WKE

NOVEMBER 2023

PROJECT ID: 2025-07-73

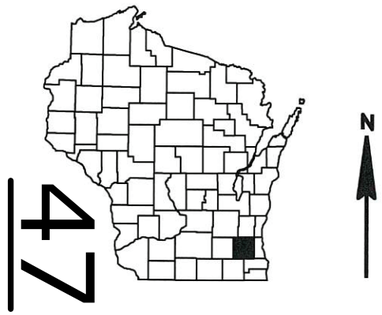
WITH: N/A

COUNTY: WAUKESHA

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 = 662



DESIGN DESIGNATION 2025-07-73

A.A.D.T.	2019	=	27,900
A.A.D.T.	2045	=	28,300
D.H.V.		=	3,540
D.D.		=	59/41
T.		=	4.7%
DESIGN SPEED		=	30-60 MPH
ESALS		=	3,300,000 (CONCRETE) 2,400,000 (ASPHALT)

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

CITY & VIL PEWAUKEE, CAPITOL DRIVE

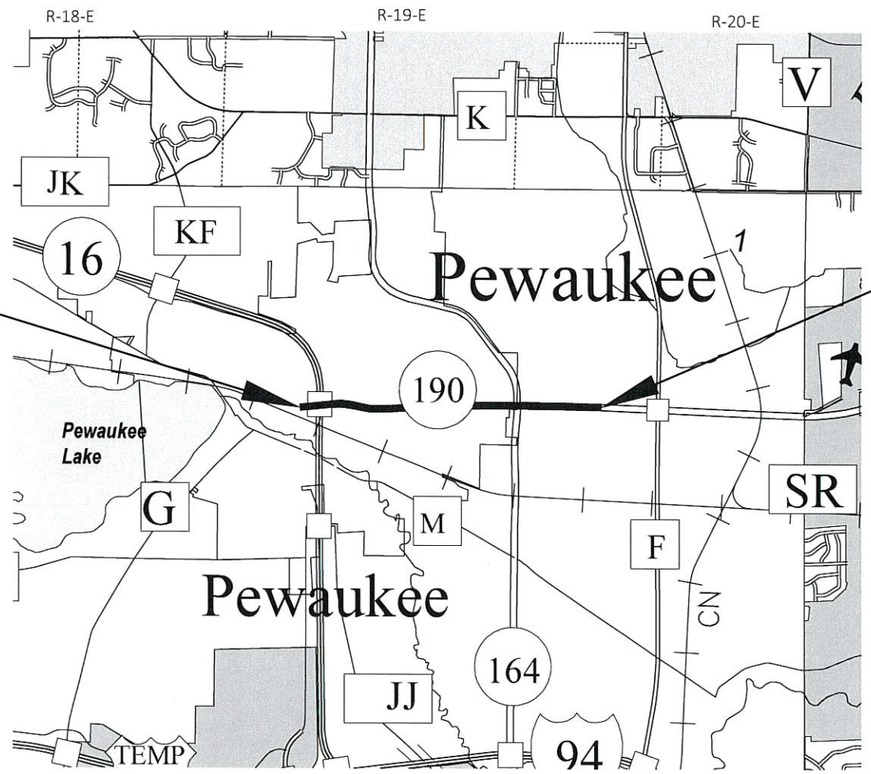
STH 16 TO .3 MI E OF FIVE FIELDS RD

STH 190

WAUKESHA COUNTY

STATE PROJECT NUMBER
2025-07-73

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2025-07-73	WISC 2024051	1



BEGIN PROJECT
STA 8+88.71'EB'
X= 677643.753
Y= 187313.125

END PROJECT
STA 111+00.00'EB'

LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 1.934 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

AYRES

WISCONSIN
AMANDA M. INMAN
44690
OREGON
WI
PROFESSIONAL ENGINEER

DATE: 7/31/2023 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	AYRES
Designer	AYRES
Project Manager	NGUYEN LY
Regional Examiner	STEVE CHOJNACKI
Regional Supervisor	BENEDICT ERUCHALU

APPROVED FOR THE DEPARTMENT

DATE: 7/31/2023 Nguyen K. Ly (Signature)

E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_010101-TI.DWG

PLOT DATE : 1/12/2023 9:03 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME :

2

GENERAL NOTES

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

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.

NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY UTILITY WHICH IS NOT A MEMBER OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

MAINTAIN ACCESS TO ALL BUSINESSES AND OTHER PROPERTIES ADJACENT TO THE PROJECT AT ALL TIMES.

A SAWED JOINT WILL BE REQUIRED WHERE NEW PAVEMENT MEETS AN EXISTING PAVED SURFACE.

TRAFFIC CONTROL DEVICES AS SHOWN IN THE PLAN ARE SUGGESTED LOCATIONS. EXACT LOCATIONS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

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

STOCKPILE EXCESS MATERIAL OR SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOOD PLAINS, AND WATERWAYS. DO NOT STORE EQUIPMENT OR MATERIALS NEAR THESE SITES UNLESS APPROVED BY THE ENGINEER.

CONTRACTOR MUST CONTACT THE PROJECT ENGINEER AND THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION, AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.
ALL SIGN LOCATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION.

STATIONS, OFFSETS, AND INVERT ELEVATIONS REFERENCE THE FOLLOWING LOCATIONS:

MANHOLES-	CENTER OF STRUCTURE
FIELD INLETS-	CENTER OF STRUCTURE
CURB INLETS-	FACE OF CURB
ENDWALLS-	END OF PIPE

REMOVAL OF ASPHALTIC SURFACE IN MEDIAN ISLANDS FOR TRAFFIC CONTROL STAGING WILL BE PAID UNDER REMOVING ASPHALTIC SURFACE. ALL OTHER REMOVAL OF ASPHALTIC SURFACE IN MEDIAN ISLANDS WILL BE PAID UNDER COMMON EXCAVATION.

THE FOLLOWING CONVERSION FACTORS WERE USED TO ESTIMATE QUANTITIES FOR BASE AGGREGATE DENSE:

- 3/4-INCH = 2.1 TONS/CY
- 1 1/4-INCH = 2.0 TONS/CY
- SELECT CRUSHED MATERIAL = 1.9 TONS/CY

A CONVERSION FACTOR OF 112 LBS/IN/SY IS USED TO ESTIMATE QUANTITIES FOR HMA PAVEMENT.

A CONVERSION FACTOR OF 0.07 GAL/SY IS USED TO ESTIMATE QUANTITIES FOR TACK COAT.

HMA PAVEMENT LAYERS AND GRADATION

	COMPOSITION	DESIGNATOR
3.5-INCH	3.50" SINGLE LAYER (4 MT 58-28 S)	AP35
4-INCH	2.25" LOWER LAYER (3 MT 58-28 S) 1.75" UPPER LAYER (4 MT 58-28 S)	AP40
4 - 5.5-INCH	2.25" - 3.75" LOWER LAYER (3 MT 58-28 S) 1.75" UPPER LAYER (4 MT 58-28 S)	AP4-55
5-INCH	3.25" LOWER LAYER (3 MT 58-28 S) 1.75" UPPER LAYER (4 MT 58-28 S)	AP50
5.5-INCH	3.75" LOWER LAYER (3 MT 58-28 S) 1.75" UPPER LAYER (4 MT 58-28 S)	AP55
6.5-INCH	2.50" LOWER LAYER (3 MT 58-28 S) 2.25" MIDDLE LAYER (3 MT 58-28 S) 1.75" UPPER LAYER (4 MT 58-28 S)	AP65
TEMP CROSSOVER - ASPHALTIC SURFACE TEMPORARY 4-INCH	2.25" LOWER LAYER 1.75" UPPER LAYER	AST4

STANDARD ABBREVIATIONS

A.D.T.	AVERAGE DAILY TRAFFIC
A.A.D.T.	AVERAGE ANNUAL DAILY TRAFFIC
ABUT	ABUTMENT
AC	ACRE
AGG	AGGREGATE
AH	AHEAD
ASPH	ASPHALTIC
AVG	AVERAGE
BK	BACK
BM	BENCH MARK
BOC	BACK OF CURB
CB	CATCH BASIN
CE	COMMERCIAL ENTRANCE
CL OR C/L	CENTERLINE
C&G	CURB AND GUTTER
CONC	CONCRETE
CP	CONTROL POINT
CPRC	CULVERT PIPE REINFORCED CONCRETE
CPCS	CULVERT PIPE CORRUGATED STEEL
CTH	COUNTY HIGHWAY
CWT	HUNDREDWEIGHT
CY	CUBIC YARD
D	DEGREE OF CURVE
D.D	DIRECTIONAL DISTRIBUTION
D.H.V	DESIGN HOURLY VOLUME
DISCH	DISCHARGE
DWY	DRIVEWAY
EAT	ENERGY ABSORBING TERMINAL
EBS	EXCAVATION BELOW SUBGRADE
EL	ELEVATION
ESALS	EQUIVALENT SINGLE AXEL LOAD
EW / AEW	APRON ENDWALL
EXC	EXCAVATION
EXIST	EXISTING
FERT	FERTILIZE
FE	FIELD ENTRANCE
FL	FLOW LINE
FO	FIBER OPTIC
HE	HELICAL ELLIPTICAL
HYD	HYDRANT
ID	INSIDE DIAMETER
IN / INL	INLET
INV	INVERT
L	LENGTH OF CURVE
LF	LINEAR FEET
LHF	LEFT-HAND FORWARD
LS	LUMP SUM
MH	MANHOLE
NC	NORMAL CROWN
PAVT	PAVEMENT
PCC	POINT OF COMPOUND CURVE
PC	POINT OF CURVATURE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PRC	POINT OF REVERSE CURVATURE
PVD	PAVED
R	RADIUS
RDWY	ROADWAY
REQ'D	REQUIRED
RES	RESIDENCE OR RESIDENTIAL
RHF	RIGHT HAND FORWARD
R/W	RIGHT OF WAY
R	RIVER
R/L	REFERENCE LINE
SAN	SANITARY SEWER
SF	SQUARE FEET
SDD	STANDARD DETAIL DRAWINGS
SHLD	SHOULDER
SS	STORM SEWER
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
STA	STATION
STH	STATE HIGHWAY
T	TANGENT
T/TN	TOWN
TYP	TYPICAL
VAR	VARIABLE
VC	VERTICAL CURVE
X	EAST GRID COORDINATE
Y	NORTH GRID COORDINATE
YD	YARD

PROJECT CONTACTS

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
DNR SERVICE CENTER.
CRAIG WEBSTER
141 NW BARSTOW ST, ROOM 180
WAUKESHA, WI 53188
PH: (262) 574-2141
CRAIG.WEBSTER@WISCONSIN.GOV

WisDOT PROJECT MANAGER
NGUYEN LY
141 NW BARSTOW ST
WAUKESHA, WI 53188
PH: (262) 548-8734
NGUYEN.LY@DOT.WI.DOT

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION
ANDY TRAEGER (CONSTRUCTION COORDINATOR)
W239 N1812 ROCKWOOD DR
P.O. BOX 1607
WAUKESHA, WI 53187-1607
PH: (262) 953-4296
MOB: (262) 853-8463
FAX: (262) 547-1103
ATRAEGER@SEWRPC.ORG

PROJECT MANAGER
AMANDA INMAN
5201 E. TERRACE DRIVE, SUITE 200
MADISON, WI 53718
PH: (608) 443-1200, EXT. 1239
FAX: (608) 299-2184
INMANA@AYRESASSOCIATES.COM

UTILITY CONTACTS

AT&T LOCAL NETWORK - COMMUNICATION
DALE DEFEVER
6070 N FLINT RD
GLENDALE, WI 53209
PH: (586) 242-2671
DD2579@ATT.COM

AT&T WISCONSIN - COMMUNICATION
TYLER FLECK
220 WISCONSIN AVE
WAUKESHA, WI 53186
PH: (414) 248-6803
TF8394@ATT.COM

CITY OF PEWAUKEE DPW - ROAD, SEWER, WATER
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W240 N3065 PEWAUKEE RD
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PH: (262) 691-0804
JEM@PEWAUKEE.WI.US

EVERSTREAM
SHAD GARCIA
734 E WISCONSIN AVE, SUITE 730
MILWAUKEE, WI 53202
MOB: (414) 522-6685
SGARCIA@EVERSTREAM.NET

LEVEL 3 COMMUNICATIONS, LLC - COMMUNICATION
BRAHIM GADDOUR
3235 INTERTECH DR, SUITE 600
BROOKFIELD, WI 53045
PH: (414) 908-1027
MOB: (414) 704-1026
BRAHIM.GADDOUR@LUMEN.COM

MIDWEST FIBER NETWORKS LLC - COMMUNICATION
MWFN UTILITY COORDINATOR
CORY SCHMUKI
6070 NORTH FLINT RD
GLENDALE, WI 53209
PH: (414) 459-3561
MOB: (414) 349-2764
RELOCATION REQUESTS@
CSCHMUKI@MIDWESTFIBERNETWORKS.COM

PAETEC COMMUNICATIONS LLC - COMMUNICATION
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GREEN BAY, WI 54304
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LORI.KETTER@WINDSTREAM.COM

SPECTRUM - COMMUNICATION
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1320 N DR MARTIN LUTHER KING JR DR
MILWAUKEE, WI 53212
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TDS METROCOM LLC - COMMUNICATION
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16924 WEST VICTOR RD
NEW BERLIN, WI 53151
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JASON.KENNY@TDSTELECOM.COM

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PEWAUKEE, WI 53072
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DNAZE@VILLAGEOFPEWAUKEE.COM

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500 S 116 ST
WEST ALLIS, WI 53214
PH: (414) 944-5917
MOB: (414) 588-7472
ERIC.KICKHAVER@WE-ENERGIES.COM

WE ENERGIES - GAS
JACOB SPENCER
S13 W33800 STH 18
DELAFIELD, WI 53018
PH: (262) 968-7009
MOB: (414) 507-2021
JACOB.SPENCER@WE-ENERGIES.COM

WISDOT ATR PULL BOXES - ELECTRIC
RUSSELL LEWIS
3625 PIERSTORFF ST
MADISON, WI 53704
PH: (608) 516-5754
RUSSELL.LEWIS@DOT.WI.GOV

WISDOT - SIGNALS
JARRETT GATES
141 NW BARSTOW ST
WAUKESHA, WI 53188
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JARRETT.GATES@DOT.WI.GOV

WISDOT - STREET LIGHTING
ERIC PEREA
141 NW BARSTOW ST
WAUKESHA, WI 53188
PH: (262) 574-5422
ERIC.PEREA@DOT.WI.GOV

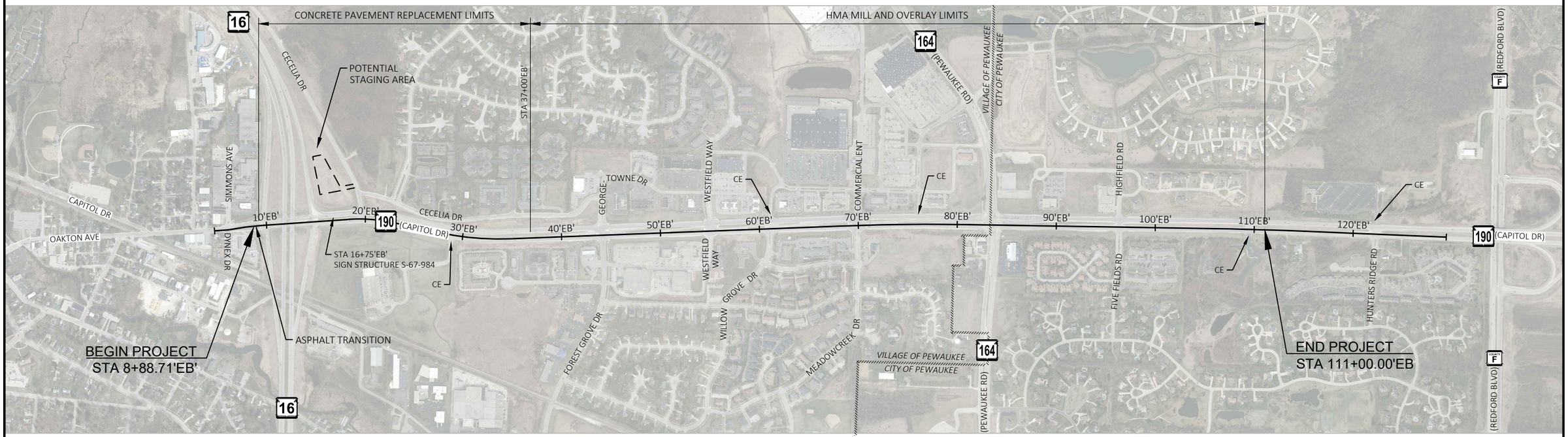
SECTION 2 ORDER OF SHEETS

GENERAL NOTES & CONTACTS
PROJECT OVERVIEW
TYPICAL SECTIONS
INTERSECTION DETAILS
PLAN DETAILS

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

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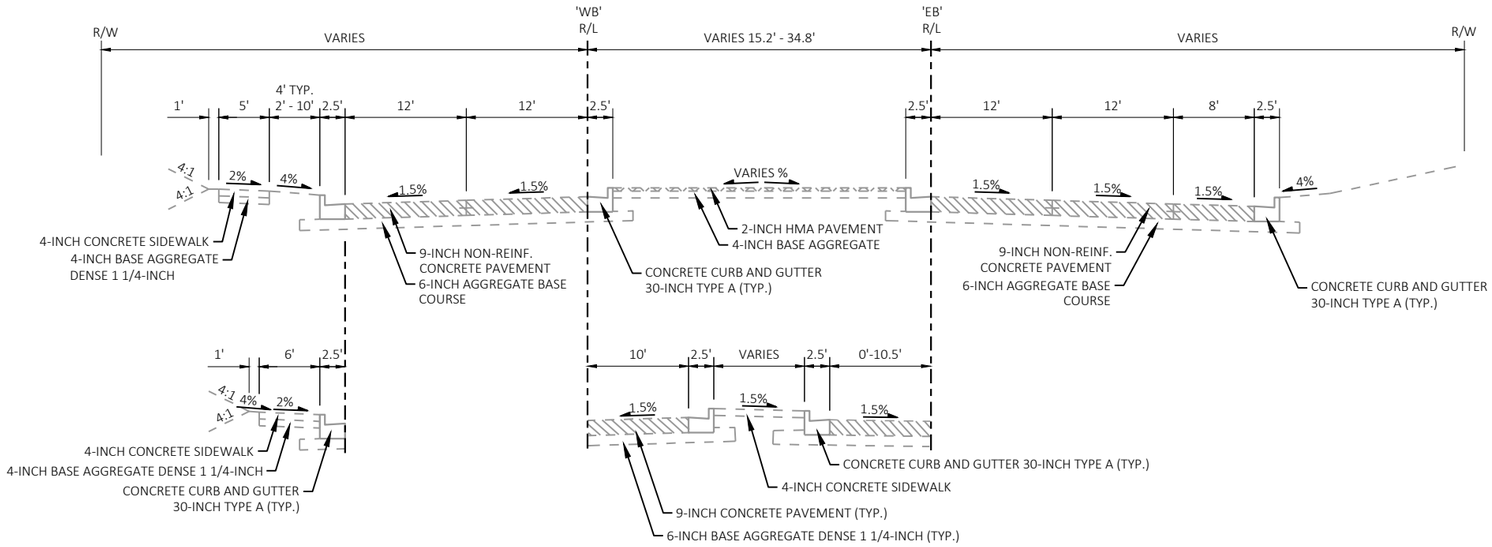


PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_020201-PO.DWG
LAYOUT NAME - 020201

PLOT DATE : 7/19/2023 2:11 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:1000 FT

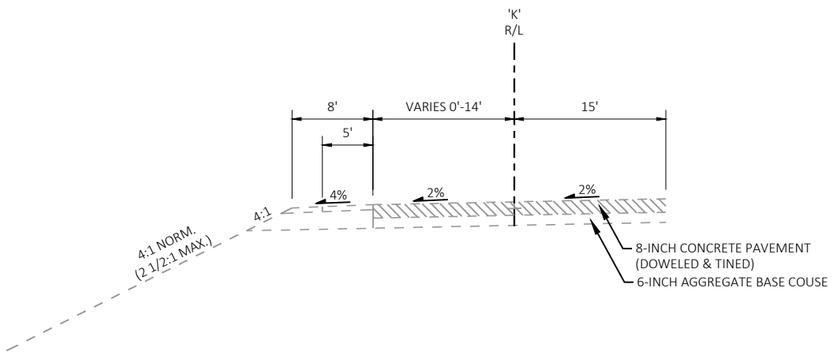
2



STH 190 SIDEWALK TYPICAL SECTION
STA. 11+29 - STA. 13+11

WESTBOUND & EASTBOUND LEFT TURN LANE
STA. 10+43 - STA. 14+29

EXISTING TYPICAL SECTION
STH 190
STA. 9+00 - STA. 15+20

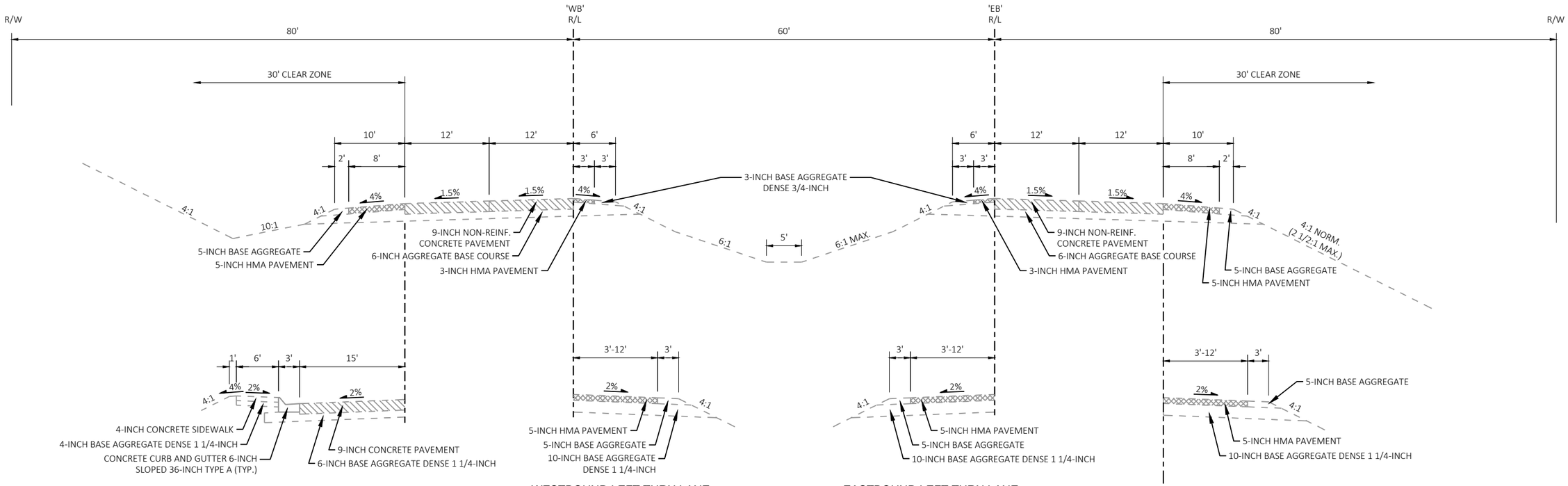


EXISTING TYPICAL SECTION
WB STH 16 OFF RAMP

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 4	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_020301-TS.DWG
LAYOUT NAME - 01
PLOT DATE : 1/30/2023 7:59 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:15 FT

2



WESTBOUND RIGHT TURN LANE
STA. 15+87 - STA. 19+14

WESTBOUND LEFT TURN LANE
STA. 29+56 - STA. 35+62

EASTBOUND LEFT TURN LANE
STA. 16+82 - STA. 19+18

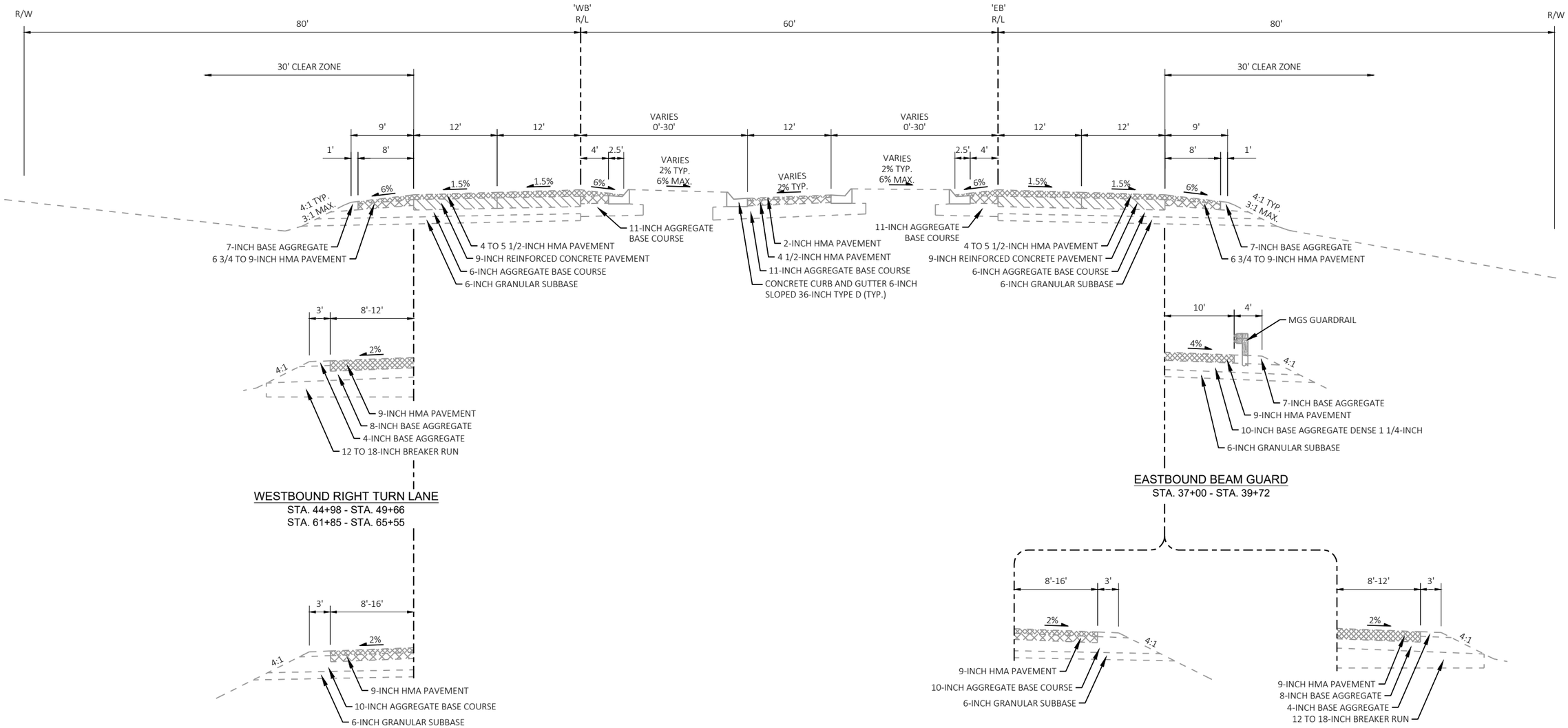
EASTBOUND RIGHT TURN LANE
STA. 25+01 - STA. 28+21

EASTBOUND BEAM GUARD
STA. 29+95 - STA. 37+00

EXISTING TYPICAL SECTION

STH 190
STA. 15+20 - STA. 37+00

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 5	E



WESTBOUND RIGHT TURN LANE
STA. 44+98 - STA. 49+66
STA. 61+85 - STA. 65+55

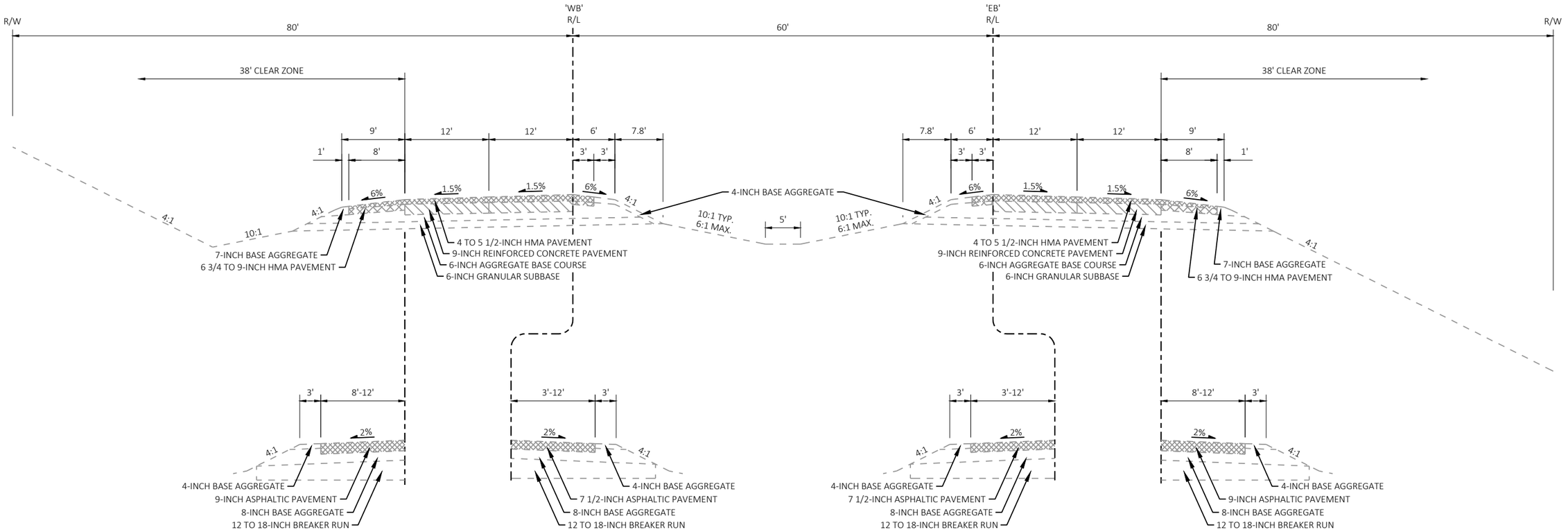
WESTBOUND RIGHT TURN LANE
STA. 56+03 - STA. 59+56
STA. 70+77 - STA. 75+63
STA. 76+74 - STA. 79+84
STA. 84+65 - STA. 90+45

EXISTING TYPICAL SECTION
STH 190
STA. 37+00 - STA. 87+00

EASTBOUND RIGHT TURN LANE
STA. 56+70 - STA. 60+22

EASTBOUND RIGHT TURN LANE
STA. 38+50 - STA. 43+25
STA. 49+11 - STA. 54+18
STA. 63+63 - STA. 68+89
STA. 76+66 - STA. 82+30

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 6	E



WESTBOUND RIGHT TURN LANE
STA. 97+09 - STA. 102+10

WESTBOUND LEFT TURN LANE
STA. 97+33 - STA. 101+39

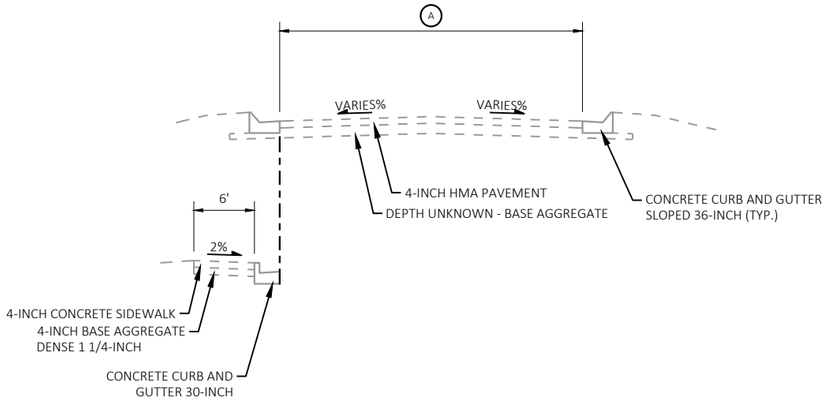
EASTBOUND LEFT TURN LANE
STA. 90+98 - STA. 95+57

EASTBOUND RIGHT TURN LANE
STA. 90+81 - STA. 95+44

EXISTING TYPICAL SECTION

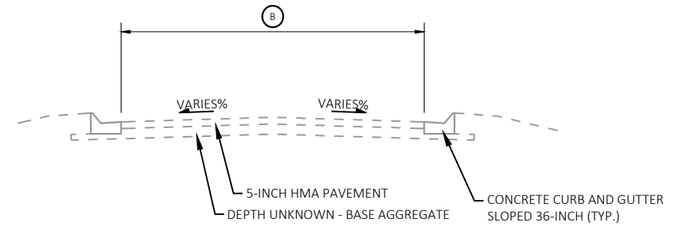
STH 190
STA. 87+00 - STA. 111+00

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 7	E

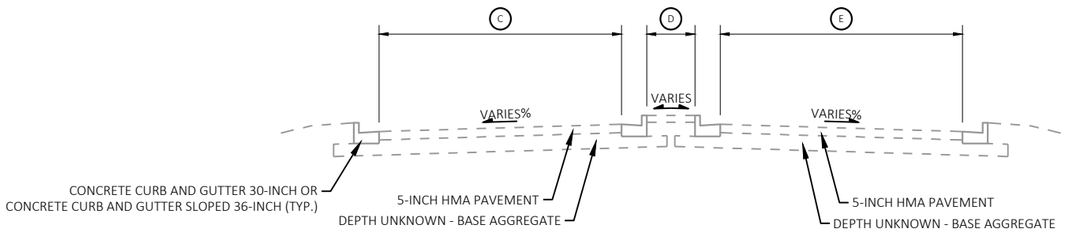


CECELIA DR SIDEWALK TYPICAL

EXISTING TYPICAL SECTION	A
CECELIA DR	31'
C.E., STA 29'EB' RT	36'

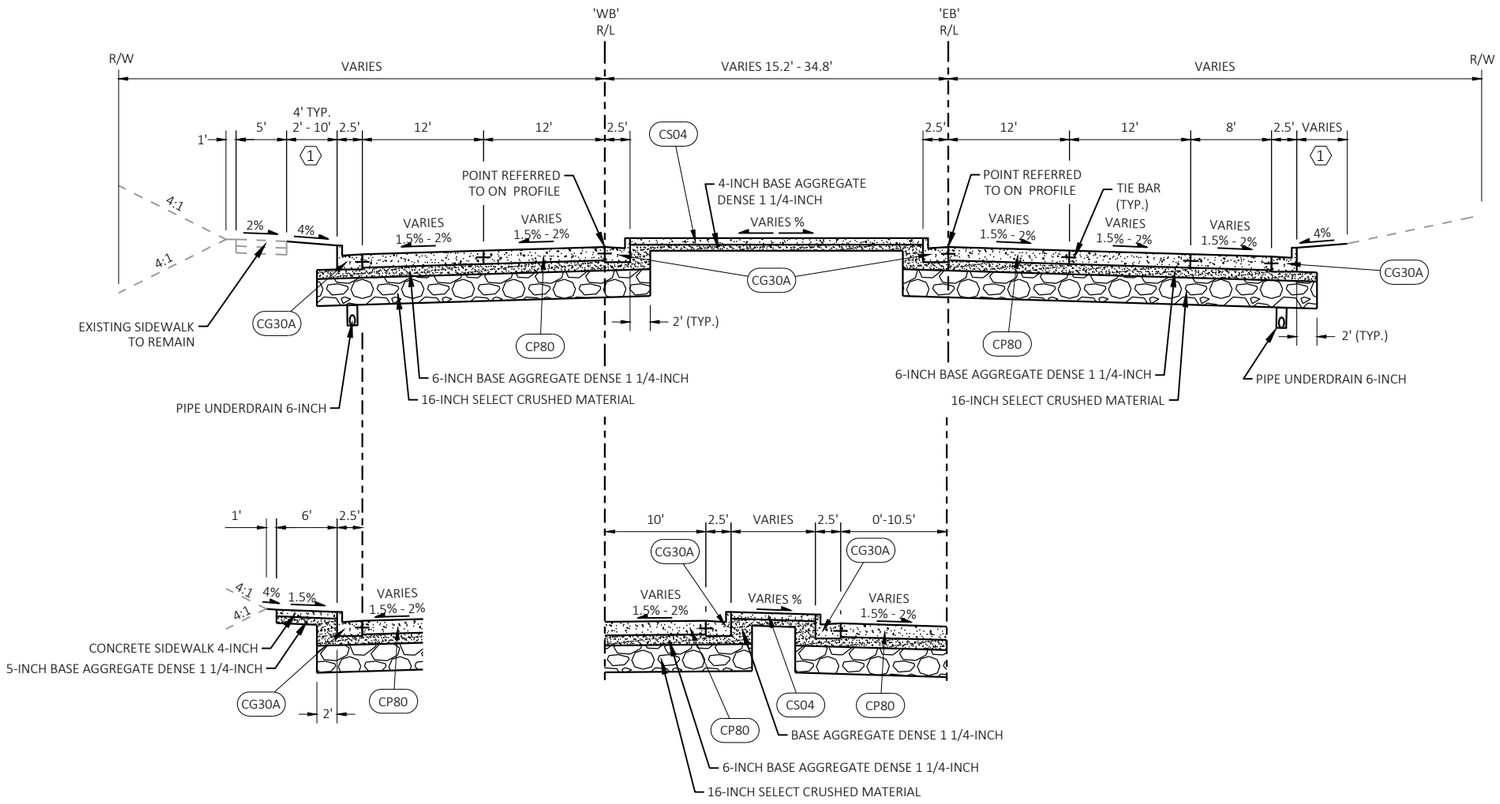


EXISTING TYPICAL SECTION	B
C.E., 61'WB' LT	38'
C.E., 109+50'EB' RT	34'



EXISTING TYPICAL SECTION	C	D	E
GEORGE TOWNE DR	35'	9'	23'
FOREST GROVE DR	20'	6.5'	20'
WESTFIELD WAY	22'	4'	22'
C.E., STA 55'EB' RT	15'	4'	20'
WILLOW GROVE DR	18'	14'	19'
C.E., STA 70'WB' LT	32'	7'	26'
MEADOWCREEK DR	21'	3'	33'
FIVE FIELDS RD	20'	10'	20'

2

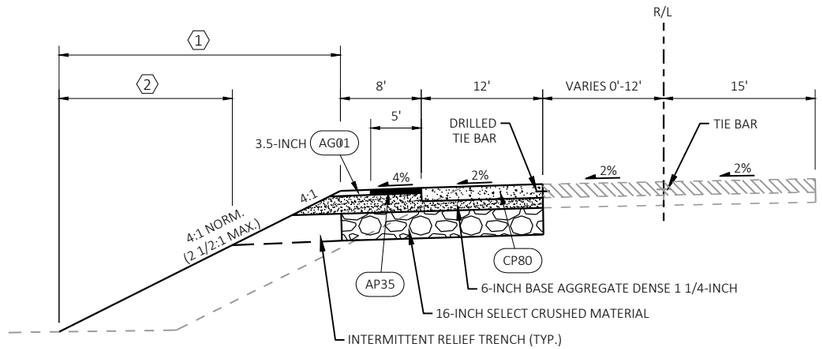


FINISHED STH 190 SIDEWALK TYPICAL SECTION
BETWEEN STH 16 RAMPS
STA. 11+50 - STA. 12+85

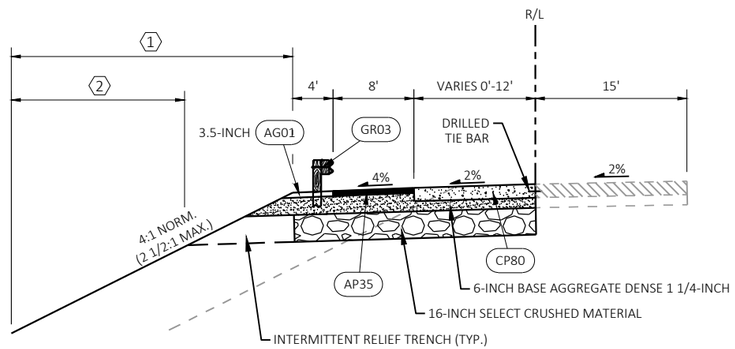
WESTBOUND & EASTBOUND LEFT TURN LANE
STA. 12+50 - STA. 14+25

FINISHED TYPICAL SECTION

STH 190
STA. 9+00 - STA. 15+20



FINISHED TYPICAL SECTION
STA. 685+87'K' - STA. 689+60'K'



FINISHED TYPICAL SECTION
STA. 689+60'K' - STA. 691+06'K'

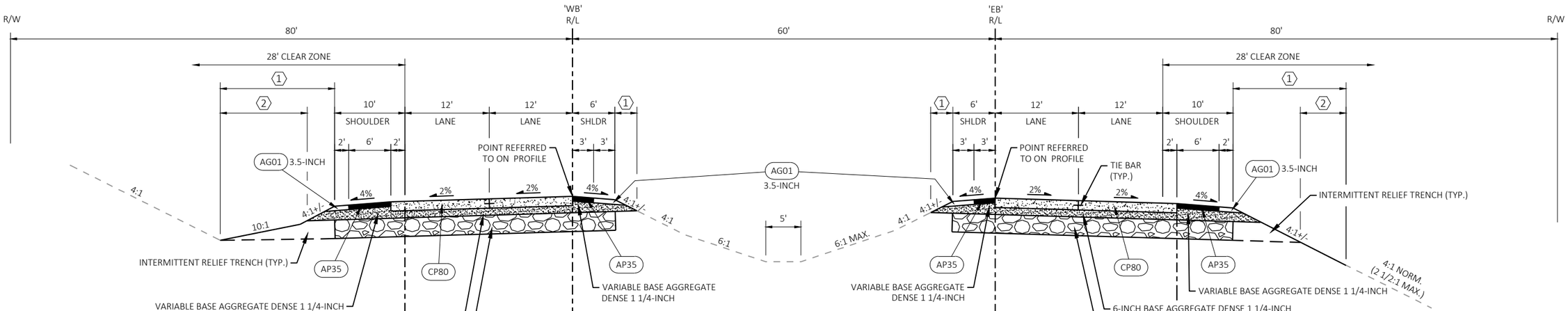
LEGEND:

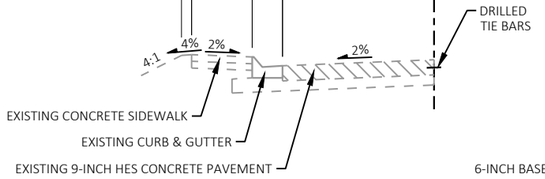
AG01	BASE AGGREGATE DENSE 3/4-INCH
AP35	3.5-INCH HMA PAVEMENT
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT
AP50	5.0-INCH HMA PAVEMENT
AP55	5.5-INCH HMA PAVEMENT
AP65	6.5-INCH HMA PAVEMENT
CG30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CP80	CONCRETE PAVEMENT 8-INCH (DOWELED & TINED)
CS04	CONCRETE SIDEWALK 4-INCH
GR03	MGS GUARDRAIL 3

FINISHING ITEMS:

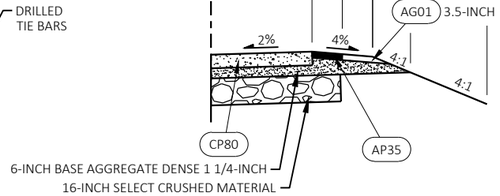
1	FERTILIZE AND SEED
2	SALVAGED TOPSOIL AND EROSION MAT OR MULCH

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 9	E

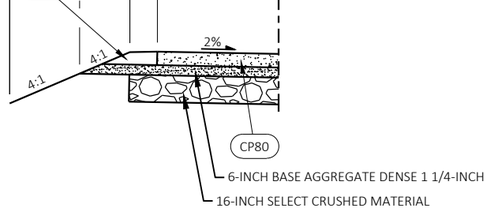




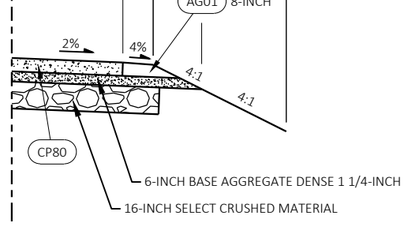
EXISTING TYPICAL SECTION
WB STH 190 TO WB STH 16 RIGHT TURN LANE
STA. 15+87 - STA. 18+97



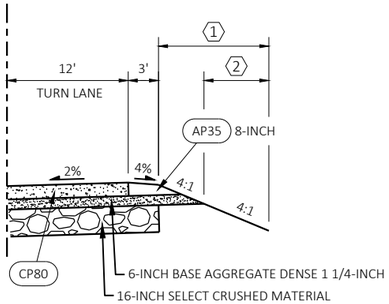
WESTBOUND LEFT TURN LANE
STA. 15+37 - STA. 18+50



EASTBOUND LEFT TURN LANE
STA. 16+88 - STA. 18+88

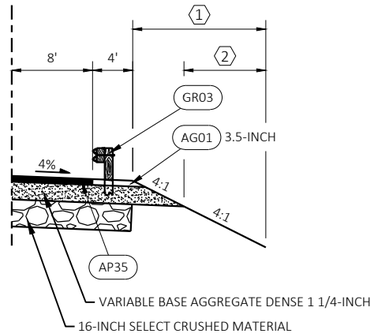


EASTBOUND RIGHT TURN LANE
STA. 24+83 - STA. 28+21



WESTBOUND LEFT TURN LANE
STA. 29+56 - STA. 35+93

NOTE:
FULL DEPTH ASPHALT PATCHES ON STH 190 EB FROM STA. 15+50'EB' TO STA. 37+00'EB' WILL BE PAID UNDER THE REMOVING CONCRETE BID ITEM.



EASTBOUND GUARDRAIL
STA. 30+00 - STA. 37+00

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP35	3.5-INCH HMA PAVEMENT
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT
AP50	5.0-INCH HMA PAVEMENT
AP55	5.5-INCH HMA PAVEMENT
AP65	6.5-INCH HMA PAVEMENT
CG30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CP80	CONCRETE PAVEMENT 8-INCH (DOWELED & TINED)
CS04	CONCRETE SIDEWALK 4-INCH
GR03	MGS GUARDRAIL 3

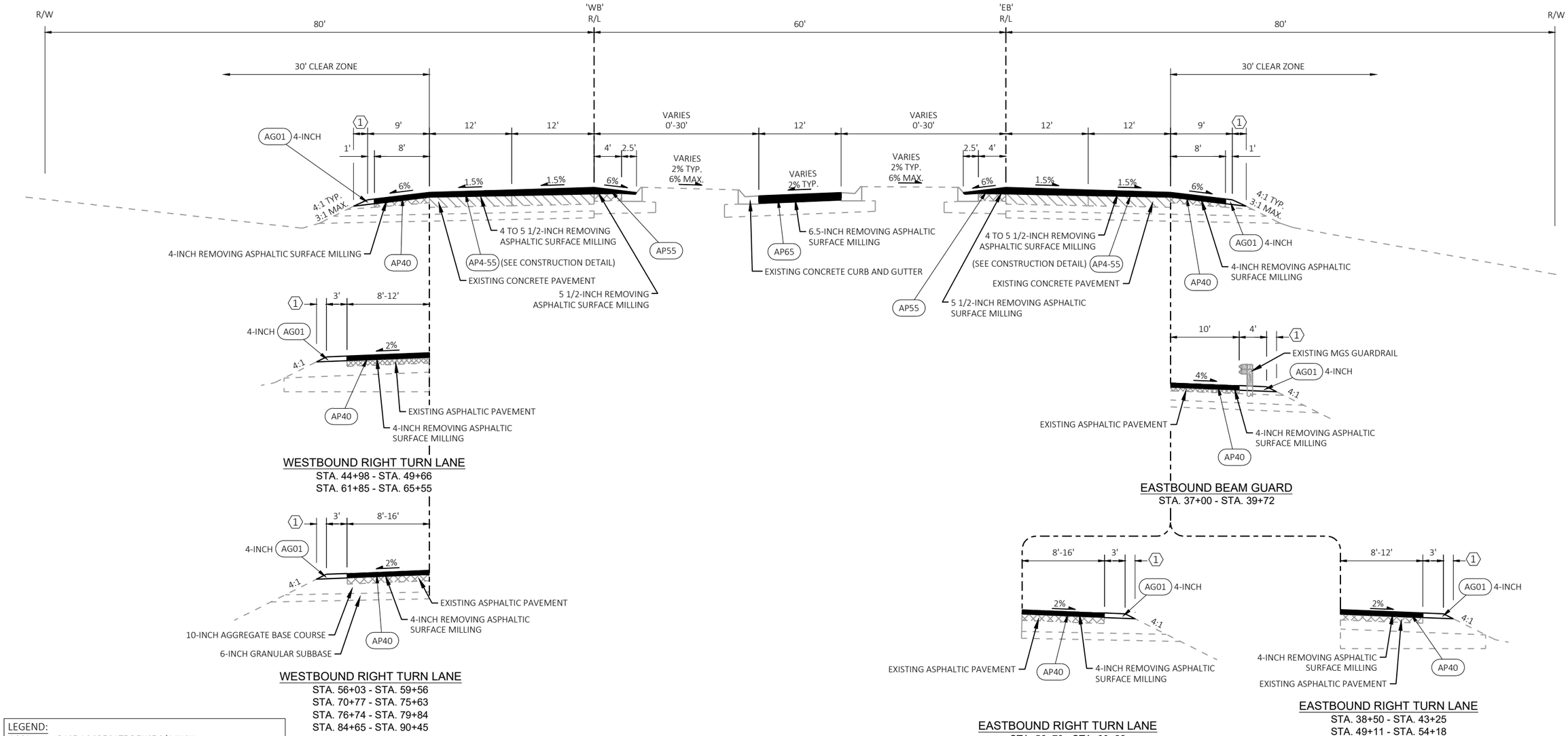
FINISHING ITEMS:

1	FERTILIZE AND SEED
2	SALVAGED TOPSOIL AND EROSION MAT OR MULCH

FINISHED TYPICAL SECTION
STH 190
STA. 15+20 - STA. 37+00

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 10

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_020301-TS.DWG
LAYOUT NAME - 07
PLOT DATE : 1/30/2023 7:59 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:15 FT



WESTBOUND RIGHT TURN LANE
STA. 44+98 - STA. 49+66
STA. 61+85 - STA. 65+55

WESTBOUND RIGHT TURN LANE
STA. 56+03 - STA. 59+56
STA. 70+77 - STA. 75+63
STA. 76+74 - STA. 79+84
STA. 84+65 - STA. 90+45

EASTBOUND BEAM GUARD
STA. 37+00 - STA. 39+72

EASTBOUND RIGHT TURN LANE
STA. 56+70 - STA. 60+22

EASTBOUND RIGHT TURN LANE
STA. 38+50 - STA. 43+25
STA. 49+11 - STA. 54+18
STA. 63+63 - STA. 68+89
STA. 76+66 - STA. 82+30

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP35	3.5-INCH HMA PAVEMENT
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT
AP50	5.0-INCH HMA PAVEMENT
AP55	5.5-INCH HMA PAVEMENT
AP65	6.5-INCH HMA PAVEMENT
CG30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CP80	CONCRETE PAVEMENT 8-INCH (DOWELED & TINED)
CS04	CONCRETE SIDEWALK 4-INCH
GR03	MGS GUARDRAIL 3

FINISHING ITEMS:

1	FERTILIZE AND SEED
2	SALVAGED TOPSOIL AND EROSION MAT OR MULCH

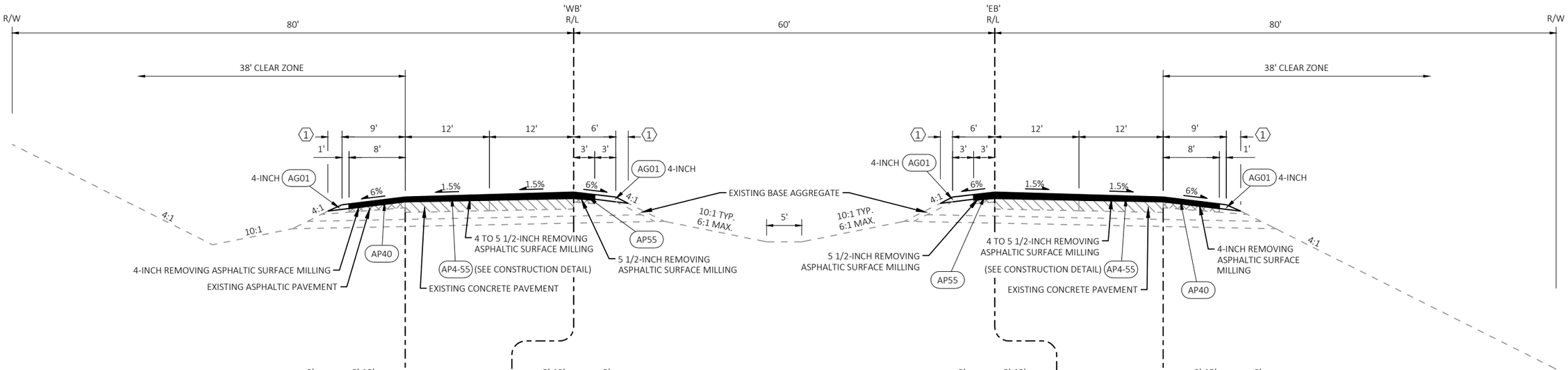
FINISHED TYPICAL SECTION

STH 190
STA. 37+00 - STA. 87+00

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 11	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_020301-TS.DWG
LAYOUT NAME - 08
PLOT DATE : 1/30/2023 7:59 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:15 FT
WISDOT/CADDS SHEET 42

2





WESTBOUND RIGHT TURN LANE
STA. 97+09 - STA. 102+10

WESTBOUND LEFT TURN LANE
STA. 97+33 - STA. 101+39

EASTBOUND LEFT TURN LANE
STA. 90+98 - STA. 95+57

EASTBOUND RIGHT TURN LANE
STA. 90+81 - STA. 95+44

FINISHED TYPICAL SECTION

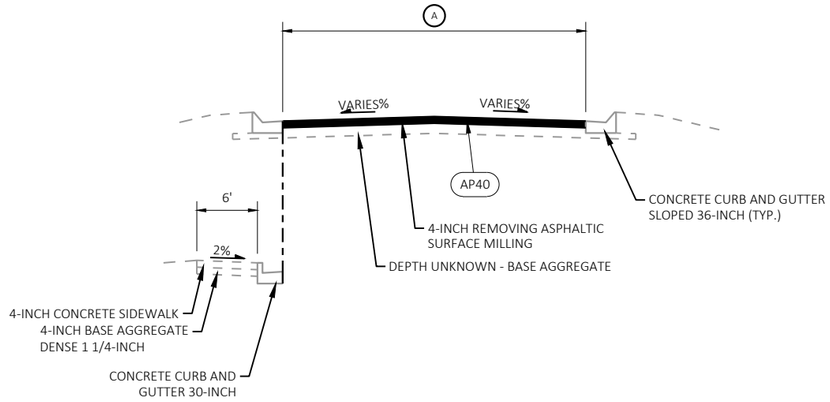
STH 190
STA. 87+00 - STA. 111+00

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP35	3.5-INCH HMA PAVEMENT
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT
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GR03	MGS GUARDRAIL 3

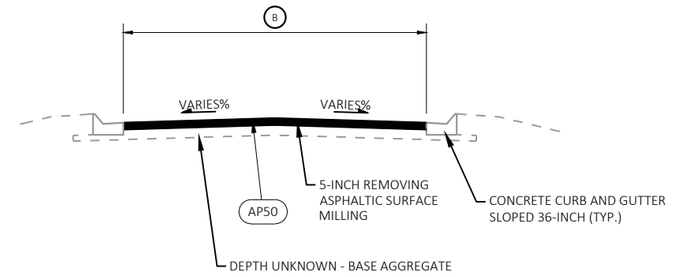
FINISHING ITEMS:

1	FERTILIZE AND SEED
2	SALVAGED TOPSOIL AND EROSION MAT OR MULCH

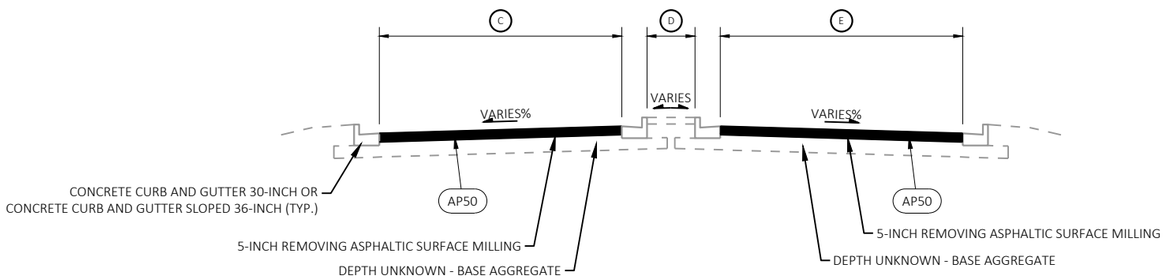


CECELIA DR SIDEWALK TYPICAL

FINISHED TYPICAL SECTION	A
CECELIA DR	31'
C.E., STA 29'EB' RT	36'



FINISHED TYPICAL SECTION	B
C.E., 61'WB' LT	38'
P.E., 109+50'EB' RT	34'



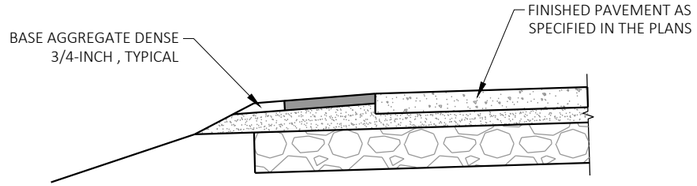
FINISHED TYPICAL SECTION	C	D	E
GEORGE TOWNE DR	35'	9'	23'
FOREST GROVE DR	20'	6.5'	20'
WESTFIELD WAY	22'	4'	22'
C.E., STA 55'EB' RT	15'	4'	20'
WILLOW GROVE DR	18'	14'	19'
C.E., STA 70'WB' LT	32'	7'	26'
MEADOWCREEK DR	21'	3'	33'
FIVE FIELDS RD	20'	10'	20'

LEGEND:

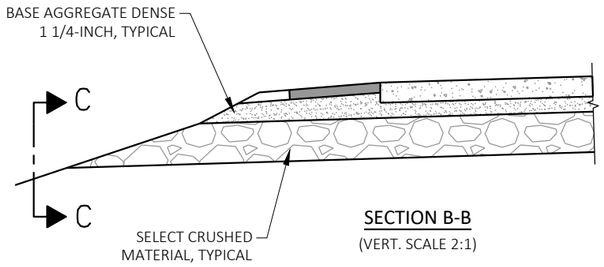
AG01	BASE AGGREGATE DENSE 3/4-INCH
AP35	3.5-INCH HMA PAVEMENT
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AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT
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CS04	CONCRETE SIDEWALK 4-INCH
GR03	MGS GUARDRAIL 3

FINISHING ITEMS:

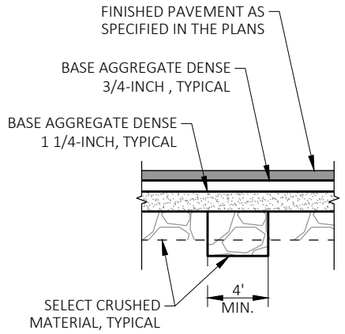
1	FERTILIZE AND SEED
2	SALVAGED TOPSOIL AND EROSION MAT OR MULCH



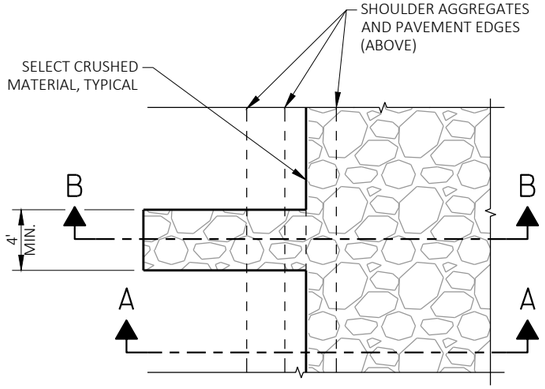
SECTION A-A
(VERT. SCALE 2:1)



SECTION B-B
(VERT. SCALE 2:1)



SECTION C-C
(VERT. SCALE 2:1)



PLAN VIEW
(VIEW PLANE AT TOP OF
SELECT CRUSHED MATERIAL)

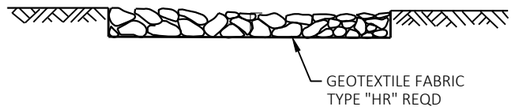
RELIEF TRENCH

NOTES:

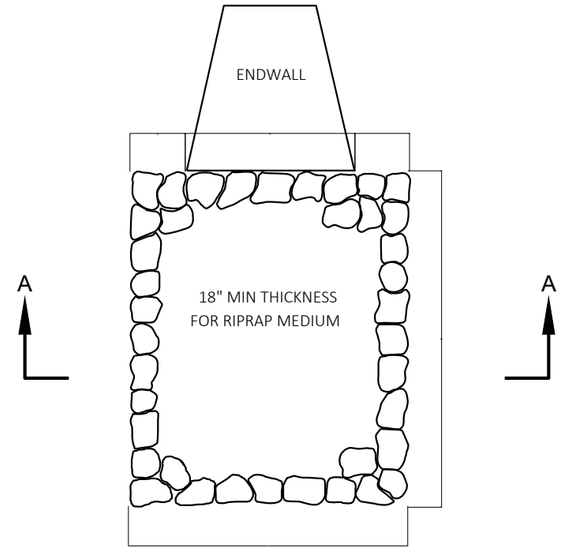
CONSTRUCT RELIEF TRENCHES AT 200'-300' INTERVALS AND AT PROFILE SAG POINTS (LEFT AND RIGHT).

APPROXIMATE LOCATIONS SHOWN ON STORM SEWER AND PIPE UNDERDRAIN PLAN SHEETS. FINAL LOCATIONS TO BE APPROVED OR DETERMINED BY THE ENGINEER IN THE FIELD.

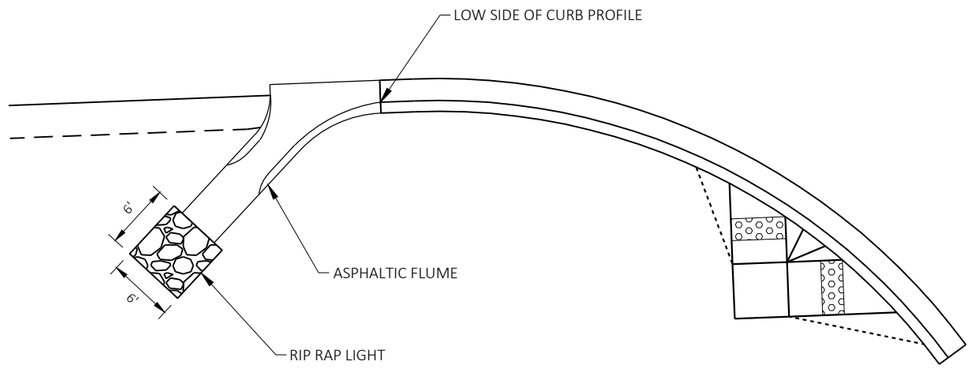
MATERIALS AND LABOR FOR RELIEF TRENCH ARE INCIDENTAL IN THE SELECT CRUSHED MATERIAL BID ITEM.



SECTION A-A



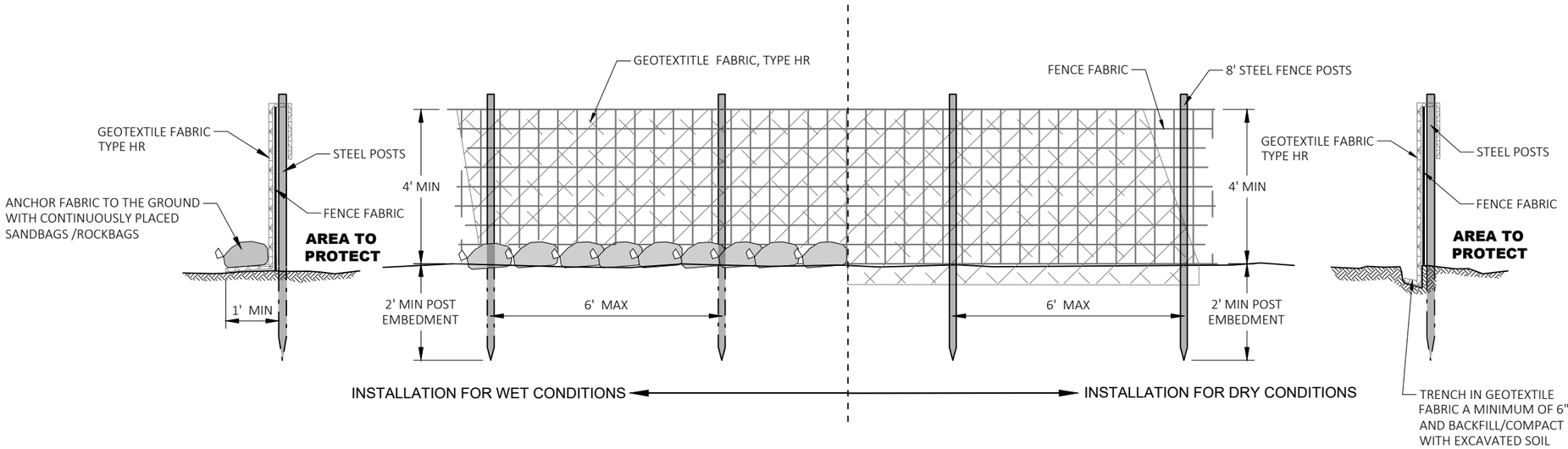
RIPRAP MEDIUM TREATMENT AT CULVERTS



ASPHLATIC FLUMES & RIP RAP (TYPICAL)

SEE PLAN DETAILS FOR LOCATIONS

2

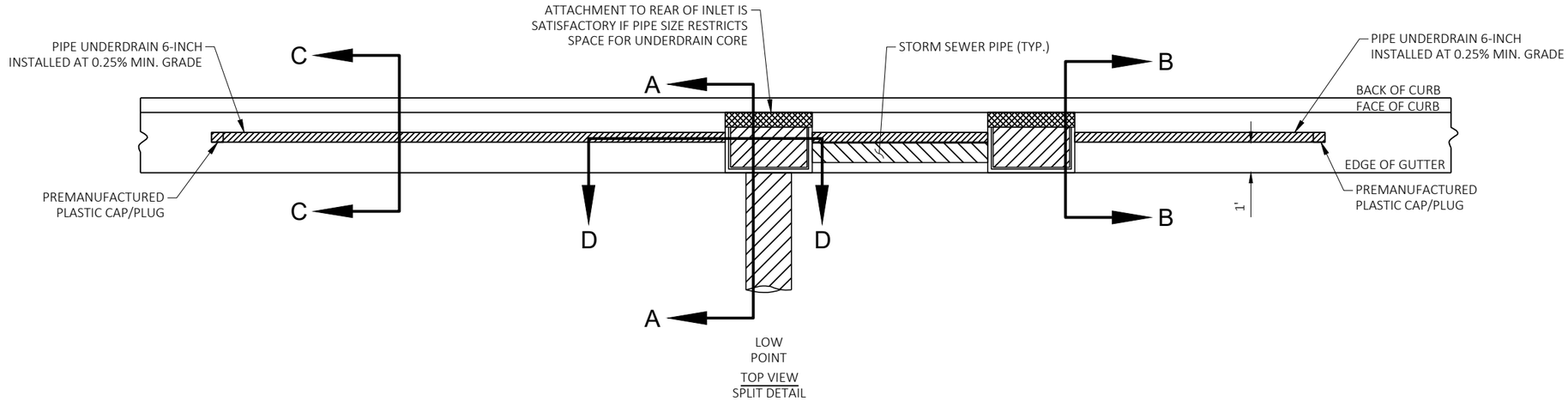


SILT FENCE HEAVY DUTY

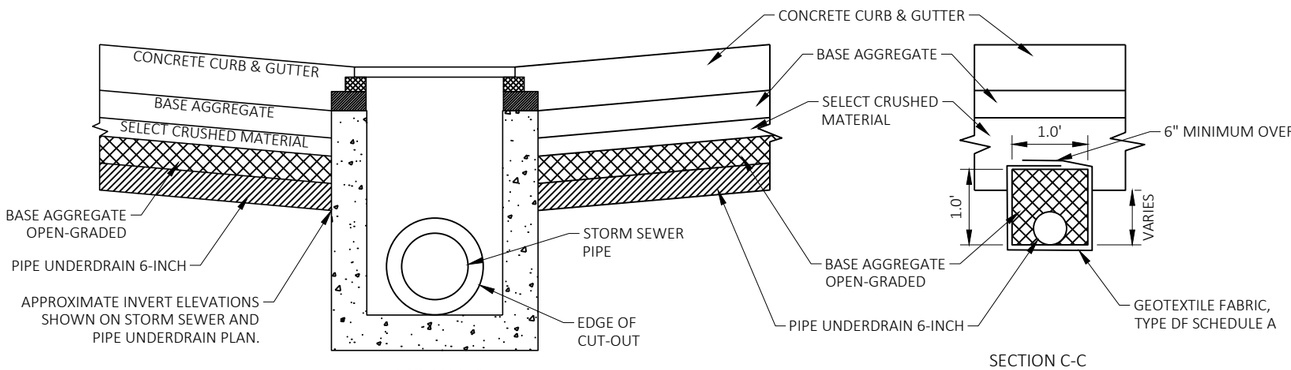
GENERAL NOTES:

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

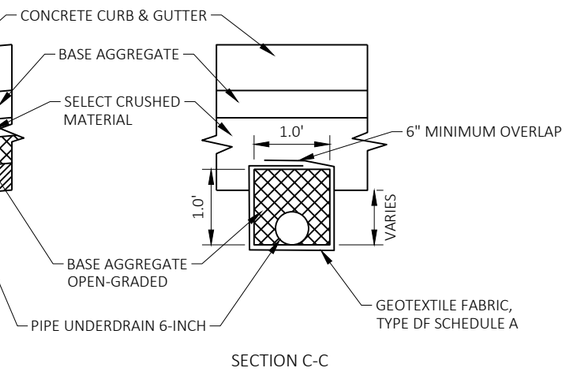


TOP VIEW
SPLIT DETAIL



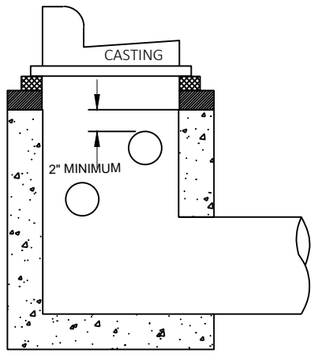
SECTION D-D

TYPICAL INLET CONFIGURATION
WITH UNDERDRAIN CORED INTO
WALL WITH NO PIPE FOUND AT LOW
POINTS WITHOUT FLANKING INLETS



SECTION C-C

NOTE:
(1) BOTTOM OF PIPE SHALL BE PLACED AT THE BOTTOM OF BASE AGGREGATE OPEN-GRADED MATERIAL.
(2) BOTTOM OF BASE AGGREGATE OPEN-GRADED MATERIAL IS NOT NECESSARILY THE BOTTOM OF THE SELECT CRUSHED MATERIAL.

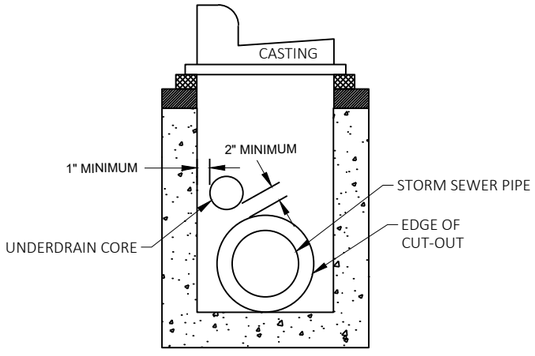


SECTION A-A

NOTE:
(1) TOP OF CORE HOLES WILL BE A MINIMUM OF 2" BELOW THE TOP OF THE INLET STRUCTURES (BOTTOM OF RINGS)
(2) DRAIN TILES SHALL NOT BE ALLOWED IN THE RING OF THE STRUCTURE OF INLETS OR SEWER ACCESS STRUCTURES

CROSS-SECTION VIEW
TYPICAL INLET CONFIGURATION
WITH UNDERDRAIN CORED INTO
WALL WITH CROSSPIPE ONLY

FOUND AT LOW POINTS
WITHOUT FLANKING INLETS



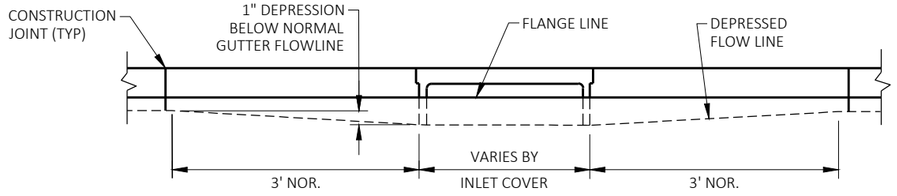
SECTION B-B

NOTE:
(1) CORE HOLES SHALL PROVIDE FOR A MINIMUM OF 2" OF CONCRETE BETWEEN THE CUTOUT FOR A CONCRETE PIPE AND THE EDGE OF THE CORE HOLE.
(2) CORE HOLES MAY HAVE 0" CLEARANCE FROM THE INSIDE WALLS OF A STRUCTURE.

CROSS-SECTION VIEW
TYPICAL INLET IN SUMP
CONDITION WITH UNDERDRAIN
CORED INTO WALL WITH PIPE
FOUND AT FLANKING INLETS
NEAR LOWPOINTS

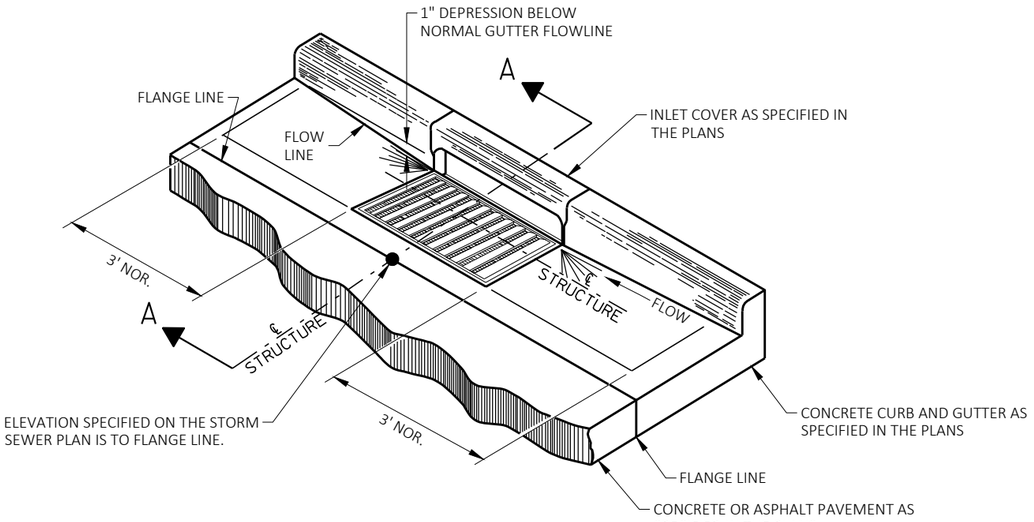
PIPE UNDERDRAIN 6-INCH

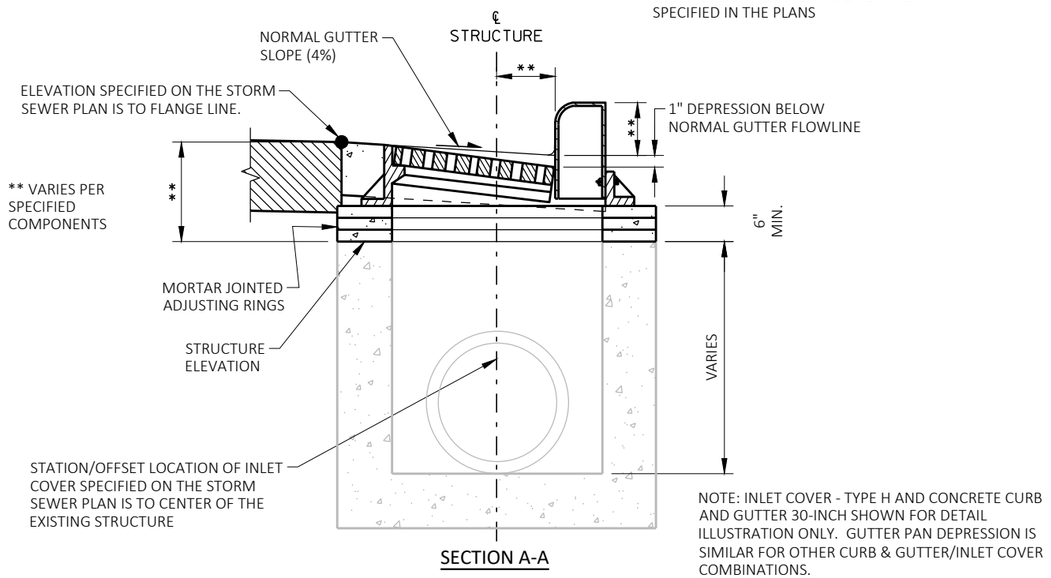
LOCATED ALONG LOW SIDE CURB



ELEVATION AT FLANGE LINE

(GRATE AND CURB DETAILS OMITTED FOR DRAWING CLARITY)

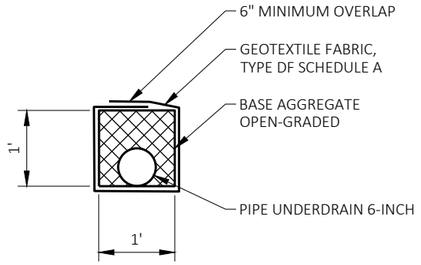




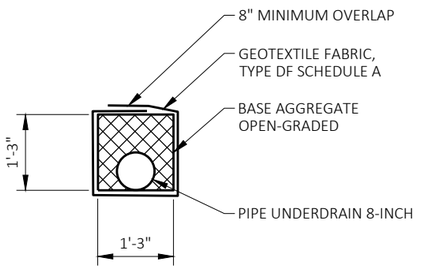
SECTION A-A

NOTE: INLET COVER - TYPE H AND CONCRETE CURB AND GUTTER 30-INCH SHOWN FOR DETAIL ILLUSTRATION ONLY. GUTTER PAN DEPRESSION IS SIMILAR FOR OTHER CURB & GUTTER/INLET COVER COMBINATIONS.

TYPICAL GUTTER PAN DEPRESSION AT INLETS



PIPE UNDERDRAIN 6-INCH TRENCH

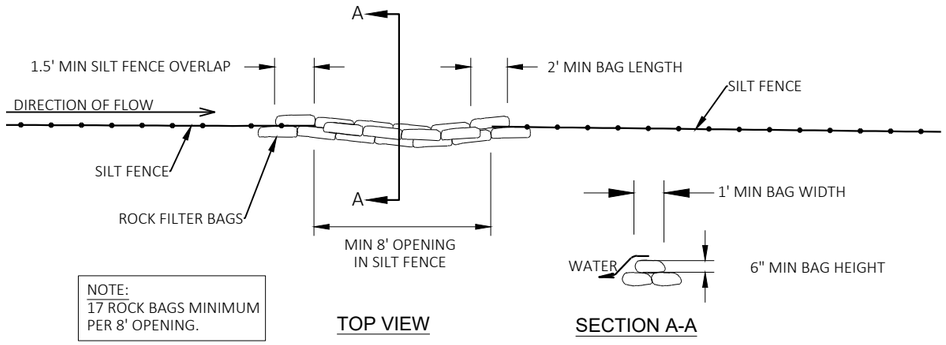


PIPE UNDERDRAIN 8-INCH TRENCH

ESTIMATED BAG SIZE = 18" X 12" X 6"	
PIPE SIZE	**ESTIMATED NO. OF BAGS**
12"	**1**
15"	**2**
18"	**2**
21"	**3**
14" X 23"	**3**
24"	**3**
27"	**4**
30"	**5**
19" X 30"	**5**
36"	**7**
24" X 38"	**8**
42"	**8**
29" X 45"	**10**
48"	**10**
34" X 53"	**10**
38" X 60"	**13**
60"	**13**
66"	**15**
53" X 83"	**19**

SEE SDD "CULVERT PIPE CHECK" FOR PLACEMENT OF ROCK BAGS AT END OF CULVERT PIPE

ROCK BAGS FOR CULVERT PIPE CHECKS



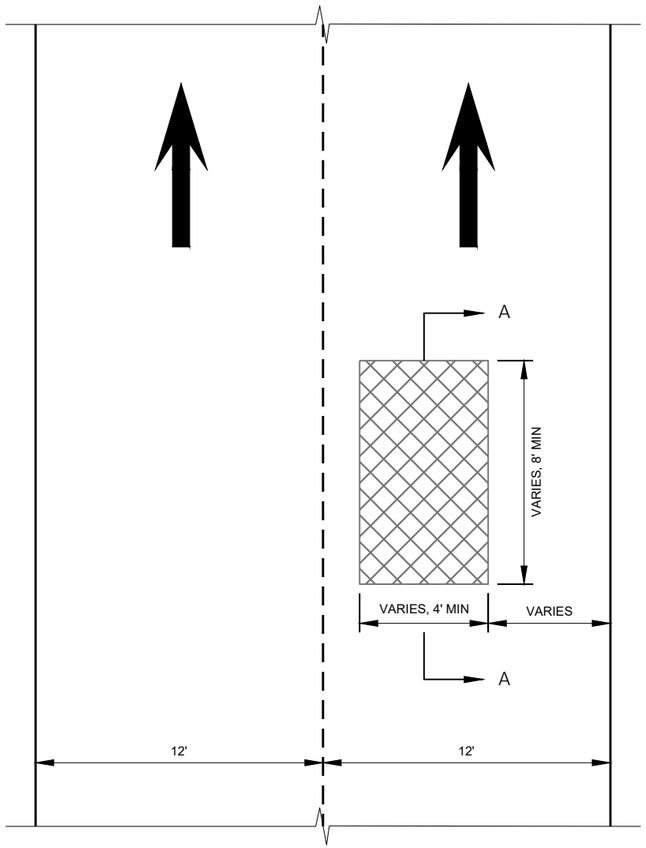
ROCK BAGS USED FOR SILT FENCE RELIEF

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 60.9 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 33.9 ACRES

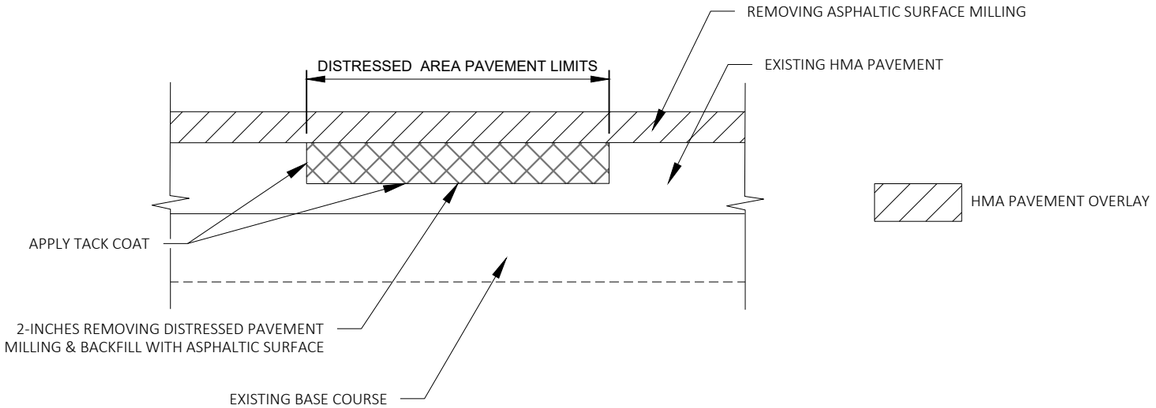
2



REMOVING DISTRESSED PAVEMENT MILLING

TRAVEL DIRECTION

PLAN VIEW

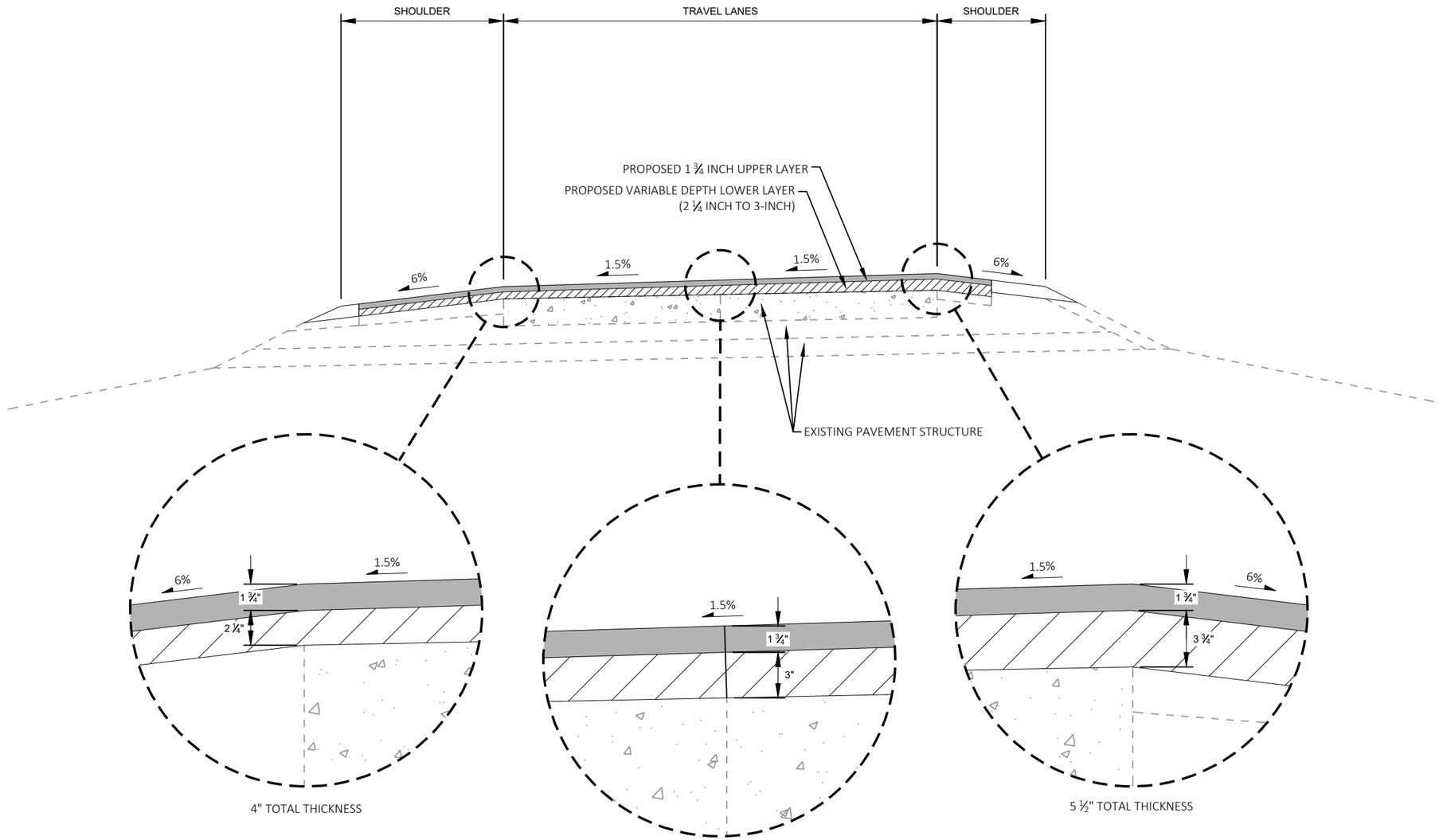


SECTION A-A

REMOVING DISTRESSED PAVEMENT MILLING

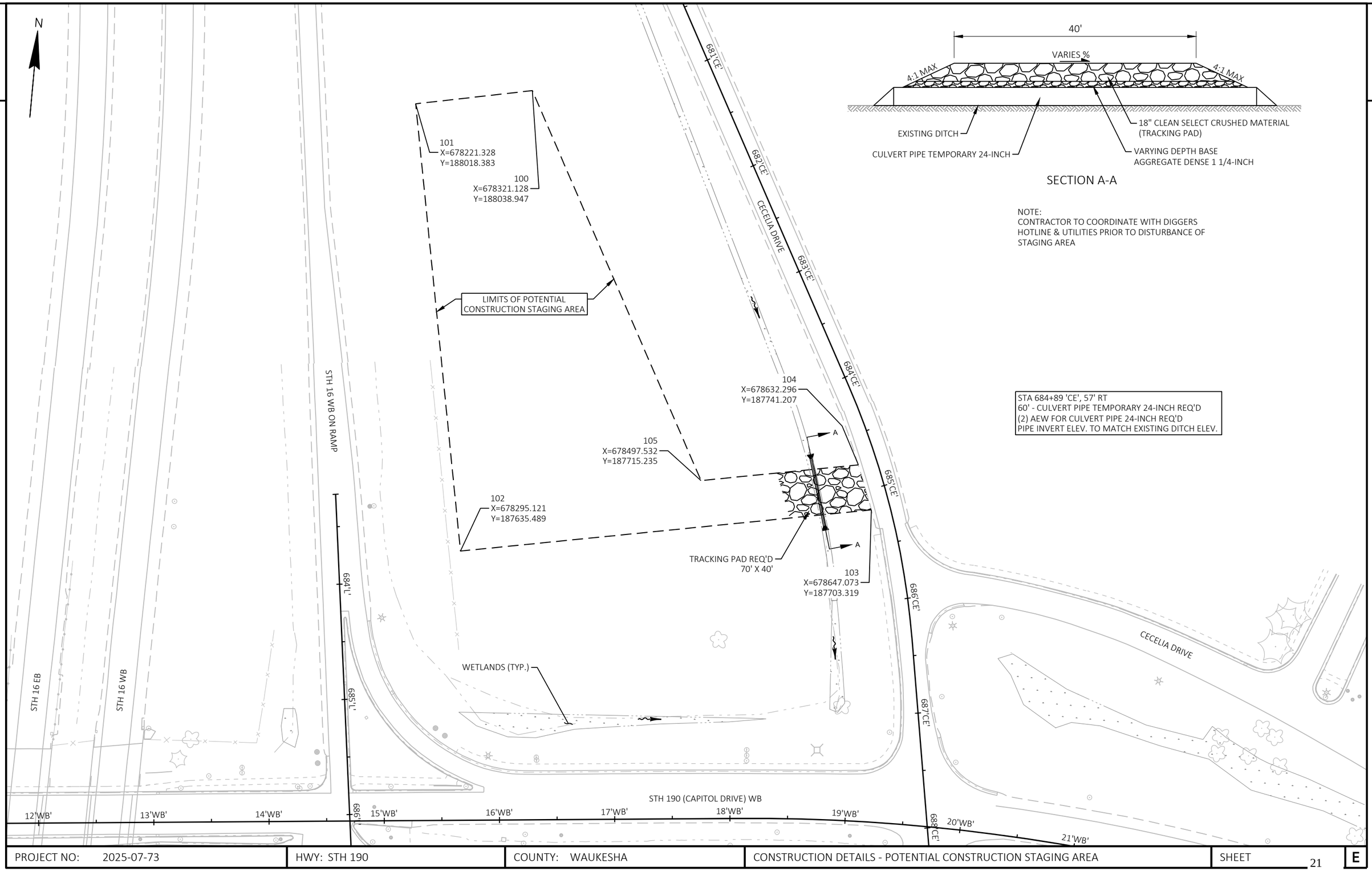
EXACT LOCATION AND LIMITS OF REMOVING DISTRESSED PAVEMENT MILLING TO BE DETERMINED BY THE ENGINEER IN THE FIELD

2



DETAIL FOR PAVING 4 TO 5 1/5-INCH HMA PAVEMENT

(SEE TYPICAL SECTIONS FOR APPROXIMATE LOCATIONS)



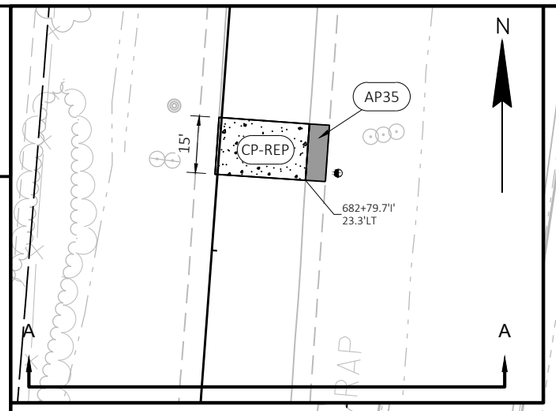
SECTION A-A

NOTE:
CONTRACTOR TO COORDINATE WITH DIGGERS HOTLINE & UTILITIES PRIOR TO DISTURBANCE OF STAGING AREA

STA 684+89 'CE', 57' RT
60' - CULVERT PIPE TEMPORARY 24-INCH REQ'D
(2) AEW FOR CULVERT PIPE 24-INCH REQ'D
PIPE INVERT ELEV. TO MATCH EXISTING DITCH ELEV.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION DETAILS - POTENTIAL CONSTRUCTION STAGING AREA	SHEET 21	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021002-CD.DWG
LAYOUT NAME - 01
PLOT DATE : 1/30/2023 8:05 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:75 FT
WISDOT/CADDS SHEET 42



STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
2	8+99.04 'WB'	85.71LT	187420.157	677639.205
3	9+66.46 'WB'	70.67LT	187414.755	677711.496
4	9+45.86 'WB'	27.00LT	187368.877	677695.553
5	9+58.40 'WB'	27.00LT	187370.424	677708.224
6	10+49.27 'WB'	37.48LT	187390.036	677798.149
7	9+94.07 'WB'	28.00LT	187375.242	677744.138
14	10+67.35 'WB'	18.97LT	187373.369	677817.941
17	9+05.19 'WB'	34.10LT	187370.151	677653.467
18	9+43.87 'WB'	63.56LT	187404.891	677688.913
19	9+89.98 'WB'	46.71LT	187393.469	677738.247

SIMMONS AVE

BEGIN PAVEMENT REPLACEMENT
STA 9+14 'WB'

2-INCH REMOVING ASPHALTIC
SURFACE MILLING
2-INCH HMA PAVEMENT 4 MT 58-28 S

BEGIN CONSTRUCTION
STA. 8+50
SAWCUT REQUIRED
MATCH EXISTING

EXISTING R/W

STH 16 EB OFF RAMP

CAPITOL DRIVE

6'EB'

8'WB'

8'EB'

10'WB'

10'EB'

STH 190
(CAPITOL DRIVE)

AP40

AP35

AG01

NOSE-1

NOSE-2

CS04

CS05

CG30A

CG30AR

CG30D

CG18A

CG18D

CB-PED

CP80

CP-REP

R52'

R1'

R2'

R3'

R4.5'

R20'

R60'

R42'

R5.0'

R46'

SI

15'

2'

12'

10'

8'

684+49.7'I'
18.0'RT

684+53.5'I'
0.0'

684+53.1'I'
29.4'LT

684+69.3'I'
24.8'LT

684+71.2'I'
34.3'LT

8+93.8'WB'
40.4'LT

8+88.0'WB'
32.0'LT

10+22.1'WB'
31.5'LT

9+21.6'EB'
40.0'RT

685+80.7'J'
21.5'RT

685+81.4'J'
10.4'LT

685+80.7'J'
5.4'LT

BEGIN PROJECT
STA. 8+88.71
SAWCUT REQUIRED
MATCH EXISTING

BEGIN PAVEMENT REPLACEMENT
STA 9+18 'EB'

REMOVE EXISTING
STONE WALL

EXISTING R/W

DYNEX DR

STH 16 EB ON RAMP

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
1	8+59.55 'EB'	4.50LT	187318.717	677614.098
8	9+43.48 'EB'	0.70RT	187321.824	677698.125
10	9+57.35 'EB'	5.00LT	187328.863	677711.371
11	9+29.99 'EB'	86.23RT	187235.374	677693.144
12	10+56.38 'EB'	60.37RT	187270.534	677814.847
13	10+23.82 'EB'	39.00RT	187289.595	677780.880
15	10+48.63 'EB'	8.52LT	187338.721	677802.335
16	9+31.52 'EB'	34.26RT	187287.249	677689.535
20	10+10.45 'EB'	58.77RT	187268.942	677768.917

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP35	3.5-INCH HMA PAVEMENT
AP40	4.0-INCH HMA PAVEMENT
CG18A	CONCRETE CURB & GUTTER 18-INCH TYPE A
CG18D	CONCRETE CURB & GUTTER 18-INCH TYPE D
CG30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CG30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
CB-PED	CONCRETE CURB PEDESTRIAN
CP80	CONCRETE PAVEMENT 8-INCH
CP-REP	CONCRETE PAVEMENT REPAIR
CS04	CONCRETE SIDEWALK 4-INCH
CS05	CONCRETE SIDEWALK 5-INCH
NOSE-1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE TYPE 2

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 22	E

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP35	3.5-INCH HMA PAVEMENT
CG30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CG36A	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A
CB-PED	CONCRETE CURB PEDESTRIAN
CP80	CONCRETE PAVEMENT 8-INCH
CS04	CONCRETE SIDEWALK 4-INCH
CS05	CONCRETE SIDEWALK 5-INCH
FLUM	ASPHALTIC FLUME
NOSE-1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE TYPE 2

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
22	14+02.58 'WB'	20.14LT	187407.101	678151.477
24	14+31.43 'WB'	46.00LT	187435.636	678177.677
25	14+76.02 'WB'	31.00LT	187425.038	678223.510
34	15+09.18 'WB'	12.90LT	187410.243	678258.272
35	16+26.15 'WB'	169.00LT	187576.967	678359.530
36	16+40.93 'WB'	195.11LT	187604.386	678371.705
45	15+50.34 'WB'	45.38LT	187446.569	678296.081
46	15+59.99 'WB'	57.09LT	187459.164	678304.554
47	15+93.90 'WB'	43.06LT	187448.494	678339.663
136	15+76.77 'WB'	28.00LT	187431.838	678324.080

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
21	14+03.68 'EB'	19.62RT	187335.297	678158.477
23	14+14.62 'EB'	16.77LT	187372.358	678166.870
26	14+61.03 'EB'	36.00RT	187322.934	678216.827
27	14+00.12 'EB'	32.72RT	187321.977	678155.835
28	14+85.84 'EB'	36.00RT	187324.656	678241.579
29	14+94.05 'EB'	36.00RT	187325.225	678249.765
30	14+73.83 'EB'	80.38RT	187279.552	678232.674
31	15+83.59 'EB'	161.33RT	187206.412	678347.793
32	15+89.30 'EB'	131.00RT	187237.065	678351.376
33	14+82.35 'EB'	20.59LT	187380.864	678234.171
37	16+35.16 'EB'	190.25RT	187181.144	678401.239

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP35	3.5-INCH HMA PAVEMENT
AP40	4.0-INCH HMA PAVEMENT
CP80	CONCRETE PAVEMENT 8-INCH
FLUM	ASPHALTIC FLUME
GR01	MGS GUARDRAIL TERMINAL EAT
GR02	MGS GUARDRAIL TERMINAL TYPE 2
GR03	MGS GUARDRAIL 3

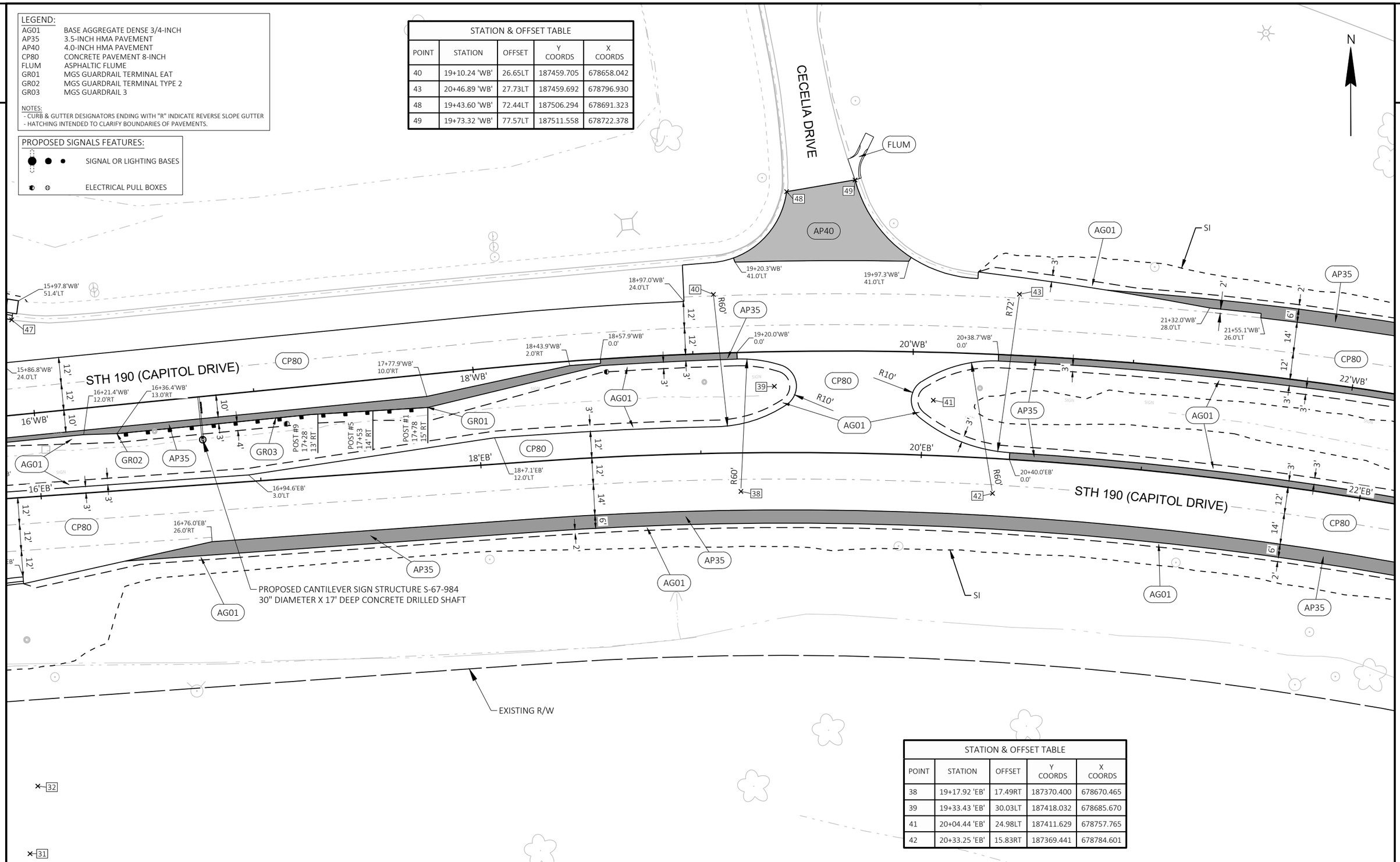
NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
40	19+10.24 'WB'	26.65LT	187459.705	678658.042
43	20+46.89 'WB'	27.73LT	187459.692	678796.930
48	19+43.60 'WB'	72.44LT	187506.294	678691.323
49	19+73.32 'WB'	77.57LT	187511.558	678722.378



STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
38	19+17.92 'EB'	17.49RT	187370.400	678670.465
39	19+33.43 'EB'	30.03LT	187418.032	678685.670
41	20+04.44 'EB'	24.98LT	187411.629	678757.765
42	20+33.25 'EB'	15.83RT	187369.441	678784.601

LEGEND:

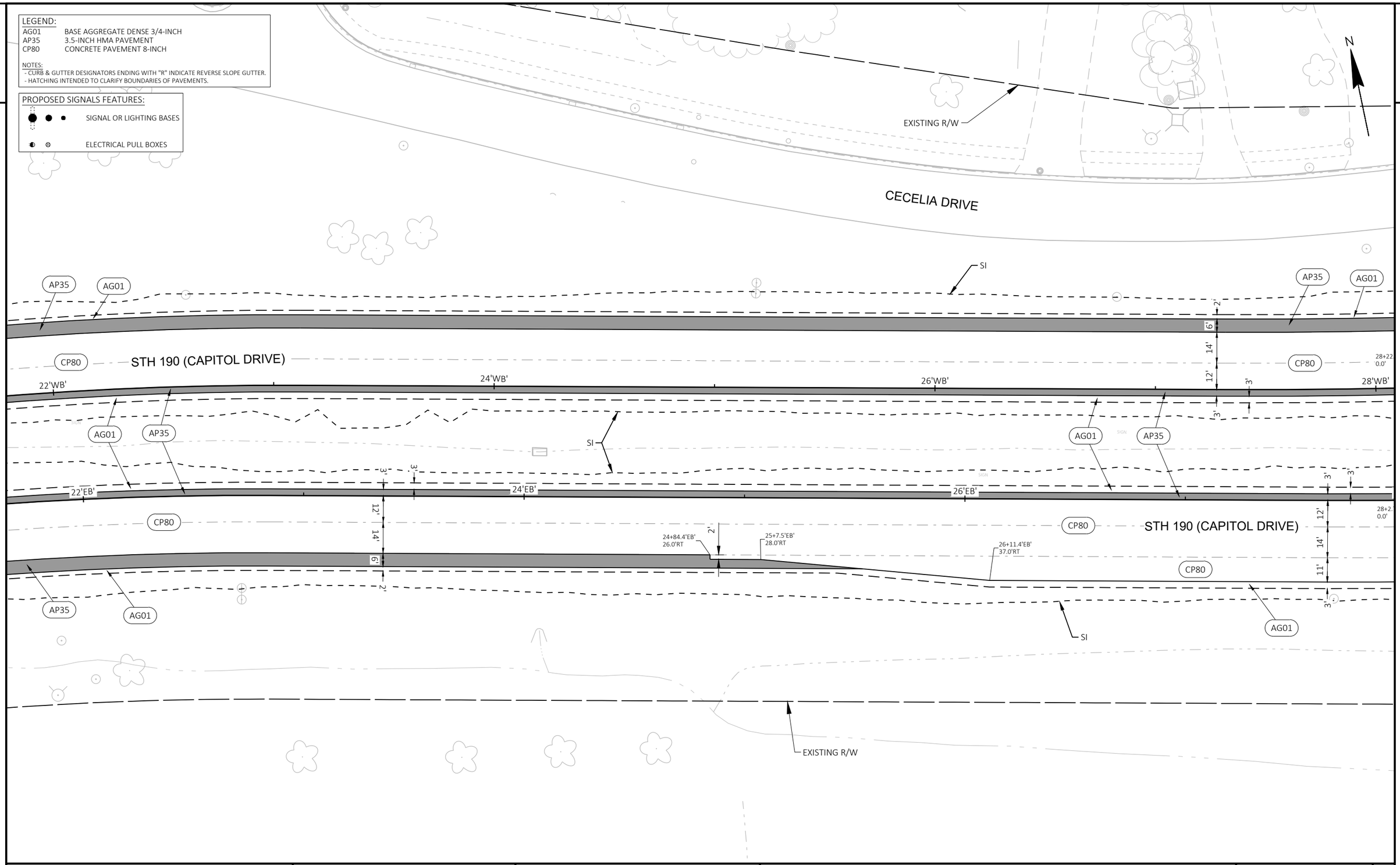
AG01	BASE AGGREGATE DENSE 3/4-INCH
AP35	3.5-INCH HMA PAVEMENT
CP80	CONCRETE PAVEMENT 8-INCH

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER.
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 25 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021201-PD.DWG
LAYOUT NAME - 04

PLOT DATE : 7/31/2023 7:43 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
52	28+16.75 'WB'	52.01LT	187343.894	679561.269
57	29+61.94 'WB'	49.74LT	187319.425	679701.766

N

EXISTING R/W

CECELIA DRIVE

AG01 AP35 AG01 AP35 AG01 SI

52 R100' 57 R100'

2' 6' 14' 12' 3' 3'

28'WB' 28+22.2'WB' 0.0' STH 190 (CAPITOL DRIVE) CP80

30'WB' 32'WB' 33+36.5'WB' 12.0'RT

CP80 CP80

AP35 AG01 R10' 53 CP80 AG01 R10' 56 AG01 SI AG01

28'EB' 28+2.7'EB' 0.0' 30'EB' 32'EB' 29+50.7'EB' 0.0'

CP80 R72' 54 CP80 STH 190 (CAPITOL DRIVE) CP80

11' 14' 12' 3' 3' 2' 8' 14'

28+32.5'EB' 36.0'RT 29+37.7'EB' 36.0'RT R75' 55 30+4.5'EB' 28.0'RT 30+14.8'EB' 26.0'RT

AG01 FLUM AP40 AG01 POST #1 30+00 36' RT GR01 POST #5 30+25 35' RT POST #9 30+49 34' RT AP35 SI AG01 GR03

50 51

EXISTING R/W

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
50	28+71.94 'EB'	86.30RT	187145.106	679594.043
51	29+07.39 'EB'	87.78RT	187137.545	679629.802
53	28+48.52 'EB'	24.92LT	187258.758	679590.454
54	28+10.29 'EB'	23.90RT	187217.985	679543.747
55	29+59.85 'EB'	33.62RT	187182.928	679690.990
56	29+20.46 'EB'	18.00LT	187239.881	679659.663

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP35	3.5-INCH HMA PAVEMENT
AP40	4.0-INCH HMA PAVEMENT
CP80	CONCRETE PAVEMENT 8-INCH
FLUM	ASPHALTIC FLUME
GR01	MGS GUARDRAIL TERMINAL EAT
GR03	MGS GUARDRAIL 3

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 26	E

2

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP35	3.5-INCH HMA PAVEMENT
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT
AP55	5.5-INCH HMA PAVEMENT
AP65	6.5-INCH HMA PAVEMENT
BP-C	BASE PATCHING CONCRETE
CP80	CONCRETE PAVEMENT 8-INCH
GR03	MGS GUARDRAIL 3

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER.
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.
- BASE PATCHING ASSOCIATED WITH PROPOSED SIGNAL LOOPS HAS STA-OFF CALLOUTS. BASE PATCHING LOCATIONS ASSOCIATED WITH POOR PAVEMENT HAS BEEN ESTIMATED. ALL LOCATIONS TO BE FIELD VERIFIED WITH THE ENGINEER.

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

CECELIA DRIVE

N

STH 190 (CAPITOL DRIVE)

AP35 AG01 SI CP80 34'WB' 36'WB' 36+90.0'WB' 32.0'LT 2' 6' 14' 12' 3' 3' 36+37.1'WB' 3.0'RT

END PAVEMENT REPLACEMENT
BEGIN RESURFACING
STA. 37+00'WB'

BP-C AG01 AP40 AP4-55 38'WB' 1' 9' 12' 12' 3' 3' BP-C AP55

INL SI AG01 AP35 34'EB' 36'EB' 3' 3' 3' 3' 12' 14' 8' 4' CP80 GR03 AP35 AG01 SI

END PAVEMENT REPLACEMENT
BEGIN RESURFACING
STA. 37+00'EB'

EXISTING R/W

BP-C AP55 37+88.0'EB' 0.0' 38'EB' 3' 3' 12' 12' 10' 4' BP-C AG01 GR03 AP4-55 AP40 AP65 BP-C 39+65.4'EB' 0.0' STH 190 (CAPITOL DRIVE)

RIPRAP

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 27	E

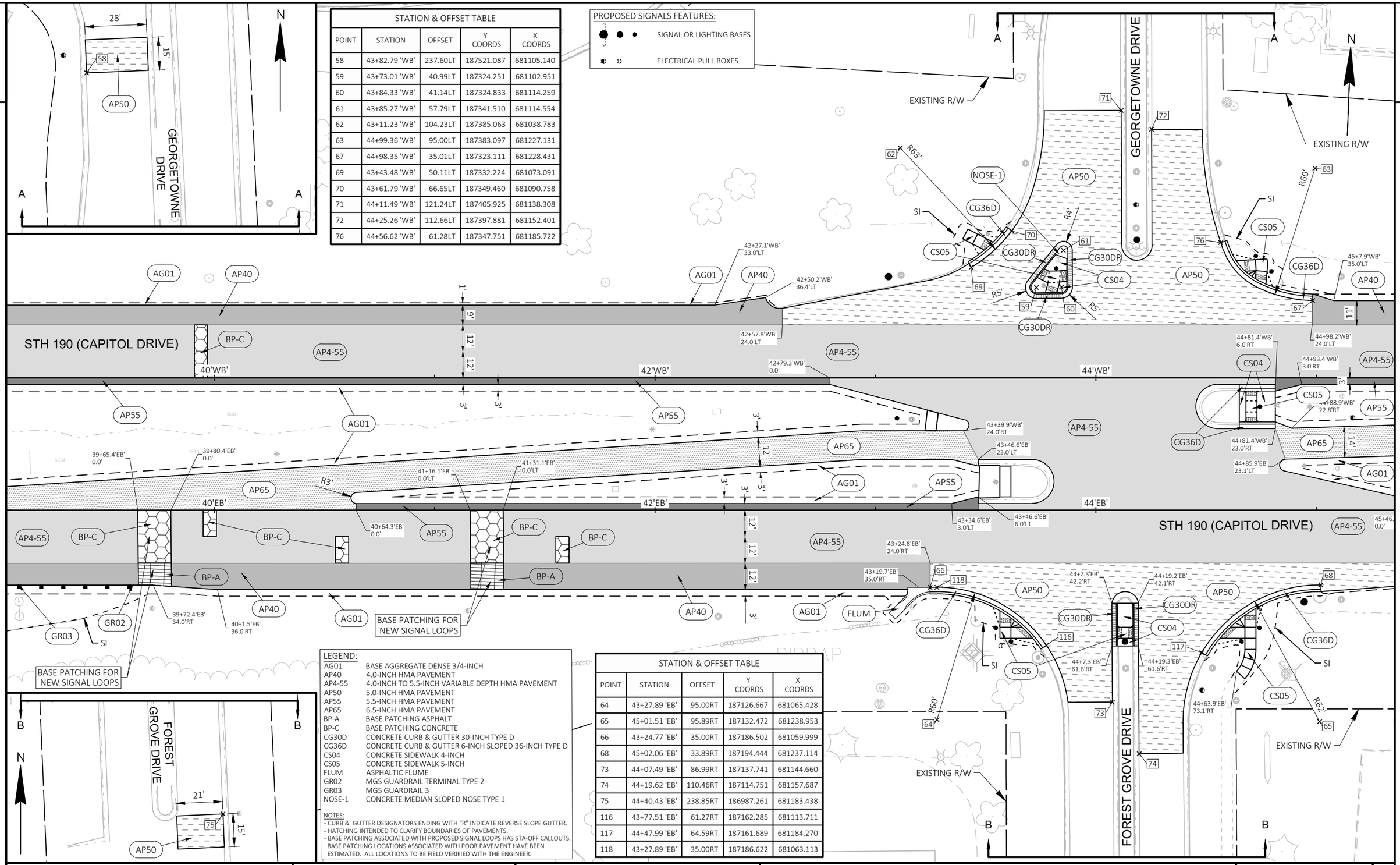
FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021201-PD.DWG
LAYOUT NAME - 06

PLOT DATE : 7/31/2023 7:44 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
58	43+82.79 'WB'	237.60LT	187521.087	681105.140
59	43+73.01 'WB'	40.99LT	187324.251	681102.951
60	43+84.33 'WB'	41.14LT	187324.833	681114.259
61	43+85.27 'WB'	57.79LT	187341.510	681114.554
62	43+11.23 'WB'	104.23LT	187385.063	681038.783
63	44+99.36 'WB'	95.00LT	187383.097	681227.131
67	44+98.35 'WB'	35.01LT	187323.111	681228.431
69	43+43.48 'WB'	50.11LT	187332.224	681073.091
70	43+61.79 'WB'	66.65LT	187349.460	681090.758
71	44+11.49 'WB'	121.24LT	187405.925	681138.308
72	44+25.26 'WB'	112.66LT	187397.881	681152.401
76	44+56.62 'WB'	61.28LT	187347.751	681185.722

PROPOSED SIGNALS FEATURES:
- SIGNAL OR LIGHTING BASES
- ELECTRICAL PULL BOXES



LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT
AP50	5.0-INCH HMA PAVEMENT
AP55	5.5-INCH HMA PAVEMENT
AP65	6.5-INCH HMA PAVEMENT
BP-A	BASE PATCHING ASPHALT
BP-C	BASE PATCHING CONCRETE
CG30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
CG36D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
CS04	CONCRETE SIDEWALK 4-INCH
CS05	CONCRETE SIDEWALK 5-INCH
FLUM	ASPHALTIC FLUME
GR02	MGS GUARDRAIL TERMINAL TYPE 2
GR03	MGS GUARDRAIL 3
NOSE-1	CONCRETE MEDIAN SLOPED NOSE TYPE 1

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER.
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.
- BASE PATCHING ASSOCIATED WITH PROPOSED SIGNAL LOOPS HAS STA-OFF CALLOUTS. BASE PATCHING LOCATIONS ASSOCIATED WITH POOR PAVEMENT HAVE BEEN ESTIMATED. ALL LOCATIONS TO BE FIELD VERIFIED WITH THE ENGINEER.

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
64	43+27.89 'EB'	95.00RT	187126.667	681065.428
65	45+01.51 'EB'	95.89RT	187132.472	681238.953
66	43+24.77 'EB'	35.00RT	187186.502	681059.999
68	45+02.06 'EB'	33.89RT	187194.444	681237.114
73	44+07.49 'EB'	86.99RT	187137.741	681144.660
74	44+19.62 'EB'	110.46RT	187114.751	681157.687
75	44+40.43 'EB'	238.85RT	186987.261	681183.438
116	43+77.51 'EB'	61.27RT	187162.285	681113.711
117	44+47.99 'EB'	64.59RT	187161.689	681184.270
118	43+27.89 'EB'	35.00RT	187186.622	681063.113

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 28	E

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT
AP50	5.0-INCH HMA PAVEMENT
AP55	5.5-INCH HMA PAVEMENT
AP65	6.5-INCH HMA PAVEMENT
BP-A	BASE PATCHING ASPHALT
BP-C	BASE PATCHING CONCRETE
CG36D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.
- BASE PATCHING ASSOCIATED WITH PROPOSED SIGNAL LOOPS HAS STA-OFF CALLOUTS. BASE PATCHING LOCATIONS ASSOCIATED WITH POOR PAVEMENT HAVE BEEN ESTIMATED. ALL LOCATIONS TO BE FIELD VERIFIED WITH THE ENGINEER.

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

N

EXISTING R/W

BASE PATCHING FOR NEW SIGNAL LOOPS

BASE PATCHING FOR NEW SIGNAL LOOPS

STH 190 (CAPITOL DRIVE)

STH 190 (CAPITOL DRIVE)

BASE PATCHING FOR NEW SIGNAL LOOPS

EXISTING R/W

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
65	45+01.51 'EB'	95.89RT	187132.472	681238.953

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 29 E

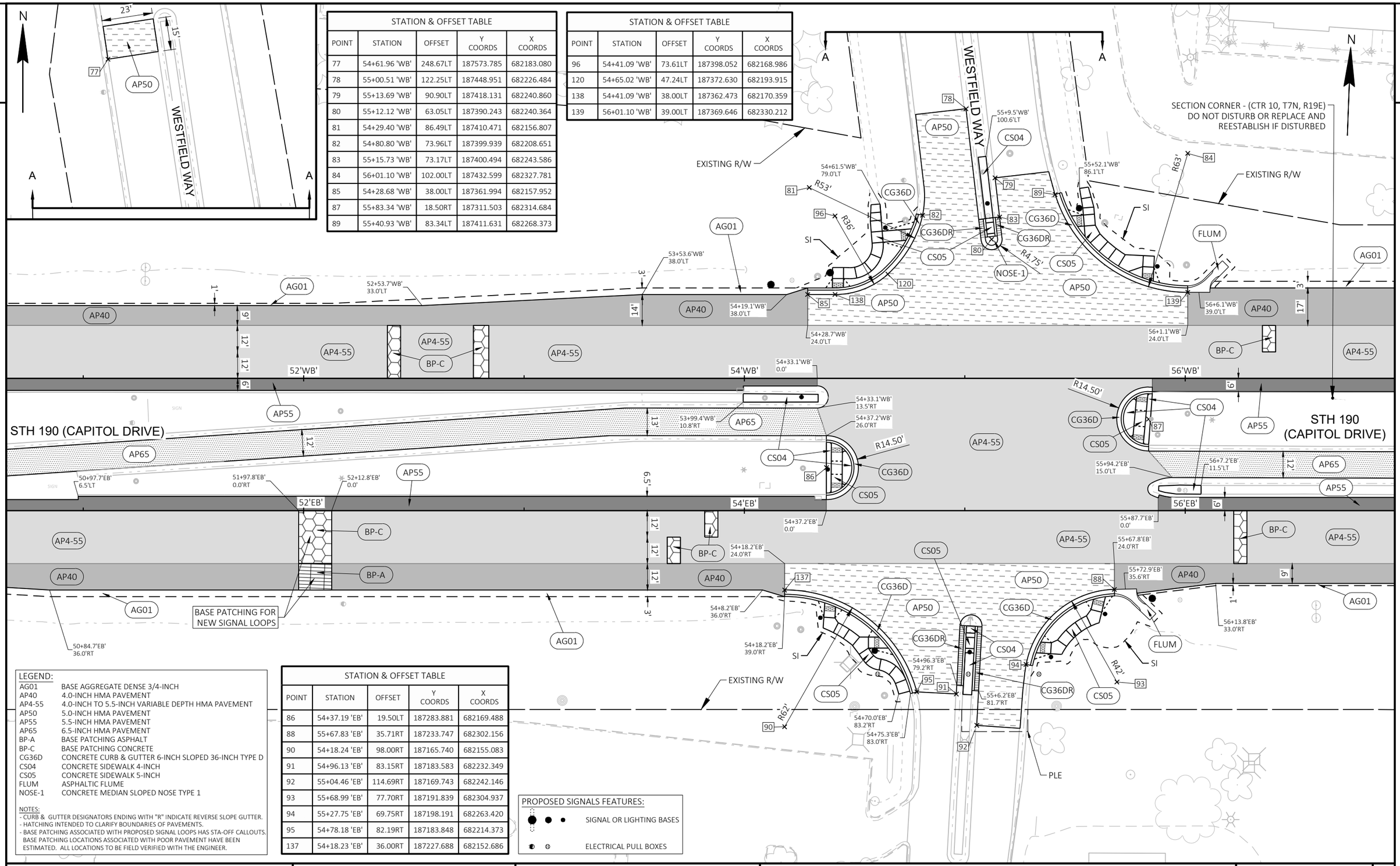
FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021201-PD.DWG
LAYOUT NAME - 08

PLOT DATE : 7/31/2023 7:44 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
77	54+61.96 'WB'	248.67LT	187573.785	682183.080
78	55+00.51 'WB'	122.25LT	187448.951	682226.484
79	55+13.69 'WB'	90.90LT	187418.131	682240.860
80	55+12.12 'WB'	63.05LT	187390.243	682240.364
81	54+29.40 'WB'	86.49LT	187410.471	682156.807
82	54+80.80 'WB'	73.96LT	187399.939	682208.651
83	55+15.73 'WB'	73.17LT	187400.494	682243.586
84	56+01.10 'WB'	102.00LT	187432.599	682327.781
85	54+28.68 'WB'	38.00LT	187361.994	682157.952
87	55+83.34 'WB'	18.50RT	187311.503	682314.684
89	55+40.93 'WB'	83.34LT	187411.631	682268.373

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
96	54+41.09 'WB'	73.61LT	187398.052	682168.986
120	54+65.02 'WB'	47.24LT	187372.630	682193.915
138	54+41.09 'WB'	38.00LT	187362.473	682170.359
139	56+01.10 'WB'	39.00LT	187369.646	682330.212

2



LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT
AP50	5.0-INCH HMA PAVEMENT
AP55	5.5-INCH HMA PAVEMENT
AP65	6.5-INCH HMA PAVEMENT
BP-A	BASE PATCHING ASPHALT
BP-C	BASE PATCHING CONCRETE
CG36D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
CS04	CONCRETE SIDEWALK 4-INCH
CS05	CONCRETE SIDEWALK 5-INCH
FLUM	ASPHALTIC FLUME
NOSE-1	CONCRETE MEDIAN SLOPED NOSE TYPE 1

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER.
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.
- BASE PATCHING ASSOCIATED WITH PROPOSED SIGNAL LOOPS HAS STA-OFF CALLOUTS. BASE PATCHING LOCATIONS ASSOCIATED WITH POOR PAVEMENT HAVE BEEN ESTIMATED. ALL LOCATIONS TO BE FIELD VERIFIED WITH THE ENGINEER.

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
86	54+37.19 'EB'	19.50LT	187283.881	682169.488
88	55+67.83 'EB'	35.71RT	187233.747	682302.156
90	54+18.24 'EB'	98.00RT	187165.740	682155.083
91	54+96.13 'EB'	83.15RT	187183.583	682232.349
92	55+04.46 'EB'	114.69RT	187169.743	682242.146
93	55+68.99 'EB'	77.70RT	187191.839	682304.937
94	55+27.75 'EB'	69.75RT	187198.191	682263.420
95	54+78.18 'EB'	82.19RT	187183.848	682214.373
137	54+18.23 'EB'	36.00RT	187227.688	682152.686

PROPOSED SIGNALS FEATURES:
- SIGNAL OR LIGHTING BASES
- ELECTRICAL PULL BOXES

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 30	E

2

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT
AP50	5.0-INCH HMA PAVEMENT
AP55	5.5-INCH HMA PAVEMENT
AP65	6.5-INCH HMA PAVEMENT
BP-A	BASE PATCHING ASPHALT
BP-C	BASE PATCHING CONCRETE
FLUM	ASPHALTIC FLUME

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER.
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.
- BASE PATCHING ASSOCIATED WITH PROPOSED SIGNAL LOOPS HAS STA-OFF CALLOUTS. BASE PATCHING LOCATIONS ASSOCIATED WITH POOR PAVEMENT HAVE BEEN ESTIMATED. ALL LOCATIONS TO BE FIELD VERIFIED WITH THE ENGINEER.

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
97	60+94.45 'WB'	67.48LT	187417.138	682822.090
98	61+32.68 'WB'	67.47LT	187418.605	682860.298

N

2

EXISTING R/W

BASE PATCHING FOR NEW SIGNAL LOOPS

BASE PATCHING FOR NEW SIGNAL LOOPS

STH 190 (CAPITOL DRIVE)

AG01 AP40 AP4-55 AP50 AP55 AP65 BP-A BP-C FLUM

57+99.7'WB' 41.0'LT
58+66.3'WB' 35.0'LT
59+36.9'WB' 35.0'LT
97
98
61+89.3'WB' 38.0'LT
61+84.2'WB' 24.0'LT
60+56.5'WB' 24.0'LT
61+36.0'WB' 0.0'
58+10.9'WB' 0.0'LT
58+29.9'WB' 0.0'
59+61.2'WB' 0.0'
59+88.2'WB' 0.0'
60+48.0'WB' 6.0'RT
58'WB'
60'WB'
62'WB'
58'EB'
60'EB'
62'EB'
62+2.6'EB' 0.0'
60+19.9'EB' 24.0'RT
61+76.8'EB' 24.0'RT
61+81.8'EB' 36.4'RT
57+60.7'EB' 33.0'RT
58+23.9'EB' 36.0'RT
59+89.8'EB' 36.0'RT
62+28.1'EB' 33.0'RT
99
100
WILLOW GROVE DRIVE
RIPRAP

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
99	60+88.13 'EB'	72.85RT	187216.713	682823.508
100	61+07.17 'EB'	82.68RT	187207.627	682842.912

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 31	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021201-PD.DWG
LAYOUT NAME - 10

PLOT DATE : 7/31/2023 7:45 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT
AP55	5.5-INCH HMA PAVEMENT
AP65	6.5-INCH HMA PAVEMENT
BP-A	BASE PATCHING ASPHALT
BP-C	BASE PATCHING CONCRETE
FLUM	ASPHALTIC FLUME

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER.
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.
- BASE PATCHING ASSOCIATED WITH PROPOSED SIGNAL LOOPS HAS STA-OFF CALLOUTS. BASE PATCHING LOCATIONS ASSOCIATED WITH POOR PAVEMENT HAVE BEEN ESTIMATED. ALL LOCATIONS TO BE FIELD VERIFIED WITH THE ENGINEER.

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

N

2

EXISTING R/W

AG01 AG01 AG01

3' 1'

AP40 15' 64+6.5'WB' 39.0'LT 64+63.6'WB' 35.0'LT 11' AP40 11' 67+77.4'WB' 35.0'LT AP40

STH 190 (CAPITOL DRIVE) AP4-55 12' 12' AP4-55 AP4-55 AP4-55

64'WB' 64+5.9'WB' 0.0' 65+56.2'WB' 0.0' BP-C 66'WB' 68'WB' 68+45.4'WB' 0.0'RT

AP65 AP55 4' AP65 AP65 4'

AP65 12' 66+99.8'WB' 14.4'RT AP65 12'

AP65 63+93.6'EB' 18.7'LT 64'EB' 65+2.0'EB' 0.0' 65+17.0'EB' 0.0'RT AP55 SIGN 4' 65+98.0'EB' 6.0'LT 66+53.3'EB' 0.0' SIGN 66+68.3'EB' 0.0'RT AP55 6' 68'EB'

64+83.8'EB' 0.0' 66'EB' 12' 12' 12'

BP-C AP4-55 AP40 62+28.1'EB' 33.0'RT AG01 AP40 BP-C BP-A 65+16.6'EB' 33.0'RT AG01 AP4-55 AP40 65+64.0'EB' 36.0'RT 3' BP-C BP-A STH 190 (CAPITOL DRIVE) AP4-55 AP40

BASE PATCHING FOR NEW SIGNAL LOOPS

BASE PATCHING FOR NEW SIGNAL LOOPS

EXISTING R/W

RIPRAP

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 32 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021201-PD.DWG
LAYOUT NAME - 11

PLOT DATE : 7/31/2023 7:45 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
101	68+79.26 'WB'	34.50LT	187414.401	683607.675
102	69+24.22 'WB'	36.42LT	187417.901	683652.608
103	69+22.70 'WB'	71.38LT	187452.795	683649.890
104	69+55.60 'WB'	59.69LT	187442.214	683683.252
105	69+91.44 'WB'	103.29LT	187486.949	683717.800
106	69+93.84 'WB'	55.97LT	187439.729	683721.688
107	69+99.42 'WB'	68.39LT	187452.314	683726.892
108	70+30.74 'WB'	68.91LT	187453.790	683758.279
109	70+36.82 'WB'	58.72LT	187443.785	683764.671
110	70+74.64 'WB'	88.12LT	187474.258	683801.757
111	70+76.30 'WB'	40.12LT	187426.321	683804.750

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT
AP50	5.0-INCH HMA PAVEMENT
AP55	5.5-INCH HMA PAVEMENT
AP65	6.5-INCH HMA PAVEMENT
BP-A	BASE PATCHING ASPHALT
BP-C	BASE PATCHING CONCRETE
CG36D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
CB-PED	CONCRETE CURB PEDESTRIAN
CS04	CONCRETE SIDEWALK 4-INCH
CS05	CONCRETE SIDEWALK 5-INCH
FLUM	ASPHALTIC FLUME
NOSE-1	CONCRETE MEDIAN SLOPED NOSE TYPE 1

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER.
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.
- BASE PATCHING ASSOCIATED WITH PROPOSED SIGNAL LOOPS HAS STA-OFF CALLOUTS. BASE PATCHING LOCATIONS ASSOCIATED WITH POOR PAVEMENT HAVE BEEN ESTIMATED. ALL LOCATIONS TO BE FIELD VERIFIED WITH THE ENGINEER.

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
112	68+92.65 'EB'	19.00LT	187339.437	683623.946
113	68+89.02 'EB'	96.00RT	187224.381	683624.426
114	69+70.16 'EB'	99.49RT	187223.642	683705.297
115	69+77.91 'EB'	111.92RT	187211.462	683713.397
121	69+18.21 'EB'	43.53RT	187277.843	683651.662
122	68+89.02 'EB'	36.00RT	187284.342	683622.280
123	70+02.66 'EB'	232.77RT	187091.500	683748.649

PROPOSED SIGNALS FEATURES:
- SIGNAL OR LIGHTING BASES
- ELECTRICAL PULL BOXES

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 33 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021201-PD.DWG
LAYOUT NAME - 12
PLOT DATE : 7/31/2023 7:45 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

LEGEND:

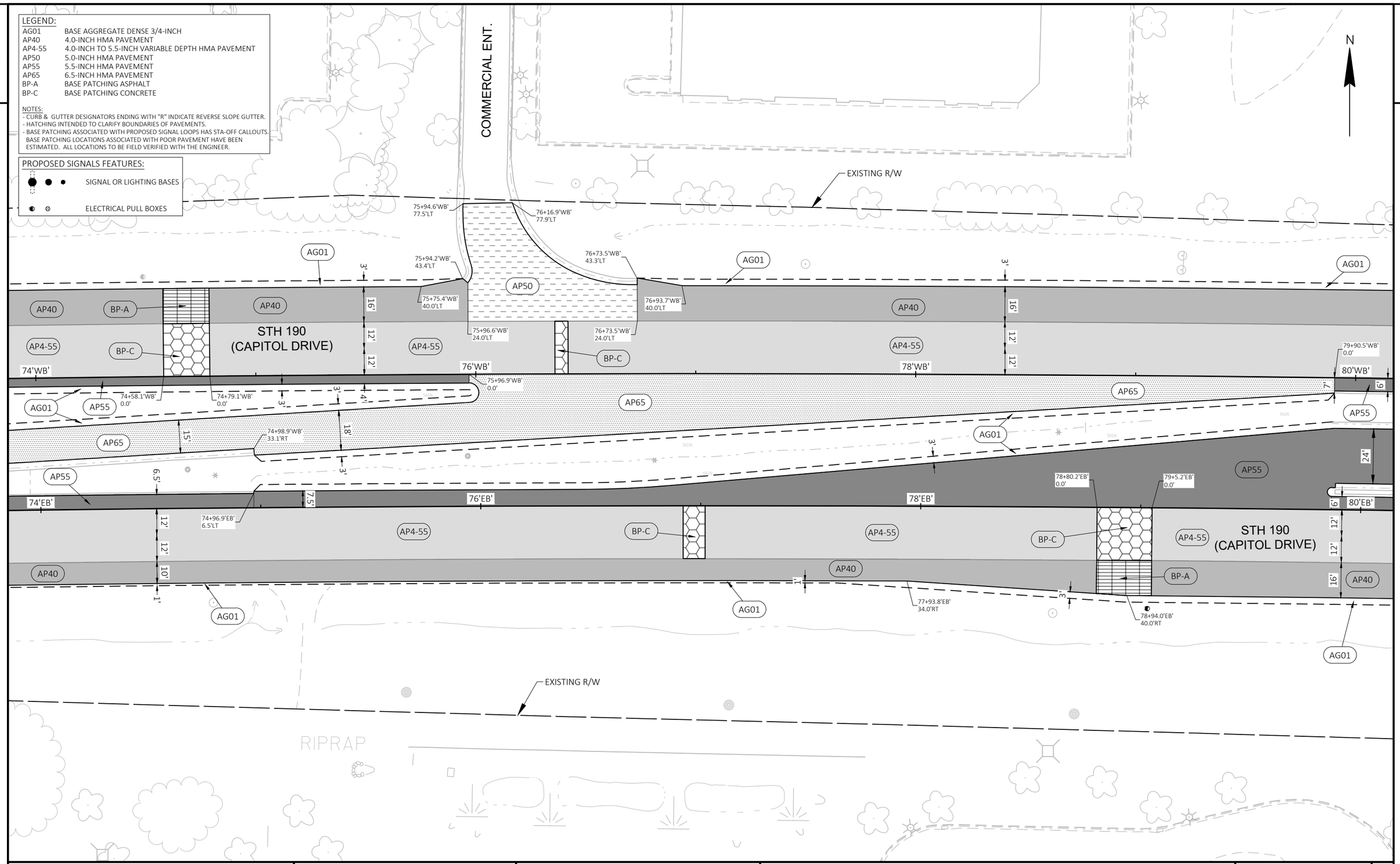
AG01	BASE AGGREGATE DENSE 3/4-INCH
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT
AP50	5.0-INCH HMA PAVEMENT
AP55	5.5-INCH HMA PAVEMENT
AP65	6.5-INCH HMA PAVEMENT
BP-A	BASE PATCHING ASPHALT
BP-C	BASE PATCHING CONCRETE

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER.
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.
- BASE PATCHING ASSOCIATED WITH PROPOSED SIGNAL LOOPS HAS STA-OFF CALLOUTS. BASE PATCHING LOCATIONS ASSOCIATED WITH POOR PAVEMENT HAVE BEEN ESTIMATED. ALL LOCATIONS TO BE FIELD VERIFIED WITH THE ENGINEER.

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 34	E

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT
AP55	5.5-INCH HMA PAVEMENT
AP65	6.5-INCH HMA PAVEMENT
BP-A	BASE PATCHING ASPHALT
BP-C	BASE PATCHING CONCRETE
CG36A	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A
CB-PED	CONCRETE CURB PEDESTRIAN
CP-REP	CONCRETE PAVEMENT REPAIR
CP-RPL	CONCRETE PAVEMENT REPLACEMENT
CS04	CONCRETE SIDEWALK 4-INCH
CS05	CONCRETE SIDEWALK 5-INCH
FLUM	ASPHALTIC FLUME
NOSE-1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE TYPE 2

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER.
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.
- BASE PATCHING ASSOCIATED WITH PROPOSED SIGNAL LOOPS HAS STA-OFF CALLOUTS. BASE PATCHING LOCATIONS ASSOCIATED WITH POOR PAVEMENT HAVE BEEN ESTIMATED. ALL LOCATIONS TO BE FIELD VERIFIED WITH THE ENGINEER.

STATION & OFFSET TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS
132	82+20.62 'WB'	97.67LT	187487.396	684951.662
133	82+24.06 'WB'	108.17LT	187497.836	684955.275
140	84+55.67 'WB'	106.10LT	187491.980	685186.816
141	85+12.12 'WB'	274.00LT	187658.934	685246.009
146	82+47.11 'WB'	54.95LT	187444.244	684977.452
147	82+74.65 'WB'	79.80LT	187468.642	685005.392
148	84+08.84 'WB'	72.68LT	187459.326	685139.451
149	84+50.55 'WB'	48.80LT	187434.770	685180.762

STATION & OFFSET TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS
142	84+70.50 'EB'	89.92RT	187235.699	685200.759
143	85+14.64 'EB'	86.95RT	187237.950	685244.937
144	81+89.18 'EB'	274.00RT	187056.240	684916.463
145	82+42.34 'EB'	104.93RT	187224.422	684972.386
150	84+43.84 'EB'	45.04RT	187281.008	685174.838
151	84+23.07 'EB'	68.11RT	187258.279	685153.695
152	82+89.39 'EB'	72.74RT	187255.834	685019.950
153	82+47.14 'EB'	48.13RT	187281.134	684978.108

PROPOSED SIGNALS FEATURES:
- SIGNAL OR LIGHTING BASES
- ELECTRICAL PULL BOXES

STH 190 (CAPITOL DRIVE)
STH 164 (PEWAUKEE ROAD)
EXISTING R/W
ADJUST WATER VALVE BOX SECTIONS
JOINT LOCATION MOVED TO +20
JOINT LOCATION MOVED TO +32
JOINT LOCATION MOVED TO +64
JOINT LOCATION MOVED TO +75
SECTION CORNER - (E1/4 10, T7N, R19E) DO NOT DISTURB, OR REPLACE AND REESTABLISH IF DISTURBED
APPROXIMATE EXISTING CONCRETE PANEL JOINT (TYP)
RIPRAP
80'WB' 82'WB' 84'WB' 80'EB' 82'EB' 84'EB'
79+90.5'WB' 0.0'
82+56.4'WB' 13.4'RT
82+32.1'EB' 7.0'LT
82+42.1'EB' 47.6'RT
84+79.5'WB' 6.9'RT
84+45.9'EB' 12.5'LT
180+67.1'PK' 8.9'RT
177+75.1'PK' 9.3'LT
R58' R75' R250' R57' R52' R110'

NOTE:
ALL CONCRETE PANEL REPLACEMENT OR REPAIR LOCATIONS TO BE FIELD VERIFIED WITH THE ENGINEER.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 35	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021201-PD.DWG
LAYOUT NAME - 14
PLOT DATE : 7/31/2023 7:45 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT (SEE CONSTRUCTION DETAILS)
AP55	5.5-INCH HMA PAVEMENT
AP65	6.5-INCH HMA PAVEMENT
BP-A	BASE PATCHING ASPHALT
BP-C	BASE PATCHING CONCRETE

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER.
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.
- BASE PATCHING ASSOCIATED WITH PROPOSED SIGNAL LOOPS HAS STA-OFF CALLOUTS. BASE PATCHING LOCATIONS ASSOCIATED WITH POOR PAVEMENT HAVE BEEN ESTIMATED. ALL LOCATIONS TO BE FIELD VERIFIED WITH THE EXISTING.

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

N

RIPRAP

RIPRAP

EXISTING R/W

ADJUST WATER VALVE BOX SECTIONS

AG01

AP40

AP4-55

BP-A

BP-C

STH 190 (CAPITOL DRIVE)

86'WB'

88'WB'

90'WB'

88+15.1'WB' 39.0'LT

88+93.0'WB' 34.0'LT

87+6.4'WB' 6.0'RT

86+68.9'WB' 0.0'

86+83.9'WB' 0.0'

88+45.8'WB' 0.0'

88+62.8'WB' 0.0'

90+32.4'WB' 3.0'RT

87+15.6'EB' 25.0'LT

91+30.3'EB' 5.0'LT

86'EB'

88'EB'

90'EB'

87+15.6'EB' 5.0'LT

86+31.4'EB' 33.0'RT

91+57.0' 33.0'RT

AP55

15'

12'

10'

6'

24'

5.5'

9'

1'

3'

5'

EXISTING R/W

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 36	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021201-PD.DWG
LAYOUT NAME - 15

PLOT DATE : 7/31/2023 7:45 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT (SEE CONSTRUCTION DETAILS)
AP50	5.0-INCH HMA PAVEMENT
AP55	5.5-INCH HMA PAVEMENT

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER.
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.
- BASE PATCHING ASSOCIATED WITH PROPOSED SIGNAL LOOPS HAS STA-OFF CALLOUTS. BASE PATCHING LOCATIONS ASSOCIATED WITH POOR PAVEMENT HAVE BEEN ESTIMATED. ALL LOCATIONS TO BE FIELD VERIFIED WITH THE ENGINEER.

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

N

HIGHFIELD ROAD

EXISTING R/W

ADJUST WATER VALVE BOX SECTIONS

127

AG01 AP40 AP4-55 AP50 AP55

BP-C

92'WB' 94'WB' 96'WB'

95+71.8'WB' 24.0'LT

97+8.9'WB' 24.0'LT

1' 399' 12' 12' 3' 3' 15' 12' 12' 12'

STH 190 (CAPITOL DRIVE)

91+30.3'EB' 5.0'LT

92+30.3'EB' 12.0'LT

92'EB' 94'EB' 96'EB'

12' 12' 480' 14' 3' 3'

91+57.0'EB' 33.0'RT

92+32.7'EB' 38.0'RT

95+43.7'EB' 24.0'RT

96+97.6'EB' 24.0'RT

9'

129 128 130

5 FIELDS ROAD

EXISTING R/W

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 37	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021201-PD.DWG
LAYOUT NAME - 16

PLOT DATE : 7/31/2023 7:46 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT (SEE CONSTRUCTION DETAILS)
AP55	5.5-INCH HMA PAVEMENT
BP-C	BASE PATCHING CONCRETE

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER.
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.
- BASE PATCHING ASSOCIATED WITH PROPOSED SIGNAL LOOPS HAS STA-OFF CALLOUTS. BASE PATCHING LOCATIONS ASSOCIATED WITH POOR PAVEMENT HAVE BEEN ESTIMATED. ALL LOCATIONS TO BE FIELD VERIFIED WITH THE ENGINEER.

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

N

EXISTING R/W

BP-C

AG01

100+6.1'WB'
39.0'LT

100+84.4'WB'
34.0'LT

AP40

97+8.9'WB'
24.0'LT

STH 190 (CAPITOL DRIVE)

AP4-55

98'WB'

100'WB'

102'WB'

AP55

100+2.7'WB'
12.0'RT

101+2.7'WB'
3.0'RT

3'
15'
12'
12'
12'
3'
1'
10'
12'
12'
3'
3'

SIGN

98'EB'

100'EB'

102'EB'

3'
3'
12'
12'
9'
1'

97+53.4'EB'
33.0'RT

EXISTING R/W

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 38	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021201-PD.DWG
LAYOUT NAME - 17

PLOT DATE : 7/31/2023 7:46 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT (SEE CONSTRUCTION DETAILS)
AP55	5.5-INCH HMA PAVEMENT
BP-C	BASE PATCHING CONCRETE

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.
- BASE PATCHING ASSOCIATED WITH PROPOSED SIGNAL LOOPS HAS STA-OFF CALLOUTS. BASE PATCHING LOCATIONS ASSOCIATED WITH POOR PAVEMENT HAVE BEEN ESTIMATED. ALL LOCATIONS TO BE FIELD VERIFIED WITH THE ENGINEER.

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

N

EXISTING R/W

AG01 AP40 AP4-55 BP-C

STH 190 (CAPITOL DRIVE)

104'WB' 106'WB' 108'WB'

1' 10' 12' 12' 3' 3'

AG01 AP55

104'EB' 106'EB' 108'EB'

3' 3' 3' 3'

AP4-55 BP-C AP40 AP55

12' 12' 12' 1'

108+50.5'EB'
36.0'RT

134

EXISTING R/W

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 39	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021201-PD.DWG
LAYOUT NAME - 18

PLOT DATE : 7/31/2023 7:46 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT (SEE CONSTRUCTION DETAILS)
AP55	5.5-INCH HMA PAVEMENT
BP-C	BASE PATCHING CONCRETE
FLUM	ASPHALTIC FLUME

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER.
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.
- BASE PATCHING ASSOCIATED WITH PROPOSED SIGNAL LOOPS HAS STA-OFF CALLOUTS. BASE PATCHING LOCATIONS ASSOCIATED WITH POOR PAVEMENT HAVE BEEN ESTIMATED. ALL LOCATIONS TO BE FIELD VERIFIED WITH THE ENGINEER.

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

EXISTING R/W

END CONSTRUCTION
STA. 110+95'WB'
MATCH EXISTING

AG01
BP-C
AP40
AP4-55
STH 190 (CAPITOL DRIVE)
AP55
1'
10'
12'
12'
12'
3'
110'WB'
112'WB'
114'WB'

END PROJECT
STA. 111+00'EB'
MATCH EXISTING

AG01
AP55
3'
3'
3'
3'
3'
3'
110'EB'
112'EB'
114'EB'
AP4-55
BP-C
BP-C
BP-C
12'
12'
9'
1'
110+4.4'EB'
36.0'RT
AP40
AP40
134
135
FLUM
AG01

STH 190 (CAPITOL DRIVE)

EXISTING R/W

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 40 E

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
26	685+95.89 'K'	20.08RT	187322.934	678216.827
27	686+07.34 'K'	80.00RT	187321.977	678155.835
28	685+89.93 'K'	4.00LT	187324.656	678241.579
29	685+87.95 'K'	11.97LT	187325.225	678249.765
30	686+35.89 'K'	3.00LT	187279.552	678232.674
31	686+88.10 'K'	129.00LT	187206.412	678347.793
32	686+57.29 'K'	127.25LT	187237.065	678351.376
37	687+03.78 'K'	186.00LT	187181.144	678401.239

LEGEND:

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP35	3.5-INCH HMA PAVEMENT
CG30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CG36A	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A
CP80	CONCRETE PAVEMENT 8-INCH
CS04	CONCRETE SIDEWALK 4-INCH
CS05	CONCRETE SIDEWALK 5-INCH
FLUM	ASPHALTIC FLUME
GR02	MGS GUARDRAIL TERMINAL TYPE 2
GR03	MGS GUARDRAIL 3
NOSE-1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE TYPE 2

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER.
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.
- BASE PATCHING ASSOCIATED WITH PROPOSED SIGNAL LOOPS HAS STA-OFF CALLOUTS. BASE PATCHING LOCATIONS ASSOCIATED WITH POOR PAVEMENT HAVE BEEN ESTIMATED. ALL LOCATIONS TO BE FIELD VERIFIED WITH THE ENGINEER.

PROPOSED SIGNALS FEATURES:
- SIGNAL OR LIGHTING BASES
- ELECTRICAL PULL BOXES

N

EXISTING R/W

STH 16 WB OFF RAMP

BEGIN CONSTRUCTION
STA. 691+06 'K'
MATCH EXISTING

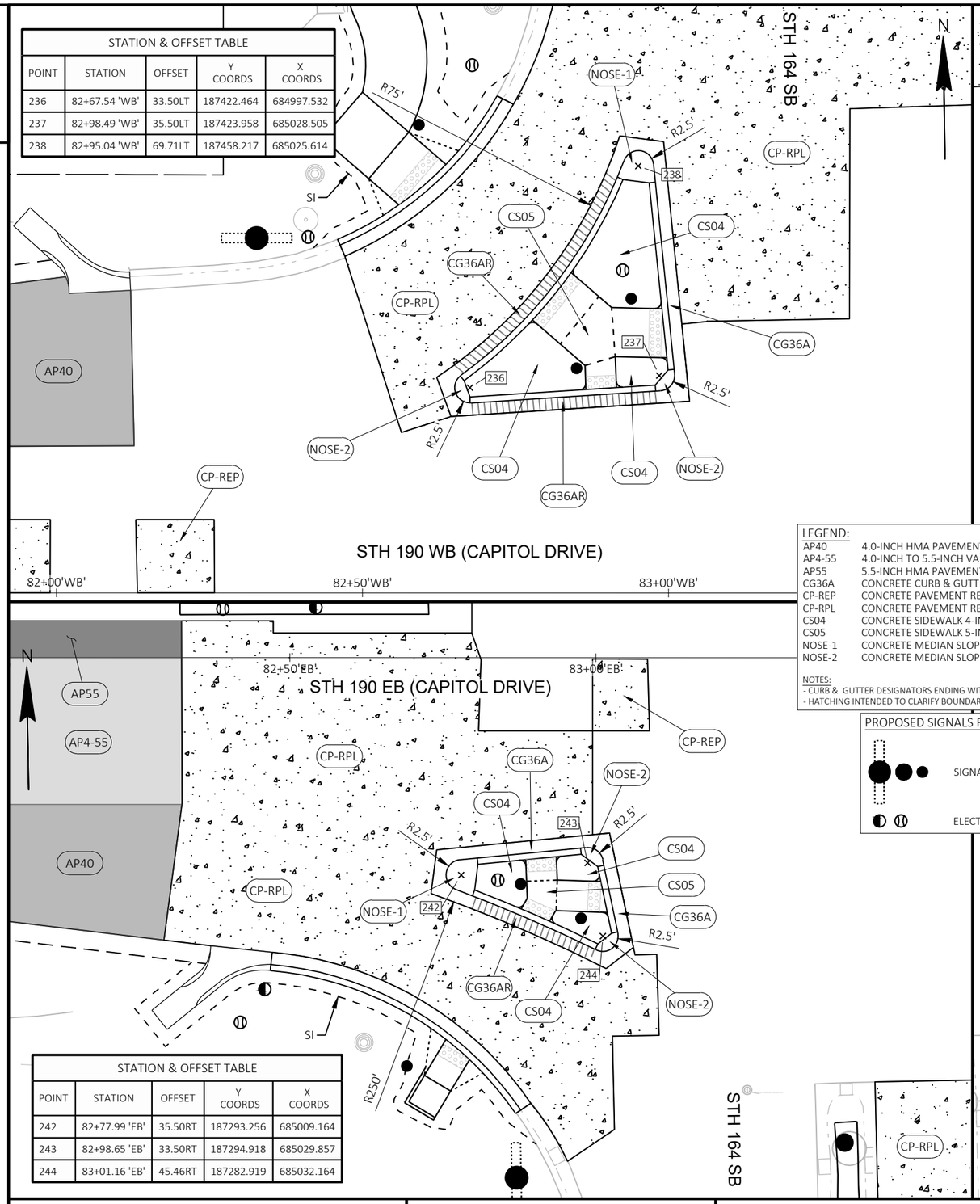
STH 190 (CAPITOL DRIVE)

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS - STH 16 WB EXIT RAMP	SHEET 41	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021202A-PD (16 WB-OFF).DWG
LAYOUT NAME - - STH 16 WB EXIT RAMP
PLOT DATE : 7/31/2023 7:49 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
236	82+67.54 'WB'	33.50LT	187422.464	684997.532
237	82+98.49 'WB'	35.50LT	187423.958	685028.505
238	82+95.04 'WB'	69.71LT	187458.217	685025.614



STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
242	82+77.99 'EB'	35.50RT	187293.256	685009.164
243	82+98.65 'EB'	33.50RT	187294.918	685029.857
244	83+01.16 'EB'	45.46RT	187282.919	685032.164

LEGEND:

AP40	4.0-INCH HMA PAVEMENT
AP4-55	4.0-INCH TO 5.5-INCH VARIABLE DEPTH HMA PAVEMENT
AP55	5.5-INCH HMA PAVEMENT
CG36A	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A
CP-REP	CONCRETE PAVEMENT REPAIR
CP-RPL	CONCRETE PAVEMENT REPLACEMENT
CS04	CONCRETE SIDEWALK 4-INCH
CS05	CONCRETE SIDEWALK 5-INCH
NOSE-1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE TYPE 2

NOTES:
- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER.
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES



STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
239	83+97.09 'WB'	46.98LT	187433.825	685127.282
240	83+99.66 'WB'	33.50LT	187420.304	685129.634
241	84+23.31 'WB'	35.50LT	187421.917	685153.308

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
245	84+02.85 'EB'	62.17RT	187264.553	685133.570
246	83+99.83 'EB'	35.50RT	187291.265	685130.986
247	84+13.37 'EB'	33.50RT	187293.043	685144.563

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS - STH 164 SAFETY ISLANDS - 20sc	SHEET 42	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021202B-PD (164 ISLANDS).DWG
LAYOUT NAME - - STH 164 SAFETY ISLANDS - 20sc
PLOT DATE : 7/31/2023 7:53 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
126	176+27.17 'PK'	15.53RT	187061.585	685095.566
131	174+66.26 'PK'	17.37RT	186900.124	685086.585

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
124	183+25.38 'PK'	14.45LT	187759.849	685054.946
125	182+11.11 'PK'	14.92LT	187645.611	685057.491

N

177'PK'

176'PK'

175'PK'

174'PK'

STH 164 SB

STH 164 NB

126

36'

12'

CP-REP

131

29'

16'

CP-RPL

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

LEGEND:

CP-REP CONCRETE PAVEMENT REPAIR

CP-RPL CONCRETE PAVEMENT REPLACEMENT

NOTES:

- CURB & GUTTER DESIGNATORS ENDING WITH "R" INDICATE REVERSE SLOPE GUTTER.
- HATCHING INTENDED TO CLARIFY BOUNDARIES OF PAVEMENTS.

184'PK'

183'PK'

182'PK'

181'PK'

24'

15'

124

CP-REP

24'

27'

125

CP-RPL

STH 164 SB

STH 164 NB

2

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN DETAILS - STH 164 SIGNAL LOOPS	SHEET 43	E

2

SIMMONS AVE

CAPITOL DRIVE

STH 16 EB OFF RAMP

STH 190 (CAPITOL DRIVE)

STH 16 EB ON RAMP

DYNEX DR

N

PAVEMENT SLOP

PAVEMENT SLOPE T

+00'WB'

+00'EB'

684'

589'

686'

25'

8'WB' 8'EB' 6'EB' 7'EB' 9'WB' 9'EB' 10'WB' 10'E 11'WB' 11'EB'

12' 12' 12' 12' 10' 8'

-2.0% -1.5% -1.9% -2.8% -1.5%

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVING GRADES	SHEET 44 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021203-PD (GRADES).DWG
LAYOUT NAME - 01

PLOT DATE : 1/25/2023 10:07 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

+00'WB'

+50'WB'

PAVEMENT SLOPE TRANSITION

+00'WB'

+25'WB'

PAVEMENT SLOPE TRANSITION

+99.70'WB'
END N.C.

1,589'

11'WB'

12'WB'

13'WB'

14'WB'

15'WB'

16'WB'

11'EB'

12'EB'

13'EB'

14'EB'

15'EB'

16'EB'

PAVEMENT SLOPE TRANSITION

+00'EB'

+50'EB'

PAVEMENT SLOPE TRANSITION

+00'EB'

+50'EB'

1,589'

686'K

687'K

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVING GRADES	SHEET 45	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021203-PD (GRADES).DWG
LAYOUT NAME - 02

PLOT DATE : 1/25/2023 10:07 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

+99.70'WB'
END N.C.

+99.70'WB'
LEVEL CROWN

+89.70'WB'
REVERSE CROWN

+79.70'WB'
BEGIN FULL SUPER

+97.66'EB'
END N.C.

