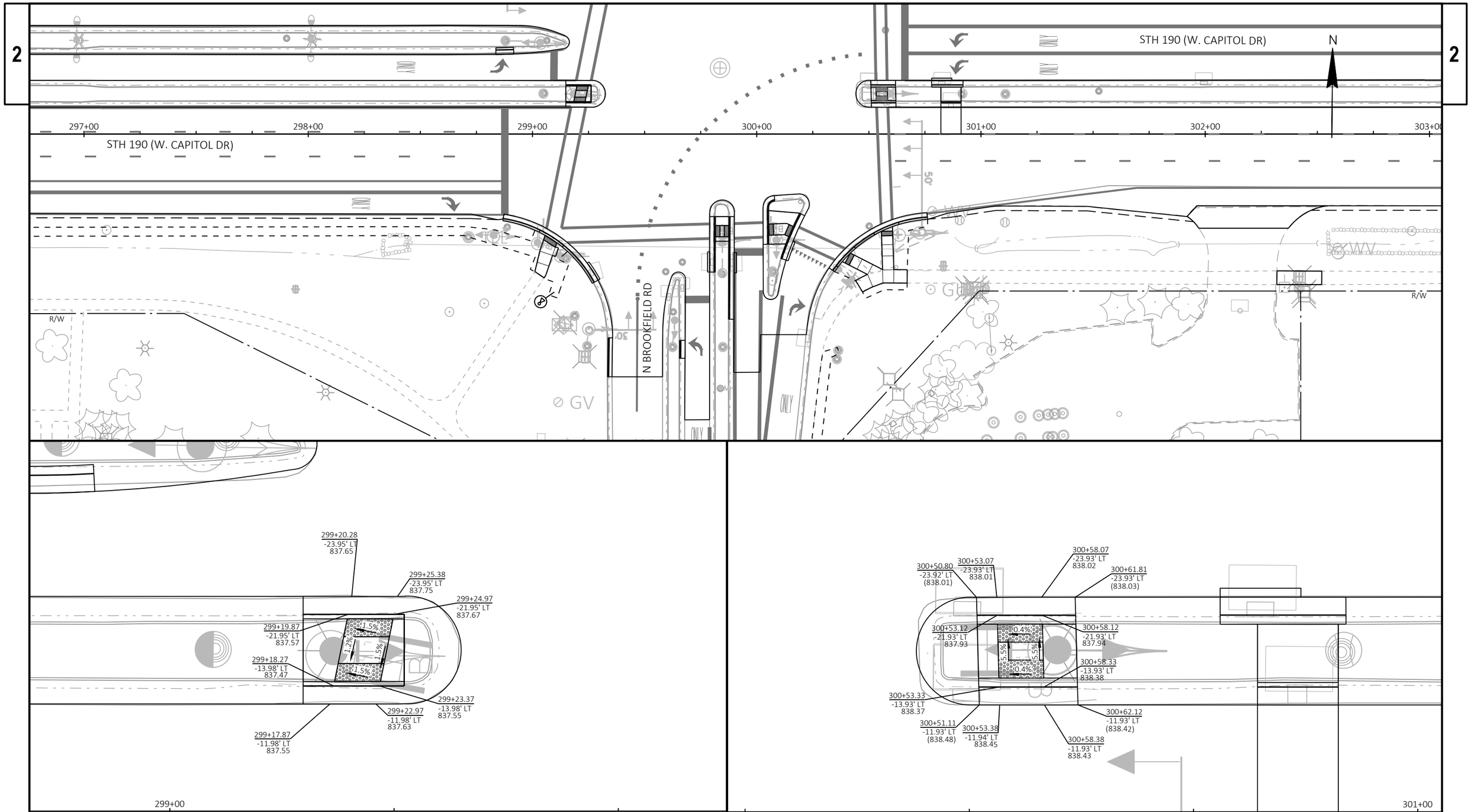
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 91	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021301_CR.DWG
LAYOUT NAME - 021301_cr
PLOT DATE : 8/20/2025 11:03 AM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 92	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021301_CR.DWG
LAYOUT NAME - 021302_cr
PLOT DATE : 8/20/2025 11:03 AM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



CONSTRUCTION NOTE:

PUSH BUTTON MUST BE WITHIN 18-IN OF A LEVEL LANDING.
CONTRACTOR TO VERIFY LOCATIONS PRIOR TO INSTALLATION.

LEGEND:

DETECTABLE WARNING FIELD

MEF — MAXIMUM EXTENT FEASIBLE

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 93	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021301_CR.DWG
LAYOUT NAME - 021303_cr

PLOT DATE : 8/20/2025 11:04 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

STH 190 (W. CAPITOL DR)

N

PC: 311+03.92

2

305+00 306+00 307+00 308+00 309+00 310+00 311+00

STH 190 (W. CAPITOL DR)

R/W

ST ANDREW LN

R/W

307+78.93
60.38' RT
(853.46)

307+63.16
69.22' RT
(854.11)

307+81.76
69.04' RT
853.76

307+83.98
69.02' RT
853.84

307+86.48
75.00' RT
854.05

307+84.36
75.02' RT
853.97

307+88.36
81.28' RT
(854.26)

307+63.21
75.19' RT
(854.11)

307+80.70
75.05' RT
853.99

1.2%
(2.0%)
13.7%
0.6%
0.5%

MEF
2.5%

308+11.62
62.02' RT
(854.12)

308+10.10
68.80' RT
854.32

308+12.12
68.78' RT
854.24

308+11.74
74.78' RT
854.36

308+09.74
74.80' RT
854.44

308+09.73
81.82' RT
(854.63)

308+13.20
74.76' RT
854.39

308+19.67
68.70' RT
854.76

308+24.67
68.64' RT
854.84

308+29.15
68.07' RT
855.07

308+33.92
66.58' RT
(855.26)

308+35.72
72.30' RT
(855.40)

308+19.74
74.70' RT
854.85

308+30.95
73.80' RT
855.16

308+24.74
74.64' RT
854.93

6.8%
1.5%
4.9%
3.8%
(2.3%)
4.8%
1.5%
7.0%
3.7%
(2.0%)

TLE

TLE

R/W

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 94	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021301_CR.DWG
LAYOUT NAME - 021304_cr

PLOT DATE : 8/20/2025 11:04 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

2

STH ~~190~~ (W. ~~CAPITOL DR~~)

N

313+00 314+00 315+00 316+00 317+00 318+00 319+00

STH 190 (W. CAPITOL DR)

MOUNTAIN DR

TEL

GUY

R/W

R/W

315+71.41
54.94' RT
(878.71)

315+61.31
61.99' RT
(879.24)

315+74.57
62.31' RT
878.79

315+77.00
62.37' RT
878.87

315+80.44
68.45' RT
878.97

315+78.17
68.39' RT
878.89

315+73.19
68.28' RT
878.91

315+84.43
78.75' RT
879.49

315+61.16
67.99' RT
(879.30)

3.4%
(1.0%)
1.7%
3.3%
0.5%

MEF
2.6%

316+21.85
50.46' RT
(879.15)

316+17.15
63.28' RT
879.17

316+15.05
63.24' RT
879.25

316+13.58
69.20' RT
879.36

316+15.61
69.25' RT
879.28

316+18.07
69.30' RT
879.32

316+13.01
77.74' RT
879.53

316+24.09
69.43' RT
879.82

316+30.11
69.56' RT
879.91

316+35.75
69.78' RT
880.37

316+41.16
71.35' RT
880.83

316+24.22
63.44' RT
879.73

316+30.24
63.56' RT
879.82

316+36.72
63.86' RT
880.28

316+42.94
65.62' RT
880.74

316+48.74
67.41' RT
881.25

316+54.52
69.19' RT
881.75

316+59.92
70.75' RT
882.24

316+65.81
70.86' RT
882.38

316+71.83
70.87' RT
882.64

316+77.85
70.88' RT
(882.91)

316+46.96
73.14' RT
881.34

316+52.74
74.93' RT
881.84

316+59.02
76.68' RT
882.38

316+65.80
76.86' RT
882.47

316+71.82
76.87' RT
882.73

316+77.84
76.88' RT
(882.92)

7.9% 1.5% 8.3% 4.4% 3.2% (0.2%)

TLE

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

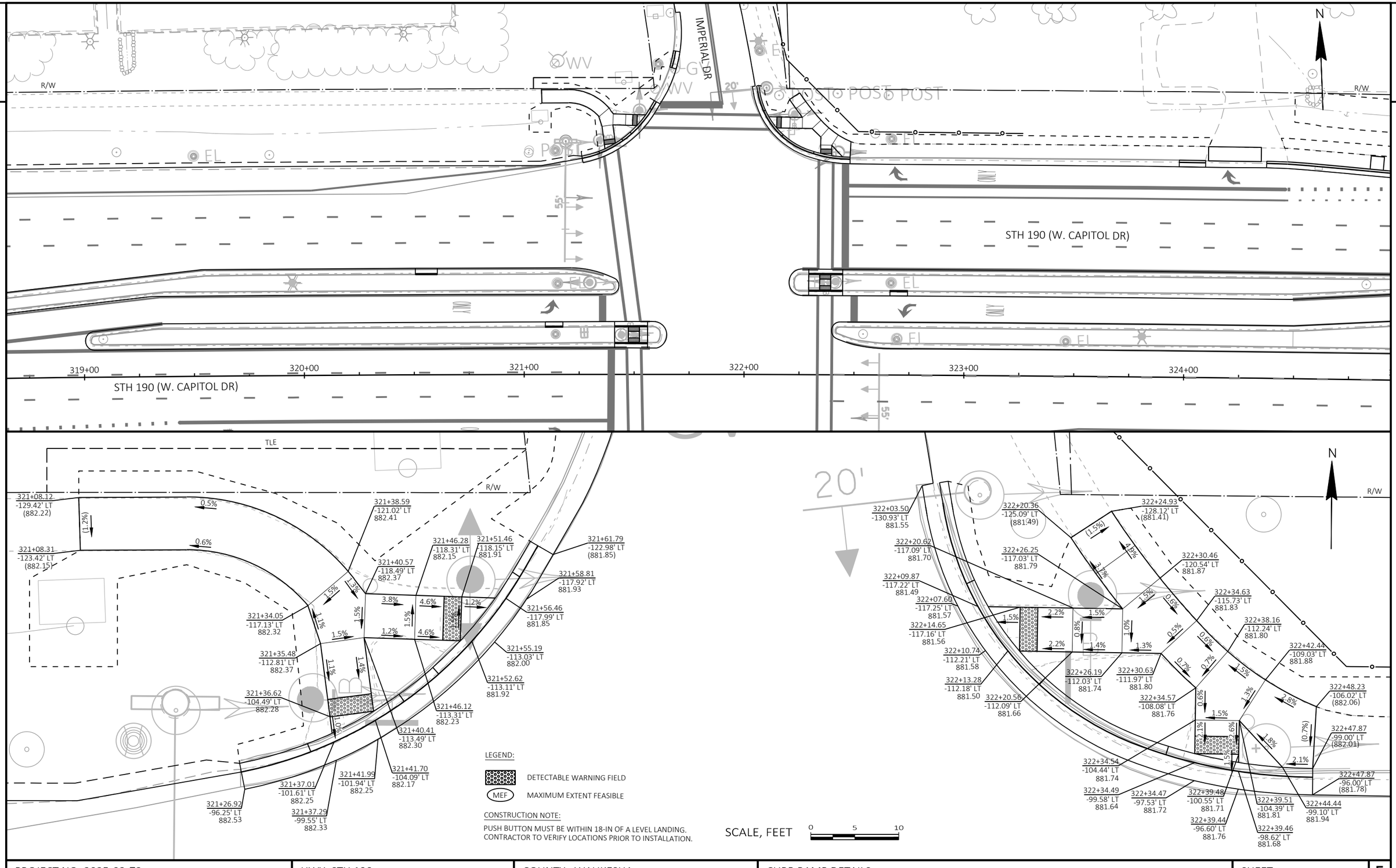
SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 95	E

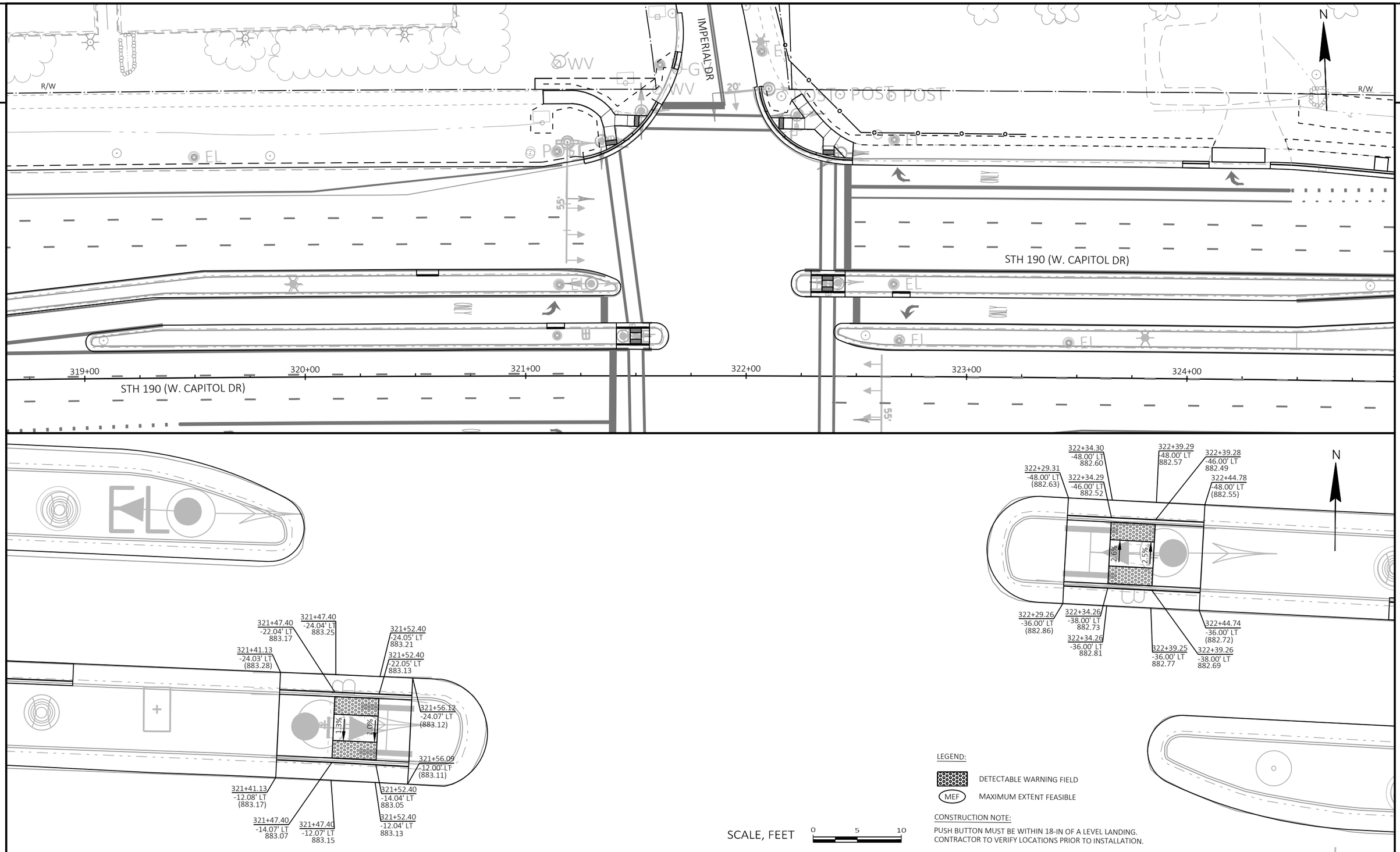
FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021301_CR.DWG
LAYOUT NAME - 021305_cr

PLOT DATE : 8/20/2025 11:04 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

2



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 96	E



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 97	E

2

319+00 320+00 321+00 322+00 323+00 324+00 325+00

STH 190 (W. CAPITOL DR)

STH 190 (W. CAPITOL DR)

ST DOMINIC DRIVEWAY

55'

R/W

R/W

322+05.17
90.60' RT
881.72

322+05.20
102.06' RT
881.65

322+05.23
110.06' RT
(881.63)

TLE

TLE

TLE

N

321+43.67
35.52' RT
882.68

321+47.63
37.91' RT
882.57

321+47.54
35.89' RT
882.65

321+52.59
36.66' RT
882.64

321+52.69
38.75' RT
882.56

321+52.80
45.95' RT
882.66

321+54.71
48.01' RT
882.63

321+62.04
47.88' RT
882.51

321+69.51
47.75' RT
882.22

321+72.32
47.70' RT
882.30

321+73.92
52.67' RT
882.10

321+76.36
52.63' RT
882.18

321+68.14
52.78' RT
882.19

321+84.01
77.45' RT
881.90

321+47.79
46.18' RT
882.68

321+47.67
39.87' RT
882.60

321+46.46
47.85' RT
882.71

321+41.06
50.47' RT
(882.88)

321+43.70
55.91' RT
(882.95)

321+49.11
53.29' RT
882.79

321+54.79
53.01' RT
882.70

321+62.13
52.88' RT
882.44

1.5%
1.3%
1.4%
1.5%
0.4%
1.1%
1.5%
1.4%
2.8%
1.5%
(1.2%)
2.7%
1.4%
3.6%
1.5%
3.9%
4.2%
1.5%

322+47.96
33.97' RT
882.03
HP

322+38.77
35.09' RT
882.01

322+33.82
36.52' RT
881.96

322+38.98
39.43' RT
881.96

322+38.87
37.12' RT
881.93

322+33.92
38.62' RT
881.88

322+53.05
38.54' RT
882.43

322+52.91
36.64' RT
882.41

322+60.68
33.08' RT
(881.93)

322+34.30
46.49' RT
882.03

322+28.24
46.61' RT
881.91

322+60.89
36.08' RT
(882.25)

322+17.77
46.83' RT
881.76

322+20.70
46.77' RT
881.68

322+61.35
42.57' RT
(882.27)

322+13.55
51.91' RT
881.72

322+16.07
51.86' RT
881.64

322+22.33
51.74' RT
881.73

322+28.34
51.61' RT
881.94

322+34.31
51.49' RT
882.08

322+34.73
57.13' RT
(881.98)

322+40.68
56.69' RT
(881.85)

322+54.76
43.78' RT
882.51

322+39.31
46.25' RT
882.07

322+40.17
51.21' RT
882.11

322+05.14
79.14' RT
881.78

0.3%
1.1%
1.9%
1.9%
0.8%
3.0%
2.0%
1.0%
0.9%
0.8%
1.5%
3.5%
2.3%
0.5%
1.8%
4.7%
(2.2%)
2.1%
1.1%
3.6%
2.3%
2.5%
(0.3%)

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

CONSTRUCTION NOTE:

PUSH BUTTON MUST BE WITHIN 18-IN OF A LEVEL LANDING.
CONTRACTOR TO VERIFY LOCATIONS PRIOR TO INSTALLATION.

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 98	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021301_CR.DWG
LAYOUT NAME - 021308_cr

PLOT DATE : 8/20/2025 11:05 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

2

N

R/W

R/W

BEAUFORT DR

STH 190 (W. CAPITOL DR)

STH 190 (W. CAPITOL DR)

338+00 339+00 340+00 341+00 342+00 343+00

339+70.55
-127.84' LT
(893.20)

339+76.23
-126.05' LT
893.33

339+68.79
-122.10' LT
(892.99)

339+73.80
-120.57' LT
893.24

339+79.18
-92.48' LT
894.46

339+89.91
-94.12' LT
894.65

339+89.95
-96.22' LT
894.57

339+92.70
-118.77' LT
894.22

339+97.80
-117.48' LT
894.30

339+90.26
-113.29' LT
894.13

339+90.22
-111.37' LT
894.16

339+90.12
-105.37' LT
894.49

339+90.05
-101.43' LT
894.65

339+94.99
-98.22' LT
894.61

339+94.95
-95.99' LT
894.69

339+95.05
-101.34' LT
894.66

339+95.12
-105.28' LT
894.57

339+95.22
-111.28' LT
894.24

339+97.96
-112.49' LT
894.26

340+07.74
-117.80' LT
894.77

340+03.80
-117.68' LT
894.69

340+17.43
-123.22' LT
(894.61)

340+13.65
-117.99' LT
894.68

340+15.83
-118.06' LT
894.76

340+13.45
-112.98' LT
894.84

340+11.10
-112.91' LT
894.76

340+07.90
-112.80' LT
894.81

340+03.96
-112.68' LT
894.61

340+08.47
-105.82' LT
894.89
HP

(3.5%) 2.2% 1.5% 4.9% 4.9% 4.9% 4.9% 1.5% 1.5% 1.5% 0.8% 6.5% 1.5% 2.0% 1.5% 1.5% 0.6% 5.8% 5.0% 1.5% 1.5% 5.5% 5.5% 1.5% 4.1% 2.3% 1.5% 1.5% 1.5%

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

340+68.29
-123.69' LT
(894.83)

340+85.57
-128.94' LT
(895.28)

340+90.52
-128.20' LT
(895.35)

340+85.07
-120.27' LT
895.38

340+79.15
-120.08' LT
894.95

340+70.98
-119.82' LT
894.95

340+73.45
-119.90' LT
894.87

340+75.08
-114.95' LT
895.05

340+77.93
-115.04' LT
894.97

340+85.23
-115.27' LT
895.45

340+88.28
-112.84' LT
895.47

340+90.07
-120.48' LT
895.46

340+91.41
-117.24' LT
895.51

341+04.34
-110.28' LT
895.94

341+09.33
-110.11' LT
896.02

341+09.16
-104.93' LT
895.94

341+22.50
-106.74' LT
896.55

341+29.28
-105.00' LT
(896.60)

341+29.29
-98.94' LT
(896.37)

341+04.17
-105.09' LT
895.88

341+03.99
-99.89' LT
895.59

341+03.93
-97.84' LT
895.67

341+08.89
-96.78' LT
895.74

341+08.96
-98.80' LT
895.66

341+09.02
-100.64' LT
895.69

341+21.00
-98.94' LT
896.44

341+21.00
-100.87' LT
896.46

341+29.31
-95.95' LT
(896.14)

(1.5%) 1.1% 1.4% 1.5% 7.0% 1.5% 1.4% 1.5% 6.6% 0.5% 0.8% 2.9% 2.3% 4' 1.2% 1.5% 1.2% 5.6% 6.0% 1.5% 3.9% 4.2% 1.5% 0.7% (3.8%) 0.8%

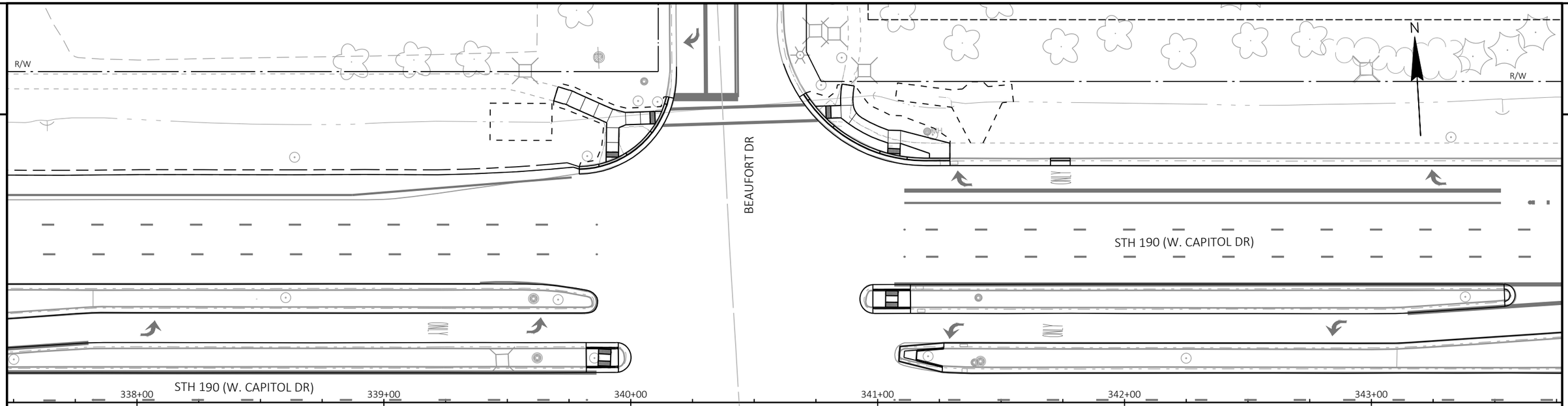
SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 99	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021301_CR.DWG
LAYOUT NAME - 021309_cr

PLOT DATE : 8/20/2025 11:06 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42





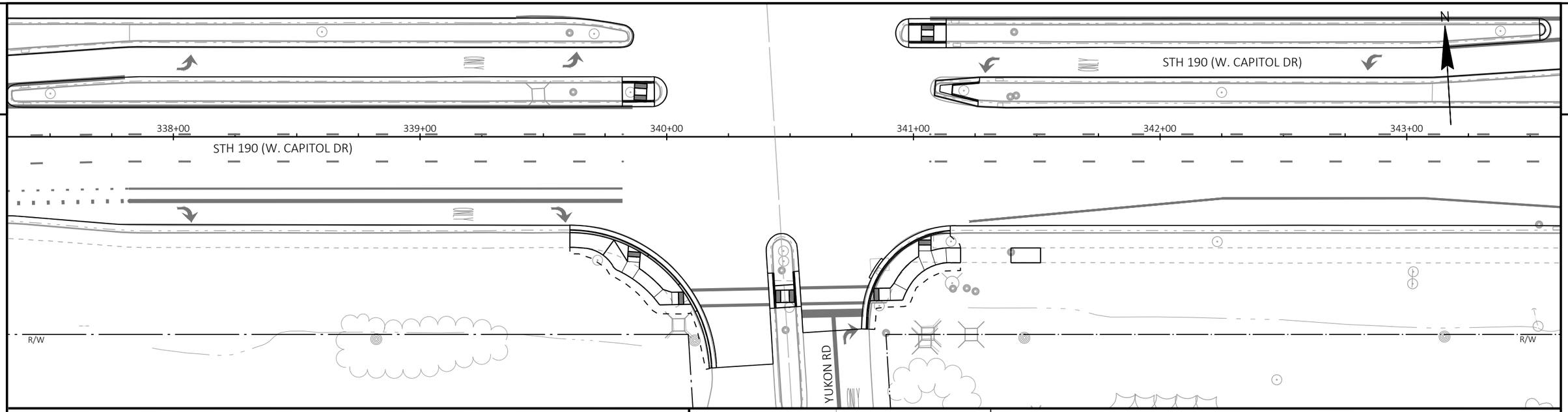
LEGEND:

DETECTABLE WARNING FIELD

MEF — MAXIMUM EXTENT FEASIBLE

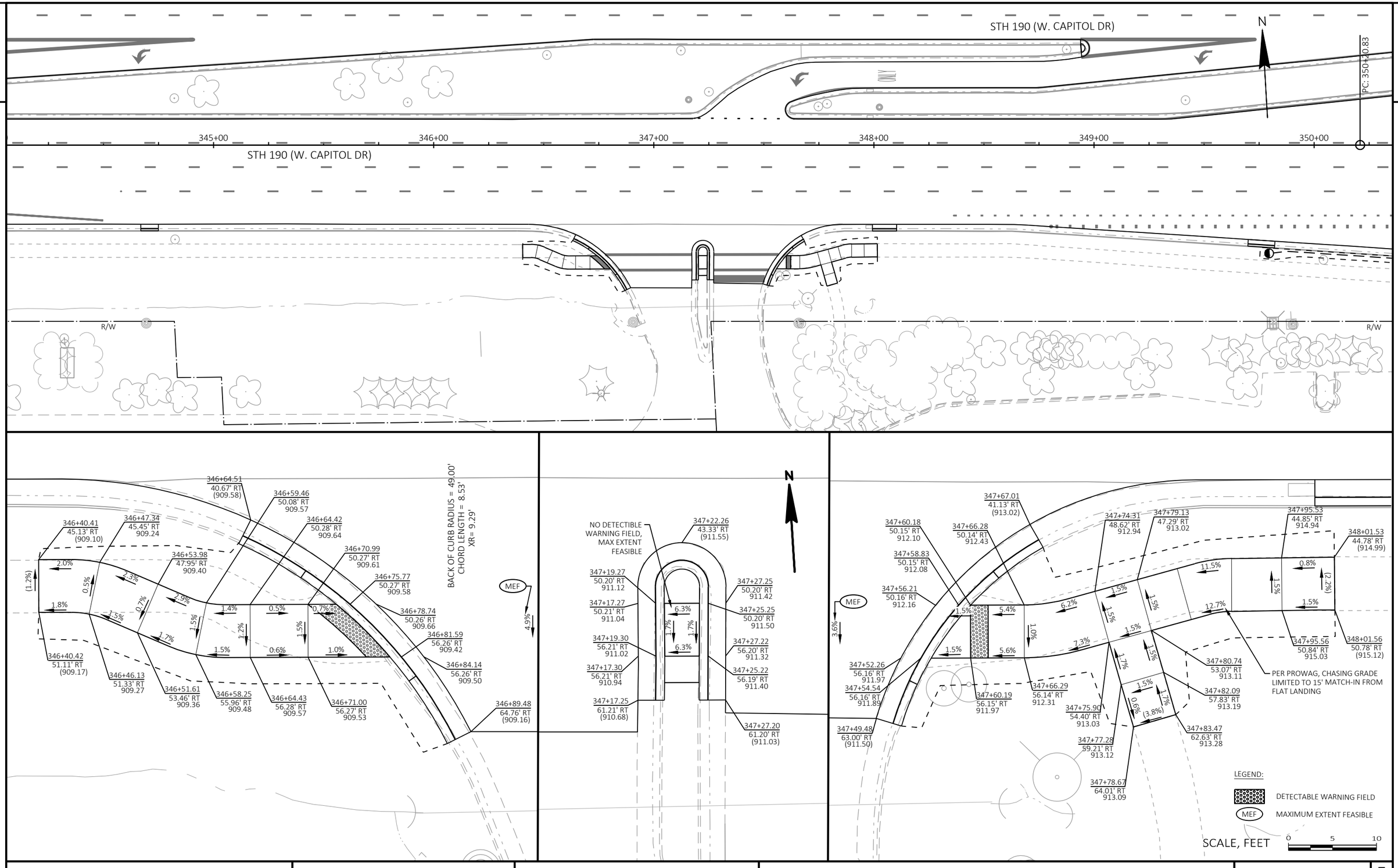
SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 100	E



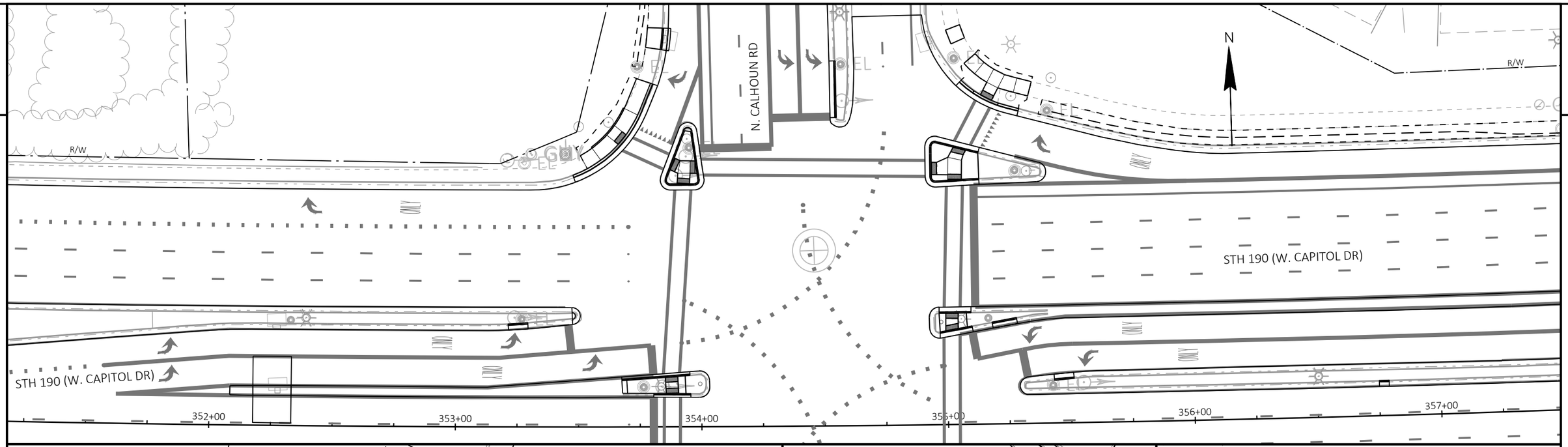
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 101	E

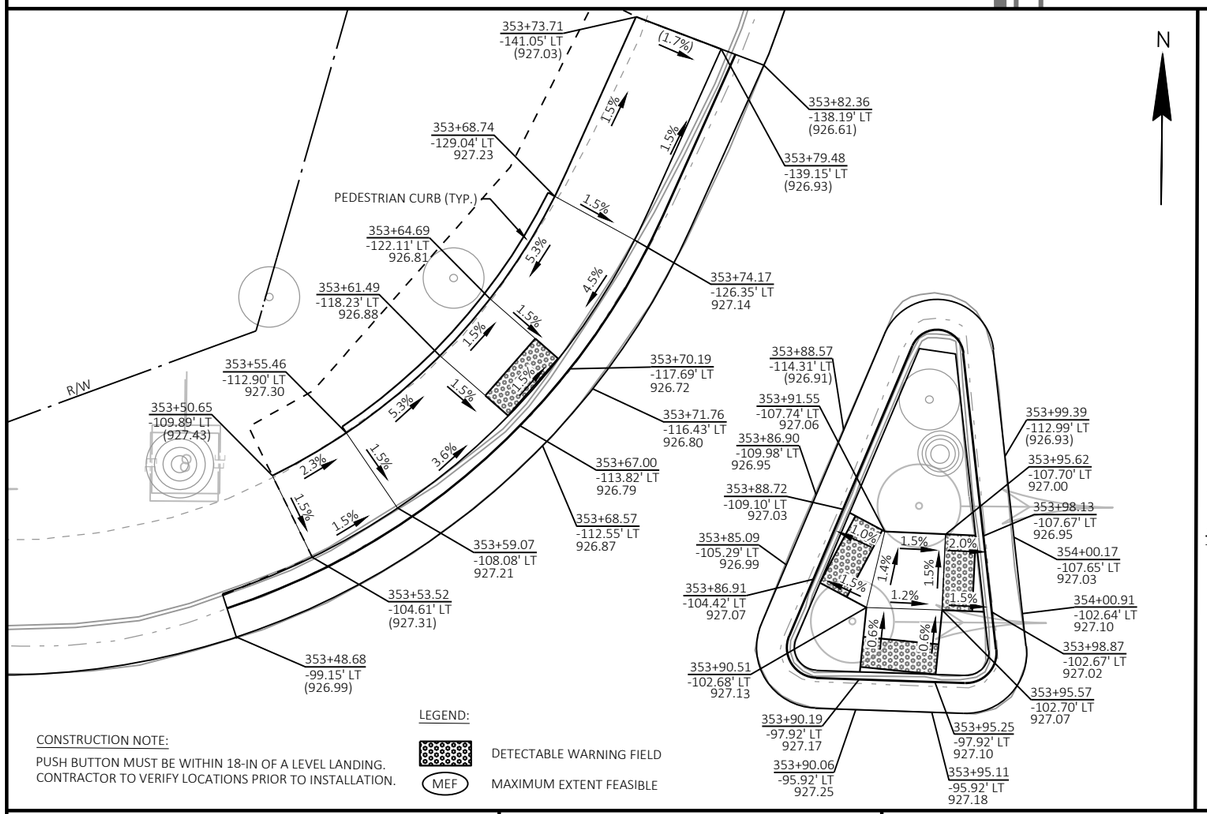
FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021302_CR.DWG
LAYOUT NAME - 021311_cr
PLOT DATE : 8/20/2025 11:07 AM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

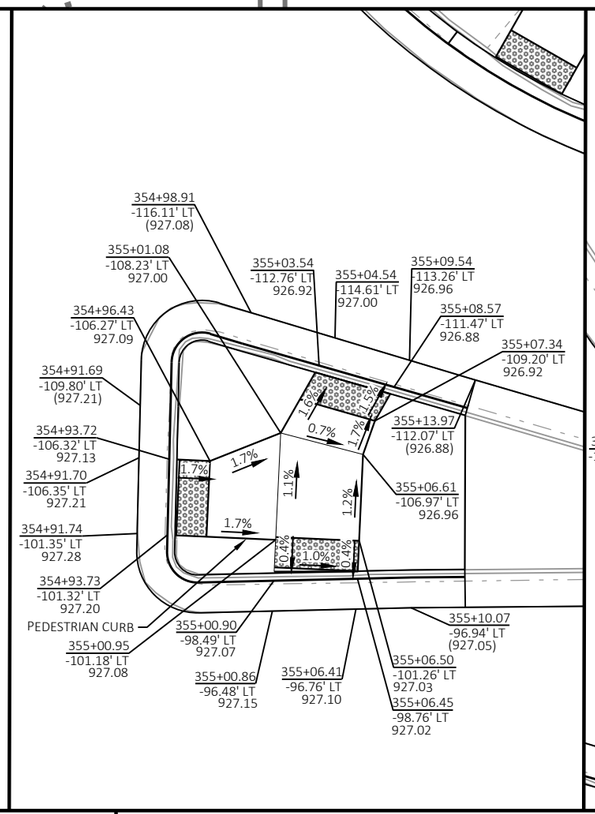


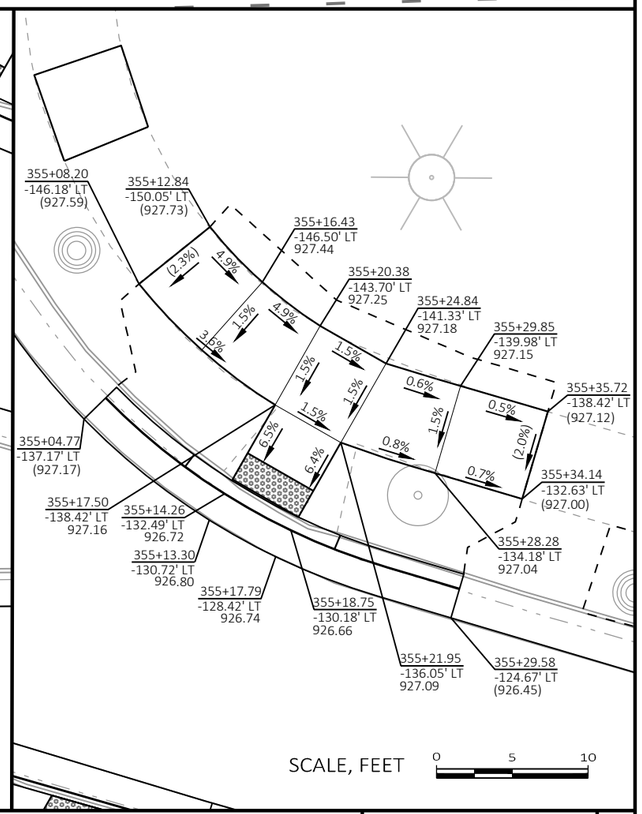
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 102	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021302_CR.DWG
LAYOUT NAME - 021312_cr
PLOT DATE : 8/20/2025 11:08 AM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

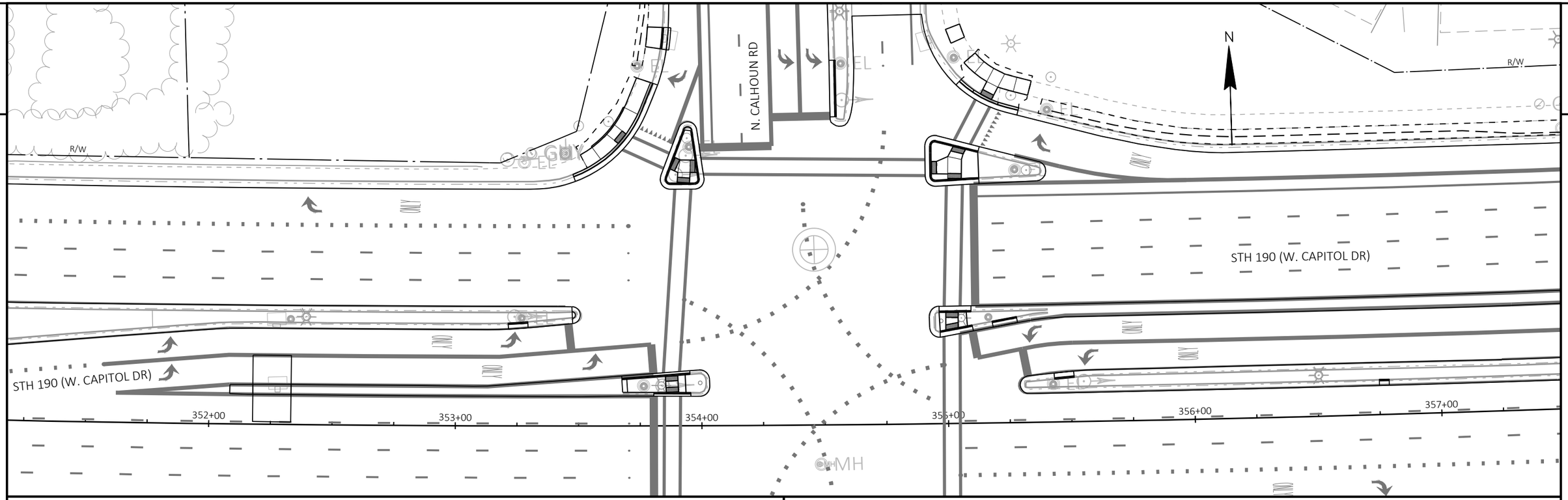


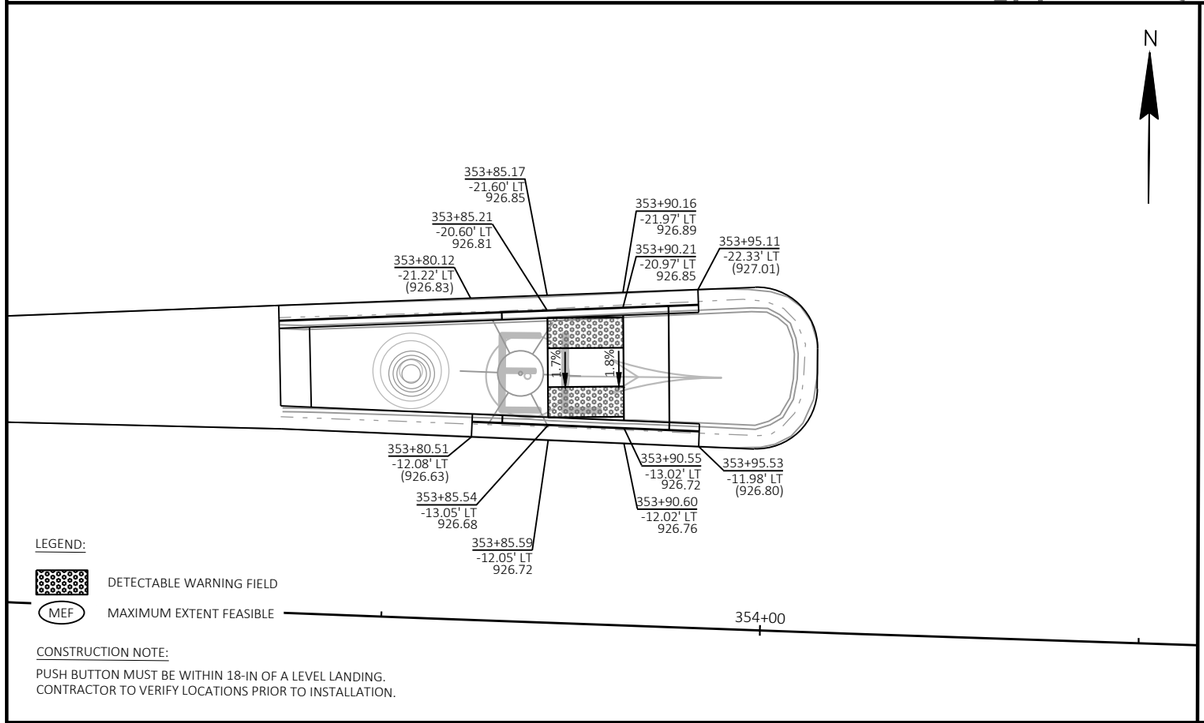


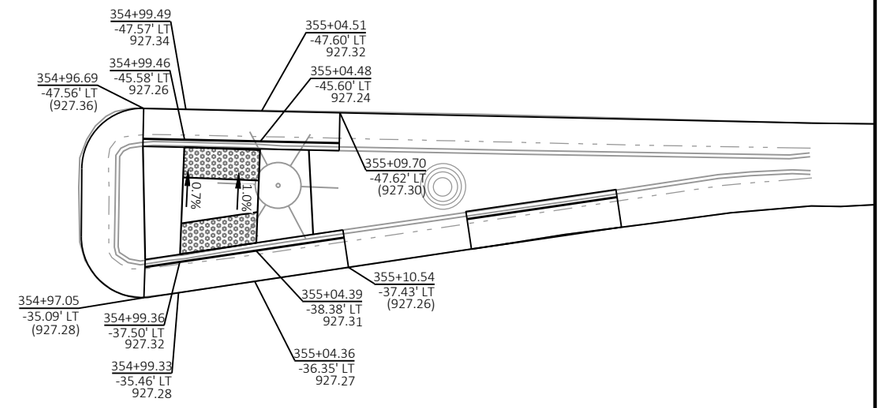




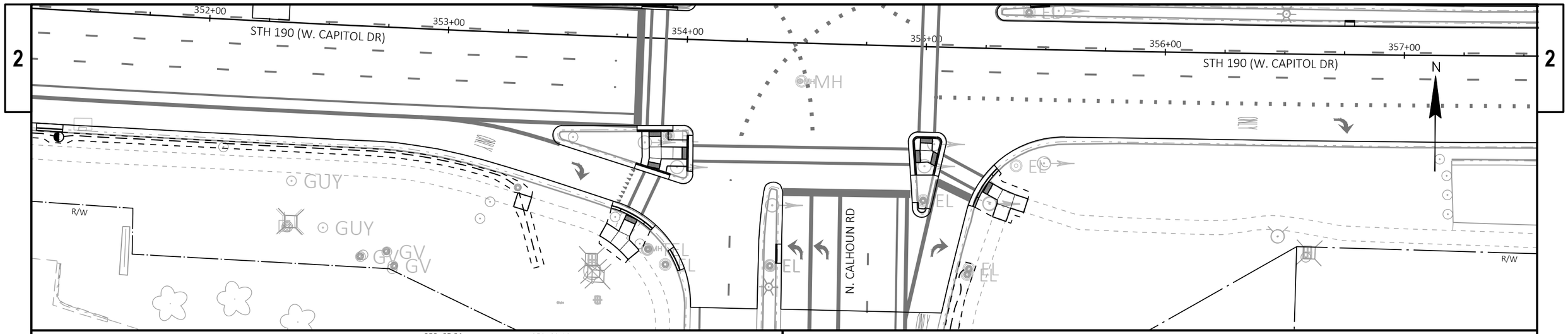
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 103	E

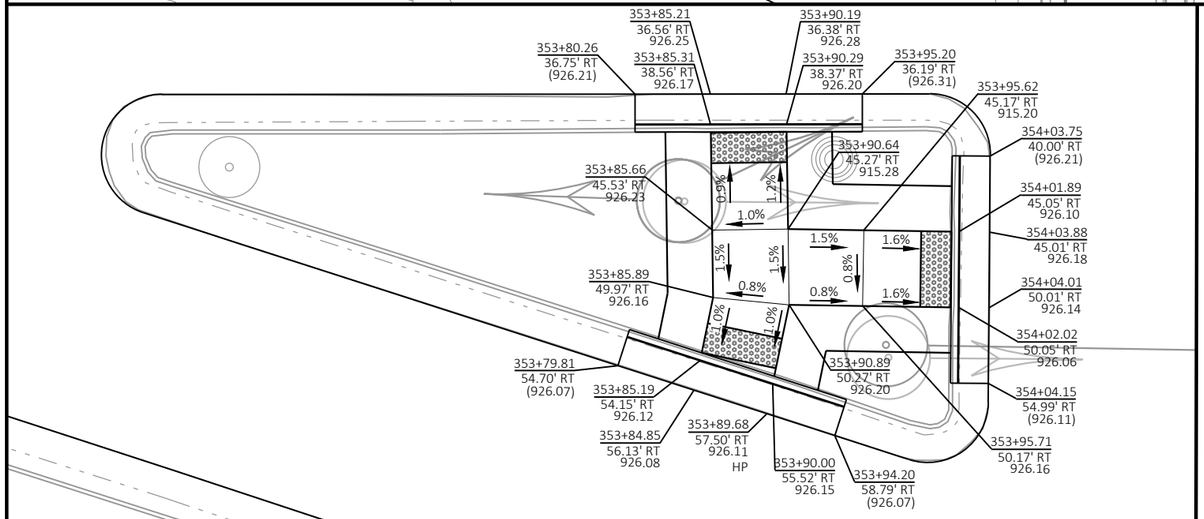


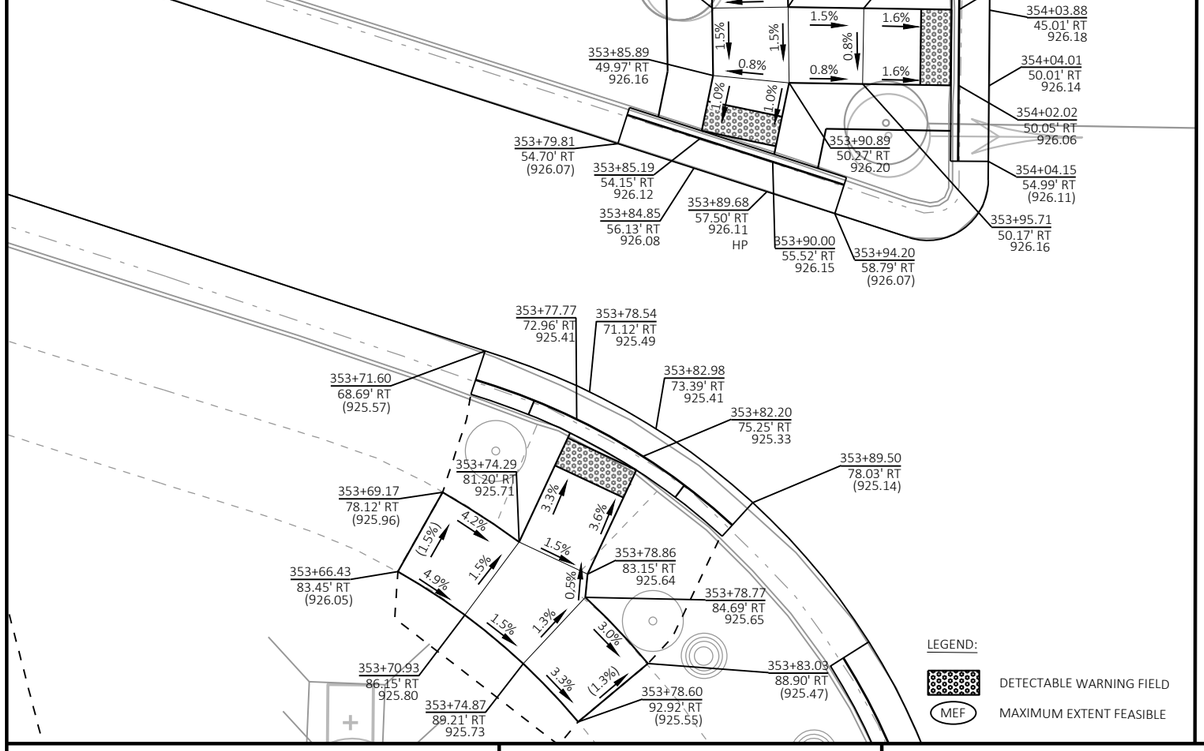


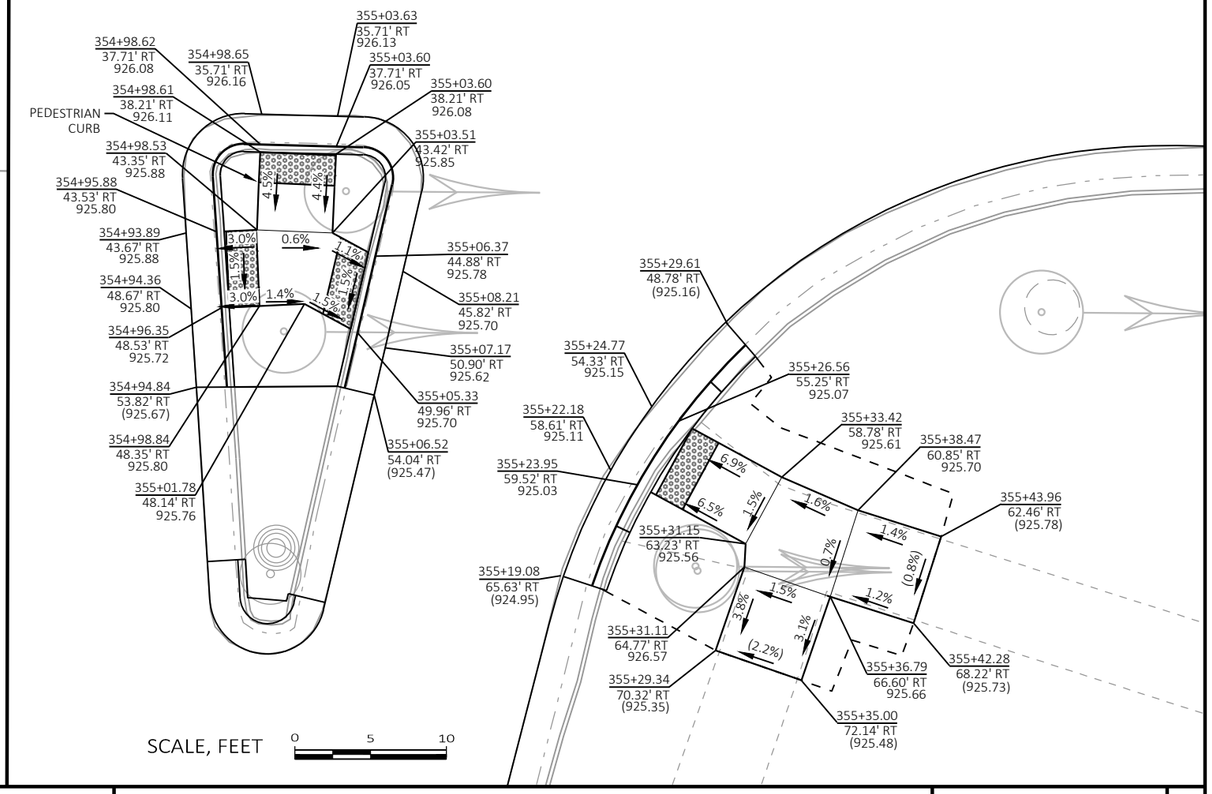


PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 104 E









CONSTRUCTION NOTE:

PUSH BUTTON MUST BE WITHIN 18-IN OF A LEVEL LANDING.
CONTRACTOR TO VERIFY LOCATIONS PRIOR TO INSTALLATION.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 105	E

2

STH 190 (W. CAPITOL DR)

PT: 358+73

357+00 358+00 359+00 360+00 361+00 362+00

STH 190 (W. CAPITOL DR)

N

FRONTAGE ROAD

GV GV GV WV

R/W R/W

359+97.46
45.53' RT
918.17

359+92.48
45.12' RT
918.24

PEDESTRIAN CURB (TYP.)

1.5% 2.5% 1.5% 1.5% (2.5%) 2.1%

360+04.33
47.36' RT
(918.35)

359+86.18
54.38' RT
(918.41)

359+91.83
52.84' RT
918.12

359+96.81
53.26' RT
918.05

359+91.67
54.83' RT
918.20

359+96.65
55.25' RT
918.13

360+03.83
53.34' RT
(918.20)

360+03.62
55.83' RT
(917.87)

N

3.8%

MEF

359+90.21
72.68' RT
918.75

359+95.19
73.08' RT
918.68

359+84.23
72.19' RT
(918.67)

359+90.05
74.68' RT
918.67

359+95.02
75.07' RT
918.60

360+01.17
73.57' RT
(918.46)

BACK OF CURB RADIUS = 34.50'
CHORD LENGTH = 8.65'
XR= 9.78'

359+40.08
71.17' RT
(919.98)

359+36.26
77.77' RT
920.24

359+31.94
77.02' RT
920.17

359+42.23
78.25' RT
920.35

359+48.21
78.73' RT
(920.47)

359+30.85
75.35' RT
920.25

1.6% 1.8% 2.0% 1.5% 1.5% (3.3%)

359+23.73
81.17' RT
920.29

1.1% 1.8% 3.8%

359+25.20
82.56' RT
920.21

359+35.76
83.75' RT
920.33

359+41.75
84.23' RT
920.44

359+47.73
84.71' RT
(920.67)

359+26.06
91.13' RT
(920.62)

R/W

359+77.46
81.09' RT
(919.68)

359+83.44
81.59' RT
919.49

359+89.44
82.07' RT
919.19

7.0% 7.0%

359+94.42
82.45' RT
919.12

(3.2%) 3.2% 4.9% 1.5% 1.5% 1.5% 1.5%

4.9% 4.9% 1.5%

359+76.98
87.07' RT
(919.87)

359+82.96
87.55' RT
949.58

359+88.94
88.03' RT
919.28

359+93.92
88.43' RT
919.21

LEGEND:

DETECTABLE WARNING FIELD

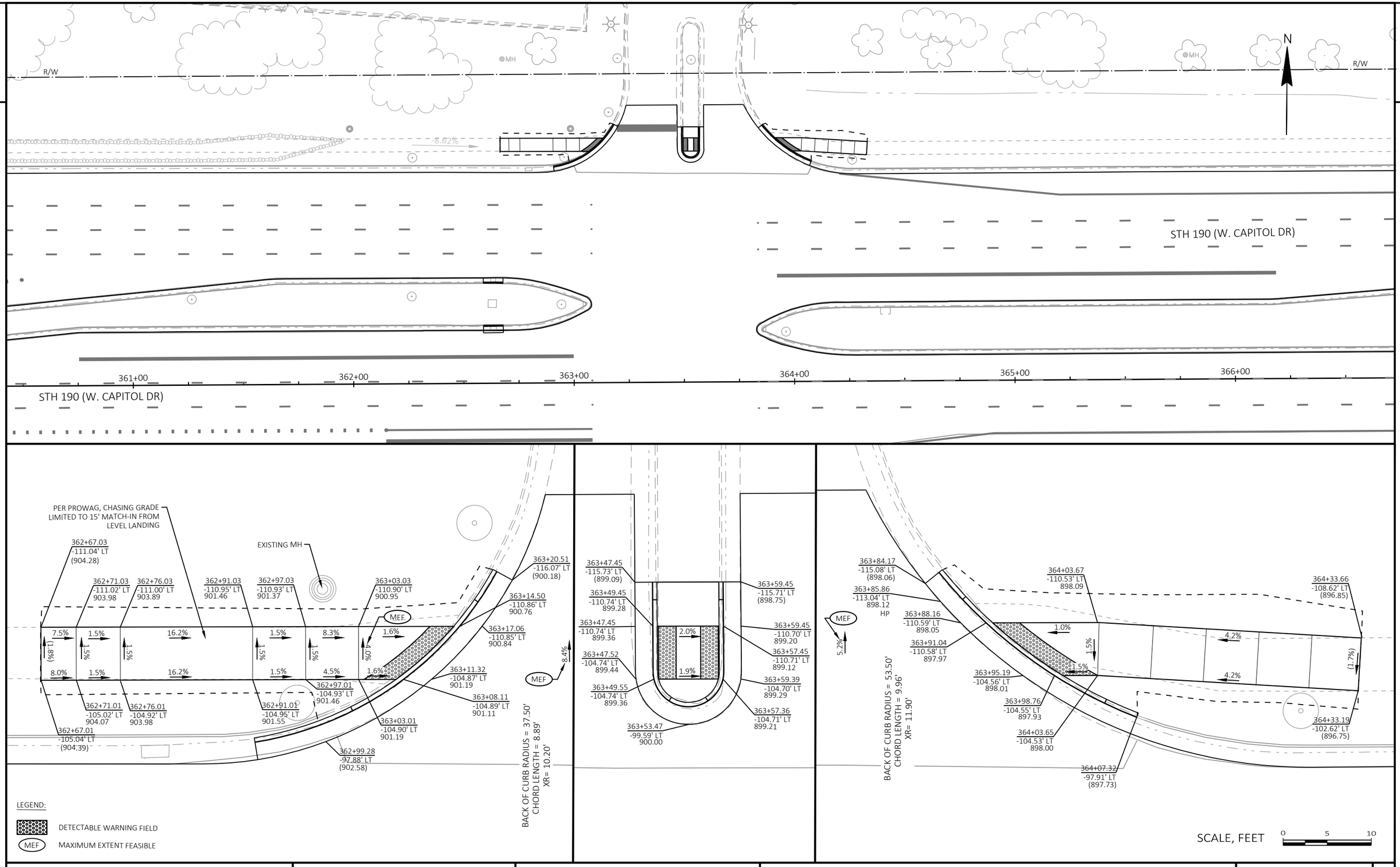
MEF MAXIMUM EXTENT FEASIBLE

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 106	E

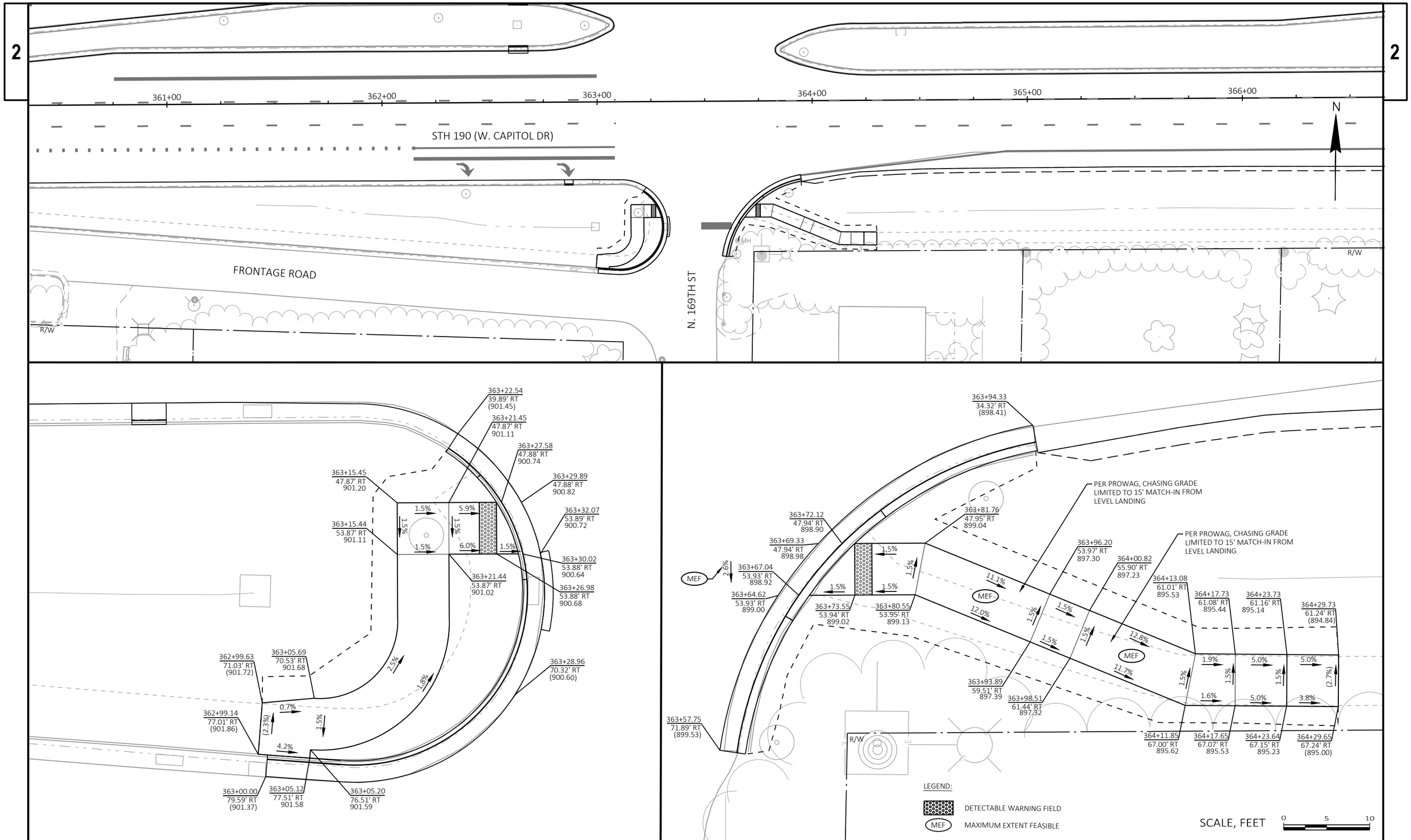
FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021302_CR.DWG
LAYOUT NAME - 021316_cr

PLOT DATE : 8/20/2025 11:10 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ########## WISDOT/CADDS SHEET 42



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 107	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021302_CR.DWG
LAYOUT NAME - 021317_cr
PLOT DATE : 8/20/2025 11:10 AM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 108	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021302_CR.DWG
LAYOUT NAME - 021318_cr
PLOT DATE : 8/20/2025 11:11 AM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

2

R/W

FOUNTAIN PLAZA DR

MH

R/W

N

STH 190 (W. CAPITOL DR)

PT: 376+05.07

+00

373+00

374+00

375+00

376+00

377+00

378+00

STH 190 (W. CAPITOL DR)

374+20.75
-102.53' LT
(850.23)

374+26.70
-102.56' LT
849.96

374+38.59
-102.71' LT
849.00

374+43.24
-102.67' LT
848.93

PER PROWAG, CHASING GRADE
LIMITED TO 15' MATCH-IN FROM
LEVEL LANDING

374+49.26
-105.37' LT
848.16

374+56.16
-108.47' LT
847.29

374+64.88
-108.52' LT
847.15

374+83.54
-113.39' LT
(846.74)

374+77.30
-108.61' LT
846.95

374+79.99
-108.63' LT
847.03

374+73.54
-102.58' LT
847.23

374+70.03
-102.56' LT
847.15

374+64.92
-102.52' LT
847.20

374+57.44
-102.48' LT
847.23

374+50.99
-99.58' LT
848.07

374+44.53
-96.69' LT
848.84

374+38.59
-96.57' LT
848.91

374+26.69
-96.51' LT
849.87

374+20.73
-96.35' LT
(850.01)

374+20.73
-93.98' LT
(849.69)

4.5%
(3.6%)
2.3%
8.0%
1.5%
8.0%
1.5%
1.2%
1.5%
11.5%
11.5%
1.5%
10.8%
11.8%
1.0%
1.6%
0.4%
1.5%
0.8%
1.0%
MEF
MEF
2.4%

BACK OF CURB RADIUS = 39.50'
CHORD LENGTH = 9.70'
XR= 11.83'

PEDESTRIAN CURB (TYP.)

N

375+75.37
-120.46' LT
(843.46)

375+70.34
-117.27' LT
843.52

375+60.26
-110.88' LT
844.49

375+49.58
-109.35' LT
844.84

375+55.52
-109.43' LT
844.57

375+78.53
-115.38' LT
(843.52)

375+73.50
-112.19' LT
843.61

375+63.44
-105.80' LT
844.58

375+59.77
-103.49' LT
844.62

375+30.38
-111.04' LT
(844.94)

375+32.43
-109.13' LT
844.80

375+35.41
-109.16' LT
844.72

375+39.88
-103.22' LT
844.75

375+43.41
-103.26' LT
844.67

375+49.66
-103.35' LT
844.75

375+52.43
-96.17' LT
(844.27)

375+55.61
-103.44' LT
844.66

MEF

2.6%

BACK OF CURB RADIUS = 74.00'
CHORD LENGTH = 10.25'
XR= 12.25'

1.0%
(1.0%)
8.1%
1.5%
1.5%
8.1%
0.8%
4.5%
1.5%
1.5%
1.5%
1.5%
1.3%
1.5%
1.0%
0.9%

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 109	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021302_CR.DWG
LAYOUT NAME - 021319_cr

PLOT DATE : 8/20/2025 11:11 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

2

STH 190 (W. CAPITOL DR)

372+00 373+00 374+00 375+00 376+00 377+00 378+00

PT: 376+05.0

STH 190 (W. CAPITOL DR)

N

MH

R/W

N. 165TH ST

R/W

N

374+63.99
47.33' RT
(847.28)

374+57.75
55.28' RT
846.88

374+62.77
55.20' RT
846.80

374+51.85
55.38' RT
846.98

374+45.86
57.26' RT
847.10

374+69.51
55.08' RT
846.58

374+72.18
55.04' RT
846.66

374+76.83
60.95' RT
846.55

374+74.40
61.00' RT
846.47

374+68.25
61.11' RT
846.56

374+85.29
78.60' RT
845.87

MEF

2.5%

374+33.88
61.02' RT
846.96

374+28.65
61.01' RT
(846.86)

1.9% 1.1% 1.9% 1.7% 1.5% 3.3% 1.5%

(2.2%) 1.5% 1.0% 1.5% 2.0% 1.5% 1.0% 1.0% 3.4%

5.0%

374+47.68
62.98' RT
847.18

374+52.82
61.36' RT
847.07

374+57.85
61.28' RT
846.82

374+62.88
61.20' RT
846.74

R/W

374+28.69
67.01' RT
(846.99)

374+34.81
67.02' RT
847.05

375+46.10
36.44' RT
(844.22)

375+46.90
39.33' RT
(844.44)

375+41.27
41.35' RT
844.72

375+36.01
44.20' RT
844.86

375+30.58
48.42' RT
845.03

375+31.78
54.42' RT
845.12

375+24.04
54.48' RT
844.64

375+21.63
54.49' RT
844.72

375+18.45
60.51' RT
844.77

375+20.65
60.50' RT
844.69

375+25.31
60.47' RT
844.76

375+15.56
70.54' RT
844.83

4.7% (3.8%) 2.4% 1.5% 2.8% 2.4% 1.5% 2.8% 1.5% 4.4% 1.0% 6.2% 1.0% 1.5% 1.5% 6.5% 1.5%

375+48.55
45.10' RT
(844.67)

375+43.79
46.80' RT
844.81

375+39.34
49.20' RT
844.95

375+37.81
54.37' RT
845.18

375+31.83
60.42' RT
845.18

375+37.86
60.37' RT
845.27

R/W

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 110	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021302_CR.DWG
LAYOUT NAME - 021320_cr

PLOT DATE : 8/20/2025 11:11 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

STH 190 (W. CAPITOL DR)

8+00 379+00 380+00 381+00 382+00 383+00 384+00

STH 190 (W. CAPITOL DR)

MH MH

BRADEE RD

R/W

N

380+62.57
60.56' RT
(827.48)

380+68.56
60.28' RT
827.53

380+80.55
59.71' RT
827.77

380+84.47
53.15' RT
(827.68)

380+87.23
59.39' RT
827.53

380+89.73
59.27' RT
827.61

380+93.44
65.10' RT
827.53

380+91.18
65.21' RT
827.45

380+86.30
65.44' RT
827.52

380+62.86
66.55' RT
(827.61)

380+68.85
66.27' RT
827.63

380+80.84
65.70' RT
827.72

381+00.19
83.07' RT
827.41

0.8% 2.0% 3.6% 0.8% 1.5% 0.3% 0.8% 3.6% (2.2%) 1.7%

R/W

381+39.08
49.49' RT
(825.95)

381+36.36
56.86' RT
826.10

381+34.01
56.98' RT
826.18

381+33.51
63.02' RT
826.13

381+31.33
63.13' RT
826.21

381+37.86
62.79' RT
826.20

381+28.05
84.77' RT
826.76

381+43.61
56.49' RT
826.24

381+49.09
56.20' RT
826.07

381+55.23
56.18' RT
(825.89)

381+43.92
62.48' RT
826.33

381+49.25
62.20' RT
826.16

381+55.25
62.18' RT
(826.03)

2.0% 3.0% 3.0% 1.5% 1.5% (2.3%) 1.5% 2.1% 3.2% 2.2%

R/W

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 111	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021303_CR.DWG
LAYOUT NAME - 021321_cr

PLOT DATE : 8/20/2025 11:12 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

2

R/W

N. 162ND ST

MH

N

R/W

STH 190 (W. CAPITOL DR)

385+00 386+00 387+00 388+00 389+00 390+00

STH 190 (W. CAPITOL DR)

R/W

386+81.03
-128.67' LT
(816.69)

386+86.01
-128.20' LT
816.52

386+95.97
-127.27' LT
816.05

387+07.70
-136.70' LT
815.71

387+01.94
-126.71' LT
815.78

387+06.41
-126.29' LT
815.83

387+04.39
-126.48' LT
815.75

387+04.48
-120.45' LT
815.88

387+02.40
-120.64' LT
815.80

387+01.03
-113.76' LT
(815.85)

386+80.47
-122.69' LT
(816.67)

386+85.45
-122.23' LT
816.43

386+95.41
-121.30' LT
816.12

3.4% 4.7% 4.5% 1.5% (0.3%) 1.5% 4.7% 3.1% 1.5% 4.6%

N. 162ND ST

387+37.24
-145.59' LT
816.06

387+50.62
-124.11' LT
815.78

TLE

387+56.61
-123.84' LT
815.94

387+62.61
-123.58' LT
(816.03)

R/W

387+45.16
-124.35' LT
815.70

387+42.85
-124.45' LT
815.78

387+49.04
-118.17' LT
815.66

387+46.50
-118.29' LT
815.74

387+56.35
-117.85' LT
815.85

387+62.34
-117.58' LT
(816.01)

387+53.65
-109.95' LT
(815.58)

1.5% 2.7% 1.5% 1.5% (0.3%) 2.6% 2.6%

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 112	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021303_CR.DWG
LAYOUT NAME - 021322_cr

PLOT DATE : 8/20/2025 11:12 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

STH 190 (W. CAPITOL DR)

N

2

385+00 386+00 387+00 388+00 389+00 390+00

STH 190 (W. CAPITOL DR)

R/W

MH

MH

LONE ELM DR

R/W

386+84.45
44.91' RT
(815.81)

386+87.11
53.15' RT
815.58

386+91.69
53.29' RT
815.51

386+94.61
53.38' RT
(815.59)

386+97.29
59.46' RT
815.47

387+00.19
59.96' RT
(815.49)

386+71.23
54.53' RT
814.65

386+81.11
52.97' RT
815.45

386+50.19
56.17' RT
(813.47)

386+56.19
56.14' RT
813.77

386+61.36
56.14' RT
813.85

386+80.93
58.96' RT
815.54

386+86.93
59.15' RT
815.63

386+50.19
62.16' RT
(813.67)

386+56.19
62.14' RT
813.86

386+62.19
62.14' RT
813.96

386+72.06
60.47' RT
814.75

5.0% 1.5% 8.0% 1.5% 1.5% 1.5% 0.8%
(3.3%) 1.5% 1.8% 7.1% 8.3% 1.5% 1.5%
3.2% 1.7% 8.3%

BACK OF CURB RADIUS = 60.00'
CHORD LENGTH = 8.47'
XR= 9.05°

387+52.99
47.70' RT
(815.27)

387+49.82
55.05' RT
815.12

387+47.53
54.98' RT
815.20

387+44.65
60.90' RT
815.14

387+46.78
60.96' RT
815.06

387+42.26
69.67' RT
815.12

387+56.57
55.26' RT
815.19

387+62.57
55.44' RT
815.23

387+68.51
55.84' RT
(815.28)

387+56.39
61.26' RT
815.16

387+62.39
61.44' RT
815.30

387+68.38
61.84' RT
(815.33)

387+50.80
61.09' RT
815.10

1.0% 0.8% 0.8%
0.5% 1.5% (0.8%)
1.0% 1.0% 2.3% 0.5%

R/W

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 113	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021303_CR.DWG
LAYOUT NAME - 021323_cr

PLOT DATE : 8/20/2025 11:13 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

2

R/W

BROOK LN

N

STH 190 (W. CAPITOL DR)

394+00 395+00 396+00 397+00 398+00 399+00

STH 190 (W. CAPITOL DR)

396+13.64
-156.55' LT
(814.29)

396+20.18
-157.33' LT
814.39

396+25.64
-157.98' LT
814.43

396+31.60
-158.69' LT
814.34

396+35.56
-159.16' LT
814.30

396+32.31
-152.73' LT
814.25

396+20.89
-151.37' LT
814.42

396+26.35
-152.02' LT
814.34

396+15.51
-150.73' LT
(814.47)

(3.0%)

1.5% 0.7% 1.5% 1.0%

0.5% 1.5% 1.5%

0.9% 1.5%

BROOK LN

396+92.11
-181.77' LT
(814.77)

396+98.07
-181.08' LT
(814.60)

396+91.42
-175.82' LT
814.68

396+97.38
-175.12' LT
814.51

396+84.20
-175.16' LT
(814.02)

396+97.34
-166.51' LT
814.18

396+91.38
-165.81' LT
814.09

397+07.93
-164.69' LT
814.32

396+84.90
-165.04' LT
813.86

396+82.85
-164.79' LT
813.94

396+82.05
-158.66' LT
813.90

396+84.09
-158.90' LT
813.82

396+86.12
-159.14' LT
813.84

396+81.40
-153.74' LT
(813.88)

396+92.10
-159.85' LT
814.02

396+98.06
-160.55' LT
814.09

397+05.40
-159.25' LT
814.23

397+18.65
-153.09' LT
814.45

397+21.18
-158.53' LT
814.54

397+27.29
-157.17' LT
814.49

397+32.29
-157.17' LT
(814.45)

397+32.29
-151.17' LT
(814.22)

397+27.29
-151.17' LT
814.30

(1.2%) 1.5% 1.5%

1.2% 5.8% 3.8%

3.5% 1.5% 1.3%

1.2% 1.5% 1.5%

1.0% 3.0% 1.2% 1.9%

1.5% 1.5% 1.5%

1.5% 1.5% 0.8%

0.8% 3.1% (4.6%)

1.7% 1.5%

PEDESTRIAN
CURB (TYP.)

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

R/W

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 114	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021303_CR.DWG
LAYOUT NAME - 021324_cr

PLOT DATE : 8/20/2025 11:13 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

STH 190 (W. CAPITOL DR)

394+00 395+00 396+00 397+00 398+00 399+00

STH 190 (W. CAPITOL DR)

N

MH

MH

R/W

BROOK LN

R/W

396+08.15
53.60' RT
(815.03)

MH

395+92.86
60.58' RT
(815.54)

395+98.86
60.77' RT
815.27

396+04.86
60.95' RT
815.08

396+11.78
61.16' RT
814.89

396+14.27
61.24' RT
814.97

396+17.93
67.35' RT
814.94

396+15.62
67.28' RT
814.86

4.5% 2.8% 2.8% (0.7%) 1.5% 0.5% 2.8% 4.2% 3.0% 1.5%

R/W

395+92.68
66.58' RT
(815.50)

395+98.68
66.76' RT
815.36

396+04.67
66.95' RT
815.11

396+10.33
67.12' RT
814.94

396+24.58
89.07' RT
814.81

396+60.34
54.42' RT
(814.65)

396+58.58
62.59' RT
814.59

396+56.49
62.52' RT
814.67

396+54.78
68.47' RT
814.73

396+56.83
68.54' RT
814.65

396+52.69
76.39' RT
814.80

396+65.57
62.80' RT
814.69

396+71.57
62.98' RT
814.78

396+77.56
63.17' RT
814.71

396+83.56
63.36' RT
(814.69)

396+83.38
69.35' RT
(814.70)

1.4% 1.5% 1.2% 0.3% 1.5% 1.5% 1.5% 1.3% (0.2%) 1.5% 1.5% 1.5% 1.3% 1.5%

396+59.46
68.62' RT
814.69

396+65.39
68.80' RT
814.78

396+71.38
68.98' RT
814.87

396+77.38
69.16' RT
814.79

R/W

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

SCALE, FEET 0 5 10

2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 115	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021303_CR.DWG
LAYOUT NAME - 021325_cr

PLOT DATE : 8/20/2025 11:13 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

2

N

R/W

STH 190 (W. CAPITOL DR)

STH 190 (W. CAPITOL DR)

398+00 399+00 400+00 401+00 402+00 403+00

PC: 403+44.42

R/W

400+26.06
-156.77' LT
(808.34)

400+31.06
-156.75' LT
808.32

400+36.07
-156.73' LT
808.24

400+39.11
-156.72' LT
(808.18)

MEF

0.6%
1.5%
2.0%
2.6%
2.4%
(2.6%)
(0.6%)
1.5%
2.4%
2.0%
3.4%

400+26.21
-151.77' LT
(808.37)

400+31.22
-151.75' LT
808.24

400+36.23
-151.73' LT
808.12

400+39.90
-151.71' LT
(808.05)

TLE

400+75.85
-158.34' LT
807.66

400+81.85
-158.53' LT
807.69

400+86.96
-158.58' LT
(807.71)

400+73.84
-158.28' LT
807.66

400+72.84
-158.24' LT
(807.70)

400+73.01
-153.25' LT
(807.71)
HP

400+75.01
-153.31' LT
807.63

400+76.01
-153.34' LT
807.65

400+76.80
-147.33' LT
808.01

400+75.16
-140.81' LT
(807.57)

400+78.09
-141.47' LT
(807.96)

0.5%
0.5%
0.4%
0.4%
1.5%
1.0%
2.4%
(2.4%)
5.9%
5.9%
1.0%
0.8%
1.4%
(0.5%)

400+87.01
-153.58' LT
(807.83)

400+82.01
-153.53' LT
807.71

400+82.70
-148.43' LT
808.07

400+83.94
-142.79' LT
(807.99)

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 116	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021303_CR.DWG
LAYOUT NAME - 021326_cr

PLOT DATE : 8/20/2025 11:13 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

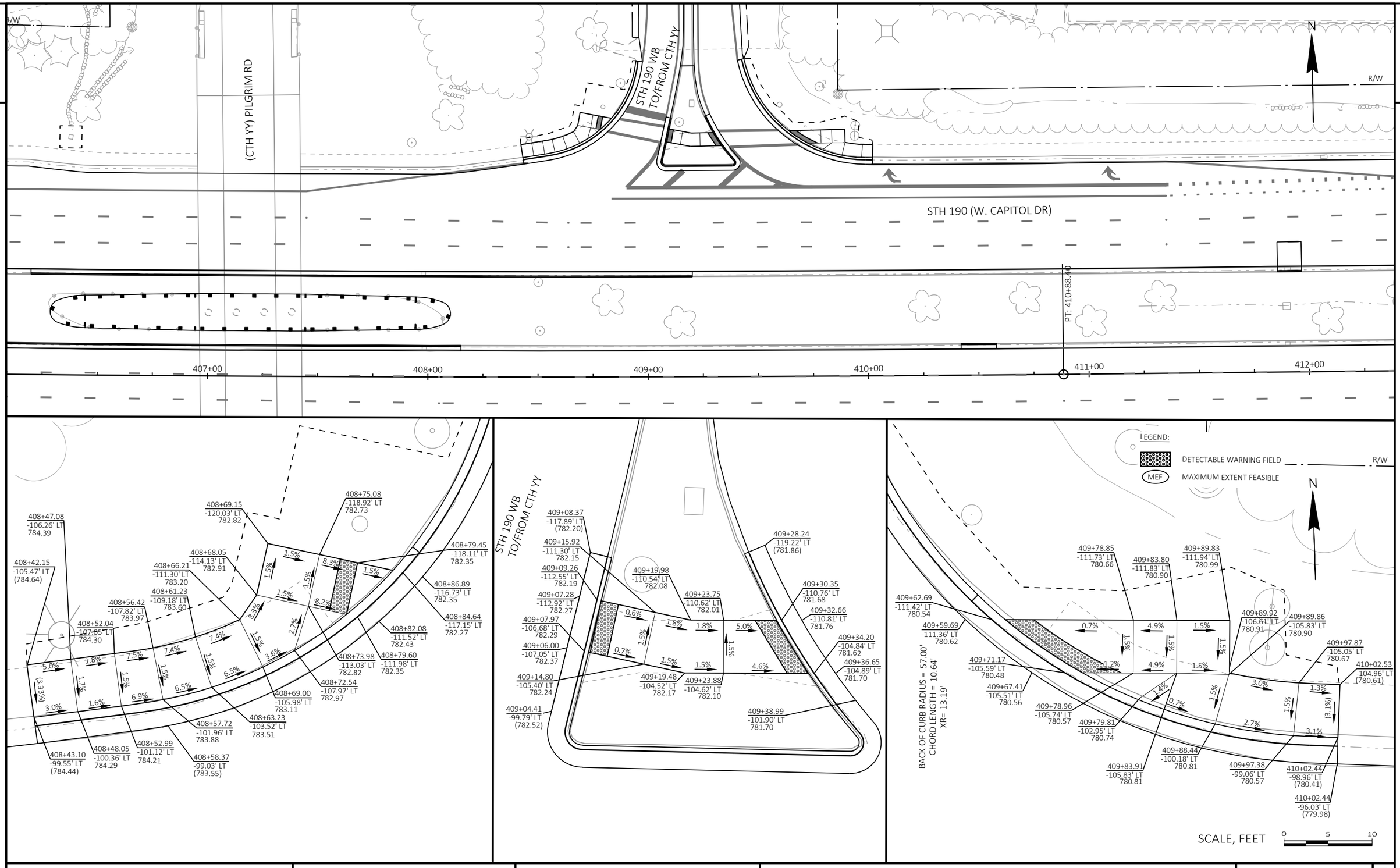
403+00
STH 190 (W. CAPITOL DR)
404+00
405+00
406+00
407+00
408+00
STH 190 (W. CAPITOL DR)
MH
N
R/W
R/W
STH 190 EB
TO/FROM CTH YY

404+99.25
39.92' RT
(794.09)
404+81.85
48.44' RT
(793.39)
404+87.62
54.11' RT
793.13
LP
404+91.88
59.81' RT
793.21
404+84.21
64.33' RT
793.69
404+79.05
67.36' RT
793.78
404+90.16
60.83' RT
793.16
404+94.81
65.05' RT
793.30
404+93.08
66.06' RT
793.25
404+98.58
75.87' RT
793.54
404+66.16
74.96' RT
796.17
404+61.00
78.00' RT
796.26
404+55.85
81.05' RT
(796.50)
404+58.88
86.22' RT
(796.65)
404+87.24
69.50' RT
793.78
404+82.08
72.54' RT
793.87
404+69.19
80.14' RT
796.26
404+64.03
83.18' RT
796.35
PER PROWAG, CHASING GRADE
LIMITED TO 15' MATCH-IN FROM
LEVEL LANDING
MEF
405+13.86
46.91' RT
793.79
405+16.03
45.64' RT
793.81
405+20.16
45.63' RT
793.84
405+24.91
45.63' RT
793.77
405+35.50
39.86' RT
(793.30)
405+09.01
49.75' RT
793.72
405+07.71
50.51' RT
793.80
405+32.63
45.62' RT
793.33
405+34.31
45.62' RT
793.25
405+33.09
51.62' RT
793.42
405+12.03
54,93' RT
793.65
405+10.73
55.69' RT
793.73
405+16.88
52.09' RT
793.70
405+20.16
51.64' RT
793.75
405+31.31
51.62' RT
793.34
405+24.92
51.63' RT
793.68
405+15.57
67.46' RT
(793.71)
405+29.87
67.56' RT
(793.66)
405+43.71
70.14' RT
(793.26)
BACK OF CURB RADIUS = 39.00'
CHORD LENGTH = 8.63'
XR= 9.63'
405+89.83
39.86' RT
791.89
405+99.30
34.28' RT
(791.21)
405+84.22
41.95' RT
792.06
405+91.99
39.06' RT
791.81
405+91.89
38.03' RT
791.81
405+67.61
46.60' RT
792.42
405+65.27
46.54' RT
792.37
405+96.62
37.55' RT
(791.64)
405+60.25
46.40' RT
792.29
405+77.67
44.39' RT
792.26
405+72.61
46.27' RT
792.49
405+57.22
46.32' RT
792.37
405+97.22
43.52' RT
(791.81)
405+54.22
52.24' RT
792.34
405+91.91
45.49' RT
791.98
405+86.30
47.58' RT
792.15
405+51.71
52.17' RT
792.42
405+79.75
50.01' RT
792.35
405+65.11
52.54' RT
792.46
405+67.44
52.60' RT
792.51
405+72.43
52.74' RT
792.58

LEGEND:
DETECTABLE WARNING FIELD
MEF MAXIMUM EXTENT FEASIBLE

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 117	E



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 118	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021303_CR.DWG
LAYOUT NAME - 021328_cr

PLOT DATE : 8/20/2025 11:14 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

2

N

R/W

R/W

GLENWOOD EXECUTIVE
CENTRE DRIVEWAY

STH 190 (W. CAPITOL DR)

415+00 416+00 417+00 418+00 419+00 420+00

STH 190 (W. CAPITOL DR)

R/W

417+45.76
-122.12' LT
(766.89)

417+17.92
-105.06' LT
767.18

417+00.45
-105.03' LT
(767.98)

417+06.45
-105.03' LT
767.71

417+12.45
-105.03' LT
767.43

417+31.39
-105.03' LT
766.98

417+34.58
-105.03' LT
767.06

417+00.45
-99.03' LT
(767.78)

417+27.58
-100.27' LT
767.13

417+18.78
-99.06' LT
767.11

417+00.44
-96.03' LT
(767.36)

417+06.45
-99.04' LT
767.62

417+12.44
-99.11' LT
767.34

4.6% 4.6% 4.6% 1.5% (3.3%) 1.5% 1.5% 1.5% 2.7% 4.6% 4.2%

BACK OF CURB RADIUS = 34.00'
CHORD LENGTH = 12.37'
XR= 11.77'

R/W

417+96.62
-122.17' LT
(765.98)

BACK OF CURB RADIUS = 62.00'
CHORD LENGTH = 16.40'
XR= 15.97'

MEF

418+15.83
-104.89' LT
766.22

418+19.97
-104.89' LT
766.14

418+26.34
-99.90' LT
766.25

418+37.86
-98.85' LT
766.26

418+38.20
-104.89' LT
766.34

418+43.83
-104.89' LT
766.52

418+49.83
-104.89' LT
766.71

418+55.83
-104.89' LT
(766.90)

418+43.83
-99.09' LT
766.43

418+49.83
-98.90' LT
766.62

418+55.83
-98.89' LT
(766.77)

418+55.83
-95.89' LT
(766.30)

3.3% 0.7% 1.5% 3.2% 1.5% 3.2% 1.5% 3.2% (2.2%) 3.0% 3.2% 2.5%

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 119	E

2

2

N

R/W

R/W

CLARE-BRIDGE LN

STH 190 (W. CAPITOL DR)

STH 190 (W. CAPITOL DR)

422+00

423+00

424+00

425+00

426+00

427+00

428+00

TLE

R/W

R/W

MEF

CLARE-BRIDGE LN

424+80.60
-138.30' LT
(764.56)

424+60.08
-126.83' LT
765.16

424+66.17
-126.83' LT
765.07

424+70.90
-126.83' LT
764.73

424+75.19
-126.83' LT
764.67

424+77.36
-126.83' LT
764.75

424+74.38
-120.83' LT
764.85

424+72.05
-120.83' LT
764.77

424+66.17
-120.83' LT
765.16

424+68.27
-117.15' LT
765.33

424+63.97
-112.35' LT
765.44

424+59.63
-108.62' LT
765.53

424+54.88
-105.44' LT
765.61

424+49.64
-102.81' LT
(765.65)

424+50.83
-100.06' LT
(765.30)

424+47.27
-108.32' LT
(765.80)

424+51.75
-110.56' LT
765.70

424+55.93
-113.34' LT
765.62

424+59.75
-116.61' LT
765.53

424+60.08
-120.83' LT
765.25

1.5%

7.2%

4.5%

7.0%

6.8%

4.3%

1.8%

1.7%

1.6%

2.0%

(2.5%)

0.7%

1.4%

2.5%

425+05.34
-133.28' LT
(765.77)

425+12.95
-126.83' LT
764.79

425+09.45
-126.83' LT
764.77

425+07.30
-126.83' LT
764.85

425+10.11
-120.83' LT
764.91

425+12.40
-120.83' LT
764.83

425+18.95
-120.83' LT
765.08

425+15.31
-113.05' LT
(765.11)

425+18.95
-126.83' LT
765.02

425+24.95
-126.83' LT
765.08

425+30.95
-126.83' LT
(764.88)

425+24.95
-120.83' LT
764.99

425+30.95
-120.83' LT
(764.81)

0.6%

3.8%

1.0%

3.3%

(1.2%)

1.5%

3.0%

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

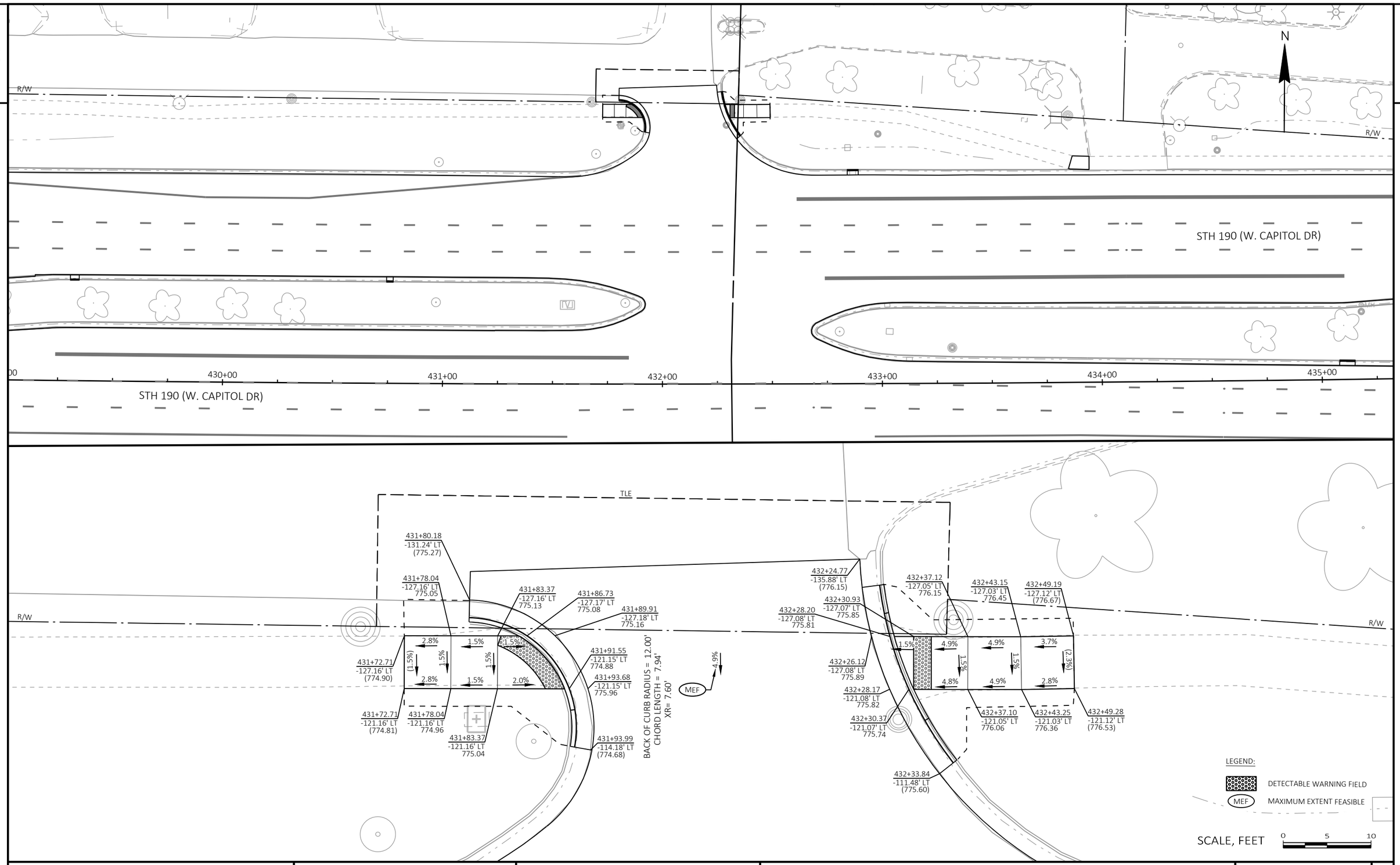
SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 120	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021303_CR.DWG
LAYOUT NAME - 021330_cr

PLOT DATE : 8/20/2025 11:15 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 121	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021304_CR.DWG
LAYOUT NAME - 021331_cr
PLOT DATE : 8/20/2025 11:16 AM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

2

STH 190 (W. CAPITOL DR)

N

430+00 431+00 432+00 433+00 434+00 435+00

STH 190 (W. CAPITOL DR)

R/W

R/W

431+90.92
46.35' RT
(772.35)

431+85.28
56.91' RT
772.05

431+91.11
56.92' RT
771.97

431+98.37
56.93' RT
771.79

432+00.87
56.93' RT
771.87

432+02.44
62.94' RT
771.74

432+04.75
62.94' RT
771.82

432+07.14
67.67' RT
(771.59)

431+74.82
59.91' RT
771.16

431+64.29
61.30' RT
(770.82)

431+70.03
61.29' RT
771.08

431+64.29
66.80' RT
(771.03)

431+70.04
66.79' RT
771.16

431+72.63
66.78' RT
771.20

431+76.46
65.68' RT
771.26

431+86.12
62.91' RT
772.08

431+91.11
62.92' RT
772.00

431+97.09
62.93' RT
771.82

MEF

MEF

5.0%

2.8%

1.4% 2.5% 1.5% 1.5% 4.5% 1.5% 8.1% 0.5% 0.5% 1.5% 3.0% 1.5% 1.5% 1.5% 8.2% 7.1% (3.8%) 1.5% 2.2% 1.5% 1.5%

432+27.17
53.99' RT
(773.03)

432+27.16
56.99' RT
772.87

432+29.15
57.00' RT
772.79

432+27.19
62.99' RT
772.68

432+29.18
63.00' RT
772.60

432+27.19
65.99' RT
(772.60)

432+37.22
54.02' RT
(772.92)

432+37.27
57.02' RT
772.76

432+35.28
57.02' RT
772.68

432+37.33
63.02' RT
772.59

432+35.34
63.02' RT
772.51

432+37.35
66.02' RT
772.56

1.8% 1.5%

432+72.88
39.86' RT
774.84

432+70.12
46.21' RT
775.06

432+74.66
42.27' RT
(775.19)

432+66.37
50.62' RT
774.76

432+68.54
57.04' RT
774.59

432+78.22
47.10' RT
(775.28)

432+61.45
57.08' RT
774.01

432+59.26
57.09' RT
774.09

432+74.37
50.43' RT
775.15

432+74.52
57.01' RT
774.68

432+74.55
63.01' RT
774.59

432+57.22
63.10' RT
774.03

432+59.28
63.09' RT
773.95

432+56.31
67.61' RT
(773.85)

432+62.58
63.07' RT
774.00

432+68.57
63.04' RT
774.50

2.2% 1.5% 1.5% 5.2% 1.5% 1.5% 7.1% 1.5% 1.5% 8.2% 1.5% 1.5% 1.5% 8.3% 1.5% 1.5%

FEE

R/W

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

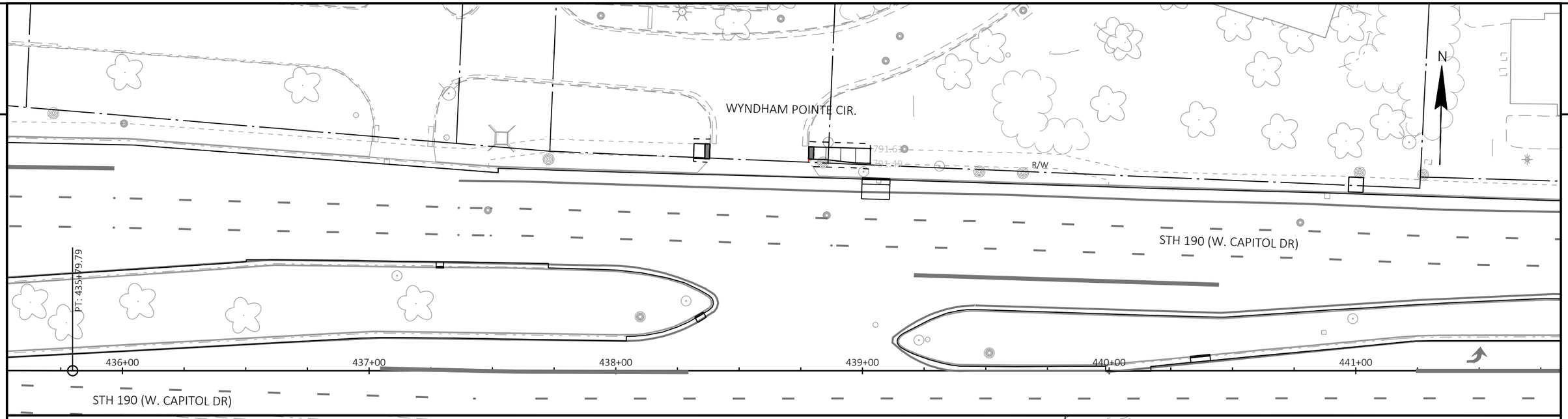
SCALE, FEET 0 5 10

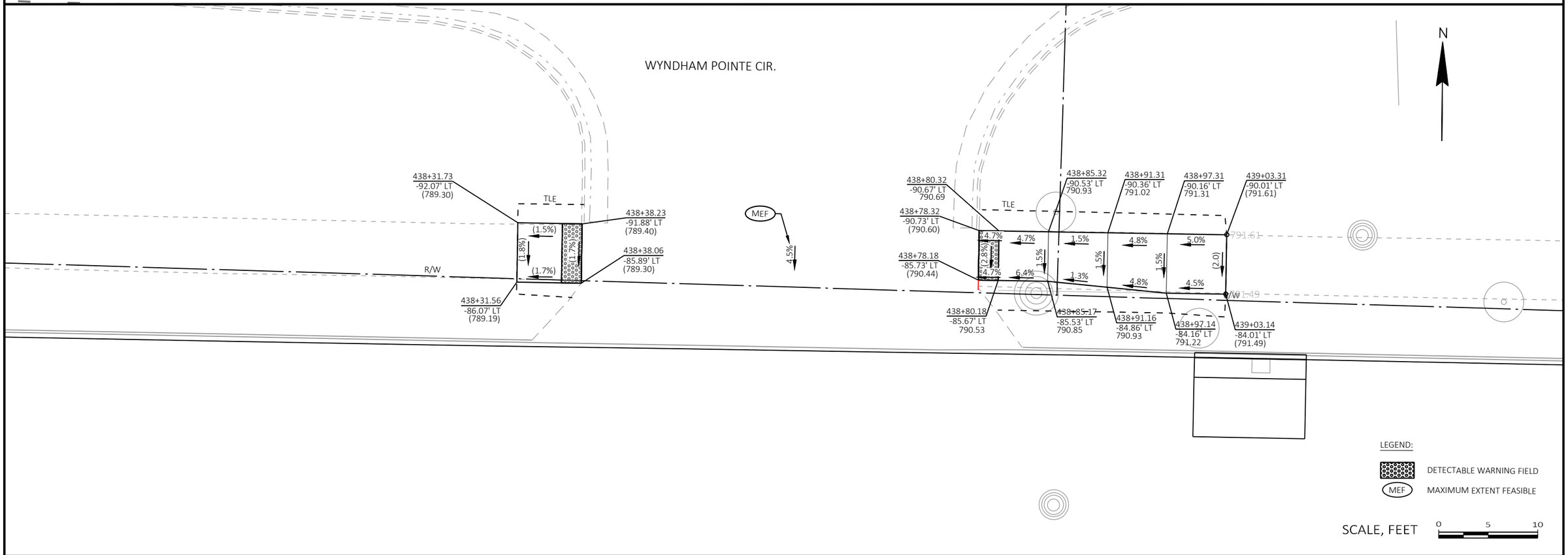
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 122	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021304_CR.DWG
LAYOUT NAME - 021332_cr

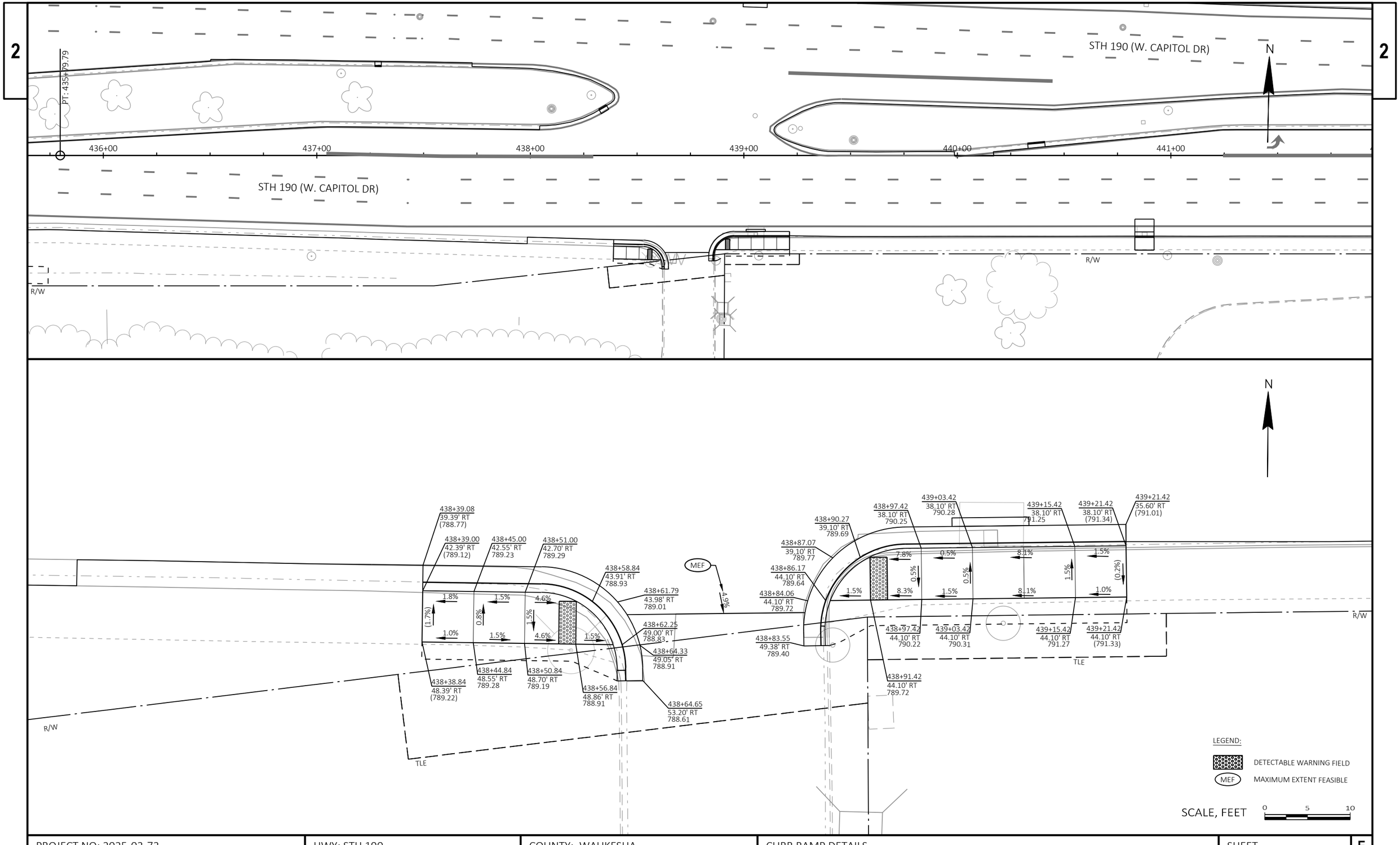
PLOT DATE : 8/20/2025 11:16 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42





PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 123	E



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 124	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021304_CR.DWG
LAYOUT NAME - 021334_cr
PLOT DATE : 8/20/2025 11:17 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

N

N. 145TH ST

R/W

STH 190 (W. CAPITOL DR)

MH

440+00 441+00 442+00 443+00 444+00 445+00 446+00

STH 190 (W. CAPITOL DR)

N. 145TH ST

N

TLE

442+38.37
-74.00' LT
(800.34)

442+44.37
-73.90' LT
800.51

442+50.37
-73.82' LT
800.61

442+56.37
-73.74' LT
800.31

442+73.01
-82.56' LT
800.64

R/W

2.8%
(3.7%)
5.0%
1.5%
1.5%
1.5%
5.0%
4.0%
10.7%
1.1%

442+68.73
-73.57' LT
800.50

442+66.11
-73.61' LT
800.42

442+62.64
-68.31' LT
800.37

442+56.42
-67.91' LT
800.27

442+38.29
-68.01' LT
(800.12)

442+44.29
-67.91' LT
800.42

442+50.29
-67.82' LT
800.51

442+38.25
-65.50' LT
(799.95)

BACK OF CURB RADIUS = 19.50'
CHORD LENGTH = 9.86'
XR= 9.06'

442+97.22
-82.00' LT
(800.98)

TLE

443+13.78
-72.76' LT
801.05

443+19.78
-72.76' LT
801.45

443+25.78
-72.76' LT
801.54

443+31.78
-72.76' LT
(801.77)

R/W

443+01.43
-72.76' LT
801.03

443+04.04
-72.76' LT
800.95

443+07.44
-67.42' LT
801.07

443+13.65
-66.93' LT
800.99

443+19.78
-66.76' LT
801.36

443+25.78
-66.76' LT
801.45

443+31.78
-66.76' LT
(801.57)

443+31.77
-64.27' LT
(801.32)

BACK OF CURB RADIUS = 19.50'
CHORD LENGTH = 9.86'
XR= 9.05'

1.0%
1.1%
6.7%
1.5%
1.5%
1.5%
3.8%
(3.3%)
6.2%
1.5%
2.0%

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

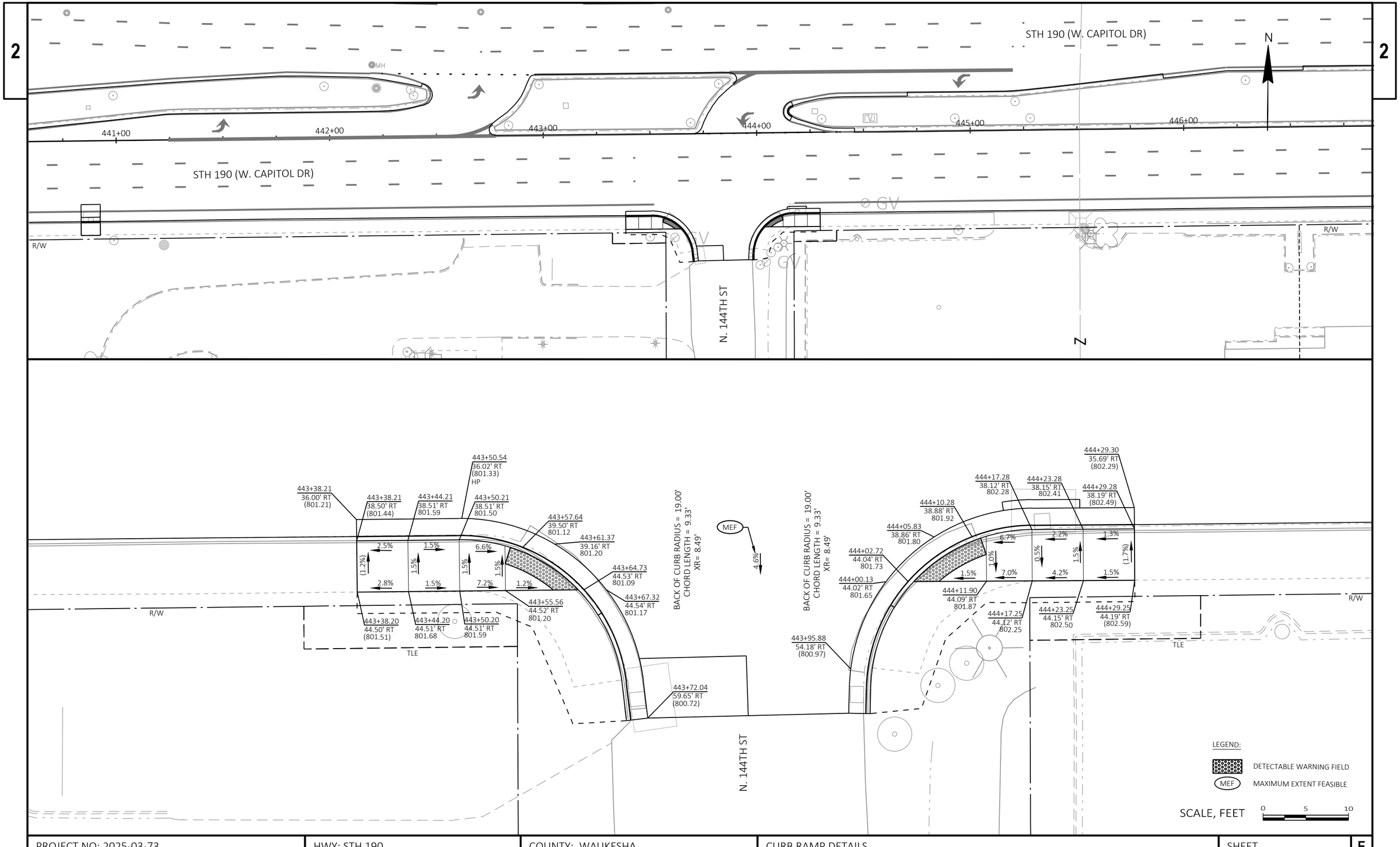
SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 125	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021304_CR.DWG
LAYOUT NAME - 021335_cr

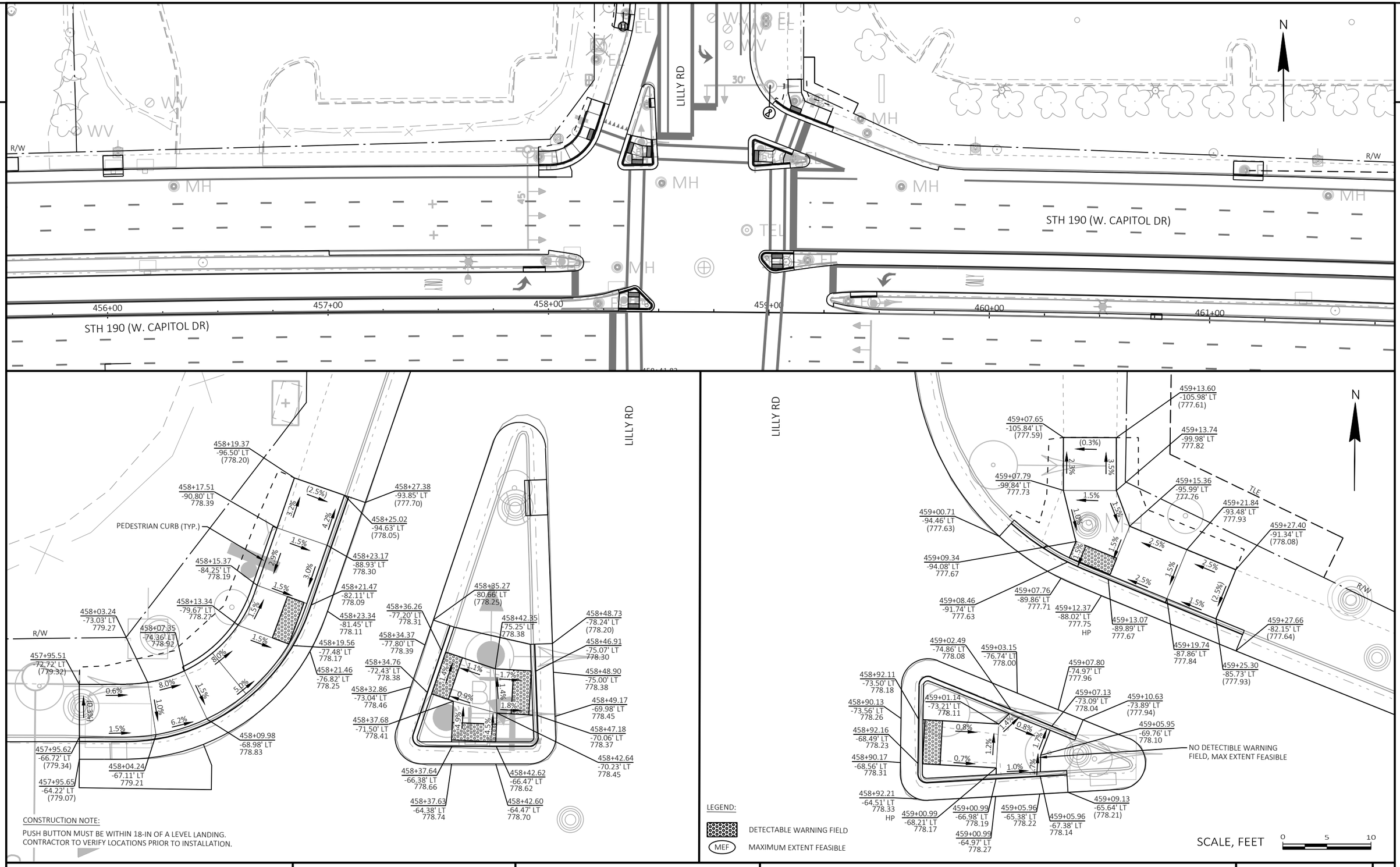
PLOT DATE : 8/20/2025 11:17 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42



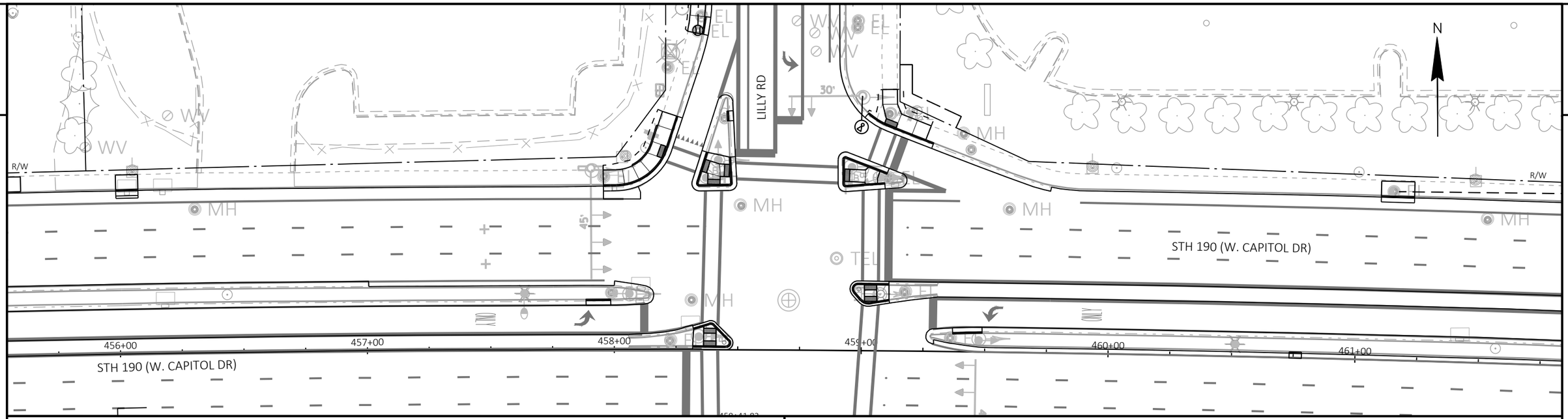
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 126	E

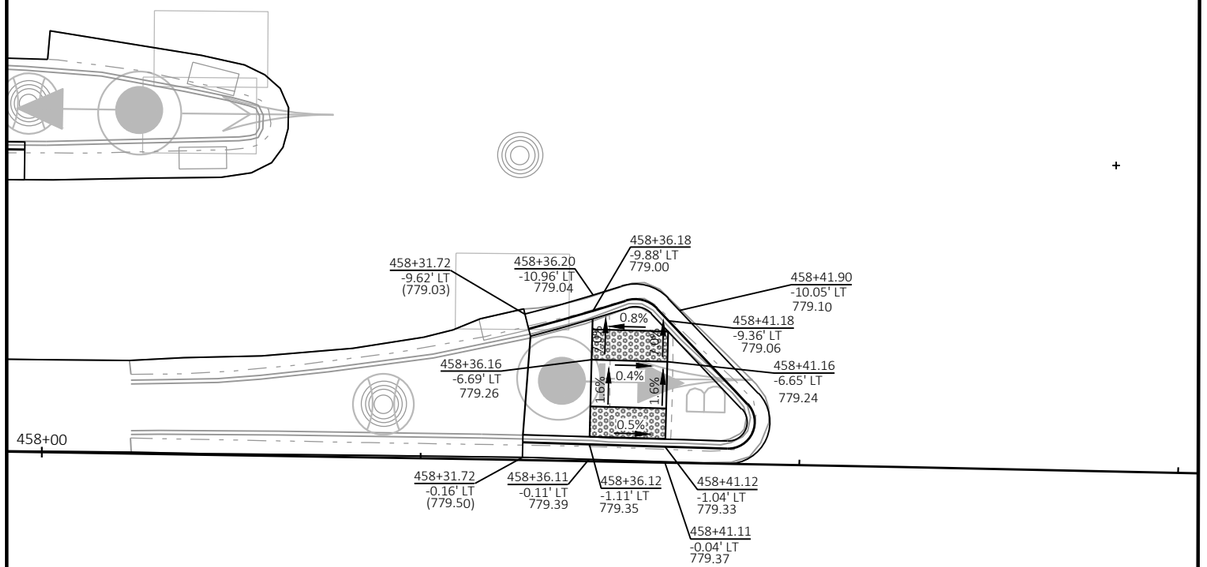
FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021304_CR.DWG
LAYOUT NAME - 021336_cr
PLOT DATE : 8/20/2025 11:17 AM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

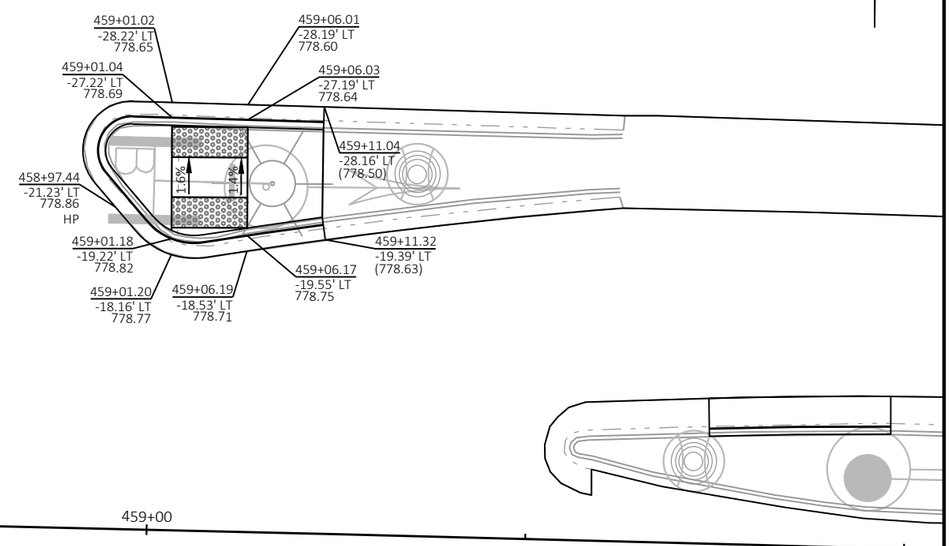


PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 127	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021304_CR.DWG
LAYOUT NAME - 021337_cr
PLOT DATE : 8/20/2025 11:18 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42







CONSTRUCTION NOTE:

PUSH BUTTON MUST BE WITHIN 18-IN OF A LEVEL LANDING.
CONTRACTOR TO VERIFY LOCATIONS PRIOR TO INSTALLATION.

LEGEND:

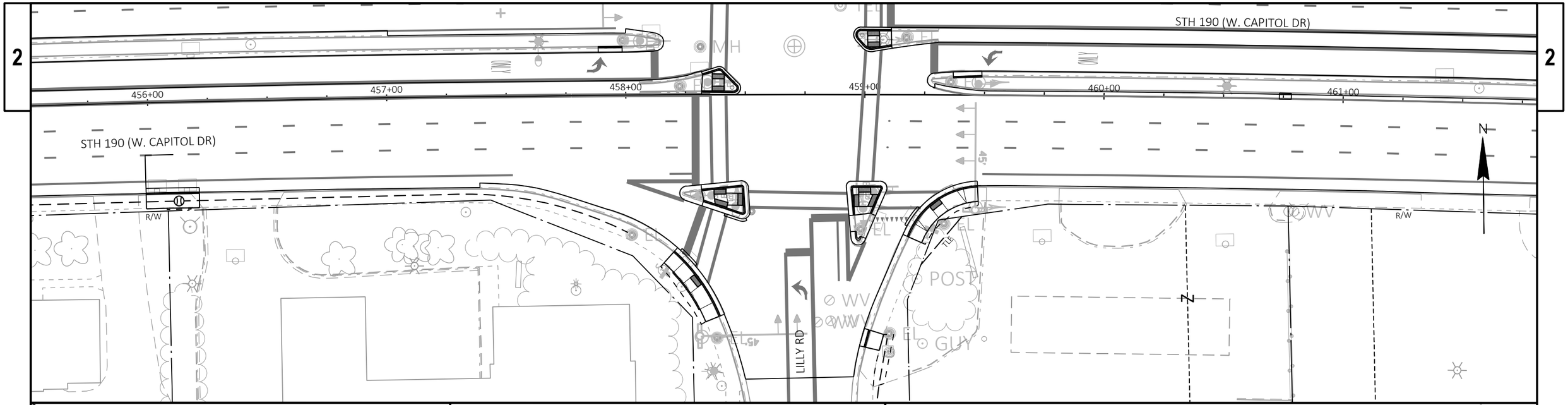
DETECTABLE WARNING FIELD

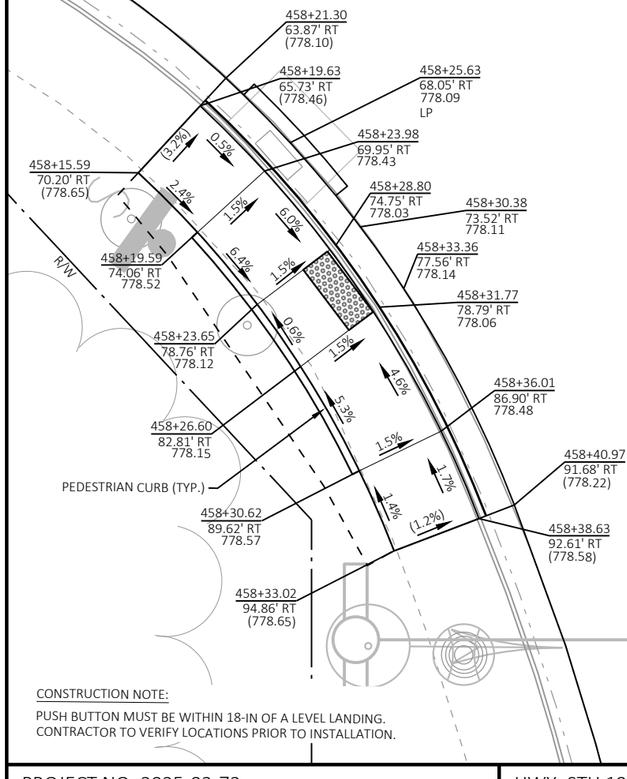
MEF — MAXIMUM EXTENT FEASIBLE

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 128	E

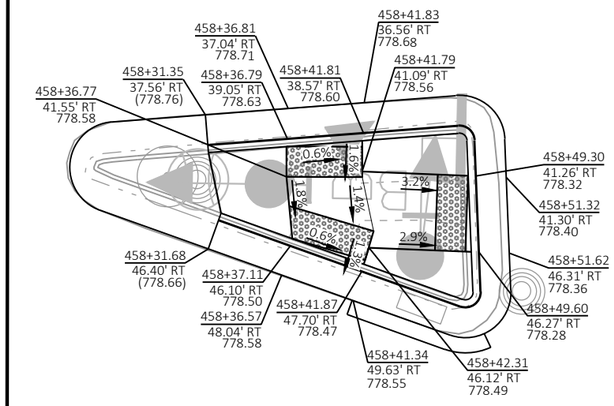
FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021304_CR.DWG
LAYOUT NAME - 021338_cr
PLOT DATE : 8/20/2025 11:18 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

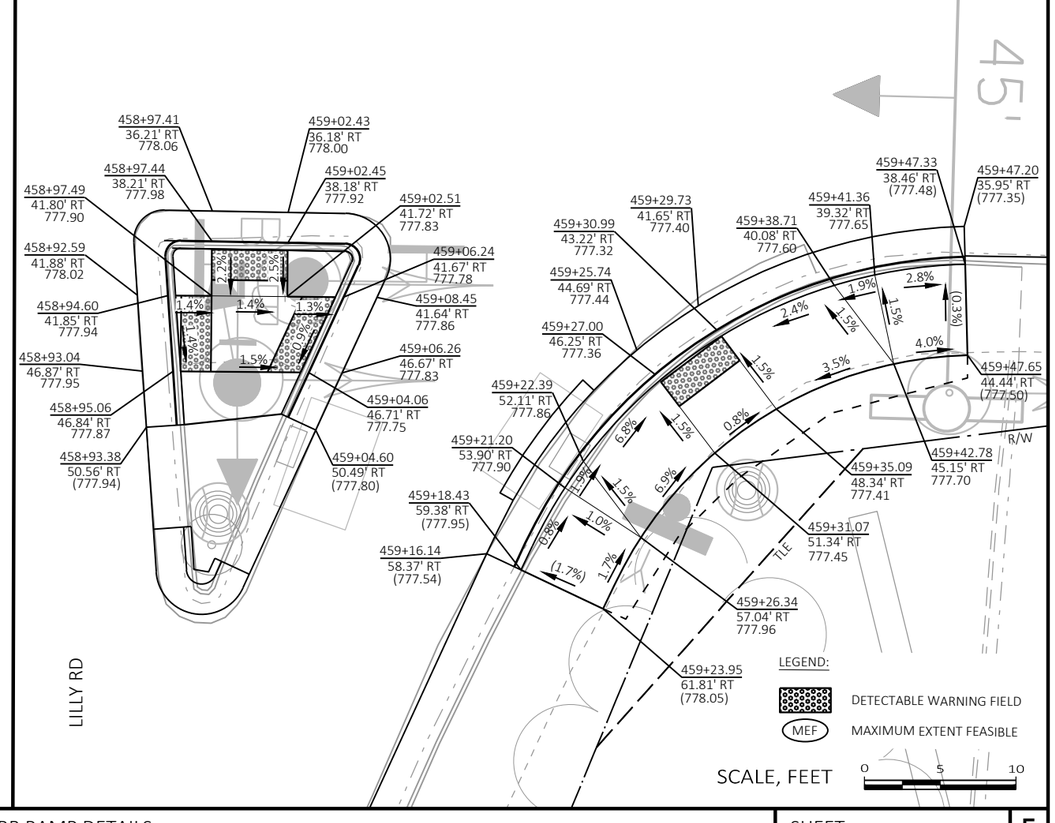




CONSTRUCTION NOTE:

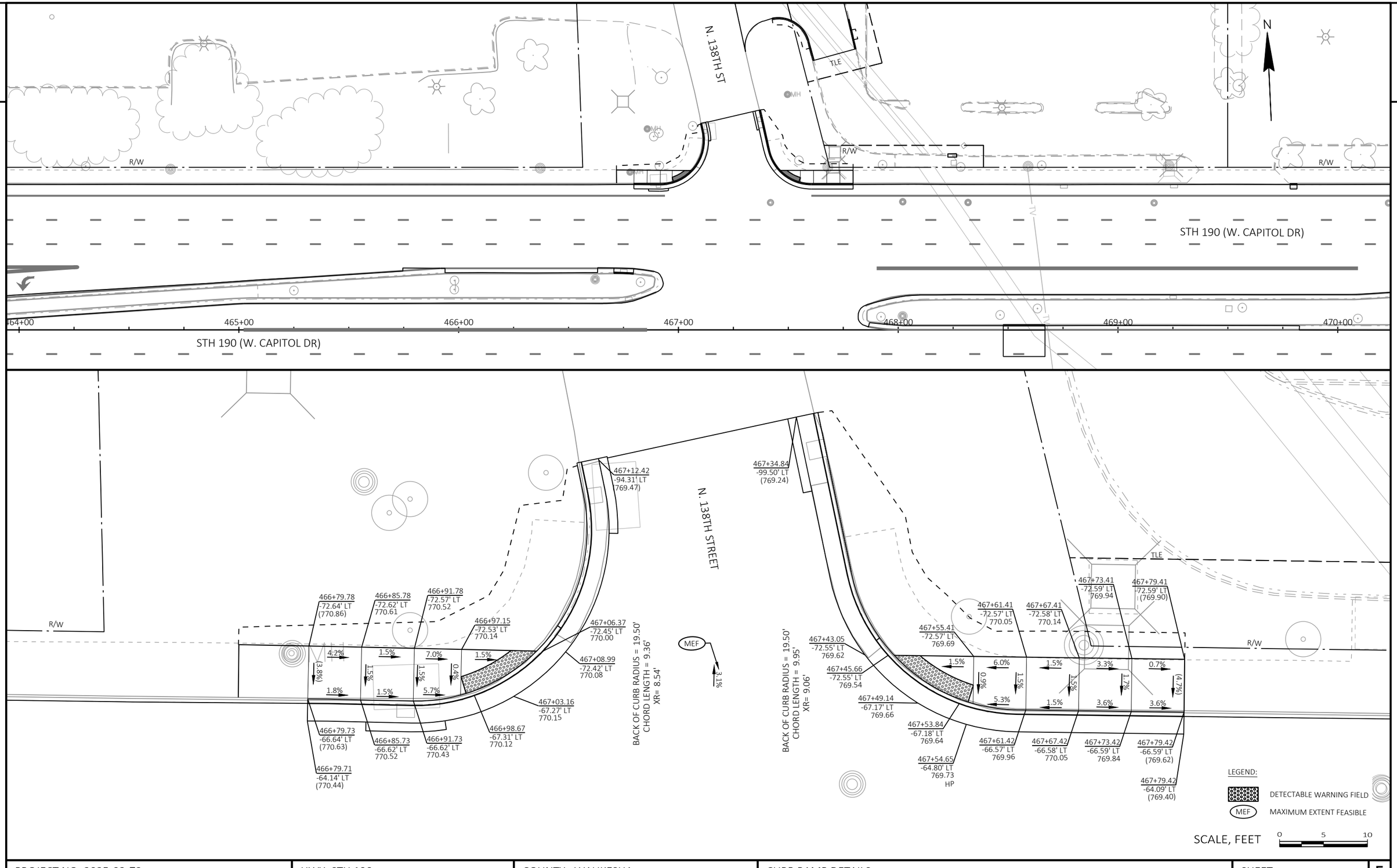
PUSH BUTTON MUST BE WITHIN 18-IN OF A LEVEL LANDING.
CONTRACTOR TO VERIFY LOCATIONS PRIOR TO INSTALLATION.





PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 129	E

2



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 130	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021304_CR.DWG
LAYOUT NAME - 021340_cr

PLOT DATE : 8/20/2025 11:19 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

2

2

STH 190 (W. CAPITOL DR)

N

465+00 466+00 467+00 468+00 469+00 470+00

STH 190 (W. CAPITOL DR)

R/W

TLE

FIEBRANTZ DR

TLE

R/W

N

467+01.26
36.14' RT
(770.33)

467+01.25
38.64' RT
(770.58)

467+07.25
38.67' RT
770.44

467+13.25
38.71' RT
770.35

467+20.86
39.58' RT
770.03

467+25.53
39.61' RT
770.04

MEF

467+28.92
44.80' RT
769.92

467+31.63
44.82' RT
770.00

BACK OF CURB RADIUS = 21.50'
CHORD LENGTH = 9.77'
XR= 9.00'

2.3% (3.5%) 1.5% 1.5% 5.2% 0.8% 2.7%

4.3% 1.5% 6.2% 1.5%

R/W

TLE

467+19.21
44.75' RT
770.07

467+13.21
44.71' RT
770.44

467+01.21
44.63' RT
(770.79)

467+07.21
44.67' RT
770.53

467+37.52
64.68' RT
769.92

FIEBRANTZ DR

BACK OF CURB RADIUS = 16.50'
CHORD LENGTH = 10.08'
XR= 9.00'

467+82.11
38.56' RT
770.00

467+88.11
38.57' RT
770.09

467+88.12
36.07' RT
(769.49)

467+74.31
38.97' RT
769.59

467+69.71
38.96' RT
769.71

467+66.46
44.53' RT
769.65

467+64.00
44.53' RT
769.73

5.3% 1.5% 1.6% 1.5% 1.5%

0.3% 6.8% 1.5%

467+76.10
44.55' RT
769.68

467+82.10
44.56' RT
770.09

467+88.10
44.57' RT
770.18

R/W

TLE

467+60.82
55.49' RT
769.85
HP

467+61.25
63.61' RT
769.68

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 131	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021305_CR.DWG
LAYOUT NAME - 021341_cr

PLOT DATE : 8/20/2025 11:20 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

2

2

N

N. 135TH ST

TLE

TLE

R/W

R/W

MH

STH 190 (W. CAPITOL DR)

473+00

474+00

475+00

475+00

477+00

478+00

STH 190 (W. CAPITOL DR)

N. 135TH ST

475+48.43
-89.80' LT
(784.00)

475+70.78
-88.40' LT
(784.08)

475+01.41
-72.31' LT
(782.86)

475+07.41
-72.32' LT
782.69

475+13.41
-72.33' LT
782.78

475+19.41
-72.34' LT
783.14

475+25.41
-72.35' LT
783.50

475+31.41
-72.36' LT
783.32

TLE

R/W

475+44.10
-72.37' LT
783.35

475+41.51
-72.37' LT
783.27

475+38.26
-67.08' LT
783.32

475+31.56
-66.50' LT
783.23

BACK OF CURB RADIUS = 18.50'
CHORD LENGTH = 10.22'
XR= 9.42'

2.8%
(7.8%)
3.2%
1.6%
1.5%
1.6%
6.0%
1.6%
6.0%
1.6%
6.0%
1.5%
3.0%
1.5%
3.0%
0.5%

475+01.42
-66.49' LT
(782.41)

475+07.42
-66.50' LT
782.60

475+07.43
-64.00' LT
(782.43)

475+13.42
-66.51' LT
782.69

475+19.42
-66.51' LT
783.05

475+25.42
-66.52' LT
783.41

475+76.49
-72.61' LT
784.16

475+79.10
-72.62' LT
784.25

475+82.45
-67.32' LT
784.35

475+89.18
-66.69' LT
784.37

BACK OF CURB RADIUS = 19.50'
CHORD LENGTH = 10.48'
XR= 9.54'

1.5%
4.5%
3.5%
3.5%
4.9%
4.9%
0.5%
1.5%
3.5%
1.5%
3.5%
1.5%
3.5%
1.5%
3.5%
4.5%
3.5%
(7.5%)

475+89.32
-72.63' LT
784.40

475+95.32
-72.64' LT
784.67

476+01.32
-72.65' LT
784.88

476+07.32
-72.66' LT
785.09

476+13.32
-72.67' LT
785.49

476+19.32
-72.65' LT
(785.88)

TLE

R/W

475+95.33
-66.64' LT
784.58

476+01.33
-66.65' LT
784.79

476+07.33
-66.66' LT
785.00

476+13.33
-66.67' LT
785.21

476+19.33
-66.74' LT
(785.43)

LEGEND:

DETECTABLE WARNING FIELD

MEF — MAXIMUM EXTENT FEASIBLE

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 132	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021305_CR.DWG
LAYOUT NAME - 021342_cr

PLOT DATE : 8/20/2025 11:20 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

2

N

N. 133RD ST

TLE

TLE

R/W

R/W

STH 190 (W. CAPITOL DR)

480+00

481+00

482+00

483+00

484+00

485+00

STH 190 (W. CAPITOL DR)

N. 133RD ST

481+86.17
-72.79' LT
(790.26)

481+92.17
-72.79' LT
790.00

481+98.17
-72.78' LT
789.77

482+04.17
-72.78' LT
789.54

482+20.99
-86.81' LT
(789.33)

TLE

R/W

482+13.70
-72.77' LT
789.37

482+16.29
-72.77' LT
789.44

482+10.30
-67.36' LT
789.49

482+04.31
-66.88' LT
789.58

4.3%

3.7%

3.8%

1.8%

(2.3%)

1.5%

0.5%

0.7%

3.5%

2.8%

2.7%

481+86.17
-64.11' LT
(789.86)

481+86.17
-66.61' LT
(790.12)

481+92.17
-66.61' LT
789.91

481+98.17
-66.61' LT
789.74

BACK OF CURB RADIUS = 19.50'
CHORD LENGTH = 9.66'
XR= 8.85'

482+43.98
-88.80' LT
(789.32)

482+48.63
-72.74' LT
789.28
HP

482+51.24
-72.74' LT
789.20

482+54.58
-67.40' LT
789.24

482+60.65
-66.91' LT
789.22

482+60.78
-72.73' LT
789.30

482+66.78
-72.73' LT
789.40

482+72.78
-72.72' LT
789.55

482+78.78
-72.72' LT
(789.59)

TLE

R/W

1.1%

1.6%

2.5%

0.7%

1.5%

1.5%

2.4%

(5.4%)

1.5%

1.6%

2.3%

BACK OF CURB RADIUS = 19.50'
CHORD LENGTH = 9.66'
XR= 8.86'

482+66.78
-66.66' LT
789.31

482+72.78
-66.66' LT
789.40

482+78.78
-66.66' LT
(789.26)

482+78.78
-64.16' LT
(789.19)

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 133	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021305_CR.DWG
LAYOUT NAME - 021343_cr

PLOT DATE : 8/20/2025 11:21 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

2

N

N. 128TH ST

TLE

R/W

MH

EL

GV

TEL

PC 497+21.40

PT 501+63.53

STH 190 (W. CAPITOL DR)

497+00

498+00

499+00

500+00

501+00

502+00

499+20.13
-81.84' LT
765.35

499+17.43
-77.16' LT
765.41

499+12.60
-73.69' LT
765.72

499+06.54
-72.64' LT
765.85

499+00.57
-72.61' LT
(765.97)

499+29.46
-90.30' LT
(765.33)

499+26.25
-79.77' LT
765.26

499+28.14
-79.14' LT
765.34

499+22.28
-72.86' LT
765.32

499+23.77
-71.53' LT
765.40

499+14.90
-68.15' LT
765.63

499+00.61
-66.61' LT
(765.85)

499+06.57
-66.64' LT
765.76

499+00.62
-64.11' LT
(765.56)

BACK OF CURB RADIUS = 19.50'
CHORD LENGTH = 7.79'
XR= 3.43'

2.0%
(2.0%)
2.1%
1.5%
5.2%
2.6%
1.1%

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

CONSTRUCTION NOTE:

PUSH BUTTON MUST BE WITHIN 18-IN OF A LEVEL LANDING.
CONTRACTOR TO VERIFY LOCATIONS PRIOR TO INSTALLATION.

499+61.08
-90.07' LT
(765.52)

499+63.57
-79.72' LT
765.52

499+65.78
-79.71' LT
765.44

499+67.39
-73.70' LT
765.60
HP

499+70.08
-73.69' LT
765.52

499+73.76
-73.68' LT
765.59

499+78.75
-79.67' LT
765.61

499+73.78
-79.68' LT
765.56

PR. R/W

499+81.33
-76.46' LT
765.67

499+82.79
-74.66' LT
765.55

499+88.75
-74.64' LT
765.52

499+94.71
-74.63' LT
765.80

500+00.67
-72.63' LT
(765.84)

499+82.78
-69.23' LT
765.49

499+82.77
-66.67' LT
765.46

499+88.73
-66.14' LT
765.43

499+94.70
-66.63' LT
765.72

500+00.66
-66.63' LT
(765.81)

499+82.76
-64.63' LT
765.54

499+88.73
-64.14' LT
765.51

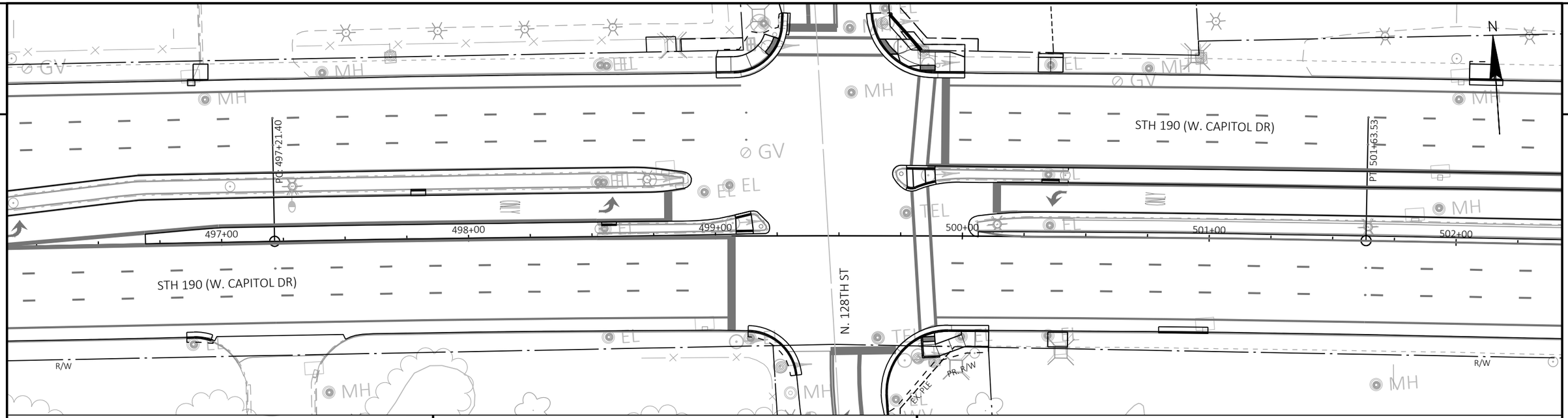
500+00.66
-64.13' LT
(765.49)

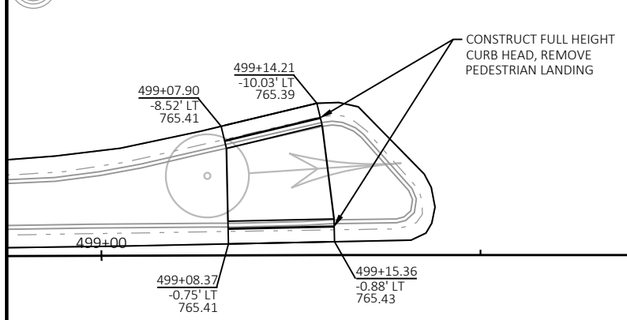
BACK OF CURB RADIUS = 24.50'
CHORD LENGTH = 7.49'
XR= 7.49'

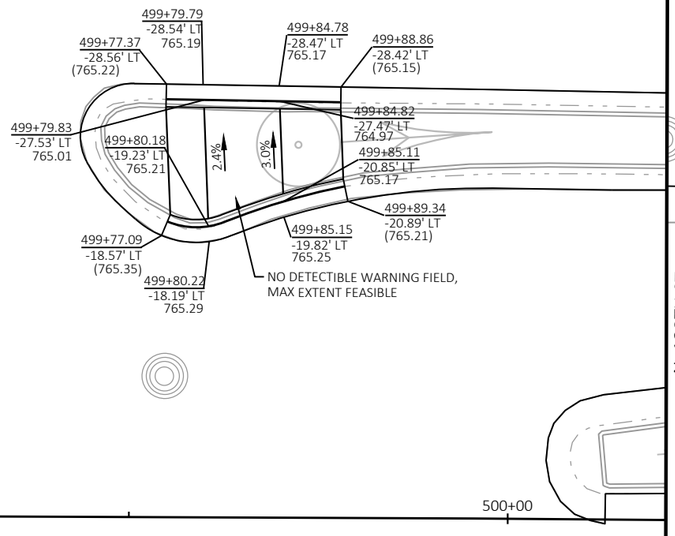
1.5%
2.0%
1.2%
1.5%
1.0%
1.1%
0.5%
4.8%
0.6%
(0.5%)

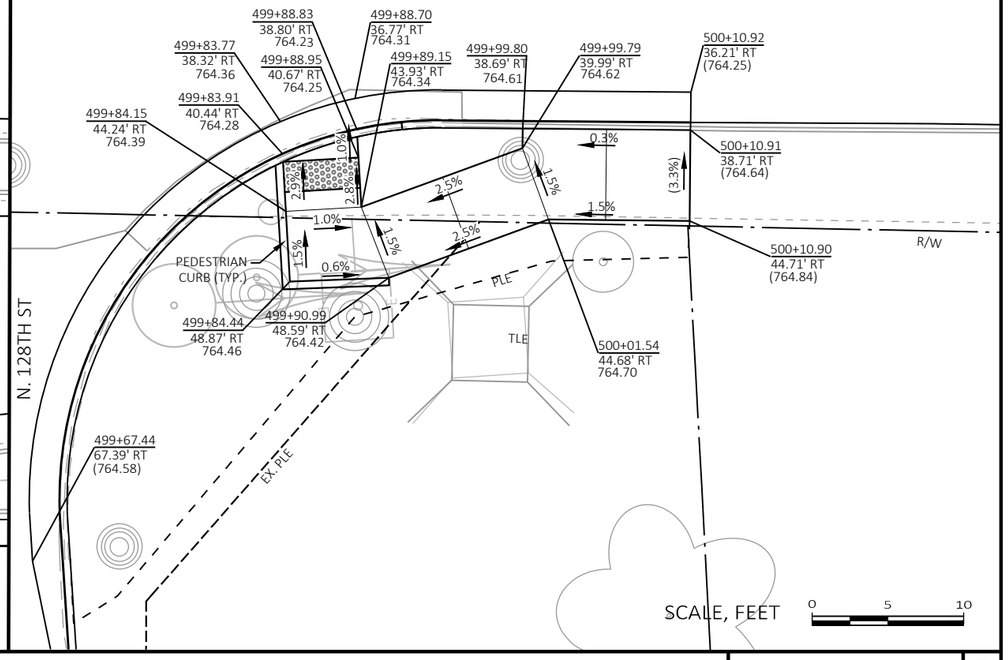
SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 134	E









LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

CONSTRUCTION NOTE:

PUSH BUTTON MUST BE WITHIN 18-IN OF A LEVEL LANDING.
CONTRACTOR TO VERIFY LOCATIONS PRIOR TO INSTALLATION.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 135	E

2

2

STH 190 (W. CAPITOL DR)

N

503+00 504+00 505+00 506+00 507+00 508+00

STH 190 (W. CAPITOL DR)

R/W

R/W

TLE

TLE

WV

WV

MH

MH

EL

EL

N

504+75.28
36.59' RT
(759.75)

504+75.25
39.09' RT
(759.97)

504+81.24
39.18' RT
759.77

504+87.24
39.27' RT
759.68

504+95.07
40.14' RT
759.23

505+00.19
40.22' RT
759.20

505+04.21
45.52' RT
759.10

505+07.11
45.56' RT
759.18

505+10.16
49.44' RT
(758.90)

BACK OF CURB RADIUS = 25.50'
CHORD LENGTH = 10.95'
XR= 10.29'

3.3% (3.2%) 1.5% 1.5% 7.5% 0.8% 1.5% 5.0% 1.5% 8.3% 1.5%

504+75.16
45.09' RT
(760.16)

504+81.16
45.18' RT
759.86

504+87.16
45.27' RT
759.77

504+93.16
45.36' RT
759.27

505+62.27
49.47' RT
(758.10)

BACK OF CURB RADIUS = 20.20'
CHORD LENGTH = 9.95'
XR= 9.18'

505+65.14
44.92' RT
758.24
HP

505+67.80
44.92' RT
758.16

505+71.34
39.59' RT
758.12

505+76.07
39.59' RT
758.01

505+83.68
38.91' RT
758.07

505+89.68
38.91' RT
758.14

505+95.68
38.91' RT
(758.23)

505+95.68
36.41' RT
(757.77)

0.7% 1.5% 1.5% 1.0% 1.2% 1.5% 1.2% 1.5% 1.2% (1.2%) 1.2%

505+77.68
44.92' RT
758.09

505+83.68
44.92' RT
758.16

505+89.68
44.92' RT
758.23

505+95.68
44.92' RT
(758.30)

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

SCALE, FEET 0 5 10

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 136	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021305_CR.DWG
LAYOUT NAME - 021346_cr

PLOT DATE : 8/20/2025 11:22 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

2

STH 190 (W. CAPITOL DR)

STH 190 (W. CAPITOL DR)

N

N

PC: 510+28.20

PT: 512+00.79

506+00

507+00

508+00

509+00

510+00

511+00

512+00

MH

MH

TEL

EL

EL

EL

EL

R/W

R/W

WV

WV

TLE

508+60.18
36.33' RT
(753.37)

508+62.90
38.84' RT
(753.48)

508+68.90
38.84' RT
753.55

508+75.20
39.23' RT
753.41

508+81.14
40.88' RT
753.28

508+87.01
44.01' RT
753.30

508+86.81
48.98' RT
753.32

508+90.80
49.15' RT
753.03

508+93.48
49.26' RT
752.84

508+96.09
49.37' RT
752.92

508+97.40
55.43' RT
753.05

508+99.64
55.52' RT
753.13

509+01.45
60.92' RT
(753.25)

508+92.55
55.23' RT
753.07

508+90.55
55.14' RT
753.20

508+86.56
54.98' RT
753.41

508+80.56
54.73' RT
753.50

508+80.81
48.73' RT
753.41

508+62.90
45.99' RT
(753.79)

508+68.90
46.17' RT
753.66

508+74.68
46.17' RT
753.52

509+20.67
40.37' RT
752.71

509+40.80
40.37' RT
752.65

509+22.10
50.45' RT
753.04

509+27.54
50.68' RT
753.09

509+33.80
50.94' RT
753.00

509+21.19
50.41' RT
753.08

509+34.80
50.98' RT
753.04

509+21.51
56.43' RT
753.18

509+33.08
56.91' RT
753.15

509+22.12
56.46' RT
753.16

509+32.46
56.89' RT
753.13

509+27.29
56.67' RT
753.18

509+21.78
61.54' RT
(753.40)

509+32.35
62.00' RT
(753.34)

509+65.91
40.91' RT
(752.55)

509+53.94
54.66' RT
753.11

509+51.89
54.26' RT
753.19

509+51.60
60.32' RT
753.20

509+49.63
59.93' RT
753.28

509+48.99
62.66' RT
(753.41)

509+51.49
62.89' RT
(753.17)

509+50.96
68.20' RT
(753.32)

509+56.85
68.57' RT
(753.64)

509+63.53
56.44' RT
753.26

509+68.22
57.30' RT
753.61

509+73.20
58.17' RT
753.97

509+79.01
56.68' RT
(754.06)

509+62.45
62.35' RT
753.35

509+67.14
63.21' RT
753.70

509+73.34
64.34' RT
754.03

509+80.62
62.49' RT
(754.14)

MEF

MEF

MEF

1.2%
2.2%
2.1%
(4.4%)
2.5%
1.5%
2.3%
2.4%
1.7%
1.6%
0.3%
0.5%
0.2%
1.5%
7.3%
7.0%
1.5%
2.8%
6.5%
3.8%
0.5%
4.1%
0.9%
0.4%
1.5%
1.0%
1.5%
1.5%
1.4%
7.2%
7.3%
5.3%
1.0%
(1.3%)
2.8%
3.5%
(5.1%)

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

PRIVATE STREET-LIGHT POLE

SCALE, FEET 0 5 10

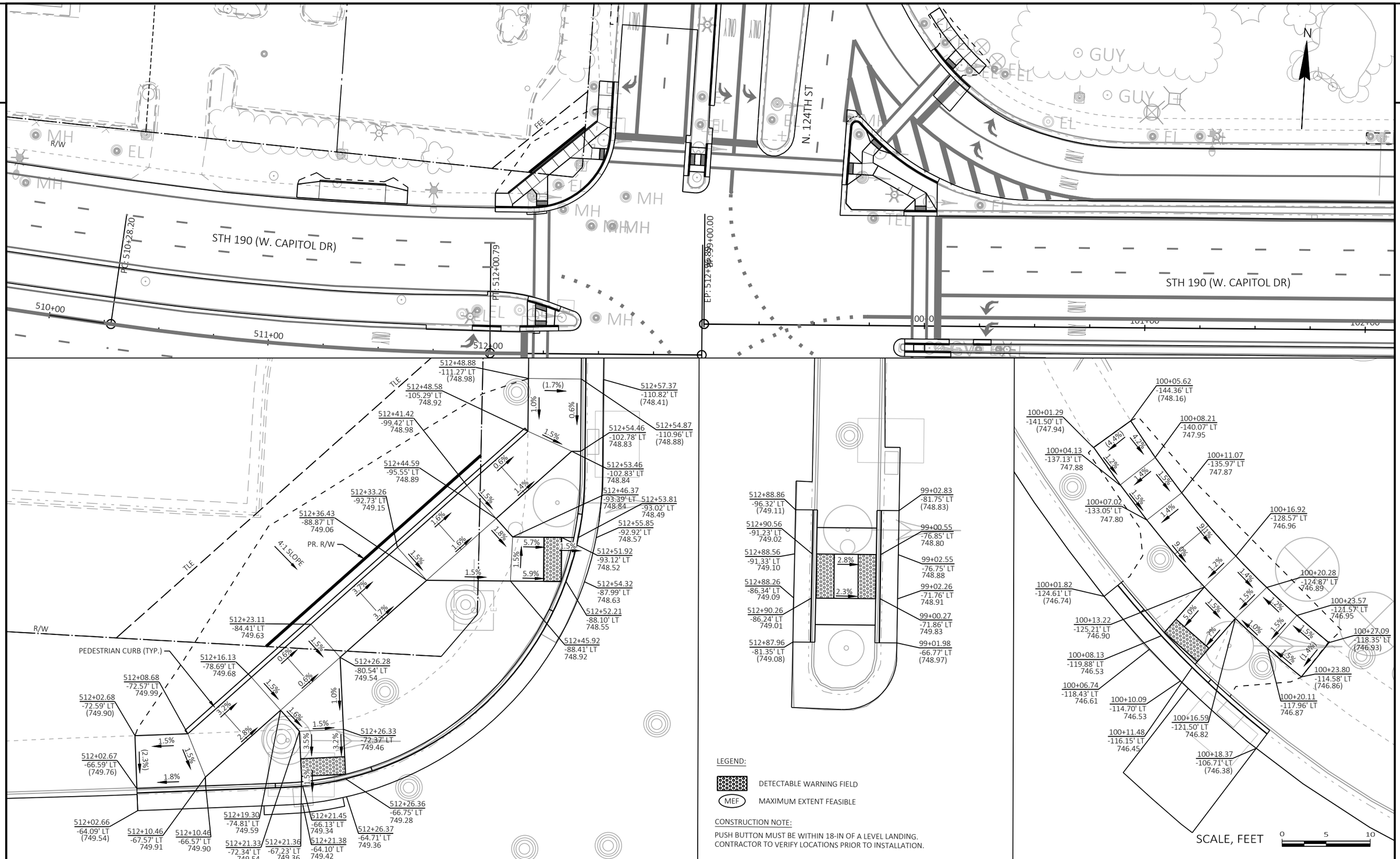
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 137	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021305_CR.DWG
LAYOUT NAME - 021347_cr

PLOT DATE : 8/20/2025 11:22 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

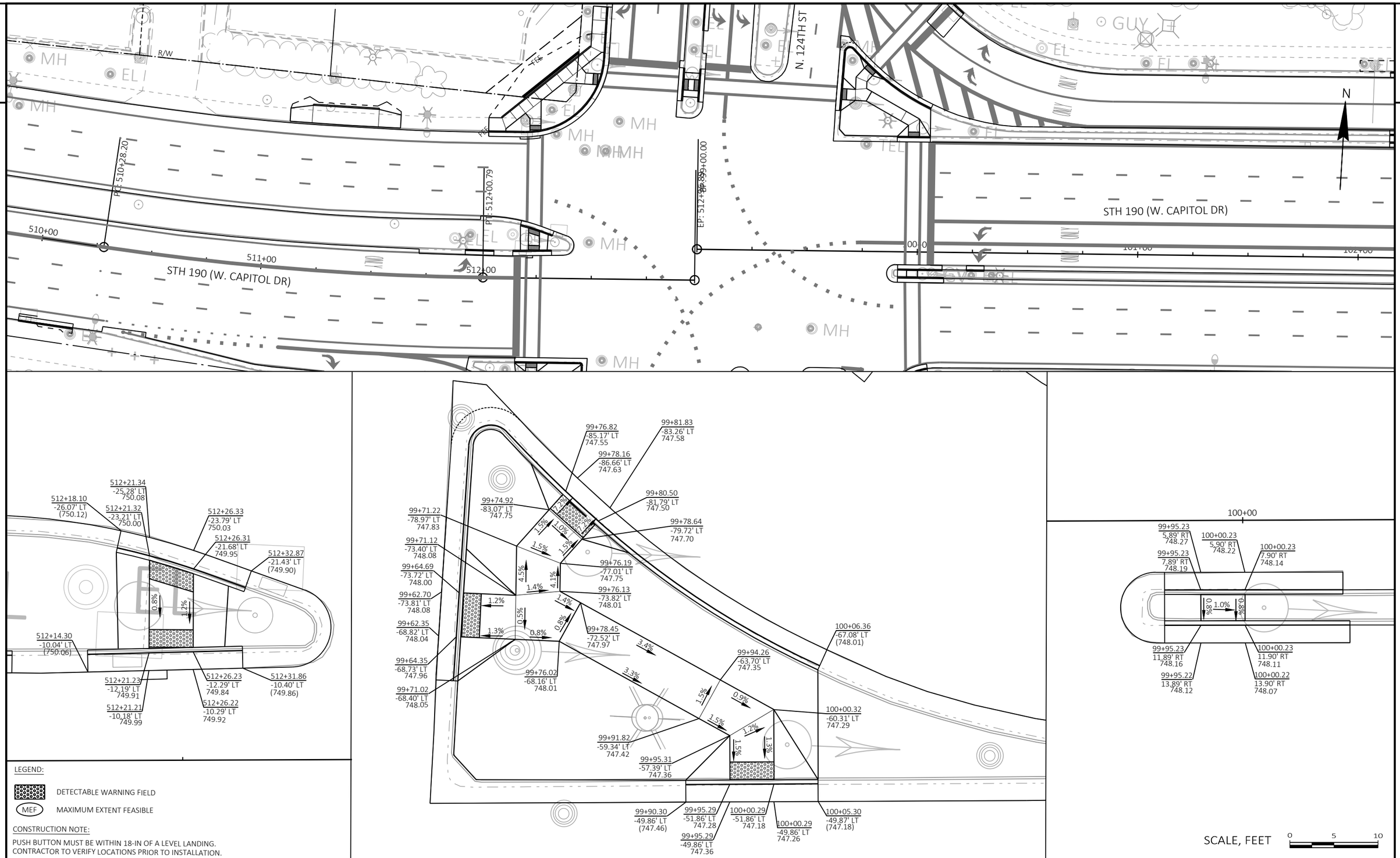
WISDOT/CADDS SHEET 42

2



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 138	E

2



LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

CONSTRUCTION NOTE:

PUSH BUTTON MUST BE WITHIN 18-IN OF A LEVEL LANDING.
CONTRACTOR TO VERIFY LOCATIONS PRIOR TO INSTALLATION.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 139	E

2

510+00

511+00

512+00

PC: 51

PT: 512

EP: 51

00.0

101+00

102+00

N

STH 190 (W. CAPITOL DR)

STH 190 (W. CAPITOL DR)

R/W

R/W

N. 124TH ST

MH

EL

GUY

GV

WV

AM

TLE

512+20.81
38.07' RT
749.84

512+15.73
36.06' RT
(749.99)

512+15.70
38.56' RT
(750.35)

512+25.86
36.08' RT
749.86

512+20.85
36.07' RT
749.92

512+25.82
38.08' RT
749.78

512+40.38
43.16' RT
749.61

512+46.27
43.41' RT
749.30

512+48.27
43.50' RT
749.38

512+48.02
48.49' RT
749.32

512+46.03
48.40' RT
749.24

512+40.16
48.15' RT
749.54

512+39.71
49.53' RT
749.52

512+37.43
56.30' RT
749.36

512+36.79
58.20' RT
749.28

512+32.11
56.41' RT
749.34

512+32.75
54.51' RT
749.42

512+25.66
47.61' RT
750.15

512+15.78
50.23' RT
(749.44)

512+16.65
47.80' RT
(750.21)

512+34.97
47.94' RT
749.60

512+20.75
42.52' RT
750.15

512+20.66
47.52' RT
750.23

512+25.74
42.61' RT
750.08

512+35.18
42.94' RT
749.68

5.9%

1.5%

4.2%

5.3%

5.1%

2.6%

2.2%

512+11.45
70.67' RT
(750.42)

512+25.01
66.67' RT
(749.45)

512+28.13
68.12' RT
749.25

512+27.04
69.81' RT
749.17

512+32.34
70.82' RT
749.21

512+31.25
72.51' RT
749.13

512+37.54
75.81' RT
(749.10)

512+17.54
71.99' RT
750.38

512+23.54
75.29' RT
750.34

512+10.62
76.61' RT
(750.58)

512+15.53
77.42' RT
750.47

512+20.71
79.69' RT
750.42

512+22.40
82.05' RT
750.38

512+22.56
87.56' RT
750.43

512+22.25
93.06' RT
(750.48)

512+27.75
77.98' RT
750.31

512+28.72
82.39' RT
750.28

512+28.55
87.89' RT
750.34

512+28.24
93.39' RT
(750.39)

0.6%

(2.7%)

2.2%

1.5%

0.9%

2.6%

2.8%

0.7%

1.0%

(1.5%)

LEGEND:

DETECTABLE WARNING FIELD

MEF MAXIMUM EXTENT FEASIBLE

CONSTRUCTION NOTE:

PUSH BUTTON MUST BE WITHIN 18-IN OF A LEVEL LANDING.
CONTRACTOR TO VERIFY LOCATIONS PRIOR TO INSTALLATION.

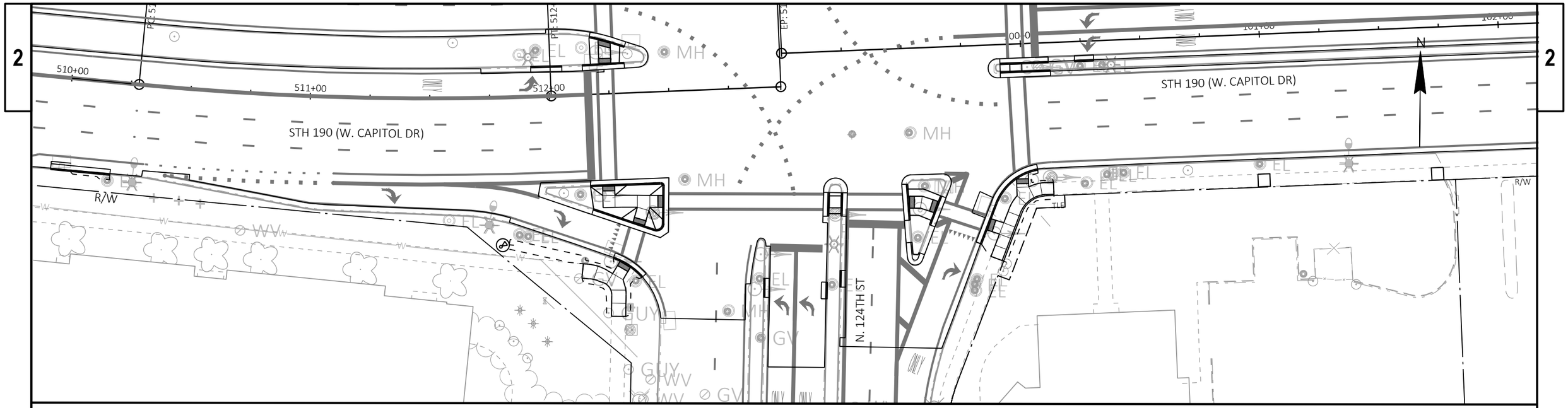
SCALE, FEET 0 5 10

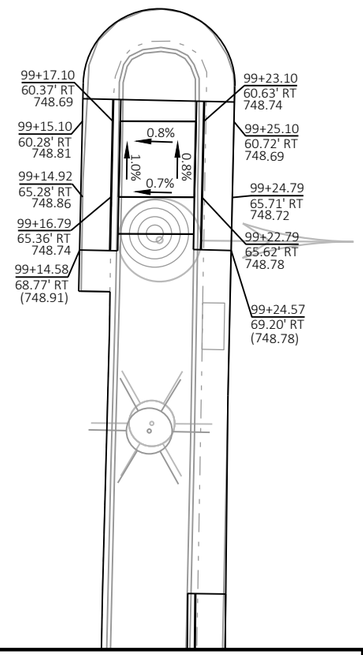
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 140	E

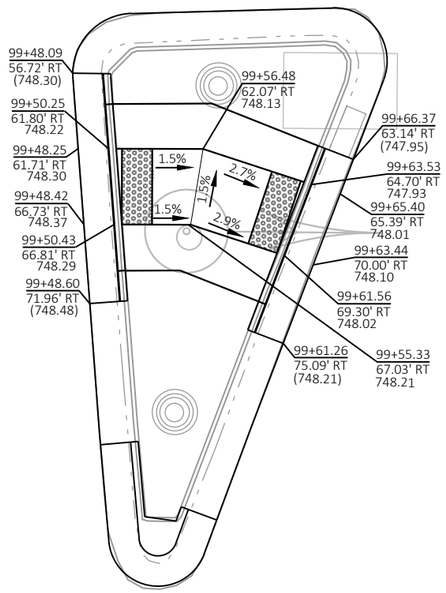
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LAYOUT NAME - 021350_cr

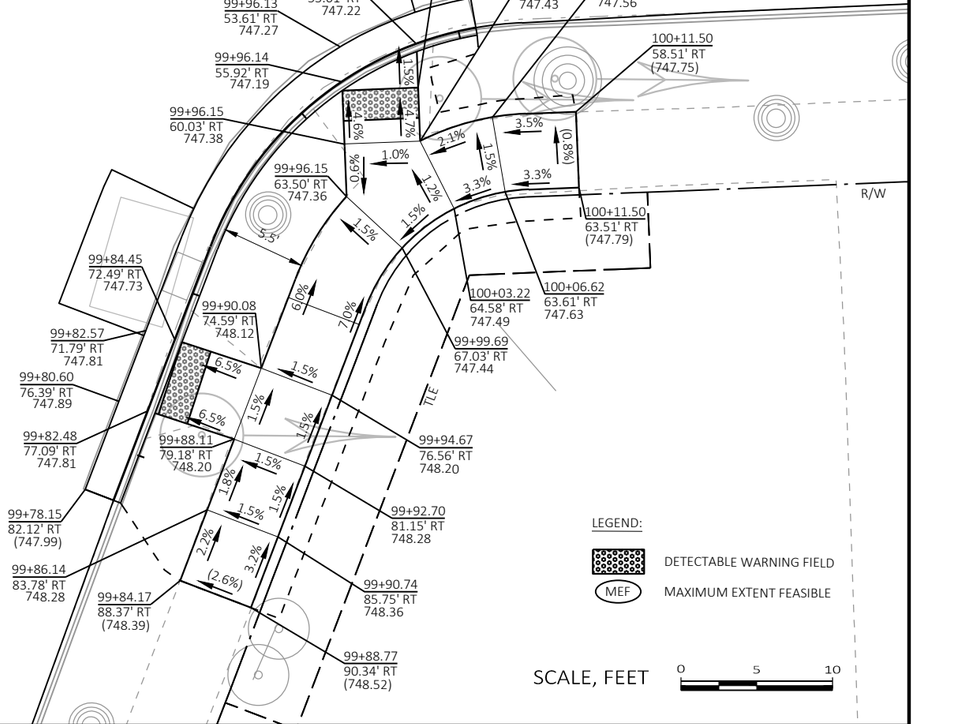
PLOT DATE : 8/20/2025 11:24 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42







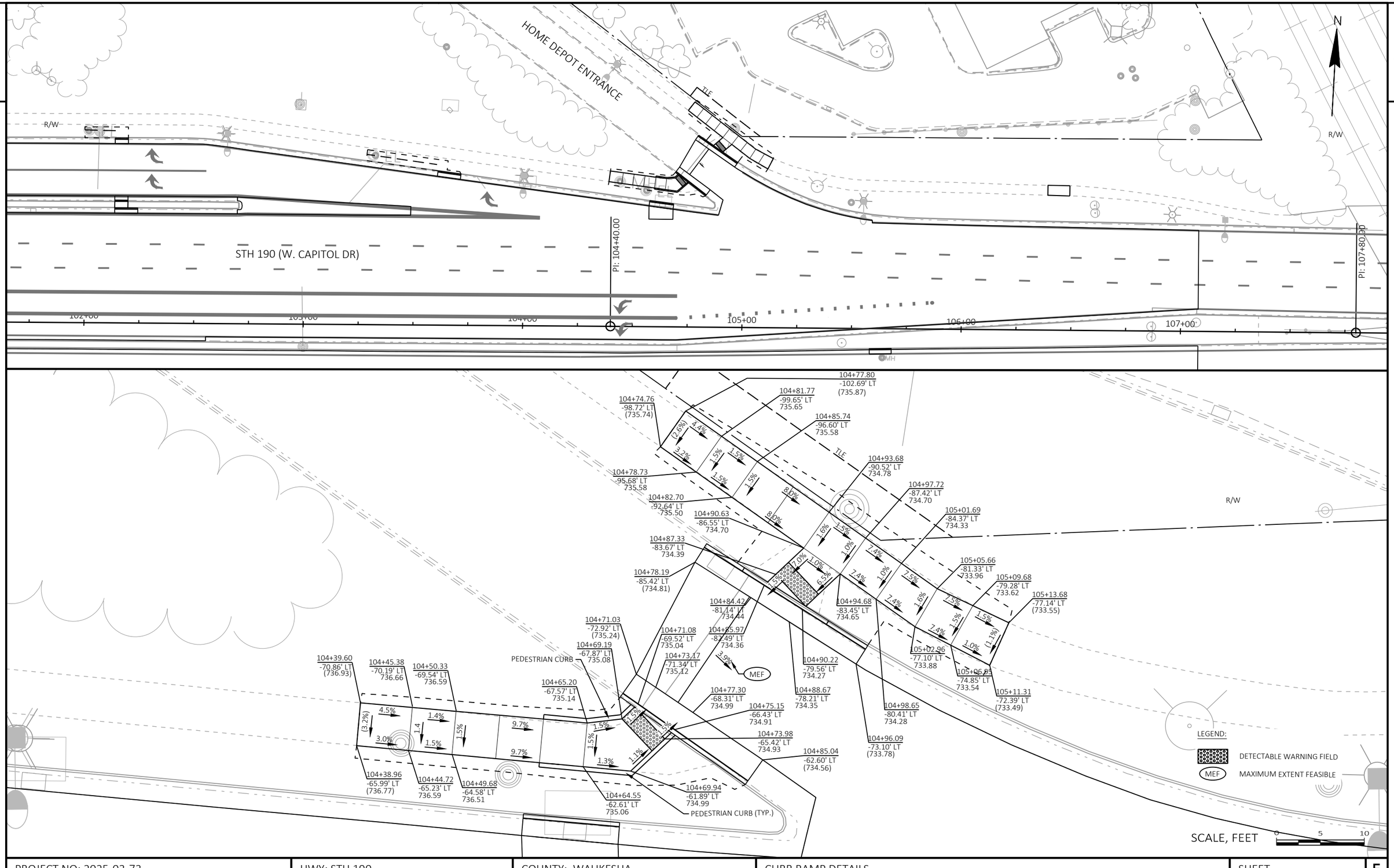


CONSTRUCTION NOTE:

PUSH BUTTON MUST BE WITHIN 18-IN OF A LEVEL LANDING.
CONTRACTOR TO VERIFY LOCATIONS PRIOR TO INSTALLATION.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 141	E

2

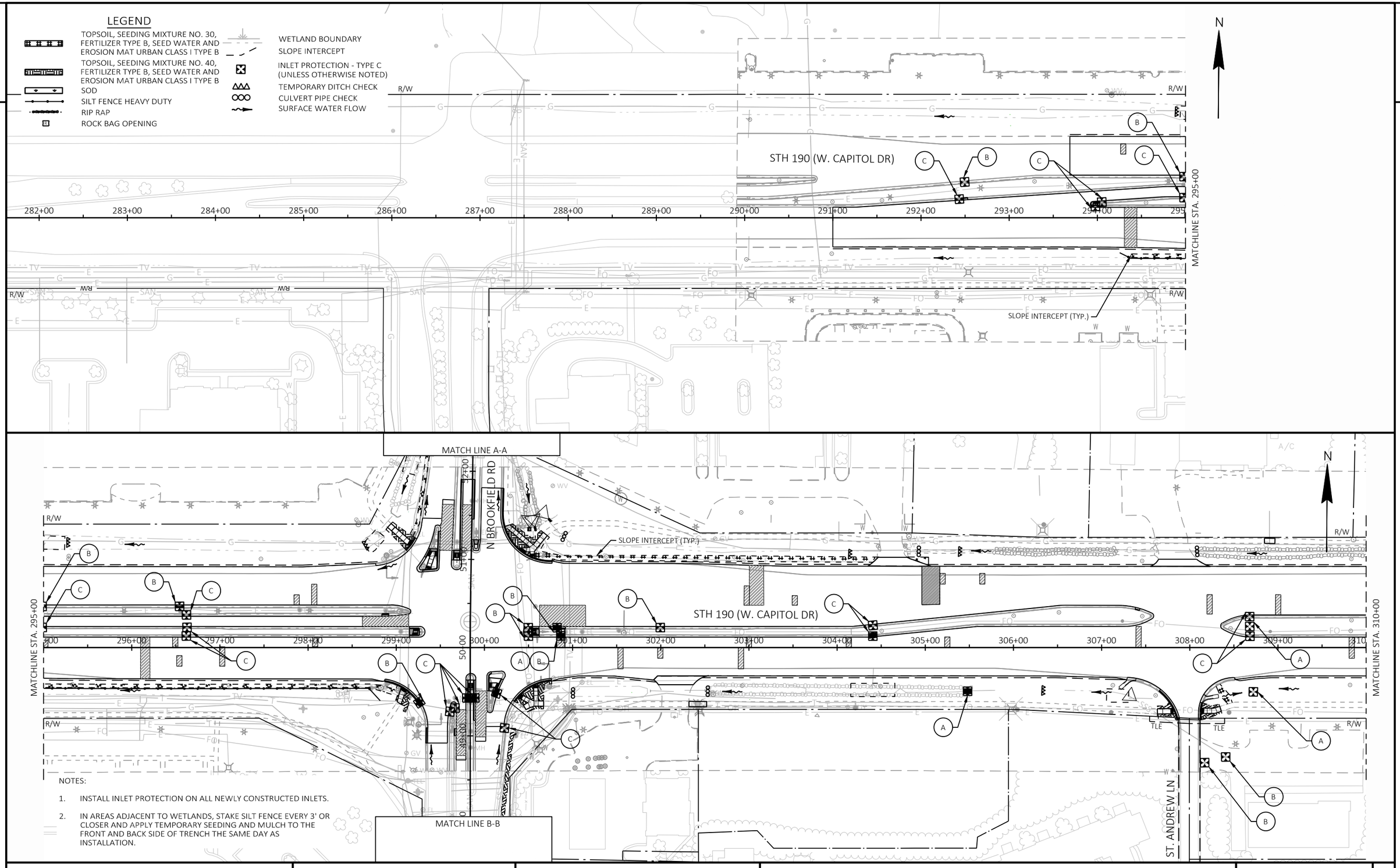


PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS	SHEET 142	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\021306_CR.DWG
LAYOUT NAME - 021352_cr
PLOT DATE : 8/20/2025 11:25 AM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

LEGEND

- TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- SOD
- SILT FENCE HEAVY DUTY
- RIP RAP
- ROCK BAG OPENING
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- INLET PROTECTION - TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW



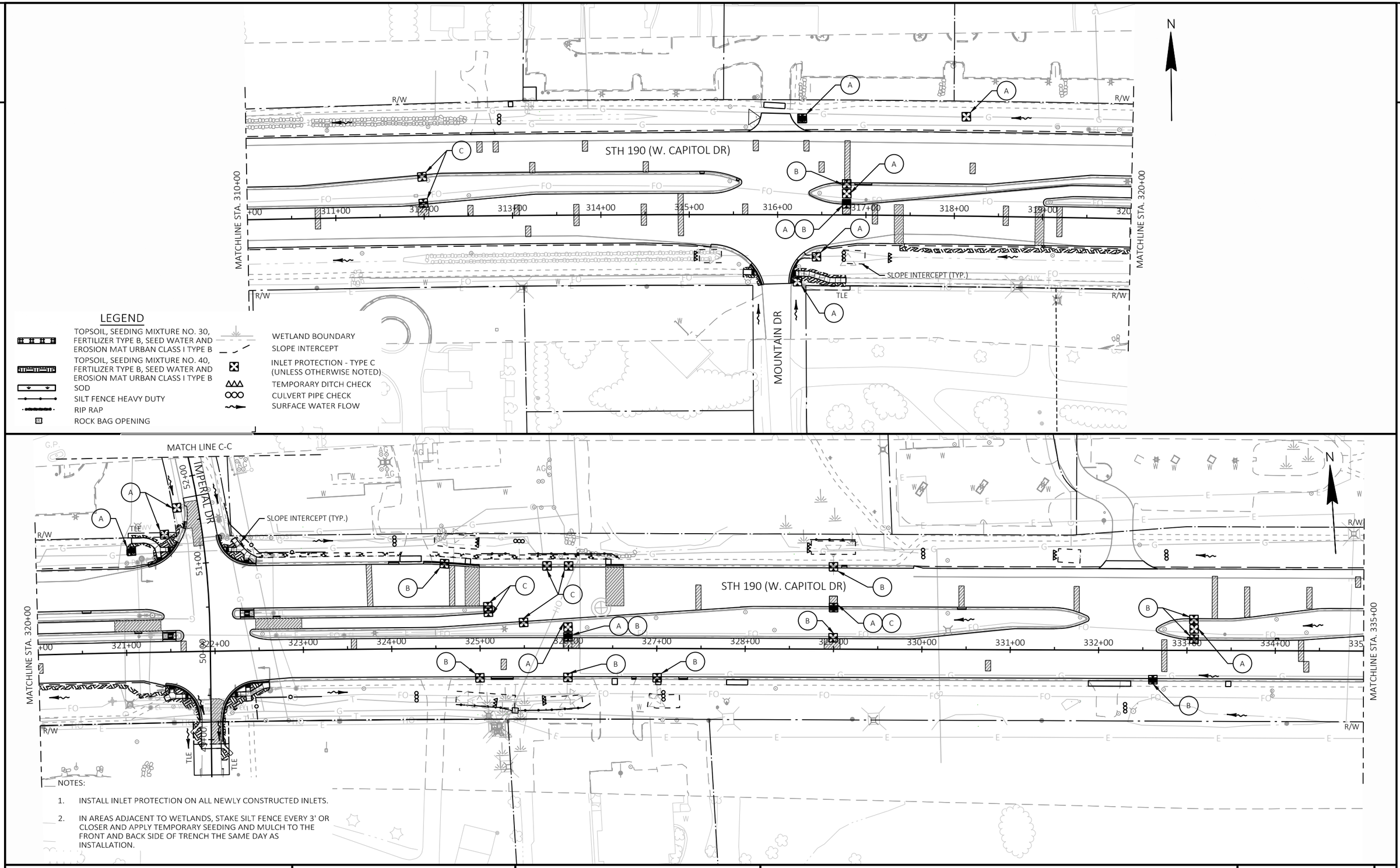
NOTES:

1. INSTALL INLET PROTECTION ON ALL NEWLY CONSTRUCTED INLETS.
2. IN AREAS ADJACENT TO WETLANDS, STAKE SILT FENCE EVERY 3' OR CLOSER AND APPLY TEMPORARY SEEDING AND MULCH TO THE FRONT AND BACK SIDE OF TRENCH THE SAME DAY AS INSTALLATION.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 143	E

2

2



LEGEND

- TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- SOD
- SILT FENCE HEAVY DUTY
- RIP RAP
- ROCK BAG OPENING
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- INLET PROTECTION - TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

NOTES:

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2. IN AREAS ADJACENT TO WETLANDS, STAKE SILT FENCE EVERY 3' OR CLOSER AND APPLY TEMPORARY SEEDING AND MULCH TO THE FRONT AND BACK SIDE OF TRENCH THE SAME DAY AS INSTALLATION.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 144	E

2

2

BEAUFORT DR

SLOPE INTERCEPT (TYP.)

STH 190 (W. CAPITOL DR)

MATCHLINE STA. 335+00

MATCHLINE STA. 350+00

YUKON RD

R/W

N

LEGEND

- TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- SOD
- SILT FENCE HEAVY DUTY
- RIP RAP
- ROCK BAG OPENING
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- INLET PROTECTION - TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

MATCH LINE D-D

N. CALHOUN RD

MATCHLINE STA. 350+00

MATCHLINE STA. 365+00

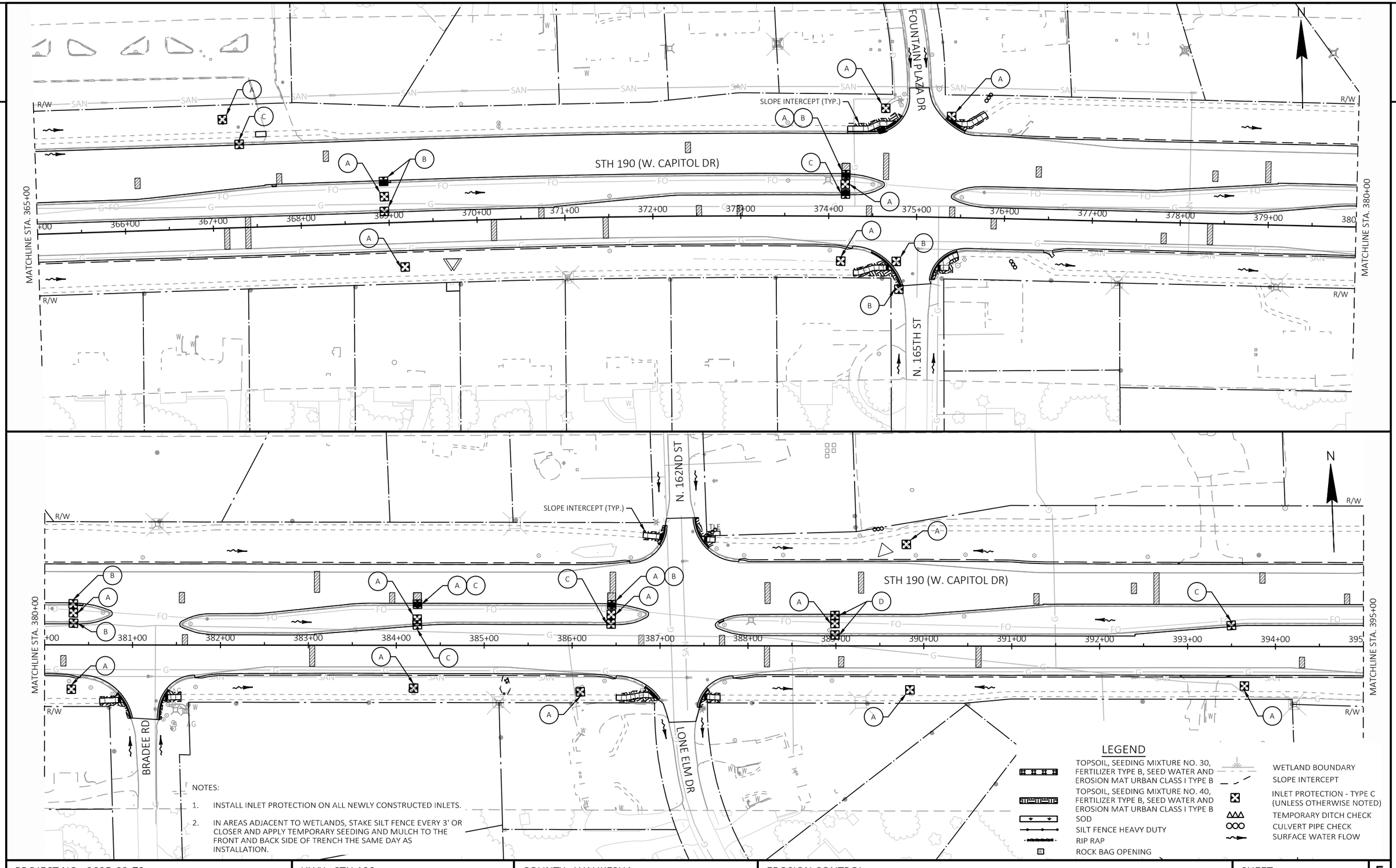
N. 169TH ST

MATCH LINE E-E

NOTES:

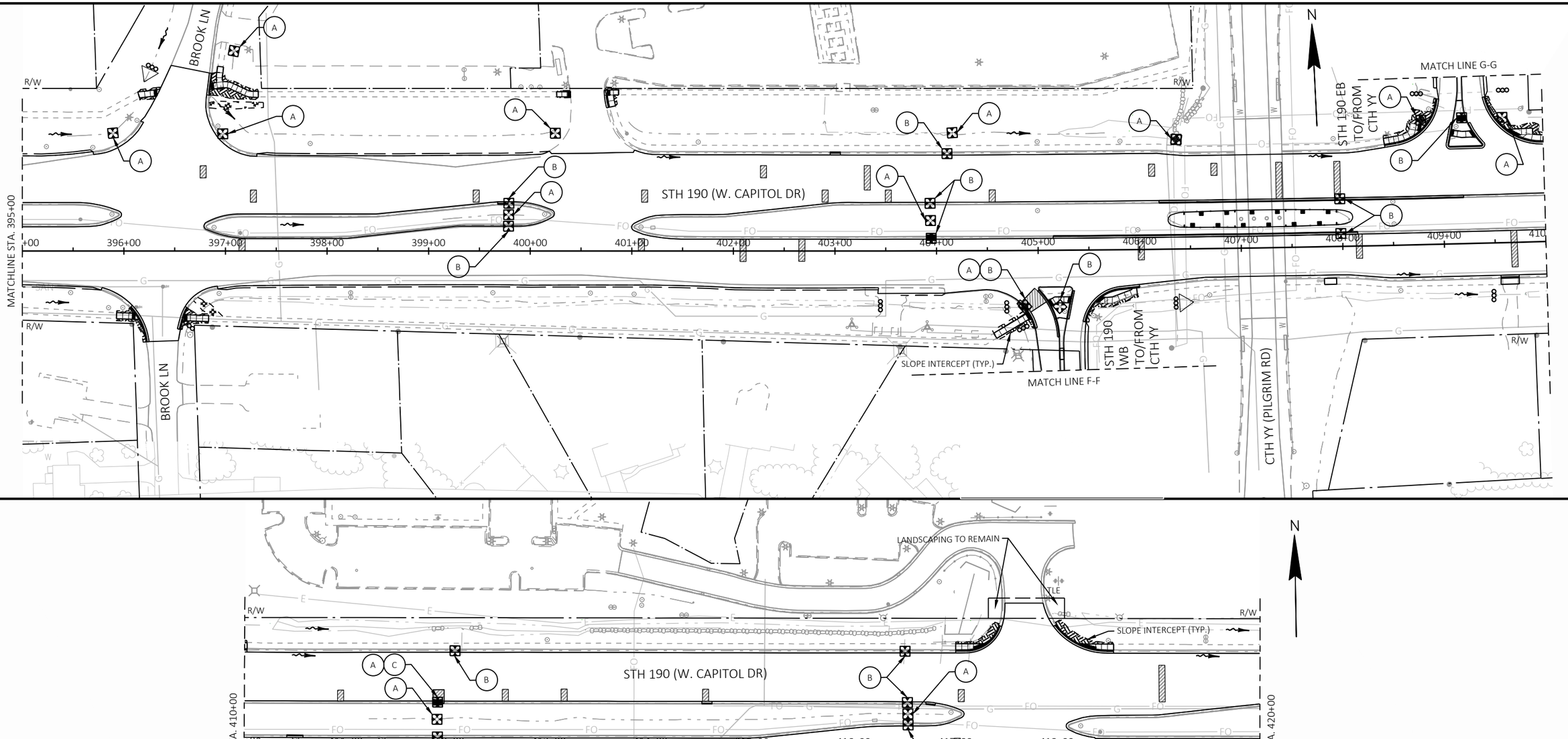
1. INSTALL INLET PROTECTION ON ALL NEWLY CONSTRUCTED INLETS.
2. IN AREAS ADJACENT TO WETLANDS, STAKE SILT FENCE EVERY 3' OR CLOSER AND APPLY TEMPORARY SEEDING AND MULCH TO THE FRONT AND BACK SIDE OF TRENCH THE SAME DAY AS INSTALLATION.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 145	E



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 146	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022004_ec
PLOT DATE : 8/20/2025 11:58 AM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



NOTES:

1. INSTALL INLET PROTECTION ON ALL NEWLY CONSTRUCTED INLETS.
2. IN AREAS ADJACENT TO WETLANDS, STAKE SILT FENCE EVERY 3' OR CLOSER AND APPLY TEMPORARY SEEDING AND MULCH TO THE FRONT AND BACK SIDE OF TRENCH THE SAME DAY AS INSTALLATION.

LEGEND

- TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- SOD
- SILT FENCE HEAVY DUTY
- RIP RAP
- ROCK BAG OPENING
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- INLET PROTECTION - TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

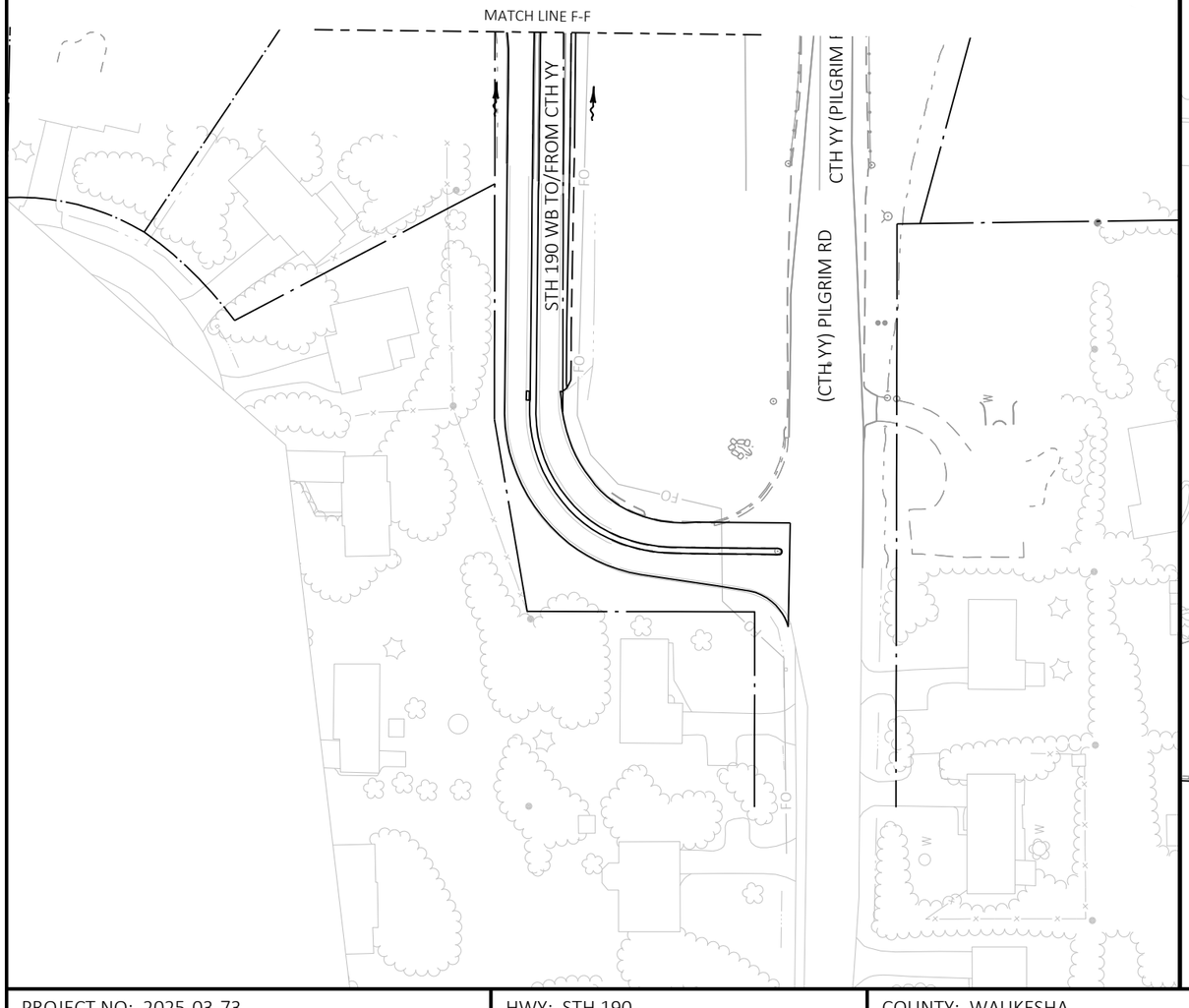
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 147	E

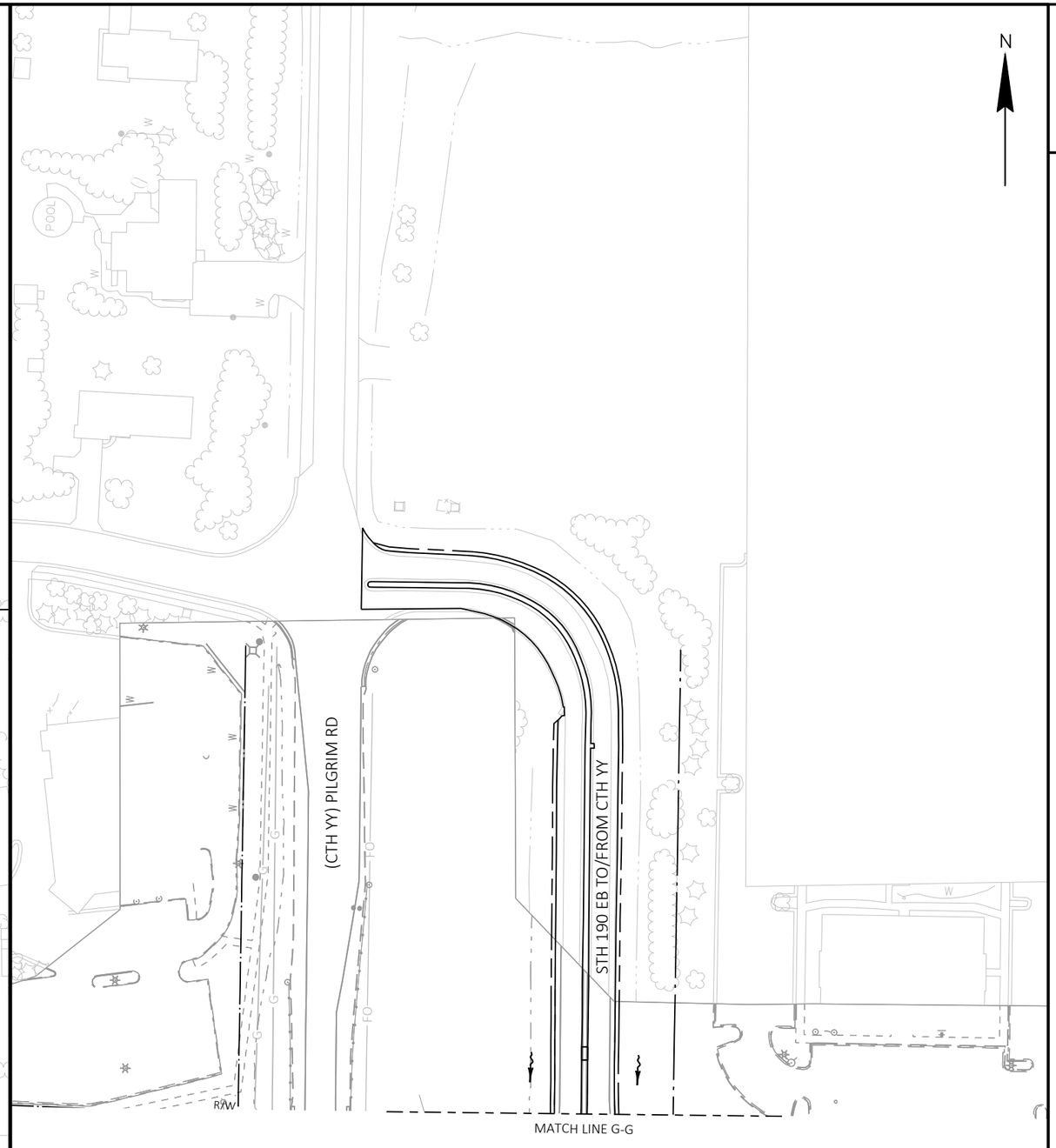
LEGEND

- TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- SOD
- SILT FENCE HEAVY DUTY
- RIP RAP
- ROCK BAG OPENING
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- INLET PROTECTION - TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

NOTES:

1. INSTALL INLET PROTECTION ON ALL NEWLY CONSTRUCTED INLETS.
2. IN AREAS ADJACENT TO WETLANDS, STAKE SILT FENCE EVERY 3' OR CLOSER AND APPLY TEMPORARY SEEDING AND MULCH TO THE FRONT AND BACK SIDE OF TRENCH THE SAME DAY AS INSTALLATION.

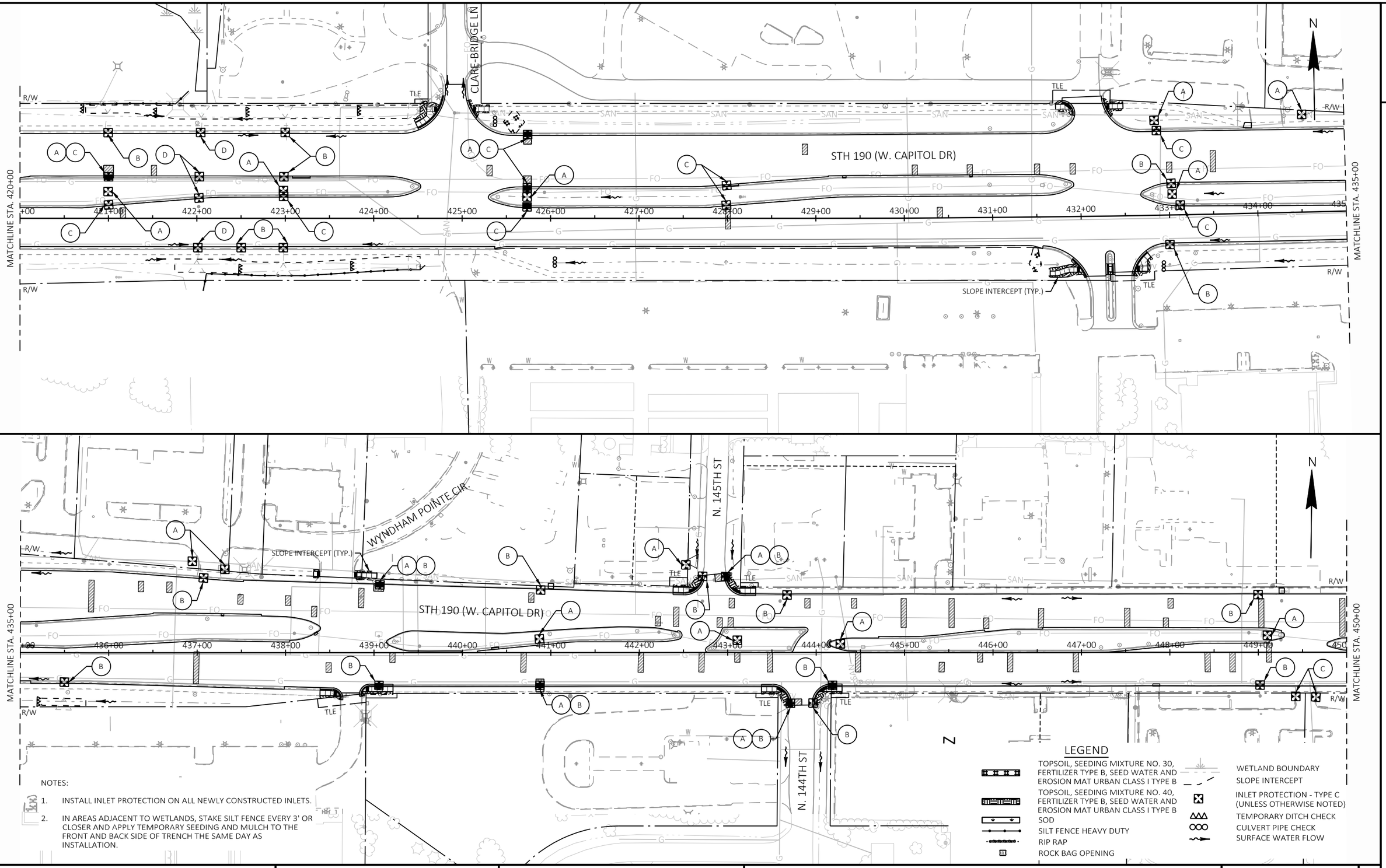




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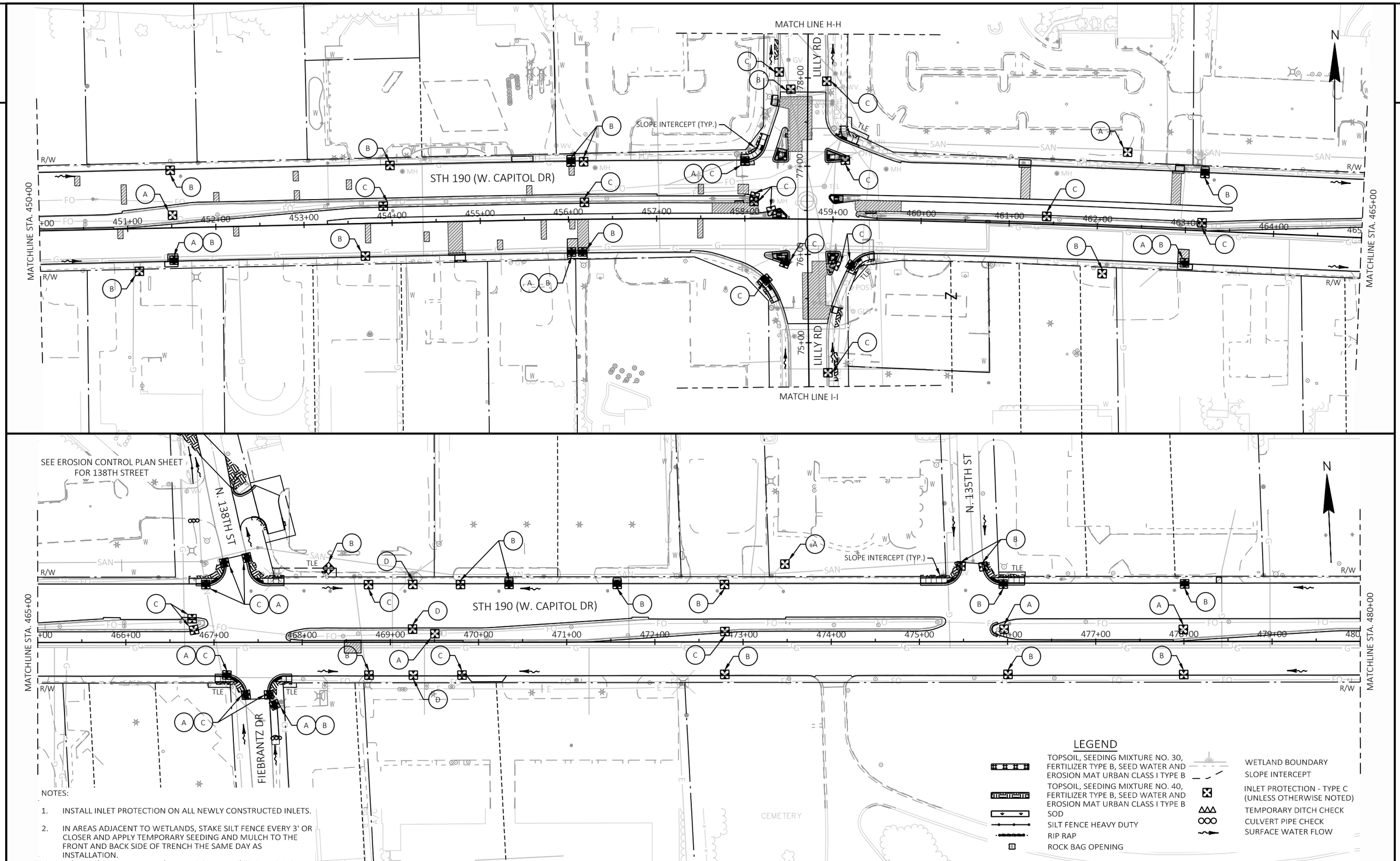
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 148	E

2



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 149	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022006_ec
PLOT DATE : 8/20/2025 12:01 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



LEGEND

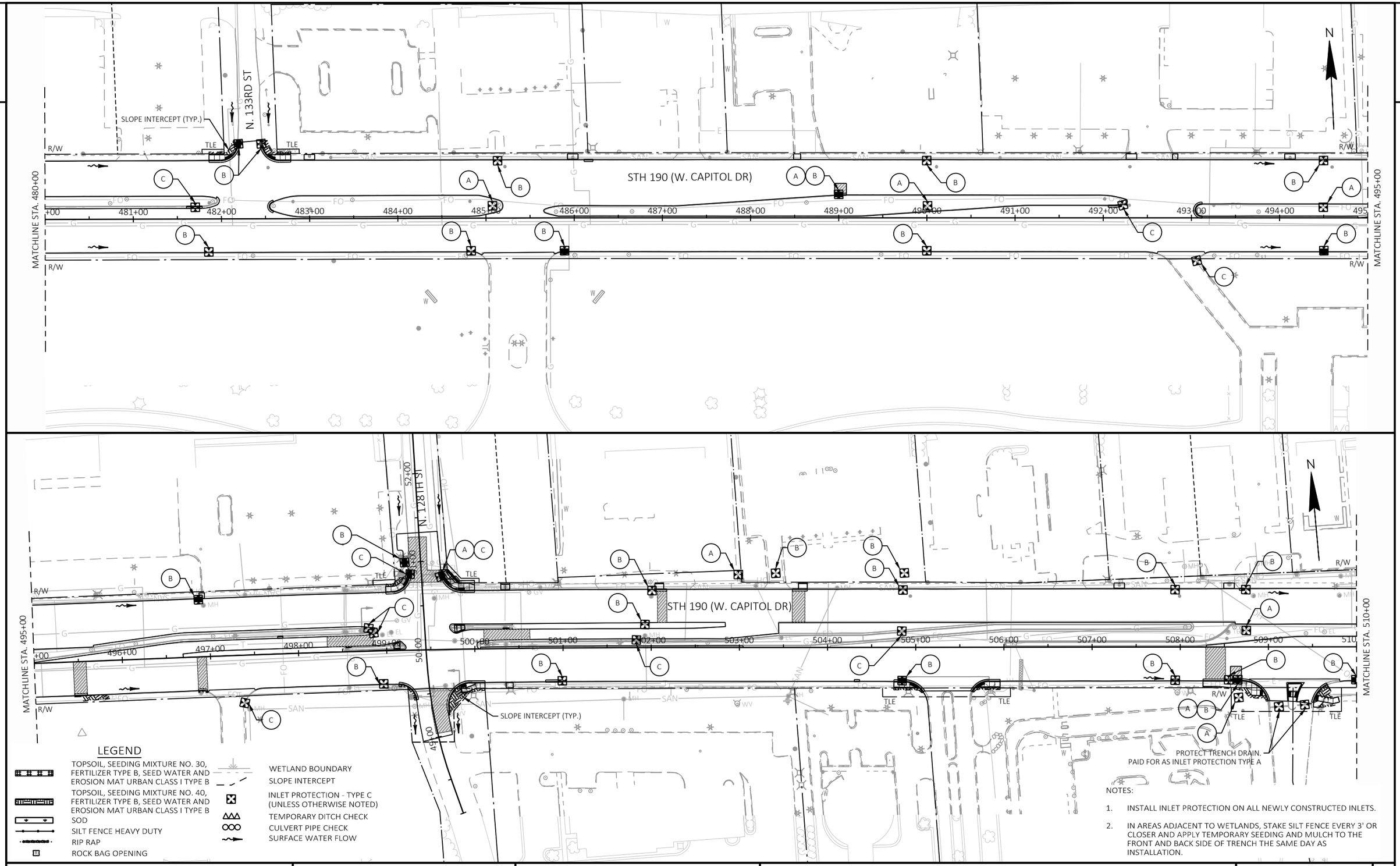
- TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- SOD
- SILT FENCE HEAVY DUTY
- RIP RAP
- ROCK BAG OPENING
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- INLET PROTECTION - TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

NOTES:

1. INSTALL INLET PROTECTION ON ALL NEWLY CONSTRUCTED INLETS.
2. IN AREAS ADJACENT TO WETLANDS, STAKE SILT FENCE EVERY 3' OR CLOSER AND APPLY TEMPORARY SEEDING AND MULCH TO THE FRONT AND BACK SIDE OF TRENCH THE SAME DAY AS INSTALLATION.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 150	E

2



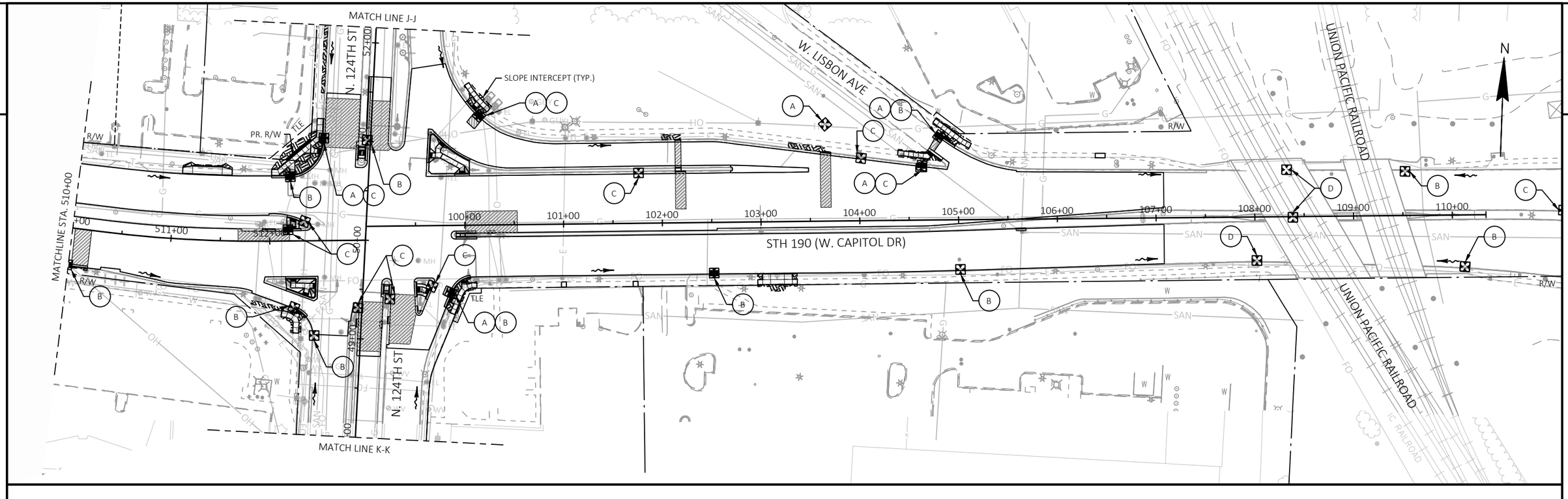
LEGEND

- TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- SOD
- SILT FENCE HEAVY DUTY
- RIP RAP
- ROCK BAG OPENING
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- INLET PROTECTION - TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

NOTES:

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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 151	E



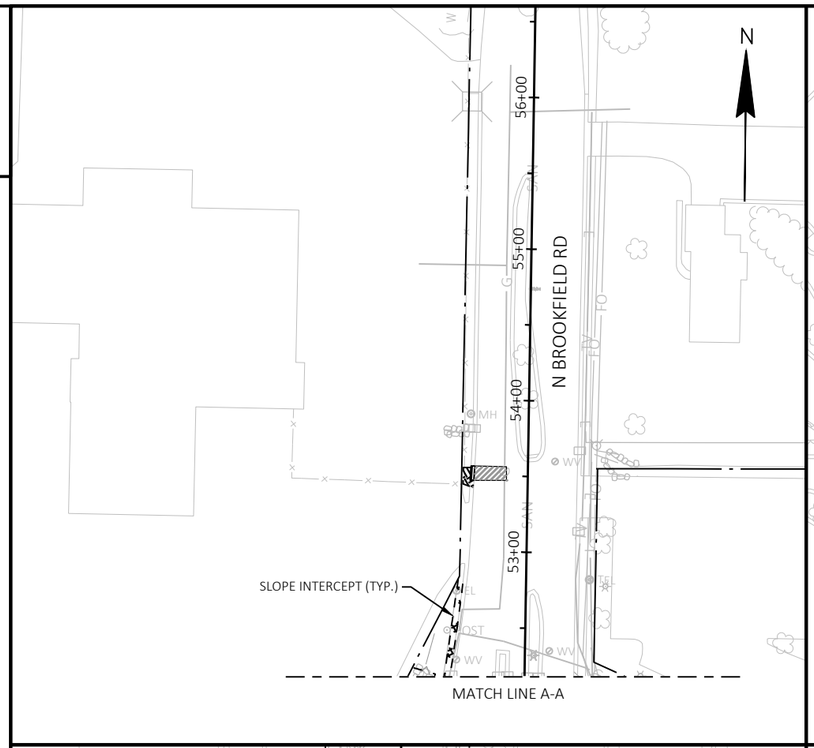
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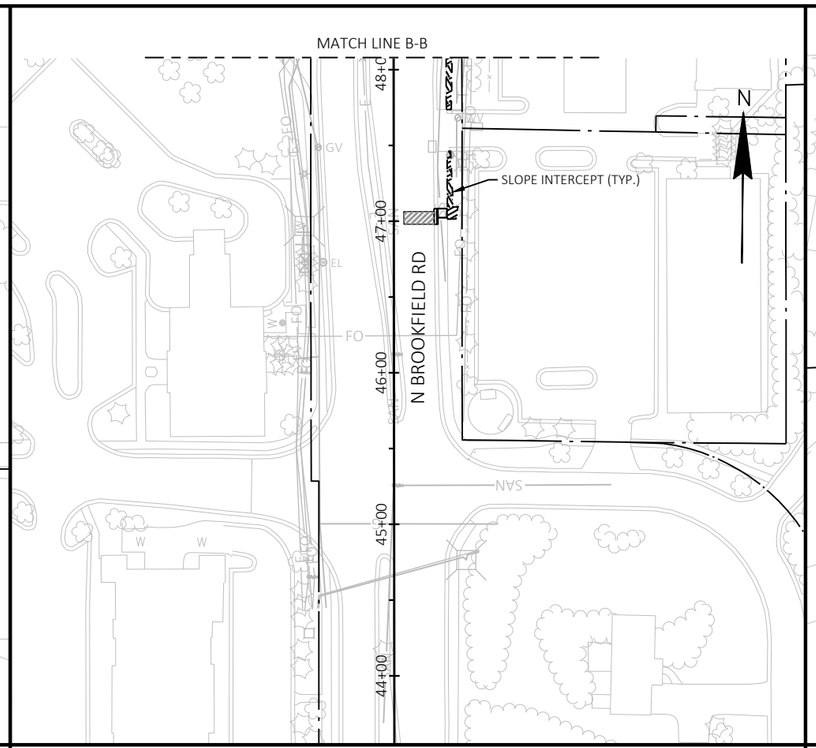
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2. IN AREAS ADJACENT TO WETLANDS, STAKE SILT FENCE EVERY 3' OR CLOSER AND APPLY TEMPORARY SEEDING AND MULCH TO THE FRONT AND BACK SIDE OF TRENCH THE SAME DAY AS INSTALLATION.

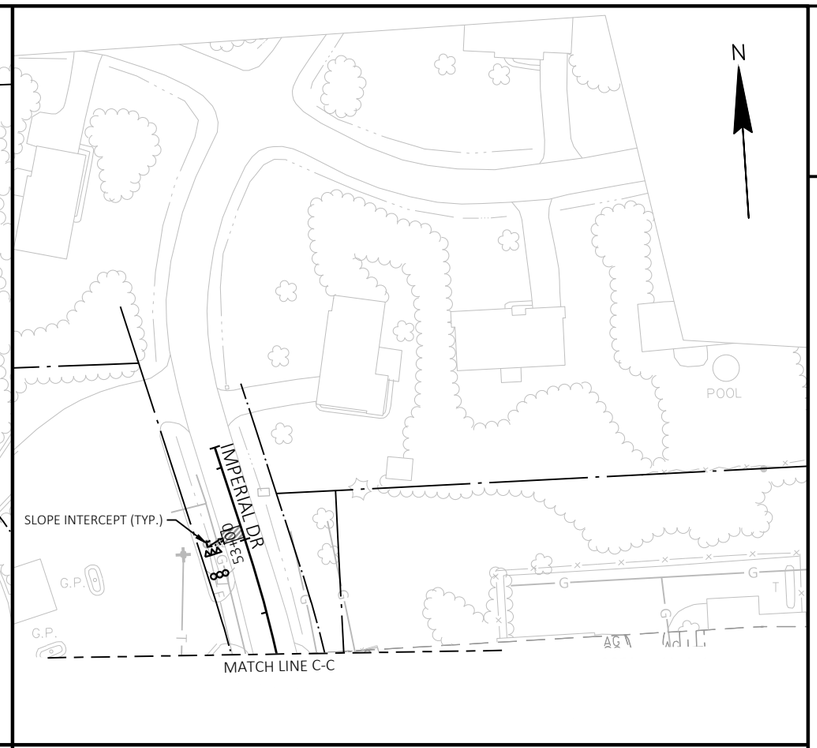
LEGEND

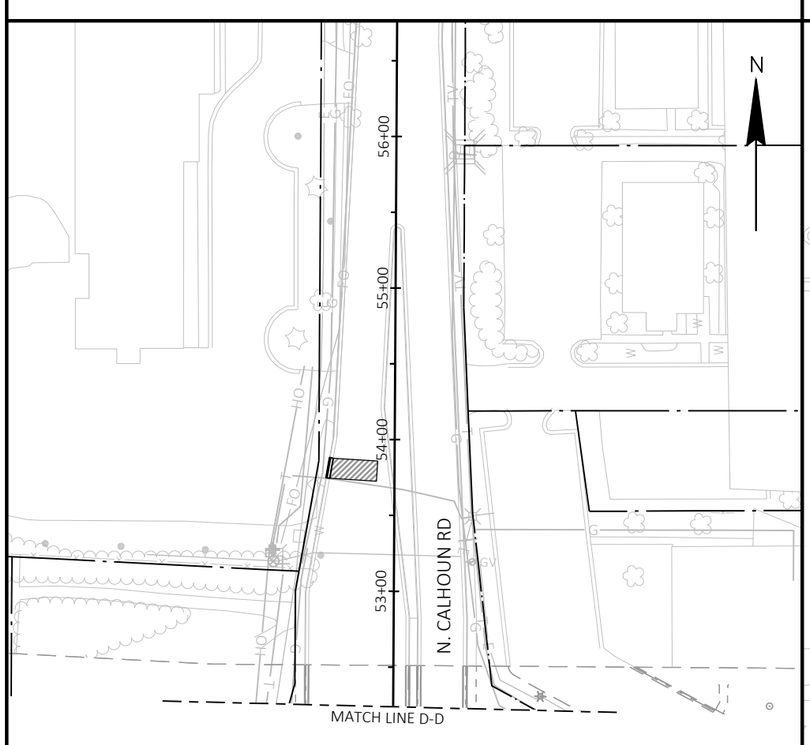
- TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- SOD
- SILT FENCE HEAVY DUTY
- RIP RAP
- ROCK BAG OPENING
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- INLET PROTECTION - TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

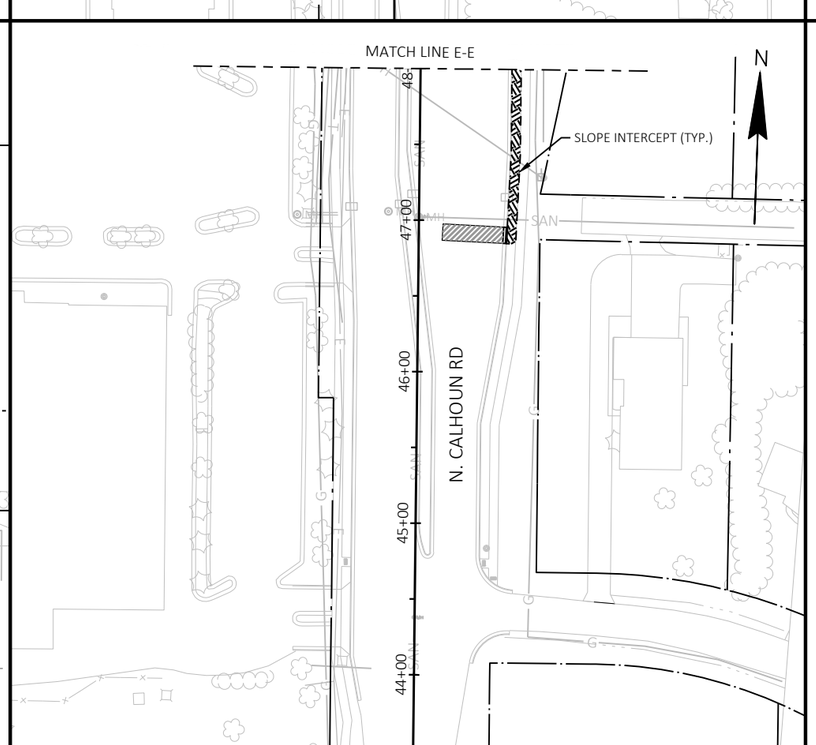
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 152	E











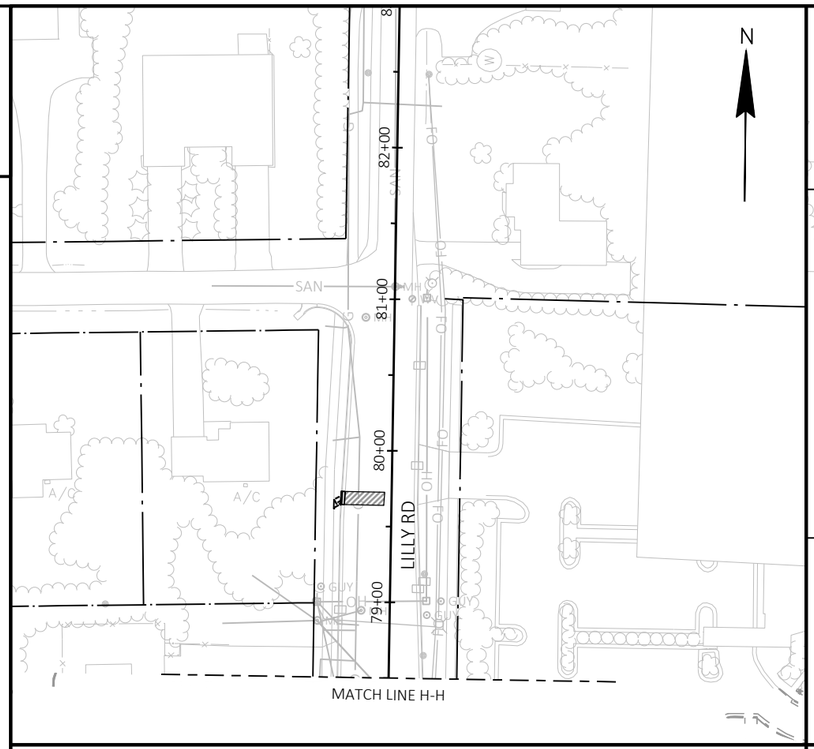
LEGEND

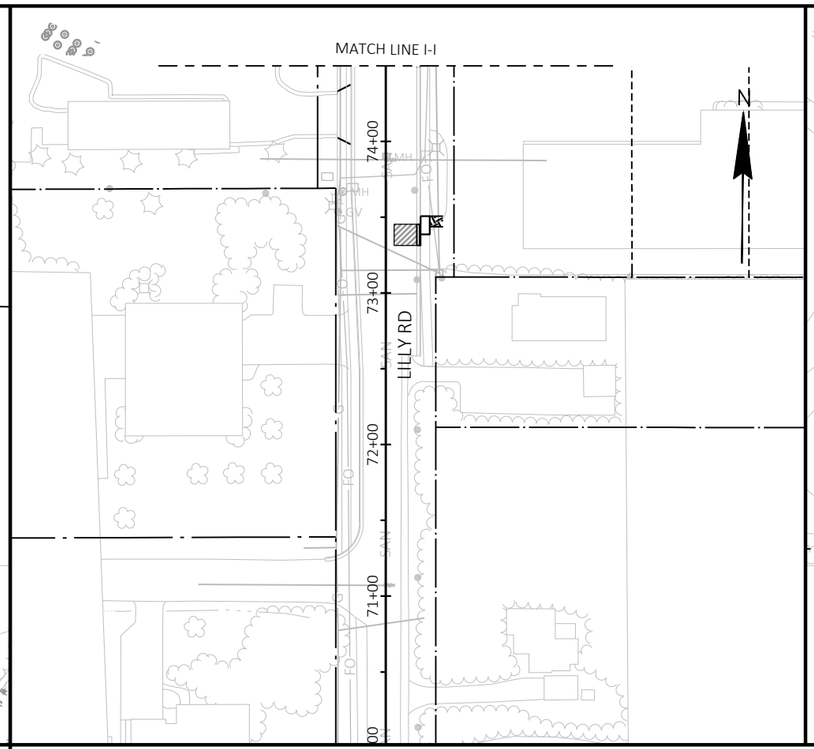
- TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- SOD
- SILT FENCE HEAVY DUTY
- RIP RAP
- ROCK BAG OPENING
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- INLET PROTECTION - TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

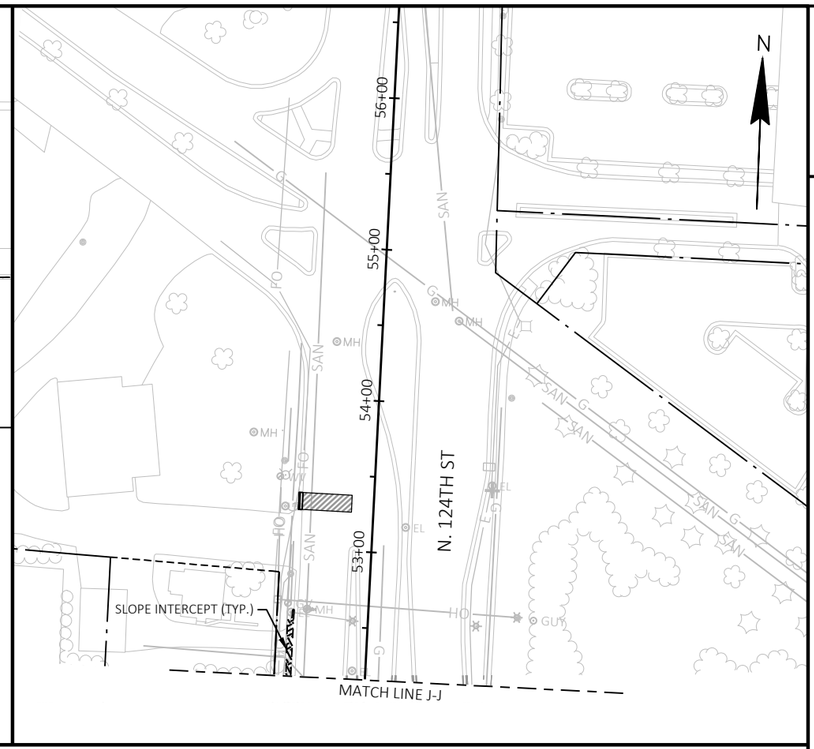
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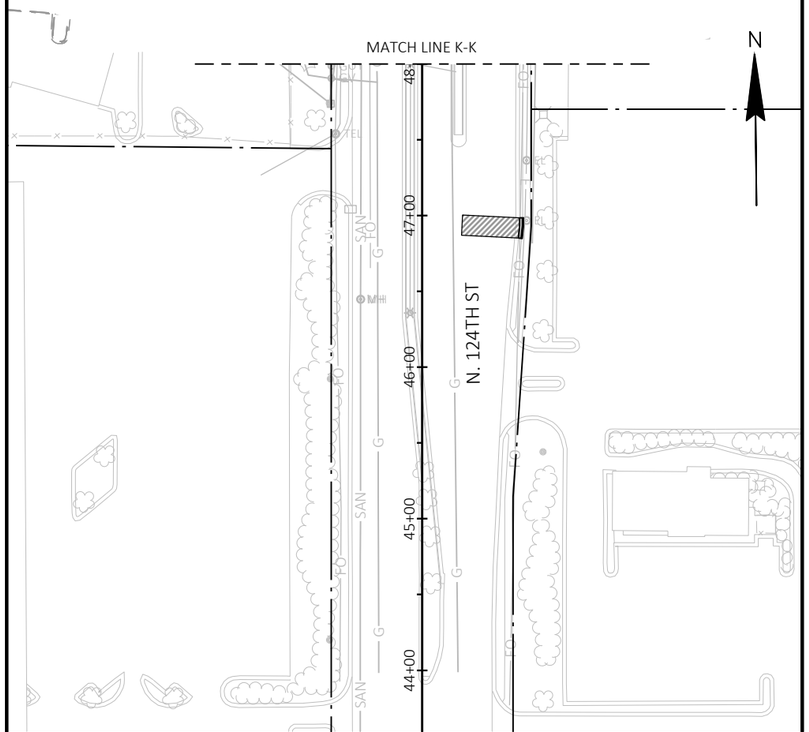
1. INSTALL INLET PROTECTION ON ALL NEWLY CONSTRUCTED INLETS.
2. IN AREAS ADJACENT TO WETLANDS, STAKE SILT FENCE EVERY 3' OR CLOSER AND APPLY TEMPORARY SEEDING AND MULCH TO THE FRONT AND BACK SIDE OF TRENCH THE SAME DAY AS INSTALLATION.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 153	E









LEGEND

- TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- SOD
- SILT FENCE HEAVY DUTY
- RIP RAP
- ROCK BAG OPENING
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- INLET PROTECTION - TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

NOTES:

1. INSTALL INLET PROTECTION ON ALL NEWLY CONSTRUCTED INLETS.
2. IN AREAS ADJACENT TO WETLANDS, STAKE SILT FENCE EVERY 3' OR CLOSER AND APPLY TEMPORARY SEEDING AND MULCH TO THE FRONT AND BACK SIDE OF TRENCH THE SAME DAY AS INSTALLATION.

2

LEGEND

- TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
- TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, SEED WATER AND EROSION MAT URBAN CLASS I TYPE B
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- SILT FENCE HEAVY DUTY
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- ROCK BAG OPENING
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- INLET PROTECTION - TYPE C (UNLESS OTHERWISE NOTED)
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- CULVERT PIPE CHECK
- SURFACE WATER FLOW

NOTES :

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2. IN AREAS ADJACENT TO WETLANDS, STAKE SILT FENCE EVERY 3' OR CLOSER AND APPLY TEMPORARY SEEDING AND MULCH TO THE FRONT AND BACK SIDE OF TRENCH THE SAME DAY AS INSTALLATION.

N

RIPRAP MEDIUM
PLACE RIPRAP SO THAT THE TOP OF RIPRAP IS JUST BELOW THE OUTFALL ELEVATION OF THE ENDWALL

SLOPE INTERCEPT (TYP.)

N. 138TH ST

STH 190 (W. CAPITOL DR)

464+00 465+00 466+00 467+00 468+00 469+00

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL - 138TH STREET	SHEET 155	E

2

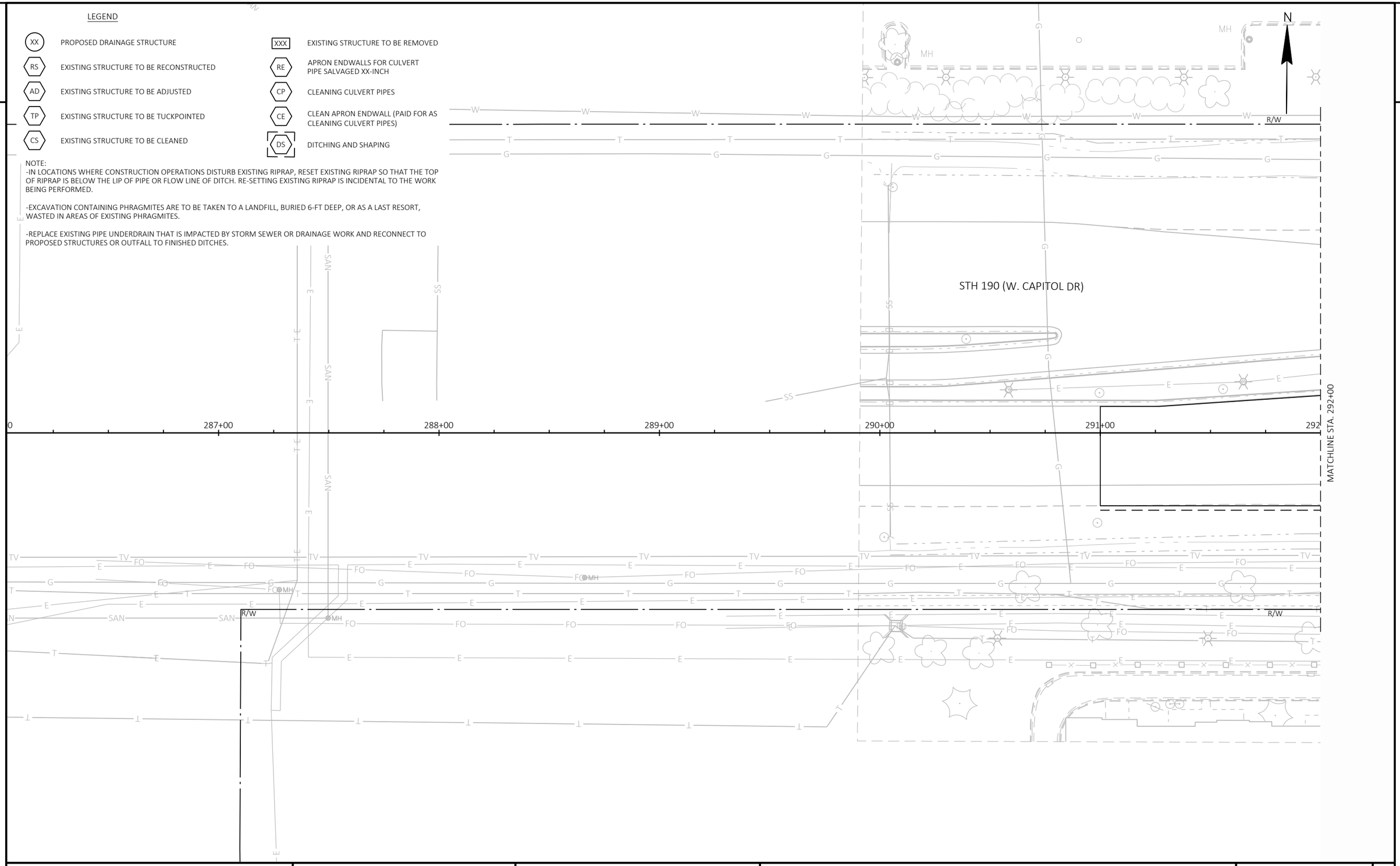
LEGEND

XX	PROPOSED DRAINAGE STRUCTURE	XXX	EXISTING STRUCTURE TO BE REMOVED
RS	EXISTING STRUCTURE TO BE RECONSTRUCTED	RE	APRON ENDWALLS FOR CULVERT PIPE SALVAGED XX-INCH
AD	EXISTING STRUCTURE TO BE ADJUSTED	CP	CLEANING CULVERT PIPES
TP	EXISTING STRUCTURE TO BE TUCKPOINTED	CE	CLEAN APRON ENDWALL (PAID FOR AS CLEANING CULVERT PIPES)
CS	EXISTING STRUCTURE TO BE CLEANED	DS	DITCHING AND SHAPING

NOTE:
-IN LOCATIONS WHERE CONSTRUCTION OPERATIONS DISTURB EXISTING RIPRAP, RESET EXISTING RIPRAP SO THAT THE TOP OF RIPRAP IS BELOW THE LIP OF PIPE OR FLOW LINE OF DITCH. RE-SETTING EXISTING RIPRAP IS INCIDENTAL TO THE WORK BEING PERFORMED.

-EXCAVATION CONTAINING PHRAGMITES ARE TO BE TAKEN TO A LANDFILL, BURIED 6-FT DEEP, OR AS A LAST RESORT, WASTED IN AREAS OF EXISTING PHRAGMITES.

-REPLACE EXISTING PIPE UNDERDRAIN THAT IS IMPACTED BY STORM SEWER OR DRAINAGE WORK AND RECONNECT TO PROPOSED STRUCTURES OR OUTFALL TO FINISHED DITCHES.



2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 156	E

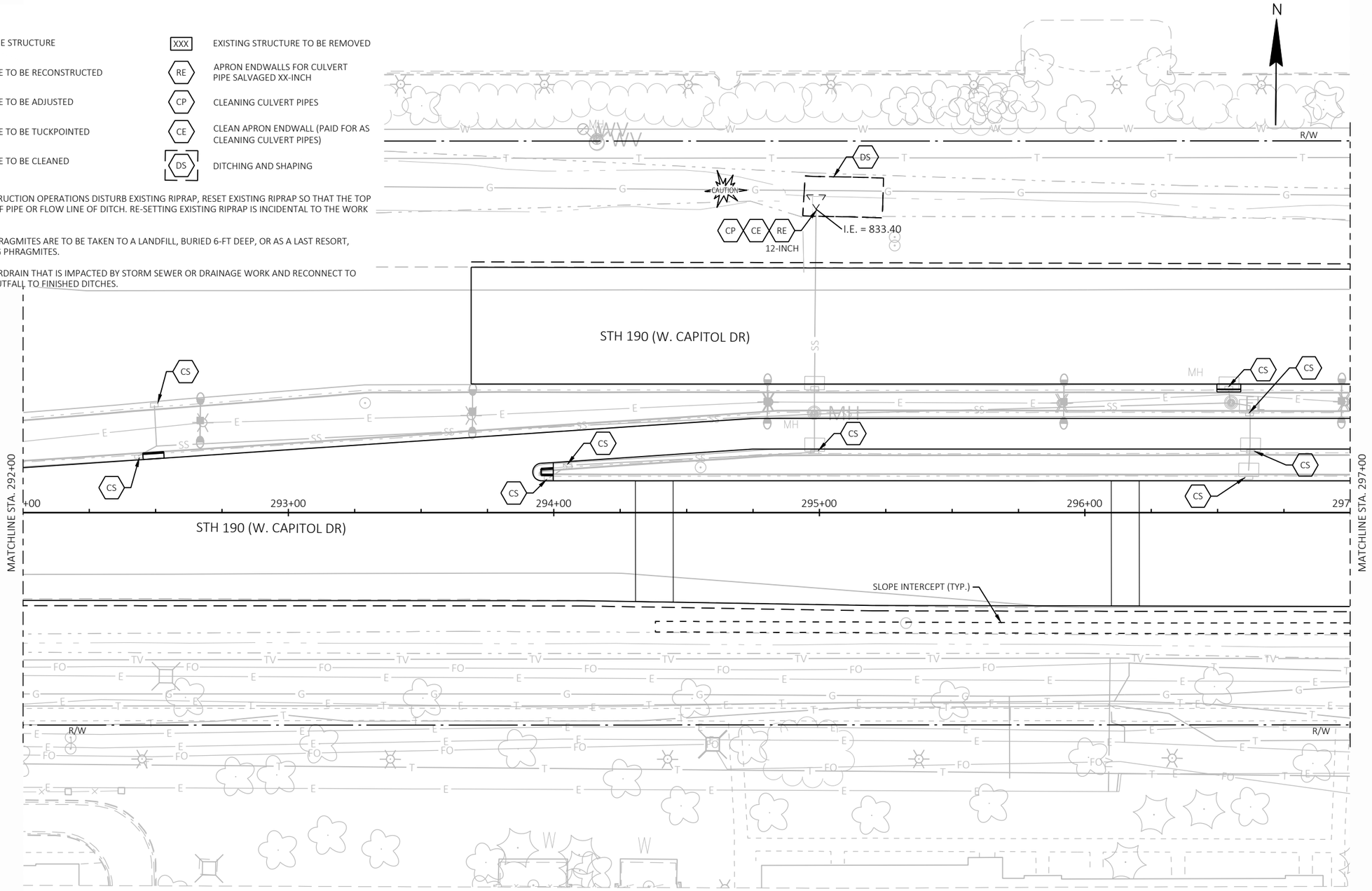
LEGEND

XX	PROPOSED DRAINAGE STRUCTURE	XXX	EXISTING STRUCTURE TO BE REMOVED
RS	EXISTING STRUCTURE TO BE RECONSTRUCTED	RE	APRON ENDWALLS FOR CULVERT PIPE SALVAGED XX-INCH
AD	EXISTING STRUCTURE TO BE ADJUSTED	CP	CLEANING CULVERT PIPES
TP	EXISTING STRUCTURE TO BE TUCKPOINTED	CE	CLEAN APRON ENDWALL (PAID FOR AS CLEANING CULVERT PIPES)
CS	EXISTING STRUCTURE TO BE CLEANED	DS	DITCHING AND SHAPING

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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 157	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\022500_SS.DWG
LAYOUT NAME - 021202_ss
PLOT DATE : 8/20/2025 12:10 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

MATCH LINE A-A

N

STH 190 (W. CAPITOL DR)

N BROOKFIELD RD

EW1 STA 300+51, 136.2' LT
APRON ENDWALLS FOR CULVERT PIPE STEEL 36-INCH

EW102

EW2 STA 300+57, 136.7' LT
APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH

EW3 STA 300+73, 145.9' LT
APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH

EW101

EW103

CP

CE

R/W

I.E. = 830.81

DS

4 LF - REMOVING STORM SEWER 12-INCH

10 STA 300+87, 13.4' LT
INLETS 2x3-H

P-10.1

110

I/C PB103

I/C PB102

I/C PB101

I/C CV101

SLOPE INTERCEPT (TYP.)

RS

AD

CS

MATCHLINE STA. 297+00

MATCHLINE STA. 303+00

298+00

299+00

300+00

301+00

302+00

303

51+00

50+00

49+00

MATCH LINE B-B

LEGEND

XX	PROPOSED DRAINAGE STRUCTURE	XXX	EXISTING STRUCTURE TO BE REMOVED
RS	EXISTING STRUCTURE TO BE RECONSTRUCTED	RE	APRON ENDWALLS FOR CULVERT PIPE SALVAGED XX-INCH
AD	EXISTING STRUCTURE TO BE ADJUSTED	CP	CLEANING CULVERT PIPES
TP	EXISTING STRUCTURE TO BE TUCKPOINTED	CE	CLEAN APRON ENDWALL (PAID FOR AS CLEANING CULVERT PIPES)
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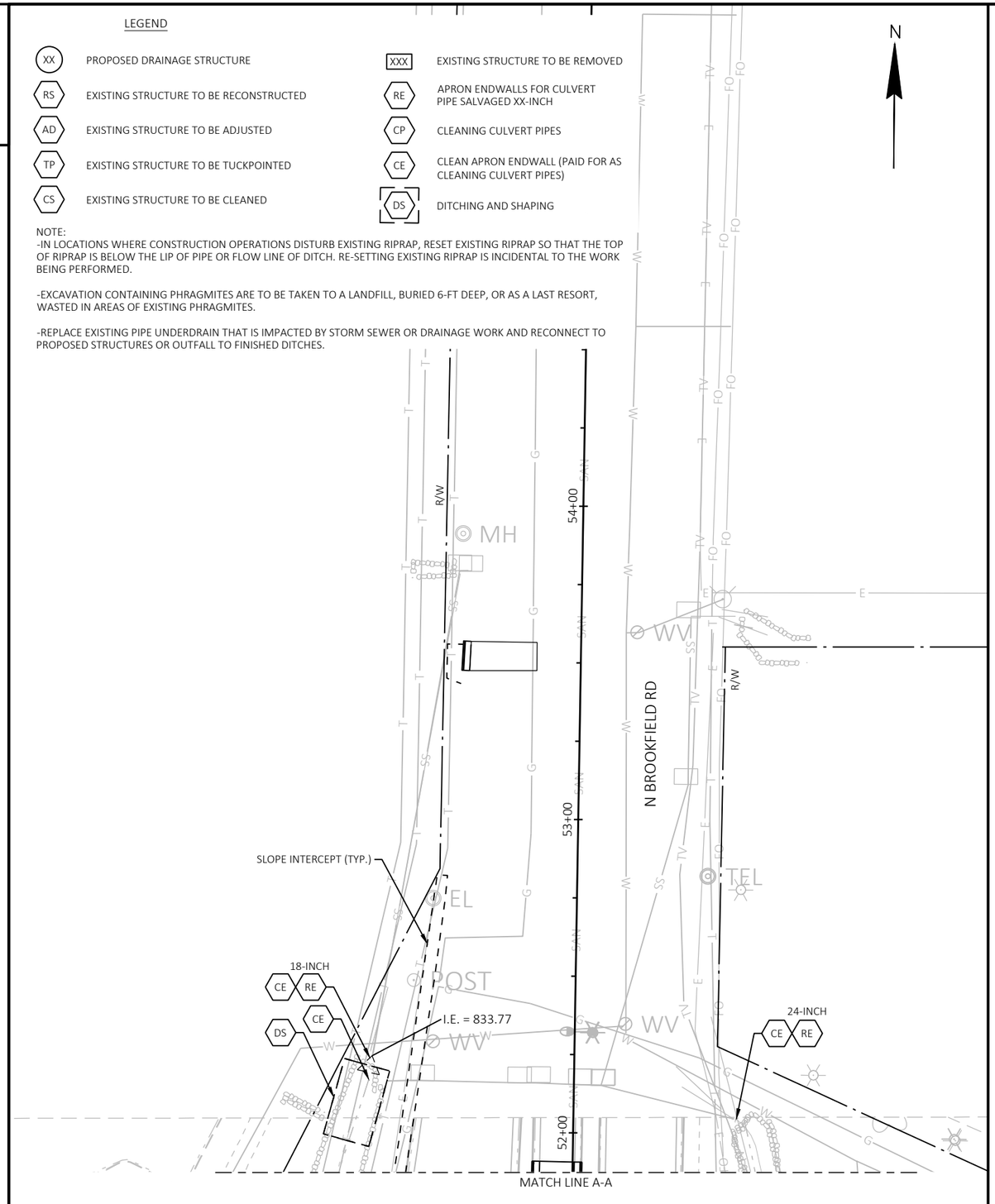
LEGEND

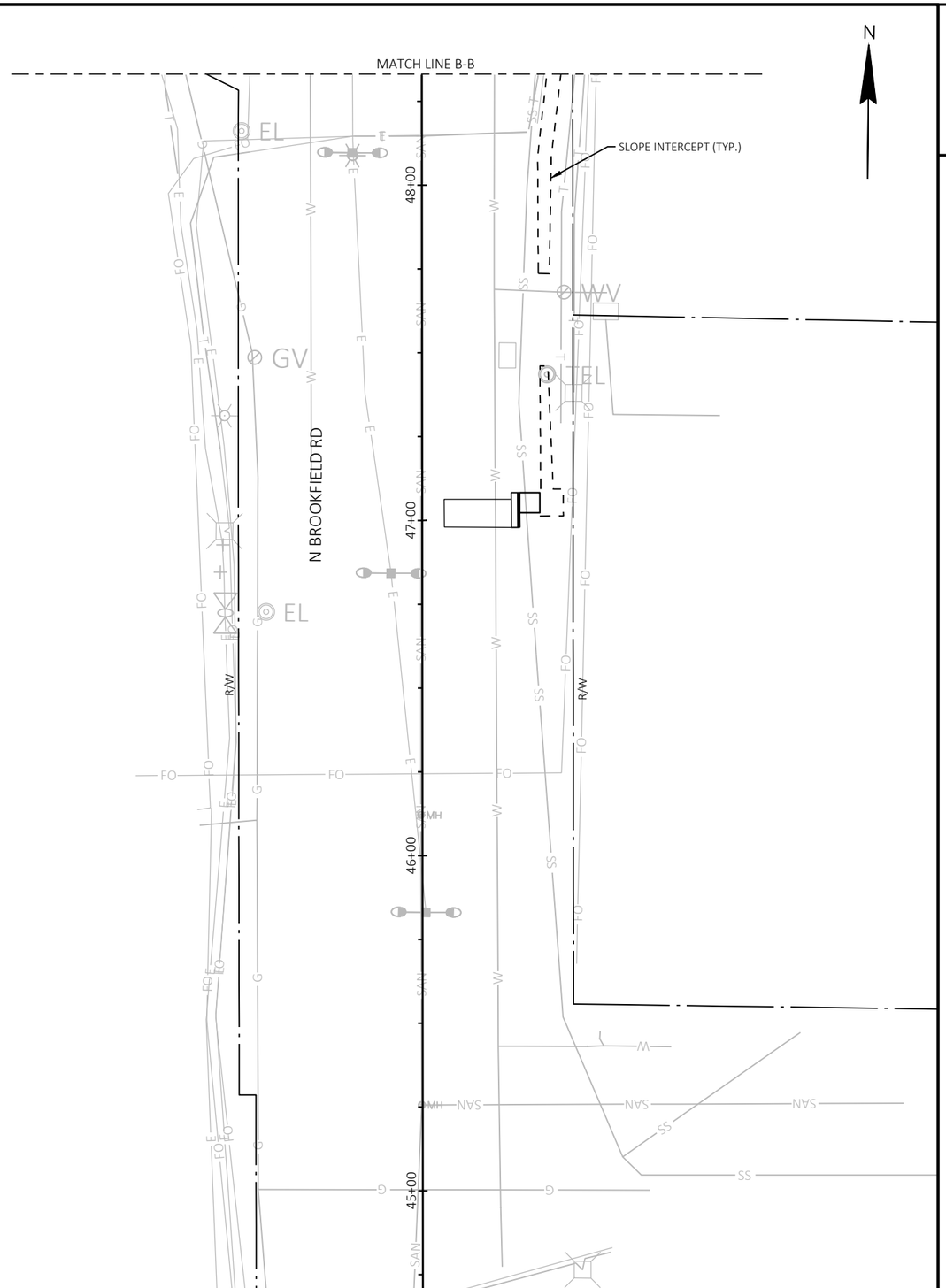
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2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 159	E

2

2

N

R/W

R/W

STH 190 (W. CAPITOL DR)

MATCHLINE STA. 303+00

304+00

305+00

306+00

307+00

308+00

309

MATCHLINE STA. 309+00

CS

AD

CS

18-INCH

CE

RE

I.E. = 839.48

DS

CS

R/W

STA 305+48, 49.5' RT
INLETS MEDIAN 1G-MS
11

P-EW6.1

DS

EW106

STA 307+39, 60.2' RT
APRON ENDWALLS FOR CPRC 24-INCH
EW6

8 LF - REMOVING STORM
SEWER 24-INCH

SLOPE INTERCEPT (TYP.)

TLE

TLE

R/W

ST ANDREW LN

MH

MH

LEGEND

XX	PROPOSED DRAINAGE STRUCTURE	XXX	EXISTING STRUCTURE TO BE REMOVED
RS	EXISTING STRUCTURE TO BE RECONSTRUCTED	RE	APRON ENDWALLS FOR CULVERT PIPE SALVAGED XX-INCH
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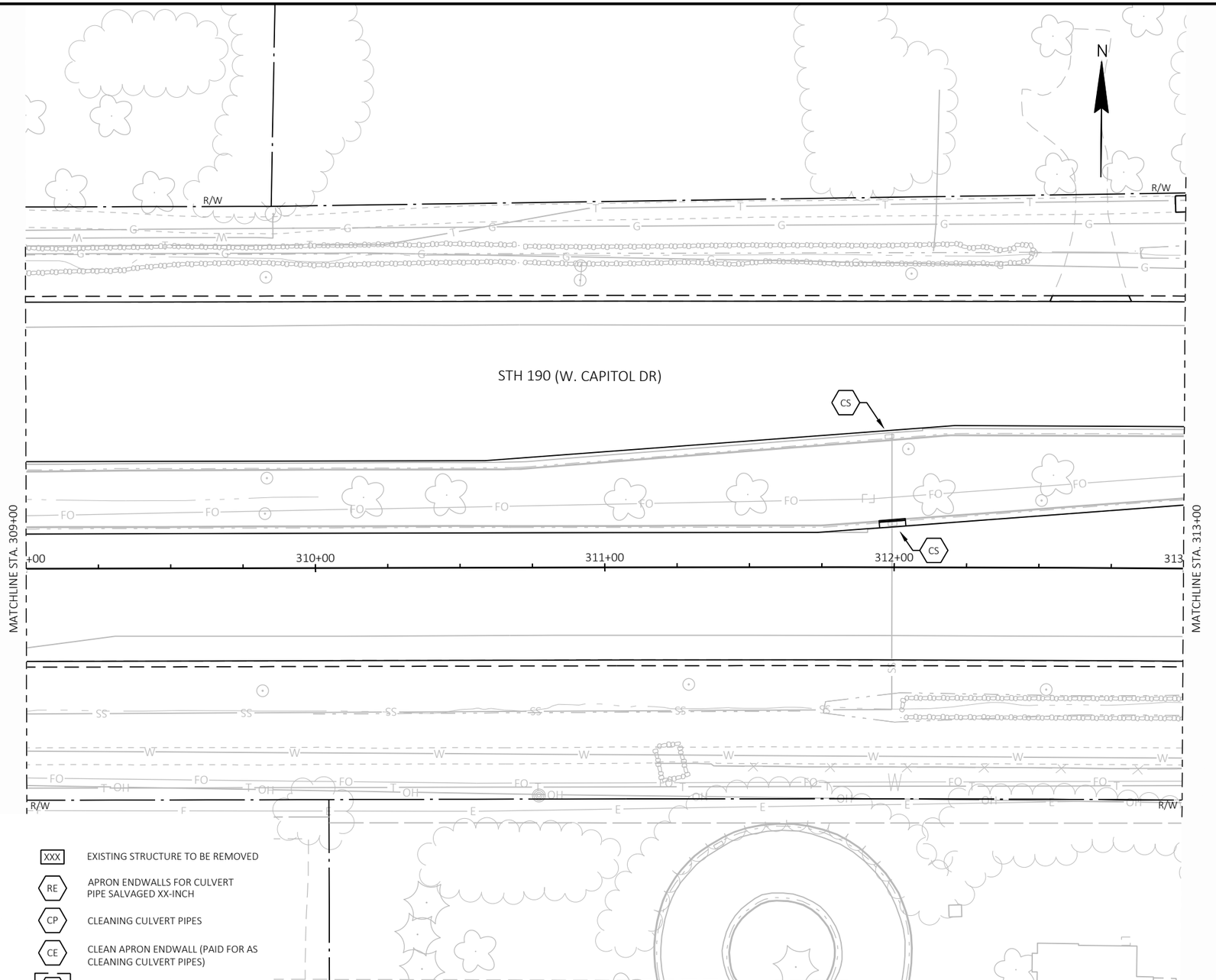
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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 160	E

2



LEGEND

XX	PROPOSED DRAINAGE STRUCTURE	XXX	EXISTING STRUCTURE TO BE REMOVED
RS	EXISTING STRUCTURE TO BE RECONSTRUCTED	RE	APRON ENDWALLS FOR CULVERT PIPE SALVAGED XX-INCH
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2

N

REMOVING SMALL PIPE CULVERTS
(47 LF OF 15-INCH CMCP)

112

4 LF - REMOVING STORM
SEWER 15-INCH

CS

CAUTION

R/W

EW107

P-12.1

P-12.2

STA 315+80, 110.0' LT
APRON ENDWALLS FOR CPRC 15-INCH

EW7

12

STA 316+27, 108.9' LT
INLETS MEDIAN 1G-MS

STH 190 (W. CAPITOL DR)

P-13.2

CS

4 LF - REMOVING STORM
SEWER 18-INCH

13

STA 316+78, 14.0' LT
INLETS 2x3-H

P-13.1

113

4 LF - REMOVING STORM
SEWER 18-INCH

MATCHLINE STA. 313+00

314+00

315+00

316+00

317+00

318+00

MATCHLINE STA. 319+00

DS

CE

I.E. = 874.36

CE

DS

I.E. = 876.51

SLOPE INTERCEPT (TYP.)

TLE

MOUNTAIN DR

LEGEND

XX	PROPOSED DRAINAGE STRUCTURE	XXX	EXISTING STRUCTURE TO BE REMOVED
RS	EXISTING STRUCTURE TO BE RECONSTRUCTED	RE	APRON ENDWALLS FOR CULVERT PIPE SALVAGED XX-INCH
AD	EXISTING STRUCTURE TO BE ADJUSTED	CP	CLEANING CULVERT PIPES
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2

MATCH LINE C-C

IMPERIAL DR

STH 190 (W. CAPITOL DR)

4 LF - REMOVING STORM SEWER 15-INCH

4 LF - REMOVING STORM SEWER 15-INCH

STA 321+08, 115.2' LT
INLETS MEDIAN 1G-MS (14)

P-14.1

P-14.2

114

TLE

R/W

CAUTION

I.E. = 876.90

I.E. = 876.90

I.E. = 877.25

I.E. = 876.80

I/C CV103

I/C PB 110

FO I/C

SLOPE INTERCEPT (TYP.)

MATCHLINE STA. 319+00

MATCHLINE STA. 325+00

320+00

321+00

322+00

323+00

324+00

50+00

51+00

49+00

LEGEND

XX	PROPOSED DRAINAGE STRUCTURE	XXX	EXISTING STRUCTURE TO BE REMOVED
RS	EXISTING STRUCTURE TO BE RECONSTRUCTED	RE	APRON ENDWALLS FOR CULVERT PIPE SALVAGED XX-INCH
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2

LEGEND

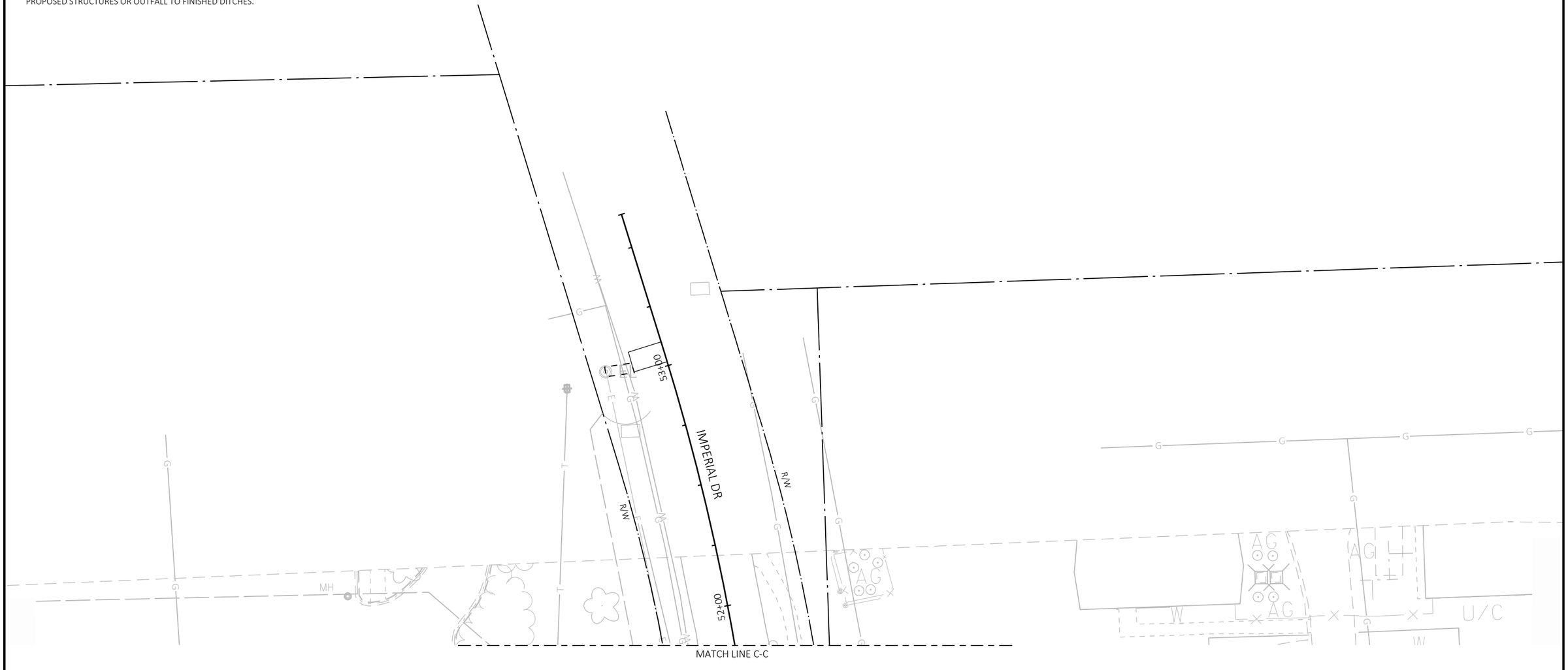
XX — PROPOSED DRAINAGE STRUCTURE	XXX — EXISTING STRUCTURE TO BE REMOVED
RS — EXISTING STRUCTURE TO BE RECONSTRUCTED	RE — APRON ENDWALLS FOR CULVERT PIPE SALVAGED XX-INCH
AD — EXISTING STRUCTURE TO BE ADJUSTED	CP — CLEANING CULVERT PIPES
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N



2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 164	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\022500_SS.DWG
LAYOUT NAME - 021209_ss
PLOT DATE : 8/20/2025 12:12 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

R/W

R/W

CE

CE

CS

CS

SLOPE INTERCEPT (TYP.)