+77.66'EB'
BEGIN FULL SUPER

16'WB' 17'WB' 18'WB' 19'WB' 20'WB' 21'WB' 22'WB'

16'EB' 17'EB' 18'EB' 19'EB' 20'EB' 21'EB' 22'EB'

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVING GRADES	SHEET 46	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021203-PD (GRADES).DWG
LAYOUT NAME - 03

PLOT DATE : 1/25/2023 10:07 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

+58.63'WB'
END FULL SUPER

+38.63'WB'
REVERSE CROWN

+18.63'WB'
LEVEL CROWN

+98.63'WB' N.C.

+55.08'WB'
END N.C.

+85.09'WB'
BEGIN FULL SUPER

22'WB' 23'WB' 24'WB' 25'WB' 26'WB' 27'WB' 28'WB'

22'EB' 23'EB' 24'EB' 25'EB' 26'EB' 27'EB'

+31.06'EB'
END FULL SUPER

+11.06'EB' N.C.

+81.44'EB'
END N.C.

+57.94'EB'
LEVEL CROWN

+37.94'EB'
REVERSE CROWN

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVING GRADES	SHEET 47	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021203-PD (GRADES).DWG
LAYOUT NAME - 04

PLOT DATE : 1/25/2023 10:07 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

+85.09'WB'
BEGIN FULL SUPER

28'WB' 29'WB' 30'WB' 31'WB' 32'WB' 33'WB'

28'EB' 29'EB' 30'EB' 31'EB' 32'EB' 33'EB'

-4.0%

-2.0%

2'

6'

14'

12'

12'

3'

3'

12'

14'

8'

4'

10'

+17.94'EB'
BEGIN FULL SUPER

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVING GRADES	SHEET 48	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021203-PD (GRADES).DWG
LAYOUT NAME - 05

PLOT DATE : 1/25/2023 10:07 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

+95.08'WB'
END FULL SUPER

+75.08'WB' N.C.

+82'WB'

+00'WB'

PAVEMENT SLOPE TRANSITION

881.00 881.81 882.63 883.47 884.44 885.42 886.38 887.21 888.02 888.83 889.65 890.46 891.27 892.08 892.90 888.60

-4.0% -2.0% -2.0% -1.5%

2' 6" 14' 12'

882.04 882.85 883.67 34'WB' 884.48 885.29 886.10 886.92 35'WB' 887.73 888.54 889.35 890.17 36'WB' 890.98 891.79 892.60 893.42 37'WB' 886.97

-2.0% -6.0%

882.28 883.08 883.86 884.65 885.40 886.15 886.92 887.69 888.47 889.25 890.05 890.85 891.66 892.46 893.26 883.23

3' 3'

INSIDE SHOULDER SLOPE TRANSITION

+00'WB'

38'WB' 39'WB'

STH 190 (CAPITOL DRIVE)

STH 190 (CAPITOL DRIVE)

+00'WB'

+28'EB'

INSIDE SHOULDER SLOPE TRANSITION

+00'EB'

34'EB' 35'EB' 36'EB' 37'EB' 38'EB' 39'EB'

882.46 883.25 884.03 884.82 885.60 886.39 887.17 887.96 888.74 889.53 890.31 891.10 891.88 892.67 893.45 894.23

-4.0% -2.0% 0.0% -1.5% -1.5%

12' 14'

883.50 884.29 885.07 885.86 886.63 887.28 887.91 888.53 889.15 889.77 890.39 891.01 891.63 892.28 893.06 893.84

8'

+27.93'EB'
END FULL SUPER

+07.93'EB'
REVERSE CROWN

+87.93'EB'
LEVEL CROWN

+45.31'EB'
BEGIN 1.5% N.C.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVING GRADES	SHEET 49	E

2

N

687'K'

688'K'

689'K'

690'K'

691'K'

PAVEMENT SLOPE TRANSITION

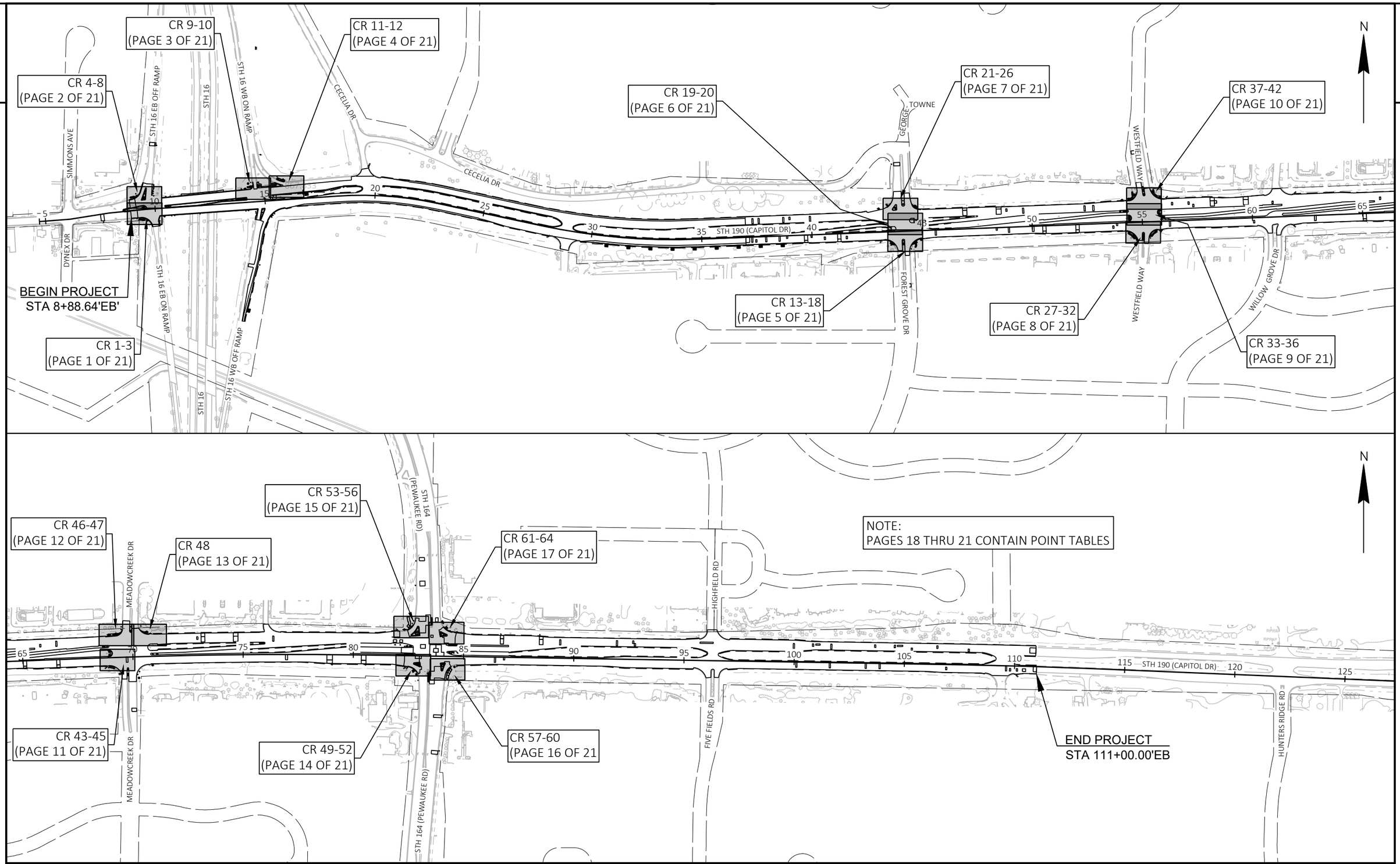
+50'EB'

+00'EB'

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVING GRADES	SHEET 50	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021203-PD (GRADES).DWG
LAYOUT NAME - 07

PLOT DATE : 1/25/2023 10:07 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

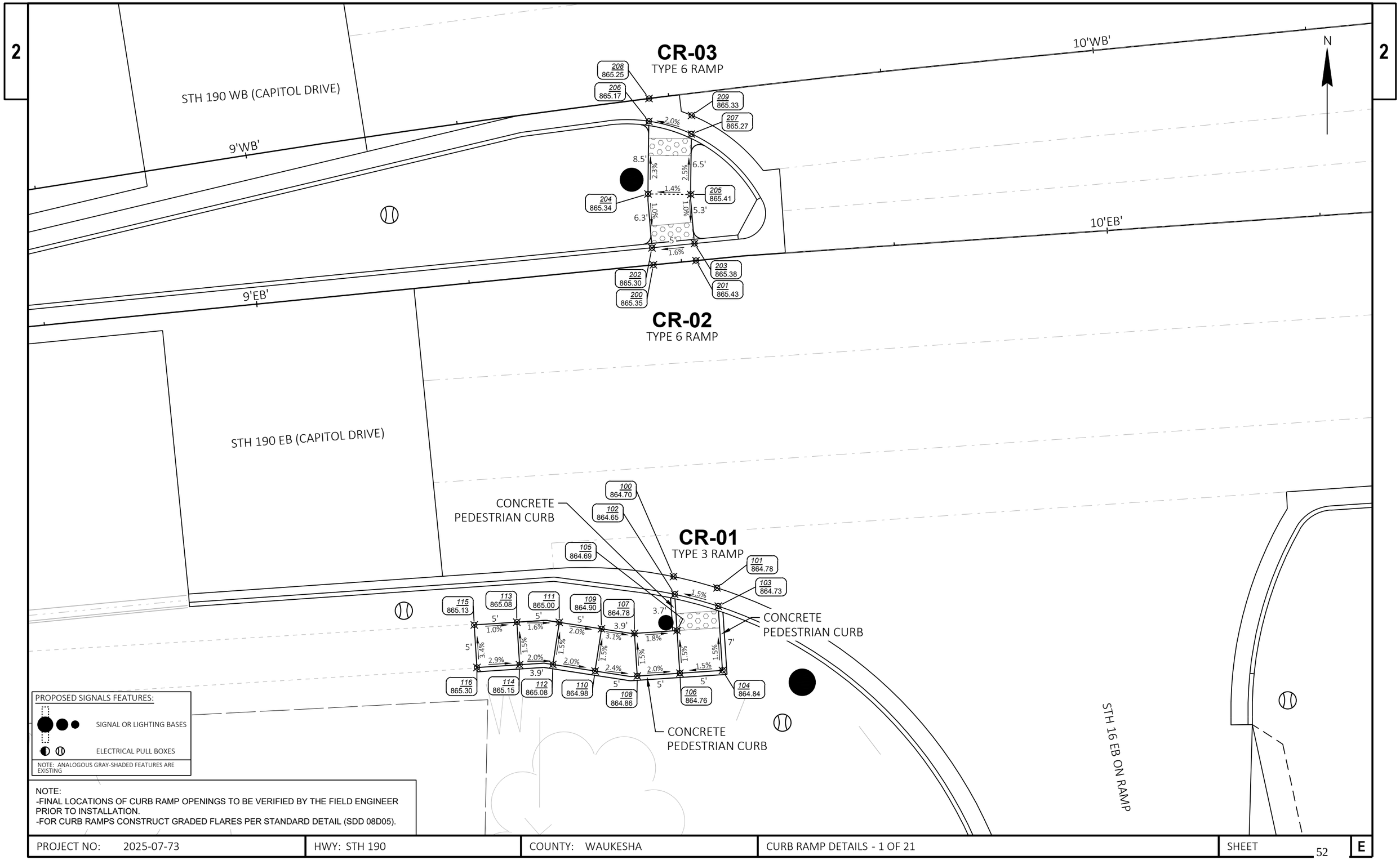


PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - OVERVIEW	SHEET 51	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021204-CR.DWG
LAYOUT NAME - - OVERVIEW

PLOT DATE : 7/25/2023 8:57 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - 1 OF 21	SHEET 52	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021204-CR.DWG
LAYOUT NAME - - 1 OF 21
PLOT DATE : 7/25/2023 8:57 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

NOTE:
-FINAL LOCATIONS OF CURB RAMP OPENINGS TO BE VERIFIED BY THE FIELD ENGINEER PRIOR TO INSTALLATION.
-FOR CURB RAMPS CONSTRUCT GRADED FLARES PER STANDARD DETAIL (SDD 08D05).

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

NOTE: ANALOGOUS GRAY-SHADED FEATURES ARE EXISTING

N

STH 16 EB OFF RAMP

CR-04
TYPE 4B1 RAMP

313 863.99 · 311 864.10 · 309 864.18 · 307 864.23 · 305 864.14 · 303 863.94 · 301 864.02
312 863.97 · 310 864.05 · 308 864.10 · 306 864.15 · 304 864.06 · 302 863.82 · 300 863.91

CR-05
TYPE 6 RAMP

403 864.68 · 401 864.61 · 415 864.90 · 413 864.97 · 411 864.87 · 409 864.92
400 864.60 · 402 864.66 · 414 864.97 · 406 864.90 · 404 864.88

CR-07
TYPE 6 RAMP

408 864.96 · 410 864.91 · 412 865.05 · 407 864.94 · 405 864.92

CR-06
TYPE 6 RAMP

CR-08
TYPE 4B1 RAMP

503 865.36 · 501 865.41 · 505 865.75 · 507 865.83 · 509 866.03 · 511 866.24 · 513 866.42 · 515 866.60
500 865.47 · 502 865.42 · 504 865.68 · 506 865.75 · 508 865.96 · 510 866.16 · 512 866.34 · 514 866.53

STH 190 WB (CAPITOL DRIVE)

10'WB'

9'WB'

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - 2 OF 21	SHEET 53	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021204-CR.DWG
LAYOUT NAME - - 2 OF 21
PLOT DATE : 7/25/2023 8:57 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:10 FT

NOTE:
-FINAL LOCATIONS OF CURB RAMP OPENINGS TO BE VERIFIED BY THE FIELD ENGINEER PRIOR TO INSTALLATION.
-FOR CURB RAMPS CONSTRUCT GRADED FLARES PER STANDARD DETAIL (SDD 08D05).

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

NOTE: ANALOGOUS GRAY-SHADED FEATURES ARE EXISTING

N

STH 16 WB ON RAMP

CR-09
TYPE 4B1 RAMP

CR-10
TYPE 6 RAMP

STH 190 WB (CAPITOL DRIVE)

14'WB'

15'WB'

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - 3 OF 21	SHEET 54	E

2

N

STH 16 WB ON RAMP

CONCRETE PEDESTRIAN CURB

CR-12
TYPE 7A RAMP

907 866.74
904 866.54
905 866.62
906 866.65
902 866.47
900 866.52
909 867.07
911 867.28
913 867.49
915 867.71
917 867.92
903 866.54
901 866.59
908 866.98
910 867.19
912 867.40
914 867.62
916 867.83

CR-11
TYPE 6 RAMP

803 867.08
801 867.03
800 867.10
802 867.15
805 867.12
811 867.68
809 867.42
807 867.16
813 867.95
812 868.05
810 867.78
808 867.52
806 867.25
804 867.23

867.833

CONCRETE
PEDESTRIAN CURB

STH 190 WB (CAPITOL DRIVE)

16'WB'

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

NOTE: ANALOGOUS GRAY-SHADED FEATURES ARE EXISTING

NOTE:
-FINAL LOCATIONS OF CURB RAMP OPENINGS TO BE VERIFIED BY THE FIELD ENGINEER PRIOR TO INSTALLATION.
-FOR CURB RAMPS CONSTRUCT GRADED FLARES PER STANDARD DETAIL (SDD 08D05).

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - 4 OF 21	SHEET 55	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021204-CR.DWG
LAYOUT NAME - - 4 OF 21
PLOT DATE : 7/25/2023 8:57 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

44'EB'

45'EB'

N

2

STH 190 EB (CAPITOL DRIVE)

CR-13
TYPE 2 RAMP

1000 912.81
1001 912.84
1002 912.74
1003 912.77
1004 912.81
1005 913.00
1006 913.08
1007 913.15
1008 913.08
1009 912.94
1010 912.92
1011 912.88
1012 912.96
1013 912.99

10:1 FLARE
MIN 2" CURB
HEIGHT BETWEEN

0.5%
3.3'
1.5%
4.2'
6.5%
5.1%
1.5%
1.2%
0.6%
5'
1.5%
1.5%
1.5%
1.8%
7.3'
3.9'
5'

CR-14
TYPE 2 RAMP

CR-15
TYPE 5 RAMP

1100 914.17
1101 914.24
1102 914.23
1103 914.30
1104 914.36
1105 914.43
1106 914.30
1107 914.37
1108 914.46
1109 914.39

7'
2.8%
1.4%
5'
1.0%
1.4%
1.4%
5'

CR-16
TYPE 5 RAMP

FOREST GROVE DRIVE

CR-18
TYPE 2 RAMP

1206 915.30
1207 915.19
1208 915.24
1209 915.33
1210 915.28
1211 915.32
1212 915.38
1213 915.30
1214 915.27
1215 915.19
1216 915.38
1217 915.45

10:1 FLARE
MIN 2" CURB
HEIGHT BETWEEN

1.5%
1.5%
3.2'
5'
5.5'
1.7%
1.0%
1.5%
1.5%
1.5%
1.5%
5'
5'

CR-17
TYPE 2 RAMP

1200 914.80
1201 914.90
1202 914.75
1203 914.85
1204 914.81
1205 915.23
1218 914.92

1.5%
5.6%
3.8%
1.5%
4.0'
8.8'
0.6%
0.6%
5'
1.5%
1.7%
1.3%
1.4%
5'

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

NOTE: ANALOGOUS GRAY-SHADED FEATURES ARE EXISTING

NOTE:
-FINAL LOCATIONS OF CURB RAMP OPENINGS TO BE VERIFIED BY THE FIELD ENGINEER PRIOR TO INSTALLATION.
-FOR CURB RAMPS CONSTRUCT GRADED FLARES PER STANDARD DETAIL (SDD 08D05).

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - 5 OF 21	SHEET 56	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021204-CR.DWG
LAYOUT NAME - - 5 OF 21

PLOT DATE : 7/25/2023 8:58 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

STH 190 WB (CAPITOL DRIVE)

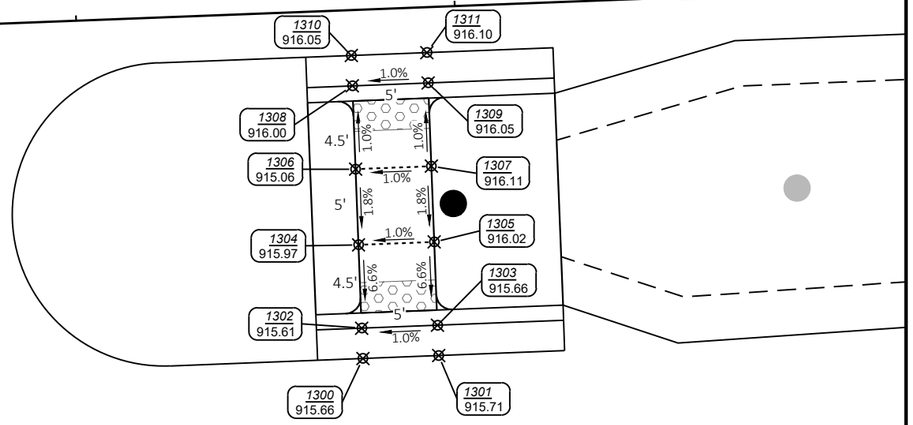
44'WB'

45'WB'

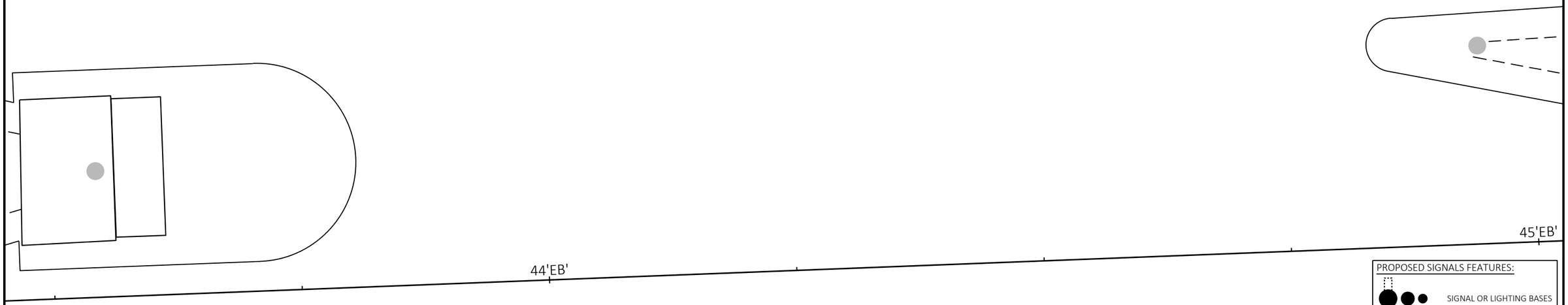
N

2

CR-20
TYPE 5 RAMP



CR-19
TYPE 5 RAMP



45'EB'

44'EB'

STH 190 EB (CAPITOL DRIVE)

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

NOTE: ANALOGOUS GRAY-SHADED FEATURES ARE EXISTING

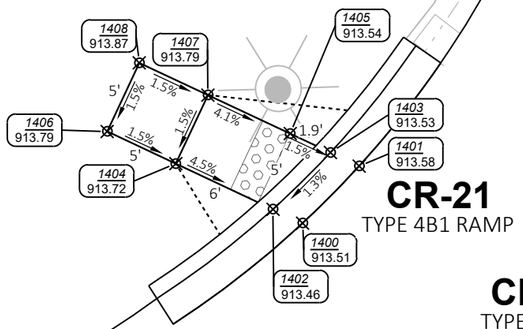
NOTE:
-FINAL LOCATIONS OF CURB RAMP OPENINGS TO BE VERIFIED BY THE FIELD ENGINEER PRIOR TO INSTALLATION.
-FOR CURB RAMPS CONSTRUCT GRADED FLARES PER STANDARD DETAIL (SDD 08D05).

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - 6 OF 21	SHEET 57	E

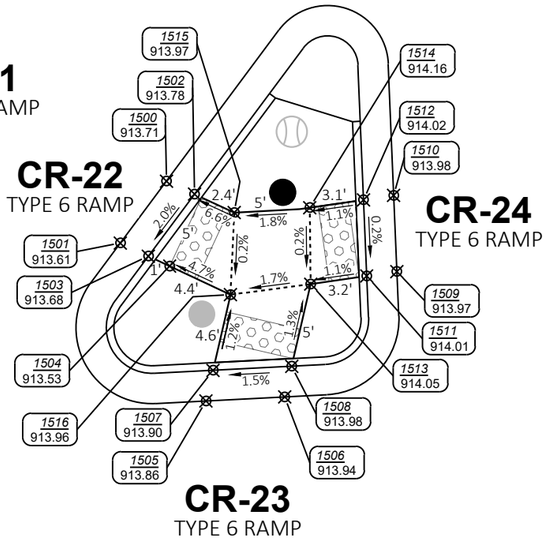
2

GEORGETOWN DRIVE

N



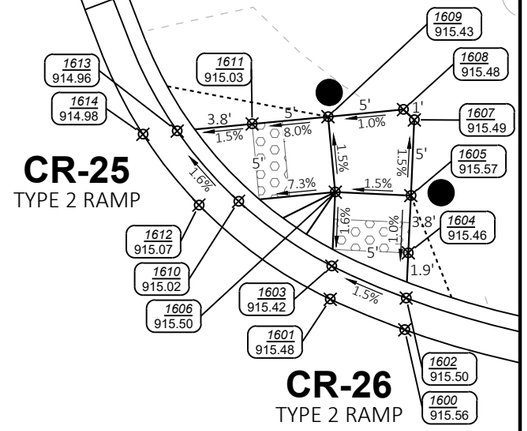
CR-21
TYPE 4B1 RAMP



CR-22
TYPE 6 RAMP

CR-24
TYPE 6 RAMP

CR-23
TYPE 6 RAMP



CR-25
TYPE 2 RAMP

CR-26
TYPE 2 RAMP

STH 190 WB (CAPITOL DRIVE)

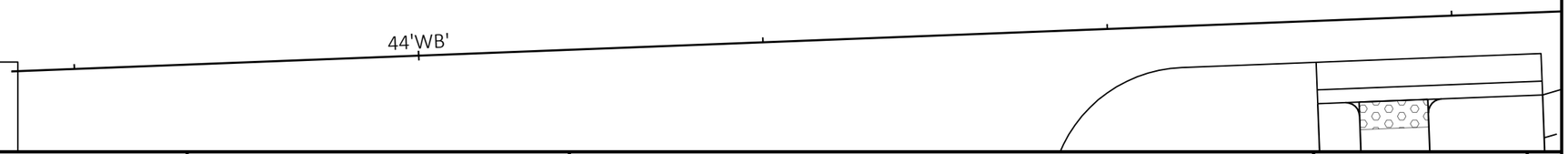
PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

NOTE: ANALOGOUS GRAY-SHADED FEATURES ARE EXISTING

NOTE:
-FINAL LOCATIONS OF CURB RAMP OPENINGS TO BE VERIFIED BY THE FIELD ENGINEER PRIOR TO INSTALLATION.
-FOR CURB RAMPS CONSTRUCT GRADED FLARES PER STANDARD DETAIL (SDD 08D05).



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - 7 OF 21	SHEET 58	E

55'EB'

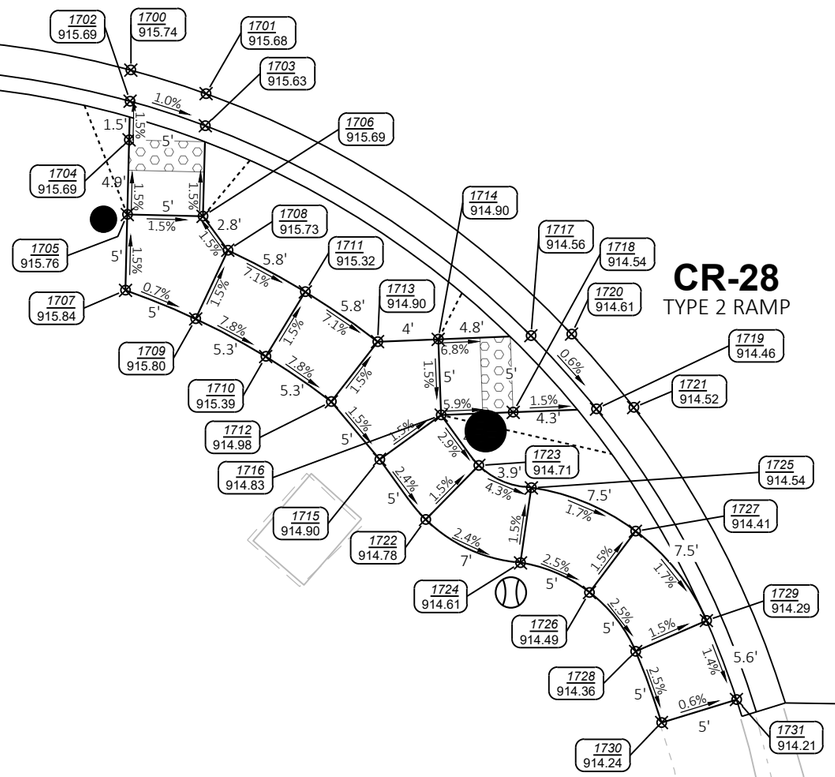
2

2

N

STH 190 EB (CAPITOL DRIVE)

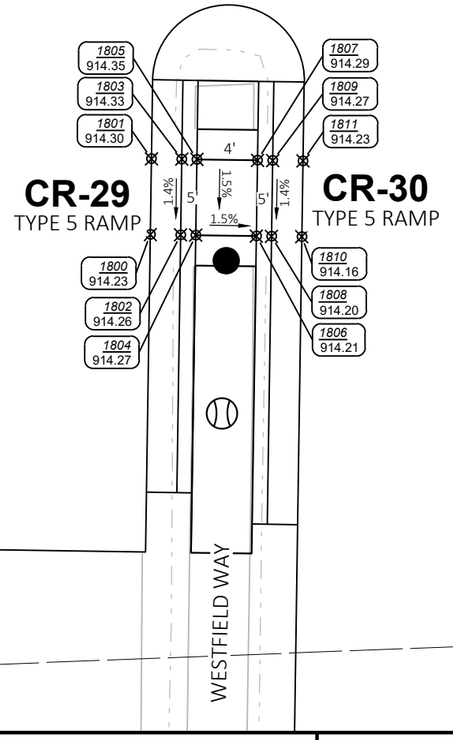
CR-27
TYPE 2 RAMP



CR-28
TYPE 2 RAMP

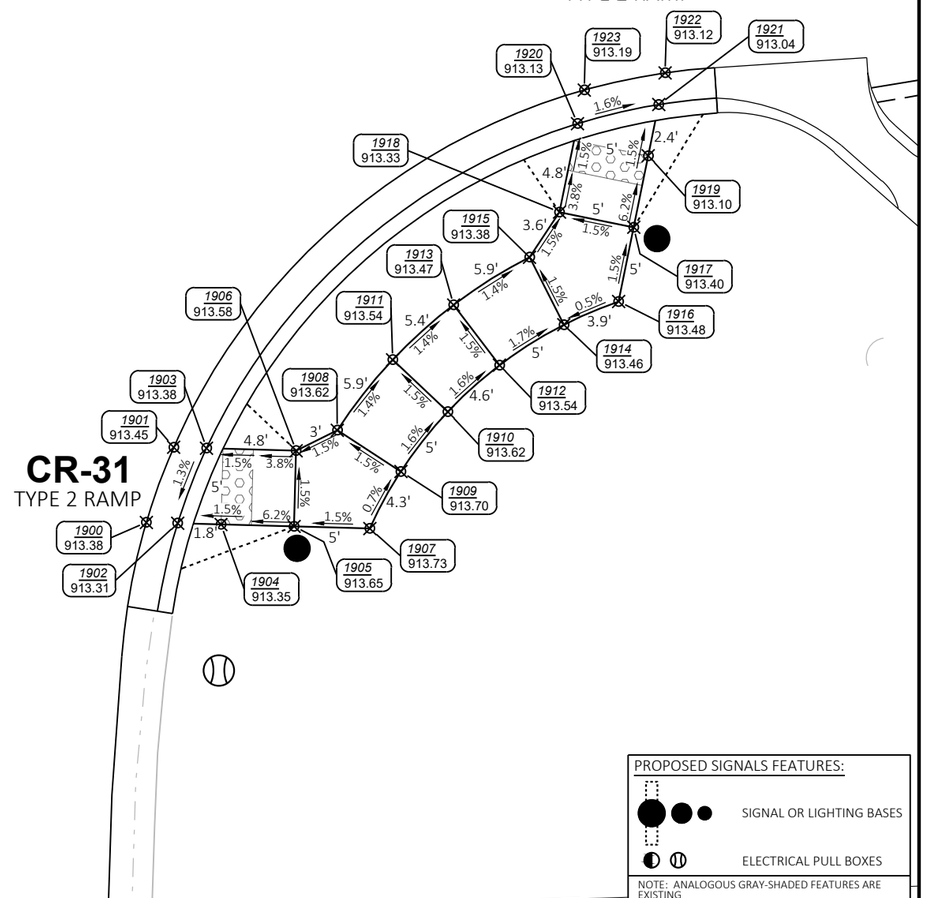
CR-29
TYPE 5 RAMP

CR-30
TYPE 5 RAMP



CR-31
TYPE 2 RAMP

CR-32
TYPE 2 RAMP



PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

NOTE: ANALOGOUS GRAY-SHADED FEATURES ARE EXISTING

NOTE:
-FINAL LOCATIONS OF CURB RAMP OPENINGS TO BE VERIFIED BY THE FIELD ENGINEER PRIOR TO INSTALLATION.
-FOR CURB RAMPS CONSTRUCT GRADED FLARES PER STANDARD DETAIL (SDD 08D05).

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - 8 OF 21	SHEET 59	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021204-CR.DWG
LAYOUT NAME - - 8 OF 21

PLOT DATE : 7/25/2023 8:58 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

NOTE:
-FINAL LOCATIONS OF CURB RAMP OPENINGS TO BE VERIFIED BY THE FIELD ENGINEER PRIOR TO INSTALLATION.
-FOR CURB RAMPS CONSTRUCT GRADED FLARES PER STANDARD DETAIL (SDD 08D05).

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

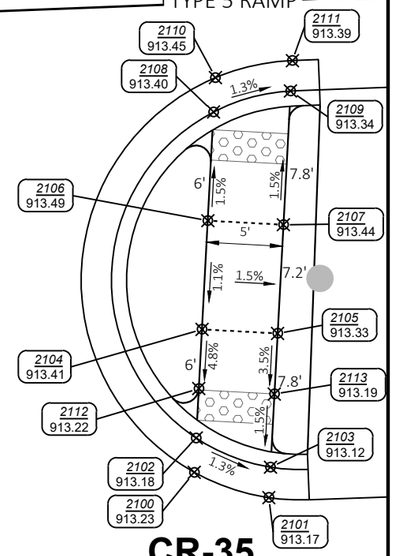
NOTE: ANALOGOUS GRAY-SHADED FEATURES ARE EXISTING

N

STH 190 WB (CAPITOL DRIVE)

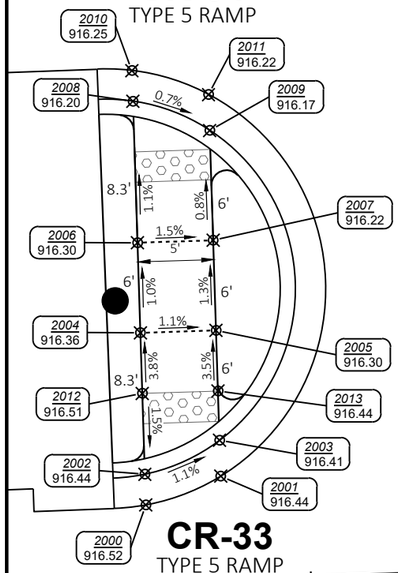
55'WB'

CR-36
TYPE 5 RAMP



CR-35
TYPE 5 RAMP

CR-34
TYPE 5 RAMP



CR-33
TYPE 5 RAMP

55'EB'

STH 190 EB (CAPITOL DRIVE)

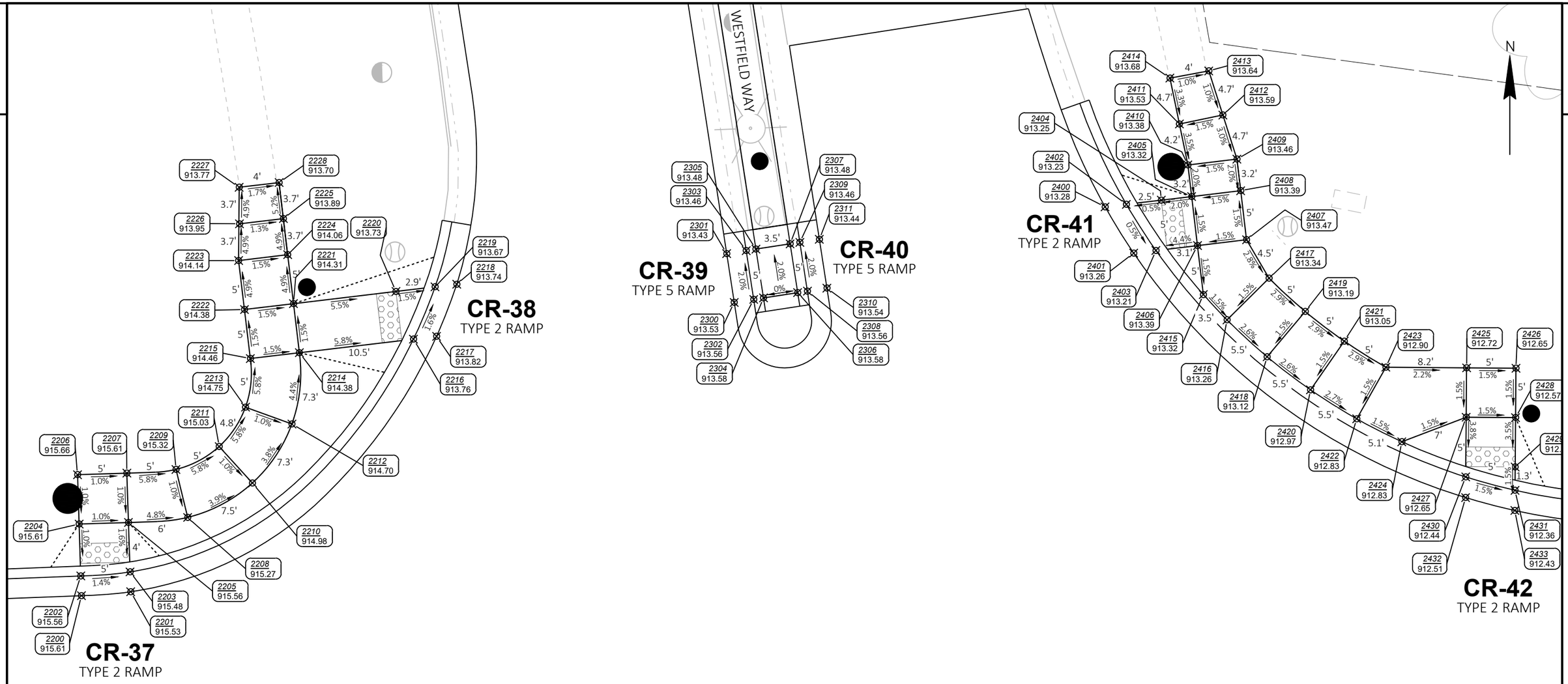
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - 9 OF 21	SHEET 60	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021204-CR.DWG
LAYOUT NAME - - 9 OF 21

PLOT DATE : 7/25/2023 8:58 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2



PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

NOTE: ANALOGOUS GRAY-SHADED FEATURES ARE EXISTING

NOTE:
-FINAL LOCATIONS OF CURB RAMP OPENINGS TO BE VERIFIED BY THE FIELD ENGINEER PRIOR TO INSTALLATION.
-FOR CURB RAMPS CONSTRUCT GRADED FLARES PER STANDARD DETAIL (SDD 08D05).

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - 10 OF 21	SHEET 61	E

NOTE:
-FINAL LOCATIONS OF CURB RAMP OPENINGS TO BE VERIFIED BY THE FIELD ENGINEER PRIOR TO INSTALLATION.
-FOR CURB RAMPS CONSTRUCT GRADED FLARES PER STANDARD DETAIL (SDD 08D05).

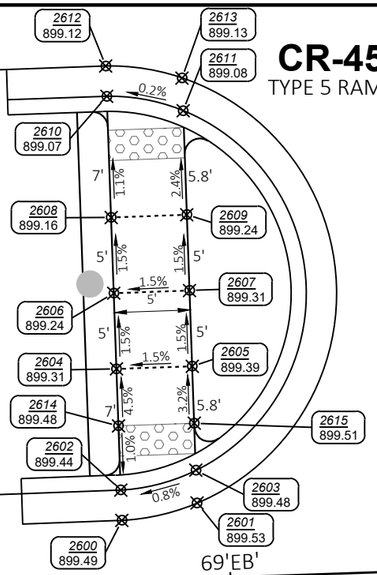
N

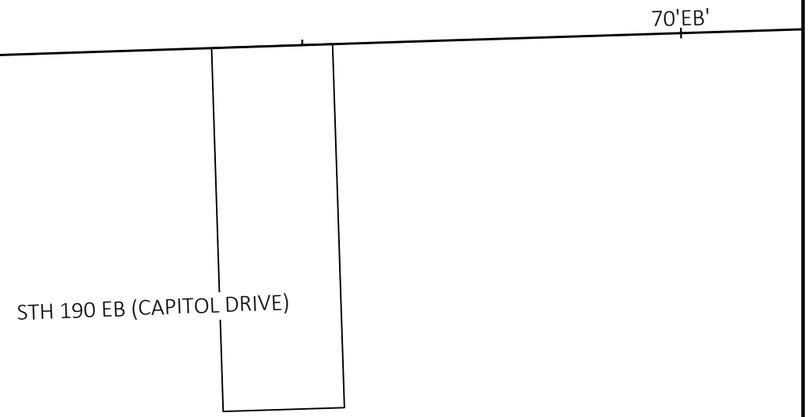
PROPOSED SIGNALS FEATURES:

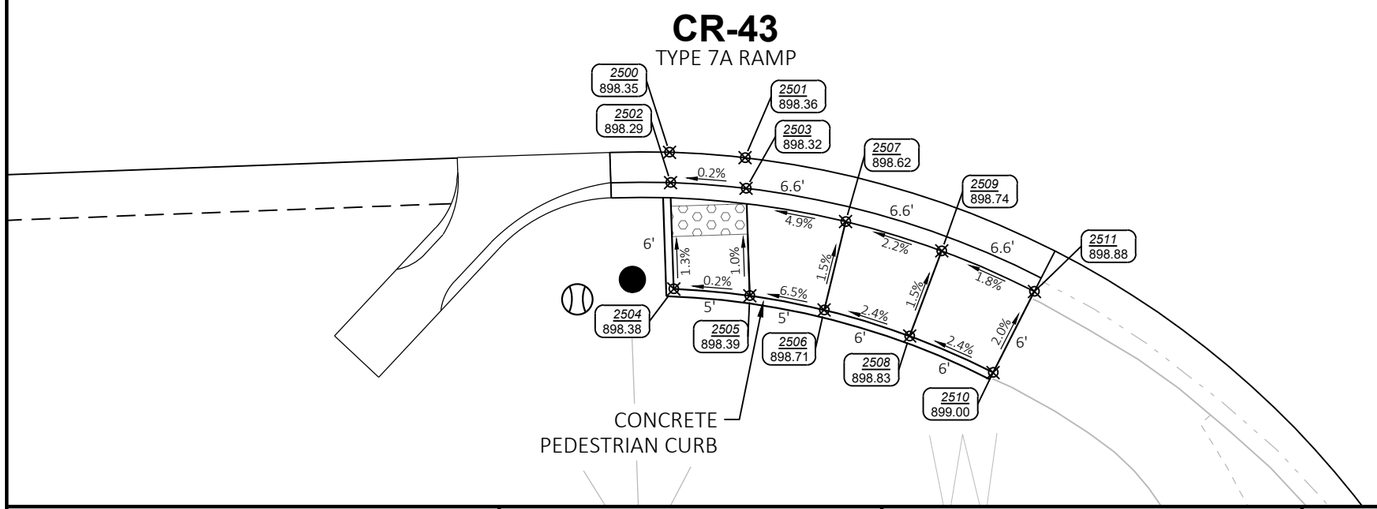
SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

NOTE: ANALOGOUS GRAY-SHADED FEATURES ARE EXISTING









PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - 11 OF 21	SHEET 62	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021204-CR.DWG
LAYOUT NAME - - 11 OF 21
PLOT DATE : 7/25/2023 8:59 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

NOTE:
-FINAL LOCATIONS OF CURB RAMP OPENINGS TO BE VERIFIED BY THE FIELD ENGINEER PRIOR TO INSTALLATION.
-FOR CURB RAMPS CONSTRUCT GRADED FLARES PER STANDARD DETAIL (SDD 08D05).

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

NOTE: ANALOGOUS GRAY-SHADED FEATURES ARE EXISTING

N

COMMERCIAL ENTRANCE

MOVE MEDIAN NOSE BACK OUT OF CROSSWALK

CR-47
TYPE 4B1 RAMP

2706 899.71
2708 899.79
2709 899.84
2712 899.88
2714 899.93
2810 899.88
2808 899.84
2806 899.79
2804 899.70
2802 899.25
2800 899.30
2801 899.41
2803 899.38
2805 899.62
2807 899.71
2809 899.76
2811 899.81
2713 899.85
2711 899.81
2710 899.76
2707 899.71
2705 899.64
2704 899.57
2703 899.55
2701 899.63
2702 899.58
2700 899.63

CR-46
TYPE 3 RAMP

STH 190 WB (CAPITOL DRIVE)

69'WB'

70'WB'

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - 12 OF 21	SHEET 63	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021204-CR.DWG
LAYOUT NAME - - 12 OF 21
PLOT DATE : 7/25/2023 8:59 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

NOTE:
-FINAL LOCATIONS OF CURB RAMP OPENINGS TO BE VERIFIED BY THE FIELD ENGINEER PRIOR TO INSTALLATION.
-FOR CURB RAMPS CONSTRUCT GRADED FLARES PER STANDARD DETAIL (SDD 08D05).

N

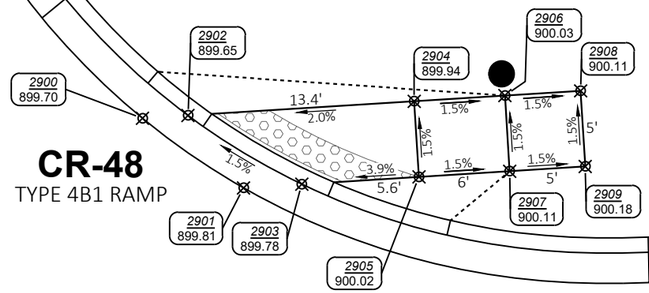
PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

NOTE: ANALOGOUS GRAY-SHADED FEATURES ARE EXISTING

MEADOWCREEK DRIVE



CR-48
TYPE 4B1 RAMP

STH 190 WB (CAPITOL DRIVE)

70'WB'

71'WB'

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - 13 OF 21	SHEET 64	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021204-CR.DWG
LAYOUT NAME - - 13 OF 21

PLOT DATE : 7/25/2023 8:59 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

82'EB'

83'EB'

2

STH 190 EB (CAPITOL DRIVE)

N

CR-51
TYPE 6 RAMP

3109 919.48
3108 919.55
3110 919.50
3111 919.43
3113 919.58
3117 919.91
3107 919.88
3112 919.66
3105 919.93
3115 919.54
3102 919.49
3104 919.98
3106 919.93
3100 919.45
3116 919.97
3103 919.56
3101 919.53
3114 919.62

CR-52
TYPE 6 RAMP

CR-50
TYPE 6 RAMP

3000 919.16
3002 919.11

CR-49
TYPE 3 RAMP

3004 919.11
3001 919.24
3003 919.19
3005 919.47
3007 919.55
3006 919.55
3008 919.62

CONCRETE
PEDESTRIAN CURB

INL

INL

INL

STH 164 (PEWAUKEE RD)

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

NOTE: ANALOGOUS GRAY-SHADED FEATURES ARE EXISTING

NOTE:
-FINAL LOCATIONS OF CURB RAMP OPENINGS TO BE VERIFIED BY THE FIELD ENGINEER PRIOR TO INSTALLATION.
-FOR CURB RAMPS CONSTRUCT GRADED FLARES PER STANDARD DETAIL (SDD 08D05).

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - 14 OF 21	SHEET 65	E

NOTE:
-FINAL LOCATIONS OF CURB RAMP OPENINGS TO BE VERIFIED BY THE FIELD ENGINEER PRIOR TO INSTALLATION.
-FOR CURB RAMPS CONSTRUCT GRADED FLARES PER STANDARD DETAIL (SDD 08D05).

PROPOSED SIGNALS FEATURES:

SIGNAL OR LIGHTING BASES

ELECTRICAL PULL BOXES

NOTE: ANALOGOUS GRAY-SHADED FEATURES ARE EXISTING

N

STH 164 (PEWAUKEE RD)

STH 190 WB (CAPITOL DRIVE)

CR-53
TYPE 3 RAMP

3410 918.40 — 10' @ 1.5% — 3409 918.75
34.9' @ 2.7% — 42.3' @ 1.1%
3408 919.36
10' @ 1.5% — 1.5%
3406 919.21
3407 919.21
3405 918.85
5.5%
1.5' — 3403 918.81
3401 918.86
1.5% — 10' — 1.5%
3404 919.06
4.8% — 6' — 1.1%
3400 918.75
3402 918.70

CR-54
TYPE 6 RAMP

3503 919.38
3501 919.30
3513 919.78
3512 919.94
3511 919.76
3500 919.15
3502 919.23
1.5% — 10' — 1.5%
6' — 5.3%
2.7' — 5.9%
8.2' — 1.9%
3509 919.84
1.0%
4.1%
1.5%
8' — 0.4%
3514 919.52
5.4' — 1.5%
7.5' — 1.0%
1'
3508 919.81
3516 919.82
5' — 5.3%
3515 919.74
3.9' — 6.4%
5'
3510 919.73
1.6%
3506 919.42
3507 919.50
3504 919.40
3505 919.48

CR-56
TYPE 6 RAMP

CR-55
TYPE 6 RAMP

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - 15 OF 21	SHEET 66	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021204-CR.DWG
LAYOUT NAME - - 15 OF 21
PLOT DATE : 7/25/2023 8:59 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

2

N

STH 190 EB (CAPITOL DRIVE)

CR-58
TYPE 6 RAMP

CR-57
TYPE 6 RAMP

CR-59
TYPE 6 RAMP

CR-60
TYPE 3 RAMP

3205 922.54
3207 922.56
3216 922.75
3204 922.45
3206 922.47
3212 922.67
3202 922.37
3200 922.32
3215 922.87
3211 922.84
3209 922.79
3201 922.39
3203 922.44
3214 922.72
3210 922.69
3208 922.64
3213 922.65
3302 923.30
3300 923.35
3304 923.44
3301 923.24
3303 923.19
3306 923.59
3305 923.21
3307 923.29
3308 923.44
3309 923.40
3310 923.55
3311 923.27
3312 923.42
3313 923.68
3314 923.82

STH 164 (PEWAUKEE RD)

PROPOSED SIGNALS FEATURES:
- SIGNAL OR LIGHTING BASES
- ELECTRICAL PULL BOXES

NOTE: ANALOGOUS GRAY-SHADED FEATURES ARE EXISTING

NOTE:
-FINAL LOCATIONS OF CURB RAMP OPENINGS TO BE VERIFIED BY THE FIELD ENGINEER PRIOR TO INSTALLATION.
-FOR CURB RAMPS CONSTRUCT GRADED FLARES PER STANDARD DETAIL (SDD 08D05).

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - 16 OF 21	SHEET 67	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021204-CR.DWG
LAYOUT NAME - - 16 OF 21
PLOT DATE : 7/25/2023 9:00 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

NOTE:
-FINAL LOCATIONS OF CURB RAMP OPENINGS TO BE VERIFIED BY THE FIELD ENGINEER PRIOR TO INSTALLATION.
-FOR CURB RAMPS CONSTRUCT GRADED FLARES PER STANDARD DETAIL (SDD 08D05).

PROPOSED SIGNALS FEATURES:
- SIGNAL OR LIGHTING BASES
- ELECTRICAL PULL BOXES

NOTE: ANALOGOUS GRAY-SHADED FEATURES ARE EXISTING

N

STH 164 (PEWAUKEE RD)

CR-64
TYPE 3 RAMP
3708 922.21
3707 922.29
3706 922.14
3705 922.21
3702 921.84
3700 921.89
3704 921.91
3703 921.88
3701 921.93

CR-63
TYPE 6 RAMP
3614 921.92
3611 921.98
3604 921.83
3613 922.00
3617 922.06
3610 922.05
3602 921.79
3600 921.74
3612 922.07
3618 922.13

CR-61
TYPE 6 RAMP
3601 921.84
3603 921.89
3615 922.04
3616 922.16

CR-62
TYPE 6 RAMP
3609 922.14
3607 922.12
3605 922.09
3608 922.24
3619 922.27
3606 922.21

STH 190 WB (CAPITOL DRIVE)

84'WB'

85'WB'

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CURB RAMP DETAILS - 17 OF 21	SHEET 68	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_021204-CR.DWG
LAYOUT NAME - - 17 OF 21
PLOT DATE : 7/25/2023 9:00 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
100	9+45.43'EB'	36.58 RT	187286.311	677703.606	864.70
101	9+50.37'EB'	38.39 RT	187284.992	677708.703	864.78
102	9+45.36'EB'	38.65 RT	187284.238	677703.742	864.65
103	9+50.30'EB'	40.54 RT	187282.846	677708.844	864.73
104	9+50.05'EB'	48.08 RT	187275.322	677709.339	864.84
105	9+45.22'EB'	42.92 RT	187279.983	677704.022	864.69
106	9+45.05'EB'	47.91 RT	187274.994	677704.350	864.76
107	9+40.22'EB'	42.75 RT	187279.655	677699.033	864.78
108	9+40.05'EB'	47.75 RT	187274.665	677699.361	864.86
109	9+36.43'EB'	41.83 RT	187280.192	677695.169	864.90
110	9+35.19'EB'	46.68 RT	187275.250	677694.411	864.98
111	9+31.58'EB'	40.59 RT	187280.950	677690.227	865.00
112	9+30.34'EB'	45.44 RT	187276.008	677689.469	865.08
113	9+26.64'EB'	40.08 RT	187280.970	677685.252	865.08
114	9+26.46'EB'	45.08 RT	187275.981	677685.574	865.15
115	9+21.64'EB'	39.91 RT	187280.648	677680.262	865.13
116	9+21.47'EB'	44.91 RT	187275.658	677680.585	865.30
200	9+46.69'EB'	0.00	187322.836	677701.256	865.35
201	9+51.69'EB'	0.00	187323.329	677706.232	865.43
202	9+46.72'EB'	2.00 LT	187324.828	677701.084	865.30
203	9+51.72'EB'	2.00 LT	187325.322	677706.060	865.38
204	9+46.87'EB'	8.32 LT	187331.133	677700.613	865.34
205	9+51.84'EB'	7.77 LT	187331.076	677705.613	865.41
206	9+47.32'WB'	2.65 RT	187339.637	677700.711	865.17
207	9+52.09'WB'	4.74 RT	187338.155	677705.694	865.27
208	9+47.68'WB'	0.00	187342.317	677700.742	865.25
209	9+52.38'WB'	2.59 RT	187340.326	677705.719	865.33
300	9+21.11'WB'	39.06 LT	187377.449	677668.870	863.91
301	9+27.44'WB'	42.96 LT	187382.223	677674.772	864.02
302	9+17.80'WB'	39.68 LT	187377.583	677665.425	863.82
303	9+24.70'WB'	43.47 LT	187382.334	677671.907	863.94
304	9+12.72'WB'	40.66 LT	187377.790	677660.124	864.06
305	9+13.62'WB'	45.57 LT	187382.786	677660.318	864.14
306	9+07.00'WB'	41.78 LT	187378.023	677654.145	864.15
307	9+07.92'WB'	46.69 LT	187383.019	677654.339	864.23
308	9+03.64'WB'	41.40 LT	187377.117	677650.789	864.10

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
309	9+03.11'WB'	46.37 LT	187381.945	677649.486	864.18
310	8+98.79'WB'	40.86 LT	187375.815	677645.962	864.05
311	8+98.26'WB'	45.83 LT	187380.642	677644.659	864.10
312	8+93.82'WB'	40.32 LT	187374.512	677641.134	863.97
313	8+93.29'WB'	45.30 LT	187379.339	677639.832	863.99
400	9+45.59'WB'	33.19 LT	187374.987	677694.501	864.60
401	9+47.82'WB'	37.81 LT	187379.857	677696.193	864.61
402	9+47.56'WB'	32.76 LT	187374.806	677696.555	864.66
403	9+49.79'WB'	37.38 LT	187379.677	677698.248	864.68
404	9+50.92'WB'	24.00 LT	187366.536	677701.026	864.88
405	9+55.88'WB'	24.00 LT	187367.142	677706.029	864.92
406	9+51.17'WB'	26.00 LT	187368.552	677701.036	864.90
407	9+56.12'WB'	26.00 LT	187369.158	677706.039	864.94
408	9+62.18'WB'	31.06 LT	187374.901	677711.584	864.96
409	9+63.14'WB'	36.06 LT	187379.979	677711.981	864.92
410	9+60.19'WB'	31.06 LT	187374.668	677709.559	864.91
411	9+61.15'WB'	36.06 LT	187379.747	677709.957	864.87
412	9+56.74'WB'	31.07 LT	187374.268	677706.065	865.05
413	9+57.73'WB'	36.07 LT	187379.348	677706.479	864.97
414	9+51.90'WB'	31.81 LT	187374.410	677701.066	864.97
415	9+52.91'WB'	36.70 LT	187379.391	677701.503	864.90
500	9+89.56'WB'	31.50 LT	187378.287	677739.310	865.47
501	9+89.27'WB'	36.50 LT	187383.235	677738.535	865.41
502	9+91.58'WB'	31.50 LT	187378.482	677741.311	865.42
503	9+91.27'WB'	36.50 LT	187383.430	677740.526	865.36
504	9+98.08'WB'	31.50 LT	187379.114	677747.783	865.68
505	9+98.08'WB'	36.50 LT	187384.090	677747.298	865.75
506	10+03.08'WB'	31.50 LT	187379.600	677752.760	865.75
507	10+03.08'WB'	36.50 LT	187384.576	677752.274	865.83
508	10+08.08'WB'	31.50 LT	187380.085	677757.736	865.96
509	10+08.08'WB'	36.50 LT	187385.062	677757.250	866.03
510	10+13.08'WB'	31.50 LT	187380.571	677762.712	866.16
511	10+13.08'WB'	36.50 LT	187385.547	677762.227	866.24
512	10+17.58'WB'	31.50 LT	187381.008	677767.191	866.34
513	10+17.58'WB'	36.50 LT	187385.984	677766.705	866.42
514	10+22.08'WB'	31.50 LT	187381.445	677771.670	866.53

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
515	10+22.08'WB'	36.50 LT	187386.421	677771.184	866.60
600	14+49.29'WB'	33.16 LT	187424.590	678196.703	867.75
601	14+52.00'WB'	38.20 LT	187429.872	678198.909	867.69
602	14+46.73'WB'	33.12 LT	187424.301	678194.155	867.69
603	14+49.83'WB'	38.17 LT	187429.628	678196.753	867.62
604	14+45.98'WB'	38.11 LT	187429.194	678192.927	867.68
605	14+40.06'WB'	33.01 LT	187423.550	678187.528	867.99
606	14+39.98'WB'	38.01 LT	187428.518	678186.965	868.07
607	14+35.06'WB'	32.94 LT	187422.987	678182.560	868.07
608	14+34.98'WB'	37.94 LT	187427.955	678181.997	868.14
609	14+30.06'WB'	32.86 LT	187422.423	678177.592	868.14
610	14+29.98'WB'	37.86 LT	187427.391	678177.029	868.22
611	14+25.06'WB'	32.78 LT	187421.860	678172.624	868.22
612	14+24.98'WB'	37.78 LT	187426.828	678172.061	868.28
700	14+68.95'WB'	32.57 LT	187425.911	678216.329	867.73
701	14+68.73'WB'	38.57 LT	187431.867	678215.523	867.65
702	14+70.96'WB'	32.52 LT	187426.062	678218.326	867.68
703	14+70.73'WB'	38.53 LT	187432.019	678217.521	867.60
704	14+77.46'WB'	32.38 LT	187426.554	678224.809	867.90
705	14+77.59'WB'	38.38 LT	187432.536	678224.355	867.81
706	14+83.45'WB'	32.25 LT	187427.007	678230.791	867.99
707	14+83.58'WB'	38.25 LT	187432.990	678230.338	867.90
708	14+89.45'WB'	32.13 LT	187427.463	678236.774	868.05
709	14+89.58'WB'	38.12 LT	187433.443	678236.321	867.97
800	15+60.58'WB'	39.64 LT	187441.852	678306.838	867.10
801	15+56.17'WB'	42.00 LT	187443.775	678302.213	867.03
802	15+59.63'WB'	37.88 LT	187440.007	678306.065	867.15
803	15+55.22'WB'	40.24 LT	187441.927	678301.446	867.08
804	15+56.03'WB'	31.20 LT	187433.004	678303.131	867.23
805	15+54.01'WB'	37.96 LT	187439.540	678300.456	867.12
806	15+51.56'WB'	31.24 LT	187432.615	678298.673	867.25
807	15+51.62'WB'	37.24 LT	187438.592	678298.151	867.16
808	15+45.56'WB'	31.30 LT	187432.093	678292.696	867.52
809	15+45.62'WB'	37.30 LT	187438.070	678292.174	867.42
810	15+39.56'WB'	31.36 LT	187431.571	678286.719	867.78
811	15+39.62'WB'	37.36 LT	187437.548	678286.197	867.68

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
812	15+33.56'WB'	31.42 LT	187431.049	678280.742	868.05
813	15+33.62'WB'	37.42 LT	187437.026	678280.220	867.95
900	15+63.29'WB'	55.21 LT	187457.608	678308.019	866.52
901	15+67.71'WB'	52.88 LT	187455.716	678312.647	866.59
902	15+64.24'WB'	56.97 LT	187459.453	678308.792	866.47
903	15+68.66'WB'	54.64 LT	187457.561	678313.420	866.54
904	15+67.60'WB'	63.22 LT	187466.000	678311.535	866.54
905	15+72.00'WB'	60.85 LT	187464.066	678316.145	866.62
906	15+61.52'WB'	59.68 LT	187461.882	678305.823	866.65
907	15+64.64'WB'	64.96 LT	187467.446	678308.419	866.74
908	15+76.49'WB'	52.11 LT	187455.809	678321.456	866.98
909	15+78.86'WB'	57.62 LT	187461.525	678323.280	867.07
910	15+81.37'WB'	50.16 LT	187454.335	678326.509	867.19
911	15+83.49'WB'	55.75 LT	187460.109	678328.077	867.28
912	15+86.34'WB'	48.40 LT	187453.072	678331.619	867.40
913	15+88.21'WB'	54.08 LT	187458.905	678332.931	867.49
914	15+91.35'WB'	46.86 LT	187452.025	678336.760	867.62
915	15+92.99'WB'	52.62 LT	187457.916	678337.833	867.71
916	15+96.44'WB'	45.52 LT	187451.190	678341.952	867.83
917	15+97.84'WB'	51.37 LT	187457.141	678342.784	867.92
1000	43+56.44'EB'	42.23 RT	187180.502	681091.919	912.81
1001	43+61.44'EB'	45.25 RT	187177.668	681097.032	912.84
1002	43+56.44'EB'	44.51 RT	187178.218	681092.007	912.74
1003	43+61.44'EB'	47.69 RT	187175.239	681097.126	912.77
1004	43+56.44'EB'	48.92 RT	187173.815	681092.177	912.81
1005	43+61.44'EB'	53.07 RT	187169.856	681097.333	913.00
1006	43+56.44'EB'	53.07 RT	187169.663	681092.337	913.08
1007	43+56.44'EB'	58.07 RT	187164.667	681092.530	913.15
1008	43+61.44'EB'	58.07 RT	187164.860	681097.526	913.08
1009	43+66.50'EB'	58.07 RT	187165.138	681104.733	912.94
1010	43+67.96'EB'	53.07 RT	187170.108	681103.857	912.92
1011	43+72.61'EB'	58.07 RT	187165.291	681108.696	912.88
1012	43+75.18'EB'	58.07 RT	187165.390	681111.259	912.96
1013	43+70.81'EB'	53.07 RT	187170.218	681106.699	912.99
1100	44+07.33'EB'	58.07 RT	187166.631	681143.383	914.17
1101	44+07.30'EB'	53.07 RT	187171.626	681143.163	914.24

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
1102	44+09.33'EB'	58.07 RT	187166.708	681145.382	914.23
1103	44+09.30'EB'	53.07 RT	187171.703	681145.161	914.30
1104	44+17.33'EB'	58.07 RT	187167.016	681153.376	914.36
1105	44+17.30'EB'	53.07 RT	187172.012	681153.155	914.43
1106	44+19.33'EB'	58.07 RT	187167.094	681155.375	914.30
1107	44+19.30'EB'	53.07 RT	187172.089	681155.154	914.37
1108	44+14.80'EB'	53.07 RT	187171.915	681150.657	914.46
1109	44+14.80'EB'	58.07 RT	187166.919	681150.850	914.39
1200	44+52.38'EB'	58.07 RT	187168.369	681188.402	914.80
1201	44+56.67'EB'	53.07 RT	187173.531	681192.497	914.90
1202	44+54.93'EB'	58.07 RT	187168.467	681190.950	914.75
1203	44+59.48'EB'	53.07 RT	187173.639	681195.304	914.85
1204	44+58.86'EB'	58.07 RT	187168.619	681194.881	914.81
1205	44+67.62'EB'	58.07 RT	187168.957	681203.630	915.23
1206	44+67.62'EB'	53.07 RT	187173.953	681203.437	915.30
1207	44+67.62'EB'	46.38 RT	187180.640	681203.179	915.19
1208	44+67.62'EB'	43.97 RT	187183.044	681203.086	915.24
1209	44+72.62'EB'	41.03 RT	187186.174	681207.969	915.33
1210	44+72.62'EB'	43.31 RT	187183.905	681208.057	915.28
1211	44+72.62'EB'	47.60 RT	187179.617	681208.222	915.32
1212	44+72.62'EB'	53.07 RT	187174.146	681208.434	915.38
1213	44+72.62'EB'	58.07 RT	187169.150	681208.627	915.30
1214	44+72.62'EB'	63.14 RT	187164.083	681208.822	915.27
1215	44+67.62'EB'	63.14 RT	187163.890	681203.826	915.19
1216	44+63.83'EB'	73.10 RT	187153.791	681200.429	915.38
1217	44+67.57'EB'	76.42 RT	187150.617	681204.293	915.45
1218	44+63.89'EB'	53.07 RT	187173.809	681199.708	914.92
1300	44+68.05'WB'	23.00 RT	187263.976	681200.391	915.66
1301	44+73.05'WB'	23.00 RT	187264.169	681205.387	915.71
1302	44+68.05'WB'	21.00 RT	187265.975	681200.313	915.61
1303	44+73.05'WB'	21.00 RT	187266.168	681205.310	915.66
1304	44+68.05'WB'	15.50 RT	187271.471	681200.101	915.97
1305	44+73.05'WB'	15.50 RT	187271.664	681205.097	916.02
1306	44+68.05'WB'	10.50 RT	187276.467	681199.908	915.06
1307	44+73.05'WB'	10.50 RT	187276.660	681204.905	916.11
1308	44+68.05'WB'	5.00 RT	187281.963	681199.696	916.00

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
1309	44+73.05'WB'	5.00 RT	187282.156	681204.692	916.05
1310	44+68.05'WB'	3.00 RT	187283.961	681199.619	916.05
1311	44+73.05'WB'	3.00 RT	187284.154	681204.615	916.10
1400	43+52.27'WB'	56.43 LT	187338.882	681081.634	913.51
1401	43+56.15'WB'	60.06 LT	187342.652	681085.370	913.58
1402	43+50.35'WB'	57.43 LT	187339.800	681079.676	913.46
1403	43+54.28'WB'	61.02 LT	187343.543	681083.471	913.53
1404	43+44.05'WB'	60.68 LT	187342.809	681073.260	913.72
1405	43+51.68'WB'	62.37 LT	187344.788	681080.815	913.54
1406	43+39.61'WB'	62.98 LT	187344.932	681068.733	913.79
1407	43+46.35'WB'	65.12 LT	187347.336	681075.383	913.79
1408	43+41.91'WB'	67.42 LT	187349.459	681070.856	913.87
1500	43+74.36'WB'	50.63 LT	187333.937	681103.929	913.71
1501	43+71.16'WB'	46.67 LT	187329.852	681100.888	913.61
1502	43+76.18'WB'	49.70 LT	187333.077	681105.783	913.78
1503	43+72.97'WB'	45.73 LT	187328.986	681102.736	913.68
1504	43+74.35'WB'	45.02 LT	187328.327	681104.141	913.53
1505	43+76.40'WB'	36.03 LT	187319.429	681106.535	913.86
1506	43+81.60'WB'	36.10 LT	187319.696	681111.728	913.94
1507	43+76.95'WB'	38.04 LT	187321.455	681107.002	913.90
1508	43+82.14'WB'	38.11 LT	187321.722	681112.195	913.98
1509	43+89.32'WB'	44.09 LT	187327.971	681119.131	913.97
1510	43+89.30'WB'	49.11 LT	187332.993	681118.918	913.98
1511	43+87.32'WB'	43.87 LT	187327.680	681117.141	914.01
1512	43+87.30'WB'	48.90 LT	187332.702	681116.929	914.02
1513	43+83.60'WB'	43.47 LT	187327.140	681113.443	914.05
1514	43+83.74'WB'	48.52 LT	187332.185	681113.387	914.16
1515	43+78.75'WB'	48.39 LT	187331.861	681108.403	913.97
1516	43+78.29'WB'	42.98 LT	187326.446	681108.152	913.96
1600	44+76.90'WB'	39.37 LT	187326.636	681206.828	915.56
1601	44+72.07'WB'	41.57 LT	187328.656	681201.915	915.48
1602	44+77.07'WB'	41.46 LT	187328.731	681206.924	915.50
1603	44+72.25'WB'	43.75 LT	187330.836	681202.016	915.42
1604	44+77.33'WB'	44.43 LT	187331.709	681207.061	915.46
1605	44+77.64'WB'	48.20 LT	187335.489	681207.234	915.57
1606	44+72.67'WB'	48.62 LT	187335.718	681202.245	915.50

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
1607	44+78.07'WB'	53.18 LT	187340.484	681207.464	915.49
1608	44+77.38'WB'	53.89 LT	187341.169	681206.749	915.48
1609	44+72.39'WB'	53.61 LT	187340.696	681201.772	915.43
1610	44+66.27'WB'	48.26 LT	187335.112	681195.869	915.02
1611	44+67.36'WB'	53.33 LT	187340.219	681196.758	915.03
1612	44+63.65'WB'	48.11 LT	187334.864	681193.256	915.07
1613	44+62.40'WB'	53.05 LT	187339.749	681191.813	914.96
1614	44+60.13'WB'	52.92 LT	187339.534	681189.551	914.98
1700	54+36.64'EB'	38.79 RT	187225.607	682171.183	915.74
1701	54+41.54'EB'	40.55 RT	187224.046	682176.146	915.68
1702	54+36.51'EB'	40.85 RT	187223.549	682171.133	915.69
1703	54+41.40'EB'	42.65 RT	187221.935	682176.095	915.63
1704	54+36.35'EB'	43.40 RT	187220.998	682171.071	915.69
1705	54+36.04'EB'	48.31 RT	187216.077	682170.951	915.76
1706	54+41.03'EB'	48.62 RT	187215.956	682175.950	915.69
1707	54+35.72'EB'	53.30 RT	187211.078	682170.830	915.84
1708	54+42.57'EB'	50.92 RT	187213.721	682177.584	915.73
1709	54+40.28'EB'	55.36 RT	187209.194	682175.461	915.80
1710	54+44.80'EB'	58.02 RT	187206.706	682180.087	915.39
1711	54+47.57'EB'	53.86 RT	187210.974	682182.693	915.32
1712	54+49.01'EB'	61.17 RT	187203.728	682184.414	914.98
1713	54+52.22'EB'	57.33 RT	187207.686	682187.470	914.90
1714	54+56.22'EB'	57.33 RT	187207.842	682191.467	914.90
1715	54+52.06'EB'	65.09 RT	187199.921	682187.607	914.90
1716	54+56.22'EB'	62.33 RT	187202.845	682191.662	914.83
1717	54+62.34'EB'	57.33 RT	187208.080	682197.587	914.56
1718	54+60.98'EB'	62.33 RT	187203.031	682196.413	914.54
1719	54+66.48'EB'	62.32 RT	187203.245	682201.908	914.46
1720	54+65.03'EB'	57.33 RT	187208.185	682200.268	914.61
1721	54+68.94'EB'	62.32 RT	187203.342	682204.372	914.52
1722	54+54.94'EB'	69.18 RT	187195.955	682190.641	914.78
1723	54+58.58'EB'	65.75 RT	187199.517	682194.149	914.71
1724	54+61.08'EB'	72.28 RT	187193.093	682196.897	914.61
1725	54+61.98'EB'	67.36 RT	187198.045	682197.615	914.54
1726	54+65.55'EB'	74.40 RT	187191.142	682201.444	914.49
1727	54+68.74'EB'	70.48 RT	187195.182	682204.487	914.41

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
1728	54+68.45'EB'	78.41 RT	187187.249	682204.499	914.36
1729	54+73.20'EB'	76.56 RT	187189.284	682209.174	914.29
1730	54+69.97'EB'	83.17 RT	187182.553	682206.208	914.24
1731	54+74.98'EB'	81.84 RT	187184.069	682211.157	914.21
1800	54+97.25'EB'	62.23 RT	187204.530	682232.658	914.23
1801	54+97.52'EB'	57.24 RT	187209.529	682232.732	914.30
1802	54+99.25'EB'	62.33 RT	187204.500	682234.658	914.26
1803	54+99.52'EB'	57.34 RT	187209.500	682234.731	914.33
1804	55+00.25'EB'	62.39 RT	187204.486	682235.658	914.27
1805	55+00.51'EB'	57.40 RT	187209.485	682235.731	914.35
1806	55+04.24'EB'	62.60 RT	187204.426	682239.657	914.21
1807	55+04.51'EB'	57.61 RT	187209.426	682239.731	914.29
1808	55+05.24'EB'	62.65 RT	187204.412	682240.657	914.20
1809	55+05.51'EB'	57.66 RT	187209.411	682240.731	914.27
1810	55+07.24'EB'	62.76 RT	187204.382	682242.657	914.16
1811	55+07.50'EB'	57.77 RT	187209.382	682242.731	914.23
1900	55+29.20'EB'	64.25 RT	187203.747	682264.660	913.38
1901	55+31.20'EB'	59.37 RT	187208.699	682266.469	913.45
1902	55+31.27'EB'	64.38 RT	187203.690	682266.733	913.31
1903	55+33.36'EB'	59.51 RT	187208.640	682268.636	913.38
1904	55+34.12'EB'	64.57 RT	187203.613	682269.591	913.35
1905	55+38.93'EB'	64.89 RT	187203.482	682274.411	913.65
1906	55+39.26'EB'	59.90 RT	187208.477	682274.547	913.58
1907	55+43.92'EB'	65.21 RT	187203.346	682279.410	913.73
1908	55+42.03'EB'	58.66 RT	187209.824	682277.268	913.62
1909	55+46.12'EB'	61.54 RT	187207.099	682281.460	913.70
1910	55+49.37'EB'	57.72 RT	187211.046	682284.563	913.62
1911	55+45.87'EB'	54.15 RT	187214.476	682280.924	913.54
1912	55+52.89'EB'	54.78 RT	187214.114	682287.971	913.54
1913	55+50.02'EB'	50.69 RT	187218.092	682284.942	913.47
1914	55+57.24'EB'	52.28 RT	187216.786	682292.222	913.46
1915	55+55.15'EB'	47.74 RT	187221.240	682289.951	913.38
1916	55+60.91'EB'	50.89 RT	187218.318	682295.832	913.48
1917	55+62.10'EB'	46.03 RT	187223.217	682296.829	913.40
1918	55+57.24'EB'	44.85 RT	187224.214	682291.930	913.33
1919	55+63.24'EB'	41.35 RT	187227.935	682297.789	913.10

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
1920	55+58.65'EB'	39.06 RT	187230.053	682293.118	913.13
1921	55+64.06'EB'	38.00 RT	187231.314	682298.477	913.04
1922	55+64.56'EB'	35.93 RT	187233.403	682298.902	913.12
1923	55+59.19'EB'	36.86 RT	187232.272	682293.569	913.19
2000	54+39.29'EB'	5.15 LT	187269.625	682172.138	916.52
2001	54+44.30'EB'	6.86 LT	187271.527	682177.080	916.44
2002	54+39.30'EB'	7.18 LT	187271.651	682172.073	916.44
2003	54+44.32'EB'	9.23 LT	187273.892	682177.004	916.41
2004	54+39.36'EB'	16.51 LT	187280.978	682171.774	916.36
2005	54+44.36'EB'	16.48 LT	187281.139	682176.771	916.30
2006	54+39.40'EB'	22.46 LT	187286.924	682171.583	916.30
2007	54+44.40'EB'	22.43 LT	187287.084	682176.580	916.22
2008	54+39.46'EB'	31.79 LT	187296.251	682171.284	916.20
2009	54+44.45'EB'	29.68 LT	187294.330	682176.348	916.17
2010	54+39.48'EB'	33.82 LT	187298.277	682171.219	916.25
2011	54+44.46'EB'	32.05 LT	187296.696	682176.272	916.22
2012	54+39.34'EB'	12.51 LT	187276.981	682171.902	916.51
2013	54+44.34'EB'	12.48 LT	187277.141	682176.899	916.44
2100	55+75.83'WB'	30.90 RT	187298.821	682307.654	913.23
2101	55+80.68'WB'	32.75 RT	187297.158	682312.572	913.17
2102	55+76.04'WB'	28.64 RT	187301.086	682307.775	913.18
2103	55+80.87'WB'	30.75 RT	187299.165	682312.679	913.12
2104	55+76.70'WB'	21.49 RT	187308.255	682308.157	913.41
2105	55+81.68'WB'	21.95 RT	187307.988	682313.150	913.33
2106	55+77.36'WB'	14.34 RT	187315.428	682308.540	913.49
2107	55+82.34'WB'	14.80 RT	187315.162	682313.533	913.44
2108	55+78.02'WB'	7.19 RT	187322.596	682308.923	913.40
2109	55+83.15'WB'	6.00 RT	187323.985	682314.004	913.34
2110	55+78.22'WB'	4.93 RT	187324.861	682309.044	913.45
2111	55+83.34'WB'	4.00 RT	187325.992	682314.125	913.39
2112	55+76.34'WB'	25.39 RT	187304.348	682307.949	913.22
2113	55+81.31'WB'	25.94 RT	187303.994	682312.937	913.19
2200	54+39.89'WB'	38.00 LT	187362.427	682169.161	915.61
2201	54+44.90'WB'	38.21 LT	187362.823	682174.151	915.53
2202	54+39.91'WB'	40.00 LT	187364.426	682169.097	915.56
2203	54+44.91'WB'	40.22 LT	187364.836	682174.086	915.48

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
2204	54+39.94'WB'	45.26 LT	187369.680	682168.928	915.61
2205	54+44.94'WB'	45.23 LT	187369.841	682173.926	915.56
2206	54+39.97'WB'	50.26 LT	187374.678	682168.768	915.66
2207	54+44.97'WB'	50.23 LT	187374.838	682173.765	915.61
2208	54+50.95'WB'	45.51 LT	187370.352	682179.923	915.27
2209	54+49.96'WB'	50.41 LT	187375.210	682178.741	915.32
2210	54+57.64'WB'	48.73 LT	187373.835	682186.477	914.98
2211	54+54.42'WB'	52.56 LT	187377.533	682183.110	915.03
2212	54+61.87'WB'	54.55 LT	187379.812	682190.479	914.70
2213	54+57.24'WB'	56.44 LT	187381.517	682185.779	914.75
2214	54+62.90'WB'	61.74 LT	187387.034	682191.233	914.38
2215	54+57.92'WB'	61.34 LT	187386.442	682186.268	914.46
2216	54+74.50'WB'	62.67 LT	187388.413	682202.790	913.76
2217	54+76.85'WB'	62.86 LT	187388.692	682205.125	913.82
2218	54+79.10'WB'	68.06 LT	187393.972	682207.173	913.74
2219	54+76.89'WB'	67.88 LT	187393.709	682204.973	913.67
2220	54+72.91'WB'	67.56 LT	187393.237	682201.016	913.73
2221	54+62.50'WB'	66.72 LT	187391.999	682190.641	914.31
2222	54+57.52'WB'	66.32 LT	187391.407	682185.676	914.38
2223	54+57.11'WB'	71.31 LT	187396.372	682185.084	914.14
2224	54+62.10'WB'	71.71 LT	187396.964	682190.048	914.06
2225	54+61.80'WB'	75.37 LT	187400.617	682189.613	913.89
2226	54+57.34'WB'	75.02 LT	187400.087	682185.169	913.95
2227	54+57.45'WB'	78.72 LT	187403.788	682185.137	913.77
2228	54+61.51'WB'	79.04 LT	187404.270	682189.177	913.70
2300	55+07.10'WB'	65.13 LT	187392.126	682235.266	913.53
2301	55+06.52'WB'	70.09 LT	187397.067	682234.502	913.43
2302	55+09.08'WB'	65.36 LT	187392.431	682237.243	913.56
2303	55+08.51'WB'	70.32 LT	187397.372	682236.479	913.46
2304	55+10.08'WB'	65.47 LT	187392.584	682238.231	913.58
2305	55+09.50'WB'	70.44 LT	187397.525	682237.467	913.48
2306	55+13.55'WB'	65.87 LT	187393.118	682241.690	913.58
2307	55+12.98'WB'	70.84 LT	187398.060	682240.926	913.48
2308	55+14.55'WB'	65.99 LT	187393.271	682242.678	913.56
2309	55+13.97'WB'	70.95 LT	187398.212	682241.914	913.46
2310	55+16.53'WB'	66.22 LT	187393.577	682244.655	913.54

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
2311	55+15.96'WB'	71.18 LT	187398.518	682243.891	913.44
2400	55+45.00'WB'	73.35 LT	187401.804	682272.820	913.28
2401	55+47.72'WB'	68.55 LT	187397.115	682275.724	913.26
2402	55+47.16'WB'	73.52 LT	187402.061	682274.975	913.23
2403	55+49.97'WB'	68.73 LT	187397.383	682277.973	913.21
2404	55+50.71'WB'	73.81 LT	187402.483	682278.512	913.25
2405	55+53.80'WB'	74.06 LT	187402.850	682281.586	913.32
2406	55+54.20'WB'	69.07 LT	187397.885	682282.179	913.39
2407	55+59.18'WB'	69.47 LT	187398.478	682287.143	913.47
2408	55+58.78'WB'	74.46 LT	187403.442	682286.551	913.39
2409	55+58.52'WB'	77.67 LT	187406.639	682286.170	913.46
2410	55+53.54'WB'	77.27 LT	187406.047	682281.205	913.38
2411	55+52.84'WB'	81.45 LT	187410.197	682280.347	913.53
2412	55+57.27'WB'	82.18 LT	187411.106	682284.745	913.59
2413	55+56.02'WB'	86.70 LT	187415.572	682283.320	913.64
2414	55+52.06'WB'	86.13 LT	187414.851	682279.386	913.68
2415	55+54.60'WB'	64.09 LT	187392.921	682282.774	913.32
2416	55+56.90'WB'	61.44 LT	187390.357	682285.171	913.26
2417	55+61.32'WB'	65.49 LT	187394.581	682289.432	913.34
2418	55+60.81'WB'	57.54 LT	187386.619	682289.234	913.12
2419	55+64.84'WB'	61.99 LT	187391.217	682293.089	913.19
2420	55+65.07'WB'	54.03 LT	187383.270	682293.624	912.97
2421	55+68.67'WB'	58.82 LT	187388.203	682297.040	913.05
2422	55+69.63'WB'	50.92 LT	187380.339	682298.303	912.83
2423	55+72.78'WB'	56.03 LT	187385.565	682301.251	912.90
2424	55+74.11'WB'	48.42 LT	187378.014	682302.871	912.83
2425	55+80.95'WB'	55.64 LT	187385.499	682309.431	912.72
2426	55+85.95'WB'	55.41 LT	187385.459	682314.431	912.65
2427	55+80.72'WB'	50.65 LT	187380.499	682309.391	912.65
2428	55+85.71'WB'	50.42 LT	187380.459	682314.391	912.57
2429	55+85.48'WB'	45.42 LT	187375.459	682314.350	912.40
2430	55+80.44'WB'	44.61 LT	187374.452	682309.342	912.44
2431	55+85.37'WB'	43.07 LT	187373.100	682314.331	912.36
2432	55+80.34'WB'	42.52 LT	187372.363	682309.325	912.51
2433	55+85.27'WB'	41.02 LT	187371.055	682314.315	912.43
2500	68+92.97'EB'	36.13 RT	187284.354	683626.222	898.35

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
2501	68+97.95'EB'	36.66 RT	187283.996	683631.210	898.36
2502	68+92.97'EB'	38.13 RT	187282.351	683626.293	898.29
2503	68+97.94'EB'	38.69 RT	187281.974	683631.279	898.32
2504	68+92.97'EB'	45.15 RT	187275.338	683626.502	898.38
2505	68+97.93'EB'	45.78 RT	187274.885	683631.521	898.39
2506	69+02.82'EB'	46.89 RT	187273.947	683636.432	898.71
2507	69+04.44'EB'	41.11 RT	187279.779	683637.844	898.62
2508	69+08.41'EB'	48.80 RT	187272.231	683642.070	898.83
2509	69+10.72'EB'	43.27 RT	187277.845	683644.189	898.74
2510	69+13.84'EB'	51.40 RT	187269.823	683647.577	899.00
2511	69+16.75'EB'	46.15 RT	187275.169	683650.301	898.88
2600	68+92.97'EB'	4.00 LT	187324.461	683624.795	899.49
2601	68+97.97'EB'	4.97 LT	187325.608	683629.757	899.53
2602	68+92.97'EB'	6.00 LT	187326.460	683624.724	899.44
2603	68+97.97'EB'	7.14 LT	187327.770	683629.680	899.48
2604	68+92.97'EB'	14.00 LT	187334.451	683624.439	899.31
2605	68+97.97'EB'	14.00 LT	187334.629	683629.436	899.39
2606	68+92.97'EB'	19.00 LT	187339.448	683624.261	899.24
2607	68+97.96'EB'	19.00 LT	187339.626	683629.258	899.31
2608	68+92.97'EB'	24.00 LT	187344.445	683624.084	899.16
2609	68+97.96'EB'	24.00 LT	187344.623	683629.081	899.24
2610	68+92.97'EB'	32.00 LT	187352.436	683623.799	899.07
2611	68+97.96'EB'	30.86 LT	187351.482	683628.836	899.08
2612	68+92.97'EB'	34.00 LT	187354.435	683623.728	899.12
2613	68+97.96'EB'	33.03 LT	187353.643	683628.760	899.13
2614	68+92.97'EB'	10.24 LT	187330.695	683624.573	899.48
2615	68+97.97'EB'	10.24 LT	187330.873	683629.570	899.51
2700	68+93.15'WB'	35.08 LT	187415.482	683621.556	899.63
2701	68+98.14'WB'	35.29 LT	187415.871	683626.546	899.63
2702	68+93.15'WB'	37.08 LT	187417.483	683621.485	899.58
2703	68+98.14'WB'	37.30 LT	187417.872	683626.474	899.55
2704	68+93.15'WB'	38.30 LT	187418.694	683621.442	899.57
2705	68+93.15'WB'	41.80 LT	187422.195	683621.317	899.64
2706	68+93.15'WB'	46.80 LT	187427.196	683621.139	899.71
2707	68+98.14'WB'	41.80 LT	187422.373	683626.314	899.71
2708	68+98.14'WB'	46.80 LT	187427.374	683626.136	899.79

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STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
2709	69+03.13'WB'	47.02 LT	187427.763	683631.126	899.84
2710	69+03.34'WB'	42.02 LT	187422.778	683631.514	899.76
2711	69+07.88'WB'	42.21 LT	187423.131	683636.046	899.81
2712	69+07.66'WB'	47.21 LT	187428.116	683635.658	899.88
2713	69+12.41'WB'	42.41 LT	187423.484	683640.579	899.85
2714	69+12.20'WB'	47.41 LT	187428.469	683640.191	899.93
2800	69+49.58'WB'	49.05 LT	187431.381	683677.574	899.30
2801	69+44.20'WB'	43.80 LT	187425.959	683672.358	899.41
2802	69+46.82'WB'	48.92 LT	187431.166	683674.813	899.25
2803	69+40.53'WB'	43.64 LT	187425.673	683668.689	899.38
2804	69+32.23'WB'	48.28 LT	187430.029	683660.222	899.70
2805	69+32.45'WB'	43.28 LT	187425.044	683660.611	899.62
2806	69+26.25'WB'	48.01 LT	187429.563	683654.240	899.79
2807	69+26.46'WB'	43.02 LT	187424.578	683654.629	899.71
2808	69+21.26'WB'	47.80 LT	187429.175	683649.256	899.84
2809	69+21.48'WB'	42.80 LT	187424.190	683649.644	899.76
2810	69+16.73'WB'	47.60 LT	187428.822	683644.723	899.88
2811	69+16.94'WB'	42.61 LT	187423.837	683645.111	899.81
2900	70+43.24'WB'	51.90 LT	187437.157	683771.303	899.70
2901	70+49.76'WB'	47.12 LT	187432.565	683777.974	899.81
2902	70+46.24'WB'	52.00 LT	187437.345	683774.309	899.65
2903	70+53.60'WB'	47.25 LT	187432.805	683781.816	899.78
2904	70+61.15'WB'	52.51 LT	187438.279	683789.234	899.94
2905	70+61.32'WB'	47.51 LT	187433.289	683789.547	900.02
2906	70+67.13'WB'	52.72 LT	187438.654	683795.222	900.03
2907	70+67.31'WB'	47.72 LT	187433.664	683795.535	900.11
2908	70+72.12'WB'	52.89 LT	187438.967	683800.213	900.11
2909	70+72.29'WB'	47.89 LT	187433.976	683800.525	900.18
3000	82+77.20'EB'	59.33 RT	187269.046	685007.850	919.16
3001	82+81.12'EB'	62.54 RT	187265.721	685011.672	919.24
3002	82+76.19'EB'	61.07 RT	187267.334	685006.789	919.11
3003	82+80.10'EB'	64.30 RT	187263.984	685010.594	919.19
3004	82+75.26'EB'	62.68 RT	187265.750	685005.806	919.11
3005	82+72.25'EB'	67.87 RT	187260.651	685002.643	919.47
3006	82+76.58'EB'	70.38 RT	187258.016	685006.892	919.55
3007	82+69.74'EB'	72.20 RT	187256.402	685000.007	919.55

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
3008	82+74.07'EB'	74.71 RT	187253.767	685004.256	919.62
3100	82+86.30'EB'	43.64 RT	187284.984	685017.341	919.45
3101	82+90.91'EB'	45.64 RT	187282.910	685021.917	919.53
3102	82+87.31'EB'	41.89 RT	187286.714	685018.374	919.49
3103	82+91.92'EB'	43.90 RT	187284.634	685022.954	919.56
3104	83+04.97'EB'	41.69 RT	187286.622	685036.035	919.98
3105	83+03.91'EB'	36.65 RT	187291.679	685035.062	919.93
3106	83+02.91'EB'	41.62 RT	187286.729	685033.978	919.93
3107	83+01.85'EB'	36.58 RT	187291.786	685033.005	919.88
3108	82+93.41'EB'	29.49 RT	187299.017	685024.679	919.55
3109	82+88.42'EB'	29.97 RT	187298.616	685019.687	919.48
3110	82+93.49'EB'	31.49 RT	187297.015	685024.731	919.50
3111	82+88.51'EB'	31.97 RT	187296.614	685019.739	919.43
3112	82+93.70'EB'	36.29 RT	187292.208	685024.856	919.66
3113	82+88.70'EB'	36.50 RT	187292.078	685019.857	919.58
3114	82+93.52'EB'	41.29 RT	187287.214	685024.597	919.62
3115	82+88.82'EB'	39.26 RT	187289.317	685019.929	919.54
3116	82+98.65'EB'	41.47 RT	187286.949	685029.721	919.97
3117	82+98.82'EB'	36.47 RT	187291.942	685029.980	919.91
3200	83+95.80'EB'	39.90 RT	187286.927	685126.885	922.32
3201	83+96.37'EB'	44.93 RT	187281.895	685127.372	922.39
3202	83+97.82'EB'	39.98 RT	187286.822	685128.905	922.37
3203	83+98.39'EB'	45.00 RT	187281.790	685129.391	922.44
3204	84+02.62'EB'	30.54 RT	187296.180	685133.860	922.45
3205	84+10.59'EB'	29.36 RT	187297.226	685141.850	922.54
3206	84+02.67'EB'	32.55 RT	187294.165	685133.879	922.47
3207	84+10.65'EB'	31.38 RT	187295.212	685141.869	922.56
3208	84+11.25'EB'	49.37 RT	187277.212	685142.183	922.64
3209	84+15.13'EB'	40.05 RT	187286.467	685146.215	922.79
3210	84+09.50'EB'	48.34 RT	187278.271	685140.447	922.69
3211	84+13.40'EB'	39.03 RT	187287.513	685144.501	922.84
3212	84+01.57'EB'	40.11 RT	187286.628	685132.657	922.67
3213	84+01.40'EB'	45.11 RT	187281.635	685132.398	922.65
3214	84+05.74'EB'	46.13 RT	187280.542	685136.726	922.72
3215	84+10.81'EB'	37.51 RT	187289.078	685141.936	922.87
3216	84+02.81'EB'	37.71 RT	187289.003	685133.930	922.75

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
3300	84+34.64'EB'	51.98 RT	187274.216	685165.527	923.35
3301	84+27.98'EB'	59.66 RT	187266.644	685158.738	923.24
3302	84+36.58'EB'	53.12 RT	187273.044	685167.448	923.30
3303	84+29.84'EB'	60.76 RT	187265.520	685160.580	923.19
3304	84+39.76'EB'	54.99 RT	187271.125	685170.591	923.44
3305	84+32.41'EB'	62.27 RT	187263.965	685163.127	923.21
3306	84+48.38'EB'	60.06 RT	187265.915	685179.127	923.59
3307	84+34.62'EB'	63.57 RT	187262.628	685165.318	923.29
3308	84+43.24'EB'	68.64 RT	187257.417	685173.854	923.44
3309	84+29.31'EB'	72.86 RT	187253.426	685159.854	923.40
3310	84+38.26'EB'	77.32 RT	187248.827	685168.734	923.55
3311	84+24.81'EB'	84.38 RT	187241.983	685155.166	923.27
3312	84+34.40'EB'	87.17 RT	187239.034	685164.705	923.42
3313	84+22.07'EB'	101.56 RT	187224.851	685152.148	923.68
3314	84+31.00'EB'	102.78 RT	187223.486	685161.052	923.82
3400	82+57.89'WB'	61.69 LT	187450.460	684988.734	918.75
3401	82+65.50'WB'	68.33 LT	187456.982	684996.445	918.86
3402	82+56.33'WB'	63.04 LT	187451.828	684987.200	918.70
3403	82+63.99'WB'	69.64 LT	187458.316	684994.950	918.81
3404	82+51.01'WB'	67.63 LT	187456.860	684981.560	919.06
3405	82+62.09'WB'	71.28 LT	187459.975	684993.089	918.85
3406	82+43.44'WB'	74.16 LT	187463.517	684974.098	919.21
3407	82+57.55'WB'	75.20 LT	187464.322	684988.217	919.21
3408	82+49.98'WB'	81.73 LT	187470.979	684980.754	919.36
3409	82+54.00'WB'	116.15 LT	187505.325	684985.337	918.75
3410	82+43.99'WB'	115.69 LT	187505.028	684975.321	918.40
3500	82+75.47'WB'	46.52 LT	187435.354	685005.668	919.15
3501	82+81.79'WB'	54.28 LT	187443.005	685012.114	919.30
3502	82+76.98'WB'	45.21 LT	187434.022	685007.162	919.23
3503	82+83.31'WB'	52.96 LT	187441.667	685013.613	919.38
3504	82+86.63'WB'	30.22 LT	187418.876	685016.562	919.40
3505	82+91.62'WB'	30.55 LT	187419.117	685021.558	919.48
3506	82+86.55'WB'	32.22 LT	187420.876	685016.510	919.42
3507	82+91.54'WB'	32.55 LT	187421.117	685021.506	919.50
3508	83+02.72'WB'	38.34 LT	187426.727	685032.787	919.81
3509	83+01.92'WB'	46.36 LT	187434.758	685032.109	919.84

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
3510	83+00.71'WB'	38.38 LT	187426.803	685030.774	919.73
3511	82+99.90'WB'	46.40 LT	187434.834	685030.096	919.76
3512	82+90.68'WB'	46.60 LT	187435.183	685020.882	919.94
3513	82+88.61'WB'	48.39 LT	187437.005	685018.840	919.78
3514	82+82.28'WB'	40.64 LT	187429.361	685012.386	919.52
3515	82+86.34'WB'	37.14 LT	187425.796	685016.382	919.74
3516	82+91.28'WB'	38.58 LT	187427.160	685021.349	919.82
3600	83+93.00'WB'	44.40 LT	187431.310	685123.152	921.74
3601	83+94.54'WB'	36.36 LT	187423.252	685124.554	921.84
3602	83+95.05'WB'	44.35 LT	187431.233	685125.195	921.79
3603	83+96.58'WB'	36.32 LT	187423.174	685126.597	921.89
3604	83+97.79'WB'	44.30 LT	187431.129	685127.933	921.83
3605	84+02.78'WB'	29.25 LT	187416.001	685132.680	922.09
3606	84+10.76'WB'	29.92 LT	187416.546	685140.675	922.21
3607	84+02.73'WB'	31.25 LT	187418.005	685132.660	922.12
3608	84+10.71'WB'	31.93 LT	187418.549	685140.655	922.24
3609	84+02.69'WB'	32.72 LT	187419.472	685132.646	922.14
3610	84+13.32'WB'	44.35 LT	187430.933	685143.463	922.05
3611	84+08.74'WB'	46.38 LT	187433.030	685138.924	921.98
3612	84+12.51'WB'	42.52 LT	187429.115	685142.629	922.07
3613	84+07.94'WB'	44.54 LT	187431.212	685138.089	922.00
3614	83+99.77'WB'	44.25 LT	187431.054	685129.920	921.92
3615	83+99.60'WB'	36.26 LT	187423.060	685129.617	922.04
3616	84+02.64'WB'	34.72 LT	187421.472	685132.626	922.16
3617	84+06.73'WB'	41.79 LT	187428.478	685136.834	922.06
3618	84+11.30'WB'	39.77 LT	187426.383	685141.374	922.13
3619	84+10.63'WB'	34.93 LT	187421.551	685140.626	922.27
3700	84+16.48'WB'	63.98 LT	187450.507	685146.946	921.89
3701	84+20.46'WB'	60.60 LT	187447.065	685150.868	921.93
3702	84+17.33'WB'	65.92 LT	187452.436	685147.831	921.84
3703	84+21.29'WB'	62.49 LT	187448.940	685151.729	921.88
3704	84+22.34'WB'	64.89 LT	187451.318	685152.820	921.91
3705	84+24.35'WB'	69.47 LT	187455.862	685154.906	922.21
3706	84+19.77'WB'	71.48 LT	187457.948	685150.362	922.14
3707	84+26.36'WB'	74.04 LT	187460.406	685156.992	922.29
3708	84+21.78'WB'	76.06 LT	187462.492	685152.447	922.21

2

2

N

CAPITOL DRIVE

ORMSBY ST

SUSSEX ST

CAPITOL DRIVE

OAKTON AVE

SIMMONS AVE

DYNEX DR

STH 16 EB OFF RAMP

BERM

RIPRAP

12'WB'

10'WB'

8'WB'

STH 190 (CAPITOL DRIVE)

12'EB'

10'EB'

8'EB'

WETLANDS
(TYP)

EXISTING R/W (TYP.)

STH EB ON 16 RAMP

EB STH 16

LEGEND

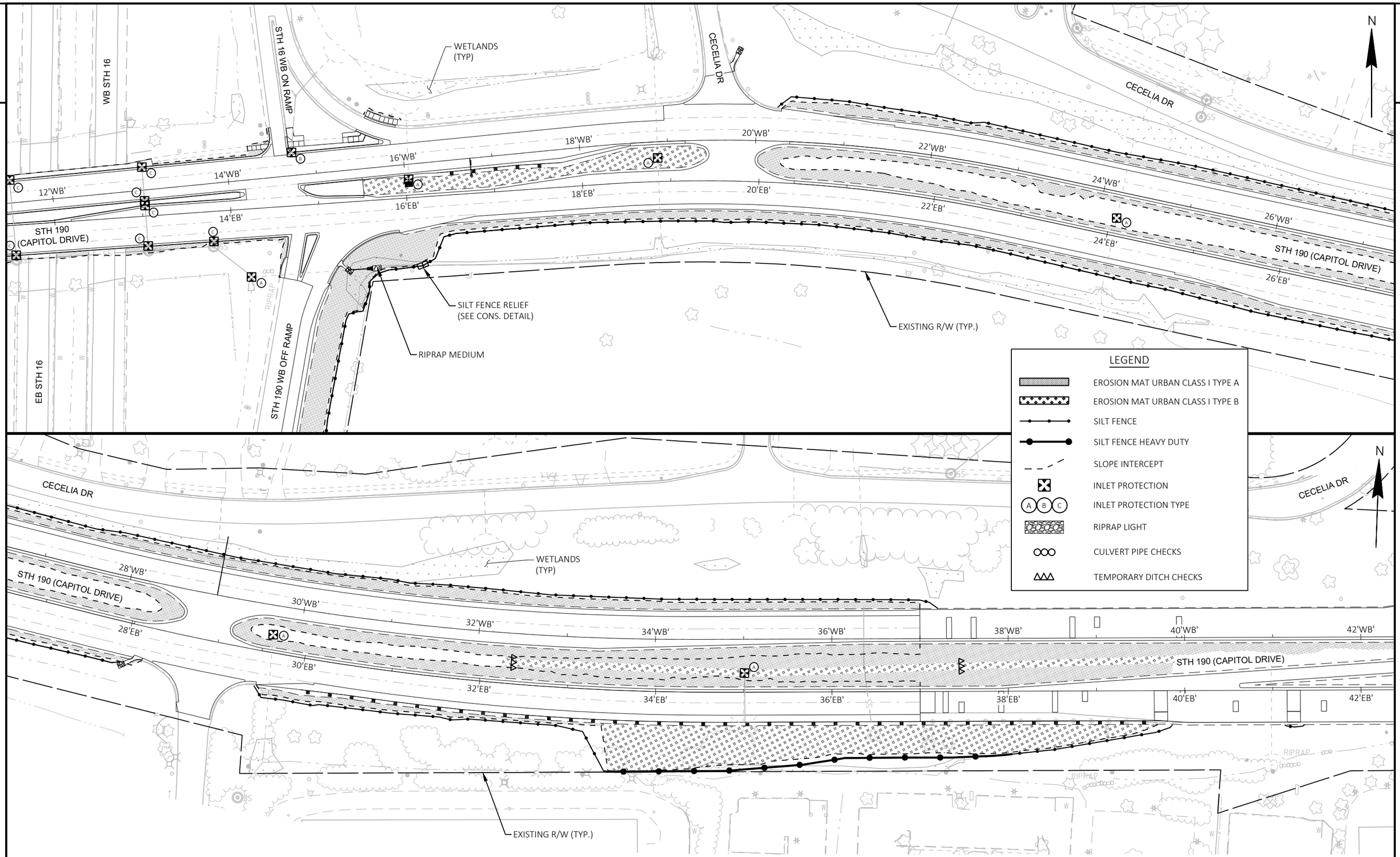
- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- SILT FENCE HEAVY DUTY
- SLOPE INTERCEPT
- INLET PROTECTION
- INLET PROTECTION TYPE (A B C)
- RIPRAP LIGHT
- CULVERT PIPE CHECKS
- TEMPORARY DITCH CHECKS

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL PLAN	SHEET 73	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_022001-EC.DWG
LAYOUT NAME - 01

PLOT DATE : 7/28/2023 11:36 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL PLAN	SHEET 74	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_022001-EC.DWG
LAYOUT NAME - 02

PLOT DATE : 7/28/2023 11:36 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

GEORGETOWN DR

WESTFIELD WAY

N

42'WB' 44'WB' 46'WB' 48'WB' 50'WB' 52'WB' 54'WB' 56'WB'

STH 190 (CAPITOL DRIVE)

42'EB' 44'EB' 46'EB' 48'EB' 50'EB' 52'EB' 54'EB' 56'EB'

STH 190 (CAPITOL DRIVE)

RIPRAP

FOREST GROVE DR

EXISTING R/W (TYP.)

LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- SILT FENCE HEAVY DUTY
- SLOPE INTERCEPT
- INLET PROTECTION
- A B C INLET PROTECTION TYPE
- RIPRAP LIGHT
- CULVERT PIPE CHECKS
- TEMPORARY DITCH CHECKS

2

N

58'WB' 60'WB' 62'WB' 64'WB' 66'WB' 68'WB' 70'WB' 72'WB'

STH 190 (CAPITOL DRIVE)

58'EB' 60'EB' 62'EB' 64'EB' 66'EB' 68'EB' 70'EB' 72'EB'

STH 190 (CAPITOL DRIVE)

SPV.0170.02 VEGETATION REMOVAL

WILLOW GROVE DR

SPV.0170.02 VEGETATION REMOVAL

EXISTING R/W (TYP.)

MEADOW CREEK DR

WETLANDS (TYP)

RIPRA

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL PLAN	SHEET 75	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_022001-EC.DWG
LAYOUT NAME - 03

PLOT DATE : 7/28/2023 11:36 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

72'WB' 74'WB' 76'WB' 78'WB' 80'WB' 82'WB' 84'WB' 86'WB'

STH 190 (CAPITOL DRIVE)

72'EB' 74'EB' 76'EB' 78'EB' 80'EB' 82'EB' 84'EB' 86'EB'

STH 190 (CAPITOL DRIVE)

STH 164

STH 164

RIPRAP

CANOPY

EXISTING R/W (TYP.)

LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- SILT FENCE HEAVY DUTY
- SLOPE INTERCEPT
- INLET PROTECTION
- INLET PROTECTION TYPE (A B C)
- RIPRAP LIGHT
- CULVERT PIPE CHECKS
- TEMPORARY DITCH CHECKS

HIGHFIELD RD

N

88'WB' 90'WB' 92'WB' 94'WB' 96'WB' 98'WB' 100'WB' 102'WB'

STH 190 (CAPITOL DRIVE)

STH 190 (CAPITOL DRIVE)

88'EB' 90'EB' 92'EB' 94'EB' 96'EB' 98'EB' 100'EB' 102'EB'

EXISTING R/W (TYP.)

FIVE FIELDS RD

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL PLAN	SHEET 76	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_022001-EC.DWG
LAYOUT NAME - 04

PLOT DATE : 7/28/2023 11:36 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

102'WB' 104'WB' 106'WB' 108'WB' 110'WB' 112'WB' 114'WB' 116'WB'

STH 190 (CAPITOL DRIVE)

102'EB' 104'EB' 106'EB' 108'EB' 110'EB' 112'EB' 114'EB' 116'EB'

STH 190 (CAPITOL DRIVE)

EXISTING R/W (TYP.)

LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- SILT FENCE HEAVY DUTY
- SLOPE INTERCEPT
- INLET PROTECTION
- A B C INLET PROTECTION TYPE
- RIPRAP LIGHT
- CULVERT PIPE CHECKS
- TEMPORARY DITCH CHECKS

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL PLAN	SHEET 77	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_022001-EC.DWG
LAYOUT NAME - 05

PLOT DATE : 7/28/2023 11:36 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- SILT FENCE HEAVY DUTY
- SLOPE INTERCEPT
- INLET PROTECTION
- INLET PROTECTION TYPE (A B C)
- RIPRAP LIGHT
- CULVERT PIPE CHECKS
- TEMPORARY DITCH CHECKS

MAINTAIN 10' WIDE GRASSY BUFFER

10'

10'

10'

10'

CECELIA DRIVE

EXISTING R/W (TYP.)

TRACKING PAD (75' X 40')

STH 16 WB ON RAMP

STH 16 EB

STH 16 WB

WETLANDS (TYP.)

CECELIA DRIVE

STH 190 (CAPITOL DRIVE)

12'WB'

14'WB'

16'WB'

18'WB'

20'WB'

C

C

C

B

2

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	EROSION CONTROL PLAN - POTENTIAL CONSTRUCTION STAGING AREA	SHEET 78	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_022001-EC.DWG
LAYOUT NAME - STAGING AREA

PLOT DATE : 7/28/2023 11:36 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:75 FT

WISDOT/CADDS SHEET 42

2

2

N

SIMMONS AVE

STH 16 EB OFF RAMP

CAPITOL DRIVE

STH 190 (CAPITOL DRIVE)

STH 16 EB ON RAMP

EXISTING R/W

AT&T WISCONSIN - COMMUNICATION

SPECTRUM - COMMUNICATION

WE ENERGIES - GAS

WISDOT - SIGNALS

WE ENERGIES - ELECTRIC

TDS - COMMUNICATION

WISDOT - ELECTRIC

684'

689'

C

415 STA 684+82 'I', 1.1' RT
INLET COVERS TYPE WM

U.E. 861.15 +/-

414 STA 9+97 'WB', 25.3' LT
INLET COVERS TYPE WM

STA. 9+01 'WB', 65.4' LT
INVERT EL. 861.51
Y = 187400.490
X = 677644.649

PIPE UNDERDRAIN 6-INCH
TEE CONNECTION REQUIRED

U.E. 863.10 +/-

418 STA 10+54 'WB', 11.2' RT
INLET COVERS TYPE WM

8'WB'

9'WB'

10'WB'

6'EB'

7'EB'

8'EB'

9'EB'

10'EB'

11'EB'

PIPE UNDERDRAIN
UNPERFORATED 6-INCH

U.E. 863.87 +/-

419 STA 10+53 'EB', 3.7' LT
INLET COVERS TYPE WM

420 STA 10+29 'EB', 33.3' RT
INLET COVERS TYPE WM

LEGEND

- PIPE UNDERDRAIN 6-INCH PERFORATED
- PIPE UNDERDRAIN 8-INCH PERFORATED
- REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN 6-INCH
- APRON ENDWALL FOR PIPE UNDERDRAIN 8-INCH
- RT — SUGGESTED LOCATION OF RELIEF TRENCH (USED FOR QUANTITY COMPUTATIONS. EXACT NUMBER AND LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.)
- C — CAPPED END OF PIPE UNDERDRAIN (INCIDENTAL TO PIPE UNDERDRAIN ITEMS)
- TAP CONNECTION TO MEDIAN INLET OR MANHOLE USING PIPE UNDERDRAIN 6-INCH UNPERFORATED (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)
- U.E. 881.17 +/- — INVERT ELEVATION OF UNDERDRAIN TAP CONNECTION (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)

NOTE:
PIPE UNDERDRAIN SLOPE SHALL BE A MINIMUM OF 0.25%

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER AND PIPE UNDERDRAIN PLAN	SHEET 79	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_022501-SS.DWG
LAYOUT NAME - 01

PLOT DATE : 7/21/2023 7:22 AM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

AT&T WISCONSIN - COMMUNICATION

WE ENERGIES - GAS

SPECTRUM - COMMUNICATION

WISDOT - SIGNALS

WISDOT - ELECTRIC

WISDOT - ELECTRIC

STH 16 WB ON RAMP

1,589'

689'

N

U.E. 865.25 +/-

U.E. 864.27 +/-

422 STA 11+53 'WB', 25.3' LT
INLET COVERS TYPE WM

425 STA 13+04 'WB', 25.3' LT
INLET COVERS TYPE WM

440 STA 14+74 'WB', 25.3' LT
INLET COVERS TYPE S

418 STA 10+54 'WB', 11.2' RT
INLET COVERS TYPE WM

U.E. 864.30 +/-

426 STA 13+03 'WB', 11.2' RT
INLET COVERS TYPE WM

11'WB' 12'WB' 13'WB' 14'WB' 15'WB' 16'WB'

STH 190 (CAPITOL DRIVE)

11'EB' 12'EB' 13'EB' 14'EB' 15'EB' 16'EB'

427 STA 13+03 'EB', 11.4' LT
INLET COVERS TYPE WM

CONCRETE COLLAR REQ'D

419 STA 10+53 'EB', 3.7' LT
INLET COVERS TYPE WM

U.E. 863.87 +/-

U.E. 864.20 +/-

430 STA 13+79 'EB', 33.3' RT
INLET COVERS TYPE WM

420 STA 10+29 'EB', 33.3' RT
INLET COVERS TYPE WM

423 STA 11+54 'EB', 33.3' RT
INLET COVERS TYPE WM

U.E. 864.65 +/-

428 STA 13+04 'EB', 33.3' RT
INLET COVERS TYPE WM

U.E. 864.91 +/-

1,989'K

01 STA 686+14 'K', 75.9' LT
APRON ENDWALLS FOR CPRC 24-INCH

CONCRETE COLLAR REQ'D

TDS - COMMUNICATION

RT

VILLAGE OF PEWAUKEE - WATER

VILLAGE OF PEWAUKEE - SANITARY

EXISTING R/W

STH 16 WB OFF RAMP

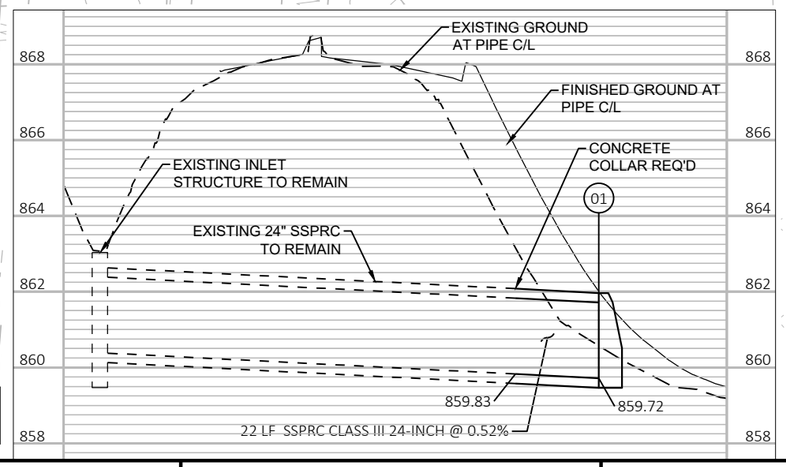
687'K

PLACE RELIEF TRENCHES EVERY 250'

LEGEND

- PIPE UNDERDRAIN 6-INCH PERFORATED
- PIPE UNDERDRAIN 8-INCH PERFORATED
- REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN 6-INCH
- APRON ENDWALL FOR PIPE UNDERDRAIN 8-INCH
- RT — SUGGESTED LOCATION OF RELIEF TRENCH (USED FOR QUANTITY COMPUTATIONS. EXACT NUMBER AND LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.)
- C — CAPPED END OF PIPE UNDERDRAIN (INCIDENTAL TO PIPE UNDERDRAIN ITEMS)
- TAP CONNECTION TO MEDIAN INLET OR MANHOLE USING PIPE UNDERDRAIN 6-INCH UNPERFORATED (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)
- U.E. 881.17 +/- — INVERT ELEVATION OF UNDERDRAIN TAP CONNECTION (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)

NOTE:
PIPE UNDERDRAIN SLOPE SHALL BE A MINIMUM OF 0.25%



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER AND PIPE UNDERDRAIN PLAN	SHEET 80	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_022501-SS.DWG
LAYOUT NAME - 02

PLOT DATE : 7/21/2023 7:23 AM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

WE ENERGIES - GAS

AT&T WISCONSIN - COMMUNICATION

SPECTRUM - COMMUNICATION

CECELIA DR

STH 190 (CAPITOL DRIVE)

16'WB' 17'WB' 18'WB' 19'WB' 20'WB' 21'WB' 22'WB'

16'EB' 17'EB' 18'EB' 19'EB' 20'EB' 21'EB' 22'EB'

C

CONCRETE COLLAR REQ'D

02 STA 16+03 'EB', 15.4' LT
INLETS MEDIAN 1G-MS

U.E. 863.50 +/-

432 STA 18+86 'EB', 26.8' LT
INLET COVERS TYPE C

WISDOT - SIGNALS

STH 190 (CAPITOL DRIVE)

RT

TDS - COMMUNICATION

VILLAGE OF PEWAUKEE - WATER

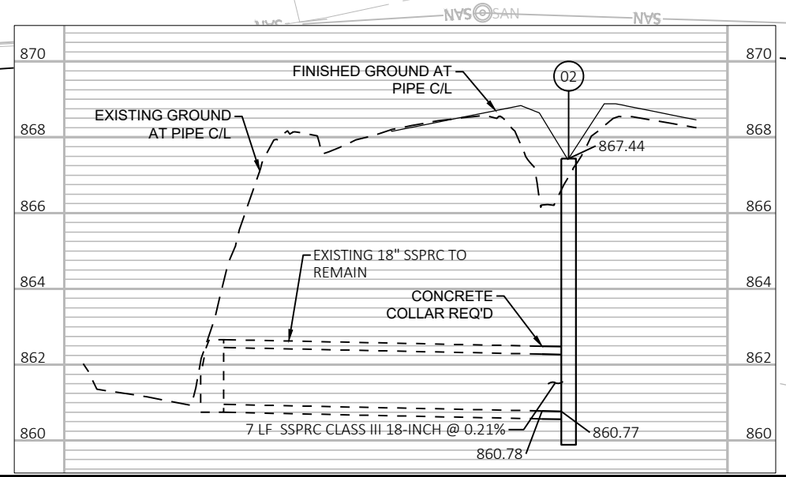
VILLAGE OF PEWAUKEE - SANITARY

EXISTING R/W

LEGEND

- PIPE UNDERDRAIN 6-INCH PERFORATED
- PIPE UNDERDRAIN 8-INCH PERFORATED
- REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN 6-INCH
- APRON ENDWALL FOR PIPE UNDERDRAIN 8-INCH
- RT — SUGGESTED LOCATION OF RELIEF TRENCH (USED FOR QUANTITY COMPUTATIONS. EXACT NUMBER AND LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.)
- C — CAPPED END OF PIPE UNDERDRAIN (INCIDENTAL TO PIPE UNDERDRAIN ITEMS)
- TAP CONNECTION TO MEDIAN INLET OR MANHOLE USING PIPE UNDERDRAIN 6-INCH UNPERFORATED (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)
- U.E. 881.17 +/- — INVERT ELEVATION OF UNDERDRAIN TAP CONNECTION (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)

NOTE:
PIPE UNDERDRAIN SLOPE SHALL BE A MINIMUM OF 0.25%



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER AND PIPE UNDERDRAIN PLAN	SHEET 81	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_022501-SS.DWG
LAYOUT NAME - 03

PLOT DATE : 7/21/2023 7:23 AM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

AT&T WISCONSIN - COMMUNICATION

VILLAGE OF PEWAUKEE - SANITARY

WE ENERGIES - GAS

SPECTRUM - COMMUNICATION

VILLAGE OF PEWAUKEE - WATER

CECELIA DR

APRON ENDWALLS FOR UNDERDRAIN 8-INCH

STA. 25+50 'WB', 46.8' LT
INVERT EL. 862.62
Y = 187393.267
X = 679300.631

PIPE UNDERDRAIN 8-INCH UNPERFORATED

RT

22'WB' 23'WB' 24'WB' 25'WB' 26'WB' 27'WB' 28'WB'

U.E. 869.40 +/-

U.E. 869.50 +/-

WISDOT - SIGNALS

STH 190 (CAPITOL DRIVE)

STH 190 (CAPITOL DRIVE)

22'EB' 23'EB' 24'EB' 25'EB' 26'EB' 27'EB'

RT RT

TDS - COMMUNICATION

EXISTING R/W

LEGEND

- PIPE UNDERDRAIN 6-INCH PERFORATED
- PIPE UNDERDRAIN 8-INCH PERFORATED
- REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN 6-INCH
- APRON ENDWALL FOR PIPE UNDERDRAIN 8-INCH
- RT — SUGGESTED LOCATION OF RELIEF TRENCH (USED FOR QUANTITY COMPUTATIONS. EXACT NUMBER AND LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.)
- C — CAPPED END OF PIPE UNDERDRAIN (INCIDENTAL TO PIPE UNDERDRAIN ITEMS)
- TAP CONNECTION TO MEDIAN INLET OR MANHOLE USING PIPE UNDERDRAIN 6-INCH UNPERFORATED (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)
- U.E. 881.17 +/- — INVERT ELEVATION OF UNDERDRAIN TAP CONNECTION (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)

NOTE:
PIPE UNDERDRAIN SLOPE SHALL BE A MINIMUM OF 0.25%

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER AND PIPE UNDERDRAIN PLAN	SHEET 82	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_022501-SS.DWG
LAYOUT NAME - 04

PLOT DATE : 7/21/2023 7:23 AM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

CECELIA DR

N

WE ENGERGIES - ELECTRIC

SPECTRUM - COMMUNICATION

C

RT

28'WB'

29'WB'

30'WB'

31'WB'

32'WB'

33'WB'

STH 190 (CAPITOL DRIVE)

STH 190 (CAPITOL DRIVE)

WISDOT - SIGNALS

28'EB'

29'EB'

30'EB'

31'EB'

32'EB'

33'EB'

U.E. 866.80 +/-

AT&T WISCONSIN - COMMUNICATION

TDS - COMMUNICATION

MIDWEST FIBER NETWORKS - COMMUNICATION

WE ENGERGIES - ELECTRIC

EXISTING R/W

LEGEND

PIPE UNDERDRAIN 6-INCH PERFORATED

PIPE UNDERDRAIN 8-INCH PERFORATED

REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN 6-INCH

APRON ENDWALL FOR PIPE UNDERDRAIN 8-INCH

RT — SUGGESTED LOCATION OF RELIEF TRENCH (USED FOR QUANTITY COMPUTATIONS. EXACT NUMBER AND LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.)

C — CAPPED END OF PIPE UNDERDRAIN (INCIDENTAL TO PIPE UNDERDRAIN ITEMS)

TAP CONNECTION TO MEDIAN INLET OR MANHOLE USING PIPE UNDERDRAIN 6-INCH UNPERFORATED (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)

U.E. 881.17 +/- — INVERT ELEVATION OF UNDERDRAIN TAP CONNECTION (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)

NOTE:
PIPE UNDERDRAIN SLOPE SHALL BE A MINIMUM OF 0.25%

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER AND PIPE UNDERDRAIN PLAN	SHEET 83	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_022501-SS.DWG
LAYOUT NAME - 05

PLOT DATE : 7/21/2023 7:23 AM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

AT&T WISCONSIN -
COMMUNICATION

RT

34'WB' 35'WB' 36'WB' 37'WB' 38'WB' 39'WB'

U.E. 863.60 +/-

STH 190 (CAPITOL DRIVE)

WISDOT -
SIGNALS

STH 190 (CAPITOL DRIVE)

34'EB' 35'EB' 36'EB' 37'EB' 38'EB' 39'EB'

TDS -
COMMUNICATION

WE ENGERGIES -
ELECTRIC

EXISTING R/W

TDS -
COMMUNICATION

MIDWEST FIBER NETWORKS -
COMMUNICATION

LEGEND

- PIPE UNDERDRAIN 6-INCH PERFORATED
- PIPE UNDERDRAIN 8-INCH PERFORATED
- REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN 6-INCH
- APRON ENDWALL FOR PIPE UNDERDRAIN 8-INCH
- RT — SUGGESTED LOCATION OF RELIEF TRENCH (USED FOR QUANTITY COMPUTATIONS. EXACT NUMBER AND LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.)
- C — CAPPED END OF PIPE UNDERDRAIN (INCIDENTAL TO PIPE UNDERDRAIN ITEMS)
- TAP CONNECTION TO MEDIAN INLET OR MANHOLE USING PIPE UNDERDRAIN 6-INCH UNPERFORATED (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)
- U.E. 881.17 +/- — INVERT ELEVATION OF UNDERDRAIN TAP CONNECTION (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)

NOTE:
PIPE UNDERDRAIN SLOPE SHALL BE A MINIMUM OF 0.25%

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	STORM SEWER AND PIPE UNDERDRAIN PLAN	SHEET 84	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_022501-SS.DWG
LAYOUT NAME - 06

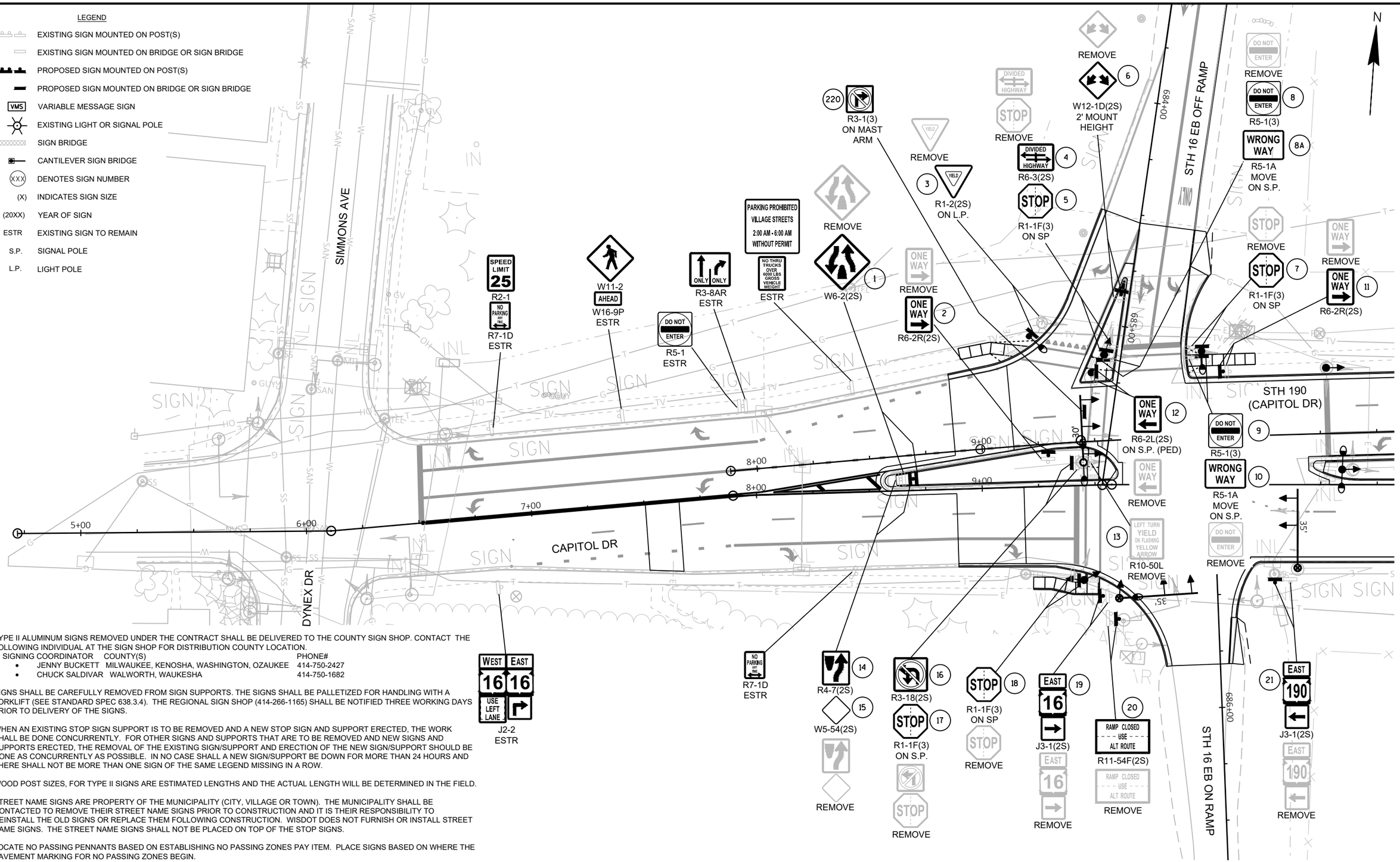
PLOT DATE : 7/21/2023 7:23 AM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:40 FT

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE



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	COUNTY(S)	PHONE#
• JENNY BUCKETT	MILWAUKEE, KENOSHA, WASHINGTON, OZAUKEE	414-750-2427
• CHUCK SALDIVAR	WALWORTH, WAUKESHA	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.

LOCATE NO PASSING PENNANTS BASED ON ESTABLISHING NO PASSING ZONES PAY ITEM. PLACE SIGNS BASED ON WHERE THE PAVEMENT MARKING FOR NO PASSING ZONES BEGIN.

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

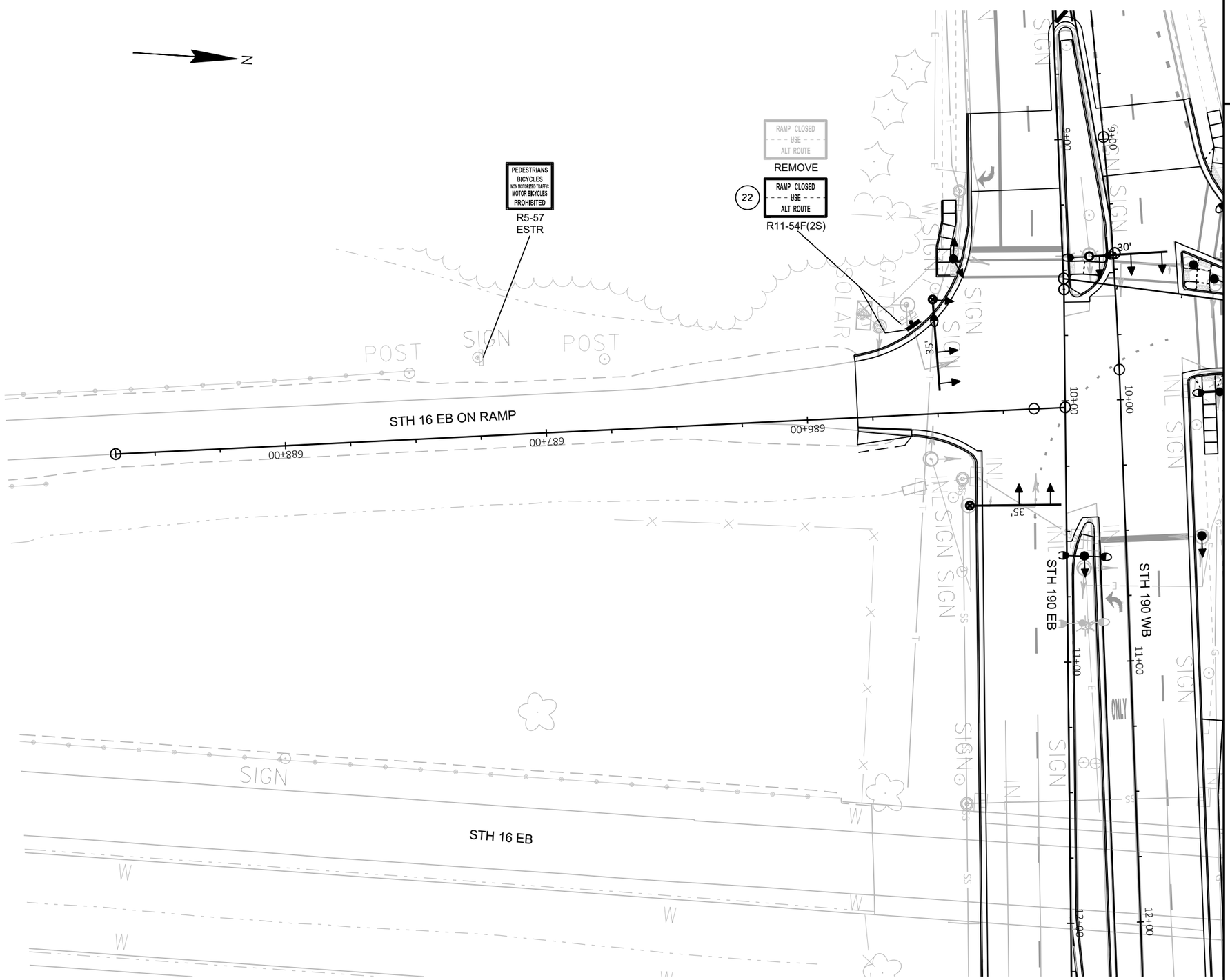
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 85	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 01
PLOT DATE : 6/13/2023 11:20 AM
PLOT BY : MARTENS, KAREN L
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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE


N
PEDESTRIANS
BICYCLES
NON MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED
R5-57
ESTR
RAMP CLOSED
USE
ALT ROUTE
REMOVE
22
RAMP CLOSED
USE
ALT ROUTE
R11-54F(2S)
POST
SIGN
POST
STH 16 EB ON RAMP
687+00
688+00
686+00
SIGN
SIGN
SIGN

2

N

EAST
190
J3-1
ESTR

WRONG WAY
R5-1A
ESTR

Milwaukee
Downtown
Pewaukee
ESTR

WRONG WAY
R5-1A
ESTR

ONLY
R3-8LA
ESTR

SIS
GAS
ESTR

STH 16 EB OFF RAMP

STH 190 WB

STH 16 EB

9+00
10+00
11+00
12+00
684+00
685+00

30'

SIGN
BERM
RIPRAP
POST
INL
FO
TV
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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

SHEET 1B OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 87	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 1B

PLOT DATE : 6/13/2023 11:20 AM PLOT BY : MARTENS, KAREN L 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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

STH 16 EB
STH 16 WB
STH 16 WB ON RAMP
STH 190 WB
STH 190 EB
STH 16 WB OFF RAMP

11+00 12+00 13+00 14+00 15+00 16+00 685+00

23 REMOVE
R4-7(2S) ON S.P.

24 25 REMOVE
STOP
R1-1F(3) ON SP

26 REMOVE
R3-1(2S)

27 I55-56 MOVE

28 Oconomowoc
D1-1
Oconomowoc
REMOVE

29 EAST 190
J4-1(2S)
EAST 190
REMOVE

30 SPEED LIMIT 25
W3-5(3)

31 32 REMOVE
EAST 16
J3-1(2S)

33 SPEED LIMIT 25
W3-5(3)

Waukesha Co Tech College
ESTR

35 STOP
41
R1-1F(3) ON S.P.

37 53 REMOVE
R4-7(2S) ON S.P.

34 RAMP CLOSED USE ALT ROUTE
REMOVE
R11-54F(2S)

36 ONE WAY
R6-2L(2S)

43A DO NOT ENTER
R5-1

43B WRONG WAY
R5-1A MOVE

43 R3-1
REMOVE

38 WEST 16
J3-1(2S)

39 40 WEST 16
J3-1 REMOVE

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

221 R3-1(2S)

222 R3-1(3) ON MAST ARM

44 ONE WAY
R6-2L(2S) ON S.P.

ONE WAY
REMOVE

45 W12-1D(2S) 2' MOUNT HEIGHT

STOP 217
R1-1F(3)

STOP
REMOVE

55 56 W3-3
REMOVE

57 STOP
R1-1F(3) ON S.P.

58 WEST 16
J3-1(2S)

RAMP CLOSED USE ALT ROUTE
R11-54F ESTR

54 STOP
R1-1F(3)

59 R3-2(3)

ONE WAY
REMOVE

51 DO NOT ENTER
R5-1(3)
DO NOT ENTER
REMOVE

52 WRONG WAY
R5-1A(2S) MOVE ON S.P.

61 ONE WAY
R6-2R(2S)

ONE WAY
R6-2R REMOVE

46 DIVIDED HIGHWAY
R6-3(2S)

47 STOP
R1-1F(3) ON SP

48 STOP
R1-1
DIVIDED HIGHWAY
R6-3 REMOVE

49 STOP
R1-1 REMOVE

50 STOP
R1-1F(3) ON SP

60 EAST 190
J3-1(2S)
EAST 190
REMOVE

SHEET 2 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 88	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 02

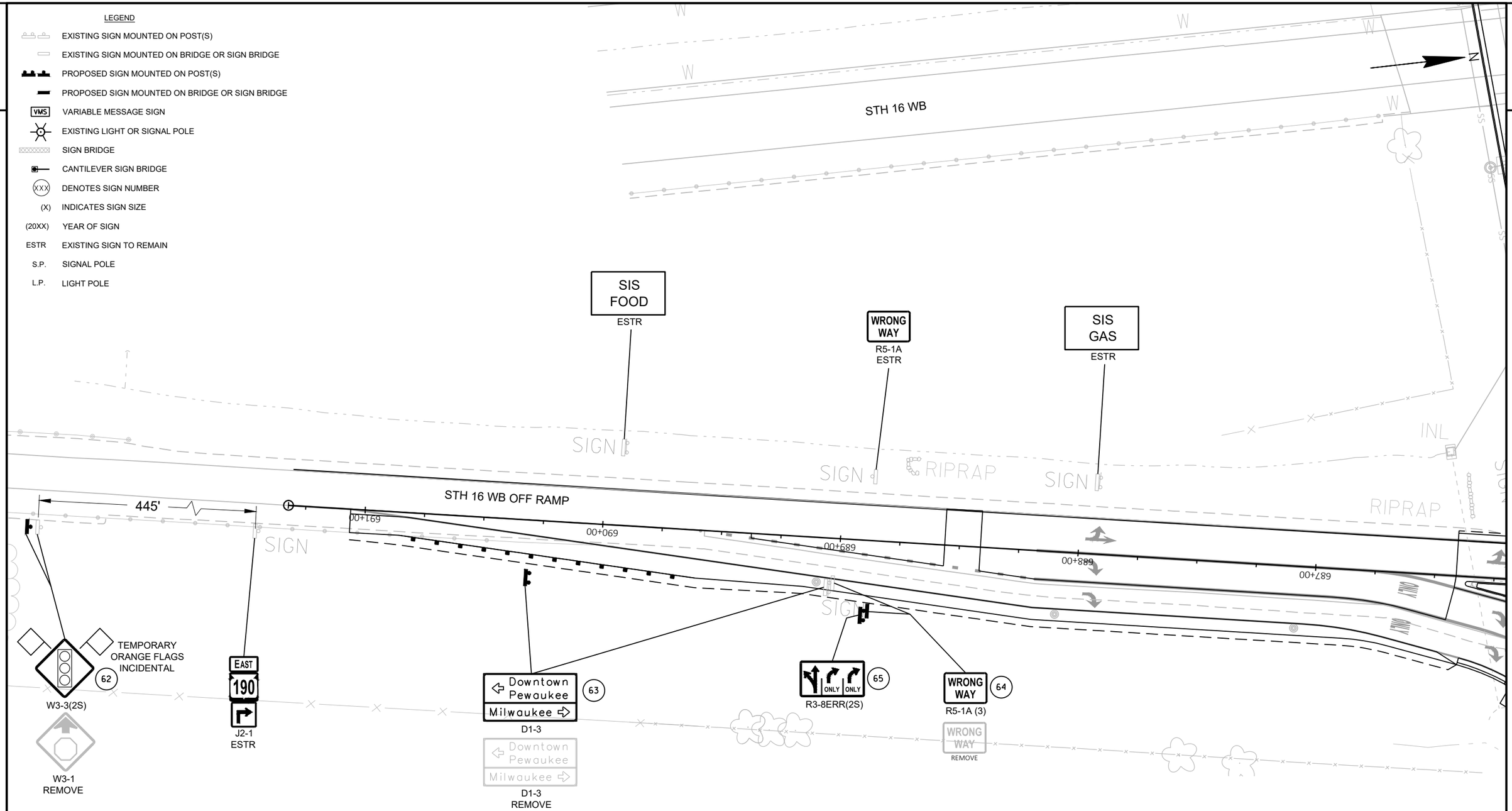
PLOT DATE : 6/13/2023 11:20 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE



SHEET 2A OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 89	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 2A

PLOT DATE : 6/13/2023 11:20 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

STH 16 WB

STH 190 WB

STH 16 WB ON RAMP

13+00

14+00

15+00

16+00

684+00

685+00

686+00

40'

SIGN POST

SOLAR GATE

INL

18" RCP

PEDESTRIANS
BICYCLES
NON MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED

R5-57
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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

SHEET 2B OF 20

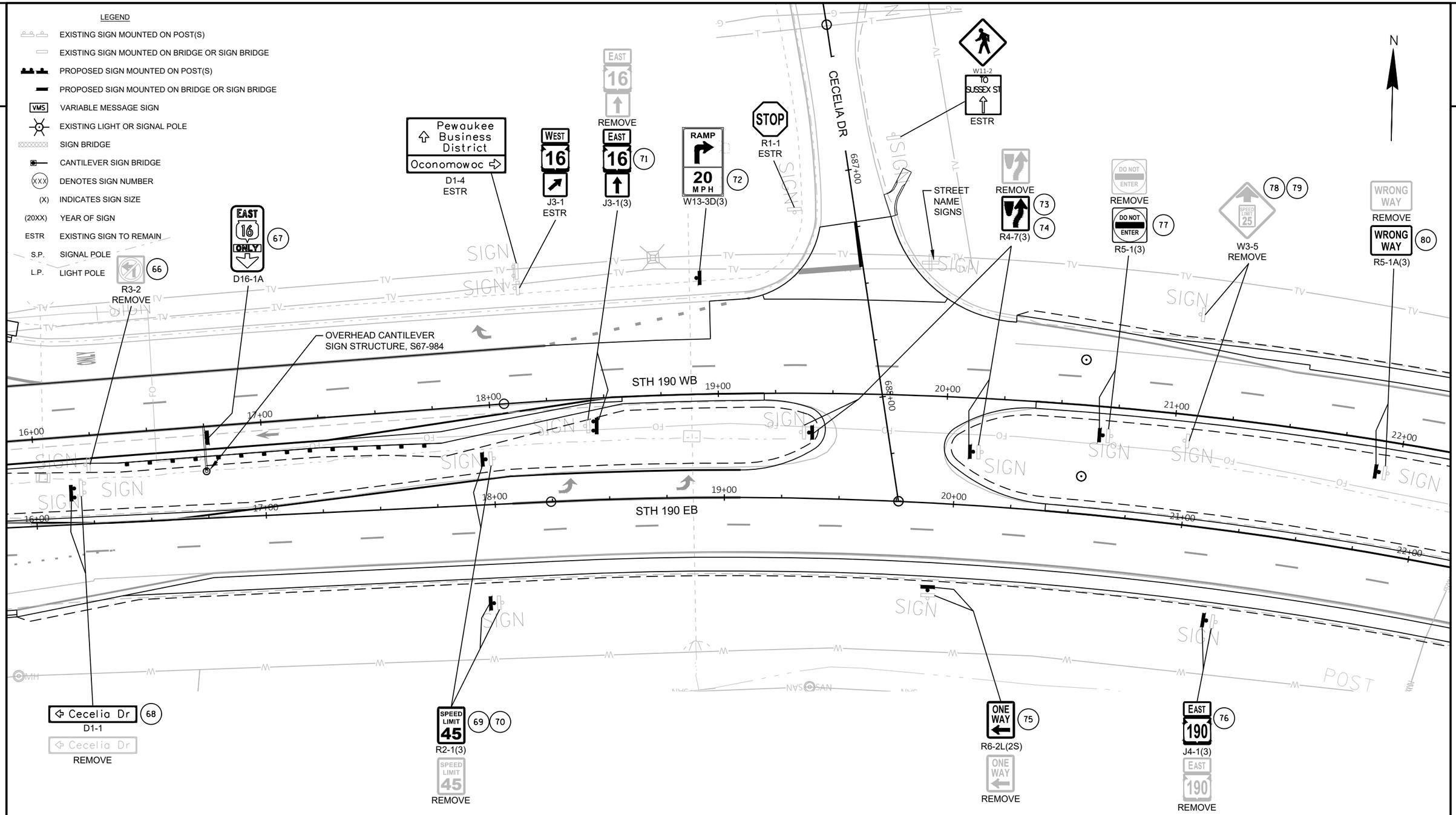
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 90	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 2B

PLOT DATE : 6/13/2023 11:20 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE



SHEET 3 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 91 E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 03

PLOT DATE : 6/13/2023 11:20 AM PLOT BY : MARTENS, KAREN L 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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

N

CECELIA DR

STH 190 WB

STH 190 EB

22+00 23+00 24+00 25+00 26+00 27+00 28+0

81 RAMP 20 MPH
W13-3
REMOVE

Cecelia Dr
REMOVE

83 Cecelia Dr
D1-1

JCT 16
REMOVE

85 JCT 16
85A
J1-1(3)

82 Brookfield 5
Milwaukee 11
D2-2

Brookfield 7
Milwaukee 13
REMOVE

84 WRONG WAY
R5-1A(3)

WRONG WAY
REMOVE

86 DO NOT ENTER
R5-1(3)

DO NOT ENTER
REMOVE

SHEET 4 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 92	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 04

PLOT DATE : 6/13/2023 11:20 AM PLOT BY : MARTENS, KAREN L 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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

N

ONE WAY
REMOVE

ONE WAY 87
R6-2L(2S)

STH 190 WB

STH 190 EB

28+00 29+00 30+00 31+00 32+00 33+00

88 89
R4-7(3)
REMOVE

10+00

YIELD
R1-2
(PRIVATE SIGN)
ESTR
DO NOT
REPLACE

SPEED LIMIT 45 90 91
R2-1(3)

SPEED LIMIT 45
REMOVE

SHEET 5 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 93	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 05

PLOT DATE : 6/13/2023 11:20 AM PLOT BY : MARTENS, KAREN L 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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

N

2

STH 190 WB

34+00 35+00 36+00 37+00 38+00 39+00

INL

SS

FO

BEGIN LEFT TURN LANE

R3-20L
ESTR

POST

SIGN

SIGN

SIGN

SIGN

34+00 35+00 36+00 37+00 38+00 39+00

STH 190 EB

92 93

W3-3(3)

REMOVE

Georgetowne Dr
Forest Grove Dr
NEXT SIGNAL

D1-65(MOD)
ESTR

SHEET 6 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 94	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 06

PLOT DATE : 6/13/2023 11:20 AM PLOT BY : MARTENS, KAREN L 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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

N

SPEED LIMIT 45
R2-1
ESTR

WEST 190
J4-1
ESTR

STH 190 WB

STH 190 EB

40+00 41+00 42+00 43+00 44+00 45+00

CECELIA DR

FOREST GROVE DR

94 ⇦ Forest Grove Dr / Cecelia Dr ⇨
M1-94H
ON MAST ARM

95 ONE WAY
R6-2L(2S)
ON S.P.

96 YIELD
R1-2(2S)
ON L.P.

REMOVE

97 98 STOP
R1-1F(3)
ON S.P.

99 DIVIDED HIGHWAY
R6-3(2S)
ON S.P.

190 Capitol Dr 218
M1-94S
ON MAST ARM

111 STOP
R1-1F(3)
ON S.P.

115 LEFT TURN YIELD ON FLASHING YELLOW ARROW
R10-50L
REMOVE

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

109
R4-7(2S)
ON S.P.

110 116 DO NOT ENTER
R5-1(3)
ON S.P.

101
R4-7(3)
ON S.P.

108 LEFT TURN YIELD ON FLASHING YELLOW ARROW
R10-50L
REMOVE

106 107 DO NOT ENTER
REMOVE

112 DIVIDED HIGHWAY
R6-3(2S)
ON S.P.

102 DIVIDED HIGHWAY
R6-3(2S)
ON S.P.

126 LEFT TURN YIELD ON FLASHING YELLOW ARROW
R10-50L
REMOVE

117
R4-7(3)
ON S.P.

113 114 STOP
R1-1F(3)
ON S.P.

125
R4-7(2S)
ON S.P.

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

118 ONE WAY
R6-2L(2S)
ON S.P.

124 ⇦ Cecelia Dr / Forest Grove Dr ⇨
M1-94H
ON MAST ARM

103 104 STOP
R1-1F(3)
ON S.P.

105 STOP
R1-1F(3)
ON S.P.

123 DIVIDED HIGHWAY
R6-3(2S)
ON S.P.

121 122 STOP
R1-1F(3)
ON S.P.

190 120
J13-1
REMOVE

219 Capitol Dr
M1-94S
ON MAST ARM

223 ONLY
R3-8LF(2S)

WRONG WAY
R5-1A
ESTR

BEGIN LEFT TURN LANE
R3-20LL
ESTR

RIPRAP

SIGN

40' 20' 125' 20'

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 95	E

SHEET 7 OF 20

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 07

PLOT DATE : 6/13/2023 11:21 AM PLOT BY : MARTENS, KAREN L 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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

N

STH 190 WB

45+00 46+00 47+00 48+00 49+00 50+00 51+00

BEGIN LEFT TURN LANE
R3-20LL
ESTR

WRONG WAY
R5-1A
ESTR

BEGIN LEFT TURN LANE
R3-20L
ESTR

SIGN

STH 190 EB

45+00 46+00 47+00 48+00 49+00 50+00 51+00

Westfield Way
NEXT SIGNAL
D1-65
ESTR

SPEED LIMIT 45
R2-1
ESTR

BEGIN LEFT TURN LANE
R3-20L
ESTR

Westfield Way
NEXT SIGNAL
D1-65
ESTR

WRONG WAY
R5-1A
ESTR

BEGIN LEFT TURN LANE
R3-20LL
ESTR

SHEET 8 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 96	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 08

PLOT DATE : 6/13/2023 11:21 AM PLOT BY : MARTENS, KAREN L 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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

N

WESTFIELD WAY

STH 190 WB

STH 190 EB

51+00 52+00 53+00 54+00 55+00 56+00

⇦ Forest Grove Dr
Georgetowne Dr ⇨
NEXT SIGNAL
D1-65(MOD)
ESTR

127 Westfield Way
M1-94H
ON MAST ARM

128 190
J13-1
REMOVE

129 149 STOP
R1-1F(3)
ON S.P.

130 ONE WAY
R6-2L(2S)

131 R4-7(3)
ON S.P.

REMOVE

132 133 STOP
REMOVE

STOP
R1-1F(3)
ON S.P.

134 LEFT TURN YIELD ON FLASHING YELLOW ARROW
R10-50L
REMOVE

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

REMOVE

137 R4-7(2S)
ON S.P.

140 190 Capitol Dr
M1-94S
ON MAST ARM

147 LEFT TURN YIELD ON FLASHING YELLOW ARROW
R10-50L
REMOVE

148 R4-7(2S)
ON S.P.

REMOVE

DO NOT ENTER
REMOVE

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

NO PARKING ANY TIME
R7-1L
ESTR

150 190 Capitol Dr
M1-94S
ON MAST ARM

152 STOP
R1-1F(3)
ON S.P.

STOP
REMOVE

146 LEFT TURN YIELD ON FLASHING YELLOW ARROW
R10-50L
REMOVE

DO NOT ENTER
R5-1
ESTR

STOP
R1-1F
ESTR

R4-7
ESTR

144 Westfield Way
M1-94H
ON MAST ARM

136 LEFT TURN YIELD ON FLASHING YELLOW ARROW
R10-50L
REMOVE

190 143
J13-1
REMOVE

145 ONE WAY
R6-2L(2S)
ON S.P.

ONE WAY
REMOVE

Willow Grove Dr
SOUTH ONLY
ESTR

141 142 STOP
R1-1F(3)
ON S.P.

STOP
REMOVE

139 STOP
R1-1F(3)
ON S.P.

STOP
REMOVE

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

DO NOT ENTER
REMOVE

WRONG WAY
R5-1A
ESTR

25' 45' 30' 40'

SHEET 9 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 97	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 09

PLOT DATE : 6/13/2023 11:21 AM PLOT BY : MARTENS, KAREN L 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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

N

STH 190 WB

57+00 58+00 59+00 60+00 61+00 62+00

SPEED LIMIT 45
R2-1
ESTR

Westfield Way
NEXT SIGNAL
D1-65
ESTR

ONE WAY
R6-2R
ESTR

RIGHT TURN ONLY
R3-53R
ESTR

Westfield Way
SOUTH
ESTR

BEGIN LEFT TURN LANE
R3-20LL
ESTR

DO NOT ENTER
R5-1
ESTR

STH 190 EB

WRONG WAY
R5-1A
ESTR

R3-2
ESTR

R3-2
ESTR

R3-4
ESTR

R4-7
ESTR

DO NOT ENTER
R5-1
ESTR

ONE WAY
R6-2R
ESTR

DO NOT ENTER
R5-1
ESTR

WILLOW GROVE DR

BEGIN LEFT TURN LANE
R3-20L
ESTR

Meadowcreek Dr
NEXT SIGNAL
D1-65
ESTR

RIGHT TURN ONLY
R3-53R
ESTR

STOP
R1-1
ESTR

SHEET 10 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 98	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 10

PLOT DATE : 6/13/2023 11:21 AM PLOT BY : MARTENS, KAREN L 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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

N

Westfield Way ↘ ESTR

Willow Grove Drive ↙ ESTR

Willow Grove Drive ESTR

Willow Grove Drive ESTR

BEGIN LEFT TURN LANE
R3-20L
ESTR

STH 190 WB

63+00 64+00 65+00 66+00 67+00 68+00

STH 190 EB

63+00 64+00 65+00 66+00 67+00 68+00

Meadowcreek Drive NEXT SIGNAL
ESTR

BEGIN LEFT TURN LANE
R3-20LL
ESTR

JCT 164
J1-1
ESTR

WRONG WAY
R5-1A
ESTR

SHEET 11 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 99	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 11

PLOT DATE : 6/13/2023 11:21 AM PLOT BY : MARTENS, KAREN L 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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

N

155 ONE WAY — R6-2L(2S)

156 190 — J13-1 REMOVE

157 TURNING VEHICLES TO — R10-15R

REMOVE

158 159 STOP — R1-1F(3) ON S.P.

163 190 Capitol Dr — M1-94S ON MAST ARM

REMOVE STOP — 165 R1-1F(3) ON S.P.

Pewaukee POPULATION 8166 — I2-3 ESTR

WRONG WAY — R5-1A ESTR

PARKING PROHIBITED VILLAGE STREETS 2-6 AM WITHOUT PERMIT — ESTR

160 DO NOT ENTER — R5-1(3) ON S.P.

161 LEFT TURN YIELD ON FLASHING YELLOW ARROW — R10-50L REMOVE

162 — R4-7(2S) ON S.P.

REMOVE

164 DO NOT ENTER — R5-1(3) ON S.P.

REMOVE

15'

40'

69+00 70+00 71+00 72+00 73+00 74+00

STH 190 WB

STOP — R1-1F ESTR

154 Meadowcreek Dr — M1-94H ON MAST ARM

176 LEFT TURN YIELD ON FLASHING YELLOW ARROW — R10-50L REMOVE

DO NOT ENTER — R5-1 ESTR

166 LEFT TURN YIELD ON FLASHING YELLOW ARROW — R10-50L REMOVE

R4-7 ESTR

ONE WAY — REMOVE

STOP — R1-1F ESTR

DO NOT ENTER — R5-1 ESTR

R4-7 ESTR

174 ONE WAY — R6-2L(2S) ON S.P.

STH 190 EB

170 LEFT TURN YIELD ON FLASHING YELLOW ARROW — R10-50L REMOVE

DO NOT ENTER — REMOVE

R4-7 ESTR

DO NOT ENTER 173 — R5-1(3) ON S.P.

175 Meadowcreek Dr — M1-94H ON MAST ARM

30'

168 STOP — R1-1F(3) ON S.P.

STOP — REMOVE

167 DO NOT ENTER — R5-1(3) ON S.P.

DO NOT ENTER — REMOVE

MEADOWCREEK DR

STOP — R1-1F ESTR

190 172 — J13-1 REMOVE

171 STOP — R1-1F(3) ON S.P.

STOP — REMOVE

169 190 Capitol Dr — M1-94S ON MAST ARM

NORTH 164 | EAST 190 | SOUTH 164 — J2-3 ESTR

SHEET 12 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 100	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 12

PLOT DATE : 6/13/2023 11:21 AM PLOT BY : MARTENS, KAREN L 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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

N

STH 190 WB

74+00 75+00 76+00 77+00 78+00 79+00 80+00

BEGIN LEFT TURN LANE
R3-20LL
ESTR

RIGHT LANE MUST TURN RIGHT
R3-7R
ESTR

Meadowcreek Drive NEXT SIGNAL
D1-65
ESTR

Meadowcreek Dr NEXT SIGNAL
D1-65
ESTR

BEGIN LEFT TURN LANE
R3-20L
ESTR

STH 190 EB

74+00 75+00 76+00 77+00 78+00 79+00 80+00

SPEED LIMIT 45
R2-1
ESTR

NORTH 164
J3-1
ESTR

BEGIN LEFT TURN LANE
R3-20L
ESTR

SOUTH 164
J3-1
ESTR

WRONG WAY
R5-1A
ESTR

2

SHEET 13 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 101	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 13

PLOT DATE : 6/13/2023 11:21 AM PLOT BY : MARTENS, KAREN L 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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

N

STH 190 WB

STH 190 EB

STH 164

80+00 81+00 82+00 83+00 84+00 85+00

SPEED LIMIT 45 — R2-1 ESTR

WEST 190 — J4-1 ESTR (177)

WEST 190 — J4-1 REMOVE

ADOPT A HIGHWAY — I55-56 ESTR

ONE WAY — REMOVE

178 STOP — R1-1F(3) ON S.P.

STOP — REMOVE

179 W12-1D(2S) 2' MOUNT HEIGHT

180 ONE WAY — R6-2L(2S) ON S.P.

55'

206 STOP / 207 — R1-1F(3) ON S.P.

STOP — REMOVE

204 ONE WAY — R6-2L(2S)

202 STOP / 203 — R1-1F(3) ON S.P.

201 W12-1D(2S) 2' MOUNT HEIGHT

205 — R4-7(3) ON S.P.

REMOVE

200 DO NOT ENTER — R5-1(3) ON S.P.

183 DO NOT ENTER — R5-1(3) ON S.P.

DO NOT ENTER — REMOVE

198 STOP — R1-1F(3) ON S.P.

STOP — R1-1F ESTR

STOP — REMOVE

182 — R4-7(3) ON S.P.

REMOVE

DO NOT ENTER — R5-1

R3-4 ESTR

DO NOT ENTER — REMOVE

DO NOT ENTER — REMOVE

DO NOT ENTER — REMOVE

181A — R3-4(2S)

EXISTING SIGN STRUCTURE TO REMAIN S-67-257

181 STOP — R1-1F(3) ON S.P.

STOP — R1-1F ESTR

STOP — REMOVE

191 DO NOT ENTER — R5-1(3) ON S.P.

192 DO NOT ENTER — R5-1(3) ON S.P.

199 — R4-7(3) ON S.P.

REMOVE

197 — R3-4(2S)

45'

189 — R4-7(3) ON S.P.

REMOVE

BEGIN LEFT TURN LANE — R3-20LL ESTR

ONLY — R3-5L ESTR

NORTH 164 — J3-1 ESTR

185 W12-1D(2S) 2' MOUNT HEIGHT

REMOVE

184 / 186 STOP — R1-1F(3) ON S.P.

STOP — REMOVE

190 ONE WAY — R6-2L(2S)

ONE WAY — REMOVE

187 — R3-4(2S)

188 STOP — R1-1F(3) ON S.P.

STOP — REMOVE

193 / 195 STOP — R1-1F(3) ON S.P.

STOP — REMOVE

196 ONE WAY — R6-2L(2S) ON S.P.

ONE WAY — REMOVE

194 W12-1D(2S) 2' MOUNT HEIGHT

SHEET 14 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 102	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 14

PLOT DATE : 6/13/2023 11:21 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

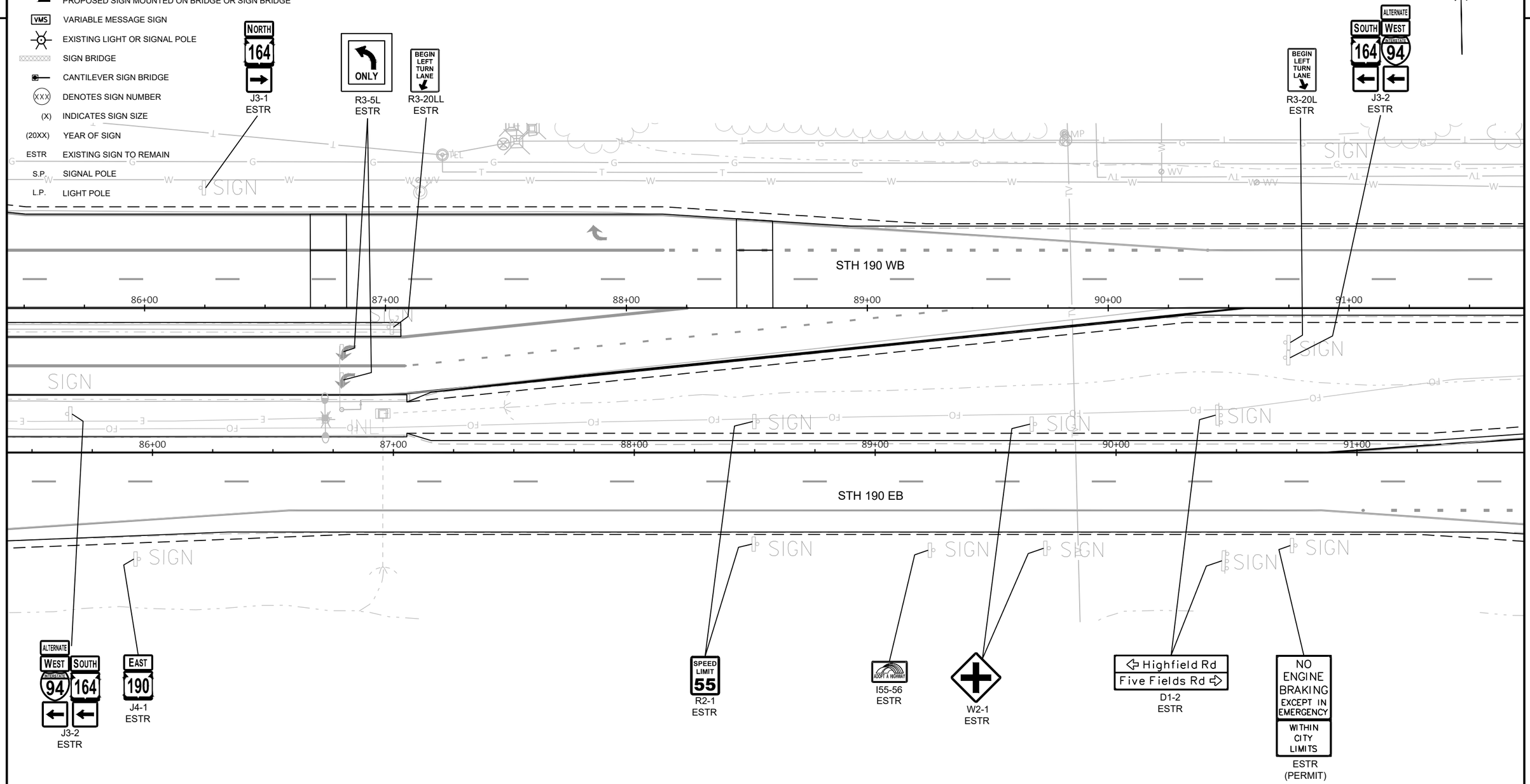
WISDOT/CADDS SHEET 42

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

N



SHEET 15 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 103	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 15

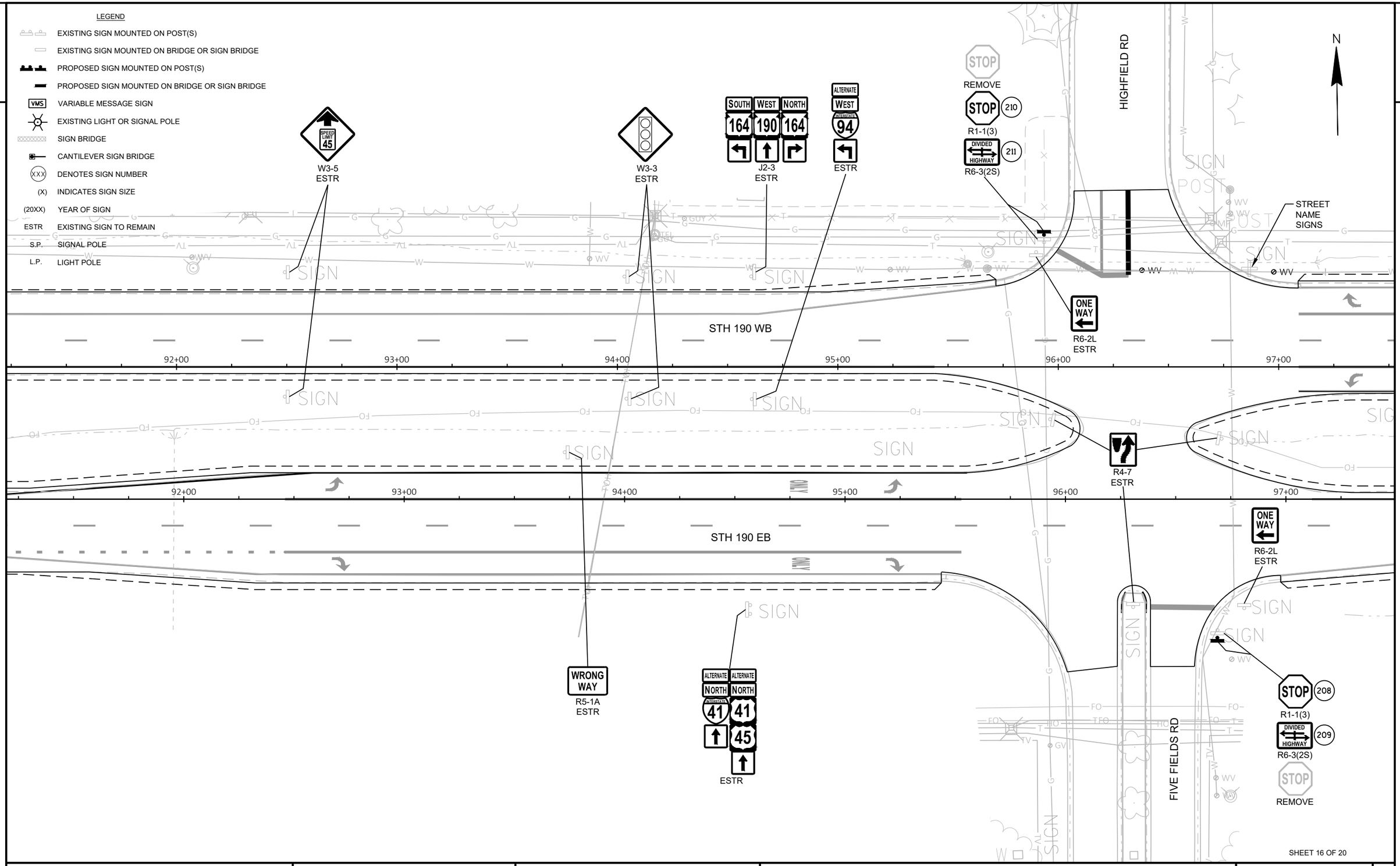
PLOT DATE : 6/13/2023 11:21 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE



SHEET 16 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 104	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 16

PLOT DATE : 6/13/2023 11:21 AM PLOT BY : MARTENS, KAREN L 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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

N

ALTERNATE WEST 94 213
REMOVE

JCT 164
J1-1
ESTR

STH 190 WB

98+00 99+00 100+00 101+00 102+00 103+00

SIGN SIGN SIGN

STH 190 EB

DO NOT ENTER
R5-1
ESTR

212 WRONG WAY
R5-1A(3)

WRONG WAY
REMOVE

2

SHEET 17 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 105	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 17

PLOT DATE : 6/13/2023 11:21 AM PLOT BY : MARTENS, KAREN L 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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

N

Five Fields Rd
Highfield Rd
D1-2
ESTR

W2-1
ESTR

STH 190 WB

103+00 104+00 105+00 106+00 107+00 108+00 109+00

103+00 104+00 105+00 106+00 107+00 108+00 109+00

STH 190 EB

2

SHEET 18 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 106	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 18

PLOT DATE : 6/13/2023 11:21 AM PLOT BY : MARTENS, KAREN L 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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN
- ESTR — EXISTING SIGN TO REMAIN
- S.P. — SIGNAL POLE
- L.P. — LIGHT POLE

N

2

ONE WAY 214

R6-2L(2S)

STH 190 WB

109+00 110+00 111+00 112+00 113+00 114+00

215 216

R4-7(3)

STH 190 EB

109+00 110+00 111+00 112+00 113+00 114+00

SHEET 19 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 107	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 19

PLOT DATE : 6/13/2023 11:21 AM PLOT BY : MARTENS, KAREN L 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

VMS VARIABLE MESSAGE SIGN

EXISTING LIGHT OR SIGNAL POLE

SIGN BRIDGE

CANTILEVER SIGN BRIDGE

XXX DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

(20XX) YEAR OF SIGN

ESTR EXISTING SIGN TO REMAIN

S.P. SIGNAL POLE

L.P. LIGHT POLE

NO SIGNS
THIS SHEET

N

2

STH 190 WB

113+00 114+00 115+00 116+00

FO

113+00 114+00 115+00 116+00 117+00 118+00 1

STH 190 EB

G

SHEET 20 OF 20

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 108	E

FILE NAME : N:\PDS\C3D\CAD\20250703\SIGN\023201_PS_2025-07-73.DWG
LAYOUT NAME - 20

PLOT DATE : 6/13/2023 11:22 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

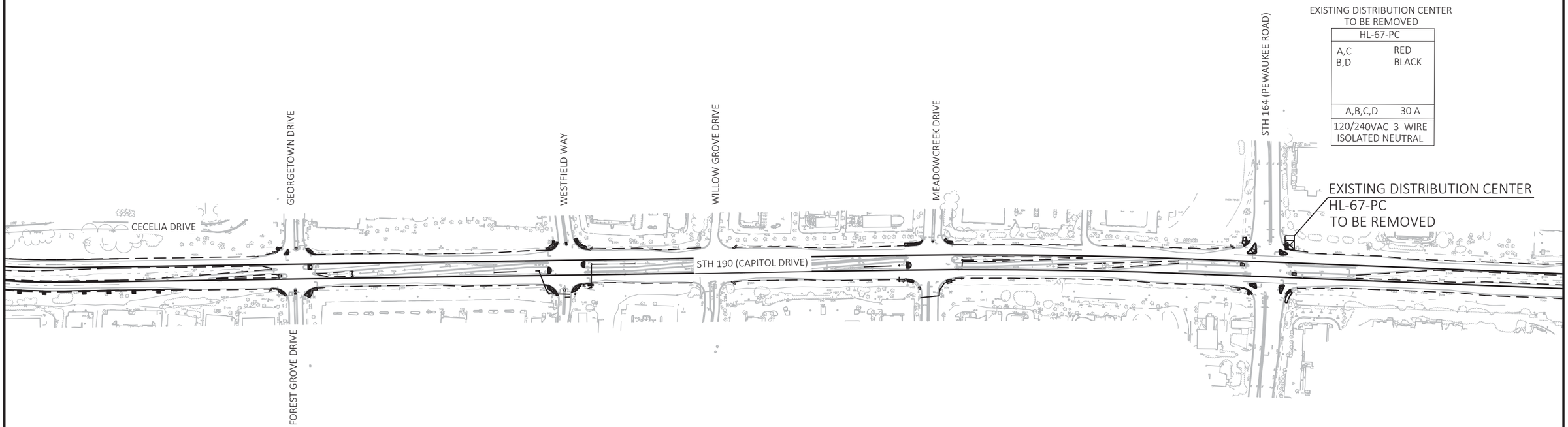
WISDOT/CADDS SHEET 42

2

N

EXISTING DISTRIBUTION CENTER
TO BE REMOVED

HL-67-PC	
A,C	RED
B,D	BLACK
A,B,C,D	30 A
120/240VAC 3 WIRE ISOLATED NEUTRAL	



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	LIGHTING OVERVIEW	SHEET 109	E

FILE NAME : W:\PROJECTS\19254\2025-07-73\04_CADD_01\CADD_SHEETS\023601_LP.DWG
LAYOUT NAME - Overview

PLOT DATE : 11/10/2022 2:49 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : Custom

GENERAL NOTES

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

LOCATIONS OF THE PVC CONDUITS ARE IDENTIFIED IN THE PLANS WHERE THEY ARE REQUIRED. APPROPRIATE ADJUSTMENT ON CONDUIT LOCATIONS MAY BE MADE IF THE FIELD CONDITIONS ARE SUCH THAT THE CONDUIT CANNOT BE INSTALLED AT THE SPECIFIED LOCATIONS. FIELD MARK EACH CONDUIT LOCATION IN RED.

THE TRENCH SHALL NOT BE BACK FILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL CONDUITS SHALL BE CAPPED OR PLUGGED WITH ENGINEER APPROVED FITTINGS IMMEDIATELY AFTER INSTALLATION.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR IMMERSION 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 ALL CONDUITS.

PRIOR TO CONDUIT ACCEPTANCE, ALL CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND BE CAPPED WITH THE APPROPRIATE CAST PLASTIC CAP WHICH FITS SNUGGLY ON THE CONDUIT, BUT EASILY REMOVED IN THE FUTURE. DUCT TAPE OR ANY OTHER CAPPING METHOD IS NOT ACCEPTABLE.

CONDUIT RUNS SHALL BE THE SAME SIZE PIPE FROM ONE END TO THE OTHER (FROM PULL BOX-TO-PULL BOX OR JUNCTION BOX OR BASE-TO-BASE, ETC.) UNLESS OTHERWISE NOTED ON PLANS.

PULL ROPE (3/8-INCH NYLON) SHALL BE INSTALLED IN ALL NEW CONDUITS.

CONTRACTOR SHALL SUPPLY AS-BUILT DRAWING FOR ALL THE WORK BEING DONE.

INSTALLATION OF LATERAL UNDERGROUND CONDUIT UNDER PAVEMENT SHALL BE INSTALLED MINIMUM 30 INCHES BELOW PROPOSED GRADE. CONDUIT LATERALS SHALL BE TRENCHED UNDER PAVEMENT BEFORE PAVEMENT CONSTRUCTION. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ROADWAY CONSTRUCTION FOR CONDUIT LATERALS INSTALLATION.

PITCH ALL CONDUITS TOWARD PULL BOXES. INSTALL A 2" DRAIN DUCT TO STORM SEWER OR DRAIN SUMP AS REQUIRED FOR DRAINAGE. THE 2" DRAIN DUCT OR SUMP IS INCIDENTAL TO THE PULL BOX BID ITEM AND IS NOT SHOWN.

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

HAND DIGGING MAY BE REQUIRED FOR LOCATIONS ADJACENT TO EXISTING GAS AND POWER LINES. HAND EXCAVATION SHOULD BE ANTICIPATED & WILL BE CONSIDERED INCIDENTAL TO THE CONCRETE BASES BID ITEM. COORDINATE ALL WORK NEAR GAS LINE WITH WE ENERGIES.

EXISTING CONDUIT AND CID NO LONGER BEING USED IS ABANDONED IN PLACE. THE CONTRACTOR MAY REMOVE ABANDONED WIRING AT THE CONTRACTOR'S EXPENSE. ABANDONED PULL BOX REMOVAL IS INCIDENTAL TO THE ROAD CONSTRUCTION.

ALL UNDERGROUND WIRING AND CONDUIT FOR POLES BEING REMOVED IS ABANDONED IN PLACE UNLESS NOTED OTHERWISE. CONTRACTOR MAY SALVAGE ABANDONED WIRING AT HIS OWN EXPENSE.

IF CID CONTAINS PHASE CONDUCTOR(S) THAT WILL NOT BE USED FOR FURTHER POLES, I.E. AT THE END OF A CIRCUIT, DO NOT ENERGIZE THE CONDUCTOR(S) LEAVING THE LAST POLE THE PHASE WAS UTILIZED. REMOVE EXCESS CONDUCTOR(S) IN ALL SUBSEQUENT POLES.

SEAL THE ENDS OF ALL CID RACEWAY WITH A UL RECOGNIZED CONDUIT SEALANT. PROVIDE A 1#2" NYLON ROPE EXTENDING BEYOND THE PLUG TO ASSIST IN REMOVING THE PLUG IN THE FUTURE.

SEE DETAIL "CONDUIT DETAILS AT STRUCTURE PARAPET TO ROADWAY BARRIER INTERFACE" WHEN CONDUIT EXITS TO GRADE FROM A BRIDGE PARAPET OR RETAINING WALL. RIGID METALLIC CONDUIT IN CONCRETE BARRIER IS INCIDENTAL TO THE RIGID NONMETALLIC CONDUIT.

PROVIDE MINIMUM CABLE SLACK AS NOTED BELOW:

PULL BOXES:	5-FT ONE WAY IN OR OUT
EMBEDDED JUNCTION BOXES:	3-FT
DISTRIBUTION CENTER/LOAD CENTER:	10-FT

STAGING NOTES

MAINTAIN LIGHTING AT ALL TIMES DURING CONSTRUCTION USING EXISTING LIGHTING, PROPOSED TEMPORARY, FINAL LIGHTING OR COMBINATIONS.

DO NOT REMOVE EXISTING LIGHTING UNTIL THE NEW OR TEMPORARY LIGHTING IS OPERATIONAL. REFER TO DRAWINGS FOR STAGING INFORMATION.

MAINTAINING SYSTEM CONTINUITY SHALL BE INCIDENTAL TO THE "REMOVING LIGHTING UNITS" BID ITEM.

DUE TO THE PHASING OF CONSTRUCTION SOME FINAL LIGHTING UNITS MAY BE ORPHANED UNTIL A LATER STAGE IS COMPLETE. IT IS AT THE DISCRETION OF THE CONTRACTOR TO SCHEDULE THESE ITEMS. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF THE PLACEMENT OF RACEWAY THAT SPANS TWO DIFFERENT PHASES OF CONSTRUCTION.

TEMPORARY OR FINAL LIGHTING MUST ILLUMINATE AN AREA BEFORE EXISTING LIGHTING UNITS IN AN AREA CAN BE REMOVED. THE SCHEDULING OF REMOVAL IS AT THE DISCRETION OF THE CONTRACTOR WITH THE PROVISION THAT LIGHTING OF THE ROADWAY IS PROVIDED AT ALL TIMES.

COORDINATE POLE REMOVAL WITH TRAFFIC CONTROL.

2

CECELIA DRIVE

MH

SIGN

SIGN

MH

INL

SIGN

SIGN

N

34'WB'

36'WB'

38'WB'

STH 190 (CAPITOL DRIVE)

40'

MATCHLINE STA 40'WB'

INL

SIGN

POST

SIGN

SIGN

34'EB'

36'EB'

38'EB'

40'

STH 190 (CAPITOL DRIVE)

SIGN

SIGN

RIPRAP

SIGN

INL

POST

POST

W

W

W

LEGEND

EXISTING WISDOT SIGNAL LIGHTING UNIT

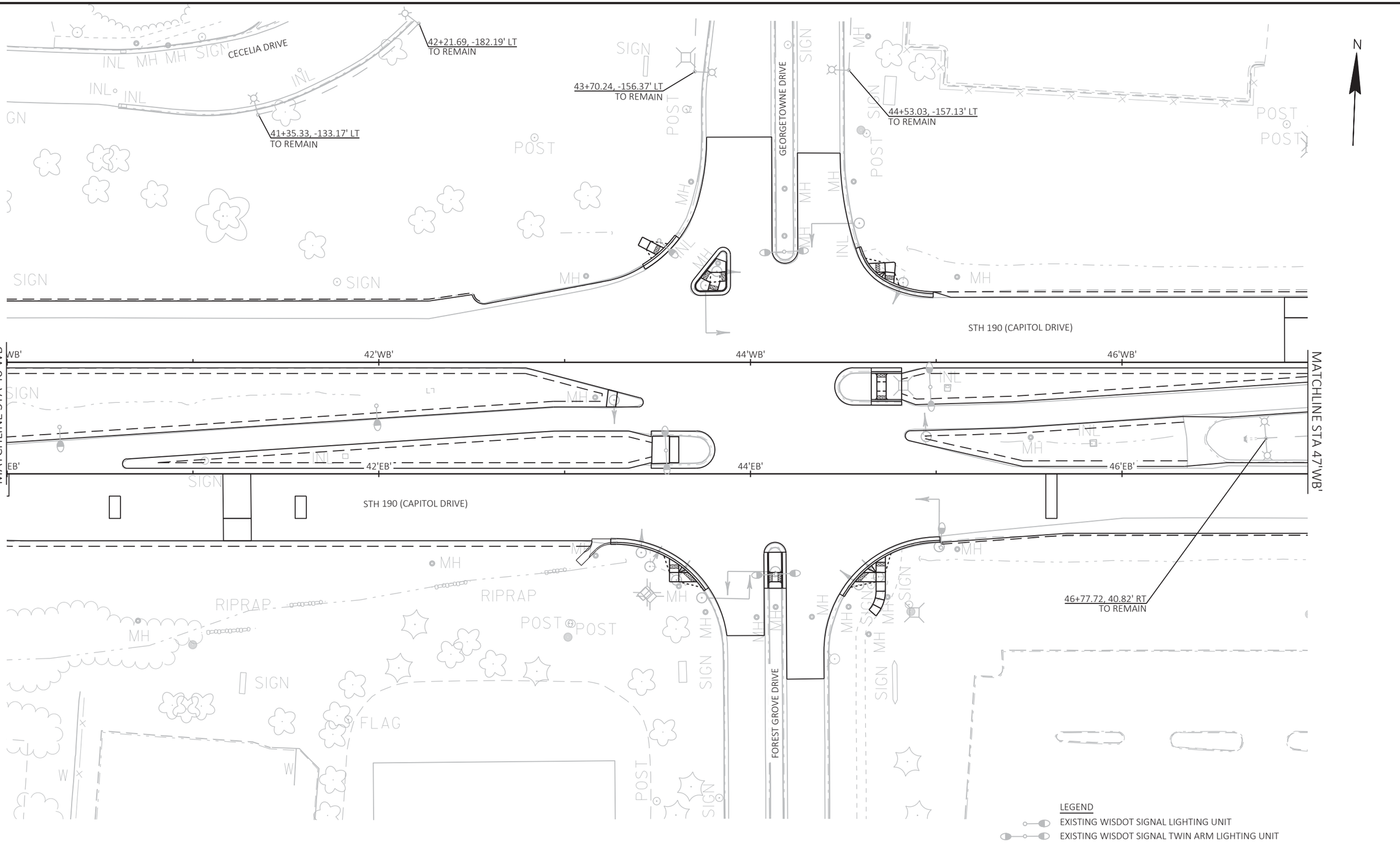
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	LIGHITNG PLAN - REMOVAL	SHEET 111	E

FILE NAME : V:\PROJECTS\19254\2025-07-73\04_CADD_01\CADD_SHEETS\023401_LR.DWG
LAYOUT NAME - 50-05

PLOT DATE : 1/25/2023 2:38 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

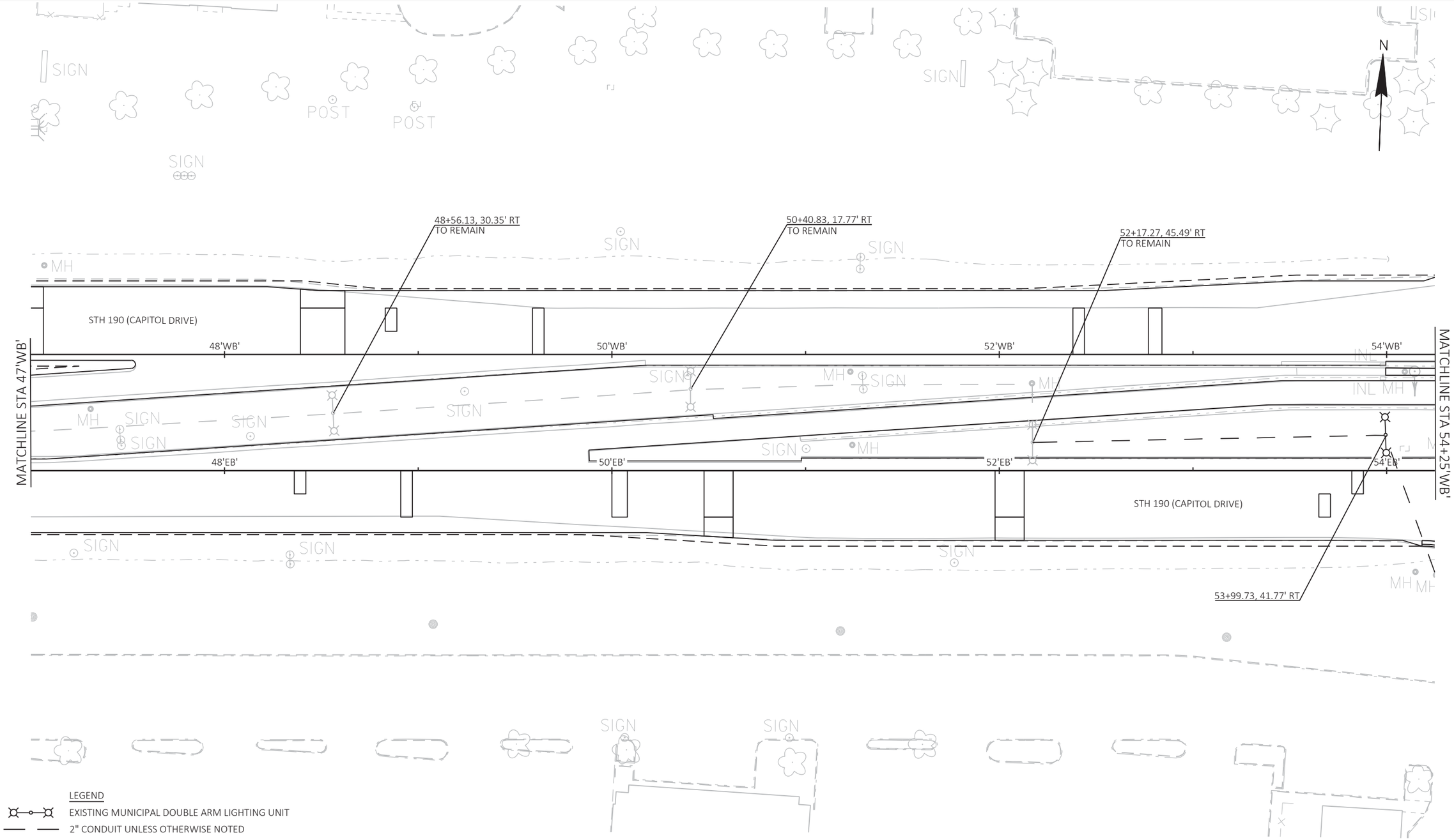


PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	LIGHITNG PLAN - REMOVAL	SHEET 112	E

FILE NAME : V:\PROJECTS\19254\2025-07-73\04_CADD_01\CADD_SHEETS\023401_LR.DWG
LAYOUT NAME - 50-06

PLOT DATE : 1/25/2023 2:38 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	LIGHITNG PLAN - REMOVAL	SHEET 113	E

FILE NAME : V:\PROJECTS\19254\2025-07-73\04_CADD_01\CADD_SHEETS\023401_LR.DWG
LAYOUT NAME - 50-07

PLOT DATE : 1/25/2023 2:38 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

WESTFIELD WAY

55+09.30, -82.61' LT

MATCHLINE STA 54+25 'WB'

MATCHLINE STA 61+25 'WB'

STH 190 (CAPITOL DRIVE)

56'WB' 58'WB' 60'WB'

56'EB' 58'EB' 60'EB'

STH 190 (CAPITOL DRIVE)

56+12.30, 18.48' RT

57+89.55, 18.74' RT
TO REMAIN

59+92.91, 43.19' RT
TO REMAIN

60+98.33, 132.83' RT
TO REMAIN

WESTFIELD WAY

WILLOW GROVE DRIVE

LEGEND

EXISTING WISDOT SIGNAL TWIN ARM LIGHTING UNIT

MUNICIPAL TWIN ARM LIGHTING UNIT

2" CONDUIT UNLESS OTHERWISE NOTED

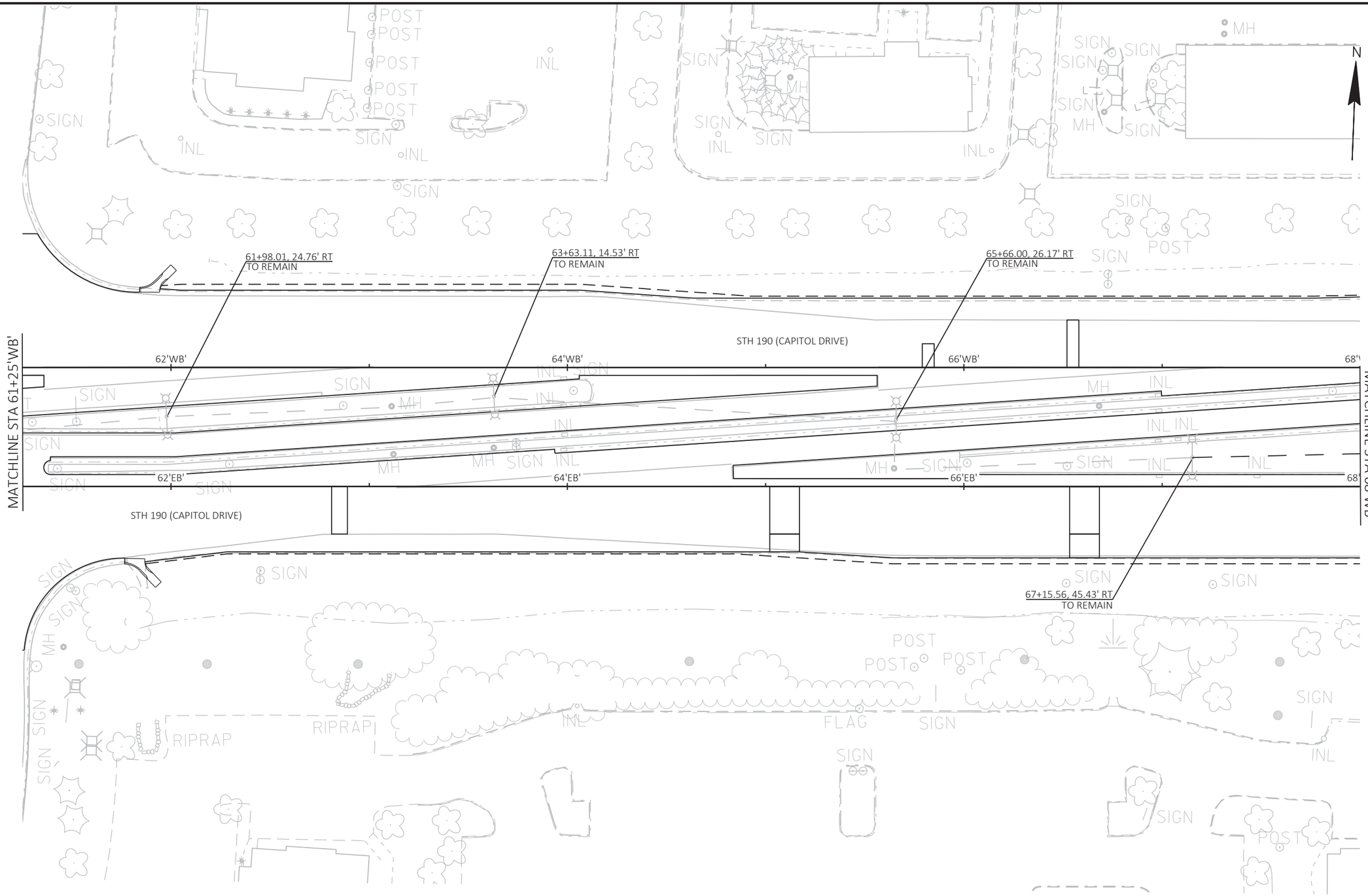
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	LIGHITNG PLAN - REMOVAL	SHEET 114	E

FILE NAME : V:\PROJECTS\19254\2025-07-73\04_CADD_01\CADD_SHEETS\023401_LR.DWG
LAYOUT NAME - 50-08

PLOT DATE : 1/25/2023 2:38 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2



LEGEND

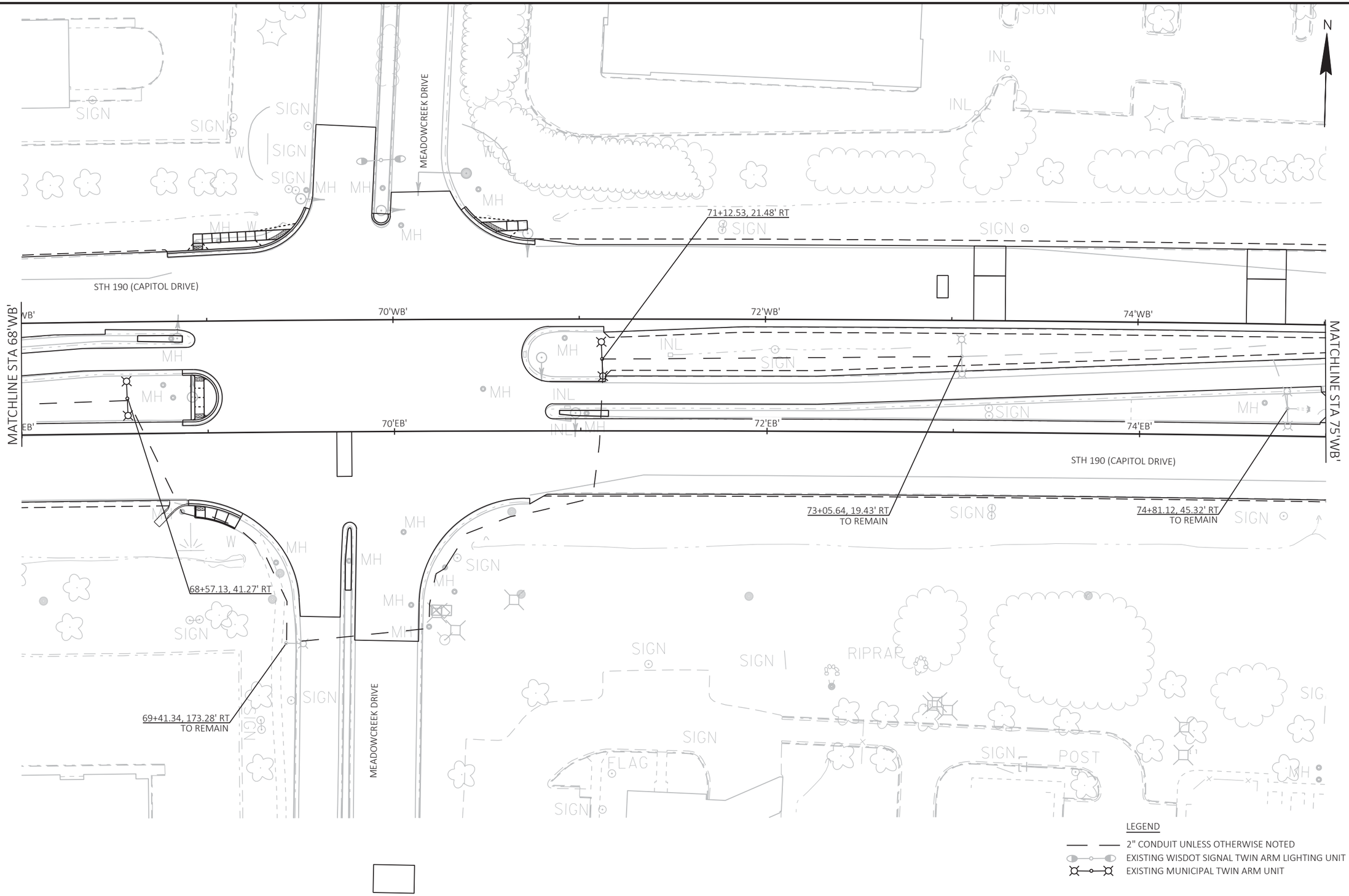
— — 2" CONDUIT UNLESS OTHERWISE NOTED

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	LIGHITNG PLAN - REMOVAL	SHEET 115	E

FILE NAME : V:\PROJECTS\19254\2025-07-73\04_CADD_01\CADD_SHEETS\023401_LR.DWG
LAYOUT NAME - 50-09

PLOT DATE : 1/25/2023 2:38 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



LEGEND

2" CONDUIT UNLESS OTHERWISE NOTED

EXISTING WISDOT SIGNAL TWIN ARM LIGHTING UNIT

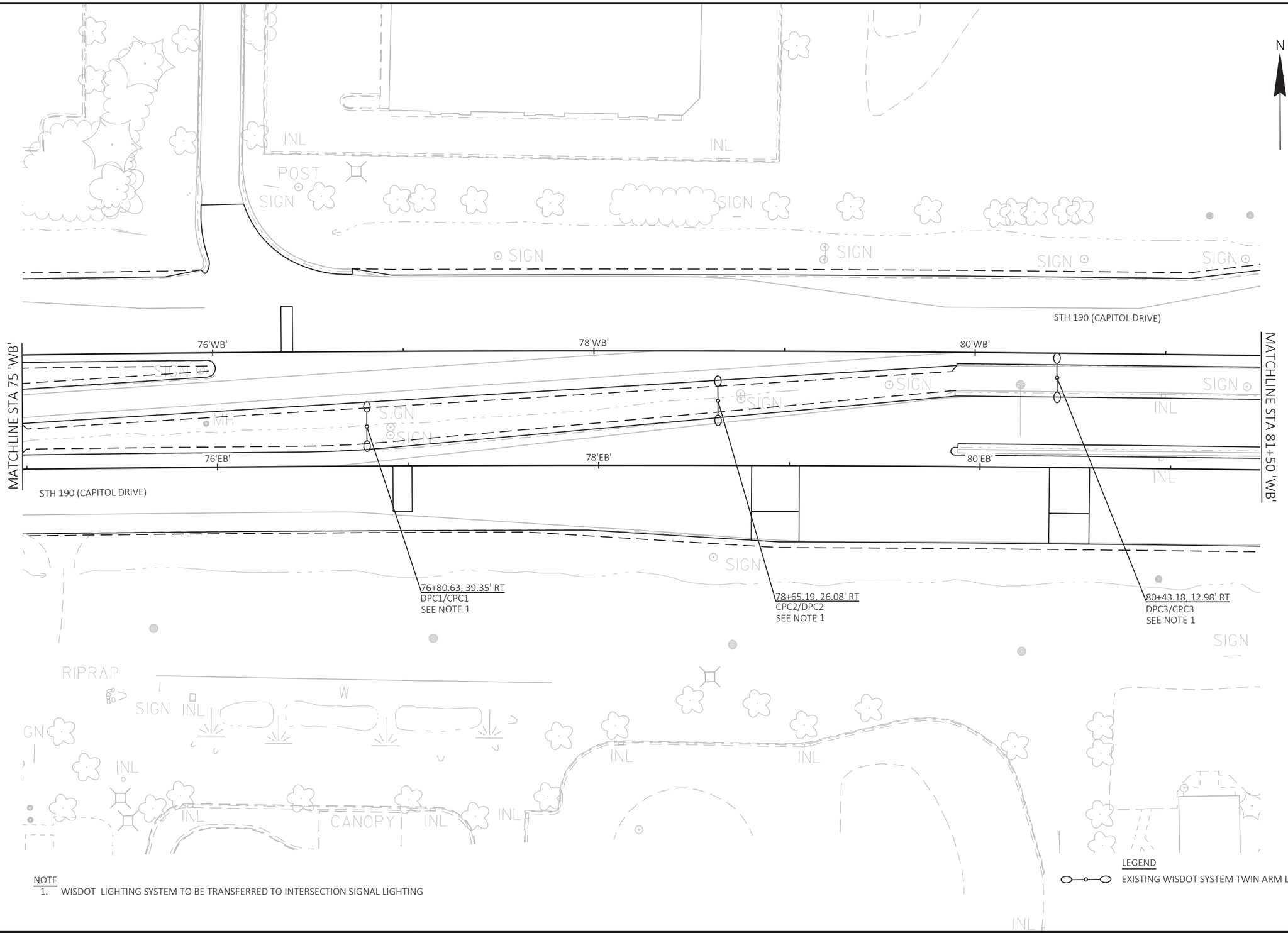
EXISTING MUNICIPAL TWIN ARM UNIT

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	LIGHTING PLAN - REMOVAL	SHEET 116	E

FILE NAME : V:\PROJECTS\19254\2025-07-73\04_CADD_01\CADD_SHEETS\023401_LR.DWG
LAYOUT NAME - 50-10

PLOT DATE : 1/25/2023 2:38 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



NOTE
1. WISDOT LIGHTING SYSTEM TO BE TRANSFERRED TO INTERSECTION SIGNAL LIGHTING

LEGEND
EXISTING WISDOT SYSTEM TWIN ARM LIGHTING UNIT

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	LIGHITNG PLAN - REMOVAL	SHEET 117	E

FILE NAME : V:\PROJECTS\19254\2025-07-73\04_CADD_01\CADD_SHEETS\023401_LR.DWG
LAYOUT NAME - 50-11
PLOT DATE : 1/25/2023 2:38 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

N

83+55.36, -131.14' LT
BPC5/CPC5
SEE NOTE 1

82+26.03, 12.29' RT
CPC4/DPC4
SEE NOTE 1

84+41.17, -67.53' LT
EXISTING DISTRIBUTION CENTER
TO BE REMOVED

STH 164 (PEWAUKEE ROAD)

STH 190 (CAPITOL DRIVE)

MATCHLINE STA 81+50 'WB'

82'WB' 84'WB' 86'WB' 88'WB'

82'EB' 84'EB' 86'EB' 88'EB'

STH 190 (CAPITOL DRIVE)

84+90.74, 47.20' RT
APC6/BPC6
SEE NOTE 1

86+74.88, 46.86' RT
BPC6/APC6
SEE NOTE 1

83+45.34, 183.92' RT
APC8/BPC8
SEE NOTE 1

STH 164 (PEWAUKEE ROAD)

NOTE
1. WISDOT LIGHTING SYSTEM TO BE TRANSFERRED TO INTERSECTION SIGNAL LIGHTING

LEGEND
EXISTING WISDOT SYSTEM TWIN ARM LIGHTING UNIT
EXISTING DISTRIBUTION CENTER

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	LIGHITNG PLAN - REMOVAL	SHEET 118	E

FILE NAME : V:\PROJECTS\19254\2025-07-73\04_CADD_01\CADD_SHEETS\023401_LR.DWG
LAYOUT NAME - 50-12

PLOT DATE : 1/25/2023 2:38 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

CECELIA DRIVE

N

NO WORK PLANNED FOR THIS SHEET

STH 190 (CAPITOL DRIVE)

34'WB' 36'WB' 38'WB' 40'WB'

34'EB' 36'EB' 38'EB' 40'EB'

MATCHLINE STA 40+50 'WB'

STH 190 (CAPITOL DRIVE)

SIGN MH INL POST RIPRAP W

LEGEND

EXISTING WISDOT SIGNAL LIGHTING UNIT

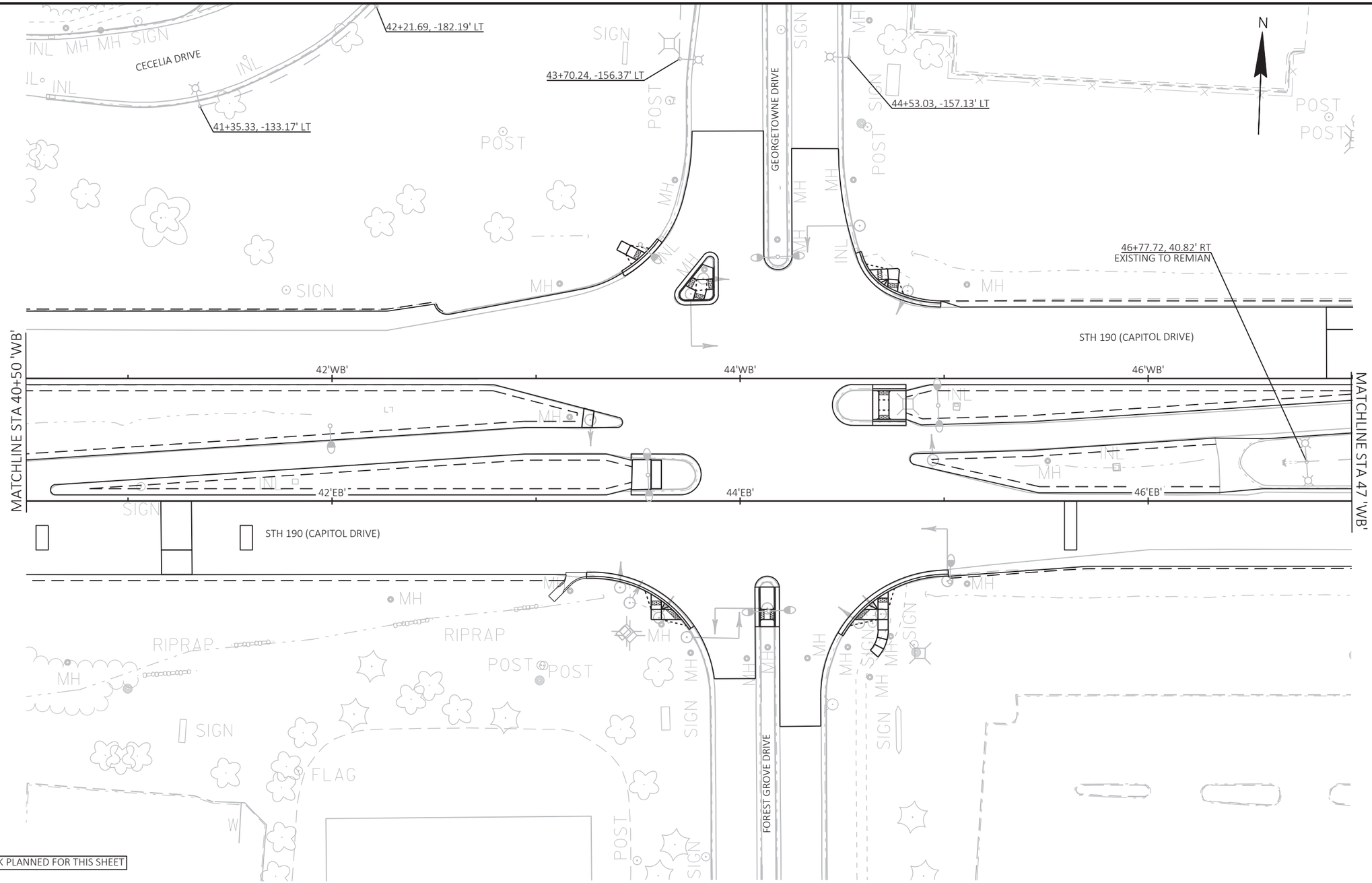
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	LIGHTING PLAN - PROPOSED	SHEET 119	E

FILE NAME : V:\PROJECTS\19254\2025-07-73\04_CADD_01\CADD_SHEETS\023601_LP.DWG
LAYOUT NAME - 50-05

PLOT DATE : 1/25/2023 2:39 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2



NO WORK PLANNED FOR THIS SHEET

NOTE
1. SEE TRAFFIC SIGNAL PLAN FOR INTERSECTION LIGHTING

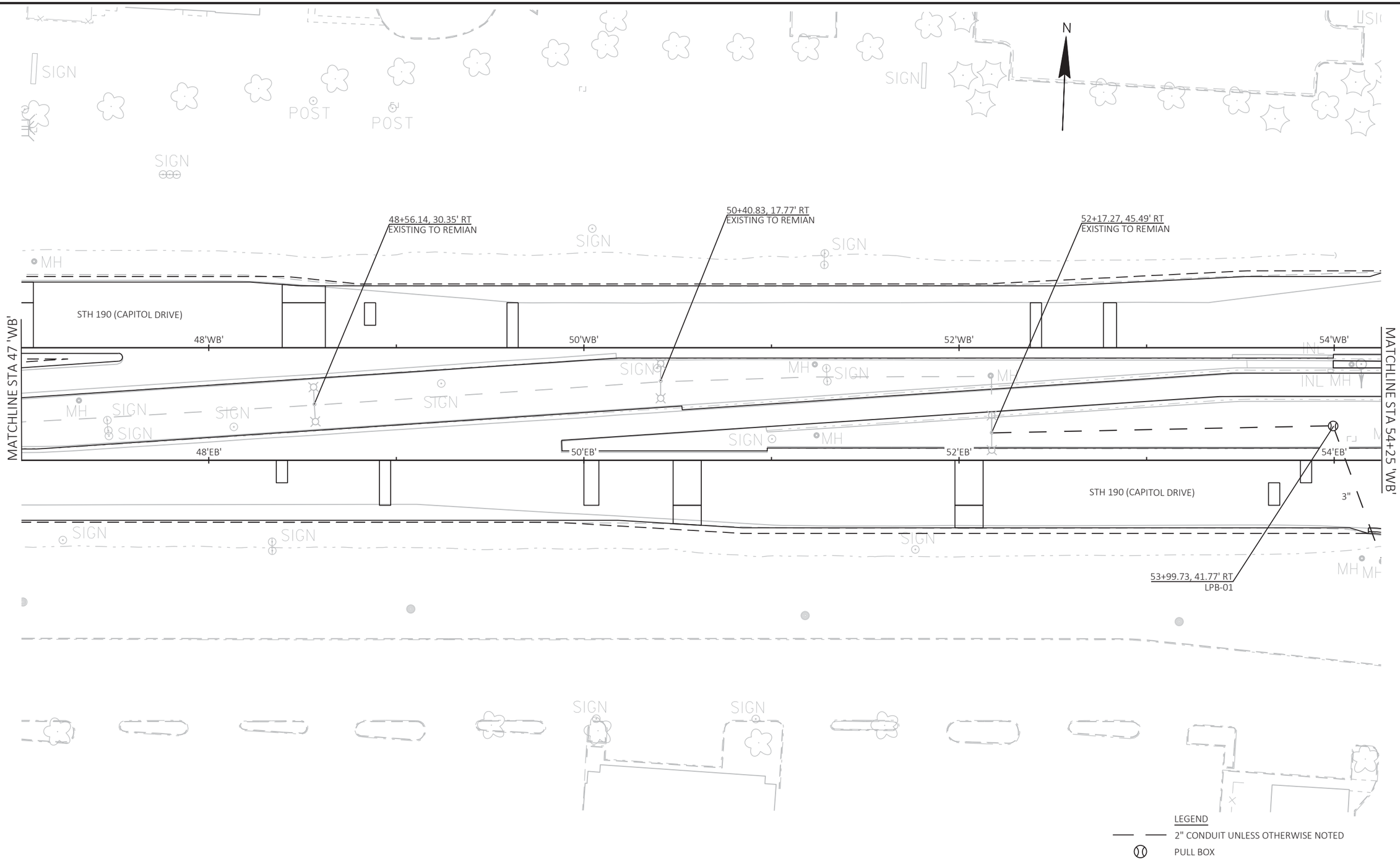
LEGEND
EXISTING WISDOT SIGNAL LIGHTING UNIT
EXISTING WISDOT SIGNAL TWIN ARM LIGHTING UNIT

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	LIGHTING PLAN - PROPOSED	SHEET 120	E

FILE NAME : V:\PROJECTS\19254\2025-07-73\04_CADD_01\CADD_SHEETS\023601_LP.DWG
LAYOUT NAME - 50-06

PLOT DATE : 1/25/2023 2:39 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	LIGHTING PLAN - PROPOSED	SHEET 121	E

FILE NAME : V:\PROJECTS\19254\2025-07-73\04_CADD_01\CADD_SHEETS\023601_LP.DWG
LAYOUT NAME - 50-07

PLOT DATE : 1/25/2023 2:39 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

WESTFIELD WAY

SIGN

MH

INL

POST

W

56+12.30, 18.48' RT
LPB-05

STH 190 (CAPITOL DRIVE)

56'WB'

58'WB'

60'WB'

MATCHLINE STA 54+25 'WB'

MATCHLINE STA 61+25 'WB'

3"

56'EB'

58'EB'

60'EB'

57+89.55, 18.74' RT
EXISTING TO REMAIN

59+92.91, 43.19' RT
EXISTING TO REMAIN

56+10.07, 110.77' RT
LPB-04

55+44.50, 138.97' RT
LPB-03

60+98.50, 133.15' RT
EXISTING TO REMAIN

54+38.59, 135.42' RT
LPB-02

FLAG

WILLOW GROVE DRIVE

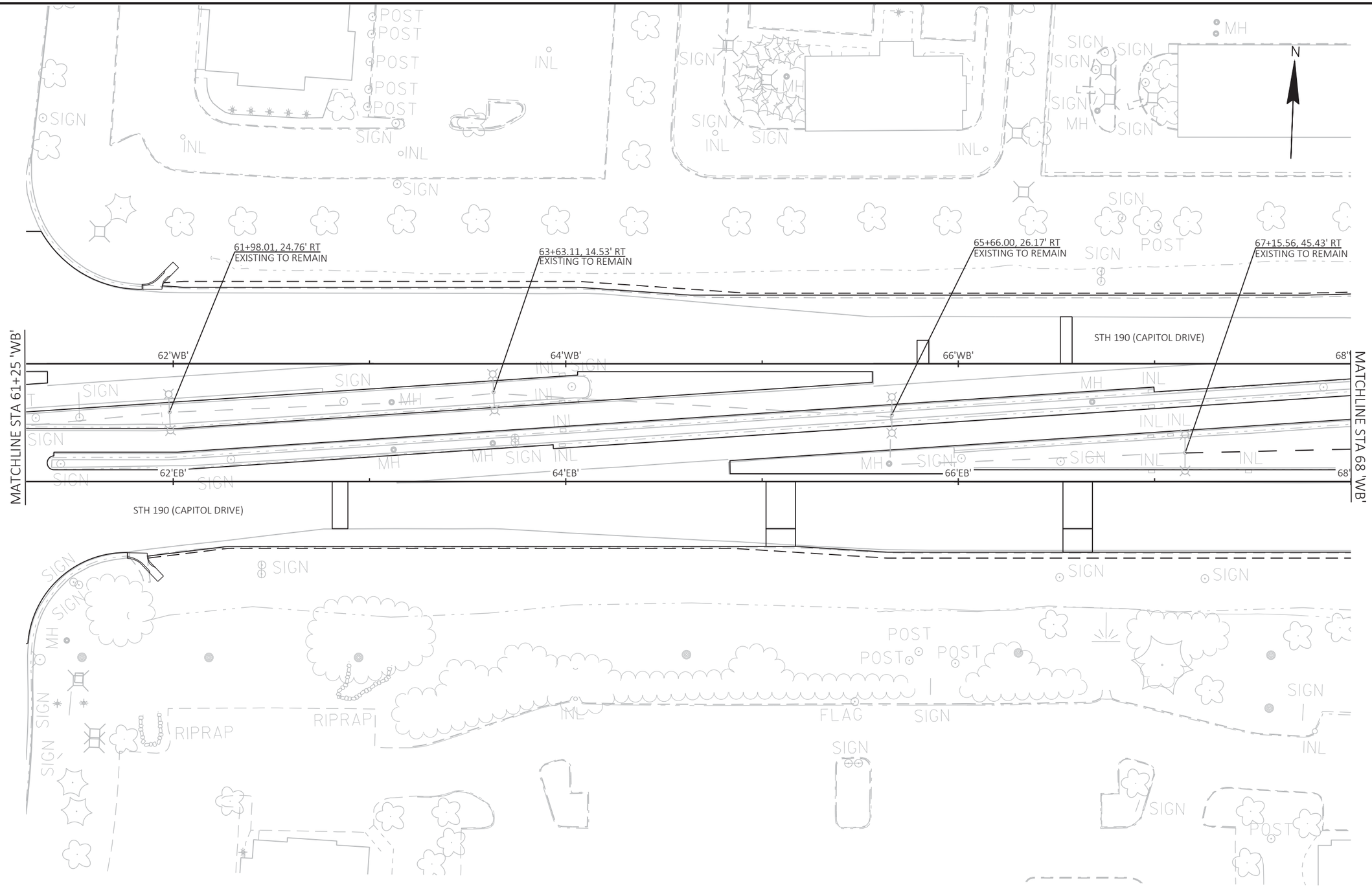
NOTE
1. SEE TRAFFIC SIGNAL PLAN FOR INTERSECTION LIGHTING

LEGEND
2" CONDUIT UNLESS OTHERWISE NOTED
PULL BOX

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	LIGHTING PLAN - PROPOSED	SHEET 122	E

FILE NAME : V:\PROJECTS\19254\2025-07-73\04_CADD_01\CADD_SHEETS\023601_LP.DWG
LAYOUT NAME - 50-08
PLOT DATE : 1/25/2023 2:40 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



LEGEND

—— —— 2" CONDUIT UNLESS OTHERWISE NOTED

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	LIGHTING PLAN - PROPOSED	SHEET 123	E

FILE NAME : V:\PROJECTS\19254\2025-07-73\04_CADD_01\CADD_SHEETS\023601_LP.DWG
LAYOUT NAME - 50-09

PLOT DATE : 1/25/2023 2:40 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

MEADOWCREEK DRIVE

STH 190 (CAPITOL DRIVE)

MATCHLINE STA 68 'WB'

MATCHLINE STA 75 'WB'

70'WB'

72'WB'

74'WB'

70'EB'

72'EB'

74'EB'

3"

3"

3"

71+12.53, 21.48' RT
LBP-09

68+57.13, 41.27' RT
LBP-06

68+56.57, 105.38' RT
LBP-07

69+41.34, 173.28' RT
EXISTING TO REMAIN

71+10.52, 99.53' RT
LBP-08

73+05.64, 19.43' RT
EXISTING TO REMAIN

74+81.12, 45.32' RT
EXISTING TO REMAIN

SIGN
MH
INL
W
RIPRAP
FLAG
POST

NOTE
1. SEE TRAFFIC SIGNAL PLAN FOR INTERSECTION LIGHTING

LEGEND
2" CONDUIT UNLESS OTHERWISE NOTED
PULL BOX

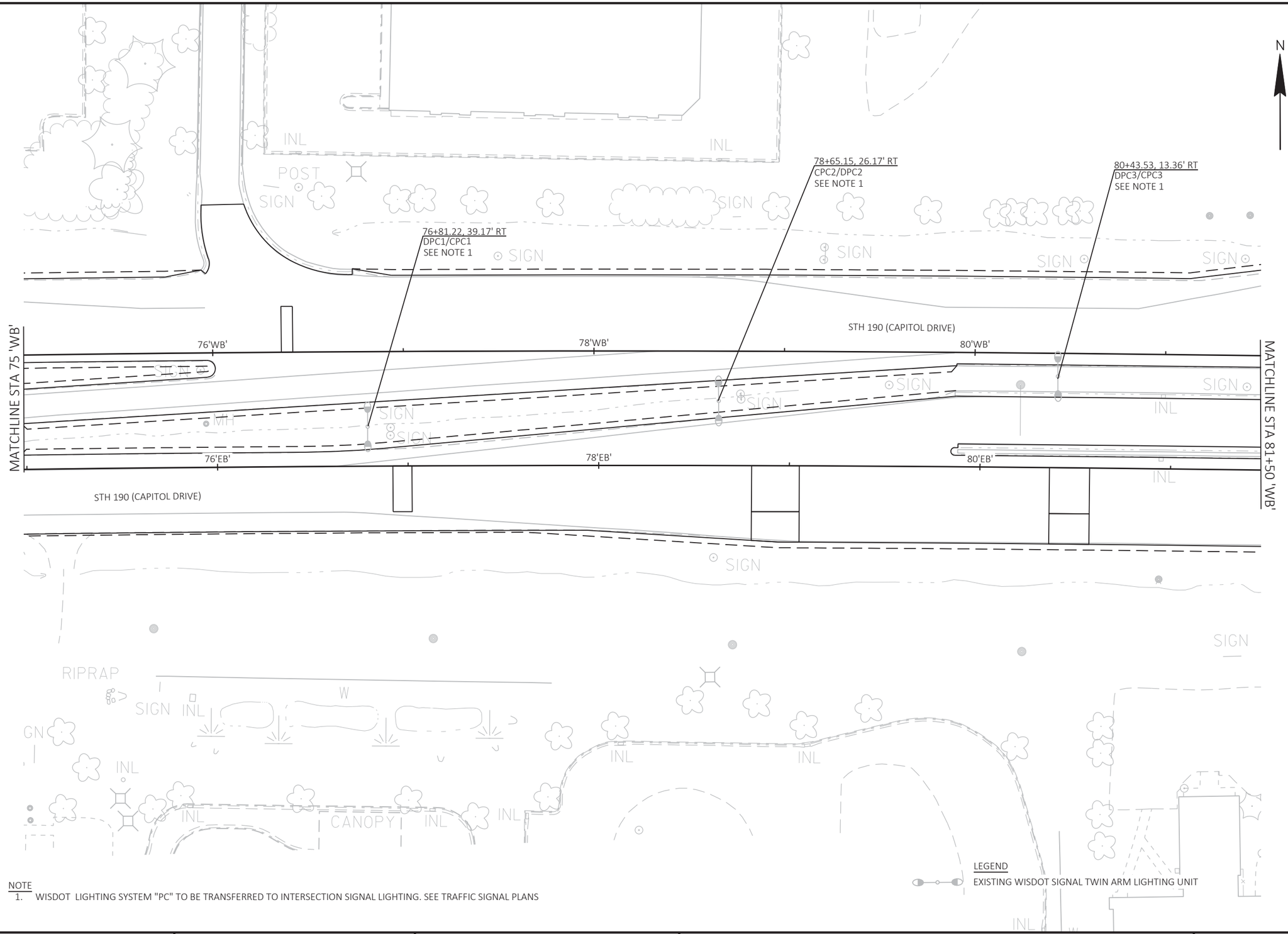
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	LIGHTING PLAN - PROPOSED	SHEET 124	E

FILE NAME : V:\PROJECTS\19254\2025-07-73\04_CADD_01\CADD_SHEETS\023601_LP.DWG
LAYOUT NAME - 50-10

PLOT DATE : 1/25/2023 2:40 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2



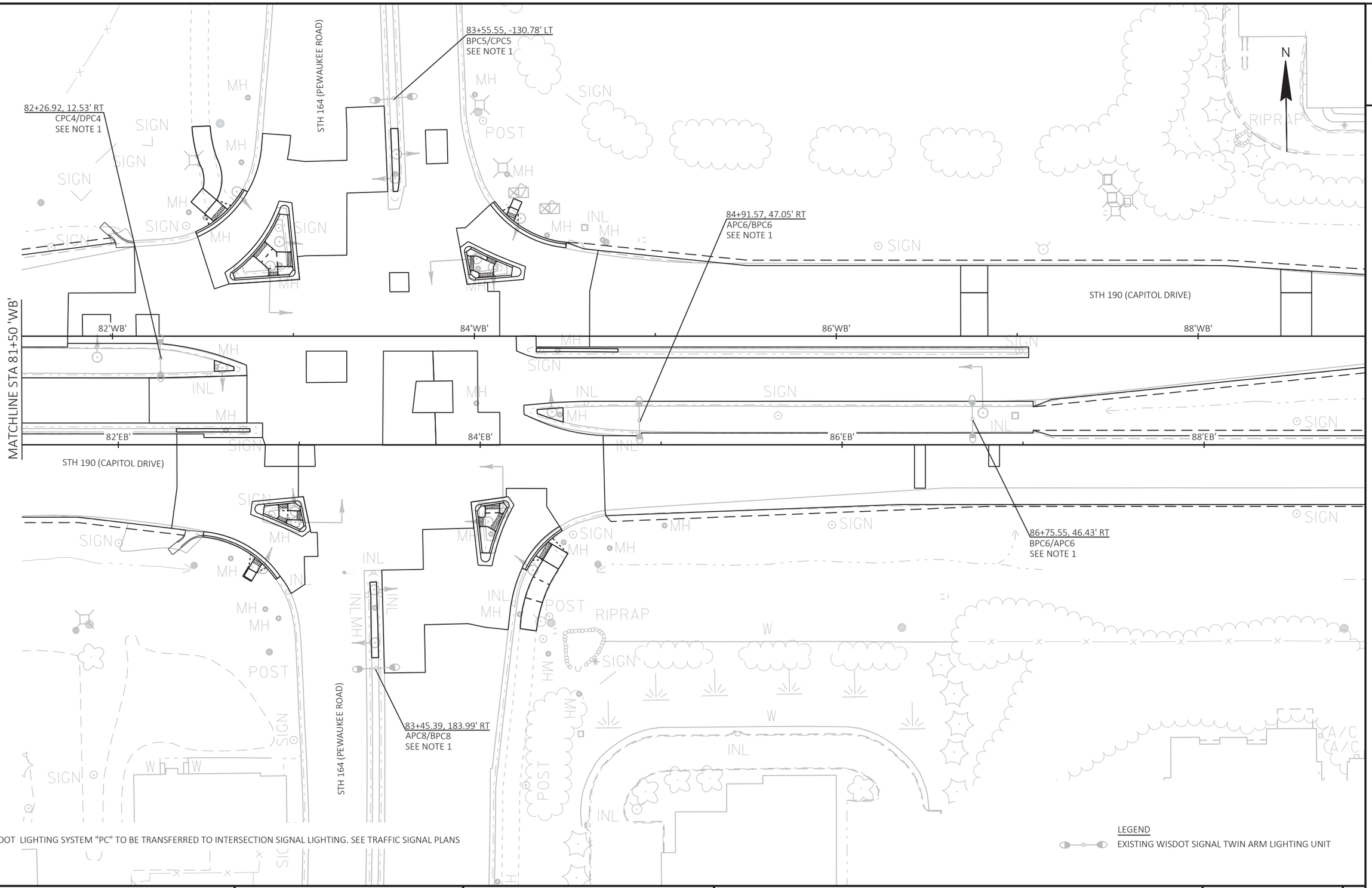
NOTE
1. WISDOT LIGHTING SYSTEM "PC" TO BE TRANSFERRED TO INTERSECTION SIGNAL LIGHTING. SEE TRAFFIC SIGNAL PLANS

LEGEND
EXISTING WISDOT SIGNAL TWIN ARM LIGHTING UNIT

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	LIGHTING PLAN - PROPOSED	SHEET 125	E

FILE NAME : V:\PROJECTS\19254\2025-07-73\04_CADD_01\CADD_SHEETS\023601_LP.DWG
LAYOUT NAME - 50-11
PLOT DATE : 1/25/2023 2:40 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

2



NOTE
1. WISDOT LIGHTING SYSTEM "PC" TO BE TRANSFERRED TO INTERSECTION SIGNAL LIGHTING. SEE TRAFFIC SIGNAL PLANS

LEGEND
EXISTING WISDOT SIGNAL TWIN ARM LIGHTING UNIT

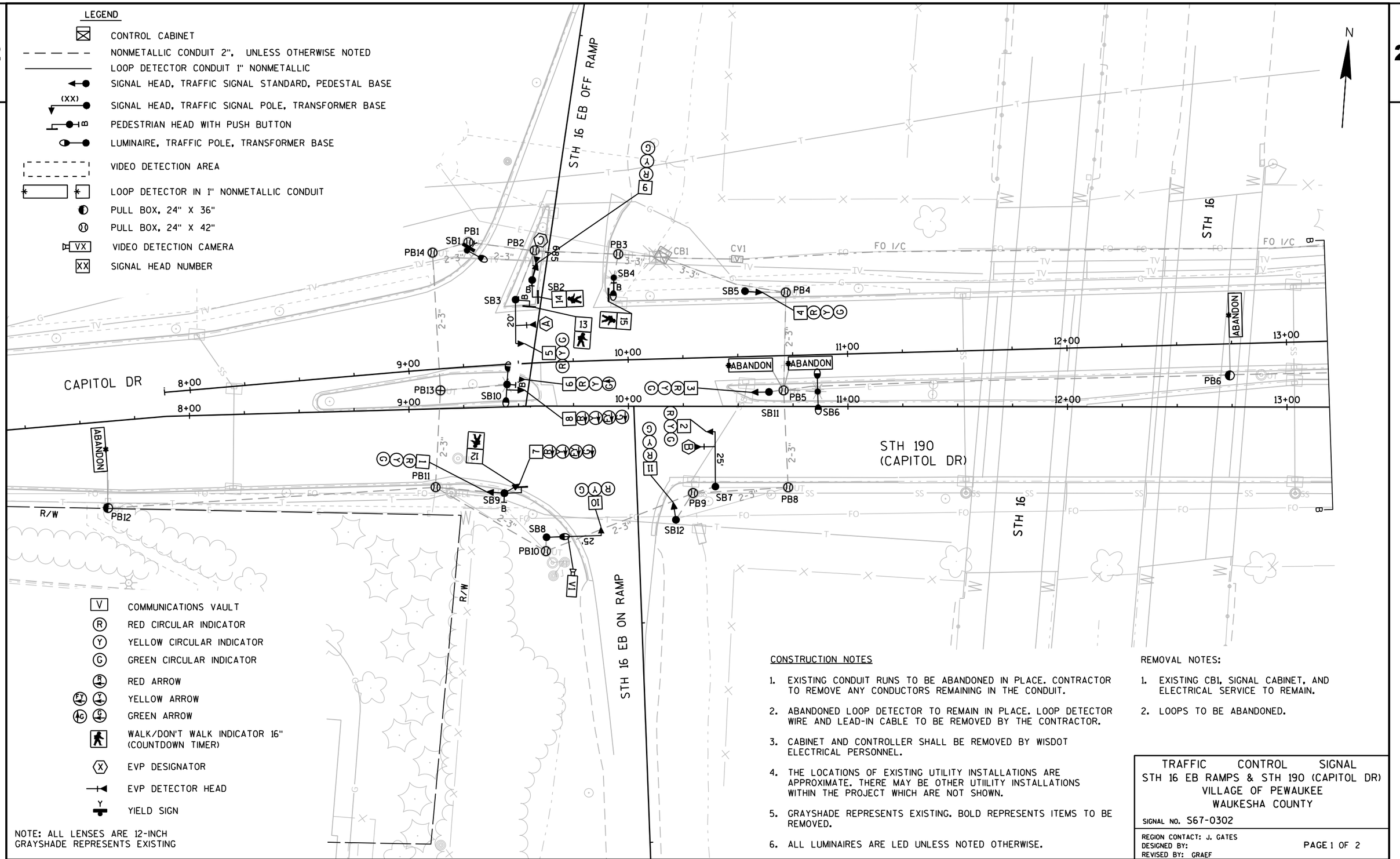
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	LIGHTING PLAN - PROPOSED	SHEET 126	E

FILE NAME : V:\PROJECTS\19254\2025-07-73\04_CADD_01\CADD_SHEETS\023601_LP.DWG
LAYOUT NAME - 50-12

PLOT DATE : 1/25/2023 2:40 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:50 FT

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- VIDEO DETECTION AREA
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- VX VIDEO DETECTION CAMERA
- XX SIGNAL HEAD NUMBER



- V COMMUNICATIONS VAULT
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RA RED ARROW
- FY YELLOW ARROW
- AG GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- Y YIELD SIGN

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. ABANDONED LOOP DETECTOR TO REMAIN IN PLACE. LOOP DETECTOR WIRE AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
4. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTIILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.
6. ALL LUMINAIRES ARE LED UNLESS NOTED OTHERWISE.

REMOVAL NOTES:

1. EXISTING CB1, SIGNAL CABINET, AND ELECTRICAL SERVICE TO REMAIN.
2. LOOPS TO BE ABANDONED.

TRAFFIC CONTROL SIGNAL
STH 16 EB RAMPS & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

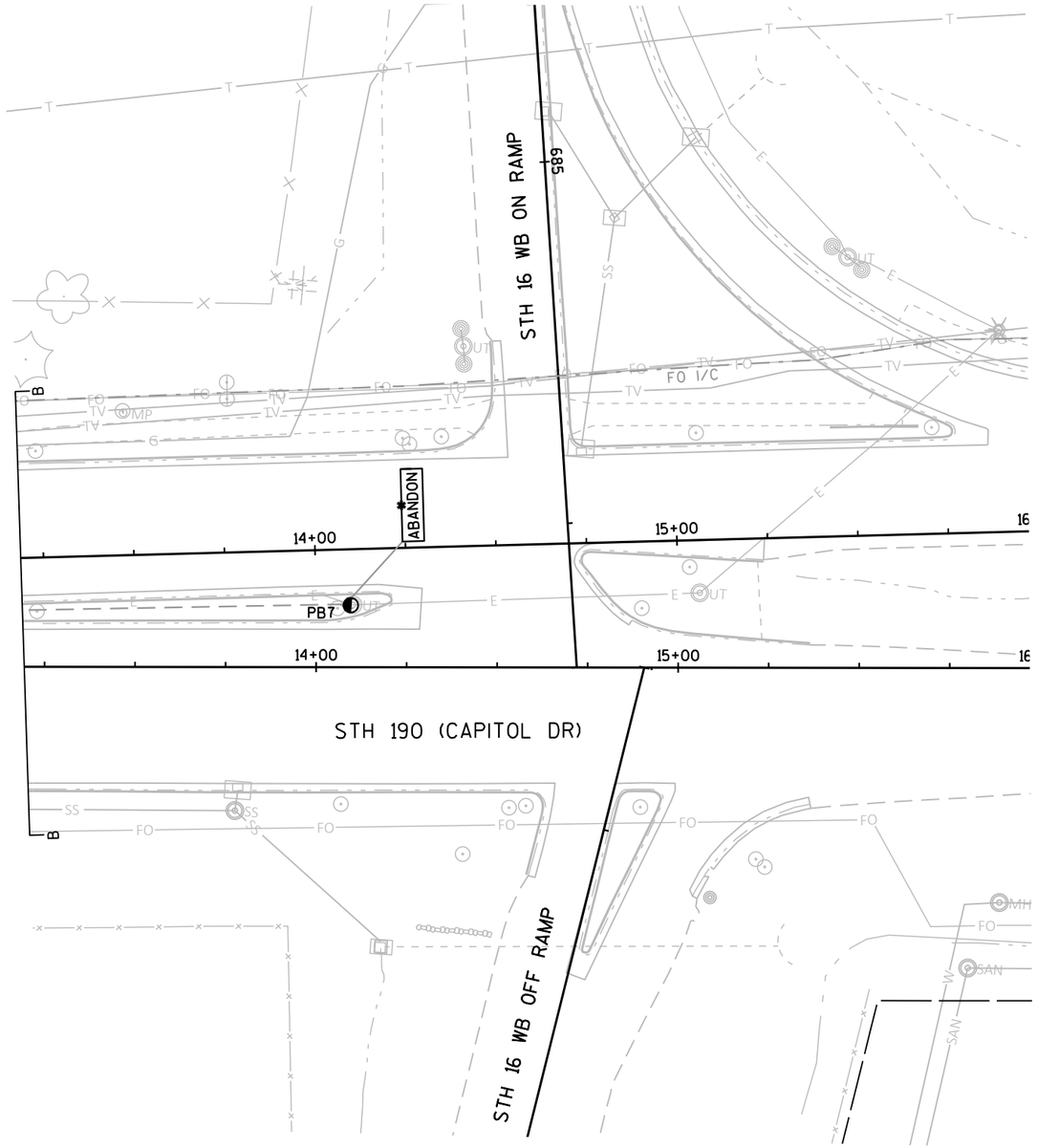
SIGNAL NO. S67-0302

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 1 OF 2

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 127 E

2



TRAFFIC CONTROL SIGNAL
STH 16 EB RAMPS & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0302

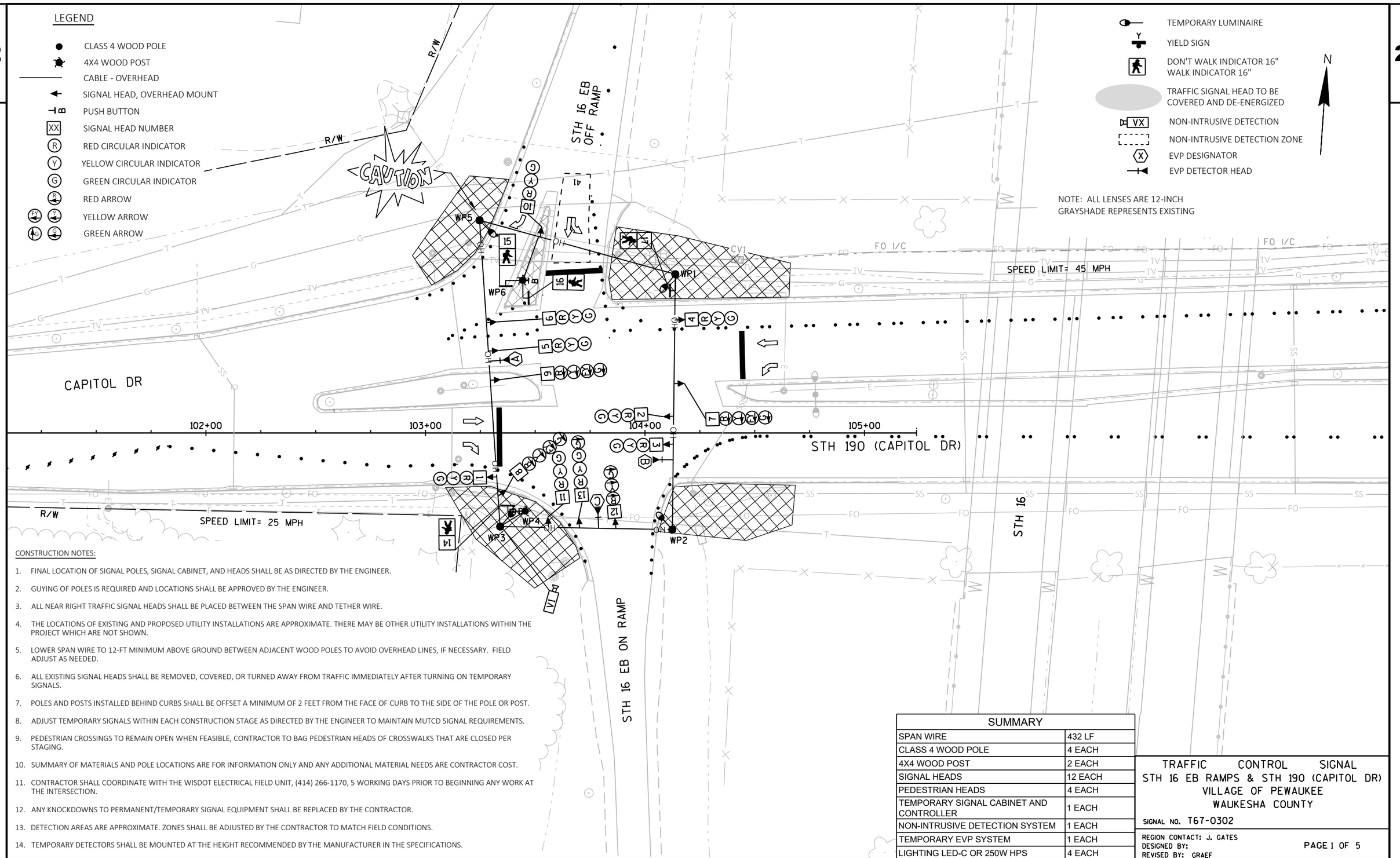
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 2 OF 2

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 128 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\01_S67-0302_G_STH16EB 024001.DWG
LAYOUT NAME - 01_S67-0302_G_STH16EB 024001 - S67-0302_G_PG2

PLOT DATE : 7/18/2023 8:08 AM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT



CONSTRUCTION NOTES:

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET, AND HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. LOWER SPAN WIRE TO 12-FT MINIMUM ABOVE GROUND BETWEEN ADJACENT WOOD POLES TO AVOID OVERHEAD LINES, IF NECESSARY. FIELD ADJUST AS NEEDED.
6. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
7. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POLE OR POST.
8. ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
9. PEDESTRIAN CROSSINGS TO REMAIN OPEN WHEN FEASIBLE, CONTRACTOR TO BAG PEDESTRIAN HEADS OF CROSSWALKS THAT ARE CLOSED PER STAGING.
10. SUMMARY OF MATERIALS AND POLE LOCATIONS ARE FOR INFORMATION ONLY AND ANY ADDITIONAL MATERIAL NEEDS ARE CONTRACTOR COST.
11. CONTRACTOR SHALL COORDINATE WITH THE WISDOT ELECTRICAL FIELD UNIT, (414) 266-1170, 5 WORKING DAYS PRIOR TO BEGINNING ANY WORK AT THE INTERSECTION.
12. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR.
13. DETECTION AREAS ARE APPROXIMATE. ZONES SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH FIELD CONDITIONS.
14. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.

SUMMARY	
SPAN WIRE	432 LF
CLASS 4 WOOD POLE	4 EACH
4X4 WOOD POST	2 EACH
SIGNAL HEADS	12 EACH
PEDESTRIAN HEADS	4 EACH
TEMPORARY SIGNAL CABINET AND CONTROLLER	1 EACH
NON-INTRUSIVE DETECTION SYSTEM	1 EACH
TEMPORARY EVP SYSTEM	1 EACH
LIGHTING LED-C OR 250W HPS	4 EACH

TRAFFIC CONTROL SIGNAL
STH 16 EB RAMPS & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. T67-0302

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 1 OF 5

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGES 1A, 4B	SHEET 129 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\01_S67-0302_G_STH16EB 024101_S1A4B.DWG
LAYOUT NAME - 01_S67-0302_G_STH16EB 024101_S1A4B - S67-0302_G_S1A4B_PG1

PLOT DATE : 7/31/2023 2:29 PM PLOT BY : NIQUETTE, MATT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- CLASS 4 WOOD POLE
- 4X4 WOOD POST
- CABLE - OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- PUSH BUTTON
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

- TEMPORARY LUMINAIRE
- YIELD SIGN
- DON'T WALK INDICATOR 16" / WALK INDICATOR 16"
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- NON-INTRUSIVE DETECTION
- NON-INTRUSIVE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD

N

STH 16 EB OFF RAMP

WP1 WP2 WP3 WP4 WP5 WP6

CV1

FO I/C

SPEED LIMIT= 45 MPH

CAPITOL DR

102+00 103+00 104+00 105+00

STH 190 (CAPITOL DR)

R/W

SPEED LIMIT= 25 MPH

STH 16 EB ON RAMP

STH 16

TRAFFIC CONTROL SIGNAL
STH 16 EB RAMPS & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. T67-0302

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 2 OF 5

PROJECT NO:2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGES 1B, 4A	SHEET 130 E

2

LEGEND

- CLASS 4 WOOD POLE
- 4X4 WOOD POST
- CABLE - OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- PUSH BUTTON
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TEMPORARY LUMINAIRE
- YIELD SIGN
- DON'T WALK INDICATOR 16" / WALK INDICATOR 16"
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- NON-INTRUSIVE DETECTION
- NON-INTRUSIVE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

N

STH 16 EB OFF RAMP

CAPITOL DR

SPEED LIMIT= 45 MPH

FO I/C

CV1

102+00 103+00 104+00 105+00

STH 190 (CAPITOL DR)

WP1 WP2 WP3 WP4 WP5 WP6

SPEED LIMIT= 25 MPH

R/W

STH 16 EB ON RAMP

STH 16

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2	SHEET 131 E

TRAFFIC CONTROL SIGNAL
STH 16 EB RAMPS & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. T67-0302

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 3 OF 5

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\01_S67-0302_G_STH16EB 024101_S2.DWG
LAYOUT NAME - 01_S67-0302_G_STH16EB 024101_S2 - S67-0302_G_S2_PG1
PLOT DATE : 7/31/2023 2:30 PM PLOT BY : NIQUETTE, MATT PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- CLASS 4 WOOD POLE
- 4X4 WOOD POST
- CABLE - OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- PUSH BUTTON
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW

- TEMPORARY LUMINAIRE
- YIELD SIGN
- DON'T WALK INDICATOR 16" / WALK INDICATOR 16"
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- NON-INTRUSIVE DETECTION
- NON-INTRUSIVE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

N

STH 16 EB OFF RAMP

WP1 WP2 WP3 WP4 WP5 WP6

CAPITOL DR

102+00 103+00 104+00 105+00

STH 190 (CAPITOL DR)

SPEED LIMIT= 45 MPH

SPEED LIMIT= 25 MPH

R/W

STH 16 EB ON RAMP

STH 16

FO I/C

CVI

TRAFFIC CONTROL SIGNAL
STH 16 EB RAMPS & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

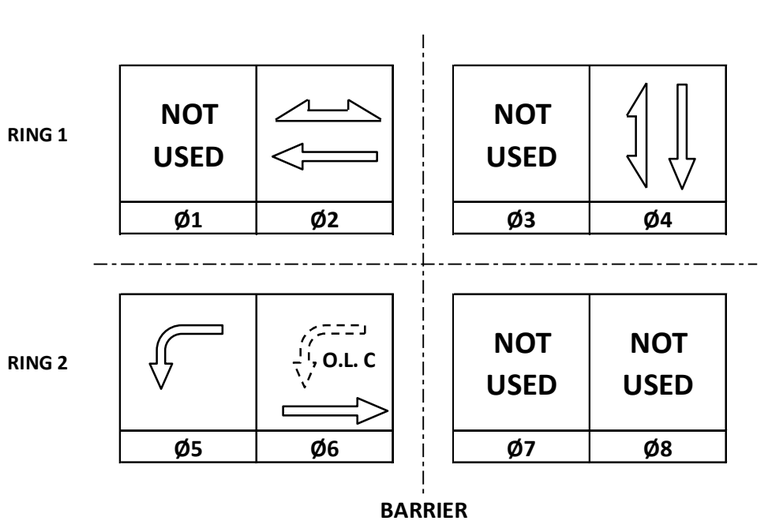
SIGNAL NO. T67-0302

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 4 OF 5

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3	SHEET 132 E

	HEAD NUMBERS	FLASH
Ø1		
Ø2	4, 5, 6	R
Ø3		
Ø4	10, 11, 12, 13	R, R
Ø5	7, 8, 9	R
Ø6	1, 2, 3	R
Ø7		
Ø8		
Ø2P	16, 17	
Ø4P	14, 15	
Ø6P		
Ø8P		
OLA		
OLB		
OLC	7, 8, 9	-
OLD		



USE MODE B FOR FLASHING YELLOW ARROW PHASING OPERATIONS

CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C
MOVEMENT			
PHASE	2+5	6+2	4

AFTER PREEMPTION SEQUENCE 2+5 OR 6+2, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4, CONTROLLER SHALL RETURN TO PHASE 4.

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

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

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

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

STH 16 EB RAMPS & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

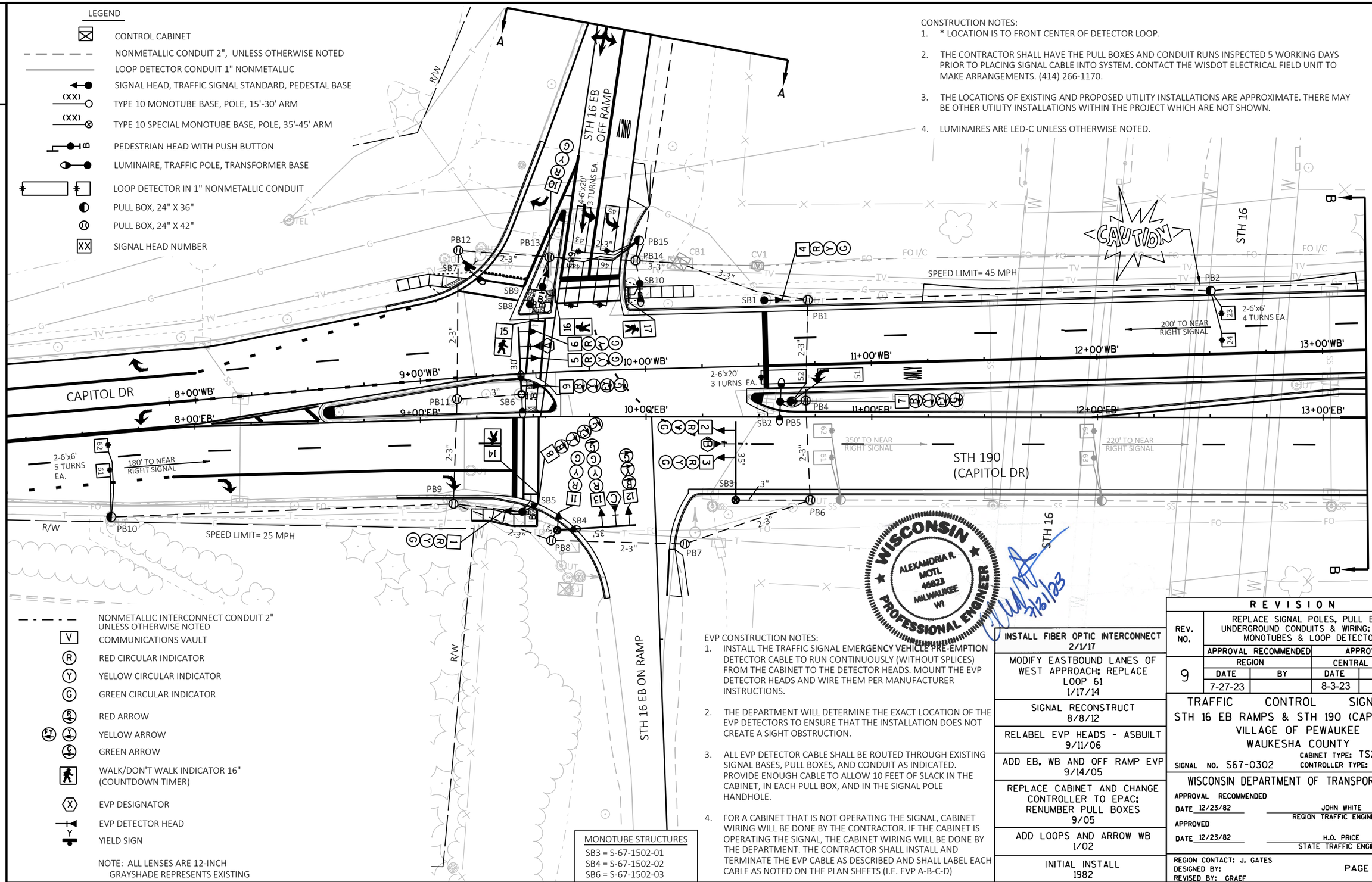
SIGNAL NO: T67-0302 CABINET TYPE: TEMP
CONTROLLER TYPE: TEMP
DATE: 8/2023 PAGE NO. 5 OF 5

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) TYPE 10 MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) TYPE 10 SPECIAL MONOTUBE BASE, POLE, 35'-45' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266-1170.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.



- NONMETALLIC INTERCONNECT CONDUIT 2" UNLESS OTHERWISE NOTED
- V COMMUNICATIONS VAULT
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RA RED ARROW
- FY YELLOW ARROW
- GA GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- Y YIELD SIGN

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

MONOTUBE STRUCTURES

SB3 = S-67-1502-01
SB4 = S-67-1502-02
SB6 = S-67-1502-03

EVP CONSTRUCTION NOTES:

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT THE EVP DETECTOR HEADS AND WIRE THEM PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF THE EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH EXISTING SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICATED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. FOR A CABINET THAT IS NOT OPERATING THE SIGNAL, CABINET WIRING WILL BE DONE BY THE CONTRACTOR. IF THE CABINET IS OPERATING THE SIGNAL, THE CABINET WIRING WILL BE DONE BY THE DEPARTMENT. THE CONTRACTOR SHALL INSTALL AND TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. EVP A-B-C-D)

WISCONSIN PROFESSIONAL ENGINEER
ALEXANDRIA R. MOTL
46823
MILWAUKEE
WI
7/31/23

REVISION	
INSTALL FIBER OPTIC INTERCONNECT 2/1/17	
MODIFY EASTBOUND LANES OF WEST APPROACH; REPLACE LOOP 61 1/17/14	
SIGNAL RECONSTRUCT 8/8/12	
RELABEL EVP HEADS - ASBUILT 9/11/06	
ADD EB, WB AND OFF RAMP EVP 9/14/05	
REPLACE CABINET AND CHANGE CONTROLLER TO EPAC; RENUMBER PULL BOXES 9/05	
ADD LOOPS AND ARROW WB 1/02	
INITIAL INSTALL 1982	

REV. NO.	REPLACE SIGNAL POLES, PULL BOXES, UNDERGROUND CONDUITS & WIRING; INSTALL MONOTUBES & LOOP DETECTORS.			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
	DATE	BY	DATE	BY
9	7-27-23		8-3-23	

TRAFFIC CONTROL SIGNAL
STH 16 EB RAMPS & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY
SIGNAL NO. S67-0302
CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 12/23/82 — JOHN WHITE, REGION TRAFFIC ENGINEER

APPROVED
DATE 12/23/82 — H.O. PRICE, STATE TRAFFIC ENGINEER

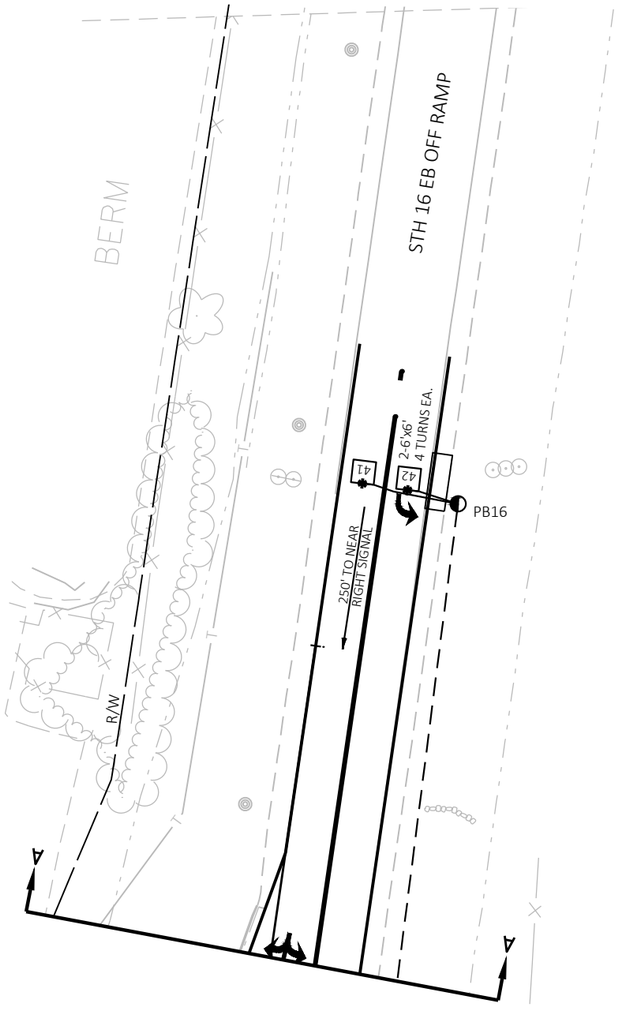
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

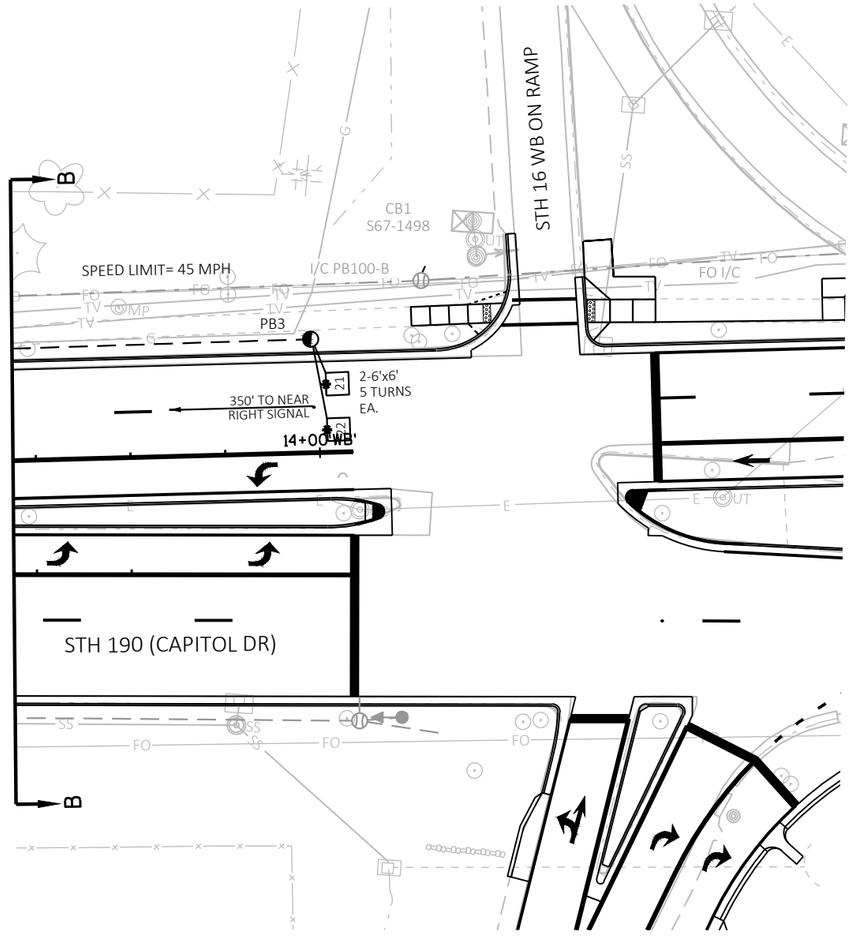
PAGE 1 OF 3

7-27-23

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 134 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\01_S67-0302_G_STH16EB 024201.DWG
LAYOUT NAME - S67-0302_G_pg1
PLOT DATE : 7/31/2023 2:55 PM PLOT BY : NIQUETTE, MATT PLOT NAME : PLOT SCALE : ##########





N

TRAFFIC CONTROL SIGNAL
STH 16 EB RAMPS & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0302

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

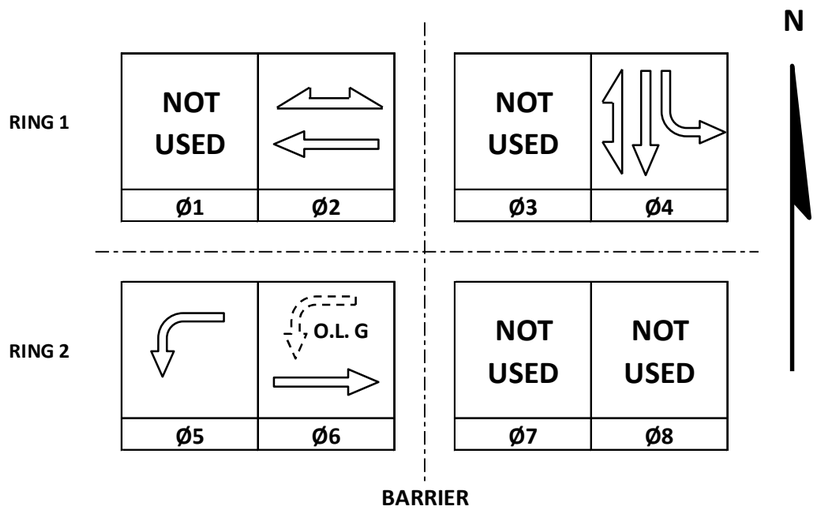
PAGE 2 OF 3

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 135 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\01_S67-0302_G_STH16EB 024201.DWG
LAYOUT NAME - S67-0302_G_pg2

PLOT DATE : 7/31/2023 2:55 PM PLOT BY : NIQUETTE, MATT PLOT NAME : PLOT SCALE : ##########

	HEAD NUMBERS	FLASH
Ø1		
Ø2	4, 5, 6	R
Ø3		
Ø4	10, 11, 12, 13	R, R
Ø5	7, 8, 9	R
Ø6	1, 2, 3	R
Ø7		
Ø8		
Ø2P	16, 17	
Ø4P	14, 15	
Ø6P		
Ø8P		
OLE		
OLF		
OLG	7, 8, 9	-
OLH		



CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C
MOVEMENT			
PHASE	2+5	6+2	4

AFTER PREEMPTION SEQUENCE 2+5 OR 6+2, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4, CONTROLLER SHALL RETURN TO PHASE 4.

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-	

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	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)	21	23	41	43	45	51	61	
CALLED PHASE	2	2	4	4	4	5	6	
CALL OPTION	X	X		X	X	X	X	
DELAY TIME								
EXTENTION OPTION	X	X	X	X	X	X	X	
EXTEND TIME			X					
USE ADDED INITIAL	X	X					X	
CROSS SWITCH PHASE						6		

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

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	22	24	42	44	46	52	62	
CALLED PHASE	2	2	4	4	4	5	6	
CALL OPTION	X	X		X	X	X	X	
DELAY TIME								
EXTENTION OPTION	X	X	X	X	X	X	X	
EXTEND TIME			X					
USE ADDED INITIAL	X	X					X	
CROSS SWITCH PHASE						6		

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

STH 16 EB RAMPS & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY
SIGNAL NO: S67-0302 CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE
DATE: 8/2023 PAGE NO. 3 OF 3

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

PROJECT ID:	2025-07-73
INTERSECTION:	STH 16 EB RAMPS & STH 190 (CAPITOL 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	7	4	RED	ORG	GRN							
SB2	12	7	RED	ORG	GRN				BLK/WHT			
SB3	7	2	RED	ORG	GRN							
		3	RED	ORG	GRN							
SB4	7	11	RED	ORG	GRN							
		12				RED	ORG	GRN				
		13	RED	ORG	GRN			GRN				
SB5	12	1	RED	ORG	GRN							
		8				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
		14								BLK	BLU	
		B										WHT/BLK
SB6	12	5	RED	ORG	GRN							
		6	RED	ORG	GRN							
		9				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
		B										WHT/BLK
SB8	7	15								BLK	BLU	
		B										WHT/BLK
SB9	12	10	RED	ORG	GRN							
		16								BLK	BLU	
		B										WHT/BLK
SB10	7	17								BLK	BLU	
		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	SB8
SB8	SB9
SB9	SB10
SB10	CB1

EMERGENCY VEHICLE PREEMPTION	
FROM	TO
CB1	HEAD A (SB6)
CB1	HEAD B (SB3)
CB1	HEAD C (SB4)

LIGHTING UF 10 AWG W/ GROUND	
FROM	TO
CB1	SB2
SB2	SB4
CB1	SB10
SB10	SB7
SB7	SB6

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	SB1
PB4	SB2
PB6	SB3
PB7	SB3
PB8	SB4
PB9	SB5
PB11	SB6
PB12	SB9
PB13	SB9
PB14	CB1

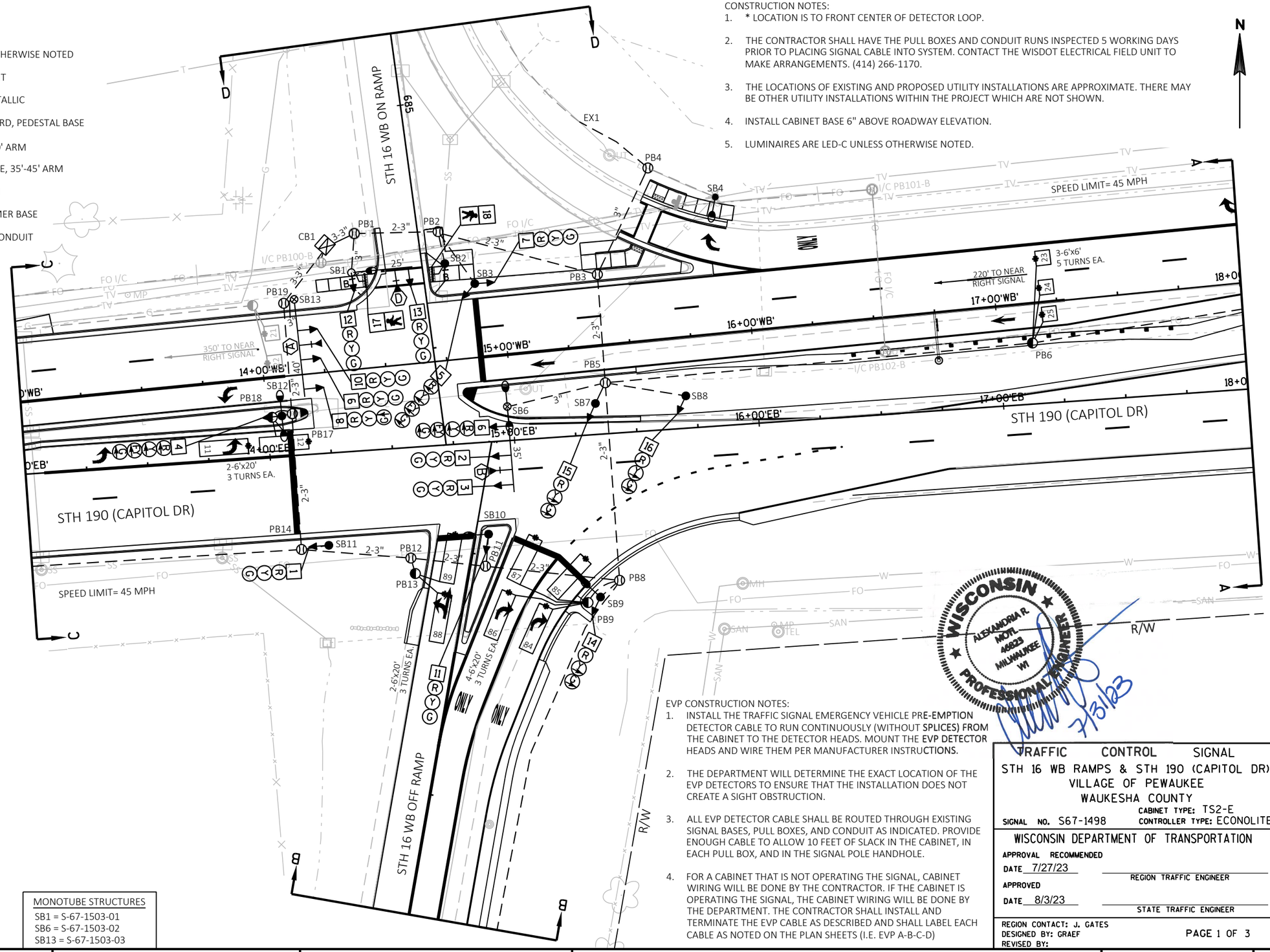
NOTES: *USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
*ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
*RECONNECT THE GROUNDING CONDUCTORS WHENEVER THE CIRCUIT HAS BEEN INTERRUPTED TO ENSURE THE GROUNDING CIRCUIT IS COMPLETE.

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT
- LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) TYPE 10 MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) TYPE 10 SPECIAL MONOTUBE BASE, POLE, 35'-45' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266-1170.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION.
5. LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.



SIGNAL HEAD NUMBER
RED CIRCULAR INDICATOR
YELLOW CIRCULAR INDICATOR
GREEN CIRCULAR INDICATOR
RED ARROW
YELLOW ARROW
GREEN ARROW
WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
EVP DESIGNATOR
EVP DETECTOR HEAD
COMMUNICATIONS VAULT

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

MONOTUBE STRUCTURES
SB1 = S-67-1503-01
SB6 = S-67-1503-02
SB13 = S-67-1503-03

EVP CONSTRUCTION NOTES:

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT THE EVP DETECTOR HEADS AND WIRE THEM PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF THE EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH EXISTING SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICATED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. FOR A CABINET THAT IS NOT OPERATING THE SIGNAL, CABINET WIRING WILL BE DONE BY THE CONTRACTOR. IF THE CABINET IS OPERATING THE SIGNAL, THE CABINET WIRING WILL BE DONE BY THE DEPARTMENT. THE CONTRACTOR SHALL INSTALL AND TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. EVP A-B-C-D)

WISCONSIN
ALEXANDRIA R. MOTL
46825
MILWAUKEE
WI
PROFESSIONAL ENGINEER
7/31/23

TRAFFIC CONTROL SIGNAL
STH 16 WB RAMPS & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY
CABINET TYPE: TS2-E
SIGNAL NO. S67-1498 CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVAL RECOMMENDED
DATE 7/27/23 REGION TRAFFIC ENGINEER
APPROVED
DATE 8/3/23 STATE TRAFFIC ENGINEER

REGION CONTACT: J. GATES
DESIGNED BY: GRAEF
REVISED BY:

PAGE 1 OF 3

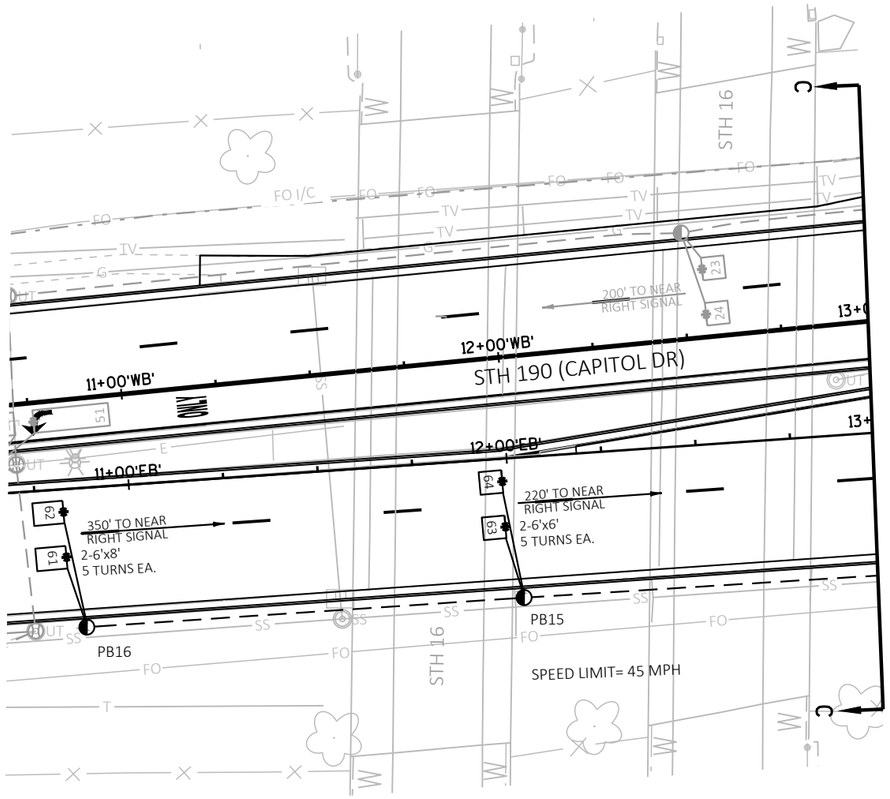
7-27-23

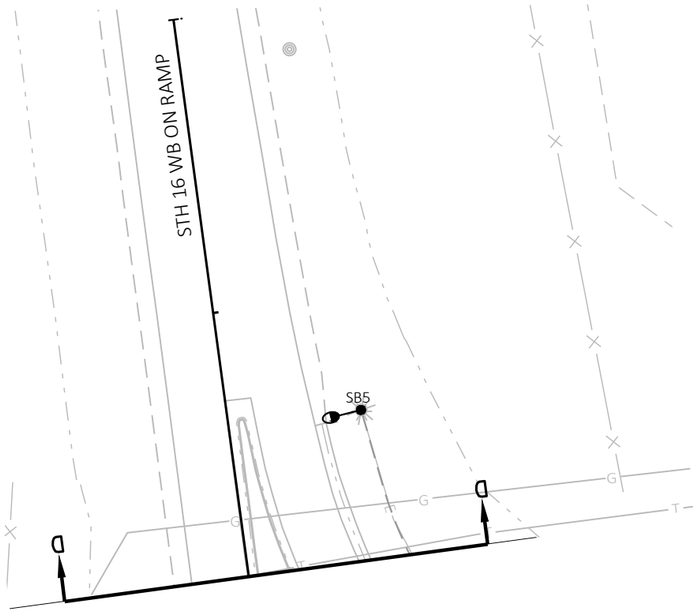
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 138	E

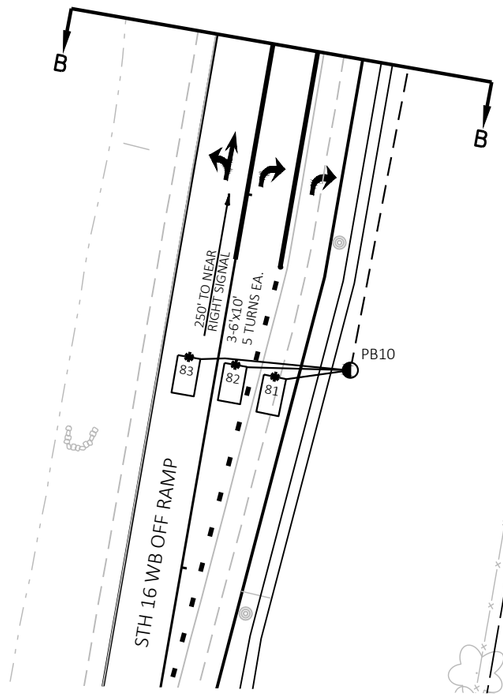
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LAYOUT NAME - S67-1498_pg1
PLOT DATE : 7/31/2023 3:02 PM PLOT BY : NIQUETTE, MATT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

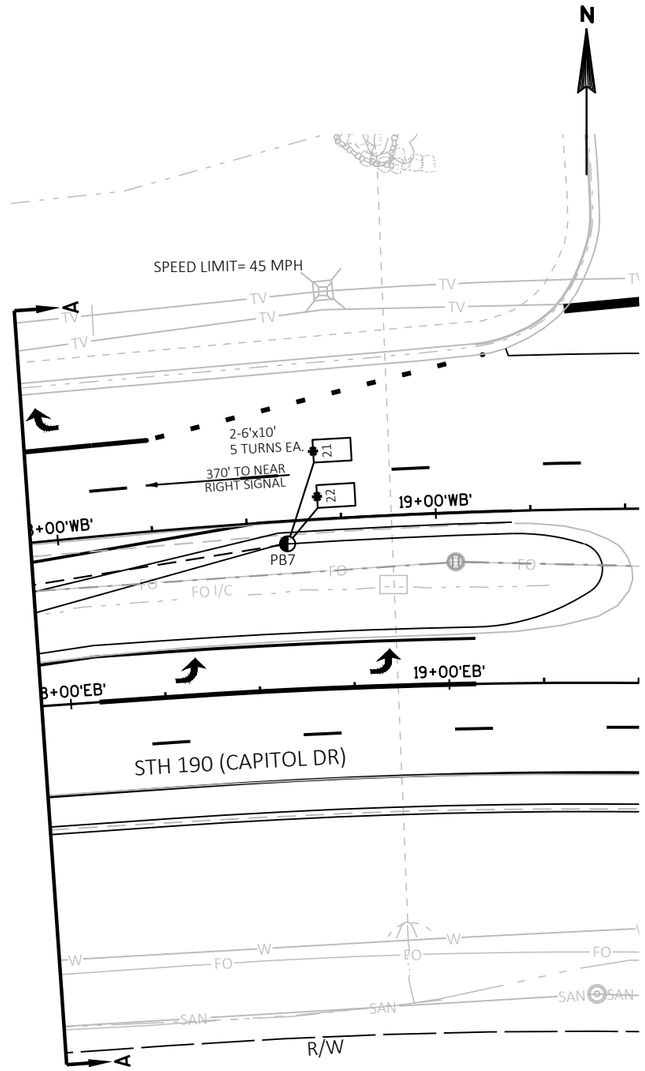
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TRAFFIC CONTROL SIGNAL
STH 16 WB RAMPS & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

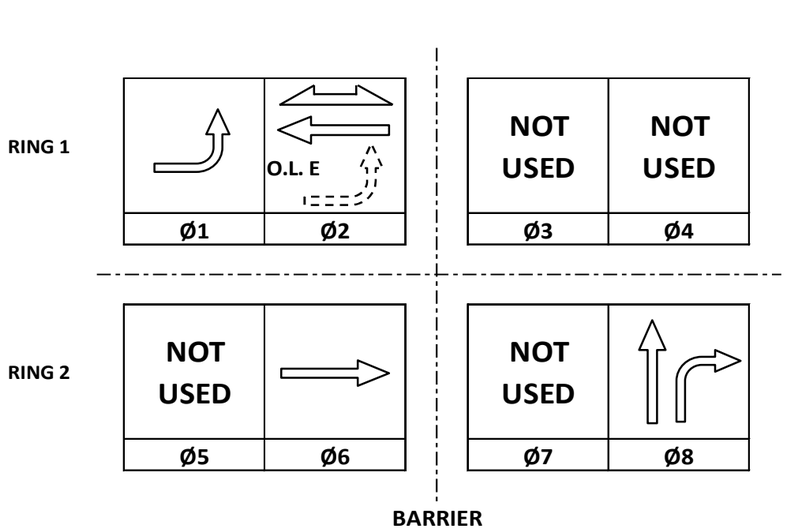
SIGNAL NO. S67-1498

REGION CONTACT: J. GATES
DESIGNED BY: GRAEF
REVISED BY:

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 139	E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\01A_S67-1498_X_STH16WB 024201.DWG
LAYOUT NAME - S67-1498_pg2
PLOT DATE : 7/31/2023 3:02 PM
PLOT BY : NIQUETTE, MATT
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	4, 5, 6	R ←
Ø2	7, 8, 9, 10	R
Ø3		
Ø4		
Ø5		
Ø6	1, 2, 3	R
Ø7		
Ø8	11, 12, 13, 14, 15, 16	R
Ø2P	17, 18	
Ø4P		
Ø6P		
Ø8P		
OLE	4, 5, 6	-
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				
4				
5				
6	X	2	MIN	X
7				
8				X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	D
MOVEMENT			
PHASE	2+6	6+1	8

AFTER PREEMPTION SEQUENCE 2+6 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 8, CONTROLLER SHALL RETURN TO PHASE 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-

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	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	62	64	82	84
CALLED PHASE	1	2	2	2	6	6	8	8
CALL OPTION	X	X	X	X	X	X		X
DELAY TIME								X
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME							X	
USE ADDED INITIAL		X	X	X	X	X		
CROSS SWITCH PHASE	2							

19	17	23	21	27	25	31	29	DETECTOR INPUT
86	88							PLAN LOOP DETECTOR*(S)
8	8							CALLED PHASE
X	X							CALL OPTION
X								DELAY TIME
X	X							EXTENTION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	12	22	24	61	63	81	83	85
CALLED PHASE	1	2	2	6	6	8	8	8
CALL OPTION	X	X	X	X	X			X
DELAY TIME								X
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME						X	X	
USE ADDED INITIAL		X	X	X	X			
CROSS SWITCH PHASE	2							

20	18	24	22	28	26	32	30	DETECTOR INPUT
87	89							PLAN LOOP DETECTOR*(S)
8	8							CALLED PHASE
X	X							CALL OPTION
X								DELAY TIME
X	X							EXTENTION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

STH 16 WB RAMPS & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO: S67-1498 CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE
DATE: 8/2023 PAGE NO. 3 OF 3

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

PROJECT ID:	2025-07-73
INTERSECTION:	STH 16 WB RAMPS & STH 190 (CAPITOL 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	12	RED	ORG	GRN							
		13	RED	ORG	GRN							
		17								BLK	BLU	
		B										WHT/BLK
SB2	7	18								BLK	BLU	
		B										WHT/BLK
SB3	12	5				RED	ORG	GRN	BLK/WHT			
		7	RED/BLK	ORG/BLK	GRN/BLK							
SB6	12	2	RED	ORG	GRN							
		3	RED	ORG	GRN							
		6				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
SB7	7	15	RED				ORG	GRN				
SB8	7	16	RED				ORG	GRN				
SB9	7	14	RED				ORG	GRN				
SB10	7	11	RED	ORG	GRN							
SB11	7	1	RED	ORG	GRN							
SB12	12	4				RED	ORG	GRN	BLK/WHT			
SB13	7	8	RED	ORG	GRN							
		9	RED	ORG	GRN							
		10	RED	ORG	GRN							

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.

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	SB1
PB2	SB2
PB3	SB2
PB5	SB7
PB8	SB9
PB11	SB10
PB12	SB11
PB14	SB11
PB17	SB12
PB19	SB13

EMERGENCY VEHICLE PREEMPTION	
FROM	TO
CB1	HEAD A (SB13)
CB1	HEAD B (SB6)
CB1	HEAD D (SB1)

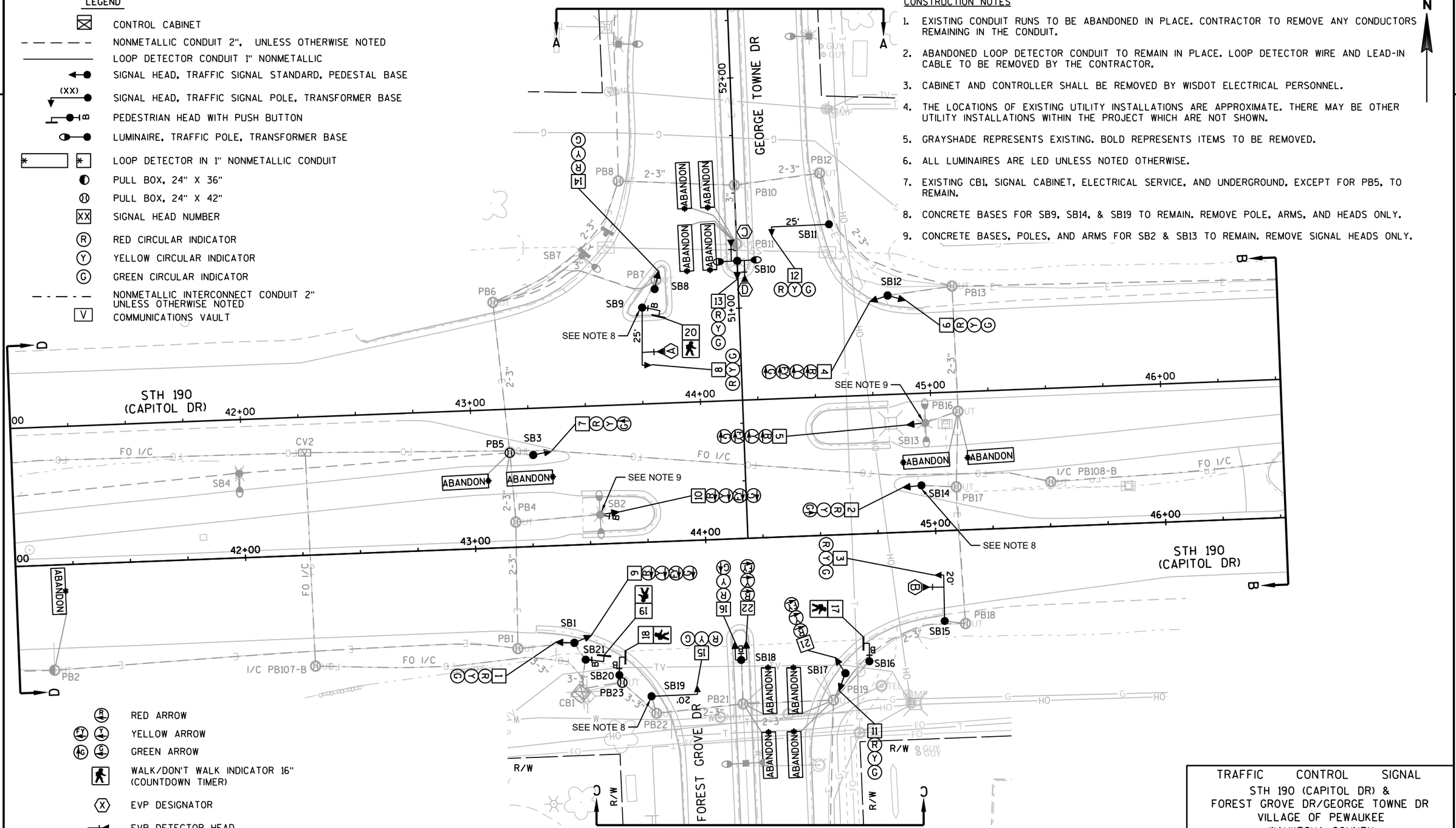
LIGHTING UF 10 AWG W/ GROUND	
FROM	TO
CB1	SB1
SB1	SB4
SB4	SB5
CB1	SB12
SB12	SB10
SB10	SB9
SB9	SB6

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- 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
- NONMETALLIC INTERCONNECT CONDUIT 2" UNLESS OTHERWISE NOTED
- V COMMUNICATIONS VAULT

CONSTRUCTION NOTES

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRE AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
4. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.
6. ALL LUMINAIRES ARE LED UNLESS NOTED OTHERWISE.
7. EXISTING CB1, SIGNAL CABINET, ELECTRICAL SERVICE, AND UNDERGROUND, EXCEPT FOR PB5, TO REMAIN.
8. CONCRETE BASES FOR SB9, SB14, & SB19 TO REMAIN. REMOVE POLE, ARMS, AND HEADS ONLY.
9. CONCRETE BASES, POLES, AND ARMS FOR SB2 & SB13 TO REMAIN. REMOVE SIGNAL HEADS ONLY.



- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- Y YIELD SIGN

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) &
FOREST GROVE DR/GEORGE TOWNE DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0649

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 1 OF 3

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 142 E

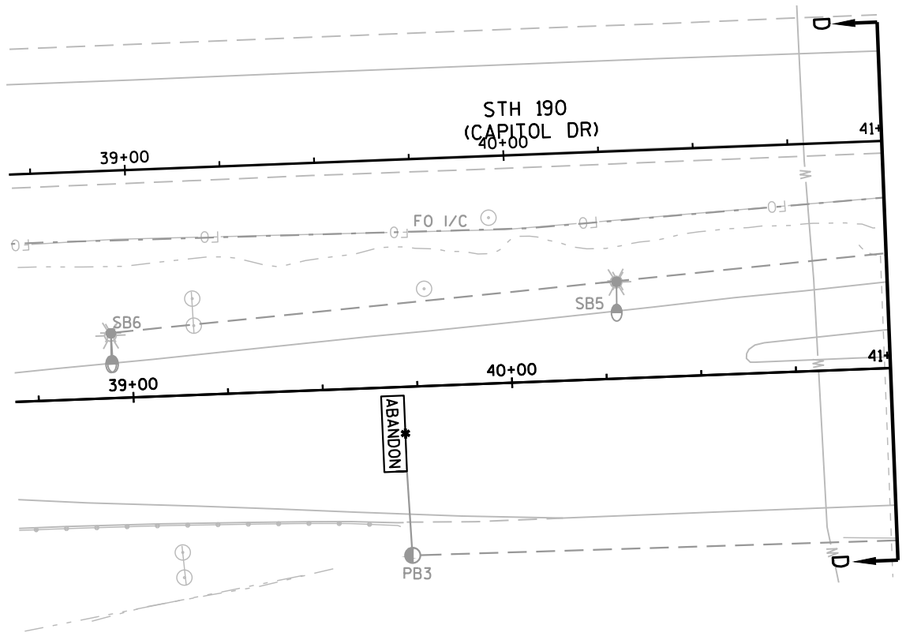
FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\02_S67-0649_I_FORESTGROVE 024001.DWG
LAYOUT NAME - 02_S67-0649_I_FORESTGROVE 024001 - S67-0649_I_PG1

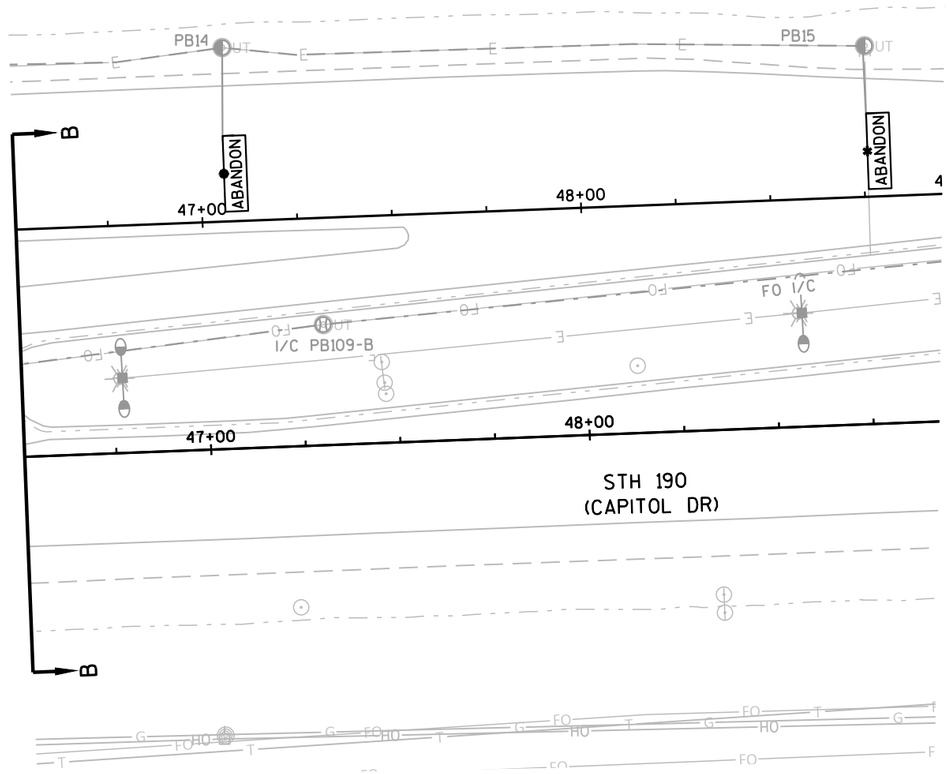
PLOT DATE : 7/18/2023 9:12 AM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N





TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DRIVE) &
FOREST GROVE DRIVE/GEORGE TOWNE DRIVE
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0649

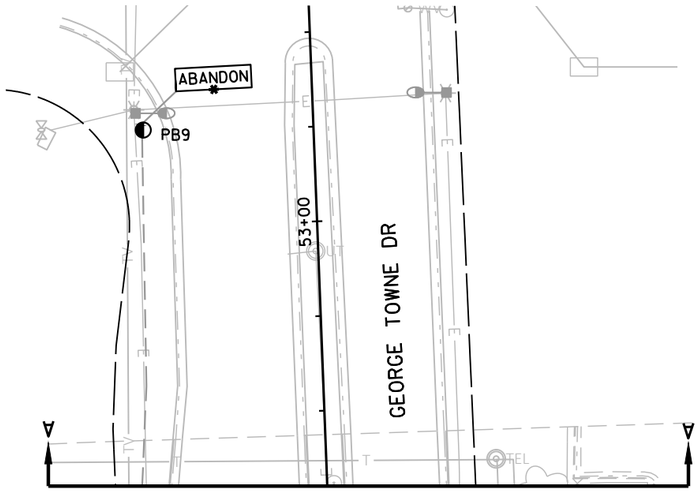
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

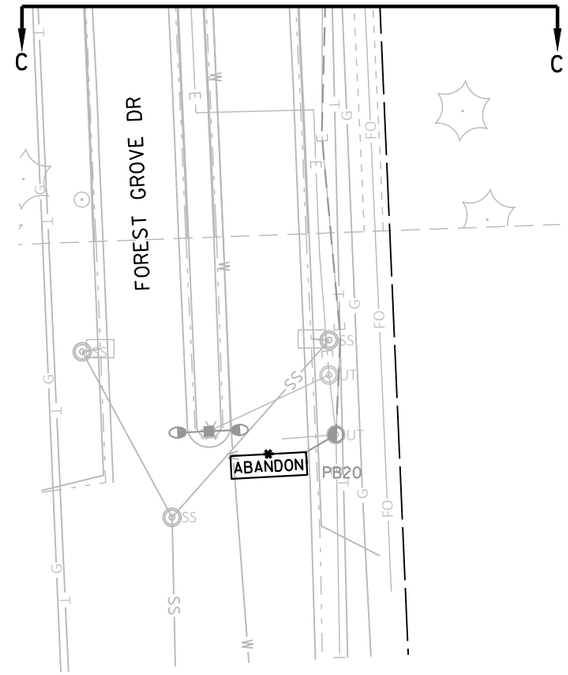
PAGE 2 OF 3

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 143 E

2

N





TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DRIVE) &
FOREST GROVE DRIVE/GEORGE TOWNE DRIVE
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0649

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 3 OF 3

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 144 E

CONSTRUCTION NOTES:

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET, AND HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. LOWER SPAN WIRE TO 12-FT MINIMUM ABOVE GROUND BETWEEN ADJACENT WOOD POLES TO AVOID OVERHEAD LINES, IF NECESSARY. FIELD ADJUST AS NEEDED.
6. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
7. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POLE OR POST.
8. ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
9. PEDESTRIAN CROSSINGS TO REMAIN OPEN WHEN FEASIBLE, CONTRACTOR TO BAG PEDESTRIAN HEADS OF CROSSWALKS THAT ARE CLOSED PER STAGING.
10. SUMMARY OF MATERIALS AND POLE LOCATIONS ARE FOR INFORMATION ONLY AND ANY ADDITIONAL MATERIAL NEEDS ARE CONTRACTOR COST.
11. CONTRACTOR SHALL COORDINATE WITH THE WISDOT ELECTRICAL FIELD UNIT, (414) 266-1170, 5 WORKING DAYS PRIOR TO BEGINNING ANY WORK AT THE INTERSECTION.
12. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR.
13. DETECTION AREAS ARE APPROXIMATE. ZONES SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH FIELD CONDITIONS.
14. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.

LEGEND

- CLASS 4 WOOD POLE
- 4X4 WOOD POST
- CABLE - OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- PUSH BUTTON
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TEMPORARY LUMINAIRE
- YIELD SIGN
- DON'T WALK INDICATOR 16" / WALK INDICATOR 16"
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- NON-INTRUSIVE DETECTION
- NON-INTRUSIVE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

SPEED LIMIT= 25 MPH
GEORGETOWNE DR
SPEED LIMIT= 45 MPH
STH 190 (CAPITOL DR)
42'WB'
44'WB'
46'WB'
42'EB'
44'EB'
46'EB'
FO I/C
CV2
I/C PB108-B
I/C PB107-B
SPEED LIMIT= 45 MPH
WP1
WP2
WP3
WP4
WP5
FOREST GROVE DR
SPEED LIMIT = 25 MPH
R/W
CAUTION

SUMMARY	
SPAN WIRE	655 LF
CLASS 4 WOOD POLE	4 EACH
4X4 WOOD POST	2 EACH
SIGNAL HEADS	20 EACH
PEDESTRIAN HEADS	4 EACH
TEMPORARY SIGNAL CABINET AND CONTROLLER	1 EACH
NON-INTRUSIVE DETECTION SYSTEM	1 EACH
TEMPORARY EVP SYSTEM	1 EACH
LIGHTING LED-C OR 250W HPS	4 EACH

TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR)
FOREST GROVE DR/GEORGE TOWNE DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. T67-0649

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 1 OF 5

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGES 1A, 3, 4B	SHEET 145 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\02_S67-0649_I_FORESTGROVE 024101_S1A34B.DWG
LAYOUT NAME - 02_S67-0649_I_FORESTGROVE 024101_S1A34B - S67-0649_I_S1A34B_PG1
PLOT DATE : 7/31/2023 2:23 PM PLOT BY : NIQUETTE, MATT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- CLASS 4 WOOD POLE
- 4X4 WOOD POST
- CABLE - OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- PUSH BUTTON
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TEMPORARY LUMINAIRE
- YIELD SIGN
- DON'T WALK INDICATOR 16" / WALK INDICATOR 16"
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- NON-INTRUSIVE DETECTION
- NON-INTRUSIVE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

N

SPEED LIMIT= 25 MPH

GEORGETOWNE DR

SPEED LIMIT= 45 MPH

STH 190
(CAPITOL DR)

42'WB'
44'WB'
46'WB'
42'EB'
44'EB'
46'EB'

CV2

FO I/C

I/C PB107-B

I/C PB108-B

WP1
WP2
WP3
WP4
WP5

OH
HO

R/W

FOREST GROVE DR

SPEED LIMIT = 25 MPH

TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR)
FOREST GROVE DR/GEORGE TOWNE DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. T67-0649

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 2 OF 5

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1B	SHEET 146 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\02_S67-0649_I_FORESTGROVE 024101_S1B.DWG
LAYOUT NAME - 02_S67-0649_I_FORESTGROVE 024101_S1B - S67-0649_I_S1B_PG1
PLOT DATE : 7/31/2023 2:23 PM PLOT BY : NIQUETTE, MATT PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- CLASS 4 WOOD POLE
- 4X4 WOOD POST
- CABLE - OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- PUSH BUTTON
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TEMPORARY LUMINAIRE
- YIELD SIGN
- DON'T WALK INDICATOR 16" / WALK INDICATOR 16"
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- NON-INTRUSIVE DETECTION
- NON-INTRUSIVE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

STH 190 (CAPITOL DR)
GEORGETOWNE DR
FOREST GROVE DR
SPEED LIMIT= 25 MPH
SPEED LIMIT= 45 MPH
SPEED LIMIT = 25 MPH
42'WB'
42'EB'
44'WB'
44'EB'
46'WB'
46'EB'
FO I/C
I/C PB107-B
I/C PB108-B
R/W
WP1
WP2
WP3
WP4
WP5
N

TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR)
FOREST GROVE DR/GEORGE TOWNE DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. T67-0649

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 3 OF 5

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2	SHEET 147 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\02_S67-0649_I_FORESTGROVE 024101_S2.DWG
LAYOUT NAME - 02_S67-0649_I_FORESTGROVE 024101_S2 - S67-0649_I_S2_PG1

PLOT DATE : 7/31/2023 2:23 PM PLOT BY : NIQUETTE, MATT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- CLASS 4 WOOD POLE
- 4X4 WOOD POST
- CABLE - OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- PUSH BUTTON
- 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
- TEMPORARY LUMINAIRE
- Y YIELD SIGN
- DON'T WALK INDICATOR 16" / WALK INDICATOR 16"
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- VX NON-INTRUSIVE DETECTION
- NON-INTRUSIVE DETECTION ZONE
- X EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

N

SPEED LIMIT= 25 MPH

GEORGETOWNE DR

SPEED LIMIT= 45 MPH

WP1 WP2 WP3 WP4 WP5

OH FO T E G M W TV MP GUY R/W

41'WB' 42'WB' 44'WB' 46'WB'

42'EB' 44'EB' 46'EB'

CV2 V1 V2

I/C PB107-B I/C PB108-B

STH 190
(CAPITOL DR)

FOREST GROVE DR

SPEED LIMIT = 25 MPH

TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR)
FOREST GROVE DR/GEORGE TOWNE DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. T67-0649

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 4 OF 5

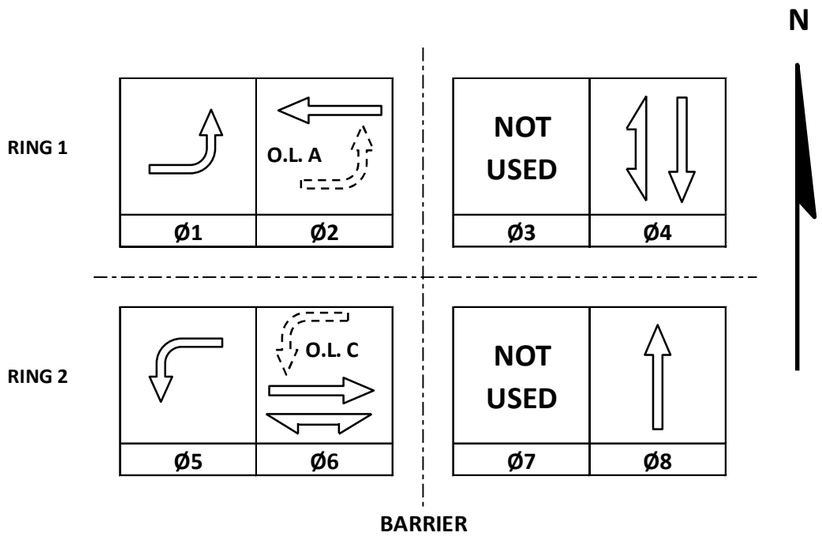
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FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\02_S67-0649_I_FORESTGROVE 024101_S4A.DWG
LAYOUT NAME - 02_S67-0649_I_FORESTGROVE 024101_S4A - S67-0649_I_S4A_PG1

PLOT DATE : 7/31/2023 2:24 PM PLOT BY : NIQUETTE, MATT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	4, 5, 6, 7, 8	R
Ø2	9, 10, 11	R
Ø3		
Ø4	18, 19, 20	R
Ø5	12, 13, 14	R
Ø6	1, 2, 3	R
Ø7		
Ø8	15, 16, 17	R
Ø2P		
Ø4P	23, 24	
Ø6P	21, 22	
Ø8P		
OLA	4, 5, 6, 7, 8	-
OLB		
OLC	12, 13, 14	-
OLD		



USE MODE B FOR FLASHING YELLOW ARROW PHASING OPERATIONS

CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1	4+8	8+4

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+8 OR 8+4, CONTROLLER SHALL RETURN TO PHASES 4+8.

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

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

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

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

STH 190 (CAPITOL DR) & FOREST GROVE DR/GEORGE TOWNE DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO: T67-0649 CABINET TYPE: TEMP
CONTROLLER TYPE: TEMP
DATE: 8/2023 PAGE NO. 5 OF 5

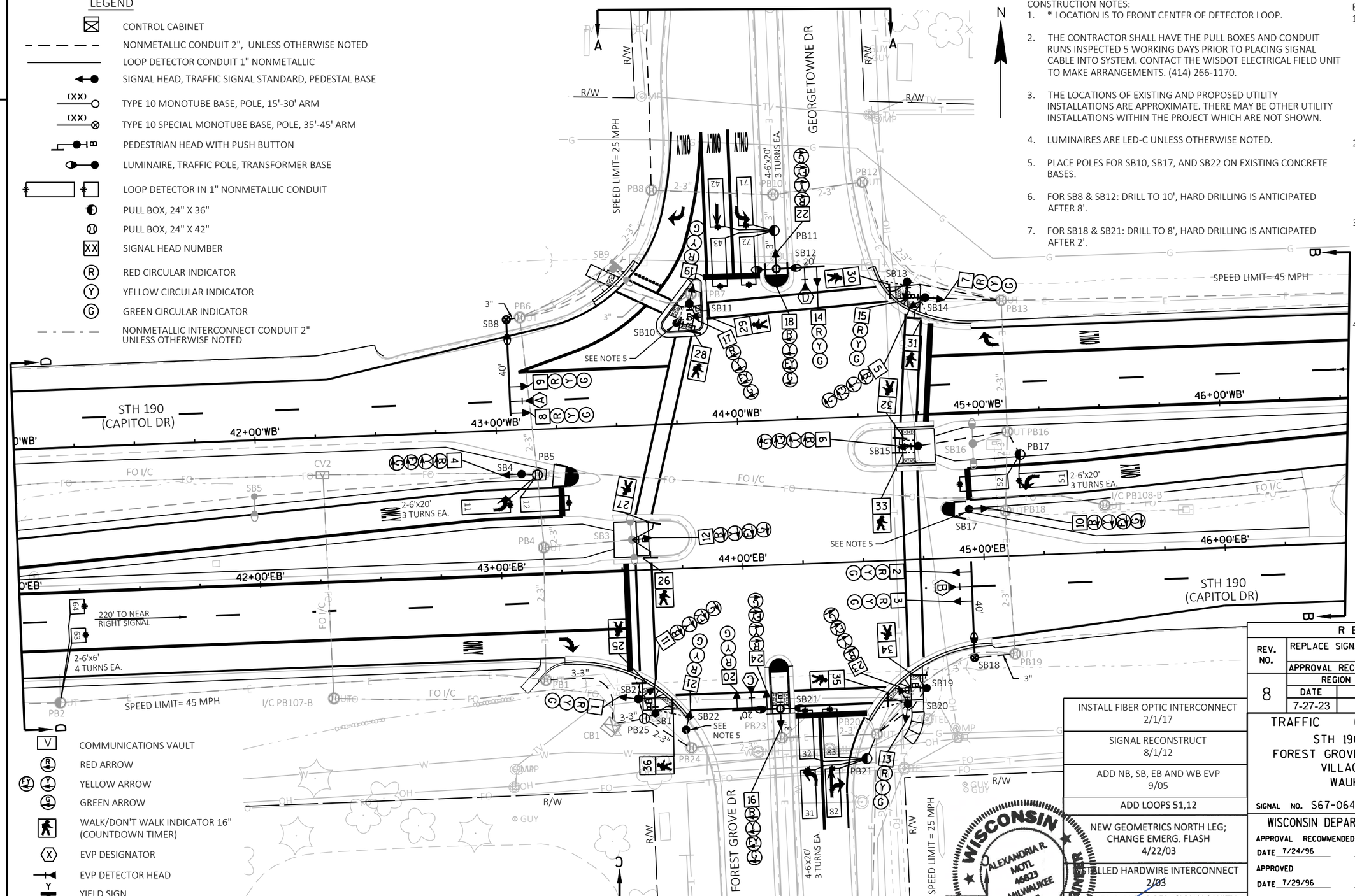
FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) TYPE 10 MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) TYPE 10 SPECIAL MONOTUBE BASE, POLE, 35'-45' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- 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
- NONMETALLIC INTERCONNECT CONDUIT 2" UNLESS OTHERWISE NOTED

- V COMMUNICATIONS VAULT
- (R) RED ARROW
- (FY) (Y) YELLOW ARROW
- (G) GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD
- Y YIELD SIGN

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266-1170.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.
5. PLACE POLES FOR SB10, SB17, AND SB22 ON EXISTING CONCRETE BASES.
6. FOR SB8 & SB12: DRILL TO 10', HARD DRILLING IS ANTICIPATED AFTER 8'.
7. FOR SB18 & SB21: DRILL TO 8', HARD DRILLING IS ANTICIPATED AFTER 2'.