STH 190 (W. CAPITOL DR)

4 LF - REMOVING STORM SEWER 18-INCH

CS

CS

CS

CAUTION

P-15.2

P-15.1

115

326+00

327+00

328+00

329+00

330+00

331

MATCHLINE STA. 325+00

4 LF - REMOVING STORM SEWER 18-INCH

15 STA 326+00, 13.5' LT INLETS 2x3-H

CS

CP

CS

CS

I.E. = 877.25

I.E. = 873.79

CE

DS

I.E. = 877.07

CE

I.E. = 877.20

I.E. = 877.85

CE

I.E. = 878.21

DS

R/W

DS

CE

CAUTION

CE

CE

I.E. = 879.39

CP

CS

4 LF - REMOVING STORM SEWER 18-INCH

P-16.1

P-16.2

16 STA 329+00, 46.5' LT INLETS 2x2.5-WM

116

4 LF - REMOVING STORM SEWER 18-INCH

CS

MATCHLINE STA. 331+00

R/W

LEGEND

XX	PROPOSED DRAINAGE STRUCTURE	XXX	EXISTING STRUCTURE TO BE REMOVED
RS	EXISTING STRUCTURE TO BE RECONSTRUCTED	RE	APRON ENDWALLS FOR CULVERT PIPE SALVAGED XX-INCH
AD	EXISTING STRUCTURE TO BE ADJUSTED	CP	CLEANING CULVERT PIPES
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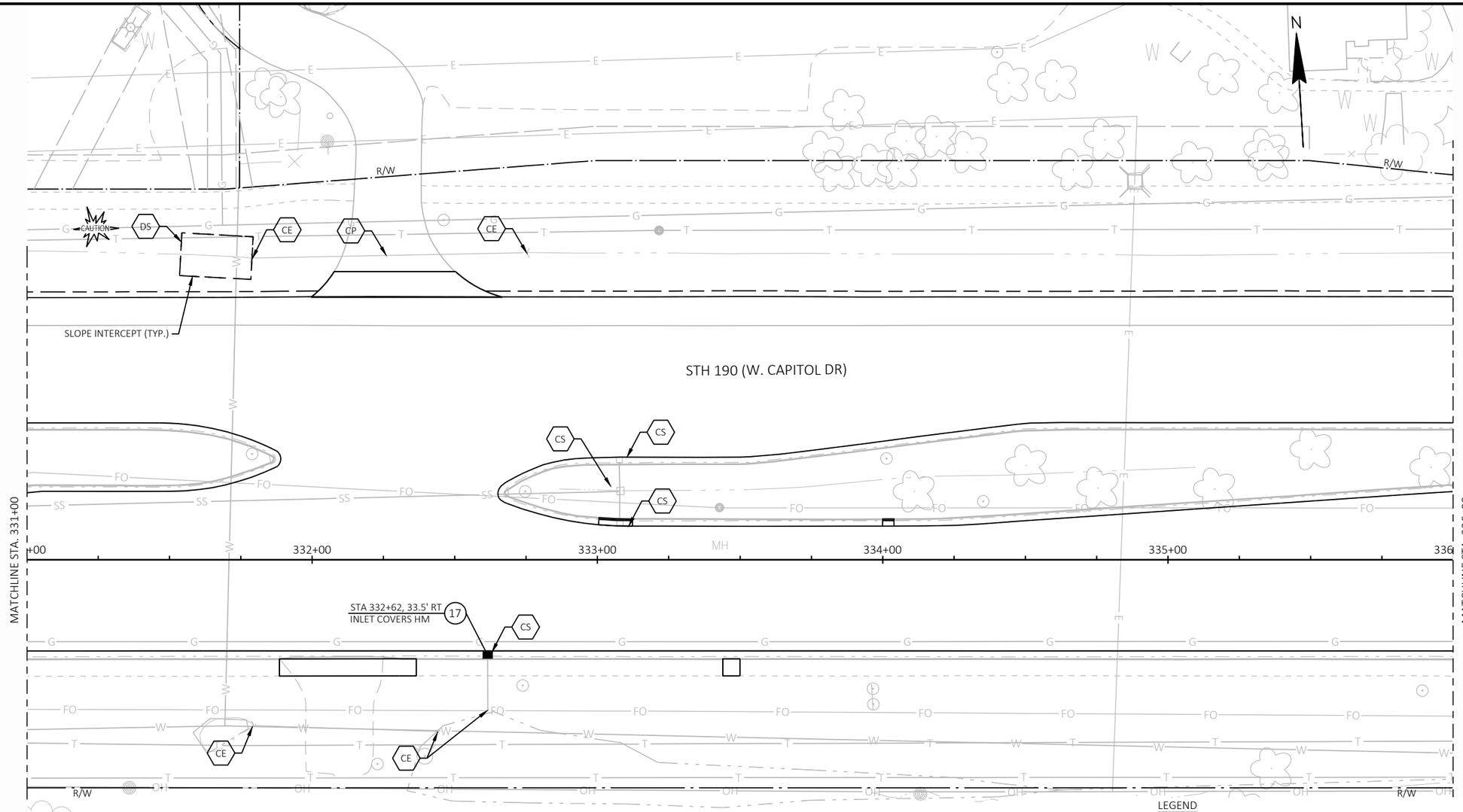
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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 165	E

2



LEGEND

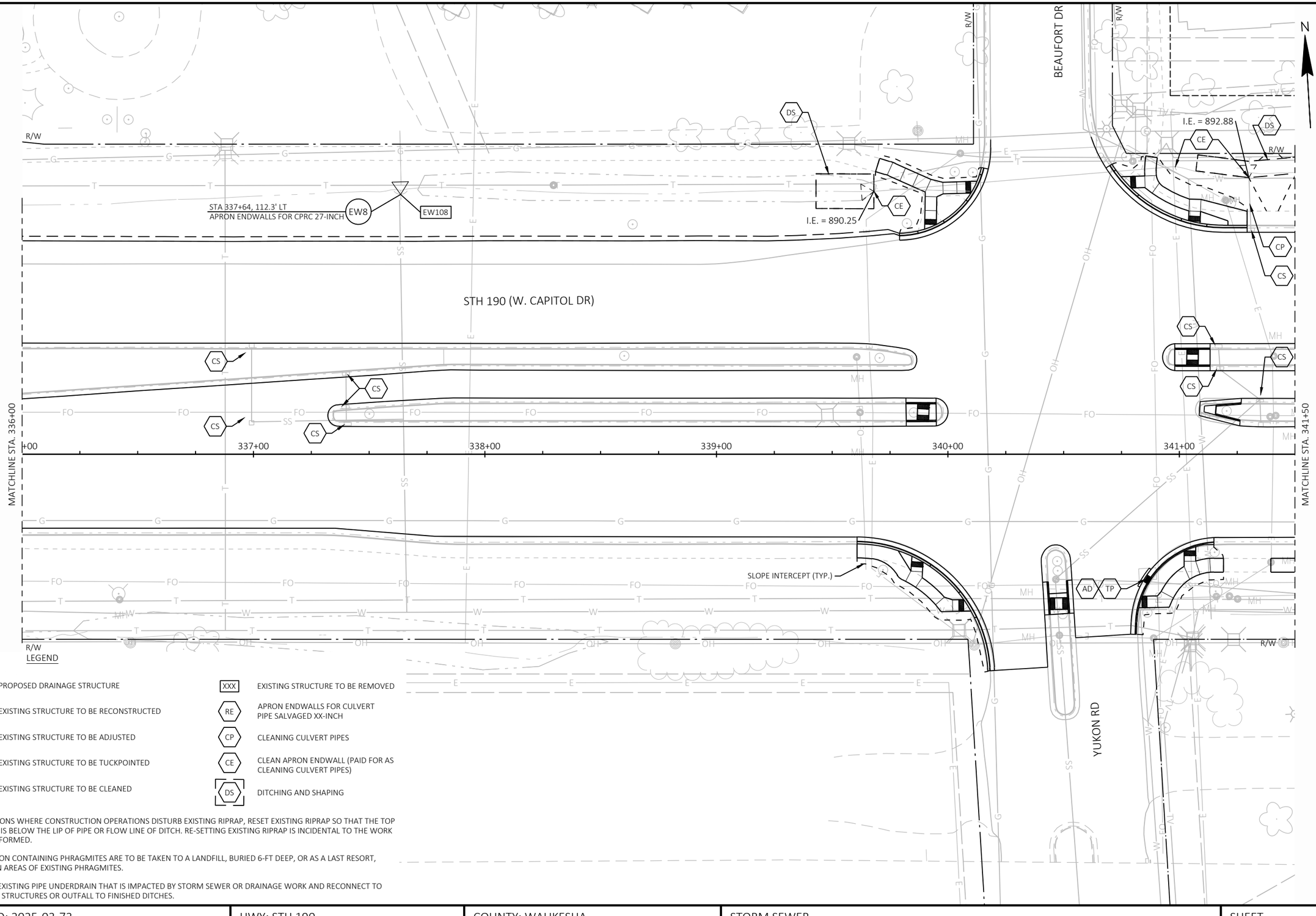
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2



LEGEND

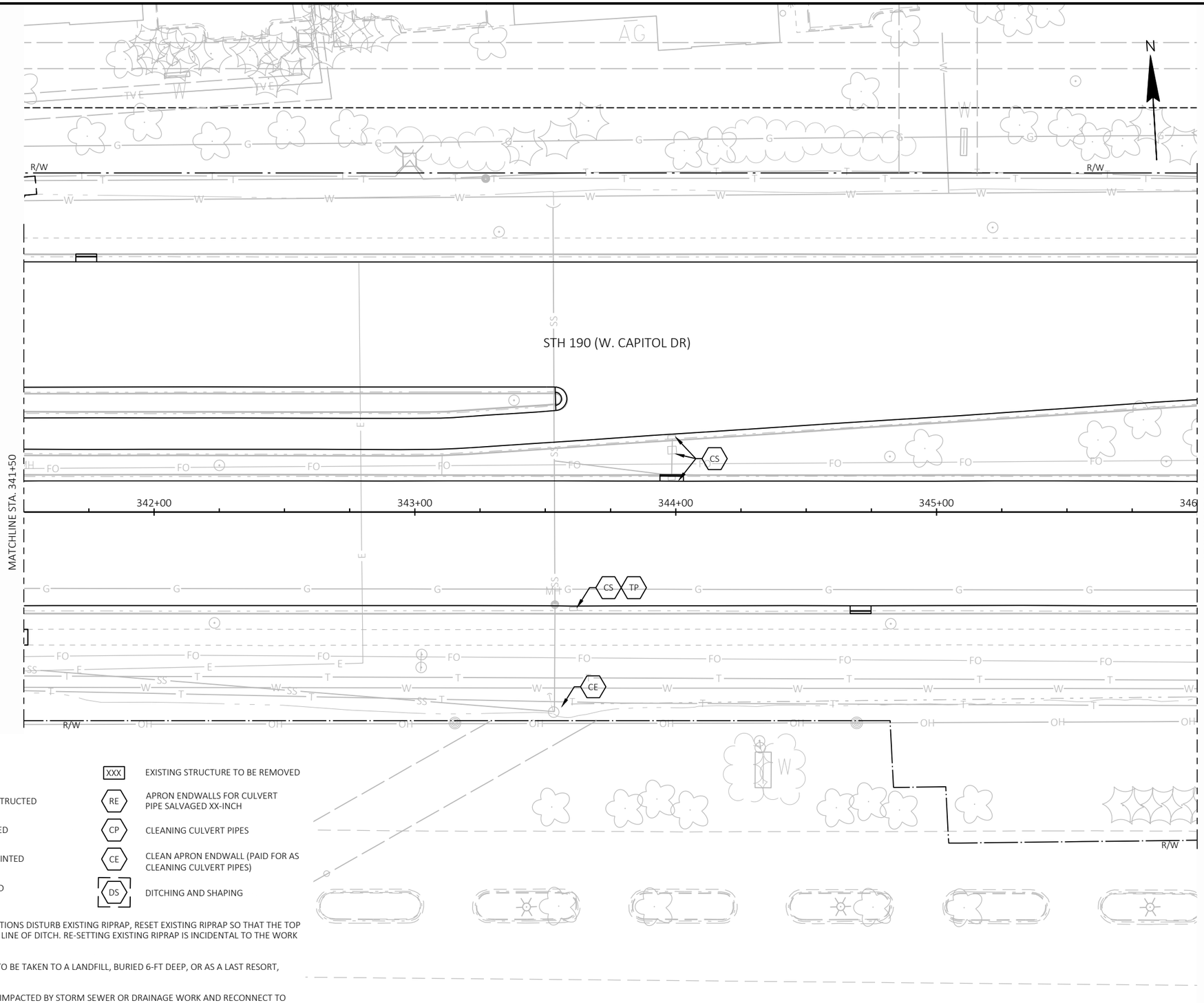
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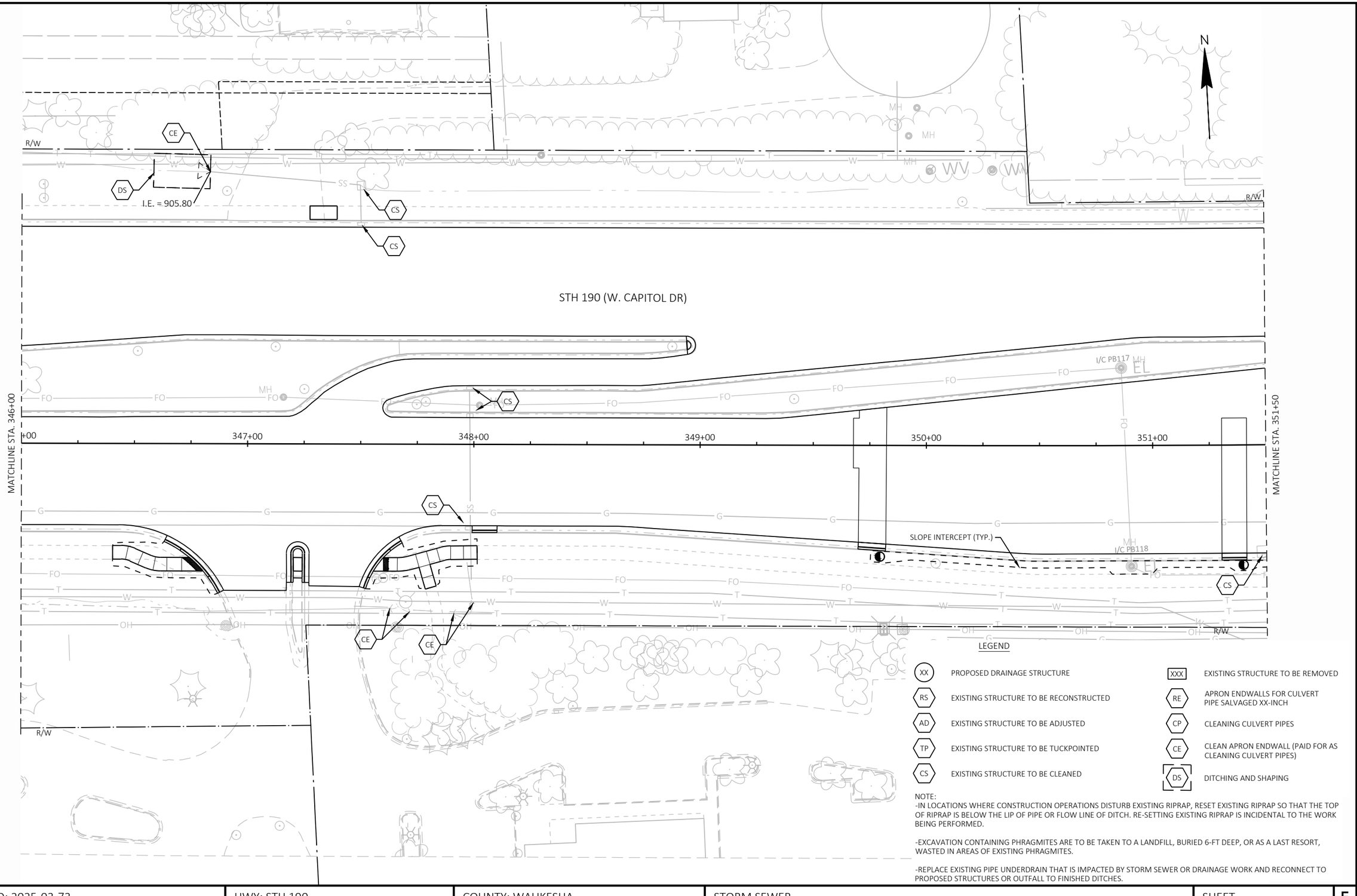
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2



LEGEND

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RS	EXISTING STRUCTURE TO BE RECONSTRUCTED	RE	APRON ENDWALLS FOR CULVERT PIPE SALVAGED XX-INCH
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2

MATCH LINE D-D

N. CALHOUN RD

STH 190 (W. CAPITOL DR)

MATCHLINE STA. 351+50

MATCHLINE STA. 357+50

352+00 353+00 354+00 355+00 356+00 357+00

51+00 50+00 49+00

4 LF - REMOVING STORM SEWER 12-INCH

4 LF - REMOVING STORM SEWER 18-INCH

18 STA 352+28, 14.2' LT INLETS 4-S

P-18.1 P-18.2

SLOPE INTERCEPT (TYP.)

I/C CV106

I/C PP119

MATCH LINE E-E

R/W

N

LEGEND

XX	PROPOSED DRAINAGE STRUCTURE	XXX	EXISTING STRUCTURE TO BE REMOVED
RS	EXISTING STRUCTURE TO BE RECONSTRUCTED	RE	APRON ENDWALLS FOR CULVERT PIPE SALVAGED XX-INCH
AD	EXISTING STRUCTURE TO BE ADJUSTED	CP	CLEANING CULVERT PIPES
TP	EXISTING STRUCTURE TO BE TUCKPOINTED	CE	CLEAN APRON ENDWALL (PAID FOR AS CLEANING CULVERT PIPES)
CS	EXISTING STRUCTURE TO BE CLEANED	DS	DITCHING AND SHAPING

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LEGEND

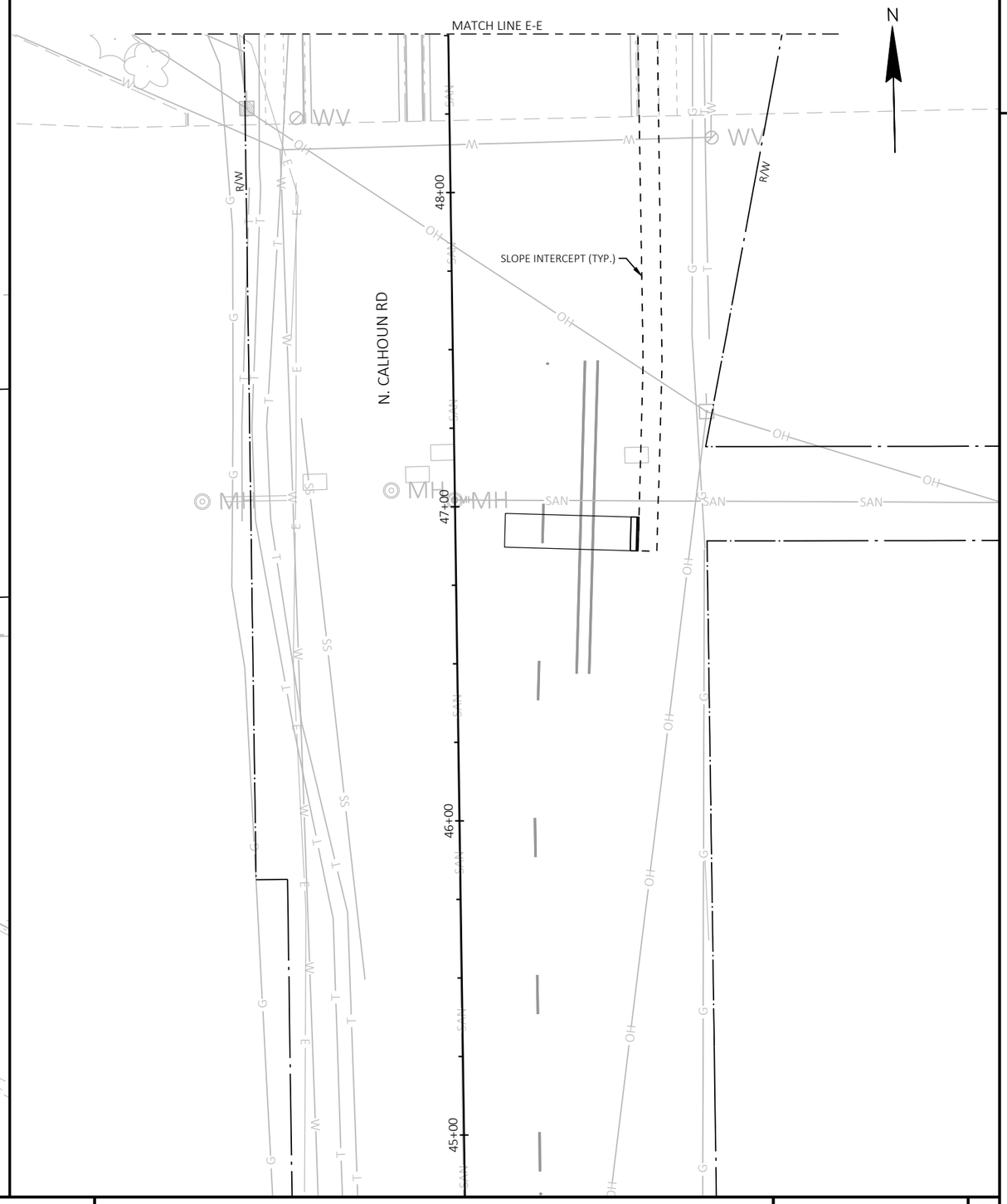
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2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 171	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\022500_SS.DWG
LAYOUT NAME - 021216_ss
PLOT DATE : 8/20/2025 12:14 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

STH 190 (W. CAPITOL DR)

SLOPE INTERCEPT (TYP.)

CS

AD CS

CS AD

4 LF - REMOVING STORM SEWER 18-INCH

P-19.1

P-19.2

19 STA 358+99, 13.2' LT INLETS 2x3-H

119

4 LF - REMOVING STORM SEWER 18-INCH

4 LF - REMOVING STORM SEWER 18-INCH

120

P-20.1

CAUTION

P-20.2

4 LF - REMOVING STORM SEWER 18-INCH

RS

20 STA 358+99, 37.3' RT INLETS 2x2.5-WM

MATCHLINE STA. 357+50

MATCHLINE STA. 363+00

358+00 359+00 360+00 361+00 362+00 363

R/W

LEGEND

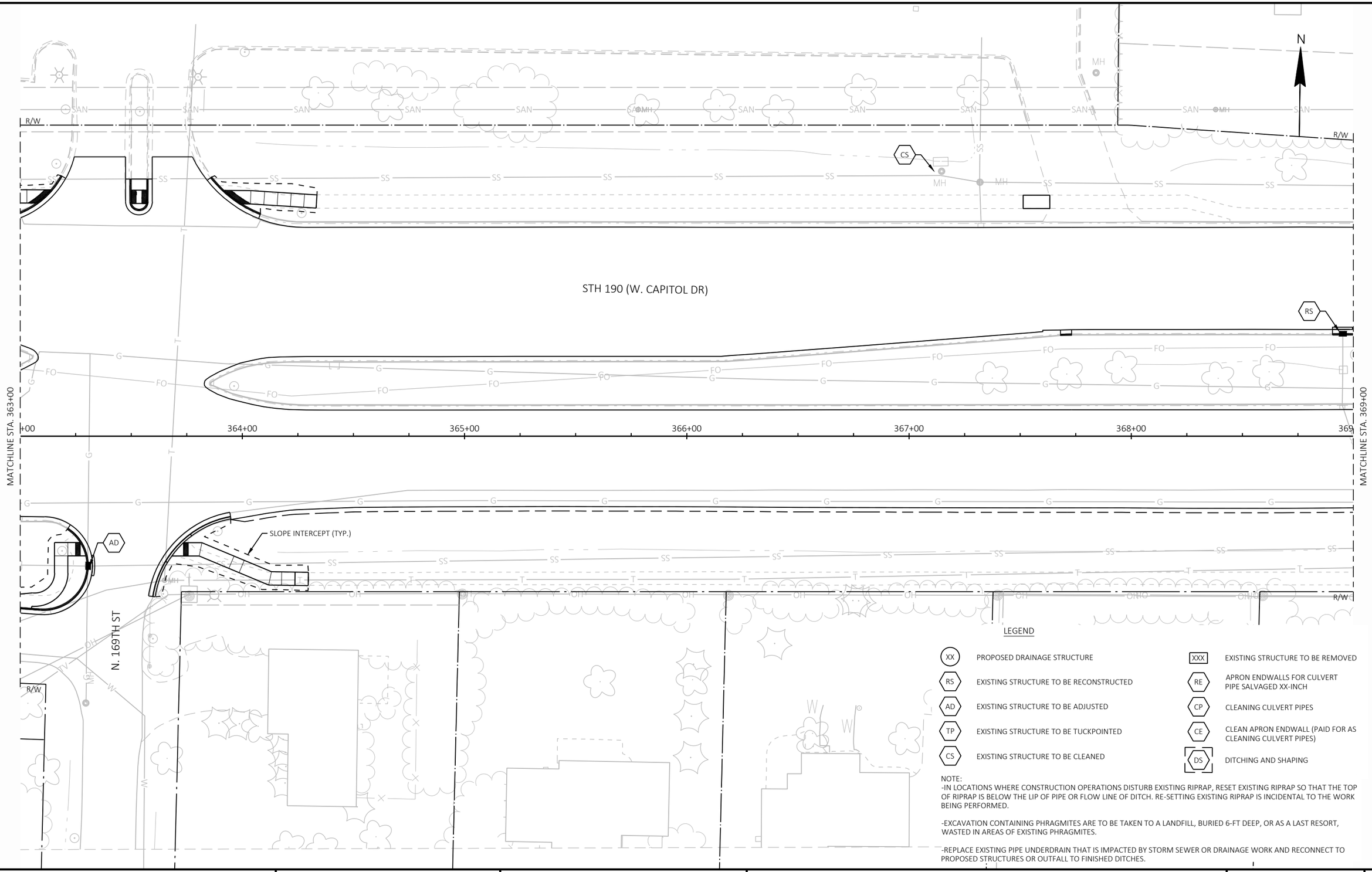
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2

N

STH 190 (W. CAPITOL DR)

R/W

R/W

4 LF - REMOVING STORM SEWER 18-INCH

CAUTION

P-21.1

STA 374+19, 46.7' LT
INLETS 4-H

21

121

P-21.2

4 LF - REMOVING STORM SEWER 18-INCH

CS

AD

CS

MATCHLINE STA. 369+00

370+00

371+00

372+00

373+00

374+00

MATCHLINE STA. 374+50

CS

EW109

EW110

EW10

STA 369+72, 56.9' RT
APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH

R/W

CE

EW9

STA 369+69, 56.8' RT
APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH

CS

SLOPE INTERCEPT (TYP.)

R/W

LEGEND

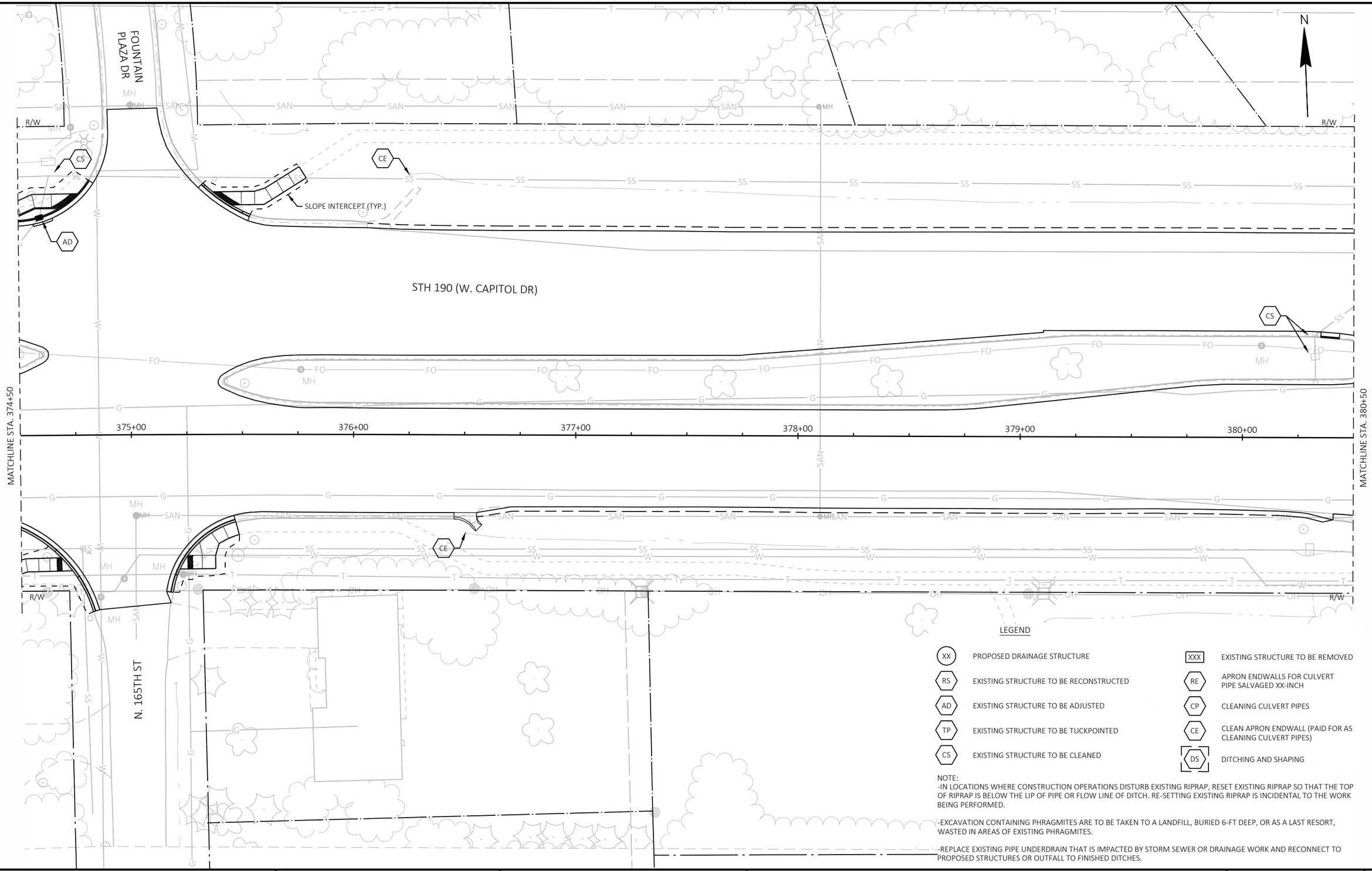
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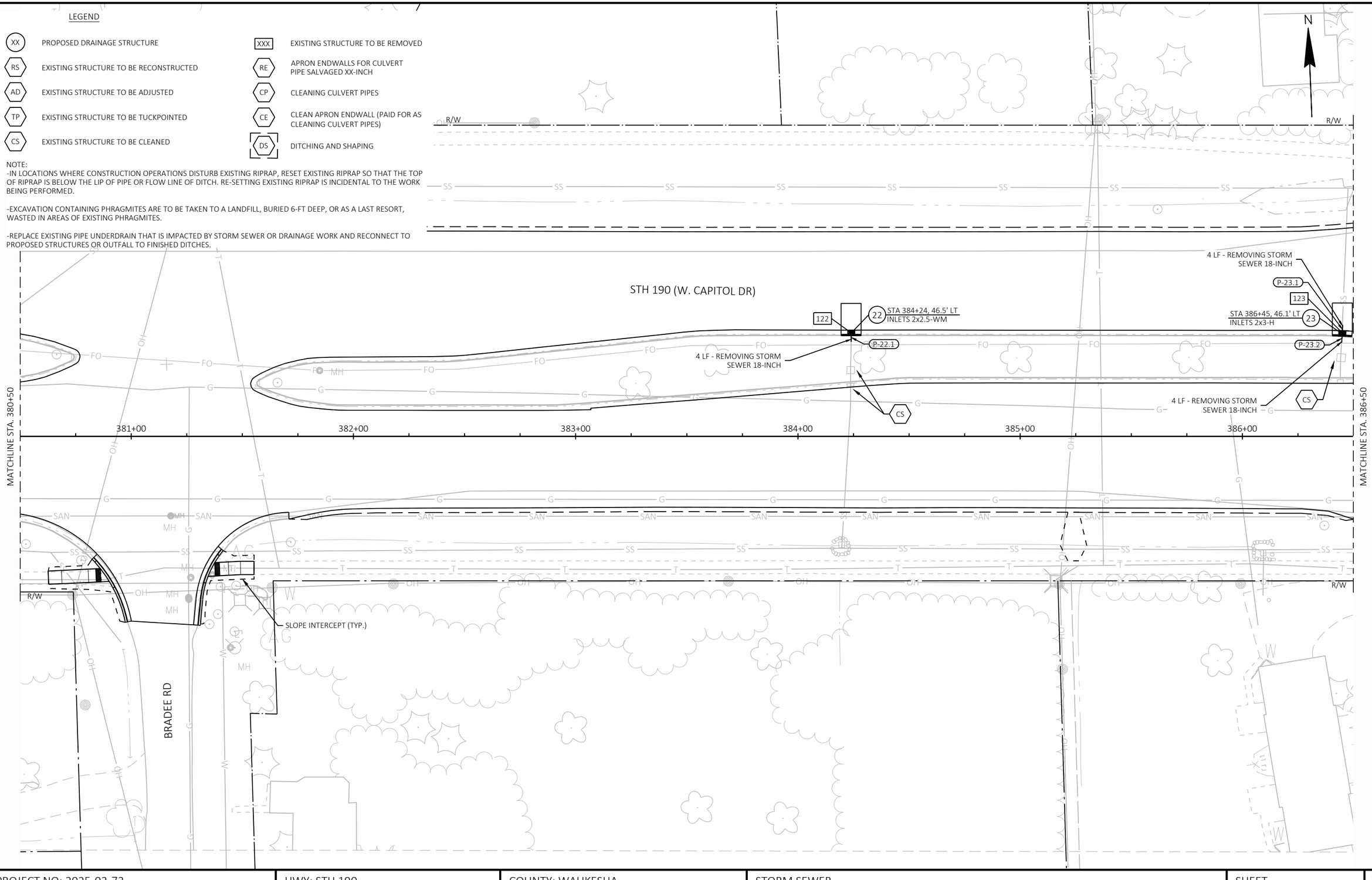
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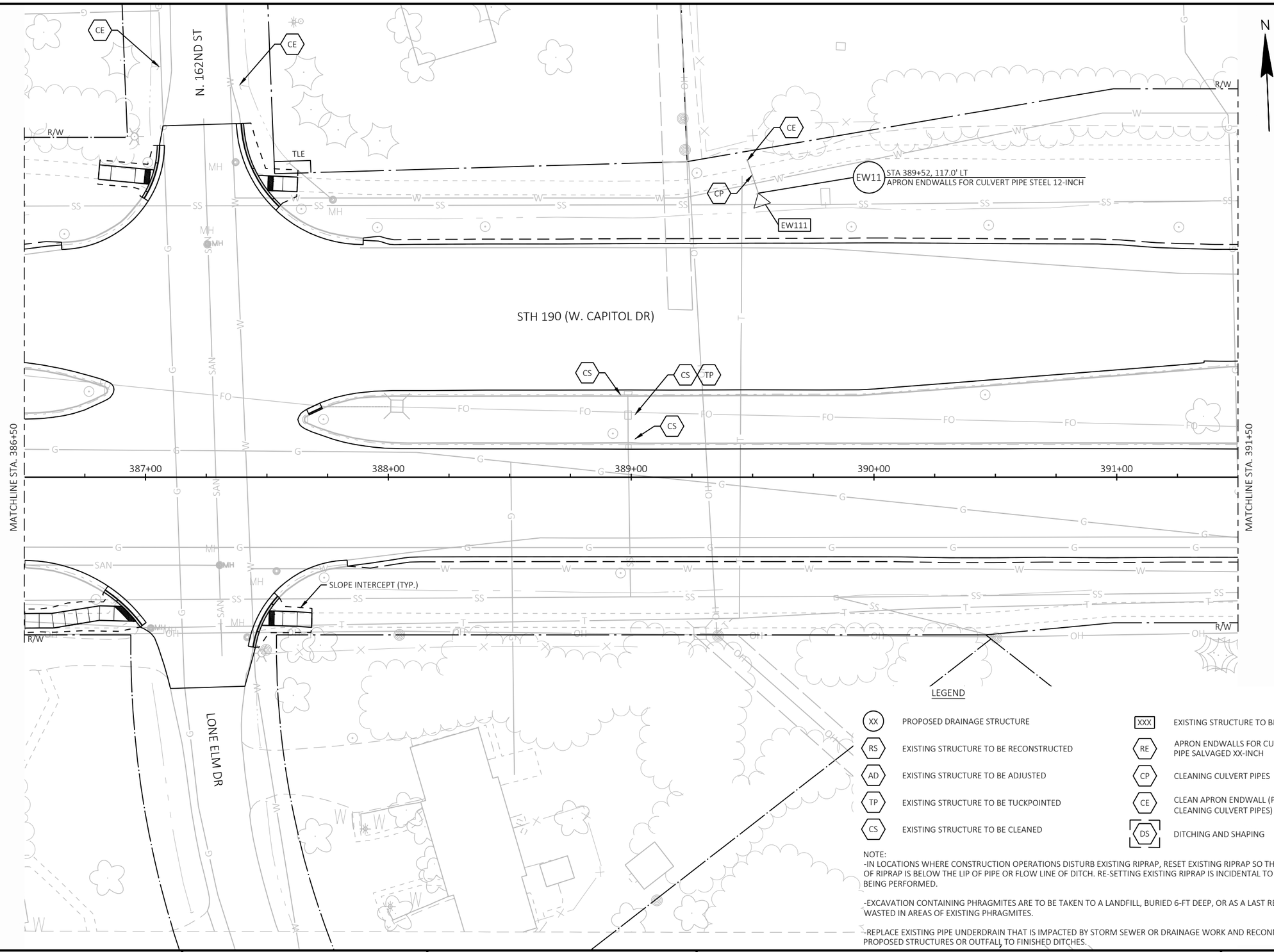
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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 176	E

2



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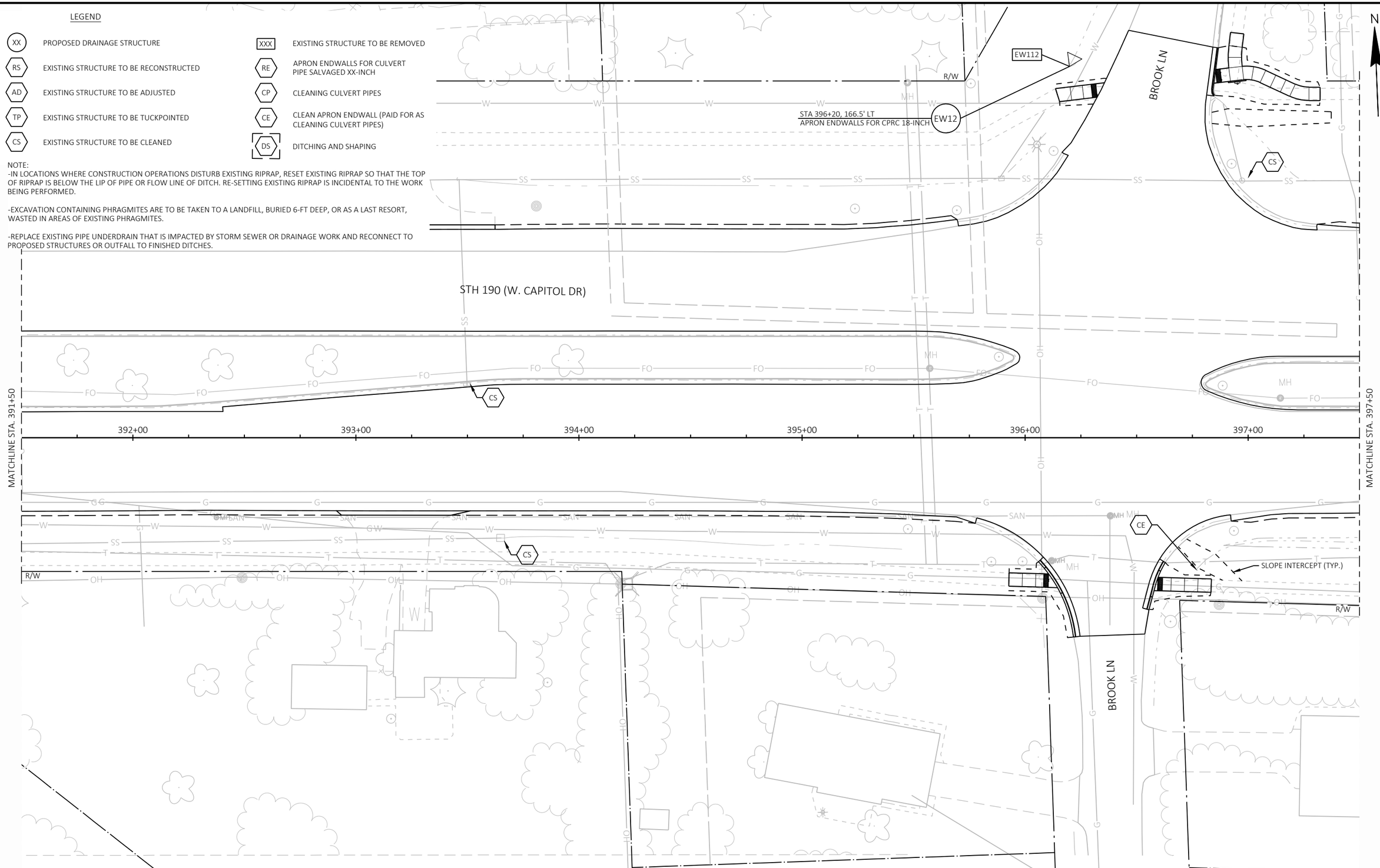
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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 178	E

2

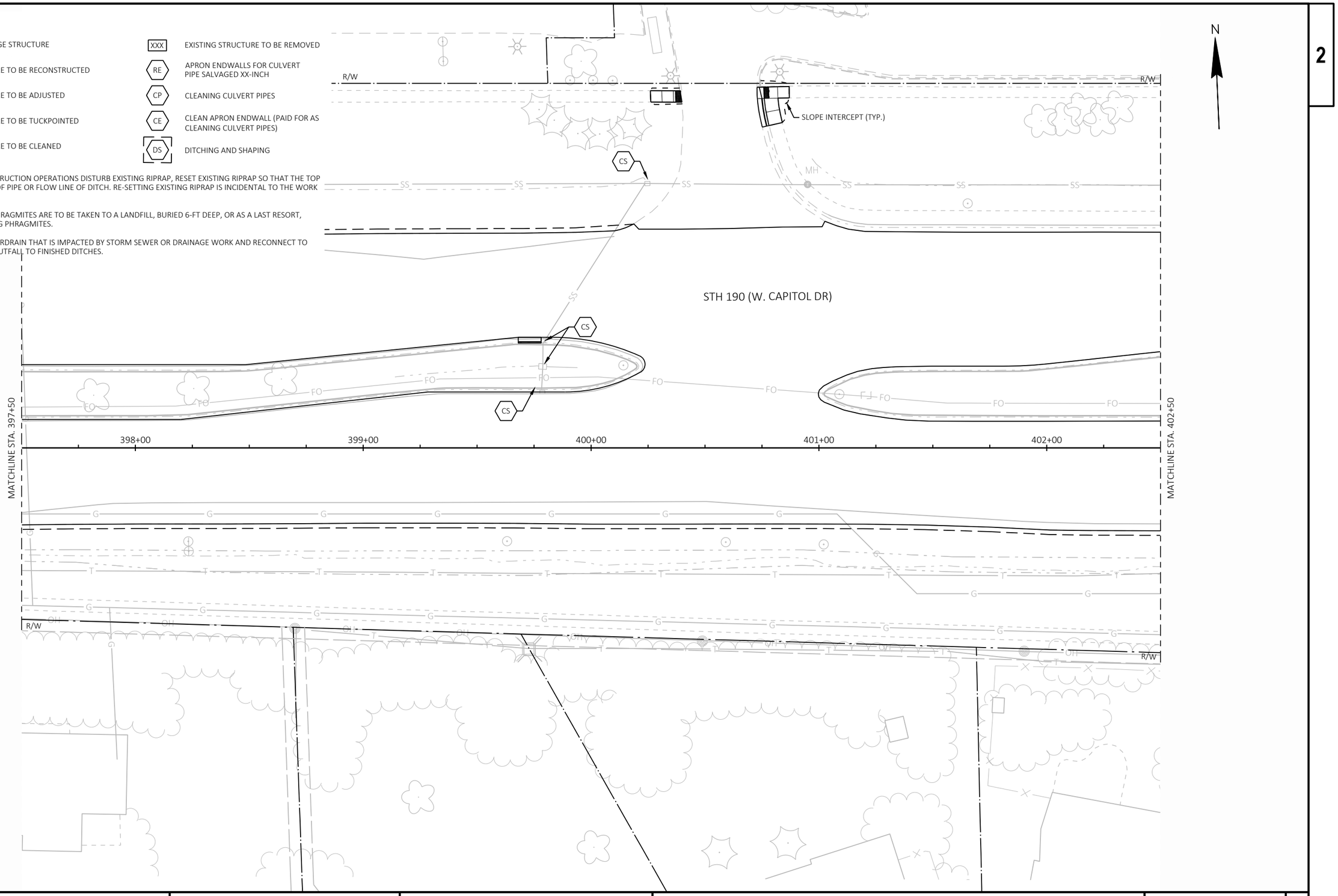
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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 179	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\022500_SS.DWG
LAYOUT NAME - 021224_ss
PLOT DATE : 8/20/2025 12:15 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

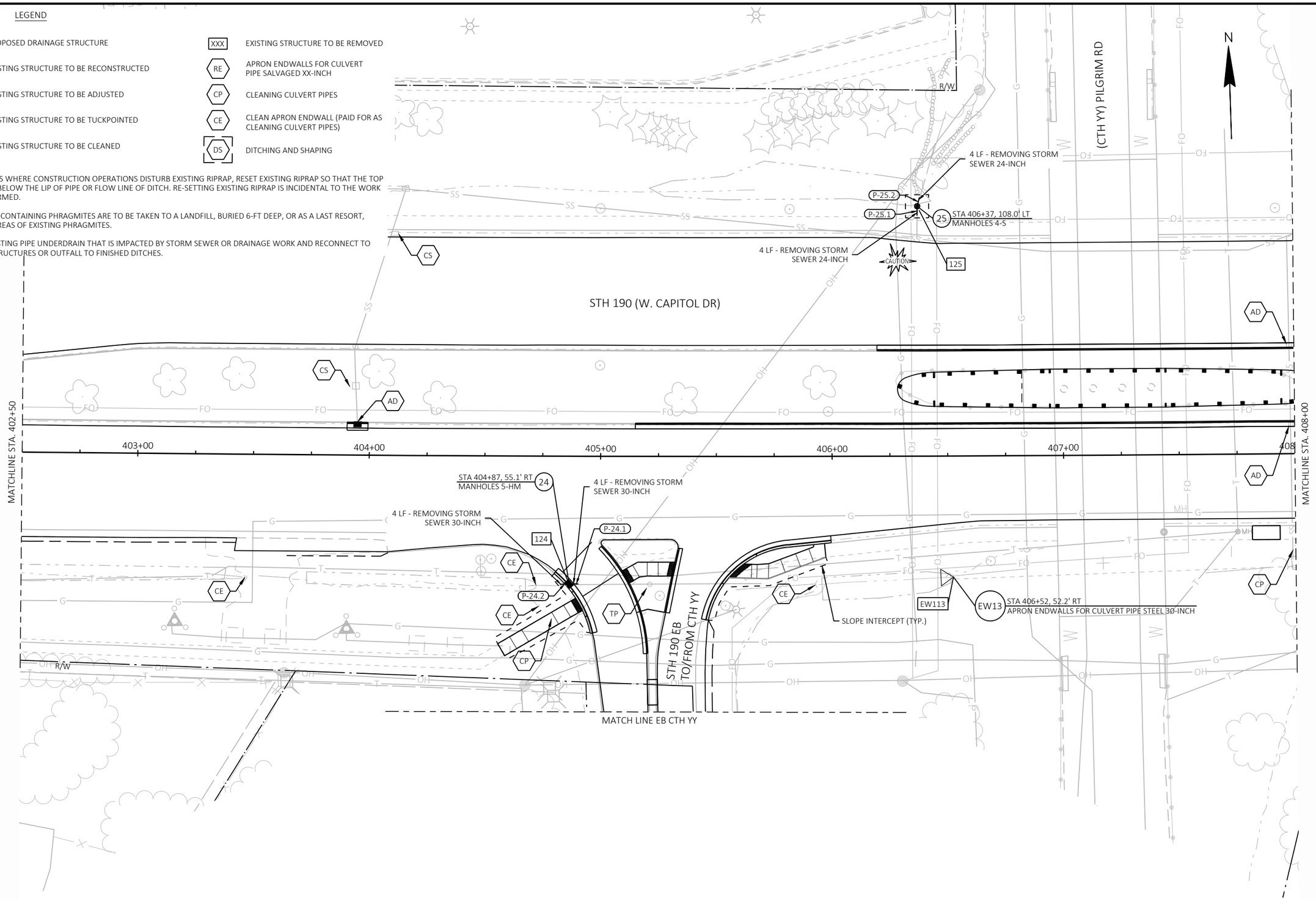
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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 180	E

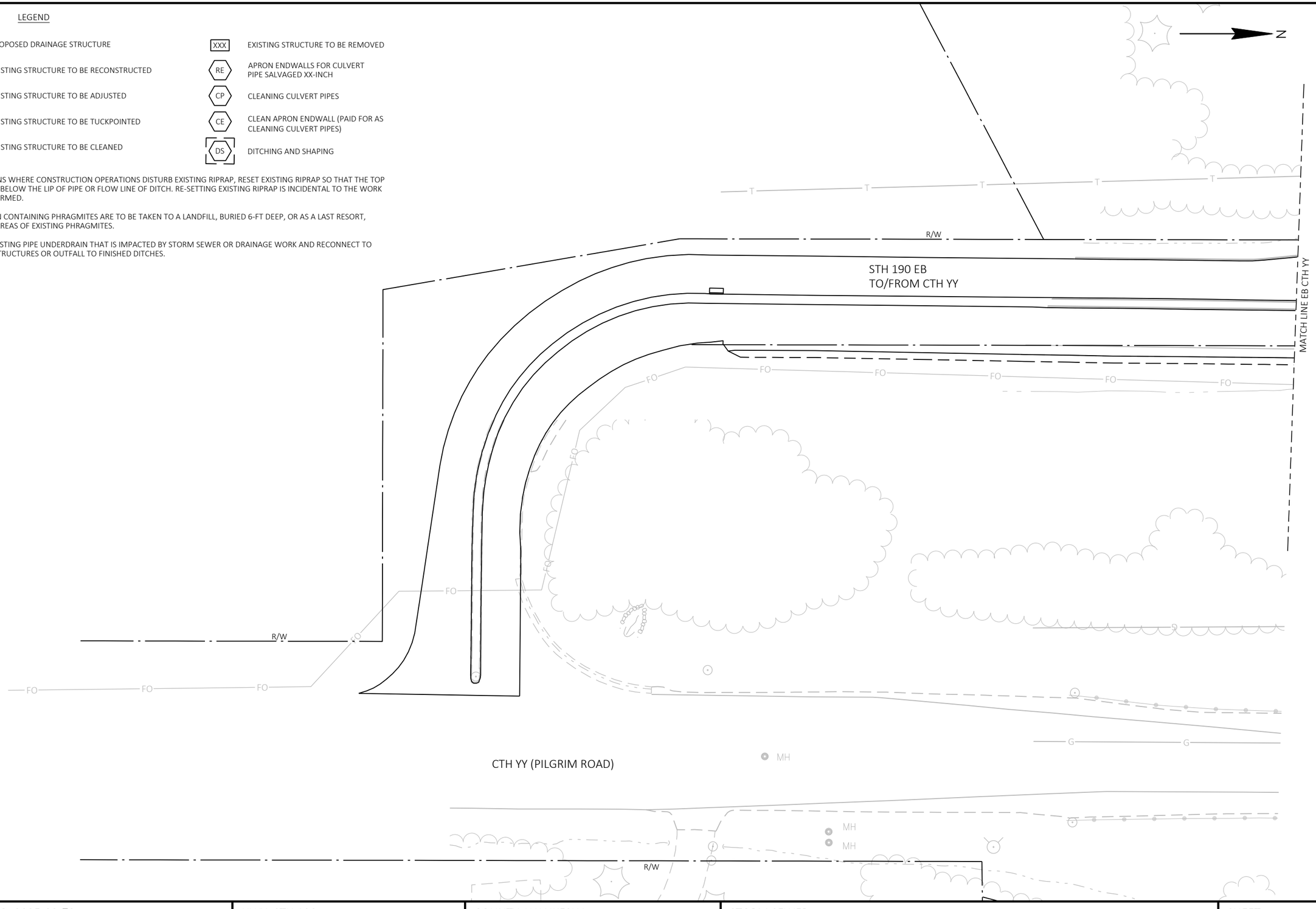
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2

MATCH LINE WB CTH YY

4 LF - REMOVING STORM SEWER 18-INCH

P-26.3

126

STA 408+80, 122.5' LT
MANHOLES 8-J

26

P-26.2

4 LF - REMOVING STORM SEWER 54-INCH

P-26.1

STH 190 WB
TO/FROM CTH YY

AD

CS

4 LF - REMOVING STORM SEWER 54-INCH

30-INCH

RE

CS

R/W

SLOPE INTERCEPT (TYP.)

CE

CS

STH 190 (W. CAPITOL DR)

4 LF - REMOVING STORM SEWER 18-INCH

P-27.1

127

P-27.2

27

STA 411+90, 46.7' LT
INLETS 2x2.5-WM

4 LF - REMOVING STORM SEWER 18-INCH

CS

MATCHLINE STA. 408+00

409+00

410+00

411+00

412+00

413+00

414

MATCHLINE STA. 414+00

CS

CE

CP

CE

CE

R/W

U/C

LEGEND

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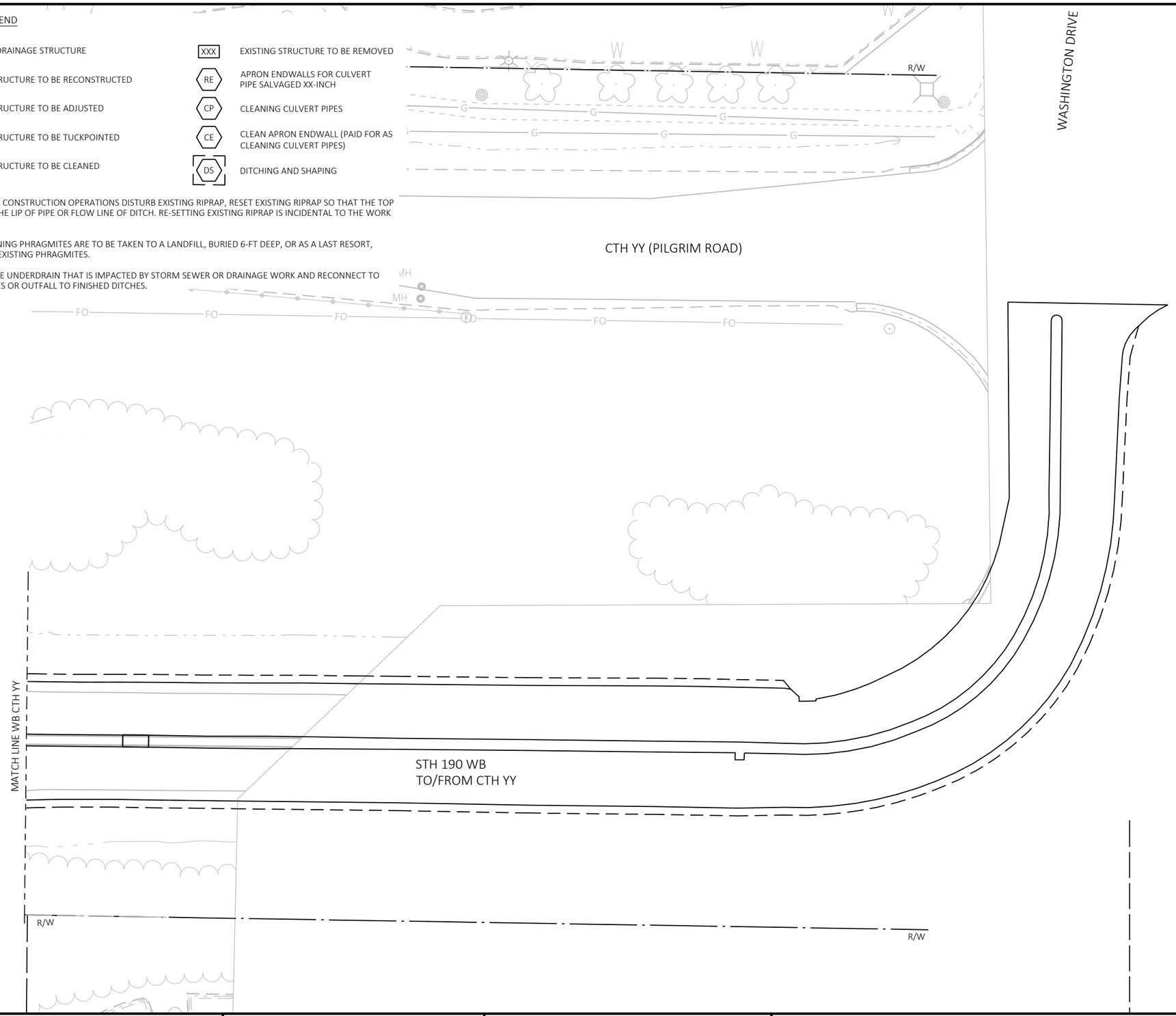
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2

2

2

N

TLE

R/W

R/W

SLOPE INTERCEPT (TYP.)

CS

STH 190 (W. CAPITOL DR)

CS

TP

MATCHLINE STA. 414+00

MATCHLINE STA. 420+00

+00 415+00 416+00 417+00 418+00 419+00 420

CS

CP

I.E. = 766.13

CE

DS

R/W

R/W

LEGEND

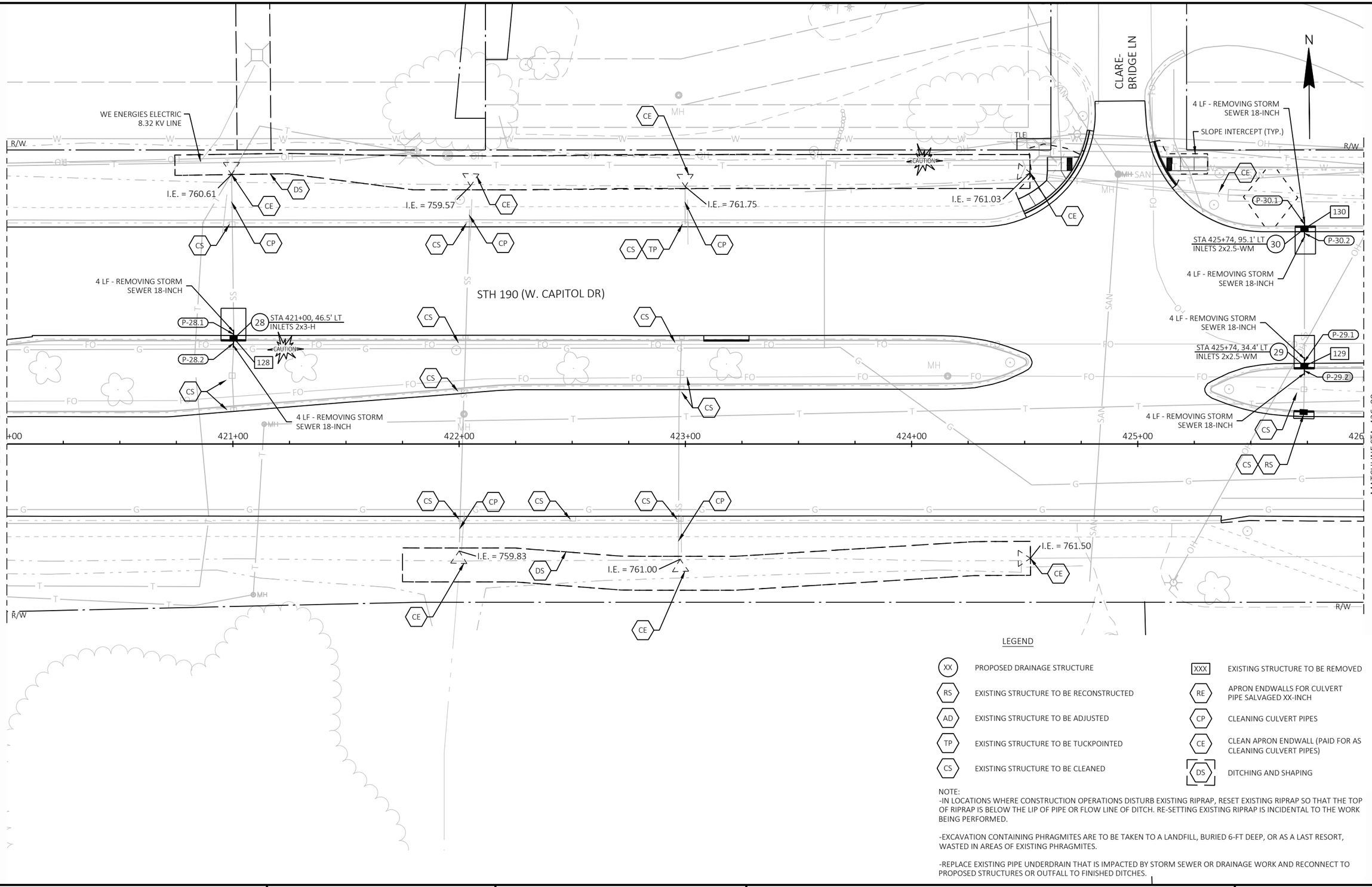
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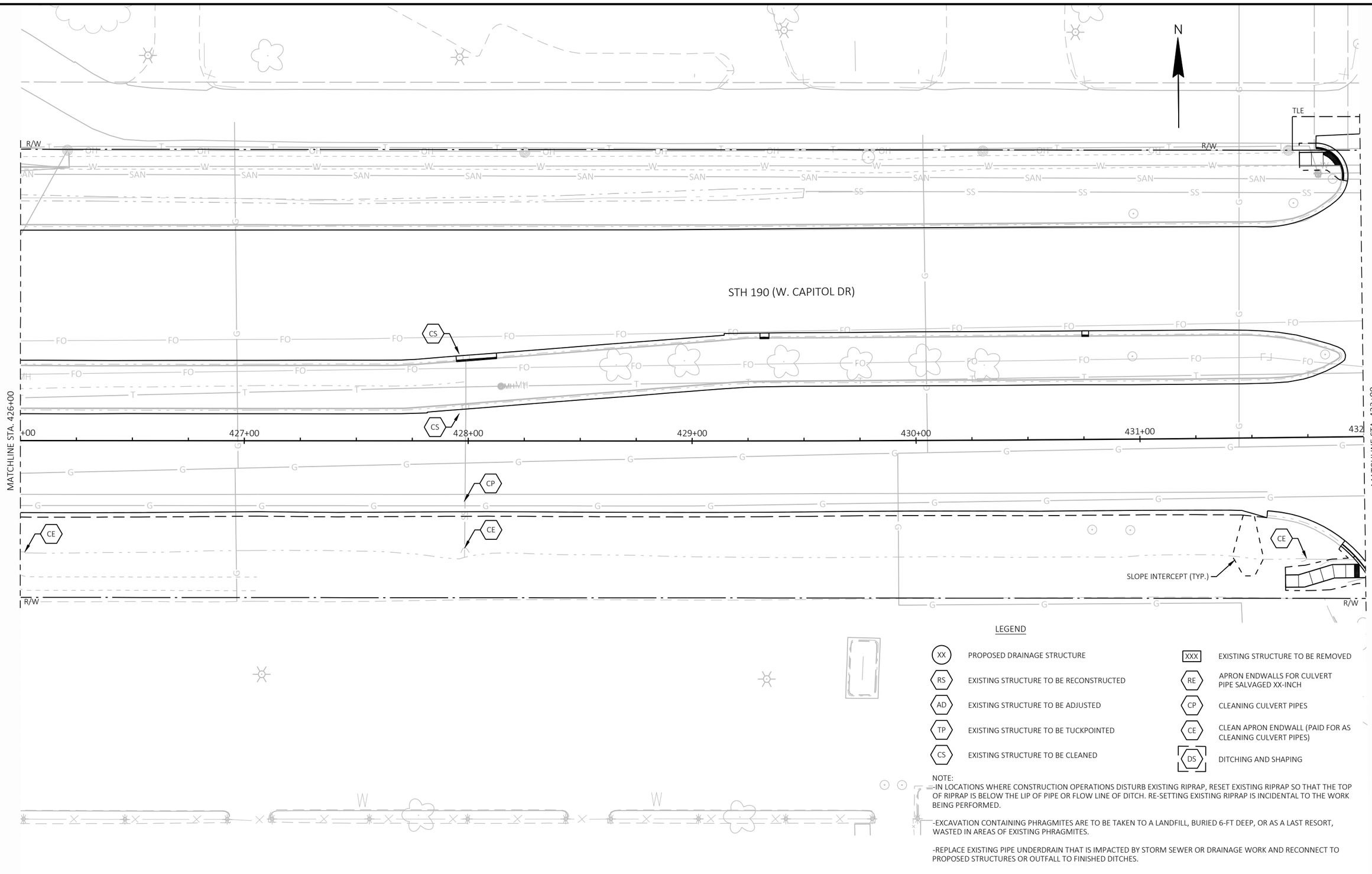
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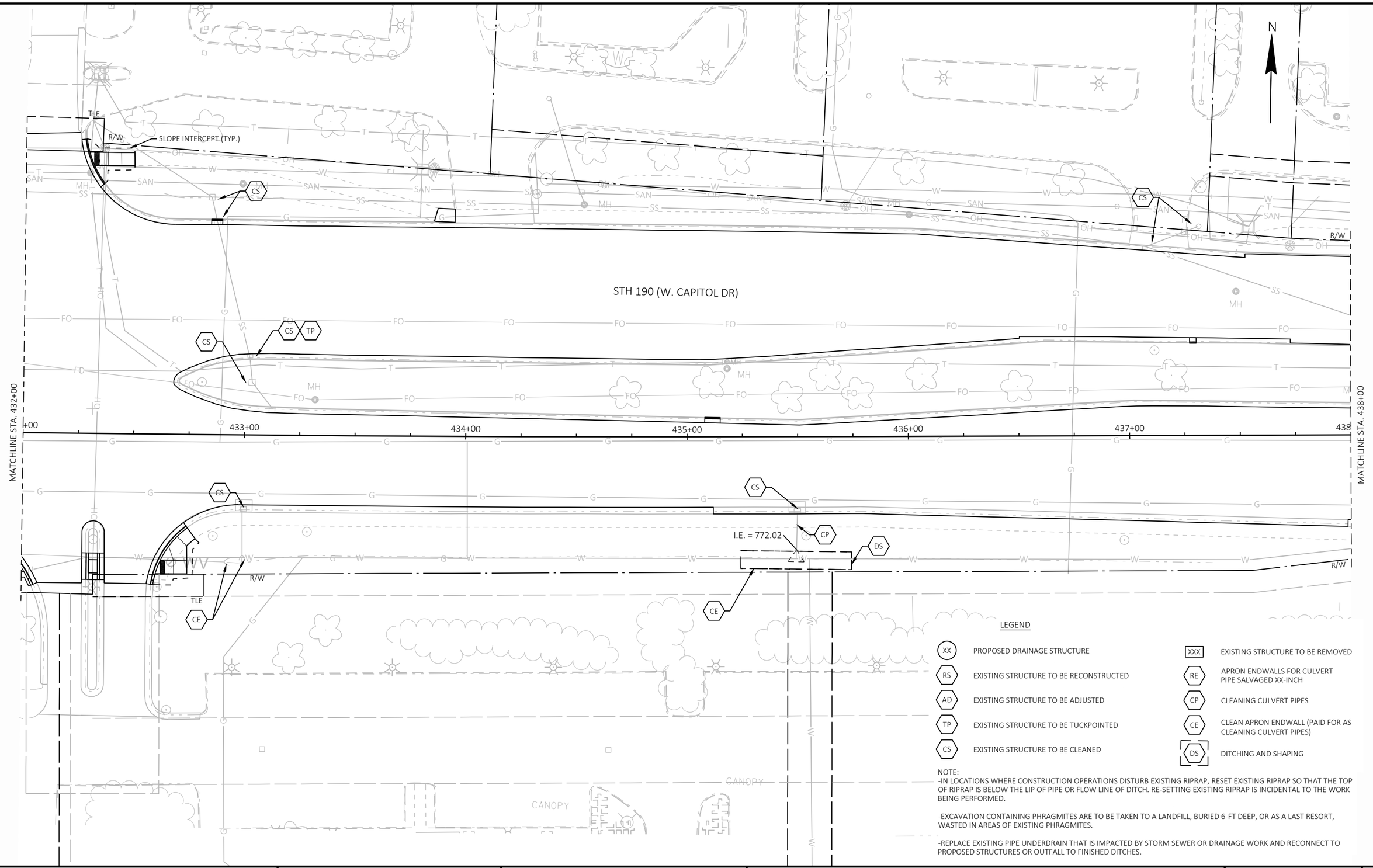
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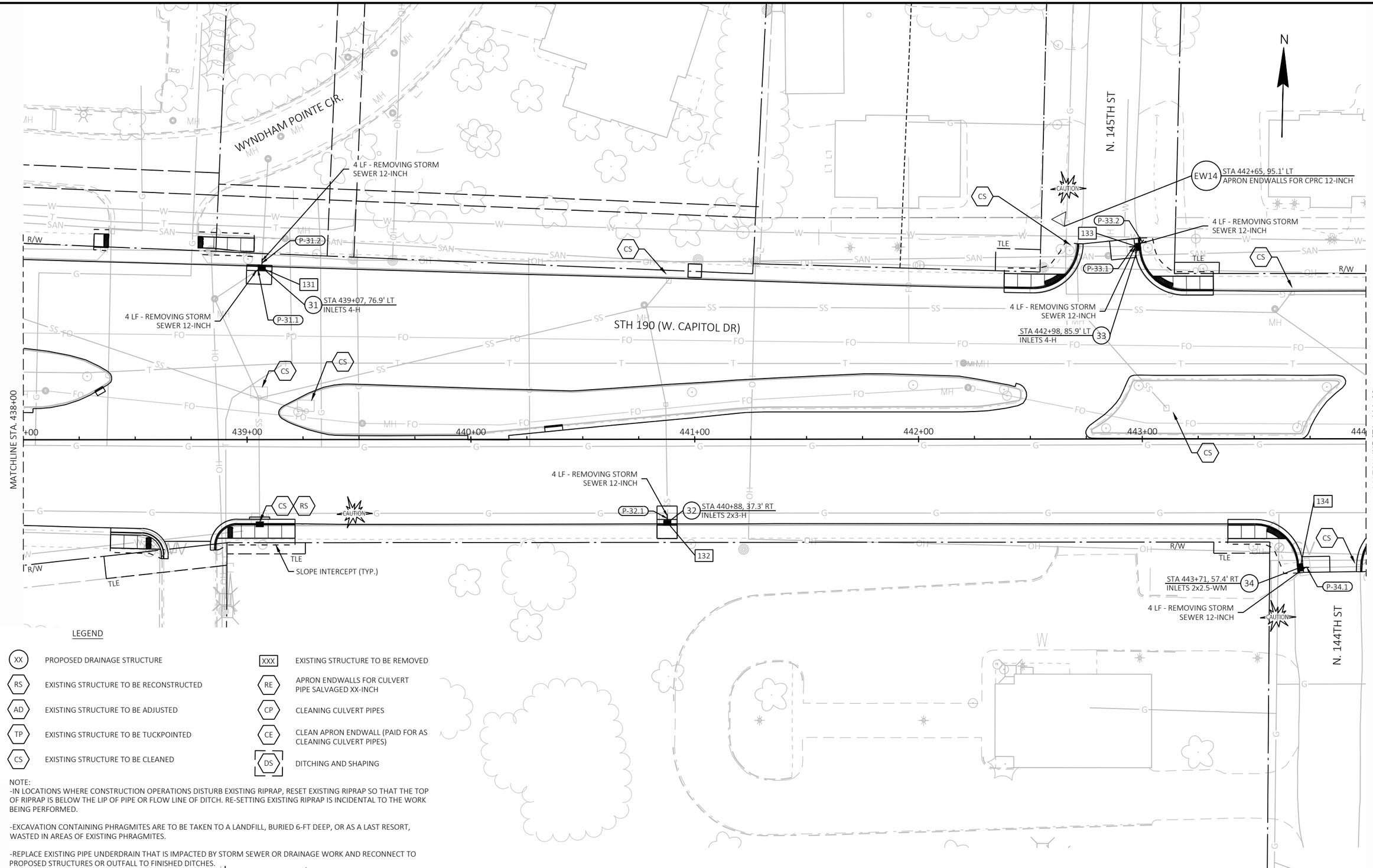
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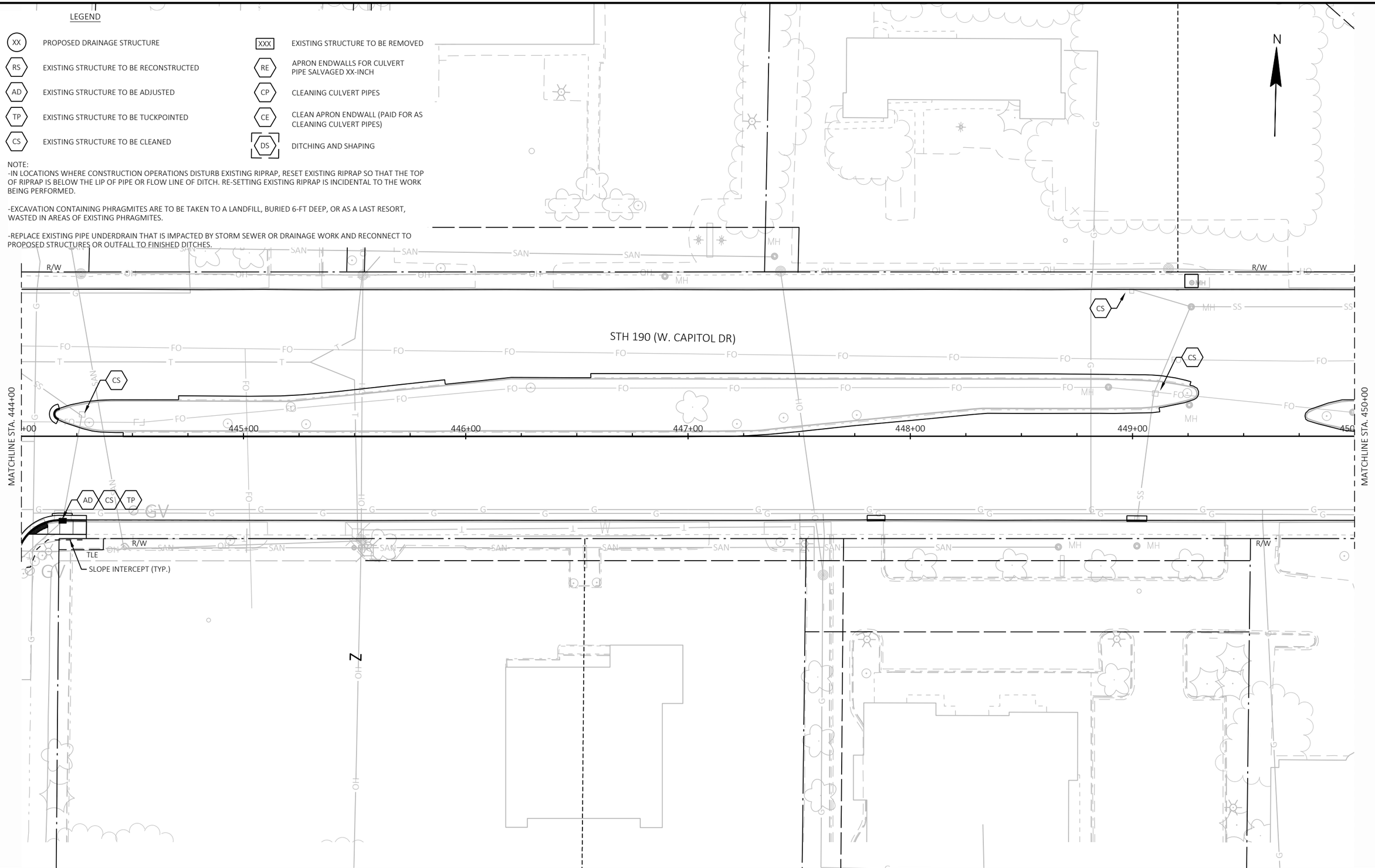
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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 189	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\022500_SS.DWG
LAYOUT NAME - 021234_ss
PLOT DATE : 8/20/2025 12:18 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

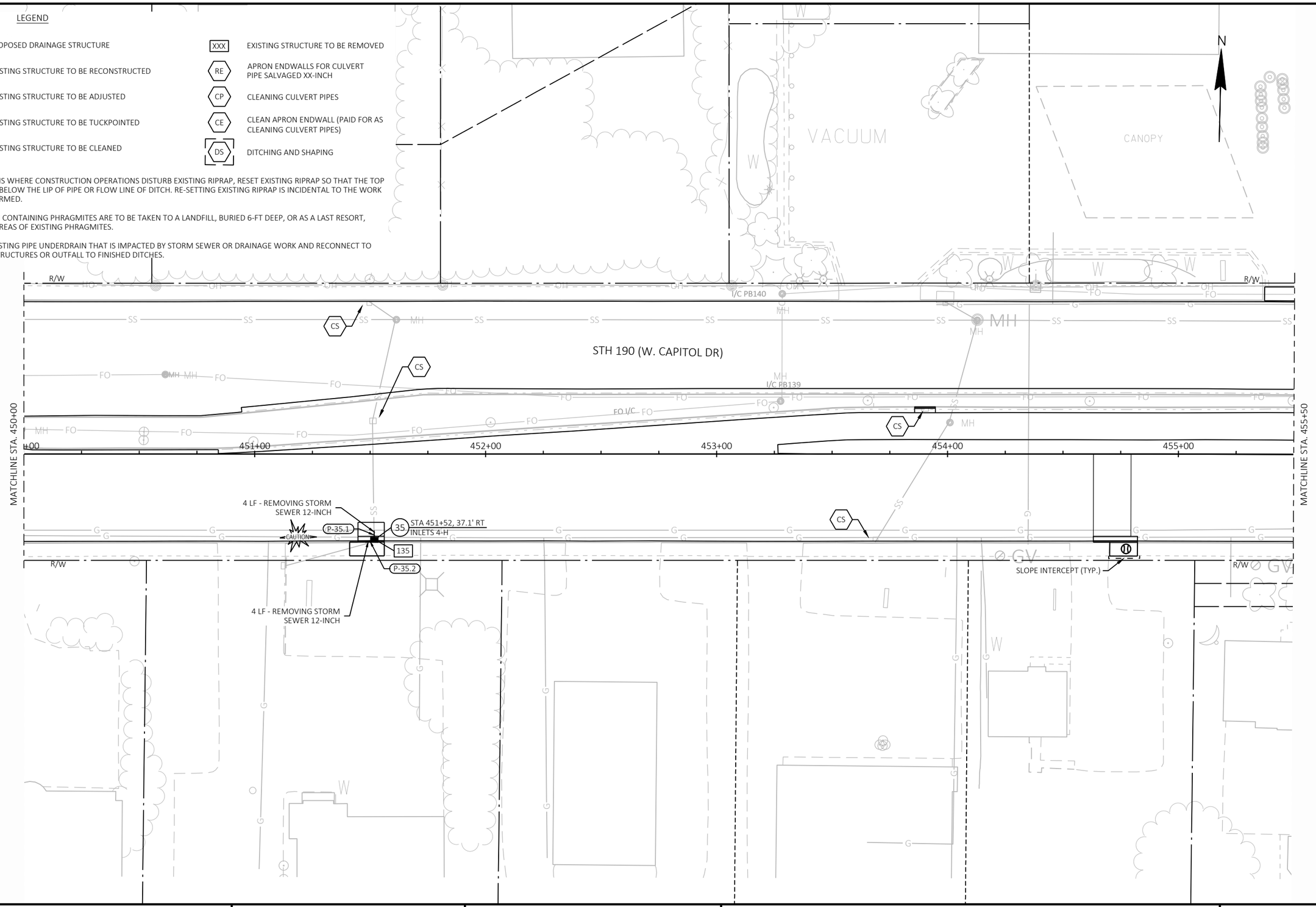
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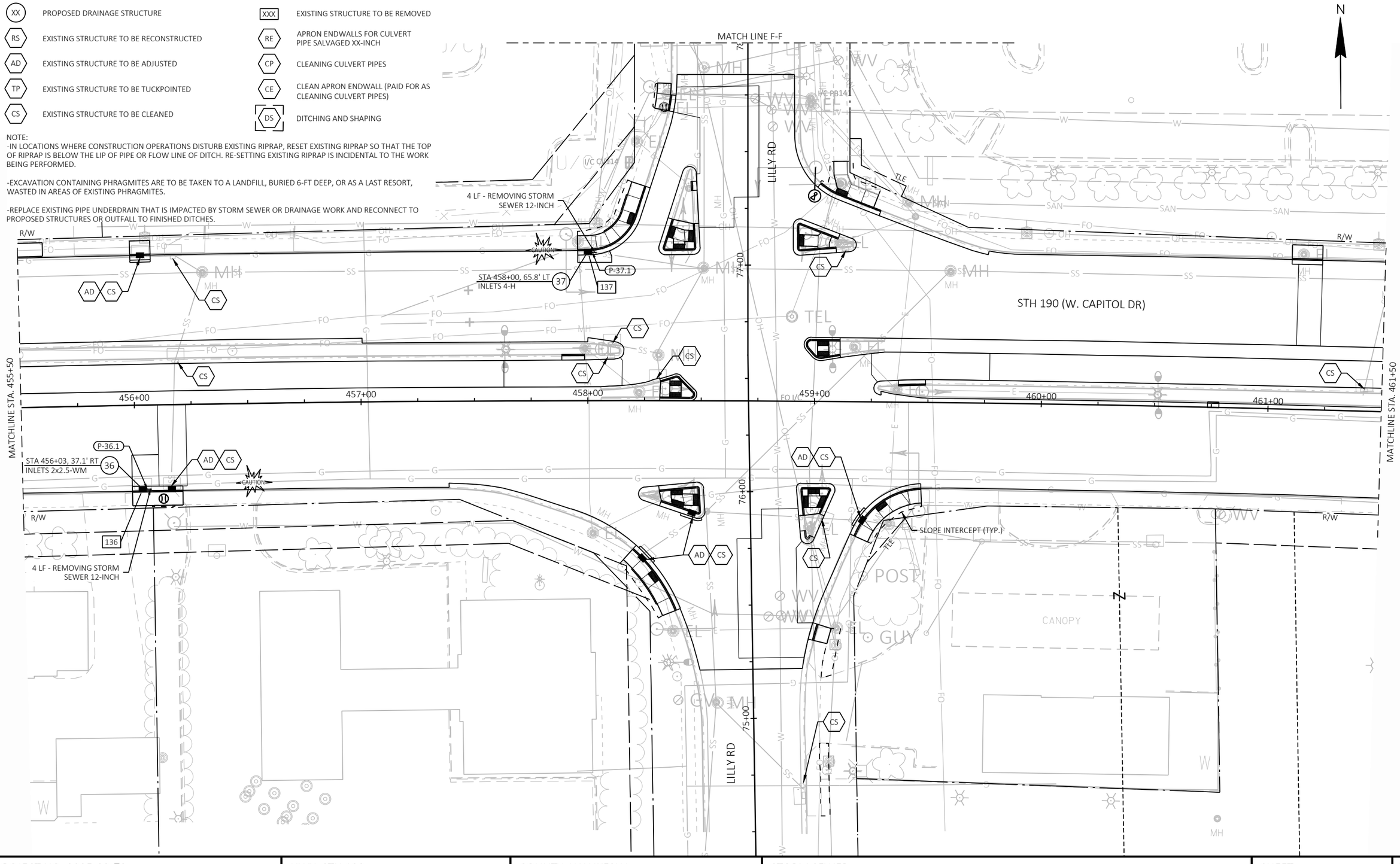
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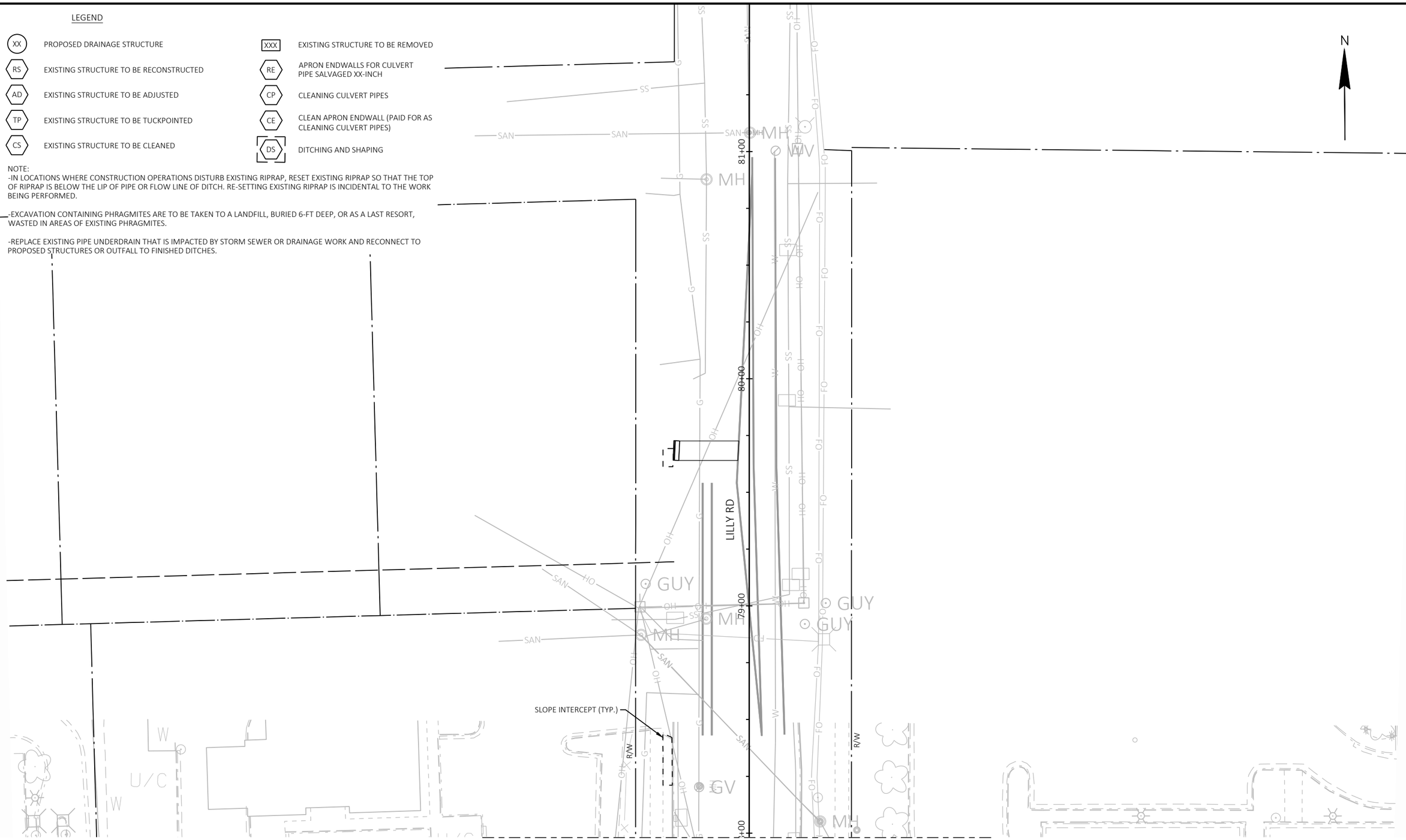
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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 192	E

2

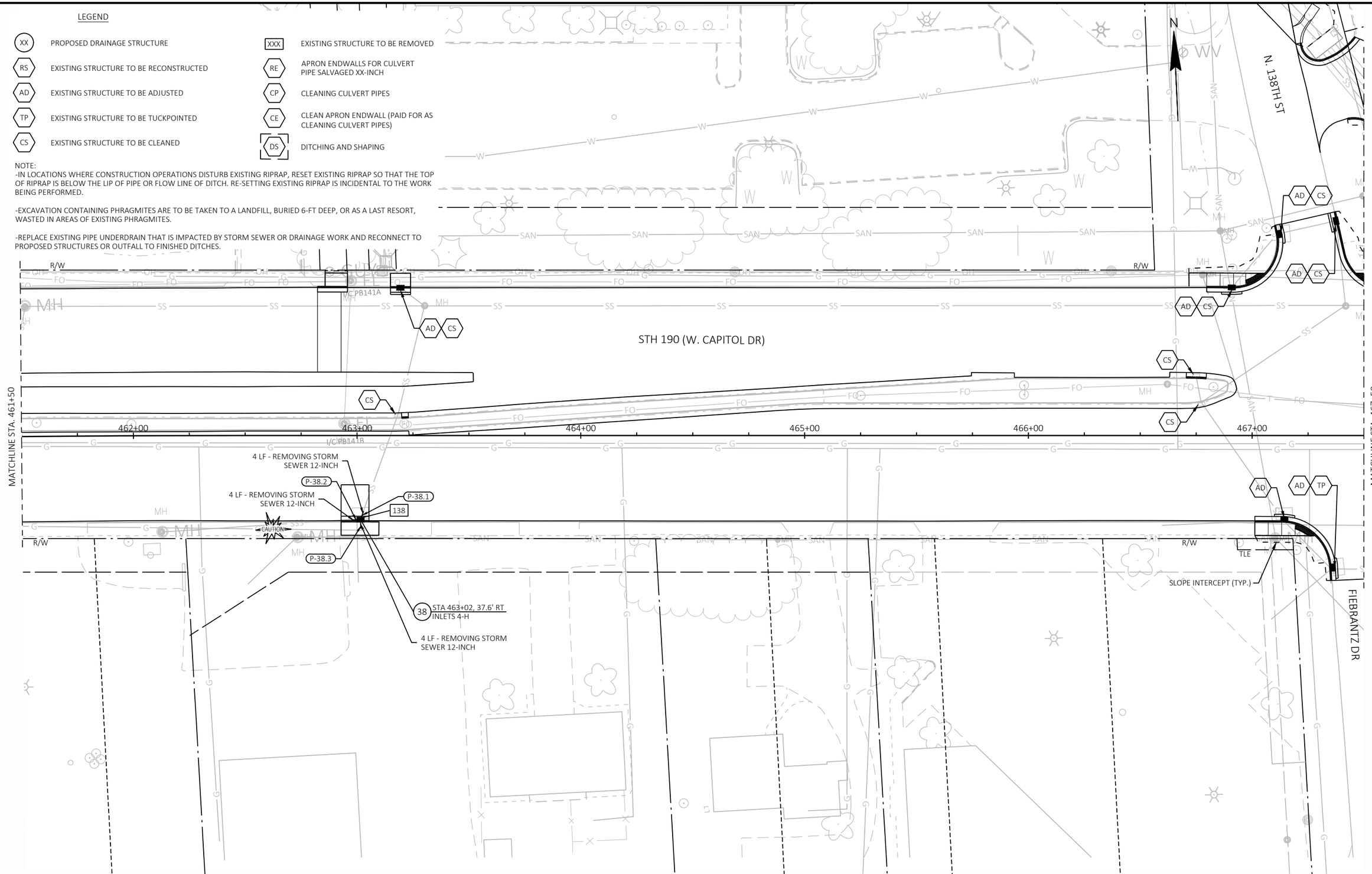
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FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\022500_SS.DWG
LAYOUT NAME - 021238_ss
PLOT DATE : 8/20/2025 12:18 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

STH 190 (W. CAPITOL DR)

MATCHLINE STA. 467+50

MATCHLINE STA. 473+00

468+00 469+00 470+00 471+00 472+00 473

FIEBRANTZ DR

TLE

R/W

SLOPE INTERCEPT (TYP.)

P-39.1

4 LF - REMOVING STORM SEWER 12-INCH

139

39

STA 467+69, 70.9' RT
INLETS MEDIAN 1G-MS

P-39.2

REMOVING SMALL PIPE CULVETS
(36 LF OF 15-INCH CMP)

LEGEND

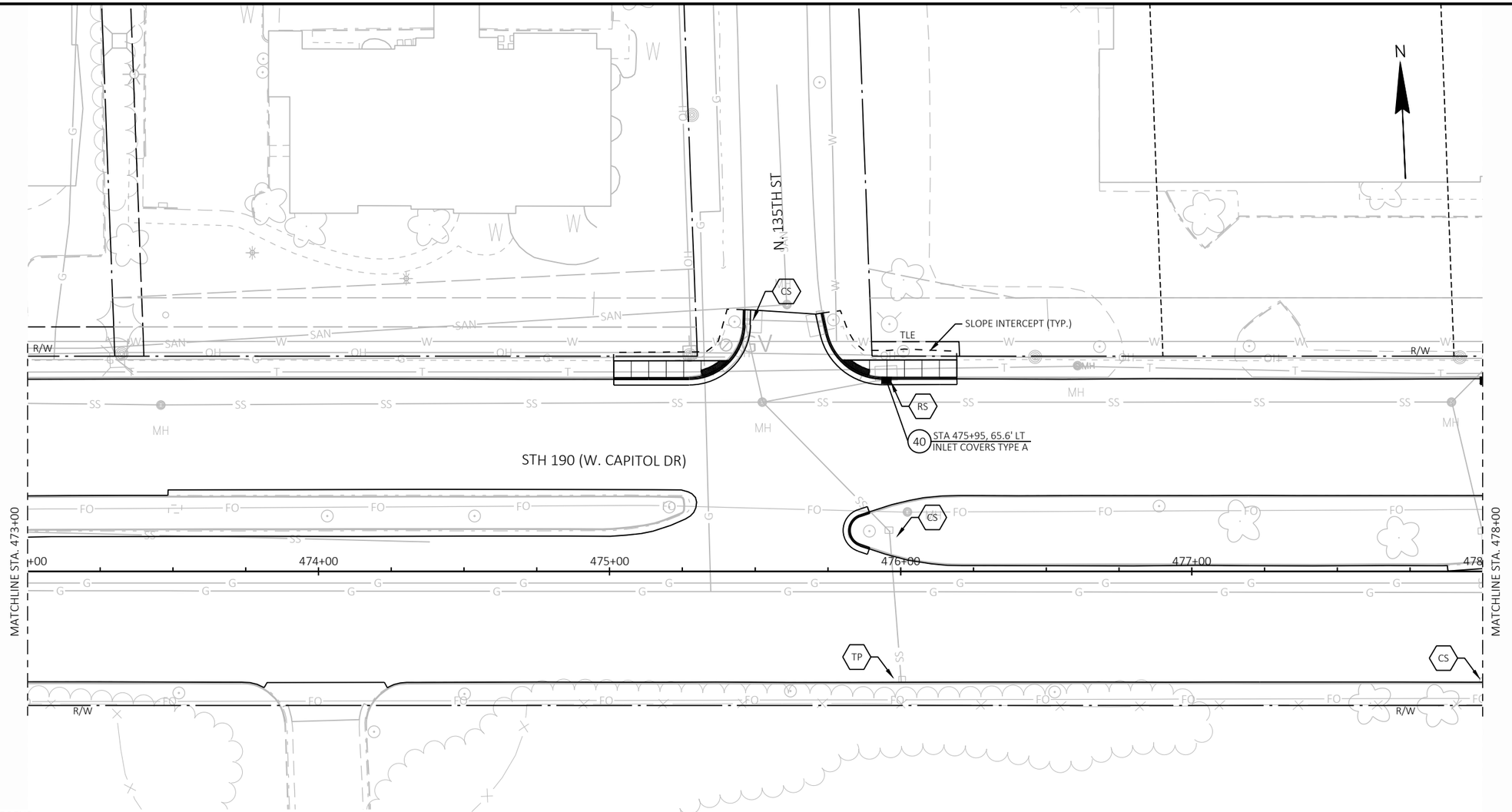
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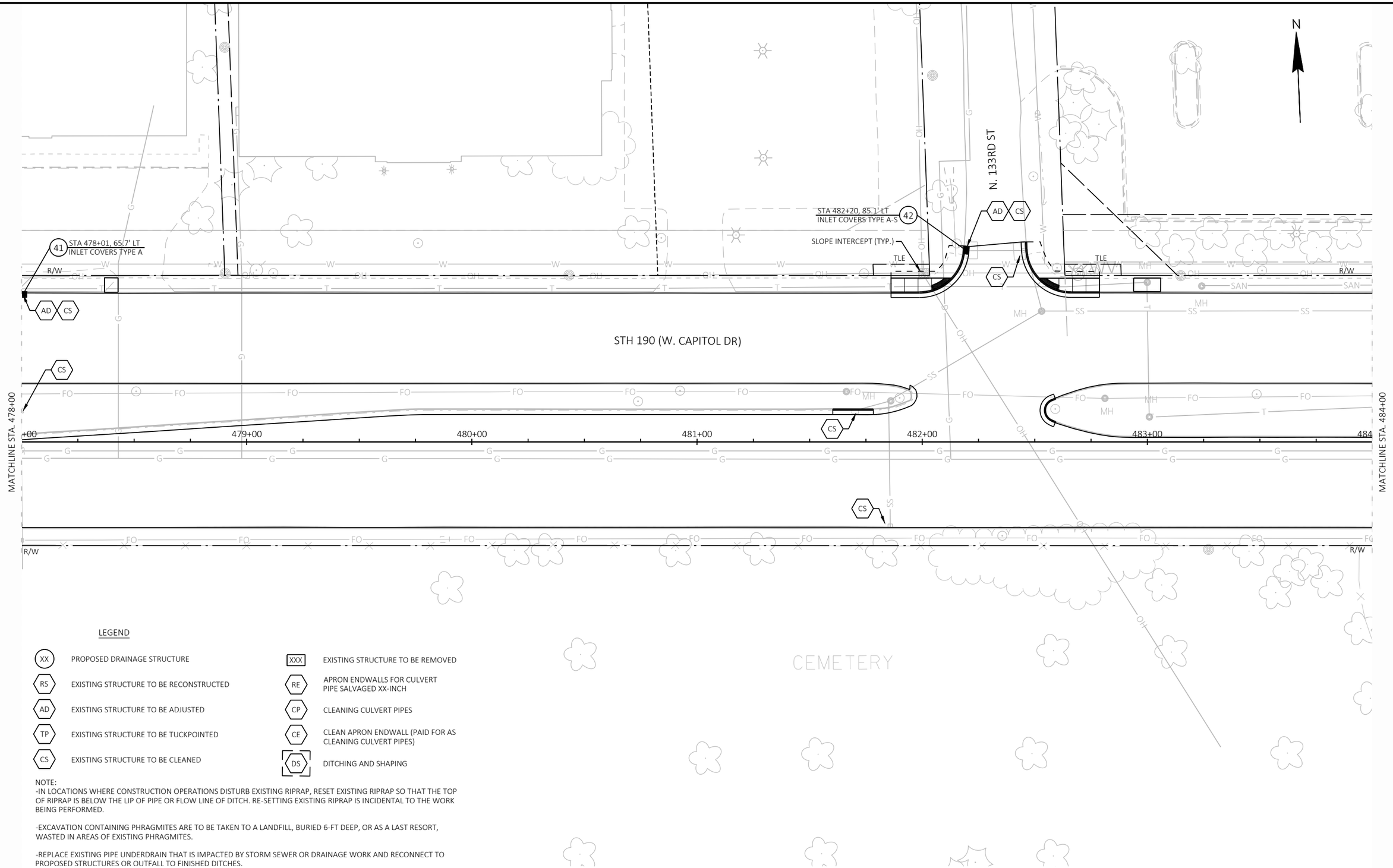
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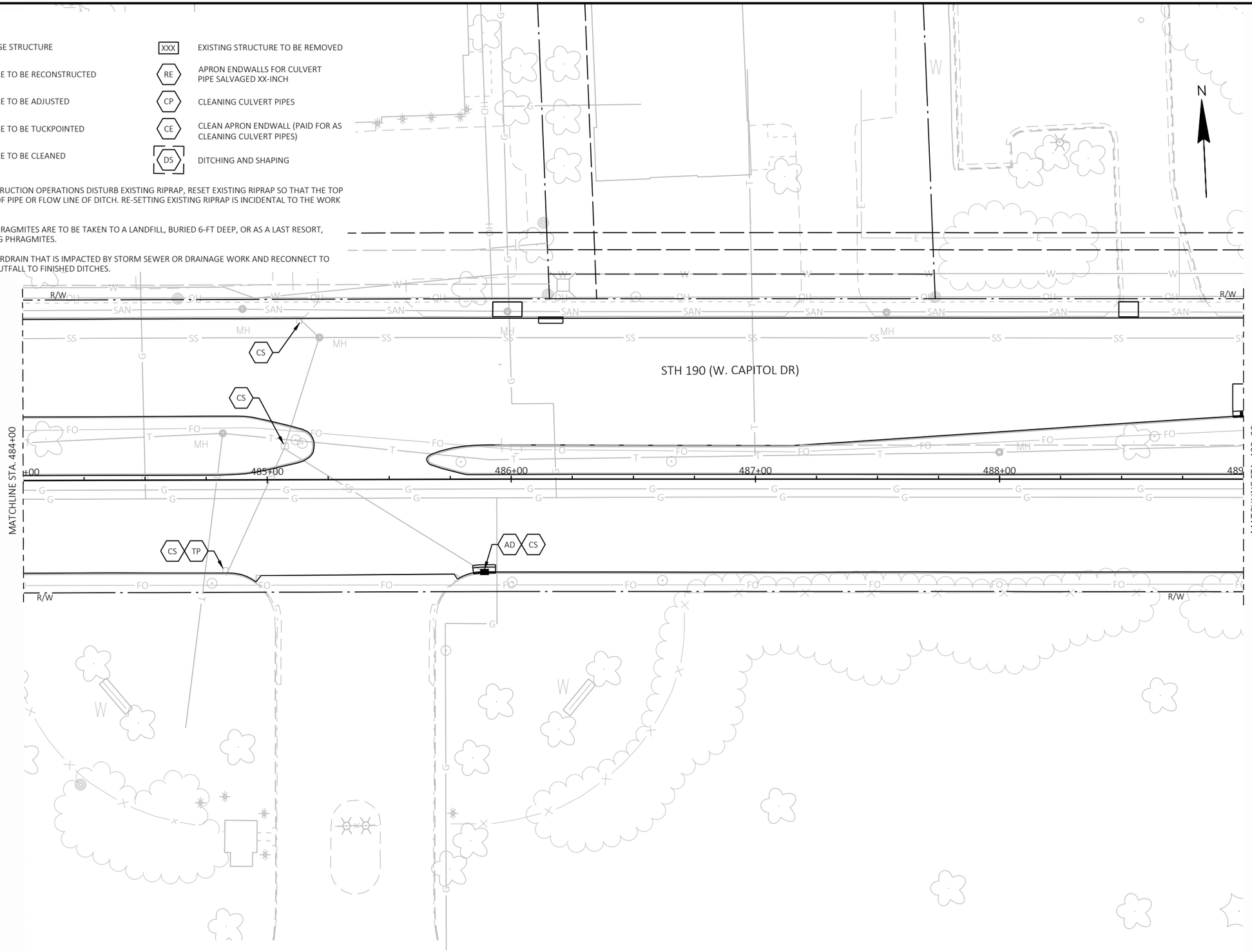
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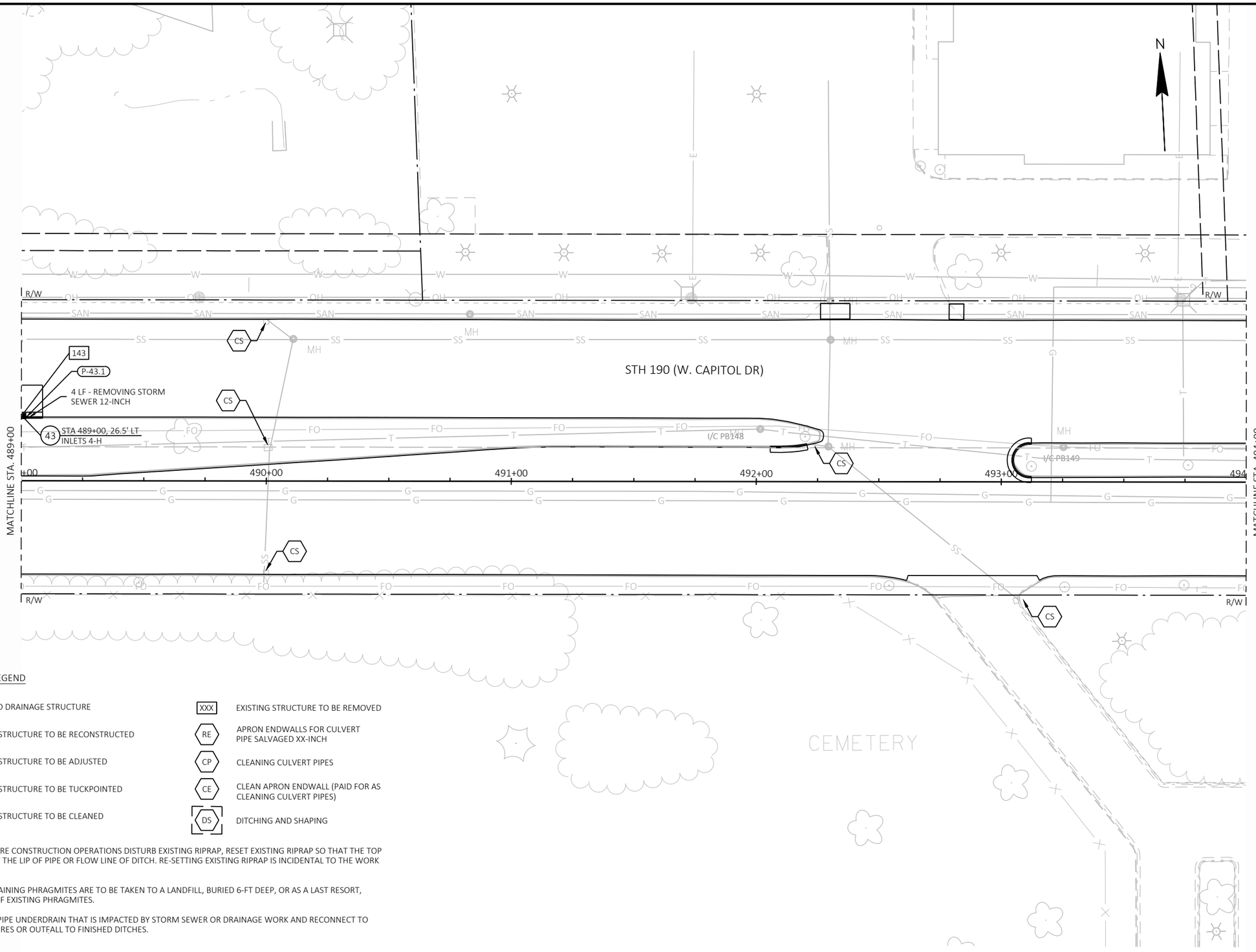


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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 197	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\022500_SS.DWG
LAYOUT NAME - 021242_ss
PLOT DATE : 8/20/2025 12:19 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

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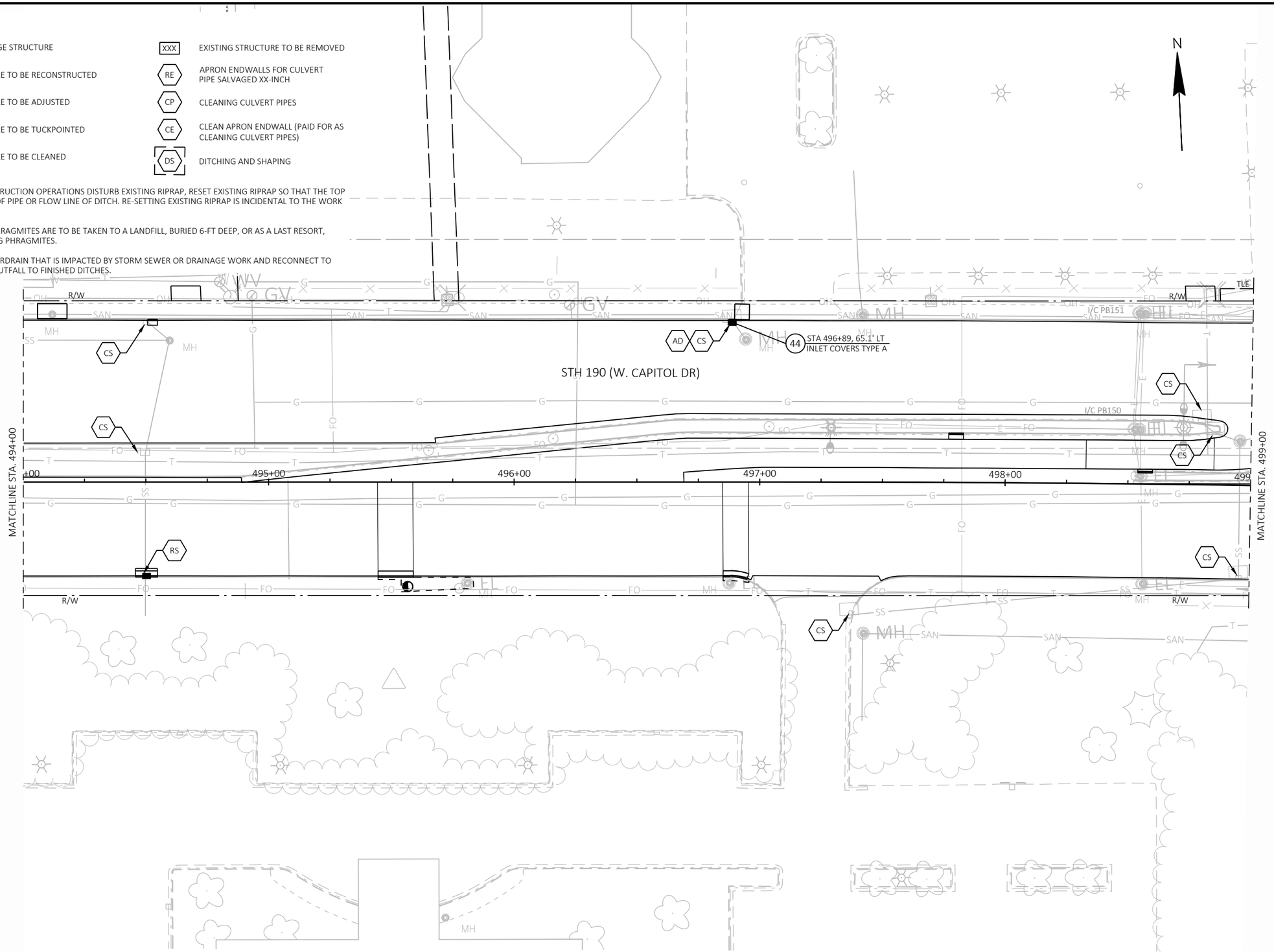
LEGEND

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RS	EXISTING STRUCTURE TO BE RECONSTRUCTED	RE	APRON ENDWALLS FOR CULVERT PIPE SALVAGED XX-INCH
AD	EXISTING STRUCTURE TO BE ADJUSTED	CP	CLEANING CULVERT PIPES
TP	EXISTING STRUCTURE TO BE TUCKPOINTED	CE	CLEAN APRON ENDWALL (PAID FOR AS CLEANING CULVERT PIPES)
CS	EXISTING STRUCTURE TO BE CLEANED	DS	DITCHING AND SHAPING

NOTE:
-IN LOCATIONS WHERE CONSTRUCTION OPERATIONS DISTURB EXISTING RIPRAP, RESET EXISTING RIPRAP SO THAT THE TOP OF RIPRAP IS BELOW THE LIP OF PIPE OR FLOW LINE OF DITCH. RE-SETTING EXISTING RIPRAP IS INCIDENTAL TO THE WORK BEING PERFORMED.

-EXCAVATION CONTAINING PHRAGMITES ARE TO BE TAKEN TO A LANDFILL, BURIED 6-FT DEEP, OR AS A LAST RESORT, WASTED IN AREAS OF EXISTING PHRAGMITES.

-REPLACE EXISTING PIPE UNDERDRAIN THAT IS IMPACTED BY STORM SEWER OR DRAINAGE WORK AND RECONNECT TO PROPOSED STRUCTURES OR OUTFALL TO FINISHED DITCHES.



2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 199	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\022500_SS.DWG
LAYOUT NAME - 021244_ss
PLOT DATE : 8/20/2025 12:20 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

N. 128TH ST

R/W

45 STA 499+64, 83.6' LT
INLETS 2x3-H

PRIVATE STORM SEWER LATERAL.
CONTRACTOR TO LOCATE AND EXPOSE EXISTING PIPE PRIOR TO PERFORMING ANY GRADING, OR PLACEMENT OF TRAFFIC SIGNAL OR STORM SEWER WORK.

MAINTAIN EXISTING PRIVATE LATERAL CONNECTIONS AT ALL TIMES.

PR. R/W

TLE

P-45.1

AD

CAUTION

SLOPE INTERCEPT (TYP.)

I/C PB152

I/C PB153

STH 190 (W. CAPITOL DR)

CS

MATCHLINE STA. 499+00

MATCHLINE STA. 504+00

500+00

501+00

502+00

503+00

504

50+00

51+00

49+00

LEGEND

XX	PROPOSED DRAINAGE STRUCTURE	XXX	EXISTING STRUCTURE TO BE REMOVED
RS	EXISTING STRUCTURE TO BE RECONSTRUCTED	RE	APRON ENDWALLS FOR CULVERT PIPE SALVAGED XX-INCH
AD	EXISTING STRUCTURE TO BE ADJUSTED	CP	CLEANING CULVERT PIPES
TP	EXISTING STRUCTURE TO BE TUCKPOINTED	CE	CLEAN APRON ENDWALL (PAID FOR AS CLEANING CULVERT PIPES)
CS	EXISTING STRUCTURE TO BE CLEANED	DS	DITCHING AND SHAPING

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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 200	E

2

2

N

STH 190 (W. CAPITOL DR)

MATCHLINE STA. 504+00

MATCHLINE STA. 510+00

505+00

506+00

507+00

508+00

509+00

510

I/C CV118

I/C PB156

I/C PB154

P-46.1

P-46.2

46 STA 508+64, 37.8' RT
INLETS 4-H

146

4 LF - REMOVING STORM SEWER 12-INCH

4 LF - REMOVING STORM SEWER 15-INCH

SLOPE INTERCEPT (TYP.)

R/W

TLE

LEGEND

XX	PROPOSED DRAINAGE STRUCTURE	XXX	EXISTING STRUCTURE TO BE REMOVED
RS	EXISTING STRUCTURE TO BE RECONSTRUCTED	RE	APRON ENDWALLS FOR CULVERT PIPE SALVAGED XX-INCH
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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 201	E

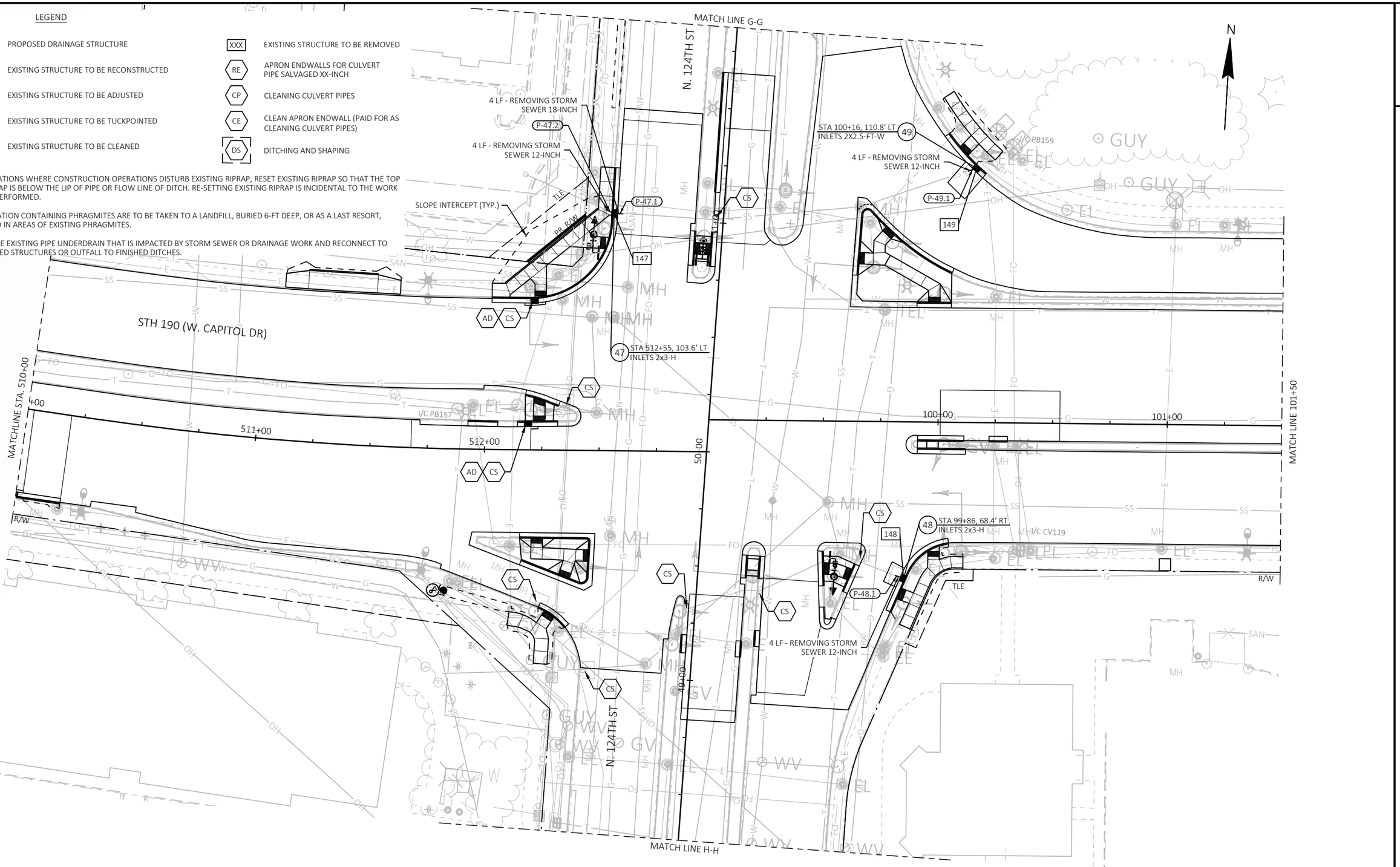
LEGEND

XX	PROPOSED DRAINAGE STRUCTURE	XXX	EXISTING STRUCTURE TO BE REMOVED
RS	EXISTING STRUCTURE TO BE RECONSTRUCTED	RE	APRON ENDWALLS FOR CULVERT PIPE SALVAGED XX-INCH
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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 202	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\022500_SS.DWG
LAYOUT NAME - 021247_ss
PLOT DATE : 8/20/2025 12:20 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

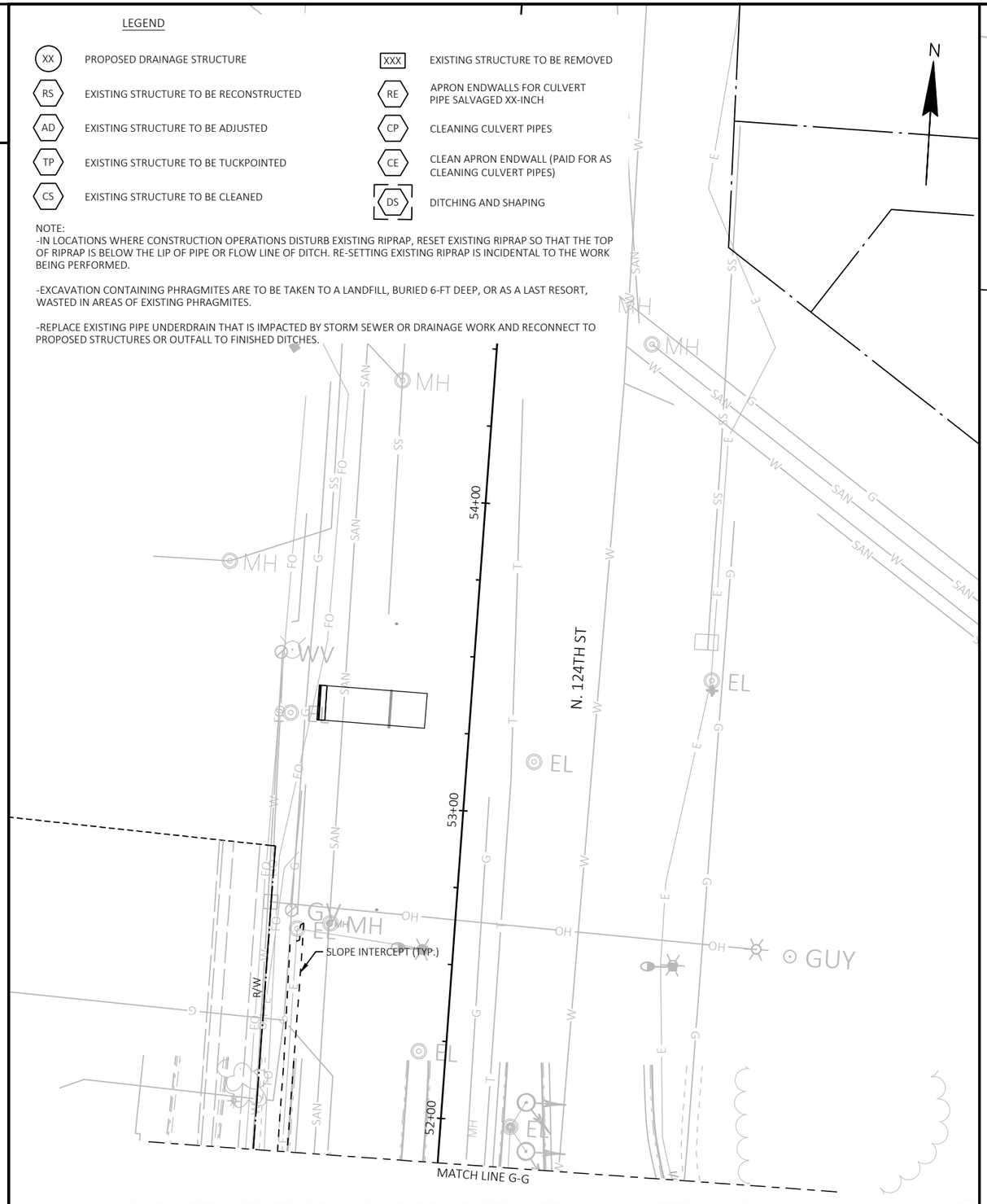
LEGEND

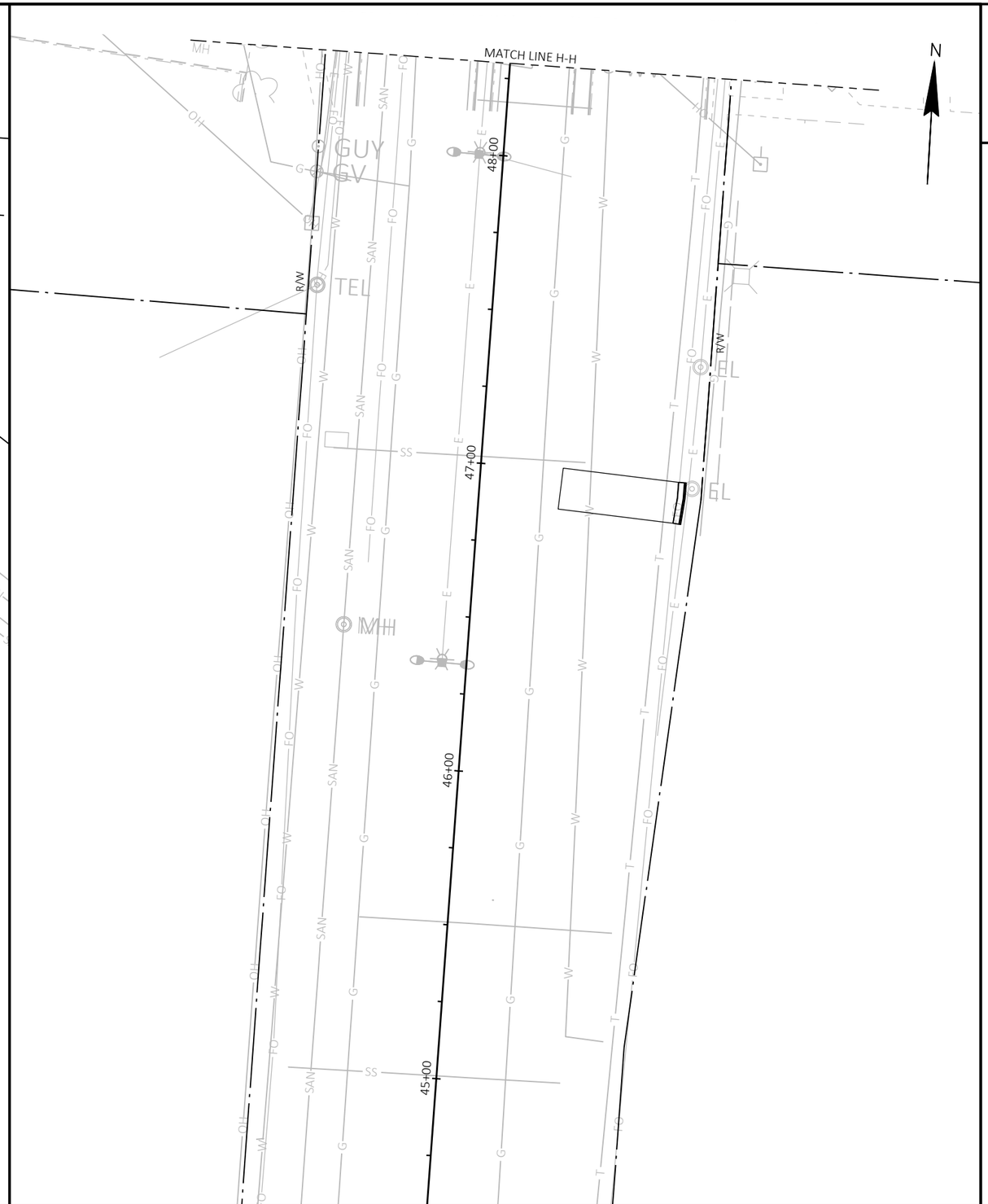
XX	PROPOSED DRAINAGE STRUCTURE	XXX	EXISTING STRUCTURE TO BE REMOVED
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2

HOME DEPOT ENTRANCE

R/W

51 STA 104+81, 84.9' LT
INLETS 2X2.5-FT-W

4 LF - REMOVING STORM SEWER 12-INCH

P-51.1

SLOPE INTERCEPT (TYP.)

151

4 LF - REMOVING STORM SEWER 12-INCH

P-50.2

50 STA 104+64, 55.5' LT
INLETS 4-W

P-50.1

150

4 LF - REMOVING STORM SEWER 12-INCH

STH 190 (W. CAPITOL DR)

MATCH LINE 101+50

102+00 103+00 104+00 105+00 106+00 107+00

CS TP AD CS CS CS TP

R/W R/W

N

LEGEND

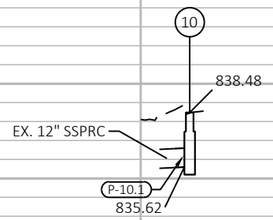
XX	PROPOSED DRAINAGE STRUCTURE	XXX	EXISTING STRUCTURE TO BE REMOVED
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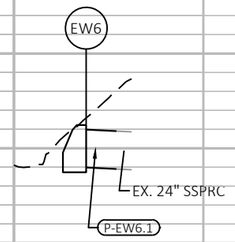
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P-10.1 4' - SSPRC CLASS III 12-INCH



P-EW6.1 8' - SSPRC CLASS III 24-INCH

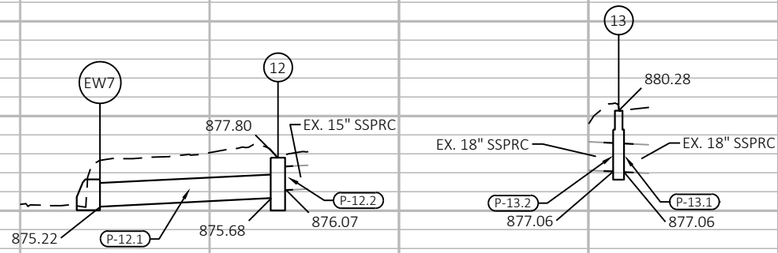


P-12.1 47' - SSPRC CLASS III 15-INCH

P-12.2 4' - SSPRC CLASS III 15-INCH

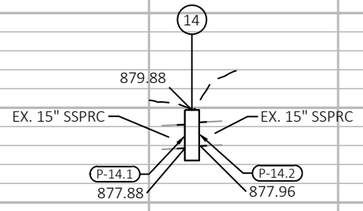
P-13.1 4' - SSPRC CLASS III 18-INCH

P-13.2 4' - SSPRC CLASS III 18-INCH



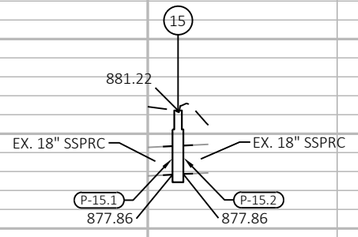
P-14.1 4' - SSPRC CLASS III 15-INCH

P-14.2 4' - SSPRC CLASS III 15-INCH



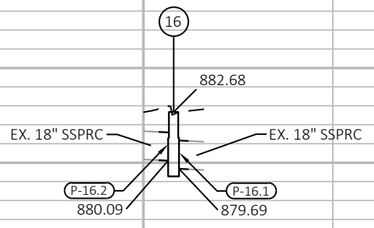
P-15.1 4' - SSPRC CLASS III 18-INCH

P-15.2 4' - SSPRC CLASS III 18-INCH



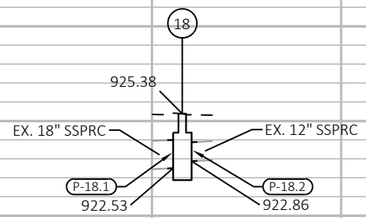
P-16.1 4' - SSPRC CLASS III 18-INCH

P-16.2 4' - SSPRC CLASS III 18-INCH



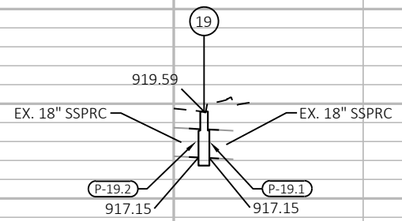
P-18.1 4' - SSPRC CLASS III 18-INCH

P-18.2 4' - SSPRC CLASS III 12-INCH



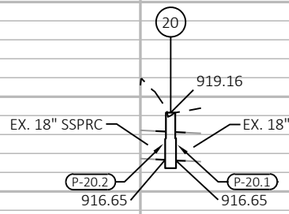
P-19.1 4' - SSPRC CLASS III 18-INCH

P-19.2 4' - SSPRC CLASS III 18-INCH



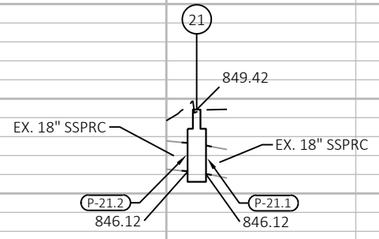
P-20.1 4' - SSPRC CLASS III 18-INCH

P-20.2 4' - SSPRC CLASS III 18-INCH



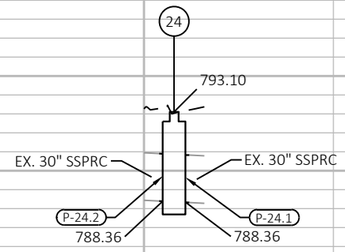
P-21.1 4' - SSPRC CLASS III 18-INCH

P-21.2 4' - SSPRC CLASS III 18-INCH



P-24.1 4' - SSPRC CLASS III 30-INCH

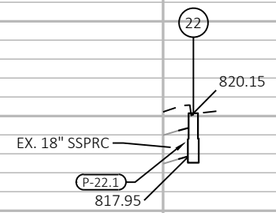
P-24.2 4' - SSPRC CLASS III 30-INCH



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 206	E

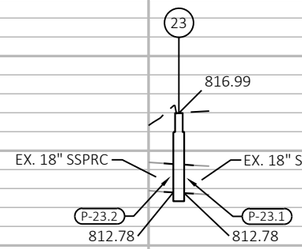
835
830
825
820
815
810
805
800

P-22.1 4' - SSPRC CLASS III 18-INCH



P-23.1 4' - SSPRC CLASS III 18-INCH

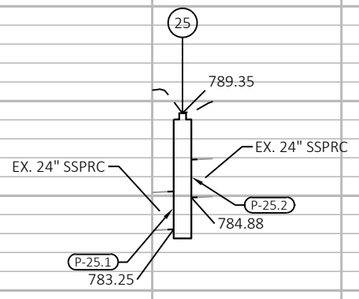
P-23.2 4' - SSPRC CLASS III 18-INCH



875
870
865
860
855
850
845
840

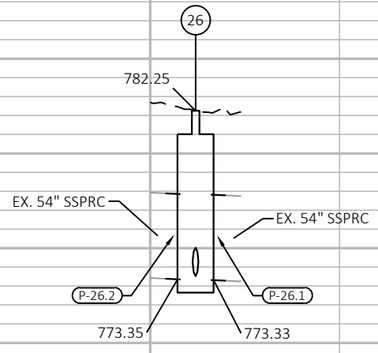
P-25.1 4' - SSPRC CLASS III 24-INCH

P-25.2 4' - SSPRC CLASS III 24-INCH

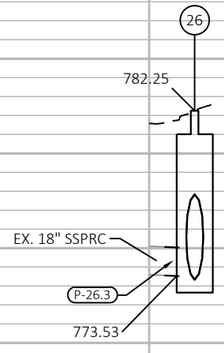


P-26.1 4' - SSPRC CLASS III 54-INCH

P-26.2 4' - SSPRC CLASS III 54-INCH

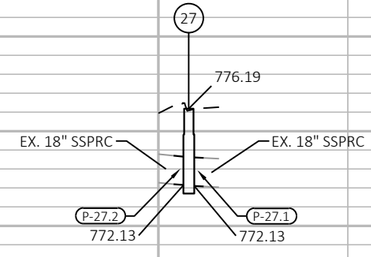


P-26.3 4' - SSPRC CLASS III 18-INCH



P-27.1 4' - SSPRC CLASS III 18-INCH

P-27.2 4' - SSPRC CLASS III 18-INCH

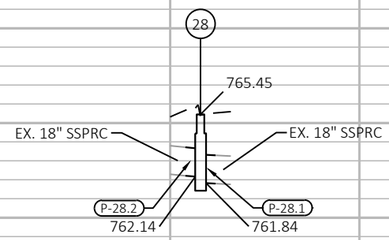


PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 207	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\022500_SS.DWG
LAYOUT NAME - 021252_ss (3P)
PLOT DATE : 8/20/2025 12:21 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

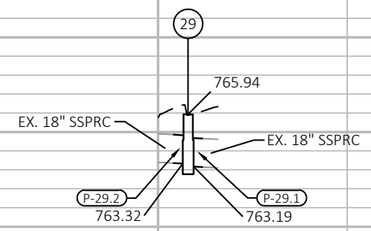
P-28.1 4' - SSPRC CLASS III 18-INCH

P-28.2 4' - SSPRC CLASS III 18-INCH



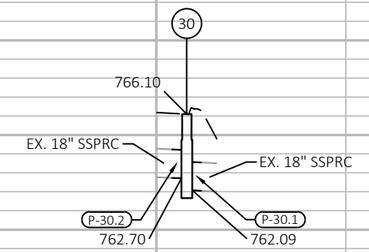
P-29.1 4' - SSPRC CLASS III 18-INCH

P-29.2 4' - SSPRC CLASS III 18-INCH



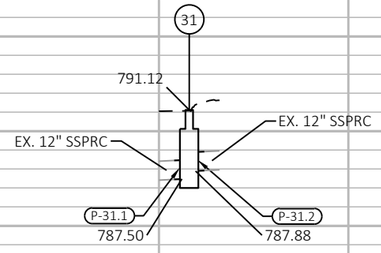
P-30.1 4' - SSPRC CLASS III 18-INCH

P-30.2 4' - SSPRC CLASS III 18-INCH

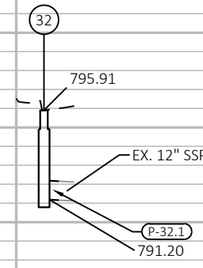


P-31.1 4' - SSPRC CLASS III 12-INCH

P-31.2 4' - SSPRC CLASS III 12-INCH

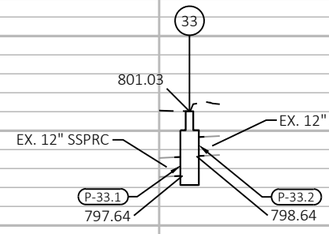


P-32.1 4' - SSPRC CLASS III 12-INCH

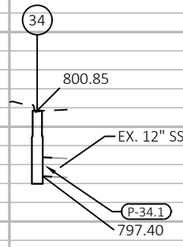


P-33.1 4' - SSPRC CLASS III 12-INCH

P-33.2 4' - SSPRC CLASS III 12-INCH

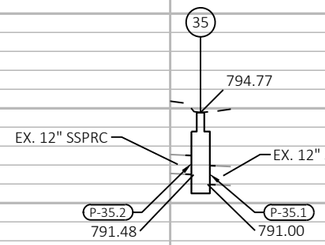


P-34.1 4' - SSPRC CLASS III 12-INCH

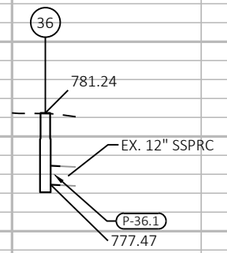


P-35.1 4' - SSPRC CLASS III 12-INCH

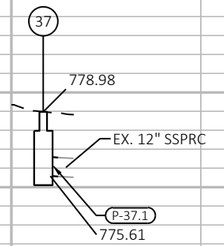
P-35.2 4' - SSPRC CLASS III 12-INCH



P-36.1 4' - SSPRC CLASS III 12-INCH

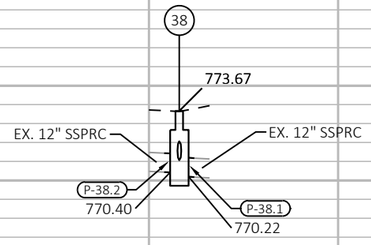


P-37.1 4' - SSPRC CLASS III 12-INCH

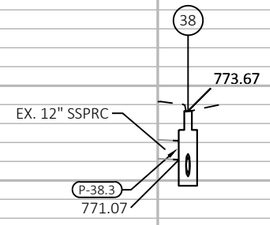


P-38.1 4' - SSPRC CLASS III 12-INCH

P-38.2 4' - SSPRC CLASS III 12-INCH

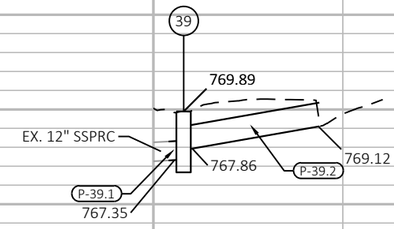


P-38.3 4' - SSPRC CLASS III 12-INCH

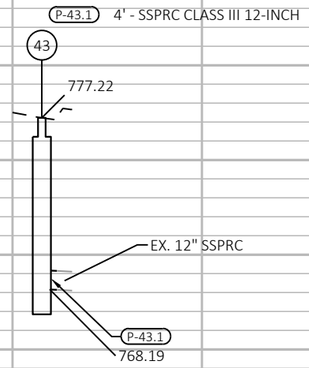


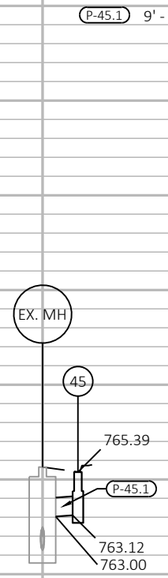
P-39.1 4' - SSPRC CLASS III 12-INCH

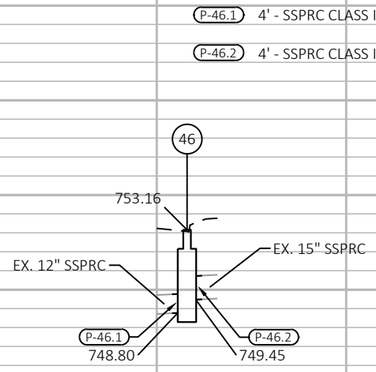
P-39.2 36' - CPCS 15-INCH

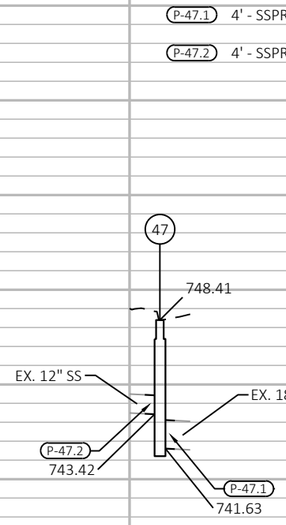


PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 209	E









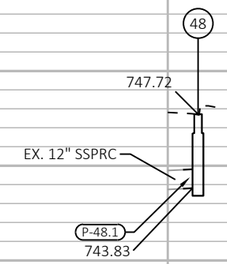
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 210	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\022500_SS.DWG
LAYOUT NAME - 021255_ss (6P)
PLOT DATE : 8/20/2025 12:22 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

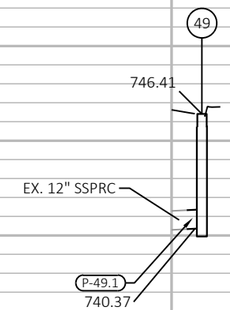
2

765
760
755
750
745
740
735
730

P-48.1 4' - SSPRC CLASS III 12-INCH



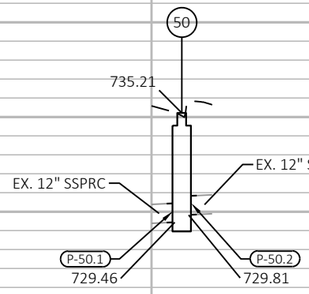
P-49.1 4' - SSPRC CLASS III 12-INCH



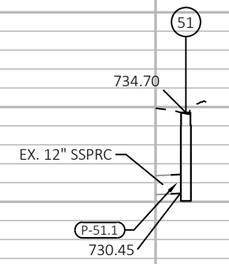
745
740
735
730
725
720
715
710

P-50.1 4' - SSPRC CLASS III 12-INCH

P-50.2 4' - SSPRC CLASS III 12-INCH



P-51.1 4' - SSPRC CLASS III 12-INCH



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER	SHEET 211	E

NOTE:
1. PERFORM WORK ON JUNCTION CHAMBER & PIPES AT THE SAME TIME AS C-67-35 REPAIRS.
2. DEWATERING REQ'D. MAINTAIN DRAINAGE IN ACCORDANCE WITH BID ITEM DEWATERING/BYPASS PUMPING UNNAMED TRIBUTARY.
3. WATER CONTAMINATED WITH SEDIMENT SHALL BE PASSED THROUGH A TEMPORARY SETTLING BASIN WITH FILTER BAG PRIOR TO DISCHARGING.

NOTE:
-IN LOCATIONS WHERE CONSTRUCTION OPERATIONS DISTURB EXISTING RIPRAP, RESET EXISTING RIPRAP SO THAT THE TOP OF RIPRAP IS BELOW THE LIP OF PIPE OR FLOW LINE OF DITCH. RE-SETTING EXISTING RIPRAP IS INCIDENTAL TO THE WORK BEING PERFORMED.

-EXCAVATION CONTAINING PHRAGMITES ARE TO BE TAKEN TO A LANDFILL, BURIED 6-FT DEEP, OR AS A LAST RESORT, WASTED IN AREAS OF EXISTING PHRAGMITES.

LEGEND

XX	PROPOSED DRAINAGE STRUCTURE
RS	EXISTING STRUCTURE TO BE RECONSTRUCTED
AD	EXISTING STRUCTURE TO BE ADJUSTED
MP	EXISTING STRUCTURE TO BE MORTARED/PATCHED
CS	EXISTING STRUCTURE TO BE CLEANED
RG	REPLACE GRATE ON EXISTING STRUCTURE
RE	RESET APRON ENDWALL
CP	CLEANING CULVERT PIPES
CE	CLEAN APRON ENDWALL (PAID FOR AS CLEANING CULVERT PIPES)
DS	DITCHING AND SHAPING

N

97' - SSPRC CLASS IV 36-INCH

97' - SSPRC CLASS IV 36-INCH

REMOVING SMALL PIPE CULVERTS (194 LF OF 36-INCH CMCP)

INSTALL CONCRETE MASONRY ENDWALL FOR CULVERT PIPE *(SEE SDD "CONCRETE MASONRY ENDWALL FOR CULVERT PIPE AND PIPE ARCH" FOR ADDITIONAL INFORMATION)*

REQUIRED JUNCTION CHAMBER REPAIRS:
-TUCKPOINTING
-CONCRETE MASONRY ENDWALL
-DEBRIS RACK GALVANIZED
-RE SETTING THE TOP SLAB AND REPLACING LID PINS IN ACCESS HATCH ARE INCIDENTAL TO JUNCTION CHAMBER REPAIRS

24' - SSPRC CLASS IV 60-INCH (CONCRETE COLLARS REQ'D)

32' - SSPRC CLASS IV 60-INCH (CONCRETE COLLARS REQ'D)

REMOVING STORM SEWER (01. 60-INCH) 24 LF

REMOVING STORM SEWER (01. 60-INCH) 32 LF

SEALING CONCRETE PIPE JOINTS (5 JOINTS)

C-67-35 (SEE STRUCTURE PLANS)

N. 138TH ST

STH 190 (W. CAPITOL DR)

STH 190 (W. CAPITOL DR)

465+00 466+00 467+00 468+00 469+00 470+00

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER - 138TH STREET	SHEET 212	E

2

REQUIRED JUNCTION CHAMBER REPAIRS:
-TUCKPOINTING
-CONCRETE MASONRY ENDWALL
-DEBRIS RACK GALVANIZED
-RE SETTING THE TOP SLAB AND REPLACING LID PINS IN ACCESS HATCH ARE INCIDENTAL TO JUNCTION CHAMBER REPAIRS

24' - SSPRC CLASS IV 60-INCH (CONCRETE COLLARS REQ'D)

32' - SSPRC CLASS IV 60-INCH (CONCRETE COLLARS REQ'D)

REMOVING STORM SEWER (01. 60-INCH) 24 LF

REMOVING STORM SEWER (01. 60-INCH) 32 LF

CENTER JUNCTION CHAMBER

DUAL 96LF - 36" RCP
SLOPE =0.30%

DUAL 36" RCP I.E. 762.30

1+00

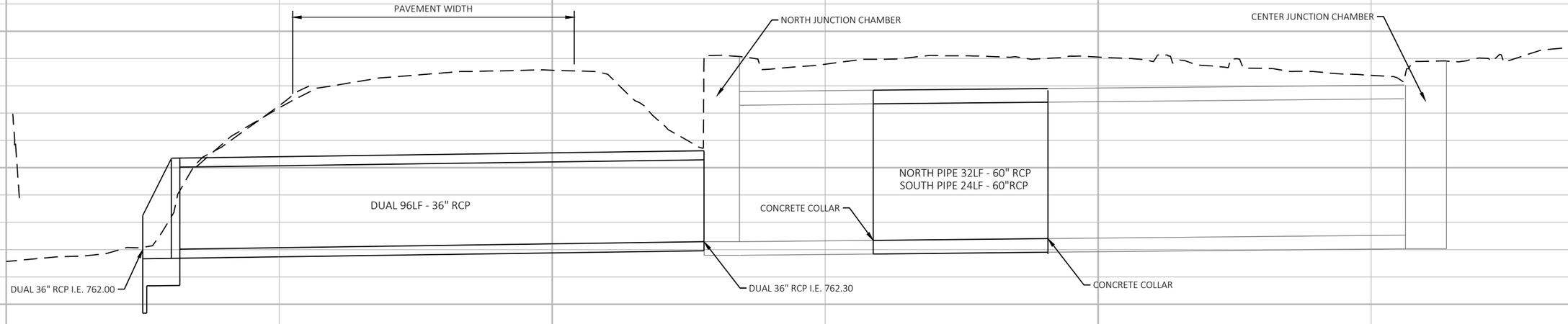
2+00

STA. 466+61.72, 249.41' LT
DUAL 36" RCP ENDWALL I.E. 762.00

INSTALL CONCRETE MASONRY ENDWALL FOR CULVERT PIPE
(SEE SDD "CONCRETE MASONRY ENDWALL FOR CULVERT PIPE AND PIPE ARCH" FOR ADDITIONAL INFORMATION)

NORTH JUNCTION CHAMBER

N. 138TH ST



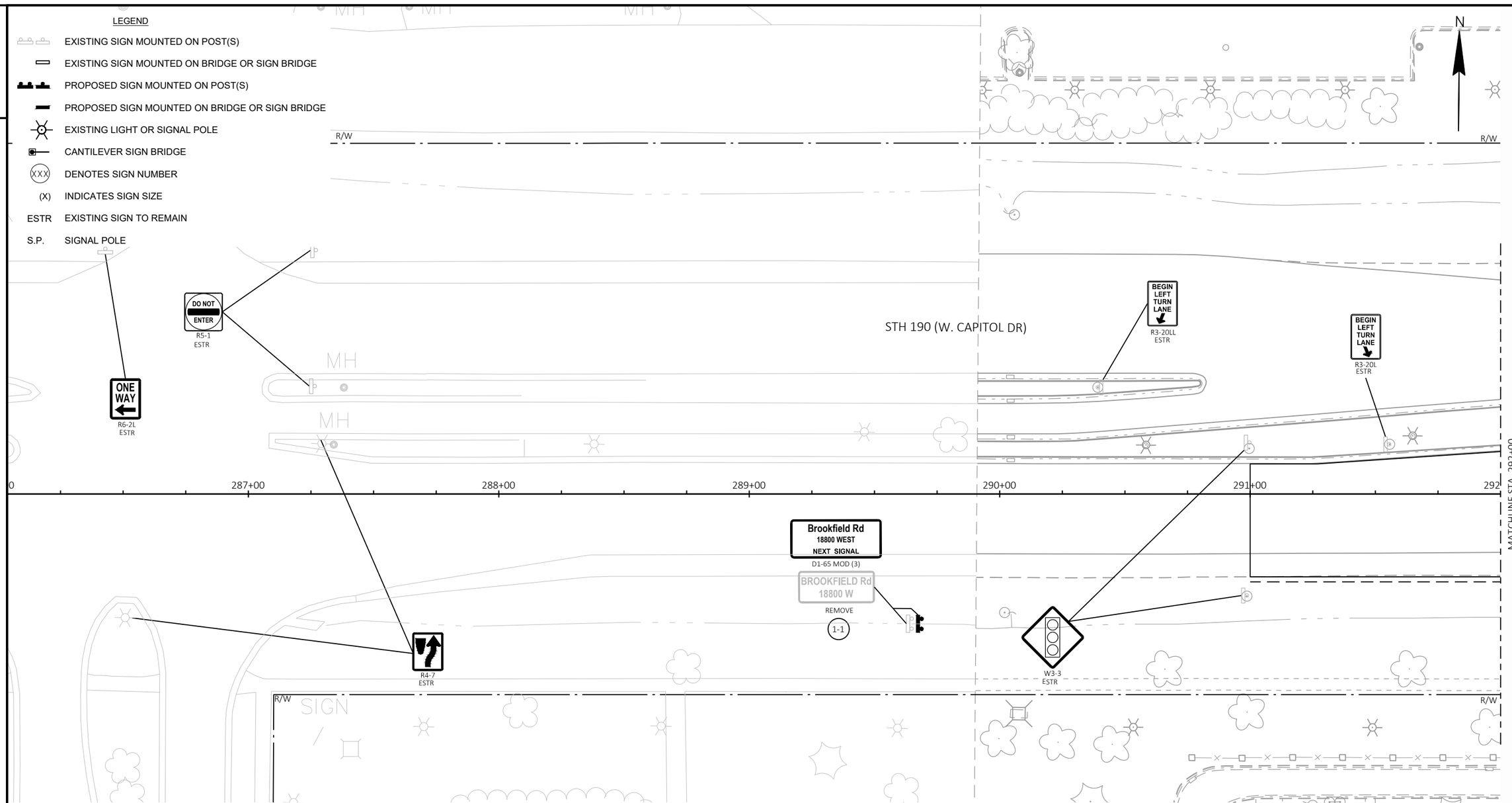
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER - 138TH STREET PLAN & PROFILE	SHEET 213	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\022502_SS.DWG
LAYOUT NAME - 022501_ss
PLOT DATE : 8/20/2025 12:24 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE



NOTES:
TYPE II ALUMINUM SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE COUNTY SIGN SHOP. CONTACT THE FOLLOWING INDIVIDUAL AT THE SIGN SHOP FOR DISTRIBUTION COUNTY LOCATION.

SIGNING COORDINATOR	COUNTIES	PHONE #
BREE JOHNS-KONKOL	MILWAUKEE, WASHINGTON, OZAUKEE, RACINE	414-750-2814
CHUCK SALDIVAR	WALWORTH, WAUKESHA, KENOSHA	414-750-1682

SIGNS SHALL BE CAREFULLY REMOVED FROM SIGN SUPPORTS. THE SIGNS SHALL BE PALLETIZED FOR HANDLING WITH A FORKLIFT (SEE STANDARD SPEC 638.3.4). THE REGIONAL SIGN SHOP (414-266-1165) SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF THE SIGNS.

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

WOOD POST SIZES FOR TYPE II SIGNS ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

STREET NAME SIGNS ARE PROPERTY OF THE MUNICIPALITY (CITY, VILLAGE OR TOWN). THE MUNICIPALITY SHALL BE CONTACTED TO REMOVE THEIR STREET NAME SIGNS PRIOR TO CONSTRUCTION AND IT IS THEIR RESPONSIBILITY TO REINSTALL THE OLD SIGNS OR REPLACE THEM FOLLOWING CONSTRUCTION. WISDOT DOES NOT FURNISH OR INSTALL STREET NAME SIGNS. THE STREET NAME SIGNS SHALL NOT BE PLACED ON TOP OF THE STOP SIGNS.

BOX OUT OR CORING OF CONCRETE SIGN POSTS IS INCIDENTAL TO THE POST.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 214	E

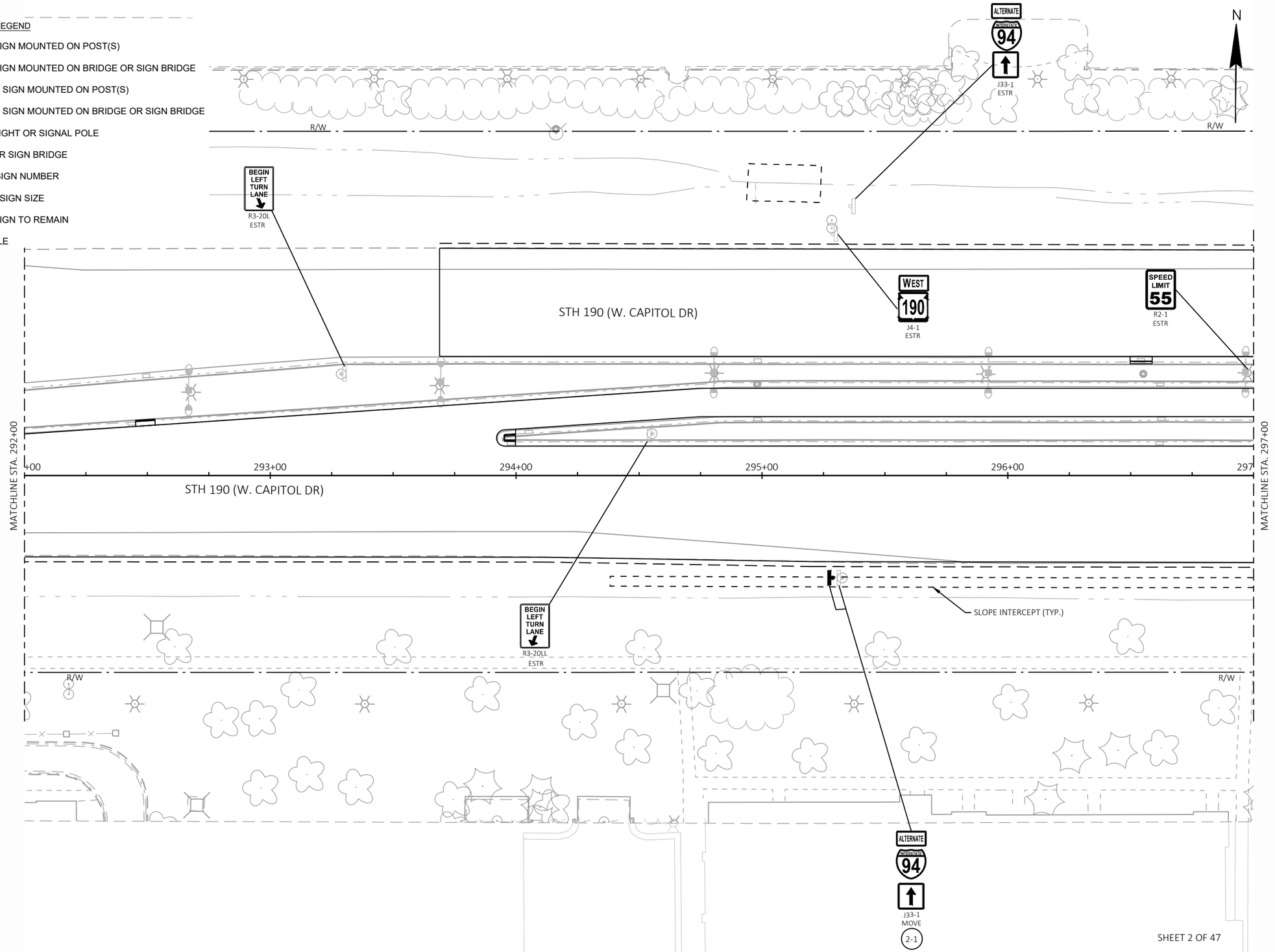
FILE NAME : X:\MIL\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023201_ps
PLOT DATE : 8/20/2025 12:25 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE



SHEET 2 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 215	E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

MATCH LINE A-A

BROOKFIELD M1-94
CAPITOL M1-94 ESTR
YIELD R1-2 ESTR
W12-1D ESTR
STOP R1-1F ESTR
ONE WAY R6-2L ESTR
N BROOKFIELD RD
RIGHT LANE ENDS W9-1R ESTR
190 W Capitol Dr M1-94S MOUNT ON MAST ARM
Capitol Dr REMOVE
3-3
3-5
DO NOT ENTER R5-1 MOVE
WRONG WAY R5-1A MOVE
3-6
ONE WAY R6-2L(2M) ON S.P
3-7
1P
R/W
N
3-10
LEFT TURN YIELD ON FLASHING YELLOW ARROW REMOVE
3-4
STOP R1-1F MOVE ON S.P.
Brookfield Dr M1-94H ESTR
R4-7 ESTR
DO NOT ENTER R5-1 ESTR
STH 190 (W. CAPITOL DR)
ONLY R3-8L ESTR
50
51+00
MATCHLINE STA. 297+00
298+00
299+00
300+00
301+00
302+00
303
MATCHLINE STA. 303+00
50-00
WRONG WAY R5-1A MOVE
3-1
SLOPE INTERCEPT (TYP.)
3-8
ONE WAY R6-2L(2M) ON S.P
190 W Capitol Dr M1-94S MOUNT ON MAST ARM
Capitol Dr REMOVE
3-2
H D9-2
M6-1 ESTR
BEGIN LEFT TURN LANE R3-20LL ESTR
30
45+00
N BROOKFIELD RD
W12-1D ESTR
YIELD R1-2 ESTR
ONE WAY R6-2L(2M) ON S.P
3-9
Brookfield Dr MI-94H ESTR
EAST 190 J4-1 ESTR
SIGN
MATCH LINE B-B

SHEET 3 OF 47

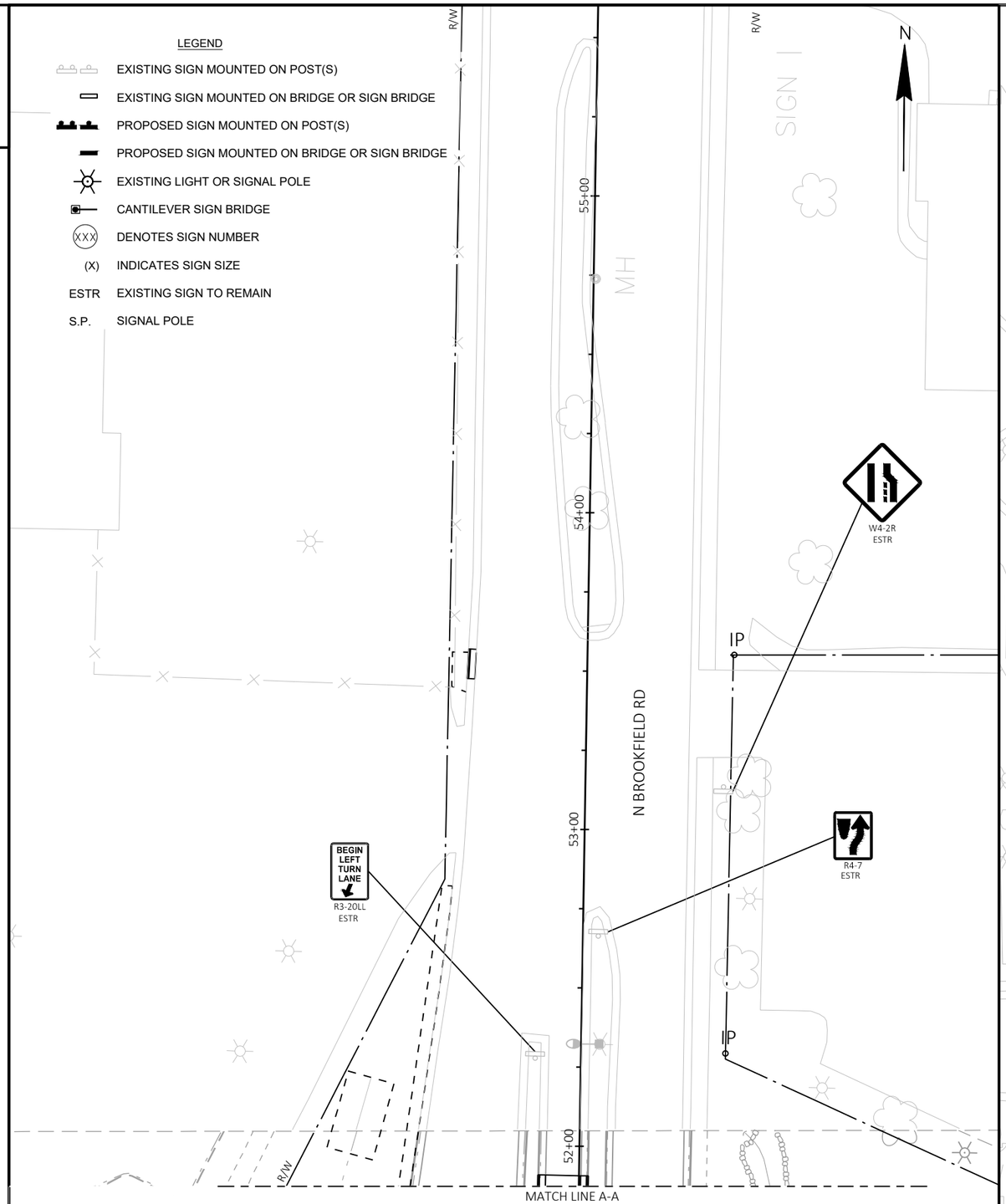
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 216	E

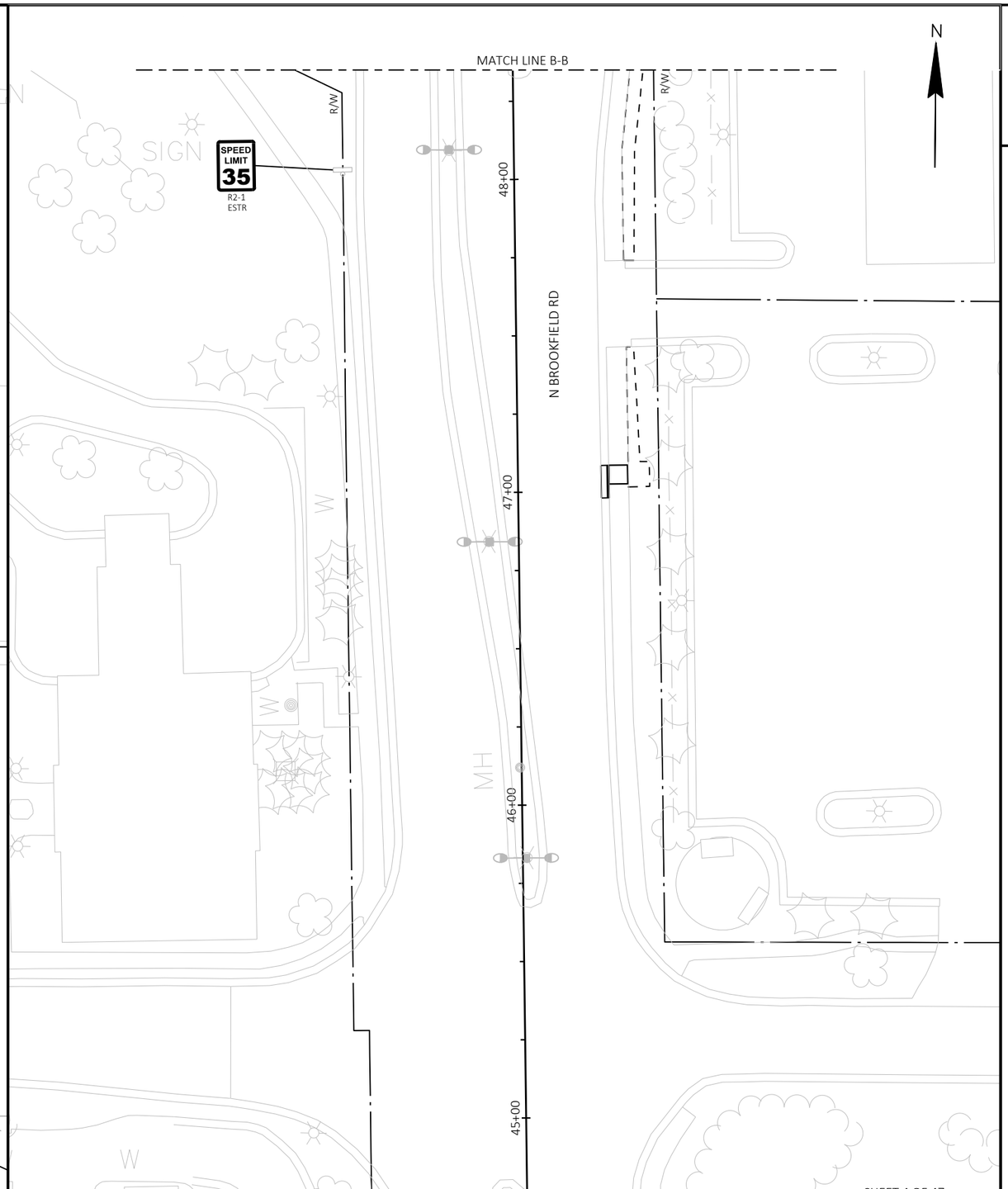
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LAYOUT NAME - 023203_ps
PLOT DATE : 8/20/2025 12:26 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE





2

SHEET 4 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 217	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023203_ps (2)
PLOT DATE : 8/20/2025 12:27 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

N

R/W

IP

IP

R/W

SLOPE INTERCEPT (TYP.)

RIPRAP

ONE WAY
R6-2L
ESTR

STH 190 (W. CAPITOL DR)

SPEED LIMIT 50
R2-1
ESTR

BEGIN LEFT TURN LANE
R3-20L
ESTR

H
D9-2

M6-1
ESTR

R4-7
ESTR

MATCHLINE STA. 303+00

304+00

305+00

306+00

307+00

308+00

309

MATCHLINE STA. 309+00

SLOPE INTERCEPT (TYP.)

R4-7
ESTR

R/W

IP

R/W

TLE

TLE

SPEED LIMIT 50
R2-1
MOVE
4-1

DO NOT ENTER
R5-1
ESTR

CAPITOL
M1-94

ST. ANDREW
M1-94
ESTR

ST ANDREW LN

STOP
R1-1
MOVE
4-2

DIVIDED HIGHWAY
R6-3A
MOVE
4-3

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

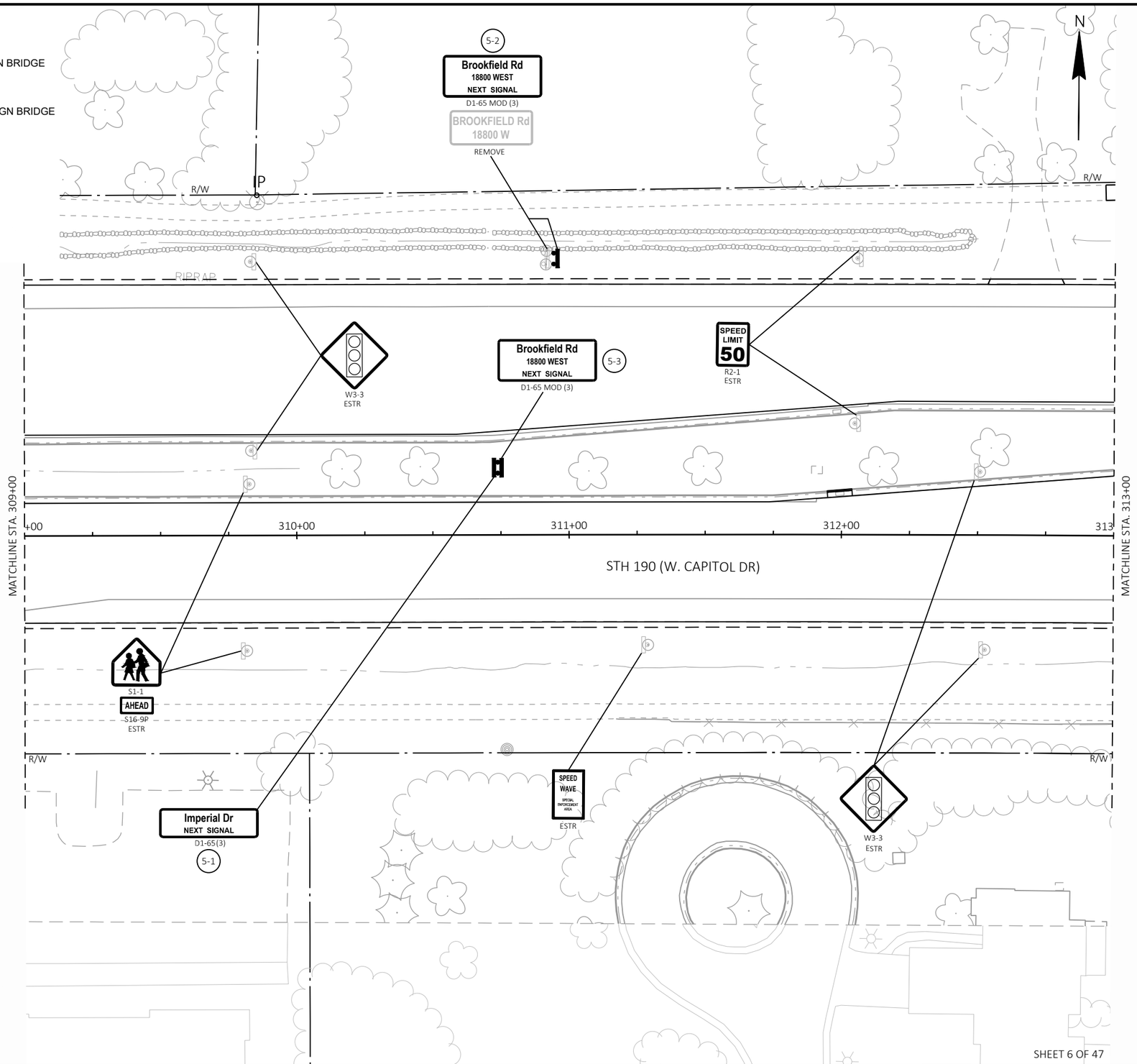
SHEET 5 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 218	E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE



SHEET 6 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 219	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023205_ps

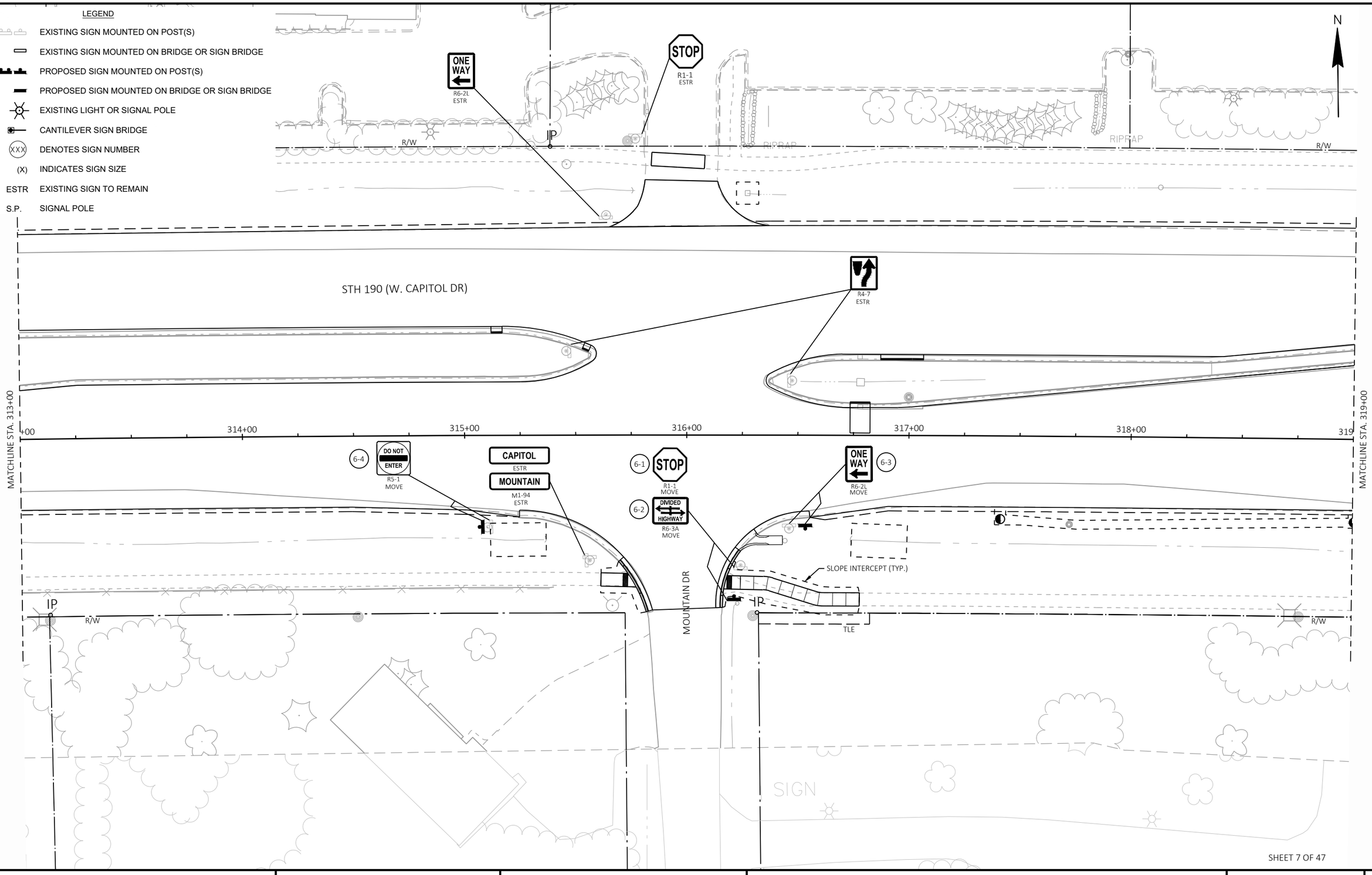
PLOT DATE : 8/20/2025 12:27 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE



SHEET 7 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 220	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023206_ps

PLOT DATE : 8/20/2025 12:28 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

IMPERIAL DR

STH 190 (W. CAPITOL DR)

MATCHLINE STA. 319+00

MATCHLINE STA. 325+00

320+00 321+00 322+00 323+00 324+00 325

50-00

49+00

55'

20'

R/W

TLE

RIPRAP

SLOPE INTERCEPT (TYP.)

7-1 S1-1 MOVE; S16-7L MOVE

7-2 WRONG WAY R5-1A ESTR

7-3 DO NOT ENTER R5-1(3) ON S.P.

7-4 STOP R1-1F MOVE ON S.P.

7-5 Capitol Dr REMOVE

7-6 STOP R1-1F MOVE ON S.P.

7-7 DO NOT ENTER R5-1 ESTR

7-8 DO NOT ENTER R5-1 MOVE ON S.P.

7-9 STOP R1-1F MOVE ON S.P.

7-10 S1-1 MOVE; S16-7L MOVE

7-11 SPEED LIMIT 25 R2-1 ESTR

7-12 LEFT TURN YIELD ON FLASHING YELLOW ARROW REMOVE

7-13 LEFT TURN YIELD ON FLASHING YELLOW ARROW REMOVE

7-14 ONE WAY R6-2L(2M) ON S.P

7-15 ONE WAY R6-2L(2M) ON S.P

BEGIN LEFT TURN LANE R3-20LL ESTR

SPEED LIMIT 50 R2-1 ESTR

STOP R1-1F ESTR

S1-1 S16-7R ESTR

Imperial Dr M1-94H ESTR

R4-7 ESTR

190 W Capitol Dr M1-94S MOUNT ON MAST ARM

Capitol Dr REMOVE

I55-56 ADOPT A HIGHWAY

I55-56P ESTR

HINDU SWAYAMSEVAK SANGH

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 221	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023207_ps
PLOT DATE : 8/20/2025 12:28 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N

WRONG WAY
R5-1A
MOVE
8-1

R/W

RIPRAP

SLOPE INTERCEPT (TYP.)

BEGIN LEFT TURN LANE
R3-20L
ESTR

STH 190 (W. CAPITOL DR)

W3-3
ESTR

Imperial Dr
NEXT SIGNAL
D1-65(3)
8-2 8-3

S1-1
AHEAD
S16-9P
ESTR

MATCHLINE STA. 325+00

+00 326+00 327+00 328+00 329+00 330+00 331

MATCHLINE STA. 331+00

SPEED LIMIT
50
R2-1
ESTR

R/W

R/W

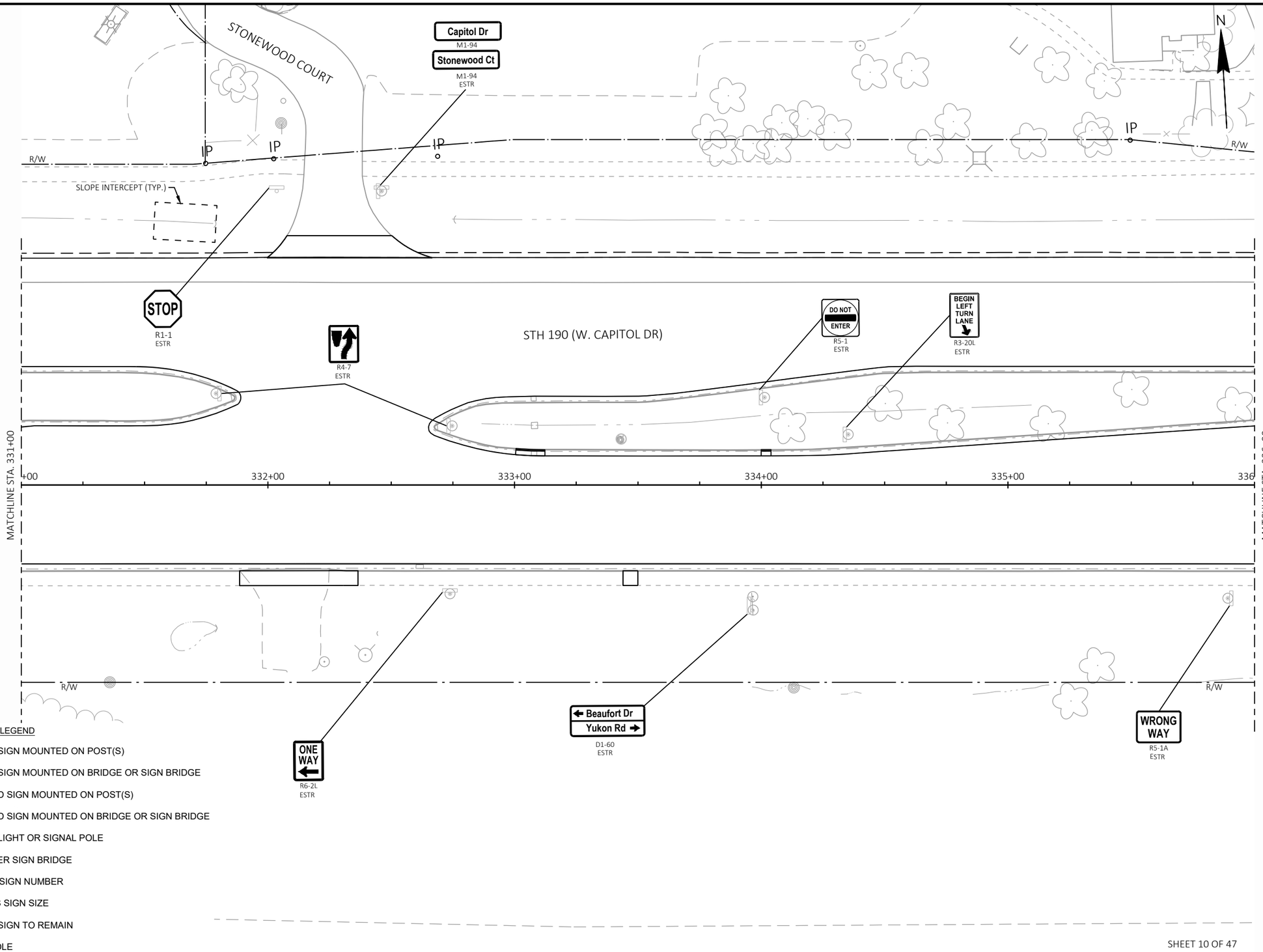
LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

SHEET 9 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 222	E

2



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

SHEET 10 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 223	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023209_ps
PLOT DATE : 8/20/2025 12:29 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

STH 190 (W. CAPITOL DR)

BEAUFORT DR

YUKON RD

R/W

SLOPE INTERCEPT (TYP.)

MATCHLINE STA. 336+00

MATCHLINE STA. 341+50

336+00 337+00 338+00 339+00 340+00 341+00

10-1 STOP R1-1 MOVE
10-2 DIVIDED HIGHWAY R6-3A MOVE
10-3 ONE WAY R6-2L MOVE
10-4 STOP R1-1 MOVE
10-5 DIVIDED HIGHWAY R6-3A MOVE
10-6 DO NOT ENTER R5-1 MOVE
10-7 DO NOT ENTER R5-1 MOVE
10-8 R4-7 MOVE
10-9 ONE WAY R6-2L MOVE
10-10 STOP R1-1 MOVE
10-11 STOP R1-1 MOVE
10-12 DIVIDED HIGHWAY R6-3A MOVE
10-13 DO NOT ENTER R5-1(2S)

SPEED LIMIT 50 R2-1 ESTR
BEGIN LEFT TURN LANE R3-20LL ESTR
R4-7 ESTR
DO NOT ENTER R5-1 ESTR
R4-7 ESTR
DO NOT ENTER R5-1 MOVE
Capitol Dr M1-94
Yukon Rd M1-94 ESTR
SPEED LIMIT 25 R2-1
NO THRU TRAFFIC R5-54 ESTR
CAPITOL DR M1-94
BEAUFORT DR M1-94 ESTR
N

SHEET 11 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 224	E

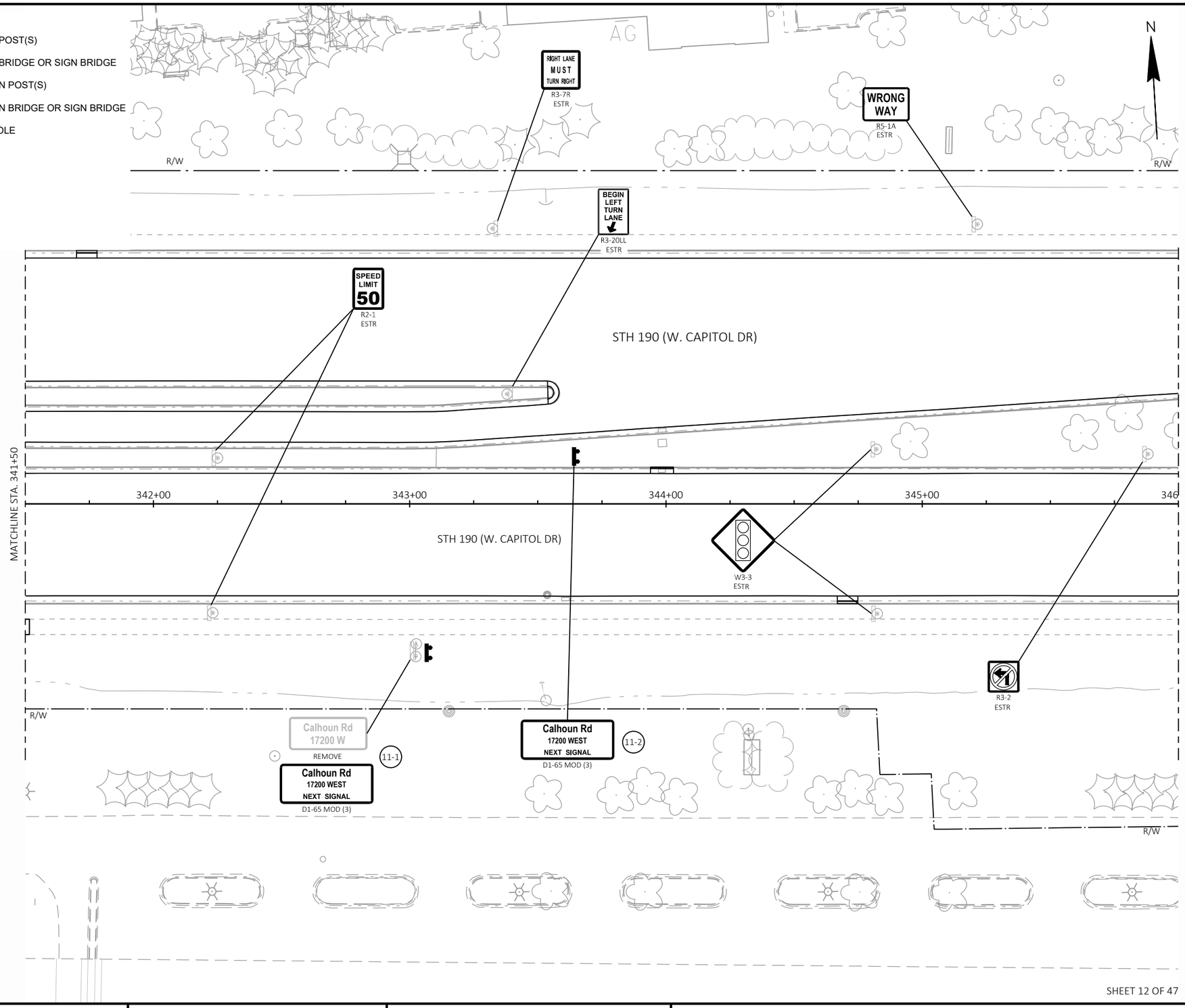
FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023210_ps
PLOT DATE : 8/20/2025 12:30 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE



SHEET 12 OF 47

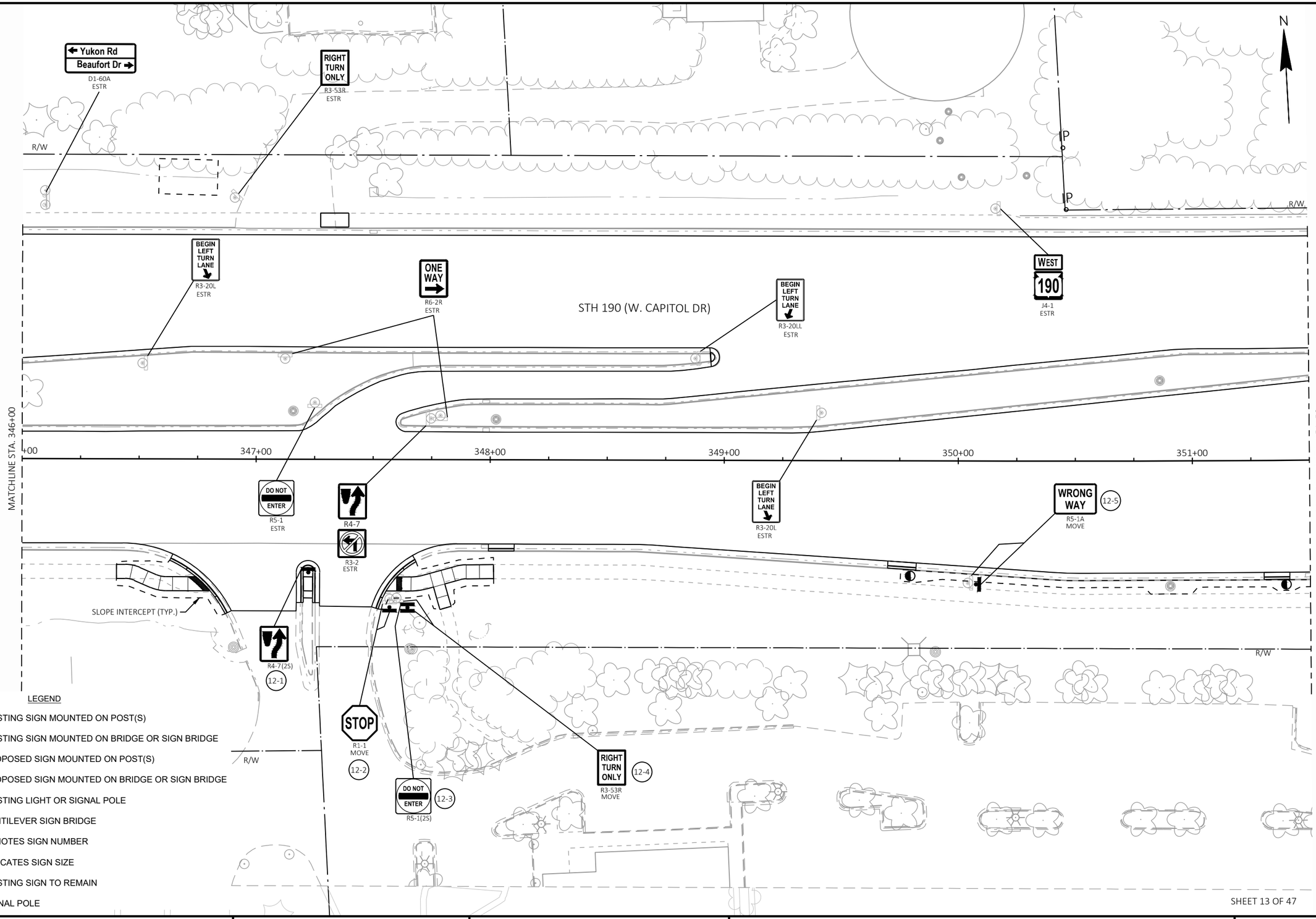
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 225	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023211_ps

PLOT DATE : 8/20/2025 12:30 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



SHEET 13 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 226	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023212_ps

PLOT DATE : 8/20/2025 12:31 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

MATCH LINE D-D

N

N. CALHOUN RD

Calhoun Rd
M1-94H
ESTR

R/W

IP

13-8
ONE WAY
R6-2L(2M)
ON S.P.

R1-2
MOVE
13-4

W12-1D
MOVE
13-5

R4-7
ESTR

ONE WAY
13-10
R6-2L(2S)

R1-2
MOVE
13-7

IP

R/W

55'

51+00

STOP
R1-1F
ESTR

DO NOT ENTER
13-11
R5-1(2M)

W Capitol Dr
M1-94S
MOUNT ON MAST ARM

Capitol Dr
REMOVE
13-6

STH 190 (W. CAPITOL DR)

ONLY
R3-8L
ESTR

SPEED LIMIT 50
R2-1
ESTR

STOP
R1-1F
ESTR

DO NOT ENTER
R5-1(2M)
ON S.P.
13-9

DO NOT ENTER
R5-1
ESTR

STOP
R1-1F
ESTR

W12-1D
ESTR

MATCHLINE STA. 351+50

352+00

353+00

354+00

355+00

356+00

357+00

MATCHLINE STA. 357+50

13-1
RIGHT LANE MUST TURN RIGHT
R3-7R
MOVE

R4-7
ESTR

DO NOT ENTER
R5-1(2M)
13-14

W12-1D
ESTR

STOP
R1-1F
ESTR

13-3
W Capitol Dr
M1-94S
MOUNT ON MAST ARM

Capitol Dr
REMOVE

50+00

55'

13-12
ONE WAY
R6-2L(2M)
ON S.P.

EAST
190
J4-1
ESTR

R4-7
ESTR

R3-4
ESTR

IP

SLOPE INTERCEPT (TYP.)

R/W

R4-7
ESTR

STOP
R1-1F
ESTR

Calhoun Rd
M1-94H
ESTR

R/W

13-2
YIELD
R1-2
MOVE

13-13
ONE WAY
R6-2L(2S)
ON S.P.

49+00

N. CALHOUN RD

STOP
R1-1F
ESTR

W12-1D
ESTR

MATCH LINE E-E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

SHEET 14 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 227	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023213_ps

PLOT DATE : 8/20/2025 12:31 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

CANTILEVER SIGN BRIDGE

XXX DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

ESTR EXISTING SIGN TO REMAIN

S.P. SIGNAL POLE

N

R/W

BEGIN LEFT TURN LANE
R3-20L
ESTR

54+00

IP

ONE WAY
R6-2R
ESTR

R/W

MH

ONLY ONLY
R3-8
ESTR

IP

53+00

N. CALHOUN RD

P

R/W

52+00

MATCH LINE D-D

MATCH LINE E-E

N

R/W

48+00

SLOPE INTERCEPT (TYP.)

R/W

47+00

MH

ONLY ONLY
R3-8
ESTR

WEST EAST
190 190
J3-2
ESTR

46+00

N. CALHOUN RD

45+00

R/W

2

SHEET 15 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 228	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023213_ps (2)

PLOT DATE : 8/20/2025 12:32 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

14-2
ONE WAY
R6-2L
MOVE

R/W

SLOPE INTERCEPT (TYP.)

BEGIN LEFT TURN LANE
R3-20L
ESTR

14-1
WRONG WAY
R5-1A
MOVE

ONLY
R3-8L
ESTR

STH 190 (W. CAPITOL DR)

W3-3
ESTR

R4-7
ESTR

MATCHLINE STA. 357+50

358+00

359+00

360+00

361+00

362+00

363

MATCHLINE STA. 363+00

RIGHT LANE MUST TURN RIGHT
R3-7R
ESTR

DO NOT ENTER
R5-1
ESTR

SPEED LIMIT 50
R2-1
ESTR

R/W

R/W

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

SHEET 16 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 229	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023214_ps

PLOT DATE : 8/20/2025 12:32 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

STOP
R1-1

DIVIDED HIGHWAY
R6-3A
ESTR

R/W

SLOPE INTERCEPT (TYP.)

DO NOT ENTER
R5-1 (2S)
15-5

15-4
R4-7 (2S)

15-3
DO NOT ENTER
R5-1
MOVE

R4-7
ESTR

STH 190 (W. CAPITOL DR)

MATCHLINE STA. 363+00

364+00 365+00 366+00 367+00 368+00 369

MATCHLINE STA. 369+00

N. 169TH ST
M1-94
MOVE BY OTHERS

CAPITOL DR
M1-94
MOVE BY OTHERS

ONE WAY
R6-2L
ESTR

N. 169TH ST

STOP
R1-1
MOVE
15-1

DIVIDED HIGHWAY
R6-3A
MOVE
15-2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

SHEET 17 OF 47

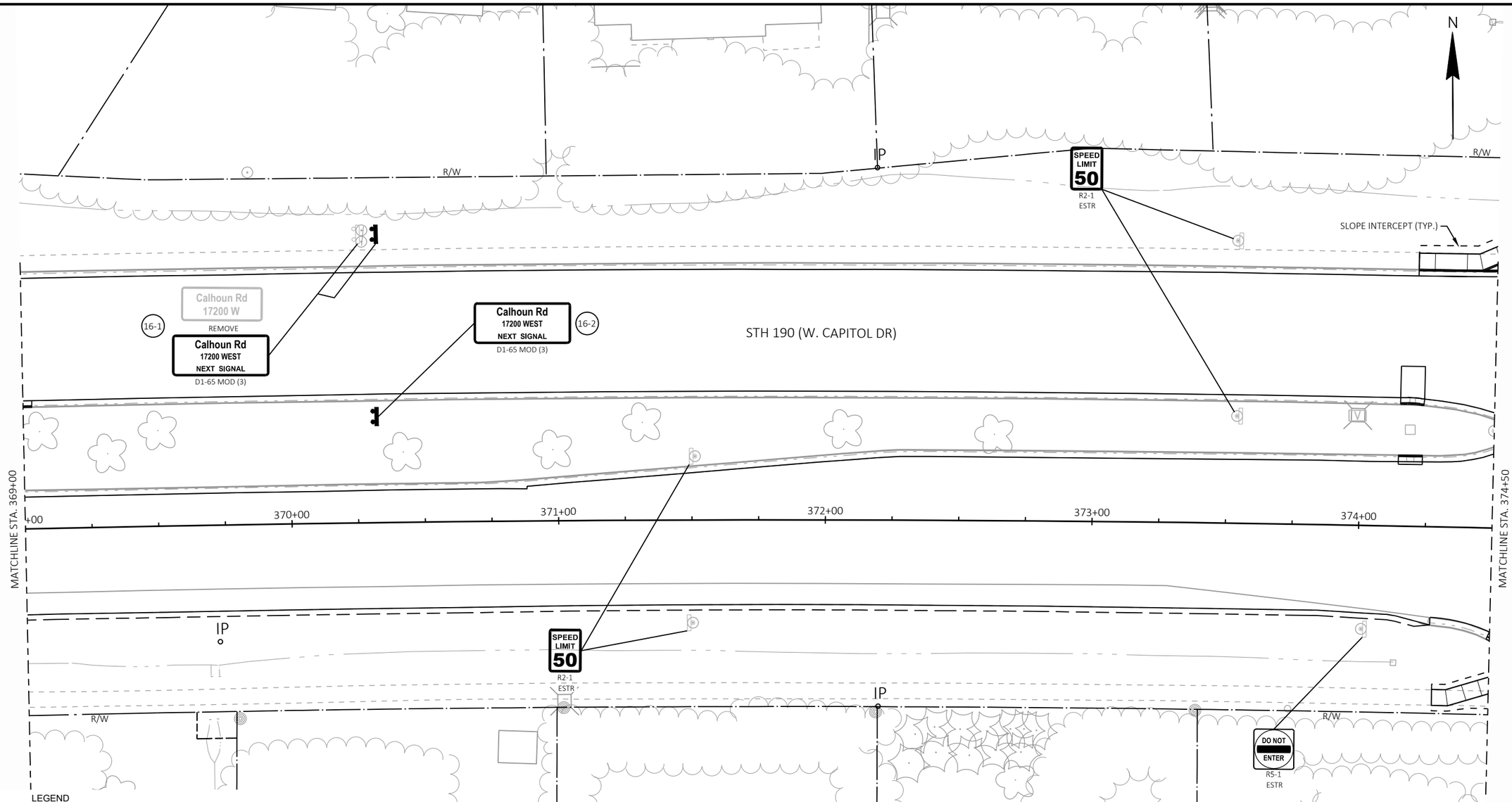
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 230	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023215_ps

PLOT DATE : 8/20/2025 12:33 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

SHEET 18 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 231 E

2

2

FOUNTAIN PLAZA DR

STOP
R1-1

DIVIDED HIGHWAY
R6-3A
ESTR

R/W

SLOPE INTERCEPT (TYP.)

DO NOT ENTER
R5-1
ESTR

N. 165TH ST
M1-94

CAPITOL DR
M1-94
ESTR

17-1
ONE WAY
R6-2L
MOVE

R4-7
ESTR

STH 190 (W. CAPITOL DR)

N

375+00 376+00 377+00 378+00 379+00 380+00

MATCHLINE STA. 374+50

MATCHLINE STA. 380+50

N. 165TH ST
M1-94
MOVE BY OTHERS

CAPITOL DR
M1-94
MOVE BY OTHERS

17-2
STOP
R1-1
MOVE

17-3
DIVIDED HIGHWAY
R6-3A
MOVE

ONE WAY
R6-2L
ESTR

IP

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

SHEET 19 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 232	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023217_ps

PLOT DATE : 8/20/2025 12:34 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

ONE WAY
R6-2L
ESTR

IP

R/W

R/W

STH 190 (W. CAPITOL DR)

R4-7
ESTR

ADOPT A HIGHWAY
I55-56
BROOKFIELD ACADEMY
I55-56P
ESTR

DO NOT ENTER
R5-1
ESTR

MATCHLINE STA. 380+50

381+00

382+00

383+00

384+00

385+00

386+00

MATCHLINE STA. 386+50

CAPITOL DR
M1-94
BRADEE RD
M1-94
ESTR

ADOPT A HIGHWAY
I55-56
KINDNESS FOR KADEN
I55-56P
ESTR

SLOPE INTERCEPT (TYP.)

RIPRAP

RIPRAP

R/W

R/W

STOP
R1-1

DIVIDED HIGHWAY
R6-3A
ESTR

BRADEE RD

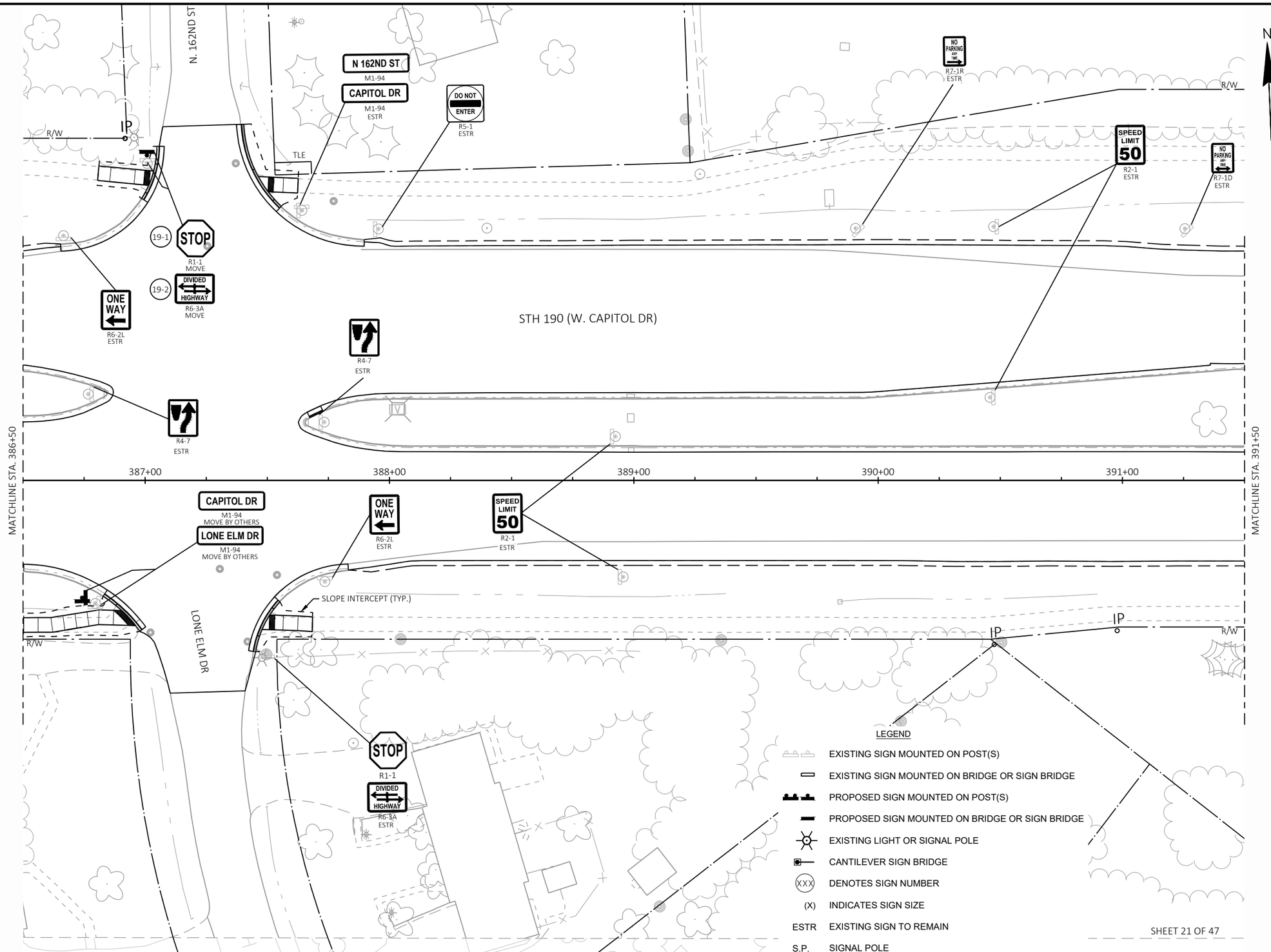
LEGEND

	EXISTING SIGN MOUNTED ON POST(S)
	EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
	PROPOSED SIGN MOUNTED ON POST(S)
	PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
	EXISTING LIGHT OR SIGNAL POLE
	CANTILEVER SIGN BRIDGE
XXX	DENOTES SIGN NUMBER
(X)	INDICATES SIGN SIZE
ESTR	EXISTING SIGN TO REMAIN
S.P.	SIGNAL POLE

SHEET 20 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 233	E

2



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 234	E

2

2

N

R/W

R/W

IP

IP

BROOK LN

STOP
R1-1

DIVIDED HIGHWAY
R6-3A
ESTR

NO PARKING ANY TIME
R7-1D
ESTR

NO PARKING ANY TIME
R7-1D
ESTR

STH 190 (W. CAPITOL DR)

NO PARKING ANY TIME
R7-1L
ESTR

ONE WAY
R6-2L
ESTR

R4-7
ESTR

R9-3A(3)
20-2

USE CROSSWALK
R9-3BR(3)
20-3

MATCHLINE STA. 391+50

392+00

393+00

394+00

395+00

396+00

397+00

MATCHLINE STA. 397+50

DO NOT ENTER
R5-1
ESTR

ONE WAY
R6-2L
ESTR

SLOPE INTERCEPT (TYP.)

R/W

R/W

IP

IP

IP

BROOK LN
M1-94

CAPITOL DR
M1-94
ESTR

BROOK LN

STOP
R1-1
MOVE

20-1

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

SHEET 22 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 235	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023220_ps

PLOT DATE : 8/20/2025 12:35 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

STH 190 (W. CAPITOL DR)

IP

IP

R/W

R/W

DO NOT ENTER
R5-1
ESTR

SLOPE INTERCEPT (TYP.)

DO NOT ENTER
R5-1
ESTR

R4-7
ESTR

MATCHLINE STA. 397+50

MATCHLINE STA. 402+50

398+00

399+00

400+00

401+00

402+00

Pilgrim Rd
15600 W
D1-65 MOD
ESTR

ONE WAY
R6-2L
ESTR

R/W

ALTERNATE
INTERSTATE
94
J33-1
ESTR

RAMP
15
MPH
W13-3
ESTR

IP

R/W

SHEET 23 OF 47

LEGEND

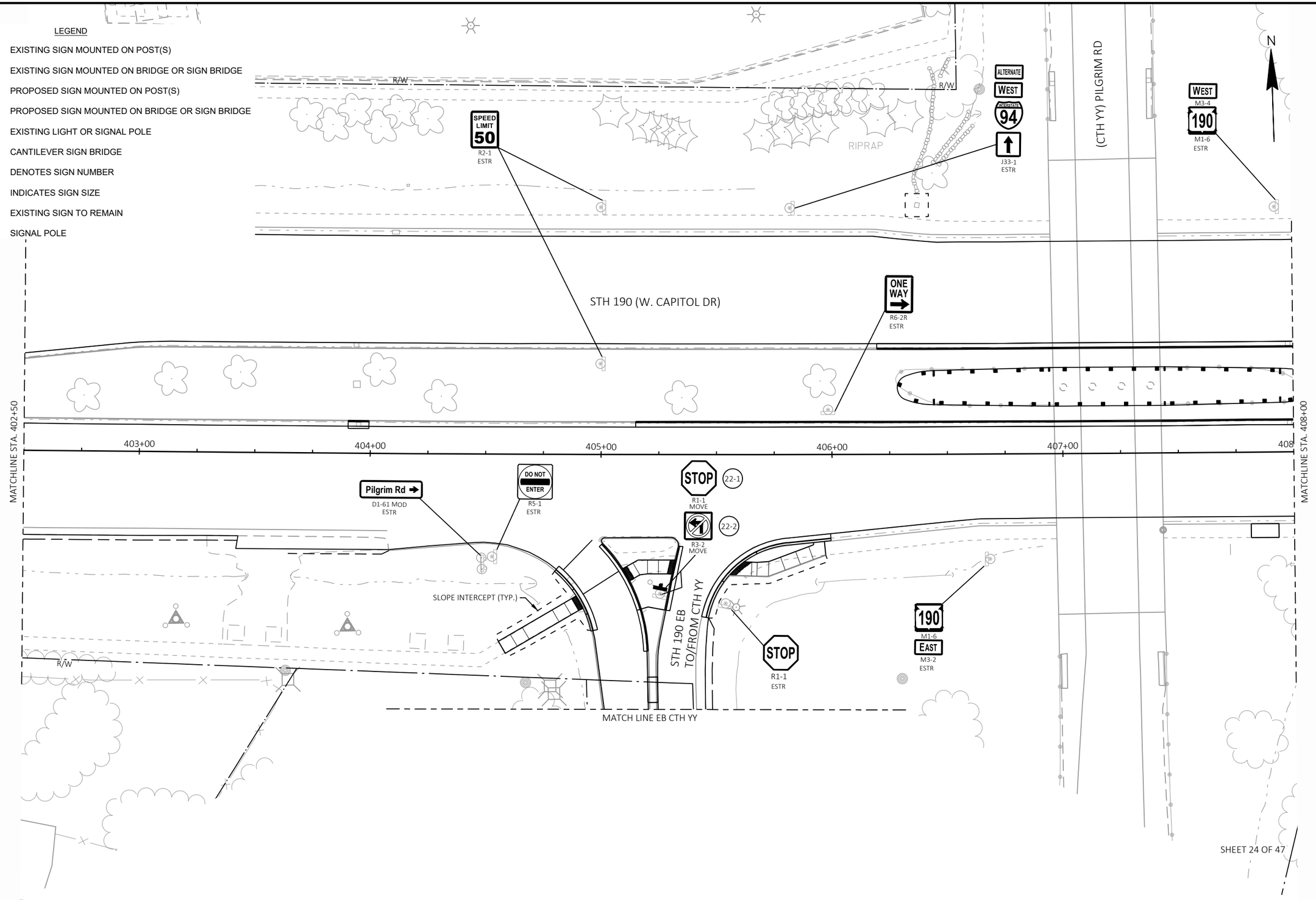
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 236	E

2

LEGEND

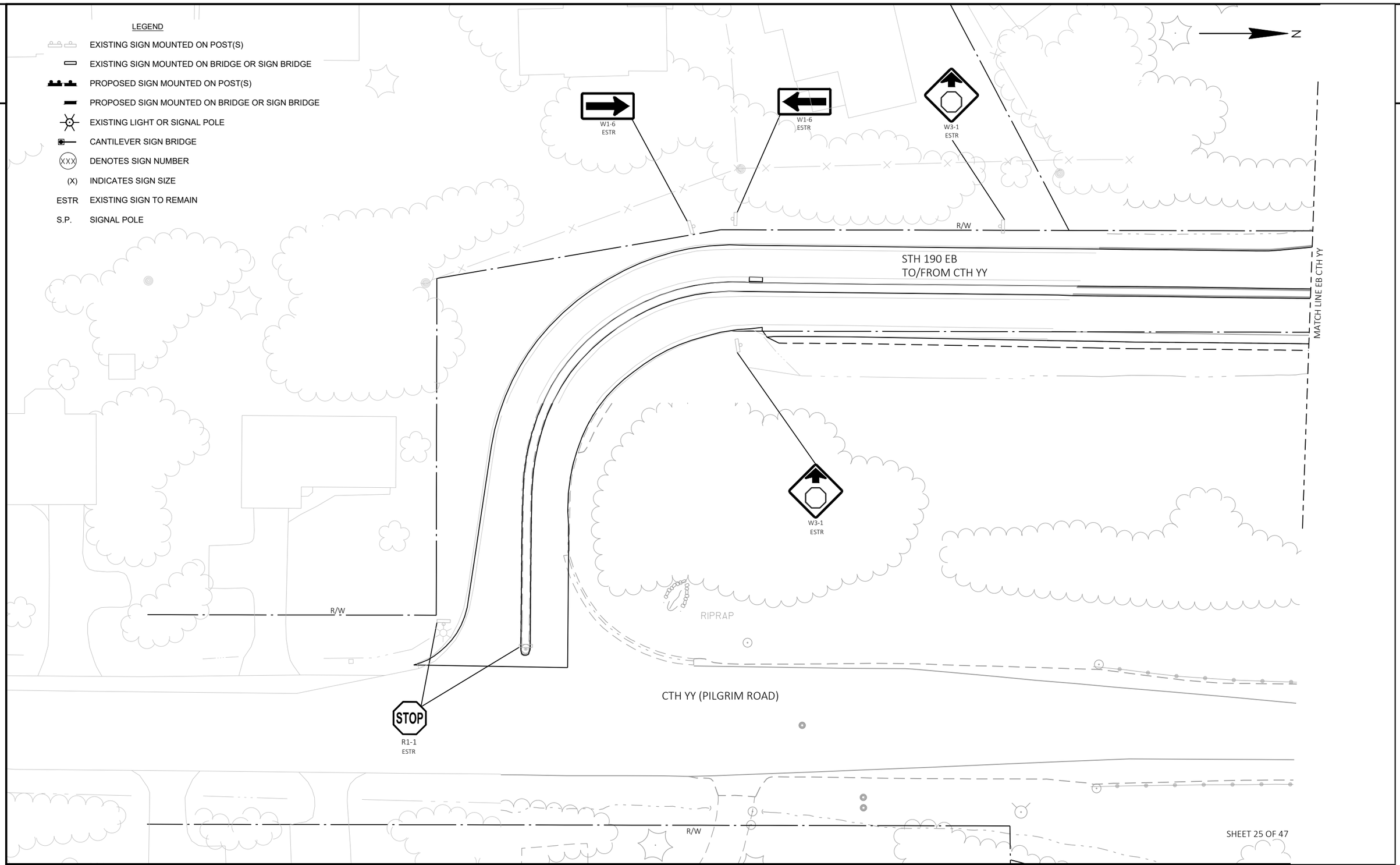
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 237	E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

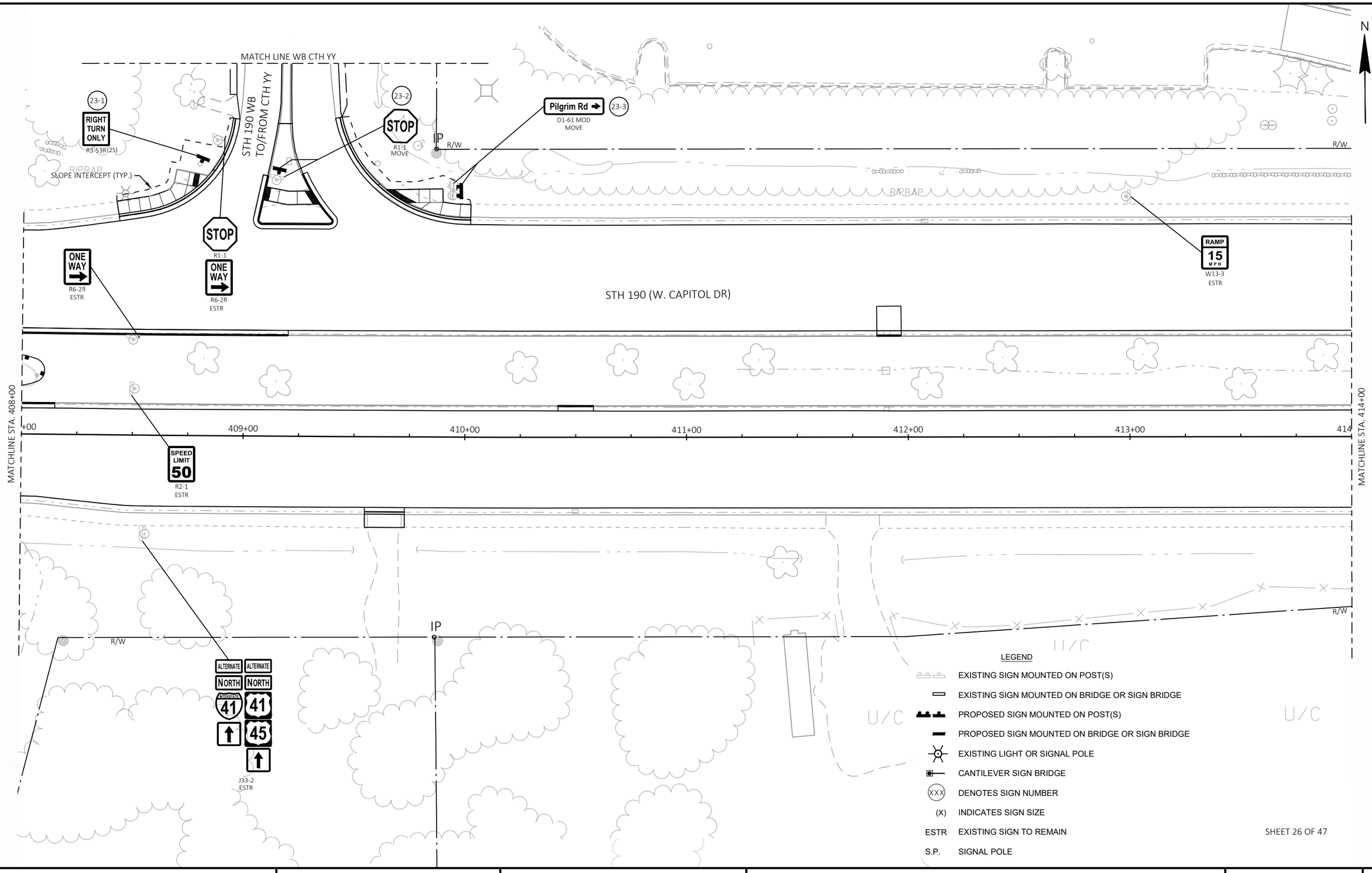


2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 238	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023222_ps (2)
PLOT DATE : 8/20/2025 12:36 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2



SHEET 26 OF 47

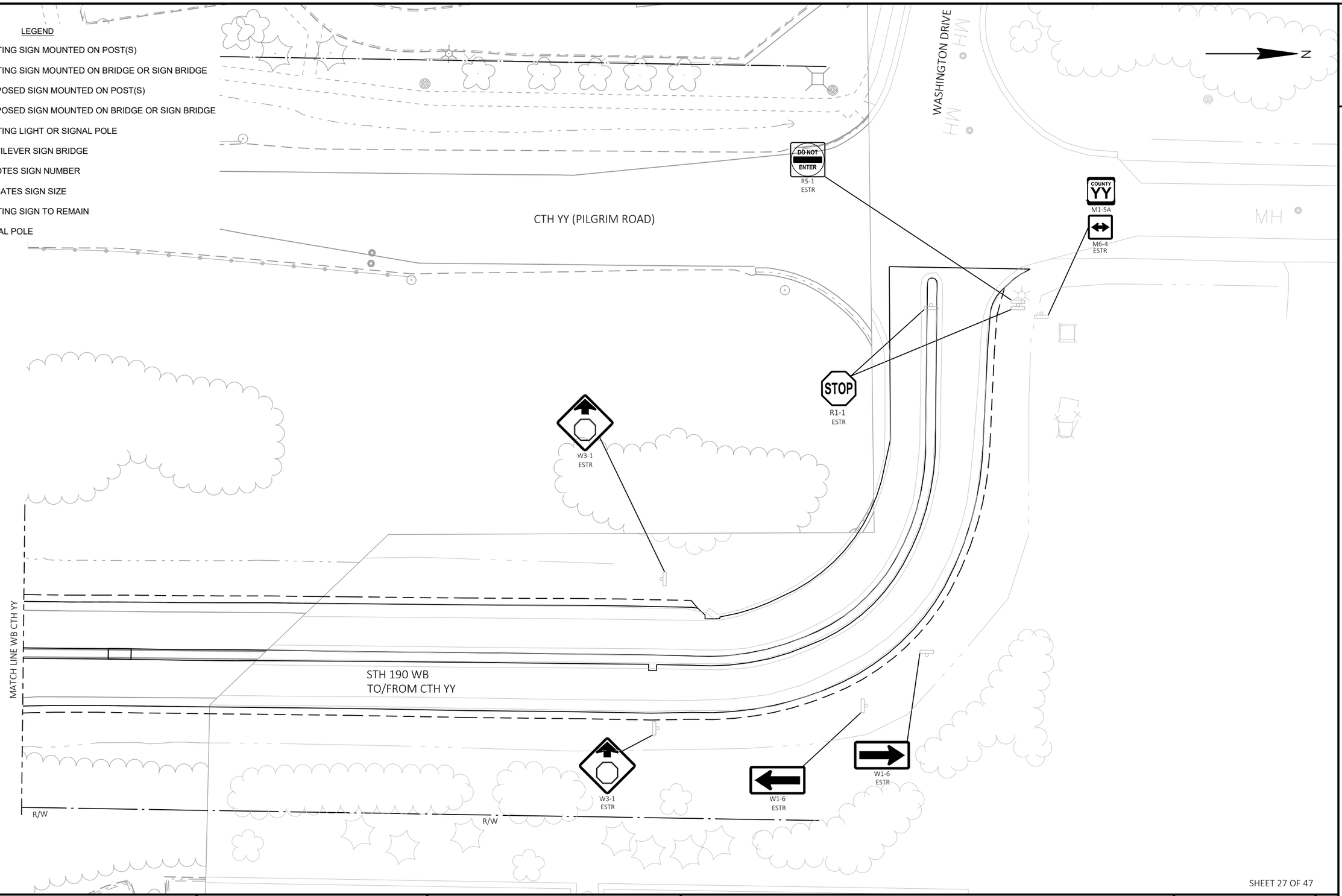
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 239	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023223_ps
PLOT DATE : 8/20/2025 12:37 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE



2

SHEET 27 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 240	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023223_ps (2)

PLOT DATE : 8/20/2025 12:37 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

24-3
DO NOT ENTER
R5-1
MOVE

Pilgrim Rd
15600 W
D1-65 MOD
ESTR

R/W

RIPRAP

SLOPE INTERCEPT (TYP.)

STOP 24-1
R1-1
MOVE

DIVIDED HIGHWAY 24-2
R6-3A
MOVE

STH 190 (W. CAPITOL DR)

R4-7
ESTR

R4-7
ESTR

MATCHLINE STA. 414+00

414+00 415+00 416+00 417+00 418+00 419+00 420+00

MATCHLINE STA. 420+00

ONE WAY 24-4
R6-2L(2M)

R/W

R/W

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

SHEET 28 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 241	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023224_ps
PLOT DATE : 8/20/2025 12:37 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

STOP
R1-1

DIVIDED HIGHWAY
R6-3A
ESTR

RIPRAP

CLARE-
BRIDGE LN

Capitol Dr
M1-94

Clare-Bridge Ln
M1-94
ESTR

N

R/W

TLE

SLOPE INTERCEPT (TYP.)

SPEED LIMIT 50
R2-1
ESTR

SPEED LIMIT 50
R2-1
MOVE

25-1

STH 190 (W. CAPITOL DR)

DO NOT ENTER
R5-1
ESTR

R4-7
ESTR

MATCHLINE STA. 420+00

420+00 421+00 422+00 423+00 424+00 425+00 426+00

MATCHLINE STA. 426+00

R/W

R/W

ONE WAY
R6-2L
ESTR

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

SHEET 29 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 242	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023225_ps

PLOT DATE : 8/20/2025 12:38 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

ONE WAY
R6-2L
ESTR

STOP
R1-1
ESTR

TLE

R/W

R/W

STH 190 (W. CAPITOL DR)

SPEED LIMIT 50
R2-1
ESTR

R4-7
ESTR

MATCHLINE STA. 426+00

+00

427+00

428+00

429+00

430+00

431+00

432

MATCHLINE STA. 432+00

SPEED LIMIT 45
R2-1
ESTR

R/W

R/W

SLOPE INTERCEPT (TYP.)

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

SHEET 30 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 243	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023226_ps

PLOT DATE : 8/20/2025 12:38 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

TLE

R/W

SLOPE INTERCEPT (TYP.)

RIPRAP

ONE WAY
R6-2R
ESTR

R/W

STH 190 (W. CAPITOL DR)

R4-7
ESTR

MATCHLINE STA. 432+00

+00

433+00

434+00

435+00

436+00

437+00

438

MATCHLINE STA. 438+00

NO PARKING ANY TIME
R7-1D
ESTR

NO PARKING ANY TIME
R7-1D
ESTR

R/W

TLE

R/W

STOP
R1-1
ESTR

ONE WAY
R6-2L
ESTR

NO PARKING ANY TIME
R7-1L
ESTR

CANOPY

CANOF

ANOPY

CANOPY

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE

SHEET 31 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 244	E

2

RIPRAP

WYNDHAM POINTE CIR.

SLOPE INTERCEPT (TYP.)

R/W

Capitol Dr
M1-94
MOVE BY OTHERS

Wyndham Pointe Cir
MI-94
MOVE BY OTHERS

R4-7
ESTR

STH 190 (W. CAPITOL DR)

ADOPT A HIGHWAY
I55-56
KINDNESS FOR KADEN
I55-56P
ESTR

NO PARKING ANY TIME
R7-1D
ESTR

BEGIN LEFT TURN LANE
R3-20L
ESTR

SPEED LIMIT 45
R2-1
NO PARKING ANY TIME
R7-1L
ESTR

RIGHT TURN ONLY
R3-53R
ESTR

STOP
R1-1
ESTR

DO NOT ENTER
R5-1
ESTR

N. 145TH ST

R4-7
W12-1D
ESTR

TLE

R/W

SPEED LIMIT 45
R2-1
ESTR

DO NOT ENTER
R5-1
ESTR

N 145TH ST
M1-94

CAPITOL DR
M1-94
ESTR

NO PARKING ANY TIME
R7-1R
ESTR

MATCHLINE STA. 438+00

438+00

439+00

440+00

441+00

442+00

443+00

444+00

MATCHLINE STA. 444+00

ONE WAY
R6-2L
MOVE
28-3

TLE

R/W

IP

NO PARKING ANY TIME
R7-1D
ESTR

28-2

NO PARKING ANY TIME
R7-1D
MOVE

DO NOT ENTER
R5-1
ESTR

R4-7

R3-2
ESTR

R4-7

W12-1D
ESTR

N. 144TH ST

DO NOT ENTER
R5-1
MOVE

28-1

IP

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

SHEET 32 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 245	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023228_ps

PLOT DATE : 8/20/2025 12:39 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

N

R4-7
R3-2
ESTR

SPEED LIMIT 45
R2-1
ESTR

WRONG WAY
R5-1A
ESTR

NO PARKING ANY TIME
R7-1D
ESTR

ONE WAY
R6-2R
ESTR

R4-7
ESTR

R/W

IP

STH 190 (W. CAPITOL DR)

MATCHLINE STA. 444+00

+00

445+00

446+00

447+00

448+00

449+00

450

MATCHLINE STA. 450+00

ONE WAY
R6-2R
ESTR

ONE WAY
R6-2R
ESTR

IP

R/W

TLE

SPEED LIMIT 45
R2-1
ESTR

W3-3
ESTR

N 144TH ST
M1-94

CAPITOL DR
M1-94
ESTR

STOP
R1-1
ESTR

N

IP

R/W

SHEET 33 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 246	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023229_ps

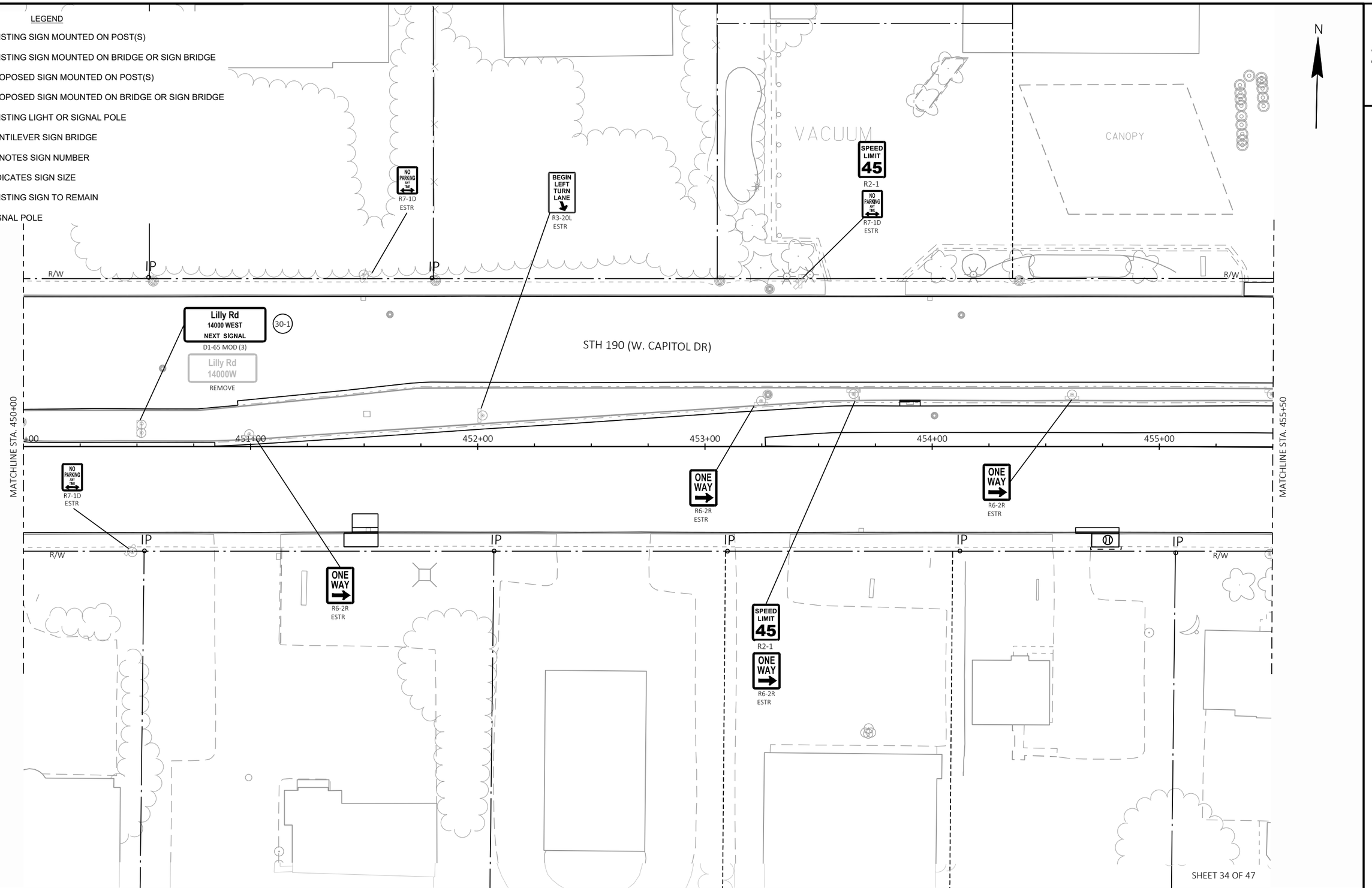
PLOT DATE : 8/20/2025 12:40 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE



SHEET 34 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 247	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023230_ps

PLOT DATE : 8/20/2025 12:40 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

STH 190 (W. CAPITOL DR)

LILLY RD

MATCHLINE STA. 455+50

MATCHLINE STA. 461+50

456+00 457+00 458+00 459+00 460+00 461+00

78+00 77+00 76+00 75+00

ONE WAY R6-2L ESTR
WEST 190 J4-1 ESTR
STOP R1-1F ESTR
31-11 DIVIDED HIGHWAY R6-3(2M) ON S.P.
W12-1D ESTR
31-4 YIELD R1-2 MOVE
Lilly Rd M1-94H ESTR
IP R/W
ONE WAY R6-2R ESTR
R4-7 ESTR
WRONG WAY R5-1A ESTR
ONE WAY R6-2R ESTR
NO PARKING ANY TIME R7-1R ESTR
STOP R1-1F ESTR
STOP R1-1F ESTR
IP
R/W
LEFT TURN YIELD ON FLASHING YELLOW ARROW REMOVE 31-7
DO NOT ENTER R5-1 ESTR
31-1 STOP R1-1 MOVE
W12-1D ESTR
190 W Capitol Dr M1-94S MOUNT ON MAST ARM
Capitol Dr REMOVE
31-2
31-8 LEFT TURN YIELD ON FLASHING YELLOW ARROW REMOVE
DO NOT ENTER R5-1 ESTR
R4-7 ESTR
Lilly Rd M1-94H ESTR
R/W
TLE
31-3 YIELD R1-2 MOVE
ONE WAY R6-2L ESTR
STOP R1-1F ESTR
DIVIDED HIGHWAY 31-9 R6-3(2M) ON S.P.
EAST 190 J4-1 ESTR
190 M1-6
M6-4 ESTR
W12-1D ESTR
SLOPE INTERCEPT (TYP.)
LEFT TURN YIELD ON FLASHING YELLOW ARROW 31-12 REMOVE
190 W Capitol Dr M1-94S MOUNT ON MAST ARM
Capitol Dr REMOVE
31-5
31-6 STOP R1-1 MOVE
NO PARKING ANY TIME R7-1R ESTR
W12-1D ESTR
TLE
DO NOT ENTER R5-1 ESTR
STOP R1-1F ESTR
LEFT TURN YIELD ON FLASHING YELLOW ARROW 31-10 REMOVE
WRONG WAY R5-1A ESTR
R/W
N
SHEET 35 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 248	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023231_ps
PLOT DATE : 8/20/2025 12:41 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

N

N. 138TH ST

SLOPE INTERCEPT (TYP.)

NO PARKING ANY TIME
R7-1D
ESTR

32-1
Lilly Rd
14000 WEST
NEXT SIGNAL
D1-65 MOD (3)

Lilly Rd
14000W
REMOVE

32-2
ONE WAY
R6-2L(3)

32-3
NO PARKING ANY TIME
R7-1L
MOVE

STOP
R1-1

DIVIDED HIGHWAY
R6-3A
ESTR

R/W

IP

STH 190 (W. CAPITOL DR)

R4-7
ESTR

MATCHLINE STA. 461+50

462+00

463+00

464+00

465+00

466+00

467+00

MATCHLINE STA. 467+50

ONE WAY
R6-2R
ESTR

SPEED LIMIT 45
R2-1
ESTR

ONE WAY
R6-2R
ESTR

BEGIN LEFT TURN LANE
R3-20L
ESTR

R/W

IP

IP

R/W

TLE

NO PARKING ANY TIME
R7-1R
ESTR

NO PARKING ANY TIME
R7-1D
ESTR

DO NOT ENTER
R5-1
ESTR

FIEBRANTZ DR
M1-94

CAPITOL DR
M1-94
ESTR

FIEBRANTZ DR

SHEET 36 OF 47

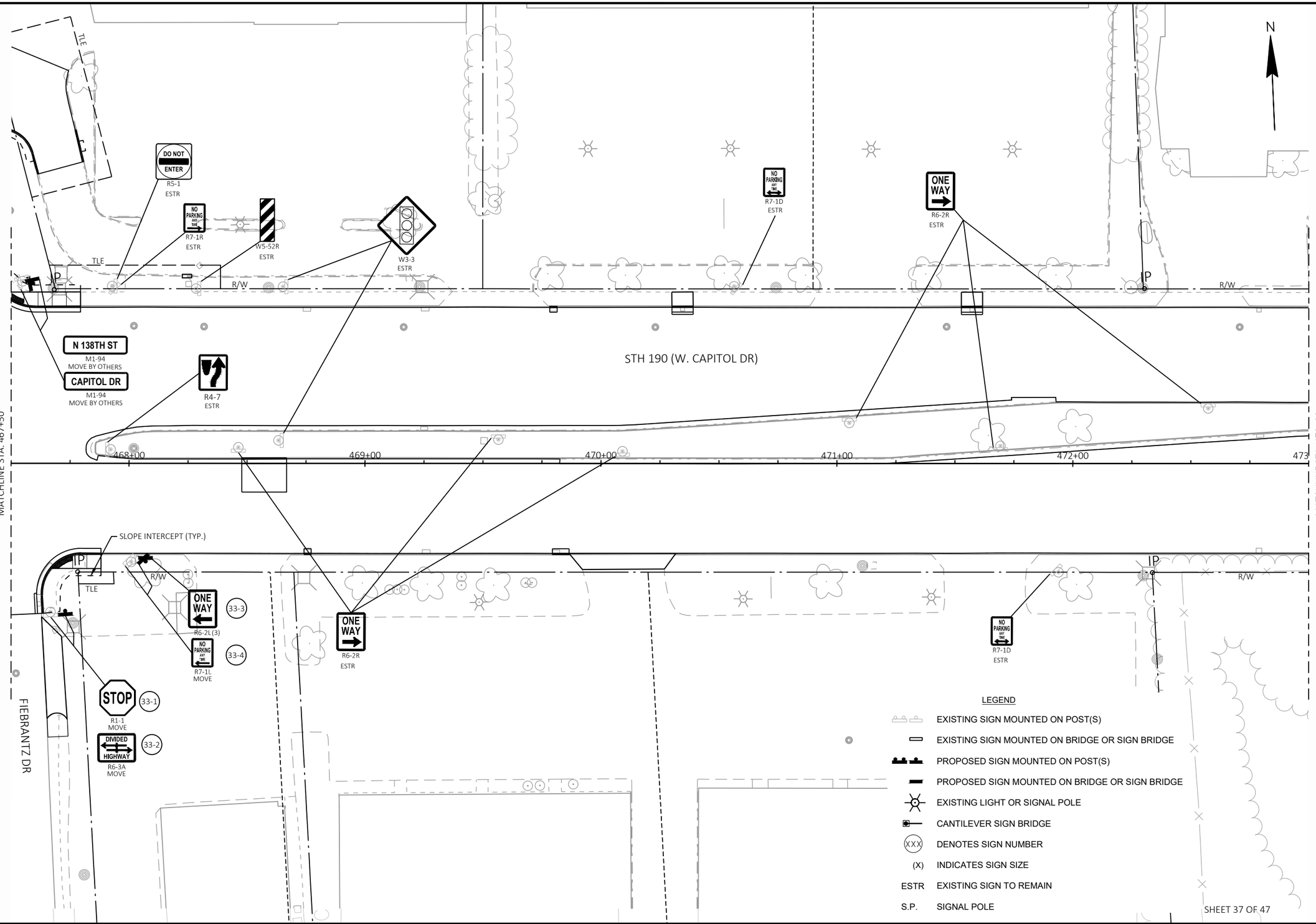
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 249	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023232_ps

PLOT DATE : 8/20/2025 12:41 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

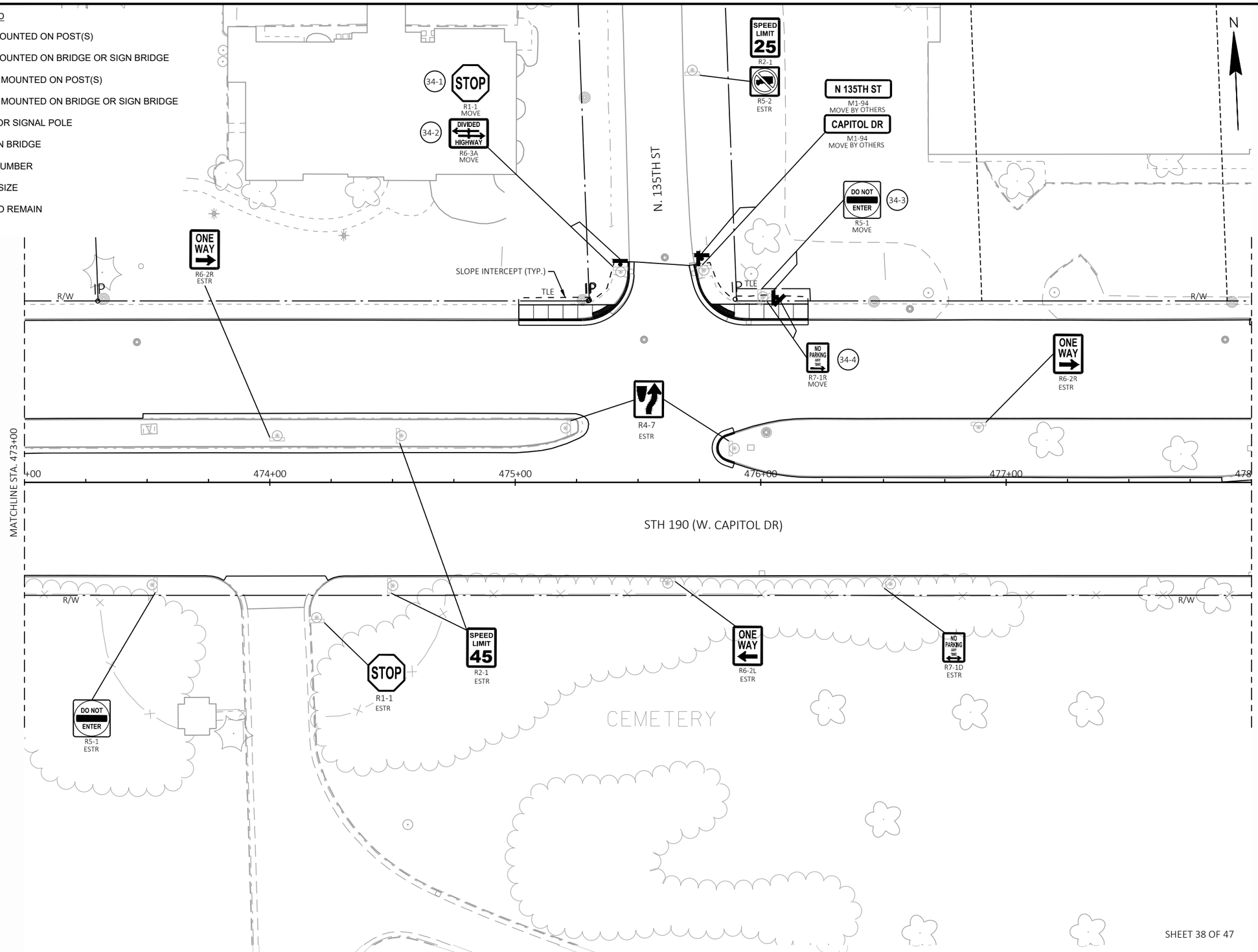
2



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 250	E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE



SHEET 38 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 251	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023234_ps

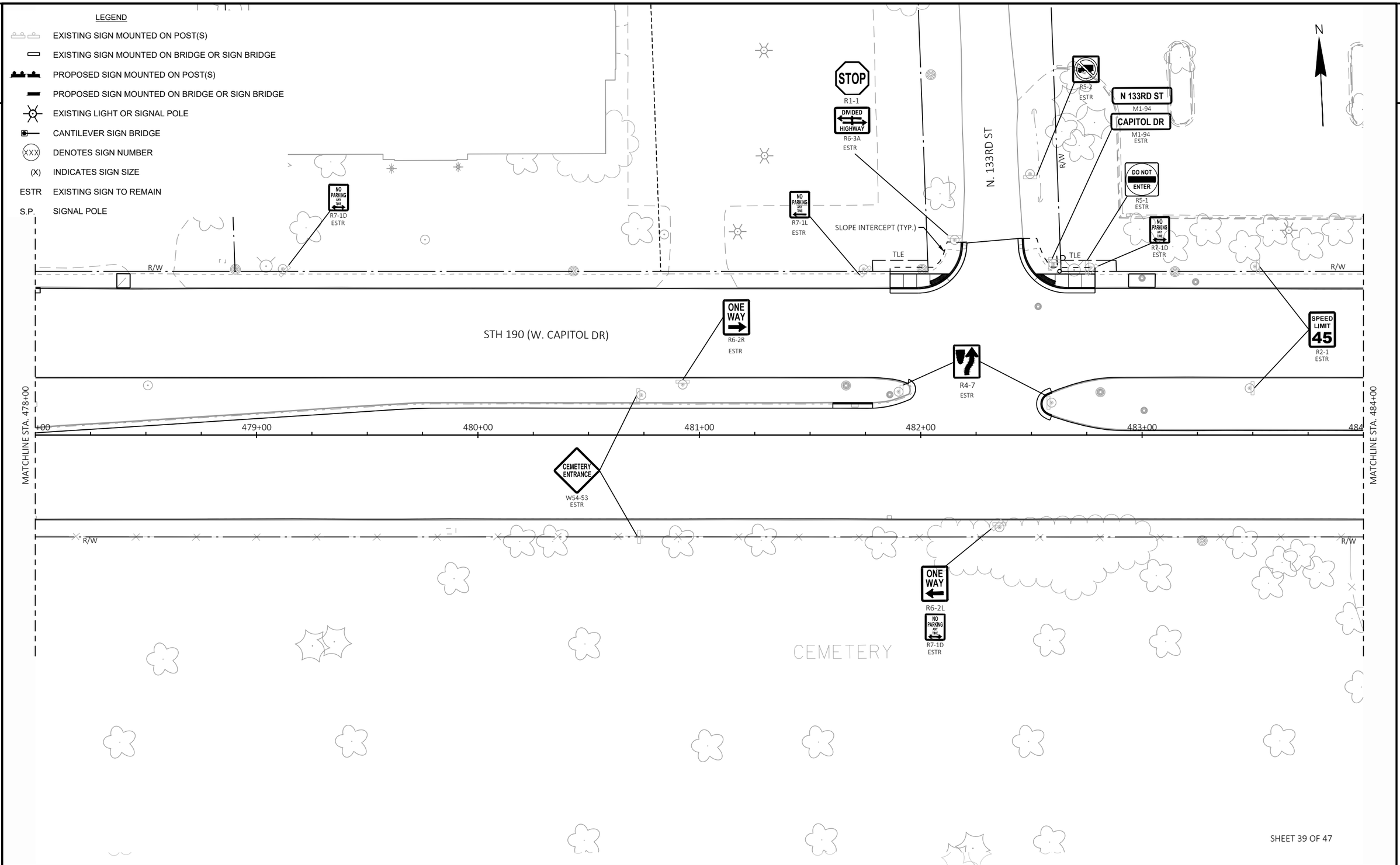
PLOT DATE : 8/20/2025 12:42 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE



SHEET 39 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 252	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023235_ps

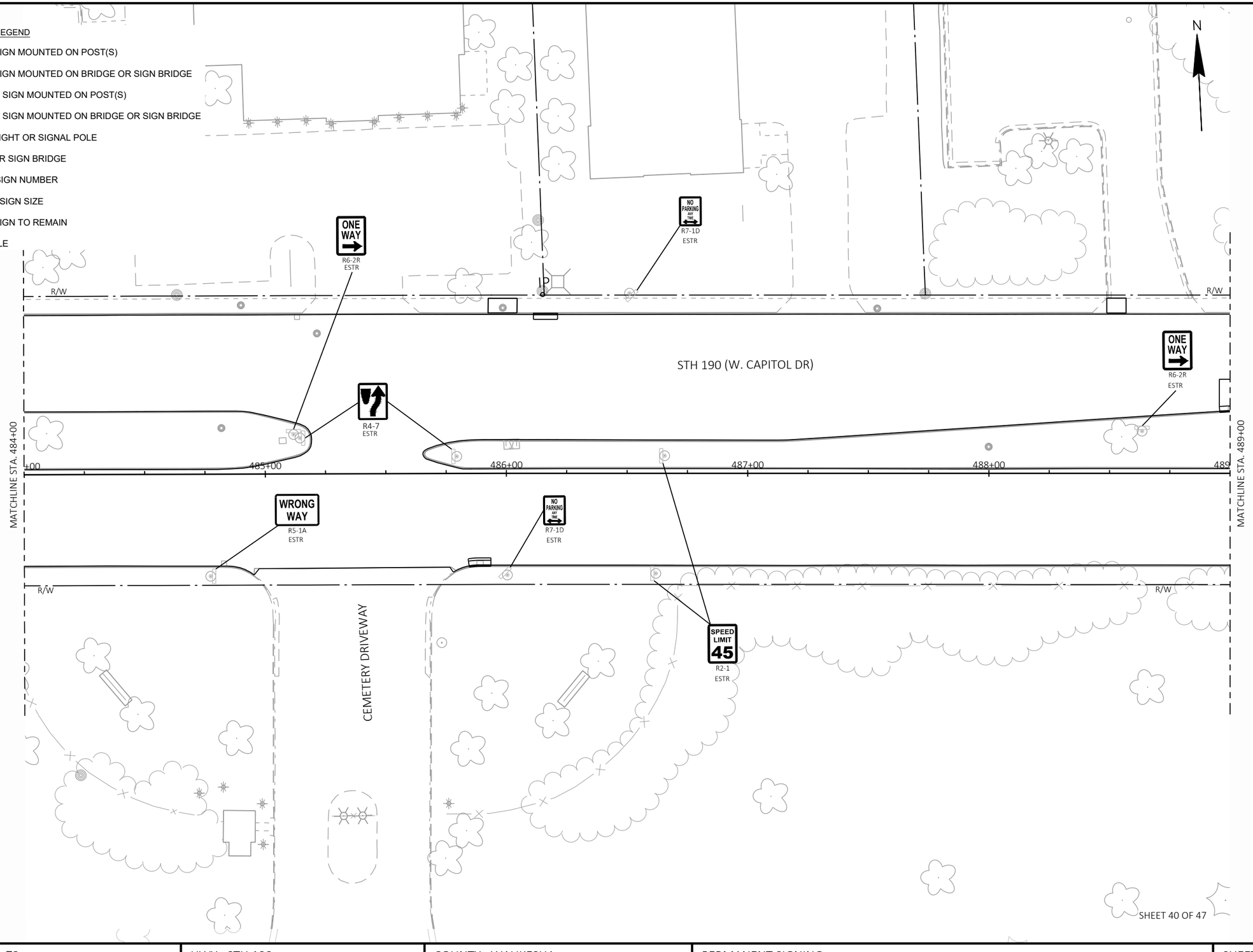
PLOT DATE : 8/20/2025 12:42 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 253	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023236_ps

PLOT DATE : 8/20/2025 12:43 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

NO PARKING ANY TIME
R7-1D
ESTR

R/W

R/W

STH 190 (W. CAPITOL DR)

R4-7
ESTR

MATCHLINE STA. 489+00

+00

490+00

491+00

492+00

493+00

494

MATCHLINE STA. 494+00

NO PARKING ANY TIME
R7-1D
ESTR

W3-3
ESTR

R/W

R/W

ONE WAY
R6-2L
ESTR

CEMETERY

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

SHEET 41 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 254	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023237_ps

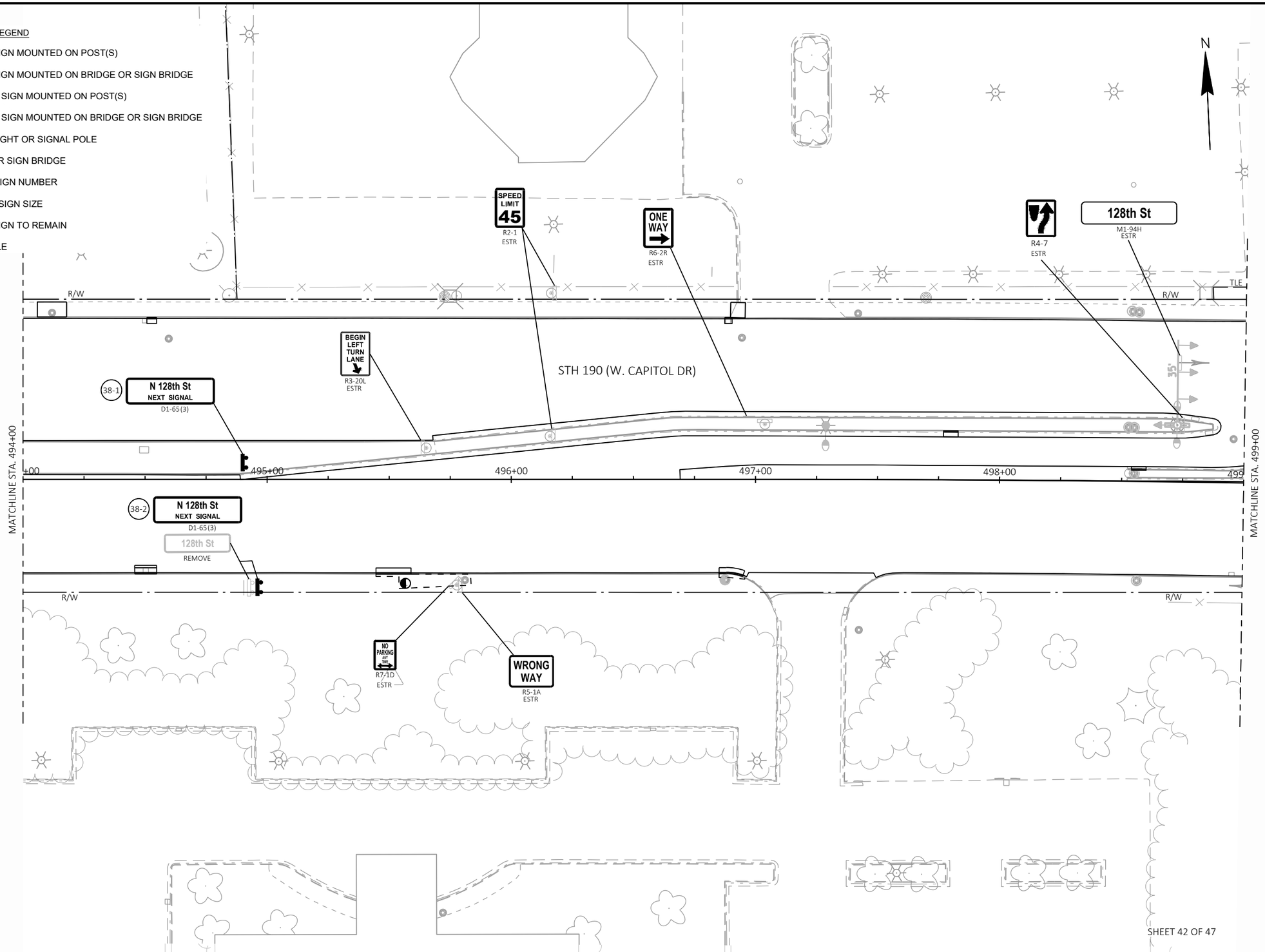
PLOT DATE : 8/20/2025 12:43 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE



SHEET 42 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 255	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023238_ps

PLOT DATE : 8/20/2025 12:43 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

N

39-4 STOP R1-1F MOVE ON S.P.

39-3 DIVIDED HIGHWAY R6-3(2M) ON S.P.

N. 128TH ST

39-5 LEFT TURN YIELD ON FLASHING YELLOW ARROW REMOVE

39-7 190 W Capitol Dr M1-94S MOUNT ON MAST ARM

Capitol Dr REMOVE

39-6 DO NOT ENTER R5-1 MOVE ON S.P.

R/W

51+00

TLE

39-11 39-12 REMOVE

39-10 REMOVE

39-9 REMOVE

39-8 STOP R1-1F MOVE ON S.P.

R4-7 ESTR

W12-1D ESTR

STH 190 (W. CAPITOL DR)

NO PARKING ANY TIME R7-1D ESTR

ONE WAY R6-2R ESTR

39-2 REMOVE

39-1 ONE WAY R6-2L MOVE ON S.P.

LEFT TURN YIELD ON FLASHING YELLOW ARROW REMOVE

DO NOT ENTER R5-1 ESTR

MATCHLINE STA. 499+00

500+00

501+00

502+00

503+00

504

MATCHLINE STA. 504+00

50-00

STOP R1-1F ESTR

NO PARKING ANY TIME R7-1R ESTR

STOP R1-1F ESTR

128th St M1-94H ESTR

STOP R1-1F ESTR

R/W

39-16 NO PARKING ANY TIME R7-1L MOVE

STOP R1-1F ESTR

DIVIDED HIGHWAY 39-15 R6-3(2M) ON S.P.

49+00

39-14 LEFT TURN YIELD ON FLASHING YELLOW ARROW REMOVE

ONE WAY R6-2L ESTR

W3-3 ESTR

BEGIN LEFT TURN LANE R3-20L ESTR

NO PARKING ANY TIME R7-1D ESTR

39-13 Capitol Dr REMOVE

190 W Capitol Dr M1-94S MOUNT ON MAST ARM

SHEET 43 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 256	E

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

CANTILEVER SIGN BRIDGE

XXX DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

ESTR EXISTING SIGN TO REMAIN

S.P. SIGNAL POLE

N

MATCHLINE STA. 504+00

MATCHLINE STA. 510+00

STH 190 (W. CAPITOL DR)

R/W

IP

40-1

N 128th St
NEXT SIGNAL
D1-65(3)

128th St
REMOVE

N 124th St
NEXT SIGNAL
D1-65(3)

124th St
REMOVE

40-2

BEGIN LEFT TURN LANE
R3-20L
ESTR

ONE WAY
R6-2R
ESTR

SPEED WAVE
SPECIAL ENFORCEMENT AREA
ESTR

W3-3
ESTR

R4-7
ESTR

R3-2
ESTR

NO PARKING ANY TIME
R7-1D
ESTR

ONE WAY
R6-2R
ESTR

DO NOT ENTER
R5-1
ESTR

BEGIN LEFT TURN LANE
R3-20L
ESTR

R3-2
ESTR

+00

505+00

506+00

507+00

508+00

509+00

510

TLE

BEGIN LEFT TURN LANE
R3-20LL
ESTR

RIPRAP

BROOKFIELD
POPULATION 41,464
I2-3

Waukesha Co
I2-2
ESTR

NO PARKING ANY TIME
R7-1D
ESTR

SLOPE INTERCEPT (TYP.)

STOP
R1-1
MOVE

40-3

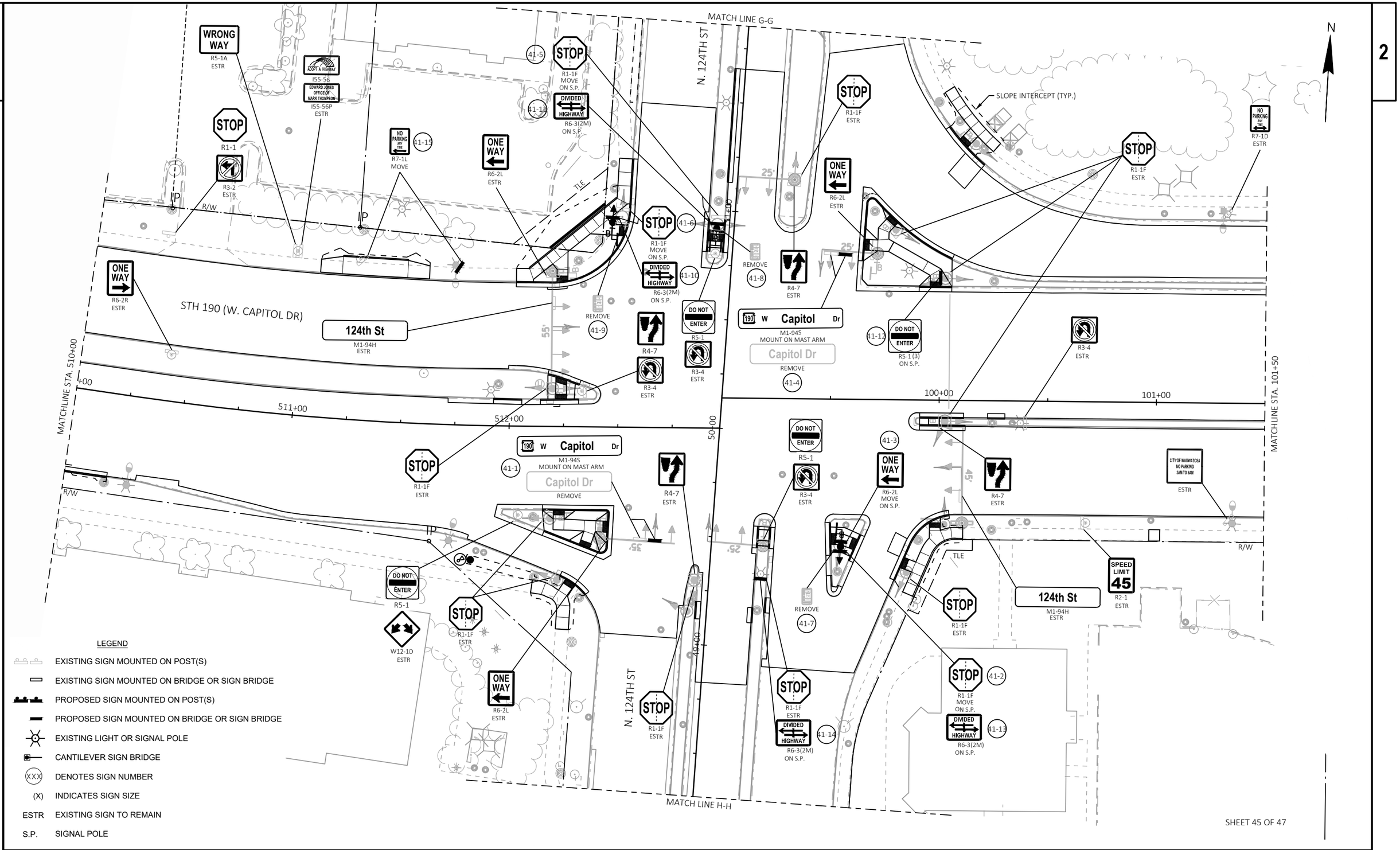
SHEET 44 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 257	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023240_ps

PLOT DATE : 8/20/2025 12:44 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

SHEET 45 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 258	E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

N

55+00

54+00

53+00

52+00

MH

SIGN

W Lisbon Rd
D1-61 MOD
ESTR

190
M1-6

M6-4
ESTR

N. 124TH ST

R/W

87885,-87.9230976,15z

MATCH LINE G-G

MATCH LINE H-H

48+00

47+00

46+00

45+00

N. 124TH ST

R/W

ONLY
R3-50A
ESTR

NO PARKING ANY TIME
R7-1D
ESTR

ONLY
R3-50R
ESTR

ONLY
R3-50L
ESTR

SPEED LIMIT 35
R2-1
ESTR

WEST
190
J3-1
ESTR

SPEED LIMIT 35
R2-1
ESTR

SHEET 46 OF 47

2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 259 E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023241_ps (2)

PLOT DATE : 8/20/2025 12:46 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

W. LISBON AVE

R/W

HOME DEPOT ENTRANCE

TILE

SLOPE INTERCEPT (TYP.)

Lisbon Rd
D16-1R ESTR

W12-1D ESTR

CITY OF WAUWATOSA NO PARKING 3AM TO 6AM
ESTR

R/W

NO PARKING ANY TIME
R7-1D ESTR

N 124TH St
D16-1R ESTR

South 124th St ONLY
D16-1L ESTR

W12-1D ESTR

STH 190 (W. CAPITOL DR)

To Lisbon Ave
D1-16 MOD ESTR

BEGIN LEFT TURN LANE
R3-20L ESTR

MATCHLINE STA. 101+50

102+00 103+00 104+00 105+00 106+00 107+00

STH 190 (W. CAPITOL DR)

R/W

R/W

STOP
R1-1 ESTR

BUS STOP
REMOVE (BY MCTS)

TO 41 45 ONLY
D16-1R ESTR

TO 41 45
J32-1 ESTR

W3-3 ESTR

TO 41 45
J33-1 ESTR

Chicago Fond Du Lac
Industrial Access
D1-2 MOD

Business Park
D1-56R MOD ESTR

Milwaukee Co
I2-2

WAUWATOSA POPULATION 48,387
I2-3 ESTR

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- S.P. SIGNAL POLE

SHEET 47 OF 47

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 260	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023242_ps

PLOT DATE : 8/20/2025 12:46 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- FY (Y) YELLOW ARROW
- (G) GREEN ARROW
- (X) EVP DESIGNATOR

NOTES:
ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

STAGING NOTES:
1. BAG OR REMOVE BAGS FROM SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
2. CABLING FOR THE INSTALLATION OF TEMPORARY SIGNAL HEADS SHALL BE FROM ADDITIONAL CABLES WITHIN THE POLE, OR FROM SPLICING EXISTING TRAFFIC SIGNAL CABLE WITHIN THE SIGNAL POLE. NO CABLING FORM THE CONTROL CABINET SHALL BE DONE FOR THE TEMPORARY SIGNALS.
3. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. INSYNC DETECTION ZONES (NOT SHOWN) PROGRAMMING TO BE UPDATED IN CONTROLLER TO ACCOUNT FOR CHANGES IN LANE CONFIGURATION AND LOCATION DURING STAGING.
4. ACCOMMODATE PEDESTRIANS ACROSS ALL OPEN CROSSINGS DURING CONSTRUCTION. SEE TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS PLANS FOR DETAILS. THE CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRIAN CROSSINGS.