EVP CONSTRUCTION NOTES:

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT THE EVP DETECTOR HEADS AND WIRE THEM PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF THE EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH EXISTING SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICATED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. FOR A CABINET THAT IS NOT OPERATING THE SIGNAL, CABINET WIRING WILL BE DONE BY THE CONTRACTOR. IF THE CABINET IS OPERATING THE SIGNAL, THE CABINET WIRING WILL BE DONE BY THE DEPARTMENT. THE CONTRACTOR SHALL INSTALL AND TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. EVP A-B-C-D)

MONOTUBE STRUCTURES

SB8 = S-67-1501-01
SB12 = S-67-1501-02
SB18 = S-67-1501-03
SB21 = S-67-1501-04

REVISION				
REV. NO.	REPLACE SIGNAL POLES & INSTALL MONOTUBES & LOOP DETECTORS			
	APPROVAL RECOMMENDED		APPROVED	
8	REGION		CENTRAL OFFICE	
	DATE	BY	DATE	BY
	7-27-23		8-3-23	

INSTALL FIBER OPTIC INTERCONNECT 2/1/17

SIGNAL RECONSTRUCT 8/1/12

ADD NB, SB, EB AND WB EVP 9/05

ADD LOOPS 51,12

NEW GEOMETRICS NORTH LEG; CHANGE EMERG. FLASH 4/22/03

INSTALLED HARDWIRE INTERCONNECT 2/03

ADDED PHASE 8 PED. SIGNALS WITH PUSH BUTTONS 4/19/99

TRAFFIC CONTROL SIGNAL 7-27-23

STH 190 (CAPITOL DR) &
FOREST GROVE DR/GEORGE TOWNE DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0649 CABINET TYPE: TS2-S CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 7/24/96 GARY P. KNERR, REGION TRAFFIC ENGINEER

APPROVED
DATE 7/29/96 WILLIAM C. GILDING, STATE TRAFFIC ENGINEER

REGION CONTACT: J GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 1 OF 4

WISCONSIN PROFESSIONAL ENGINEER ALEXANDRIA R. MOTL 46823 MILWAUKEE WI

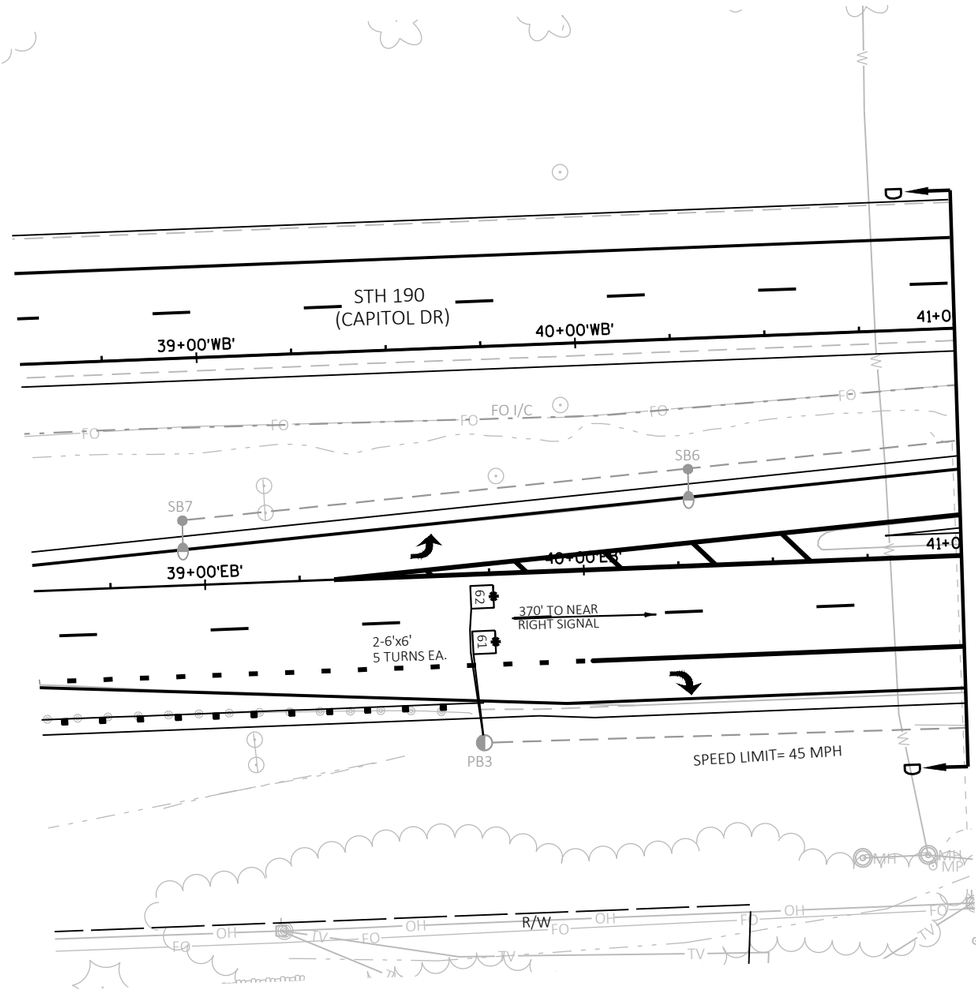
7/31/23

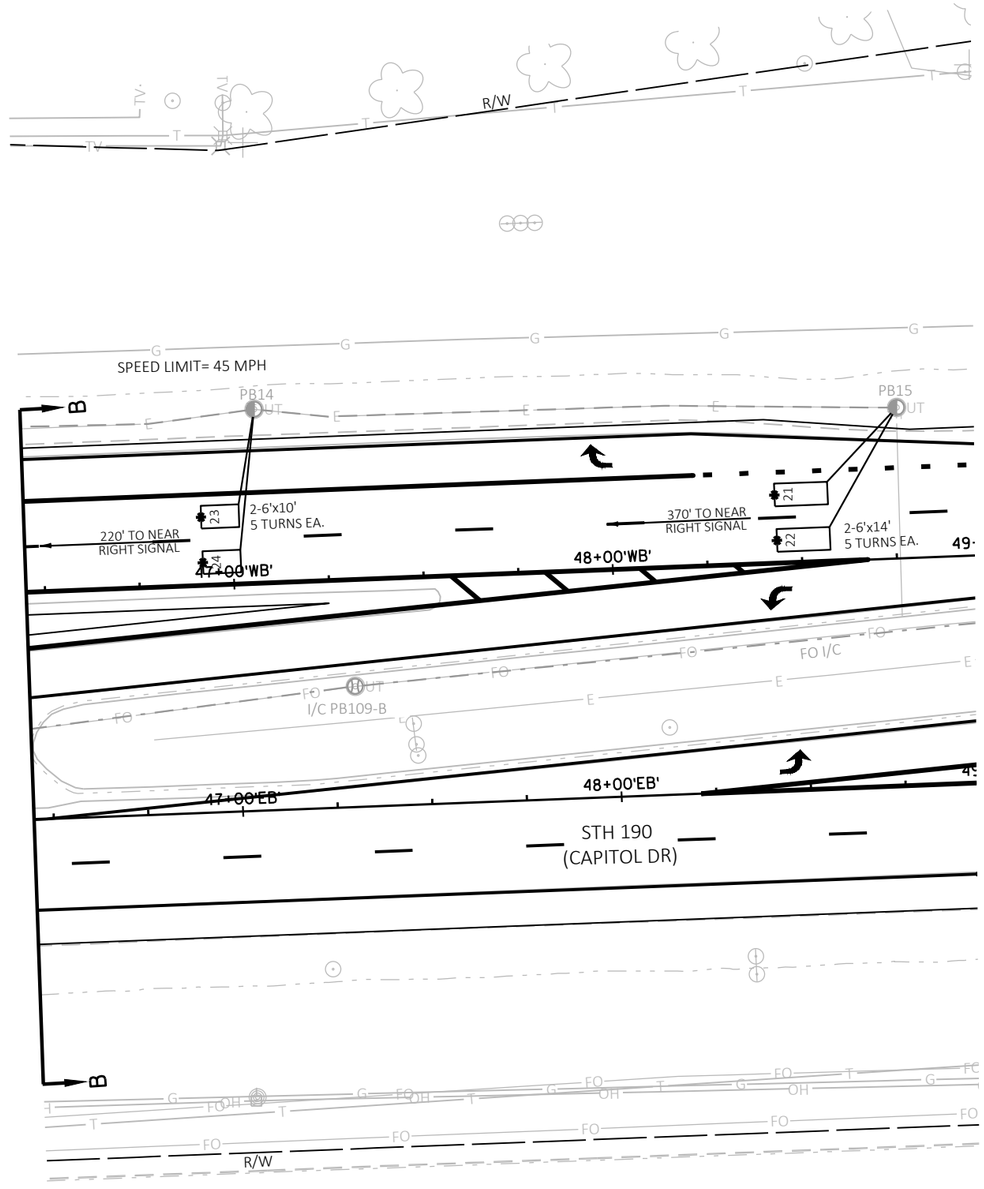
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 150 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\02_S67-0649_I_FORESTGROVE 024201.DWG
LAYOUT NAME - S67-0649_I_pg1
PLOT DATE : 7/31/2023 2:57 PM PLOT BY : NIQUETTE, MATT PLOT NAME : PLOT SCALE : ########

WISDOT/CADDS SHEET 42

2





TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) &
FOREST GROVE DR/GEORGE TOWNE DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0649

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

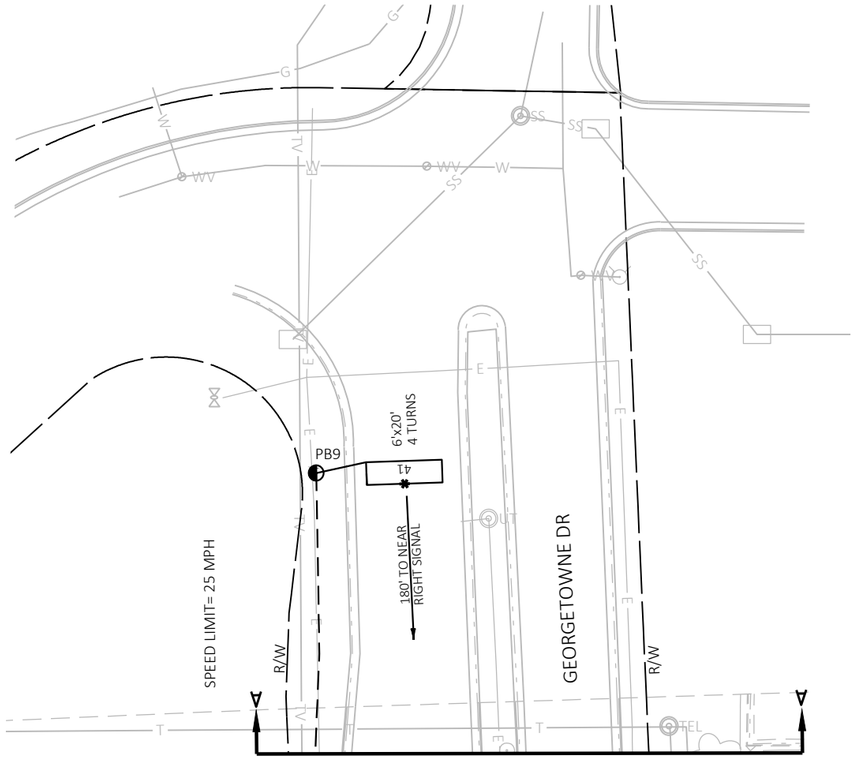
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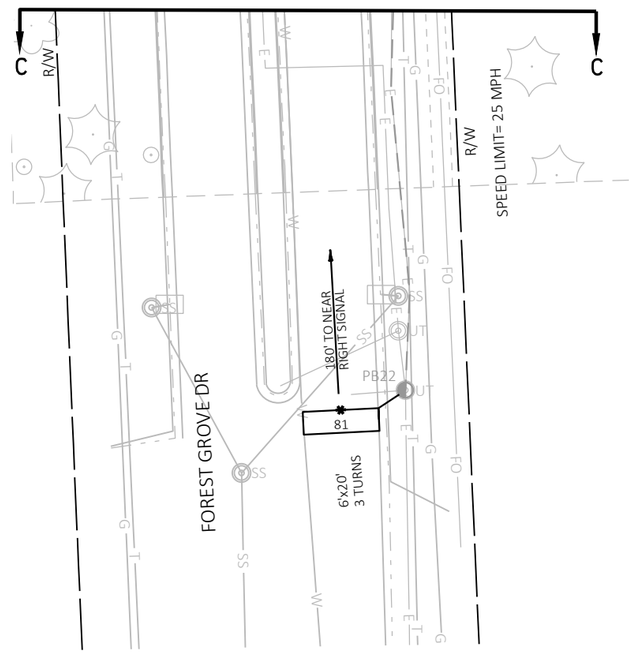
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LAYOUT NAME - S67-0649_I_pg2

PLOT DATE : 7/31/2023 2:57 PM PLOT BY : NIQUETTE, MATT PLOT NAME : PLOT SCALE : ##########

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TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) &
FOREST GROVE DR/GEORGE TOWNE DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0649

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

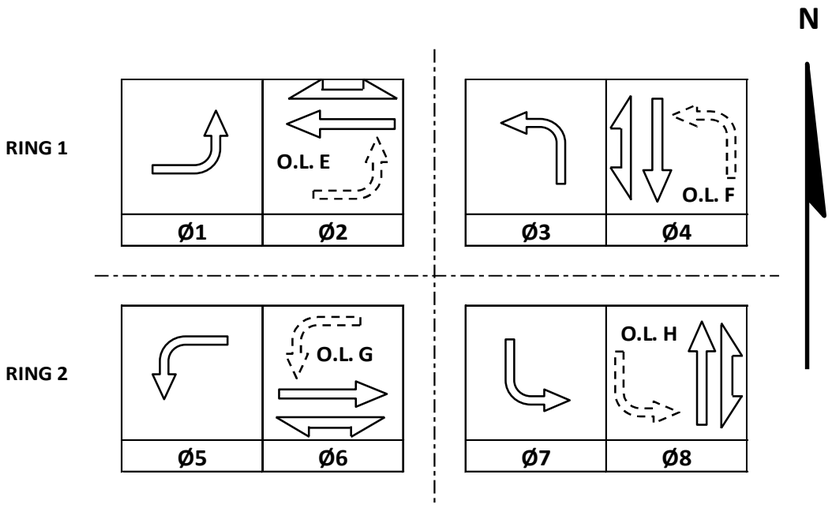
PAGE 3 OF 4

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 152 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\02_S67-0649_I_FORESTGROVE 024201.DWG
LAYOUT NAME - S67-0649_I_pg3

PLOT DATE : 7/31/2023 2:57 PM PLOT BY : NIQUETTE, MATT PLOT NAME : PLOT SCALE : ##########

	HEAD NUMBERS	FLASH
Ø1	4, 5, 6	R ←
Ø2	7, 8, 9	R
Ø3	16, 17, 18	R ←
Ø4	19, 20, 21	R
Ø5	10, 11, 12	R ←
Ø6	1, 2, 3	R
Ø7	22, 23, 24	R ←
Ø8	13, 14, 15	R
Ø2P	29, 30	
Ø4P	25, 26, 27, 28	
Ø6P	35, 36	
Ø8P	31, 32, 33, 34	
OLE	4, 5, 6	-
OLF	16, 17, 18	-
OLG	10, 11, 12	-
OLH	22, 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-

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

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	X
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	31	41	43	52	62	64	72	82						PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	2	3	4	4	5	6	6	7	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								USE ADDED INITIAL
CROSS SWITCH PHASE	2			4			6			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	32	42	51	61	63	71	81	83						PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	2	3	4	5	6	6	7	8	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									USE ADDED INITIAL
CROSS SWITCH PHASE	2			4		6			8								CROSS SWITCH PHASE

STH 190 (CAPITOL DR) & FOREST GROVE DR/GEORGE TOWNE DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO: S67-0649 CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE
DATE: 8/2023 PAGE NO. 4 OF 4

PROJECT ID:	2025-07-73
INTERSECTION:	STH 190 (CAPITOL DR) & FOREST GROVE DR/GEORGETOWNE 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	7	36								BLK	BLU	
		B										WHT/BLK
SB2	12	1	RED	ORG	GRN							
		11				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
		25								BLK	BLU	
		B										WHT/BLK
SB3	12	12				RED	ORG	GRN	BLK/WHT			
		26								BLK	BLU	
		27								BLK	BLU	
		B										WHT/BLK
SB4	12	4				RED	ORG	GRN	BLK/WHT			
SB8	7	8	RED	ORG	GRN							
		9	RED	ORG	GRN							
SB10	7	28								BLK	BLU	
		B										WHT/BLK
SB11	12	17				RED	ORG	GRN	BLK/WHT			
		19	RED/BLK	ORG/BLK	GRN/BLK							
		29								BLK	BLU	
		B										WHT/BLK
SB12	15	14	RED	ORG	GRN							
		18				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
		22				RED/WHT	BLU/WHT	GRN/WHT	BLU/BLK			
SB13	12	15	RED	ORG	GRN							
		30								BLK	BLU	
		B										WHT/BLK
SB14	12	5				RED	ORG	GRN	BLK/WHT			
		7	RED/BLK	ORG/BLK	GRN/BLK							
		31								BLK	BLU	
		B										WHT/BLK
SB15	12	6				RED	ORG	GRN	BLK/WHT			
		32								BLK	BLU	
		33								BLK	BLU	
		B										WHT/BLK
SB17	12	10				RED	ORG	GRN	BLK/WHT			
SB18	7	2	RED	ORG	GRN							
		3	RED	ORG	GRN							
SB19	7	34								BLK	BLU	
		B										WHT/BLK
SB20	12	13	RED	ORG	GRN							
		23				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
		35								BLK	BLU	
		B										WHT/BLK
SSB21	15	16				RED	ORG	GRN	BLK/WHT			
		20	RED/BLK	ORG/BLK	GRN/BLK							
		24				RED/WHT	BLU/WHT	GRN/WHT	BLU/BLK			
		B										WHT/BLK
SB22	7	21	RED	ORG	GRN							

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB3
SB3	SB4
SB4	SB8
SB8	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	SB14
SB14	SB15
SB15	SB17
SB17	SB18
SB18	SB19
SB19	SB20
SB20	SB21
SB21	SB22
SB22	SB1
SB1	SB2
SB2	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	CB1
PB4	SB3
PB5	SB4
PB6	SB8
PB7	SB11
PB8	SB8
PB10	SB12
PB12	SB12
PB13	SB14
PB16	SB15
PB18	SB17
PB19	SB18
PB20	SB20
PB23	SB21
PB24	SB22
PB25	SB1
PB11	SB12

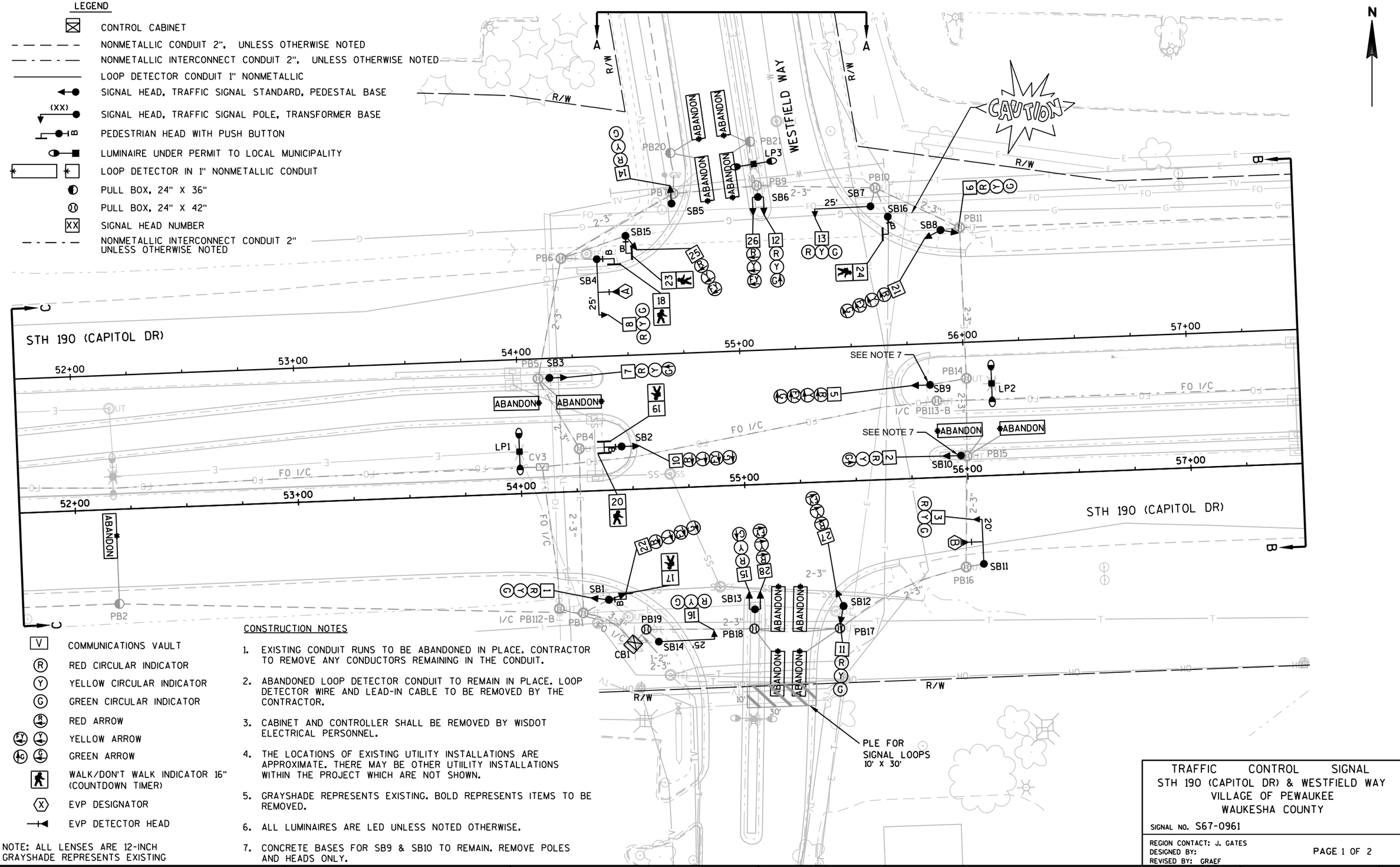
EMERGENCY VEHICLE PREEMPTION	
FROM	TO
CB1	HEAD A (SB8)
CB1	HEAD B (SB18)
CB1	HEAD C (SB21)
CB1	HEAD D (SB12)

LIGHTING UF 10 AWG W/ GROUND	
FROM	TO
CB1	SB3
SB3	SB5
SB5	SB6
SB6	SB7
SB3	SB8
SB8	SB9
CB1	SB21
SB21	SB18
SB18	SB16
SB16	SB12

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
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- NONMETALLIC INTERCONNECT CONDUIT 2" UNLESS OTHERWISE NOTED



- V COMMUNICATIONS VAULT
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RA RED ARROW
- FY YELLOW ARROW
- AG GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- X EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRE AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
4. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.
6. ALL LUMINAIRES ARE LED UNLESS NOTED OTHERWISE.
7. CONCRETE BASES FOR SB9 & SB10 TO REMAIN. REMOVE POLES AND HEADS ONLY.

TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) & WESTFIELD WAY
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0961

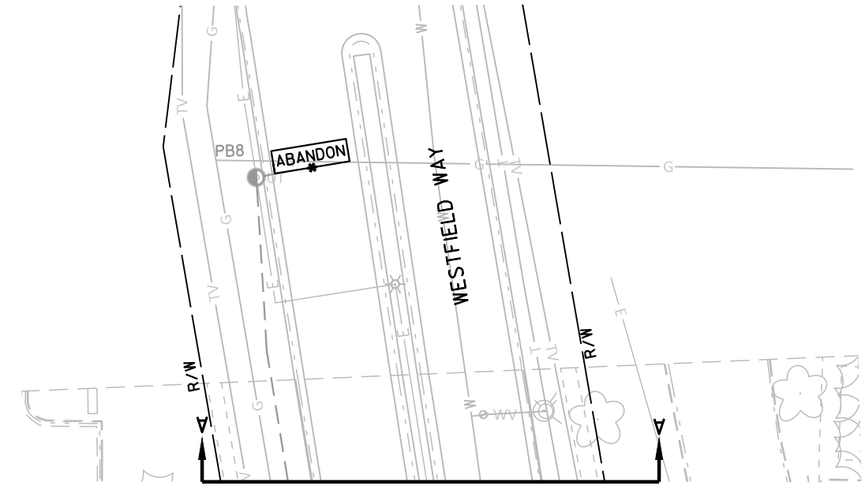
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

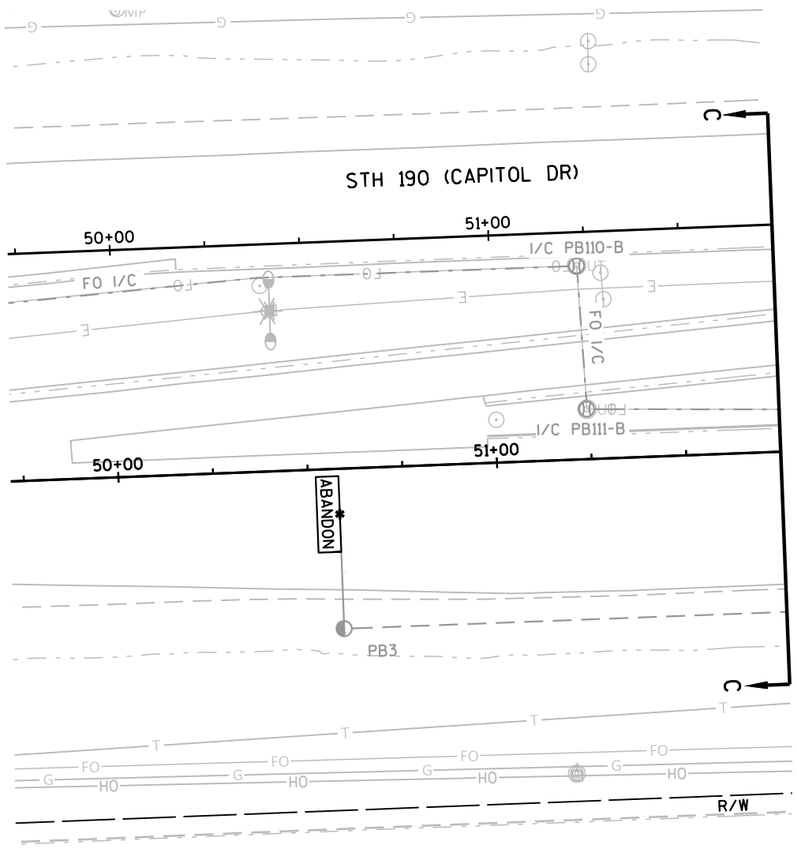
PAGE 1 OF 2

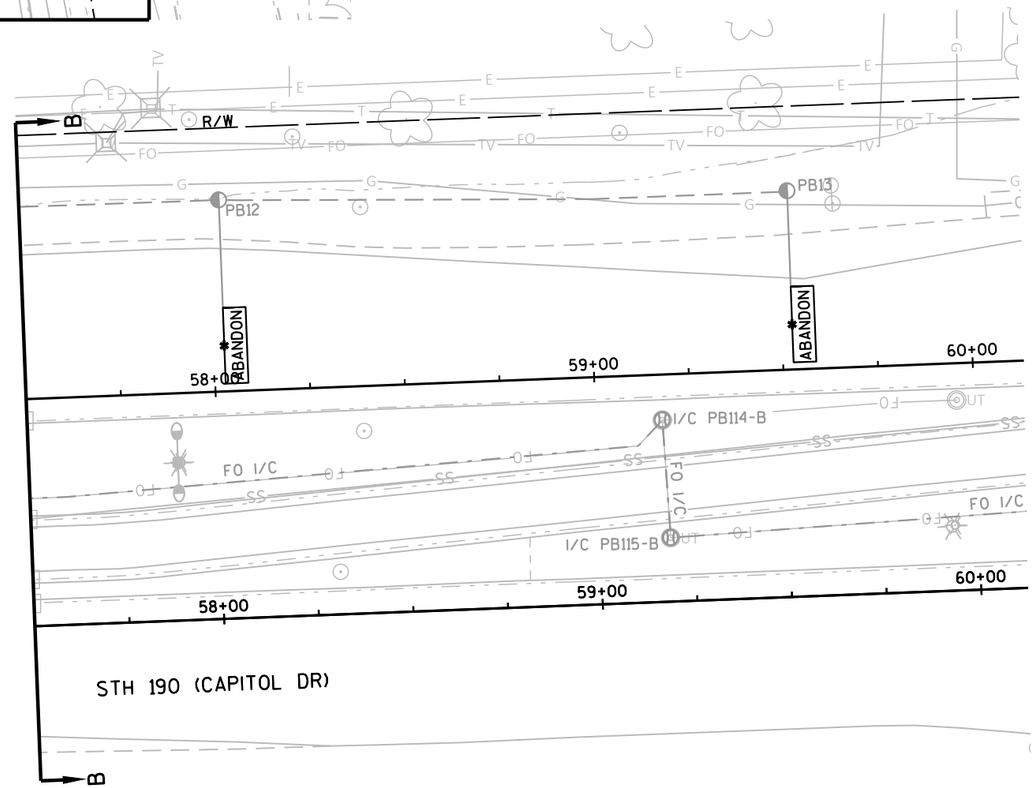
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 155 E

2

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TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) & WESTFIELD WAY
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0961

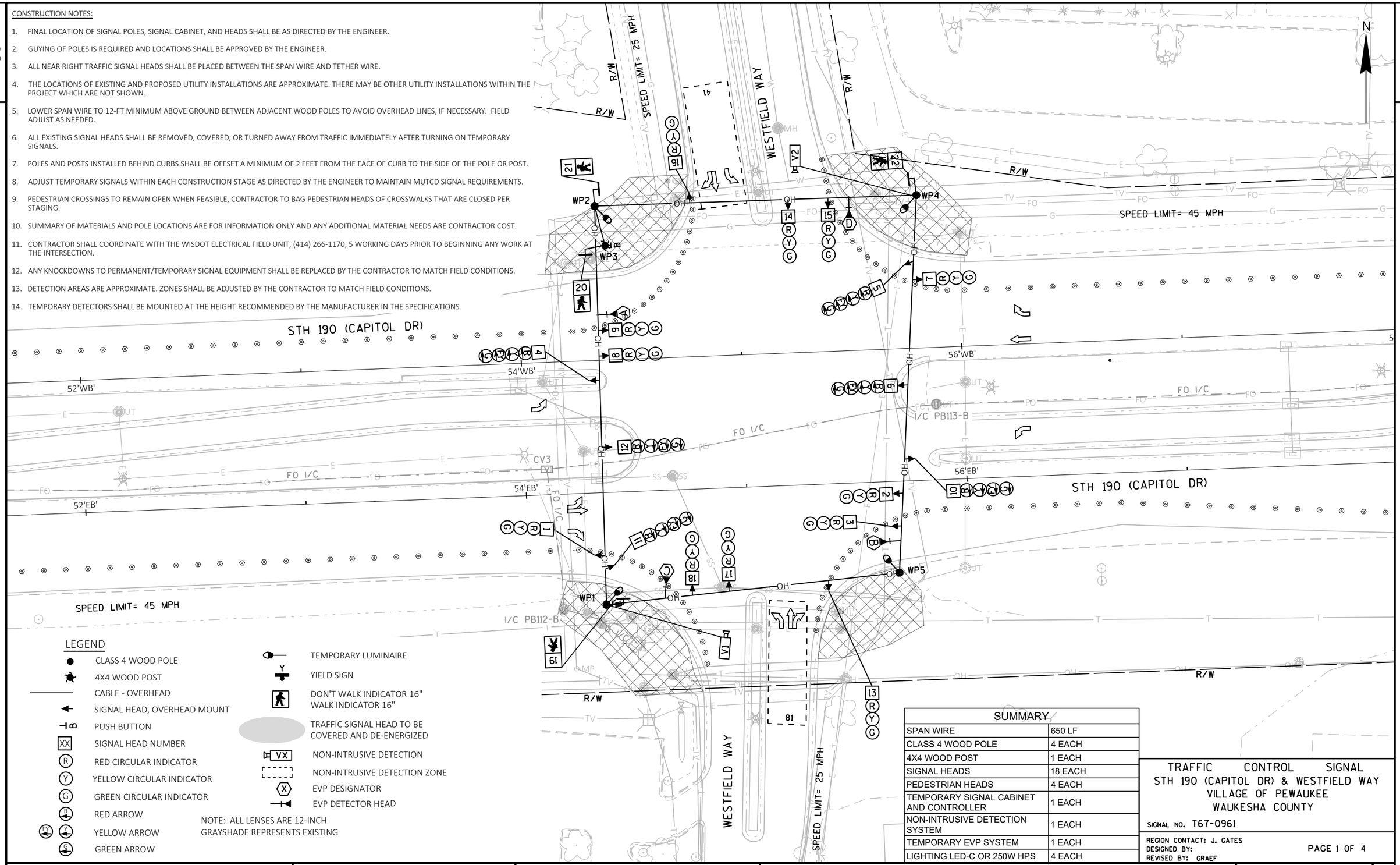
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 2 OF 2

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 156 E

CONSTRUCTION NOTES:

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET, AND HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. LOWER SPAN WIRE TO 12-FT MINIMUM ABOVE GROUND BETWEEN ADJACENT WOOD POLES TO AVOID OVERHEAD LINES, IF NECESSARY. FIELD ADJUST AS NEEDED.
6. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
7. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POLE OR POST.
8. ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
9. PEDESTRIAN CROSSINGS TO REMAIN OPEN WHEN FEASIBLE, CONTRACTOR TO BAG PEDESTRIAN HEADS OF CROSSWALKS THAT ARE CLOSED PER STAGING.
10. SUMMARY OF MATERIALS AND POLE LOCATIONS ARE FOR INFORMATION ONLY AND ANY ADDITIONAL MATERIAL NEEDS ARE CONTRACTOR COST.
11. CONTRACTOR SHALL COORDINATE WITH THE WISDOT ELECTRICAL FIELD UNIT, (414) 266-1170, 5 WORKING DAYS PRIOR TO BEGINNING ANY WORK AT THE INTERSECTION.
12. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO MATCH FIELD CONDITIONS.
13. DETECTION AREAS ARE APPROXIMATE. ZONES SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH FIELD CONDITIONS.
14. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.



LEGEND

- CLASS 4 WOOD POLE
- 4X4 WOOD POST
- CABLE - OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- PUSH BUTTON
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TEMPORARY LUMINAIRE
- Y YIELD SIGN
- DON'T WALK INDICATOR 16" / WALK INDICATOR 16"
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- VX NON-INTRUSIVE DETECTION
- NON-INTRUSIVE DETECTION ZONE
- X EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

SUMMARY	
SPAN WIRE	650 LF
CLASS 4 WOOD POLE	4 EACH
4X4 WOOD POST	1 EACH
SIGNAL HEADS	18 EACH
PEDESTRIAN HEADS	4 EACH
TEMPORARY SIGNAL CABINET AND CONTROLLER	1 EACH
NON-INTRUSIVE DETECTION SYSTEM	1 EACH
TEMPORARY EVP SYSTEM	1 EACH
LIGHTING LED-C OR 250W HPS	4 EACH

TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) & WESTFIELD WAY
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. T67-0961

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 1 OF 4

PROJECT NO:2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGES 1A, 3, 4B	SHEET 157	E

LEGEND

- CLASS 4 WOOD POLE
- 4X4 WOOD POST
- CABLE - OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- PUSH BUTTON
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TEMPORARY LUMINAIRE
- YIELD SIGN
- DON'T WALK INDICATOR 16" / WALK INDICATOR 16"
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- NON-INTRUSIVE DETECTION
- NON-INTRUSIVE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

STH 190 (CAPITOL DR)
SPEED LIMIT= 45 MPH
SPEED LIMIT= 25 MPH
WESTFIELD WAY
R/W
WP1
WP2
WP3
WP4
WP5
FO I/C
I/C PB112-B
I/C PB113-B
CV3
V1
V2
52'WB'
54'WB'
56'WB'
52'EB'
54'EB'
56'EB'

TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) & WESTFIELD WAY
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. T67-0961

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 2 OF 4

PROJECT NO:2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGES 1B, 4A	SHEET 158 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\03_S67-0961_E_WESTFIELD 024101_S1B4A.DWG
LAYOUT NAME - 03_S67-0961_E_WESTFIELD 024101_S1B4A - S67-0961_E_S1B4A_PG1

PLOT DATE : 7/31/2023 2:21 PM PLOT BY : NIQUETTE, MATT PLOT NAME : PLOT SCALE : 1 IN:40 FT

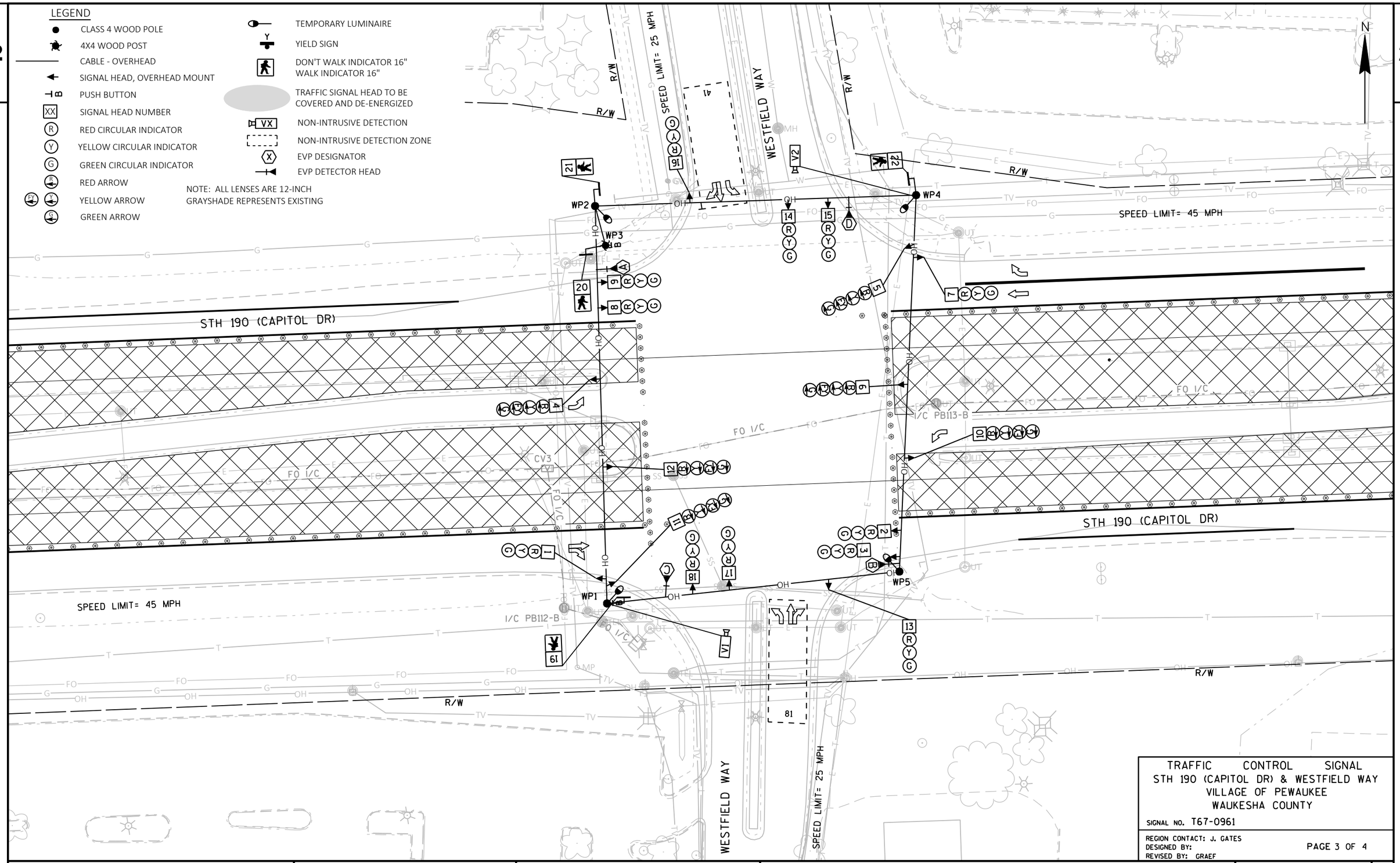
WISDOT/CADDS SHEET 42

2

LEGEND

- CLASS 4 WOOD POLE
- 4X4 WOOD POST
- CABLE - OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- PUSH BUTTON
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TEMPORARY LUMINAIRE
- YIELD SIGN
- DON'T WALK INDICATOR 16" / WALK INDICATOR 16"
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- NON-INTRUSIVE DETECTION
- NON-INTRUSIVE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) & WESTFIELD WAY
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. T67-0961

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 3 OF 4

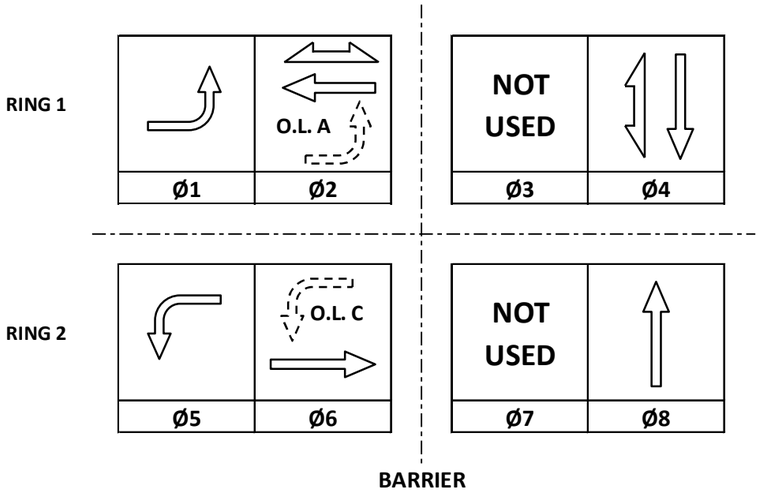
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2	SHEET 159	E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\03_S67-0961_E_WESTFIELD 024101_S2.DWG
LAYOUT NAME - 03_S67-0961_E_WESTFIELD 024101_S2 - S67-0961_E_S2_PG1

PLOT DATE : 7/31/2023 2:21 PM PLOT BY : NIQUETTE, MATT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	4, 5, 6	R ←
Ø2	7, 8, 9	R
Ø3		
Ø4	16, 17, 18	R
Ø5	10, 11, 12	R ←
Ø6	1, 2, 3	R
Ø7		
Ø8	13, 14, 15	R
Ø2P	21, 22	
Ø4P	19, 20	
Ø6P		
Ø8P		
OLA	4, 5, 6	-
OLB		
OLC	10, 11, 12	-
OLD		



USE MODE B FOR FLASHING YELLOW ARROW PHASING OPERATIONS

CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1	4+8	8+4

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+8 OR 8+4, CONTROLLER SHALL RETURN TO PHASES 4+8.

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

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

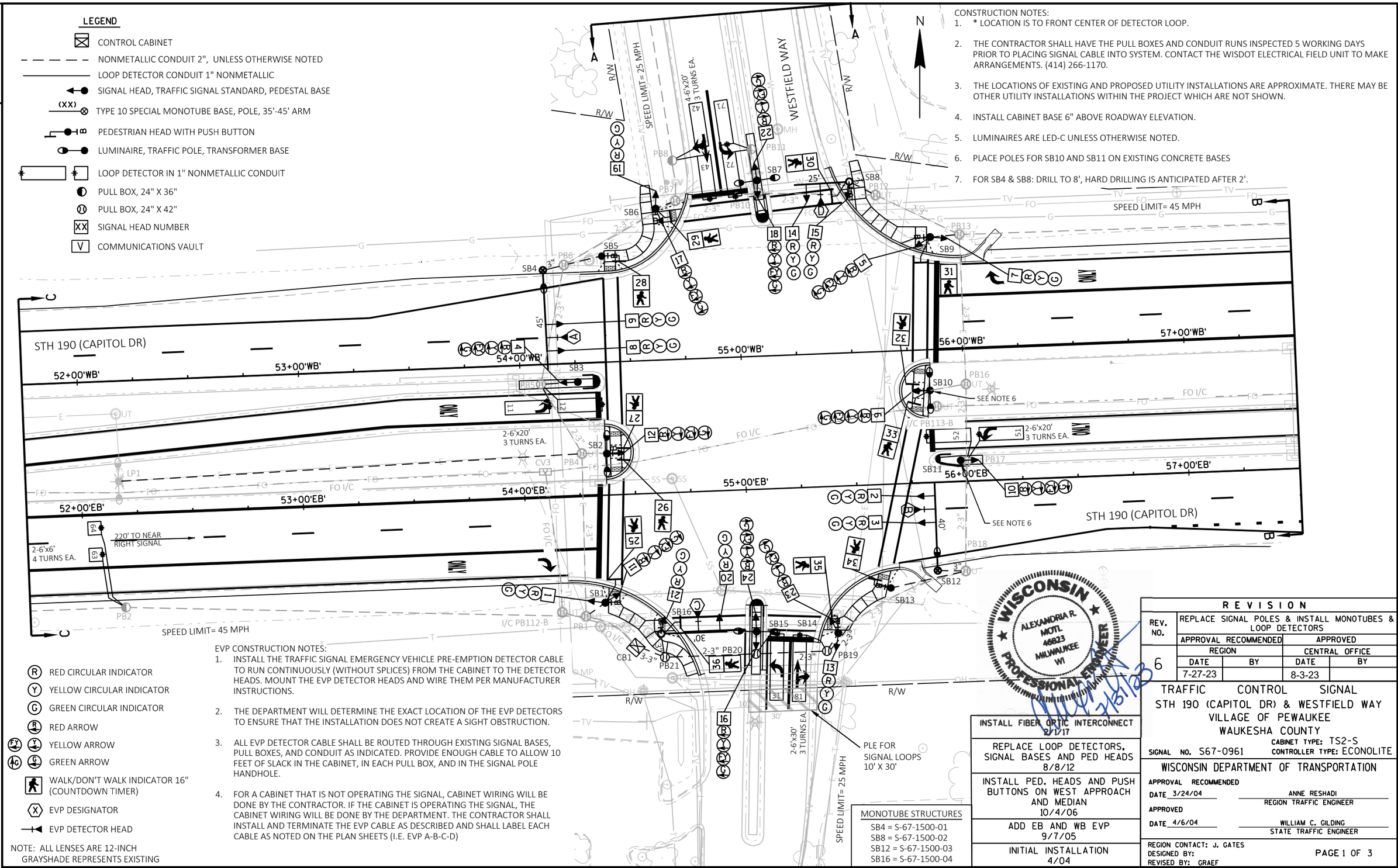
TYPE OF LIGHTING	
BY OTHER AGENCY	X
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

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

STH 190 (CAPITOL DR) & WESTFIELD WAY
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO: T67-0961 CABINET TYPE: TEMP
CONTROLLER TYPE: TEMP
DATE: 8/2023 PAGE NO. 4 OF 4

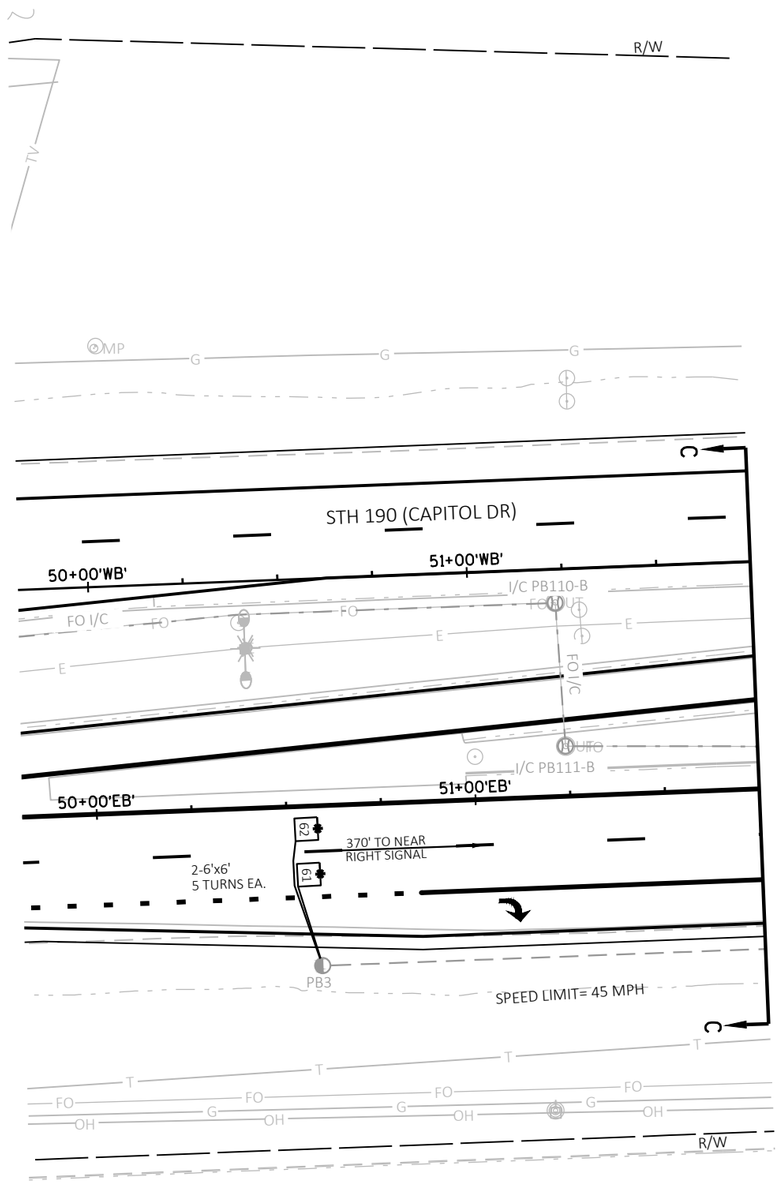
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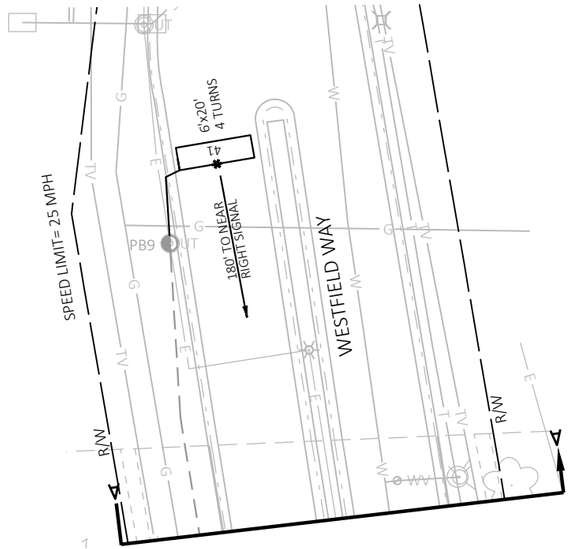


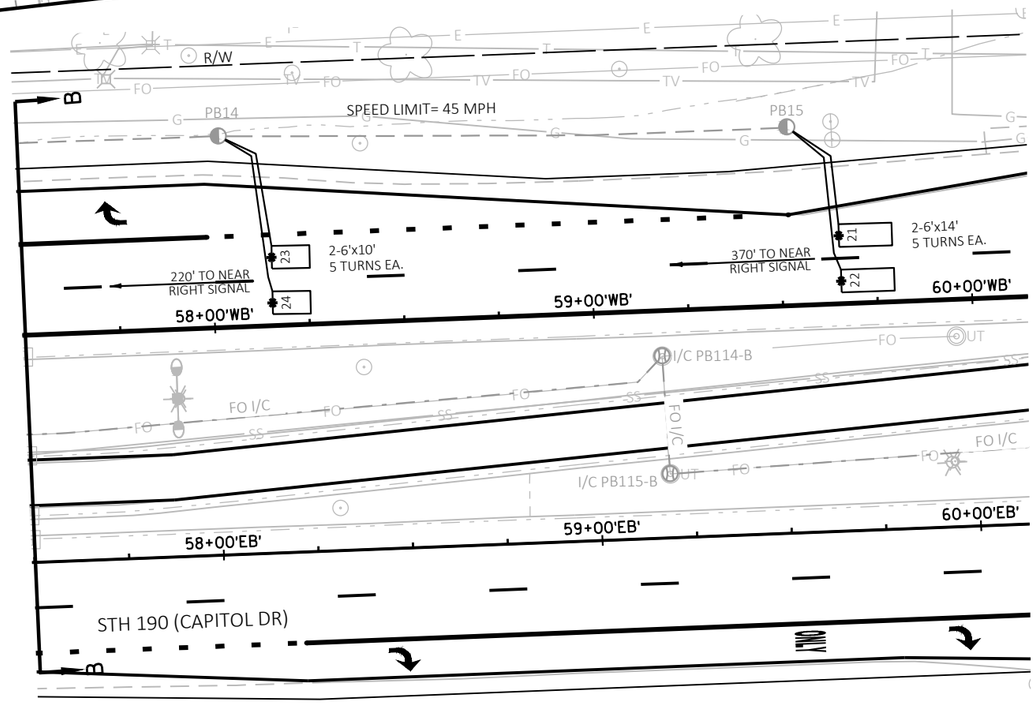
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 161	E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\03_S67-0961_E_WESTFIELD 024201.DWG
LAYOUT NAME - S67-0961_E_pg1
PLOT DATE : 7/31/2023 2:59 PM PLOT BY : NIQUETTE, MATT PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2







N

TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) & WESTFIELD WAY
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0961

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

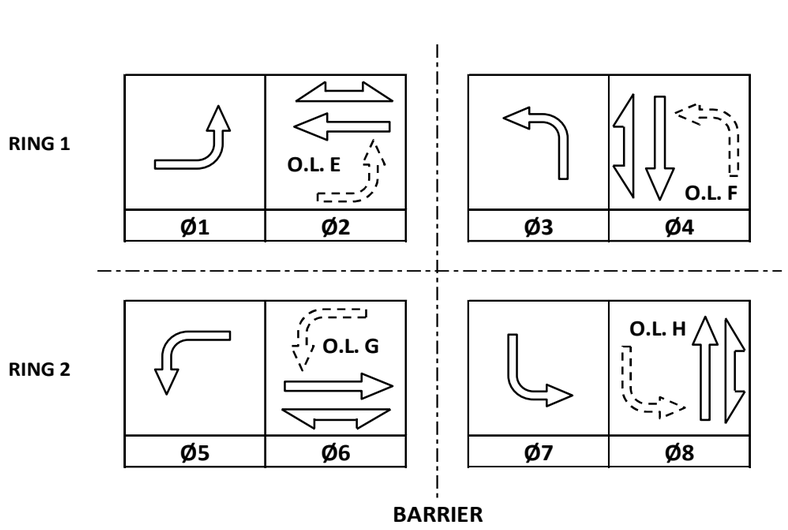
PAGE 2 OF 3

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 162 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\03_S67-0961_E_WESTFIELD 024201.DWG
LAYOUT NAME - S67-0961_E_pg2

PLOT DATE : 7/31/2023 2:59 PM PLOT BY : NIQUETTE, MATT PLOT NAME : PLOT SCALE : ##########

	HEAD NUMBERS	FLASH
Ø1	4, 5, 6	R ←
Ø2	7, 8, 9	R
Ø3	16, 17, 18	R ←
Ø4	19, 20, 21	R
Ø5	10, 11, 12	R ←
Ø6	1, 2, 3	R
Ø7	22, 23, 24	R ←
Ø8	13, 14, 15	R
Ø2P	29, 30	
Ø4P	25, 26, 27, 28	
Ø6P	35, 36	
Ø8P	31, 32, 33, 34	
OLE	4, 5, 6	-
OLF	16, 17, 18	-
OLG	10, 11, 12	-
OLH	22, 23, 24	-



CONTROLLER LOGIC

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

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

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	X
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	31	42	51	61	63	71	81							PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	2	3	4	5	6	6	7	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									USE ADDED INITIAL
CROSS SWITCH PHASE	2			4		6			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	41	43	52	62	64	72								PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	2	4	4	5	6	6	7								CALLED PHASE
CALL OPTION	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								EXTENTION OPTION
EXTEND TIME				X													EXTEND TIME
USE ADDED INITIAL		X	X				X	X									USE ADDED INITIAL
CROSS SWITCH PHASE	2					6			8								CROSS SWITCH PHASE

STH 190 (CAPITOL DR) & WESTFIELD WAY
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO: S67-0961 CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE
DATE: 8/2023 PAGE NO. 3 OF 3

PROJECT ID:	2025-07-73
INTERSECTION:	STH 190 (CAPITOL DR) & WESTFIELD WAY

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							
		11				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
		25								BLK	BLU	
		B										WHT/BLK
SB2	12	12				RED	ORG	GRN	BLK/WHT			
		26								BLK	BLU	
		27								BLK	BLU	
		B										WHT/BLK
SB3	12	4				RED	ORG	GRN	BLK/WHT			
SB4	7	8	RED	ORG	GRN							
		9	RED	ORG	GRN							
SB5	7	28								BLK	BLU	
		B										WHT/BLK
SB6	12	17				RED	ORG	GRN	BLK/WHT			
		19	RED/BLK	ORG/BLK	GRN/BLK							
		29								BLK	BLU	
		B										WHT/BLK
SB7	12	18				RED	ORG	GRN	BLK/WHT			
		22				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK			
SB8	12	14	RED	ORG	GRN							
		15	RED	ORG	GRN							
		30								BLK	BLU	
		B										WHT/BLK
SB9	12	5				RED	ORG	GRN	BLK/WHT			
		7	RED/BLK	ORG/BLK	GRN/BLK							
		31								BLK	BLU	
		B										WHT/BLK
SB10	12	6	RED	ORG	GRN				BLK/WHT			
		32								BLK	BLU	
		33								BLK	BLU	
		B										WHT/BLK
SB11	12	10	RED	ORG	GRN				BLK/WHT			
SB12	7	2	RED	ORG	GRN							
		3	RED	ORG	GRN							
SB13	7	34								BLK	BLU	
		B										WHT/BLK
SB14	12	13	RED	ORG	GRN							
		23				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
		35								BLK	BLU	
		B										WHT/BLK
SB15	12	16				RED	ORG	GRN	BLK/WHT			
		24				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK			
SB16	12	20	RED	ORG	GRN							
		21	RED	ORG	GRN							
		36								BLK	BLU	
		B										WHT/BLK

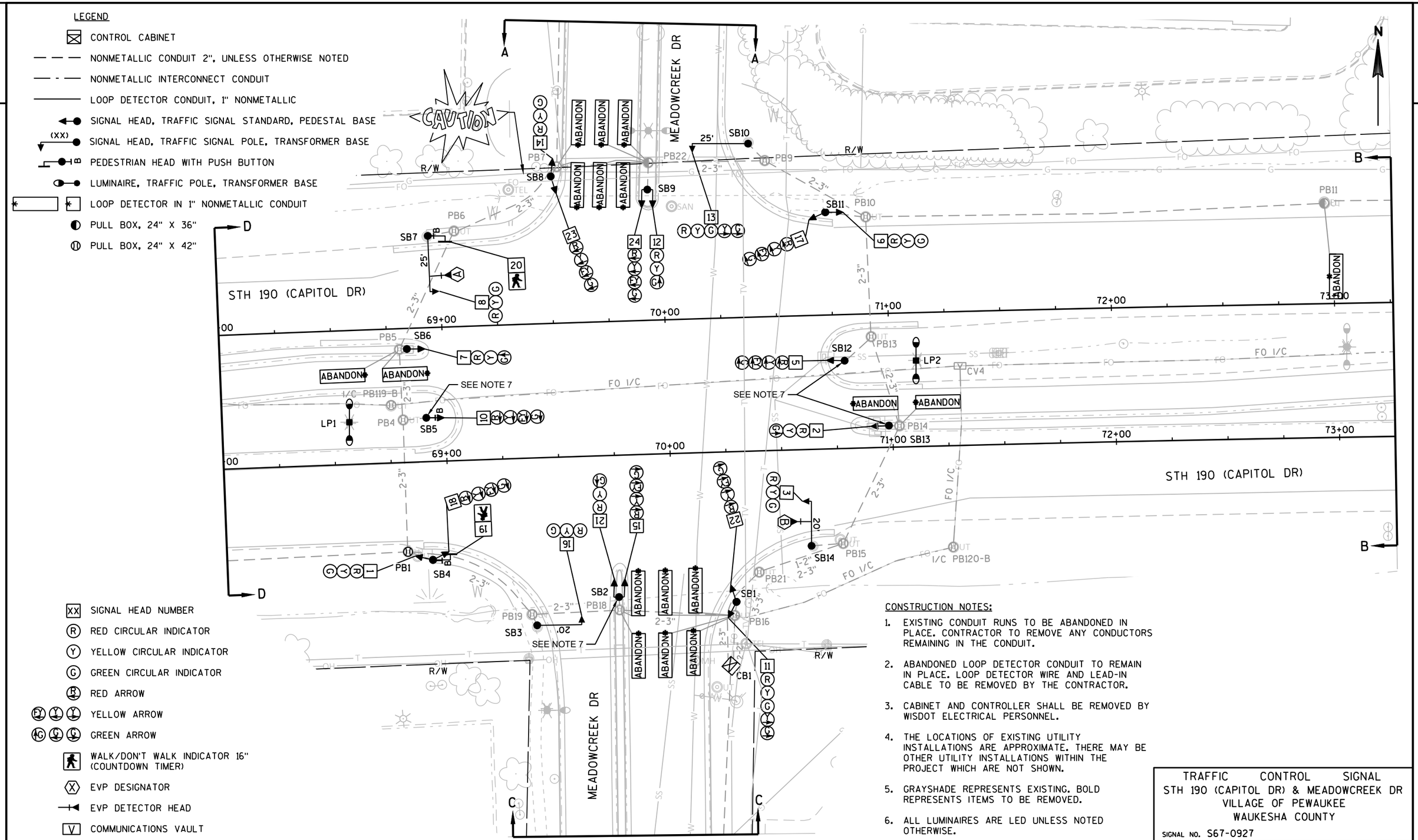
EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	SB14
SB14	SB15
SB15	SB16
SB16	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	SB1
PB4	SB2
PB5	SB3
PB6	SB4
PB7	SB6
PB10	SB7
PB12	SB8
PB13	SB9
PB16	SB10
PB17	SB11
PB18	SB12
PB19	SB14
PB20	SB15
PB21	SB16

EMERGENCY VEHICLE PREEMPTION	
FROM	TO
CB1	HEAD A (SB4)
CB1	HEAD B (SB12)
CB1	HEAD C (SB16)
CB1	HEAD D (SB8)

LIGHTING UF 10 AWG W/ GROUND	
FROM	TO
CB1	SB2
SB2	LP1
SB2	SB4
SB4	SB7
CB1	SB15
SB15	SB12
SB12	SB10

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.



CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRE AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
4. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.
6. ALL LUMINAIRES ARE LED UNLESS NOTED OTHERWISE.
7. CONCRETE BASES FOR SB2, SB5, SB12, AND SB13 TO REMAIN. REMOVE POLES AND HEADS ONLY.

TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) & MEADOWCREEK DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0927

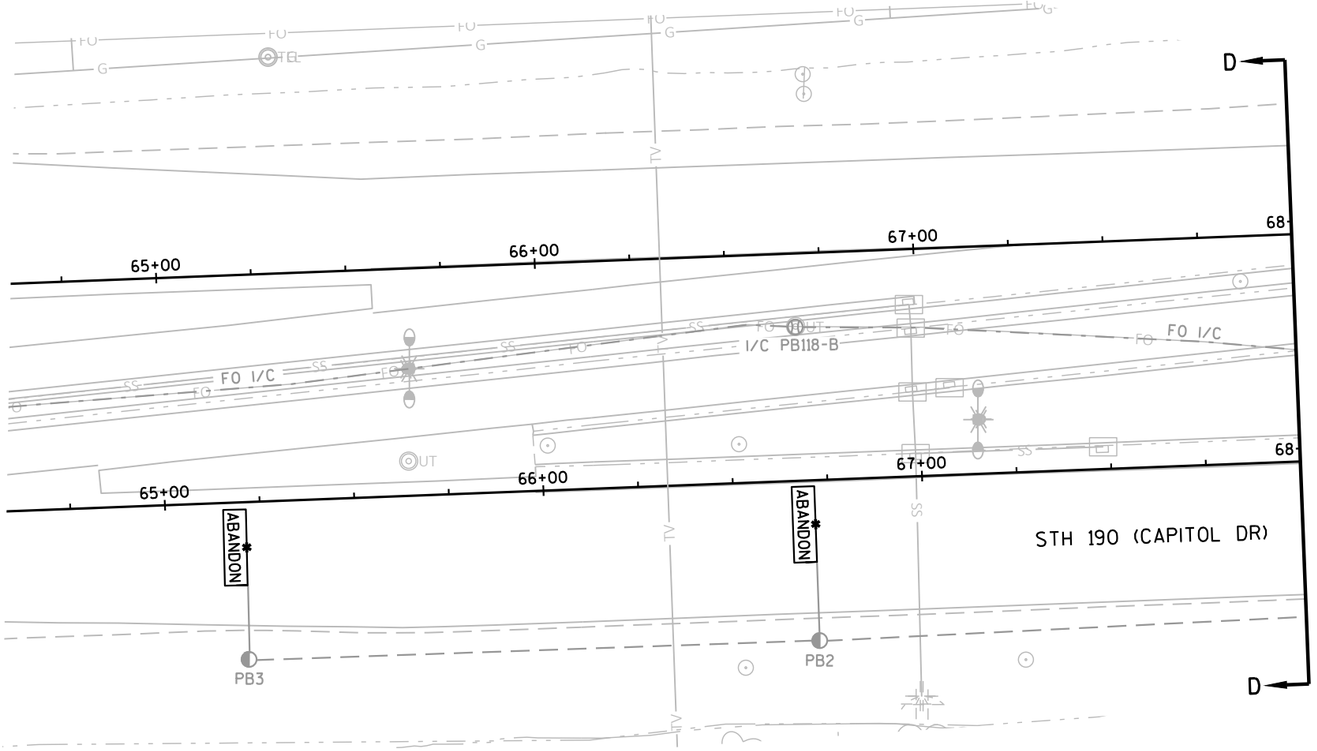
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

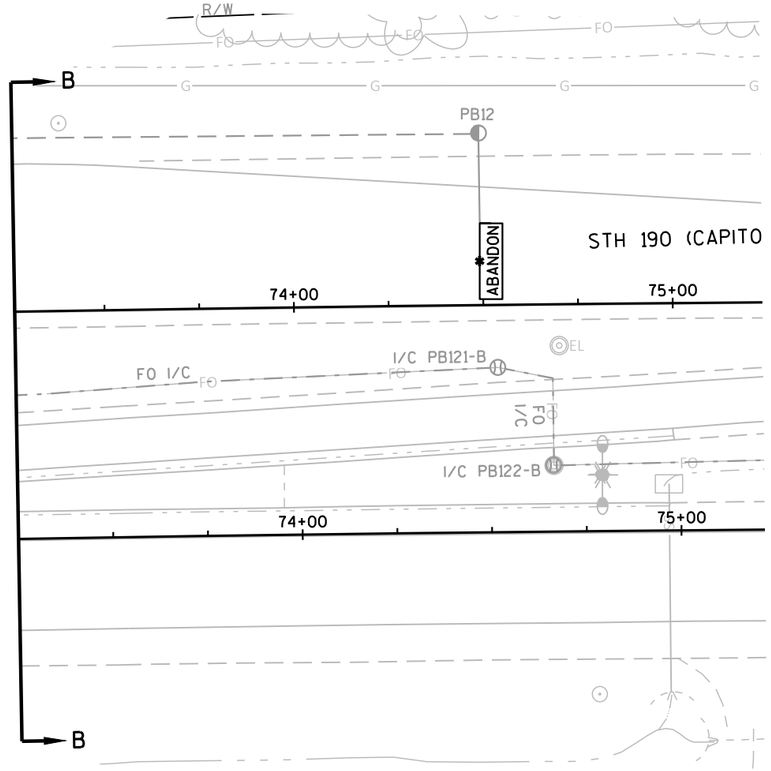
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 165	E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\04_S67_0927_F_18_MEADOWCREEK 024001.DWG
LAYOUT NAME - S67-0927_F_pg1
PLOT DATE : 8/3/2023 1:23 PM
PLOT BY : BIEBERITZ, BEN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

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TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) & MEADOWCREEK DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0927

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

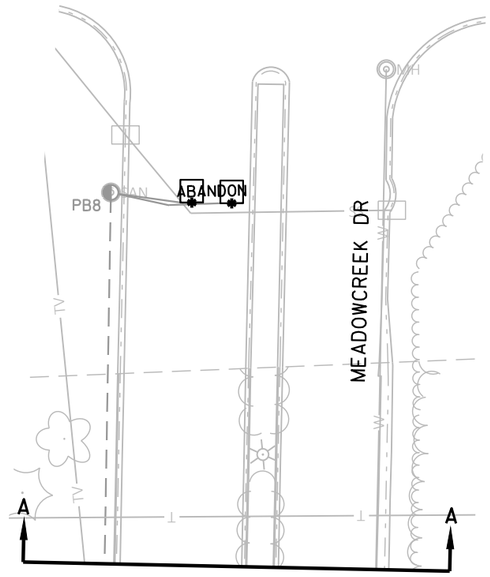
PAGE 2 OF 3

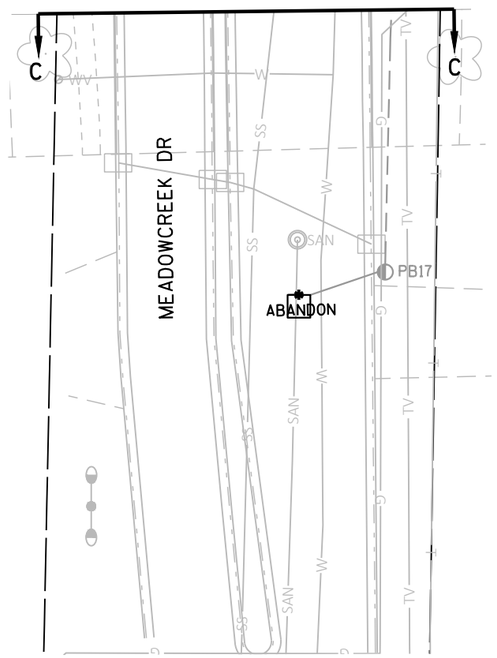
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 166	E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\04_S67_0927_F_18_MEADOWCREEK 024001.DWG
LAYOUT NAME - S67-0927_F_pg2
PLOT DATE : 8/3/2023 1:23 PM
PLOT BY : BIEBERITZ, BEN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N





TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) & MEADOWCREEK DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0927

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 3 OF 3

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 167	E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\04_S67_0927_F_18_MEADOWCREEK 024001.DWG
LAYOUT NAME - S67-0927_F_pg3

PLOT DATE : 8/3/2023 1:23 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

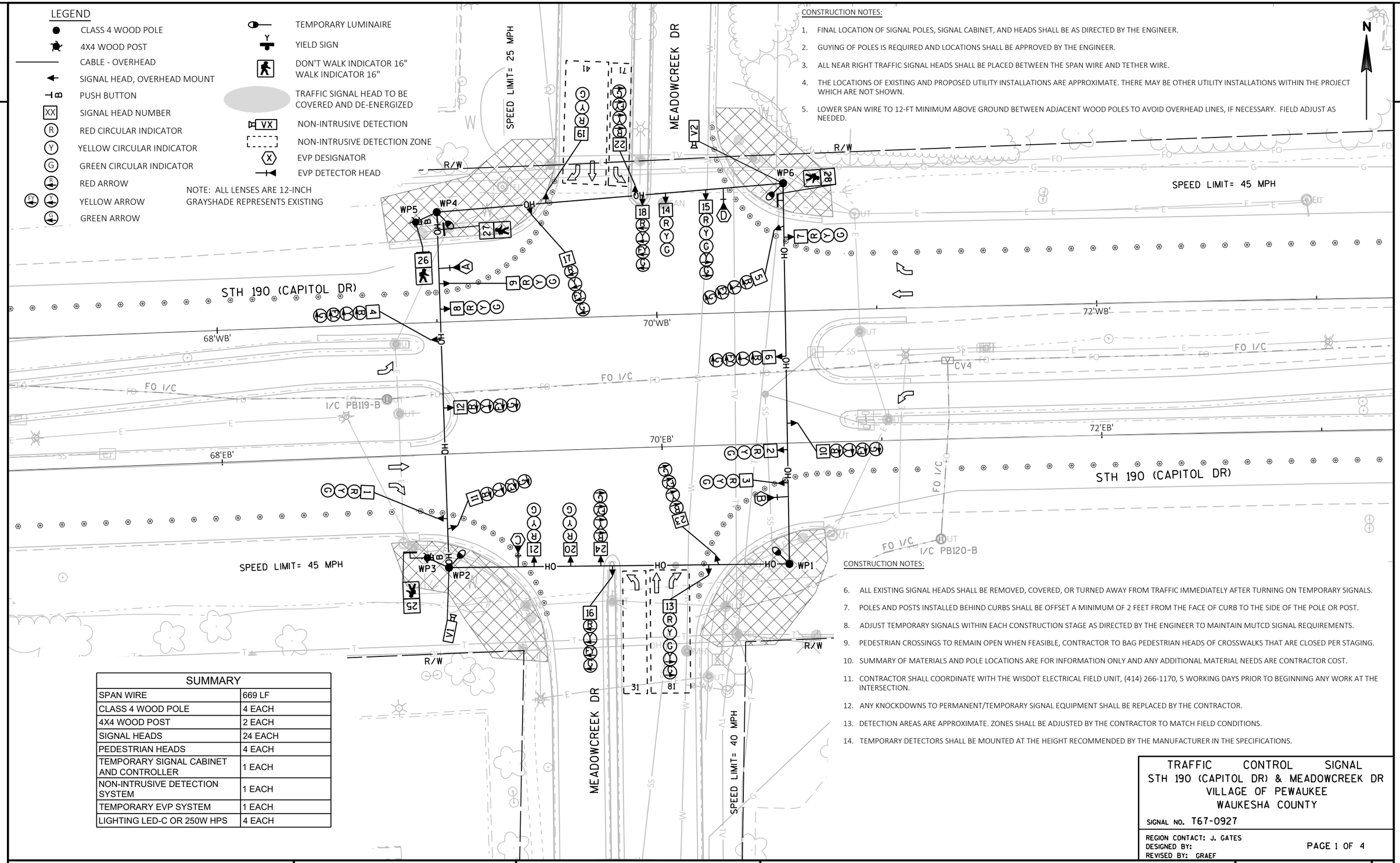
LEGEND

- CLASS 4 WOOD POLE
- 4X4 WOOD POST
- CABLE - OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- PUSH BUTTON
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TEMPORARY LUMINAIRE
- YIELD SIGN
- DON'T WALK INDICATOR 16" WALK INDICATOR 16"
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- NON-INTRUSIVE DETECTION
- NON-INTRUSIVE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET, AND HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. LOWER SPAN WIRE TO 12-FT MINIMUM ABOVE GROUND BETWEEN ADJACENT WOOD POLES TO AVOID OVERHEAD LINES, IF NECESSARY. FIELD ADJUST AS NEEDED.



CONSTRUCTION NOTES:

6. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
7. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POLE OR POST.
8. ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
9. PEDESTRIAN CROSSINGS TO REMAIN OPEN WHEN FEASIBLE, CONTRACTOR TO BAG PEDESTRIAN HEADS OF CROSSWALKS THAT ARE CLOSED PER STAGING.
10. SUMMARY OF MATERIALS AND POLE LOCATIONS ARE FOR INFORMATION ONLY AND ANY ADDITIONAL MATERIAL NEEDS ARE CONTRACTOR COST.
11. CONTRACTOR SHALL COORDINATE WITH THE WISDOT ELECTRICAL FIELD UNIT, (414) 266-1170, 5 WORKING DAYS PRIOR TO BEGINNING ANY WORK AT THE INTERSECTION.
12. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR.
13. DETECTION AREAS ARE APPROXIMATE. ZONES SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH FIELD CONDITIONS.
14. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.

SUMMARY	
SPAN WIRE	669 LF
CLASS 4 WOOD POLE	4 EACH
4X4 WOOD POST	2 EACH
SIGNAL HEADS	24 EACH
PEDESTRIAN HEADS	4 EACH
TEMPORARY SIGNAL CABINET AND CONTROLLER	1 EACH
NON-INTRUSIVE DETECTION SYSTEM	1 EACH
TEMPORARY EVP SYSTEM	1 EACH
LIGHTING LED-C OR 250W HPS	4 EACH

TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) & MEADOWCREEK DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. T67-0927

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 1 OF 4

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGES 1A, 3, 4B	SHEET 168	E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\04_S67_0927_F_18_MEADOWCREEK 024101_S1A34B.DWG
LAYOUT NAME - S67-0927_F_s1a34b_pg1

PLOT DATE : 8/3/2023 1:35 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

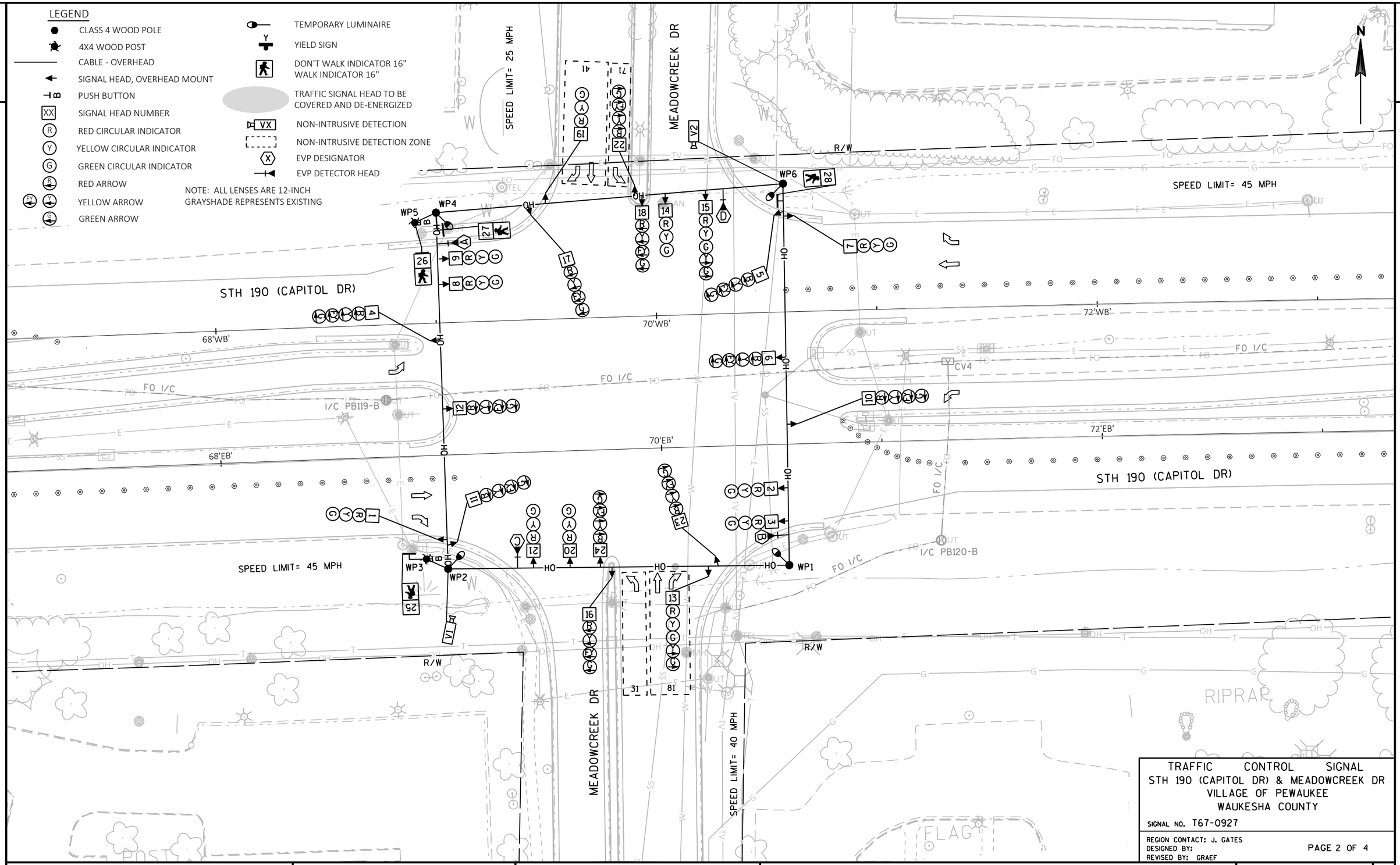
WISDOT/CADDS SHEET 42

2

LEGEND

- CLASS 4 WOOD POLE
- 4X4 WOOD POST
- CABLE - OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- PUSH BUTTON
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TEMPORARY LUMINAIRE
- YIELD SIGN
- DON'T WALK INDICATOR 16" WALK INDICATOR 16"
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- NON-INTRUSIVE DETECTION
- NON-INTRUSIVE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) & MEADOWCREEK DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. T67-0927

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 2 OF 4

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGES 1B, 4A	SHEET 169	E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\04_S67_0927_F_18_MEADOWCREEK 024101_S1B4A.DWG
LAYOUT NAME - S67-0927_F_s1b4a_pg1

PLOT DATE : 8/3/2023 1:35 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- CLASS 4 WOOD POLE
- 4X4 WOOD POST
- CABLE - OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- PUSH BUTTON
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TEMPORARY LUMINAIRE
- YIELD SIGN
- DON'T WALK INDICATOR 16" WALK INDICATOR 16"
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- NON-INTRUSIVE DETECTION
- NON-INTRUSIVE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

STH 190 (CAPITOL DR)
MEADOWCREEK DR
SPEED LIMIT= 25 MPH
SPEED LIMIT= 45 MPH
SPEED LIMIT= 40 MPH
R/W
WP1
WP2
WP3
WP4
WP5
WP6
68'WB'
70'WB'
72'WB'
68'EB'
70'EB'
72'EB'
I/C PB119-B
I/C PB120-B
FO I/C
RIPRAP
POST
FLAG

TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) & MEADOWCREEK DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. T67-0927

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 3 OF 4

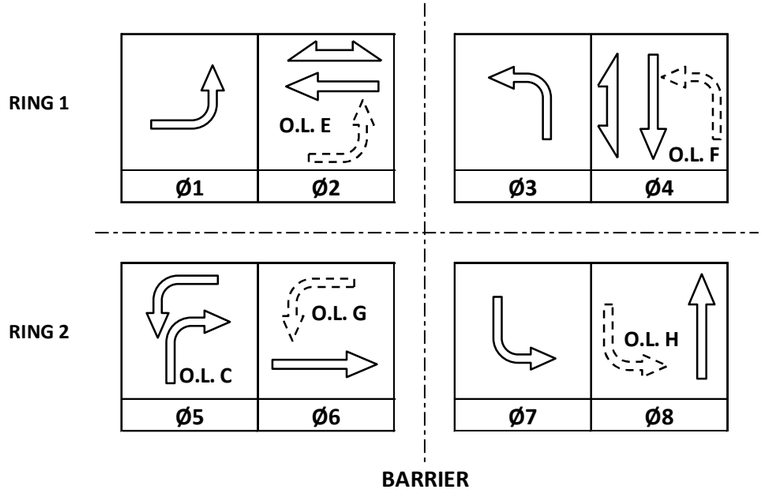
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2	SHEET 170	E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\04_S67_0927_F_18_MEADOWCREEK 024101_S2.DWG
LAYOUT NAME - S67-0927_F_s2_pg1

PLOT DATE : 8/3/2023 1:35 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

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





USE MODE B FOR FLASHING YELLOW ARROW PHASING OPERATIONS

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6	MAX	X
2		6	MAX	X
3		8		X
4		8		X
5		2	MAX	X
6		2	MAX	X
7		4		X
8		4		X
2P		2	MAX	X
4P		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+8 OR 8+4, CONTROLLER SHALL RETURN TO PHASES 4+8.

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

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

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

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

STH 190 (CAPITOL DR) & MEADOWCREEK DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO: T67-0927 CABINET TYPE: TEMP
CONTROLLER TYPE: TEMP
DATE: 8/2023 PAGE NO. 4 OF 4

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT
- LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) TYPE 10 SPECIAL MONOTUBE BASE, POLE, 35'-45' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"

EVP CONSTRUCTION NOTES:

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT THE EVP DETECTOR HEADS AND WIRE THEM PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF THE EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH EXISTING SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICATED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. FOR A CABINET THAT IS NOT OPERATING THE SIGNAL, CABINET WIRING WILL BE DONE BY THE CONTRACTOR. IF THE CABINET IS OPERATING THE SIGNAL, THE CABINET WIRING WILL BE DONE BY THE DEPARTMENT. THE CONTRACTOR SHALL INSTALL AND TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. EVP A-B-C-D)

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266-1170.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION.
5. LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.
6. FOR SB7 & SB16, HARD DRILLING IS ANTICIPATED FOR THE LAST 4'.
7. PLACE POLES FOR SB2, SB5, SB14, AND SB15 ON EXISTING CONCRETE BASES.

- 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
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- V COMMUNICATIONS VAULT

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

MONOTUBE STRUCTURES

SB3 = S-67-1499-01
SB7 = S-67-1499-02
SB10 = S-67-1499-03
SB16 = S-67-1499-04

REVISION	
REV. NO.	REPLACE SIGNAL POLES & INSTALL MONOTUBES & LOOP DETECTORS
8	APPROVAL RECOMMENDED: REGION — DATE 7-27-23 — BY
	APPROVED: CENTRAL OFFICE — DATE 8-3-23 — BY
	REPLACE LOOP 81; CHANGE HEADS 23 & 24 TO 4-SECTION FYA; CHANGE HEADS 11 & 13 TO 5-SECTION; CHANGE SB5 TO 15-FT STANDARD; ADD 12 AWG TO SB14; ADD PHASE 3; PLAN UPDATE PER 2025-13-70 7/13/18
	INSTALL FIBER OPTIC INTERCONNECT 2-2-17
	REPLACE SB 2,3,4,8,9; REPLACE OR RELOCATE SIGNAL HEADS AND REPLACE LOOPS 8-1-12
	CHANGE BASE FOR LUMINAIRE ON NORTH MEDIAN 7-07
	NEW GEOMETRICS; RELOCATE SB5, SB6, PB8 7-18-06
	ADD EB AND WB EVP 9-05
	INITIAL INSTALL 6-04

ALEXANDRIA R. MOTL 46823 MILWAUKEE WI — WISCONSIN PROFESSIONAL ENGINEER

7-27-23

TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) & MEADOWCREEK DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY
CABINET TYPE: TS2-S
SIGNAL NO. S67-0927 CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 5/26/04 — ANNE RESHADI, REGION TRAFFIC ENGINEER
APPROVED
DATE 6/17/04 — WILLIAM C. GILDING, STATE TRAFFIC ENGINEER

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

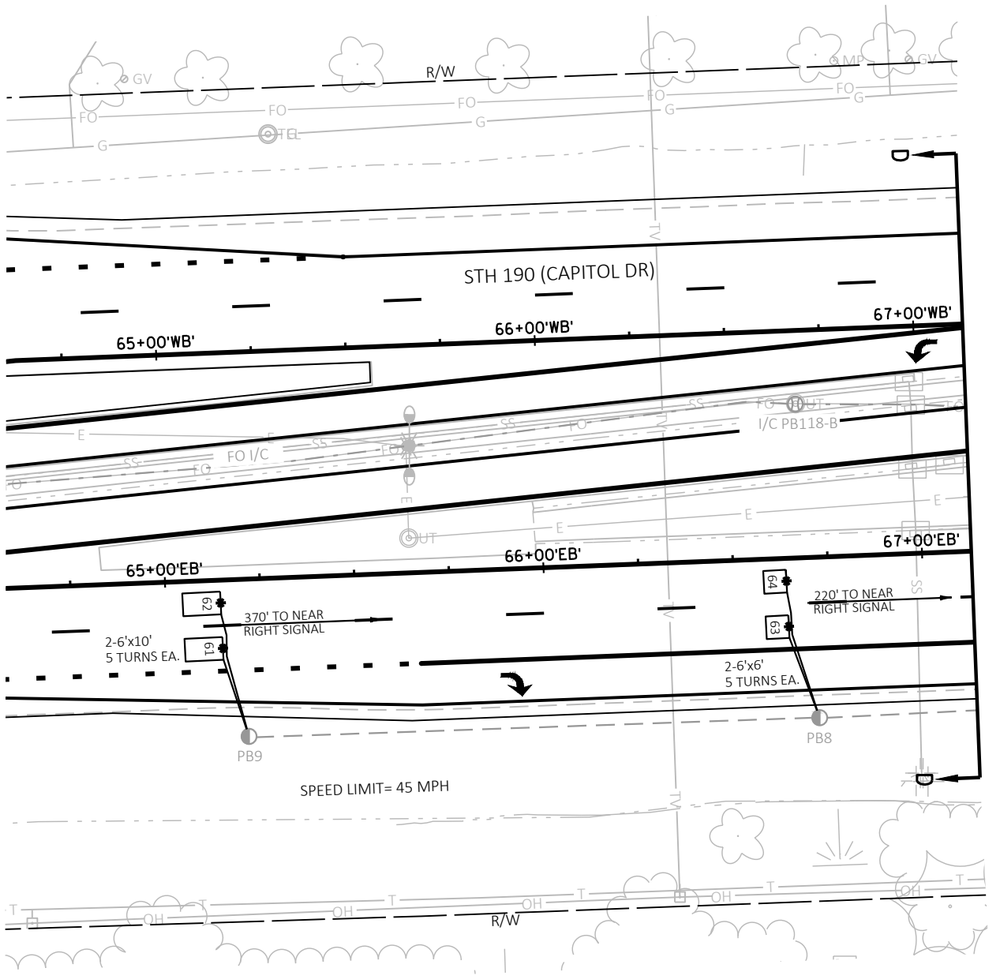
PAGE 1 OF 4

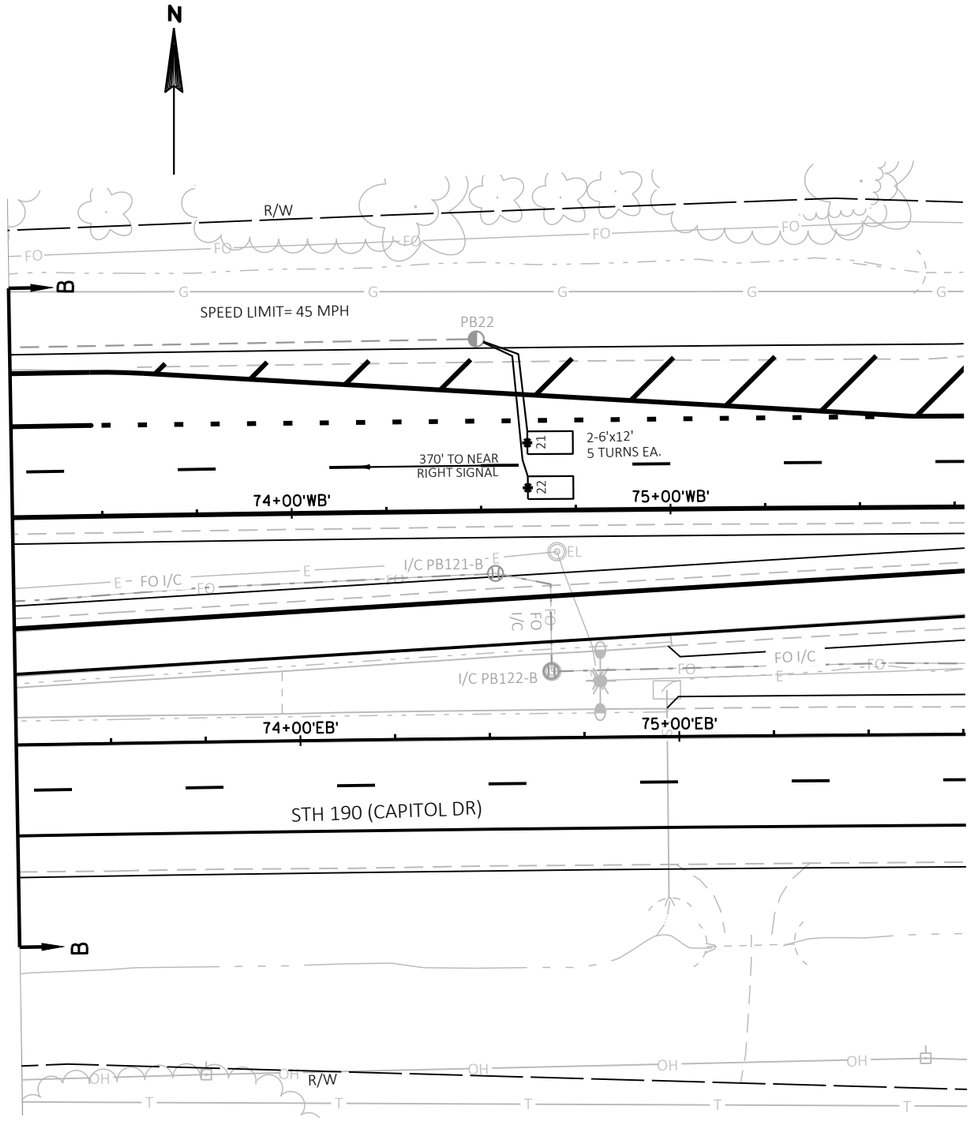
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 172 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\04_S67_0927_F_18_MEADOWCREEK 024201.DWG
LAYOUT NAME - S67-0927_F_pg1
PLOT DATE : 8/3/2023 1:16 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2





TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) & MEADOWCREEK DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0927

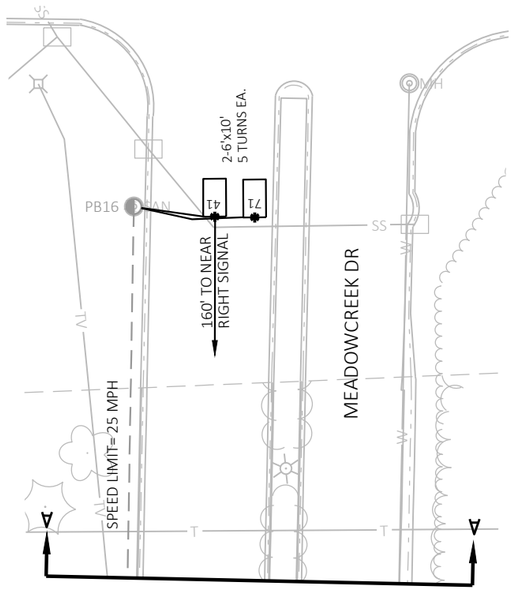
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

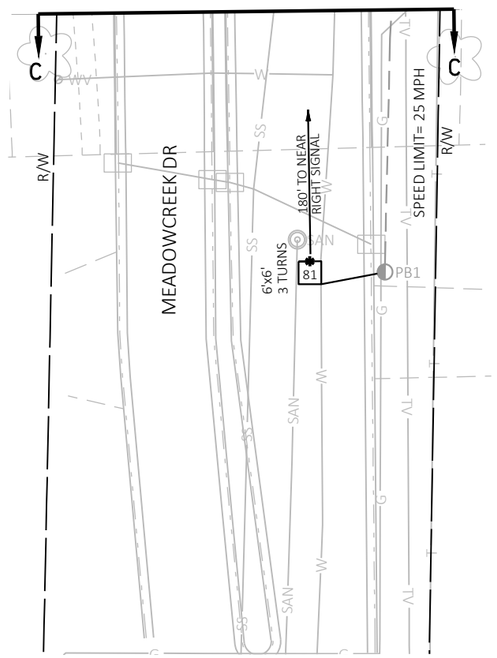
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 173	E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\04_S67_0927_F_18_MEADOWCREEK 024201.DWG
LAYOUT NAME - S67-0927_F_pg2
PLOT DATE : 8/3/2023 1:16 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

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TRAFFIC CONTROL SIGNAL
STH 190 (CAPITOL DR) & MEADOWCREEK DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0927

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 3 OF 4

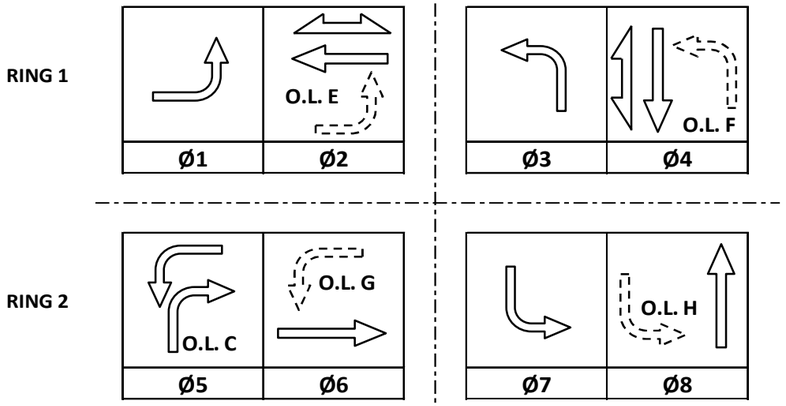
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 174	E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\04_S67_0927_F_18_MEADOWCREEK 024201.DWG
LAYOUT NAME - S67-0927_F_pg3

PLOT DATE : 8/3/2023 1:31 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

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

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	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	31	41	43	45	52	54	62	64	72	81	83			PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	2	3	4	4	4	5	5	6	6	7	8	8			CALLED PHASE
CALL OPTION	X	X	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	X	X	X	X			EXTENTION OPTION
EXTEND TIME					X								X				EXTEND TIME
USE ADDED INITIAL		X	X							X	X						USE ADDED INITIAL
CROSS SWITCH PHASE	2			4				6				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	32	42	44	51	53	61	63	71	73	82				PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	2	3	4	4	5	5	6	6	7	7	8				CALLED PHASE
CALL OPTION	X	X	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	X	X	X				EXTENTION OPTION
EXTEND TIME											X						EXTEND TIME
USE ADDED INITIAL		X	X						X	X							USE ADDED INITIAL
CROSS SWITCH PHASE	2			4			6					8					CROSS SWITCH PHASE

STH 190 (CAPITOL DR) & MEADOWCREEK DR
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY
SIGNAL NO: S67-0927 CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE
DATE: 8/2023 PAGE NO. 4 OF 4

PROJECT ID:	2025-07-73
INTERSECTION:	STH 190 (CAPITOL DR) & MEADOWCREEK 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	15	13	RED	ORG	GRN		ORG/BLK	GRN/BLK				
		23				RED/BLK	BLU/WHT	GRN/WHT	BLK/WHT			
SB2	12	16				RED	ORG	GRN	BLK/WHT			
		24				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK			
SB3	7	20	RED	ORG	GRN							
		21	RED	ORG	GRN							
SB4	12	1	RED	ORG	GRN							
		11				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
		25								BLK	BLU	
		B										WHT/BLK
SB5	12	12	RED	ORG	GRN				BLK/WHT			
SB6	12	4				RED	ORG	GRN	BLK/WHT			
SB7	12	8	RED	ORG	GRN							
		9	RED	ORG	GRN							
		26								BLK	BLU	
		B										WHT/BLK
SB8	7	27								BLK	BLU	
		B										WHT/BLK
SB9	12	17				RED	ORG	GRN	BLK/WHT			
		19	RED/BLK	ORG/BLK	GRN/BLK							
SB10	15	14	RED	ORG	GRN							
		18				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
		22				RED/WHT	BLU/WHT	GRN/WHT	BLU/BLK			
SB11	12	15	RED	ORG	GRN		ORG/BLK	GRN/BLK				
SB12	7	28								BLK	BLU	
		B										WHT/BLK
SB13	12	5				RED	ORG	GRN	BLK/WHT			
		7	RED/BLK	ORG/BLK	GRN/BLK							
SB14	12	6				RED	ORG	GRN	BLK/WHT			
SB15	12	10				RED	ORG	GRN	BLK/WHT			
SB16	7	2	RED	ORG	GRN							
		3	RED	ORG	GRN							

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.

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	SB14
SB14	SB15
SB15	SB16
SB16	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
PB2	SB1
PB4	SB2
PB6	SB3
PB7	SB4
PB10	SB5
PB11	SB6
PB13	SB7
PB14	SB9
PB17	SB10
PB19	SB11
PB20	SB13
PB23	SB14
PB24	SB15
PB26	SB16
PB27	CB1

EMERGENCY VEHICLE PREEMPTION	
FROM	TO
CB1	HEAD A (SB7)
CB1	HEAD B (SB16)
CB1	HEAD C (SB3)
CB1	HEAD D (SB10)

LIGHTING UF 10 AWG W/ GROUND	
FROM	TO
CB1	SB2
SB2	SB5
SB5	LP1
SB5	SB7
CB1	SB16
SB16	SB14
SB14	LP2
SB14	SB10

LEGEND

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

CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRE AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
4. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.
6. ALL LUMINAIRES ARE LED UNLESS NOTED OTHERWISE.

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STH 190 (CAPITOL DR)

STH 164

81+00 82+00 83+00 84+00 85+00 86+00

CAUTION

- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT WITH 12" PULL BOX
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 12" 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

- NONMETALLIC INTERCONNECT CONDUIT 2" UNLESS OTHERWISE NOTED
- V COMMUNICATIONS VAULT
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- X EVP DESIGNATOR
- EVP DETECTOR HEAD

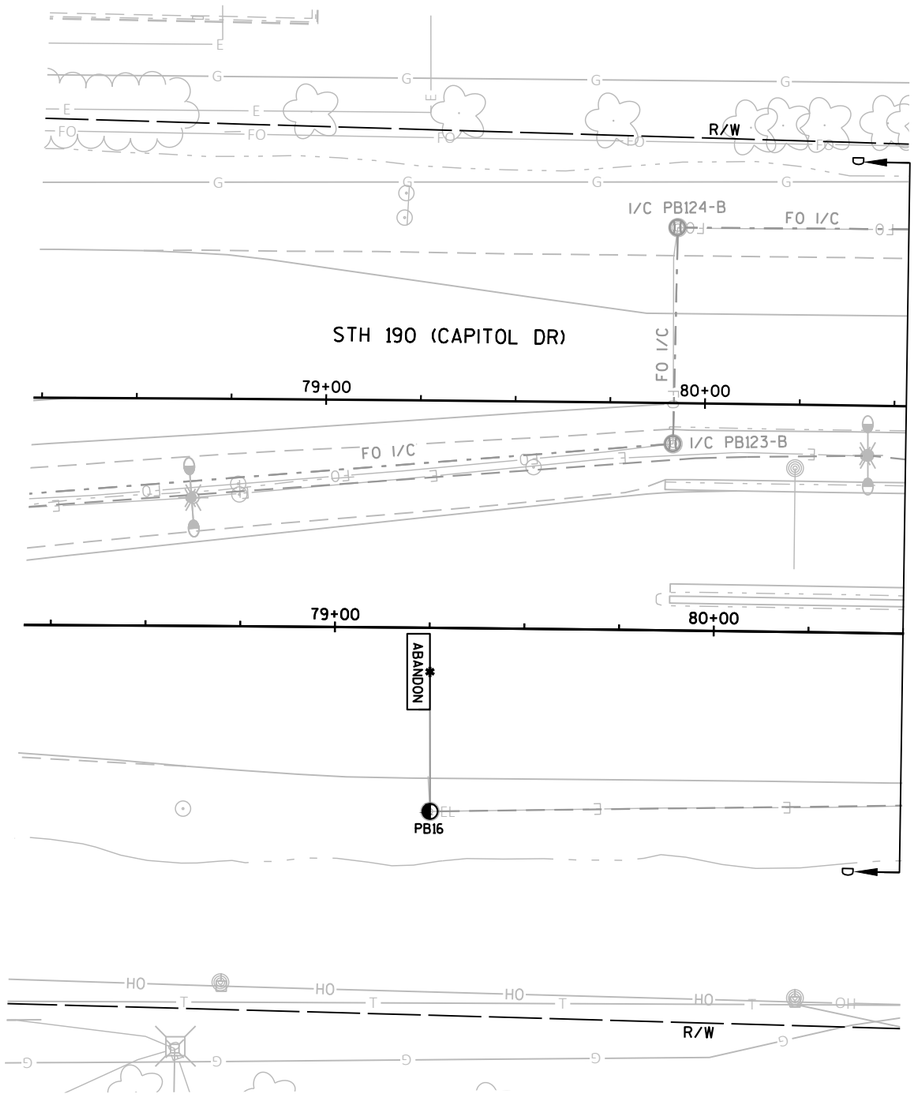
TRAFFIC CONTROL SIGNAL
STH 164 & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

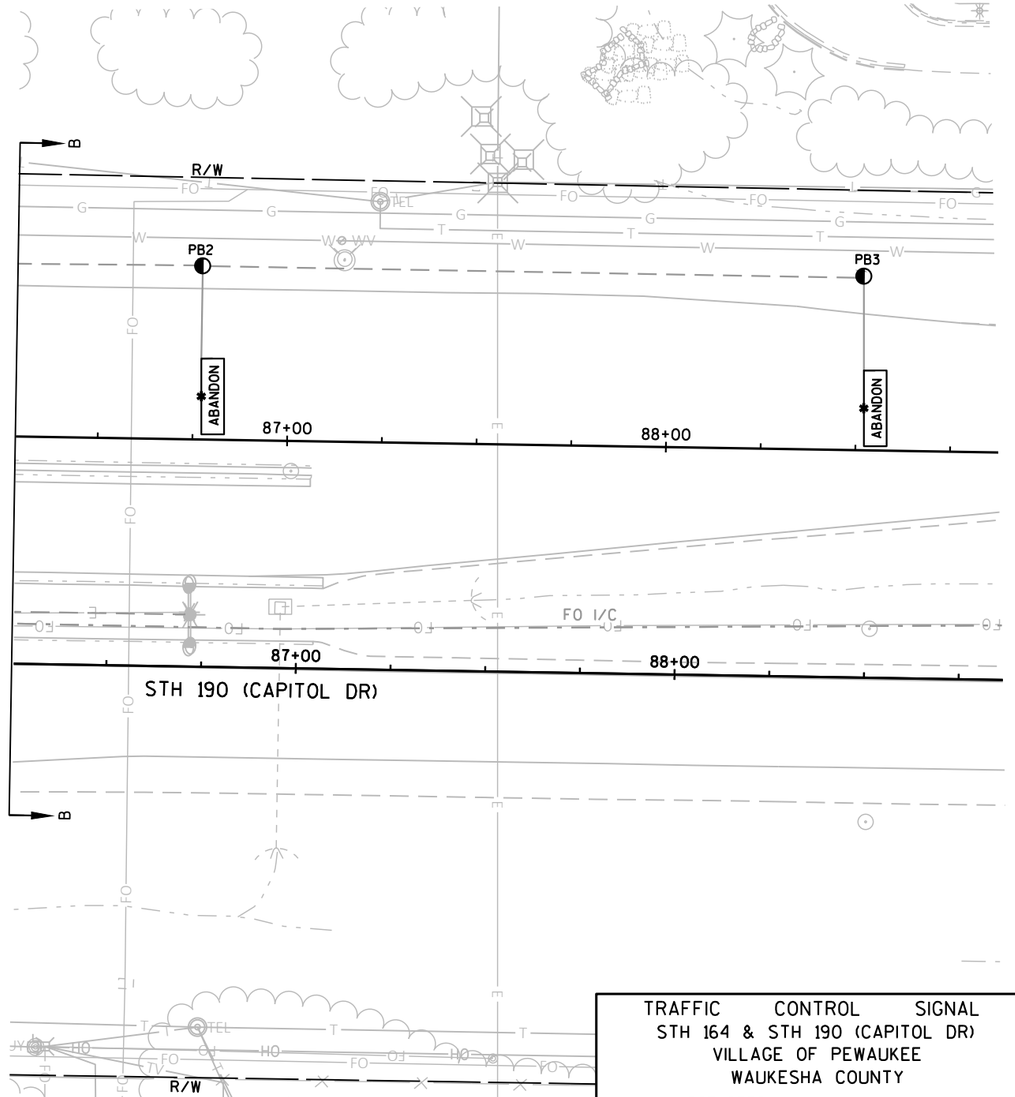
SIGNAL NO. S67-0339

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 1 OF 3

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 177 E





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TRAFFIC CONTROL SIGNAL
STH 164 & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

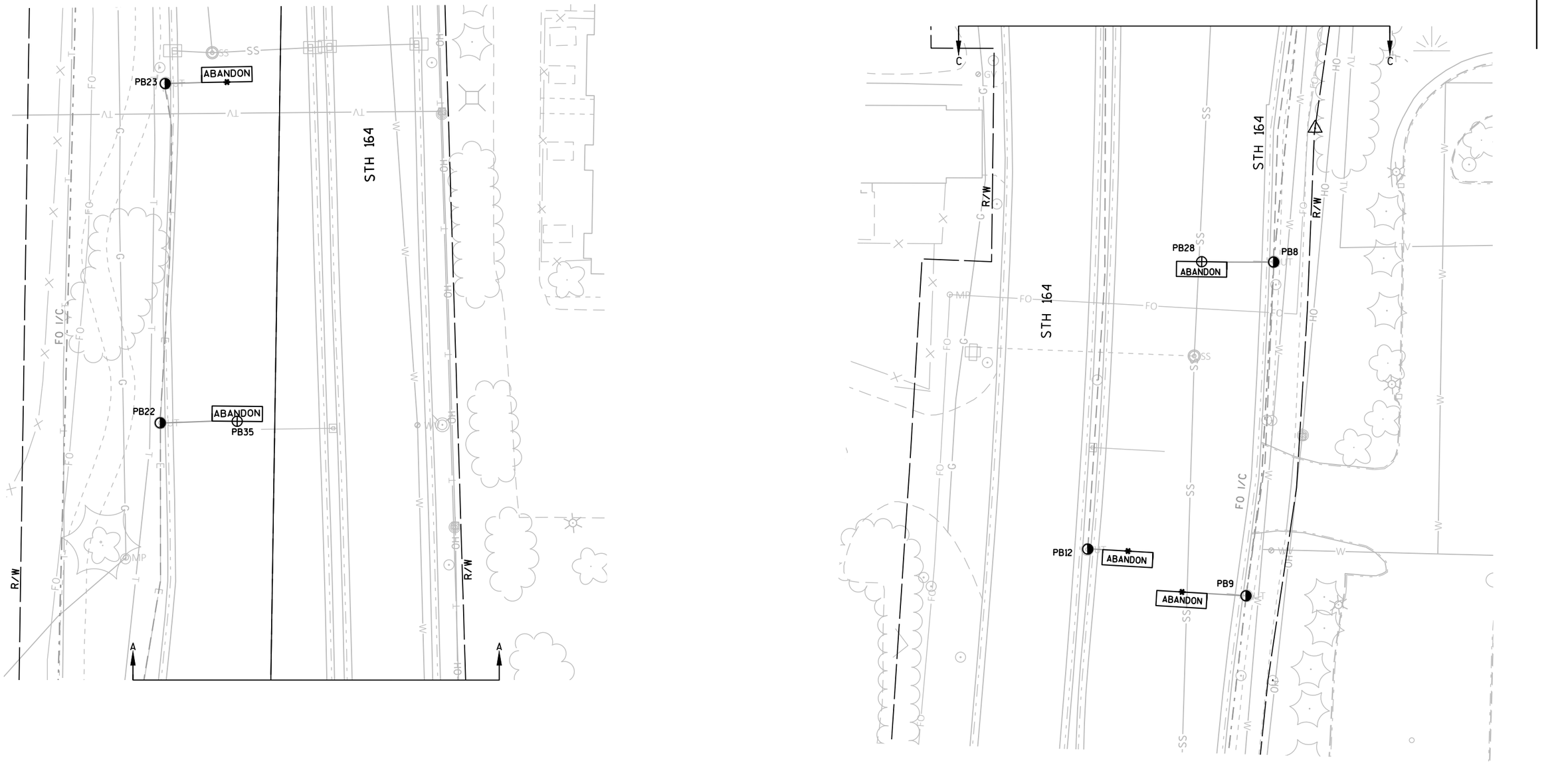
SIGNAL NO. S67-0339

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 2 OF 3

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 178 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\05_S67-0339_I_STH164 024001.DWG
LAYOUT NAME - S67-0339_I_PG2
PLOT DATE : 8/3/2023 1:28 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



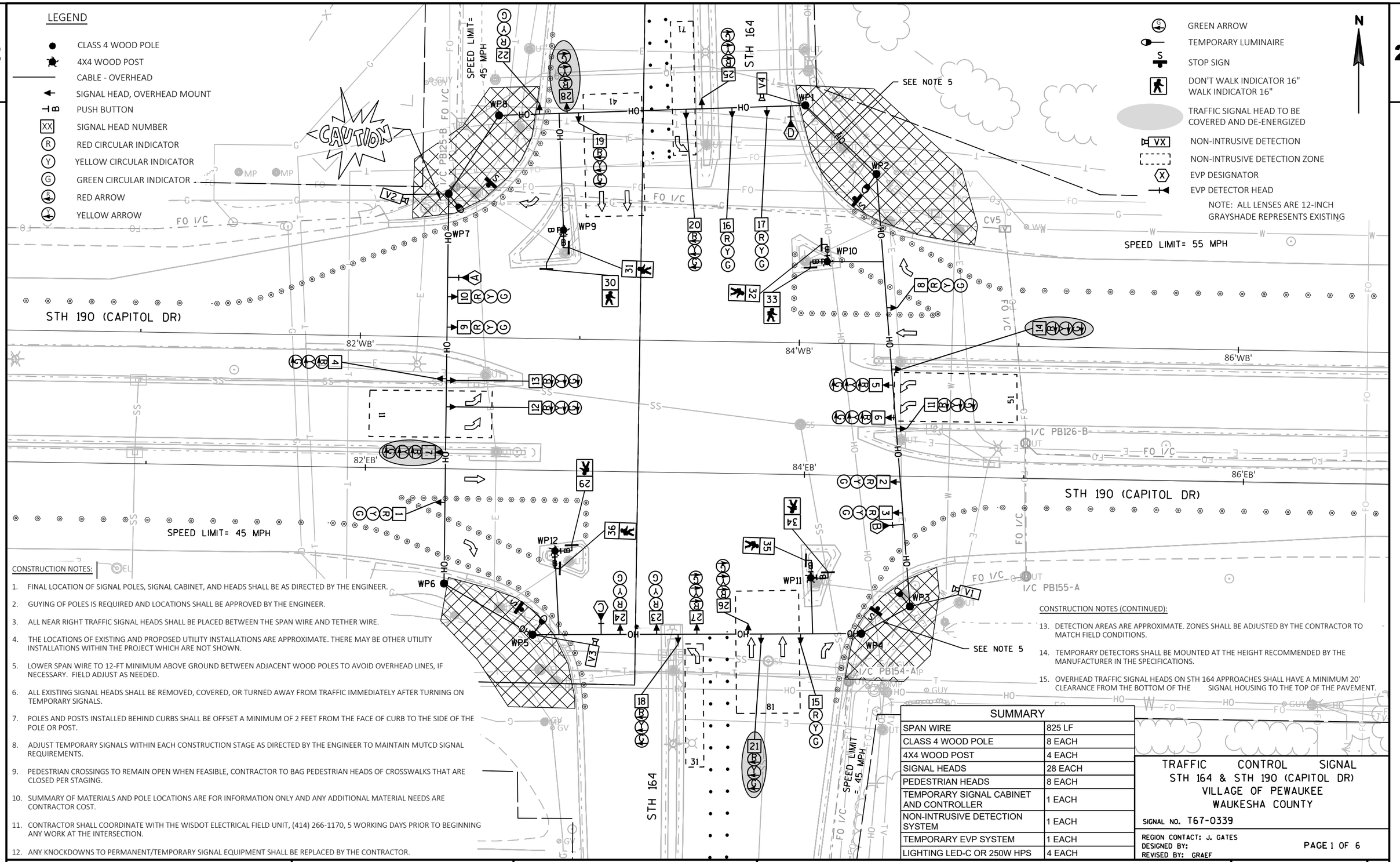
TRAFFIC CONTROL SIGNAL
STH 164 & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0339

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 3 OF 3

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 179 E



CONSTRUCTION NOTES:

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET, AND HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. LOWER SPAN WIRE TO 12-FT MINIMUM ABOVE GROUND BETWEEN ADJACENT WOOD POLES TO AVOID OVERHEAD LINES, IF NECESSARY. FIELD ADJUST AS NEEDED.
6. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
7. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POLE OR POST.
8. ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
9. PEDESTRIAN CROSSINGS TO REMAIN OPEN WHEN FEASIBLE, CONTRACTOR TO BAG PEDESTRIAN HEADS OF CROSSWALKS THAT ARE CLOSED PER STAGING.
10. SUMMARY OF MATERIALS AND POLE LOCATIONS ARE FOR INFORMATION ONLY AND ANY ADDITIONAL MATERIAL NEEDS ARE CONTRACTOR COST.
11. CONTRACTOR SHALL COORDINATE WITH THE WISDOT ELECTRICAL FIELD UNIT, (414) 266-1170, 5 WORKING DAYS PRIOR TO BEGINNING ANY WORK AT THE INTERSECTION.
12. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR.

CONSTRUCTION NOTES (CONTINUED):

13. DETECTION AREAS ARE APPROXIMATE. ZONES SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH FIELD CONDITIONS.
14. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.
15. OVERHEAD TRAFFIC SIGNAL HEADS ON STH 164 APPROACHES SHALL HAVE A MINIMUM 20' CLEARANCE FROM THE BOTTOM OF THE SIGNAL HOUSING TO THE TOP OF THE PAVEMENT.

SUMMARY	
SPAN WIRE	825 LF
CLASS 4 WOOD POLE	8 EACH
4X4 WOOD POST	4 EACH
SIGNAL HEADS	28 EACH
PEDESTRIAN HEADS	8 EACH
TEMPORARY SIGNAL CABINET AND CONTROLLER	1 EACH
NON-INTRUSIVE DETECTION SYSTEM	1 EACH
TEMPORARY EVP SYSTEM	1 EACH
LIGHTING LED-C OR 250W HPS	4 EACH

TRAFFIC CONTROL SIGNAL
STH 164 & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. T67-0339

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

PAGE 1 OF 6

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGES 1A & 4B	SHEET 180 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\05_S67-0339_I_STH164 024101_1A4B.DWG
LAYOUT NAME - S67-0339_I_PG1

PLOT DATE : 8/3/2023 1:44 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- CLASS 4 WOOD POLE
- 4X4 WOOD POST
- CABLE - OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- PUSH BUTTON
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RA RED ARROW
- YA YELLOW ARROW
- GA GREEN ARROW
- TEMPORARY LUMINAIRE
- S STOP SIGN
- DON'T WALK INDICATOR 16" / WALK INDICATOR 16"
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- VX NON-INTRUSIVE DETECTION
- NON-INTRUSIVE DETECTION ZONE
- X EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

N

STH 190 (CAPITOL DR)

STH 164

SPEED LIMIT= 45 MPH

SPEED LIMIT= 55 MPH

SEE NOTE 5

I/C PB125-B

I/C PB126-B

I/C PB154-A

I/C PB155-A

WP1 WP2 WP3 WP4 WP5 WP6 WP7 WP8 WP9 WP10 WP11 WP12

82'WB' 84'WB' 86'WB'

82'EB' 84'EB' 86'EB'

TRAFFIC CONTROL SIGNAL
STH 164 & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. T67-0339

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: GRAEF

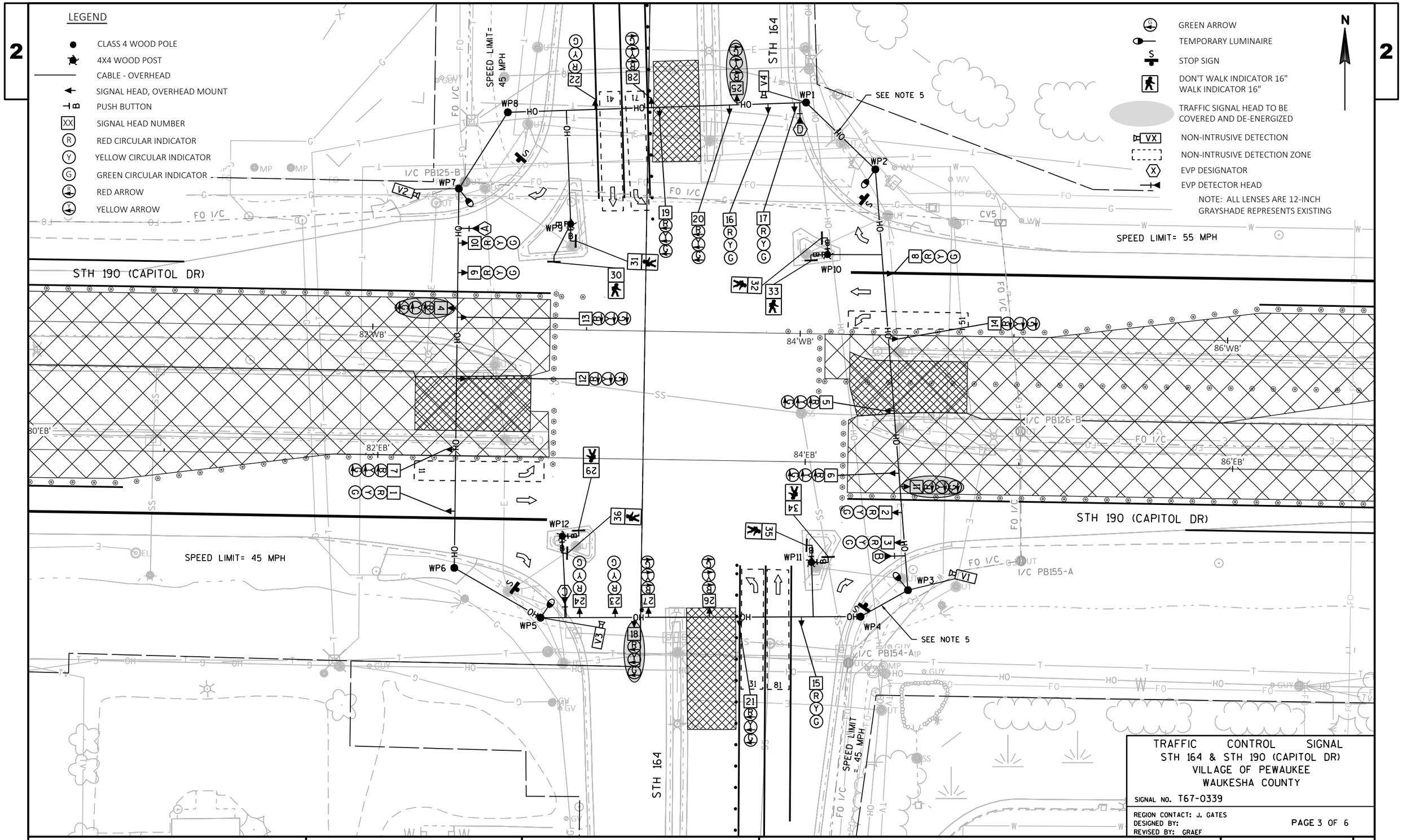
PAGE 2 OF 6

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGES 1B & 4A	SHEET 181 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\05_S67-0339_I_STH164 024101_1B4A.DWG
LAYOUT NAME - S67-0339_I_PG1

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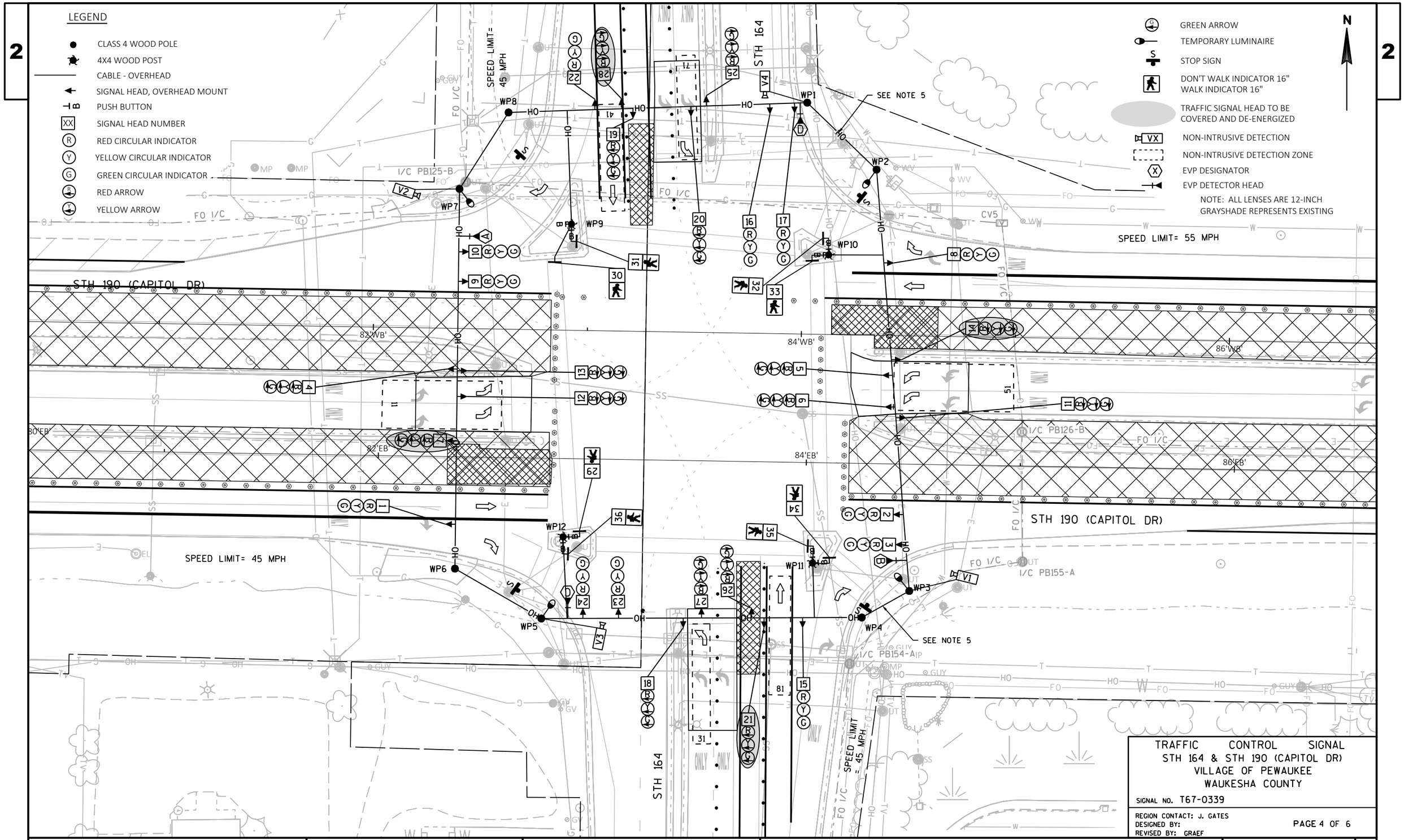
WISDOT/CADDS SHEET 42



PROJECT NO:2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2A	SHEET 182 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\05_S67-0339_I_STH164 024101_2A.DWG
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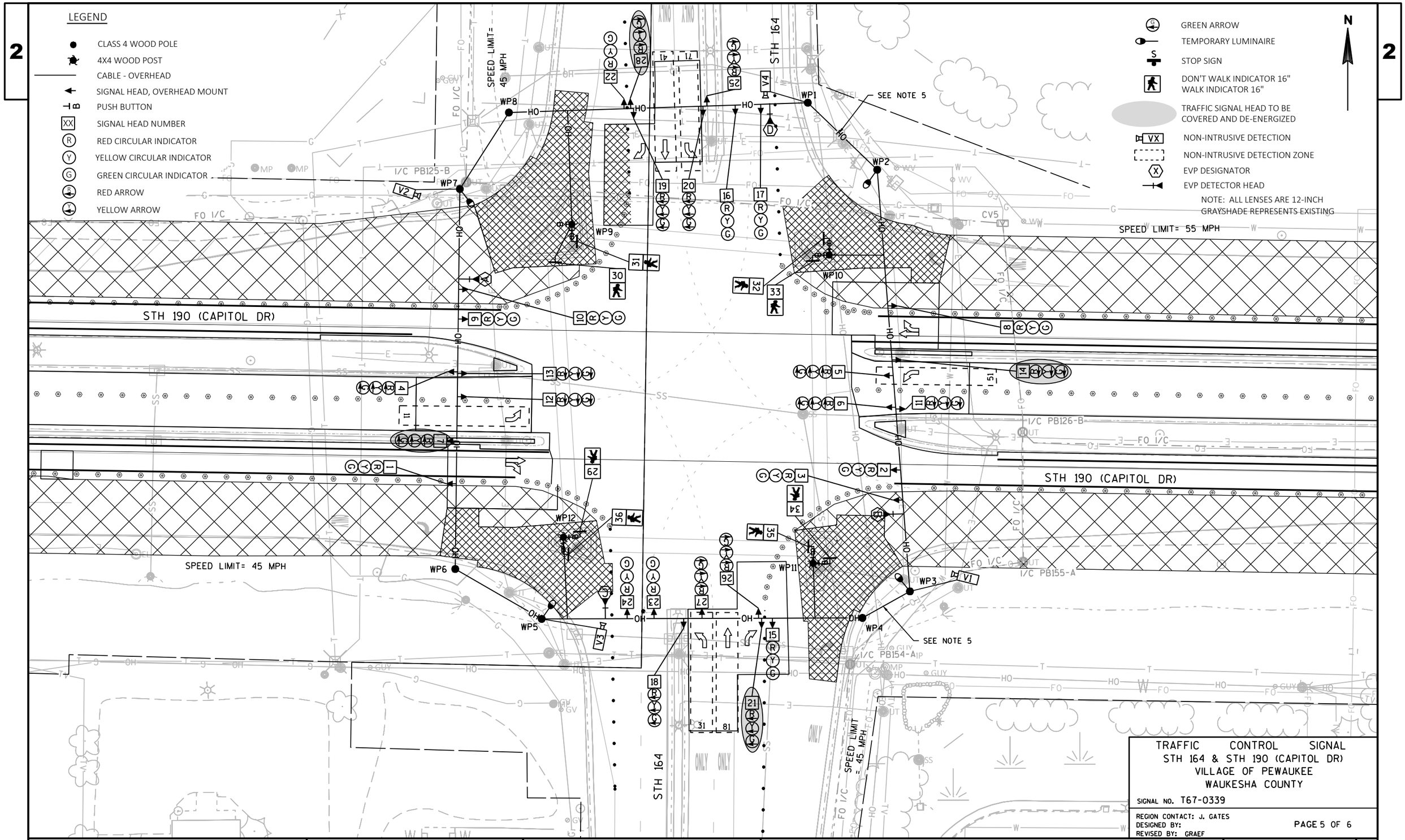
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PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2B	SHEET 183 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\05_S67-0339_I_STH164 024101_2B.DWG
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PLOT DATE : 8/3/2023 1:45 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

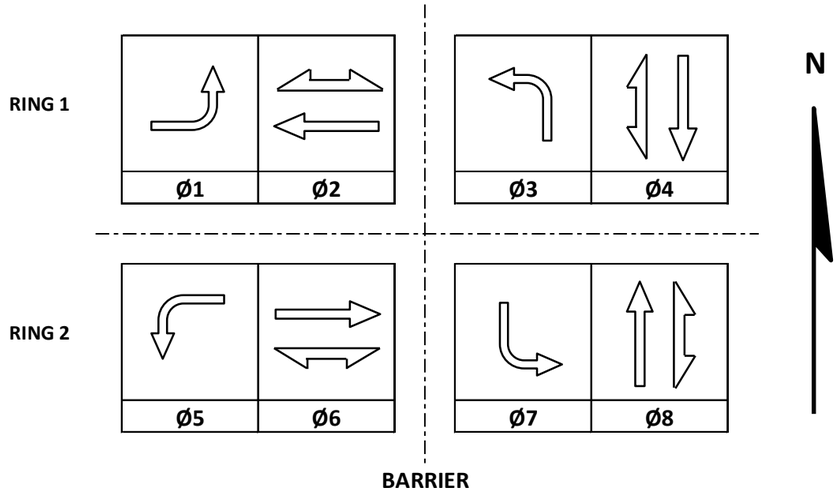


PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGES 3A, 3B	SHEET 184 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\05_S67-0339_I_STH164 024101_3A3B.DWG
LAYOUT NAME - S67-0339_I_PG1

PLOT DATE : 8/3/2023 1:45 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

	HEAD NUMBERS	FLASH
Ø1	4, 5, 6, 7	R ←
Ø2	8, 9, 10	R
Ø3	18, 19, 20, 21	R ←
Ø4	22, 23, 24	R
Ø5	11, 12, 13, 14	R ←
Ø6	1, 2, 3	R
Ø7	25, 26, 27, 28	R ←
Ø8	15, 16, 17	R
Ø2P	31, 32	
Ø4P	29, 30	
Ø6P	35, 36	
Ø8P	33, 34	



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MAX	X
3		8		X
4		8		X
5		2		X
6	X	2	MAX	X
7		4		X
8		4		X
2P		2		X
4P		4		X
6P		6		X
8P		8		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)	
RADIO	
CELL MODEM	X

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

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

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

STH 164 & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO: T67-0339 CABINET TYPE: TEMP
CONTROLLER TYPE: TEMP
DATE: 8/2023 PAGE NUMBER: 6 OF 6

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TEMPORARY SEQUENCE OF OPERATIONS – ALL STAGES	SHEET NO: 185	E

2

2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) TYPE 10 SPECIAL MONOTUBE BASE, POLE, 35'-45' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266-1170.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION.
5. LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.
6. SB11, SB12 & SB25 MONOTUBES SHALL BE "OVER-HEIGHT MONOTUBES" WITH MOUNTING HEIGHT 20'-0" TO 25'-6".

STH 190 (CAPITOL DR)

STH 164

SPEED LIMIT= 45 MPH

SPEED LIMIT= 55 MPH

CAUTION

220' TO NEAR RIGHT SIGNAL 2-6'x12' 5 TURNS EA.

- 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
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- NONMETALLIC INTERCONNECT CONDUIT 2" UNLESS OTHERWISE NOTED
- V COMMUNICATIONS VAULT
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- X EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

MONOTUBE STRUCTURES

SB4 = S-67-1498-01	SB16 = S-67-1498-05
SB6 = S-67-1498-02	SB19 = S-67-1498-06
SB11 = S-67-1498-03	SB25 = S-67-1498-07
SB12 = S-67-1498-04	

WISCONSIN ALEXANDRIA R. MOTL 46823 MILWAUKEE WI PROFESSIONAL ENGINEER 7/31/23

TRAFFIC CONTROL SIGNAL
STH 164 & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY
CABINET TYPE: TS2-E
SIGNAL NO. S67-0339 CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 7/27/23 REGION TRAFFIC ENGINEER
APPROVED
DATE 8/3/23 STATE TRAFFIC ENGINEER

REGION CONTACT: J. GATES
DESIGNED BY: GRAEF
REVISED BY:

PAGE 1 OF 4

7-27-23

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 186 E

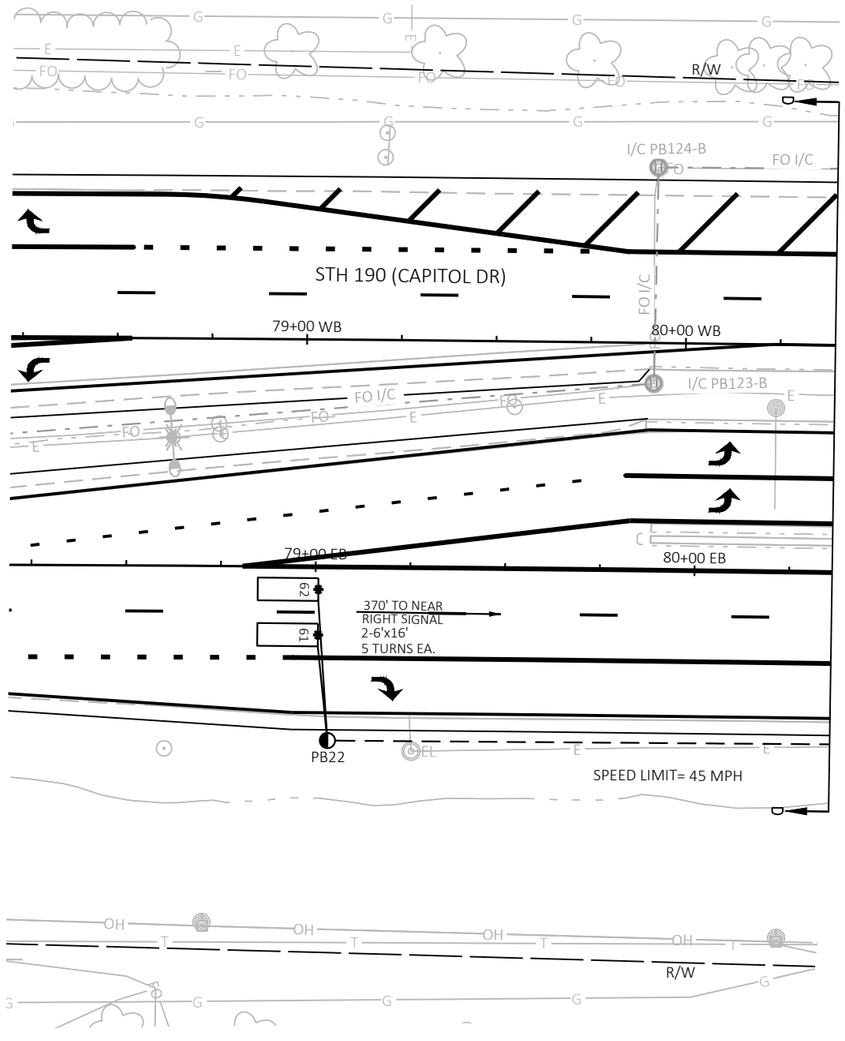
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LAYOUT NAME - S67-0339_I_pg1

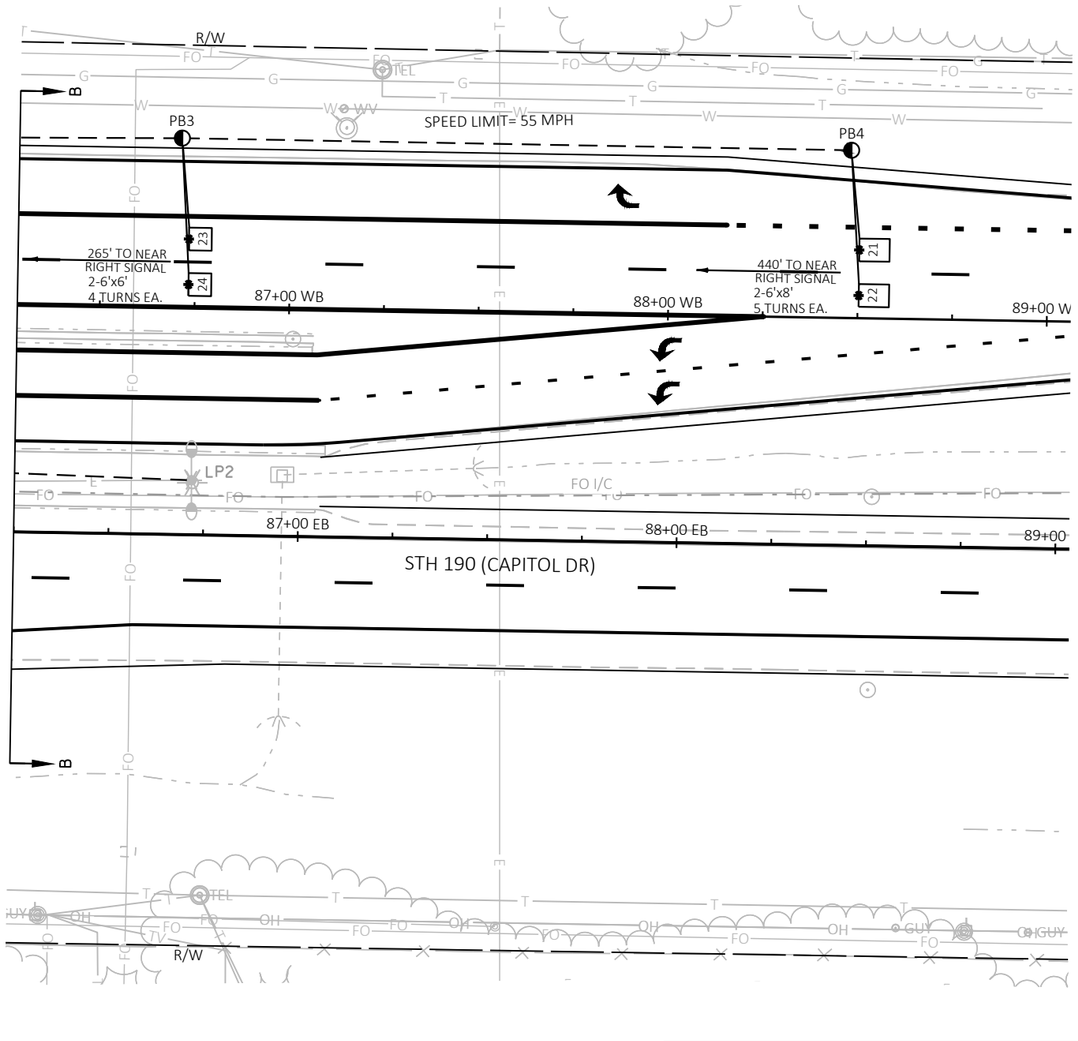
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WISDOT/CADDS SHEET 42

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TRAFFIC CONTROL SIGNAL
STH 164 & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0339

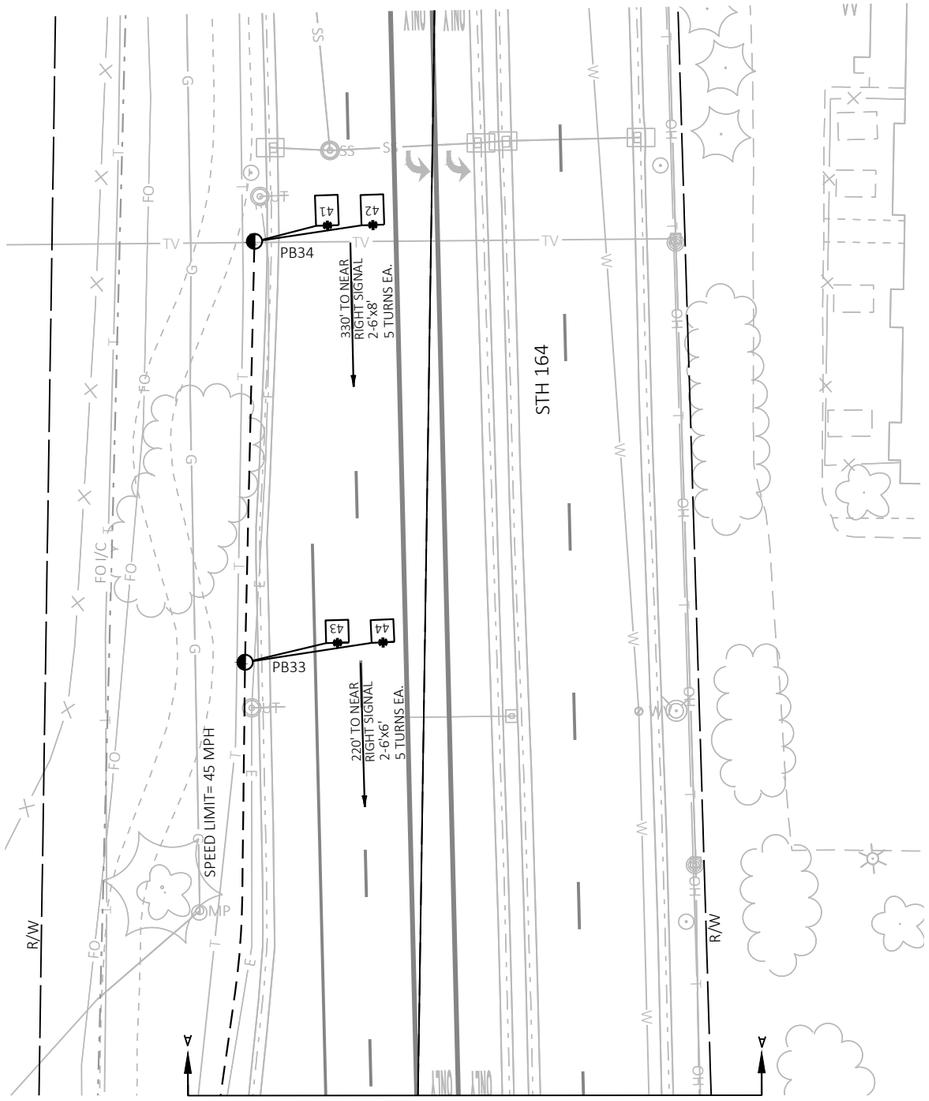
REGION CONTACT: J. GATES
DESIGNED BY: GRAEF
REVISED BY:

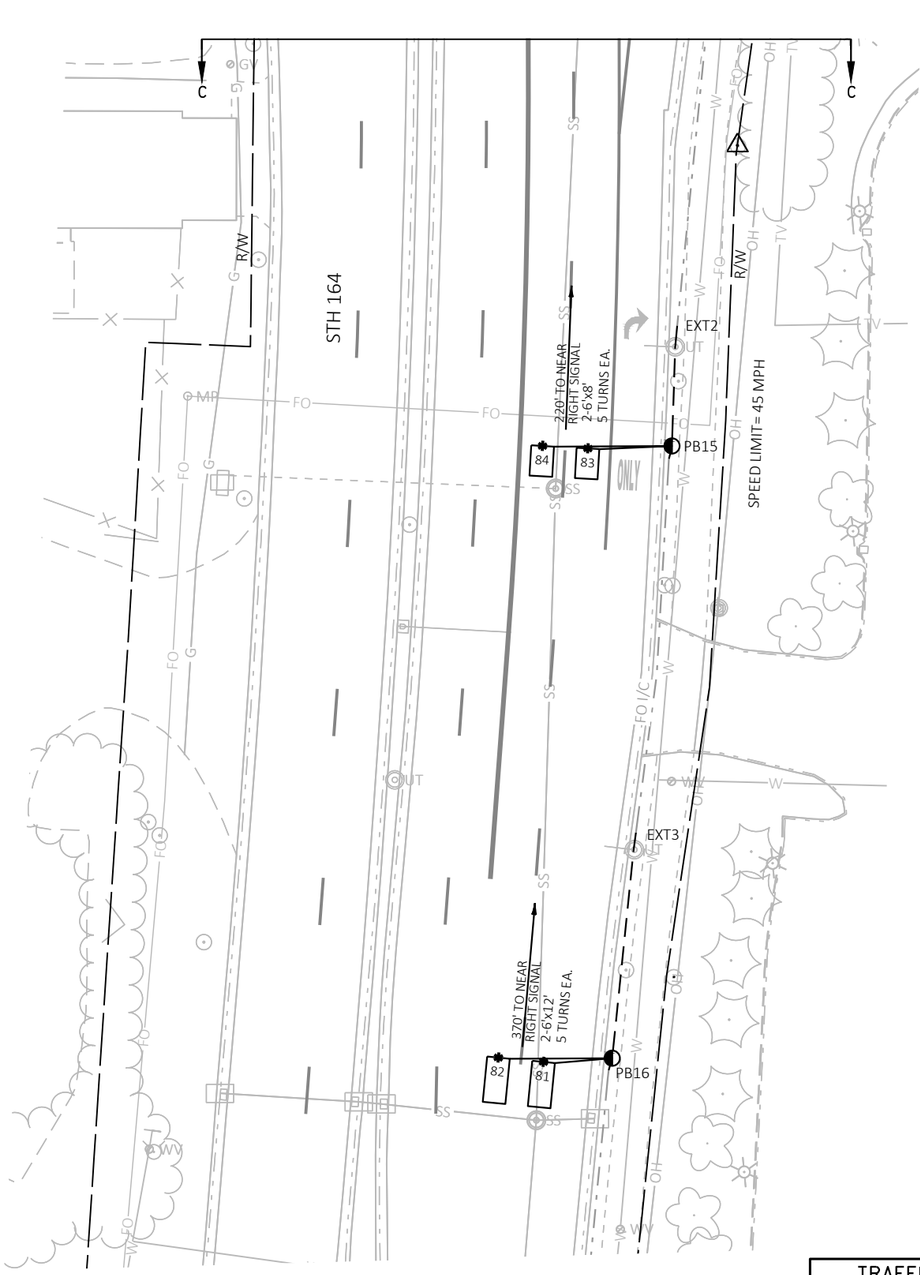
PAGE 2 OF 4

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 187 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\05_S67-0339_I_STH164 024201.DWG
LAYOUT NAME - S67-0339_I_pg2

PLOT DATE : 8/3/2023 1:18 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : ##########





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TRAFFIC CONTROL SIGNAL
STH 164 & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0339

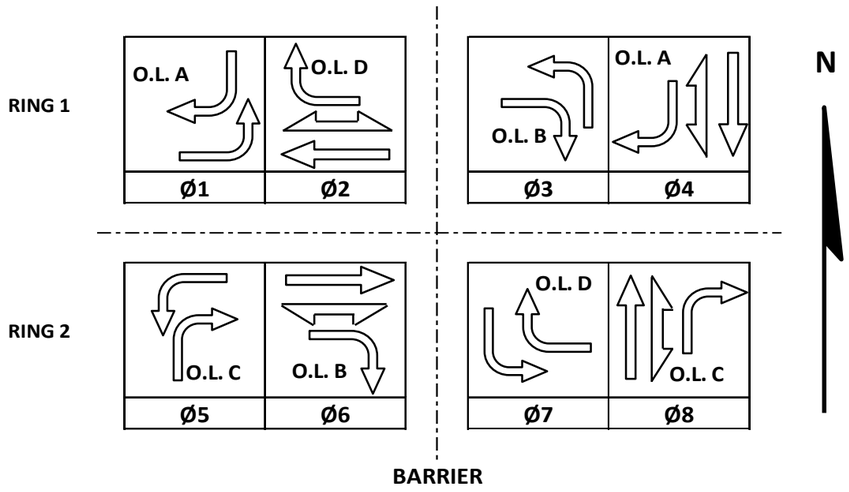
REGION CONTACT: J. GATES
DESIGNED BY: GRAEF
REVISED BY:

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 188 E

FILE NAME : X:\ML\2021\20210030\DESIGN\TRANSPORTATION\SHEETSPLAN\05_S67-0339_I_STH164 024201.DWG
LAYOUT NAME - S67-0339_I_pg3

PLOT DATE : 8/3/2023 1:18 PM PLOT BY : BIEBERITZ, BEN PLOT NAME : PLOT SCALE : ##########

	HEAD NUMBERS	FLASH
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Ø2	10, 11, 12	R
Ø3	22, 23, 24	R
Ø4	28, 29, 30	R
Ø5	13, 14, 15	R
Ø6	1, 2, 3	R
Ø7	31, 32, 33	R
Ø8	19, 20, 21	R
Ø2P	39, 40	
Ø4P	37, 38	
Ø6P	43, 44	
Ø8P	41, 42	
OLA	34, 35, 36	R
OLB	7, 8, 9	R
OLC	25, 26, 27	R
OLD	16, 17, 18	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	O.L. D	O.L. B	O.L. A	O.L. C
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-

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	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	13	15	21, 22	25	27	31	33
CALLED PHASE	1	1	1	2	2	2	3	3
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			4					

	19	17	23	21	27	25	31	29
	35	41, 42	45	47	51	53	55	61, 62
	3	4	4	4	5	5	5	6
	X		X	X	X	X	X	X
	X						X	
	X	X	X	X	X	X	X	X
		X						
	6						8	

	35	33	39	37	43	41	47	45	DETECTOR INPUT
	65	67	71	73	75	81, 82	85	87	PLAN LOOP DETECTOR*(S)
	6	6	7	7	7	8	8	8	CALLED PHASE
	X	X	X	X	X		X	X	CALL OPTION
					X				DELAY TIME
	X	X	X	X	X	X	X	X	EXTENTION OPTION
						X			EXTEND TIME
									USE ADDED INITIAL
					2				CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	12	14	16	23, 24	26	28	32	34
CALLED PHASE	1	1	1	2	2	2	3	3
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			4					

	20	18	24	22	28	26	32	30
	36	43, 44	46	48	52	54	56	63, 64
	3	4	4	4	5	5	5	6
	X		X	X	X	X	X	X
	X						X	
	X	X	X	X	X	X	X	X
		X						
	6						8	

	36	34	40	38	44	42	48	46	DETECTOR INPUT
	66	68	72	74	76	83, 84	86	88	PLAN LOOP DETECTOR*(S)
	6	6	7	7	7	8	8	8	CALLED PHASE
	X	X	X	X	X		X	X	CALL OPTION
					X				DELAY TIME
	X	X	X	X	X	X	X	X	EXTENTION OPTION
						X			EXTEND TIME
									USE ADDED INITIAL
					2				CROSS SWITCH PHASE

STH 164 & STH 190 (CAPITOL DR)
VILLAGE OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO: S67-0339 CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE
DATE: 8/2023 PAGE NUMBER: 4 OF 4

PROJECT ID:	2025-07-73
INTERSECTION:	STH 164 & STH 190 (CAPITOL 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	7	40								BLK	BLU	
		B										WHT/BLK
SB2	12	10	RED	ORG	GRN							
		41								BLK	BLU	
		B										WHT/BLK
SB3	7	16	RED				ORG	GRN				
SB4	15	5				RED/BLK	ORG/BLK	GRN/BLK				
		6				RED/BLK	ORG/BLK	GRN/BLK				
		13				RED/WHT	BLU/WHT	GRN/WHT				
		26	RED				ORG	GRN				
SB5	7	27	RED				ORG	GRN				
SB6	7	2	RED	ORG	GRN							
		3	RED	ORG	GRN							
SB7	7	25	RED				ORG	GRN				
SB8	12	19	RED	ORG	GRN							
		43								BLK	BLU	
		B										WHT/BLK
SB9	7	42								BLK	BLU	
		B										WHT/BLK
SB10	7	9	RED				ORG	GRN				
SB11	15	8	RED/WHT				BLU/WHT	GRN/WHT				
		22				RED	ORG	GRN				
		32				RED/BLK	ORG/BLK	GRN/BLK				
		33				RED/BLK	ORG/BLK	GRN/BLK				
SB12	7	29	RED	ORG	GRN							
		30	RED	ORG	GRN							
SB13	7	7	RED				ORG	GRN				
SB14	12	1	RED	ORG	GRN							
		37								BLK	BLU	
		B										WHT/BLK
SB15	7	44								BLK	BLU	
		B										WHT/BLK
SB16	12	4				RED	ORG	GRN				
		14				RED/BLK	ORG/BLK	GRN/BLK				
		15				RED/BLK	ORG/BLK	GRN/BLK				
SB17	7	35	RED				ORG	GRN				
SB18	7	36	RED				ORG	GRN				
SB19	7	11	RED	ORG	GRN							
		12	RED	ORG	GRN							
SB20	12	28	RED	ORG	GRN							
		39								BLK	BLU	
		B										WHT/BLK
SB21	7	38								BLK	BLU	
		B										WHT/BLK
SB22	7	34	RED				ORG	GRN				
SB23	12	17	RED/BLK				ORG/BLK	GRN/BLK				
		31				RED	ORG	GRN				
SB24	7	18	RED				ORG	GRN				
SB25	12	20	RED	ORG	GRN							
		21	RED	ORG	GRN							
		23				RED/BLK	ORG/BLK	GRN/BLK				
		24				RED/BLK	ORG/BLK	GRN/BLK				

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	SB14
SB14	SB15
SB15	SB16
SB16	SB17
SB17	SB18
SB18	SB19
SB19	SB20
SB20	SB21
SB21	SB22
SB22	SB23
SB23	SB24
SB24	SB25
SB25	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	SB3
PB2	SB3
PB6	SB2
PB7	SB4
PB9	SB4
PB11	SB6
PB12	SB7
PB13	SB7
PB14	SB8
PB17	SB11
PB19	SB12
PB20	SB13
PB24	SB14
PB25	SB16
PB27	SB16
PB28	SB16
PB29	SB19
PB30	SB20
PB31	SB22
PB35	SB23
PB37	SB25

EMERGENCY VEHICLE PREEMPTION	
FROM	TO
CB1	HEAD A (SB19)
CB1	HEAD B (SB6)
CB1	HEAD C (SB12)
CB1	HEAD D (SB25)

LIGHTING UF 10 AWG W/ GROUND	
FROM	TO
CB1	SB4
SB4	LP2
SB4	SB11
CB1	SB24
SB24	SB16
SB16	LP1

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.