STAGING NOTES:
5. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.

- LANE DESIGNATION FOR INFO ONLY
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- EVP DETECTOR HEAD
- Y YIELD SIGN
- V COMMUNICATIONS VAULT
- VX VIDEO DETECTION CAMERA
- RX XX RADAR DETECTOR

STH 190
BROOKFIELD RD
SPEED LIMIT= 35 MPH
SPEED LIMIT= 50 MPH
SPEED LIMIT= 55 MPH
R/W
297+00
298+00
299+00
300+00
301+00
302+00

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 190 & BROOKFIELD RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0168

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 1 OF 4

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION STAGE 1	SHEET 261	E

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (FY) (Y) YELLOW ARROW
- (G) GREEN ARROW
- (X) EVP DESIGNATOR

NOTES:
ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

STAGING NOTES:
1. BAG OR REMOVE BAGS FROM SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
2. CABLING FOR THE INSTALLATION OF TEMPORARY SIGNAL HEADS SHALL BE FROM ADDITIONAL CABLES WITHIN THE POLE, OR FROM SPLICING EXISTING TRAFFIC SIGNAL CABLE WITHIN THE SIGNAL POLE. NO CABLING FORM THE CONTROL CABINET SHALL BE DONE FOR THE TEMPORARY SIGNALS.
3. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. INSYNC DETECTION ZONES (NOT SHOWN) PROGRAMMING TO BE UPDATED IN CONTROLLER TO ACCOUNT FOR CHANGES IN LANE CONFIGURATION AND LOCATION DURING STAGING.
4. ACCOMMODATE PEDESTRIANS ACROSS ALL OPEN CROSSINGS DURING CONSTRUCTION. SEE TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS PLANS FOR DETAILS. THE CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRIAN CROSSINGS.

STAGING NOTES:
5. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.

- LANE DESIGNATION FOR INFO ONLY
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- EVP DETECTOR HEAD
- Y YIELD SIGN
- V COMMUNICATIONS VAULT
- VX VIDEO DETECTION CAMERA
- RX XX RADAR DETECTOR

STH 190
BROOKFIELD RD
SPEED LIMIT= 35 MPH
SPEED LIMIT= 50 MPH
SPEED LIMIT= 55 MPH
R/W
297+00
298+00
299+00
300+00
301+00
302+00

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 190 & BROOKFIELD RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0168

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 2 OF 4

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION STAGE 1B	SHEET 262	E

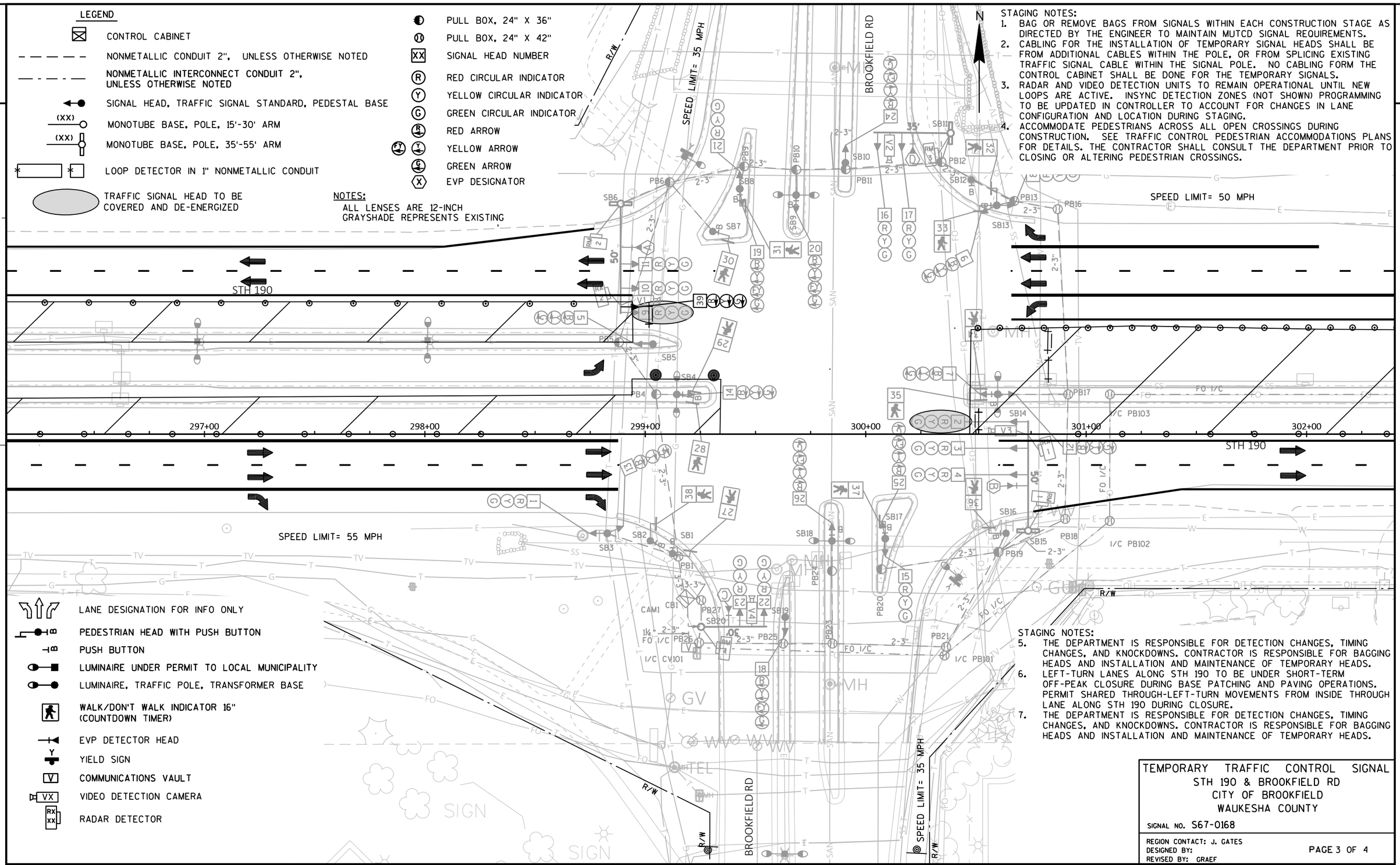
LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- (X) EVP DESIGNATOR

NOTES:
ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

STAGING NOTES:
1. BAG OR REMOVE BAGS FROM SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
2. CABLING FOR THE INSTALLATION OF TEMPORARY SIGNAL HEADS SHALL BE FROM ADDITIONAL CABLES WITHIN THE POLE, OR FROM SPLICING EXISTING TRAFFIC SIGNAL CABLE WITHIN THE SIGNAL POLE. NO CABLING FORM THE CONTROL CABINET SHALL BE DONE FOR THE TEMPORARY SIGNALS.
3. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. INSYNC DETECTION ZONES (NOT SHOWN) PROGRAMMING TO BE UPDATED IN CONTROLLER TO ACCOUNT FOR CHANGES IN LANE CONFIGURATION AND LOCATION DURING STAGING.
4. ACCOMMODATE PEDESTRIANS ACROSS ALL OPEN CROSSINGS DURING CONSTRUCTION. SEE TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS PLANS FOR DETAILS. THE CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRIAN CROSSINGS.



- LANE DESIGNATION FOR INFO ONLY
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- EVP DETECTOR HEAD
- Y YIELD SIGN
- V COMMUNICATIONS VAULT
- VX VIDEO DETECTION CAMERA
- RX XX RADAR DETECTOR

STAGING NOTES:
5. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.
6. LEFT-TURN LANES ALONG STH 190 TO BE UNDER SHORT-TERM OFF-PEAK CLOSURE DURING BASE PATCHING AND PAVING OPERATIONS. PERMIT SHARED THROUGH-LEFT-TURN MOVEMENTS FROM INSIDE THROUGH LANE ALONG STH 190 DURING CLOSURE.
7. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 190 & BROOKFIELD RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

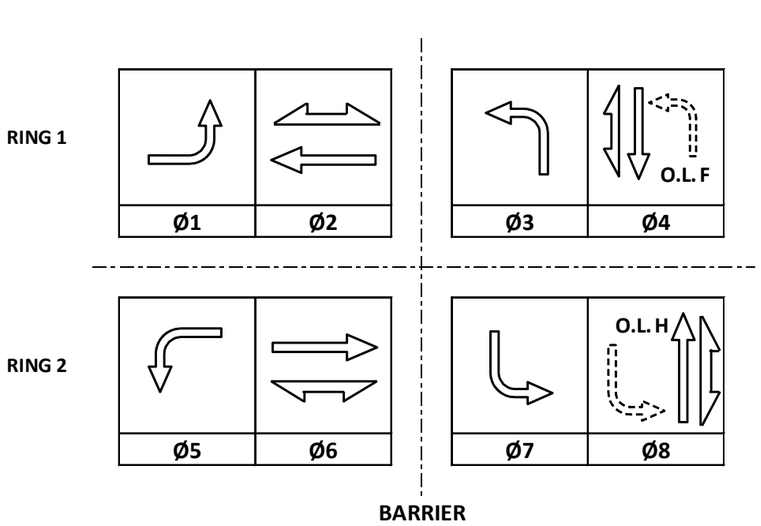
SIGNAL NO. S67-0168

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION STAGE 2	SHEET 263	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\01_BROOKFIELD\024102_SP.DWG
LAYOUT NAME - 024102_SP - 024102_SP
PLOT DATE : 1/9/2025 2:44 PM
PLOT BY : BIEBERITZ, BEN
PLOT NAME :
PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	5,6,7	R ←
Ø2	8,9,10,11	R
Ø3	18,19,20	-
Ø4	21,22,23	R
Ø5	12,13,14,39	R ←
Ø6	1,2,3,4	R
Ø7	24,25,26	-
Ø8	15,16,17	R
Ø2P	31,32	
Ø4P	27,28,29,30	
Ø6P	37,38	
Ø8P	33,34,35,36	
OLE		
OLF	18,19,20	R ←
OLG		
OLH	24,25,26	R ←



CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	←	→	↓	↑
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

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

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 00-59

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

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

DETECTOR LOGIC

DETECTOR CHANNEL	17	19	21	23	25	27	29	31
PLAN LOOP DETECTOR*(S)	11	23	31	51	62	64	81	
CALLED PHASE	1	2	3	5	6	6	8	
CALL OPTION	X	X	X	X	X	X	X	
DELAY TIME								
EXTENTION OPTION	X	X	X	X	X	X	X	
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE			4					

DETECTOR CHANNEL	33	35	37	39	41	43	45	49
PLAN LOOP DETECTOR*(S)								21
CALLED PHASE								2
CALL OPTION								
DELAY TIME								
EXTENTION OPTION								X
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

DETECTOR CHANNEL	18	20	22	24	26	28	30	32
PLAN LOOP DETECTOR*(S)	22	24	41	52	63	71		
CALLED PHASE	2	2	4	5	6	7		
CALL OPTION	X	X	X	X	X	X		
DELAY TIME								
EXTENTION OPTION	X	X	X	X	X	X		
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE						8		

DETECTOR CHANNEL	34	36	38	40	42	44	46	50
PLAN LOOP DETECTOR*(S)								61
CALLED PHASE								6
CALL OPTION								
DELAY TIME								
EXTENTION OPTION								X
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

GENERAL NOTES MODIFIED FOR CONSTRUCTION:

1. REFER TO TRAFFIC CONTROL PEDESTRIAN ACCOMODATIONS PLANS FOR WHERE PEDESTRIANS ARE ACCOMODATED DURING CONSTRUCTION STAGING. CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRAIN CROSSINGS.
2. OMIT OVERLAP O.L.F. AND O.L.H. DURING CONSTRUCTION.
3. DURING STAGES 1 AND 1B, PHASES 4+7 AND 8+3 ARE TO OPERATE AS SPLIT PHASE AND SHALL NOT RUN CONCURRENTLY.
4. DURING STAGE 2, PHASES 1 AND 5 SHALL NOT RUN CONCURRENTLY.

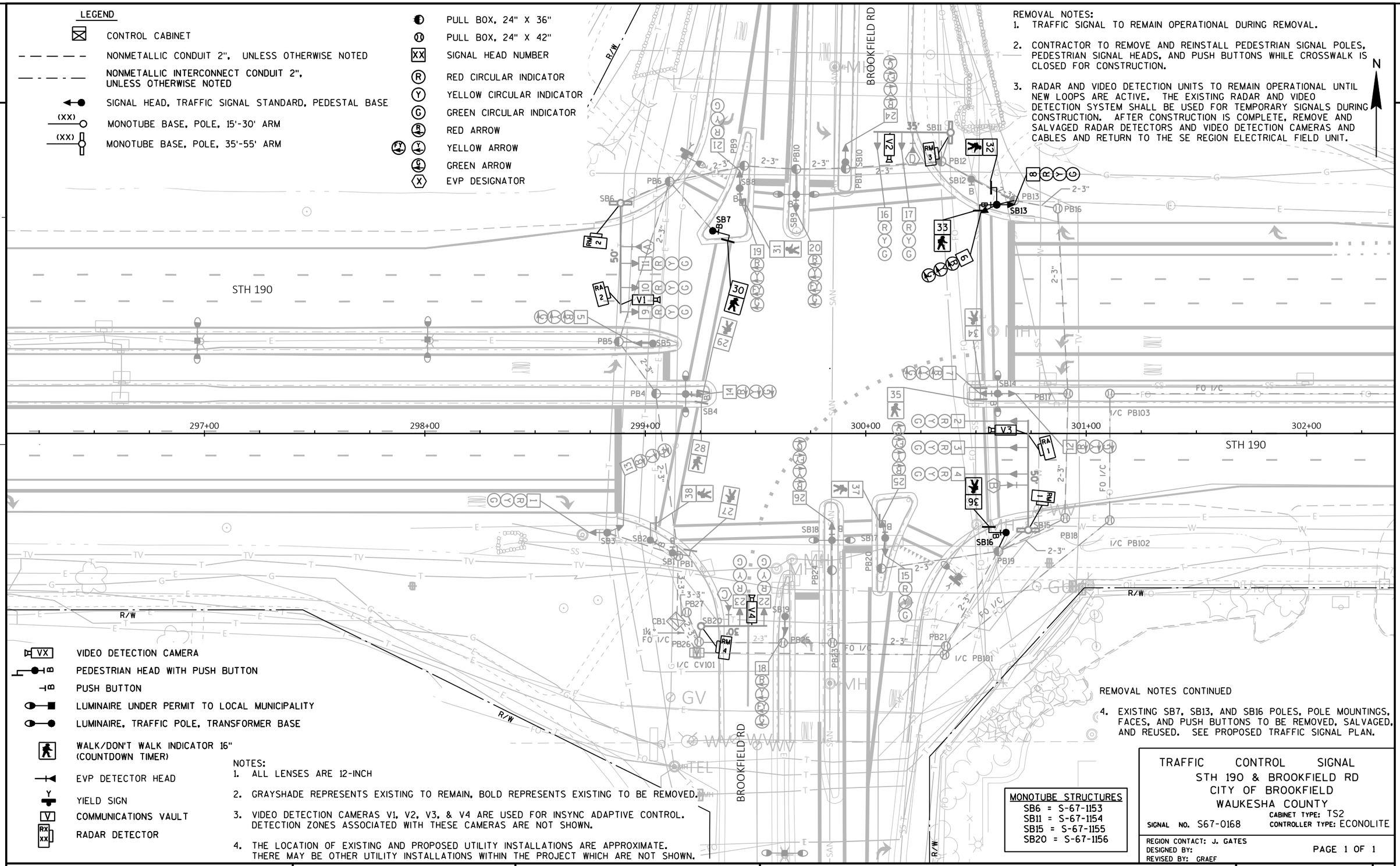
STH 190 & BROOKFIELD RD
CITY OF BROOKFIELD
WAUKESHA COUNTY
SIGNAL NO: S67-0168 CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
DATE: 2/2025 PAGE: 4 OF 4

2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- (X) EVP DESIGNATOR

REMOVAL NOTES:
1. TRAFFIC SIGNAL TO REMAIN OPERATIONAL DURING REMOVAL.
2. CONTRACTOR TO REMOVE AND REINSTALL PEDESTRIAN SIGNAL POLES, PEDESTRIAN SIGNAL HEADS, AND PUSH BUTTONS WHILE CROSSWALK IS CLOSED FOR CONSTRUCTION.
3. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. THE EXISTING RADAR AND VIDEO DETECTION SYSTEM SHALL BE USED FOR TEMPORARY SIGNALS DURING CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETE, REMOVE AND SALVAGED RADAR DETECTORS AND VIDEO DETECTION CAMERAS AND CABLES AND RETURN TO THE SE REGION ELECTRICAL FIELD UNIT.



- VX VIDEO DETECTION CAMERA
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- EVP DETECTOR HEAD
- Y YIELD SIGN
- V COMMUNICATIONS VAULT
- RX XX RADAR DETECTOR

NOTES:
1. ALL LENSES ARE 12-INCH
2. GRAYSHADE REPRESENTS EXISTING TO REMAIN, BOLD REPRESENTS EXISTING TO BE REMOVED.
3. VIDEO DETECTION CAMERAS V1, V2, V3, & V4 ARE USED FOR INSYNC ADAPTIVE CONTROL. DETECTION ZONES ASSOCIATED WITH THESE CAMERAS ARE NOT SHOWN.
4. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.

REMOVAL NOTES CONTINUED

4. EXISTING SB7, SB13, AND SB16 POLES, POLE MOUNTINGS, FACES, AND PUSH BUTTONS TO BE REMOVED, SALVAGED, AND REUSED. SEE PROPOSED TRAFFIC SIGNAL PLAN.

MONOTUBE STRUCTURES
SB6 = S-67-1153
SB11 = S-67-1154
SB15 = S-67-1155
SB20 = S-67-1156

TRAFFIC CONTROL SIGNAL
STH 190 & BROOKFIELD RD
CITY OF BROOKFIELD
WAUKESHA COUNTY
SIGNAL NO. S67-0168
CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF
PAGE 1 OF 1

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 265	E

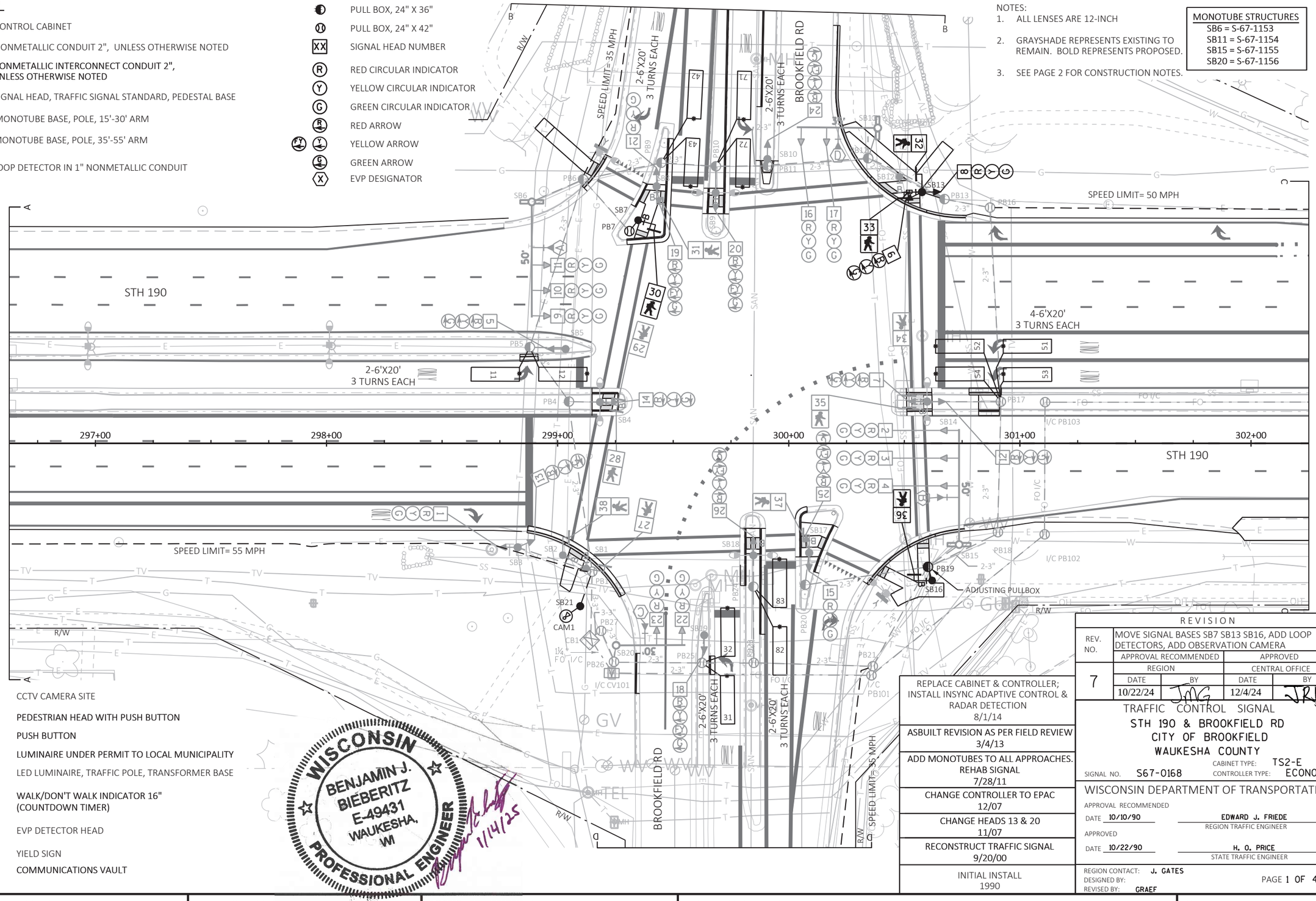
LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- (X) EVP DESIGNATOR

NOTES:
1. ALL LENSES ARE 12-INCH
2. GRAYSHADE REPRESENTS EXISTING TO REMAIN. BOLD REPRESENTS PROPOSED.
3. SEE PAGE 2 FOR CONSTRUCTION NOTES.

MONOTUBE STRUCTURES
SB6 = S-67-1153
SB11 = S-67-1154
SB15 = S-67-1155
SB20 = S-67-1156



- CCTV CAMERA SITE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LED LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- EVP DETECTOR HEAD
- Y YIELD SIGN
- V COMMUNICATIONS VAULT

WISCONSIN
BENJAMIN J. BIEBERITZ
E-49431
WAUKESHA, WI
PROFESSIONAL ENGINEER
1/14/25

REVISION				
REV. NO.	MOVE SIGNAL BASES SB7 SB13 SB16, ADD LOOP DETECTORS, ADD OBSERVATION CAMERA			
	APPROVAL RECOMMENDED		APPROVED	
7	REGION		CENTRAL OFFICE	
	DATE	BY	DATE	BY
	10/22/24	JMG	12/4/24	JRH

REPLACE CABINET & CONTROLLER; INSTALL INSYNC ADAPTIVE CONTROL & RADAR DETECTION 8/1/14
ASBUILT REVISION AS PER FIELD REVIEW 3/4/13
ADD MONOTUBES TO ALL APPROACHES. REHAB SIGNAL 7/28/11
CHANGE CONTROLLER TO EPAC 12/07
CHANGE HEADS 13 & 20 11/07
RECONSTRUCT TRAFFIC SIGNAL 9/20/00
INITIAL INSTALL 1990

TRAFFIC CONTROL SIGNAL
STH 190 & BROOKFIELD RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0168
CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 10/10/90 — EDWARD J. FRIEDE, REGION TRAFFIC ENGINEER

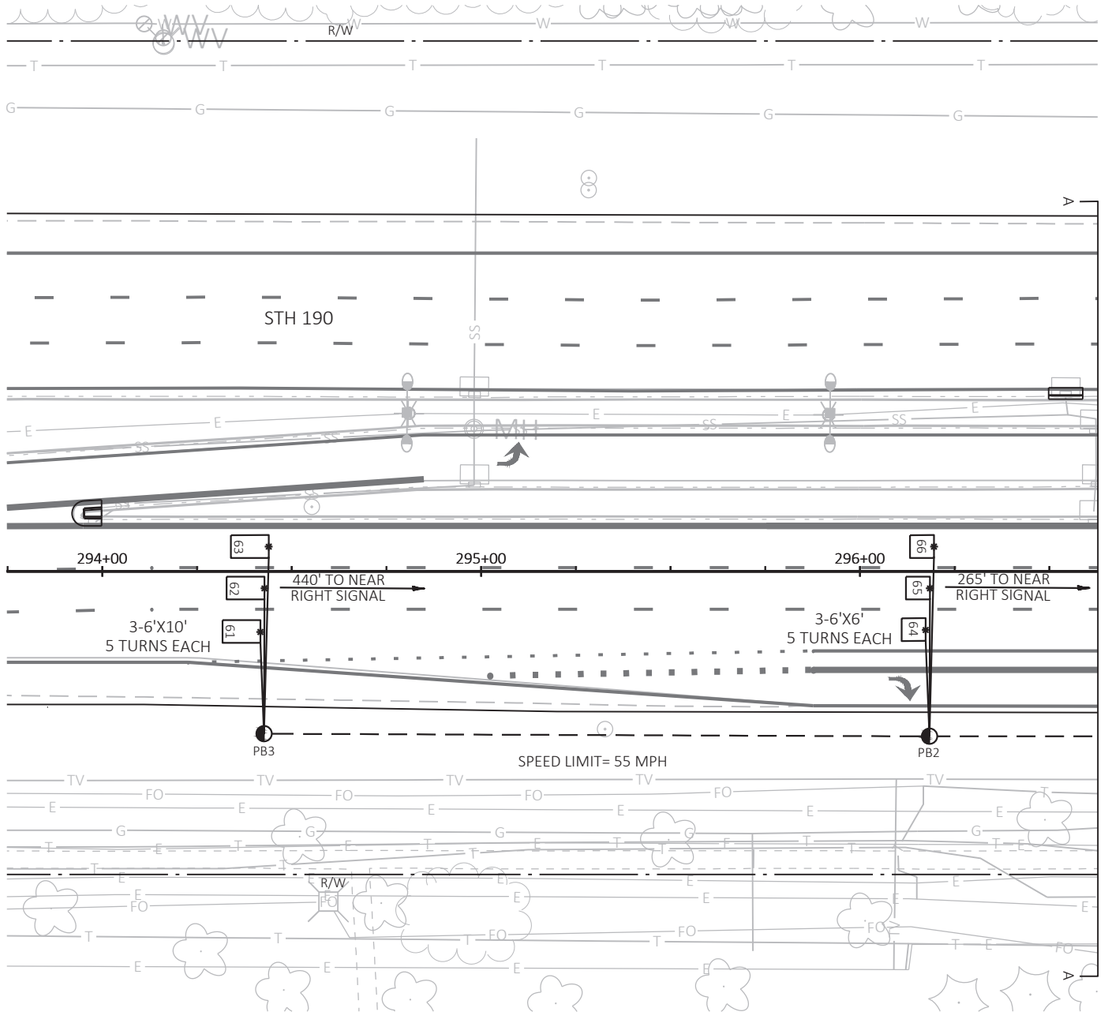
APPROVED
DATE 10/22/90 — H. O. PRICE, STATE TRAFFIC ENGINEER

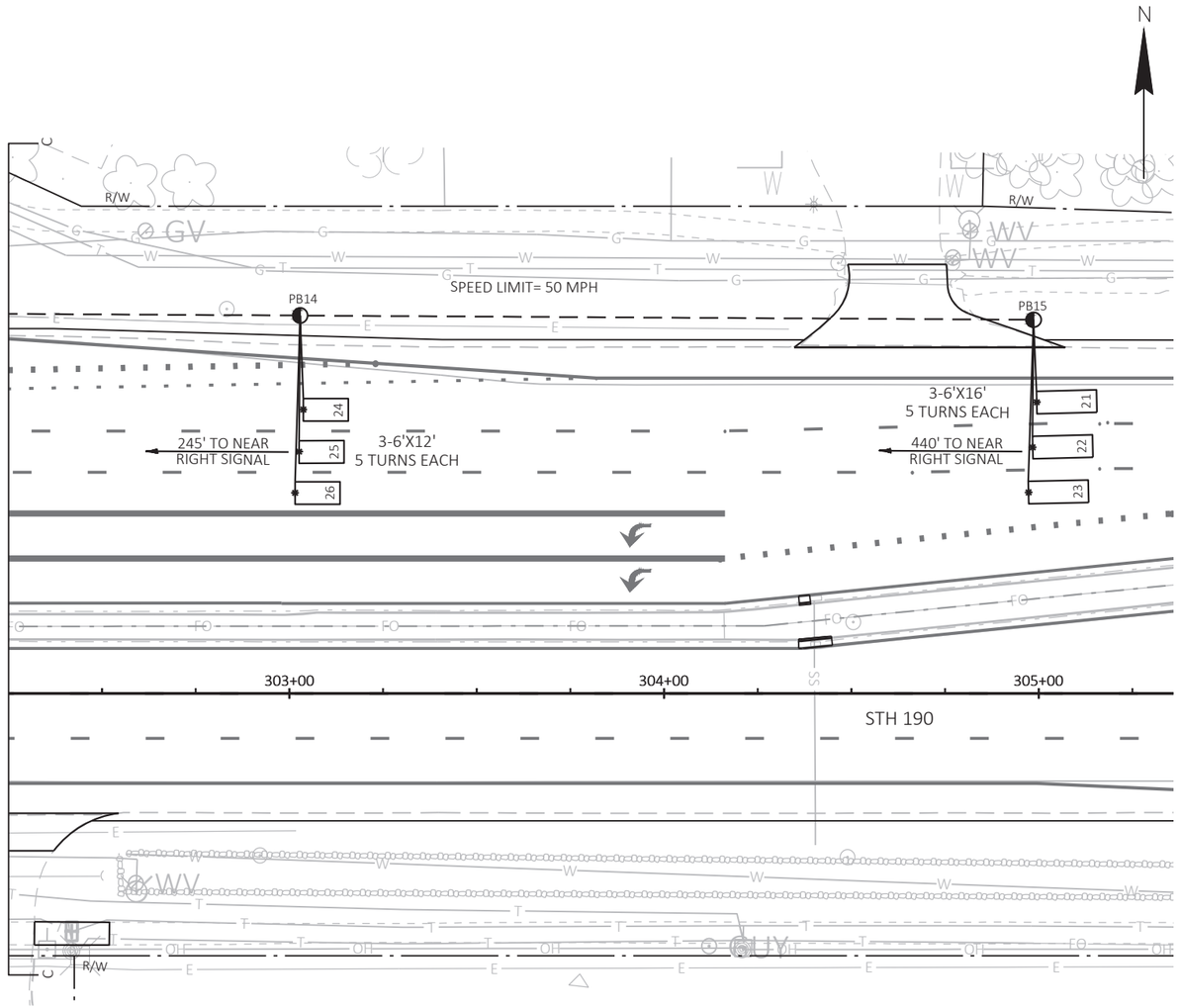
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

11/15/24 JMM

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 266	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\01_BROOKFIELD\024021_SP.DWG
LAYOUT NAME - 024021_SP - 024021_SP
PLOT DATE : 1/9/2025 2:45 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1" = 40'_XREF





CONSTRUCTION NOTES:

1. REUSE EXISTING POLES, POLE MOUNTINGS, FACES, AND PUSH BUTTONS FOR SB7, SB13, AND SB16. SEE TRAFFIC SIGNAL REMOVAL PLAN.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170.
3. * LOCATION IS TO THE FRONT CENTER OF DETECTOR LOOP.
4. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.
5. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
6. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.

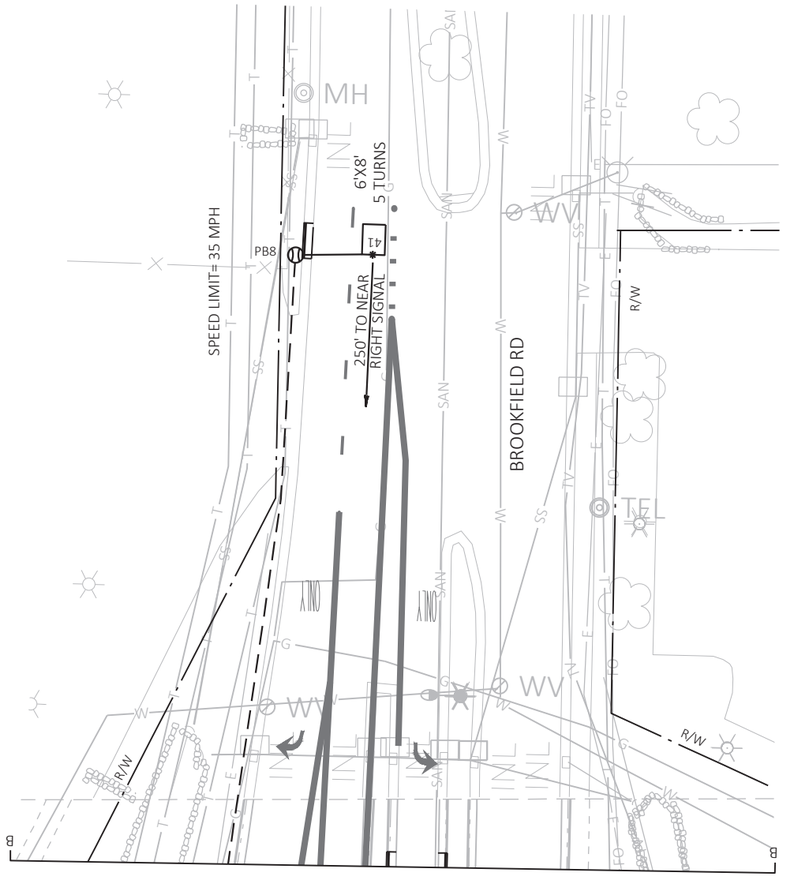
TRAFFIC CONTROL SIGNAL
STH 190 & BROOKFIELD RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

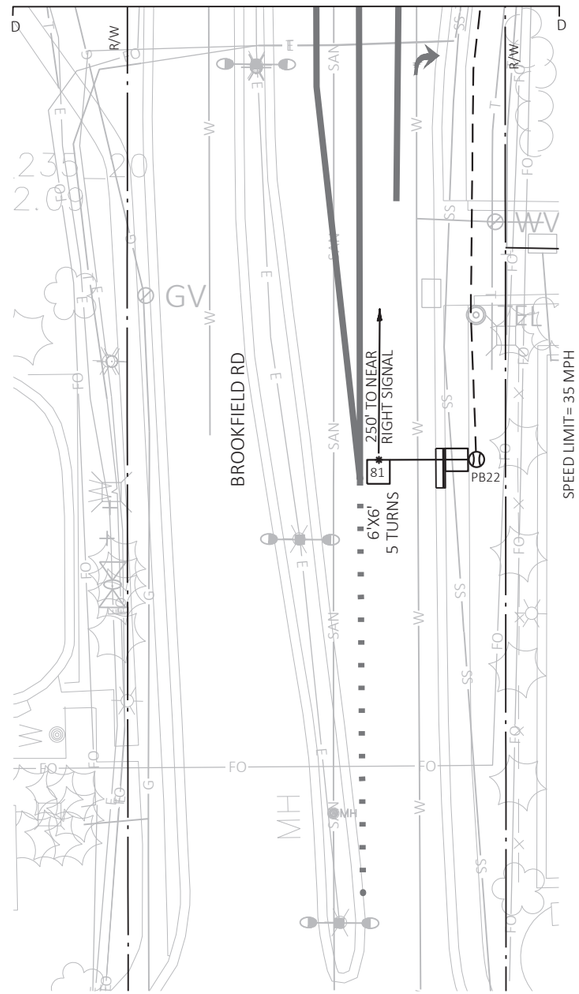
SIGNAL NO. S67-0168

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 267	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\01_BROOKFIELD\024021_SP.DWG
LAYOUT NAME - 024021_SP - 024022_SP
PLOT DATE : 1/9/2025 2:45 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 42





TRAFFIC CONTROL SIGNAL
STH 190 & BROOKFIELD RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0168

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 3 OF 4

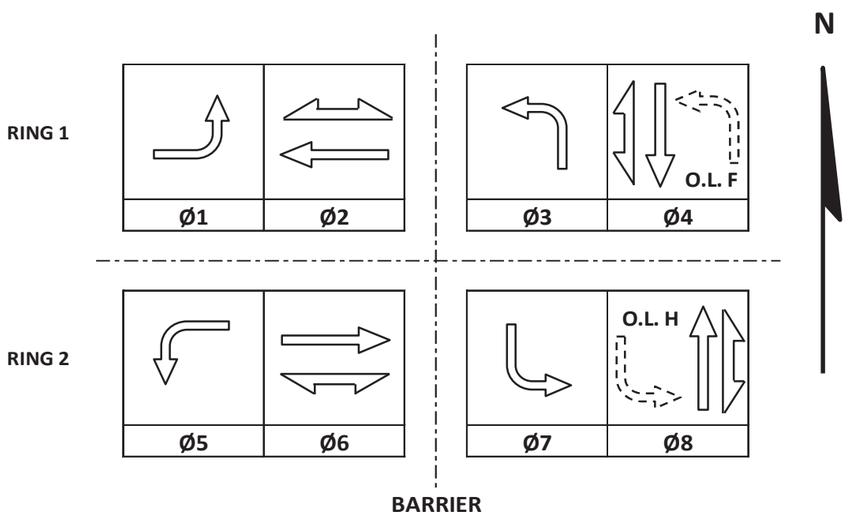
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 268	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\01_BROOKFIELD\024021_SP.DWG
LAYOUT NAME - 024021_SP - 024023_SP

PLOT DATE : 1/9/2025 2:46 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	5, 6, 7	R ←
Ø2	8, 9, 10, 11	R
Ø3	18, 19, 20	-
Ø4	21, 22, 23	R
Ø5	12, 13, 14	R ←
Ø6	1, 2, 3, 4	R
Ø7	24, 25, 26	-
Ø8	15, 16, 17	R
Ø2P	31, 32	
Ø4P	27, 28, 29, 30	
Ø6P	37, 38	
Ø8P	33, 34, 35, 36	
OLE		-
OLF	18, 19, 20	R ←
OLG		-
OLH	24, 25, 26	R ←



CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	←	→	↓	↑
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

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

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 00-59

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

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

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	11	21	23	25	31	41	43	52	54	62	64	66	72	82			PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	2	2	3	4	4	5	5	6	6	6	7	8			CALLED PHASE
CALL OPTION	X	X	X	X	X		X	X	X	X	X	X	X	X			CALL OPTION
DELAY TIME																	DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X	X	X	X	X	X	X	X	X			EXTENTION OPTION
EXTEND TIME						X											EXTEND TIME
USE ADDED INITIAL		X	X	X						X	X	X					USE ADDED INITIAL
CROSS SWITCH PHASE					4								8				CROSS SWITCH PHASE

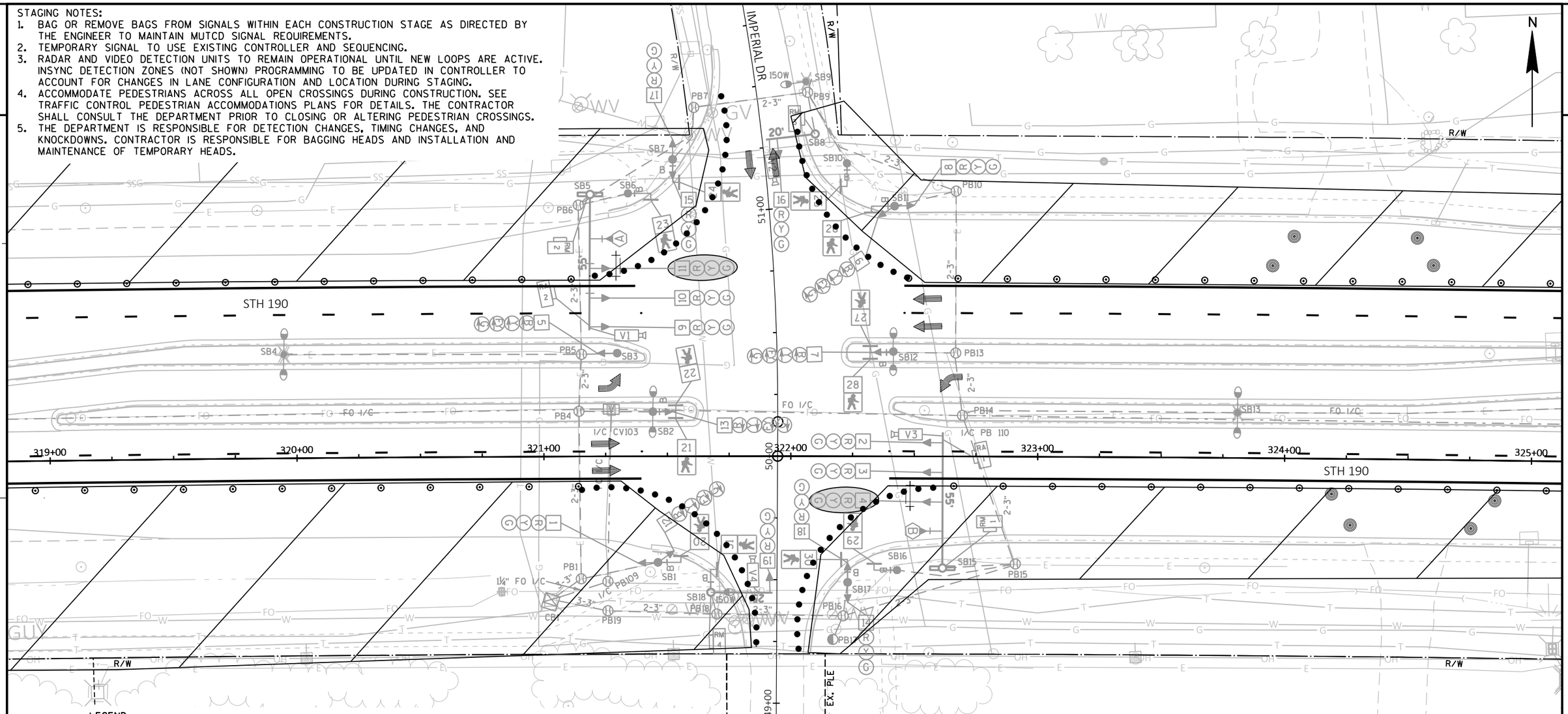
DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	12	22	24	26	32	42	51	53	61	63	65	71	81	83			PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	2	2	3	4	5	5	6	6	6	7	8	8			CALLED PHASE
CALL OPTION	X	X	X	X	X	X	X	X	X	X	X	X		X			CALL OPTION
DELAY TIME																	DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X	X	X	X	X	X	X	X	X			EXTENTION OPTION
EXTEND TIME													X				EXTEND TIME
USE ADDED INITIAL		X	X	X					X	X	X						USE ADDED INITIAL
CROSS SWITCH PHASE					4							8					CROSS SWITCH PHASE

STH 190 & BROOKFIELD RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO: S67-0168 CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE
DATE: 2/2025 PAGE NO. 4 OF 4

STAGING NOTES:

1. BAG OR REMOVE BAGS FROM SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
2. TEMPORARY SIGNAL TO USE EXISTING CONTROLLER AND SEQUENCING.
3. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. INSYNC DETECTION ZONES (NOT SHOWN) PROGRAMMING TO BE UPDATED IN CONTROLLER TO ACCOUNT FOR CHANGES IN LANE CONFIGURATION AND LOCATION DURING STAGING.
4. ACCOMMODATE PEDESTRIANS ACROSS ALL OPEN CROSSINGS DURING CONSTRUCTION. SEE TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS PLANS FOR DETAILS. THE CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRIAN CROSSINGS.
5. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R ARROW RED ARROW
- FY Y YELLOW ARROW
- G GREEN ARROW
- X EVP DESIGNATOR
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- VX VIDEO DETECTION CAMERA
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- EVP DETECTOR HEAD
- V COMMUNICATION VAULT
- Rx XX RADAR DETECTOR
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTES:
ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

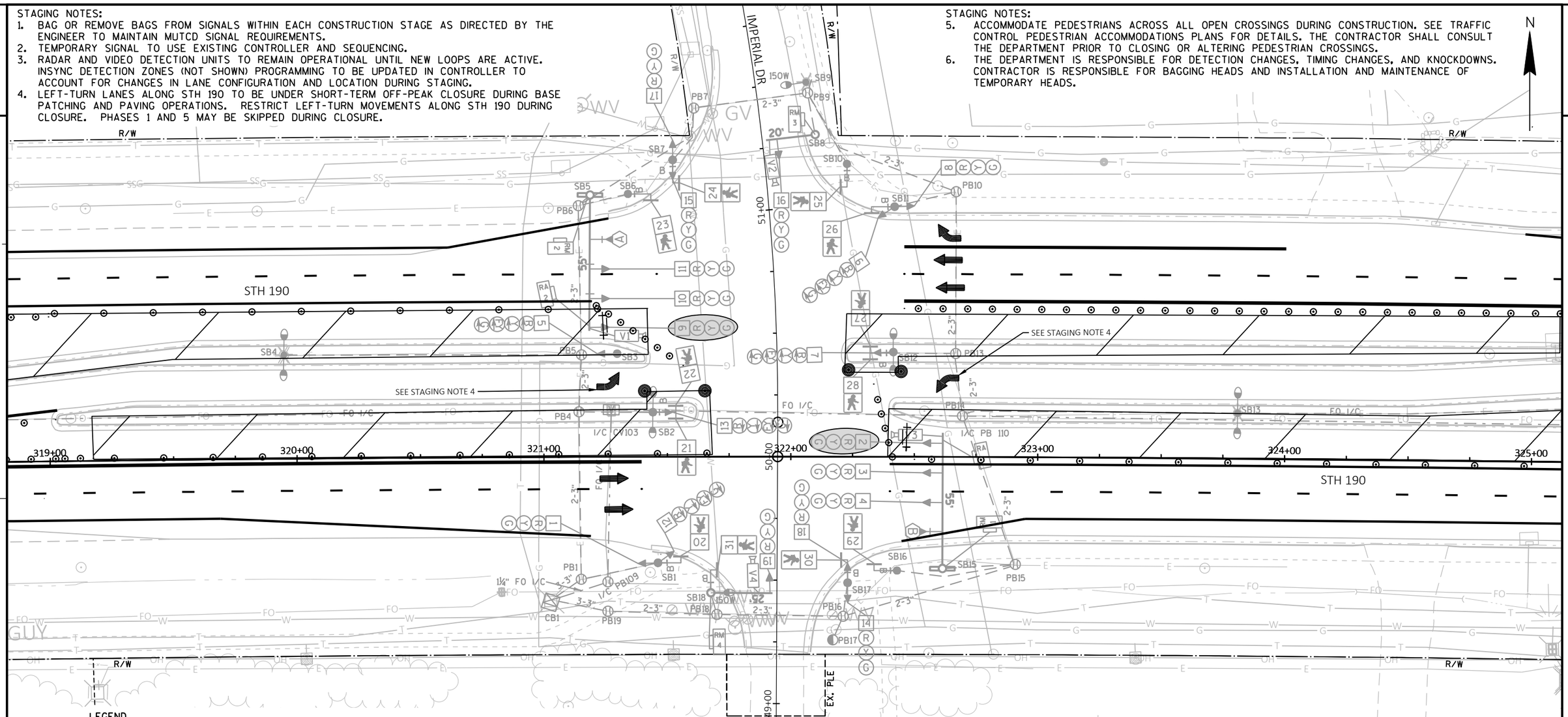
TEMPORARY TRAFFIC CONTROL SIGNAL
STH 190 & IMPERIAL DR
CITY OF BROOKFIELD
WAUKESHA COUNTY
SIGNAL NO. S67-0098
CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF
PAGE 1 OF 3

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION STAGE 1	SHEET 270	E

2

STAGING NOTES:
1. BAG OR REMOVE BAGS FROM SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
2. TEMPORARY SIGNAL TO USE EXISTING CONTROLLER AND SEQUENCING.
3. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. INSYNC DETECTION ZONES (NOT SHOWN) PROGRAMMING TO BE UPDATED IN CONTROLLER TO ACCOUNT FOR CHANGES IN LANE CONFIGURATION AND LOCATION DURING STAGING.
4. LEFT-TURN LANES ALONG STH 190 TO BE UNDER SHORT-TERM OFF-PEAK CLOSURE DURING BASE PATCHING AND PAVING OPERATIONS. RESTRICT LEFT-TURN MOVEMENTS ALONG STH 190 DURING CLOSURE. PHASES 1 AND 5 MAY BE SKIPPED DURING CLOSURE.

STAGING NOTES:
5. ACCOMMODATE PEDESTRIANS ACROSS ALL OPEN CROSSINGS DURING CONSTRUCTION. SEE TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS PLANS FOR DETAILS. THE CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRIAN CROSSINGS.
6. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.



LEGEND

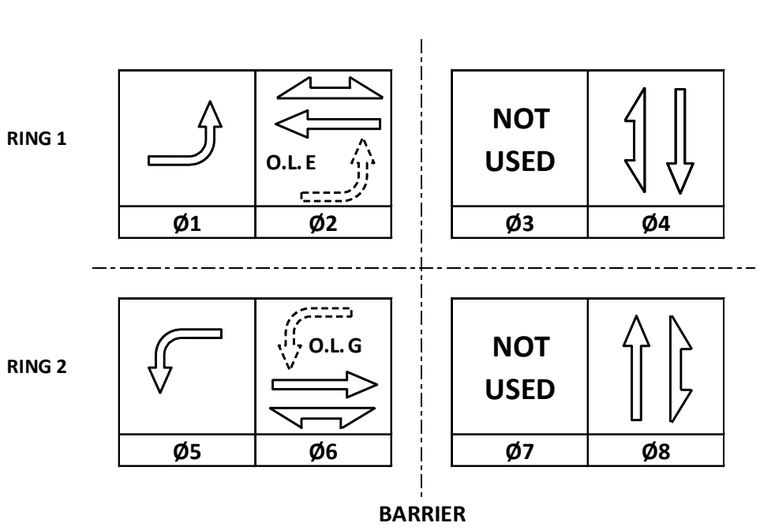
- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- EVP DESIGNATOR
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- VX VIDEO DETECTION CAMERA
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- EVP DETECTOR HEAD
- V COMMUNICATION VAULT
- RX XX RADAR DETECTOR
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTES:
ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 190 & IMPERIAL DR
CITY OF BROOKFIELD
WAUKESHA COUNTY
SIGNAL NO. S67-0098
CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF
PAGE 2 OF 3

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION STAGE 2	SHEET 271	E

	HEAD NUMBERS	FLASH
Ø1	5,6,7	-
Ø2	8,9,10,11	R
Ø3		
Ø4	17,18,19	R
Ø5	12,13	-
Ø6	1,2,3,4	R
Ø7		
Ø8	14,15,16	R
Ø2P	24,25	
Ø4P	20,21,22,23	
Ø6P	30,31	
Ø8P	26,27,28,29	
OLE	5,6,7	R ←
OLF		
OLG	12,13	R ←
OLH		





CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	←	→		
PHASE	2+5	6+1		

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6

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

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 00-59

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

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

DETECTOR LOGIC

DETECTOR CHANNEL	17	19	21	23	25	27	29	31
PLAN LOOP DETECTOR*(S)	11	23	41	51	63	81		
CALLED PHASE	1	2	4	5	6	8		
CALL OPTION	X	X	X	X	X	X		
DELAY TIME			X			X		
EXTENTION OPTION	X	X	X	X	X	X		
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE	2			6				

DETECTOR CHANNEL	18	20	22	24	26	28	30	32
PLAN LOOP DETECTOR*(S)	22	24	42	62	64			
CALLED PHASE	2	2	4	6	6			
CALL OPTION	X	X	X	X	X			
DELAY TIME			X					
EXTENTION OPTION	X	X	X	X	X			
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

								49
								21
								2
								X

DETECTOR CHANNEL
PLAN LOOP DETECTOR*(S)
CALLED PHASE
CALL OPTION
DELAY TIME
EXTENTION OPTION
EXTEND TIME
USE ADDED INITIAL
CROSS SWITCH PHASE

								50
								61
								6
								X

DETECTOR CHANNEL
PLAN LOOP DETECTOR*(S)
CALLED PHASE
CALL OPTION
DELAY TIME
EXTENTION OPTION
EXTEND TIME
USE ADDED INITIAL
CROSS SWITCH PHASE

GENERAL NOTES MODIFIED FOR CONSTRUCTION:

1. REFER TO TRAFFIC CONTROL PEDESTRIAN ACCOMODATIONS PLANS FOR WHERE PEDESTRIANS ARE ACCOMODATED DURING CONSTRUCTION STAGING. CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRAIN CROSSINGS.

STH 190 & IMPERIAL DRIVE
CITY OF BROOKFIELD
WAUKEHSA COUNTY
SIGNAL NO: S67-0098 CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
DATE: 2/2025 PAGE: 3 OF 3

NOTES:
1. ALL LENSES ARE 12-INCH
2. GRAYSHADE REPRESENTS EXISTING TO REMAIN. BOLD REPRESENTS EXISTING TO BE REMOVED.
3. VIDEO DETECTION CAMERAS V1, V2, V3, & V4 ARE USED FOR INSYNC ADAPTIVE CONTROL. DETECTION ZONES ASSOCIATED WITH THESE CAMERAS ARE NOT SHOWN.
4. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.

N

IMPERIAL DR

STH 190

320+00 321+00 322+00 323+00 324+00 325+00

SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10 SB11 SB12 SB13 SB15 SB16 SB17 SB18

PB1 PB4 PB5 PB6 PB7 PB9 PB10 PB13 PB14 PB15 PB16 PB17 PB18 PB19

V1 V2 V3 V4

RM 1 RM 2 RM 3 RM 4

RA 1 RA 2

EX. PLE

REMOVAL NOTES:
1. TRAFFIC SIGNAL TO REMAIN OPERATIONAL DURING REMOVAL.
2. CONTRACTOR TO REMOVAL AND REINSTALL PEDESTRIAN SIGNAL POLES, PEDESTRIAN SIGNAL HEADS, AND PUSH BUTTONS WHILE CROSSWALK IS CLOSED FOR CONSTRUCTION.
3. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. THE EXISTING RADAR AND VIDEO DETECTION SYSTEM SHALL BE USED FOR TEMPORARY SIGNALS DURING CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETE, REMOVE AND SALVAGED RADAR DETECTORS AND VIDEO DETECTION CAMERAS AND CABLES AND RETURN TO THE SE REGION ELECTRICAL FIELD UNIT.
4. EXISTING SB1, SB11, SB16, AND SB17 POLES, POLE MOUNTINGS, AND FACES TO BE REMOVED, SALVAGED, AND REUSED. EXISTING SB1, SB11, AND SB16 PUSH BUTTONS TO BE SALVAGED AND REUSED AT NEW POLE LOCATION. EXISTING SB7 FACE HEAD 24 TO BE REMOVED, SALVAGED, AND REUSED ON NEW POLE. EXISTING SB1 PUSH BUTTON TO BE REMOVED, SALVAGED, AND REUSED ON NEW POLE. SEE PROPOSED TRAFFIC SIGNAL PLAN.

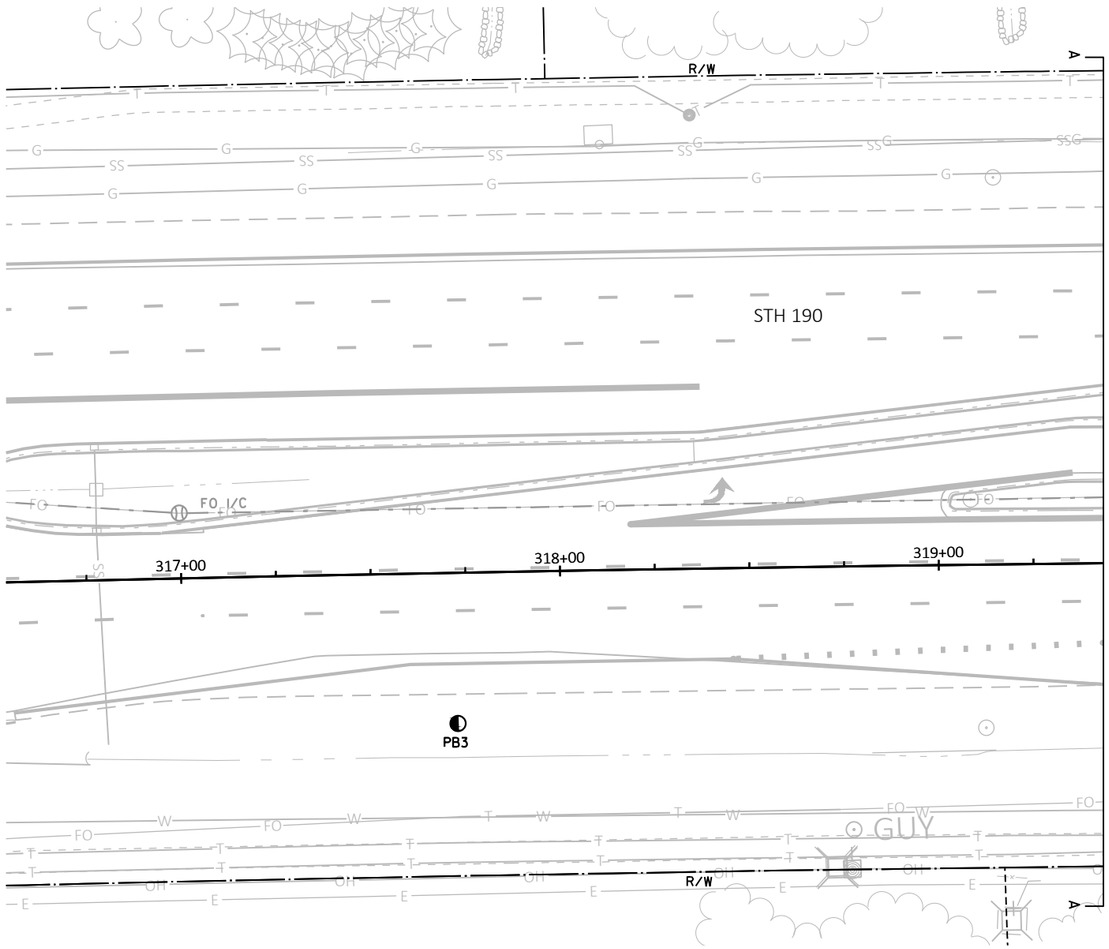
LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- X EVP DESIGNATOR
- VX VIDEO DETECTION CAMERA
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- EVP DETECTOR HEAD
- V COMMUNICATION VAULT
- RX XX RADAR DETECTOR

MONOTUBE STRUCTURES
SB5 = S-67-1157
SB8 = S-67-1158
SB15 = S-67-1159
SB18 = S-67-1160

TRAFFIC CONTROL SIGNAL
STH 190 & IMPERIAL DR
CITY OF BROOKFIELD
WAUKESHA COUNTY
SIGNAL NO. S67-0098
CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF
PAGE 1 OF 2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 273 E



N

2

TRAFFIC CONTROL SIGNAL
STH 190 & IMPERIAL DR
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0098

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 2 OF 2

PROJECT NO:2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 274	E

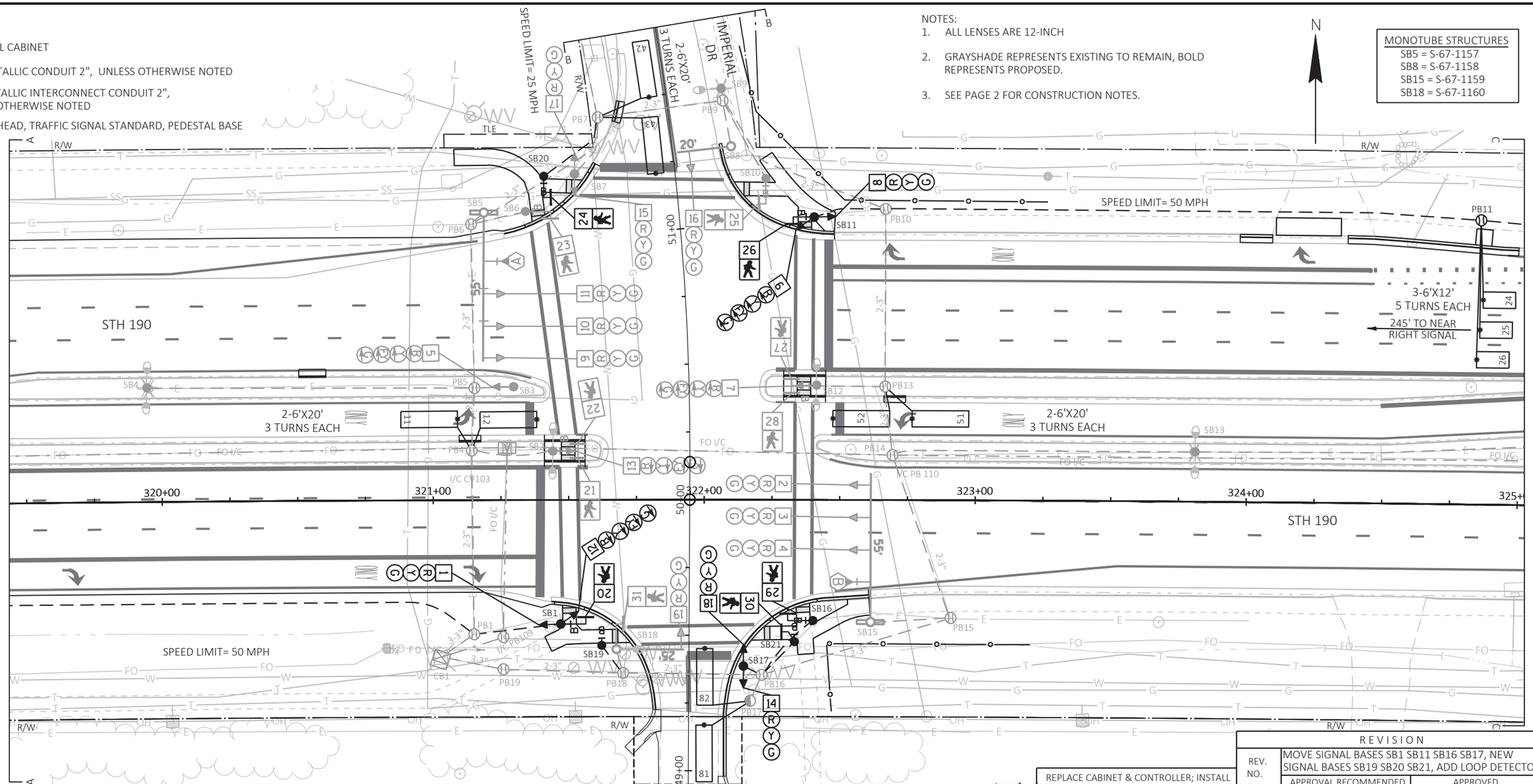
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LAYOUT NAME - 024011_SP - 024012_SP
PLOT DATE : 1/9/2025 2:47 PM
PLOT BY : BIEBERITZ, BEN
PLOT NAME :
PLOT SCALE : **********
WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE

NOTES:
1. ALL LENSES ARE 12-INCH
2. GRAYSHADE REPRESENTS EXISTING TO REMAIN, BOLD REPRESENTS PROPOSED.
3. SEE PAGE 2 FOR CONSTRUCTION NOTES.

MONOTUBE STRUCTURES
SB5 = S-67-1157
SB8 = S-67-1158
SB15 = S-67-1159
SB18 = S-67-1160



(XX) MONOTUBE BASE, POLE, 15'-30' ARM
(XX) MONOTUBE BASE, POLE, 35'-55' ARM
PULL BOX, 24" X 36"
PULL BOX, 24" X 42"
XX SIGNAL HEAD NUMBER
R RED CIRCULAR INDICATOR
Y YELLOW CIRCULAR INDICATOR
G GREEN CIRCULAR INDICATOR
R RED ARROW
FY Y YELLOW ARROW
G GREEN ARROW

X EVP DESIGNATOR
LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
B PEDESTRIAN HEAD WITH PUSH BUTTON
B PUSH BUTTON
LED LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
EVP DETECTOR HEAD
V COMMUNICATION VAULT

WISCONSIN
BENJAMIN J. BIEBERITZ
E-49431
WAUKESHA, WI
PROFESSIONAL ENGINEER
1/14/25

REVISION				
REV. NO.	MOVE SIGNAL BASES SB1 SB11 SB16 SB17, NEW SIGNAL BASES SB19 SB20 SB21, ADD LOOP DETECTORS			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
8	DATE	BY	DATE	BY
	10/22/24	JMG	12/4/24	JRH

REPLACE CABINET & CONTROLLER; INSTALL INSYNC ADAPTIVE CONTROL & RADAR DETECTION 8/1/14
ADDED WB LEFT TURN PHASE 10/17/13
ASBUILT REVISION AS PER FIELD REVIEW 3/4/13
FULL SIGNAL REHABILITATION 8/16/11
CHANGE CONTROLLER TO EPAC 05/11
EMERGENCY VEHICLE PREEMPTION EB & WB APPROACHES 11/95
ADDED CALLING DELAY TO LOOPS 81 & 82 07/94
INITIAL INSTALL 01/66

TRAFFIC CONTROL SIGNAL
STH 190 & IMPERIAL DR
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0098
CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 10/10/90 — EDWARD J. FRIEDE, REGION TRAFFIC ENGINEER

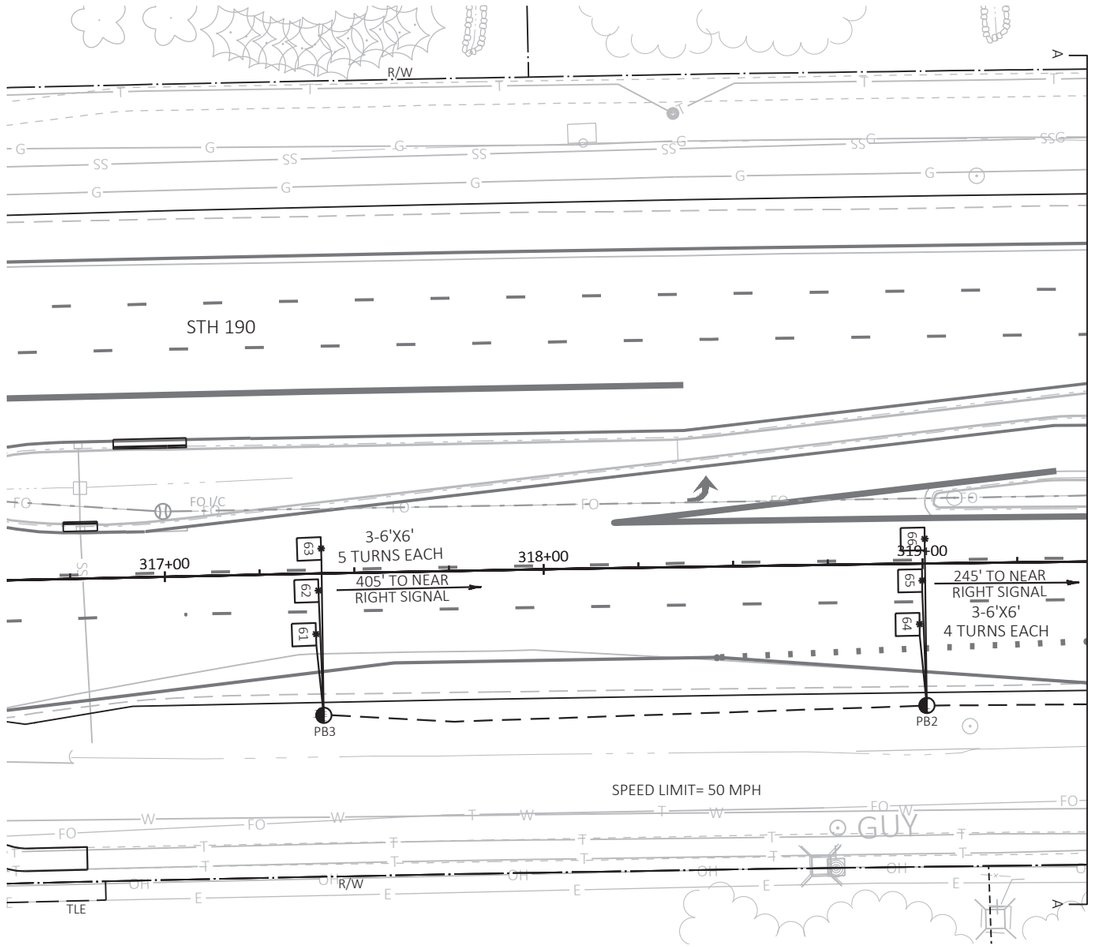
APPROVED
DATE 10/22/90 — H. O. PRICE, STATE TRAFFIC ENGINEER

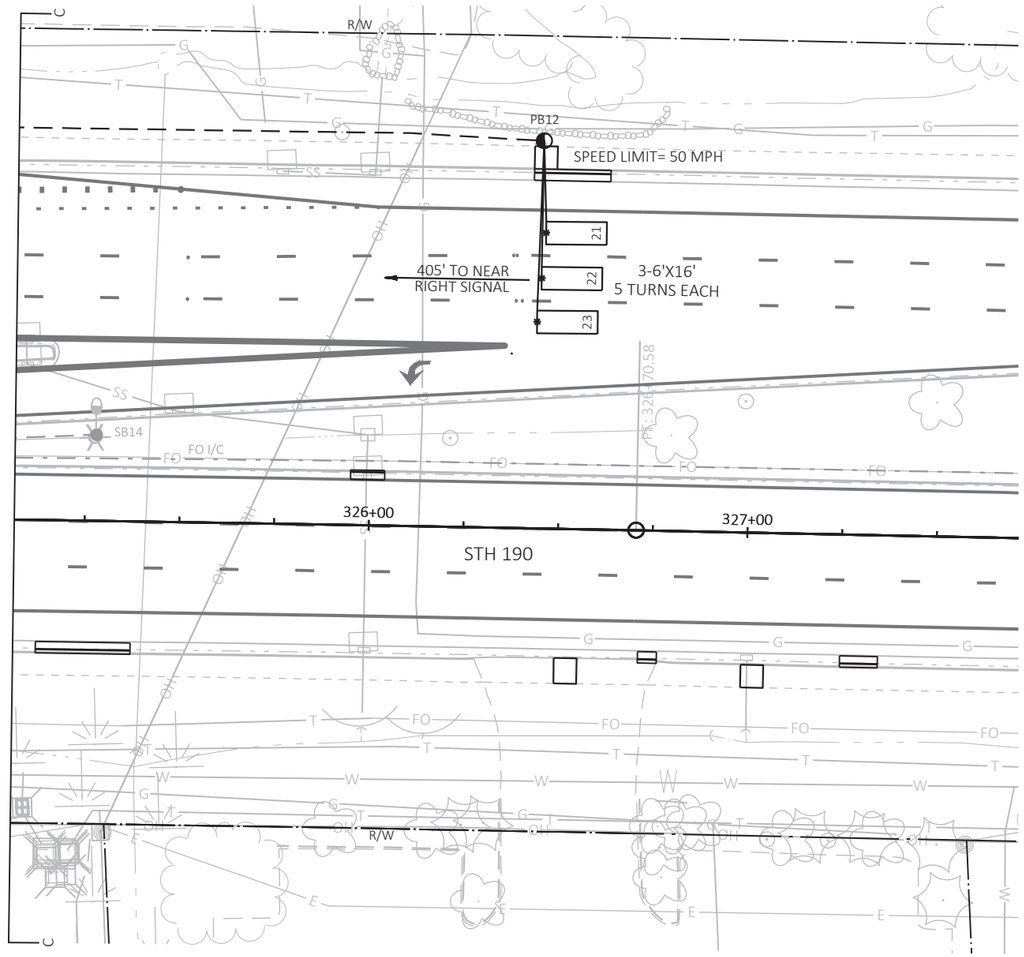
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 275 E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\02_IMPERIAL\024021_SP.DWG
LAYOUT NAME - 024021_SP - 024021_SP
PLOT DATE : 1/9/2025 2:48 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42

11/15/24 JMM





N

CONSTRUCTION NOTES:

1. REUSE EXISTING POLES, POLE MOUNTINGS, AND FACES FOR SB1, SB11, SB16, AND SB17. REUSED EXISTING FACE HEAD 30 SALVAGED FROM EXISTING SB17 TO NEW SB21. REUSE EXISTING FACE HEAD 24 SALVAGED FROM SB7 TO NEW SB20. SEE TRAFFIC SIGNAL REMOVAL PLAN. PROVIDE NEW PUSH BUTTONS FOR SB19, SB20, AND SB21.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170.
3. * LOCATION IS TO THE FONT CENTER OF DETECTOR LOOP.
4. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.
5. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
6. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.

TRAFFIC CONTROL SIGNAL
STH 190 & IMPERIAL DR
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0098

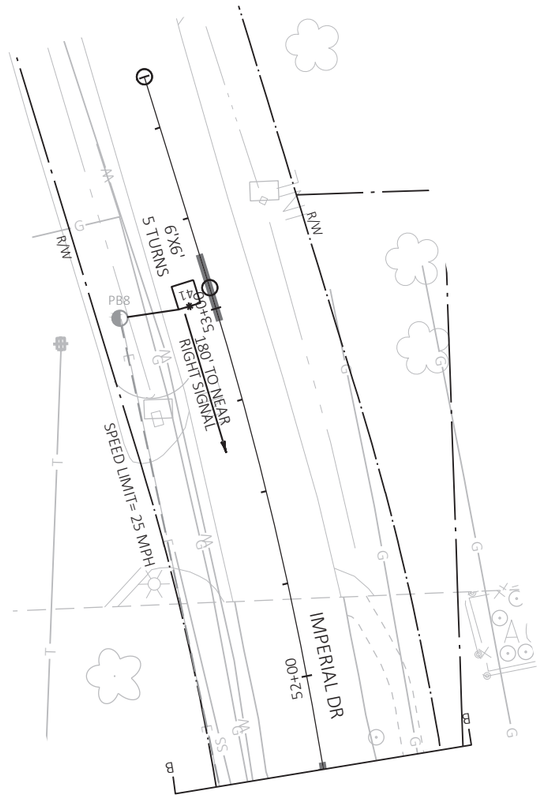
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 276	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\02_IMPERIAL\024021_SP.DWG
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2

N



TRAFFIC CONTROL SIGNAL
STH 190 & IMPERIAL DR
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0098

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

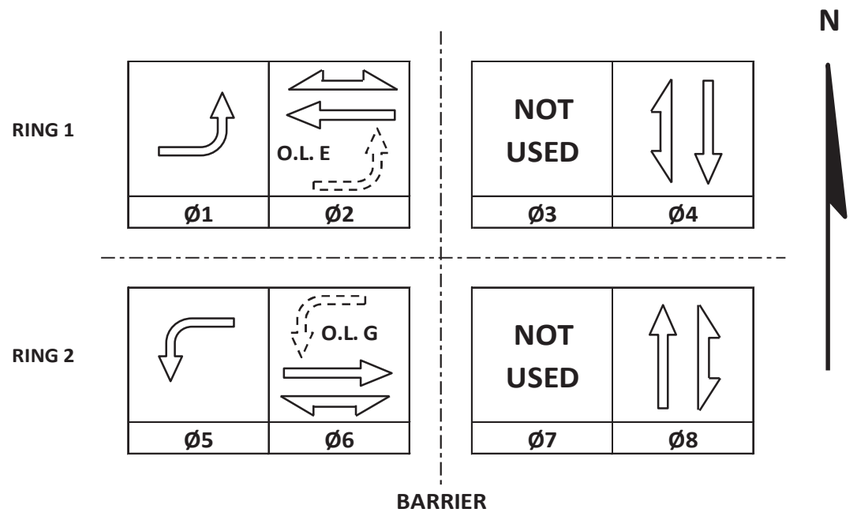
PAGE 3 OF 4

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 277	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\02_IMPERIAL\024021_SP.DWG
LAYOUT NAME - 024021_SP - 024023_SP

PLOT DATE : 1/9/2025 2:48 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF

	HEAD NUMBERS	FLASH
Ø1	5, 6, 7	-
Ø2	8, 9, 10, 11	R
Ø3		
Ø4	17, 18, 19	R
Ø5	12, 13	-
Ø6	1, 2, 3, 4	R
Ø7		
Ø8	14, 15, 16	R
Ø2P	24, 25	
Ø4P	20, 21, 22, 23	
Ø6P	30, 31	
Ø8P	26, 27, 28, 29	
OLE	5, 6, 7	R ←
OLF		
OLG	12, 13	R ←
OLH		



CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1		

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.

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

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 00-59

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

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

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	11	21	23	25	41	43	52	62	64	66	82						PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	2	2	4	4	5	6	6	6	8						CALLED PHASE
CALL OPTION	X	X	X	X		X	X	X	X	X	X						CALL OPTION
DELAY TIME											X						DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X	X	X	X	X	X						EXTENTION OPTION
EXTEND TIME					X												EXTEND TIME
USE ADDED INITIAL		X	X	X				X	X	X							USE ADDED INITIAL
CROSS SWITCH PHASE	2						6										CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	12	22	24	26	42	51	61	63	65	81							PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	2	2	4	5	6	6	6	8							CALLED PHASE
CALL OPTION	X	X	X	X	X	X	X	X	X	X							CALL OPTION
DELAY TIME					X					X							DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X	X	X	X	X							EXTENTION OPTION
EXTEND TIME																	EXTEND TIME
USE ADDED INITIAL		X	X	X			X	X	X								USE ADDED INITIAL
CROSS SWITCH PHASE	2					6											CROSS SWITCH PHASE

STH 190 & IMPERIAL DRIVE
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO: S67-0098 CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
DATE: 2/2025 PAGE NO. 4 OF 4

PROJECT ID:	2025-03-73
INTERSECTION:	STH 190 & IMPERIAL DR

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

			SIGNAL INDICATION WIRE COLOR									PED BUTTON
CB1 TO	AWG14 # OF CONDUCTORS	HEAD NO.	RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	FLASHING <YELLOW>	D/WALK	WALK	
SB1	12	1	RED	ORG	GRN							
		12				RED/BLK	ORG/BLK		BLK/WHT			
		20								BLK	BLU	
		B										WHT/BLK
SB2	12	13				RED/BLK	ORG/BLK		BLK/WHT			
		21								BLK	BLU	
		22								BLK	BLU	
		B										WHT/BLK
SB3	12	5				RED	ORG	GRN	BLK/WHT			
SB5	12	9	RED	ORG	GRN							
		10	RED	ORG	GRN							
		11	RED	ORG	GRN							
SB6	7	23								BLK	BLU	
		B										WHT/BLK
SB20	7	24								BLK	BLU	
		B										WHT/BLK
SB7	12	15	RED	ORG	GRN							
		17	RED/BLK	ORG/BLK	GRN/BLK							
SB8	12	16	RED	ORG	GRN							
SB10	7	25								BLK	BLU	
		B										WHT/BLK
SB11	15	6				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
		8	RED	ORG	GRN							
		26								BLK	BLU	
		B										WHT/BLK
SB12	12	7				RED	ORG	GRN	BLK/WHT			
		27								BLK	BLU	
		28								BLK	BLU	
		B										WHT/BLK
SB15	12	2	RED	ORG	GRN							
		3	RED	ORG	GRN							
		4	RED	ORG	GRN							
SB16	7	29								BLK	BLU	
		B										WHT/BLK
SB21	7	30								BLK	BLU	
		B										WHT/BLK
SB17	12	14	RED	ORG	GRN							
		18	RED/BLK	ORG/BLK	GRN/BLK							
SB18	12	19	RED	ORG	GRN							
		31								BLK	BLU	
SB19	7	B										WHT/BLK

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB5
SB5	SB6
SB6	SB20
SB20	SB7
SB7	SB8
SB8	SB10
SB10	SB11
SB11	SB12
SB12	SB15
SB15	SB16
SB16	SB21
SB21	SB17
SB17	SB18
SB18	SB19
SB19	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	CB1
PB4	SB2
PB5	SB3
PB6	SB5
PB7	SB7
PB9	SB8
PB10	SB11
PB13	SB12
PB14	SB12
PB15	SB15
PB16	SB17
PB18	SB18
PB19	CB1

EMERGENCY VEHICLE PREEMPTION	
FROM	TO
CB1	HEAD A (SB5)
CB1	HEAD B (SB15)

LIGHTING UF 10 AWG W/ GROUND	
FROM	TO
CB1	SB2
SB2	SB4
SB2	SB9
CB1	SB18
SB18	SB12
SB12	SB13
SB13	SB14

NOTES:
*USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
*ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
*RECONNECT THE GROUNDING CONDUCTORS WHENEVER THE CIRCUIT HAS BEEN INTERRUPTED TO ENSURE THE GROUNDING CIRCUIT IS COMPLETE.

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- EVP DETECTOR HEAD
- X EVP DESIGNATOR
- Y YIELD SIGN

STAGING NOTES:

1. BAG OR REMOVE BAGS FROM SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
2. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. INSYNC DETECTION ZONES (NOT SHOWN) PROGRAMMING TO BE UPDATED IN CONTROLLER TO ACCOUNT FOR CHANGES IN LANE CONFIGURATION AND LOCATION DURING STAGING.
3. ACCOMMODATE PEDESTRIANS ACROSS ALL OPEN CROSSINGS DURING CONSTRUCTION. SEE TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS PLANS FOR DETAILS. THE CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRIAN CROSSINGS.
4. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- VX VIDEO DETECTION CAMERA
- V COMMUNICATIONS VAULT
- RX XX RADAR DETECTOR
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTES:
ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 190 & CALHOUN RD
CITY OF BROOKFIELD
WAUKESHA COUNTY
CABINET TYPE: TS2
SIGNAL NO. S67-0122
CONTROLLER TYPE: ECONOLITE
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF
PAGE 1 OF 4

PROJECT NO:2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION STAGE 1	SHEET 280	E

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- EVP DETECTOR HEAD
- X EVP DESIGNATOR
- Y YIELD SIGN

STAGING NOTES:

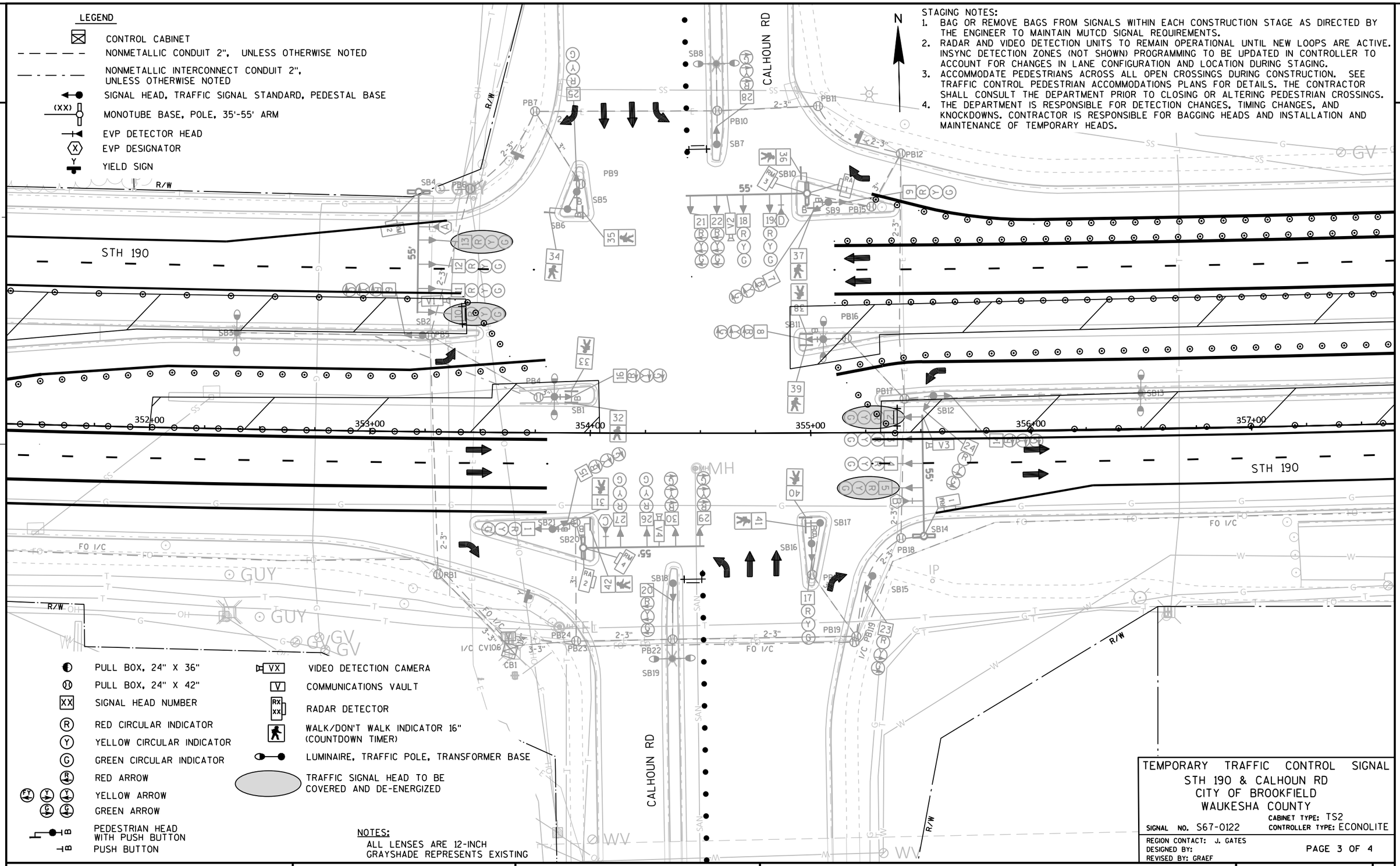
1. BAG OR REMOVE BAGS FROM SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
2. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. INSYNC DETECTION ZONES (NOT SHOWN) PROGRAMMING TO BE UPDATED IN CONTROLLER TO ACCOUNT FOR CHANGES IN LANE CONFIGURATION AND LOCATION DURING STAGING.
3. ACCOMMODATE PEDESTRIANS ACROSS ALL OPEN CROSSINGS DURING CONSTRUCTION. SEE TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS PLANS FOR DETAILS. THE CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRIAN CROSSINGS.
4. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- VX VIDEO DETECTION CAMERA
- V COMMUNICATIONS VAULT
- RX XX RADAR DETECTOR
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTES:
ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 190 & CALHOUN RD
CITY OF BROOKFIELD
WAUKESHA COUNTY
CABINET TYPE: TS2
SIGNAL NO. S67-0122
CONTROLLER TYPE: ECONOLITE
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF
PAGE 2 OF 4

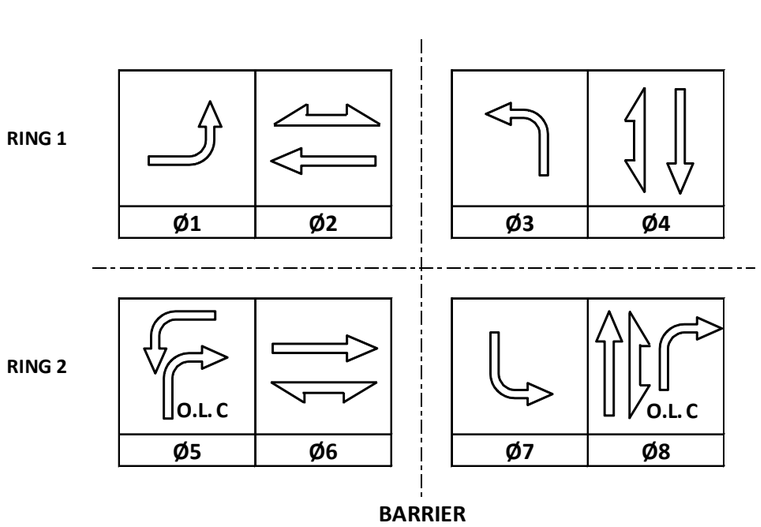
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION STAGE 1B	SHEET 281	E



FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\03_CALHOUN\024102_SP.DWG
LAYOUT NAME - 024102_SP - 024102_SP
PLOT DATE : 1/9/2025 2:50 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	6,7,8	R ←
Ø2	9,10,11,12,13	R
Ø3	20,21,22	R ←
Ø4	25,26,27	R
Ø5	14,15,16	R ←
Ø6	1,2,3,4,5	R
Ø7	28,29,30	R ←
Ø8	17,18,19	R
Ø2P	35,36	
Ø4P	31,32,33,34	
Ø6P	41,42	
Ø8P	37,38,39,40	
OLC	23,24	R
OLE		
OLF		
OLG		





CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	←	→	↓	↑
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

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

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 00-59

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

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

DETECTOR LOGIC

DETECTOR CHANNEL	17	19	21	23	25	27	29	31	33	35	37					49
PLAN LOOP DETECTOR*(S)	11	22	24	31	41	51	62	64	71	81						21
CALLED PHASE	1	2	2	3	4	5	6	6	7	8						2
CALL OPTION	X	X	X	X	X	X	X	X	X	X						
DELAY TIME																
EXTENTION OPTION	X	X	X	X	X	X	X	X	X	X						X
EXTEND TIME																
USE ADDED INITIAL																
CROSS SWITCH PHASE																

DETECTOR CHANNEL	18	20	22	24	26	28	30	32	34	36	38					50
PLAN LOOP DETECTOR*(S)	12	23	25	32	42	52	63	65	72	82						61
CALLED PHASE	1	2	2	3	4	5	6	6	7	8						6
CALL OPTION	X	X	X	X	X	X	X	X	X	X						
DELAY TIME																
EXTENTION OPTION	X	X	X	X	X	X	X	X	X	X						X
EXTEND TIME																
USE ADDED INITIAL																
CROSS SWITCH PHASE																

GENERAL NOTES MODIFIED FOR CONSTRUCTION:

1. REFER TO TRAFFIC CONTROL PEDESTRIAN ACCOMODATIONS PLANS FOR WHERE PEDESTRIANS ARE ACCOMODATED DURING CONSTRUCTION STAGING. CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRAIN CROSSINGS.
2. DURING STAGE 1, OMIT OVERLAP O.L.C.
   DURING STAGES 1B AND 2, O.L.C. MAY BE ACTIVE.

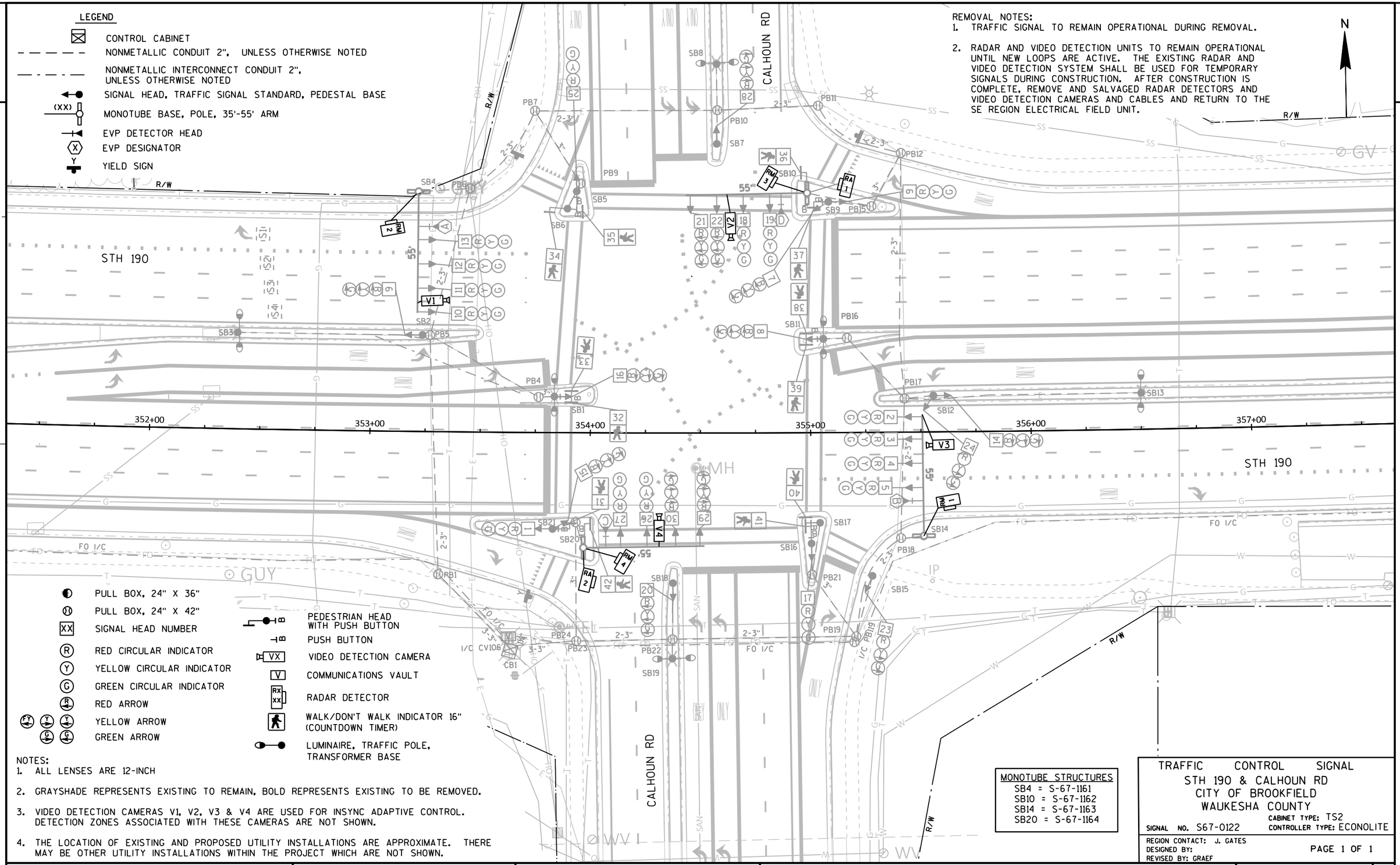
STH 190 & CALHOUN RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO: S67-0122 CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
DATE: 2/2025 PAGE: 4 OF 4

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- EVP DETECTOR HEAD
- (X) EVP DESIGNATOR
- Y YIELD SIGN

REMOVAL NOTES:
1. TRAFFIC SIGNAL TO REMAIN OPERATIONAL DURING REMOVAL.
2. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. THE EXISTING RADAR AND VIDEO DETECTION SYSTEM SHALL BE USED FOR TEMPORARY SIGNALS DURING CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETE, REMOVE AND SALVAGED RADAR DETECTORS AND VIDEO DETECTION CAMERAS AND CABLES AND RETURN TO THE SE REGION ELECTRICAL FIELD UNIT.



- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- VX VIDEO DETECTION CAMERA
- V COMMUNICATIONS VAULT
- RX RADAR DETECTOR XX
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE

NOTES:
1. ALL LENSES ARE 12-INCH
2. GRAYSHADE REPRESENTS EXISTING TO REMAIN, BOLD REPRESENTS EXISTING TO BE REMOVED.
3. VIDEO DETECTION CAMERAS V1, V2, V3 & V4 ARE USED FOR INSYNC ADAPTIVE CONTROL. DETECTION ZONES ASSOCIATED WITH THESE CAMERAS ARE NOT SHOWN.
4. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.

MONOTUBE STRUCTURES
SB4 = S-67-1161
SB10 = S-67-1162
SB14 = S-67-1163
SB20 = S-67-1164

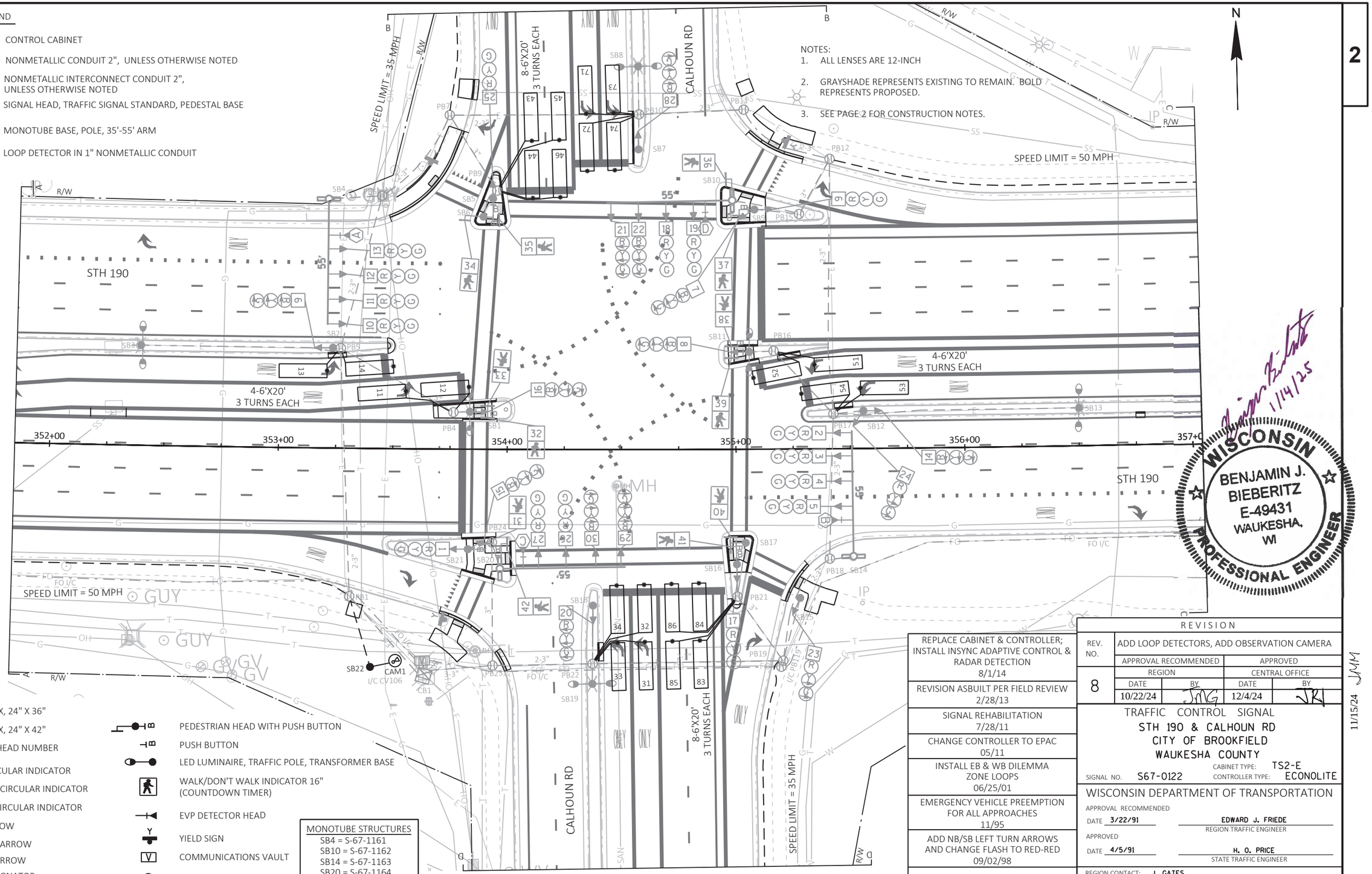
TRAFFIC CONTROL SIGNAL
STH 190 & CALHOUN RD
CITY OF BROOKFIELD
WAUKESHA COUNTY
CABINET TYPE: TS2
SIGNAL NO. S67-0122
CONTROLLER TYPE: ECONOLITE
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF
PAGE 1 OF 1

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 284	E

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT

NOTES:
1. ALL LENSES ARE 12-INCH
2. GRAYSHADE REPRESENTS EXISTING TO REMAIN. BOLD REPRESENTS PROPOSED.
3. SEE PAGE 2 FOR CONSTRUCTION NOTES.



PULL BOX, 24" X 36"
PULL BOX, 24" X 42"
SIGNAL HEAD NUMBER
RED CIRCULAR INDICATOR
YELLOW CIRCULAR INDICATOR
GREEN CIRCULAR INDICATOR
RED ARROW
YELLOW ARROW
GREEN ARROW
EVP DESIGNATOR

PEDESTRIAN HEAD WITH PUSH BUTTON
PUSH BUTTON
LED LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
EVP DETECTOR HEAD
YIELD SIGN
COMMUNICATIONS VAULT
CCTV CAMERA SITE

MONOTUBE STRUCTURES
SB4 = S-67-1161
SB10 = S-67-1162
SB14 = S-67-1163
SB20 = S-67-1164

REVISION	
REPLACE CABINET & CONTROLLER; INSTALL INSYNC ADAPTIVE CONTROL & RADAR DETECTION 8/1/14	
REVISION ASBUILT PER FIELD REVIEW 2/28/13	
SIGNAL REHABILITATION 7/28/11	
CHANGE CONTROLLER TO EPAC 05/11	
INSTALL EB & WB DILEMMA ZONE LOOPS 06/25/01	
EMERGENCY VEHICLE PREEMPTION FOR ALL APPROACHES 11/95	
ADD NB/SB LEFT TURN ARROWS AND CHANGE FLASH TO RED-RED 09/02/98	
INITIAL INSTALL 1991	

REV. NO.	ADD LOOP DETECTORS, ADD OBSERVATION CAMERA			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
	DATE	BY	DATE	BY
8	10/22/24	JMG	12/4/24	JRH

TRAFFIC CONTROL SIGNAL
STH 190 & CALHOUN RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0122
CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 3/22/91 — EDWARD J. FRIEDE, REGION TRAFFIC ENGINEER

APPROVED
DATE 4/5/91 — H. O. PRICE, STATE TRAFFIC ENGINEER

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 1 OF 4

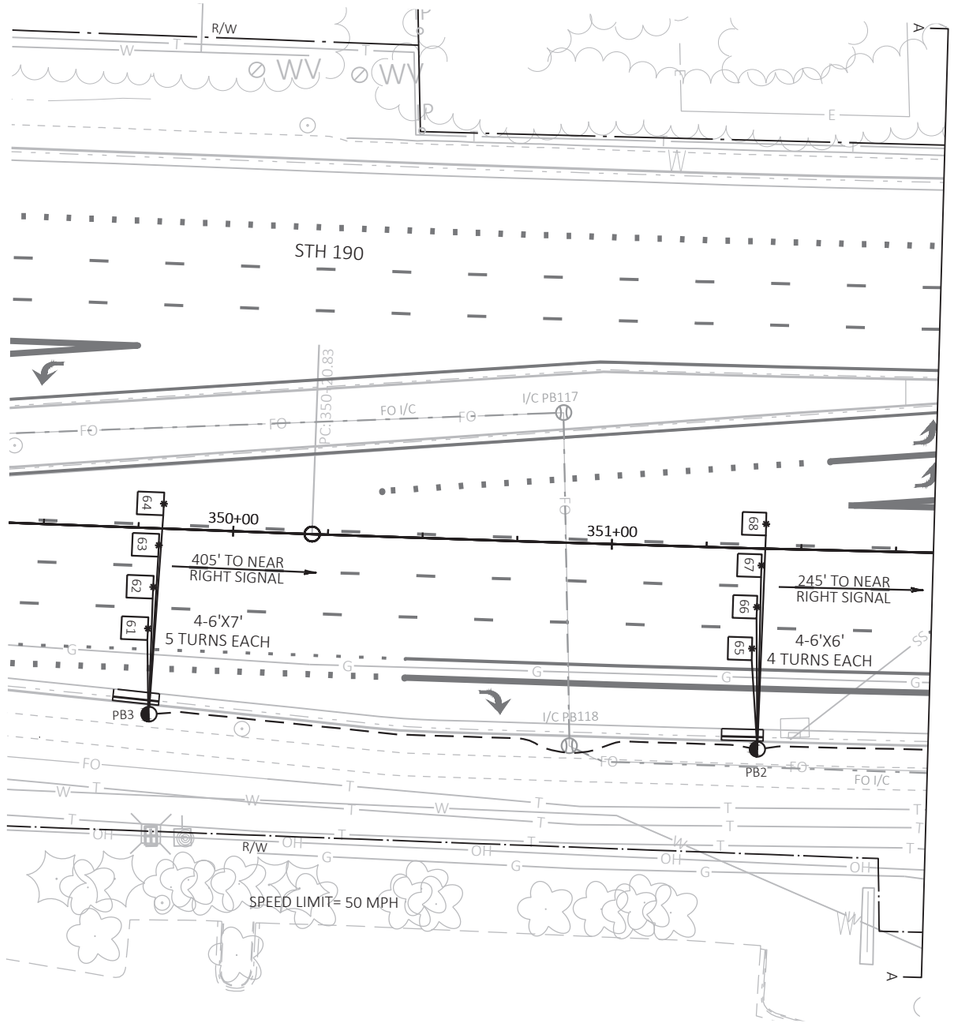
BENJAMIN J. BIEBERITZ E-49431 WAUKESHA, WI
PROFESSIONAL ENGINEER
1/14/25

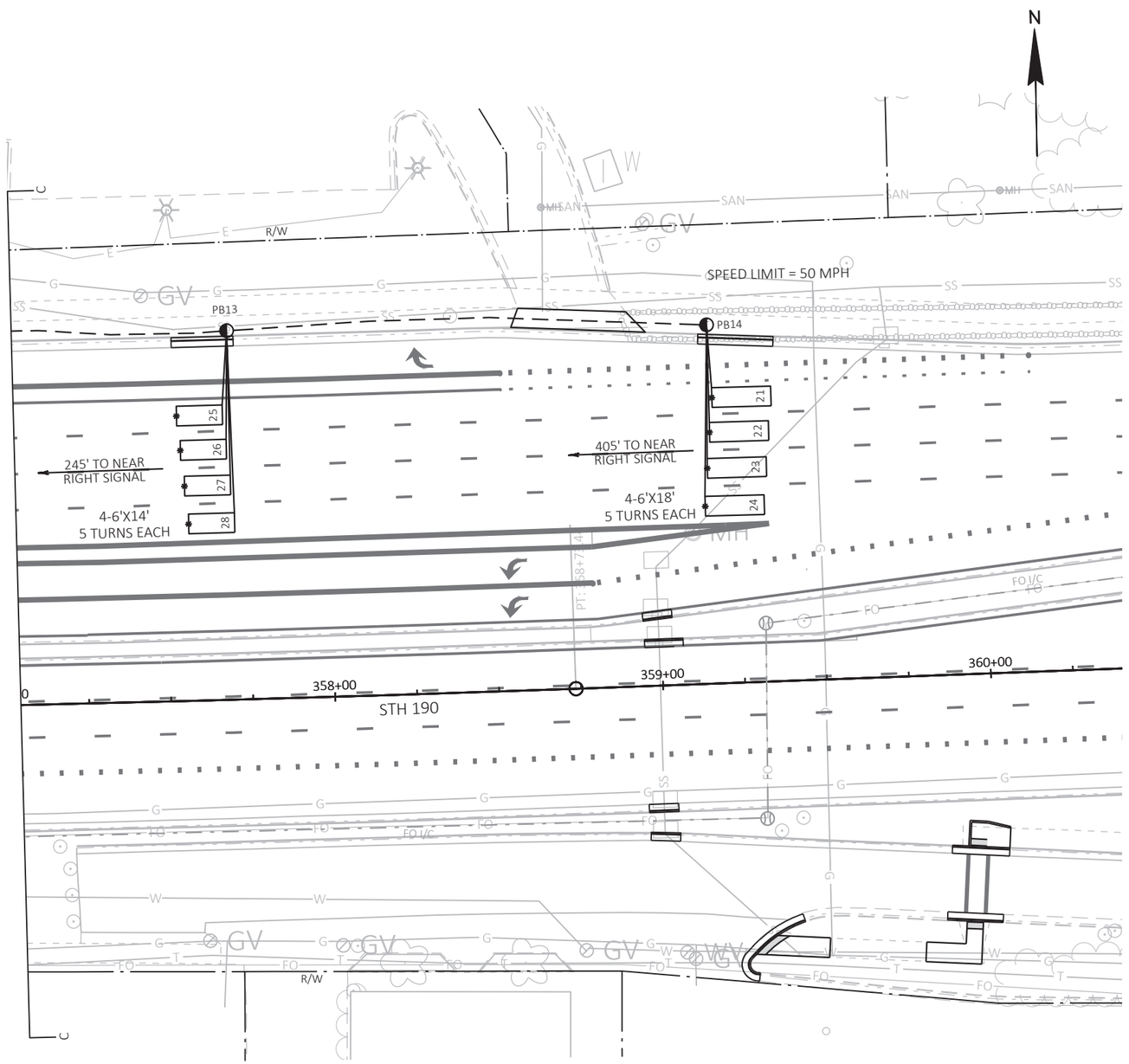
11/15/24 JMM

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 285	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\03_CALHOUN\024021_SP.DWG
LAYOUT NAME - 024021_SP - 024021_SP
PLOT DATE : 1/9/2025 2:51 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42





CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170.
2. * LOCATION IS TO THE FRONT CENTER OF DETECTOR LOOP.
3. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.
4. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.

TRAFFIC CONTROL SIGNAL
STH 190 & CALHOUN RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0122

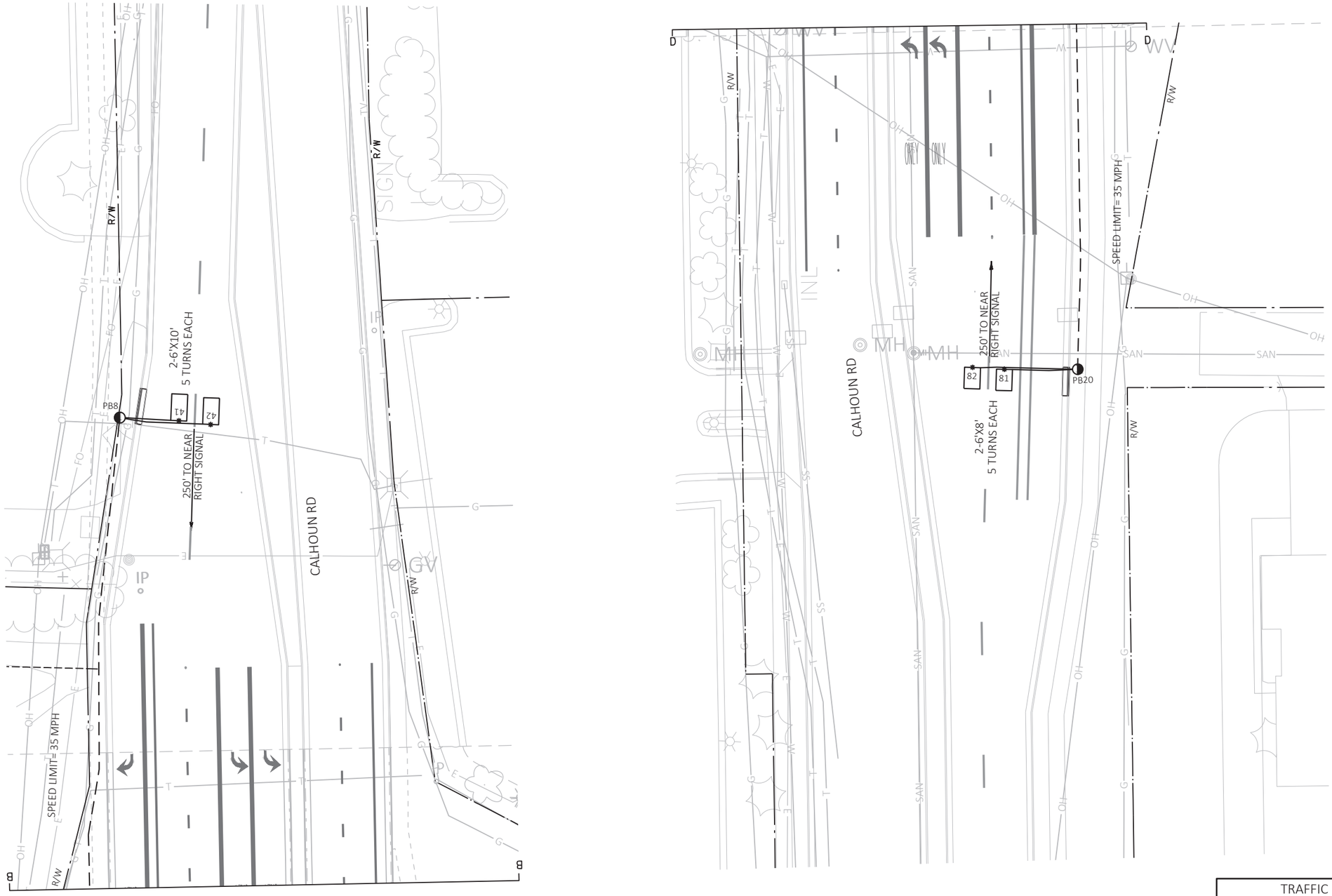
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 2 OF 4

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 286	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\03_CALHOUN\024021_SP.DWG
LAYOUT NAME - 024021_SP - 024022_SP

PLOT DATE : 1/9/2025 2:51 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF



TRAFFIC CONTROL SIGNAL
STH 190 & CALHOUN RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0122

REGION CONTACT: J, GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 3 OF 4

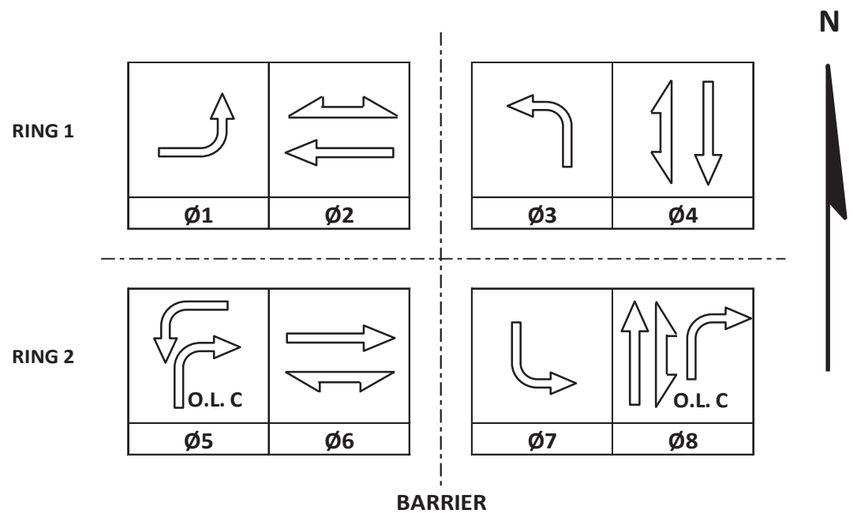
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 287	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\03_CALHOUN\024021_SP.DWG
LAYOUT NAME - 024021_SP - 024023_SP

PLOT DATE : 1/9/2025 2:52 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	6, 7, 8	R ↵
Ø2	9, 10, 11, 12, 13	R
Ø3	20, 21, 22	R ↵
Ø4	25, 26, 27	R
Ø5	14, 15, 16	R ↵
Ø6	1, 2, 3, 4, 5	R
Ø7	28, 29, 30	R ↵
Ø8	17, 18, 19	R
Ø2P	35, 36	
Ø4P	31, 32, 33, 34	
Ø6P	41, 42	
Ø8P	37, 38, 39, 40	
OLC	23, 24	R
OLE		
OLF		
OLG		
OLH		



CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	←	↗	↓	↑
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

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

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 00-59

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

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

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	35	33	39	37	43	41	47	45	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	11	13	21	23	25	27	31	33	41	43	45	51	53	61	63	65	67	71	73	81	83	85			PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	1	2	2	2	2	3	3	4	4	4	5	5	6	6	6	6	7	7	8	8	8			CALLED PHASE
CALL OPTION	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X		X	X			CALL OPTION
DELAY TIME																									DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			EXTENTION OPTION
EXTEND TIME									X											X					EXTEND TIME
USE ADDED INITIAL			X	X	X	X								X	X	X	X								USE ADDED INITIAL
CROSS SWITCH PHASE																									CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	36	34	40	38	44	42	48	46	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	12	14	22	24	26	28	32	34	42	44	46	52	54	62	64	66	68	72	74	82	84	86			PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	1	2	2	2	2	3	3	4	4	4	5	5	6	6	6	6	7	7	8	8	8			CALLED PHASE
CALL OPTION	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X		X	X			CALL OPTION
DELAY TIME																									DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			EXTENTION OPTION
EXTEND TIME									X											X					EXTEND TIME
USE ADDED INITIAL			X	X	X	X								X	X	X	X								USE ADDED INITIAL
CROSS SWITCH PHASE																									CROSS SWITCH PHASE

STH 190 & CALHOUN RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO: S67-0122 CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
DATE: 2/2025 PAGE NO. 4 OF 4

LEGEND

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

STAGING NOTES:

1. BAG OR REMOVE BAGS FROM SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
2. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. INSYNC DETECTION ZONES (NOT SHOWN) PROGRAMMING TO BE UPDATED IN CONTROLLER TO ACCOUNT FOR CHANGES IN LANE CONFIGURATION AND LOCATION DURING STAGING.
3. ACCOMMODATE PEDESTRIANS ACROSS ALL OPEN CROSSINGS DURING CONSTRUCTION. SEE TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS PLANS FOR DETAILS. THE CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRIAN CROSSINGS.
4. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.

N

- VX VIDEO DETECTION CAMERA
- RX RADAR DETECTOR
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY YELLOW ARROW
- G GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)

- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- V COMMUNICATIONS VAULT
- Y YIELD SIGN
- S STOP SIGN
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTES:
ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 190 & LILLY RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

CABINET TYPE: TS-2
SIGNAL NO. S67-0065 CONTROLLER TYPE: ECONOLITE

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 1 OF 4

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION STAGE 1	SHEET 289	E

LEGEND

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

STAGING NOTES:

1. BAG OR REMOVE BAGS FROM SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
2. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. INSYNC DETECTION ZONES (NOT SHOWN) PROGRAMMING TO BE UPDATED IN CONTROLLER TO ACCOUNT FOR CHANGES IN LANE CONFIGURATION AND LOCATION DURING STAGING.
3. ACCOMMODATE PEDESTRIANS ACROSS ALL OPEN CROSSINGS DURING CONSTRUCTION. SEE TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS PLANS FOR DETAILS. THE CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRIAN CROSSINGS.
4. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.

N

STH 190

LILLY RD

456+00 457+00 458+00 459+00 460+00 461+00

- VX VIDEO DETECTION CAMERA
- RX RADAR DETECTOR
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY YELLOW ARROW
- G GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)

- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- V COMMUNICATIONS VAULT
- Y YIELD SIGN
- S STOP SIGN
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTES:
ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 190 & LILLY RD
CITY OF BROOKFIELD
WAUKESHA COUNTY
CABINET TYPE: TS-2
SIGNAL NO. S67-0065 CONTROLLER TYPE: ECONOLITE

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 2 OF 4

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION STAGE 1B	SHEET 290	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\04_LILLY\024101B_SP.DWG
LAYOUT NAME - 024101B_SP - 024101B_SP

PLOT DATE : 1/9/2025 2:52 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

LEGEND

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

STAGING NOTES:

1. BAG OR REMOVE BAGS FROM SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
2. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. INSYNC DETECTION ZONES (NOT SHOWN) PROGRAMMING TO BE UPDATED IN CONTROLLER TO ACCOUNT FOR CHANGES IN LANE CONFIGURATION AND LOCATION DURING STAGING.
3. LEFT-TURN LANES ALONG STH 190 TO BE UNDER SHORT-TERM OFF-PEAK CLOSURE DURING BASE PATCHING AND PAVING OPERATIONS. RESTRICT LEFT-TURN MOVEMENTS ALONG STH 190 DURING CLOSURE. PHASES 1 AND 5 MAY BE SKIPPED DURING CLOSURE.
4. ACCOMMODATE PEDESTRIANS ACROSS ALL OPEN CROSSINGS DURING CONSTRUCTION. SEE TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS PLANS FOR DETAILS. THE CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRIAN CROSSINGS.
5. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.

N

- VX VIDEO DETECTION CAMERA
- RX RADAR DETECTOR
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY YELLOW ARROW
- G GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)

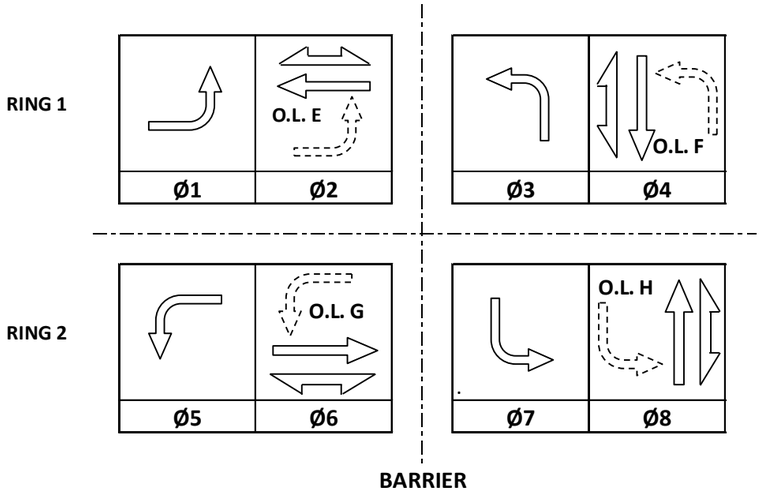
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- V COMMUNICATIONS VAULT
- Y YIELD SIGN
- S STOP SIGN
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTES:
ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 190 & LILLY RD
CITY OF BROOKFIELD
WAUKESHA COUNTY
SIGNAL NO. S67-0065
CABINET TYPE: TS-2
CONTROLLER TYPE: ECONOLITE
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF
PAGE 3 OF 4

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION STAGE 2	SHEET 291	E

	HEAD NUMBERS	FLASH
Ø1	5,6,7	R ←
Ø2	8,9,10,11	R
Ø3	18,19	R ←
Ø4	20,21,22	R
Ø5	12,13,14	R ←
Ø6	1,2,3,4	R
Ø7	23,24	R ←
Ø8	15,16,17	R
Ø2P	29,30	
Ø4P	25,26,27,28	
Ø6P	35,36	
Ø8P	31,32,33,34	
OLE	5,6,7	-
OLF	18,19	-
OLG	12,13,14	-
OLH	23,24	-



CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

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

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 00-58

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

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

Matrix detectors are on inputs 17-32. Advanced detectors are on inputs 49 and 50.

JMG 6/10/2021

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	11	23	31	51	63	71										21	PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	3	5	6	7										2	CALLED PHASE
CALL OPTION	X	X	X	X	X	X											CALL OPTION
DELAY TIME			X			X											DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X										X	EXTENTION OPTION
EXTEND TIME																	EXTEND TIME
USE ADDED INITIAL																	USE ADDED INITIAL
CROSS SWITCH PHASE																	CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	22	24	41	62	64	81										61	PLAN LOOP DETECTOR*(S)
CALLED PHASE	2	2	4	6	6	8										6	CALLED PHASE
CALL OPTION	X	X	X	X	X	X											CALL OPTION
DELAY TIME																	DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X										X	EXTENTION OPTION
EXTEND TIME																	EXTEND TIME
USE ADDED INITIAL																	USE ADDED INITIAL
CROSS SWITCH PHASE																	CROSS SWITCH PHASE

GENERAL NOTES MODIFIED FOR CONSTRUCTION:

1. REFER TO TRAFFIC CONTROL PEDESTRIAN ACCOMODATIONS PLANS FOR WHERE PEDESTRIANS ARE ACCOMODATED DURING CONSTRUCTION STAGING. CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRAIN CROSSINGS.
2. DURING STAGES 1 AND 1B, PHASES 4+7 AND 8+3 ARE TO OPERATE AS SPLIT PHASE AND SHALL NOT RUN CONCURRENTLY.
3. DURING STAGES 1 AND 1B, OMIT OVERLAPS O.L.F. AND O.L.H. DURING STAGE 2, O.L.F. AND O.L.H. MAY BE ACTIVE.
4. DURING STAGE 2, OMIT OVERLAPS O.L.E. AND O.L.G. DURING STAGES 1 AND 1B, O.L.E. AND O.L.G. MAY BE ACTIVE.

STH 190 (CAPITOL DR) & LILLY RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO: S67-0065	CABINET TYPE: TS2-S
	CONTROLLER TYPE: ECONOLITE
DATE: 2/2025	PAGE NUMBER: 4 OF 4

LEGEND

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

REMOVAL NOTES:
1. TRAFFIC SIGNAL TO REMAIN OPERATIONAL DURING REMOVAL.
2. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. THE EXISTING RADAR AND VIDEO DETECTION SYSTEM SHALL BE USED FOR TEMPORARY SIGNALS DURING CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETE, REMOVE AND SALVAGED RADAR DETECTORS AND VIDEO DETECTION CAMERAS AND CABLES AND RETURN TO THE SE REGION ELECTRICAL FIELD UNIT.

N

LILLY RD

STH 190

456+00 457+00 458+00 459+00 460+00 461+00

R/W

CANOPY

POST

GUY

- VX VIDEO DETECTION CAMERA
- RX RADAR DETECTOR
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD
- V COMMUNICATIONS VAULT
- Y YIELD SIGN
- S STOP SIGN

NOTES:
1. ALL LENSES ARE 12-INCH
2. GRAYSHADE REPRESENTS EXISTING TO REMAIN, BOLD REPRESENTS EXISTING TO BE REMOVED.
3. VIDEO DETECTION CAMERAS V1, V2, V3 & V4 ARE USED FOR INSYNC ADAPTIVE CONTROL. DETECTION ZONES ASSOCIATED WITH THESE CAMERAS ARE NOT SHOWN.
4. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.

MONOTUBE STRUCTURES
SB1 = S-67-1165
SB8 = S-67-1166
SB11 = S-67-1167
SB18 = S-67-1168

TRAFFIC CONTROL SIGNAL
STH 190 & LILLY RD
CITY OF BROOKFIELD
WAUKESHA COUNTY
CABINET TYPE: TS-2
SIGNAL NO. S67-0065 CONTROLLER TYPE: ECONOLITE
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF
PAGE 1 OF 1

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 293	E

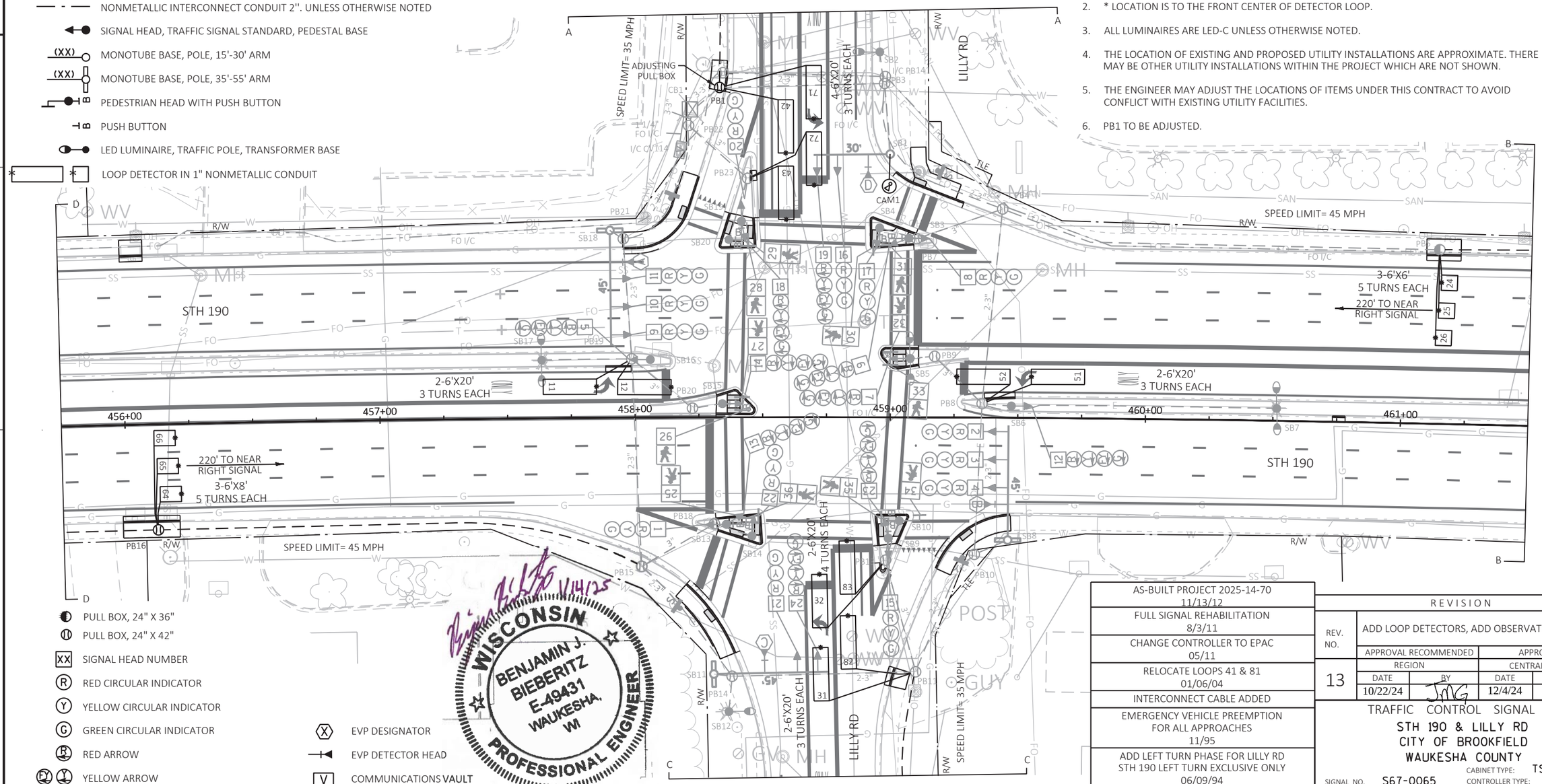
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LAYOUT NAME - 024011_SP - 024011_SP
PLOT DATE : 1/9/2025 2:53 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2". UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LED LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170.
2. * LOCATION IS TO THE FRONT CENTER OF DETECTOR LOOP.
3. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.
4. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
6. PB1 TO BE ADJUSTED.



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

- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD
- V COMMUNICATIONS VAULT
- CCTV CAMERA SITE

NOTES:
1. ALL LENSES ARE 12-INCH
2. GRAYSHADE REPRESENTS EXISTING TO REMAIN. BOLD REPRESENTS PROPOSED.

MONOTUBE STRUCTURES
SB1 = S-67-1165
SB8 = S-67-1166
SB11 = S-67-1167
SB18 = S-67-1168

WISCONSIN
BENJAMIN J. BIEBERITZ
E-49431
WAUKESHA, WI
PROFESSIONAL ENGINEER
11/14/25

AS-BUILT PROJECT 2025-14-70
11/13/12

FULL SIGNAL REHABILITATION
8/3/11

CHANGE CONTROLLER TO EPAC
05/11

RELOCATE LOOPS 41 & 81
01/06/04

INTERCONNECT CABLE ADDED

EMERGENCY VEHICLE PREEMPTION FOR ALL APPROACHES
11/95

ADD LEFT TURN PHASE FOR LILLY RD STH 190 LEFT TURN EXCLUSIVE ONLY
06/09/94

REMOVED PEDESTRIAN HEADS AT MEDIAN
06/11/91

LEFT TURN PHASE
1981

GREEN EXTENSION SYSTEM DETECTION
04/20/78

INITIAL INSTALL
01/06/56

AS-BUILT PER 2025-14-70; INSTALL FYA EB/WB; INSTALL 15-FT POLE ON SB3, SB6, SB13, SB15 AND SB16.
6/1/20

REPLACE CABINET & CONTROLLER; INSTALL INSYNC ADAPTIVE CONTROL & RADAR DETECTION
8/1/14

REVISION

REV. NO.	ADD LOOP DETECTORS, ADD OBSERVATION CAMERA			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
13	DATE	BY	DATE	BY
	10/22/24	JMG	12/4/24	JBI

11/15/24 JMM

TRAFFIC CONTROL SIGNAL
STH 190 & LILLY RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0065
CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

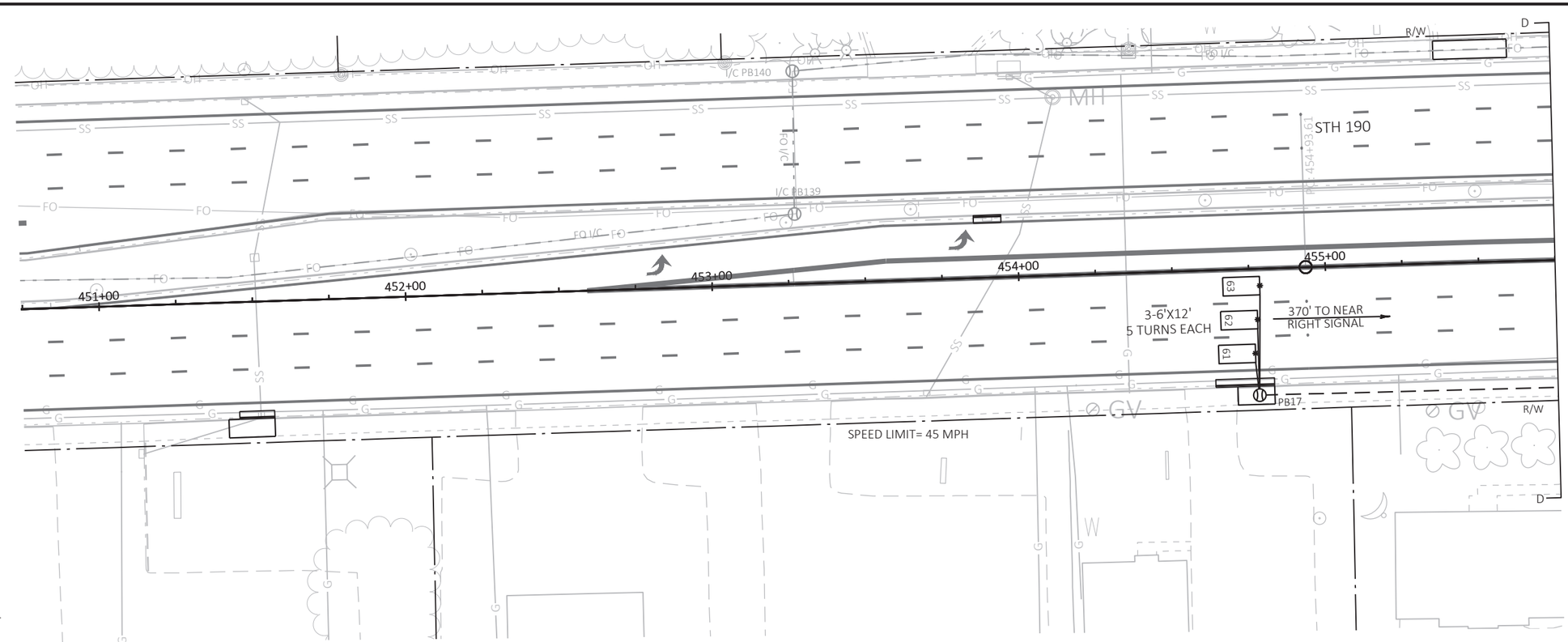
APPROVAL RECOMMENDED
DATE 4/8/81 JOHN A. WHITE
REGION TRAFFIC ENGINEER

APPROVED
DATE 4/29/81 H. O. PRICE
STATE TRAFFIC ENGINEER

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 294	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\04_LILLY\024021_SP.DWG
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PLOT DATE : 1/9/2025 2:54 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF



TRAFFIC CONTROL SIGNAL
STH 190 & LILLY RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0065

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

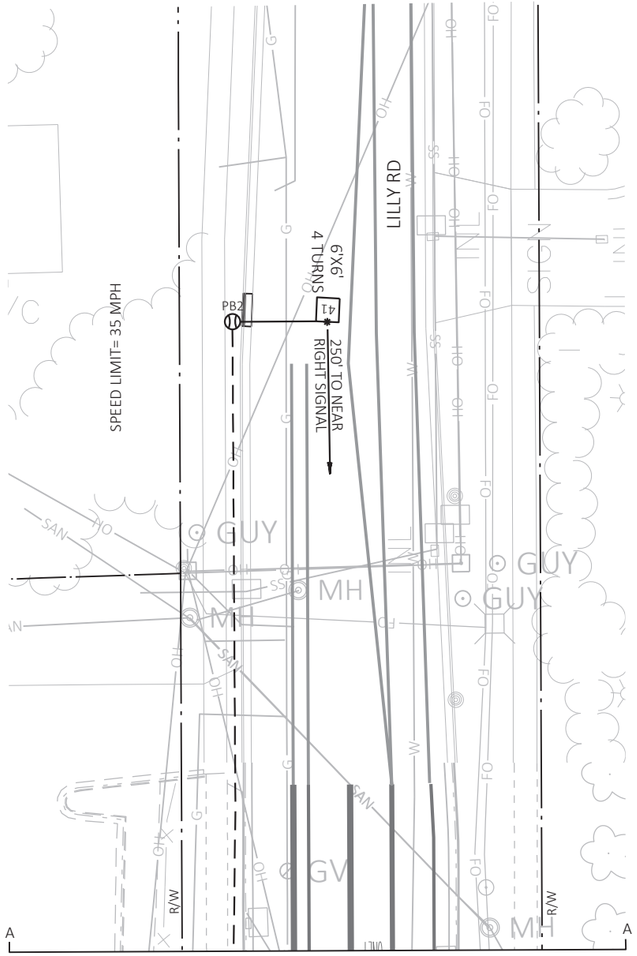
PAGE 2 OF 4

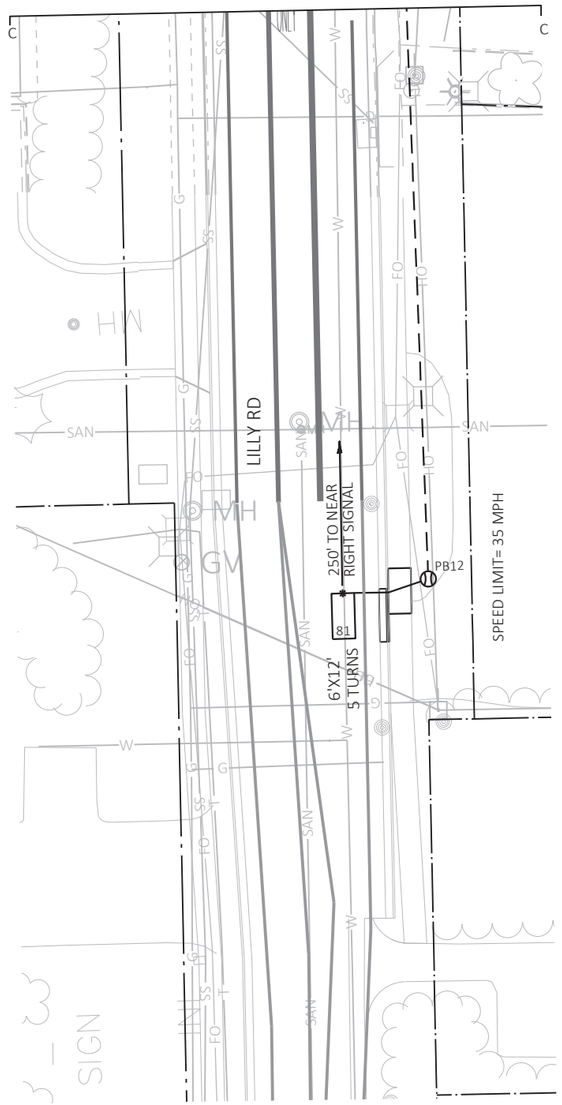
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 295	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\04_LILLY\024021_SP.DWG
LAYOUT NAME - 024021_SP - 024022_SP

PLOT DATE : 1/9/2025 2:54 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42





N

TRAFFIC CONTROL SIGNAL
STH 190 & LILLY RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0065

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 3 OF 4

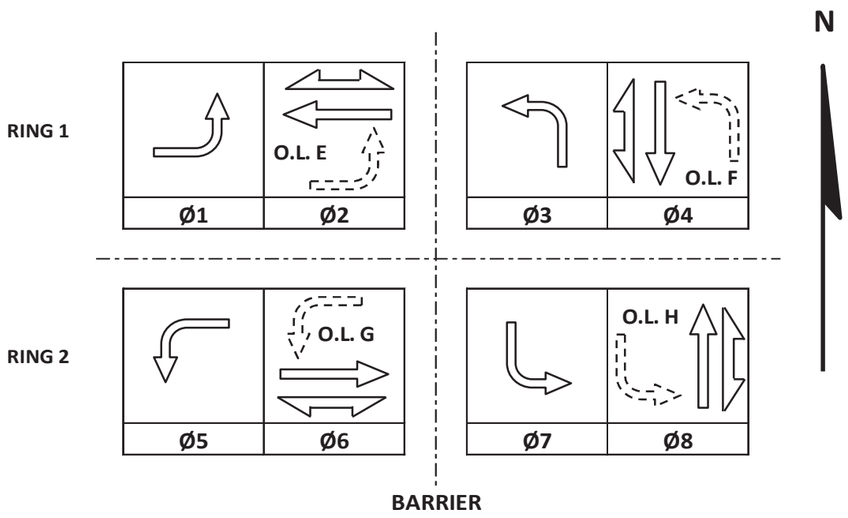
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 296	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\04_LILLY\024021_SP.DWG
LAYOUT NAME - 024021_SP - 024023_SP

PLOT DATE : 1/9/2025 2:55 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	5, 6, 7	R ←
Ø2	8, 9, 10, 11	R
Ø3	18, 19	R ←
Ø4	20, 21, 22	R
Ø5	12, 13, 14	R ←
Ø6	1, 2, 3, 4	R
Ø7	23, 24	R ←
Ø8	15, 16, 17	R
Ø2P	29, 30	
Ø4P	25, 26, 27, 28	
Ø6P	35, 36	
Ø8P	31, 32, 33, 34	
OLE	5, 6, 7	-
OLF	18, 19	-
OLG	12, 13, 14	-
OLH	23, 24	-



CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

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

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 00-58

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

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

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11	21	23	25	31	41	43	52
CALLED PHASE	1	2	2	2	3	4	4	5
CALL OPTION	X	X	X	X	X		X	X
DELAY TIME								
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME						X		
USE ADDED INITIAL		X	X	X				
CROSS SWITCH PHASE	2				4			6

DETECTOR INPUT	19	17	23	21	27	25	31	29
PLAN LOOP DETECTOR*(S)	62	64	66	72	82			
CALLED PHASE	6	6	6	7	8			
CALL OPTION	X	X	X	X	X			
DELAY TIME								
EXTENTION OPTION	X	X	X	X	X			
EXTEND TIME								
USE ADDED INITIAL	X	X	X					
CROSS SWITCH PHASE				8				

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	12	22	24	26	32	42	51	61
CALLED PHASE	1	2	2	2	3	4	5	6
CALL OPTION	X	X	X	X	X	X	X	X
DELAY TIME								
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME								
USE ADDED INITIAL		X	X	X				X
CROSS SWITCH PHASE	2				4		6	

DETECTOR INPUT	20	18	24	22	28	26	32	30
PLAN LOOP DETECTOR*(S)	63	65	71	81	83			
CALLED PHASE	6	6	7	8	8			
CALL OPTION	X	X	X		X			
DELAY TIME								
EXTENTION OPTION	X	X	X	X	X			
EXTEND TIME				X				
USE ADDED INITIAL	X	X						
CROSS SWITCH PHASE			8					

STH 190 & LILLY RD
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO: S67-0065 CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE
DATE: 2/2025 PAGE NO. 4 OF 4

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM

STAGING NOTES:

1. BAG OR REMOVE BAGS FROM SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
2. CABLING FOR THE INSTALLATION OF TEMPORARY SIGNAL HEADS SHALL BE FROM ADDITIONAL CABLES WITHIN THE POLE, OR FROM SPLICING EXISTING TRAFFIC SIGNAL CABLE WITHIN THE SIGNAL POLE. NO CABLING FORM THE CONTROL CABINET SHALL BE DONE FOR THE TEMPORARY SIGNALS.
3. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. INSYNC DETECTION ZONES (NOT SHOWN) PROGRAMMING TO BE UPDATED IN CONTROLLER TO ACCOUNT FOR CHANGES IN LANE CONFIGURATION AND LOCATION DURING STAGING.
4. ACCOMMODATE PEDESTRIANS ACROSS ALL OPEN CROSSINGS DURING STAGE 1B CONSTRUCTION. SEE TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS PLANS FOR DETAILS. THE CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRIAN CROSSINGS.
5. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.

N

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY Y YELLOW ARROW
- G GREEN ARROW
- X EVP DESIGNATOR
- RX XX RADAR DETECTOR
- VX VIDEO DETECTION CAMERA
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- EVP DETECTOR HEAD
- V COMMUNICATIONS VAULT
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTES:
ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 190 & 128TH ST
CITY OF BROOKFIELD
WAUKESHA COUNTY
SIGNAL NO. S67-0496
CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF
PAGE 1 OF 4

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION STAGE 1	SHEET 298	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\05_128TH\024101_SP.DWG
LAYOUT NAME - 024101_SP - 024101_SP
PLOT DATE : 1/9/2025 2:55 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM

STAGING NOTES:

1. BAG OR REMOVE BAGS FROM SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
2. CABLING FOR THE INSTALLATION OF TEMPORARY SIGNAL HEADS SHALL BE FROM ADDITIONAL CABLES WITHIN THE POLE, OR FROM SPLICING EXISTING TRAFFIC SIGNAL CABLE WITHIN THE SIGNAL POLE. NO CABLING FORM THE CONTROL CABINET SHALL BE DONE FOR THE TEMPORARY SIGNALS.
3. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. INSYNC DETECTION ZONES (NOT SHOWN) PROGRAMMING TO BE UPDATED IN CONTROLLER TO ACCOUNT FOR CHANGES IN LANE CONFIGURATION AND LOCATION DURING STAGING.
4. ACCOMMODATE PEDESTRIANS ACROSS ALL OPEN CROSSINGS DURING STAGE 1B CONSTRUCTION. SEE TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS PLANS FOR DETAILS. THE CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRIAN CROSSINGS.
5. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.

N

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY Y YELLOW ARROW
- G GREEN ARROW
- X EVP DESIGNATOR
- RX XX RADAR DETECTOR
- VX VIDEO DETECTION CAMERA
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- EVP DETECTOR HEAD
- V COMMUNICATIONS VAULT
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTES:
ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 190 & 128TH ST
CITY OF BROOKFIELD
WAUKESHA COUNTY
SIGNAL NO. S67-0496
CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF
PAGE 2 OF 4

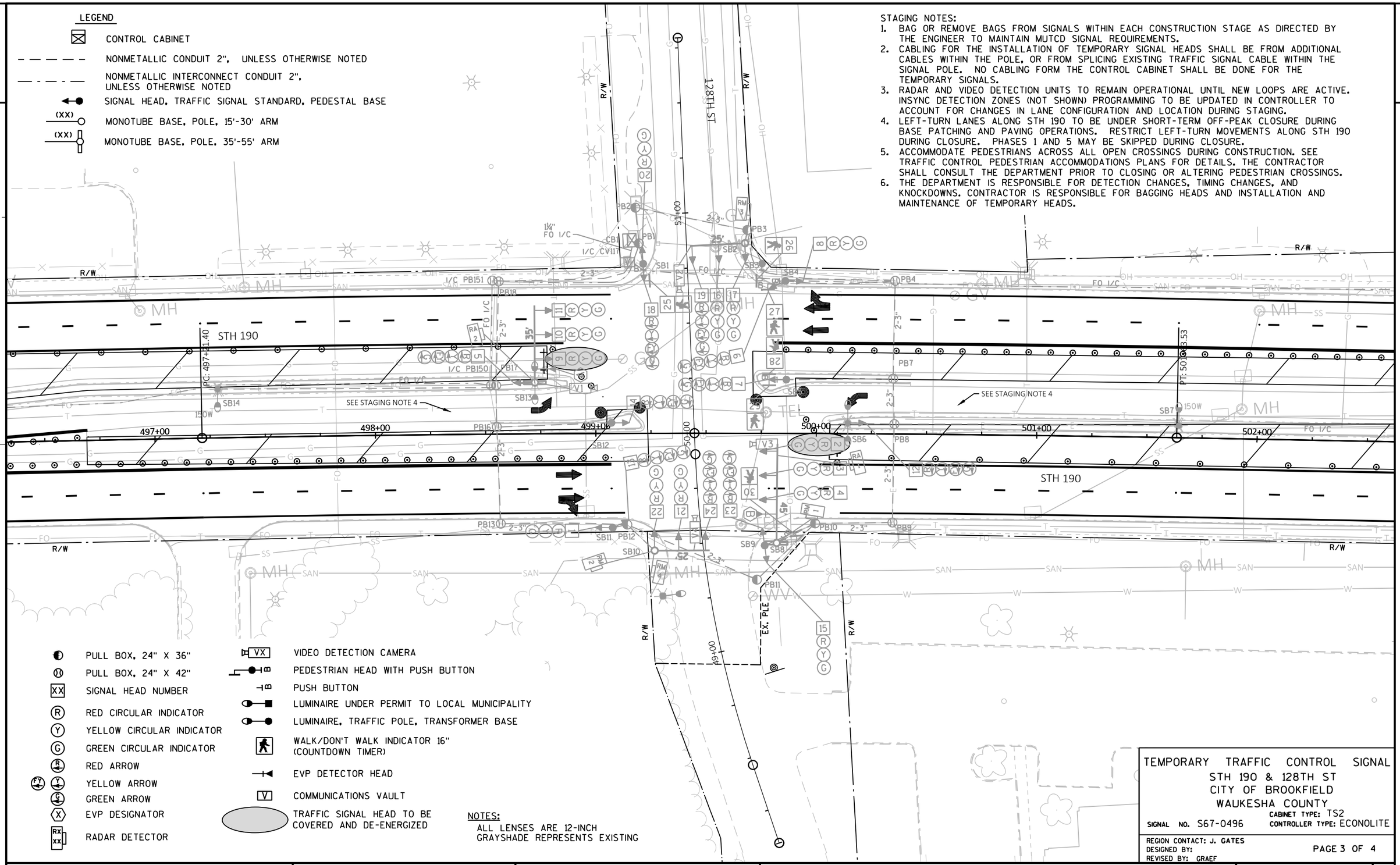
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION STAGE 1B	SHEET 299	E

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM

STAGING NOTES:

1. BAG OR REMOVE BAGS FROM SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
2. CABLING FOR THE INSTALLATION OF TEMPORARY SIGNAL HEADS SHALL BE FROM ADDITIONAL CABLES WITHIN THE POLE, OR FROM SPLICING EXISTING TRAFFIC SIGNAL CABLE WITHIN THE SIGNAL POLE. NO CABLING FORM THE CONTROL CABINET SHALL BE DONE FOR THE TEMPORARY SIGNALS.
3. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. INSYNC DETECTION ZONES (NOT SHOWN) PROGRAMMING TO BE UPDATED IN CONTROLLER TO ACCOUNT FOR CHANGES IN LANE CONFIGURATION AND LOCATION DURING STAGING.
4. LEFT-TURN LANES ALONG STH 190 TO BE UNDER SHORT-TERM OFF-PEAK CLOSURE DURING BASE PATCHING AND PAVING OPERATIONS. RESTRICT LEFT-TURN MOVEMENTS ALONG STH 190 DURING CLOSURE. PHASES 1 AND 5 MAY BE SKIPPED DURING CLOSURE.
5. ACCOMMODATE PEDESTRIANS ACROSS ALL OPEN CROSSINGS DURING CONSTRUCTION. SEE TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS PLANS FOR DETAILS. THE CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRIAN CROSSINGS.
6. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.



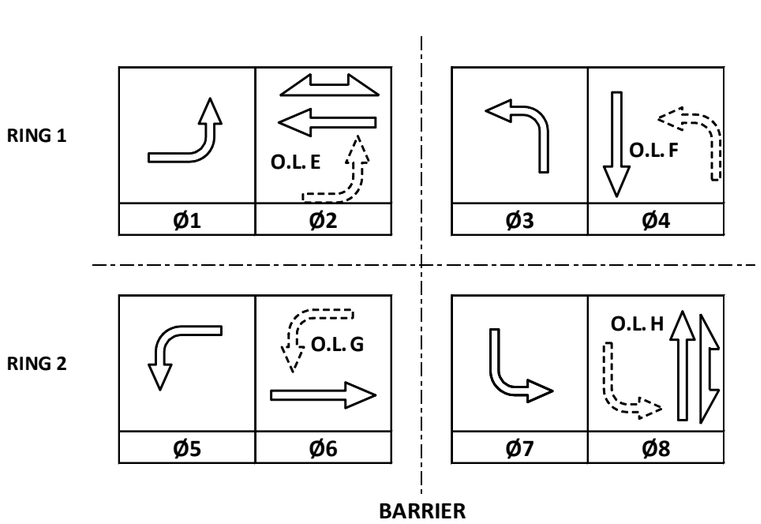
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RA RED ARROW
- FY YA YELLOW ARROW
- GA GREEN ARROW
- X EVP DESIGNATOR
- RX XX RADAR DETECTOR
- VX VIDEO DETECTION CAMERA
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- EVP DETECTOR HEAD
- V COMMUNICATIONS VAULT
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTES:
ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 190 & 128TH ST
CITY OF BROOKFIELD
WAUKESHA COUNTY
CABINET TYPE: TS2
SIGNAL NO. S67-0496 CONTROLLER TYPE: ECONOLITE
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF
PAGE 3 OF 4

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION STAGE 2	SHEET 300	E

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





CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	←	→		
PHASE	2+5	6+1		

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.

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

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 00-58

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

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

DETECTOR LOGIC

DETECTOR INPUT	17	19	21	23	25	27	29	31
PLAN LOOP DETECTOR*(S)	11	23	31	51	63	71		
CALLED PHASE	1	2	3	5	6	7		
CALL OPTION	X	X	X	X	X	X		
DELAY TIME			X			X		
EXTENTION OPTION	X	X	X	X	X	X		
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE	2		4	6		8		

							49	DETECTOR INPUT
							21	PLAN LOOP DETECTOR*(S)
							2	CALLED PHASE
								CALL OPTION
								DELAY TIME
							X	EXTENTION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	18	20	22	24	26	28	30	32
PLAN LOOP DETECTOR*(S)	22	24	41	62	64	81		
CALLED PHASE	2	2	4	6	6	8		
CALL OPTION	X	X	X	X		X		
DELAY TIME	X		X			X		
EXTENTION OPTION	X	X	X	X	X	X		
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

							50	DETECTOR INPUT
							61	PLAN LOOP DETECTOR*(S)
							6	CALLED PHASE
								CALL OPTION
								DELAY TIME
							X	EXTENTION OPTION
								TEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

GENERAL NOTES MODIFIED FOR CONSTRUCTION:

1. REFER TO TRAFFIC CONTROL PEDESTRIAN ACCOMODATIONS PLANS FOR WHERE PEDESTRIANS ARE ACCOMODATED DURING CONSTRUCTION STAGING. CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRAIN CROSSINGS.
2. DURING STAGES 1 AND 1B, PHASES 4+7 AND 8+3 ARE TO OPERATE AS SPLIT PHASE AND SHALL NOT RUN CONCURRENTLY.
3. DURING STAGES 1 AND 1B, OMIT OVERLAP O.L.F. AND O.L.H. DURING STAGE 2, O.L.F. AND O.L.H. MAY BE ACTIVE.
4. DURING STAGE 2, OMIT OVERLAP O.L.E. AND O.L.G. DURING STAGES 1 AND 1B, O.L.E. AND O.L.G. MAY BE ACTIVE.

STH 190 & 128TH STREET
CITY OF BROOKFIELD
WAUKESHA COUNTY

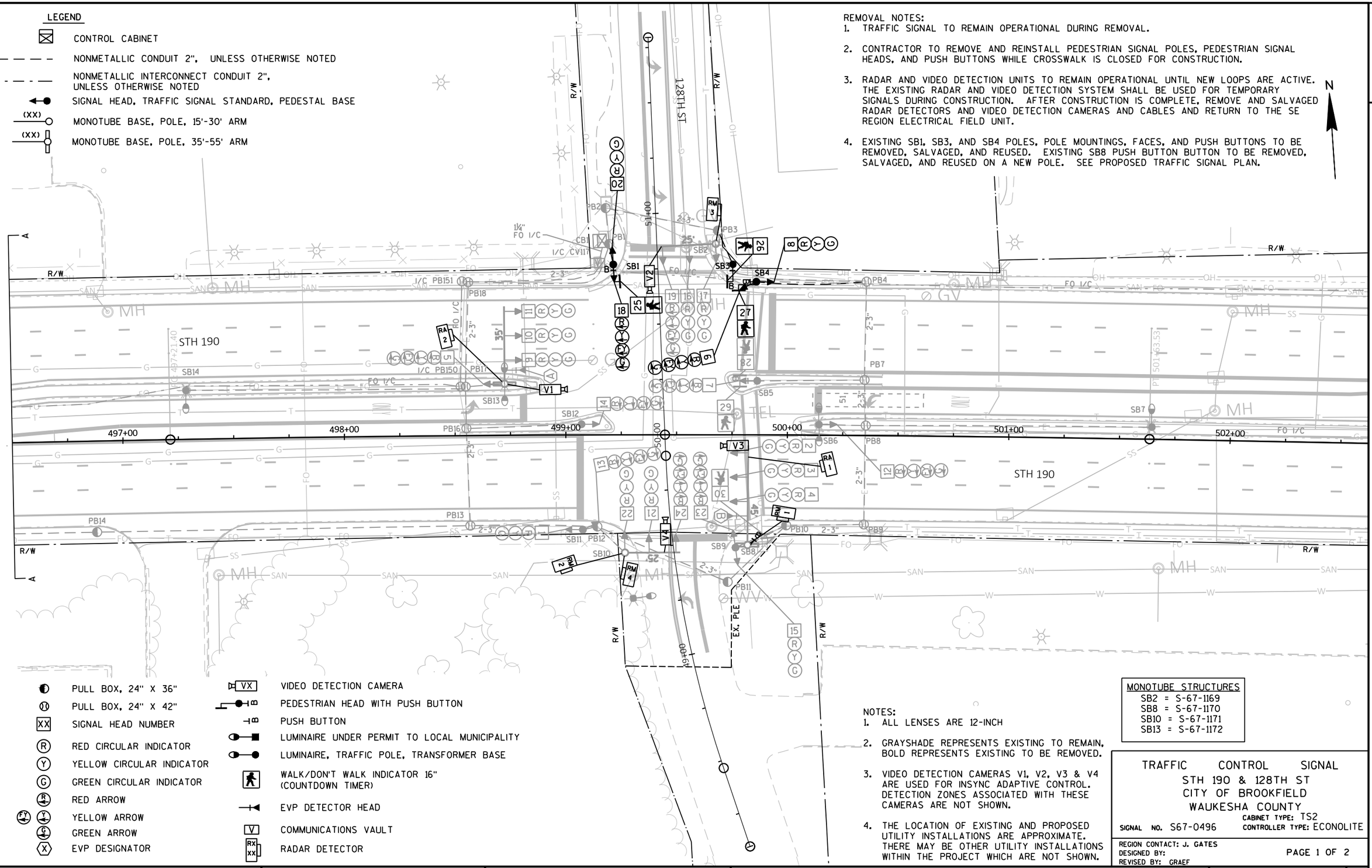
SIGNAL NO: S67-0496 CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
DATE: 2/2025 PAGE: 4 OF 4

2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM

REMOVAL NOTES:
1. TRAFFIC SIGNAL TO REMAIN OPERATIONAL DURING REMOVAL.
2. CONTRACTOR TO REMOVE AND REINSTALL PEDESTRIAN SIGNAL POLES, PEDESTRIAN SIGNAL HEADS, AND PUSH BUTTONS WHILE CROSSWALK IS CLOSED FOR CONSTRUCTION.
3. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. THE EXISTING RADAR AND VIDEO DETECTION SYSTEM SHALL BE USED FOR TEMPORARY SIGNALS DURING CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETE, REMOVE AND SALVAGED RADAR DETECTORS AND VIDEO DETECTION CAMERAS AND CABLES AND RETURN TO THE SE REGION ELECTRICAL FIELD UNIT.
4. EXISTING SB1, SB3, AND SB4 POLES, POLE MOUNTINGS, FACES, AND PUSH BUTTONS TO BE REMOVED, SALVAGED, AND REUSED. EXISTING SB8 PUSH BUTTON BUTTON TO BE REMOVED, SALVAGED, AND REUSED ON A NEW POLE. SEE PROPOSED TRAFFIC SIGNAL PLAN.



- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- X EVP DESIGNATOR
- VX VIDEO DETECTION CAMERA
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- EVP DETECTOR HEAD
- V COMMUNICATIONS VAULT
- RX XX RADAR DETECTOR

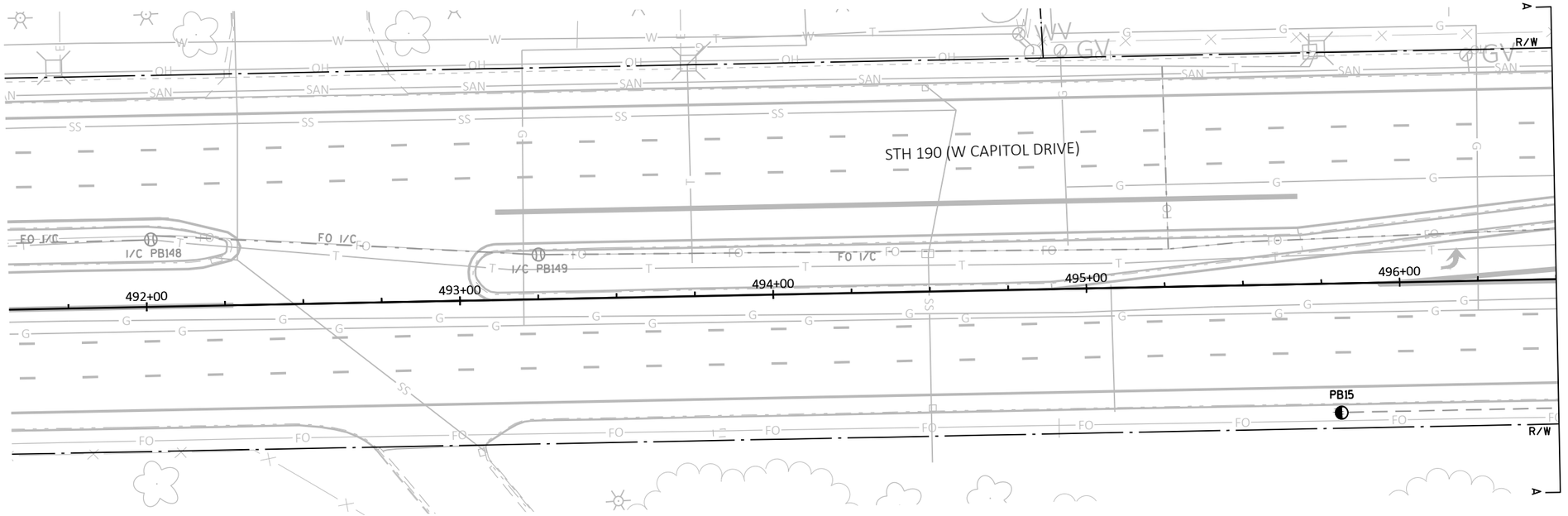
NOTES:
1. ALL LENSES ARE 12-INCH
2. GRAYSHADE REPRESENTS EXISTING TO REMAIN, BOLD REPRESENTS EXISTING TO BE REMOVED.
3. VIDEO DETECTION CAMERAS V1, V2, V3 & V4 ARE USED FOR INSYNC ADAPTIVE CONTROL. DETECTION ZONES ASSOCIATED WITH THESE CAMERAS ARE NOT SHOWN.
4. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.

MONOTUBE STRUCTURES
SB2 = S-67-1169
SB8 = S-67-1170
SB10 = S-67-1171
SB13 = S-67-1172

TRAFFIC CONTROL SIGNAL
STH 190 & 128TH ST
CITY OF BROOKFIELD
WAUKESHA COUNTY
SIGNAL NO. S67-0496
CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF
PAGE 1 OF 2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 302	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\05_128TH\024011_SP.DWG
LAYOUT NAME - 024011_SP - 024011_SP
PLOT DATE : 1/9/2025 2:56 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42



TRAFFIC CONTROL SIGNAL
STH 190 & 128TH ST
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0496
CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 2 OF 2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 303	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\05_128TH\024011_SP.DWG
LAYOUT NAME - 024011_SP - 024012_SP

PLOT DATE : 1/9/2025 2:56 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : **********

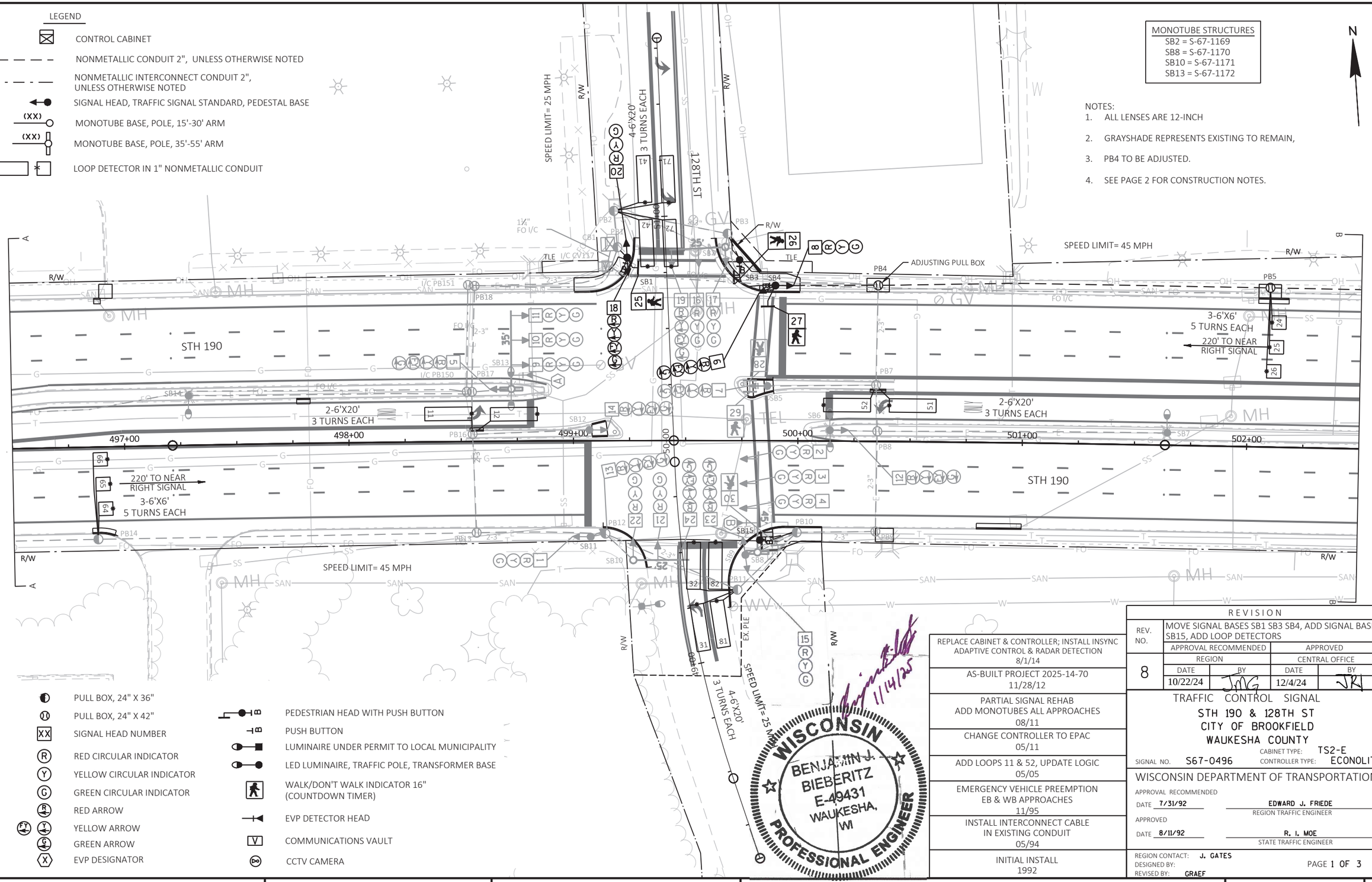
WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT

MONOTUBE STRUCTURES
SB2 = S-67-1169
SB8 = S-67-1170
SB10 = S-67-1171
SB13 = S-67-1172

NOTES:
1. ALL LENSES ARE 12-INCH
2. GRAYSHADE REPRESENTS EXISTING TO REMAIN,
3. PB4 TO BE ADJUSTED.
4. SEE PAGE 2 FOR CONSTRUCTION NOTES.



- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- X EVP DESIGNATOR
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LED LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- EVP DETECTOR HEAD
- V COMMUNICATIONS VAULT
- CCTV CAMERA

REPLACE CABINET & CONTROLLER; INSTALL INSYNC ADAPTIVE CONTROL & RADAR DETECTION 8/1/14	
AS-BUILT PROJECT 2025-14-70 11/28/12	
PARTIAL SIGNAL REHAB ADD MONOTUBES ALL APPROACHES 08/11	
CHANGE CONTROLLER TO EPAC 05/11	
ADD LOOPS 11 & 52, UPDATE LOGIC 05/05	
EMERGENCY VEHICLE PREEMPTION EB & WB APPROACHES 11/95	
INSTALL INTERCONNECT CABLE IN EXISTING CONDUIT 05/94	
INITIAL INSTALL 1992	

REVISION

REV. NO.				
	MOVE SIGNAL BASES SB1 SB3 SB4, ADD SIGNAL BASE SB15, ADD LOOP DETECTORS			
	APPROVAL RECOMMENDED		APPROVED	
8	REGION		CENTRAL OFFICE	
	DATE	BY	DATE	BY
	10/22/24	JMG	12/4/24	JKJ

TRAFFIC CONTROL SIGNAL
STH 190 & 128TH ST
CITY OF BROOKFIELD
WAUKESHA COUNTY
SIGNAL NO. S67-0496
CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVAL RECOMMENDED
DATE 7/31/92 — EDWARD J. FRIEDE, REGION TRAFFIC ENGINEER
APPROVED
DATE 8/11/92 — R. I. MOE, STATE TRAFFIC ENGINEER

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

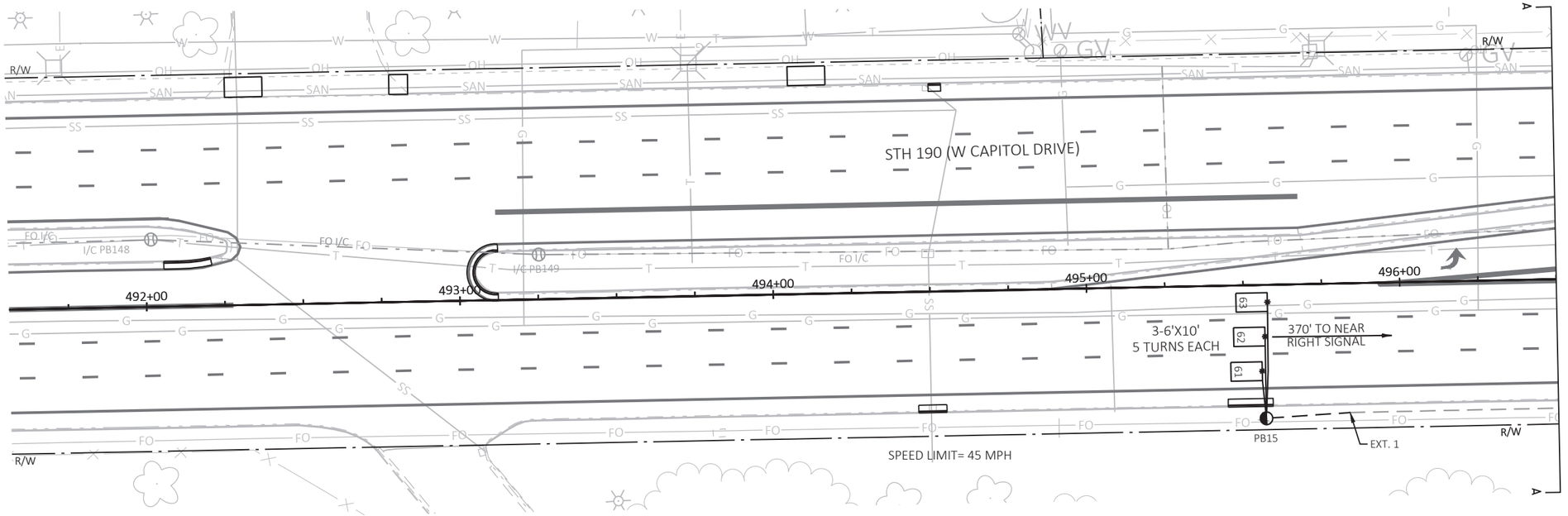
PAGE 1 OF 3

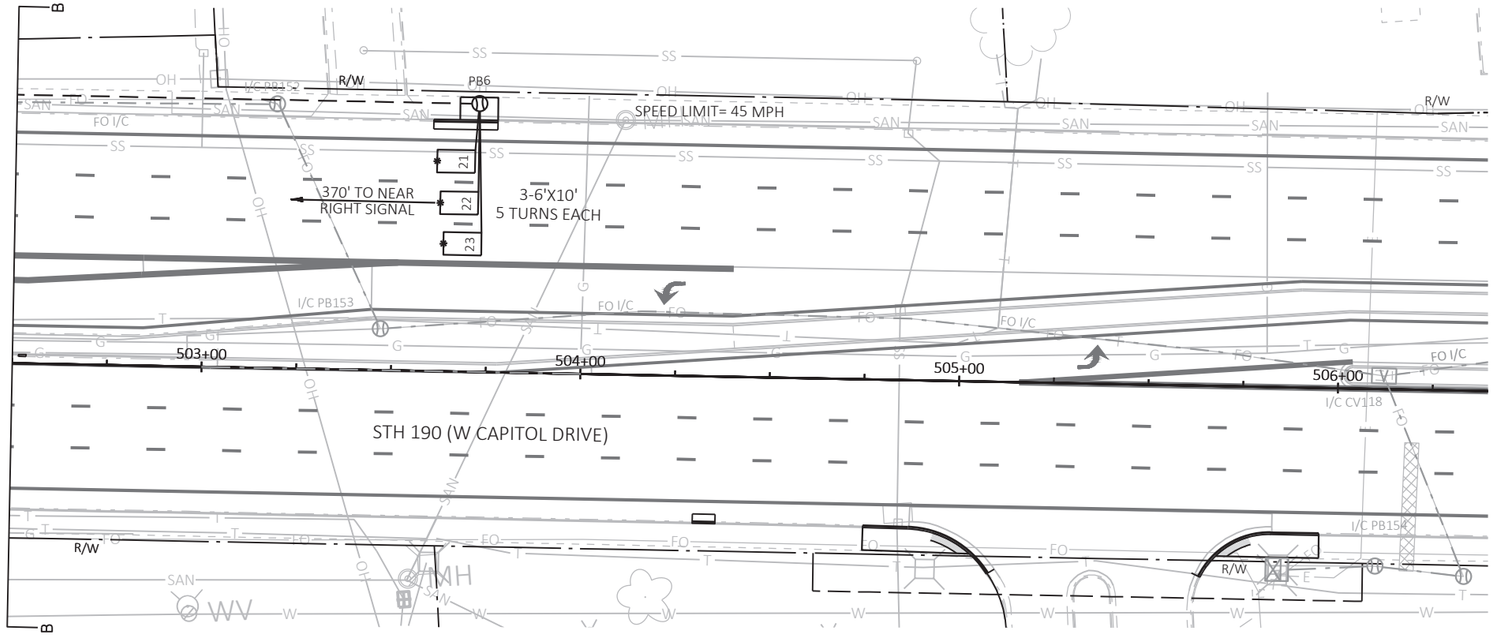
WISCONSIN BENJAMIN J. BIEBERITZ E-49431 WAUKESHA, WI PROFESSIONAL ENGINEER
11/14/25

11/15/24 JMM

PROJECT NO:	HWY:	COUNTY:		SHEET	
2025-03-73	STH 190	WAUKESHA	TRAFFIC SIGNAL PLAN	304	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\05_128TH\024021_SP.DWG
LAYOUT NAME - 024021_SP - 024021_SP
PLOT DATE : 1/9/2025 2:57 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF





CONSTRUCTION NOTES:

1. REUSE EXISTING POLES, POLE MOUNTINGS, FACES, AND PUSH BUTTONS FOR SB1, SB3, AND SB4. REUSE EXISTING PUSH BUTTON SALVAGED FROM SB8 TO NEW SB15. SEE TRAFFIC SIGNAL REMOVAL PLAN.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170.
3. * LOCATION IS TO THE FRONT CENTER OF DETECTOR LOOP.
4. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.
5. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
6. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.

TRAFFIC CONTROL SIGNAL
STH 190 & 128TH ST
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0496

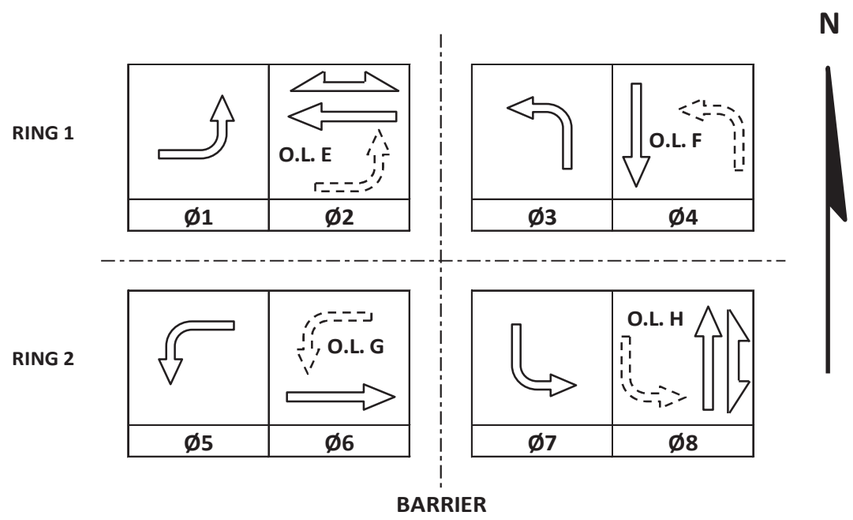
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 305	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\05_128TH\024021_SP.DWG
LAYOUT NAME - 024021_SP - 024022_SP

PLOT DATE : 1/9/2025 2:57 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF

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



CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	←	→		
PHASE	2+5	6+1		

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.

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

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 00-58

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

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

DETECTOR LOGIC

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

DETECTOR INPUT	19	17	23	21	27	25	31	29
PLAN LOOP DETECTOR*(S)	63	65	71	81				
CALLED PHASE	6	6	7	8				
CALL OPTION	X	X	X	X				
DELAY TIME				X				
EXTENTION OPTION	X	X	X	X				
EXTEND TIME								
USE ADDED INITIAL	X	X						
CROSS SWITCH PHASE			8					

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

DETECTOR INPUT	20	18	24	22	28	26	32	30
PLAN LOOP DETECTOR*(S)	64	66	72	82				
CALLED PHASE	6	6	7	8				
CALL OPTION	X	X	X	X				
DELAY TIME				X				
EXTENTION OPTION	X	X	X	X				
EXTEND TIME								
USE ADDED INITIAL	X	X						
CROSS SWITCH PHASE			8					

STH 190 & 128TH ST
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO: S67-0496 CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
DATE: 2/2025 PAGE NO. 3 OF 3

PROJECT ID:	2025-03-73
INTERSECTION:	STH 190 & 128TH ST

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

			SIGNAL INDICATION WIRE COLOR									PED BUTTON
CB1 TO	AWG14 # OF CONDUCTORS	HEAD NO.	RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	FLASHING <YELLOW>	D/WALK	WALK	
SB1	15	18				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
		20	RED	ORG	GRN							
		25								BLK	BLU	
		B										WHT/BLK
SB2	15	16	RED	ORG	GRN							
		17	RED	ORG	GRN							
		19				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
SB3	7	26								BLK	BLU	
		B										WHT/BLK
SB4	12	6				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
		8	RED	ORG	GRN							
		27								BLK	BLU	
		B										WHT/BLK
SB5	12	7				RED	ORG	GRN	BLK/WHT			
		28								BLK	BLU	
		29								BLK	BLU	
		B										WHT/BLK
SB6	12	12				RED	ORG	GRN	BLK/WHT			
SB8	12	2	RED	ORG	GRN							
		3	RED	ORG	GRN							
		4	RED	ORG	GRN							
		30								BLK	BLU	
		B										WHT/BLK
SB9	12	15	RED	ORG	GRN							
		23				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
SB10	12	21	RED	ORG	GRN							
		22	RED	ORG	GRN							
		24				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
SB11	12	1	RED	ORG	GRN							
		13				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
SB12	12	14				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
SB13	12	5				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
		9	RED	ORG	GRN							
		10	RED	ORG	GRN							
		11	RED	ORG	GRN							
SB15	7	B										WHT/BLK

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB15
SB15	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	CB1
PB2	CB1
PB3	SB2
PB4	SB4
PB7	SB5
PB8	SB6
PB9	SB8
PB10	SB8
PB12	SB11
PB13	SB11
PB16	SB12
PB17	SB13
PB18	CB1
PB19	SB7

EMERGENCY VEHICLE PREEMPTION	
FROM	TO
CB1	HEAD A (SB13)
CB1	HEAD B (SB8)

LIGHTING UF 10 AWG W/ GROUND	
FROM	TO
CB1	SB2
SB2	SB6
SB6	SB7
CB1	SB13
SB13	SB14

NOTES:
*USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
*ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
*RECONNECT THE GROUNDING CONDUCTORS WHENEVER THE CIRCUIT HAS BEEN INTERRUPTED TO ENSURE THE GROUNDING CIRCUIT IS COMPLETE.

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- EVP DETECTOR HEAD
- X EVP DESIGNATOR
- RX XX RADAR DETECTOR
- VX VIDEO DETECTION CAMERA
- V COMMUNICATIONS VAULT
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTES:
ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

STAGING NOTES:
1. BAG OR REMOVE BAGS FROM SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
2. CABLING FOR THE INSTALLATION OF TEMPORARY SIGNAL HEADS SHALL BE FROM ADDITIONAL CABLES WITHIN THE POLE, OR FROM SPLICING EXISTING TRAFFIC SIGNAL CABLE WITHIN THE SIGNAL POLE. NO CABLING FORM THE CONTROL CABINET SHALL BE DONE FOR THE TEMPORARY SIGNALS.
3. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. INSYNC DETECTION ZONES (NOT SHOWN) PROGRAMMING TO BE UPDATED IN CONTROLLER TO ACCOUNT FOR CHANGES IN LANE CONFIGURATION AND LOCATION DURING STAGING.

STAGING NOTES:
4. ACCOMMODATE PEDESTRIANS ACROSS ALL OPEN CROSSINGS DURING CONSTRUCTION. SEE TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS PLANS FOR DETAILS. THE CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRIAN CROSSINGS.
5. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.
6. DURING THE SHORT-TERM CLOSURE OF THE EASTBOUND RIGHT-TURN SLIP-LANE, BAG HEADS 8 AND 9 AND OMIT PHASE O.L.B

STH 190 & 124TH ST
124TH ST
SEE STAGING NOTE 6.
GUY
OLD
OLB
OLC

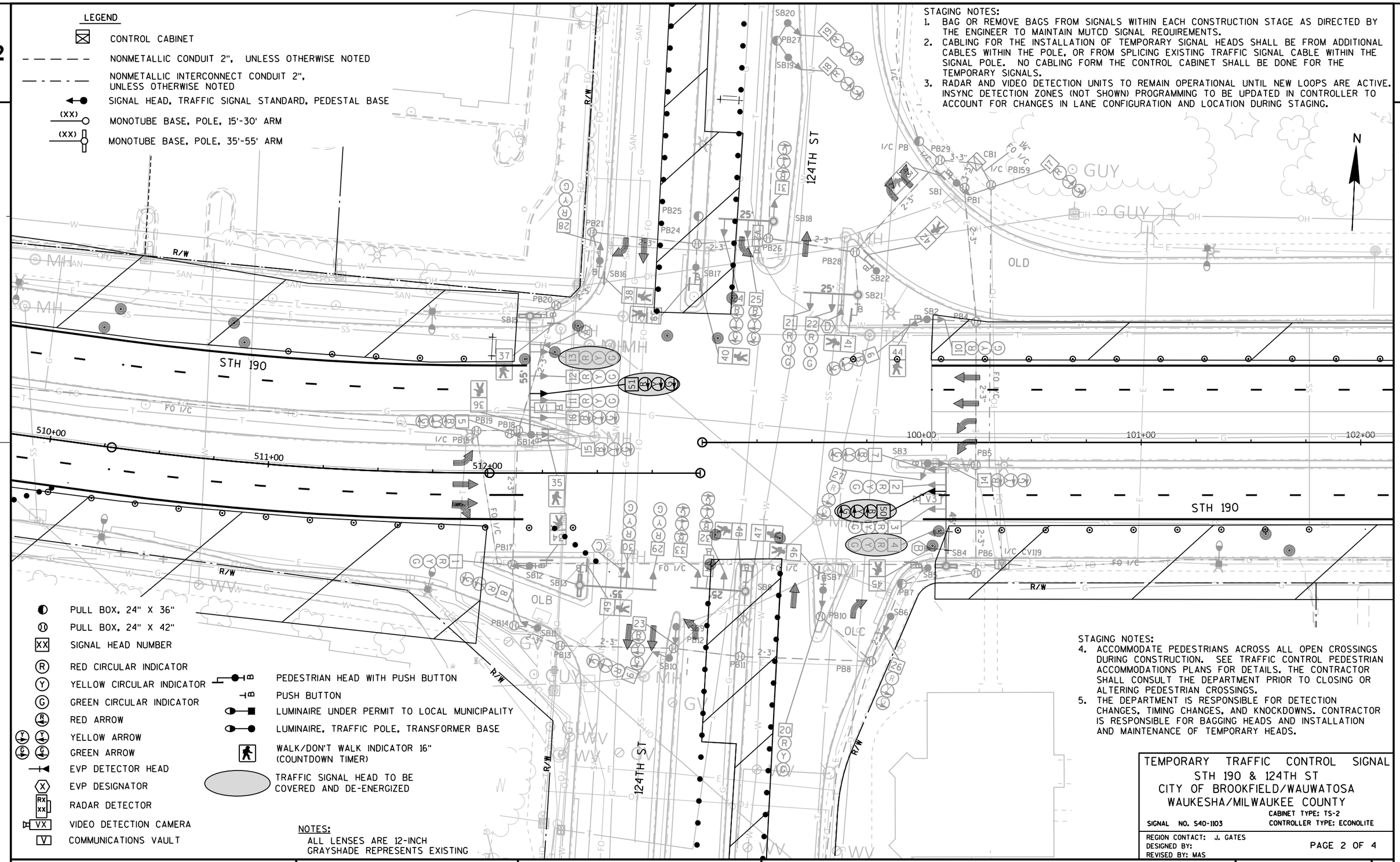
TEMPORARY TRAFFIC CONTROL SIGNAL
STH 190 & 124TH ST
CITY OF BROOKFIELD/WAUWATOSA
WAUKESHA/MILWAUKEE COUNTY
SIGNAL NO. S40-1103
CABINET TYPE: TS-2
CONTROLLER TYPE: ECONOLITE
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: MAS
PAGE 1 OF 4

PROJECT NO:2025-03-73	HWY: STH 190	COUNTY: WAUKESHA/MILWAUKEE	MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION STAGE 1	SHEET 308	E

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM

STAGING NOTES:
1. BAG OR REMOVE BAGS FROM SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
2. CABLING FOR THE INSTALLATION OF TEMPORARY SIGNAL HEADS SHALL BE FROM ADDITIONAL CABLES WITHIN THE POLE, OR FROM SPLICING EXISTING TRAFFIC SIGNAL CABLE WITHIN THE SIGNAL POLE. NO CABLING FORM THE CONTROL CABINET SHALL BE DONE FOR THE TEMPORARY SIGNALS.
3. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. INSYNC DETECTION ZONES (NOT SHOWN) PROGRAMMING TO BE UPDATED IN CONTROLLER TO ACCOUNT FOR CHANGES IN LANE CONFIGURATION AND LOCATION DURING STAGING.



- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- EVP DETECTOR HEAD
- X EVP DESIGNATOR
- RX XX RADAR DETECTOR
- VX VIDEO DETECTION CAMERA
- V COMMUNICATIONS VAULT
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTES:
ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

STAGING NOTES:
4. ACCOMMODATE PEDESTRIANS ACROSS ALL OPEN CROSSINGS DURING CONSTRUCTION. SEE TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS PLANS FOR DETAILS. THE CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRIAN CROSSINGS.
5. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 190 & 124TH ST
CITY OF BROOKFIELD/WAUWATOSA
WAUKESHA/MILWAUKEE COUNTY
CABINET TYPE: TS-2
SIGNAL NO. S40-1103
CONTROLLER TYPE: ECONOLITE
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: MAS
PAGE 2 OF 4

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA/MILWAUKEE	MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION STAGE 1B	SHEET 309	E

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM

STAGING NOTES:
1. BAG OR REMOVE BAGS FROM SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
2. CABLING FOR THE INSTALLATION OF TEMPORARY SIGNAL HEADS SHALL BE FROM ADDITIONAL CABLES WITHIN THE POLE, OR FROM SPLICING EXISTING TRAFFIC SIGNAL CABLE WITHIN THE SIGNAL POLE. NO CABLING FORM THE CONTROL CABINET SHALL BE DONE FOR THE TEMPORARY SIGNALS.
3. RADAR AND VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. INSYNC DETECTION ZONES (NOT SHOWN) PROGRAMMING TO BE UPDATED IN CONTROLLER TO ACCOUNT FOR CHANGES IN LANE CONFIGURATION AND LOCATION DURING STAGING.

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- EVP DETECTOR HEAD
- X EVP DESIGNATOR
- RX XX RADAR DETECTOR
- VX VIDEO DETECTION CAMERA
- V COMMUNICATIONS VAULT
- B PEDESTRIAN HEAD WITH PUSH BUTTON
- B PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTES:
ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

STAGING NOTES:
4. ACCOMMODATE PEDESTRIANS ACROSS ALL OPEN CROSSINGS DURING CONSTRUCTION. SEE TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS PLANS FOR DETAILS. THE CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRIAN CROSSINGS.
5. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 190 & 124TH ST
CITY OF BROOKFIELD/WAUWATOSA
WAUKESHA/MILWAUKEE COUNTY

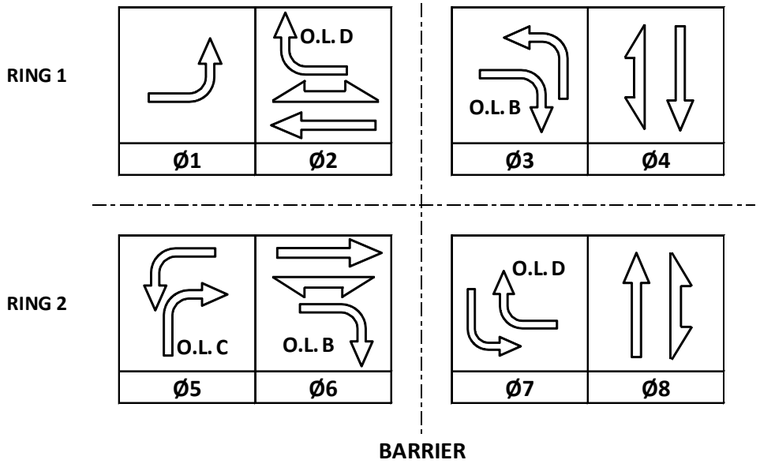
SIGNAL NO. S40-1103
CABINET TYPE: TS-2
CONTROLLER TYPE: ECONOLITE

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: MAS

PAGE 3 OF 4

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA/MILWAUKEE	MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION STAGE 2	SHEET 310 E

	HEAD NUMBERS	FLASH
Ø1	5,6,7,50	R ←
Ø2	10,11,12,13	R
Ø3	23,24,25	R ←
Ø4	28,29,30	R
Ø5	14,15,16,51	R ←
Ø6	1,2,3,4	R
Ø7	31,32,33	R ←
Ø8	20,21,22	R
Ø2P	38,39,40,41	
Ø4P	34,35,36,37	
Ø6P	46,47,48,49	
Ø8P	42,43,44,45	
OLB	8,9	R
OLC	26,27	R
OLD	17,18,19	R





CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	←	→	↓	↑
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

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

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 00-58

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

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

DETECTOR LOGIC

DETECTOR CHANNEL	17	19	21	23	25	27	29	31
PLAN LOOP DETECTOR*(S)	11	32	42	51	71	81	23	71
CALLED PHASE	1	3	4	5	7	8	2	7
CALL OPTION	X	X	X	X	X	X	X	X
DELAY TIME				X				
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

DETECTOR CHANNEL	18	20	22	24	26	28	30	32
PLAN LOOP DETECTOR*(S)	31	41	43	52	72	82	63	72
CALLED PHASE	3	4	4	5	7	8	6	7
CALL OPTION	X	X	X	X	X	X	X	X
DELAY TIME		X						
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

DETECTOR CHANNEL	33						5	49
PLAN LOOP DETECTOR*(S)	81						22	21
CALLED PHASE	8						2	2
CALL OPTION	X						X	X
DELAY TIME								
EXTENTION OPTION	X						X	X
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

DETECTOR CHANNEL	34						52	50
PLAN LOOP DETECTOR*(S)	82						62	61
CALLED PHASE	8						6	6
CALL OPTION	X						X	X
DELAY TIME								
EXTENTION OPTION	X						X	X
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

GENERAL NOTES MODIFIED FOR CONSTRUCTION:

1. REFER TO TRAFFIC CONTROL PEDESTRIAN ACCOMODATIONS PLANS FOR WHERE PEDESTRIANS ARE ACCOMODATED DURING CONSTRUCTION STAGING. CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRAIN CROSSINGS.
2. DURING THE SHORT-TERM CLOSURE OF THE EASTBOUND RIGHT-TURN SLIP-LANE DURING CONSTRUCTION STAGE 1, OMIT O.L.B.
3. OMIT OVERLAP O.L.C. DURING STAGE 1.
   DURING STAGES 1B AND 2, O.L.C. MAY BE ACTIVE.
4. DURING STAGE 2, PHASES 1 AND 5 SHALL NOT RUN CONCURRENTLY.

STH 190 & 124TH ST
CITY OF BROOKFIELD / WAUWATOSA
WAUKESHA/MILWAUKEE COUNTY
SIGNAL NO: S40-1103 CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
DATE: 2/2025 PAGE: 4 OF 4

2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM

REMOVAL NOTES:
1. TRAFFIC SIGNAL TO REMAIN OPERATIONAL DURING REMOVAL.
2. VIDEO DETECTION UNITS TO REMAIN OPERATIONAL UNTIL NEW LOOPS ARE ACTIVE. THE EXISTING VIDEO DETECTION SYSTEM SHALL BE USED FOR TEMPORARY SIGNALS DURING CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETE, REMOVE AND SALVAGED VIDEO DETECTION CAMERAS AND CABLE AND RETURN TO THE SE REGION ELECTRICAL FIELD UNIT.
3. EXISTING SB7, SB16, AND SB17 POLES, POLE MOUNTINGS, FACES, AND PUSH BUTTONS TO BE REMOVED, SALVAGED, AND REUSED. SEE PROPOSED TRAFFIC SIGNAL PLAN.

N

STH 190

124TH ST

R/W

10+00 511+00 512+00 100+00 101+00

SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10 SB11 SB12 SB13 SB14 SB15 SB16 SB17 SB18 SB19 SB20 SB21 SB22

PB1 PB4 PB5 PB6 PB7 PB8 PB10 PB11 PB12 PB13 PB14 PB15 PB17 PB18 PB19 PB20 PB21 PB22 PB24 PB25 PB26 PB27 PB28 PB29

V1 V2 V3 V4

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- EVP DETECTOR HEAD
- X EVP DESIGNATOR
- VX VIDEO DETECTION CAMERA
- V COMMUNICATIONS VAULT
- B PEDESTRIAN HEAD WITH PUSH BUTTON
- B PUSH BUTTON

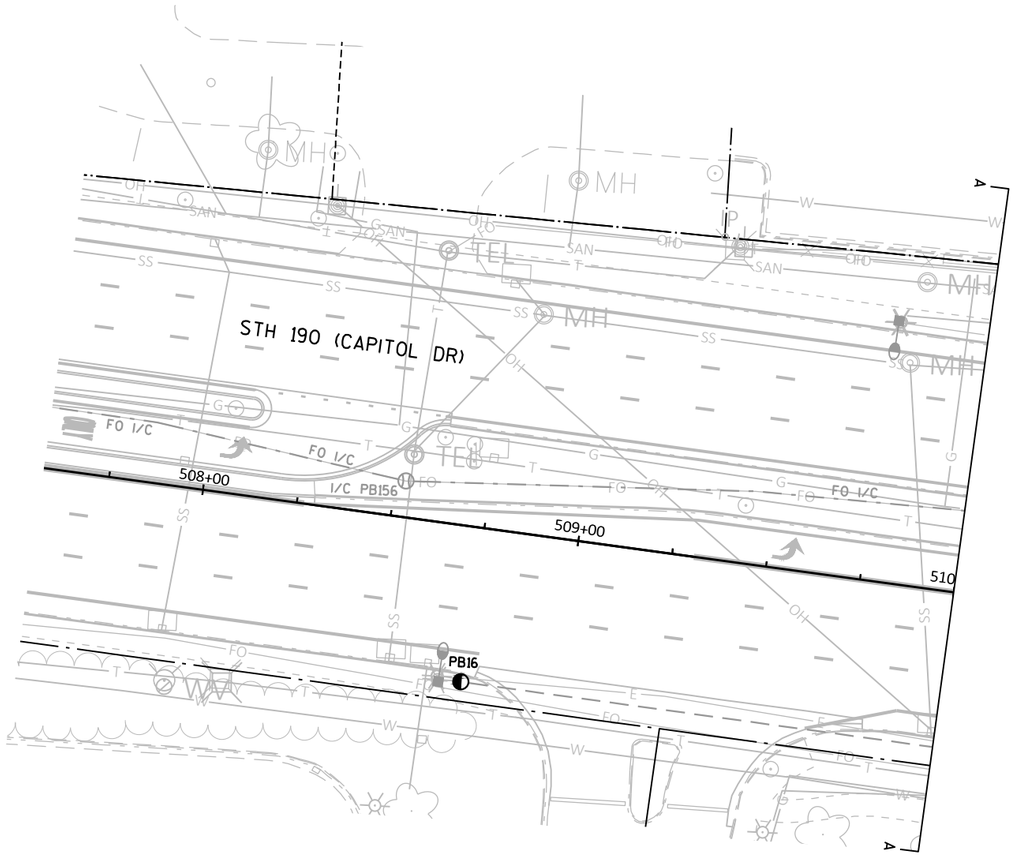
NOTES:
1. ALL LENSES ARE 12-INCH
2. GRAYSHADE REPRESENTS EXISTING TO REMAIN, BOLD REPRESENTS EXISTING TO BE REMOVED.
3. VIDEO DETECTION CAMERAS V1, V2, V3 & V4 ARE USED FOR INSYNC ADAPTIVE CONTROL. DETECTION ZONES ASSOCIATED WITH THESE CAMERAS ARE NOT SHOWN.
4. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.

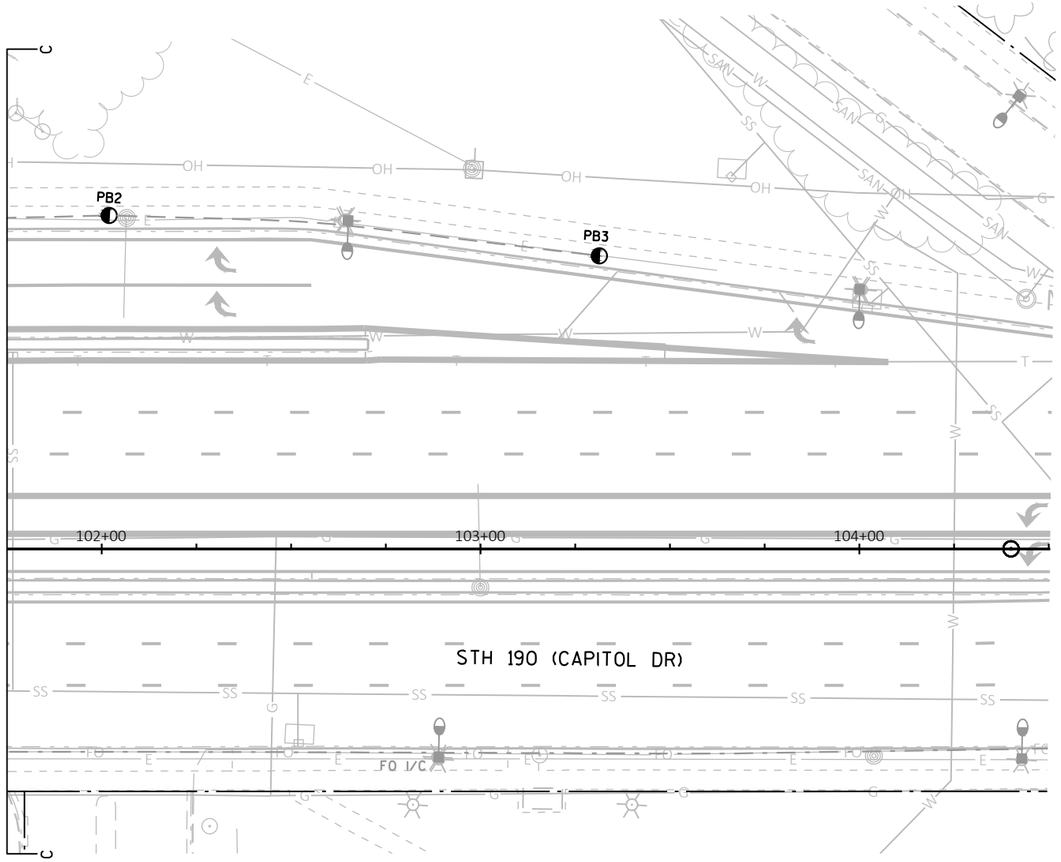
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE

MONOTUBE STRUCTURES
SB4 = S-40-1230
SB8 = S-40-1231
SB13 = S-40-1232
SB15 = S-40-1233
SB18 = S-40-1234
SB21 = S-40-1235

TRAFFIC CONTROL SIGNAL
STH 190 & 124TH ST
CITY OF BROOKFIELD/WAUWATOSA
WAUKESHA/MILWAUKEE COUNTY
CABINET TYPE: TS-2
SIGNAL NO. S40-1103 CONTROLLER TYPE: ECONOLITE
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF
PAGE 1 OF 2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA/MILWAUKEE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 312 E





N

TRAFFIC CONTROL SIGNAL
STH 190 & 124TH ST
CITY OF BROOKFIELD/WAUWATOSA
WAUKESHA/MILWAUKEE COUNTY

SIGNAL NO. S40-1103

CABINET TYPE: TS-2
CONTROLLER TYPE: ECONOLITE

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 2 OF 2

PROJECT NO:2025-03-73	HWY: STH 190	COUNTY: WAUKESHA/MILWAUKEE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 313	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\06_124TH\024011_SP.DWG
LAYOUT NAME - 024011_SP - 024012_SP

PLOT DATE : 1/9/2025 2:59 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : *********

WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT

MONOTUBE STRUCTURES
SB4 = S-40-1230
SB8 = S-40-1231
SB13 = S-40-1232
SB15 = S-40-1233
SB18 = S-40-1234
SB21 = S-40-1235

NOTES:
1. ALL LENSES ARE 12-INCH
2. GRAYSHADE REPRESENTS EXISTING TO REMAIN. BOLD REPRESENTS PROPOSED.
3. SEE PAGE 2 FOR CONSTRUCTION NOTES.

WISCONSIN
BENJAMIN J. BIEBERITZ
E-49431
WAUKESHA, WI
PROFESSIONAL ENGINEER
1/14/25

N

STH 190
124TH ST
SPEED LIMIT= 30 MPH
SPEED LIMIT= 45 MPH
SPEED LIMIT= 35 MPH
3-6'X12' 5 TURNS EACH 220' TO NEAR RIGHT SIGNAL
2-6'X20' 3 TURNS EACH I/C PB157
6-6'X20' 3 TURNS EACH
4-6'X20' 3 TURNS EACH
8-6'X20' 3 TURNS EACH
4-6'X20' 3 TURNS EACH
10+00
511+00
512+00
100+00
101+00
CAM1
SB23
EXT. 4

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- PULL BOX, 18" X 24"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- V COMMUNICATIONS VAULT
- CCTV CAMERA SITE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)

REVISION				
REV. NO.	MOVE SIGNAL BASES SB7 SB16 SB17, ADD LOOP DETECTORS, ADD OBSERVATION CAMERA			
	APPROVAL RECOMMENDED		APPROVED	
4	REGION		CENTRAL OFFICE	
	DATE	BY	DATE	BY
	10/22/24	JMG	12/4/24	JBI

REDLINE UPDATES; REMOVE INSYNC CAMERAS AND RADAR DETECTION. INSTALL AUTOSCOPE VISION CAMERAS; UPDATE DETECTION ZONES 5/19/21
REPLACE CABINET & CONTROLLER; INSTALL INSYNC ADAPTIVE CONTROL & RADAR DETECTION 9/5/14
AS-BUILT PER FIELD REVIEW 9/26/12
FULL TRAFFIC SIGNAL REHAB 8/3/11

TRAFFIC CONTROL SIGNAL
STH 190 & 124TH ST
CITY OF BROOKFIELD/WAUWATOSA
WAUKESHA/MILWAUKEE COUNTY

SIGNAL NO. S40-1103
CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 11/16/99 — MITZI M. DOBERSEK, REGION TRAFFIC ENGINEER

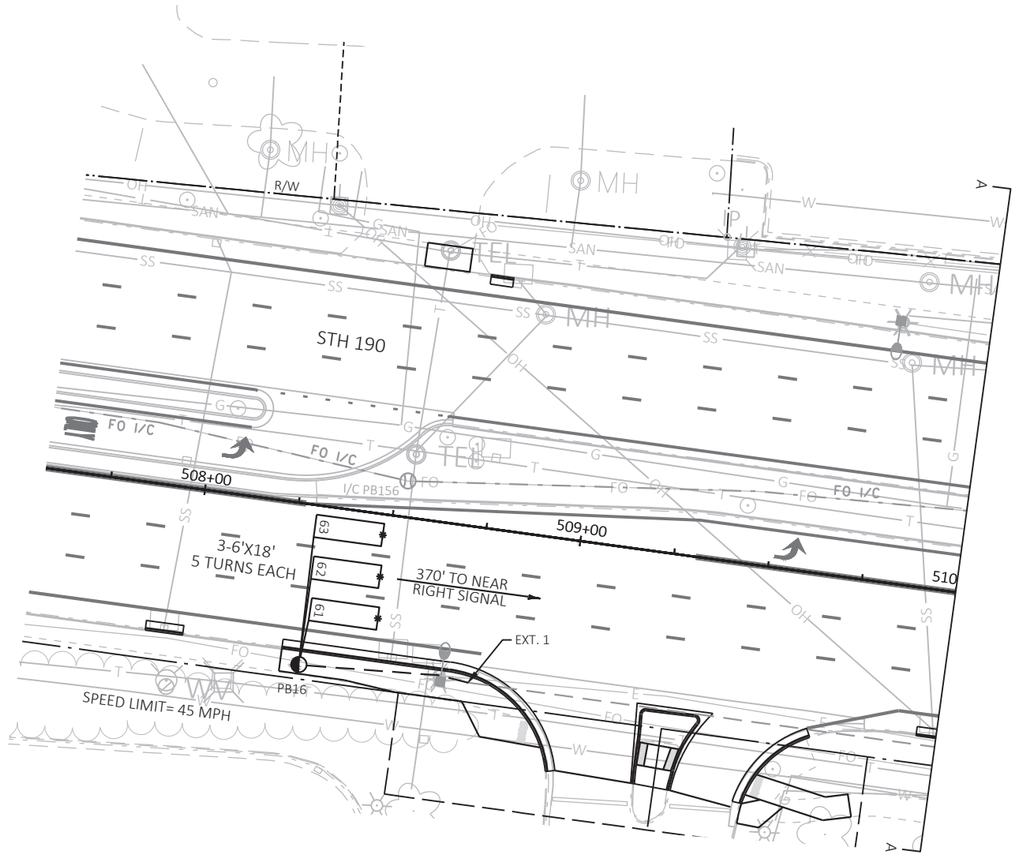
APPROVED
DATE 8/25/20 — WILLIAM C. GILDING, STATE TRAFFIC ENGINEER

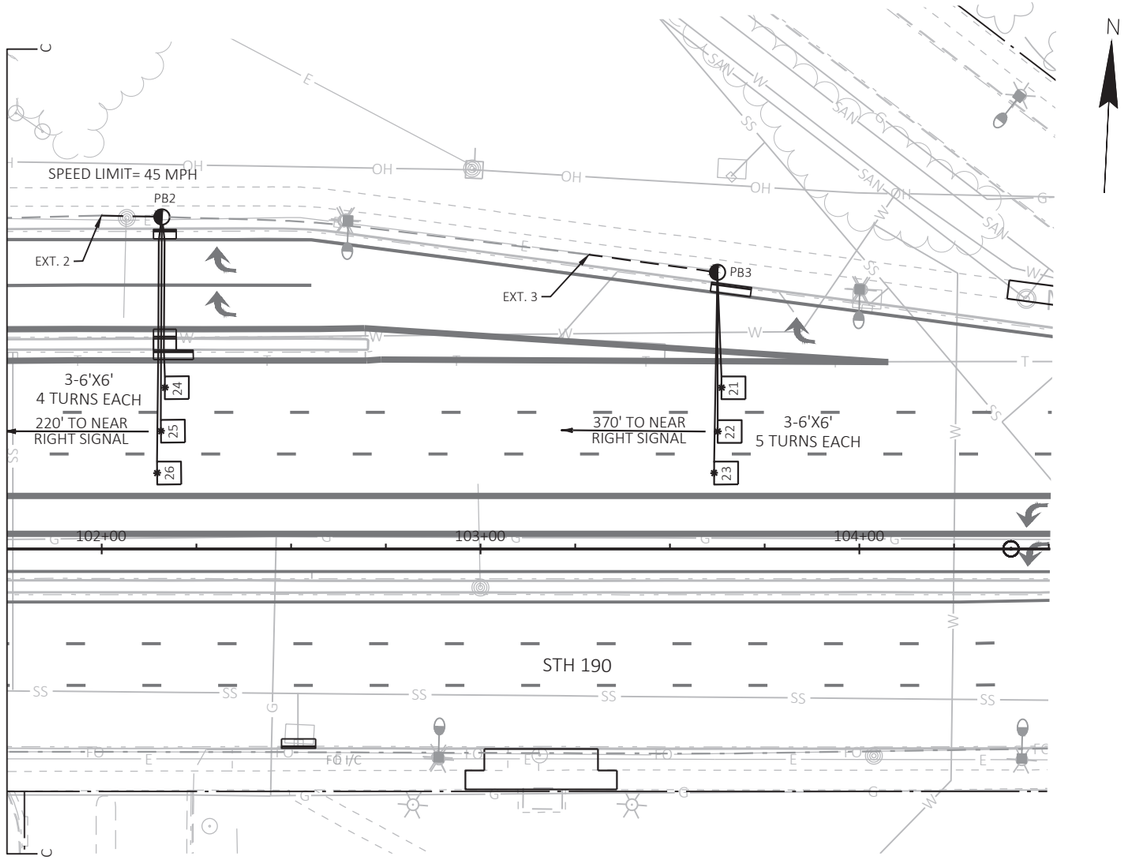
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA/MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET 314	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\06_124TH\024021_SP.DWG
LAYOUT NAME - 024021_SP - 024021_SP
PLOT DATE : 1/9/2025 3:16 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF

11/15/24 JMM





CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170.
2. * LOCATION IS TO THE FRONT CENTER OF DETECTOR LOOP.
3. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
5. REUSE EXISTING POLES, POLE MOUNTINGS, FACES, AND PUSH BUTTONS FOR SB7, SB16, AND SB17. SEE TRAFFIC SIGNAL REMOVAL PLAN.
6. SB7 BASE TO BE PLACED ON AND CONNECT TO EXISTING CONDUIT.

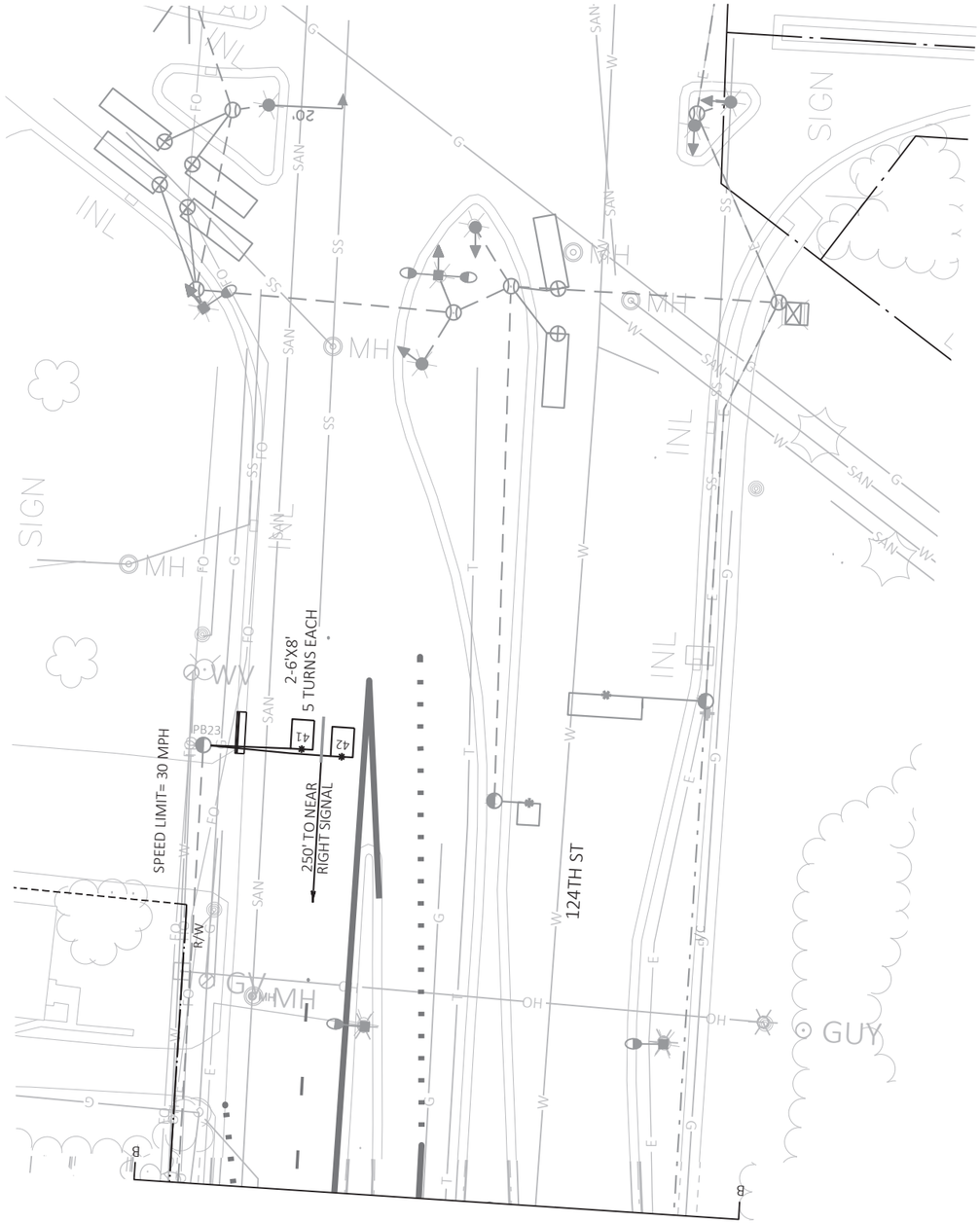
TRAFFIC CONTROL SIGNAL
STH 190 & 124TH ST
CITY OF BROOKFIELD/WAUWATOSA
WAUKESHA/MILWAUKEE COUNTY

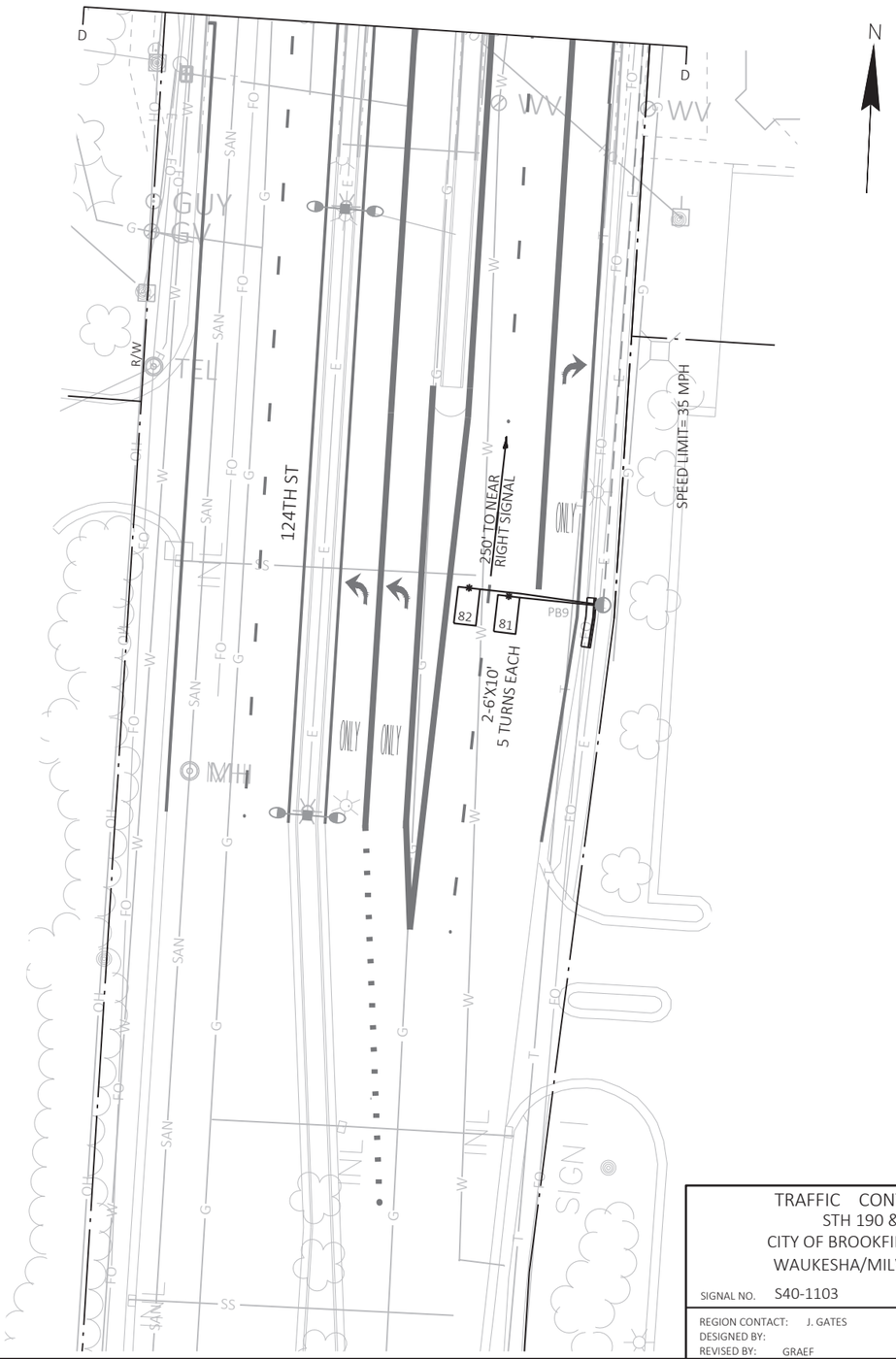
SIGNAL NO. S40-1103

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA/MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET 315	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\06_124TH\024021_SP.DWG
LAYOUT NAME - 024021_SP - 024022_SP
PLOT DATE : 1/9/2025 2:59 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42





TRAFFIC CONTROL SIGNAL
STH 190 & 124TH ST
CITY OF BROOKFIELD/WAUWATOSA
WAUKESHA/MILWAUKEE COUNTY

SIGNAL NO. S40-1103

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 3 OF 4

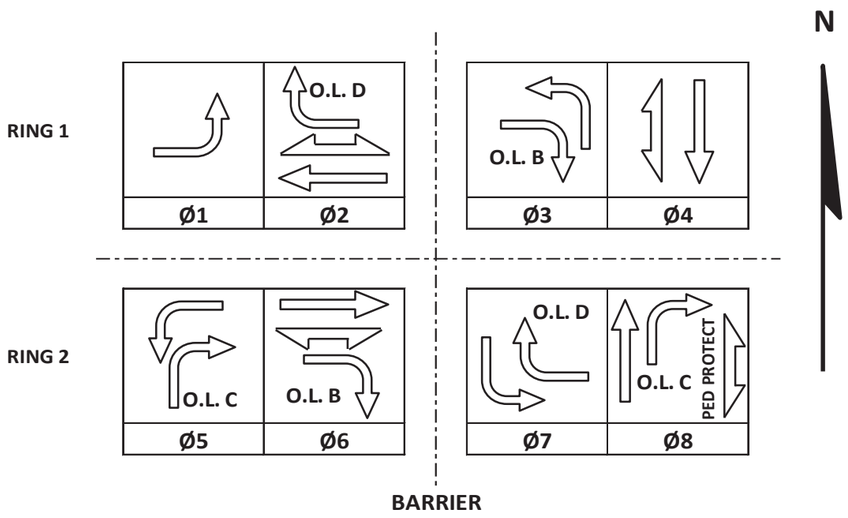
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA/MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET 316	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\SIGNALS\06_124TH\024021_SP.DWG
LAYOUT NAME - 024021_SP - 024023_SP

PLOT DATE : 1/9/2025 3:00 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	5, 6, 7	R ←
Ø2	10, 11, 12, 13	R
Ø3	23, 24, 25	R ←
Ø4	28, 29, 30	R
Ø5	14, 15, 16	R ←
Ø6	1, 2, 3, 4	R
Ø7	31, 32, 33	R ←
Ø8	20, 21, 22	R
Ø2P	38, 39, 40, 41	
Ø4P	34, 35, 36, 37	
Ø6P	46, 47, 48, 49	
Ø8P	42, 43, 44, 45	
OLB	8, 9	R
OLC	26, 27	R
OLD	17, 18, 19	R



CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	←	↗	↓	↑
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

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

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 00-58

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

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

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	35	33	39	37	43	41	47	45	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	11	21	23	25	31	33	41	43	45	47	51	53	61	63	65	71	73	81	83	85					PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	2	2	3	3	4	4	4	4	5	5	6	6	6	7	7	8	8	8					CALLED PHASE
CALL OPTION	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X		X	X					CALL OPTION
DELAY TIME								X																	DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					EXTENTION OPTION
EXTEND TIME							X											X							EXTEND TIME
USE ADDED INITIAL		X	X	X									X	X	X										USE ADDED INITIAL
CROSS SWITCH PHASE																									CROSS SWITCH PHASE

DETECTOR INPUT	18	20	22	24	26	28	30	32	34	36	38	40	42	44	52	50	36	34	40	38	44	42	48	46	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	12	22	24	26	32	34	42	44	46	48	52	54	62	64	66	72	74	82	84	86					PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	2	2	3	3	4	4	4	4	5	5	6	6	6	7	7	8	8	8					CALLED PHASE
CALL OPTION	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X		X	X					CALL OPTION
DELAY TIME								X																	DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					EXTENTION OPTION
EXTEND TIME							X											X							EXTEND TIME
USE ADDED INITIAL		X	X	X									X	X	X										USE ADDED INITIAL
CROSS SWITCH PHASE																									CROSS SWITCH PHASE

GENERAL NOTES:

1. ENABLE PED PROTECT FOR O.L. C WITH PHASE 8.

STH 190 & 124TH ST
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO: S40-1103 CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
DATE: 2/2025 PAGE NO. 4 OF 4

2

2

N

R/W

R/W

STH 190 (W. CAPITOL DR)

281+00

282+00

283+00

284+00

285+00

286+00

MATCHLINE STA. 286+50

13'

12'

12'

12'

12'

14'

11'

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

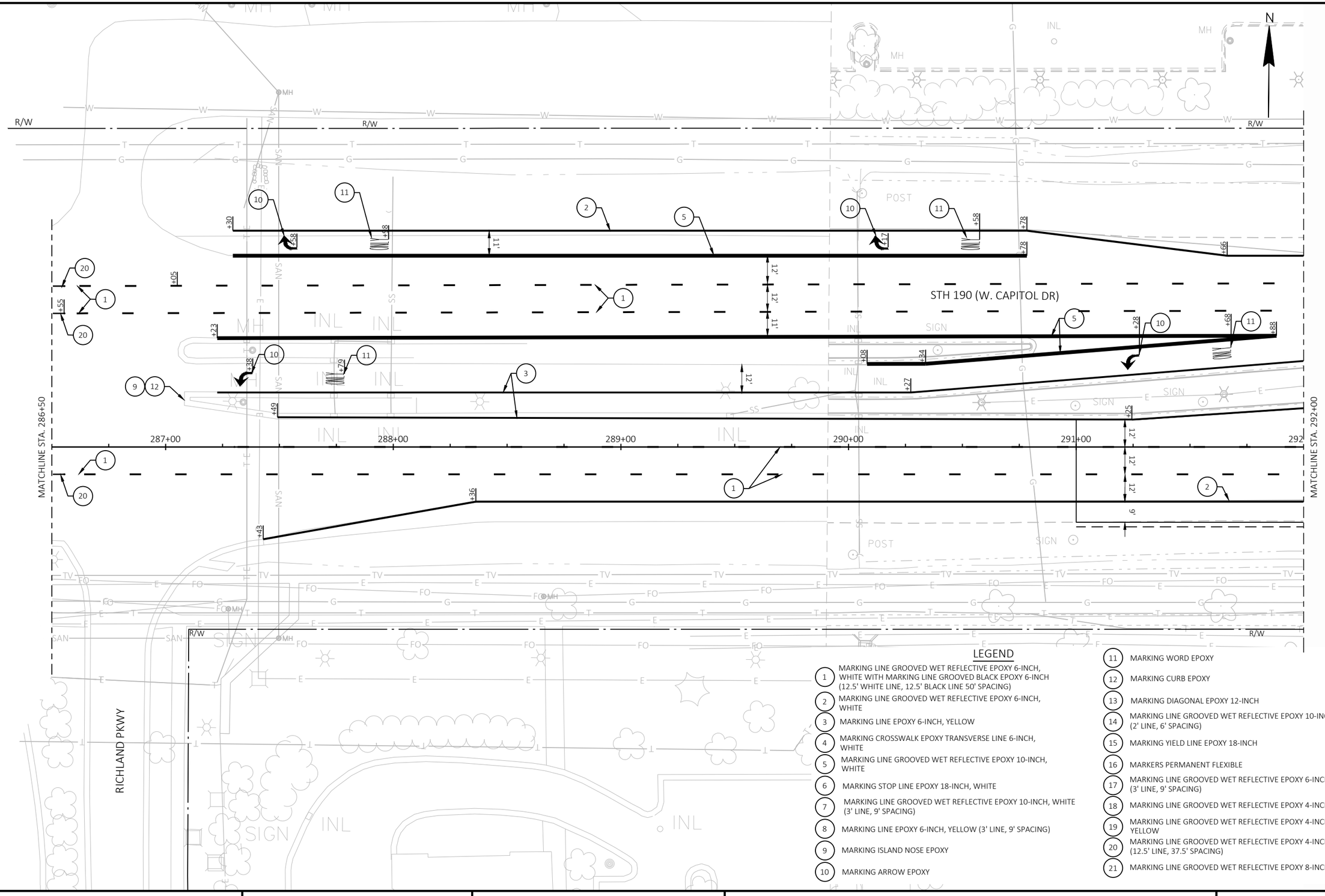
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 318	E

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LAYOUT NAME - 024501_pm (2)

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WISDOT/CADDS SHEET 42

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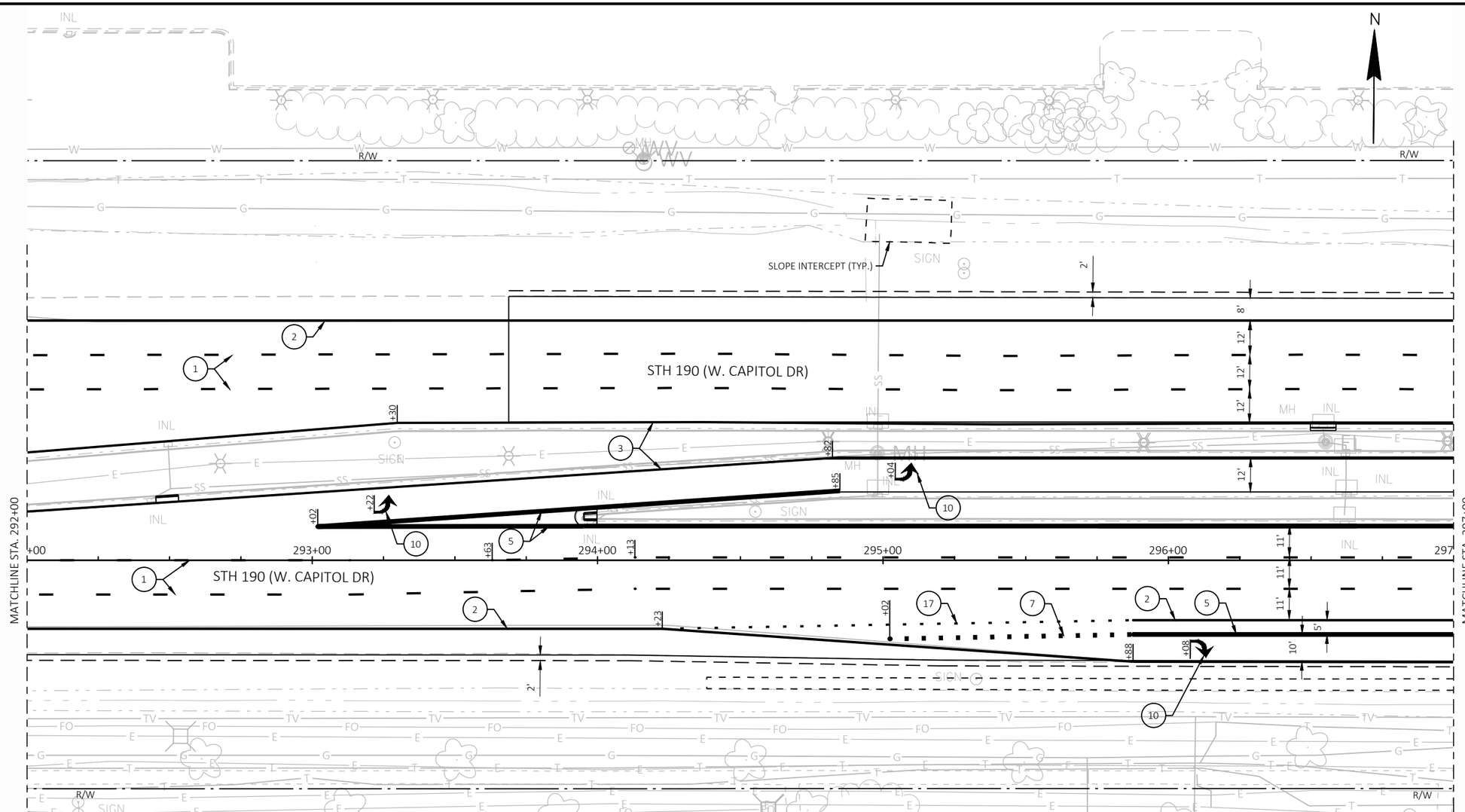


LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 319	E

2



LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
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21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 320	E

2

2

MATCH LINE A-A

N BROOKFIELD RD

STH 190 (W. CAPITOL DR)

SLOPE INTERCEPT (TYP.)

MATCHLINE STA. 297+00

MATCHLINE STA. 303+00

MATCH LINE B-B

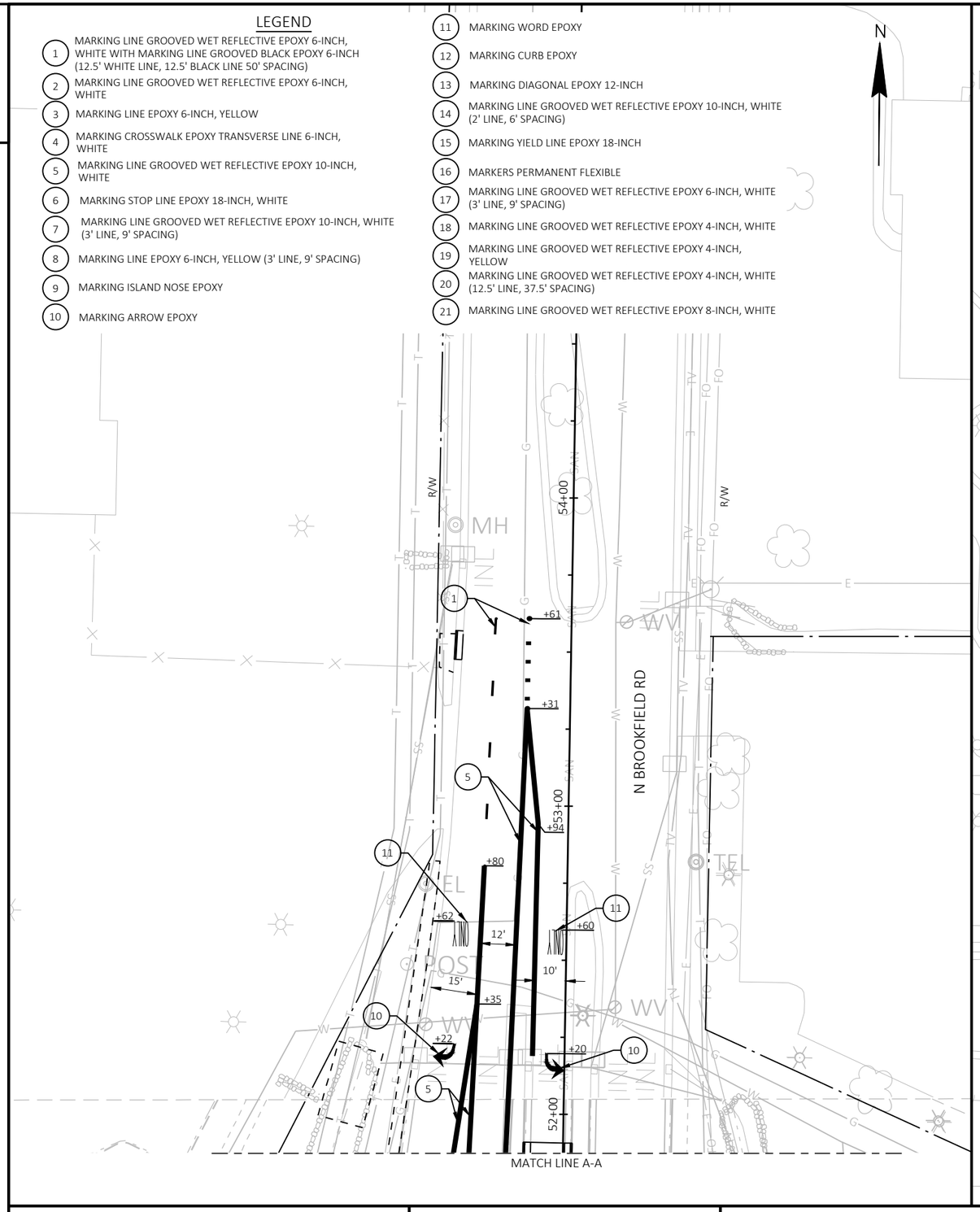
LEGEND

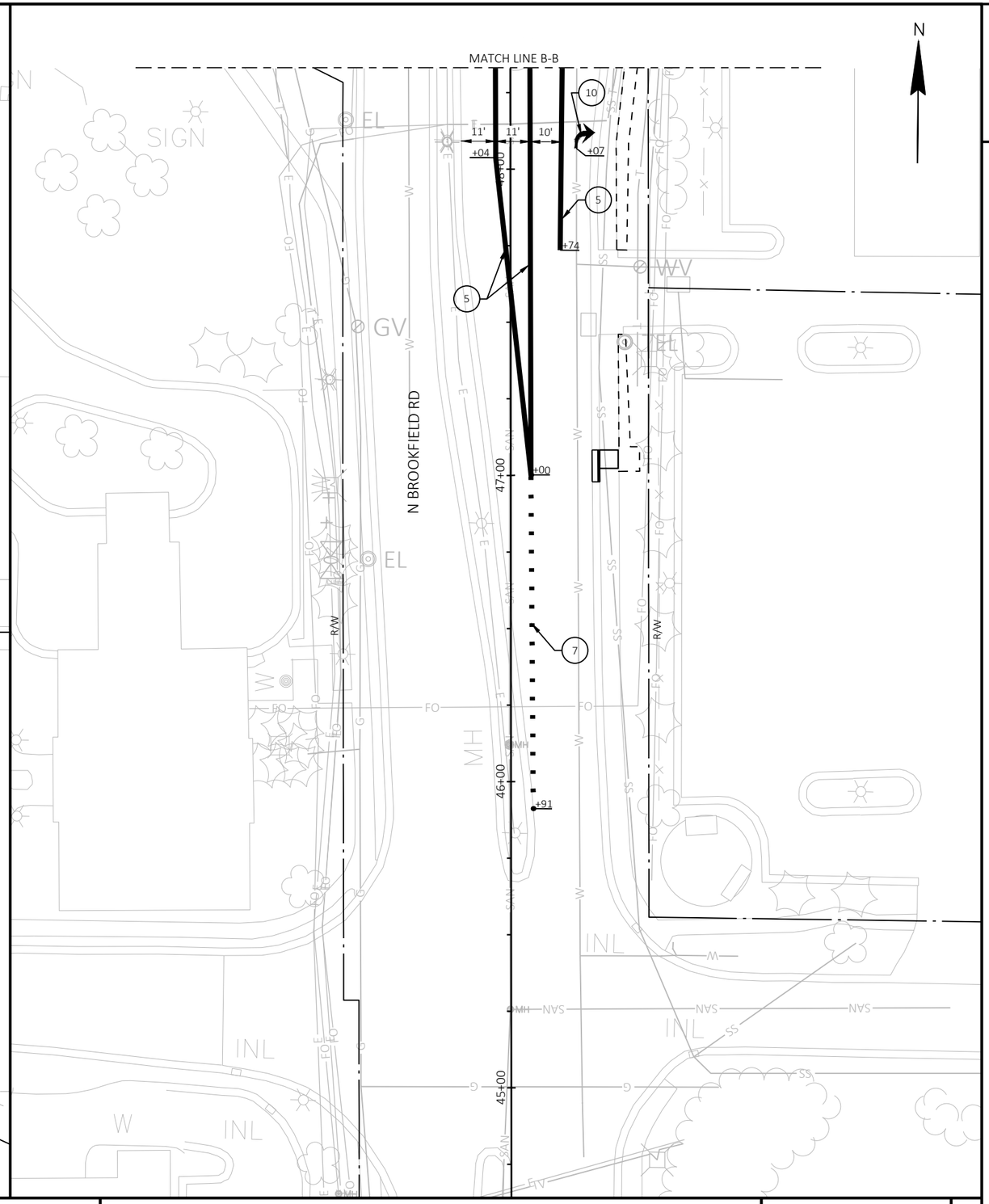
1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 321	E

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
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9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
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16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 322	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024504_pm

PLOT DATE : 8/20/2025 1:24 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

STH 190 (W. CAPITOL DR)

ST ANDREW LN

MATCHLINE STA. 303+00

MATCHLINE STA. 309+00

303+00 304+00 305+00 306+00 307+00 308+00 309

SLOPE INTERCEPT (TYP.)

DOUBLE

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
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21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

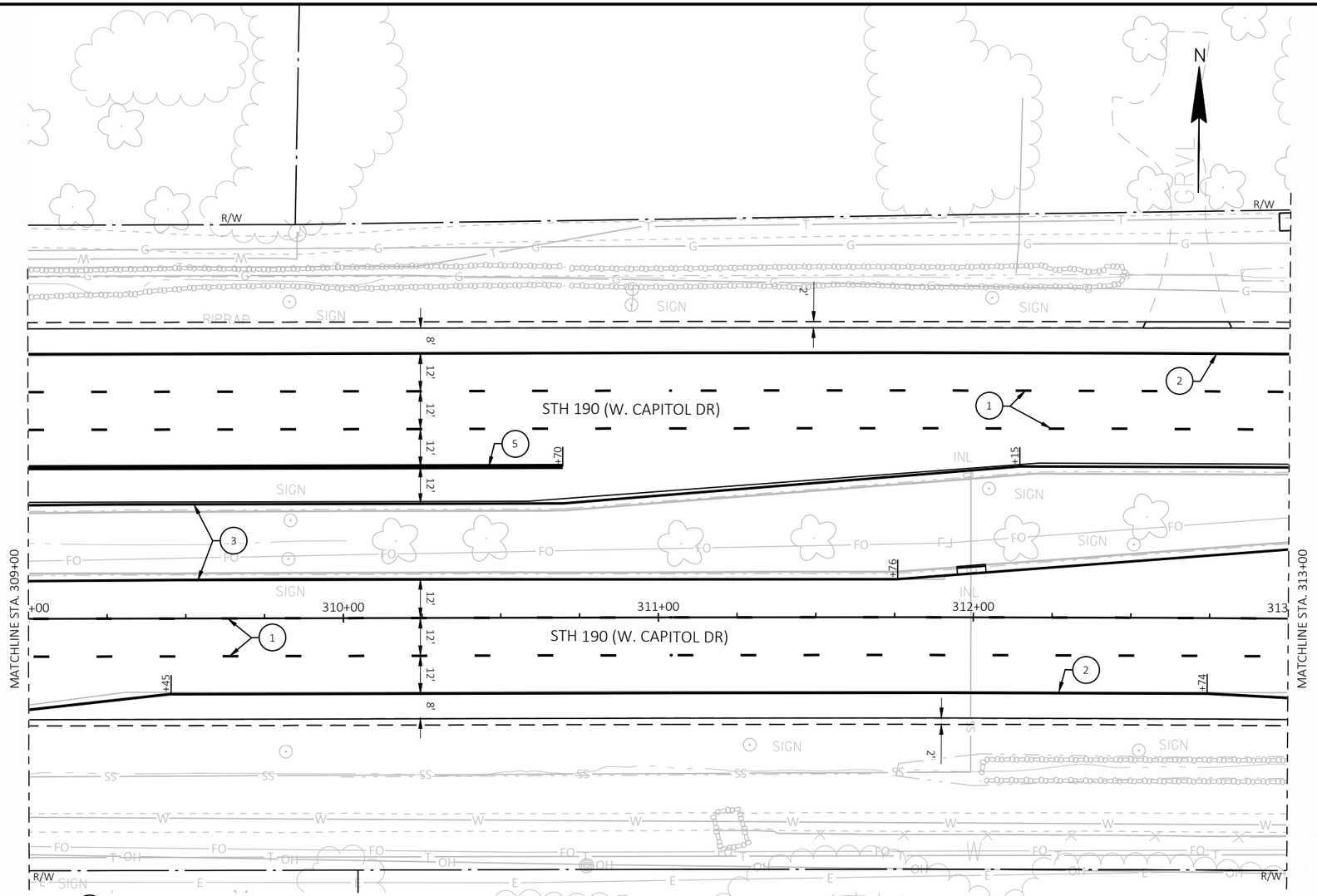
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 323	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\024501_PM.DWG
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PLOT DATE : 8/20/2025 1:25 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

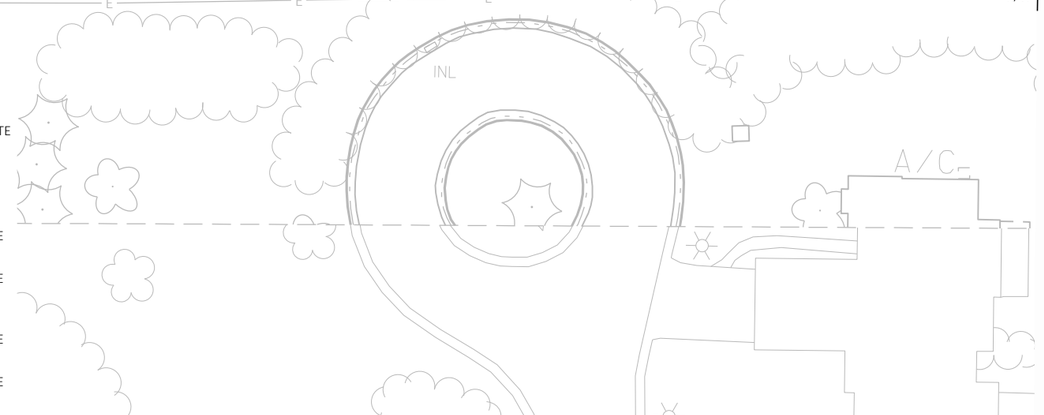
WISDOT/CADDS SHEET 42

2



LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
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9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 324	E

2

2

N

STH 190 (W. CAPITOL DR)

MOUNTAIN DR

MATCHLINE STA. 313+00

MATCHLINE STA. 319+00

+00 314+00 315+00 316+00 317+00 318+00 319

DOUBLE

SLOPE INTERCEPT (TYP.)

TLE

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
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3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
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12. MARKING CURB EPOXY
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21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 325	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024507_pm

PLOT DATE : 8/20/2025 1:25 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

MATCH LINE C-C

MATCHLINE STA. 319+00

MATCHLINE STA. 325+00

STH 190 (W. CAPITOL DR)

IMPERIAL DR

DOUBLE

TLE

R/W

SLOPE INTERCEPT (TYP.)

RIPRAP

SIGN

POST

INL

MH

ASPH

320+00

321+00

322+00

323+00

324+00

50+00

51+00

49+00

LEGEND

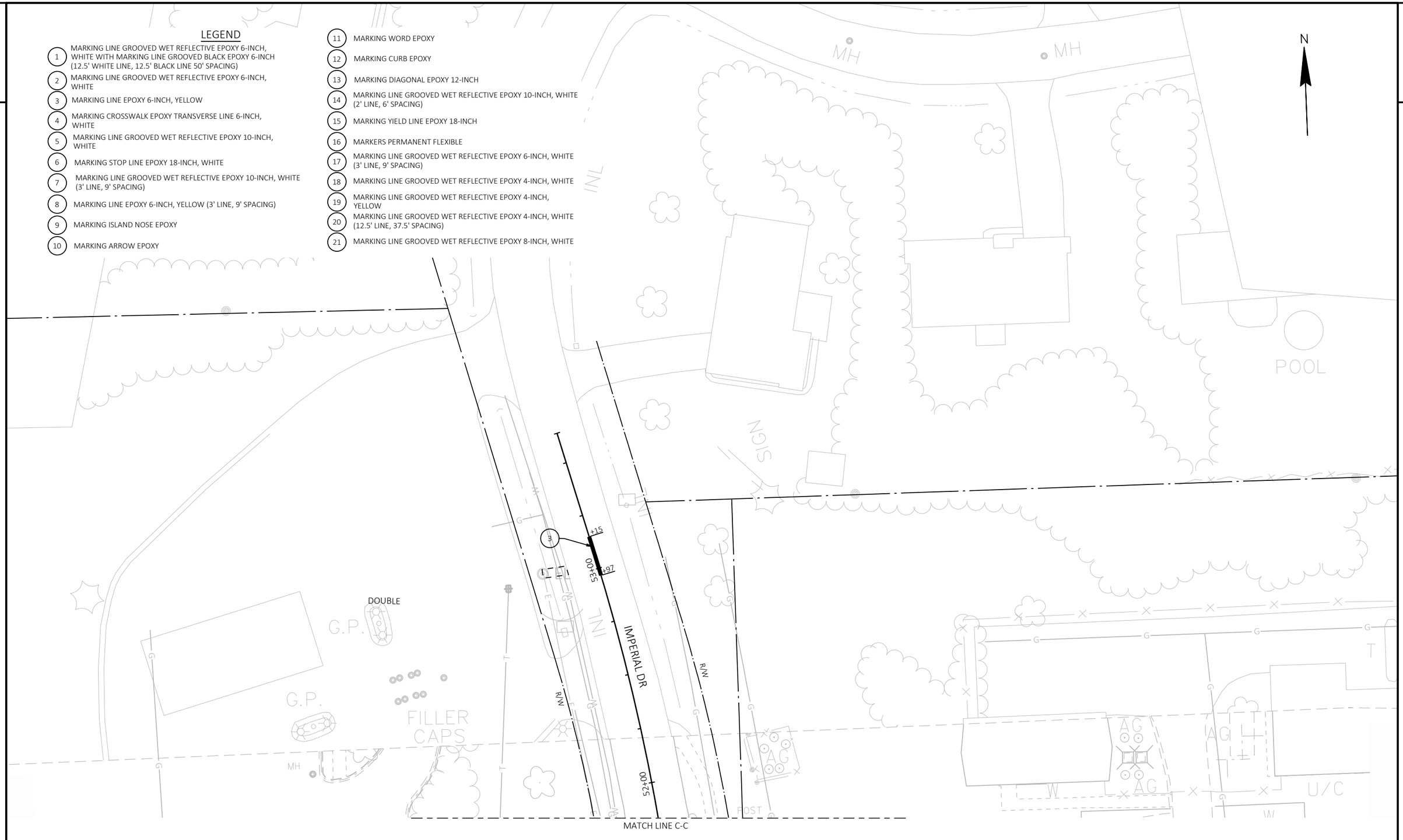
1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
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11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
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16. MARKERS PERMANENT FLEXIBLE
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21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 326	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024508_pm
PLOT DATE : 8/20/2025 1:26 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

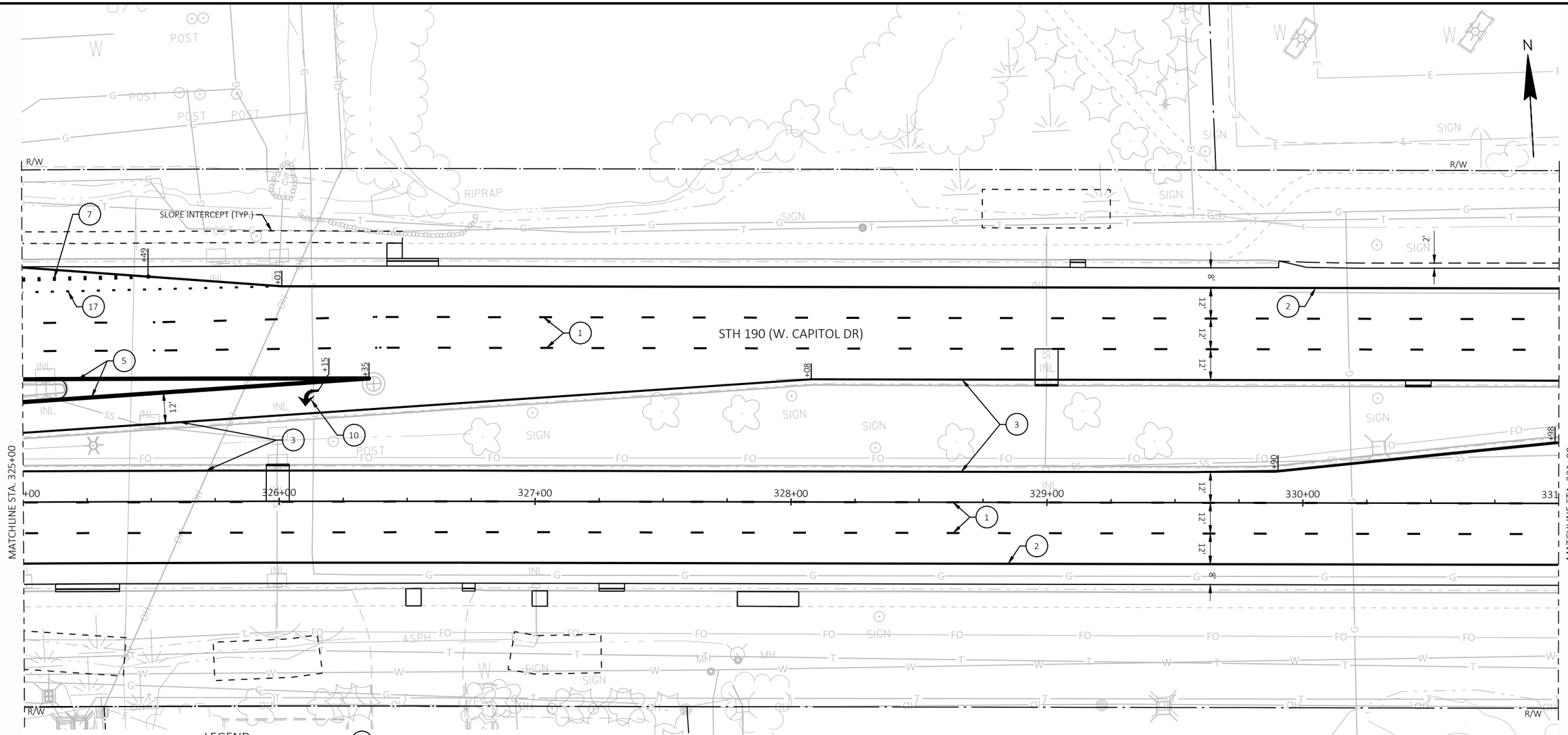
1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
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21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE



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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 327	E

2

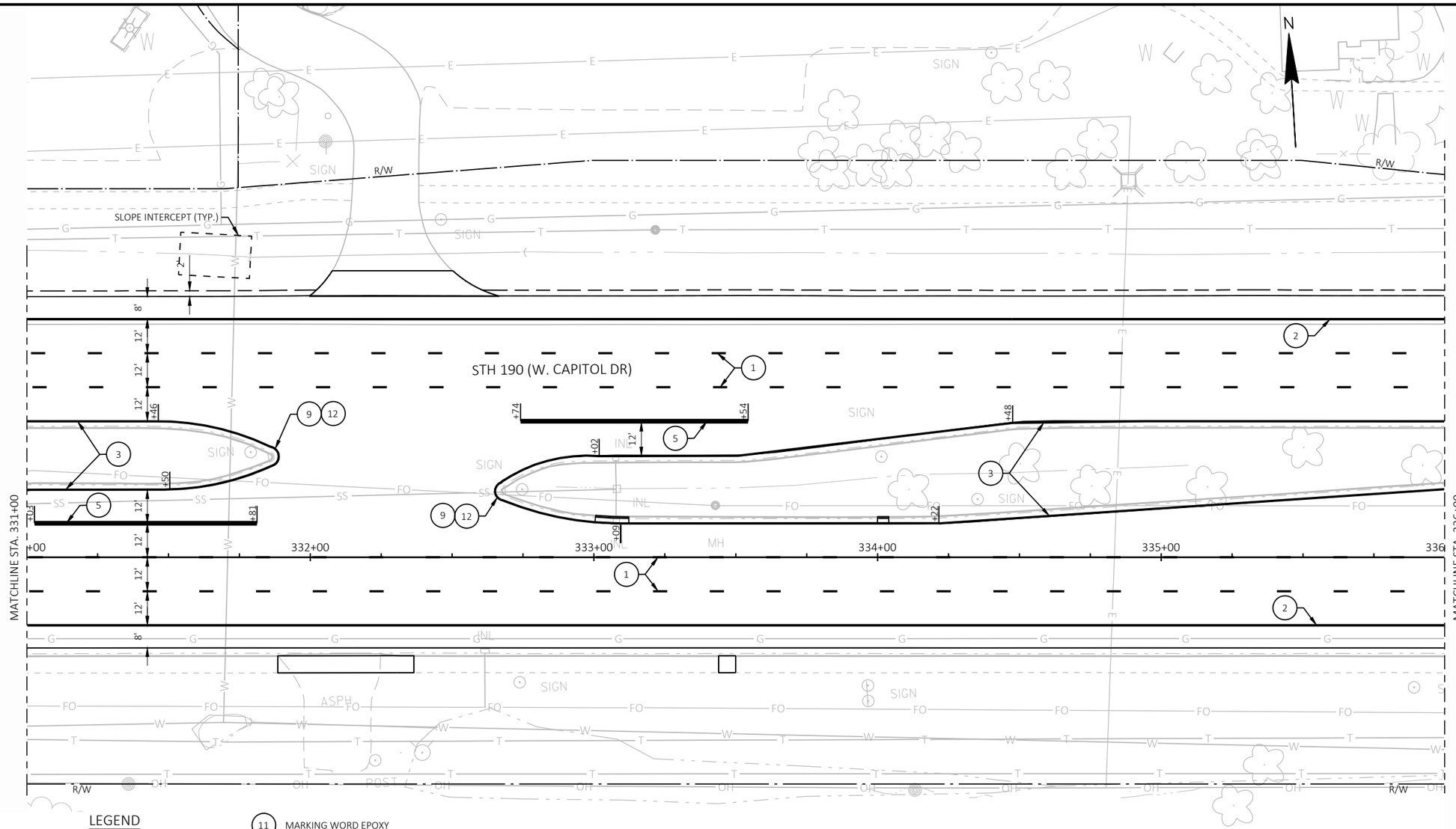


LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
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4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
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19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 328	E

2



LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 329	E

2

STH 190 (W. CAPITOL DR)

BEAUFORT DR

YUKON RD

SLOPE INTERCEPT (TYP.)

DOUBLE

ONLY

MATCHLINE STA. 336+00

MATCHLINE STA. 341+50

+00 337+00 338+00 339+00 340+00 341+00

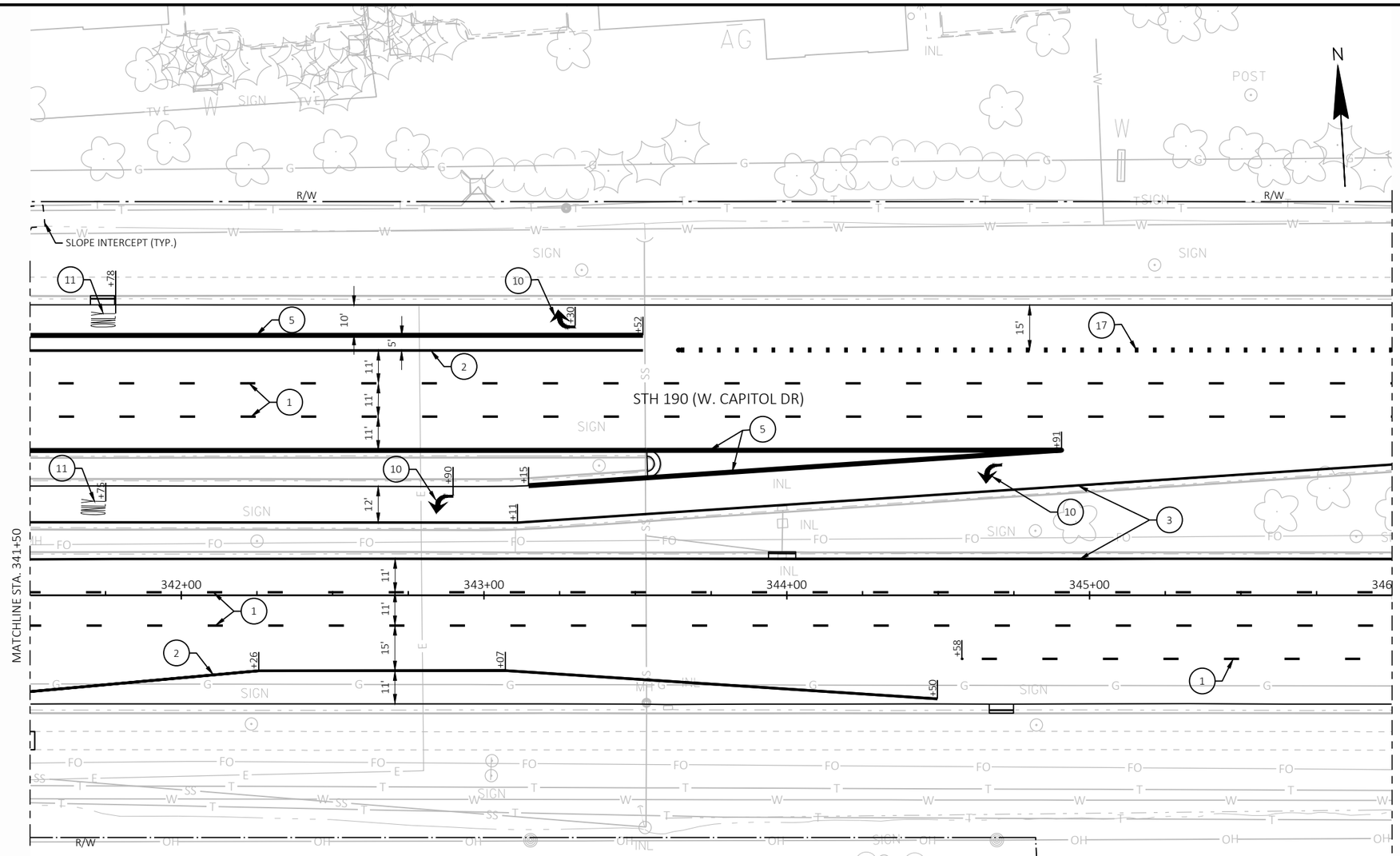
LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 330	E

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PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



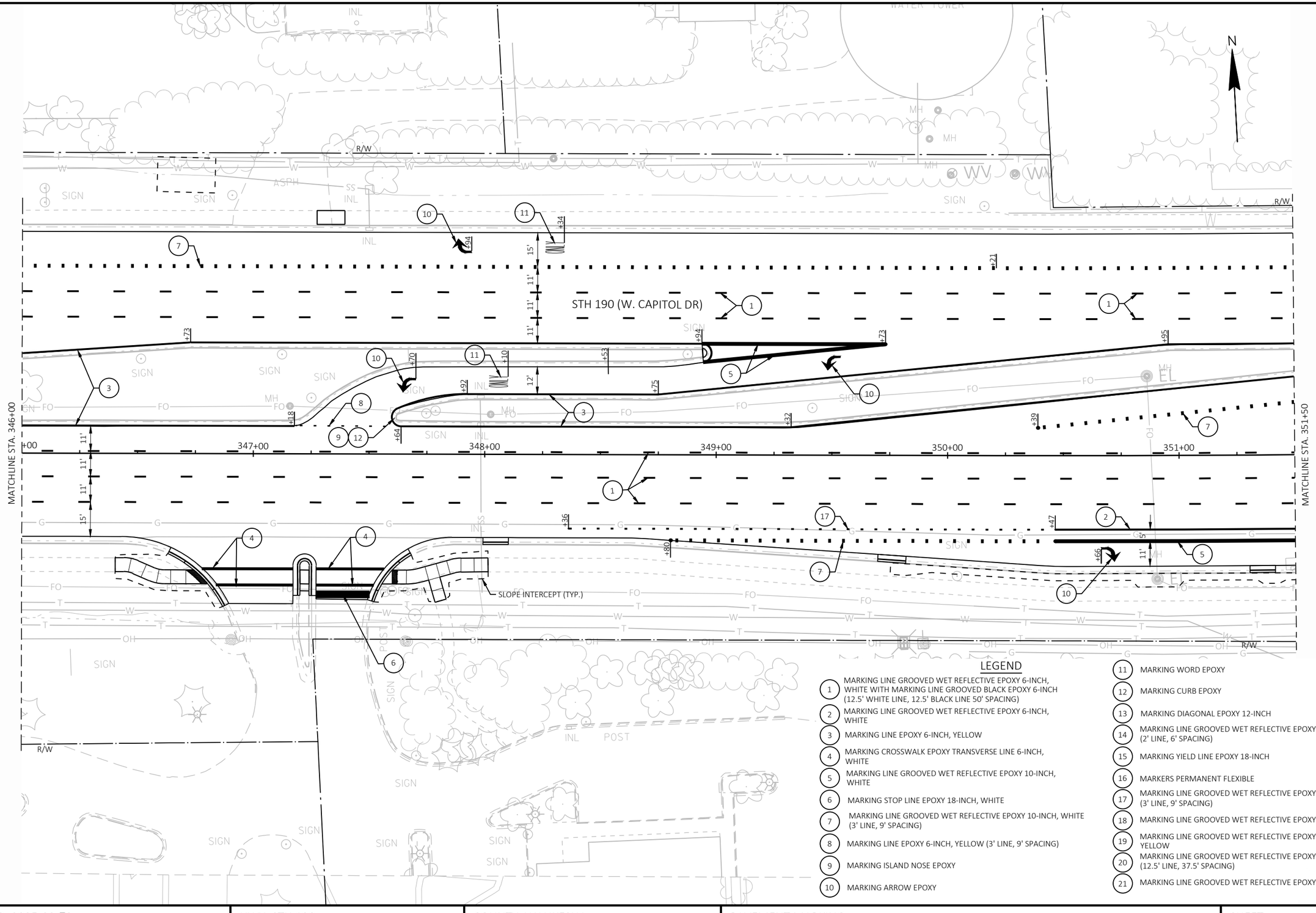
LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 331	E

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WISDOT/CADDS SHEET 42

2



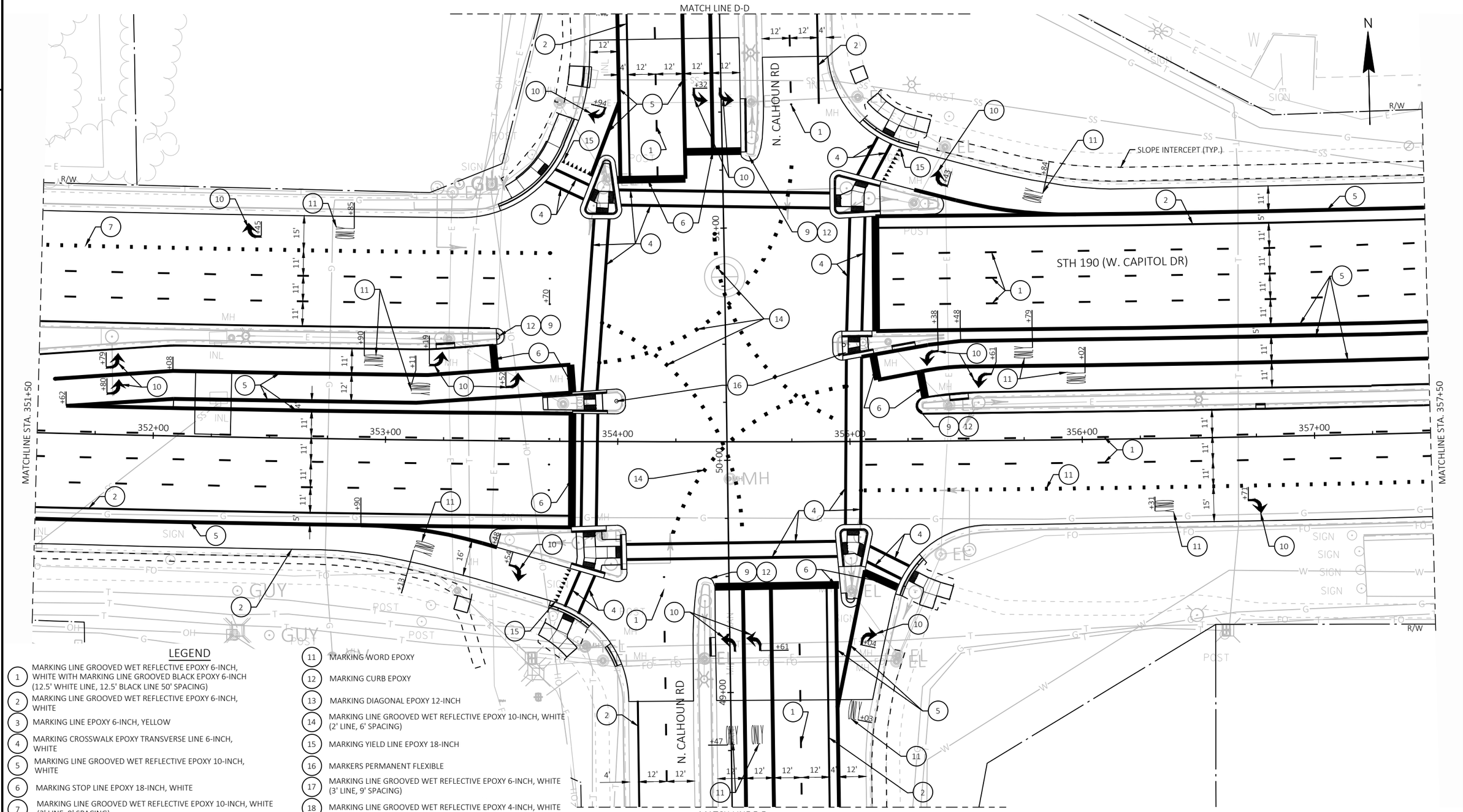
LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 332	E

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PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

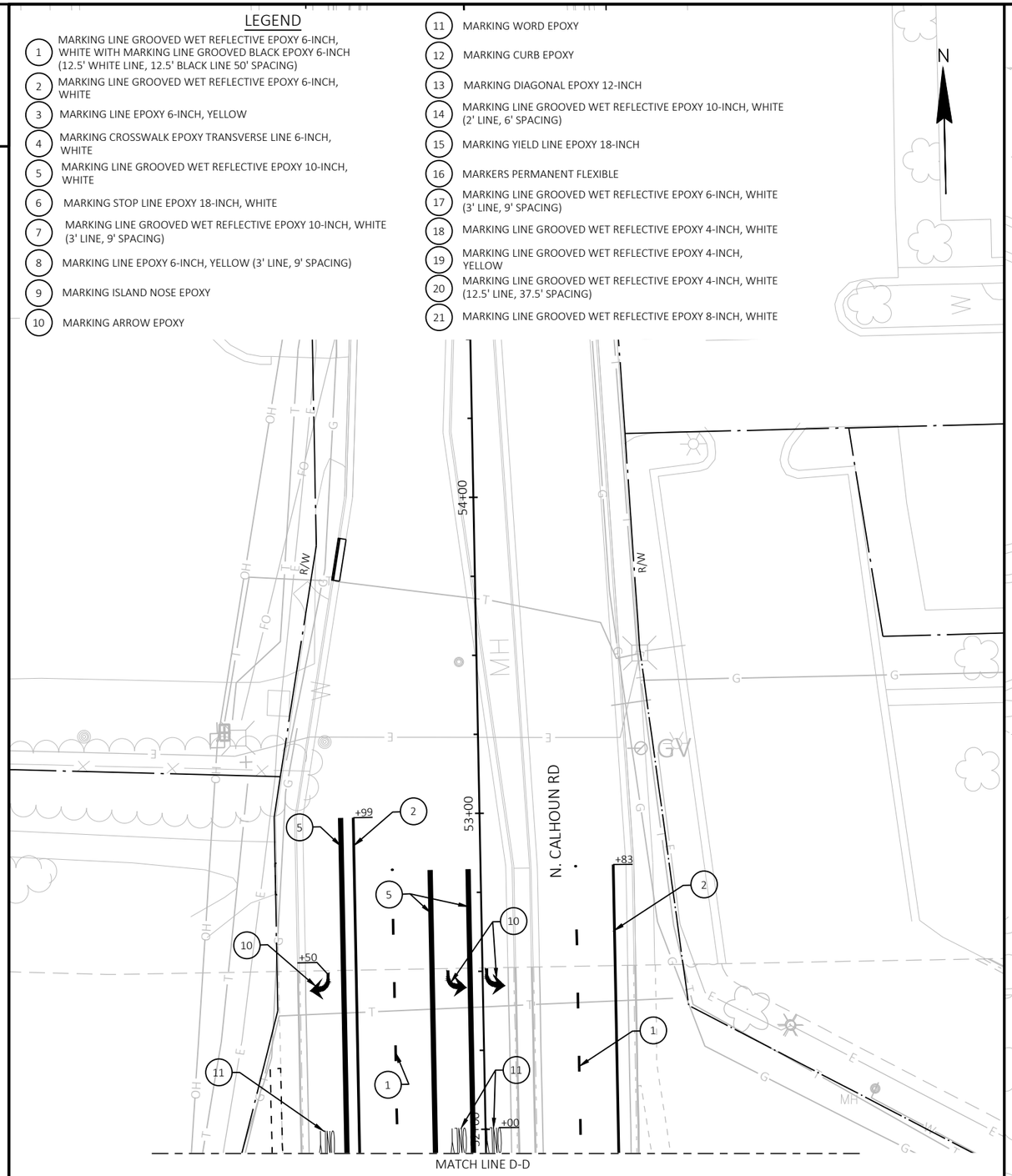
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 333	E

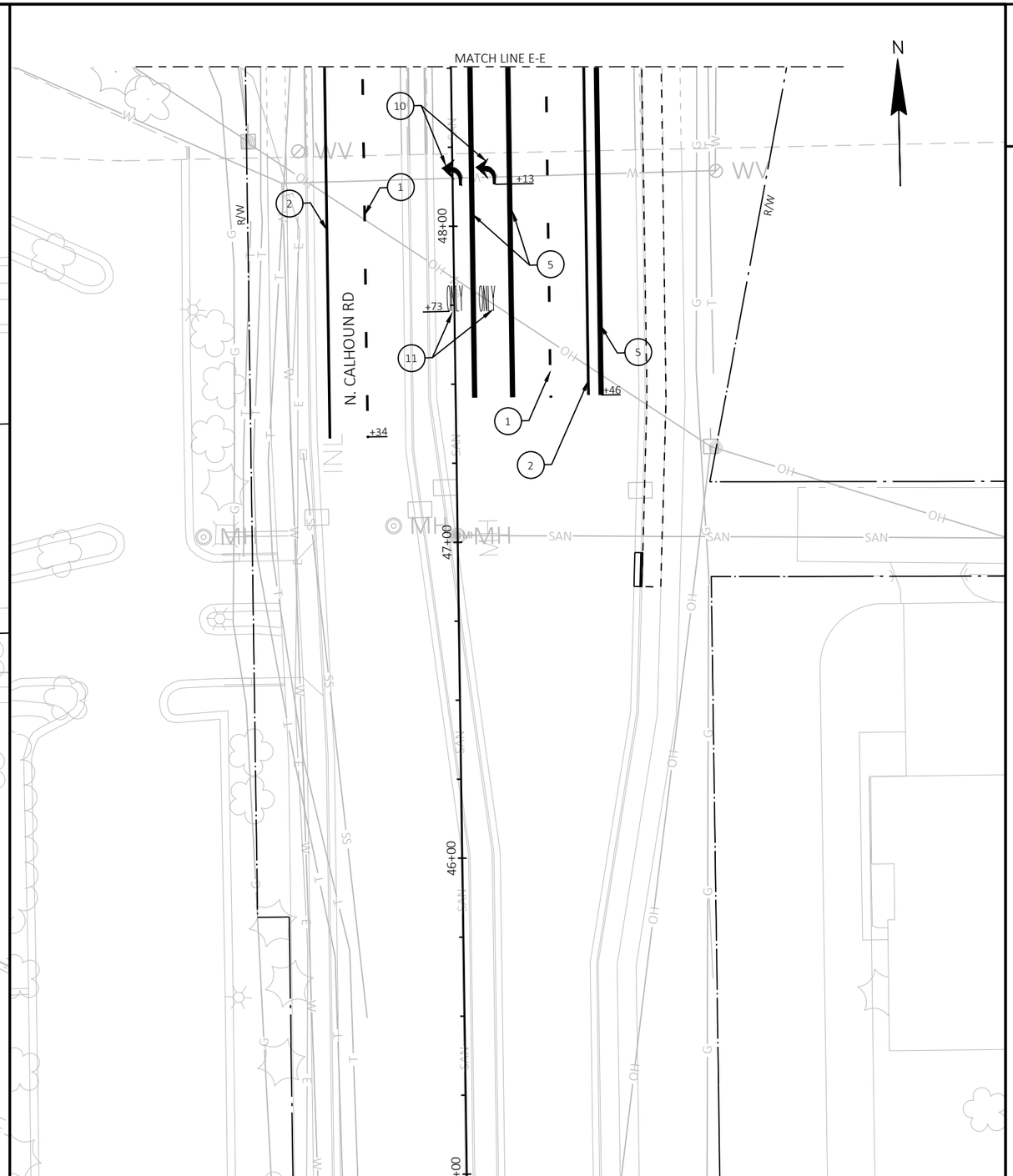
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PLOT DATE : 8/20/2025 1:29 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE



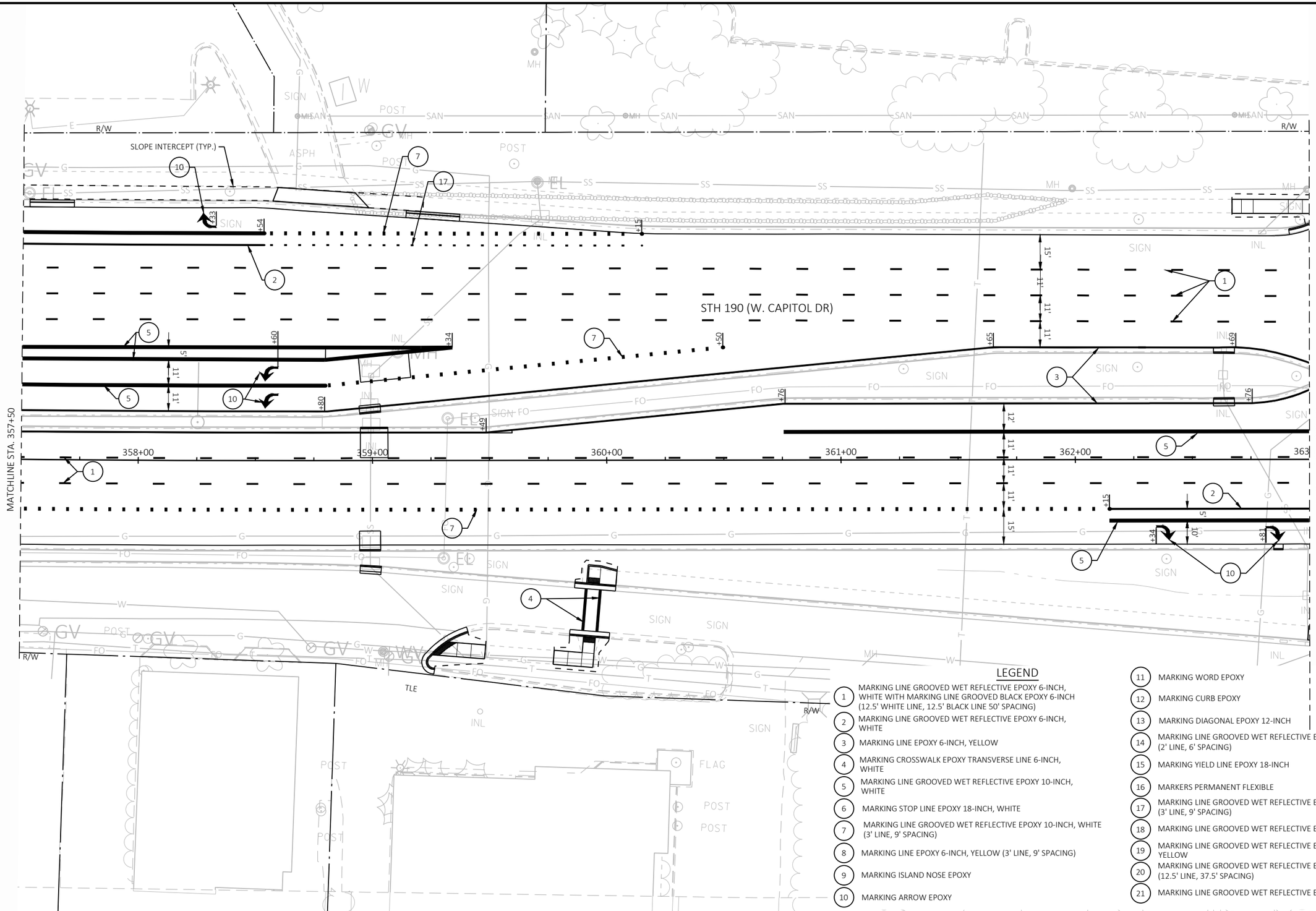


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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 334	E

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PLOT DATE : 8/20/2025 1:30 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

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LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 335	E

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PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

STH 190 (W. CAPITOL DR)

N. 169TH ST

MATCHLINE STA. 363+00

MATCHLINE STA. 369+00

364+00 365+00 366+00 367+00 368+00

SLOPE INTERCEPT (TYP.)

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
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16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 336	E

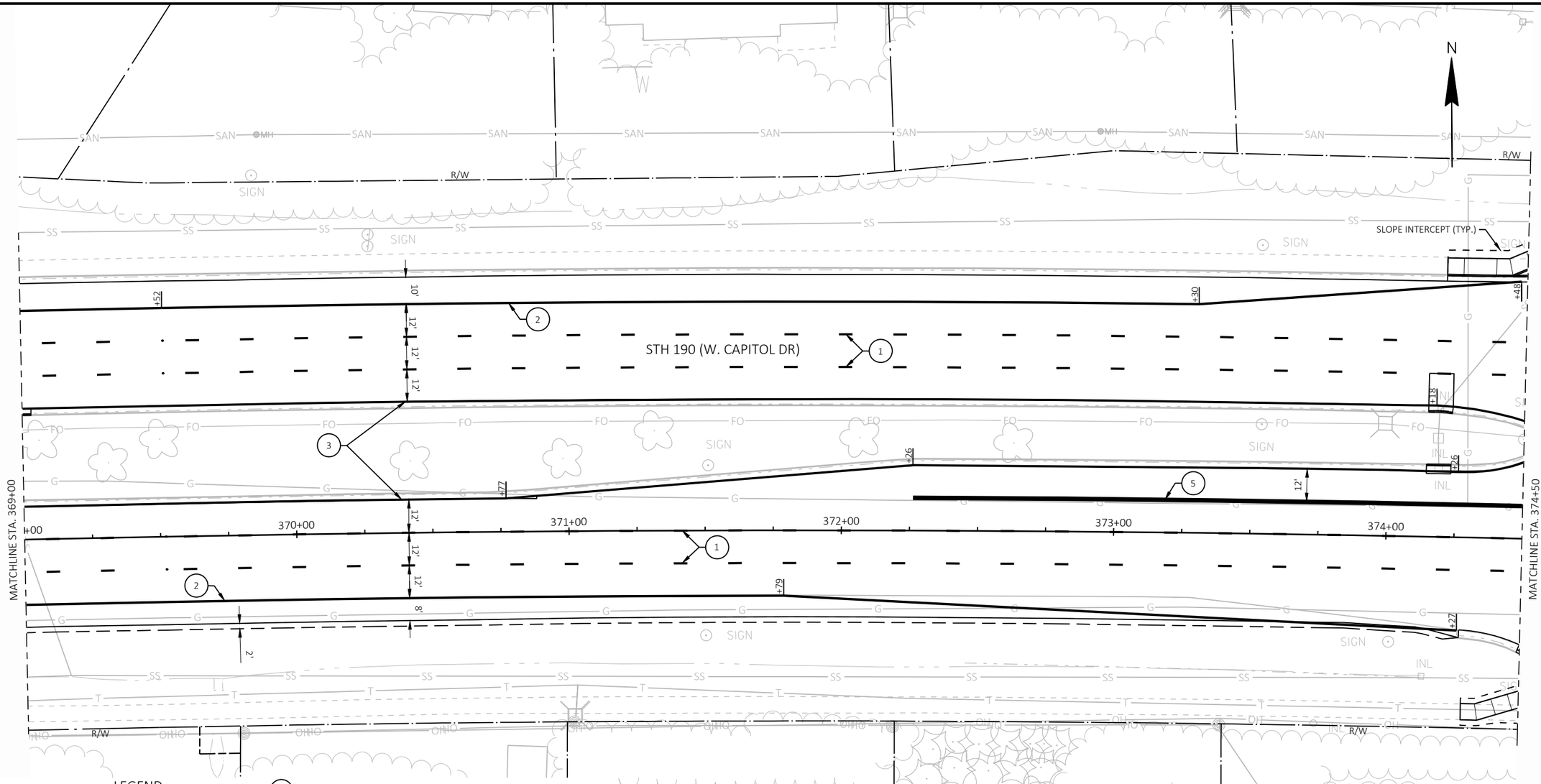
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WISDOT/CADDS SHEET 42

2

2



LEGEND

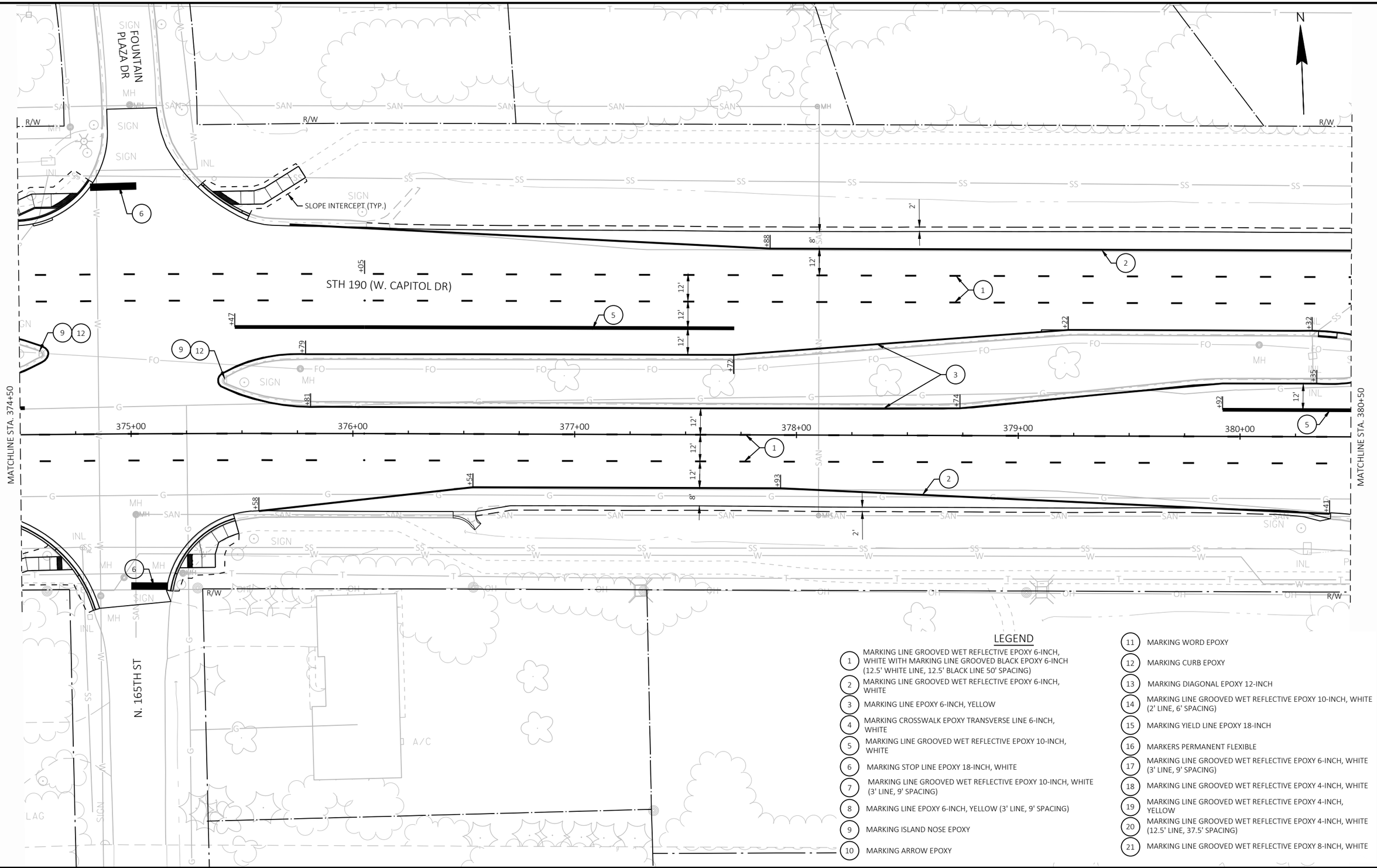
1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 337	E

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LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
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20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 338	E

2

2

N

STH 190 (W. CAPITOL DR)

MATCHLINE STA. 380+50

MATCHLINE STA. 386+50

381+00 382+00 383+00 384+00 385+00 386+00

BRADEE RD

SLOPE INTERCEPT (TYP.)

R/W

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 339	E

2

N. 162ND ST

STH 190 (W. CAPITOL DR)

LONE ELM DR

MATCHLINE STA. 386+50

MATCHLINE STA. 391+50

387+00 388+00 389+00 390+00 391+00

SLOPE INTERCEPT (TYP.)

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
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10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
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17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
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19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 340	E

2

STH 190 (W. CAPITOL DR)

BROOK LN

SLOPE INTERCEPT (TYP.)

MATCHLINE STA. 391+50

MATCHLINE STA. 397+50

392+00 393+00 394+00 395+00 396+00 397+00

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
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20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

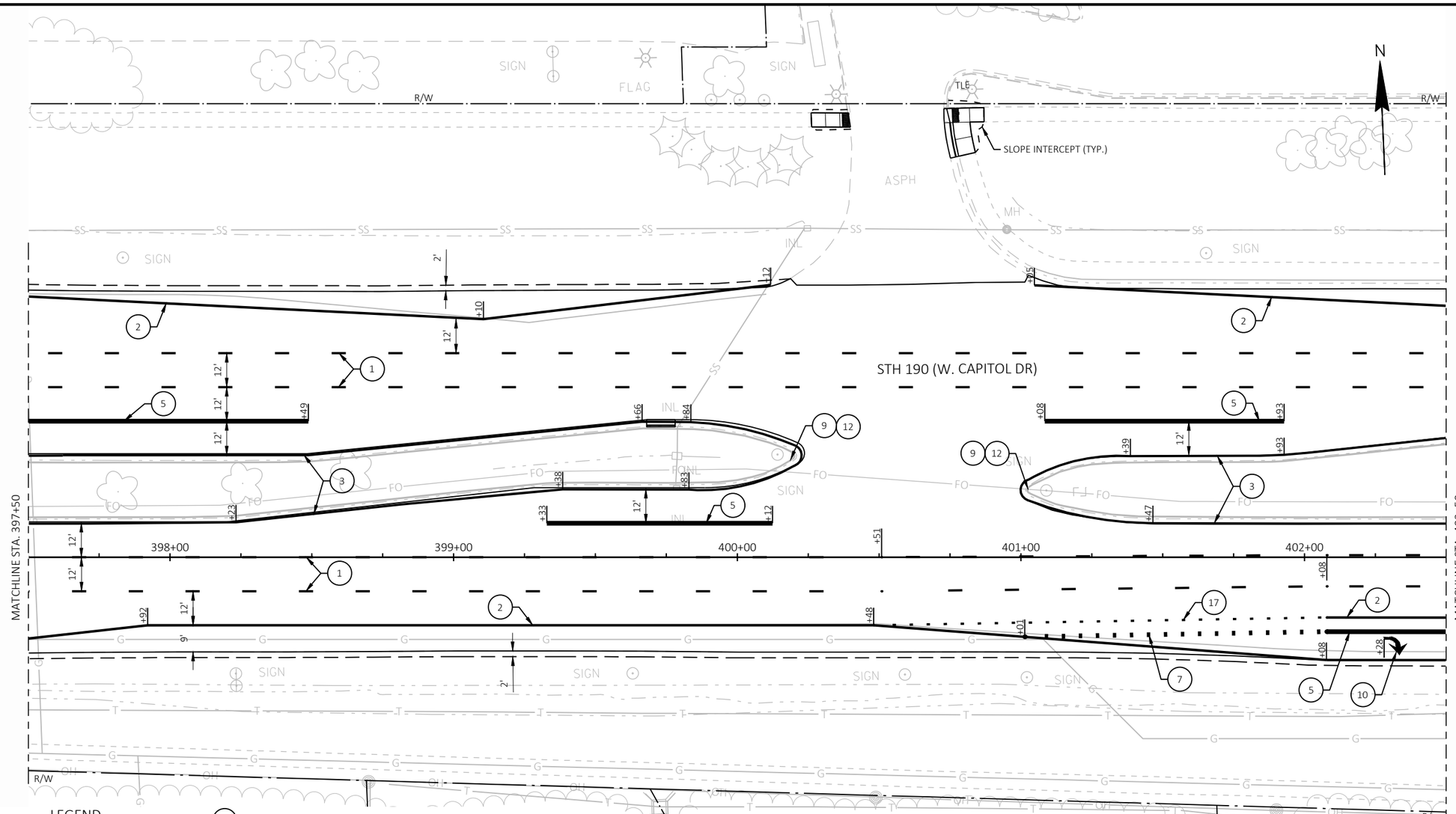
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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 341	E

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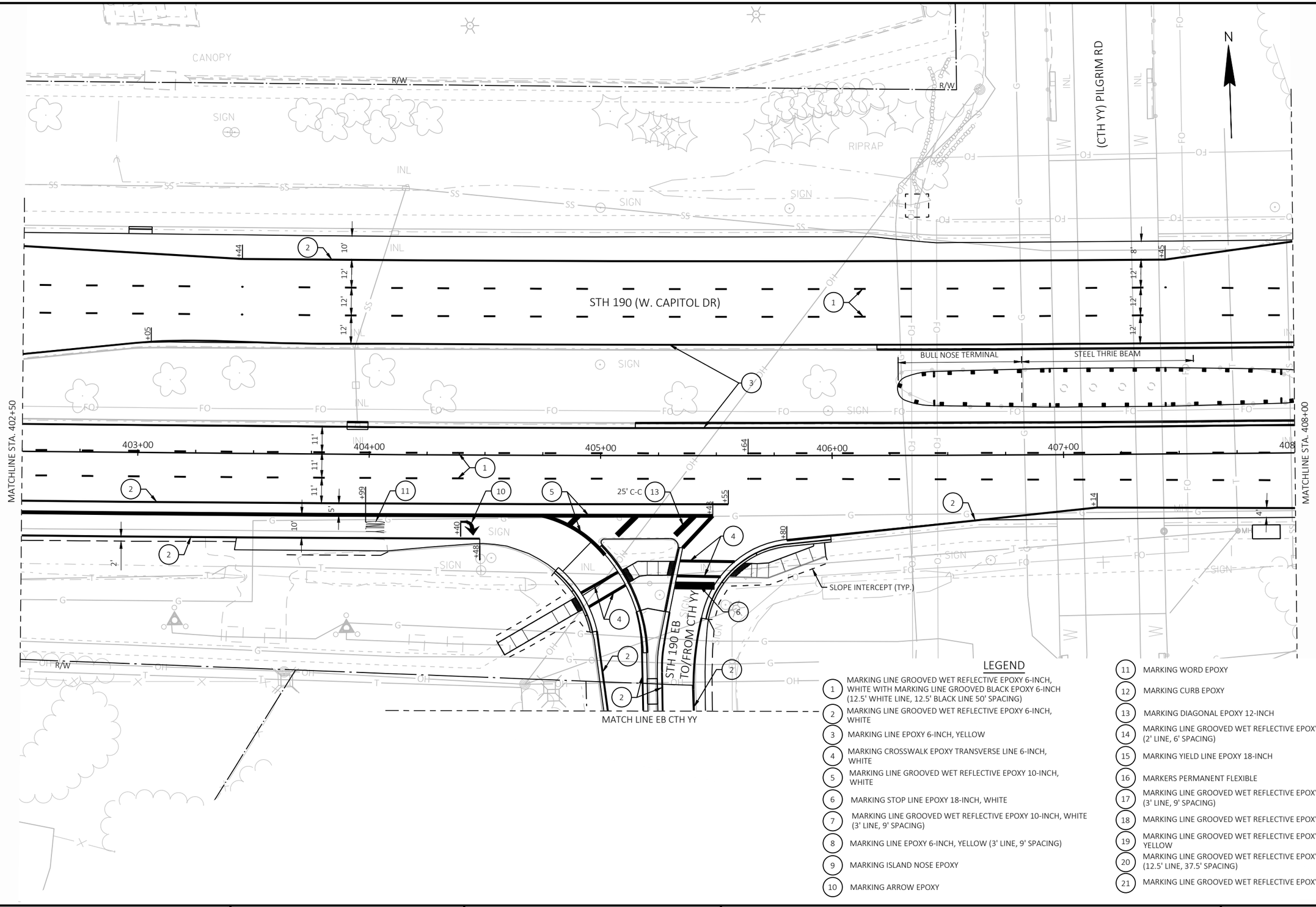


LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 342	E

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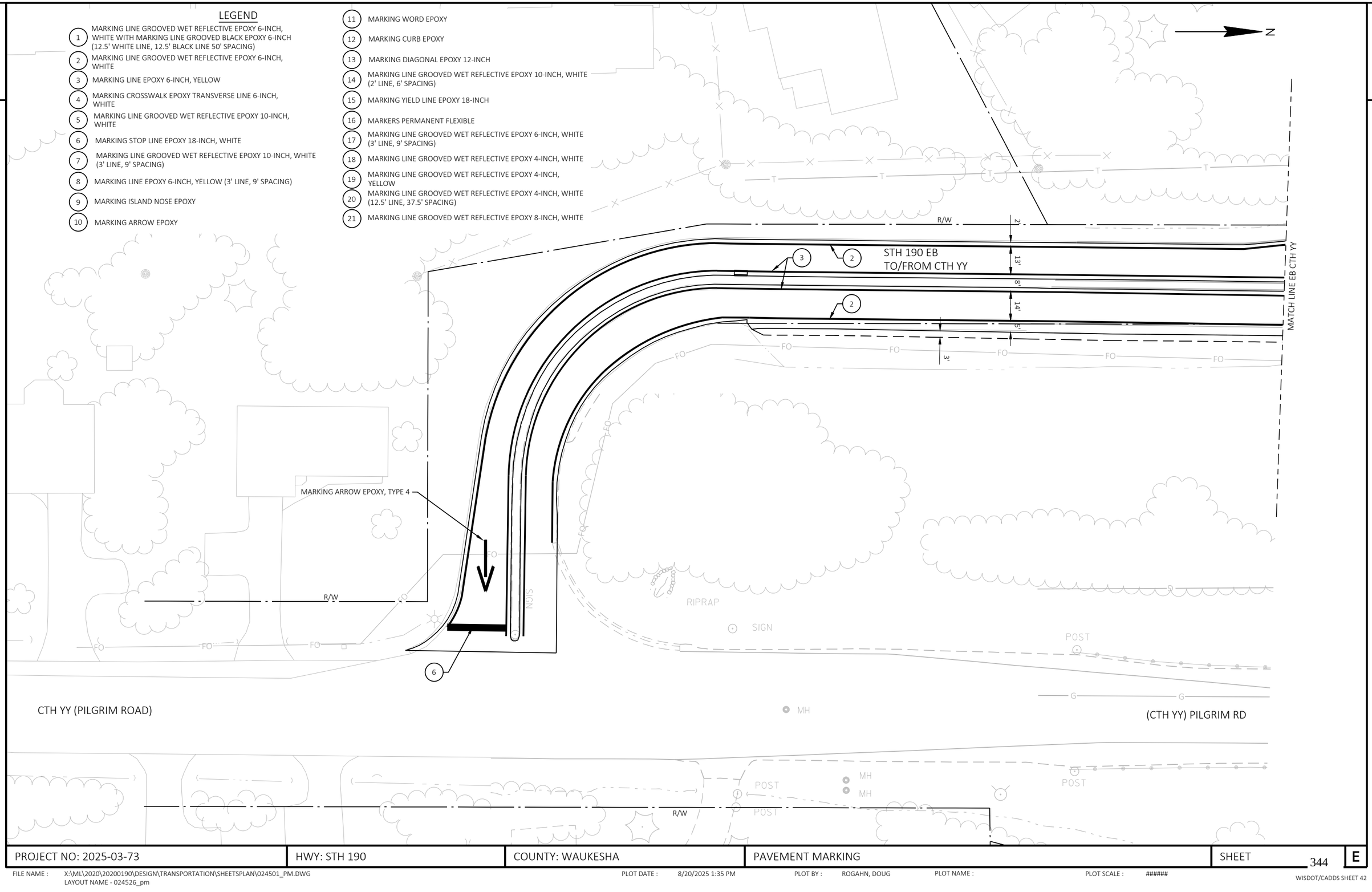
LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
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21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

2

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
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4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
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21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE



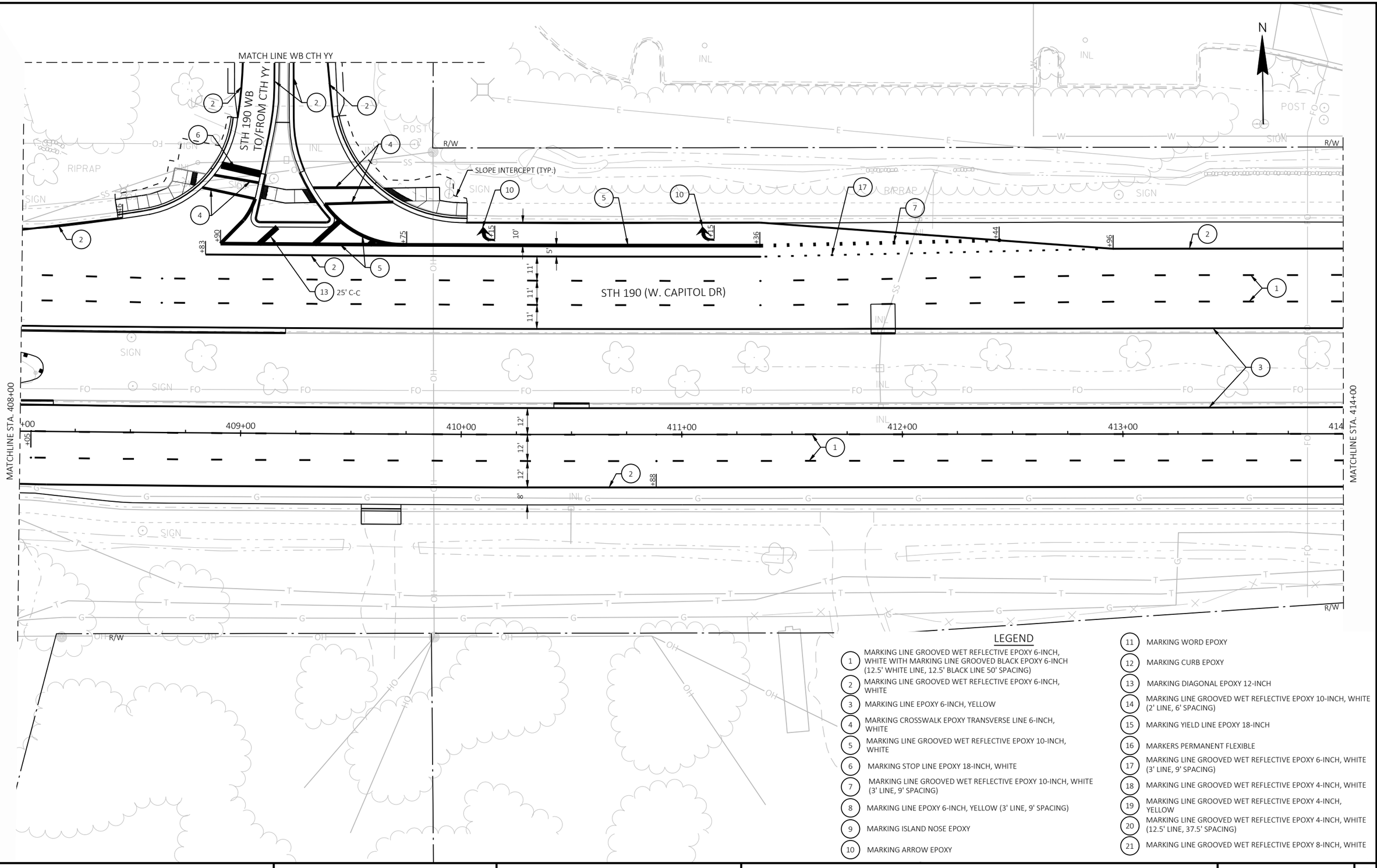
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 344	E

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WISDOT/CADDS SHEET 42

2



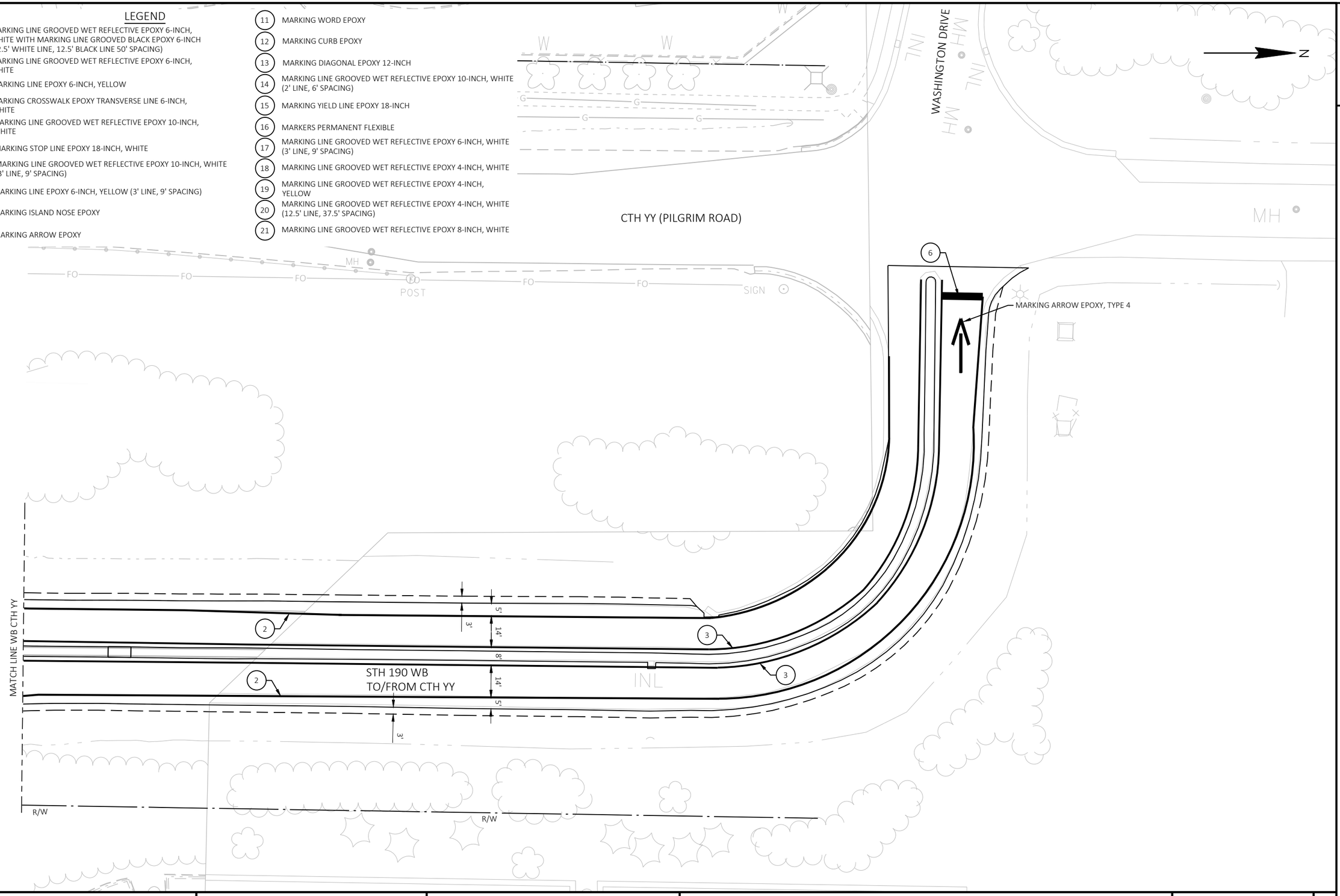
LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
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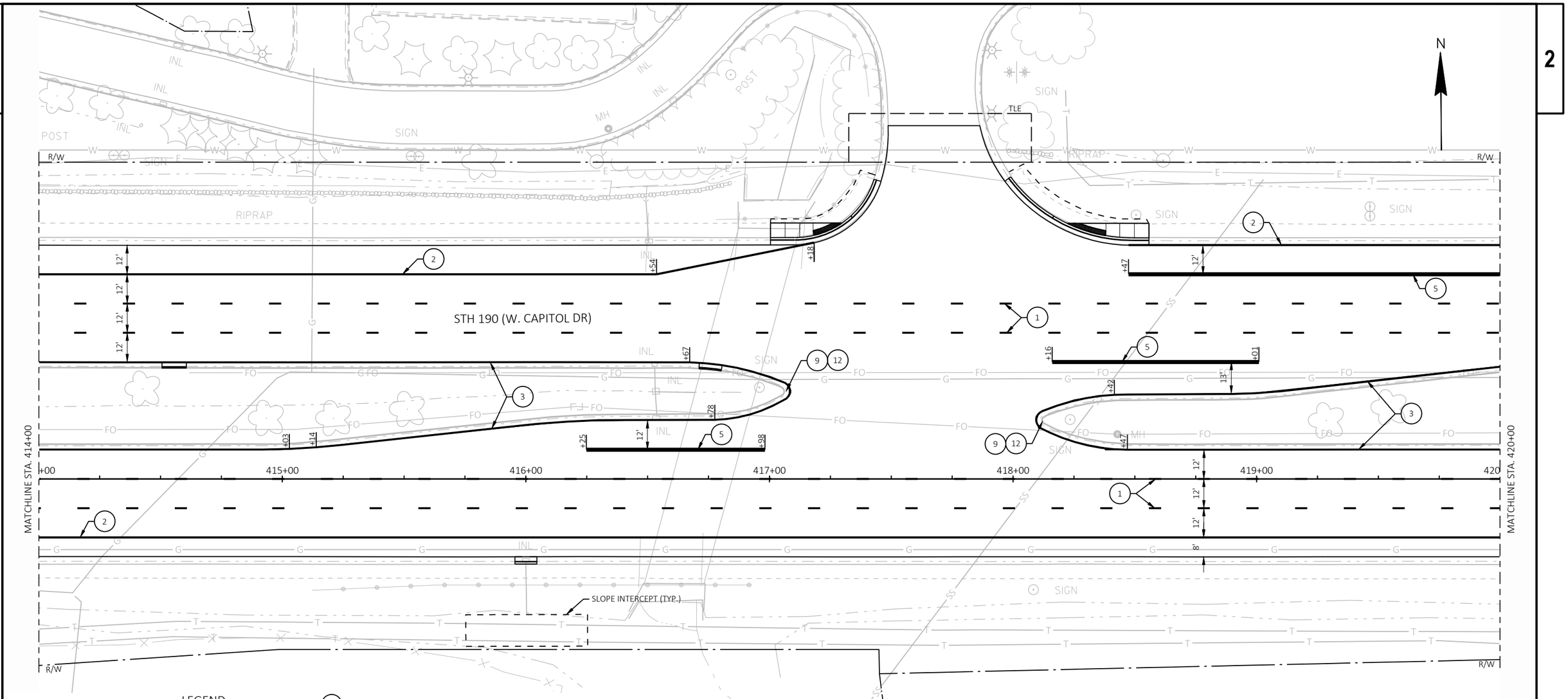
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 345	E

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
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21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE



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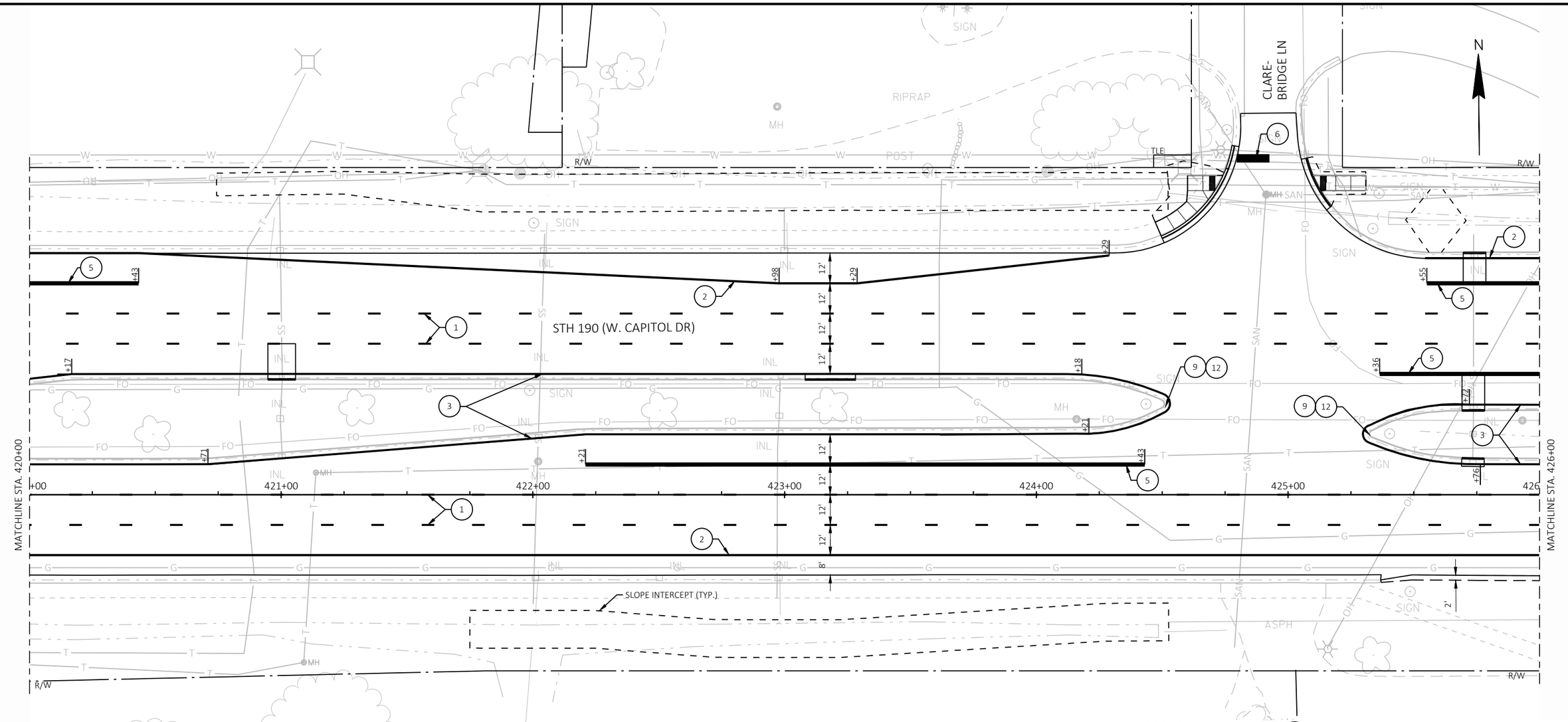


LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
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16. MARKERS PERMANENT FLEXIBLE
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21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 347	E

2



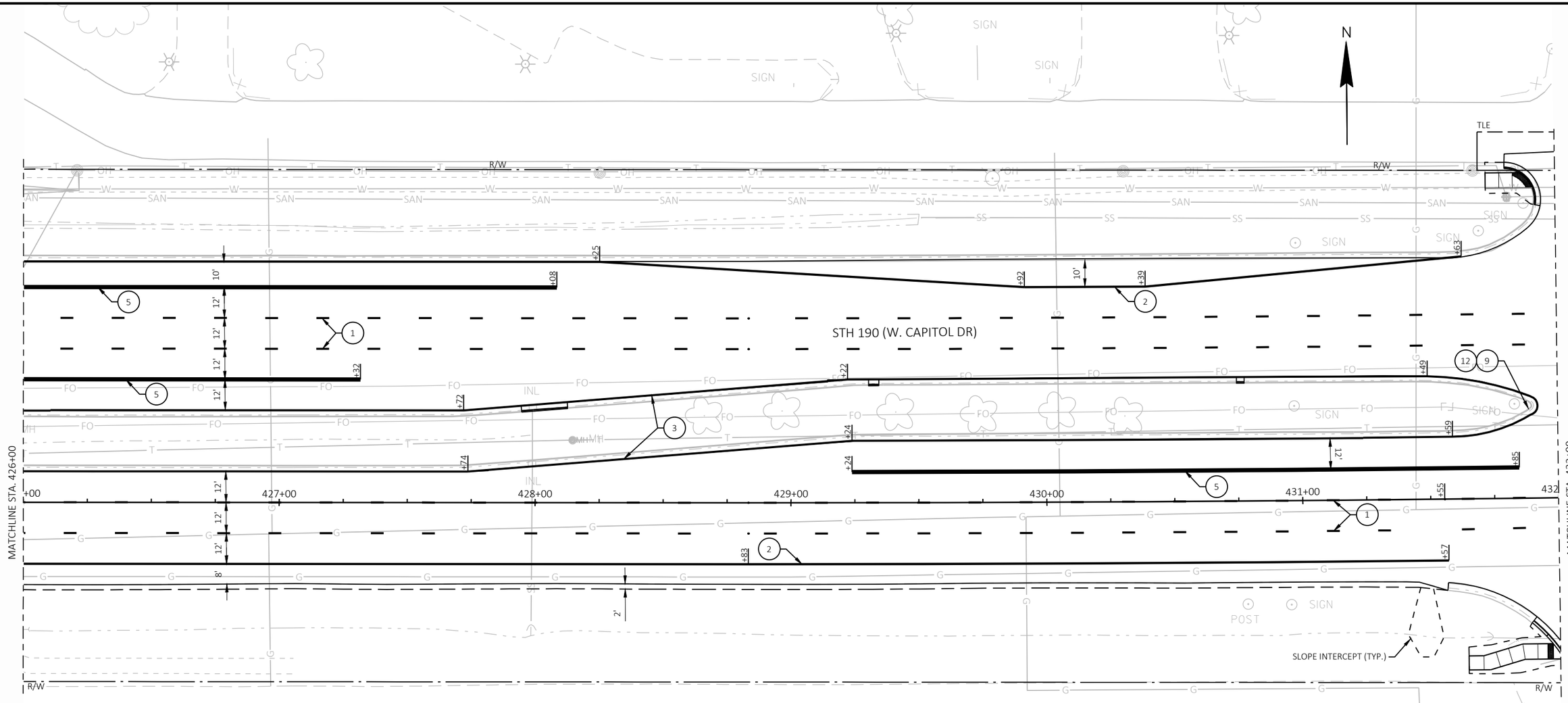
LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 348	E

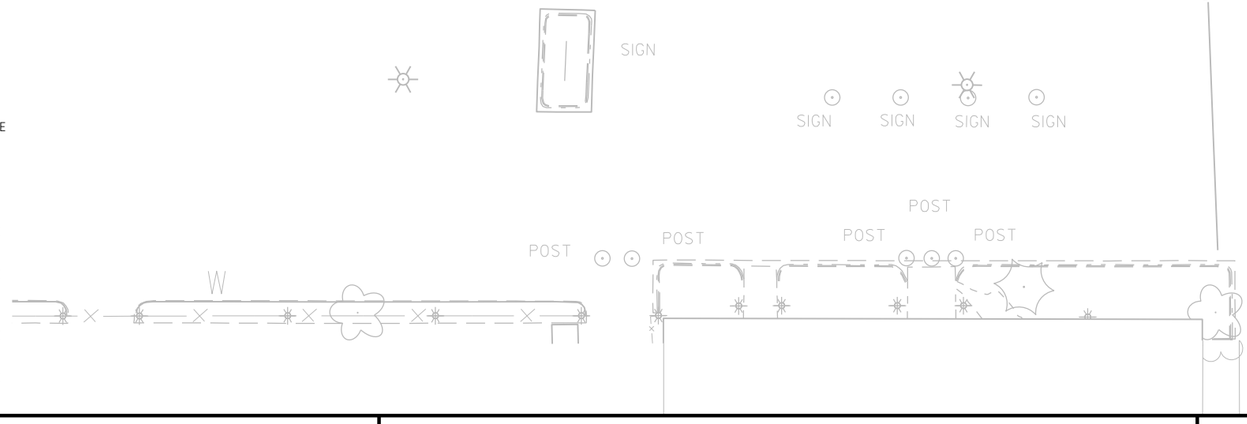
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PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

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LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 349	E

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STH 190 (W. CAPITOL DR)

MATCHLINE STA. 432+00

MATCHLINE STA. 438+00

+00 433+00 434+00 435+00 436+00 437+00

TLE

R/W

SLOPE INTERCEPT (TYP.)

FEE

SIGN

POSTS

RIPRAP

ASPH

CANOPY

INL

MH

SAN

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W

10'

12'

11'

13'

5'

+19 +97 +74 +11 +50 +14 +69 +96 +51 +80 +36 +60 +05 +42

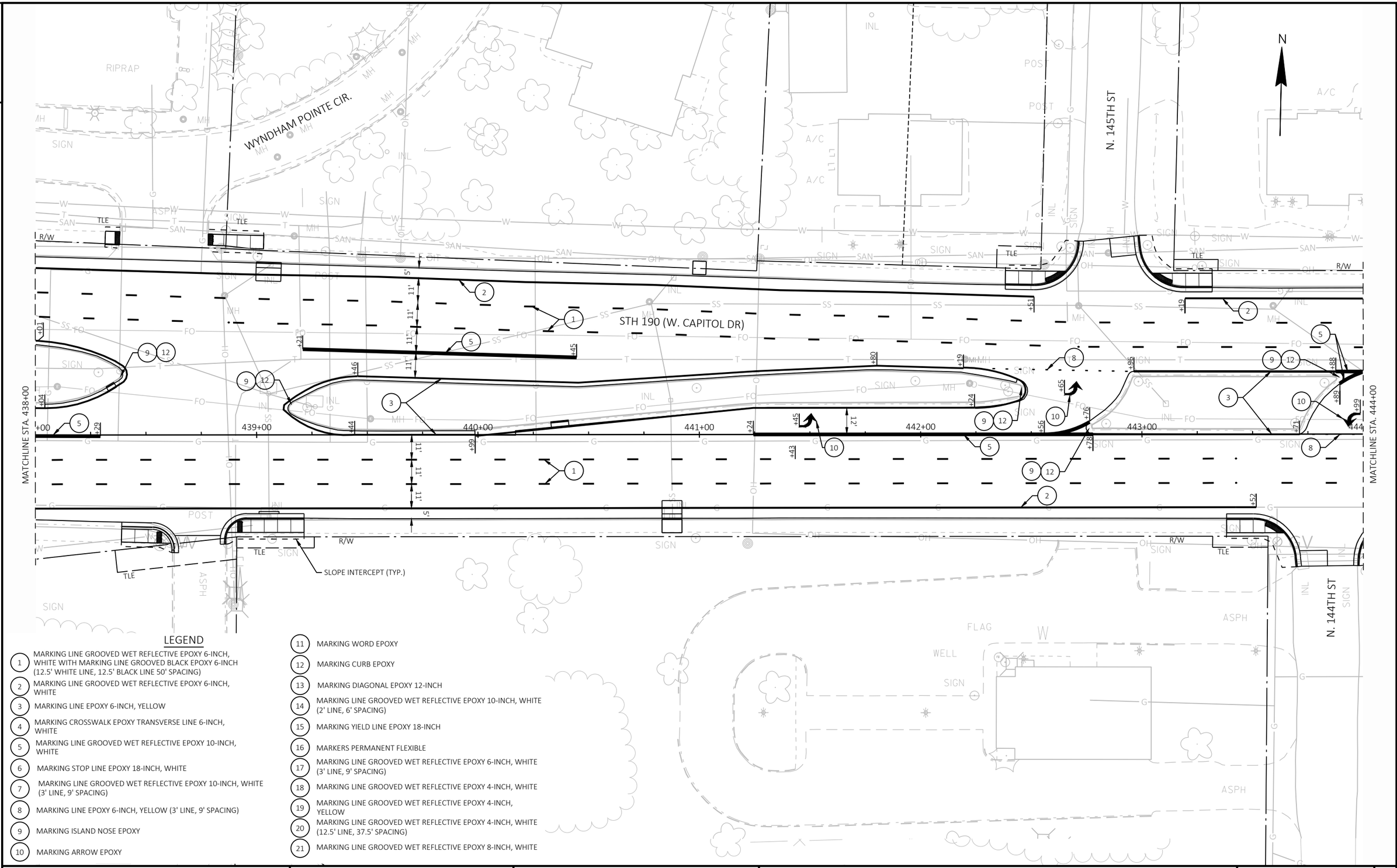
LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 350	E

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PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

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LEGEND

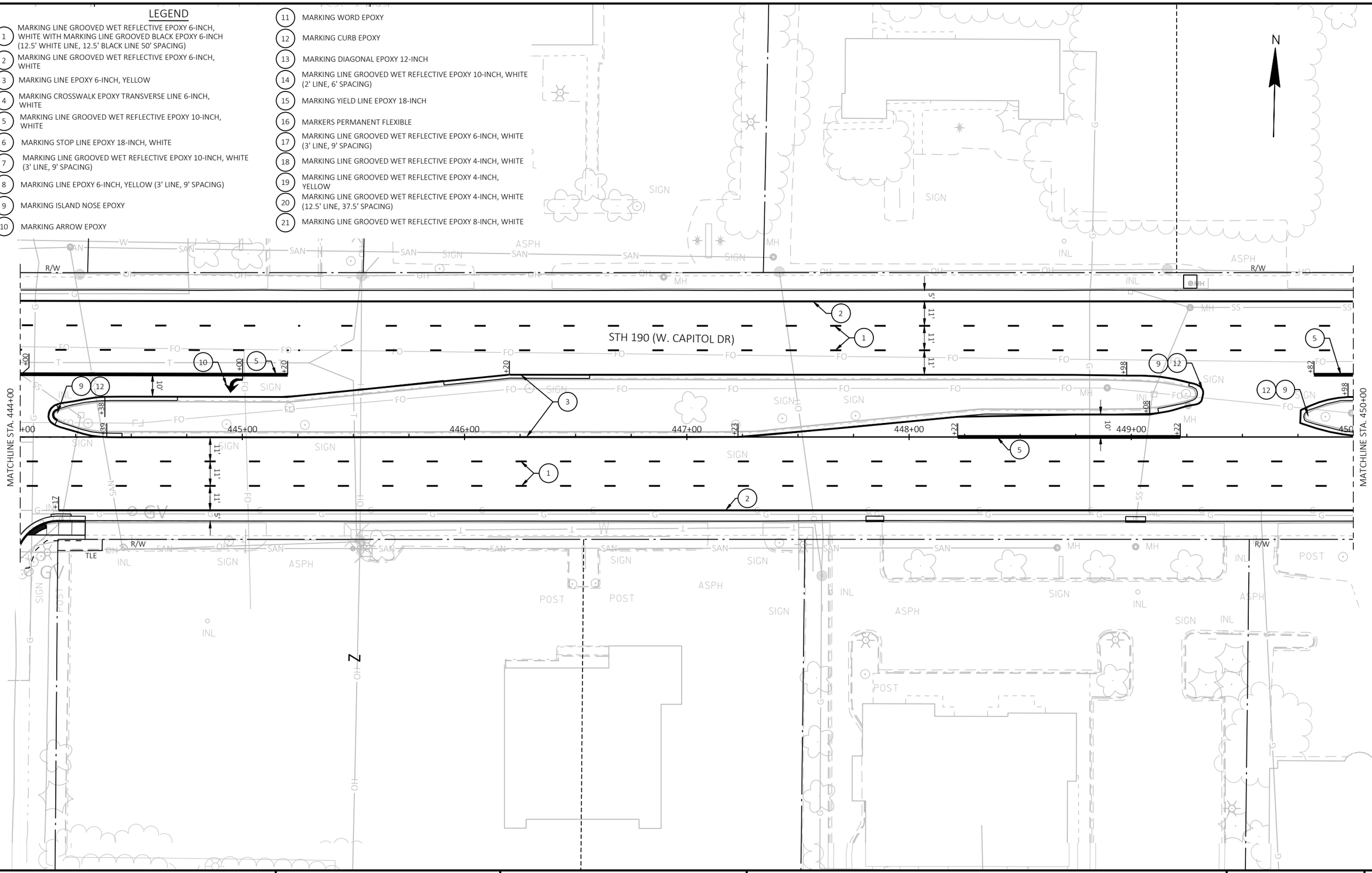
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6. MARKING STOP LINE EPOXY 18-INCH, WHITE
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11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
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14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
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16. MARKERS PERMANENT FLEXIBLE
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20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 351	E

2

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
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5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
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8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
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16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
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19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
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21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE



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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 352	E

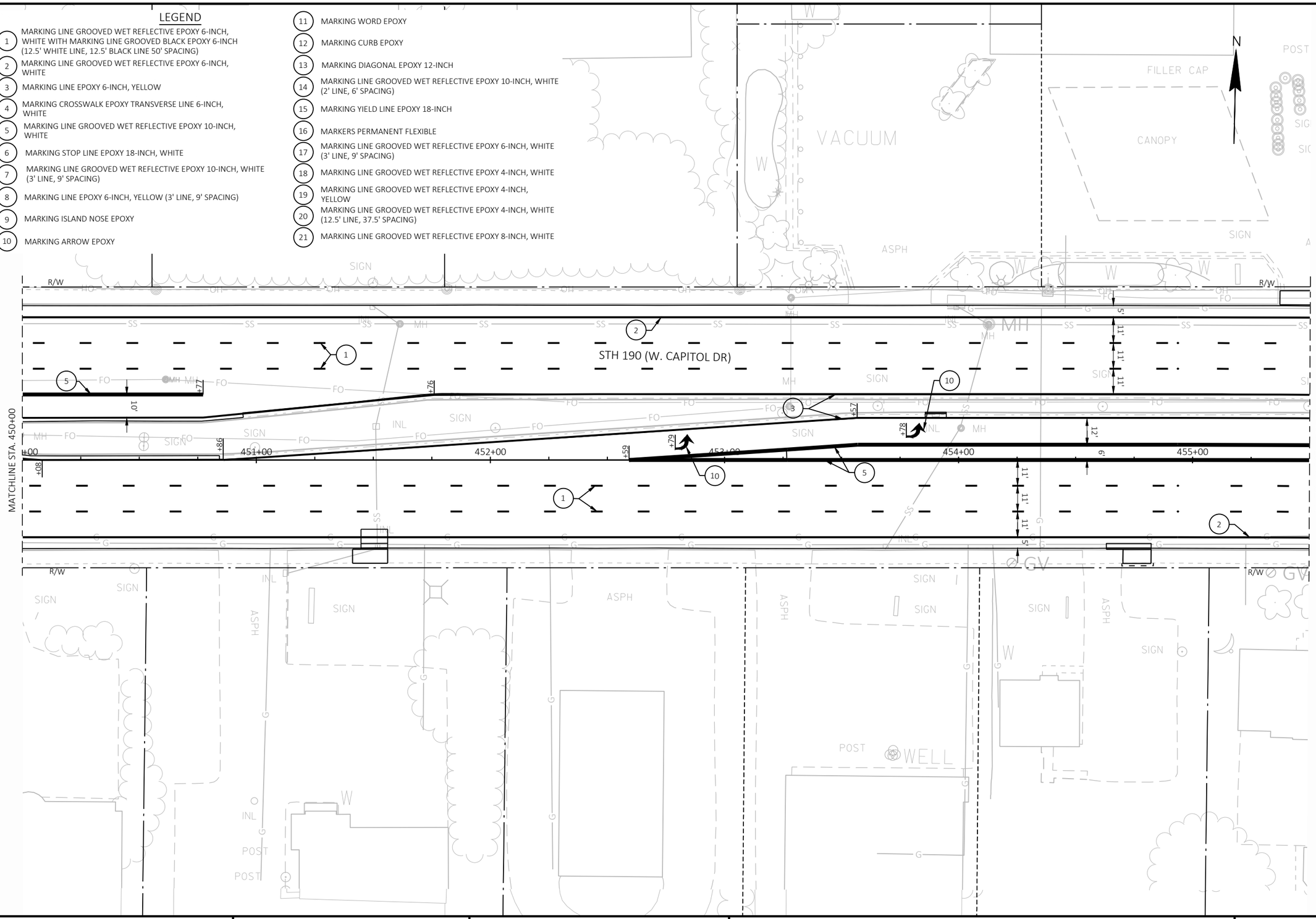
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LAYOUT NAME - 024534_pm

PLOT DATE : 8/20/2025 1:39 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
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9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

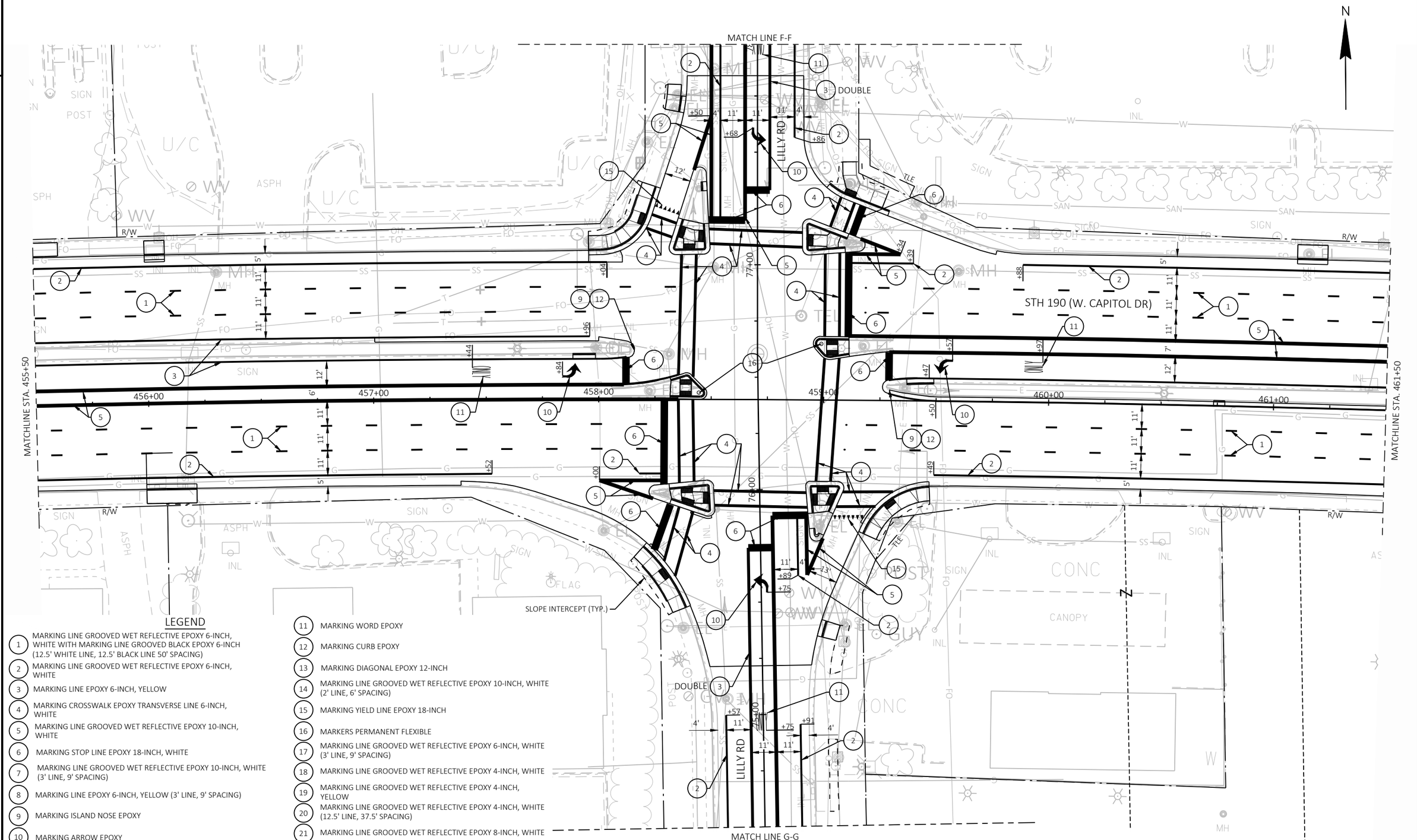


PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 353	E

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LEGEND

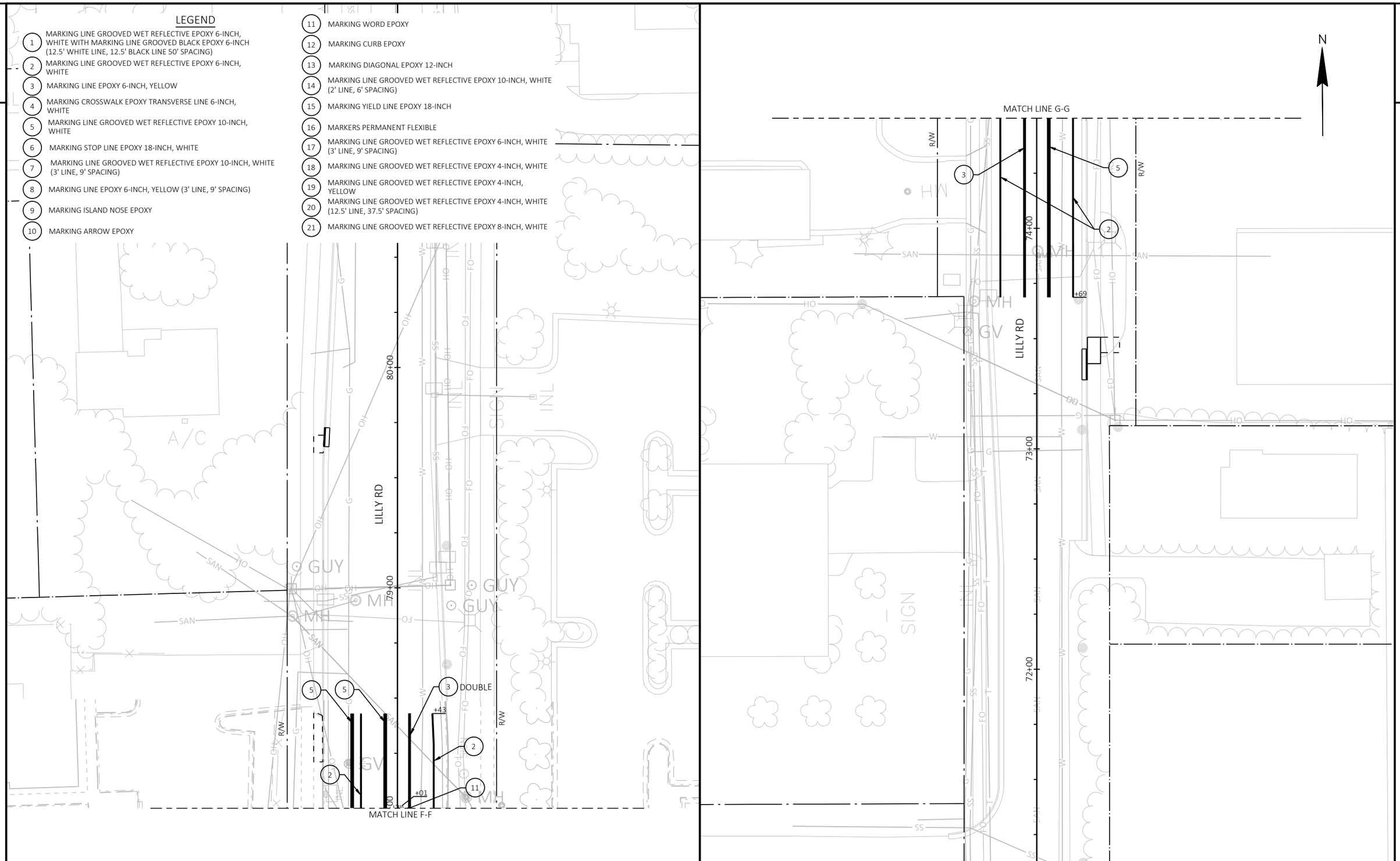
1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 354	E

2

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
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11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
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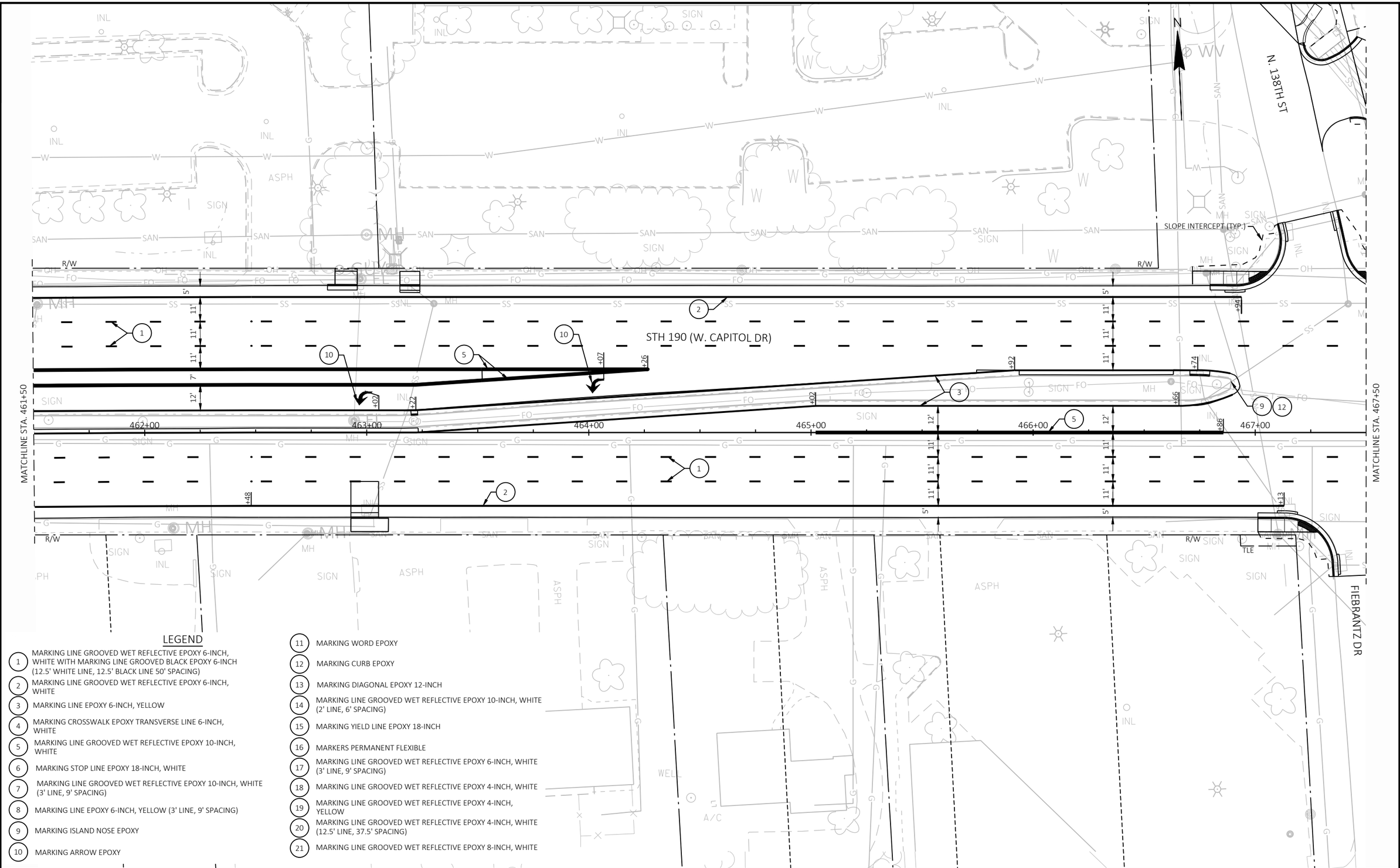
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WISDOT/CADDS SHEET 42

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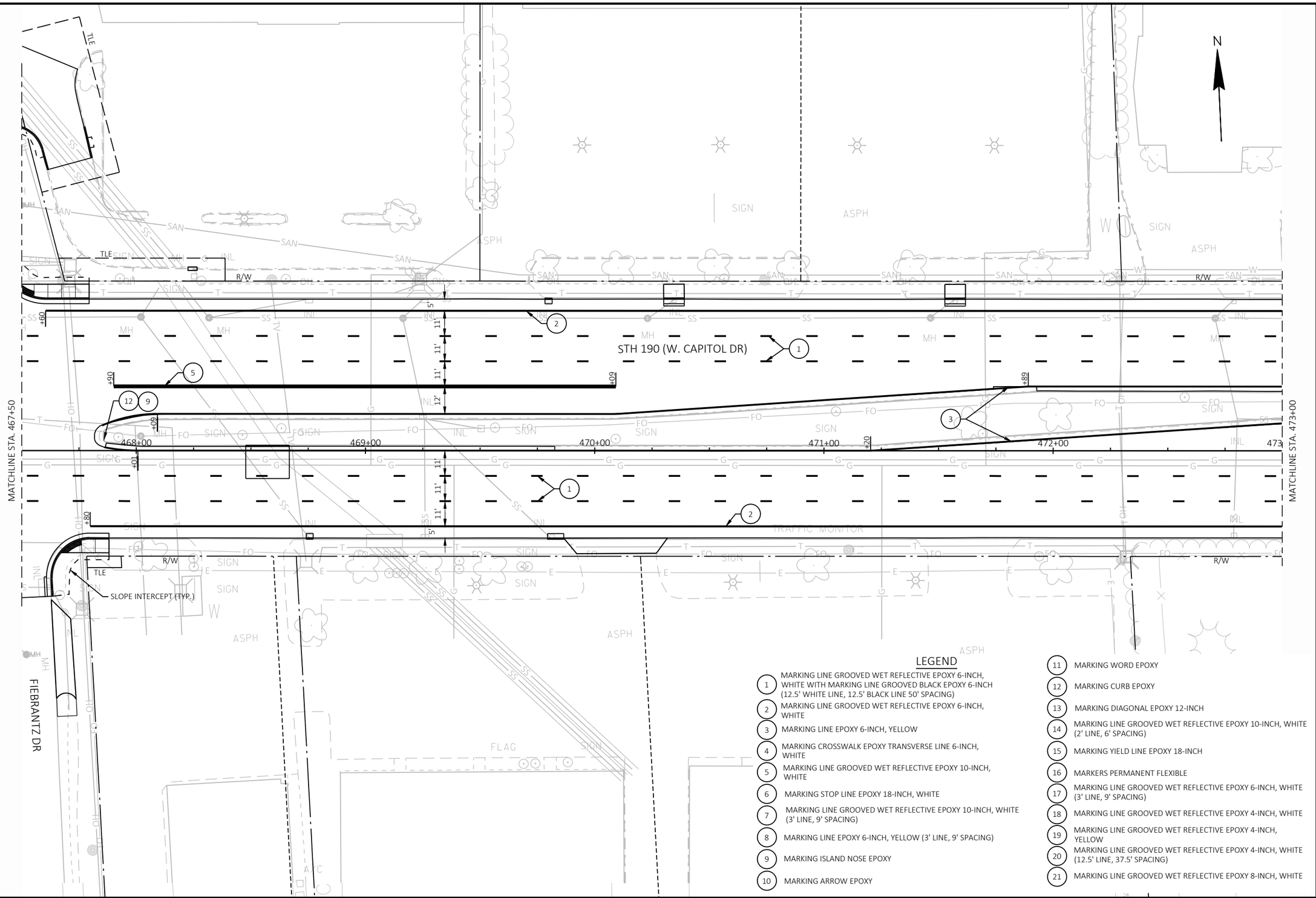
LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
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6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
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12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
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21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 356	E

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WISDOT/CADDS SHEET 42

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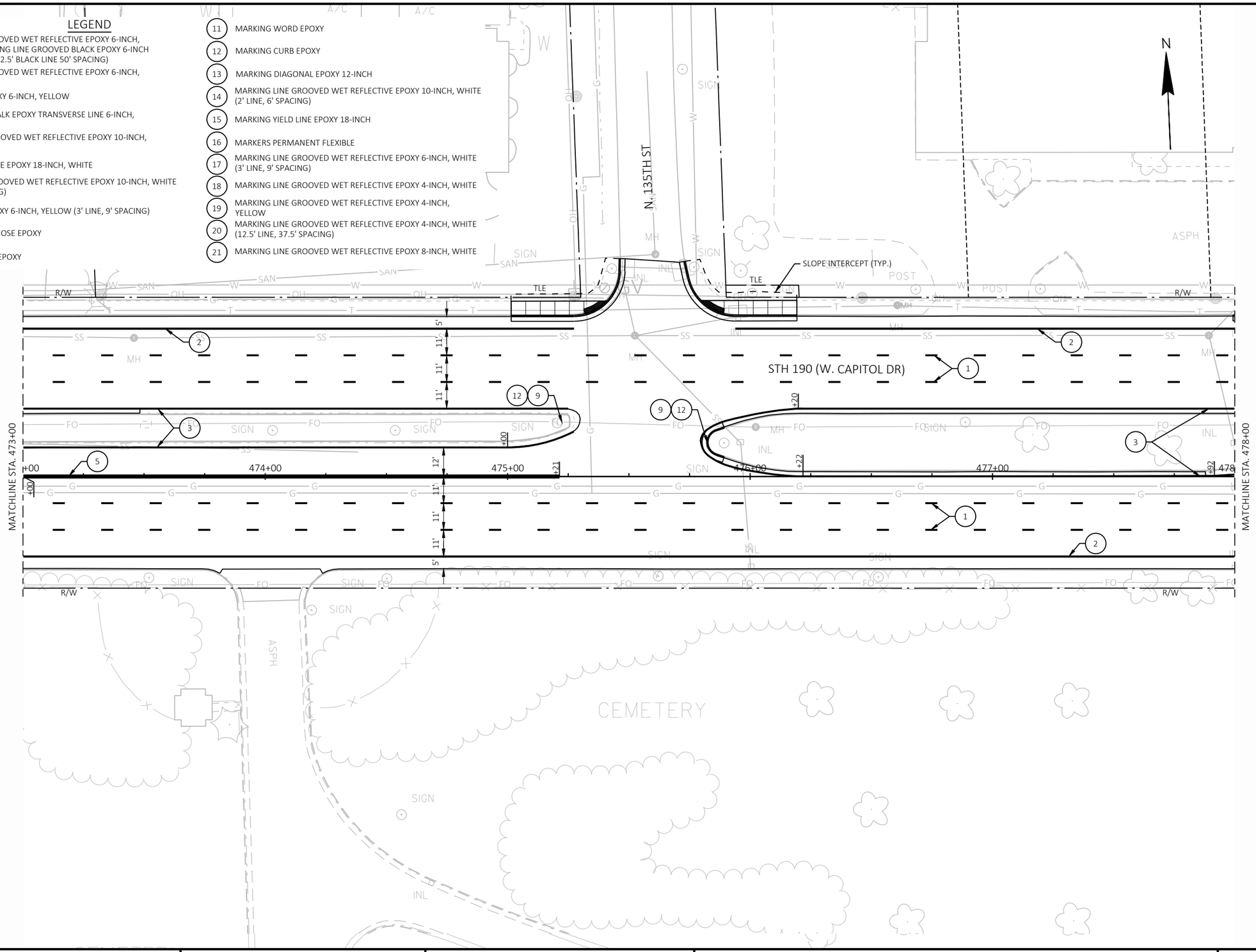
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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 357	E

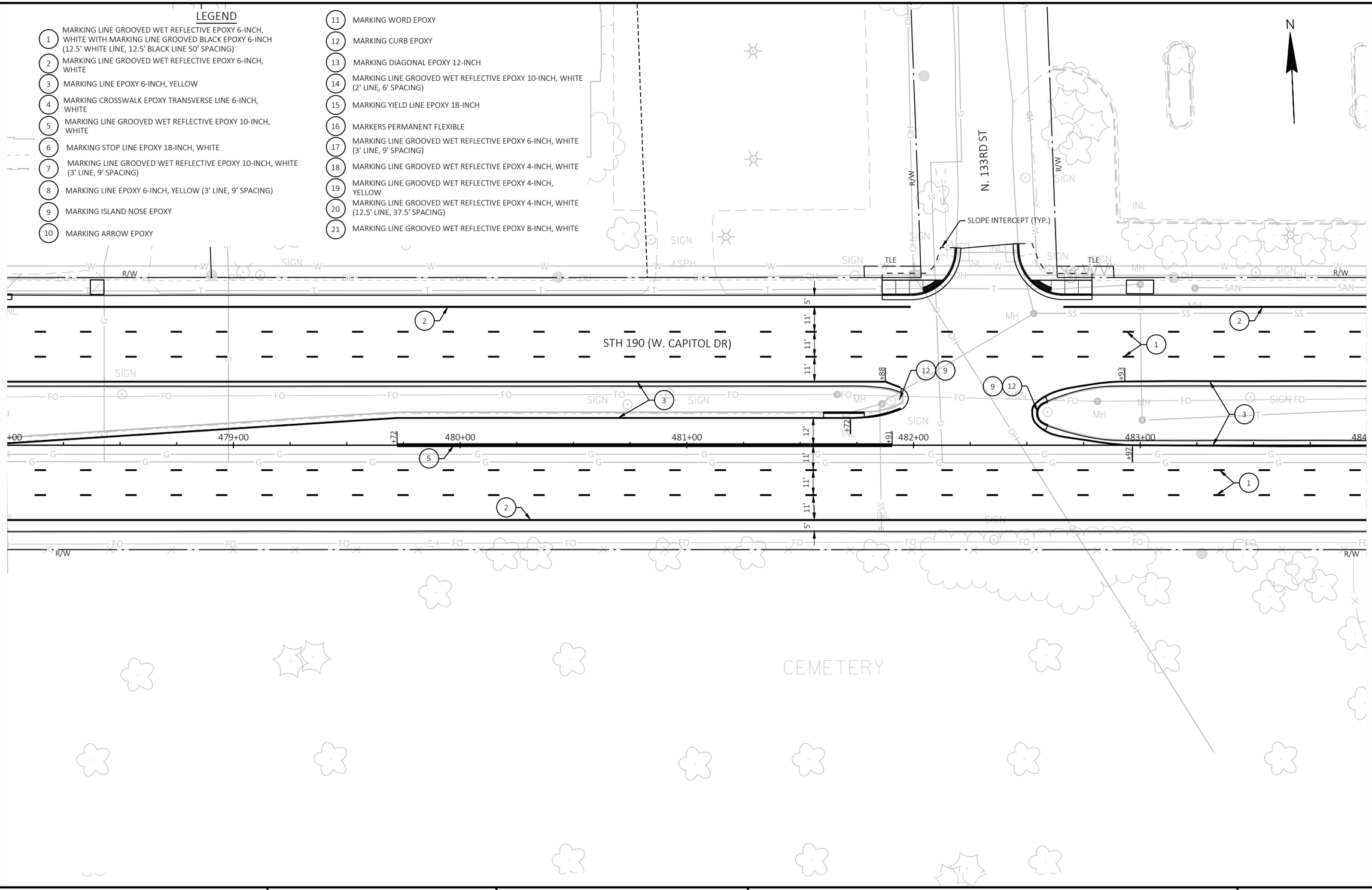
LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
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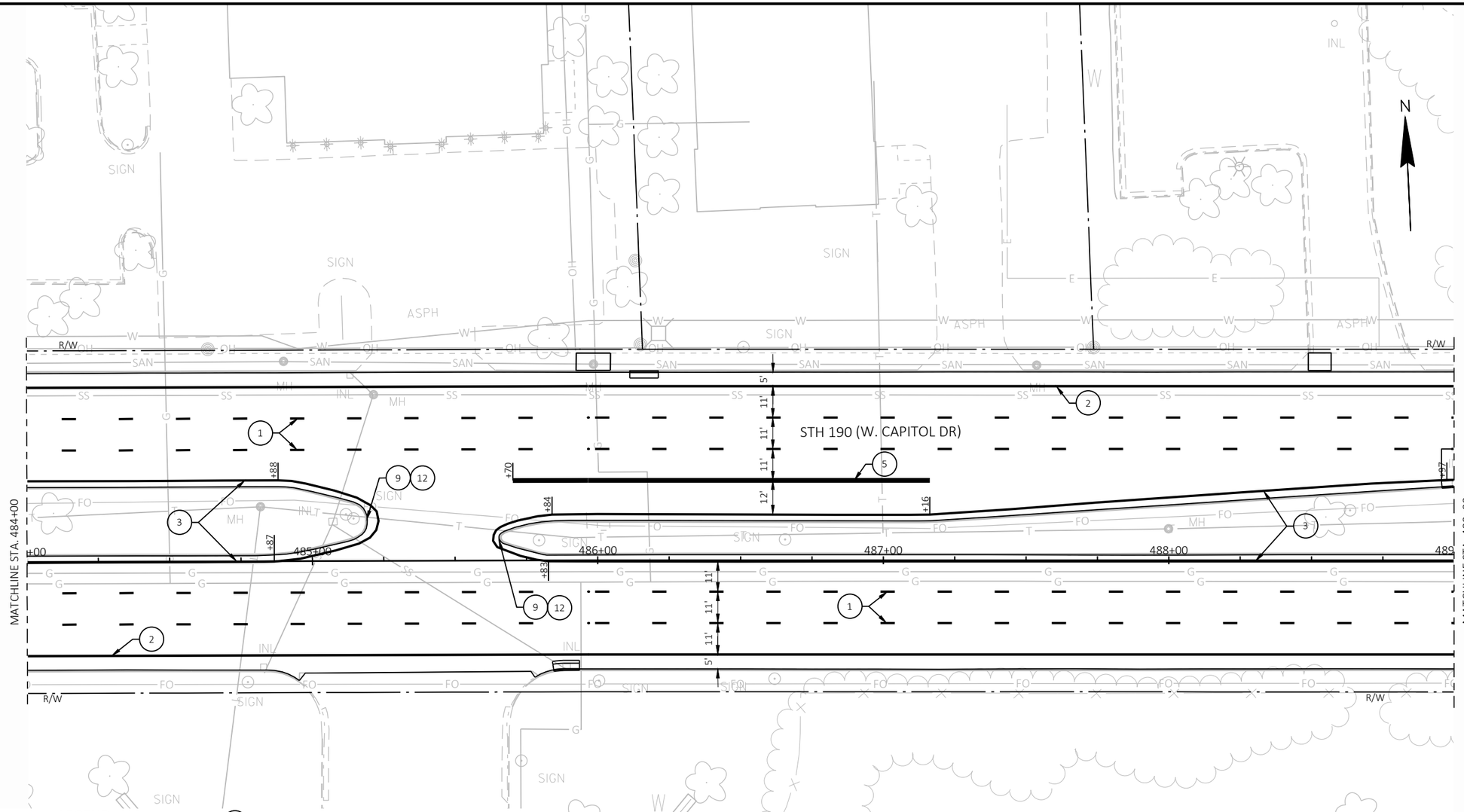


LEGEND

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2



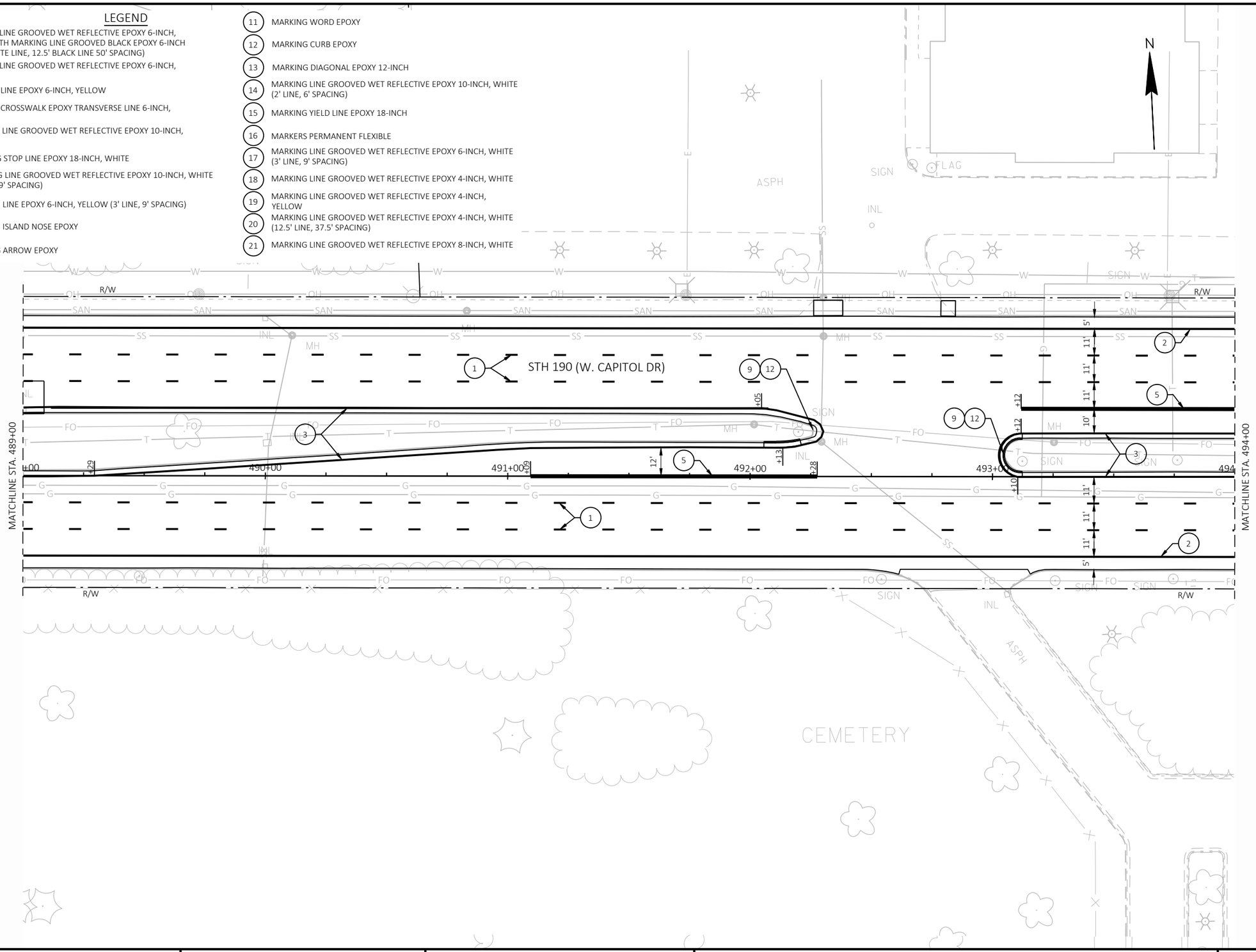
LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
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12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 360	E

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

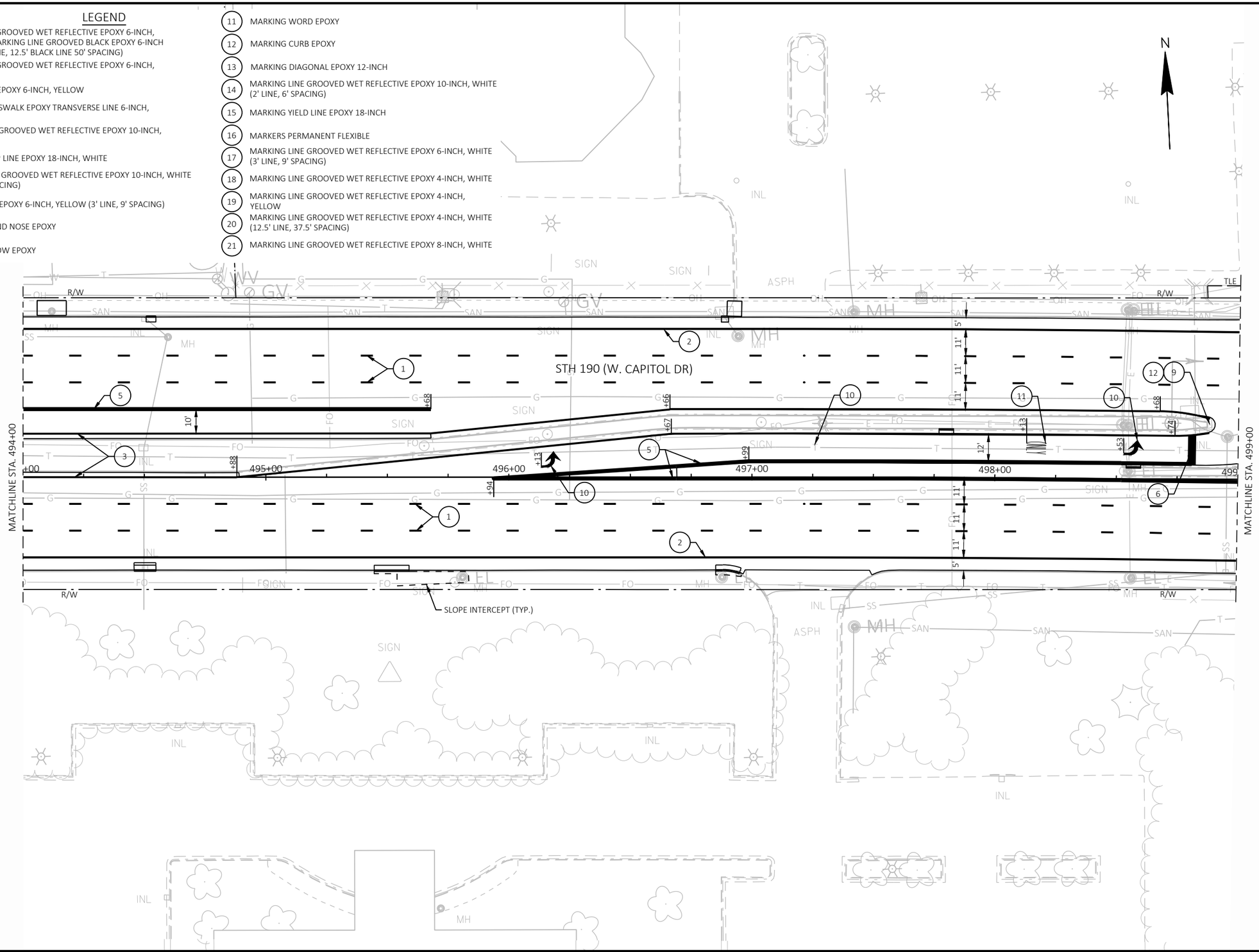


2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 361	E

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

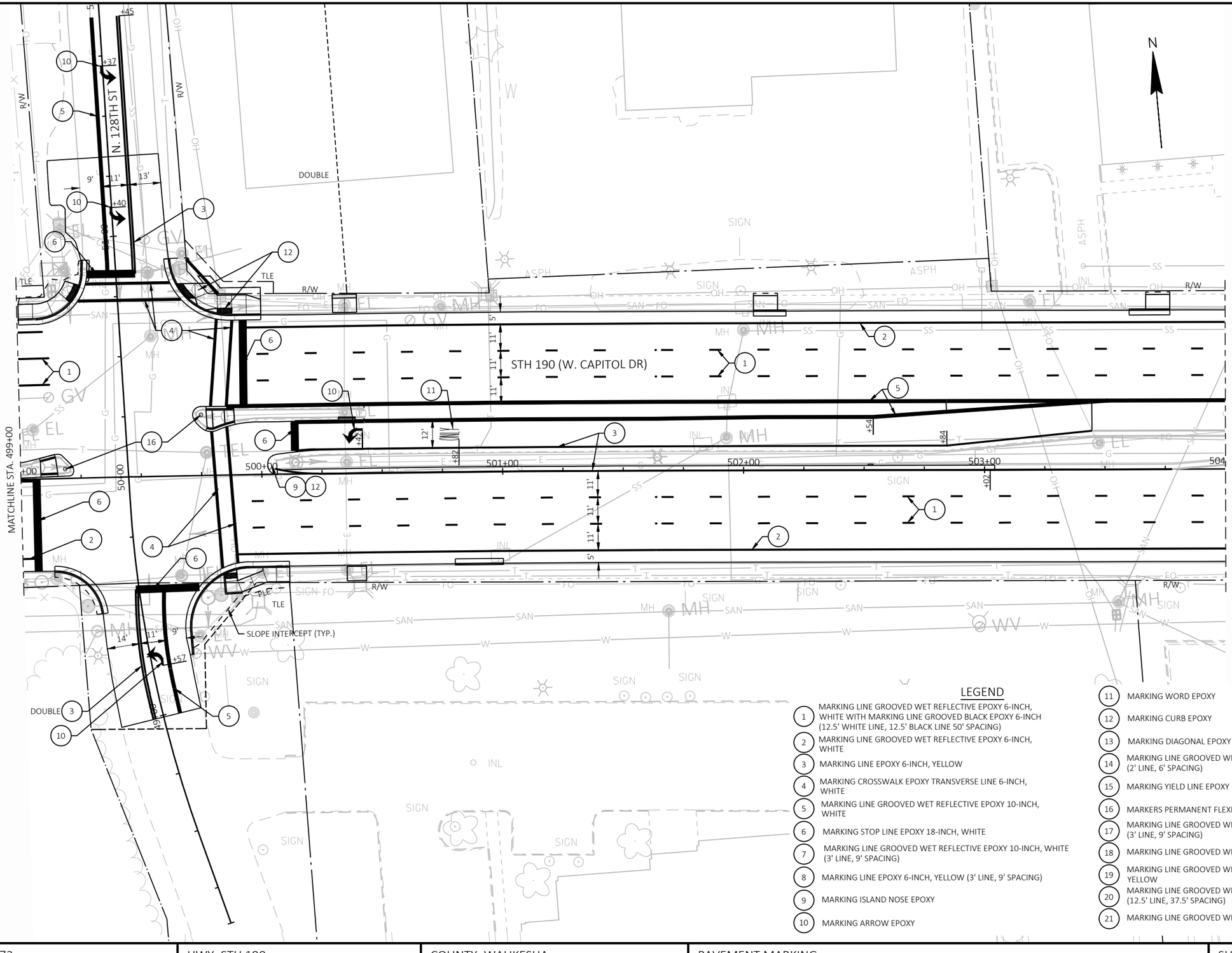


PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 362	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024544_pm

PLOT DATE : 8/20/2025 1:44 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
8. MARKING LINE EPOXY 6-INCH, YELLOW (3' LINE, 9' SPACING)
9. MARKING ISLAND NOSE EPOXY
10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH
14. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (2' LINE, 6' SPACING)
15. MARKING YIELD LINE EPOXY 18-INCH
16. MARKERS PERMANENT FLEXIBLE
17. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE (3' LINE, 9' SPACING)
18. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE
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20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 363	E

2

STH 190 (W. CAPITOL DR)

MATCHLINE STA. 504+00

MATCHLINE STA. 510+00

505+00 506+00 507+00 508+00 509+00 510

SLOPE INTERCEPT (TYP.)

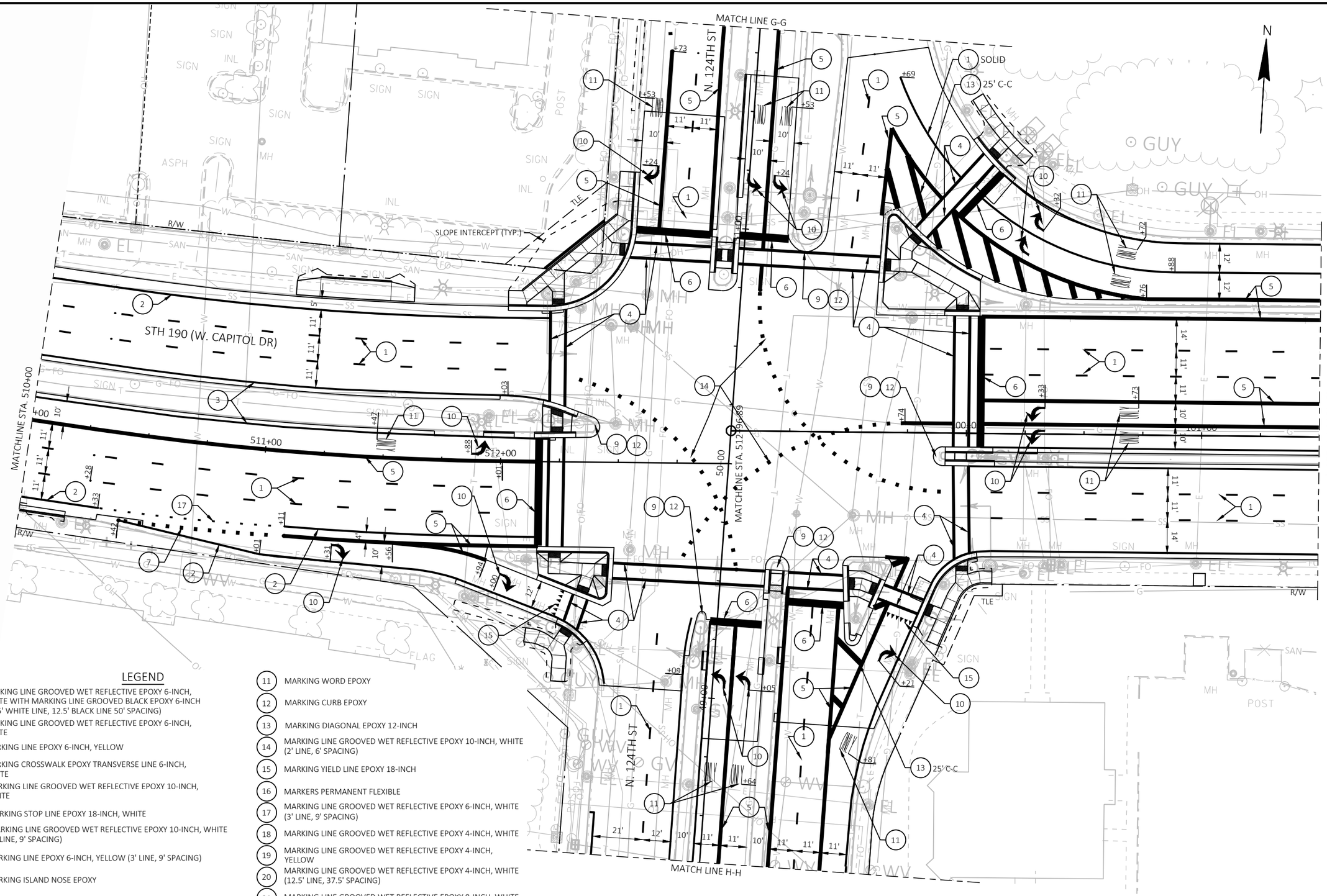
LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
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11. MARKING WORD EPOXY
12. MARKING CURB EPOXY
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20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 364	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024546_pm
PLOT DATE : 8/20/2025 1:45 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
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16. MARKERS PERMANENT FLEXIBLE
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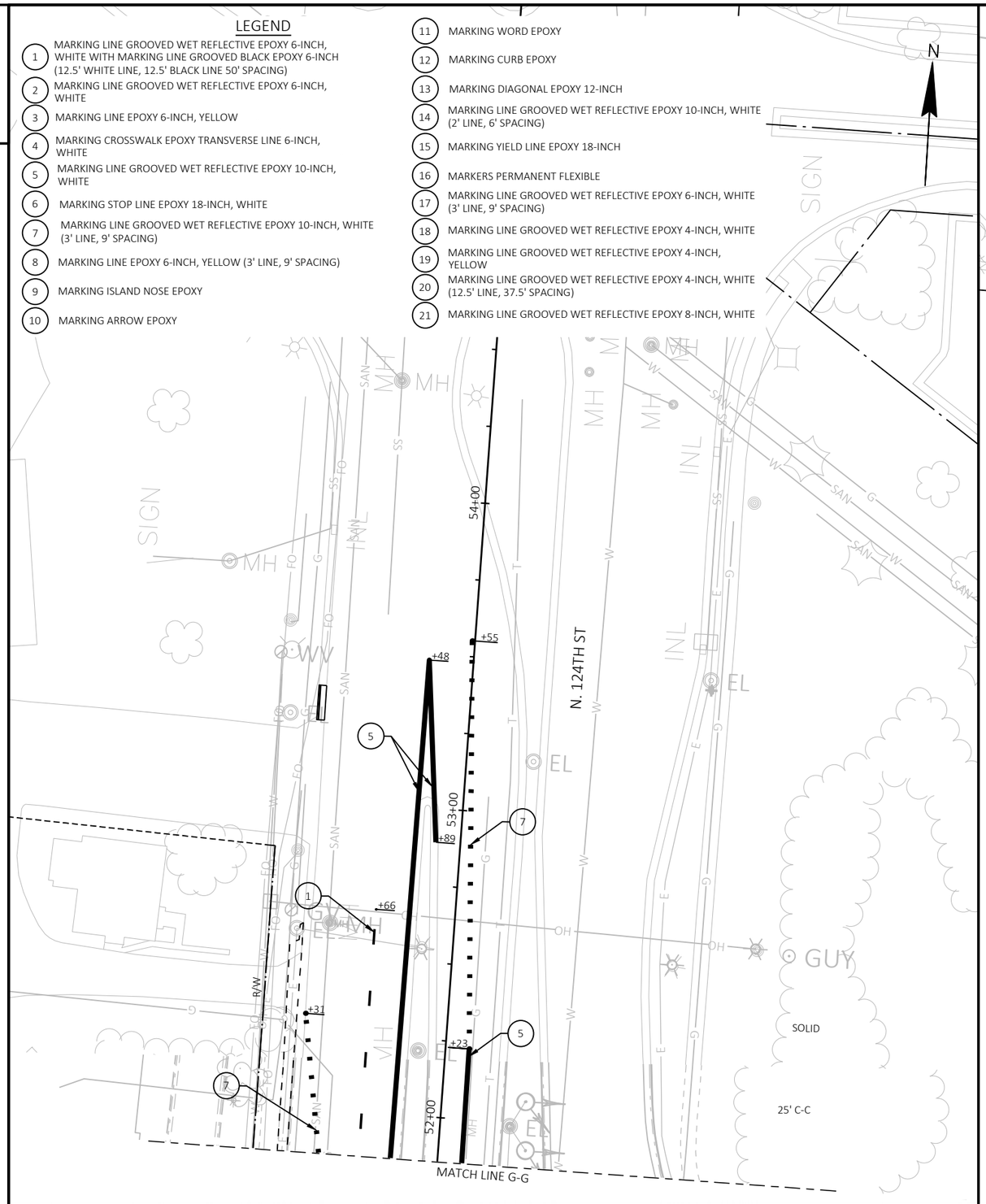
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 365	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024547_pm
PLOT DATE : 8/20/2025 1:46 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
5. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE
6. MARKING STOP LINE EPOXY 18-INCH, WHITE
7. MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH, WHITE (3' LINE, 9' SPACING)
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10. MARKING ARROW EPOXY
11. MARKING WORD EPOXY
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21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE



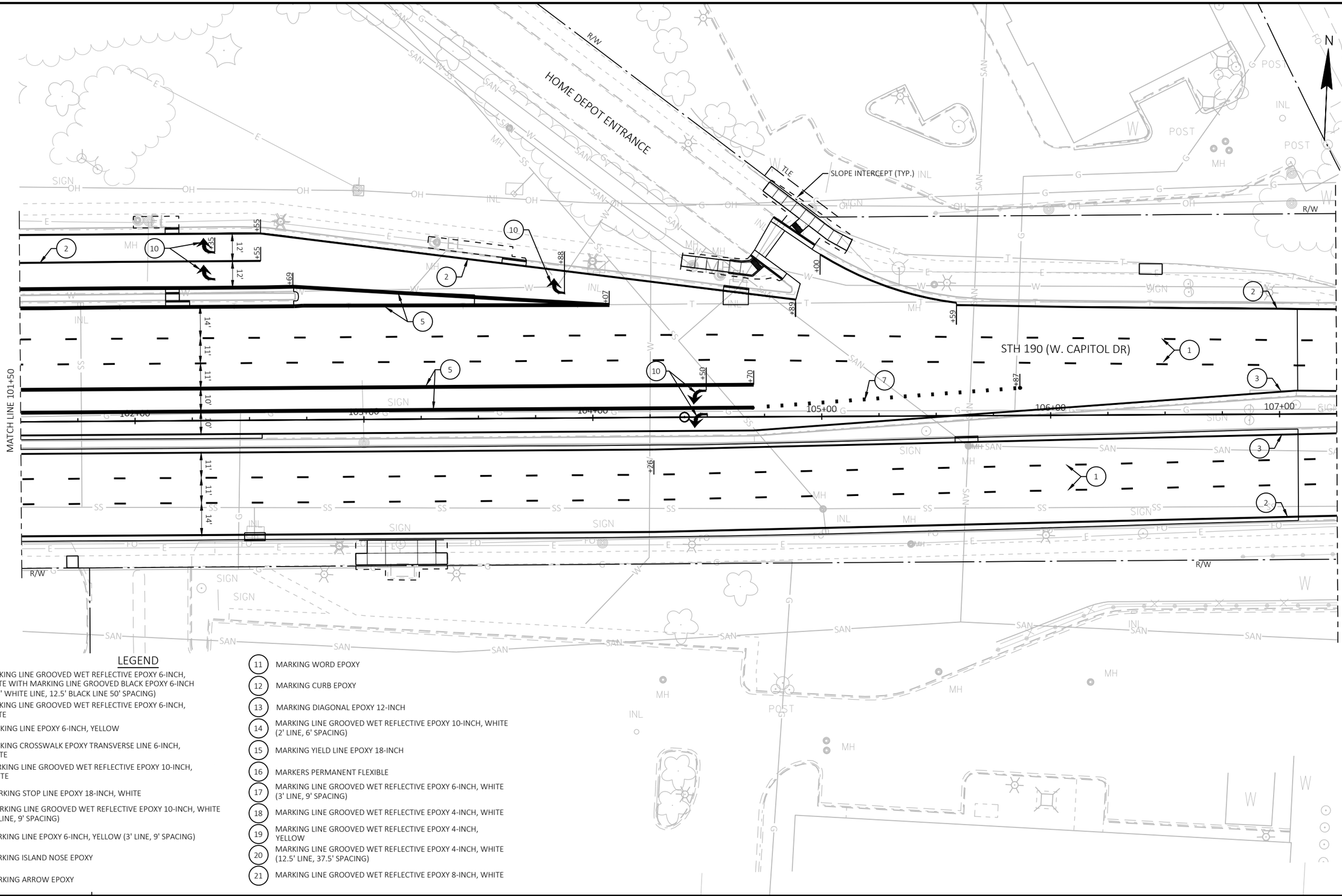


2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 366	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024548_pm
PLOT DATE : 8/20/2025 1:47 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
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20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 367	E

2



LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
4. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH, WHITE
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19. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, YELLOW
20. MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH, WHITE (12.5' LINE, 37.5' SPACING)
21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 368	E

2

2

N

MATCHLINE BB-BB

MATCHLINE CC-CC

STH 190 (W. CAPITOL DR)

N 118TH ST

12'

12'

1

2

3

LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
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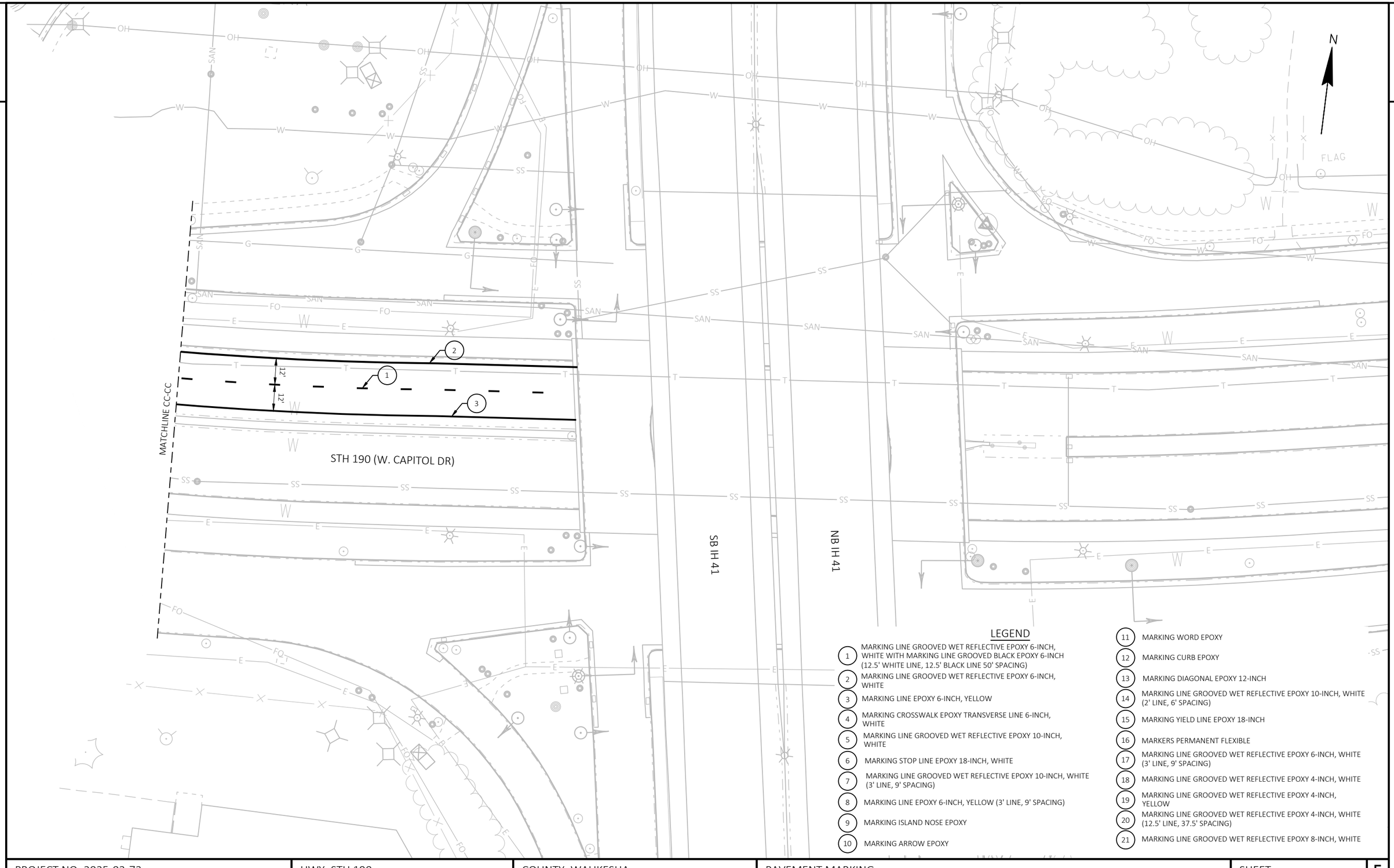
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 369	E

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LAYOUT NAME - 024551_pm

PLOT DATE : 8/20/2025 1:48 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2



LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE WITH MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' WHITE LINE, 12.5' BLACK LINE 50' SPACING)
2. MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE
3. MARKING LINE EPOXY 6-INCH, YELLOW
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21. MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH, WHITE

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 370	E

2

1. MAINTAIN TWO 11-FOOT MINIMUM LANES IN EACH DIRECTION DURING PEAK HOURS AT ALL TIMES. MAINTAIN ONE 11-FOOT MINIMUM LANE IN EACH DIRECTION DURING NON PEAK HOURS AT ALL TIMES.
2. TRAFFIC CONTROL CONES 42-INCH AND DRUMS ARE SPACED AT 50' ON CENTER EXCEPT AT DRIVEWAY AND INTERSECTIONS, WHERE SPACING IS 25'. TRAFFIC CONTROL DRUMS IN LANE CLOSURE TAPERS ARE SPACED AT 50'
3. THE CONTRACTOR SHALL REMOVE ALL EXISTING PAVEMENT MARKINGS WHICH CONFLICT WITH THE TRAFFIC CONTROL.
4. THE CONTRACTOR SHALL COVER ANY SIGN CONFLICTING WITH THE TRAFFIC CONTROL IN OPERATION AS NEEDED OR AS DIRECTED BY THE ENGINEER. COVERING SIGNS TO BE PAID FOR AS "TRAFFIC CONTROL COVERING SIGNS TYPE II" PAY ITEM
5. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY BARRICADES, SIGNS, DIRECTIONAL ARROWS, LIGHTS, TEMPORARY MARKINGS, FLAGMEN, AND SAFETY DEVICES AS CALLED FOR ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
6. DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON CONTRACTOR'S METHOD OR SEQUENCES OF OPERATION
7. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE
8. ALL SIGNS ARE 48" X 48" EXCEPT OTHERWISE NOTED
9. THE EXACT LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD LOCATIONS AS APPROVED BY THE ENGINEER IN THE FIELD.
10. BOTH STEADY BURN LIGHTS AND FLASHING LIGHTS SHALL BE ONE WAY WITH THE LIGHT SOURCE SHOWING TOWARDS ADJACENT APPROACHING TRAFFIC.
11. CHANNELIZING DEVICES SHALL BE DRUMS WITH ATTACHED TYPE "C" STEADY BURN LIGHT (APPROACH TAPERS ONLY).
12. MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES UNLESS COORDINATED WITH PROPERTY OWNER.
13. ARROW BOARDS SHALL BE LOCATED AS SHOWN ON THE PLAN, OR AS DIRECTED BY THE ENGINEER.

NOTE: SIGNING TO BE USED WHEN STH 190 IS REDUCED TO ONE LANE DURING NON PEAK HOURS

VILLAGE OF MENOMONEE FALLS

CITY OF MILWAUKEE

VILLAGE OF BUTLER

WAUKESHA COUNTY

MILWAUKEE COUNTY

UNION PACIFIC RAILWAY

CITY OF WAUWATOSA

TOWN OF BROOKFIELD

K
LISBON ROAD

LISBON ROAD

EAST
190
M3-2 24"X12"
M1-6 24"X24"
MAX. 11' WIDTH
W12-52 48"X48"

MAX. 11' WIDTH
W12-52 48"X48"

WORK ZONE

190

190

240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 100 110 120 130 138

CAPITOL DRIVE

CAPITOL DRIVE

STA. AHEAD = 99+00.00
STA. BACK = 512+96.89

WEST
190
M3-4 24"X12"
M1-6 24"X24"
MAX. 11' WIDTH
W12-52 48"X48"

BROOKFIELD RD

CALHOUN RD

PILGRIM RD

LILLY RD

124TH ST

IH 41

CITY OF BROOKFIELD

YY

BURLEIGH ROAD

CTH F

N

2

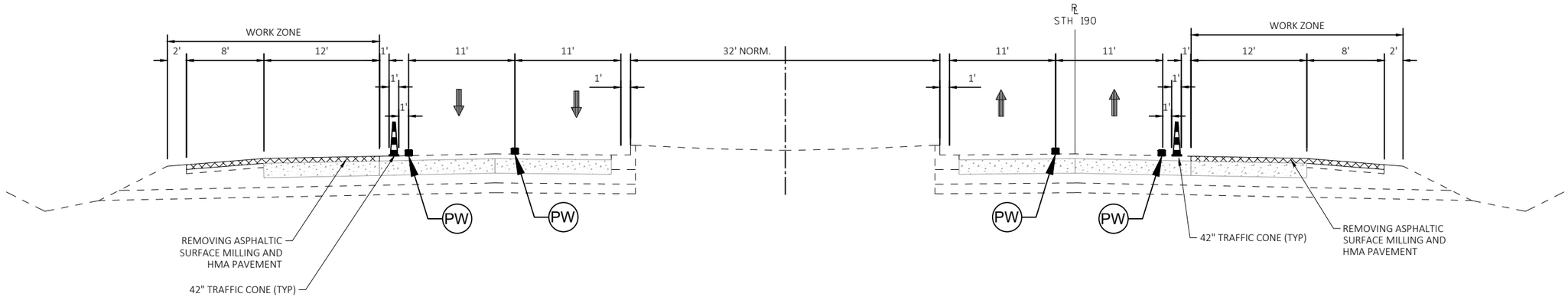
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PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	ADVANCED TRAFFIC CONTROL - STAGE 1 & 2 - OFF PEAK HOUR LANE CLOSURES	SHEET 372	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025002_TC.DWG
LAYOUT NAME - 025002
PLOT DATE : 8/20/2025 2:19 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:3000 FT
WISDOT/CADDS SHEET 42

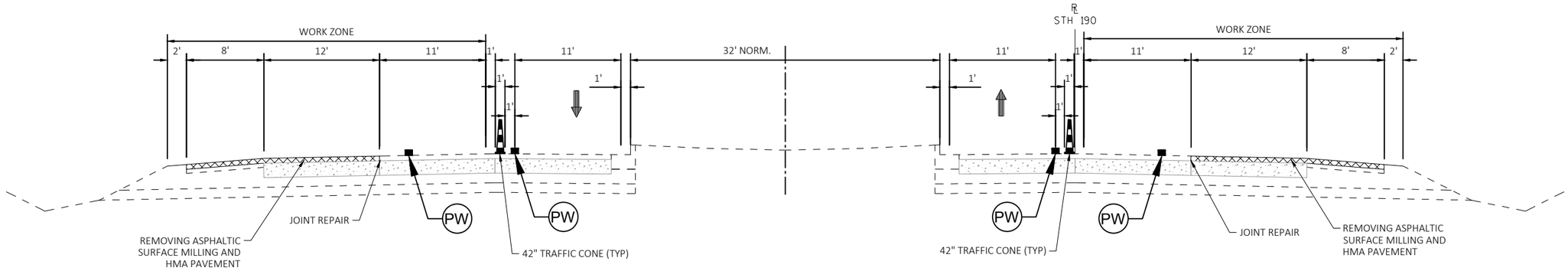
GENERAL NOTE:

PULL BACK CONES TO 2 FEET FROM TEMPORARY MARKING WHEN NOT WORKING ON LANES AND NO HAZARDS ARE PRESENT.



STAGE 1 - PEAK HOURS

STH 190 MAINLINE
STA. 291+00 - STA. 442+00.00
(MITCHELL PARK DRIVE - 145TH STREET)



STAGE 1 - OFF PEAK HOURS

STH 190 MAINLINE
STA. 291+00 - STA. 442+00.00
(MITCHELL PARK DRIVE - 145TH STREET)

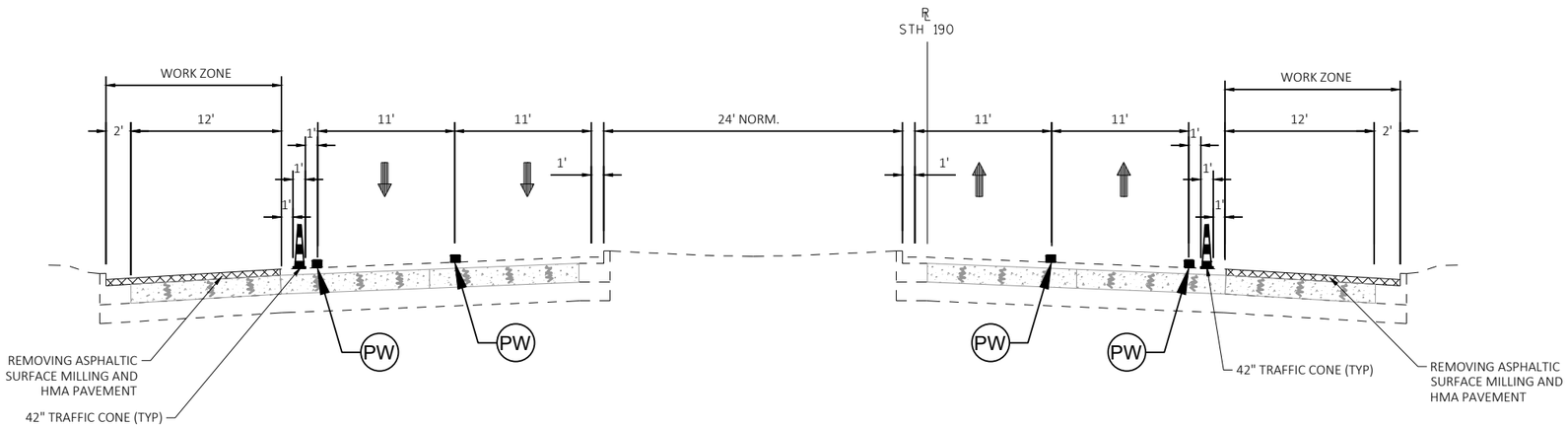
LEGEND

- (PW) TEMPORARY MARKING LINE PAINT 6-INCH, WHITE
- (PY) TEMPORARY MARKING LINE PAINT 6-INCH, YELLOW
- (TW) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH, WHITE
- (TY) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH, YELLOW

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1	SHEET 373	E

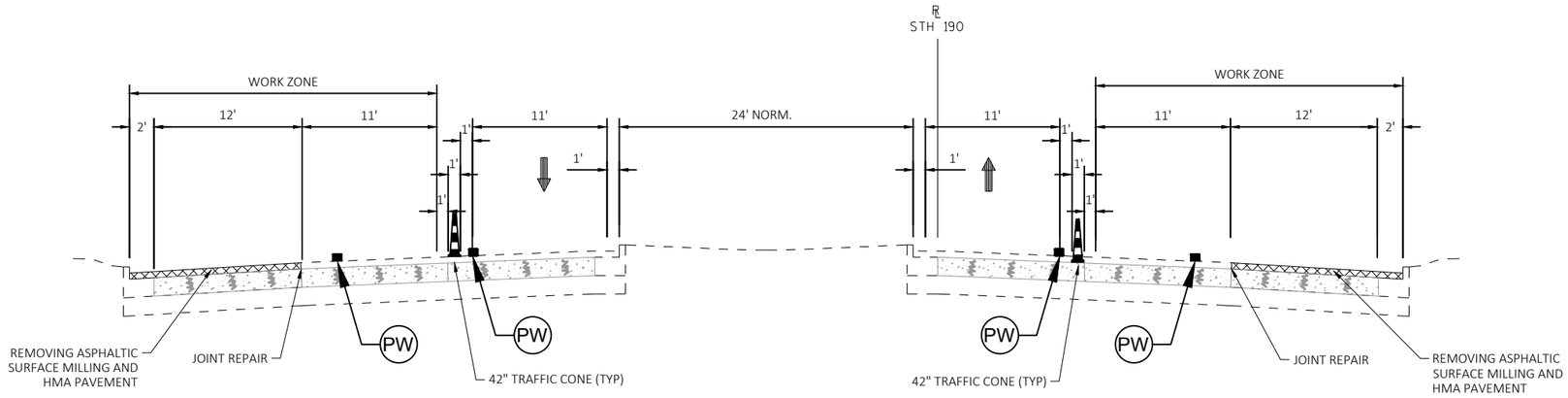
GENERAL NOTE:

PULL BACK CONES TO 2 FEET FROM TEMPORARY MARKING WHEN NOT WORKING ON LANES AND NO HAZARDS ARE PRESENT.



STAGE 1 - PEAK HOURS

STH 190 MAINLINE
STA. 442+00 - STA. 512+96.87
(145TH STREET - 124TH STREET)



STAGE 1 - OFF PEAK HOURS

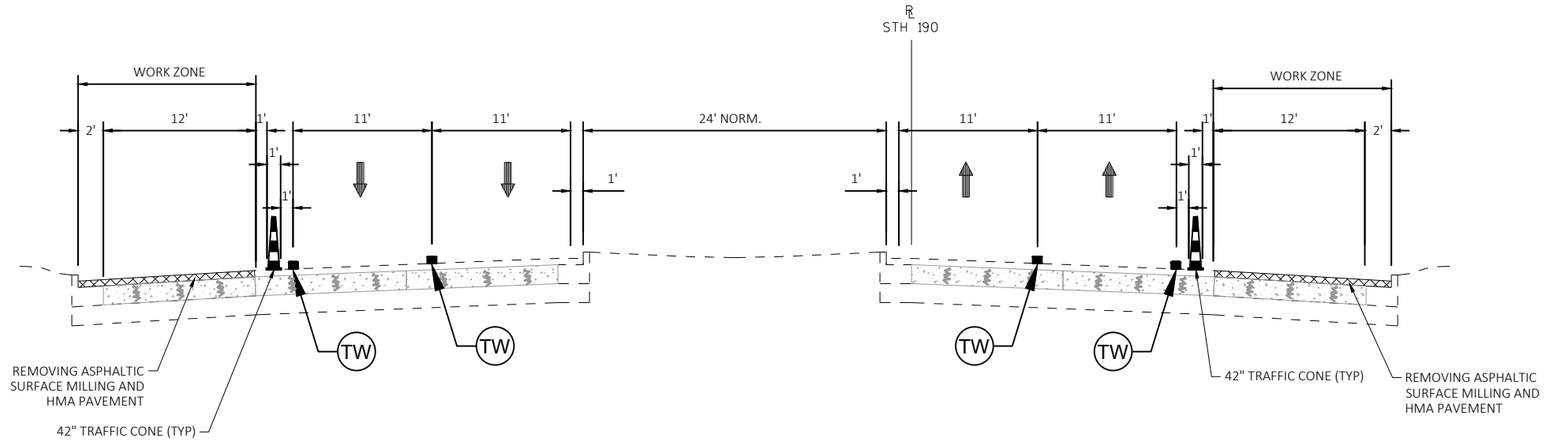
STH 190 MAINLINE
STA. 442+00 - STA. 512+96.87
(145TH STREET - 124TH STREET)

LEGEND

- (PW) TEMPORARY MARKING LINE PAINT 6-INCH, WHITE
- (PY) TEMPORARY MARKING LINE PAINT 6-INCH, YELLOW
- (TW) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH, WHITE
- (TY) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH, YELLOW

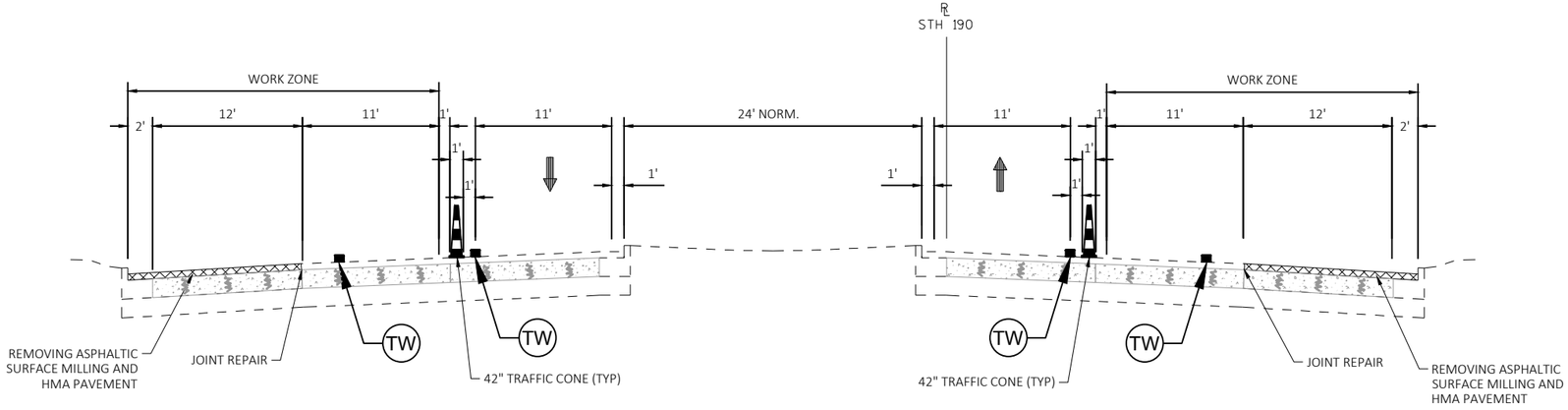
GENERAL NOTE:

PULL BACK CONES TO 2 FEET FROM TEMPORARY MARKING WHEN NOT WORKING ON LANES AND NO HAZARDS ARE PRESENT.



STAGE 1 - PEAK HOURS

STH 190 MAINLINE
STA. 99+00 - STA. 107+08
(124TH STREET - USH 41/STH 45)



STAGE 1 - OFF PEAK HOURS

STH 190 MAINLINE
STA. 99+00 - STA. 107+08
(124TH STREET - USH 41/STH 45)

LEGEND

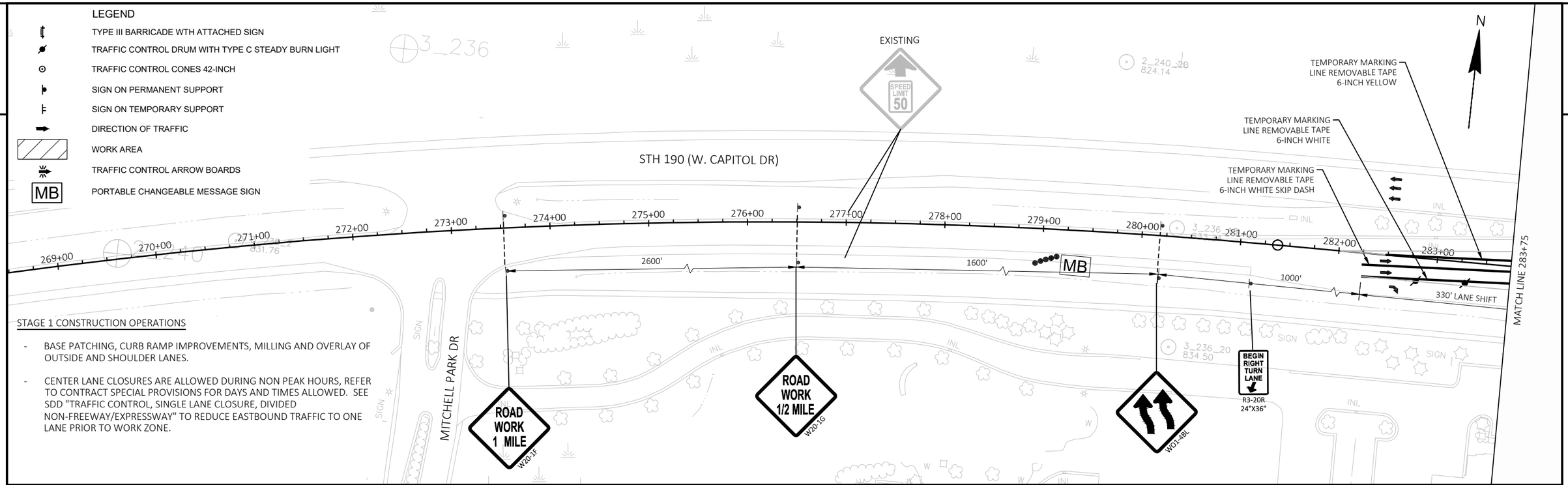
- (PW) TEMPORARY MARKING LINE PAINT 6-INCH, WHITE
- (PY) TEMPORARY MARKING LINE PAINT 6-INCH, YELLOW
- (TW) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH, WHITE
- (TY) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH, YELLOW

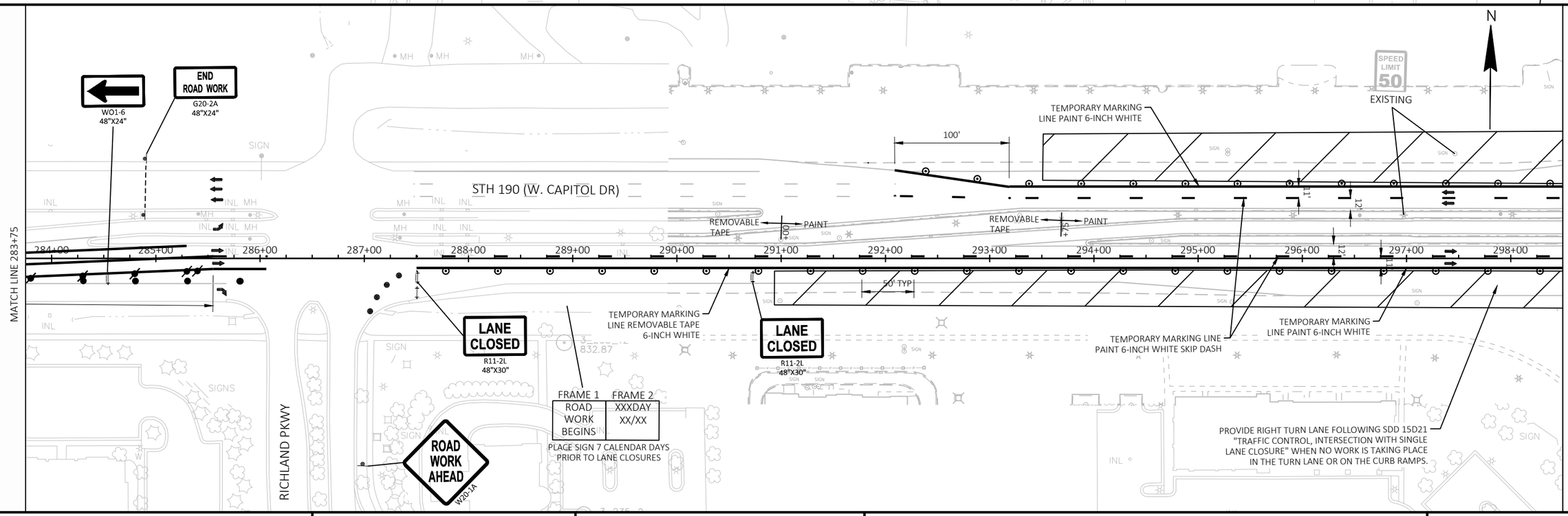
LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB — PORTABLE CHANGEABLE MESSAGE SIGN

STAGE 1 CONSTRUCTION OPERATIONS

- BASE PATCHING, CURB RAMP IMPROVEMENTS, MILLING AND OVERLAY OF OUTSIDE AND SHOULDER LANES.
- CENTER LANE CLOSURES ARE ALLOWED DURING NON PEAK HOURS, REFER TO CONTRACT SPECIAL PROVISIONS FOR DAYS AND TIMES ALLOWED. SEE SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY" TO REDUCE EASTBOUND TRAFFIC TO ONE LANE PRIOR TO WORK ZONE.





PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1	SHEET 376	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026005_S1.DWG
LAYOUT NAME - 026005_s1

PLOT DATE : 8/20/2025 2:20 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

N

ROAD WORK AHEAD
W20-1A

ONLY
R3-8ER
36"X30"

350'

100'

LEFT LANE MUST TURN LEFT

COVER

N BROOKFIELD RD

LANE CLOSED
R11-2L
48"X30"

END ROAD WORK
G20-2A
48"X24"

350'

TEMPORARY MARKING
LINE PAINT 6-INCH
YELLOW 2' LINE 6' GAP

PROVIDE RIGHT TURN LANE FOLLOWING SDD 15D21
"TRAFFIC CONTROL, INTERSECTION WITH SINGLE
LANE CLOSURE" WHEN NO WORK IS TAKING PLACE
IN THE TURN LANE OR ON THE CURB RAMPS.

LANE CLOSED
R11-2L
48"X30"

TEMPORARY MARKING
LINE PAINT 6-INCH WHITE
SKIP DASH

EXISTING
SPEED LIMIT 50

MATCH LINE 313+25

STH 190 (W. CAPITOL DR)

299+00 300+00 301+00 302+00 303+00 304+00 305+00 306+00 307+00 308+00 309+00 310+00 311+00 312+00 313+00

50' TYP

MATCH LINE 298+50

WO1-6
48"X24"

350'

LANE CLOSED
R11-2L
48"X30"

SPEED LIMIT 50
EXISTING

TEMPORARY MARKING
LINE PAINT 6-INCH WHITE

ST ANDREW LA

200'

LANE CLOSED
R11-2L
48"X30"

TEMPORARY MARKING
LINE REMOVABLE TAPE
6-INCH WHITE

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48"X24"

25' TYP

N BROOKFIELD RD

LANE CLOSED
R11-2L
48"X30"

ONLY
R3-8ER
36"X30"

350'

ROAD WORK AHEAD
W20-1A

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB PORTABLE CHANGEABLE MESSAGE SIGN

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1	SHEET 377	E

2

2

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB — PORTABLE CHANGEABLE MESSAGE SIGN

N

ROAD WORK AHEAD
W20-1A

350'

ONLY
R3-8ER
36"X30"

100'

LEFT LANE MUST TURN LEFT
COVER

N BROOKFIELD RD

LANE CLOSED
R11-2L
48"X30"

END ROAD WORK
G20-2A
48"X24"

350'

WO1-6
48"X24"

299+00 300+00 301+00 302+00 303+00 304+00 305+00 306+00 307+00 308+00 309+00 310+00 311+00 312+00 313+00

50' TYP

LANE CLOSED
R11-2L
48"X30"

TEMPORARY MARKING
LINE PAINT 6-INCH WHITE
SKIP DASH

SPEED LIMIT 50
EXISTING

STH 190 (W. CAPITOL DR)

MATCH LINE 313+25

TEMPORARY MARKING
LINE REMOVABLE TAPE
6-INCH WHITE

SPEED LIMIT 50
EXISTING

LANE CLOSED
R11-2L
48"X30"

TEMPORARY MARKING
LINE REMOVABLE TAPE
6-INCH WHITE

ST ANDREW LA

200'

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1A

MATCH LINE 298+50

350'

END ROAD WORK
G20-2A
48"X24"

N BROOKFIELD RD

25' TYP

ONLY
R3-8ER
36"X30"

350'

ROAD WORK AHEAD
W20-1A

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1B	SHEET 378	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026005_S1B.DWG
LAYOUT NAME - 026006_s1b

PLOT DATE : 8/20/2025 2:21 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

STH 190 (W. CAPITOL DR)

MATCH LINE 313+25

MATCH LINE 328+00

MATCH LINE 328+00

MATCH LINE 342+75

MOUNTAIN DR

IMPERIAL DR

BEAUFORT DR

YUKON RD

EXISTING SPEED LIMIT 50

ROAD WORK AHEAD W20-1A

END ROAD WORK G20-2A 48"X24"

LANE CLOSED R11-2L 48"X30"

TEMPORARY MARKING LINE PAINT 6-INCH WHITE SKIP DASH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE REMOVABLE 6-INCH WHITE

PROVIDE RIGHT TURN LANE FOLLOWING SDD 15D21 "TRAFFIC CONTROL, INTERSECTION WITH SINGLE LANE CLOSURE" WHEN NO WORK IS TAKING PLACE IN THE TURN LANE OR ON THE CURB RAMPS.

50' TYP

200'

11'

12'

314+00 315+00 316+00 317+00 318+00 319+00 320+00 321+00 322+00 323+00 324+00 325+00 326+00 327+00

329+00 330+00 331+00 332+00 333+00 334+00 335+00 336+00 337+00 338+00 339+00 340+00 341+00 342+00

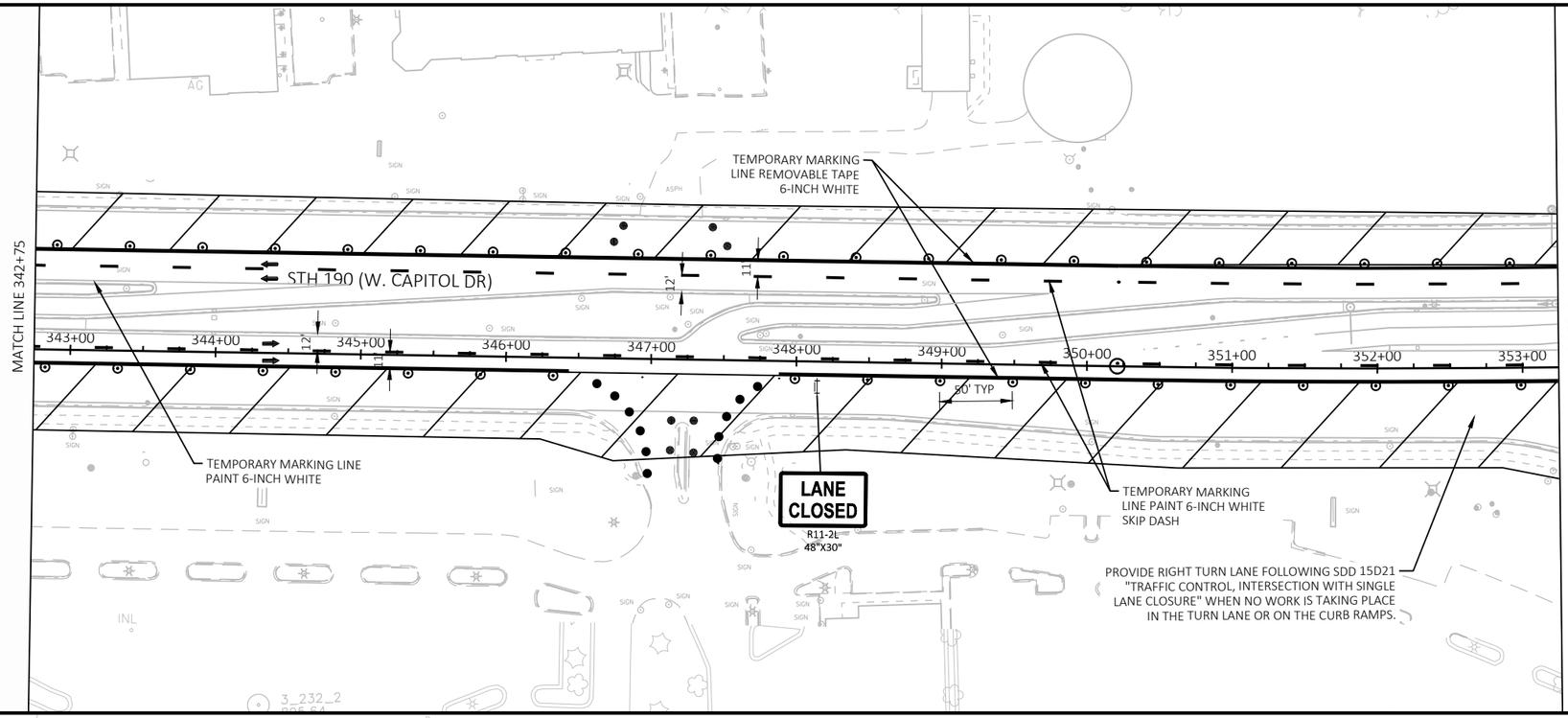
885.68

N

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB — PORTABLE CHANGEABLE MESSAGE SIGN

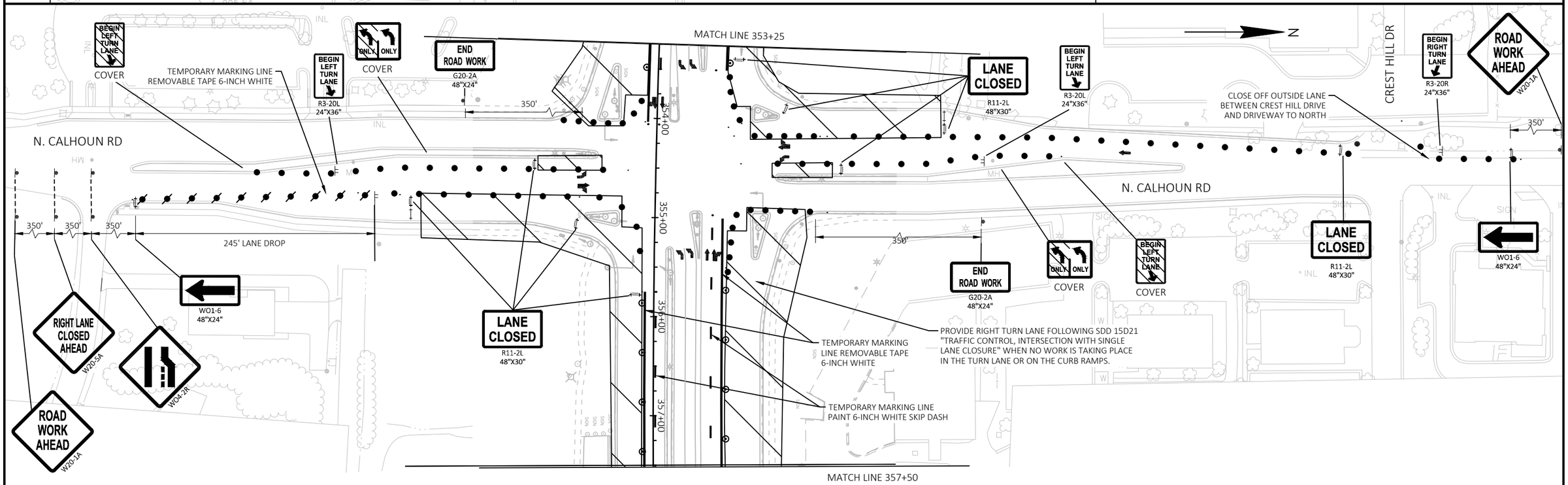
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1	SHEET 379	E



N

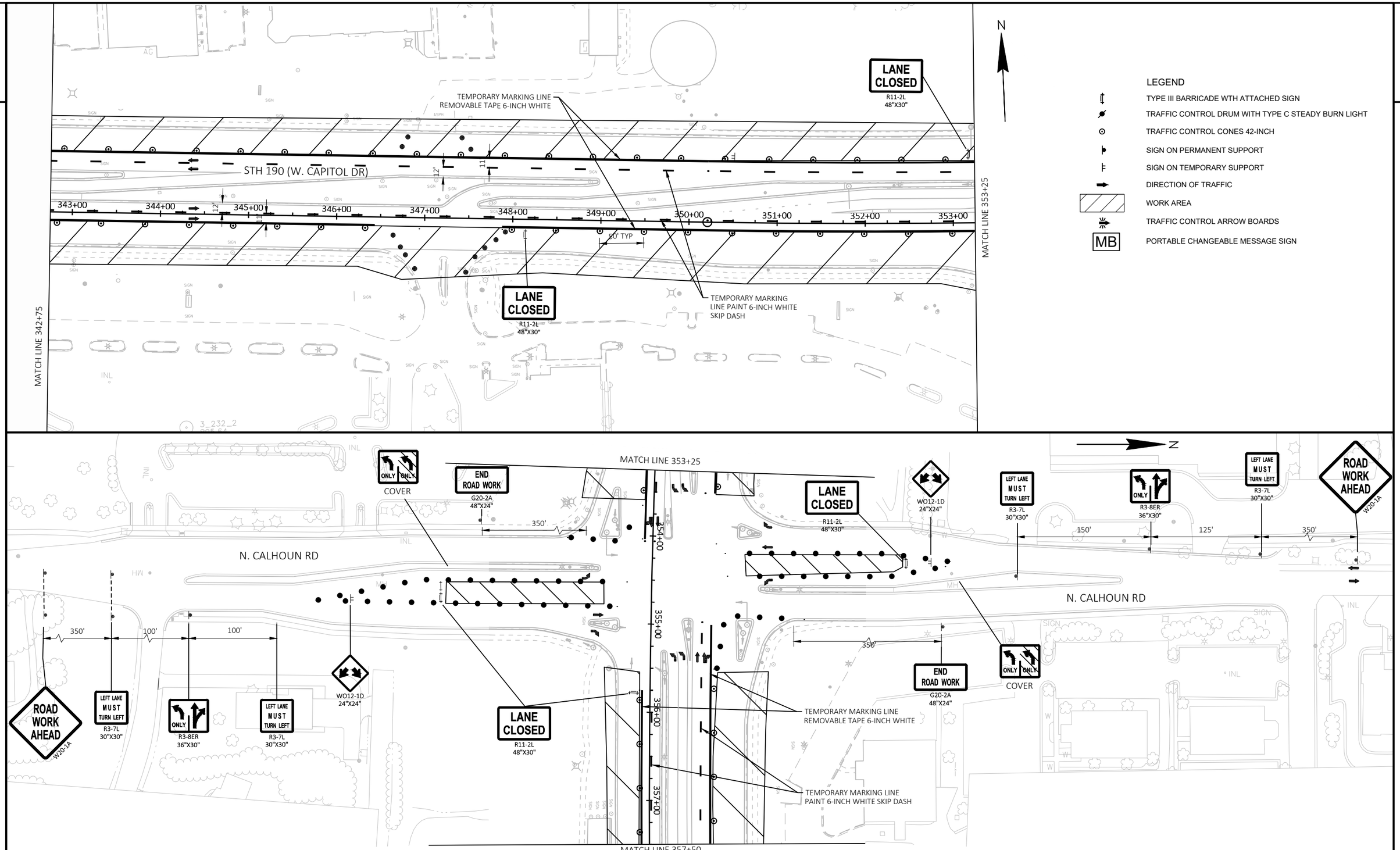
LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB — PORTABLE CHANGEABLE MESSAGE SIGN



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1	SHEET 380	E

2



2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1B	SHEET 381	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026005_S1B.DWG
LAYOUT NAME - 026008_s1b
PLOT DATE : 8/20/2025 2:25 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

LANE CLOSED R11-2L 48"X30"

STH 190 (W. CAPITOL DR)

358+00 359+00 360+00 361+00 362+00 363+00 364+00 365+00 366+00 367+00 368+00 369+00 370+00 371+00 372+00

MATCH LINE 372+25

MATCH LINE 357+50

SPEED LIMIT 50 EXISTING

N. 169TH ST

160'

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1A

TEMPORARY MARKING LINE PAINT 6-INCH WHITE SKIP DASH

50' TYP

11'

12'

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB PORTABLE CHANGEABLE MESSAGE SIGN

EXISTING SPEED LIMIT 50

LANE CLOSED R11-2L 48"X30"

ROAD WORK AHEAD W20-1A

170'

FOUNTAIN PLAZA DR

END ROAD WORK G20-2A 48"X24"

STH 190 (W. CAPITOL DR)

373+00 374+00 375+00 376+00 377+00 378+00 379+00 380+00 381+00 382+00 383+00 384+00 385+00 386+00

MATCH LINE 372+25

MATCH LINE 386+50

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

N. 165TH ST

180'

TEMPORARY MARKING LINE PAINT 6-INCH WHITE SKIP DASH

BRADEE RD

200'

TEMPORARY MARKING LINE PAINT 6-INCH WHITE

50' TYP

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1	SHEET 382	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026005_S1.DWG
LAYOUT NAME - 026009_s1

PLOT DATE : 8/20/2025 2:26 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

MATCH LINE 386+50

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1A

170'

EXISTING SPEED LIMIT 50

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

LANE CLOSED R11-2L 48"X30"

ROAD WORK AHEAD W20-1A

200'

BROOK LN

END ROAD WORK G20-2A 48"X24"

LANE CLOSED R11-2L 48"X30"

N

12'

11'

50' TYP

STH 190 (W. CAPITOL DR)

387+00 388+00 389+00 390+00 391+00 392+00 393+00 394+00 395+00 396+00 397+00 398+00 399+00 400+00 401+00

MATCH LINE 401+50

LANE CLOSED R11-2L 48"X30"

SPEED LIMIT 50 EXISTING

200'

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1A

TEMPORARY MARKING LINE PAINT 6-INCH WHITE SKIP DASH

BROOK LN

200'

LANE CLOSED R11-2L 48"X30"

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

LANE CLOSED R11-2L 48"X30"

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1A

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB PORTABLE CHANGEABLE MESSAGE SIGN

ROAD WORK AHEAD W20-1A

END ROAD WORK G20-2A 48"X24"

350'

STH 190 EB TO/FROM CTH YY

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

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

N

EXISTING SPEED LIMIT 50

LANE CLOSED R11-2L 48"X30"

100' 100'

TEMPORARY MARKING LINE PAINT 6-INCH WHITE

11'

11'

50' TYP

STH 190 (W. CAPITOL DR)

MATCH LINE 401+50

402+00 403+00 404+00 405+00 406+00 407+00 408+00 409+00 410+00 411+00 412+00 413+00 414+00 415+00 416+00

MATCH LINE 416+50

TEMPORARY MARKING LINE PAINT 10-INCH

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

LANE CLOSED R11-2L 48"X30"

STH 190 WB TO/FROM CTH YY

350'

CTH YY (PILGRIM RD)

SPEED LIMIT 50 EXISTING

TEMPORARY MARKING LINE PAINT 6-INCH WHITE SKIP DASH

TEMPORARY MARKING LINE PAINT 10-INCH

LANE CLOSED R11-2L 48"X30"

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1A

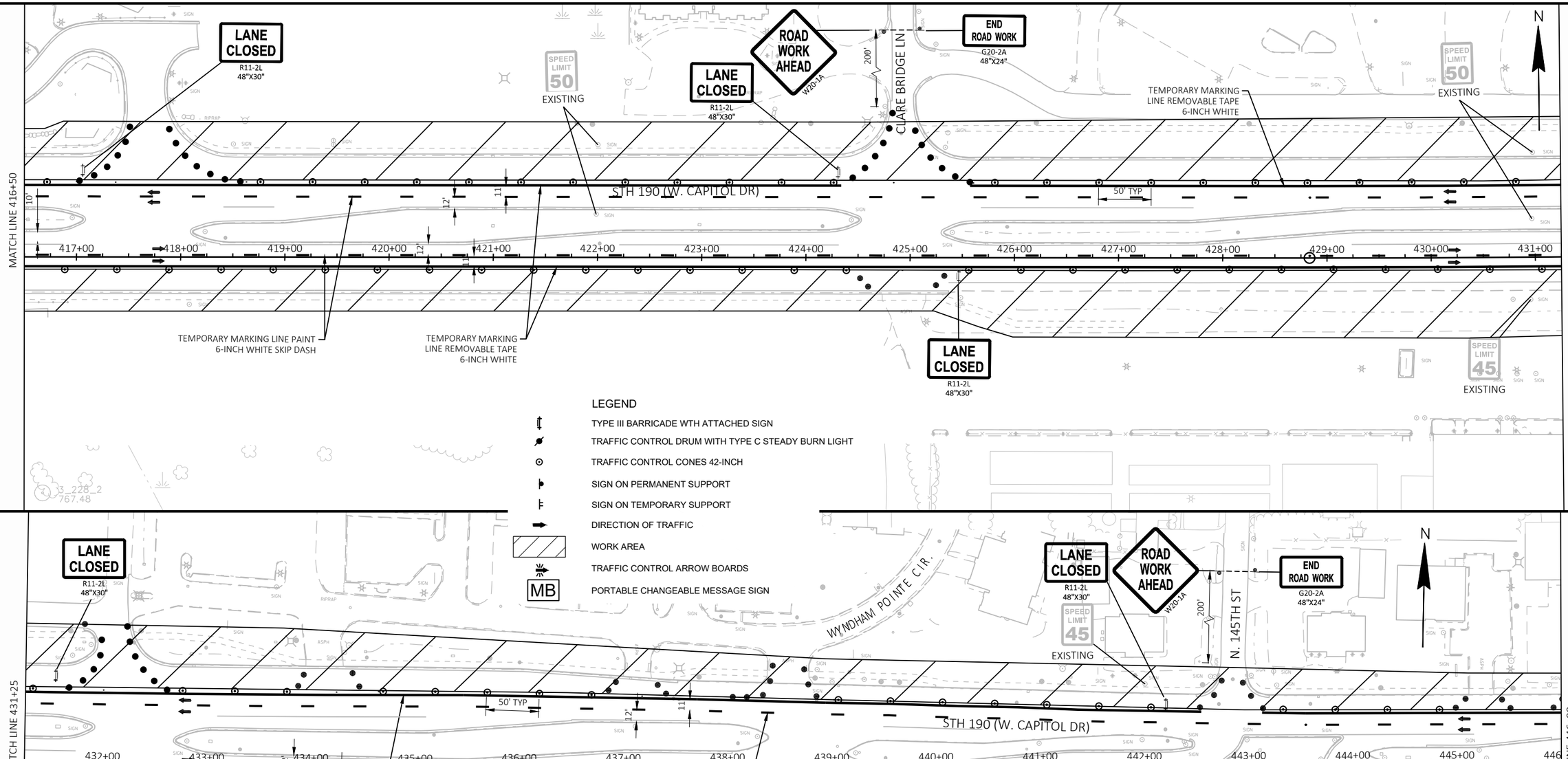
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1	SHEET 383	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026005_S1.DWG
LAYOUT NAME - 026010_s1

PLOT DATE : 8/20/2025 2:26 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1	SHEET 384	E

2

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB PORTABLE CHANGEABLE MESSAGE SIGN

N

STH 190 (W. CAPITOL DR)

MATCH LINE 446+00

MATCH LINE 460+75

446+00 447+00 448+00 449+00 450+00 451+00 452+00 453+00 454+00 455+00 456+00 457+00 458+00 459+00 460+00

50' TYP

12'

11'

SPEED LIMIT 45 EXISTING

ROAD WORK AHEAD W20-1A

350'

END ROAD WORK G20-2A 48"X24"

LILLY RD

25' TYP

PROVIDE RIGHT TURN LANE FOLLOWING SDD 15D21 "TRAFFIC CONTROL, INTERSECTION WITH SINGLE LANE CLOSURE" WHEN NO WORK IS TAKING PLACE IN THE TURN LANE OR ON THE CURB RAMPS.

WO1-6 48"X24"

LANE CLOSED R11-2L 48"X30"

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE PAINT 6-INCH YELLOW 2' LINE 6' GAP

TEMPORARY MARKING LINE PAINT 6-INCH WHITE SKIP DASH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

PROVIDE RIGHT TURN LANE FOLLOWING SDD 15D21 "TRAFFIC CONTROL, INTERSECTION WITH SINGLE LANE CLOSURE" WHEN NO WORK IS TAKING PLACE IN THE TURN LANE OR ON THE CURB RAMPS.

LANE CLOSED R11-2L 48"X30"

LANE CLOSED R11-2L 48"X30"

END ROAD WORK G20-2A 48"X24"

WO1-6 48"X24"

WO1-4L

ROAD WORK AHEAD W20-1A

3_226_2 797.74

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1	SHEET 385	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026006_S1.DWG
LAYOUT NAME - 026012_s1

PLOT DATE : 8/20/2025 2:28 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB — PORTABLE CHANGEABLE MESSAGE SIGN

N

MATCH LINE 446+00

MATCH LINE 460+75

STH 190 (W. CAPITOL DR)

446+00 447+00 448+00 449+00 450+00 451+00 452+00 453+00 454+00 455+00 456+00 457+00 458+00 459+00 460+00

50' TYP

12'

11'

SPEED LIMIT 45 EXISTING

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE PAINT 6-INCH WHITE SKIP DASH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

ROAD WORK AHEAD W20-1A

350'

END ROAD WORK G20-2A 48"X24"

WO1-6 48"X24"

LILLY RD

PROVIDE RIGHT TURN LANE FOLLOWING SDD 15D21 "TRAFFIC CONTROL, INTERSECTION WITH SINGLE LANE CLOSURE" WHEN NO WORK IS TAKING PLACE IN THE TURN LANE OR ON THE CURB RAMPS.

LANE CLOSED R11-2L 48"X30"

PROVIDE RIGHT TURN LANE FOLLOWING SDD 15D21 "TRAFFIC CONTROL, INTERSECTION WITH SINGLE LANE CLOSURE" WHEN NO WORK IS TAKING PLACE IN THE TURN LANE OR ON THE CURB RAMPS.

LANE CLOSED R11-2L 48"X30"

WO1-6 48"X24"

350'

END ROAD WORK G20-2A 48"X24"

LILLY RD

350'

ROAD WORK AHEAD W20-1A

3_226_2 797.74

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1B	SHEET 386	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026006_S1B.DWG
LAYOUT NAME - 026012_s1b

PLOT DATE : 8/20/2025 2:29 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE 460+75

MATCH LINE 475+25

STH 190 (W. CAPITOL DR)

461+00 462+00 463+00 464+00 465+00 466+00 467+00 468+00 469+00 470+00 471+00 472+00 473+00 474+00 475+00

50' TYP

12' 11' 11' 12'

N. 138TH ST

FIEBRANTZ DR

200'

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48"X24"

LANE CLOSED
R11-2L
48"X30"

TEMPORARY MARKING
LINE REMOVABLE TAPE
6-INCH WHITE

TEMPORARY MARKING
LINE PAINT 6-INCH WHITE
SKIP DASH

SPEED LIMIT 45
EXISTING

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB PORTABLE CHANGEABLE MESSAGE SIGN

N

MATCH LINE 475+25

MATCH LINE 490+00

STH 190 (W. CAPITOL DR)

476+00 477+00 478+00 479+00 480+00 481+00 482+00 483+00 484+00 485+00 486+00 487+00 488+00 489+00 490

N. 133RD ST

CEMETERY

INL

3_225_20

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1	SHEET 387	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026006_S1.DWG
LAYOUT NAME - 026013_s1

PLOT DATE : 8/20/2025 2:30 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB — PORTABLE CHANGEABLE MESSAGE SIGN

ROAD WORK AHEAD W20-1A

END ROAD WORK G20-2A 48"X24"

120' LANE SHIFT 200'

WO1-6 48"X24"

N. 128TH ST

LANE CLOSED R11-2L 48"X30"

SPEED LIMIT 45

EXISTING

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE PAINT 6-INCH WHITE SKIP DASH

STH 190 (W. CAPITOL DR)

50' TYP

11' 12'

MATCH LINE 490+00

MATCH LINE 505+00

+00 491+00 492+00 493+00 494+00 495+00 496+00 497+00 498+00 499+00 500+00 501+00 502+00 503+00 504+00 505

CEMETERY

N

MATCH LINE B-B

MATCH LINE 505+50

+00 506+00 507+00 508+00 509+00 510+00 511+00 512+00 100+00 101+00 102+00 103+00 104+00 105+00

N. 124TH ST

W. LISBON AVE

CLOSE INSIDE TURN LANE AND OUTSIDE SHOULDER TO CONSTRUCT CURB RAMPS

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

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

CLOSE RIGHT TURN LANE TO CONSTRUCT CURB RAMPS.

MATCH LINE A-A

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1	SHEET 388	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026006_S1.DWG
LAYOUT NAME - 026014_s1

PLOT DATE : 8/20/2025 2:31 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

W. FEERICK STREET

N. 124TH STREET

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

350' 350' 350' 245' 25' TYP 25' 50'

ROAD WORK AHEAD
W20-1A

RIGHT LANE CLOSED AHEAD
W20-5A

W04-2R

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

LANE CLOSED
R11-2L
48"X30"

50'

END ROAD WORK
G20-2A
48"X24"

ONLY
COVER

ONLY

25' TYP

LANE CLOSED
R11-2L
48"X30"

ONLY
COVER

ONLY
COVER

MATCH LINE A-A

N

ROAD WORK AHEAD
W20-1A

350'

To EAST 190
COVER

124th St South
COVER

LANE CLOSED
R11-2L
48"X30"

EXTEND DRUMS TO N 126TH STREET TO CLOSE OFF OUTSIDE LANE BEFORE IT DEVELOPS. LEAVE GAPS FOR DRIVEWAYS.

LANE CLOSED
R11-2L
48"X30"

MATCH LINE B-B

W. LISBON ROAD

END ROAD WORK
G20-2A
48"X24"

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

LANE CLOSED
R11-2L
48"X30"

50' TYP

N. 124TH STREET

LANE CLOSED
R11-2L
48"X30"

ROAD WORK AHEAD
W20-1A

350'

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

TO EAST 190
COVER

END ROAD WORK
G20-2A
48"X24"

LANE CLOSED
R11-2L
48"X30"

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB PORTABLE CHANGEABLE MESSAGE SIGN

N

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1	SHEET 389	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026006_S1.DWG
LAYOUT NAME - 026015_s1

PLOT DATE : 8/20/2025 2:32 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ############

WISDOT/CADDS SHEET 44

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB PORTABLE CHANGEABLE MESSAGE SIGN

ROAD WORK AHEAD W20-1A

200'

130'

END ROAD WORK G20-2A 48"X24"

N

SPEED LIMIT 45 EXISTING

LANE CLOSED R11-2L 48"X30"

N. 128TH ST

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

MATCH LINE 490+00

50' TYP

STH 190 (W. CAPITOL DR)

11'

12'

+00 491+00 492+00 493+00 494+00 495+00 496+00 497+00 498+00 499+00 500+00 501+00 502+00 503+00 504+00 505

MATCH LINE 505+00

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE PAINT 6-INCH WHITE SKIP DASH

CEMETERY

LANE CLOSED R11-2L 48"X30"

TEMPORARY MARKING LINE PAINT 6-INCH WHITE SKIP DASH

WO1-6 48"X24"

ROAD WORK AHEAD W20-1A

MATCH LINE B-B

N. 124TH ST

W. LISBON AVE

N

MATCH LINE 505+00

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

LANE CLOSED R11-2L 48"X30"

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

LANE CLOSED R11-2L 48"X30"

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

+00 506+00 507+00 508+00 509+00 510+00 511+00 512+00

50' TYP

STH 190 (W. CAPITOL DR)

11'

12'

100+00 101+00 102+00 103+00 104+00 105+00

MATCH LINE 105+50

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE PAINT 6-INCH WHITE SKIP DASH

PROVIDE RIGHT TURN LANE FOLLOWING SDD 15D21 "TRAFFIC CONTROL, INTERSECTION WITH SINGLE LANE CLOSURE" WHEN NO WORK IS TAKING PLACE IN THE TURN LANE OR ON THE CURB RAMPS.

N. 124TH ST

LANE CLOSED R11-2L 48"X30"

TEMPORARY MARKING LINE PAINT 6-INCH WHITE SKIP DASH

MATCH LINE A-A

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1B	SHEET 390	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026006_S1B.DWG
LAYOUT NAME - 026014_s1b

PLOT DATE : 8/20/2025 2:33 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB — PORTABLE CHANGEABLE MESSAGE SIGN

W. FEERICK STREET

N. 124TH STREET

WO1-6
48"X24"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH YELLOW

25' TYP

350' 350' 350' 245' LANE DROP 50'

ROAD WORK AHEAD
W20-1A

LEFT LANE CLOSED AHEAD
W20-5SA

WO4-2L

END ROAD WORK
G20-2A
48"X24"

ONLY

COVER

LANE CLOSED
R11-2L
48"X30"

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

MATCH LINE A-A

N

2

MATCH LINE B-B

W. LISBON ROAD

TO EAST 190

124th St South

COVER

LANE CLOSED
R11-2L
48"X30"

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

END ROAD WORK
G20-2A
48"X24"

50' TYP

245' LANE DROP

350' 350' 350'

N. 124TH STREET

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH YELLOW

N

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1B	SHEET 391	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026006_S1B.DWG
LAYOUT NAME - 026015_s1b

PLOT DATE : 8/20/2025 2:34 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

2

2

FRAME 1 ROAD WORK BEGINS | FRAME 2 XXXDAY XX/XX

PLACE SIGN 7 CALENDAR DAYS PRIOR TO LANE CLOSURES

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

MB

100' 100' 300' LANE SHIFT 300' 300'

25'

12' 12'

106+00 107+00 108+00 109+00 110+00

50' TYP

100'

PAINT +50 REMOVABLE TAPE

MATCH LINE 105+50

WO1-4L

ROAD WORK AHEAD
W20-1A

N

CAMERA

STH 190 (W. CAPITOL DR)

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

WO1-6
48"X24"

END ROAD WORK
G20-2A
48"X24"

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

MATCH LINE C-C

TEMPORARY MARKING LINE PAINT 6-INCH WHITE SKIP DASH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

540' LANE DROP

MH

IC RAILROAD

3_222_12
40.97

W

CEMETERY CEMETERY

500' 500' 500'

MATCH LINE C-C

WO4-2R

RIGHT LANE CLOSED AHEAD
W20-5A

ROAD WORK AHEAD
W20-1A

GOLF COURSE

GOLF COURSE

3_221

STH 190 (W. CAPITOL DR)

N

LEGEND

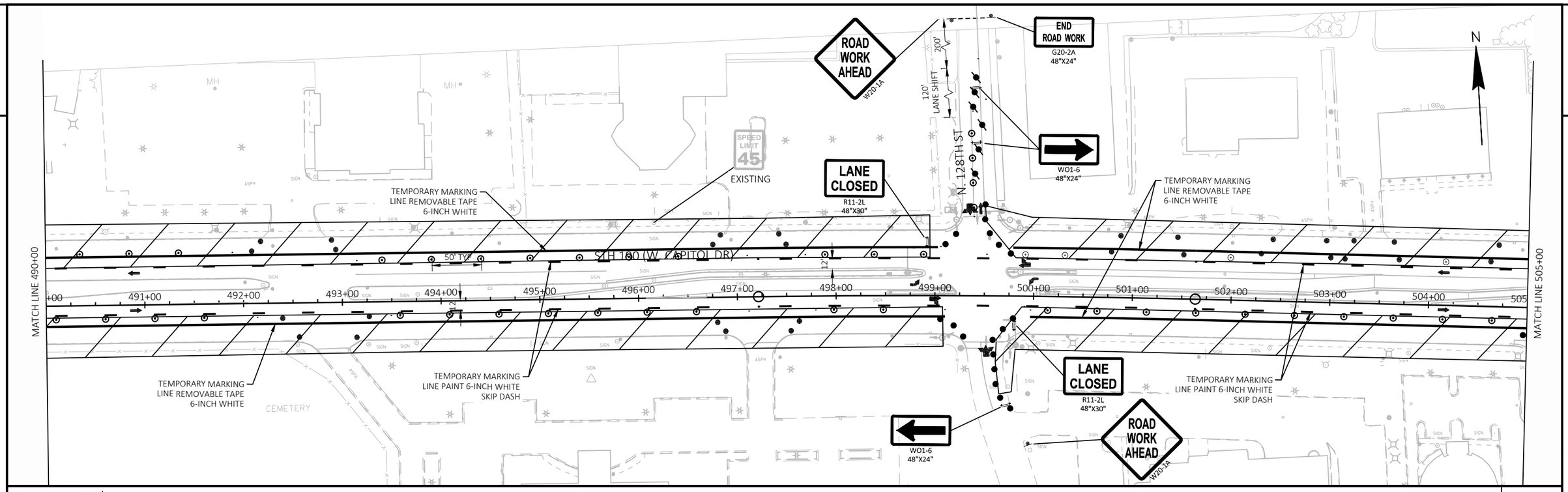
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB PORTABLE CHANGEABLE MESSAGE SIGN

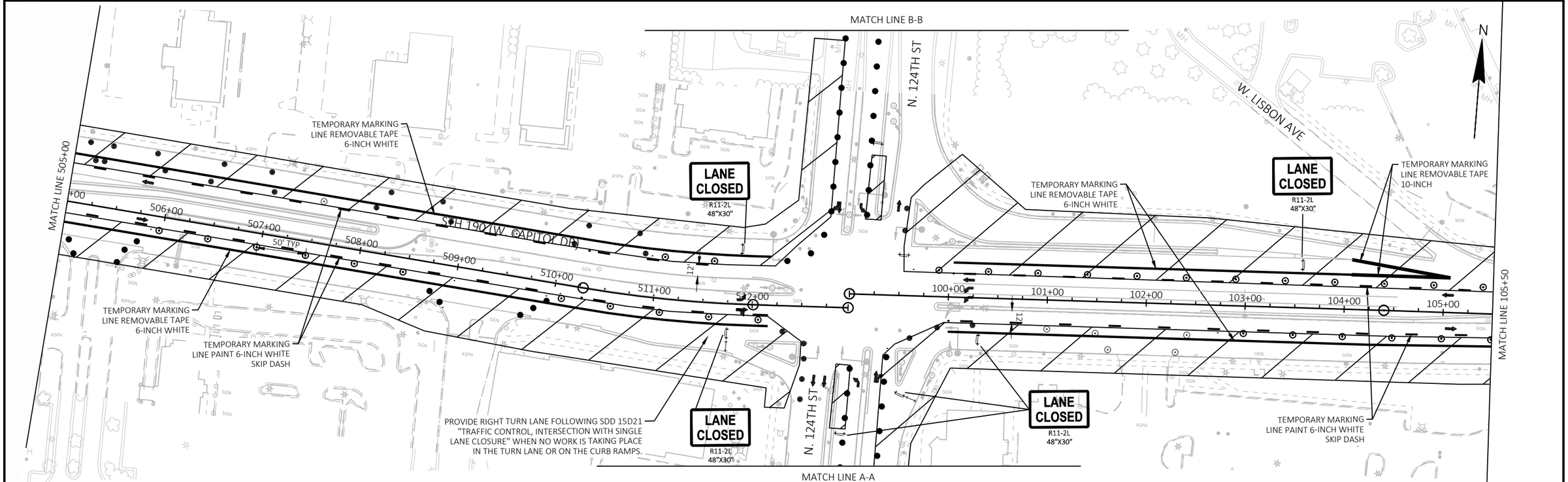
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1	SHEET 392	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026006_S1.DWG
LAYOUT NAME - 026016_s1

PLOT DATE : 8/20/2025 2:35 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

2





PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 OFF PEAK CLOSURE	SHEET 393	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026006_S1NIGHT.DWG
LAYOUT NAME - 026014_s1n
PLOT DATE : 8/20/2025 2:36 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

MATCH LINE 105+50

100'
100'
300' LANE SHIFT
300'
300'
25'
12'
106+00
107+00
108+00
109+00
110+00
50' TYP
100'

WO1-6
48"X24"

WO1-4L

ROAD WORK AHEAD
W20-1A

N

CAMERA

STH 190 (W. CAPITOL DR)

END ROAD WORK
G20-2A
48"X24"

MATCH LINE C-C

MATCH LINE D-D

SUBSTATION

MH

IC RAILROAD

3_222_12
40.97

W

IH 41 SB

IH 41 NB

CEMETERY

DETOUR
M4-8
24"X12"
WEST
M3-4
24"X12"
190
M1-6
24"X24"
M06-1
21"X21"

270' LANE SHIFT
200'

WO1-4BR

STH 190 (W. CAPITOL DR)

ROAD CLOSED
R11-2
48"X30"

LANE CLOSED
R11-2L
48"X30"

GOLF COURSE

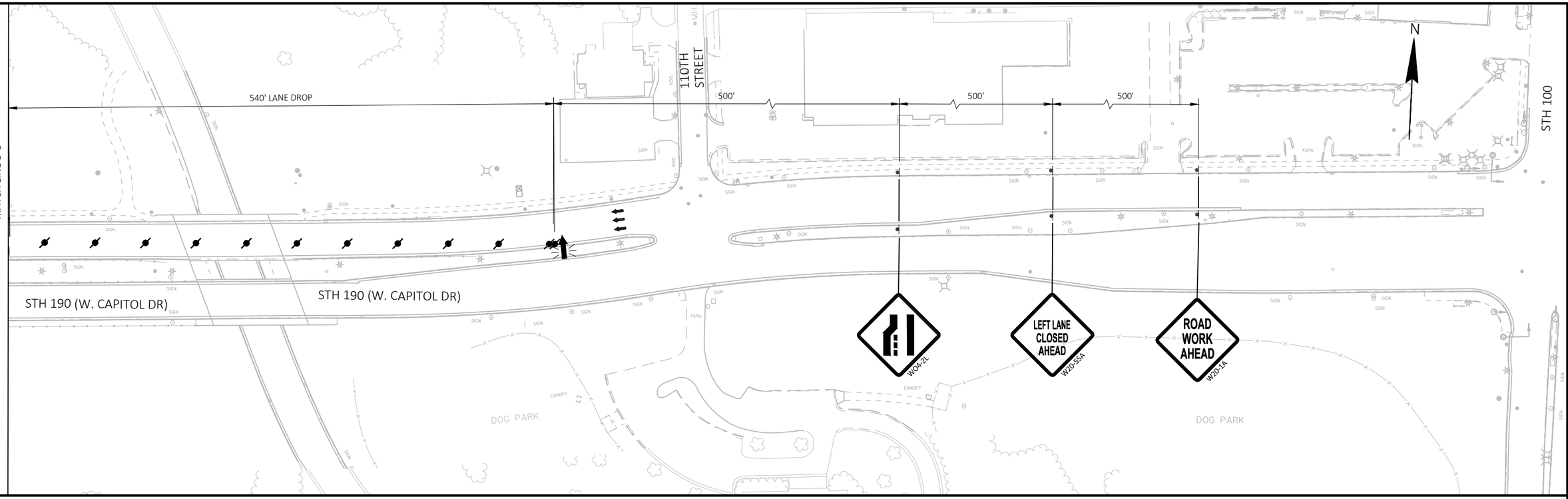
3_221

GOLF

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 OFF PEAK CLOSURE	SHEET 394	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026006_S1NIGHT.DWG
LAYOUT NAME - 026016_s1n
PLOT DATE : 8/20/2025 2:36 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



2

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 OFF PEAK CLOSURE	SHEET 395	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026006_S1NIGHT.DWG
LAYOUT NAME - 026017_s1n
PLOT DATE : 8/20/2025 2:37 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

N

R/W

M4-60R
30"X24"

N BROOKFIELD RD

M4-60L
30"X24"

M4-60D
30"X24"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

5' (TYP)

STH 190 (W. CAPITOL DR)

297+00

298+00

299+00

300+00

301+00

302+00

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

15' (TYP)

5' (TYP)

STH 190 (W. CAPITOL DR)

N BROOKFIELD RD

M4-60L
30"X24"

M4-60R
30"X24"

M4-60D
30"X24"

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1A PEDESTRIAN ACCOMMODATIONS - BROOKFIELD ROAD	SHEET 396	E

2

2

N

M4-60R
30"X24"

M4-60L
30"X24"

M4-60D
30"X24"

N BROOKFIELD RD

R/W

STH 190 (W. CAPITOL DR)

297+00

298+00

299+00

300+00

301+00

302+00

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1B PEDESTRIAN ACCOMMODATIONS - BROOKFIELD ROAD	SHEET 397	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025101B_TC.DWG
LAYOUT NAME - 025101b_tc

PLOT DATE : 8/20/2025 1:50 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

2

2

N

STH 190 (W. CAPITOL DR)

PC: 311+03.92

305+00 306+00 307+00 308+00 309+00 310+00 311+00

STH 190 (W. CAPITOL DR)

15' (TYP)

TEMPORARY MARKING
LINE REMOVABLE TAPE
6-INCH WHITE

5' (TYP)

10 LF OF CULVERT PIPE
TEMPORARY 12-INCH

R/W

TLE

M4-60L
30"X24"

M4-60R
30"X24"

ST ANDREW LN

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - ST ANDREW LANE	SHEET 398	E

2

2

N

R/W

STH 190 (W. CAPITOL DR)

313+00

314+00

315+00

316+00

317+00

318+00

319+00

STH 190 (W. CAPITOL DR)

15' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

5' (TYP)

EL

GUY

TLE

MOUNTAIN DR

M4-60L
30"X24"

M4-60R
30"X24"

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRAIN ACCOMMODATIONS - MOUNTAIN DRIVE	SHEET 399	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025101_TC.DWG
LAYOUT NAME - 025103_tc

PLOT DATE : 8/20/2025 1:51 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

M4-60R
30"X24"

M4-60L
30"X24"

TLE

R/W

IMPERIAL DR

5' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

STH 190 (W. CAPITOL DR)

319+00 320+00 321+00 322+00 323+00 324+00 325

15' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

STH 190 (W. CAPITOL DR)

5' (TYP)

M4-60D
30"X24"

M4-60L
30"X24"

M4-60R
30"X24"

ST DOMINIC
DRIVEWAY

TLE

TLE

R/W

R/W

LEGEND

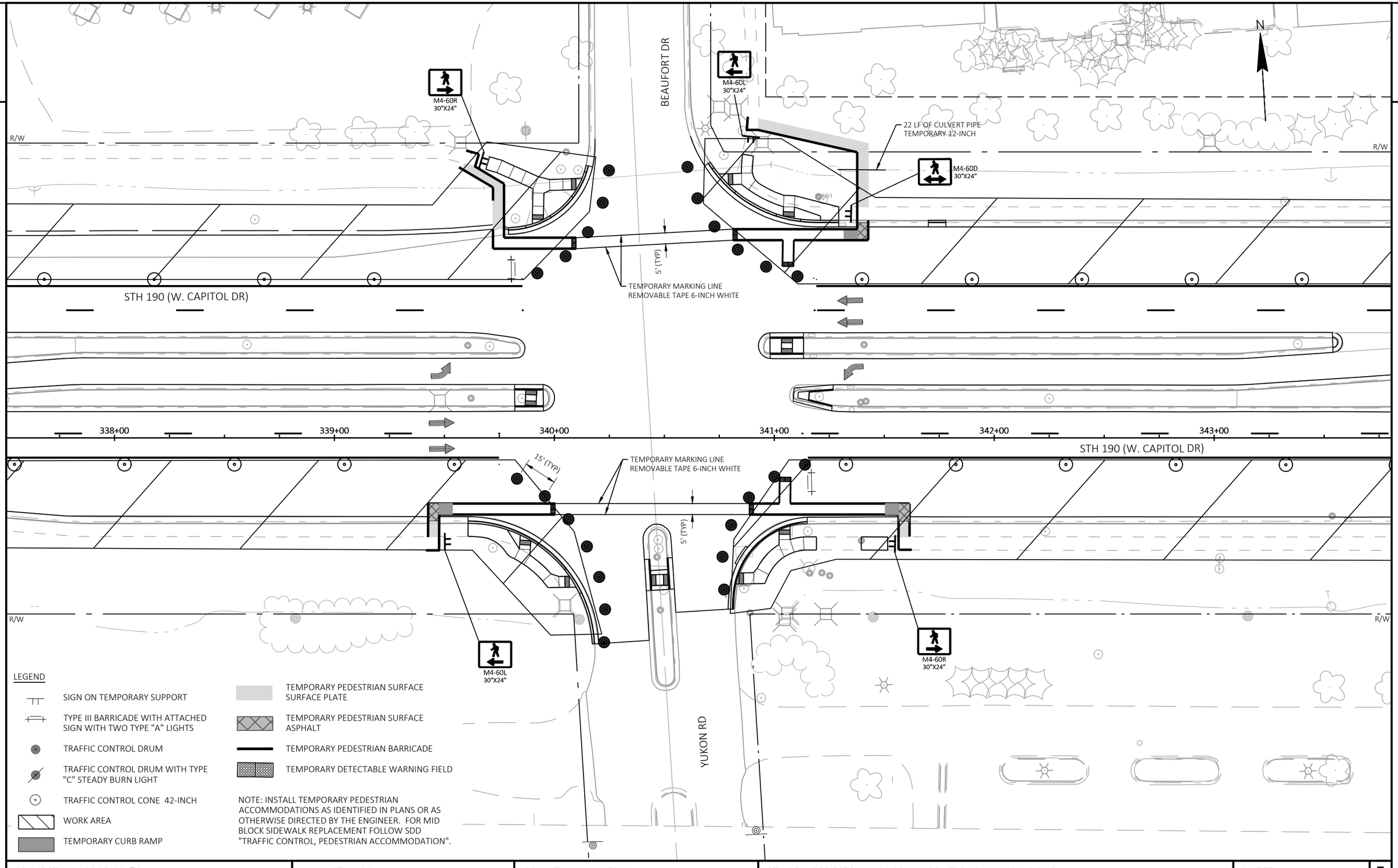
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRAIN ACCOMMODATIONS - IMPERIAL DRIVE	SHEET 400	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025101_TC.DWG
LAYOUT NAME - 025104_tc
PLOT DATE : 8/20/2025 1:51 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2



LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - YUKON ROAD	SHEET 401	E

2

2

R/W

R/W

N

STH 190 (W. CAPITOL DR)

PC: 350+10.83

345+00 346+00 347+00 348+00 349+00 350+00

STH 190 (W. CAPITOL DR)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

15' (TYP)

5' (TYP)

M4-60L
30"X24"

M4-60D
30"X24"

R/W

R/W

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - COMMERCIAL DRIVEWAY	SHEET 402	E

2

N

STH 190 (W. CAPITOL DR)

M4-60L 30"X24"

M4-60R 30"X24"

M4-60L 30"X24"

M4-60D 30"X24"

15' (TYP)

5' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

353+00

354+00

355+00

356+00

357+00

358+00

MATCH LINE STA 358+50

STH 190 (W. CAPITOL DR)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

5' (TYP)

M4-60L 30"X24"

M4-60D 30"X24"

M4-60R 30"X24"

M4-60D 30"X24"

M4-60L 30"X24"

N CALHOUN ROAD

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - CALHOUN ROAD	SHEET 403	E

2

N

R/W

M4-60R
30"X24"

M4-60L
30"X24"

5' (TYP)

5' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

STH 190 (W. CAPITOL DR)

MATCH LINE STA 358+50

PT: 358+73.44

359+00

360+00

361+00

362+00

363+00

364+00

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

5' (TYP)

M4-60R
30"X24"

N 169TH STREET

R/W

R/W

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - 169TH STREET	SHEET 404	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025101_TC.DWG
LAYOUT NAME - 025108_tc

PLOT DATE : 8/20/2025 1:52 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

FOUNTAIN PLAZA

R/W

MH

M4-60R
30"X24"

M4-60L
30"X24"

5' (TYP)

15' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

STH 190 (W. CAPITOL DR)

PT: 376+05.02

372+00 373+00 374+00 375+00 376+00 377+00 378+00

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

5' (TYP)

M4-60R
30"X24"

M4-60L
30"X24"

N 165TH STREET

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - 165TH STREET	SHEET 405	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025101_TC.DWG
LAYOUT NAME - 025109_tc

PLOT DATE : 8/20/2025 1:52 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

MH

R/W

STH 190 (W. CAPITOL DR)

378+00

379+00

380+00

381+00

382+00

383+00

384+00

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

15' (TYP)

5' (TYP)

M4-60L
30"X24"

M4-60R
30"X24"

BRADEE ROAD

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - BRADEE ROAD	SHEET 406	E

2

2

N

N 162ND STREET

M4-60R
30"X24"

M4-60L
30"X24"

R/W

R/W

5' (TYP)

MH

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

STH 190 (W. CAPITOL DR)

385+00

386+00

387+00

388+00

389+00

390+00

15' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

STH 190 (W. CAPITOL DR)

5' (TYP)

MH

R/W

R/W

12 LF OF CULVERT PIPE
TEMPORARY 12-INCH

M4-60L
30"X24"

M4-60R
30"X24"

LONE ELM DRIVE

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - LONE ELM DRIVE	SHEET 407	E

2

BROOK LANE

M4-60R
30"X24"

M4-60L
30"X24"

M4-60R
30"X24"

M4-60L
30"X24"

N

5' (TYP)

12 LF OF CULVERT PIPE
TEMPORARY 12-INCH

TEMPORARY MARKING
LINE REMOVABLE TAPE
6-INCH WHITE

15' (TYP)

5' (TYP)

15' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

396+00 397+00 398+00 399+00 400+00 401+00

STH 190 (W. CAPITOL DR)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

15' (TYP)

MH

MH

5' (TYP)

10 LF OF CULVERT PIPE
TEMPORARY 12-INCH

M4-60L
30"X24"

M4-60R
30"X24"

BROOK LANE

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - BROOK LANE	SHEET 408	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025101_TC.DWG
LAYOUT NAME - 025112_tc
PLOT DATE : 8/20/2025 1:53 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

N

STH 190 (W. CAPITOL DR)

STH 190 (W. CAPITOL DR)

PC: 403+44.42

402+00

403+00

404+00

405+00

406+00

407+00

408+0

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

15' (TYP)

15' (TYP)

M4-60L
30"X24"

M4-60R
30"X24"

R/W

PILGRIM ROAD
ON/OFF RAMP

PILGRIM ROAD

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1A PEDESTRIAN ACCOMMODATIONS - PILGRIM ON/OFF RAMP	SHEET 409	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025101_TC.DWG
LAYOUT NAME - 025113_tc
PLOT DATE : 8/20/2025 1:53 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

N

STH 190 (W. CAPITOL DR)

STH 190 (W. CAPITOL DR)

PC: 403+44.42

402+00

403+00

404+00

405+00

406+00

407+00

408+0

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

5' (TYP)

15' (TYP)

M4-60L
30"X24"

M4-60R
30"X24"

R/W

PILGRIM ROAD
ON/OFF RAMP

PILGRIM ROAD

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PR	COUNTY: WAUKESHA	STAGE 1B PEDESTRIAN ACCOMMODATIONS - PILGRIM ON/OFF RAMP	SHEET 410	E

2

N

PILGRIM ROAD

PILGRIM ROAD
ON/OFF RAMP

R/W

R/W

M4-60R
30"X24"

M4-60L
30"X24"

5' (TYP)

15' (TYP)

5' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

STH 190 (W. CAPITOL DR)

PT: 410+88.40

407+00

408+00

409+00

410+00

411+00

412+00

STH 190 (W. CAPITOL DR)

PILGRIM ROAD

R/W

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1A PEDESTRIAN ACCOMMODATIONS - PILGRIM ON/OFF RAMP	SHEET 411	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025102_TC.DWG
LAYOUT NAME - 025114_tc

PLOT DATE : 8/20/2025 1:55 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

2

PILGRIM ROAD

PILGRIM ROAD ON/OFF RAMP

N

R/W

M4-60R 30"X24"

M4-60L 30"X24"

5' (TYP)

15' (TYP)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

STH 190 (W. CAPITOL DR)

407+00

408+00

409+00

410+00

411+00

412+00

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1B PEDESTRIAN ACCOMMODATIONS - PILGRIM ON/OFF RAMP	SHEET 412	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025102B_TC.DWG
LAYOUT NAME - 025114b_tc

PLOT DATE : 8/20/2025 1:55 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

2

N

M4-60R
30"X24"

M4-60L
30"X24"

R/W

R/W

15' (TYP)

5' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

STH 190 (W. CAPITOL DR)

415+00

416+00

417+00

418+00

419+00

420+00

STH 190 (W. CAPITOL DR)

R/W

R/W

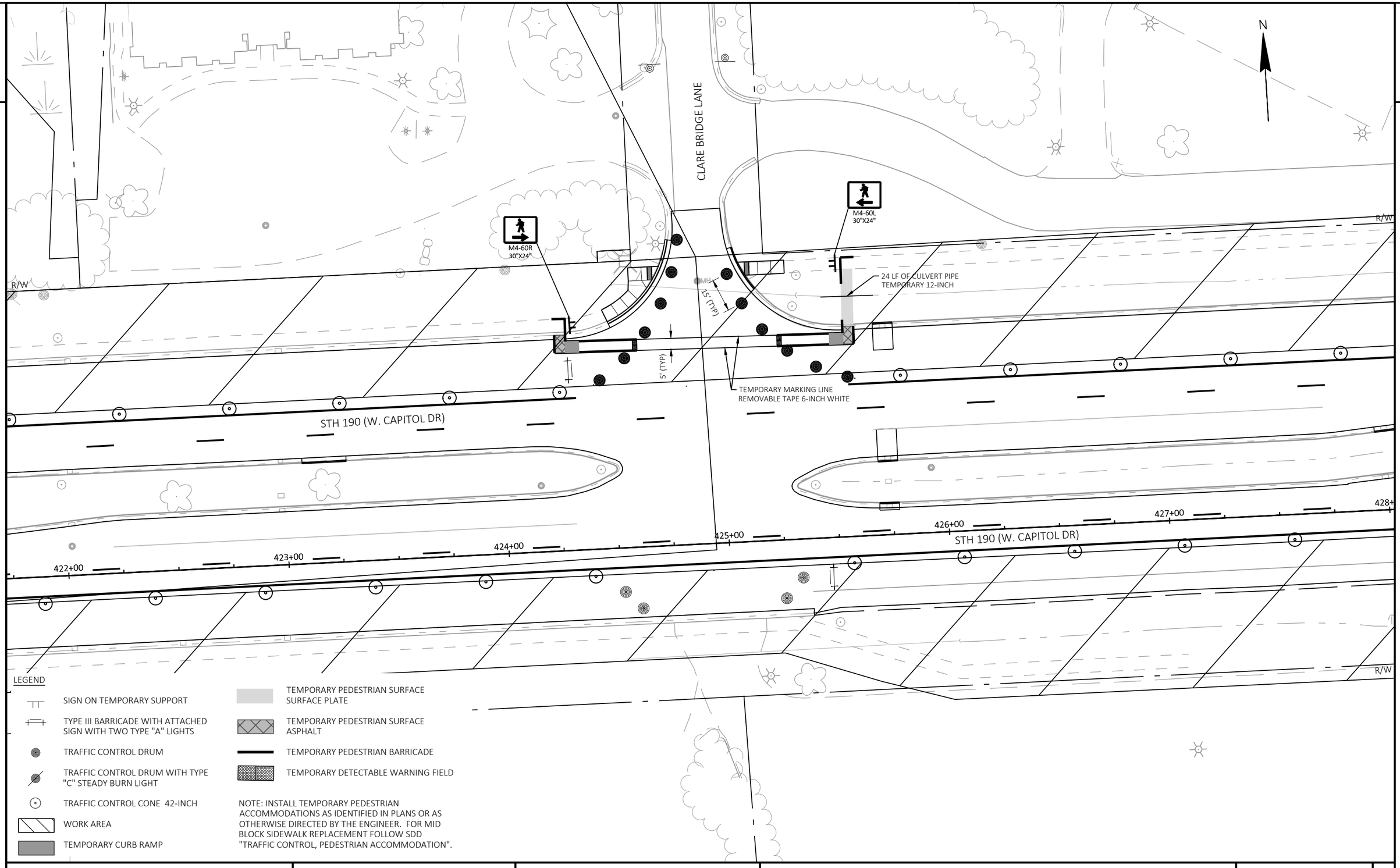
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - COMMERCIAL DRIVEWAY	SHEET 413	E

2



LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - CLARE BRIDGE LANE	SHEET 414	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025102_TC.DWG
LAYOUT NAME - 025116_tc
PLOT DATE : 8/20/2025 1:57 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

N

M4-60R
30"X24"

M4-60L
30"X24"

R/W

STH 190 (W. CAPITOL DR)

5' (TYP)

15' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

430+00

431+00

432+00

433+00

434+00

435+00

20 LF OF CULVERT PIPE
TEMPORARY 12-INCH

M4-60L
30"X24"

M4-60R
30"X24"

R/W LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - COMMERCIAL DRIVEWAY	SHEET 415	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025102_TC.DWG
LAYOUT NAME - 025117_tc

PLOT DATE : 8/20/2025 1:57 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

WYNDHAM POINTE CIRCLE

M4-60R
30"X24"

M4-60L
30"X24"

R/W

5' (TYP)

15' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

STH 190 (W. CAPITOL DR)

PT: 435+79.79

436+00

437+00

438+00

439+00

440+00

441+00

M4-60L
30"X24"

M4-60R
30"X24"

R/W LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - WYNDHAM POINTE CIRCLE	SHEET 416 E

2

N

N 145TH STREET

M4-60R
30"X24"

M4-60L
30"X24"

R/W

5' (TYP)

15' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

STH 190 (W. CAPITOL DR)

441+00

442+00

443+00

444+00

445+00

446+00

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

15' (TYP)

5' (TYP)

M4-60R
30"X24"

M4-60L
30"X24"

N 144TH STREET

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - 145TH/144TH STREET	SHEET 417	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025102_TC.DWG
LAYOUT NAME - 025119_tc
PLOT DATE : 8/20/2025 1:58 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

N

R/W

STH 190 (W. CAPITOL DR)

456+00

457+00

458+00

459+00

460+00

461+00

25' (TYP)

15' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

M4-60L
30"X24"

M4-60R
30"X24"

M4-60R
30"X24"

M4-60L
30"X24"

LILLY ROAD

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1A PEDESTRIAN ACCOMMODATIONS - LILLY ROAD	SHEET 418	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025102_TC.DWG
LAYOUT NAME - 025120_tc

PLOT DATE : 8/20/2025 1:59 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

M4-60L
30"X24"

M4-60R
30"X24"

M4-60L
30"X24"

M4-60D
30"X24"

15' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

STH 190 (W. CAPITOL DR)

456+00

457+00

458+00

459+00

460+00

461+00

STH 190 (W. CAPITOL DR)

R/W

R/W

R/W

R/W

LILLY ROAD

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1B PEDESTRIAN ACCOMMODATIONS - LILLY ROAD	SHEET 419	E

2

2

N

N 138TH STREET

M4-60R
30"X24"

M4-60L
30"X24"

15' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

R/W

STH 190 (W. CAPITOL DR)

465+00

466+00

467+00

468+00

469+00

470+00

STH 190 (W. CAPITOL DR)

SIDEWALK CLOSED
R9-9
24"X12"

FIEBRANTZ DRIVE

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - 138TH STREET/FIEBRANTZ DRIVE	SHEET 420	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025102_TC.DWG
LAYOUT NAME - 025121_tc
PLOT DATE : 8/20/2025 2:01 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

N

N 135TH STREET

M4-60R
30"X24"

M4-60L
30"X24"

TLE

R/W

R/W

15' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

STH 190 (W. CAPITOL DR)

473+00

474+00

475+00

476+00

477+00

478+00

STH 190 (W. CAPITOL DR)

R/W

R/W

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - 135TH STREET	SHEET 421	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025102_TC.DWG
LAYOUT NAME - 025122_tc

PLOT DATE : 8/20/2025 2:01 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

N 133RD STREET

M4-60R
30"X24"

M4-60L
30"X24"

R/W

R/W

STH 190 (W. CAPITOL DR)

15' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

480+00

481+00

482+00

483+00

484+00

485+00

STH 190 (W. CAPITOL DR)

R/W

R/W

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - 133RD STREET	SHEET 422	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025102_TC.DWG
LAYOUT NAME - 025123_tc

PLOT DATE : 8/20/2025 2:01 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

2

2

N

N 128TH STREET

M4-60R
30"X24"

M4-60L
30"X24"

R/W

STH 190 (W. CAPITOL DR)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

15' (TYP)

PC: 497+21.40

PT: 501+63.53

497+00

498+00

499+00

500+00

501+00

502+00

STH 190 (W. CAPITOL DR)

15' (TYP)

M4-60R
30"X24"

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1A PEDESTRIAN ACCOMMODATIONS - 128TH STREET	SHEET 423	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025102_TC.DWG
LAYOUT NAME - 025124_tc
PLOT DATE : 8/20/2025 2:02 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

N

N 128TH STREET

15' (TYP)

M4-60R
30"X24"

M4-60L
30"X24"

R/W

STH 190 (W. CAPITOL DR)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

497+00

498+00

499+00

500+00

501+00

502+00

STH 190 (W. CAPITOL DR)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1B PEDESTRIAN ACCOMMODATIONS - 128TH STREET	SHEET 424	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025102B_TC.DWG
LAYOUT NAME - 025124b_tc
PLOT DATE : 8/20/2025 2:03 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

STH 190 (W. CAPITOL DR)

504+00 505+00 506+00 507+00 508+00 509+00 510

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH WHITE

STH 190 (W. CAPITOL DR)

R/W

N

MATCH LINE STA 510+00

M4-60L
30"X24"

M4-60R
30"X24"

M4-60L
30"X24"

M4-60L
30"X24"

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

3_223_2
756.24

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1A PEDESTRIAN ACCOMMODATIONS - COMMERCIAL DRIVEWAYS	SHEET 425	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025102_TC.DWG
LAYOUT NAME - 025125_tc

PLOT DATE : 8/20/2025 2:04 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

2

2

N

R/W

MH

TEL

EL

STH 190 (W. CAPITOL DR)

505+00

506+00

507+00

508+00

509+00

510+00

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH

M4-60L
30"X24"

M4-60R
30"X24"

M4-60L
30"X24"

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1B PEDESTRIAN ACCOMMODATIONS - COMMERCIAL DRIVEWAYS	SHEET 426	E

FILE NAME : X:\MIL\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025102B_TC.DWG
LAYOUT NAME - 025125b_tc

PLOT DATE : 8/20/2025 2:04 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

N

N 124TH STREET

STH 190 (W. CAPITOL DR)

PC: 510+28.20

PT: 512+00.79

EP: 512+89.89

510+00

511+00

512+00

100+00

101+00

102+00

M4-60R 30"X24"

M4-60L 30"X24"

M4-60D 30"X24"

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

R/W

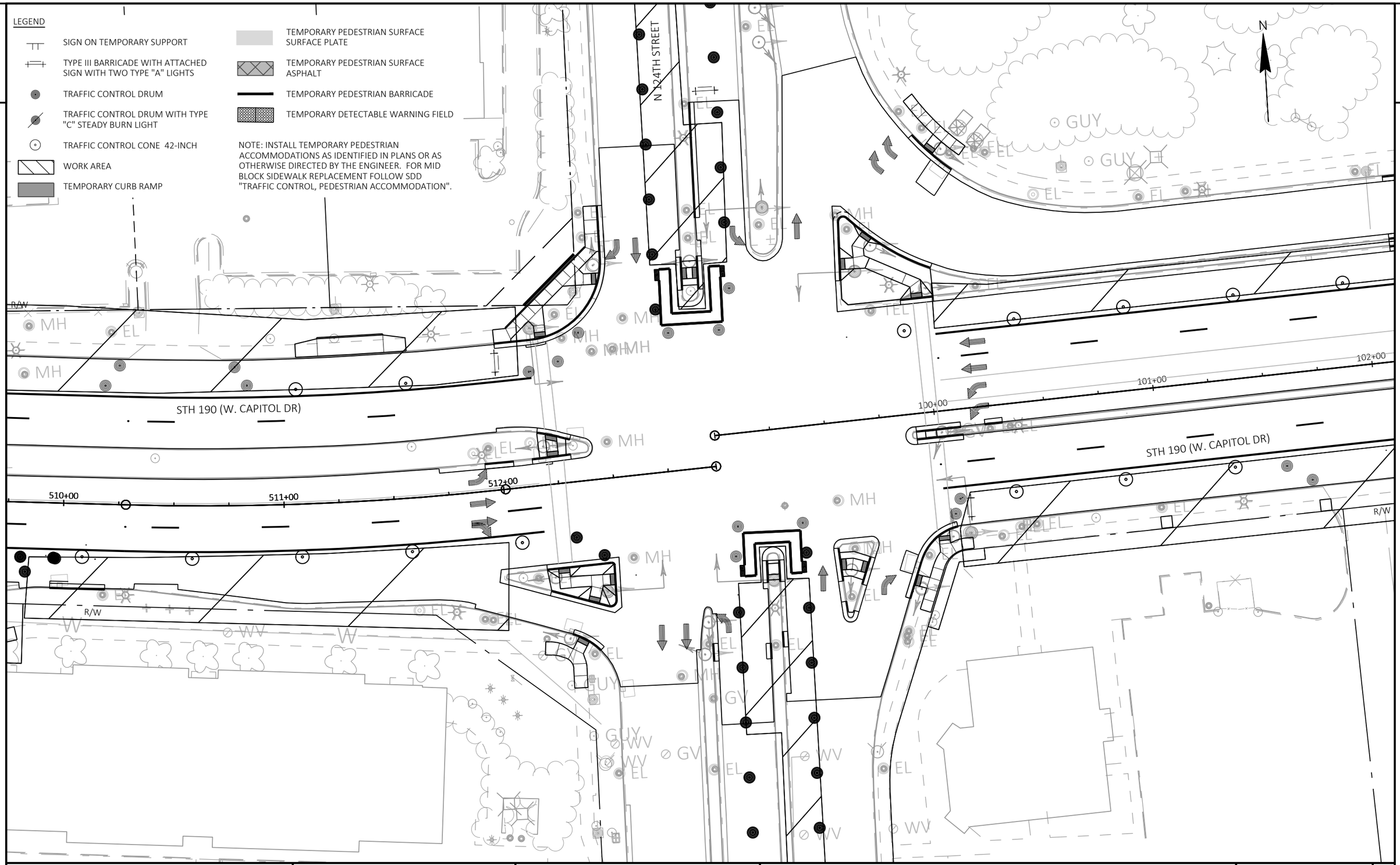
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1A PEDESTRIAN ACCOMMODATIONS - 124TH STREET	SHEET 427 E

2

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1B PEDESTRIAN ACCOMMODATIONS - 124TH STREET	SHEET 428	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025102B_TC.DWG
LAYOUT NAME - 025126b_tc

PLOT DATE : 8/20/2025 2:06 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

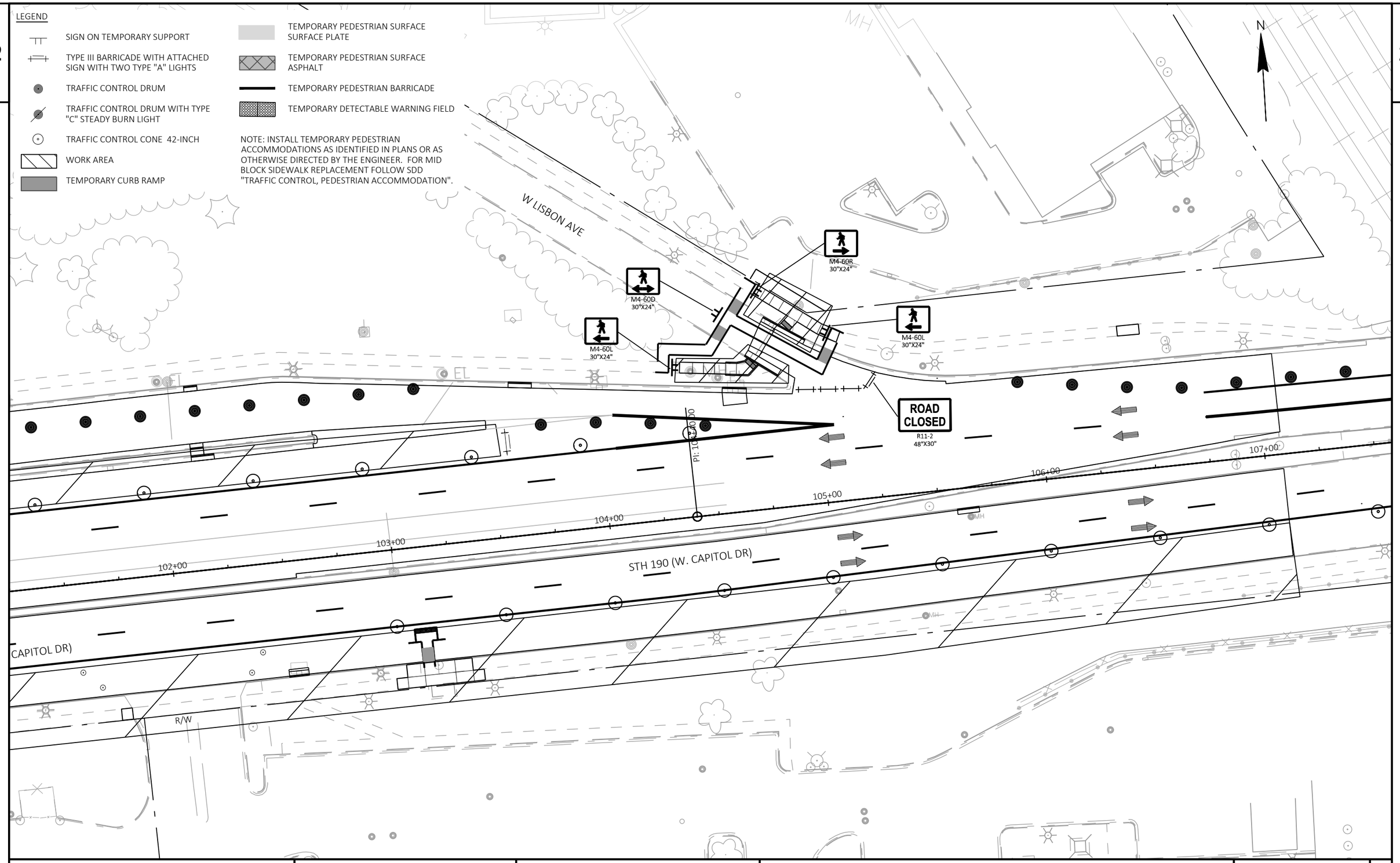
WISDOT/CADDS SHEET 42

2

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL CONE 42-INCH
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE SURFACE PLATE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. FOR MID BLOCK SIDEWALK REPLACEMENT FOLLOW SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".



2

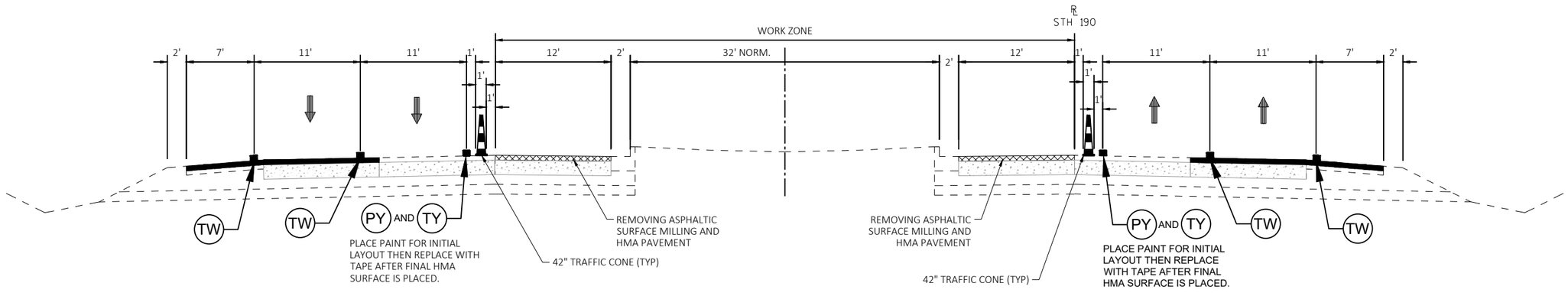
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 1 PEDESTRIAN ACCOMMODATIONS - LISBON AVE	SHEET 429	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025102_TC.DWG
LAYOUT NAME - 025127_tc

PLOT DATE : 8/20/2025 2:07 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

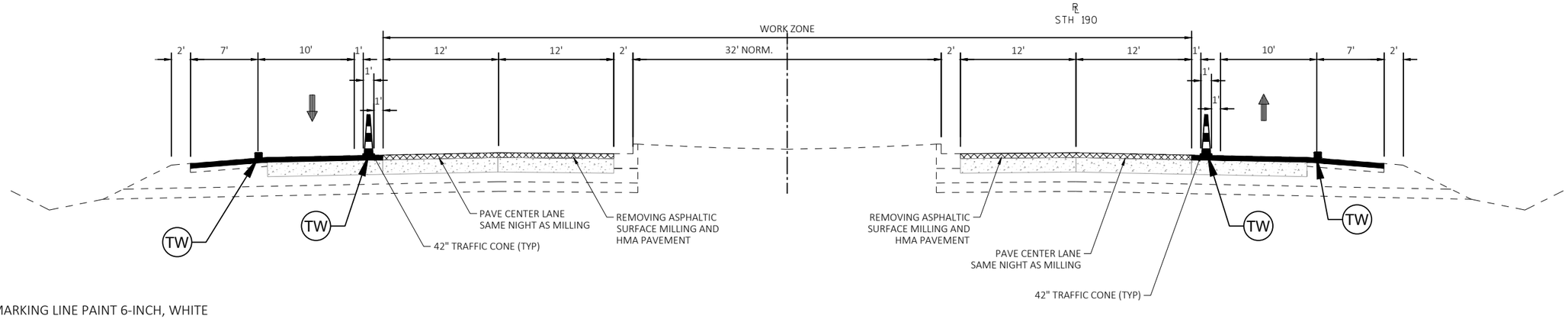
GENERAL NOTE:

PULL BACK CONES TO 2 FEET FROM TEMPORARY MARKING WHEN NOT WORKING ON LANES AND NO HAZARDS ARE PRESENT.



STAGE 2 - PEAK HOURS

STH 190 MAINLINE
STA. 291+00 - STA. 442+00.00
(MITCHELL PARK DRIVE- 145TH STREET)



STAGE 2 - OFF PEAK HOURS

STH 190 MAINLINE
STA. 291+00 - STA. 442+00.00
(MITCHELL PARK DRIVE- 145TH STREET)

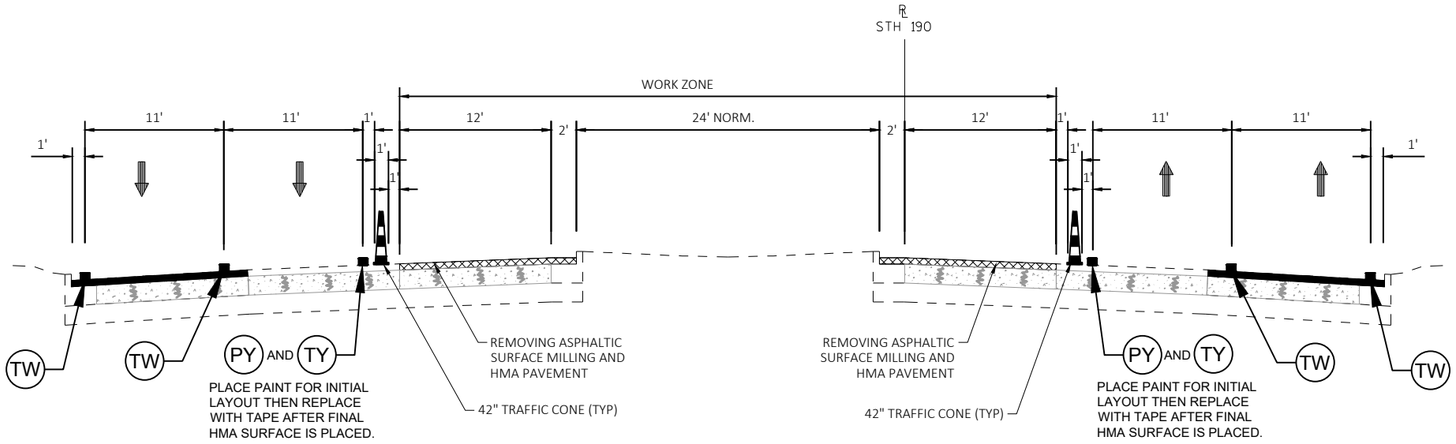
LEGEND

- (PW) TEMPORARY MARKING LINE PAINT 6-INCH, WHITE
- (PY) TEMPORARY MARKING LINE PAINT 6-INCH, YELLOW
- (TW) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH, WHITE
- (TY) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH, YELLOW

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 430	E

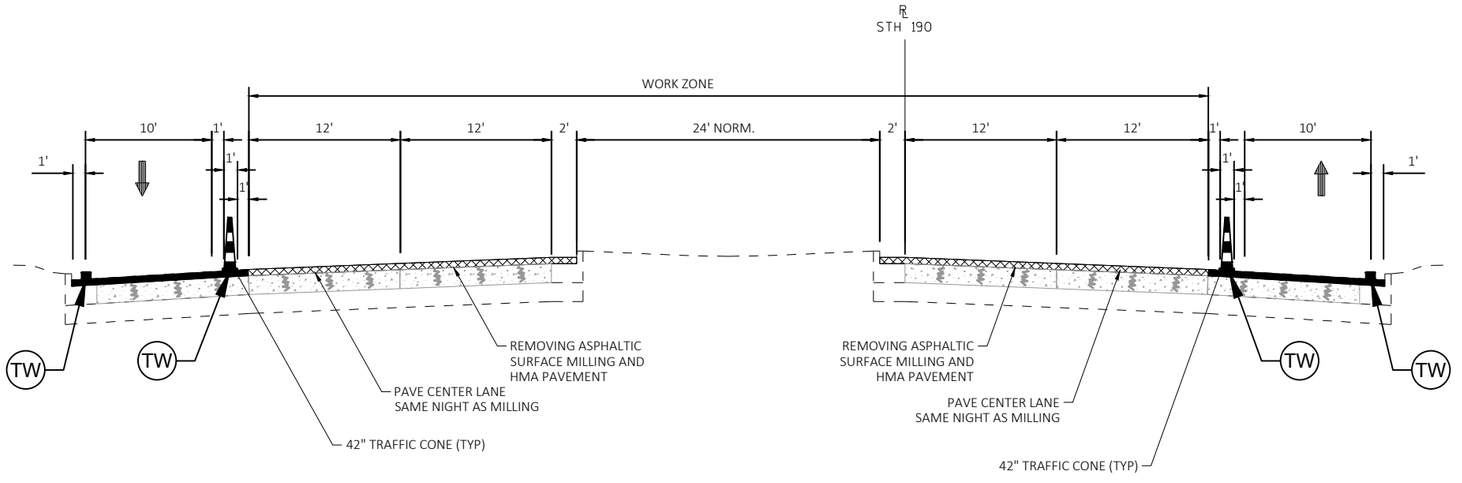
GENERAL NOTE:

PULL BACK CONES TO 2 FEET FROM TEMPORARY MARKING WHEN NOT WORKING ON LANES AND NO HAZARDS ARE PRESENT.



STAGE 2 - PEAK HOURS

STH 190 MAINLINE
STA. 442+00 - STA. 512+96.87
(145TH STREET - 124TH STREET)



LEGEND

- (PW) TEMPORARY MARKING LINE PAINT 6-INCH, WHITE
- (PY) TEMPORARY MARKING LINE PAINT 6-INCH, YELLOW
- (TW) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH, WHITE
- (TY) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH, YELLOW

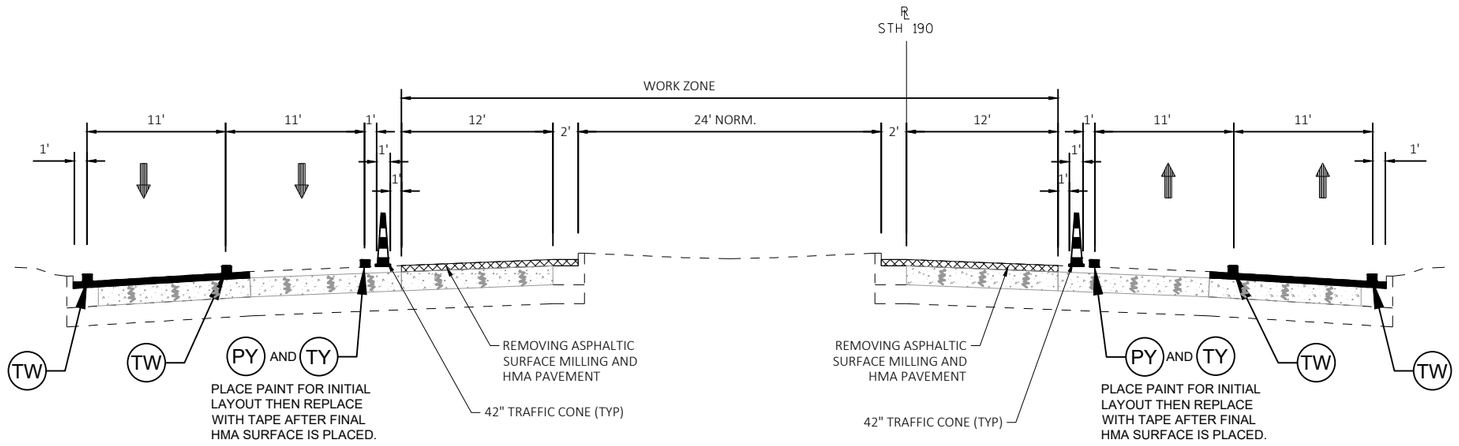
STAGE 2 - OFF PEAK HOURS

STH 190 MAINLINE
STA. 442+00 - STA. 512+96.87
(145TH STREET - 124TH STREET)

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 431	E

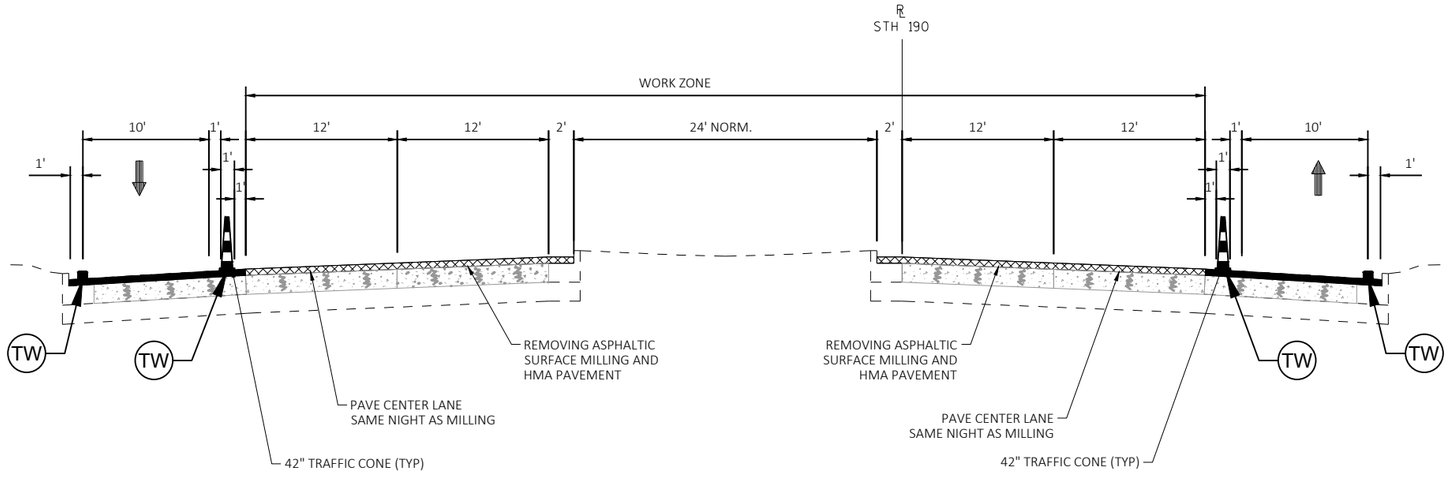
GENERAL NOTE:

PULL BACK CONES TO 2 FEET FROM TEMPORARY MARKING WHEN NOT WORKING ON LANES AND NO HAZARDS ARE PRESENT.



STAGE 2 - PEAK HOURS

STH 190 MAINLINE
STA. 99+00 - STA. 107+08
(124TH STREET - USH 41/STH 45)



STAGE 2 - OFF PEAK HOURS

STH 190 MAINLINE
STA. 99+00 - STA. 107+08
(124TH STREET - USH 41/STH 45)

LEGEND

- (PW) TEMPORARY MARKING LINE PAINT 6-INCH, WHITE
- (PY) TEMPORARY MARKING LINE PAINT 6-INCH, YELLOW
- (TW) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH, WHITE
- (TY) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH, YELLOW

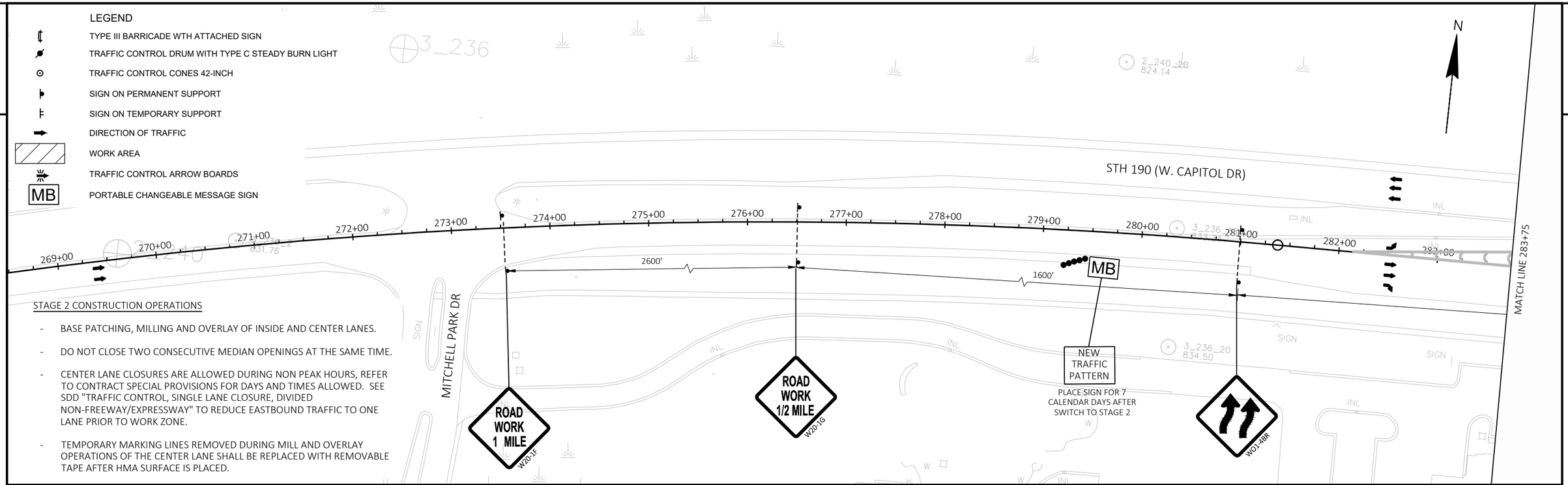
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 432	E

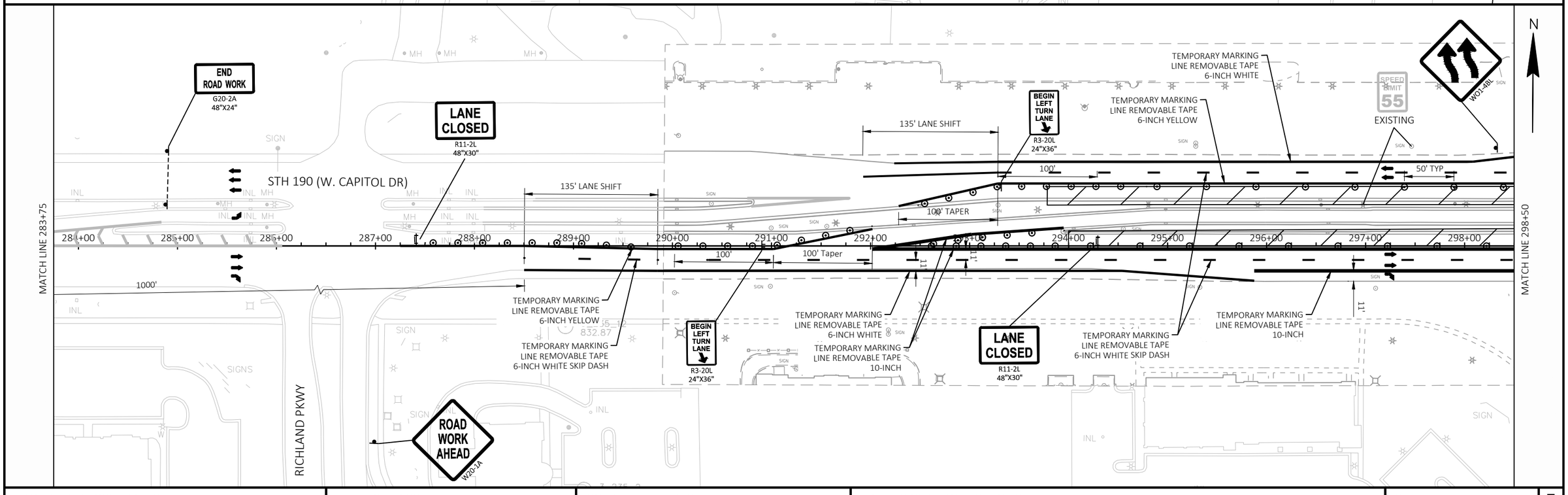
LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB — PORTABLE CHANGEABLE MESSAGE SIGN

STAGE 2 CONSTRUCTION OPERATIONS

- BASE PATCHING, MILLING AND OVERLAY OF INSIDE AND CENTER LANES.
- DO NOT CLOSE TWO CONSECUTIVE MEDIAN OPENINGS AT THE SAME TIME.
- CENTER LANE CLOSURES ARE ALLOWED DURING NON PEAK HOURS, REFER TO CONTRACT SPECIAL PROVISIONS FOR DAYS AND TIMES ALLOWED. SEE SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY" TO REDUCE EASTBOUND TRAFFIC TO ONE LANE PRIOR TO WORK ZONE.
- TEMPORARY MARKING LINES REMOVED DURING MILL AND OVERLAY OPERATIONS OF THE CENTER LANE SHALL BE REPLACED WITH REMOVABLE TAPE AFTER HMA SURFACE IS PLACED.





PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 433	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026105_S2.DWG
LAYOUT NAME - 026105_s2
PLOT DATE : 8/20/2025 2:38 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

ROAD WORK AHEAD W20-1A 350'

END ROAD WORK G20-2A 48"X24"

N BROOKFIELD RD

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH YELLOW

SPEED LIMIT 50 EXISITNG

STH 190 (W. CAPITOL DR)

25' TYP

100' 100'

100' TAPER 100'

50' TYP

MATCH LINE 298+50

299+00 300+00 301+00 302+00 303+00 304+00 305+00 306+00 307+00 308+00 309+00 310+00 311+00 312+00 313+00

MATCH LINE 313+25

11'

LANE CLOSED R11-2L 48"X30"

WO1-6 48"X24"

SPEED LIMIT 50 EXISTING

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH YELLOW

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

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

WO1-6 48"X24"

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

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE SKIP DASH

ST ANDREW LA

200'

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1A

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1A 350'

3_235_20 842.09

N

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB PORTABLE CHANGEABLE MESSAGE SIGN

ROAD WORK AHEAD W20-1A

END ROAD WORK G20-2A 48"X24"

IMPERIAL DR

200'

WO1-6 48"X24"

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH YELLOW

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

SPEED LIMIT 50 EXISTING

STH 190 (W. CAPITOL DR)

100' TAPER 100' 50' TYP

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

100' TAPER

MATCH LINE 313+25

314+00 315+00 316+00 317+00 318+00 319+00 320+00 321+00 322+00 323+00 324+00 325+00 326+00 327+00 328

MATCH LINE 328+00

100' TAPER

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

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

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

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

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE SKIP DASH

MOUNTAIN DR

200'

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1A

N

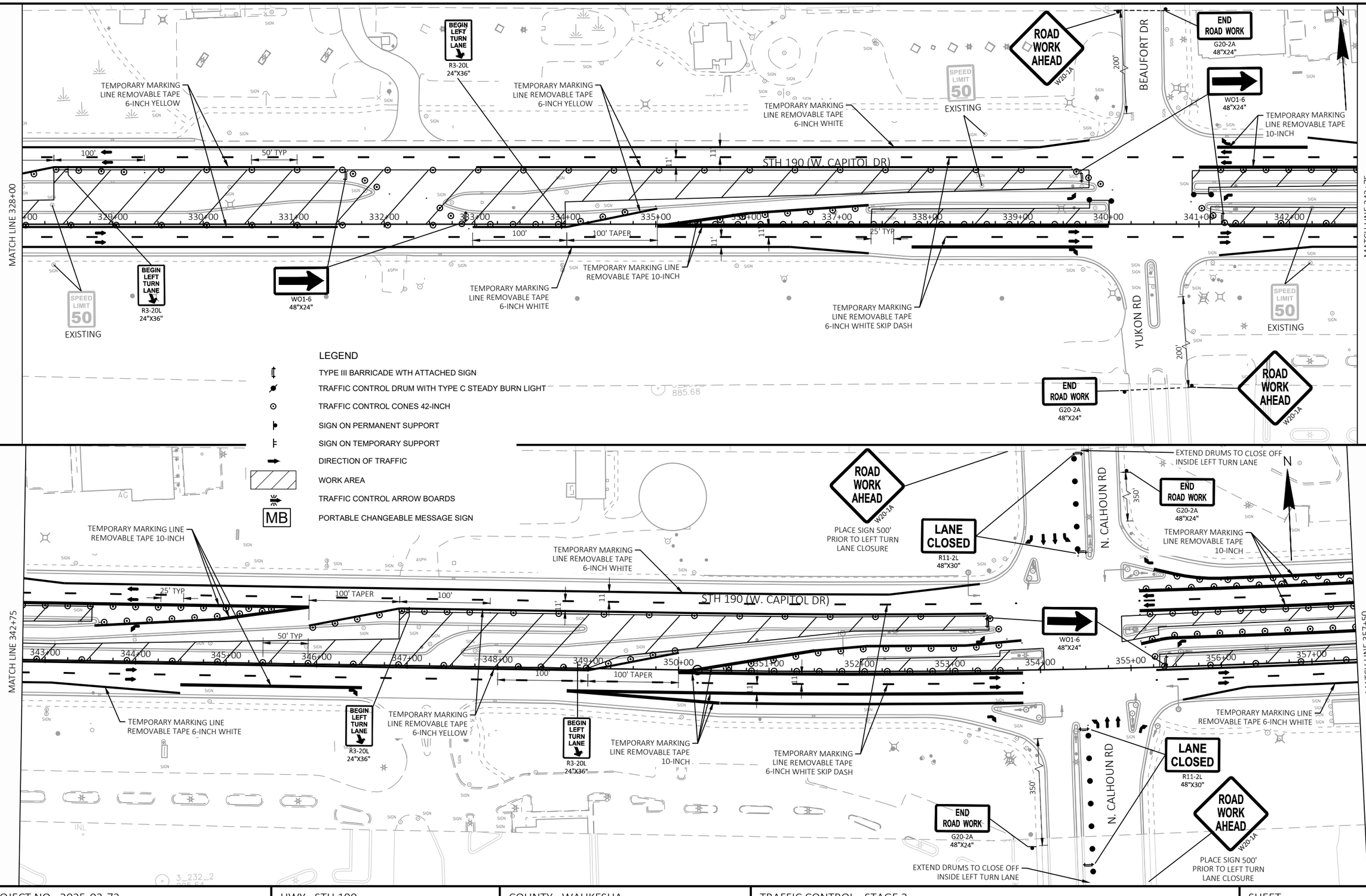
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 434	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026105_S2.DWG
LAYOUT NAME - 026106_s2

PLOT DATE : 8/20/2025 2:38 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 435	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026105_S2.DWG
LAYOUT NAME - 026107_s2
PLOT DATE : 8/20/2025 2:38 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

N

MATCH LINE 357+50

MATCH LINE 372+25

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

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

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

100' TAPER

100'

STH 190 (W. CAPITOL DR)

50' TYP

11'

358+00 359+00 360+00 361+00 362+00 363+00 364+00 365+00 366+00 367+00 368+00 369+00 370+00 371+00 372+00

100'

100' TAPER

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH YELLOW

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE SKIP DASH

SPEED LIMIT 50
EXISTING

WO1-6
48"X24"

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

END ROAD WORK
G20-2A
48"X24"

N. 169TH ST

160'

ROAD WORK AHEAD
W20-1A

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB PORTABLE CHANGEABLE MESSAGE SIGN

N

MATCH LINE 372+25

MATCH LINE 386+50

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

SPEED LIMIT 50
EXISTING

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48"X24"

FOUNTAIN PLAZA DR

170'

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH WHITE

100' TAPER

100'

50' TYP

STH 190 (W. CAPITOL DR)

11'

373+00 374+00 375+00 376+00 377+00 378+00 379+00 380+00 381+00 382+00 383+00 384+00 385+00 386+00

100'

100' TAPER

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

WO1-6
48"X24"

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH YELLOW

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE SKIP DASH

N. 165TH ST

180'

BRADEE RD

200'

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 436 E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026105_S2.DWG
LAYOUT NAME - 026108_s2

PLOT DATE : 8/20/2025 2:39 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1A

170'

N. 162ND ST

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

SPEED LIMIT 50 EXISTING

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

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

WO1-6 48"X24"

ROAD WORK AHEAD W20-1A

200'

BROOK LN

END ROAD WORK G20-2A 48"X24"

N

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

WO1-6 48"X24"

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH WHITE

100' TAPER 100'

STH 190 (W. CAPITOL DR)

11'

MATCH LINE 386+50

387+00 388+00 389+00 390+00 391+00 392+00 393+00 394+00 395+00 396+00 397+00 398+00 399+00 400+00 401+00

MATCH LINE 401+50

50' TYP 100' 100' TAPER 25' TYP

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH YELLOW

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE SKIP DASH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH YELLOW

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

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

LONE ELM DR

200'

BROOK LN

200'

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1A

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1A

350'

STH 190 EB TO/FROM CTH YY

END ROAD WORK G20-2A 48"X24"

N

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

SPEED LIMIT 50 EXISTING

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

50' TYP

STH 190 (W. CAPITOL DR)

MATCH LINE 401+50

402+00 403+00 404+00 405+00 406+00 407+00 408+00 409+00 410+00 411+00 412+00 413+00 414+00 415+00 416+00

MATCH LINE 416+50

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE SKIP DASH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH YELLOW

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE SKIP DASH

STH 190 WB TO/FROM CTH YY

350'

CTH YY (PILGRIM RD)

SPEED LIMIT 50 EXISTING

END ROAD WORK G20-2A 48"X24"

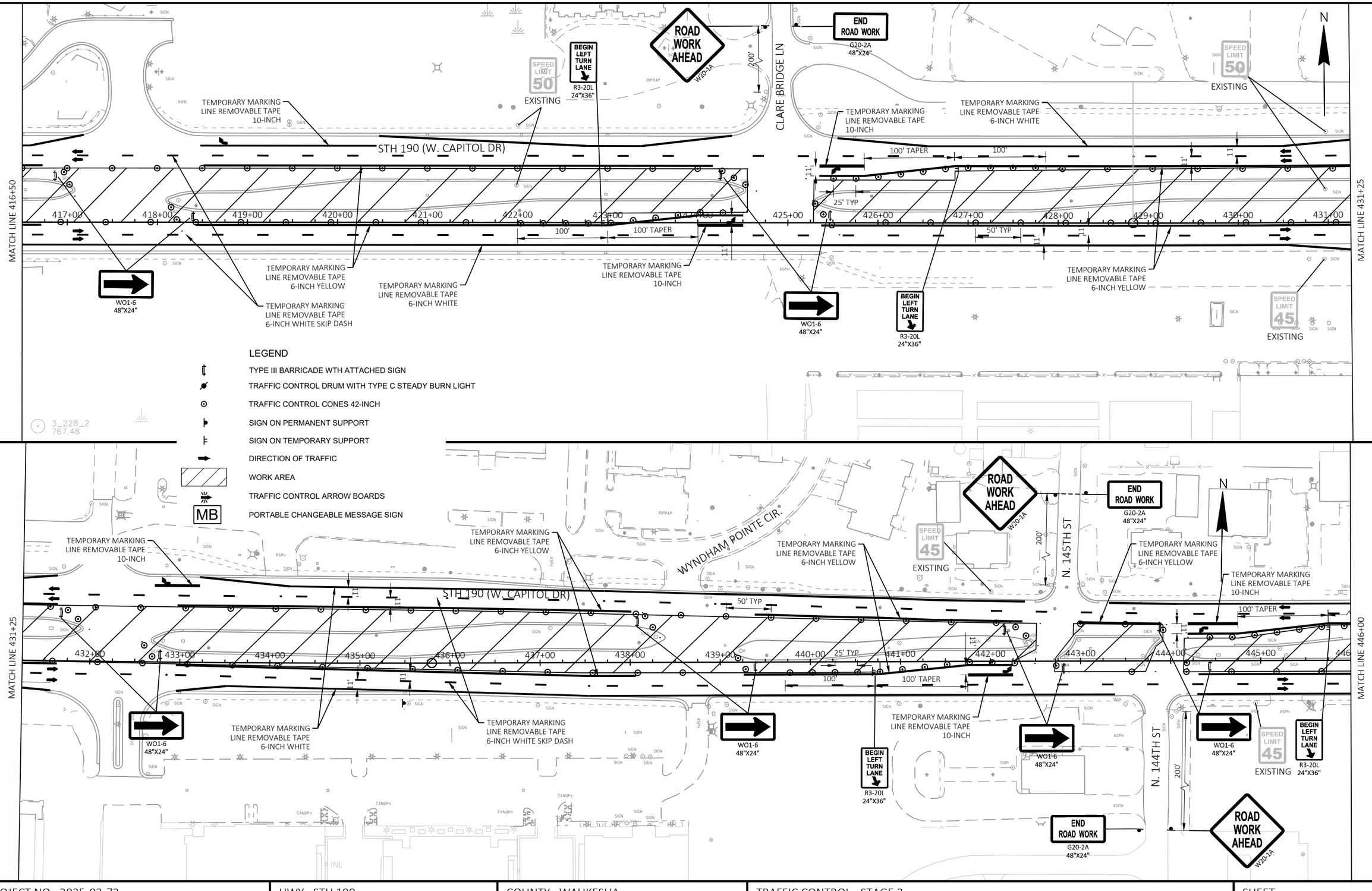
ROAD WORK AHEAD W20-1A

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB — PORTABLE CHANGEABLE MESSAGE SIGN

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 437	E

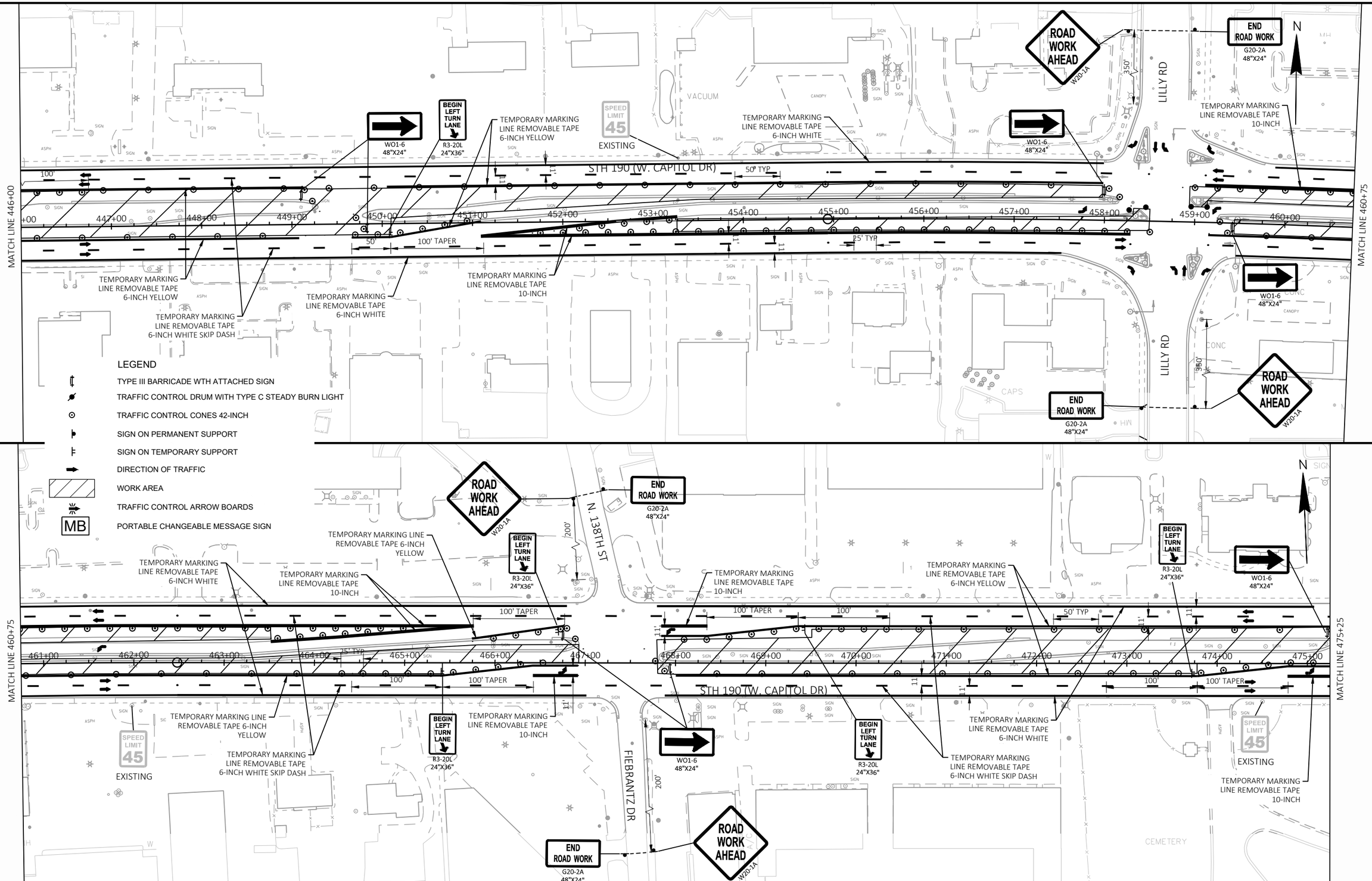
FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026105_S2.DWG
LAYOUT NAME - 026109_s2
PLOT DATE : 8/20/2025 2:39 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 438	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026106_S2.DWG
LAYOUT NAME - 026110_s2
PLOT DATE : 8/20/2025 2:40 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 439	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026106_S2.DWG
LAYOUT NAME - 026111_s2
PLOT DATE : 8/20/2025 2:40 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

2

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS

N

ROAD CLOSED AHEAD
W20-3A

ROAD CLOSED AHEAD
W20-3A

N. 138TH ST

500'

500'

WOODSIDE PL

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

N. 138TH ST

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED
R11-2
48"X30"

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

R3-1
24"X24"

ROAD CLOSED
R11-2
48"X30"

MATCH LINE 460+75

100' TAPER

25' TYP

461+00 462+00 463+00 464+00 465+00 466+00 467+00

100'

STH 190 (W. CAPITOL DR)

100' TAPER

100'

50' TYP

468+00 469+00 470+00 471+00 472+00 473+00 474+00 475+00

100'

100' TAPER

MATCH LINE 475+25

SPEED LIMIT 45
EXISTING

R3-2
24"X24"

LANE CLOSED
R11-2L
48"X30"

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

SPEED LIMIT 45
EXISTING

LANE CLOSED
R11-2L
48"X30"

FIEBRANTZ DR

200'

INSTALL CONCRETE BARRIER TEMPORARY PRECAST TO PROTECT CULVERT WORK. BEGINNING OF BARRIER TO BE A MINIMUM OF 10' FROM TRAVEL LANE.

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1A

CEMETERY

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2B - CULVERT REPLACEMENT	SHEET 440	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026106_S2NIGHT.DWG
LAYOUT NAME - 026111_s2b

PLOT DATE : 8/20/2025 2:41 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1A

200'

N. 135TH ST

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

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

STH 190 (W. CAPITOL DR)

MATCH LINE 475+25

476+00 477+00 478+00 479+00 480+00 481+00 482+00

11'

100'

100' TAPER

WO1-6
48"X24"

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE SKIP DASH

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48"X24"

200'

N. 133RD ST

SPEED LIMIT 45
EXISTING

483+00 484+00 485+00

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH YELLOW

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

25' TYP

100' TAPER

100'

486+00 487+00 488+00 489+00 490

50' TYP

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH YELLOW

MATCH LINE 490+00

N

WO1-6
48"X24"

SPEED LIMIT 45
EXISTING

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

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB — PORTABLE CHANGEABLE MESSAGE SIGN

SPEED LIMIT 45
EXISTING

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

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH YELLOW

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

STH 190 (W. CAPITOL DR)

MATCH LINE 490+00

+00 491+00 492+00 493+00 494+00 495+00 496+00 497+00 498+00 499+00

50'

100' TAPER

WO1-6
48"X24"

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE SKIP DASH

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48"X24"

200'

N. 128TH ST

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

25' TYP

500+00 501+00 502+00 503+00 504+00 505

50' TYP

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH YELLOW

MATCH LINE 505+00

N

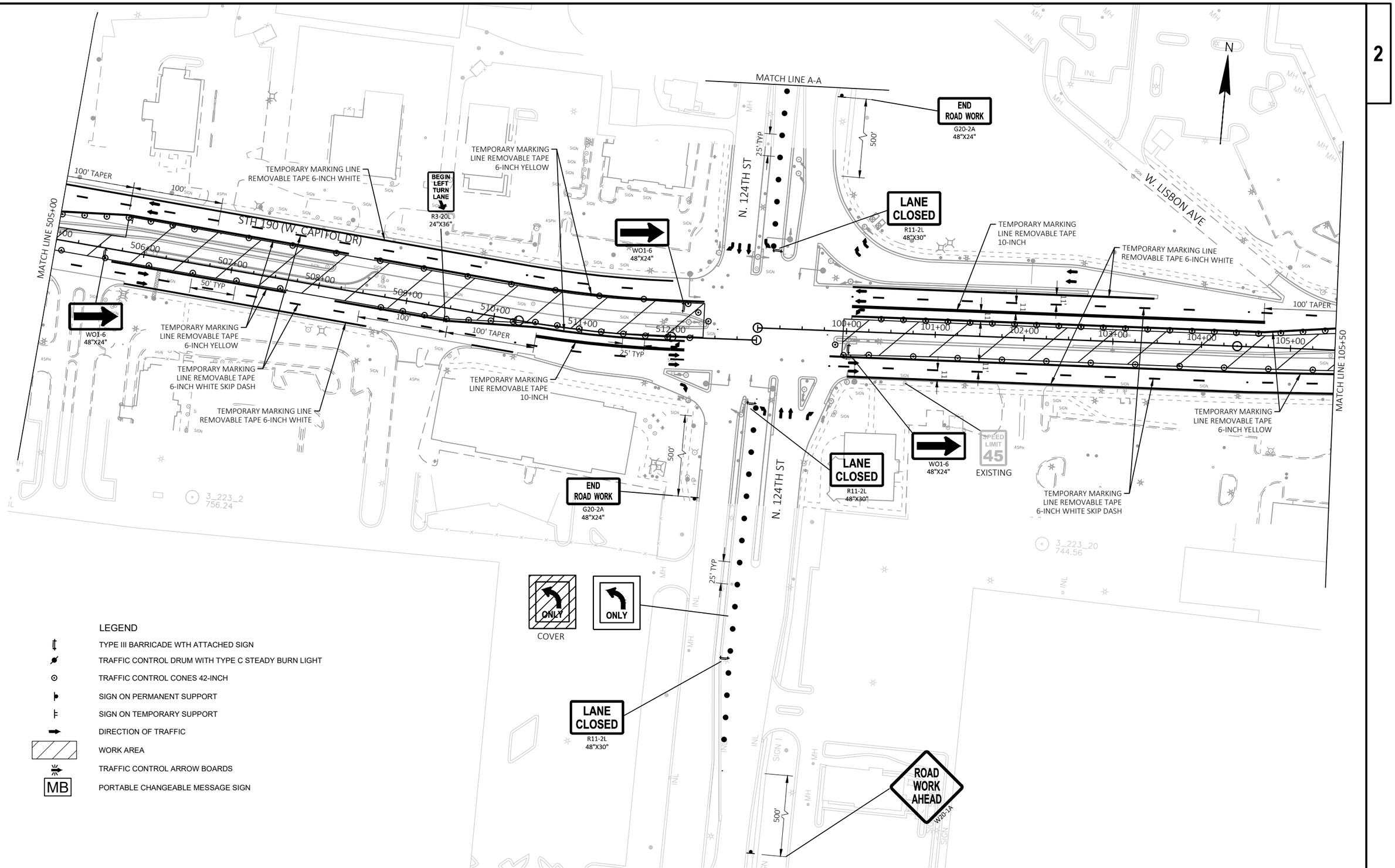
WO1-6
48"X24"

ROAD WORK AHEAD
W20-1A

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 441	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026106_S2.DWG
LAYOUT NAME - 026112_s2
PLOT DATE : 8/20/2025 2:42 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



LEGEND

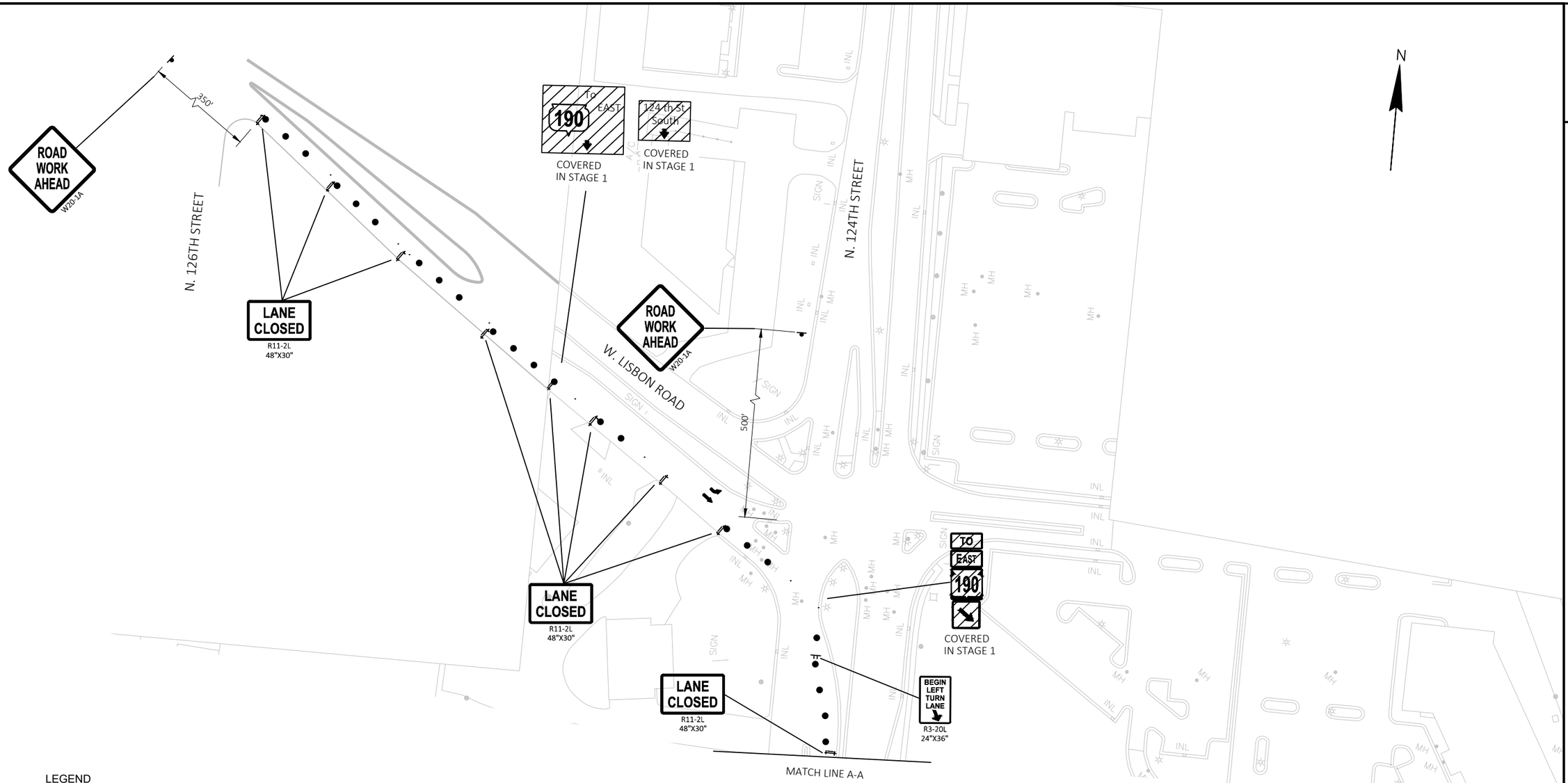
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB — PORTABLE CHANGEABLE MESSAGE SIGN

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 442	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026106_S2.DWG
LAYOUT NAME - 026113_s2

PLOT DATE : 8/20/2025 2:42 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB — PORTABLE CHANGEABLE MESSAGE SIGN

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 443	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026106_S2.DWG
LAYOUT NAME - 026113a_s2

PLOT DATE : 8/20/2025 2:42 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

PLACE SIGN FOR 7 CALENDAR DAYS AFTER SWITCH TO STAGE 2

NEW TRAFFIC PATTERN

MATCH LINE 105+50

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

MB

100'

STH 190 (W. CAPITOL DR)

106+00

107+00

108+00

109+00

110+00

ROAD WORK AHEAD

W20-1A

CAMERA

N

50'

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

MATCH LINE B-B

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH YELLOW

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

BEGIN LEFT TURN LANE

R3-20L 24"X36"

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE SKIP DASH

END ROAD WORK

G20-2A 48"X24"

540' LANE DROP

MH

IC RAILROAD

3_222_12
740.97

W

2

500'

500'

500'

MATCH LINE B-B

W04-2L

LEFT LANE CLOSED AHEAD

W20-5A

ROAD WORK AHEAD

W20-1A

N

3_221

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS
- MB — PORTABLE CHANGEABLE MESSAGE SIGN

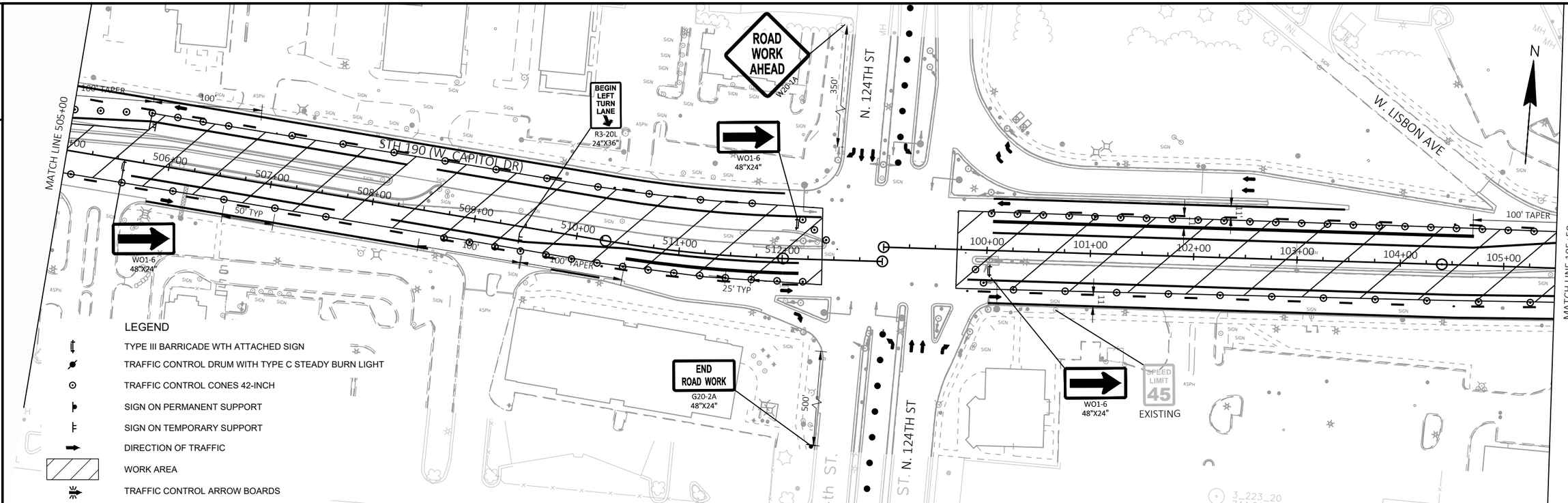
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 444	E

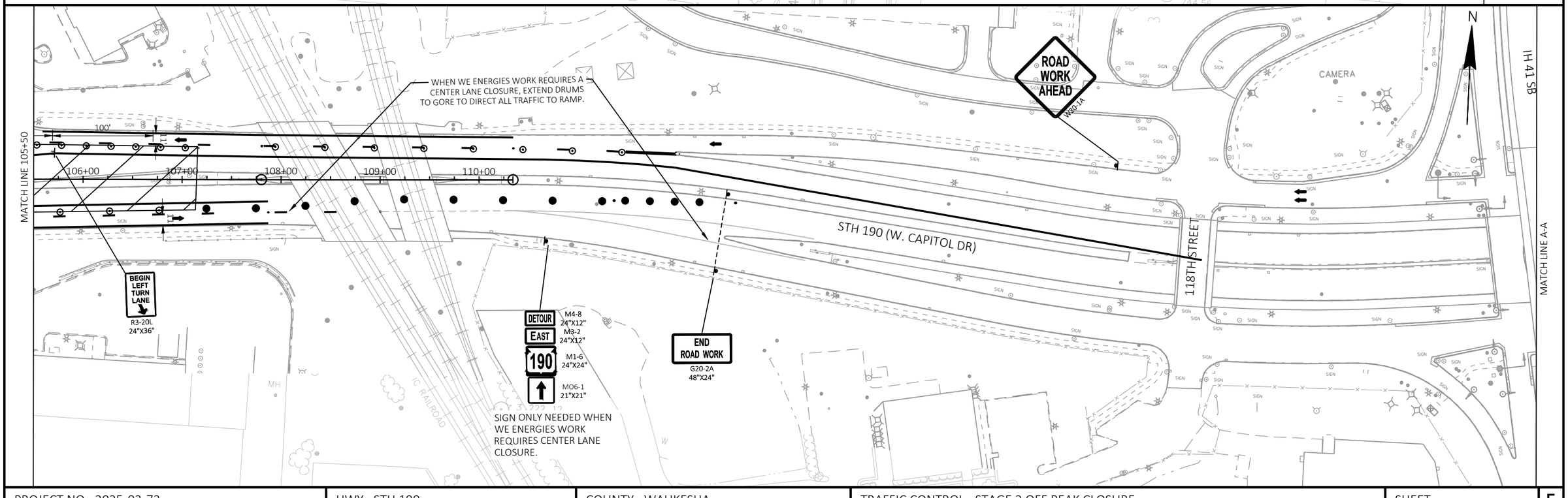
FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026106_S2.DWG
LAYOUT NAME - 026114_s2

PLOT DATE : 8/21/2025 3:06 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2





PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2 OFF PEAK CLOSURE	SHEET 445	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026106_S2NIGHT.DWG
LAYOUT NAME - 026113_s2n
PLOT DATE : 8/21/2025 3:05 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

2

IH 41 NB

MATCH LINE A-A

MATCH LINE B-B

DETOUR M4-8 24"X12"
WEST M3-4 24"X12"
190 M1-6 24"X24"
MO6-1 21"X21"

270' LANE SHIFT

200'

W01-4BR

STH 190 (W. CAPITOL DR)

ROAD CLOSED
R11-2
48"X30"

DETOUR M4-8 24"X12"
WEST M3-4 24"X12"
190 M1-6 24"X24"
MO5-2R 21"X21"

LANE CLOSED
R11-2L
48"X30"

N

MENOMONEE

110TH STREET

MH

INL

INL

STH 100

540' LANE DROP

500'

500'

500'

MATCH LINE B-B

W04-2L

LEFT LANE CLOSED AHEAD
W20-5SA

ROAD WORK AHEAD
W20-1A

DOG PARK

CANOPY

ASPH

N

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL CONES 42-INCH
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- TRAFFIC CONTROL ARROW BOARDS

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2 OFF PEAK CLOSURE	SHEET 446	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\026106_S2NIGHT.DWG
LAYOUT NAME - 026114_s2n

PLOT DATE : 8/20/2025 2:44 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

N

N BROOKFIELD RD

STH 190 (W. CAPITOL DR)

R/W

M4-60L
30"X24"

M4-60R
30"X24"

297+00 298+00 299+00 300+00 301+00 302+00

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- DETOUR ROUTE

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DETAILS.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 2 PEDESTRIAN ACCOMMODATIONS - BROOKFIELD ROAD	SHEET 447	E

2

2

N

IMPERIAL DR

M4-60L
30"X24"

TLE

R/W

STH 190 (W. CAPITOL DR)

319+00

320+00

321+00

322+00

323+00

324+00

325

STH 190 (W. CAPITOL DR)

M4-60R
30"X24"

TLE

ST DOMINIC
DRIVEWAY

TLE

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- DETOUR ROUTE

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DETAILS.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 2A PEDESTRAIN ACCOMMODATIONS - IMPERIAL DRIVE	SHEET 448	E

2

2

N

IMPERIAL DR

TLE

R/W

M4-60R
30"X24"

STH 190 (W. CAPITOL DR)

319+00 320+00 321+00 322+00 323+00 324+00 325

STH 190 (W. CAPITOL DR)

M4-60L
30"X24"

TLE

ST DOMINIC
DRIVEWAY

TLE

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- DETOUR ROUTE

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DETAILS.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 2B PEDESTRAIN ACCOMMODATIONS - IMPERIAL DRIVE	SHEET 449	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025201B_TC.DWG
LAYOUT NAME - 025204b_tc

PLOT DATE : 8/20/2025 2:11 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

BEAUFORT DR

N

R/W

R/W

M4-60L
30"X24"

STH 190 (W. CAPITOL DR)

338+00

339+00

340+00

341+00

342+00

343+00

STH 190 (W. CAPITOL DR)

R/W

R/W

M4-60R
30"X24"

YUKON RD

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- DETOUR ROUTE

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DETAILS.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 2A PEDESTRIAN ACCOMMODATIONS - YUKON ROAD	SHEET 450	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025201_TC.DWG
LAYOUT NAME - 025205_tc

PLOT DATE : 8/20/2025 2:12 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

2

2

BEAUFORT DR

N

R/W

R/W

M4-60R
30"X24"

STH 190 (W. CAPITOL DR)

338+00

339+00

340+00

341+00

342+00

343+00

STH 190 (W. CAPITOL DR)

R/W

R/W

M4-60L
30"X24"

YUKON RD

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- DETOUR ROUTE

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DETAILS.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 2B PEDESTRIAN ACCOMMODATIONS - YUKON ROAD	SHEET 451	E

2

2

N

M4-60L
30"X24"

M4-60R
30"X24"

STH 190 (W. CAPITOL DR)

STH 190 (W. CAPITOL DR)

352+00

353+00

354+00

355+00

356+00

357+00

358

N CALHOUN ROAD

GUY

GV

WV

MH

EL

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- DETOUR ROUTE

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DETAILS.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 2A PEDESTRIAN ACCOMMODATIONS - CALHOUN ROAD	SHEET 452	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025201_TC.DWG
LAYOUT NAME - 025207_tc

PLOT DATE : 8/20/2025 2:14 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

2

N

M4-60R
30"X24"

M4-60L
30"X24"

STH 190 (W. CAPITOL DR)

STH 190 (W. CAPITOL DR)

352+00

353+00

354+00

355+00

356+00

357+00

358

N CALHOUN ROAD

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- DETOUR ROUTE

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DETAILS.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 2B PEDESTRIAN ACCOMMODATIONS - CALHOUN ROAD	SHEET 453	E

2

2

N

M4-60L
30"X24"

M4-60R
30"X24"

STH 190 (W. CAPITOL DR)

456+00

457+00

458+00

459+00

460+00

461+00

LILLY ROAD

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- DETOUR ROUTE

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DETAILS.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 2A PEDESTRIAN ACCOMMODATIONS - LILLY ROAD	SHEET 454	E

2

2

N

M4-60R
30"X24"

M4-60L
30"X24"

STH 190 (W. CAPITOL DR)

456+00

457+00

458+00

459+00

460+00

461+00

STH 190 (W. CAPITOL DR)

LILLY ROAD

POST

GUY

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- DETOUR ROUTE

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DETAILS.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 2B PEDESTRIAN ACCOMMODATIONS - LILLY ROAD	SHEET 455	E

2

2

N

N 128TH STREET

SIDEWALK CLOSED
DETOUR
R9-9
24"X12"
M4-9BL
30"X24"

ITOL DR)

498+00

499+00

500+00

501+00

502+00

503+00

504

STH 190 (W. CAPITOL DR)

MATCH LINE STA 504+00

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- DETOUR ROUTE

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DETAILS.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 2 PEDESTRIAN ACCOMMODATIONS - 128TH STREET	SHEET 456 E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025201_TC.DWG
LAYOUT NAME - 025224_tc

PLOT DATE : 8/20/2025 2:18 PM PLOT BY : ROGAHN, DOUG PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE STA 504+00

MATCH LINE STA 510+00

505+00

506+00

507+00

508+00

509+00

MH

TEL

EL

SIDEWALK CLOSED
R9-9
24"X12"

SIDEWALK CLOSED AHEAD
DETOUR
R9-9A
30"X18"
M4-9BR
30"X24"

SIDEWALK CLOSED AHEAD
DETOUR
R9-9A
30"X18"
M4-9BR
30"X24"

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- DETOUR ROUTE

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DETAILS.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 2 PEDESTRIAN ACCOMMODATIONS - COMMERCIAL DRIVEWAYS	SHEET 457	E

2

2

N

N 124TH STREET

STH 190 (W. CAPITOL DR)

STH 190 (W. CAPITOL DR)

MATCH LINE STA 510+00

510+00

511+00

M4-9BL
30"X24"

M4-9BR
30"X24"

M4-60R
30"X24"

M4-9BL
30"X24"

M4-9BR
30"X24"

M4-60L
30"X24"

M4-9BL
30"X24"

M4-9BR
30"X24"

SIDEWALK CLOSED AHEAD

R9-9A
30"X18"

M4-9BR
30"X24"

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- DETOUR ROUTE

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DETAILS.