2

N

SEE LATER SHEET

SIMMONS AVE

CAPITOL DRIVE

DYNEX DR

STH 16 EB OFF RAMP

STH 16 EB ON RAMP

STH 16

STH 190 (CAPITOL DRIVE)

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
511	10+45.65'WB'	35.58 LT	187387.793	677794.733

LEGEND

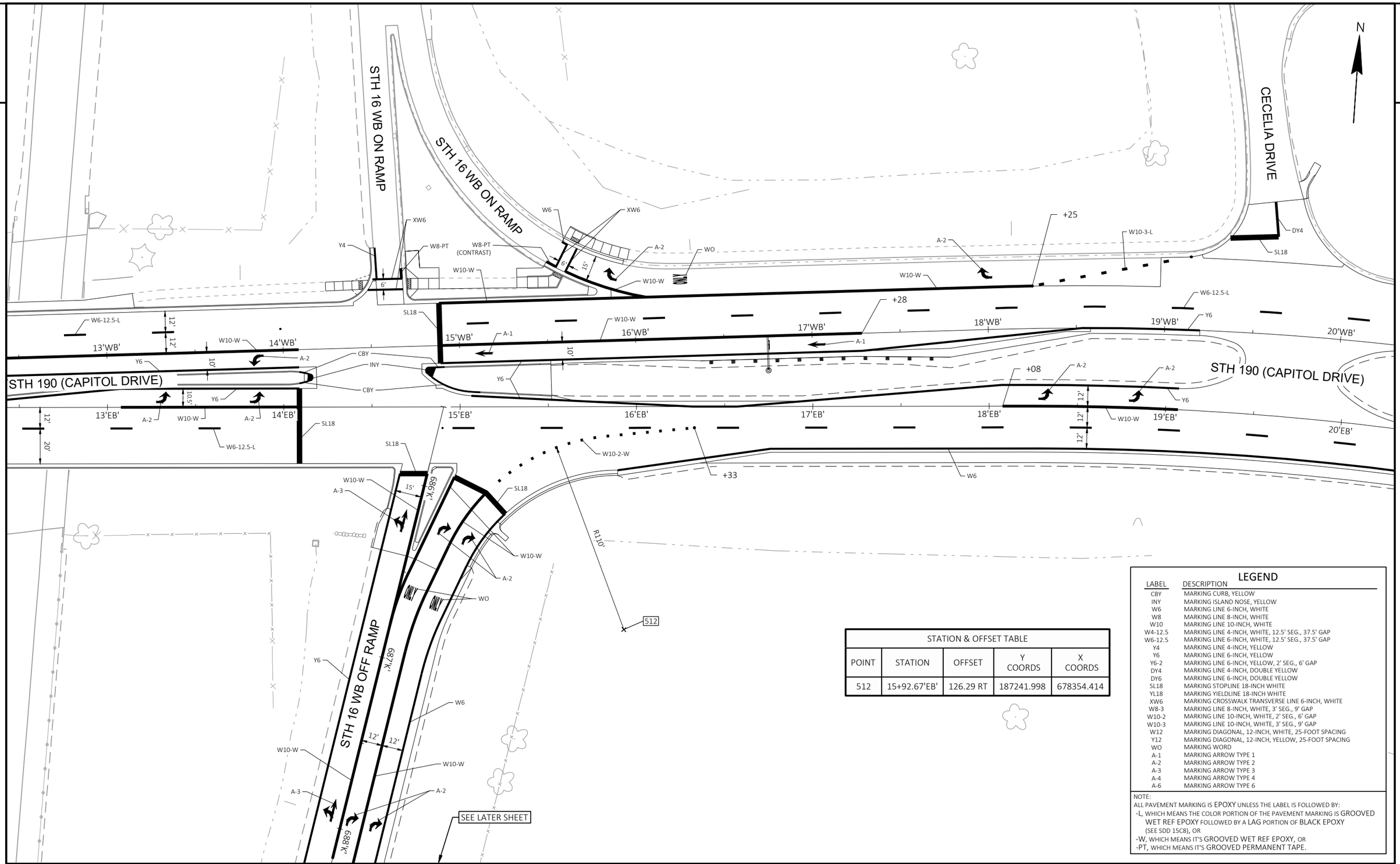
LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 191	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_01
PLOT DATE : 9/11/2023 12:50 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
512	15+92.67'EB'	126.29 RT	187241.998	678354.414

LEGEND

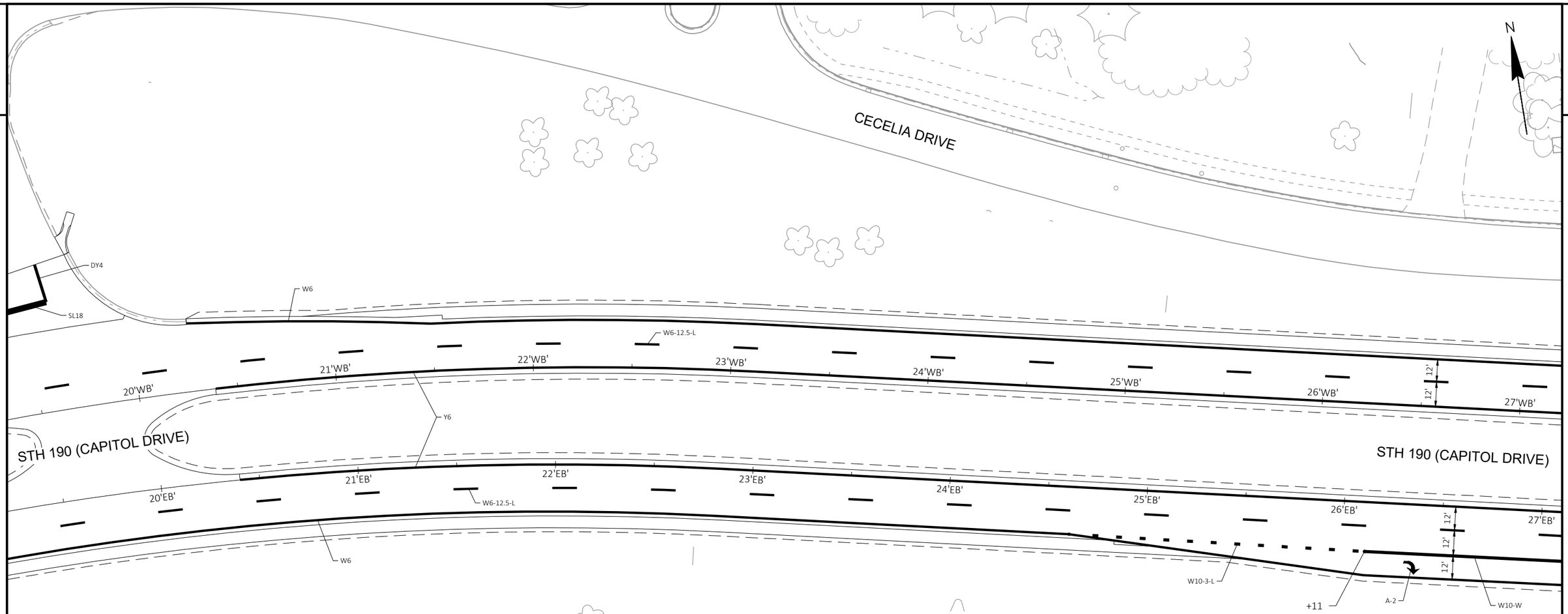
LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 192	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_02
PLOT DATE : 9/11/2023 12:50 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

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-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 193	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_03
PLOT DATE : 9/11/2023 12:50 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

CECELIA DR

N

STH 190 (CAPITOL DRIVE)

STH 190 (CAPITOL DRIVE)

27'WB' 28'WB' 29'WB' 30'WB' 31'WB' 32'WB' 33'WB' 34'W

27'EB' 28'EB' 29'EB' 30'EB' 31'EB' 32'EB' 33'EB'

12' 12' 12' 12' 12' 12' 12' 12'

+69 +11

W6 W6-12.5-L W10-W WO A-2 Y6

LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
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A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
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-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 194	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_04

PLOT DATE : 9/11/2023 12:50 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

CECELIA DRIVE

N

2

W6

W10-W

W6-12.5-L

12'

12'

33'WB'

34'WB'

35'WB'

36'WB'

37'WB'

38'WB'

39'WB'

40'WB'

A-2

STH 190 (CAPITOL DRIVE)

Y6

STH 190 (CAPITOL DRIVE)

W10-W

A-2

W12

12'

33'EB'

34'EB'

35'EB'

36'EB'

37'EB'

38'EB'

39'EB'

40'EB'

+34

W10-W

12'

12'

11'

A-2

W6-12.5-L

W6

W10-3-L

W10-W

+01

LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
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A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

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-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 195	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_05

PLOT DATE : 9/11/2023 12:50 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

GEORGETOWNE DRIVE

STH 190 (CAPITOL DRIVE)

STH 190 (CAPITOL DRIVE)

FOREST GROVE DRIVE

N

40'WB' 41'WB' 42'WB' 43'WB' 44'WB' 45'WB' 46'WB' 47'WB'

40'EB' 41'EB' 42'EB' 43'EB' 44'EB' 45'EB' 46'EB' 47'EB'

+01 +10 +31 +99

LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 196	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_06
PLOT DATE : 9/11/2023 12:50 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

N

W6 +22 +67 +72 +33 W6

A-2

11'

12'

12'

W10-W W10-3-L W6-12.5-L W12

47'WB' 48'WB' 49'WB' 50'WB' 51'WB' 52'WB' 53'WB' 54'WB'

XW6 6' INY CBY

12'

Y6

STH 190 (CAPITOL DRIVE)

+21 A-2 W10-W +02

12' WO A-2 SL18

STH 190 (CAPITOL DRIVE)

47'EB' 48'EB' 49'EB' 50'EB' 51'EB' 52'EB' 53'EB' 54'EB'

W10-W

12' 12' 12'

XW6 6'

W6-12.5-L

8"

W6 W10-3-L A-2 WO A-2

+93 +85 W6

LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 197	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_07

PLOT DATE : 9/11/2023 12:50 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
501	60+46.76'WB'	84.19 LT	187431.990	682773.792

N

WESTFIELD WAY

STH 190 (CAPITOL DRIVE)

STH 190 (CAPITOL DRIVE)

WILLOW GROVE DRIVE

54'WB' 55'WB' 56'WB' 57'WB' 58'WB' 59'WB' 60'WB' 61'WB'

54'EB' 55'EB' 56'EB' 57'EB' 58'EB' 59'EB' 60'EB' 61'EB'

+99 +52 +43 +96 +64 +62 +82 +21 +20

501 502

R63' R35'

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
502	61+24.14'EB'	19.74 RT	187271.176	682857.438

LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 198	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_08
PLOT DATE : 9/11/2023 12:50 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
501	60+46.76'WB'	84.19 LT	187431.990	682773.792

N

501
R63'
13'
Y4
Y4
Y12
Y4
W6
+84
A-2
WO
W6
A-2
+20
+50
W6
12'
12'
12'
11'
W10-W
W10-3-L
61'WB'
62'WB'
W6-12.5-L
63'WB'
64'WB'
Y6
W10-W
65'WB'
66'WB'
67'WB'
+12
68'WB'
W10-W
11'
A-2
+97
+02
12'
STH 190 (CAPITOL DRIVE)
WO
A-2
+96
Y12
CBY
Y6
12'
WO
STH 190 (CAPITOL DRIVE)
W10-W
+03
W10-W
A-2
Y6-2
61'EB'
INY
Y6
62'EB'
63'EB'
64'EB'
12'
65'EB'
66'EB'
67'EB'
68'EB'
+64
R35'
502
12'
W6-12.5-L
W10-3-L
SL-18
9'
+74
W6
W6
+68
A-2
+67
12'
W10-W
W6
WO
WILLOW GROVE DRIVE

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
502	61+24.14'EB'	19.74 RT	187271.176	682857.438

LEGEND

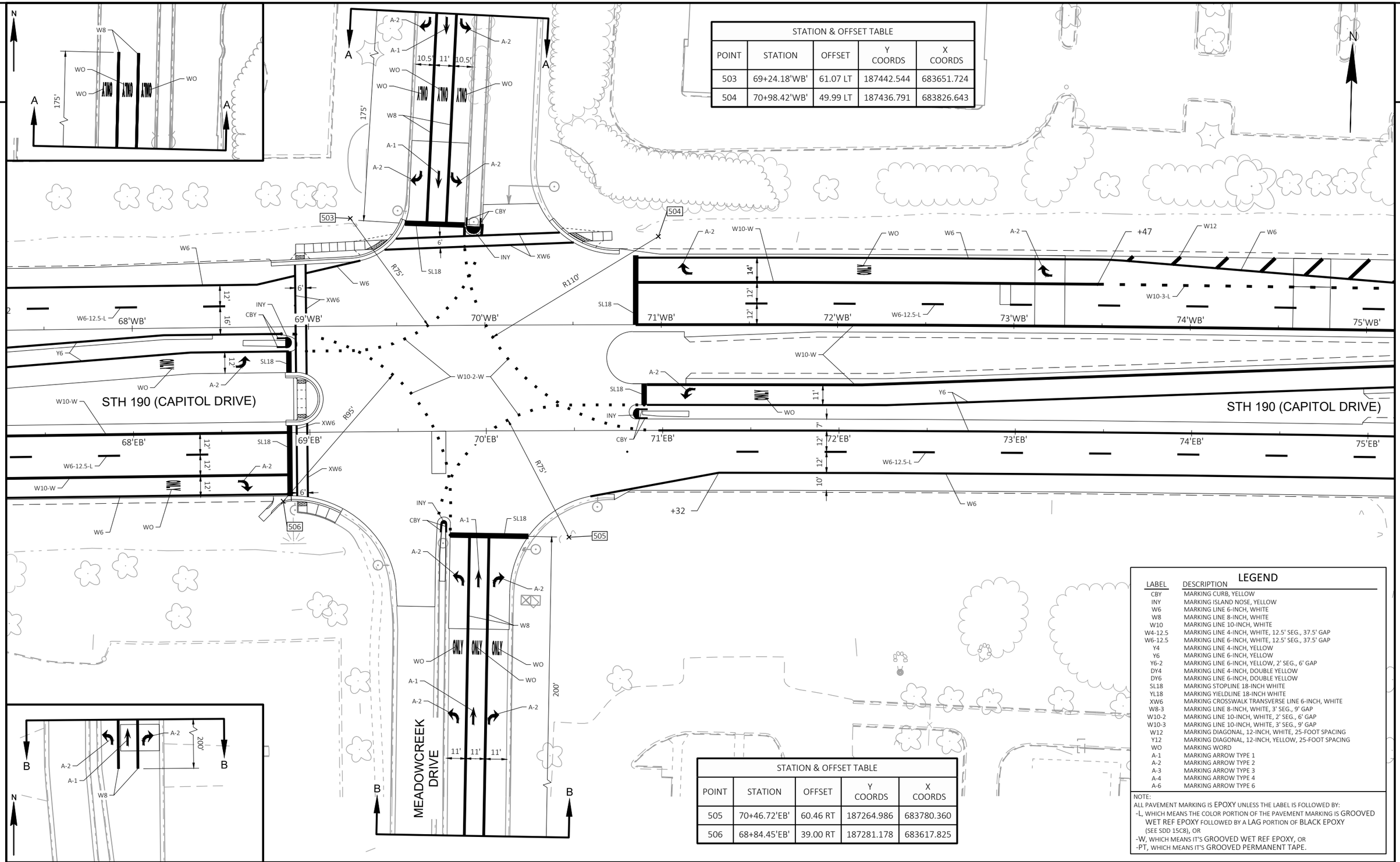
LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 199	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_09
PLOT DATE : 9/11/2023 12:50 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
503	69+24.18'WB'	61.07 LT	187442.544	683651.724
504	70+98.42'WB'	49.99 LT	187436.791	683826.643



STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
505	70+46.72'EB'	60.46 RT	187264.986	683780.360
506	68+84.45'EB'	39.00 RT	187281.178	683617.825

LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 200	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_10
PLOT DATE : 9/11/2023 12:51 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

N

+16 +45 +64 +54 +84 +87

W6 W12 W10-3-L W10-W W6-12.5-L W10-W WO W6 W10-W A-2 A-2 W6 W10-3-L W6 W6

14' 12' 12' 16'

75'WB' 76'WB' 77'WB' 78'WB' 79'WB' 80'WB' 81'WB' 82'W

STH 190 (CAPITOL DRIVE)

W10-W 12' A-2 Y6 +59 +81 W10-3-L +81 Y6 12' 12' STH 190 (CAPITOL DRIVE)

A-2 W10-W WO

75'EB' 76'EB' 77'EB' 78'EB' 79'EB' 80'EB' 81'EB' 82'E

W6-12.5-L +82 W10-3-L 12' 12' 14'

W6 +63 +90 A-2 W10-W W6

CANOPY

LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 201	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_11

PLOT DATE : 9/11/2023 12:51 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

N

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
507	82+85.00'WB'	55.03 LT	187443.702	685015.333
508	84+81.13'WB'	68.00 LT	187453.468	685211.654

STH 164 (PEWAUKEE ROAD)

SEE LATER SHEET

STH 190 (CAPITOL DRIVE)

STH 164 (PEWAUKEE ROAD)

SEE LATER SHEET

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
509	84+33.50'EB'	74.01 RT	187252.209	685164.021
510	82+30.98'EB'	53.27 RT	187276.254	684961.865

LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
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A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 202	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_12
PLOT DATE : 9/11/2023 12:51 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

N

W10-W +15
W10-3-L
W6
+41
W6
+64
W6
+44
+44
88'WB'
89'WB'
90'WB'
91'WB'
W6-12.5-L
92'WB'
93'WB'
94'WB'
95'WB'
10'
12'
12'
W10-W
+25
W10-3-L

STH 190 (CAPITOL DRIVE)

Y6
+88
+46
A2
Y6
STH 190 (CAPITOL DRIVE)
WO
A2
88'EB'
89'EB'
90'EB'
91'EB'
92'EB'
93'EB'
94'EB'
95'EB'
+53
W10-W
12'
12'
12'
W10-3-L
10'
WO
A2
W6
W6-12.5-L
+66
+46
A2
W6

LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 203	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_13
PLOT DATE : 9/11/2023 12:51 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

N

HIGHFIELD ROAD

12' 12'

A2 A3 W8 DY4 SL18

64 W6 +44

95'WB' 96'WB' 97'WB' 98'WB' 99'WB' 100'WB' 101'WB' 102'WB'

W6 +03 +02

A2 WO W10-W W6-12.5-L W10-3-L

12' 12' 12' 12'

+09

STH 190 (CAPITOL DRIVE)

STH 190 (CAPITOL DRIVE)

Y6

WO A2

95'EB' 96'EB' 97'EB' 98'EB' 99'EB' 100'EB' 101'EB' 102'EB'

W10-W +53 +12 W6-12.5-L

12' 12' 9'

A2 W10-W WO W6 INY SL18 CBY +05 W6

5 FIELDS ROAD

LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 204	E

2

2

N

+02

W6

W6

W10-3-L

W6-12.5-L

102'WB' 103'WB' 104'WB' 105'WB' 106'WB' 107'WB' 108'WB' 109'WB'

10'
12'
12'
3'

Y6

Y6

+55

STH 190 (CAPITOL DRIVE)

STH 190 (CAPITOL DRIVE)

Y6

+52

3'

Y4

102'EB' 103'EB' 104'EB' +59 105'EB' 106'EB' +62 107'EB' 108'EB' +65 109'EB'

12'
12'
10'

W6-12.5-L

W10-W

A2

WO

A2

2

W6

W10-3-L

LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 205	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_15

PLOT DATE : 9/11/2023 12:52 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

W6

W6

W6-12.5-L

W6-12.5-L

10'

12'

12'

12'

109'WB'

110'WB'

111'WB'

112'WB'

113'WB'

114'WB'

115'WB'

116'WB'

+39

+11

+86

WO

A-2

A-2

Y6

W10-W

Y6

STH 190 (CAPITOL DRIVE)

STH 190 (CAPITOL DRIVE)

Y6

109'EB'

110'EB'

111'EB'

112'EB'

113'EB'

114'EB'

115'EB'

116'EB'

W6-12.5-L

+25

+50

12'

12'

+99

W4

W6

LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 206	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_16

PLOT DATE : 9/11/2023 12:52 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

N

W6

W6-12.5-L

12'

12'

116'WB'

+75

+26

Y6

STH 190 (CAPITOL DRIVE)

STH 190 (CAPITOL DRIVE)

116'EB' 117'EB' 118'EB' 119'EB' 120'EB' 121'EB' 122'EB' 123'EB'

HUNTERS RIDGE ROAD

LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 207	E

2

2

N

CTH F TO WB STH 190 RAMP

WB STH 190 TO CTH F RAMP

RAMP

~2890' EAST OF EAST
END OF CONSTRUCTION

14'

12'

W4-12.5
(CONTRAST)

~3460' EAST OF EAST
END OF CONSTRUCTION

STH 190 (CAPITOL DRIVE)

STH 190 (CAPITOL DRIVE)

EB STH 190 TO CTH F RAMP

CTH F TO EB STH 190 RAMP

LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 208	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_18

PLOT DATE : 9/11/2023 12:52 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

STH 16 WB

STH 16 EB

STH 16 EB OFF RAMP

50'

A4

Y6

W6

W10-3-PT
TO TAPER POINT

W10-3-PT

STH 16 EB OFF RAMP

N

2

LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

STH 16 EB OFF RAMP

W10-3-PT

W10-PT

A-2

Y6

12'

12'

683'I'

684'I'

685'I'

W6

A-6

WO

W10-PT

A-2

A-3

SL18

XW6

W10-PT

A-2

YL18

XW6

+09

511

MATCH

STH 190 (CAPITOL DRIVE)

10'WB'

10'EB'

9'WB'

9'EB'

STH 16 EB ON RAMP

BERM

N

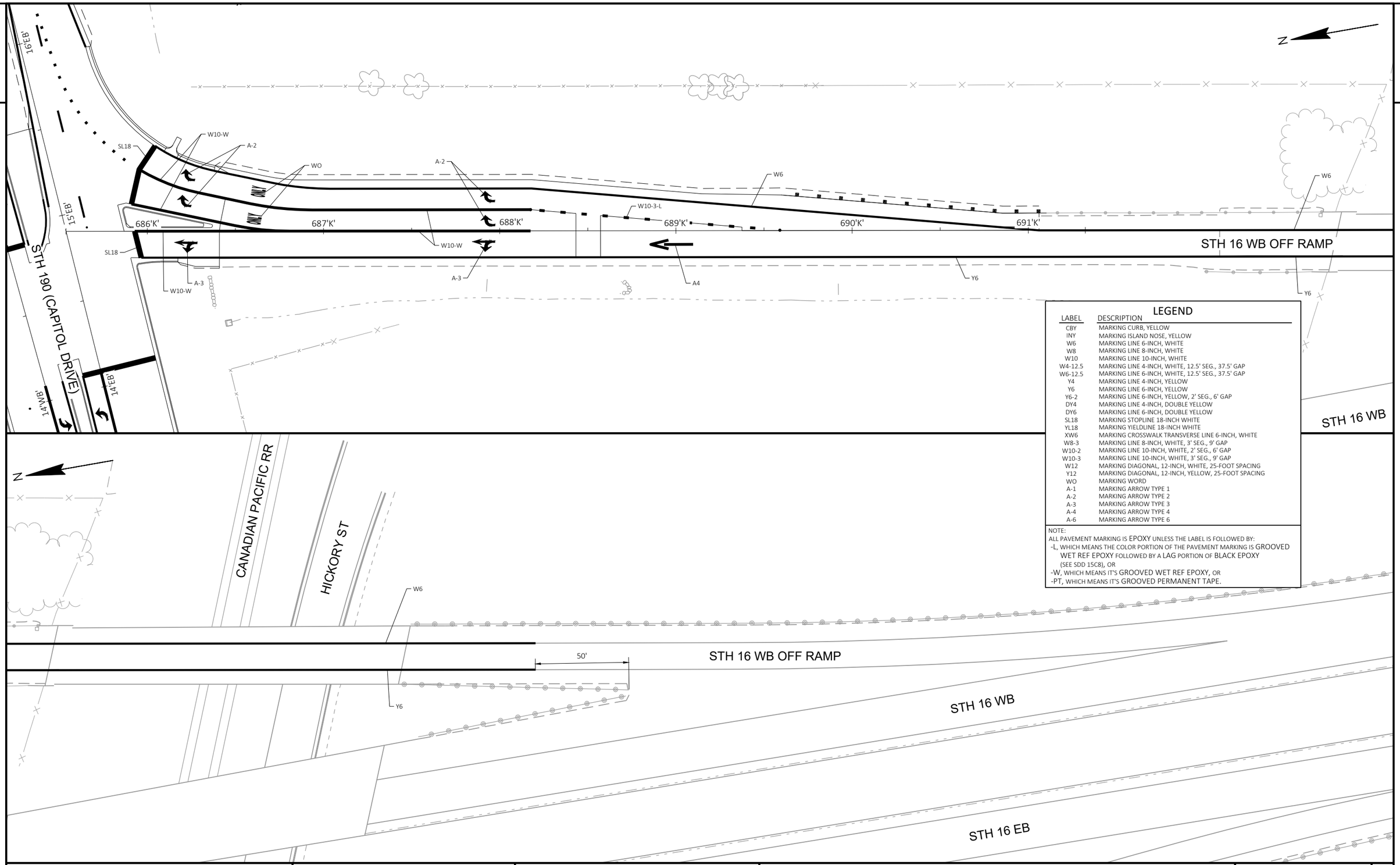
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 209	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_19

PLOT DATE : 9/11/2023 12:52 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

2



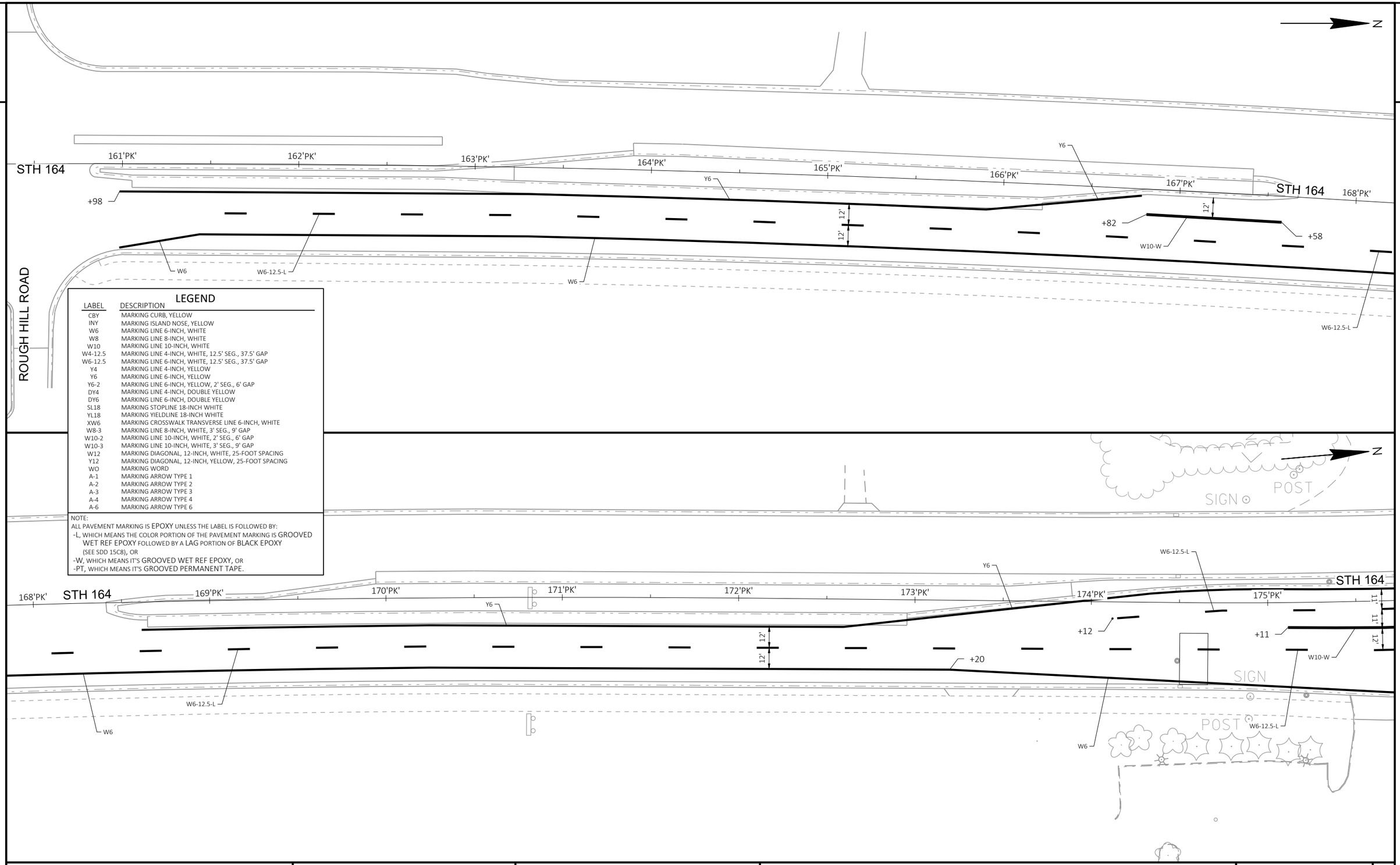
LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 210	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024501-PM.DWG
LAYOUT NAME - PM_20
PLOT DATE : 9/11/2023 12:52 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42



LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 211	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024502-PM.DWG
LAYOUT NAME - 164 PM - 50
PLOT DATE : 9/11/2023 1:00 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

N

STH 190
(CAPITOL DRIVE)

STH 164

STH 164

STH 190
(CAPITOL DRIVE)

POST

POST

POST

POST

RIPRAP

ONLY

ONLY

ONLY

ONLY

ONLY

176'PK'

177'PK'

178'PK'

179'PK'

180'PK'

181'PK'

182'PK'

183'P

Y6

W6-12.5-L

11'

11'

12'

12'

WO

A2

SL18

XW6

W10-W

+99

W6

12'

12'

12'

12'

11'

11'

W10-W

+45

W6-12.5-L

WO

A2

SL18

XW6

Y6

W6

W

LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

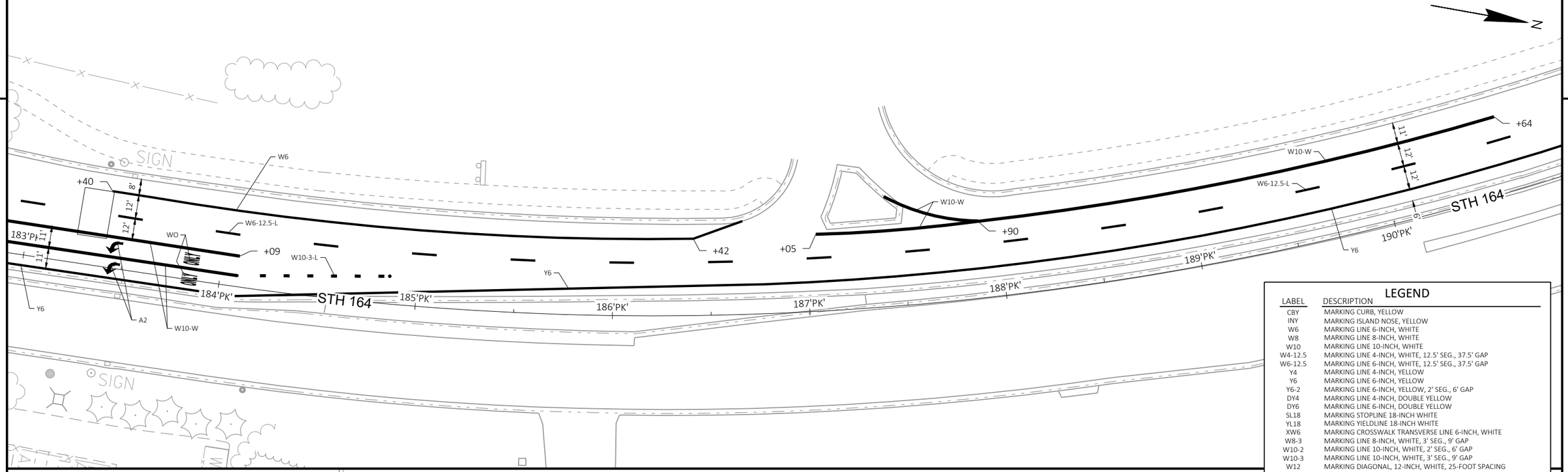
NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 212	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024502-PM.DWG
LAYOUT NAME - 164 PM - 51

PLOT DATE : 9/11/2023 1:00 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

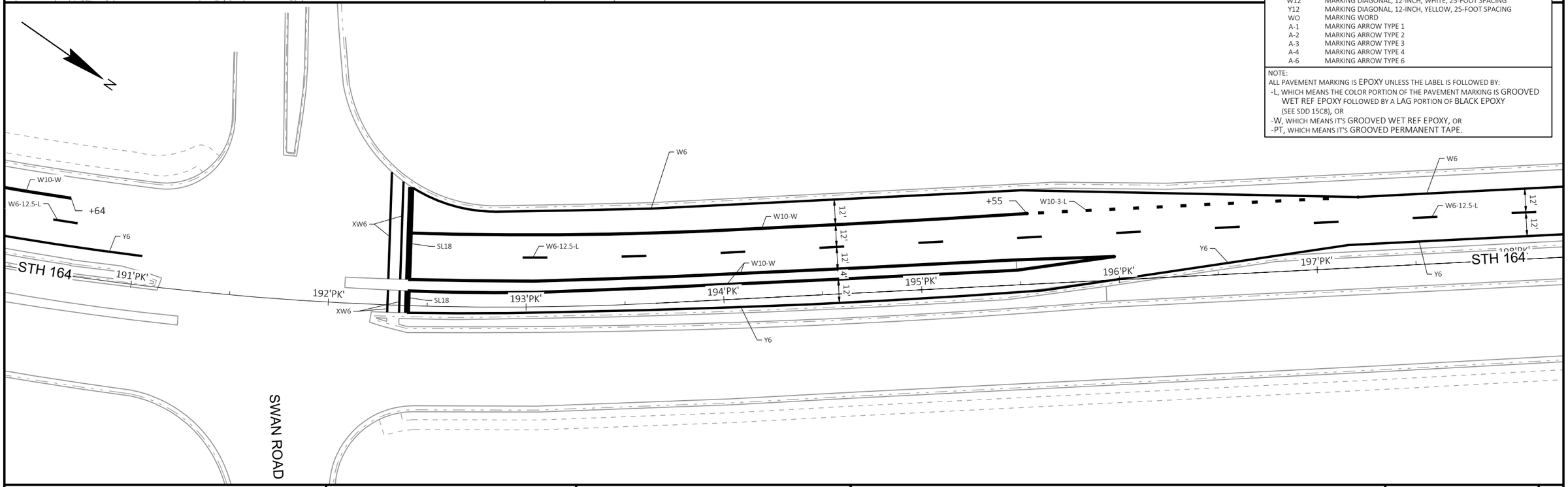
2



LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

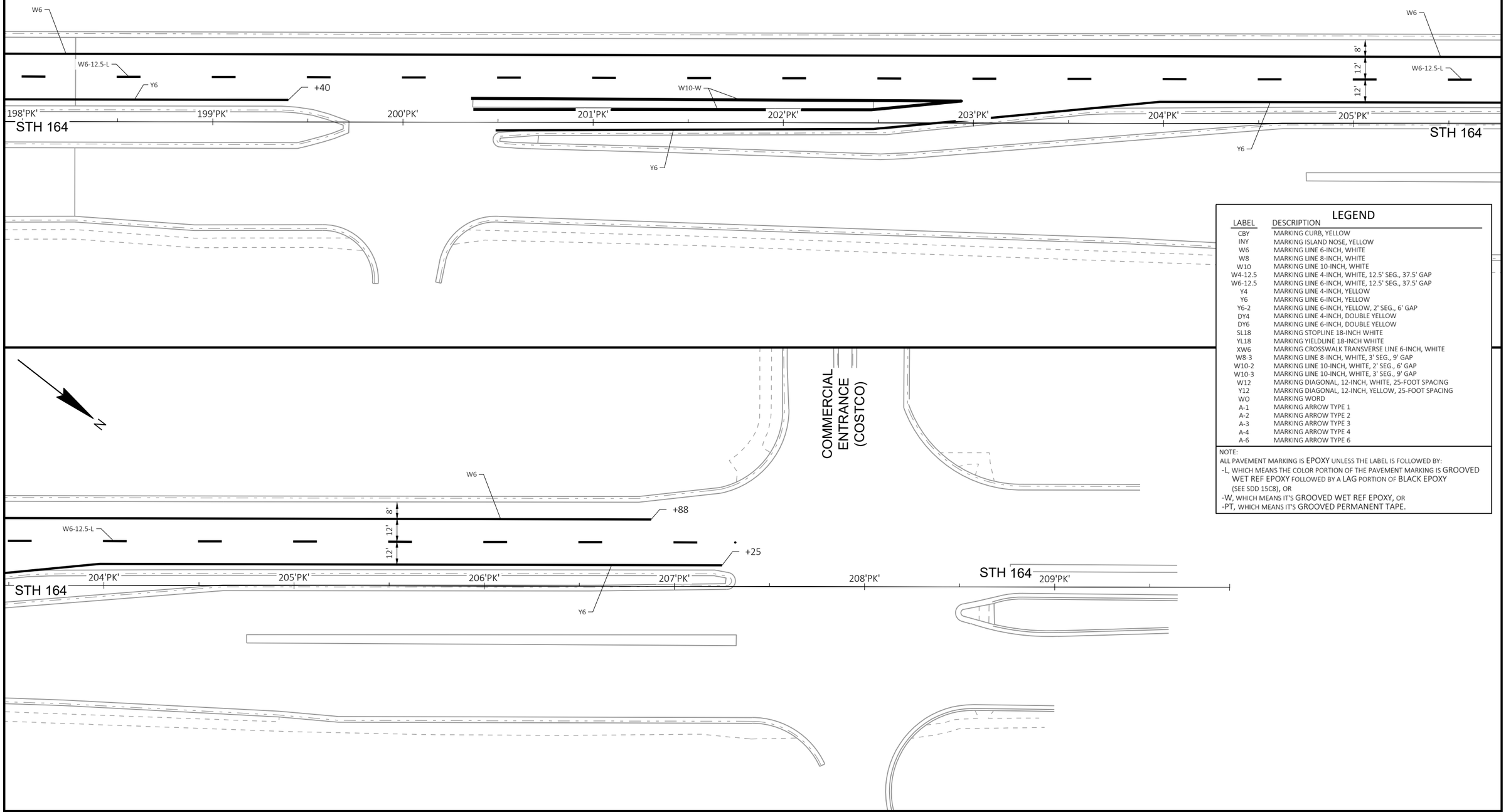


PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 213	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024502-PM.DWG
LAYOUT NAME - 164 PM - 52

PLOT DATE : 9/11/2023 1:01 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



LEGEND

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W6	MARKING LINE 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W10	MARKING LINE 10-INCH, WHITE
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5' GAP
W6-12.5	MARKING LINE 6-INCH, WHITE, 12.5' SEG., 37.5' GAP
Y4	MARKING LINE 4-INCH, YELLOW
Y6	MARKING LINE 6-INCH, YELLOW
Y6-2	MARKING LINE 6-INCH, YELLOW, 2' SEG., 6' GAP
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
DY6	MARKING LINE 6-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH WHITE
YL18	MARKING YIELDLINE 18-INCH WHITE
XW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH, WHITE
W8-3	MARKING LINE 8-INCH, WHITE, 3' SEG., 9' GAP
W10-2	MARKING LINE 10-INCH, WHITE, 2' SEG., 6' GAP
W10-3	MARKING LINE 10-INCH, WHITE, 3' SEG., 9' GAP
W12	MARKING DIAGONAL, 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL, 12-INCH, YELLOW, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-4	MARKING ARROW TYPE 4
A-6	MARKING ARROW TYPE 6

NOTE:
ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY:
-L, WHICH MEANS THE COLOR PORTION OF THE PAVEMENT MARKING IS GROOVED WET REF EPOXY FOLLOWED BY A LAG PORTION OF BLACK EPOXY (SEE SDD 15C8), OR
-W, WHICH MEANS IT'S GROOVED WET REF EPOXY, OR
-PT, WHICH MEANS IT'S GROOVED PERMANENT TAPE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 214	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_024502-PM.DWG
LAYOUT NAME - 164 PM - 53
PLOT DATE : 9/11/2023 1:01 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

N

190 M1-6 36"X36"
ROAD WORK AHEAD
W20-1A

190 M1-6 36"X36"
ROAD WORK AHEAD
W20-1A

190 M1-6 36"X36"
MAX. 11' WIDTH
W12-52 48"X48"

EXIT 187
190
Capitol Dr

190 M1-6 36"X36"
MAX. 11' WIDTH
W12-52 48"X48"

16

CAPITOL DR

SIMMONS AVE

CECELIA DR

164

OAKTON DR

CAPITOL DR

190 CAPITOL DR

CAPITOL DR 190

190 M1-6 36"X36"
MAX. 11' WIDTH
W12-52 48"X48"

E WISCONSIN AVE

MAIN ST

190 M1-6 36"X36"
MAX. 11' WIDTH
W12-52 48"X48"

0.5 MILES AHEAD
WO57-52 48"X36"

CANADIAN PACIFIC RR

EXIT 187
190
Capitol Dr
EXIT ONLY

(ON CANTILEVER SIGN STRUCTURE)

PEWAUKEE LAKE

190 M1-6 36"X36"
ROAD WORK AHEAD
W20-1A

190 M1-6 36"X36"
ROAD WORK AHEAD
W20-1A

190 M1-6 36"X36"
MAX. 11' WIDTH
W12-52 48"X48"

16

WATERTOWN RD

LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
DY6	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - ADVANCED WARNING SIGNING - STH 190 & STH 16	SHEET 215 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_025001-AWS.DWG
LAYOUT NAME - - STH 190 & STH 16
PLOT DATE : 9/18/2023 2:37 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT

2

N

ROAD WORK AHEAD W20-1A

MAX. 11' WIDTH W12-52 48"X48"

2.5 MILES AHEAD WO57-52 48"X36"

164

K

K

F

LINDSAY RD

KF

16

KF

CECELIA DR

164

SWAN RD

HIGHFIELD DR

PCMS

CECELIA DR

190 CAPITOL DRIVE

MEADOWCREEK DR

FIVE FIELDS RD

HUNTERS RIDGE RD

CAPITOL DRIVE 190

PCMS

MAIN ST

FOREST GROVE RD

ROUGH HILL RD

GREEN RD

CANADIAN PACIFIC RR

E WISCONSIN AVE

M

16

164

M

F

FRAME A	FRAME B
ROAD WORK BEGINS	XXXDAY XX XX

(PORTABLE CHANGEABLE MESSAGE SIGN IN PLACE 7 DAYS PRIOR TO BEGINNING WORK)

WEST 190 M3-4 24"X12" M1-6 24"X24"

MAX. 11' WIDTH W12-52 48"X48"

MAX. 11' WIDTH W12-52 48"X48"

1.0 MILES AHEAD WO57-52 48"X36"

WEST 190 M3-4 24"X12" M1-6 24"X24"

MAX. 11' WIDTH W12-52 48"X48"

MAX. 11' WIDTH W12-52 48"X48"

1.0 MILES AHEAD WO57-52 48"X36"

FRAME A	FRAME B
ROAD WORK BEGINS	XXXDAY XX XX

(PORTABLE CHANGEABLE MESSAGE SIGN IN PLACE 7 DAYS PRIOR TO BEGINNING WORK)

ROAD WORK AHEAD W20-1A

LEGEND:

- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
DY6	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - ADVANCED WARNING SIGNING - STH 190 & STH 164	SHEET 216	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_025001-AWS.DWG
LAYOUT NAME - - STH 190 & STH 164

PLOT DATE : 9/18/2023 2:37 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:2000 FT

WISDOT/CADDS SHEET 42

2

PEWAUKEE LAKE

CAPITOL DR

OAKTON AVE

CAPITOL DR

190

16

PCMS

CAPITOL DR

190

2

N

RAMP CLOSED
R11-2R
48"X30"

PCMS

FRAME A: RAMP TO CLOSE
FRAME B: XXXDAY XX XX
(PORTABLE CHANGEABLE MESSAGE SIGN IN PLACE 7 DAYS PRIOR TO STH 16 WB OFF-RAMP CLOSURE)

COVER

EXIT 187

E WISCONSIN AVE

MEADOWBROOK RD

MAIN ST

FRAME A: RAMP TO CLOSE
FRAME B: XXXDAY XX XX
(PORTABLE CHANGEABLE MESSAGE SIGN IN PLACE 7 DAYS PRIOR TO STH 16 EB ON-RAMP CLOSURE)

RAMP CLOSED
R11-2R
48"X30"

CANADIAN PACIFIC RR

1000'

EXIT 187
190
Capitol Dr
EXIT ONLY

COVER WITH
CLOSED
G20-60
108"X24"

16

E WISCONSIN AVE

RAMP CLOSED 1000 FT
W20-53C

MORRIS ST

EXIT 187
190
Capitol Dr
EXIT ONLY

M

COVER WITH
CLOSED
G20-60
108"X24"

1500'

MAIN ST

TO 190
M4-5 24"X12"
M1-6 24"X24"

RAMP CLOSED AHEAD
W20-53A

WATERTOWN RD

TO 190
M4-5 24"X12"
M1-6 24"X24"

RAMP CLOSED AHEAD
W20-53A

EXIT 187
190
Capitol Dr
MILE

COVER WITH
CLOSED
G20-60
108"X24"

16

1500'

JJ

BLUEMOUND RD

BLUEMOUND RD

190
M1-6
36"X36"

ROAD WORK AHEAD
W20-1A

MAIN ST

LEGEND:

- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or — DIRECTION OF TRAFFIC
- XXX XXX — PAVEMENT MARKING REMOVAL

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
DY6	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - ADVANCED WARNING SIGNING - STAGE 2 - SOUTH RAMPS CLOSED	SHEET 217	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_025001-AWS.DWG
LAYOUT NAME - - STAGE 2 - SOUTH RAMPS CLOSED

PLOT DATE : 9/18/2023 2:37 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:500 FT

WISDOT/CADDS SHEET 42

2

2

N

KF

16

190 M1-6 36"X36"

ROAD WORK AHEAD W20-1A

EXIT 187

190

Capitol Dr

1 MILE

COVER WITH

CLOSED

G20-60 108"X24"

190 M1-6 36"X36"

ROAD WORK AHEAD W20-1A

RAMP CLOSED AHEAD W20-53A

1500'

RAMP CLOSED 1000 FT W20-53C

1000'

SEE SDD 15D16 FOR DRUM LAYOUT AND PLACEMENT OF TEMPORARY PAVEMENT MARKING

COVER ARROW

EXIT 187

190

Capitol Dr

CLOSED

G20-61 120"X30"

RAMP CLOSED R11-2R 48"X30"

CECELIA DR

COVER

EXIT 187

PCMS

FRAME A: RAMP TO CLOSE

FRAME B: XXXDAY XX XX

(PORTABLE CHANGEABLE MESSAGE SIGN IN PLACE 7 DAYS PRIOR TO STH 16 EB OFF-RAMP CLOSURE)

RAMP CLOSED R11-2R 48"X30"

FRAME A: RAMP TO CLOSE

FRAME B: XXXDAY XX XX

(PORTABLE CHANGEABLE MESSAGE SIGN IN PLACE 7 DAYS PRIOR TO STH 16 WB ON-RAMP CLOSURE)

PCMS

16

SIMMONS AVE

CAPITOL DR

CANADIAN PACIFIC RR

PEWAUKEE LAKE

OAKTON DR

CAPITOL DR

190

LEGEND:

- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

- ARWx TEMPORARY MARKING ARROW
- DY6x TEMPORARY MARKING 6-INCH DOUBLE YELLOW
- W6x TEMPORARY MARKING 6-INCH WHITE
- W10x TEMPORARY MARKING 10-INCH WHITE
- W18x TEMPORARY MARKING 18-INCH WHITE
- DY6 TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

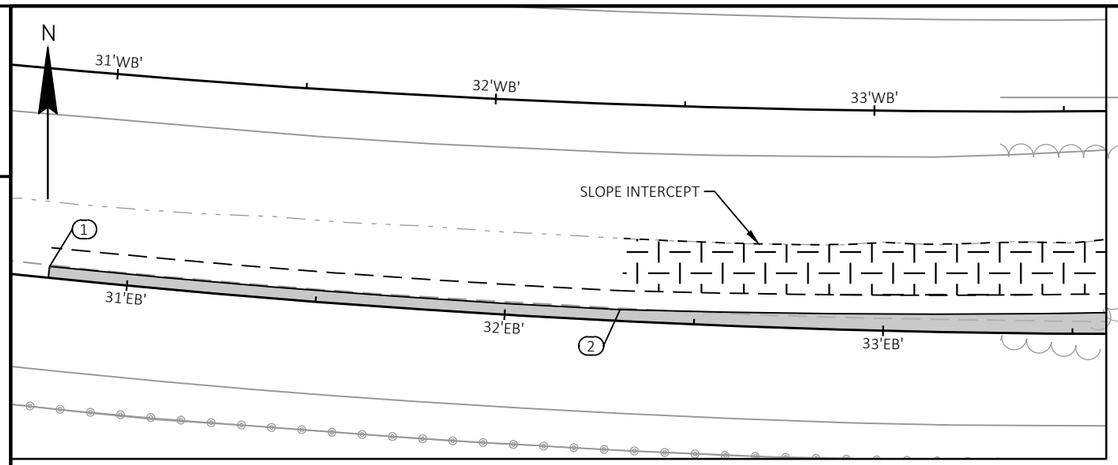
NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

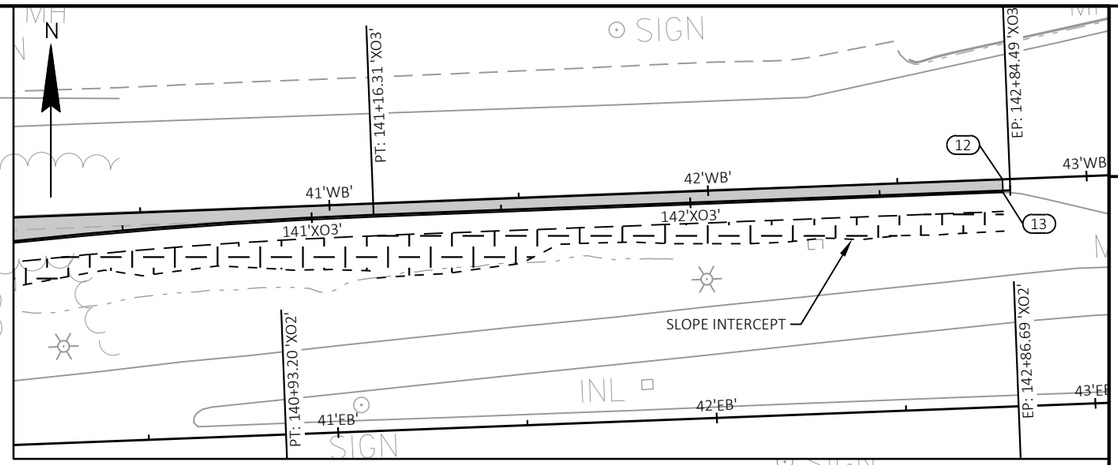
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	TRAFFIC CONTROL - ADVANCED WARNING SIGNING - STAGE 3 - NORTH RAMPS CLOSED	SHEET 218	E

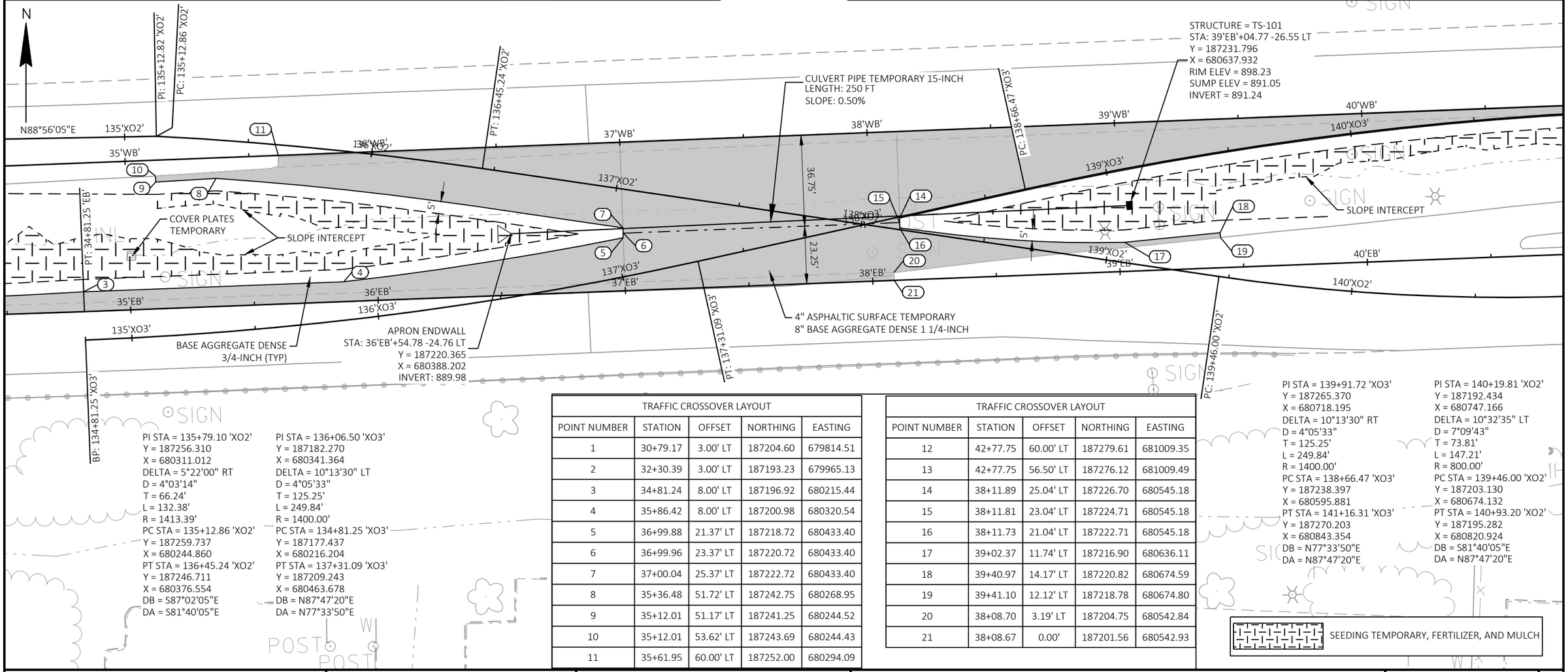
FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_025001-AWS.DWG
LAYOUT NAME - - STAGE 3 - NORTH RAMPS CLOSED

PLOT DATE : 9/18/2023 2:37 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:500 FT

WISDOT/CADDS SHEET 42







PI STA = 135+79.10 'XO2'
Y = 187256.310
X = 680311.012
DELTA = 5°22'00" RT
D = 4°03'14"
T = 66.24'
L = 132.38'
R = 1413.39'
PC STA = 135+12.86 'XO2'
Y = 187259.737
X = 680244.860
PT STA = 136+45.24 'XO2'
Y = 187246.711
X = 680376.554
DB = S87°02'05"E
DA = S81°40'05"E

PI STA = 136+06.50 'XO3'
Y = 187182.270
X = 680341.364
DELTA = 10°13'30" LT
D = 4°05'33"
T = 125.25'
L = 249.84'
R = 1400.00'
PC STA = 134+81.25 'XO3'
Y = 187177.437
X = 680216.204
PT STA = 137+31.09 'XO3'
Y = 187209.243
X = 680463.678
DB = N87°47'20"E
DA = N77°33'50"E

PI STA = 139+91.72 'XO3'
Y = 187265.370
X = 680718.195
DELTA = 10°13'30" RT
D = 4°05'33"
T = 125.25'
L = 249.84'
R = 1400.00'
PC STA = 138+66.47 'XO3'
Y = 187238.397
X = 680595.881
PT STA = 141+16.31 'XO3'
Y = 187270.203
X = 680843.354
DB = N77°33'50"E
DA = N87°47'20"E

PI STA = 140+19.81 'XO2'
Y = 187192.434
X = 680747.166
DELTA = 10°32'35" LT
D = 7°09'43"
T = 73.81'
L = 147.21'
R = 800.00'
PC STA = 139+46.00 'XO2'
Y = 187203.130
X = 680674.132
PT STA = 140+93.20 'XO2'
Y = 187195.282
X = 680820.924
DB = S81°40'05"E
DA = N87°47'20"E

TRAFFIC CROSSOVER LAYOUT

POINT NUMBER	STATION	OFFSET	NORTHING	EASTING
1	30+79.17	3.00' LT	187204.60	679814.51
2	32+30.39	3.00' LT	187193.23	679965.13
3	34+81.24	8.00' LT	187196.92	680215.44
4	35+86.42	8.00' LT	187200.98	680320.54
5	36+99.88	21.37' LT	187218.72	680433.40
6	36+99.96	23.37' LT	187220.72	680433.40
7	37+00.04	25.37' LT	187222.72	680433.40
8	35+36.48	51.72' LT	187242.75	680268.95
9	35+12.01	51.17' LT	187241.25	680244.52
10	35+12.01	53.62' LT	187243.69	680244.43
11	35+61.95	60.00' LT	187252.00	680294.09

TRAFFIC CROSSOVER LAYOUT

POINT NUMBER	STATION	OFFSET	NORTHING	EASTING
12	42+77.75	60.00' LT	187279.61	681009.35
13	42+77.75	56.50' LT	187276.12	681009.49
14	38+11.89	25.04' LT	187226.70	680545.18
15	38+11.81	23.04' LT	187224.71	680545.18
16	38+11.73	21.04' LT	187222.71	680545.18
17	39+02.37	11.74' LT	187216.90	680636.11
18	39+40.97	14.17' LT	187220.82	680674.59
19	39+41.10	12.12' LT	187218.78	680674.80
20	38+08.70	3.19' LT	187204.75	680542.84
21	38+08.67	0.00'	187201.56	680542.93

SEEDING TEMPORARY, FERTILIZER, AND MULCH

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - DETAILS - TRAFFIC CROSSOVERS	SHEET 219	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_025001-PD (XO).DWG
LAYOUT NAME - Plan 1 IN 100 FT
PLOT DATE : 2/1/2023 11:56 AM
PLOT BY : BUTTERIS, BRADLEY
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND:

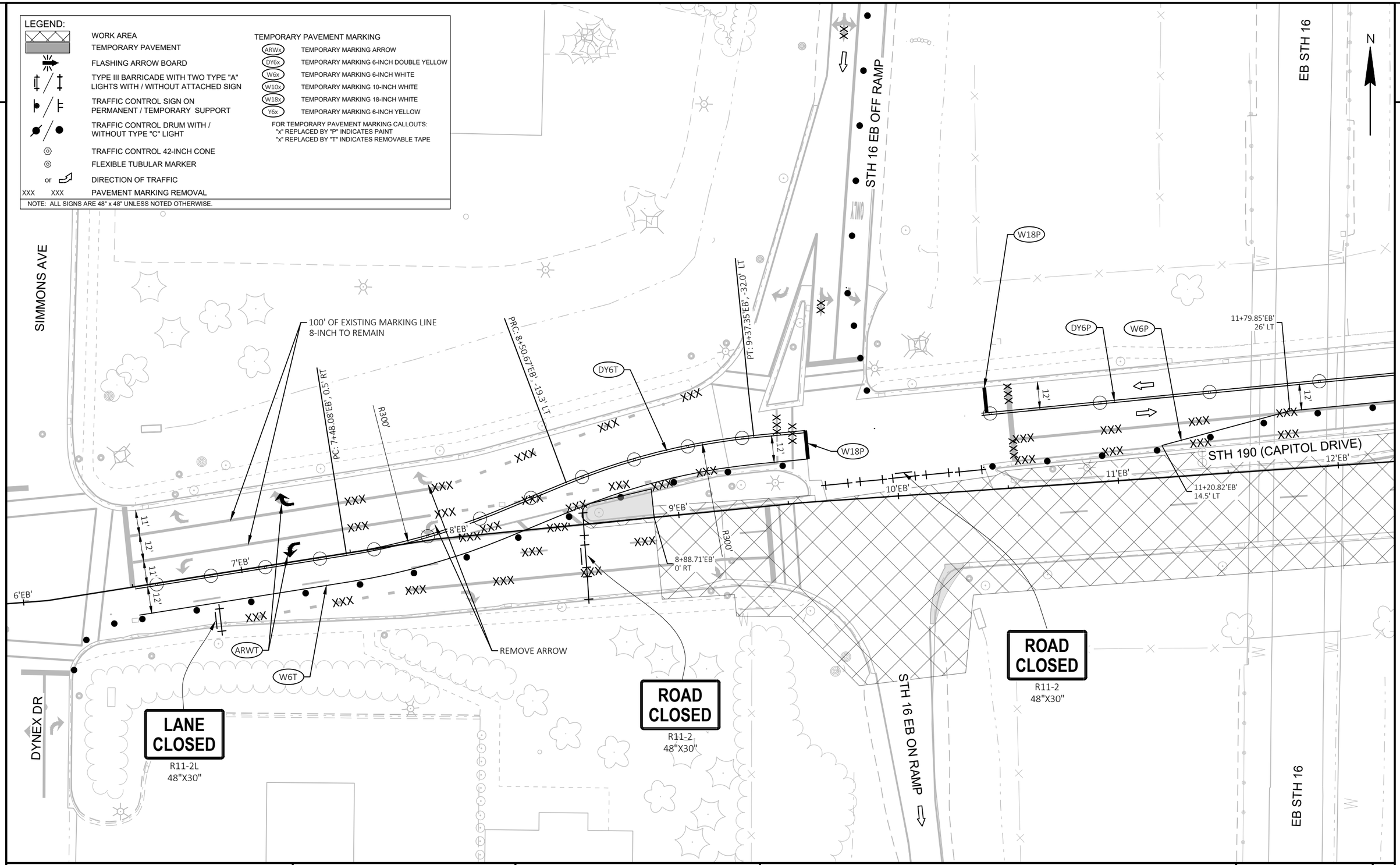
- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

- ARWx TEMPORARY MARKING ARROW
- DY6x TEMPORARY MARKING 6-INCH DOUBLE YELLOW
- W6x TEMPORARY MARKING 6-INCH WHITE
- W10x TEMPORARY MARKING 10-INCH WHITE
- W18x TEMPORARY MARKING 18-INCH WHITE
- Y6x TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - DETAILS - STAGE 2	SHEET 220	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026002-TC - CD_01.DWG
LAYOUT NAME - - STAGE 2
PLOT DATE : 9/11/2023 9:05 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND:

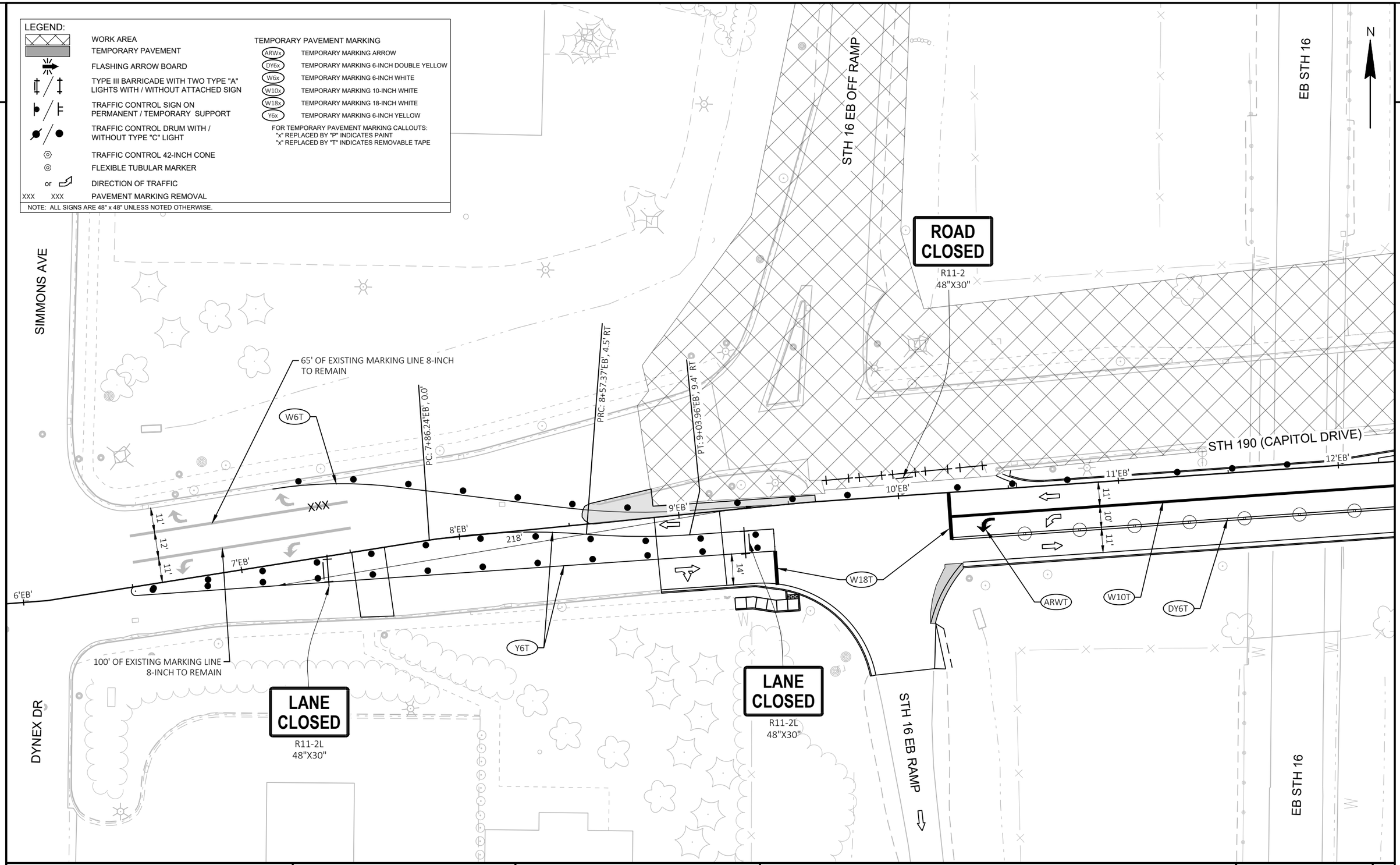
- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - DETAILS - STAGE 3	SHEET 221	E

2

2

N

EB STH 16 TO CTH JJ RAMP

EB STH 16

EB STH 16

WB STH 16

WB STH 16

CTH JJ TO WB STH 16 RAMP

50' TYP

25' TYP

600'

300' CLOSURE TAPER

W6T

LANE CLOSED
R11-2L
48"X30"

LEGEND:

WORK AREA

TEMPORARY PAVEMENT

FLASHING ARROW BOARD

TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN

TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT

TRAFFIC CONTROL 42-INCH CONE

FLEXIBLE TUBULAR MARKER

or DIRECTION OF TRAFFIC

XXX XXX PAVEMENT MARKING REMOVAL

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING

- ARWx TEMPORARY MARKING ARROW
- DY6x TEMPORARY MARKING 6-INCH DOUBLE YELLOW
- W6x TEMPORARY MARKING 6-INCH WHITE
- W10x TEMPORARY MARKING 10-INCH WHITE
- W18x TEMPORARY MARKING 18-INCH WHITE
- Y6x TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

N

STH 190 TO EB STH 16 RAMP

EB STH 16

EB STH 16

WB STH 16

WB STH 16

50' TYP

WB STH 16 TO STH 190 RAMP

CTH M (E WISCONSIN AVE)

PEWAUKEE RIV

AUXILIARY LANE CLOSED

SEE ADVANCED WARNING SIGNING FOR RAMP CLOSURE (STAGE 2)

HICKORY ST

CANADIAN PACIFIC RR

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - DETAILS - NB STH 16 AUXILIARY LANE CLOSURE - STAGE 2	SHEET 222	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026003-TC - CD_03.DWG
LAYOUT NAME - - NB STH 16 AUXILIARY LANE CLOSURE - STAGE 2

PLOT DATE : 9/11/2023 9:09 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

CAPITOL DRIVE

ORMSBY ST

SUSSEX ST

SIMMONS AVE

OAKTON AVE

CAPITOL DRIVE

DYNEX DR

EB STH 16 TO STH 190 RAMP

BERM

RIPRAP

MAINTAIN ALL PEDESTRIAN TRAFFIC DURING STAGE 2

6'EB'

8'WB'

8'EB'

10'WB'

10'EB'

12'WB'

STH 190 (CAPITOL DRIVE)

SIDEWALK CLOSED

R9-9

24"X12"

SIDEWALK CLOSED AHEAD

R9-9A

30"X18"

DETOUR

M4-9BL

30"X24"

STH 190 TO EB STH 16 RAMP

LEGEND:

- WORK ZONE
- TYPE II SIGN ON TEMPORARY SUPPORT, TYPE II SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM, TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TEMPORARY PEDESTRIAN BARRICADE
- EXISTING SIGN, COVER EXISTING SIGN, PROPOSED SIGN
- 16" X 16" ORANGE WARNING FLAGS (INCIDENTAL TO OTHER ITEMS OF WORK)

NOTES:

1) ALL SIGNS ARE 48" X 48", UNLESS OTHERWISE NOTED.
2) "WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND IS ORANGE.
3) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - PEDESTRIAN STAGE 2	SHEET 223	E

2

2

WB STH 16

STH 190 TO WB STH 16 RAMP

MAINTAIN ALL PEDESTRIAN TRAFFIC DURING STAGE 2

CECELIA DR

CECELIA DR

N

12'WB'
14'WB'
16'WB'
18'WB'
20'WB'
22'WB'
24'WB'
26'WB'

STH 190 (CAPITOL DRIVE)

14'EB'
16'EB'
18'EB'
20'EB'
22'EB'
24'EB'
26'EB'

STH 190 (CAPITOL DRIVE)

RIPRAP

WB STH 16 TO STH 190 RAMP

EB STH 16

LEGEND:

- WORK ZONE
- TYPE II SIGN ON TEMPORARY SUPPORT, TYPE II SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM, TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TEMPORARY PEDESTRIAN BARRICADE
- 26 26 26 EXISTING SIGN, COVER EXISTING SIGN, PROPOSED SIGN
- 16" X 16" ORANGE WARNING FLAGS (INCIDENTAL TO OTHER ITEMS OF WORK)

NOTES:
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4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.

CECELIA DR

CECELIA DR

N

28'WB'
30'WB'
32'WB'
34'WB'
36'WB'
38'WB'
40'WB'
42'WB'

STH 190 (CAPITOL DRIVE)

28'EB'
30'EB'
32'EB'
34'EB'
36'EB'
38'EB'
40'EB'
42'EB'

STH 190 (CAPITOL DRIVE)

RIPRAP

RIPRAP

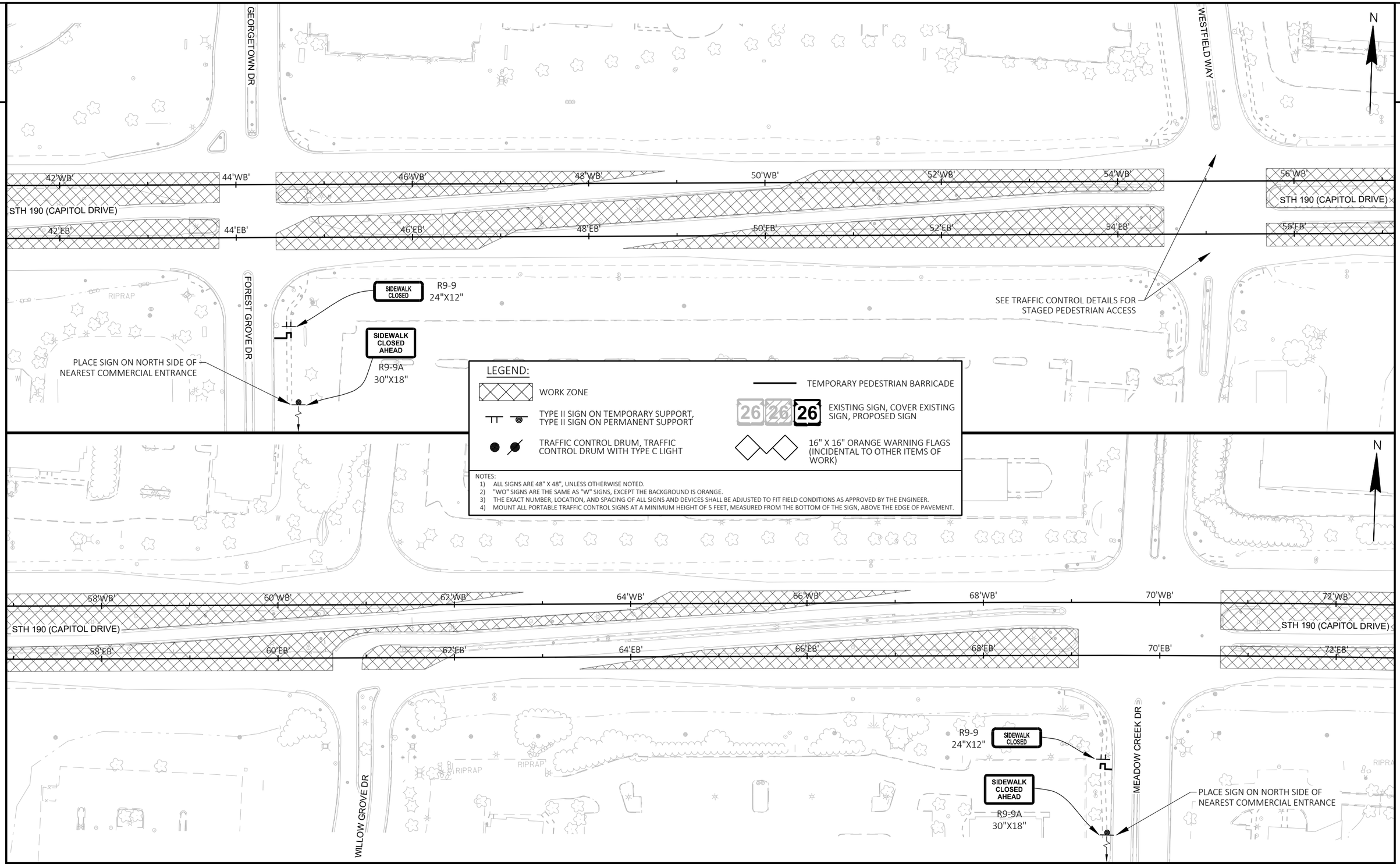
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - PEDESTRIAN STAGE 2	SHEET 224	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026003-TC - PEDS-S2.DWG
LAYOUT NAME - 02

PLOT DATE : 9/11/2023 10:27 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - PEDESTRIAN STAGE 2	SHEET 225	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026003-TC - PEDS-S2.DWG
LAYOUT NAME - 03

PLOT DATE : 9/11/2023 10:27 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

STH 164

U/C

N

72'WB'
74'WB'
76'WB'
78'WB'
80'WB'
82'WB'
84'WB'
86'WB'

STH 190 (CAPITOL DRIVE)

72'EB'
74'EB'
76'EB'
78'EB'
80'EB'
82'EB'
84'EB'
86'EB'

STH 190 (CAPITOL DRIVE)

RIPRAP

MAINTAIN ALL PEDESTRIAN TRAFFIC DURING STAGE 2

STH 164

LEGEND:

- WORK ZONE
- TYPE II SIGN ON TEMPORARY SUPPORT, TYPE II SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM, TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TEMPORARY PEDESTRIAN BARRICADE
- 26 26 26 EXISTING SIGN, COVER EXISTING SIGN, PROPOSED SIGN
- 16" X 16" ORANGE WARNING FLAGS (INCIDENTAL TO OTHER ITEMS OF WORK)

NOTES:
1) ALL SIGNS ARE 48" X 48", UNLESS OTHERWISE NOTED.
2) "WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND IS ORANGE.
3) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.

HIGHFIELD RD

N

88'WB'
90'WB'
92'WB'
94'WB'
96'WB'
98'WB'
100'WB'
102'WB'

STH 190 (CAPITOL DRIVE)

88'EB'
90'EB'
92'EB'
94'EB'
96'EB'
98'EB'
100'EB'
102'EB'

STH 190 (CAPITOL DRIVE)

FIVE FIELDS RD

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - PEDESTRIAN STAGE 2	SHEET 226	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026003-TC - PEDS-S2.DWG
LAYOUT NAME - 04

PLOT DATE : 9/11/2023 10:27 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

WESTFIELD WAY

N

SIDEWALK CLOSED
DETOUR
R9-9
24"X12"
M4-9BR
30"X24"

54'WB'
56'WB'
STH 190 (CAPITOL DRIVE)
AT LEAST ONE MEDIAN ISLAND MUST REMAIN OPEN AT ALL TIMES DURING STAGE 2
54'EB'
56'EB'

DETOUR
M4-9BR
30"X24"

SIDEWALK CLOSED
R9-9
24"X12"

LEGEND:

- WORK ZONE
- PEDESTRIAN ROUTE
- TYPE II SIGN ON TEMPORARY SUPPORT, TYPE II SIGN ON PERMANENT SUPPORT
- TEMPORARY PEDESTRIAN BARRICADE
- 26 26 26 EXISTING SIGN, COVER EXISTING SIGN, PROPOSED DETOUR SIGN

NOTES:
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4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.

WESTFIELD WAY

N

SIDEWALK CLOSED
DETOUR
R9-9
24"X12"
M4-9BL
30"X24"

54'WB'
56'WB'
STH 190 (CAPITOL DRIVE)
AT LEAST ONE MEDIAN ISLAND MUST REMAIN OPEN AT ALL TIMES DURING STAGE 2
54'EB'
56'EB'

DETOUR
SIDEWALK CLOSED
M4-9BR
30"X24"
R9-9
24"X12"

2

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - PEDESTRIAN STAGE 2 - DETAIL	SHEET 227	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026003-TC - PEDS-S2.DWG
LAYOUT NAME - Stage 2_Detail
PLOT DATE : 9/11/2023 10:27 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N

EB STH 16 TO STH 190 RAMP

BERM

RIPRAP

SEE PEDESTRIAN STAGE 3 DETAILS FOR
STAGED PEDESTRIAN ACCOMMODATIONS

CAPITOL DRIVE

ORMSBY ST

SUSSEX ST

SIMMONS AVE

OAKTON AVE

CAPITOL DRIVE

6'EB'

8'WB'
8'EB'

10'WB'
10'EB'

12'WB'

STH 190 (CAPITOL DRIVE)

DYNEX DR

SIDEWALK CLOSED

R9-9
24"X12"

SIDEWALK CLOSED AHEAD

R9-9A
30"X18"

DETOUR

M4-9BL
30"X24"

STH 190 TO EB STH 16 RAMP

LEGEND:

- WORK ZONE
- TYPE II SIGN ON TEMPORARY SUPPORT, TYPE II SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM, TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TEMPORARY PEDESTRIAN BARRICADE
- 26 26 26 EXISTING SIGN, COVER EXISTING SIGN, PROPOSED SIGN
- 16" X 16" ORANGE WARNING FLAGS (INCIDENTAL TO OTHER ITEMS OF WORK)

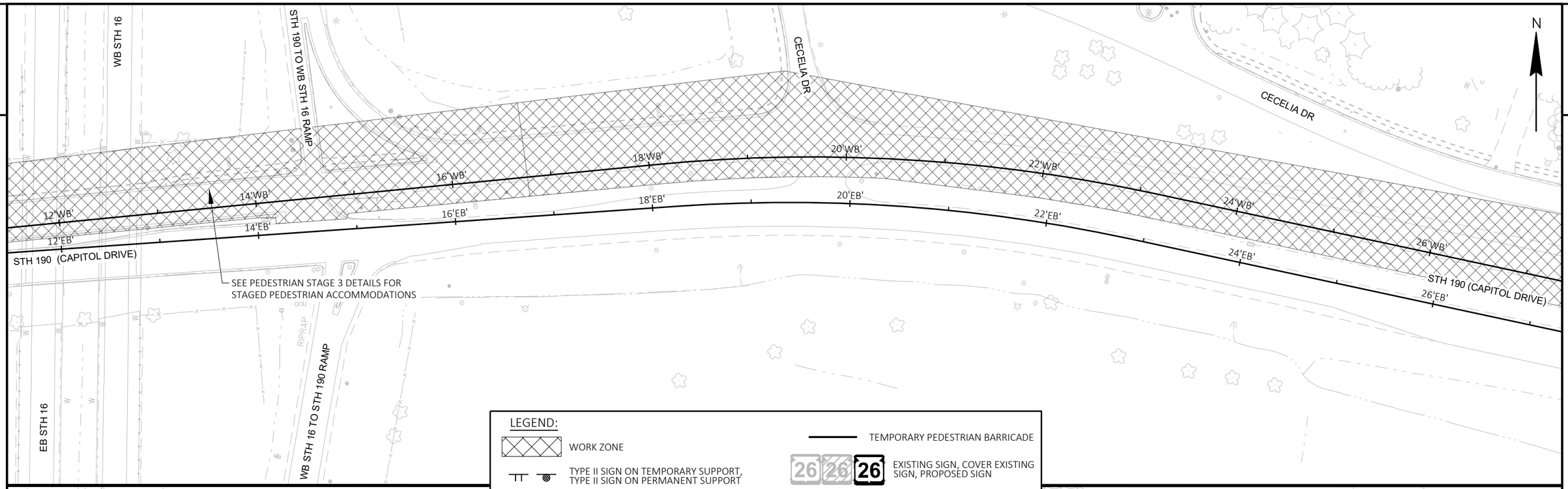
NOTES:
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3) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - PEDESTRIAN STAGE 3	SHEET 228	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026003-TC - PEDS-S3.DWG
LAYOUT NAME - 01

PLOT DATE : 9/11/2023 10:34 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

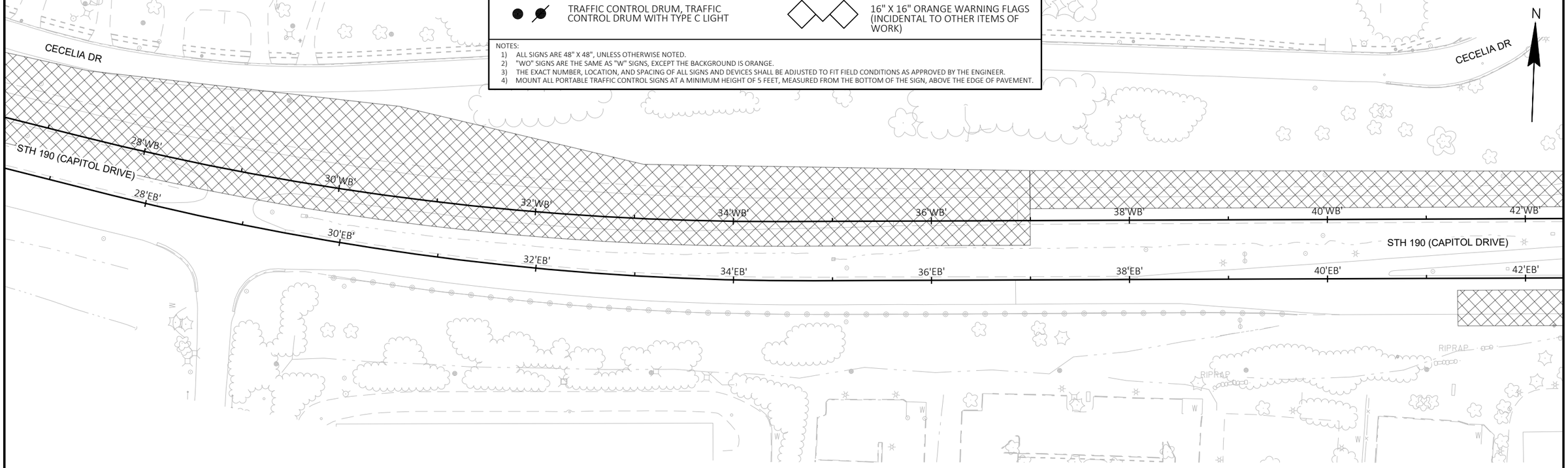


LEGEND:

- WORK ZONE
- TYPE II SIGN ON TEMPORARY SUPPORT, TYPE II SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM, TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TEMPORARY PEDESTRIAN BARRICADE
- EXISTING SIGN, COVER EXISTING SIGN, PROPOSED SIGN
- 16" X 16" ORANGE WARNING FLAGS (INCIDENTAL TO OTHER ITEMS OF WORK)

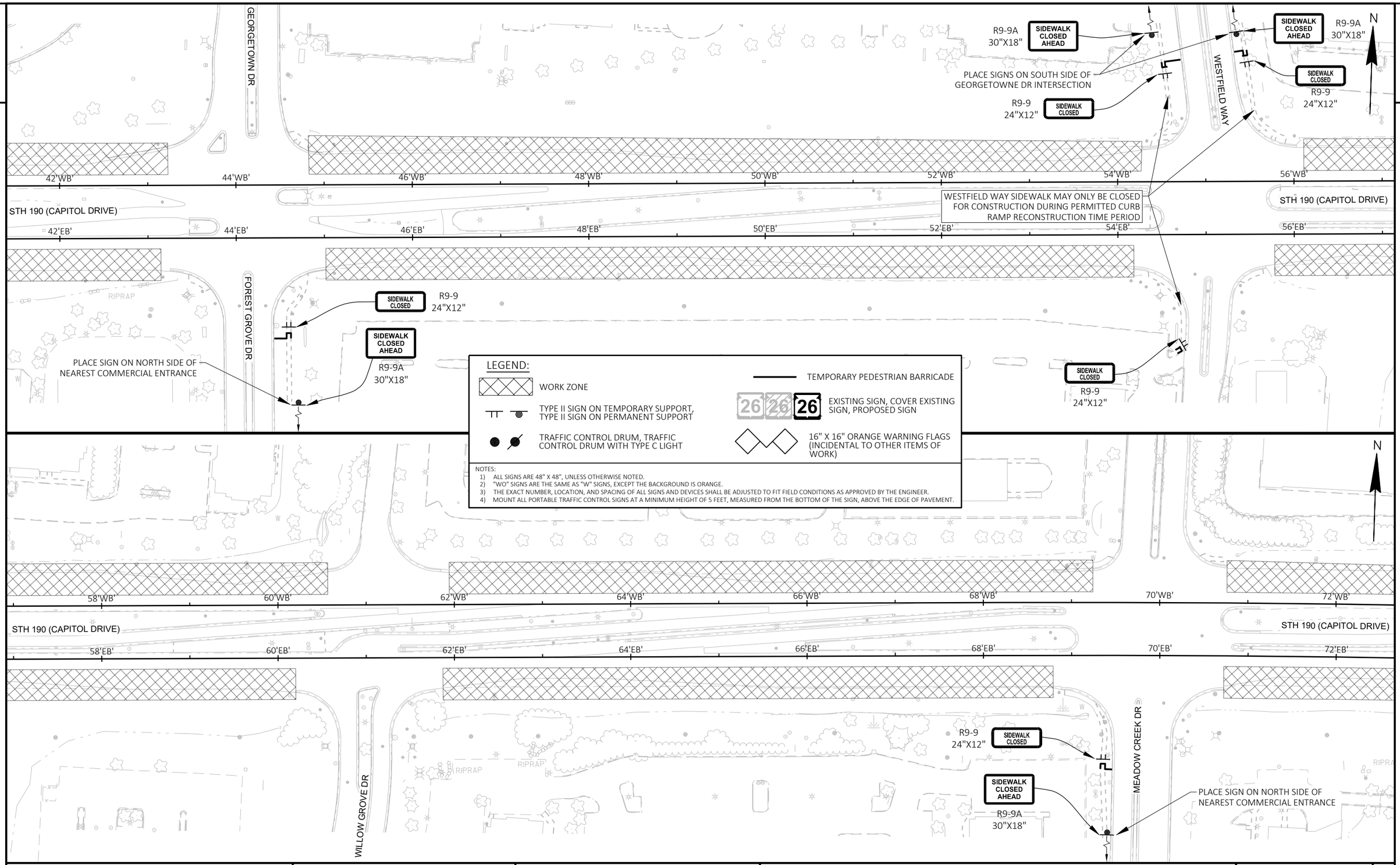
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4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - PEDESTRIAN STAGE 3	SHEET 229	E

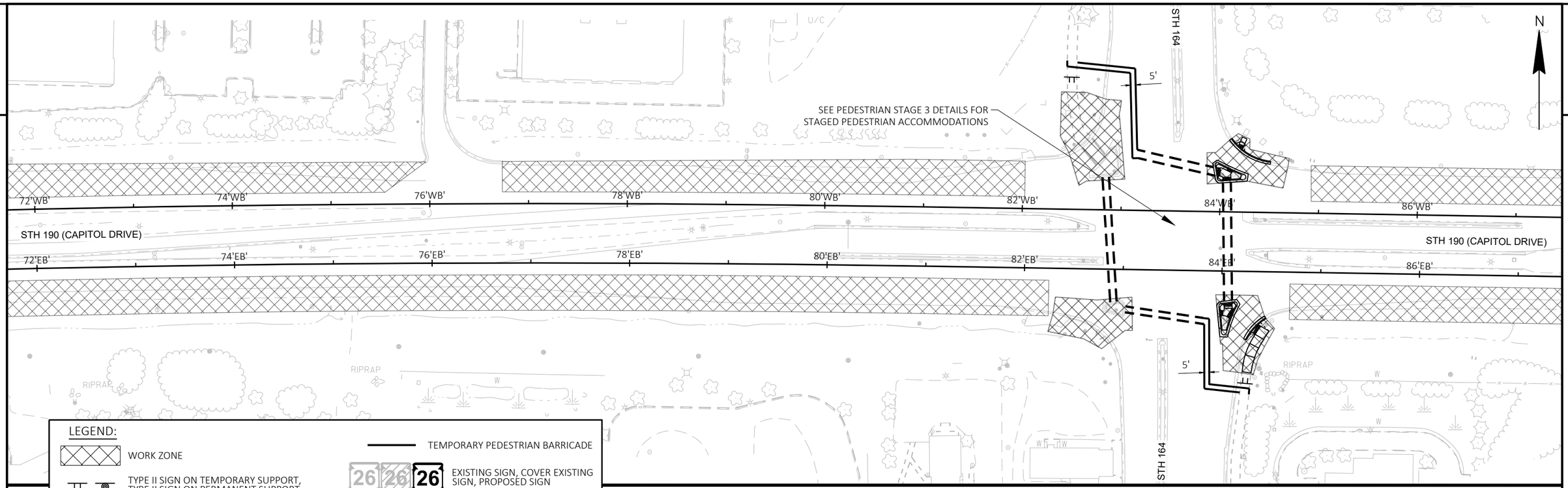
FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026003-TC - PEDS-S3.DWG
LAYOUT NAME - 02
PLOT DATE : 9/11/2023 10:35 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - PEDESTRIAN STAGE 3	SHEET 230 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026003-TC - PEDS-S3.DWG
LAYOUT NAME - 03
PLOT DATE : 9/11/2023 10:35 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

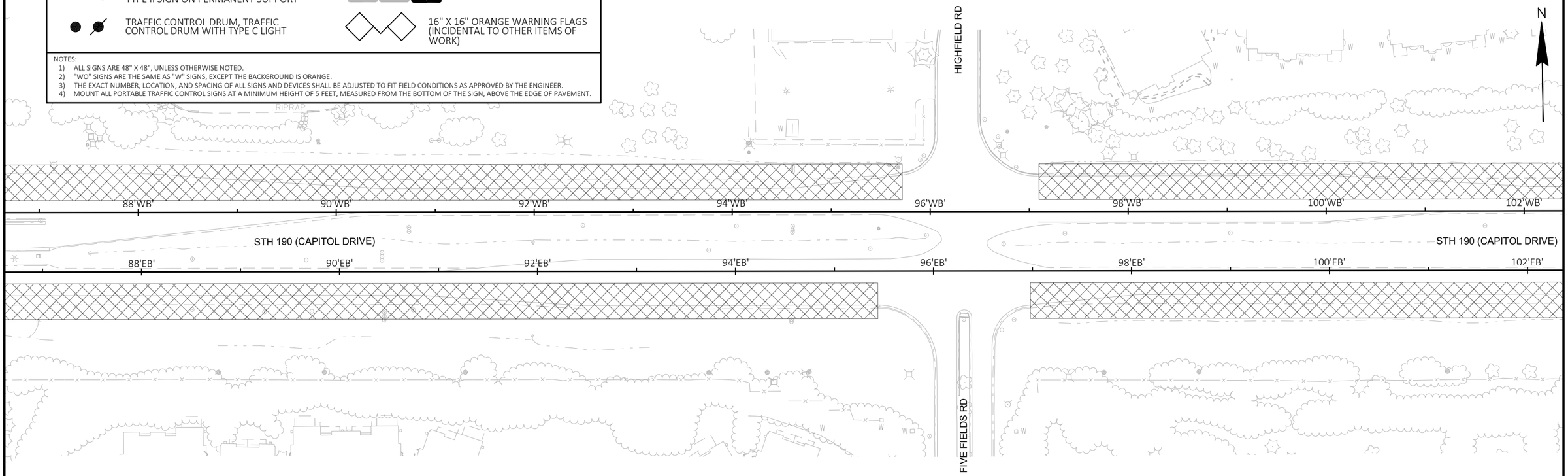


LEGEND:

- WORK ZONE
- TYPE II SIGN ON TEMPORARY SUPPORT, TYPE II SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM, TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TEMPORARY PEDESTRIAN BARRICADE
- 26 26 26 EXISTING SIGN, COVER EXISTING SIGN, PROPOSED SIGN
- 16" X 16" ORANGE WARNING FLAGS (INCIDENTAL TO OTHER ITEMS OF WORK)

NOTES:

1) ALL SIGNS ARE 48" X 48", UNLESS OTHERWISE NOTED.
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4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - PEDESTRIAN STAGE 3	SHEET 231	E

2

2

N

SIMMONS AVE

STH 16 EB OFF RAMP

TEMPORARY PEDESTRIAN
SURFACE & CURB RAMP REQ'D

M4-60R
30"X24"

5'

3'

8'WB'

8'EB'

10'WB'

10'EB'

6'EB'

STH 190 (CAPITOL DRIVE)

STH 190 (CAPITOL DRIVE)

SIDEWALK CLOSED

R9-9
24"X12"

SIDEWALK CLOSED AHEAD

R9-9A
30"X18"

DETOUR

M4-9BL
30"X24"

DYNEX DR

STH 16 EB ON RAMP

LEGEND:

- WORK ZONE
- TYPE II SIGN ON TEMPORARY SUPPORT, TYPE II SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM, TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TEMPORARY PEDESTRIAN BARRICADE
- EXISTING SIGN, COVER EXISTING SIGN, PROPOSED SIGN
- 16" X 16" ORANGE WARNING FLAGS (INCIDENTAL TO OTHER ITEMS OF WORK)

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4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - PEDESTRIAN STAGE 3 - DETAIL 3A	SHEET 232	E

2

N

STH 16 WB ON RAMP

TEMPORARY PEDESTRIAN
SURFACE & CURB RAMP REQ'D

TEMPORARY PEDESTRIAN
SURFACE & CURB RAMP REQ'D

M4-60L
30"X24"

3'

5'

12'WB'

14'WB'

16'WB'

12'EB'

14'EB'

16'EB'

STH 190 (CAPITOL DRIVE)

RIPRAP

STH 16 WB OFF RAMP

LEGEND:

- WORK ZONE
- TYPE II SIGN ON TEMPORARY SUPPORT, TYPE II SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM, TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TEMPORARY PEDESTRIAN BARRICADE
- EXISTING SIGN, COVER EXISTING SIGN, PROPOSED SIGN
- 16" X 16" ORANGE WARNING FLAGS (INCIDENTAL TO OTHER ITEMS OF WORK)

NOTES:
1) ALL SIGNS ARE 48" X 48", UNLESS OTHERWISE NOTED.
2) "WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND IS ORANGE.
3) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - PEDESTRIAN STAGE 3 - DETAIL 3A	SHEET 233	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026003-TC - PEDS-S3.DWG
LAYOUT NAME - 3A_02

PLOT DATE : 9/11/2023 10:35 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

SIMMONS AVE

STH 16 EB OFF RAMP

MAINTAIN PEDESTRIAN ACCESS ON SIDEWALK

SIDEWALK CLOSED
R9-9
24"X12"

8'WB'
8'EB'
10'WB'
10'EB'
6'EB'

STH 190 (CAPITOL DRIVE)

STH 190 (CAPITOL DRIVE)

SIDEWALK CLOSED
R9-9
24"X12"

SIDEWALK CLOSED AHEAD
R9-9A
30"X18"

DETOUR
M4-9BL
30"X24"

DYNEX DR

STH 16 EB ON RAMP

LEGEND:

- WORK ZONE
- TYPE II SIGN ON TEMPORARY SUPPORT, TYPE II SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM, TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TEMPORARY PEDESTRIAN BARRICADE
- 26 26 26 EXISTING SIGN, COVER EXISTING SIGN, PROPOSED SIGN
- 16" X 16" ORANGE WARNING FLAGS (INCIDENTAL TO OTHER ITEMS OF WORK)

NOTES:
1) ALL SIGNS ARE 48" X 48", UNLESS OTHERWISE NOTED.
2) "WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND IS ORANGE.
3) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - PEDESTRIAN STAGE 3 - DETAIL 3B	SHEET 234	E

2

2

N

STH 16 WB ON RAMP

MAINTAIN PEDESTRIAN ACCESS ON SIDEWALK

12'WB'

14'WB'

16'WB'

12'EB'

14'EB'

16'EB'

STH 190 (CAPITOL DRIVE)

RIPRAP

STH 16 WB OFF RAMP

LEGEND:

- WORK ZONE
- TYPE II SIGN ON TEMPORARY SUPPORT, TYPE II SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM, TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TEMPORARY PEDESTRIAN BARRICADE
- 26 26 26 EXISTING SIGN, COVER EXISTING SIGN, PROPOSED SIGN
- 16" X 16" ORANGE WARNING FLAGS (INCIDENTAL TO OTHER ITEMS OF WORK)

NOTES:

1) ALL SIGNS ARE 48" X 48", UNLESS OTHERWISE NOTED.
2) "WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND IS ORANGE.
3) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - PEDESTRIAN STAGE 3 - DETAIL 3B	SHEET 235	E

2

2

N

STH 164

82'WB'

84'WB'

86'WB'

STH 190 (CAPITOL DRIVE)

TEMPORARY MARKING CROSSWALK
REMOVABLE TAPE 6-INCH

STH 190 (CAPITOL DRIVE)

82'EB'

84'EB'

86'EB'

LEGEND:

- WORK ZONE
- TYPE II SIGN ON TEMPORARY SUPPORT, TYPE II SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM, TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TEMPORARY PEDESTRIAN BARRICADE
- EXISTING SIGN, COVER EXISTING SIGN, PROPOSED SIGN
- 16" X 16" ORANGE WARNING FLAGS (INCIDENTAL TO OTHER ITEMS OF WORK)

NOTES:
1) ALL SIGNS ARE 48" X 48", UNLESS OTHERWISE NOTED.
2) "WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND IS ORANGE.
3) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.

TEMPORARY MARKING CROSSWALK
REMOVABLE TAPE 6-INCH

5'

STH 164

M4-60L
30"X24"

TEMPORARY PEDESTRIAN
SURFACE & CURB RAMP REQ'D

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - PEDESTRIAN STAGE 3 - DETAIL 3B1	SHEET 236	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026003-TC - PEDS-S3.DWG
LAYOUT NAME - 164_3B1

PLOT DATE : 9/11/2023 10:35 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

TEMPORARY PEDESTRIAN
SURFACE & CURB RAMP REQ'D

5'

STH 164

M4-60L
30"X24"

TEMPORARY MARKING CROSSWALK
REMOVABLE TAPE 6-INCH

N

82'WB'

84'WB'

86'WB'

STH 190 (CAPITOL DRIVE)

STH 190 (CAPITOL DRIVE)

MARKING CROSSWALK EPOXY
TRANSVERSE LINE 6-INCH

82'EB'

84'EB'

86'EB'

LEGEND:

- WORK ZONE
- TYPE II SIGN ON TEMPORARY SUPPORT, TYPE II SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM, TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TEMPORARY PEDESTRIAN BARRICADE
- 26 26 26 EXISTING SIGN, COVER EXISTING SIGN, PROPOSED SIGN
- 16" X 16" ORANGE WARNING FLAGS (INCIDENTAL TO OTHER ITEMS OF WORK)

NOTES:
1) ALL SIGNS ARE 48" X 48", UNLESS OTHERWISE NOTED.
2) "WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND IS ORANGE.
3) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.

STH 164

RIPRAP

W

W

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - PEDESTRIAN STAGE 3 - DETAIL 3B2	SHEET 237	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026003-TC - PEDS-S3.DWG
LAYOUT NAME - 164_3B2

PLOT DATE : 9/11/2023 10:35 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

CAPITOL DRIVE

ORMSBY ST

SUSSEX ST

SIMMONS AVE

OAKTON AVE

CAPITOL DRIVE

DYNEX DR

EB STH 16 TO STH 190 RAMP

BERM

RIPRAP

6'EB'

8'WB'

8'EB'

10'WB'

10'EB'

12'WB'

STH 190 (CAPITOL DRIVE)

SIDEWALK CLOSED

R9-9
24"X12"

SIDEWALK CLOSED AHEAD

R9-9A
30"X18"

DETOUR

M4-9BL
30"X24"

SIDEWALK CLOSED - PEDESTRIAN TRAFFIC DIRECTED TO NORTH SIDE OF STH 190

STH 190 TO EB STH 16 RAMP

LEGEND:

- WORK ZONE
- TYPE II SIGN ON TEMPORARY SUPPORT, TYPE II SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM, TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TEMPORARY PEDESTRIAN BARRICADE
- 26 26 26 EXISTING SIGN, COVER EXISTING SIGN, PROPOSED SIGN
- 16" X 16" ORANGE WARNING FLAGS (INCIDENTAL TO OTHER ITEMS OF WORK)

NOTES:

1) ALL SIGNS ARE 48" X 48", UNLESS OTHERWISE NOTED.
2) "WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND IS ORANGE.
3) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.

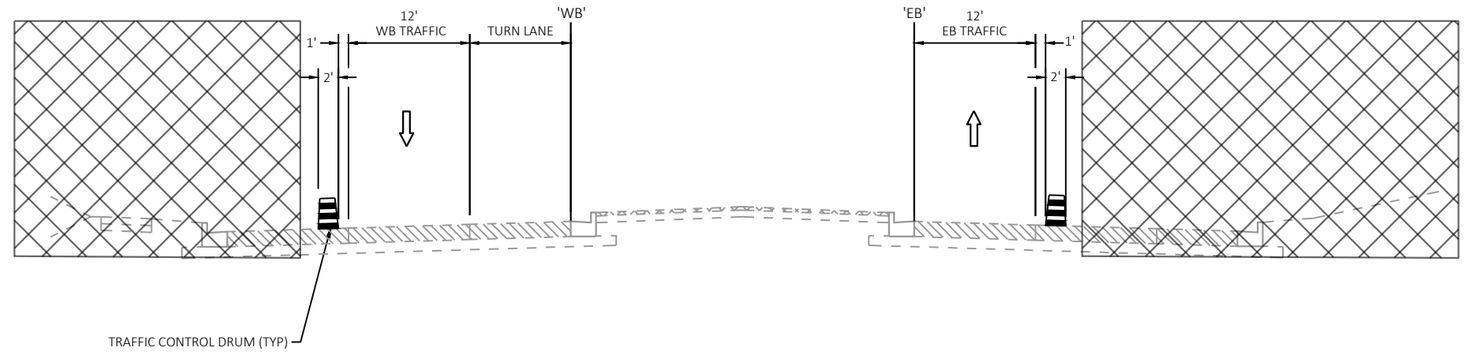
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - PEDESTRIAN STAGE 4A	SHEET 238	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026007-TC - PEDS-S4A.DWG
LAYOUT NAME - 01

PLOT DATE : 9/11/2023 10:43 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

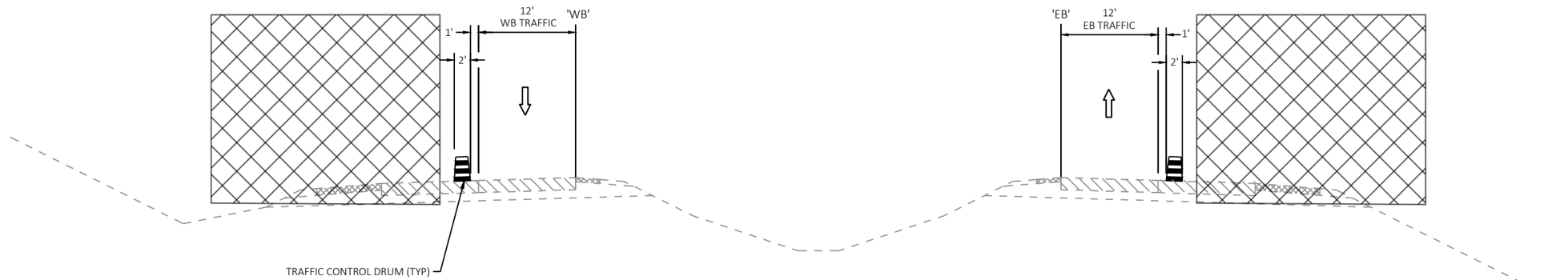
WISDOT/CADDS SHEET 42

2



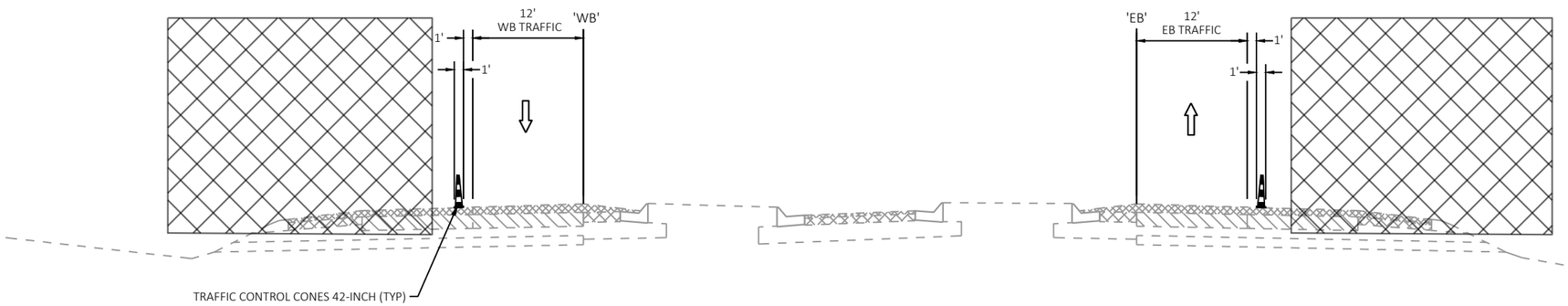
STAGE 1A CONSTRUCTION - CONCRETE SECTION (URBAN)

STA. 8+56'EB' - STA. 15+36'EB'
CONSTRUCT TEMPORARY SIGNALS
TRAFFIC ON EXISTING INSIDE LANES



STAGE 1A CONSTRUCTION - CONCRETE SECTION (RURAL)

STA. 15+36'EB' - STA. 37+00'EB'
CONSTRUCT TEMPORARY SIGNALS
TRAFFIC ON EXISTING INSIDE LANES



STAGE 1A CONSTRUCTION - ASPHALT SECTION

STA. 37+00'EB' - STA. 111+00'EB'
CONSTRUCT TEMPORARY SIGNALS
TRAFFIC ON EXISTING INSIDE LANES

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1A - TYPICAL SECTION	SHEET 239	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026101-S1A.DWG
LAYOUT NAME - - TYPICAL SECTION
PLOT DATE : 9/11/2023 9:12 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : ############
WISDOT/CADDS SHEET 42

2

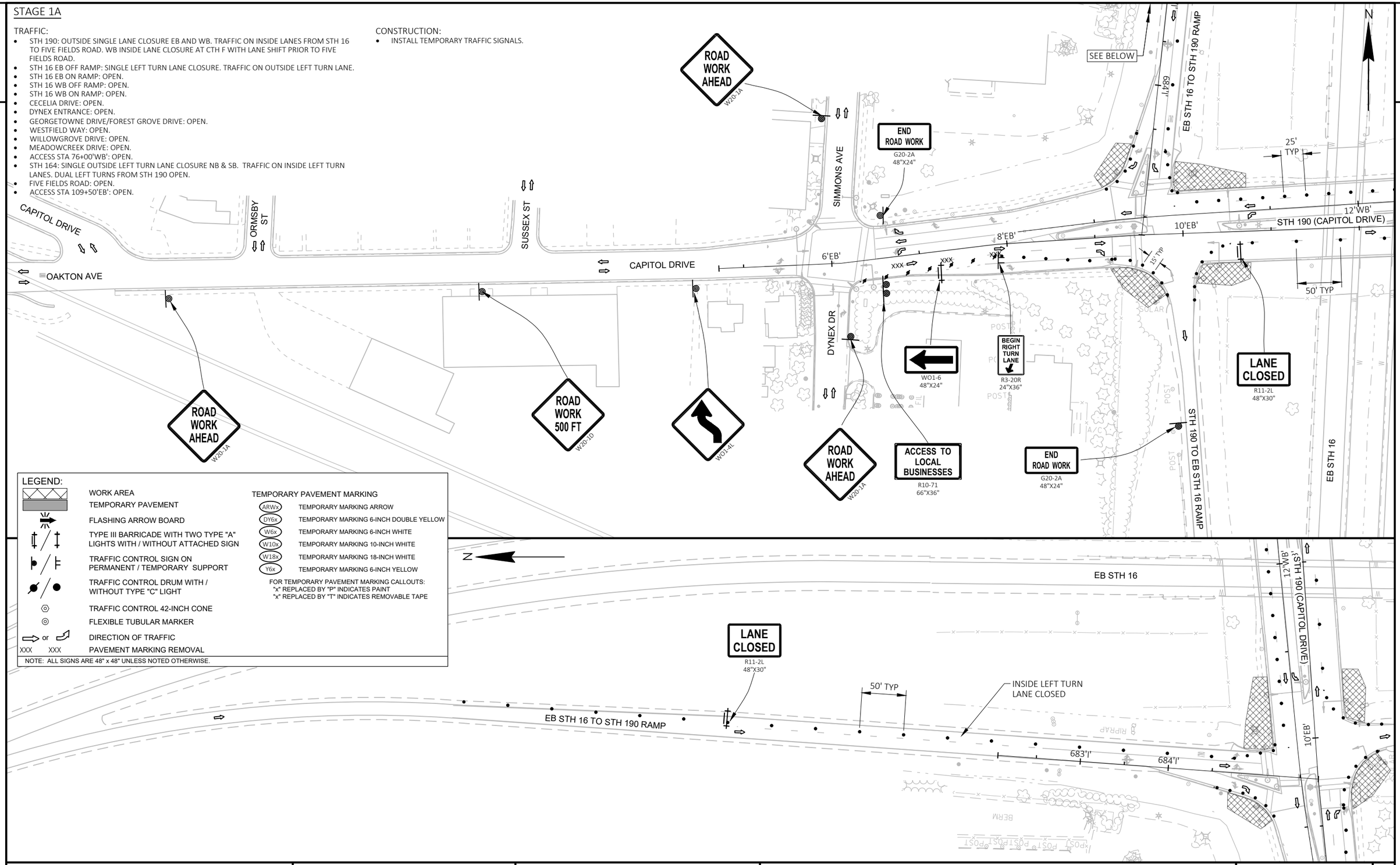
STAGE 1A

TRAFFIC:

- STH 190: OUTSIDE SINGLE LANE CLOSURE EB AND WB. TRAFFIC ON INSIDE LANES FROM STH 16 TO FIVE FIELDS ROAD. WB INSIDE LANE CLOSURE AT CTH F WITH LANE SHIFT PRIOR TO FIVE FIELDS ROAD.
- STH 16 EB OFF RAMP: SINGLE LEFT TURN LANE CLOSURE. TRAFFIC ON OUTSIDE LEFT TURN LANE.
- STH 16 EB ON RAMP: OPEN.
- STH 16 WB OFF RAMP: OPEN.
- STH 16 WB ON RAMP: OPEN.
- CECELIA DRIVE: OPEN.
- DYNEX ENTRANCE: OPEN.
- GEORGETOWNE DRIVE/FOREST GROVE DRIVE: OPEN.
- WESTFIELD WAY: OPEN.
- WILLOWGROVE DRIVE: OPEN.
- MEADOWCREEK DRIVE: OPEN.
- ACCESS STA 76+00'WB': OPEN.
- STH 164: SINGLE OUTSIDE LEFT TURN LANE CLOSURE NB & SB. TRAFFIC ON INSIDE LEFT TURN LANES. DUAL LEFT TURNS FROM STH 190 OPEN.
- FIVE FIELDS ROAD: OPEN.
- ACCESS STA 109+50'EB': OPEN.

CONSTRUCTION:

- INSTALL TEMPORARY TRAFFIC SIGNALS.



LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

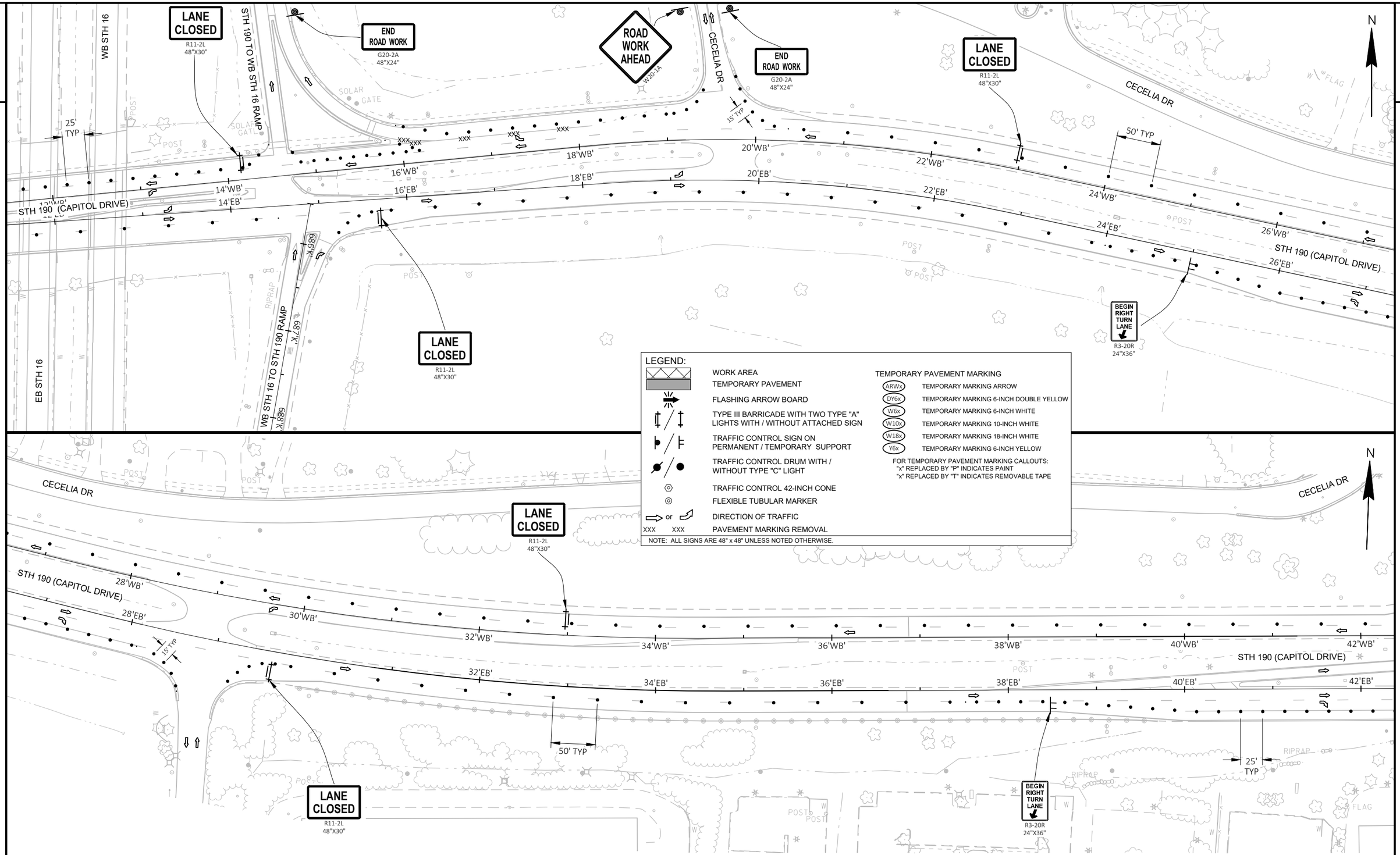
TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1A	SHEET 240	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026101-S1A.DWG
LAYOUT NAME - 1A-01 (100)
PLOT DATE : 9/11/2023 9:12 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : ##########



LEGEND:

- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

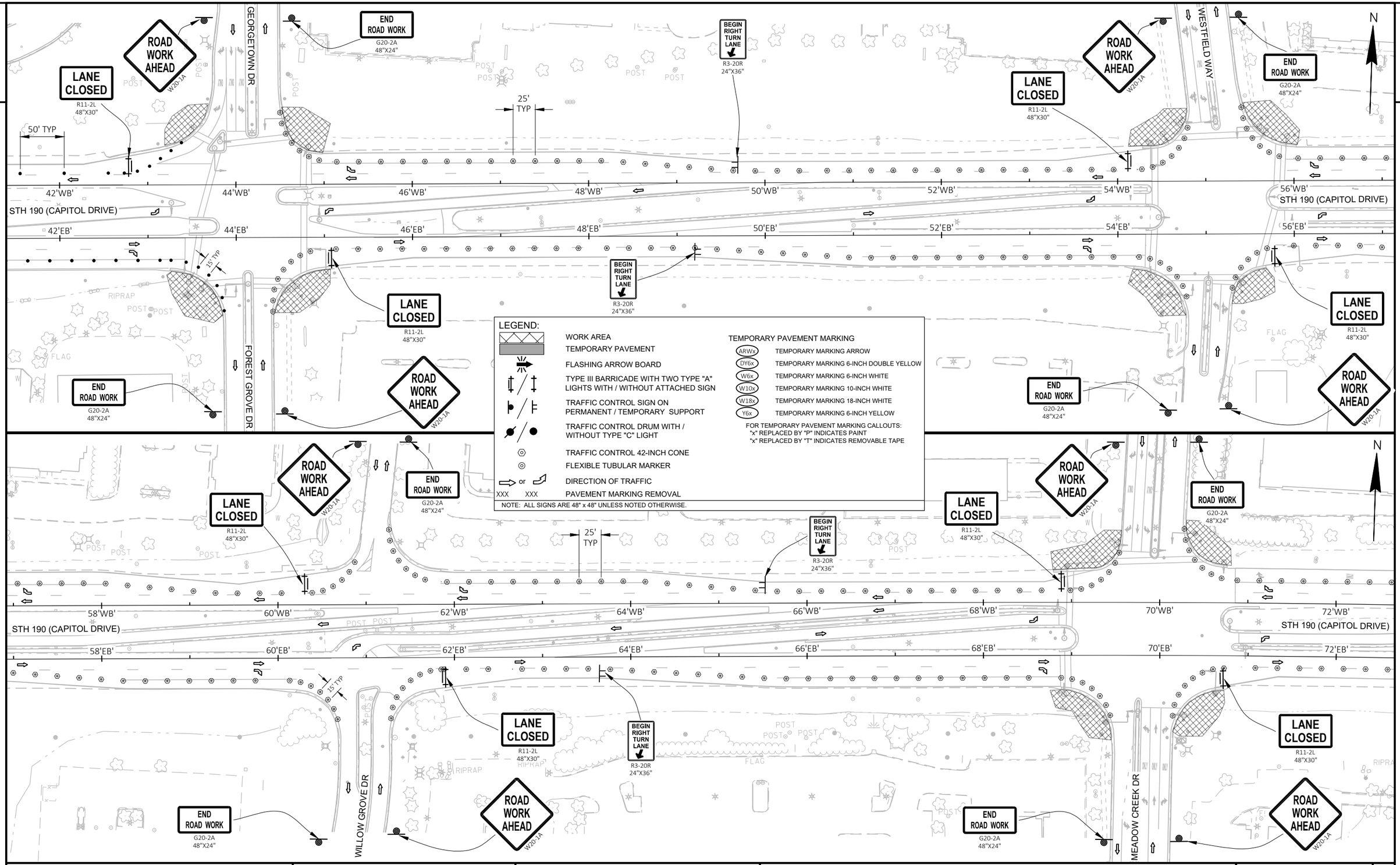
ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1A	SHEET 241	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026101-S1A.DWG
LAYOUT NAME - 1A-02 (100)
PLOT DATE : 9/11/2023 9:12 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1A	SHEET 242	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026101-S1A.DWG
LAYOUT NAME - 1A-03 (100)

PLOT DATE : 9/11/2023 9:12 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LANE CLOSED
R11-2L
48"X30"

END ROAD WORK
G20-2A
48"X24"

25'
TYP

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

OUTSIDE LEFT TURN LANE CLOSED

STH 164

LANE CLOSED
R11-2L
48"X30"

ACCESS TO LOCAL BUSINESSES
R10-71
66"X36"

N

72'WB' 74'WB' 76'WB' 78'WB' 80'WB' 82'WB' 84'WB' 86'WB'

STH 190 (CAPITOL DRIVE)

72'EB' 74'EB' 76'EB' 78'EB' 80'EB' 82'EB' 84'EB' 86'EB'

STH 190 (CAPITOL DRIVE)

15' TYP

RIPRAP

POST

ANOPY

LANE CLOSED
R11-2L
48"X30"

OUTSIDE LEFT TURN LANE CLOSED

LEGEND:

- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

- ARWx TEMPORARY MARKING ARROW
- DY6x TEMPORARY MARKING 6-INCH DOUBLE YELLOW
- W6x TEMPORARY MARKING 6-INCH WHITE
- W10x TEMPORARY MARKING 10-INCH WHITE
- W18x TEMPORARY MARKING 18-INCH WHITE
- Y6x TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

ROAD WORK AHEAD
W20-1A

HIGHFIELD RD

END ROAD WORK
G20-2A
48"X24"

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

25'
TYP

88'WB' 90'WB' 92'WB' 94'WB' 96'WB' 98'WB' 100'WB' 102'WB'

STH 190 (CAPITOL DRIVE)

88'EB' 90'EB' 92'EB' 94'EB' 96'EB' 98'EB' 100'EB' 102'EB'

STH 190 (CAPITOL DRIVE)

15' TYP

LANE CLOSED
R11-2L
48"X30"

ROAD WORK AHEAD
W20-1A

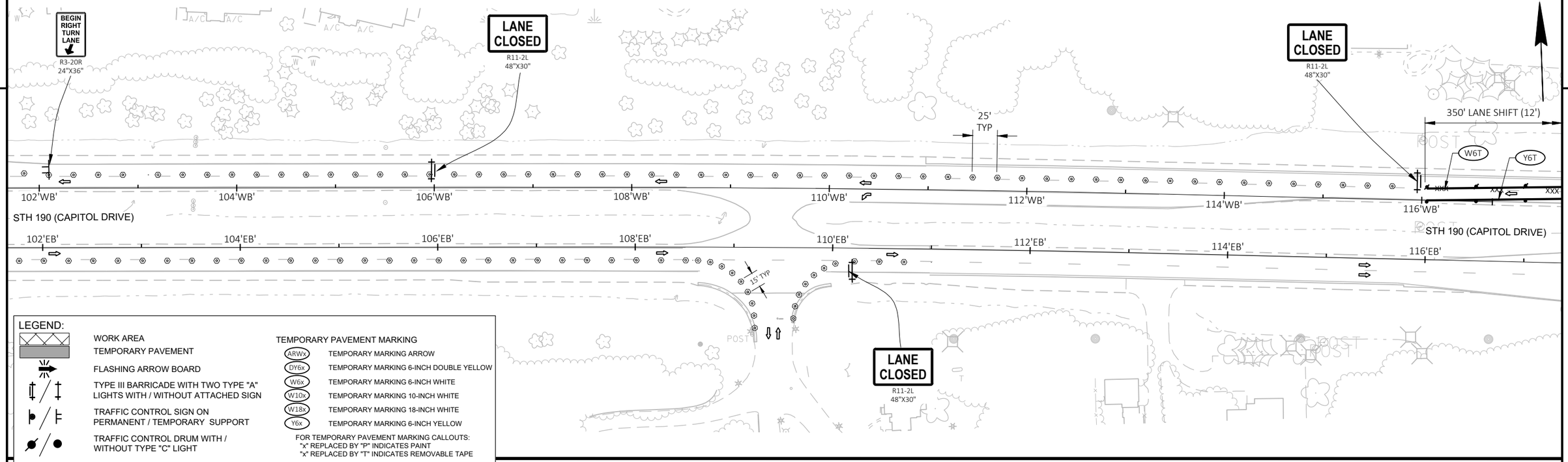
FIVE FIELDS RD

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1A	SHEET 243	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026101-S1A.DWG
LAYOUT NAME - 1A-04 (100)

PLOT DATE : 9/11/2023 9:12 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



LEGEND:

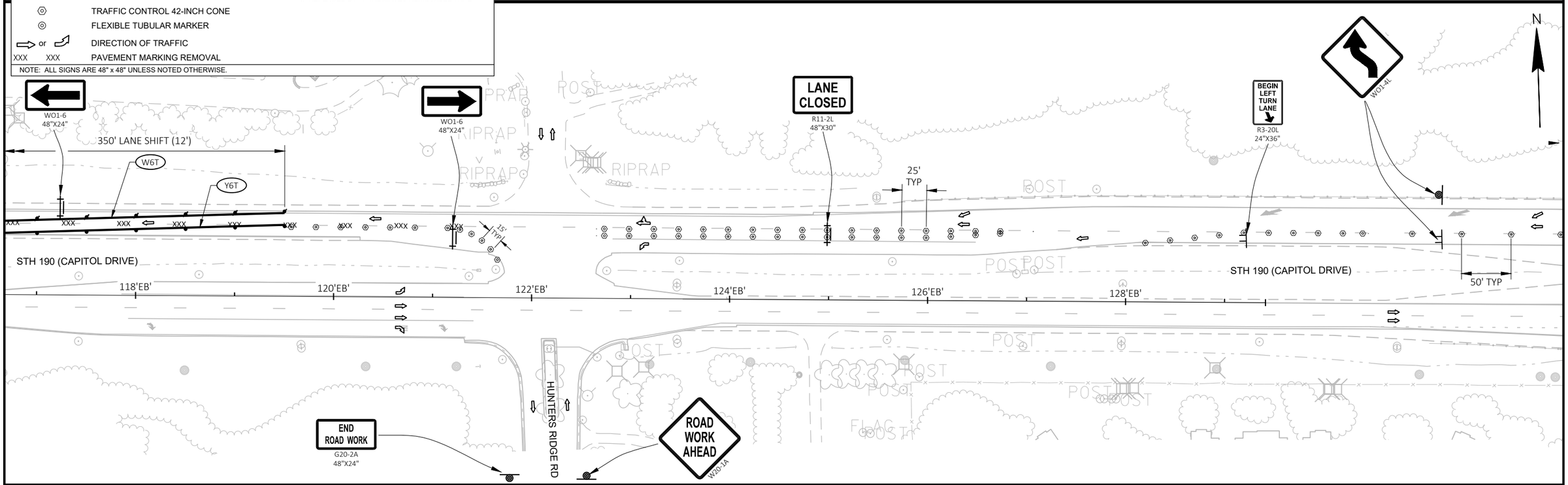
- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1A	SHEET 244	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026101-S1A.DWG
LAYOUT NAME - 1A-05 (100)
PLOT DATE : 9/11/2023 9:12 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

CTH F (REDFORD BLVD)

RIPRAP

RAMP

POST

STH 190 (CAPITOL DRIVE)

Y6T

50' TYP

xxx

660' LANE CLOSURE TAPER (12')

1000'

500'

STH 190 (CAPITOL DRIVE)

N

LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

ROAD WORK AHEAD
W20-1A

W04-2L

WETHERSFIELD RD

END ROAD WORK
G20-2A
48"X24"

LEFT LANE CLOSED 1/2 MILE
W20-5SG

ROAD WORK 1 MILE
W20-1F

1000'

1600'

2600'

50' TYP

STH 190 (CAPITOL DRIVE)

500'

STH 190 (CAPITOL DRIVE)

N

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1A	SHEET 245	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026101-S1A.DWG
LAYOUT NAME - 1A-06 (100)

PLOT DATE : 9/11/2023 9:12 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

STH 164

GREEN RD

ROUGH HILL RD

STH 164

ROAD WORK AHEAD
W20-1A

LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

COVER OUTSIDE LEFT TURN LANE ARROW

END ROAD WORK
G20-2A
48"X24"

LANE CLOSED
R11-2L
48"X30"

COVER OUTSIDE LEFT TURN LANE SIGN ON OVERHEAD STRUCTURE

OUTSIDE LEFT TURN LANE CLOSED

STH 164

ROAD WORK 500 FT
W20-1D

25' TYP

COVER OUTSIDE LEFT TURN LANE ARROW

STH 190 (CAPITOL DRIVE)

87'EB

82'WB

84'EB

84'WB

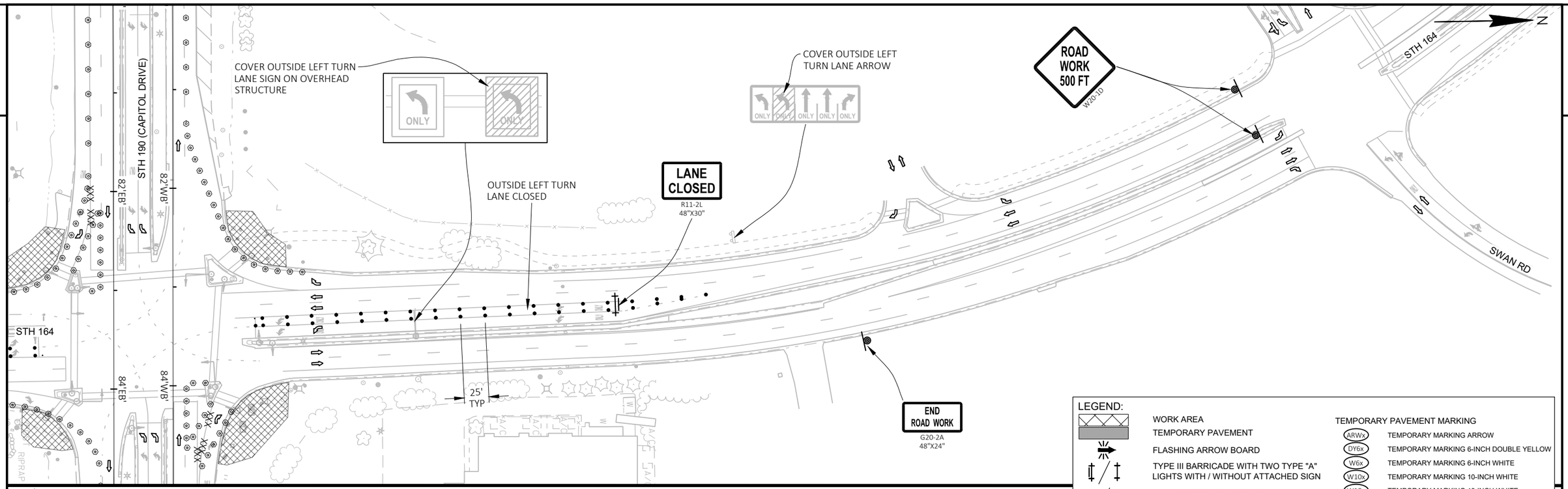
STH 164

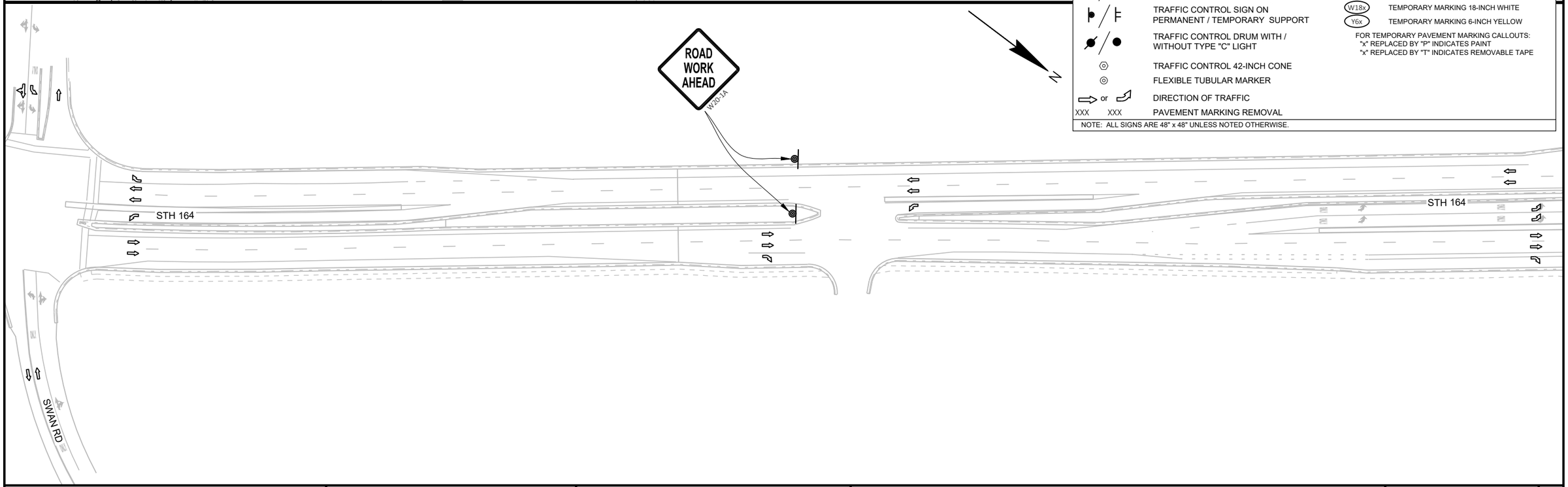
STH 190 (CAPITOL DRIVE)

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1A	SHEET 246 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026101-S1A.DWG
LAYOUT NAME - 1A-164 S (100)

PLOT DATE : 9/11/2023 9:12 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT





LEGEND:

- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

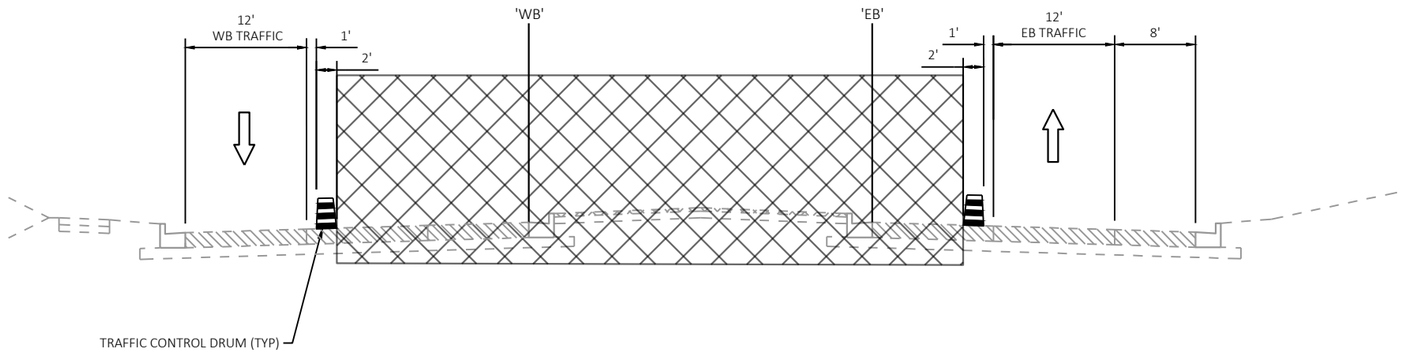
ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

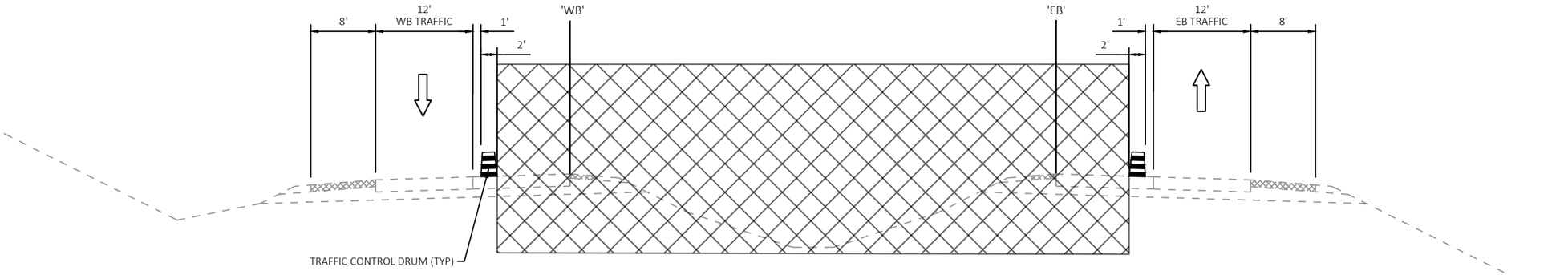
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1A	SHEET 247	E

2



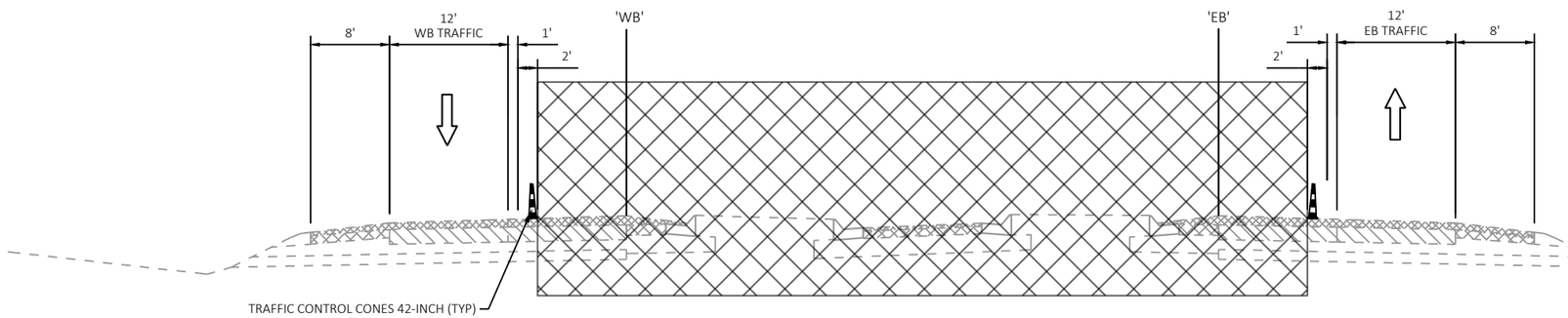
STAGE 1B CONSTRUCTION - CONCRETE SECTION (URBAN)

STA. 8+56'EB' - STA. 15+36'EB'
MEDIAN ISLAND WORK
TRAFFIC ON EXISTING OUTSIDE LANES



STAGE 1B CONSTRUCTION - CONCRETE SECTION (RURAL)

STA. 15+36'EB' - STA. 37+00'EB'
CONSTRUCT MEDIAN CROSSOVER
TRAFFIC ON EXISTING OUTSIDE LANES



STAGE 1B CONSTRUCTION - ASPHALT SECTION

STA. 37+00'EB' - STA. 111+00'EB'
CONSTRUCT MEDIAN CROSSOVER
TRAFFIC ON EXISTING OUTSIDE LANES

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1B - TYPICAL SECTION	SHEET 248	E

2

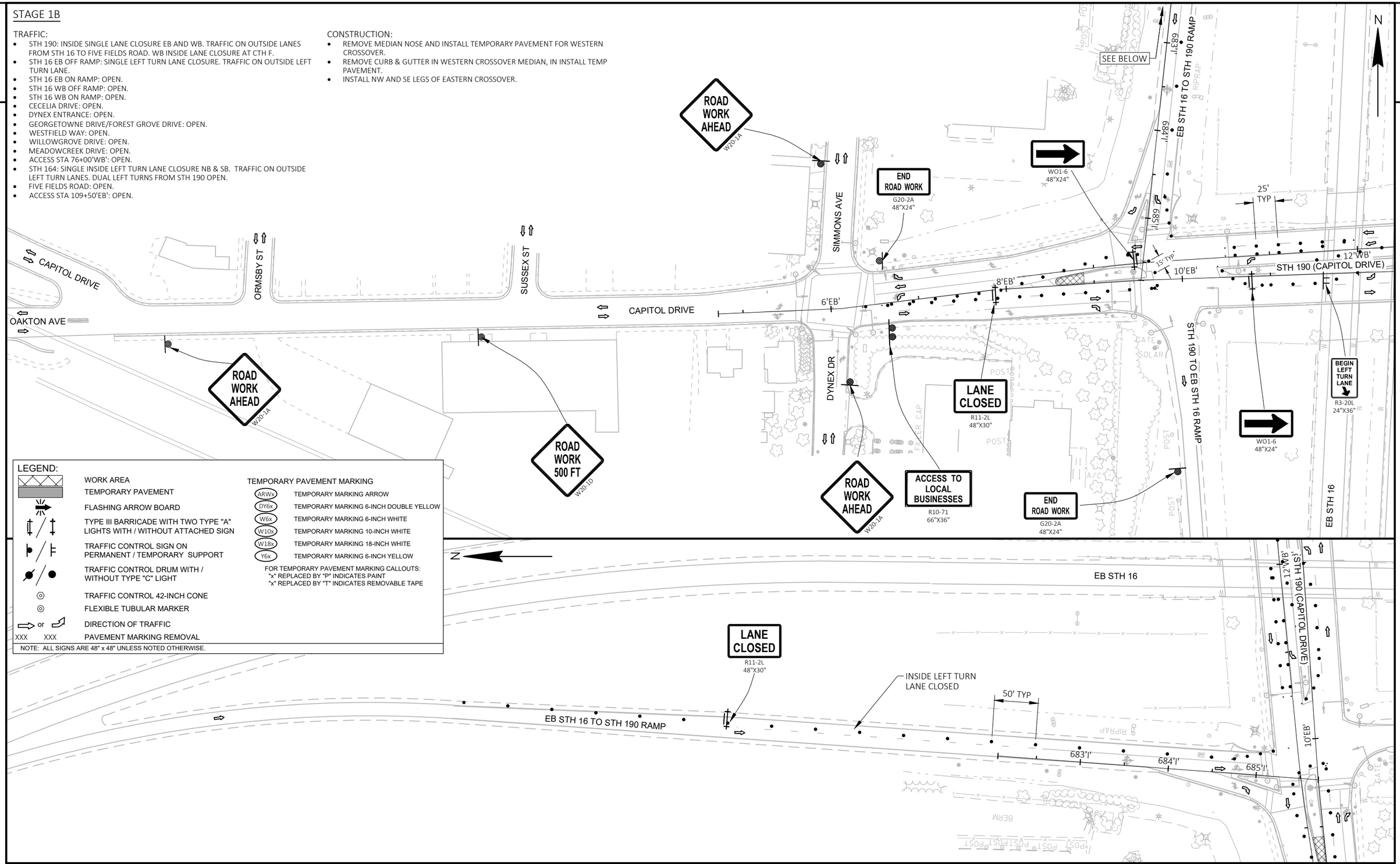
STAGE 1B

TRAFFIC:

- STH 190: INSIDE SINGLE LANE CLOSURE EB AND WB. TRAFFIC ON OUTSIDE LANES FROM STH 16 TO FIVE FIELDS ROAD. WB INSIDE LANE CLOSURE AT CTH F.
- STH 16 EB OFF RAMP: SINGLE LEFT TURN LANE CLOSURE. TRAFFIC ON OUTSIDE LEFT TURN LANE.
- STH 16 EB ON RAMP: OPEN.
- STH 16 WB OFF RAMP: OPEN.
- STH 16 WB ON RAMP: OPEN.
- CECELIA DRIVE: OPEN.
- DYNEX ENTRANCE: OPEN.
- GEORGETOWNE DRIVE/FOREST GROVE DRIVE: OPEN.
- WESTFIELD WAY: OPEN.
- WILLOWGROVE DRIVE: OPEN.
- MEADOWCREEK DRIVE: OPEN.
- ACCESS STA 76+00'WB': OPEN.
- STH 164: SINGLE INSIDE LEFT TURN LANE CLOSURE NB & SB. TRAFFIC ON OUTSIDE LEFT TURN LANES. DUAL LEFT TURNS FROM STH 190 OPEN.
- FIVE FIELDS ROAD: OPEN.
- ACCESS STA 109+50'EB': OPEN.

CONSTRUCTION:

- REMOVE MEDIAN NOSE AND INSTALL TEMPORARY PAVEMENT FOR WESTERN CROSSOVER.
- REMOVE CURB & GUTTER IN WESTERN CROSSOVER MEDIAN, IN INSTALL TEMP PAVEMENT.
- INSTALL NW AND SE LEGS OF EASTERN CROSSOVER.



LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

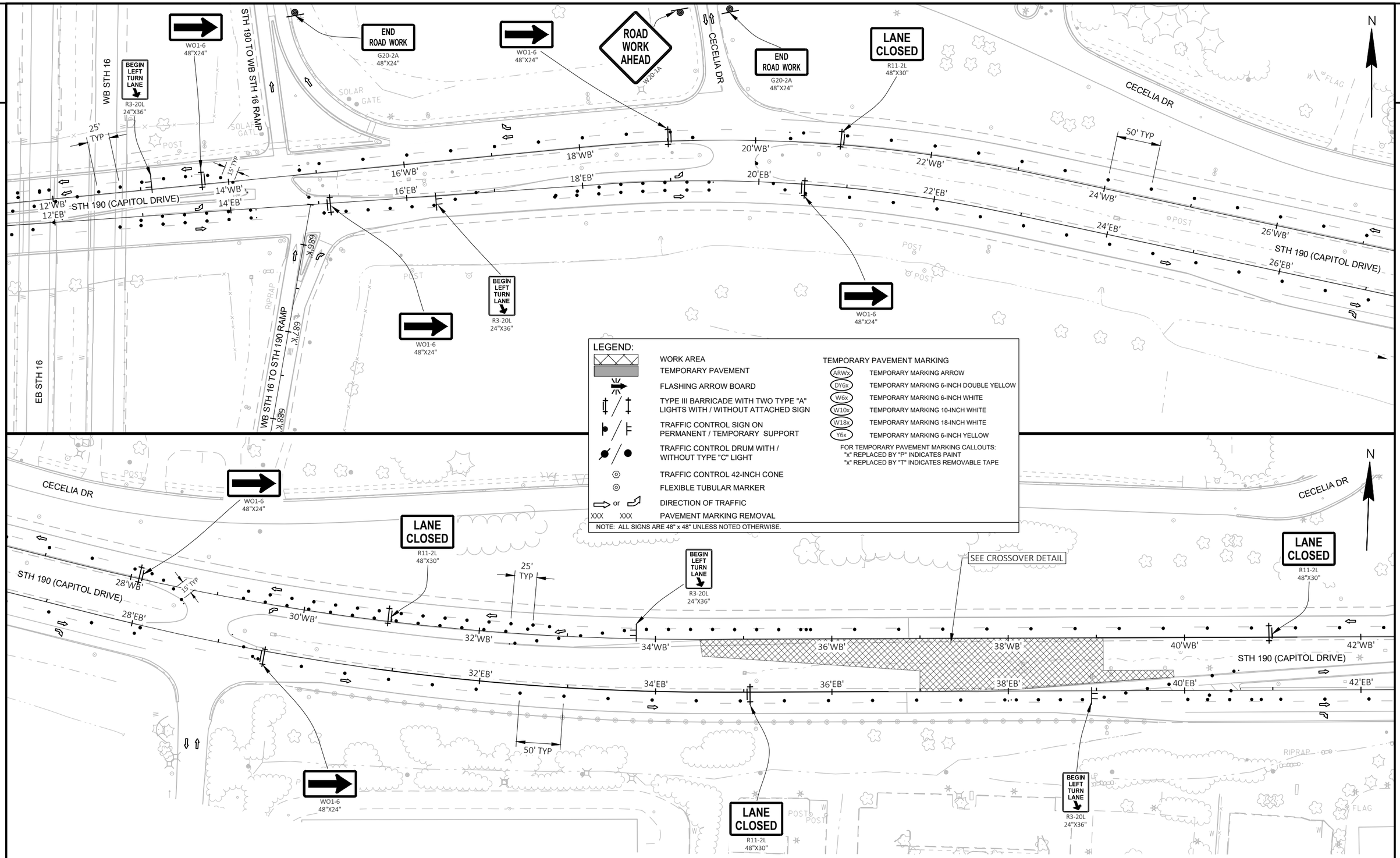
TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

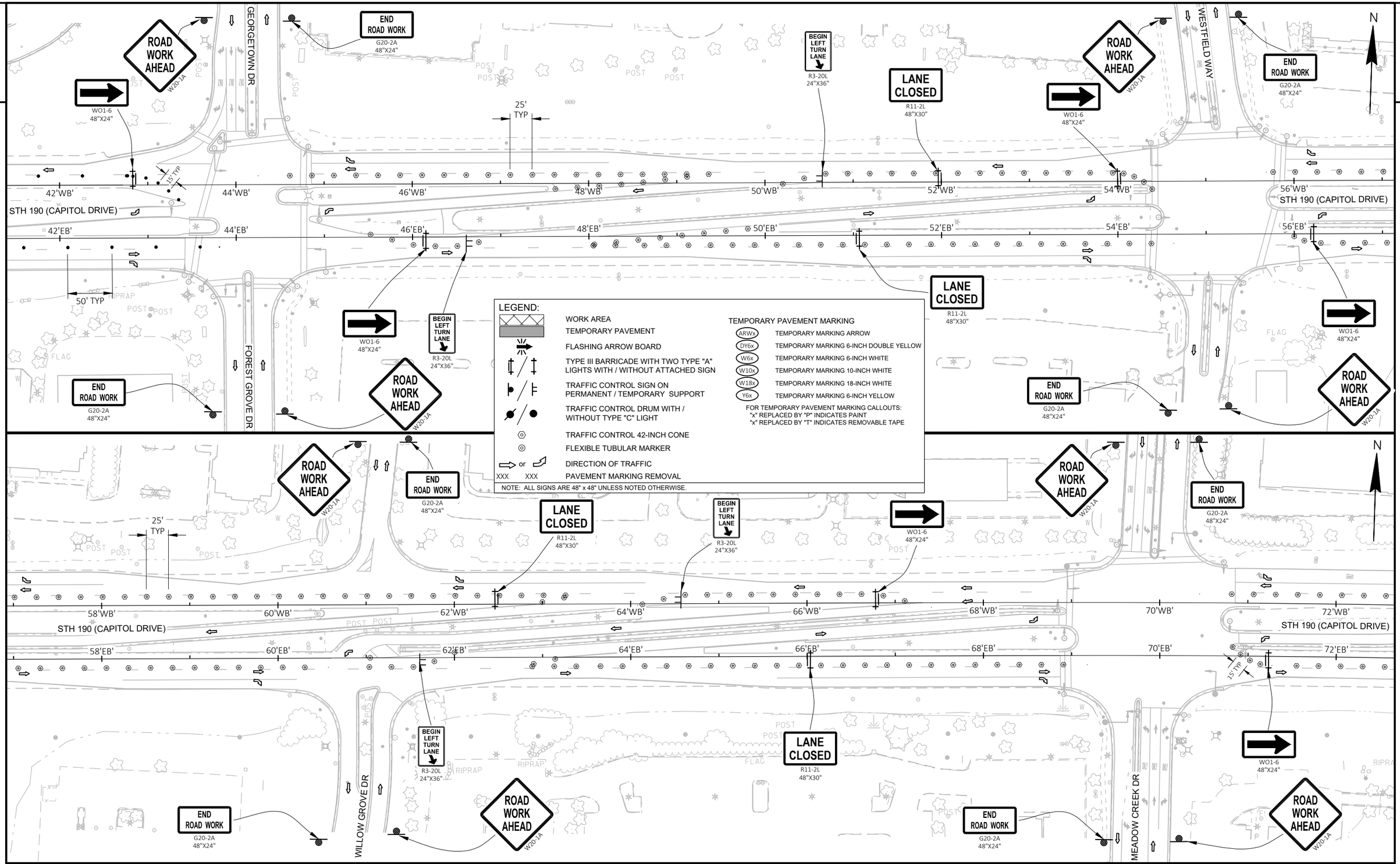
NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1B	SHEET 249	E



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1B	SHEET 250	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026102-S1B.DWG
LAYOUT NAME - 1B-02 (100)
PLOT DATE : 9/11/2023 9:49 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



LEGEND:

- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1B	SHEET 251	E

2

LANE CLOSED
R11-2L
48"X30"

END ROAD WORK
G20-2A
48"X24"

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

25' TYP

INSIDE LEFT TURN LANE CLOSED

WO1-6
48"X24"

15' TYP

ACCESS TO LOCAL BUSINESSES
R10-71
66"X36"

STH 164

N

72'WB' 74'WB' 76'WB' 78'WB' 80'WB' 82'WB' 84'WB' 86'WB'

STH 190 (CAPITOL DRIVE)

72'EB' 74'EB' 76'EB' 78'EB' 80'EB' 82'EB' 84'EB' 86'EB'

RIPRAP POST ANOPY

LEGEND:

WORK AREA
TEMPORARY PAVEMENT
FLASHING ARROW BOARD
TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
TRAFFIC CONTROL 42-INCH CONE
FLEXIBLE TUBULAR MARKER
or DIRECTION OF TRAFFIC
XXX XXX PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

MAX. 12' WIDTH
W12-52
48"X48"

1.1 MILES AHEAD
WO57-52
48"X36"

ROAD WORK AHEAD
W20-1A

HIGHFIELD RD

88'WB' 90'WB' 92'WB' 94'WB' 96'WB' 98'WB' 100'WB' 102'WB'

STH 190 (CAPITOL DRIVE)

88'EB' 90'EB' 92'EB' 94'EB' 96'EB' 98'EB' 100'EB' 102'EB'

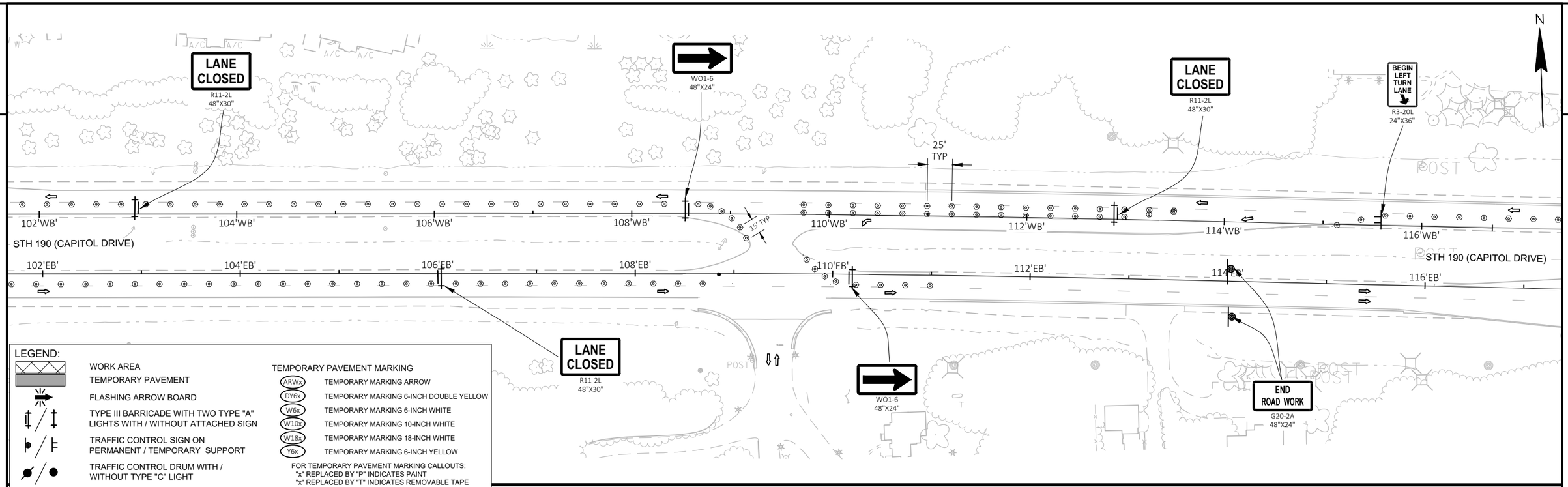
FIVE FIELDS RD

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1B	SHEET 252	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026102-S1B.DWG
LAYOUT NAME - 1B-04 (100)

PLOT DATE : 9/11/2023 9:49 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



LEGEND:

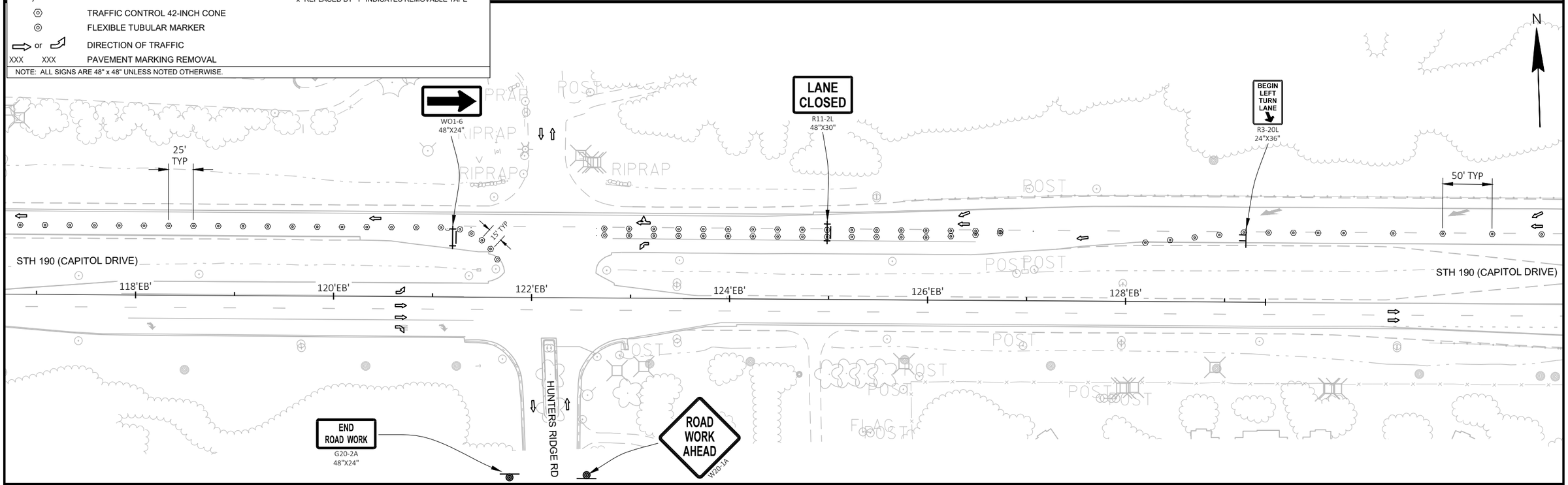
- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1B	SHEET 253	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026102-S1B.DWG
LAYOUT NAME - 1B-05 (100)

PLOT DATE : 9/11/2023 9:49 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

CTH F (REDFORD BLVD)

RIPRAP

STH 190 (CAPITOL DRIVE)

Y6T

50' TYP

660' LANE CLOSURE TAPER (12')

1000'

500'

STH 190 (CAPITOL DRIVE)

N

2

LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

ROAD WORK AHEAD
W20-1A

W04-2L

WETHERSFIELD RD

END ROAD WORK
G20-2A
48"X24"

LEFT LANE CLOSED 1/2 MILE
W20-5SG

ROAD WORK 1 MILE
W20-1F

1000'

1600'

2600'

50' TYP

STH 190 (CAPITOL DRIVE)

500'

STH 190 (CAPITOL DRIVE)

N

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1B	SHEET 254	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026102-S1B.DWG
LAYOUT NAME - 1B-06 (100)

PLOT DATE : 9/11/2023 9:49 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

STH 164

GREEN RD

ROUGH HILL RD

STH 164

ROAD WORK AHEAD
W20-1A

LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

COVER INSIDE LEFT TURN LANE ARROW

END ROAD WORK
G20-2A
48"X24"

COVER INSIDE LEFT TURN LANE SIGN ON OVERHEAD STRUCTURE

LANE CLOSED
R11-2L
48"X30"

INSIDE LEFT TURN LANE CLOSED

ROAD WORK 500 FT
W20-1D

COVER INSIDE LEFT TURN LANE ARROW

25' TYP

25'TYP

STH 190 (CAPITOL DRIVE)

83'EB

82'WB

15' TYP

STH 164

84'EB

84'WB

STH 190 (CAPITOL DRIVE)

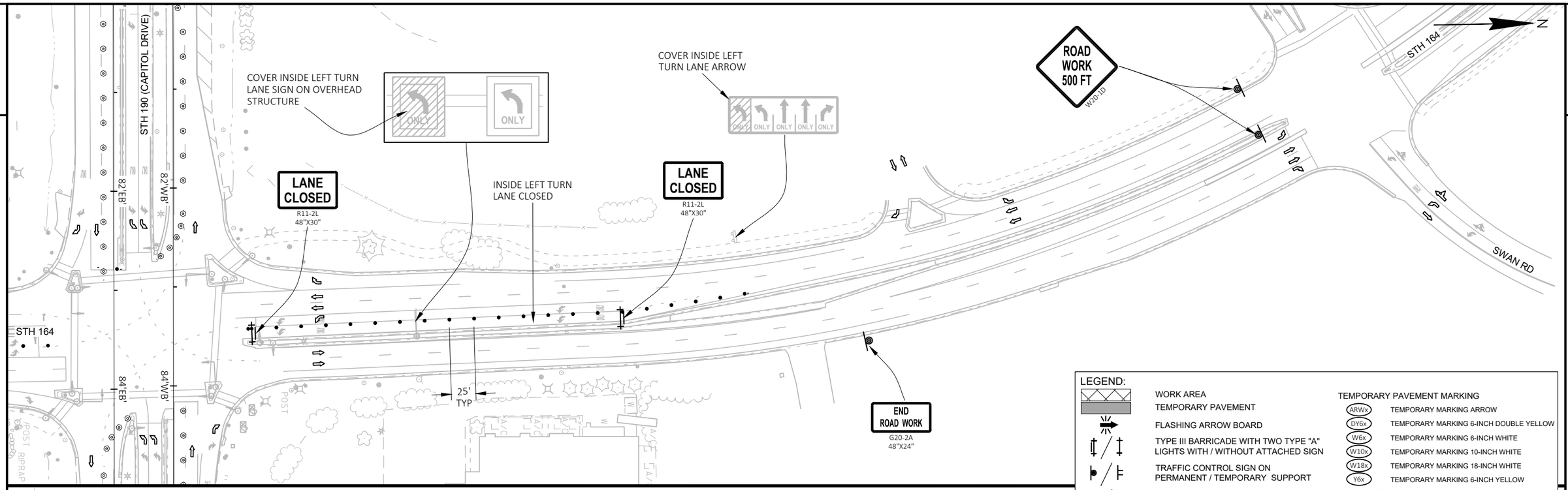
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1B	SHEET 255 E

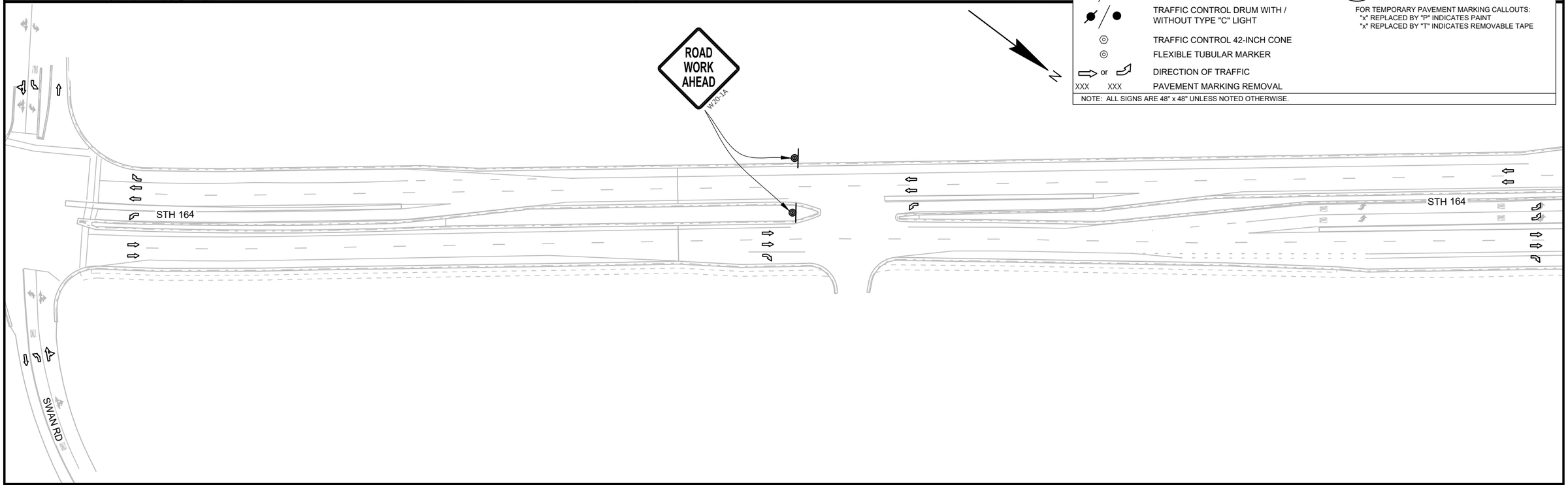
FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026102-S1B.DWG
LAYOUT NAME - 1B-164 S (100)

PLOT DATE : 9/11/2023 9:49 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2





LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
F	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

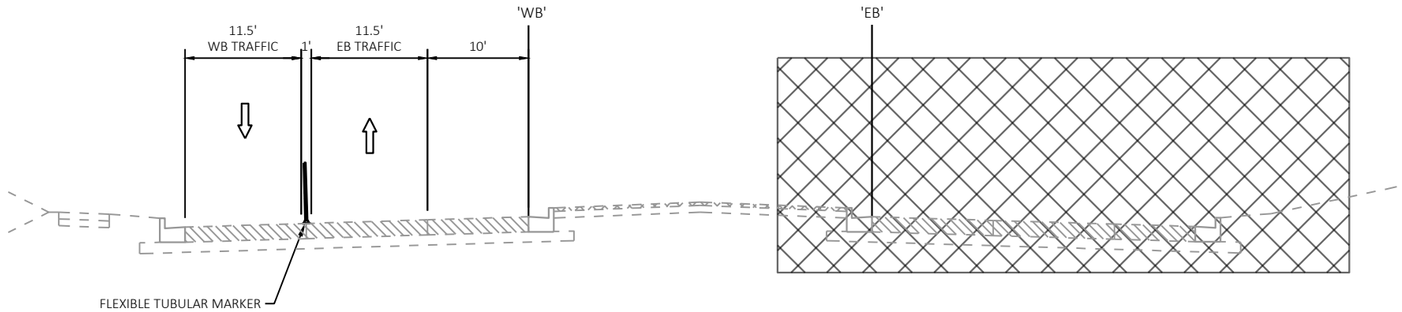
FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 1B	SHEET 256 E

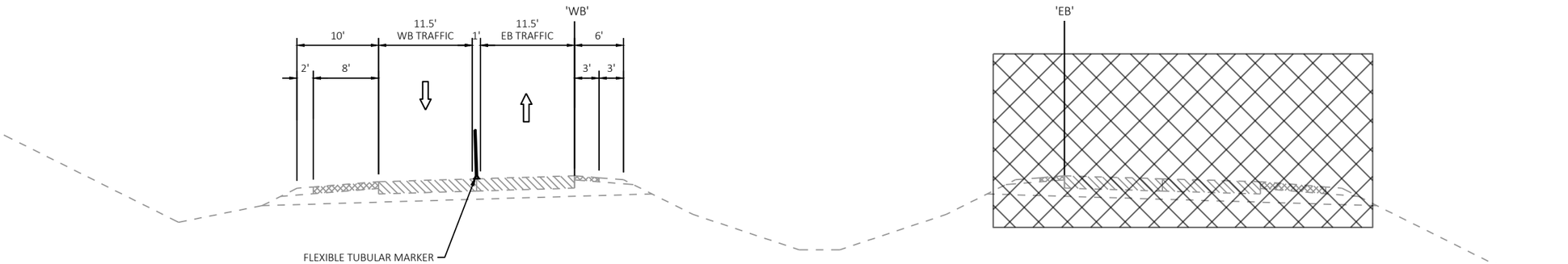
FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026102-S1B.DWG
LAYOUT NAME - 1B-164 N (100)

PLOT DATE : 9/11/2023 9:49 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : ############



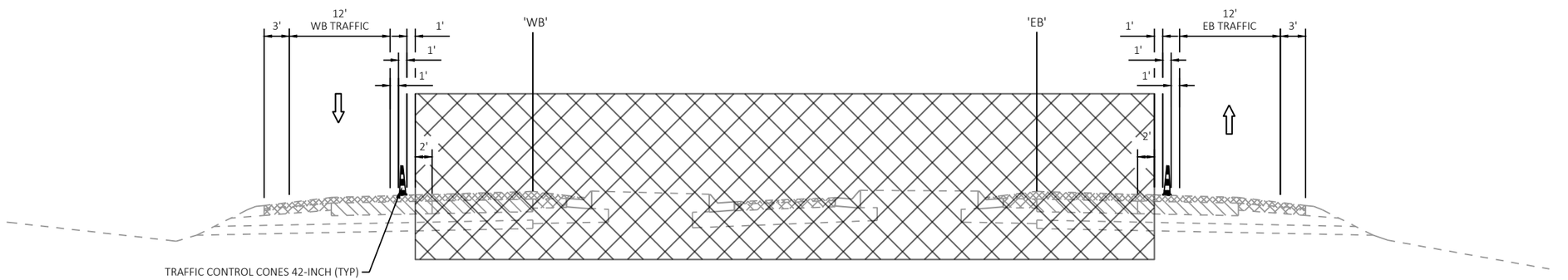
STAGE 2 CONSTRUCTION - CONCRETE SECTION (RURAL)

STA. 8+56'EB' - STA. 15+36'EB'
REPLACE PAVEMENT OF EASTBOUND LANES
BI-DIRECTIONAL TRAFFIC ON EXISTING WESTBOUND LANES



STAGE 2 CONSTRUCTION - CONCRETE SECTION (RURAL)

STA. 15+36'EB' - STA. 37+00'EB'
REPLACE PAVEMENT OF EASTBOUND LANES
BI-DIRECTIONAL TRAFFIC ON EXISTING WESTBOUND LANES



STAGE 2 CONSTRUCTION - ASPHALT SECTION

STA. 37+00'EB' - STA. 111+00'EB'
MILL AND OVERLAY INSIDE LANES
TRAFFIC ON EXISTING OUTSIDE LANES AND SHOULDERS

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 2 - TYPICAL SECTION	SHEET 257	E

2

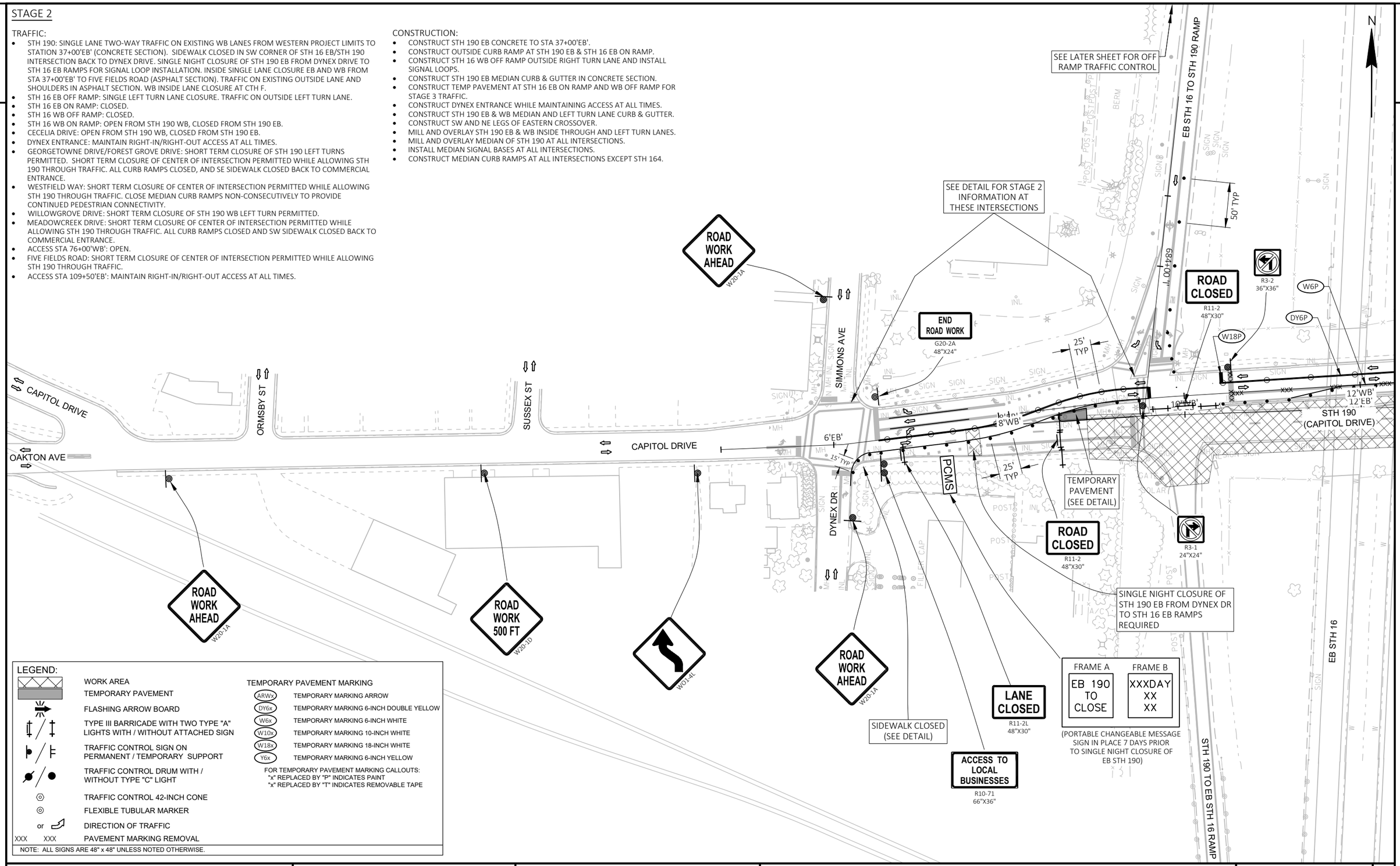
STAGE 2

TRAFFIC:

- STH 190: SINGLE LANE TWO-WAY TRAFFIC ON EXISTING WB LANES FROM WESTERN PROJECT LIMITS TO STATION 37+00'EB' (CONCRETE SECTION). SIDEWALK CLOSED IN SW CORNER OF STH 16 EB/STH 190 INTERSECTION BACK TO DYNEX DRIVE. SINGLE NIGHT CLOSURE OF STH 190 EB FROM DYNEX DRIVE TO STH 16 EB RAMPS FOR SIGNAL LOOP INSTALLATION. INSIDE SINGLE LANE CLOSURE EB AND WB FROM STA 37+00'EB' TO FIVE FIELDS ROAD (ASPHALT SECTION). TRAFFIC ON EXISTING OUTSIDE LANE AND SHOULDERS IN ASPHALT SECTION. WB INSIDE LANE CLOSURE AT CTH F.
- STH 16 EB OFF RAMP: SINGLE LEFT TURN LANE CLOSURE. TRAFFIC ON OUTSIDE LEFT TURN LANE.
- STH 16 EB ON RAMP: CLOSED.
- STH 16 WB OFF RAMP: CLOSED.
- STH 16 WB ON RAMP: OPEN FROM STH 190 WB, CLOSED FROM STH 190 EB.
- CECELIA DRIVE: OPEN FROM STH 190 WB, CLOSED FROM STH 190 EB.
- DYNEX ENTRANCE: MAINTAIN RIGHT-IN/RIGHT-OUT ACCESS AT ALL TIMES.
- GEORGETOWNE DRIVE/FOREST GROVE DRIVE: SHORT TERM CLOSURE OF STH 190 LEFT TURNS PERMITTED. SHORT TERM CLOSURE OF CENTER OF INTERSECTION PERMITTED WHILE ALLOWING STH 190 THROUGH TRAFFIC. ALL CURB RAMPS CLOSED, AND SE SIDEWALK CLOSED BACK TO COMMERCIAL ENTRANCE.
- WESTFIELD WAY: SHORT TERM CLOSURE OF CENTER OF INTERSECTION PERMITTED WHILE ALLOWING STH 190 THROUGH TRAFFIC. CLOSE MEDIAN CURB RAMPS NON-CONSECUTIVELY TO PROVIDE CONTINUED PEDESTRIAN CONNECTIVITY.
- WILLOWGROVE DRIVE: SHORT TERM CLOSURE OF STH 190 WB LEFT TURN PERMITTED.
- MEADOWCREEK DRIVE: SHORT TERM CLOSURE OF CENTER OF INTERSECTION PERMITTED WHILE ALLOWING STH 190 THROUGH TRAFFIC. ALL CURB RAMPS CLOSED AND SW SIDEWALK CLOSED BACK TO COMMERCIAL ENTRANCE.
- ACCESS STA 76+00'WB': OPEN.
- FIVE FIELDS ROAD: SHORT TERM CLOSURE OF CENTER OF INTERSECTION PERMITTED WHILE ALLOWING STH 190 THROUGH TRAFFIC.
- ACCESS STA 109+50'EB': MAINTAIN RIGHT-IN/RIGHT-OUT ACCESS AT ALL TIMES.

CONSTRUCTION:

- CONSTRUCT STH 190 EB CONCRETE TO STA 37+00'EB'.
- CONSTRUCT OUTSIDE CURB RAMP AT STH 190 EB & STH 16 EB ON RAMP.
- CONSTRUCT STH 16 WB OFF RAMP OUTSIDE RIGHT TURN LANE AND INSTALL SIGNAL LOOPS.
- CONSTRUCT STH 190 EB MEDIAN CURB & GUTTER IN CONCRETE SECTION.
- CONSTRUCT TEMP PAVEMENT AT STH 16 EB ON RAMP AND WB OFF RAMP FOR STAGE 3 TRAFFIC.
- CONSTRUCT DYNEX ENTRANCE WHILE MAINTAINING ACCESS AT ALL TIMES.
- CONSTRUCT STH 190 EB & WB MEDIAN AND LEFT TURN LANE CURB & GUTTER.
- CONSTRUCT SW AND NE LEGS OF EASTERN CROSSOVER.
- MILL AND OVERLAY STH 190 EB & WB INSIDE THROUGH AND LEFT TURN LANES.
- MILL AND OVERLAY MEDIAN OF STH 190 AT ALL INTERSECTIONS.
- INSTALL MEDIAN SIGNAL BASES AT ALL INTERSECTIONS.
- CONSTRUCT MEDIAN CURB RAMPS AT ALL INTERSECTIONS EXCEPT STH 164.



LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

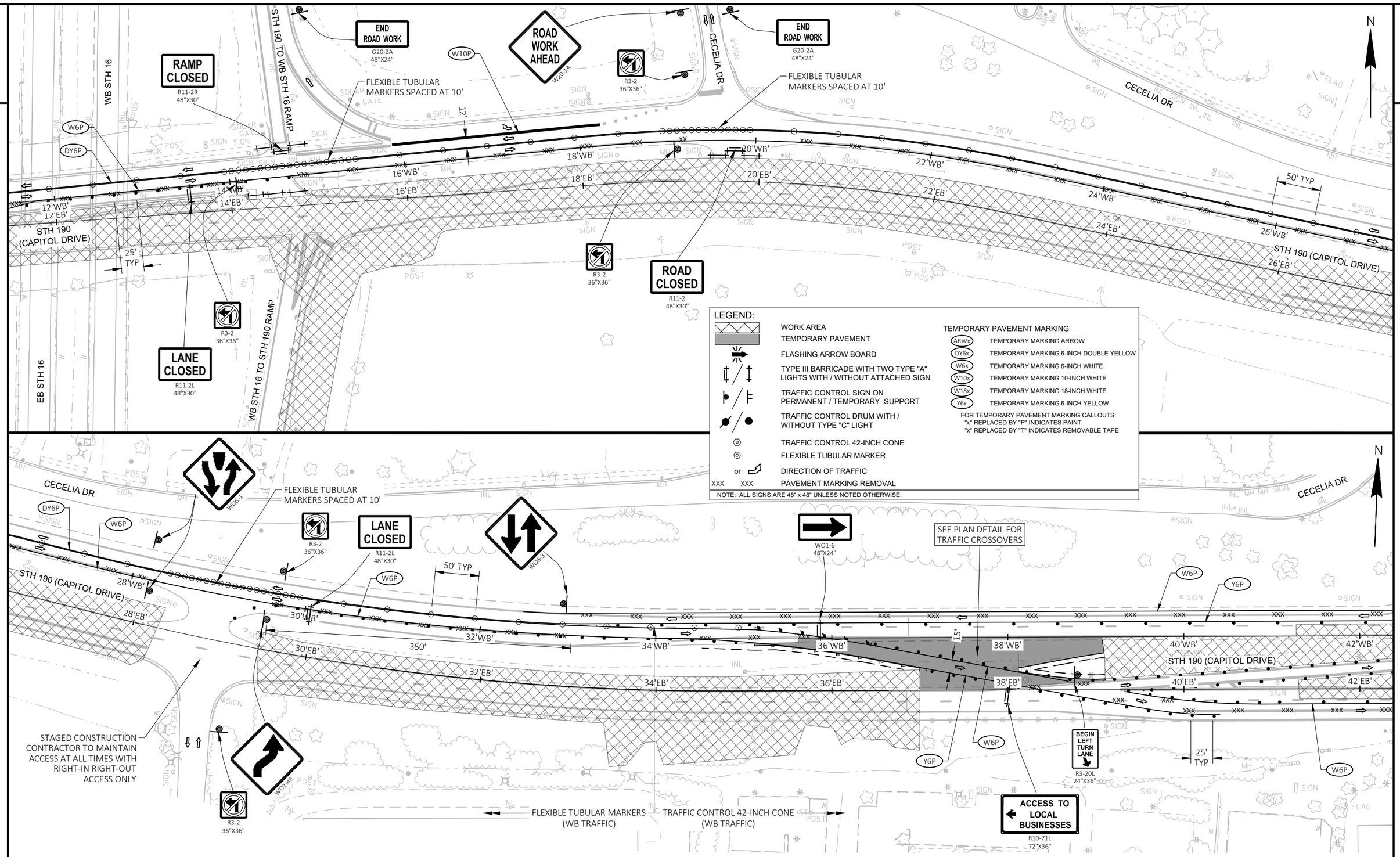
ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

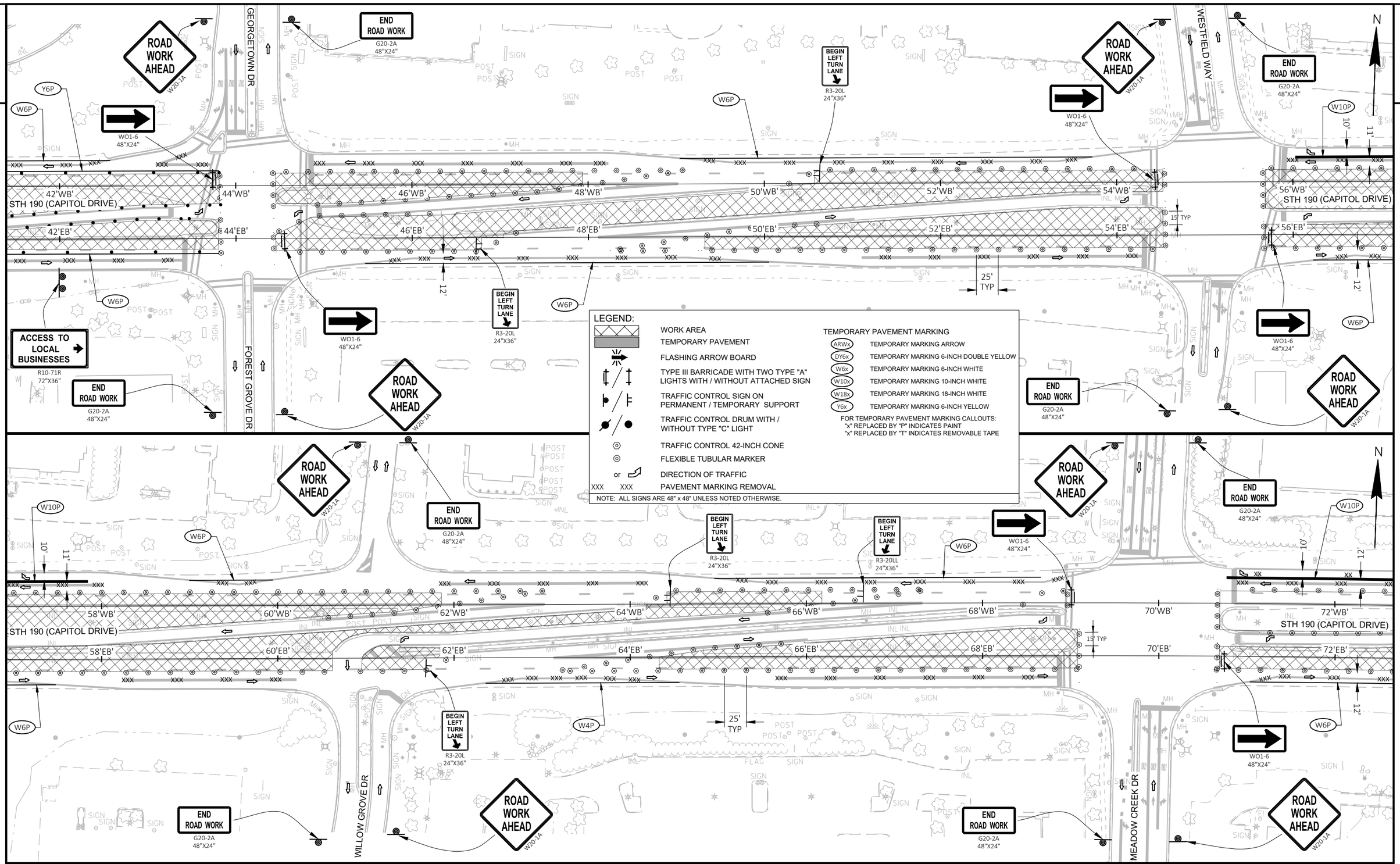
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 2	SHEET 258	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026201-S2.DWG
LAYOUT NAME - 2-01 (100)
PLOT DATE : 9/11/2023 9:54 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 2	SHEET 259	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026201-S2.DWG
LAYOUT NAME - 2-02 (100)
PLOT DATE : 9/11/2023 9:54 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 2	SHEET 260	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026201-S2.DWG
LAYOUT NAME - 2-03 (100)

PLOT DATE : 9/11/2023 9:54 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

ACCESS TO LOCAL BUSINESSES
R10-71R
72"X36"

END ROAD WORK
G20-2A
48"X24"

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

ACCESS TO LOCAL BUSINESSES
R10-71L
72"X36"

OUTSIDE LEFT TURN, AND INSIDE THROUGH LANES CLOSED

WO1-6
48"X24"

ACCESS TO LOCAL BUSINESSES
R10-71
66"X36"

STH 164

STH 190 (CAPITOL DRIVE)

72'WB' 74'WB' 76'WB' 78'WB' 80'WB' 82'WB' 84'WB' 86'WB'

72'EB' 74'EB' 76'EB' 78'EB' 80'EB' 82'EB' 84'EB' 86'EB'

W10P W6P

10' 12' 11' 15' TYP 25' TYP

N

LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

ROAD WORK AHEAD
W20-1A

HIGHFIELD DR

END ROAD WORK
G20-2A
48"X24"

WO1-6
48"X24"

STH 190 (CAPITOL DRIVE)

88'WB' 90'WB' 92'WB' 94'WB' 96'WB' 98'WB' 100'WB' 102'WB'

88'EB' 90'EB' 92'EB' 94'EB' 96'EB' 98'EB' 100'EB' 102'EB'

FIVE FIELDS RD

ROAD WORK AHEAD
W20-1A

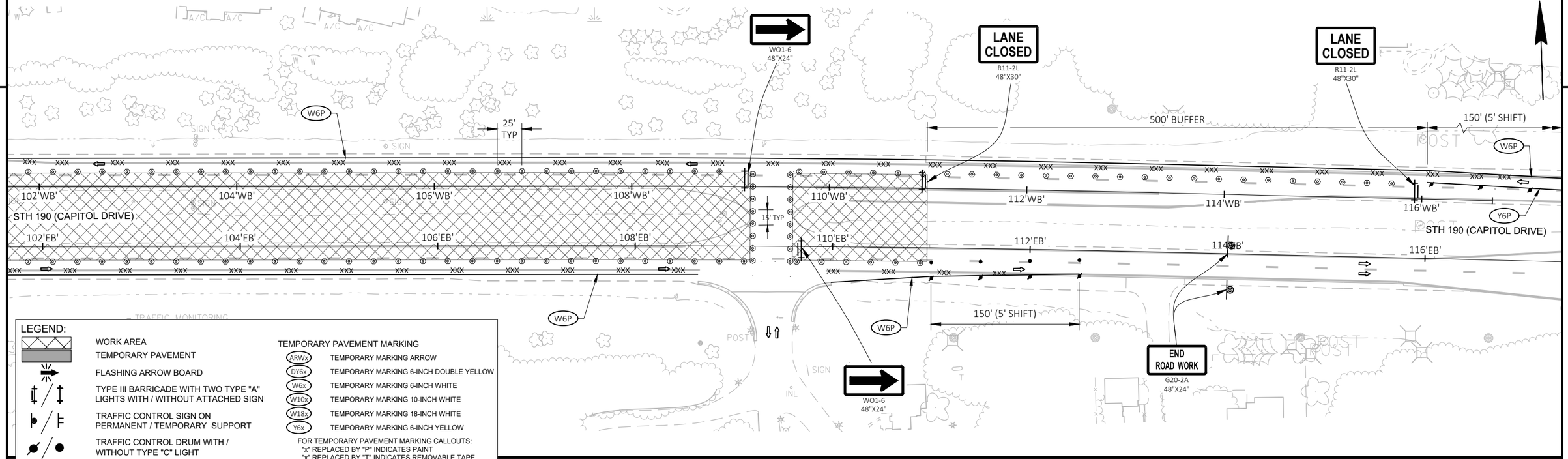
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 2	SHEET 261	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026201-S2.DWG
LAYOUT NAME - 2-04 (100)

PLOT DATE : 9/11/2023 9:54 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



LEGEND:

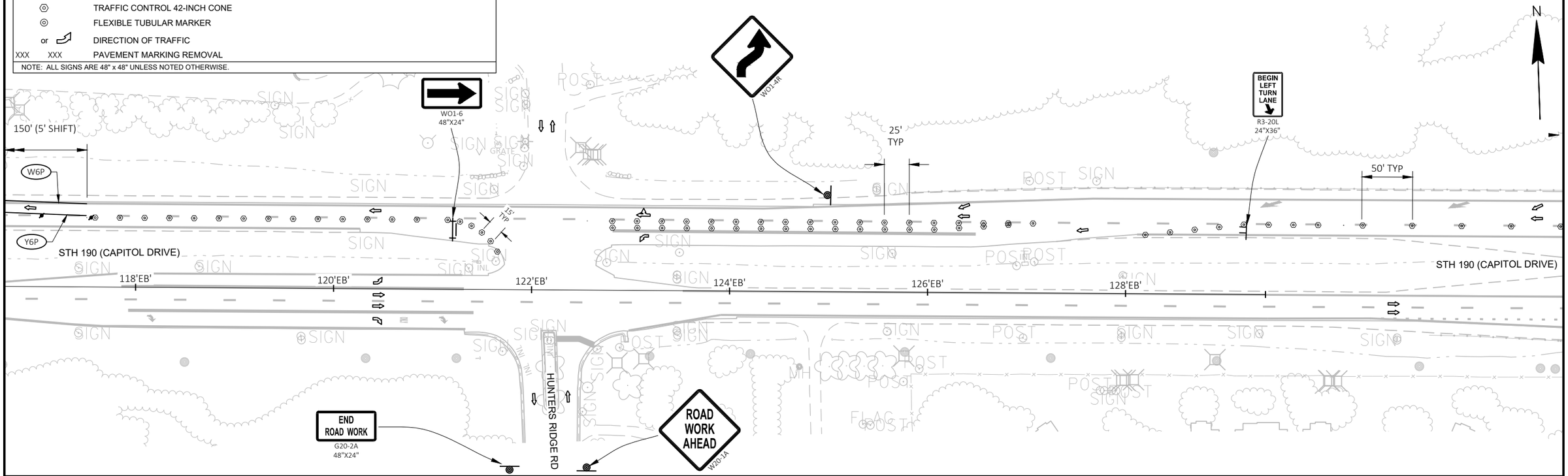
- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

- (ARWx) TEMPORARY MARKING ARROW
- (DY6x) TEMPORARY MARKING 6-INCH DOUBLE YELLOW
- (W6x) TEMPORARY MARKING 6-INCH WHITE
- (W10x) TEMPORARY MARKING 10-INCH WHITE
- (W18x) TEMPORARY MARKING 18-INCH WHITE
- (Y6x) TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 2	SHEET 262	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026201-S2.DWG
LAYOUT NAME - 2-05 (100)
PLOT DATE : 9/11/2023 9:55 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

CTH F (REDFORD BLVD)

STH 190 (CAPITOL DRIVE)

Y6T

50' TYP

660' LANE CLOSURE TAPER (12')

1000'

500'

STH 190 (CAPITOL DRIVE)

N

LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

ROAD WORK AHEAD
W20-1A

W04-2L

WETHERSFIELD RD

END ROAD WORK
G20-2A
48"X24"

LEFT LANE CLOSED 1/2 MILE
W20-5SG

ROAD WORK 1 MILE
W20-1F

1000'

1600'

2600'

50' TYP

STH 190 (CAPITOL DRIVE)

500'

STH 190 (CAPITOL DRIVE)

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 2	SHEET 263	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026201-S2.DWG
LAYOUT NAME - 2-06 (100)

PLOT DATE : 9/11/2023 9:55 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

EB STH 16

STH 190 (CAPITOL DRIVE)

16'WB

LANE CLOSED
R11-2L
48"X30"

INSIDE LEFT TURN
LANE CLOSED

50' TYP

EB STH 16 TO STH 190 RAMP

684+00 'I'

14'WB

8'WB

14'EB

LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

N

STH 190 (CAPITOL DRIVE)

16'WB

14'WB

14'EB

12'WB

12'EB

RAMP CLOSED

WB STH 16 TO STH 190 RAMP

50' TYP

AUXILIARY
LANE CLOSED
(SEE DETAIL)

WB STH 16

EB STH 16

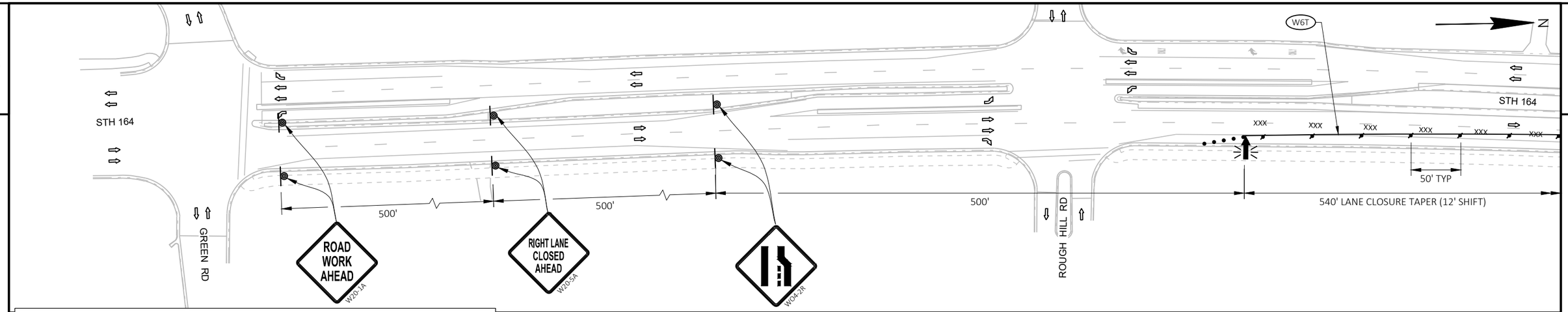
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 2	SHEET 264	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026201-S2.DWG
LAYOUT NAME - 2-OFF RAMPS (100)

PLOT DATE : 9/11/2023 9:55 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



LEGEND:

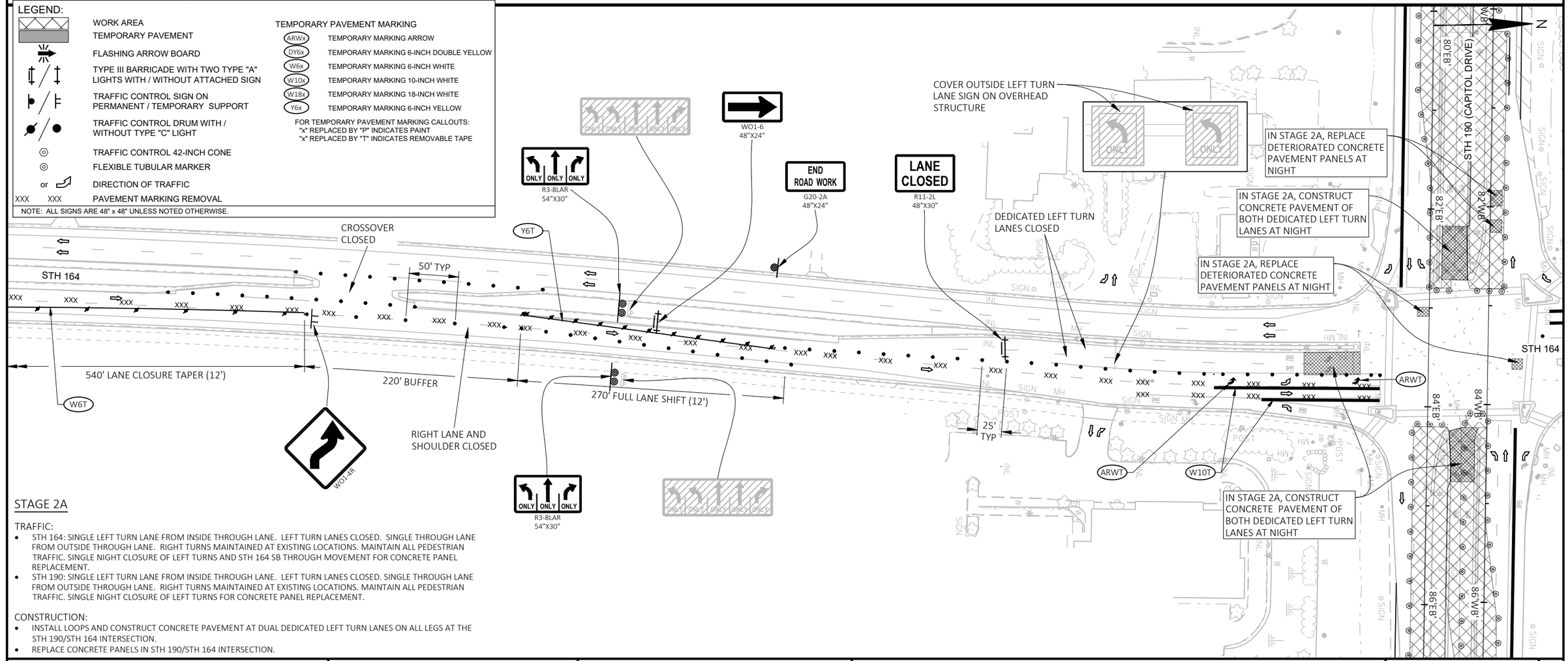
	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE



STAGE 2A

TRAFFIC:

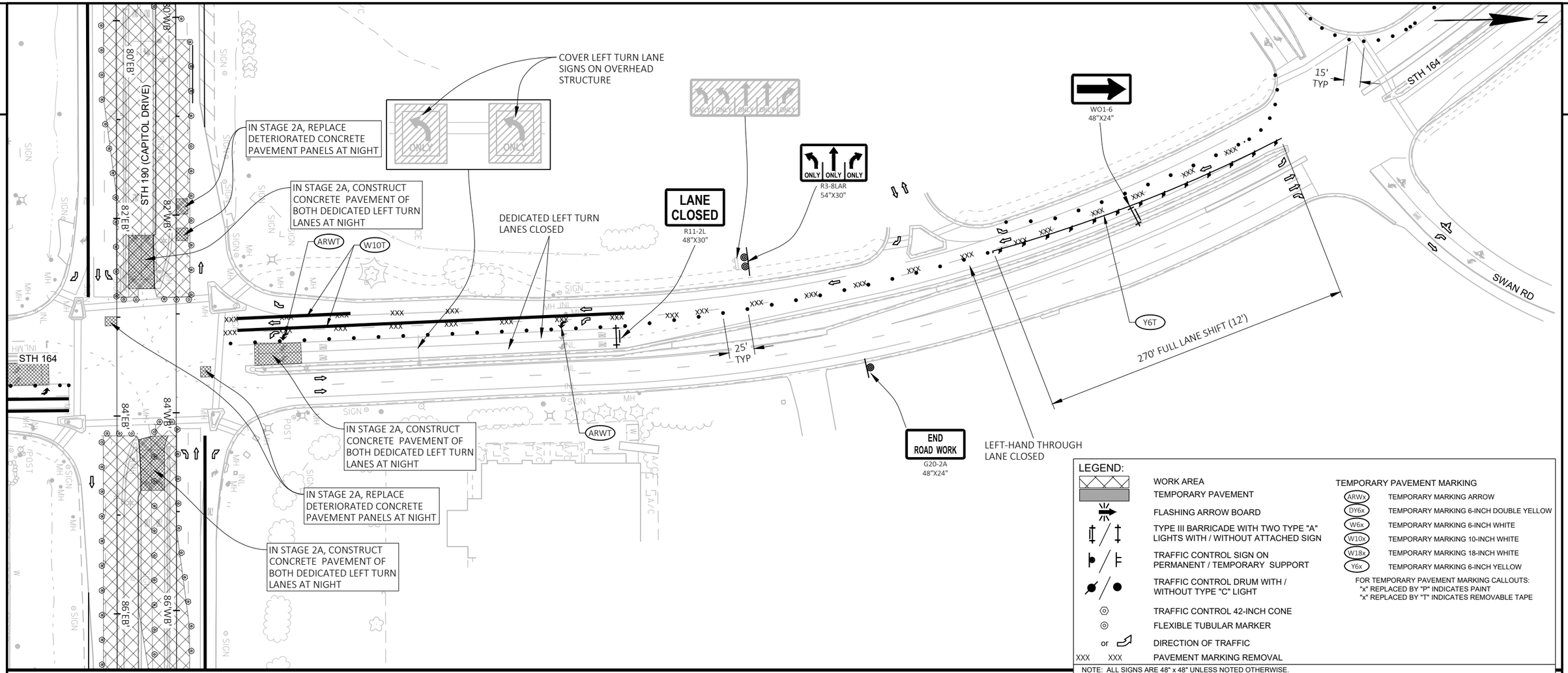
- STH 164: SINGLE LEFT TURN LANE FROM INSIDE THROUGH LANE. LEFT TURN LANES CLOSED. SINGLE THROUGH LANE FROM OUTSIDE THROUGH LANE. RIGHT TURNS MAINTAINED AT EXISTING LOCATIONS. MAINTAIN ALL PEDESTRIAN TRAFFIC. SINGLE NIGHT CLOSURE OF LEFT TURNS AND STH 164 SB THROUGH MOVEMENT FOR CONCRETE PANEL REPLACEMENT.
- STH 190: SINGLE LEFT TURN LANE FROM INSIDE THROUGH LANE. LEFT TURN LANES CLOSED. SINGLE THROUGH LANE FROM OUTSIDE THROUGH LANE. RIGHT TURNS MAINTAINED AT EXISTING LOCATIONS. MAINTAIN ALL PEDESTRIAN TRAFFIC. SINGLE NIGHT CLOSURE OF LEFT TURNS FOR CONCRETE PANEL REPLACEMENT.

CONSTRUCTION:

- INSTALL LOOPS AND CONSTRUCT CONCRETE PAVEMENT AT DUAL DEDICATED LEFT TURN LANES ON ALL LEGS AT THE STH 190/STH 164 INTERSECTION.
- REPLACE CONCRETE PANELS IN STH 190/STH 164 INTERSECTION.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 2A - CONCRETE AT STH 164	SHEET 265	E

2



LEGEND:

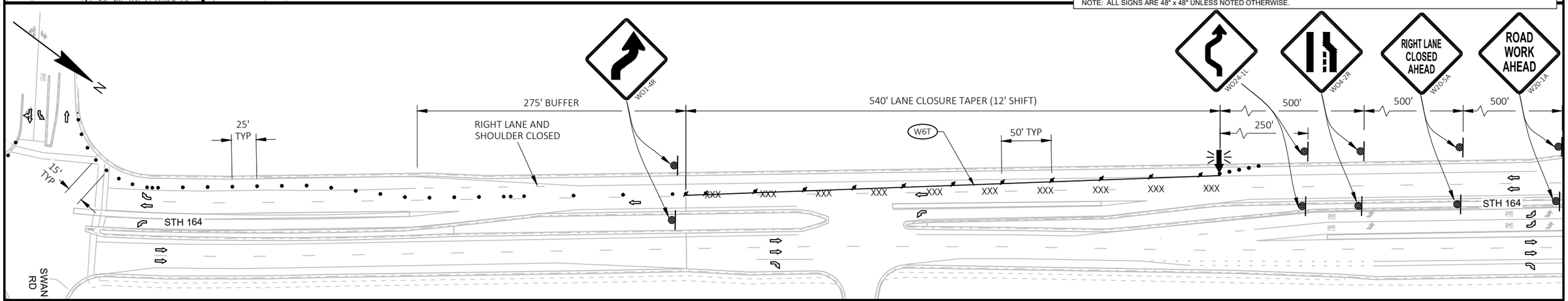
- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

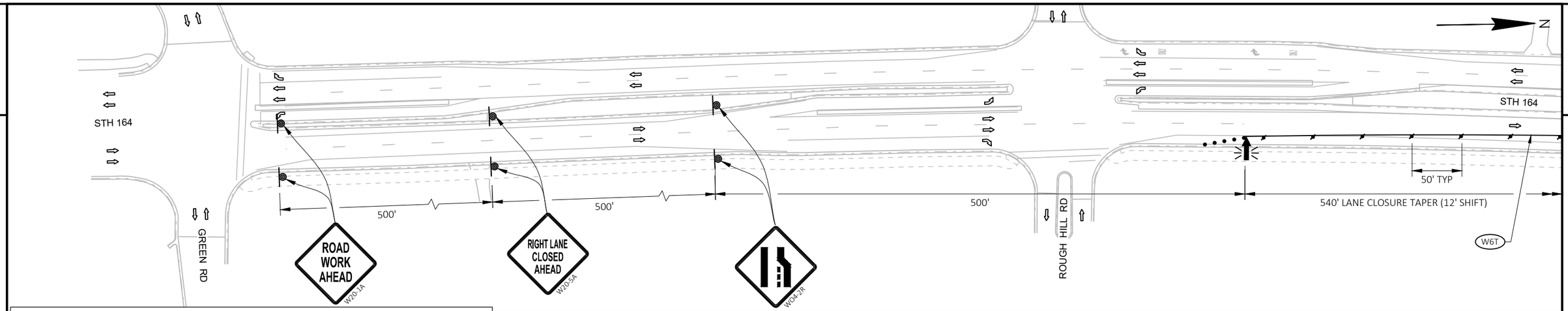
NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 2A - CONCRETE AT STH 164	SHEET 266	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026202-S2A (AT 164).DWG
LAYOUT NAME - 2A-164 N (100)

PLOT DATE : 9/11/2023 9:57 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : ##########



2

LEGEND:

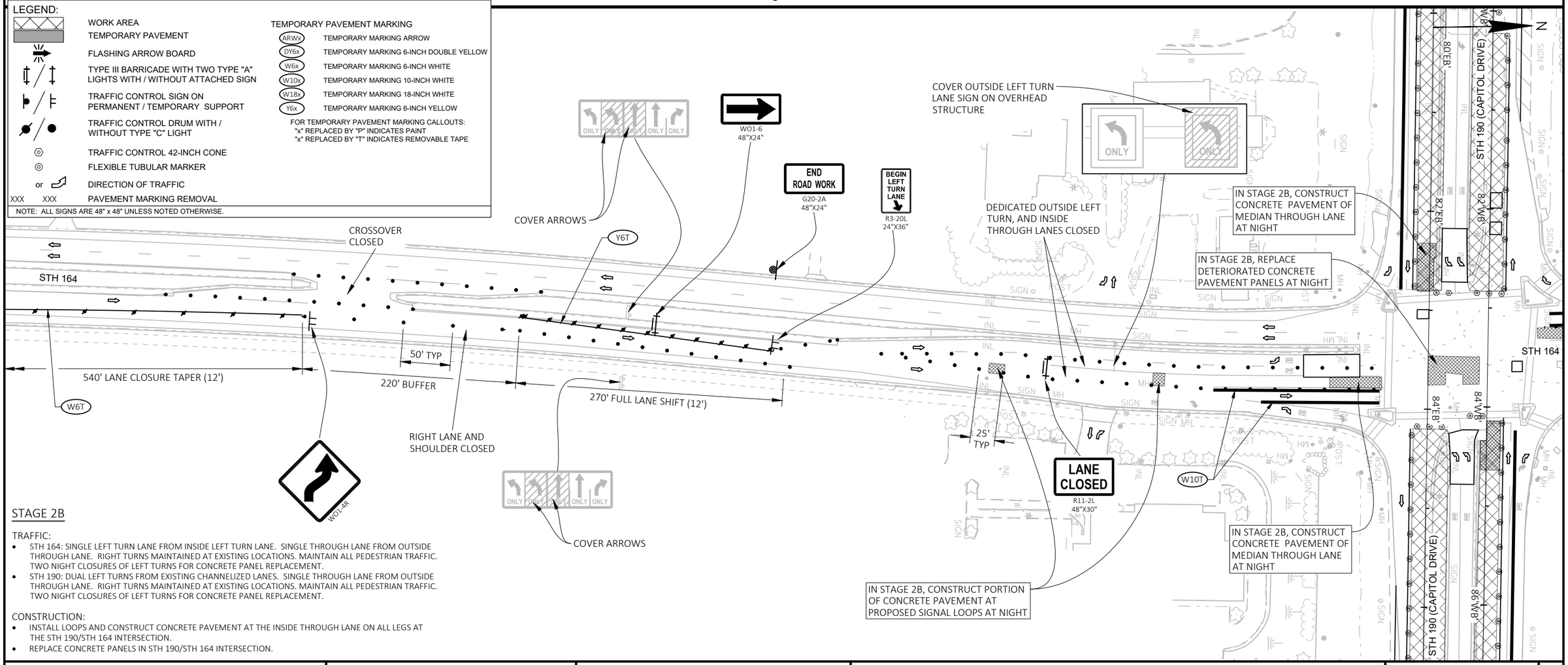
- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE



STAGE 2B

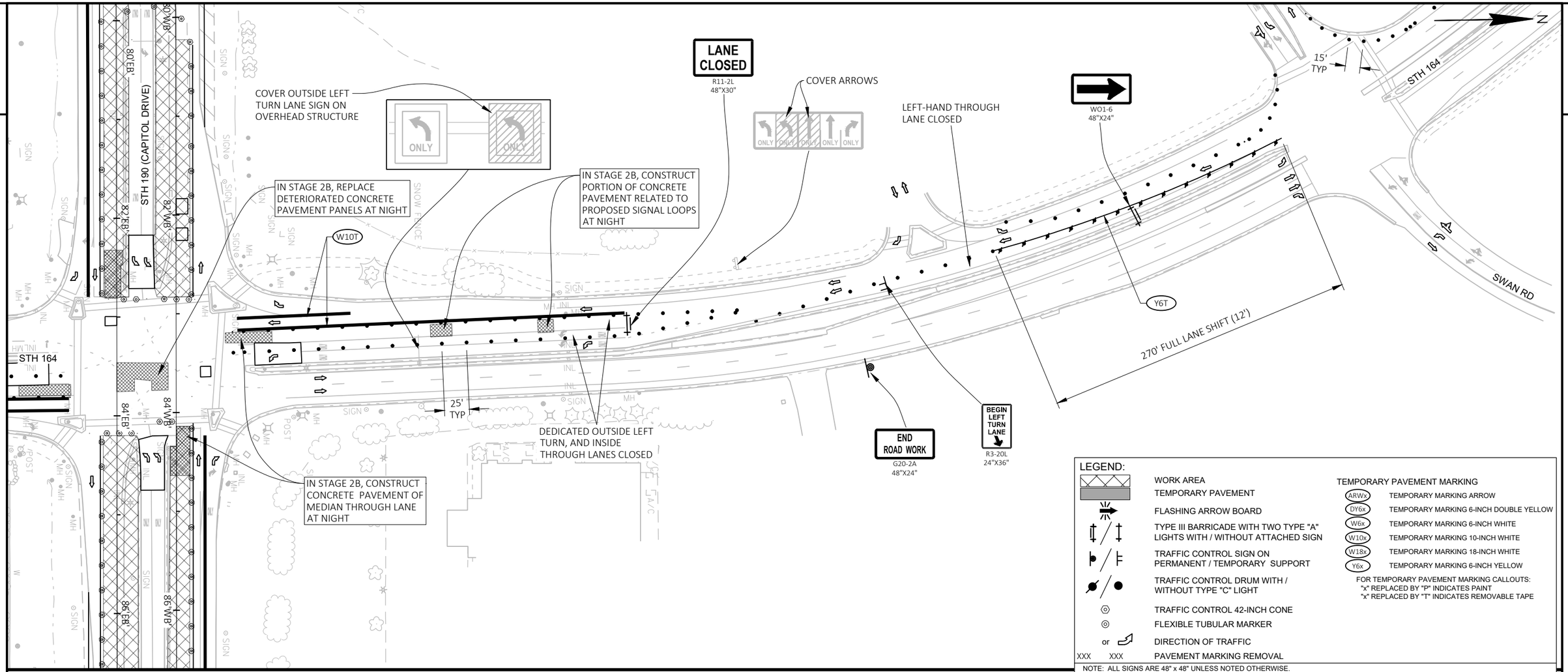
TRAFFIC:

- STH 164: SINGLE LEFT TURN LANE FROM INSIDE LEFT TURN LANE. SINGLE THROUGH LANE FROM OUTSIDE THROUGH LANE. RIGHT TURNS MAINTAINED AT EXISTING LOCATIONS. MAINTAIN ALL PEDESTRIAN TRAFFIC. TWO NIGHT CLOSURES OF LEFT TURNS FOR CONCRETE PANEL REPLACEMENT.
- STH 190: DUAL LEFT TURNS FROM EXISTING CHANNELIZED LANES. SINGLE THROUGH LANE FROM OUTSIDE THROUGH LANE. RIGHT TURNS MAINTAINED AT EXISTING LOCATIONS. MAINTAIN ALL PEDESTRIAN TRAFFIC. TWO NIGHT CLOSURES OF LEFT TURNS FOR CONCRETE PANEL REPLACEMENT.

CONSTRUCTION:

- INSTALL LOOPS AND CONSTRUCT CONCRETE PAVEMENT AT THE INSIDE THROUGH LANE ON ALL LEGS AT THE STH 190/STH 164 INTERSECTION.
- REPLACE CONCRETE PANELS IN STH 190/STH 164 INTERSECTION.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 2B - CONCRETE AT STH 164	SHEET 267	E



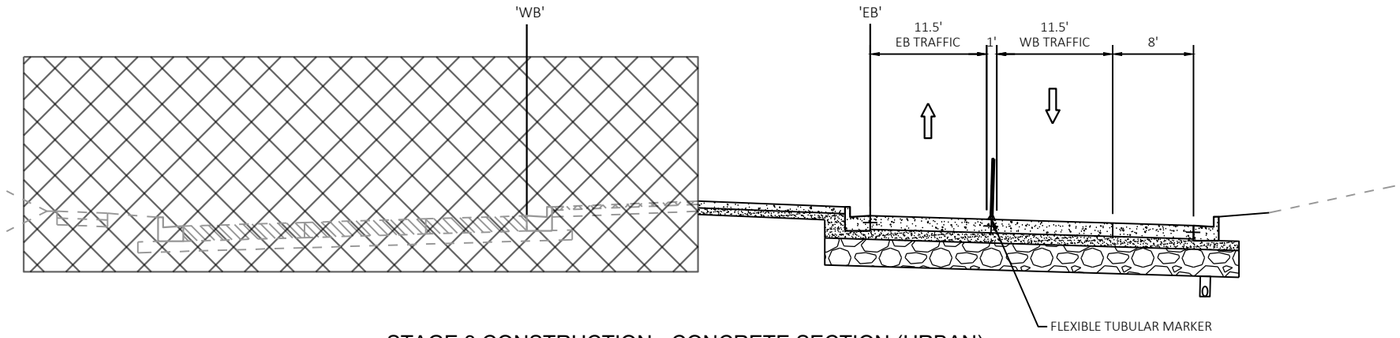
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 2B - CONCRETE AT STH 164	SHEET 268	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026203-S2B (AT 164).DWG
LAYOUT NAME - 2B-164 N (100)

PLOT DATE : 9/11/2023 9:59 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : ############

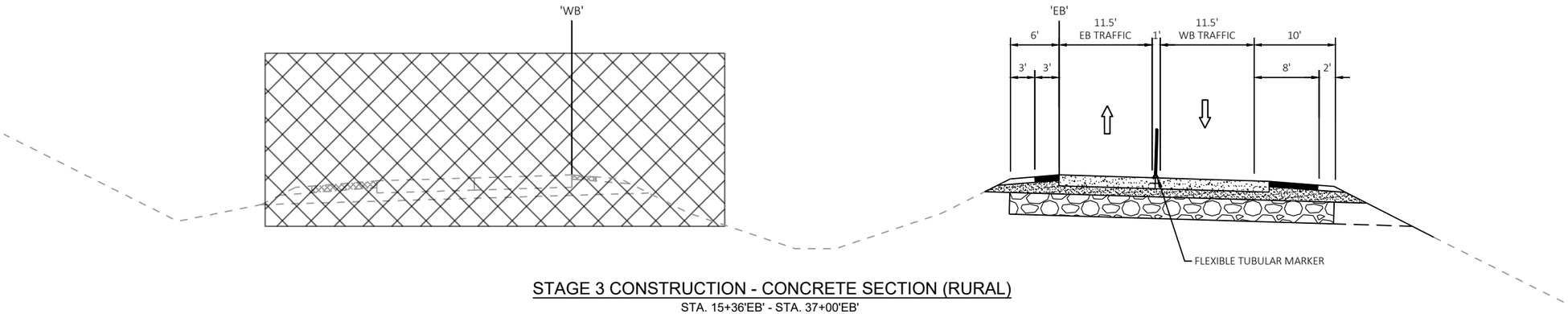
WISDOT/CADDS SHEET 42

2



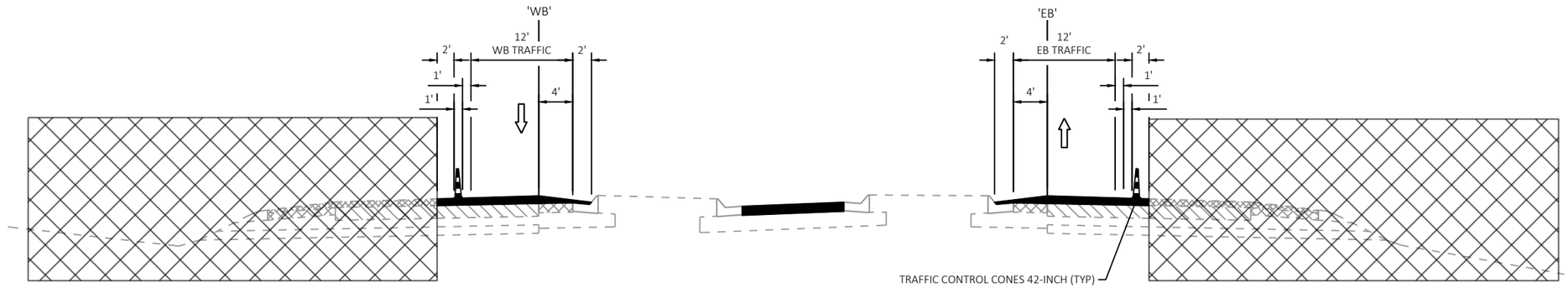
STAGE 3 CONSTRUCTION - CONCRETE SECTION (URBAN)

STA. 8+56'EB' - STA. 15+36'EB'
REPLACE PAVEMENT OF WESTBOUND LANES
BI-DIRECTIONAL TRAFFIC ON FINISHED EASTBOUND LANES



STAGE 3 CONSTRUCTION - CONCRETE SECTION (RURAL)

STA. 15+36'EB' - STA. 37+00'EB'
REPLACE PAVEMENT OF WESTBOUND LANES
BI-DIRECTIONAL TRAFFIC ON FINISHED EASTBOUND LANES



STAGE 3 CONSTRUCTION - ASPHALT SECTION

STA. 37+00'EB' - STA. 111+00'EB'
MILL AND OVERLAY OUTSIDE LANES
TRAFFIC ON FINISHED INSIDE LANES AND SHOULDERS

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 3 - TYPICAL SECTION	SHEET 269	E

2

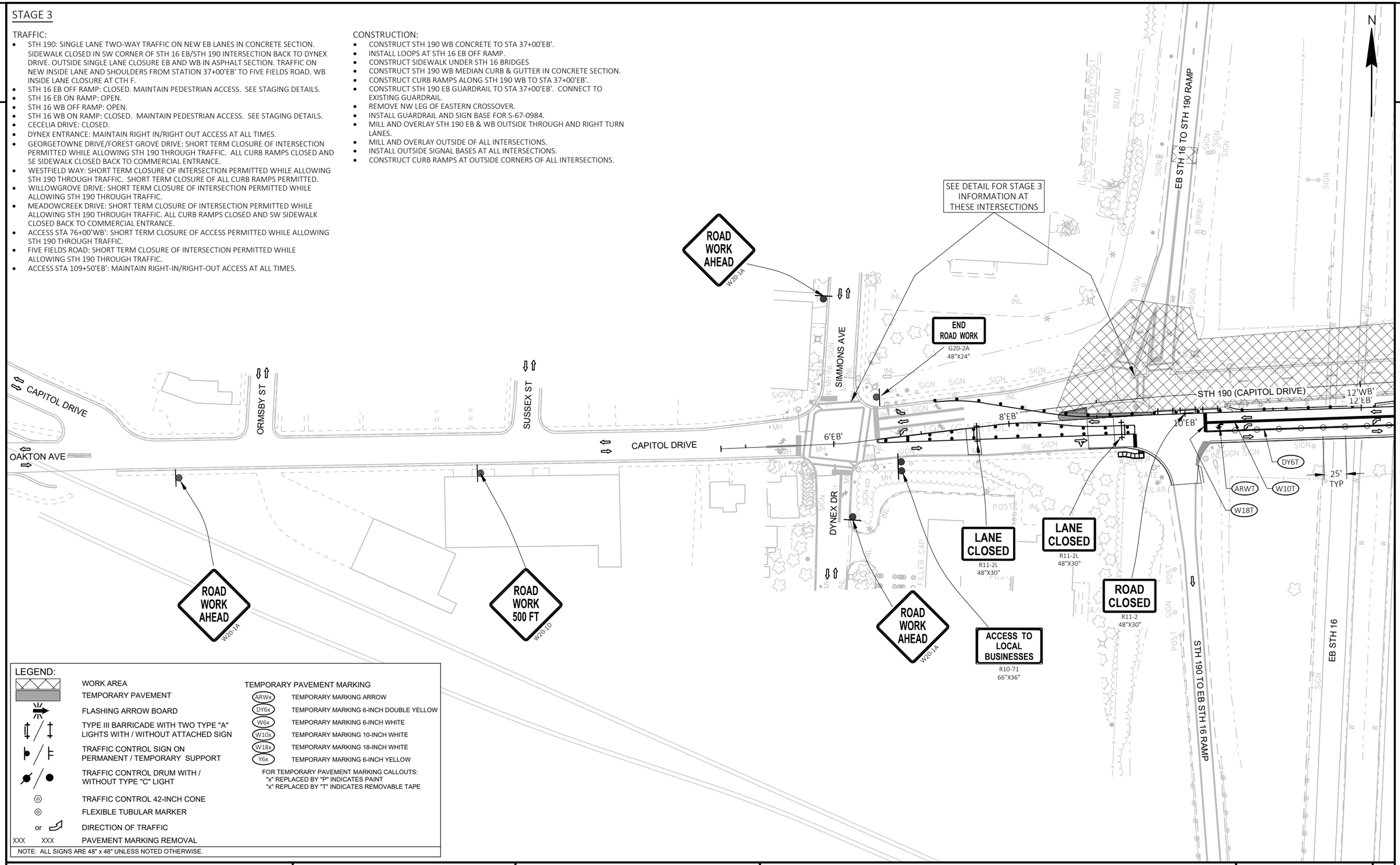
STAGE 3

TRAFFIC:

- STH 190: SINGLE LANE TWO-WAY TRAFFIC ON NEW EB LANES IN CONCRETE SECTION. SIDEWALK CLOSED IN SW CORNER OF STH 16 EB/STH 190 INTERSECTION BACK TO DYNEX DRIVE. OUTSIDE SINGLE LANE CLOSURE EB AND WB IN ASPHALT SECTION. TRAFFIC ON NEW INSIDE LANE AND SHOULDERS FROM STATION 37+00'EB' TO FIVE FIELDS ROAD. WB INSIDE LANE CLOSURE AT CTH F.
- STH 16 EB OFF RAMP: CLOSED. MAINTAIN PEDESTRIAN ACCESS. SEE STAGING DETAILS.
- STH 16 EB ON RAMP: OPEN.
- STH 16 WB OFF RAMP: OPEN.
- STH 16 WB ON RAMP: CLOSED. MAINTAIN PEDESTRIAN ACCESS. SEE STAGING DETAILS.
- CECELIA DRIVE: CLOSED.
- DYNEX ENTRANCE: MAINTAIN RIGHT IN/RIGHT OUT ACCESS AT ALL TIMES.
- GEORGETOWNE DRIVE/FOREST GROVE DRIVE: SHORT TERM CLOSURE OF INTERSECTION PERMITTED WHILE ALLOWING STH 190 THROUGH TRAFFIC. ALL CURB RAMPS CLOSED AND SE SIDEWALK CLOSED BACK TO COMMERCIAL ENTRANCE.
- WESTFIELD WAY: SHORT TERM CLOSURE OF INTERSECTION PERMITTED WHILE ALLOWING STH 190 THROUGH TRAFFIC. SHORT TERM CLOSURE OF ALL CURB RAMPS PERMITTED.
- WILLOWGROVE DRIVE: SHORT TERM CLOSURE OF INTERSECTION PERMITTED WHILE ALLOWING STH 190 THROUGH TRAFFIC.
- MEADOWCREEK DRIVE: SHORT TERM CLOSURE OF INTERSECTION PERMITTED WHILE ALLOWING STH 190 THROUGH TRAFFIC. ALL CURB RAMPS CLOSED AND SW SIDEWALK CLOSED BACK TO COMMERCIAL ENTRANCE.
- ACCESS STA 76+00'WB': SHORT TERM CLOSURE OF ACCESS PERMITTED WHILE ALLOWING STH 190 THROUGH TRAFFIC.
- FIVE FIELDS ROAD: SHORT TERM CLOSURE OF INTERSECTION PERMITTED WHILE ALLOWING STH 190 THROUGH TRAFFIC.
- ACCESS STA 109+50'EB': MAINTAIN RIGHT-IN/RIGHT-OUT ACCESS AT ALL TIMES.

CONSTRUCTION:

- CONSTRUCT STH 190 WB CONCRETE TO STA 37+00'EB'.
- INSTALL LOOPS AT STH 16 EB OFF RAMP.
- CONSTRUCT SIDEWALK UNDER STH 16 BRIDGES
- CONSTRUCT STH 190 WB MEDIAN CURB & GUTTER IN CONCRETE SECTION.
- CONSTRUCT CURB RAMPS ALONG STH 190 WB TO STA 37+00'EB'.
- CONSTRUCT STH 190 EB GUARDRAIL TO STA 37+00'EB'. CONNECT TO EXISTING GUARDRAIL.
- REMOVE NW LEG OF EASTERN CROSSOVER.
- INSTALL GUARDRAIL AND SIGN BASE FOR S-67-0984.
- MILL AND OVERLAY STH 190 EB & WB OUTSIDE THROUGH AND RIGHT TURN LANES.
- MILL AND OVERLAY OUTSIDE OF ALL INTERSECTIONS.
- INSTALL OUTSIDE SIGNAL BASES AT ALL INTERSECTIONS.
- CONSTRUCT CURB RAMPS AT OUTSIDE CORNERS OF ALL INTERSECTIONS.



LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

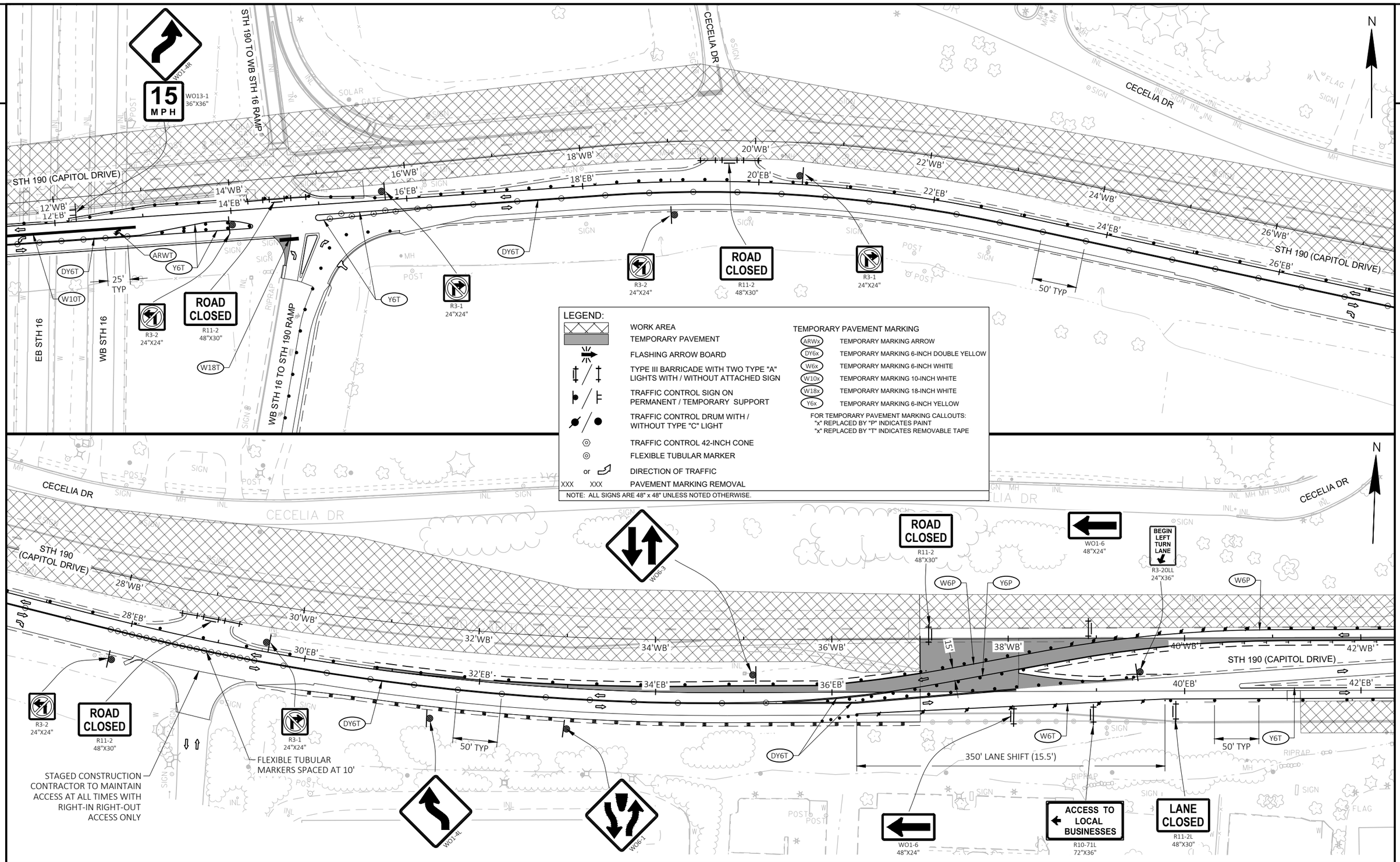
TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

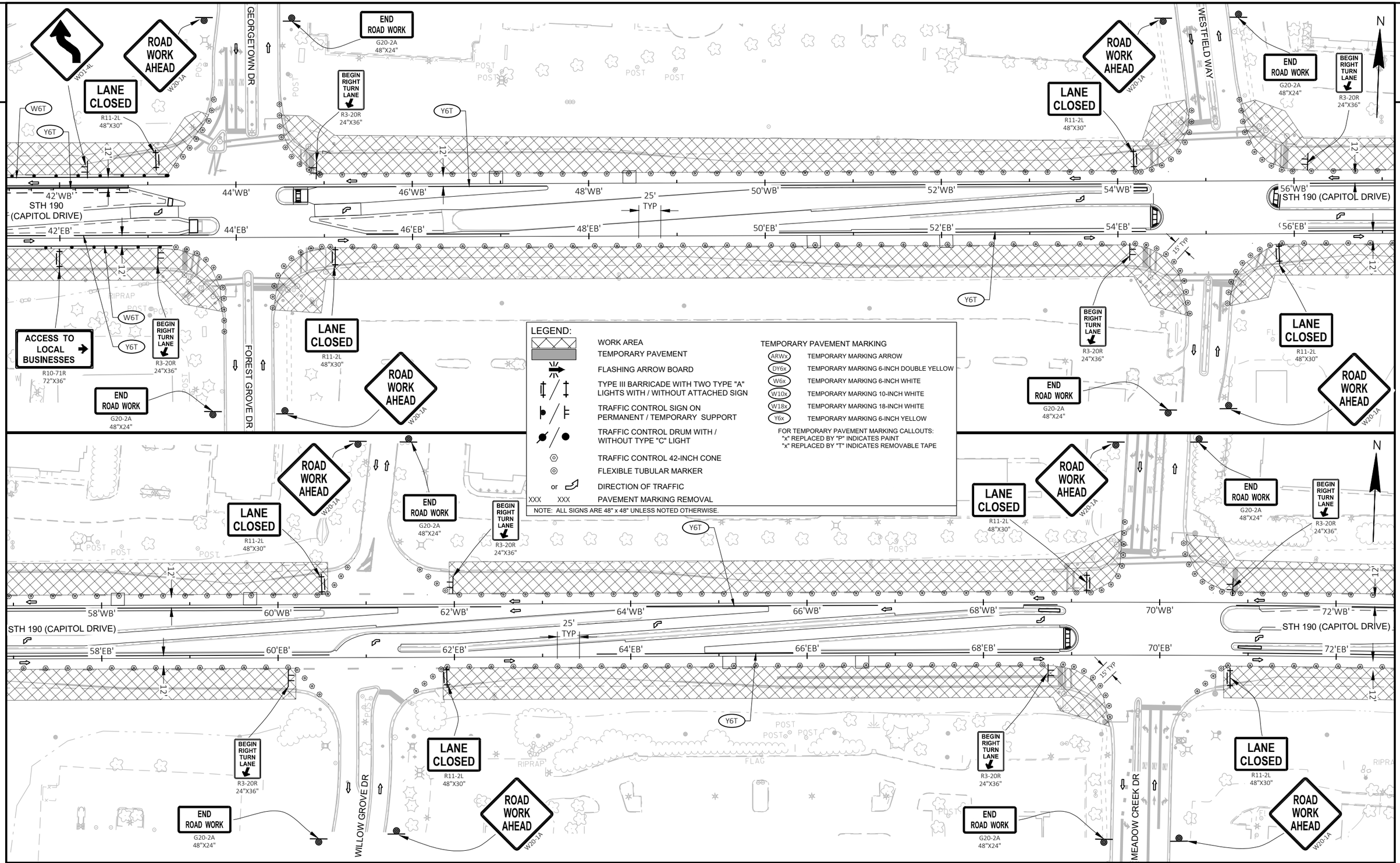
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 3	SHEET 270	E



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 3	SHEET 271	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026301-S3.DWG
LAYOUT NAME - 3-02 (100)

PLOT DATE : 9/11/2023 10:02 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 3	SHEET 272	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026301-S3.DWG
LAYOUT NAME - 3-03 (100)

PLOT DATE : 9/11/2023 10:02 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

ACCESS TO LOCAL BUSINESSES
R10-71R
72"X36"

LANE CLOSED
R11-2L
48"X30"

END ROAD WORK
G20-2A
48"X24"

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

ACCESS TO LOCAL BUSINESSES
R10-71L
72"X36"

LANE CLOSED
R11-2L
48"X30"

EXISTING THROUGH LANES CLOSED

ACCESS TO LOCAL BUSINESSES
R10-71
66"X36"

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

Y6T

12'

15' TYP

25' TYP

72'WB' 74'WB' 76'WB' 78'WB' 80'WB' 82'WB' 84'WB' 86'WB'

72'EB' 74'EB' 76'EB' 78'EB' 80'EB' 82'EB' 84'EB' 86'EB'

STH 190 (CAPITOL DRIVE)

STH 164

POST

RIPRAP

U/C

CANOPY

N

LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

ROAD WORK AHEAD
W20-1A

HIGHFIELD RD

FIVE FIELDS RD

88'WB' 90'WB' 92'WB' 94'WB' 96'WB' 98'WB' 100'WB' 102'WB'

88'EB' 90'EB' 92'EB' 94'EB' 96'EB' 98'EB' 100'EB' 102'EB'

A/C

W

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 3	SHEET 273 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026301-S3.DWG
LAYOUT NAME - 3-04 (100)
PLOT DATE : 9/11/2023 10:03 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

LANE CLOSED
R11-2L
48"X30"

500' BUFFER

450' LANE SHIFT (15')

50'

W6T

Y6T

102'WB' 104'WB' 106'WB' 108'WB' 110'WB' 112'WB' 114'WB' 116'WB'

STH 190 (CAPITOL DRIVE)

25' TYP

102'EB' 104'EB' 106'EB' 108'EB' 110'EB' 112'EB' 114'EB' 116'EB'

STH 190 (CAPITOL DRIVE)

15' TYP

150' (3' SHIFT)

END ROAD WORK
G20-2A
48"X24"

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

LANE CLOSED
R11-2L
48"X30"

LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

N

WO1-6
48"X24"

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48"X24"

WO1-6
48"X24"

WO1-4L

LANE CLOSED
R11-2L
48"X30"

450' LANE SHIFT (15')

50' TYP

W6T

25' TYP

15' TYP

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

STH 190 (CAPITOL DRIVE)

118'EB' 120'EB' 122'EB' 124'EB' 126'EB' 128'EB'

STH 190 (CAPITOL DRIVE)

Y6T

HUNTERS RIDGE RD

END ROAD WORK
G20-2A
48"X24"

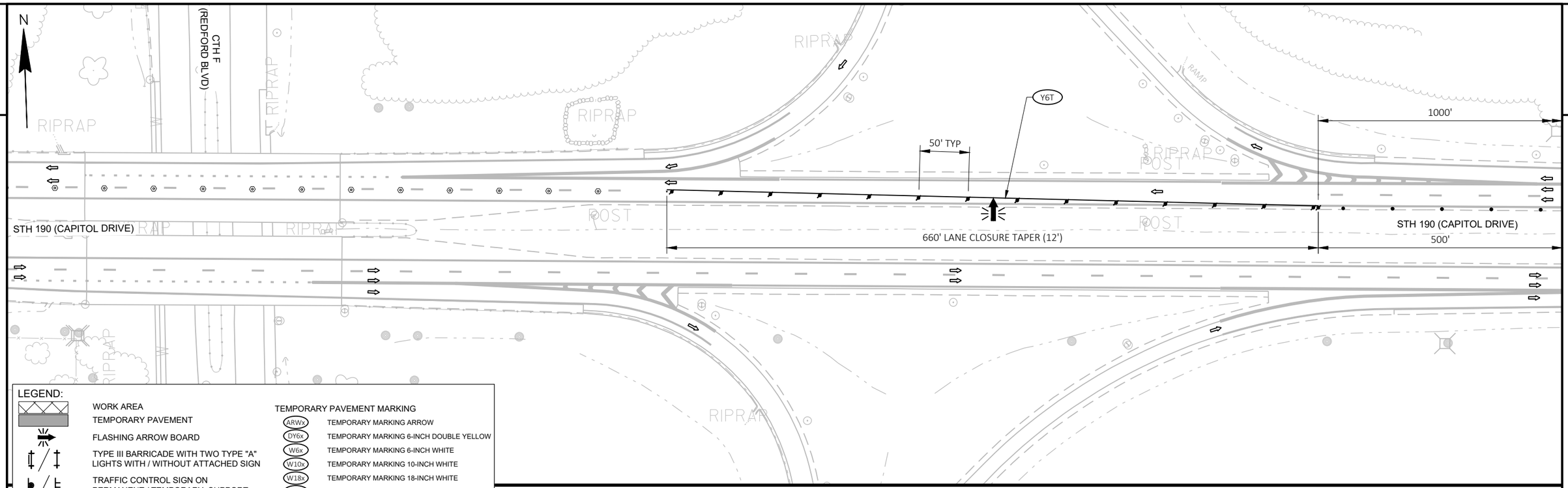
ROAD WORK AHEAD
W20-1A

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 3	SHEET 274	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026301-S3.DWG
LAYOUT NAME - 3-05 (100)

PLOT DATE : 9/11/2023 10:03 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



LEGEND:

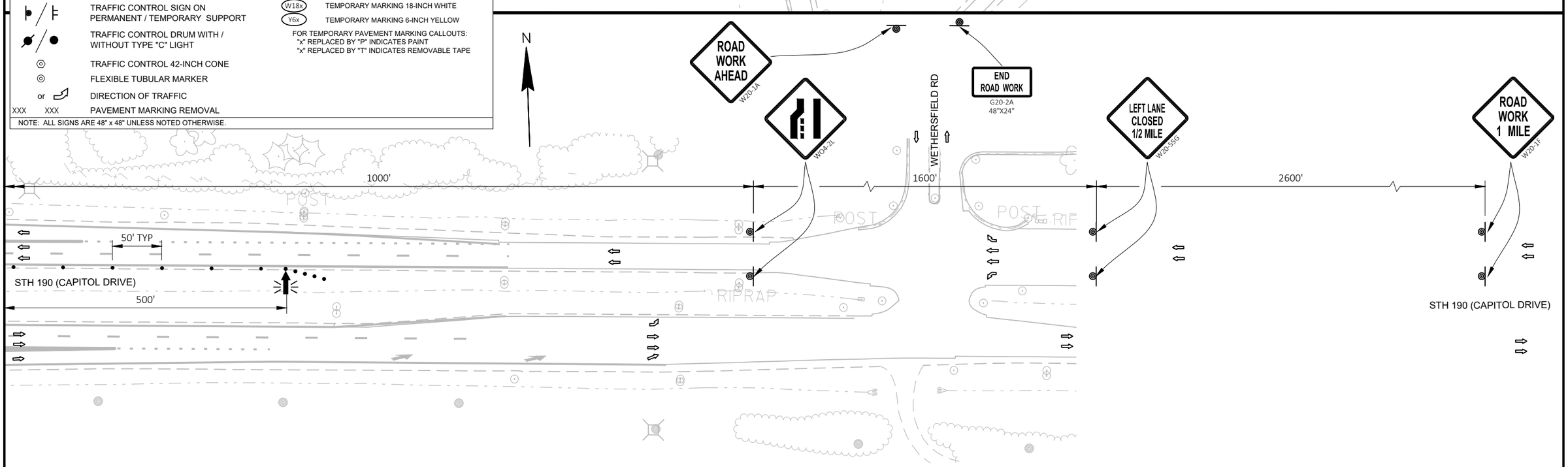
- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 3	SHEET 275	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026301-S3.DWG
LAYOUT NAME - 3-06 (100)
PLOT DATE : 9/11/2023 10:03 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

EB STH 16

STH 190 (CAPITOL DRIVE)

12'WB

RAMP CLOSED

EB STH 16 TO STH 190 RAMP

10'EB

8'EB

LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

N

OUTSIDE RIGHT TURN LANE CLOSED

LANE CLOSED
R11-2L
48"X30"

25' TYP

STH 190 (CAPITOL DRIVE)

16'WB

16'EB

14'WB

14'EB

12'WB

12'EB

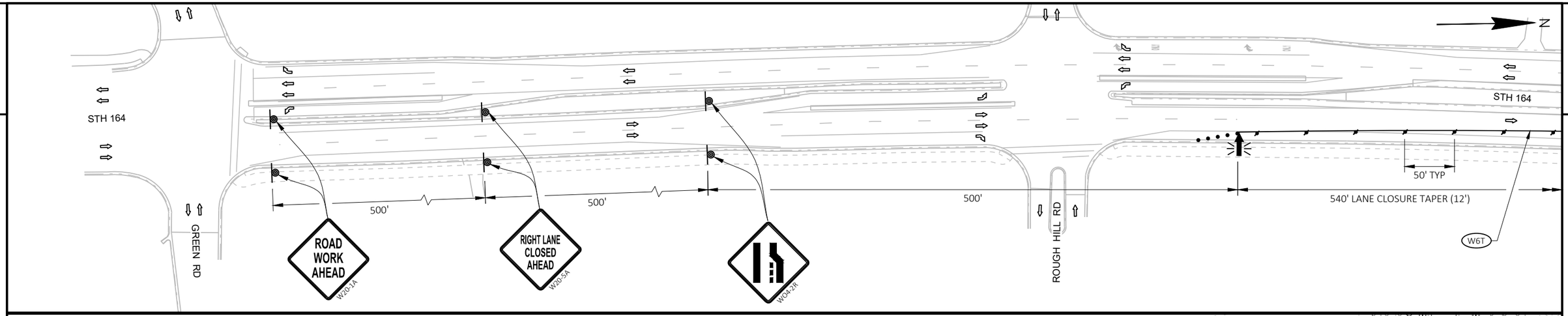
WB STH 16 TO STH 190 RAMP

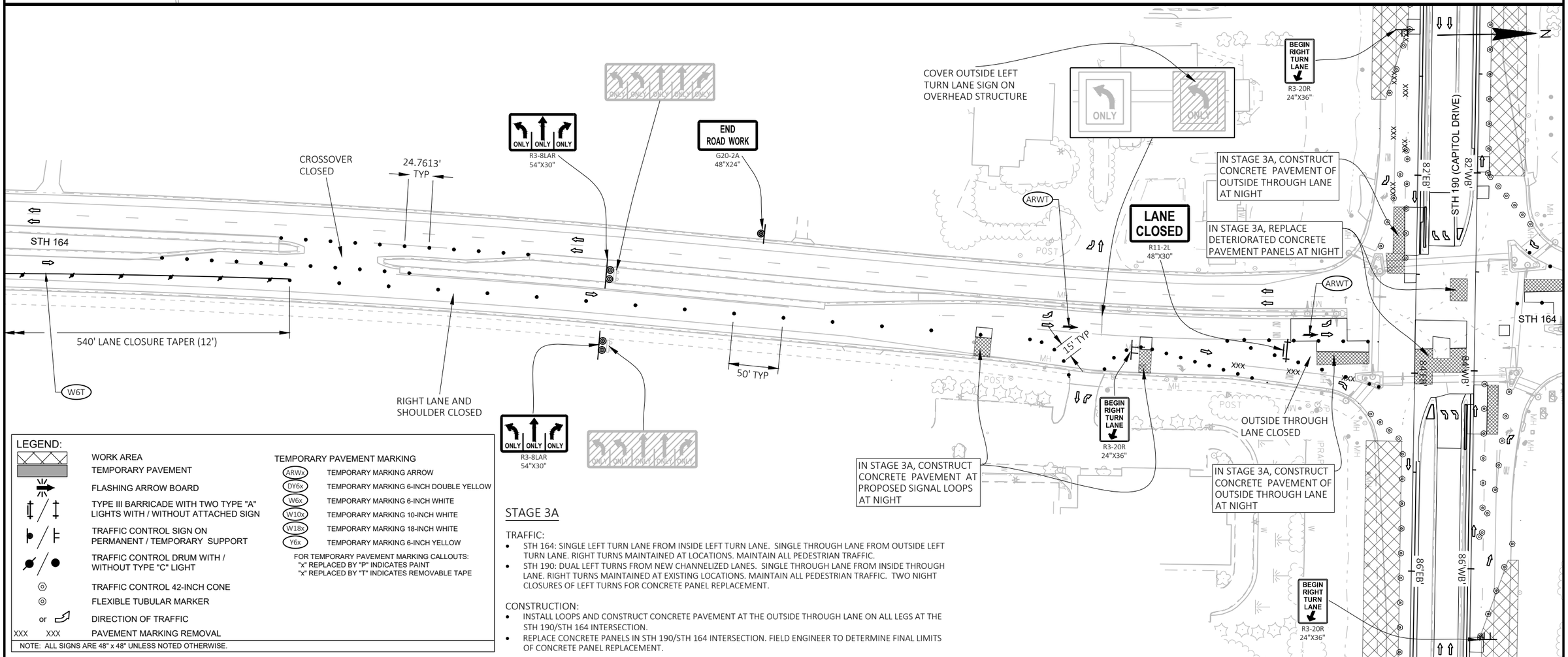
WB STH 16

EB STH 16

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 3	SHEET 276 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026301-S3.DWG
LAYOUT NAME - 3-OFF RAMPS (100)
PLOT DATE : 9/11/2023 10:03 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42





LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

STAGE 3A

TRAFFIC:

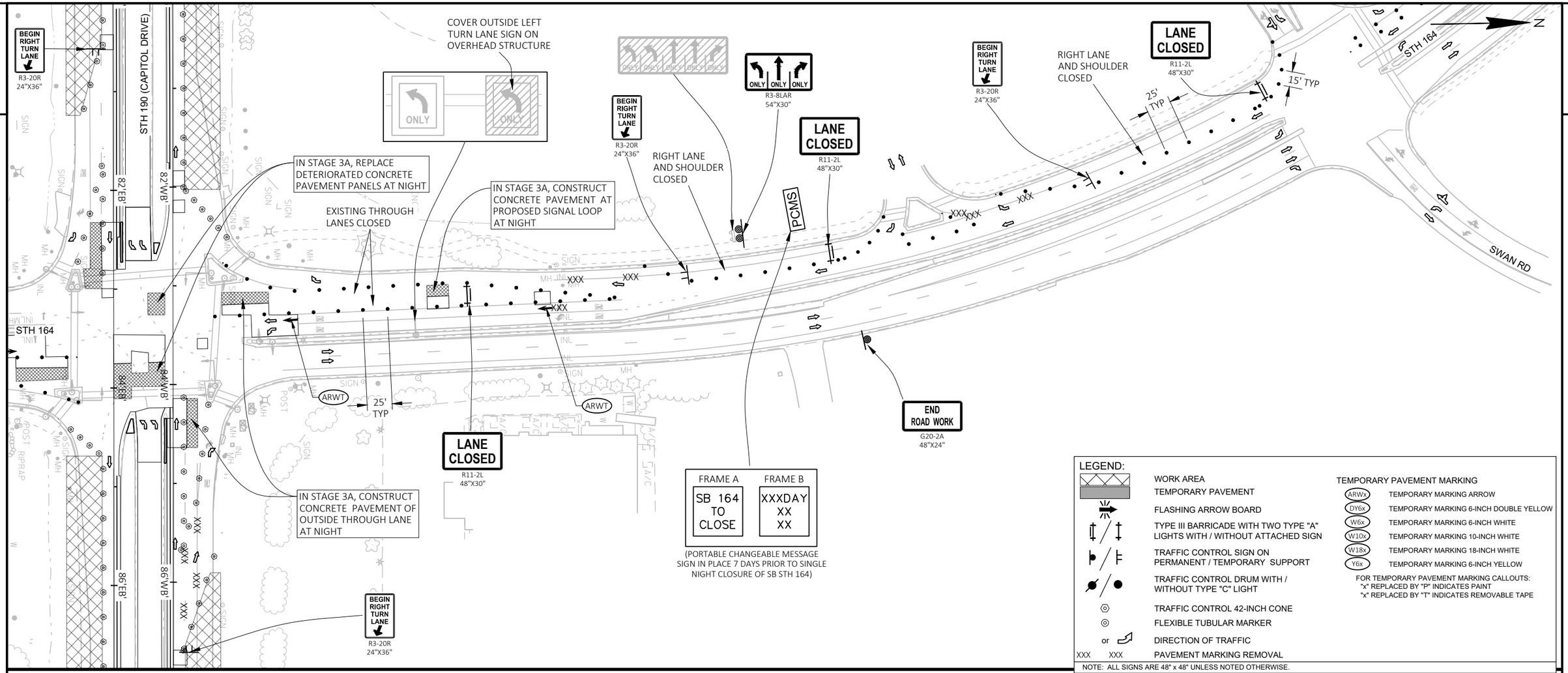
- STH 164: SINGLE LEFT TURN LANE FROM INSIDE LEFT TURN LANE. SINGLE THROUGH LANE FROM OUTSIDE LEFT TURN LANE. RIGHT TURNS MAINTAINED AT LOCATIONS. MAINTAIN ALL PEDESTRIAN TRAFFIC.
- STH 190: DUAL LEFT TURNS FROM NEW CHANNELIZED LANES. SINGLE THROUGH LANE FROM INSIDE THROUGH LANE. RIGHT TURNS MAINTAINED AT EXISTING LOCATIONS. MAINTAIN ALL PEDESTRIAN TRAFFIC. TWO NIGHT CLOSURES OF LEFT TURNS FOR CONCRETE PANEL REPLACEMENT.

CONSTRUCTION:

- INSTALL LOOPS AND CONSTRUCT CONCRETE PAVEMENT AT THE OUTSIDE THROUGH LANE ON ALL LEGS AT THE STH 190/STH 164 INTERSECTION.
- REPLACE CONCRETE PANELS IN STH 190/STH 164 INTERSECTION. FIELD ENGINEER TO DETERMINE FINAL LIMITS OF CONCRETE PANEL REPLACEMENT.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 3A - CONCRETE AT STH 164	SHEET 277	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026302-S3A (AT 164).DWG
LAYOUT NAME - 3A-164 S (100)
PLOT DATE : 9/11/2023 10:05 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



LEGEND:

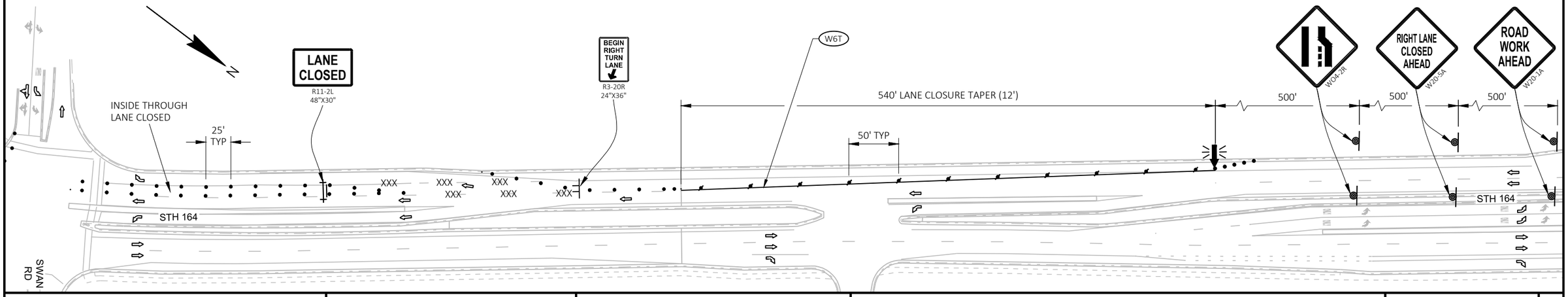
- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

- ARWx TEMPORARY MARKING ARROW
- DY6x TEMPORARY MARKING 6-INCH DOUBLE YELLOW
- W6x TEMPORARY MARKING 6-INCH WHITE
- W10x TEMPORARY MARKING 10-INCH WHITE
- W18x TEMPORARY MARKING 18-INCH WHITE
- Y6x TEMPORARY MARKING 6-INCH YELLOW

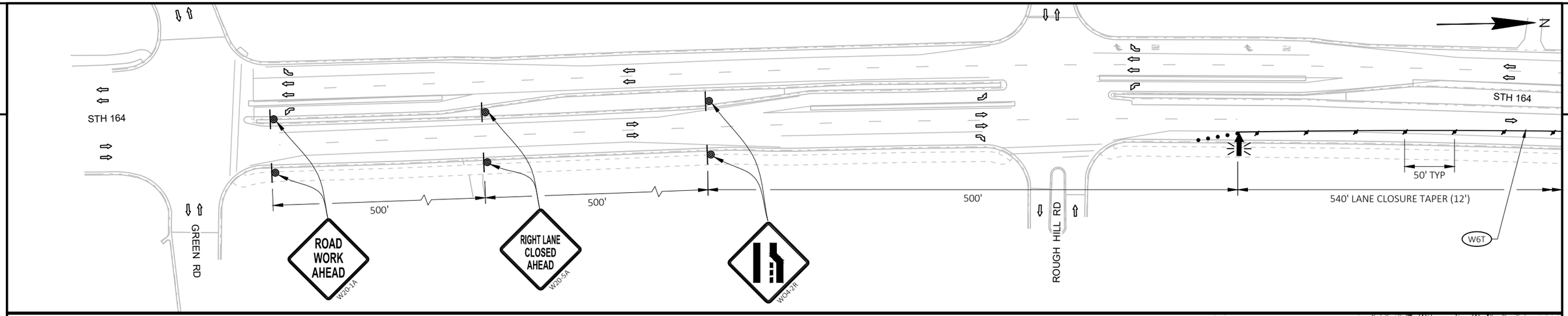
FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

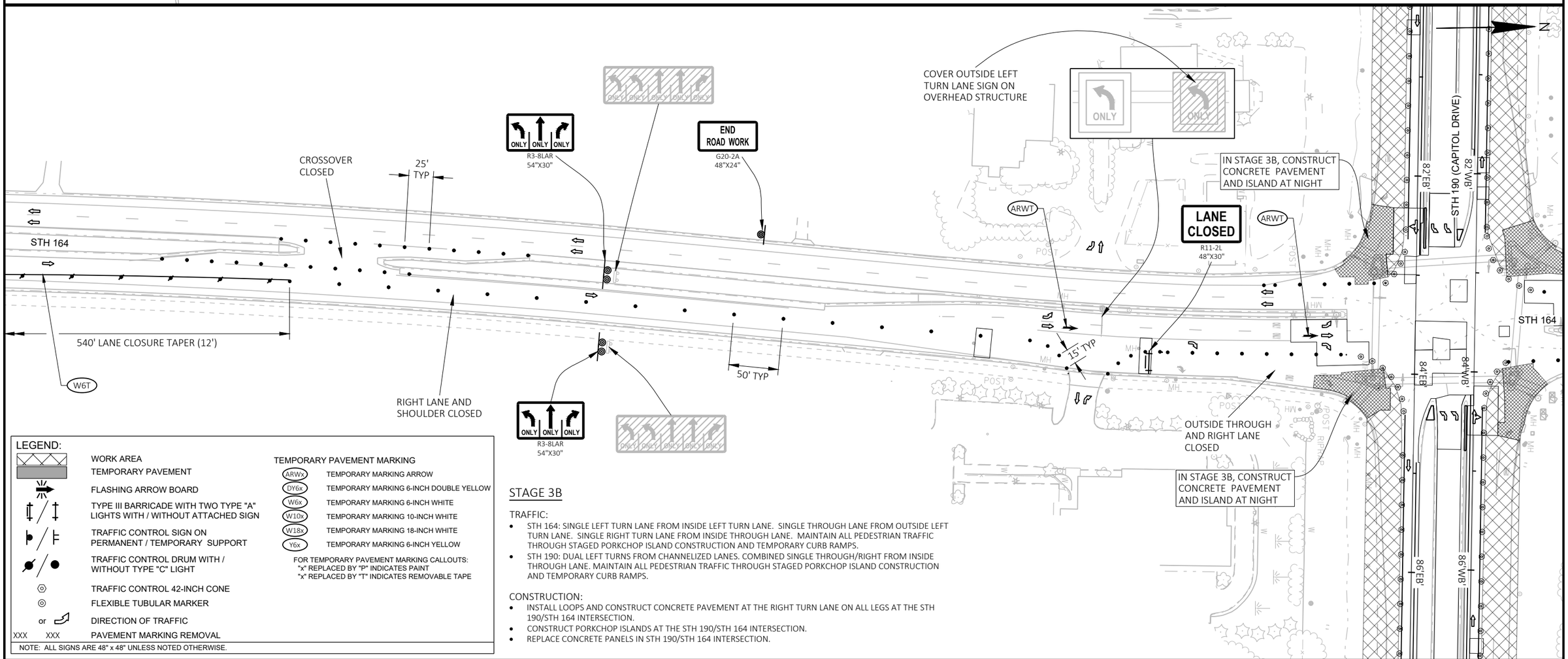
NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 3A - CONCRETE AT STH 164	SHEET 278	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026302-S3A (AT 164).DWG
LAYOUT NAME - 3A-164 N (100)
PLOT DATE : 9/11/2023 10:06 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42





LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

STAGE 3B

TRAFFIC:

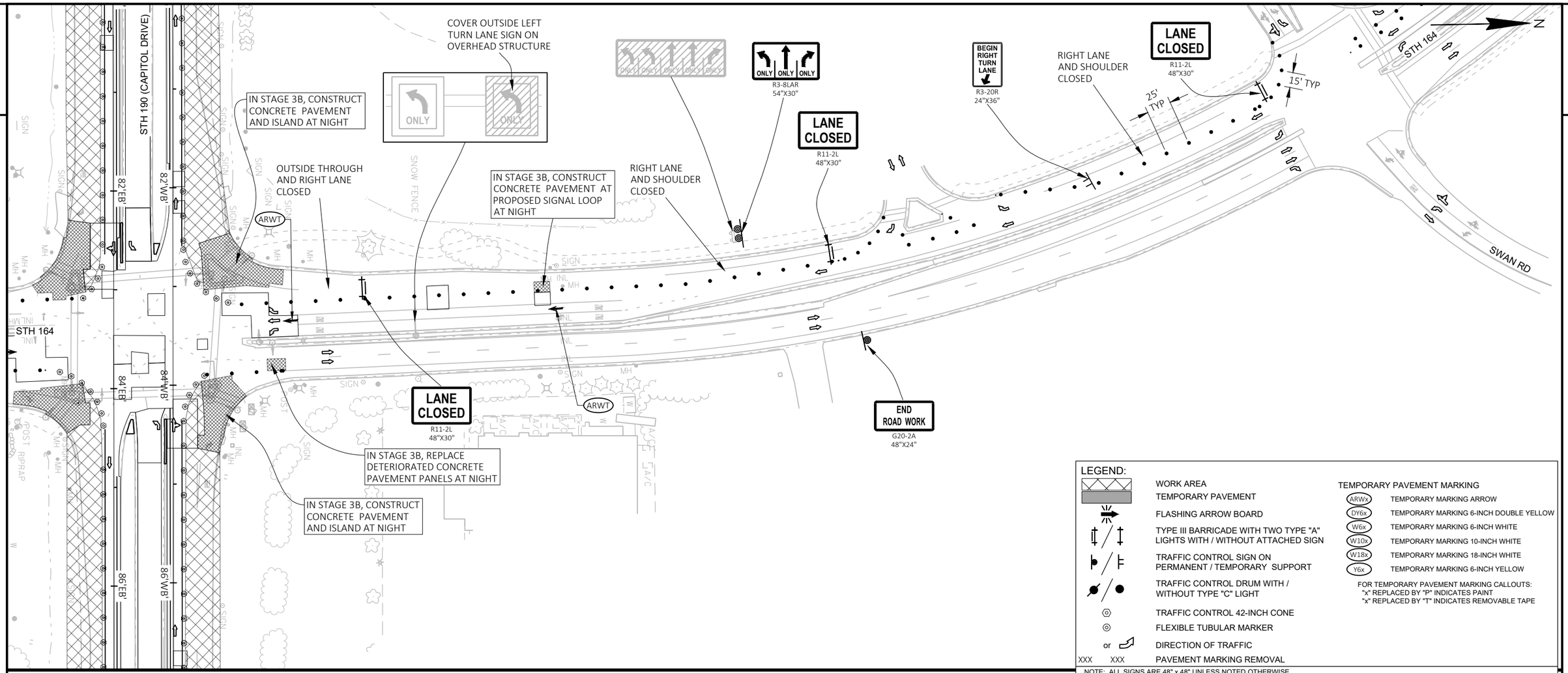
- STH 164: SINGLE LEFT TURN LANE FROM INSIDE LEFT TURN LANE. SINGLE THROUGH LANE FROM OUTSIDE LEFT TURN LANE. SINGLE RIGHT TURN LANE FROM INSIDE THROUGH LANE. MAINTAIN ALL PEDESTRIAN TRAFFIC THROUGH STAGED PORKCHOP ISLAND CONSTRUCTION AND TEMPORARY CURB RAMPS.
- STH 190: DUAL LEFT TURNS FROM CHANNELIZED LANES. COMBINED SINGLE THROUGH/RIGHT FROM INSIDE THROUGH LANE. MAINTAIN ALL PEDESTRIAN TRAFFIC THROUGH STAGED PORKCHOP ISLAND CONSTRUCTION AND TEMPORARY CURB RAMPS.

CONSTRUCTION:

- INSTALL LOOPS AND CONSTRUCT CONCRETE PAVEMENT AT THE RIGHT TURN LANE ON ALL LEGS AT THE STH 190/STH 164 INTERSECTION.
- CONSTRUCT PORKCHOP ISLANDS AT THE STH 190/STH 164 INTERSECTION.
- REPLACE CONCRETE PANELS IN STH 190/STH 164 INTERSECTION.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 3B - CONCRETE AT STH 164	SHEET 279	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026303-S3B (AT 164).DWG
LAYOUT NAME - 3B-164 S (100)
PLOT DATE : 9/11/2023 10:08 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



LEGEND:

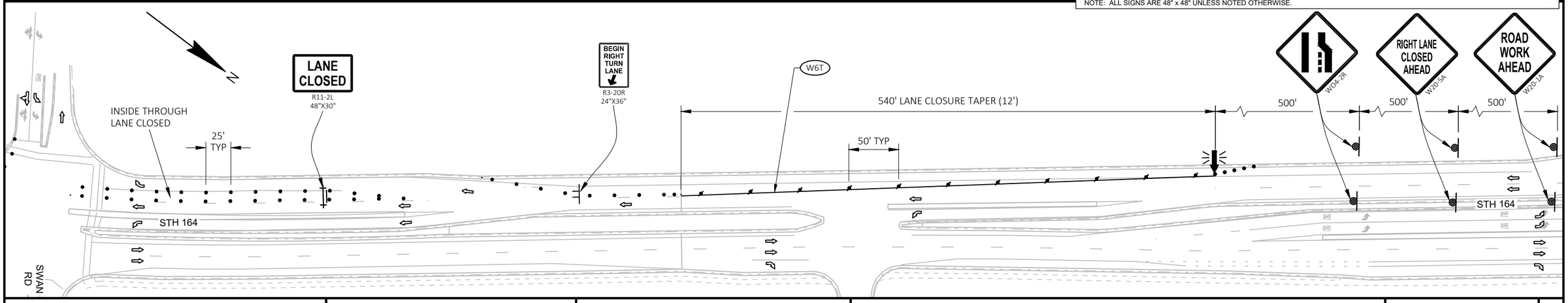
	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

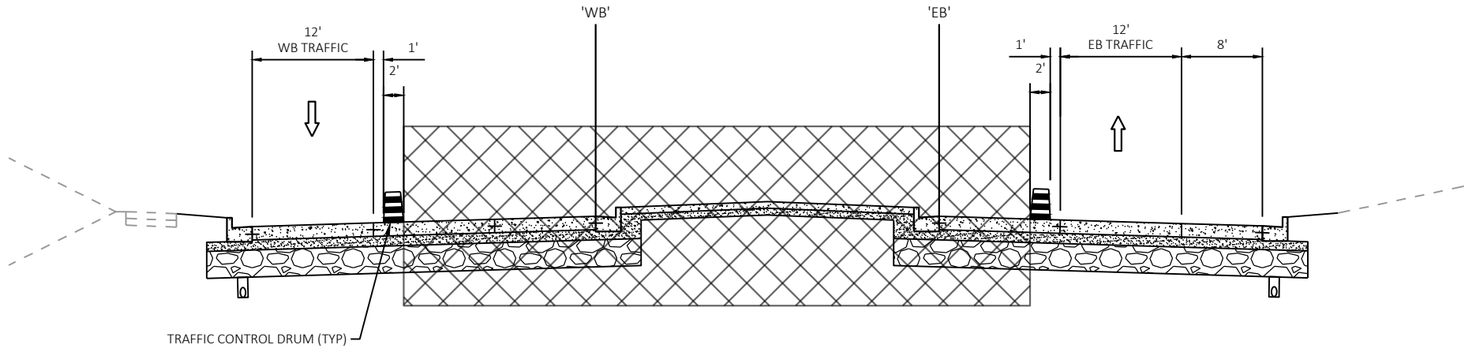
FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.



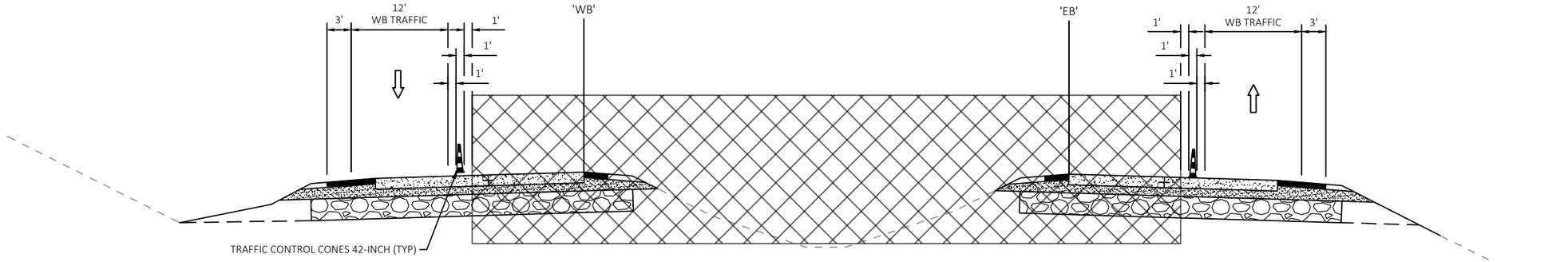
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 3B - CONCRETE AT STH 164	SHEET 280 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026303-S3B (AT 164).DWG
LAYOUT NAME - 3B-164 N (100)
PLOT DATE : 9/11/2023 10:08 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42



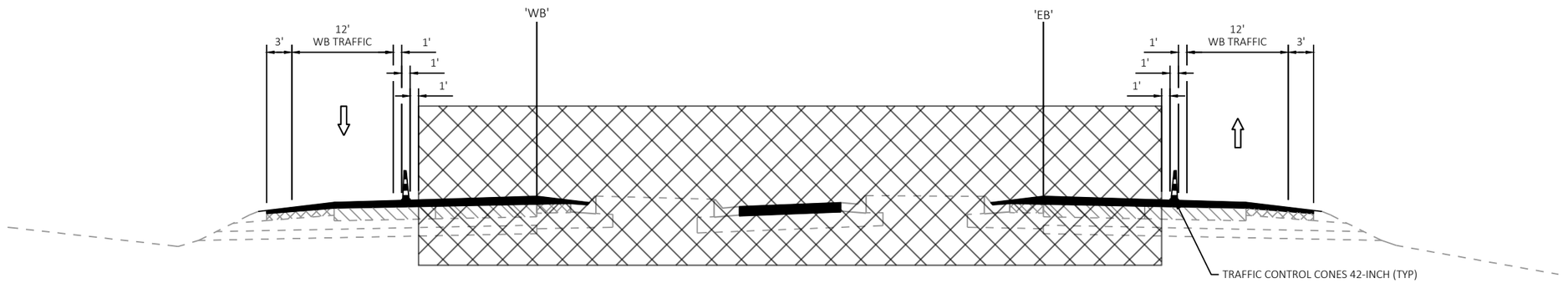
STAGE 4A CONSTRUCTION - CONCRETE SECTION (URBAN)

STA. 8+56'EB' - STA. 15+36'EB'
FINISH MEDIAN CONSTRUCTION
TRAFFIC ON FINISHED OUTSIDE LANES AND SHOULDERS



STAGE 4A CONSTRUCTION - CONCRETE SECTION (URBAN)

STA. 15+36'EB' - STA. 37+00'EB'
REMOVE CROSSOVER AND FINISH MEDIAN CONSTRUCTION
TRAFFIC ON FINISHED OUTSIDE LANES AND SHOULDERS



STAGE 4A CONSTRUCTION - ASPHALT SECTION

STA. 37+00'EB' - STA 111+00'EB'
REMOVE CROSSOVER AND FINISH MILLING AND OVERLAYING INSIDE LANES
TRAFFIC ON FINISHED OUTSIDE LANES AND SHOULDERS

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4A - TYPICAL SECTIONS	SHEET 281	E

2

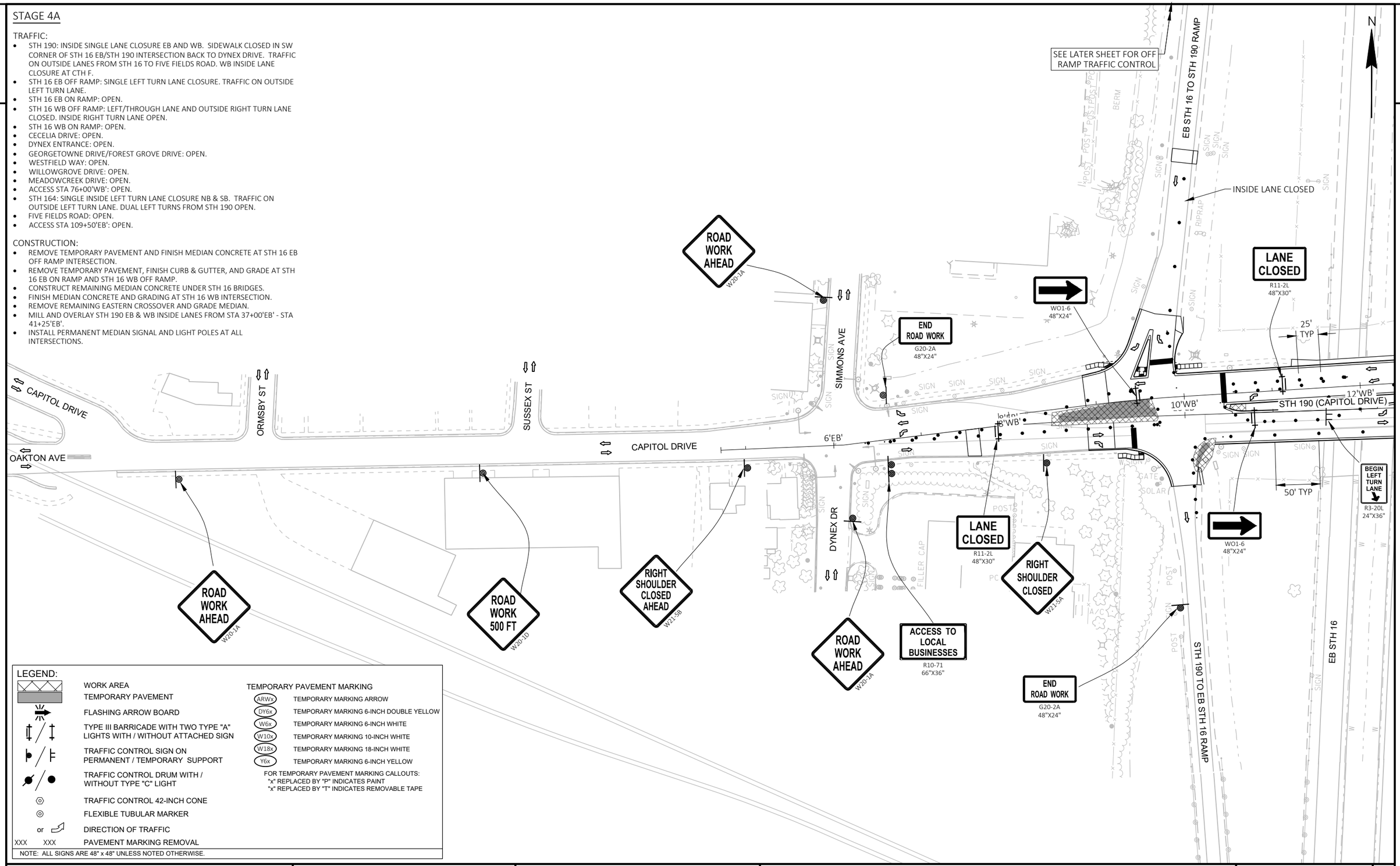
STAGE 4A

TRAFFIC:

- STH 190: INSIDE SINGLE LANE CLOSURE EB AND WB. SIDEWALK CLOSED IN SW CORNER OF STH 16 EB/STH 190 INTERSECTION BACK TO DYNEX DRIVE. TRAFFIC ON OUTSIDE LANES FROM STH 16 TO FIVE FIELDS ROAD. WB INSIDE LANE CLOSURE AT CTH F.
- STH 16 EB OFF RAMP: SINGLE LEFT TURN LANE CLOSURE. TRAFFIC ON OUTSIDE LEFT TURN LANE.
- STH 16 EB ON RAMP: OPEN.
- STH 16 WB OFF RAMP: LEFT/THROUGH LANE AND OUTSIDE RIGHT TURN LANE CLOSED. INSIDE RIGHT TURN LANE OPEN.
- STH 16 WB ON RAMP: OPEN.
- CECELIA DRIVE: OPEN.
- DYNEX ENTRANCE: OPEN.
- GEORGETOWNE DRIVE/FOREST GROVE DRIVE: OPEN.
- WESTFIELD WAY: OPEN.
- WILLOWGROVE DRIVE: OPEN.
- MEADOWCREEK DRIVE: OPEN.
- ACCESS STA 76+00'WB': OPEN.
- STH 164: SINGLE INSIDE LEFT TURN LANE CLOSURE NB & SB. TRAFFIC ON OUTSIDE LEFT TURN LANE. DUAL LEFT TURNS FROM STH 190 OPEN.
- FIVE FIELDS ROAD: OPEN.
- ACCESS STA 109+50'EB': OPEN.

CONSTRUCTION:

- REMOVE TEMPORARY PAVEMENT AND FINISH MEDIAN CONCRETE AT STH 16 EB OFF RAMP INTERSECTION.
- REMOVE TEMPORARY PAVEMENT, FINISH CURB & GUTTER, AND GRADE AT STH 16 EB ON RAMP AND STH 16 WB OFF RAMP.
- CONSTRUCT REMAINING MEDIAN CONCRETE UNDER STH 16 BRIDGES.
- FINISH MEDIAN CONCRETE AND GRADING AT STH 16 WB INTERSECTION.
- REMOVE REMAINING EASTERN CROSSOVER AND GRADE MEDIAN.
- MILL AND OVERLAY STH 190 EB & WB INSIDE LANES FROM STA 37+00'EB' - STA 41+25'EB'.
- INSTALL PERMANENT MEDIAN SIGNAL AND LIGHT POLES AT ALL INTERSECTIONS.



LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

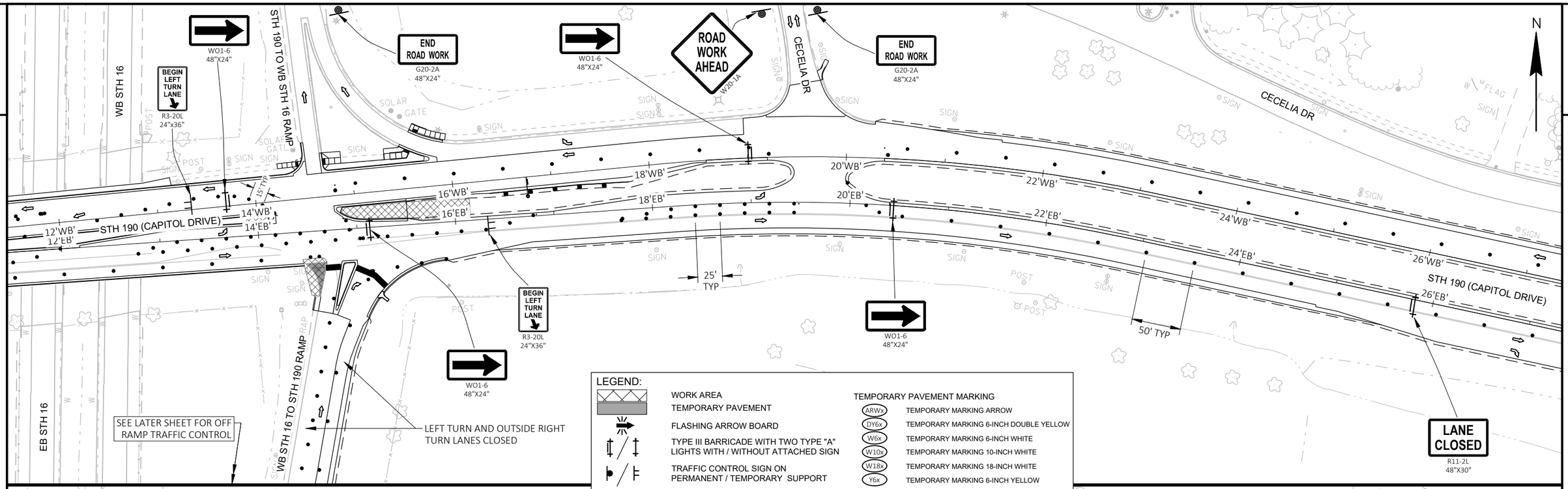
TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4A	SHEET 282	E



LEGEND:

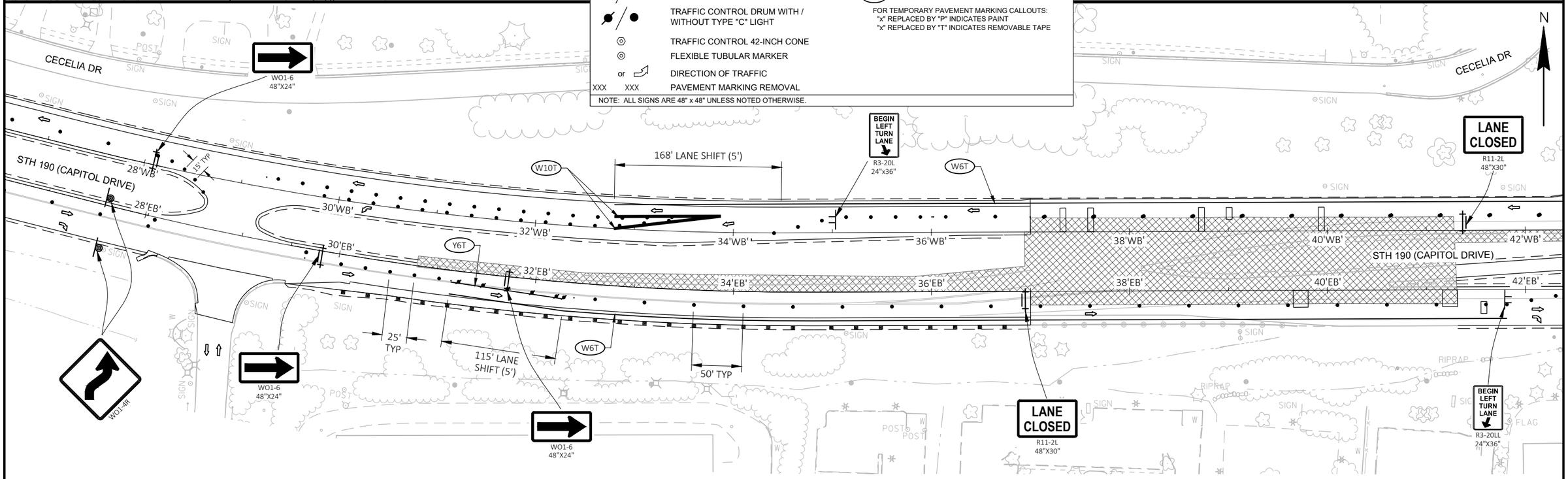
- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

- ARWx TEMPORARY MARKING ARROW
- DY6x TEMPORARY MARKING 6-INCH DOUBLE YELLOW
- W6x TEMPORARY MARKING 6-INCH WHITE
- W10x TEMPORARY MARKING 10-INCH WHITE
- W18x TEMPORARY MARKING 18-INCH WHITE
- Y6x TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

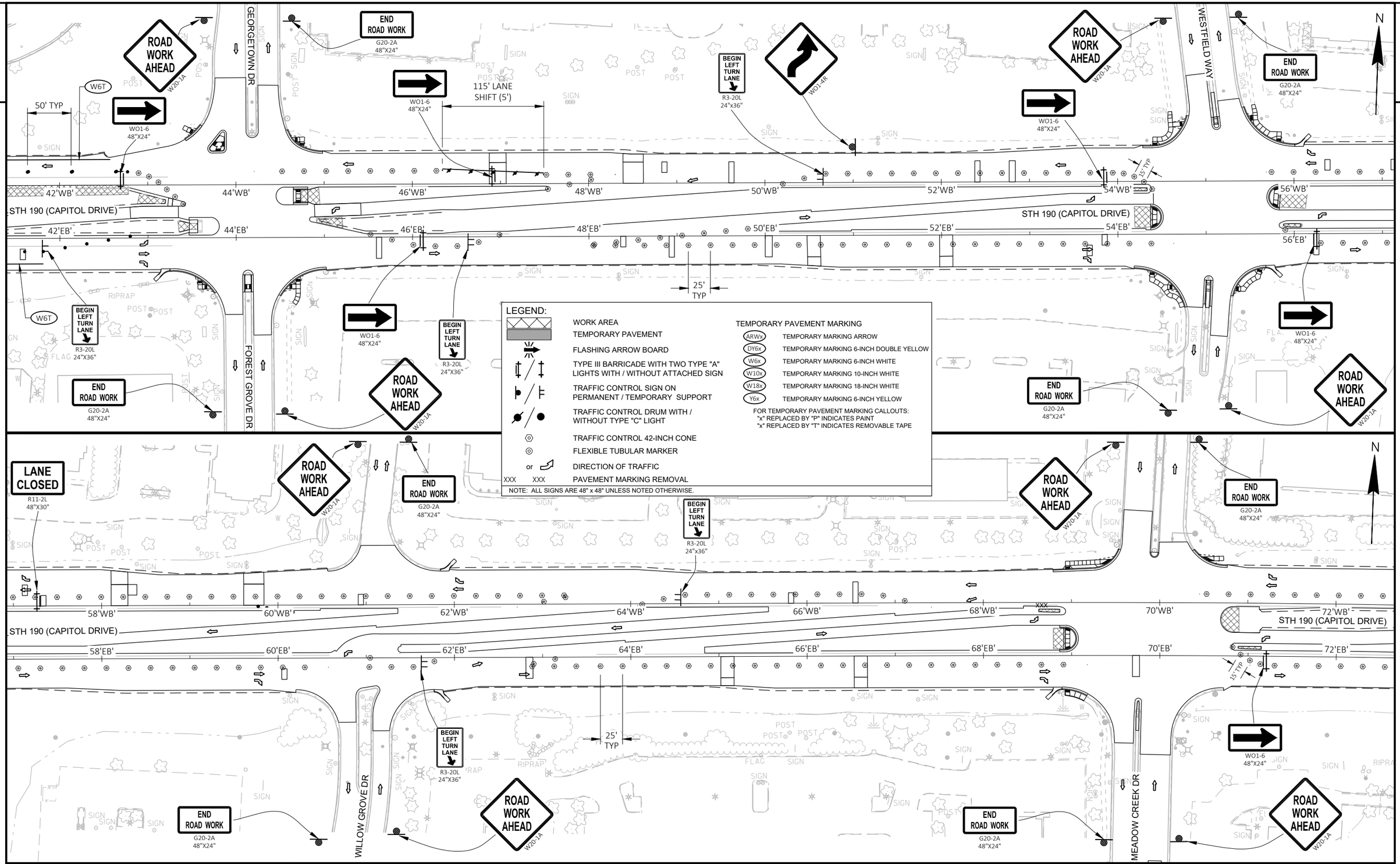
NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4A	SHEET 283	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026401-S4A.DWG
LAYOUT NAME - 4A-02 (100)

PLOT DATE : 9/11/2023 10:12 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4A	SHEET 284	E

2

LANE CLOSED
R11-2L
48"X30"

END ROAD WORK
G20-2A
48"X24"

25'
TYP

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

WO1-6
48"X24"

INSIDE LEFT TURN LANE CLOSED

STH 164

15' TYP

ACCESS TO LOCAL BUSINESSES
R10-71
66"X36"

72'WB' 74'WB' 76'WB' 78'WB' 80'WB' 82'WB' 84'WB' 86'WB'

STH 190 (CAPITOL DRIVE)

72'EB' 74'EB' 76'EB' 78'EB' 80'EB' 82'EB' 84'EB' 86'EB'

STH 190 (CAPITOL DRIVE)

LANE CLOSED
R11-2L
48"X30"

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

WO1-6
48"X24"

INSIDE LEFT TURN LANE CLOSED

STH 164

N

LEGEND:

- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

ROAD WORK AHEAD
W20-1A

HIGHFIELD RD

LANE CLOSED
R11-2L
48"X30"

END ROAD WORK
G20-2A
48"X24"

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

WO1-6
48"X24"

25'
TYP

88'WB' 90'WB' 92'WB' 94'WB' 96'WB' 98'WB' 100'WB' 102'WB'

STH 190 (CAPITOL DRIVE)

88'EB' 90'EB' 92'EB' 94'EB' 96'EB' 98'EB' 100'EB' 102'EB'

STH 190 (CAPITOL DRIVE)

15' TYP

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

LANE CLOSED
R11-2L
48"X30"

END ROAD WORK
G20-2A
48"X24"

FIVE FIELDS RD

WO1-6
48"X24"

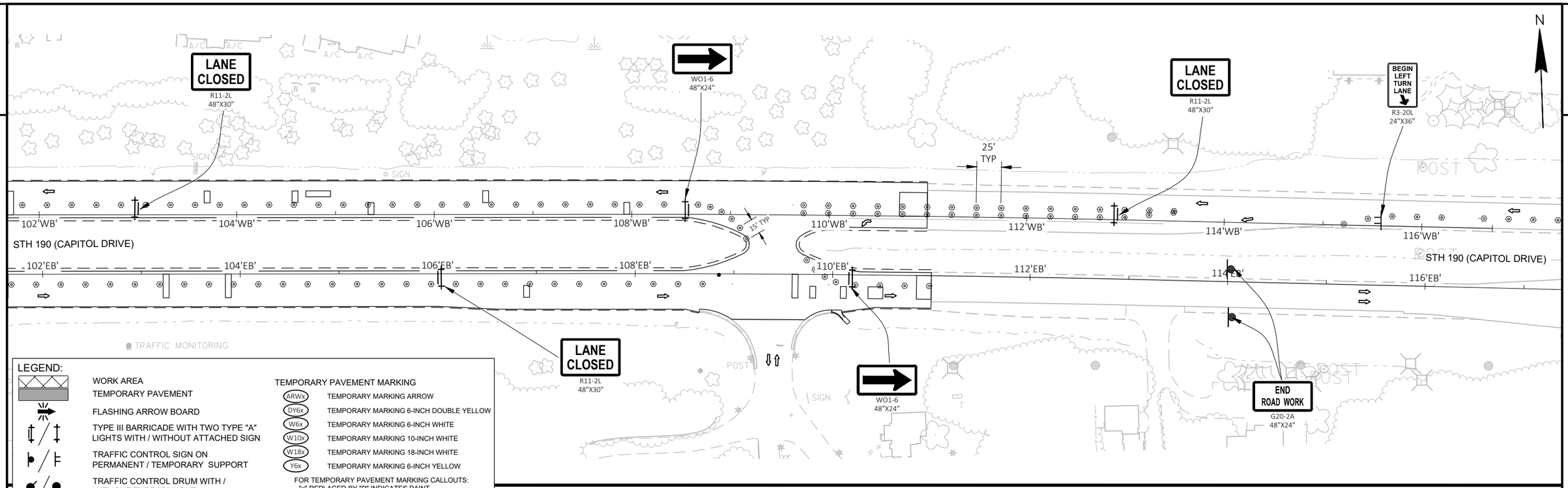
ROAD WORK AHEAD
W20-1A

N

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4A	SHEET 285	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026401-S4A.DWG
LAYOUT NAME - 4A-04 (100)

PLOT DATE : 9/11/2023 10:12 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT



LEGEND:

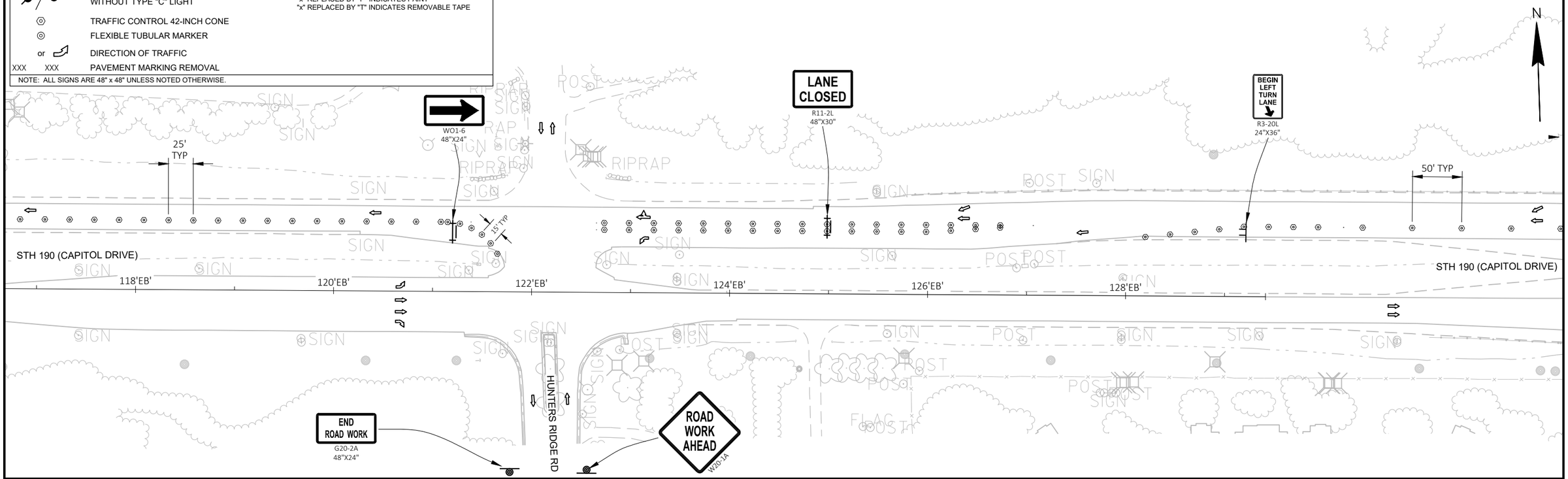
- WORK AREA TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4A	SHEET 286	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026401-S4A.DWG
LAYOUT NAME - 4A-05 (100)
PLOT DATE : 9/11/2023 10:12 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

CTH F (REDFORD BLVD)

STH 190 (CAPITOL DRIVE)

Y6T

50' TYP

660' LANE CLOSURE TAPER (12')

1000'

500'

STH 190 (CAPITOL DRIVE)

N

LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

ROAD WORK AHEAD
W20-1A

W04-2L

WETHERSFIELD RD

END ROAD WORK
G20-2A
48"X24"

LEFT LANE CLOSED 1/2 MILE
W20-5SG

ROAD WORK 1 MILE
W20-1F

1000'

1600'

2600'

50' TYP

STH 190 (CAPITOL DRIVE)

500'

STH 190 (CAPITOL DRIVE)

N

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4A	SHEET 287	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026401-S4A.DWG
LAYOUT NAME - 4A-06 (100)

PLOT DATE : 9/11/2023 10:13 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

STH 164

GREEN RD

ROAD WORK AHEAD
W20-1A

ROUGH HILL RD

STH 164

LEGEND:

WORK AREA

TEMPORARY PAVEMENT

FLASHING ARROW BOARD

TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN

TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT

TRAFFIC CONTROL 42-INCH CONE

FLEXIBLE TUBULAR MARKER

or DIRECTION OF TRAFFIC

XXX XXX PAVEMENT MARKING REMOVAL

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING

- (ARWx) TEMPORARY MARKING ARROW
- (DY6x) TEMPORARY MARKING 6-INCH DOUBLE YELLOW
- (W6x) TEMPORARY MARKING 6-INCH WHITE
- (W10x) TEMPORARY MARKING 10-INCH WHITE
- (W18x) TEMPORARY MARKING 18-INCH WHITE
- (Y6x) TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

COVER INSIDE LEFT TURN LANE ARROW

END ROAD WORK
G20-2A
48"X24"

COVER INSIDE LEFT TURN LANE SIGN ON OVERHEAD STRUCTURE

LANE CLOSED
R11-2L
48"X30"

INSIDE LEFT TURN LANE CLOSED

LANE CLOSED
R11-2L
48"X30"

25' TYP

STH 164

ROAD WORK 500 FT
W20-1D

COVER INSIDE LEFT TURN LANE ARROW

STH 190 (CAPITOL DRIVE)

82'EB

82'WB

25'TYP

15'TYP

84'EB

84'WB

STH 164

STH 190 (CAPITOL DRIVE)

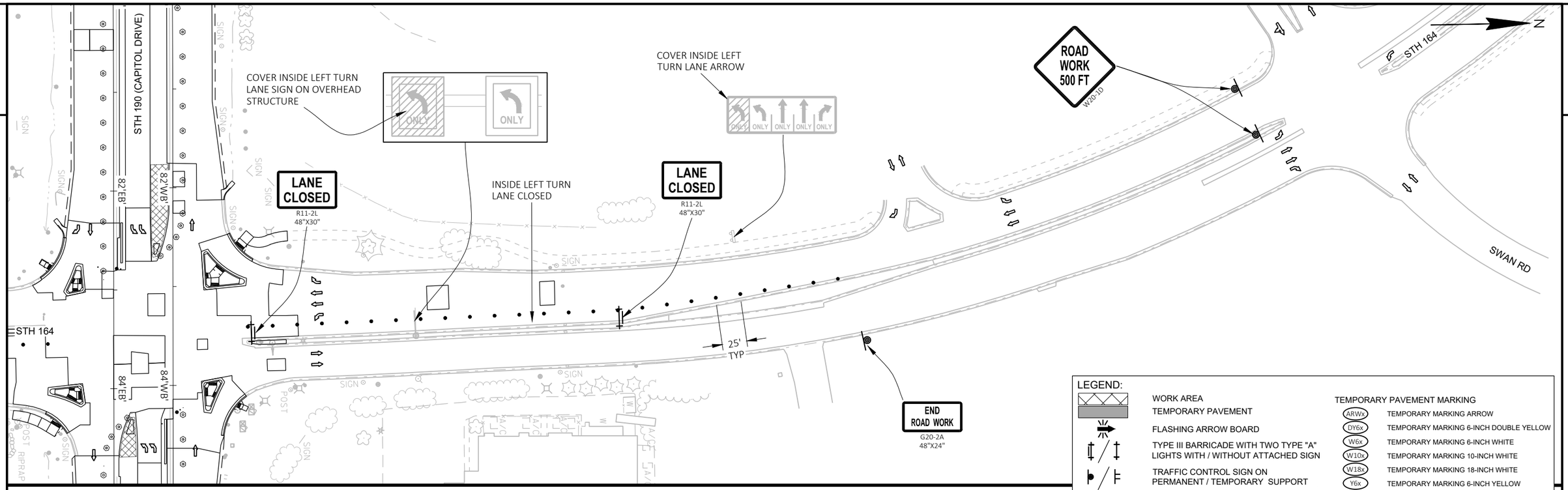
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4A	SHEET 288	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026401-S4A.DWG
LAYOUT NAME - 4A-164 S (100)

PLOT DATE : 9/11/2023 10:13 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



LEGEND:

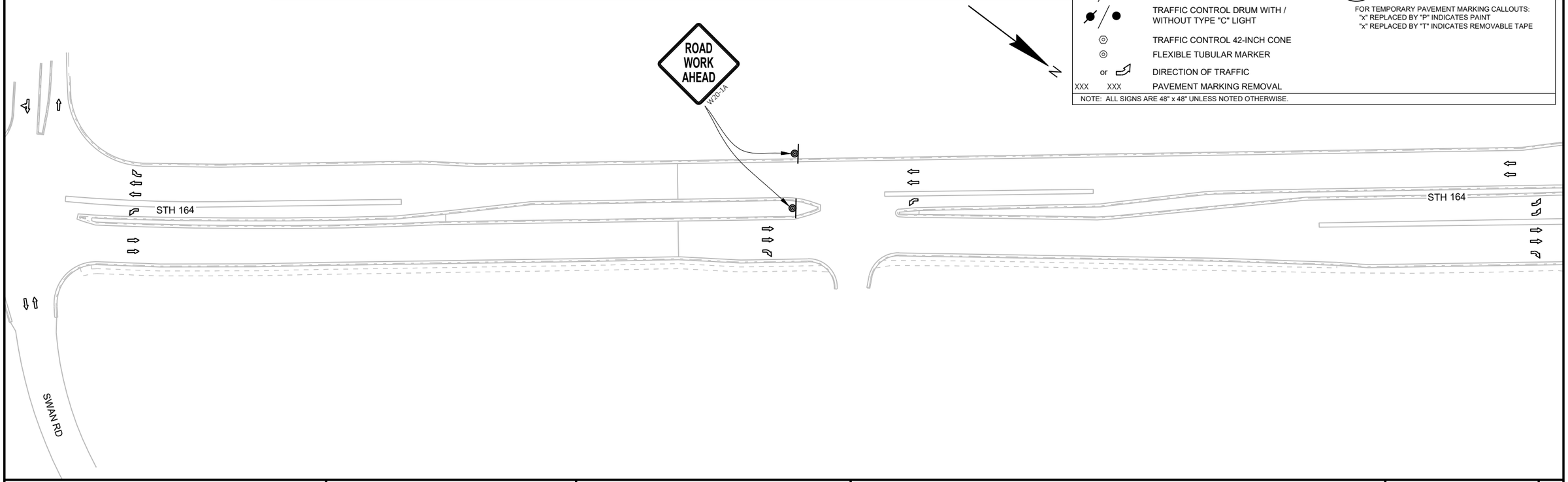
	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4A	SHEET 289 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026401-S4A.DWG
LAYOUT NAME - 4A-164 N (100)
PLOT DATE : 9/11/2023 10:13 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : ##########

2

N

EB STH 16

STH 190 (CAPITOL DRIVE)

12'WB

10'WB

8'WB

LANE CLOSED
R11-2L
48"X30"

INSIDE LEFT TURN LANE CLOSED

EB STH 16 TO STH 190 RAMP

LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

N

WO1-6
48"X24"

R3-2
24"X24"

LANE CLOSED
R11-2L
48"X30"

OUTSIDE RIGHT TURN LANE CLOSED

LEFT TURN LANE CLOSED

LANE CLOSED
R11-2L
48"X30"

STH 190 (CAPITOL DRIVE)

16'WB

14'WB

14'EB

12'WB

12'EB

WB STH 16 TO STH 190 RAMP

WB STH 16

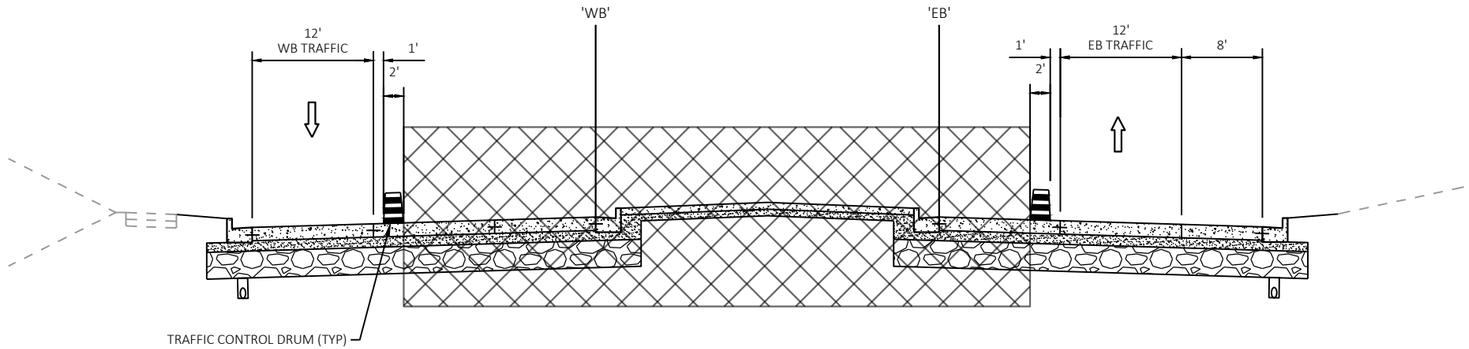
EB STH 16

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4A	SHEET 290	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026401-S4A.DWG
LAYOUT NAME - 4A-OFF RAMPS (100)

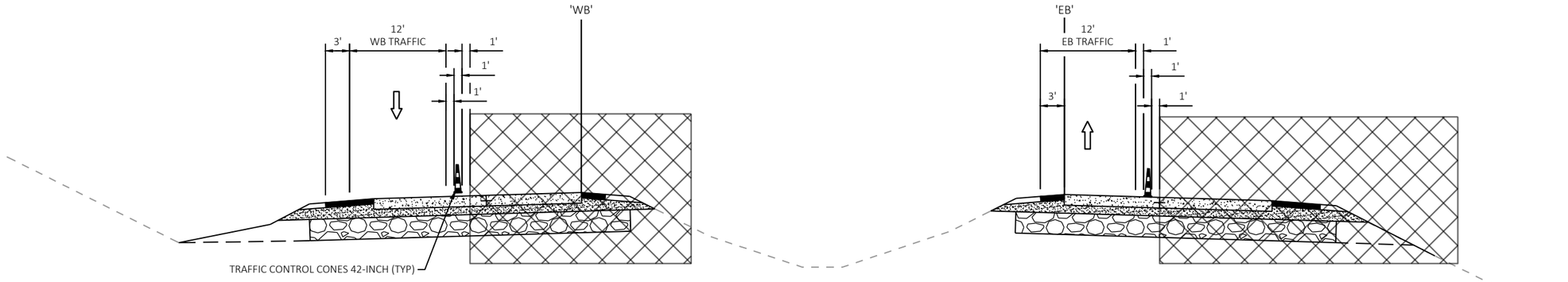
PLOT DATE : 9/11/2023 10:13 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42



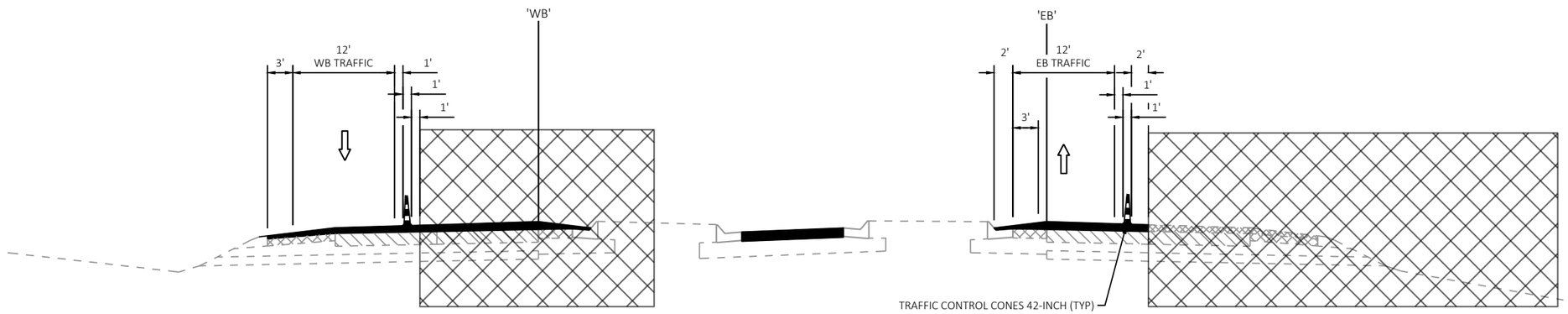
STAGE 4B CONSTRUCTION - CONCRETE SECTION (URBAN)

STA. 8+56'EB' - STA. 15+36'EB'
FINISH MEDIAN CONSTRUCTION
TRAFFIC ON FINISHED OUTSIDE LANES AND SHOULDERS



STAGE 4B CONSTRUCTION - CONCRETE SECTION (RURAL)

FINISH CONSTRUCTION OF WESTBOUND MEDIAN LANE AND OUTSIDE EASTBOUND LANE
TRAFFIC ON FINISHED WB OUTSIDE LANE AND SHOULDER, AND ON FINISHED EB MEDIAN LANE



STAGE 4B CONSTRUCTION - ASPHALT SECTION

STA. 37+00'EB' - STA 111+00'EB'
FINISH CONSTRUCTION OF WESTBOUND MEDIAN LANE AND OUTSIDE EASTBOUND LANE
TRAFFIC ON FINISHED WB OUTSIDE LANE AND SHOULDER, AND ON FINISHED EB MEDIAN LANE

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4B	SHEET 291	E

2

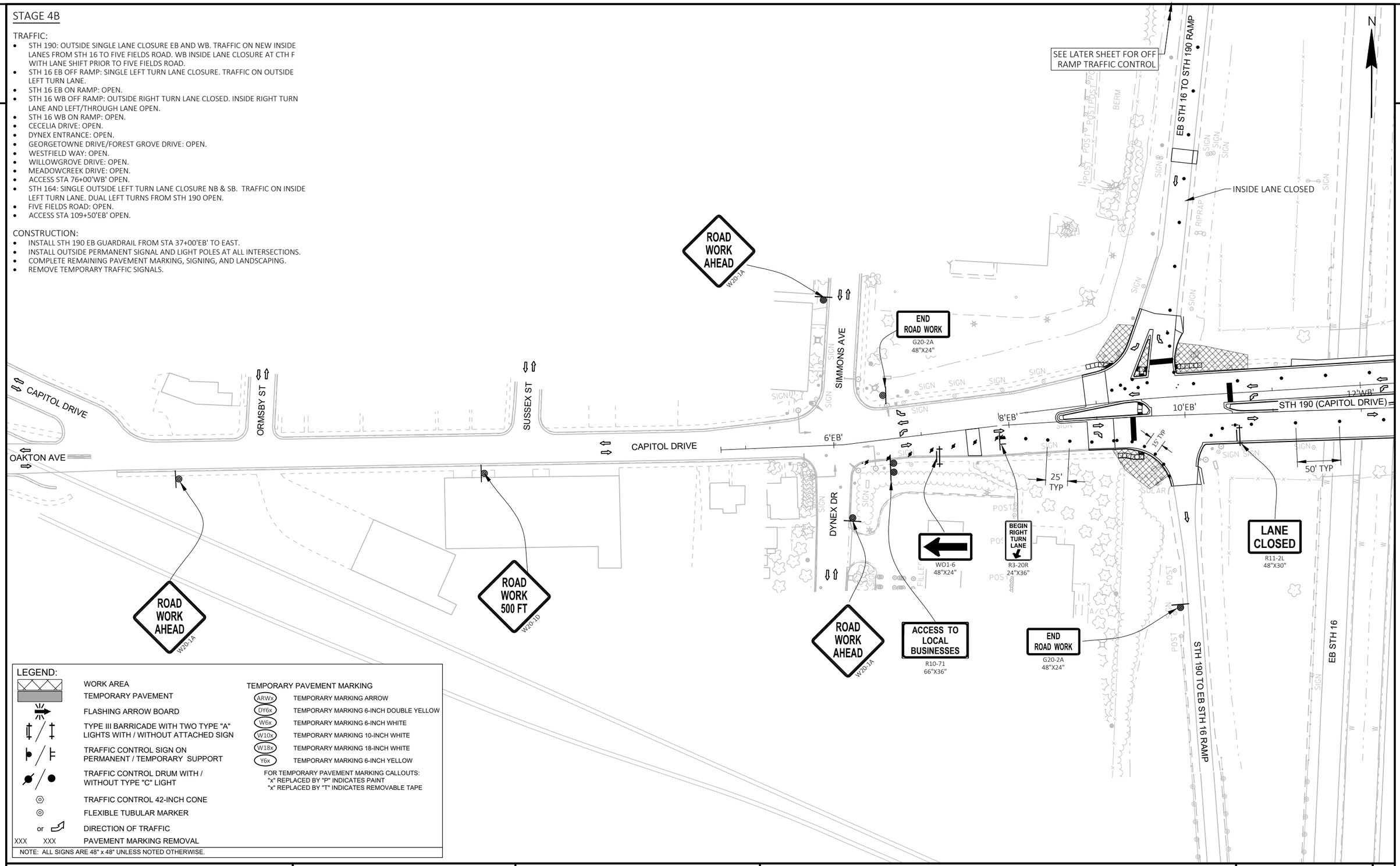
STAGE 4B

TRAFFIC:

- STH 190: OUTSIDE SINGLE LANE CLOSURE EB AND WB. TRAFFIC ON NEW INSIDE LANES FROM STH 16 TO FIVE FIELDS ROAD. WB INSIDE LANE CLOSURE AT CTH F WITH LANE SHIFT PRIOR TO FIVE FIELDS ROAD.
- STH 16 EB OFF RAMP: SINGLE LEFT TURN LANE CLOSURE. TRAFFIC ON OUTSIDE LEFT TURN LANE.
- STH 16 EB ON RAMP: OPEN.
- STH 16 WB OFF RAMP: OUTSIDE RIGHT TURN LANE CLOSED. INSIDE RIGHT TURN LANE AND LEFT/THROUGH LANE OPEN.
- STH 16 WB ON RAMP: OPEN.
- CECELIA DRIVE: OPEN.
- DYNEX ENTRANCE: OPEN.
- GEORGETOWNE DRIVE/FOREST GROVE DRIVE: OPEN.
- WESTFIELD WAY: OPEN.
- WILLOWGROVE DRIVE: OPEN.
- MEADOWCREEK DRIVE: OPEN.
- ACCESS STA 76+00'WB' OPEN.
- STH 164: SINGLE OUTSIDE LEFT TURN LANE CLOSURE NB & SB. TRAFFIC ON INSIDE LEFT TURN LANE. DUAL LEFT TURNS FROM STH 190 OPEN.
- FIVE FIELDS ROAD: OPEN.
- ACCESS STA 109+50'EB' OPEN.

CONSTRUCTION:

- INSTALL STH 190 EB GUARDRAIL FROM STA 37+00'EB' TO EAST.
- INSTALL OUTSIDE PERMANENT SIGNAL AND LIGHT POLES AT ALL INTERSECTIONS.
- COMPLETE REMAINING PAVEMENT MARKING, SIGNING, AND LANDSCAPING.
- REMOVE TEMPORARY TRAFFIC SIGNALS.



LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

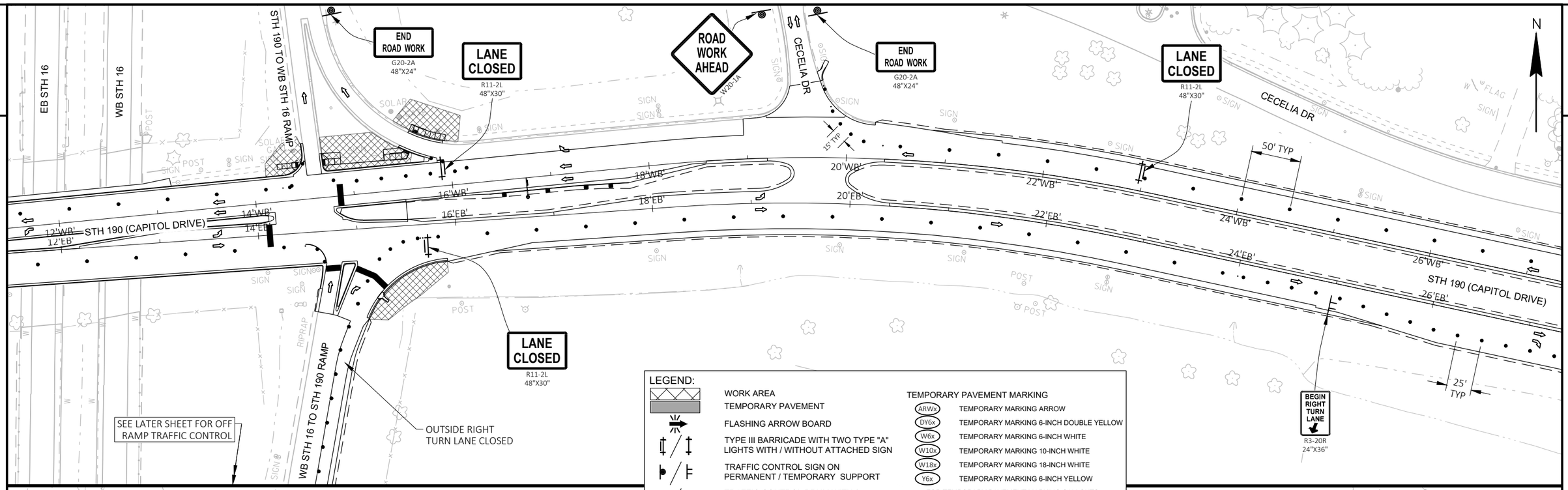
ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4B	SHEET 292	E

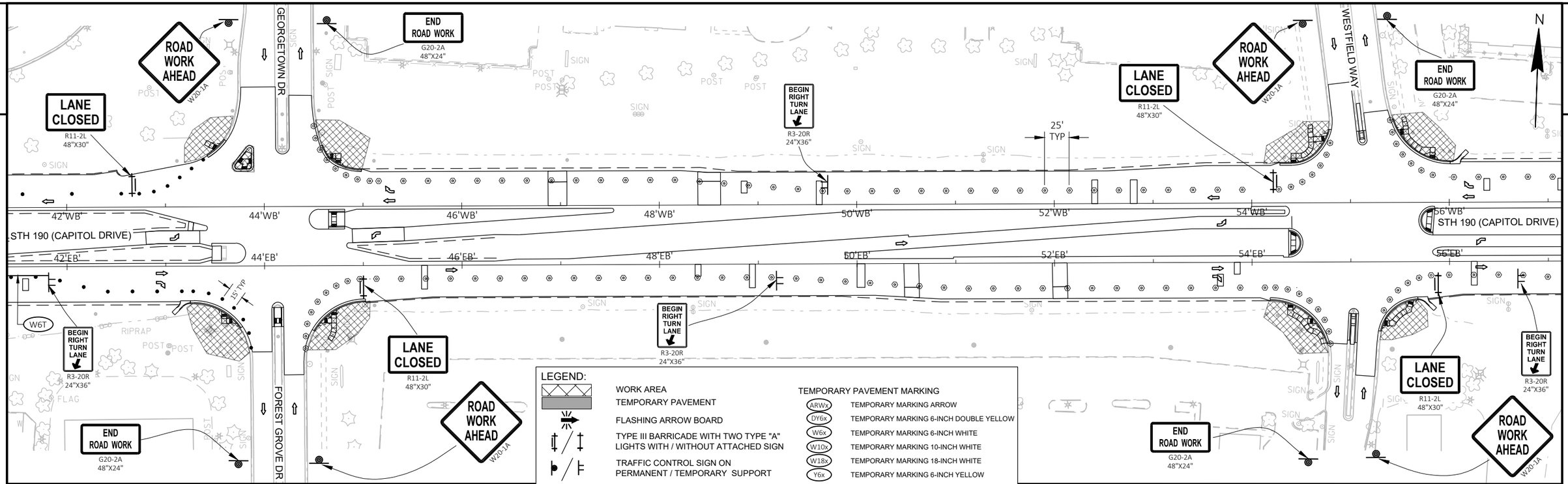
FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026402-S4B.DWG
LAYOUT NAME - 4B-01 (100)
PLOT DATE : 9/11/2023 10:17 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : ##########

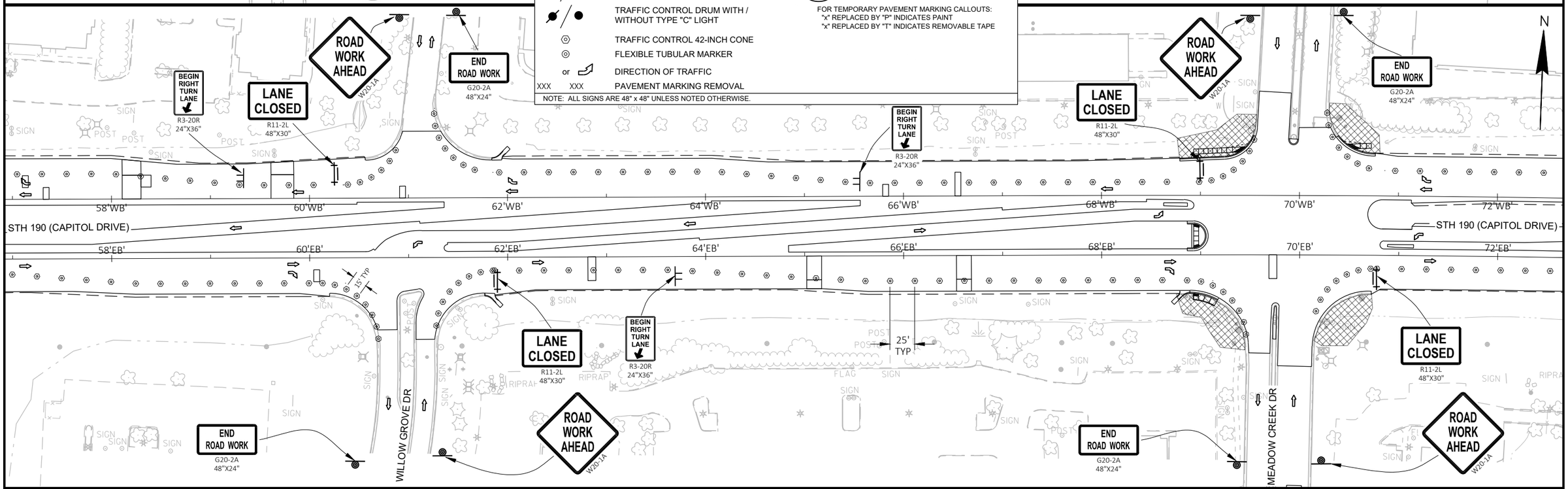


PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4B	SHEET 293	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026402-S4B.DWG
LAYOUT NAME - 4B-02 (100)
PLOT DATE : 9/11/2023 10:17 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2





LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

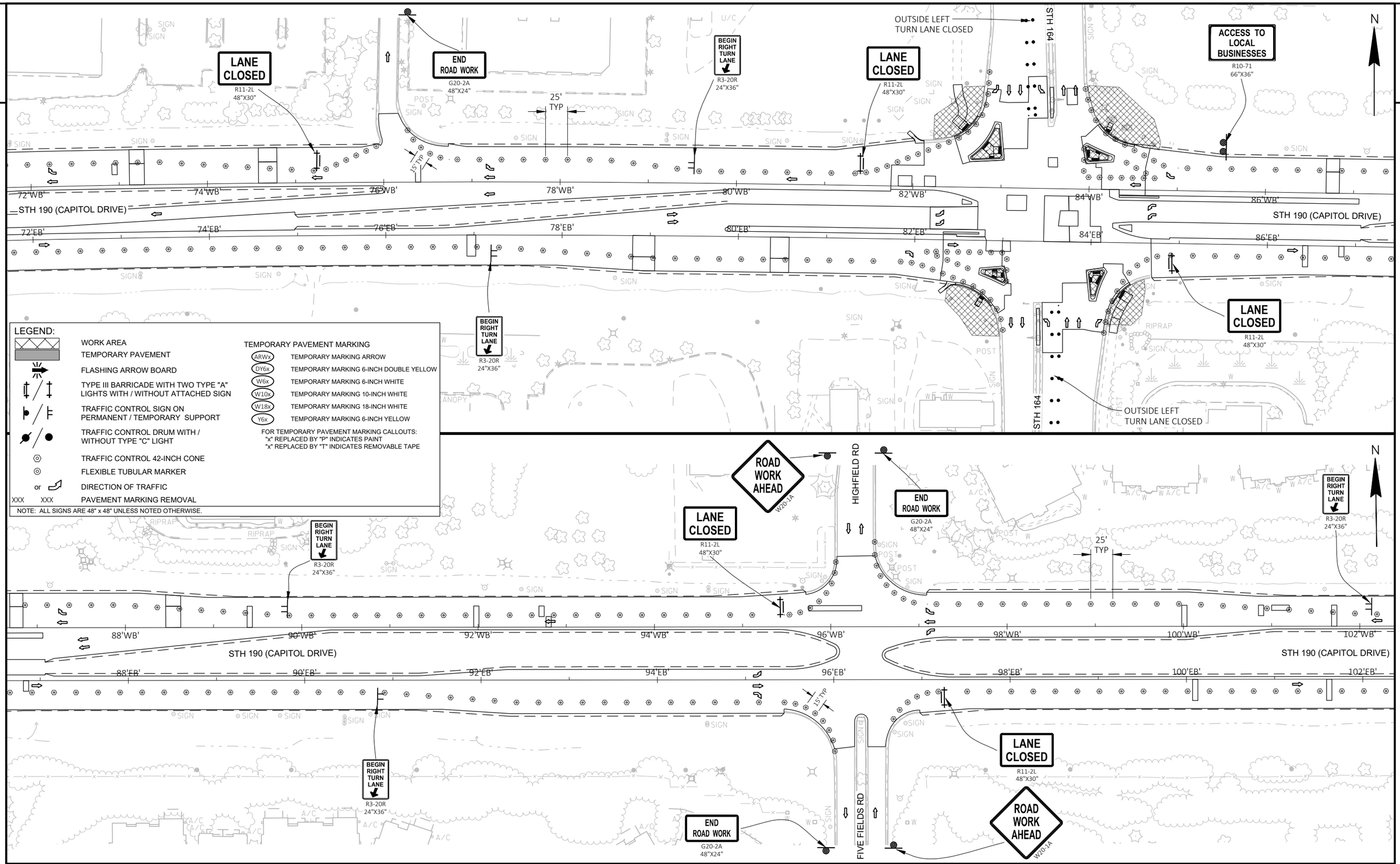
TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4B	SHEET 294	E



LEGEND:

- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

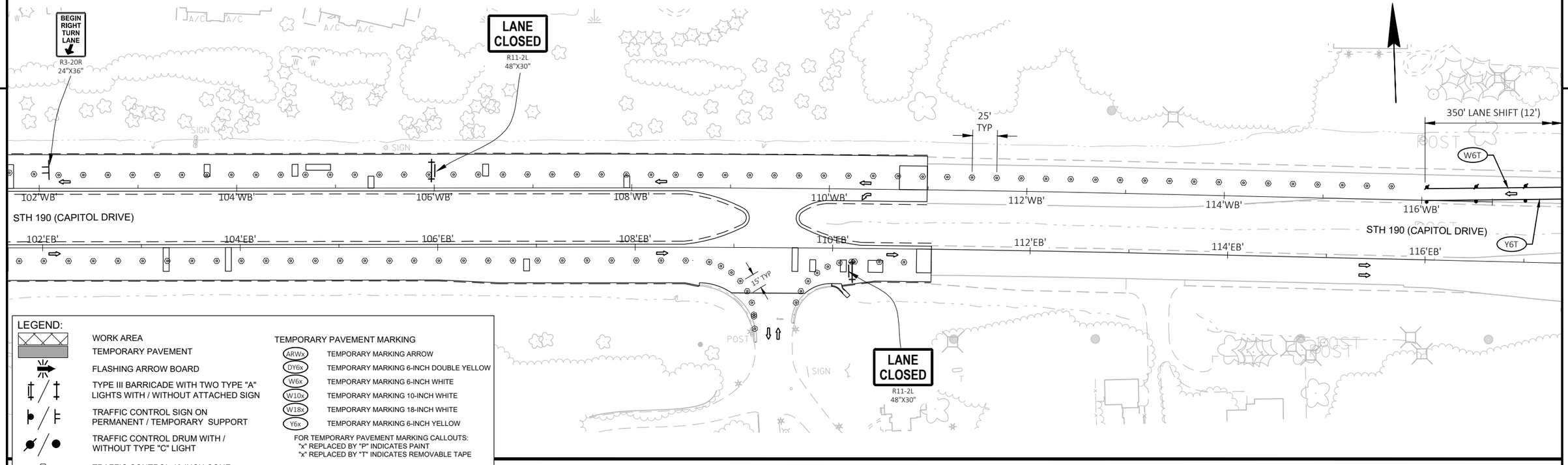
TEMPORARY PAVEMENT MARKING

- ARWx TEMPORARY MARKING ARROW
- DY6x TEMPORARY MARKING 6-INCH DOUBLE YELLOW
- W6x TEMPORARY MARKING 6-INCH WHITE
- W10x TEMPORARY MARKING 10-INCH WHITE
- W18x TEMPORARY MARKING 18-INCH WHITE
- Y6x TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4B	SHEET 295	E



LEGEND:

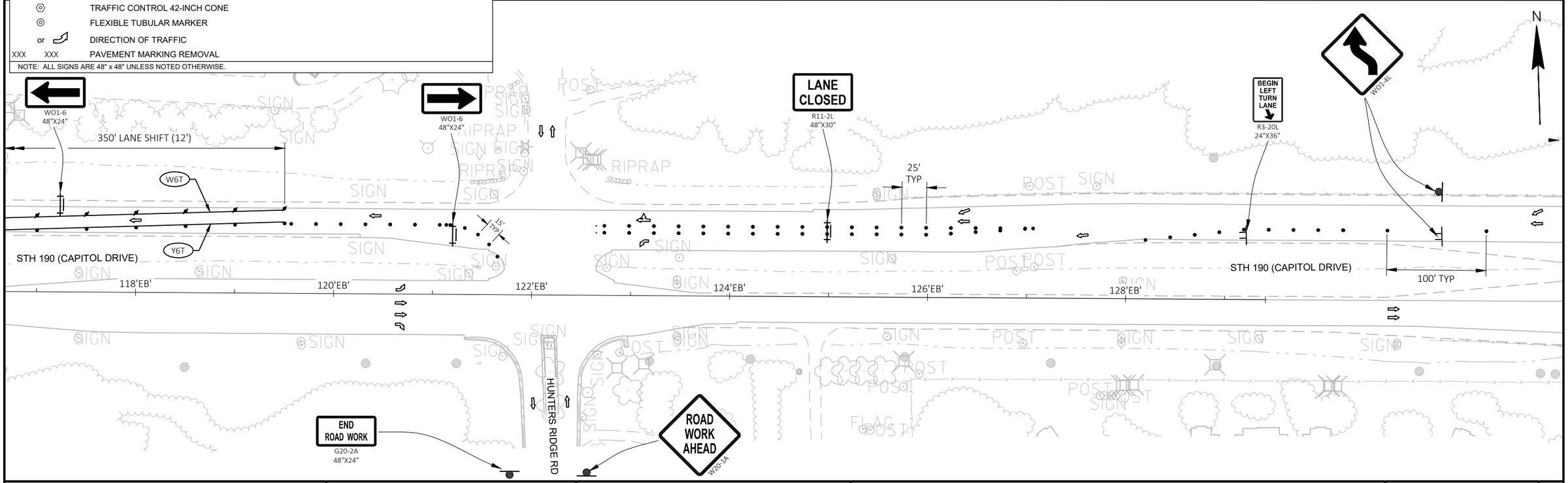
- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- TRAFFIC CONTROL 42-INCH CONE
- FLEXIBLE TUBULAR MARKER
- or DIRECTION OF TRAFFIC
- XXX XXX PAVEMENT MARKING REMOVAL

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4B	SHEET 296	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026402-S4B.DWG
LAYOUT NAME - 4B-05 (100)

PLOT DATE : 9/11/2023 10:17 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

CTH F (REDFORD BLVD)

100' TYP

50' TYP

Y6T

1000'

STH 190 (CAPITOL DRIVE)

660' LANE CLOSURE TAPER (12')

500'

STH 190 (CAPITOL DRIVE)

N

LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

ROAD WORK AHEAD
W20-1A

W04-2L

WETHERSFIELD RD

END ROAD WORK
G20-2A
48"X24"

LEFT LANE CLOSED 1/2 MILE
W20-5SG

ROAD WORK 1 MILE
W20-1F

1000'

1600'

2600'

50' TYP

STH 190 (CAPITOL DRIVE)

500'

STH 190 (CAPITOL DRIVE)

N

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4B	SHEET 297	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026402-S4B.DWG
LAYOUT NAME - 4B-06 (100)

PLOT DATE : 9/11/2023 10:18 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

STH 164

GREEN RD

ROAD WORK AHEAD
W20-1A

ROUGH HILL RD

STH 164

LEGEND:

WORK AREA

TEMPORARY PAVEMENT

FLASHING ARROW BOARD

TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN

TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT

TRAFFIC CONTROL 42-INCH CONE

FLEXIBLE TUBULAR MARKER

or DIRECTION OF TRAFFIC

XXX XXX PAVEMENT MARKING REMOVAL

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING

- ARWx TEMPORARY MARKING ARROW
- DY6x TEMPORARY MARKING 6-INCH DOUBLE YELLOW
- W6x TEMPORARY MARKING 6-INCH WHITE
- W10x TEMPORARY MARKING 10-INCH WHITE
- W18x TEMPORARY MARKING 18-INCH WHITE
- Y6x TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

ONLY ONLY ONLY ONLY ONLY

COVER OUTSIDE LEFT TURN LANE ARROW

END ROAD WORK
G20-2A
48"X24"

COVER OUTSIDE LEFT TURN LANE SIGN ON OVERHEAD STRUCTURE

LANE CLOSED
R11-2L
48"X30"

OUTSIDE LEFT TURN LANE CLOSED

N

STH 190 (CAPITOL DRIVE)

87'EB

87'WB

STH 164

84'EB

84'WB

25' TYP

15' TYP

ROAD WORK 500 FT
W20-1D

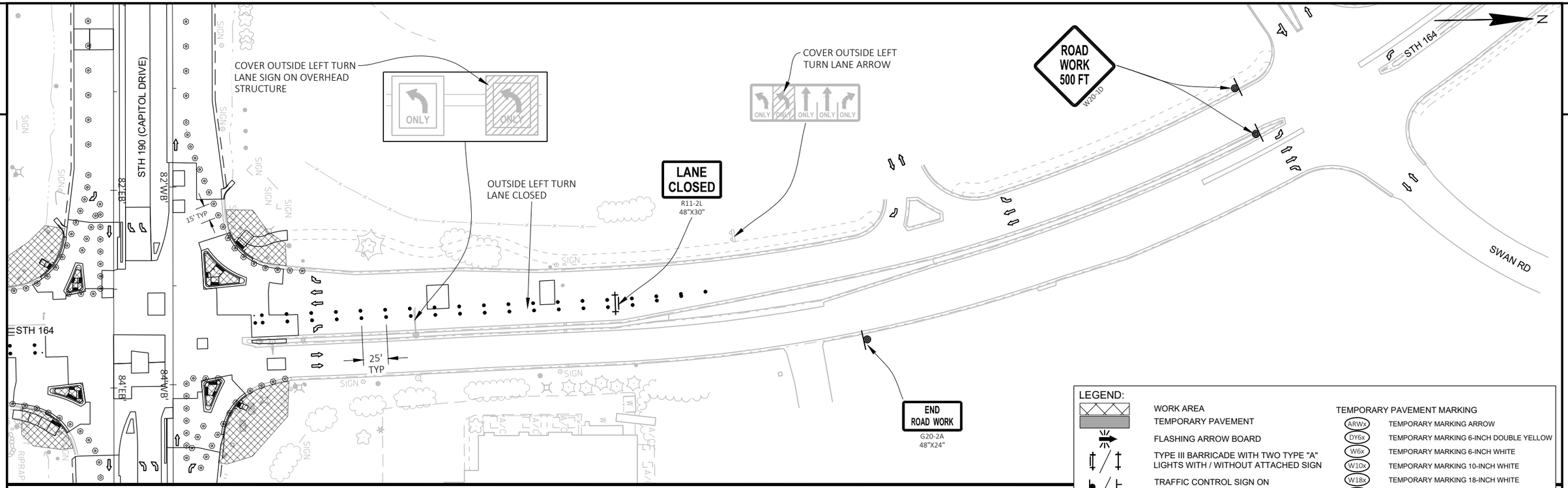
COVER OUTSIDE LEFT TURN LANE ARROW

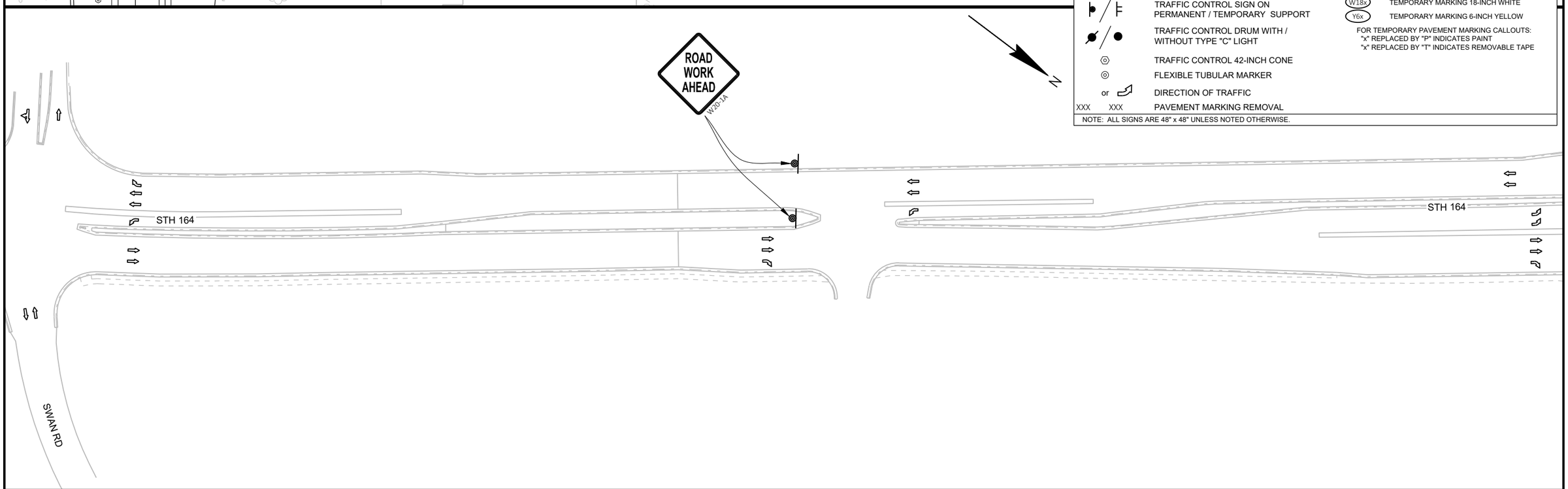
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4B	SHEET 298	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026402-S4B.DWG
LAYOUT NAME - 4B-164 S (100)

PLOT DATE : 9/11/2023 10:18 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42





LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4B	SHEET 299	E

2

N

EB STH 16

STH 190 (CAPITOL DRIVE)

LANE CLOSED
R11-2L
48"X30"

INSIDE LEFT TURN LANE CLOSED

EB STH 16 TO STH 190 RAMP

LEGEND:

	WORK AREA
	TEMPORARY PAVEMENT
	FLASHING ARROW BOARD
	TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS WITH / WITHOUT ATTACHED SIGN
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	TRAFFIC CONTROL 42-INCH CONE
	FLEXIBLE TUBULAR MARKER
or	DIRECTION OF TRAFFIC
XXX XXX	PAVEMENT MARKING REMOVAL

TEMPORARY PAVEMENT MARKING

ARWx	TEMPORARY MARKING ARROW
DY6x	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W6x	TEMPORARY MARKING 6-INCH WHITE
W10x	TEMPORARY MARKING 10-INCH WHITE
W18x	TEMPORARY MARKING 18-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

NOTE: ALL SIGNS ARE 48" x 48" UNLESS NOTED OTHERWISE.

N

STH 190 (CAPITOL DRIVE)

LANE CLOSED
R11-2L
48"X30"

OUTSIDE RIGHT TURN LANE CLOSED

WB STH 16 TO STH 190 RAMP

WB STH 16

EB STH 16

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CONSTRUCTION STAGING - STAGE 4B	SHEET 300	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_026402-S4B.DWG
LAYOUT NAME - 4B-OFF RAMPS (100)
PLOT DATE : 9/11/2023 10:18 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

N

SOUTH RAMPS CLOSED

PEWAUKEE LAKE

16

164

F

190

CAPITOL DR

M

CANADIAN PACIFIC RR

WATERTOWN RD

JJ

MEADOWBROOK RD

N GRANDVIEW BLVD

BLUEMOUND RD

94

GOLF RD

SILVERNALL RD

J

LEGEND:

- DETOUR ROUTE
- WORK AREA
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- EXISTING TYPE I SIGN ON STEEL SUPPORT
- EXISTING SIGN, COVER EXISTING SIGN, PROPOSED DETOUR SIGN

NOTES:

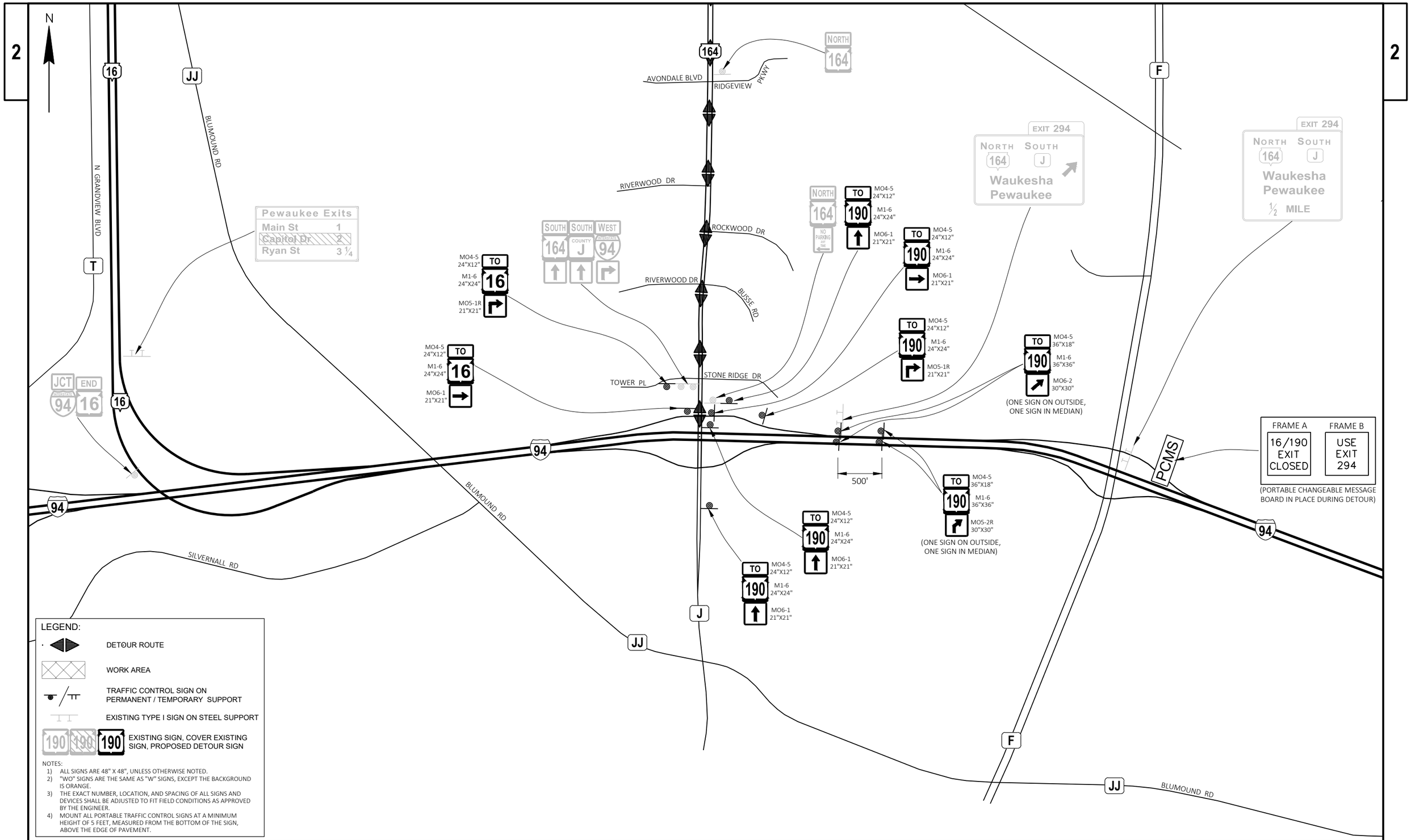
1) ALL SIGNS ARE 48" X 48", UNLESS OTHERWISE NOTED.
2) "WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND IS ORANGE.
3) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 2 DETOUR - OVERVIEW	SHEET 301	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_027001-DT (STAGE 2).DWG
LAYOUT NAME - - OVERVIEW

PLOT DATE : 9/18/2023 11:47 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:2000 FT

WISDOT/CADDS SHEET 42



LEGEND:

- DETOUR ROUTE
- WORK AREA
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- EXISTING TYPE I SIGN ON STEEL SUPPORT
- EXISTING SIGN, COVER EXISTING SIGN, PROPOSED DETOUR SIGN

NOTES:

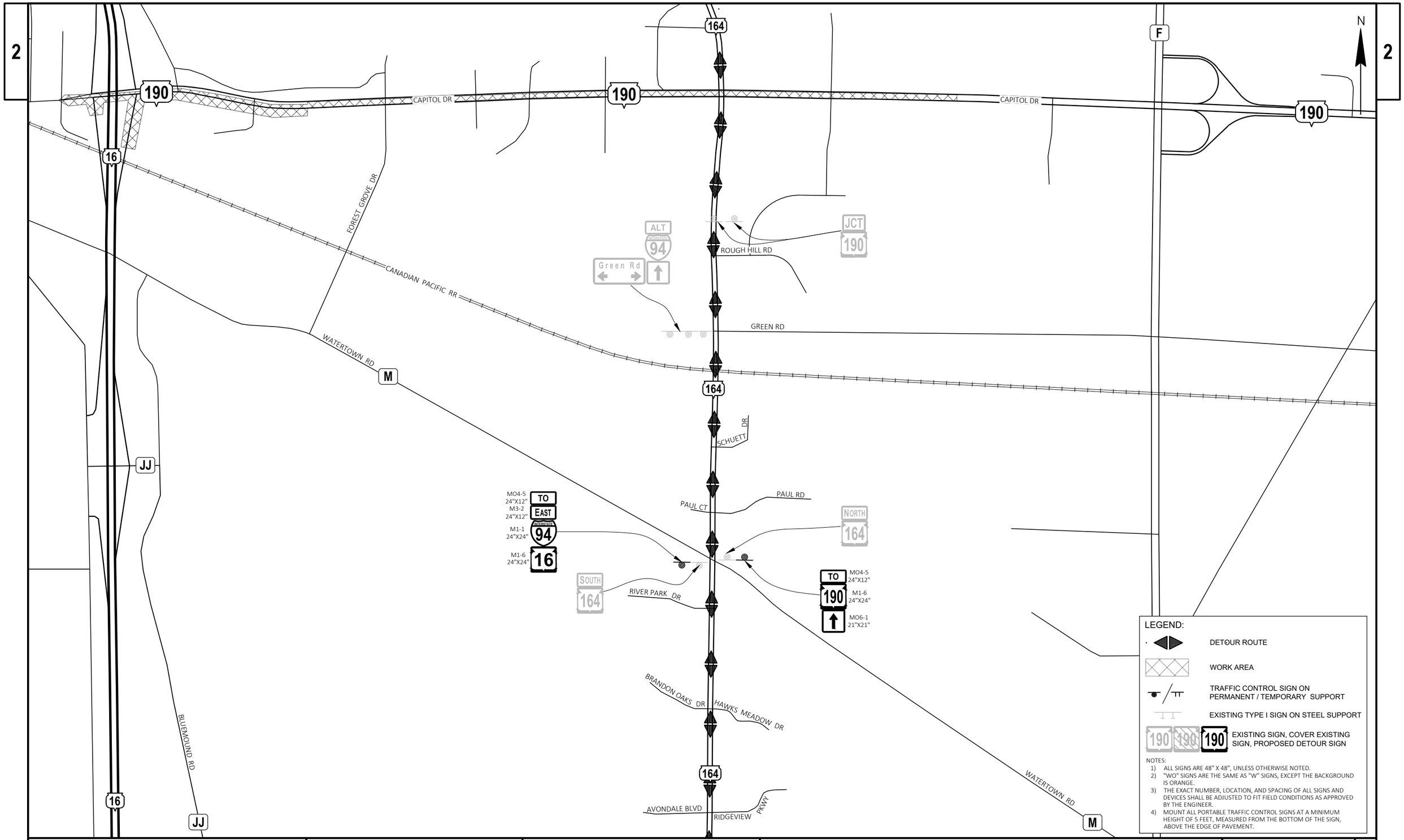
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3) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 2 DETOUR - PAGE 1 OF 3	SHEET 302	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_027001-DT (STAGE 2).DWG
LAYOUT NAME - - PAGE 1 OF 3

PLOT DATE : 9/18/2023 11:48 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:1000 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 2 DETOUR - PAGE 2 OF 3	SHEET 303	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_027001-DT (STAGE 2).DWG
LAYOUT NAME - - PAGE 2 OF 3

PLOT DATE : 9/18/2023 11:48 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:1000 FT

LEGEND:

- DETOUR ROUTE
- WORK AREA
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- EXISTING TYPE I SIGN ON STEEL SUPPORT
- EXISTING SIGN, COVER EXISTING SIGN, PROPOSED DETOUR SIGN

NOTES:
1) ALL SIGNS ARE 48" X 48", UNLESS OTHERWISE NOTED.
2) "WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND IS ORANGE.
3) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.

N

164
16
190
F
M
CAPITOL DR
OAKTON AVE
SIMMONS AVE
CECELIA DR
E WISCONSIN AVE
MAIN ST
CANADIAN PACIFIC RR
FOREST GROVE DR
MEADOW CREEK DR
HIGHFIELD RD
FIVE FIELDS RD
ROUGH HILL RD
GREEN RD
WATERTOWN RD
SWAN RD
1000'

TO EAST 16 M4-5 24"X12" M3-2 24"X12" M1-6 24"X24"
DETOUR AHEAD W20-2A

TO EAST 16 M4-5 24"X12" M3-2 24"X12" M1-6 24"X24" M6-1 21"X21"
(IN MEDIAN)

SOUTH 164 WEST ALTERNATE INTERSTATE 94 (IN MEDIAN)

BEGIN LEFT TURN LANE (IN MEDIAN)

WEST 16 EAST 16 USE LEFT LANE (COVER WITH) M6-1 21"X21"

EAST 16

SOUTH 164 WRONG WAY (BACKSIDE)

EAST SOUTH WEST 190 164 190

TO EAST INTERSTATE 94 16 M4-5 24"X12" M3-2 24"X12" M1-1 24"X24" M1-6 24"X24" M6-1 21"X21"

NORTH EAST SOUTH 164 190 164

SOUTH WEST NORTH 164 190 164

ALTERNATE WEST INTERSTATE 94 (IN MEDIAN)

TO EAST 16 M4-5 24"X12" M3-2 24"X12" M1-6 24"X24" M5-1L 21"X21"

EAST 16 M3-2 24"X12" M1-6 24"X24"
RAMP CLOSED AHEAD W20-53A

TO EAST INTERSTATE 94 16 M4-5 24"X12" M3-2 24"X12" M1-1 24"X24" M1-6 24"X24" M5-1R 21"X21"

ALTERNATE WEST INTERSTATE 94 SOUTH 164 (IN MEDIAN)

SOUTH 164

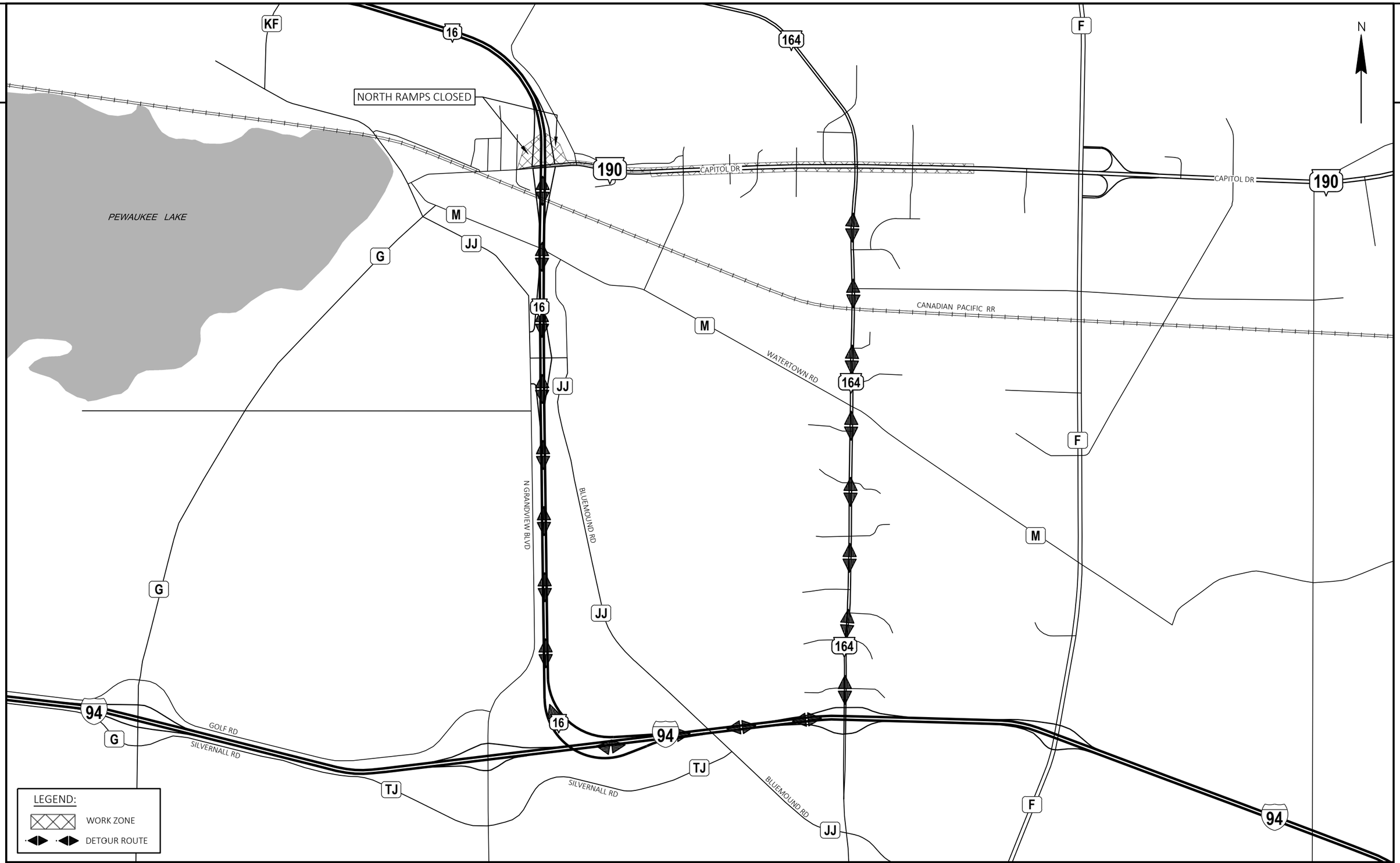
TO EAST INTERSTATE 94 16 M4-5 24"X12" M3-2 24"X12" M1-1 24"X24" M1-6 24"X24" M6-1 21"X21"

EAST 16 M3-2 24"X12" M1-6 24"X24"
RAMP CLOSED AHEAD W20-53A

TO EAST INTERSTATE 94 16 M4-5 24"X12" M3-2 24"X12" M1-6 24"X24" M6-1 21"X21"
(IN MEDIAN)

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 2 DETOUR - PAGE 3 OF 3	SHEET 304 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_027001-DT (STAGE 2).DWG
LAYOUT NAME - - PAGE 3 OF 3
PLOT DATE : 9/18/2023 11:48 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:1000 FT



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 3 DETOUR - OVERVIEW	SHEET 305	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_027002-DT (STAGE 3).DWG
LAYOUT NAME - - OVERVIEW

PLOT DATE : 9/18/2023 10:54 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:2000 FT

WISDOT/CADDS SHEET 42

LEGEND:

- DETOUR ROUTE
- WORK AREA
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- EXISTING TYPE I SIGN ON STEEL SUPPORT
- EXISTING SIGN, COVER EXISTING SIGN, PROPOSED DETOUR SIGN

NOTES:
1) ALL SIGNS ARE 48" X 48", UNLESS OTHERWISE NOTED.
2) "WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND IS ORANGE.
3) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.

N

KF

16

164

FRAME A: 16/190 EXIT CLOSED
FRAME B: USE EXIT 294
(PORTABLE CHANGEABLE MESSAGE SIGN IN PLACE DURING DETOUR)

PCMS

TO 190 — M04-5 36"x18", M1-6 36"X36", M06-1 30"X30"

500'

CECELIA DR

WEST 16 (SPLITTER ISLAND)

CANADIAN PACIFIC RR

CAPITOL DR

SIMMONS AVE

OAKTON DR

PEWAUKEE LAKE

WEST 16 — M3-4 24"X12", M1-6 24"X24"

RAMP CLOSED AHEAD — W20-3A

M04-5 24"x12" TO WEST 16 (COVER WITH) M06-1 21"X21"

TO WEST 16 (COVER WITH) M06-1 21"X21" — USE LEFT LANE

E WISCONSIN AVE

MAIN ST

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 3 DETOUR - PAGE 1 OF 5	SHEET 306	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_027002-DT (STAGE 3).DWG
LAYOUT NAME - - PAGE 1 OF 5

PLOT DATE : 9/18/2023 10:54 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:1000 FT

WISDOT/CADDS SHEET 42

2

N

PEWAUKEE LAKE

OAKTON DR

190

CAPITOL DR

190

16

E WISCONSIN AVE

MAIN ST

FOREST GROVE DR

CANADIAN PACIFIC RR

TO
190
MO4-5
36"X18"
M1-6
36"X36"
MO6-1
30"X30"

EXIT 187
190
Capitol Dr
EXIT ONLY
(ON CANTILEVER
SIGN STRUCTURE)

MEADOWBROOK RD

G

WATERTOWN RD

M

16

JJ

EXIT 187
190
Capitol Dr
½ MILE

164

SS

COLLEGE AVE

T

BLUMOUND RD

EAST
16

N GRANDVIEW BLVD

16

JJ

2

LEGEND:

- DETOUR ROUTE
- WORK AREA
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- EXISTING TYPE I SIGN ON STEEL SUPPORT
- 190 190 190 EXISTING SIGN, COVER EXISTING SIGN, PROPOSED DETOUR SIGN

NOTES:
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4) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 3 DETOUR - PAGE 2 OF 5	SHEET 307	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_027002-DT (STAGE 3).DWG
LAYOUT NAME - - PAGE 2 OF 5

PLOT DATE : 9/18/2023 10:54 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:1000 FT

WISDOT/CADDS SHEET 42

2

N

N GRANDVIEW BLVD

BLUMOUND RD

T

16

JJ

JCT END INTERSTATE 94 16

EXIT 293 C
16 WEST
Pewaukee
¼ MILE
EXIT ONLY

TO MO4-5 36"X18"
190 M1-6 36"X36"

94

SILVERNALL RD

500'

MO4-5 24"X12"
M3-4 24"X12"
M1-6 24"X24"
MO5-1R 21"X21"
TO WEST 16
SOUTH 164
SOUTH COUNTY J
WEST INTERSTATE 94

JCT INTERSTATE 94 COUNTY J

MO4-5 24"X12"
M3-4 24"X12"
M1-6 24"X24"
MO6-1 21"X21"
TO WEST 16
WEST INTERSTATE 94

WEST INTERSTATE 94

164

AVONDALE BLVD

RIDGEVIEW PKWY

NORTH 164

RIVERWOOD DR

ROCKWOOD DR

NORTH 164
Rockwood Dr

RIVERWOOD DR

BUSSE RD

NORTH 164 NO PARKING ANY TIME
MO4-5 24"X12"
TO 190
M1-6 24"X24"

TOWER PL

STONE RIDGE DR

LEGEND:

- DETOUR ROUTE
- WORK AREA
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- EXISTING TYPE I SIGN ON STEEL SUPPORT
- 190 190 190 EXISTING SIGN, COVER EXISTING SIGN, PROPOSED DETOUR SIGN

NOTES:
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F

2

MO4-5 24"X12"
M3-4 24"X12"
M1-6 24"X24"
MO6-1 21"X21"
TO WEST 16
WEST INTERSTATE 94

MO4-5 24"X12"
TO 190
M1-6 24"X24"
NORTH 164

MO4-5 24"X12"
TO 190
M1-6 24"X24"
MO6-1 21"X21"
NORTH 164

MO4-5 36"X18"
TO 190
M1-6 36"X36"
MO5-2R 30"X30"

MO4-5 36"X18"
TO 190
M1-6 36"X36"
MO6-2 30"X30"

MO4-5 24"X12"
TO 190
M1-6 24"X24"
MO5-1L 21"X21"
NORTH 164
SOUTH COUNTY J

EXIT 294
NORTH 164 SOUTH J
Waukesha
Pewaukee
EXIT ONLY
(ON OVERHEAD SIGN STRUCTURE)

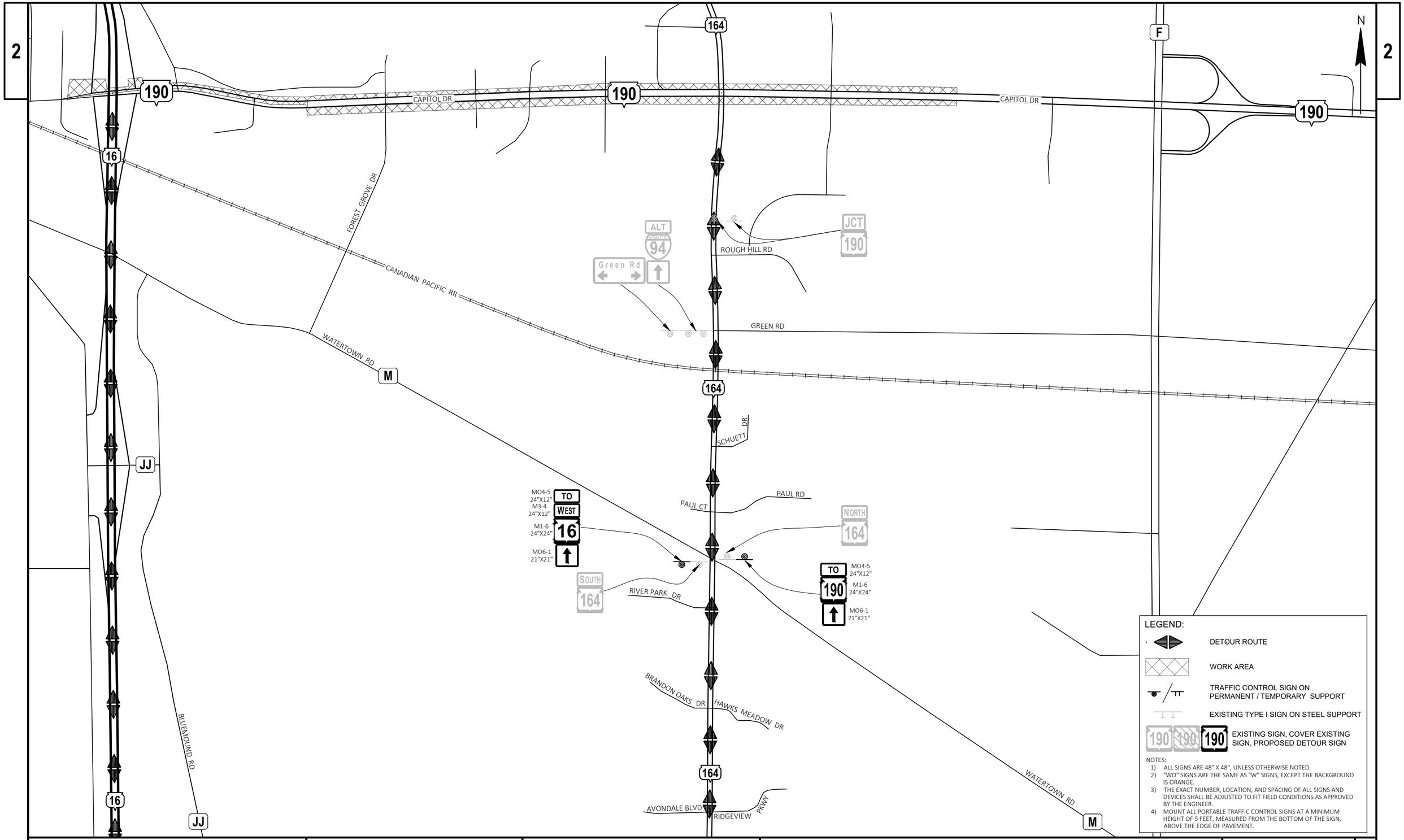
MO4-5 36"X18"
TO 190
M1-6 36"X36"
R3-54R 36"X36"
USE RIGHT LANE
EAST INTERSTATE 94

EXIT 294
NORTH 164 SOUTH J
Waukesha
Pewaukee
EXIT ONLY
(ON OVERHEAD SIGN STRUCTURE)

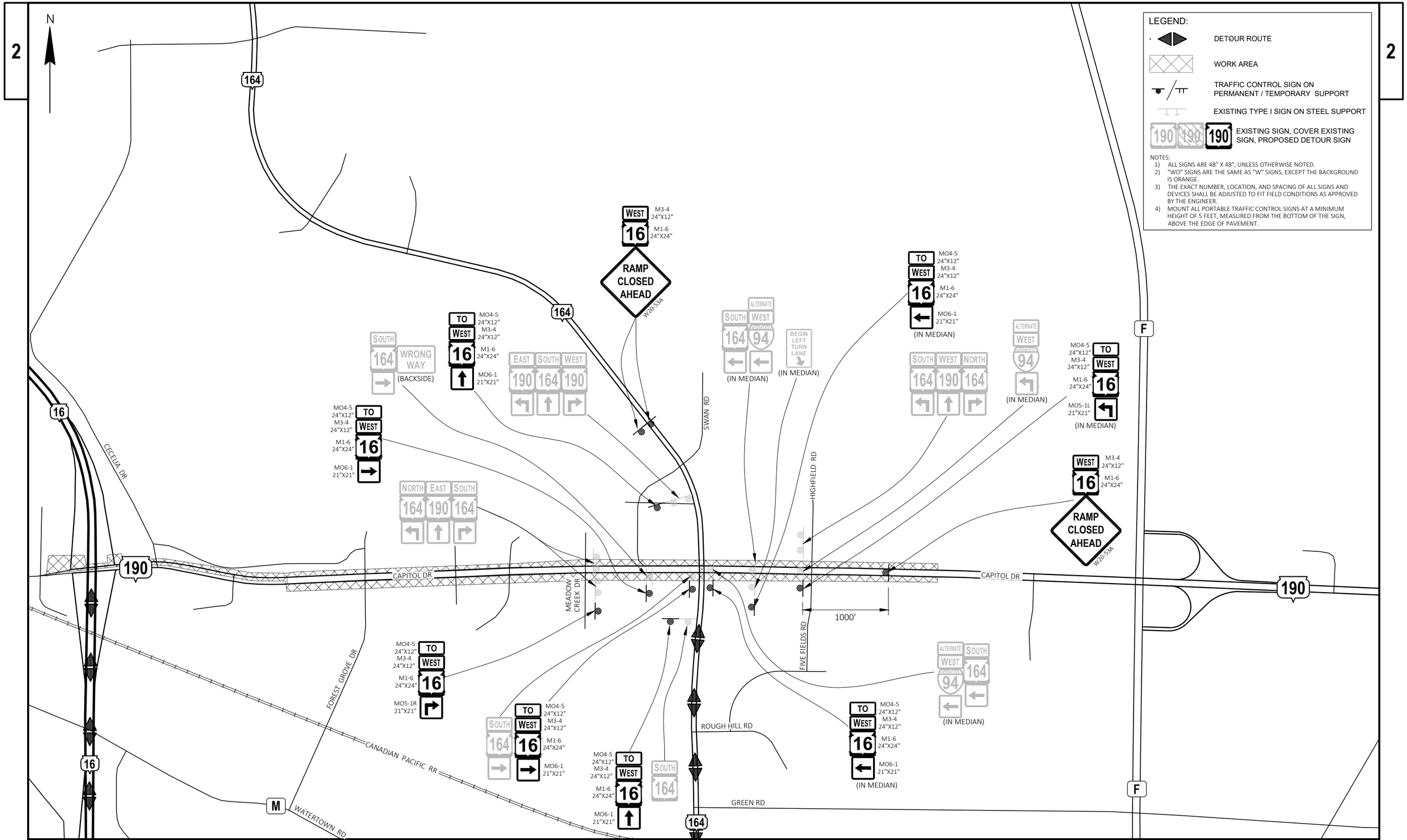
JJ

BLUMOUND RD

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 3 DETOUR - PAGE 3 OF 5	SHEET 308	E



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 3 DETOUR - PAGE 4 OF 5	SHEET 309	E



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	STAGE 3 DETOUR - PAGE 5 OF 5	SHEET 310	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_027002-DT (STAGE 3).DWG
LAYOUT NAME - - PAGE 5 OF 5

PLOT DATE : 9/18/2023 10:54 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:1000 FT

WISDOT/CADDS SHEET 42

2

N

PI STA = 9+43.85 'WB'
Y = 187342.493
X = 677696.843
DELTA = 3°24'34" RT
D = 3°49'11"
T = 44.64'
L = 89.26'
R = 1500.00'
PC STA = 8+99.21 'WB'
Y = 187335.523
X = 677652.750
PT STA = 9+88.46 'WB'
Y = 187346.829
X = 677741.274
DB = N81°01'01"E
DA = N84°25'34"E

BP: 4+71.98 'EB'
SIMMONS AVE
BP: 7+88.25 'WB'
PC: 8+99.21 'WB'
PI: 9+43.85 'WB'
STH 16 EB OFF RAMP
S4°14'07"W
PT: 9+88.46 'WB'
STH 16
STH 16 WB ON RAMP
686'L, S7°42'07"E
STA 14+72.02 'EB'
STA 686+39.89 'L'
PC: 18+06.37 'WB'
CECELIA DR
PI: 685+23.04 'CE'
686'CE
PT: 686+36.02 'CE'
S9°49'20"E
688'CE
PI: 20+61.19 'WB'
PI: 20+55.89 'EB'
PT: 23+11.96 'WB'
PI STA = 20+61.19 'WB'
Y = 187451.021
X = 678808.931
DELTA = 17°41'44" RT
D = 3°30'00"
T = 254.82'
L = 505.59'
R = 1637.02'
PC STA = 18+06.37 'WB'
Y = 187426.271
X = 678555.314
PT STA = 23+11.96 'WB'
Y = 187397.511
X = 679058.072
DB = N84°25'34"E
DA = S77°52'42"E
PC: 27+31.76 'WB'
PI STA = 30+91.96 'WB'
Y = 187233.718
X = 679820.687
DELTA = 14°19'59" LT
D = 2°00'00"
T = 360.20'
L = 716.65'
R = 2864.79'
PC STA = 27+31.76 'WB'
Y = 187309.357
X = 679468.514
PT STA = 34+48.41 'WB'
Y = 187247.616
X = 680180.622
DB = S77°52'42"E
DA = N87°47'20"E
MATCH LINE 32+00

8'WB' 10'WB' 12'WB' 14'WB' 16'WB' N84°25'34"E 18'WB' 20'WB' 22'WB' 24'WB' S77°52'42"E 26'WB' 28'WB' 30'WB' 32'W
N81°01'01"E
N81°01'01"E
8'EB' N84°20'19"E 10'EB' 12'EB' 14'EB' 16'EB' N86°01'12"E 18'EB' 20'EB' 22'EB' 24'EB' S77°52'42"E 26'EB' 28'EB' 30'EB' 32'
STH 190 (CAPITOL DRIVE)
N85°33'29 6'EB'
DYKEX DR
PI: 6+10.90 'EB'
PI: 7+89.54 'EB'
PI: 9+57.35 'EB'
686'L, S6°11'17"E
STH 16 EB ON RAMP
688'J'
STA 9+53.21 'EB'
STA 685+70.75 'J'
STA 10+02.48 'EB'
STA 685+01.25 'J'
STH 16
STH 16 WB OFF RAMP
686'K, M61°55'45"S
688'K
690'K
STA 14+90.63 'EB'
STA 685+53.83 'K'
PC: 18+24.34 'EB'
STA 19+75.93 'EB'
STA 688+46.02 'CE'
PT: 22+84.39 'EB'
PC: 27+64.61 'EB'
STH 190 (CAPITOL DRIVE)
PI: 30+91.96 'WB'
PI: 31+24.81 'EB'

PI: 6+10.90'EB'
Δ = 004°32'29"
Y = 187279.439
X = 677368.425

PI: 7+89.54'EB'
Δ = 003°19'18"
Y = 187307.333
X = 677544.875

PI: 9+57.35'EB'
Δ = 001°40'53"
Y = 187323.887
X = 677711.864

PI: 685+23.04 'CE'
Y = 187707.860
X = 678672.810
DELTA = 18°48'47" RT
D = 8°15'00"
T = 115.05'
L = 228.04'
R = 694.49'
PC STA = 684+07.99 'CE'
Y = 187808.842
X = 678617.672
PT STA = 686+36.02 'CE'
Y = 187594.492
X = 678692.437
DB = S28°38'07"E
DA = S09°49'20"E

PI STA = 20+55.89 'EB'
Y = 187400.135
X = 678807.750
DELTA = 16°06'06" RT
D = 3°30'00"
T = 231.55'
L = 460.05'
R = 1637.02'
PC STA = 18+24.34 'EB'
Y = 187384.063
X = 678576.757
PT STA = 22+84.39 'EB'
Y = 187351.512
X = 679034.138
DB = N86°01'12"E
DA = S77°52'42"E

PI STA = 31+24.81 'EB'
Y = 187175.031
X = 679855.825
DELTA = 14°19'58" LT
D = 2°00'00"
T = 360.20'
L = 716.65'
R = 2864.79'
PC STA = 27+64.61 'EB'
Y = 187250.670
X = 679503.653
PT STA = 34+81.25 'EB'
Y = 187188.929
X = 680215.760
DB = S77°52'42"E
DA = N87°47'20"E

MATCH LINE 32+00

PI STA = 30+91.96 'WB'
Y = 187233.718
X = 679820.687
DELTA = 14°19'59" LT
D = 2°00'00"
T = 360.20'
L = 716.65'
R = 2864.79'
PC STA = 27+31.76 'WB'
Y = 187309.357
X = 679468.514
PT STA = 34+48.41 'WB'
Y = 187247.616
X = 680180.622
DB = S77°52'42"E
DA = N87°47'20"E

PT: 34+48.41 'WB'
CECELIA DR
GEORGETOWNE DR
WESTFIELD WAY
N

34'WB' 36'WB' 38'WB' 40'WB' 42'WB' 44'WB' 46'WB' 48'WB' N87°47'20"E 50'WB' 52'WB' 54'WB' 56'WB' 58'WB' 60'WB' 62'WB'
STH 190 (CAPITOL DRIVE)
STH 190/CAPITOL DR
34'EB' 36'EB' 38'EB' 40'EB' 42'EB' 44'EB' 46'EB' 48'EB' N87°47'20"E 50'EB' 52'EB' 54'EB' 56'EB' 58'EB' 60'EB' 62'EB'

PT: 34+81.25 'EB'
PI STA = 31+24.81 'EB'
Y = 187175.031
X = 679855.825
DELTA = 14°19'58" LT
D = 2°00'00"
T = 360.20'
L = 716.65'
R = 2864.79'
PC STA = 27+64.61 'EB'
Y = 187250.670
X = 679503.653
PT STA = 34+81.25 'EB'
Y = 187188.929
X = 680215.760
DB = S77°52'42"E
DA = N87°47'20"E

FOREST GROVE DR
WILLOW GROVE DR
MATCH LINE 62+50

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	ALIGNMENT DIAGRAM	SHEET 311	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_027201-AD.DWG
LAYOUT NAME - al_1
PLOT DATE : 2/1/2023 7:04 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2

PI STA = 74+55.96 'WB'
Y = 187402.239
X = 684185.190
DELTA = 3°08'52" RT
D = 0°14'58"
T = 631.36'
L = 1262.40'
R = 22978.31'
PC STA = 68+24.60 'WB'
Y = 187377.879
X = 683554.301
PT STA = 80+87.00 'WB'
Y = 187391.919
X = 684816.465
DB = N87°47'20"E
DA = S89°03'48"E

PI STA = 74+54.31 'EB'
Y = 187342.220
X = 684185.860
DELTA = 3°08'52" RT
D = 0°15'00"
T = 629.71'
L = 1259.10'
R = 22918.31'
PC STA = 68+24.60 'EB'
Y = 187317.924
X = 683556.621
PT STA = 80+83.70 'EB'
Y = 187331.927
X = 684815.484
DB = N87°47'20"E
DA = S89°03'48"E

PC: 68+24.60 'WB'
PI: 74+55.96 'WB'
PT: 80+87.00 'WB'
PC: 68+24.60 'EB'
PI: 74+54.31 'EB'
PT: 80+83.70 'EB'
PC: 174+64.11 'PK'
PT: 178+52.12 'PK'

STH 164/CTH J/PEAWAUKEE RD
182'PK'
N13°03'31"W
180'PK'
178'PK'
176'PK'
'PK'

STA 83+49.78'WB' =
STA 179+52.64'PK'

STA 83+49.04'EB' =
STA 178+92.59'PK'

64'WB' N87°47'20"E 66'WB' 68'WB' 70'WB' 72'WB' 74'WB' 76'WB' 78'WB' 80'WB' 82'WB' 84'WB' 86'WB' 88'WB' 90'WB' S89°03'48"E 92'WB'

64'EB' N87°47'20"E 66'EB' 68'EB' 70'EB' 72'EB' 74'EB' 76'EB' 78'EB' 80'EB' 82'EB' 84'EB' 86'EB' 88'EB' 90'EB' S89°03'48"E 92'EB'

STH 190/CAPITOL DR

MATCH LINE 62+50

MATCH LINE 93+00

MEADOW CREEK DR

STH 164/CTH J/PEAWAUKEE RD

N

2

PI STA = 110+52.31 'WB'
Y = 187343.450
X = 687781.380
DELTA = 1°25'54" RT
D = 0°14'58"
T = 287.09'
L = 574.14'
R = 22978.31'
PC STA = 107+65.22 'WB'
Y = 187348.142
X = 687494.332
PT STA = 113+39.37 'WB'
Y = 187331.587
X = 688068.222
DB = S89°03'48"E
DA = S87°37'55"E

PI STA = 110+48.27 'EB'
Y = 187283.470
X = 687779.650
DELTA = 1°25'54" RT
D = 0°15'00"
T = 286.34'
L = 572.65'
R = 22918.31'
PC STA = 107+61.93 'EB'
Y = 187288.150
X = 687493.351
PT STA = 113+34.57 'EB'
Y = 187271.638
X = 688065.743
DB = S89°03'48"E
DA = S87°37'55"E

PC: 107+65.22 'WB'
PI: 110+52.31 'WB'
PT: 113+39.37 'WB'
EP: 116+71.57 'WB'
PC: 107+61.93 'EB'
PI: 110+48.27 'EB'
PT: 113+34.57 'EB'

HIGHFIELD RD

94'WB' 96'WB' 98'WB' 100'WB' S89°03'48"E 102'WB' 104'WB' 106'WB' 108'WB' 110'WB' 112'WB' 114'WB' S87°37'55"E 116'WB'

94'EB' 96'EB' 98'EB' 100'EB' S89°03'48"E 102'EB' 104'EB' 106'EB' 108'EB' 110'EB' 112'EB' 114'EB' 116'EB' 118'EB' S87°37'55"E 120'EB' 122'EB'

STH 190/CAPITOL DR

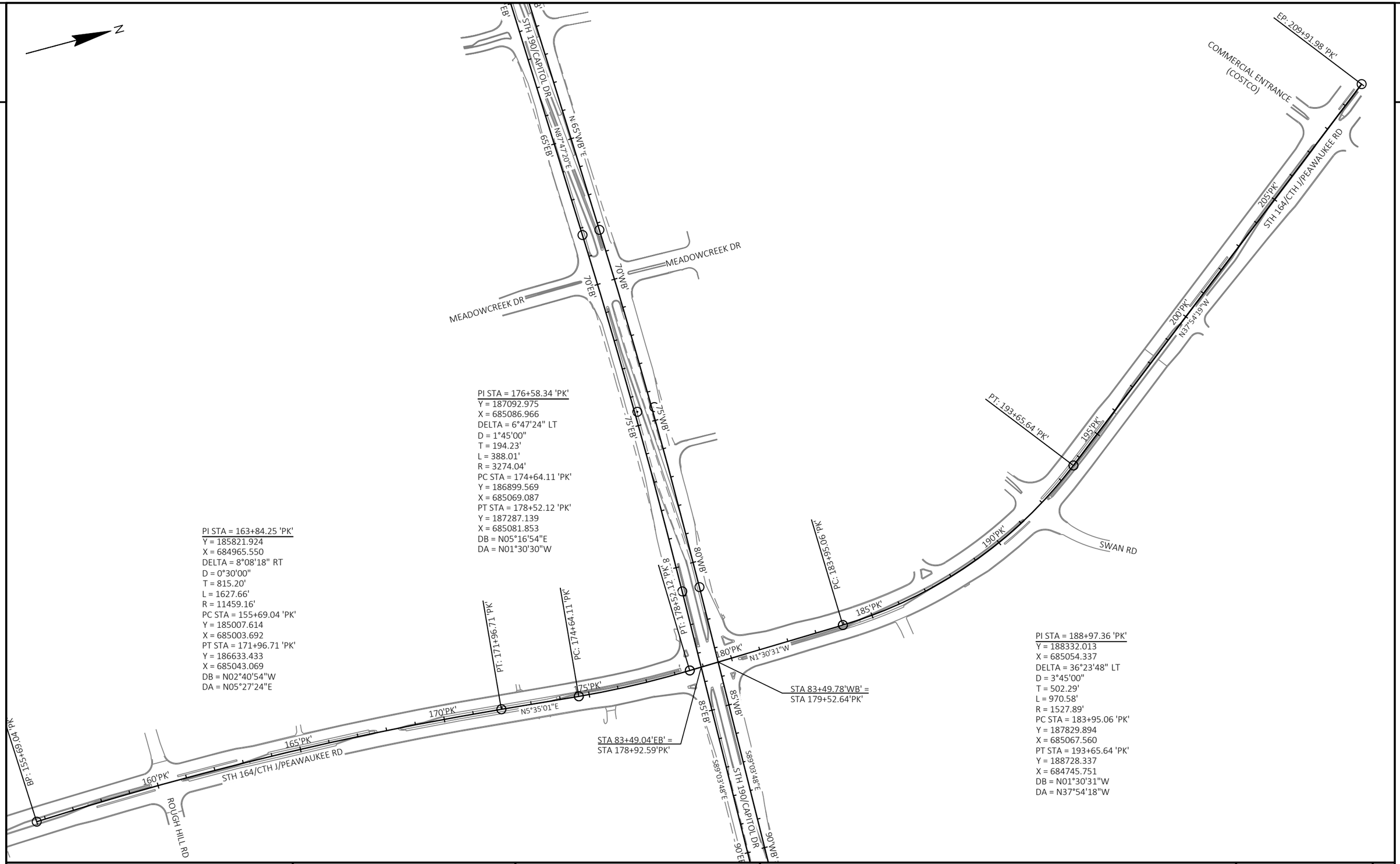
MATCH LINE 93+00

FIVE FIELDS RD

N

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	ALIGNMENT DIAGRAM	SHEET 312	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_027201-AD.DWG
LAYOUT NAME - al_2
PLOT DATE : 2/1/2023 7:04 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	ALIGNMENT DIAGRAM	SHEET 313	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_027202-AD.DWG
LAYOUT NAME - al_3
PLOT DATE : 2/1/2023 7:58 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:300 FT
WISDOT/CADDS SHEET 42

2

SIMMONS AVE

BM: 647
CUT CROSS SE CORNER OF CONTROL CABINET BASE
STA. 6+54'EB', 57' LT
N: 187342.345'
E: 677401.762'
EL: 857.61'

CP: 654
FENO MONUMENT WITH ALUMINUM CAP
STA. 6+58'EB', 49' LT
N: 187335.142'
E: 677407.153'
EL: 857.25'

8'WB'
7'EB'
STH 190/CAPITOL DR
6'EB'

DYNEX DR

BM: 648
CHISELED CROSS NORTH BOLT SIGNAL POLE
STA. 6+44'EB', 30' RT
N: 187254.779'
E: 677405.922'
EL: 857.63'

POST

SOLAR GATE

POST

STH 16 WB ON RAMP

15'WB'
14'WB'
STH 190/CAPITOL DR
STH 190/CAPITOL DR
15'EB'
14'EB'

CP & BM: 1440
FENO MONUMENT WITH PK NAIL
STA. 14+41'EB', 50' RT
N: 187307.127'
E: 678197.586'
EL: 868.27'

RIPRAP

STH 16 WB OFF RAMP

CECELIA DR

CECELIA DR

CP & BM: 1968
FENO MONUMENT WITH PK NAIL
STA. 19+75'WB', 184' LT
N: 187617.930'
E: 678725.039'
EL: 870.11'

STH 190/CAPITOL DR (WB)

19'WB'
20'WB'
21'WB'

2

CECELIA DR

STH 190/CAPITOL DR (WB)

CP & BM: 2465
FENO MONUMENT WITH PK NAIL
STA. 24+79'WB', 17' RT
N: 187345.960'
E: 679217.476'
EL: 863.42'

24'WB'
25'WB'
26'WB'
24'EB'
25'EB'
26'EB'

POST

STH 190/CAPITOL DR (EB)

STH 190/CAPITOL DR (WB)

CP & BM: 2941
FENO MONUMENT WITH PK NAIL
STA. 29+41'EB', 22' LT
N: 187240.631'
E: 679680.731'
EL: 868.89'

29'WB'
30'WB'
29'EB'
30'EB'

STH 190/CAPITOL DR (EB)

COMMERCIAL ENT.

STH 190/CAPITOL DR (WB)

CP & BM: 3816
FENO MONUMENT WITH PK NAIL
STA. 38+17'WB', 29' RT
N: 187232.451'
E: 680549.641'
EL: 894.57'

37'WB'
38'WB'
39'WB'
POST
37'EB'
38'EB'
39'EB'

STH 190/CAPITOL DR (EB)

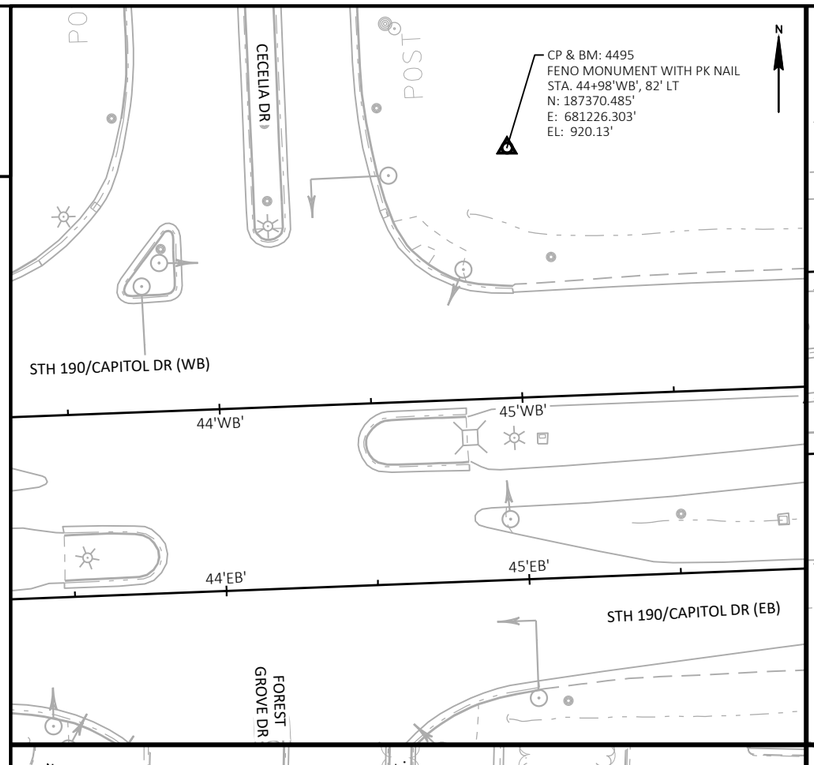
RIPRAP

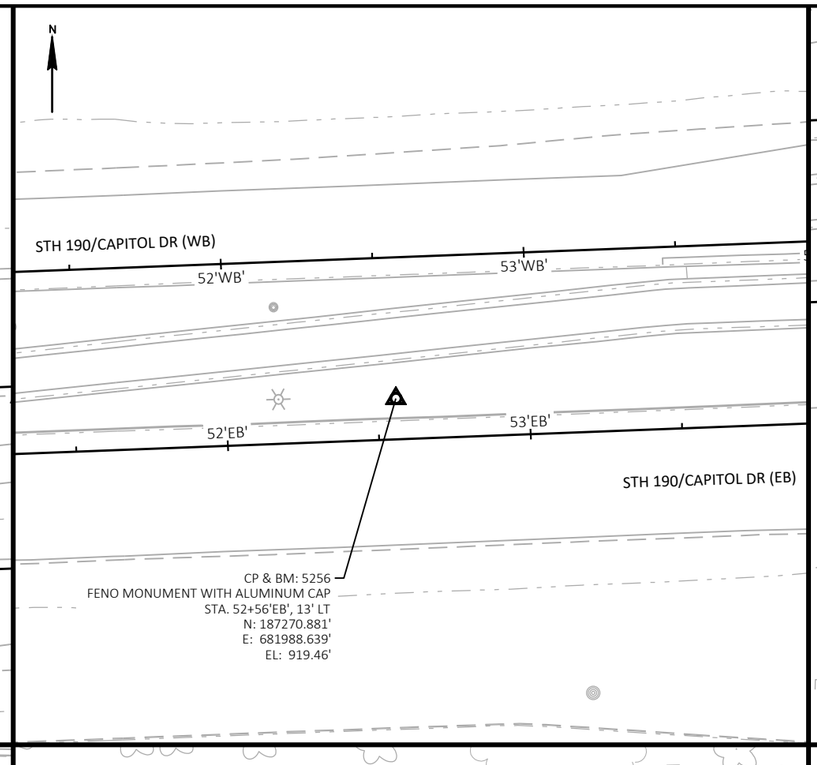
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	ALIGNMENT LAYOUT SURVEY CONTROL	SHEET 314	E

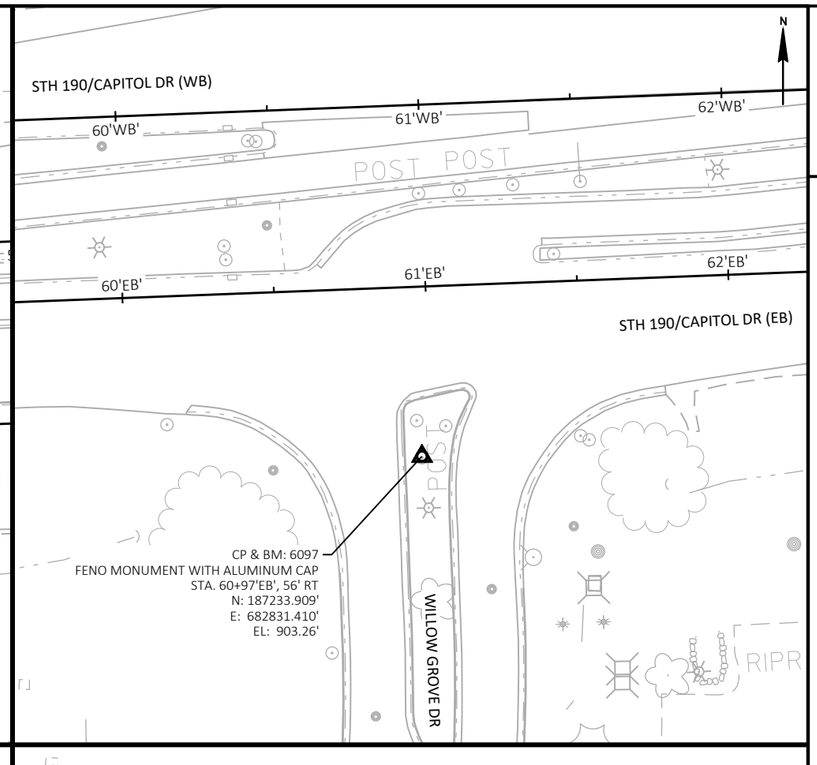
FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_027203-AD-CP.DWG
LAYOUT NAME - 01

PLOT DATE : 1/17/2023 9:34 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2





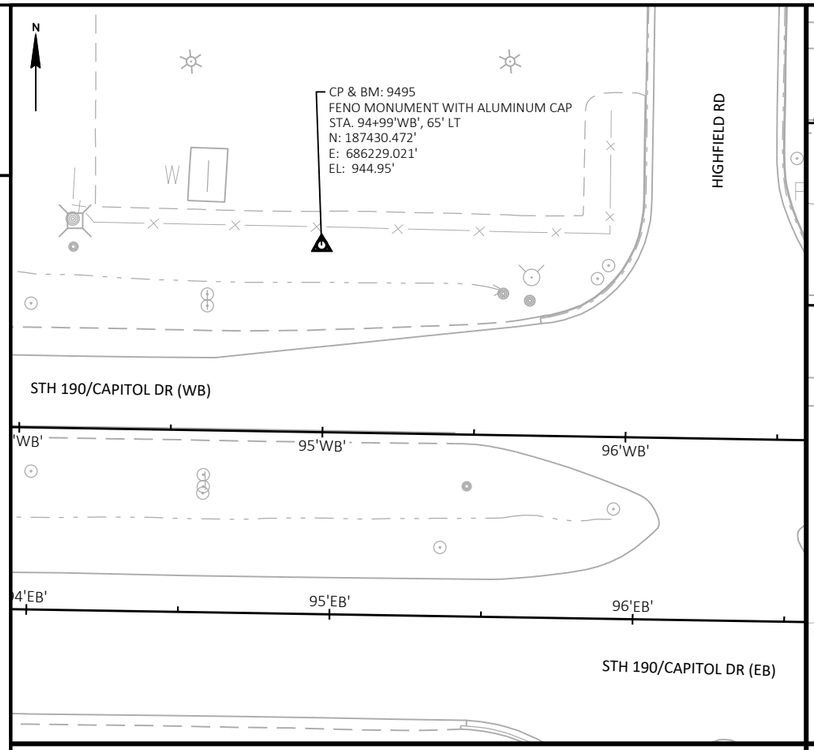


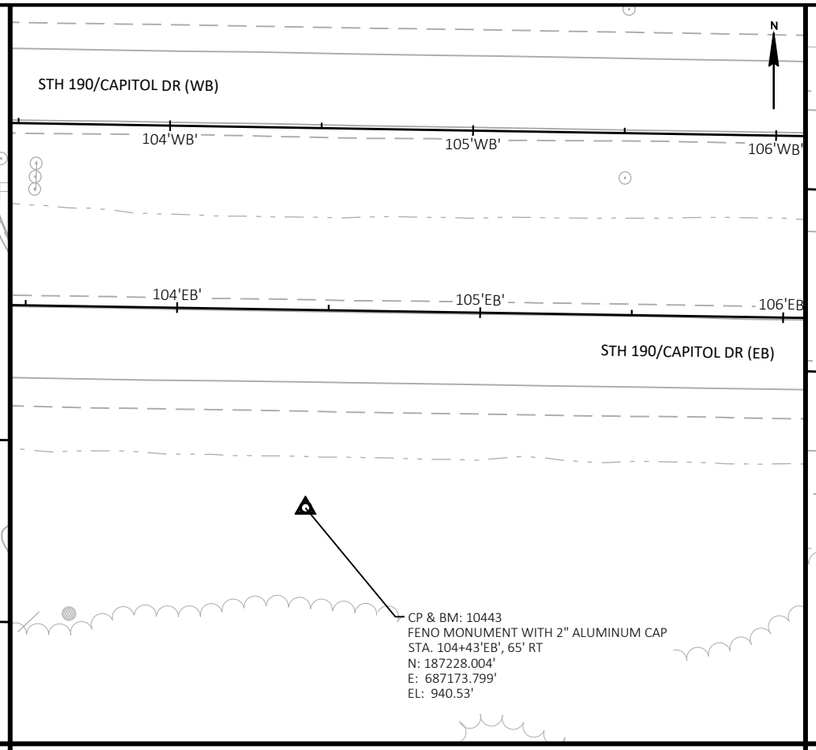
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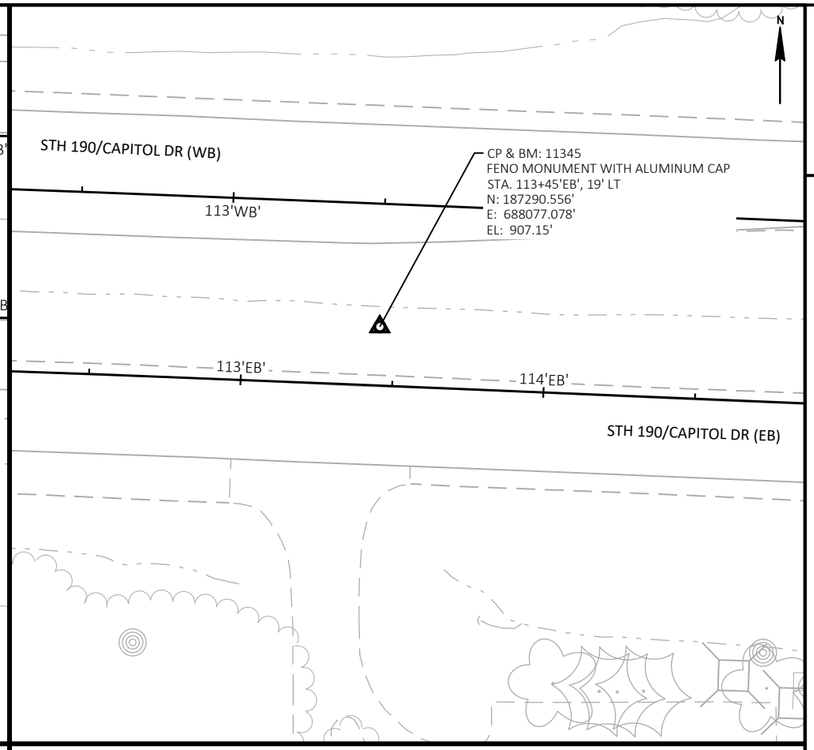
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	ALIGNMENT LAYOUT SURVEY CONTROL	SHEET 315	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_027203-AD-CP.DWG
LAYOUT NAME - 02

PLOT DATE : 1/17/2023 9:34 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT







2

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	ALIGNMENT LAYOUT SURVEY CONTROL	SHEET 316	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_027203-AD-CP.DWG
LAYOUT NAME - 03
PLOT DATE : 1/17/2023 9:35 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2025-07-73

Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	5.000	5.000
0004	204.0100	Removing Concrete Pavement	SY	18,330.000	18,330.000
0006	204.0110	Removing Asphaltic Surface	SY	574.000	574.000
0008	204.0120	Removing Asphaltic Surface Milling	SY	82,630.000	82,630.000
0010	204.0150	Removing Curb & Gutter	LF	1,716.000	1,716.000
0012	204.0155	Removing Concrete Sidewalk	SY	1,464.000	1,464.000
0014	204.0165	Removing Guardrail	LF	1,095.000	1,095.000
0016	204.0175	Removing Concrete Slope Paving	SY	55.000	55.000
0018	204.0195	Removing Concrete Bases	EACH	85.000	85.000
0020	204.0220	Removing Inlets	EACH	2.000	2.000
0022	204.9060.S	Removing (item description) 01. Traffic Signals, STH 16 EB Ramps & STH 190	EACH	1.000	1.000
0024	204.9060.S	Removing (item description) 02. Traffic Signals, STH 190 & Forest Grove Dr	EACH	1.000	1.000
0026	204.9060.S	Removing (item description) 03. Traffic Signals, STH 190 & Westfield Way	EACH	1.000	1.000
0028	204.9060.S	Removing (item description) 04. Traffic Signals, STH 190 & Meadowcreek Dr	EACH	1.000	1.000
0030	204.9060.S	Removing (item description) 05. Traffic Signals, STH 164 & STH 190	EACH	1.000	1.000
0032	204.9060.S	Removing (item description) 06. Loop Detector Wire and Lead-In Cable, STH 16 EB Ramps & STH 190	EACH	1.000	1.000
0034	204.9060.S	Removing (item description) 07. Loop Detector Wire and Lead-In Cable, STH 190 & Forest Grove Dr	EACH	1.000	1.000
0036	204.9060.S	Removing (item description) 08. Loop Detector Wire and Lead-In Cable, STH 190 & Westfield Way	EACH	1.000	1.000
0038	204.9060.S	Removing (item description) 09. Loop Detector Wire and Lead-In Cable, STH 190 & Meadowcreek Dr	EACH	1.000	1.000
0040	204.9060.S	Removing (item description) 10. Loop Detector Wire and Lead-In Cable, STH 164 & STH 190	EACH	1.000	1.000
0042	204.9060.S	Removing (item description) 21. Lighting Units	EACH	5.000	5.000
0044	204.9060.S	Removing (item description) 22. Distribution Center	EACH	1.000	1.000
0046	204.9090.S	Removing (item description) 01. Retaining Wall	LF	16.000	16.000
0048	205.0100	Excavation Common	CY	27,516.000	27,516.000
0050	208.0100	Borrow	CY	63.000	63.000
0052	213.0100	Finishing Roadway (project) 01. 2025-07-73	EACH	1.000	1.000
0054	305.0110	Base Aggregate Dense 3/4-Inch	TON	3,188.000	3,188.000
0056	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	16,053.000	16,053.000
0058	310.0110	Base Aggregate Open-Graded	TON	282.000	282.000
0060	312.0110	Select Crushed Material	TON	25,420.000	25,420.000
0062	390.0100	Removing Pavement for Base Patching	CY	1,071.000	1,071.000
0064	390.0201	Base Patching Asphaltic	TON	124.000	124.000
0066	390.0405	Base Patching Concrete SHES	CY	571.000	571.000
0068	415.0080	Concrete Pavement 8-Inch	SY	22,222.000	22,222.000
0070	416.0610	Drilled Tie Bars	EACH	1,290.000	1,290.000
0072	416.0620	Drilled Dowel Bars	EACH	3,859.000	3,859.000
0074	416.1710	Concrete Pavement Repair	SY	128.000	128.000
0076	416.1720	Concrete Pavement Replacement	SY	2,578.000	2,578.000
0078	450.4000	HMA Cold Weather Paving	TON	2,400.000	2,400.000
0080	455.0605	Tack Coat	GAL	6,713.000	6,713.000
0082	460.2000	Incentive Density HMA Pavement	DOL	15,340.000	15,340.000
0084	460.6223	HMA Pavement 3 MT 58-28 S	TON	15,198.000	15,198.000
0086	460.6224	HMA Pavement 4 MT 58-28 S	TON	8,764.000	8,764.000
0088	465.0105	Asphaltic Surface	TON	370.000	370.000
0090	465.0125	Asphaltic Surface Temporary	TON	726.000	726.000

2025-07-73

Line	Item	Item Description	Unit	Total	Qty
0092	465.0315	Asphaltic Flumes	SY	164.000	164.000
0094	520.2015	Culvert Pipe Temporary 15-Inch	LF	250.000	250.000
0096	520.2024	Culvert Pipe Temporary 24-Inch	LF	60.000	60.000
0098	520.8000	Concrete Collars for Pipe	EACH	2.000	2.000
0100	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	1.000	1.000
0102	531.2036	Drilling Shaft 36-Inch	LF	18.000	18.000
0104	531.5310	Foundation Single-Shaft Type TC-I (structure) 01. S-67-0984	EACH	1.000	1.000
0106	532.5310	Truss Cantilever 2-Chord Type I (structure) 01. S-67-0984	EACH	1.000	1.000
0108	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	13.000	13.000
0110	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	30.000	30.000
0112	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	2,413.000	2,413.000
0114	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	229.000	229.000
0116	601.0555	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	LF	581.000	581.000
0118	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	874.000	874.000
0120	601.0600	Concrete Curb Pedestrian	LF	138.000	138.000
0122	602.0405	Concrete Sidewalk 4-Inch	SF	8,993.000	8,993.000
0124	602.0410	Concrete Sidewalk 5-Inch	SF	6,807.000	6,807.000
0126	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	614.000	614.000
0128	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	86.000	86.000
0130	604.0400	Slope Paving Concrete	SY	55.000	55.000
0132	606.0100	Riprap Light	CY	24.000	24.000
0134	606.0200	Riprap Medium	CY	4.000	4.000
0136	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	7.000	7.000
0138	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	22.000	22.000
0140	611.0612	Inlet Covers Type C	EACH	1.000	1.000
0142	611.0642	Inlet Covers Type MS	EACH	2.000	2.000
0144	611.0651	Inlet Covers Type S	EACH	1.000	1.000
0146	611.0660	Inlet Covers Type WM	EACH	12.000	12.000
0148	611.3901	Inlets Median 1 Grate	EACH	2.000	2.000
0150	611.8120.S	Cover Plates Temporary	EACH	1.000	1.000
0152	612.0106	Pipe Underdrain 6-Inch	LF	2,915.000	2,915.000
0154	612.0108	Pipe Underdrain 8-Inch	LF	692.000	692.000
0156	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	227.000	227.000
0158	612.0208	Pipe Underdrain Unperforated 8-Inch	LF	15.000	15.000
0160	612.0806	Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	EACH	1.000	1.000
0162	614.2300	MGS Guardrail 3	LF	1,162.500	1,162.500
0164	614.2610	MGS Guardrail Terminal EAT	EACH	2.000	2.000
0166	614.2620	MGS Guardrail Terminal Type 2	EACH	3.000	3.000
0168	618.0100	Maintenance And Repair of Haul Roads (project) 01. 2025-07-73	EACH	1.000	1.000
0170	619.1000	Mobilization	EACH	1.000	1.000
0172	620.0300	Concrete Median Sloped Nose	SF	1,015.000	1,015.000
0174	623.0200	Dust Control Surface Treatment	SY	28,580.000	28,580.000
0176	624.0100	Water	MGAL	520.000	520.000
0178	625.0500	Salvaged Topsoil	SY	33,882.000	33,882.000
0180	627.0200	Mulching	SY	10,150.000	10,150.000
0182	628.1504	Silt Fence	LF	7,338.000	7,338.000
0184	628.1520	Silt Fence Maintenance	LF	7,338.000	7,338.000
0186	628.1530.S	Silt Fence Heavy Duty	LF	582.000	582.000
0188	628.1535.S	Silt Fence Heavy Duty Maintenance	LF	582.000	582.000

2025-07-73

Line	Item	Item Description	Unit	Total	Qty
0190	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0192	628.1910	Mobilizations Emergency Erosion Control	EACH	6.000	6.000
0194	628.2006	Erosion Mat Urban Class I Type A	SY	18,282.000	18,282.000
0196	628.2008	Erosion Mat Urban Class I Type B	SY	5,450.000	5,450.000
0198	628.6505	Soil Stabilizer Type A	ACRE	2.600	2.600
0200	628.6510	Soil Stabilizer Type B	ACRE	2.600	2.600
0202	628.7005	Inlet Protection Type A	EACH	9.000	9.000
0204	628.7010	Inlet Protection Type B	EACH	4.000	4.000
0206	628.7015	Inlet Protection Type C	EACH	20.000	20.000
0208	628.7504	Temporary Ditch Checks	LF	80.000	80.000
0210	628.7555	Culvert Pipe Checks	EACH	15.000	15.000
0212	628.7560	Tracking Pads	EACH	1.000	1.000
0214	628.7570	Rock Bags	EACH	19.000	19.000
0216	629.0210	Fertilizer Type B	CWT	21.000	21.000
0218	630.0130	Seeding Mixture No. 30	LB	1,400.000	1,400.000
0220	630.0200	Seeding Temporary	LB	841.000	841.000
0222	630.0500	Seed Water	MGAL	763.000	763.000
0224	633.1100	Delineators Temporary	EACH	14.000	14.000
0226	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	84.000	84.000
0228	637.2210	Signs Type II Reflective H	SF	1,087.930	1,087.930
0230	637.2215	Signs Type II Reflective H Folding	SF	388.080	388.080
0232	637.2220	Signs Type II Reflective SH	SF	18.000	18.000
0234	637.2230	Signs Type II Reflective F	SF	95.250	95.250
0236	638.2102	Moving Signs Type II	EACH	16.000	16.000
0238	638.2602	Removing Signs Type II	EACH	128.000	128.000
0240	638.3000	Removing Small Sign Supports	EACH	87.000	87.000
0242	642.5401	Field Office Type D	EACH	1.000	1.000
0244	643.0300	Traffic Control Drums	DAY	78,901.000	78,901.000
0246	643.0420	Traffic Control Barricades Type III	DAY	9,865.000	9,865.000
0248	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	226.000	226.000
0250	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	226.000	226.000
0252	643.0705	Traffic Control Warning Lights Type A	DAY	12,036.000	12,036.000
0254	643.0715	Traffic Control Warning Lights Type C	DAY	10,571.000	10,571.000
0256	643.0800	Traffic Control Arrow Boards	DAY	617.000	617.000
0258	643.0900	Traffic Control Signs	DAY	43,393.000	43,393.000
0260	643.0910	Traffic Control Covering Signs Type I	EACH	1.000	1.000
0262	643.0920	Traffic Control Covering Signs Type II	EACH	42.000	42.000
0264	643.1050	Traffic Control Signs PCMS	DAY	173.000	173.000
0266	643.1070	Traffic Control Cones 42-Inch	DAY	126,569.000	126,569.000
0268	643.3165	Temporary Marking Line Paint 6-Inch	LF	17,471.000	17,471.000
0270	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	30,375.000	30,375.000
0272	643.3265	Temporary Marking Line Paint 10-Inch	LF	2,635.000	2,635.000
0274	643.3280	Temporary Marking Line Removable Tape 10-Inch	LF	1,063.000	1,063.000
0276	643.3350	Temporary Marking Crosswalk Removable Tape 6-inch	LF	815.000	815.000
0278	643.3550	Temporary Marking Arrow Removable Tape	EACH	8.000	8.000
0280	643.3805	Temporary Marking Stop Line Paint 18-Inch	LF	25.000	25.000
0282	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	60.000	60.000
0284	643.5000	Traffic Control	EACH	1.000	1.000
0286	644.1430	Temporary Pedestrian Surface Plate	SF	275.000	275.000

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Line	Item	Item Description	Unit	Total	Qty
0288	644.1601	Temporary Pedestrian Curb Ramp	DAY	223.000	223.000
0290	644.1605	Temporary Pedestrian Detectable Warning Field	SF	10.000	10.000
0292	644.1810	Temporary Pedestrian Barricade	LF	2,225.000	2,225.000
0294	645.0111	Geotextile Type DF Schedule A	SY	1,896.000	1,896.000
0296	645.0120	Geotextile Type HR	SY	154.000	154.000
0298	646.1020	Marking Line Epoxy 4-Inch	LF	322.000	322.000
0300	646.1545	Marking Line Grooved Wet Ref Contrast Epoxy 4-Inch	LF	165.000	165.000
0302	646.2020	Marking Line Epoxy 6-Inch	LF	47,944.000	47,944.000
0304	646.2025	Marking Line Grooved Black Epoxy 6-Inch	LF	6,242.000	6,242.000
0306	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	6,242.000	6,242.000
0308	646.3020	Marking Line Epoxy 8-Inch	LF	1,362.000	1,362.000
0310	646.3050	Marking Line Grooved Permanent Tape 8-Inch	LF	455.000	455.000
0312	646.3555	Marking Line Grooved Contrast Permanent Tape 8-Inch	LF	6.000	6.000
0314	646.4025	Marking Line Grooved Black Epoxy 10-Inch	LF	1,378.000	1,378.000
0316	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	21,345.000	21,345.000
0318	646.5020	Marking Arrow Epoxy	EACH	133.000	133.000
0320	646.5120	Marking Word Epoxy	EACH	59.000	59.000
0322	646.6120	Marking Stop Line Epoxy 18-Inch	LF	1,228.000	1,228.000
0324	646.6220	Marking Yield Line Epoxy 18-Inch	EACH	10.000	10.000
0326	646.6464	Cold Weather Marking Epoxy 4-Inch	LF	25,200.000	25,200.000
0328	646.6468	Cold Weather Marking Epoxy 8-Inch	LF	2,800.000	2,800.000
0330	646.7120	Marking Diagonal Epoxy 12-Inch	LF	482.000	482.000
0332	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	3,322.000	3,322.000
0334	646.8120	Marking Curb Epoxy	LF	337.000	337.000
0336	646.8220	Marking Island Nose Epoxy	EACH	25.000	25.000
0338	646.9000	Marking Removal Line 4-Inch	LF	10,840.000	10,840.000
0340	646.9100	Marking Removal Line 8-Inch	LF	864.000	864.000
0342	646.9150	Marking Removal Line Grooved Permanent Tape 8-Inch	LF	4,267.000	4,267.000
0344	646.9155	Marking Removal Line Grooved Contrast Permanent Tape 8-Inch	LF	1,081.000	1,081.000
0346	646.9200	Marking Removal Line Wide	LF	178.000	178.000
0348	646.9300	Marking Removal Special Marking	EACH	21.000	21.000
0350	650.4000	Construction Staking Storm Sewer	EACH	4.000	4.000
0352	650.4500	Construction Staking Subgrade	LF	6,213.000	6,213.000
0354	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	942.000	942.000
0356	650.6000	Construction Staking Pipe Culverts	EACH	1.000	1.000
0358	650.7000	Construction Staking Concrete Pavement	LF	6,213.000	6,213.000
0360	650.8000	Construction Staking Resurfacing Reference	LF	14,800.000	14,800.000
0362	650.9000	Construction Staking Curb Ramps	EACH	64.000	64.000
0364	650.9500	Construction Staking Sidewalk (project) 01. 2025-07-73	EACH	1.000	1.000
0366	650.9911	Construction Staking Supplemental Control (project) 01. 2025-07-73	EACH	1.000	1.000
0368	650.9920	Construction Staking Slope Stakes	LF	6,213.000	6,213.000
0370	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	5,706.000	5,706.000
0372	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	2,188.000	2,188.000
0374	652.0605	Conduit Special 2-Inch	LF	476.000	476.000
0376	652.0615	Conduit Special 3-Inch	LF	3,477.000	3,477.000
0378	652.0700.S	Install Conduit into Existing Item	EACH	9.000	9.000
0380	652.0800	Conduit Loop Detector	LF	12,924.000	12,924.000
0382	653.0135	Pull Boxes Steel 24x36-Inch	EACH	42.000	42.000
0384	653.0140	Pull Boxes Steel 24x42-Inch	EACH	55.000	55.000

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Line	Item	Item Description	Unit	Total	Qty
0386	653.0900	Adjusting Pull Boxes	EACH	1.000	1.000
0388	653.0905	Removing Pull Boxes	EACH	63.000	63.000
0390	654.0101	Concrete Bases Type 1	EACH	50.000	50.000
0392	654.0102	Concrete Bases Type 2	EACH	9.000	9.000
0394	654.0105	Concrete Bases Type 5	EACH	3.000	3.000
0396	654.0110	Concrete Bases Type 10	EACH	11.000	11.000
0398	654.0113	Concrete Bases Type 13	EACH	3.000	3.000
0400	654.0120	Concrete Bases Type 10-Special	EACH	11.000	11.000
0402	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	4.000	4.000
0404	655.0230	Cable Traffic Signal 5-14 AWG	LF	4,023.000	4,023.000
0406	655.0240	Cable Traffic Signal 7-14 AWG	LF	12,594.000	12,594.000
0408	655.0260	Cable Traffic Signal 12-14 AWG	LF	12,681.000	12,681.000
0410	655.0270	Cable Traffic Signal 15-14 AWG	LF	1,929.000	1,929.000
0412	655.0320	Cable Type UF 2-10 AWG Grounded	LF	8,022.000	8,022.000
0414	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	15,155.000	15,155.000
0416	655.0610	Electrical Wire Lighting 12 AWG	LF	7,506.000	7,506.000
0418	655.0615	Electrical Wire Lighting 10 AWG	LF	1,960.000	1,960.000
0420	655.0620	Electrical Wire Lighting 8 AWG	LF	1,570.000	1,570.000
0422	655.0625	Electrical Wire Lighting 6 AWG	LF	4,710.000	4,710.000
0424	655.0700	Loop Detector Lead In Cable	LF	51,392.000	51,392.000
0426	655.0800	Loop Detector Wire	LF	51,722.000	51,722.000
0428	655.0900	Traffic Signal EVP Detector Cable	LF	7,185.000	7,185.000
0430	656.0201	Electrical Service Meter Breaker Pedestal (location) 01. STH 16 WB Ramps & STH 190	EACH	1.000	1.000
0432	656.0201	Electrical Service Meter Breaker Pedestal (location) 02. STH 190 & Westfield Way	EACH	1.000	1.000
0434	656.0201	Electrical Service Meter Breaker Pedestal (location) 03. STH 190 & Meadowcreek Dr	EACH	1.000	1.000
0436	656.0201	Electrical Service Meter Breaker Pedestal (location) 04. STH 164 & STH 190	EACH	1.000	1.000
0438	657.0100	Pedestal Bases	EACH	54.000	54.000
0440	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	16.000	16.000
0442	657.0310	Poles Type 3	EACH	13.000	13.000
0444	657.0322	Poles Type 5-Aluminum	EACH	3.000	3.000
0446	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	19.000	19.000
0448	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	22.000	22.000
0450	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	13.000	13.000
0452	657.0609	Luminaire Arms Single Member 4-Inch Clamp 6-FT	EACH	23.000	23.000
0454	657.0610	Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	EACH	3.000	3.000
0456	658.0173	Traffic Signal Face 3S 12-Inch	EACH	92.000	92.000
0458	658.0174	Traffic Signal Face 4S 12-Inch	EACH	43.000	43.000
0460	658.0175	Traffic Signal Face 5S 12-Inch	EACH	2.000	2.000
0462	658.0416	Pedestrian Signal Face 16-Inch	EACH	42.000	42.000
0464	658.0500	Pedestrian Push Buttons	EACH	41.000	41.000
0466	658.5070	Signal Mounting Hardware (location) 01. STH 16 EB Ramps & STH 190	EACH	1.000	1.000
0468	658.5070	Signal Mounting Hardware (location) 02. STH 16 WB Ramps & STH 190	EACH	1.000	1.000
0470	658.5070	Signal Mounting Hardware (location) 03. STH 190 & Forest Grove Dr	EACH	1.000	1.000
0472	658.5070	Signal Mounting Hardware (location) 04. STH 190 & Westfield Way	EACH	1.000	1.000
0474	658.5070	Signal Mounting Hardware (location) 05. STH 190 & Meadowcreek Dr	EACH	1.000	1.000
0476	658.5070	Signal Mounting Hardware (location) 06. STH 164 and STH 190	EACH	1.000	1.000
0478	659.1125	Luminaires Utility LED C	EACH	58.000	58.000
0480	659.5000.S	Lamp, Ballast, LED, Switch Disposal by Contractor	EACH	162.000	162.000
0482	661.0201	Temporary Traffic Signals for Intersections (location) 01. STH 16 EB Ramps & STH 190	EACH	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
0484	661.0201	Temporary Traffic Signals for Intersections (location) 02. STH 190 & Forest Grove Dr	EACH	1.000	1.000
0486	661.0201	Temporary Traffic Signals for Intersections (location) 03. STH 190 & Westfield Way	EACH	1.000	1.000
0488	661.0201	Temporary Traffic Signals for Intersections (location) 04. STH 190 & Meadowcreek Dr	EACH	1.000	1.000
0490	661.0201	Temporary Traffic Signals for Intersections (location) 05. STH 164 & STH 190	EACH	1.000	1.000
0492	661.0300	Generators	DAY	15.000	15.000
0494	690.0150	Sawing Asphalt	LF	2,338.000	2,338.000
0496	690.0250	Sawing Concrete	LF	14,648.000	14,648.000
0498	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	6,666.600	6,666.600
0500	740.0440	Incentive IRI Ride	DOL	15,033.000	15,033.000
0502	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	3,000.000	3,000.000
0504	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	10,500.000	10,500.000
0506	SPV.0060	Special 01. Apron Endwall For Underdrain 8-Inch	EACH	1.000	1.000
0508	SPV.0060	Special 02. Cored Holes 6-Inch	EACH	19.000	19.000
0510	SPV.0060	Special 03. Install Poles Type 9	EACH	3.000	3.000
0512	SPV.0060	Special 04. Install Poles Types 9-Special	EACH	3.000	3.000
0514	SPV.0060	Special 05. Install Poles Type 10	EACH	7.000	7.000
0516	SPV.0060	Special 06. Install Poles Type 10-Special	EACH	8.000	8.000
0518	SPV.0060	Special 07. Install Poles Type 12	EACH	1.000	1.000
0520	SPV.0060	Special 08. Install Monotube Arms 15-FT	EACH	2.000	2.000
0522	SPV.0060	Special 09. Install Monotube Arms 20-FT	EACH	4.000	4.000
0524	SPV.0060	Special 10. Install Monotube Arms 25-FT	EACH	2.000	2.000
0526	SPV.0060	Special 11. Install Monotube Arms 30-FT	EACH	3.000	3.000
0528	SPV.0060	Special 12. Install Monotube Arms 35-FT Special	EACH	3.000	3.000
0530	SPV.0060	Special 13. Install Monotube Arms 40-FT Special	EACH	6.000	6.000
0532	SPV.0060	Special 14. Install Monotube Arms 45-FT	EACH	1.000	1.000
0534	SPV.0060	Special 15. Install Monotube Arms 45-FT Special	EACH	2.000	2.000
0536	SPV.0060	Special 16. Install Monotube Arms 55-FT	EACH	2.000	2.000
0538	SPV.0060	Special 17. Install Luminaire Arms Steel 15-FT	EACH	24.000	24.000
0540	SPV.0060	Special 18. Install Poles Type 12 Over Height	EACH	2.000	2.000
0542	SPV.0060	Special 19. Install Poles Type 10 Over Height	EACH	1.000	1.000
0544	SPV.0060	Special 20. Trnspt & Install State Furn Traffic Sig Cabinet, STH 16 WB Ramps & STH 190	EACH	1.000	1.000
0546	SPV.0060	Special 21. Trnspt & Install State Furn Traffic Signal Cabinet, STH 190 & Westfield Way	EACH	1.000	1.000
0548	SPV.0060	Special 22. Trnspt & Install State Furn Traffic Signal Cabinet, STH 190 & Meadowcreek Dr	EACH	1.000	1.000
0550	SPV.0060	Special 23. Trnspt & Install State Furn Traffic Signal Cabinet, STH 164 & STH 190	EACH	1.000	1.000
0552	SPV.0060	Special 24. Trnspt & Install State Furn EVP Heads, STH 16 EB Ramps & STH 190	EACH	1.000	1.000
0554	SPV.0060	Special 25. Trnspt & Install State Furn EVP Heads, STH 16 WB Ramps & STH 190	EACH	1.000	1.000
0556	SPV.0060	Special 26. Trnspt & Install State Furn EVP Heads, STH 190 & Forest Grove Dr	EACH	1.000	1.000
0558	SPV.0060	Special 27. Trnspt & Install State Furn EVP Heads, STH 190 & Westfield Way	EACH	1.000	1.000
0560	SPV.0060	Special 28. Trnspt & Install State Furn EVP Heads, STH 190 & Meadowcreek Dr	EACH	1.000	1.000
0562	SPV.0060	Special 29. Trnspt & Install State Furn EVP Heads, STH 164 & STH 190	EACH	1.000	1.000
0564	SPV.0060	Special 30. Trnspt Traffic Signals & Inter Lighting Materials, STH 16 EB Ramps & STH 190	EACH	1.000	1.000
0566	SPV.0060	Special 31. Trnspt Traffic Signals & Inter Lighting Materials, STH 16 WB Ramps & STH 190	EACH	1.000	1.000
0568	SPV.0060	Special 32. Trnspt Traffic Signals & Inter Lighting Materials, STH 190 & Forest Grove Dr	EACH	1.000	1.000
0570	SPV.0060	Special 33. Trnspt Traffic Signals & Inter Lighting Materials, STH 190 & Westfield Way	EACH	1.000	1.000
0572	SPV.0060	Special 34. Trnspt Traffic Signals & Inter Lighting Materials, STH 190 & Meadowcreek Dr	EACH	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
0574	SPV.0060	Special 35. Trnspt Traffic Signals & Inter Lighting Materials, STH 164 & STH 190	EACH	1.000	1.000
0576	SPV.0060	Special 36. Temporary EVP System, STH 16 EB Ramps & STH 190	EACH	1.000	1.000
0578	SPV.0060	Special 37. Temporary EVP System, STH 190 & Forest Grove Dr	EACH	1.000	1.000
0580	SPV.0060	Special 38. Temporary EVP System, STH 190 & Westfield Way	EACH	1.000	1.000
0582	SPV.0060	Special 39. Temporary EVP System, STH 190 & Meadowcreek Dr	EACH	1.000	1.000
0584	SPV.0060	Special 40. Temporary EVP System, STH 164 & STH 190	EACH	1.000	1.000
0586	SPV.0060	Special 41. Remove and Reinstall Fiber Optic Pigtail, STH 16 EB Ramps & STH 190	EACH	1.000	1.000
0588	SPV.0060	Special 42. Remove and Reinstall Fiber Optic Pigtail, STH 190 & Forest Grove Dr	EACH	1.000	1.000
0590	SPV.0060	Special 43. Remove and Reinstall Fiber Optic Pigtail, STH 190 & Westfield Way	EACH	1.000	1.000
0592	SPV.0060	Special 44. Remove and Reinstall Fiber Optic Pigtail, STH 190 & Meadowcreek Dr	EACH	1.000	1.000
0594	SPV.0060	Special 45. Remove and Reinstall Fiber Optic Pigtail, STH 164 & STH 190	EACH	1.000	1.000
0596	SPV.0060	Special 46. Temporary Vehicle Detection System, STH 16 EB Ramps and STH 190	EACH	1.000	1.000
0598	SPV.0060	Special 47. Temporary Vehicle Detection System, STH 190 & Forest Grove Dr	EACH	1.000	1.000
0600	SPV.0060	Special 48. Temporary Vehicle Detection System, STH 190 & Westfield Way	EACH	1.000	1.000
0602	SPV.0060	Special 49. Temporary Vehicle Detection System, STH 190 & Meadowcreek Dr	EACH	1.000	1.000
0604	SPV.0060	Special 50. Temporary Vehicle Detection System, STH 164 & STH 190	EACH	1.000	1.000
0606	SPV.0060	Special 97. Adjust Water Valve Box Sections	EACH	5.000	5.000
0608	SPV.0060	Special 99. Verify Landmark Reference Monuments	EACH	3.000	3.000
0610	SPV.0170	Special 02. Vegetation Removal	STA	2.000	2.000
0612	SPV.0180	Special 01. Removing Distressed Pavement Milling	SY	3,300.000	3,300.000

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GRUBBING

CATEGORY	STATION	TO	STATION	OFFSET	LOCATION	201.0205 GRUBBING STA
0010	33+00 'EB'	-	38+00 'EB'	RT	EB - STH 190	5
					TOTAL 0010	5

REMOVING ASPHALTIC SURFACE

CATEGORY	STATION	TO	STATION	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY
0010	7+51 'EB'	-	7+66 'EB'	EB - STH 190	51
	8+60 'EB'	-	9+44 'EB'	MEDIAN - STH 190	102
	682+65 'I'	-	682+80 'I'	LT SHLD - STH 16 EB OFF RAMP	9
	44+20 'EB'	-	44+41 'EB'	FOREST GROVE DRIVE	36
	43+83 'WB'	-	44+11 'WB'	GEORGETOWNE DRIVE	47
	55+01 'EB'	-	55+04 'EB'	MEDIAN - COMMERCIAL ENT.	14
	55+05 'WB'	-	55+14 'WB'	MEDIAN - WESTFIELD WAY	16
	54+61 'WB'	-	54+84 'WB'	WESTFIELD WAY	39
	69+87 'EB'	-	70+02 'EB'	MEADOWCREEK DRIVE	37
	82+44 'WB'	-	82+63 'WB'	NW QUAD PATH - STH 190 / STH 164	53
	84+22 'EB'	-	84+47 'EB'	SE QUAD PATH - STH 190 / STH 164	51
	8+56 'EB'	-	9+62 'EB'	TEMP. MEDIAN CROSSOVER - STH 190	71
	685+34 'J'	-	685+60 'J'	TEMP. WIDENING - STH 16 EB ON RAMP	17
	685+91 'K'	-	686+26 'K'	TEMP. WIDENING - STH 16 WB OFF RAMP	31
				TOTAL 0010	574

REMOVING ASPHALTIC SURFACE MILLING

CATEGORY	STATION	TO	STATION	LOCATION	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
0010	8+89 'EB'	-	9+19 'EB'	EB - STH 190	110
	8+88 'WB'	-	9+14 'WB'	WB - STH 190	110
	19+20 'WB'	-	19+97 'WB'	CECELIA DR	190
	28+32 'EB'	-	29+38 'EB'	COMMERCIAL ENT. - DYNEX	320
	37+00 'EB'	-	82+47 'EB'	EB - STH 190	19,500
	37+00 'EB'	-	82+24 'EB'	MEDIAN & LEFT TURN LANES	15,400
	37+00 'WB'	-	82+13 'WB'	WB - STH 190	20,600
	84+68 'EB'	-	111+00 'EB'	EB - STH 190	10,500
	84+63 'EB'	-	111+00 'EB'	MEDIAN & LEFT TURN LANES	5,200
	84+34 'WB'	-	111+00 'WB'	WB - STH 190	10,700
				TOTAL 0010	82,630

REMOVING GUARDRAIL

CATEGORY	STATION	TO	STATION	LOCATION	204.0165 REMOVING GUARDRAIL LF
0010	689+95 'K'	-	691+10 'K'	STH 16 WB OFF RAMP	115
	29+95 'EB'	-	39+69 'EB'	EB - STH 190	980
				TOTAL 0010	1,095

REMOVING CURB & GUTTER

CATEGORY	STATION	TO	STATION	OFFSET	LOCATION	204.0150 REMOVING CURB & GUTTER LF
0010	8+61 'WB'	-	9+14 'WB'	RT	MEDIAN - STH 190	122
	8+88 'WB'	-	9+13 'WB'	LT	WB - STH 190	27
	8+89 'EB'	-	9+19 'EB'	RT	EB - STH 190	30
	685+49 'L'	-	685+67 'L'	RT	STH 16 WB ON RAMP	19
	685+61 'L'	-	685+78 'L'	LT	STH 16 WB ON RAMP	18
	15+49 'WB'	-	15+74 'WB'	LT	STH 16 WB ON RAMP	28
	15+61 'WB'	-	15+94 'WB'	LT	STH 16 WB ON RAMP	36
	43+42 'WB'	-	43+60 'WB'	LT	NW QUAD - STH 190 / GEORGETOWNE DRIVE	24
	43+70 'WB'	-	43+87 'WB'	LT	NW QUAD ISLAND - GEORGETOWNE DRIVE	65
	44+58 'WB'	-	44+98 'WB'	LT	NE QUAD - STH 190 / GEORGETOWNE DRIVE	51
	44+65 'WB'	-	44+81 'WB'	RT	WB MEDIAN - STH 190	32
	44+09 'EB'	-	44+17 'EB'	RT	MEDIAN - FOREST GROVE DR.	39
	43+25 'EB'	-	43+76 'EB'	RT	SW QUAD - STH 190 / FOREST GROVE DRIVE	60
	44+50 'EB'	-	45+02 'EB'	RT	SE QUAD - STH 190 / FOREST GROVE DRIVE	63
	54+37 'EB'	-	54+50 'EB'	LT	MEDIAN EB - STH 190	40
	55+71 'WB'	-	55+85 'WB'	RT	MEDIAN WB - STH 190	41
	54+18 'EB'	-	54+76 'EB'	RT	SW QUAD - STH 190 / COMMERCIAL ENT.	79
	54+29 'WB'	-	54+79 'WB'	LT	NW QUAD - STH 190 / WESTFIELD WAY	68
	54+99 'EB'	-	54+05 'EB'	RT	MEDIAN - COMMERCIAL ENT.	56
	55+08 'WB'	-	55+42 'WB'	LT	MEDIAN - WESTFIELD WAY	17
	55+30 'EB'	-	55+68 'EB'	RT	SE QUAD - STH 190 / COMMERCIAL ENT.	54
	55+43 'WB'	-	56+01 'WB'	LT	NE QUAD - STH 190 / WESTFIELD WAY	78
	68+86 'EB'	-	69+06 'EB'	LT	EB MEDIAN - STH 190	54
	68+79 'WB'	-	69+54 'WB'	LT	NW QUAD - STH 190 / COMMERCIAL ENT.	85
	70+38 'WB'	-	70+75 'WB'	LT	NE QUAD - STH 190 / COMMERCIAL ENT.	44
	69+89 'WB'	-	69+98 'WB'	LT	MEDIAN - COMMERCIAL ENT.	17
	68+89 'EB'	-	69+17 'EB'	RT	SW QUAD - STH 190 / MEADOWCREEK DRIVE	30
	82+46 'WB'	-	82+97 'WB'	LT	NW QUAD - STH 190 / STH 164	141
	82+77 'EB'	-	82+88 'EB'	RT	SW QUAD - STH 190 / STH 164	105
	84+31 'EB'	-	84+45 'EB'	RT	SE QUAD - STH 190 / STH 164	95
	84+10 'WB'	-	84+21 'WB'	LT	NE QUAD - STH 190 / STH 164	98
					TOTAL 0010	1,716

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

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REMOVING CONCRETE PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	204.0100 REMOVING CONCRETE PAVEMENT SY
0010	9+18 'EB'	-	36+85 'EB'	EB - STH 190	8,710
	685+34 'J'	-	685+81 'J'	STH 16 EB ON RAMP	230
	685+85 'K'	-	689+57 'K'	STH 16 WB OFF RAMP	400
	9+24 'WB'	-	36+87 'WB'	WB - STH 190	8,570
	684+54 'I'	-	685+24 'I'	STH 16 EB OFF RAMP	420
				TOTAL 0010	18,330

* REMOVAL OF FULL DEPTH ASPHALT PATCHES ON STH 190 EB FROM STA. 15+50 TO STA. 37+00 WILL BE PAID UNDER THE REMOVING CONCRETE PAVEMENT ITEM

REMOVING CONCRETE SLOPE PAVING

CATEGORY	STATION	TO	STATION	LOCATION	204.0175 REMOVING CONCRETE SLOPE PAVING SY
0010	11+57 'EB'	-	11+99 'EB'	EB - STH 190	22
	12+36 'EB'	-	12+78 'EB'	EB - STH 190	33
				TOTAL 0010	55

REMOVING CONCRETE SIDEWALK

CATEGORY	STATION	TO	STATION	LOCATION	204.0155 REMOVING CONCRETE SIDEWALK SY
0010	9+44 'EB'	-	9+59 'EB'	MEDIAN - STH 190	18
	9+22 'EB'	-	9+56 'EB'	SW QUAD - STH 190 / STH 16 EB ON RAMP	21
	8+94 'WB'	-	9+27 'WB'	NW QUAD - STH 190 / STH 16 EB OFF RAMP	23
	684+79 'I'	-	685+27 'I'	SPLITTER ISLAND - STH 16 EB OFF RAMP	37
	9+90 'WB'	-	10+22 'WB'	NE QUAD - STH 190 / STH 16 EB OFF RAMP	19
	10+45 'EB'	-	14+21 'EB'	MEDIAN - STH 190	303
	11+24 'WB'	-	13+16 'WB'	STH 16 EB OFF - WB ON RAMP	113
	14+25 'WB'	-	14+50 'WB'	NW QUAD - STH 190 / STH 16 WB ON RAMP	16
	14+71 'WB'	-	15+77 'WB'	ISLAND - STH 16 WB ON RAMP	121
	14+74 'WB'	-	15+23 'WB'	MEDIAN - STH 190	97
	15+63 'WB'	-	15+96 'WB'	NE QUAD - STH 190 / STH 16 WB ON RAMP	23
	43+47 'EB'	-	43+56 'EB'	MEDIAN - STH 190	16
	44+65 'WB'	-	44+81 'WB'	MEDIAN - STH 190	27
	43+46 'EB'	-	43+70 'EB'	SW QUAD - STH 190 / FOREST GROVE DR.	19
	43+70 'WB'	-	43+87 'WB'	NW QUAD ISLAND - GEORGETOWNE DR.	24
	44+10 'EB'	-	44+17 'EB'	MEDIAN - FOREST GROVE DR.	15
	44+59 'EB'	-	44+82 'EB'	SE QUAD - STH 190 / FOREST GROVE DR.	36
	44+60 'WB'	-	44+83 'WB'	NE QUAD - STH 190 / GEORGETOWNE DR.	27
	53+99 'WB'	-	54+33 'WB'	MEDIAN - STH 190	14
	54+37 'EB'	-	54+50 'EB'	MEDIAN - STH 190	28
	55+71 'WB'	-	55+84 'WB'	MEDIAN - STH 190	25
	55+88 'EB'	-	56+07 'EB'	MEDIAN - STH 190	8
	54+34 'EB'	-	54+75 'EB'	SW QUAD - STH 190 / WESTFIELD WAY	34
	54+37 'WB'	-	54+68 'WB'	NW QUAD - STH 190 / WESTFIELD WAY	38
	55+38 'EB'	-	55+65 'EB'	SE QUAD - STH 190 / WESTFIELD WAY	18
	55+52 'WB'	-	55+92 'WB'	NE QUAD - STH 190 / WESTFIELD WAY	44
	68+63 'WB'	-	68+87 'WB'	MEDIAN - STH 190	9
	68+91 'EB'	-	69+05 'EB'	MEDIAN - STH 190	29
	70+88 'EB'	-	71+15 'EB'	MEDIAN - STH 190	9
	68+92 'EB'	-	69+17 'EB'	SW QUAD - STH 190 / MEADOWCREEK DR.	17
	68+95 'WB'	-	69+47 'WB'	NW QUAD - STH 190 / COMMERCIAL ENTRANCE	36
	69+73 'EB'	-	69+77 'EB'	MEDIAN - MEADOWCREEK DR.	11
	70+45 'WB'	-	70+72 'WB'	NE QUAD - STH 190 / COMMERCIAL ENTRANCE	16
	82+32 'EB'	-	82+73 'EB'	MEDIAN - STH 190	9
	82+56 'WB'	-	82+67 'WB'	MEDIAN - STH 190	5
	84+31 'EB'	-	84+46 'EB'	MEDIAN - STH 190	9
	84+34 'WB'	-	84+80 'WB'	MEDIAN - STH 190	10
	82+53 'WB'	-	82+68 'WB'	NW QUAD - STH 190 / STH 164	11
	82+74 'EB'	-	82+82 'EB'	SW QUAD - STH 190 / STH 164	5
	83+39 'EB'	-	83+44 'EB'	S. MEDIAN - STH 164	17
	83+55 'WB'	-	83+59 'WB'	N. MEDIAN - STH 164	15
	84+14 'WB'	-	84+23 'WB'	NE QUAD - STH 190 / STH 164	4
	84+28 'EB'	-	84+40 'EB'	SE QUAD - STH 190 / STH 164	7
	82+72 'WB'	-	82+97 'WB'	NW QUAD - ISLAND	42
	82+83 'EB'	-	83+00 'EB'	SW QUAD - ISLAND	15
	83+99 'WB'	-	84+12 'WB'	NE QUAD - ISLAND	9
	84+02 'EB'	-	84+13 'EB'	SE QUAD - ISLAND	15
				TOTAL 0010	1,464

REMOVING STORM SEWER ITEMS

CATEGORY	STATION	LOCATION	204.0220 REMOVING INLETS EACH	REMARKS
0010	16+03 'EB'	MEDIAN - STH 190	1	
	39+05 'EB'	MEDIAN - STH 190	1	TEMP. CROSSOVER, CULVERT PIPE TEMPORARY 15-INCH
		TOTAL 0010	2	

REMOVING RETAINING WALL

CATEGORY	STATION	TO	STATION	LOCATION	204.9090.S.01 REMOVING (ITEM DESCRIPTION) (01. RETAINING WALL) LF
0010	9+23 'EB'	-	9+40 'EB'	EB - STH 190	16
				TOTAL 0010	16

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

EARTHWORK SUMMARY (PROJECT ID 2025-07-73)

CATEGORY 0010

SUBSTAGE	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1)		SALVAGED/ UNUSABLE MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13)	MASS ORDINATE +/- (14)	WASTE	208.0100 BORROW	COMMENT:
			CUT (2)	EBS EXCAVATION				FACTOR 1.25				
STAGE 1	30+79 'EB' - 42+78 'EB'	MEDIAN - STH 190 (TEMP. CROSSOVER)	510	0	47	463	421	526	-63	0	63	
		STAGE 1 SUBTOTALS	510	0	47	463	421	526	-63	0	63	
STAGE 2	9+19 'EB' - 39+73 'EB'	EB - STH 190	12,384	0	3,542	8,842	932	1165	7,677	8,035	-	
	686+00 'K' - 691+06 'K'	STH 16 WB OFF RAMP	781	0	90	691	903	1,129	-438	0	-	
	685+36 'J' - 685+81 'J'	STH 16 EB OFF RAMP	429	0	51	378	0	0	378	438	-	
		STAGE 2 SUBTOTALS	13,594	0	3,683	9,911	1,835	2,294	7,617	8,473	0	
STAGE 3	9+17 'WB' - 37+00 'WB'	WB - STH 190	12,164	0	4,284	7,880	142	178	7,703	7,703	-	
	684+54 'I' - 685+26 'I'	STH 16 EB ON RAMP	266	0	94	172	0	0	172	172	-	
		STAGE 3 SUBTOTALS	12,430	0	4,378	8,052	142	178	7,875	7,875	0	
STAGE 4	30+79 'EB' - 42+78 'EB'	MEDIAN - STH 190 (REMOVING TEMP. CROSSOVER)	982	0	245	737	58	73	664	664	-	
		STAGE 4 SUBTOTALS	982	0	245	737	58	73	664	664	0	
		PROJECT ID 2025-07-73 TOTALS	27,516	0	8,353	19,163	2,456	3,071	16,093	17,012	63	
		TOTAL COMMON EXC	27,516									

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNUSABLE MATERIAL IS INCLUDED IN CUT.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE MATERIAL.
(13) EXPANDED FILL FACTOR = 1.25
DEPENDING ON SELECTIONS: EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR
(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

3

BASE AGGREGATE ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	312.0110 SELECT CRUSHED MATERIAL TON	623.0200 DUST CONTROL SURFACE TREATMENT SY	624.0100 WATER MGAL	628.7560 TRACKING PADS EACH
0010	8+56 'EB'	-	9+68 'EB'	TEMP. MEDIAN - STH 190	-	81	-	-	10	-
	35+12 'EB'	-	39+41 'EB'	TEMP. MEDIAN CROSSOVER	205	1,520	-	-	20	-
	8+88 'EB'	-	37+00 'EB'	EB - STH 190	520	5,750	11,200	12,810	180	-
	685+30 'J'	-	685+81 'J'	STH 16 EB ON RAMP	3	120	260	240	10	-
	685+65 'K'	-	691+06 'K'	STH 16 WB OFF RAMP	58	750	1,360	1,470	30	-
	39+40 'EB'	-	46+58 'EB'	MEDIAN SHLDR - STH 190	130	-	-	-	10	-
	71+13 'WB'	-	79+90 'WB'	MEDIAN SHLDR - STH 190	190	-	-	-	10	-
	87+05 'EB'	-	111+00 'EB'	MEDIAN SHLDR - STH 190	450	-	-	-	10	-
	684+54 'I'	-	685+36 'I'	STH 16 EB OFF RAMP	2	220	460	390	10	-
	9+14 'WB'	-	37+00 'WB'	WB - STH 190	500	5,820	11,400	12,920	180	-
	37+00 'WB'	-	68+79 'WB'	WB & EB OUTSIDE SHLDR - STH 190	400	-	-	-	10	-
	70+76 'WB'	-	111+00 'WB'	WB & EB OUTSIDE SHLDR - STH 190	480	-	-	-	10	-
	8+56 'EB'	-	9+68 'EB'	MEDIAN - STH 190	-	64	100	-	10	-
	30+79 'WB'	-	42+78 'WB'	WB & EB MEDIAN SHLDR - STH 190	250	700	640	750	20	-
	680+34 'CE'	-	685+18 'CE'	CONSTRUCTION STAGING AREA	-	250	-	-	-	1
				TOTAL 0010	3,188	15,275	25,420	28,580	520	1

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

CONCRETE PAVEMENT ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	415.0080 CONCRETE PAVEMENT 8-INCH SY	* 416.0610 DRILLED TIE BARS EACH	* 416.0620 DRILLED DOWEL BARS EACH
0010	9+18 'EB'	-	37+00 'EB'	EB - STH 190	10,170	-	-
	685+30 'J'	-	685+81 'J'	STH 16 EB ON RAMP	232	-	18
	685+65 'K'	-	691+06 'K'	STH 16 WB OFF RAMP	896	148	45
	685+87 'K'	-	686+41 'K'	STH 16 WB OFF RAMP	87	-	10
	684+54 'I'	-	685+36 'I'	STH 16 EB OFF RAMP	377	-	27
	9+14 'WB'	-	37+00 'WB'	WB - STH 190	10,460	107	11
				TOTAL 0010	22,222	255	111

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

ASPHALTIC FLUMES

CATEGORY	STATION	TO	STATION	OFFSET	LOCATION	465.0315 ASPHALTIC FLUMES SY
0010	686+11 'K'	-	686+18 'K'	LT	STH 16 WB OFF RAMP	12
	28+13 'EB'	-	28+21 'EB'	RT	EB - STH 190	25
	19+70 'WB'	-	19+76 'WB'	LT	CECELIA DRIVE	14
	43+17 'EB'	-	43+25 'EB'	RT	EB - STH 190	10
	55+68 'EB'	-	55+76 'EB'	RT	EB - STH 190	12
	56+01 'WB'	-	56+09 'WB'	LT	WB - STH 190	7
	61+77 'EB'	-	61+85 'EB'	RT	EB - STH 190	19
	61+84 'WB'	-	61+92 'WB'	LT	WB - STH 190	12
	68+81 'EB'	-	68+89 'EB'	RT	EB - STH 190	19
	82+04 'WB'	-	82+12 'WB'	LT	WB - STH 190	7
	82+39 'EB'	-	82+47 'EB'	RT	EB - STH 190	14
	109+99 'EB'	-	110+07 'EB'	RT	EB - STH 190	13
					TOTAL 0010	164

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

PAVEMENT REPAIR ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	390.0100 REMOVING PAVEMENT FOR BASE PATCHING CY	390.0201 BASE PATCHING ASPHALTIC TON	390.0405 BASE PATCHING CONCRETE SHES CY	* 416.0610 DRILLED TIE BARS EACH	* 416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	* 690.0150 SAWING ASPHALT LF	* 690.0250 SAWING CONCRETE LF
0010	682+64 'I'	-	682+79 'I'	STH 16 EB OFF RAMP	4	3	-	-	32	40	-	11	63
	37+00 'EB'	-	37+17 'EB'	EB - STH 190	19	-	12	-	32	-	-	-	65
	37+26 'EB'	-	37+32 'EB'	EB - STH 190	6	-	4	-	32	-	-	-	54
	37+44 'EB'	-	37+50 'EB'	EB - STH 190	3	-	2	3	16	-	-	-	30
	37+89 'EB'	-	37+95 'EB	EB - STH 190	6	-	4	-	32	-	-	-	54
	38+50 'EB'	-	38+56 'EB'	EB - STH 190	6	-	4	-	32	-	-	-	54
	38+84 'EB'	-	38+90 'EB'	EB - STH 190	3	-	2	3	16	-	-	-	30
	37+30 'WB'	-	37+36 'WB'	WB - STH 190	6	-	4	-	32	-	-	-	54
	37+58 'WB'	-	37+64 'WB	WB - STH 190	6	-	4	-	32	-	-	-	54
	38+70 'WB'	-	37+76 'WB'	WB - STH 190	6	-	4	-	32	-	-	-	54
	38+98 'WB'	-	39+04 'WB'	WB - STH 190	3	-	2	3	16	-	-	-	30
	39+65 'EB'	-	39+80 'EB'	EB - STH 190	23	5	10	-	32	-	-	21	87
	39+91 'WB'	-	39+97 'WB'	WB - STH 190	6	-	4	-	32	-	-	-	54
	39+95 'EB'	-	40+01 'EB'	EB - STH 190	3	-	2	3	16	-	-	-	30
	40+55 'EB'	-	40+61 'EB'	EB - STH 190	3	-	2	3	16	-	-	-	30
	41+16 'EB'	-	41+31 'EB'	EB - STH 190	25	6	10	-	32	-	-	24	87
	41+55 'EB'	-	41+61 'EB'	EB - STH 190	3	-	2	-	16	-	-	-	30
	45+59 'EB'	-	45+65 'EB'	EB - STH 190	6	-	4	-	32	-	-	-	54
	48+36 'EB'	-	48+42 'EB'	EB - STH 190	3	-	2	3	16	-	-	-	30
	46+87 'WB'	-	47+02 'WB'	WB - STH 190	30	7	13	-	32	-	-	22	92
	48+91 'EB'	-	48+97 'EB'	EB - STH 190	6	-	4	-	32	-	-	-	54
	48+39 'WB'	-	48+54 'WB'	WB - STH 190	35	7	16	-	32	-	-	19	119
	48+83 'WB'	-	48+89 'WB'	WB - STH 190	3	-	2	3	16	-	-	-	30
	49+59 'WB'	-	49+65 'WB'	WB - STH 190	6	-	4	-	32	-	-	-	54
	50+00 'EB'	-	50+08 'EB'	EB - STH 190	9	-	6	-	32	-	-	-	56
	50+47 'EB'	-	50+62 'EB'	EB - STH 190	23	5	10	-	32	-	-	21	87
	51+98 'EB'	-	52+13 'EB'	EB - STH 190	25	6	10	-	32	-	-	24	87
	52+38 'WB'	-	52+44 'WB'	WB - STH 190	6	-	4	-	32	-	-	-	54
	52+77 'WB'	-	52+84 'WB'	WB-STH 190	8	-	5	-	32	-	-	-	54
	53+65 'EB'	-	53+71 'EB'	EB - STH 190	3	-	2	-	16	-	-	-	30
	53+82 'EB'	-	53+88 'EB'	EB - STH 190	3	-	2	-	16	-	-	-	30
	56+22 'EB'	-	56+28 'EB'	EB-STH 190	6	-	4	-	32	-	-	-	56
	56+35 'WB'	-	56+41 'WB'	WB - STH 190	3	-	2	3	16	-	-	-	30
	57+10 'WB'	-	57+16 'WB'	WB - STH 190	3	-	2	3	16	-	-	-	30
	57+31 'WB'	-	57+37 'WB'	WB - STH 190	3	-	2	3	16	-	-	-	30
	58+11 'WB'	-	58+26 'WB'	WB - STH 190	33	9	13	-	24	-	-	31	91
	58+30 'WB'	-	58+40 'WB	WB - STH 190	6	-	4	4	8	-	-	-	22
	59+61 'WB'	-	59+76 'WB'	WB - STH 190	38	9	16	-	32	-	-	26	119
	60+04 'EB'	-	60+10 'EB'	EB - STH 190	3	-	2	3	16	-	-	-	30
	60+91 'WB'	-	60+97 'WB'	WB - STH 190	3	-	2	3	16	-	-	-	30
	62+81 'EB'	-	62+89 'EB'	EB - STH 190	9	-	6	-	32	-	-	-	54
	65+04 'EB'	-	65+19 'EB'	EB - STH 190	23	4	10	-	32	-	-	19	87
	65+79 'WB'	-	65+85 'WB'	WB - STH 190	3	-	2	3	16	-	-	-	30
	66+52 'WB'	-	66+58 'WB'	WB - STH 190	6	-	4	-	32	-	-	-	54
	66+55 'EB'	-	66+70 'EB'	EB - STH 190	24	6	10	-	32	-	-	24	87
	69+69 'EB'	-	69+77 'EB'	EB - STH 190	9	-	6	6	32	-	-	-	72
	72+92 'WB'	-	72+98 'WB'	WB - STH 190	3	-	2	3	16	-	-	-	30
	73+12 'WB'	-	73+27 'WB'	WB - STH 190	31	9	12	-	32	-	-	32	89
	74+58 'WB'	-	74+73 'WB'	WB - STH 190	38	11	14	-	32	-	-	32	117
	76+36 'WB'	-	76+42 'WB	WB - STH 190	6	-	4	-	32	-	-	-	54
				PAGE 1/2 - SUBTOTALS	547	87	273	52	1296	40	0	306	2803

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

CONTINUED ON NEXT PAGE

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

3

PAVEMENT REPAIR ITEMS (CONTINUED)

CATEGORY	STATION	TO	STATION	LOCATION	390.0100 REMOVING PAVEMENT FOR BASE PATCHING CY	390.0201 BASE PATCHING ASPHALTIC TON	390.0405 BASE PATCHING CONCRETE SHES CY	* 416.0610 DRILLED TIE BARS EACH	* 416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	* 690.0150 SAWING ASPHALT LF	* 690.0250 SAWING CONCRETE LF
0010	76+92 'EB'	-	77+02 'EB'	EB - STH 190	11	-	7	-	32	-	-	-	82
	78+80 'EB'	-	79+05 'EB'	EB - STH 190	44	12	17	-	32	-	-	32	121
	80+36 'EB'	-	80+57 'EB'	EB - STH 190	38	11	14	-	32	-	-	32	117
	81+84 'WB'	-	81+99 'WB'	WB - STH 190	-	-	-	12	16	-	21	-	68
	82+13 'WB'	-	82+26 'WB'	WB - STH 190	-	-	-	10	16	-	17	-	62
	82+17 'EB'	-	82+71 'EB'	EB - STH 190, LEFT TURN LANE	-	-	-	42	40	-	155	-	370
	82+32 'EB'	-	83+05 'EB'	EB - STH 190 AND TURN LANE	-	-	-	80	75	-	415	-	880
	82+47 'WB'	-	83+52 'WB'	STH 164 SB / PEWAUKEE RD	-	-	-	100	110	-	490	-	1,100
	82+99 'EB	-	83+08 'EB'	EB - STH 190	-	-	-	6	16	-	12	-	42
	83+06 'WB'	-	83+29 'WB'	STH 164 & STH 190 INTERSECTION	-	-	-	16	26	-	43	-	170
	83+46 'EB'	-	84+11 'EB'	STH 164 & STH 190 INTERSECTION	-	-	-	68	106	-	285	-	775
	177+66 'PK'	-	178+67 'PK'	NB STH 164	-	-	-	106	115	-	505	-	1,300
	83+53 'WB'	-	83+64 'WB'	WB - STH 190	-	-	-	16	-	-	14	-	55
	180+48 'PK'	-	180+66 'PK'	NB STH 164	-	-	-	14	16	-	25	-	86
	83+91 'WB'	-	84+64 'WB'	WB - STH 190	-	-	-	70	36	-	335	-	625
	84+23 'WB'	-	84+78 'WB	WB - STH 190 LEFT TURN LANE	-	-	-	42	22	-	150	-	440
	86+40 'EB'	-	86+46 'EB'	EB - STH 190	6	-	4	-	32	-	-	-	54
	86+69 'WB'	-	86+84 'WB'	WB - STH 190	26	7	10	-	32	-	-	30	87
	86+81 'EB'	-	86+87 'EB'	EB - STH 190	3	-	2	3	16	-	-	-	30
	88+46 'WB'	-	88+63 'WB'	WB - STH 190	26	7	10	-	32	-	-	25	87
	89+38 'WB'	-	89+44 'WB'	WB - STH 190	6	-	4	-	32	-	-	-	54
	91+95 'WB'	-	92+01 'WB'	WB - STH 190	6	-	4	-	32	-	-	-	54
	92+69 'WB'	-	92+75 'WB'	WB - STH 190	3	-	2	3	16	-	-	-	30
	92+77 'WB'	-	92+83 'WB'	WB - STH 190	3	-	2	3	16	-	-	-	30
	95+75 'WB'	-	96+35 'WB'	WB - STH 190	16	-	10	24	8	-	-	-	114
	99+98 'WB'	-	100+04 'WB'	WB - STH 190	6	-	4	-	32	-	-	-	54
	100+07 'EB'	-	100+13 'EB'	EB - STH 190	6	-	4	-	32	-	-	-	54
	100+85 'WB'	-	100+91 'WB'	WB - STH 190	3	-	2	3	16	-	-	-	30
	101+00 'WB'	-	101+20 'WB'	WB - STH 190	6	-	4	8	8	-	-	-	38
	101+59 'EB'	-	101+65 'EB'	EB - STH 190	6	-	4	-	32	-	-	-	54
	101+68 'WB'	-	101+74 'WB'	WB - STH 190	6	-	4	-	32	-	-	-	54
	103+22 'EB'	-	103+28 'EB'	EB - STH 190	6	-	4	-	32	-	-	-	54
	103+67 'WB'	-	103+73 'WB'	WB - STH 190	3	-	2	3	16	-	-	-	30
	103+85 'EB'	-	103+91 'EB'	EB - STH 190	6	-	4	-	32	-	-	-	54
	104+56 'WB'	-	104+62 'WB'	WB - STH 190	3	-	2	3	16	-	-	-	30
	104+70 'WB'	-	104+95 'WB'	WB - STH 190	7	-	4	10	8	-	-	-	55
	105+33 'WB'	-	105+39 'WB'	WB - STH 190	3	-	2	3	16	-	-	-	30
	106+49 'WB'	-	106+55 'WB'	WB - STH 190	3	-	2	3	16	-	-	-	30
	106+87 'EB'	-	106+93 'EB'	EB - STH 190	3	-	2	3	16	-	-	-	30
	107+92 'WB'	-	107+98 'WB'	WB - STH 190	3	-	2	3	16	-	-	-	30
	109+59 'EB'	-	109+65 'EB'	EB - STH 190	6	-	4	-	32	-	-	-	54
	109+77 'EB'	-	109+83 'EB'	EB - STH 190	3	-	2	3	16	-	-	-	30
	110+08 'EB'	-	110+14 'EB'	EB - STH 190	3	-	2	3	16	-	-	-	30
	110+36 'EB	-	110+51 'EB'	EB - STH 190	8	-	5	5	16	-	-	-	63
	110+71 'WB'	-	110+95 'WB'	WB - STH 190	31	-	19	11	16	-	-	-	72
	110+85 'EB'	-	111+00 'EB'	EB - STH 190	16	-	10	5	16	-	-	-	48
	174+44 'PK	-	174+59 'PK'	STH 164 - NB	-	-	-	5	32	-	52	-	91
	176+11 'PK'	-	176+23 'PK'	STH 164 - NB	-	-	-	4	58	48	-	-	122
	182+11 'PK'	-	182+33 'PK'	STH 164 - SB	-	-	-	16	32	-	59	-	138
	183+25 'PK'	-	183+40 'PK'	STH 164 - SB	-	-	-	12	32	40	-	-	117
				UNDISTRIBUTED	199	-	124	90	960	-	-	-	1620
				PAGE 2/2 - SUBTOTALS	524	37	298	808	2,452	88	2,578	119	9,845
				TOTAL 0010	1,071	124	571	860	3,748	128	2,578	425	12,648

*ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLANS

3

ASPHALTIC PAVEMENT ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	* 455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON
0010	8+56 'EB'	-	9+68 'EB'	TEMP. MEDIAN - STH 190	13	-	-	41
	32+30 'EB'	-	42+78 'EB'	TEMP. MEDIAN CROSSOVER	154	-	-	494
	685+34 'J'	-	685+60 'J'	LT TEMP. SHLDR, EB ON RAMP - STH 16	1	-	-	4
	685+90 'K'	-	686+26 'K'	RT TEMP. SHLDR, WB OFF RAMP - STH 16	2	-	-	7
	7+50 'EB'	-	7+66 'EB'	EB LANES - STH 190	4	6	5	-
	8+89 'EB'	-	9+19 'EB'	EB LANES - STH 190	8	-	12	-
	8+88 'WB'	-	9+14 'WB'	WB LANES - STH 190	7	-	12	-
	8+53 'EB'	-	8+89 'EB'	MEDIAN - STH 190	-	-	2	-
	685+60 'J'	-	685+81 'J'	LT SHLDR, EB ON RAMP - STH 16	-	-	1	-
	684+53 'I'	-	684+72 'I'	LT SHLDR, EB OFF RAMP - STH 16	-	-	3	-
	686+17 'K'	-	686+41 'K'	RT SHLDR, WB OFF RAMP - STH 16	-	-	2	-
	686+38 'K'	-	691+06 'K'	LT SHLDR, WB OFF RAMP - STH 16	-	-	60	-
	16+36 'EB'	-	25+54 'EB'	RT SHLDR - EB STH 190	-	-	111	-
	20+40 'EB'	-	28+03 'EB'	LT SHLDR - EB STH 190	-	-	50	-
	28+32 'EB'	-	29+38 'EB'	COMMERCIAL ENTRANCE - DYNEX	22	40	31	-
	29+51 'EB'	-	30+79 'EB'	LT SHLDR - EB STH 190	-	-	8	-
	29+51 'EB'	-	37+00 'EB'	RT SHLDR - EB STH 190	-	-	127	-
	15+52 'WB'	-	19+20 'WB'	RT SHLDR - WB STH 190	-	-	25	-
	19+20 'WB'	-	19+98 'WB'	CECELIA DRIVE	13	24	18	-
	20+39 'WB'	-	28+22 'WB'	RT SHLDR - WB STH 190	-	-	51	-
	20+86 'WB'	-	37+00 'WB'	LT SHLDR - WB STH 190	-	-	205	-
	30+79 'EB'	-	37+00 'EB'	RT SHLDR - EB STH 190	-	-	41	-
	37+00 'WB'	-	42+58 'WB'	LT SHLDR - WB STH 190	39	71	55	-
	42+58 'WB'	-	44+98 'WB'	GEORGE TOWNE DRIVE	77	201	108	-
	37+00 'WB'	-	42+79 'WB'	RT SHLDR - WB STH 190	14	41	19	-
	37+00 'EB'	-	43+47 'EB'	LT SHLDR - EB STH 190	9	26	12	-
	37+00 'EB'	-	43+47 'EB'	LEFT TURN LANE - EB STH 190	108	206	76	-
	37+00 'EB'	-	43+25 'EB'	RT SHLDR - EB STH 190	53	96	75	-
	43+25 'EB'	-	45+71 'EB'	FOREST GROVE DRIVE	55	143	77	-
	42+79 'WB'	-	44+81 'WB'	MEDIAN - STH 190	65	196	92	-
	44+98 'WB'	-	54+29 'WB'	LT SHLDR - WB STH 190	75	226	106	-
	44+81 'WB'	-	54+33 'WB'	RT SHLDR - WB STH 190	24	71	33	-
	44+81 'WB'	-	50+18 'WB'	LEFT TURN LANE - WB STH 190	121	231	85	-
	45+46 'EB'	-	54+37 'EB'	LT SHLDR - EB STH 190	24	72	34	-
	46+34 'EB'	-	54+37 'EB'	LEFT TURN LANE - EB STH 190	160	304	112	-
	45+70 'EB'	-	54+18 'EB'	RT SHLDR - EB STH 190	64	116	90	-
	54+29 'WB'	-	56+01 'WB'	WESTFIELD WAY	58	152	82	-
	54+33 'WB'	-	55+85 'WB'	MEDIAN - STH 190	64	193	90	-
	54+18 'EB'	-	55+68 'EB'	COMMERCIAL ENT.	42	110	59	-
	56+01 'WB'	-	68+79 'WB'	LT SHLDR - WB STH 190	121	362	169	-
	60+56 'WB'	-	61+84 'WB'	COMMERCIAL ENT.	51	132	71	-
	55+85 'WB'	-	68+45 'WB'	RT SHLDR - WB STH 190	29	87	41	-
	55+85 'WB'	-	68+45 'WB'	LEFT TURN LANE - WB STH 190	322	612	225	-
	55+88 'EB'	-	68+86 'EB'	LT SHLDR - EB STH 190	46	137	64	-
	55+68 'EB'	-	68+89 'EB'	RT SHLDR - EB STH 190	59	106	83	-
	60+20 'EB'	-	61+77 'EB'	WILLOW GROVE DRIVE	34	88	47	-
	62+03 'EB'	-	68+93 'EB'	LEFT TURN LANE - EB STH 190	141	267	98	-
	68+79 'WB'	-	70+76 'WB'	COMMERCIAL ENT.	51	132	71	-
	70+76 'WB'	-	82+13 'WB'	LT SHLDR - WB STH 190	138	413	193	-
	75+97 'WB'	-	76+73 'WB'	COMMERCIAL ENT.	20	52	28	-
	70+84 'WB'	-	81+75 'WB'	RT SHLDR - WB STH 190	26	77	36	-
	68+90 'WB'	-	70+84 'WB'	MEDIAN - STH 190	86	257	120	-
	70+84 'WB'	-	79+91 'WB'	LEFT TURN LANE - WB STH 190	239	454	167	-
	70+85 'EB'	-	82+32 'EB'	LT SHLDR & LEFT TURN LANES - EB STH 190	142	425	198	-
	68+89 'EB'	-	70+73 'EB'	MEADOWCREEK DRIVE	62	162	87	-
	70+73 'EB'	-	82+32 'EB'	RT SHLDR - EB STH 190	110	197	153	-
	37+00 'WB'	-	81+75 'WB'	WB - STH 190	835	2,005	1,169	-
	37+00 'EB'	-	82+32 'EB'	EB - STH 190	846	2,030	1,184	-
	84+64 'WB'	-	95+72 'WB'	LT SHLDR - WB STH 190	105	316	148	-
	84+64 'WB'	-	95+44 'WB'	RT SHLDR & LEFT TURN LANES - WB STH 190	116	347	162	-
	84+68 'EB'	-	95+55 'WB'	LT SHLDR - EB STH 190	28	85	40	-
	84+68 'EB'	-	95+44 'EB'	RT SHLDR - EB STH 190	93	167	130	-
	95+44 'WB'	-	97+30 'WB'	MEDIAN CROSSOVER & LEFT TURN LANES	118	355	166	-
	95+72 'WB'	-	97+09 'WB'	HIGHFIELD ROAD	35	92	50	-
	95+44 'EB'	-	96+98 'EB'	FIVE FIELDS ROAD	35	91	49	-
	97+09 'WB'	-	110+99 'WB'	LT SHLDR - WB STH 190	121	364	170	-
	97+30 'WB'	-	110+99 'WB'	RT SHLDR - WB STH 190	18	53	25	-
	97+30 'EB'	-	111+00 'EB'	LT SHLDR - EB STH 190	28	83	39	-
	96+98 'EB'	-	111+00 'EB'	RT SHLDR - EB STH 190	116	209	162	-
	108+53 'WB'	-	109+98 'WB'	MEDIAN CROSSOVER	52	157	73	-
	84+64 'WB'	-	110+99 'WB'	WB - STH 190	492	1,180	689	-
	84+68 'EB'	-	111+00 'EB'	EB - STH 190	491	1,179	688	-
	37+00 EB'	-	111+00 'EB'	SAFETY EDGE WEDGE	-	-	-	90
	37+00 WB'	-	110+99 'WB'	SAFETY EDGE WEDGE	-	-	-	90
					6,482	15,198	8,764	726

NOTES:

***ADDITIONAL QUANTITIES LISTED ELSEWHERE**
TACK COAT APPLICATION RATE = 0.07 GAL/SY
ASSUMED ASPHALT AT 112 LBS/SY/IN

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

3

CONCRETE CURB & GUTTER

CATEGORY	STATION	TO	STATION	OFFSET	LOCATION	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	* 416.0610 DRILLED TIE BARS EACH	601.0405 CONCRETE CURB & GUTTER 18-INCH TYPE A LF	601.0407 CONCRETE CURB & GUTTER 18-INCH TYPE D LF	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0555 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	601.0600 CONCRETE CURB PEDESTRIAN LF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	REMARKS
0010	8+88 'EB'	-	9+18 'EB'	RT	STH 190 / STH 16 EB ON RAMP	-	-	-	30	-	-	-	-	-	-	-	
	9+18 'EB'	-	9+82 'EB'	RT	STH 190 / STH 16 EB ON RAMP	-	-	13	-	72	-	-	-	-	-	-	
	9+21 'EB'	-	9+51 'EB'	RT	SW CURB RAMP - EB STH 190 & STH 16 WB ON RAMP	-	-	-	-	-	-	-	-	41	-	-	
	10+27 'EB'	-	14+45 'EB'	RT	STH 16 EB ON - WB OFF RAMP	-	-	-	-	420	-	-	-	-	-	-	
	10+51 'EB'	-	14+12 'EB'	LT	EB MEDIAN - STH 190	-	-	-	-	362	-	-	-	-	-	-	
	685+86 'K'	-	686+90 'K'	LT	SPLITTER ISLAND - STH 16 WB OFF RAMP	-	-	-	-	-	-	-	-	-	15	-	TYPE 2
	685+86 'K'	-	686+32 'K'	LT	SPLITTER ISLAND - STH 16 WB OFF RAMP	-	-	-	-	97	-	-	-	-	-	-	REVERSE SLOPE
	686+32 'K'	-	686+41 'K'	LT	SPLITTER ISLAND - STH 16 WB OFF RAMP	-	-	-	-	-	-	-	-	-	62	-	TYPE 1
	15+05 'EB'	-	15+89 'EB'	RT	STH 190 / STH 16 WB OFF RAMP	-	-	-	-	-	-	105	-	-	-	-	
	14+91 'EB'	-	15+52 'EB'	LT	EB MEDIAN - STH 190	-	-	-	-	62	-	-	-	-	-	-	
	44+65 'WB'	-	44+81 'WB'	RT	WB MEDIAN - STH 190	2	-	-	-	-	-	-	32	-	-	32	
	54+37 'EB'	-	54+50 'EB'	LT	EB MEDIAN - STH 190	3	-	-	-	-	-	-	40	-	-	40	
	55+71 'WB'	-	55+85 'WB'	RT	WB MEDIAN - STH 190	3	-	-	-	-	-	-	41	-	-	41	
	68+86 'EB'	-	69+06 'EB'	LT	EB MEDIAN - STH 190	4	-	-	-	-	-	-	54	-	-	54	
	8+88 'WB'	-	9+14 'WB'	LT	STH 190 / STH 16 EB OFF RAMP	-	-	-	-	-	27	-	-	-	-	-	
	9+14 'WB'	-	9+40 'WB'	LT	STH 190 / STH 16 EB OFF RAMP	-	-	-	-	32	-	-	-	-	-	-	
	684+72 'I'	-	684+82 'I'	RT	SPLITTER ISLAND - STH 16 EB OFF RAMP	-	-	-	-	-	-	-	-	-	61	-	TYPE 1
	684+82 'I'	-	685+27 'I'	RT	SPLITTER ISLAND - STH 16 EB OFF RAMP	-	-	-	-	60	-	-	-	-	-	-	REVERSE SLOPE
	684+83 'I'	-	685+23 'I'	RT	SPLITTER ISLAND - STH 16 EB OFF RAMP	-	-	-	-	41	-	-	-	-	-	-	
	685+23 'I'	-	685+27 'I'	RT	SPLITTER ISLAND - STH 16 EB OFF RAMP	-	-	-	-	-	-	-	-	-	11	-	TYPE 2
	9+91 'WB'	-	14+51 'WB'	LT	STH 16 EB OFF - WB ON RAMP	-	7	-	-	528	-	-	-	-	-	-	
	10+44 'WB'	-	10+52 'WB'	RT	WB MEDIAN - STH 190	-	-	-	-	-	-	-	-	-	55	-	TYPE 1
	10+52 'WB'	-	14+12 'WB'	RT	WB MEDIAN - STH 190	-	-	-	-	360	-	-	-	-	-	-	
	14+84 'EB'	-	14+91 'EB'	LT	EB MEDIAN - STH 190	-	-	-	-	8	-	-	-	-	-	-	
	14+12 'EB'	-	14+19 'EB'	LT	EB MEDIAN - STH 190	-	-	-	-	-	-	-	-	-	86	-	TYPE 1
	14+70 'WB'	-	15+73 'WB'	LT	ISLAND - STH 16 WB ON RAMP	-	7	-	-	119	-	-	-	-	-	-	
	14+78 'WB'	-	14+86 'WB'	RT	WB MEDIAN - STH 190	-	-	-	-	-	-	-	-	-	56	-	TYPE 1
	14+86 'WB'	-	15+52 'WB'	RT	WB MEDIAN - STH 190	-	-	-	-	66	-	-	-	-	-	-	
	15+40 'WB'	-	15+60 'WB'	LT	CURB RAMP SPLITTER ISLAND - STH 16 WB ON RAMP	-	-	-	-	-	-	-	-	40	-	-	
	15+49 'WB'	-	15+74 'WB'	LT	ISLAND - STH 16 WB ON RAMP	-	10	-	-	28	-	-	-	-	-	-	REVERSE SLOPE
	15+61 'WB'	-	15+94 'WB'	LT	STH 16 WB ON RAMP	-	11	-	-	-	-	36	-	-	-	-	
	15+65 'WB'	-	15+79 'WB'	LT	NW CURB RAMP - WB STH 190 & STH 16 WB ON RAMP	-	-	-	-	-	-	-	-	16	-	-	
	15+74 'WB'	-	15+87 'WB'	LT	ISLAND - STH 16 WB ON RAMP	-	7	-	-	-	-	-	-	-	89	-	TYPE 1
	43+25 'EB'	-	43+76 'EB'	RT	SW QUAD - STH 190 / FOREST GROVE DR.	4	-	-	-	-	-	-	60	-	-	60	
	43+42 'WB'	-	43+60 'WB'	LT	NW QUAD - STH 190 / GEORGETOWNE DR.	2	-	-	-	-	-	-	24	-	-	24	
	43+70 'WB'	-	43+87 'WB'	LT	NW QUAD ISLAND - GEORGETOWNE DR.	0	-	-	-	-	53	-		-	-	0	REVERSE SLOPE
	43+80 'WB'	-	43+89 'WB'	LT	NW QUAD ISLAND - GEORGETOWNE DR.	1	-	-	-	-	-	-	-	-	52	-	TYPE 1
	44+09 'EB'	-	44+09 'EB'	RT	MEDIAN - FOREST GROVE DR.	2	-	-	-	-	19	-	-	-	-	19	REVERSE SLOPE
	44+17 'EB'	-	44+17 'EB'	RT	MEDIAN - FOREST GROVE DR.	2	-	-	-	-	20	-	-	-	-	20	REVERSE SLOPE
	44+50 'EB'	-	45+02 'EB'	RT	SE QUAD - STH 190 / FOREST GROVE DR.	4	-	-	-	-	-	-	63	-	-	63	
	44+58 'WB'	-	44+98 'WB'	LT	NE QUAD - STH 190 / GEORGETOWNE DR.	4	-	-	-	-	-	-	51	-	-	51	
	54+18 'EB'	-	54+76 'EB'	RT	SW QUAD - STH 190 / WESTFIELD WAY	5	-	-	-	-	-	-	79	-	-	79	
	54+29 'WB'	-	54+79 'WB'	LT	NW QUAD - STH 190 / WESTFIELD WAY	5	-	-	-	-	-	-	68	-	-	68	
	54+99 'EB'	-	54+05 'EB'	RT	MEDIAN - S. WESTFIELD WAY	4	-	-	-	-	-	-	56	-	-	56	REVERSE SLOPE
					PAGE 1/2 - SUBTOTALS	45	42	13	30	2,255	119	141	568	97	487	607	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

CONTINUED ON NEXT PAGE

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

CONCRETE CURB & GUTTER (CONTINUED)

CATEGORY	STATION	TO	STATION	OFFSET	LOCATION	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	* 416.0610 DRILLED TIE BARS EACH	601.0405 CONCRETE CURB & GUTTER 18-INCH TYPE A LF	601.0407 CONCRETE CURB & GUTTER 18-INCH TYPE D LF	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0555 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	601.0600 CONCRETE CURB PEDESTRIAN LF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	REMARKS
0010	55+07 'WB'	-	55+17 'WB'	LT	MEDIAN - N. WESTFIELD WAY	1	-	-	-	-	-	-	-	-	48	-	TYPE 1
	55+08 'WB'	-	55+42 'WB'	LT	MEDIAN - N. WESTFIELD WAY	2	-	-	-	-	-	-	17	-	-	17	REVERSE SLOPE
	55+30 'EB'	-	55+68 'EB'	RT	SE QUAD - STH 190 / WESTFIELD WAY	4	-	-	-	-	-	-	54	-	-	54	
	55+43 'WB'	-	56+01 'WB'	LT	NE QUAD - STH 190 / WESTFIELD WAY	5	-	-	-	-	-	-	78	-	-	78	
	68+79 'WB'	-	69+54 'WB'	LT	NW QUAD - STH 190 / COMMERCIAL ENTRANCE	6	-	-	-	-	-	-	85	-	-	85	
	68+89 'EB'	-	69+17 'EB'	RT	SW QUAD - STH 190 / MEADOWCREEK DR.	2	-	-	-	-	-	-	30	-	-	30	
	68+92 'EB'	-	69+14 'EB'	RT	SW CURB RAMP - STH 190 / MEADOWCREEK DR.	-	-	-	-	-	-	-	-	29	-	29	
	69+89 'WB'	-	69+99 'WB'	LT	MEDIAN - COMMERCIAL ENTRANCE	1	-	-	-	-	-	-	-	-	50	-	TYPE 1
	70+38 'WB'	-	70+75 'WB'	LT	NE QUAD - STH 190 / COMMERCIAL ENTRANCE	3	-	-	-	-	-	-	42	-	-	42	
	82+46 'WB'	-	82+73 'WB'	LT	NW QUAD - STH 190 / STH 164	3	3	-	-	-	-	37	-	-	-	-	
	82+47 'EB'	-	82+88 'EB'	RT	SW QUAD - STH 190 / STH 164	4	5	-	-	-	-	49	-	-	-	-	
	82+69 'EB'	-	82+74 'EB'	RT	SW CURB RAMP - STH 190 / STH 164	-	-	-	-	-	-	-	-	12	-	-	
	84+10 'WB'	-	84+51 'WB'	LT	NE QUAD - STH 190 / STH 164	3	5	-	-	-	-	48	-	-	-	-	
	84+25 'EB'	-	84+44 'EB'	RT	SE QUAD - STH 190 / STH 164	2	6	-	-	-	-	30	-	-	-	-	
	82+63 'WB'	-	82+66 'WB'	LT	NW QUAD - ISLAND	1	3	-	-	-	-	-	-	-	24	-	TYPE 2
	82+67 'WB'	-	82+98 'WB'	LT	NW QUAD - ISLAND	5	15	-	-	-	-	72	-	-	-	-	REVERSE SLOPE
	82+97 'WB'	-	82+98 'WB'	LT	NW QUAD - ISLAND	2	10	-	-	-	-	31	-	-	-	-	
	82+73 'EB'	-	82+80 'EB'	RT	SW QUAD - ISLAND	1	5	-	-	-	-	-	-	-	55	-	TYPE 1
	82+80 'EB'	-	83+00 'EB'	RT	SW QUAD - ISLAND	1	6	-	-	-	-	22	-	-	-	-	REVERSE SLOPE
	82+80 'EB'	-	83+03 'EB'	RT	SW QUAD - ISLAND	1	7	-	-	-	-	29	-	-	-	-	
	82+90 'WB'	-	83+00 'WB'	LT	NW QUAD - ISLAND	1	3	-	-	-	-	-	-	-	55	-	TYPE 1
	82+97 'EB'	-	83+03 'EB'	RT	SW QUAD - ISLAND	1	3	-	-	-	-	-	-	-	21	-	TYPE 2
	82+98 'WB'	-	83+03 'WB'	LT	NW QUAD - ISLAND	1	3	-	-	-	-	-	-	-	21	-	TYPE 2
	82+99 'EB'	-	83+06 'EB'	RT	SW QUAD - ISLAND	1	3	-	-	-	-	-	-	-	24	-	TYPE 2
	83+93 'WB'	-	83+99 'WB'	LT	NE QUAD - ISLAND	1	3	-	-	-	-	-	-	-	24	-	TYPE 2
	83+94 'WB'	-	84+21 'WB'	LT	NE QUAD - ISLAND	4	17	-	-	-	-	59	-	-	-	-	REVERSE SLOPE
	83+95 'WB'	-	84+01 'WB'	LT	NE QUAD - ISLAND	1	3	-	-	-	-	-	-	-	21	-	TYPE 2
	83+95 'EB'	-	84+00 'EB'	RT	SE QUAD - ISLAND	1	3	-	-	-	-	-	-	-	21	-	TYPE 2
	83+97 'EB'	-	84+15 'EB'	RT	SE QUAD - ISLAND	4	16	-	-	-	-	63	-	-	-	-	REVERSE SLOPE
	83+98 'EB'	-	84+08 'EB'	RT	SE QUAD - ISLAND	1	4	-	-	-	-	-	-	-	54	-	TYPE 1
	84+13 'EB'	-	84+18 'EB'	RT	SE QUAD - ISLAND	1	3	-	-	-	-	-	-	-	23	-	TYPE 2
	84+21 'WB'	-	84+28 'WB'	LT	NE QUAD - ISLAND	1	7	-	-	-	-	-	-	-	55	-	TYPE 1
	8+88 'EB'	-	9+18 'EB'	LT	EB MEDIAN - STH 190	-	-	-	-	-	56	-	-	-	-	-	
	8+88 'WB'	-	9+14 'WB'	RT	WB MEDIAN - STH 190	-	-	-	-	-	54	-	-	-	-	-	
	9+18 'EB'	-	9+57 'EB'	LT	EB MEDIAN - STH 190	-	-	-	-	38	-	-	-	-	-	-	
	9+14 'WB'	-	9+59 'WB'	RT	WB MEDIAN - STH 190	-	-	-	-	50	-	-	-	-	-	-	
	9+57 'EB'	-	9+62 'EB'	LT	EB MEDIAN - STH 190	-	-	-	-	-	-	-	-	-	32	-	TYPE 2
	10+10 'EB'	-	10+27 'EB'	RT	EB ON RAMP - STH 16	-	-	-	-	32	-	-	-	-	-	-	
	14+45 'EB'	-	14+67 'EB'	RT	WB OFF RAMP - STH 16	-	-	-	-	38	-	-	-	-	-	-	
					PAGE 2/2 - SUBTOTALS	65	133	0	0	158	110	440	306	41	528	335	
					TOTAL 0010	110	175	13	30	2,413	229	581	874	138	1,015	942	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