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 2A PEDESTRIAN ACCOMMODATIONS - 124TH STREET	SHEET 458	E

2

N 124TH ST

N

M4-60L
30"X24"

STH 190 (W. CAPITOL DR)

510+00

511+00

512+00

100+00

101+00

STH 190 (W. CAPITOL DR)

M4-60R
30"X24"

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- DETOUR ROUTE

NOTE: INSTALL TEMPORARY PEDESTRIAN ACCOMMODATIONS AS IDENTIFIED IN PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DETAILS.

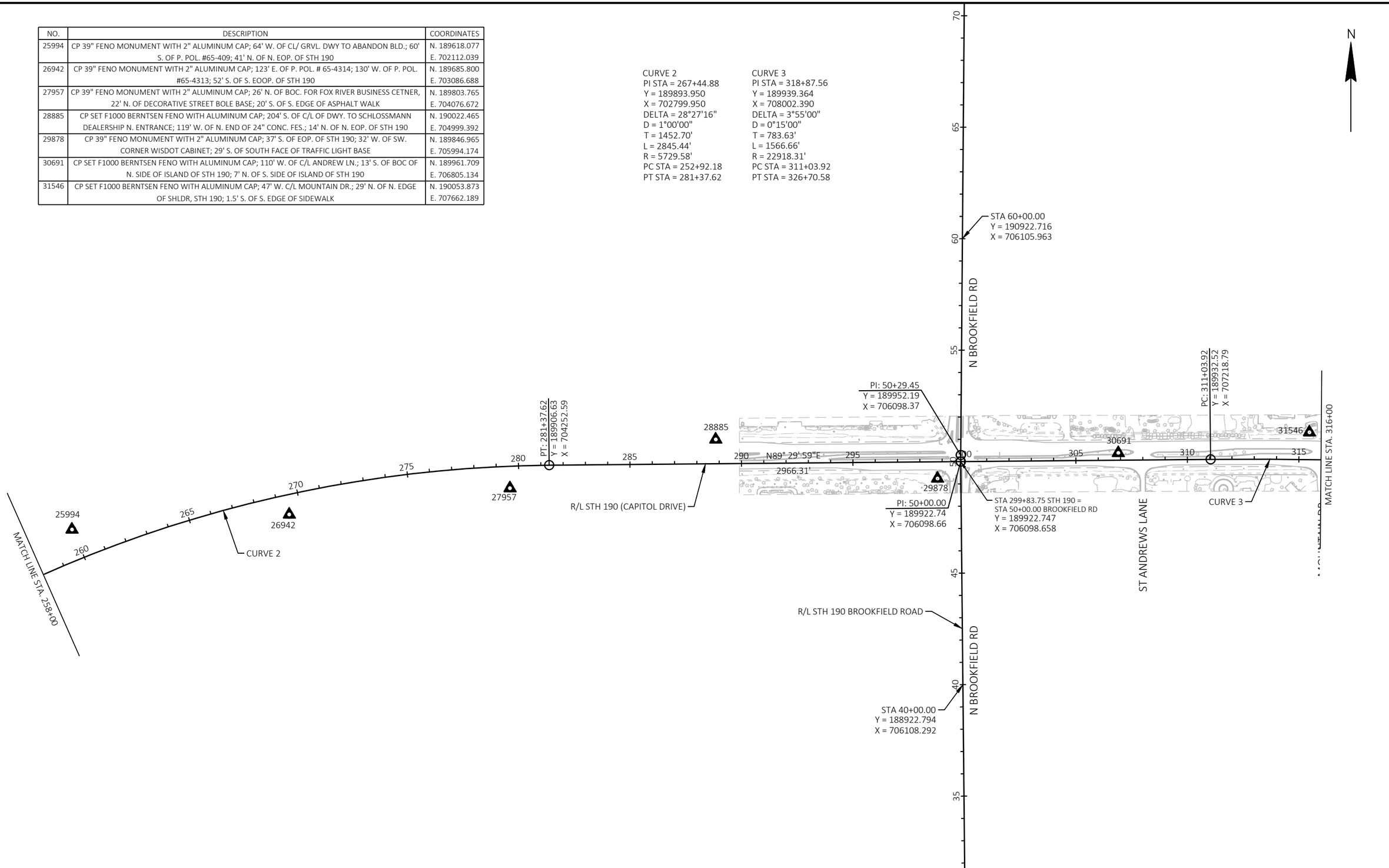
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 2B PEDESTRIAN ACCOMMODATIONS - 124TH STREET	SHEET 459	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\025201B_TC.DWG
LAYOUT NAME - 025226b_tc
PLOT DATE : 8/20/2025 2:19 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

NO.	DESCRIPTION	COORDINATES
25994	CP 39" FENO MONUMENT WITH 2" ALUMINUM CAP; 64' W. OF CL/ GRVL. DWY TO ABANDON BLD.; 60' S. OF P. POL. #65-409; 41' N. OF N. EOP. OF STH 190	N. 189618.077 E. 702112.039
26942	CP 39" FENO MONUMENT WITH 2" ALUMINUM CAP; 123' E. OF P. POL. # 65-4314; 130' W. OF P. POL. #65-4313; 52' S. OF S. EOOP. OF STH 190	N. 189685.800 E. 703086.688
27957	CP 39" FENO MONUMENT WITH 2" ALUMINUM CAP; 26' N. OF BOC. FOR FOX RIVER BUSINESS CETNER, 22' N. OF DECORATIVE STREET BOLE BASE; 20' S. OF S. EDGE OF ASPHALT WALK	N. 189803.765 E. 704076.672
28885	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 204' S. OF C/L OF DWY. TO SCHLOSSMANN DEALERSHIP N. ENTRANCE; 119' W. OF N. END OF 24" CONC. FES.; 14' N. OF N. EOP. OF STH 190	N. 190022.465 E. 704999.392
29878	CP 39" FENO MONUMENT WITH 2" ALUMINUM CAP; 37' S. OF EOP. OF STH 190; 32' W. OF SW. CORNER WISDOT CABINET; 29' S. OF SOUTH FACE OF TRAFFIC LIGHT BASE	N. 189846.965 E. 705994.174
30691	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 110' W. OF C/L ANDREW LN.; 13' S. OF BOC OF N. SIDE OF ISLAND OF STH 190; 7' N. OF S. SIDE OF ISLAND OF STH 190	N. 189961.709 E. 706805.134
31546	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 47' W. C/L MOUNTAIN DR.; 29' N. OF N. EDGE OF SHLDR, STH 190; 1.5' S. OF S. EDGE OF SIDEWALK	N. 190053.873 E. 707662.189

CURVE 2
PI STA = 267+44.88
Y = 189893.950
X = 702799.950
DELTA = 28°27'16"
D = 1°00'00"
T = 1452.70'
L = 2845.44'
R = 5729.58'
PC STA = 252+92.18
PT STA = 281+37.62

CURVE 3
PI STA = 318+87.56
Y = 189939.364
X = 708002.390
DELTA = 3°55'00"
D = 0°15'00"
T = 783.63'
L = 1566.66'
R = 22918.31'
PC STA = 311+03.92
PT STA = 326+70.58



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	ALIGNMENT PLAN	SHEET 460	E

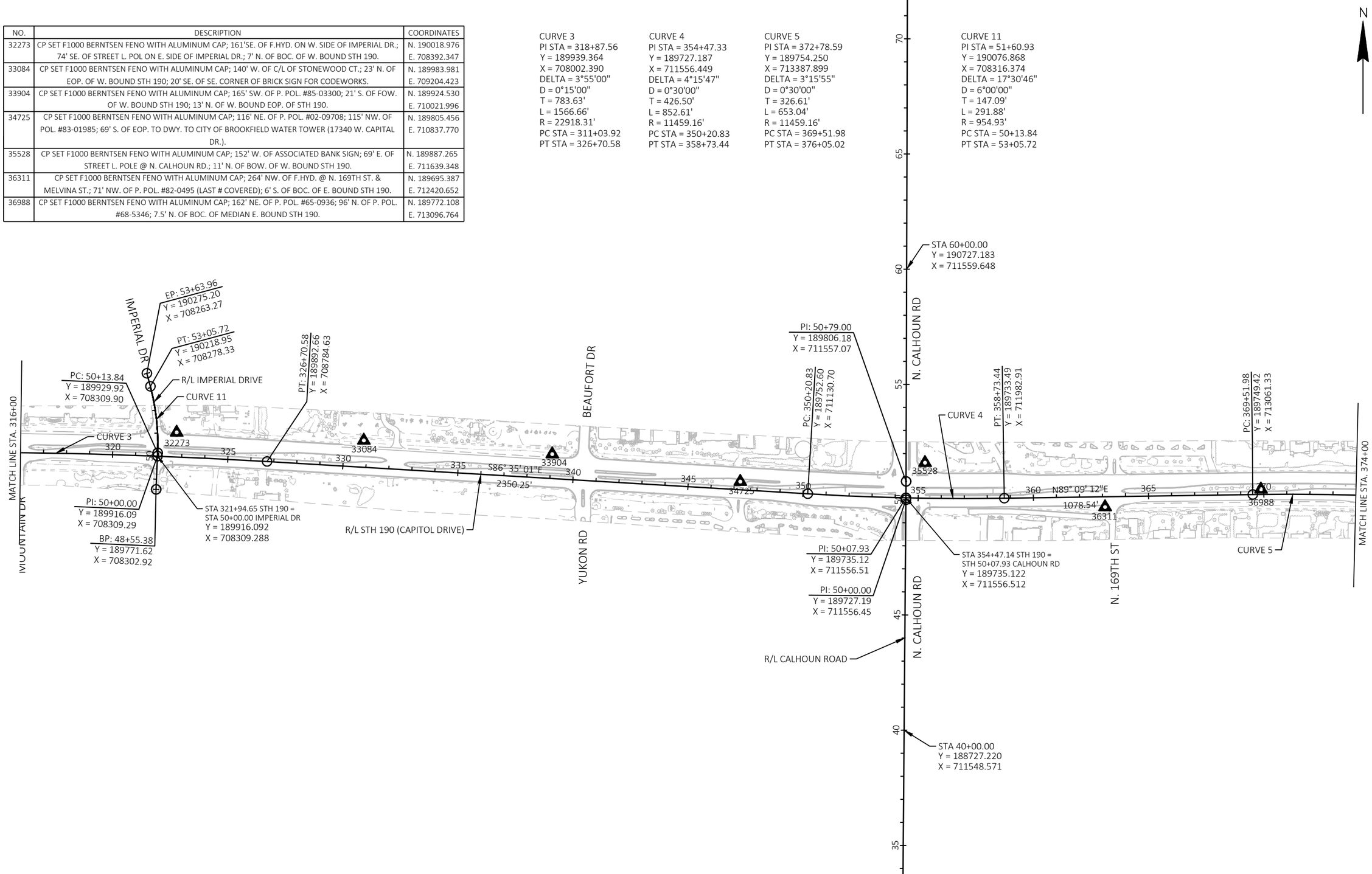
NO.	DESCRIPTION	COORDINATES
32273	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 161'SE. OF F.HYD. ON W. SIDE OF IMPERIAL DR.; 74' SE. OF STREET L. POL ON E. SIDE OF IMPERIAL DR.; 7' N. OF BOC. OF W. BOUND STH 190.	N. 190018.976 E. 708392.347
33084	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 140' W. OF C/L OF STONEWOOD CT.; 23' N. OF EOP. OF W. BOUND STH 190; 20' SE. OF SE. CORNER OF BRICK SIGN FOR CODEWORKS.	N. 189983.981 E. 709204.423
33904	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 165' SW. OF P. POL. #85-03300; 21' S. OF FOW. OF W. BOUND STH 190; 13' N. OF W. BOUND EOP. OF STH 190.	N. 189924.530 E. 710021.996
34725	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 116' NE. OF P. POL. #02-09708; 115' NW. OF POL. #83-01985; 69' S. OF EOP. TO DWY. TO CITY OF BROOKFIELD WATER TOWER (17340 W. CAPITAL DR.).	N. 189805.456 E. 710837.770
35528	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 152' W. OF ASSOCIATED BANK SIGN; 69' E. OF STREET L. POLE @ N. CALHOUN RD.; 11' N. OF BOW. OF W. BOUND STH 190.	N. 189887.265 E. 711639.348
36311	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 264' NW. OF F.HYD. @ N. 169TH ST. & MELVINA ST.; 71' NW. OF P. POL. #82-0495 (LAST # COVERED); 6' S. OF BOC. OF E. BOUND STH 190.	N. 189695.387 E. 712420.652
36988	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 162' NE. OF P. POL. #65-0936; 96' N. OF P. POL. #68-5346; 7.5' N. OF BOC. OF MEDIAN E. BOUND STH 190.	N. 189772.108 E. 713096.764

CURVE 3
PI STA = 318+87.56
Y = 189939.364
X = 708002.390
DELTA = 3°55'00"
D = 0°15'00"
T = 783.63'
L = 1566.66'
R = 22918.31'
PC STA = 311+03.92
PT STA = 326+70.58

CURVE 4
PI STA = 354+47.33
Y = 189727.187
X = 711556.449
DELTA = 4°15'47"
D = 0°30'00"
T = 426.50'
L = 852.61'
R = 11459.16'
PC STA = 350+20.83
PT STA = 358+73.44

CURVE 5
PI STA = 372+78.59
Y = 189754.250
X = 713387.899
DELTA = 3°15'55"
D = 0°30'00"
T = 326.61'
L = 653.04'
R = 11459.16'
PC STA = 369+51.98
PT STA = 376+05.02

CURVE 11
PI STA = 51+60.93
Y = 190076.868
X = 708316.374
DELTA = 17°30'46"
D = 6°00'00"
T = 147.09'
L = 291.88'
R = 954.93'
PC STA = 50+13.84
PT STA = 53+05.72

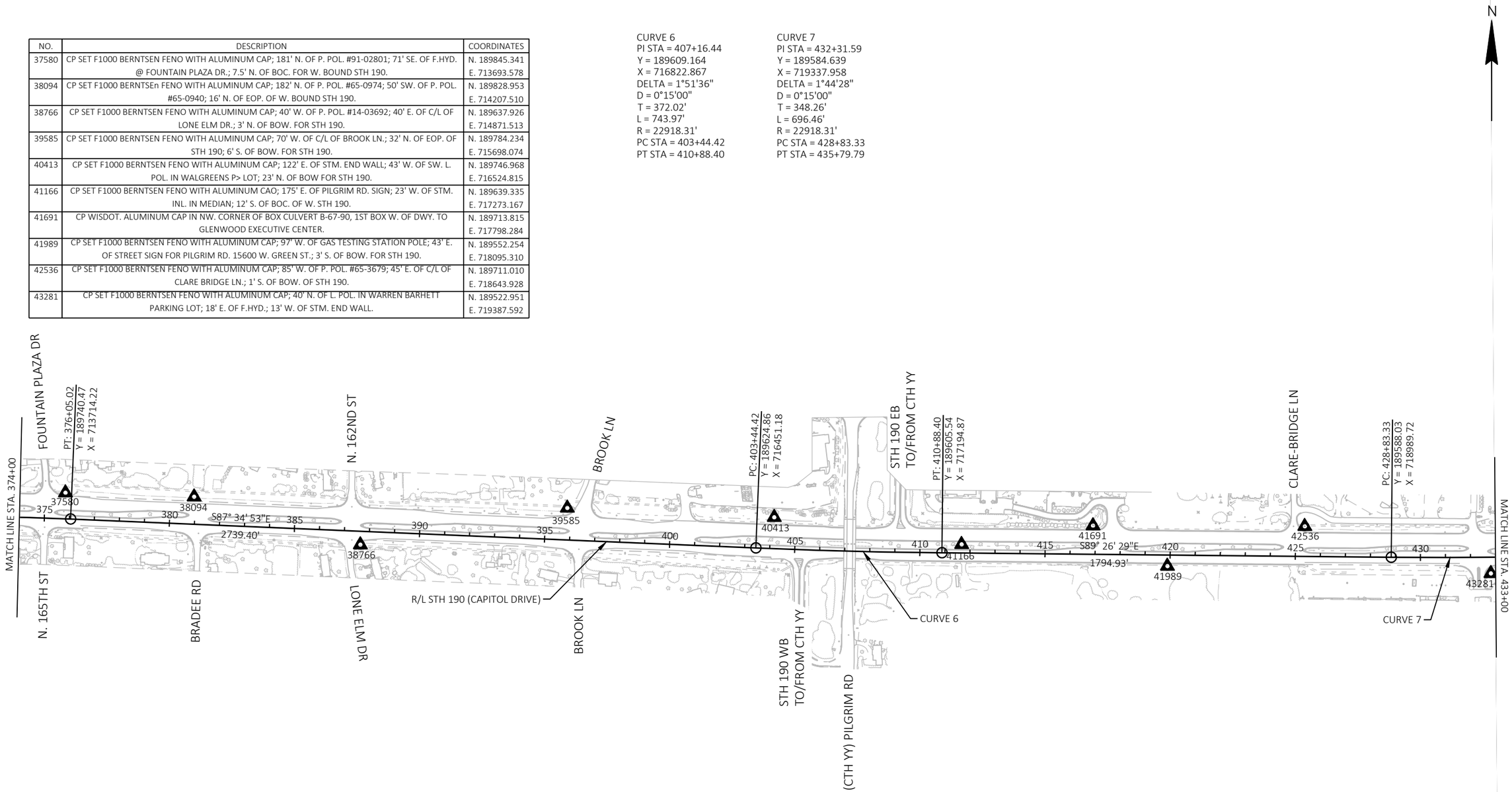


PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	ALIGNMENT PLAN	SHEET 461	E

NO.	DESCRIPTION	COORDINATES
37580	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 181' N. OF P. POL. #91-02801; 71' SE. OF F.HYD. @ FOUNTAIN PLAZA DR.; 7.5' N. OF BOC. FOR W. BOUND STH 190.	N. 189845.341 E. 713693.578
38094	CP SET F1000 BERNTSEn FENO WITH ALUMINUM CAP; 182' N. OF P. POL. #65-0974; 50' SW. OF P. POL. #65-0940; 16' N. OF EOP. OF W. BOUND STH 190.	N. 189828.953 E. 714207.510
38766	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 40' W. OF P. POL. #14-03692; 40' E. OF C/L OF LONE ELM DR.; 3' N. OF BOW. FOR STH 190.	N. 189637.926 E. 714871.513
39585	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 70' W. OF C/L OF BROOK LN.; 32' N. OF EOP. OF STH 190; 6' S. OF BOW. FOR STH 190.	N. 189784.234 E. 715698.074
40413	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 122' E. OF STM. END WALL; 43' W. OF SW. L. POL. IN WALGREENS P> LOT; 23' N. OF BOW FOR STH 190.	N. 189746.968 E. 716524.815
41166	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAO; 175' E. OF PILGRIM RD. SIGN; 23' W. OF STM. INL. IN MEDIAN; 12' S. OF BOC. OF W. STH 190.	N. 189639.335 E. 717273.167
41691	CP WISDOT. ALUMINUM CAP IN NW. CORNER OF BOX CULVERT B-67-90, 1ST BOX W. OF DWY. TO GLENWOOD EXECUTIVE CENTER.	N. 189713.815 E. 717798.284
41989	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 97' W. OF GAS TESTING STATION POLE; 43' E. OF STREET SIGN FOR PILGRIM RD. 15600 W. GREEN ST.; 3' S. OF BOW. FOR STH 190.	N. 189552.254 E. 718095.310
42536	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 85' W. OF P. POL. #65-3679; 45' E. OF C/L OF CLARE BRIDGE LN.; 1' S. OF BOW. OF STH 190.	N. 189711.010 E. 718643.928
43281	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 40' N. OF L. POL. IN WARREN BARHETT PARKING LOT; 18' E. OF F.HYD.; 13' W. OF STM. END WALL.	N. 189522.951 E. 719387.592

CURVE 6
PI STA = 407+16.44
Y = 189609.164
X = 716822.867
DELTA = 1°51'36"
D = 0°15'00"
T = 372.02'
L = 743.97'
R = 22918.31'
PC STA = 403+44.42
PT STA = 410+88.40

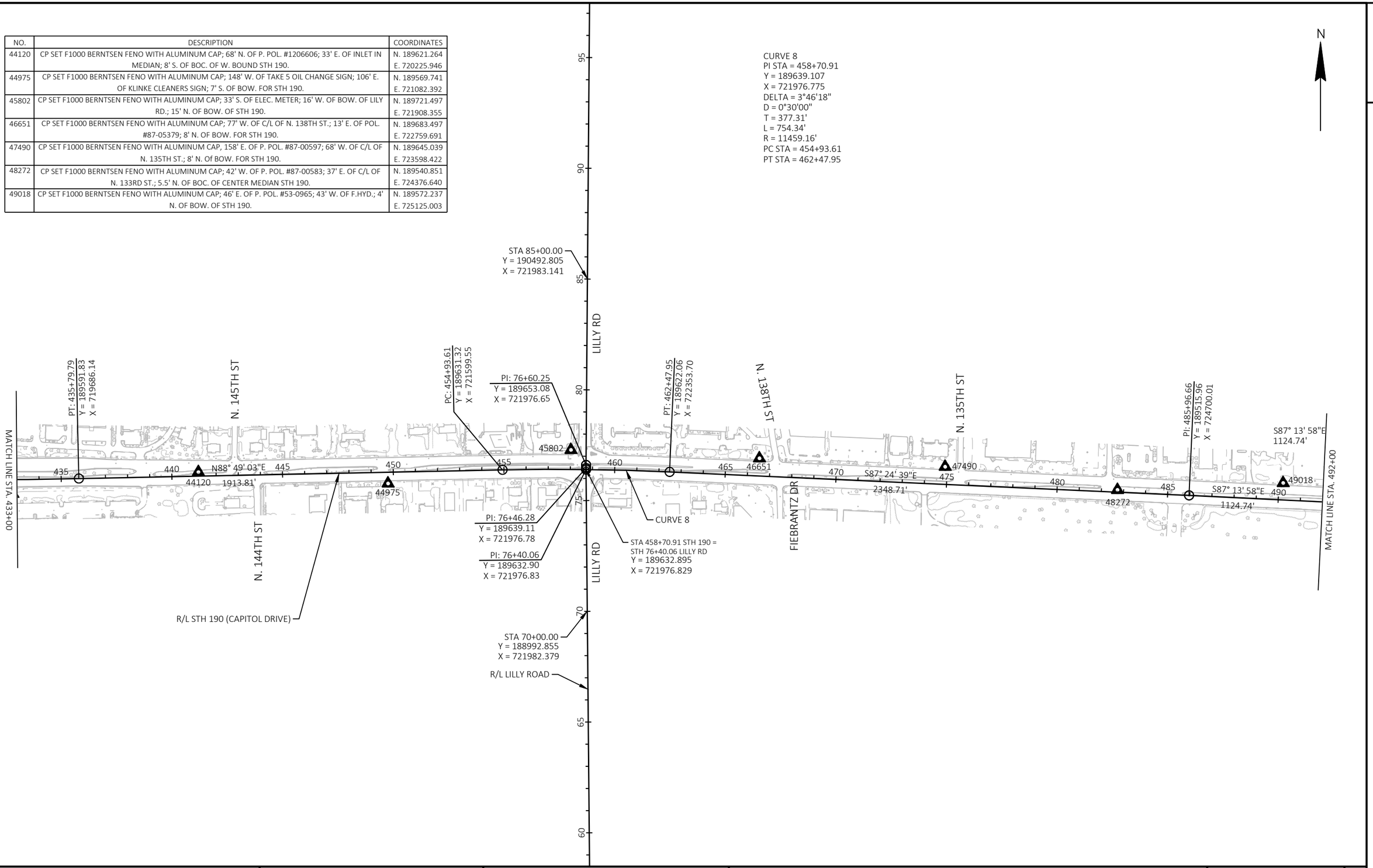
CURVE 7
PI STA = 432+31.59
Y = 189584.639
X = 719337.958
DELTA = 1°44'28"
D = 0°15'00"
T = 348.26'
L = 696.46'
R = 22918.31'
PC STA = 428+83.33
PT STA = 435+79.79



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	ALIGNMENT PLAN	SHEET 462	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 027203_ad
PLOT DATE : 8/20/2025 2:44 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:400 FT
WISDOT/CADDS SHEET 42

NO.	DESCRIPTION	COORDINATES
44120	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 68' N. OF P. POL. #1206606; 33' E. OF INLET IN MEDIAN; 8' S. OF BOC. OF W. BOUND STH 190.	N. 189621.264 E. 720225.946
44975	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 148' W. OF TAKE 5 OIL CHANGE SIGN; 106' E. OF KLINKE CLEANERS SIGN; 7' S. OF BOW. FOR STH 190.	N. 189569.741 E. 721082.392
45802	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 33' S. OF ELEC. METER; 16' W. OF BOW. OF LILY RD.; 15' N. OF BOW. OF STH 190.	N. 189721.497 E. 721908.355
46651	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 77' W. OF C/L OF N. 138TH ST.; 13' E. OF POL. #87-05379; 8' N. OF BOW. FOR STH 190.	N. 189683.497 E. 722759.691
47490	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP, 158' E. OF P. POL. #87-00597; 68' W. OF C/L OF N. 135TH ST.; 8' N. Of BOW. FOR STH 190.	N. 189645.039 E. 723598.422
48272	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 42' W. OF P. POL. #87-00583; 37' E. OF C/L OF N. 133RD ST.; 5.5' N. OF BOC. OF CENTER MEDIAN STH 190.	N. 189540.851 E. 724376.640
49018	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 46' E. OF P. POL. #53-0965; 43' W. OF F.HYD.; 4' N. OF BOW. OF STH 190.	N. 189572.237 E. 725125.003



PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	ALIGNMENT PLAN	SHEET 463	E

CURVE 9
PI STA = 499+42.49
Y = 189450.984
X = 726044.276
DELTA = 2°12'38"
D = 0°30'00"
T = 221.09'
L = 442.13'
R = 11459.16'
PC STA = 497+21.40
PT STA = 501+63.53

CURVE 10
PI STA = 511+14.63
Y = 189349.273
X = 727212.045
DELTA = 7°46'00"
D = 4°30'00"
T = 86.43'
L = 172.59'
R = 1273.24'
PC STA = 510+28.20
PT STA = 512+00.79

CURVE 12
PI STA = 49+18.99
Y = 189366.764
X = 726044.281
DELTA = 16°10'42"
D = 11°15'00"
T = 72.39'
L = 143.81'
R = 509.30'
PC STA = 48+46.61
PT STA = 49+90.42

NO.	DESCRIPTION	COORDINATES
49908	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 41' W. OF C/L OF N. 128TH ST.; 37' E. OF TRAFFIC L. POLE #S671172; 6' N. OF BOW. OF STH 190.	N. 189529.729 E. 726015.140
50593	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 93' E. OF FIRST CITIZENS BANK SIGN; 26' W. OF OVERHEAD SIGN POLE S67404; 11.5' S. OF BOW. ON S. SIDE STH 190.	N. 189337.956 E. 726686.986
38	CP SET F1000 BERNSTEN FENO WITH ALUMINUM CAP; AT SE. CORNER N. 124TH ST. & STH 190. 75' NE. OF F.HYD.; 15' SW. OF NW. CORNER OF QDOBA SIGN; 5' E. OF BOW.	N. 189291.438 E. 727494.663
39	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 119' E. OF L. POL. #21 C0944 0; 50' W. CONC. MEDIAN SEPARATOR; 3' N. OF BOC. OF STH 190.	N. 189408.608 E. 728212.423
40	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 124' W. OF L. POL. #DCD6; 26' E. OF L. POL. #DCD7; 11.5' S. OF BOC. OF RAMP TO W. BOUND STH 190.	N. 189443.400 E. 729000.562
41	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 83' E. OF L. POL. #JCD1; 29' W. OF CEMETERY CONC. RETAINING WALL; 2' N. OF BOW. OF ONRAMP TO I-45.	N. 189526.571 E. 729810.056
42	CP SET F1000 BERNTSEN FENO WITH ALUMINUM CAP; 280' W. OF C/L OF N. 110TH ST.; 149' E. OF E. EDGE OF BRIDGE B-40-337; 9' N. OF BOW. OF STH 190.	N. 189626.773 E. 731218.217
45	CP BM CHISELED SQUARE IN TOP OF N. PARAPET WALL @ NE. CORNER OF BRIDGE B-40-199 OVER THE MENOMONEE RIVER ON THE N. SIDE STH 190.	N. 189594.117 E. 730612.579
938	CP 39" FENO MONUMENT WITH 2" ALUMINUM CAP; 183' SE. OF F.HYD. ON W. BOUND SIDE OF STH 190; 131' SW. OF NE. CORNER BRIDGE B-40-199; 4.5' S. OF BOC. FOR W. BOUND STH 190.	N. 189525.024 E. 730503.531

N

STA 60+00.00
Y = 190358.065
X = 727407.583

N. 124TH ST

EP: 58+26.04
Y = 190274.47
X = 726067.68

R/L 128TH STREET

N. 128TH ST

STH 499+44.73 STH 190 =
STH 50+00.00 128TH ST
Y = 189448.703
X = 726046.394

PC: 497+21.40
Y = 189461.66
X = 725823.44

PT: 49+90.42
Y = 189439.13
X = 726046.15

PT: 501+63.53
Y = 189431.80
X = 726264.53

PC: 510+28.20
Y = 189356.77
X = 727125.94

PT: 512+00.79
Y = 189353.48
X = 727298.37

PI: 50+41.08
Y = 189399.23
X = 727394.90

EP: 512+96.89
Y = 189358.15
X = 727394.36

BP: 99+00.00
Y = 189372.18
X = 727394.54

W. LISBON AVE

PI: 104+40.00
Y = 189398.50
X = 727933.90

UNION PACIFIC RAILROAD

PI: 107+80.00
Y = 189414.49
X = 728273.52

EP: 110+34.15
Y = 189426.60
X = 728527.39

MATCH LINE STA. 492+00

495
49908
500
505
S85° 01' 20"E
864.67'
50593
510
100
N87° 12' 22"E
540.00'
105
39
110
40
41
938
45
42

PI: 50+00.00
Y = 189448.70
X = 726046.39

CURVE 12

PC: 48+46.61
Y = 189296.75
X = 726062.65

BP: 48+09.23
Y = 189260.59
X = 726072.14

CURVE 9

R/L STH 190 (CAPITOL DRIVE)

CURVE 10

N87° 12' 40"E
96.10'

PI: 50+14.03
Y = 189372.18
X = 727394.54

PI: 50+00.00
Y = 189358.15
X = 727394.36

38

STA 99+00.00 STH 190 MKE =
STA 50+14.03 124TH ST
Y = 189372.180
X = 727394.543

STA 512+96.89 STH 190 WAU =
STA 50+00.00 124TH ST
Y = 189358.152
X = 727394.357

N87° 18' 20"E
340.00'

N87° 16' 03"E
254.15'

UNION PACIFIC RAILROAD

R/L 124TH STREET

N. 124TH ST

STA 40+00.00
Y = 188358.240
X = 727381.131

70
65
60
55
50
45
40
35

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	ALIGNMENT PLAN	SHEET 464	E

FILE NAME : X:\ML\2020\20200190\DESIGN\TRANSPORTATION\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 027205_ad
PLOT DATE : 8/20/2025 2:45 PM
PLOT BY : ROGAHN, DOUG
PLOT NAME :
PLOT SCALE : 1 IN:400 FT

Estimate Of Quantities

2025-03-73

Line	Item	Item Description	Unit	Total	Qty
0002	201.0120	Clearing	ID	45.000	45.000
0004	201.0220	Grubbing	ID	45.000	45.000
0006	203.0100	Removing Small Pipe Culverts	EACH	4.000	4.000
0008	203.0220	Removing Structure (structure) 01. C-67-0035	EACH	1.000	1.000
0010	204.0100	Removing Concrete Pavement	SY	241.000	241.000
0012	204.0110	Removing Asphaltic Surface	SY	816.000	816.000
0014	204.0115	Removing Asphaltic Surface Butt Joints	SY	151.000	151.000
0016	204.0120	Removing Asphaltic Surface Milling	SY	274,109.000	274,109.000
0018	204.0150	Removing Curb & Gutter	LF	7,828.000	7,828.000
0020	204.0155	Removing Concrete Sidewalk	SY	3,368.000	3,368.000
0022	204.0165	Removing Guardrail	LF	370.000	370.000
0024	204.0185	Removing Masonry	CY	2.000	2.000
0026	204.0195	Removing Concrete Bases	EACH	13.000	13.000
0028	204.0210	Removing Manholes	EACH	1.000	1.000
0030	204.0215	Removing Catch Basins	EACH	2.000	2.000
0032	204.0220	Removing Inlets	EACH	32.000	32.000
0034	204.0245	Removing Storm Sewer (size) 01. 60-Inch	LF	56.000	56.000
0036	204.0245	Removing Storm Sewer (size) 02. 12-Inch	LF	105.000	105.000
0038	204.0245	Removing Storm Sewer (size) 03. 15-Inch	LF	16.000	16.000
0040	204.0245	Removing Storm Sewer (size) 04. 18-Inch	LF	104.000	104.000
0042	204.0245	Removing Storm Sewer (size) 05. 24-Inch	LF	16.000	16.000
0044	204.0245	Removing Storm Sewer (size) 06. 30-Inch	LF	8.000	8.000
0046	204.0245	Removing Storm Sewer (size) 07. 54-Inch	LF	8.000	8.000
0048	204.9060.S	Removing (item description) 01. Traffic Signals, STH 190 & Brookfield Rd	EACH	1.000	1.000
0050	204.9060.S	Removing (item description) 02. Traffic Signals, STH 190 & Imperial Dr	EACH	1.000	1.000
0052	204.9060.S	Removing (item description) 03. Traffic Signals, STH 190 & Calhoun Rd	EACH	1.000	1.000
0054	204.9060.S	Removing (item description) 04. Traffic Signals, STH 190 & Lilly Rd	EACH	1.000	1.000
0056	204.9060.S	Removing (item description) 05. Traffic Signals, STH 190 & 128th St	EACH	1.000	1.000
0058	204.9060.S	Removing (item description) 06. Traffic Signals, STH 190 & 124th St	EACH	1.000	1.000
0060	204.9060.S	Removing (item description) 10. Apron Endwalls	EACH	11.000	11.000
0062	206.2001	Excavation for Structures Culverts (structure) 01. C-67-0035	EACH	1.000	1.000
0064	209.2500	Backfill Granular Grade 2	TON	10.000	10.000
0066	210.2500	Backfill Structure Type B	TON	15.000	15.000
0068	213.0100	Finishing Roadway (project) 01. ID 2025-03-73	EACH	1.000	1.000
0070	305.0110	Base Aggregate Dense 3/4-Inch	TON	533.000	533.000
0072	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,851.000	2,851.000
0074	305.0500	Shaping Shoulders	STA	131.000	131.000
0076	390.0100	Removing Pavement for Base Patching	CY	3,386.000	3,386.000
0078	390.0201	Base Patching Asphaltic	TON	743.000	743.000
0080	390.0405	Base Patching Concrete SHES	CY	2,132.000	2,132.000
0082	416.0610	Drilled Tie Bars	EACH	3,397.000	3,397.000
0084	416.0620	Drilled Dowel Bars	EACH	6,836.000	6,836.000
0086	450.4000	HMA Cold Weather Paving	TON	1,000.000	1,000.000
0088	455.0605	Tack Coat	GAL	32,954.000	32,954.000
0090	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	2.000	2.000
0092	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	4.000	4.000
0094	460.2005	Incentive Density PWL HMA Pavement	DOL	41,162.000	41,162.000
0096	460.2010	Incentive Air Voids HMA Pavement	DOL	67,049.000	67,049.000
0098	460.6223	HMA Pavement 3 MT 58-28 S	TON	39,461.000	39,461.000

2025-03-73

Line	Item	Item Description	Unit	Total	Qty
0100	460.6224	HMA Pavement 4 MT 58-28 S	TON	27,620.000	27,620.000
0102	465.0105	Asphaltic Surface	TON	30.000	30.000
0104	465.0110	Asphaltic Surface Patching	TON	1,000.000	1,000.000
0106	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	89.000	89.000
0108	465.0125	Asphaltic Surface Temporary	TON	50.000	50.000
0110	465.0305	Asphaltic Surface Safety Islands	TON	25.000	25.000
0112	465.0310	Asphaltic Curb	LF	45.000	45.000
0114	465.0315	Asphaltic Flumes	SY	64.000	64.000
0116	502.4205	Adhesive Anchors No. 5 Bar	EACH	46.000	46.000
0118	504.0100	Concrete Masonry Culverts	CY	2.000	2.000
0120	504.0900	Concrete Masonry Endwalls	CY	6.000	6.000
0122	505.0400	Bar Steel Reinforcement HS Structures	LB	500.000	500.000
0124	509.1500	Concrete Surface Repair	SF	30.000	30.000
0126	516.0610.S	Sheet Membrane Waterproofing for Buried Structures	SY	10.000	10.000
0128	520.2012	Culvert Pipe Temporary 12-Inch	LF	54.000	54.000
0130	520.8000	Concrete Collars for Pipe	EACH	65.000	65.000
0132	520.8700	Cleaning Culvert Pipes	EACH	96.000	96.000
0134	521.1012	Apron Endwalls for Culvert Pipe Steel 12-Inch	EACH	3.000	3.000
0136	521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	EACH	2.000	2.000
0138	521.1030	Apron Endwalls for Culvert Pipe Steel 30-Inch	EACH	1.000	1.000
0140	521.1036	Apron Endwalls for Culvert Pipe Steel 36-Inch	EACH	1.000	1.000
0142	521.3115	Culvert Pipe Corrugated Steel 15-Inch	LF	36.000	36.000
0144	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	1.000	1.000
0146	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	1.000	1.000
0148	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	1.000	1.000
0150	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	1.000	1.000
0152	522.1027	Apron Endwalls for Culvert Pipe Reinforced Concrete 27-Inch	EACH	1.000	1.000
0154	524.0612	Apron Endwalls for Culvert Pipe Salvaged 12-Inch	EACH	1.000	1.000
0156	524.0618	Apron Endwalls for Culvert Pipe Salvaged 18-Inch	EACH	2.000	2.000
0158	524.0624	Apron Endwalls for Culvert Pipe Salvaged 24-Inch	EACH	1.000	1.000
0160	524.0630	Apron Endwalls for Culvert Pipe Salvaged 30-Inch	EACH	1.000	1.000
0162	601.0331	Concrete Curb & Gutter 31-Inch	LF	179.000	179.000
0164	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	114.000	114.000
0166	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	107.000	107.000
0168	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	1,941.000	1,941.000
0170	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	2,985.000	2,985.000
0172	601.0555	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	LF	1,116.000	1,116.000
0174	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	1,272.000	1,272.000
0176	601.0600	Concrete Curb Pedestrian	LF	237.000	237.000
0178	602.0410	Concrete Sidewalk 5-Inch	SF	27,783.000	27,783.000
0180	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	1,558.000	1,558.000
0182	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	523.000	523.000
0184	602.0815	Concrete Driveway 7-Inch	SY	191.000	191.000
0186	602.0865	Concrete Driveway HES 7-Inch	SY	149.000	149.000
0188	603.8000	Concrete Barrier Temporary Precast Delivered	LF	100.000	100.000
0190	603.8125	Concrete Barrier Temporary Precast Installed	LF	100.000	100.000
0192	606.0200	Riprap Medium	CY	8.000	8.000
0194	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	105.000	105.000
0196	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	63.000	63.000

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Line	Item	Item Description	Unit	Total	Qty
0198	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	104.000	104.000
0200	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	16.000	16.000
0202	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	8.000	8.000
0204	608.0354	Storm Sewer Pipe Reinforced Concrete Class III 54-Inch	LF	8.000	8.000
0206	608.0436	Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch	LF	194.000	194.000
0208	608.0460	Storm Sewer Pipe Reinforced Concrete Class IV 60-Inch	LF	56.000	56.000
0210	611.0430	Reconstructing Inlets	EACH	7.000	7.000
0212	611.0530	Manhole Covers Type J	EACH	1.000	1.000
0214	611.0600	Inlet Covers Type A	EACH	3.000	3.000
0216	611.0603	Inlet Covers Type A-S	EACH	1.000	1.000
0218	611.0624	Inlet Covers Type H	EACH	18.000	18.000
0220	611.0627	Inlet Covers Type HM	EACH	2.000	2.000
0222	611.0642	Inlet Covers Type MS	EACH	4.000	4.000
0224	611.0651	Inlet Covers Type S	EACH	2.000	2.000
0226	611.0657	Inlet Covers Type W	EACH	3.000	3.000
0228	611.0660	Inlet Covers Type WM	EACH	8.000	8.000
0230	611.2004	Manholes 4-FT Diameter	EACH	1.000	1.000
0232	611.2005	Manholes 5-FT Diameter	EACH	1.000	1.000
0234	611.2008	Manholes 8-FT Diameter	EACH	1.000	1.000
0236	611.3004	Inlets 4-FT Diameter	EACH	10.000	10.000
0238	611.3225	Inlets 2x2.5-FT	EACH	10.000	10.000
0240	611.3230	Inlets 2x3-FT	EACH	10.000	10.000
0242	611.3901	Inlets Median 1 Grate	EACH	3.000	3.000
0244	611.8115	Adjusting Inlet Covers	EACH	40.000	40.000
0246	611.8120.S	Cover Plates Temporary	EACH	10.000	10.000
0248	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	100.000	100.000
0250	614.0010	Barrier System Grading Shaping Finishing	EACH	1.000	1.000
0252	614.0220	Steel Thrie Beam Bullnose Terminal	EACH	2.000	2.000
0254	614.0230	Steel Thrie Beam	LF	150.000	150.000
0256	616.0700.S	Fence Safety	LF	247.000	247.000
0258	619.1000	Mobilization	EACH	1.000	1.000
0260	620.0100	Concrete Corrugated Median	SF	72.000	72.000
0262	620.0300	Concrete Median Sloped Nose	SF	410.000	410.000
0264	625.0100	Topsoil	SY	8,049.000	8,049.000
0266	627.0200	Mulching	SY	643.000	643.000
0268	628.1104	Erosion Bales	EACH	440.000	440.000
0270	628.1504	Silt Fence	LF	100.000	100.000
0272	628.1520	Silt Fence Maintenance	LF	100.000	100.000
0274	628.1530.S	Silt Fence Heavy Duty	LF	1,548.000	1,548.000
0276	628.1535.S	Silt Fence Heavy Duty Maintenance	LF	1,548.000	1,548.000
0278	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0280	628.1910	Mobilizations Emergency Erosion Control	EACH	6.000	6.000
0282	628.2008	Erosion Mat Urban Class I Type B	SY	7,860.000	7,860.000
0284	628.7005	Inlet Protection Type A	EACH	110.000	110.000
0286	628.7010	Inlet Protection Type B	EACH	146.000	146.000
0288	628.7015	Inlet Protection Type C	EACH	116.000	116.000
0290	628.7020	Inlet Protection Type D	EACH	12.000	12.000
0292	628.7504	Temporary Ditch Checks	LF	380.000	380.000
0294	628.7555	Culvert Pipe Checks	EACH	118.000	118.000

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Line	Item	Item Description	Unit	Total	Qty
0296	628.7570	Rock Bags	EACH	22.000	22.000
0298	629.0210	Fertilizer Type B	CWT	4.000	4.000
0300	630.0130	Seeding Mixture No. 30	LB	1,521.000	1,521.000
0302	630.0140	Seeding Mixture No. 40	LB	1,662.000	1,662.000
0304	630.0160	Seeding Mixture No. 60	LB	262.000	262.000
0306	630.0200	Seeding Temporary	LB	17.000	17.000
0308	630.0500	Seed Water	MGAL	224.000	224.000
0310	631.0300	Sod Water	MGAL	2.100	2.100
0312	631.1000	Sod Lawn	SY	189.000	189.000
0314	633.5350	Markers Permanent Flexible	EACH	7.000	7.000
0316	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	110.000	110.000
0318	637.2210	Signs Type II Reflective H	SF	779.920	779.920
0320	637.2230	Signs Type II Reflective F	SF	25.000	25.000
0322	638.2102	Moving Signs Type II	EACH	96.000	96.000
0324	638.2602	Removing Signs Type II	EACH	48.000	48.000
0326	638.3000	Removing Small Sign Supports	EACH	89.000	89.000
0328	638.4000	Moving Small Sign Supports	EACH	10.000	10.000
0330	643.0300	Traffic Control Drums	DAY	107,728.000	107,728.000
0332	643.0420	Traffic Control Barricades Type III	DAY	16,813.000	16,813.000
0334	643.0705	Traffic Control Warning Lights Type A	DAY	33,626.000	33,626.000
0336	643.0715	Traffic Control Warning Lights Type C	DAY	6,685.000	6,685.000
0338	643.0800	Traffic Control Arrow Boards	DAY	276.000	276.000
0340	643.0900	Traffic Control Signs	DAY	37,487.000	37,487.000
0342	643.0910	Traffic Control Covering Signs Type I	EACH	2.000	2.000
0344	643.0920	Traffic Control Covering Signs Type II	EACH	25.000	25.000
0346	643.1050	Traffic Control Signs PCMS	DAY	48.000	48.000
0348	643.1070	Traffic Control Cones 42-Inch	DAY	195,648.000	195,648.000
0350	643.3165	Temporary Marking Line Paint 6-Inch	LF	52,954.000	52,954.000
0352	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	98,073.000	98,073.000
0354	643.3265	Temporary Marking Line Paint 10-Inch	LF	201.000	201.000
0356	643.3280	Temporary Marking Line Removable Tape 10-Inch	LF	16,435.000	16,435.000
0358	643.4100	Traffic Control Interim Lane Closure	EACH	70.000	70.000
0360	643.5000	Traffic Control	EACH	1.000	1.000
0362	644.1410	Temporary Pedestrian Surface Asphalt	SF	1,620.000	1,620.000
0364	644.1430	Temporary Pedestrian Surface Plate	SF	9,200.000	9,200.000
0366	644.1601	Temporary Pedestrian Curb Ramp	DAY	2,110.000	2,110.000
0368	644.1605	Temporary Pedestrian Detectable Warning Field	SF	1,360.000	1,360.000
0370	644.1810	Temporary Pedestrian Barricade	LF	15,488.000	15,488.000
0372	645.0120	Geotextile Type HR	SY	1,004.000	1,004.000
0374	646.1020	Marking Line Epoxy 4-Inch	LF	543.000	543.000
0376	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	1,267.000	1,267.000
0378	646.2020	Marking Line Epoxy 6-Inch	LF	47,564.000	47,564.000
0380	646.2025	Marking Line Grooved Black Epoxy 6-Inch	LF	23,757.000	23,757.000
0382	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	70,527.000	70,527.000
0384	646.3040	Marking Line Grooved Wet Ref Epoxy 8-Inch	LF	1,032.000	1,032.000
0386	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	33,372.000	33,372.000
0388	646.5020	Marking Arrow Epoxy	EACH	119.000	119.000
0390	646.5120	Marking Word Epoxy	EACH	63.000	63.000
0392	646.6120	Marking Stop Line Epoxy 18-Inch	LF	1,440.000	1,440.000

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Line	Item	Item Description	Unit	Total	Qty
0394	646.6220	Marking Yield Line Epoxy 18-Inch	EACH	65.000	65.000
0396	646.6464	Cold Weather Marking Epoxy 4-Inch	LF	500.000	500.000
0398	646.6466	Cold Weather Marking Epoxy 6-Inch	LF	35,600.000	35,600.000
0400	646.6468	Cold Weather Marking Epoxy 8-Inch	LF	300.000	300.000
0402	646.6470	Cold Weather Marking Epoxy 10-Inch	LF	8,300.000	8,300.000
0404	646.7120	Marking Diagonal Epoxy 12-Inch	LF	473.000	473.000
0406	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	4,942.000	4,942.000
0408	646.8120	Marking Curb Epoxy	LF	3,403.000	3,403.000
0410	646.8220	Marking Island Nose Epoxy	EACH	56.000	56.000
0412	646.9000	Marking Removal Line 4-Inch	LF	11,396.000	11,396.000
0414	646.9100	Marking Removal Line 8-Inch	LF	408.000	408.000
0416	646.9200	Marking Removal Line Wide	LF	159.000	159.000
0418	650.4000	Construction Staking Storm Sewer	EACH	41.000	41.000
0420	650.4500	Construction Staking Subgrade	LF	100.000	100.000
0422	650.5000	Construction Staking Base	LF	100.000	100.000
0424	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	7,075.000	7,075.000
0426	650.6000	Construction Staking Pipe Culverts	EACH	3.000	3.000
0428	650.8000	Construction Staking Resurfacing Reference	LF	46,010.000	46,010.000
0430	650.8501	Construction Staking Electrical Installations (project) 01. ID 2025-03-73	EACH	1.000	1.000
0432	650.9000	Construction Staking Curb Ramps	EACH	128.000	128.000
0434	650.9911	Construction Staking Supplemental Control (project) 01. ID 2025-03-73	EACH	1.000	1.000
0436	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	3,405.000	3,405.000
0438	652.0605	Conduit Special 2-Inch	LF	1,563.000	1,563.000
0440	652.0800	Conduit Loop Detector	LF	16,134.000	16,134.000
0442	653.0135	Pull Boxes Steel 24x36-Inch	EACH	17.000	17.000
0444	653.0140	Pull Boxes Steel 24x42-Inch	EACH	11.000	11.000
0446	653.0900	Adjusting Pull Boxes	EACH	3.000	3.000
0448	653.0905	Removing Pull Boxes	EACH	5.000	5.000
0450	654.0101	Concrete Bases Type 1	EACH	17.000	17.000
0452	654.0102	Concrete Bases Type 2	EACH	3.000	3.000
0454	655.0230	Cable Traffic Signal 5-14 AWG	LF	611.000	611.000
0456	655.0240	Cable Traffic Signal 7-14 AWG	LF	1,347.000	1,347.000
0458	655.0260	Cable Traffic Signal 12-14 AWG	LF	399.000	399.000
0460	655.0270	Cable Traffic Signal 15-14 AWG	LF	1,037.000	1,037.000
0462	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	1,336.000	1,336.000
0464	655.0700	Loop Detector Lead In Cable	LF	63,947.000	63,947.000
0466	655.0800	Loop Detector Wire	LF	65,368.000	65,368.000
0468	657.0100	Pedestal Bases	EACH	4.000	4.000
0470	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	3.000	3.000
0472	657.0310	Poles Type 3	EACH	3.000	3.000
0474	657.0405	Traffic Signal Standards Aluminum 3.5-FT	EACH	2.000	2.000
0476	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	2.000	2.000
0478	658.0500	Pedestrian Push Buttons	EACH	3.000	3.000
0480	658.5070	Signal Mounting Hardware (location) 01. STH 190 & Brookfield Rd	EACH	1.000	1.000
0482	658.5070	Signal Mounting Hardware (location) 02. STH 190 & Imperial Dr	EACH	1.000	1.000
0484	658.5070	Signal Mounting Hardware (location) 03. STH 190 & 128th St	EACH	1.000	1.000
0486	658.5070	Signal Mounting Hardware (location) 04. STH 190 & 124th St	EACH	1.000	1.000
0488	677.0200	Install Camera Assembly	EACH	4.000	4.000
0490	690.0150	Sawing Asphalt	LF	3,207.000	3,207.000

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Line	Item	Item Description	Unit	Total	Qty
0492	690.0250	Sawing Concrete	LF	31,062.000	31,062.000
0494	740.0440	Incentive IRI Ride	DOL	51,978.000	51,978.000
0496	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	4,800.000	4,800.000
0498	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	11,400.000	11,400.000
0500	SPV.0060	Special 01. Grading and Shaping Curb Ramps	EACH	128.000	128.000
0502	SPV.0060	Special 02. Cleaning Storm Sewer Structures	EACH	228.000	228.000
0504	SPV.0060	Special 03. Utility Line Opening (ULO)	EACH	10.000	10.000
0506	SPV.0060	Special 04. Field Facilities Office Space	EACH	1.000	1.000
0508	SPV.0060	Special 05. Tuckpointing Storm Sewer Structures	EACH	15.000	15.000
0510	SPV.0060	Special 06. Section Corner Monuments	EACH	6.000	6.000
0512	SPV.0060	Special 20. Remove & Salvage Video Detection Equipment, STH 190 & Brookfield Rd	EACH	1.000	1.000
0514	SPV.0060	Special 21. Remove & Salvage Video Detection Equipment, STH 190 & Imperial Dr	EACH	1.000	1.000
0516	SPV.0060	Special 22. Remove & Salvage Video Detection Equipment, STH 190 & Calhoun Rd	EACH	1.000	1.000
0518	SPV.0060	Special 23. Remove & Salvage Video Detection Equipment, STH 190 & Lilly Rd	EACH	1.000	1.000
0520	SPV.0060	Special 24. Remove & Salvage Video Detection Equipment, STH 190 & 128th St	EACH	1.000	1.000
0522	SPV.0060	Special 25. Remove & Salvage Video Detection Equipment, STH 190 & 124th St	EACH	1.000	1.000
0524	SPV.0060	Special 26. Removing, Salvaging, & Reinstalling Traffic Signal Equip, STH 190 & Brookfie	EACH	1.000	1.000
0526	SPV.0060	Special 27. Removing, Salvaging, & Reinstalling Traffic Signal Equip, STH 190 & Imperial	EACH	1.000	1.000
0528	SPV.0060	Special 28. Removing, Salvaging, & Reinstalling Traffic Signal Equip, STH 190 & 128th St	EACH	1.000	1.000
0530	SPV.0060	Special 29. Removing, Salvaging, & Reinstalling Traffic Signal Equip, STH 190 & 124th St	EACH	1.000	1.000
0532	SPV.0060	Special 30. Modify Existing Traffic Signal During Construction, STH 190 & Brookfield Rd	EACH	1.000	1.000
0534	SPV.0060	Special 31. Modify Existing Traffic Signal During Construction, STH 190 & Imperial Dr	EACH	1.000	1.000
0536	SPV.0060	Special 32. Modify Existing Traffic Signal During Construction, STH 190 & Calhoun Rd	EACH	1.000	1.000
0538	SPV.0060	Special 33. Modify Existing Traffic Signal During Construction, STH 190 & Lilly Rd	EACH	1.000	1.000
0540	SPV.0060	Special 34. Modify Existing Traffic Signal During Construction, STH 190 & 128th St	EACH	1.000	1.000
0542	SPV.0060	Special 35. Modify Existing Traffic Signal During Construction, STH 190 & 124th St	EACH	1.000	1.000
0544	SPV.0060	Special 40. Debris Rack Galvanized	EACH	1.000	1.000
0546	SPV.0060	Special 41. Dewatering/Bypass Pumping Unnamed Tributary	EACH	1.000	1.000
0548	SPV.0060	Special 42. Sealing Concrete Pipe Joints	EACH	5.000	5.000
0550	SPV.0060	Special 43. Tuckpointing Junction Chamber	EACH	1.000	1.000
0552	SPV.0060	Special 50. Adjust Sanitary Sewer Manhole	EACH	12.000	12.000
0554	SPV.0060	Special 51. Sanitary Manhole Seal	EACH	12.000	12.000
0556	SPV.0060	Special 52. Adjust Water Valve Box	EACH	30.000	30.000
0558	SPV.0090	Special 01. Concrete Joint and Crack Cleaning and Repair	LF	1,002.000	1,002.000
0560	SPV.0090	Special 02. Ditching and Shaping	LF	1,323.000	1,323.000
0562	SPV.0090	Special 03. Concrete Curb & Gutter 24-Inch Type D	LF	18.000	18.000
0564	SPV.0195	Special 01. Excavation, Hauling, and Disposal of PAH and Arsenic Contaminated Soil	TON	74.000	74.000

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CLEARING & GRUBBING

STATION TO STATION	CATEGORY 0040 201.0120 CLEARING ID	CATEGORY 0040 201.0220 GRUBBING ID
STH 190		
STA 291+00 - CALHOUN RD	-	-
CALHOUN RD - PILGRIM RD	-	-
PILGRIM RD - LILLY RD	-	-
LILLY RD - STA 107+08	45	45
TOTALS	45	45

REMOVING SMALL PIPE CULVERTS

STATION TO STATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH
CATEGORY 0010	
STA 291+00 - CALHOUN RD	1
CALHOUN RD - PILGRIM RD	-
PILGRIM RD - LILLY RD	-
LILLY RD - STA 107+08	-
SUBTOTAL	1
CATEGORY 0040	
138TH STREET/FIEBRANZ DRIVE	3
SUBTOTAL	3
TOTALS	4

REMOVING CONCRETE PAVEMENT

STATION TO STATION	204.0100 REMOVING CONCRETE PAVEMENT SY
STH 190	
STA 291+00 - CALHOUN RD	-
CALHOUN RD - PILGRIM RD	24
PILGRIM RD - LILLY RD	-
LILLY RD - STA 107+08	217
TOTALS	241

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REMOVING ASPHALTIC SURFACE

STATION TO STATION	204.0110 REMOVING ASPHALTIC SURFACE SY
STH 190	
CATEGORY 0010	
STA 291+00 - CALHOUN RD	275
CALHOUN RD - PILGRIM RD	90
PILGRIM RD - LILLY RD	63
LILLY RD - STA 107+08	17
SUBTOTAL	445
CATEGORY 0040	
138TH STREET	371
SUBTOTAL	371
TOTALS	816

REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION TO STATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY
STH 190	
STA 291+00 - CALHOUN RD	40
CALHOUN RD - PILGRIM RD	39
PILGRIM RD - LILLY RD	39
LILLY RD - STA 107+08	33
TOTALS	151

REMOVING ASPHALTIC SURFACE MILLING

STATION TO STATION	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
STH 190	
STA 291+00 - CALHOUN RD	78,657
CALHOUN RD - PILGRIM RD	68,465
PILGRIM RD - LILLY RD	59,127
LILLY RD - STA 107+08	67,860
TOTALS	274,109

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

REMOVING CURB & GUTTER

STATION TO STATION	204.0150 REMOVING CURB & GUTTER LF
STH 190	
STA 291+00 - CALHOUN RD	2,279
CALHOUN RD - PILGRIM RD	1,367
PILGRIM RD - LILLY RD	1,895
LILLY RD - STA 107+08	2,287
TOTALS	7,828

REMOVING CONCRETE SIDEWALK

STATION TO STATION	204.0155 REMOVING CONCRETE SIDEWALK SY
STH 190	
STA 291+00 - CALHOUN RD	845
CALHOUN RD - PILGRIM RD	666
PILGRIM RD - LILLY RD	524
LILLY RD - STA 107+08	1,054
SUBTOTAL	3,089
CATEGORY 0040	
	279
SUBTOTAL	279
TOTALS	3,368

REMOVING STORM SEWER

STRUCTURE	STATION	OFFSET*	ALIGNMENT	204.0210 REMOVING MANHOLES EACH	204.0215 REMOVING CATCH BASINS EACH	204.0220 REMOVING INLETS EACH
110	300+86.75	13.45' LT	STH190WAU	-	-	1
112	316+27.24	108.86' LT	STH190WAU	-	-	1
113	316+77.96	13.99' LT	STH190WAU	-	-	1
114	321+07.50	115.18' LT	STH190WAU	-	-	1
115	325+99.46	13.50' LT	STH190WAU	-	-	1
116	328+99.78	46.51' LT	STH190WAU	-	-	1
118	352+27.77	14.23' LT	STH190WAU	-	-	1
119	358+99.45	12.97' LT	STH190WAU	-	-	1
120	358+99.34	37.32' RT	STH190WAU	-	-	1
121	374+19.30	46.66' LT	STH190WAU	-	-	1
122	384+24.01	46.54' LT	STH190WAU	-	-	1
123	386+45.03	46.59' LT	STH190WAU	-	-	1
124	404+86.51	55.12' RT	STH190WAU	-	1	-
125	406+37.09	107.97' LT	STH190WAU	-	-	1
126	408+79.58	122.52' LT	STH190WAU	1	-	-
127	411+90.42	46.72' LT	STH190WAU	-	-	1
128	421+00.40	46.76' LT	STH190WAU	-	-	1
129	425+73.70	34.43' LT	STH190WAU	-	-	1
130	425+73.74	95.12' LT	STH190WAU	-	-	1
131	439+06.61	76.67' LT	STH190WAU	-	-	1
132	440+87.72	37.08' RT	STH190WAU	-	-	1
133	442+97.99	85.86' LT	STH190WAU	-	1	-
134	443+70.54	57.45' RT	STH190WAU	-	-	1
135	451+51.80	36.88' RT	STH190WAU	-	-	1
136	456+03.02	37.12' RT	STH190WAU	-	-	1
137	458+00.14	65.55' LT	STH190WAU	-	-	1
138	462+99.90	37.31' RT	STH190WAU	-	-	1
139	467+68.68	70.93' RT	STH190WAU	-	-	1
143	489+00.28	26.71' LT	STH190WAU	-	-	1
146	508+64.11	37.58' RT	STH190WAU	-	-	1
147	512+55.50	103.56' LT	STH190WAU	-	-	1
148	99+85.65	68.41' RT	STH190MKE	-	-	1
149	100+15.71	110.84' LT	STH190MKE	-	-	1
150	104+63.70	55.45' LT	STH190MKE	-	-	1
151	104+81.10	84.93' LT	STH190MKE	-	-	1
			TOTALS	1	2	32

REMARKS:
*STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

REMOVING GUARDRAIL

STATION TO STATION	204.0165 REMOVING GUARDRAIL LF
STH 190	
STA 291+00 - CALHOUN RD	-
CALHOUN RD - PILGRIM RD	-
PILGRIM RD - LILLY RD	370
LILLY RD - STA 107+08	-
TOTALS	370

REMOVING APRON ENDWALLS

STRUCTURE	STATION	OFFSET	ALIGNMENT	204.9060.S.10 REMOVING APRON ENDWALLS EACH
EW101	300+50.86	136.16' LT	STH190WAU	1
EW102	300+57.12	136.67' LT	STH190WAU	1
EW103	300+72.80	145.89' LT	STH190WAU	1
EW106	307+30.58	54.59' RT	STH190WAU	1
EW107	315+75.83	110.07' LT	STH190WAU	1
EW108	337+63.54	112.27' LT	STH190WAU	1
EW109	369+68.80	56.80' RT	STH190WAU	1
EW110	369+71.86	56.88' RT	STH190WAU	1
EW111	389+52.34	117.01' LT	STH190WAU	1
EW112	396+19.95	166.50' LT	STH190WAU	1
EW113	406+52.25	52.21' RT	STH190WAU	1
			TOTALS	11

REMARKS:

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

FILE NAME : X:\ML\2020\20200190\Design\Transportation\SheetsPlan\030201_mq.pptx" PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

3

REMOVING STORM SEWER

CATEGORY 0040

STATION TO STATION	204.0185 REMOVING MASONRY CY	204.0245.01 REMOVING STORM SEWER 60-INCH LF
STH 190		
138TH STREET	2	56
TOTALS	2	56

3

REMOVING STORM SEWER

PIPE NO.	FROM		TO	204.0245.02 REMOVING STORM SEWER 12-INCH LF	204.0245.03 REMOVING STORM SEWER 15-INCH LF	204.0245.04 REMOVING STORM SEWER 18-INCH LF	204.0245.05 REMOVING STORM SEWER 24-INCH LF	204.0245.06 REMOVING STORM SEWER 30-INCH LF	204.0245.07 REMOVING STORM SEWER 54-INCH LF
P-10.1	10	-	EX. PIPE	4	-	-	-	-	-
P-12.1	EW7	-	12	-	-	-	-	-	-
P-13.1	13	-	EX. PIPE	-	-	4	-	-	-
P-14.1	14	-	EX. PIPE	-	4	-	-	-	-
P-15.1	15	-	EX. PIPE	-	-	4	-	-	-
P-16.1	16	-	EX. PIPE	-	-	4	-	-	-
P-18.1	18	-	EX. PIPE	-	-	4	-	-	-
P-19.1	EX. PIPE	-	19	-	-	4	-	-	-
P-20.1	EX. PIPE	-	20	-	-	4	-	-	-
P-21.1	21	-	EX. PIPE	-	-	4	-	-	-
P-22.1	22	-	EX. PIPE	-	-	4	-	-	-
P-23.1	23	-	EX. PIPE	-	-	4	-	-	-
P-24.1	24	-	EX. PIPE	-	-	-	-	4	-
P-25.1	25	-	EX. PIPE	-	-	-	4	-	-
P-27.1	27	-	EX. PIPE	-	-	4	-	-	-
P-28.1	28	-	EX. PIPE	-	-	4	-	-	-
P-29.1	29	-	EX. PIPE	-	-	4	-	-	-
P-30.1	30	-	EX. PIPE	-	-	4	-	-	-
P-31.1	31	-	EX. PIPE	4	-	-	-	-	-
P-32.1	32	-	EX. PIPE	4	-	-	-	-	-
P-33.1	33	-	EX. PIPE	4	-	-	-	-	-
P-34.1	34	-	EX. PIPE	4	-	-	-	-	-
P-35.1	35	-	EX. PIPE	4	-	-	-	-	-
P-36.1	36	-	EX. PIPE	4	-	-	-	-	-
P-37.1	37	-	EX. PIPE	4	-	-	-	-	-
P-38.1	38	-	EX. PIPE	4	-	-	-	-	-
P-39.1	39	-	EX. PIPE	4	-	-	-	-	-
P-43.1	43	-	EX. PIPE	4	-	-	-	-	-
P-45.1	45	-	EX. MH	9	-	-	-	-	-
P-46.1	46	-	EX. PIPE	4	-	-	-	-	-
P-47.1	47	-	EX. PIPE	-	-	4	-	-	-
P-48.1	48	-	EX. PIPE	4	-	-	-	-	-
P-49.1	49	-	EX. PIPE	4	-	-	-	-	-
P-50.1	50	-	EX. PIPE	4	-	-	-	-	-
P-51.1	51	-	EX. PIPE	4	-	-	-	-	-
P-39.2	STUB	-	39	-	-	-	-	-	-
P-EW4.1	EW5	-	EW4	-	-	-	-	-	-
P-EW6.1	EW6	-	EX. PIPE	-	-	-	8	-	-
P-26.1	EX26.1	-	EX. PIPE	-	-	-	-	-	4
P-12.2	12	-	EX. PIPE	-	4	-	-	-	-
P-13.2	EX. PIPE	-	13	-	-	4	-	-	-
P-14.2	EX. PIPE	-	14	-	4	-	-	-	-
P-15.2	EX. PIPE	-	15	-	-	4	-	-	-
P-16.2	EX. PIPE	-	16	-	-	4	-	-	-
P-18.2	EX. PIPE	-	18	4	-	-	-	-	-
P-19.2	19	-	EX. PIPE	-	-	4	-	-	-
P-20.2	20	-	EX. PIPE	-	-	4	-	-	-
P-21.2	EX. PIPE	-	21	-	-	4	-	-	-
P-23.2	EX. PIPE	-	23	-	-	4	-	-	-
P-24.2	EX. PIPE	-	24	-	-	-	-	4	-
P-25.2	EX. PIPE	-	25	-	-	-	4	-	-
P-26.2	EX. PIPE	-	26	-	-	-	-	-	4
P-26.3	EX. PIPE	-	26	-	-	4	-	-	-
P-27.2	EX. PIPE	-	27	-	-	4	-	-	-
P-28.2	EX. PIPE	-	28	-	-	4	-	-	-
P-29.2	EX. PIPE	-	29	-	-	4	-	-	-
P-30.2	EX. PIPE	-	30	-	-	4	-	-	-
P-31.2	EX. PIPE	-	31	4	-	-	-	-	-
P-33.2	EX. PIPE	-	33	4	-	-	-	-	-
P-35.2	EX. PIPE	-	35	4	-	-	-	-	-
P-38.2	EX. PIPE	-	38	4	-	-	-	-	-
P-38.3	EX. PIPE	-	38	4	-	-	-	-	-
P-16.2	EX. PIPE	-	46	-	4	-	-	-	-
P-47.2	EX. PIPE	-	47	4	-	-	-	-	-
P-50.2	EX. PIPE	-	50	4	-	-	-	-	-
				105	16	104	16	8	8

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

3

BACKFILL GRANULAR GRADE 2

	209.2500 BACKFILL GRANULAR GRADE 2 TON
STH 190	
UNDISTRIBUTED	10
TOTALS	10

FINISHING ROADWAY

	213.0100.01 FINISHING ROADWAY EACH
PROJECT	
ID 2025-03-73	1
TOTALS	1

BASE AGGREGATE DENSE 3/4-INCH

STATION TO STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON
STH 190	
STA 291+00 - CALHOUN RD	231
CALHOUN RD - PILGRIM RD	232
PILGRIM RD - LILLY RD	70
LILLY RD - STA 107+08	-
TOTALS	533

BASE AGGREGATE DENSE 1 1/4-INCH

STATION TO STATION	*305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON
STH 190	
CATEGORY 0010	
STA 291+00 - CALHOUN RD	275
CALHOUN RD - PILGRIM RD	229
PILGRIM RD - LILLY RD	161
LILLY RD - STA 107+08	260
SUBTOTAL	925
CATEGORY 0040	
138TH STREET	158
SUBTOTAL	158
TOTALS	1,083

*ADDITIONAL QUANTITIES SHOWN ELSWHERE

3

SHAPING SHOULDERS

STATION TO STATION	305.0500 SHAPING SHOULDERS STA
STH 190	
STA 291+00 - CALHOUN RD	59
CALHOUN RD - PILGRIM RD	57
PILGRIM RD - LILLY RD	15
LILLY RD - STA 107+08	-
TOTALS	131

BASE PATCHING

STATION TO STATION	EXISTING BASE PAVEMENT	390.0100 REMOVING PAVEMENT FOR BASE PATCHING CY	390.0201 BASE PATCHING ASPHALTIC TON	390.0405 BASE PATCHING CONCRETE SHES CY	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON
STH 190					
STA 291+00 - CALHOUN RD	INTACT CONCRETE	1,015	-	807	415
CALHOUN RD - PILGRIM RD	INTACT CONCRETE	498	-	436	129
PILGRIM RD - LILLY RD	INTACT CONCRETE	398	-	379	38
LILLY RD - 128TH ST	RUBBLIZED CONCRETE	160	50	82	108
128TH ST - STA 107+08	CRACK & SEATED CONCRETE	350	50	208	229
SIDE ROADS - EXCEPT 124TH ST	ASPHALT	608	643	-	596
124TH ST SIDE ROAD	RUBBLIZED CONCRETE	357	-	220	220
	TOTALS	3,386	743	2,132	1,735

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

DRILLED TIE BARS

STATION TO STATION	416.0610 DRILLED TIE BARS EACH
STH 190	
STA 291+00 - CALHOUN RD	1,502
CALHOUN RD - PILGRIM RD	735
PILGRIM RD - LILLY RD	804
LILLY RD - STA 107+08	356
TOTALS	3,397

DRILLED DOWEL BARS

STATION TO STATION	416.0620 DRILLED DOWEL EACH
STH 190	
STA 291+00 - CALHOUN RD	2,908
CALHOUN RD - PILGRIM RD	1,915
PILGRIM RD - LILLY RD	2,013
LILLY RD - STA 107+08	-
TOTALS	6,836

HMA COLD WEATHER PAVING

STREET NAME	450.4000 HMA COLD WEATHER PAVING TON
STH 190	
UNDISTRIBUTED	1,000
TOTALS	1,000

3

HMA PAVEMENT

STATION TO STATION	460.6223 3 MT 58-28 S TON	460.6224 4 MT 58-28 S TON	465.0120 DRIVEWAYS AND FIELD ENTRANCES TON	465.0105 ASPHALTIC SURFACE TON	455.0605 TACK COAT GAL
STH 190					
CATEGORY 0010					
STA 291+00 - CALHOUN RD	11,304	7,913	62	-	9,453
CALHOUN RD - PILGRIM RD	9,832	6,883	7	-	8,209
PILGRIM RD - LILLY RD	8,551	5,986	-	-	7,138
LILLY RD - STA 107+08	9,753	6,827	3	-	8,142
SUBTOTAL	39,440	27,609	72	0	32,942
CATEGORY 0040					
138TH STREET	21	11	17	30	12
SUBTOTAL	21	11	17	30	12
TOTALS	39,461	27,620	89	30	32,954

HMA PERCENT WITHIN LIMITS (PWL)

MIX	PAVED ON	460.0105.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS EACH	460.0110.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY EACH
STH 190			
3 MT 58-28 S	- EXIST. CONCRETE	1	-
4 MT 58-28 S	- NEW HMA PAVEMENT 3 MT 58-28 S	1	-
3 MT 58-28 S	- EXIST. INTACT CONCRETE PAVEMENT	-	1
3 MT 58-28 S	- EXIST. RUBBLIZED CONCRETE PAVEMENT	-	1
3 MT 58-28 S	- EXIST. CRACK & SEATED CONCRETE PAVEMENT	-	1
4 MT 58-28 S	- NEW. HMA PAVEMENT 3 MT 58-28 S	-	1
TOTALS		2	4

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

3

ASPHALTIC SURFACE PATCHING

	465.0110 ASPHALTIC SURFACE PATCHING TON
STH 190	
UNDISTRIBUTED	1,000
TOTALS	1,000

ASPHALTIC SURFACE TEMPORARY

	465.0125 ASPHALTIC SURFACE TEMPORARY TON
STH 190	
UNDISTRIBUTED	50
TOTALS	50

ASPHALTIC CURB

CATEGORY 0040

STATION TO STATION	465.0310 ASPHALTIC CURB LF
STH 190	
138TH STREET	45
TOTALS	45

ASPHALTIC FLUMES

STATION TO STATION	465.0315 ASPHALTIC FLUMES SY
STH 190	
STA 291+00 - CALHOUN RD	49
CALHOUN RD - PILGRIM RD	6
PILGRIM RD - LILLY RD	-
LILLY RD - STA 107+08	-
SUBTOTAL	55
CATEGORY 0040	
138TH STREET	9
SUBTOTAL	9
TOTALS	64

3

ASPHALTIC SURFACE SAFETY ISLANDS

STATION TO STATION	465.0305 ASPHALTIC SURFACE SAFETY ISLANDS TON
STH 190	
STA 291+00 - CALHOUN RD	-
CALHOUN RD - PILGRIM RD	10
PILGRIM RD - LILLY RD	15
LILLY RD - STA 107+08	-
TOTALS	25

CLEANING CULVERT PIPES

STATION TO STATION	520.8700 CLEANING CULVERT PIPES EACH
STH 190	
STA 291+00 - CALHOUN RD	52
CALHOUN RD - PILGRIM RD	16
PILGRIM RD - LILLY RD	28
LILLY RD - STA 107+08	-
TOTALS	96

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STORM SEWER

CATEGORY 0040

STATION TO STATION	504.0900 CONCRETE MASONRY ENDWALLS CY	509.1500 CONCRETE SURFACE REPAIR SF	520.8000 CONCRETE COLLARS FOR PIPE EACH	608.0436 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 36-INCH LF	608.0460 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 60-INCH LF	SPV.0060.42 SEALING CONCRETE PIPE JOINTS EACH
STH 190						
138TH STREET - STORM SEWER	-	-	4	194	56	5
138TH STREET - JUNCTION CHAMBER	3	2	-	-	-	-
138TH STREET - OUTFALL	3	-	-	-	-	-
TOTALS	6	2	4	194	56	5

3

APRON ENDWALLS

STRUCTURE	STATION	OFFSET*	LOCATION	521.1012 APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH EACH	521.1018 APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH EACH	521.1030 APRON ENDWALLS FOR CULVERT PIPE STEEL 30-INCH EACH	521.1036 APRON ENDWALLS FOR CULVERT PIPE STEEL 36-INCH EACH	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1027 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 27-INCH EACH	JOINT TIES REQ'D
EW1	300+50.86	136.16' LT	STH190WAU	-	-	-	1	-	-	-	-	-	-
EW2	300+57.12	136.67' LT	STH190WAU	-	1	-	-	-	-	-	-	-	-
EW3	300+72.80	145.89' LT	STH190WAU	-	1	-	-	-	-	-	-	-	-
EW6	307+39.47	60.20' RT	STH190WAU	-	-	-	-	-	-	-	1	-	X
EW7	315+80.47	109.95' LT	STH190WAU	-	-	-	-	-	1	-	-	-	X
EW8	337+63.54	112.27' LT	STH190WAU	-	-	-	-	-	-	-	-	1	X
EW9	369+68.80	56.80' RT	STH190WAU	1	-	-	-	-	-	-	-	-	-
EW10	369+71.86	56.88' RT	STH190WAU	1	-	-	-	-	-	-	-	-	-
EW11	389+52.34	117.01' LT	STH190WAU	1	-	-	-	-	-	-	-	-	-
EW12	396+19.95	166.50' LT	STH190WAU	-	-	-	-	-	-	1	-	-	X
EW13	406+52.25	52.21' RT	STH190WAU	-	-	1	-	-	-	-	-	-	-
EW14	442+65.23	95.11' LT	STH190WAU	-	-	-	-	1	-	-	-	-	X
			TOTALS	3	2	1	1	1	1	1	1	1	

REMARKS:
*STATIONS AND OFFSETS ARE TO END OF PIPE

APRON ENDWALLS FOR CULVERT PIPE SALVAGED

STATION	524.0612 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 12-INCH EACH	524.0618 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 18-INCH EACH	524.0624 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 24-INCH EACH	524.0630 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 30-INCH EACH
STH 190				
294+99, 114' LT	1	-	-	-
299+22, 225' LT	-	1	-	-
300+39, 204' LT	-	-	1	-
304+40, 40' RT	-	1	-	-
409+60, 149' LT	-	-	-	1
TOTALS	1	2	1	1

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

CONCRETE CURB & GUTTER

STATION TO STATION	601.0331 31-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	601.0555 6-INCH SLOPED 36-INCH TYPE A LF	601.0557 6-INCH SLOPED 36-INCH TYPE D LF	SPV.0090.03 CONCRETE CURB & GUTTER 24-INCH TYPE D LF
STH 190								
CATEGORY 0010								
STA 291+00 - CALHOUN RD	-	43	-	766	103	778	525	18
CALHOUN RD - PILGRIM RD	-	-	-	675	347	256	378	-
PILGRIM RD - LILLY RD	-	36	-	500	602	82	369	-
LILLY RD - STA 107+08	179	35	107	-	1,900	-	-	-
SUBTOTAL	179	114	107	1,941	2,952	1,116	1,272	18
CATEGORY 0040								
138TH STREET	-	-	-	-	33	-	-	-
SUBTOTAL	0	0	0	0	33	0	0	0
TOTALS	179	114	107	1,941	2,985	1,116	1,272	18

CONCRETE CURB

STATION TO STATION	601.0600 PEDESTRIAN LF
STH 190	
STA 291+00 - CALHOUN RD	21
CALHOUN RD - PILGRIM RD	53
PILGRIM RD - LILLY RD	39
LILLY RD - STA 107+08	124
TOTALS	237

CONCRETE SIDEWALK

STATION TO STATION	602.0410 5-INCH SF
STH 190	
STA 291+00 - CALHOUN RD	7,340
CALHOUN RD - PILGRIM RD	5,903
PILGRIM RD - LILLY RD	4,352
LILLY RD - STA 107+08	8,957
SUBTOTAL	26,552
CATEGORY 0040	
	1,231
SUBTOTAL	1,231
TOTALS	27,783

CURB RAMP DETECTABLE WARNING FIELD YELLOW

STATION TO STATION	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF
STH 190		
STA 291+00 - CALHOUN RD	607	32
CALHOUN RD - PILGRIM RD	358	134
PILGRIM RD - LILLY RD	243	154
LILLY RD - STA 107+08	350	203
TOTALS	1,558	523

CONCRETE DRIVEWAY

STATION TO STATION	602.0815 7-INCH SY	602.0865 HES 7-INCH SY
STH 190		
STA 291+00 - CALHOUN RD	-	-
CALHOUN RD - PILGRIM RD	24	-
PILGRIM RD - LILLY RD	-	-
LILLY RD - STA 107+08	30	149
SUBTOTAL	54	149
CATEGORY 0040		
	137	-
SUBTOTAL	137	0
TOTALS	191	149

RIPRAP

STATION TO STATION	606.0200 RIPRAP MEDIUM CY	* 645.0120 GEOTEXTILE TYPE HR SY
CATEGORY 0040		
138TH STREET	8	14
TOTALS	8	14

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STORM SEWER PIPES

FROM	FROM	-	TO	LOCATION	520.8000 CONCRETE COLLARS FOR PIPE EACH	CATEGORY 0040 521.3115 CULVERT PIPE CORRUGATED STEEL 15-INCH LF	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0354 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 54-INCH LF	JOINT TIES* EACH	INLET ELEVATION	DISCHARGE ELEVATION
P-10.1	10	-	EX. PIPE	STH190WAU	1	-	4	-	-	-	-	-	-	835.62	-
P-12.1	EW7	-	12	STH190WAU	-	-	-	47	-	-	-	-	X	875.68	875.22
P-12.2	12	-	EX. PIPE	STH190WAU	1	-	-	4	-	-	-	-	-	-	876.07
P-13.1	13	-	EX. PIPE	STH190WAU	1	-	-	-	4	-	-	-	-	877.06	-
P-13.2	EX. PIPE	-	13	STH190WAU	1	-	-	-	4	-	-	-	-	-	877.06
P-14.1	14	-	EX. PIPE	STH190WAU	1	-	-	4	-	-	-	-	-	877.88	-
P-14.2	EX. PIPE	-	14	STH190WAU	1	-	-	4	-	-	-	-	-	-	877.96
P-15.1	15	-	EX. PIPE	STH190WAU	1	-	-	-	4	-	-	-	-	877.86	-
P-15.2	EX. PIPE	-	15	STH190WAU	1	-	-	-	4	-	-	-	-	-	877.86
P-16.1	16	-	EX. PIPE	STH190WAU	1	-	-	-	4	-	-	-	-	879.69	-
P-16.2	EX. PIPE	-	16	STH190WAU	1	-	-	-	4	-	-	-	-	-	880.09
P-18.1	18	-	EX. PIPE	STH190WAU	1	-	-	-	4	-	-	-	-	922.53	-
P-18.2	EX. PIPE	-	18	STH190WAU	1	-	4	-	-	-	-	-	-	-	922.86
P-19.1	EX. PIPE	-	19	STH190WAU	1	-	-	-	4	-	-	-	-	917.15	-
P-19.2	19	-	EX. PIPE	STH190WAU	1	-	-	-	4	-	-	-	-	-	917.15
P-20.1	EX. PIPE	-	20	STH190WAU	1	-	-	-	4	-	-	-	-	916.65	--
P-20.2	20	-	EX. PIPE	STH190WAU	1	-	-	-	4	-	-	-	-	--	916.65
P-21.1	21	-	EX. PIPE	STH190WAU	1	-	-	-	4	-	-	-	-	846.12	-
P-21.2	EX. PIPE	-	21	STH190WAU	1	-	-	-	4	-	-	-	-	-	846.12
P-22.1	22	-	EX. PIPE	STH190WAU	1	-	-	-	4	-	-	-	-	817.95	-
P-23.1	23	-	EX. PIPE	STH190WAU	1	-	-	-	4	-	-	-	-	812.78	-
P-23.2	EX. PIPE	-	23	STH190WAU	1	-	-	-	4	-	-	-	-	-	812.78
P-24.1	24	-	EX. PIPE	STH190WAU	1	-	-	-	-	-	4	-	-	788.36	-
P-24.2	EX. PIPE	-	24	STH190WAU	1	-	-	-	-	-	4	-	-	-	788.36
P-25.1	25	-	EX. PIPE	STH190WAU	1	-	-	-	-	4	-	-	-	783.25	-
P-25.2	EX. PIPE	-	25	STH190WAU	1	-	-	-	-	4	-	-	-	-	784.88
P-26.1	26	-	EX. PIPE	STH190WAU	1	-	-	-	-	-	-	4	-	773.33	-
P-26.2	EX. PIPE	-	26	STH190WAU	1	-	-	-	-	-	-	4	-	-	773.35
P-26.3	EX. PIPE	-	26	STH190WAU	1	-	-	-	4	-	-	-	-	-	773.53
P-27.1	27	-	EX. PIPE	STH190WAU	1	-	-	-	4	-	-	-	-	772.13	-
P-27.2	EX. PIPE	-	27	STH190WAU	1	-	-	-	4	-	-	-	-	-	772.13
P-28.1	28	-	EX. PIPE	STH190WAU	1	-	-	-	4	-	-	-	-	761.84	-
P-28.2	EX. PIPE	-	28	STH190WAU	1	-	-	-	4	-	-	-	-	-	762.14
P-29.1	29	-	EX. PIPE	STH190WAU	1	-	-	-	4	-	-	-	-	763.19	-
P-29.2	EX. PIPE	-	29	STH190WAU	1	-	-	-	4	-	-	-	-	-	763.32
P-30.1	30	-	EX. PIPE	STH190WAU	1	-	-	-	4	-	-	-	-	762.09	-
P-30.2	EX. PIPE	-	30	STH190WAU	1	-	-	-	4	-	-	-	-	-	762.70
P-31.1	31	-	EX. PIPE	STH190WAU	1	-	4	-	-	-	-	-	-	787.50	-
P-31.2	EX. PIPE	-	31	STH190WAU	1	-	4	-	-	-	-	-	-	-	787.88
P-32.1	32	-	EX. PIPE	STH190WAU	1	-	4	-	-	-	-	-	-	791.20	-
P-33.1	33	-	EX. PIPE	STH190WAU	1	-	4	-	-	-	-	-	-	797.64	-
P-33.2	EX. PIPE	-	33	STH190WAU	1	-	4	-	-	-	-	-	-	-	798.64
P-34.1	34	-	EX. PIPE	STH190WAU	1	-	4	-	-	-	-	-	-	797.40	-
P-35.1	35	-	EX. PIPE	STH190WAU	1	-	4	-	-	-	-	-	-	791.00	-
P-35.2	EX. PIPE	-	35	STH190WAU	1	-	4	-	-	-	-	-	-	-	791.48
P-36.1	36	-	EX. PIPE	STH190WAU	1	-	4	-	-	-	-	-	-	777.47	-
P-37.1	37	-	EX. PIPE	STH190WAU	1	-	4	-	-	-	-	-	-	775.61	-
P-38.1	38	-	EX. PIPE	STH190WAU	1	-	4	-	-	-	-	-	-	770.22	-
P-38.2	EX. PIPE	-	38	STH190WAU	1	-	4	-	-	-	-	-	-	-	770.40
P-38.3	EX. PIPE	-	38	STH190WAU	1	-	4	-	-	-	-	-	-	-	771.07
P-39.1	39	-	EX. PIPE	STH190WAU	1	-	4	-	-	-	-	-	-	767.35	-
P-39.2	STUB	-	39	STH190WAU	-	36	-	-	-	-	-	-	-	769.12	767.86
P-43.1	43	-	EX. PIPE	STH190WAU	1	-	4	-	-	-	-	-	-	768.19	-
P-45.1	45	-	EX. MH	STH190WAU	-	-	9	-	-	-	-	-	-	763.12	763.00
P-46.1	46	-	EX. PIPE	STH190WAU	1	-	4	-	-	-	-	-	-	748.80	-
P-46.2	EX. PIPE	-	46	STH190WAU	1	-	-	4	-	-	-	-	-	-	749.45
P-47.1	47	-	EX. PIPE	STH190WAU	1	-	-	-	4	-	-	-	-	741.63	-
P-47.2	EX. PIPE	-	47	STH190WAU	1	-	4	-	-	-	-	-	-	-	743.42
P-48.1	48	-	EX. PIPE	STH190WAU	1	-	4	-	-	-	-	-	-	743.83	-
P-49.1	49	-	EX. PIPE	STH190WAU	1	-	4	-	-	-	-	-	-	740.37	-
P-50.1	50	-	EX. PIPE	STH190WAU	1	-	4	-	-	-	-	-	-	729.46	-
P-50.2	EX. PIPE	-	50	STH190WAU	1	-	4	-	-	-	-	-	-	-	729.81
P-51.1	51	-	EX. PIPE	STH190WAU	1	-	4	-	-	-	-	-	-	730.45	-
P-EW6.1	EW6	-	EX. PIPE	STH190WAU	1	-	-	-	-	8	-	-	X	848.98	-
				TOTALS	61	36	105	63	104	16	8	8			

*NON-BID ITEM: FOR INFORMATION ONLY

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STORM SEWER STRUCTURES

STRUCTURE	STATION	OFFSET*	LOCATION	611.0530 MANHOLE COVERS TYPE J EACH	611.0600 INLET COVERS TYPE A EACH	611.0603 INLET COVERS TYPE A-S EACH	611.0624 INLET COVERS TYPE H EACH	611.0627 INLET COVERS TYPE HM EACH	611.0642 INLET COVERS TYPE MS EACH	611.0651 INLET COVERS TYPE S EACH	611.0657 INLET COVERS TYPE W EACH	611.0660 INLET COVERS TYPE WM EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2008 MANHOLES 8-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3225 INLETS 2X2.5-FT EACH	611.3230 INLETS 2X3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	RIM** ELEVATION	INVERT*** ELEVATION	DEPTH**** FT	COMMENTS
10	300+86.75	13.45' LT	STH190WAU	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	838.48	835.62	2.03	-
11	305+47.82	49.46' RT	STH190WAU	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	MATCH EXISTING
12	316+27.24	108.86' LT	STH190WAU	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	877.80	875.68	2.31	-
13	316+77.96	13.99' LT	STH190WAU	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	880.28	877.06	2.43	-
14	321+07.50	115.18' LT	STH190WAU	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	879.88	877.88	2.19	-
15	325+99.66	13.50' LT	STH190WAU	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	881.22	877.86	2.57	-
16	328+99.78	46.51' LT	STH190WAU	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	882.68	879.69	1.84	-
17	332+61.53	33.50' RT	STH190WAU	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	352+27.77	14.23' LT	STH190WAU	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	925.38	922.53	2.06	FLAT TOP REQUIRED WITH 2X2.5-FT OPENING
19	358+99.45	13.22' LT	STH190WAU	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	919.59	917.15	1.65	-
20	358+99.34	37.32' RT	STH190WAU	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	919.16	916.65	1.37	-
21	374+19.30	46.66' LT	STH190WAU	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	849.42	846.12	2.51	FLAT TOP REQUIRED WITH 2X3-FT OPENING
22	384+24.01	46.54' LT	STH190WAU	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	820.15	817.95	1.06	-
23	386+44.98	46.10' LT	STH190WAU	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	816.99	812.78	3.42	-
24	404+86.50	55.11' RT	STH190WAU	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	793.10	788.36	4.03	FLAT TOP REQUIRED WITH 2X3-FT OPENING
25	406+37.09	107.97' LT	STH190WAU	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	789.35	783.25	5.52	FLAT TOP REQUIRED WITH 2X2.5-FT OPENING. ROTATE HOLE TO WEST
26	408+79.58	122.52' LT	STH190WAU	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	782.25	773.33	8.14	FLAT TOP REQUIRED WITH 2-FT DIA. OPENING. ROTATE HOLE TO SOUTHEAST
27	411+90.42	46.72' LT	STH190WAU	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	776.19	772.13	2.91	-
28	421+00.26	46.51' LT	STH190WAU	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	765.45	761.84	2.82	-
29	425+73.70	34.43' LT	STH190WAU	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	765.94	763.19	1.60	-
30	425+73.74	95.12' LT	STH190WAU	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	766.10	762.09	2.86	-
31	439+06.62	76.94' LT	STH190WAU	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	791.12	787.50	2.79	FLAT TOP REQUIRED WITH 2X3-FT OPENING
32	440+87.72	37.33' RT	STH190WAU	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	795.91	791.20	3.88	FLAT TOP REQUIRED WITH 2X3-FT OPENING
33	442+98.24	85.88' LT	STH190WAU	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	801.03	797.64	2.55	FLAT TOP REQUIRED WITH 2X3-FT OPENING
34	443+70.54	57.45' RT	STH190WAU	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	800.85	797.40	2.26	-
35	451+51.80	37.13' RT	STH190WAU	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	794.77	791.00	2.94	FLAT TOP REQUIRED WITH 2X3-FT OPENING
36	456+03.02	37.12' RT	STH190WAU	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	781.24	777.47	2.58	-
37	458+00.12	65.80' LT	STH190WAU	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	778.98	775.61	2.54	FLAT TOP REQUIRED WITH 2X3-FT OPENING
38	463+01.54	37.56' RT	STH190WAU	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	773.67	770.22	2.62	FLAT TOP REQUIRED WITH 2X3-FT OPENING
39	467+68.68	70.93' RT	STH190WAU	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	769.89	767.35	2.71	-
40	475+95.13	65.58' LT	STH190WAU	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	478+00.70	65.66' LT	STH190WAU	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	482+19.50	85.07' LT	STH190WAU	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	489+00.29	26.46' LT	STH190WAU	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	777.22	767.36	8.87	FLAT TOP REQUIRED WITH 2X3-FT OPENING. VERIFY STRUCTURE INVERT
44	496+88.79	65.09' LT	STH190WAU	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	499+63.69	83.56' LT	STH190WAU	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	765.39	763.12	1.44	-
46	508+64.11	37.83' RT	STH190WAU	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	753.16	748.80	3.52	FLAT TOP REQUIRED WITH 2X3-FT OPENING
47	512+55.50	103.56' LT	STH190WAU	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	748.41	741.63	5.98	-
48	99+85.65	68.41' RT	STH190MKE	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	747.72	743.83	3.05	-
49	100+15.71	110.84' LT	STH190MKE	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	746.41	740.37	5.04	-
50	104+63.71	55.50' LT	STH190MKE	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	735.21	729.46	4.75	FLAT TOP REQUIRED WITH 2X2.5-FT OPENING
51	104+81.19	84.92' LT	STH190MKE	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	734.70	730.45	3.25	-
			TOTALS	1	3	1	18	2	4	2	3	8	1	1	1	10	10	10	3				

REMARKS:
*STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
**RIM ELEV IS AT THE INLET COVER FLANGE LOCATION OR CENTER OF MANHOLE COVER
***FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
****DEPTH = RIM ELEV - TOP OF STRUCTURE BASE ELEV - COVER HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

RECONSTRUCTING

STATION	OFFSET*	LOCATION	611.0430 RECONSTRUCTING INLETS EACH
299+25.81	61.70' RT	STH190WAU	1
358+99.16	46.44' RT	STH190WAU	1
368+95.26	46.11' LT	STH190WAU	1
425+73.38	14.09' LT	STH190WAU	1
439+05.64	37.84' RT	STH190WAU	1
475+95.34	66.08' LT	STH190WAU	1
494+50.24	38.21' RT	STH190WAU	1
		TOTALS	7

REMARKS:
*STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

ADJUSTING INLET COVERS

STATION	OFFSET*	LOCATION	611.8115 ADJUSTING INLET COVERS EACH
299+80.41	57.10' RT	STH190WAU	1
299+88.41	57.34' RT	STH190WAU	1
300+13.13	51.25' RT	STH190WAU	1
300+82.67	22.51' LT	STH190WAU	1
304+40.42	13.78' LT	STH190WAU	1
340+86.46	54.26' RT	STH190WAU	1
353+85.12	156.92' LT	STH190WAU	1
358+99.27	35.80' LT	STH190WAU	1
358+98.58	21.40' LT	STH190WAU	1
362+63.53	25.75' LT	STH190WAU	1
363+30.58	58.38' RT	STH190WAU	1
374+18.82	26.00' LT	STH190WAU	1
374+59.40	97.95' LT	STH190WAU	1
403+94.88	13.35' LT	STH190WAU	1
407+97.83	46.99' LT	STH190WAU	1
407+97.33	12.77' LT	STH190WAU	1
409+19.62	123.55' LT	STH190WAU	1
444+18.59	38.04' RT	STH190WAU	1
456+03.70	66.06' LT	STH190WAU	1
456+15.93	37.31' RT	STH190WAU	1
458+24.11	69.44' RT	STH190WAU	1
458+46.08	49.43' RT	STH190WAU	1
459+21.57	52.19' RT	STH190WAU	1
463+19.34	66.07' LT	STH190WAU	1
466+90.97	66.20' LT	STH190WAU	1
467+11.96	90.02' LT	STH190WAU	1
467+37.53	95.93' LT	STH190WAU	1
467+14.43	37.32' RT	STH190WAU	1
467+36.07	58.97' RT	STH190WAU	1
467+62.47	59.60' RT	STH190WAU	1
470+34.95	66.08' LT	STH190WAU	1
471+57.39	66.08' LT	STH190WAU	1
485+88.94	38.06' RT	STH190WAU	1
499+22.46	99.36' LT	STH190WAU	1
499+27.60	86.16' LT	STH190WAU	1
504+84.67	37.63' RT	STH190WAU	1
509+99.25	37.58' RT	STH190WAU	1
512+18.92	11.71' LT	STH190WAU	1
512+21.24	64.93' LT	STH190WAU	1
102+52.13	51.39' RT	STH190MKE	1
		TOTALS	40

REMARKS:
*STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

3

COVER PLATES TEMPORARY

	611.8120.S COVER PLATES TEMPORARY EACH
STH 190	
UNDISTRIBUTED	10
TOTALS	10

PIPE UNDERDRAIN UNPERFORATED 6-INCH

	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF
STH 190	
UNDISTRIBUTED	100
TOTALS	100

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

3

GUARDRAIL

STATION TO STATION	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING EACH	614.0220 STEEL THRIE BEAM BULLNOSE TERMINAL EACH	614.0230 STEEL THRIE BEAM LF
STH 190			
STA 291+00 - CALHOUN RD	-	-	-
CALHOUN RD - PILGRIM RD	-	-	-
PILGRIM RD - LILLY RD	1	2	150
LILLY RD - STA 107+08	-	-	-
TOTALS	1	2	150

BARRIER SYSTEM GRADING, SHAPING, AND FINISHING

LOCATION	*EXCAVATION COMMON [CY]	*SALVAGEABLE TOPSOIL [SY]	*FERTILIZER TYPE B [CWT]	*SEEDING MIXTURE NO. 30 [LB]	*EROSION MAT URBAN CLASS I TYPE B [SY]
STA. 404+18.06 - STA. 410+20.49	269	2085	1	94	2,085
TOTALS	269	2085	1	94	2085

*ITEMS & QUANTITIES LISTED FOR BID INFORMATION ONLY

MOBILIZATION

	619.1000 MOBILIZATION EACH
PROJECT	
2025-03-73	1
TOTALS	1

FENCE SAFETY

STATION TO STATION	616.0700.S FENCE SAFETY LF
STH 190	
STA 291+00 - CALHOUN RD	247
CALHOUN RD - PILGRIM RD	-
PILGRIM RD - LILLY RD	-
LILLY RD - STA 107+08	-
TOTALS	247

CONCRETE CORRUGATED MEDIAN

STATION TO STATION	620.0100 CONCRETE CORRUGATED MEDIAN SF
STH 190	
STA 291+00 - CALHOUN RD	72
CALHOUN RD - PILGRIM RD	-
PILGRIM RD - LILLY RD	-
LILLY RD - STA 107+08	-
TOTALS	72

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

3

CONCRETE MEDIAN NOSE

STATION TO STATION	620.0300 SLOPED NOSE SF
STH 190	
STA 291+00 - CALHOUN RD	267
CALHOUN RD - PILGRIM RD	21
PILGRIM RD - LILLY RD	-
LILLY RD - STA 107+08	122
TOTALS	410

TOPSOIL

STATION TO STATION	625.0100 TOPSOIL SY
STH 190	
STA 291+00 - CALHOUN RD	2,900
CALHOUN RD - PILGRIM RD	1,032
PILGRIM RD - LILLY RD	1,615
LILLY RD - STA 107+08	892
UNDISTRIBUTED	1,610
TOTALS	8,049

3

MULCHING & SEEDING

STATION TO STATION	627.0200 MULCHING SY	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0160 SEEDING MIXTURE NO. 60 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
STH 190						
STA 291+00 - CALHOUN RD	-	695	467	75	-	78
CALHOUN RD - PILGRIM RD	-	26	378	-	-	22
PILGRIM RD - LILLY RD	-	496	143	135	-	60
LILLY RD - STA 107+08	-	-	342	-	-	19
UNDISTRIBUTED	643	304	332	52	17	45
TOTALS	643	1,521	1,662	262	17	224

TEMPORARY SETTLING BASINS

STATION TO STATION	628.1104 EROSION BALES EACH	* 645.0120 GEOTEXTILE TYPE HR SY
CATEGORY 0010		
STH 190 - UNDISTRIBUTED	400	900
CATEGORY 0040		
138TH STREET - UNDISTRIBUTED	40	90
TOTALS	440	990

*ADDITIONAL QUANTITIES SHOWN ELSWHERE

SILT FENCE

STATION TO STATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1530.S SILT FENCE HEAVY DUTY LF	628.1535.S SILT FENCE HEAVY DUTY MAINTENANCE LF
STH 190				
STA 291+00 - CALHOUN RD	-	-	802	802
CALHOUN RD - PILGRIM RD	-	-	-	-
PILGRIM RD - LILLY RD	-	-	393	393
LILLY RD - STA 107+08	-	-	43	43
UNDISTRIBUTED	100	100	310	310
TOTALS	100	100	1,548	1,548

EROSION CONTROL MOBILIZATIONS

STREET	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
STH 190	4	6
TOTALS	4	6

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

3

EROSION MATTING

STATION TO STATION	628.2008 EROSION MAT URBAN CLASS I TYPE B SY
STH 190	
STA 291+00 - CALHOUN RD	2,869
CALHOUN RD - PILGRIM RD	997
PILGRIM RD - LILLY RD	1,577
LILLY RD - STA 107+08	845
UNDISTRIBUTED	1,572
TOTALS	7,860

INLET PROTECTION

STATION TO STATION	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH
STH 190				
STA 291+00 - CALHOUN RD	20	31	39	-
CALHOUN RD - PILGRIM RD	33	22	15	2
PILGRIM RD - LILLY RD	27	39	23	4
LILLY RD - STA 107+08	30	54	39	6
TOTALS	110	146	116	12

DITCH CHECKS

STATION TO STATION	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH
STH 190		
STA 291+00 - CALHOUN RD	255	59
CALHOUN RD - PILGRIM RD	-	25
PILGRIM RD - LILLY RD	125	25
LILLY RD - STA 107+08	-	9
TOTALS	380	118

ROCK BAGS

STATION TO STATION	628.7570 ROCK BAGS EACH
STH 190	
STA 291+00 - CALHOUN RD	2
CALHOUN RD - PILGRIM RD	-
PILGRIM RD - LILLY RD	-
LILLY RD - STA 107+08	-
UNDISTRIBUTED	20
TOTALS	22

SOD

STATION TO STATION	629.0210 FERTILIZER TYPE B CWT	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY
STH 190			
STA 291+00 - CALHOUN RD	1.4	0.4	32
CALHOUN RD - PILGRIM RD	0.6	0.4	34
PILGRIM RD - LILLY RD	0.3	0.4	38
LILLY RD - STA 107+08	0.6	0.5	47
UNDISTRIBUTED	1.1	0.4	38
TOTALS	4	2.1	189

MARKERS PERMANENT FLEXIBLE

STATION TO STATION	633.5350 MARKERS PERMANENT FLEXIBLE EACH
STH 190	
STA 291+00 - CALHOUN RD	2
CALHOUN RD - PILGRIM RD	1
PILGRIM RD - LILLY RD	1
LILLY RD - STA 107+08	3
TOTALS	7

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	**637.2210** SIGNS TYPE II REFLC H [SF]	**637.2230** SIGNS TYPE II REFLC F [SF]	**638.2602** REMOVING SIGNS TYPE II [EA]	**638.3000** REMOVING SMALL SIGN SUPPORTS [EA]	**634.0618** POSTS WOOD 4"X6"X18' [EA]	**638.2102** MOVING SIGNS TYPE II [EA]	**638.4000** MOVING SMALL SIGN SUPPORTS [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
1-1	D1-65 MOD (3)	II	BROOKFIELD RD	96	x	36	24.00	--	1	2	2	--	--	--	--
2-1	J33-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
	M4-1			--	x	--	--	--	--	--	--	--	--	--	
	M1-1			--	x	--	--	--	--	--	--	--	--	--	
	M6-1			--	x	--	--	--	--	--	--	--	--	--	
3-1	R5-1A	--	--	--	x	--	--	--	--	1	1	1	--	--	--
3-2	M1-94S (3)	II	CAPITOL DR	102	x	18	12.75	--	1	--	--	--	--	--	MOUNT ON MAST ARM
3-3	M1-94S (3)	II	CAPITOL DR	102	x	18	12.75	--	1	--	--	--	--	--	MOUNT ON MAST ARM
3-4	R1-1F	--	--	--	x	--	--	--	--	--	--	1	--	--	MOUNT ON SIGNAL POLE
3-5	R5-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
3-6	R5-1A	--	--	--	x	--	--	--	--	1	1	1	--	--	--
3-7	R6-2L (2M)	--	--	30	x	36	7.50	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
3-8	R6-2L (2M)	--	--	30	x	36	7.50	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
3-9	R6-2L (2M)	--	--	30	x	36	7.50	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
3-10	R10-50L	--	--	--	x	--	--	--	1	--	--	--	--	--	--
4-1	R2-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
4-2	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
4-3	R6-3A	--	--	--	x	--	--	--	--	--	--	1	--	4-2	--
5-1	D1-65 (3)	II	IMPERIAL DRIVE	84	x	30	17.50	--	1	2	2	--	--	--	--
5-2	D1-65 MOD (3)	II	BROOKFIELD RD	96	x	36	24.00	--	1	2	2	--	--	--	--
5-3	D1-65 MOD (3)	II	BROOKFIELD RD	96	x	36	24.00	--	--	--	2	--	--	--	--
6-1	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
6-2	R6-3A	--	--	--	x	--	--	--	--	--	--	1	--	6-1	--
6-3	R6-2L	--	--	--	x	--	--	--	--	1	1	1	--	--	--
6-4	R5-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
7-1	S1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
7-2	S16-7L	--	--	--	x	--	--	--	--	--	--	1	--	7-1	--
7-3	R5-1 (3)	II	--	36	x	36	9.00	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
7-4	R1-1	--	--	--	x	--	--	--	--	--	--	1	--	--	MOUNT ON SIGNAL POLE
7-5	M1-94S (3)	II	CAPITOL DR	102	x	18	12.75	--	1	--	--	--	--	--	MOUNT ON MAST ARM
7-6	R1-1F	--	--	--	x	--	--	--	--	--	--	1	--	--	MOUNT ON SIGNAL POLE
7-7	M1-94S (3)	II	CAPITOL DR	102	x	18	12.75	--	1	--	--	--	--	--	MOUNT ON MAST ARM
7-8	R5-1	--	--	--	x	--	--	--	--	--	--	1	--	--	MOUNT ON SIGNAL POLE
7-9	R1-1F	--	--	--	x	--	--	--	--	--	--	1	--	--	MOUNT ON SIGNAL POLE
7-10	S1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
7-11	S16-7L	--	--	--	x	--	--	--	--	--	--	1	--	7-10	--

TYPE II PERMANENT SIGNING

2025-03-73 STH 190

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 POSTS WOOD 4"X6"X18' [EA]	638.2102 MOVING SIGNS TYPE II [EA]	638.4000 MOVING SMALL SIGN SUPPORTS [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
7-12	R10-50L	--	--	--	x	--	--	--	1	--	--	--	--	--	--
7-13	R10-50L	--	--	--	x	--	--	--	1	--	--	--	--	--	--
7-14	R6-2L (2M)	--	--	30	x	36	7.50	--	--	--	--	--	--	--	MOUNT ON S.P.
7-15	R6-2L (2M)	--	--	30	x	36	7.50	--	--	--	--	--	--	--	MOUNT ON S.P.
8-1	R5-1A	--	--	--	x	--	--	--	--	1	1	1	--	--	--
8-2	D1-65 (3)	II	IMPERIAL DR	84	x	30	17.50	--	--	--	2	--	--	--	--
8-3	D1-65 (3)	II	IMPERIAL DR	84	x	30	17.50	--	--	--	2	--	--	--	--
10-1	R5-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
10-2	R5-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
10-3	R6-2L	--	--	--	x	--	--	--	--	1	1	1	--	--	--
10-4	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
10-5	R6-3A	--	--	--	x	--	--	--	--	--	--	1	--	10-4	--
10-6	R5-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
10-7	R5-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
10-8	R4-7	--	--	--	x	--	--	--	--	1	1	1	--	--	--
10-9	R6-2L	--	--	--	x	--	--	--	--	1	1	1	--	--	--
10-10	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
10-11	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
10-12	R6-3A	--	--	--	x	--	--	--	--	--	--	1	--	10-11	--
10-13	R5-1 (2S)	II	--	30	x	30	6.25	--	--	--	--	--	--	10-11	BACK OF SIGN
11-1	D1-65 MOD (3)	II	CALHOUN RD	84	x	36	21.00	--	1	2	2	--	--	--	--
11-2	D1-65 MOD (3)	II	CALHOUN RD	84	x	36	21.00	--	--	--	2	--	--	--	--
12-1	R4-7 (2S)	II	--	24	x	30	5.00	--	--	--	1	--	--	--	--
12-2	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
12-3	R5-1 (2S)	II	--	30	x	30	6.25	--	--	--	--	--	--	12-4	BACK OF SIGN
12-4	R3-53R	--	--	--	x	--	--	--	--	1	1	1	--	--	--
12-5	R5-1A	--	--	--	x	--	--	--	--	1	1	1	--	--	--
13-1	R3-7R	--	--	--	x	--	--	--	--	1	1	1	--	--	--
13-2	R1-2	--	--	--	x	--	--	--	--	1	1	1	--	--	--
13-3	M1-94S (3)	II	CAPITOL DR	102	x	18	12.75	--	1	--	--	--	--	--	MOUNT ON MAST ARM
13-4	R1-2	--	--	--	x	--	--	--	--	1	1	1	--	--	--
13-5	W12-1D	--	--	--	x	--	--	--	--	1	1	1	--	--	2' HEIGHT
13-6	M1-94S (3)	II	CAPITOL DR	102	x	18	12.75	--	1	--	--	--	--	--	MOUNT ON MAST ARM
13-7	R1-2	--	--	--	x	--	--	--	--	1	1	1	--	--	--
13-8	R6-2L (2M)	II	--	30	x	36	7.50	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
13-9	R5-1 (2M)	II	--	36	x	36	9.00	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 POSTS WOOD 4"X6"X18' [EA]	638.2102 MOVING SIGNS TYPE II [EA]	638.4000 MOVING SMALL SIGN SUPPORTS [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
13-10	R6-2L (2S)	II	--	24	x	30	5.00	--	--	--	1	--	--	--	--
13-11	R5-1 (2M)	II	--	36	x	36	9.00	--	--	--	1	--	--	--	--
13-12	R6-2L (2M)	II	--	30	x	36	7.50	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
13-13	R6-2L (2S)	II	--	24	x	30	5.00	--	--	--	1	--	--	--	--
13-14	R5-1 (2M)	II	--	36	x	36	9.00	--	--	--	1	--	--	--	--
14-1	R5-1A	--	--	--	x	--	--	--	--	1	1	1	--	--	--
14-2	R6-2L	--	--	--	x	--	--	--	--	1	1	1	--	--	--
15-1	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
15-2	R6-3A	--	--	--	x	--	--	--	--	--	--	1	--	15-3	--
15-3	R5-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
15-4	R4-7 (2S)	II	--	24	x	30	5.00	--	--	--	1	--	--	--	--
15-5	R5-1 (2S)	II	--	30	x	30	6.25	--	--	--	1	--	--	--	--
16-1	D1-65 MOD (3)	II	CALHOUN RD	84	x	36	21.00	--	1	2	2	--	--	--	--
16-2	D1-65 MOD (3)	II	CALHOUN RD	84	x	36	21.00	--	--	--	2	--	--	--	--
17-1	R6-2L	--	--	--	x	--	--	--	--	1	1	1	--	--	--
17-2	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
17-3	R6-3A	--	--	--	x	--	--	--	--	--	--	1	--	17-4	--
19-1	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
19-2	R6-3A	--	--	--	x	--	--	--	--	--	--	1	--	19-1	--
20-1	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
20-2	R9-3A (3)	II	--	24	x	24	4.00	--	--	--	1	--	--	--	--
20-3	R9-3BR (3)	II	--	18	x	12	1.50	--	--	--	--	--	--	20-2	--
22-1	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
22-2	R6-3A	--	--	--	x	--	--	--	--	--	--	1	--	22-1	--
23-1	R3-53R	II	--	14	x	30	2.92	--	--	--	1	--	--	--	--
23-2	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
23-3	M1-94 MOD	--	--	--	x	--	--	--	--	2	2	1	--	--	--
24-1	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
24-2	R9-3A	--	--	--	x	--	--	--	--	--	--	1	--	24-1	--
24-3	R5-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
24-4	R6-2L (2M)	II	--	30	x	36	7.50	--	--	--	1	--	--	--	--
25-1	R2-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
28-1	R5-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
28-2	R7-1D	--	--	--	x	--	--	--	--	--	--	1	--	28-3	--
28-3	R6-2L	--	--	--	x	--	--	--	--	1	1	1	--	--	--

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	**637.2210** SIGNS TYPE II REFLC H [SF]	**637.2230** SIGNS TYPE II REFLC F [SF]	**638.2602** REMOVING SIGNS TYPE II [EA]	**638.3000** REMOVING SMALL SIGN SUPPORTS [EA]	**634.0618** POSTS WOOD 4"X6"X18' [EA]	**638.2102** MOVING SIGNS TYPE II [EA]	**638.4000** MOVING SMALL SIGN SUPPORTS [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
30-1	D1-65 MOD (3)	II	LILLY RD	72	x	36	18.00	--	1	2	2	--	--	--	--
31-1	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
31-2	M1-94S (3)	II	CAPITOL DR	102	x	18	12.75	--	1	--	--	--	--	--	MOUNT ON MAST ARM
31-3	R1-2	--	--	--	x	--	--	--	--	1	1	1	--	--	--
31-4	R1-2	--	--	--	x	--	--	--	--	1	1	1	--	--	--
31-5	M1-94S (3)	II	CAPITOL DR	102	x	18	12.75	--	1	--	--	--	--	--	MOUNT ON MAST ARM
31-6	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
31-7	R10-50L	--	--	--	x	--	--	--	1	--	--	--	--	--	--
31-8	R10-50L	--	--	--	x	--	--	--	1	--	--	--	--	--	--
31-9	R6-3 (2M)	II	--	30	x	24	5.00	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
31-10	R10-50L	--	--	--	x	--	--	--	1	--	--	--	--	--	--
31-11	R6-3 (2M)	II	--	30	x	24	5.00	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
31-12	R10-50L	--	--	--	x	--	--	--	1	--	--	--	--	--	--
32-1	D1-65 MOD (3)	II	LILLY RD	72	x	36	18.00	--	1	2	2	--	--	--	--
32-2	R6-2L (3)	II	--	36	x	48	12.00	--	--	--	1	--	--	--	--
32-3	R7-1L	--	--	--	x	--	--	--	--	1	--	1	--	32-2	--
33-1	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
33-2	R6-3A	--	--	--	x	--	--	--	--	--	--	1	--	33-3	--
33-3	R6-2L (3)	II	--	36	x	48	12.00	--	--	--	1	--	--	--	--
33-4	R7-1L	--	--	--	x	--	--	--	--	1	--	1	--	33-5	--
34-1	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
34-2	R6-3A	--	--	--	x	--	--	--	--	--	--	1	--	34-1	--
34-3	R5-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
34-4	R7-1R	--	--	--	x	--	--	--	--	--	--	1	--	34-5	--
38-1	D1-65 (3)	II	N 128TH ST	78	x	30	16.25	--	--	--	2	--	--	--	--
38-2	D1-65 (3)	II	N 128TH ST	78	x	30	16.25	--	1	2	2	--	--	--	--
39-1	R6-2L	--	--	--	x	--	--	--	--	--	--	1	--	--	MOUNT ON SIGNAL POLE
39-2	--	--	--	--	x	--	--	--	1	--	--	--	--	--	--
39-3	R6-3 (2M)	II	--	30	x	24	5.00	--	--	--	--	--	--	39-2	MOUNT ON SIGNAL POLE
39-4	R1-1F	--	--	--	x	--	--	--	--	--	--	1	--	--	MOUNT ON SIGNAL POLE
39-5	R10-50L	--	--	--	x	--	--	--	1	--	--	--	--	--	--
39-6	R5-1	--	--	--	x	--	--	--	--	--	--	1	--	--	MOUNT ON SIGNAL POLE
39-7	M1-94S (3)	II	CAPITOL DR	102	x	18	12.75	--	1	--	--	--	--	--	MOUNT ON MAST ARM
39-8	R1-1F	--	--	--	x	--	--	--	--	--	--	1	--	--	MOUNT ON SIGNAL POLE
39-9	--	--	--	--	x	--	--	--	1	--	--	--	--	--	--

TYPE II PERMANENT SIGNING

2025-03-73 STH 190

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	**637.2210** SIGNS TYPE II REFLC H [SF]	**637.2230** SIGNS TYPE II REFLC F [SF]	**638.2602** REMOVING SIGNS TYPE II [EA]	**638.3000** REMOVING SMALL SIGN SUPPORTS [EA]	**634.0618** POSTS WOOD 4"X6"X18' [EA]	**638.2102** MOVING SIGNS TYPE II [EA]	**638.4000** MOVING SMALL SIGN SUPPORTS [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
39-10	--	--	--	--	x	--	--	--	1	--	--	--	--	--	--
39-11	R10-50L	--	--	--	x	--	--	--	1	--	--	--	--	--	--
39-12	R10-50L	--	--	--	x	--	--	--	1	--	--	--	--	--	--
39-13	M1-94S (3)	II	CAPITOL DR	102	x	18	12.75	--	--	--	--	--	--	--	MOUNT ON MAST ARM
39-14	R10-50L	--	--	--	x	--	--	--	1	--	--	--	--	--	--
39-15	R6-3 (2M)	II	--	30	x	24	5.00	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
39-16	R7-1L	--	--	--	x	--	--	--	--	1	1	1	--	--	--
40-1	D1-65 (3)	II	N 128TH ST	78	x	30	16.25	--	1	2	2	--	--	--	--
40-2	D1-65 (3)	II	N 124TH ST	84	x	30	17.50	--	1	2	2	--	--	--	--
40-3	R1-1	--	--	--	x	--	--	--	--	1	1	1	--	--	--
41-1	M1-94S (3)	II	CAPITOL DR	102	x	18	12.75	--	1	--	--	--	--	--	MOUNT ON MAST ARM
41-2	R1-1F	--	--	--	x	--	--	--	--	--	--	1	--	--	MOUNT ON SIGNAL POLE
41-3	R6-2L	--	--	--	x	--	--	--	--	--	--	1	--	--	MOUNT ON SIGNAL POLE
41-4	M1-94S (3)	II	CAPITOL DR	102	x	18	12.75	--	1	--	--	--	--	--	MOUNT ON MAST ARM
41-5	R1-1F	--	--	--	x	--	--	--	--	--	--	1	--	--	MOUNT ON SIGNAL POLE
41-6	R1-1F	--	--	--	x	--	--	--	--	--	--	1	--	--	MOUNT ON SIGNAL POLE
41-7	--	--	--	--	x	--	--	--	1	--	--	--	--	--	--
41-8	--	--	--	--	x	--	--	--	1	--	--	--	--	--	--
41-9	--	--	--	--	x	--	--	--	1	--	--	--	--	--	--
41-10	R6-3 (2M)	II	--	30	x	24	5.00	--	--	--	--	--	--	41-6	MOUNT ON SIGNAL POLE
41-11	R6-3 (2M)	II	--	30	x	24	5.00	--	--	--	--	--	--	41-5	MOUNT ON SIGNAL POLE
41-12	R5-1 (3)	II	--	36	x	36	9.00	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
41-13	R6-3 (2M)	II	--	30	x	24	5.00	--	--	--	--	--	--	41-2	MOUNT ON SIGNAL POLE
41-14	R6-3 (2M)	II	--	30	x	24	5.00	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
41-15	R7-1L	--	--	--	x	--	--	--	--	1	--	1	--	--	MOUNT ON LIGHT POLE
			UNDISTRIBUTED				100.00	25.00	10	10	10	10	10		
							779.92	25.00	48	89	110	96	10		

SHEET 5 0F 5

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

3

TRAFFIC CONTROL

STAGE	DURATION DAYS	643.0300 TRAFFIC CONTROL DRUMS EACH	643.0300 DAY	* 643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH	* 643.0420 DAY	* 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	* 643.0705 DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH	643.0715 DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS EACH	643.0800 DAY	* 643.0900 TRAFFIC CONTROL SIGNS EACH	* 643.0900 DAY	643.1050 TRAFFIC CONTROL SIGNS PCMS EACH	643.1050 DAY	643.1070 TRAFFIC CONTROL CONES 42-INCH EACH	643.1070 DAY
STH 190																	
STAGE 1	89	1,086	96,654	105	9,345	210	18,690	63	5,607	2	178	199	17,711	2	14	736	65,504
STAGE 2	98	113	11,074	76	7,448	152	14,896	11	1,078	1	98	192	18,816	2	14	1,328	130,144
ADVANCED TRAFFICC CONTROL - OFF PEAK LANE CLOSURE	20	-	-	-	-	-	-	-	-	-	-	10	200	-	-	-	-
UNDISTRIBUTED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-
TOTALS	207	1,199	107,728	181	16,793	362	33,586	74	6,685	3	276	401	36,727	4	48	2,064	195,648

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

MARKING OTHER

STATION TO STATION	646.5020 ARROW EPOXY EACH	646.5120 WORD EPOXY EACH	646.6120 STOP LINE EPOXY 18-INCH LF	646.6220 YIELD LINE EPOXY 18-INCH EACH	646.7120 DIAGONAL EPOXY 12-INCH LF	646.7420 CROSSWALK EPOXY TRAVERSE LINE 6-INCH LF	646.8120 CURB EPOXY LF	646.8220 ISLAND NOSE EPOXY EACH
STH 190								
STA 291+00 - CALHOUN RD	59	35	529	32	239	2,421	781	18
CALHOUN RD - PILGRIM RD	17	10	302	8	30	604	986	13
PILGRIM RD - LILLY RD	11	1	148	6	31	446	850	10
LILLY RD - STA 107+08	32	17	461	19	173	1,471	786	15
TOTALS	119	63	1,440	65	473	4,942	3,403	56

TEMPORARY MARKING LINE

STAGE	643.3165 PAINT 6-INCH (WHITE) LF	* 643.3180 REMOVABLE TAPE 6-INCH LF	643.3265 PAINT 10-INCH (WHITE) LF	643.3280 REMOVABLE TAPE 10-INCH LF
STH 190				
STAGE 1	52,954	2,805	201	1,306
STAGE 2	-	84,048	-	15,129
TOTALS	52,954	91,961	201	16,435

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC CONTROL

STREET	643.5000 TRAFFIC CONTROL EACH
STH 190	
	1
TOTALS	1

TEMPORARY PEDESTRIAN FACILITIES

STAGE	* 643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	* 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	* 643.0900 TRAFFIC CONTROL SIGNS DAY	* 643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) LF	644.1410 SURFACE ASPHALT SF	644.1430 SURFACE PLATE SF	644.1601 CURB RAMP DAY	644.1605 DETECTABLE WARNING FIELD SF	644.1810 BARRICADE LF	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	520.2012 CULVERT PIPE TEMPORARY 12-INCH LF
STH 190											
STAGE 1	20	40	580	6,112	1,620	9,200	2,110	1,340	15,037	33	54
STAGE 2	0	0	180	-	-	-	-	20	451	-	-
TOTALS	20	40	760	6,112	1,620	9,200	2,110	1,360	15,488	33	54

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

3

MARKING LINE

STATION TO STATION	646.1020 EPOXY 4-INCH (YELLOW) LF	646.1040 GROOVED WET REF EPOXY 4-INCH (WHITE) LF	646.3040 GROOVED WET REF EPOXY 8-INCH (WHITE) LF	646.2025 GROOVED BLACK EPOXY 6-INCH LF	646.2040 GROOVED WET REF EPOXY 6-INCH (WHITE) LF	646.2020 EPOXY 6-INCH (YELLOW) LF	646.4040 GROOVED WET REF EPOXY 10-INCH (WHITE) LF
STH 190							
STA 291+00 - CALHOUN RD	543	1,267	1,032	6,661	18,449	12,723	13,721
CALHOUN RD - PILGRIM RD	-	-	-	5,351	15,057	10,662	5,360
PILGRIM RD - LILLY RD	-	-	-	5,082	15,620	10,505	4,416
LILLY RD - STA 107+08	-	-	-	6,663	21,401	13,674	9,875
TOTALS	543	1,267	1,032	23,757	70,527	47,564	33,372

3

TRAFFIC CONTROL

STAGE	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	CYCLES	SIGNS	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	CYCLES	SIGNS	643.4100 TRAFFIC CONTROL INTERIM LANE CLOSURE EACH
STH 190									
STAGE 1	-	-	2	1	2	19	1	19	30
STAGE 2	100	100	-	1	-	1	1	1	40
UNDISTRIBUTED	-	-	-	1	-	5	1	5	-
TOTALS	100	100			2			25	70

MARKING COLD WEATHER EPOXY

STREET	646.6464 MARKING COLD WEATHER EPOXY 4-INCH LF	646.6466 MARKING COLD WEATHER EPOXY 6-INCH LF	646.6468 MARKING COLD WEATHER EPOXY 8-INCH LF	646.6470 MARKING COLD WEATHER EPOXY 10-INCH LF
STH 190				
UNDISTRIBUTED	500	35,600	300	8,300
TOTALS	500	35,600	300	8,300

CONSTRUCTION STAKING

ITEM	QUANTITY	UNIT	DESCRIPTION
650.4000	41	EACH	CONSTRUCTION STAKING STORM SEWER
650.4500	100	LF	CONSTRUCTION STAKING SUBGRADE
650.5000	100	LF	CONSTRUCTION STAKING BASE
650.5500	7,075	LF	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER
650.6000	3	EACH	CONSTRUCTION STAKING PIPE CULVERTS
650.8000	46,010	LF	CONSTRUCTION STAKING RESURFACING REFERENCE
650.8501.01	1	EACH	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (ID 2025-03-73)
650.9000	128	EACH	CONSTRUCTION STAKING CURB RAMPS
650.9911.01	1	EACH	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (ID 2025-03-73)

MARKING REMOVAL

STATION TO STATION	646.9000 LINE 4-INCH LF	646.9100 LINE 8-INCH LF	646.9200 LINE WIDE LF
STH 190			
STA 291+00 - CALHOUN RD	3,089	408	159
CALHOUN RD - PILGRIM RD	2,621	-	-
PILGRIM RD - LILLY RD	2,541	-	-
LILLY RD - STA 107+08	3,145	-	-
TOTALS	11,396	408	159

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

SAWING

STATION TO STATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF
STH 190		
CATEGORY 0010		
STA 291+00 - CALHOUN RD	1,070	10,729
CALHOUN RD - PILGRIM RD	812	6,348
PILGRIM RD - LILLY RD	475	7,137
LILLY RD - STA 107+08	599	6,417
SUBTOTAL	2,956	30,631
CATEGORY 0040		
138TH STREET	251	431
SUBTOTAL	251	431
TOTALS	3,207	31,062

GRADING AND SHAPING CURB RAMPS

	SPV.0060.01 GRADING AND SHAPING CURB RAMPS EACH
PROJECT	
2025-03-73	128
TOTALS	128

CLEANING STORM SEWER STRUCTURES

STATION TO STATION	SPV.0060.02 CLEANING STORM SEWER STRUCTURES EACH
STH 190	
STA 291+00 - CALHOUN RD	61
CALHOUN RD - PILGRIM RD	33
PILGRIM RD - LILLY RD	57
LILLY RD - STA 107+08	77
TOTALS	228

UTILITY LINE OPENING (ULO)

	SPV.0060.03 UTILITY LINE OPENING (ULO) EACH
STH 190	
UNDISTRIBUTED	10
TOTALS	10

FIELD FACILITIES OFFICE SPACE

STREET	SPV.0060.04 FIELD FACILITIES OFFICE SPACE EACH
STH 190	1
TOTALS	1

TUCKPOINTING STORM SEWER STRUCTURES

STATION	SPV.0060.05 TUCKPOINTING STORM SEWER STRUCTURES EACH
STH 190	
340+86, 54' RT	1
343+61, 37' RT	1
388+99, 26' LT	1
405+21, 55' RT	1
416+54, 25' LT	1
423+00, 97' LT	1
433+02, 36' LT	1
444+19, 37' RT	1
467+36, 59' RT	1
469+26, 37' RT	1
476+01, 37' RT	1
484+83, 37' RT	1
504+85, 38' RT	1
101+77, 51' LT	1
105+01, 50' RT	1
TOTALS	15

SECTION CORNER MONUMENTS

STATION	SPV.0060.06 SECTION CORNER MONUMENTS EACH
STH 190	
299+84, 29' LT	1
354+46, 71' LT	1
407+17, 47' RT	1
432+31, 11' LT	1
458+70, 20' LT	1
99+02, 27' LT	1
TOTALS	6

CONCRETE JOINT AND CRACK CLEANING AND REPAIR

	SPV.0090.01 CONCRETE JOINT AND CRACK CLEANING AND REPAIR LF
STH 190	
UNDISTRIBUTED	1,002
TOTALS	1,002

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

3

DITCHING AND SHAPING

STATION TO STATION	SPV.0090.02 DITCHING AND SHAPING LF
STH 190	
STA 291+00 - CALHOUN RD	567
CALHOUN RD - PILGRIM RD	-
PILGRIM RD - LILLY RD	756
LILLY RD - STA 107+08	-
TOTALS	1,323

EXCAVATION, HAULING, AND DISPOSAL OF PAH AND ARSENIC CONTAMINATED SOIL

	SPV.0195.01 EXCAVATION, HAULING, AND DISPOSAL OF PAH AND ARSENIC CONTAMINATED SOIL TON
STH 190	
UNDISTRIBUTED	74
TOTALS	74

DEBRIS RACK GALVANIZED

CATEGORY 0040

STREET	SPV.0060.40 DEBRIS RACK GALVANIZED EACH
138TH STREET	1
TOTALS	1

3

DEWATERING/BYPASS PUMPING UNNAMED TRIBUTARY

CATEGORY 0040

STREET	SPV.0060.41 DEWATERING/BYPASS PUMPING UNNAMED TRIBUTARY EACH
138TH STREET	1
TOTALS	1

TUCKPOINTING JUNCTION CHAMBER

CATEGORY 0040

STREET	SPV.0060.43 TUCKPOINTING JUNCTION CHAMBER EACH
138TH STREET	1
TOTALS	1

SANITARY MANHOLES

STATION	CATEGORY 0050 SPV.0060.50 ADJUST SANITARY SEWER MANHOLE EACH	CATEGORY 0050 SPV.0060.51 SANITARY MANHOLE SEAL EACH
STH 190		
299+86, 166' LT	1	1
387+25, 96' LT	1	1
396+38, 36' RT	1	1
424+91, 119' LT	1	1
467+11, 46' RT	1	1
512+55, 37' RT	1	1
512+63, 71' LT	1	1
UNDISTRIBUTED	5	5
TOTALS	12	12

ADJUSTING WATER VALVE BOX

CATEGORY 0050

STATION	SPV.0060.52 ADJUST WATER VALVE BOX EACH
STH 190	
300+78, 34' RT	1
307+78, 62' RT	1
316.30, 63' RT	1
321+84, 66' RT	1
374+85, 119' LT	1
374+86, 73' RT	1
374+96, 65' RT	1
381+27, 64' RT	1
381+36, 62' RT	1
387+37, 130' LT	1
387+42, 66' RT	1
387+54, 39' RT	1
432+67, 58' RT	1
438+56, 48' RT	1
458+73, 133' LT	1
458+80, 129' LT	1
458+81, 121' LT	1
458+80, 95' RT	1
458+85, 95' RT	1
458+85, 86' RT	1
UNDISTRIBUTED	10
TOTALS	30

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

HMA MIXTURE USE TABLE

THE FOLLOWING ACCEPTANCE CRITERIA AREA APPLICABLE FOR THIS PROJECT:

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
BEGIN PROJECT TO 145TH STREET								
12 FOOT MAINLINE LANES - INTACT CONCRETE	291+00 to 442+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	4 MT 58-28 S	11,826	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT MAINLINE LANES - INTACT CONCRETE	291+00 to 442+00	LOWER LAYER	EXISTING CONCRETE PAVEMENT	3 MT 58-28 S	15,205	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
INTACT CONCRETE RAMPS/TURN LANES/MEDIAN OPENINGS/GUTTER PANS	291+00 to 442+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	4 MT 58-28 S	4497	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
INTACT CONCRETE RAMPS/TURN LANES/MEDIAN OPENINGS/GUTTER PANS	291+00 to 442+00	LOWER LAYER	EXISTING CONCRETE PAVEMENT	3 MT 58-28 S	9117	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
ASPHALT SIDEROADS/TURN LANES/MEDIAN OPENINGS	291+00 to 442+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	4 MT 58-28 S	1426	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
ASPHALT SIDEROADS/TURN LANES/MEDIAN OPENINGS	291+00 to 442+00	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	2890	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
8 FOOT SHOULDER (TYP.)	291+00 to 442+00	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	1239	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
OVERLAYED GUTTER PANS - ONE LAYER	291+00 to 442+00	UPPER LAYER	EXISTING CONCRETE PAVEMENT	4 MT 58-28 S	59	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
145TH STREET TO 128TH STREET								
12 FOOT MAINLINE LANES - RUBBLIZED CONCRETE	442+00 to 499+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	4 MT 58-28 S	4,528	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT MAINLINE LANES - RUBBLIZED CONCRETE	442+00 to 499+00	LOWER LAYER	EXISTING RUBBLIZED CONCRETE PAVEMENT	3 MT 58-28 S	5,822	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
RUBBLIZED CONCRETE TURN LANES/MEDIAN OPENINGS	442+00 to 499+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	4 MT 58-28 S	440	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
RUBBLIZED CONCRETE TURN LANES/MEDIAN OPENINGS	442+00 to 499+00	LOWER LAYER	EXISTING RUBBLIZED CONCRETE PAVEMENT	3 MT 58-28 S	864	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
INTACT CONCRETE TURN LANES/MEDIAN OPENINGS/GUTTER PANS	442+00 to 499+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	4 MT 58-28 S	288	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
INTACT CONCRETE TURN LANES/MEDIAN OPENINGS/GUTTER PANS	442+00 to 499+00	LOWER LAYER	EXISTING CONCRETE PAVEMENT	3 MT 58-28 S	566	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
ASPHALT SIDEROADS/TURN LANES/MEDIAN OPENINGS	442+00 to 499+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	4 MT 58-28 S	563	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
ASPHALT SIDEROADS/TURN LANES/MEDIAN OPENINGS	442+00 to 499+00	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	1104	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
OVERLAYED GUTTER PANS - ONE LAYER	442+00 to 499+00	UPPER LAYER	EXISTING CONCRETE PAVEMENT	4 MT 58-28 S	33	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
N. 138TH ST CULVERT REPLACEMENT	466+75 to 467+20, LT	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	4 MT 58-28 S	11	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
N. 138TH ST CULVERT REPLACEMENT	466+75 to 467+20, LT	LOWER LAYER	BASE AGGREGATE	3 MT 58-28 S	22	3 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
N. 138TH ST PARKING LOT	467+30 to 467+80, LT	PARKING LOT	BASE AGGREGATE	ASPHALITC SURFACE	40	4"	QMP AS PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION
128TH STREET TO END PROJECT								
12 FOOT MAINLINE LANES - CRACK AND SEATED CONCRETE	499+00 to 107+08	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	4 MT 58-28 S	1,654	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT MAINLINE LANES - CRACK AND SEATED CONCRETE	499+00 to 107+08	LOWER LAYER	EXISTING CRACK AND SEATED CONCRETE PAVEMENT	3 MT 58-28 S	2,127	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
CRACK AND SEATED CONCRETE TURN LANES/MEDIAN OPENINGS/GUTTER PANS	499+00 to 107+08	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	4 MT 58-28 S	886	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
CRACK AND SEATED CONCRETE TURN LANES/MEDIAN OPENINGS/GUTTER PANS	499+00 to 107+08	LOWER LAYER	EXISTING CRACK AND SEATED CONCRETE PAVEMENT	3 MT 58-28 S	1464	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
ASPHALT SIDEROADS/TURN LANES/MEDIAN OPENINGS	499+00 to 107+08	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	4 MT 58-28 S	169	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
ASPHALT SIDEROADS/TURN LANES/MEDIAN OPENINGS	499+00 to 107+08	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	279	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE

INTERSECTION OF
STH 190 & BROOKFIELD RD
ALL ITEMS CATEGORY 0020

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STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
1	CCTV CAMERA

STATE FURNISHED MATERIALS SUMMARY

(FOR INFORMATION ONLY)

SIGNAL BASE NO.	CCTV CAMERA EACH
SB21	1
TOTAL	1

REMOVING CONCRETE BASES

EXISTING BASE NO.	204.0195* REMOVING CONCRETE BASES EACH
SB7	1
SB13	1
SB16	1
TOTALS	3

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL REMOVALS

LOCATION	204.9060.S.01 REMOVING TRAFFIC SIGNALS EACH
STH 190 & BROOKFIELD RD	1
TOTALS	1

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CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0605* CONDUIT SPECIAL 2-INCH LF
PB1	PB2	299	-
PB2	PB3	176	-
PB6	PB8	174	67
PB16	PB14	216	-
PB14	PB15	196	-
PB21	PB22	172	28
PB1	SB21	16	-
PB7	SB7	6	-
PB13	SB13	11	-
PB19	SB16	6	-
	TOTALS	1,272	95

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PULL BOXES

PULL BOX NO.	STATION	LOCATION	653.0135* PULL BOXES STEEL 24X36-INCH EACH	653.0140* PULL BOXES STEEL 24X42-INCH EACH
PB2	296+18.3	43.6' RT	1	-
PB3	294+42.7	42.9' RT	1	-
PB7	299+31.0	91.8' LT	-	1
PB8	299+49.3	348.5' LT	-	1
PB14	303+02.8	100.8' LT	1	-
PB15	304+98.6	99.6' LT	1	-
PB22	300+21.3	294.7' RT	-	1
		TOTALS	4	3

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL CABLE

FROM	TO	655.0260* CABLE TRAFFIC SIGNAL 12-14 AWG LF	655.0270* CABLE TRAFFIC SIGNAL 15-14 AWG LF
CB1	SB7	325	-
SB7	HEAD 30	-	-
CB1	SB13	-	539
SB13	HEAD 6	-	-
SB13	HEAD 8	-	-
SB13	HEAD 32	-	-
SB13	HEAD 33	-	-
CB1	SB16	-	-
SB16	HEAD 36	-	-
	TOTALS	325	539

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE
CABLE WITHIN EXISTING SIGNAL POLE ASSEMBLY TO BE RESUED.
RELOCATED SIGNAL ASSEMBLIES MOVED CLOSER TO CB1 TO REUSE EXISTING SIGNAL CABLE.

ADJUSTING PULL BOXES

PULL BOX NO.	653.0900* ADJUSTING PULL BOXES EACH
PB19	1
TOTALS	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE BASES

BASE NO.	STATION	LOCATION	654.0101* CONCRETE BASES TYPE 1 EACH	654.0102* CONCRETE BASES TYPE 2 EACH
SB7	299+34.8	96.5' LT	1	-
SB13	300+57.6	108.7' LT	1	-
SB16	300+62.0	59.4' RT	1	-
SB21	299+09.7	70.5' RT	-	1
		TOTALS	3	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 1 OF 3

INTERSECTION OF
STH 190 & BROOKFIELD RD
ALL ITEMS CATEGORY 0020

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LOOP DETECTORS

LOOP NO.	HOME RUN PB	STATION	LOCATION	SIZE	NO. OF TURNS	SDD INSTALLATION REF	652.0800* CONDUIT LOOP DETECTOR LF	655.0700* LOOP DETECTOR LEAD IN CABLE LF	655.0800* LOOP DETECTOR WIRE LF
11	PB5	298+83.5	30.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	137	226
12	PB5	299+12.7	30.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	137	220
21	PB15	304+99.5	77.7' LT	6'X16'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	773	420
22	PB15	304+98.4	65.6' LT	6'X16'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	106	773	540
23	PB15	304+97.3	53.6' LT	6'X16'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	130	773	660
24	PB14	303+03.7	75.7' LT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	80	577	410
25	PB14	303+02.6	64.5' LT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	102	577	520
26	PB14	303+01.5	53.5' LT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	124	577	630
31	PB25	299+73.4	100.5' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	82	220
32	PB25	299+73.5	71.3' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	82	226
41	PB8	299+69.9	348.6' LT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	64	454	330
42	PB9	299+58.9	140.5' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	248	298
43	PB9	299+57.5	111.2' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	248	256
51	PB17	300+92.8	42.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	297	292
52	PB17	300+63.5	42.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	297	298
53	PB17	300+92.8	30.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	297	220
54	PB17	300+63.5	30.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	297	232
61	PB3	294+41.7	16.0' RT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	80	507	410
62	PB3	294+42.8	4.5' RT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	104	507	530
63	PB3	294+43.9	6.7' LT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	126	507	640
64	PB2	296+17.3	15.5' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	331	380
65	PB2	296+18.4	4.5' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	98	331	500
66	PB2	296+19.5	6.5' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	120	331	610
71	PB10	299+80.5	140.1' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	272	298
72	PB10	299+80.0	110.9' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	272	256
81	PB22	299+95.6	294.7' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	357	360
82	PB24	299+96.1	79.3' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	90	138	280
83	PB24	299+96.0	50.1' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	138	238
						TOTALS	2,500	10,317	10,500

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
** STATION AND LOCATION IS TO FRONT CENTER OF DETECTION LOOP
*** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

POLES AND ARMS

SIGNAL BASE NO.	657.0255* TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0310* POLES TYPE 3 EACH
SB21	1	1
TOTALS	1	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE
**SALVAGE AND REUSE EXISTING, SEE SIGNAL PLANS.

ELECTRICAL WIRE TRAFFIC SIGNALS

FROM	TO	655.0515* ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
SB6	SB7	101
SB7	SB8	137
	TOTALS	238

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SIGNAL MOUNTING HARDWARE

LOCATION	658.5070.01 SIGNAL MOUNTING HARDWARE EACH
STH 190 & BROOKFIELD RD	1
TOTALS	1

SHEET 2 OF 3

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MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION

LOCATION	SPV.0060.30 MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION EACH
STH 190 & BROOKFIELD RD	1
TOTALS	1

CAMERAS

LOCATION	677.0200* INSTALL CAMERA ASSEMBLY EACH
STH 190 & BROOKFIELD RD - SB21	1
TOTALS	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVE & SALVAGE VIDEO DETECTION EQUIPMENT

LOCATION	SPV.0060.20 REMOVE & SALVAGE VIDEO DETECTION EQUIPMENT EACH
STH 190 & BROOKFIELD RD	1
TOTALS	1

REMOVING, SALVAGING, & REINSTALLING TRAFFIC SIGNAL EQUIPMENT

LOCATION	SPV.0060.26 REMOVING, SALVAGING, & REINSTALLING TRAFFIC SIGNAL EQUIPMENT EACH
STH 190 & BROOKFIELD RD	1
TOTALS	1

INTERSECTION OF
STH 190 & IMPERIAL DR
ALL ITEMS CATEGORY 0020

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REMOVING PULL BOXES

PULL BOX NO.	653.0905* REMOVING PULL BOXES EACH
PB3	1
TOTALS	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING CONCRETE BASES

EXISTING BASE NO.	204.0195* REMOVING CONCRETE BASES EACH
SB1	1
SB11	1
SB16	1
SB17	1
TOTALS	4

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL REMOVALS

LOCATION	204.9060.S.02 REMOVING TRAFFIC SIGNALS EACH
STH 190 & IMPERIAL DR	1
TOTALS	1

PULL BOXES

PULL BOX NO.	STATION	LOCATION	653.0135* PULL BOXES STEEL 24X36-INCH EACH	653.0140* PULL BOXES STEEL 24X42-INCH EACH
PB2	319+00.6	37.5'RT	1	-
PB3	317+41.2	37.5'RT	1	-
PB11	324+85.5	104.8'LT	-	1
PB12	326+44.3	102.3'LT	1	-
		TOTALS	3	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0605* CONDUIT SPECIAL 2-INCH LF
PB1	PB2	217	-
PB2	PB3	159	-
PB10	PB11	186	34
PB11	PB12	160	-
PB1	SB1	32	-
PB7	SB20	31	-
PB10	SB11	27	-
PB16	SB16	28	-
PB16	SB17	7	-
PB16	SB21	17	-
PB18	SB19	13	-
	TOTALS	877	34

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE BASES

BASE NO.	STATION	LOCATION	654.0101* CONCRETE BASES TYPE 1 EACH
SB1	321+47.0	45.8'RT	1
SB11	322+40.4	104.3'LT	1
SB16	322+40.2	44.6'RT	1
SB17	322+14.5	61.4'RT	1
SB19	321+62.1	53.7'RT	1
SB20	321+41.1	119.4'LT	1
SB21	322+33.4	52.3'RT	1
		TOTALS	7

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 1 OF 3

INTERSECTION OF
STH 190 & IMPERIAL DR
ALL ITEMS CATEGORY 0020

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LOOP DETECTORS

LOOP NO.	HOME RUN PB	STATION	LOCATION	SIZE	NO. OF TURNS	SDD INSTALLATION REF	652.0800* CONDUIT LOOP DETECTOR LF	655.0700* LOOP DETECTOR LEAD IN CABLE LF	655.0800* LOOP DETECTOR WIRE LF
11	PB4	321+09.1	29.7' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	99	226
12	PB4	321+38.3	29.7' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	99	214
21	PB12	326+45.3	78.0' LT	6'X16'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	86	742	440
22	PB12	326+44.4	66.0' LT	6'X16'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	110	742	560
23	PB12	326+43.4	54.5' LT	6'X16'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	134	742	680
24	PB11	324+86.5	75.5' LT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	88	582	450
25	PB11	324+85.5	64.5' LT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	110	582	560
26	PB11	324+84.4	53.5' LT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	132	582	670
41	PB8	321+47.3	296.6' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	56	405	290
42	PB7	321+79.7	148.5' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	86	249	268
43	PB7	321+82.2	120.4' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	84	249	262
51	PB13	322+76.6	30.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	297	244
52	PB13	322+47.5	30.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	297	220
61	PB3	317+39.6	16.0' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	62	407	320
62	PB3	317+40.5	4.5' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	84	407	430
63	PB3	317+41.4	6.5' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	106	407	540
64	PB2	318+99.0	16.0' RT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	62	247	258
65	PB2	318+99.9	4.5' RT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	84	247	346
66	PB2	319+00.7	6.5' LT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	106	247	434
81	PB17	321+99.9	83.2' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	86	146	268
82	PB17	322+00.2	54.9' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	146	244
						TOTALS	1,842	7,921	7,924

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
** STATION AND LOCATION IS TO FRONT CENTER OF DETECTION LOOP
*** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

ELECTRICAL WIRE TRAFFIC SIGNALS

FROM	TO	655.0515* ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
SB6	SB20	155
SB20	SB7	77
SB15	SB16	170
SB16	SB21	69
SB21	SB17	48
SB18	SB19	47
SB19	CB1	126
	TOTALS	692

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

POLES AND ARMS

SIGNAL BASE NO.	657.0100* PEDESTAL BASES EACH	657.0405* TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FOOT EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FOOT EACH	658.0500* PEDESTRIAN PUSH BUTTONS EACH
SB19	1	1	-	1
SB20	1	-	1	1
SB21	1	-	1	1
TOTALS	3	1	2	3

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SIGNAL MOUNTING HARDWARE

LOCATION	658.5070.02 SIGNAL MOUNTING HARDWARE EACH
STH 190 & IMPERIAL DR	1
TOTALS	1

SHEET 2 OF 3

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET: 499	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

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TRAFFIC SIGNAL CABLE

FROM	TO	655.0230* CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0240* CABLE TRAFFIC SIGNAL 7-14 AWG LF	655.0260* CABLE TRAFFIC SIGNAL 12-14 AWG LF	655.0270* CABLE TRAFFIC SIGNAL 15-14 AWG LF
CB1	SB1	-	-	74	-
SB1	HEAD 1	-	-	-	-
SB1	HEAD 12	-	-	-	-
SB1	HEAD 20	-	-	-	-
CB1	SB11	-	-	-	498
SB11	HEAD 6	-	-	-	-
SB11	HEAD 8	-	-	-	-
SB11	HEAD 26	-	-	-	-
CB1	SB16	-	209	-	-
SB16	HEAD 29	-	-	-	-
CB1	SB17	-	-	-	-
SB17	HEAD 14	19	-	-	-
SB17	HEAD 18	19	-	-	-
CB1	SB19	-	126	-	-
CB1	SB21	-	198	-	-
SB21	HEAD 30	18	-	-	-
CB1	SB20	-	355	-	-
SB20	HEAD 24	18	-	-	-
	TOTALS	74	888	74	498

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE
CABLE WITHIN EXISTING SIGNAL POLE ASSEMBLY TO BE RESUED.
RELOCATED SIGNAL ASSEMBLIES MOVED CLOSER TO CB1 TO REUSE EXISTING SIGNAL CABLE.

REMOVE & SALVAGE VIDEO DETECTION EQUIPMENT

SPV.0060.21
REMOVE & SALVAGE VIDEO DETECTION EQUIPMENT

LOCATION	EACH
STH 190 & IMPERIAL DR	1
TOTALS	1

MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION

SPV.0060.31
MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION

LOCATION	EACH
STH 190 & IMPERIAL DR	1
TOTALS	1

REMOVING, SALVAGING, & REINSTALLING TRAFFIC SIGNAL EQUIPMENT

SPV.0060.27
REMOVING, SALVAGING, & REINSTALLING TRAFFIC SIGNAL EQUIPMENT

LOCATION	EACH
STH 190 & IMPERIAL DR	1
TOTALS	1

SHEET 3 OF 3

INTERSECTION OF
STH 190 & CALHOUN RD
ALL ITEMS CATEGORY 0020

STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
1	CCTV CAMERA

STATE FURNISHED MATERIALS SUMMARY

(FOR INFORMATION ONLY)

SIGNAL BASE NO.	CCTV CAMERA EACH
SB22	1
TOTAL	1

CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0605* CONDUIT SPECIAL 2-INCH LF
PB1	PB2	194	-
PB2	PB3	161	-
PB7	PB8	65	158
PB12	PB13	227	-
PB13	PB14	147	-
PB19	PB20	223	-
PB1	SB21	32	-
	TOTALS	1,049	158

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL REMOVALS

LOCATION	204.9060.S.03 REMOVING TRAFFIC SIGNALS EACH
STH 190 & CALHOUN RD	1
TOTALS	1

PULL BOXES

PULL BOX NO.	STATION	LOCATION	653.0135* PULL BOXES STEEL 24X36-INCH EACH
PB2	351+39.8	53.0' RT	1
PB3	349+79.5	49.2' RT	1
PB8	353+87.2	367.9' LT	1
PB13	357+70.0	112.5' LT	1
PB14	359+17.3	109.3' LT	1
PB20	355+11.3	312.1' RT	1
		TOTALS	6

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE BASES

BASE NO.	STATION	LOCATION	654.0102* CONCRETE BASES TYPE 2 EACH
SB22	353+41.0	95.4' RT	1
		TOTALS	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

POLES AND ARMS

SIGNAL BASE NO.	657.0255* TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0310* POLES TYPE 3 EACH
SB22	1	1
TOTALS	1	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 1 OF 3

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET: 501	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

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LOOP DETECTORS

LOOP NO.	HOME RUN PB	STATION	LOCATION	SIZE	NO. OF TURNS	SDD INSTALLATION REF	652.0800* CONDUIT LOOP DETECTOR LF	655.0700* LOOP DETECTOR LEAD IN CABLE LF	655.0800* LOOP DETECTOR WIRE LF
11	PB4	353+55.5	25.2' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	229	298
12	PB4	353+83.2	27.2' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	229	232
13	PB5	353+20.9	33.7' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	172	220
14	PB5	353+50.0	35.9' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	66	172	208
21	PB14	359+18.1	87.1' LT	6'X18'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	86	775	440
22	PB14	359+17.0	76.6' LT	6'X18'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	108	775	550
23	PB14	359+15.9	65.6' LT	6'X18'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	130	775	660
24	PB14	359+14.9	54.1' LT	6'X18'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	152	775	770
25	PB13	357+53.9	87.0' LT	6'X14'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	628	420
26	PB13	357+54.8	76.5' LT	6'X14'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	102	628	520
27	PB13	357+55.8	65.5' LT	6'X14'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	124	628	630
28	PB13	357+56.8	54.0' LT	6'X14'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	146	628	740
31	PB22	354+60.2	83.9' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	102	88	316
32	PB22	354+59.8	59.0' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	104	88	322
33	PB22	354+48.4	84.3' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	88	238
34	PB22	354+47.9	59.3' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	84	88	262
41	PB8	354+10.2	366.8' LT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	512	360
42	PB8	354+22.6	365.5' LT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	512	480
43	PB9	354+10.3	134.8' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	102	329	316
44	PB9	354+10.9	109.8' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	329	244
45	PB9	354+22.4	135.1' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	122	329	376
46	PB9	354+23.0	110.2' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	102	329	316
51	PB16	355+34.5	36.7' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	88	326	274
52	PB16	355+07.7	31.2' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	326	238
53	PB17	355+54.6	26.5' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	289	256
54	PB17	355+28.7	24.1' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	289	232
61	PB3	349+78.5	26.5' RT	6'X7'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	66	420	340
62	PB3	349+79.5	15.5' RT	6'X7'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	88	420	450
63	PB3	349+80.5	4.5' RT	6'X7'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	110	420	560
64	PB3	349+81.4	6.5' LT	6'X7'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	132	420	670
65	PB2	351+37.7	26.5' RT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	258	298
66	PB2	351+38.7	15.5' RT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	258	386
67	PB2	351+39.6	4.5' RT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	116	258	474
68	PB2	351+40.5	6.5' LT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	138	258	562
71	PB10	354+34.3	146.6' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	92	372	286
72	PB10	354+34.9	121.6' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	372	292
73	PB10	354+46.4	147.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	372	214
74	PB10	354+47.0	122.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	372	220
81	PB20	354+84.5	311.3' RT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	396	400
82	PB20	354+72.8	312.0' RT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	102	396	520
83	PB21	354+84.0	83.3' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	98	208	304
84	PB21	354+83.6	58.3' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	92	208	286
85	PB21	354+72.1	83.6' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	120	208	370
86	PB21	354+71.7	58.7' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	116	208	358
						TOTALS	4,236	16,160	16,908

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
** STATION AND LOCATION IS TO FRONT CENTER OF DETECTION LOOP
*** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

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MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION

LOCATION	SPV.0060.32 MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION EACH
STH 190 & CALHOUN RD	1
TOTALS	1

CAMERAS

LOCATION	677.0200* INSTALL CAMERA ASSEMBLY EACH
STH 190 & CALHOUN RD - SB22	1
TOTALS	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVE & SALVAGE VIDEO DETECTION EQUIPMENT

LOCATION	SPV.0060.22 REMOVE & SALVAGE VIDEO DETECTION EQUIPMENT EACH
STH 190 & CALHOUN RD	1
TOTALS	1

INTERSECTION OF
STH 190 & LILLY RD
ALL ITEMS CATEGORY 0020

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STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
1	CCTV CAMERA

STATE FURNISHED MATERIALS SUMMARY

(FOR INFORMATION ONLY)

SIGNAL BASE NO.	CCTV CAMERA EACH
SB1	1
TOTAL	1

TRAFFIC SIGNAL REMOVALS

LOCATION	204.9060.S.04 REMOVING TRAFFIC SIGNALS EACH
STH 190 & LILLY RD	1
TOTALS	1

ADJUSTING PULL BOXES

PULL BOX NO.	653.0900* ADJUSTING PULL BOXES EACH
PB1	1
TOTALS	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONDUIT

FROM	TO	652.0605* CONDUIT SPECIAL 2-INCH LF
PB1	PB2	196
PB5	PB6	178
PB11	PB12	192
PB15	PB16	192
PB16	PB17	134
	TOTALS	892

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PULL BOXES

PULL BOX NO.	STATION	LOCATION	653.0140* PULL BOXES STEEL 24X42-INCH EACH
PB2	458+34.1	325.1' LT	1
PB6	462+90.7	72.3' LT	1
PB12	459+11.7	291.6' RT	1
PB16	456+12.2	41.4' RT	1
PB17	454+77.3	41.1' RT	1
		TOTALS	5

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 1 OF 3

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LOOP DETECTORS

LOOP NO.	HOME RUN PB	STATION	LOCATION	SIZE	NO. OF TURNS	SDD INSTALLATION REF	652.0800* CONDUIT LOOP DETECTOR LF	655.0700* LOOP DETECTOR LEAD IN CABLE LF	655.0800* LOOP DETECTOR WIRE LF
11	PB19	457+85.0	12.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	84	129	262
12	PB19	458+14.1	12.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	129	214
21	PB6	462+82.4	55.5' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	60	510	310
22	PB6	462+83.4	44.5' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	510	420
23	PB6	462+84.4	33.8' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	104	510	530
24	PB5	461+15.0	55.5' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	40	331	210
25	PB5	461+14.0	44.5' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	62	331	320
26	PB5	461+13.0	33.8' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	84	331	430
31	PB11	458+72.7	90.4' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	124	346	382
32	PB13	458+72.2	61.7' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	122	392	376
41	PB2	458+58.5	325.0' LT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	223	290
42	PB1	458+59.2	103.6' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	98	27	304
43	PB23	458+59.3	77.5' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	52	244
51	PB8	459+55.2	16.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	235	292
52	PB8	459+26.0	16.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	235	244
61	PB17	454+76.4	27.5' RT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	58	536	300
62	PB17	454+77.4	16.5' RT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	80	536	410
63	PB17	454+78.5	5.5' RT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	102	536	520
64	PB16	456+21.6	27.5' RT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	50	402	260
65	PB16	456+20.6	16.5' RT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	402	370
66	PB16	456+19.6	5.5' RT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	402	480
71	PB1	458+70.0	117.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	122	27	376
72	PB23	458+70.2	90.9' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	114	52	352
81	PB12	458+88.5	295.4' RT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	538	360
82	PB11	458+83.5	77.9' T	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	98	346	304
83	PB13	458+83.0	48.6' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	88	392	274
						TOTALS	2,196	8,460	8,834

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
** STATION AND LOCATION IS TO FRONT CENTER OF DETECTION LOOP
*** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

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MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION

LOCATION	SPV.0060.33 MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION EACH
STH 190 & LILLY RD	1
TOTALS	1

CAMERAS

LOCATION	677.0200* INSTALL CAMERA ASSEMBLY EACH
STH 190 & LILLY RD - SB1	1
TOTALS	1

REMOVE & SALVAGE VIDEO DETECTION EQUIPMENT

LOCATION	SPV.0060.23 REMOVE & SALVAGE VIDEO DETECTION EQUIPMENT EACH
STH 190 & LILLY RD	1
TOTALS	1

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TRAFFIC SIGNAL REMOVALS

LOCATION	204.9060.S.05 REMOVING TRAFFIC SIGNALS EACH
STH 190 & 128TH ST	1
TOTALS	1

REMOVING PULL BOXES

PULL BOX NO.	653.0905* REMOVING PULL BOXES EACH
PB15	1
TOTALS	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ADJUSTING PULL BOXES

PULL BOX NO.	653.0900* ADJUSTING PULL BOXES EACH
PB4	1
TOTALS	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING CONCRETE BASES

EXISTING BASE NO.	204.0195* REMOVING CONCRETE BASES EACH
SB1	1
SB3	1
SB4	1
TOTALS	3

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0605* CONDUIT SPECIAL 2-INCH LF
PB4	PB5	-	175
PB5	PB6	-	163
EXT. 1	PB15	27	-
PB1	SB1	6	-
PB3	SB3	13	-
PB4	SB4	-	46
PB10	SB15	17	-
	TOTALS	63	384

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PULL BOXES

PULL BOX NO.	STATION	LOCATION	653.0135* PULL BOXES STEEL 24X36-INCH EACH	653.0140* PULL BOXES STEEL 24X42-INCH EACH
PB5	502+09.3	70.9' LT	-	1
PB6	503+72.1	70.8' LT	-	1
PB15	495+56.7	42.6' RT	1	-
		TOTALS	1	2

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE BASES

BASE NO.	STATION	LOCATION	654.0101* CONCRETE BASES TYPE 1 EACH
SB1	499+24.1	81.6' LT	1
SB3	499+73.9	80.5' LT	1
SB4	499+89.8	69.2' LT	1
SB15	499+83.1	44.3' RT	1
		TOTALS	4

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 1 OF 3

INTERSECTION OF
STH 190 & 128TH ST
ALL ITEMS CATEGORY 0020

3

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LOOP DETECTORS

LOOP NO.	HOME RUN PB	STATION	LOCATION	SIZE	NO. OF TURNS	SDD INSTALLATION REF	652.0800* CONDUIT LOOP DETECTOR LF	655.0700* LOOP DETECTOR LEAD IN CABLE LF	655.0800* LOOP DETECTOR WIRE LF
11	PB16	498+54.8	12.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	64	158	202
12	PB16	498+84.0	12.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	158	226
21	PB6	503+61.2	55.5' LT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	56	496	290
22	PB6	503+62.2	44.5' LT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	496	400
23	PB6	503+63.2	33.8' LT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	100	496	510
24	PB5	502+10.3	55.5' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	48	346	250
25	PB5	502+09.3	44.5' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	346	360
26	PB5	502+08.3	33.8' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	92	346	470
31	PB11	499+55.0	73.0' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	84	324	262
32	PB11	499+53.7	45.3' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	86	324	268
41	PB2	499+32.1	106.1' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	35	232
42	PB2	499+33.2	77.6' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	35	232
51	PB7	500+11.4	16.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	216	220
52	PB7	500+40.6	16.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	64	216	202
61	PB15	495+55.6	27.5' RT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	56	502	290
62	PB15	495+56.6	16.5' RT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	502	400
63	PB15	495+57.6	5.5' RT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	100	502	510
64	PB14	496+94.3	27.5' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	46	371	240
65	PB14	496+93.2	16.5' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	371	350
66	PB14	496+92.2	5.5' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	90	371	460
71	PB2	499+42.5	106.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	35	298
72	PB2	499+43.6	77.6' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	35	298
81	PB11	499+63.9	71.4' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	324	214
82	PB11	499+63.4	45.3' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	66	324	208
						TOTALS	1,796	7,329	7,392

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
** STATION AND LOCATION IS TO FRONT CENTER OF DETECTION LOOP
*** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

POLES AND ARMS

SIGNAL BASE NO.	657.0100 PEDESTAL BASES EACH	657.0405 TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FOOT EACH
SB15	1	1
TOTALS	1	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL WIRE TRAFFIC SIGNALS

FROM	TO	655.0515* ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
SB6	SB15	174
SB15	SB8	61
	TOTALS	235

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 2 OF 3

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET: 508	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

INTERSECTION OF
STH 190 & 128TH ST
ALL ITEMS CATEGORY 0020

3

3

TRAFFIC SIGNAL CABLE

FROM	TO	655.0240* CABLE TRAFFIC SIGNAL 7-14 AWG LF
CB1	SB1	-
SB1	HEAD 18	-
SB1	HEAD 20	-
SB1	HEAD 25	-
CB1	SB3	-
SB3	HEAD 26	-
CB1	SB4	-
SB4	HEAD 6	-
SB4	HEAD 8	-
SB4	HEAD 27	-
CB1	SB15	459
	TOTALS	459

*ADDITIONAL QUANTITIES SHOWN ELSEWHER
CABLE WITHIN EXISTING SIGNAL POLE ASSEME
RELOCATED SIGNAL ASSEMBLIES MOVED
CLOSER TO CB1 TO REUSE EXISTING SIGNAL
SHOWN FOR INFORMATION ONLY.

SIGNAL MOUNTING HARDWARE

LOCATION	658.5070.03 SIGNAL MOUNTING HARDWARE EACH
STH 190 & 128TH ST	1
TOTALS	1

MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION

LOCATION	SPV.0060.34 MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION EACH
STH 190 & 128TH ST	1
TOTALS	1

REMOVE & SALVAGE VIDEO DETECTION EQUIPMENT

LOCATION	SPV.0060.24 REMOVE & SALVAGE VIDEO DETECTION EQUIPMENT EACH
STH 190 & 128TH ST	1
TOTALS	1

REMOVING, SALVAGING, & REINSTALLING TRAFFIC SIGNAL EQUIPMENT

LOCATION	SPV.0060.28 REMOVING, SALVAGING, & REINSTALLING TRAFFIC SIGNAL EQUIPMENT EACH
STH 190 & 128TH ST	1
TOTALS	1

SHEET 3 OF 3

INTERSECTION OF
STH 190 & 124TH ST
ALL ITEMS CATEGORY 0020

3

STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
1	CCTV CAMERA

STATE FURNISHED MATERIALS SUMMARY

(FOR INFORMATION ONLY)

SIGNAL BASE NO.	CCTV CAMERA EACH
SB23	1
TOTAL	1

REMOVING CONCRETE BASES

EXISTING BASE NO.	204.0195* REMOVING CONCRETE BASES EACH
SB7	1
SB16	1
SB17	1
TOTALS	3

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING PULL BOXES

PULL BOX NO.	653.0905* REMOVING PULL BOXES EACH
PB2	1
PB3	1
PB16	1
TOTALS	3

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL REMOVALS

LOCATION	204.9060.S.06 REMOVING TRAFFIC SIGNALS EACH
STH 190 & 124TH ST	1
TOTALS	1

3

CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF
EXT. 2	PB2	16
EXT. 3	PB3	35
EXT. 1	PB16	45
		-
PB14	SB23	30
PB21	SB16	15
EXT. 4	SB17	3
	TOTALS	144

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SB7 TO USE EXISTING CONDUIT

CONCRETE BASES

BASE NO.	STATION	LOCATION	654.0101* CONCRETE BASES TYPE 1 EACH	654.0102* CONCRETE BASES TYPE 2 EACH
SB7	99+55.4	67.9' RT	1	-
SB16	512+46.8	94.2' LT	1	-
SB17	512+94.6	91.9' LT	1	-
SB23	511+83.6	61.9' RT	-	1
		TOTALS	3	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PULL BOXES

PULL BOX NO.	STATION	LOCATION	653.0135* PULL BOXES STEEL 24X36-INCH EACH
PB2	102+15.9	87.6' LT	1
PB3	103+62.5	72.9' LT	1
PB16	508+30.8	42.4' RT	1
		TOTALS	3

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 1 OF 4

3

3

LOOP DETECTORS

LOOP NO.	HOME RUN PB	STATION	LOCATION	SIZE	NO. OF TURNS	SDD INSTALLATION REF	652.0800* CONDUIT LOOP DETECTOR LF	655.0700* LOOP DETECTOR LEAD IN CABLE LF	655.0800* LOOP DETECTOR WIRE LF
11	PB18	511+89.9	5.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	104	313	322
12	PB18	512+19.2	5.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	90	313	280
21	PB3	103+63.6	42.5' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	379	400
22	PB3	103+62.6	31.0' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	102	379	520
23	PB3	103+61.6	20.0' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	124	379	630
24	PB2	102+16.7	42.5' LT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	104	231	426
25	PB2	102+15.7	31.0' LT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	128	231	522
26	PB2	102+14.7	20.0' LT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	150	231	610
31	PB11	99+07.0	104.8' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	330	226
32	PB11	99+08.7	77.9' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	66	330	208
33	PB12	512+93.8	90.3' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	361	238
34	PB12	512+95.5	63.4' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	361	214
41	PB23	512+85.8	329.5' LT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	431	390
42	PB23	512+96.6	327.5' LT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	98	431	500
43	PB22	512+62.8	122.3' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	221	244
44	PB22	512+61.1	95.4' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	221	244
45	PB22	512+73.2	121.7' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	98	221	304
46	PB22	512+71.6	94.8' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	98	221	304
47	PB22	512+84.2	121.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	120	221	370
48	PB22	512+82.6	94.1' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	120	221	370
51	PB5	100+31.2	9.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	88	148	274
52	PB5	100+02.0	9.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	84	148	262
53	PB5	100+31.2	1.0' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	148	220
54	PB5	100+02.0	1.0' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	66	148	208
61	PB16	508+49.8	27.5' RT	6'X18'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	795	370
62	PB16	508+48.9	16.5' RT	6'X18'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	795	480
63	PB16	508+48.0	5.5' RT	6'X18'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	116	795	590
64	PB15	510+16.1	27.5' RT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	54	607	280
65	PB15	510+17.2	16.5' RT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	607	390
66	PB15	510+18.3	5.5' RT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	98	607	500
71	PB25	99+09.5	105.1' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	173	220
72	PB25	99+07.9	78.2' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	173	220
73	PB25	99+19.5	104.6' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	88	173	274
74	PB25	99+17.9	77.7' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	88	173	274
81	PB9	99+23.4	318.6' RT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	492	400
82	PB9	99+12.6	316.3' RT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	102	492	520
83	PB10	99+39.5	97.7' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	300	292
84	PB10	99+41.2	70.8' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	86	300	268
85	PB11	99+28.5	97.0' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	330	214
86	PB11	99+30.2	70.1' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	330	232
						TOTALS	3,564	13,760	13,810

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
** STATION AND LOCATION IS TO FRONT CENTER OF DETECTION LOOP
*** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

INTERSECTION OF
STH 190 & 124TH ST
ALL ITEMS CATEGORY 0020

3

3

POLES AND ARMS

SIGNAL BASE NO.	657.0255* TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0310* POLES TYPE 3 EACH
SB23	1	1
TOTALS	1	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL WIRE TRAFFIC SIGNALS

FROM	TO	655.0515* ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
SB11	SB23	65
SB23	SB12	106
	TOTALS	171

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL CABLE

FROM	TO	655.0230* CABLE TRAFFIC SIGNAL 5-14 AWG LF
CB1	SB7	-
SB7	HEAD 20	-
SB7	HEAD 46	-
CB1	SB16	302
SB16	HEAD 28	-
SB16	HEAD 38	-
CB1	SB17	235
SB17	HEAD 39	-
SB17	HEAD 40	-
	TOTALS	537

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE
CABLE WITHIN EXISTING SIGNAL POLE ASSEMBLY TO BE RESUED.
RELOCATED SIGNAL ASSEMBLIES MOVED CLOSER TO CB1 TO REUSE EXISTING SIGNAL CABLE.

SIGNAL MOUNTING HARDWARE

LOCATION	658.5070.04 SIGNAL MOUNTING HARDWARE EACH
STH 190 & 124TH ST	1
TOTALS	1

SHEET 3 OF 4

3

3

CAMERAS

677.0200*
INSTALL CAMERA ASSEMBLY

LOCATION	EACH
STH 190 & 124TH ST - SB23	1
TOTALS	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVE & SALVAGE VIDEO DETECTION EQUIPMENT

SPV.0060.25
REMOVE & SALVAGE VIDEO DETECTION EQUIPMENT

LOCATION	EACH
STH 190 & 124TH ST	1
TOTALS	1

REMOVING, SALVAGING, & REINSTALLING TRAFFIC SIGNAL EQUIPMENT

SPV.0060.29
REMOVING, SALVAGING, & REINSTALLING TRAFFIC SIGNAL EQUIPMENT

LOCATION	EACH
STH 190 & 124TH ST	1
TOTALS	1

MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION

SPV.0060.35
MODIFY EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION

LOCATION	EACH
STH 190 & 124TH ST	1
TOTALS	1

NOTES:
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COORDINATES AND BEARINGS ON THIS EXHIBIT ARE REFERENCED TO BROOKFIELD GPS. LISBON SOUTH GPS. WAUWATOSA WEST GPS, AND PEWAUKEE NORTH GPS POINTS AND ORIENTED TO WISCONSIN COUNTY COORDINATE SYSTEM, WAUKESHA COUNTY ZONE, NAD 83 (1991) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS EXHIBIT

R/W PROJECT NUMBER: 2025-03-23 | SHEET NUMBER: 1 of 24

R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 WAUKESHA COUNTY

PART OF THE NW 1/4 OF THE NW 1/4 OF SECTION 9 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

4

STH 190

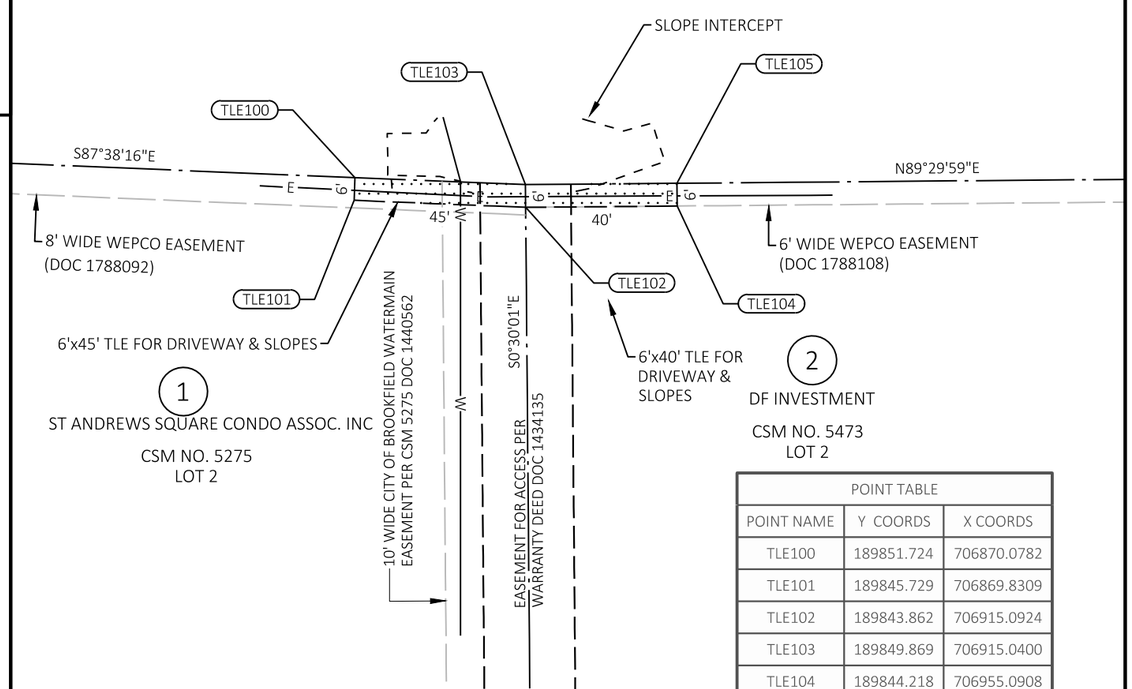
SEC. 4 T7N R20E
SW-SW

S89°44'57"E SECTION LINE

SEC. 9 T7N R20E
NW-NW

308 REFERENCE LINE

N89°29'59"E



POINT TABLE		
POINT NAME	Y COORDS	X COORDS
TLE100	189851.724	706870.0782
TLE101	189845.729	706869.8309
TLE102	189843.862	706915.0924
TLE103	189849.869	706915.0400
TLE104	189844.218	706955.0908
TLE105	189850.218	706955.0385

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
1	ST ANDREWS SQUARE CONDO ASSOC. INC	TLE	271
2	DF INVESTMENT	TLE	240

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
100	WE Energies - Electric	ROR	
110	City of Brookfield - Water	ROR	

(100) **WE ENERGIES - ELECTRIC**
PARCEL 1 - DOC. 1788092
PARCEL 2 - DOC. 1788108

(110) **CITY OF BROOKFIELD - WATER**
PARCEL 1 - DOC. 144562

REVISED 02/28/2023
REVISED 04/11/2023
REVISED 05/30/2023
REVISED 12/12/2023

GN

SCALE, FEET
0 20 40

THIS MAP IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
REGION AND CITY REGION OFFICE

SIGNATURE: Robert L Duffield DATE: 04/11/2022

PRINT NAME:

FILE NAME : 2025-03-23_EXHIBITS.DWG PLOT DATE : 12/15/2023 1:49 PM R/W PROJECT: R/W PROJ NO

NOTES:
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R/W PROJECT NUMBER: 2025-03-23 | SHEET NUMBER: 2 of 24

R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 WAUKESHA COUNTY

PART OF THE NE 1/4 OF THE NW 1/4 OF SECTION 9 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

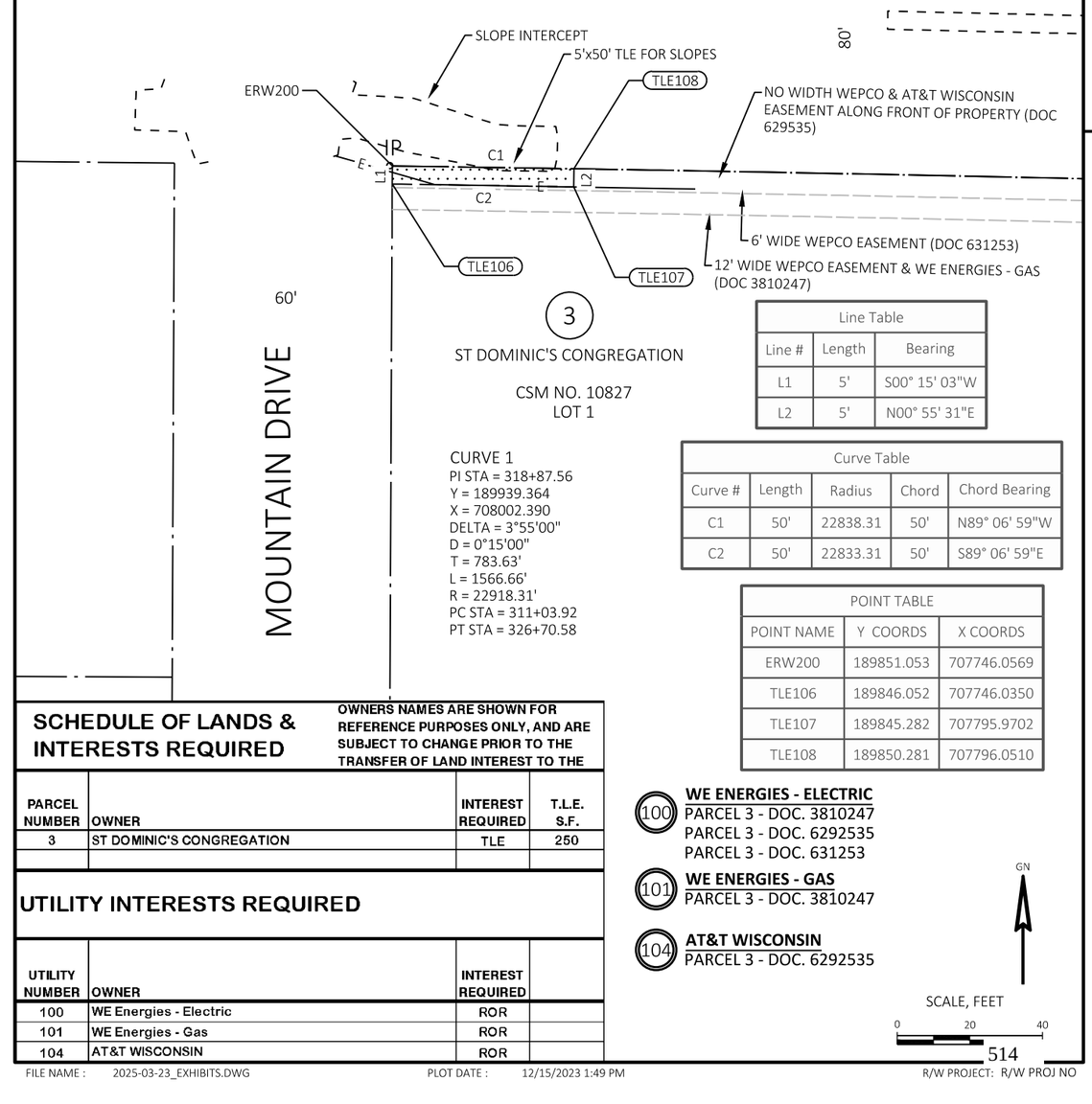
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STH 190

SECTION LINE S89°44'57"E

316 CURVE 1 REFERENCE LINE 318

NE-NW
SEC. 9 T7N R20E



Line Table		
Line #	Length	Bearing
L1	5'	S00° 15' 03"W
L2	5'	N00° 55' 31"E

Curve Table				
Curve #	Length	Radius	Chord	Chord Bearing
C1	50'	22838.31	50'	N89° 06' 59"W
C2	50'	22833.31	50'	S89° 06' 59"E

CURVE 1
PI STA = 318+87.56
Y = 189939.364
X = 708002.390
DELTA = 3°55'00"
D = 0°15'00"
T = 783.63'
L = 1566.66'
R = 22918.31'
PC STA = 311+03.92
PT STA = 326+70.58

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
ERW200	189851.053	707746.0569
TLE106	189846.052	707746.0350
TLE107	189845.282	707795.9702
TLE108	189850.281	707796.0510

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
3	ST DOMINIC'S CONGREGATION	TLE	250

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
100	WE Energies - Electric	ROR	
101	WE Energies - Gas	ROR	
104	AT&T WISCONSIN	ROR	

(100) **WE ENERGIES - ELECTRIC**
PARCEL 3 - DOC. 3810247
PARCEL 3 - DOC. 6292535
PARCEL 3 - DOC. 631253

(101) **WE ENERGIES - GAS**
PARCEL 3 - DOC. 3810247

(104) **AT&T WISCONSIN**
PARCEL 3 - DOC. 6292535

GN

SCALE, FEET
0 20 40

514

FILE NAME : 2025-03-23_EXHIBITS.DWG PLOT DATE : 12/15/2023 1:49 PM R/W PROJECT: R/W PROJ NO

NOTES:
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R/W PROJECT NUMBER: 2025-03-23 | **SHEET NUMBER:** 3 of 24

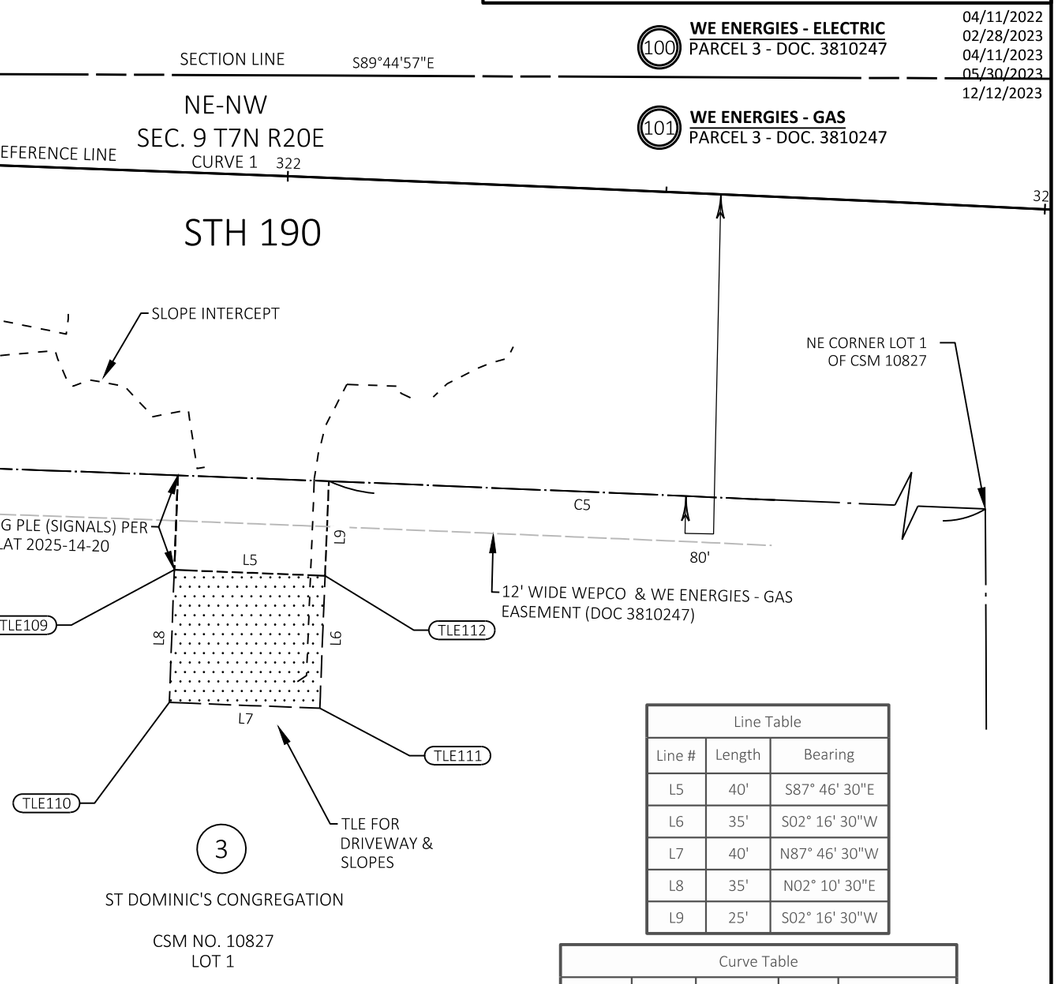
R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 — WAUKESHA COUNTY

PART OF THE NE 1/4 OF THE NW 1/4 OF SECTION 9 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
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4



100 **WE ENERGIES - ELECTRIC**
PARCEL 3 - DOC. 3810247

101 **WE ENERGIES - GAS**
PARCEL 3 - DOC. 3810247

Line Table		
Line #	Length	Bearing
L5	40'	S87° 46' 30"E
L6	35'	S02° 16' 30"W
L7	40'	N87° 46' 30"W
L8	35'	N02° 10' 30"E
L9	25'	S02° 16' 30"W

Curve Table				
Curve #	Length	Radius	Chord	Chord Bearing
C5	316'	22838.31	316'	N87° 19' 42"W

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
TLE109	189811.961	708284.6685
TLE110	189776.986	708283.3401
TLE111	189775.442	708323.0658
TLE112	189810.415	708324.4552

GN

SCALE, FEET
0 20 40

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
3	ST DOMINIC'S CONGREGATION	TLE	1393

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
100	WE Energies - Electric	ROR	
101(2)	WE Energies - Gas	ROR	

NOTES:
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R/W PROJECT NUMBER: 2025-03-23 | **SHEET NUMBER:** 4 of 24

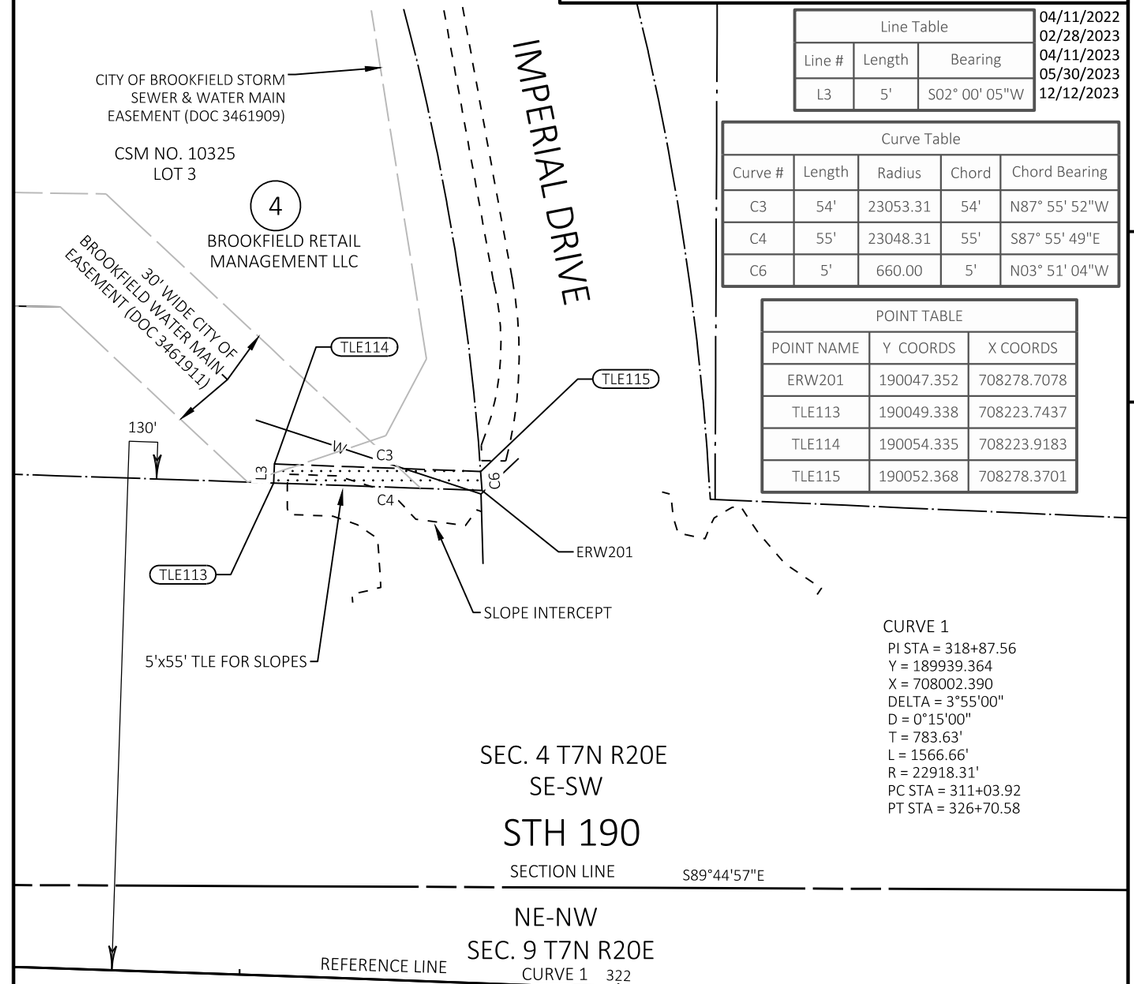
R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 — WAUKESHA COUNTY

PART OF THE SE 1/4 OF THE SW 1/4 OF SECTION 4 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

4



Line Table		
Line #	Length	Bearing
L3	5'	S02° 00' 05"W

Curve Table				
Curve #	Length	Radius	Chord	Chord Bearing
C3	54'	23053.31	54'	N87° 55' 52"W
C4	55'	23048.31	55'	S87° 55' 49"E
C6	5'	660.00	5'	N03° 51' 04"W

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
ERW201	190047.352	708278.7078
TLE113	190049.338	708223.7437
TLE114	190054.335	708223.9183
TLE115	190052.368	708278.3701

CURVE 1
PI STA = 318+87.56
Y = 189939.364
X = 708002.390
DELTA = 3°55'00"
D = 0°15'00"
T = 783.63'
L = 1566.66'
R = 22918.31'
PC STA = 311+03.92
PT STA = 326+70.58

GN

SCALE, FEET
0 20 40

110 **CITY OF BROOKFIELD - WATER**
PARCEL 4 - DOC. 3461909
PARCEL 4 - DOC. 3461911

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
4	BROOKFIELD RETAIL MANAGEMENT LLC	TLE	274

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
110	CITY OF BROOKEFIELD - WATER	ROR	

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R/W PROJECT NUMBER: 2025-03-23 | **SHEET NUMBER:** 5 of 24

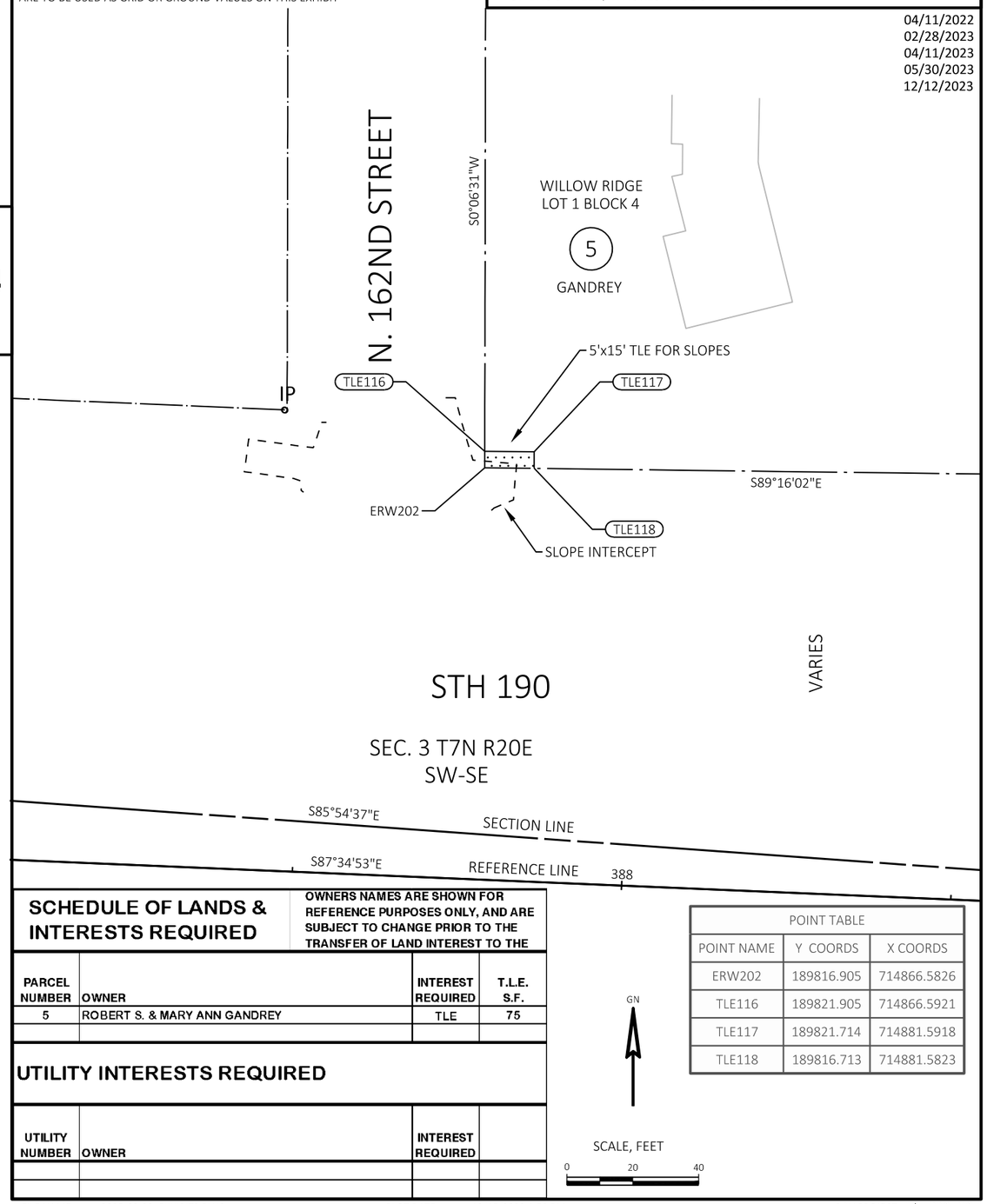
R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 — WAUKESHA COUNTY

PART OF THE SW 1/4 OF THE SE 1/4 OF SECTION 3 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

4



POINT TABLE		
POINT NAME	Y COORDS	X COORDS
ERW202	189816.905	714866.5826
TLE116	189821.905	714866.5921
TLE117	189821.714	714881.5918
TLE118	189816.713	714881.5823

GN

SCALE, FEET
0 20 40

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
5	ROBERT S. & MARY ANN GANDREY	TLE	75

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	

FILE NAME : 2025-03-23_EXHIBITS.DWG PLOT DATE : 12/15/2023 1:50 PM R/W PROJECT: R/W PROJ NO

NOTES:
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R/W PROJECT NUMBER: 2025-03-23 | **SHEET NUMBER:** 6 of 24

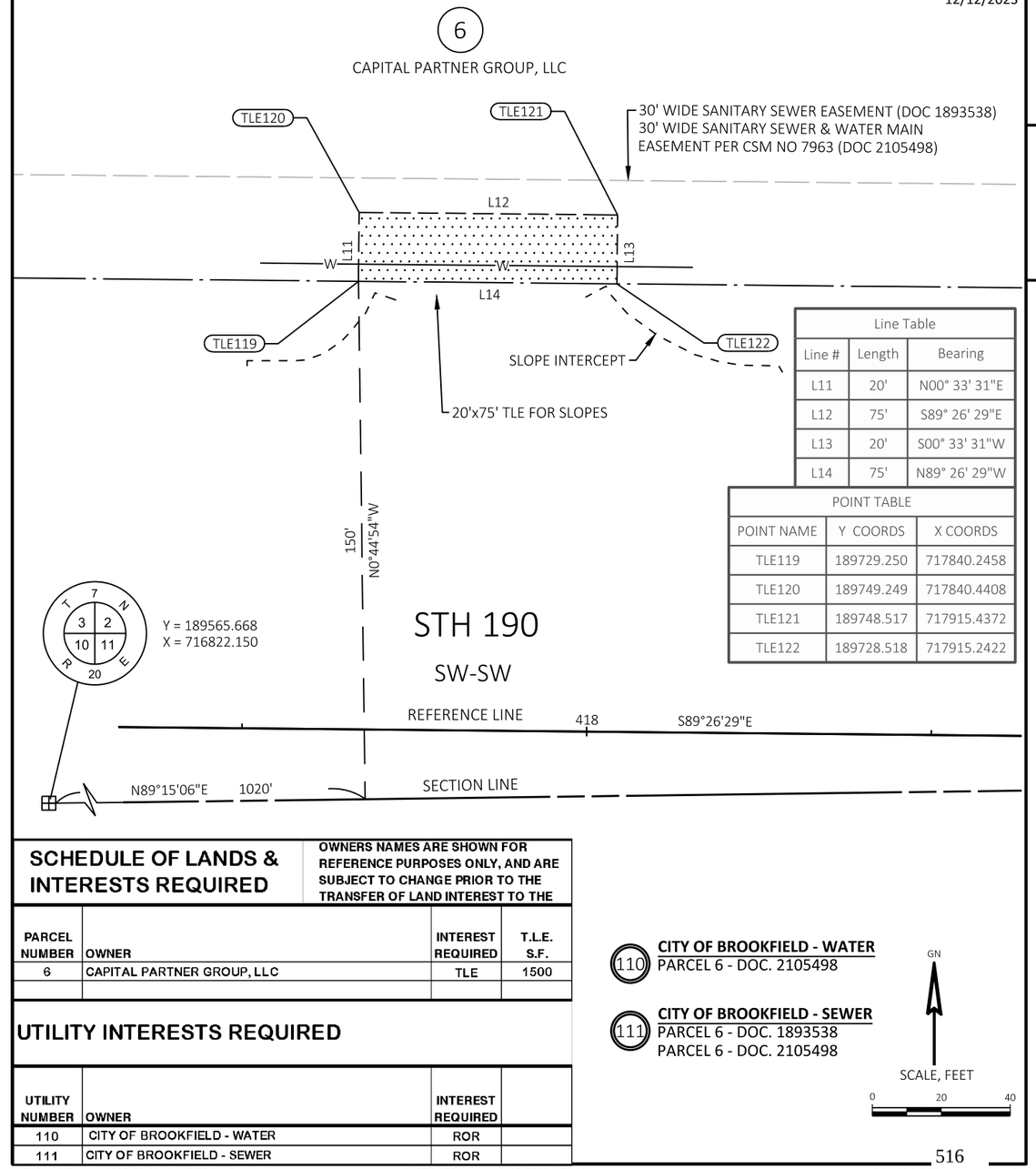
R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 — WAUKESHA COUNTY

PART OF THE SW 1/4 OF THE SW 1/4 OF SECTION 2 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

4



Line Table		
Line #	Length	Bearing
L11	20'	N00° 33' 31"E
L12	75'	S89° 26' 29"E
L13	20'	S00° 33' 31"W
L14	75'	N89° 26' 29"W

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
TLE119	189729.250	717840.2458
TLE120	189749.249	717840.4408
TLE121	189748.517	717915.4372
TLE122	189728.518	717915.2422

SCHEDULE OF LANDS & INTERESTS REQUIRED

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PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
6	CAPITAL PARTNER GROUP, LLC	TLE	1500

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
110	CITY OF BROOKFIELD - WATER	ROR	
111	CITY OF BROOKFIELD - SEWER	ROR	

(110) **CITY OF BROOKFIELD - WATER**
PARCEL 6 - DOC. 2105498

(111) **CITY OF BROOKFIELD - SEWER**
PARCEL 6 - DOC. 1893538
PARCEL 6 - DOC. 2105498

GN

SCALE, FEET
0 20 40

FILE NAME : 2025-03-23_EXHIBITS.DWG PLOT DATE : 12/15/2023 1:50 PM R/W PROJECT: R/W PROJ NO

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R/W PROJECT NUMBER: 2025-03-23 | **SHEET NUMBER:** 7 of 24

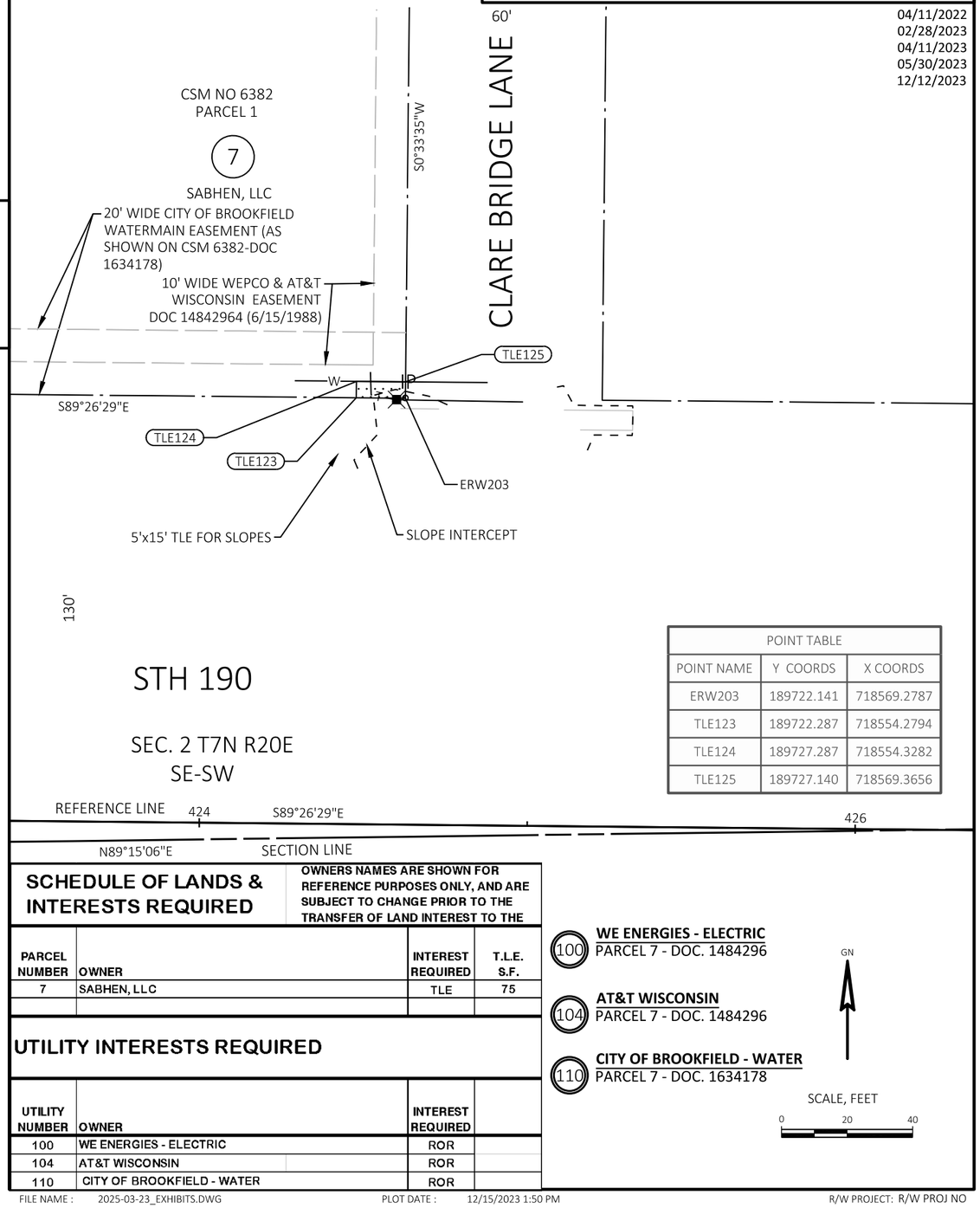
R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 — WAUKESHA COUNTY

PART OF THE SE 1/4 OF THE SW 1/4 OF SECTION 2 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

4



POINT TABLE		
POINT NAME	Y COORDS	X COORDS
ERW203	189722.141	718569.2787
TLE123	189722.287	718554.2794
TLE124	189727.287	718554.3282
TLE125	189727.140	718569.3656

SCHEDULE OF LANDS & INTERESTS REQUIRED

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PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
7	SABHEN, LLC	TLE	75

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
100	WE ENERGIES - ELECTRIC	ROR	
104	AT&T WISCONSIN	ROR	
110	CITY OF BROOKFIELD - WATER	ROR	

(100) **WE ENERGIES - ELECTRIC**
PARCEL 7 - DOC. 1484296

(104) **AT&T WISCONSIN**
PARCEL 7 - DOC. 1484296

(110) **CITY OF BROOKFIELD - WATER**
PARCEL 7 - DOC. 1634178

GN

SCALE, FEET
0 20 40

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R/W PROJECT NUMBER: 2025-03-23 | **SHEET NUMBER:** 8 of 24

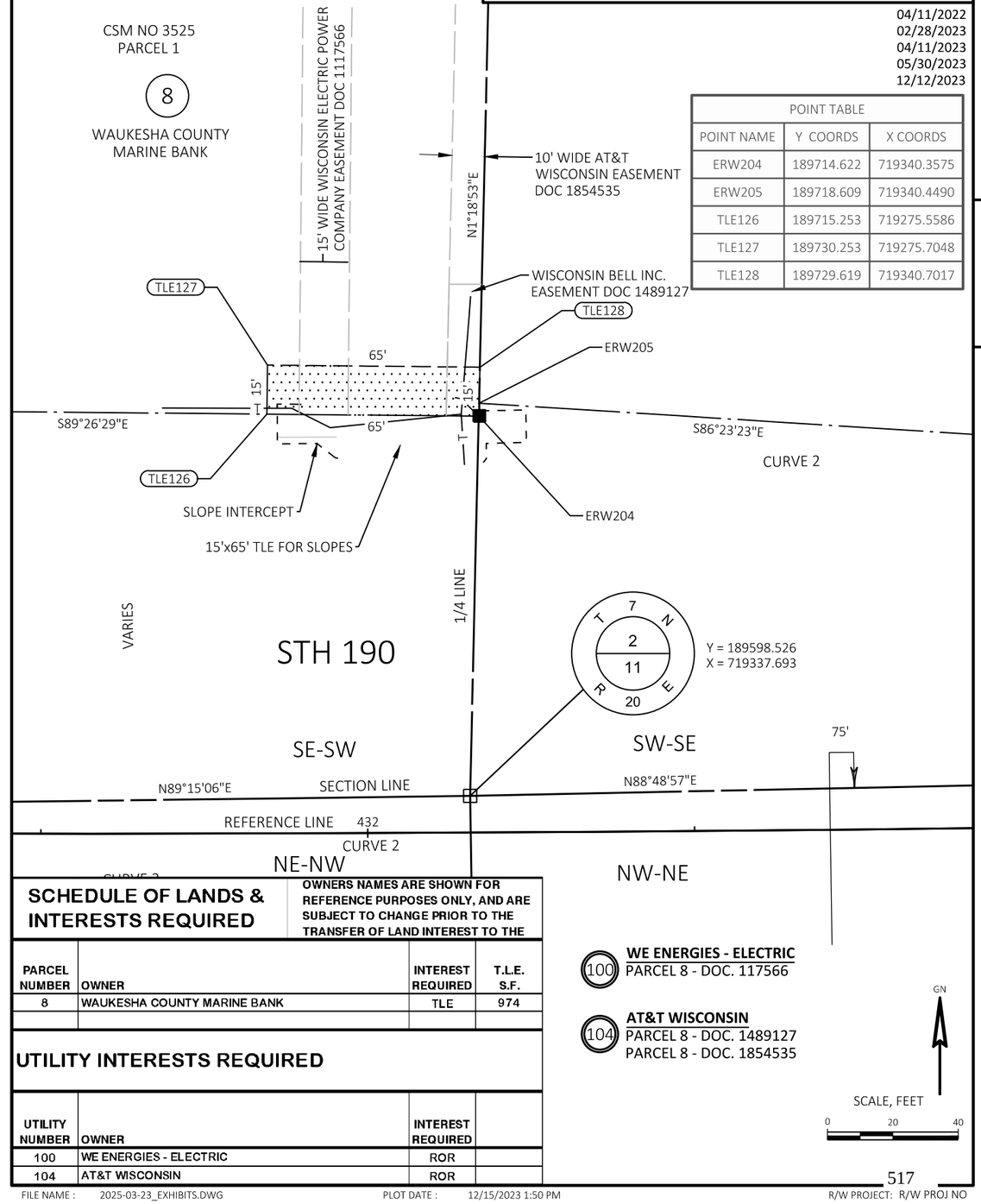
R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 — WAUKESHA COUNTY

PART OF THE SE 1/4 OF THE SW 1/4 OF SECTION 2 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

4



POINT TABLE		
POINT NAME	Y COORDS	X COORDS
ERW204	189714.622	719340.3575
ERW205	189718.609	719340.4490
TLE126	189715.253	719275.5586
TLE127	189730.253	719275.7048
TLE128	189729.619	719340.7017

SCHEDULE OF LANDS & INTERESTS REQUIRED

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PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
8	WAUKESHA COUNTY MARINE BANK	TLE	974

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
100	WE ENERGIES - ELECTRIC	ROR	
104	AT&T WISCONSIN	ROR	

(100) **WE ENERGIES - ELECTRIC**
PARCEL 8 - DOC. 117566

(104) **AT&T WISCONSIN**
PARCEL 8 - DOC. 1489127
PARCEL 8 - DOC. 1854535

GN

SCALE, FEET
0 20 40

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R/W PROJECT NUMBER: 2025-03-23 | **SHEET NUMBER:** 9 of 24

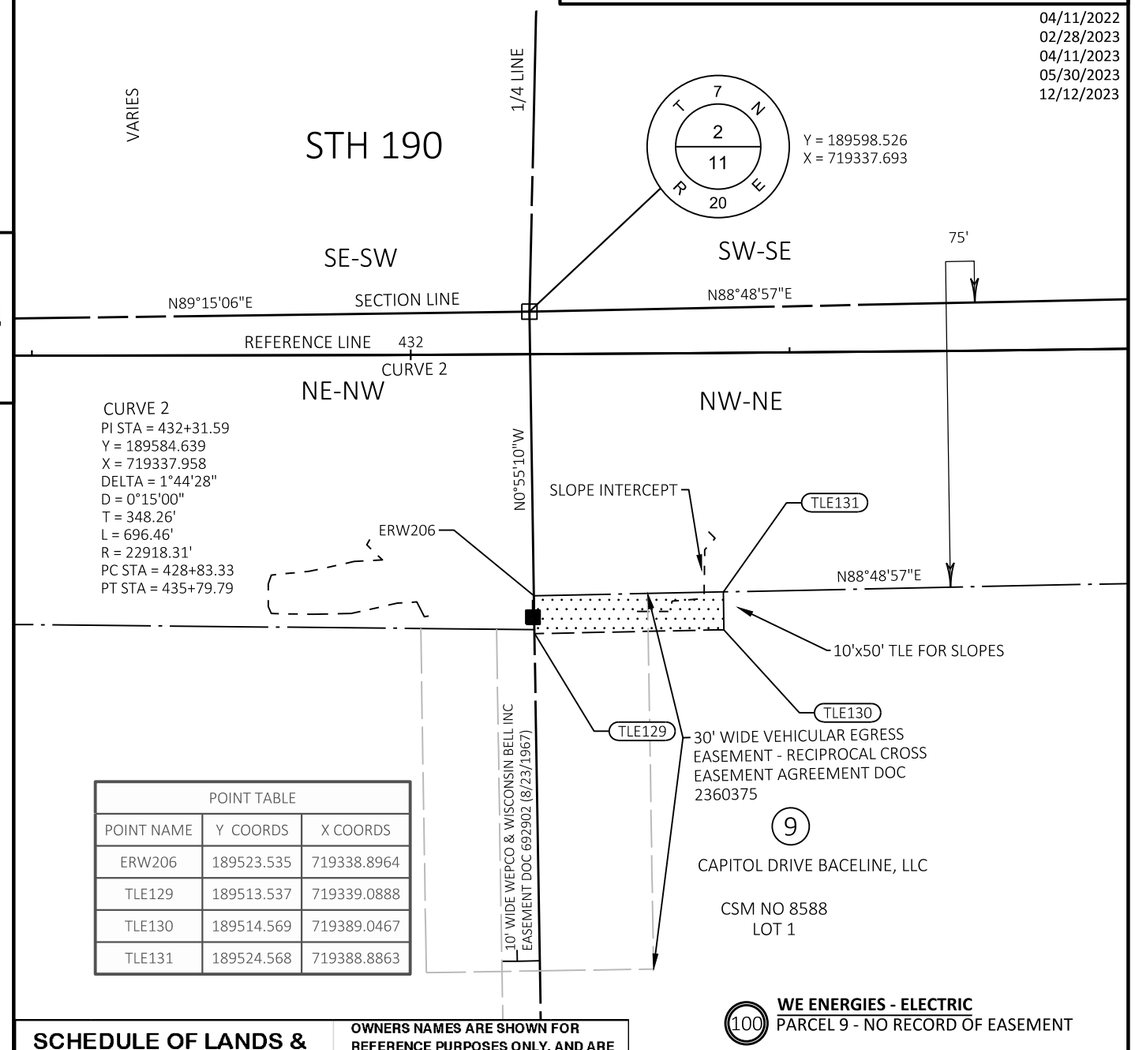
R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 WAUKESHA COUNTY

PART OF THE NW 1/4 OF THE NE 1/4 OF SECTION 11 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

4



POINT TABLE		
POINT NAME	Y COORDS	X COORDS
ERW206	189523.535	719338.8964
TLE129	189513.537	719339.0888
TLE130	189514.569	719389.0467
TLE131	189524.568	719388.8863

SCHEDULE OF LANDS & INTERESTS REQUIRED

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PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
9	CAPITOL DRIVE BACELINE, LLC	TLE	500

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
100	WE - ENERGIES - ELECTRIC	ROR	

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R/W PROJECT NUMBER: 2025-03-23 | **SHEET NUMBER:** 10 of 24

R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 WAUKESHA COUNTY

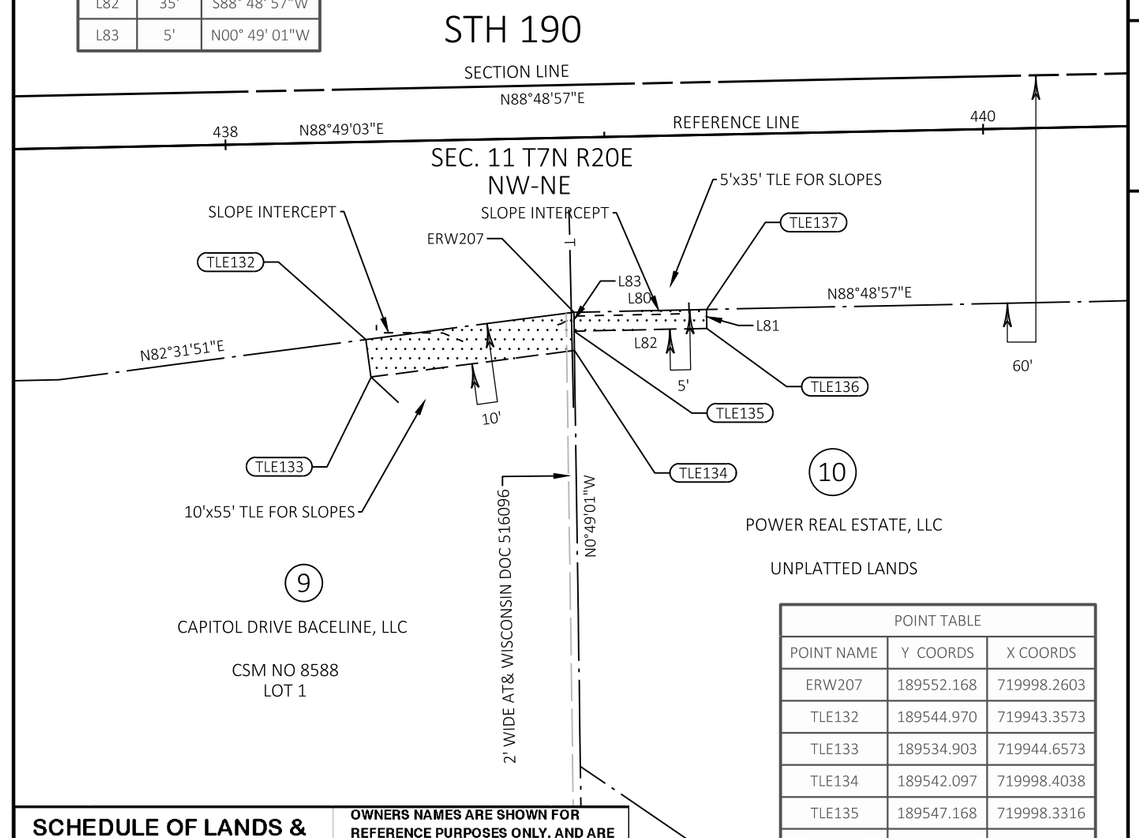
PART OF THE NW 1/4 OF THE NE 1/4 OF SECTION 11 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

Line Table		
Line #	Length	Bearing
L80	35'	N88° 48' 57"E
L81	5'	S00° 49' 01"E
L82	35'	S88° 48' 57"W
L83	5'	N00° 49' 01"W

104 **AT&T WISCONSIN**
PARCEL 9 - DOC. NO. 516096

4



POINT TABLE		
POINT NAME	Y COORDS	X COORDS
ERW207	189552.168	719998.2603
TLE132	189544.970	719943.3573
TLE133	189534.903	719944.6573
TLE134	189542.097	719998.4038
TLE135	189547.168	719998.3316
TLE136	189547.892	720033.3248
TLE137	189552.891	720033.2535

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
9(3)	CAPITOL DRIVE BACELINE, LLC	TLE	552
10	POWERS REAL ESTATE, LLC	TLE	175

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
104	AT&T WISCONSIN	ROR	

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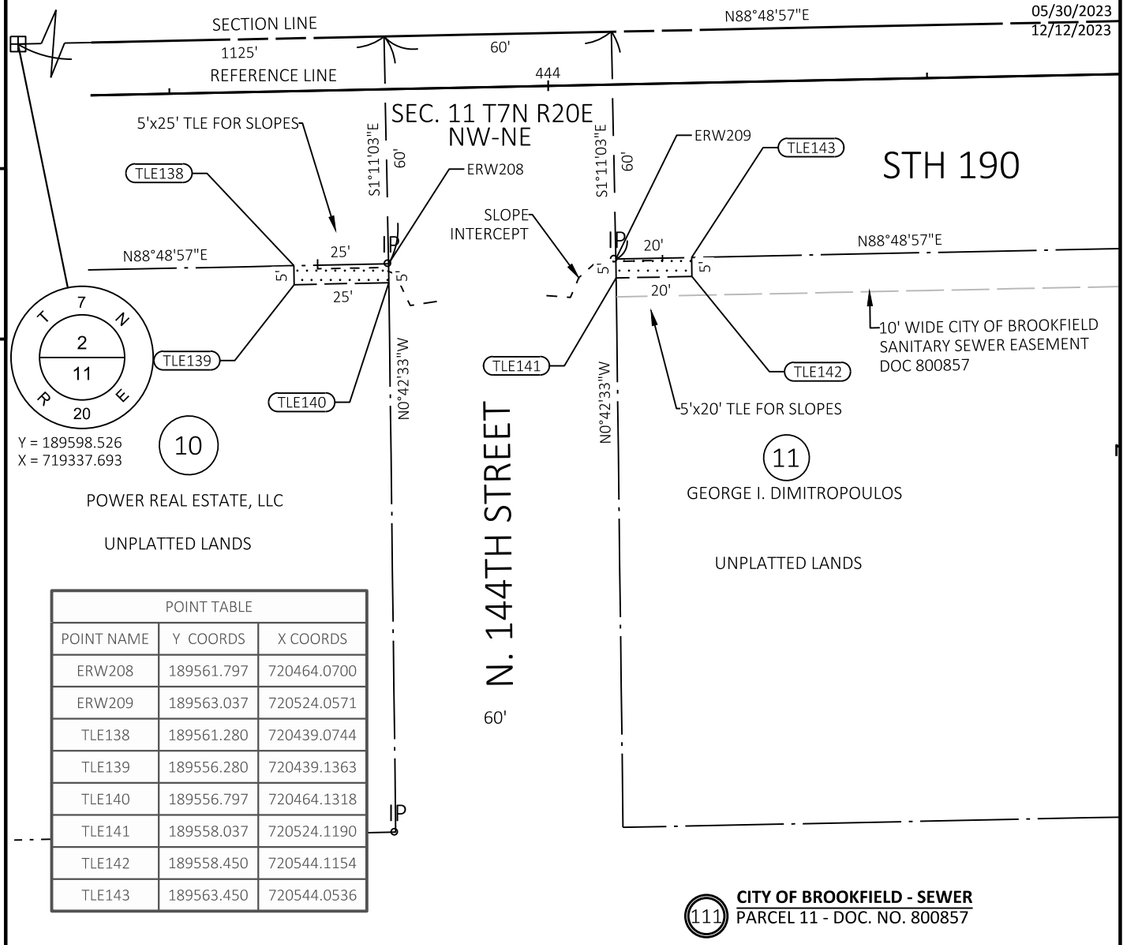
R/W PROJECT NUMBER: 2025-03-23 | **SHEET NUMBER:** 11 of 24

R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 — WAUKESHA COUNTY

PART OF THE NW 1/4 OF THE NE 1/4 OF SECTION 11 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023



POINT TABLE		
POINT NAME	Y COORDS	X COORDS
ERW208	189561.797	720464.0700
ERW209	189563.037	720524.0571
TLE138	189561.280	720439.0744
TLE139	189556.280	720439.1363
TLE140	189556.797	720464.1318
TLE141	189558.037	720524.1190
TLE142	189558.450	720544.1154
TLE143	189563.450	720544.0536

111 **CITY OF BROOKFIELD - SEWER**
PARCEL 11 - DOC. NO. 800857

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
10	POWER REAL ESTATE, LLC	TLE	125
11	GEORGE I. DIMITROPOULOS	TLE	100

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
111	CITY OF BROOKFIELD - SEWER	ROR	

GN
SCALE, FEET
0 20 40

4

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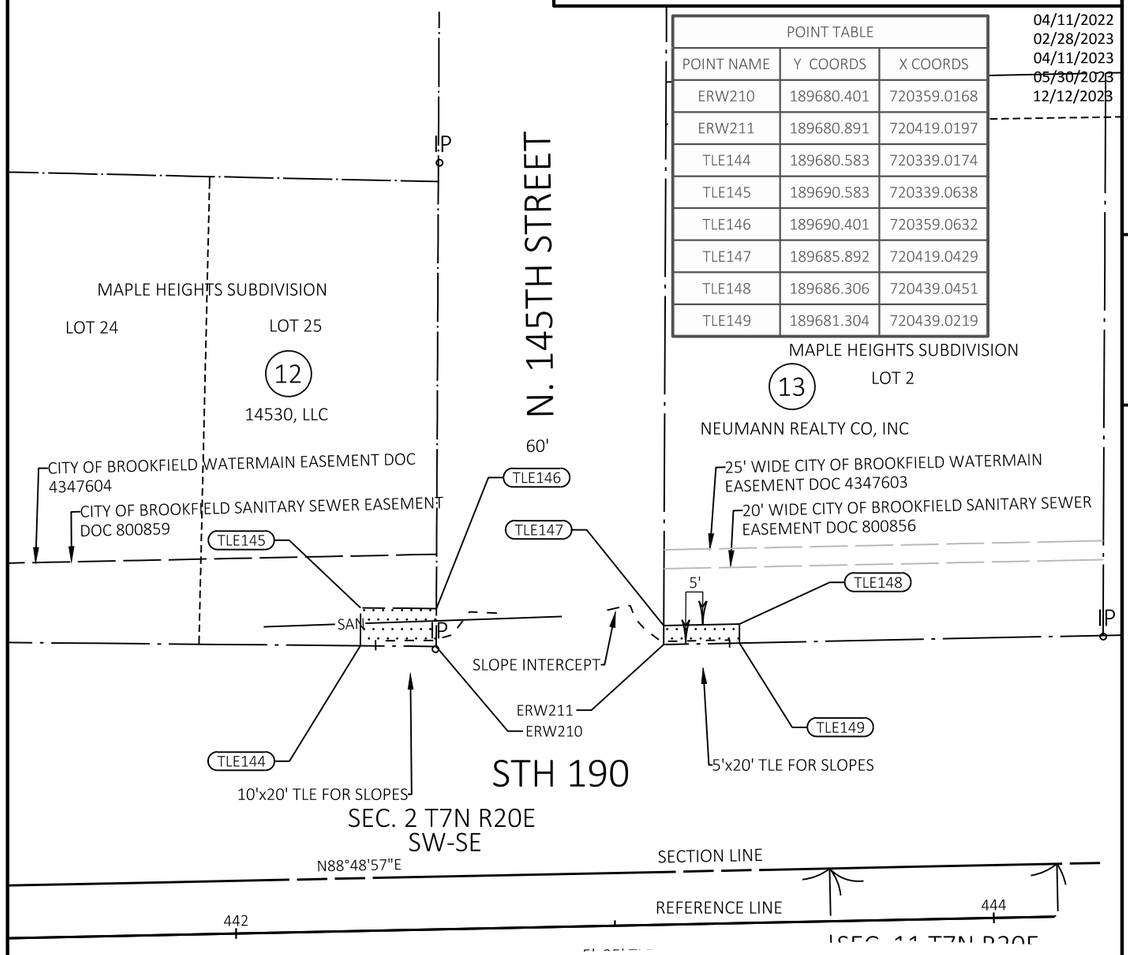
R/W PROJECT NUMBER: 2025-03-23 | **SHEET NUMBER:** 12 of 24

R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 — WAUKESHA COUNTY

PART OF THE SW 1/4 OF THE SE 1/4 OF SECTION 2 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023



POINT TABLE		
POINT NAME	Y COORDS	X COORDS
ERW210	189680.401	720359.0168
ERW211	189680.891	720419.0197
TLE144	189680.583	720339.0174
TLE145	189690.583	720339.0638
TLE146	189690.401	720359.0632
TLE147	189685.892	720419.0429
TLE148	189686.306	720439.0451
TLE149	189681.304	720439.0219

110 **CITY OF BROOKFIELD - WATER**
PARCEL 12 - DOC. NO. 4347604
PARCEL 13 - DOC. NO. 4347603

111 **CITY OF BROOKFIELD - SEWER**
PARCEL 12 - DOC. NO. 800859
PARCEL 13 - DOC. NO. 800856

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
12	14530, llc	TLE	200
13	NEUMANN REALTY CO, INC	TLE	100

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
110	CITY OF BROOKFIELD - WATER	ROR	
111	CITY OF BROOKFIELD - SEWER	ROR	

GN
SCALE, FEET
0 20 40

4

NOTES:
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R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 — WAUKESHA COUNTY

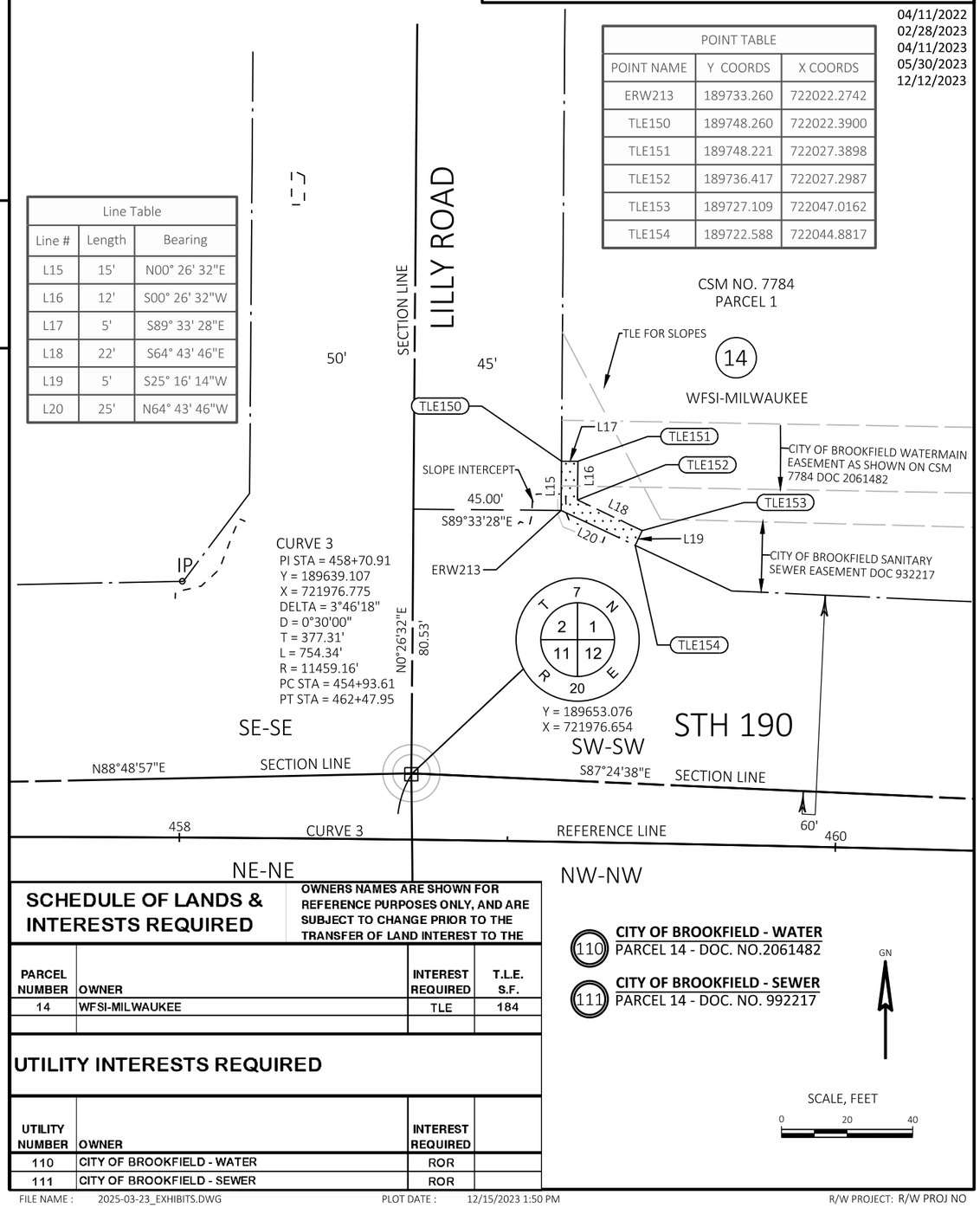
PART OF THE SW 1/4 OF THE SW 1/4 OF SECTION 1 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

4

Line Table		
Line #	Length	Bearing
L15	15'	N00° 26' 32"E
L16	12'	S00° 26' 32"W
L17	5'	S89° 33' 28"E
L18	22'	S64° 43' 46"E
L19	5'	S25° 16' 14"W
L20	25'	N64° 43' 46"W

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
ERW213	189733.260	722022.2742
TLE150	189748.260	722022.3900
TLE151	189748.221	722027.3898
TLE152	189736.417	722027.2987
TLE153	189727.109	722047.0162
TLE154	189722.588	722044.8817



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
14	WFSI-MILWAUKEE	TLE	184

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
110	CITY OF BROOKFIELD - WATER	ROR	
111	CITY OF BROOKFIELD - SEWER	ROR	

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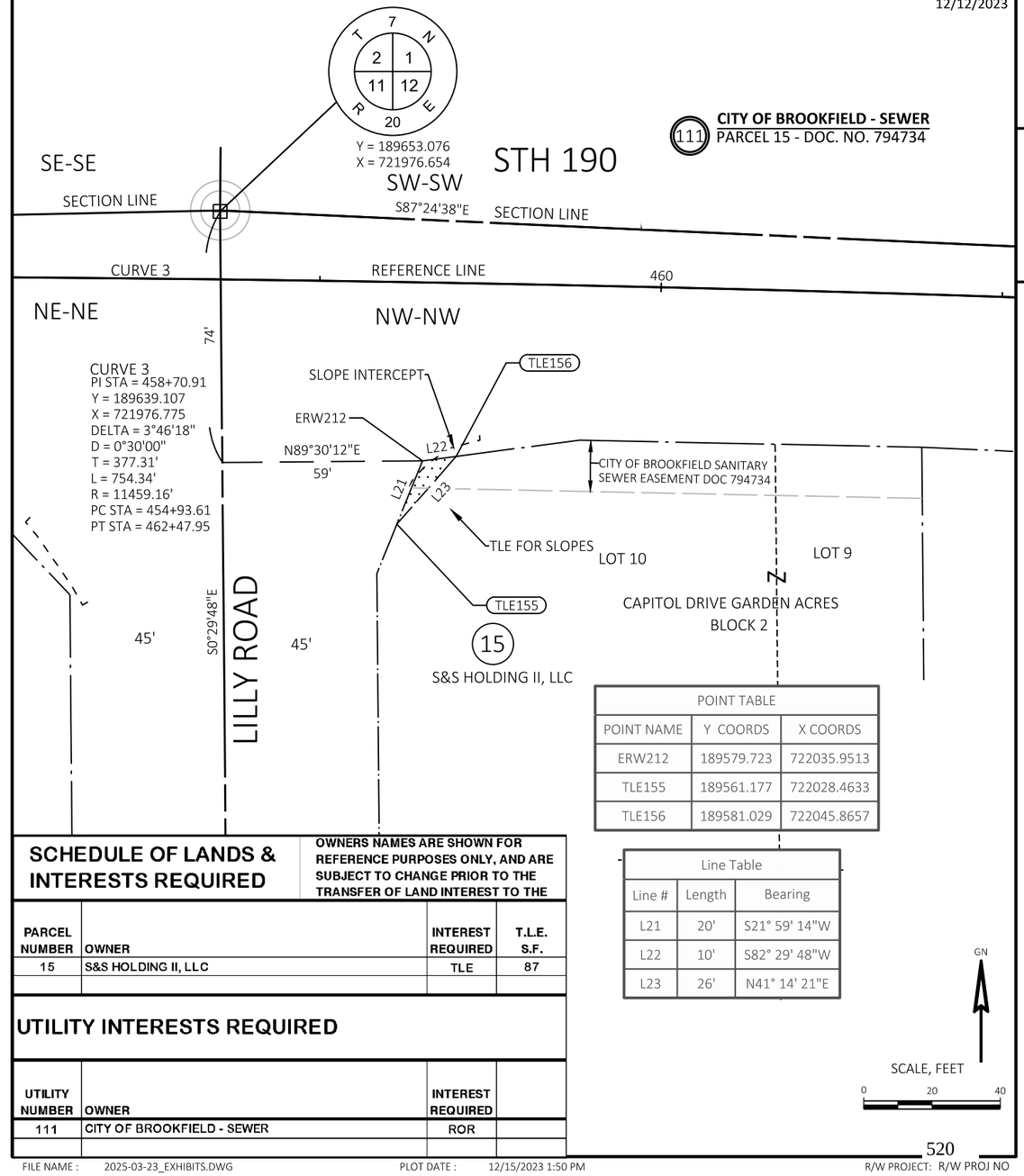
R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 — WAUKESHA COUNTY

PART OF THE NW 1/4 OF THE NW 1/4 OF SECTION 12 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

4



POINT TABLE		
POINT NAME	Y COORDS	X COORDS
ERW212	189579.723	722035.9513
TLE155	189561.177	722028.4633
TLE156	189581.029	722045.8657

Line Table		
Line #	Length	Bearing
L21	20'	S21° 59' 14"W
L22	10'	S82° 29' 48"W
L23	26'	N41° 14' 21"E

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
15	S&S HOLDING II, LLC	TLE	87

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
111	CITY OF BROOKFIELD - SEWER	ROR	

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R/W PROJECT NUMBER: 2025-03-23 | SHEET NUMBER: 15 of 24

R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 WAUKESHA COUNTY

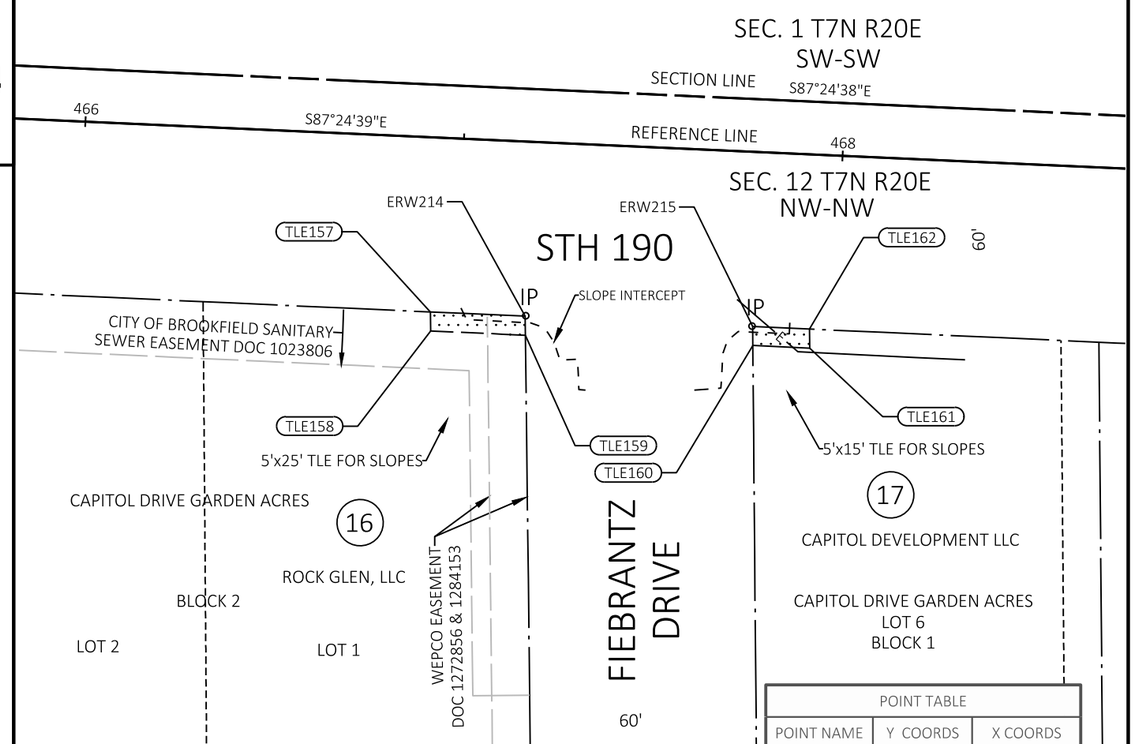
PART OF THE NW 1/4 OF THE NW 1/4 OF SECTION 12 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

(100) **WE ENERGIES - ELECTRIC**
PARCEL 16 - DOC. NO. 1272856
PARCEL 16 - DOC. NO. 1284153
PARCEL 17 - NO RECORD OF EASEMENT

(111) **CITY OF BROOKFIELD - SEWER**
PARCEL 16 - DOC. NO. 1023806

4



POINT TABLE		
POINT NAME	Y COORDS	X COORDS
ERW214	189554.810	722821.4478
ERW215	189552.095	722881.4837
TLE157	189555.941	722796.4329
TLE158	189550.933	722796.4915
TLE159	189549.802	722821.5064
TLE160	189547.088	722881.5271
TLE161	189546.409	722896.5335
TLE162	189551.416	722896.4901

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
16	ROCK GLEN, LLC	TLE	125
17	CORBIN DEVELOPMENT, LLC	TLE	75

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
100	WE ENERGIES - ELECTRIC	ROR	
111	CITY OF BROOKFIELD - SEWER	ROR	

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R/W PROJECT NUMBER: 2025-03-23 | SHEET NUMBER: 16 of 24

R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

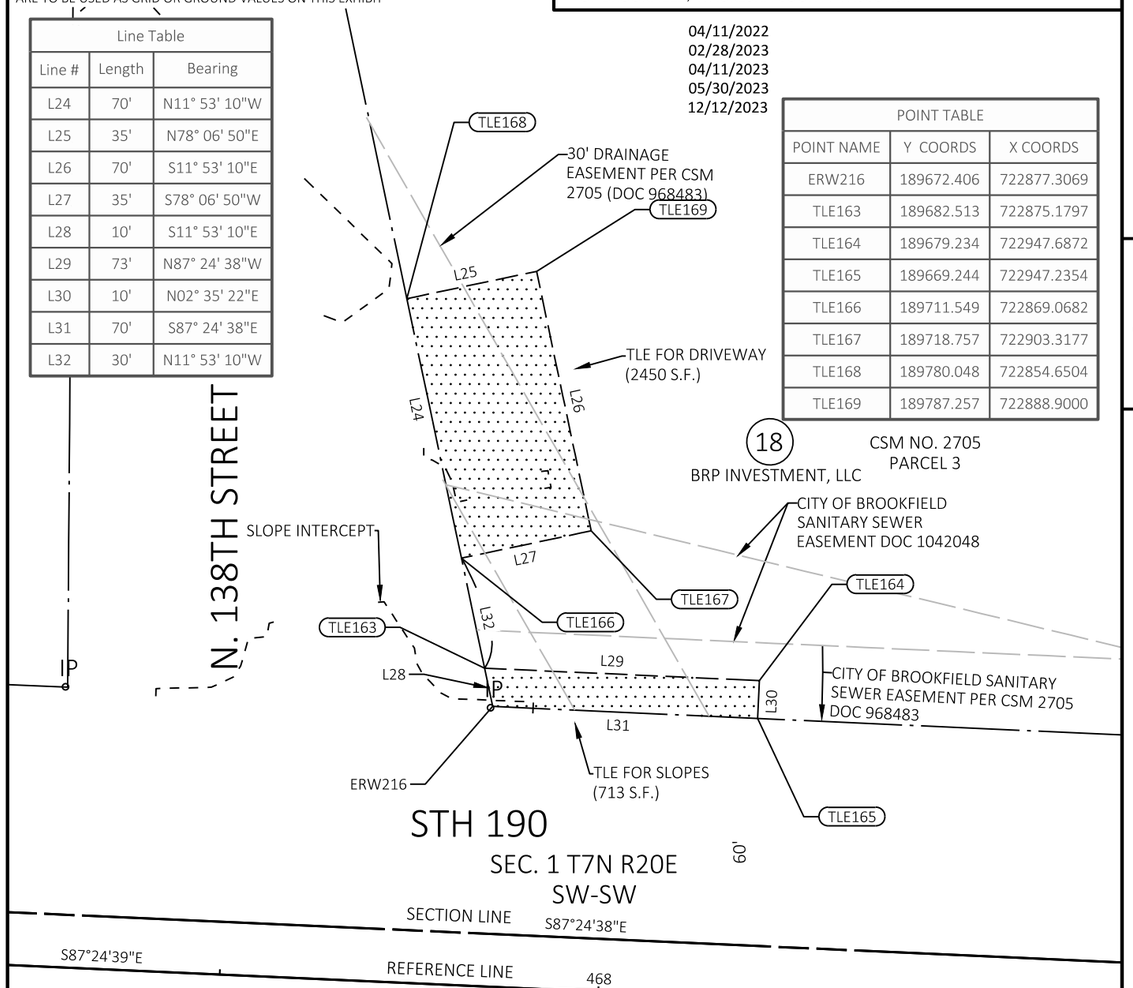
STH 190 WAUKESHA COUNTY

PART OF THE SW 1/4 OF THE SW 1/4 OF SECTION 1 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

Line Table		
Line #	Length	Bearing
L24	70'	N11° 53' 10"W
L25	35'	N78° 06' 50"E
L26	70'	S11° 53' 10"E
L27	35'	S78° 06' 50"W
L28	10'	S11° 53' 10"E
L29	73'	N87° 24' 38"W
L30	10'	N02° 35' 22"E
L31	70'	S87° 24' 38"E
L32	30'	N11° 53' 10"W

4



POINT TABLE		
POINT NAME	Y COORDS	X COORDS
ERW216	189672.406	722877.3069
TLE163	189682.513	722875.1797
TLE164	189679.234	722947.6872
TLE165	189669.244	722947.2354
TLE166	189711.549	722869.0682
TLE167	189718.757	722903.3177
TLE168	189780.048	722854.6504
TLE169	189787.257	722888.9000

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
18	BRP INVESTMENT, LLC	TLE	3,163

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
111	CITY OF BROOKFIELD - SEWER	ROR	

(110) **CITY OF BROOKFIELD - SEWER**
PARCEL 18 - DOC. NO. 1023806
PARCEL 18 - DOC. NO. 968483

GN
SCALE, FEET
0
20
40

NOTES:
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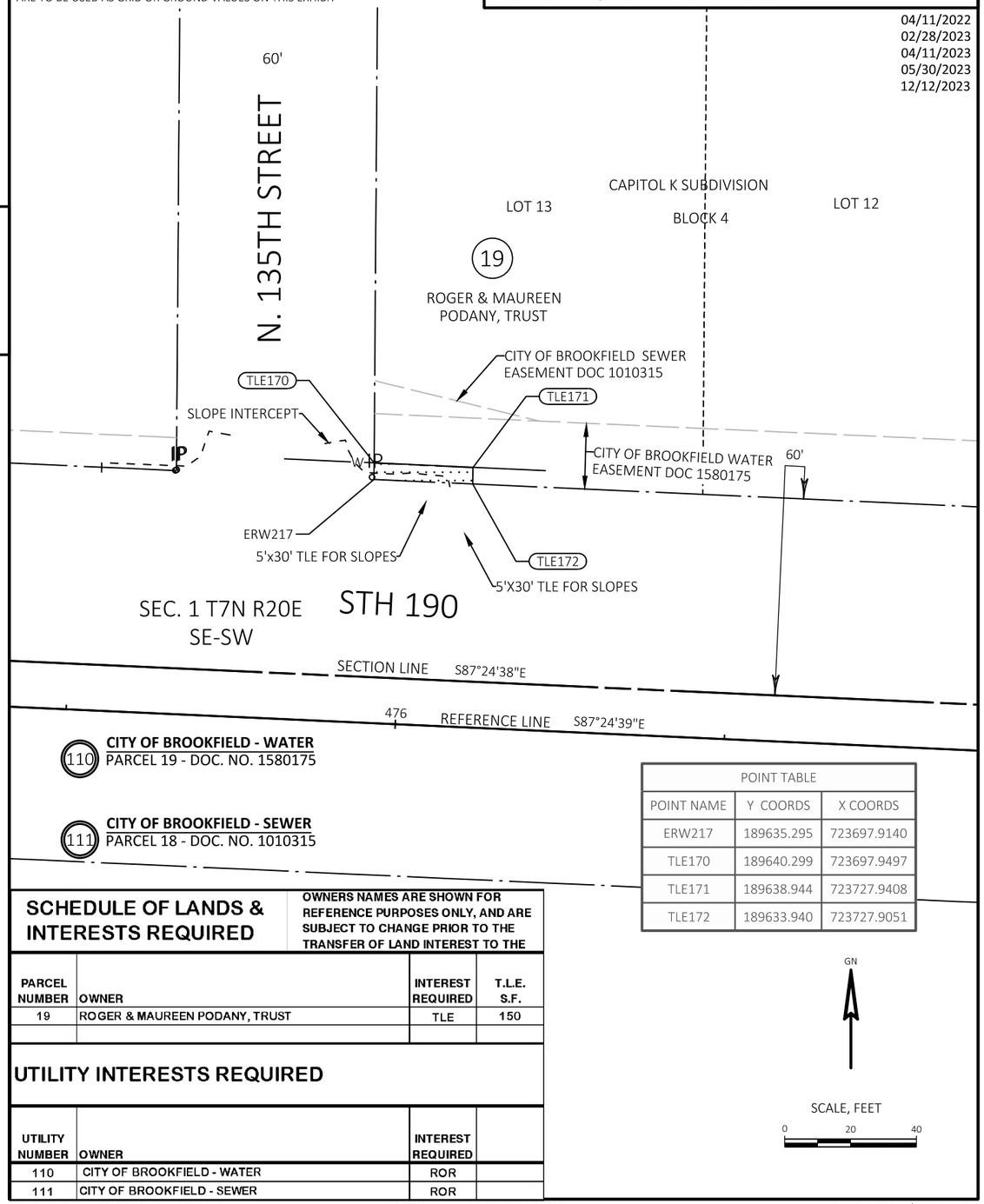
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R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 WAUKESHA COUNTY

PART OF THE SE 1/4 OF THE SW 1/4 OF SECTION 1 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023



POINT TABLE		
POINT NAME	Y COORDS	X COORDS
ERW217	189635.295	723697.9140
TLE170	189640.299	723697.9497
TLE171	189638.944	723727.9408
TLE172	189633.940	723727.9051

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
19	ROGER & MAUREEN PODANY, TRUST	TLE	150

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
110	CITY OF BROOKFIELD - WATER	ROR	
111	CITY OF BROOKFIELD - SEWER	ROR	

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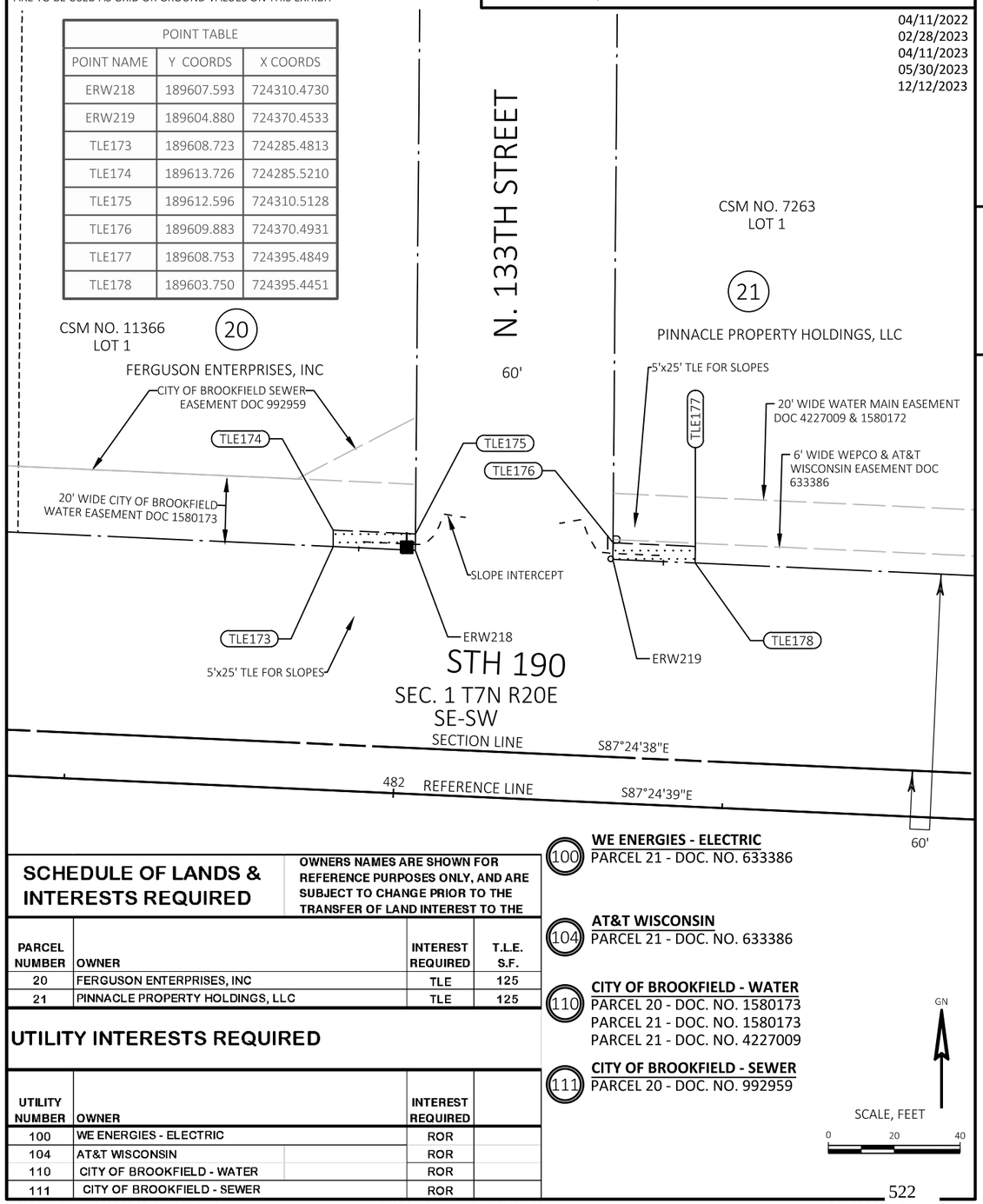
R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 WAUKESHA COUNTY

PART OF THE SE 1/4 OF THE SW 1/4 OF SECTION 1 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
ERW218	189607.593	724310.4730
ERW219	189604.880	724370.4533
TLE173	189608.723	724285.4813
TLE174	189613.726	724285.5210
TLE175	189612.596	724310.5128
TLE176	189609.883	724370.4931
TLE177	189608.753	724395.4849
TLE178	189603.750	724395.4451



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
20	FERGUSON ENTERPRISES, INC	TLE	125
21	PINNACLE PROPERTY HOLDINGS, LLC	TLE	125

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
100	WE ENERGIES - ELECTRIC	ROR	
104	AT&T WISCONSIN	ROR	
110	CITY OF BROOKFIELD - WATER	ROR	
111	CITY OF BROOKFIELD - SEWER	ROR	

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R/W PROJECT NUMBER: 2025-03-23 | SHEET NUMBER: 19 of 24

R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

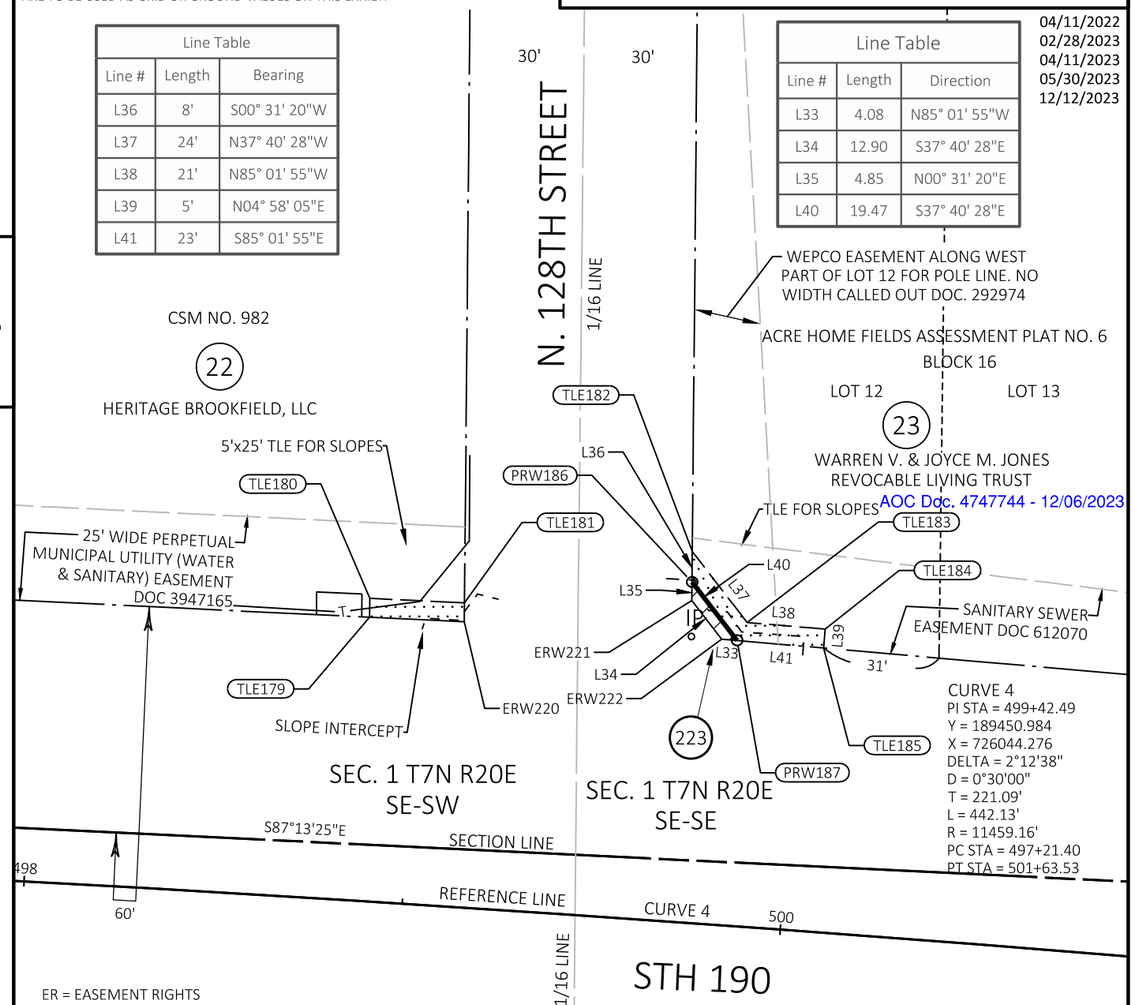
STH 190 — WAUKESHA COUNTY

PART OF THE SW 1/4 OF THE SE 1/4 AND THE SE 1/4 OF THE SE 1/4 OF SECTION 1 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

Line Table		
Line #	Length	Bearing
L36	8'	S00° 31' 20"W
L37	24'	N37° 40' 28"W
L38	21'	N85° 01' 55"W
L39	5'	N04° 58' 05"E
L41	23'	S85° 01' 55"E

Line Table		
Line #	Length	Direction
L33	4.08	N85° 01' 55"W
L34	12.90	S37° 40' 28"E
L35	4.85	N00° 31' 20"E
L40	19.47	S37° 40' 28"E



ER = EASEMENT RIGHTS

SCALE, FEET
0 20 40

GN

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.	F.E.E. S.F.	EASE. RIGHTS S.F.
22	HERITAGE BROOKFIELD, LLC	TLE	125	--	--
23	WARREN V. & JOYCE M. JONES REVOCABLE TRUST	FEE, TLE	217	49	--
223(5)	WE ENERGIES - ELECTRIC	ER	--	--	49

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
100	WE ENERGIES - ELECTRIC	ROR
104(2)	AT&T WISCONSIN	ROR
110	CITY OF BROOKFIELD - WATER	ROR
111	CITY OF BROOKFIELD - SANITARY	ROR

(100) **WE ENERGIES - ELECTRIC**
PARCEL 23 - DOC. NO. 292974

(104) **AT&T WISCONSIN**
PARCEL 22 - NO RECORD OF EASEMENT

(110) **CITY OF BROOKFIELD - WATER**
PARCEL 22 - DOC. NO. 3947165

(111) **CITY OF BROOKFIELD - SEWER**
PARCEL 22 - DOC. NO. 3947165
PARCEL 23 - DOC. NO. 612070

FILE NAME : 2025-03-23_EXHIBITS.DWG PLOT DATE : 12/15/2023 1:50 PM R/W PROJECT: R/W PROJ NO

4

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R/W PROJECT NUMBER: 2025-03-23 | SHEET NUMBER: 20 of 24

R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 — WAUKESHA COUNTY

PART OF THE NE 1/4 OF THE NE 1/4 OF SECTION 12 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

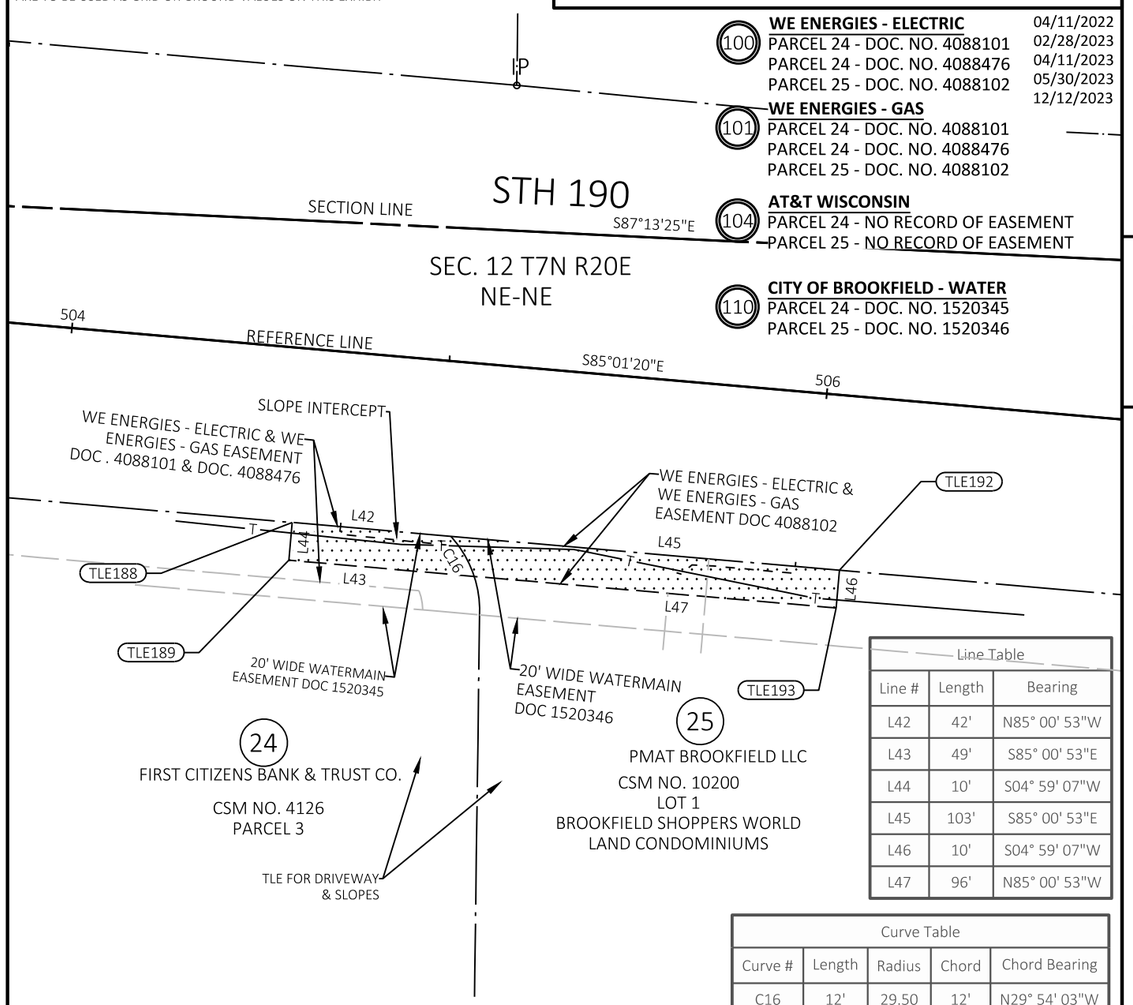
04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

(100) **WE ENERGIES - ELECTRIC**
PARCEL 24 - DOC. NO. 4088101
PARCEL 24 - DOC. NO. 4088476
PARCEL 25 - DOC. NO. 4088102

(101) **WE ENERGIES - GAS**
PARCEL 24 - DOC. NO. 4088101
PARCEL 24 - DOC. NO. 4088476
PARCEL 25 - DOC. NO. 4088102

(104) **AT&T WISCONSIN**
PARCEL 24 - NO RECORD OF EASEMENT
PARCEL 25 - NO RECORD OF EASEMENT

(110) **CITY OF BROOKFIELD - WATER**
PARCEL 24 - DOC. NO. 1520345
PARCEL 25 - DOC. NO. 1520346



Line Table		
Line #	Length	Bearing
L42	42'	N85° 00' 53"W
L43	49'	S85° 00' 53"E
L44	10'	S04° 59' 07"W
L45	103'	S85° 00' 53"E
L46	10'	S04° 59' 07"W
L47	96'	N85° 00' 53"W

Curve Table				
Curve #	Length	Radius	Chord	Chord Bearing
C16	12'	29.50	12'	N29° 54' 03"W

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
24	FIRST CITIZENS BANK & TRUST CO.	TLE	461
25	PMAT BROOKFIELD LLC	TLE	989

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
101	WE ENERGIES - GAS	ROR
110	CITY OF BROOKFIELD - WATER	ROR

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
TLE188	189359.930	726558.2298
TLE189	189349.968	726557.3608
TLE192	189347.330	726702.6813
TLE193	189337.368	726701.8123

GN

SCALE, FEET
0 20 40

523

FILE NAME : 2025-03-23_EXHIBITS.DWG PLOT DATE : 12/15/2023 1:50 PM R/W PROJECT: R/W PROJ NO

4

NOTES:
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R/W PROJECT NUMBER: 2025-03-23 | **SHEET NUMBER:** 21 of 24

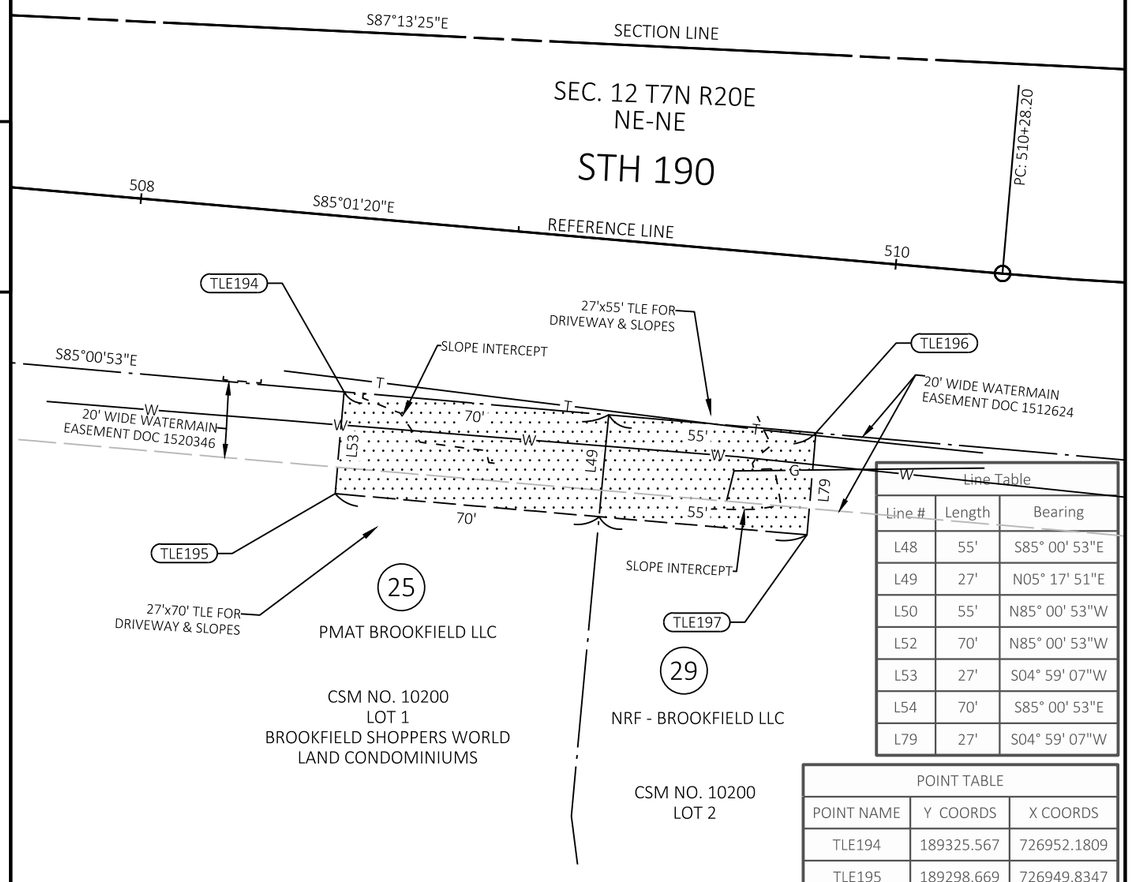
R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 — WAUKESHA COUNTY

PART OF THE NE 1/4 OF THE NE 1/4 OF SECTION 12 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

4



Line Table

Line #	Length	Bearing
L48	55'	S85° 00' 53"E
L49	27'	N05° 17' 51"E
L50	55'	N85° 00' 53"W
L52	70'	N85° 00' 53"W
L53	27'	S04° 59' 07"W
L54	70'	S85° 00' 53"E
L79	27'	S04° 59' 07"W

POINT TABLE

POINT NAME	Y COORDS	X COORDS
TLE194	189325.567	726952.1809
TLE195	189298.669	726949.8347
TLE196	189314.705	727076.7081
TLE197	189287.807	727074.3619

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
25(3)	PMAT BROOKFIELD LLC	TLE	1891
29	NRF - BROOKFIELD LLC	TLE	1484

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
101	WE ENERGIES - GAS	ROR	
104	AT&T WISCONSIN	ROR	
110	CITY OF BROOKFIELD - WATER	ROR	

(101) **WE ENERGIES - GAS**
PARCEL 29 - NO RECORD OF EASEMENT

(104) **AT&T WISCONSIN**
PARCEL 29 - NO RECORD OF EASEMENT

(110) **CITY OF BROOKFIELD - WATER**
PARCEL 25 - DOC. NO. 1520346
PARCEL 29 - DOC. NO. 1512624

GN

SCALE, FEET
0 20 40

NOTES:
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COORDINATES AND BEARINGS ON THIS EXHIBIT ARE REFERENCED TO BROOKFIELD GPS. LISBON SOUTH GPS. WAUWATOSA WEST GPS, AND PEWAUKEE NORTH GPS POINTS AND ORIENTED TO WISCONSIN COUNTY COORDINATE SYSTEM, WAUKESHA COUNTY ZONE, NAD 83 (1991) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS EXHIBIT

R/W PROJECT NUMBER: 2025-03-23 | **SHEET NUMBER:** 22 of 24

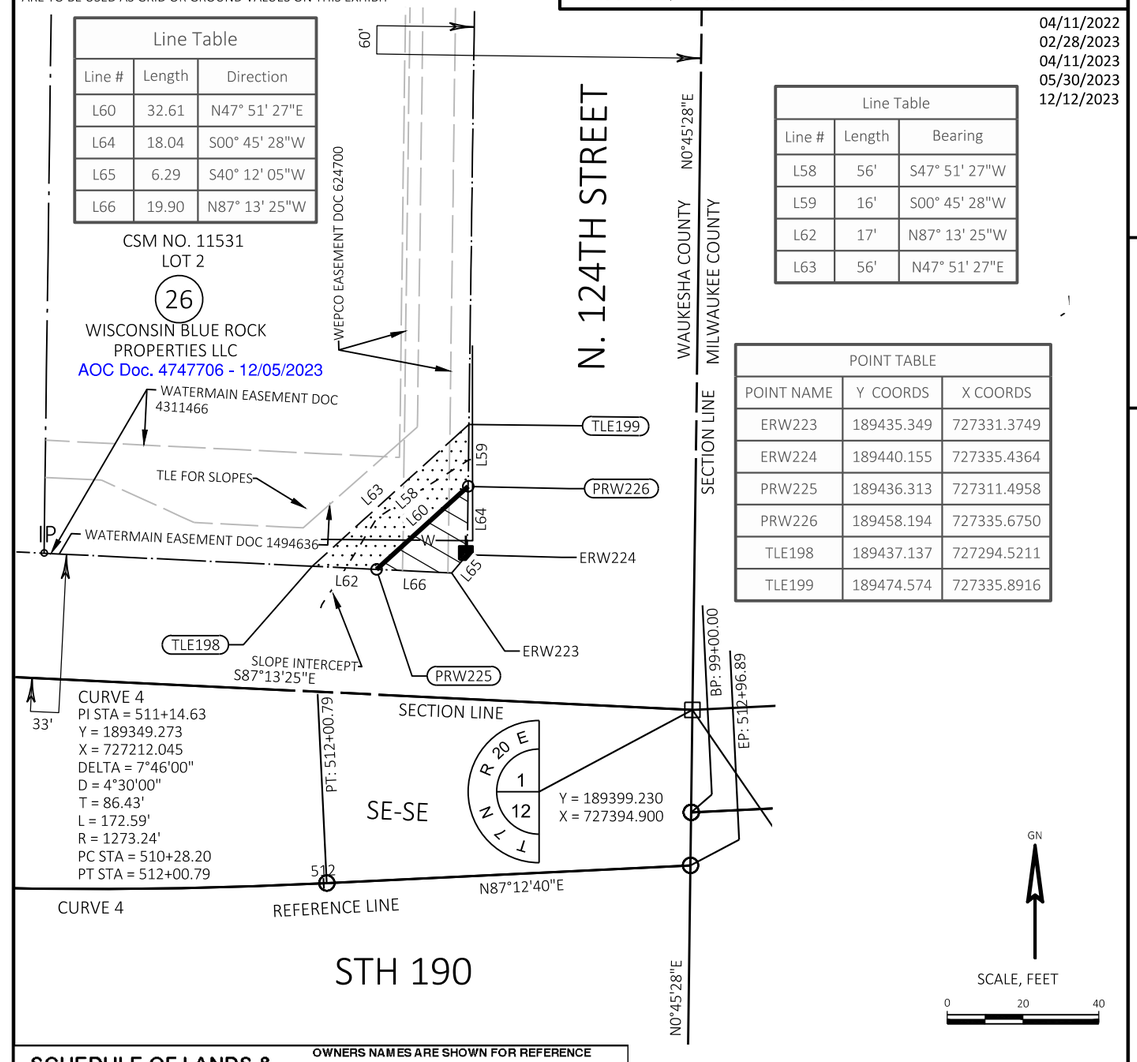
R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 — WAUKESHA COUNTY

PART OF THE SE 1/4 OF THE SE 1/4 OF SECTION 1 T7N, R20E IN THE CITY OF BROOKFIELD, WAUKESHA COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

4



Line Table

Line #	Length	Bearing
L58	56'	S47° 51' 27"W
L59	16'	S00° 45' 28"W
L62	17'	N87° 13' 25"W
L63	56'	N47° 51' 27"E

POINT TABLE

POINT NAME	Y COORDS	X COORDS
ERW223	189435.349	727331.3749
ERW224	189440.155	727335.4364
PRW225	189436.313	727311.4958
PRW226	189458.194	727335.6750
TLE198	189437.137	727294.5211
TLE199	189474.574	727335.8916

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.	F.E.E. S.F.
26	WISCONSIN BLUE ROCK PROPERTIES, LLC	FEE, TLE	530	265

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED		
100	WE ENERGIES - ELECTRIC	ROR		
104	AT&T WISCONSIN	ROR		
110	CITY OF BROOKFIELD - WATER	ROR		

(100) **WE ENERGIES - ELECTRIC**
PARCEL 26 - DOC. NO. 6247000
PARCEL 26 - DOC. NO. 424460 BLANKET EASEMENT

(104) **AT&T WISCONSIN**
PARCEL 26 - DOC. NO. 424460 BLANKET EASEMENT

(110) **CITY OF BROOKFIELD - WATER**
PARCEL 26 - DOC. NO. 1494636
PARCEL 26 - DOC. NO. 4311466

NOTES:
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R/W PROJECT NUMBER: 2025-03-23 | **SHEET NUMBER:** 23 of 24

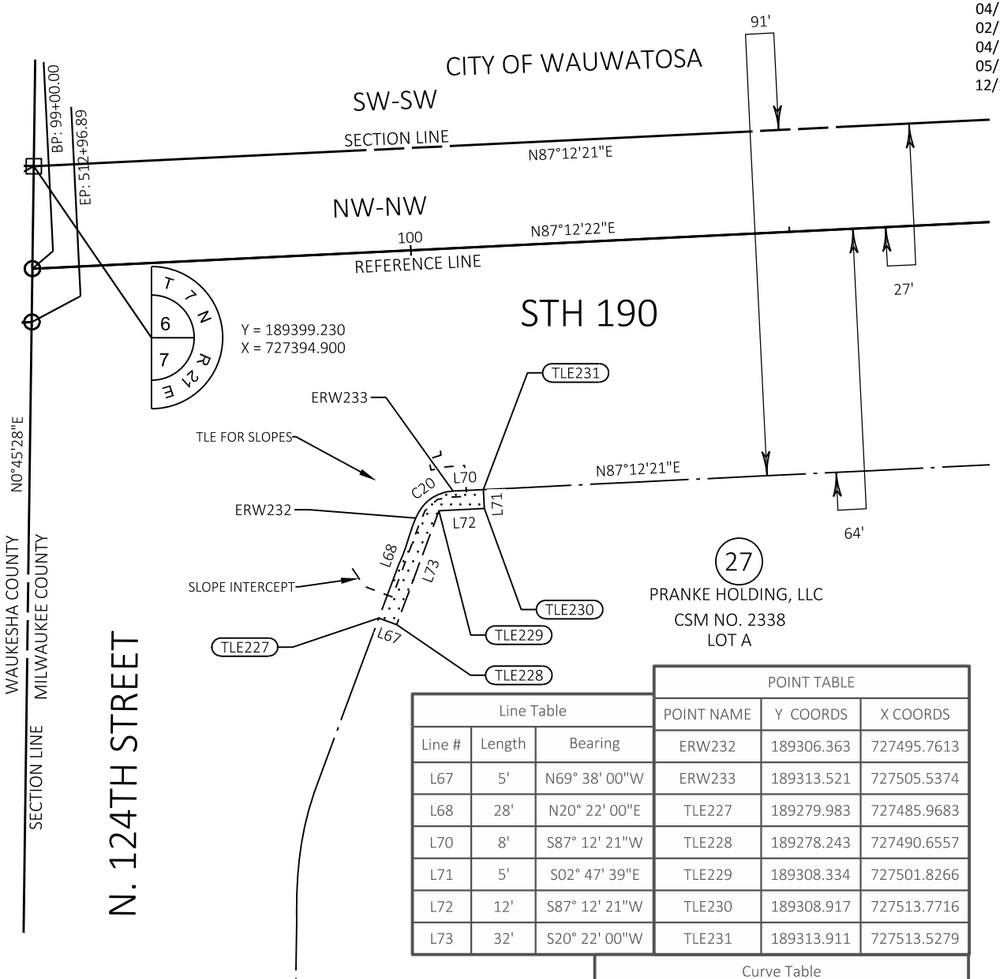
R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

STH 190 — WAUKESHA COUNTY

PART OF THE NW 1/4 OF THE NW 1/4 OF SECTION 7 T7N, R21E IN THE CITY OF WAUWATOSA, MILWAUKEE COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

4



Line Table		
Line #	Length	Bearing
L67	5'	N69° 38' 00"W
L68	28'	N20° 22' 00"E
L70	8'	S87° 12' 21"W
L71	5'	S02° 47' 39"E
L72	12'	S87° 12' 21"W
L73	32'	S20° 22' 00"W

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
ERW232	189306.363	727495.7613
ERW233	189313.521	727505.5374
TLE227	189279.983	727485.9683
TLE228	189278.243	727490.6557
TLE229	189308.334	727501.8266
TLE230	189308.917	727513.7716
TLE231	189313.911	727513.5279

Curve Table				
Curve #	Length	Radius	Chord	Chord Bearing
C20	13'	11.00	12'	N53° 47' 11"E

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE

PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
27	PRANKE HOLDING, LLC	TLE	228

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	

GN

SCALE, FEET
0 20 40

FILE NAME : 2025-03-23_EXHIBITS.DWG PLOT DATE : 12/15/2023 1:50 PM R/W PROJECT: R/W PROJ NO

NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

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R/W PROJECT NUMBER: 2025-03-23 | **SHEET NUMBER:** 24 of 24

R/W ACQUISITION EXHIBIT
STH 190
BROOKFIELD RD - 124TH ST

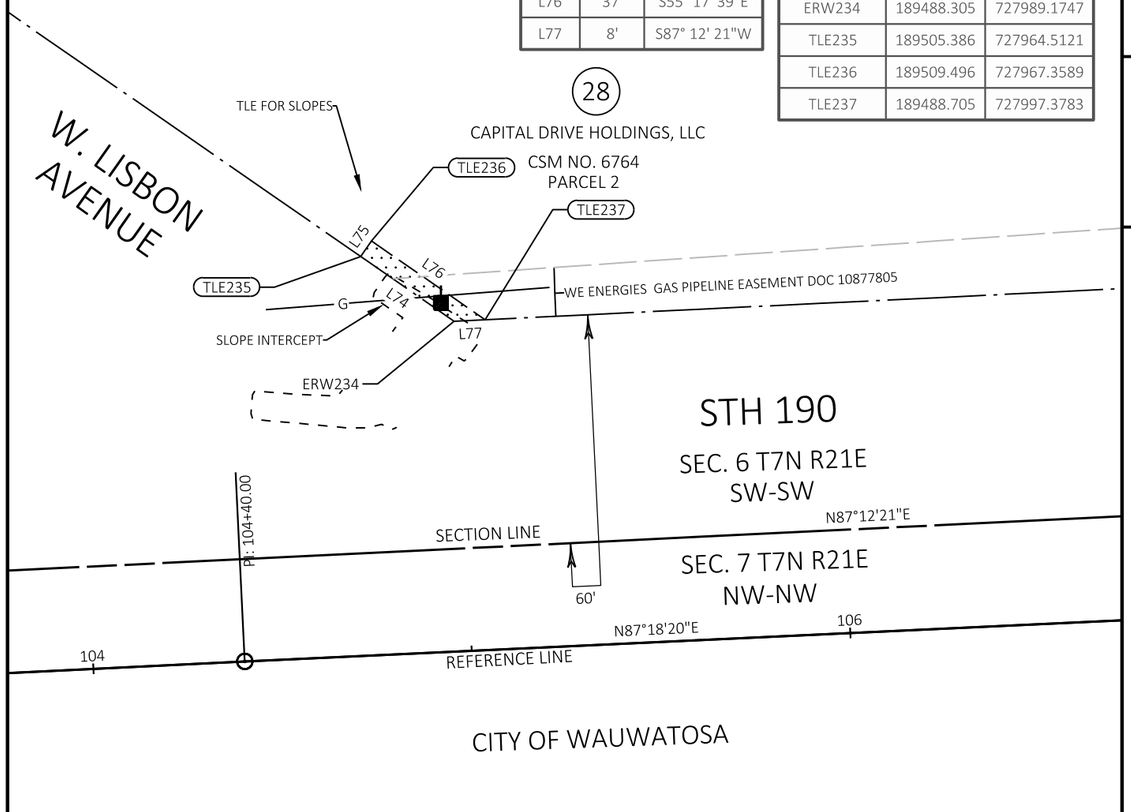
STH 190 — WAUKESHA COUNTY

PART OF THE SW 1/4 OF THE SW 1/4 OF SECTION 6 T7N, R21E IN THE CITY OF WAUWATOSA, MILWAUKEE COUNTY WISCONSIN

04/11/2022
02/28/2023
04/11/2023
05/30/2023
12/12/2023

Line Table		
Line #	Length	Bearing
L74	30'	N55° 17' 39"W
L75	5'	N34° 42' 21"E
L76	37'	S55° 17' 39"E
L77	8'	S87° 12' 21"W

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
ERW234	189488.305	727989.1747
TLE235	189505.386	727964.5121
TLE236	189509.496	727967.3589
TLE237	189488.705	727997.3783



SCHEDULE OF LANDS & INTERESTS REQUIRED

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PARCEL NUMBER	OWNER	INTEREST REQUIRED	T.L.E. S.F.
28	CAPITAL DRIVE HOLDINGS, LLC	TLE	166

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED	
100	WE ENERGIES - ELECTRIC	ROR	
101	WE ENERGIES - GAS	ROR	

(100) **WE ENERGIES - ELECTRIC**
PARCEL 28 - NO RECORD OF EASEMENT

(101) **WE ENERGIES - GAS**
PARCEL 28 - DOC. NO. 10877805

GN

SCALE, FEET
0 20 40

525

FILE NAME : 2025-03-23_EXHIBITS.DWG PLOT DATE : 12/15/2023 1:50 PM R/W PROJECT: R/W PROJ NO

Standard Detail Drawing List

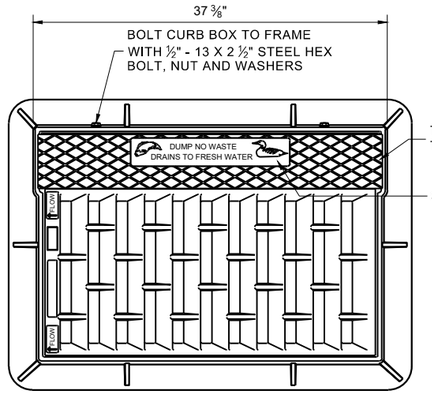
08A05-21A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-21B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-21C	INLET COVERS TYPE F, HM, HM-S, S, T, HM-GJ & HM-GJ-S
08A05-21E	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-04	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08C06-03	INLETS 3-FT AND 4-FT DIAMETER
08C07-03	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT
08C08-03	INLETS MEDIAN 1 AND 2 GRATE
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-21A	CURB RAMPS TYPES 1 AND 1-A
08D05-21B	CURB RAMPS TYPES 2 AND 3
08D05-21C	CURB RAMPS TYPES 4A AND 4A1
08D05-21D	CURB RAMPS TYPE 4B AND 4B1
08D05-21E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-21F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D16-11	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08D17-06	MANHOLES, MANHOLE & INLET COVERS
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F10-02	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
09B02-10	CONDUIT
09B04-13	PULL BOX
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09E01-15B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-06	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
09H11-01	IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS
11B01-05	CONCRETE CORRUGATED MEDIAN
11B02-02	CONCRETE MEDIAN NOSE
13C14-07A	BASE PATCHING CONCRETE
13C14-07B	BASE PATCHING CONCRETE
13C14-07C	BASE PATCHING CONCRETE
13C19-03	HMA LONGITUDINAL JOINTS
14B07-16A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16J	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16K	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16L	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16M	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16N	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B26-05A	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05B	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05C	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05D	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05E	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05F	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05G	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05H	STEEL THRIE BEAM BULLNOSE TERMINAL
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END

6

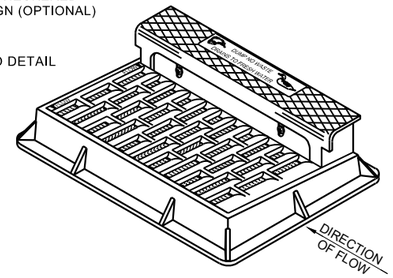
Standard Detail Drawing List

15A04-08A	FLEXIBLE DELINEATOR POST
15A04-08D	CHANNELIZING DEVICES, PERMANENT FLEXIBLE TUBULAR MARKER POST
15C02-09F	ADVANCED WIDTH RESTRICTION SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-16B	PAVEMENT MARKING WORDS
15C07-16C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-09A	MEDIAN ISLAND MARKINGS
15C18-09B	PAVEMENT MARKINGS, MEDIAN ISLAND NOSE
15C18-09C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
15C19-09C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C20-02	YIELD MARKING
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-14A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D20-09A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D22-07	TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D23-07A	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE
15D23-07B	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D30-10A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10L	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

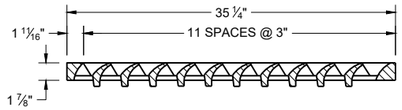
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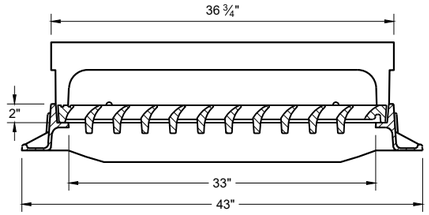


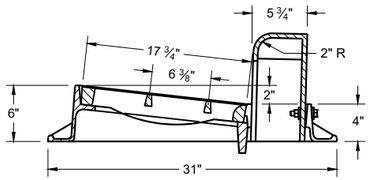
NOTE: EITHER CASTING IS ACCEPTABLE

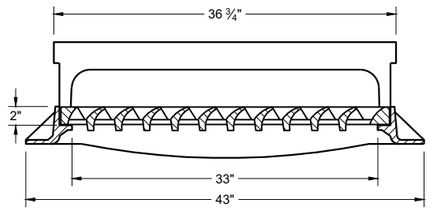


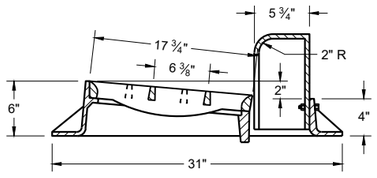
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"







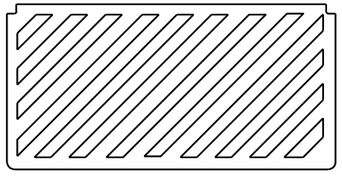




TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

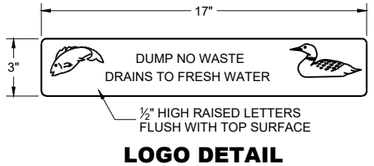
1 1/8" DIAGONAL BARS WITH 1 5/8" OPENINGS



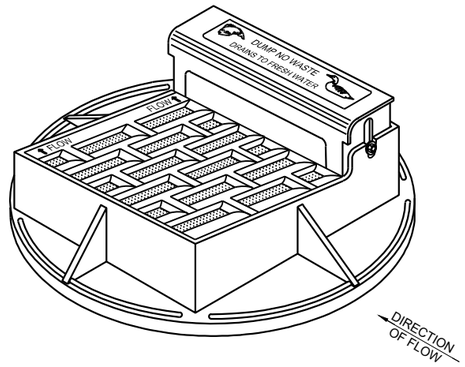
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

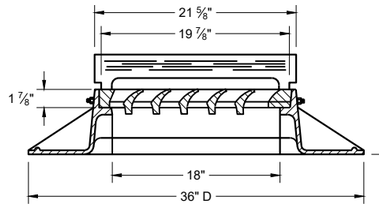


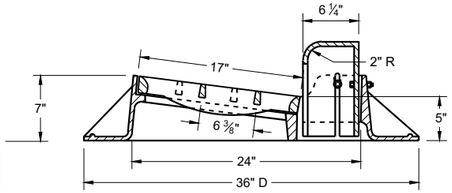
LOGO DETAIL



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

NOTE: EITHER CASTING IS ACCEPTABLE





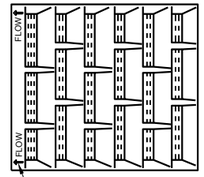
TYPE "A"

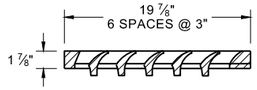
GENERAL NOTES

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.

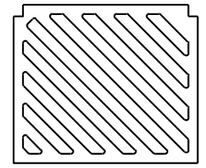
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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





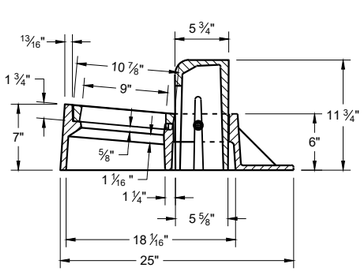
1" DIAGONAL BARS WITH 1 1/2" OPENINGS



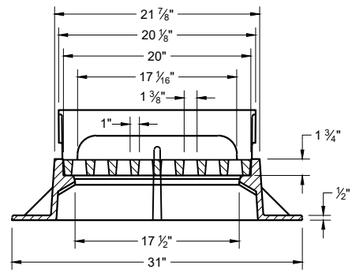
SPECIAL GRATE FOR TYPE "A" COVER

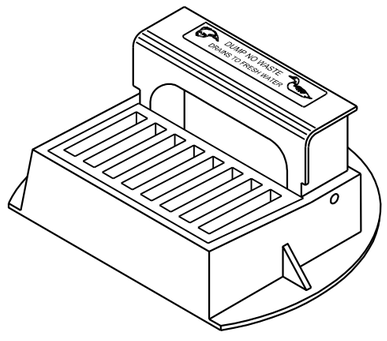
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "Z"





INLET COVERS
TYPES A, H, A-S, H-S AND Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

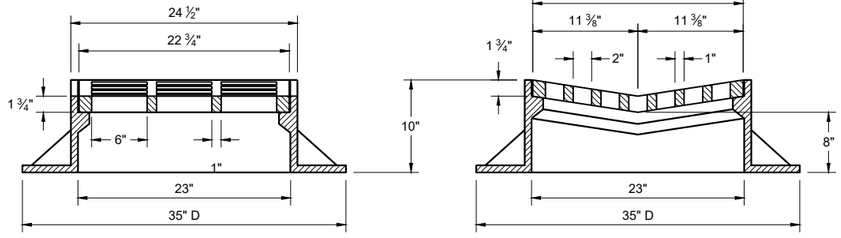
APPROVED
December 2023
DATE

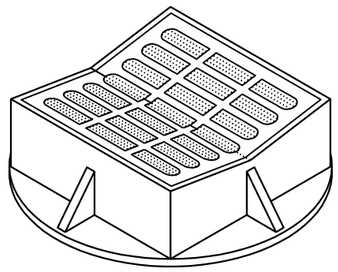
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

FHWA

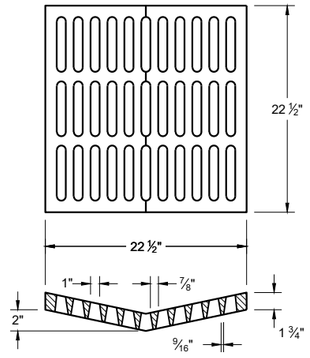
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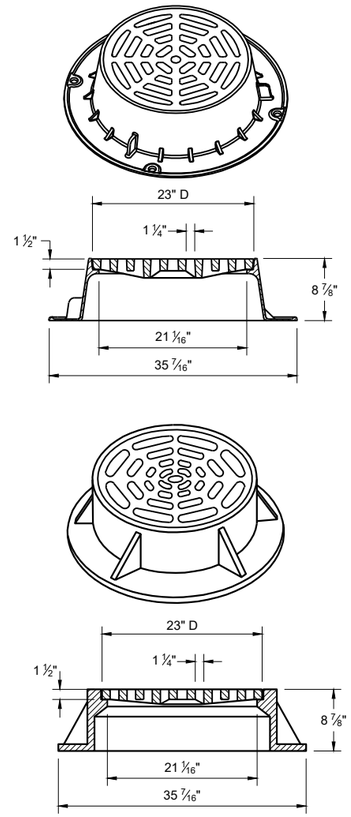
TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS POSSIBLE

NOTED AS TYPE B - A ON THE DRAINAGE TABLE



TYPE "C"

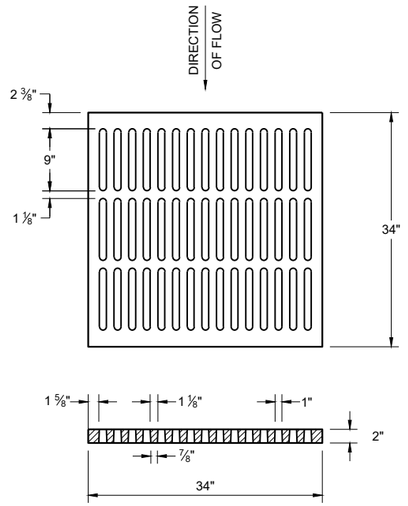
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

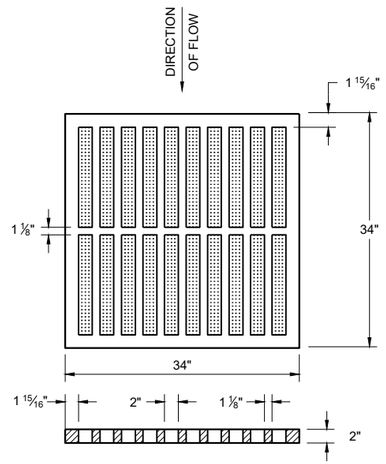
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS PERMITTED

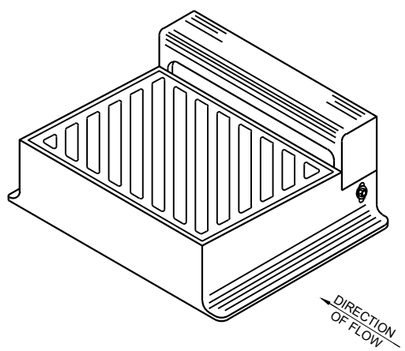
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



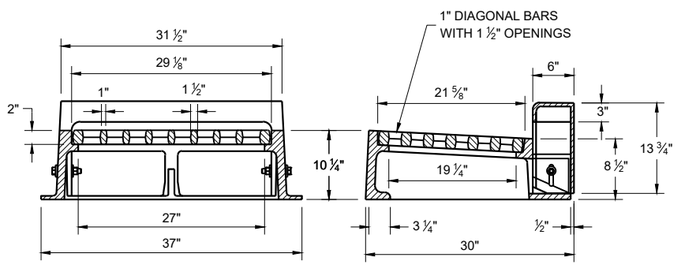
TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON THE DRAINAGE TABLE



DIAGONAL SLOTS SHALL BE ORIENTEDTO THE DIRECTION OF FLOW AS ILLUSTRATED.
GRATES ARE MANUFACTURED TO BE REVERSIBLE.



TYPE "WM"

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

INLET COVERS TYPES B, B-A, C, MS, MS-A AND WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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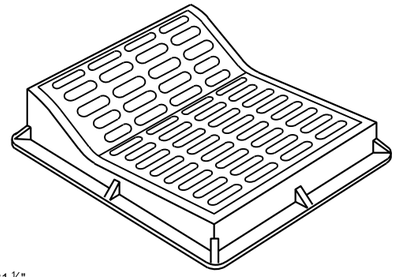
SDD 08A05-21b

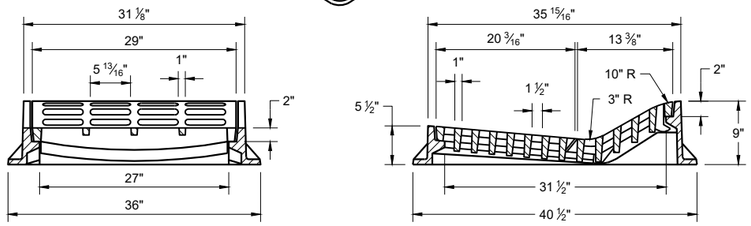
SDD 08A05-21b

GENERAL NOTES

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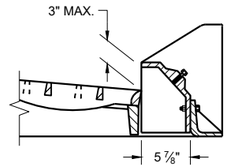
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.





TYPE "F"

USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"

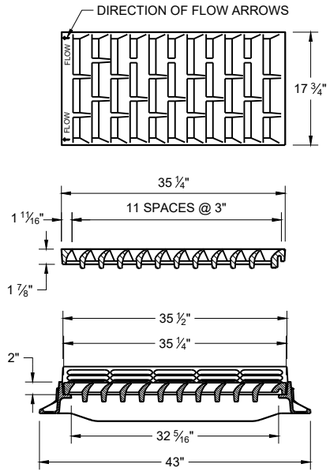


ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

USE WITH TYPES "G" AND "J" CONCRETE CURB AND GUTTER, 30 INCH
NOTED AS TYP "HM-GJ" ON DRAINAGE TABLE

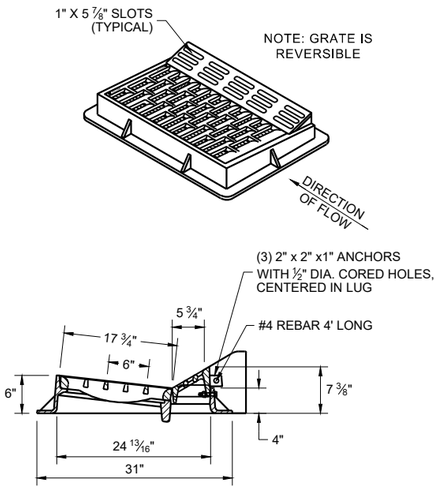
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.



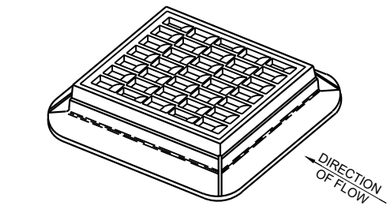
TYPE "HM"

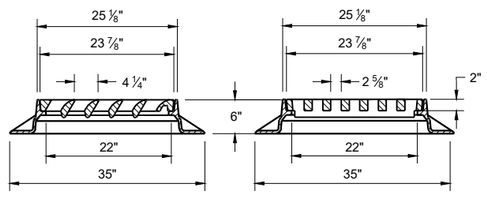
USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"



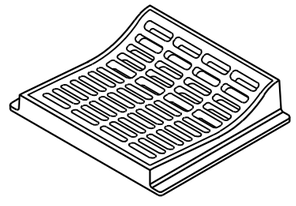
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

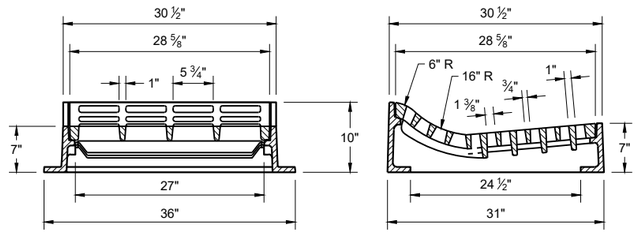
NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.





TYPE "S"





TYPE "T"

USE WITH TYPES "R" AND "T" CONCRETE CURB AND GUTTER, 36"

INLET COVERS
TYPES F, HM, HM-S, S, T, HM-GJ AND HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

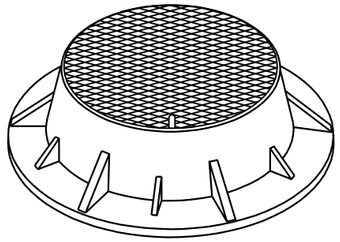
6
SDD 08A05-21c

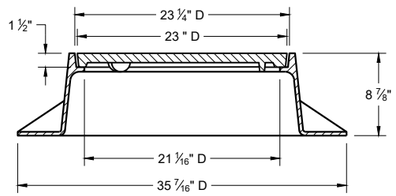
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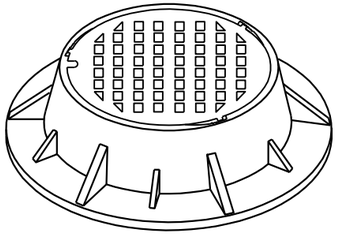
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

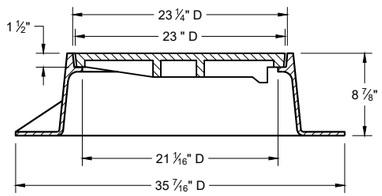




TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

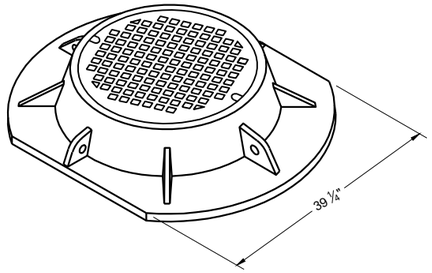


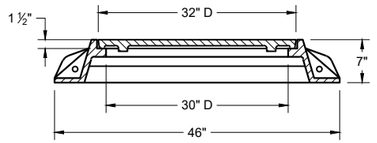


TYPE "J" SPECIAL

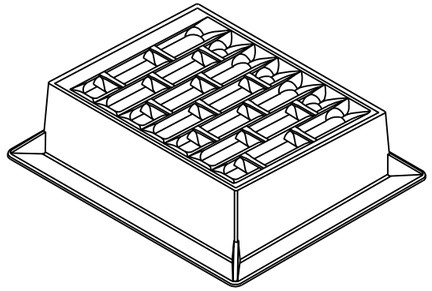
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

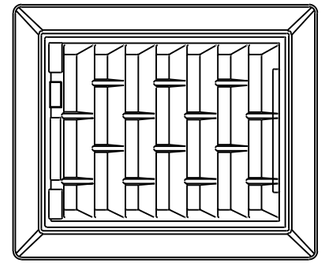
NOTE: EITHER CASTING IS ACCEPTABLE

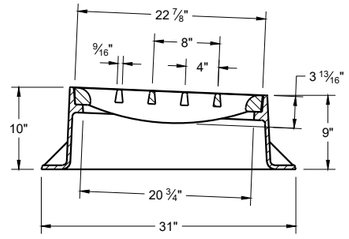


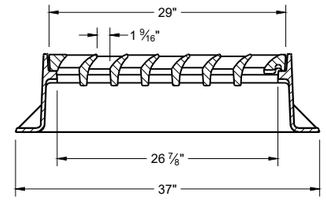


TYPE "K"

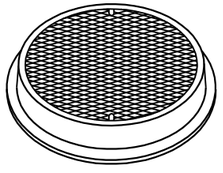


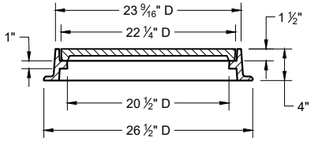




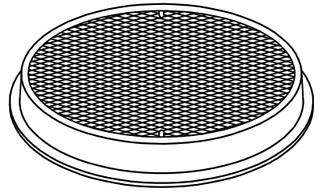


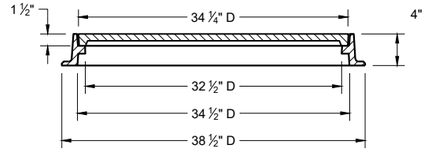
INLET COVER TYPE "BW"





TYPE "L"





TYPE "M"

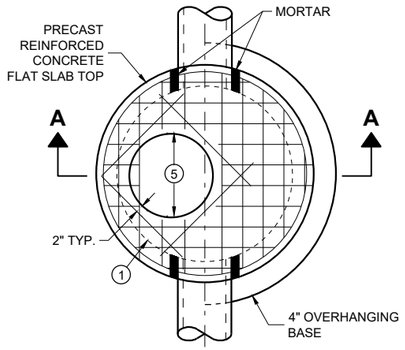
INLET COVERS TYPES BW
MANHOLE COVERS TYPES K, J, J-S, L, AND M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
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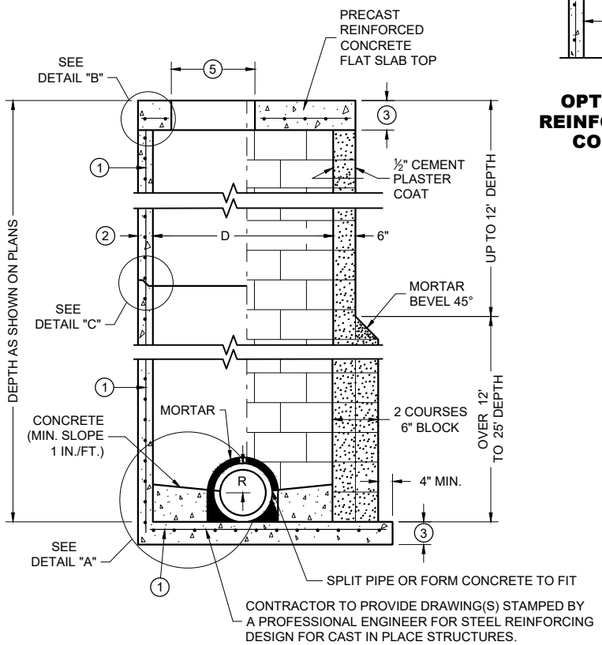
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PLAN VIEW

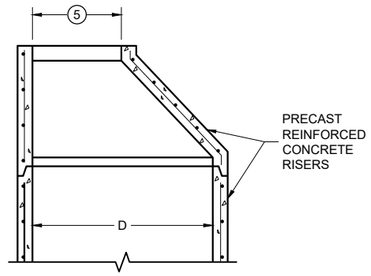
CIRCULAR OPENING



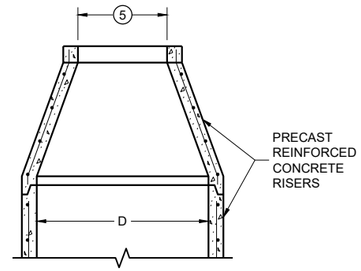
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

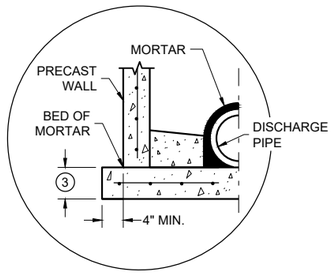
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)



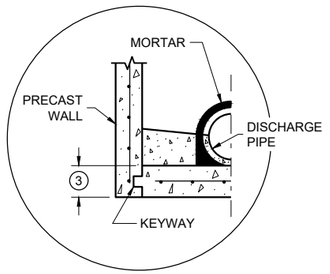
OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

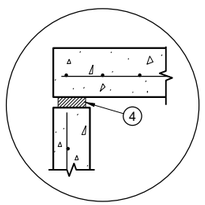


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

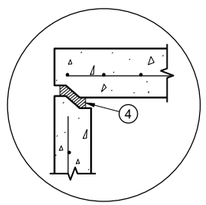


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

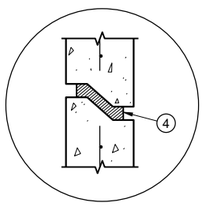
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B" **DETAIL "C"**

MANHOLE COVER OPENING MATRIX

OPENING SIZE (FT.) (5) \ MANHOLE COVER TYPE	C	ALL J'S	K	L	M
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42 *	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES. SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

GENERAL NOTES

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

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 FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. 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 IMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

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

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

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

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

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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

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

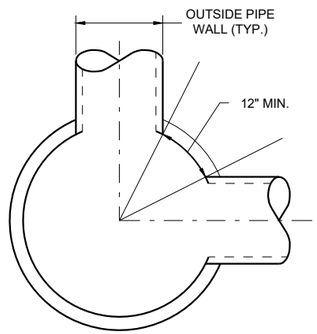
(1) FOR PRECAST MANHOLES AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

(4) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.

(5) SEE MANHOLE COVER OPENING MATRIX.



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

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DEPARTMENT OF TRANSPORTATION

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December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

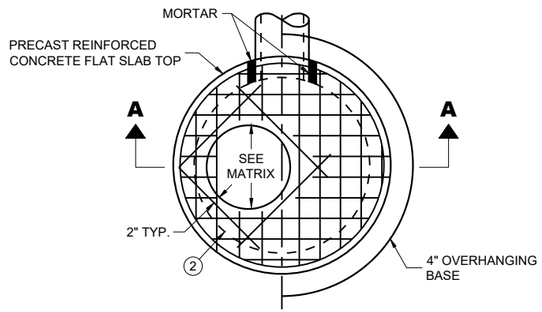
FHWA

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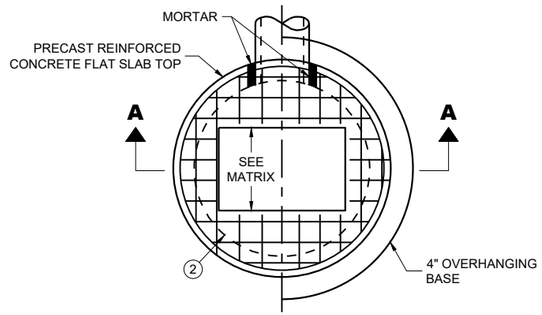
SDD 08B09-04

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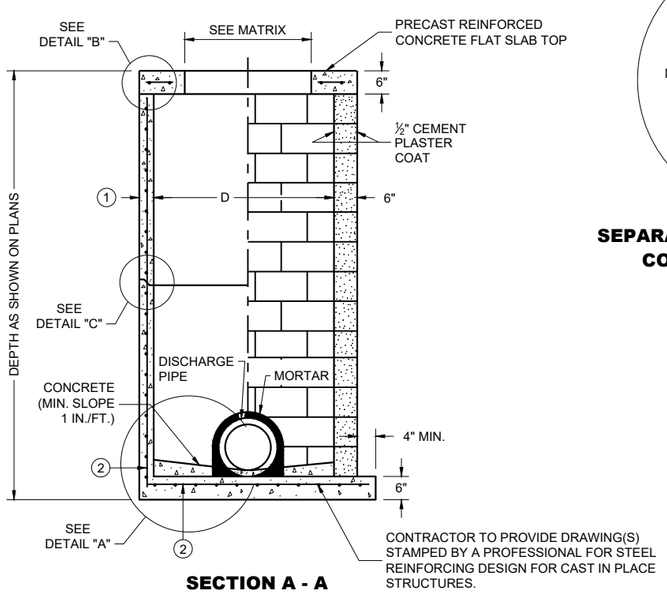
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PLAN VIEW CIRCULAR OPENING



PLAN VIEW RECTANGULAR OPENING



SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (2)

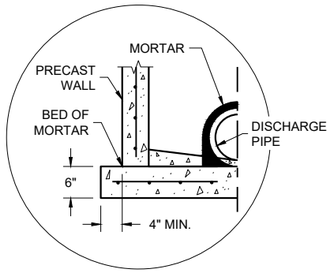
CIRCULAR INLETS WITH FLAT TOP

CATCH BASIN COVER OPENING MATRIX

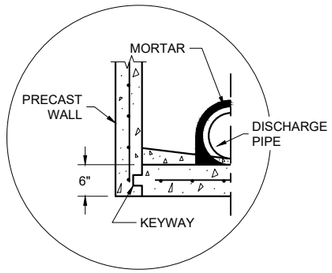
INLET SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT.)											
3-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
4-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
	2 X 2.5			X				X	X	X	X	
	2 X 3						X					
	2.5 X 3					X						

PIPE MATRIX

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

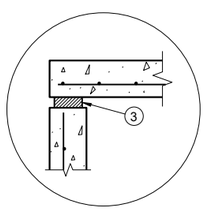


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

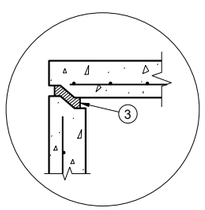


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

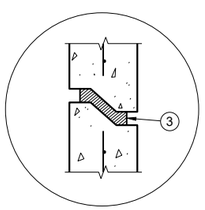
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B" **DETAIL "C"**

GENERAL NOTES

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

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

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

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

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

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

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

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

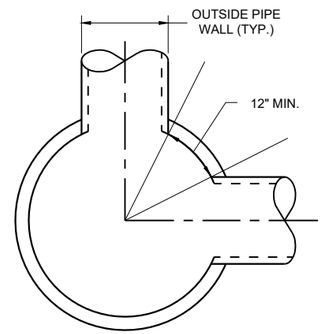
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

(1) MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT DIAMETER AND 5 INCHES FOR 4-FT DIAMTER PRECAST INLETS.

(2) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(3) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

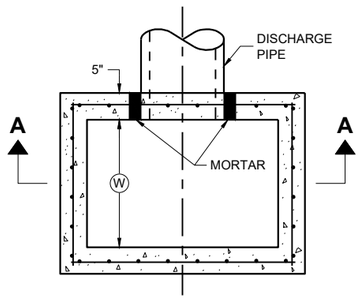
INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

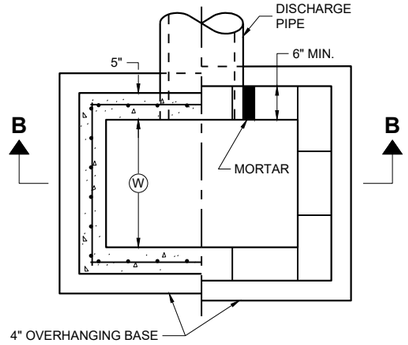
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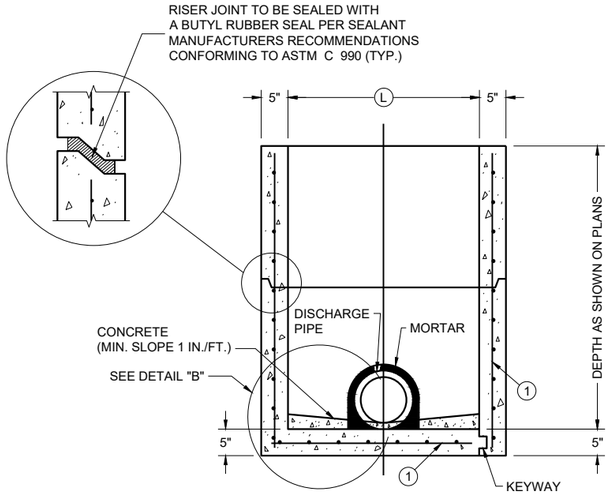
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PLAN VIEW



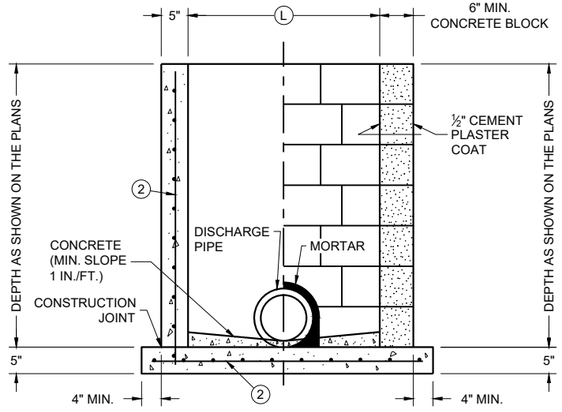
PLAN VIEW



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

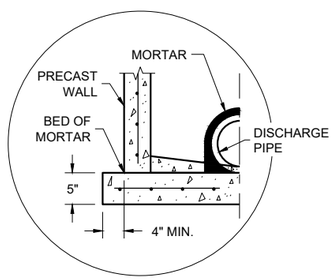
SECTION A - A



CAST IN PLACE REINFORCED CONCRETE

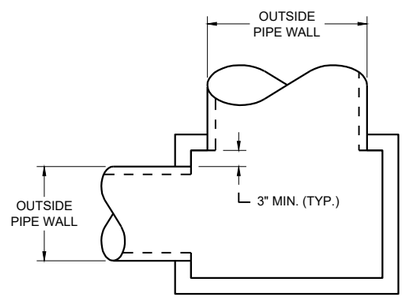
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

SECTION B - B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "B"



DETAIL "A"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP N0T SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

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

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

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

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

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

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

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

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

(1) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES 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.

CATCH BASIN COVER MATRIX

INLET SIZE	WIDTH (W) (FT.)	LENGTH (L) (FT.)	INLET COVER TYPE									
			ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM	V V-B
2 X 2-FT	2	2	X	X				X				
2 X 2.5-FT	2	2.5			X			X	X	X	X	
2 X 3-FT	2	3					X					
2.5 X 3-FT	2.5	3				X						
2 X 3.5-FT	2	3.5										X

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2 X 2-FT	12	12
2 X 2.5-FT	12	18
2 X 3-FT	12	24
2.5 X 3-FT	18	24
2 X 3.5-FT	12	30

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2X3.5-FT

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2 X 3.5-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

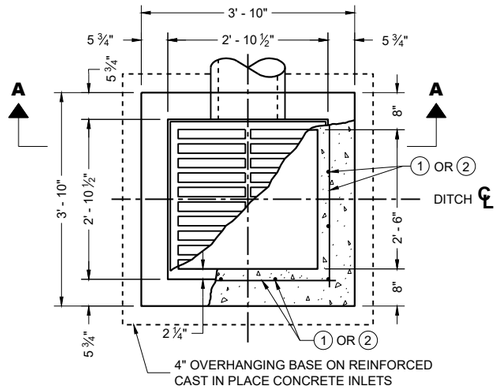
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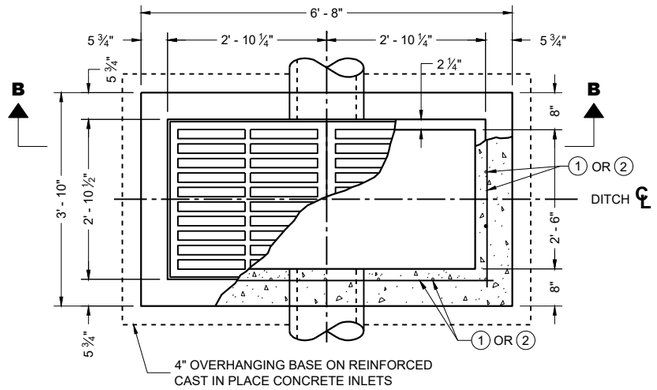
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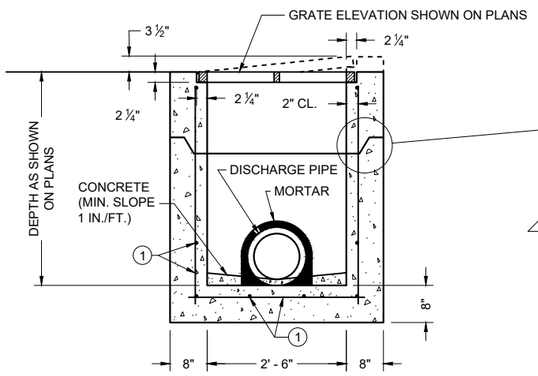
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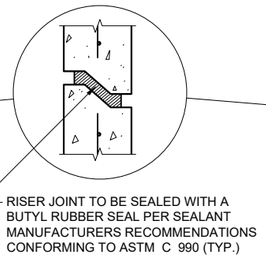
PLAN VIEW

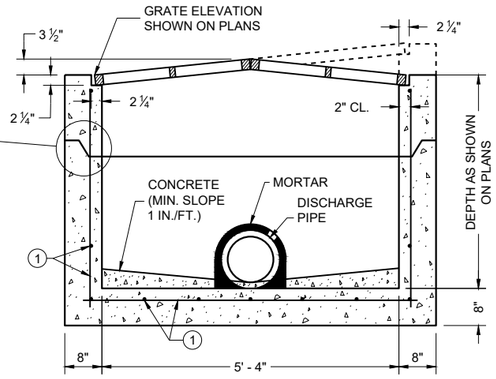


PLAN VIEW

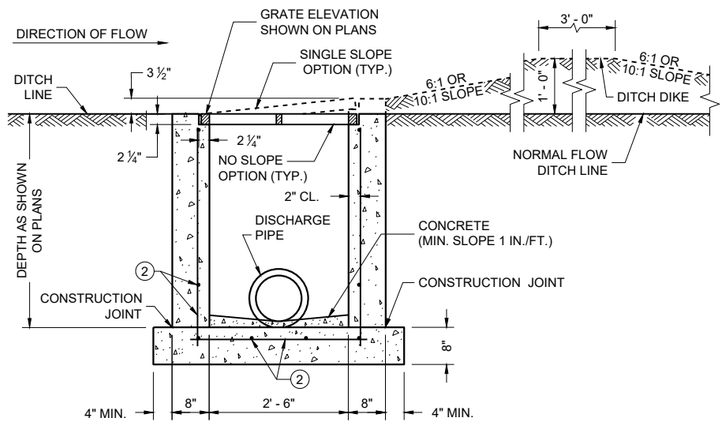


PRECAST REINFORCED CONCRETE SECTION A - A



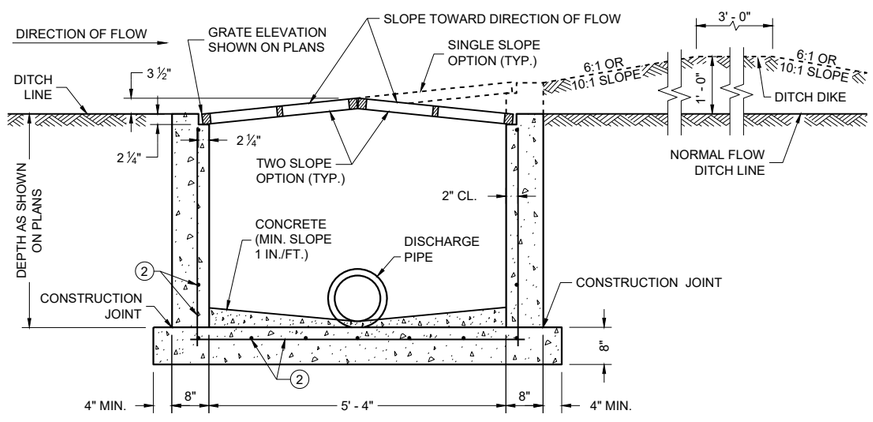


PRECAST REINFORCED CONCRETE SECTION B - B



REINFORCED CAST IN PLACE CONCRETE SECTION A - A

INLETS MEDIAN 1 GRATE



REINFORCED CAST IN PLACE CONCRETE SECTION B - B

INLETS MEDIAN 2 GRATE

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DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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

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

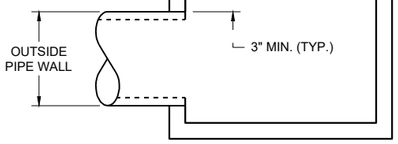
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

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

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

(1) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES 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.



DETAIL "A"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42

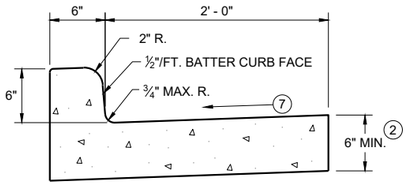
INLETS
MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

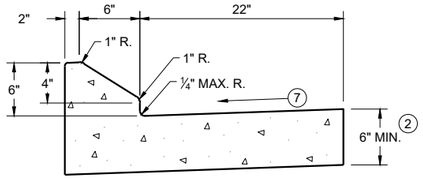
APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

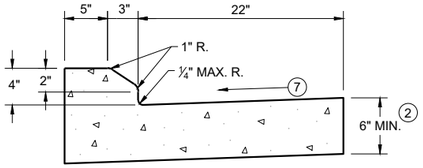
6
SDD 08C08-03



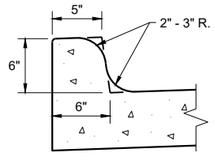
TYPES A (1) & D



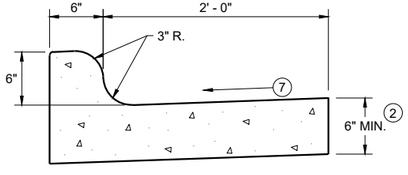
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

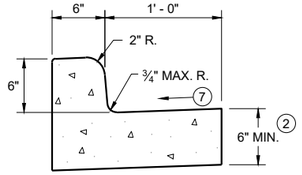


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



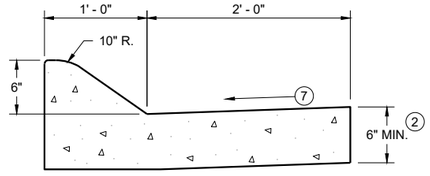
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

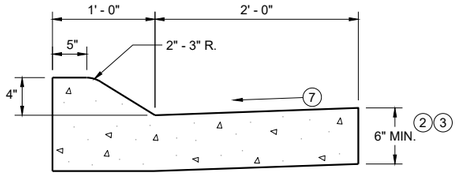


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

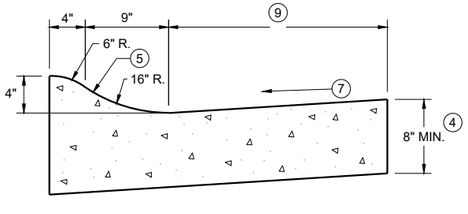


6" SLOPED CURB TYPES A (1) & D



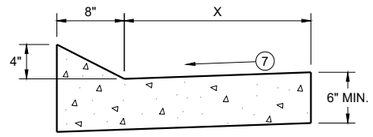
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

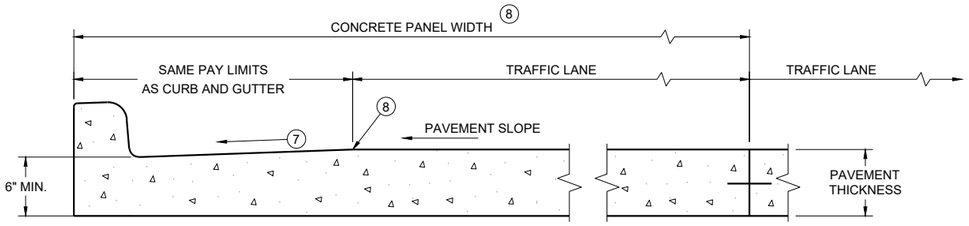


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

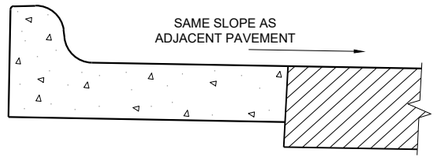
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER *

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION 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 AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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 GUTTERS TYPES A, G, K, R, AND TBTT.

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

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

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

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

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

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

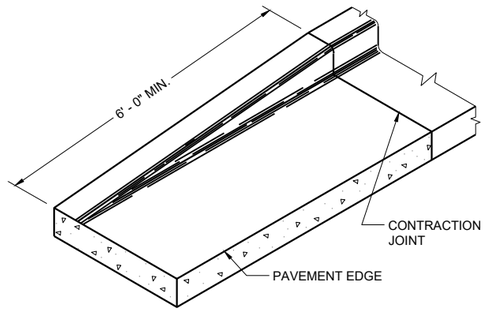
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

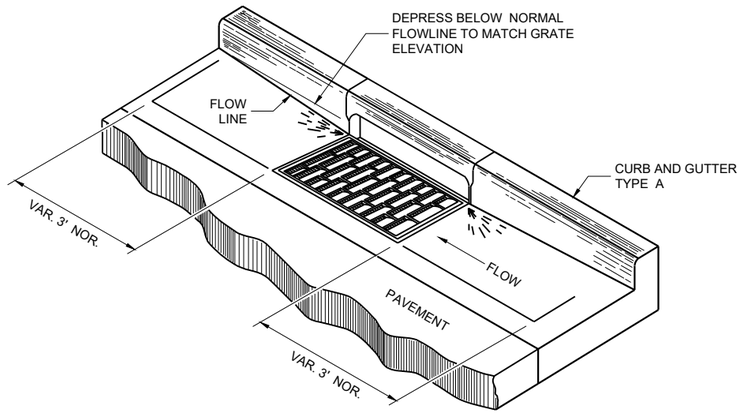
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

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

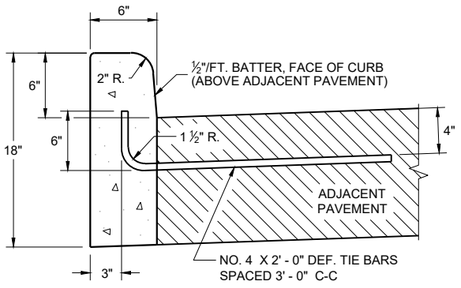
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

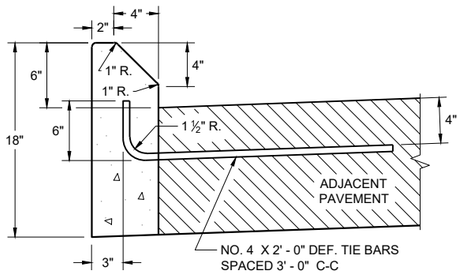
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

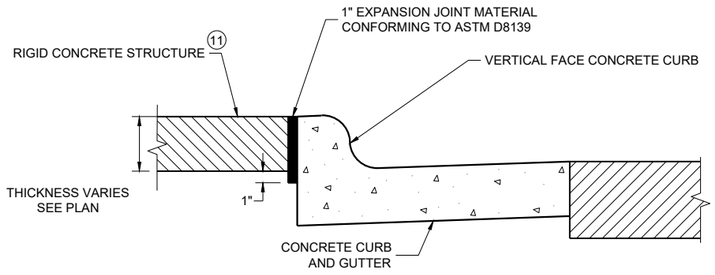


TYPES A (1) & D

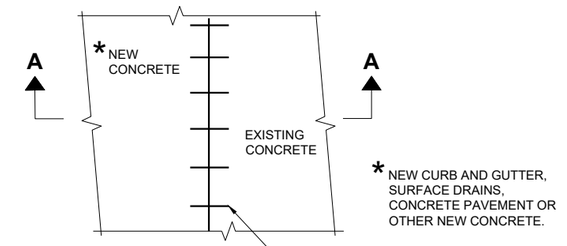


TYPES G (1) & J

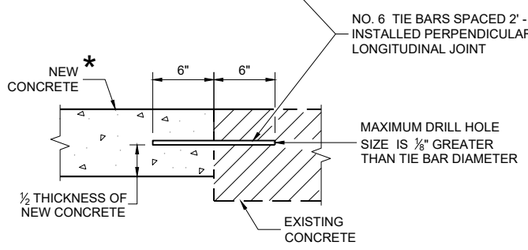
CONCRETE CURB



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)

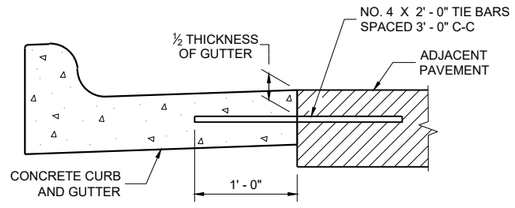


PLAN VIEW

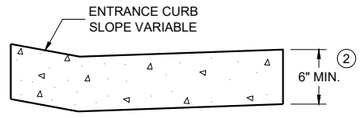


SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6

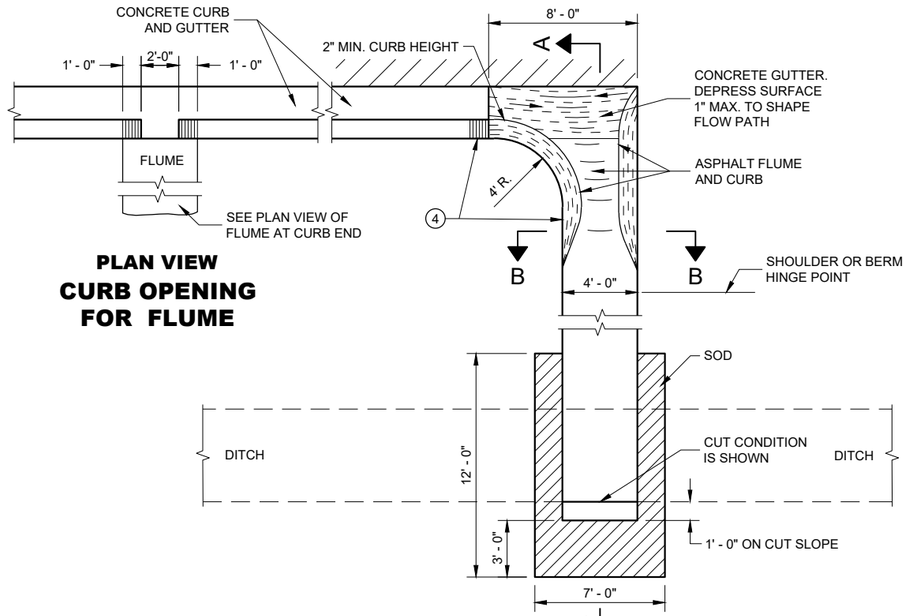
SDD 08D01-23b

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SDD 08D01-23b

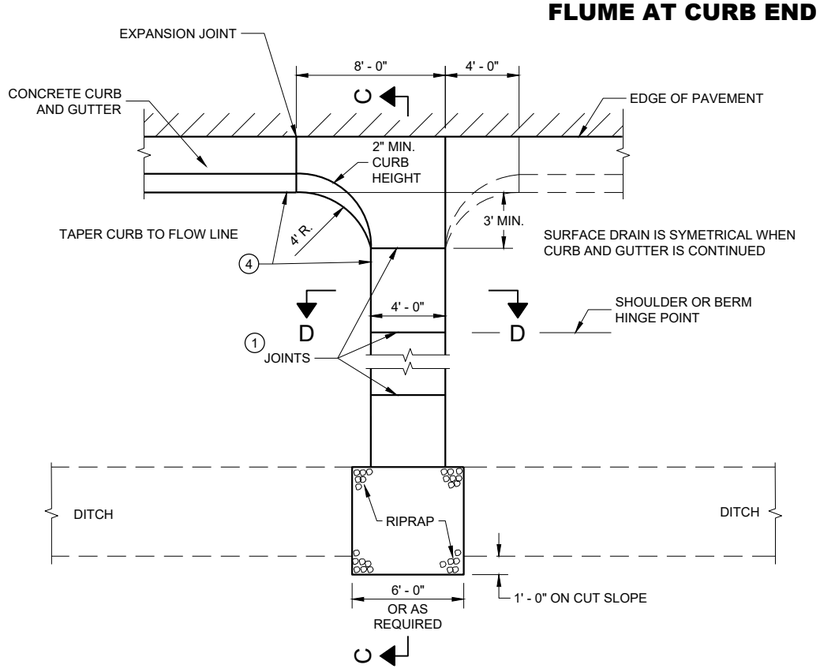
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



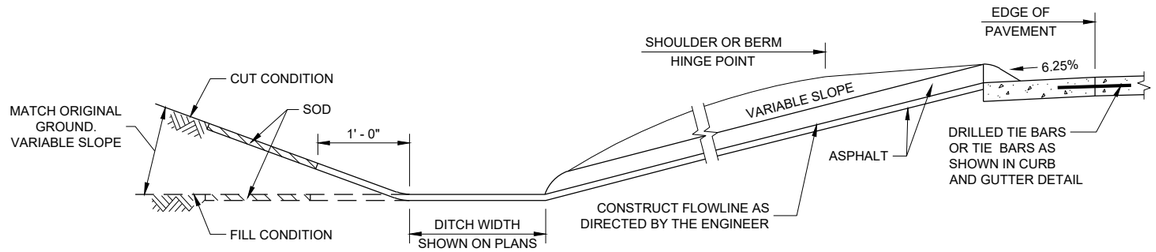
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

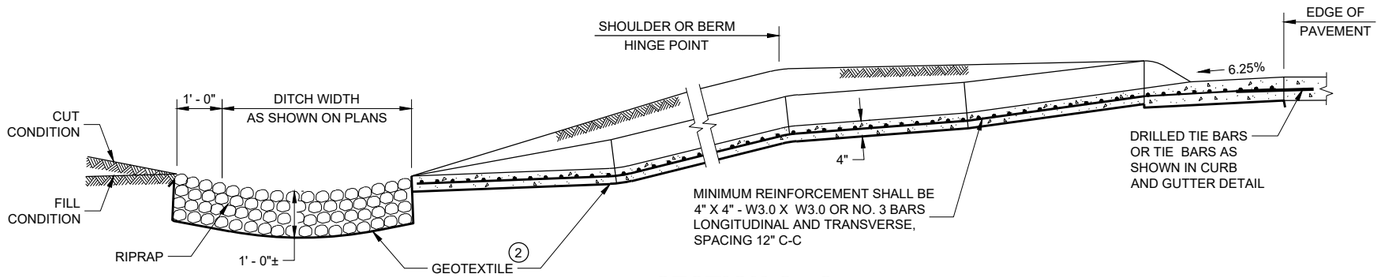
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.

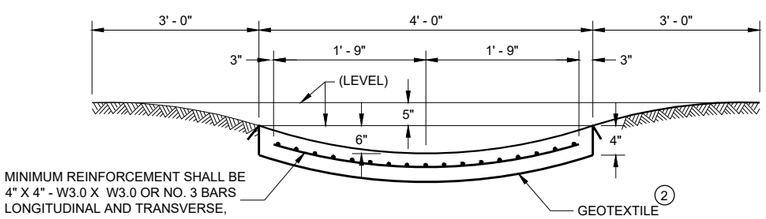


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

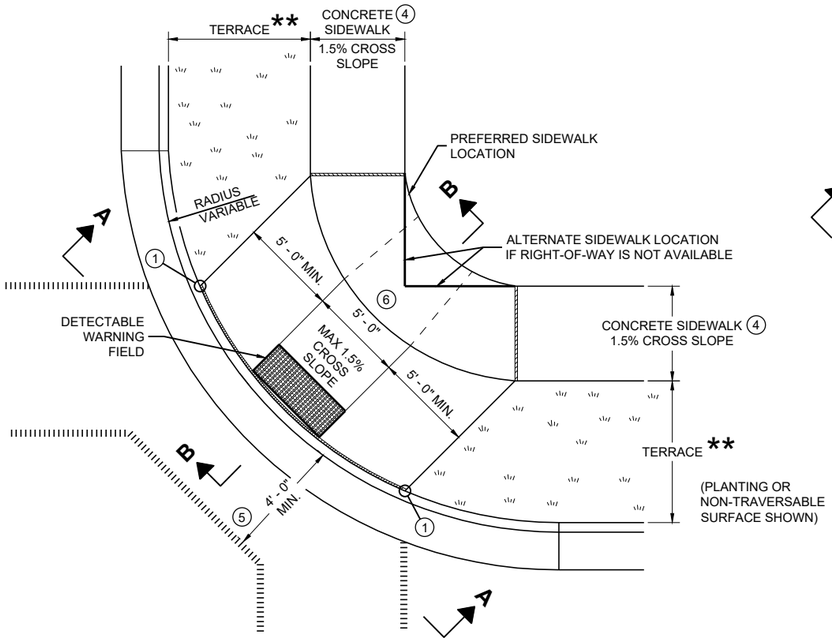
FHWA

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SDD 08D04 - 07

6

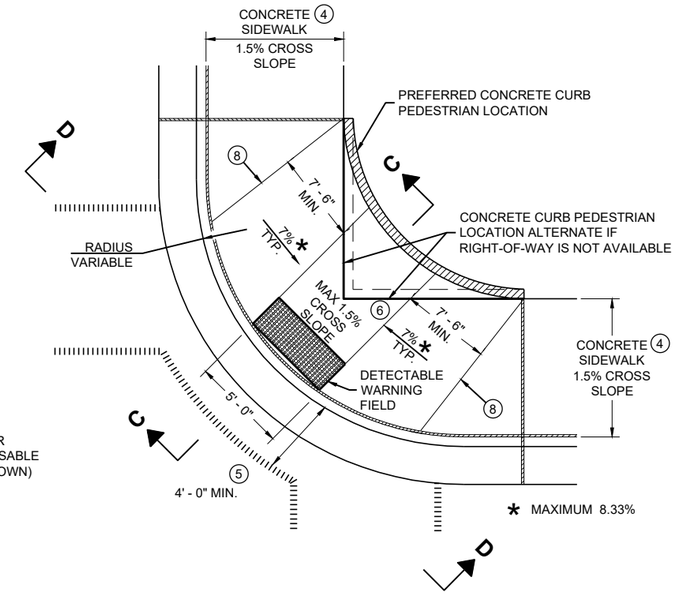
SDD 08D04 - 07



PLAN VIEW

CURB RAMP TYPE 1

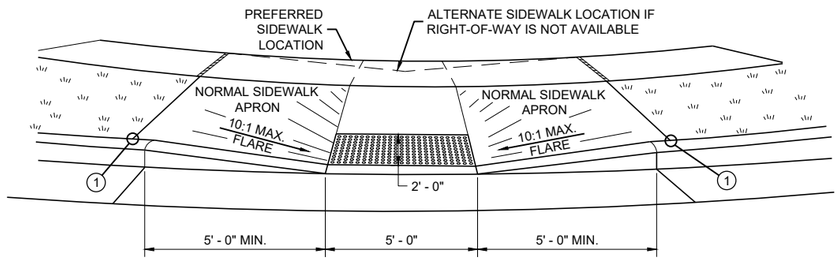
(CENTER OF CORNER RADIUS)



PLAN VIEW

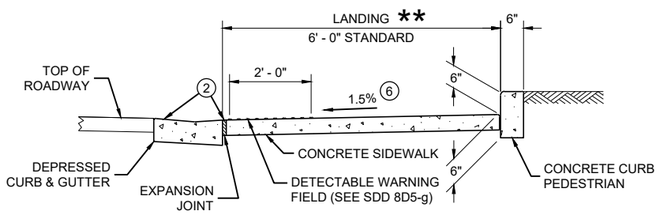
CURB RAMP TYPE 1 - A

(NO TERRACE)

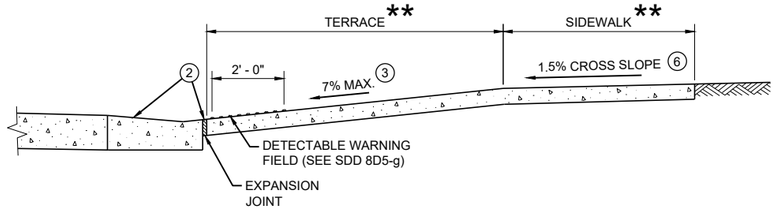


VIEW A - A FOR TYPE 1

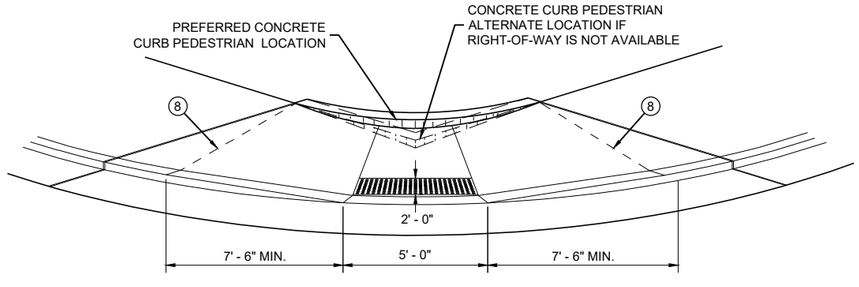
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION C - C FOR TYPE 1 - A



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

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

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

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

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

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

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

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA. 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE

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

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

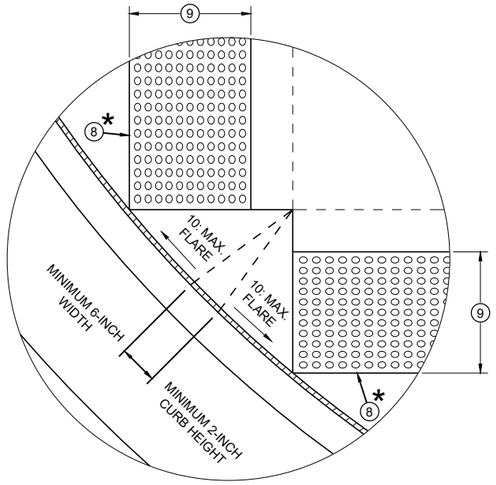
LEGEND

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

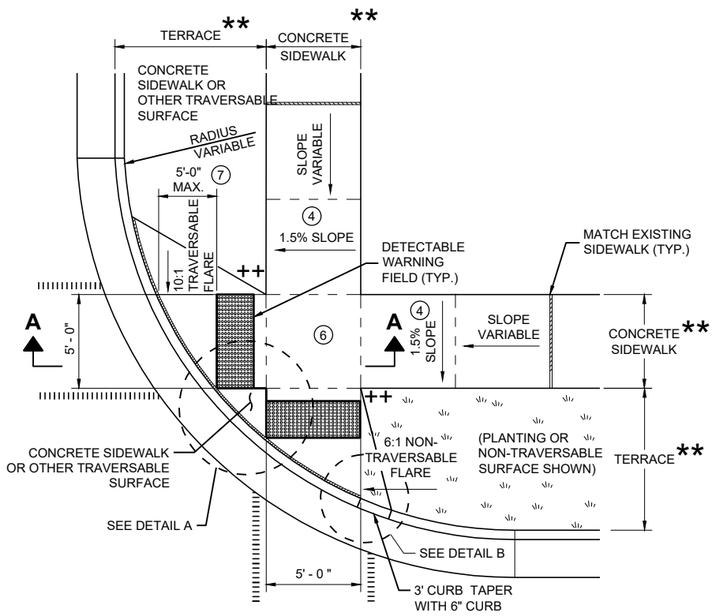
CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D05-21a



DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)

GENERAL NOTES

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

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

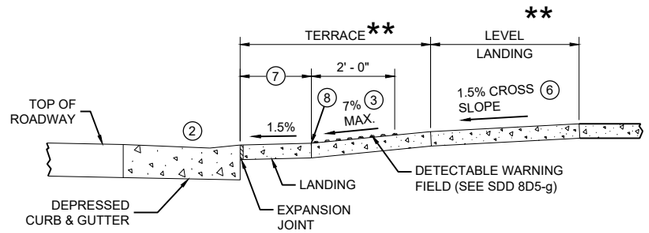
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

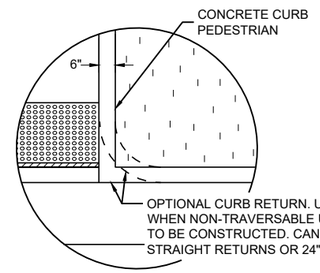


SECTION A - A FOR TYPE 2

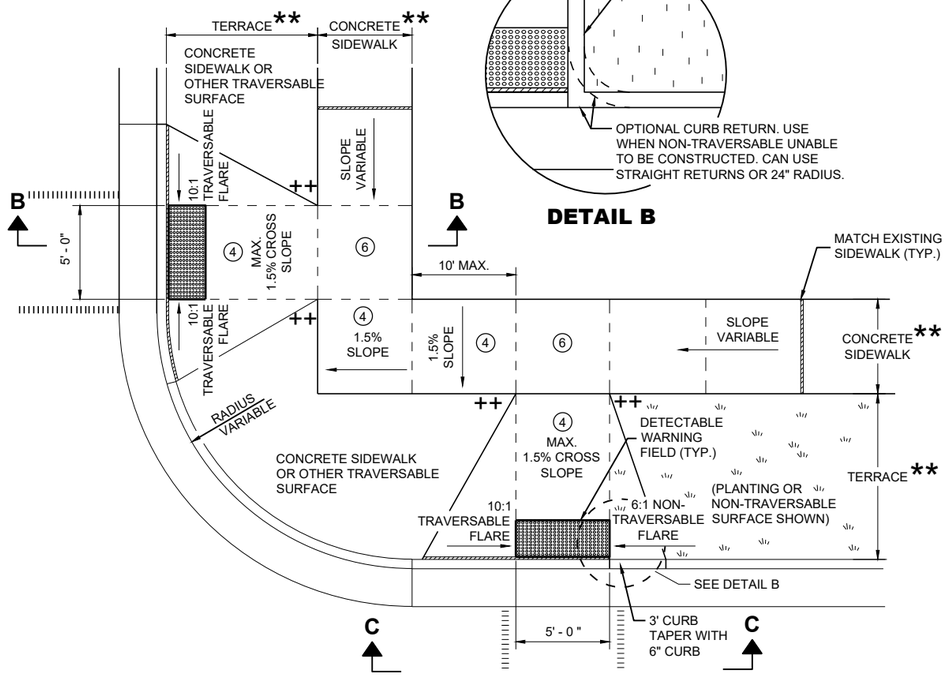
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

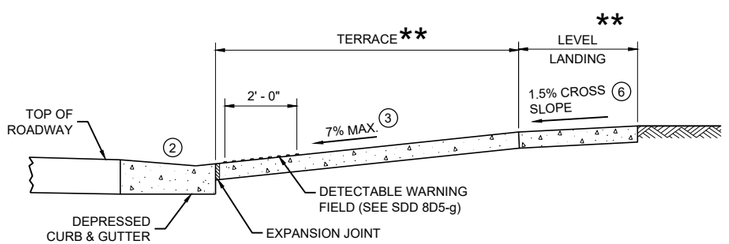
++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



DETAIL B



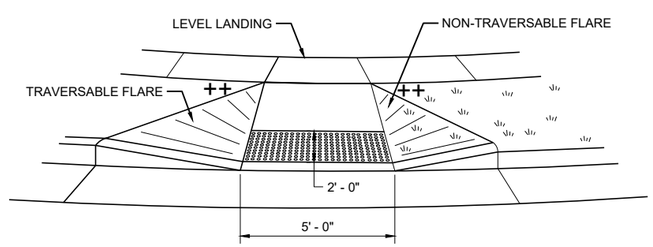
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3

LEGEND

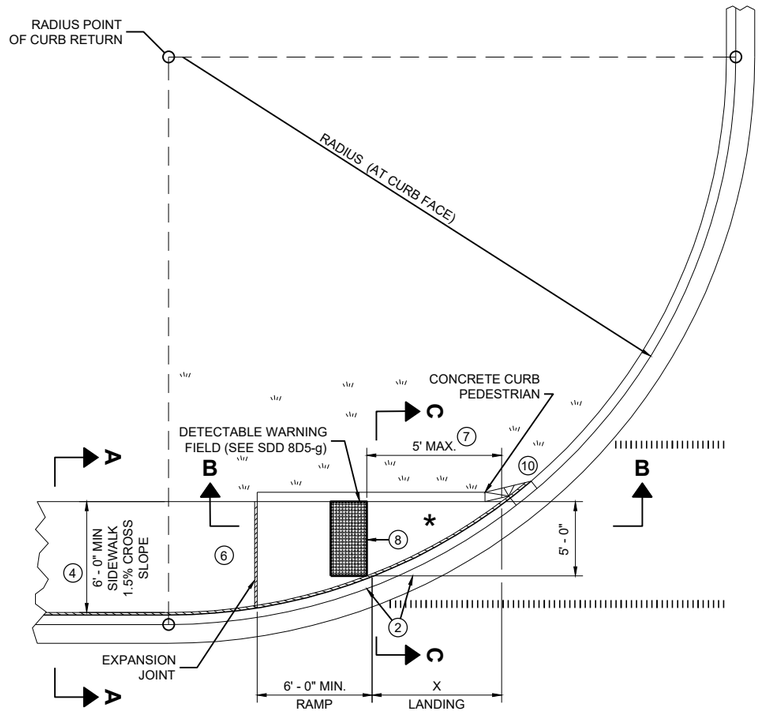
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)



VIEW C - C FOR TYPE 3

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

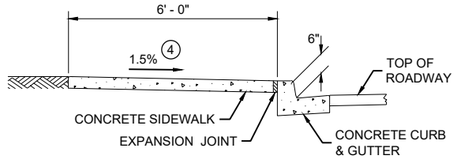


PLAN VIEW

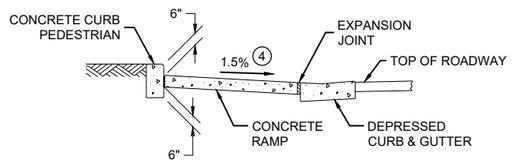
CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"

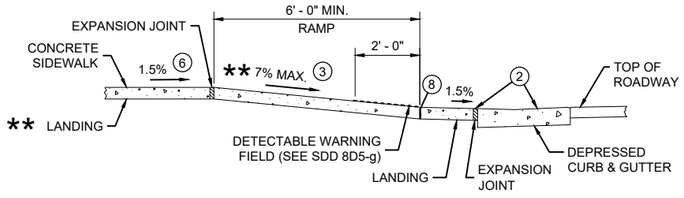
INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A



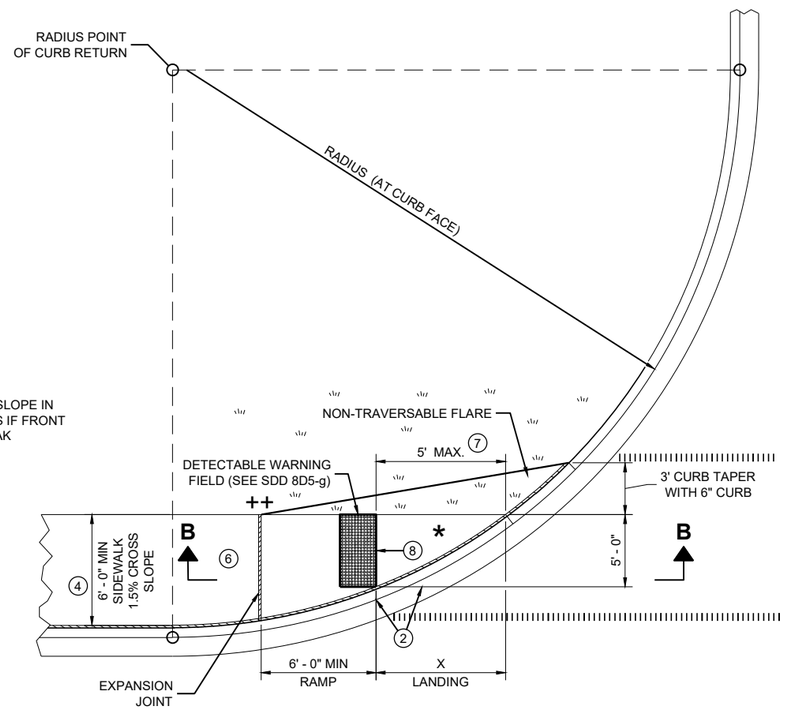
SECTION C - C FOR TYPE 4A



SECTION B - B FOR TYPE 4A AND TYPE 4A1

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

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



PLAN VIEW

CURB RAMP TYPE 4A1

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

GENERAL NOTES

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

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

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

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

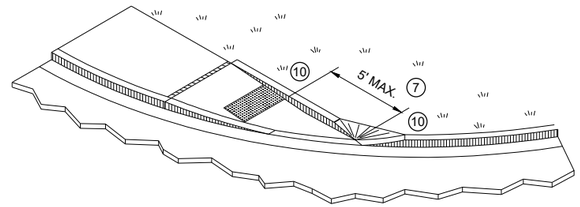
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

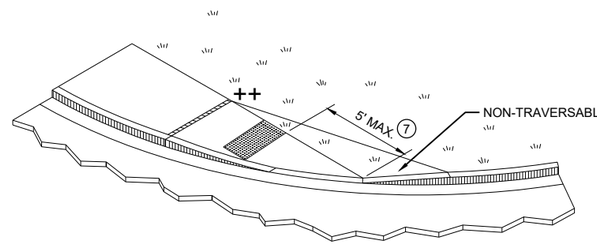
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



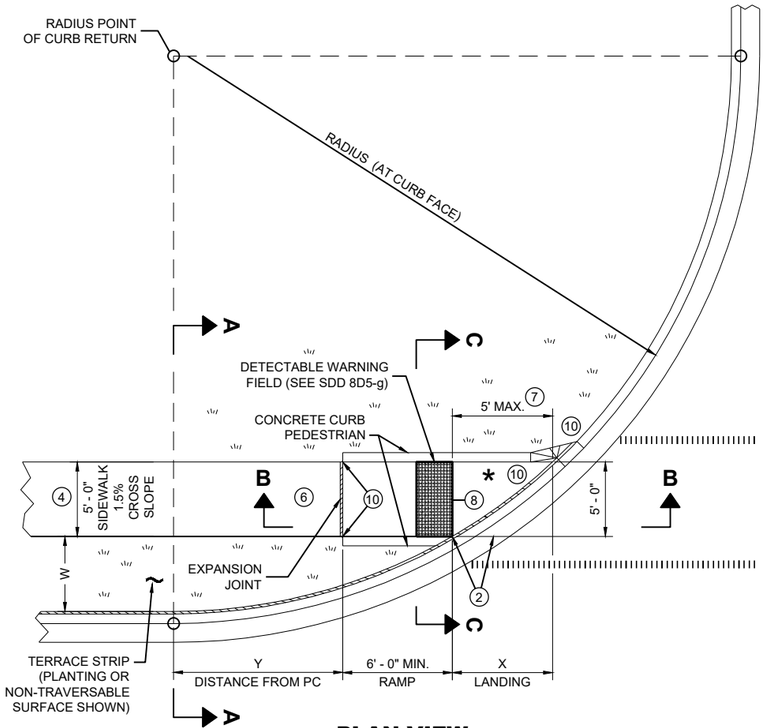
ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

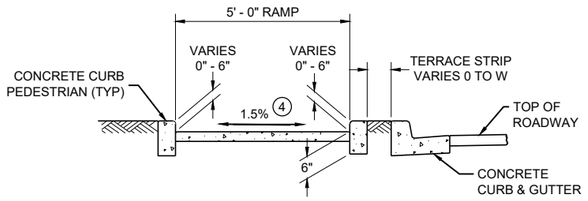
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW
CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 1/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET			4' - 11 1/2"	5' - 1 3/4"	4' - 3 1/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET									4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET															4' - 10 3/4"	19' - 8 1/4"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C - C FOR TYPE 4B

LEGEND

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

GENERAL NOTES

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

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

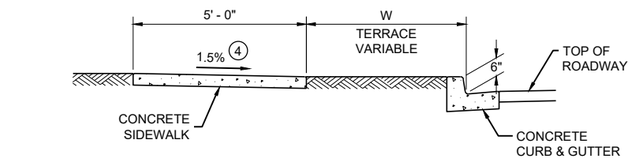
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

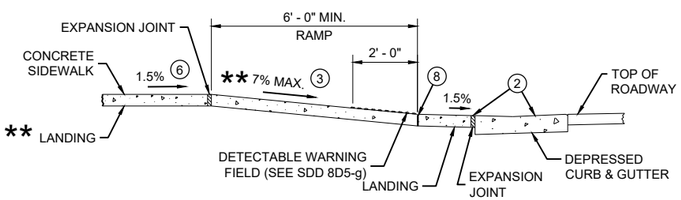
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

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

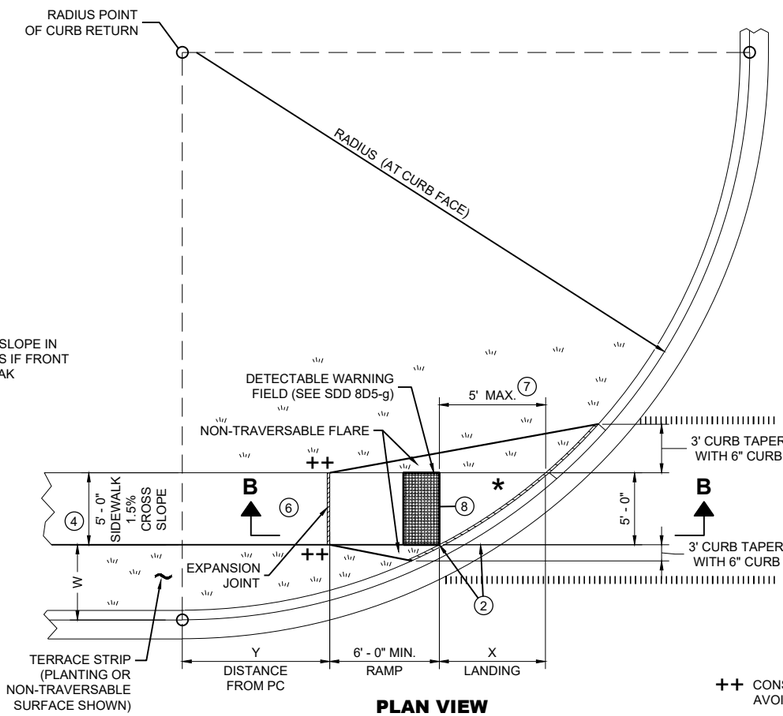


SECTION A - A FOR TYPE 4B



SECTION B - B FOR TYPE 4B AND TYPE 4B1

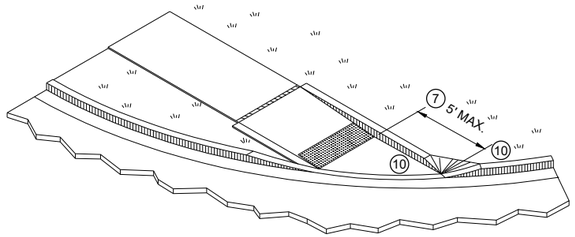
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED



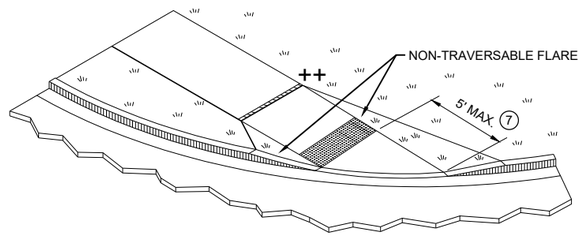
PLAN VIEW
CURB RAMP TYPE 4B1

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

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



ISOMETRIC VIEW FOR TYPE 4B



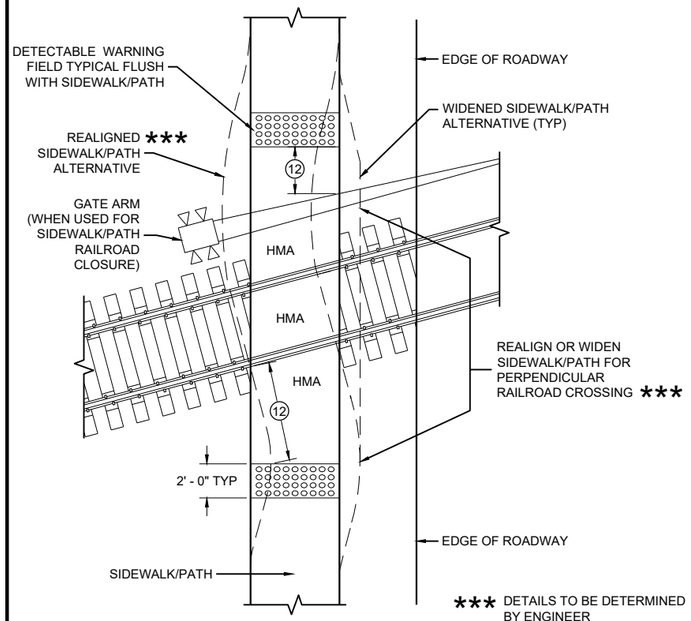
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

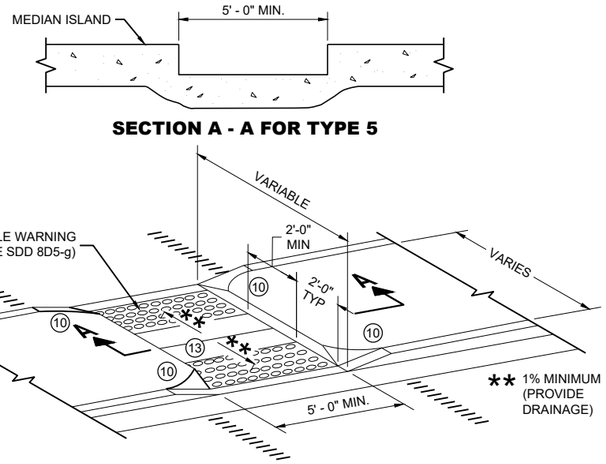
6

SDD 08D05-21d



CURB RAMP TYPE 8

DETECTABLE WARNINGS FOR SIDEWALKS OR SHARED USE PATHS AT RAILROAD CROSSINGS



SECTION A - A FOR TYPE 5

CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

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

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

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

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

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

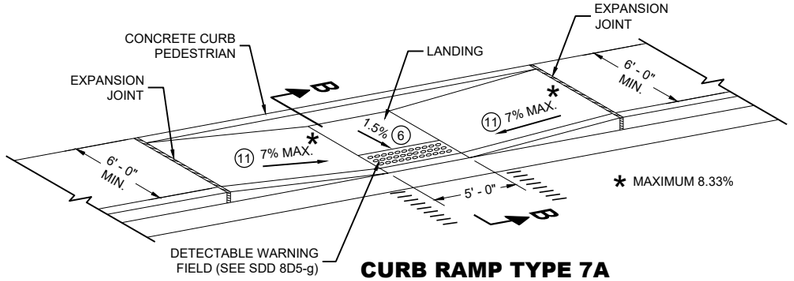
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK/PATH. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

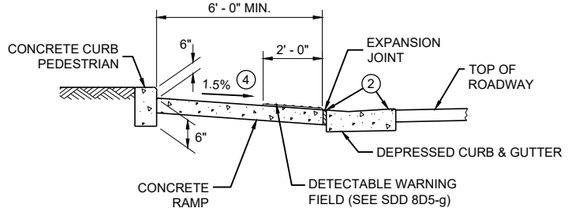
LEGEND

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

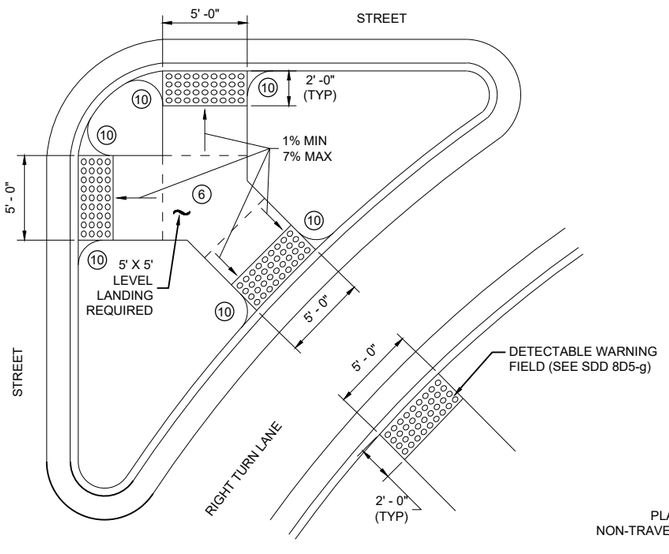


CURB RAMP TYPE 7A

FOR INTERSECTIONS AND MID BLOCK CROSSINGS



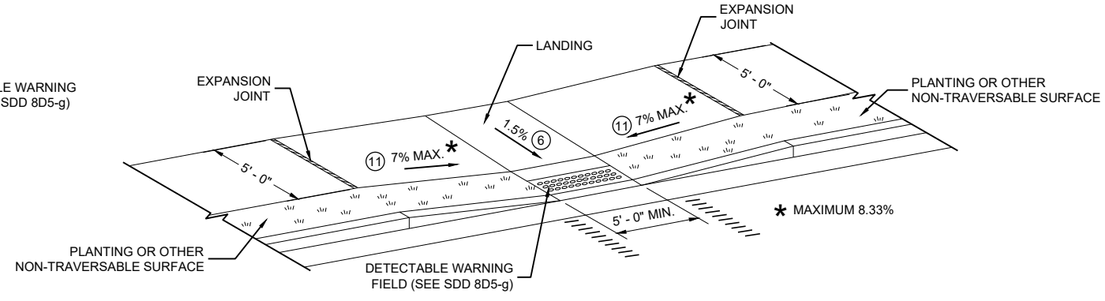
SECTION B - B FOR TYPE 7A



CURB RAMP TYPE 6

DETECTABLE WARNING AT ISLANDS

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



CURB RAMP TYPE 7B

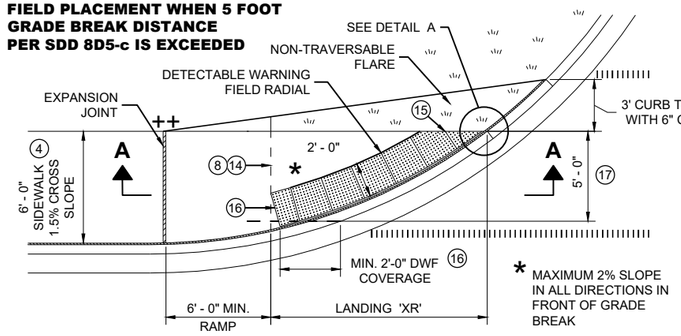
FOR INTERSECTIONS AND MID BLOCK CROSSINGS

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

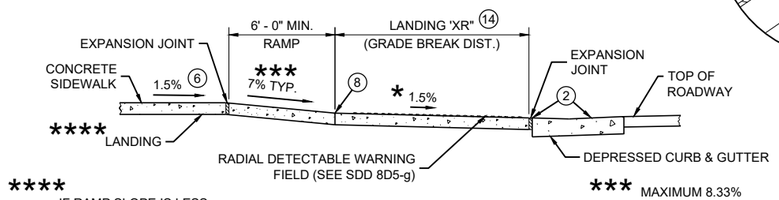
SDD 08D05-21e

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



PLAN VIEW

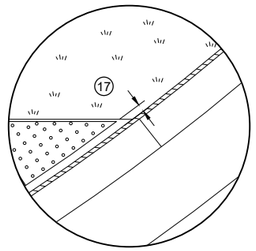
CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1



DETAIL A

LEGEND

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

GENERAL NOTES

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

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

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

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

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

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

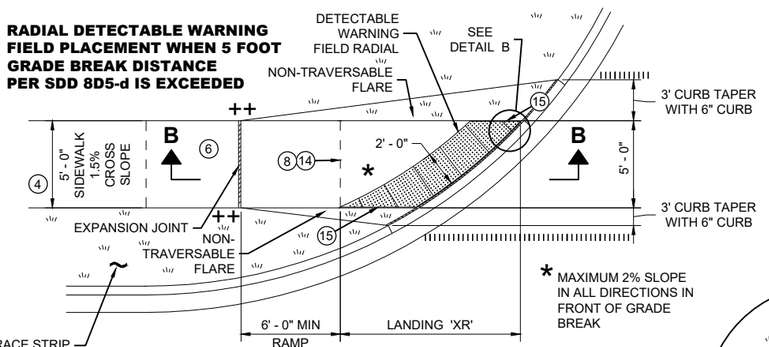
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

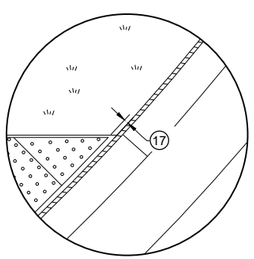
(17) A MAXIMUM 3 INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED

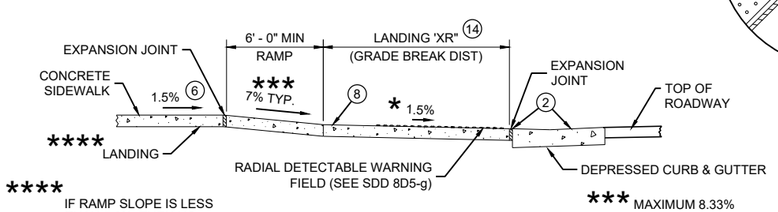


PLAN VIEW

CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B

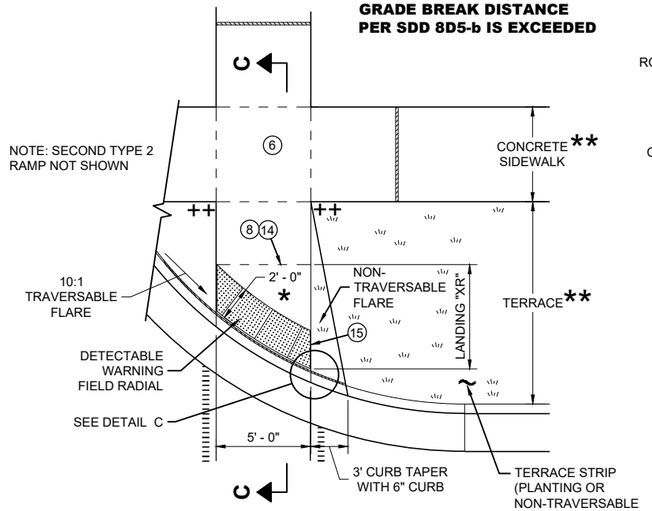


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

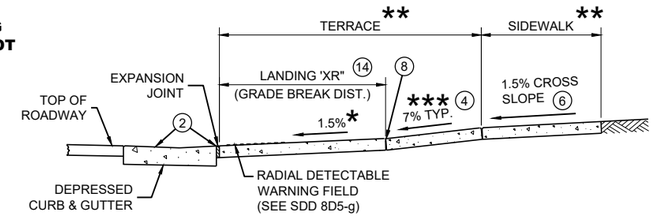
SECTION B - B FOR TYPE 4B1

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

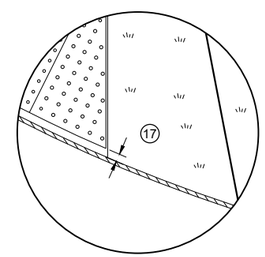


PLAN VIEW

CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)



SECTION C - C FOR TYPE 2



DETAIL C

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

CURB RAMPS
RADIAL DETECTABLE WARNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

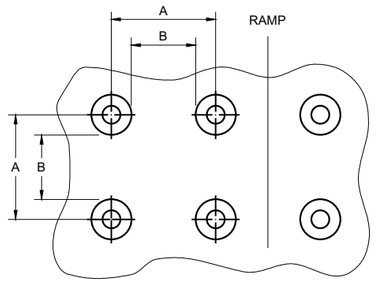
SDD 08D05-21f

6

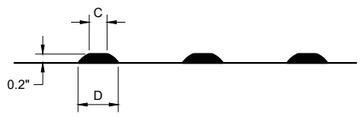
SDD 08D05-21f

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

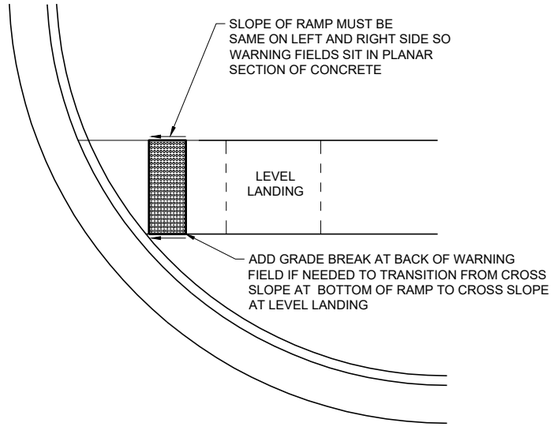
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD
PLANAR INSTALLATION

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

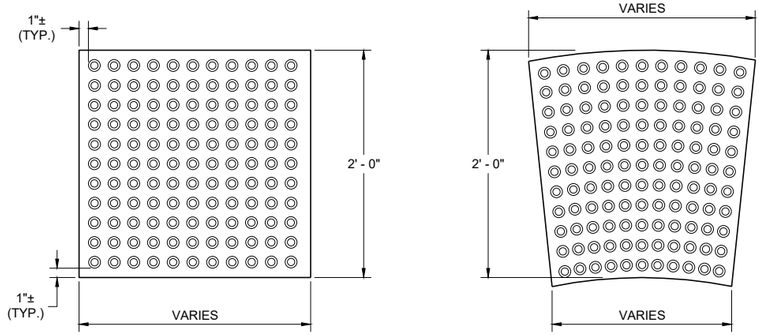
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

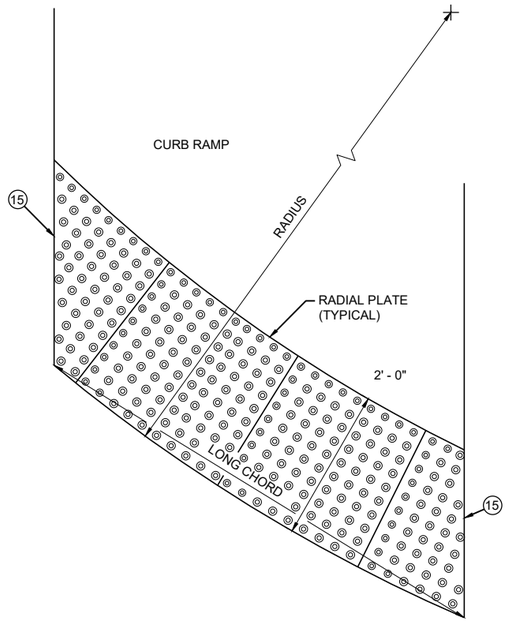
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



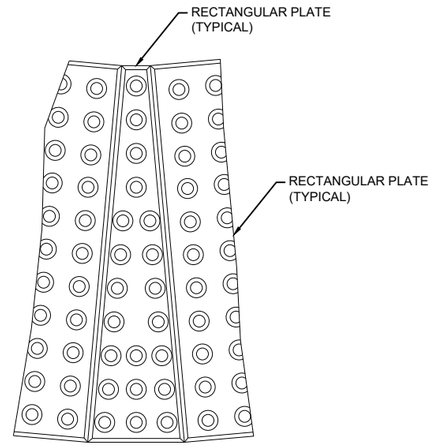
RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

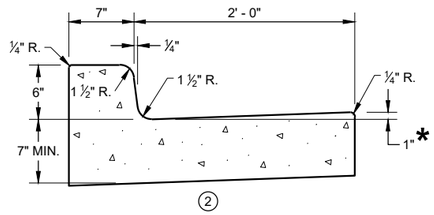
APPROVED

July 2023 — DATE

/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

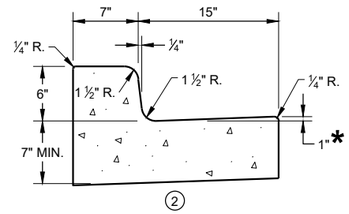
FHWA

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SDD 08D05-21g

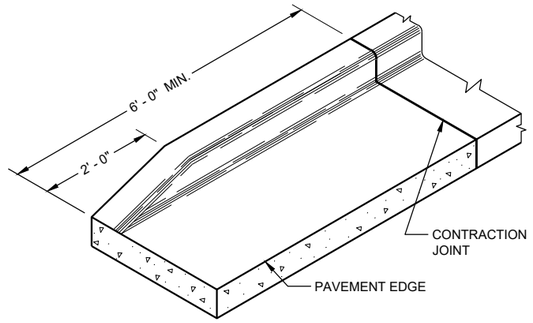


CONCRETE CURB AND GUTTER 31" ①

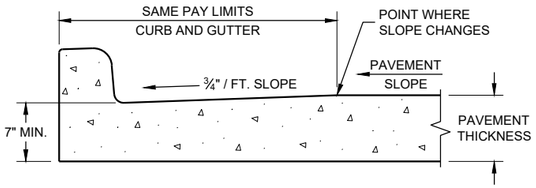
*TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



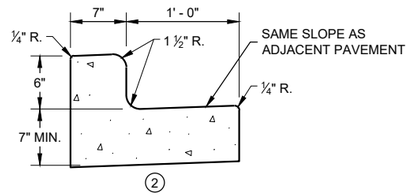
CONCRETE CURB AND GUTTER 22" ①



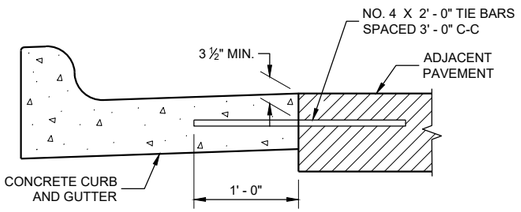
END SECTIONCURB AND GUTTER



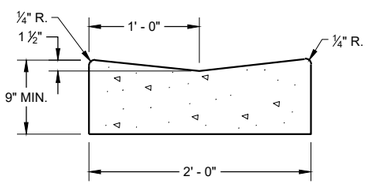
PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER



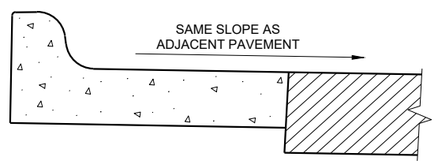
CONCRETE CURB AND GUTTER 19" ①



TYPICAL TIE BAR LOCATION ①



CONCRETE GUTTER 24" ①



HIGH SIDE SECTION ③

(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION 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.

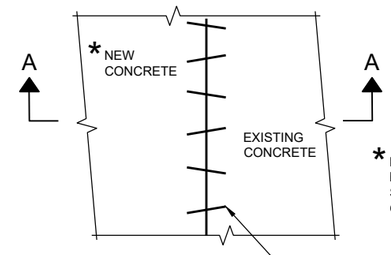
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

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

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUITED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".

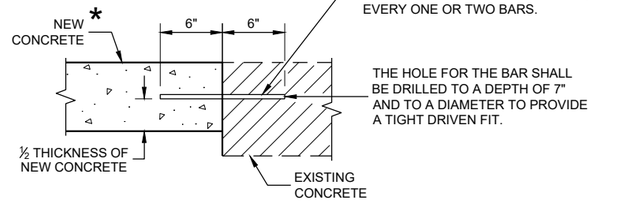
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MINIMUM GUTTER THICKNESS IS MAINTAINED.

③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLANS



PLAN VIEW

* EXISTING AND NEW CONCRETE MAY BE CURB AND GUTTER, SURFACE DRAINS, PAVEMENT OR OTHER CONCRETE STRUCTURE.



SECTION A - A

PAVEMENT TIES

CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES

(For Optional use in Milwaukee Co. Only)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

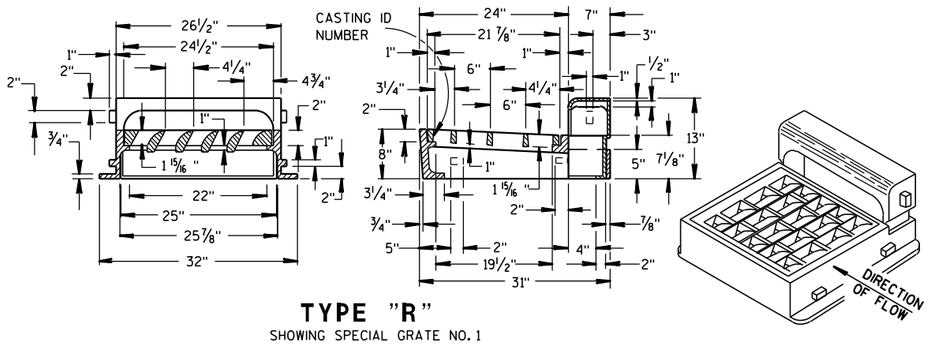
APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

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SDD 08D16 - 11

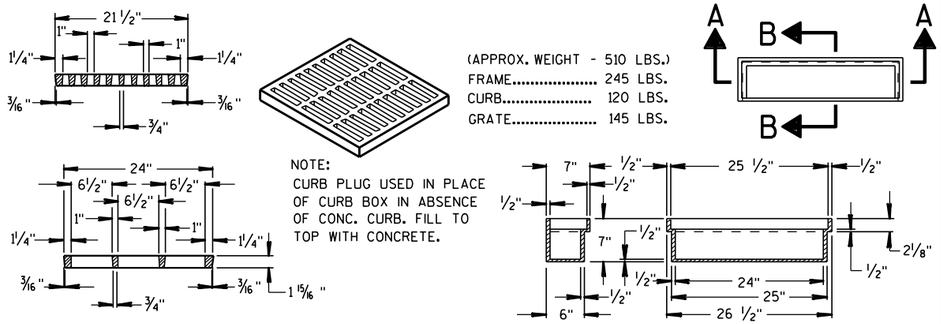
SDD 08D16 - 11

INLET COVERS



TYPE "R"

SHOWING SPECIAL GRATE NO. 1
(TO BE NOTED AS R-1 IN DRAINAGE TABLE)



(APPROX. WEIGHT - 510 LBS.)
FRAME..... 245 LBS.
CURB..... 120 LBS.
GRATE..... 145 LBS.

NOTE:
CURB PLUG USED IN PLACE OF CURB BOX IN ABSENCE OF CONC. CURB. FILL TO TOP WITH CONCRETE.

GRATE FOR TYPE "R" INLET COVER

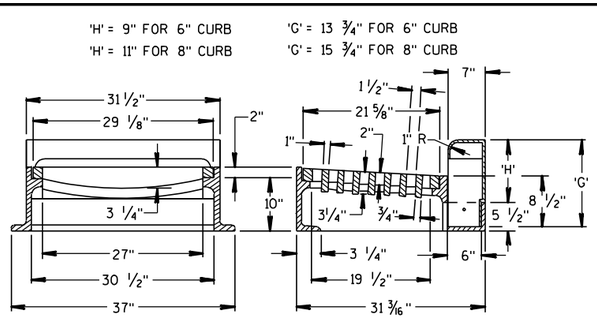
(GRATE..... 150 LBS.)
(TO BE USED UNLESS OTHERWISE NOTED IN DRAINAGE TABLE)

SECTION B-B SECTION A-A

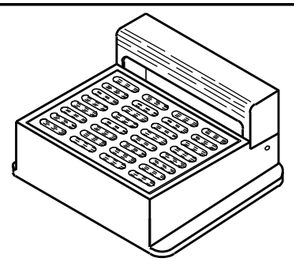
SPECIAL CURB PLUG "P"

(CURB PLUG..... 85 LBS.)
(TO BE NOTED AS R-P IN DRAINAGE TABLE)

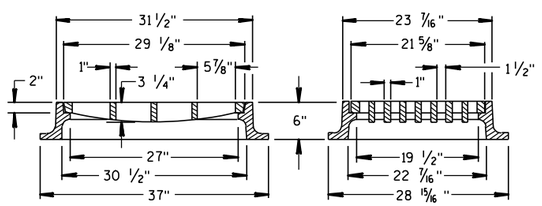
'H' = 9" FOR 6" CURB
'H' = 11" FOR 8" CURB
'G' = 13 3/4" FOR 6" CURB
'G' = 15 3/4" FOR 8" CURB



TYPE "W"



(APPROX. WEIGHT - 670 LBS.)
FRAME..... 350 LBS.
CURB BOX..... 135 LBS.
GRATE..... 185 LBS.

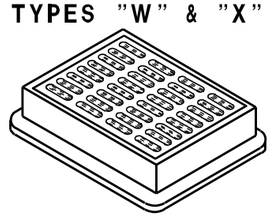


TYPE "X"

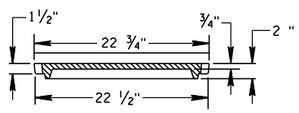
(APPROX. WEIGHT - 470 LBS.)

ALTERNATE GRATE
(FOR EXPRESSWAY RAMPS)

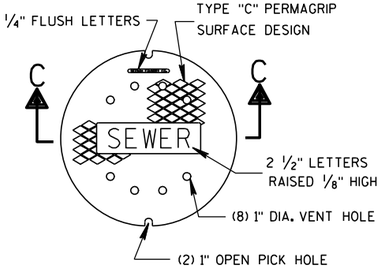
TYPES "W" & "X"

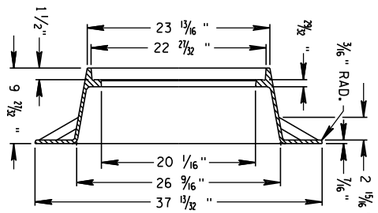


MANHOLE COVER



SECTION C-C





TYPE "Q"

(APPROX. WEIGHT - 290 LBS.)

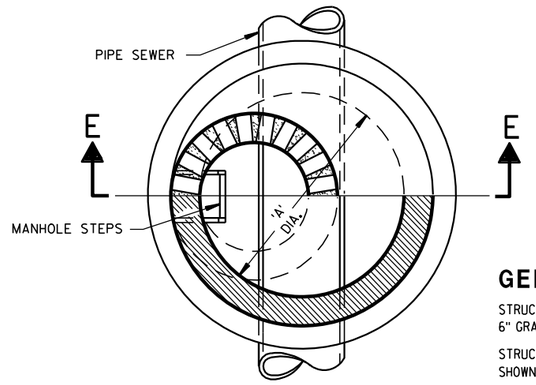
TABLE OF DIMENSIONS

TYPE	'A'	'B'	'C'
11	3'-6"	2'-8"	12" - 36"*
12	4'-0"	3'-8"	12" - 42"**
13	5'-0"	5'-8"	42" - 48"
14	6'-0"	7'-8"	54" - 60"

* 12" - 21" FOR PRECAST MANHOLES
** 12" - 24" FOR PRECAST MANHOLES

THE FIRST STEP SHALL BE PLACED 16" ABOVE THE BENCH.

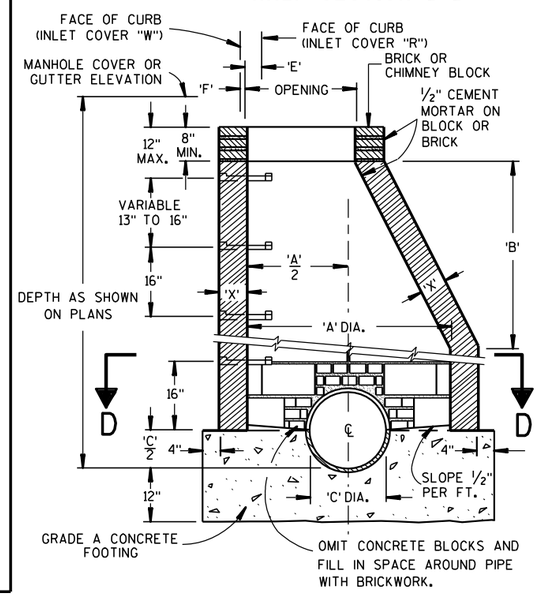
MANHOLE



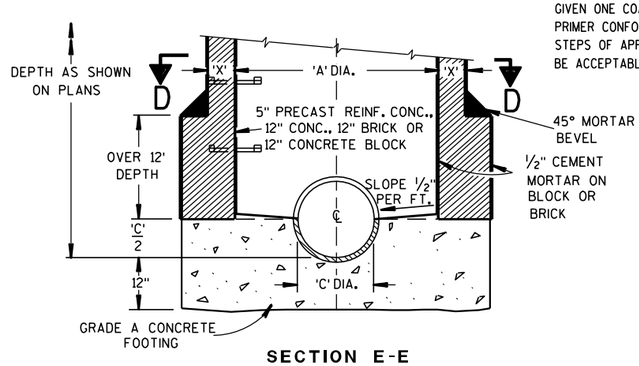
HALF SECTION D-D

TABLE OF OPENING DIMENSIONS

TYPE	COVER DESCRIPTION	OPENING	'E'	'F'
"O"	ROUND	2'-2" DIA.	—	—
"W"	CURB BOX	1'-8" X 2'-6"	—	1"
"X"	INLET	1'-10" X 2'-6"	—	—
"R"	CURB BOX	2'-0" X 2'-1"	4"	—



SECTION E-E



SECTION E-E

TYPES 11, 12, 13 & 14

GENERAL NOTES

STRUCTURE WALL THICKNESS 'X' TO BE 8" BRICK, 6" CONCRETE BLOCK, 6" GRADE A CONCRETE OR 5" PRECAST REINFORCED CONCRETE.

STRUCTURE FOOTINGS ARE TO BE GRADE A CONCRETE OF THE THICKNESS SHOWN IN THE DETAIL OR 5" PRECAST REINFORCED CONCRETE.

REINFORCEMENT FOR 5" PRECAST REINFORCED CONCRETE SHALL BE 6" X 6" W16 X W16 WELDED SREEL WIRE FABRIC AND SHALL BE EMBEDDED 2" CLEAR.

PRECAST INLET UNITS AND BASES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

PRECAST CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

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

SET FRAME ELEVATION 0.03 FT. LOWER THAN ELEVATION INDICATED ON THE PLANS.

THE CONTRACTOR MAY FORM AND POUR MONOLITHIC CONCRETE INVERT PROVIDED THE PIPE ENDS ARE EXTENDED INTO THE M.H. AND NOT TERMINATED WITHIN THE M.H. WALLS.

MANHOLE STEPS

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH; 16 INCH C-C MAX. SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM WALL EMBEDMENT OF 3 INCHES IN PRECAST MANHOLE AND 6 INCHES IN 8 INCH BRICK OR 6 INCH BLOCK MANHOLE; TREAD OF STEP SHALL HAVE A NON-SKID SURFACE AND BE FLANKED BY CLEATS, WITH A MINIMUM OF 10 INCHES CLEAR BETWEEN CLEATS, TO PREVENT FOOT SLIPPING OFF THE EDGE CLEATS SHALL BE A MINIMUM OF 3/4 INCH HIGH BY 3/4 INCH WIDE HAVING A MINIMUM THICKNESS OF 5/8 INCH. STEPS SHALL BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 300 LBS. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 0.75 INCH. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT. STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCING BAR WILL BE ACCEPTABLE.

MANHOLES, MANHOLE & INLET COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

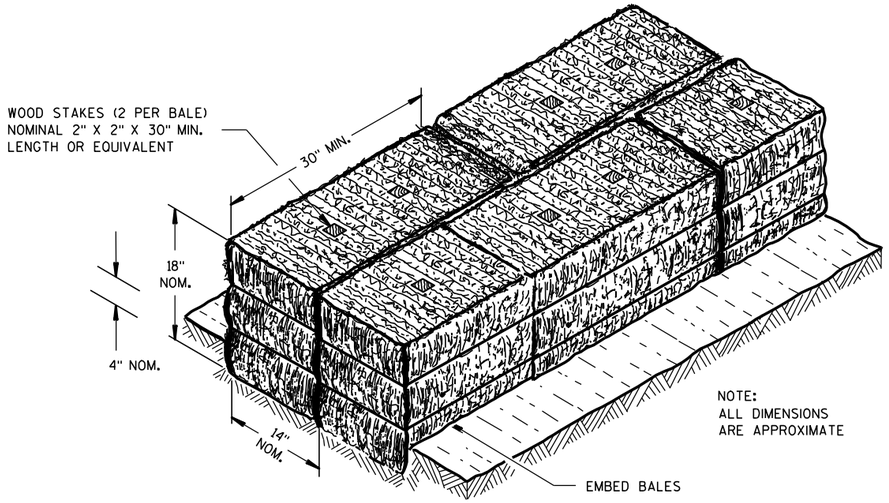
APPROVED
4/12/2011 — DATE
/S/ Jerry H. Zogg — ROADSIDE STANDARDS ENGINEER
547
FHWA

S.D.D. 8 D 17-6

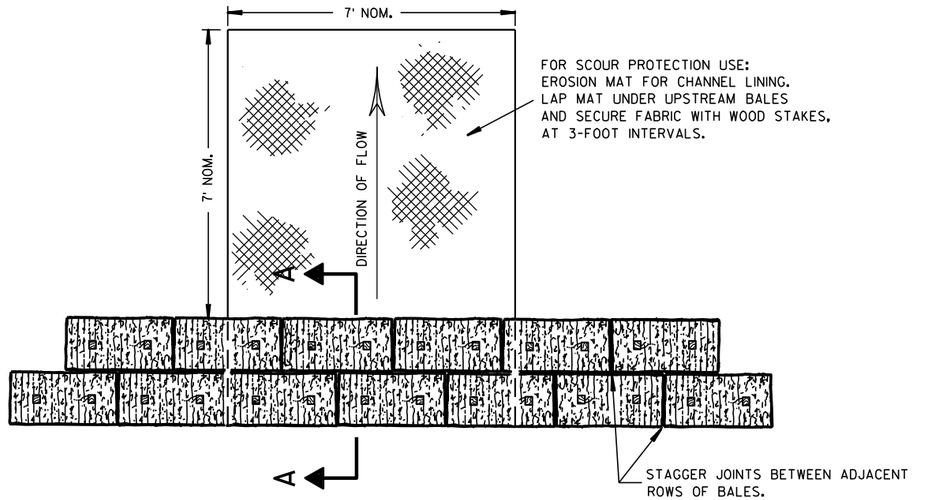
S.D.D. 8 D 17-6

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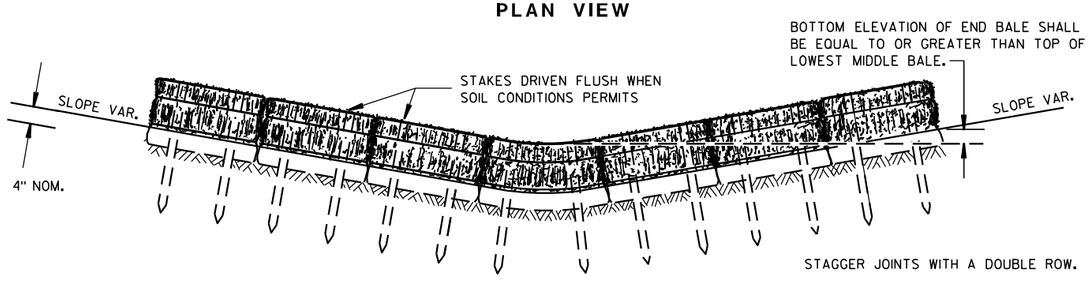
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SECTION A-A



PLAN VIEW



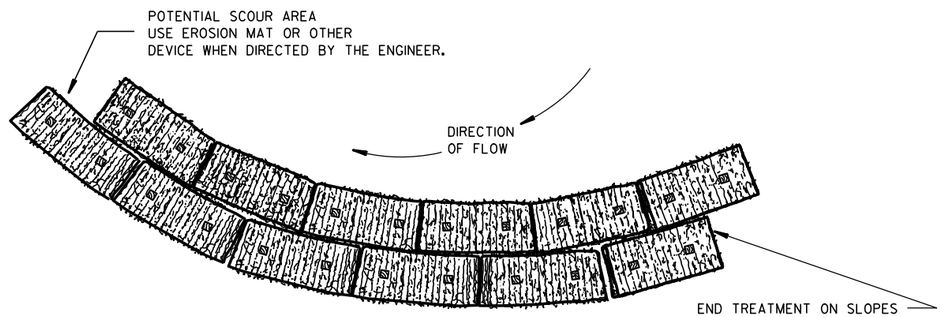
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

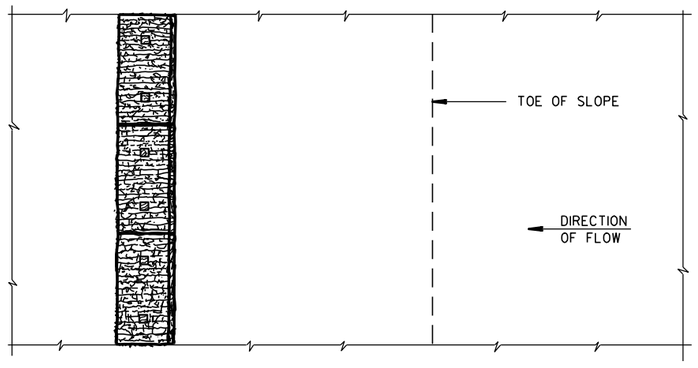
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

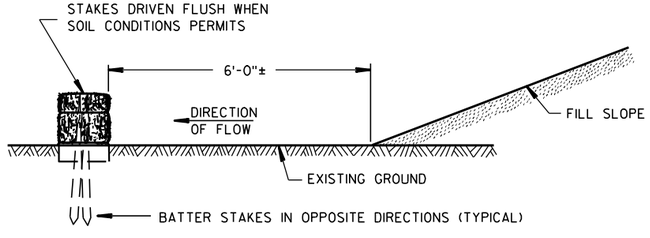


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

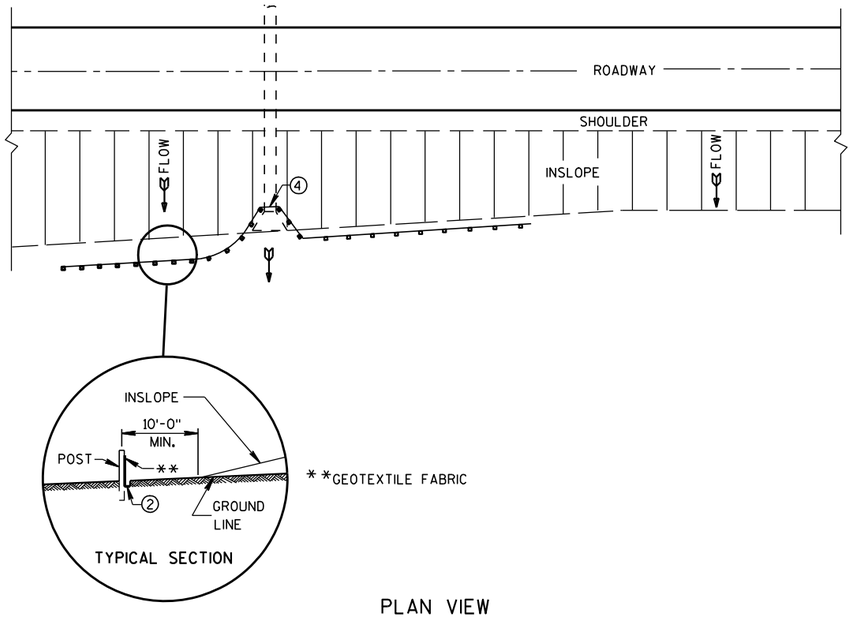
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

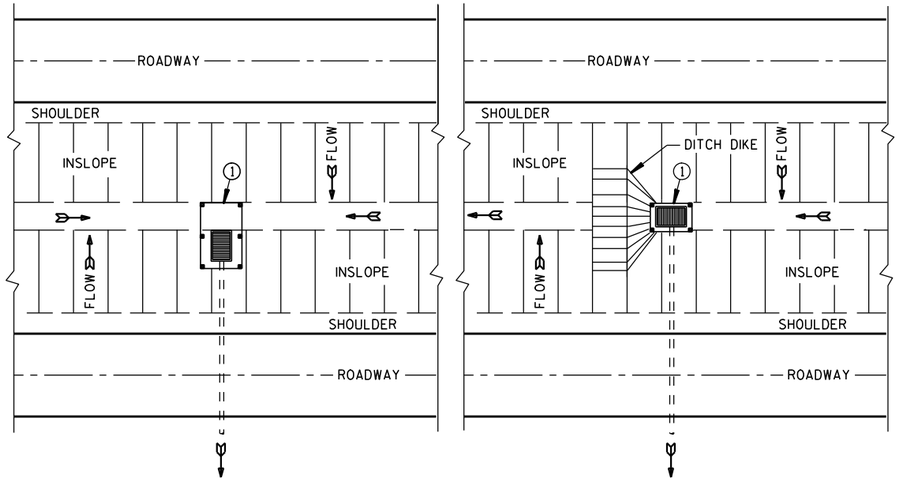
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



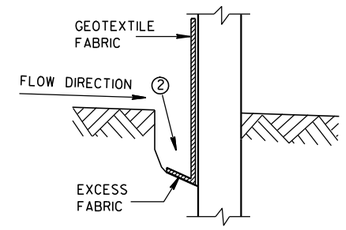
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

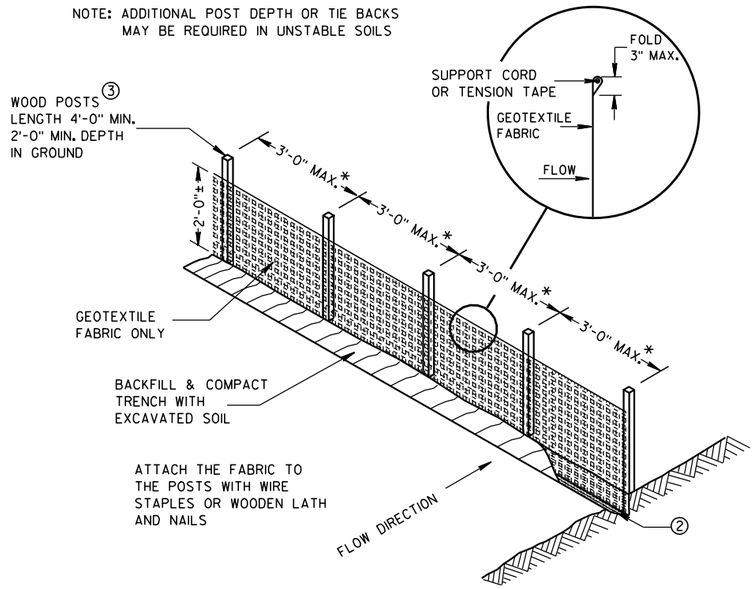
GENERAL NOTES

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

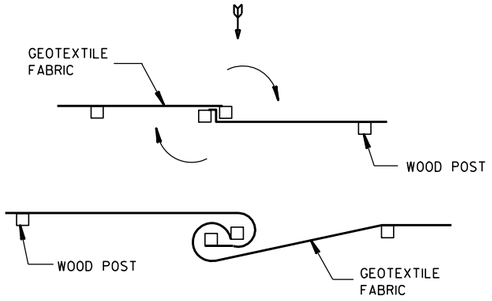
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



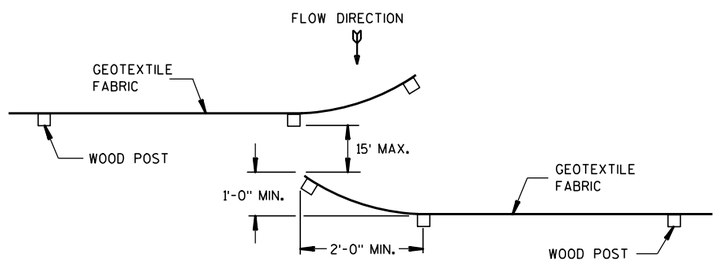
TRENCH DETAIL



SILT FENCE

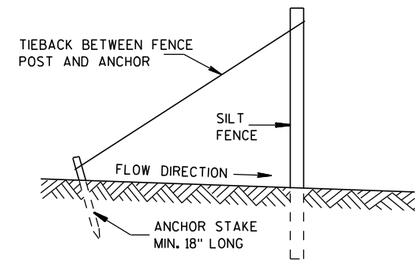


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

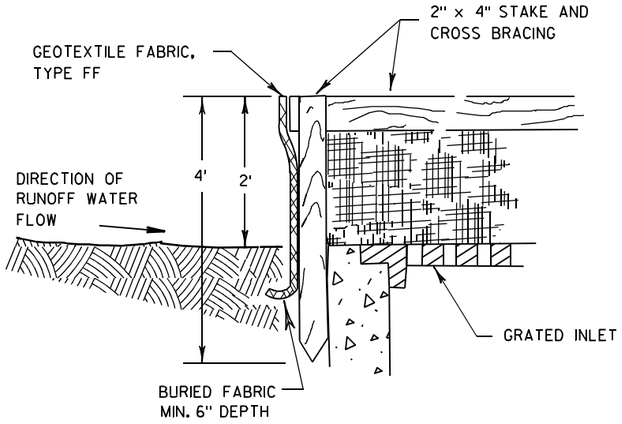
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

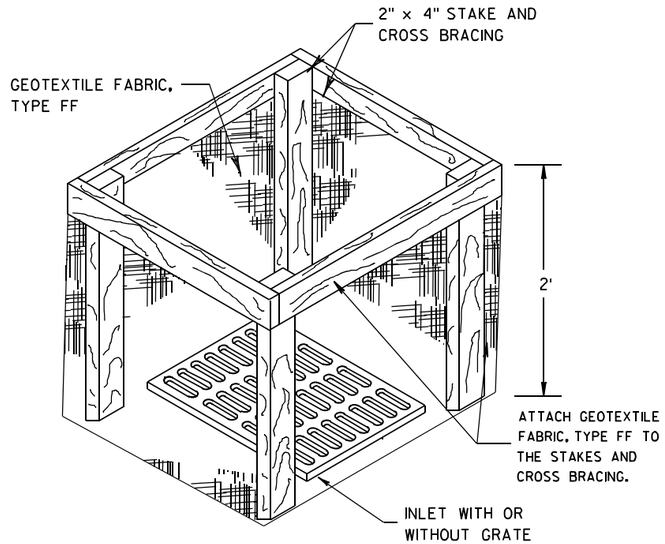
6

S.D.D. 8 E 9-6

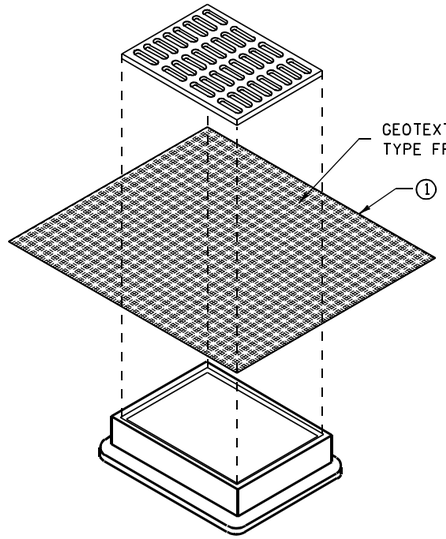
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S.D.D. 8 E 9-6



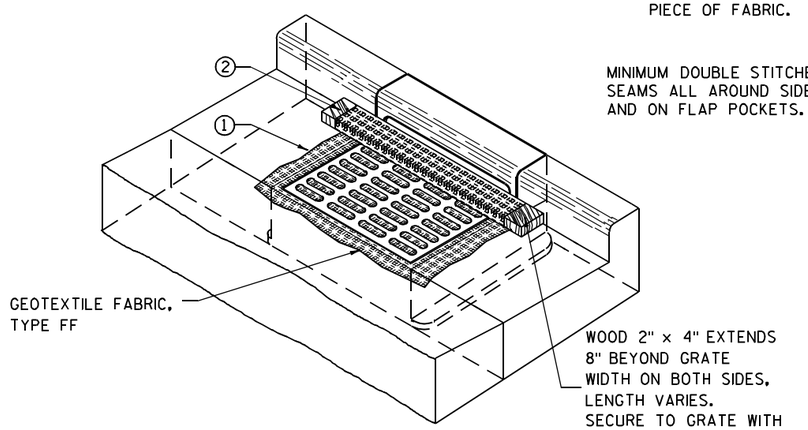


INLET PROTECTION, TYPE A

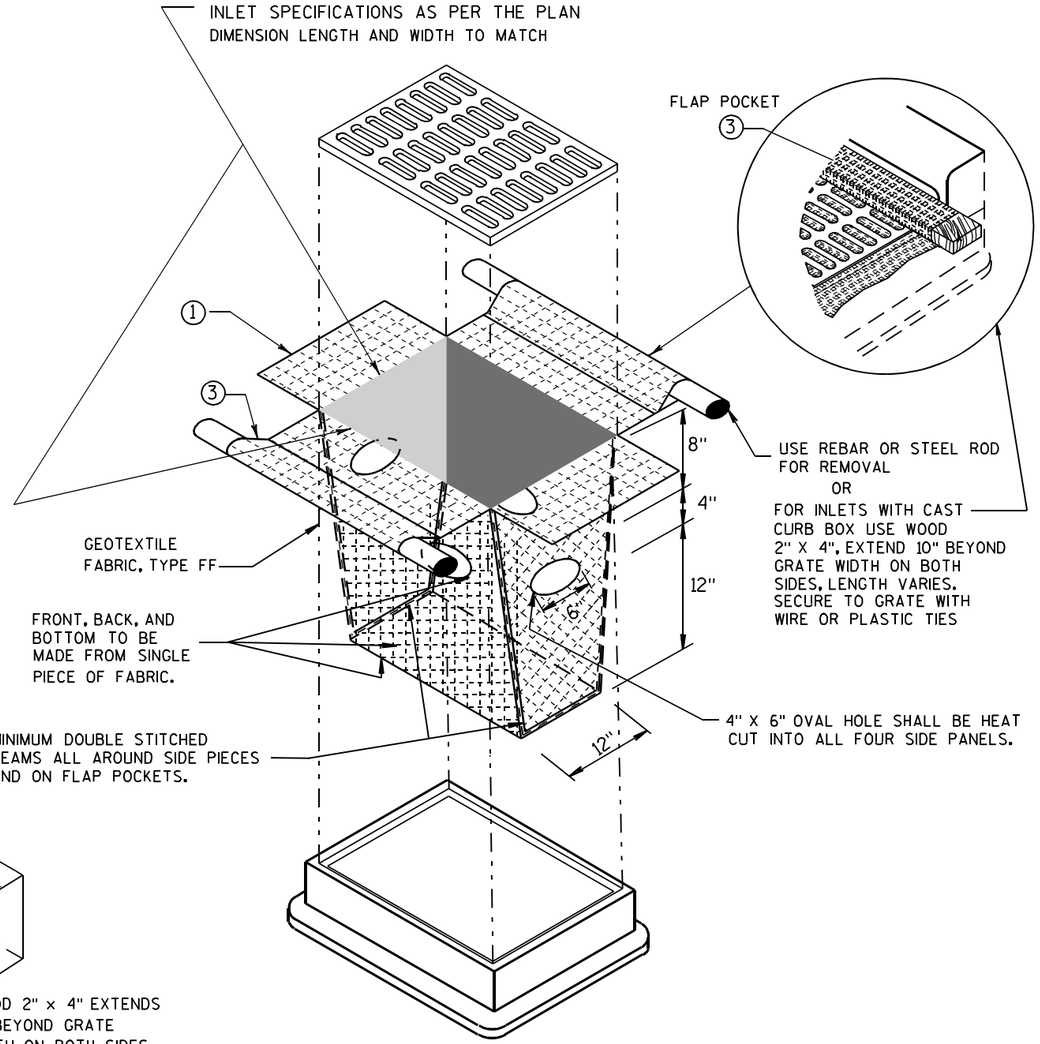


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

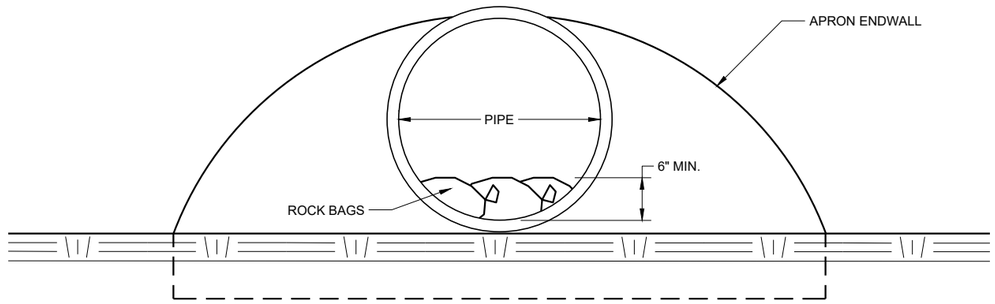
FHWA

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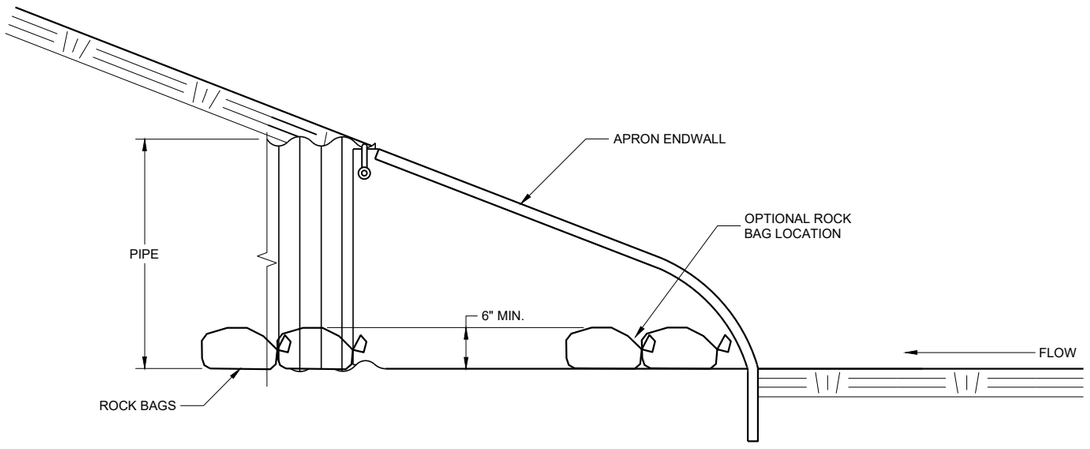
S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

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SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

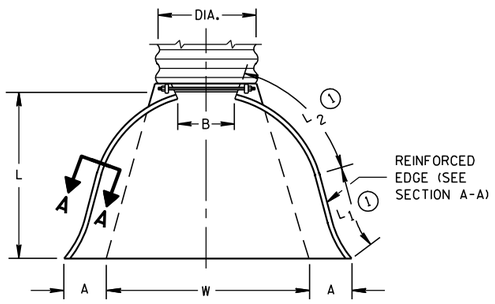
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

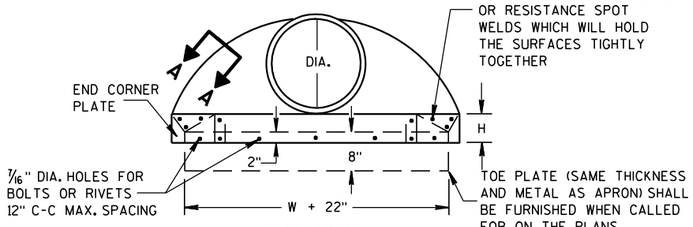
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

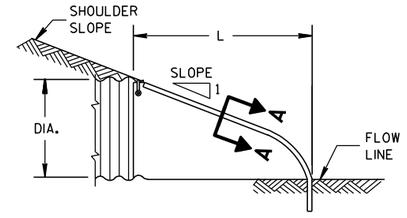
*MINIMUM
**MAXIMUM



PLAN VIEW

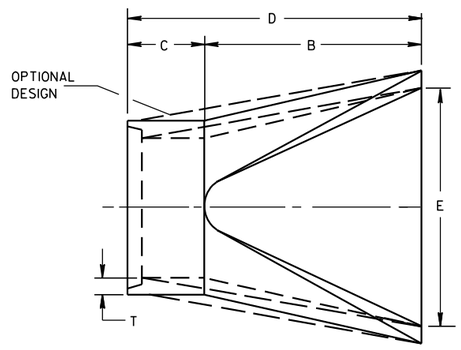


END VIEW

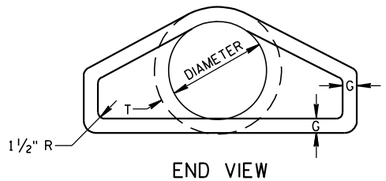


SIDE ELEVATION

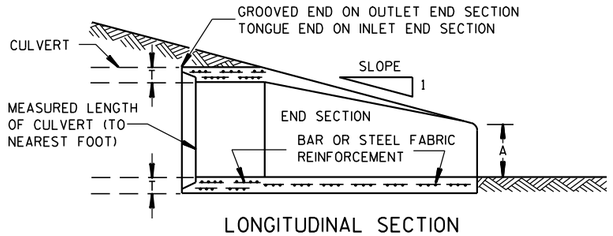
METAL ENDWALLS



PLAN

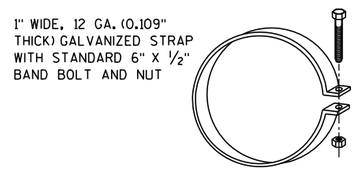


END VIEW



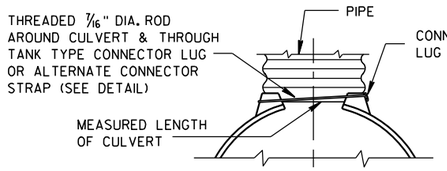
LONGITUDINAL SECTION

CONCRETE ENDWALLS

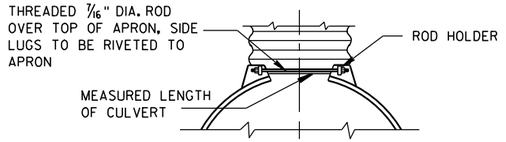


ALTERNATE FOR TYPE 1 CONNECTION

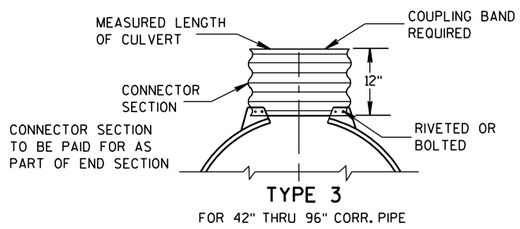
END SECTION CONNECTOR STRAP



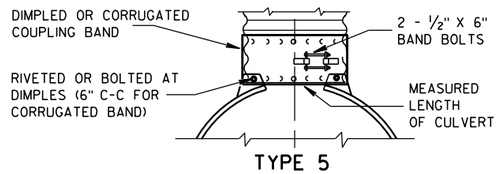
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

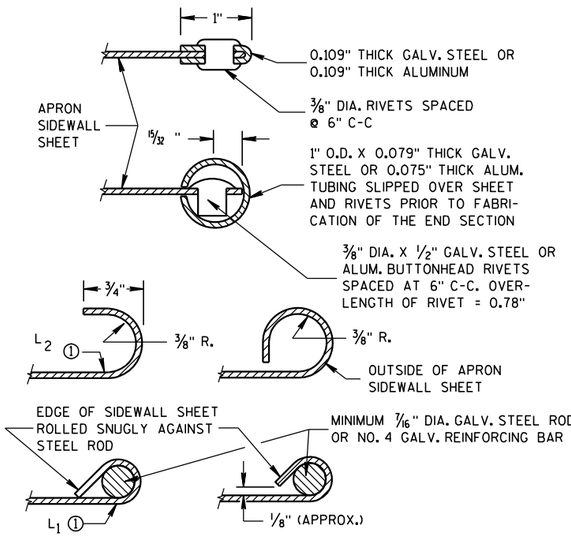
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

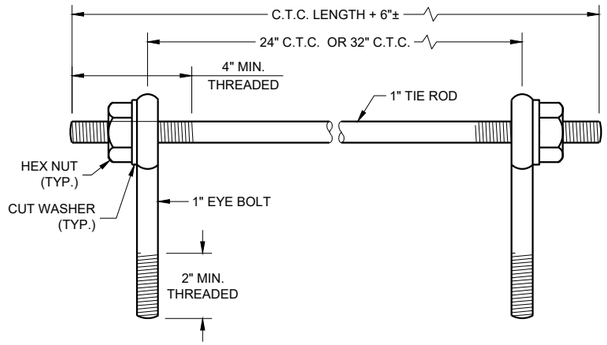
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

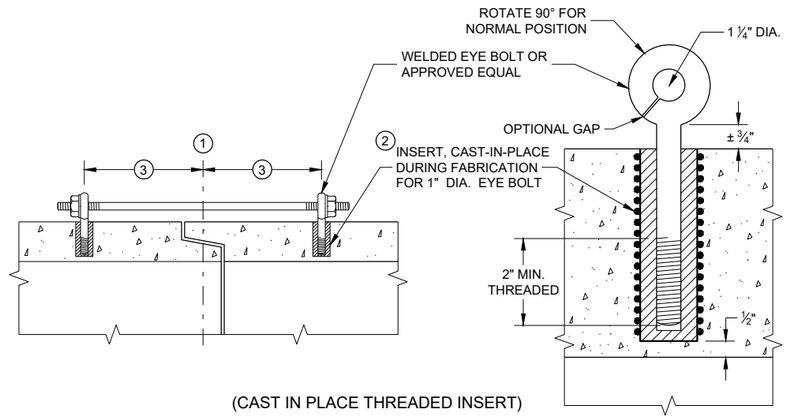
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

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

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

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

(1) CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

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

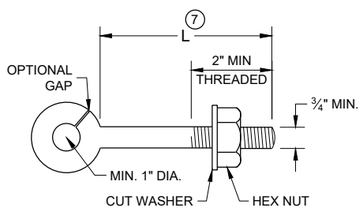
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

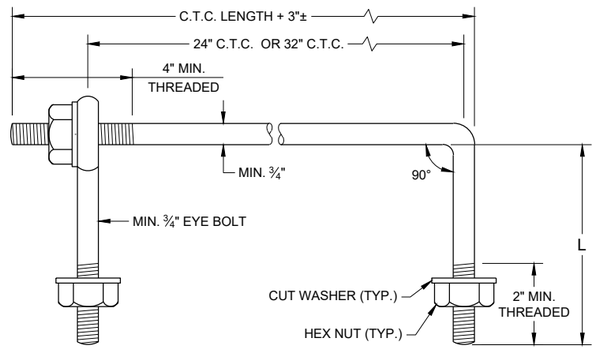
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

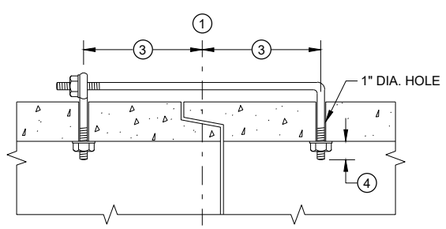


EYE BOLT (7)

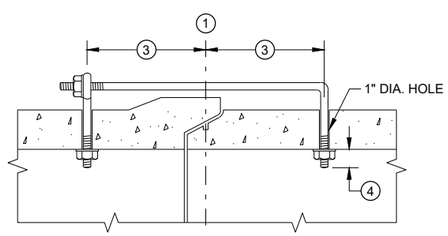
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

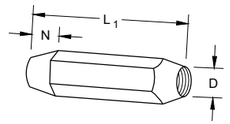
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

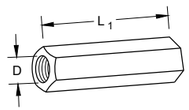
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



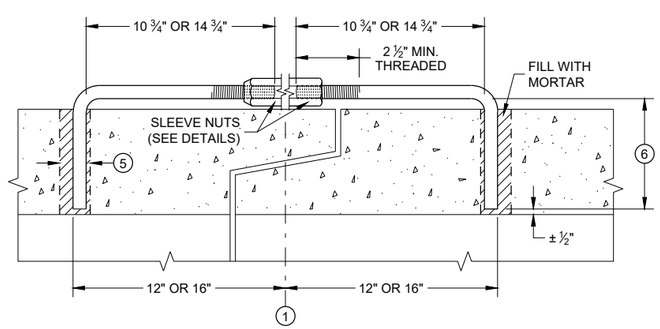
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PLAIN

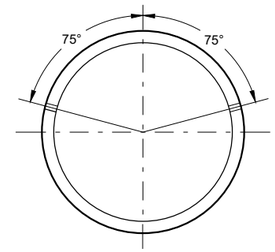
RIGHT AND LEFT THREADS

SLEEVE NUTS



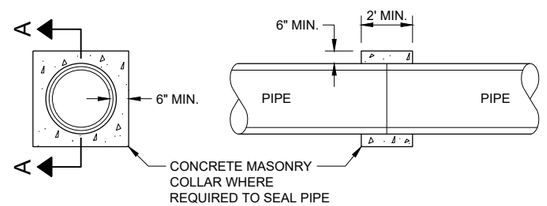
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 08F04 - 08

SDD 08F04 - 08

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.

FILL SLOPES FLATTER THAN 2 ½:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

(1) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

(2) THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2' - 0"
OVER 48" TO 72"	½ DIA. OR SPAN
OVER 72"	3' - 0"

(3) LIMITS OF TRENCH BACKFILL

(4) LIMITS OF FOUNDATION BACKFILL

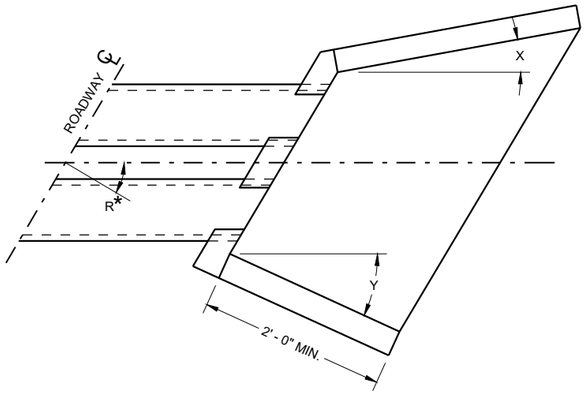
(5) FOUNDATION AND TRENCH BACKFILL ARE MATERIALS INCLUDED IN PAYMENT FOR CULVERT PIPE, PIPE ARCH, CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPSE OR CONCRETE MASONRY ENDWALLS.

(6) DO NOT PLACE FOUNDATION BACK FILL OR ANY OTHER GRANULAR BACKFILL AROUND OR BELOW CUT OFF WALL. POUR CUT OFF WALL AGAINST NATIVE SOIL

(7) MINIMUM HEIGHT SHALL BE THE GREATER OF 1'- 0" OR ¼ HEIGHT OF CULVERT PIPE.

TRENCH BACKFILL

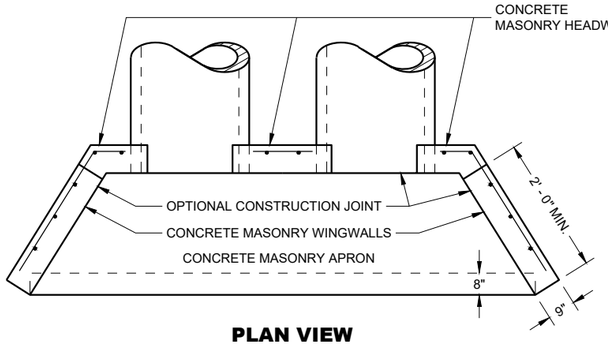
FOUNDATION BACKFILL



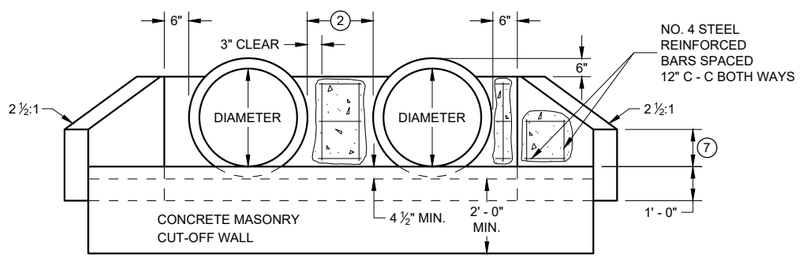
WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	30°	16 - 45°	10°	15°
23 - 37°	20°	30°	46 - 75°	5°	15°
38 - 52°	15°	30°	OVER 75°	0°	15°
53 - 67°	10°	30°			
68 - 82°	5°	30°			
OVER 82°	0°	30°			

R* = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

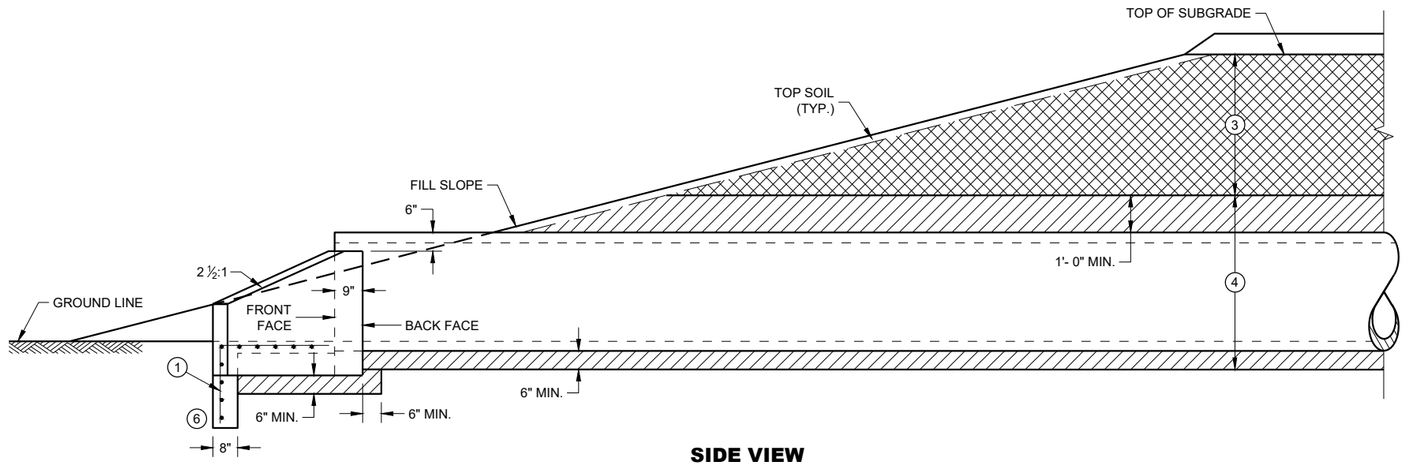


PLAN VIEW



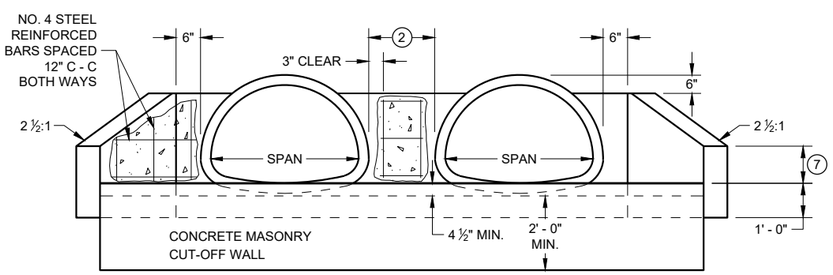
END VIEW

CIRCULAR PIPE



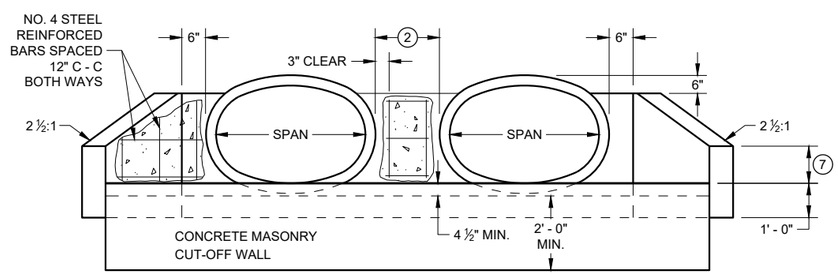
SIDE VIEW

CIRCULAR PIPE, PIPE ARCH OR HORIZONTAL ELLIPSE



END VIEW

PIPE ARCH



END VIEW

HORIZONTAL ELLIPSE

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

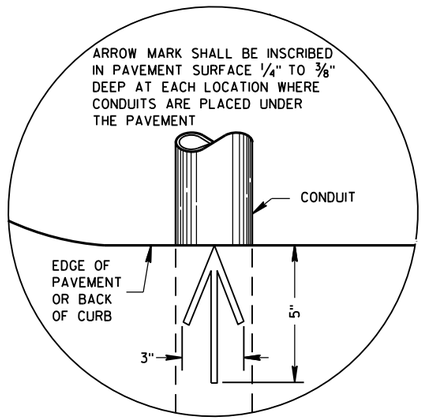
May 2022
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

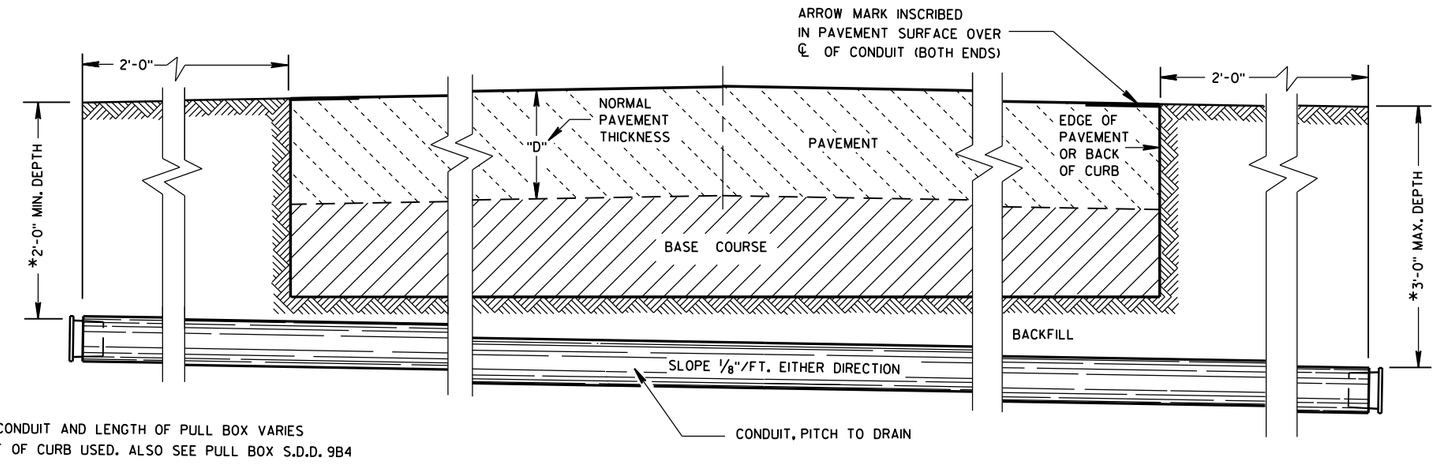
6

SDD 08F10 - 02



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

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

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

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

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

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

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

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

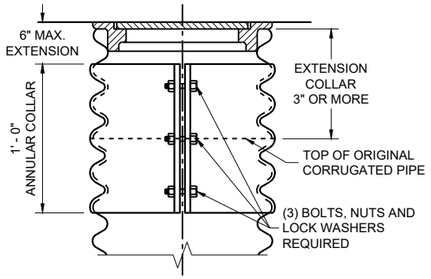
CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

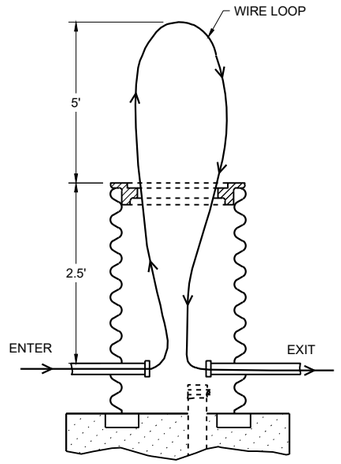
APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 555
FHWA

6

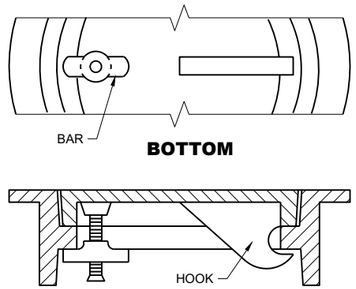
S.D.D. 9 B 2-10



CORRUGATED PIPE EXTENDER



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



BOTTOM

SECTION

ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

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.

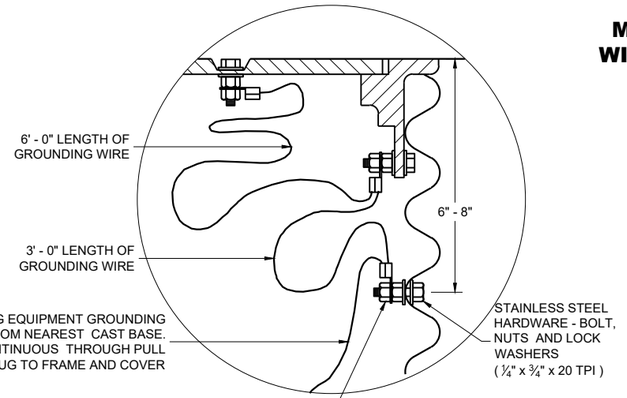
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

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

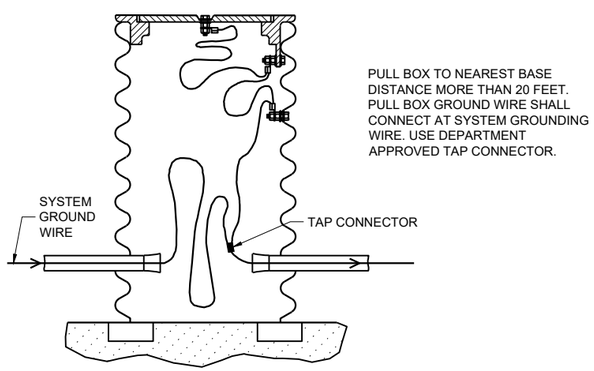
GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

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

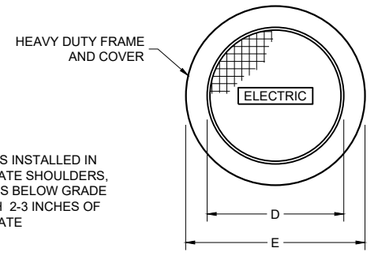
WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



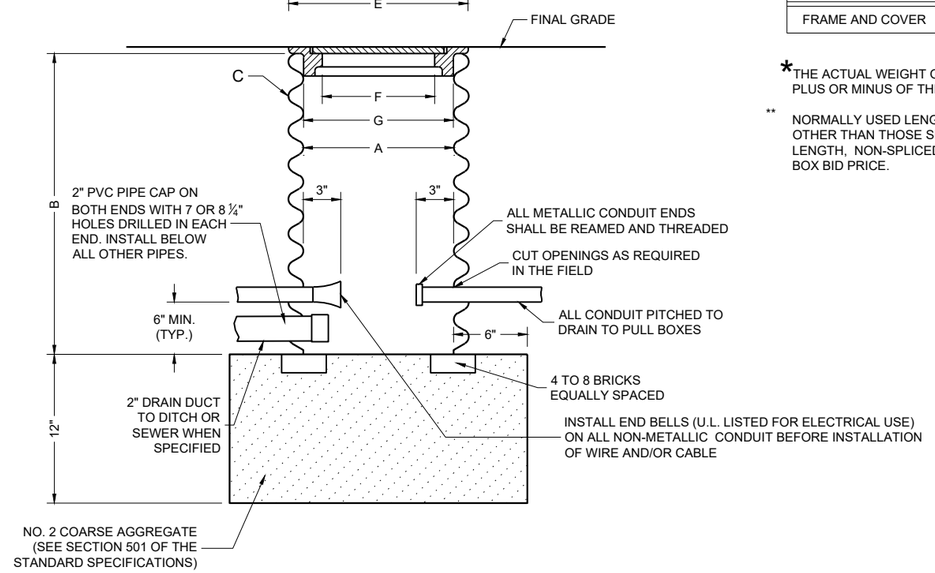
EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE



PULL BOX

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 ¼	10 ¼	10 ¼	16 ¼	16 ¼	16 ¼	22 ¼	22 ¼	22 ¼
FRAME	E	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½	26 ½	26 ½	26 ½
FRAME	F	8 ½	8 ½	8 ½	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½
FRAME	G	11 ½	11 ½	11 ½	17 ½	17 ½	17 ½	23 ½	23 ½	23 ½
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.

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

FHWA

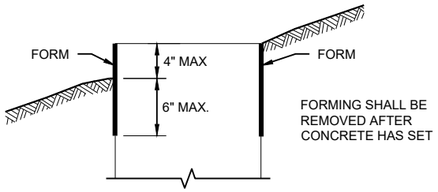
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SDD 09B04-13

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SDD 09B04-13

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 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWINGSHALL 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 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 A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X 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 NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC 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, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

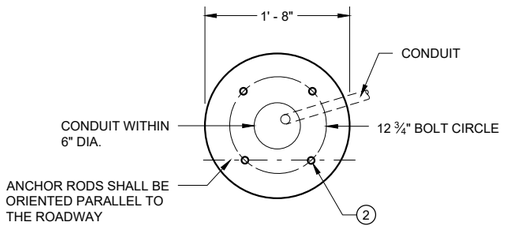
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

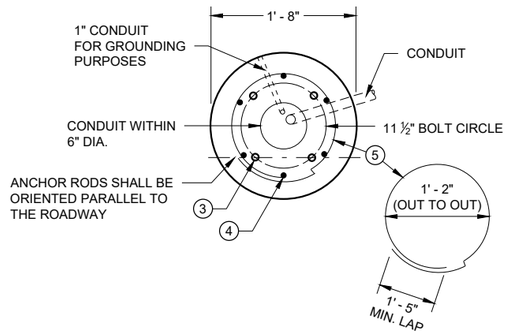
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

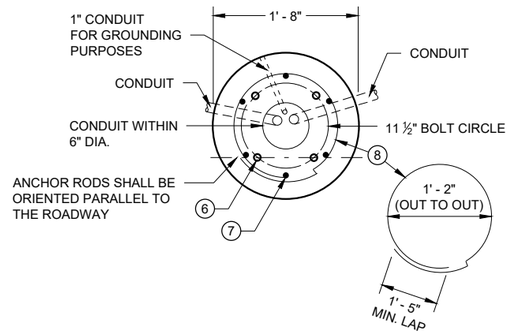
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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 OF 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 STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

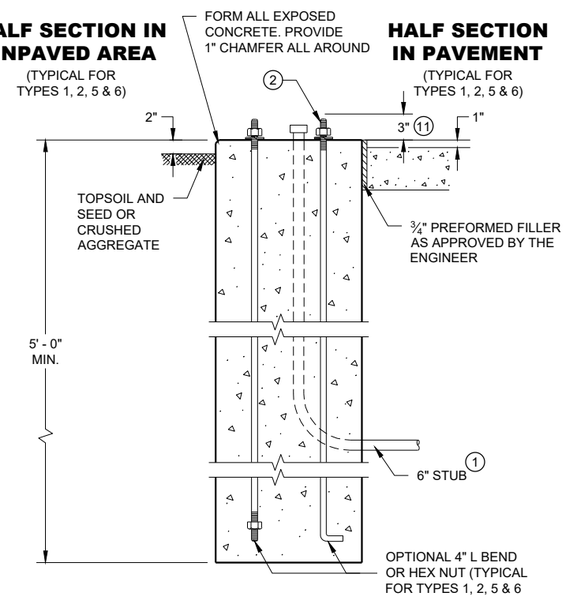
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

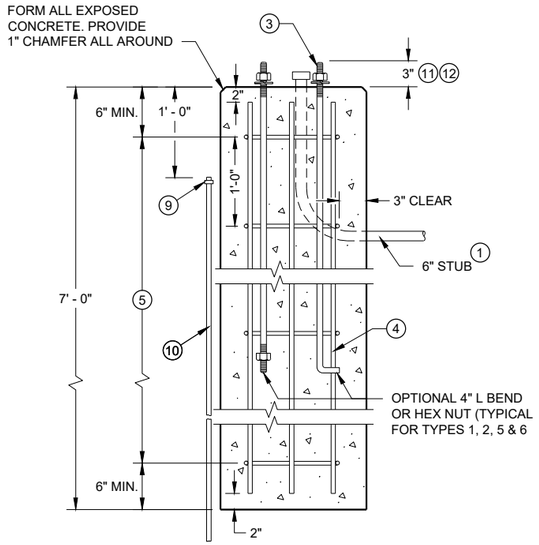
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

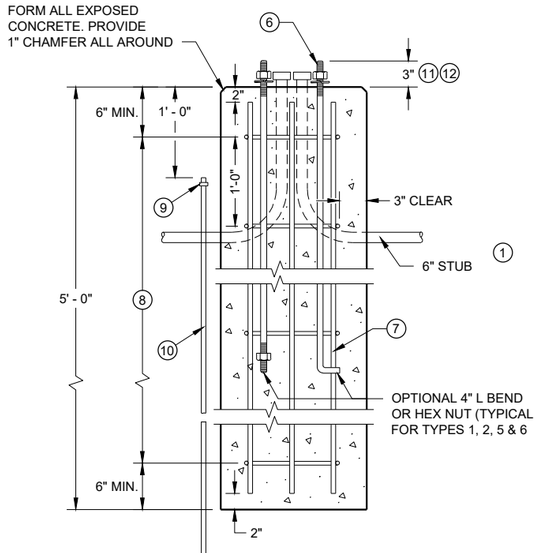
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 557

FHWA

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SDD 09C02 - 09

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

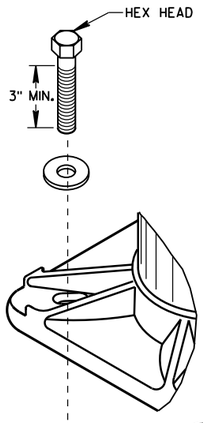
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

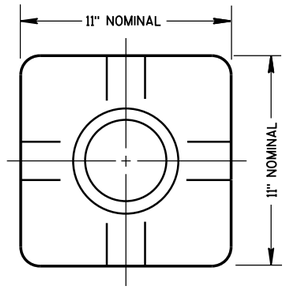
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

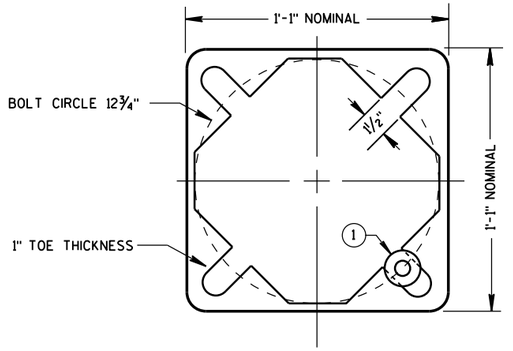
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

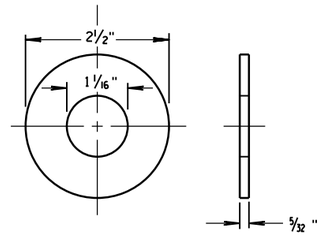




TOP VIEW
(PEDESTAL BASE)

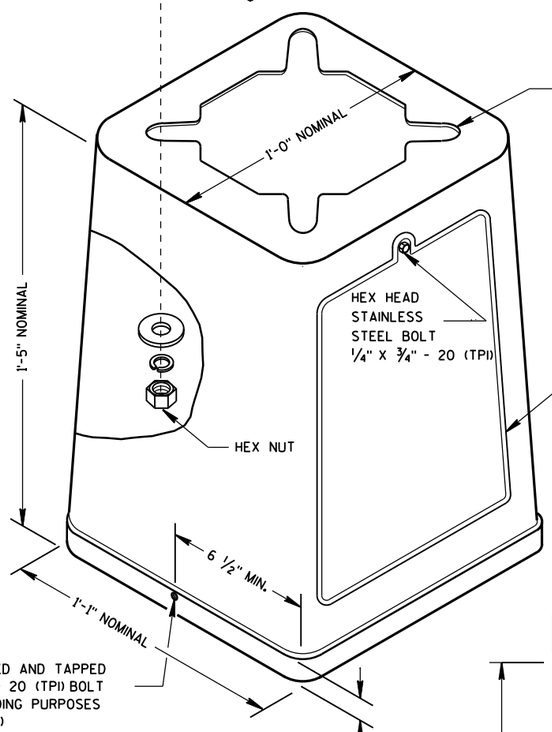


BOTTOM VIEW
(PEDESTAL BASE)

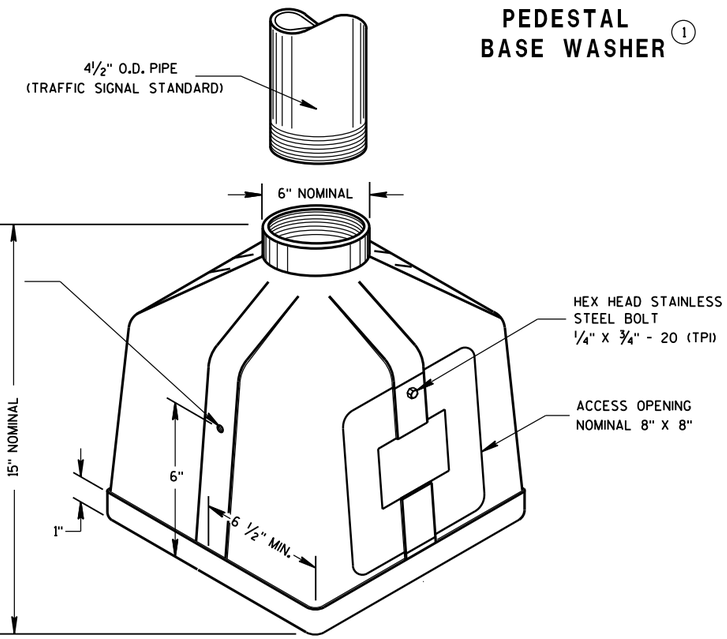


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

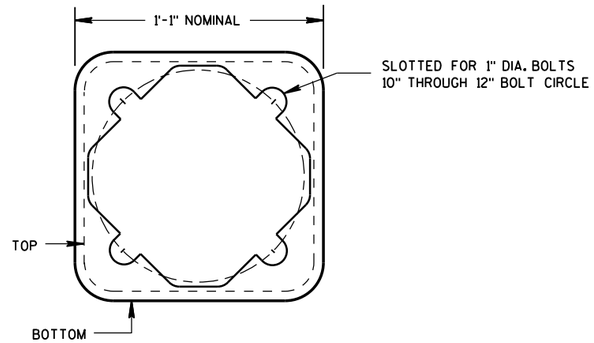


ISOMETRIC VIEW

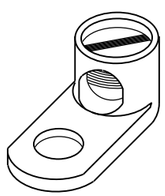


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

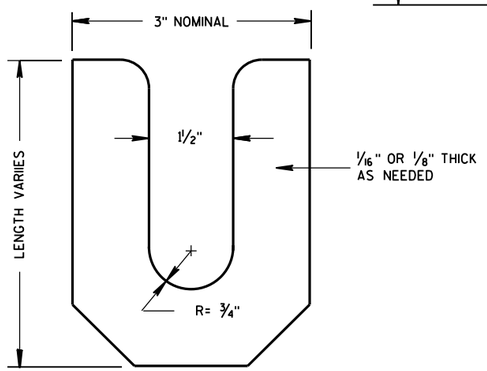


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

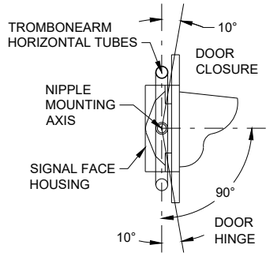
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 558
FHWA

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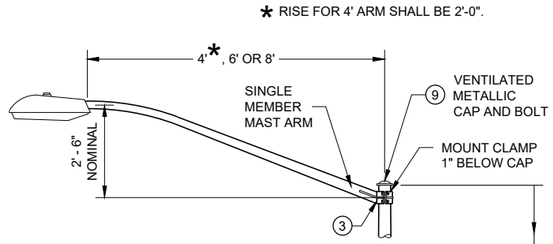
S.D.D. 9 C 3-4

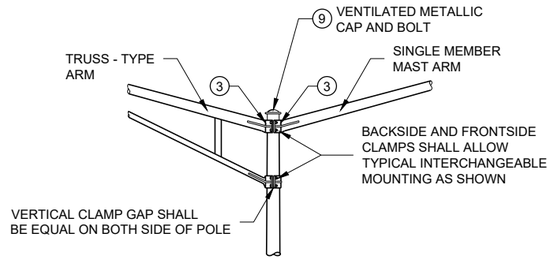
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S.D.D. 9 C 3-4

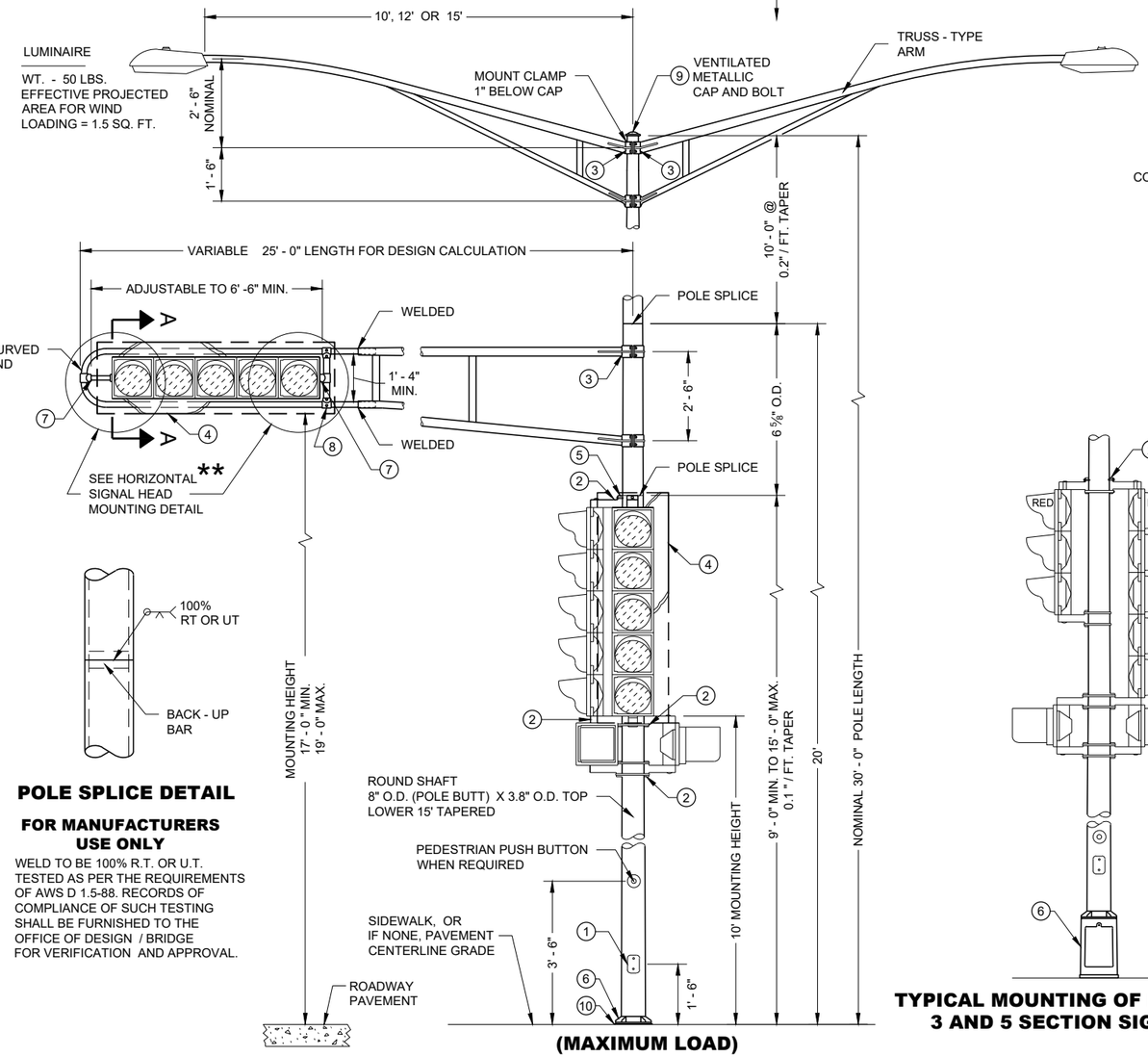


SECTION A-A





INTERCHANGEABLE MOUNTING DETAIL

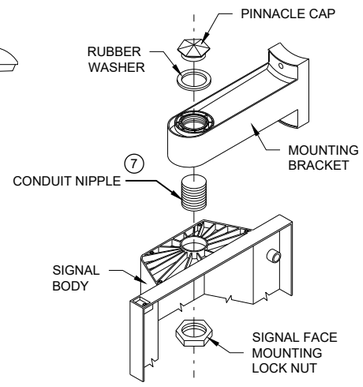


POLE SPLICE DETAIL

FOR MANUFACTURERS USE ONLY

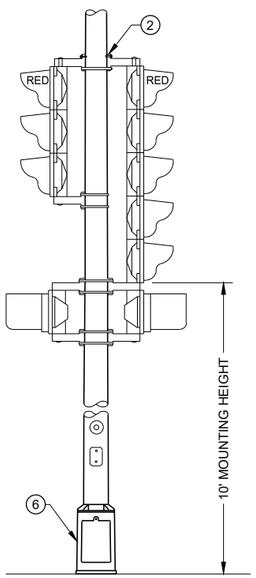
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN / BRIDGE FOR VERIFICATION AND APPROVAL.

(MAXIMUM LOAD)

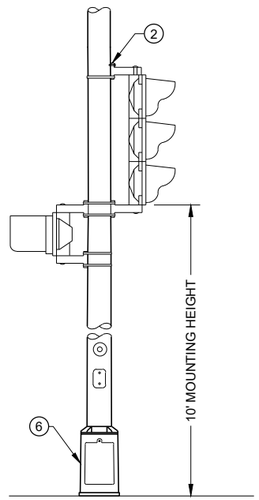


SIGNAL FACE MOUNTING DETAIL

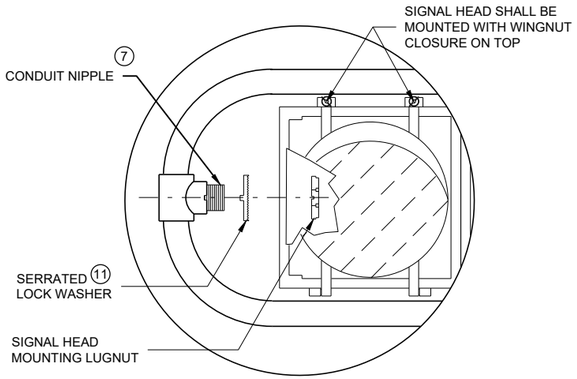
(BANDED)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



HORIZONTAL SIGNAL HEAD ** MOUNTING DETAIL

** SIGNAL HEAD ATTACHMENT ALSO APPLIES TO MOUNTING AT CROSS BAR

GENERAL NOTES

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

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED. UNDER MAX LOADING, TYPE 3 POLE SHALL BE MOUNTED DIRECTLY TO ITS CONCRETE BASE.

(7) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

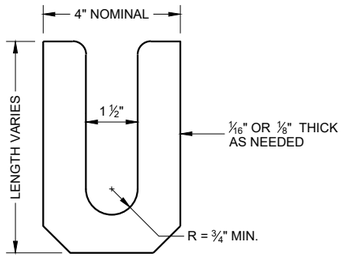
TYPE 3 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS TYPE 3 (HEAVY DUTY)

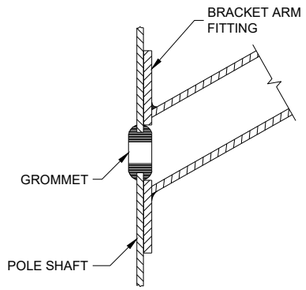
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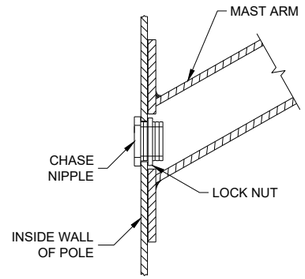
SDD 09E01 - 15b



LEVELING SHIM (1)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

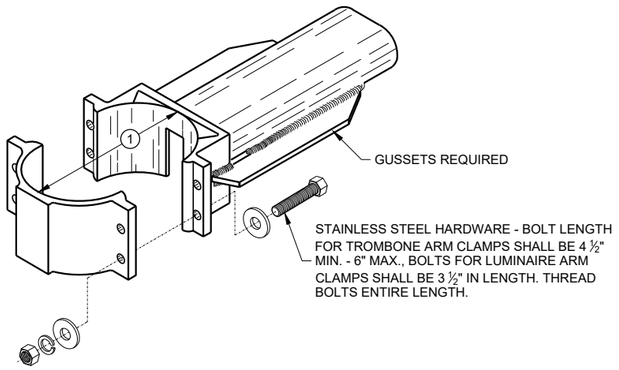
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

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

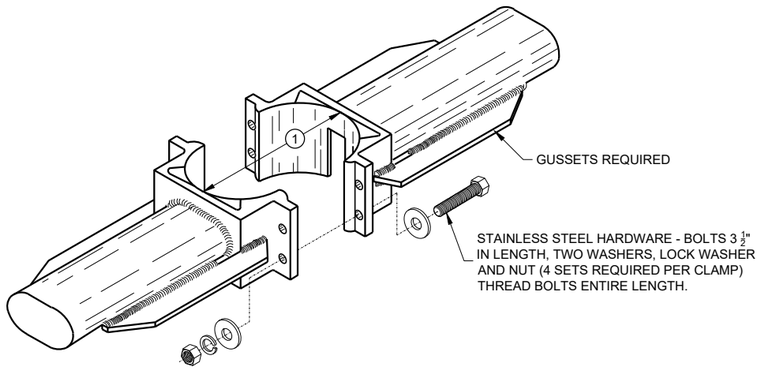
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(4) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

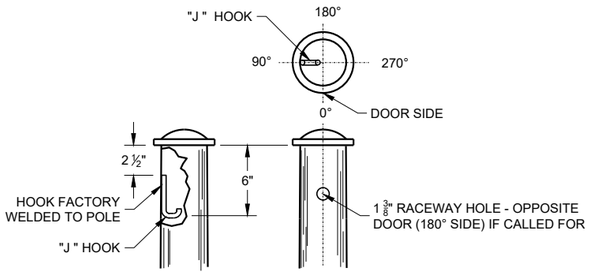
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



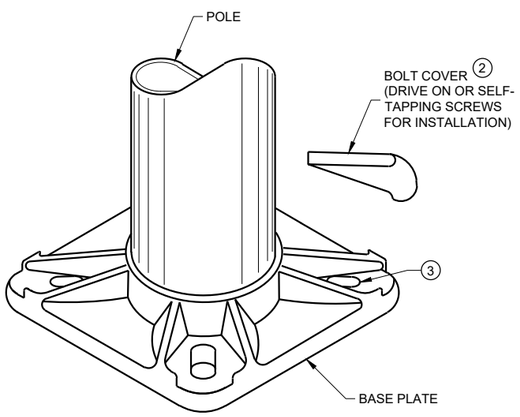
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



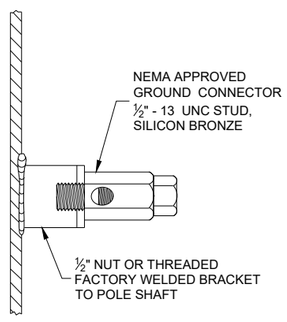
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

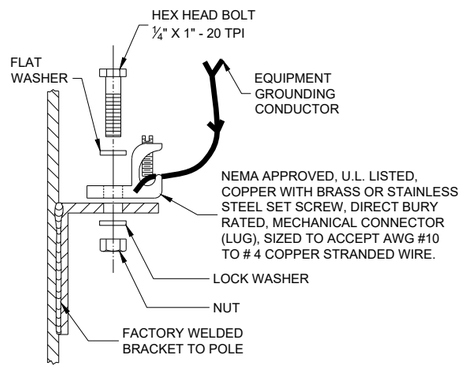


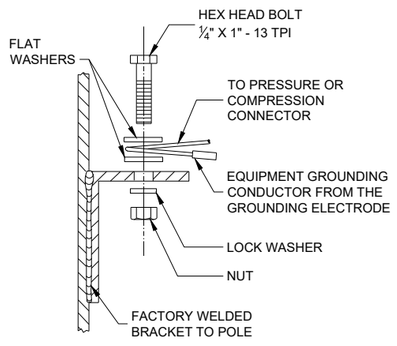
TYPICAL "J" HOOK LOCATION



BASE PLATE







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

HARDWARE DETAILS FOR POLE MOUNTING

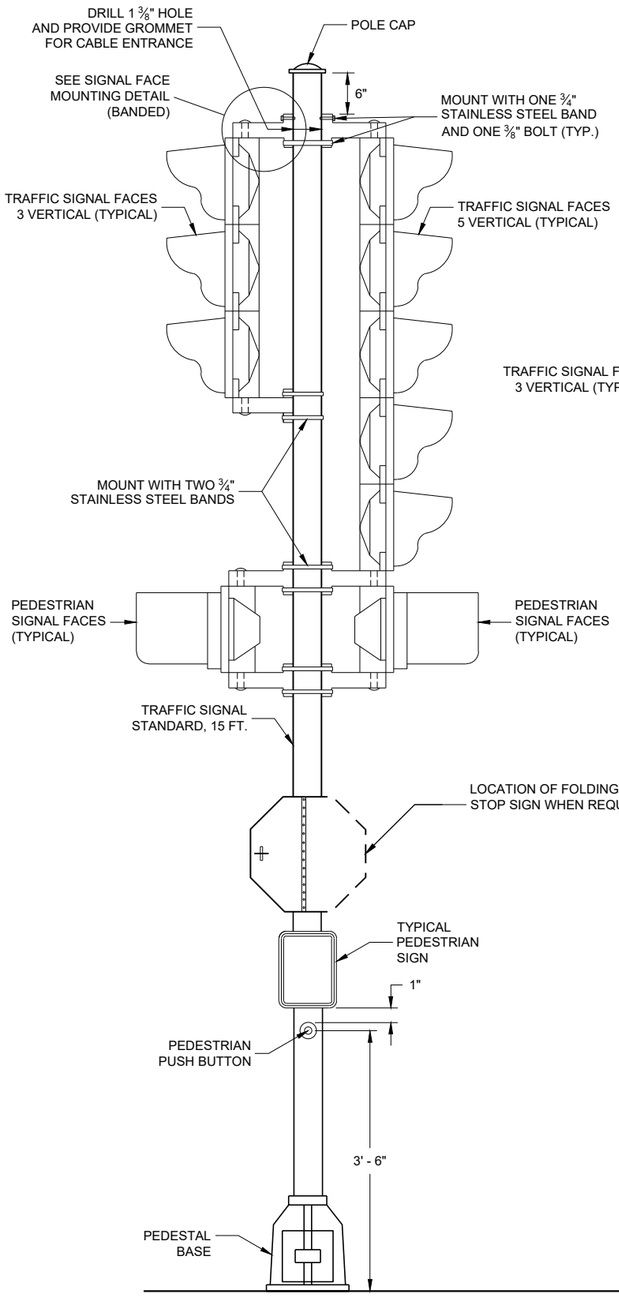
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November 2018
DATE

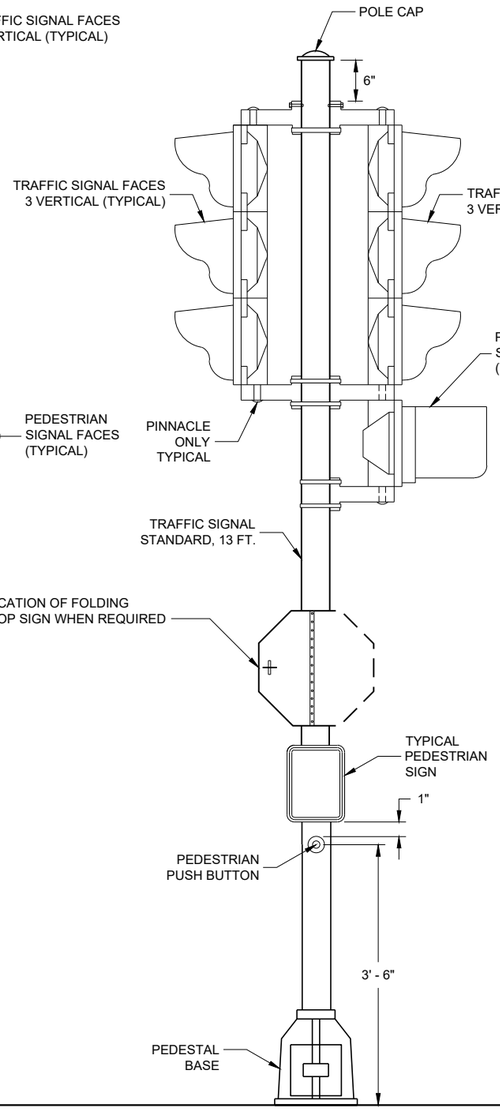
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 560

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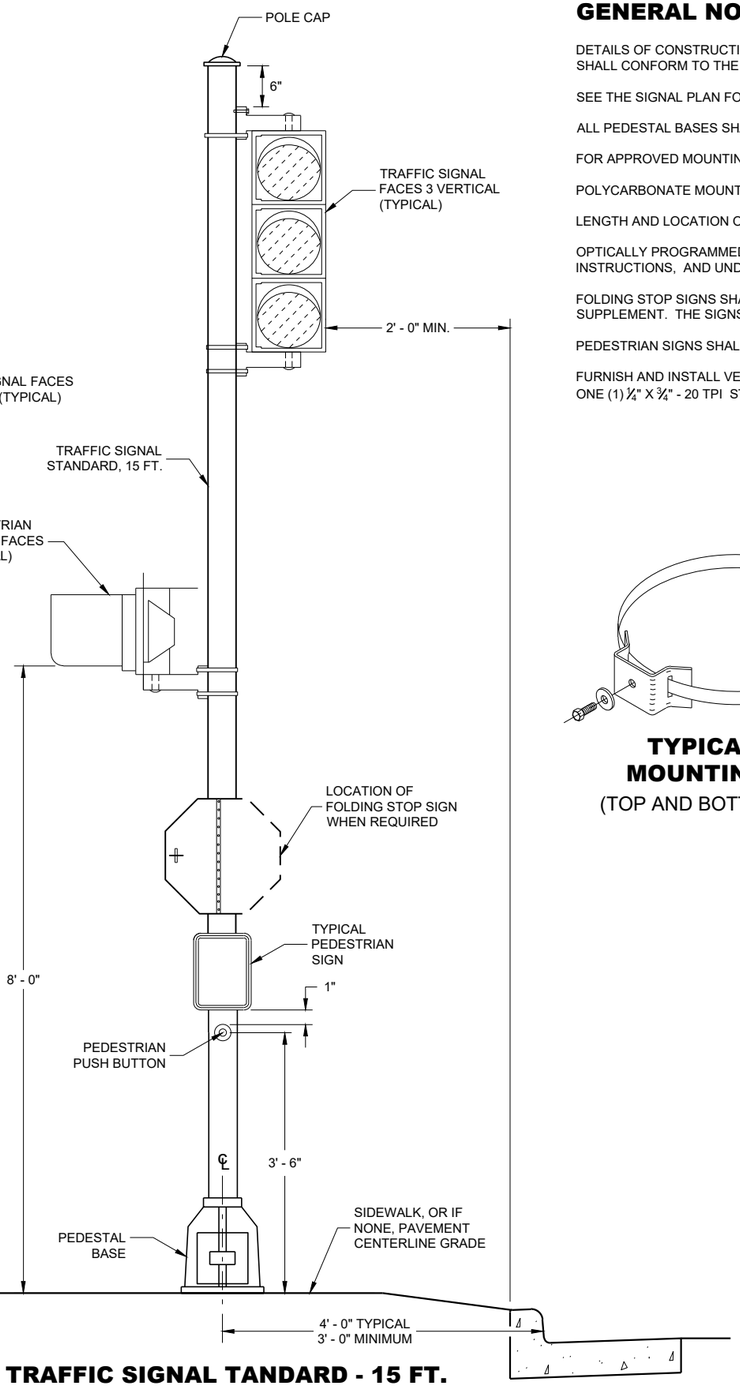
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TRAFFIC SIGNAL STANDARD - 15 FT.



TRAFFIC SIGNAL STANDARD - 13 FT.



TRAFFIC SIGNAL TANDARD - 15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

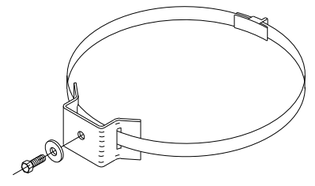
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

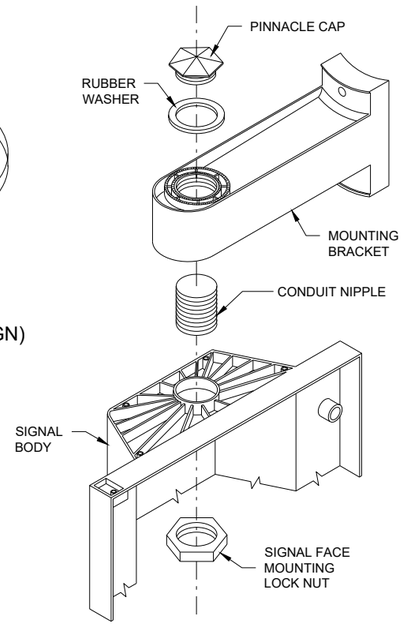
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



SIGNAL FACE MOUNTING DETAIL (BANDED)

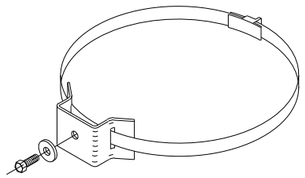
TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

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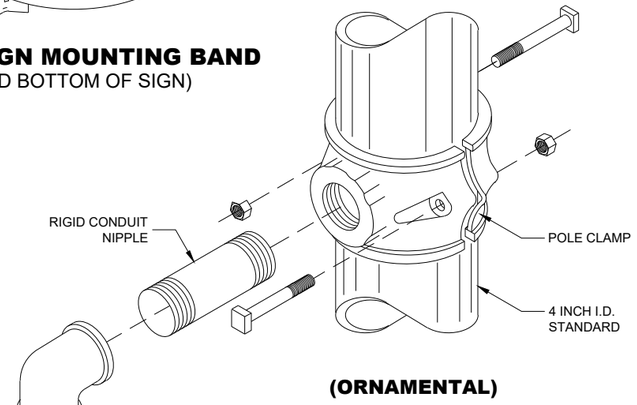
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/S/ Ahmet Demirbilek
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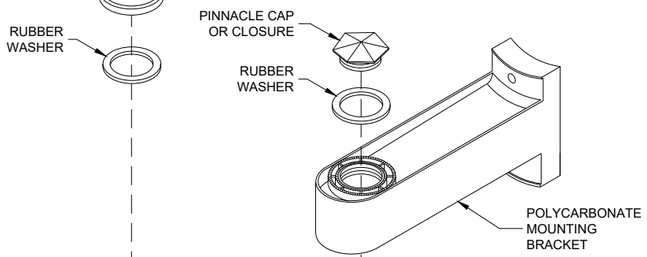
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SDD 09E06 - 05



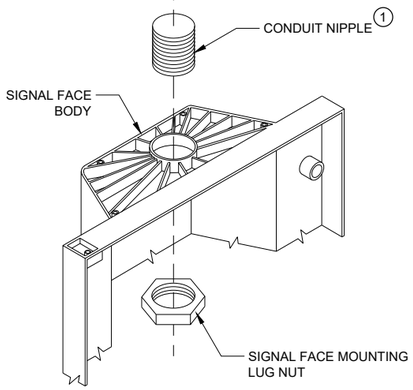
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



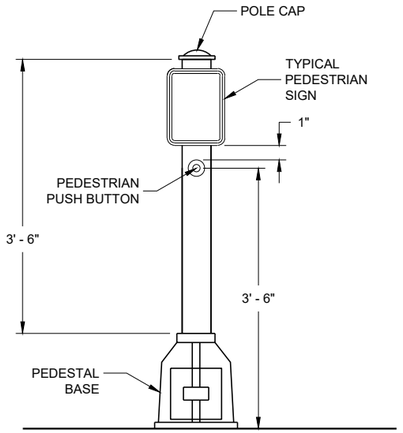
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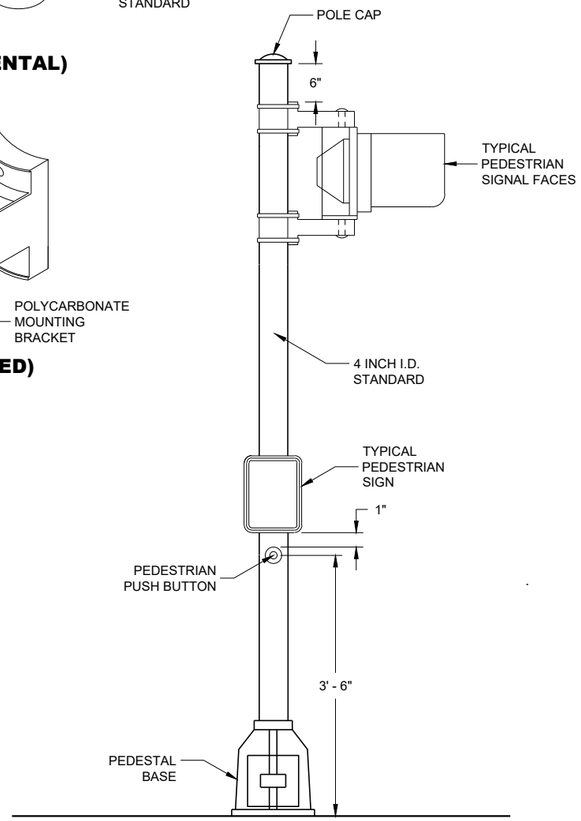
(BANDED)



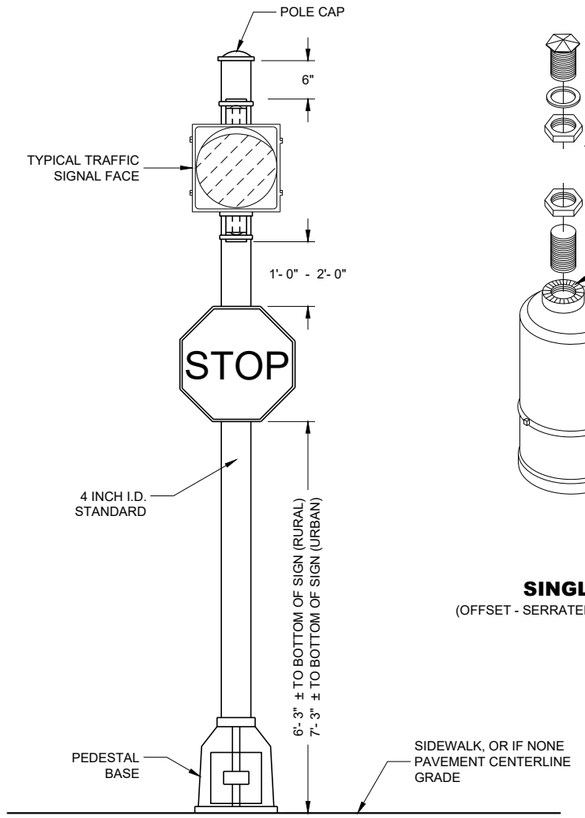
SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING



PEDESTRIAN FACE STANDARD - 10 FT.
(WALK - DON'T WALK)



STANDARD FLASHER
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS, UNLESS APPROVED BY THE ENGINEER IN THE FIELD.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

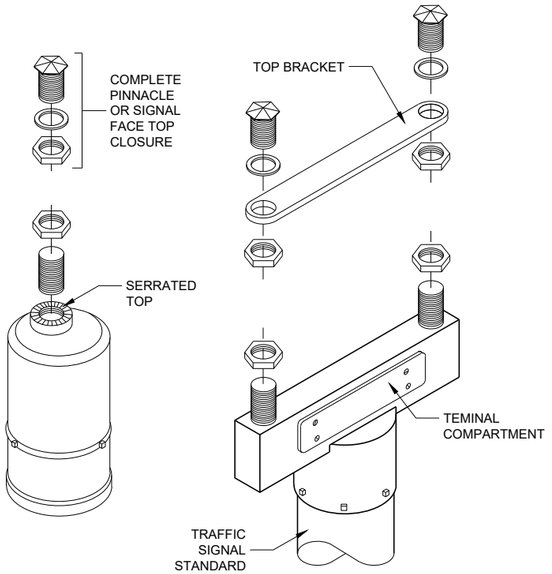
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE REGION TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(1) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACESAND BRACKET ENDS.



SINGLE
(OFFSET - SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

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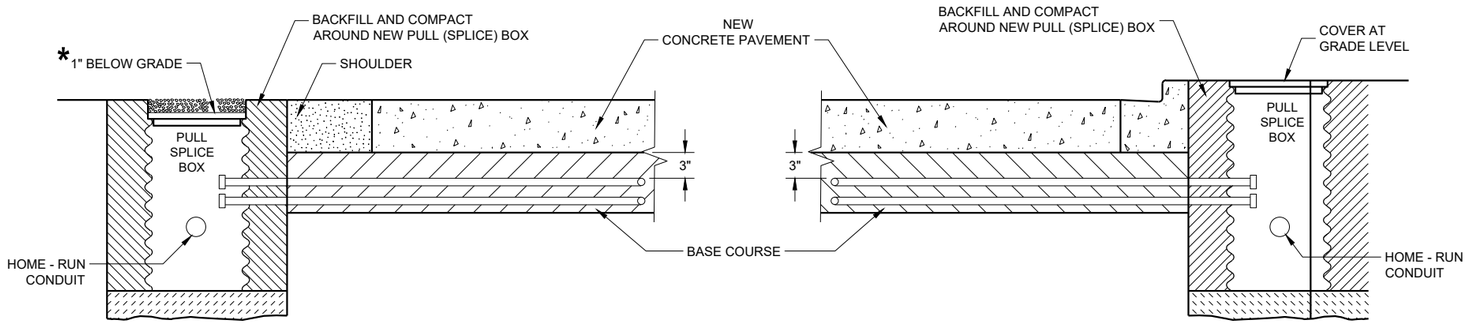
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SECTION A - A
NO CURB AND GUTTER

SECTION B - B
CURB AND GUTTER

* RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READING TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

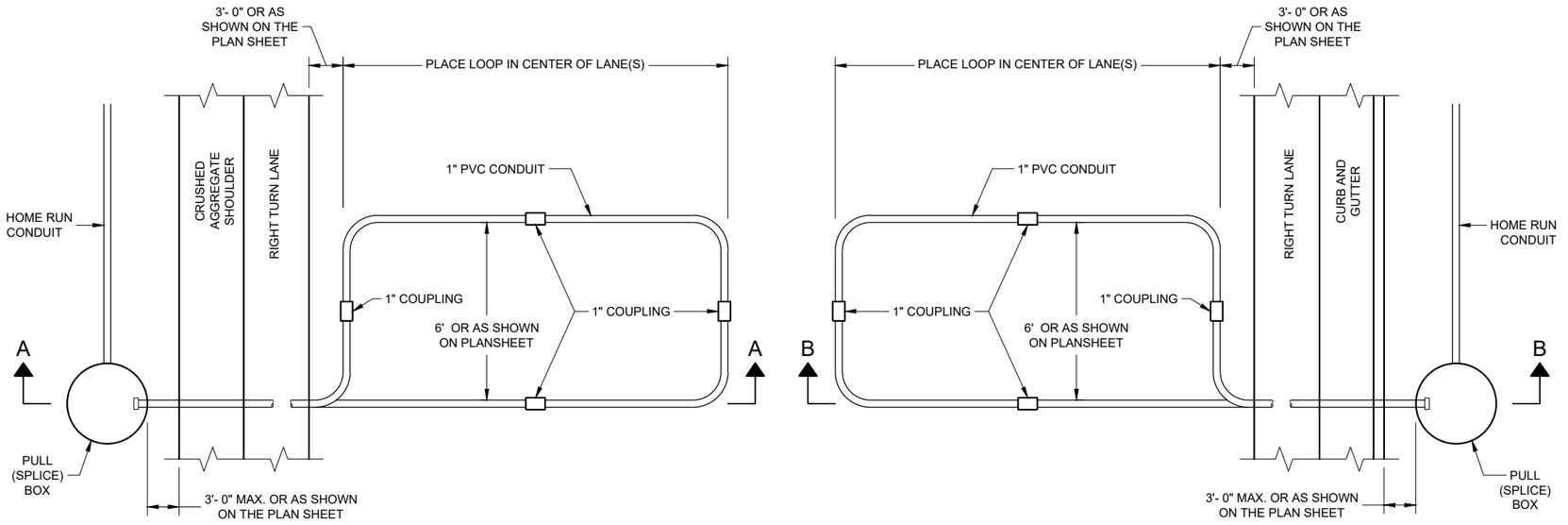
THE #12 AWG LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

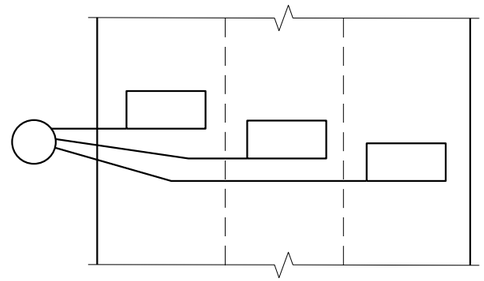
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN LOOP DETECTOR
WITH 24" PULL (SPLICE) BOX



MULTI-LANE
INSTALLATION

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

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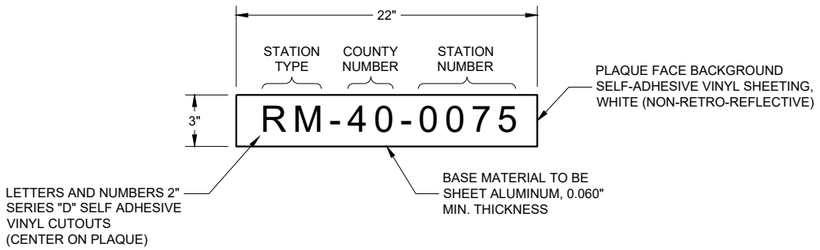
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September 2014
DATE
/S/ Ahmet Demirbilek
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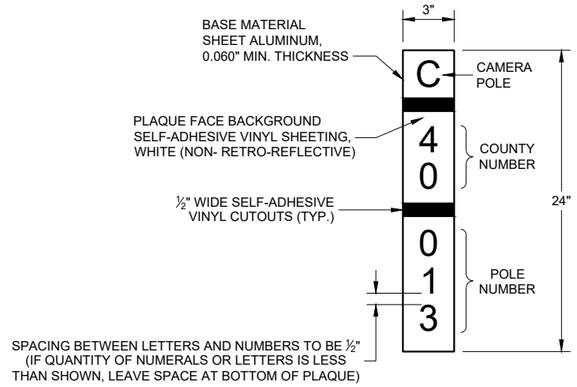
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CONTROL CABINET IDENTIFICATION PLAQUE DETAIL



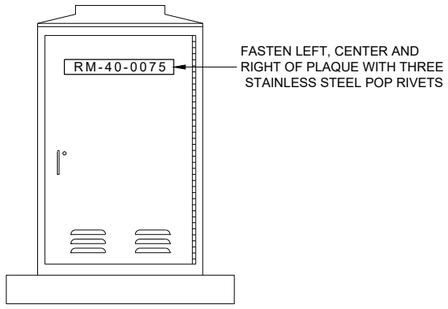
POLE IDENTIFICATION PLAQUE DETAIL

GENERAL NOTES

1. TWO PLAQUES PER CABINET REQUIRED ON CONTROL CABINET.
2. FASTEN ONE PLAQUE ON FRONT DOOR, UPPER HALF.
3. FASTEN ONE PLAQUE ON SIDE FACING LOCAL STREET. IF NO LOCAL STREET NEARBY, OR IF SUCH LOCATION COINCIDES WITH LOCATION OF PLAQUE IN NOTE 2 , FASTEN PLAQUE ON REAR OF CABINET, UPPER HALF.
4. COUNTY NUMBER NOT REQUIRED ON RAMP METER CABINETS.

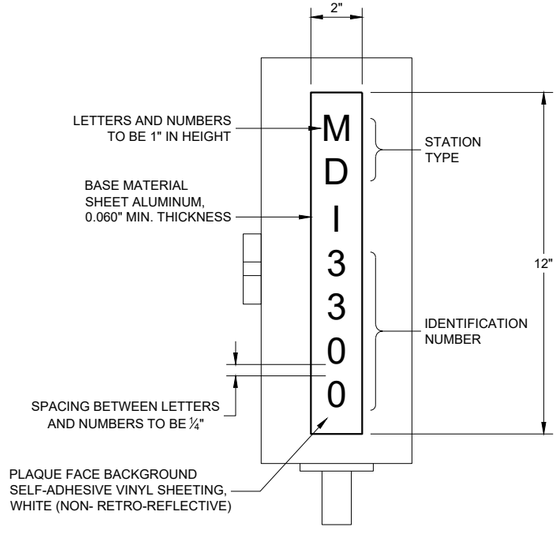
LEGEND STATION TYPE

RM - RAMP METER
CCTV - CLOSED CIRCUIT TELEVISION
ATR - AUTOMATIC TRAFFIC RECORDER
SDS - SYSTEM DETECTOR STATION
MD - MICROWAVE DETECTOR



CONTROL CABINET IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

(TYPICAL ALL CONTROL CABINETS)



MICROWAVE DETECTOR FIELD CABINET IDENTIFICATION PLAQUE DETAIL

IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

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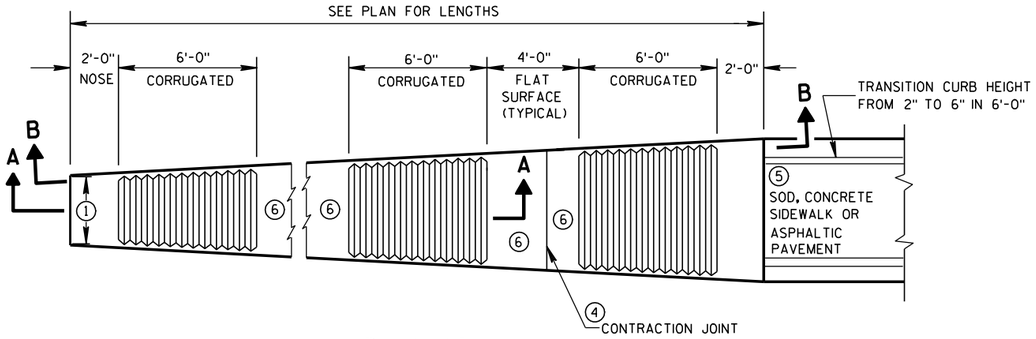
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SDD 09H11 - 01

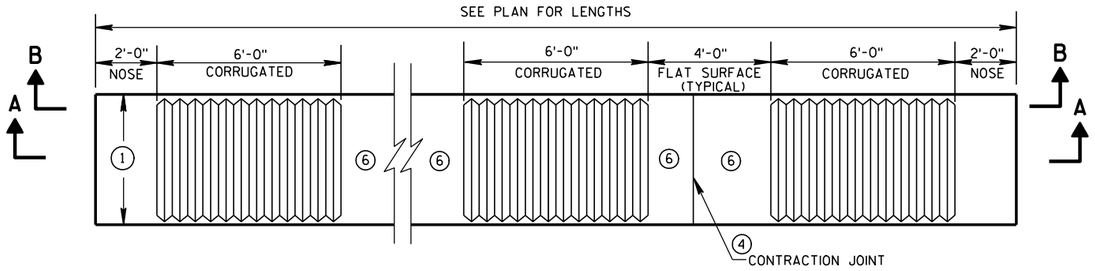
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SDD 09H11 - 01



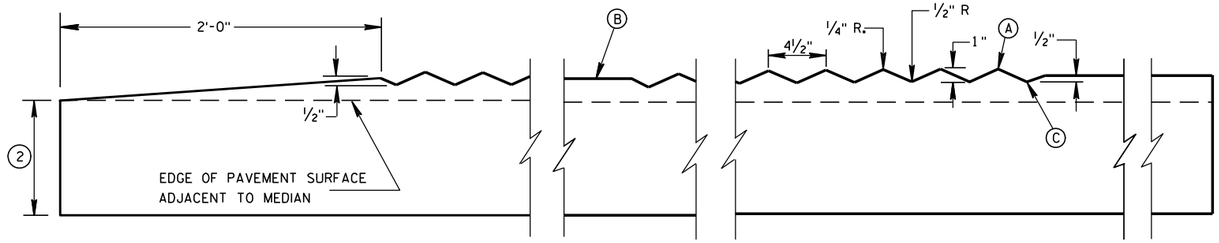
PLAN VIEW

VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN



PLAN VIEW

UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN



SECTION A-A

LONGITUDINAL SECTION

GENERAL NOTES

(1) SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.

(2) THE DEPTH OF THE CONCRETE CORRUGATED MEDIAN SHALL BE 9-INCHES UNLESS SHOWN OTHERWISE IN THE PLAN.

ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

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

(3) ASPHALTIC PAVEMENT OVER BASE AGGREGATE DENSE.

(3) 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.

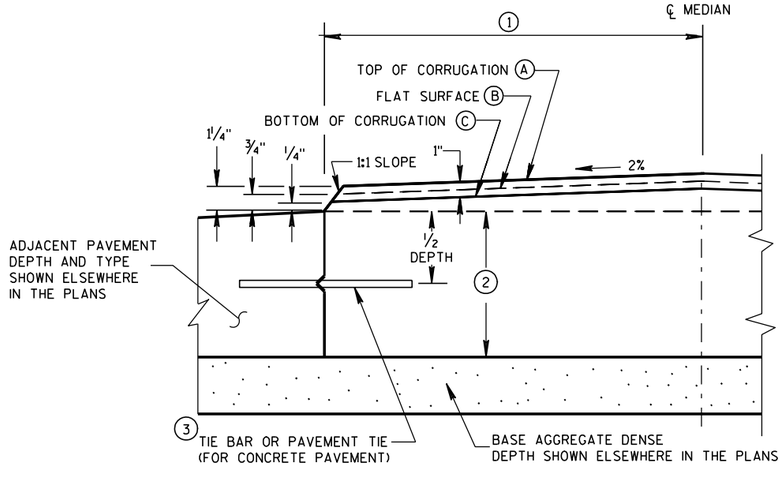
INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP).

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR 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.

(4) CONCRETE CORRUGATED MEDIAN CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH BASE AGGREGATE DENSE. TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS.

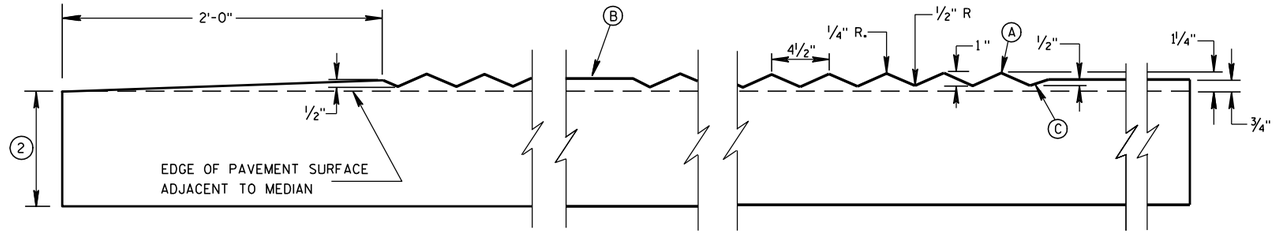
(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.

(6) YELLOW MARKING ON FLAT SURFACE WHEN MEDIAN SEPARATES OPPOSING TRAFFIC.



HALF CROSS SECTION

(2) CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT



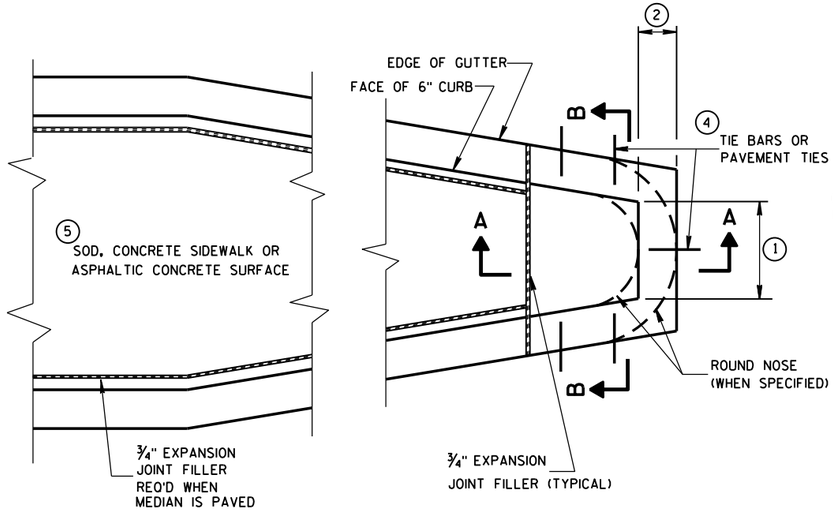
SECTION B-B

LONGITUDINAL SECTION

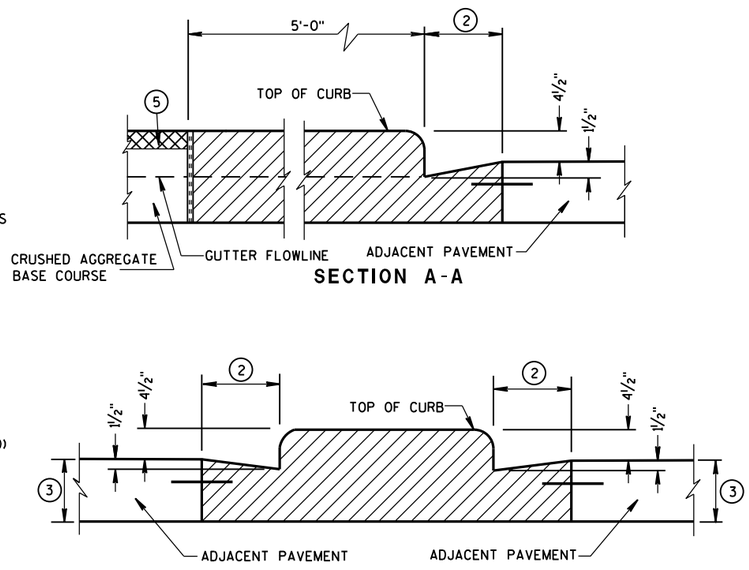
CONCRETE CORRUGATED MEDIAN	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
12/17/07 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS ENGINEER
FHWA	565

6

S.D.D. 11 B 1-5



CONCRETE MEDIAN BLUNT NOSE DETAIL



GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

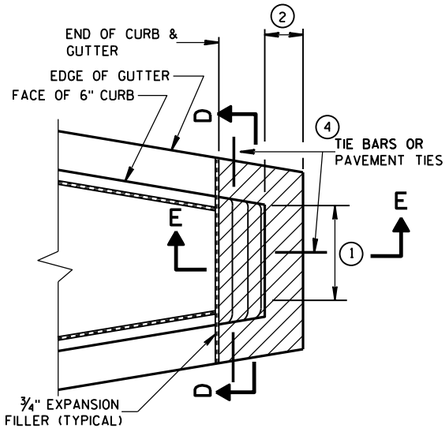
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

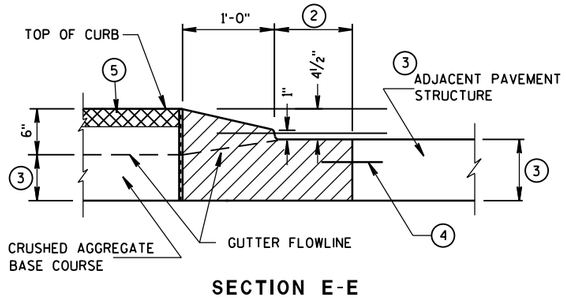
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

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

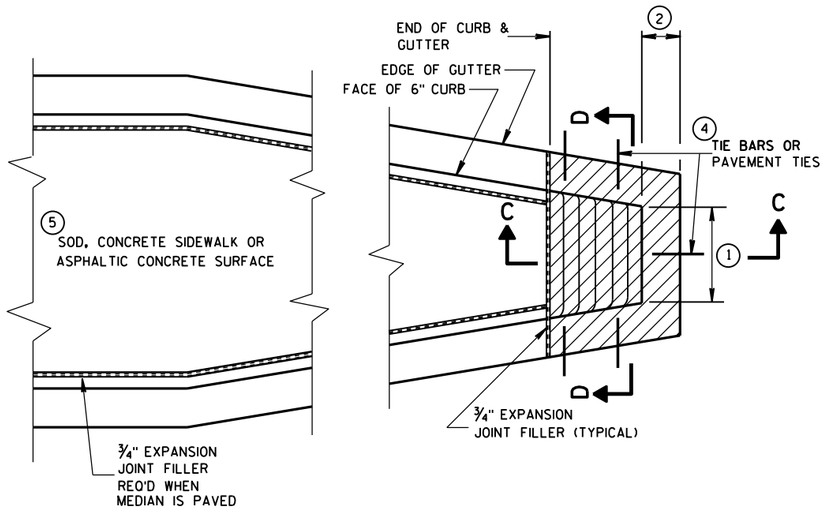
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

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

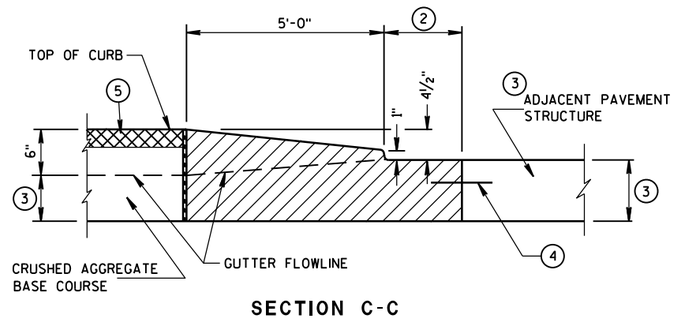


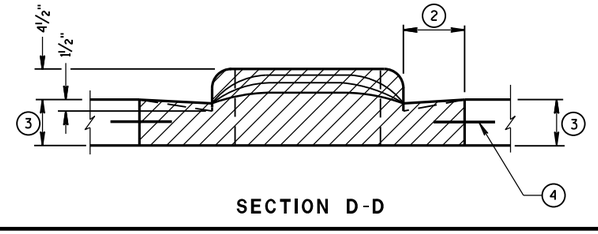


CONCRETE MEDIAN SLOPED NOSE TYPE 2



CONCRETE MEDIAN SLOPED NOSE TYPE 1





CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

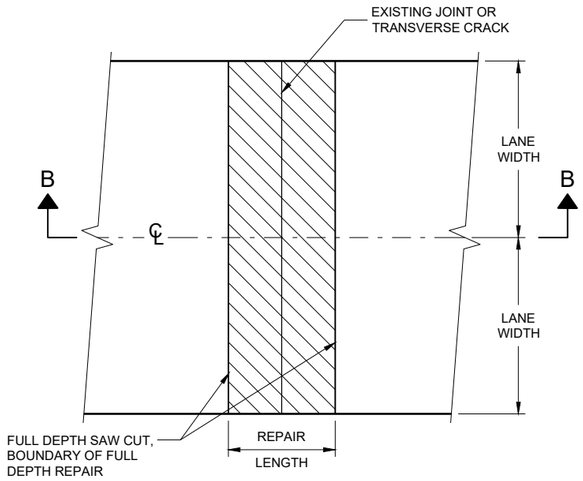
FHWA

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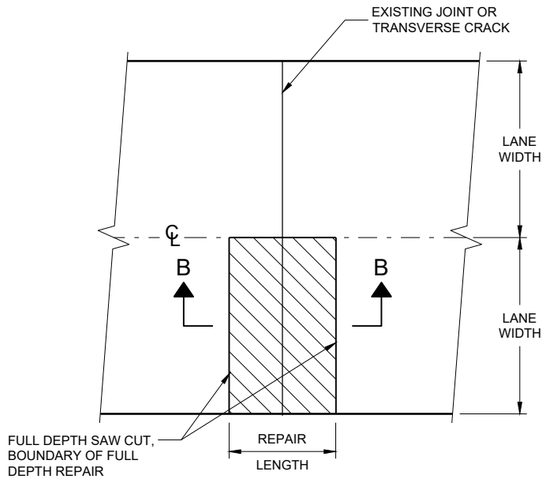
S.D.D. 11 B 2-2

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S.D.D. 11 B 2-2



PLAN VIEW
DOUBLE LANE REPAIR



PLAN VIEW
SINGLE LANE REPAIR

GENERAL NOTES

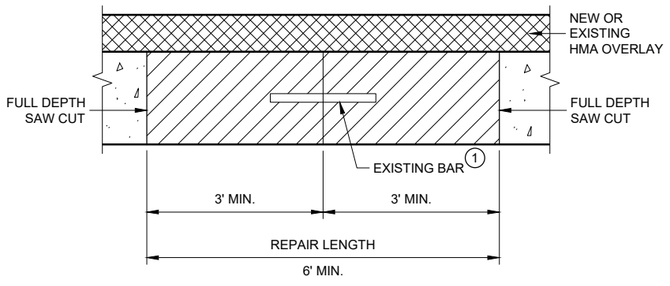
SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

PROVIDE A 6 FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREA TO ADJACENT TRANSVERSE JOINT OR CRACK.

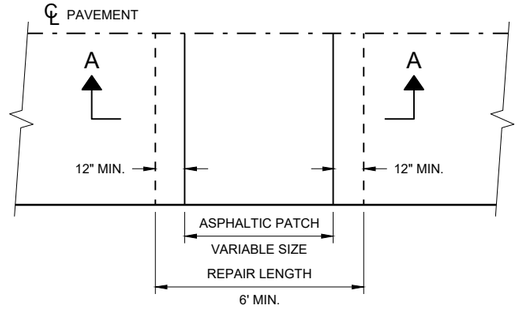
THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NON-DOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

(1) DOWEL BARS MAY NOT BE PRESENT.

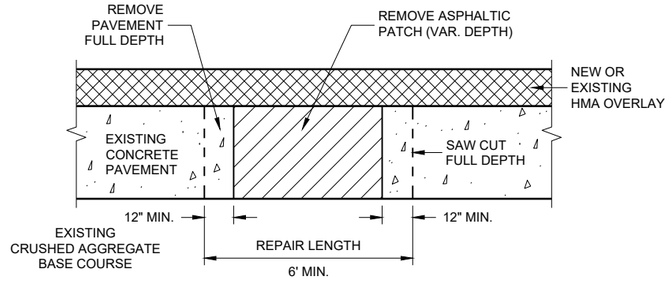
FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION B - B
CONCRETE REMOVAL



PLAN VIEW



SECTION A - A

HMA PATCH REMOVAL

BASE PATCHING CONCRETE

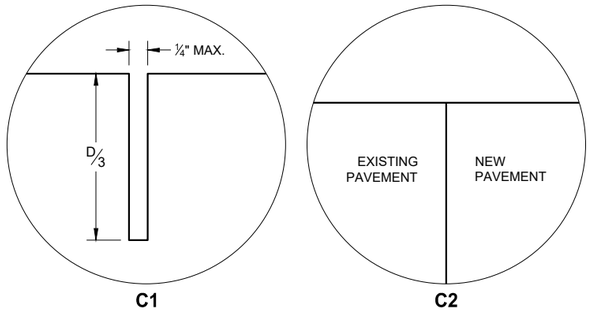
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA 567

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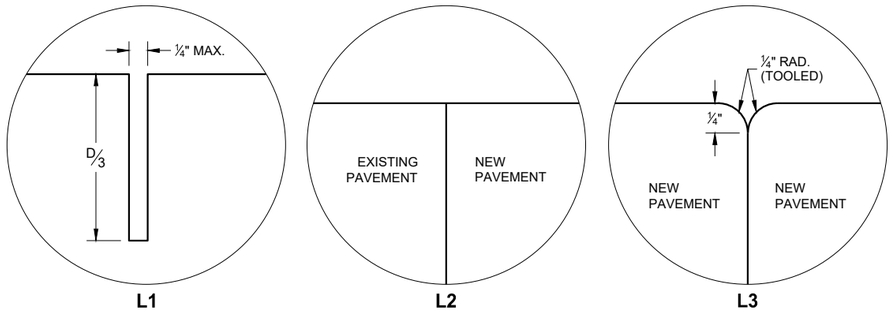
SDD 13C14 - 07a

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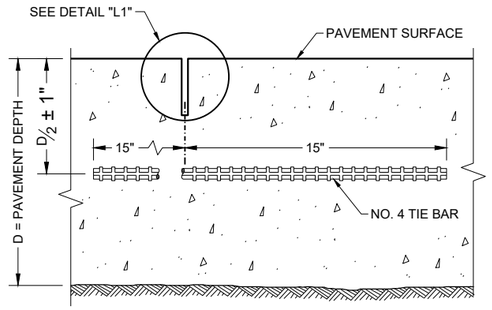
SDD 13C14 - 07a



TRANSVERSE JOINTS

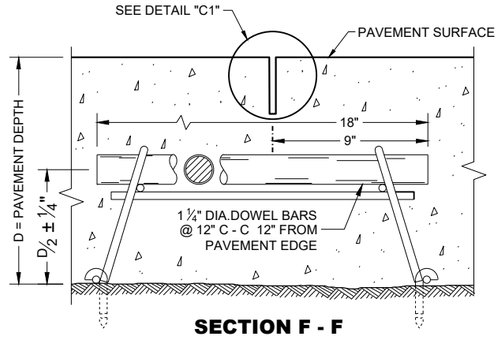


LONGITUDINAL JOINTS



SECTION C - C

SAWED LONGITUDINAL JOINT



SECTION F - F

CONTRACTION JOINT

GENERAL NOTES

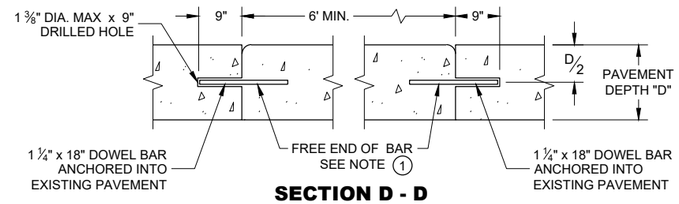
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE BASE PATCHES OF EXISTING NON-DOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

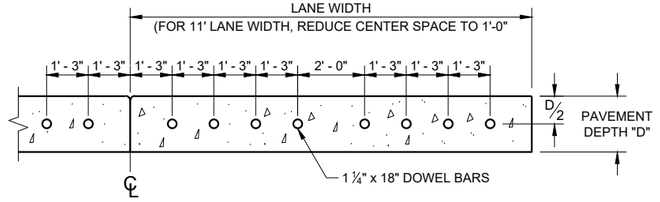
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT O EDGE.

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

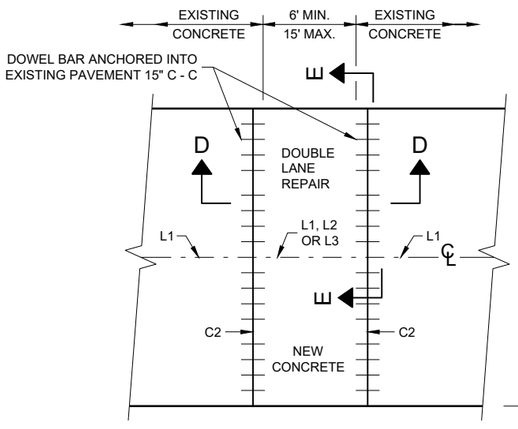


SECTION D - D



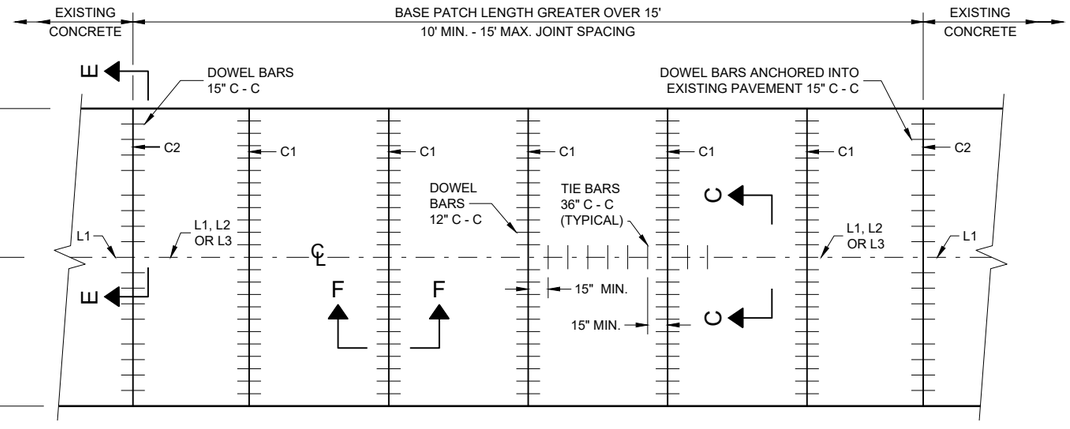
SECTION E - E

SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT



PLAN VIEW

MULTILANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

MULTILANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH

BASE PATCHING CONCRETE

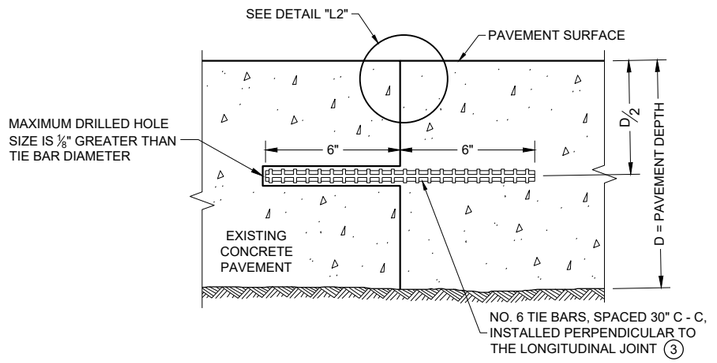
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA 568

SDD 13C14 - 07b

SDD 13C14 - 07b

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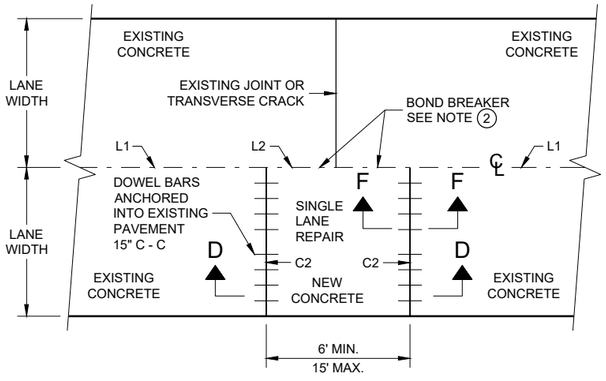


SECTION G - G

TIE BARS ANCHORED INTO EXISTING PAVEMENT

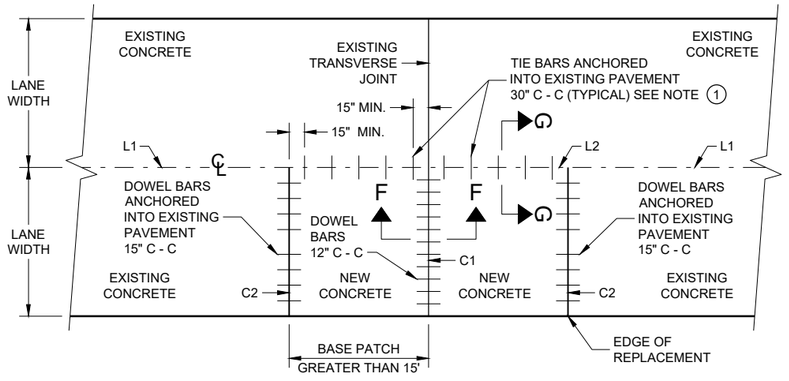
GENERAL NOTES

1. WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.
2. USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.
3. ANCHOR TIE BARS INTO DRILLED HOES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH
15' MAXIMUM LENGTH



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH
GREATER THAN 15' LENGTH

BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

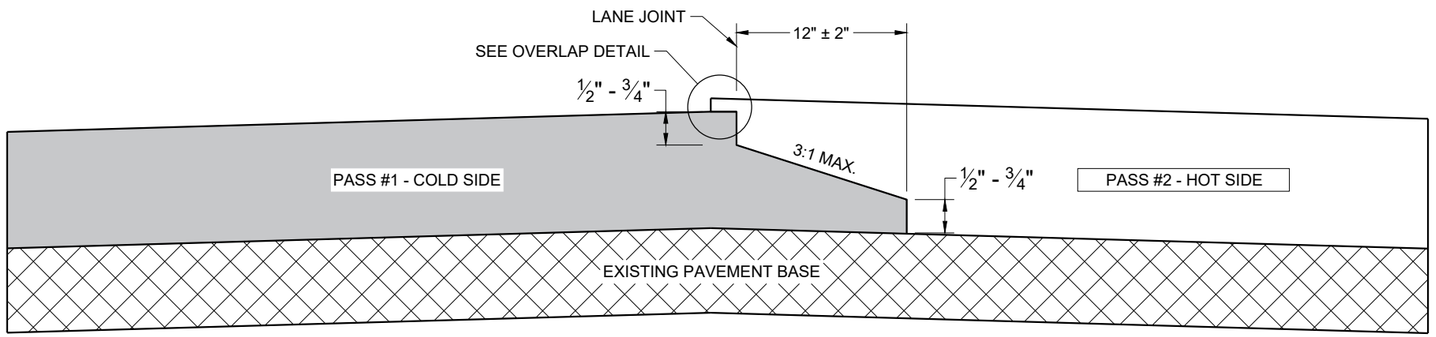
APPROVED
March 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVISO

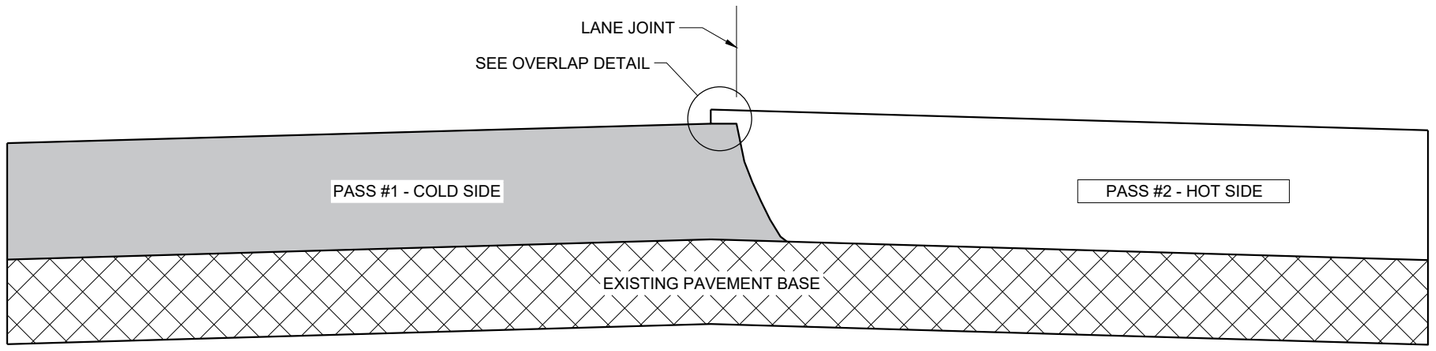
FHWA

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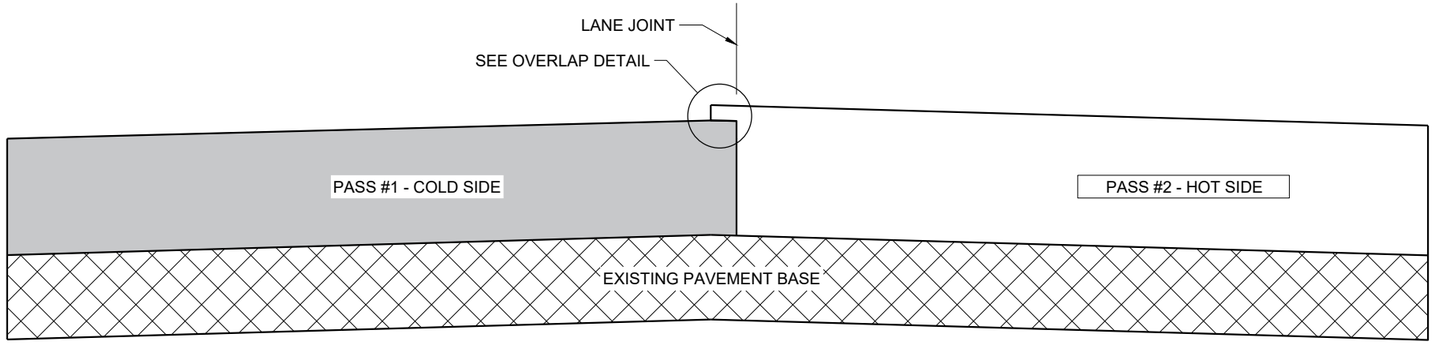
SDD 13C14 - 07c
SDD 13C14 - 07c



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

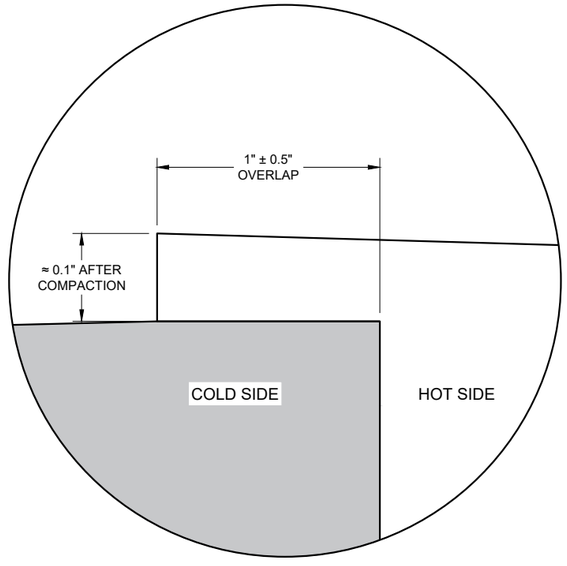
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

6

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SDD 13C19 - 03

SDD 13C19 - 03

HMA LONGITUDINAL JOINTS

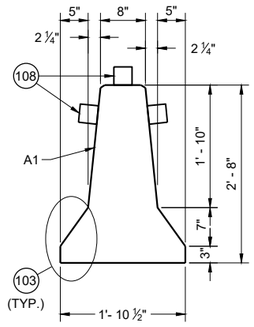
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

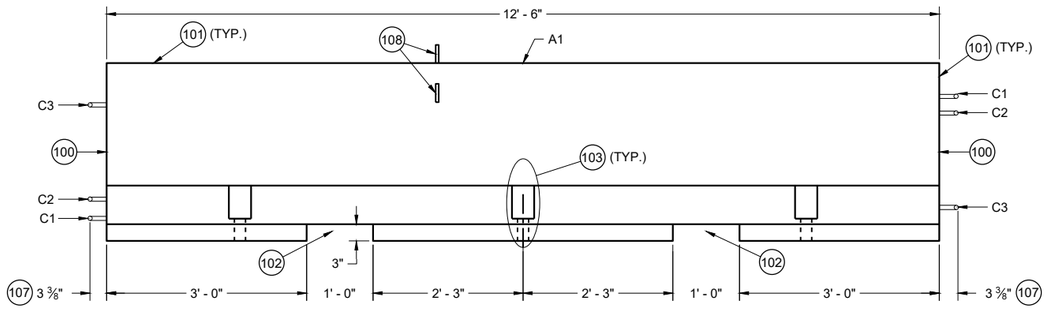
/S/ Steven Hefel
HMA PAVEMENT ENGIN

570

FHWA



CROSS SECTION



PROFILE VIEW

GENERAL NOTES

PLACE BARRIER ON PAVED SURFACE. BEFORE PLACEMENT OF TEMPORARY BARRIER, REMOVE ALL LOOSE MATERIAL FROM PAVED SURFACE.

LOOP BARS C1, C2 AND C3 ARE NOT FOR PLACEMENT OR MOVEMENT OF BARRIER.

(100) PERMANENTLY FORM INTO ONE END OF BARRIER THE FOLLOWING INFORMATION:
- A. TYPE OF BARRIER: WI-CBTP
- B. MANUFACTURER
- C. DATE OF MANUFACTURE (MONTH AND YEAR)

(101) 1" OPTIONAL CHAMFER

(102) SEE LIFTING SLOT DETAIL

(103) SEE ANCHOR BLOCK DETAIL

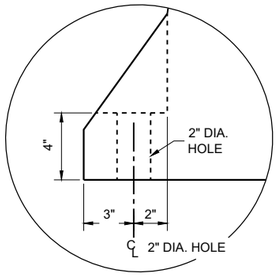
(104) 1 ¾" MIN. CLEAR COVER

(105) 2" MIN. CLEAR COVER

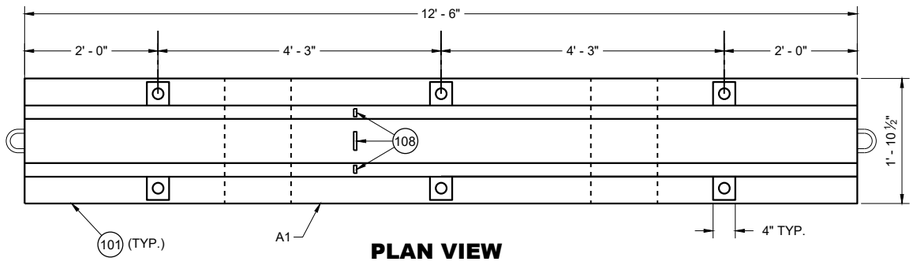
(106) 1" MIN. CLEAR COVER

(107) ± ⅛" MEASURED FROM FACE OF CONCRETE BARRIER TO OUTSIDE OF LOOP BAR (TYP.)

(108) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURERS INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED LEFT OF TRAFFIC AND WHITE WHEN BARRIER IS LOCATED RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART, PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO SIDE MOUNTED DELINEATORS ON BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAT 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

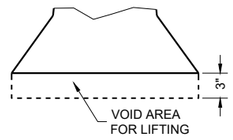


ANCHOR BLOCK DETAIL

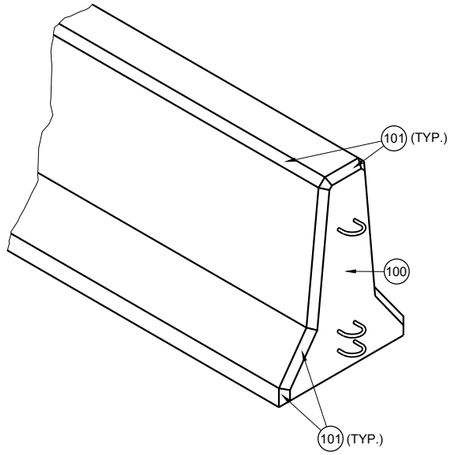


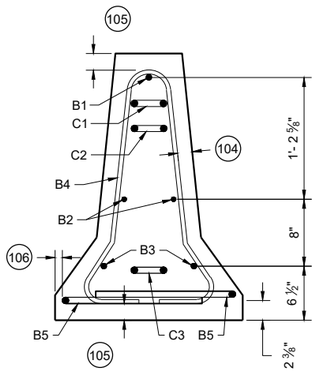
PLAN VIEW

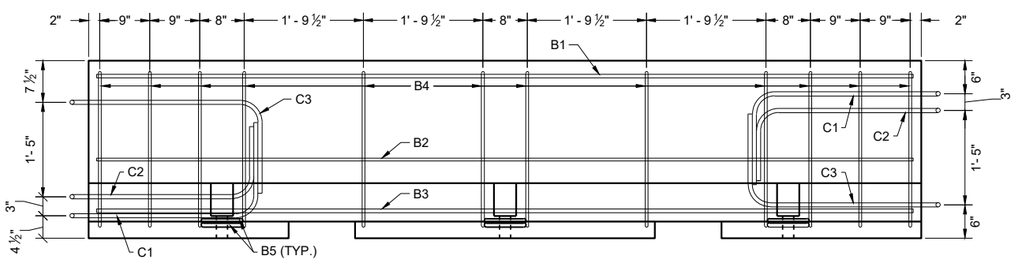
TEMPORARY BARRIER



LIFTING SLOT DETAIL (TYP.)







PROFILE VIEW

TEMPORARY BARRIER REINFORCEMENT

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

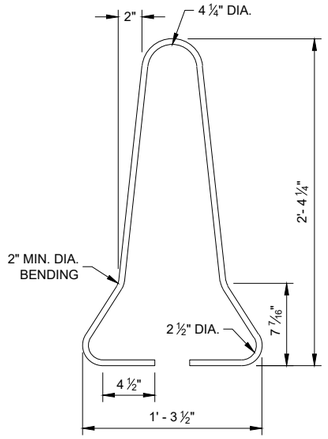
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

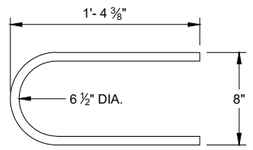
SDD 14B07-16a

6

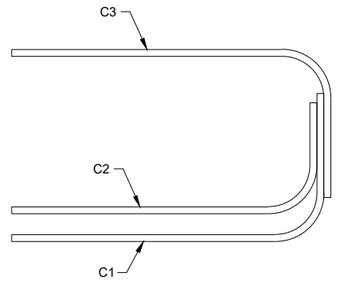
SDD 14B07-16a



B4 BAR DETAIL

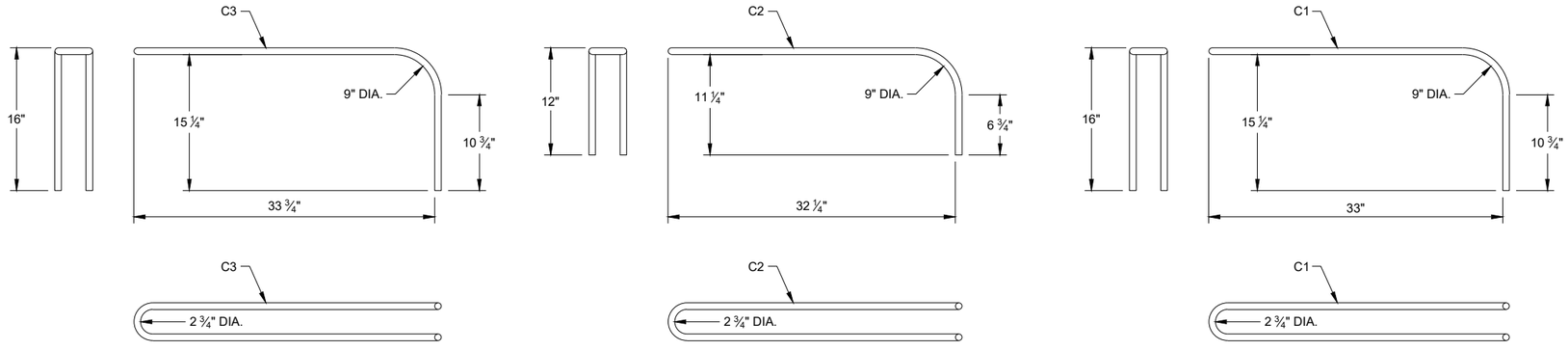


B5 BAR DETAIL



PROFILE VIEW

LOOP BAR ASSEMBLY



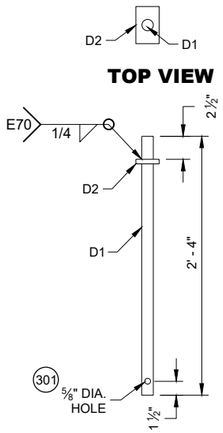
C BAR DETAILS

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

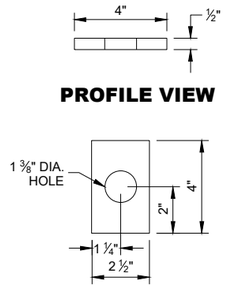
SDD 14B07-16b



TOP VIEW

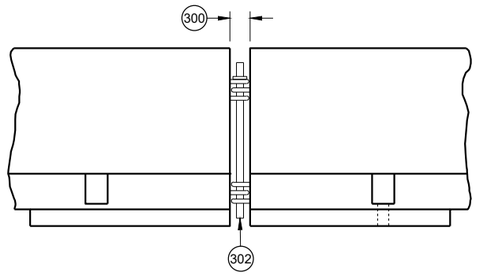
PROFILE VIEW

CONNECTOR PIN ASSEMBLY



PROFILE VIEW

TOP VIEW D2



CONNECTING TEMPORARY BARRIER SECTIONS

GENERAL NOTES

300 SET WITH 3 ⅝" WOOD BLOCK.

301 HOLE IS OPTIONAL.

302 CONNECTOR PIN ASSEMBLY.

303 CONCRETE PAVEMENT, APPROACH SLAB, OR DECK.

304 CONCRETE DECK.

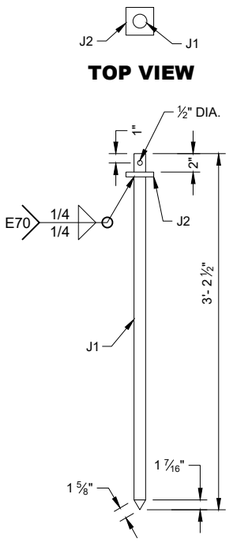
305 DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY OR CONCRETE PAVEMENT WITH ASPHALT OVERLAY.

306 MINIMUM OF 2" OF ASPHALT.

307 ASPHALT ANCHOR PIN ASSEMBLY

308 IF DRILLING A PILOT HOLE, THE MAX, DIA. OF THE HOLE IS 3/4"

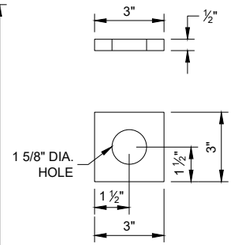
309 WHEN THERE IS ASPHALT OVERLAYING CONCRETE PAVEMENT, A 1 5/8" DIA. PILOT HOLE CAN BE DRILLED INTO THE OVERLAY AND CONCRETE. IF NEEDED DRILL A 3/4" PILOT HOLE IN BASE COURSE.



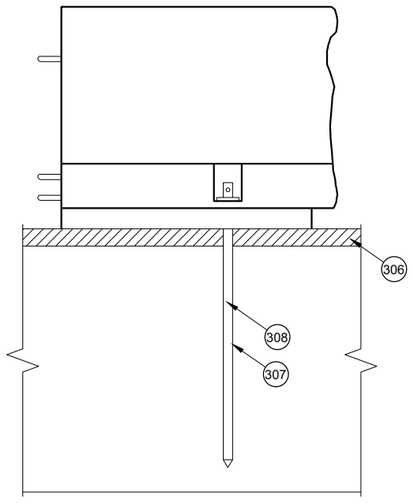
TOP VIEW

PROFILE VIEW

ASPHALT ANCHOR PIN ASSEMBLY

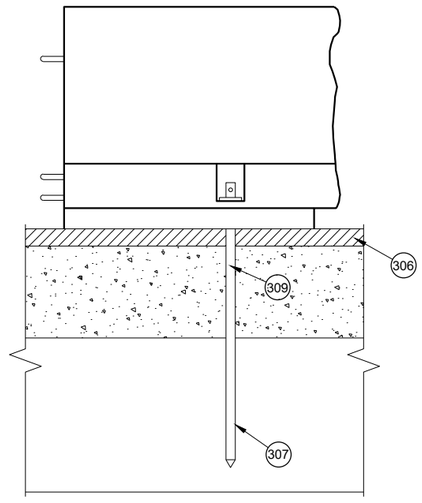


TOP VIEW J2



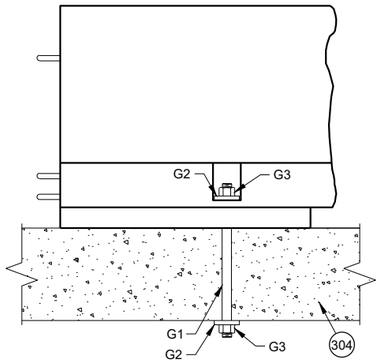
SIDE VIEW

ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT PAVEMENT



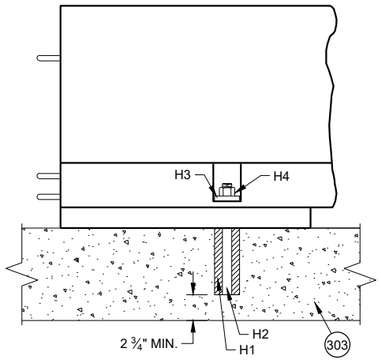
SIDE VIEW

ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT OVERLAY ON TOP OF CONCRETE PAVEMENT



SIDE VIEW

THROUGH BOLT ANCHOR INSTALLATION (305)



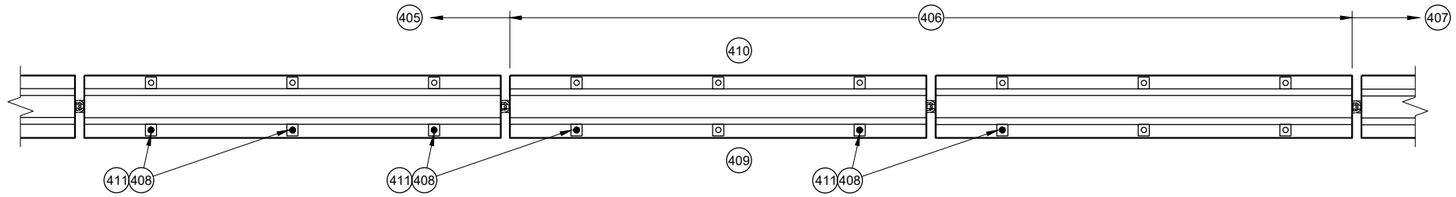
SIDE VIEW

ADHESIVE ANCHOR INSTALLATION (305)

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

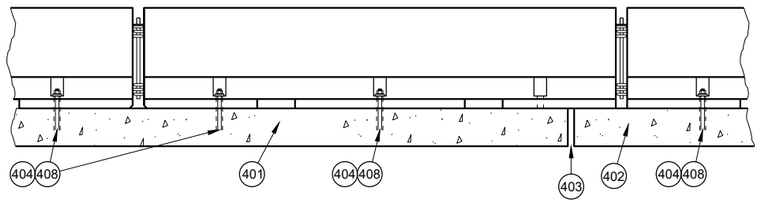
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B07-16c



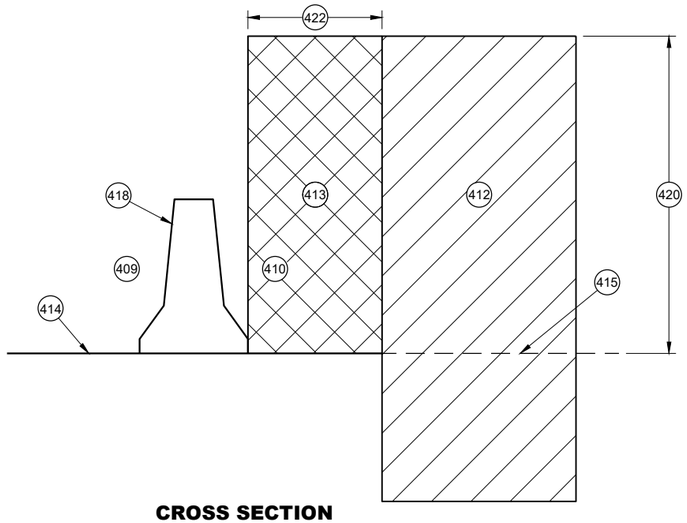
PLAN VIEW

TRANSITION FROM FREE STANDING TO ANCHORED BARRIER



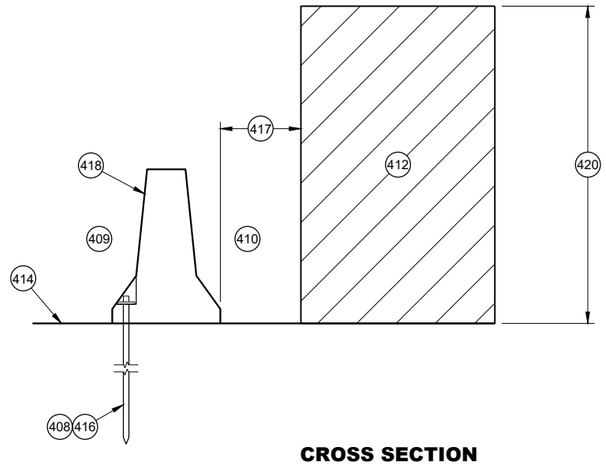
PROFILE VIEW

ANCHORED BARRIER NEAR EXPANSION JOINT (400)



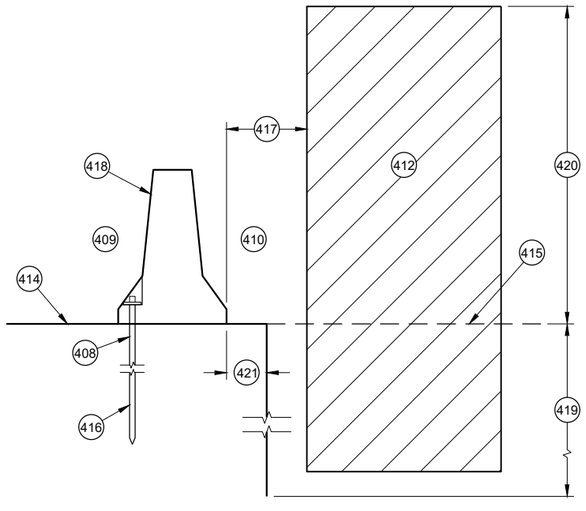
CROSS SECTION

FREE STANDING BARRIER



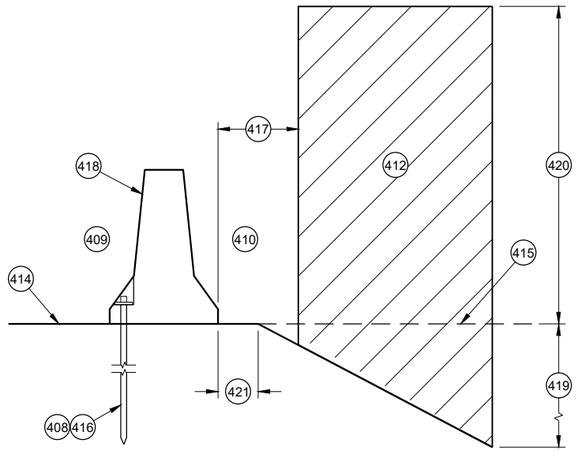
CROSS SECTION

ANCHORED BARRIER FOR OBJECTS ABOVE THE GRADE LINE AND NEAR THE BARRIER



CROSS SECTION

ANCHORED BARRIER NEAR VERTICAL DROP OFF



CROSS SECTION

ANCHORED BARRIER NEAR A SLOPE

GENERAL NOTES

(400) NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.

(401) CONCRETE DECK

(402) CONCRETE DECK OR APPROACH SLAB.

(403) EXPANSION JOINT

(404) ADHESIVE ANCHOR SHOWN. SEE ANCHOR DETAILS.

(405) ANCHORED TEMPORARY BARRIER

(406) TRANSITION FROM ANCHORED TEMPORARY BARRIER TO FREE STANDING

(407) FREE STANDING BARRIER

(408) REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERCIAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

(409) TRAFFIC SIDE

(410) NON-TRAFFIC SIDE

(411) ANCHOR LOCATION. SEE ANCHORING DETAILS.

(412) WORK AREA

(413) AREA FREE OF OBJECTS AND WORKERS

(414) GRADE LINE

(415) EXTENDED GRADE LINE

(416) ANCHORED TEMPORARY BARRIER. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR AN ASPHALT ANCHOR ROD DETAILS FOR MORE INFORMATION. ASPHALT ANCHOR ROD SHOWN.

(417) WHEN OBJECTS EXTEND ABOVE THE GRADE. A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT.

(418) OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR ALLOWED TO LEAN AGAINST THE BARRIER WITHOUT WRITTEN PERMISSION OF THE PROJECT ENGINEER.

(419) DEPTHS OF 3 FEET OR MORE.

(420) Y = 6.5'

(421) OFFSET FROM BACK OF BARRIER EDGE:

CONCRETE PAVEMENT	0.5'
ASPHALT	0.5'

(422) POSTED SPEED (MPH):

45 OR GREATER	4.0'
40 OR LOWER	2.0'

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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GENERAL NOTES

(500) EXISTING RIGID BARRIERS (VARIES)

(501) TEMPORARY BARRIER

(502) SEE OTHER DETAIL ON HOW TO ANCHOR TEMPORARY BARRIER (BARRIER ASPHALT ANCHOR SHOWN).

(503) ANCHORS ARE REQUIRED ON BOTH SIDE OF THE TEMPORARY BARRIER.

(504) NESTED RAILS ARE REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

(505) TRAFFIC TRAVELS FROM PERMANENT BARRIER TO TEMPORARY BARRIER.

(506) TRAFFIC TRAVELS FROM TEMPORARY BARRIER TO PERMANENT BARRIER.

(507) VERTICAL BARRIER

(508) SAFETY SHAPE BARRIER

(509) SINGLE SLOPE BARRIER

(510) CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF RIGID BARRIER.

(511) BENT THRIE BEAM TO FIT.

(512) THRIE BEAM PIECES ARE OFFSET 15 ¼" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.

(513) TWO (2) P1, P2 AND P3 ARE REQUIRED

(514) FIVE (5) N1, N2 AND N3 ARE REQUIRED

(515) TWO (2) R1, R2 AND R3 ARE REQUIRED

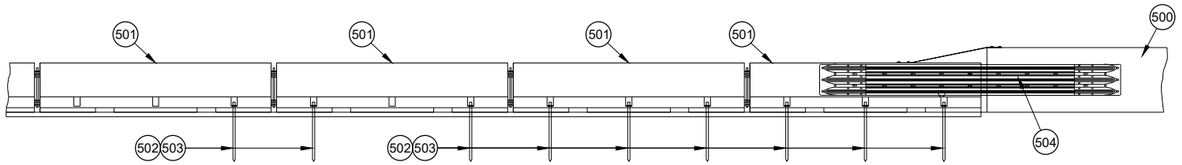
(516) CUT WOOD BLOCK TO FIT.

(517) SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL ASSEMBLY.

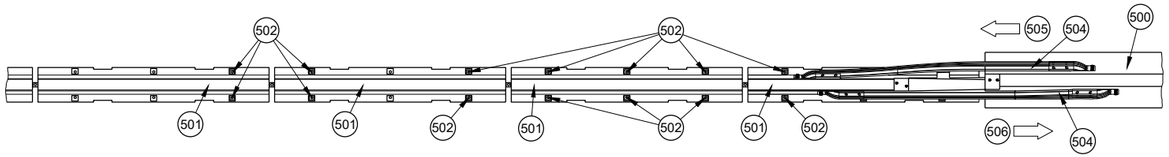
(518) CAP ASSEMBLY

(519) 4" MAX. GAP BETWEEN TEMPORARY BARRIER AND RIGID BARRIER.

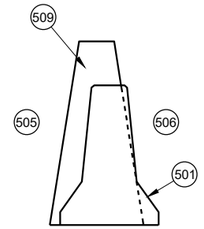
(520) ALL TWELVE SPLICE HOLES REQUIRE M1 AND M2



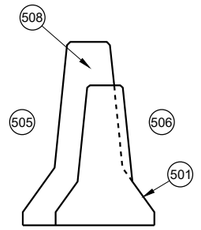
PROFILE VIEW



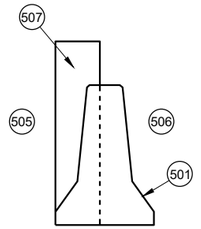
PLAN VIEW



CROSS SECTION TEMPORARY BARRIER PLACEMENT SINGLE SLOPE

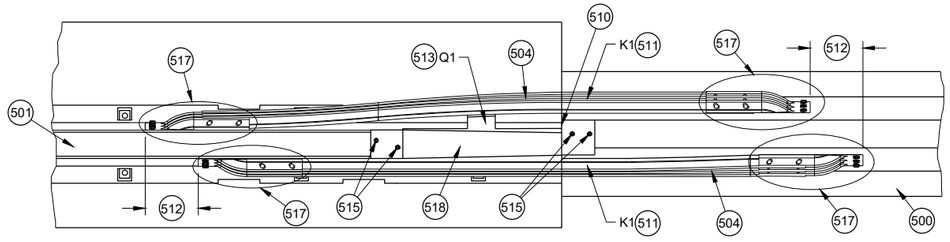


CROSS SECTION TEMPORARY BARRIER PLACEMENT SAFETY SHAPE

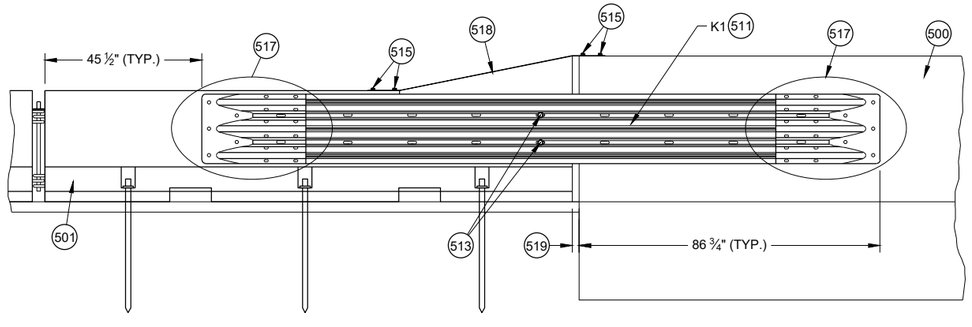


CROSS SECTION TEMPORARY BARRIER PLACEMENT VERTICAL

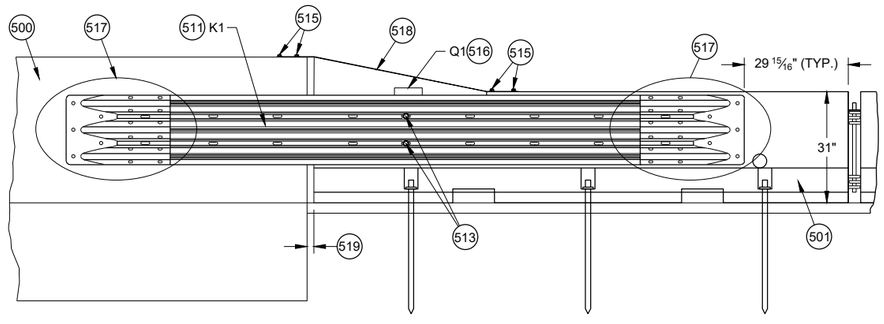
PLAN VIEW
TRANSITION TO RIGID BARRIER



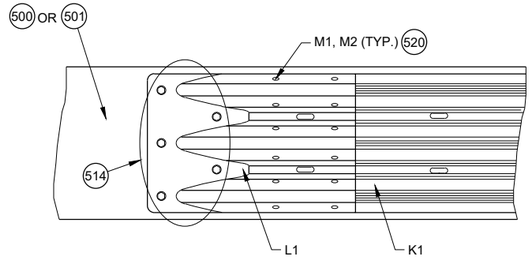
PLAN DETAIL VIEW
TRANSITION TO RIGID BARRIER



FRONT DETAIL VIEW
TRANSITION TO RIGID BARRIER



BACK DETAIL VIEW
TRANSITION TO RIGID BARRIER



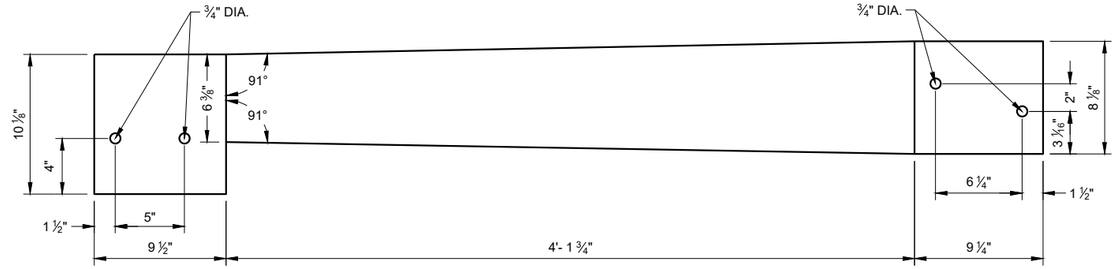
(517) DETAIL PLAN VIEW
THRIE BEAM RAIL TERMINAL CONNECTOR ASSEMBLY

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

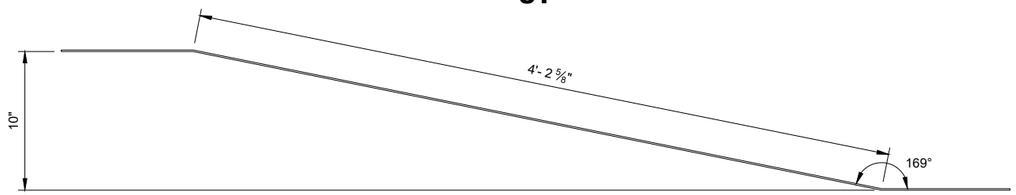
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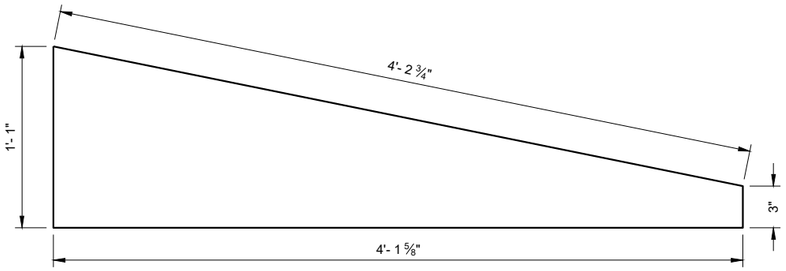
TOP VIEW

S1



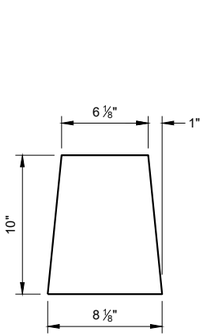
ELEVATION VIEW

S1

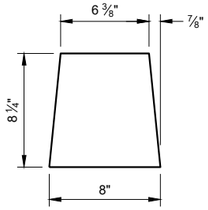


SIDE VIEW

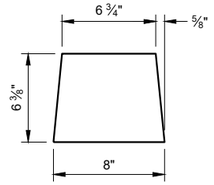
S3



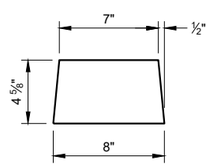
S2



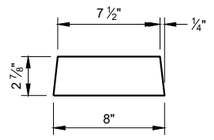
S4



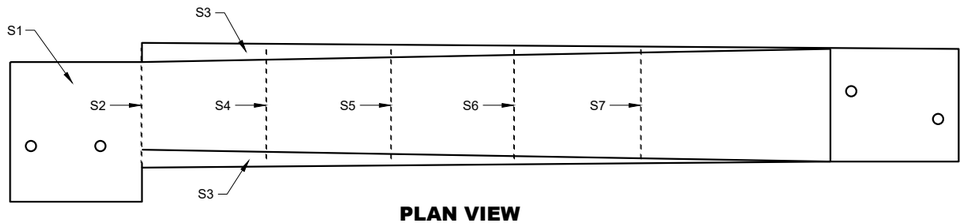
S5



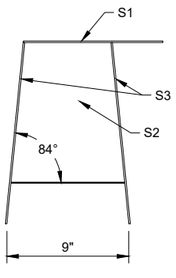
S6



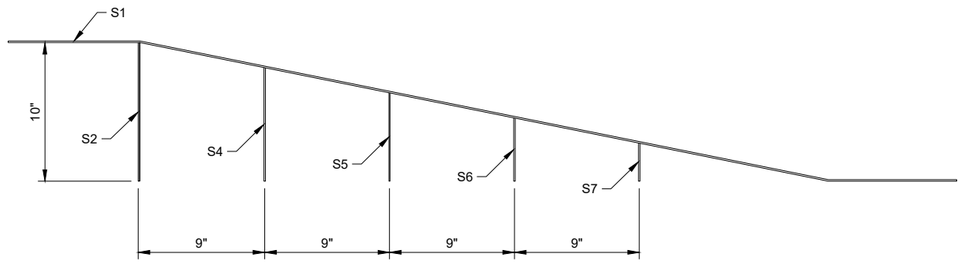
S7



PLAN VIEW



BACK VIEW



SIDE VIEW (600)

42" TOP CAP ASSEMBLY

GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THREE SIDES

STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

(600) SIDE PLATES (S3) NOT SHOWN FOR CLARITY.

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

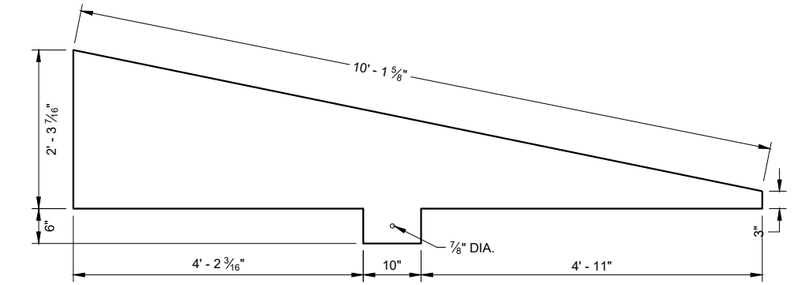
576

6

SDD 14B07-16f

6

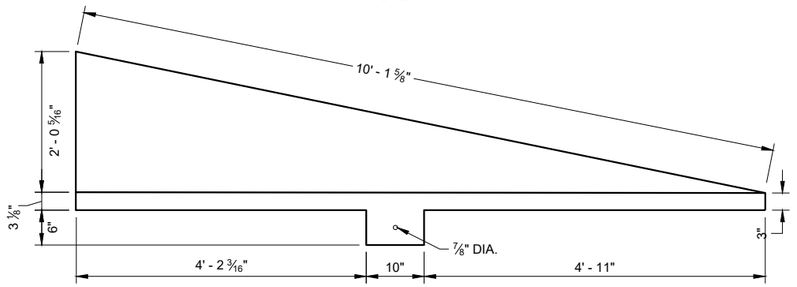
SDD 14B07-16f



SIDE VIEW
T4



END VIEW



SIDE VIEW
T3

END VIEW

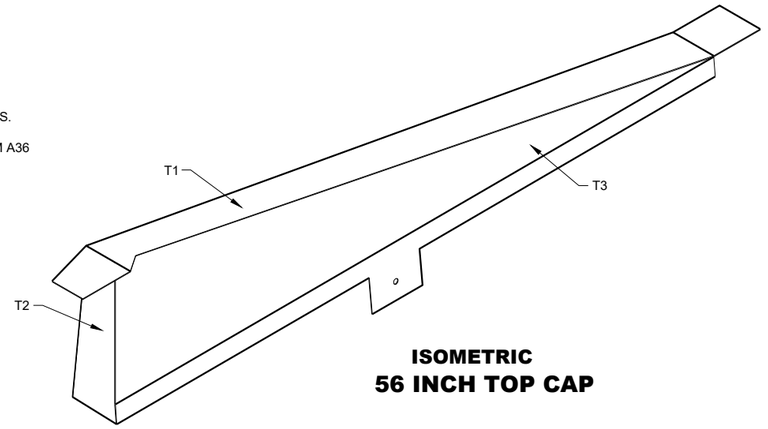
GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THRIE SIDES

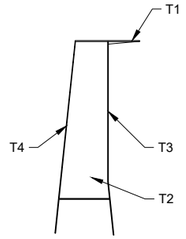
STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.

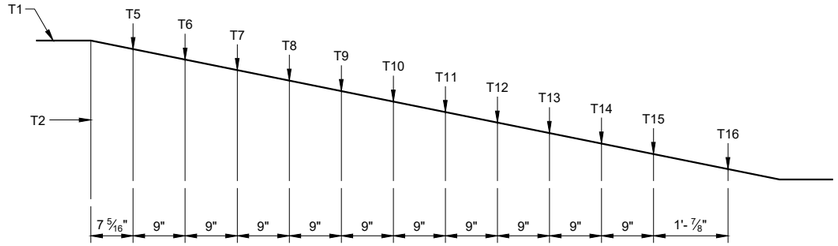
(700) SIDE PLATES (T3 AND T4) NOT SHOWN FOR CLARITY.



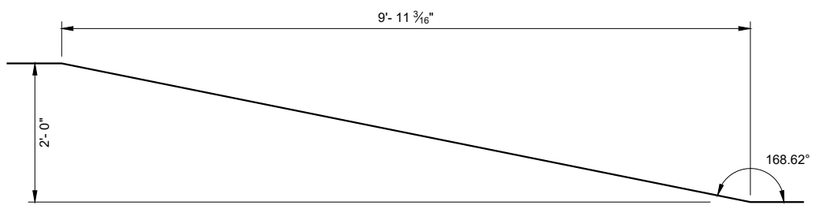
ISOMETRIC
56 INCH TOP CAP



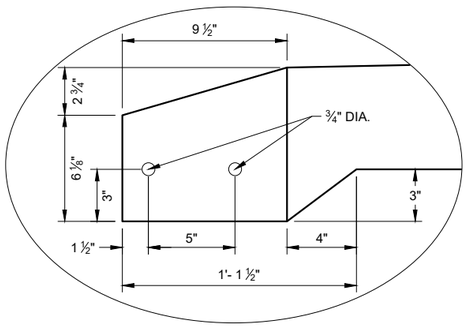
END VIEW
56 INCH TOP CAP



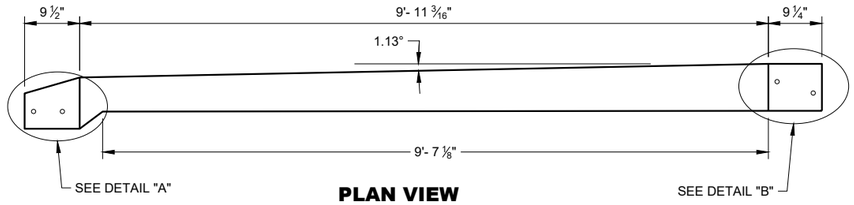
SIDE VIEW (700)
56 INCH TOP CAP



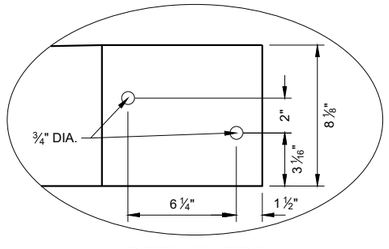
SIDE VIEW
TOP PLATE T1



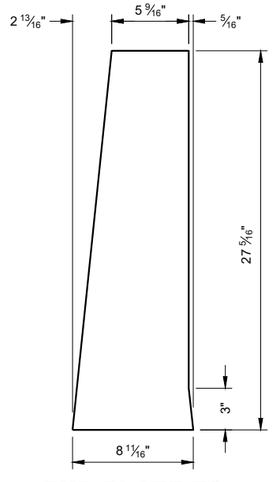
DETAIL "A"



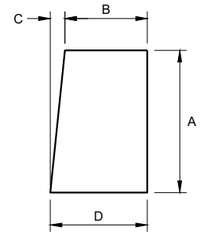
PLAN VIEW
TOP PLATE T1



DETAIL "B"



END PLATE T2



GUSSET PLATES
T5 - T16

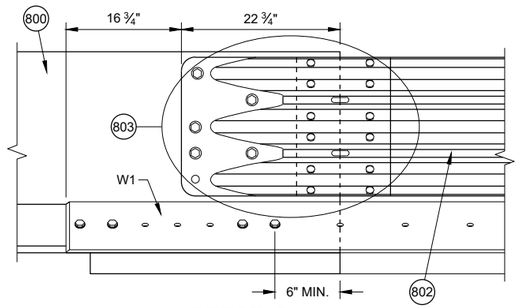
GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
T5	22 13/16"	5 1/16"	2 5/16"	8 1/16"
T6	21"	5 7/8"	2 3/16"	8 1/16"
T7	19 3/16"	6 1/16"	1 15/16"	8 1/16"
T8	17 3/8"	6 1/4"	1 13/16"	8 1/16"
T9	15 5/16"	6 7/16"	1 9/16"	8 1/16"
T10	13 3/4"	6 5/8"	1 7/16"	8 1/16"
T11	11 15/16"	6 13/16"	1 1/4"	8 1/16"
T12	10 1/8"	7"	1 1/16"	8 1/16"
T13	8 5/16"	7 3/16"	7/8"	8 1/16"
T14	6 1/2"	7 3/8"	1 1/16"	8 1/16"
T15	4 11/16"	7 9/16"	1/2"	8"
T16	2 7/8"	7 3/4"	1/4"	8"

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

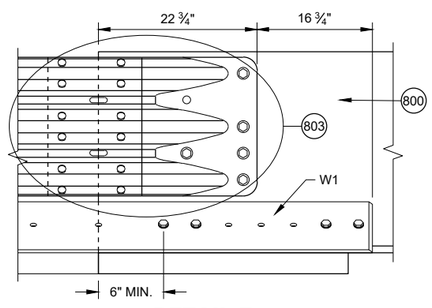
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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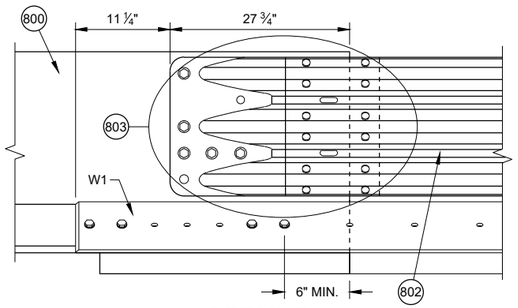
SDD 14B07-16g



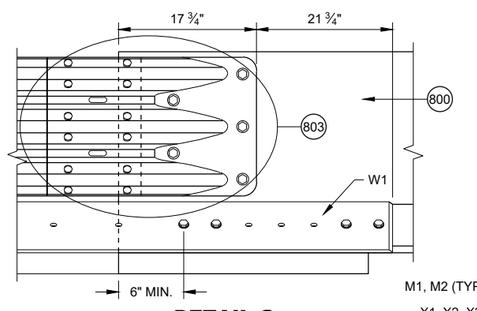
DETAIL D



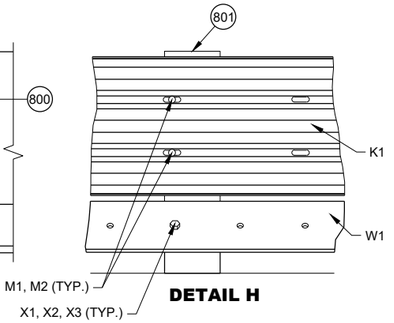
DETAIL E



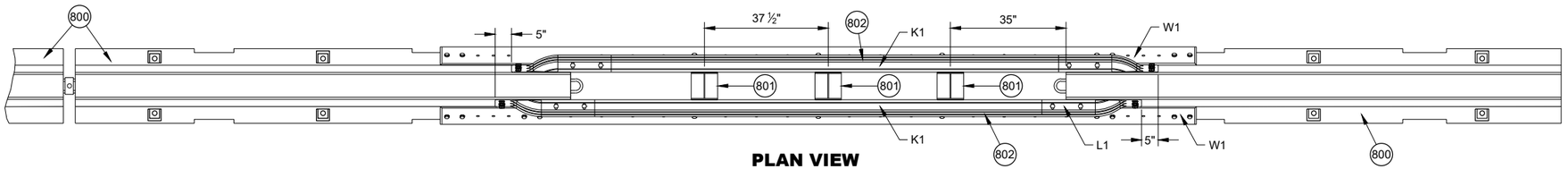
DETAIL F



DETAIL G



DETAIL H



PLAN VIEW

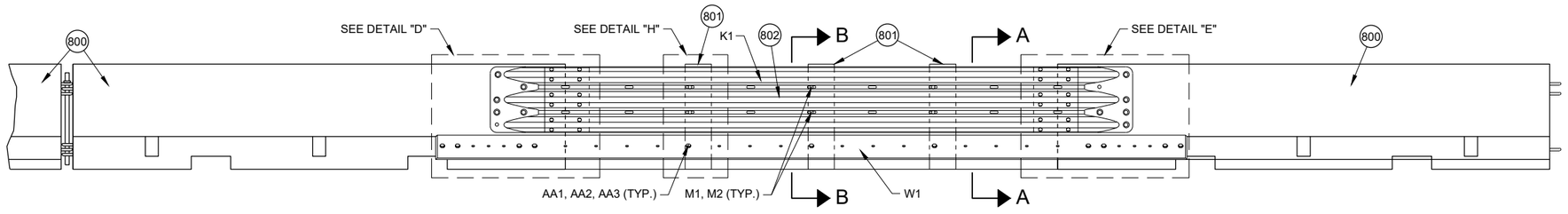
GENERAL NOTES

(800) FREE STANDING TEMPORARY BARRIER

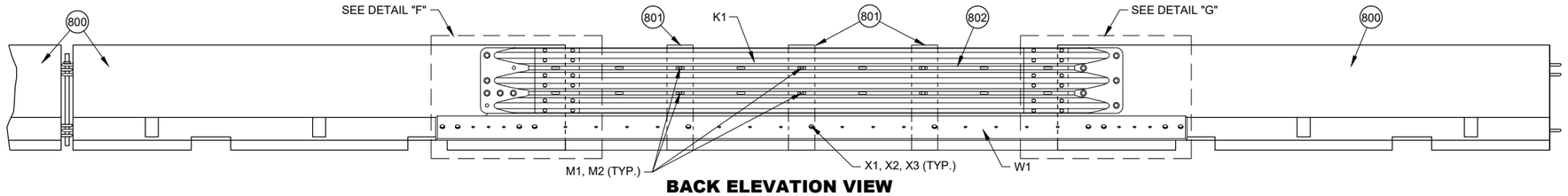
(801) GAP STIFFENER ASSEMBLY

(802) THRIE BEAMS ARE NESTED ON BOTH SIDES OF THE TEMPORARY BARRIER.

(803) SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL



FRONT ELEVATION VIEW



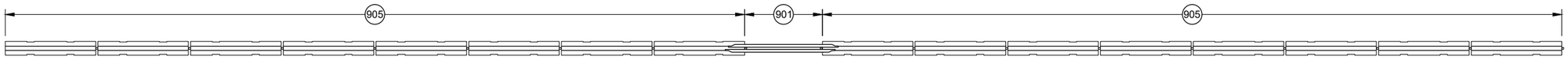
BACK ELEVATION VIEW

PORTABLE CONCRETE BARRIER GAP THRIE BEAM COVER

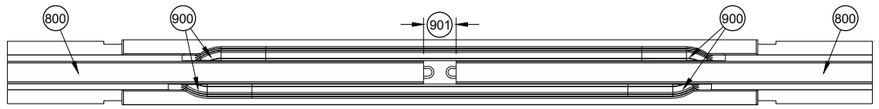
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B07-16h



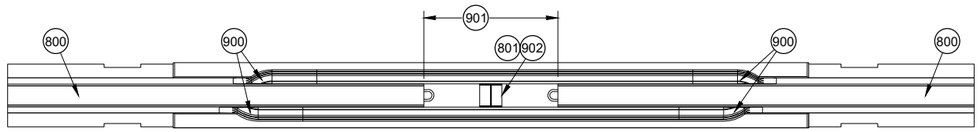
PLAN VIEW
GAP WITHIN SPACING



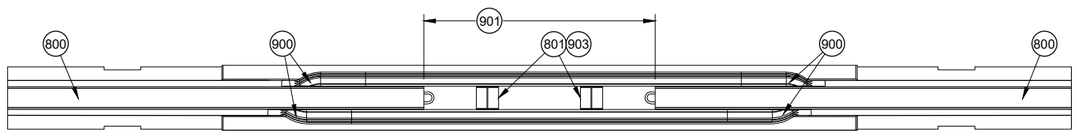
PLAN VIEW
TEMPORARY BARRIER GAP OVER 4" TO 1' MAX. (904)

GENERAL NOTES

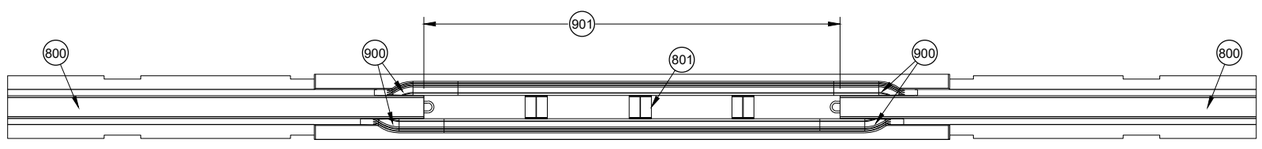
(900) SEE OTHER DETAILS FOR TEMPORARY GAP HARDWARE (TYP.)
(901) TEMPORARY BARRIER GAP
(902) GAP STIFFENER ASSEMBLY CENTERED IN THE GAP.
(903) GAP STIFFENER ASSEMBLY IS OFFSET 18 ¾" FROM CENTER
(904) MINIMUM NUMBER OF GAP STIFFENERS SHOWN FOR THE GAP RANGE SHOWN.
(905) MINIMUM OF 8 CONTINUOUS FREE STANDING TEMPORARY BARRIERS



PLAN VIEW
TEMPORARY BARRIER GAP OVER 1' TO 4' MAX. (904)



PLAN VIEW
TEMPORARY BARRIER GAP OVER 4' TO 7' MAX. (904)

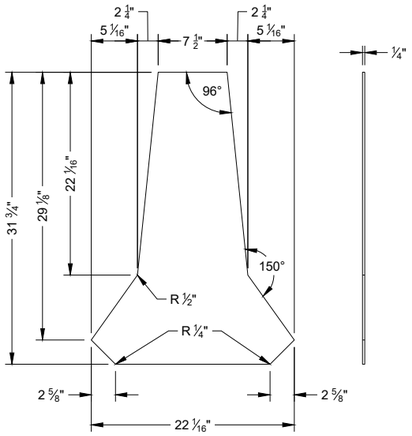


PLAN VIEW
TEMPORARY BARRIER GAP OVER 7' TO 12.5' MAX. (904)

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

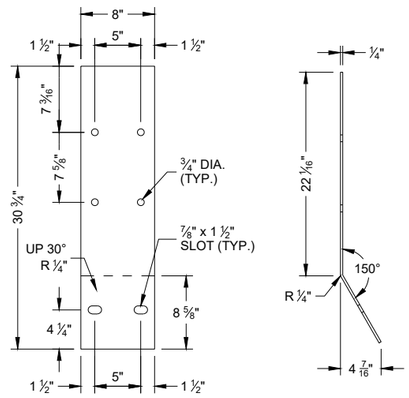
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B07-16i



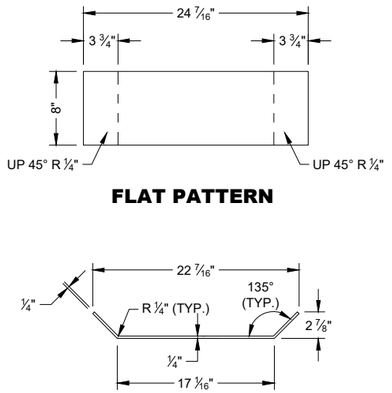
PROFILE VIEW SIDE VIEW

STIFFENER ASSEMBLY CENTER PANEL U1



FLAT PATTERN SIDE VIEW

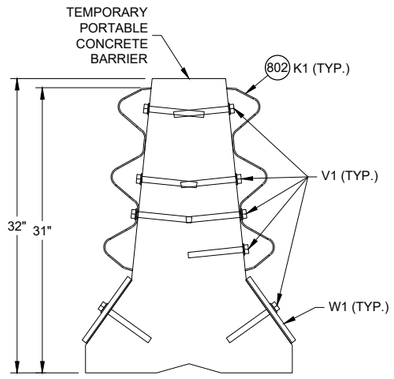
STIFFENER ASSEMBLY SIDE PANEL U2



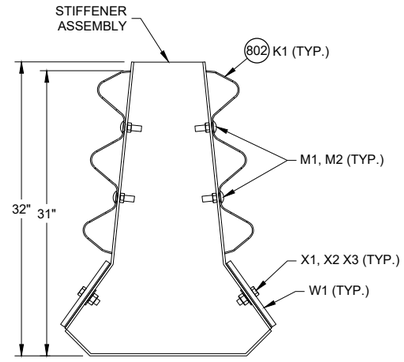
FLAT PATTERN

PROFILE VIEW

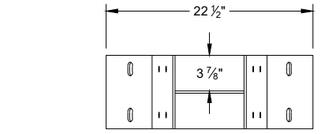
STIFFENER ASSEMBLY BOTTOM PANEL U3



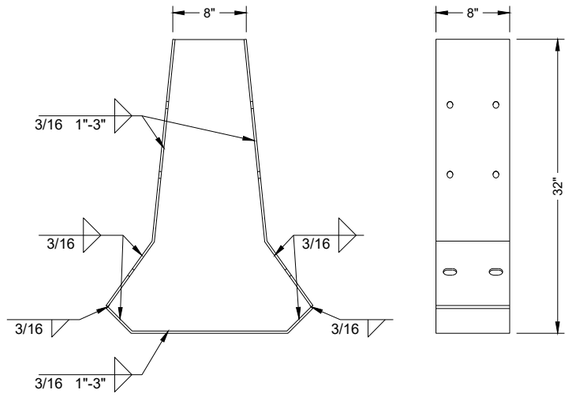
SECTION A - A



SECTION B - B

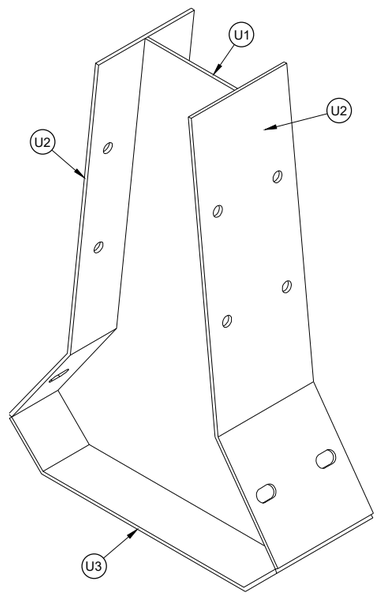


PLAN VIEW



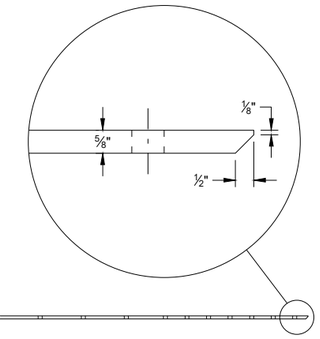
PROFILE VIEW

SIDE VIEW

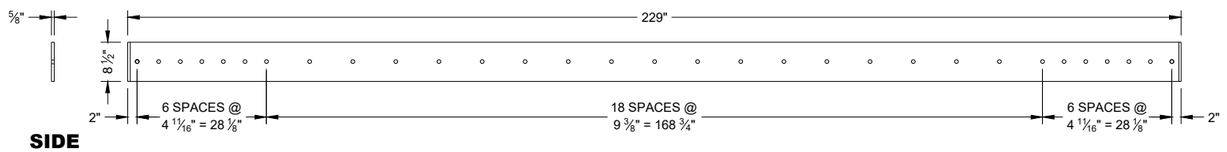


ISOMETRIC

GAP STIFFENER ASSEMBLY



PLAN VIEW



SIDE VIEW

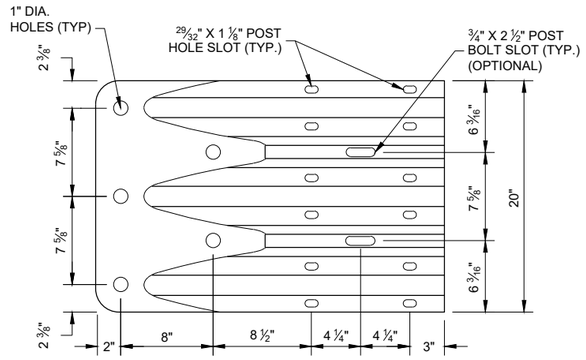
ELEVATION VIEW

W1 TOE PLATE

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

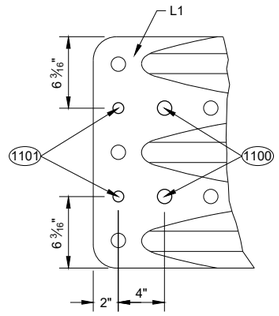
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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ELEVATION VIEW

THRIE BEAM TERMINAL CONNECTOR



ELEVATION VIEW

ADDITIONAL THRIE BEAM (1102) TERMINAL CONNECTOR HOLE DETAIL

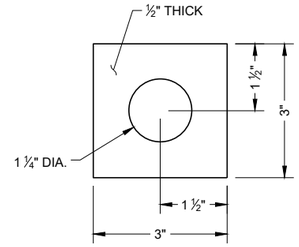


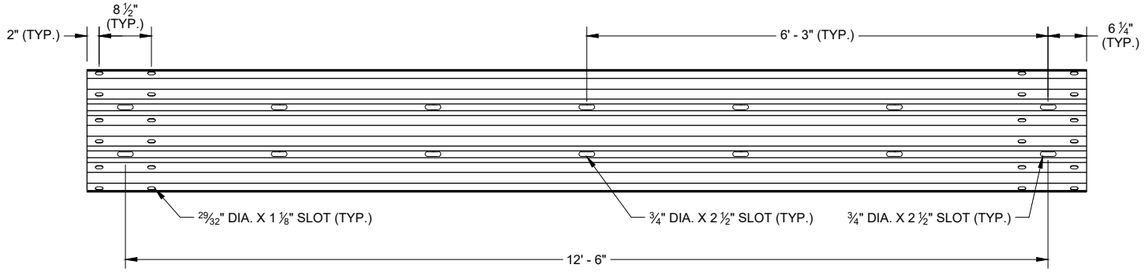
PLATE WASHER DETAIL G2, H3

GENERAL NOTES

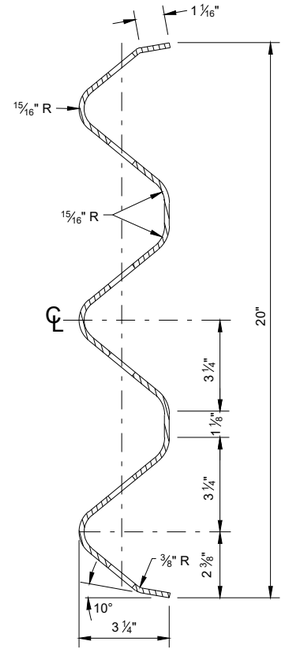
(1100) 1" DIA. HOLE

(1101) 3/4" DIA. HOLE

(1102) PROVIDE HOLES IN THRIE BEAM TERMINAL CONNECTOR TO LIMIT STEEL REINFORCEMENT OR LOOP BAR CONFLICT. CONTRACTOR MAY FIELD DRILL ADDITIONAL HOLE OR PROVIDE THRIE BEAM TERMINAL CONNECTOR WITH ADDITIONAL HOLES FROM SUPPLIER.



SLOTTED THRIE BEAM RAIL K1

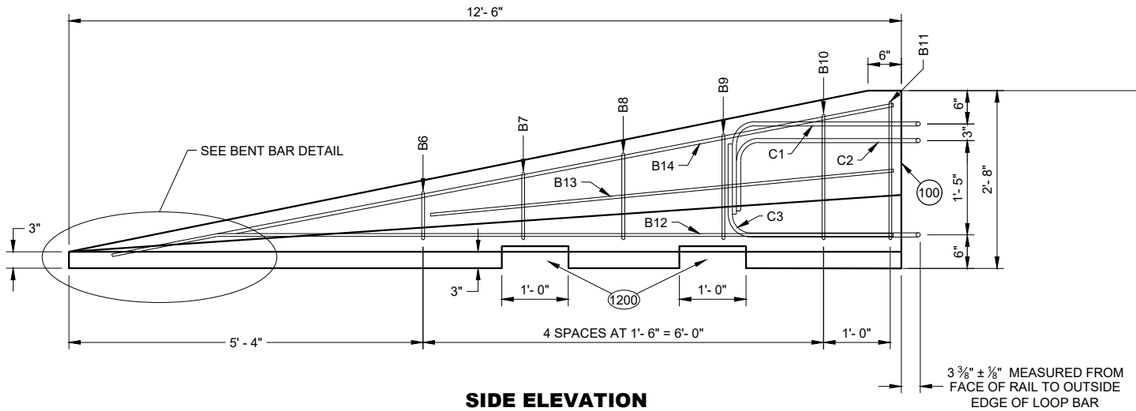


SECTION THROUGH BEAM K1

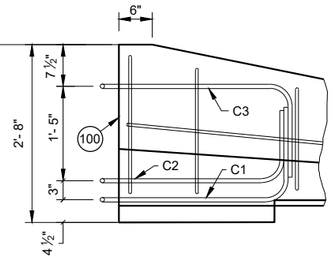
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B07-16k



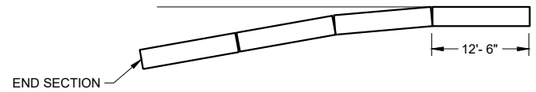
SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED FOR OPPOSITE END
(FOR CONNECTION TO RIGHT END OF BARRIER)

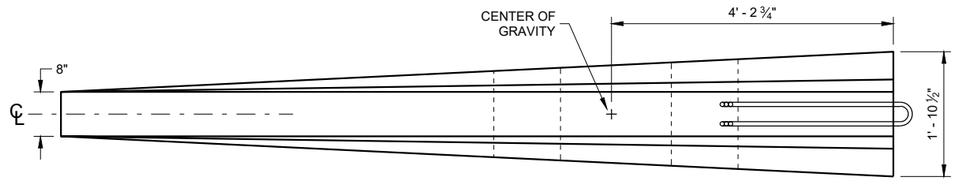
GENERAL NOTES

(1200) SEE LIFTING SLOT DETAIL. LOCATION OF LIFTING SLOTS DETERMINED BY CONTRACTOR.

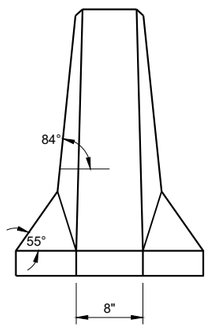


FLARE AT BARRIER END

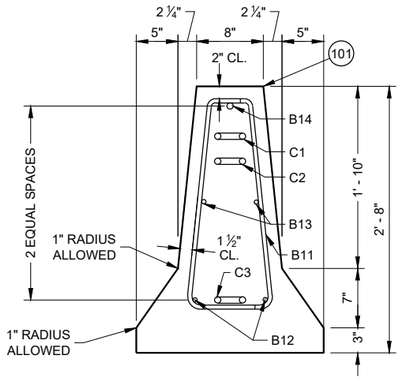
POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1



PLAN VIEW

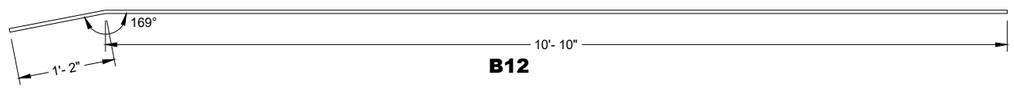


FRONT ELEVATION

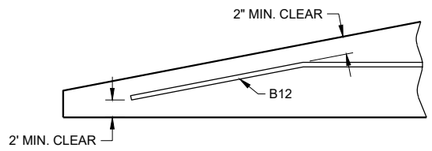


END SECTION

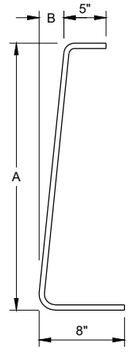
DETAILS OF BARRIER TAPER SECTION



B12



BENT BAR DETAIL



BAR	A	B
B6	10"	1"
B7	1'- 1"	1 ¼"
B8	1'- 5"	1 ⅝"
B9	1'- 8"	1 ⅞"
B10	2'- 0 ½"	2 ⅜"
B11	2'- 3"	2 ¾"

B BARS
2 OF EACH SIZE REQUIRED FOR STIRRUP ASSEMBLY

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B07-16I

BILL OF MATERIALS - CONCRETE BARRIER PRECAST

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	PRECAST TEMPORARY BARRIER - CONCRETE	MIN. = f'c 5000 PSI	
B1	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 12'-2"
B2	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 12'-2"
B3	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 12'-2"
B4	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 6'-0"
B5	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#6 REBAR, LENGTH 2'-11"
B6	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 1'-11"
B7	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-2"
B8	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-6"
B9	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-9"
B10	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 3'-2"
B11	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 3'-4"
B12	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 12'-0"
B13	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 7'-9"
B14	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 11'-9"
C1	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
C2	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
C3	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
D1	CONNECTION PIN - ROD	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	1 ¼" DIA.
D2	CONNECTION PIN - TOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
G1	BOLT THROUGH ANCHOR - THREADED ROD	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A OR SAE J429 GRADE 2 UNC	1 ⅛" DIA.
G2	BOLT THROUGH ANCHOR - WASHER, SQUARE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
G3	BOLT THROUGH ANCHOR - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
H1	ADHESIVE ANCHOR - ADHESIVE	ICC-ES-AC308 5 ¼" EMBEDMENT WITH A MIN. BOND STRENGTH OF 1,650 PSI. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
H2	ADHESIVE ANCHOR - THREADED ROD	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A / SAE J429 GRADE 2 UNC	1 ⅛" DIA.
H3	ADHESIVE ANCHOR - WASHER, SQUARE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
H4	ADHESIVE ANCHOR - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
J1	ASPHALT ANCHOR PIN - ROD	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	1 ½" DIA.
J2	ASPHALT ANCHOR PIN - STOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
K1	THRIE BEAM RAIL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER	12 GAUGE
L1	THRIE BEAM RAIL - TERMINAL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER	12 GAUGE

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
M1	SPLICE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	⅝" DIA.
M2	SPLICE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
N1	THRIE BEAM RAIL TERMINAL - MECHANICAL ANCHOR	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	¾" DIA. LENGTH 6"
N2	THRIE BEAM RAIL TERMINAL - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
N3	THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
P1	THRIE BEAM RAIL CONNECTION 1-BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	¾" DIA.
P2	THRIE BEAM RAIL CONNECTION 1-WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
P3	THRIE BEAM RAIL CONNETION 1- MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
Q1	BLOCK WOOD	SEE STANDARD SPEC. 614	
R1	CAP - BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	⅝" DIA.
R2	CAP- BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
R3	CAP - BOLT - MECHANICAL ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	12 GAUGE
S1	CAP 42-INCH TOP PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S2	CAP 42-INCH END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S3	CAP 42-INCH SIDE PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S4	CAP 42-INCH GUSSET 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S5	CAP 42-INCH GUSSET 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S6	CAP 42-INCH GUSSET 3	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S7	CAP 42-INCH GUSSET 4	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B07-16m

BILL OF MATERIALS - CONCRETE BARRIER PRECAST

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
T1	CAP 56-INCH TOP PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T2	CAP 56-INCH END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T3	CAP 56-INCH SIDE PLATE 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T4	CAP 56-INCH SIDE PLATE 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T5	CAP 56-INCH GUSSET 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T6	CAP 56-INCH GUSSET 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T7	CAP 56-INCH GUSSET 3	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T8	CAP 42-INCH GUSSET 4	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T9	CAP 42-INCH GUSSET 5	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T10	CAP 42-INCH GUSSET 6	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T11	CAP 42-INCH GUSSET 7	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T12	CAP 42-INCH GUSSET 8	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T13	CAP 42-INCH GUSSET 9	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T14	CAP 42-INCH GUSSET 10	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T15	CAP 42-INCH GUSSET 11	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T16	CAP 42-INCH GUSSET 12	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
U1	GAP STIFFENER	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
U2	GAP STIFFENER - CONNECTOR PLATE 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
U3	GAP STIFFENER - CONNECTOR PLATE 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
V1	THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 24.0 KIPS AND ULTIMATE SHEAR LOAD 21.5 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	¾" DIA.
V2	GAP STIFFENER - BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C O R MECHANICAL GALVANIZE TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
W1	TOE PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
X1	TOE PLATE - CONNECTION BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC HEAVY HEX HEAD OR AASTHO M180 HEAD, ASTM F3125 GRADE A325 TYPE 1 HEAVY HEX HEAD OR SAE J429 GRADE 5 HEAVY HEX HEAD / ASTM A449 TYPE 1 HEAVY HEX HEAD. BOLTS MAY BE FULLY THREADED. PROVIDE ENOUGH THREADING FOR PROPER TIGHTENING OF BOLT.	¾" DIA.
X2	TOE PLATE - CONNECTION BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1 (HARDEN WASHER ONLY)	
X3	TOE PLATE - CONNECTION BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	

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SDD 14B07-16n

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

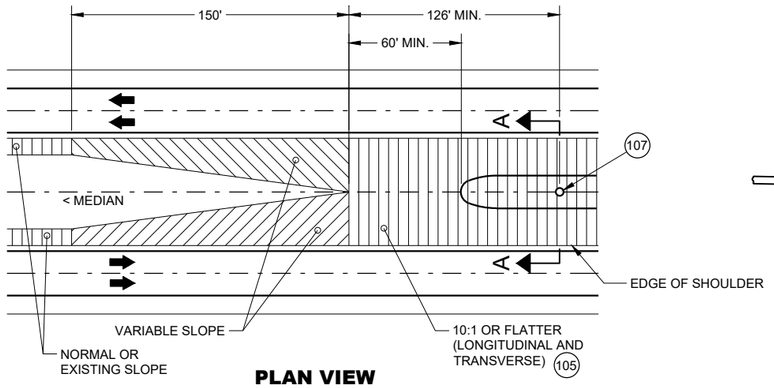
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

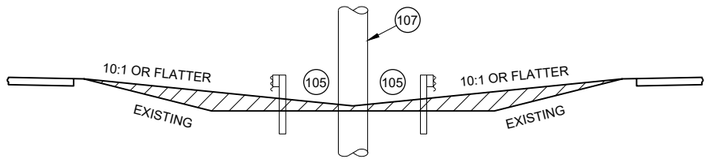
FHWA

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SDD 14B07-16n



PLAN VIEW
GRADING AT BULLNOSE
(ALL INSTALLATIONS)



SECTION A -A
MEDIAN GRADING
(ALL INSTALLATIONS)

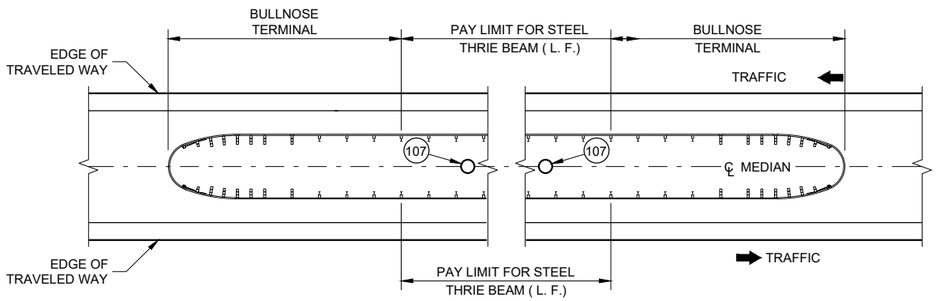
GENERAL NOTES

THRIE BEAM RAILS MAY NEED TO BE FIELD BENT TO FIT THE LOCATION.

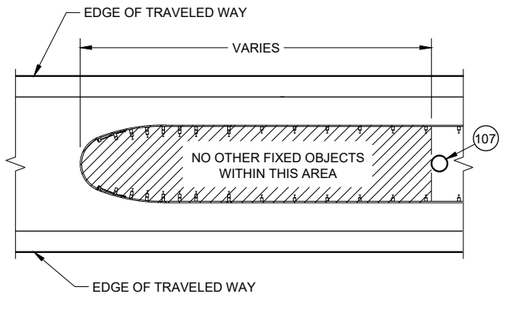
SEE STANDARD DETAIL DRAWINGS 14B26 SHEETS a-h.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 ½". MINIMUM DIAMETER OF THE ROCK REMOVAL IS 12" DIAMETER

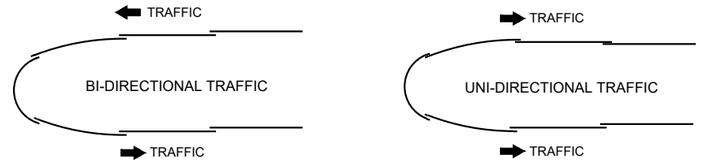
- E1 UNBENT STANDARD THRIE BEAM RAIL B1 (POST 8 TO POST 10 AND POST 10 TO POST 12)
- E2 SLOTTED THRIE BEAM RAIL E1 (POST 1 TO POST 1)
- E3 SLOTTED THRIE BEAM RAIL B3 (POST 5 TO POST 8)
- E4 SLOTTED THRIE BEAM RAIL E4 (POST 1 TO POST 5)
- 5 BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.
- (100) DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST OR BLOCK.
- (101) U-BOLT CABLE CLIPS (3 PER CABLE) SPACED OUT ON NOSE, TO HOLD CABLE TO BACKSIDE OF THE RAIL.
- (102) NOSE CABLE WITH SWAGGED END BUTTONS.
- (103) NOSE CABLE ANCHOR PLATE (BACKSIDE OF SPLICE).
- (104) THE SLACK IN THE NOSE CABLES SHALL BE EVENLY DISTRIBUTED BETWEEN THE CABLE CLIP FASTENERS AND POST NO. 1 ON EITHER SIDE OF THE NOSE.
- (105) MINIMUM WORKING WIDTH 4' - 2".
- (106) MAX. WIDTH OF SYSTEM IS 14' - 2 ½" MEASURED FROM THE BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.
- (107) FIXED OBJECT OR OTHER HAZARD.
- (108) PLAN IS TO PROVIDE STATION OFFSET TO CENTER OF POST 5 IN PLANS.



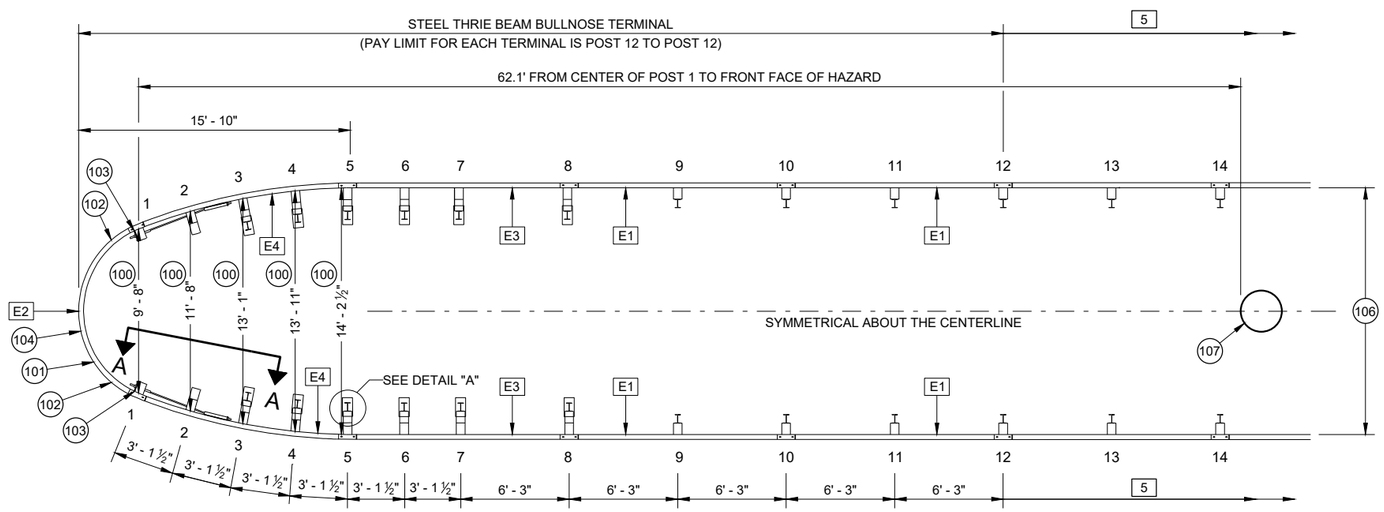
MEDIAN HAZARD PROTECTION PAY LIMITS



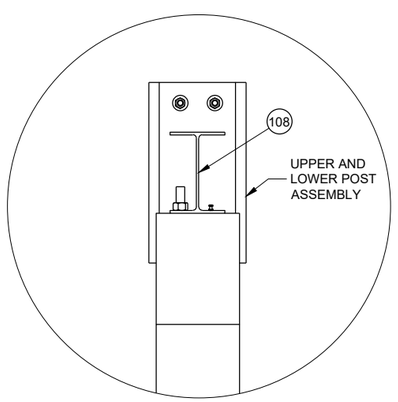
HAZARD FREE AREA
INSIDE BULLNOSE



LAPPING DETAIL



PLAN VIEW
TYPICAL BULLNOSE LAYOUT



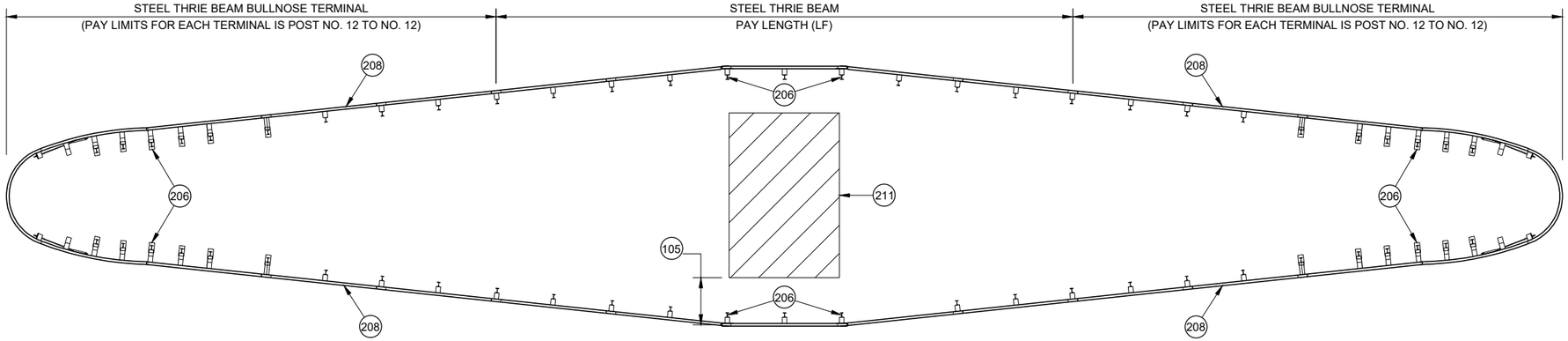
DETAIL "A"

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B26 - 05a



VARIABLE WIDTH BULLNOSE

GENERAL NOTES

200 6' - 3" ASYMMETRICAL 10-GAUGE W-BEAM TO THRIE BEAM GUARD TRANSITION. SEE SDD 14B45 FOR MORE INFORMATION.

201 W-BEAM RAIL. SEE SDD 14B42 FOR MORE INFORMATION.

202 SEE POST NO. 9 AND ALL STEEL THRIE BEAM POST BEYOND DETAIL.

203 SEE SDD 14B42 FOR INSTALLATION INFORMATION.

204 SEE SDD 14B45 FOR INSTALLATION DETAILS. REPLACE ASYMMETRICAL W-BEAM TO THRIE BEAM TRANSITION AND W-BEAM RAIL WITH E1. PAY FOR MODIFIED THRIE BEAM TRANSITION.

205 CONCRETE BARRIER OR BRIDGE RAIL.

206 SEE PLAN FOR STATION AND OFFSET TO CENTER OF POST.

207 SEE PLAN FOR STATION AND OFFSET TO CENTER OF SPLICE.

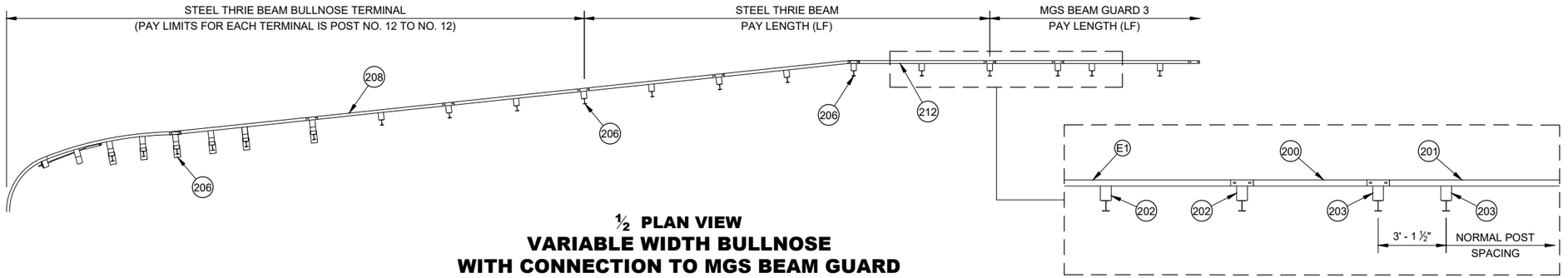
208 SEE PLAN FOR FLARE RATE.

209 A MINIMUM OF 25 FT OF THRIE BEAM TANGENT BEFORE TRANSITIONING TO BEAM GUARD OR THRIE BEAM TRANSITION.

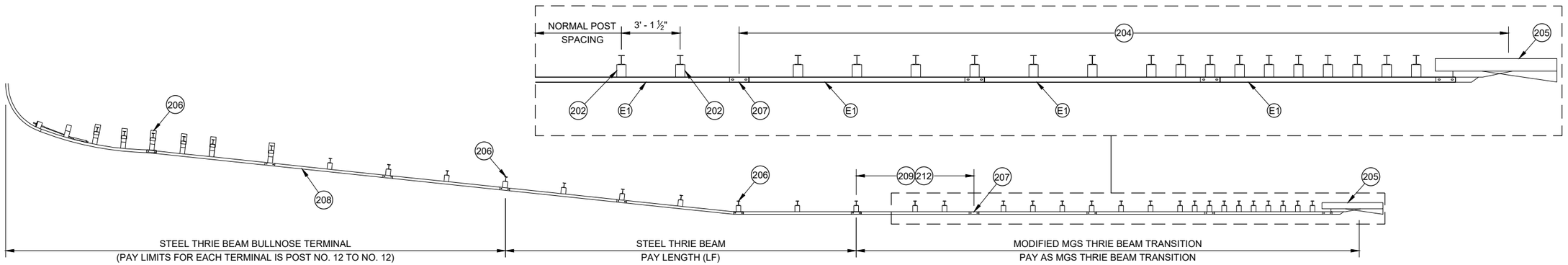
210 NOT ALL BULLNOSE HARDWARE SHOWN. SEE OTHER SHEETS IN 14B26.

211 WIDER HAZARD TO BE SHIELDED.

212 TRANSITION RAIL HEIGHT TO 31" OVER THE LENGTH OF A 12' - 6" BEAM SECTION.



½ PLAN VIEW
VARIABLE WIDTH BULLNOSE
WITH CONNECTION TO MGS BEAM GUARD



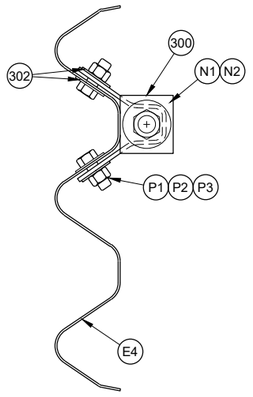
½ PLAN VIEW
VARIABLE WIDTH BULLNOSE
WITH CONNECTION TO RIGID BARRIER

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA 586

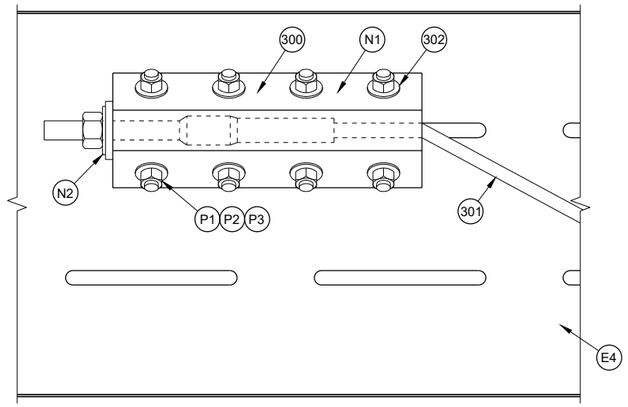
6

SDD 14B26 - 05b

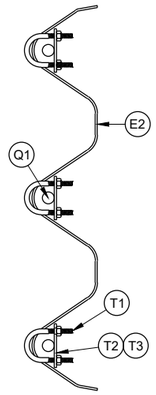


PROFILE VIEW

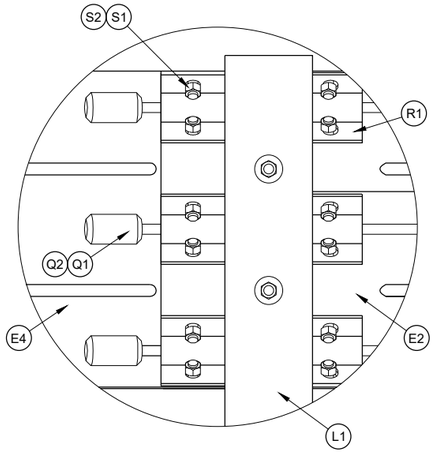
CABLE ANCHOR ASSEMBLY CONNECTION



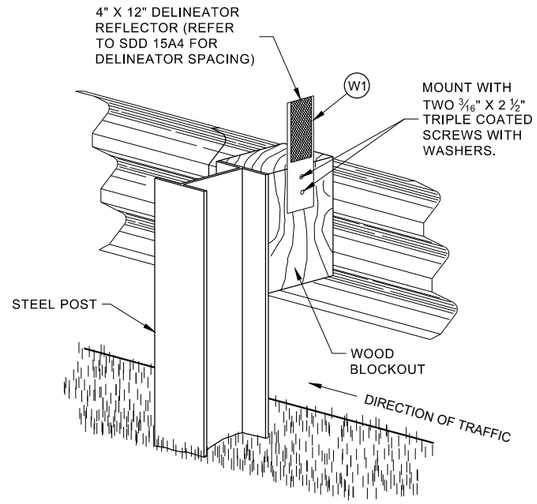
CABLE ANCHOR ASSEMBLY



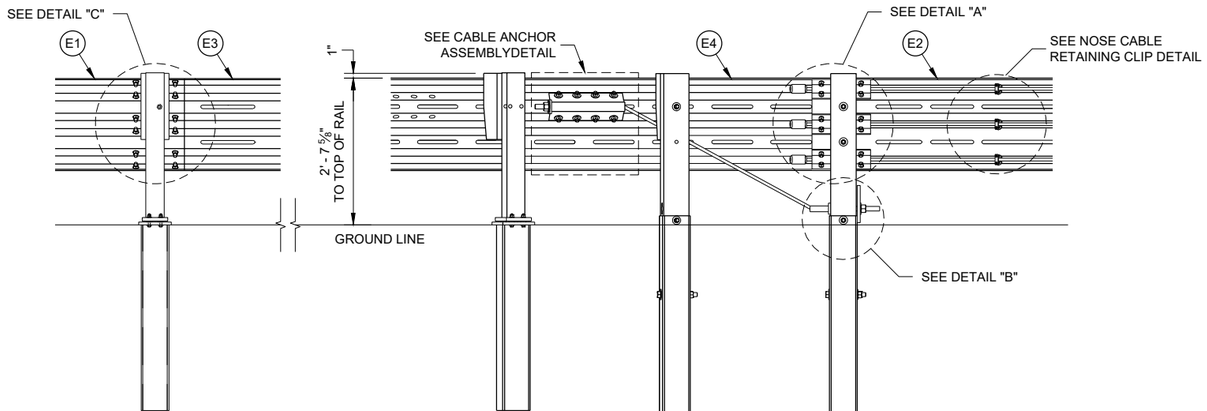
NOSE CABLE RETAINING CLIP



DETAIL "A"

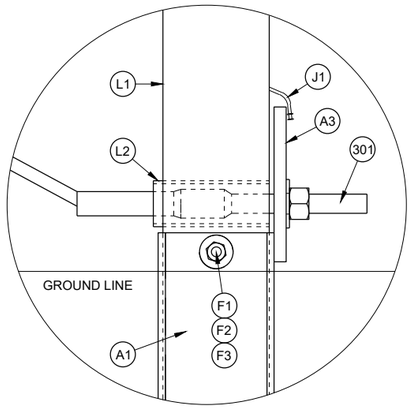


ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

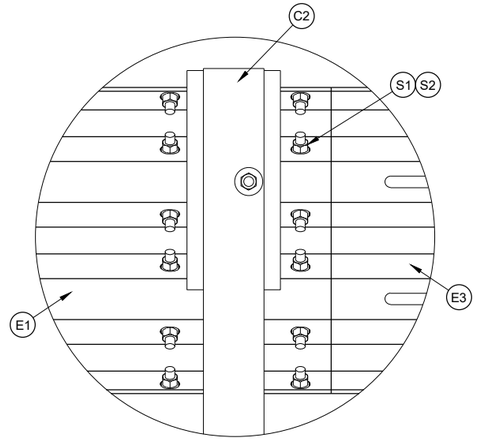


POST 8 **POST 3** **POST 2** **POST 1**

CROSS SECTION A - A



DETAIL "B"



DETAIL "C" THRIE BEAM SPLICE

GENERAL NOTES

(300) SEE ANCHOR BRACKET ASSEMBLY DETAIL.

(301) SEE ANCHOR CABLE ASSEMBLY DETAIL

(302) ONE WASHER BETWEEN BOLT HEAD AND RAIL AND BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

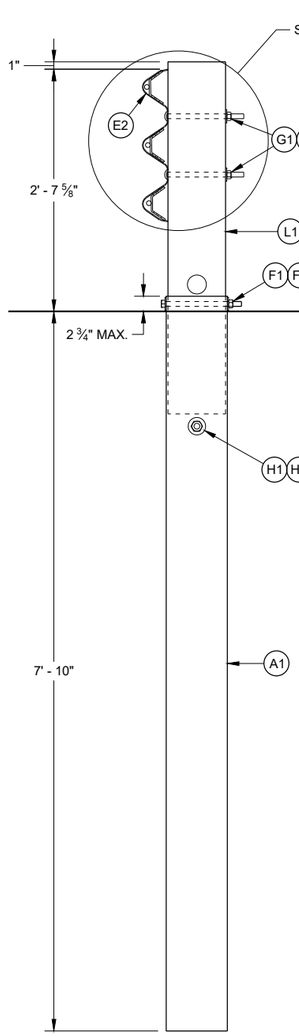
(303) ONE WASHER BETWEEN BOLD HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

STEEL THRIE BEAM BULLNOSE TERMINAL

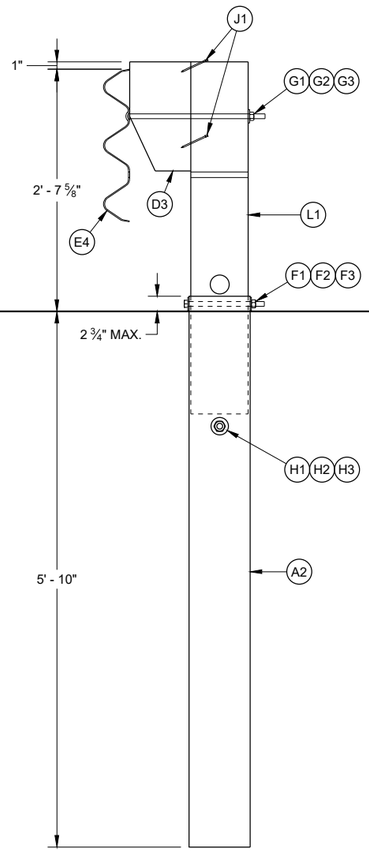
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

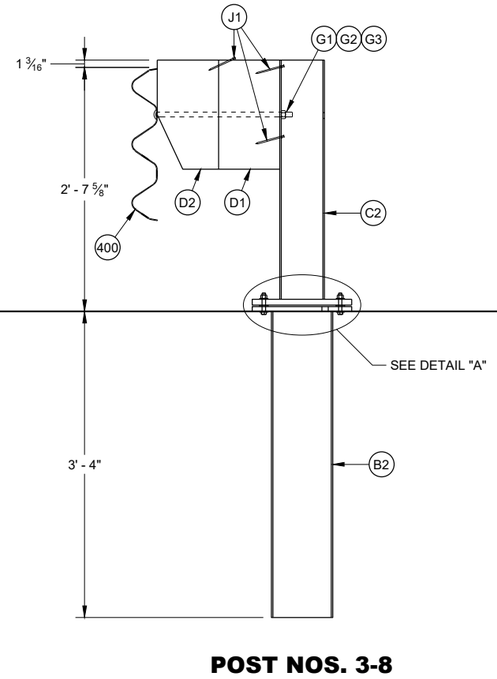
SDD 14B26 - 05c



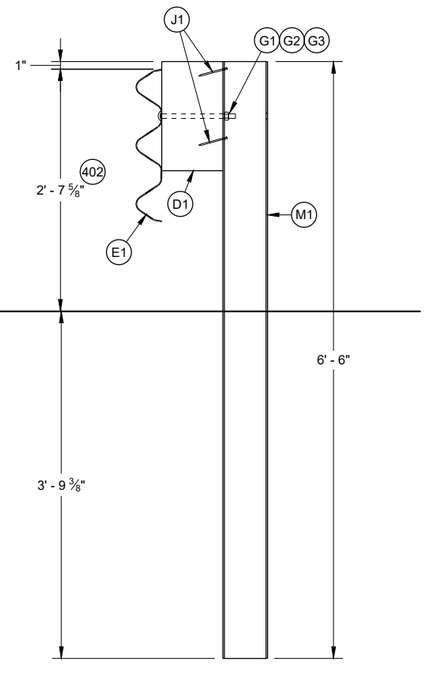
POST NO. 1



POST NO. 2



POST NOS. 3-8



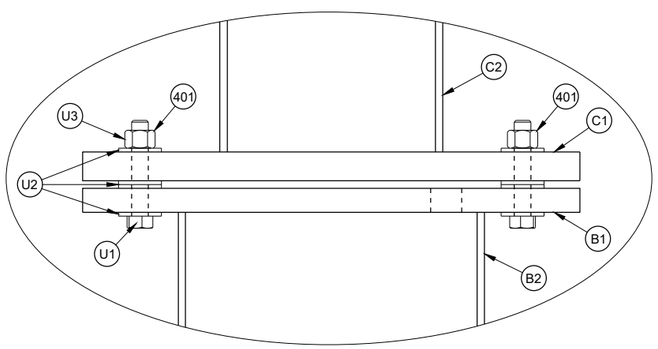
POST NOS. 9 AND ALL STEEL THRIE BEAM POSTS BEYOND

GENERAL NOTES

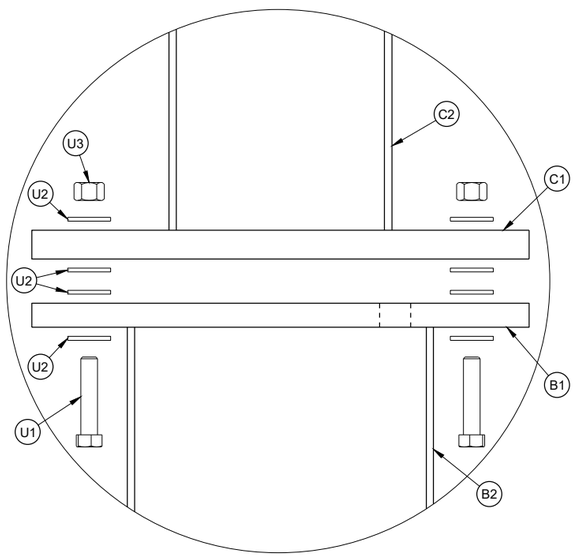
(400) RAIL CAN BE E3 OR E4 DEPENDING ON POST LOCATION.

(401) TORQUE BOLD BETWEEN 60-75 FT-LB

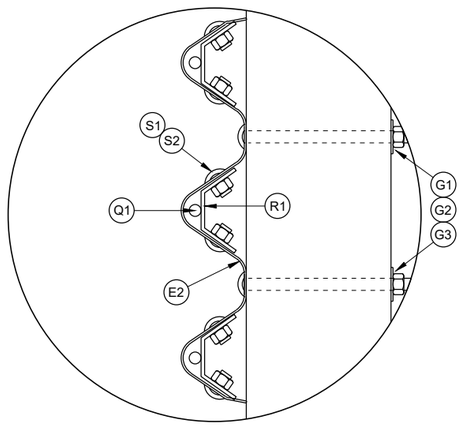
(402) HEIGHT WILL VARY WITHIN HEIGHT TRANSITION TO OTHER HARDWARE. SEE NOTE 213, SHEET "b".



DETAIL "A"



EXPLODED VIEW
DETAIL "A"



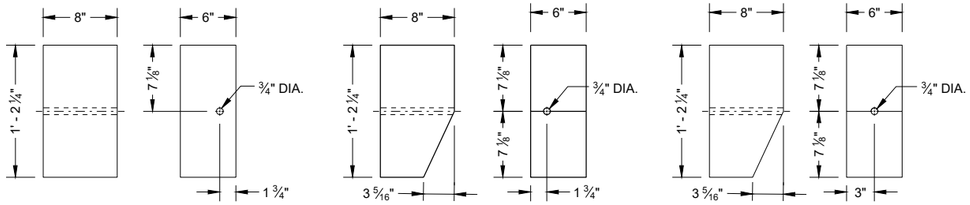
DETAIL "B"

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

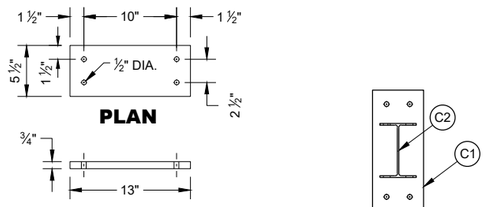
SDD 14B26 - 05d



ELEVATION PROFILE
BLOCKOUT (D1)

ELEVATION PROFILE
BLOCKOUT (D2)

ELEVATION PROFILE
BLOCKOUT (D3)

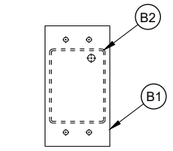


PLAN

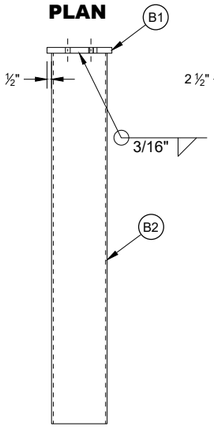
PROFILE

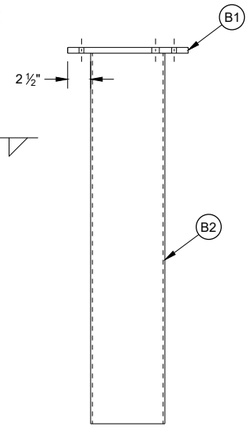
UPPER SHEAR PLATE (C1)

PLAN

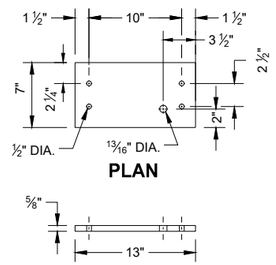


PLAN





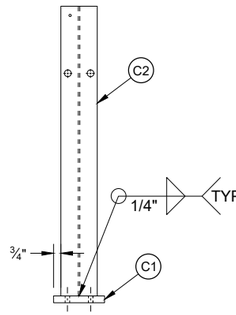
ELEVATION PROFILE
LOWER POST ASSEMBLY

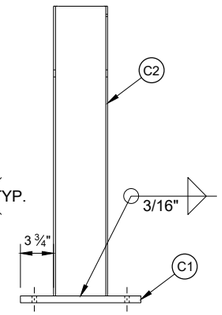


PLAN

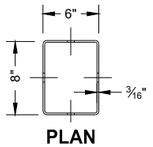
PROFILE

LOWER SHEAR PLATE (B1)



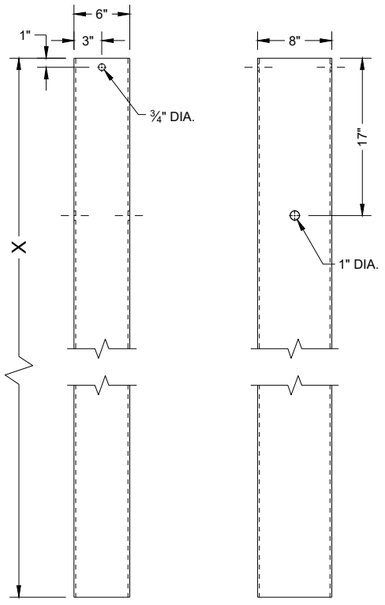


ELEVATION PROFILE
UPPER POST ASSEMBLY

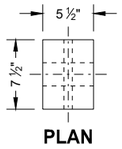


PLAN

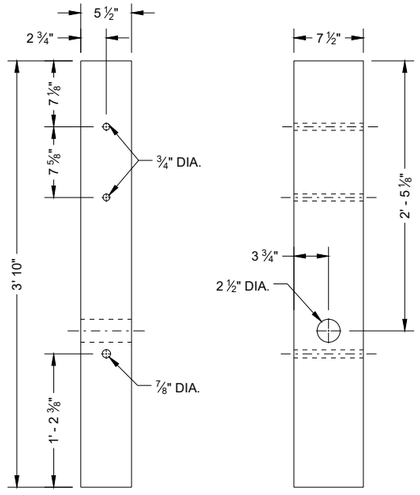
PART	LENGTH "X"
A1	8' - 0"
A2	6' - 0"
B2	3' - 4"



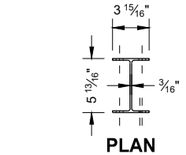
ELEVATION PROFILE
FOUNDATION TUBE



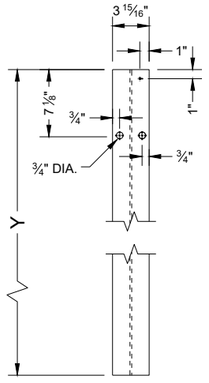
PLAN



ELEVATION PROFILE
BCT POST (L1)



PLAN



ELEVATION
POST

PART	LENGTH "Y"
M1	6' - 6"
M2	5' - 8 5/8"
C2	2' - 7 5/8"

STEEL THRIE BEAM BULLNOSE TERMINAL

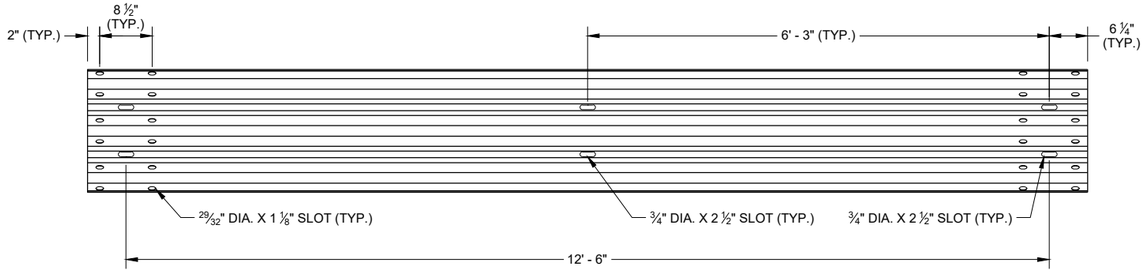
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

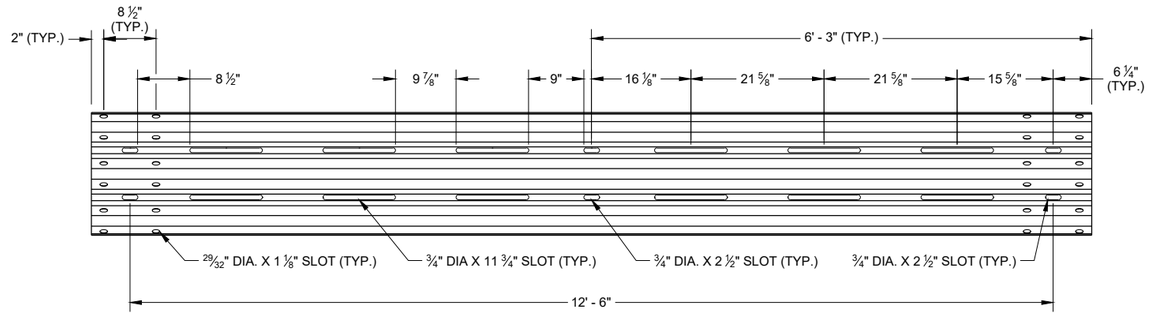
SDD 14B26 - 05e

6

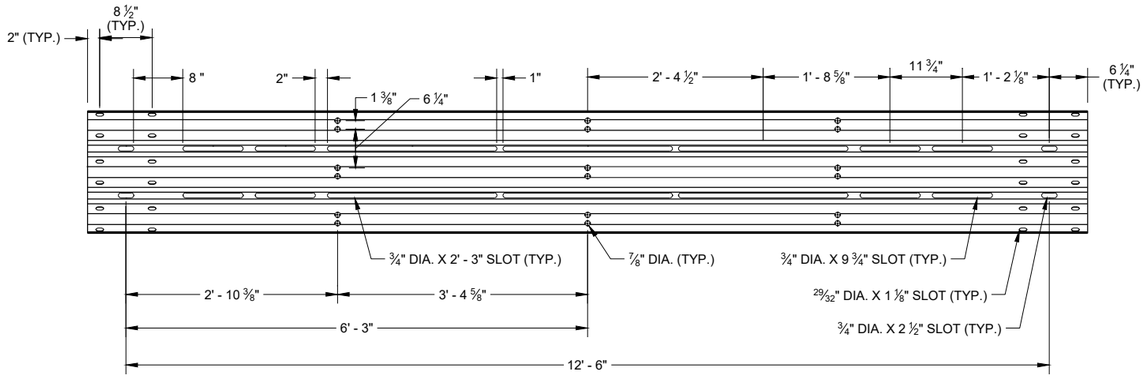
SDD 14B26 - 05e



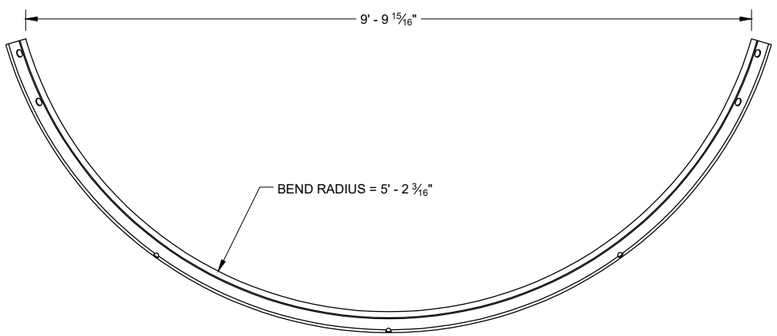
SLOTTED THRIE BEAM RAIL E1



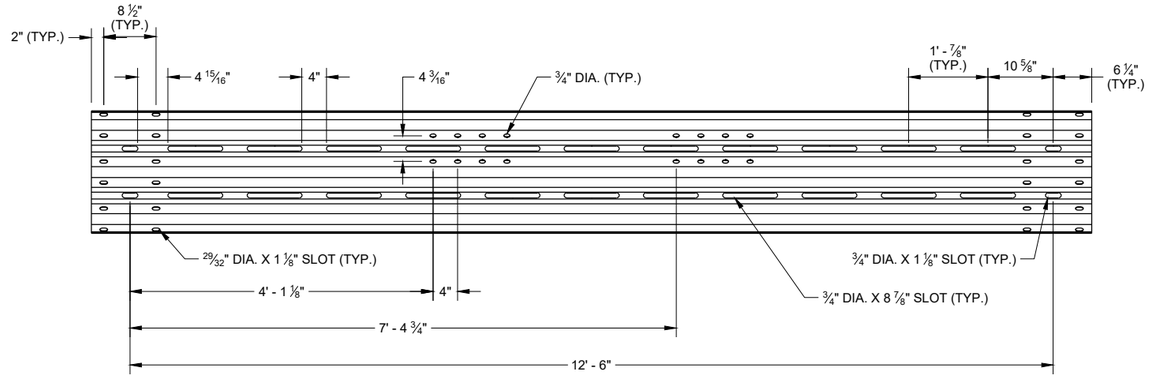
SLOTTED THRIE BEAM RAIL E3



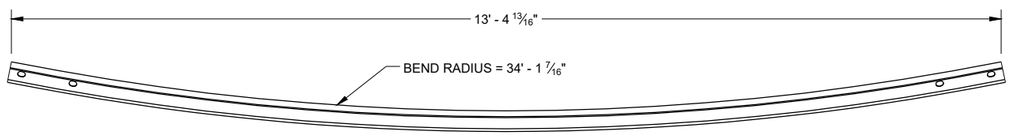
ELEVATION VIEW NON - RADIUSED
SLOTTED THRIE BEAM RAIL E2



PLAN VIEW
SLOTTED THRIE BEAM RAIL E2



ELEVATION VIEW NON - RADIUSED
SLOTTED THRIE BEAM RAIL E4



PLAN VIEW
SLOTTED THRIE BEAM RAIL E4

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

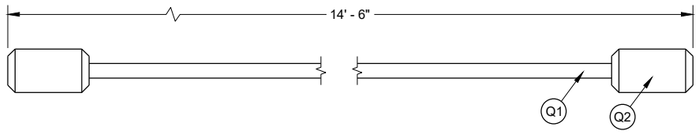
590

6

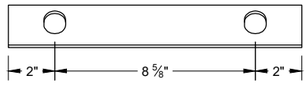
SDD 14B26 - 05f

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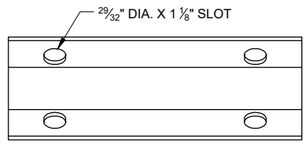
SDD 14B26 - 05f



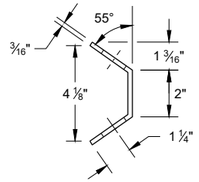
NOSE CABLE AND SWAGE BUTTON



PLAN VIEW

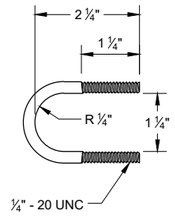


ELEVATION VIEW

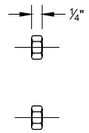


PROFILE VIEW

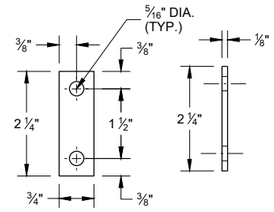
NOSE CABLE ANCHOR (R1)



U - BOLT (T1)

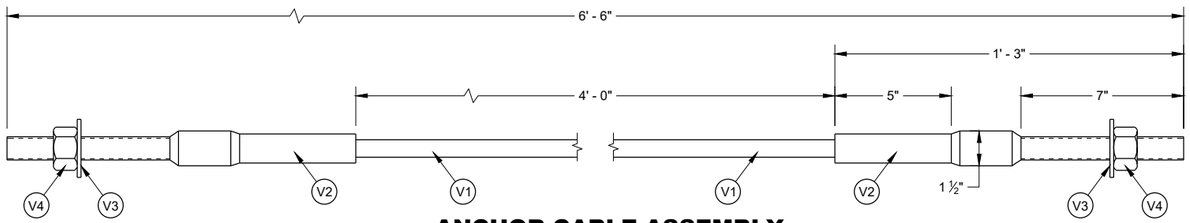


U - BOLT NUT (T3)

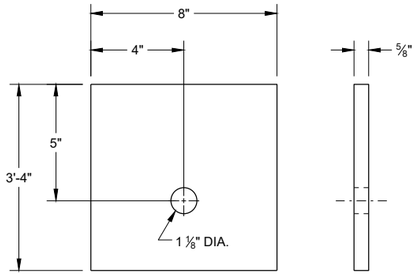


ELEVATION VIEW **PROFILE VIEW**

U - BOLT PLATE WASHER (T2)

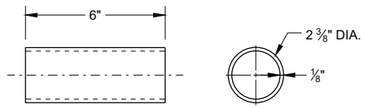


ANCHOR CABLE ASSEMBLY



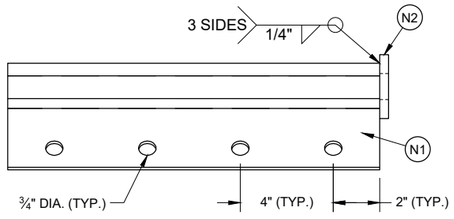
ELEVATION VIEW **PROFILE VIEW**

BCT BEARING PLATE (A3)

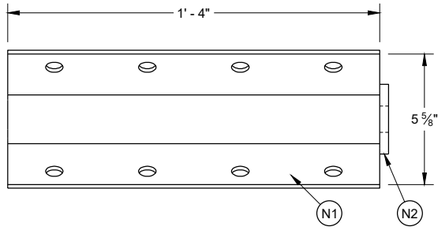


ELEVATION VIEW **PROFILE VIEW**

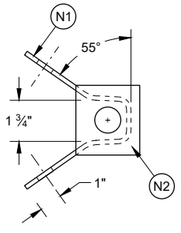
BCT POST SLEEVE (L2)



PLAN VIEW

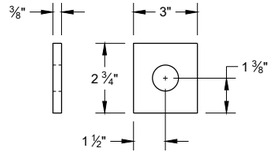


ELEVATION VIEW



PROFILE VIEW

ANCHOR BRACKET ASSEMBLY (N1)



ANCHOR BRACKET END PLATE (N2)

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B26 - 05g

BILL OF MATERIALS LIST

PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
A1	LONG FOUNDATION TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
A2	FOUNDATION TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
A3	BEARING PLATE AT POST	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
B1	LOWER SLIP POST ASSEMBLY - PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
B2	LOWER SLIP POST ASSEMBLY - TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
C1	UPPER SLIP POST ASSEMBLY - PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
C2	UPPER SLIP POST ASSEMBLY - POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
D1	BLOCK FOR STEEL POST - WOOD	WISDOT SPEC. 614
D2	TAPERED BLOCK FOR STEEL POST - WOOD	WISDOT SPEC. 614
D3	TAPERED BLOCK FOR BCT POST - WOOD	WISDOT SPEC. 614
E1	THRIE BEAM RAIL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER
E2	THRIE BEAM RAIL - SHOP BENT AND PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS.
E3	THRIE BEAM RAIL - PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER
E4	THRIE BEAM RAIL - SHOP BENT AND PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS.
F1	5/8" DIA. HEX HEAD GROUND STRUT AND YOKE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
F2	5/8" DIA. GROUND STRUT AND YOKE BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
F3	GROUND STRUT AND YOKE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
G1	5/8 " DIA. POST BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD)
G2	POST BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD)
G3	POST BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
H1	7/8" DIA. SOIL TUBE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD 7/8" ASTM A563DH OR SAE J995 GRADE 5
H2	SOIL TUBE BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 7/8" ASTM F844 TYPE 1 (HARDEN WASHER ONLY)
H3	SOIL TUBE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD 7/8" ASTM A563DH OR SAE J995 GRADE 5
J1	16D DOUBLE HEAD NAIL	ASTM A153 HOT DIPPED CLASS D DOUBLE HEAD ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)
L1	BCT TIMBER POST	WISDOT SPEC. 614 S4S FINISH ON 4 SIDE
L2	BCT POST SLEEVE	AASHTO M111/ASTM A123 2 3/8" OD ASTM 53 GRADE B
M1	W6X8.5 OR W6X9 STEEL POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
M2	W6X8.5 OR W6X9 STEEL POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
N1	ANCHOR BRACKET	AASHTO M111/ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
N2	ANCHOR BRACKET - BEARING PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI

PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
P1	5/8" DIA. ANCHOR BRACKET BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
P2	ANCHOR BRACKET BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
P3	SOIL TUBE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
Q1	5/8" DIA. NOSE CABLE	6X19 AASTHO M30 / ASTM A741 XIPS INDEPENDENT WIRE CORE (IWRC) PR 6X25 XIPS, IWRC NOMINAL BREAKING STRENGTH OF 41.2 KIPS.
Q2	NOSE CABLE-SWAGE BUTTON	COLD TUFF BUTTON, S-409 SIZE NO. 12 STOCK NUMBER 1040395 OR ANY OTHER SIMILAR SIZED WAGED-GRIP-BUTTON FERRULES. ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FIELD SWAGED PER MANUFACTURERS RECOMMENDATION. NOMINAL BREAKING STRENGTH OF 41.2 KIPS.
R1	NOSE CABLE ANCHOR BRACKET	AASHTO M111/ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
S1	5/8" DIA. SPLICE BOLT - BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
S2	SPLICE - BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD 5/8" ASTM A563DH OR SAE J995 GRADE 5
T1	1/4" DIA. NOSE CABLE - U BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
T2	U-BOLT - PLATE WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
T3	U-BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
U1	7/16" DIA. SLIP POST ASSEMBLY - BREAKAWAY BOLT	ASTM A153 OR B695 CLASS 55 OR F2329 UNC FULLY THREADED HEX HEAD TAP BOLT ASTM A449 OR SAE J429 GRADE 5
U2	7/16" DIA. SLIP POST ASSEBLY - BREAKAWAY BOLT - WASHER	ASTM F436 TYPE I (HARDEN TYPICALLY USED WITH STEEL) GALV. AASHTO M111/ASTM A 123 OR GALV. HOT DIP. TO POST BOLT CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 55, F2329
U3	SLIP POST ASSEBLY - BREAKAWAY BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / STM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
V1	¾" DIA. BCT CABLE	AASHTO M30 / ASTM A741 6X19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS), 6X19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS) TYPE II OR IIC, CLASS C ZINC COATED MIN BREAKING STRENGTH OF 42.7 KIPS
V2	ANCHOR CABLE-SWAGE FITTING	UNC ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FACTORY SWAGED. MIN. BREAKING STRENGTH OF 42.7 KIPS. ASME B30.26 "FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING IN TO CONNECTION: NAME OF MANUFACTURE OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE FOR ALLOY EYEBOLTS."
V3	1" DIA. ANCHOR CABLE-WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
V4	1" DIA. ANCHOR CABLE-NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
W1	REFLECTOR	SEE SDD 15A4

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STEEL THRIE BEAM BULLNOSE TERMINAL

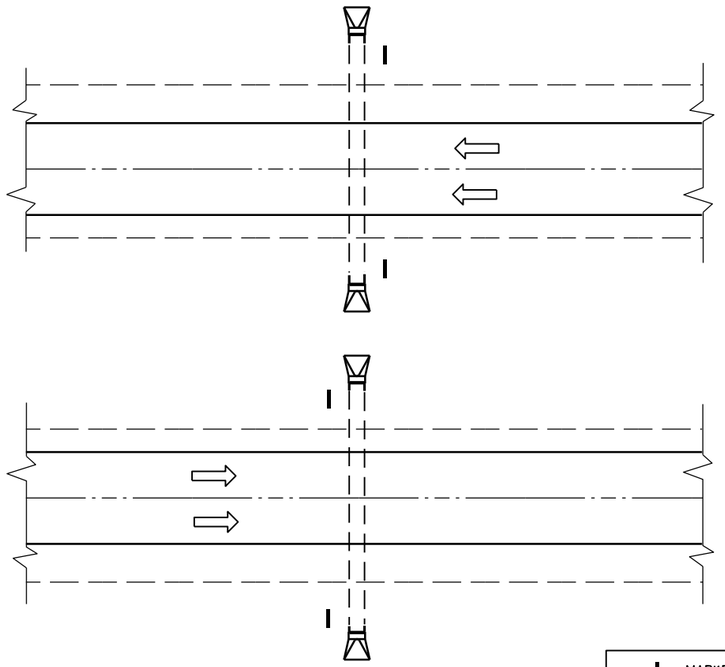
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

November 2022
DATE

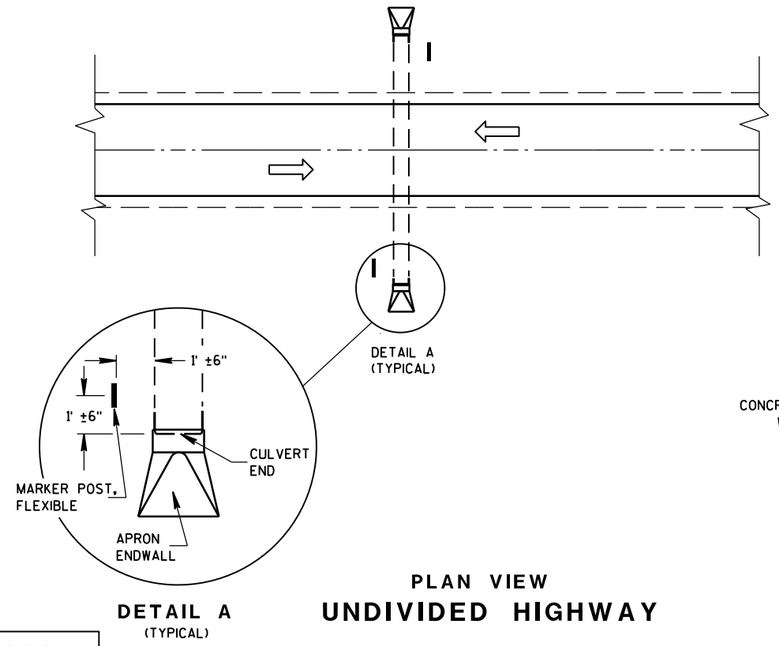
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

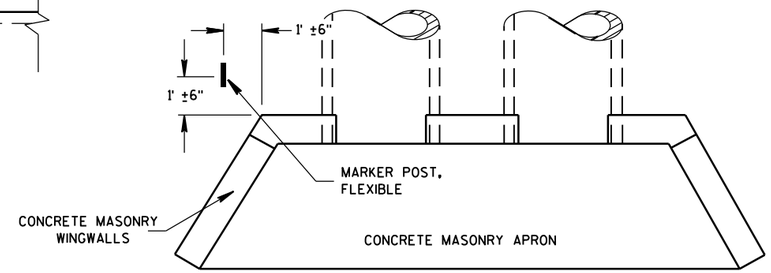
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

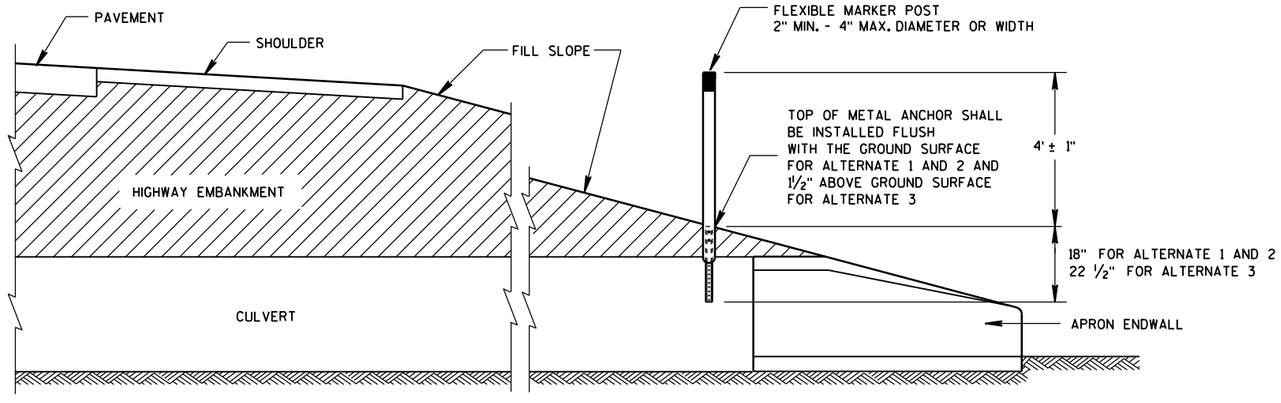
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

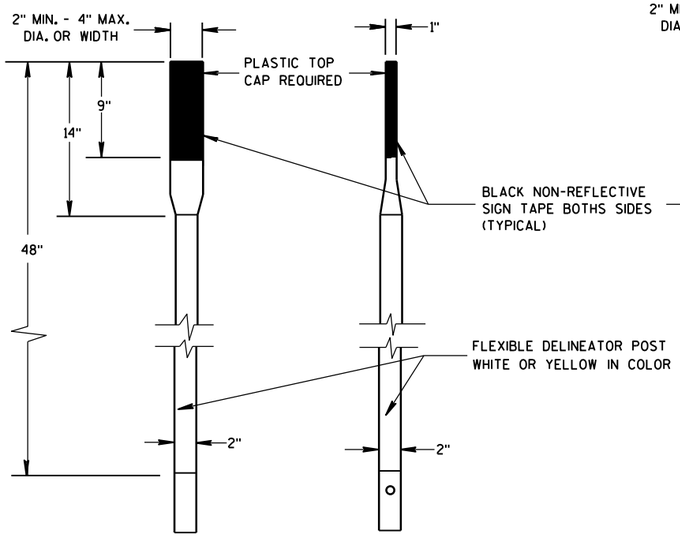
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

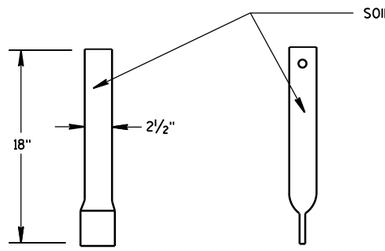
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S.D.D. 15 A 3-2a

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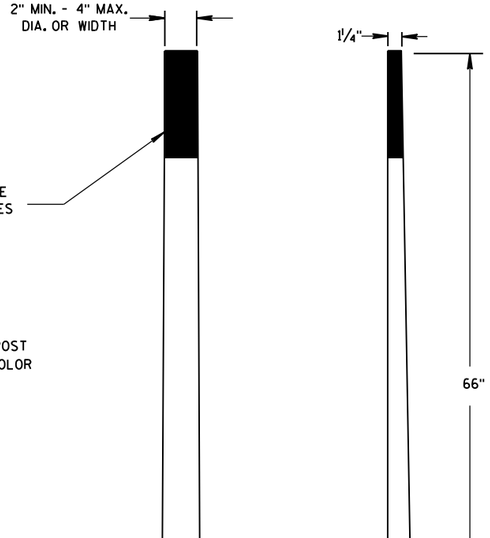
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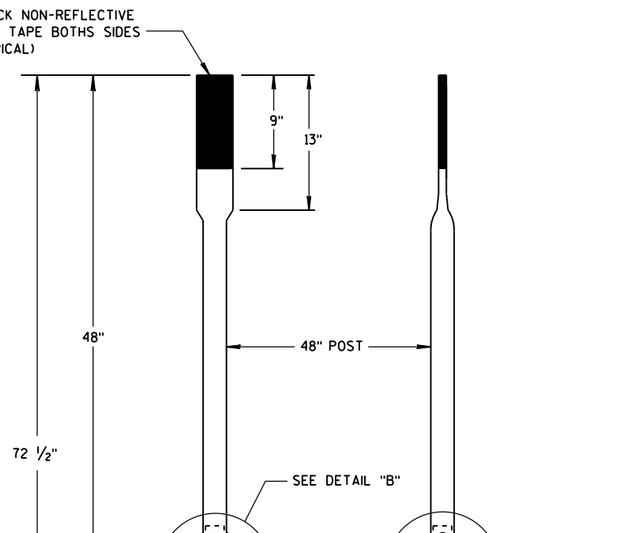
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

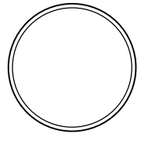
ALTERNATE 2



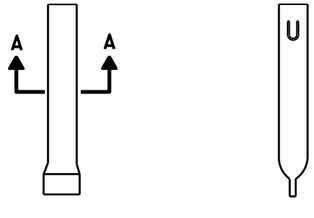
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

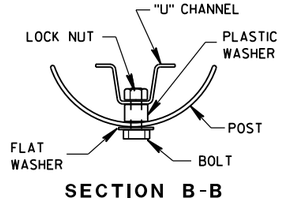


SECTION A-A

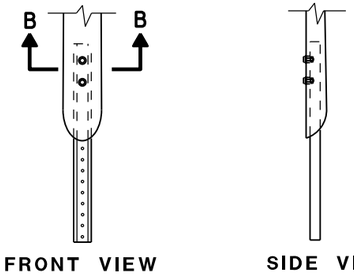


FRONT VIEW SIDE VIEW

ALTERNATE 1

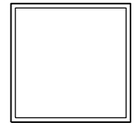


SECTION B-B

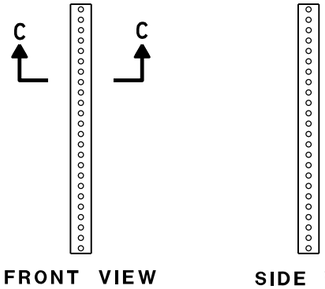


FRONT VIEW SIDE VIEW

ALTERNATE 2



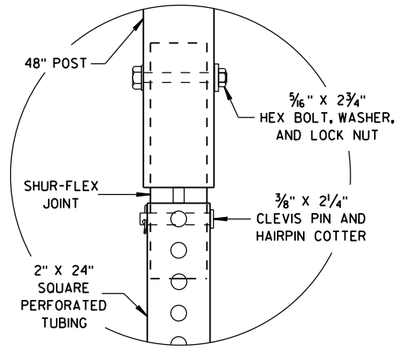
SECTION C-C



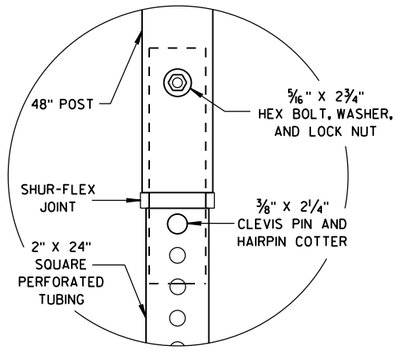
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

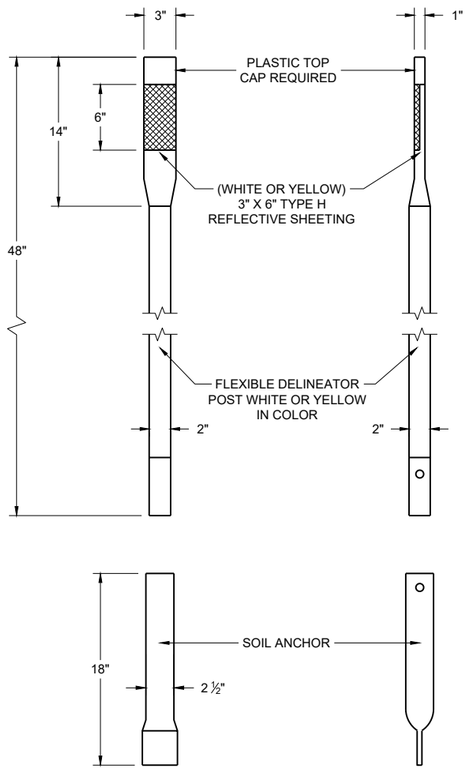
APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

6

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

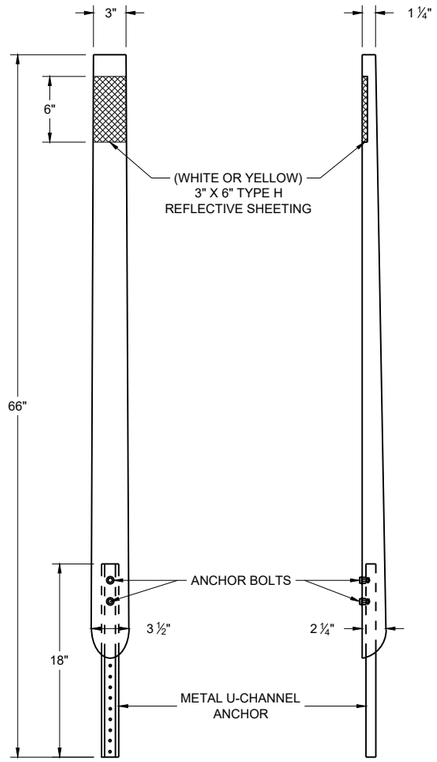
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S.D.D. 15 A 3-2b



FRONT VIEW SIDE VIEW

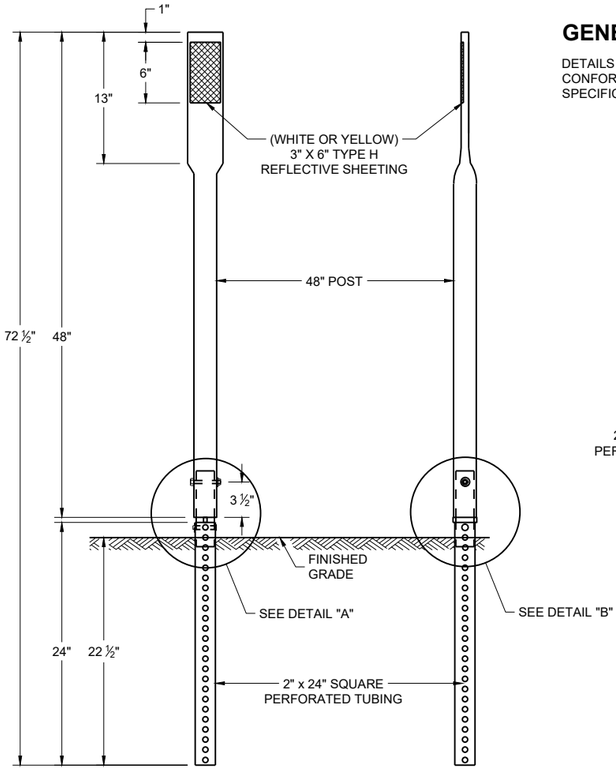
ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2

FLEXIBLE DELINEATOR POSTS

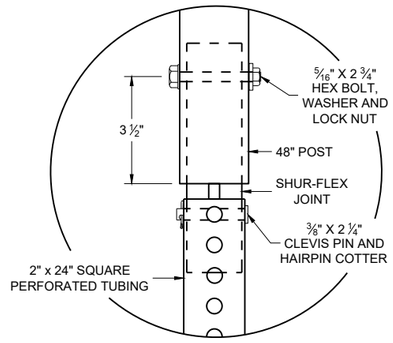


FRONT VIEW SIDE VIEW

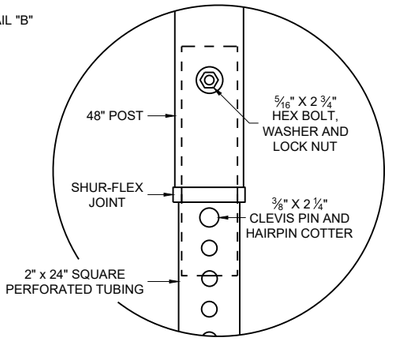
ALTERNATE 3

GENERAL NOTES

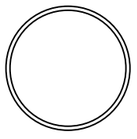
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



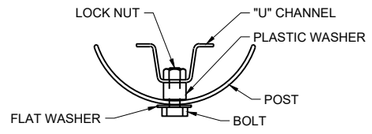
DETAIL A



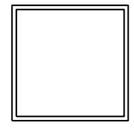
DETAIL B



SECTION A - A



SECTION B - B

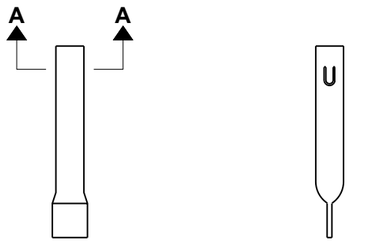


SECTION C - C

REFLECTOR SPACING TABLE

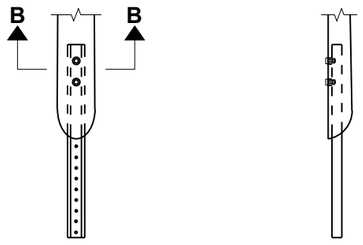
REFLECTOR SPACING	LOCATION
* 100' C-C	RAMPS
400' C-C	MAINLINE

* START AT BEGINNING OF RAMP TAPER AND END AT END OF RAMP TAPER



FRONT VIEW SIDE VIEW

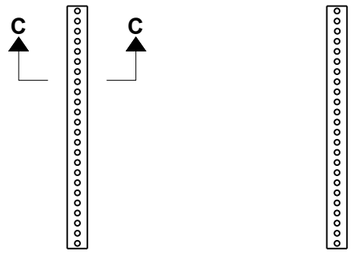
ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2

FLEXIBLE MARKER POST ANCHORS



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE DELINEATOR POST

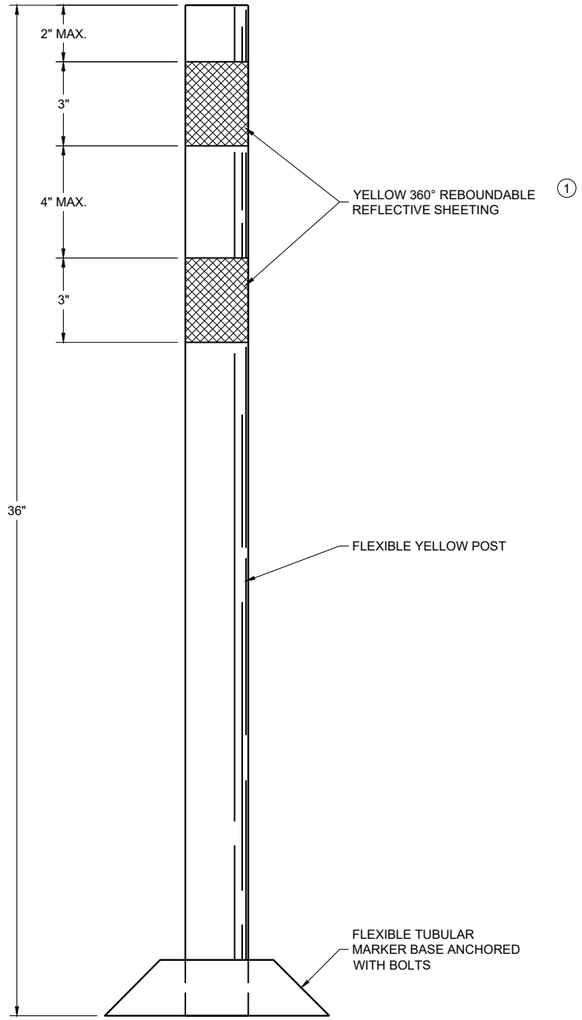
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

SDD 15A04-08a



PERMANENT FLEXIBLE TUBULAR MARKER POST

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

CHANNELIZING DEVICES
PERMANENT FLEXIBLE
TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

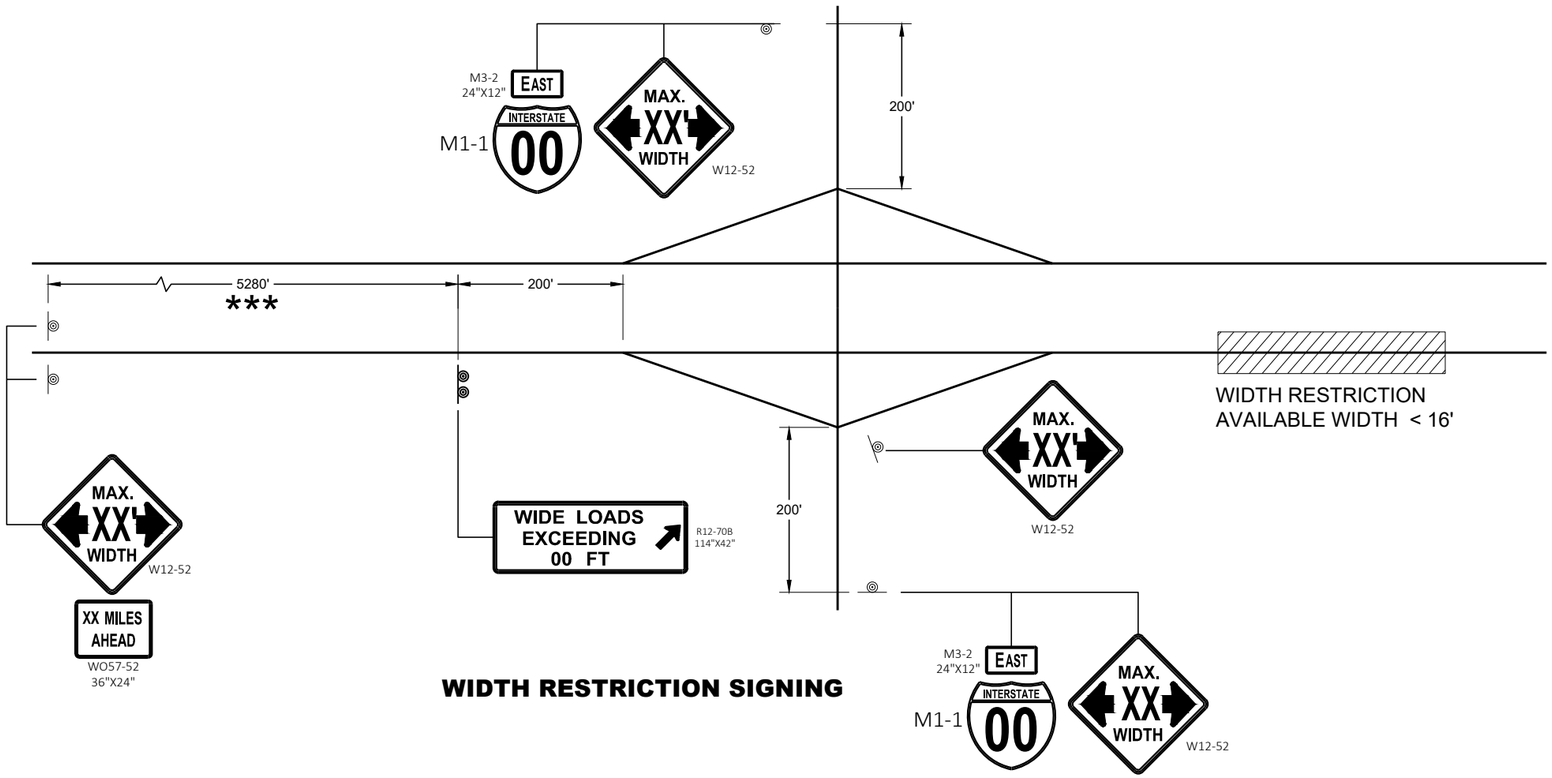
APPROVED
March 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

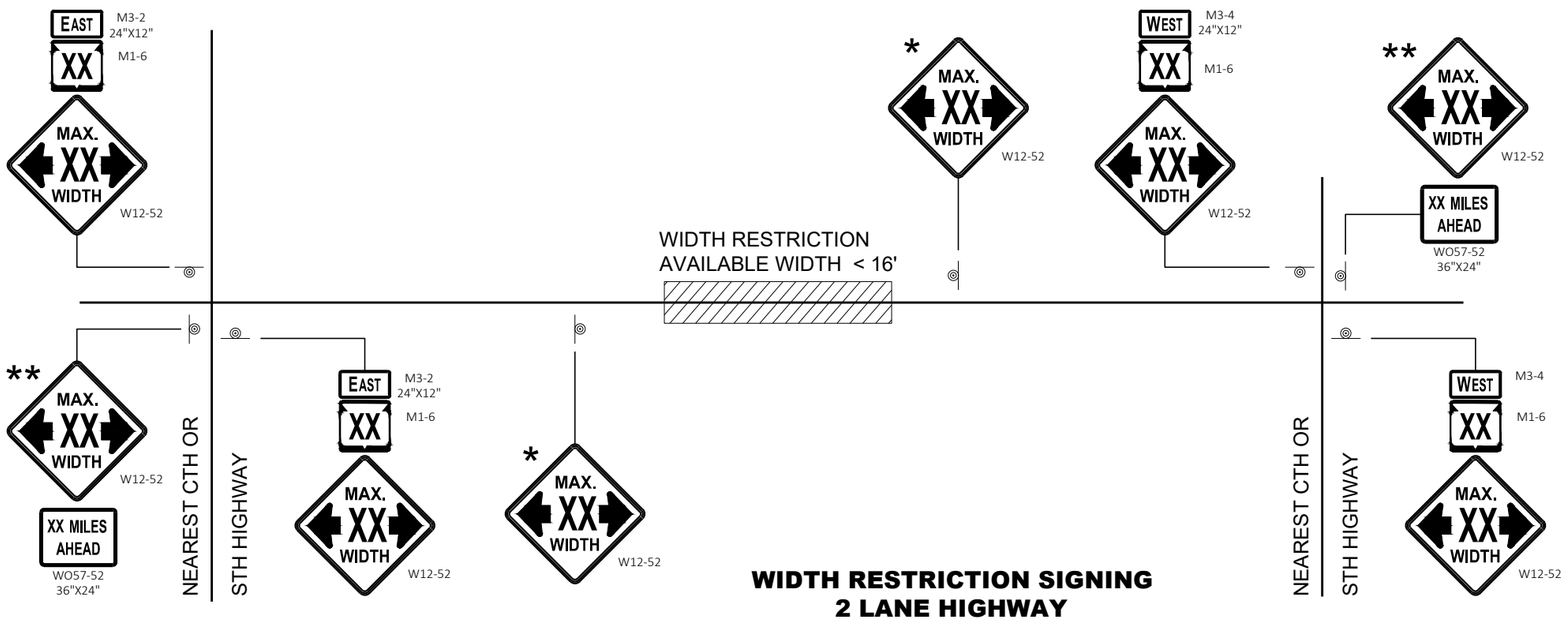
FHWA

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SDD 15A04-08d



WIDTH RESTRICTION SIGNING



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

LEGEND

◎ SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A 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.

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

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

WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

* PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.



WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH

ADVANCED WIDTH RESTRICTION SIGNING

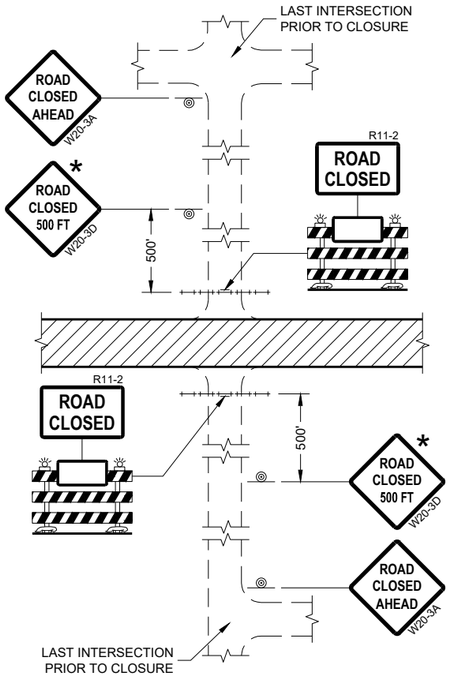
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

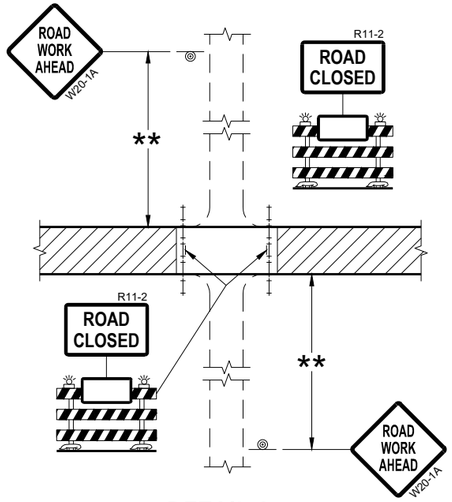
FHWA

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SDD 15C02 - 09f



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO 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 (500 FEET DESIRABLE) 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 REESTABLISHED.

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

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN 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.

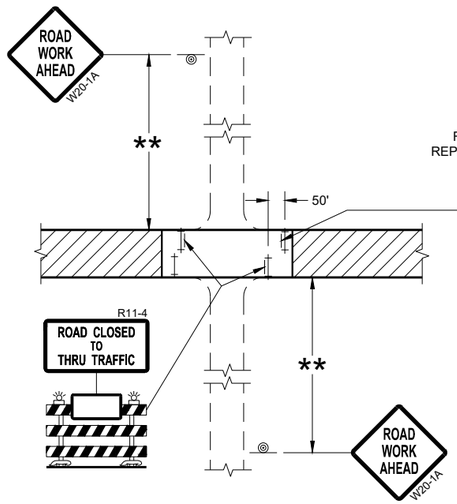
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

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.

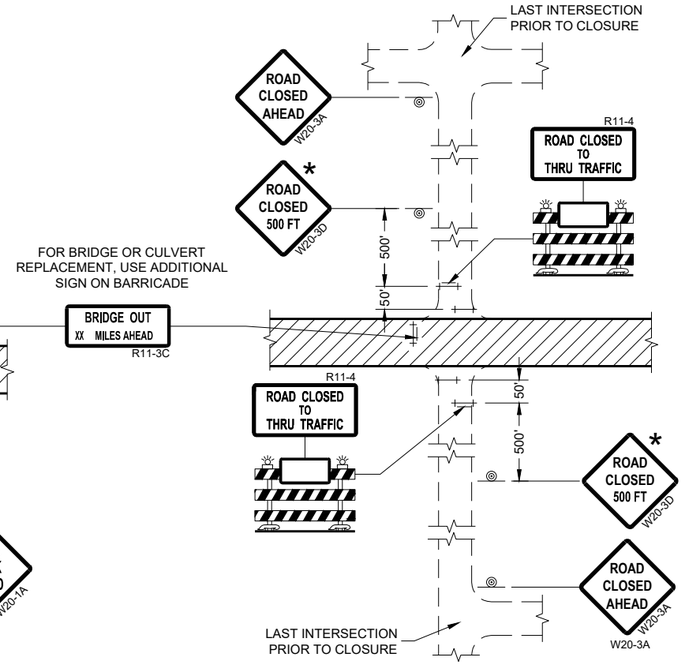
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

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

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.



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



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

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE 598

FHWA

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SDD 15C03 - 05

GENERAL NOTES

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

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

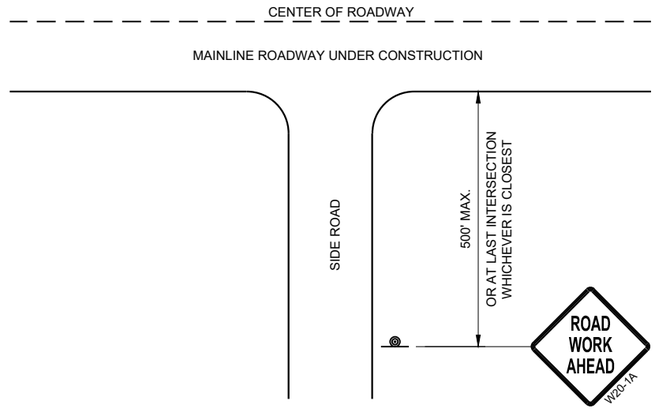
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

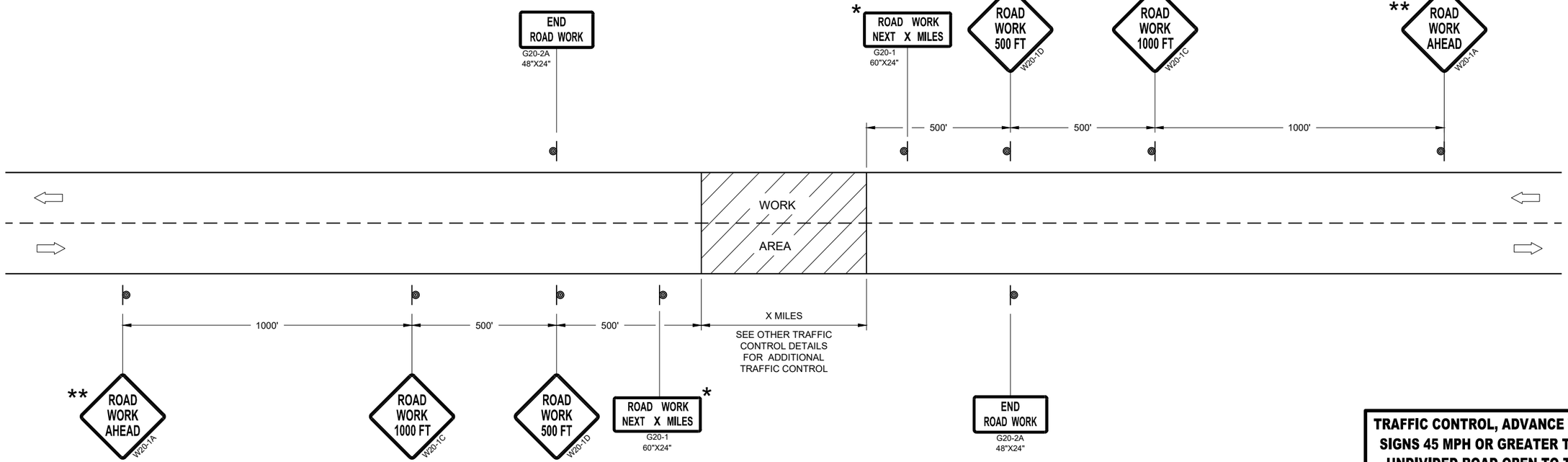
** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

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



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

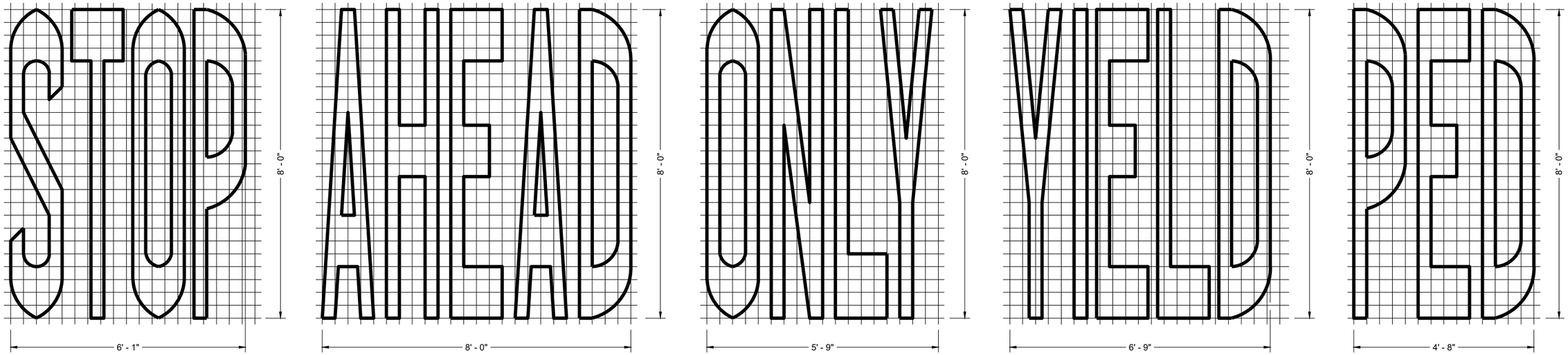
APPROVED
July 2018
DATE

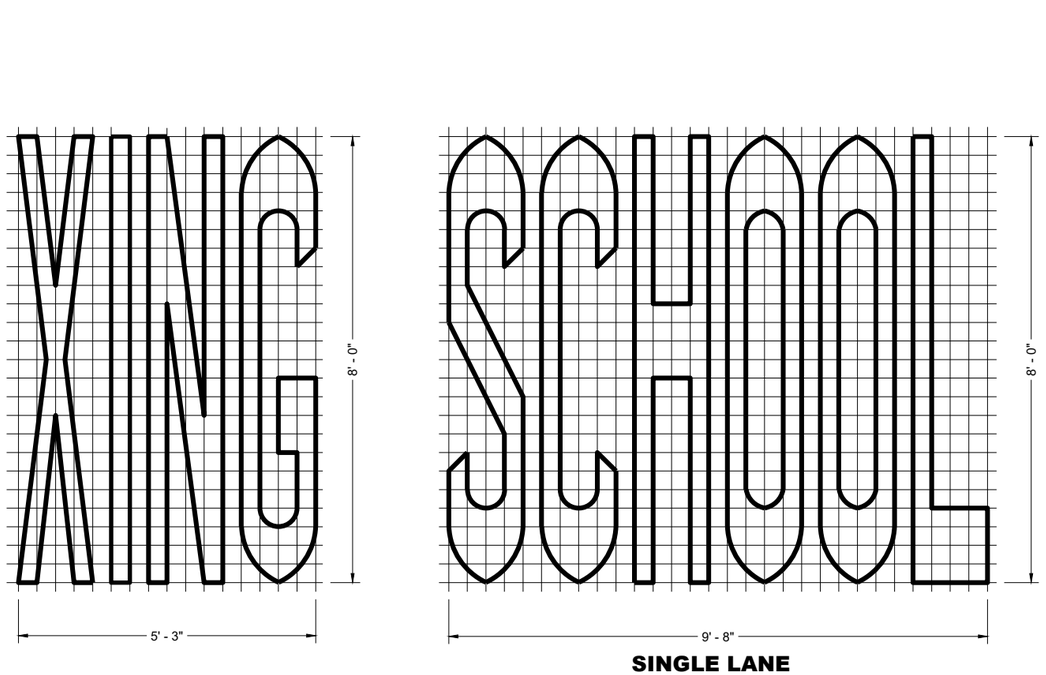
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

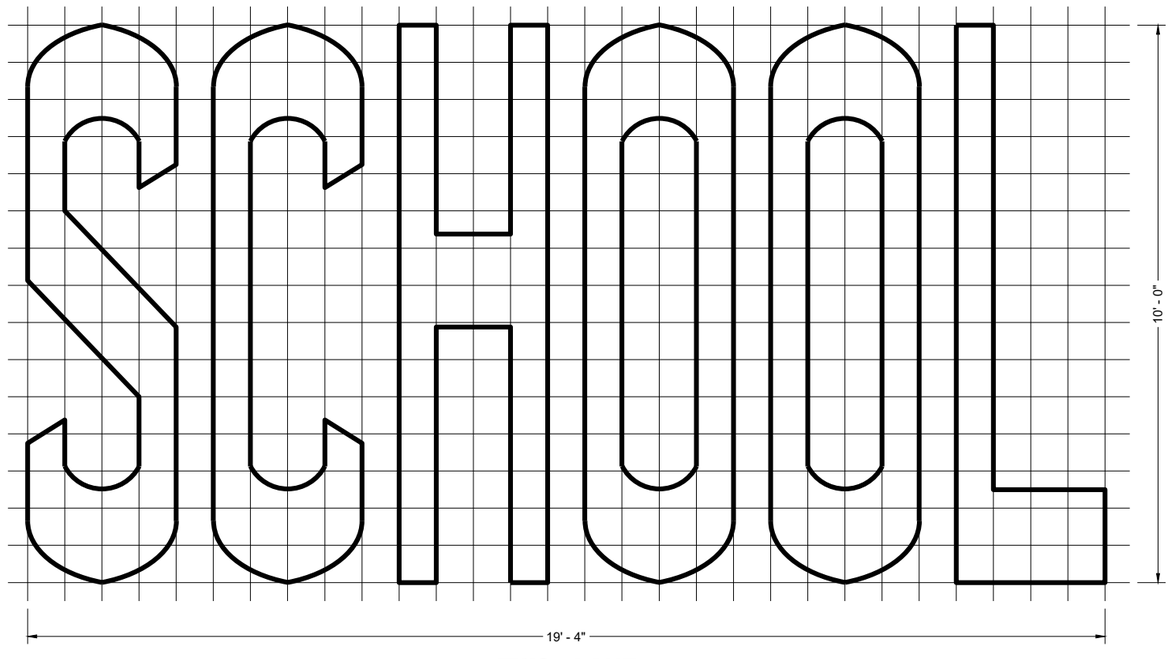
6

SDD 15C04 - 05





SINGLE LANE



TWO - LANE

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.

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

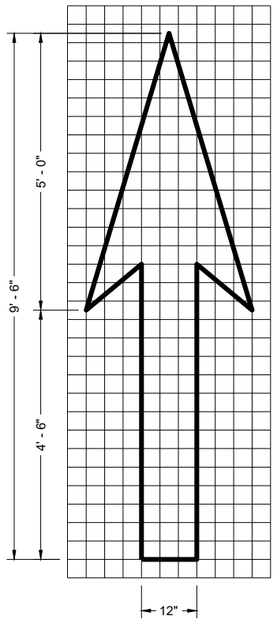
FHWA

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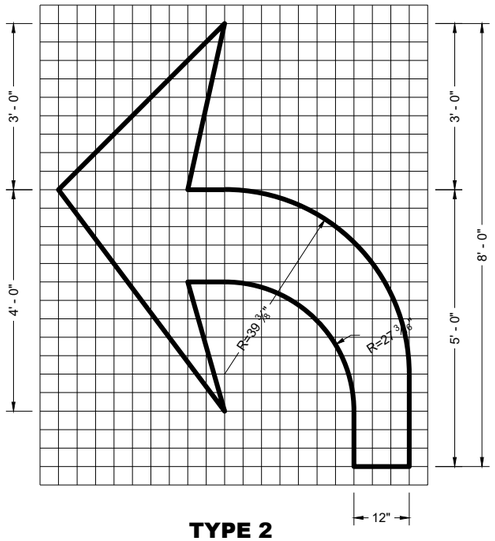
SDD 15C07-16b

GENERAL NOTES

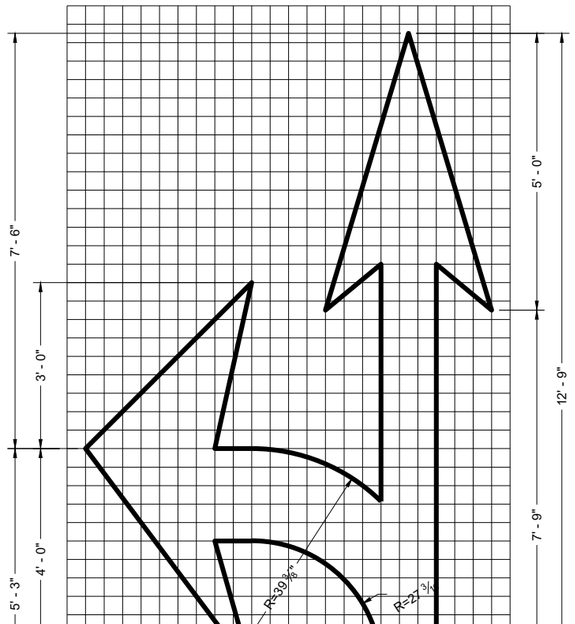
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



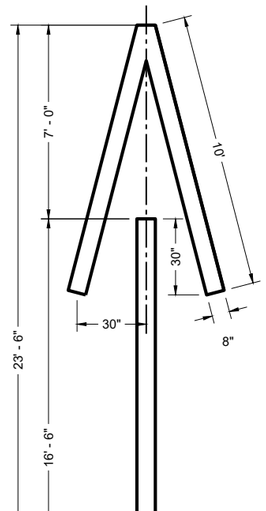
TYPE 1



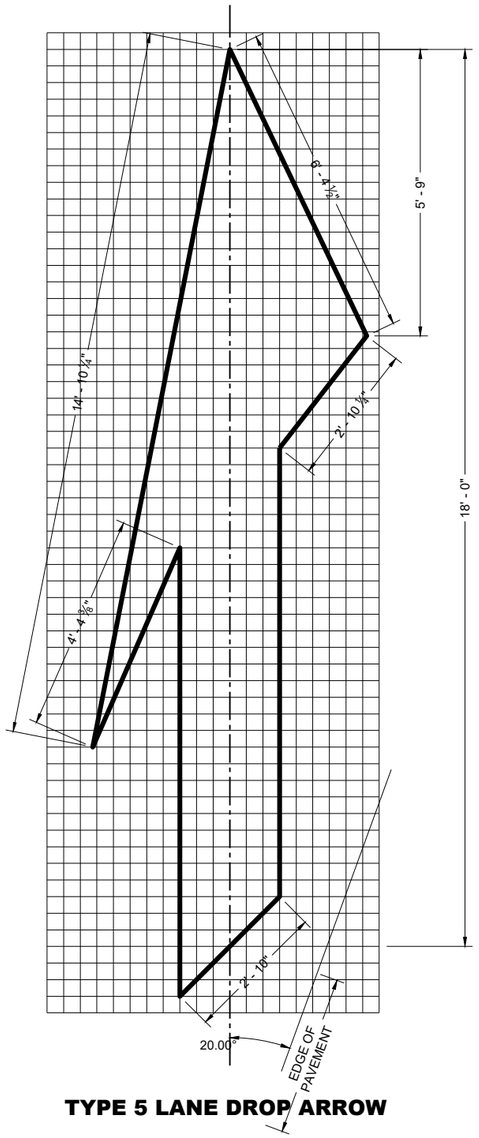
TYPE 2



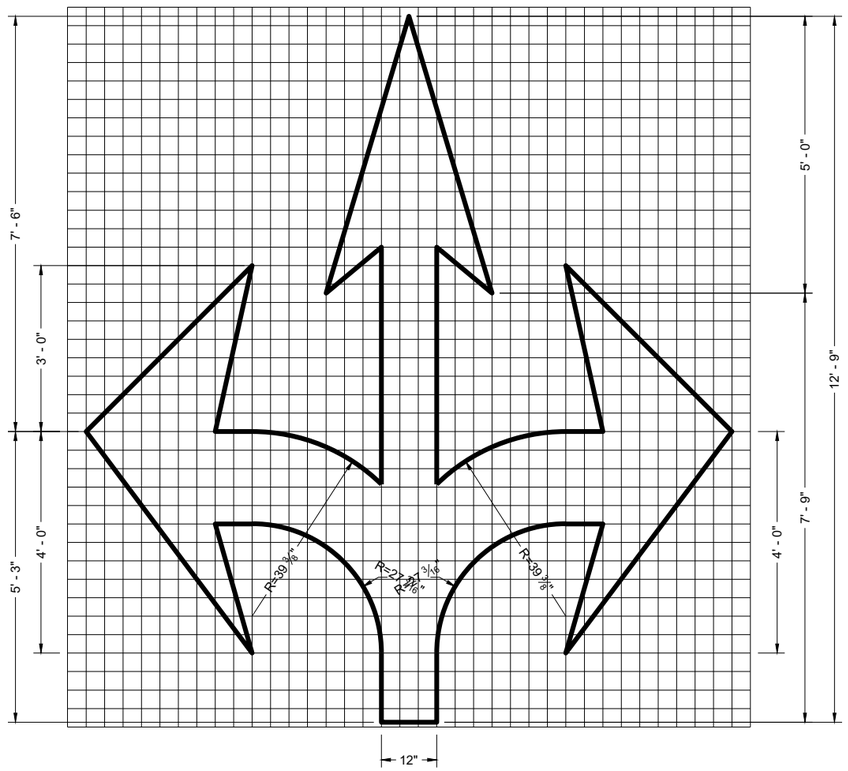
TYPE 3



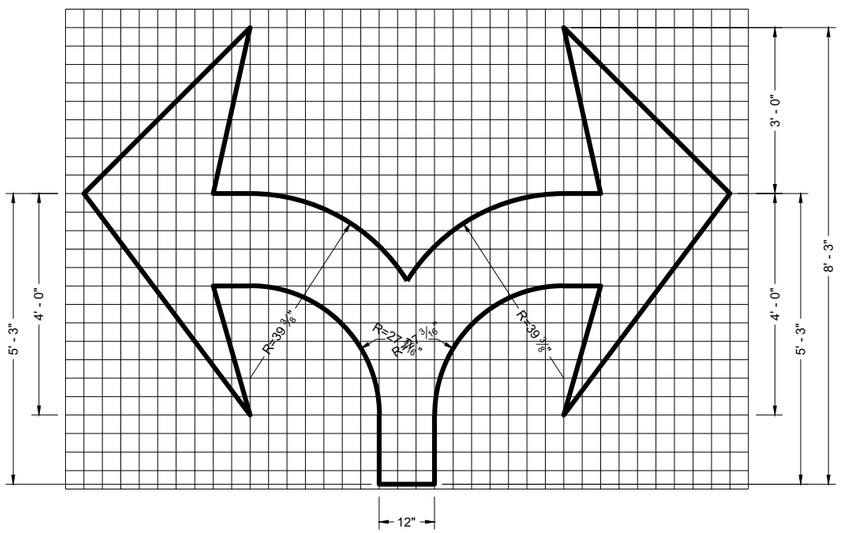
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C07-16c

6

SDD 15C07-16c

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

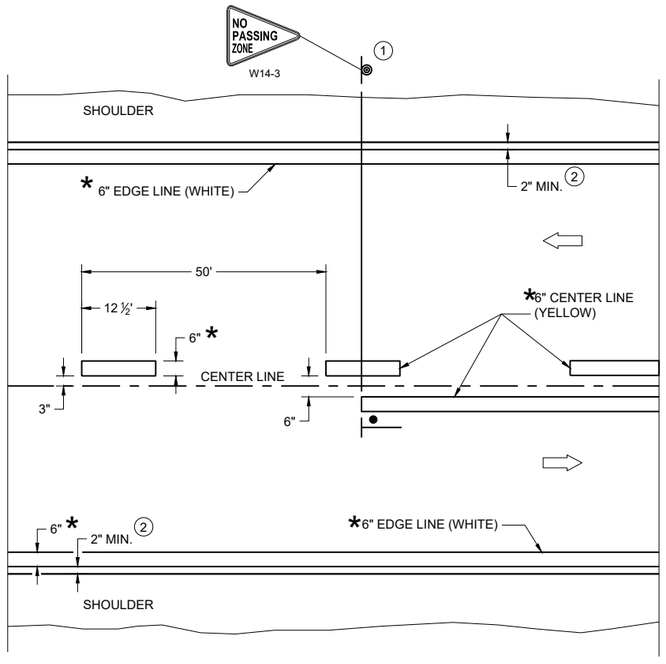
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

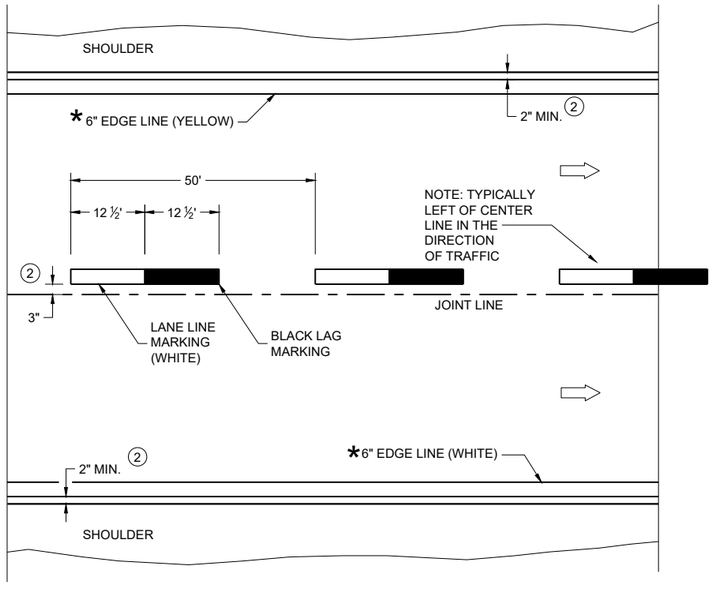
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

SDD 15C08-23a

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

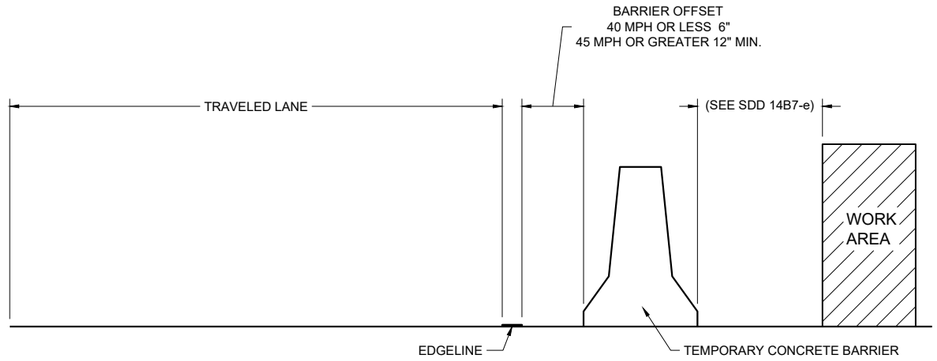
May 2023
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

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TEMPORARY BARRIER OFFSET FROM EDGELINE

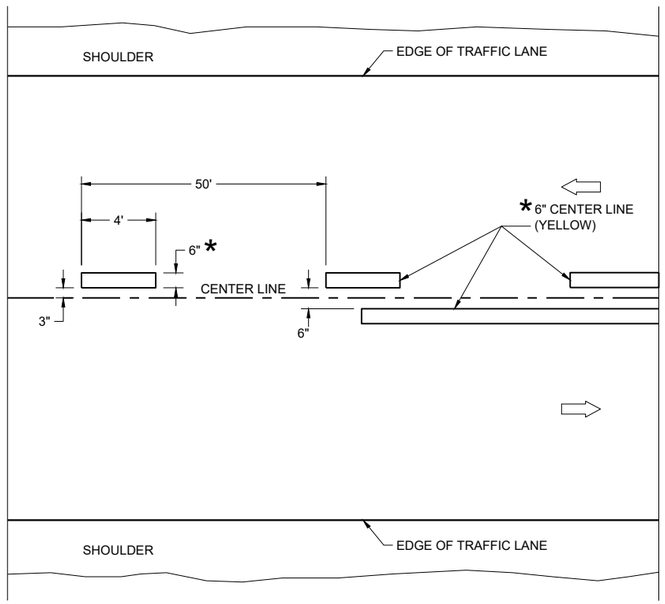
GENERAL NOTES

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

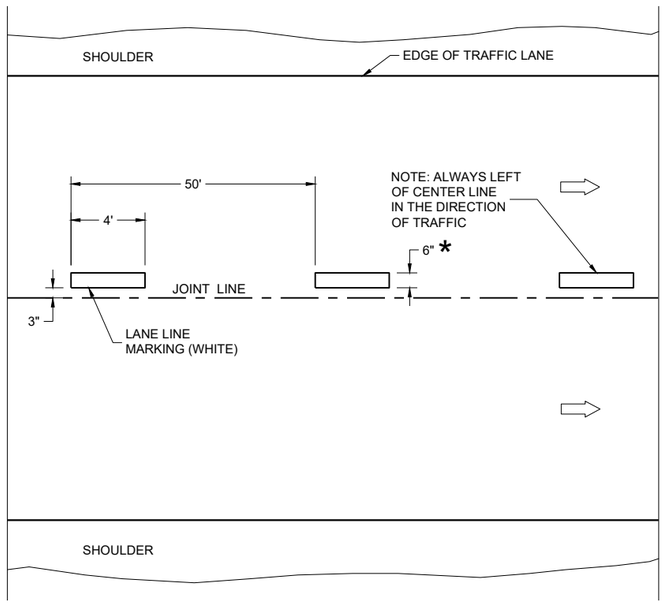
LEGEND

DIRECTION OF TRAFFIC

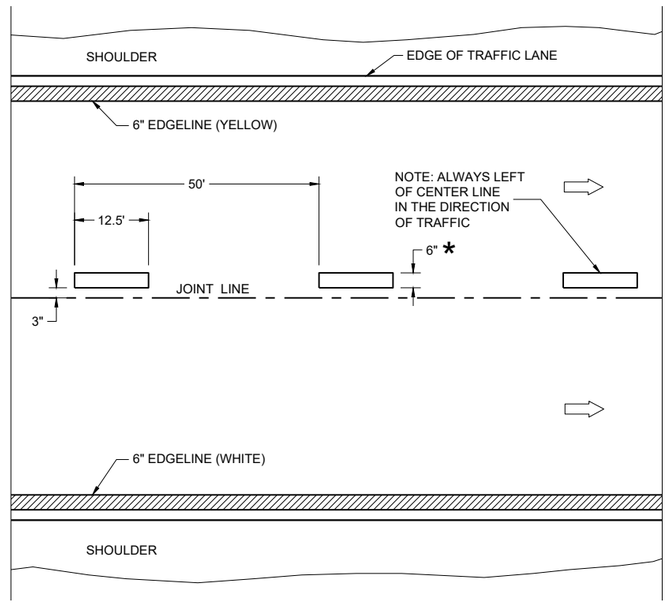
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — Statewide Pavement Marking Engineer

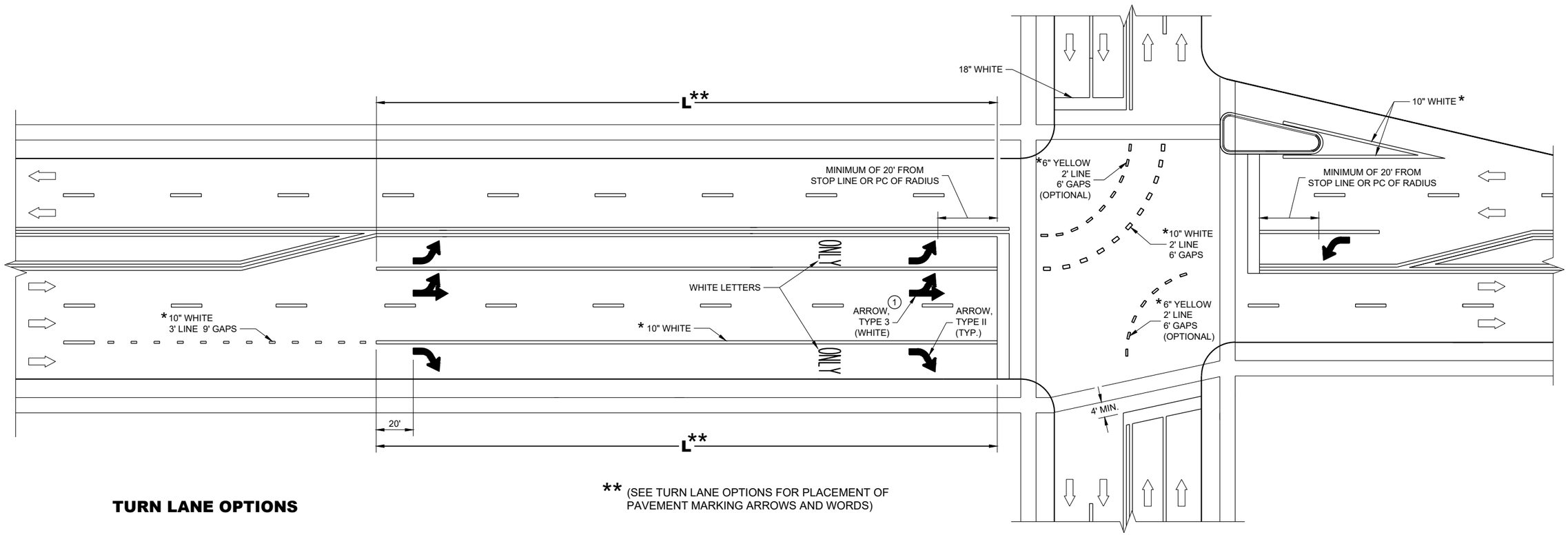
FHWA

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SDD 15C08-23b

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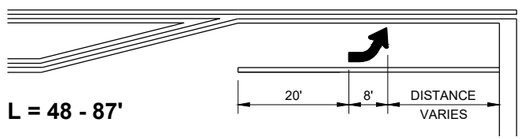
SDD 15C08-23b



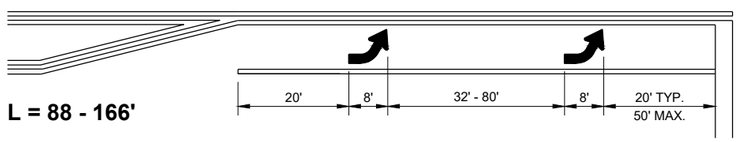
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

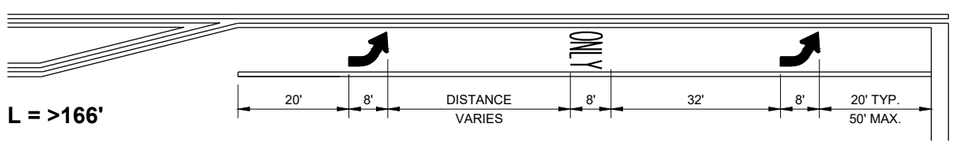
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

(1) QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

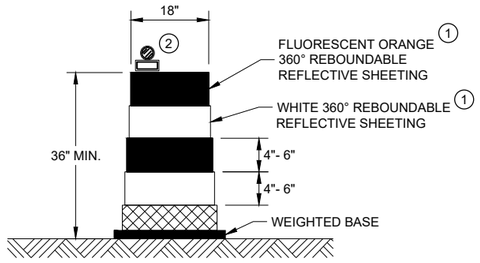
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 15C08-23d

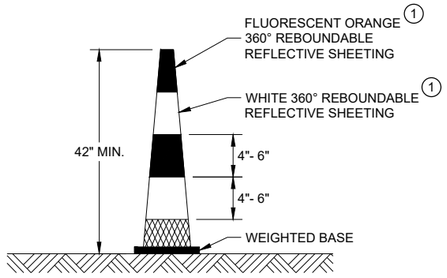
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

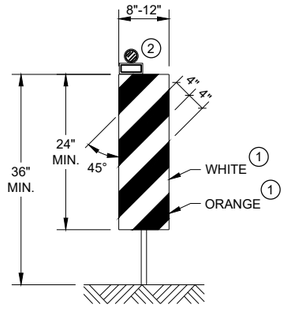
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

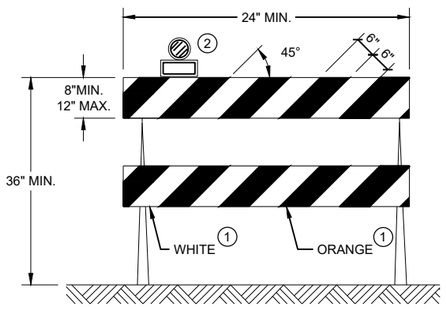
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



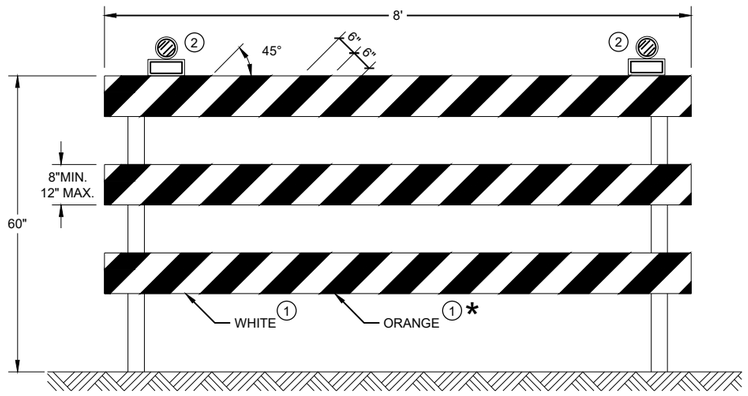
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

605

FHWA

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SDD 15C11 - 10b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

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

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

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

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

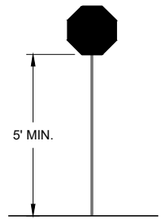
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



STOP/SLOW PADDLE ON SUPPORT STAFF

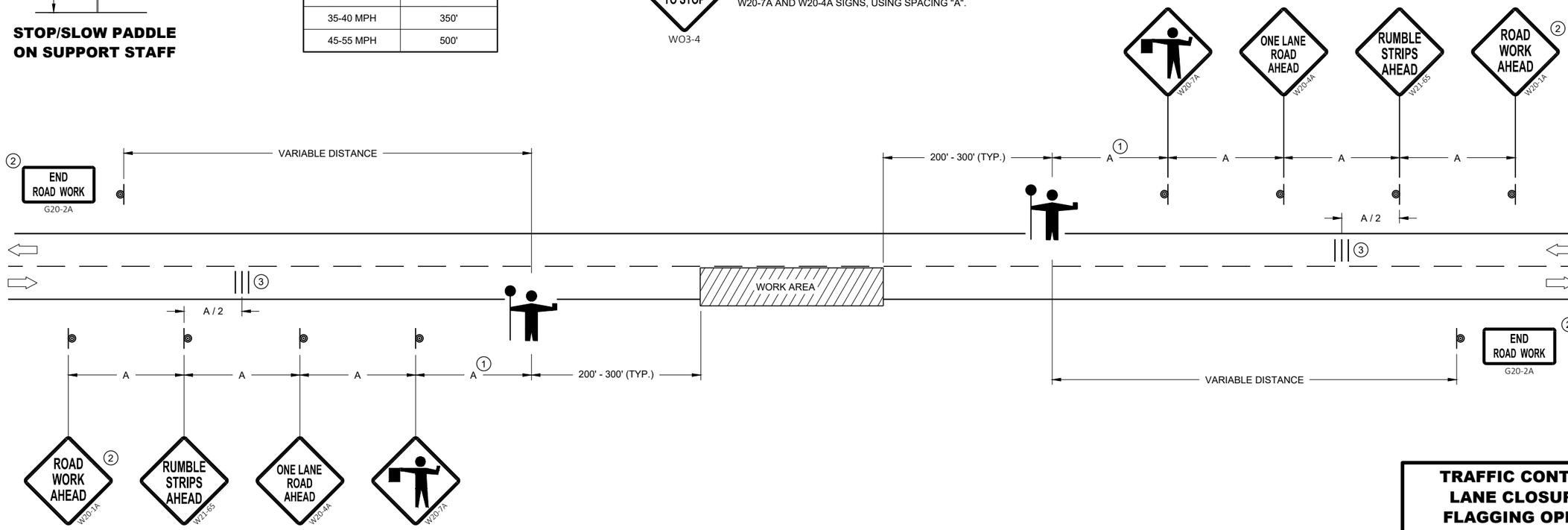
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

606

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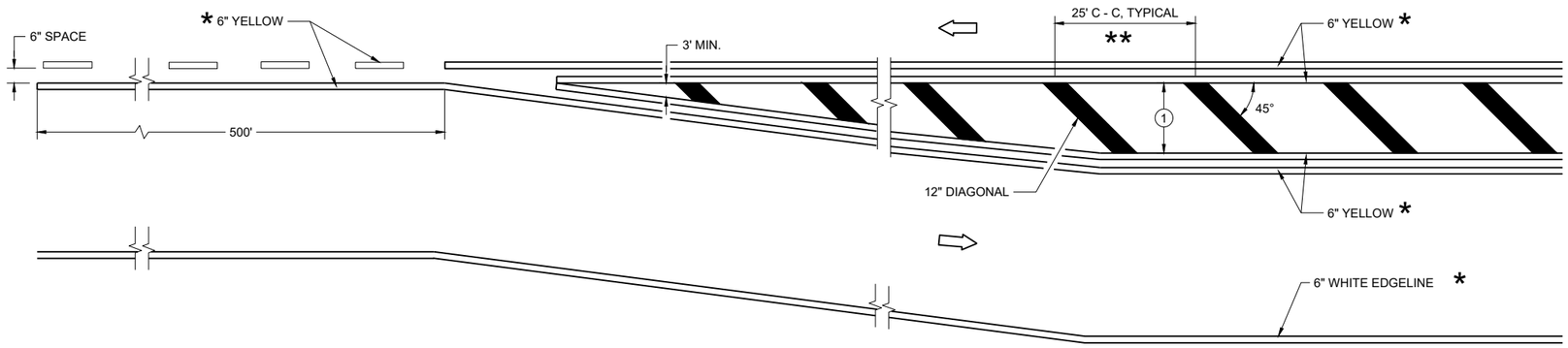
6

SDD 15C12 - 09a

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SDD 15C12 - 09a

** WHEN THE PAINTED MEDIAN LENGTH IS LESS THAN 50 FEET THE SPACING IS 10'.



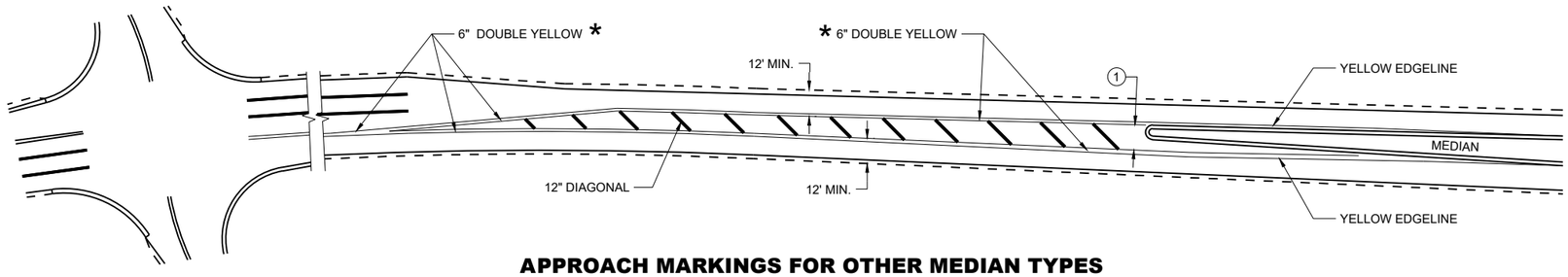
MEDIAN ISLAND DETAIL

GENERAL NOTES

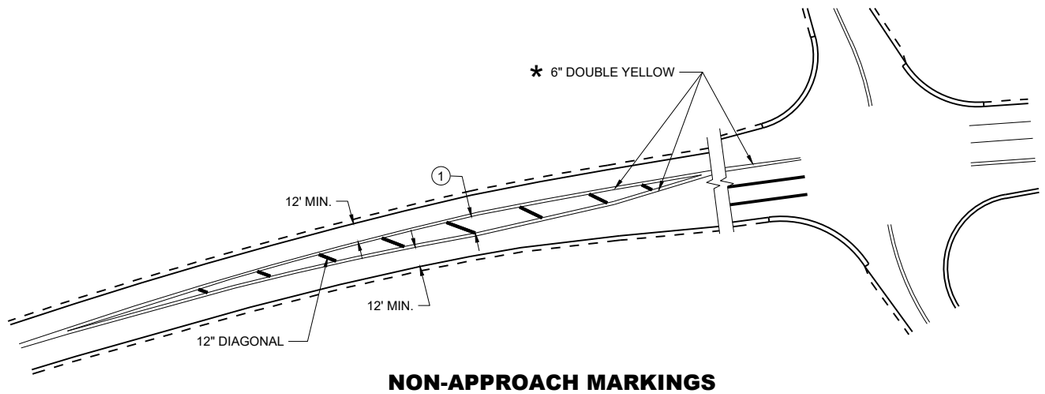
1. DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

⇨ DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

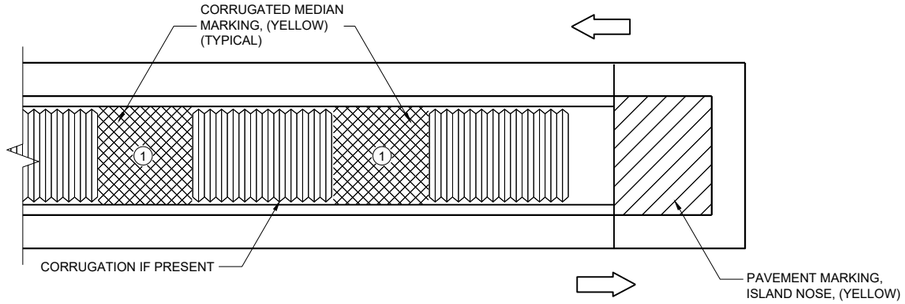
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

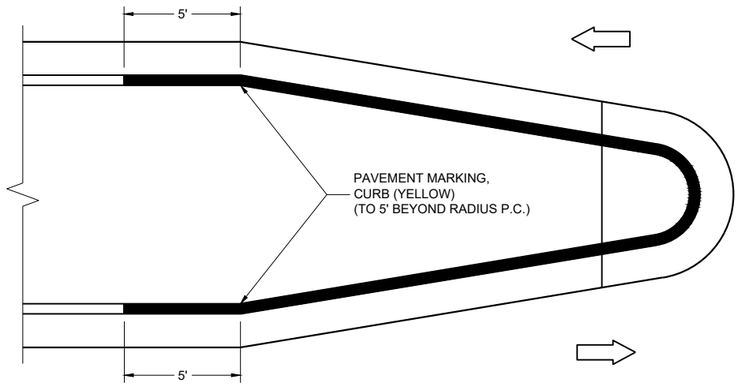
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SDD 15C18-09a

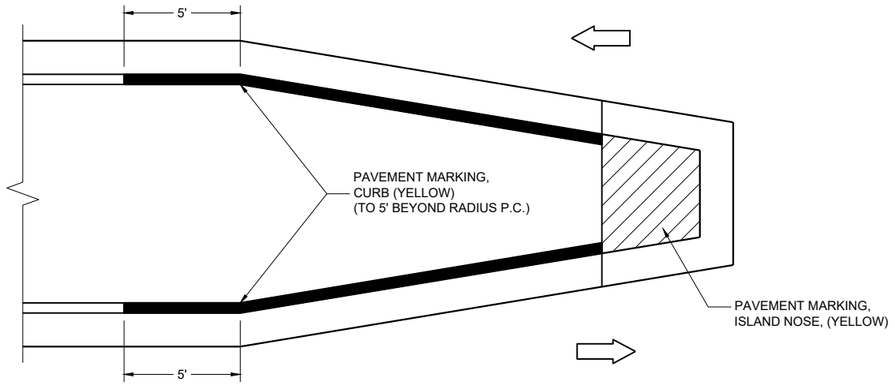
SDD 15C18-09a



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**

GENERAL NOTES

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.

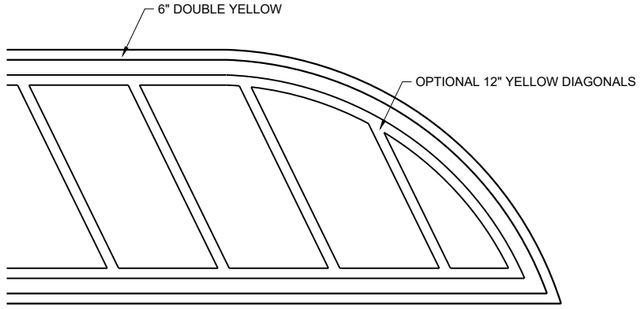
(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL



FLUSH MEDIAN ISLAND NOSE

**PAVEMENT MARKINGS,
MEDIAN ISLAND NOSE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

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REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED

GENERAL NOTES

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

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

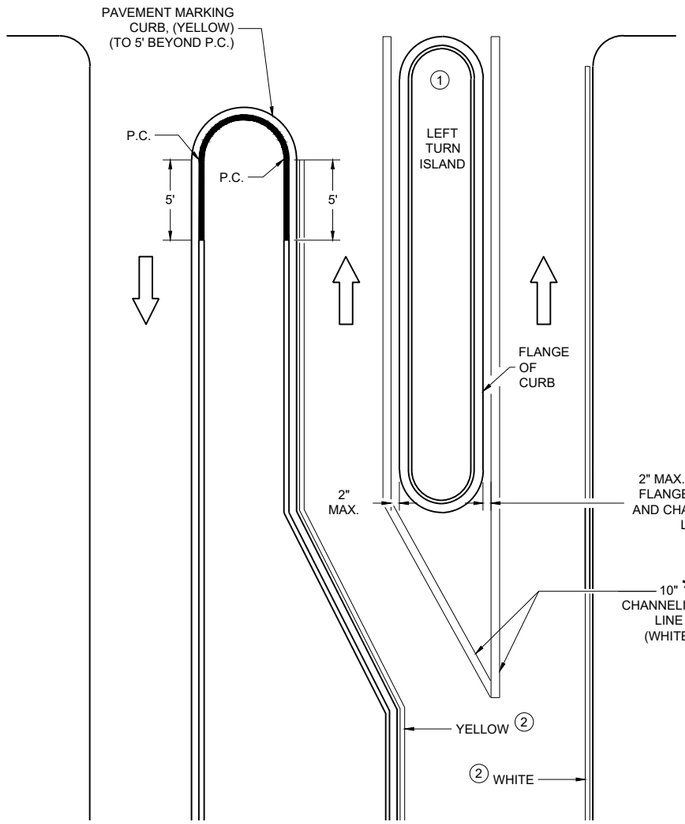
(1) MARK CURB NOSES YELLOW.

(2) MARK ACCORDING TO TABLE.

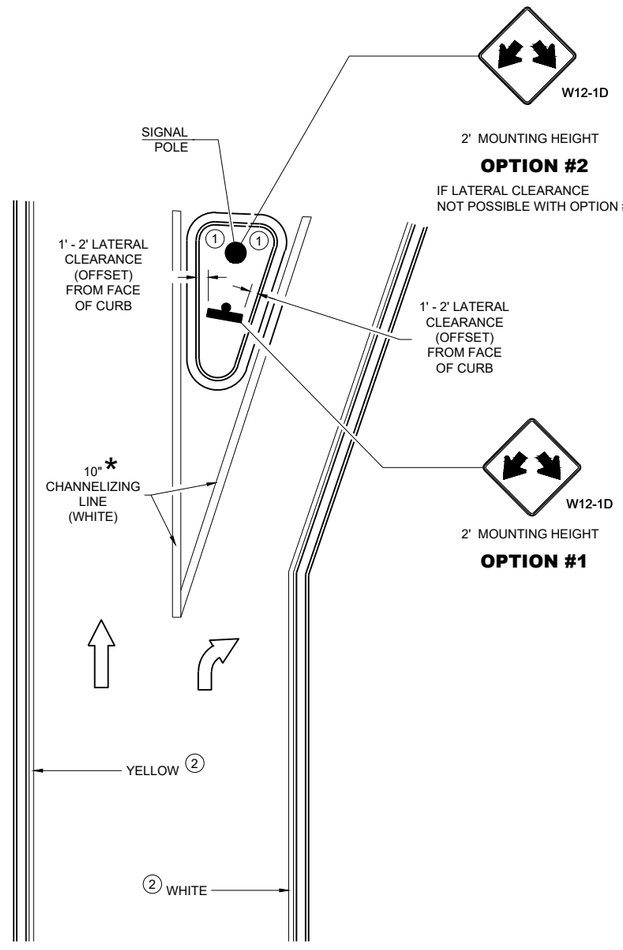
(3) CHEVRON MAY BE OMITTED IF LESS THAN 4" WIDE

DIRECTION OF TRAVEL

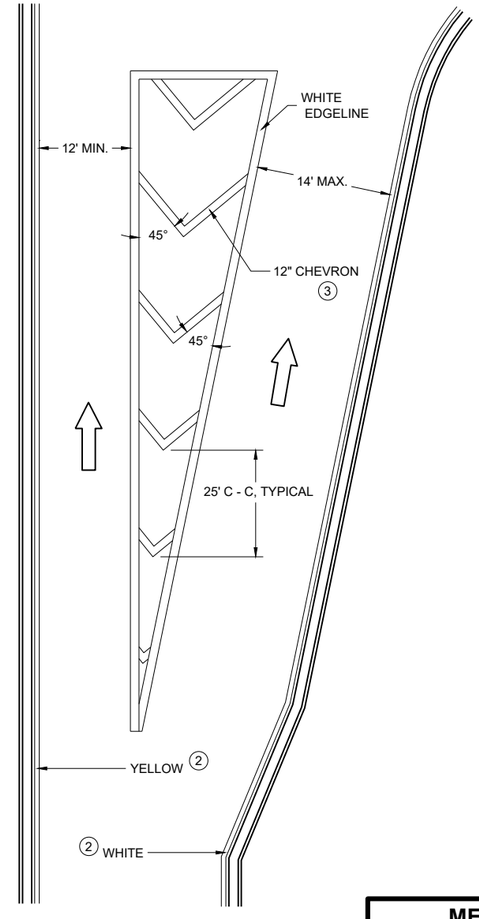
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



LEFT TURN & MEDIAN ISLAND



RIGHT TURN ISLAND



TURN LANE DETAIL

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

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SDD 15C18-09c

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LEGEND

V1 MARKING VEHICLE

V2 SHADOW VEHICLE

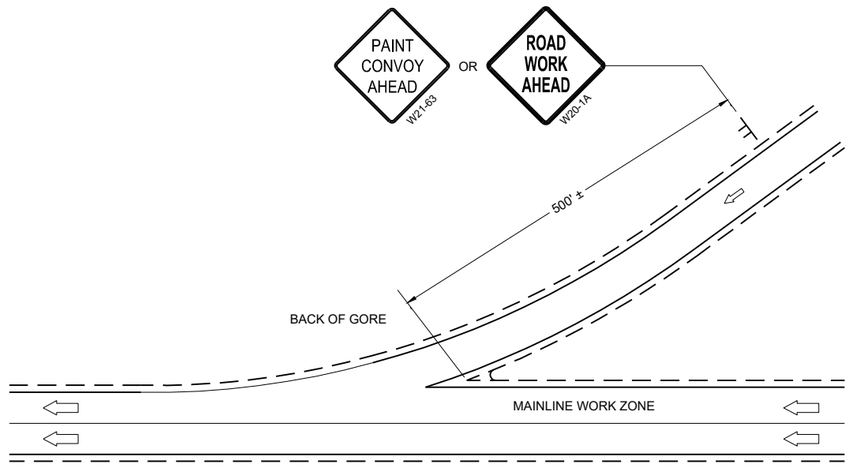
V3 TRAIL VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (MERGE)



GENERAL NOTES

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

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

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

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

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

IF THE SHOULDER IS TOO NARROW TO ACCOMMODATE THE LAST TRAILING VEHICLE, THE VEHICLE SHOULD STRADDLE THE EDGE LINE.

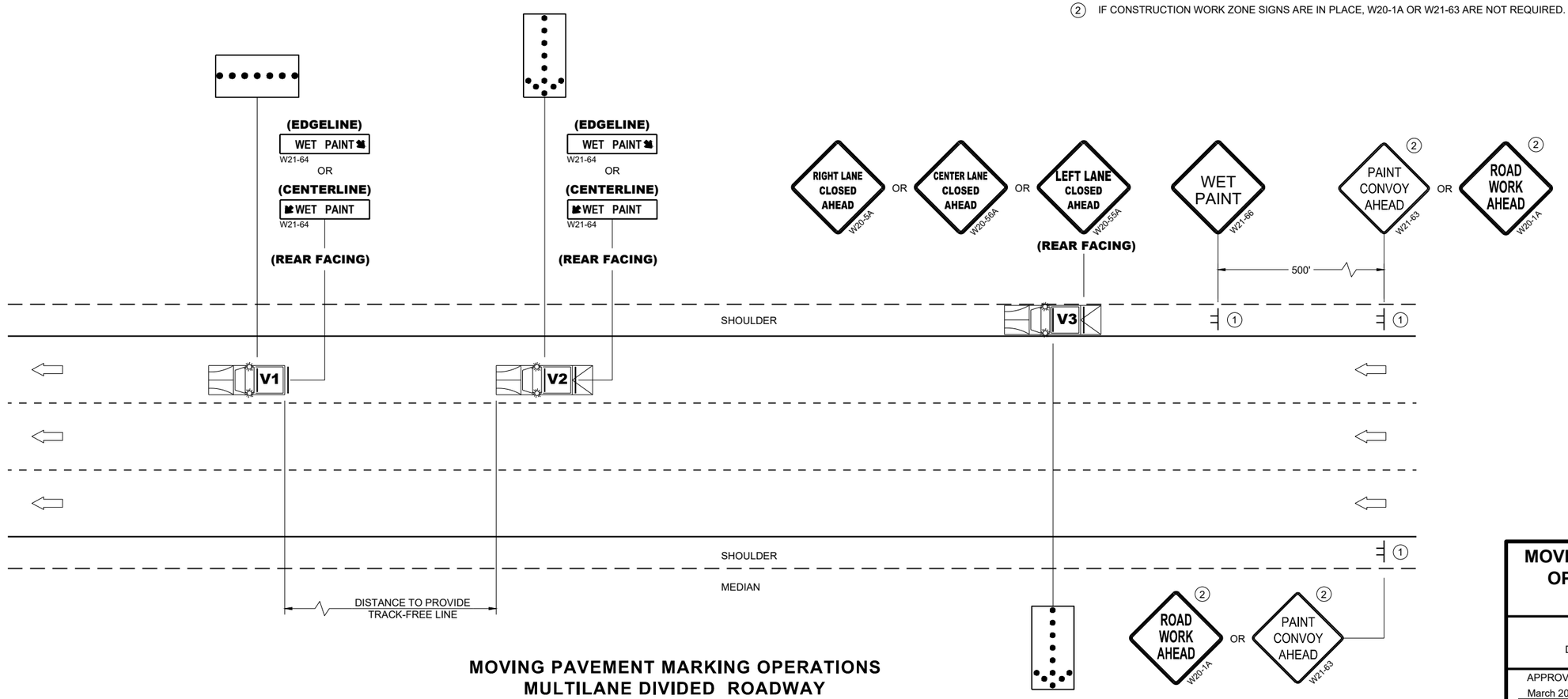
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY ON RAMP.

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



MOVING PAVEMENT MARKING OPERATIONS MULTILANE DIVIDED ROADWAY

MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

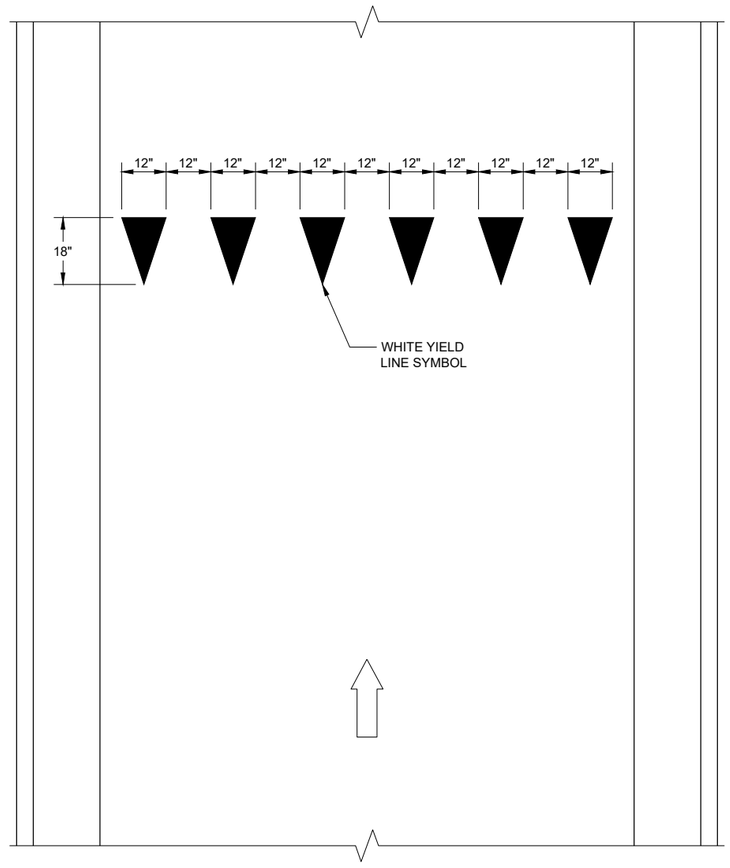
FHWA

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SDD 15C19-9c

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SDD 15C19-9c

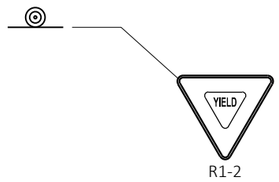


YIELD LINE

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL



R1-2

YIELD MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-81-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR ENGINEER

FHWA

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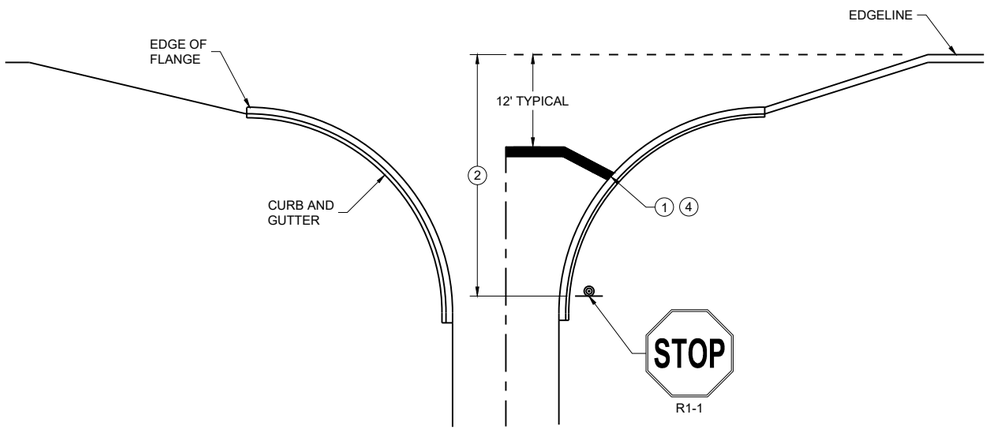
SDD 15C20 - 02

SDD 15C20 - 02

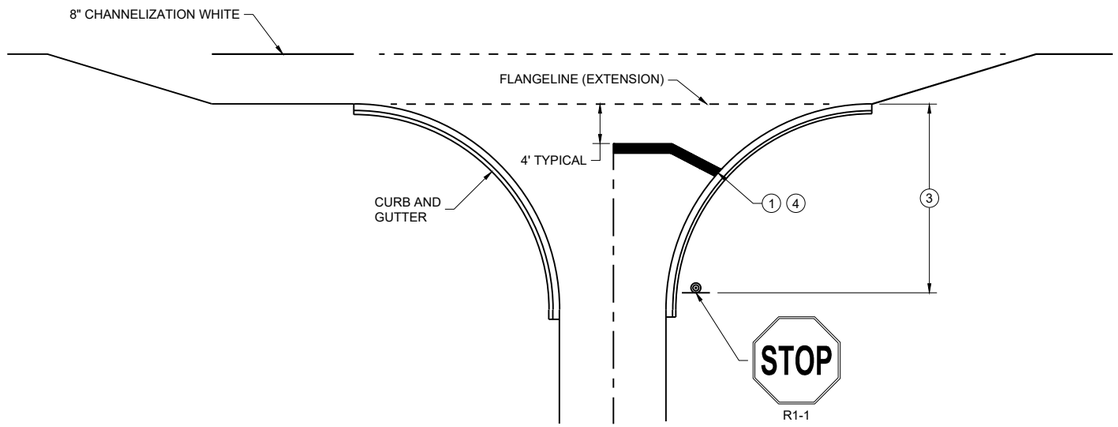
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

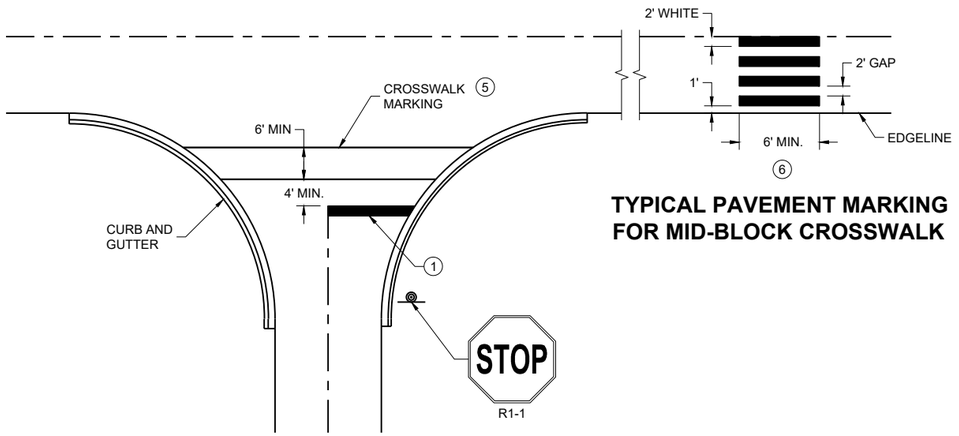
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES.
6. POSTED SPEED LIMITS OF 40 MPH OR GREATER USE A MINIMUM WIDTH OF 8' FOR MIDBLOCK CROSSWALKS



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

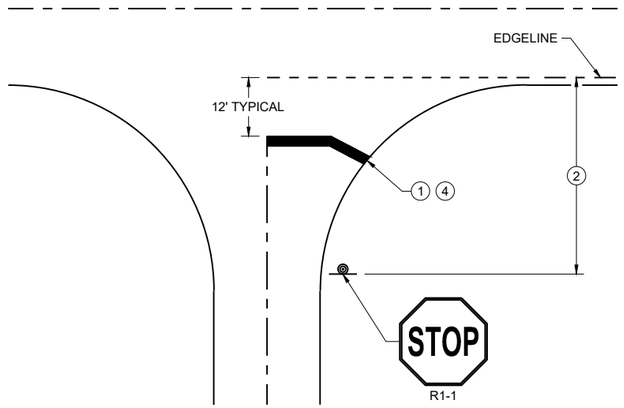


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

March 2024 — DATE

/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C33-05

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SDD 15C33-05

GENERAL NOTES

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

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

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

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

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

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

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

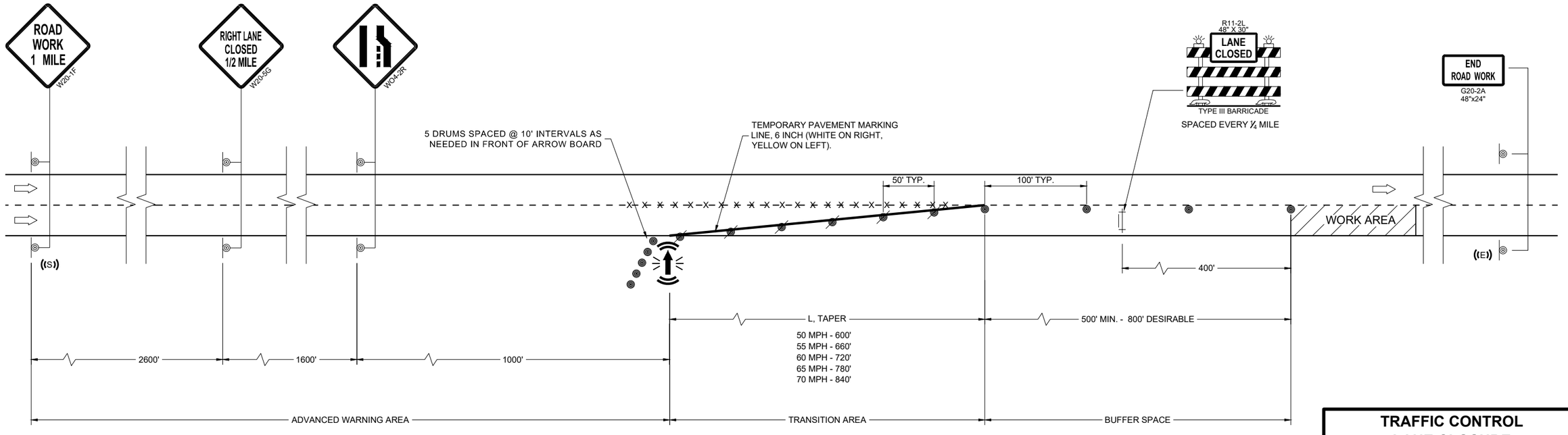
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6

SDD 15D12-14a

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SDD 15D12-14a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

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

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

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

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

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

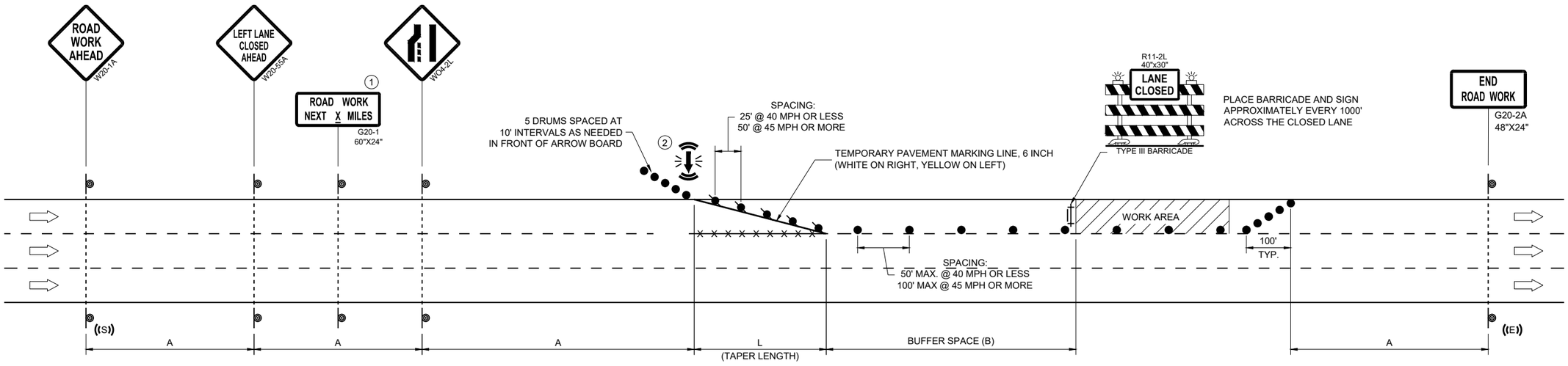
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

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

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

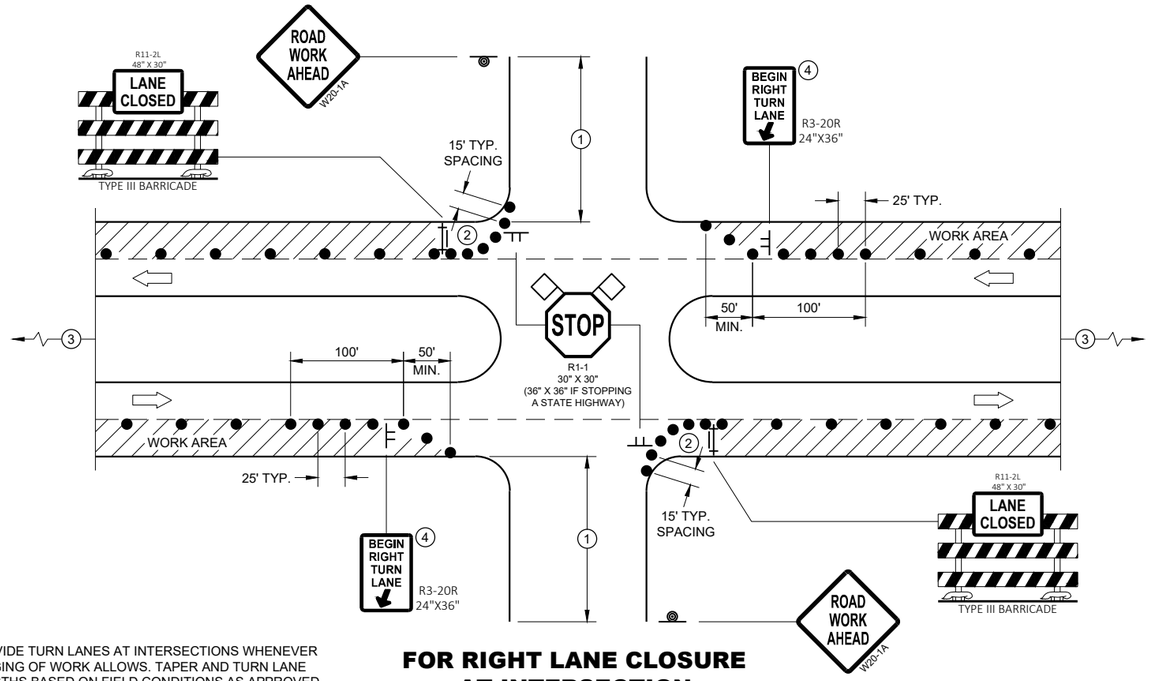
FHWA

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SDD 15D20-09a

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SDD 15D20-09a



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

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

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

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

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

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

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

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

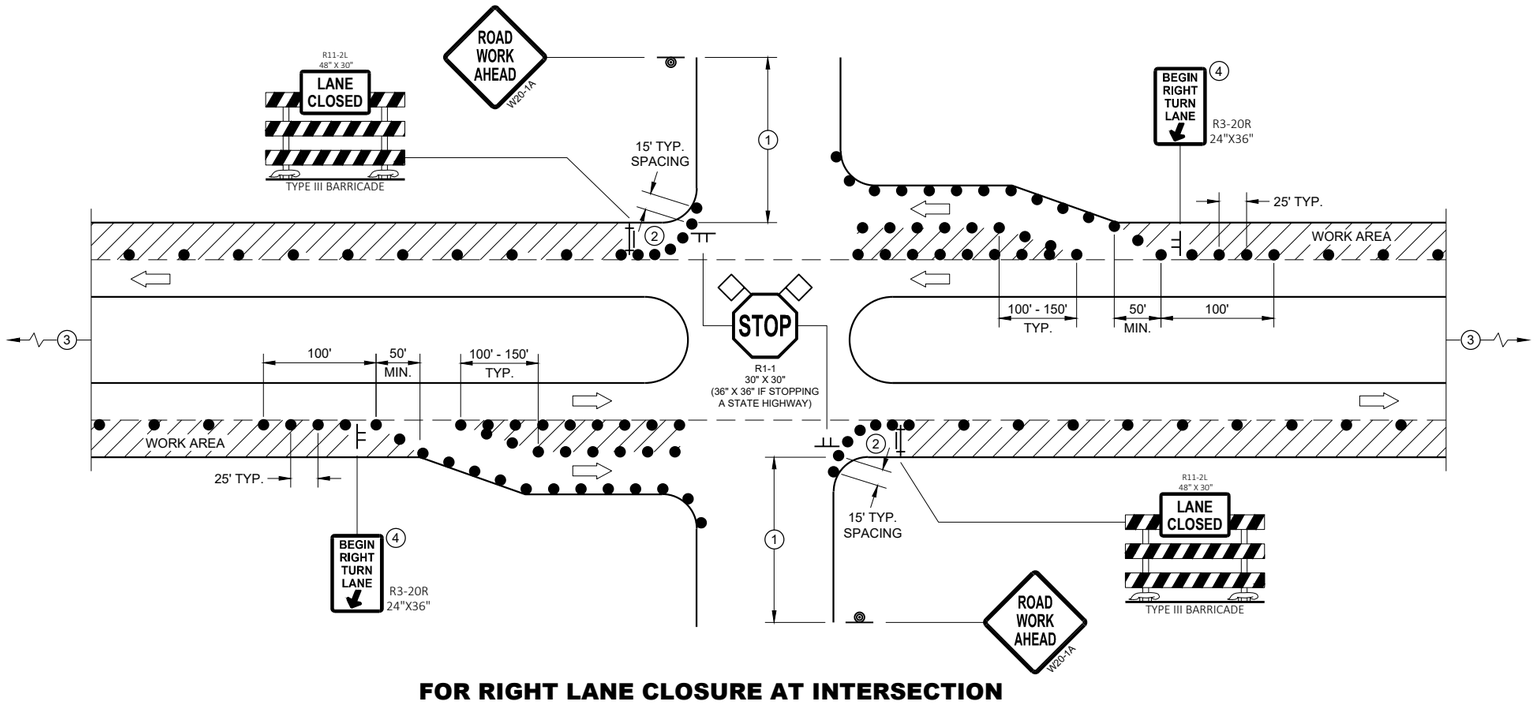
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

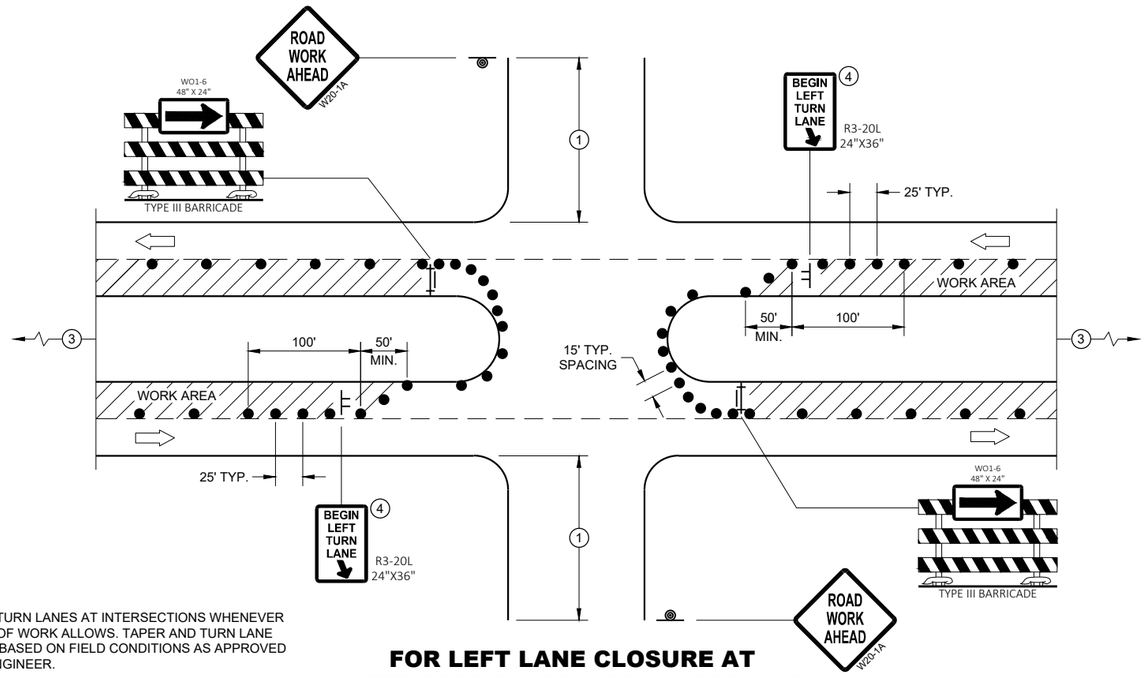
- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D21 - 07a



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

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

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

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

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

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

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

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

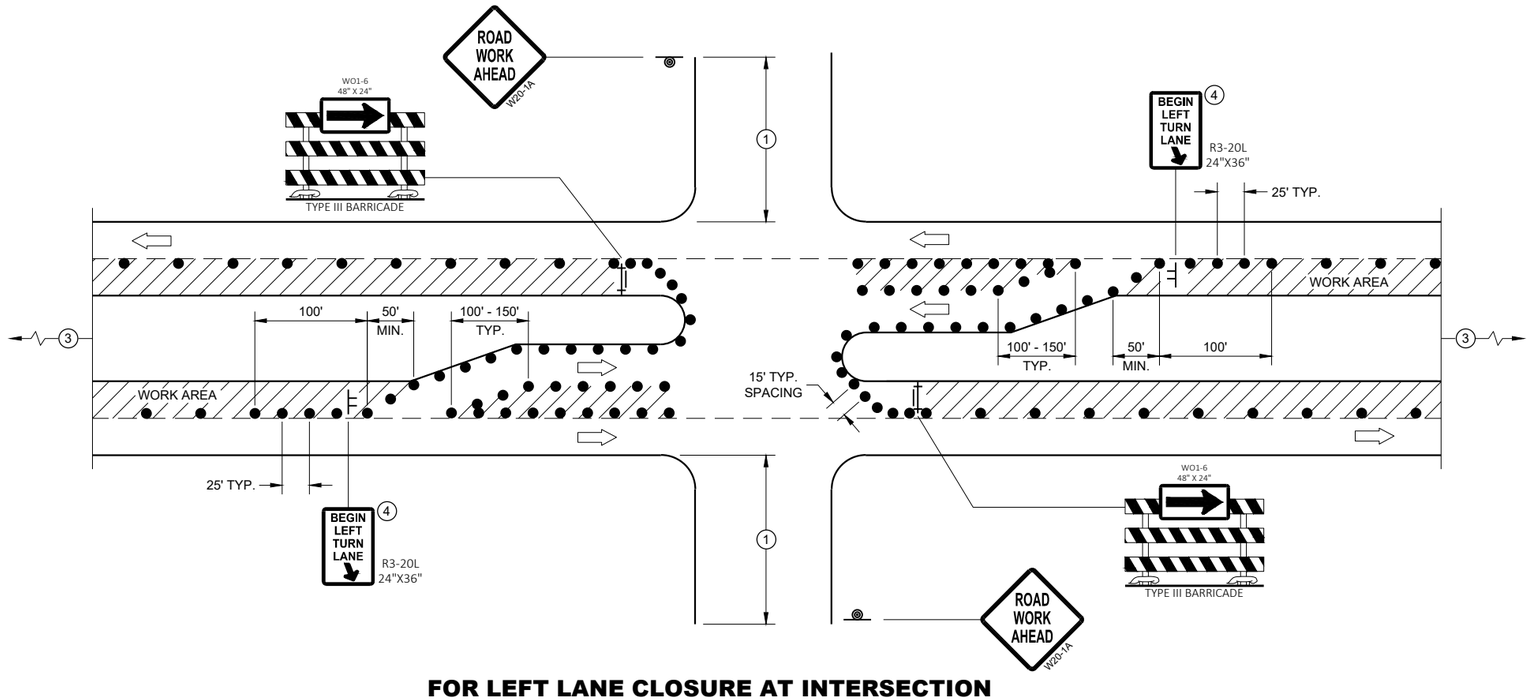
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D21 - 07b

6

SDD 15D21 - 07b

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA
- CONNECTED ARROW BOARD
- (IS) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45 MPH, USE SDD 15D14.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES.
FOR CLOSING LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

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

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

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

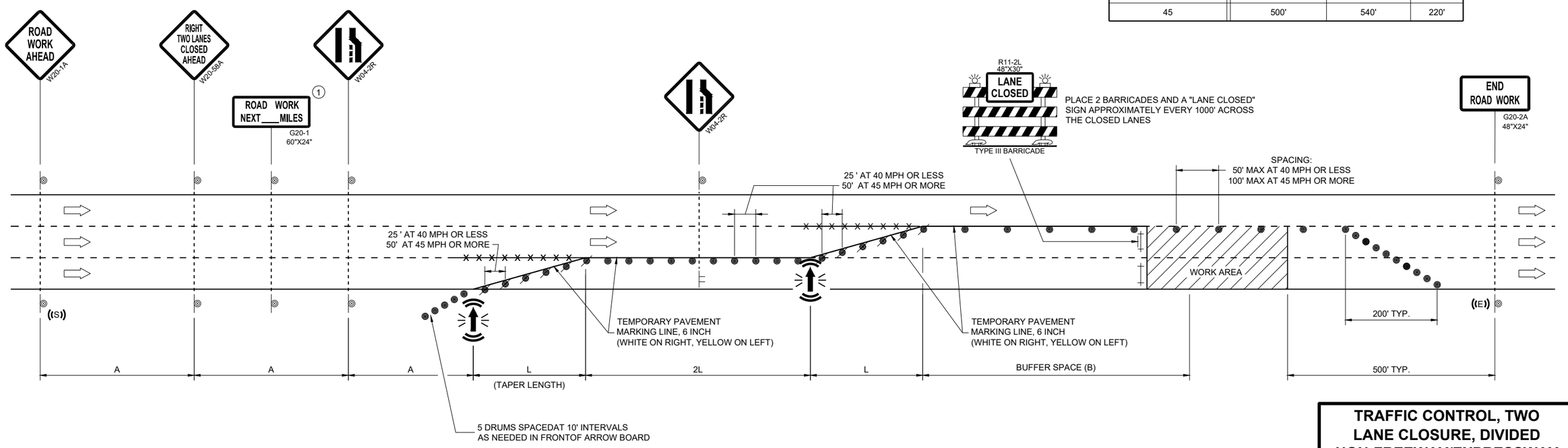
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

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

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'



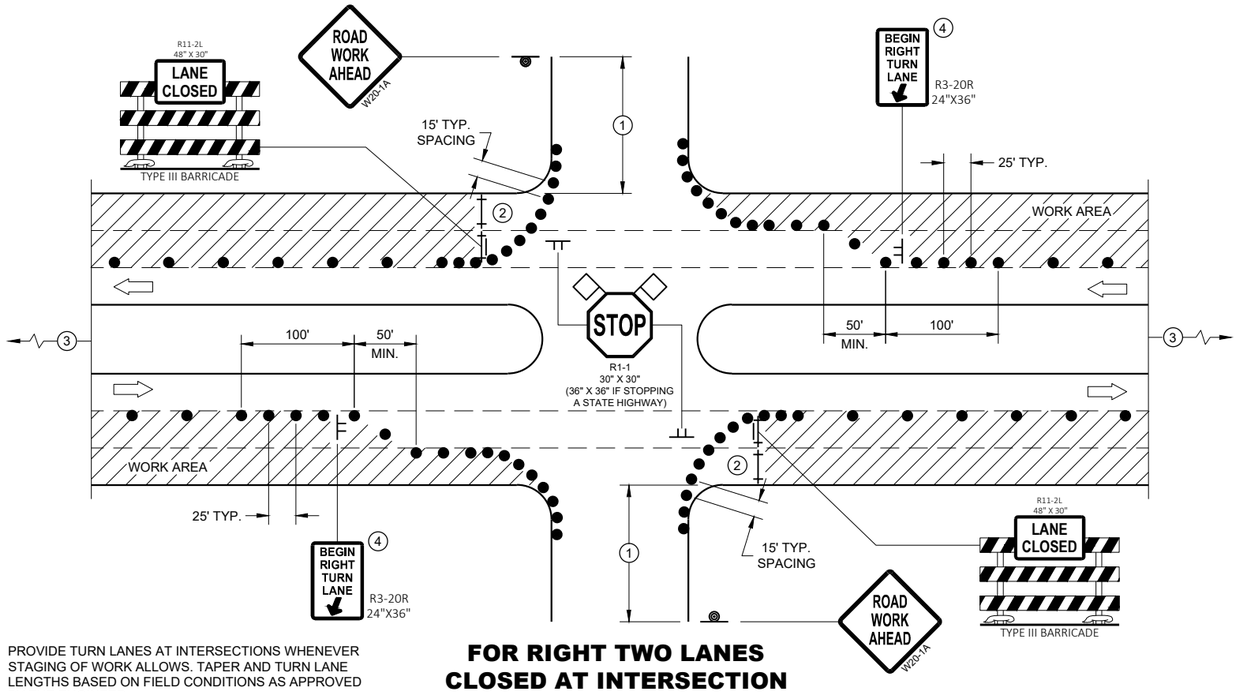
TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6
SDD 15D22-07



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

FOR RIGHT TWO LANES CLOSED AT INTERSECTION

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

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

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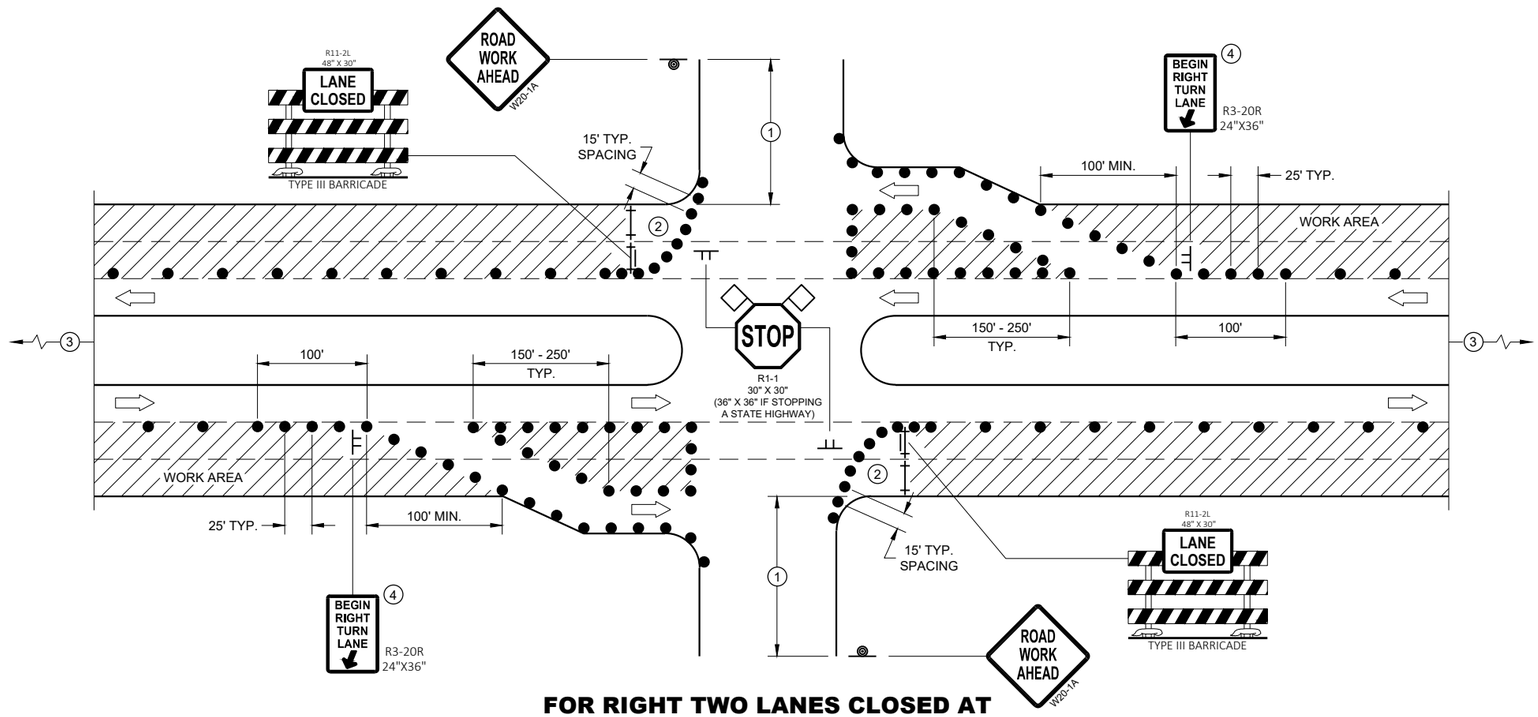
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR RIGHT TWO LANES CLOSED AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

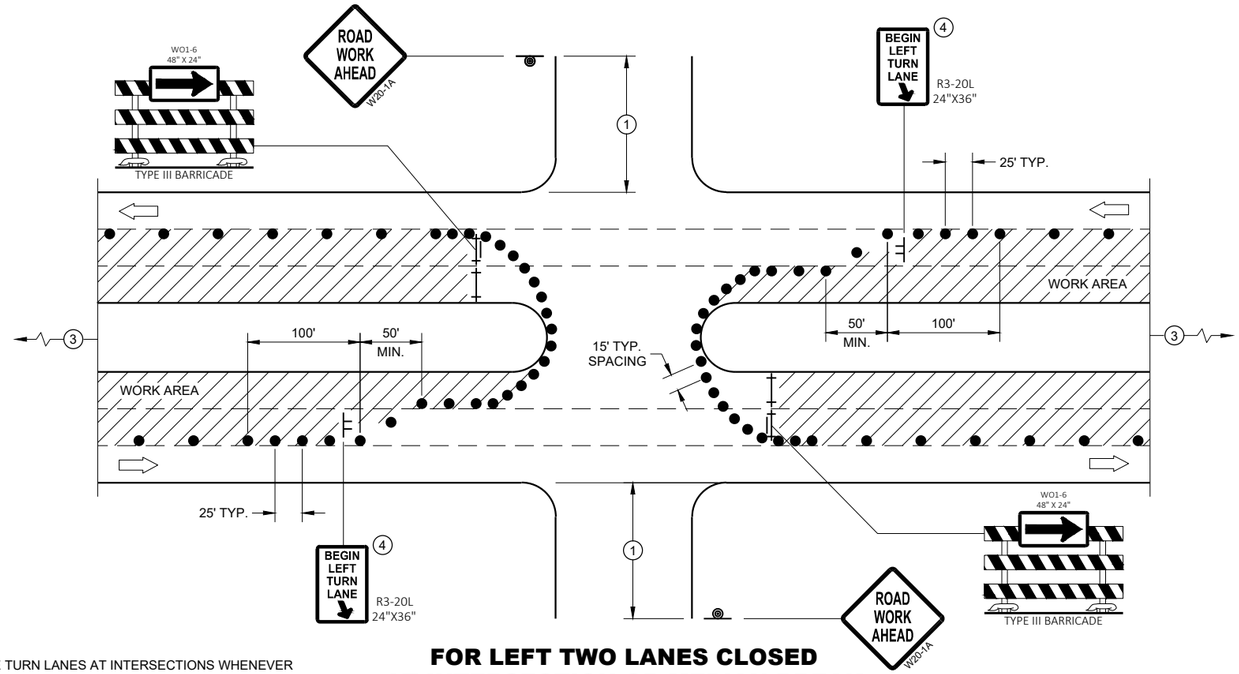
- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN TWO RIGHT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D23 - 07a



FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK

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

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

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

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

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

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

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

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

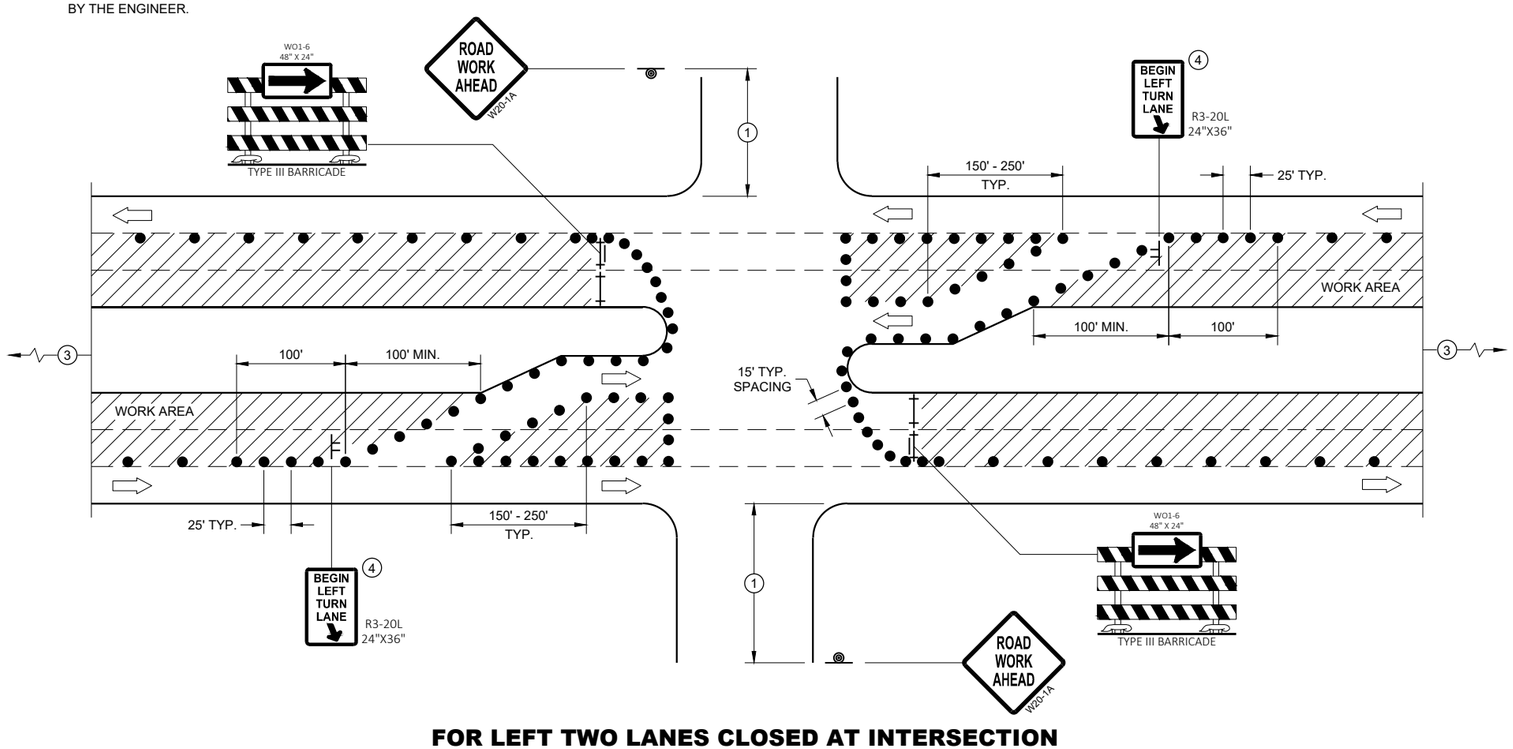
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN TWO LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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SDD15D23 - 07b

LEGEND

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

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

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

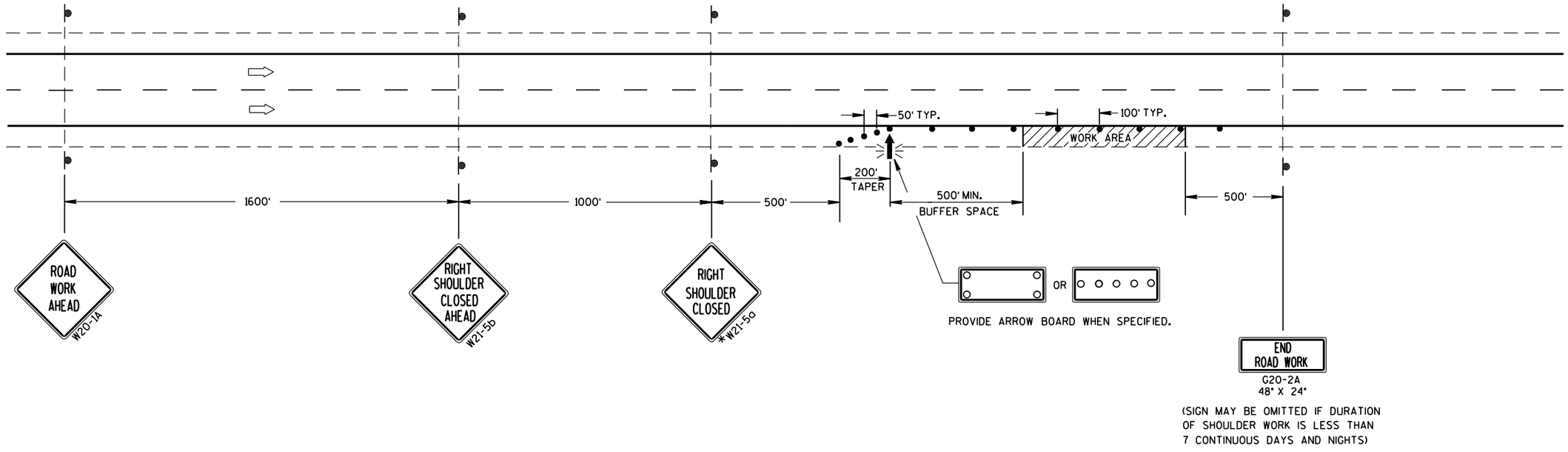
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

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

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

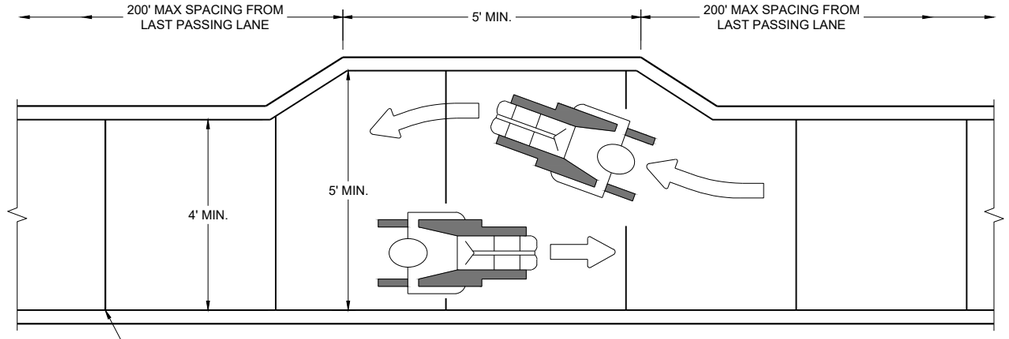
June 2016 — DATE

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

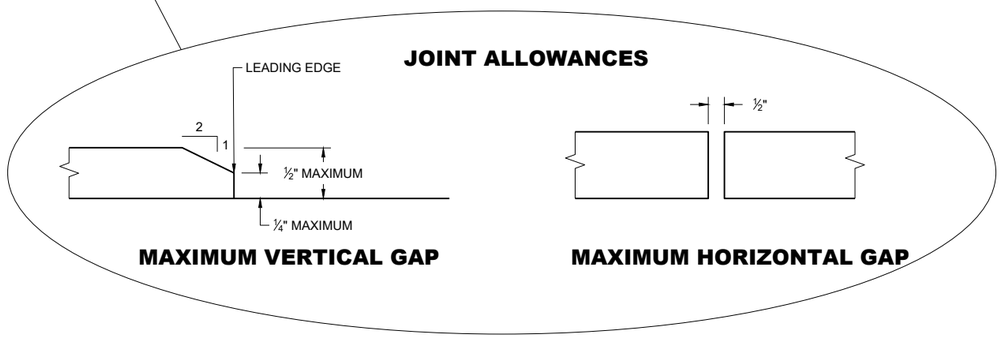
FHWA

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S.D.D. 15 D 27-3



NARROW SIDEWALK PASSING DETAIL



MAXIMUM VERTICAL GAP

MAXIMUM HORIZONTAL GAP

GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

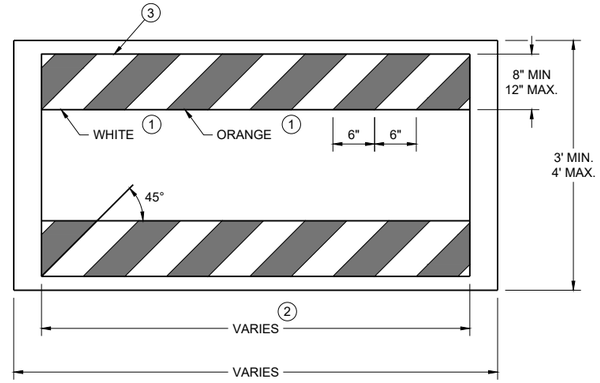
(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

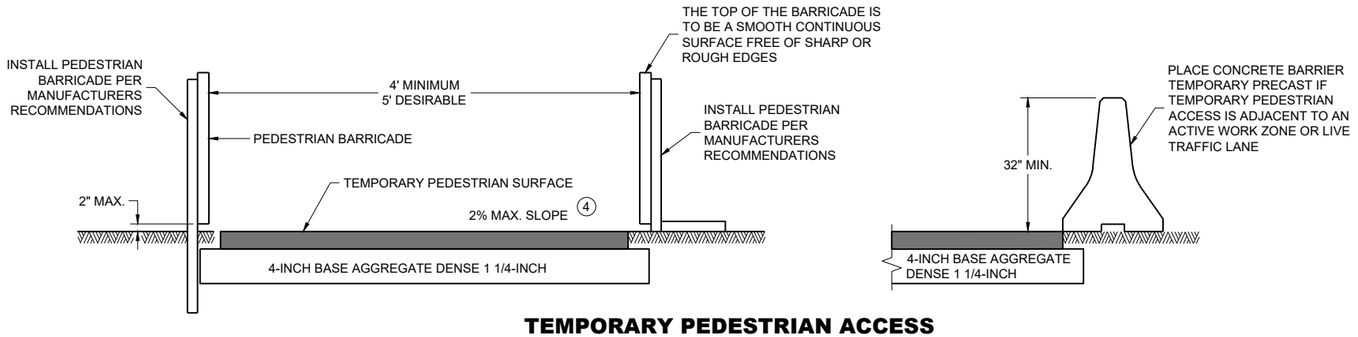
(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

(4) WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.



TEMPORARY PEDESTRIAN BARRICADE *



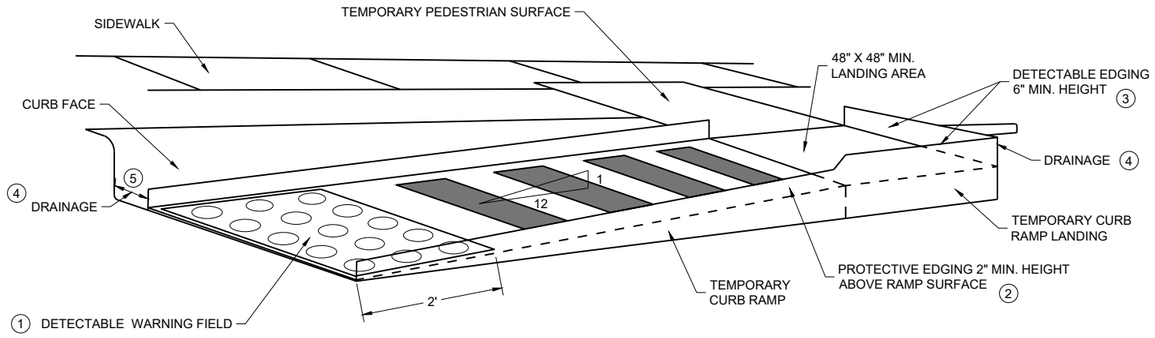
TEMPORARY PEDESTRIAN ACCESS

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-10a



PERSPECTIVE VIEW

GENERAL NOTES

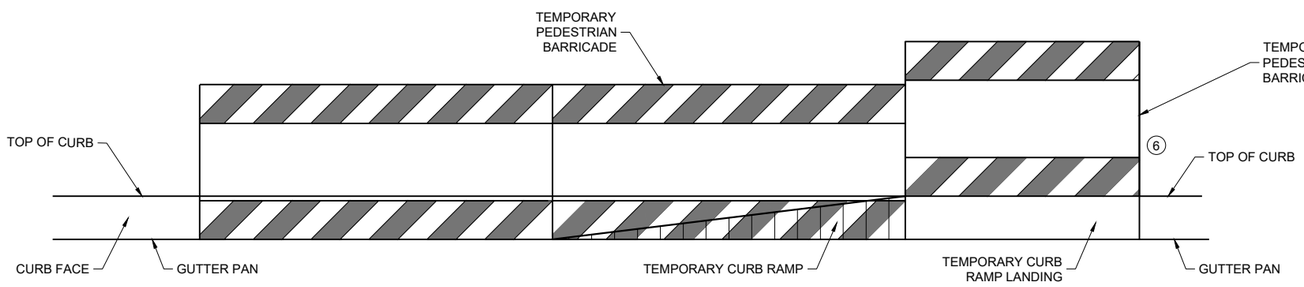
CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

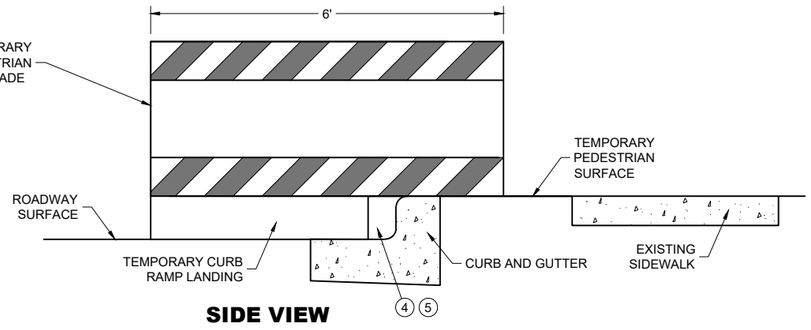
CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

1. INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.
2. PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
3. DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
5. ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.
6. IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



FRONT VIEW



SIDE VIEW

TEMPORARY CURB RAMP PARALLEL TO CURB

6

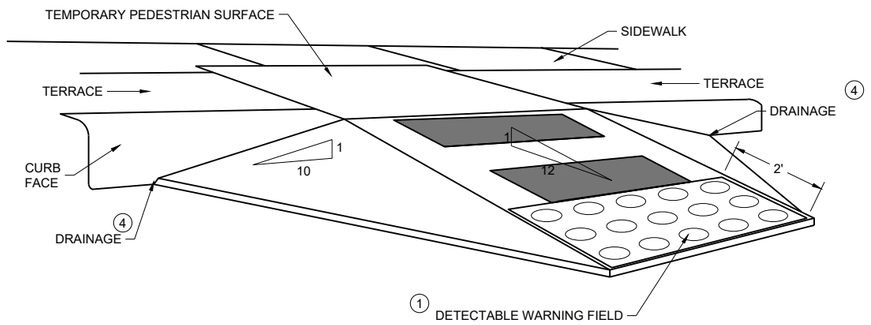
SDD 15D30-10b

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

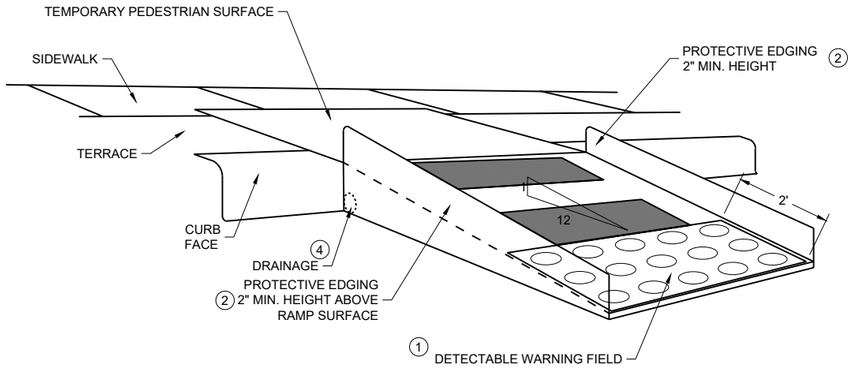
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-10b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

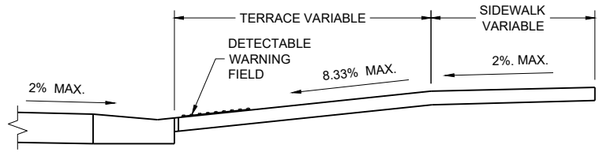
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

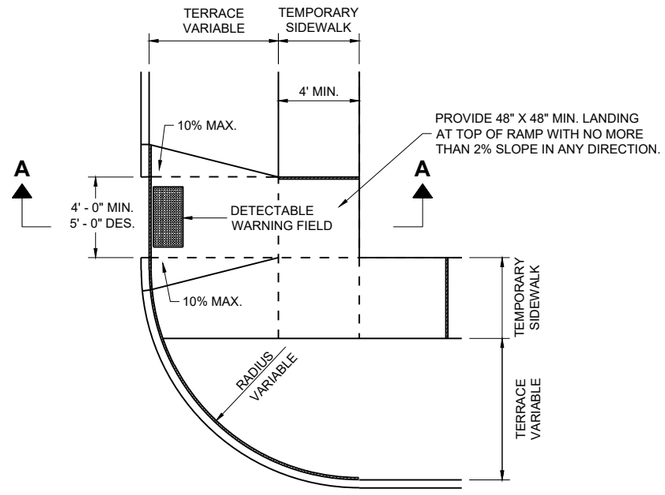
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

GENERAL NOTES



SECTION A - A



PLAN VIEW
TEMPORARY TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

6

SDD 15D30-10d

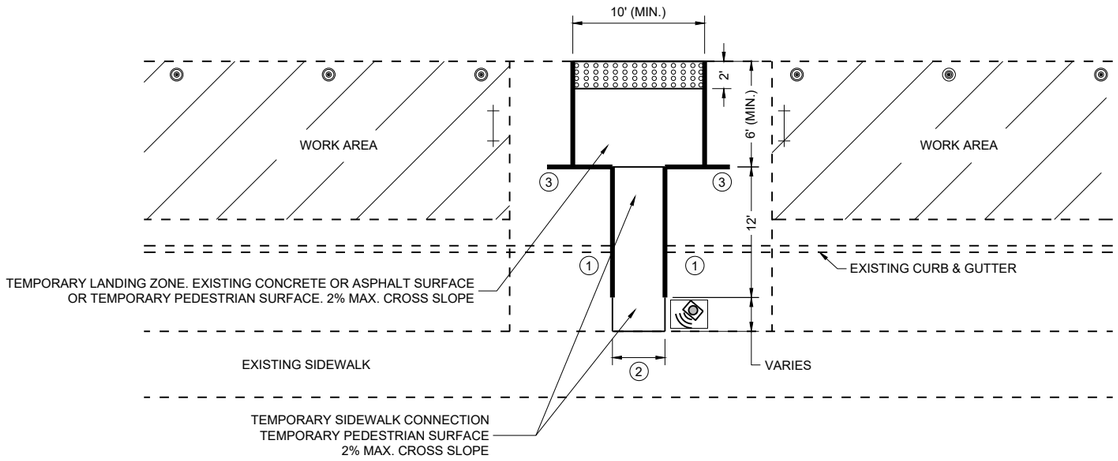
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

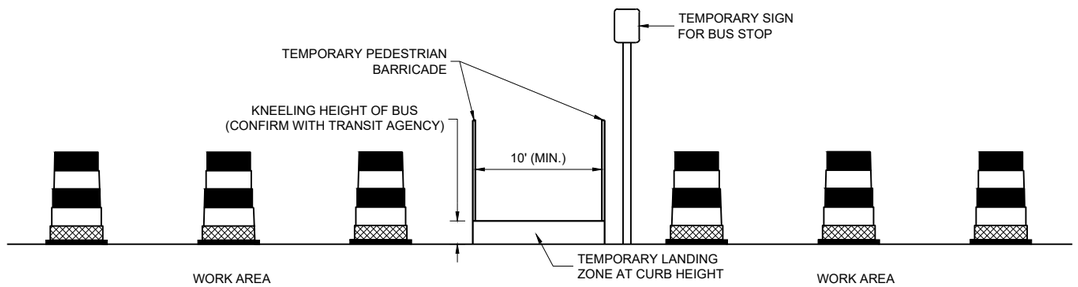
APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — <position>
FHWA

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SDD 15D30-10d



PLAN VIEW



PROFILE VIEW TEMPORARY BUS STOP PAD

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

(1) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(2) 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.

(3) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

6

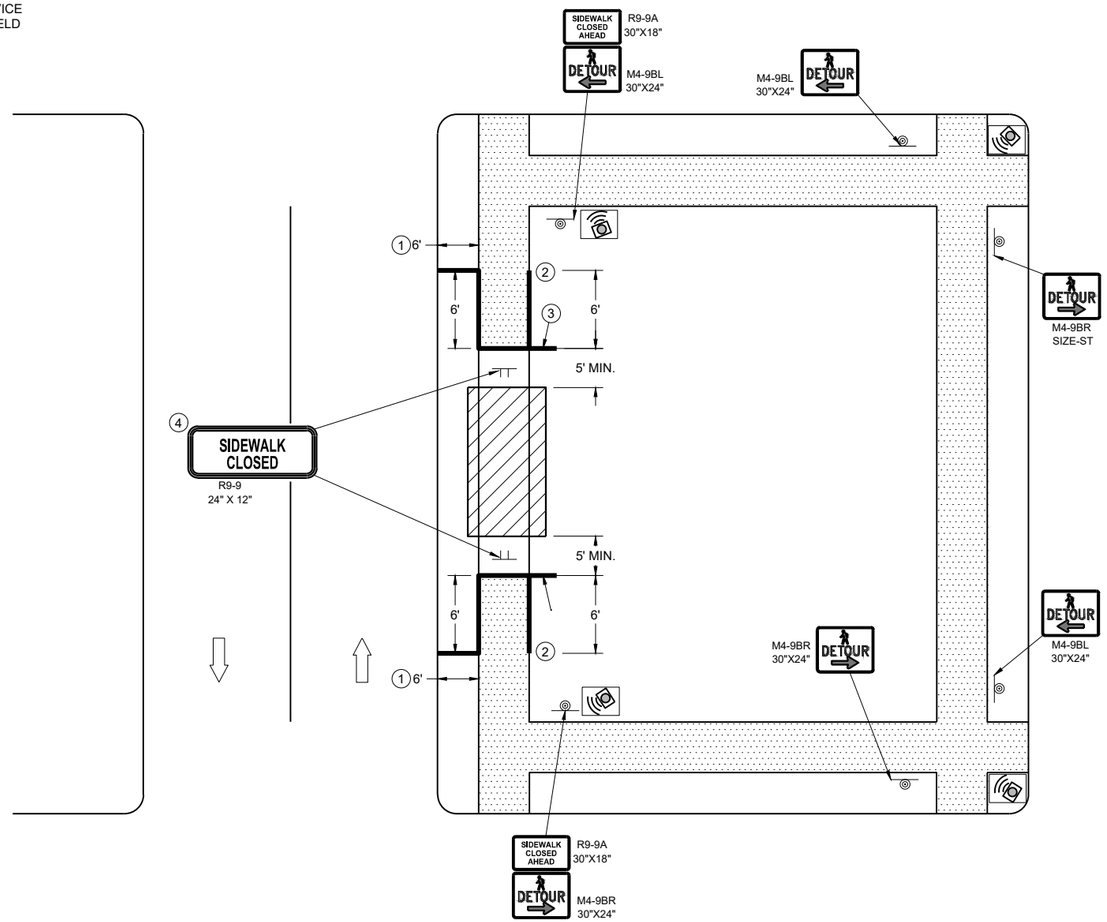
SDD 15D30-10e

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



GENERAL NOTES

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

SIGN ON TEMPORARY SUPPORT

WORK AREA

UNDER PEDESTRIAN TRAFFIC

TEMPORARY PEDESTRIAN SURFACE

TEMPORARY PEDESTRIAN BARRICADE

OPTIONAL TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

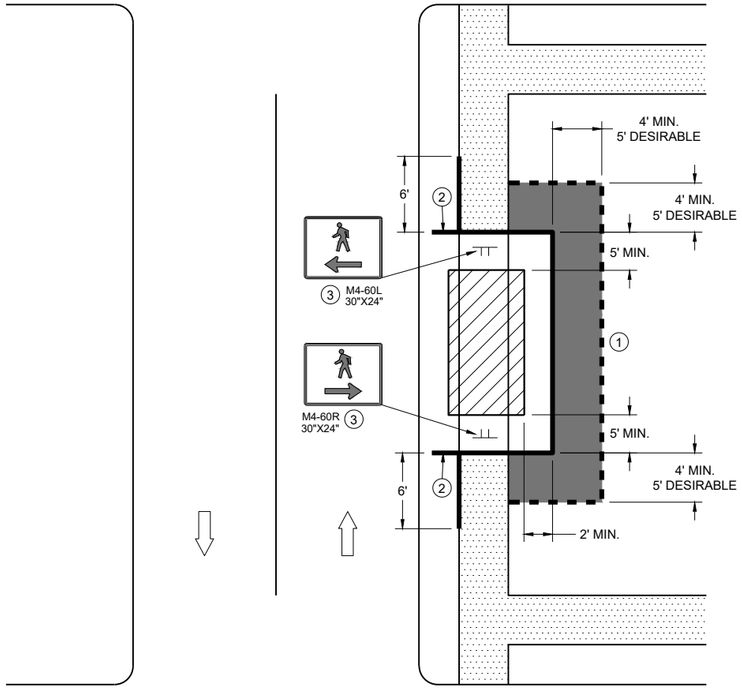
WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

(1) USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.

(2) IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.

(3) MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK BYPASS
SINGLE SIDE

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-10g

6

SDD 15D30-10g

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

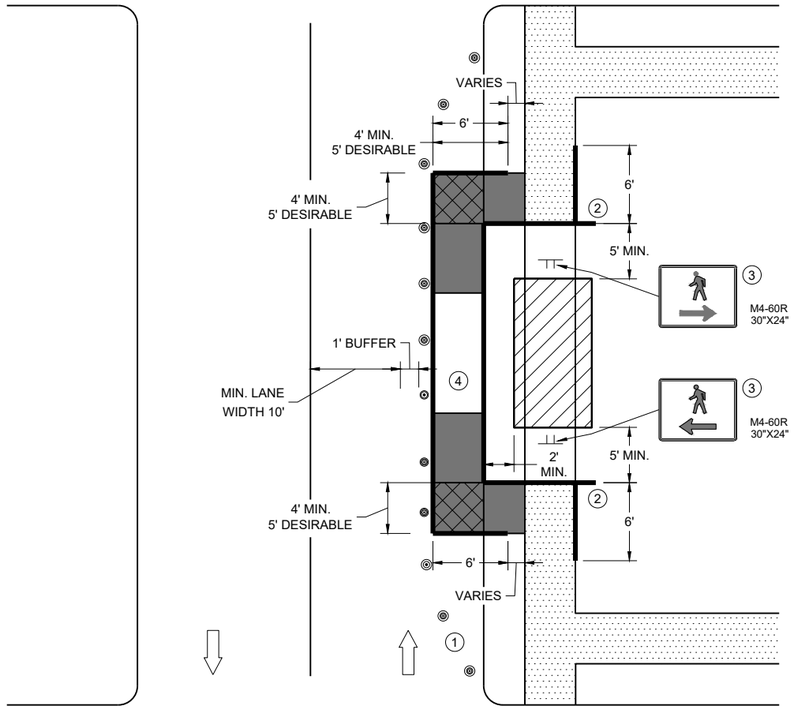
WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

(1) SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.

(2) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.

(3) MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

(4) USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURFACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE. WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.



SIDEWALK BYPASS, SINGLE SIDE

6

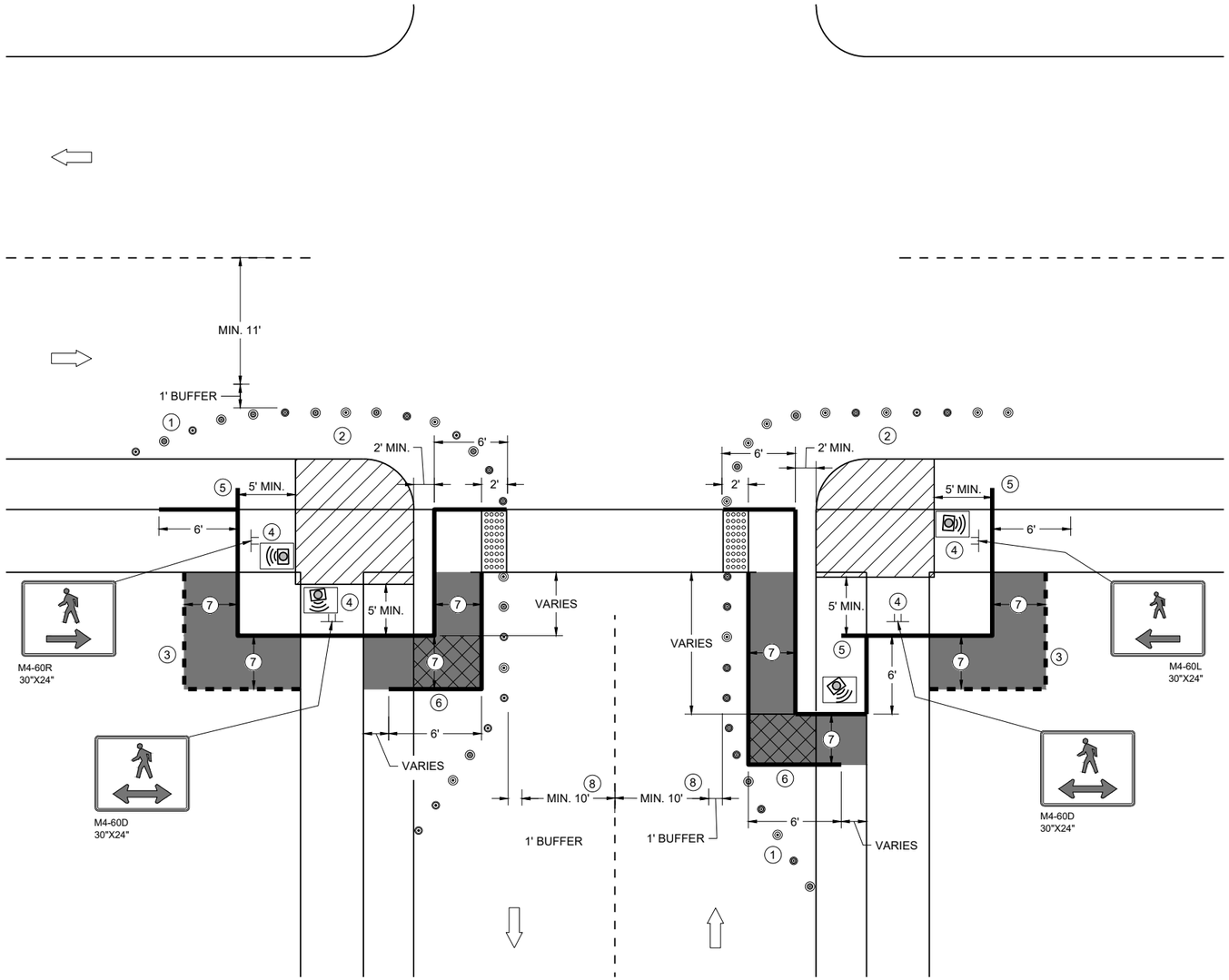
SDD 15D30-10h

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SDD 15D30-10h

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

(1) SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.

(2) PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS

(3) USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.

(4) MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.

(5) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.

(6) IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.

(7) 4 FEET MINIMUM, 5 FEET DESIRABLE

(8) IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

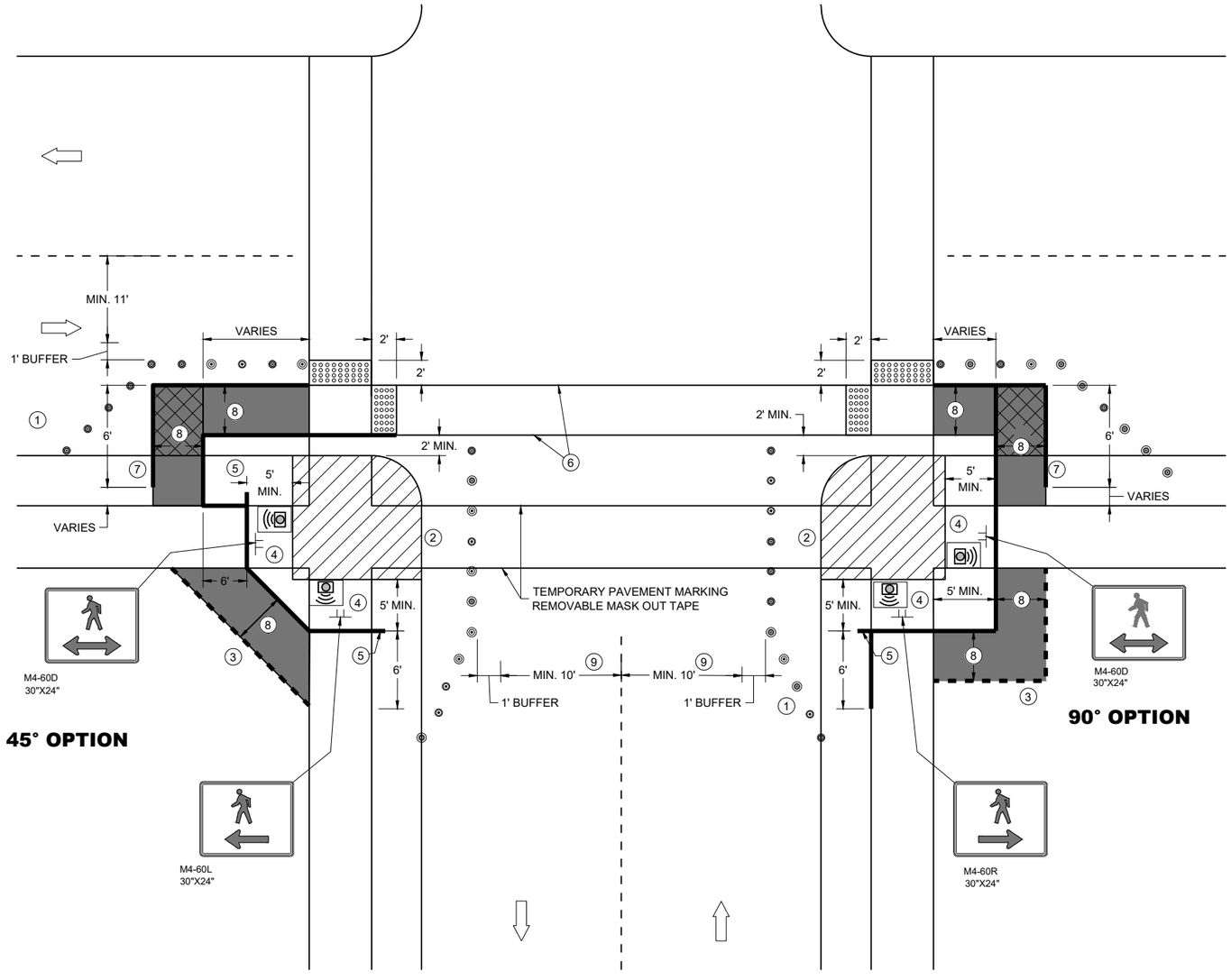
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-10i



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. WHITE 6" TEMPORARY PAVEMENT MARKING
7. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
8. 4 FEET MINIMUM, 5 FEET DESIRABLE
9. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

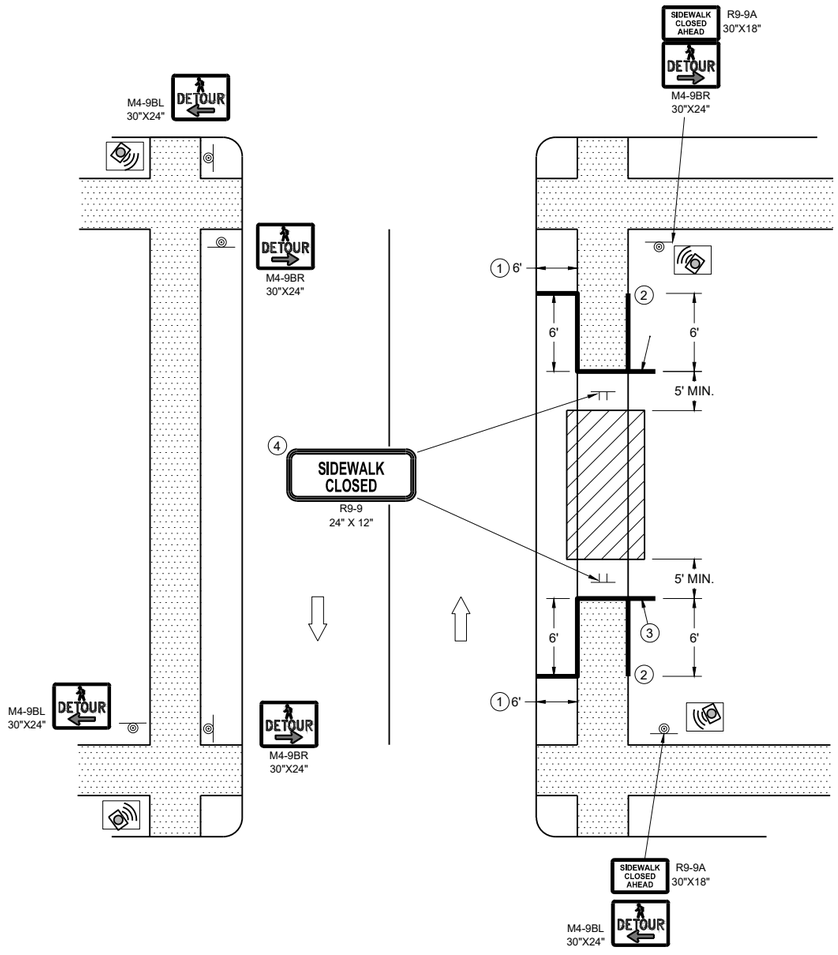
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 15D30-10j

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

GENERAL NOTES

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

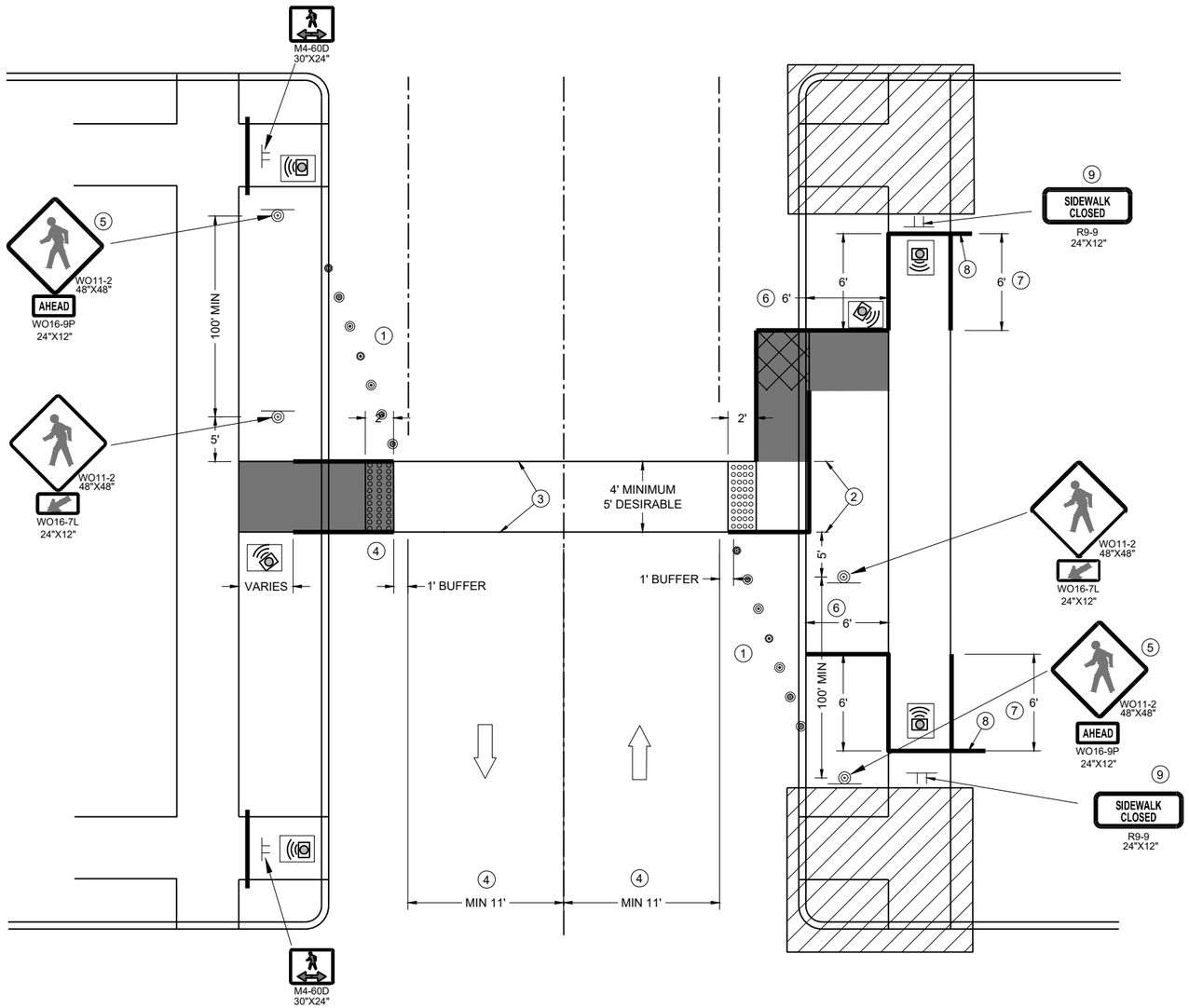
1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-10k



TEMPORARY PEDESTRIAN CROSSING

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT PEDESTRIAN FACILITIES CLOSURES.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

1. SHOULDER OR LANE CLOSURE ADVANCED WARNING AND PROPER BUFFER SPACE REQUIRED.
2. 4 FEET MINIMUM, 5 FEET DESIRABLE.
3. WHITE 6" TEMPORARY PAVEMENT MARKING.
4. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, PERPENDICULAR CURB RAMPS MAY NEED TO BE UTILIZED.
5. IF MINIMUM 100' SPACING FROM THE MID-BLOCK CROSSING CANNOT BE ATTAINED BEFORE THE INTERSECTION, REMOVE THIS SIGN ASSEMBLY.
6. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
7. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
8. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF THE EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
9. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF THE SIGN.

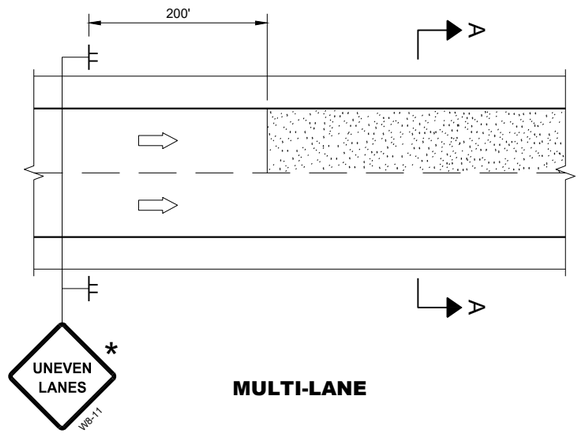
LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

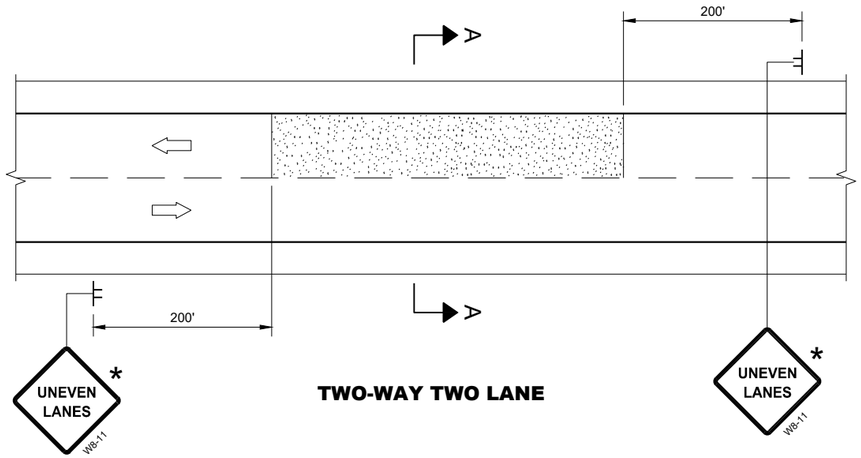
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 15D30-10I



MULTI-LANE



TWO-WAY TWO LANE

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

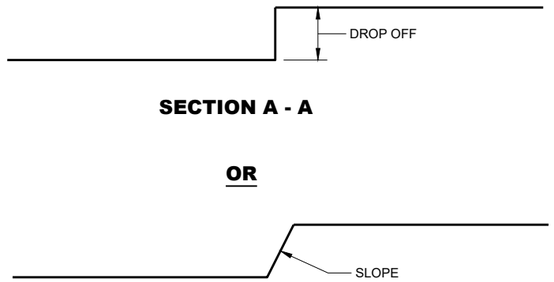
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

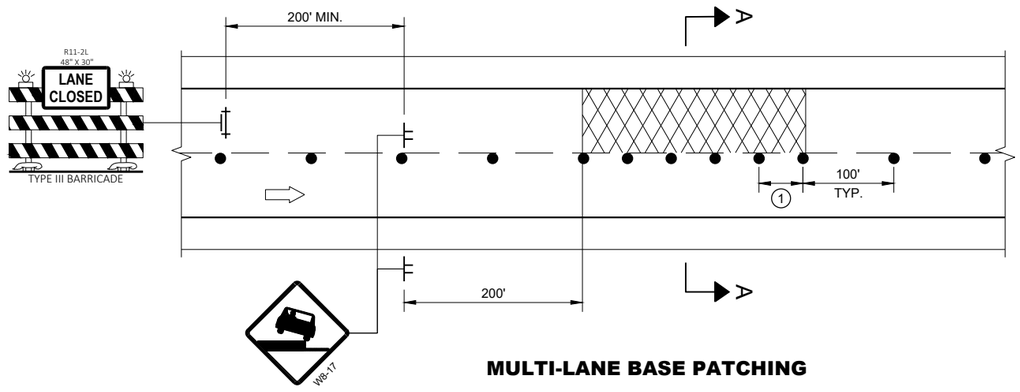
* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

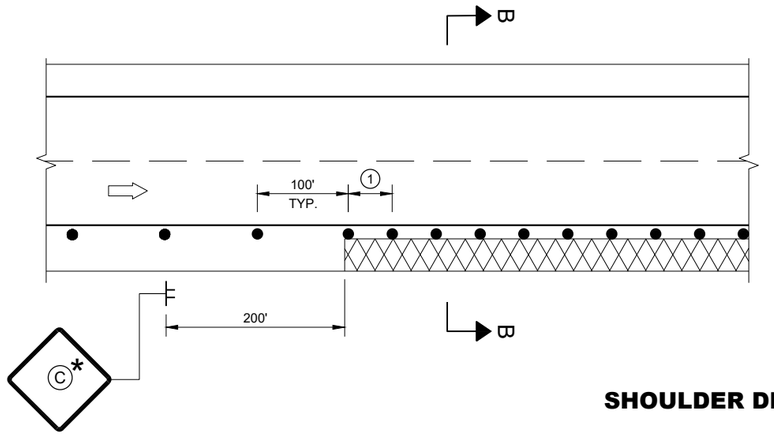
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE



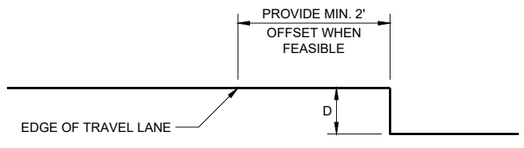


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

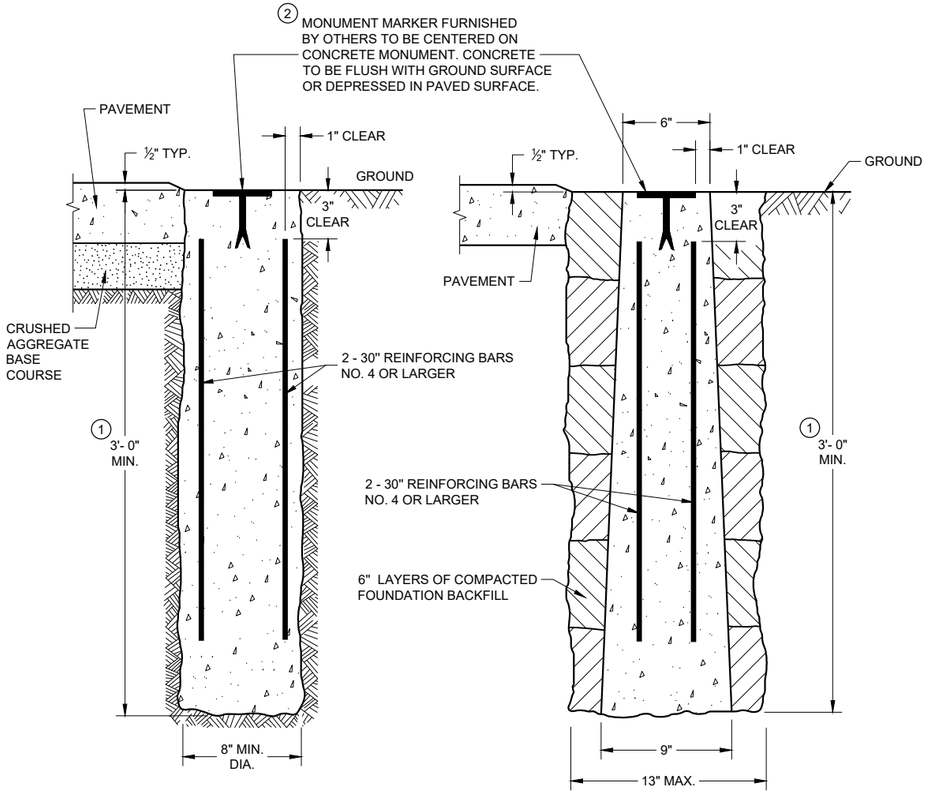
APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

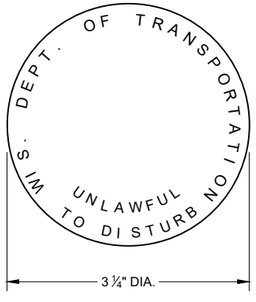
6

SDD 15D39 - 02



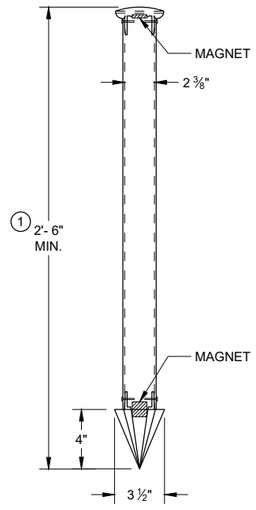
CAST-IN-PLACE **PRECAST**

CONCRETE MONUMENTS
TYPE A

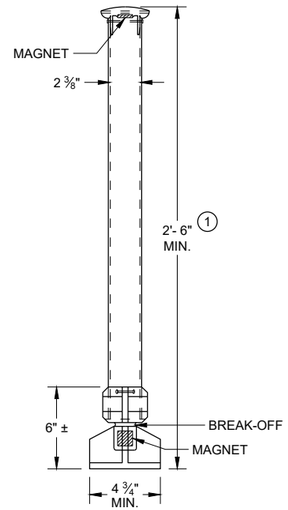


② **WIS DOT MONUMENT MARKER LOGO**

FOR TYPES "A", "C" & "D"

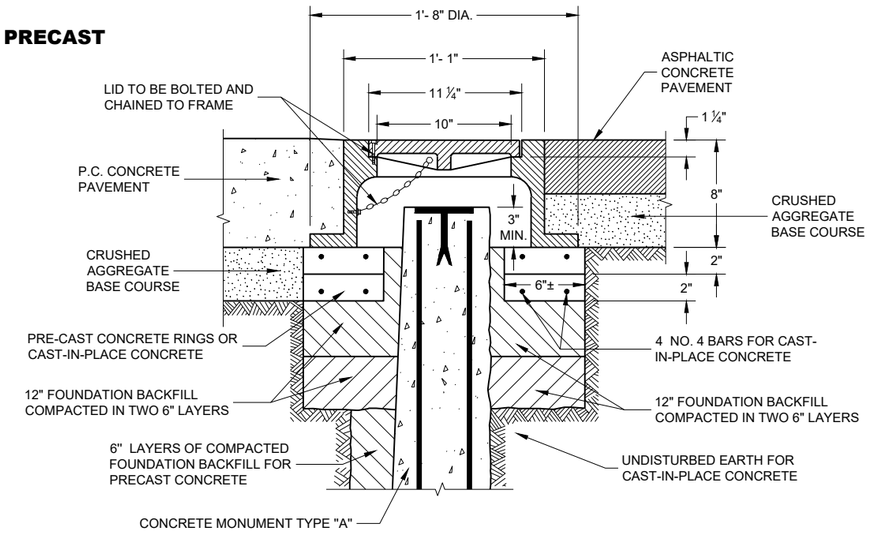


TYPE C DRIVEN MONUMENT



TYPE D NON-DRIVEN BREAK-OFF MONUMENT

ALUMINUM MONUMENTS
(INCLUDES MARKER)



CAST IRON MONUMENT COVER
(APPROXIMATE WEIGHT 95 LBS)

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.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

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.

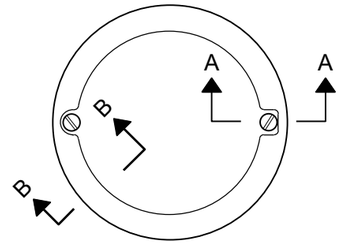
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

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.

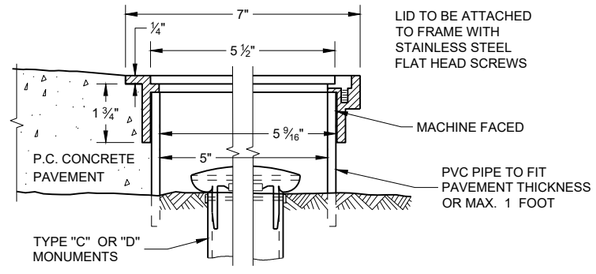
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

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 WISDOT MARKER.



TOP VIEW



SECTION B-B **SECTION A-A**

ALUMINUM MONUMENT COVER
(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Raymond A. Kumapayii
CHIEF SURVEYING AND MAPPING ENGINEER

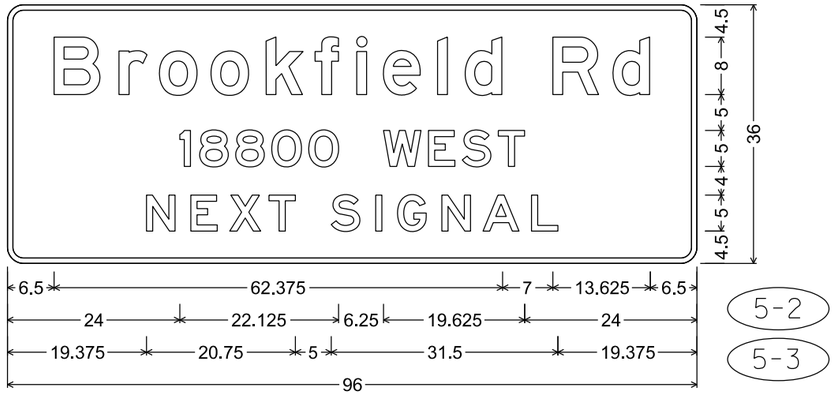
FHWA

6

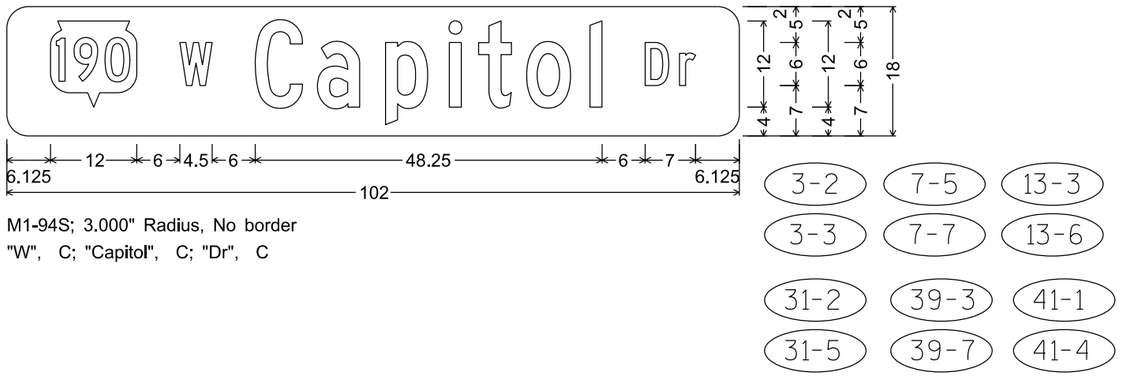
SDD 16A01 - 07

NOTES

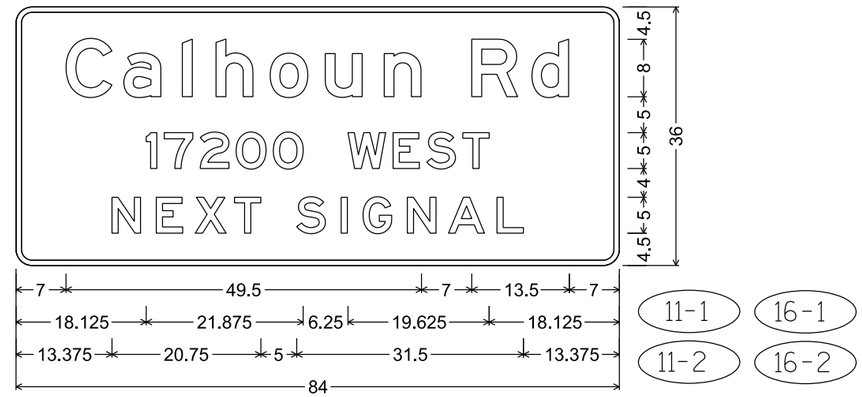
1. Signs are Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted



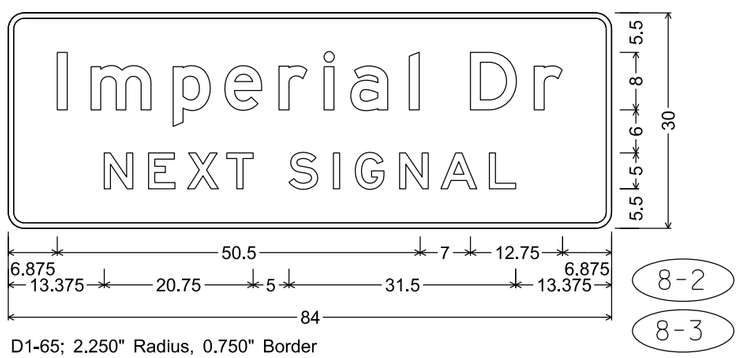
D1-65; 2.250" Radius, 0.750" Border



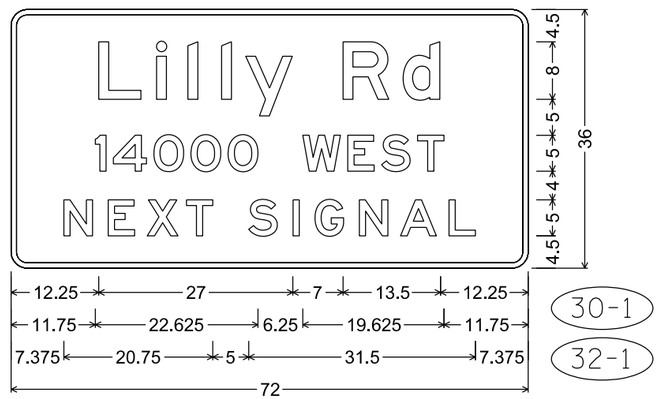
M1-94S; 3.000" Radius, No border
"W", C; "Capitol", C; "Dr", C



D1-65; 2.250" Radius, 0.750" Border



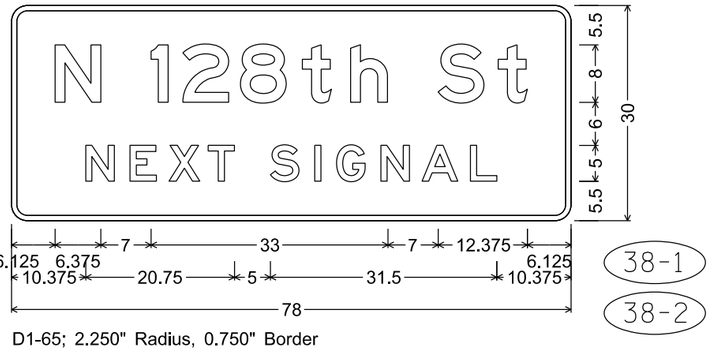
D1-65; 2.250" Radius, 0.750" Border



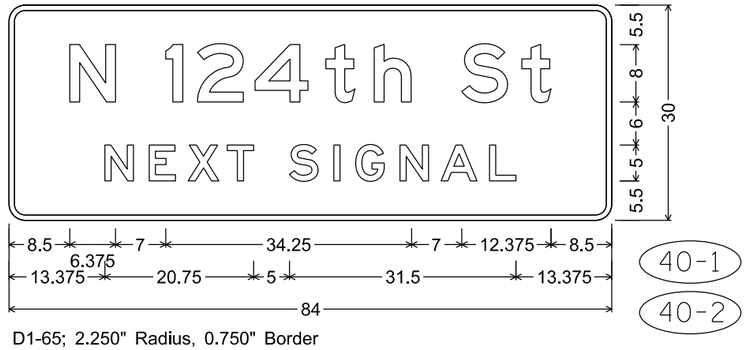
D1-65; 2.250" Radius, 0.750" Border

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E



D1-65; 2.250" Radius, 0.750" Border



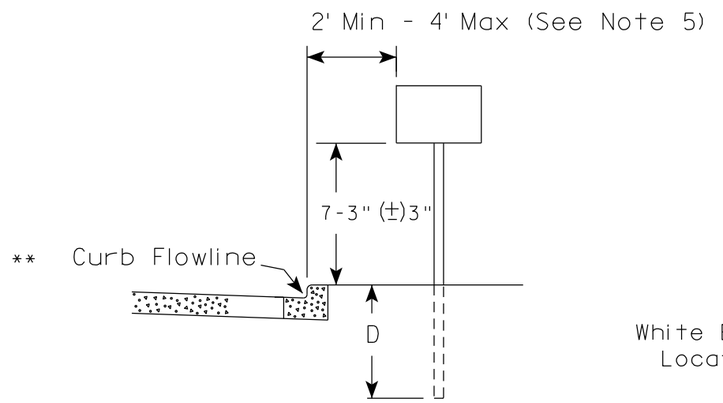
D1-65; 2.250" Radius, 0.750" Border

7

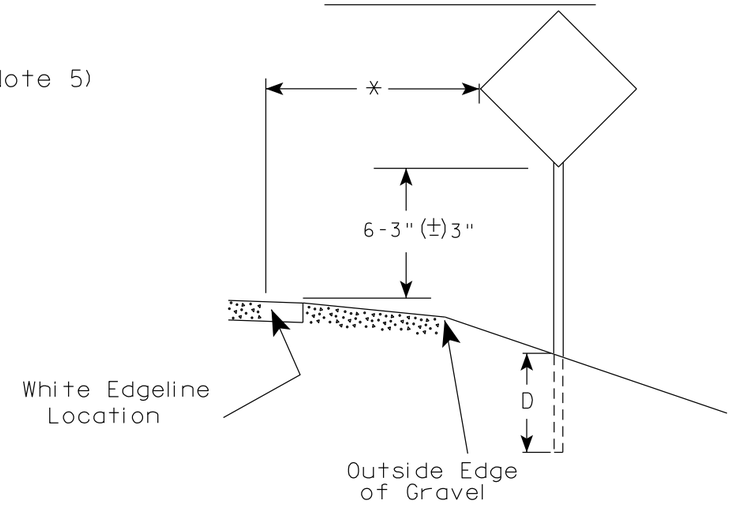
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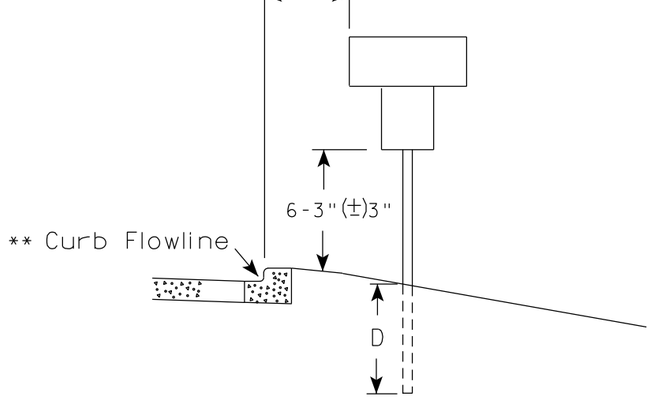
PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET NO: 636	E

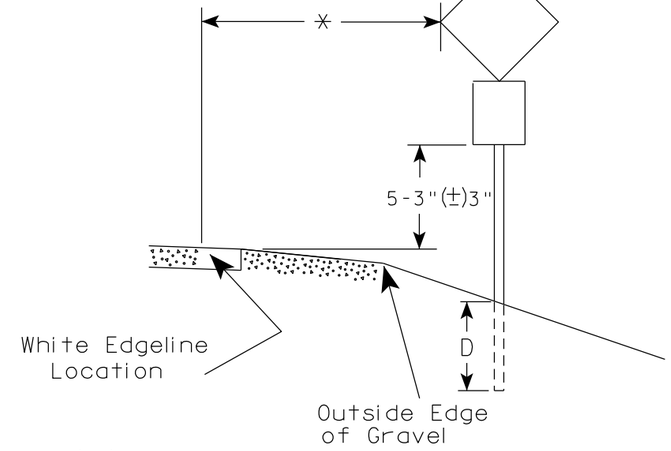
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

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

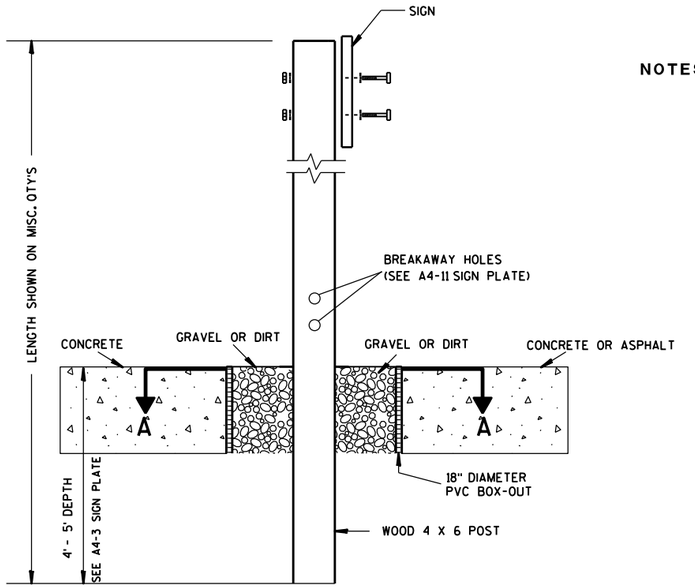
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

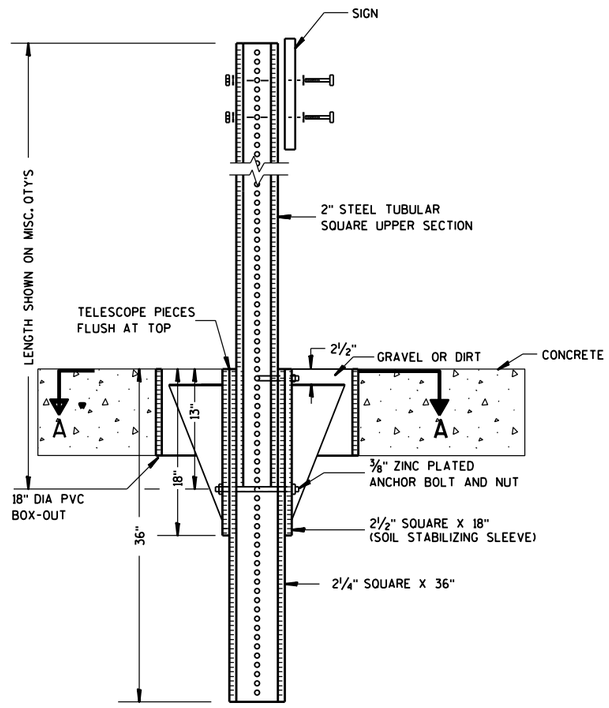
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 637	E



ELEVATION VIEW

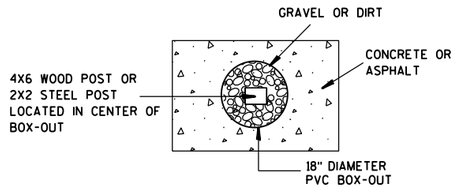
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

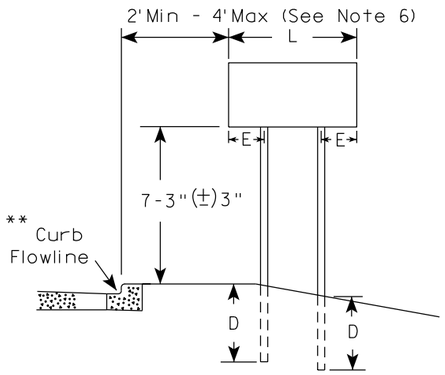
APPROVED Matthew R Rauch
for State Traffic Engineer

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

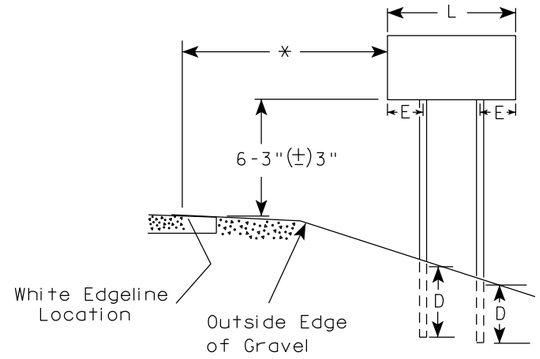
638

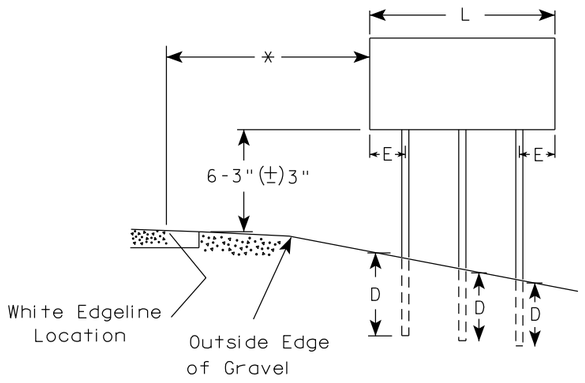
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

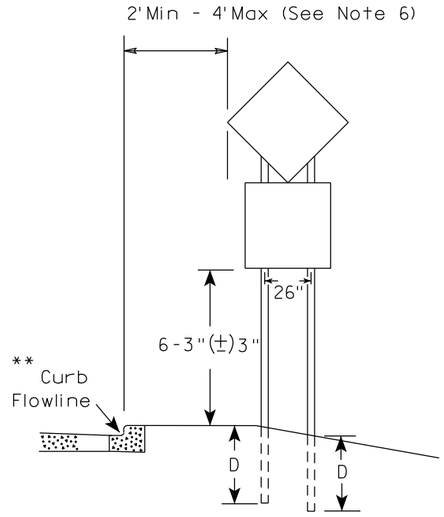
URBAN AREA



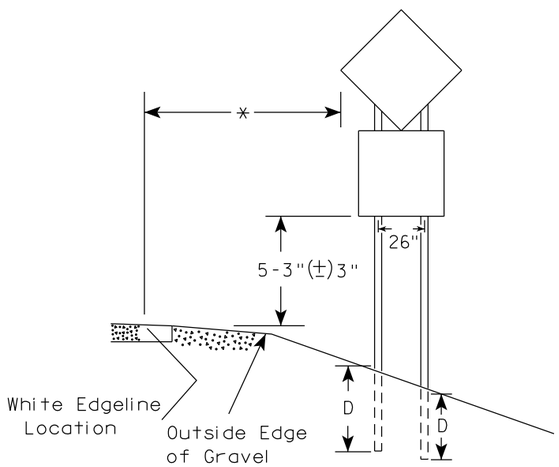
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

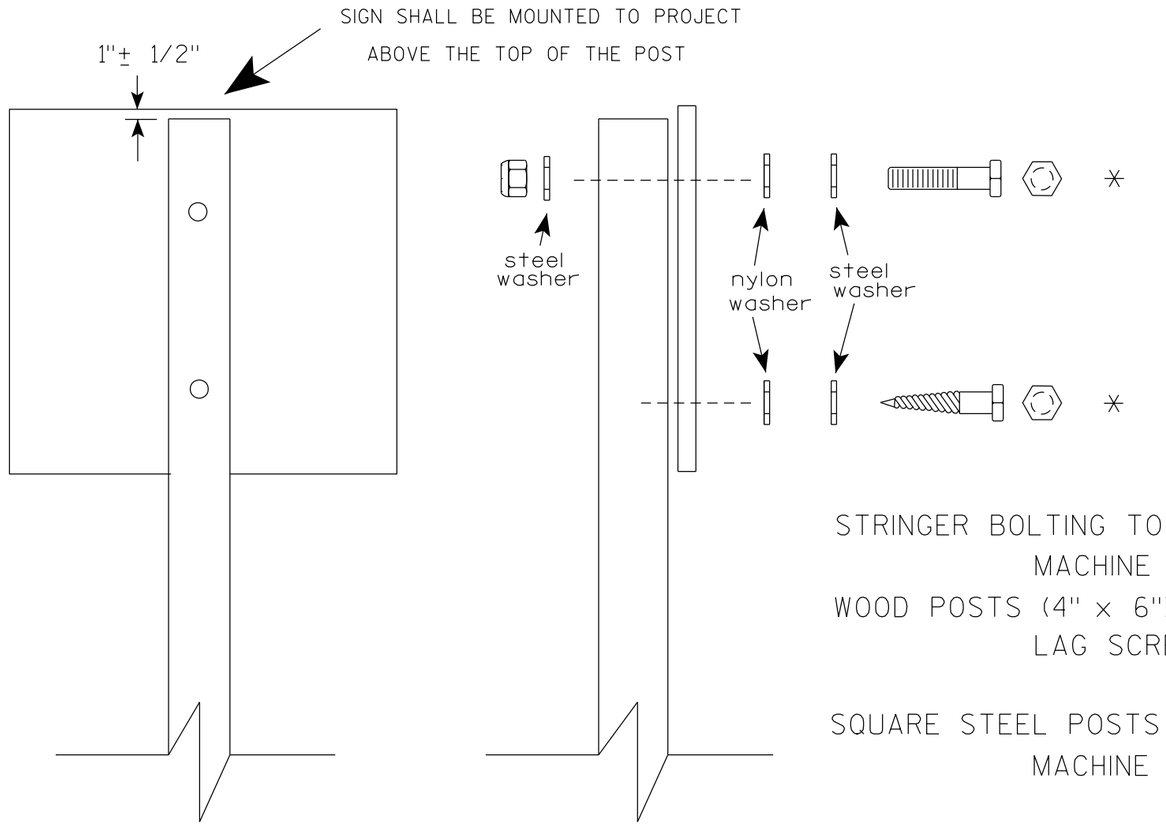
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 639	E



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

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

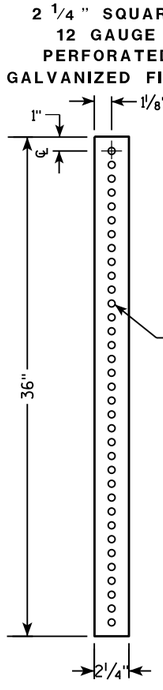
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

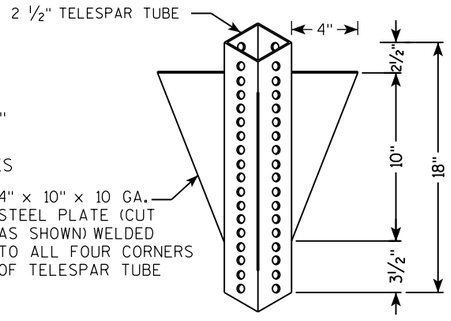
SHEET NO: 640 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

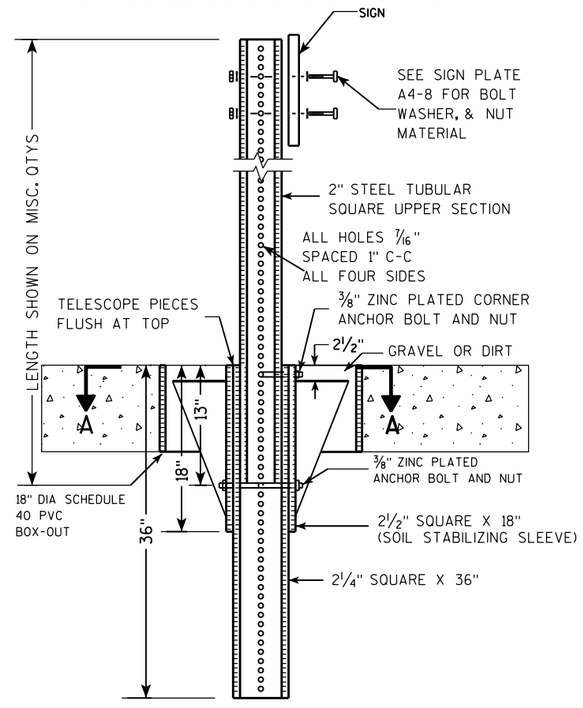
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



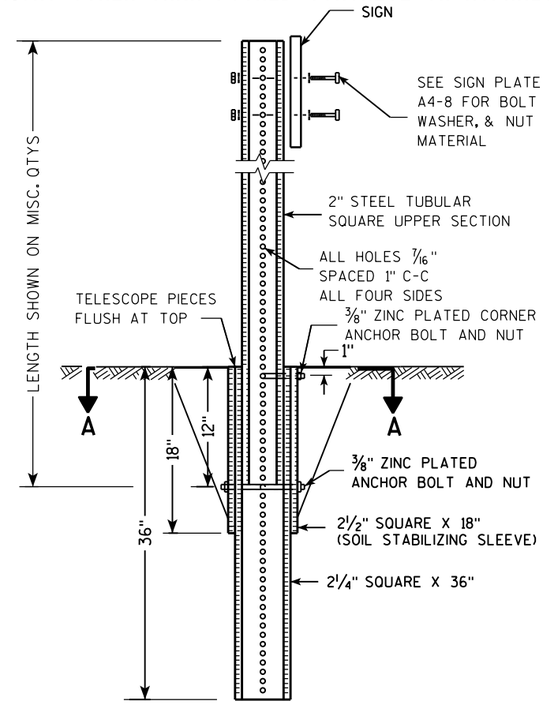
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

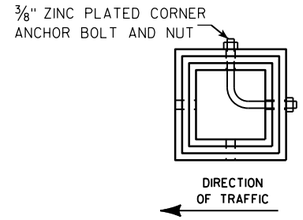


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

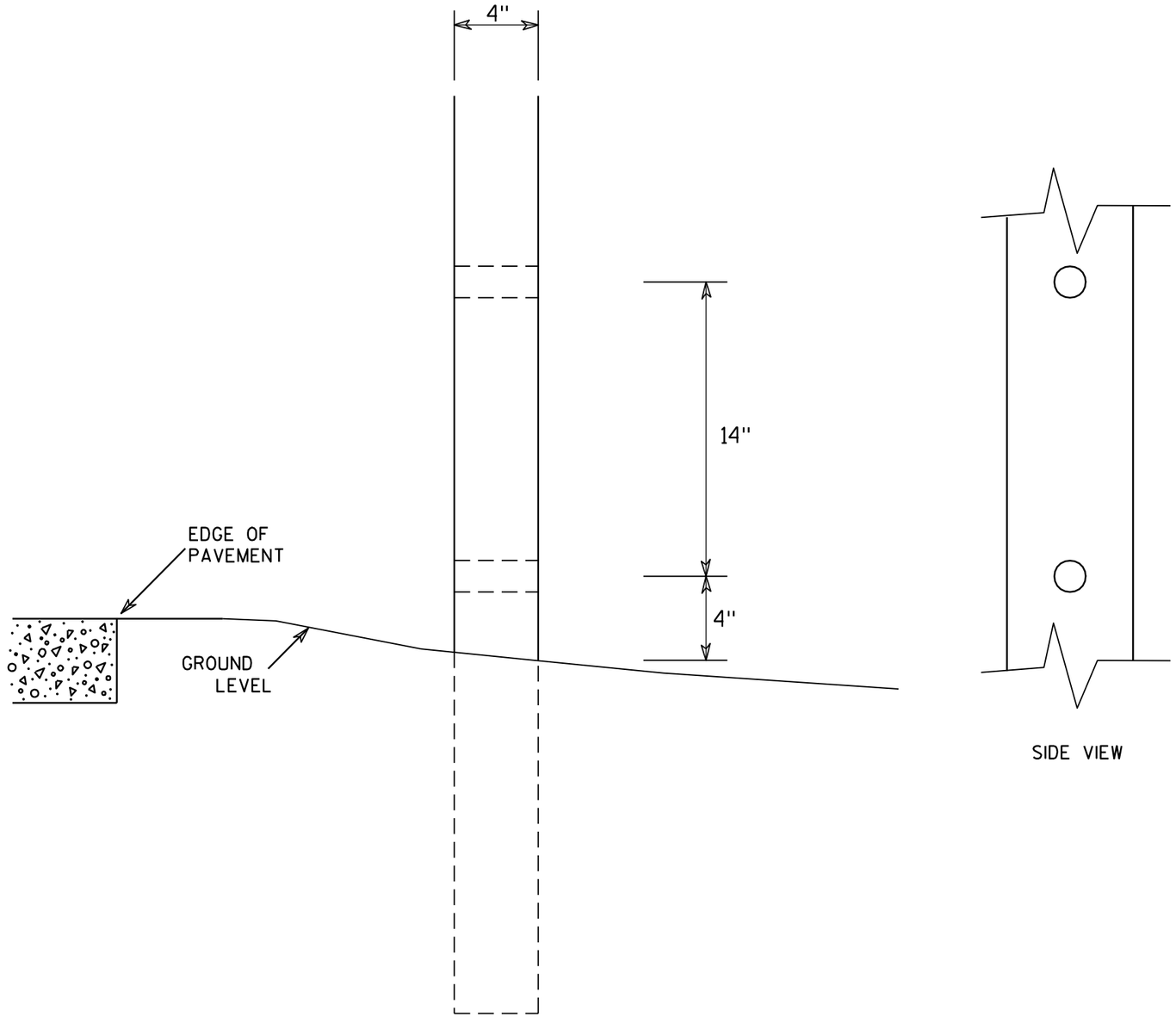
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 641 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

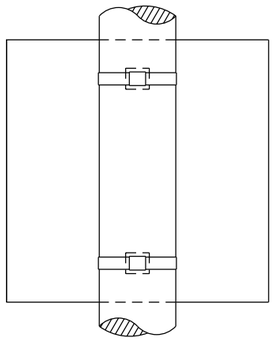
APPROVED Chester J Spang for State Traffic Engineer

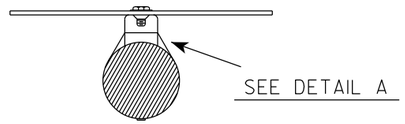
DATE 3/27/97 PLATE NO. A4-11.2

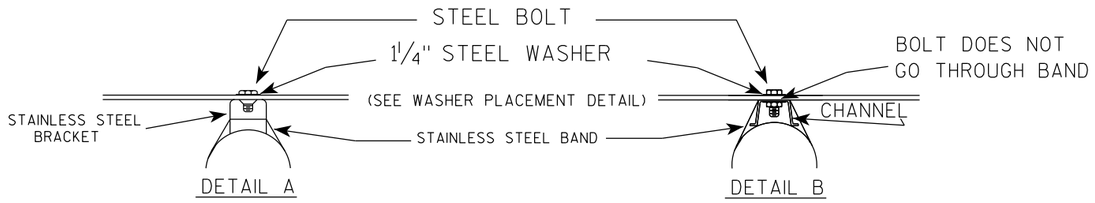
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 642	E

BANDING

SINGLE SIGN



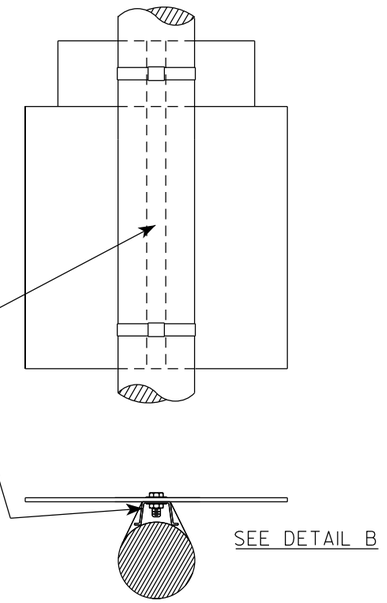




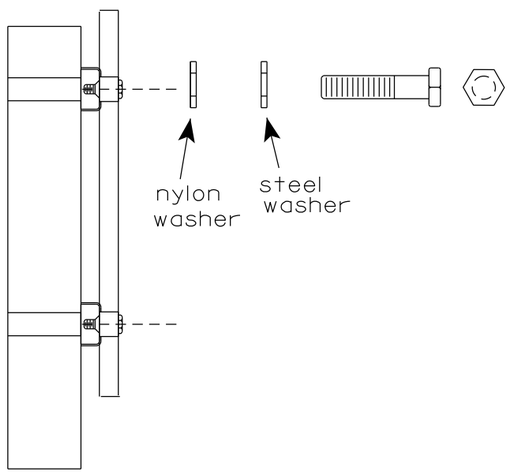
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

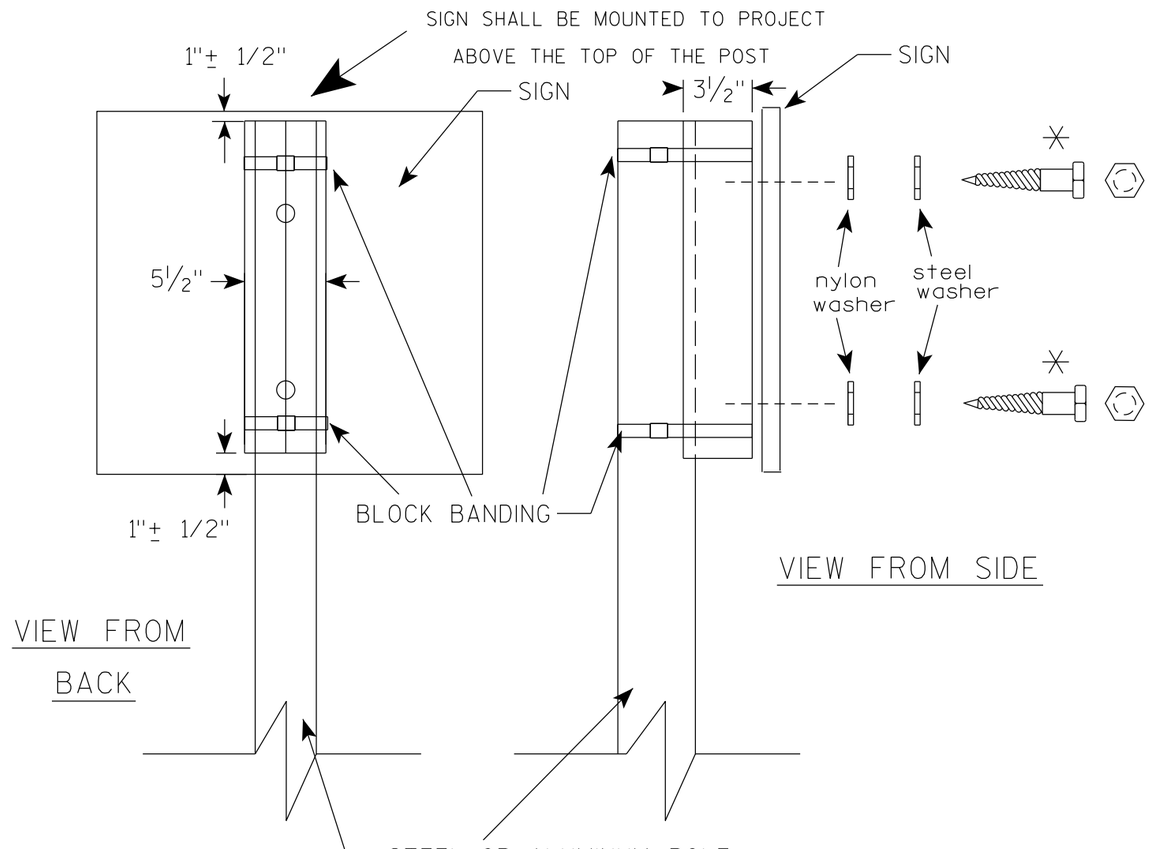
WISCONSIN DEPT OF TRANSPORTATION

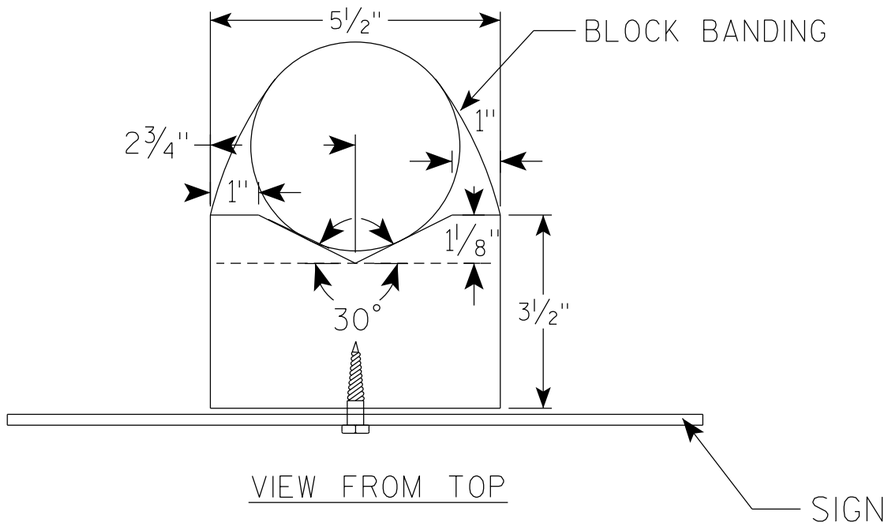
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-9.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 643	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

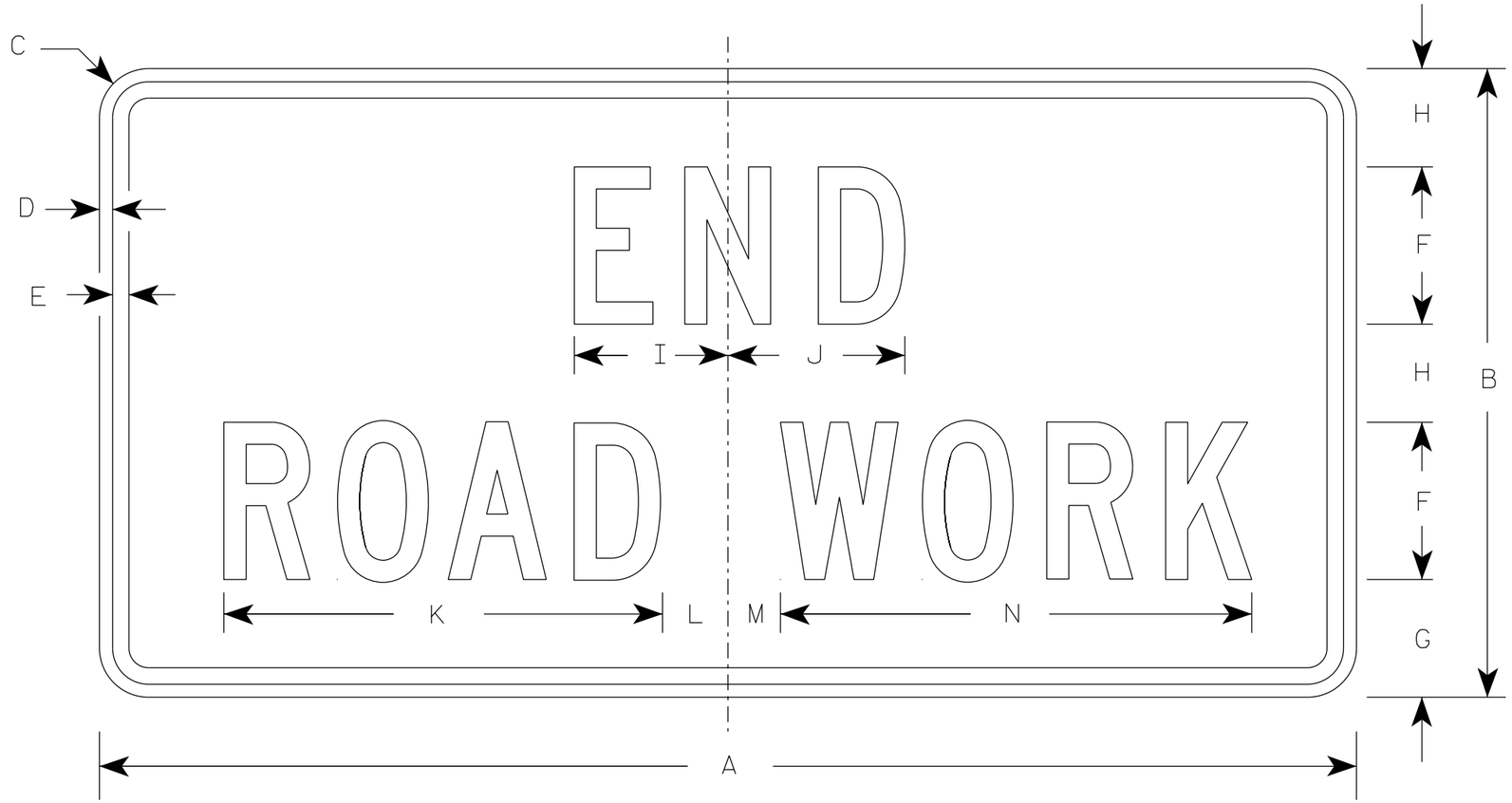
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 644 E



G20-2A

NOTES

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

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

STANDARD SIGN

G20-2A

WISCONSIN DEPT OF TRANSPORTATION

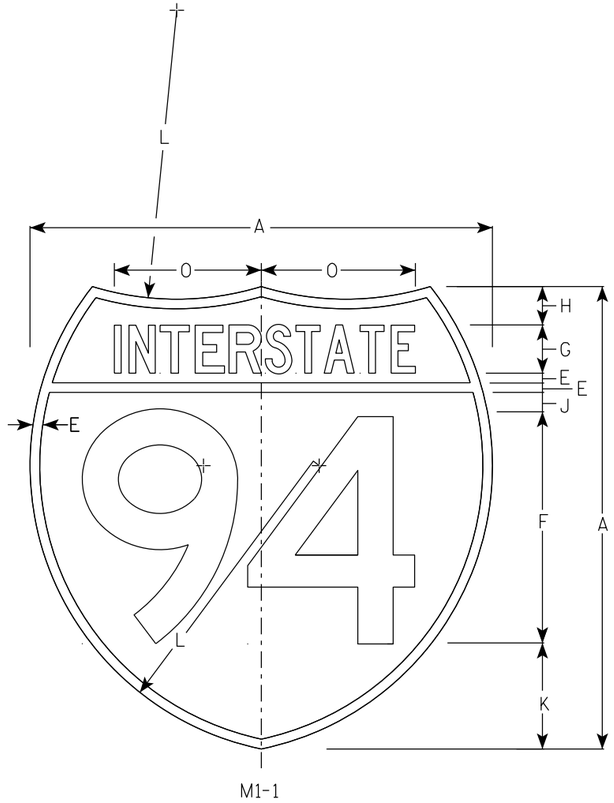
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-2A.10

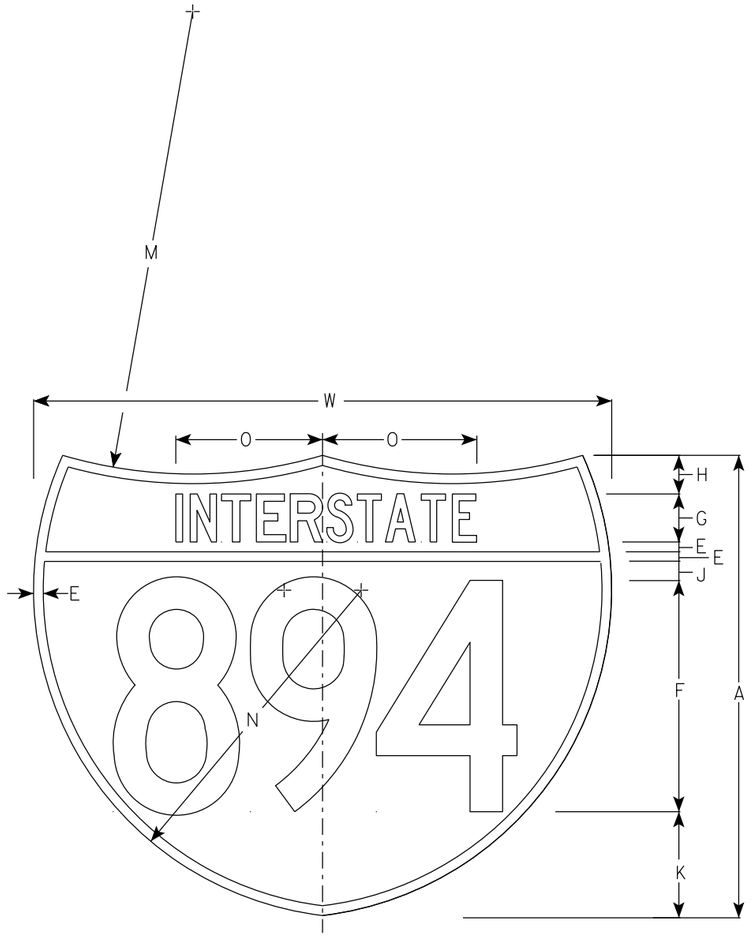
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 645 E

7

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M1-1



M1-1A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Top Red - Bottom Blue
   Message - White
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.
1																											
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91
2M	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79

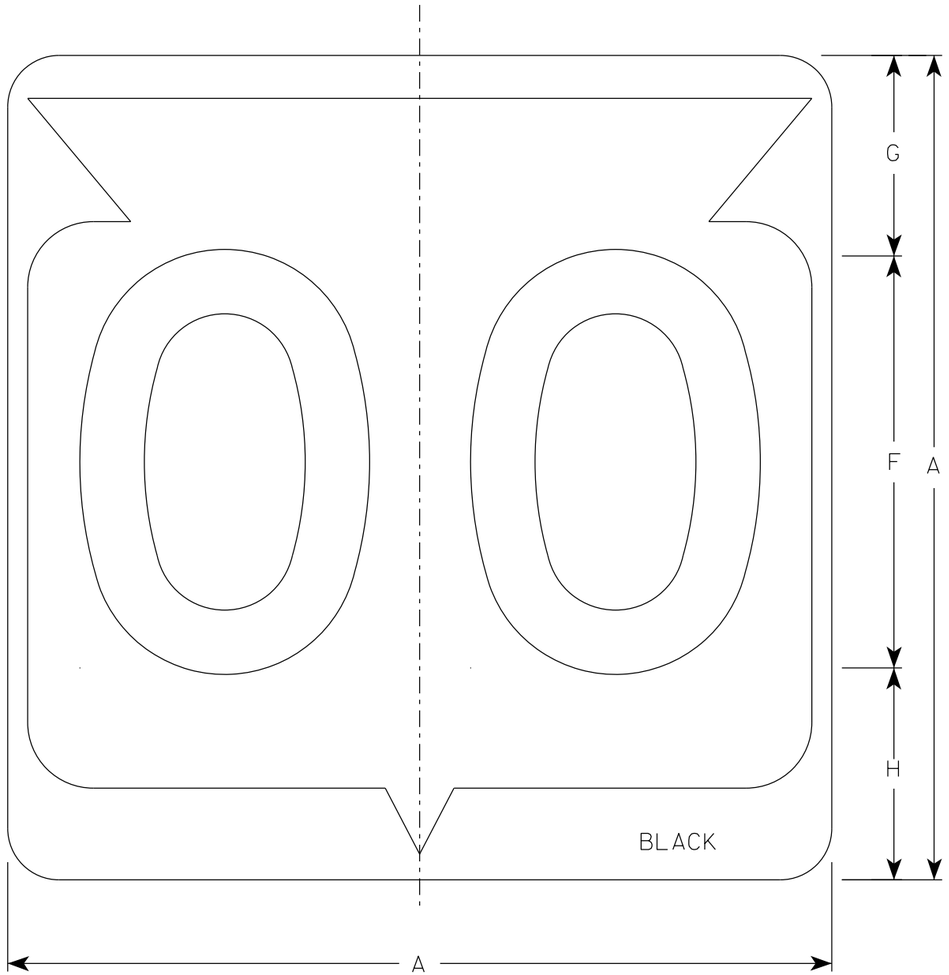
INTERSTATE ROUTE MARKER M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

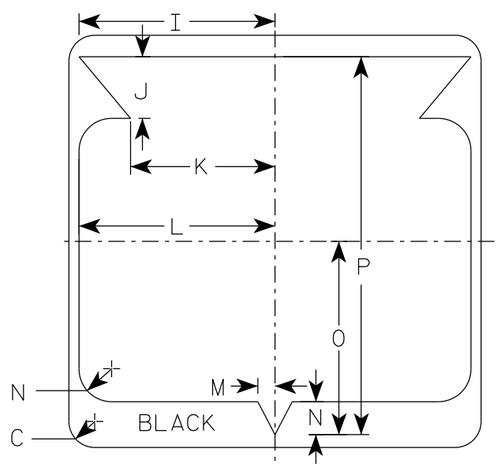
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 11/7/2022 PLATE NO. M1-1.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 646 E



M1-6



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C

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

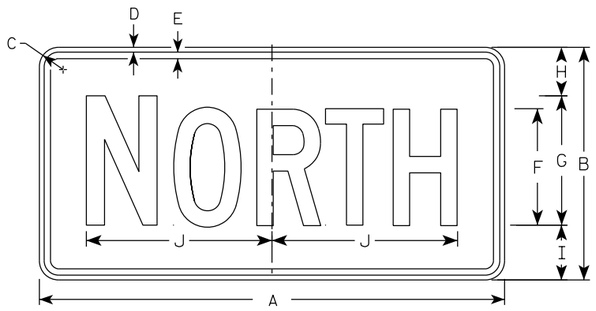
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

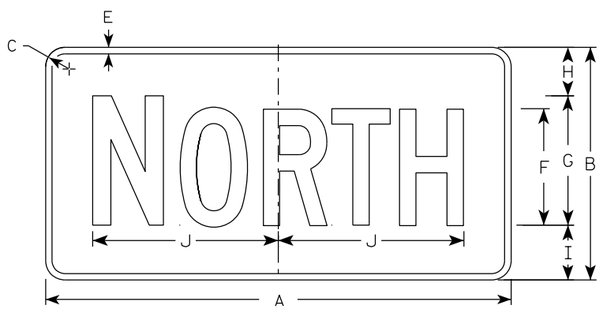
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-6.11

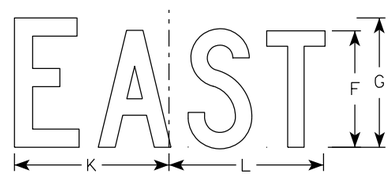
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 647	E



M3-1
MM3-1
MP3-1



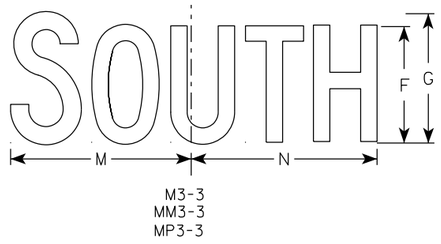
MB3-1
MK3-1
MN3-1



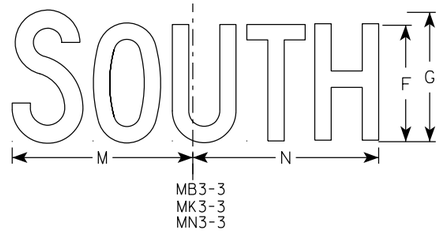
M3-2
MM3-2
MP3-2



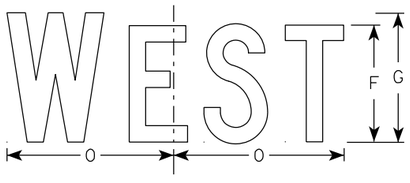
MB3-2
MK3-2
MN3-2



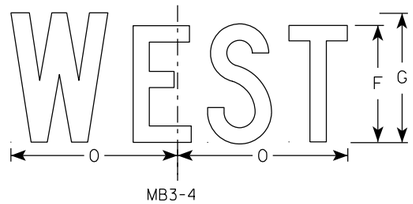
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

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

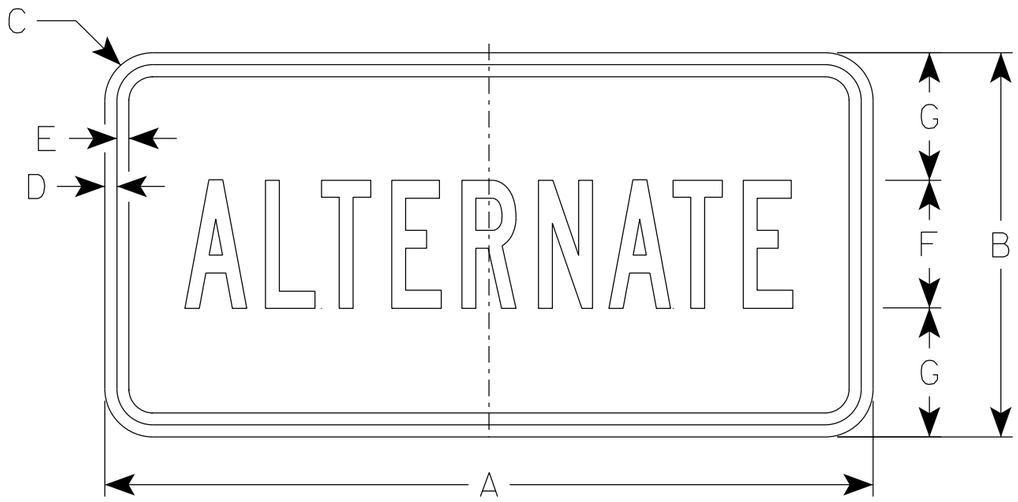
STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 648	E



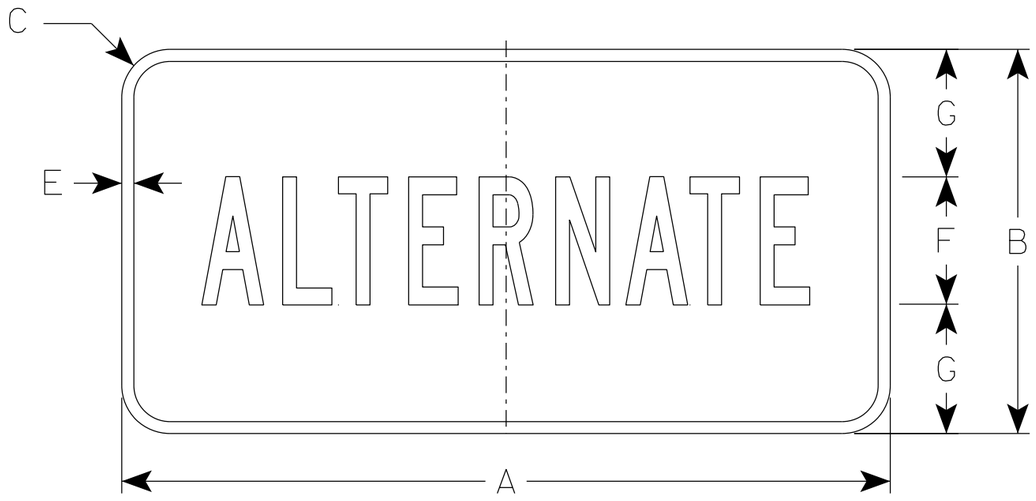
M4-1
MO4-1

NOTES

1. Sign is Type II - Type H Reflective except as Shown
2. Color:
   Background - See Note 5
   Message - See note 5
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.
5. M4-1 Background - White
   Message - Black

   MB4-1 Background - Blue
   Message - White

   MO4-1 Background - Orange - Type F Reflective
   Message - Black



MB4-1

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																											
2S	24	12	1 1/2	3/8	3/8	4	4	9 3/4	9 1/2																		2.00
2M	24	12	1 1/2	3/8	3/8	4	4	9 3/4	9 1/2																		2.00
3	36	18	1 1/2	3/8	1/2	7	5 1/2	16 3/8	16 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	7	5 1/2	16 3/8	16 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	7	5 1/2	16 3/8	16 1/2																		4.5

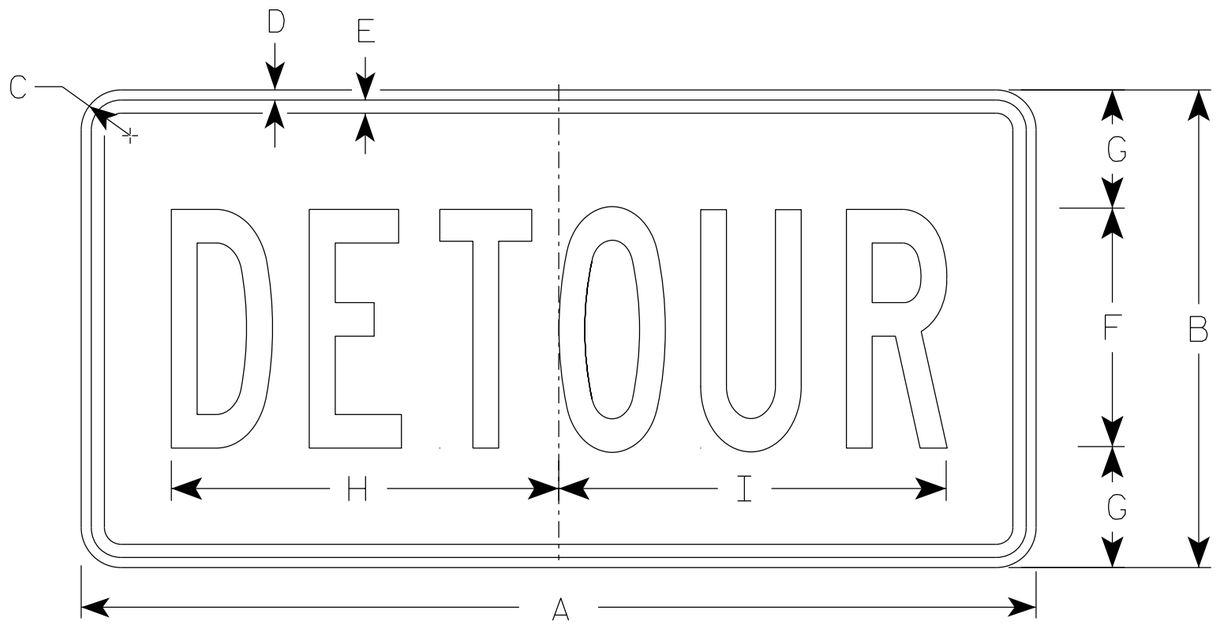
STANDARD SIGN
M4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/8/2023 PLATE NO. M4-1.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 649 | E



M4-8

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
2M	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5

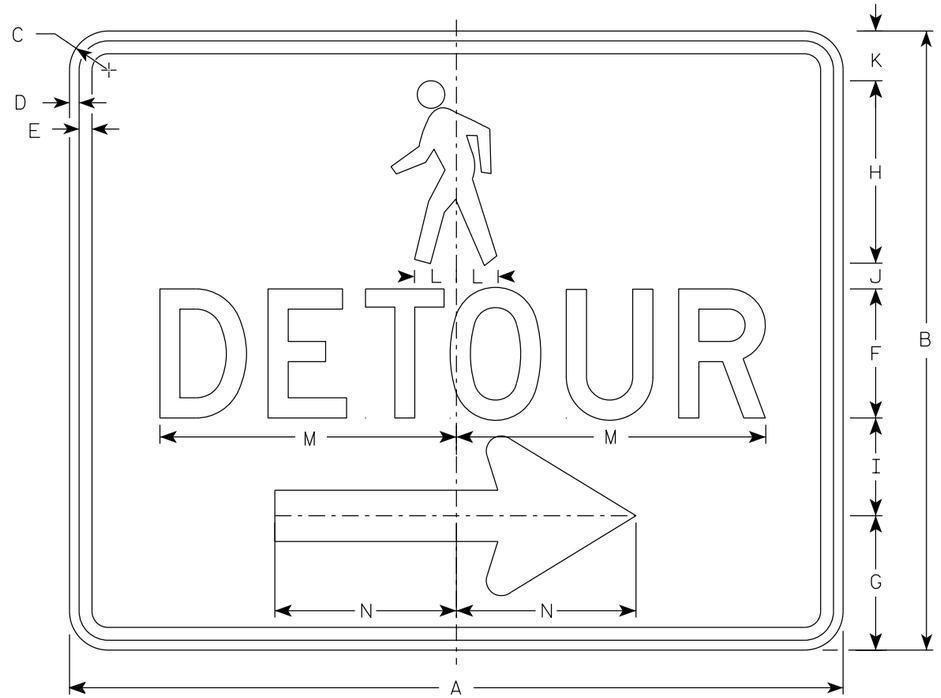
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

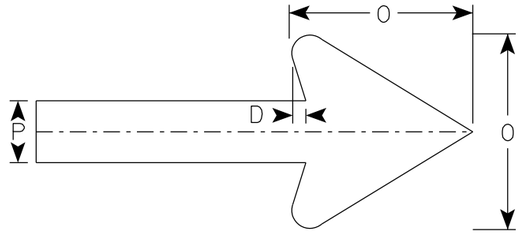
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 650	E



M4-9BR

NOTES

1. Sign is Type II-Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9BL is the same as M4-9BR except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
2M	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
3																											
4																											
5																											

STANDARD SIGN
M4-9B L&R

WISCONSIN DEPT OF TRANSPORTATION

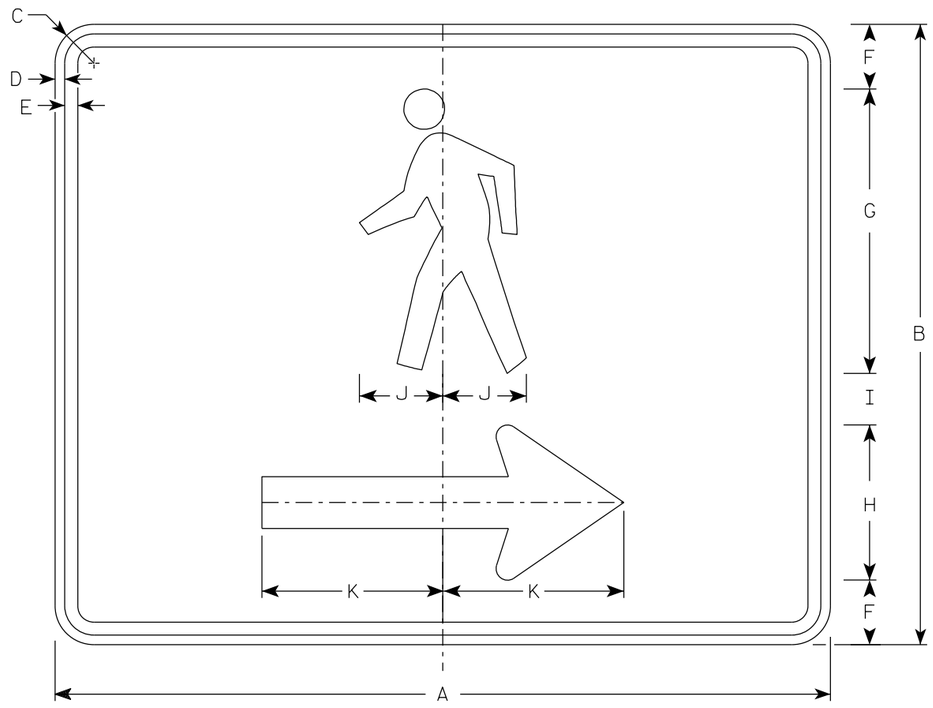
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9B.4

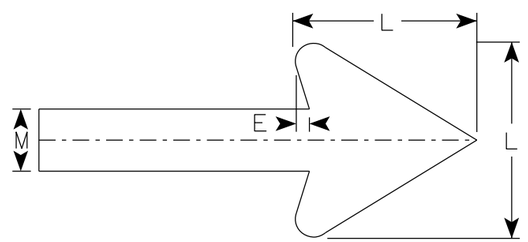
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 651 | E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M4-60L is the same as M4-60R except the arrow is reversed.



M4-60R



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	30	24	1 ½	⅜	½	2 ½	11	6	2	3 ¼	7	6	2														5.00
2M	30	24	1 ½	⅜	½	2 ½	11	6	2	3 ¼	7	6	2														5.00
3																											
4																											
5																											

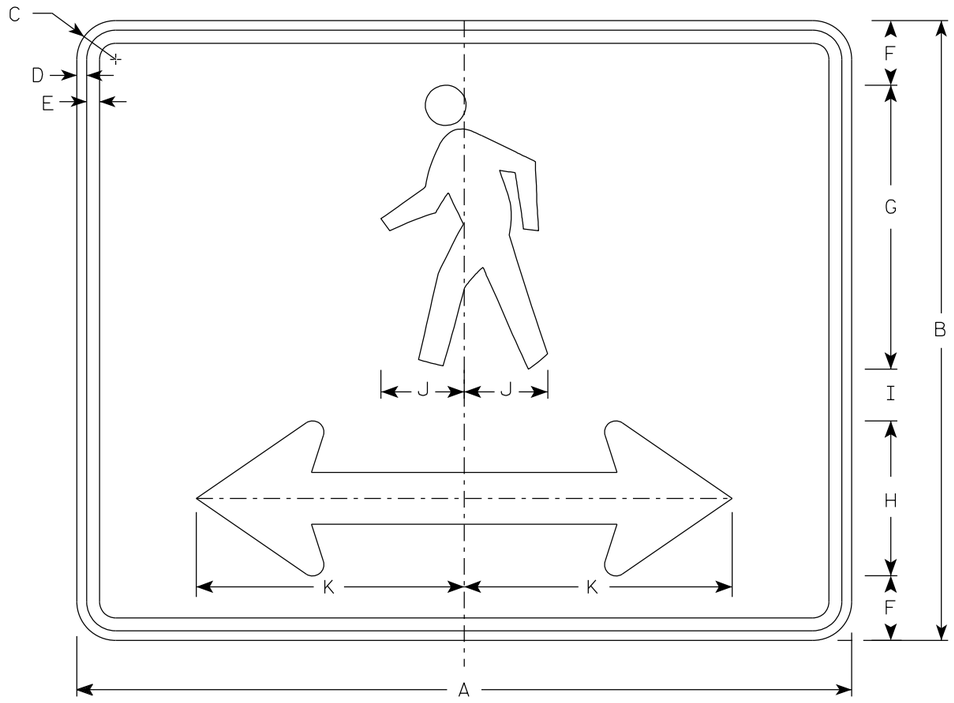
STANDARD SIGN
M4-60 L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/2023 PLATE NO. M4-60.2

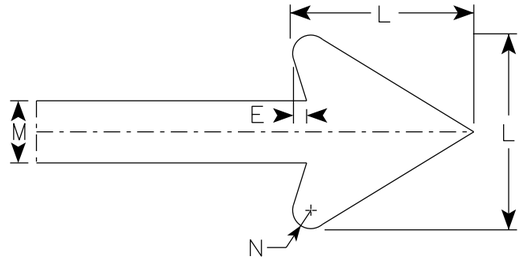
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 652 | E



M4-60D

NOTES

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



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	3/8	1/2	2 1/2	11	6	2	3 1/4	10 3/8	6	2	3/8													5.00
2M	30	24	1 1/2	3/8	1/2	2 1/2	11	6	2	3 1/4	10 3/8	6	2	3/8													5.00
3																											
4																											
5																											

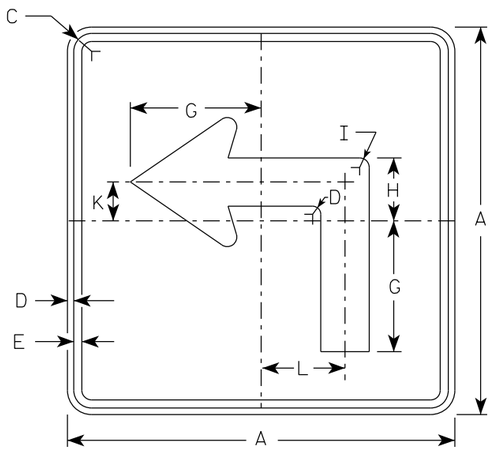
STANDARD SIGN
M4-60D

WISCONSIN DEPT OF TRANSPORTATION

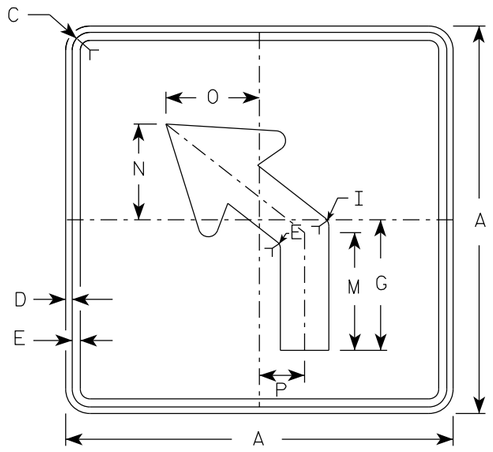
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/2023 PLATE NO. M4-60D.2

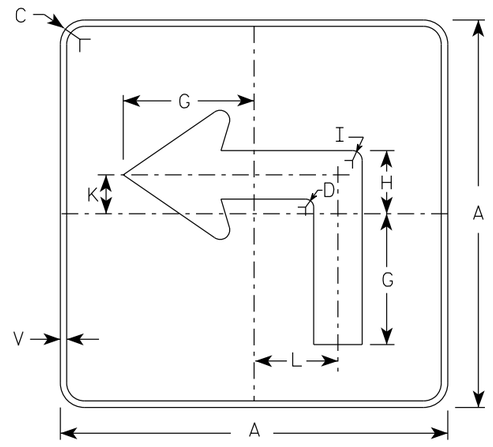
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 653 | E



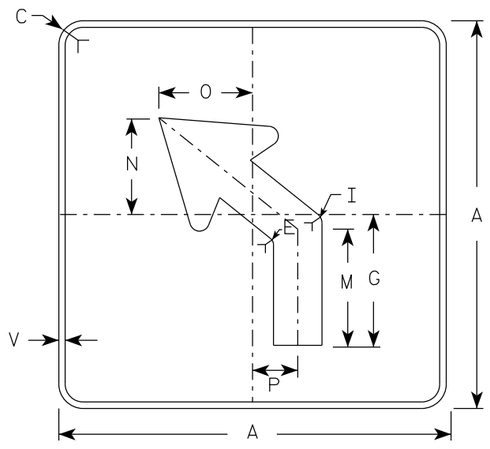
M5-1L
MM5-1L
MO5-1L
MP5-1L



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



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

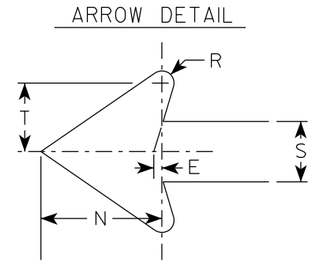


MB5-2L
MK5-2L
MN5-2L
MR5-2L

NOTES

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

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	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
2M	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
3	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
4	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
5	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25

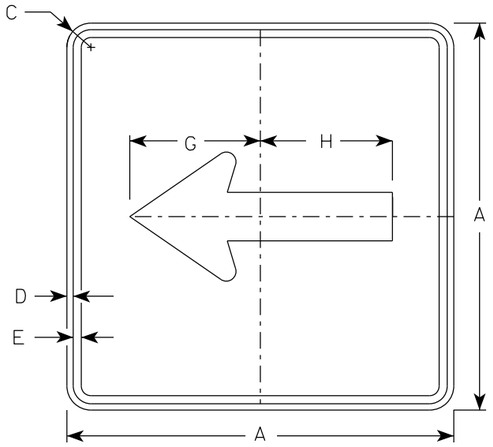
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

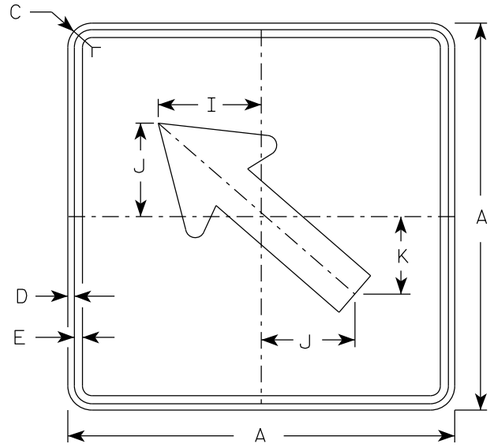
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

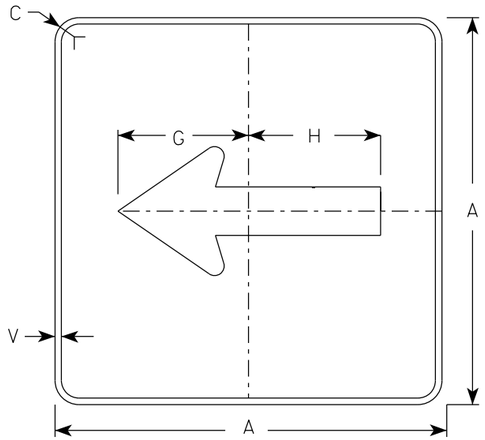
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 654 | E



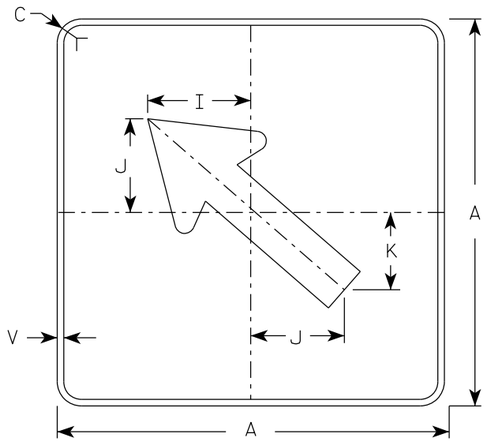
M6-1
MM6-1
MO6-1
MP6-1



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



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

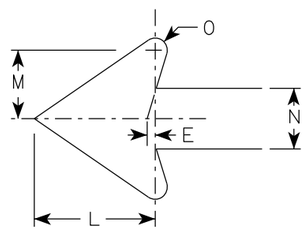


MB6-2
MK6-2
MN6-2
MR6-2

NOTES

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

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	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

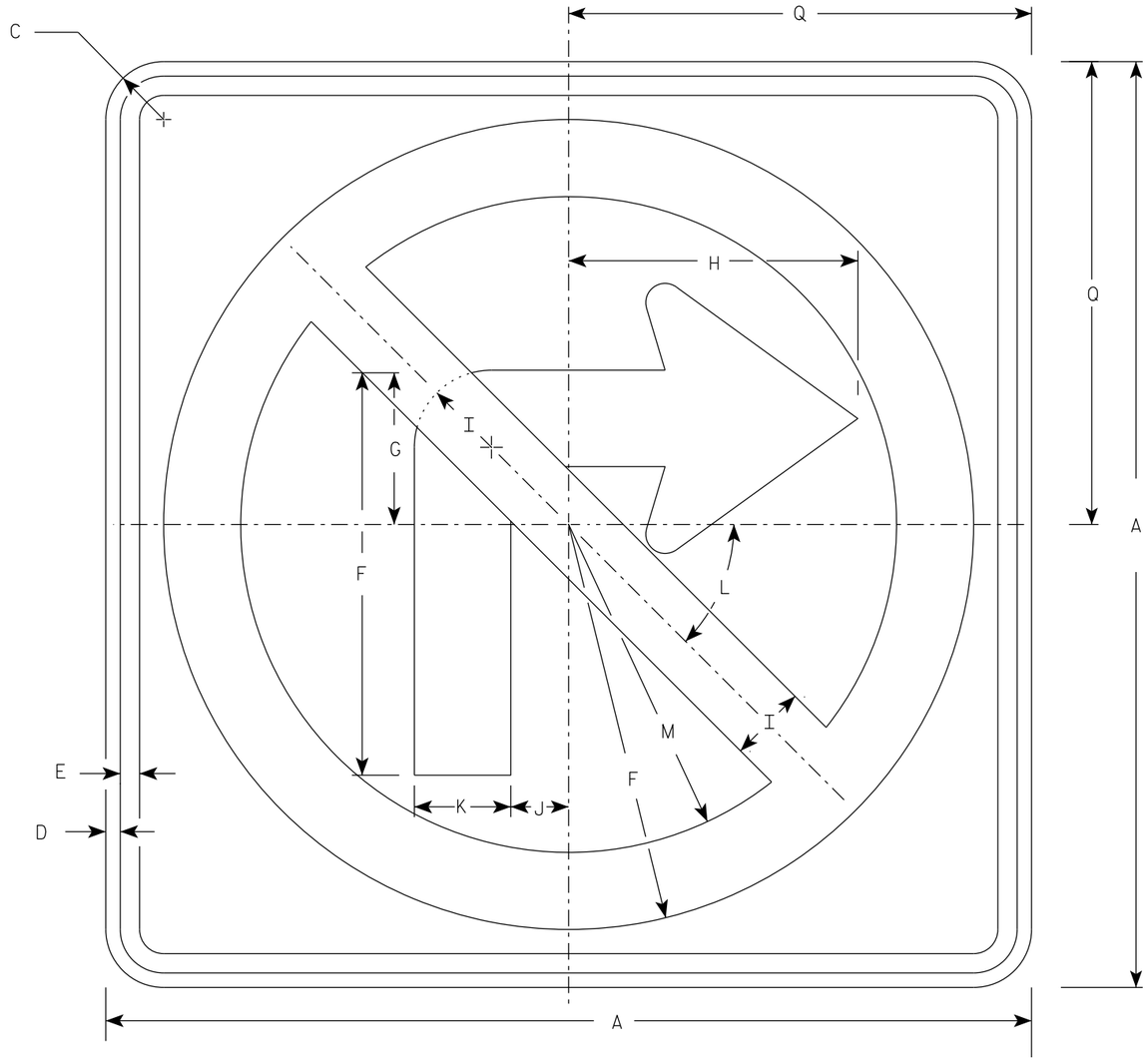
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

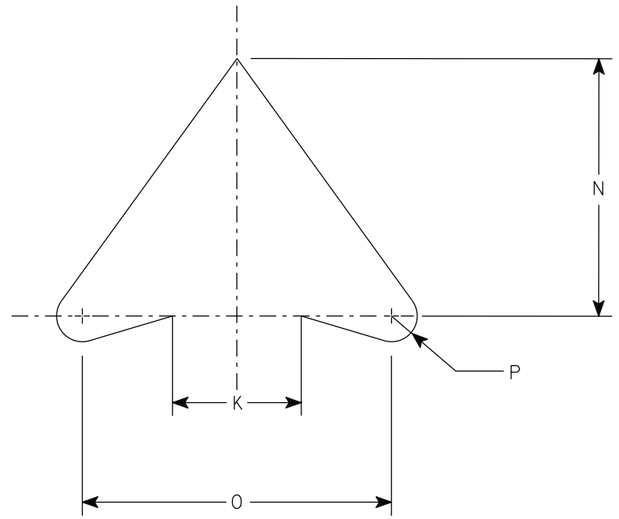
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 655 | E



R3-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45	8 ½	5	6	½	12										4.0
2S	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45°	8 ½	5	6	½	12										4.0
2M	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45	12 ¾	7 ½	9	¾	18										9.0
3	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45	12 ¾	7 ½	9	¾	18										9.0
4	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾	18										9.0
5	48		2 ¼	¾	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

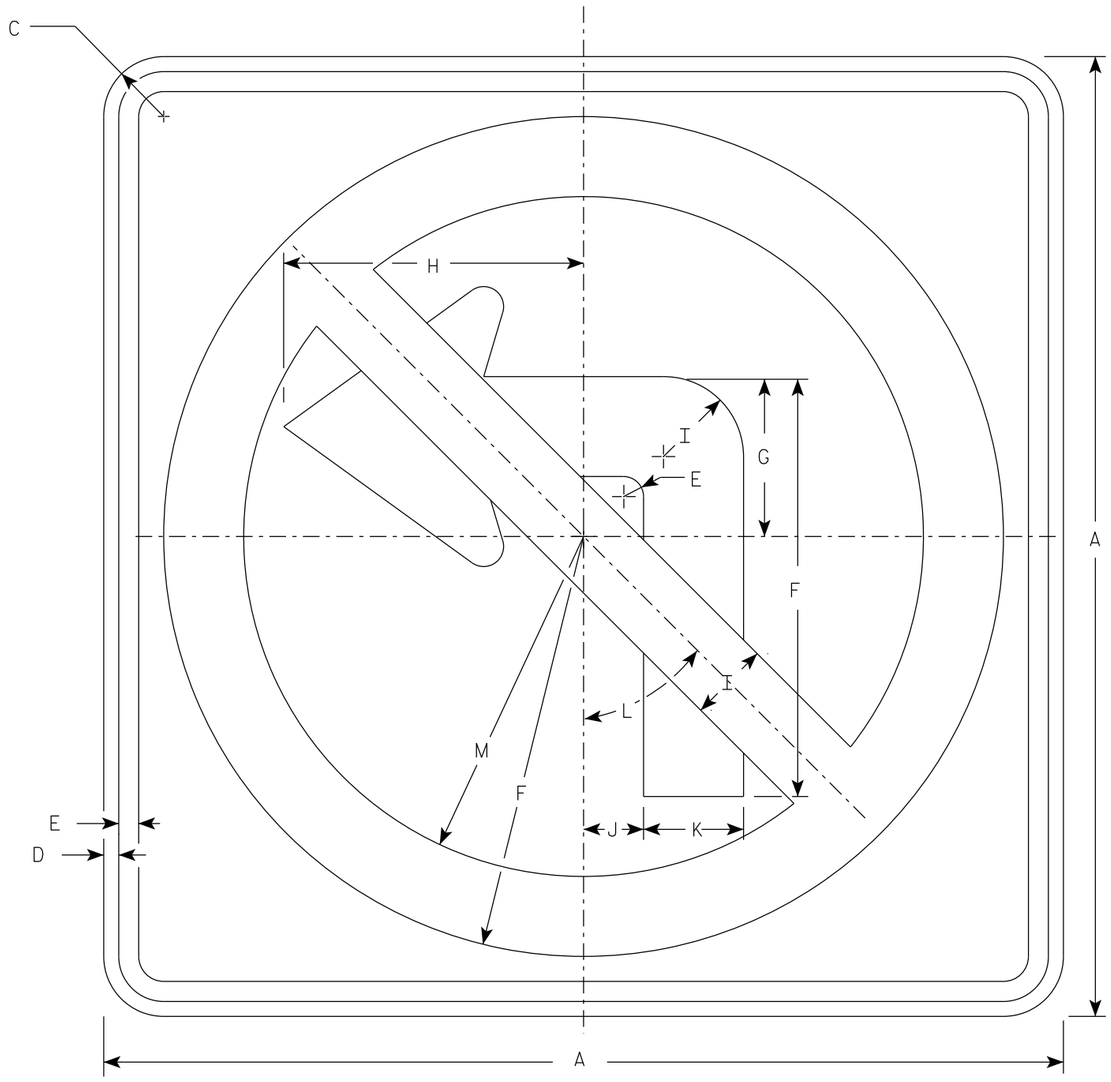
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/2/23 PLATE NO. R3-1.6

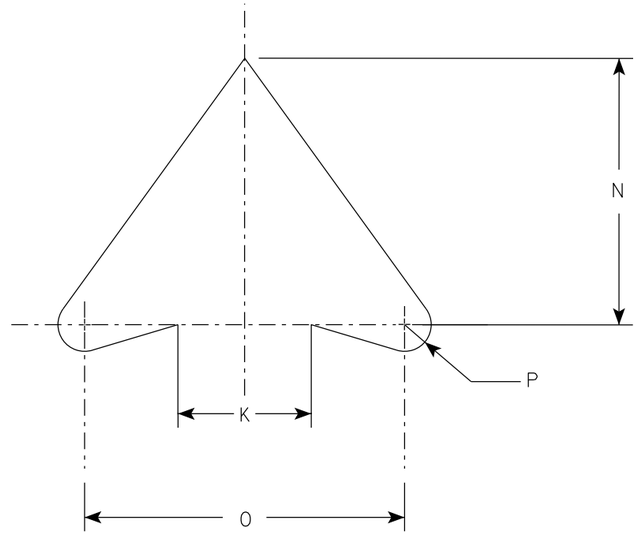
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 656 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



R3-2



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45°	8 ½	5	6	½											4.0
2S	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45°	8 ½	5	6	½											4.0
2M	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾											9.0
3	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾											9.0
4	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾											9.0
5	48		2 ¼	¾	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

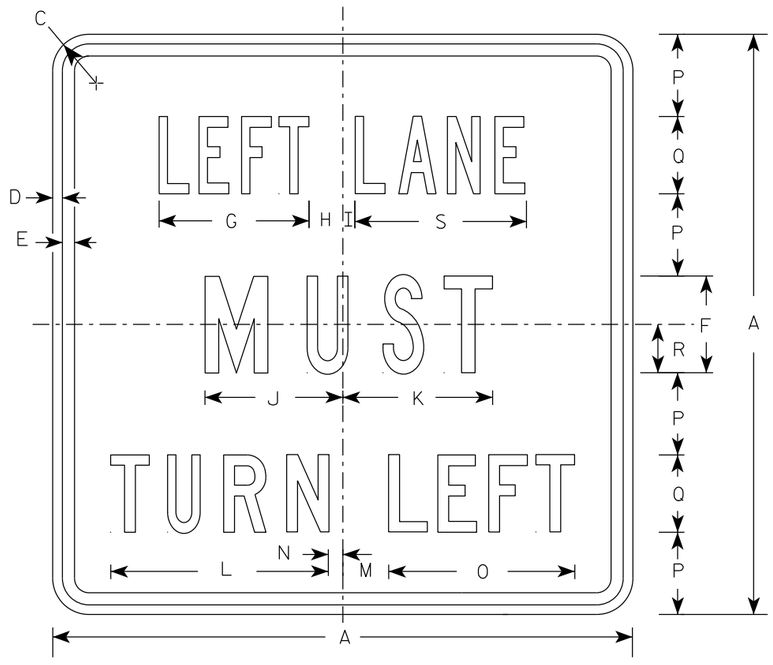
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/2/23 PLATE NO. R3-2.11

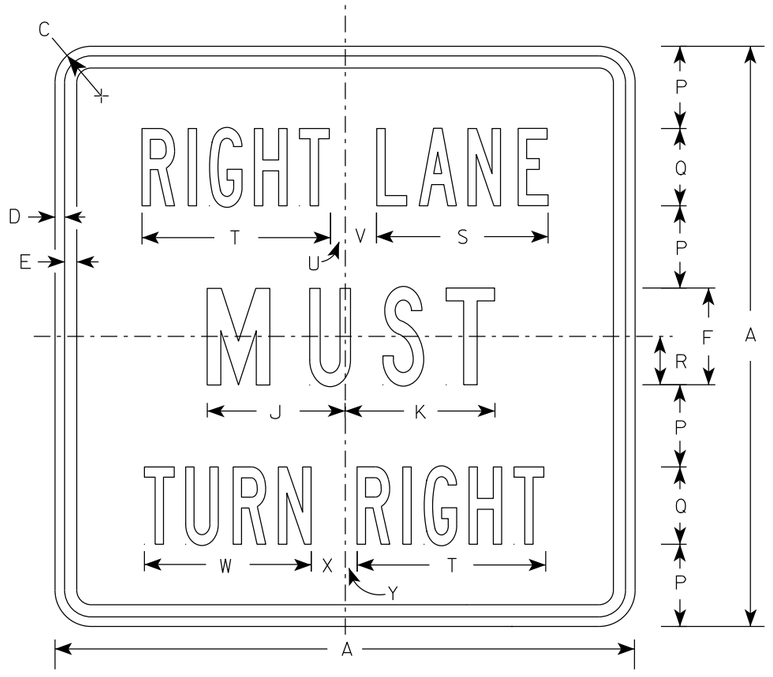
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 657 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.



R3-7L



R3-7R

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 7/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 7/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 7/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		2 1/4	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

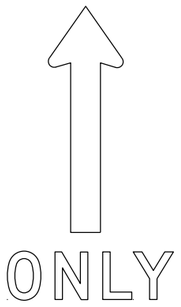
STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/23 PLATE NO. R3-7.4

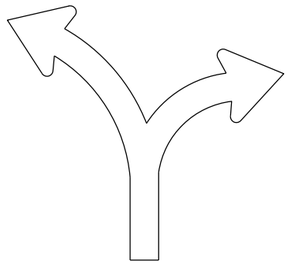
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 658 | E

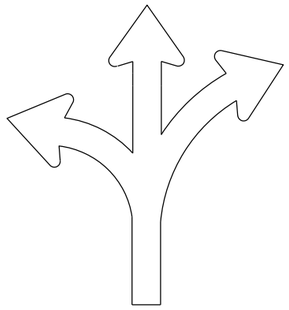


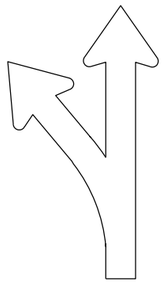
(A)

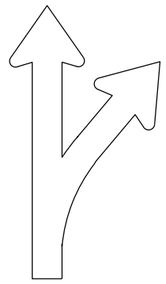


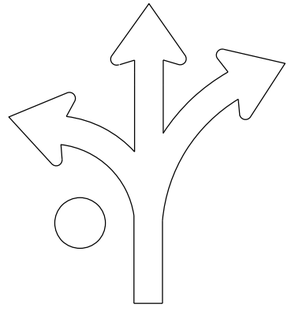
(B)

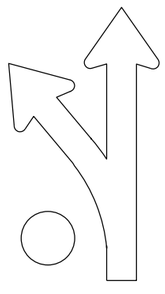

(C)

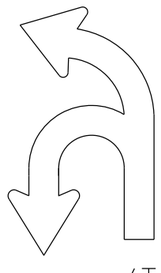

(D)

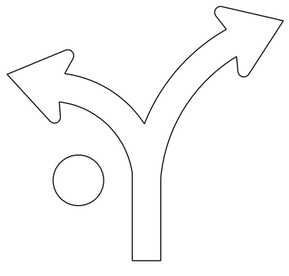

(E)

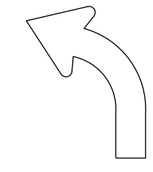

(F)


(G)

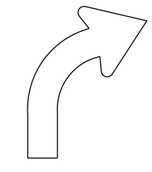

(H)


(I)


(J)



(L)



(R)

NOTES

1. Sigs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Use appropriate Letter for Sign Code
   Each letter added makes sign wider. Example R3-8EAR
5. Square footage of sign varies by letters

1	Letter =	3.75 sq ft for Size 2
		6.0 sq ft for Size 3
		10.0 sq ft for Size 4 or 5
2	Letters =	7.5 sq ft for Size 2
		12.0 sq ft for Size 3
		20.0 sq ft for Size 4 or 5
3	Letters =	11.25 sq ft for Size 2
		18.0 sq ft for Size 3
		30.0 sq ft for Size 4 or 5
4	Letters =	15.0 sq ft for Size 2
		24.0 sq ft for Size 3
		40.0 sq ft for Size 4 or 5
5	Letters =	18.75 sq ft for Size 2
		30.0 sq ft for Size 3
		50.0 sq ft for Size 4 or 5
6	Letters =	22.5 sq ft for Size 2
		36.0 sq ft for Size 3
		60.0 sq ft for Size 4 or 5

6. When letters C,D,G,J are used on the Left or Right end of the sign the Sq. Ft. changes.
   Add the amounts when these letters are used:
   1.25 sq ft for Size 2
   1.5 sq ft for Size 3
   2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

SHEET NO: 659 E

FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn PLOT DATE : 14-FEB 2023 3:01 PLOT BY : mscj9h PLOT NAME :

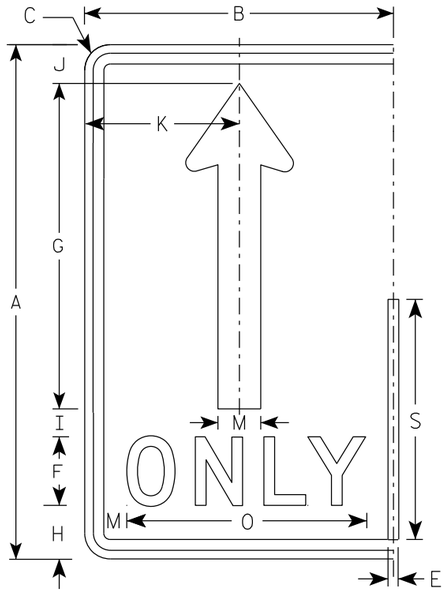
WISDOT/CADDS SHEET 42

7

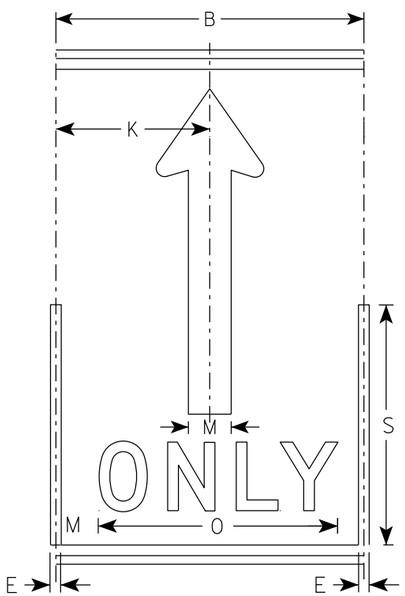
7

NOTES

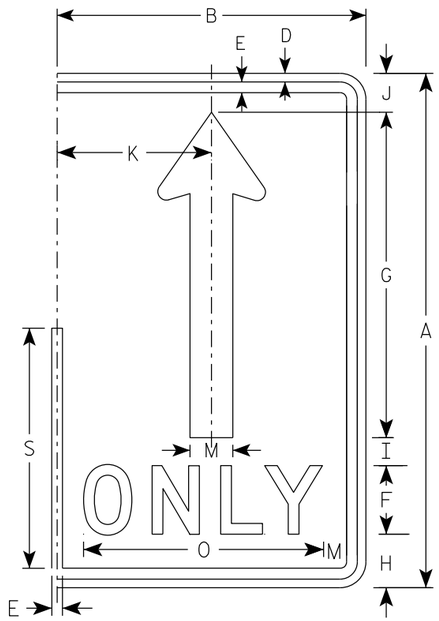
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



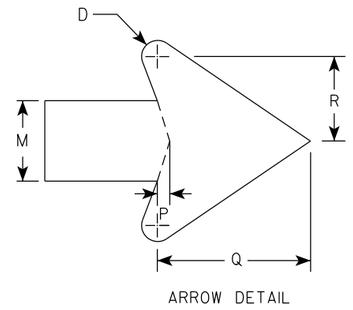
(A)



(A)



(A)



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	30	18	1 1/2	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8	5	22 3/4	3 3/4	1 3/4	2 3/4	12		3		17 5/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (A) Arrow

WISCONSIN DEPT OF TRANSPORTATION

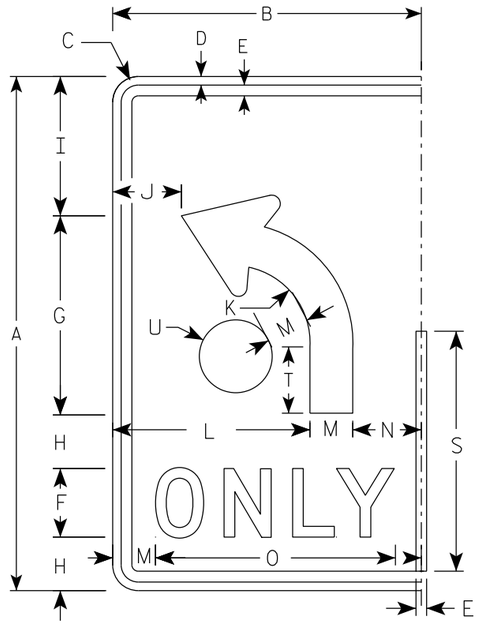
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

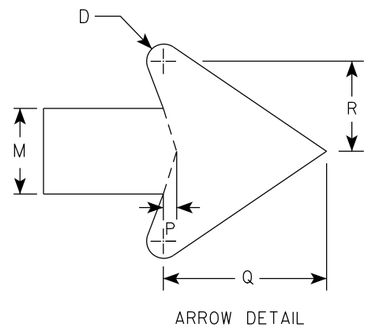
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 660 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
   Message Series - D



(B)



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	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
2M	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
3	36	24	1 1/2	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8	2 1/2						6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0

STANDARD SIGN

R3-8 (B) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

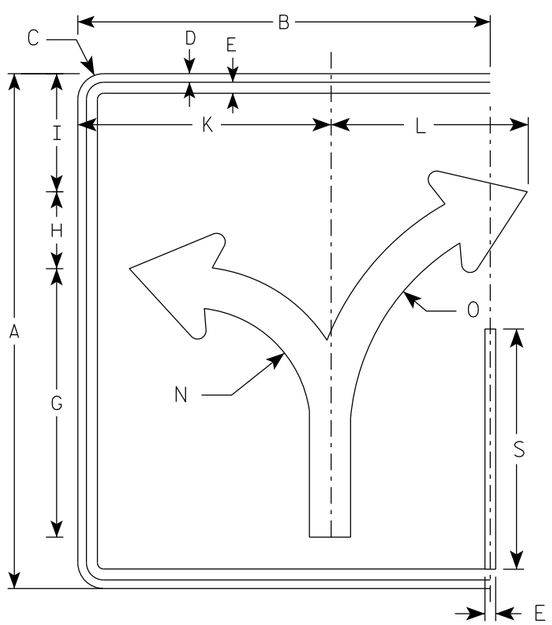
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

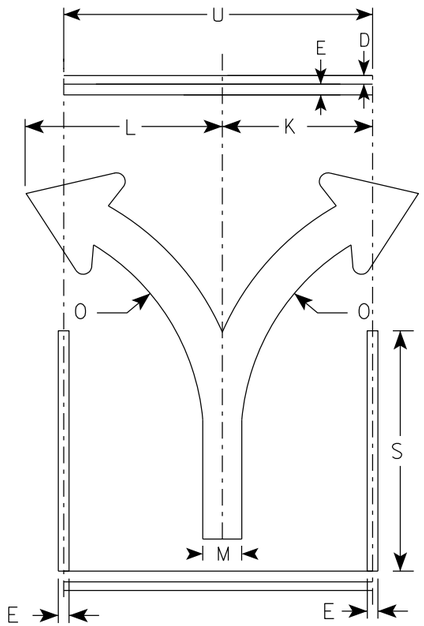
SHEET NO: 661 E

NOTES

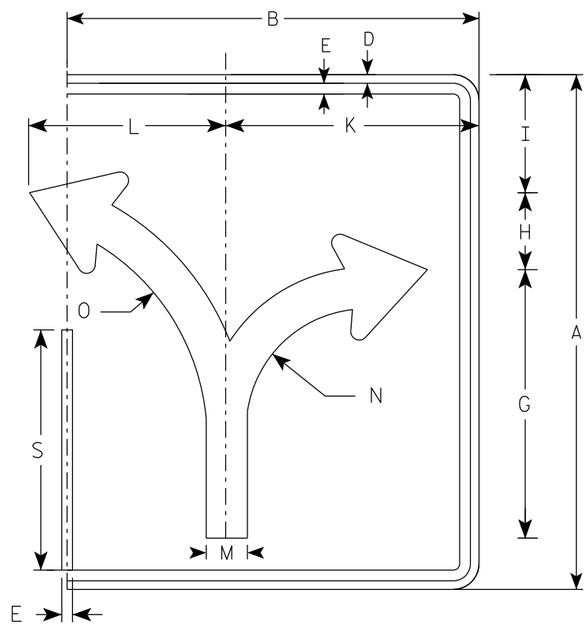
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



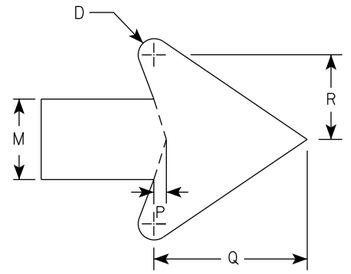
(C)



(C)



(C)



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	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (C) Arrow

WISCONSIN DEPT OF TRANSPORTATION

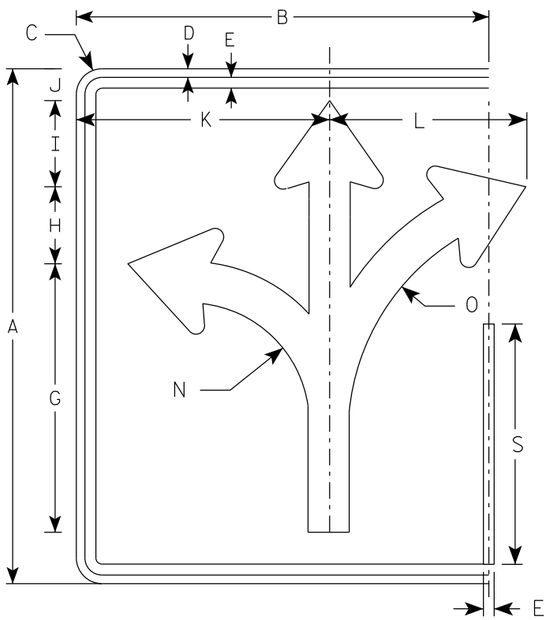
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

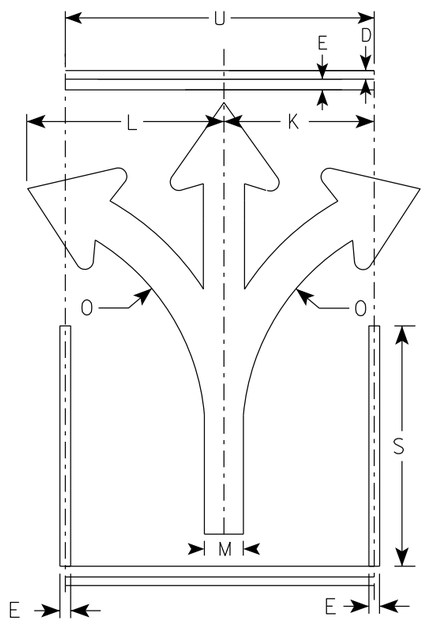
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 662 | E

NOTES

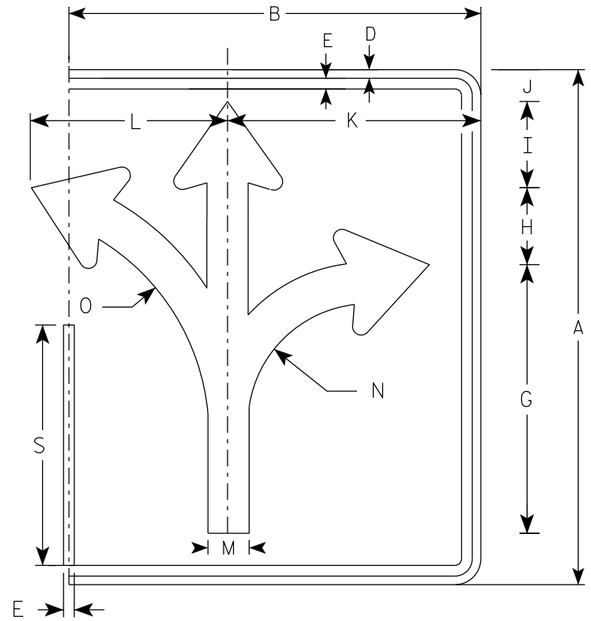
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



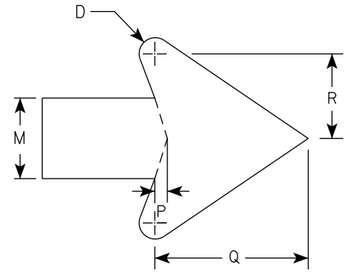
(D)



(D)



(D)



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	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	6	2 1/4	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (D) Arrow

WISCONSIN DEPT OF TRANSPORTATION

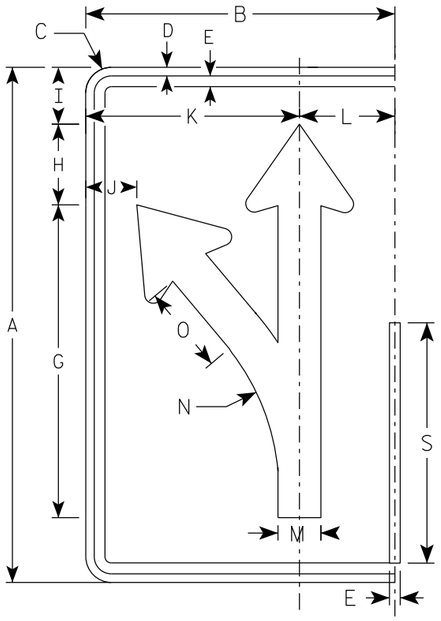
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

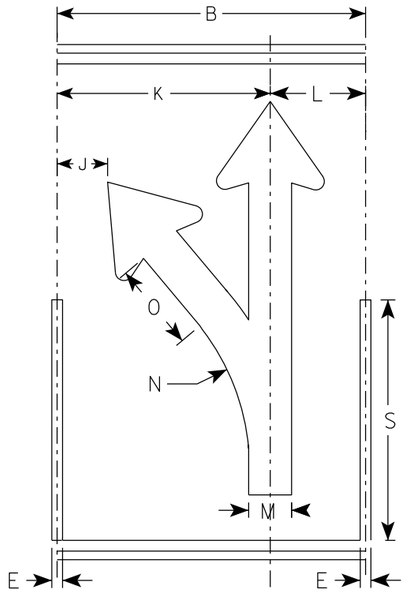
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 663 | E

NOTES

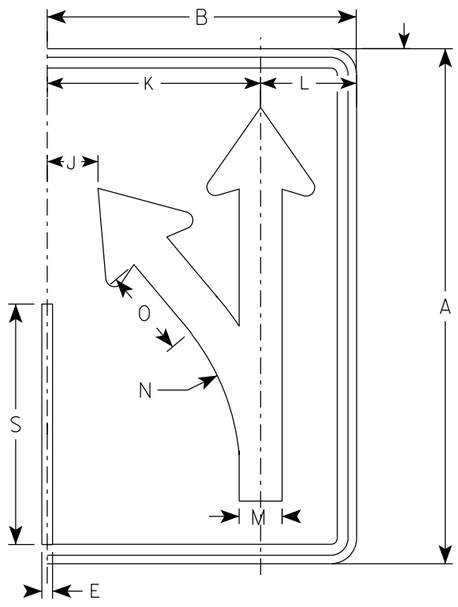
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



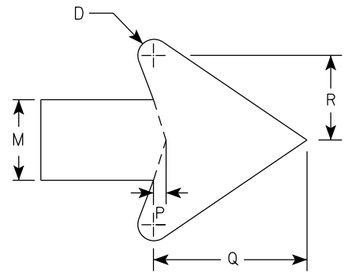
(E)



(E)



(E)



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	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (E) Arrow

WISCONSIN DEPT OF TRANSPORTATION

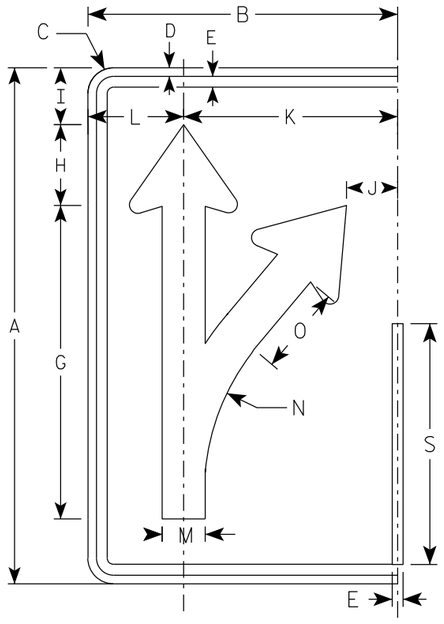
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

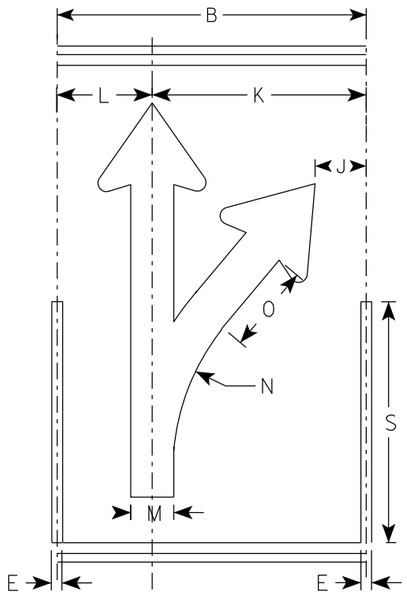
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 664 | E

NOTES

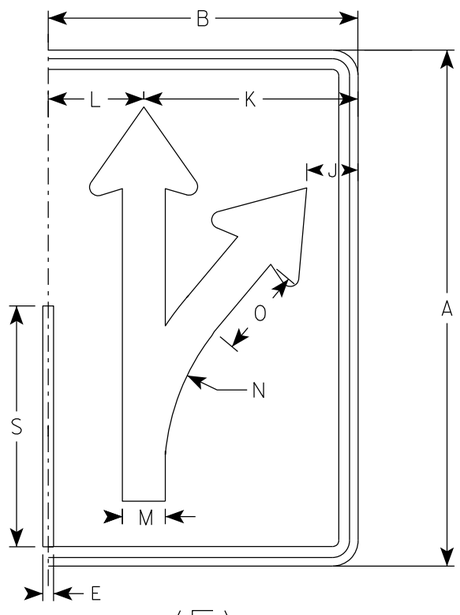
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



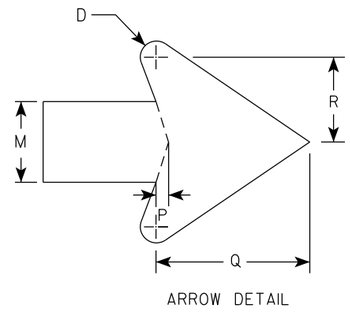
(F)



(F)



(F)



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	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (F) Arrow

WISCONSIN DEPT OF TRANSPORTATION

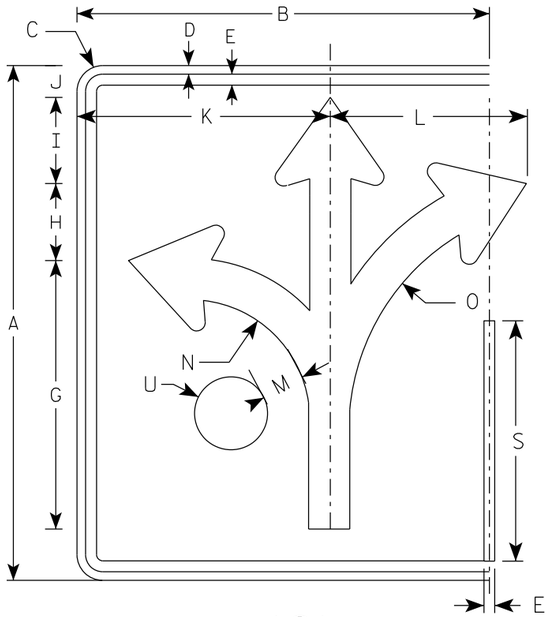
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

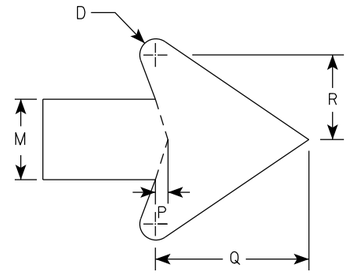
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 665 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(G)



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	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	6	3 1/8	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (G) Arrow

WISCONSIN DEPT OF TRANSPORTATION

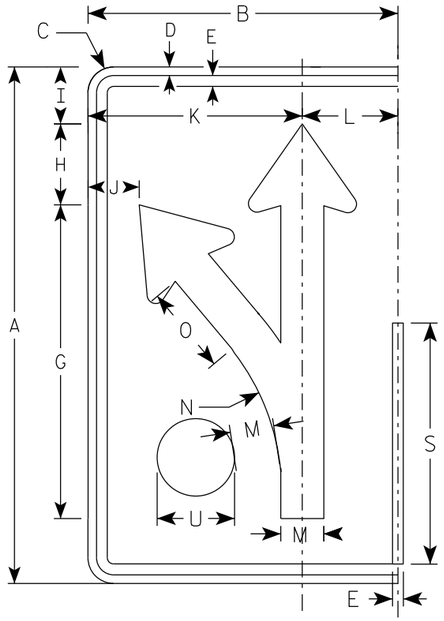
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

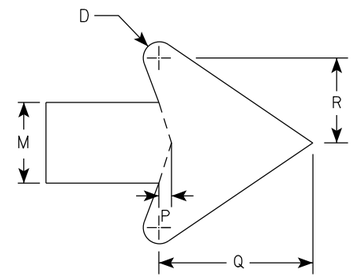
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 666	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(H)



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	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4		2 1/2						6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0

STANDARD SIGN
R3-8 (H) Arrow

WISCONSIN DEPT OF TRANSPORTATION

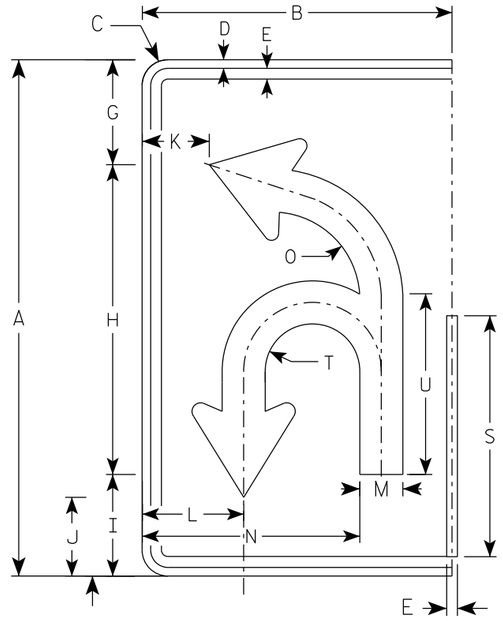
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

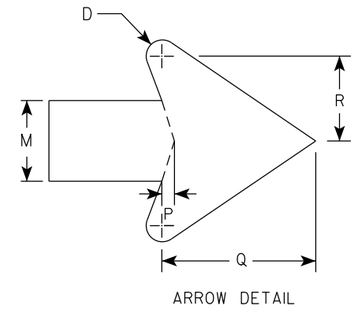
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 667 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(I)



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	30	18	1 1/2	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
2M	30	18	1 1/2	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	21 5/8	7 1/8	5 1/2	5 7/8	8 1/4	3	16 3/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4	3 1/4	12 5/8						6.0
4	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0
5	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0

STANDARD SIGN
R3-8 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

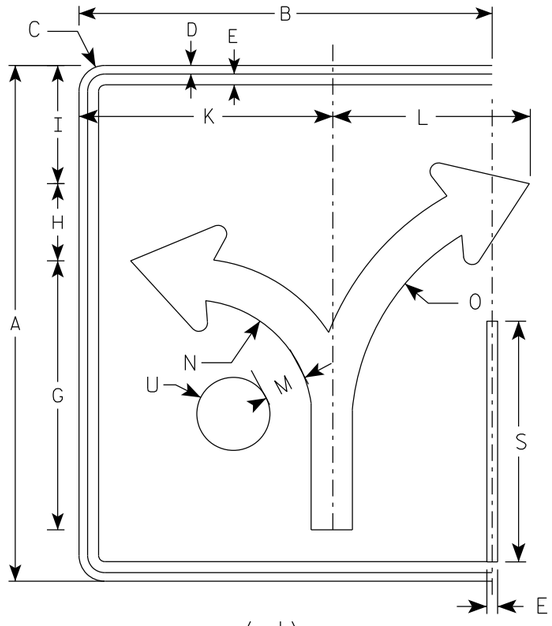
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

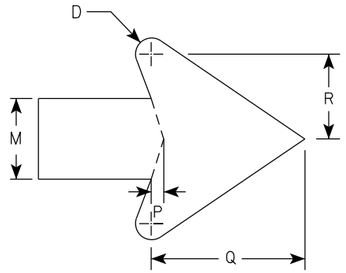
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 668 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(J)



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	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (J) Arrow

WISCONSIN DEPT OF TRANSPORTATION

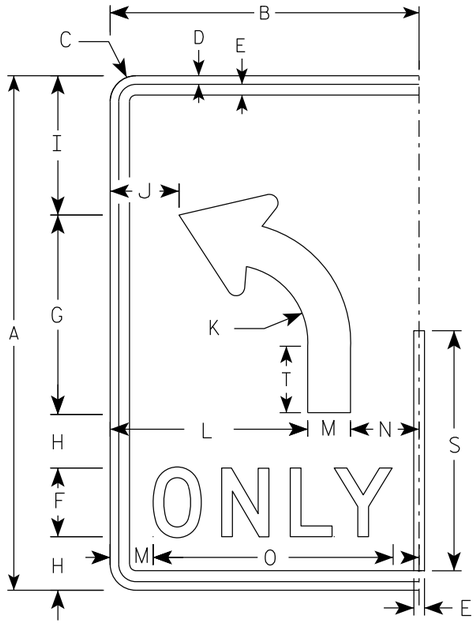
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

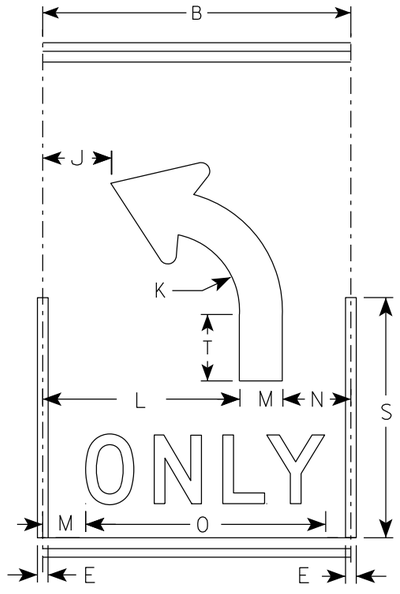
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 669 | E

NOTES

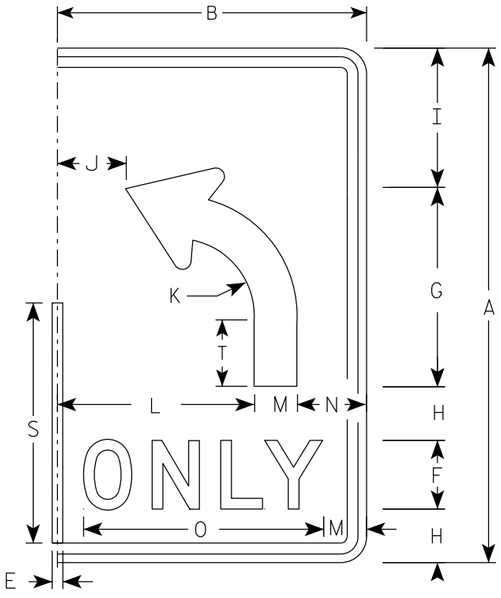
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



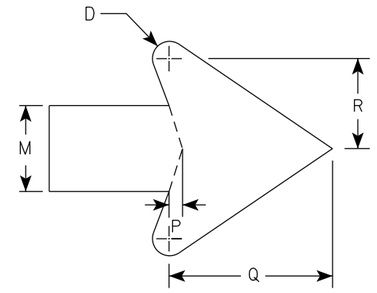
(L)



(L)



(L)



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	30	18	1 ½	½	⅝	4	11 ⅝	3 ⅛	8 ⅛	4	4 ½	11 ½	2 ½	4	14	⅜	4 ¾	2 ⅝	14	3 ⅞							3.75
2M	30	18	1 ½	½	⅝	4	11 ⅝	3 ⅛	8 ⅛	4	4 ½	11 ½	2 ½	4	14	⅜	4 ¾	2 ⅝	14	3 ⅞							3.75
3	36	24	1 ½	½	⅝	5	14	3 ½	9 ¾	6	5 ⅜	15	3	6	17 ⅝	½	5 ¾	3 ⅛	16 ¾	4 ⅝							6.0
4	48	30	2 ¼	¾	1	6	18 ⅝	5 ⅛	13 ⅛	6 ⅛	7 ¼	18	4	8	21 ¾	⅝	7 ⅝	4 ¼	22 ⅜	6 ¼							10.0
5	48	30	2 ¼	¾	1	6	18 ⅝	5 ⅛	13 ⅛	6 ⅛	7 ¼	18	4	8	21 ¾	⅝	7 ⅝	4 ¼	22 ⅜	6 ¼							10.0

STANDARD SIGN

R3-8 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

SHEET NO: 670 E

FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn PLOT DATE : 14-FEB 2023 3:02 PLOT BY : mscj9h PLOT NAME :

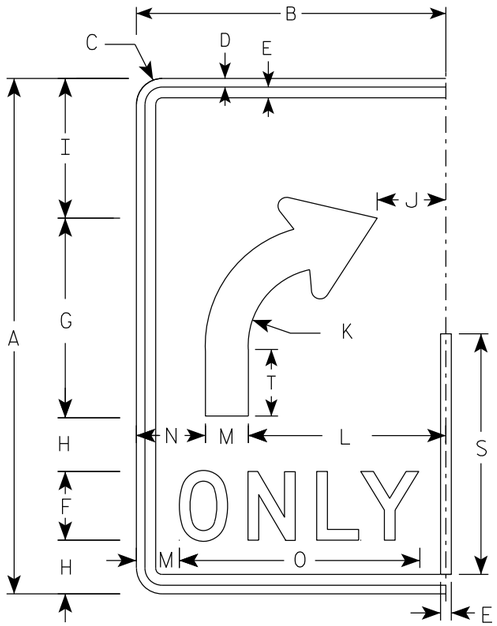
WISDOT/CADDS SHEET 42

7

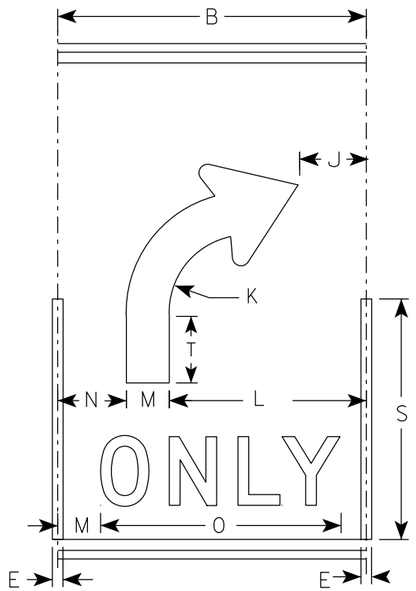
7

NOTES

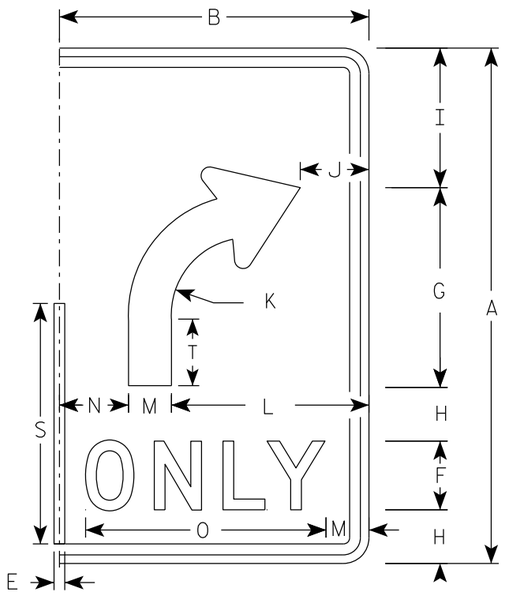
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



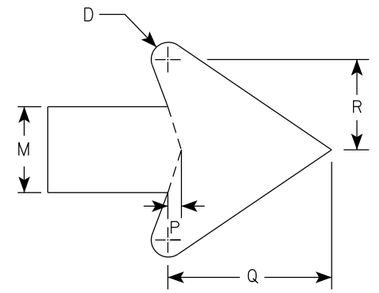
(R)



(R)



(R)



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	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 1/2	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN

R3-8 (R) Arrow

WISCONSIN DEPT OF TRANSPORTATION

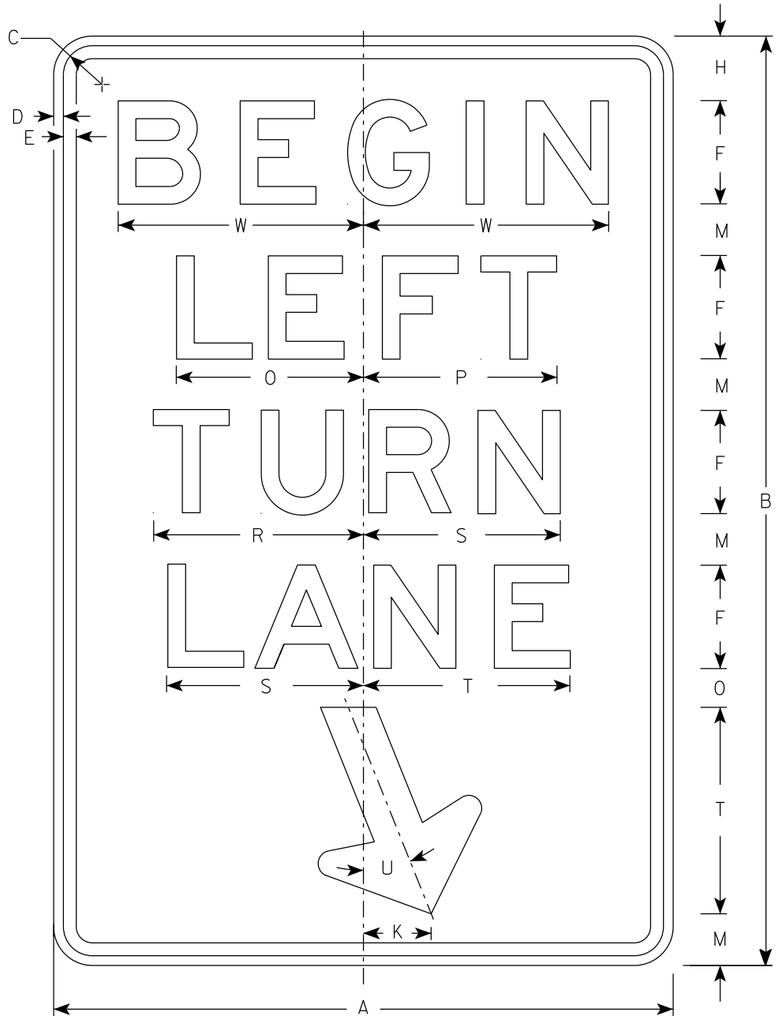
APPROVED Matthew R Rauch

for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

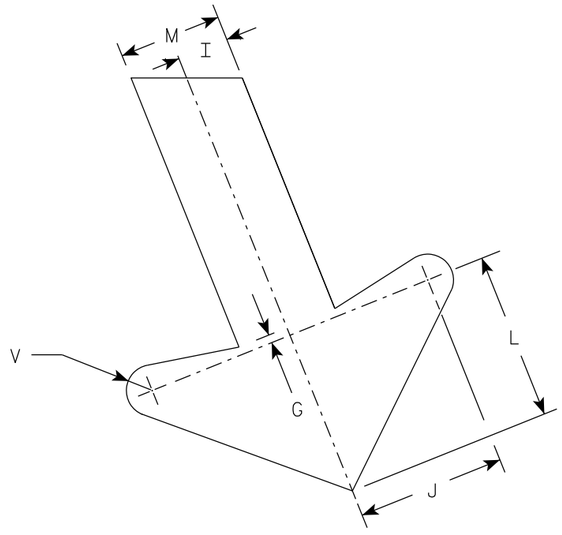
SHEET NO: 671 **E**



R3-20L

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/2	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/2	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 7/8	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

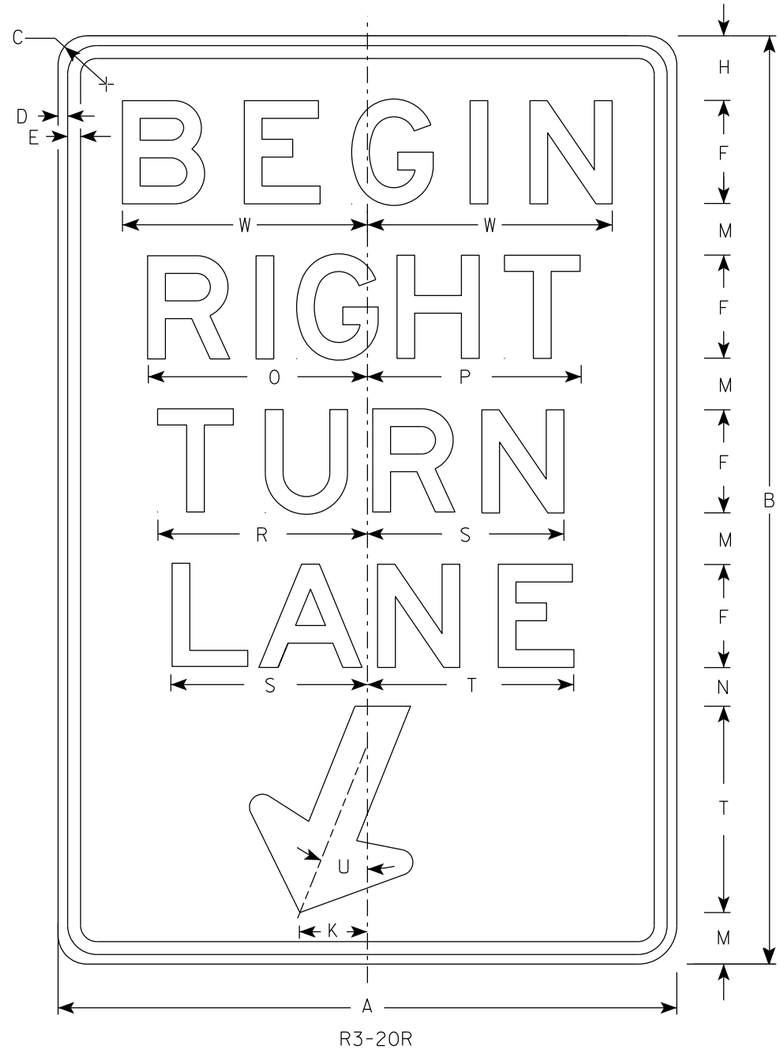
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-20L.8

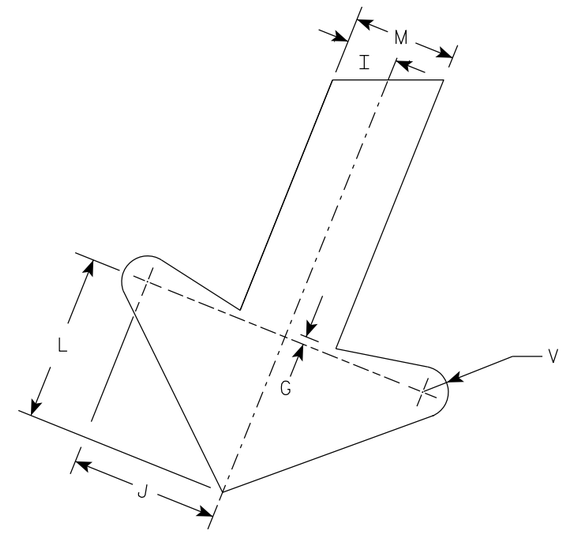
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 672	E



R3-20R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/2	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/2	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 7/8	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

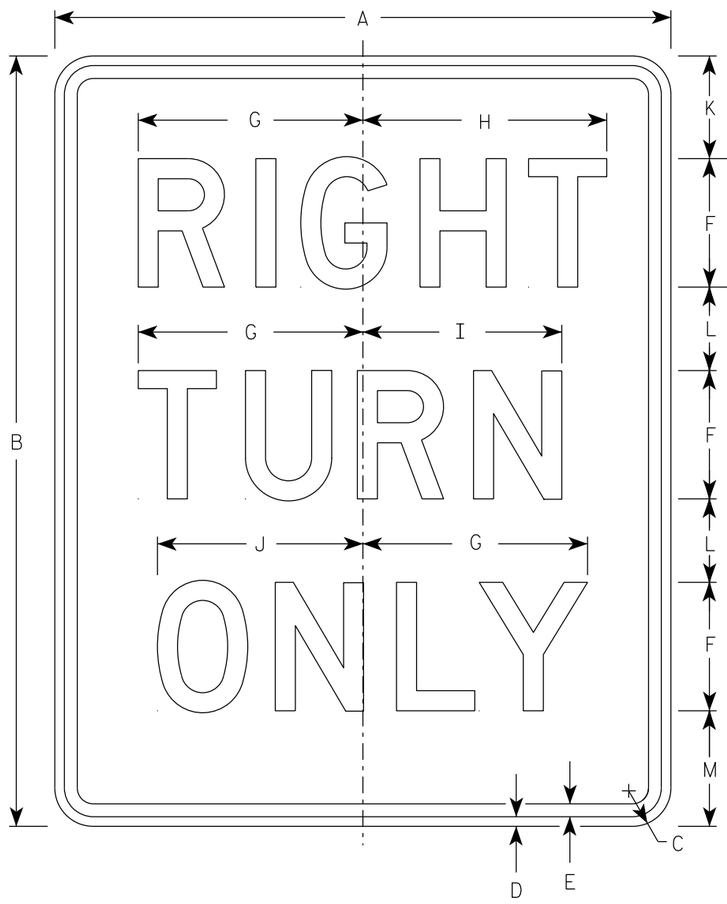
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

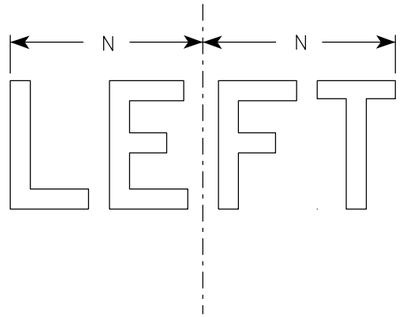
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-20R.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 673 | E



R3-53R



R3-53L

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. R3-53L same as R3-53R except LEFT is substituted for RIGHT

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

STANDARD SIGN
R3-53

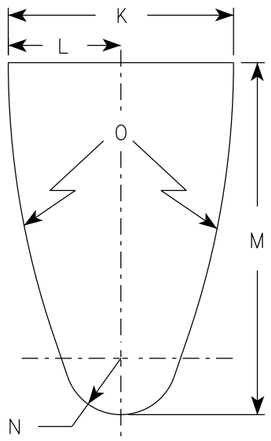
WISCONSIN DEPT OF TRANSPORTATION

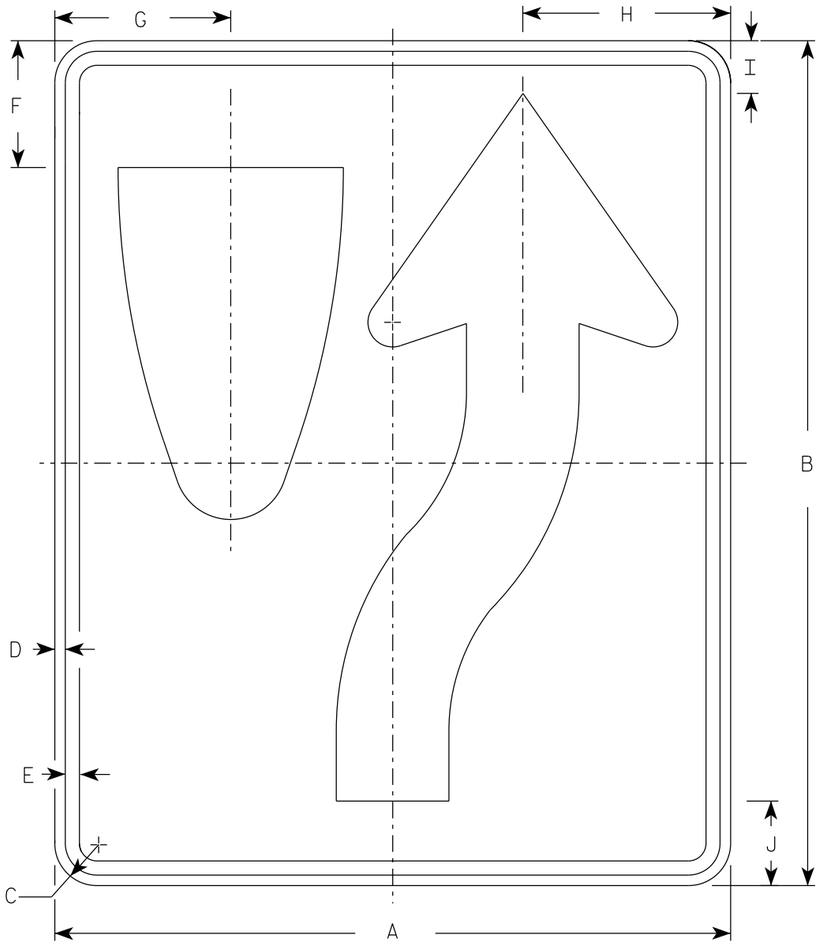
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-53.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 674 | E

DIVIDER DETAIL



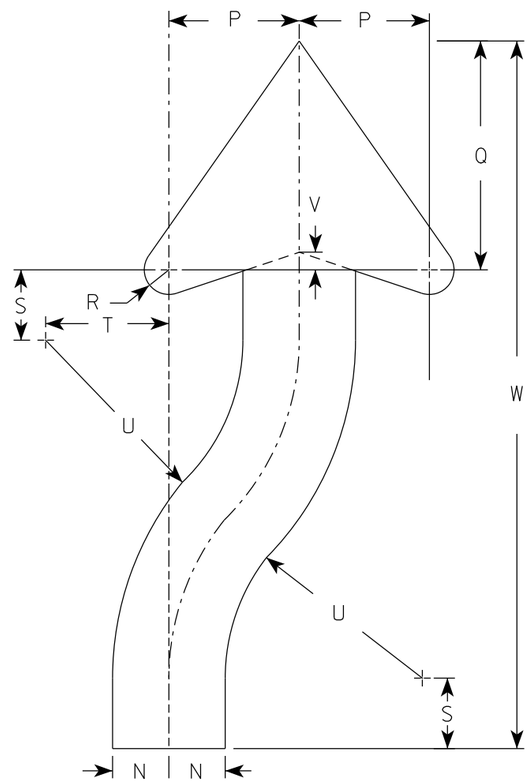


R4-7

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. R4-8 is the same as R4-7 except Legend is reversed.

ARROW DETAIL



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

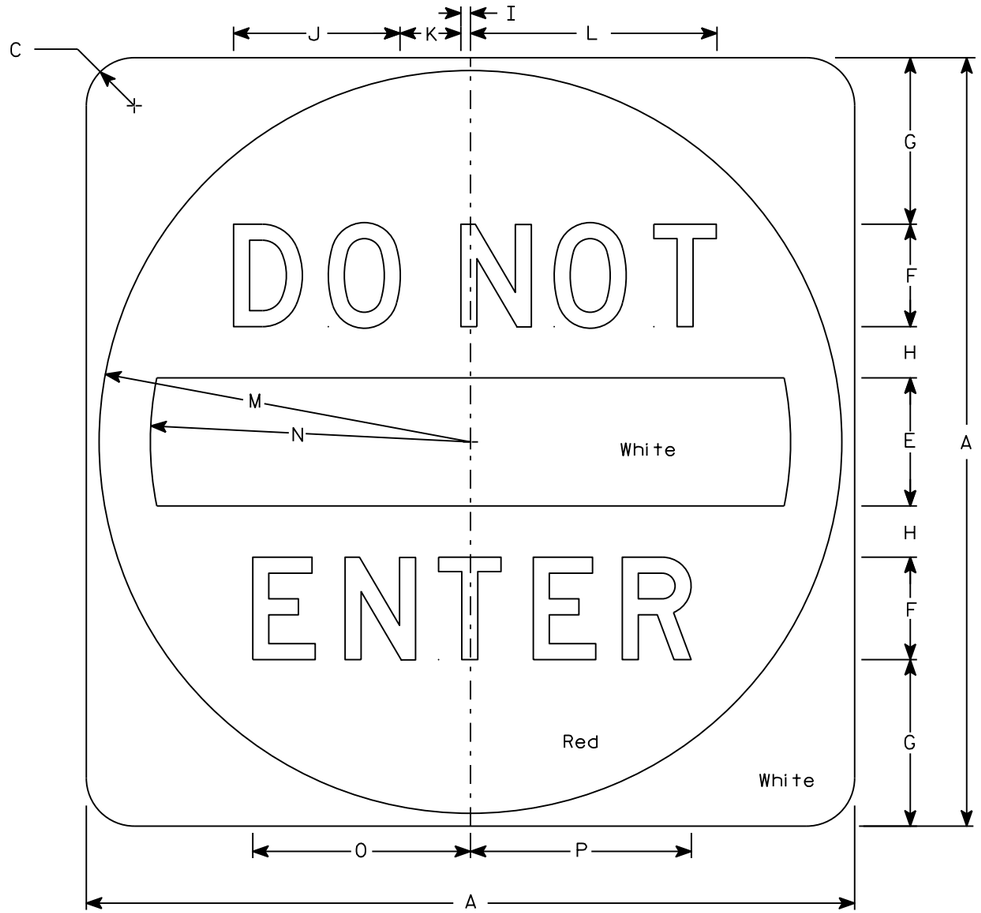
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/17/23 PLATE NO. R4-7.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 675	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.25
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

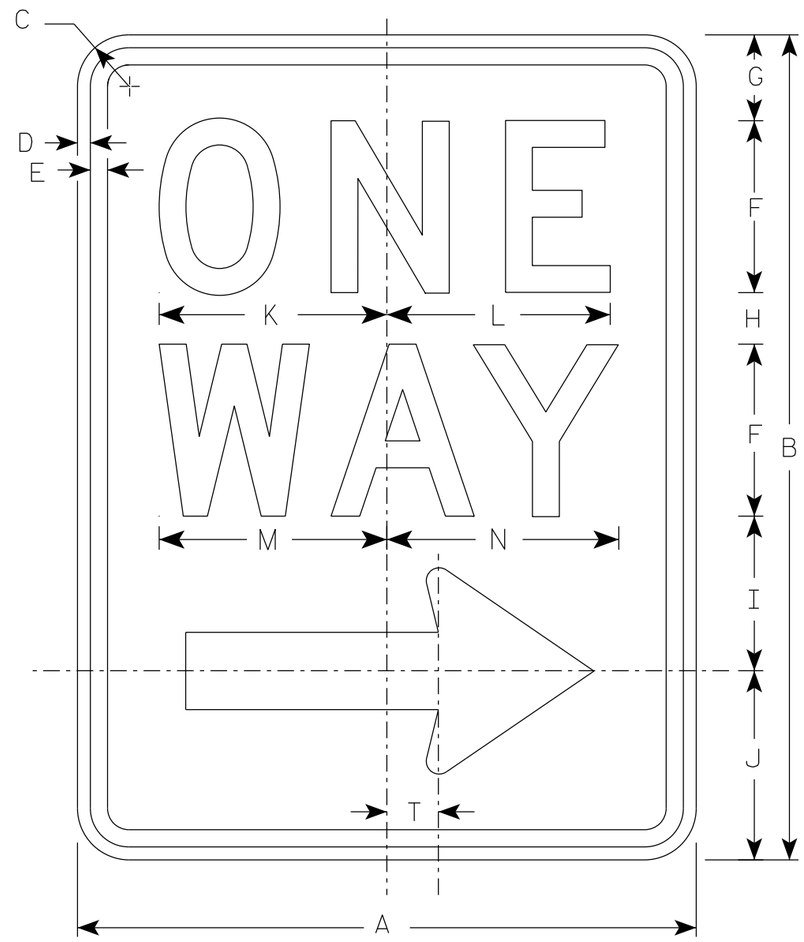
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 676 | E

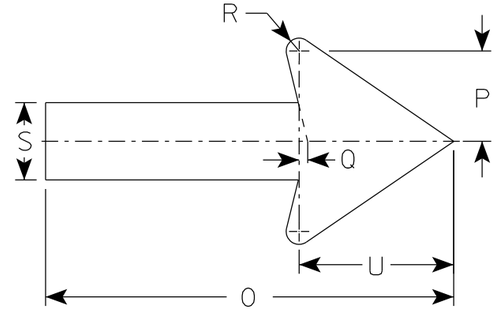
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. R6-2L same as R6-2R except arrow points to the left.



R6-2R

Arrow Detail



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/2	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	1 1/2	1 1/2	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 7/8	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

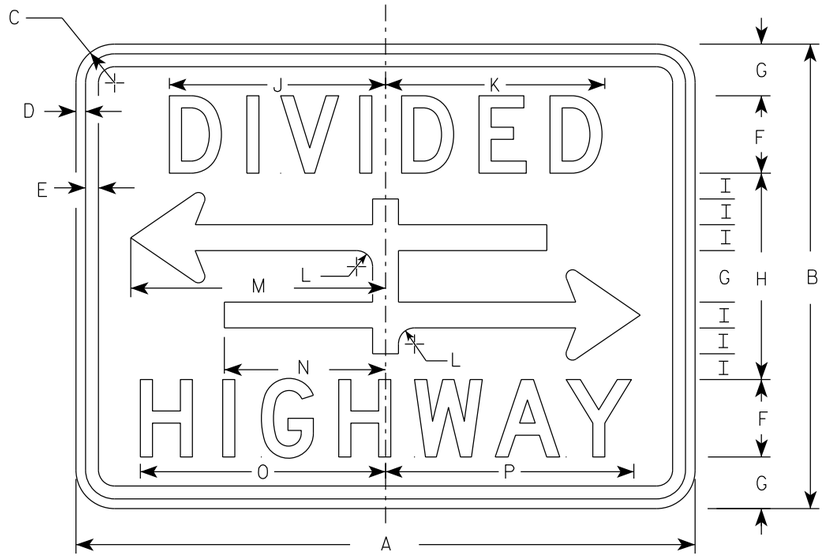
APPROVED Matthew R Rauch
for State Traffic Engineer

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

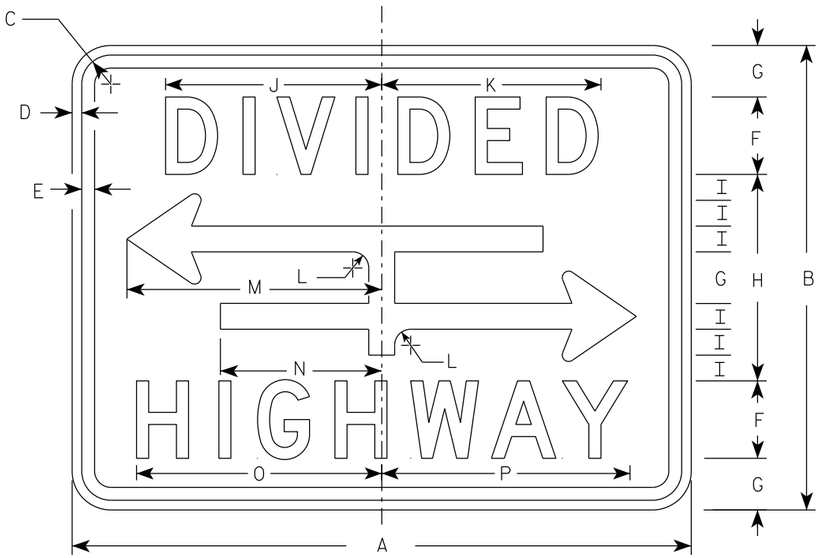
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 677	E

NOTES

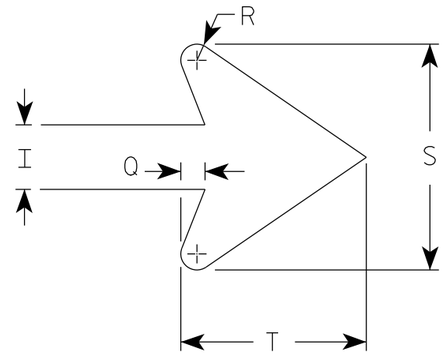
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



R6-3



R6-3A



ARROW DETAIL

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

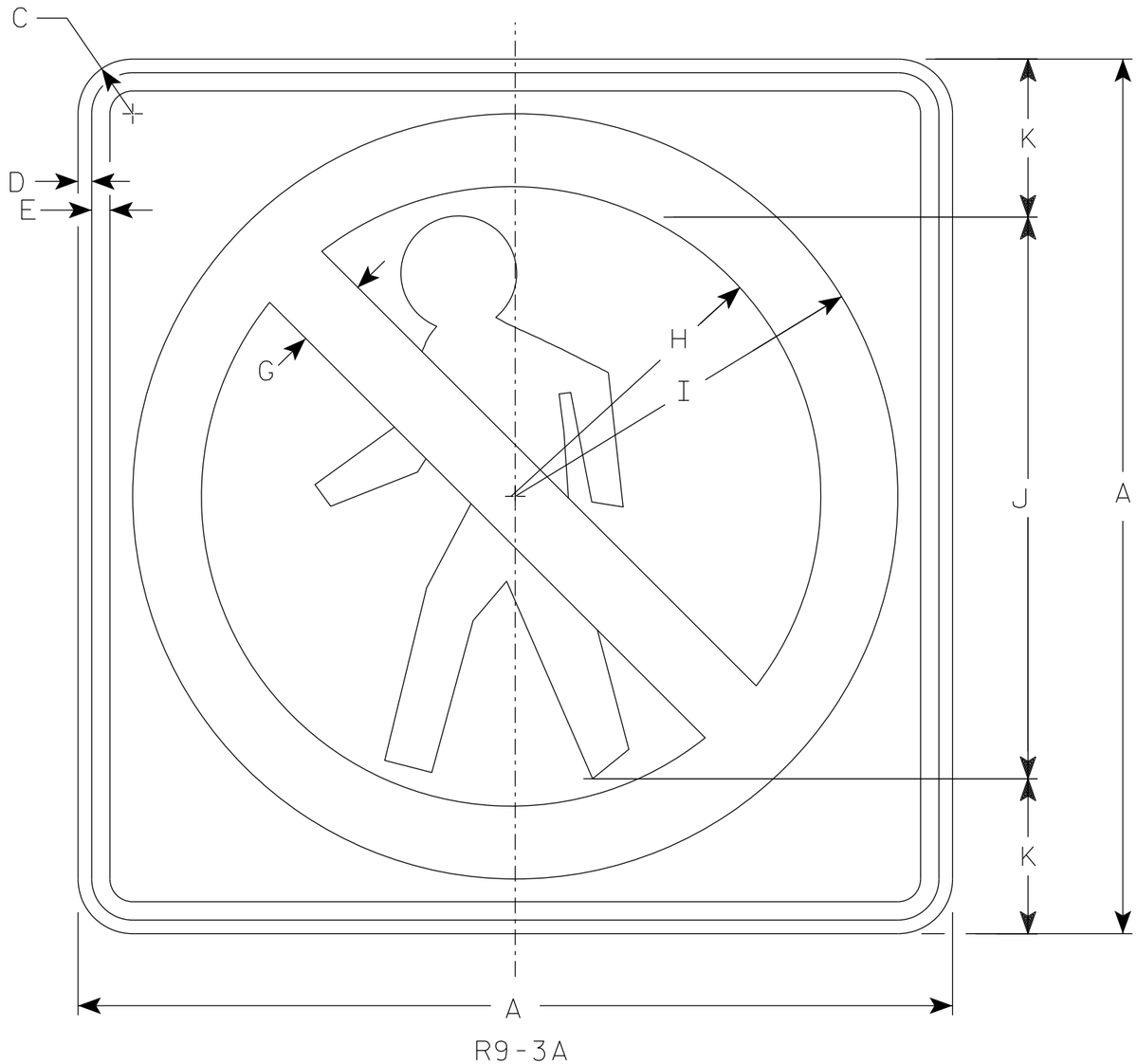
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/26/23 PLATE NO. R6-3.6

PROJECT NO:

SHEET NO: 678 E



R9-3A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Pedestrian are non-reflective black. Circle with diagonal bar is reflective red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/2	3/8	3/8		1 1/2	6 1/4	7 7/8	12	3																2.25
2S	24		1 1/2	3/8	1/2		2	8 1/2	10 1/2	15	4																4.00
2M	24		1 1/2	3/8	1/2		2	8 1/2	10 1/2	15	4																4.00
3																											
4																											
5																											

STANDARD SIGN
R9-3A

WISCONSIN DEPT OF TRANSPORTATION

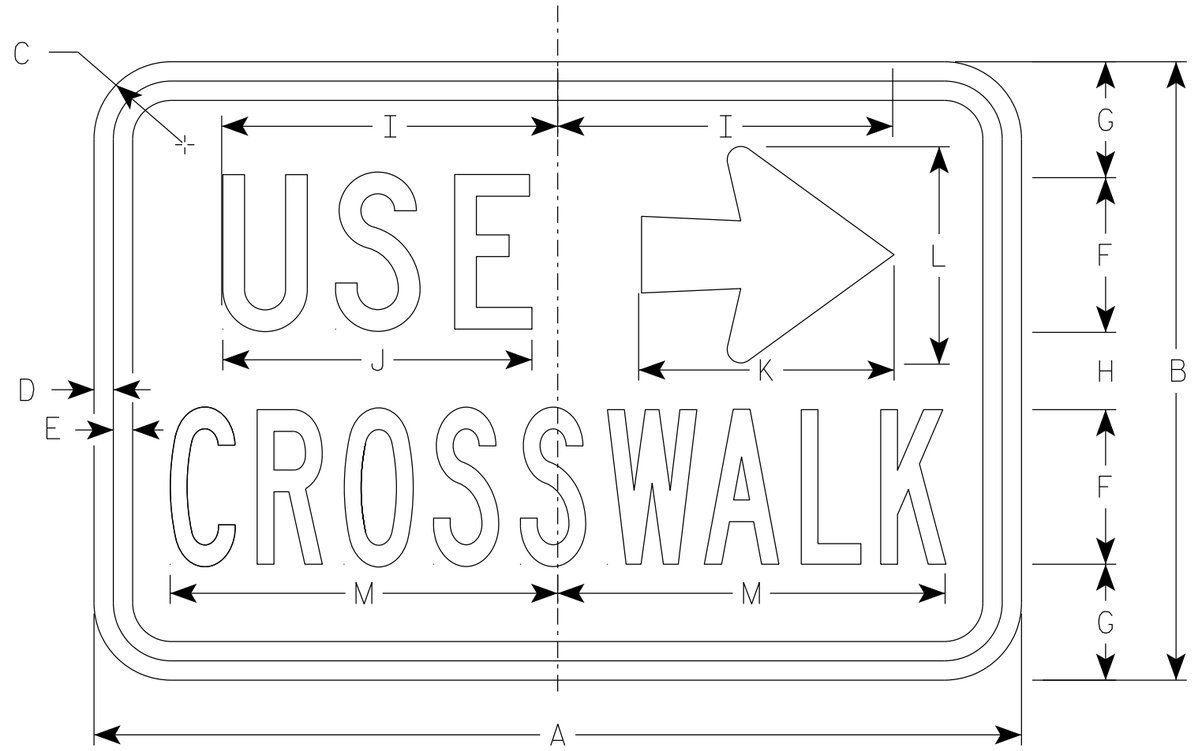
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/23/24 PLATE NO. R9-3A.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 679 E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C Line 1, Series B Line 2



R9-3B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	18	12	1 1/2	3/8	3/8	3	2 1/4	1 1/2	6 1/2	6	5	4 1/4	7 1/2														1.5
2M	18	12	1 1/2	3/8	3/8	3	2 1/4	1 1/2	6 1/2	6	5	4 1/4	7 1/2														1.5
3																											
4																											
5																											

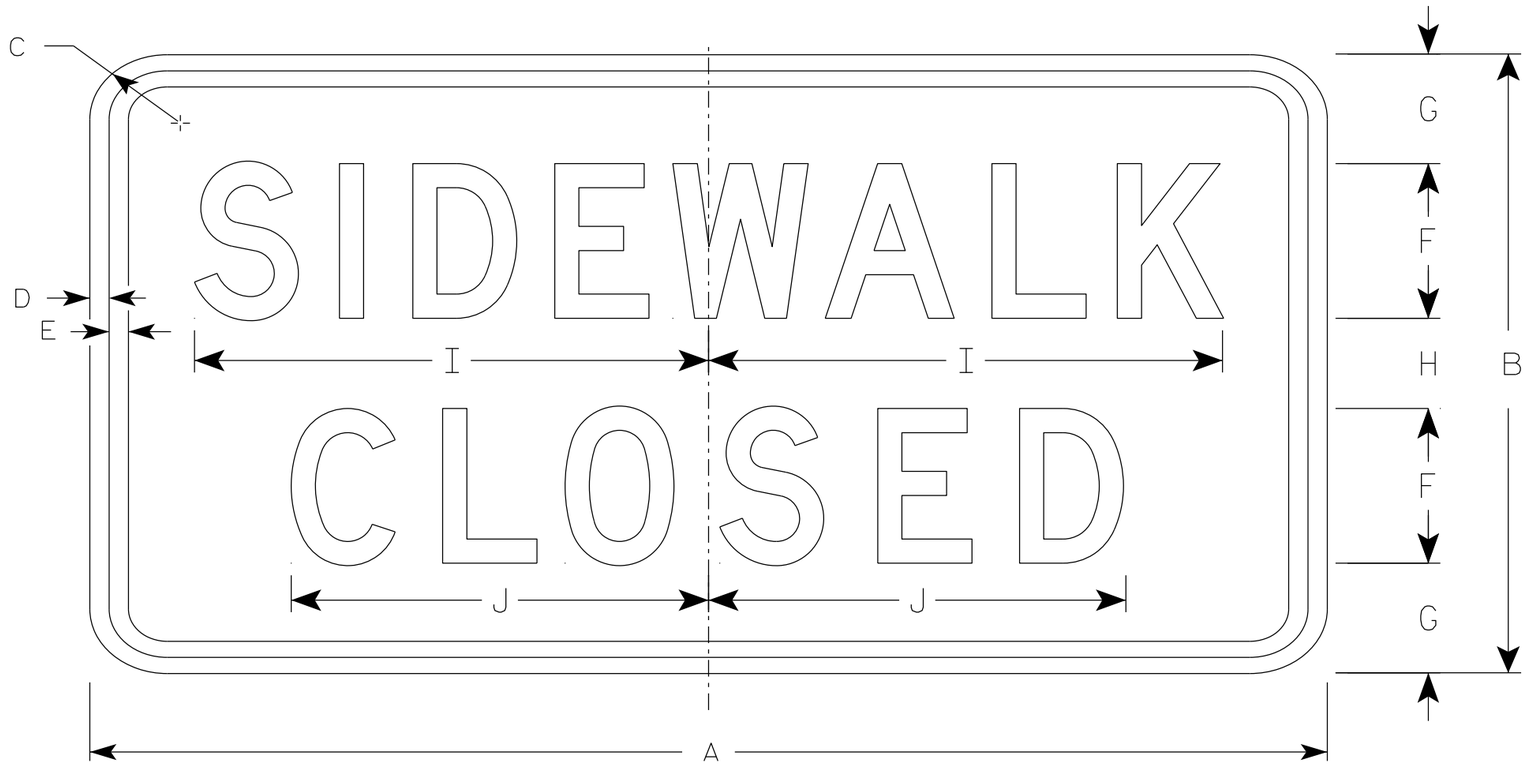
STANDARD SIGN
R9-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/23/24 PLATE NO. R9-3B.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 680 | E



R9-9

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
2M	24	12	1 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
3	30	18	1 ½	½	½	4	3 ½	3	12 ½	10 ¼																	3.75
4																											
5																											

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

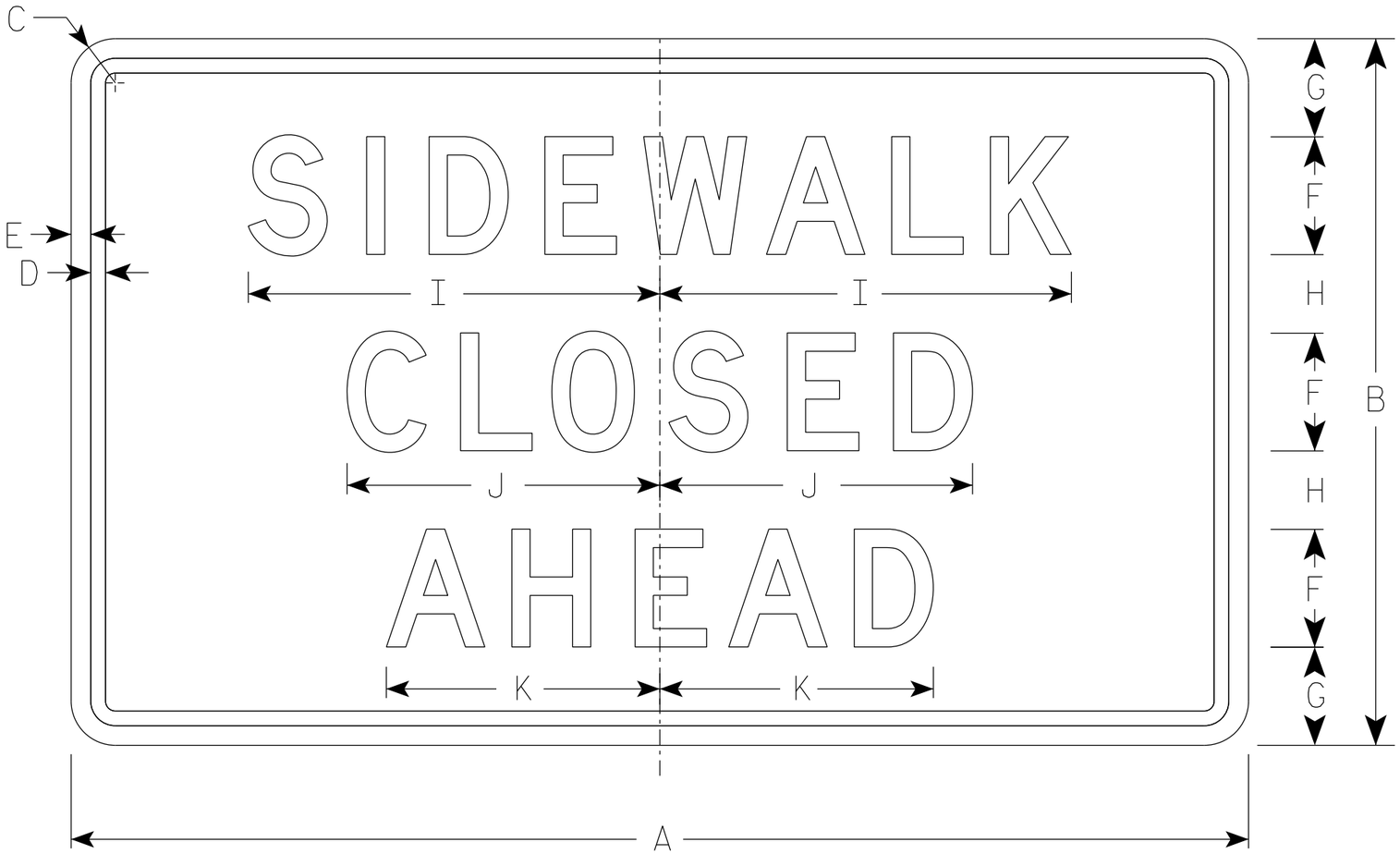
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 681 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



R9-9A

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	18	1 ½	⅜	½	3	2 ½	2	10 ½	8	7																3.75
2M	30	18	1 ½	⅜	½	3	2 ½	2	10 ½	8	7																3.75
3																											
4																											
5																											

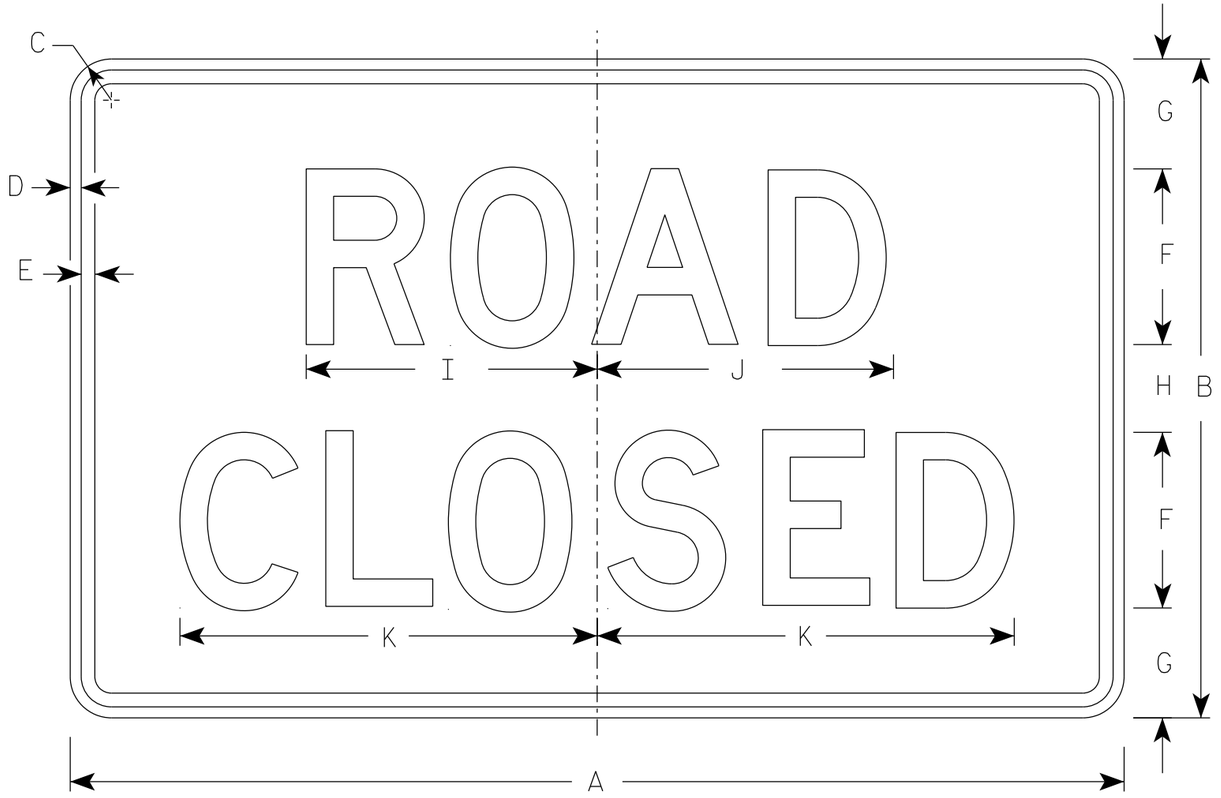
STANDARD SIGN
R9-9A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9A.2

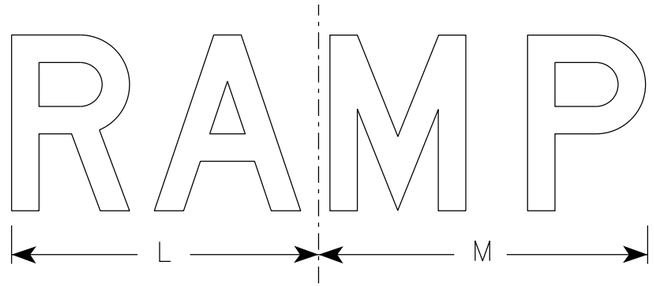
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 682 | E



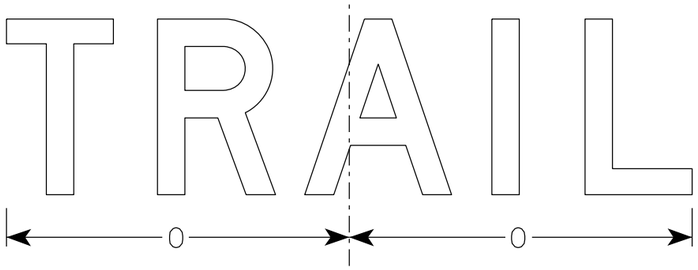
R11-2

NOTES

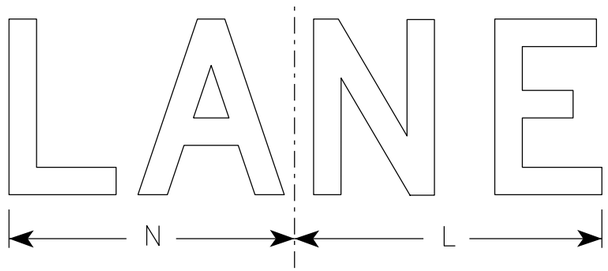
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the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



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

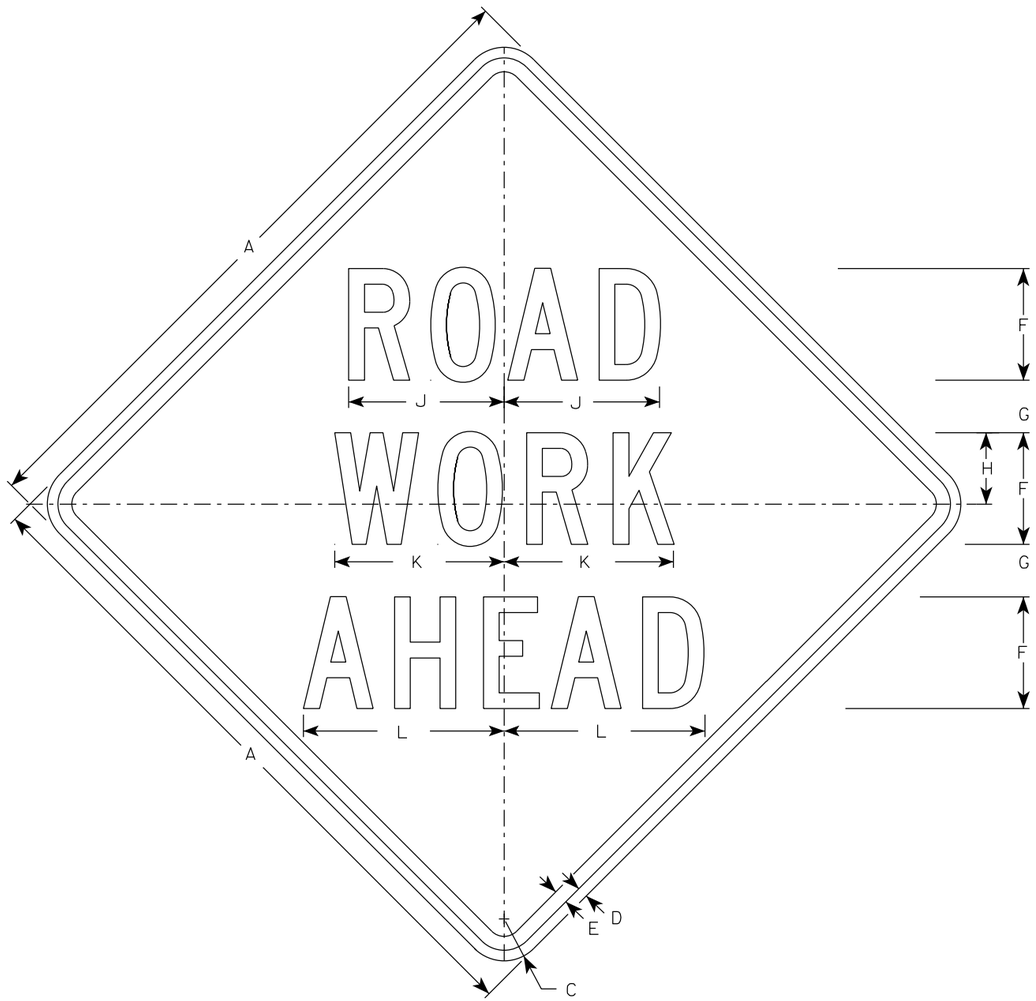
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-2.12

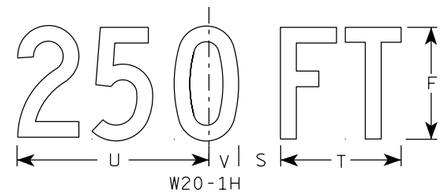
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.dgn PLOT DATE : 5-FEB 2024 2:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

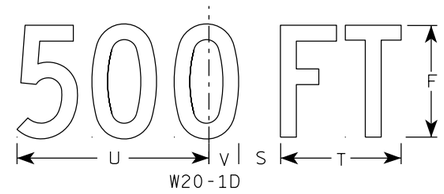
7



W20-1A



W20-1H



W20-1D



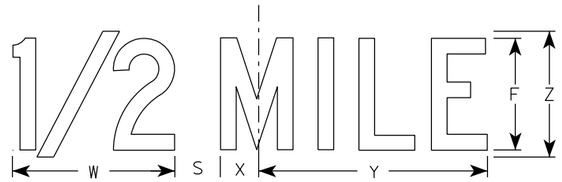
W20-1C



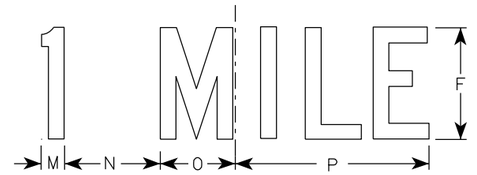
W20-1B

NOTES

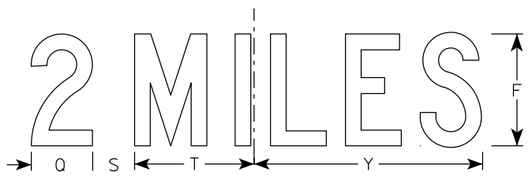
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



W20-1F



W20-1E

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

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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-1.12

PROJECT NO:

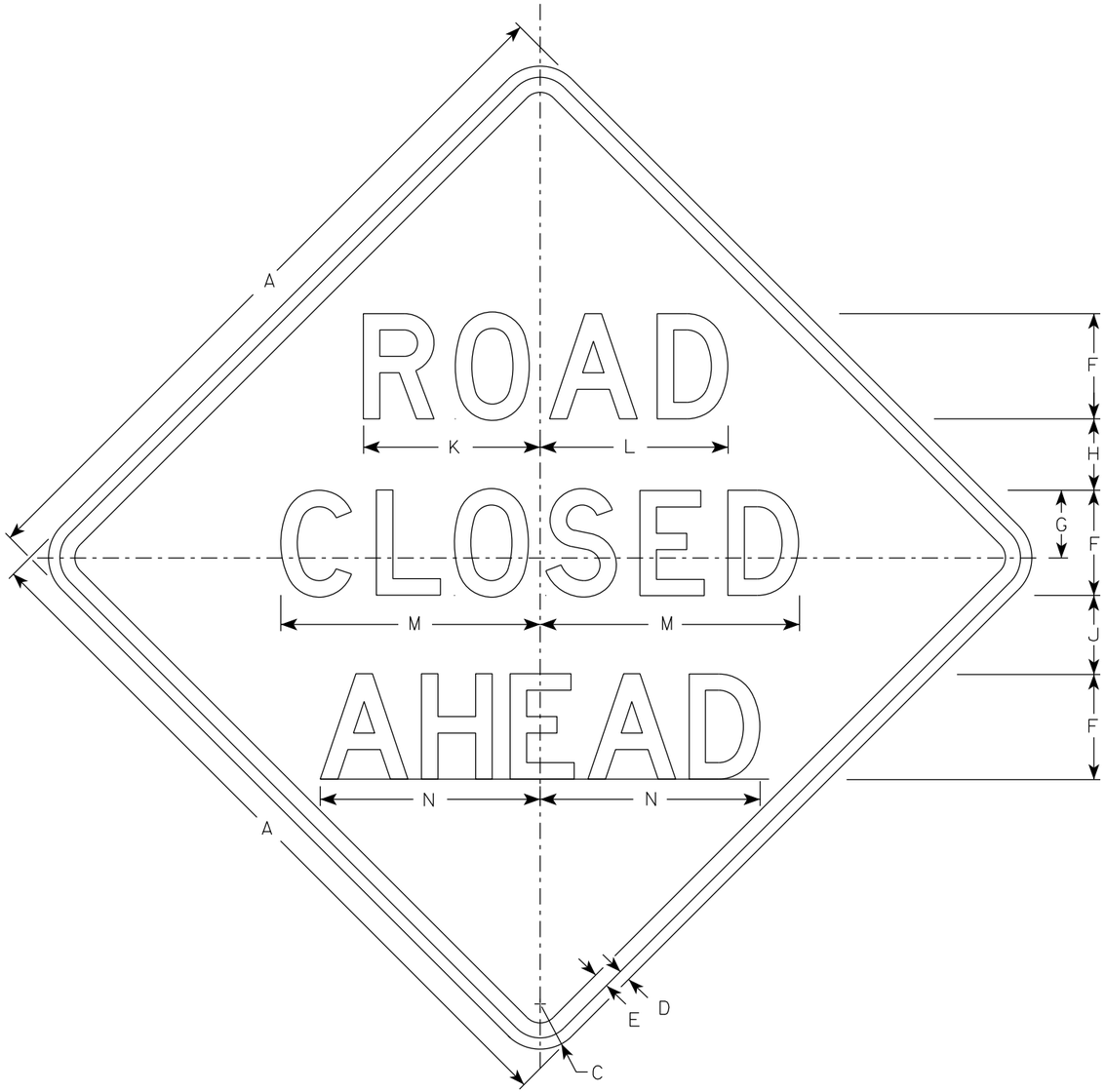
SHEET NO: 684 E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 10-JAN 2024 11:16 PLOT BY : dotc4c

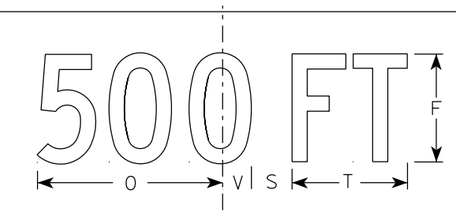
WISDOT/CADDS SHEET 42

7

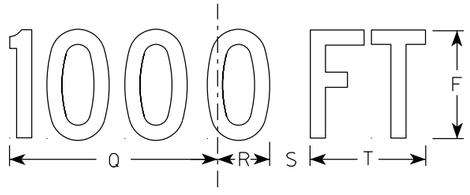
7



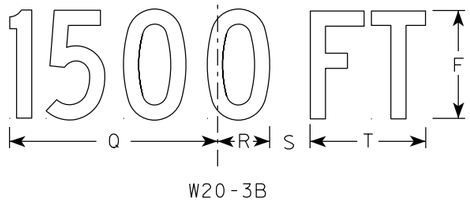
W20-3A



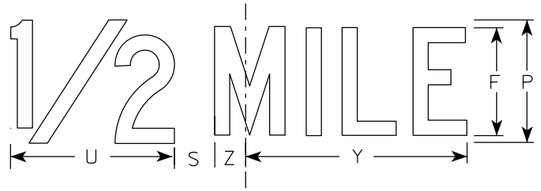
W20-3D



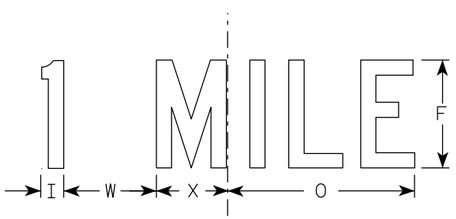
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

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

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

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

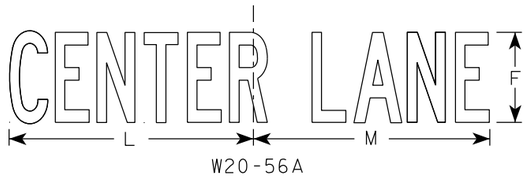
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

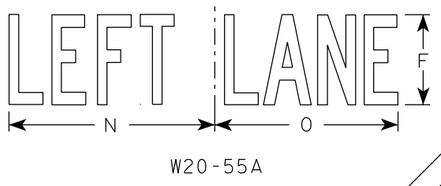
DATE 1/10/2024 PLATE NO. W20-3.8

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

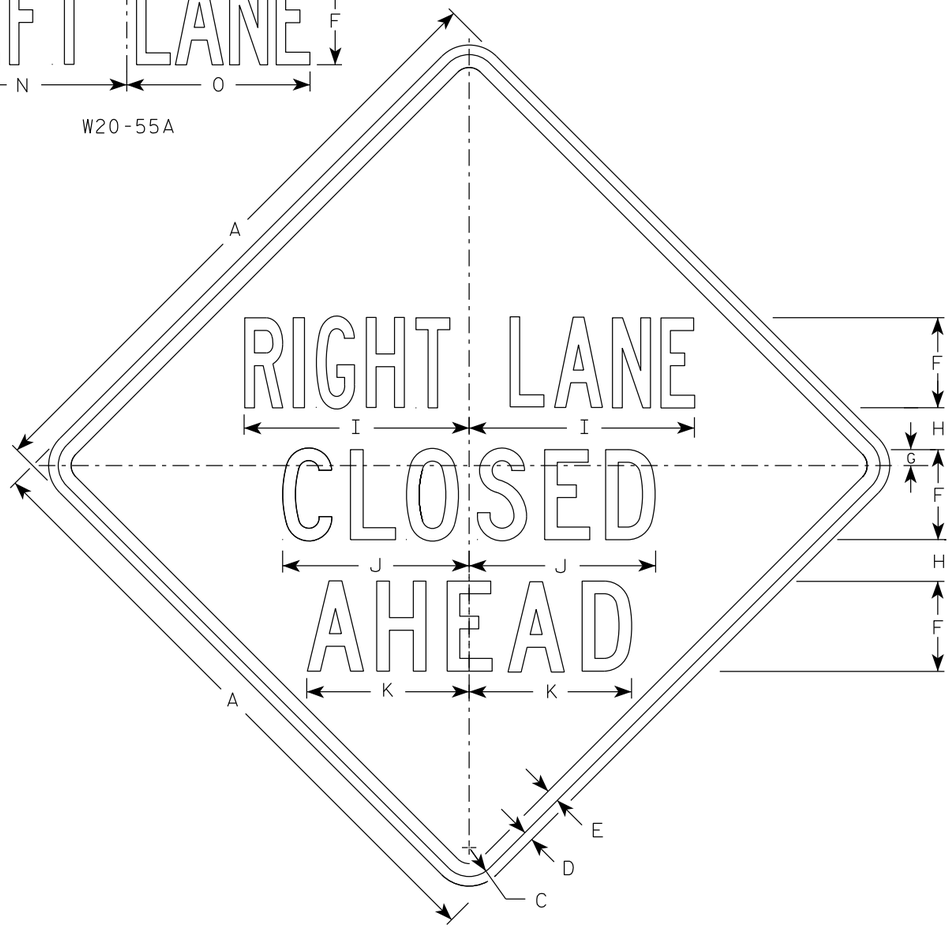
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W203.DGN PLOT DATE : 10-JAN 2024 12:02 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



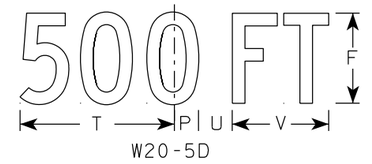
W20-56A



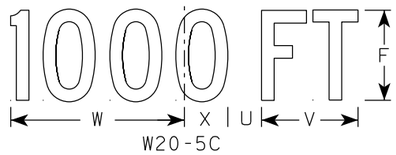
W20-55A



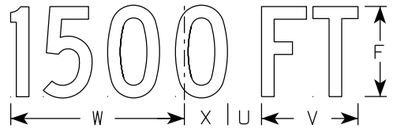
W20-5A



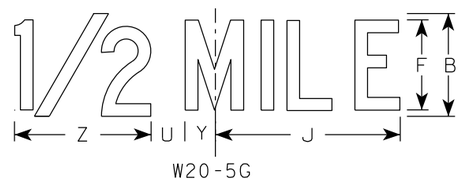
W20-5D



W20-5C



W20-5B



W20-5G



W20-5F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	2 1/4	5/8	3/4	5	7/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

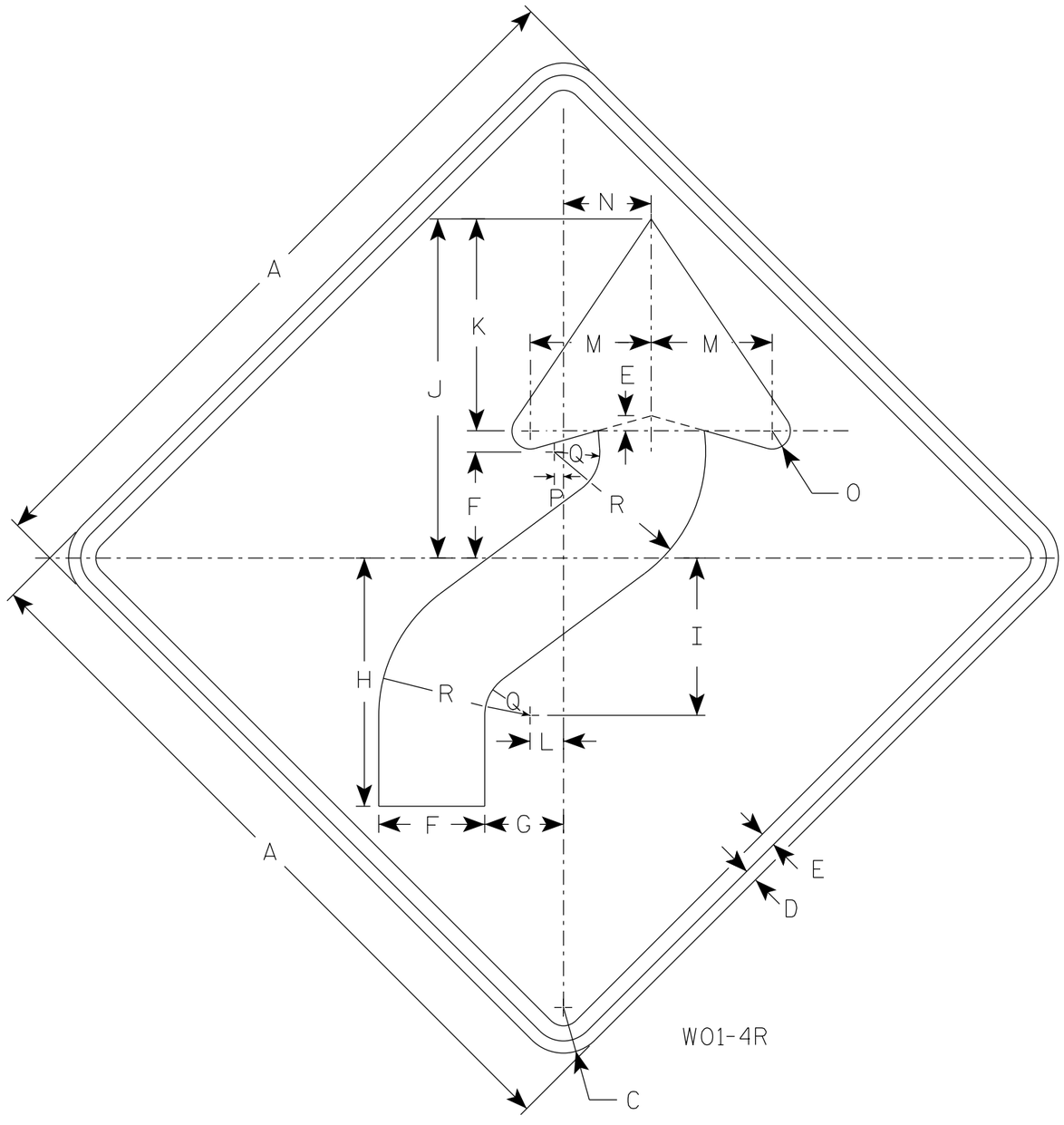
STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/27/24 PLATE NO. W20-5.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 686	E



W01-4R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

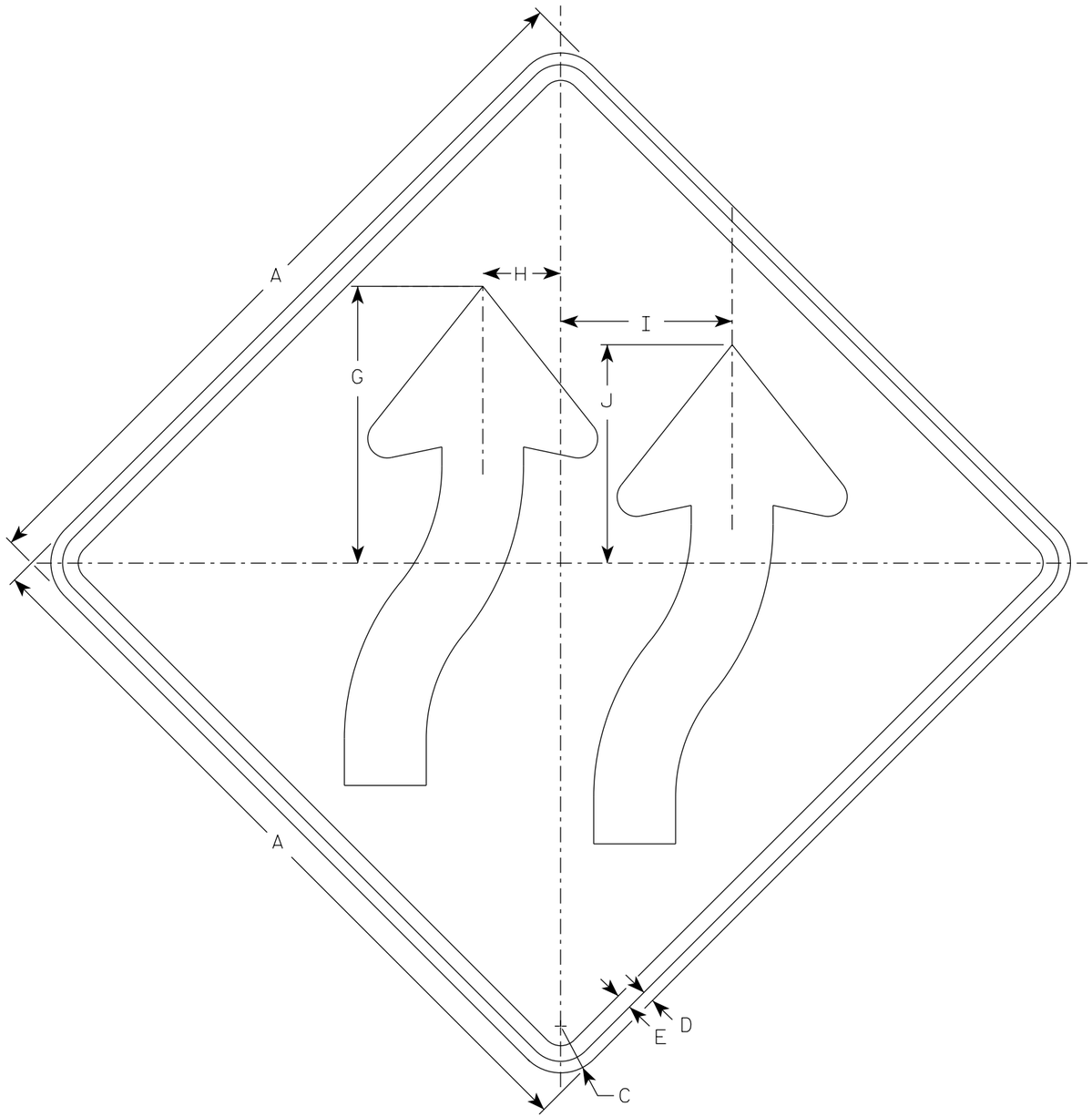
STANDARD SIGN
W01-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-4.2

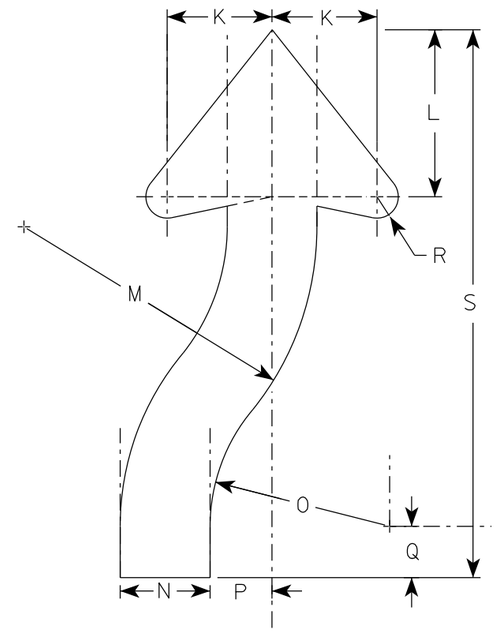
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 687 E



W01-4BR

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4BL is the same as W014-BR exept arrows are reversed along the vertical centerline



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4		13 3/8	3 3/4	8 1/4	10 1/2	4 5/8	7 3/8	12 7/8	3 7/8	7 7/8	2 3/4	2 1/4	7/8	24								9.0
2S	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
2M	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
3	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
4	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
5	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0

STANDARD SIGN
W01-4B

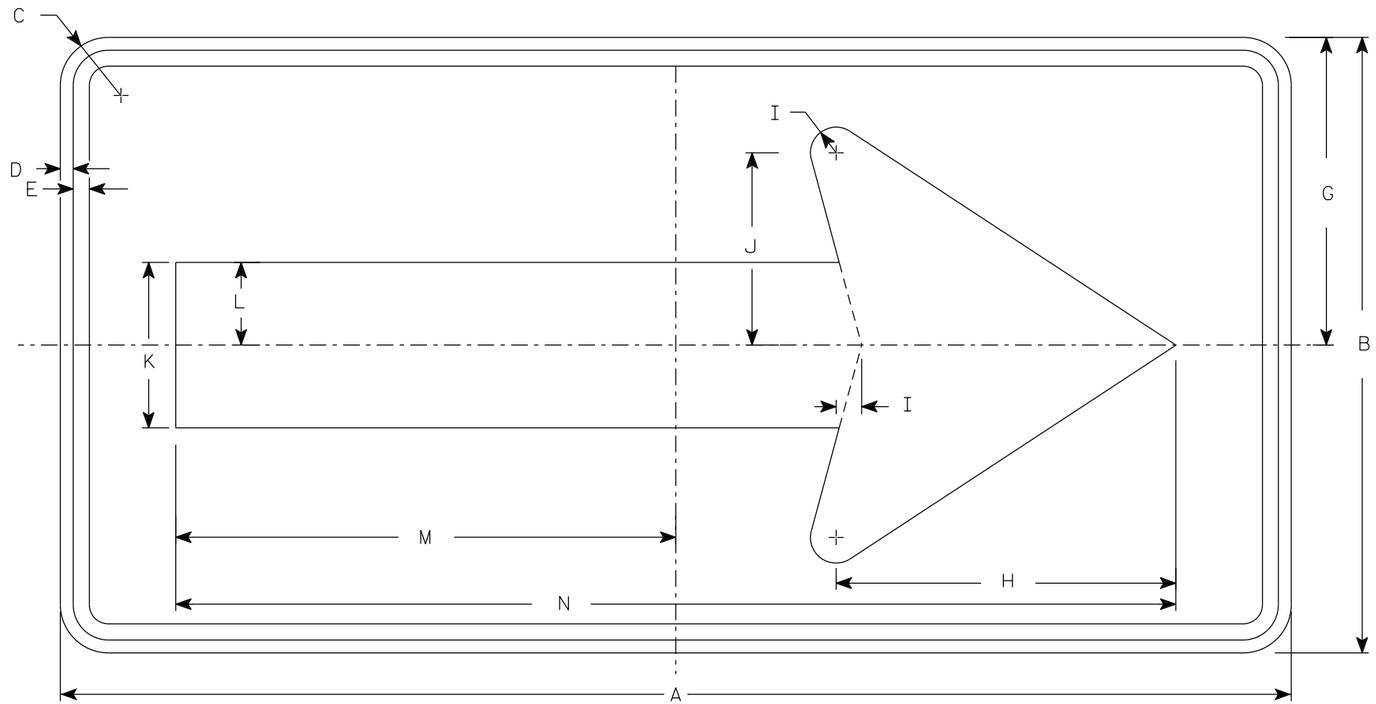
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-4B.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014B.dgn PLOT DATE : 29-JAN 2024 3:41 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



WO1-6

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

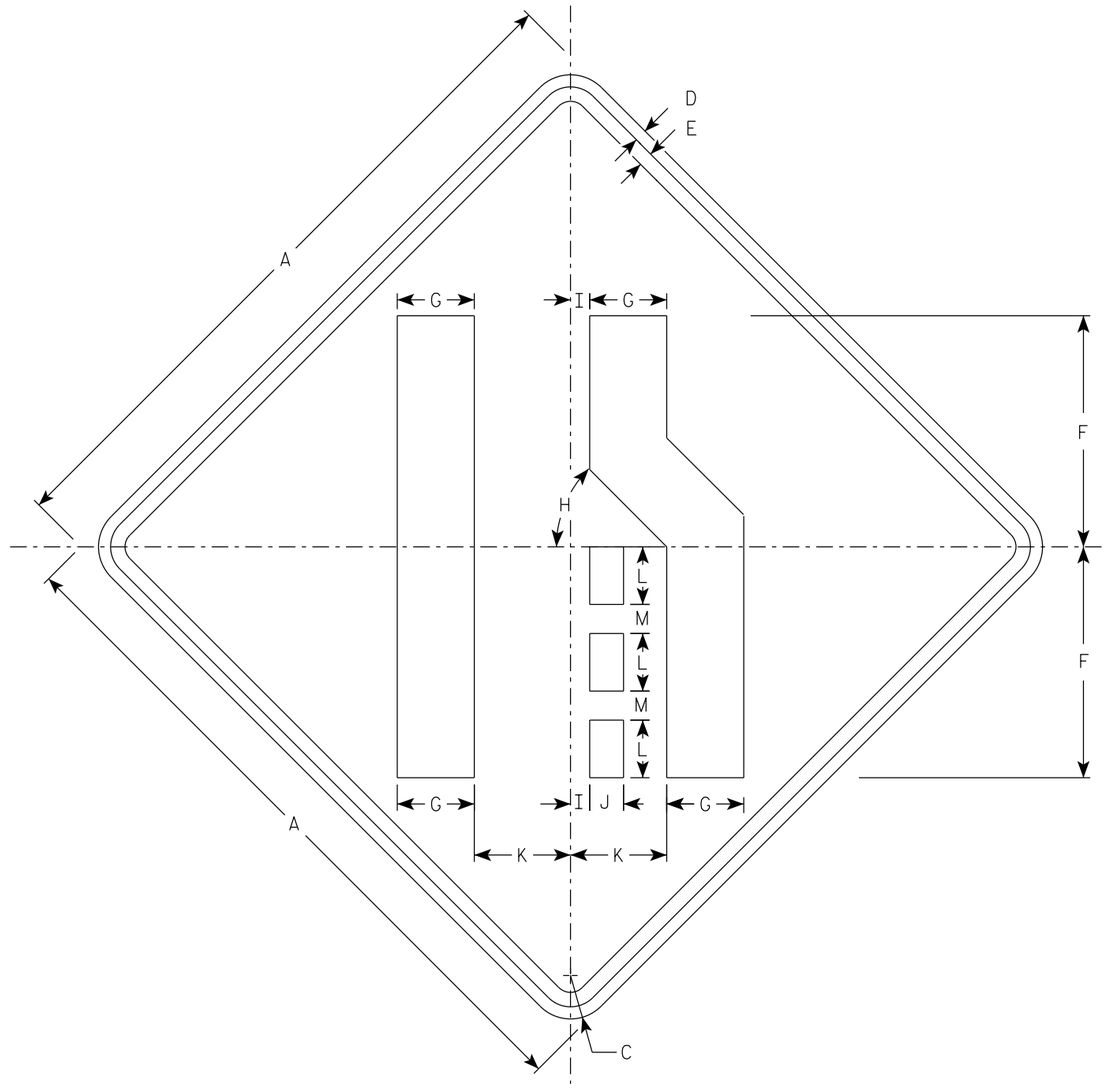
STANDARD SIGN
WO1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-6.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W04-2R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

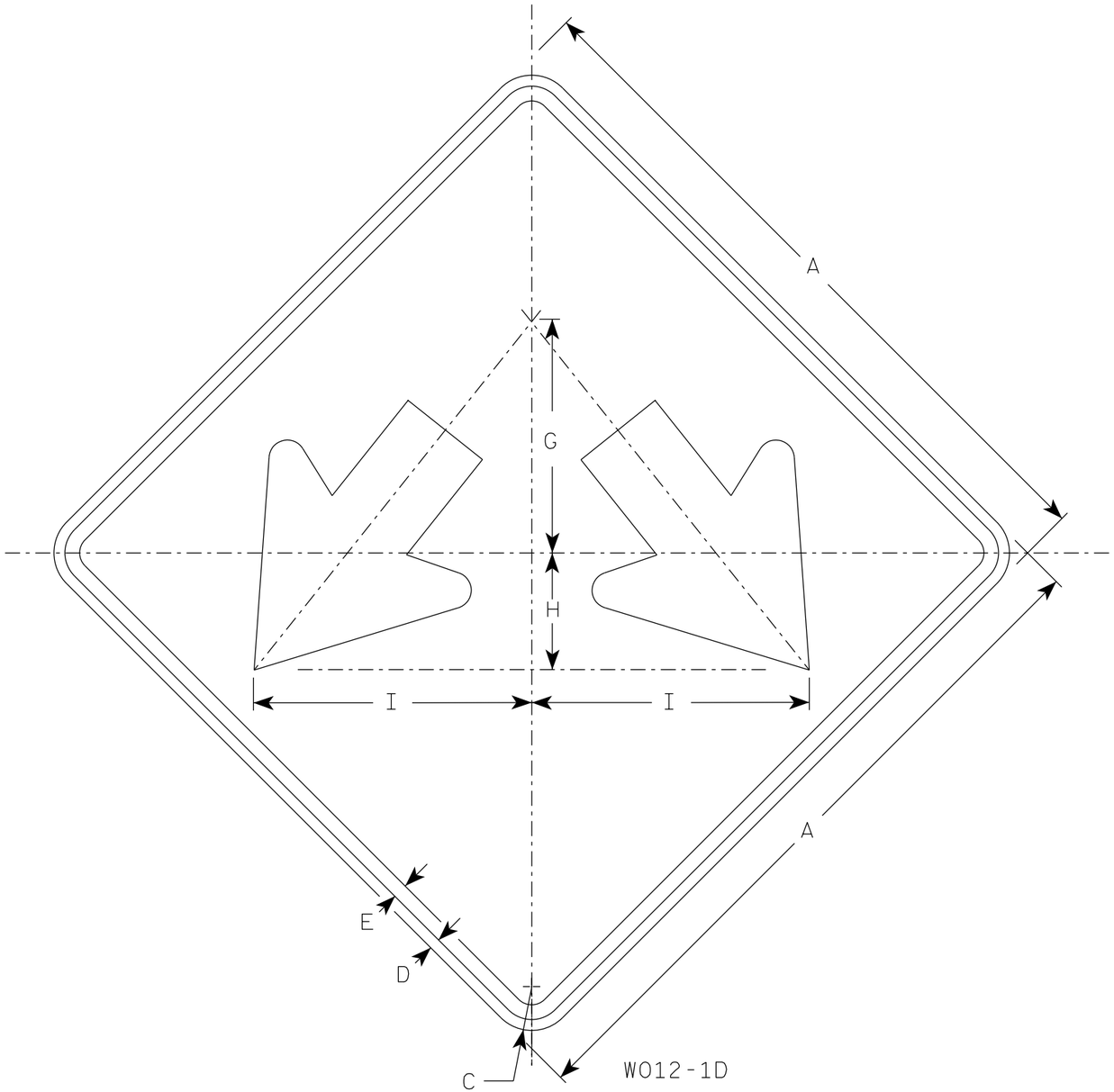
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-2.2

PROJECT NO:

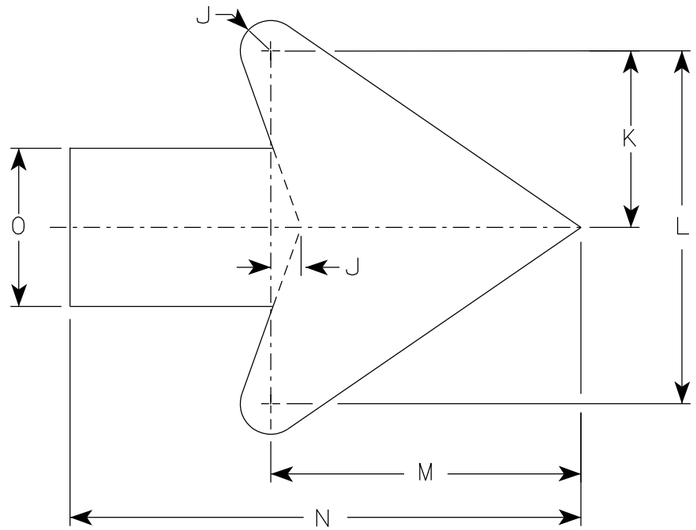
SHEET NO: 690 E



W012-1D

NOTES

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



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/2	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
2S	24		1 1/2	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 1/2	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 7/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		2 1/4	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	36		2 1/4	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

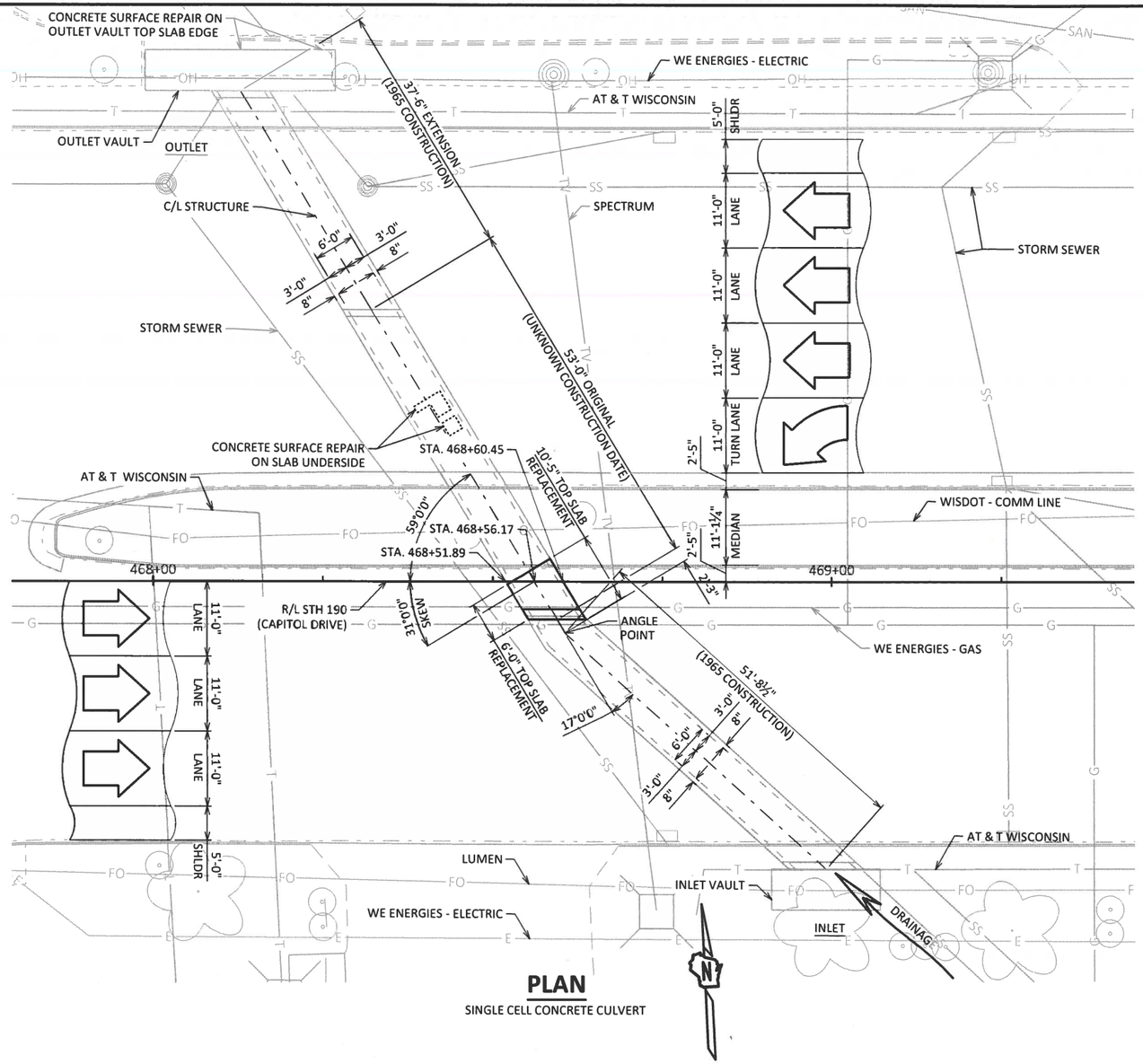
STANDARD SIGN
W012-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

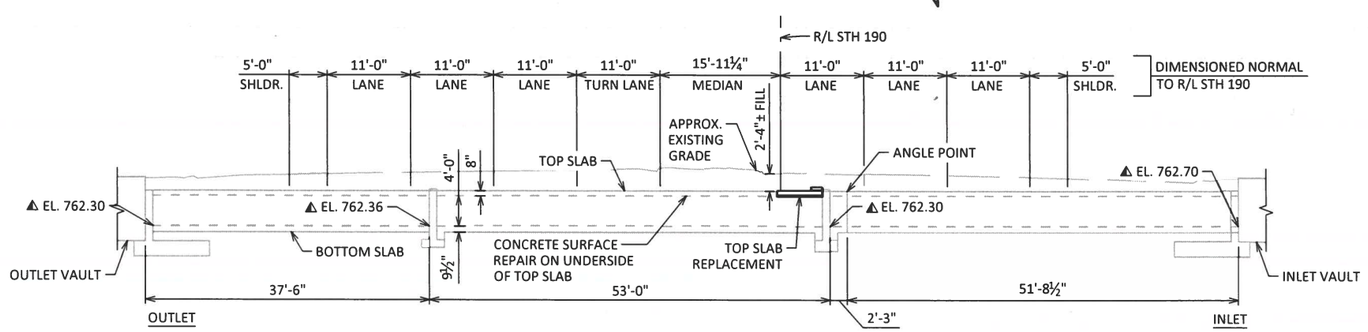
DATE 2/1/2024 PLATE NO. W012-1D.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 691 E



PLAN

SINGLE CELL CONCRETE CULVERT



SECTION ALONG C/L OF STRUCTURE

LOOKING EAST

LEGEND

⚠ PER 1965 STRUCTURE LENGTHENING PLAN ELEVATIONS

STATE PROJECT NUMBER

2025-03-73

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.11
OPERATING RATING: RF = 1.44
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)
(RATINGS FOR TOP SLAB ONLY)

EARTHLOAD:

DESIGNED FOR 2.50 FT. TO 3.5 FT. OF FILL.

ORIGINAL CONSTRUCTION AND 1965 EXTENSIONS

LIVE LOAD:

DESIGN LOADING: UNREPORTED

EARTHLOAD:

DESIGNED FOR 1.99 FT. OF FILL. (TAKEN FROM 1965 EXTENSION DRAWINGS)

MATERIAL PROPERTIES:

CONCRETE MASONRY ——— f'_c = 3,500 PSI
BAR STEEL REINFORCEMENT ——— f_y = 60,000 PSI

TRAFFIC DATA

FEATURE ON STH 190:

ADT = 34,300 (2047)
R.D.S. = 50 MPH

HYDRAULIC DATA

UNREPORTED

SCOPE OF WORK: C-67-35

1. PARTIAL TOP SLAB REPLACEMENT
2. CONCRETE SURFACE REPAIR TO TOP SLAB & VAULT

SHEET LIST

1. GENERAL PLAN
2. GENERAL NOTES AND DETAILS

STRUCTURE DESIGN CONTACTS:

CONSULTANT CONTACT: KEVIN WOOD (414) 259-1500
BOS CONTACT: AARON BONK (608) 261-0261

NO.	DATE	REVISION	BY

GRÄEF
275 W. Wisconsin Avenue
Suite 300
Milwaukee, WI 53203
414 / 259 1500
414 / 259 0037 fax
www.graef-usa.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED EMK 05/05/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

WISCONSIN KEVIN G. WOOD E-32070 MILWAUKEE, WI PROFESSIONAL ENGINEER
4-1-2025

STRUCTURE C-67-35

STH 190 (W. CAPITOL DRIVE) OVER DRAINAGE

COUNTY	CITY
WAUKESHA	BROOKFIELD

DESIGN SPEC.
N/A REHABILITATION

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
CWG	KGW	CWG	KGW

GENERAL PLAN

SHEET 1 OF 2
692

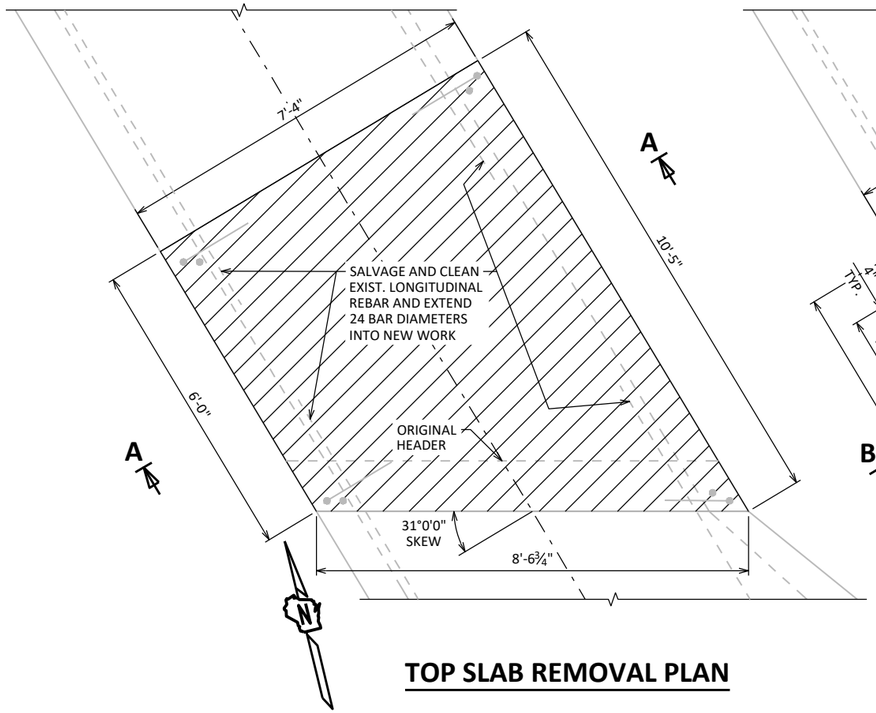
I.D. DATE:

8

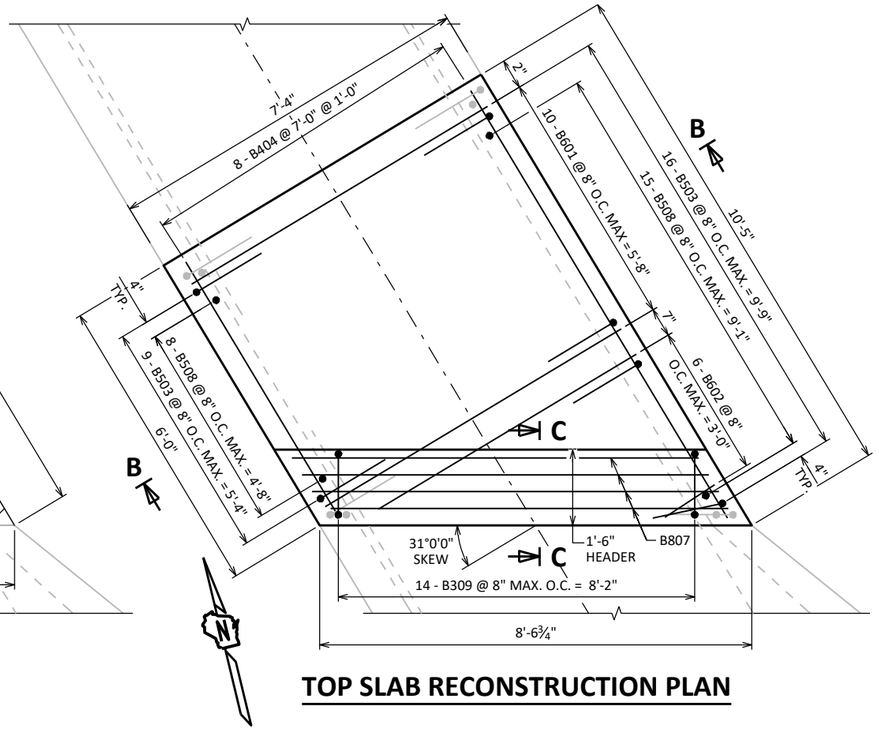
8

STATE PROJECT NUMBER

2025-03-73



TOP SLAB REMOVAL PLAN



TOP SLAB RECONSTRUCTION PLAN

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL STATIONS AND ELEVATIONS ARE IN FEET. STATIONING BASED ON PROJECT ALIGNMENT.

DIMENSIONS SHOWN ARE BASED ON THE 1965 CULVERT EXTENSION PLANS.

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

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS NOTED OTHERWISE.

CONCRETE SURFACE REPAIR AS DIRECTED BY THE FIELD ENGINEER. QUANTITIES SHOWN ON PLANS ARE APPROXIMATE.

CONCRETE REMOVAL SHALL BE DEFINED BY A 1/2" DEEP SAW CUT.

EXCAVATION REQUIRED FOR REMOVAL OF EXISTING TOP SLAB SHALL BE INCLUDED IN "EXCAVATION FOR STRUCTURE CULVERTS C-67-35".

SEE ROADWAY PLANS FOR TRAFFIC STAGING.

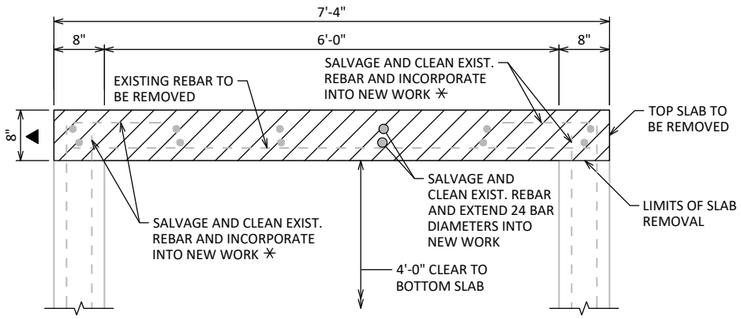
EXISTING STRUCTURE C-67-35 IS A CAST-IN-PLACE SINGLE CELL BOX CULVERT WITH CLEAR WIDTH OF 6'-0", CLEAR HEIGHT OF 4'-0" AND LENGTH OF 145'-5½". A PORTION OF THE TOP SLAB IS TO BE REMOVED AND REPLACED.

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

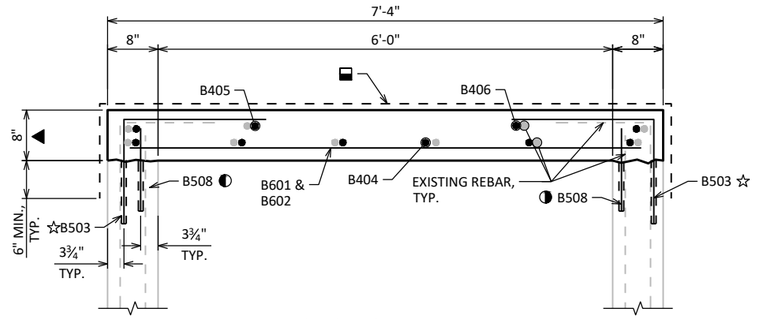
	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
	B601		10	7'-0"			TOP SLAB TRANS.
	B602		6	3'-6"		◭	TOP SLAB TRANS.
☆	B503		25	3'-4"	X		TOP SLAB CORNER
	B404		8	7'-10"		◭	LONG. BOTTOM
	B405		1	5'-8"			LONG. TOP
	B406		1	9'-3"			LONG. TOP
	B807		8	8'-2"			HEADER LONG.
◐	B508		23	1'-2"			VERT. DOWEL
	B309		14	4'-5"	X		HEADER TRAN.

◭ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



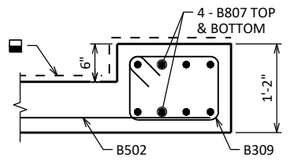
SECTION A-A

DIMENSIONS PERPENDICULAR TO C/L CULVERT



SECTION B-B

DIMENSIONS PERPENDICULAR TO C/L CULVERT

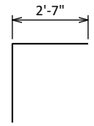


SECTION C-C

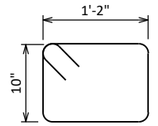
BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

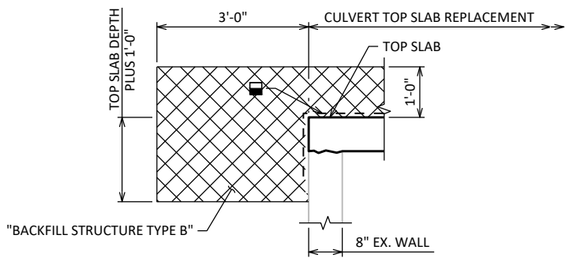
BAR MARK	NO. REQ'D.	LENGTH
B602	1 SERIES OF 6	1'-0" TO 6'-0"
B404	1 SERIES OF 8	5'-8" TO 10'-0"



B503



B309



CULVERT BACKFILL DETAIL

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
203.0220	REMOVING STRUCTURE C-67-35	EACH	1
206.2001	EXCAVATION FOR STRUCTURES CULVERTS C-67-35	EACH	1
210.2500	BACKFILL STRUCTURE TYPE B	TON	15
502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	46
504.0100	CONCRETE MASONRY CULVERTS	CY	2
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	500
509.1500	CONCRETE SURFACE REPAIR	SF	28
516.0610.S	SHEET MEMBRANE WATERPROOFING FOR BURIED STRUCTURES	SY	10
	NON-BID ITEMS		

ALL ITEMS ARE CATEGORY 0030

LEGEND

- SHEET MEMBRANE WATERPROOFING REQUIRED ACROSS TOP SLAB REPLACEMENT. EXTEND 6" MIN. BELOW THE BOTTOM OF TOP SLAB.
- CONCRETE REMOVAL LIMITS
- BACKFILL STRUCTURE TYPE B LIMITS
- ✳ EXISTING BARS ARE LIKELY TO BE CORRODED AND OR DAMAGED DURING CONCRETE REMOVAL. PRESERVE AND INCORPORATE AS MUCH REBAR AS PRACTICAL. SUPPLEMENTAL WITH THE BARS INDICATED BY ☆ AND ◐ .
- ▲ ORIGINAL STRUCTURE PLANS UNAVAILABLE. ASSUMED TOP SLAB THICKNESS OF 8" TO MATCH 1965 CULVERT EXTENSION PLANS.
- ☆ ADHESIVE ANCHORS NO. 5 BAR. EMBED 10" IN CONCRETE.
- ◐ ADHESIVE ANCHORS NO. 5 BAR EMBED 8" IN CONCRETE.

NO.	DATE	REVISION	BY

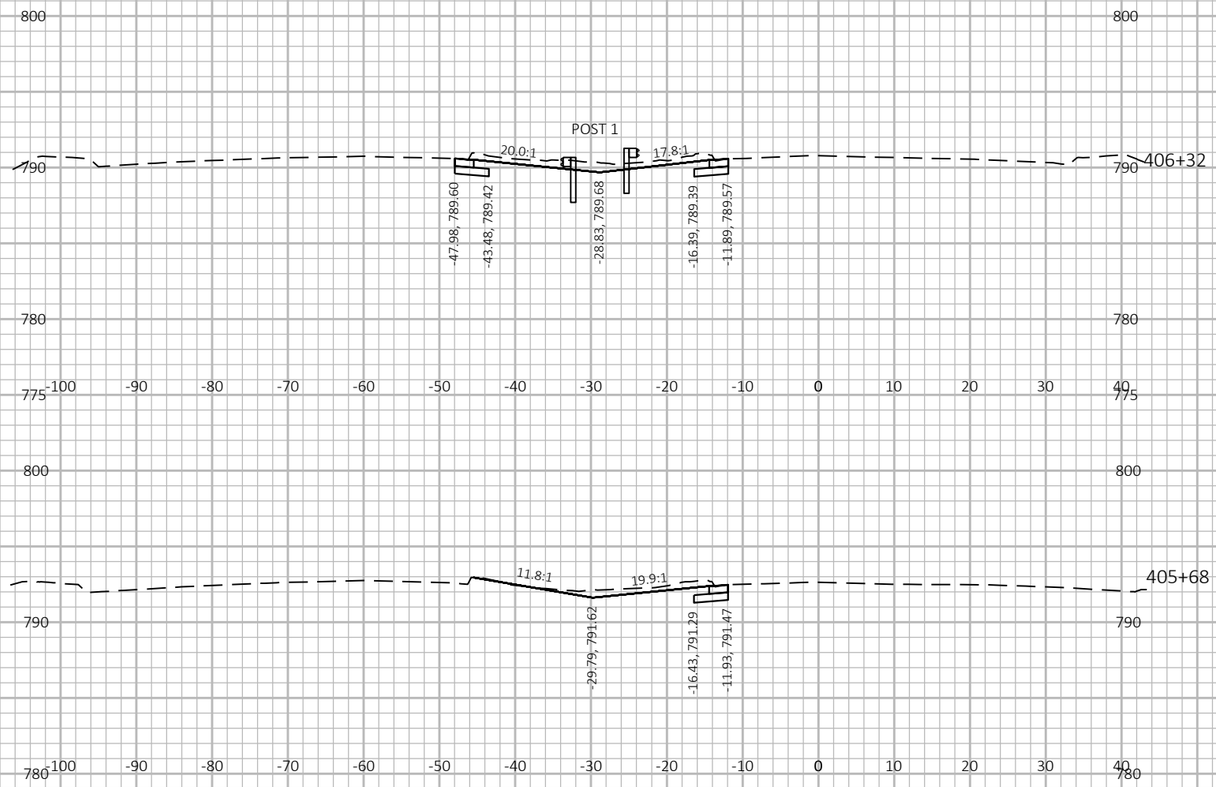
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

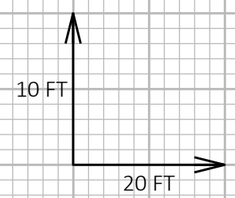
STRUCTURE C-67-35

DRAWN BY CWG | PLANS CK'D KGW

GENERAL NOTES AND DETAILS

SHEET 2 OF 2
693





9

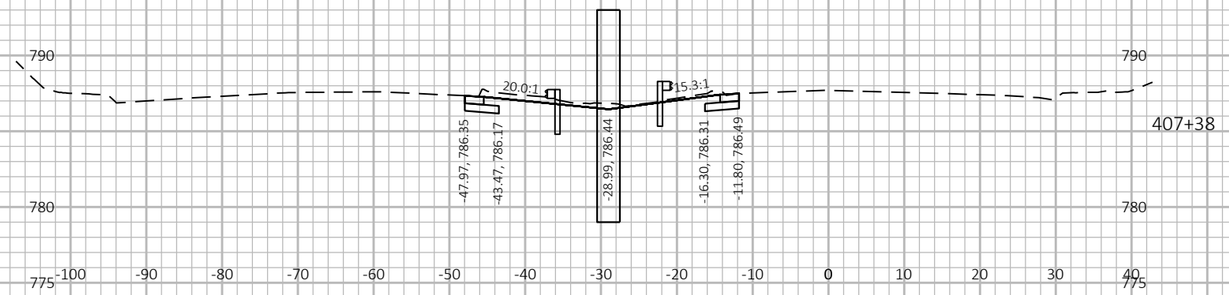
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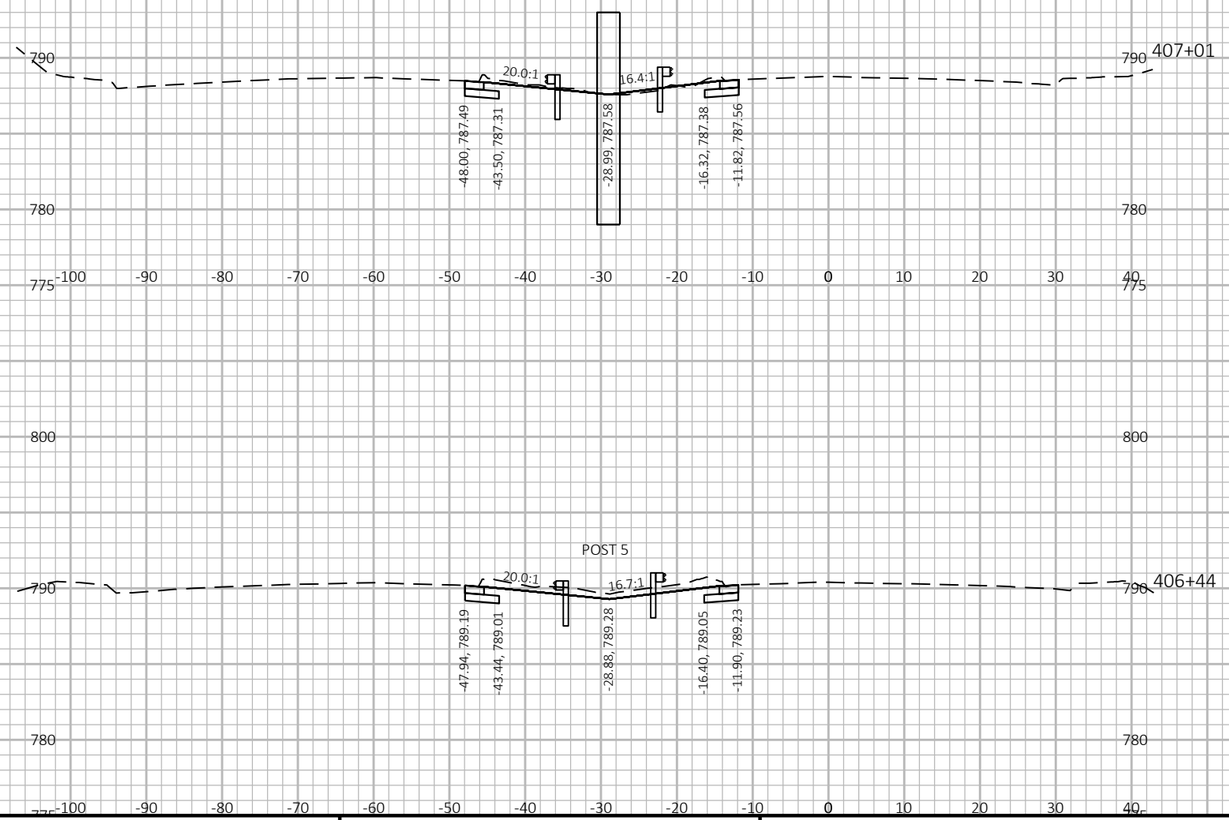
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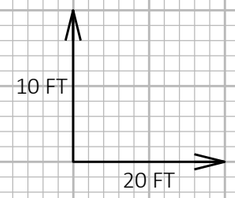
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LAYOUT NAME - 090201_xs

PLOT DATE : 8/21/2025 10:33 AM PLOT BY : BARRETT, WILL PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







9

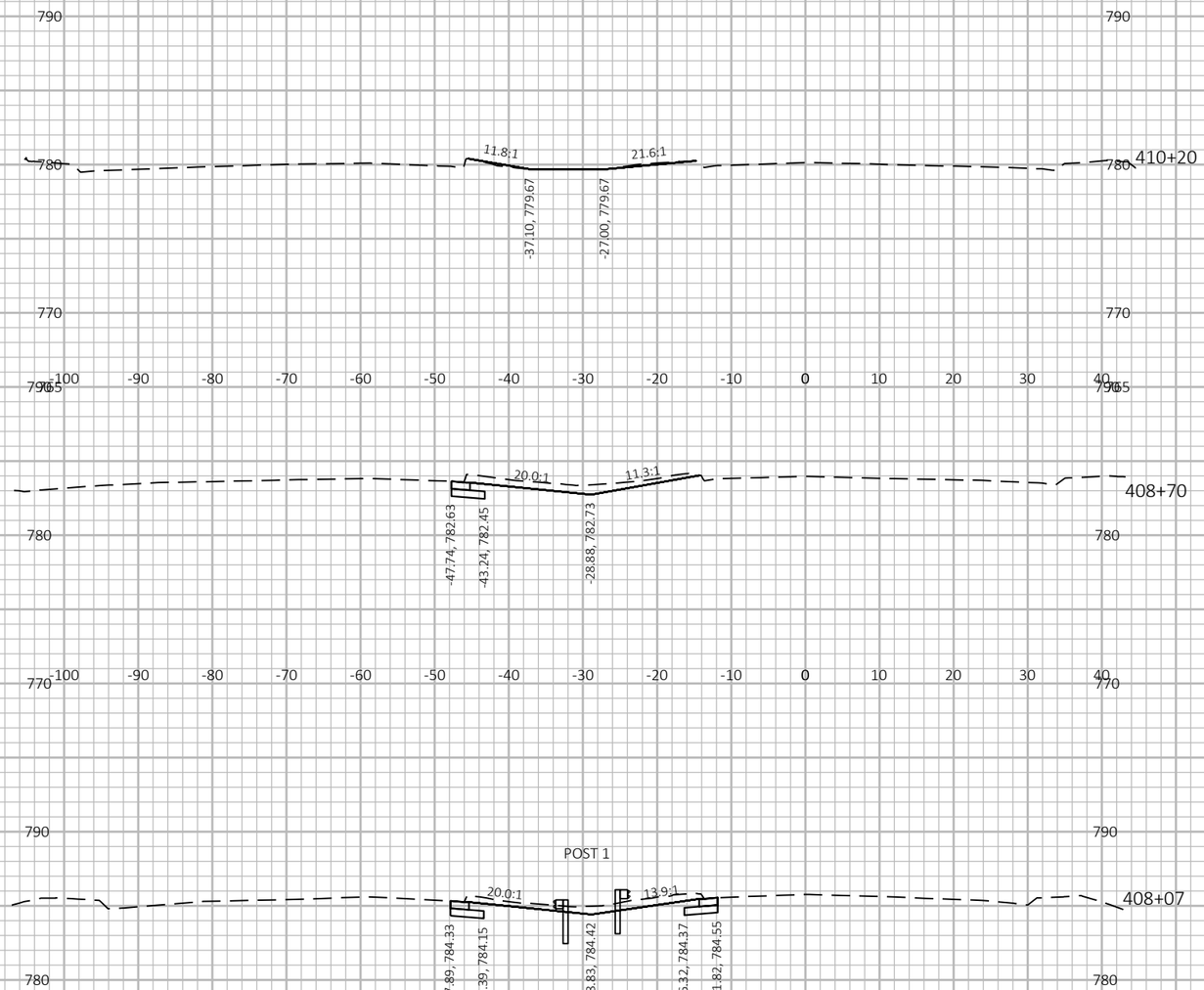
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WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2025-03-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS	SHEET 696	E

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PLOT DATE : 8/21/2025 10:33 AM PLOT BY : BARRETT, WILL PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

Notes

Wisconsin Department of Transportation

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