CONCRETE SIDEWALK

CATEGORY	STATION	TO	STATION	OFFSET	LOCATION	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH	REMARKS
0010	9+22 'EB'	-	9+50 'EB'	RT	SW QUAD - STH 190 / STH 16 EB ON RAMP	9	-	160	10	-	1	CR-01
	685+87 'K'	-	686+32 'K'	LT	SPLITTER ISLAND - STH 16 WB OFF RAMP	11	276	-	-	-	-	-
	43+22 'WB'	-	43+28 'WB'	RT	WB MEDIAN - STH 190	2	44	-	-	-	-	-
	43+47 'EB'	-	43+56 'WB'	LT	EB MEDIAN - STH 190	6	138	-	-	-	-	-
	44+65 'WB'	-	44+81 'WB'	RT	WB MEDIAN - STH 190	6	159	-	-	-	-	-
	44+68 'WB'	-	44+73 'WB'	RT	WB MEDIAN - STH 190	3	-	70	20	-	2	CR-19/20
	53+99 'EB'	-	54+33 'EB'	LT	EB MEDIAN - STH 190	5	126	-	-	-	-	-
	54+37 'EB'	-	54+49 'EB'	LT	EB MEDIAN - STH 190	4	104	-	-	-	-	-
	54+39 'EB'	-	54+44 'EB'	LT	EB MEDIAN - STH 190	4	-	104	20	-	2	CR-33/34
	55+72 'WB'	-	55+85 'WB'	LT	WB MEDIAN - STH 190	5	116	-	-	-	-	-
	55+76 'WB'	-	55+83 'WB'	LT	WB MEDIAN - STH 190	4	-	108	20	-	2	CR-35/36
	55+89 'EB'	-	56+07 'EB'	LT	EB MEDIAN - STH 190	3	71	-	-	-	-	-
	68+63 'WB'	-	68+87 'WB'	RT	WB MEDIAN - STH 190	3	80	-	-	-	-	-
	68+90 'EB'	-	69+05 'EB'	LT	EB MEDIAN - STH 190	6	151	-	-	-	-	-
	68+92 'EB'	-	69+17 'EB'	LT	EB MEDIAN - STH 190	5	-	116	20	-	2	CR-44/45
	70+89 'EB'	-	71+15 'EB'	LT	EB MEDIAN - STH 190	3	76	-	-	-	-	-
	82+32 'EB'	-	82+73 'EB'	LT	EB MEDIAN - STH 190	3	77	-	-	-	-	-
	82+57 'WB'	-	82+67 'WB'	RT	WB MEDIAN - STH 190	2	45	-	-	-	-	-
	84+31 'EB'	-	84+46 'EB'	LT	EB MEDIAN - STH 190	3	75	-	-	-	-	-
	84+34 'WB'	-	84+80 'WB'	RT	WB MEDIAN - STH 190	4	85	-	-	-	-	-
	8+99 'WB'	-	9+24 'WB'	LT	NW QUAD - STH 190 / STH 16 EB OFF RAMP	6	-	116	-	18	1	CR-04
	684+82 'I'	-	685+27 'I'	RT	SPLITTER ISLAND - STH 16 EB OFF RAMP	10	248	-	-	-	-	-
	685+14 'I'	-	685+26 'I'	RT	SPLITTER ISLAND - STH 16 EB OFF RAMP	4	-	83	30	-	3	CR-05/06/07
	9+92 'WB'	-	10+22 'WB'	LT	NE QUAD - STH 190 / STH 16 EB OFF RAMP	8	-	151	10	-	1	CR-08
	10+51 'WB'	-	14+12 'WB'	RT	WB MEDIAN - STH 190	106	2,847	-	-	-	-	-
	11+28 'WB'	-	13+17 'WB'	LT	STH 16 EB OFF - WB ON RAMP	48	-	1,088	-	-	-	-
	14+25 'WB'	-	14+49 'WB'	LT	NW QUAD - STH 190 / STH 16 WB ON RAMP	6	-	115	10	-	1	CR-09
	14+71 'WB'	-	14+90 'WB'	LT	W. ISLAND - STH 16 WB ON RAMP	6	-	145	10	-	1	CR-10
	14+71 'WB'	-	15+74 'WB'	LT	ISLAND - STH 16 WB ON RAMP	30	804	-	-	-	-	-
	14+84 'WB'	-	15+51 'WB'	RT	WB MEDIAN - STH 190	36	949	-	-	-	-	-
	15+34 'WB'	-	15+59 'WB'	LT	E. ISLAND - STH 16 WB ON RAMP	6	-	153	10	-	1	CR-11
	15+62 'WB'	-	15+98 'WB'	LT	NE QUAD - STH 190 / STH 16 WB ON RAMP	11	-	223	10	-	1	CR-12
	43+40 'WB'	-	43+53 'WB'	LT	NW QUAD - STH 190 / GEORGETOWNE DR.	4	-	60	10	-	1	CR-21
	43+56 'EB'	-	43+71 'EB'	RT	SW QUAD - STH 190 / FOREST GROVE DR.	5	-	103	10	14	2	CR-13/14
	43+71 'WB'	-	43+87 'WB'	LT	NW QUAD ISLAND - GEORGETOWNE DR.	5	110	-	-	-	-	-
	43+73 'WB'	-	43+87 'WB'	LT	NW QUAD ISLAND - GEORGETOWNE DR.	4	-	87	30	-	3	CR-22/23/24
	44+10 'EB'	-	44+17 'EB'	RT	MEDIAN - FOREST GROVE DR.	5	74	35	20	-	2	CR-15/16
	44+56 'EB'	-	44+73 'EB'	RT	SE QUAD - STH 190 / FOREST GROVE DR.	11	-	215	10	14	2	CR-17/18
	44+64 'WB'	-	44+77 'WB'	LT	NE QUAD - STH 190 / GEORGETOWNE DR.	5	-	98	20	-	2	CR-25/26
	54+34 'WB'	-	54+76 'WB'	LT	NW QUAD - STH 190 / WESTFIELD WAY	17	-	309	20	-	2	CR-37/38
	54+36 'EB'	-	54+75 'EB'	RT	SW QUAD - STH 190 / WESTFIELD WAY	17	-	332	20	-	2	CR-31/32
	55+00 'EB'	-	55+05 'EB'	RT	S. MEDIAN - WESTFIELD WAY	5	92	20	-	-	2	CR-29/30
	55+10 'WB'	-	55+14 'WB'	LT	N. MEDIAN - WESTFIELD WAY	5	110	18	-	-	2	CR-39/40
	55+32 'EB'	-	55+64 'EB'	RT	SE QUAD - STH 190 / WESTFIELD WAY	11	-	206	20	-	2	CR-27/28
	55+48 'WB'	-	55+85 'WB'	LT	NE QUAD - STH 190 / WESTFIELD WAY	17	-	378	20	-	2	CR-41/42
					PAGE 1/2 - SUBTOTALS	479	6,857	4,493	350	46	42	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

CONTINUED ON NEXT PAGE

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

CONCRETE SIDEWALK (CONTINUED)

CATEGORY	STATION	TO	STATION	OFFSET	LOCATION	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH	REMARKS
0010	68+92 'EB'	-	69+17 'EB'	RT	SW QUAD - STH 190 / MEADOWCREEK DR.	7	-	141	10	-	1	CR-43
	68+93 'WB'	-	69+45 'WB'	LT	NW QUAD - STH 190 / COMMERCIAL ENTRANCE	14	-	265	10	20	2	CR-46/47
	69+73 'EB'	-	69+76 'EB'	RT	MEDIAN - MEADOWCREEK DR.	4	96	-	-	-	-	-
	70+48 'WB'	-	70+72 'WB'	LT	NE QUAD - STH 190 / COMMERCIAL ENTRANCE	6	-	104	-	20	1	CR-48
	82+43 'WB'	-	82+63 'WB'	LT	NW QUAD - STH 190 / STH 164	25	-	554	20	-	1	CR-53
	82+69 'EB'	-	82+80 'EB'	RT	SW QUAD - STH 190 / STH 164	4	-	58	10	-	1	CR-49
	83+39 'EB'	-	83+44 'EB'	RT	S. MEDIAN - STH 164	6	152	-	-	-	-	-
	83+54 'WB'	-	83+59 'WB'	LT	N. MEDIAN - STH 164	5	132	-	-	-	-	-
	84+18 'WB'	-	84+26 'WB'	LT	NE QUAD - STH 190 / STH 164	4	-	55	10	-	1	CR-64
	84+22 'EB'	-	84+48 'EB'	RT	SE QUAD - STH 190 / STH 164	23	-	516	20	-	1	CR-60
	82+77 'WB'	-	83+00 'WB'	LT	NW QUAD - ISLAND	22	381	209	46	-	3	CR-54/55/56
	82+88 'EB'	-	83+02 'EB'	RT	SW QUAD - ISLAND	8	113	86	30	-	3	CR-50/51/52
	83+96 'WB'	-	84+12 'WB'	LT	NE QUAD - ISLAND	10	111	133	42	-	3	CR-61/62/63
	83+99 'EB'	-	84+13 'EB'	RT	SE QUAD - ISLAND	10	134	127	46	-	3	CR-57/58/59
	8+61 'EB'	-	9+59 'EB'	LT	EB MEDIAN - STH 190	38	1,017	-	-	-	-	-
	9+46 'EB'	-	9+53 'EB'	LT	EB MEDIAN - STH 190	3	-	66	20	-	2	CR-02/03
					PAGE 2/2 - SUBTOTALS	189	2,136	2,314	264	40	22	
					TOTAL 0010	668	8,993	6,807	614	86	64	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

STORM SEWER ITEMS

CATEGORY	STATION	OFFSET	STRUCTURE NO.	LOCATION	520.2015 CULVERT PIPE TEMPORARY 15-INCH LF	520.2024 CULVERT PIPE TEMPORARY 24-INCH LF	520.8000 CONCRETE COLLARS FOR PIPE EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	611.0612 INLET COVERS TYPE C EACH	611.0642 INLET COVERS TYPE MS EACH	611.0651 INLET COVERS TYPE S EACH	611.0660 INLET COVERS TYPE WM EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.8120.S COVER PLATES TEMPORARY EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH
0010	35+01 'EB'	21.8' LT	EX.	MEDIAN - STH 190	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	39+05 'EB'	26.6' LT	TS-101	TEMPORARY CROSSOVER	250	-	-	-	-	-	-	1	-	-	1	-	2	-
	10+29 'EB'	33.3' RT	420	SE QUAD - STH 190 / STH 16 EB ON RAMP	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	10+53 'EB'	3.7' LT	419	MEDIAN - STH 190	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	11+54 'EB'	33.3' RT	423	EB - STH 190	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	13+03 'EB'	11.4' LT	427	MEDIAN - STH 190	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	13+04 'EB'	33.3' RT	428	EB - STH 190	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	13+79 'EB'	33.3' RT	430	EB - STH 190	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	686+14 'K'	75.9' LT	01	SE QUAD - STH 190 / STH 16 WB OFF RAMP	-	-	1	1	-	22	-	-	-	-	-	-	1	-
	16+03 'EB'	15.4' LT	02	MEDIAN - STH 190	-	-	1	-	7	-	-	1	-	-	1	-	1	-
	642+82 'I'	1.1' RT	415	ISLAND - STH 16 EB OFF RAMP	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	9+97 'WB'	25.3' LT	414	NE QUAD - STH 190 / STH 16 EB OFF RAMP	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	10+54 'WB'	11.2' RT	418	MEDIAN - STH 190	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	11+53 'WB'	25.3' LT	422	WB - STH 190	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	13+03 'WB'	11.2' RT	426	MEDIAN - STH 190	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	13+04 'WB'	25.3' LT	425	WB - STH 190	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	14+74 'WB'	25.3' LT	440	ISLAND - STH 16 WB ON RAMP	-	-	-	-	-	-	-	-	1	-	-	-	-	-
	18+86 'EB'	26.8' LT	432	MEDIAN - STH 190	-	-	-	-	-	-	1	-	-	-	-	-	-	-
	684+89 'CE'	57.0' RT	-	CONSTRUCTION STAGING AREA	-	60	-	-	-	-	-	-	-	-	-	-	-	1
				TOTAL 0010	250	60	2	1	7	22	1	2	1	12	2	1	4	1

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

PIPE UNDERDRAIN ITEMS

CATEGORY	BEGIN STATION	BEGIN OFFSET	BEGIN STRUCTURE NO.	END STATION	END OFFSET	END STRUCTURE NO.	LOCATION	310.0110 BASE AGGREGATE OPEN-GRADED TON	612.0106 PIPE UNDERDRAIN 6-INCH LF	612.0108 PIPE UNDERDRAIN 8-INCH LF	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	612.0208 PIPE UNDERDRAIN UNPERFORATED 8-INCH LF	612.0806 APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH EACH	645.0111 GEOTEXTILE TYPE DF SCHEDULE A SY	SPV.0060.01 SPECIAL (01. APRON ENDWALL FOR UNDERDRAIN 8-INCH) EACH	SPV.0060.02 SPECIAL (02. CORED HOLES 6-INCH) EACH
0010	9+16 'EB'	RT	-	9+22 'EB'	LT	AEW	MEDIAN - STH 190	-	-	-	124	-	1	-	-	-
	685+34 'J'	RT	-	685+81 'J'	RT	CAP END REQ'D	SW QUAD - STH 190 / STH 16 EB ON RAMP	6	83	-	-	-	-	42	-	-
	10+29 'EB'	RT	420	11+54 'EB'	RT	423	EB - STH 190	9	122	-	-	-	-	61	-	1
	11+54 'EB'	RT	423	13+04 'EB'	RT	428	EB - STH 190	10	147	-	-	-	-	74	-	2
	13+04 'EB'	RT	428	13+79 'EB'	RT	430	EB - STH 190	5	72	-	-	-	-	36	-	2
	13+79 'EB'	RT	430	686+41 'K'	RT	CAP END REQ'D	SW QUAD - STH 190 / STH 16 WB OFF RAMP	9	134	-	-	-	-	67	-	2
	684+50 'I'	LT	CAP END REQ'D	9+15 'WB'	LT	TEE CONNECTION REQ'D	NW QUAD - STH 190 / STH 16 EB OFF RAMP	6	82	-	-	-	-	41	-	-
	685+26 'I'	RT	CAP END REQ'D	684+82 'I'	RT	415	MEDIAN ISLAND - STH 16 EB OFF RAMP	3	42	-	-	-	-	21	-	1
	9+97 'WB'	LT	414	11+53 'WB'	LT	422	WB - STH 190	11	153	-	-	-	-	77	-	1
	11+53 'WB'	LT	422	13+04 'WB'	LT	425	WB - STH 190	10	148	-	-	-	-	74	-	2
	13+04 'WB'	LT	425	685+67 'L'	RT	CAP END REQ'D	NW QUAD - STH 190 / STH 16 WB ON RAMP	11	151	-	-	-	-	76	-	2
	14+74 'WB'	LT	440	17+00 'WB'	LT	CAP END REQ'D	ISLAND - STH 16 WB ON RAMP	16	224	-	-	-	-	112	-	1
	17+00 'EB'	LT	CAP END REQ'D	18+86 'EB'	LT	432	MEDIAN - STH 190	13	185	-	16	-	-	93	-	1
	20+05 'WB'	RT	CAP END REQ'D	24+14 'WB'	RT	EX. INLET	MEDIAN - STH 190	29	408	-	28	-	-	204	-	1
	24+14 'EB'	LT	-	28+53 'EB'	LT	CAP END REQ'D	MEDIAN - STH 190	31	440	-	18	-	-	220	-	1
	25+50 'WB'	LT	AEW	32+50 'WB'	LT	CAP END REQ'D	WB - STH 190	76	-	692	-	15	-	436	1	-
	29+63 'EB'	LT	EX. INLET	34+99 'EB'	LT	EX. INLET	MEDIAN - STH 190	37	524	-	41	-	-	262	-	2
							TOTAL 0010	282	2,915	692	227	15	1	1,896	1	19

MGS GUARDRAIL ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	614.2300 MGS GUARDRAIL 3 LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EACH
0010	16+36 'WB'	-	17+78 'WB'	WB MEDIAN - STH 190	87.5	1	1
	689+60 'K'	-	690+85 'K'	STH 16 WB OFF RAMP	150	-	1
	30+00 'EB'	-	37+00 'EB'	EB OUTSIDE SHLDR - STH 190	650	1	-
	37+00 'EB'	-	39+72 'EB'	EB OUTSIDE SHLDR - STH 190	275	-	1
				TOTAL 0010	1,162.5	2	3

SLOPE PAVING CONCRETE

CATEGORY	STATION	TO	STATION	LOCATION	604.0400 SLOPE PAVING CONCRETE SY
0010	11+57 'EB'	-	11+99 'EB'	EB - STH 190	22
	12+36 'EB'	-	12+78 'EB'	EB - STH 190	33
				TOTAL 0010	55

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

3

EROSION CONTROL ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	606.0100 RIPRAP LIGHT CY	606.0200 RIPRAP MEDIUM CY	627.0200 MULCHING SY	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	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.6505 SOIL STABILIZER TYPE A ACRE	628.6510 SOIL STABILIZER TYPE B ACRE	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH	645.0120 GEOTEXTILE TYPE HR SY
0010	8+00 'EB'	-	20+00 'EB'	EB - STH 190	2	4	-	1,000	1,000	-	-	2,500	700	-	-	2	-	8	-	-	15	13
	20+00 'EB'	-	29+00 'EB'	EB - STH 190	2	-	-	790	790	-	-	1,500	-	-	-	1	-	-	-	-	-	10
	29+00 'EB'	-	44+00 'EB'	EB - STH 190	2	-	-	665	665	465	465	2,240	3,070	0.50	0.50	2	-	-	20	-	-	10
	44+00 'EB'	-	55+00 'EB'	EB - STH 190	-	-	-	50	50	-	-	95	-	-	-	-	-	-	-	-	-	-
	55+00 'EB'	-	70+00 'EB'	EB - STH 190	6	-	-	60	60	-	-	120	-	-	-	-	-	-	-	-	-	30
	70+00 'EB'	-	84+00 'EB'	EB - STH 190	2	-	-	80	80	-	-	25	-	-	-	-	-	-	-	-	-	10
	84+00 'EB'	-	96+00 'EB'	EB - STH 190	-	-	-	-	-	-	-	40	-	-	-	-	-	-	-	-	-	-
	96+00 'EB'	-	111+00 'EB'	EB - STH 190	2	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	10
	8+00 'WB'	-	20+00 'WB'	WB - STH 190	2	-	-	-	-	-	-	210	-	-	-	2	2	8	-	-	-	10
	20+00 'WB'	-	29+00 'WB'	WB - STH 190	-	-	-	890	890	-	-	1,580	-	-	-	-	-	-	-	-	-	-
	29+00 'WB'	-	44+00 'WB'	WB - STH 190	-	-	-	815	815	-	-	2,840	-	-	-	-	-	-	-	-	-	-
	44+00 'WB'	-	55+00 'WB'	WB - STH 190	-	-	-	60	60	-	-	105	-	-	-	-	-	-	-	-	-	-
	55+00 'WB'	-	70+00 'WB'	WB - STH 190	4	-	-	60	60	-	-	140	-	-	-	-	-	-	-	-	-	20
	70+00 'WB'	-	84+00 'WB'	WB - STH 190	2	-	-	70	70	-	-	90	-	-	-	-	-	-	-	-	-	10
	84+00 'WB'	-	96+00 'WB'	WB - STH 190	-	-	-	70	70	-	-	40	-	-	-	-	-	-	-	-	-	-
	96+00 'WB'	-	111+00 'WB'	WB - STH 190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	135+00 'XS'	-	142+85 'XS'	TEMPORARY CROSSOVER	-	-	700	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
	7+50 'EB'	-	89+00 'EB'	CONDUIT INSTALLATION	-	-	-	-	-	-	-	3,090	-	-	-	-	-	-	-	-	-	-
	680+34 'CE'	-	685+18 'CE'	CONSTRUCTION STAGING AREA	-	-	7,420	1,260	1,260	-	-	-	590	1.60	1.60	-	-	-	-	3	-	-
				UNDISTRIBUTED (25%)	-	-	2,030	1,468	1,468	117	117	3,657	1,090	0.5	0.5	2	1	4	60	12	4	31
				TOTAL 0010	24	4	10,150	7,338	7,338	582	582	18,282	5,450	2.6	2.6	9	4	20	80	15	19	154

EROSION CONTROL MOBILIZATION

CATEGORY	STAGE	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	1	STH 190	1	1
	2	STH 190	2	2
	3	STH 190	2	2
	4	STH 190	1	1
		TOTAL 0010	6	6

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

FINISHING ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
0010	8+00 'EB'	-	20+00 'EB'	EB - STH 190	3,200	2.0	140	86	72
	20+00 'EB'	-	29+00 'EB'	EB - STH 190	1,500	0.9	68	41	34
	29+00 'EB'	-	44+00 'EB'	EB - STH 190	5,310	3.3	240	143	120
	44+00 'EB'	-	55+00 'EB'	EB - STH 190	95	0.1	4	3	2.1
	55+00 'EB'	-	70+00 'EB'	EB - STH 190	120	0.1	5	3	2.7
	70+00 'EB'	-	84+00 'EB'	EB - STH 190	25	0.1	1	1	0.6
	84+00 'EB'	-	96+00 'EB'	EB - STH 190	40	0.1	2	1	0.9
	96+00 'EB'	-	111+00 'EB'	EB - STH 190	10	0.1	1	0	0.2
	8+00 'WB'	-	20+00 'WB'	WB - STH 190	210	0.1	9	6	4.7
	20+00 'WB'	-	29+00 'WB'	WB - STH 190	1,580	1.0	71	43	35
	29+00 'WB'	-	44+00 'WB'	WB - STH 190	2,840	1.8	130	77	64
	44+00 'WB'	-	55+00 'WB'	WB - STH 190	105	0.1	5	3	2.4
	55+00 'WB'	-	70+00 'WB'	WB - STH 190	140	0.1	6	4	3.1
	70+00 'WB'	-	84+00 'WB'	WB - STH 190	90	0.1	4	2	2.0
	84+00 'WB'	-	96+00 'WB'	WB - STH 190	40	0.1	2	1	0.9
	96+00 'WB'	-	111+00 'WB'	WB - STH 190	-	-	-	-	-
	135+00 'XS'	-	142+85 'XS'	TEMPORARY CROSSOVER	700	0.4	32	19	16
	7+50 'EB'	-	89+00 'EB'	CONDUIT INSTALLATION	3,090	1.9	140	83	69
	680+34 'CE'	-	685+18 'CE'	CONSTRUCTION STAGING AREA	8,010	5.0	360	216	180
				UNDISTRIBUTED (25%)	6,777	3.7	180	109	153
				TOTAL 0010	33,882	21	1,400	841	763

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

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DELINEATORS TEMPORARY

CATEGORY	STAGE	LOCATION	633.1100 DELINEATORS TEMPORARY EACH
0010	2	TEMPORARY CROSSOVER	4
	3	TEMPORARY CROSSOVER	10
		TOTAL 0010	14

TEMPORARY MARKING

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH (SOLID WHITE) LF	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH (SOLID YELLOW) LF	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (SOLID WHITE) LF	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (SOLID YELLOW) LF	643.3265 TEMPORARY MARKING LINE PAINT 10-INCH (SOLID WHITE) LF	643.3280 TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (SOLID WHITE) LF	643.3350 TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH LF	643.3550 TEMPORARY MARKING ARROW REMOVABLE TAPE EACH	643.3805 TEMPORARY MARKING STOP LINE PAINT 18-INCH LF	643.3850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH LF
0010	1	116+05 'EB'	-	119+50 'EB'	EB - STH 190	-	-	350	350	-	-	-	-	-	-
					STH 190/CTH F INTERCHANGE	-	-	-	660	-	-	-	-	-	-
0010	2	6+13 'EB'	-	9+60 'EB'	WEST TEMP. CROSSOVER	-	-	373	628	-	-	-	-	13	-
		10+43 'WB'	-	43+81 'WB'	STH 190	3,876	6,625	-	-	220	-	-	-	12	-
		45+46 'EB'	-	112+50 'EB'	EB - STH 190	3,395	-	-	-	368	-	-	-	-	-
		49+04 'WB'	-	117+50 'WB'	WB - STH190	3,425	150	-	-	984	-	-	-	-	-
					STH 164	-	-	1,080	572	-	795	-	4	-	-
0010	3	6+50 'EB'	-	9+42 'EB'	WEST TEMP.CROSSOVER	-	-	189	600	-	-	-	-	-	16
		10+22 'EB'	-	43+69 'EB'	STH 190	-	-	4,172	6,692	-	268	-	-	-	44
		45+48 'EB'	-	112+50 'EB'	EB - STH 190	-	-	-	4,915	-	-	-	-	-	-
		44+54 'WB'	-	120+44 'WB'	WB - STH190	-	-	444	5,421	-	-	-	-	-	-
					STH 164	-	-	-	-	-	-	815	4	-	-
0010	4A	31+14 'EB'	-	41+81 'EB'	EB - STH 190	-	-	1,071	115	-	-	-	-	-	-
		32+78 'WB'	-	42+58 'WB'	WB - STH190	-	-	978	100	-	-	-	-	-	-
		46+34 'WB'	-	47+49 'WB'	WB - STH190	-	-	-	115	-	-	-	-	-	-
	4B	34+06 'EB'	-	41+81 'EB'	EB - STH 190	-	-	775	75	-	-	-	-	-	-
		116+05 'WB'	-	119+50 'WB'	WB - STH190	-	-	350	350	-	-	-	-	-	-
					SUBTOTALS	10,696	6,775	9,782	20,593	1,572	1,063	815	8	25	60
					TOTAL 0010		17,471		30,375	2,635	1,063	815	8	25	60

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

TRAFFIC CONTROL ITEMS

CATEGORY	STAGE	LOCATION	APPROXIMATE SERVICE DAY	NO.	643.0300 TRAFFIC CONTROL DRUMS DAY	NO.	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	NO.	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH	NO.	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH	NO.	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	NO.	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	NO.	643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	NO.	* 643.0900 TRAFFIC CONTROL SIGNS DAY	NO. SIGNS	NO. CYCLES	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	NO. SIGNS	NO. CYCLES	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	NO.	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	NO.	643.1070 TRAFFIC CONTROL CONES 42-INCH DAY
0010	1A	BOP - GEORGETOWNE DR	8	260	2,080	9	72	0	0	0	0	16	128	7	56	0	0	24	192	0	0	0	0	0	0	1	7	0	0
		GEORGETOWNE DR - WESTFIELD WAY	8	0	0	2	16	0	0	0	0	4	32	0	0	0	0	8	64	0	0	0	0	0	0	0	0	101	808
		WESTFIELD WAY - MEADOWCREEK DR	8	0	0	4	32	0	0	0	0	8	64	0	0	0	0	14	112	0	0	0	0	0	0	0	0	142	1,136
		MEADOWCREEK DR - STH 164	8	0	0	3	24	0	0	0	0	6	48	0	0	0	0	8	64	0	0	0	0	0	0	0	0	149	1,192
		STH 164	8	74	592	2	16	0	0	0	0	4	32	0	0	0	0	11	88	0	0	0	5	1	5	0	0	0	0
		STH 164 - EOP	8	46	368	9	72	0	0	0	0	14	112	22	176	2	16	31	248	0	0	0	0	0	0	1	7	350	2,800
		ADV. SIGNING & WIDTH RESTRICTION	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	200	0	0	0	0	0	0	0	0	0	0
		STAGE 1A SUBTOTALS			3040		232		0		0		416		232		16		968			0			5		14		5936
0010	1B	BOP - GEORGETOWNE DR	8	272	2,176	15	120	0	0	0	0	12	96	0	0	0	0	31	248	0	0	0	0	0	0	0	0	0	0
		GEORGE TOWNE DR - WESTFIELD WAY	8	0	0	4	32	0	0	0	0	4	32	0	0	0	0	10	80	0	0	0	0	0	0	0	0	87	696
		WESTFIELD WAY - MEADOWCREEK DR	8	0	0	3	24	0	0	0	0	4	32	0	0	0	0	14	112	0	0	0	0	0	0	0	0	99	792
		MEADOWCREEK DR - STH 164	8	0	0	4	32	0	0	0	0	4	32	0	0	0	0	9	72	0	0	0	0	0	0	0	0	111	888
		STH 164	8	47	376	3	24	0	0	0	0	6	48	0	0	0	0	13	104	0	0	0	5	1	5	0	0	0	0
		STH 164 - EOP	8	29	232	13	104	0	0	0	0	14	112	14	112	2	16	39	312	0	0	0	0	0	0	0	0	357	2,856
		ADV. SIGNING & WIDTH RESTRICTION	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	200	0	0	0	0	0	0	0	0	0	0
		STAGE 1B SUBTOTALS			2,784		336		0		0		352		112		16		1,128			0			5		0		5,232
0010	2	BOP - GEORGETOWNE DR	54	153	8,262	38	2,052	137	137	137	137	43	2,322	6	324	0	0	35	1,890	0	0	0	0	0	0	1	7	7	378
		GEORGETOWNE DR - WESTFIELD WAY	54	0	0	3	162	0	0	0	0	2	108	0	0	0	0	9	486	0	0	0	0	0	0	0	0	118	6,372
		WESTFIELD WAY - MEADOWCREEK DR	54	0	0	3	162	0	0	0	0	2	108	0	0	0	0	14	756	0	0	0	0	0	0	0	0	137	7,398
		MEADOWCREEK DR - STH 164	54	0	0	5	270	0	0	0	0	2	108	0	0	0	0	10	540	0	0	0	0	0	0	0	0	190	10,260
		STH 164 - STAGE 2A	27	205	5,535	4	108	0	0	0	0	4	108	47	1,269	2	54	23	621	0	0	0	5	1	5	0	0	0	0
		STH 164 - STAGE 2B	27	238	6,426	4	108	0	0	0	0	4	108	47	1,269	2	54	24	648	0	0	0	5	1	5	0	0	0	0
		STH 164 - EOP	54	41	2,214	8	432	0	0	0	0	4	216	22	1,188	2	108	32	1,728	0	0	0	0	0	0	0	0	381	20,574
		ADV. SIGNING & WIDTH RESTRICTION	54	72	3,888	6	324	0	0	0	0	9	486	13	702	0	0	78	4,212	0	0	0	1	1	1	2	14	0	0
		DETOUR ROUTE	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94	5,076	0	0	0	5	1	5	1	54	0	0
		STAGE 2 SUBTOTALS			26,325		3,618		137		137		3,564		4,752		216		15,957			0			16		75		44,982
0010	3	BOP - GEORGETOWNE DR	63	218	13,734	39	2,457	89	89	89	89	45	2,835	16	1,008	0	0	32	2,016	0	0	0	0	0	0	0	0	9	567
		GEORGETOWNE DR - WESTFIELD WAY	63	0	0	2	126	0	0	0	0	4	252	0	0	0	0	8	504	0	0	0	0	0	0	0	0	91	5,733
		WESTFIELD WAY - MEADOWCREEK DR	63	0	0	4	252	0	0	0	0	8	504	0	0	0	0	16	1,008	0	0	0	0	0	0	0	0	125	7,875
		MEADOWCREEK DR - STH 164	63	0	0	5	315	0	0	0	0	6	378	0	0	0	0	11	693	0	0	0	0	0	0	0	0	138	8,694
		STH 164 - STAGE 3A	31	206	6,386	5	155	0	0	0	0	10	310	22	682	2	62	26	806	0	0	0	5	1	5	1	7	0	0
		STH 164 - STAGE 3B	32	185	5,920	5	160	0	0	0	0	10	320	22	704	2	64	21	672	0	0	0	3	1	3	0	0	0	0
		STH 164 - EOP	63	29	1,827	8	504	0	0	0	0	12	756	31	1,953	2	126	37	2,331	0	0	0	0	0	0	0	0	342	21,546
		ADV. SIGNING & WIDTH RESTRICTION	63	51	3,213	5	315	0	0	0	0	7	441	0	0	0	0	71	4,473	1	1	1	1	1	1	2	14	0	0
		DETOUR ROUTE	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	6,300	0	0	0	2	1	2	1	63	0	0
		STAGE 3 SUBTOTALS			31,080		4,284		89		89		5,796		4,347		252		18,803			1			11		84		44,415
0010	4A	BOP - GEORGETOWNE DR	15	311	4,665	19	285	0	0	0	0	16	240	5	75	1	15	42	630	0	0	0	0	0	0	0	0	6	90
		GEORGETOWNE DR - WESTFIELD WAY	15	5	75	3	45	0	0	0	0	0	0	5	75	0	0	10	150	0	0	0	0	0	0	0	0	75	1,125
		WESTFIELD WAY - MEADOWCREEK DR	15	0	0	2	30	0	0	0	0	2	30	0	0	0	0	12	180	0	0	0	0	0	0	0	0	98	1,470
		MEADOWCREEK DR - STH 164	15	0	0	4	60	0	0	0	0	4	60	0	0	0	0	10	150	0	0	0	0	0	0	0	0	112	1,680
		STH 164 - STAGE 4A	15	47	705	4	60	0	0	0	0	8	120	0	0	0	0	14	210	0	0	0	5	1	5	0	0	0	0
		STH 164 - EOP	15	29	435	13	195	0	0	0	0	14	210	14	210	2	30	39	585	0	0	0	0	0	0	0	0	345	5,175
		ADV. SIGNING & WIDTH RESTRICTION	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	240	0	0	0	0	0	0	0	0	0	0
		STAGE 4A SUBTOTALS			5,880		675		0		0		660		360		45		2,145			0			5		0		9,540
0010	4B	BOP - GEORGETOWNE DR	24	247	5,928	11	264	0	0	0	0	18	432	10	240	1	24	27	648	0	0	0	0	0	0	0	0	0	0
		GEORGETOWNE DR - WESTFIELD WAY	24	0	0	2	48	0	0	0	0	4	96	0	0	0	0	8	192	0	0	0	0	0	0	0	0	105	2,520
		WESTFIELD WAY - MEADOWCREEK DR	24	0	0	4	96	0	0	0	0	8	192	0	0	0	0	16	384	0	0	0	0	0	0	0	0	146	3,504
		MEADOWCREEK DR - STH 164	24	0	0	3	72	0	0	0	0	6	144	0	0	0	0	8	192	0	0	0	0	0	0	0	0	151	3,624
		STH 164 - STAGE 4B	24	74	1,776	2	48	0	0	0	0	4	96	0	0	0	0	12	288	0	0	0	0	0	0	0	0	0	0
		STH 164 - EOP	24	87	2,088	8	192	0	0	0	0	12	288	22	528	2	48	30	720	0	0	0	0	0	0	0	0	284	6,816
		ADV. SIGNING & WIDTH RESTRICTION	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	384	0	0	0	0	0	0	0	0	0	0
		STAGE 4B SUBTOTALS			9,792		720		0		0		1,248		768		72		2,808			0			0		0		16,464
***ADDITIONAL QUANTITIES LISTED ELSEWHERE**		**TOTAL 0010**			78,901		9,865		226		226		12,036		10,571		617		41,809			1			42		173		126,569

PERMANENT PAVEMENT MARKING LINES

CATEGORY	STATION	TO	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH (SOLID YELLOW) LF	646.1545 MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH (SKIP WHITE) LF	(SOLID WHITE) LF	(SOLID YELLOW) LF	646.2020 MARKING LINE EPOXY 6-INCH (SKIP YELLOW) LF	646.2025 MARKING LINE GROOVED BLACK EPOXY 6-INCH (BLACK) LF	646.2040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (SKIP WHITE) LF	(SOLID WHITE) LF	646.3020 MARKING LINE EPOXY 8-INCH (SKIP WHITE) LF	(SOLID WHITE) LF	646.3050 MARKING LINE GROOVED PERMANENT TAPE 8-INCH (SKIP WHITE) LF	646.3555 MARKING LINE GROOVED CONTRAST PERMANNET TAPE 8-INCH (SOLID WHITE) LF	646.4025 MARKING LINE GROOVED BLACK EPOXY 10-INCH (BLACK) LF	(SOLID WHITE) LF	646.4040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH (SKIP WHITE) LF
0010	689+60 'K'	-	690+85 'K'	STH 16 WB OFF RAMP	-	-	949	952	-	-	-	-	-	-	-	-	36	541	36
	683+00 'I'	-	685+50 'I'	STH 16 EB OFF RAMP	-	-	1274	1262	-	-	-	-	-	364	91	-	-	-	-
	6+00 'EB'	-	44+00 'EB	EB - STH 190	21	-	2597	3235	-	869	869	-	-	-	-	-	162	1612	162
	6+00 'WB'	-	44+00 'WB'	WB - STH 190	58	-	2601	3246	-	844	844	15	-	-	-	6	84	1781	84
	44+00 'EB'	-	83+50 'EB'	EB - STH 190	68	-	3274	3339	8	869	869	574	19	-	-	-	584	3864	584
	44+00 'WB'	-	83+50 'WB'	WB - STH 190	99	-	3169	2893	-	854	854	716	-	-	-	-	195	5289	195
	83+50 'EB'	-	122+00 'EB'	EB - STH 190	-	-	2495	2452	-	693	693	-	-	-	-	-	89	817	89
	83+50 'WB'	-	122+00 'WB'	WB - STH 190	76	-	3595	3123	-	941	941	38	-	-	-	-	166	2252	166
	2800' E/OF WB CONSTRUCTION			CTH F INTERCHANGE	-	165	-	-	-	-	-	-	-	-	-	-	-	-	-
	161+00'PK'	-	178+50'PK'	NB STH 164	-	-	1733	1540	-	537	537	-	-	-	-	-	-	777	-
	179+75'PK'	-	207+50'PK'	SB STH 164	-	-	1766	2441	-	635	635	-	-	-	-	-	62	3034	62
				SUBTOTALS	322	165	23453	24483	8	6242	6242	1343	19	364	91	6	1378	19967	1378
				TOTAL 0010	322	165			47,944	6,242	6,242		1,362		455	6	1,378		21,345

'PERMANENT PAVEMENT MARKING ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	646.5020 MARKING ARROW EPOXY (WHITE) EACH	646.5120 MARKING WORD EPOXY (WHITE) EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH (SOLID WHITE) LF	646.6220 MARKING YIELD LINE EPOXY 18-INCH (SOLID WHITE) EACH	(SOLID WHITE)	646.7120 MARKING DIAGONAL EPOXY 12-INCH (SOLID YELLOW) LF	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (SOLID WHITE) LF	646.8120 MARKING CURB EPOXY (YELLOW) LF	646.8220 MARKING ISLAND NOSE EPOXY (YELLOW) EACH
0010	689+60 'K'	-	690+85 'K'	STH 16 WB OFF RAMP	7	2	52	-	-	-	-	-	-
	683+00 'I'	-	685+50 'I'	STH 16 EB OFF RAMP	6	1	26	6	-	-	103	-	-
	6+00 'EB'	-	44+00 'EB	EB - STH 190	12	3	135	-	24	12	238	80	4
	6+00 'WB'	-	44+00 'WB'	WB - STH 190	18	6	154	4	-	-	457	51	4
	44+00 'EB'	-	83+50 'EB'	EB - STH 190	32	11	286	-	-	-	922	69	7
	44+00 'WB'	-	83+50 'WB'	WB - STH 190	31	19	243	-	389	57	974	68	6
	83+50 'EB'	-	122+00 'EB'	EB - STH 190	6	3	70	-	-	-	226	30	1
	83+50 'WB'	-	122+00 'WB'	WB - STH 190	12	6	106	-	-	-	276	10	1
	2800' E/OF WB CONSTRUCTION			CTH F INTERCHANGE	-	-	-	-	-	-	-	-	-
	161+00'PK'	-	178+50'PK'	NB STH 164	4	4	46	-	-	-	-	11	1
	179+75'PK'	-	207+50'PK'	SB STH 164	5	4	110	-	-	-	126	18	1
				SUBTOTALS	133	59	1,228	10	413	69	3,322	337	25
				TOTAL 0010	133	59	1,228	10		482	3,322	337	25

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

3

PEDESTRIAN TRAFFIC CONTROL ITEMS

CATEGORY	STAGE	LOCATION	* 643.0900 TRAFFIC CONTROL SIGNS DAY	644.1430 TEMPORARY PEDESTRIAN SURFACE PLATE SF	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY	644.1605 TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD SF	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF	REMARKS
0010	2	EB - STH 190	162	-	-	-	18	
		FOREST GROVE DR	108	-	-	-	32	
		WESTFIELD WAY	216	-	-	-	12	
		MEADOWCREEK DR	108	-	-	-	26	
		STAGE 2 SUBTOTALS	594	0	0	0	88	
0010	3	EB - STH 190	189	-	-	-	-	
		WB - STH 190	126	100	160	-	1,762	4 - 5'x5' SURFACE PLATES
		FOREST GROVE DR	126	-	-	-	-	
		WESTFIELD WAY	252	-	-	-	52	
		COMMERCIAL ENTERANCE	63	-	-	-	18	
		MEADOWCREEK DR	126	-	-	-	-	
		STH 164	63	175	63	10	305	SE QUAD: 5'x5' / NW QUAD: 30'x5' SURFACE PLATES
		STAGE 3 SUBTOTALS	945	275	223	10	2,137	
0010	4	EB - STH 190	45	-	-	-	-	
		TOTAL 0010	1,584	275	223	10	2,225	

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

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MARKING REMOVALS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9100 MARKING REMOVAL LINE 8-INCH LF	646.9150 MARKING REMOVAL LINE GROOVED PERMANENT TAPE 8-INCH LF	646.9155 MARKING REMOVAL LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH LF	646.9200 MARKING REMOVAL LINE WIDE LF	646.9300 MARKING REMOVAL SPECIAL MARKING EACH
0010	1	6+50 'EB'	-	8+00 'EB'	EB - STH 190	35	-	-	-	-	-
		16+00'WB'	-	18+00'WB'	WB - STH 190	-	-	-	264	-	-
		75+50'WB'	-	76+50'WB'	WB - STH 190	-	-	183	-	39	-
		82+00'EB'	-	82+50'EB'	EB - STH 190	-	-	76	-	-	-
		84+00'WB'	-	85+00'WB'	WB - STH 190	-	-	67	47	-	-
		116+00'EB'	-	122+00'EB'	WB - STH 190	131	-	-	-	-	-
		1530' EAST OF END PROJECT LIMIT			WB - STH 190	165	-	-	-	-	-
					STAGE 1 SUBTOTALS	331	0	326	311	39	0
0010	2	7+00'EB'	-	9+50'EB'	EB & WB - STH 190	450	155	-	-	53	-
		10+00'WB'	-	10+00'WB'	STH 16 EB OFF RAMP	-	-	269	-	-	2
		10+50'WB'	-	14+00'WB'	WB - STH 190	-	-	-	360	35	-
		14+00'WB'	-	28+25'WB'	WB - STH 190	1212	-	-	72	-	-
		29+50'EB'	-	44+00'EB'	EB & WB STH 190	1235	98	341	-	-	-
		44+00'EB'	-	55+00'EB'	EB & WB STH 190	924	-	659	-	-	-
		55+00'EB'	-	70+00'EB'	EB & WB STH 190	835	-	963	-	-	-
		70+00'EB'	-	83+00'EB'	EB & WB STH 190	891	-	790	-	51	10
		84+00'EB'	-	96+00'EB'	EB & WB STH 190	1119	-	699	-	-	5
		97+00'EB'	-	109+00'EB'	EB & WB STH 190	1880	290	-	-	-	3
		109+00'EB'	-	122+00'EB'	EB & WB STH 190	1104	-	-	-	-	-
	2A	STH 164 SOUTH OF STH 190			NB STH 164	218	111	-	135	-	-
		STH 164 NORTH STH 190			SB STH 164	294	49	-	78	-	-
					STAGE 2 SUBTOTALS	10161	703	3721	645	139	20
0010	3	80+50'EB'	-	82+25'EB'	EB STH 190	27	-	120	-	-	-
		STH 164 SOUTH OF STH 190			NB STH 164	-	-	-	125	-	-
		85+50'WB'	-	86+50'WB'	WB STH 190	104	-	100	-	-	-
		STH 164 NORTH STH 190			SB STH 164	218	161	-	-	-	1
					STAGE 3 SUBTOTALS	349	161	220	125	0	1
					TOTAL 0010	10,840	864	4,267	1,081	178	21

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

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SAW CUTTING ITEMS

CATEGORY	STATION	TO	STATION	OFFSET	LOCATION	* 690.0150 SAWING ASPHALT LF	* 690.0250 SAWING CONCRETE LF
0010	8+53 'EB'	-	8+89 'EB'	LT/RT	MEDIAN - STH 190	42	3
	8+52 'WB'	-	8+88 'WB'	LT/RT	MEDIAN - STH 190	42	3
	8+88 'WB'	-	8+88 'WB'	LT	WB LANES - STH 190	34	3
	8+93 'WB'		8+94'WB'	LT	NW QUAD SIDEWALK	-	5
	9+14 'EB'	-	9+68 'EB'	LT	MEDIAN - STH 190	-	120
	7+51 'EB'	-	7+66 'EB'	RT	EB LANES - STH 190	80	-
	8+89 'EB'	-	8+89 'EB'	RT	EB LANES - STH 190	33	3
	9+21 'EB'	-	9+21 'EB'	RT	SW QUAD - STH 190 / STH 16 EB ON RAMP	-	5
	11+66 'WB'	-	12+10 'WB'	LT	WB STH 190 SLOPE PAVING UNDER SB STH 16	-	45
	12+43 'WB'	-	12+88 'WB'	LT	WB STH 190 SLOPE PAVING UNDER NB STH 16	-	45
	11+57 'EB'	-	11+99 'EB'	RT	EB STH 190 SLOPE PAVING UNDER SB STH 16	-	45
	12+36 'EB'	-	12+78 'EB'	RT	EB STH 190 SLOPE PAVING UNDER NB STH 16	-	45
	685+81 'J'	-	685+81 'J'	LT/RT	STH 16 EB ON RAMP	6	30
	686+41 'K'	-	689+57 'K'	LT/RT	STH 16 WB OFF RAMP	13	500
	688+43 'K'	-	688+43 'K'	LT/RT	STH 16 WB OFF RAMP CROSSCUT	-	26
	688+57 'K'	-	688+57 'K'	LT/RT	STH 16 WB OFF RAMP CROSSCUT	-	24
	28+52 'WB'	-	29+55 ' WB'	RT	MEDIAN WB STH 190	103	-
	28+72 'EB'	-	29+07 'EB'	RT	COMMERCIAL ENTRANCE - DYNEX	37	-
	28+95 'EB'	-	28+95 'EB'	LT/RT	MEDIAN/EB STH 190 SAWCUT FOR STAGING	100	36
	35+00 'WB'	-	35+00 'WB'	RT	WB SHOULDER CUT FOR TEMP X-OVER WB STH 190	7	-
	37+00 'WB'	-	37+00 'WB'	RT	WB SHOULDER CUT FOR TEMP X-OVER WB STH 190	3	-
	39+65 'EB'	-	39+80 'EB'	RT	EB LANE - STH 190	-	54
	43+27 'WB'	-	43+28 'WB'	RT	MEDIAN - STH 190	-	8
	43+56 'EB'	-	43+56 'EB'	LT	MEDIAN - STH 190	-	15
	44+65 'WB'	-	44+65 'WB'	RT	MEDIAN - STH 190	-	20
	53+99 'WB'	-	53+99 'WB'	RT	MEDIAN - STH 190	-	4
	54+37 'EB'	-	54+37 'EB'	RT	CURB & GUTTER MEDIAN - STH 190	-	6
	55+85 'WB'	-	55+85 'WB'	RT	MEDIAN - STH 190	-	6
	56+07 'EB'	-	56+07 'EB'	LT	MEDIAN - STH 190	-	4
	68+63 'WB'	-	68+63 'WB'	RT	SIDEWALK MEDIAN - STH 190	-	4
	68+86 'EB'	-	68+86 'EB'	LT	CURB & GUTTER MEDIAN - STH 190	-	6
	71+15 'EB'	-	71+15 'EB'	LT	SIDEWALK MEDIAN - STH 190	-	4
	82+32 'EB'	-	82+32 'EB'	LT	SIDEWALK MEDIAN - STH 190	-	2
	82+56 'EB'	-	82+56 'EB'	LT	SIDEWALK MEDIAN - STH 190	-	7
	84+46 'EB'	-	84+46 'EB'	LT	SIDEWALK MEDIAN - STH 190	-	8
	84+80 'WB'	-	84+80 'WB'	RT	SIDEWALK MEDIAN - STH 190	-	2
	684+50 'I'	-	684+53 'I'	LT/RT	STH 16 EB OFF RAMP	6	43
	10+22 'WB'	-	10+22 'WB'	LT	NE QUAD - STH 190 / STH 16 EB OFF RAMP	-	5
	11+24 'WB'	-	11+24 'WB'	LT	WB SIDEWALK - STH 190	-	5
	13+16 'WB'	-	13+16 'WB'	LT	WB SIDEWALK - STH 190	-	5
	14+25 'WB'	-	14+25 'WB'	LT	NW QUAD - STH 190 / STH 16 WB ON RAMP	-	5
	14+18 'WB'	-	14+78 'WB'	RT	WB STH 190 MEDIAN SAWCUT FOR STAGING		60
	685+48 'L'	-	685+81 'L'	RT	NW QUAD - STH 190 / STH 16 WB ON RAMP	-	33
	14+54 'WB'	-	14+69 'WB'	LT	STH 16 WB ON RAMP	-	15
	685+61 'L'	-	685+81 'L'	CL	STH 16 WB ON RAMP	-	21
	14+68 'WB'	-	14+90 'WB'	LT	SIDEWALK ISLAND - STH 16 WB ON RAMP	-	23
	685+62 'L'	-	685+74 'L'	LT	SIDEWALK ISLAND - STH 16 WB ON RAMP	-	12
	14+89 'WB'	-	15+34 'WB'	LT	SIDEWALK ISLAND - STH 16 WB ON RAMP	-	63
	685+66 'L'	-	685+77 'L'	LT	SIDEWALK ISLAND - STH 16 WB ON RAMP	-	11
	15+34 'WB'	-	15+50 'WB'	LT	SIDEWALK ISLAND - STH 16 WB ON RAMP	-	19
	15+86 'WB'	-	18+97 'WB'	LT	WB STH 190 / STH 16 WB ON RAMP	-	335
	15+60 'WB'	-	15+94 'WB'	LT	NE QUAD - STH 190 / STH 16 WB ON RAMP	-	58
	15+50 'WB	-	15+87 'WB'	LT	NE QUAD - STH 190 / STH 16 WB ON RAMP	-	48
	19+44 'WB'	-	19+73 'WB'	LT	CECELIA DRIVE	42	-
	19+44 'WB'	-	20+15 'WB'	RT	WB MEDIAN STH 190	71	-
					PAGE 1/2 - SUBTOTALS	619	1849

*ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLANS

SAW CUTTING ITEMS (CONTINUED)

CATEGORY	STATION	TO	STATION	OFFSET	LOCATION	* 690.0150 SAWING ASPHALT LF	* 690.0250 SAWING CONCRETE LF
0010	43+42 'WB'	-	43+43 'WB'	LT	CURB & GUTTER - NW QUAD STH 190 / GEORGETOWNE DR.	-	6
	43+60 'WB'	-	43+91 'WB'	LT	ISLAND REMOVAL AT SB GEORGETOWNE DR	110	-
	43+75 'EB'	-	43+77 'EB'	RT	CURB & GUTTER - SW QUAD STH 190 / FOREST GROOVE DR.	-	3
	44+07 'EB'	-	44+19 'EB'	RT	MEDIAN - FOREST GROOVE DR.	75	14
	43+77 'WB'	-	44+12 'WB'	LT	SB LANE - GEORGETOWNE DR.	35	-
	43+83 'WB'	-	44+11 'WB'	LT	HMA PATCH - GEORGETOWNE DR.	56	-
	43+87 'EB'	-	44+08 'EB'	RT	SB LANE - FOREST GROOVE DR.	21	-
	44+20 'EB'	-	44+40 'EB'	RT	NB LANE - FOREST GROOVE DR.	20	-
	44+20 'EB'	-	44+40 'EB'	RT	HMA PATCH - FOREST GROOVE DR.	57	-
	44+25 'WB'	-	44+48 'WB'	LT	NB LANE - GEORGETOWNE DR.	23	-
	44+48 'EB'	-	44+51 'EB'	RT	CURB & GUTTER - SE QUAD STH 190 / FOREST GROOVE DR.	-	3
	44+56 'WB'	-	44+56 'WB'	LT	CURB & GUTTER - NE QUAD STH 190 / GEORGETOWNE DR.		3
	44+64 'EB'	-	44+67 'EB'	RT	SIDEWALK - SE QUAD STH 190 / FOREST GROOVE DR.	-	5
	46+35 'EB'	-	46+56 'EB'	LT	MEDIAN ASPHALT BETWEEN WB TURN LANE AND EB STH 190	45	-
	54+57 'WB'	-	54+62 'WB'	LT	SIDEWALK - NW QUAD STH 190 / WESTFIELD WAY	-	5
	54+61 'WB'	-	54+84 'WB'	LT	HMA PATCH - WESTFIELD WAY	46	-
	54+70 'EB'	-	54+75 'EB'	RT	SIDEWALK - SW QUAD STH 190 / COMMERCIAL ENT.	-	5
	54+75 'EB'	-	54+78 'EB'	RT	CURB & GUTTER - SW QUAD STH 190 / COMMERCIAL ENT.	-	3
	54+78 'WB'	-	54+81 'WB'	LT	CURB & GUTTER - NW QUAD STH 190 / WESTFIELD WAY	-	3
	54+78 'WB'	-	55+01 'WB'	LT	SB LANE - WESTFIELD WAY	24	-
	54+78 'EB'	-	54+96 'EB'	RT	SB LANE - COMMERCIAL ENTRANCE	18	-
	54+96 'EB'	-	55+06 'EB'	RT	CURB & GUTTER SB MEDIAN - COMMERCIAL ENT.	-	6
	54+94 'EB'	-	55+10 'EB'	RT	MEDIAN SAWCUT FOR CURB & GUTTER COMMERCIAL ENT.	85	-
	54+98 'EB'	-	55+08 'EB'	RT	SB MEDIAN - COMMERCIAL ENTRANCE	4	-
	54+98 'EB'	-	55+08 'EB'	RT	SB MEDIAN - COMMERCIAL ENTRANCE	4	-
	55+04 'EB'	-	55+24 'EB'	RT	NB LANE - COMMERCIAL ENTRANCE	20	-
	55+05 'WB'	-	55+20 'WB'	LT	MEDIAN SAWCUT FOR CURB & GUTTER WESTFIELD WAY.	55	-
	55+06 'WB'	-	55+10 'WB'	LT	NB MEDIAN - WESTFIELD WAY	4	-
	55+06 'WB'	-	55+16 'WB'	LT	CURB & GUTTER NB MEDIAN - WESTFIELD WAY	-	6
	55+14 'WB'	-	55+38 'WB'	LT	NB LANE - WESTFIELD WAY	25	-
	55+28 'EB'	-	55+31 'EB'	RT	CURB & GUTTER - SE QUAD STH 190 / COMMERCIAL ENT.	-	3
	55+41 'WB'	-	55+44 'WB'	LT	CURB & GUTTER - NE QUAD STH 190 / WESTFIELD WAY	-	3
	55+52 'WB'	-	55+56 'WB'	LT	SIDEWALK - NE QUAD STH 190 / WESTFIELD WAY	-	5
	60+68 'EB'	-	60+88 'EB'	RT	SB LANE - WILLOW GROOVE DRIVE	20	-
	60+94 'WB'	-	61+33 'WB'	LT	COMMERCIAL ENTRANCE	39	-
	61+07 'EB'	-	61+26 'EB'	RT	NB LANE - WILLOW GROOVE DRIVE	19	-
	61+76 'EB'	-	61+86' EB	RT	EB LANE STH 190, CUTOUT FOR FLUME		
	61+84 'WB'	-	61+94 'WB'	LT	WB TURN LANE STH 190, CUTOUT FOR FLUME	15	
	69+14 'EB'	-	69+18 'EB'	RT	SIDEWALK - SW QUAD STH 190 / MEADOWCREEK DR.	-	10
	69+53 'WB'	-	69+56 'WB'	LT	CURB & GUTTER - NW QUAD STH 190 / COMMERCIAL ENT.	-	3
	69+49 'EB'	-	69+70 'EB'	RT	SB LANE - MEADOWCREEK DRIVE	22	-
	69+59 'WB'	-	69+91 'WB'	LT	SB LANE - COMMERCIAL ENTRANCE	33	-
	69+73 'EB'	-	69+76 'EB'	RT	SIDEWALK MEDIAN - MEADOWCREEK DRIVE	-	4
	69+79 'EB'	-	70+12 'EB'	RT	NB LANE - MEADOWCREEK DRIVE	35	-
	69+87 'EB'	-	70+03 'EB'	RT	HMA PATCH - MEADOWCREEK DRIVE	60	-
	69+87 'WB'	-	70+00 'WB'	LT	MEDIAN SAWCUT FOR CURB & GUTTER	40	-
	69+99 'WB'	-	70+31 'WB'	LT	NB LANE - COMMERCIAL ENTRANCE	32	-
	70+37 'WB'	-	70+39 'WB'	LT	CURB & GUTTER - NE QUAD STH 190 / COMMERCIAL ENT.	-	3
	75+95 'WB'	-	76+17 'WB'	LT	COMMERCIAL ENTRANCE	23	-
	82+44 'WB'	-	82+54 'WB'	LT	PATH - NW QUAD STH 190 / STH 164	10	-
	82+02 'WB'	-	82+12 'WB'	LT	WB STH 190 CUTOUT FOR FLUME	15	-
	83+40 'EB'	-	83+44 'EB'	RT	SIDEWALK MEDIAN - STH 164	-	4
	84+22 'EB'	-	84+31 'EB'	RT	PATH - SE QUAD STH 190 / STH 164	10	-
	83+54 'WB'	-	83+58 'WB'	LT	SIDEWALK MEDIAN - STH 164	-	4
	96+01 'EB'	-	96+24 'EB'	RT	SB LANE - 5 FIELDS ROAD	23	-
	96+07 'WB'	-	96+50 'WB'	LT	HIGHFIELD ROAD	43	-
	96+38 'EB'	-	96+58 'EB'	RT	NB LANE - 5 FIELDS ROAD	21	-
	108+98 'EB'	-	109+72 'EB'	RT	COMMERCIAL ENTRANCE	75	-
	110+99 'WB'	-	110+99 'WB'	LT	WB LANE - STH 190	22	24
	111+00 'EB'	-	111+00 'EB'	RT	EB LANE - STH 190	10	26
					PAGE 2/2 - SUBTOTALS	1294	151
					TOTAL 0010	1,913	2,000

*ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLANS

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

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ADDITIONAL STAKING ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
0010	9+14 'WB'	-	37+00 'WB'	WB - STH 190	2,786	2,786	-	2,786
	9+18 'EB'	-	37+00 'EB'	EB - STH 190	2,782	2,782	-	2,782
	685+33 'J'	-	685+81 'J'	STH 16 EB ON RAMP	48	48	-	48
	684+50 'I'	-	685+27 'I'	STH 16 EB OFF RAMP	77	77	-	77
	685+86 'K'	-	691+06 'K'	STH 16 WB OFF RAMP	520	520	-	520
	37+00 'WB'	-	111+00 'WB'	WB - STH 190	-	-	7,400	-
	37+00 'EB'	-	111+00 'EB'	EB - STH 190	-	-	7,400	-
				TOTAL 0010	6,213	6,213	14,800	6,213

REMOVING DISTRESSED PAVEMENT MILLING

CATEGORY	STATION	TO	STATION	LOCATION	* 455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON	SPV.0180.01 SPECIAL (01. REMOVING DISTRESSED PAVEMENT MILLING) SY
0010	37+00 'EB'	-	111+00 'EB'	STH 190	231	370	3,300
				TOTAL 0010	231	370	3,300

***ADDITIONAL QUANTITIES LISTED ELSEWHERE**

VERIFY LANDMARK REFERENCE MONUMENTS

CATEGORY	STATION	OFFSET	LOCATION	SPV.0060.99 SPECIAL (99. VERIFY LANDMARK REFERENCE MONUMENTS) EACH
0010	56+67 'WB'	9.0' RT	WB - STH 190	1
	83+24 'EB'	70.6' RT	EB - STH 190	1
	109+45 'EB'	72.0' RT	EB - STH 190	1
			TOTAL 0010	3

ADJUST WATER VALVE BOX SECTIONS

CATEGORY	STATION	OFFSET	SPV.0060.97 SPECIAL (97. ADJUST WATER VALVE BOX SECTIONS) EACH	REMARKS
0050	84+43 'WB'	78' LT	1	STRAIGHTEN TOP TWO SECTIONS OF MAIN VALVE BOX
	84+30 'EB'	96' RT	1	REPLACE TOP SECTION OF HYDRANT VALVE BOX
	90+62 'WB'	52' LT	1	STRAIGHTEN TOP TWO SECTIONS OF MAIN VALVE BOX
	92+07 'WB'	50' LT	1	STRAIGHTEN TOP TWO SECTIONS OF HYDRANT VALVE BOX
	96+38 'WB'	44' LT	1	REPLACE TOP SECTION OF MAIN VALVE BOX
		TOTAL 0050	5	

VEGETATION REMOVAL AT WILLOW GROVE DRIVE

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0170.02 SPECIAL (02. VEGETATION REMOVAL) STA
0010	60+00 'EB'	-	62+00 'EB'	EB - STH 190, RT	2
				TOTAL 0010	2

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

3

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]	637.2220 SIGNS TYPE II REFLC SH [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 POSTS WOOD 4"X 6"X18' [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
1	W6-2(2S)	II	--	36 x 36	--	--	9.000	--	1	1	1	--	--	--
2	R6-2R(2S)	II	--	24 x 30	5.000	--	--	--	1	1	1	--	--	--
3	R1-2(2S)	II	--	36 x 31	3.880	--	--	--	1	--	--	--	--	MOUNT ON LIGHT POLE
4	R6-3(2S)	II	--	30 x 24	5.000	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
5	R1-1F(3)	II	--	36 x 36	--	--	--	7.460	--	--	--	--	--	MOUNT ON SIGNAL POLE
6	W12-1D(2S)	II	--	24 x 24	--	--	4.000	--	1	1	1	--	--	2 FT MOUNT HEIGHT
7	R1-1F(3)	II	--	36 x 36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
8	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
8A	R5-1A	--	--	-- x --	--	--	--	--	--	--	--	1	--	MOUNT ON SIGNAL POLE
9	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
10	R5-1A	--	--	-- x --	--	--	--	--	--	--	--	1	--	MOUNT ON SIGNAL POLE
11	R6-2R(2S)	II	--	24 x 30	5.000	--	--	--	1	1	1	--	--	--
12	R6-2L(2S)	II	--	24 x 30	5.000	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
13	R10-50L	--	--	-- x --	--	--	--	--	1	--	--	--	--	--
14	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	1	BACK OF SIGN #1
15	W5-54(2S)	II	--	18 x 18	--	--	2.250	--	--	--	--	--	1	BELOW SIGN #14
16	R3-18(2S)	II	--	24 x 24	4.000	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
17	R1-1F(3)	II	--	36 x 36	--	--	--	7.460	--	--	--	--	--	MOUNT ON SIGNAL POLE
18	R1-1F(3)	II	--	36 x 36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
19	J3-1(2S)	II	--	24 x 57	9.500	--	--	--	1	1	1	--	--	--
	M3-2		EAST	24 x 12										
	M1-6		STH 16	24 x 24										
	M6-1		--	21 x 21										
20	R11-54F(2S)	II	--	48 x 30	--	--	--	10.000	1	2	1	--	--	--
21	J3-1(2S)	II	--	24 x 57	9.500	--	--	--	1	1	1	--	--	--
	M3-2		EAST	24 x 12										
	M1-6		STH 190	24 x 24										
	M6-1		--	21 x 21										
22	R11-54F(2S)	II	--	48 x 30	--	--	--	10.000	1	2	1	--	--	--
23	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
24	R1-1F(3)	II	--	36 x 36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
25	R1-1F(3)	II	--	36 x 36	--	--	--	7.460	--	--	--	--	--	MOUNT ON SIGNAL POLE
26	R3-1(2S)	II	--	24 x 24	4.000	--	--	--	1	1	1	--	--	--

3

3

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]	637.2220 SIGNS TYPE II REFLC SH [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 POSTS WOOD 4"X 6"X18' [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
27	I55-56	--	--	-- x --	--	--	--	--	--	1	1	1	--	--
28	D1-1	II	[A] OCONOMOWOC	84 x 15	8.750	--	--	--	1	2	2	--	--	--
29	J4-1(2S)	II	--	24 x 36	6.000	--	--	--	1	1	1	--	--	--
	M3-2		EAST	24 x 12										
	M1-6		STH 190	24 x 24										
30	W3-5(3)	II	25 MPH	36 x 36	--	--	9.000	--	--	--	1	--	--	--
31	J3-1(2S)	--	--	24 x 57	9.500	--	--	--	1	1	1	--	--	--
	M3-2		EAST	24 x 12										
	M1-6		STH 16	24 x 24										
	M6-1		--	21 x 21										
32	J3-1(2S)	--	--	24 x 57	9.500	--	--	--	1	1	1	--	--	--
	M3-2		EAST	24 x 12										
	M1-6		STH 16	24 x 24										
	M6-1		--	21 x 21										
33	W3-5(3)	II	25 MPH	36 x 36	--	--	9.000	--	--	--	1	--	--	--
34	R11-54F(2S)	II	--	48 x 30	--	--	--	10.000	1	2	1	--	--	--
35	R1-1F(3)	II	--	36 x 36	--	--	--	7.460	--	--	--	--	--	MOUNT ON SIGNAL POLE
36	R6-2L(2S)	II	--	24 x 30	5.000	--	--	--	1	1	1	--	--	--
37	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
38	J3-1(2S)	II	--	24 x 57	9.500	--	--	--	--	--	--	--	32	BACK OF SIGN
	M3-4		WEST	24 x 12										
	M1-6		STH 16	24 x 24										
	M6-1		--	21 x 21										
39	J3-1	--	--	-- x --	--	--	--	--	1	--	--	--	--	--
40	J3-1	--	--	-- x --	--	--	--	--	1	1	--	--	--	ALSO REMOVE R5-1
41	R1-1F(3)	II	--	36 x 36	--	--	--	7.460	--	--	--	--	--	MOUNT ON SIGNAL POLE
42	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
43	R3-1	--	--	-- x --	--	--	--	--	1	1	--	--	--	--
43A	R5-1	--	--	-- x --	--	--	--	--	--	--	1	1	--	MOVE TO NEW WOOD POST
43B	R5-1A	--	--	-- x --	--	--	--	--	--	--	--	1	43A	3 FT MOUNT HEIGHT
44	R6-2L(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--
45	W12-1D(2S)	II	--	24 x 24	--	--	4.000	--	--	--	1	--	--	2 FT MOUNT HEIGHT
46	R6-3(2S)	II	--	30 x 24	5.000	--	--	--	--	--	--	--	--	--
47	R1-1F(3)	II	--	36 x 36	--	--	--	7.460	--	--	--	--	--	--
48	R1-1	--	--	-- x --	--	--	--	--	1	1	--	--	--	ALSO REMOVE R6-3, R6-2L, R5-1, 5-1A

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]	637.2220 SIGNS TYPE II REFLC SH [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 POSTS WOOD 4"X 6"X18' [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
49	R1-1	--	--	-- x --	--	--	--	--	1	1	--	--	--	--
50	R1-1F(3)	II	--	36 x 36	--	--	--	7.460	--	--	--	--	--	MOUNT ON SIGNAL POLE
51	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
52	R5-1A	--	--	-- x --	--	--	--	--	--	--	--	1	--	MOUNT ON SIGNAL POLE
53	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	1	1	--	--	--	MOUNT ON SIGNAL POLE
54	R1-1F(3)	II	--	36 x 36	--	--	--	7.460	--	--	1	--	--	--
55	W3-3	--	--	-- x --	--	--	--	--	1	1	--	--	--	--
56	W3-3	--	--	-- x --	--	--	--	--	1	1	--	--	--	--
57	R1-1F(3)	II	--	36 x 36	--	--	--	7.460	--	--	--	--	--	MOUNT ON SIGNAL POLE
58	J3-1(2S) M3-4 M1-6 M6-1	II	-- WEST STH 16 --	24 x 57 24 x 12 24 x 24 21 x 21	9.500	--	--	--	1	1	1	--	--	--
59	R3-2(3)	II	--	36 x 36	9.000	--	--	--	--	--	1	--	--	--
60	J3-1(2S) M3-2 M1-6 M6-1	II	--	24 x 57 24 x 12 24 x 24 21 x 21	9.500	--	--	--	1	1	1	--	--	--
61	R6-2R(2S)	II	--	24 x 30	5.000	--	--	--	--	--	1	--	--	--
62	W3-3(2S)	II	--	36 x 36	--	--	9.000	--	1	1	1	--	--	TEMPORARY ORANGE FLAGS INCIDENTAL
63	D1-3	II	[A] DOWNTOWN PEWAUKEE MILWAUKEE [A]	72 x 36	18.000	--	--	--	1	2	2	--	--	--
64	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	1	1	--	--	65	--
65	R3-8ERR(2S)	II	--	54 x 30	11.250	--	--	--	--	--	2	--	--	--
66	R3-2	--	--	-- x --	--	--	--	--	1	1	--	--	--	--
67	D16-1A	II	EAST [16] ONLY [DA]	36 x 72	--	18.000	--	--	--	--	--	--	--	INSTALL ON S-67-984
68	D1-1	II	[A] CECELIA DR	96 x 21	14.000	--	--	--	1	2	2	--	--	--
69	R2-1(3)	II	45 MPH	36 x 48	12.000	--	--	--	1	1	1	--	--	--
70	R2-1(3)	II	45 MPH	36 x 48	12.000	--	--	--	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]	637.2220 SIGNS TYPE II REFLC SH [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 POSTS WOOD 4"X 6"X18' [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
71	J3-1(3)	II	--	36 x 84	21.000	--	--	--	1	1	2	--	--	--
	M3-2		EAST	36 x 18										
	M1-6		STH 16	36 x 36										
	M6-1		--	30 x 30										
72	W13-3D(3)	II	20 MPH	36 x 60	--	--	15.000	--	--	--	1	--	--	--
73	R4-7(3)	II	--	36 x 48	12.000	--	--	--	1	1	1	--	--	--
74	R4-7(3)	II	--	36 x 48	12.000	--	--	--	1	1	1	--	--	--
75	R6-2L(2S)	II	--	24 x 30	5.000	--	--	--	1	1	1	--	--	--
76	J4-1(2S)	II	--	36 x 54	13.500	--	--	--	1	1	1	--	--	--
	M3-2			36 x 18										
	M1-6			36 x 36										
77	R5-1(3)	II	--	36 x 36	9.000	--	--	--	1	1	1	--	--	--
78	W3-5	--	25 MPH	-- x --	--	--	--	--	1	1	--	--	--	--
79	W3-5	--	25 MPH	-- x --	--	--	--	--	1	1	--	--	--	--
80	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	1	1	1	--	--	--
81	W13-3	--	--	-- x --	--	--	--	--	1	1	--	--	--	--
82	D2-2	II	BROOKFIELD 5	102 x 36	25.500	--	--	--	1	2	2	--	--	--
			MILWAUKEE 11											
83	D1-1	II	CECELIA DR [A]	96 x 21	14.000	--	--	--	1	2	2	--	--	--
84	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	1	1	1	--	--	--
85	J1-1(3)	II	--	36 x 57	14.250	--	--	--	1	1	1	--	--	--
	M2-1		JCT	30 x 21										
	M1-6		STH 16	36 x 36										
85A	J1-1(3)	II	--	36 x 57	14.250	--	--	--	1	1	1	--	--	
	M2-1		JCT	30 x 21										
	M1-6		STH 16	36 x 36										
86	R5-1(3)	II	--	36 x 36	9.000	--	--	--	1	1	1	--	--	--
87	R6-2L(2S)	II	--	24 x 30	5.000	--	--	--	1	1	1	--	--	--
88	R4-7(3)	II	--	36 x 48	12.000	--	--	--	1	1	1	--	--	--
89	R4-7(3)	II	--	36 x 48	12.000	--	--	--	1	1	1	--	--	--
90	R2-1(3)	II	45 MPH	36 x 48	12.000	--	--	--	1	1	1	--	--	--
91	R2-1(3)	II	45 MPH	36 x 48	12.000	--	--	--	1	1	1	--	--	--
92	W3-3(3)	II	--	36 x 36	--	--	9.000	--	1	1	1	--	--	--
93	W3-3(3)	II	--	36 x 36	--	--	9.000	--	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]	637.2220 SIGNS TYPE II REFLC SH [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 POSTS WOOD 4"X 6"X18' [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
94	M1-94H	II	[A] FOREST GROVE DR CECELIA DR [A]	102	x	30	21.250	--	--	--	--	--	--	--	--	ON MAST ARM
95	R6-2L(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
96	R1-2(2S)	II	--	36	x	31	3.880	--	--	--	1	--	--	--	--	MOUNT ON LIGHT POLE
97	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
98	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
99	R6-3(2S)	II	--	30	x	24	5.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
100	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
101	R4-7(3)	II	--	36	x	48	12.000	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
102	R6-3(2S)	II	--	30	x	24	5.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
103	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	--	--	--	--	--	MOUNT ON SIGNAL POLE
104	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	--	--	--	--	--	MOUNT ON SIGNAL POLE
105	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
106	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
107	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
108	R10-50L	--	--	--	x	--	--	--	--	--	1	--	--	--	--	--
109	R4-7(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
110	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
111	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
112	R6-3(2S)	II	--	30	x	24	5.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
113	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
114	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
115	R10-50L	--	--	--	x	--	--	--	--	--	1	--	--	--	--	--
116	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
117	R4-7(3)	II	--	36	x	48	12.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
118	R6-2L(2S)	II	--	24	x	30	5.000	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
119	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	--
120	J13-1	--	--	--	x	--	--	--	--	--	1	1	--	--	--	--
121	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
122	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
123	R6-3(2S)	II	--	30	x	24	5.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
124	M1-94H	II	[A] CECELIA DR FOREST GROVE DR [A]	102	x	30	21.250	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM

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]	637.2220 SIGNS TYPE II REFLC SH [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 POSTS WOOD 4"X 6"X18' [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
125	R4-7(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
126	R10-50L	--	--	--	x	--	--	--	--	--	1	--	--	--	--	--
127	M1-94H	II	WESTFIELD WAY	96	x	18	12.000	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
128	J13-1	--	--	--	x	--	--	--	--	--	1	1	--	--	--	--
129	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
130	R6-2L(2S)	II	--	24	x	30	5.000	--	--	--	--	--	1	--	--	--
131	R4-7(3)	II	--	36	x	48	12.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
132	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
133	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
134	R10-50L	--	--	--	x	--	--	--	--	--	1	--	--	--	--	--
135	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
136	R10-50L	--	--	--	x	--	--	--	--	--	1	--	--	--	--	--
137	R4-7(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
138	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
139	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
140	M1-94S	II	[190] CAPITOL DR	90	x	18	11.250	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
141	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
142	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
143	J13-1	--	--	--	x	--	--	--	--	--	1	1	--	--	--	--
144	M1-94H	II	WESTFIELD WAY	96	x	18	12.000	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
145	R6-2L(2S)	II	--	24	x	30	5.000	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
146	R10-50L	--	--	--	x	--	--	--	--	--	1	--	--	--	--	--
147	R10-50L	--	--	--	x	--	--	--	--	--	1	--	--	--	--	--
148	R4-7(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
149	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
150	M1-94S	II	[190] CAPITOL DR	90	x	18	11.250	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
151	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
152	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
153	NOT USED	--	--	--	x	--	--	--	--	--	--	--	--	--	--	--
154	M1-94H	II	MEADOWCREEK DR	102	x	18	12.750	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
155	R6-2L(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
156	J13-1	--	--	--	x	--	--	--	--	--	1	1	--	--	--	--
157	R10-15R(2S)	II	--	30	x	30	6.250	--	--	--	1	1	1	--	--	--
158	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
159	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE

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]	637.2220 SIGNS TYPE II REFLC SH [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 POSTS WOOD 4"X 6"X18' [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
160	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
161	R10-50L	--	--	--	x	--	--	--	--	--	1	--	--	--	--	--
162	R4-7(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
163	M1-94S	II	[190] CAPITOL DR	90	x	18	11.250	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
164	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
165	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	--	--	--	--	--	MOUNT ON SIGNAL POLE
166	R10-50L	--	--	--	x	--	--	--	--	--	1	--	--	--	--	--
167	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
168	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
169	M1-94S	II	[190] CAPITOL DR	90	x	18	11.250	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
170	R10-50L	--	--	--	x	--	--	--	--	--	1	--	--	--	--	--
171	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
172	J13-1	--	--	--	x	--	--	--	--	--	1	1	--	--	--	--
173	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
174	R6-2L(2S)	II	--	24	x	30	5.000	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
175	M1-94H	II	MEADOWCREEK DR	102	x	18	12.750	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
176	R10-50L	--	--	--	x	--	--	--	--	--	1	--	--	--	--	--
177	J4-1	--	--	--	x	--	--	--	--	--	1	--	--	--	--	--
178	R1-1F(3)	--	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
179	W12-1D(2S)	II	--	24	x	24	--	--	4.000	--	1	1	--	--	--	2 FT MOUNT HEIGHT
180	R6-2L(2S)	II	--	24	x	30	5.000	--	--	--	1	1	--	--	--	MOUNT ON SIGNAL POLE
181	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
181A	R3-4(2S)	II	--	24	x	24	4.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
182	R4-7(3)	II	--	36	x	48	12.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
183	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
184	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
185	W12-1D(2S)	II	--	24	x	24	--	--	4.000	--	1	1	--	--	--	2 FT MOUNT HEIGHT
186	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
187	R3-4(2S)	II	--	24	x	24	4.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
188	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
189	R4-7(3)	II	--	36	x	48	12.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
190	R6-2L(2S)	II	--	24	x	30	5.000	--	--	--	1	--	1	--	--	--
191	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
192	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
193	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE

3

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]	637.2220 SIGNS TYPE II REFLC SH [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 POSTS WOOD 4"X 6"X18' [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
194	W12-1D(2S)	II	--	24	x	24	--	--	4.000	--	--	--	1	--	--	2 FT MOUNT HEIGHT
195	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
196	R6-2L(2S)	II	--	24	x	30	5.000	--	--	--	1	1	--	--	--	MOUNT ON SIGNAL POLE
197	R3-4(2S)	II	--	24	x	24	4.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
198	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
199	R4-7(3)	II	--	36	x	48	12.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
200	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
201	W12-1D(2S)	II	--	24	x	24	--	--	4.000	--	--	--	1	--	--	2 FT MOUNT HEIGHT
202	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
203	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
204	R6-2L(2S)	II	--	24	x	30	5.000	--	--	--	--	--	1	--	--	--
205	R4-7(3)	II	--	36	x	48	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
206	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
207	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	--	--	--	--	MOUNT ON SIGNAL POLE
208	R1-1(3)	II	--	36	x	36	7.460	--	--	--	1	1	1	--	--	--
209	R6-3(2S)	II	--	30	x	24	5.000	--	--	--	--	--	--	--	208	--
210	R1-1(3)	II	--	36	x	36	7.460	--	--	--	1	1	1	--	--	--
211	R6-3(2S)	II	--	30	x	24	5.000	--	--	--	--	--	--	--	210	--
212	R5-1A(3)	II	--	42	x	30	8.750	--	--	--	--	1	1	--	--	--
213	J2-1	--	--	--	x	--	--	--	--	--	1	--	--	--	--	--
214	R6-2L(2S)	II	--	24	x	30	5.000	--	--	--	--	--	1	--	--	--
215	R4-7(3)	II	--	36	x	48	12.000	--	--	--	--	--	1	--	--	--
216	R4-7(3)	II	--	36	x	48	12.000	--	--	--	--	--	1	--	--	--
217	R1-1F(3)	II	--	36	x	36	--	--	--	7.460	1	1	1	--	--	REMOVE R1-1 AND R6-2R
218	M1-94S	II	[190] CAPITOL DR	90	x	18	11.250	--	--	--	--	--	--	--	--	SHEET 7 - ON MAST ARM
219	M1-94S	II	[190] CAPITOL DR	90	x	18	11.250	--	--	--	--	--	--	--	--	SHEET 7 - ON MAST ARM
220	R3-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	SHEET 1 - ON MAST ARM
221	R3-1(2S)	II	--	24	x	24	4.000	--	--	--	--	--	1	--	--	SHEET 2
222	R3-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	SHEET 2 - ON MAST ARM
223	R3-8LF(2S)	II	--	36	x	30	7.500	--	--	--	--	--	1	--	--	SHEET 7
	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--	--
	UNDISTRIBUTED			--	x	--	--	--	--	--	--	10	10	10	--	--
	TOTALS						1087.930	18.000	95.250	388.080	128	87	84	16		

3

STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
3	EVP DETECTOR HEADS
1	POLES TYPE 9 - SPECIAL
1	POLES TYPE 10
1	POLES TYPE 10 - SPECIAL
1	MONOTUBE ARMS 30-FT
2	MONOTUBE ARMS 35-FT SPECIAL
3	LUMINAIRE ARMS STEEL 15-FT

REMOVING PULL BOXES

	653.0905*
	REMOVING PULL BOXES
PULL BOX NO.	EACH
PB1	1
PB2	1
PB3	1
PB4	1
PB5	1
PB6	1
PB7	1
PB8	1
PB9	1
PB10	1
PB11	1
PB12	1
PB13	1
PB14	1
TOTALS	14

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING TRAFFIC SIGNALS, REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE

	204.9060.S.01	204.9060.S.06
	REMOVING TRAFFIC SIGNALS	REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE
LOCATION	EACH	EACH
STH 16 EB RAMPS & STH 190	1	1
TOTALS	1	1

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PULL BOXES

			653.0135*	653.0140*
			PULL BOXES STEEL 24X36-INCH	PULL BOXES STEEL 24X42-INCH
PULL BOX NO.	STATION	LOCATION	EACH	EACH
PB1	10+72.6 WB	28.7' LT	-	1
PB2	12+51.1 WB	28.0' LT	1	-
PB3	13+98.3 WB	30.0' LT	1	-
PB4	10+70.7 EB	7.3' LT	-	1
PB5	10+64.6 EB	6.8' LT	1	-
PB6	10+72.8 EB	36.9' RT	-	1
PB7	10+17.3 EB	56.4' RT	-	1
PB8	9+56.4 EB	54.9' RT	-	1
PB9	9+13.6 EB	37.4' RT	-	1
PB10	7+59.3 EB	37.3' RT	1	-
PB11	9+16.5 EB	8.9' LT	-	1
PB12	9+20.8 WB	56.3' LT	-	1
PB13	9+59.6 WB	50.9' LT	-	1
PB14	9+96.8 WB	48.2' LT	-	1
PB15	9+98.5 WB	57.0' LT	1	-
PB16	10+34.1 WB	263.8' LT	1	-
		TOTALS	6	10

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING CONCRETE BASES

	204.0195*
	REMOVING CONCRETE BASES
EXISTING BASE NO.	EACH
SB1	1
SB2	1
SB3	1
SB4	1
SB5	1
SB6	1
SB7	1
SB8	1
SB9	1
SB10	1
SB11	1
SB12	1
TOTALS	12

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONDUIT

		652.0225*	652.0235*	652.0605*	652.0615*
		CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	CONDUIT SPECIAL 2-INCH	CONDUIT SPECIAL 3-INCH
FROM	TO	LF	LF	LF	LF
CB1	PB1	-	177	-	-
PB1	PB2	179	-	-	-
PB2	PB3	147	-	-	-
PB1	PB4	-	-	-	90
PB4	PB5	6	-	-	-
PB4	PB6	-	-	-	88
PB6	PB7	-	118	-	-
PB7	PB8	-	-	-	118
PB8	PB9	-	92	-	-
PB9	PB10	-	-	152	-
PB9	PB11	-	-	-	92
PB11	PB12	-	-	-	132
PB12	PB13	-	-	-	82
PB13	PB14	-	-	-	76
PB14	PB15	9	-	-	-
PB14	PB16	219	-	-	-
PB14	CB1	-	60	-	-
PB1	SB1	19	-	-	-
PB4	SB2	12	-	-	-
PB6	SB3	-	33	-	-
PB8	SB4	-	5	-	-
PB9	SB5	31	-	-	-
PB11	SB6	-	29	-	-
PB12	SB7	9	-	-	-
PB13	SB8	23	-	-	-
PB13	SB9	14	-	-	-
PB14	SB10	10	-	-	-
	TOTALS	678	514	152	678

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 1 OF 4

INTERSECTION OF
STH 16 EB RAMPS & STH 190
ALL ITEMS CATEGORY 0020

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LOOP DETECTORS

LOOP NO.	HOME RUN PB	STATION	LOCATION	SIZE	NO. OF TURNS	SDD INSTALATION REF	652.0800* CONDUIT LOOP DETECTOR LF	655.0700* LOOP DETECTOR LEAD IN CABLE LF	655.0800* LOOP DETECTOR WIRE LF
21	PB3	14+02.1 WB	18.0' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	46	399	240
22	PB3	14+02.1 WB	6.0' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	66	399	340
23	PB2	12+55.8' WB	18.0' LT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	42	252	178
24	PB2	12+55.7' WB	6.0' LT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	62	252	258
41	PB16	10+09.0 WB	270.0' LT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	253	290
42	PB16	10+20.9 WB	267.8' LT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	46	253	194
43	PB15	9+72.1 WB	53.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	102	43	316
44	PB15	9+67.9 WB	29.1' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	106	43	328
45	PB15	9+84.4 WB	52.9' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	43	238
46	PB15	9+80.5 WB	29.0 LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	80	43	250
51	PB5	10+76.2 WB	5.0' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	80	124	250
52	PB5	10+51.1 WB	5.0' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	124	232
61	PB10	7+60.8 EB	16.5' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	60	377	310
62	PB10	7+61.0 EB	5.5' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	86	377	440
						TOTALS	996	2,982	3,864

* 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
CB1	SB1	105
SB1	SB2	116
SB2	SB3	129
SB3	SB4	212
SB4	SB5	122
SB5	SB6	146
SB6	SB8	215
SB8	SB9	61
SB9	SB10	111
SB10	CB1	57
PB1	SB1	39
PB4	SB2	32
PB6	SB3	53
PB7	SB3	128
PB8	SB4	25
PB9	SB5	51
PB11	SB6	49
PB12	SB9	91
PB13	SB9	34
PB14	CB1	43
	TOTALS	1,819

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE BASES

BASE NO.	STATION	LOCATION	654.0101* CONCRETE BASES TYPE 1 EACH	654.0102* CONCRETE BASES TYPE 2 EACH	654.0105* CONCRETE BASES TYPE 5 EACH	654.0110* CONCRETE BASES TYPE 10 EACH	654.0120* CONCRETE BASES TYPE 10-SPECIAL EACH
SB1	10+53.3 WB	29.1' LT	1	-	-	-	-
SB2	10+59.5 EB	6.7' LT	-	1	-	-	-
SB3	10+39.7 EB	36.9' RT	-	-	-	-	1
SB4	9+60.7 EB	50.3' RT	-	-	-	-	1
SB5	9+44.0 EB	41.9' RT	1	-	-	-	-
SB6	9+45.1 EB	10.2' LT	-	-	-	1	-
SB7	9+24.3 WB	48.1' LT	-	-	1	-	-
SB8	9+50.1 WB	30.4' LT	1	-	-	-	-
SB9	9+56.0 WB	37.9' LT	1	-	-	-	-
SB10	9+98.4 WB	38.0' LT	-	1	-	-	-
		TOTALS	4	2	1	1	2

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL EVP DETECTOR CABLE

FROM	TO	655.0900* TRAFFIC SIGNAL EVP DETECTOR CABLE LF
CB1	SB6 (HEAD A)	318
CB1	SB3 (HEAD B)	289
CB1	SB4 (HEAD C)	413
	TOTALS	1,020

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 2 OF 4

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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
CB1	SB1	-	102	-
SB1	HEAD4	19	-	-
CB1	SB2	-	-	159
SB2	HEAD 7	-	22	-
CB1	SB3	-	240	-
SB3	HEAD 2	56	-	-
SB3	HEAD 3	44	-	-
CB1	SB4	-	287	-
SB4	HEAD 11	21	-	-
SB4	HEAD 12	58	-	-
SB4	HEAD 13	-	46	-
CB1	SB5	-	-	333
SB5	HEAD 1	19	-	-
SB5	HEAD 8	-	22	-
SB5	HEAD 14	18	-	-
CB1	SB6	-	-	269
SB6	HEAD 5	41	-	-
SB6	HEAD 6	53	-	-
SB6	HEAD 9	-	30	-
CB1	SB8	-	124	-
SB8	HEAD 15	15	-	-
CB1	SB9	-	-	115
SB9	HEAD 10	19	-	-
SB9	HEAD 16	18	-	-
CB1	SB10	-	57	-
SB10	HEAD 17	18	-	-
	TOTALS	399	930	876

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL WIRE LIGHTING

FROM	TO	655.0320* CABLE TYPE UF 2-10 AWG GROUNDED LF	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF
CB1	SB2	159	-
SB2	LUMIN	-	234
SB2	SB4	251	-
SB4	LUMIN	-	144
CB1	SB10	57	-
SB10	LUMIN	-	117
SB10	SB7	154	-
SB7	LUMIN	-	117
SB7	SB6	144	-
SB6	LUMIN	-	288
	TOTALS	765	900

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

INTERSECTION OF
STH 16 EB RAMPS & STH 190
ALL ITEMS CATEGORY 0020

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SIGNAL MOUNTING HARDWARE

LOCATION	658.5070.01 SIGNAL MOUNTING HARDWARE EACH
STH 16 EB RAMPS & STH 190	1
TOTALS	1

TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS

LOCATION	661.0201.01 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS EACH	661.0300* GENERATORS DAY
STH 16 EB RAMPS & STH 190	1	3
TOTALS	1	3

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

POLES AND ARMS

SIGNAL BASE NO.	657.0100* PEDESTAL BASES EACH	657.0255* TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0310* POLES TYPE 3 EACH	657.0322* POLES TYPE 5-ALUMINUM EACH	SPV.0060.04* INSTALL POLES TYPE 9-SPECIAL EACH	SPV.0060.05* INSTALL POLES TYPE 10 EACH	SPV.0060.06* INSTALL POLES TYPE 10-SPECIAL EACH	657.0420* TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FOOT EACH	657.0425* TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FOOT EACH	657.0430* TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FOOT EACH	SPV.0060.11* INSTALL MONOTUBE ARMS 30-FT EACH	SPV.0060.12* INSTALL MONOTUBE ARMS 35-FT-SPECIAL EACH	657.0609* LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FOOT EACH	657.0610* LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FOOT EACH	SPV.0060.17* INSTALL LUMINAIRE ARMS STEEL 15-FT EACH	659.1125* LUMINAIRES UTILITY LED C EACH	658.0500* PEDESTRIAN PUSH BUTTONS EACH
SB1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
SB2	-	1	1	-	-	-	-	-	-	-	-	-	2	-	-	2	-
SB3	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-
SB4	-	-	-	-	-	-	1	-	-	-	-	1	-	-	1	1	-
SB5	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
SB6	-	-	-	-	-	1	-	-	-	-	-	1	-	-	2	2	1
SB7	-	1	-	1	-	-	-	-	-	-	-	-	-	1	-	1	-
SB8	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
SB9	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
SB10	-	1	1	-	-	-	-	-	-	-	-	-	1	-	-	1	1
TOTALS	4	3	2	1	1	1	1	2	1	1	1	2	3	1	3	7	5

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 3 OF 4

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET: 354	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

INTERSECTION OF
STH 16 EB RAMPS & STH 190
ALL ITEMS CATEGORY 0020

3

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LAMP, BALLAST, LED, SWITCH DISPOAL BY CONTRACTOR

FIXTURE TYPE	659.5000.S* LAMP, BALLAST, LED, SWITCH DISPOSAL BY CONTRACTOR EACH
LUMINAIRES, UTILITY, LED A	2
LUMINAIRES, UTILITY, LED C	5
PEDESTRIAN SIGNAL - 16 INCH	4
TRAFFIC SIGNAL, THREE SECTION	9
TRAFFIC SIGNAL, FOUR SECTION	2
	22

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRNSPT TRAFFIC SIGNALS & INTER LIGHTING MATERIALS

LOCATION	SPV.0060.30 TRNSPT TRAFFIC SIGNALS & INTER LIGHTING MATERIALS EACH
STH 16 EB RAMPS & STH 190	1
TOTALS	1

TRAFFIC SIGNAL FACES

SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0173* TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174* TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0416* PEDESTRIAN SIGNAL FACE 16-INCH EACH
1	SB5	1	-	-
2	SB3	1	-	-
3	SB3	1	-	-
4	SB1	1	-	-
5	SB6	1	-	-
6	SB6	1	-	-
7	SB2	-	1	-
8	SB5	-	1	-
9	SB6	-	1	-
10	SB9	1	-	-
11	SB4	1	-	-
12	SB4	1	-	-
13	SB4	-	1	-
14	SB5	-	-	1
15	SB8	-	-	1
16	SB9	-	-	1
17	SB10	-	-	1
	TOTALS	9	4	4

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

EMERGENCY VEHICLE PREEMPTION

LOCATION	SPV.0060.36 TEMPORARY EVP SYSTEM EACH	SPV.0060.24 TRNSPT & INSTALL STATE FURN EVP HEADS EACH
STH 16 EB RAMPS & STH 190	1	1
TOTALS	1	1

REMOVE AND REINSTALL FIBER OPTIC PIGTAIL

LOCATION	SPV.0060.41 REMOVE AND REINSTALL FIBER OPTIC PIGTAIL EACH
STH 16 EB RAMPS & STH 190	1
TOTALS	1

TEMPORARY VEHICLE DETECTION

LOCATION	SPV.0060.46 TEMPORARY VEHICLE DETECTION SYSTEM EACH
STH 16 EB RAMPS & STH 190	1
TOTALS	1

SHEET 4 OF 4

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STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER, FULLY ACTUATED, 8 PHASE
1	TRAFFIC SIGNAL CABINET
3	EVP DETECTOR HEADS
1	POLES TYPE 9 - SPECIAL
1	POLES TYPE 10
1	POLES TYPE 10 - SPECIAL
1	MONOTUBE ARMS 25-FT
1	MONOTUBE ARMS 35-FT SPECIAL
1	MONOTUBE ARMS 40-FT SPECIAL
3	LUMINAIRE ARMS STEEL 15-FT

PULL BOXES

PULL BOX NO.	STATION	LOCATION	653.0135* PULL BOXES STEEL 24X36-INCH EACH	653.0140* PULL BOXES STEEL 24X42-INCH EACH
PB1	14+42.5 WB	55.2' LT	-	1
PB2	14+76.6 WB	52.7' LT	-	1
PB3	15+39.6 WB	28.9' LT	-	1
PB4	15+64.3 WB	70.2' LT	-	1
PB5	15+38.5 WB	15.3 RT	-	1
PB6	17+13.5 WB	16.1' RT	1	-
PB7	18+60.5 WB	6.0' RT	1	-
PB8	15+38.8 EB	60.0' RT	-	1
PB9	15+22.3 EB	72.8' RT	1	-
PB10	14+55.5 EB	287.2' RT	1	-
PB11	14+84.5 EB	50.5' RT	-	1
PB12	14+54.4 EB	45.1' RT	-	1
PB13	14+55.8 EB	51.5' RT	1	-
PB14	14+10.2 EB	38.5' RT	-	1
PB15	12+02.0 EB	37.0' RT	1	-
PB16	10+86.4 EB	36.7' RT	1	-
PB17	14+10.3 EB	17.0' LT	-	1
PB18	14+02.0 EB	16.2' LT	1	-
PB19	14+11.0 WB	29.7' LT	-	1
		TOTALS	8	11

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0605* CONDUIT SPECIAL 2-INCH LF	652.0615* CONDUIT SPECIAL 3-INCH LF
CB1	PB1	-	39	-	-
PB1	PB2	-	-	-	68
PB2	PB3	-	134	-	-
PB3	PB4	-	-	-	48
PB3	PB5	-	-	-	88
PB5	PB6	175	-	-	-
PB6	PB7	147	-	-	-
PB5	PB8	-	-	-	162
PB8	PB9	22	-	-	-
PB8	PB10	245	-	-	-
PB8	PB11	-	-	-	110
PB11	PB12	-	-	-	62
PB12	PB13	7	-	-	-
PB12	PB14	-	90	-	-
PB14	PB15	-	-	208	-
PB15	PB16	-	-	116	-
PB14	PB17	-	-	-	112
PB17	PB18	9	-	-	-
PB17	PB19	-	-	-	90
PB19	CB1	-	87	-	-
PB1	SB1	-	16	-	-
PB2	SB2	13	-	-	-
PB2	SB3	26	-	-	-
PB4	EXT1	34	-	-	-
PB5	SB6	-	41	-	-
PB5	SB7	9	-	-	-
PB5	SB8	33	-	-	-
PB8	SB9	10	-	-	-
PB11	SB10	13	-	-	-
PB14	SB11	11	-	-	-
PB17	SB12	9	-	-	-
PB19	SB13	-	5	-	-
	TOTALS	763	412	324	740

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL WIRE TRAFFIC SIGNALS

FROM	TO	655.0515* ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
CB1	SB1	56
SB1	SB2	103
SB2	SB3	63
SB3	SB6	234
SB6	SB7	74
SB7	SB8	63
SB8	SB9	164
SB9	SB10	118
SB10	SB11	156
SB11	SB12	111
SB12	SB13	94
SB13	CB1	61
PB1	SB1	36
PB2	SB2	33
PB3	SB2	116
PB5	SB7	29
PB8	SB9	30
PB11	SB10	33
PB12	SB11	92
PB14	SB11	31
PB17	SB12	24
PB19	SB13	25
	TOTALS	1,746

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 1 OF 5

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET: 356	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

INTERSECTION OF
STH 16 WB RAMPS & STH 190
ALL ITEMS CATEGORY 0020

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LOOP DETECTORS

LOOP NO.	HOME RUN PB	STATION	LOCATION	SIZE	NO. OF TURNS	SDD INSTALATION REF	652.0800* CONDUIT LOOP DETECTOR LF	655.0700* LOOP DETECTOR LEAD IN CABLE LF	655.0800* LOOP DETECTOR WIRE LF
11	PB18	14+03.0 EB	5.3' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	97	214
12	PB18	14+27.7 EB	5.3' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	97	226
21	PB7	18+68.6 WB	18.0' LT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	494	390
22	PB7	18+69.0 WB	6.0' LT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	56	494	290
23	PB6	17+18.0 WB	18.0' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	84	347	430
24	PB6	17+18.4 WB	6.0' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	64	347	330
25	PB6	17+18.6 WB	5.0' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	46	347	240
61	PB16	10+82.3 EB	18.0' RT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	64	468	330
62	PB16	10+82.4 EB	6.0' RT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	84	468	430
63	PB15	11+98.5 EB	18.0' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	60	352	310
64	PB15	11+98.5 EB	6.0' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	80	352	410
81	PB10	14+35.6 EB	287.6' RT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	498	360
82	PB10	14+25.4 EB	283.7' RT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	498	490
83	PB10	14+13.3 EB	280.8' RT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	116	498	590
84	PB9	15+08+1 EB	68.5' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	80	253	250
85	PB9	15+25.6 EB	50.3' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	253	244
86	PB9	14+93.4 EB	61.9' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	110	253	340
87	PB9	15+05.8 EB	40.3' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	110	253	340
88	PB13	14+67.2 EB	60.6' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	196	238
89	PB13	14+73.1 EB	36.7' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	196	226
						TOTALS	1,562	6,761	6,678

* 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

CONCRETE BASES

BASE NO.	STATION	LOCATION	654.0101* CONCRETE BASES TYPE 1 EACH	654.0102* CONCRETE BASES TYPE 2 EACH	654.0105* CONCRETE BASES TYPE 5 EACH	654.0110* CONCRETE BASES TYPE 10 EACH	654.0120* CONCRETE BASES TYPE 10-SPECIAL EACH	654.0217* CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
CB1	14+30.8 WB	51.0' LT	-	-	-	-	-	1
SB1	14+39.8 WB	39.5' LT	-	-	-	1	-	-
SB2	14+78.0 WB	39.4' LT	1	-	-	-	-	-
SB3	14+89.4 WB	30.1' LT	1	-	-	-	-	-
SB4	15+90.5 WB	55.8' LT	-	-	1	-	-	-
SB5	14+98.9 WB	176.1' LT	-	-	1	-	-	-
SB6	14+98.0 EB	13.9' LT	-	-	-	-	1	-
SB7	15+33.9 EB	12.7' LT	1	-	-	-	-	-
SB8	15+70.9 EB	13.2' LT	1	-	-	-	-	-
SB9	15+30.5 EB	66.3' RT	-	1	-	-	-	-
SB10	14+86.7 EB	37.5' RT	-	1	-	-	-	-
SB11	14+21.4 EB	37.5' RT	1	-	-	-	-	-
SB12	14+05.9 EB	16.5' LT	-	1	-	-	-	-
SB13	14+15.4 WB	30.9' LT	-	-	-	-	1	-
		TOTALS	5	3	2	1	2	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL EVP DETECTOR CABLE

FROM	TO	655.0900* TRAFFIC SIGNAL EVP DETECTOR CABLE LF
CB1	SB13 (HEAD A)	115
CB1	SB6 (HEAD B)	328
CB1	SB1 (HEAD D)	100
	TOTALS	543

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 2 OF 5

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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
CB1	SB1	-	-	56
SB1	HEAD 12	21	-	-
SB1	HEAD 13	48	-	-
SB1	HEAD 17	18	-	-
CB1	SB2	-	103	-
SB2	HEAD 18	18	-	-
CB1	SB3	-	-	116
SB3	HEAD 5	-	22	-
SB3	HEAD 7	21	-	-
CB1	SB6	-	-	274
SB6	HEAD 2	45	-	-
SB6	HEAD 3	57	-	-
SB6	HEAD 6	-	34	-
CB1	SB7	-	242	-
SB7	HEAD 15	19	-	-
CB1	SB8	-	266	-
SB8	HEAD 16	19	-	-
CB1	SB9	-	341	-
SB9	HEAD 14	21	-	-
CB1	SB10	-	310	-
SB10	HEAD 11	21	-	-
CB1	SB11	-	200	-
SB11	HEAD 1	19	-	-
CB1	SB12	-	-	121
SB12	HEAD 4	-	22	-
CB1	SB13	-	61	-
SB13	HEAD 8	62	-	-
SB13	HEAD 9	50	-	-
SB13	HEAD 10	38	-	-
	TOTALS	477	1,601	567

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL WIRE LIGHTING

FROM	TO	655.0320* CABLE TYPE UF 2-10 AWG GROUNDED LF	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF
CB1	SB1	56	-
SB1	LUMIN	-	144
SB1	SB4	267	-
SB4	LUMIN	-	117
SB4	SB5	183	-
SB5	LUMIN	-	117
CB1	SB12	121	-
SB12	LUMIN	-	234
SB12	SB10	221	-
SB10	LUMIN	-	117
SB10	SB9	118	-
SB9	LUMIN	-	117
SB9	SB6	172	-
SB6	LUMIN	-	288
	TOTALS	1,138	1,134

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL SERCIVE METER BREAKER PEDESTAL

STH 16 WB RAMPS & STH 190

BASE NO.	656.0201.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL EACH
CB1	1
TOTALS	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

SIGNAL MOUNTING HARDWARE

LOCATION	658.5070.02 SIGNAL MOUNTING HARDWARE EACH
STH 16 WB RAMPS & STH 190	1
TOTALS	1

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POLES AND ARMS

SIGNAL BASE NO.	657.0100* PEDESTAL BASES EACH	657.0255* TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0310* POLES TYPE 3 EACH	657.0322* POLES TYPE 5-ALUMINUM EACH	SPV.0060.04* INSTALL POLES TYPE 9-SPECIAL EACH	SPV.0060.05* INSTALL POLES TYPE 10 EACH	SPV.0060.06* INSTALL POLES TYPE 10-SPECIAL EACH	657.0420* TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FOOT EACH	657.0425* TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FOOT EACH	657.0430* TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FOOT EACH	SPV.0060.10* INSTALL MONOTUBE ARMS 25-FT EACH	SPV.0060.12* INSTALL MONOTUBE ARMS 35-FT-SPECIAL EACH	SPV.0060.13* INSTALL MONOTUBE ARMS 40-FT-SPECIAL EACH	657.0609* LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FOOT EACH	657.0610* LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FOOT EACH	SPV.0060.17* INSTALL LUMINAIRE ARMS STEEL 15-FT EACH	659.1125* LUMINAIRES UTILITY LED C EACH	658.0500* PEDESTRIAN PUSH BUTTONS EACH
SB1	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	1	1	1
SB2	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
SB3	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
SB4	-	1	-	1	-	-	-	-	-	-	-	-	-	-	1	-	1	-
SB5	-	1	-	1	-	-	-	-	-	-	-	-	-	-	1	-	1	-
SB6	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	2	2	-
SB7	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
SB8	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
SB9	-	1	1	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-
SB10	-	1	1	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-
SB11	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
SB12	-	1	1	-	-	-	-	-	-	-	-	-	-	2	-	-	2	-
SB13	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-
TOTALS	5	5	3	2	1	1	1	3	1	1	1	1	1	4	2	3	9	2

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

TRAFFIC SIGNAL FACES

SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0173* TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174* TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0416* PEDESTRIAN SIGNAL FACE 16-INCH EACH
1	SB11	1	-	-
2	SB6	1	-	-
3	SB6	1	-	-
4	SB12	-	1	-
5	SB3	-	1	-
6	SB6	-	1	-
7	SB3	1	-	-
8	SB13	1	-	-
9	SB13	1	-	-
10	SB13	1	-	-
11	SB10	1	-	-
12	SB1	1	-	-
13	SB1	1	-	-
14	SB9	1	-	-
15	SB7	1	-	-
16	SB8	1	-	-
17	SB1	-	-	1
18	SB2	-	-	1
	TOTALS	13	3	2

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRNSPT & INSTALL STATE FURN TRAFFIC SIGNAL CABINET

LOCATION	SPV.0060.20 TRNSPT & INSTALL STATE FURN TRAFFIC SIGNAL CABINET EACH
STH 16 WB RAMPS & STH 190	1
TOTALS	1

EMERGENCY VEHICLE PREEMPTION

LOCATION	SPV.0060.25 TRNSPT & INSTALL STATE FURN EVP HEADS EACH
STH 16 WB RAMPS & STH 190	1
TOTALS	1

TRNSPT TRAFFIC SIGNALS & INTER LIGHTING MATERIALS

LOCATION	SPV.0060.31 TRNSPT TRAFFIC SIGNALS & INTER LIGHTING MATERIALS EACH
STH 16 WB RAMPS & STH 190	1
TOTALS	1

INTERSECTION OF
STH 190 & FOREST GROVE DR
ALL ITEMS CATEGORY 0020

STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
4	EVP DETECTOR HEADS
2	POLES TYPE 10
2	POLES TYPE 10 - SPECIAL
2	MONOTUBE ARMS 20-FT
2	MONOTUBE ARMS 40-FT SPECIAL
6	LUMINAIRE ARMS STEEL 15-FT

REMOVING CONCRETE BASES

EXISTING BASE NO.	204.0195* REMOVING CONCRETE BASES EACH
SB1	1
SB3	1
SB8	1
SB10	1
SB11	1
SB12	1
SB15	1
SB16	1
SB17	1
SB18	1
SB20	1
SB21	1
TOTALS	12

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF
CB1	PB1	-	129
PB8	PB9	149	-
PB16	PB17	11	-
PB20	PB21	11	-
PB24	PB25	-	46
PB25	CB1	-	42
PB25	SB1	5	-
PB25	SB2	9	-
PB5	SB4	7	-
PB6	SB8	-	6
PB7	SB11	4	-
PB11	SB12	-	16
PB13	SB13	40	-
PB13	SB14	32	-
PB16	SB15	37	-
PB19	SB18	-	17
PB20	SB19	28	-
PB20	SB20	18	-
PB23	SB21	-	12
	TOTALS	351	268

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL WIRE TRAFFIC SIGNALS

FROM	TO	655.0515* ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
CB1	SB3	178
SB3	SB4	114
SB4	SB8	119
SB8	SB10	135
SB10	SB11	41
SB11	SB12	328
SB12	SB13	263
SB13	SB14	96
SB14	SB15	163
SB15	SB17	125
SB17	SB18	131
SB18	SB19	132
SB19	SB20	70
SB20	SB21	109
SB21	SB22	98
SB22	SB1	76
SB1	SB2	38
SB2	CB1	50
PB1	CB1	66
PB4	SB3	57
PB5	SB4	27
PB6	SB8	26
PB7	SB11	24
PB8	SB8	121
PB10	SB12	67
PB11	SB12	36
PB12	SB12	120
PB13	SB14	52
PB16	SB15	57
PB18	SB17	35
PB19	SB18	37
PB20	SB20	38
PB23	SB21	32
PB24	SB22	28
PB25	SB1	25
	TOTALS	3,114

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING PULL BOXES

PULL BOX NO.	653.0905* REMOVING PULL BOXES EACH
PB5	1
PB9	1
PB23	1
TOTALS	3

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING TRAFFIC SIGNALS, REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE

LOCATION	204.9060.S.02 REMOVING TRAFFIC SIGNALS EACH	204.9060.S.07 REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE EACH
STH 190 & FOREST GROVE DR	1	1
TOTALS	1	1

SHEET 1 OF 5

INTERSECTION OF
STH 190 & FOREST GROVE DR
ALL ITEMS CATEGORY 0020

CONCRETE BASES

BASE NO.	STATION	LOCATION	654.0101* CONCRETE BASES TYPE 1 EACH	654.0110* CONCRETE BASES TYPE 10 EACH	654.0120* CONCRETE BASES TYPE 10-SPECIAL EACH	CONSTRUCTION NOTES
SB1	43+61.4 EB	59.5' RT	1	-	-	-
SB2	43+54.6 EB	53.3' RT	1	-	-	-
SB4	43+09.8 WB	18.3' RT	1	-	-	-
SB8	43+05.9 WB	45.9' LT	-	-	1	SPV 1-DRILL TO 10', ANTICIPATE HARD DRILLING AFTER 8'
SB11	43+82.0 WB	49.6' LT	1	-	-	-
SB12	44+18.6 WB	62.6' LT	-	1	-	SPV 1-DRILL TO 10', ANTICIPATE HARD DRILLING AFTER 8'
SB13	44+72.5 WB	55.2' LT	1	-	-	-
SB14	44+79.7 WB	48.3' LT	1	-	-	-
SB15	44+74.4 WB	13.0' RT	1	-	-	-
SB18	44+94.5 EB	41.6' RT	-	-	1	SPV 2-DRILL TO 8', ANTICIPATE HARD DRILLING AFTER 2'
SB19	44+74.1 EB	53.4' RT	1	-	-	-
SB20	44+66.1 EB	59.6' RT	1	-	-	-
SB21	44+13.2 EB	59.6' RT	-	1	-	SPV 2-DRILL TO 8', ANTICIPATE HARD DRILLING AFTER 2'
		TOTALS	9	2	2	

*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	652.0700.S* INSTALL CONDUIT INTO EXISTING ITEM EACH
PB5	43+64.4 WB	18.9' RT	-	1	-
PB6	43+11.6 WB	46.4' LT	-	-	1
PB9	43+72.6 WB	245.9' LT	1	-	-
PB11	44+18.3 WB	78.5' LT	1	-	-
PB17	45+16.5 WB	18.1' RT	1	-	-
PB19	45+11.4 EB	40.6' RT	-	-	1
PB21	44+48.2 EB	81.7' RT	1	-	-
PB25	43+56.8 EB	61.5' RT	-	1	-
		TOTALS	4	2	2

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LOOP DETECTORS

LOOP NO.	HOME RUN PB	STATION	LOCATION	SIZE	NO. OF TURNS	SDD INSTALATION REF	652.0800* CONDUIT LOOP DETECTOR LF	655.0700* LOOP DETECTOR LEAD IN CABLE LF	655.0800* LOOP DETECTOR WIRE LF
11	PB5	43+04.6 EB	29.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	149	256
12	PB5	43+28.9 EB	29.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	149	238
21	PB15	48+43.3 WB	18.0' LT	6'X14'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	684	480
22	PB15	48+43.5 WB	6.0' LT	6'X14'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	112	684	570
23	PB14	46+91.9 WB	18.0' LT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	514	420
24	PB14	46+92.0 WB	6.0' LT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	106	514	540
31	PB21	44+23.6 EB	85.4' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	139	298
32	PB21	44+23.4 EB	60.7' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	139	298
41	PB9	43+95.9 WB	242.2' LT	6'X20'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	436	322
42	PB11	43+94.9 WB	81.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	352	292
43	PB11	43+95.1 WB	56.3' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	352	292
51	PB17	45+15.8 WB	29.0' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	272	214
52	PB17	44+91.2 WB	29.5' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	272	226
61	PB3	39+76.0 EB	18.0' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	402	370
62	PB3	39+75.9 EB	6.0' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	402	490
63	PB2	41+26.8 EB	18.0' RT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	259	306
64	PB2	41+26.7 EB	6.0' RT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	98	259	402
71	PB11	44+06.7 WB	81.1' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	352	220
72	PB11	44+06.9 WB	56.4' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	352	220
81	PB22	44+30.6 EB	243.4' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	296	220
82	PB21	44+33.7 EB	85.2' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	139	238
83	PB21	44+33.6 EB	60.6' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	139	238
						TOTALS	1,852	7,256	7,150

* 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

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET: 362	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	-	39	-	-
SB1	HEAD 36	15	-	-	-
CB1	SB2	-	-	43	-
SB2	HEAD 1	21	-	-	-
SB2	HEAD 11	-	22	-	-
SB2	HEAD 25	18	-	-	-
CB1	SB3	-	-	178	-
SB3	HEAD 12	-	22	-	-
SB3	HEAD 26	18	-	-	-
SB3	HEAD 27	18	-	-	-
CB1	SB4	-	-	194	-
SB4	HEAD 4	-	22	-	-
CB1	SB8	-	275	-	-
SB8	HEAD 8	64	-	-	-
SB8	HEAD 9	53	-	-	-
CB1	SB10	-	358	-	-
SB10	HEAD 28	15	-	-	-
CB1	SB11	-	-	349	-
SB11	HEAD 17	-	22	-	-
SB11	HEAD 19	21	-	-	-
SB11	HEAD 29	18	-	-	-
CB1	SB12	-	-	-	476
SB12	HEAD 14	42	-	-	-
SB12	HEAD 18	-	22	-	-
SB12	HEAD 22	-	22	-	-
CB1	SB13	-	-	486	-
SB13	HEAD 15	19	-	-	-
SB13	HEAD 30	18	-	-	-
CB1	SB14	-	-	478	-
SB14	HEAD 5	-	22	-	-
SB14	HEAD 7	21	-	-	-
SB14	HEAD 31	18	-	-	-
CB1	SB15	-	-	413	-
SB15	HEAD 6	-	22	-	-
SB15	HEAD 32	18	-	-	-
SB15	HEAD 33	18	-	-	-
CB1	SB17	-	-	342	-
SB17	HEAD 10	-	22	-	-
CB1	SB18	-	269	-	-
SB18	HEAD 2	61	-	-	-
SB18	HEAD 3	49	-	-	-
CB1	SB19	-	217	-	-
SB19	HEAD 34	15	-	-	-
CB1	SB20	-	-	207	-
SB20	HEAD 13	21	-	-	-
SB20	HEAD 23	-	22	-	-
SB20	HEAD 35	18	-	-	-
CB1	SB21	-	-	-	146
SB21	HEAD 16	-	22	-	-
SB21	HEAD 20	43	-	-	-
SB21	HEAD 24	-	38	-	-
CB1	SB22	-	88	-	-
SB22	HEAD 21	19	-	-	-
	TOTALS	641	1,526	2,690	622

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL WIRE LIGHTING

FROM	TO	655.0320* CABLE TYPE UF 2-10 AWG GROUNDED LF	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF
CB1	SB3	178	-
SB3	LUMIN	-	-
SB3	SB5	225	-
SB5	LUMIN	-	-
SB5	SB6	179	-
SB6	LUMIN	-	-
SB6	SB7	142	-
SB7	LUMIN	-	-
SB3	SB8	195	-
SB8	LUMIN	-	144
SB8	SB9	74	-
SB9	LUMIN	-	-
CB1	SB21	146	-
SB21	LUMIN	-	288
SB21	SB18	171	-
SB18	LUMIN	-	144
SB18	SB16	180	-
SB16	LUMIN	-	-
SB16	SB12	308	-
SB12	LUMIN	-	288
	TOTALS	1,798	864

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SIGNAL MOUNTING HARDWARE

LOCATION	658.5070.03 SIGNAL MOUNTING HARDWARE EACH
STH 190 & FOREST GROVE DR	1
TOTALS	1

INTERSECTION OF
STH 190 & FOREST GROVE DR
ALL ITEMS CATEGORY 0020

3

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TRAFFIC SIGNAL EVP DETECTOR CABLE

FROM	TO	655.0900* TRAFFIC SIGNAL EVP DETECTOR CABLE LF
CB1	SB8 (HEAD A)	334
CB1	SB18 (HEAD B)	328
CB1	SB21 (HEAD C)	185
CB1	SB12 (HEAD D)	516
	TOTALS	1,363

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS

LOCATION	661.0201.02 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS EACH	661.0300* GENERATORS DAY
STH 190 & FOREST GROVE DR	1	3
TOTALS	1	3

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

POLES AND ARMS

SIGNAL BASE NO.	657.0100* PEDESTAL BASES EACH	SPV.0060.05* INSTALL POLES TYPE 10 EACH	SPV.0060.06* INSTALL POLES TYPE 10-SPECIAL EACH	657.0420* TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FOOT EACH	657.0425* TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FOOT EACH	657.0430* TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FOOT EACH	SPV.0060.09* INSTALL MONOTUBE ARMS 20-FT EACH	SPV.0060.13* INSTALL MONOTUBE ARMS 40-FT-SPECIAL EACH	SPV.0060.17* INSTALL LUMINAIRE ARMS STEEL 15-FT EACH	659.1125* LUMINAIRES UTILITY LED C EACH	658.0500* PEDESTRIAN PUSH BUTTONS EACH
SB1	1	-	-	-	-	1	-	-	-	-	1
SB2	1	-	-	-	1	-	-	-	-	-	1
SB3	-	-	-	-	-	-	-	-	-	2	1
SB4	1	-	-	-	1	-	-	-	-	-	-
SB5	-	-	-	-	-	-	-	-	-	1	-
SB6	-	-	-	-	-	-	-	-	-	1	-
SB7	-	-	-	-	-	-	-	-	-	1	-
SB8	-	-	1	-	-	-	-	1	1	1	-
SB9	-	-	-	-	-	-	-	-	-	1	-
SB10	1	-	-	-	-	1	-	-	-	-	1
SB11	1	-	-	-	1	-	-	-	-	-	1
SB12	-	1	-	-	-	-	1	-	2	2	-
SB13	1	-	-	1	-	-	-	-	-	-	1
SB14	1	-	-	-	1	-	-	-	-	-	1
SB15	1	-	-	-	1	-	-	-	-	-	1
SB16	-	-	-	-	-	-	-	-	-	2	-
SB17	1	-	-	-	1	-	-	-	-	-	-
SB18	-	-	1	-	-	-	-	1	1	1	-
SB19	1	-	-	-	-	1	-	-	-	-	1
SB20	1	-	-	-	1	-	-	-	-	-	1
SB21	-	1	-	-	-	-	1	-	2	2	1
TOTALS	11	2	2	1	7	3	2	2	6	14	11

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

INTERSECTION OF
STH 190 & FOREST GROVE DR
ALL ITEMS CATEGORY 0020

3

TRNSPT TRAFFIC SIGNALS & INTER LIGHTING MATERIALS

LOCATION	SPV.0060.32 TRNSPT TRAFFIC SIGNALS & INTER LIGHTING MATERIALS EACH
STH 190 & FOREST GROVE DR	1
TOTALS	1

TRAFFIC SIGNAL FACES

SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0173* TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174* TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0416* PEDESTRIAN SIGNAL FACE 16-INCH EACH
1	SB2	1	-	-
2	SB18	1	-	-
3	SB18	1	-	-
4	SB4	-	1	-
5	SB14	-	1	-
6	SB15	-	1	-
7	SB14	1	-	-
8	SB8	1	-	-
9	SB8	1	-	-
10	SB17	-	1	-
11	SB2	-	1	-
12	SB3	-	1	-
13	SB20	1	-	-
14	SB12	1	-	-
15	SB13	1	-	-
16	SB21	-	1	-
17	SB11	-	1	-
18	SB12	-	1	-
19	SB11	1	-	-
20	SB21	1	-	-
21	SB22	1	-	-
22	SB12	-	1	-
23	SB20	-	1	-
24	SB21	-	1	-
25	SB2	-	-	1
26	SB3	-	-	1
27	SB3	-	-	1
28	SB10	-	-	1
29	SB11	-	-	1
30	SB13	-	-	1
31	SB14	-	-	1
32	SB15	-	-	1
33	SB15	-	-	1
34	SB19	-	-	1
35	SB20	-	-	1
36	SB1	-	-	1
	TOTALS	12	12	12

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LAMP, BALLAST, LED, SWITCH DISPOAL BY CONTRACTOR

FIXTURE TYPE	659.5000.S* LAMP, BALLAST, LED, SWITCH DISPOSAL BY CONTRACTOR EACH
LUMINAIRES, UTILITY, LED C	6
PEDESTRIAN SIGNAL - 16 INCH	4
TRAFFIC SIGNAL, THREE SECTION	14
TRAFFIC SIGNAL, FOUR SECTION	4
	28

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

EMERGENCY VEHICLE PREEMPTION

LOCATION	SPV.0060.37 TEMPORARY EVP SYSTEM EACH	SPV.0060.26 TRNSPT & INSTALL STATE FURN EVP HEADS EACH
STH 190 & FOREST GROVE DR	1	1
TOTALS	1	1

REMOVE AND REINSTALL FIBER OPTIC PIGTAIL

LOCATION	SPV.0060.42 REMOVE AND REINSTALL FIBER OPTIC PIGTAIL EACH
STH 190 & FOREST GROVE DR	1
TOTALS	1

TEMPORARY VEHICLE DETECTION SYSTEM

LOCATION	SPV.0060.47 TEMPORARY VEHICLE DETECTION SYSTEM EACH
STH 190 & FOREST GROVE DR	1
TOTALS	1

SHEET 5 OF 5

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET: 365	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

INTERSECTION OF
STH 190 & WESTFIELD WAY
ALL ITEMS CATEGORY 0020

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STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER, FULLY ACTUATED, 8 PHASE
1	TRAFFIC SIGNAL CABINET
4	EVP DETECTOR HEADS
2	POLES TYPE 9
2	POLES TYPE 10 - SPECIAL
1	MONOTUBE ARMS 25-FT
1	MONOTUBE ARMS 30-FT
1	MONOTUBE ARMS 40-FT SPECIAL
1	MONOTUBE ARMS 45-FT SPECIAL
2	LUMINAIRE ARMS STEEL 15-FT

REMOVING CONCRETE BASES

EXISTING BASE NO.	204.0195* REMOVING CONCRETE BASES EACH
CB1	1
SB1	1
SB2	1
LP1	1
SB3	1
SB4	1
SB5	1
SB6	1
LP2	1
SB7	1
SB8	1
LP3	1
SB11	1
SB12	1
SB13	1
SB14	1
SB15	1
SB16	1
TOTALS	18

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL WIRE TRAFFIC SIGNALS

FROM	TO	655.0515* ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
CB1	SB1	76
SB1	SB2	135
SB2	SB3	104
SB3	SB4	122
SB4	SB5	52
SB5	SB6	126
SB6	SB7	95
SB7	SB8	113
SB8	SB9	109
SB9	SB10	137
SB10	SB11	93
SB11	SB12	107
SB12	SB13	72
SB13	SB14	160
SB14	SB15	92
SB15	SB16	102
SB16	CB1	51
PB1	SB1	31
PB4	SB2	31
PB5	SB3	37
PB6	SB4	30
PB7	SB6	30
PB10	SB7	26
PB12	SB8	34
PB13	SB9	33
PB16	SB10	36
PB17	SB11	24
PB18	SB12	33
PB19	SB14	30
PB20	SB15	30
PB21	SB16	31
	TOTALS	2,182

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0615* CONDUIT SPECIAL 3-INCH LF
EXT1	PB19	-	30	-
PB19	PB20	-	-	64
PB20	PB21	-	-	82
PB21	CB1	-	39	-
PB1	SB1	11	-	-
PB4	LP1	210	-	-
PB5	SB3	17	-	-
PB6	SB4	-	10	-
PB6	SB5	18	-	-
PB7	SB6	10	-	-
PB10	SB7	6	-	-
PB12	SB8	-	14	-
PB13	SB9	13	-	-
PB18	SB12	-	13	-
PB18	SB13	35	-	-
PB19	SB14	10	-	-
PB20	SB15	10	-	-
PB21	SB16	-	11	-
	TOTALS	340	117	146

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING TRAFFIC SIGNALS, REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE

LOCATION	204.9060.S.03 REMOVING TRAFFIC SIGNALS EACH	204.9060.S.08 REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE EACH
STH 190 & WESTFIELD WAY	1	1
TOTALS	1	1

SHEET 1 OF 5

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET: 366	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

3

CONCRETE BASES

BASE NO.	STATION	LOCATION	654.0101* CONCRETE BASES TYPE 1 EACH	654.0102* CONCRETE BASES TYPE 2 EACH	654.0110* CONCRETE BASES TYPE 10 EACH	654.0120* CONCRETE BASES TYPE 10-SPECIAL EACH	654.0217* CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH	CONSTRUCTION NOTES
CB1	54+48.2 EB	68.6' RT	-	-	-	-	1	-
SB1	54+34.5 EB	48.6' RT	1	-	-	-	-	-
SB2	54+37.8 EB	18.7' LT	-	1	-	-	-	-
SB3	54+25.8 WB	8.9' RT	1	-	-	-	-	-
SB4	54+12.0 WB	42.5' LT	-	-	-	1	-	SPV 2-DRILL TO 8', ANTICIPATE HARD DRILLING AFTER 2'
SB5	54+38.9 WB	47.9' LT	1	-	-	-	-	-
SB6	54+63.9 WB	68.3' LT	1	-	-	-	-	-
SB7	55+10.2 WB	79.3' LT	-	1	-	-	-	-
SB8	55+51.8 WB	77.1' LT	-	-	1	-	-	SPV 2-DRILL TO 8', ANTICIPATE HARD DRILLING AFTER 2'
SB9	55+87.3 WB	50.7' LT	1	-	-	-	-	-
SB12	55+85.1 EB	39.8' RT	-	-	-	1	-	-
SB13	55+63.7 EB	46.9' RT	1	-	-	-	-	-
SB14	55+39.1 EB	66.3' RT	1	-	-	-	-	-
SB15	55+02.2 EB	64.2' RT	-	1	-	-	-	-
SB16	54+59.2 EB	63.5' RT	-	-	1	-	-	-
		TOTALS	7	3	2	2	1	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

INTERSECTION OF
STH 190 & WESTFIELD WAY
ALL ITEMS CATEGORY 0020

3

PULL BOXES

PULL BOX NO.	STATION	LOCATION	653.0140* PULL BOXES STEEL 24X42-INCH EACH	652.0700.S* INSTALL CONDUIT INTO EXISTING ITEM EACH
PB6	54+21.6 WB	44.5' LT	-	1
PB12	55+63.4 WB	70.5' LT	-	1
PB18	55+97.6 EB	40.5' RT	-	1
PB19	55+33.7 EB	74.2' RT	1	-
PB20	55+01.6 EB	74.2' RT	1	-
PB21	54+60.4 EB	74.2' RT	1	-
		TOTALS	3	3

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING PULL BOXES

PULL BOX NO.	653.0905* REMOVING PULL BOXES EACH
PB17	1
PB18	1
PB19	1
TOTALS	3

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LOOP DETECTORS

LOOP NO.	HOME RUN PB	STATION	LOCATION	SIZE	NO. OF TURNS	SDD INSTALATION REF	652.0800* CONDUIT LOOP DETECTOR LF	655.0700* LOOP DETECTOR LEAD IN CABLE LF	655.0800* LOOP DETECTOR WIRE LF
11	PB5	54+12.6 EB	41.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	178	214
12	PB5	54+36.4 EB	41.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	178	226
21	PB15	59+65.4 WB	18.0' LT	6'X14'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	104	677	530
22	PB15	59+65.6 WB	6.0' LT	6'X14'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	126	677	640
23	PB14	58+15.6 WB	18.0' LT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	104	527	530
24	PB14	58+15.4 WB	6.0' LT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	126	527	640
31	PB20	55+11.6 EB	65.6' RT	6'X30'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	68	298
41	PB9	54+72.6 WB	254.2' LT	6'X20'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	437	394
42	PB8	54+86.1 WB	95.5' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	292	232
43	PB8	54+88.6 WB	71.7' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	292	232
51	PB17	56+06.1 WB	39.0' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	228	232
52	PB17	55+82.3 WB	39.0' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	228	220
61	PB3	50+58.3 EB	18.0' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	420	350
62	PB3	50+58.1 EB	6.0' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	92	420	470
63	PB2	52+08.5 EB	18.0' RT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	260	314
64	PB2	52+08.3 EB	6.0' RT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	260	394
71	PB11	54+97.4 WB	96.1' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	334	214
72	PB11	55+00.4 WB	72.5' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	66	334	208
81	PB19	55+21.7 EB	66.5' RT	6'X30'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	98	100	304
						TOTALS	1,648	6,437	6,642

* 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

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET: 367	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

3

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
CB1	SB1	-	-	76
SB1	HEAD 1	21	-	-
SB1	HEAD 11	-	22	-
SB1	HEAD 25	18	-	-
CB1	SB2	-	-	165
SB2	HEAD 12	-	22	-
SB2	HEAD 26	18	-	-
SB2	HEAD 27	18	-	-
CB1	SB3	-	-	223
SB3	HEAD 4	-	22	-
CB1	SB4	-	287	-
SB4	HEAD 8	62	-	-
SB4	HEAD 9	50	-	-
CB1	SB5	-	295	-
SB5	HEAD 28	15	-	-
CB1	SB6	-	-	361
SB6	HEAD 17	-	22	-
SB6	HEAD 19	21	-	-
SB6	HEAD 29	18	-	-
CB1	SB7	-	-	412
SB7	HEAD 18	-	22	-
SB7	HEAD 22	-	22	-
CB1	SB8	-	-	489
SB8	HEAD 14	45	-	-
SB8	HEAD 15	21	-	-
SB8	HEAD 30	18	-	-
CB1	SB9	-	-	447
SB9	HEAD 5	-	22	-
SB9	HEAD 7	21	-	-
SB9	HEAD 31	18	-	-
CB1	SB10	-	-	366
SB10	HEAD 6	-	22	-
SB10	HEAD 32	18	-	-
SB10	HEAD 33	18	-	-
CB1	SB11	-	-	305
SB11	HEAD 10	-	22	-
CB1	SB12	-	248	-
SB12	HEAD 2	59	-	-
SB12	HEAD 3	47	-	-
CB1	SB13	-	270	-
SB13	HEAD 34	15	-	-
CB1	SB14	-	-	155
SB14	HEAD 13	21	-	-
SB14	HEAD 23	-	22	-
SB14	HEAD 35	18	-	-
CB1	SB15	-	-	107
SB15	HEAD 16	-	22	-
SB15	HEAD 24	-	22	-
CB1	SB16	-	-	51
SB16	HEAD 20	52	-	-
SB16	HEAD 21	21	-	-
SB16	HEAD 36	18	-	-
	TOTALS	651	1,364	3,157

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL WIRE LIGHTING

FROM	TO	655.0320* CABLE TYPE UF 2-10 AWG GROUNDED LF	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF
CB1	SB2	165	-
SB2	LUMIN	-	234
SB2	LP1	245	-
LP1	LUMIN	-	234
SB2	SB4	168	-
SB4	LUMIN	-	144
SB4	SB7	169	-
SB7	LUMIN	-	234
CB1	SB15	107	-
SB15	LUMIN	-	234
SB15	SB12	185	-
SB12	LUMIN	-	144
SB12	SB10	168	-
SB10	LUMIN	-	234
	TOTALS	1,207	1,458

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SIGNAL MOUNTING HARDWARE

LOCATION	658.5070.04 SIGNAL MOUNTING HARDWARE EACH
STH 190 & WESTFIELD WAY	1
TOTALS	1

TRAFFIC SIGNAL EVP DETECTOR CABLE

FROM	TO	655.0900* TRAFFIC SIGNAL EVP DETECTOR CABLE LF
CB1	SB4 (HEAD A)	346
CB1	SB12 (HEAD B)	287
CB1	SB16 (HEAD C)	95
CB1	SB8 (HEAD D)	535
	TOTALS	1,263

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL SERCIVE METER BREAKER PEDESTAL

STH 190 & WESTFIELD WAY

BASE NO.	656.0201.02 ELECTRICAL SERVICE METER BREAKER PEDESTAL EACH
CB1	1
TOTALS	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS

LOCATION	661.0201.03 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS EACH	661.0300* GENERATORS DAY
STH 190 & WESTFIELD WAY	1	3
TOTALS	1	3

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

POLES AND ARMS

SIGNAL BASE NO.	657.0100* PEDESTAL BASES EACH	657.0255* TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0310* POLES TYPE 3 EACH	SPV.0060.03* INSTALL POLES TYPE 9 EACH	SPV.0060.06* INSTALL POLES TYPE 10-SPECIAL EACH	657.0425* TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FOOT EACH	657.0430* TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FOOT EACH	SPV.0060.10* INSTALL MONOTUBE ARMS 25-FT EACH	SPV.0060.11* INSTALL MONOTUBE ARMS 30-FT EACH	SPV.0060.13* INSTALL MONOTUBE ARMS 40-FT-SPECIAL EACH	SPV.0060.15* INSTALL MONOTUBE ARMS 45-FT-SPECIAL EACH	657.0609* LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FOOT EACH	SPV.0060.17* INSTALL LUMINAIRE ARMS STEEL 15-FT EACH	659.1125* LUMINAIRES UTILITY LED C EACH	658.0500* PEDESTRIAN PUSH BUTTONS EACH
SB1	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1
SB2	-	1	1	-	-	-	-	-	-	-	-	2	-	2	1
SB3	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-
SB4	-	-	-	-	1	-	-	-	-	-	1	-	1	1	-
SB5	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1
SB6	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1
SB7	-	1	1	-	-	-	-	-	-	-	-	2	-	2	-
SB8	-	-	-	1	-	-	-	1	-	-	-	-	-	-	1
SB9	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1
SB10	-	1	1	-	-	-	-	-	-	-	-	2	-	2	1
SB11	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-
SB12	-	-	-	-	1	-	-	-	-	1	-	-	1	1	-
SB13	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1
SB14	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1
SB15	-	1	1	-	-	-	-	-	-	-	-	2	-	2	-
SB16	-	-	-	1	-	-	-	-	1	-	-	-	-	-	1
TOTALS	8	4	4	2	2	6	2	1	1	1	1	8	2	10	10

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

INTERSECTION OF
STH 190 & WESTFIELD WAY
ALL ITEMS CATEGORY 0020

3

TRNSPT & INSTALL STATE FURN TRAFFIC SIGNAL CABINET

LOCATION	SPV.0060.21 TRNSPT & INSTALL STATE FURN TRAFFIC SIGNAL CABINET EACH
STH 190 & WESTFIELD WAY	1
TOTALS	1

TRAFFIC SIGNAL FACES

SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0173* TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174* TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0416* PEDESTRIAN SIGNAL FACE 16-INCH EACH
1	SB1	1	-	-
2	SB12	1	-	-
3	SB12	1	-	-
4	SB3	-	1	-
5	SB9	-	1	-
6	SB10	-	1	-
7	SB9	1	-	-
8	SB4	1	-	-
9	SB4	1	-	-
10	SB11	-	1	-
11	SB1	-	1	-
12	SB2	-	1	-
13	SB14	1	-	-
14	SB8	1	-	-
15	SB8	1	-	-
16	SB15	-	1	-
17	SB6	-	1	-
18	SB7	-	1	-
19	SB6	1	-	-
20	SB16	1	-	-
21	SB16	1	-	-
22	SB7	-	1	-
23	SB14	-	1	-
24	SB15	-	1	-
25	SB1	-	-	1
26	SB2	-	-	1
27	SB2	-	-	1
28	SB5	-	-	1
29	SB6	-	-	1
30	SB8	-	-	1
31	SB9	-	-	1
32	SB10	-	-	1
33	SB10	-	-	1
34	SB13	-	-	1
35	SB14	-	-	1
36	SB16	-	-	1
	TOTALS	12	12	12

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LAMP, BALLAST, LED, SWITCH DISPOAL BY CONTRACTOR

FIXTURE TYPE	659.5000.S* LAMP, BALLAST, LED, SWITCH DISPOSAL BY CONTRACTOR EACH
LUMINAIRES, UTILITY, LED C	6
PEDESTRIAN SIGNAL - 16 INCH	6
TRAFFIC SIGNAL, THREE SECTION	16
TRAFFIC SIGNAL, FOUR SECTION	4
	32

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRNSPT TRAFFIC SIGNALS & INTER LIGHTING MATERIALS

LOCATION	SPV.0060.33 TRNSPT TRAFFIC SIGNALS & INTER LIGHTING MATERIALS EACH
STH 190 & WESTFIELD WAY	1
TOTALS	1

EMERGENCY VEHICLE PREEMPTION

LOCATION	SPV.0060.38 TEMPORARY EVP SYSTEM EACH	SPV.0060.27 TRNSPT & INSTALL STATE FURN EVP HEADS EACH
STH 190 & AND WESTFIELD WAY	1	1
TOTALS	1	1

REMOVE AND REINSTALL FIBER OPTIC PIGTAIL

LOCATION	SPV.0060.43 REMOVE AND REINSTALL FIBER OPTIC PIGTAIL EACH
STH 190 & WESTFIELD WAY	1
TOTALS	1

TEMPORARY VEHICLE DETECTION SYSTEM

LOCATION	SPV.0060.48 TEMPORARY VEHICLE DETECTION SYSTEM EACH
STH 190 & WESTFIELD WAY	1
TOTALS	1

3

STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER, FULLY ACTUATED, 8 PHASE
1	TRAFFIC SIGNAL CABINET
4	EVP DETECTOR HEADS
1	POLES TYPE 9
1	POLES TYPE 10
2	POLES TYPE 10 - SPECIAL
1	MONOTUBE ARMS 15-FT
1	MONOTUBE ARMS 30-FT
2	MONOTUBE ARMS 40-FT SPECIAL
4	LUMINAIRE ARMS STEEL 15-FT

REMOVING CONCRETE BASES

EXISTING BASE NO.	204.0195* REMOVING CONCRETE BASES EACH
CB1	1
SB1	1
SB3	1
SB4	1
LP1	1
SB6	1
SB7	1
SB8	1
SB9	1
SB10	1
SB11	1
LP2	1
SB14	1
TOTALS	13

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL WIRE TRAFFIC SIGNALS

FROM	TO	655.0515* ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
CB1	SB1	55
SB1	SB2	104
SB2	SB3	91
SB3	SB4	111
SB4	SB5	124
SB5	SB6	87
SB6	SB7	118
SB7	SB8	61
SB8	SB9	122
SB9	SB10	100
SB10	SB11	117
SB11	SB12	130
SB12	SB13	59
SB13	SB14	121
SB14	SB15	105
SB15	SB16	115
SB16	CB1	143
PB2	SB1	26
PB4	SB2	26
PB6	SB3	26
PB7	SB4	24
PB10	SB5	31
PB11	SB6	24
PB13	SB7	36
PB14	SB9	25
PB17	SB10	32
PB19	SB11	32
PB20	SB13	29
PB23	SB14	38
PB24	SB15	25
PB26	SB16	32
PB27	CB1	71
	TOTALS	2,240

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF
PB2	PB3	10	-
PB4	PB5	9	-
PB6	PB7	-	122
PB7	PB8	24	-
PB7	PB10	-	28
PB11	PB12	11	-
PB14	PB15	8	-
PB17	PB18	6	-
PB24	PB25	5	-
PB2	SB1	6	-
PB6	SB3	-	6
PB7	SB4	4	-
PB10	LP1	167	-
PB13	SB7	-	16
PB13	SB8	21	-
PB17	SB10	-	12
PB19	SB11	12	-
PB20	SB12	26	-
PB20	SB13	9	-
PB23	LP2	214	-
PB26	SB16	-	12
	TOTALS	532	196

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

INTERSECTION OF
STH 190 & MEADOWCREEK DR
ALL ITEMS CATEGORY 0020

3

REMOVING TRAFFIC SIGNALS, REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE

LOCATION	204.9060.S.04 REMOVING TRAFFIC SIGNALS EACH	204.9060.S.09 REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE EACH
STH 190 & MEADOWCREEK DR	1	1
TOTALS	1	1

REMOVING PULL BOXES

PULL BOX NO.	653.0905* REMOVING PULL BOXES EACH
PB1	1
TOTALS	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

LOOP DETECTORS

LOOP NO.	HOME RUN PB	STATION	LOCATION	SIZE	NO. OF TURNS	SDD INSTALATION REF	652.0800* CONDUIT LOOP DETECTOR LF	655.0700* LOOP DETECTOR LEAD IN CABLE LF	655.0800* LOOP DETECTOR WIRE LF
11	PB12	68+66.7 EB	40.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	300	214
12	PB12	68+90.4 EB	40.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	300	214
21	PB22	74+62.3 WB	18.0' LT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	100	615	510
22	PB22	74+62.5 WB	6.0' LT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	122	615	620
23	PB21	73+16.2 WB	18.0' LT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	108	462	550
24	PB21	73+16.2 WB	6.0' LT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	128	462	650
31	PB5	69+84.5 EB	81.1' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	66	97	208
32	PB5	69+84.9 EB	57.3' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	66	97	208
41	PB16	69+82.9 WB	229.8' LT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	-	566	360
42	PB15	69+63.4 WB	79.6' LT	6'X20'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	411	290
43	PB15	69+62.4 WB	55.7' LT	6'X20'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	411	290
44	PB18	69+74.2 WB	79.2' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	88	452	274
45	PB18	69+73.1 WB	55.5' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	88	452	274
51	PB25	71+11.7 WB	40.0' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	165	214
52	PB25	70+87.9 WB	40.0' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	165	214
53	PB3	70+07.0 EB	81.6' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	46	220
54	PB3	70+07.4 EB	57.8' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	46	220
61	PB9	65+14.6 EB	18.0' RT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	554	380
62	PB9	65+14.5 EB	6.0' RT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	98	554	500
63	PB8	66+64.1 EB	18.0' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	403	360
64	PB8	66+63.9 EB	6.0' RT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	92	403	470
71	PB16	69+93.3 WB	229.2' LT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	-	566	480
72	PB18	69+84.5 WB	79.1' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	452	214
73	PB18	69+83.4 WB	55.2' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	66	452	208
81	PB1	69+95.1 EB	237.1' RT	6'X6'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	58	158	184
82	PB3	69+95.3 EB	81.4' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	46	292
83	PB3	69+95.8 EB	57.6' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	46	292
						TOTALS	2,032	9,296	8,910

* 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
**** EXISTING CONDUIT TO REMAIN FOR LOOPS 41 AND 71, REPLACE WIREING AS NEEDED

3

PULL BOXES

PULL BOX NO.	STATION	LOCATION	653.0135* PULL BOXES STEEL 24X36-INCH EACH	653.0140* PULL BOXES STEEL 24X42-INCH EACH	652.0700.S* INSTALL CONDUIT INTO EXISTING ITEM EACH	653.0900 ADJUSTING PULL BOXES EACH
PB3	70+19.1 EB	80.4' RT	1	-	-	-
PB5	69+74.7 EB	78.1' RT	1	-	-	-
PB6	69+35.8 EB	70.1' RT	-	-	1	-
PB7	68+86.6 EB	45.6' RT	-	1	-	-
PB12	68+69.9 WB	9.2' RT	1	-	-	-
PB13	69+06.9 WB	42.9' LT	-	-	1	1
PB15	69+51.6 WB	77.5' LT	1	-	-	-
PB18	69+94.7 WB	76.1' LT	1	-	-	-
PB19	70+46.7 WB	69.9' LT	-	-	1	-
PB25	71+07.9 WB	9.4' LT	1	-	-	-
PB26	70+76.4 EB	42.5' RT	-	-	1	-
		TOTALS	6	1	4	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE BASES

BASE NO.	STATION	LOCATION	654.0101* CONCRETE BASES TYPE 1 EACH	654.0110* CONCRETE BASES TYPE 10 EACH	654.0120* CONCRETE BASES TYPE 10-SPECIAL EACH	654.0217* CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH	CONSTRUCTION NOTES
CB1	70+23.9 EB	95.2' RT	-	-	-	1	-
SB1	70+27.7 EB	67.3' RT	1	-	-	-	-
SB3	69+37.9 EB	75.8' RT	-	1	-	-	-
SB4	68+90.2 EB	44.4' RT	1	-	-	-	-
SB6	68+84.0 WB	9.2' RT	1	-	-	-	-
SB7	68+91.4 WB	43.1' LT	-	-	1	-	PLAN NOTE - ANTICIPATE HARD DRILLING LAST 4'
SB8	69+26.3 WB	49.5' LT	1	-	-	-	-
SB9	69+51.0 WB	65.8' LT	1	-	-	-	-
SB10	69+94.0 WB	58.6' LT	-	1	-	-	-
SB11	70+39.6 WB	78.4' LT	1	-	-	-	-
SB12	70+67.0 WB	54.1' LT	1	-	-	-	-
SB13	70+82.4 WB	44.1' LT	1	-	-	-	-
SB16	70+87.8 EB	40.8' RT	-	-	1	-	PLAN NOTE - ANTICIPATE HARD DRILLING LAST 4'
		TOTALS	8	2	2	1	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL EVP DETECTOR CABLE

FROM	TO	655.0900* TRAFFIC SIGNAL EVP DETECTOR CABLE LF
CB1	SB7 (HEAD A)	531
CB1	SB16 (HEAD B)	197
CB1	SB3 (HEAD C)	227
CB1	SB10 (HEAD D)	522
	TOTALS	1,477

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL SERCIVE METER BREAKER PEDESTAL

STH 190 & MEADOWCREEK DR

BASE NO.	656.0201.03 ELECTRICAL SERVICE METER BREAKER PEDESTAL EACH
CB1	1
TOTALS	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS

LOCATION	661.0201.04 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS EACH	661.0300* GENERATORS DAY
STH 190 & MEADOWCREEK DR	1	3
TOTALS	1	3

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 3 OF 6

3

ELECTRICAL WIRE LIGHTING

FROM	TO	655.0320* CABLE TYPE UF 2-10 AWG GROUNDED LF	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF
CB1	SB2	123	-
SB2	LUMIN	-	234
SB2	SB5	258	-
SB5	LUMIN	-	234
SB5	LP1	202	-
LP1	LUMIN	-	234
SB5	SB7	173	-
SB7	LUMIN	-	144
CB1	SB16	143	-
SB16	LUMIN	-	144
SB16	SB14	186	-
SB14	LUMIN	-	234
SB14	LP2	256	-
LP2	LUMIN	-	234
SB14	SB10	261	-
SB10	LUMIN	-	288
	TOTALS	1,602	1,746

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

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	-	-	-	55
SB1	HEAD 13	-	23	-	-
SB1	HEAD 23	-	22	-	-
CB1	SB2	-	-	123	-
SB2	HEAD 16	-	22	-	-
SB2	HEAD 24	-	22	-	-
CB1	SB3	-	178	-	-
SB3	HEAD 20	52	-	-	-
SB3	HEAD 21	40	-	-	-
CB1	SB4	-	-	253	-
SB4	HEAD 1	21	-	-	-
SB4	HEAD 11	-	22	-	-
SB4	HEAD 25	18	-	-	-
CB1	SB5	-	-	345	-
SB5	HEAD 12	-	22	-	-
CB1	SB6	-	-	386	-
SB6	HEAD 4	-	22	-	-
CB1	SB7	-	-	472	-
SB7	HEAD 8	62	-	-	-
SB7	HEAD 9	50	-	-	-
SB7	HEAD 26	18	-	-	-
CB1	SB8	-	477	-	-
SB8	HEAD 27	15	-	-	-
CB1	SB9	-	-	533	-
SB9	HEAD 17	-	22	-	-
SB9	HEAD 19	21	-	-	-
CB1	SB10	-	-	-	482
SB10	HEAD 14	37	-	-	-
SB10	HEAD 18	-	22	-	-
SB10	HEAD 22	-	22	-	-
CB1	SB11	-	-	413	-
SB11	HEAD 15	-	23	-	-
CB1	SB12	-	359	-	-
SB12	HEAD 28	15	-	-	-
CB1	SB13	-	-	342	-
SB13	HEAD 5	-	22	-	-
SB13	HEAD 7	21	-	-	-
CB1	SB14	-	-	281	-
SB14	HEAD 6	-	22	-	-
CB1	SB15	-	-	210	-
SB15	HEAD 10	-	22	-	-
CB1	SB16	-	143	-	-
SB16	HEAD 2	49	-	-	-
SB16	HEAD 3	61	-	-	-
	TOTALS	480	1,467	3,358	537

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

SHEET 4 OF 6

INTERSECTION OF
STH 190 & MEADOWCREEK DR
ALL ITEMS CATEGORY 0020

3

SIGNAL MOUNTING HARDWARE

LOCATION	658.5070.05 SIGNAL MOUNTING HARDWARE EACH
STH 190 & MEADOWCREEK DR	1
TOTALS	1

LAMP, BALLAST, LED, SWITCH DISPOAL BY CONTRACTOR

FIXTURE TYPE	659.5000.S* LAMP, BALLAST, LED, SWITCH DISPOSAL BY CONTRACTOR EACH
LUMINAIRES, UTILITY, LED C	4
PEDESTRIAN SIGNAL - 16 INCH	2
TRAFFIC SIGNAL, THREE SECTION	10
TRAFFIC SIGNAL, FOUR SECTION	8
TRAFFIC SIGNAL, FIVE SECTION	2
	26

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

POLES AND ARMS

SIGNAL BASE NO.	657.0100* PEDESTAL BASES EACH	657.0255* TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0310* POLES TYPE 3 EACH	SPV.0060.03* INSTALL POLES TYPE 9 EACH	SPV.0060.05* INSTALL POLES TYPE 10 EACH	SPV.0060.06* INSTALL POLES TYPE 10-SPECIAL EACH	657.0425* TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FOOT EACH	657.0430* TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FOOT EACH	SPV.0060.08* INSTALL MONOTUBE ARMS 15-FT EACH	SPV.0060.11* INSTALL MONOTUBE ARMS 30-FT EACH	SPV.0060.13* INSTALL MONOTUBE ARMS 40-FT-SPECIAL EACH	657.0609* LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FOOT EACH	SPV.0060.17* INSTALL LUMINAIRE ARMS STEEL 15-FT EACH	659.1125* LUMINAIRES UTILITY LED C EACH	658.0500* PEDESTRIAN PUSH BUTTONS EACH
SB1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-
SB2	-	1	1	-	-	-	-	-	-	-	-	2	-	2	-
SB3	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-
SB4	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1
SB5	-	1	1	-	-	-	-	-	-	-	-	2	-	2	1
SB6	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-
SB7	-	-	-	-	-	1	-	-	-	-	1	-	1	1	1
SB8	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1
SB9	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-
SB10	-	-	-	-	1	-	-	-	1	-	-	-	2	2	-
SB11	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-
SB12	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1
SB13	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-
SB14	-	1	1	-	-	-	-	-	-	-	-	2	-	2	-
SB15	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-
SB16	-	-	-	-	-	1	-	-	-	-	1	-	1	1	-
TOTALS	9	3	3	1	1	2	7	2	1	1	2	6	4	10	5

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET: 375	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

INTERSECTION OF
STH 190 & MEADOWCREEK DR
ALL ITEMS CATEGORY 0020

3

TRNSPT & INSTALL STATE FURN TRAFFIC SIGNAL CABINET

LOCATION	SPV.0060.22 TRNSPT & INSTALL STATE FURN TRAFFIC SIGNAL CABINET EACH
STH 190 & MEADOWCREEK DR	1
TOTALS	1

TRNSPT TRAFFIC SIGNALS & INTER LIGHTING MATERIALS

LOCATION	SPV.0060.34 TRNSPT TRAFFIC SIGNALS & INTER LIGHTING MATERIALS EACH
STH 190 & MEADOWCREEK DR	1
TOTALS	1

3

TRAFFIC SIGNAL FACES

SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0173* TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174* TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0175 TRAFFIC SIGNAL FACE 5S 12-INCH EACH	658.0416* PEDESTRIAN SIGNAL FACE 16-INCH EACH
1	SB4	1	-	-	-
2	SB16	1	-	-	-
3	SB16	1	-	-	-
4	SB6	-	1	-	-
5	SB13	-	1	-	-
6	SB14	-	1	-	-
7	SB13	1	-	-	-
8	SB7	1	-	-	-
9	SB7	1	-	-	-
10	SB15	-	1	-	-
11	SB4	-	1	-	-
12	SB5	-	1	-	-
13	SB1	-	-	1	-
14	SB10	1	-	-	-
15	SB11	-	-	1	-
16	SB2	-	1	-	-
17	SB6	-	1	-	-
18	SB10	-	1	-	-
19	SB9	1	-	-	-
20	SB3	1	-	-	-
21	SB3	1	-	-	-
22	SB10	-	1	-	-
23	SB1	-	1	-	-
24	SB2	-	1	-	-
25	SB4	-	-	-	1
26	SB7	-	-	-	1
27	SB8	-	-	-	1
28	SB12	-	-	-	1
	TOTALS	10	12	2	4

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

EMERGENCY VEHICLE PREEMPTION

LOCATION	SPV.0060.39 TEMPORARY EVP SYSTEM EACH	SPV.0060.28 TRNSPT & INSTALL STATE FURN EVP HEADS EACH
STH 190 & MEADOWCREEK DR	1	1
TOTALS	1	1

REMOVE AND REINSTALL FIBER OPTIC PIGTAIL

LOCATION	SPV.0060.44 REMOVE AND REINSTALL FIBER OPTIC PIGTAIL EACH
STH 190 & MEADOWCREEK DR	1
TOTALS	1

TEMPORARY VIDEO DETECTION SYSTEM

LOCATION	SPV.0060.49 TEMPORARY VIDEO DETECTION SYSTEM EACH
STH 190 & MEADOWCREEK DR	1
TOTALS	1

SHEET 6 OF 6

STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER, FULLY ACTUATED, 8 PHASE
1	TRAFFIC SIGNAL CABINET
4	EVP DETECTOR HEADS
1	POLES TYPE 9 - SPECIAL
3	POLES TYPE 10
1	POLES TYPE 12
2	POLES TYPE 12 OVER HEIGHT
1	MONOTUBE ARMS 15-FT
2	MONOTUBE ARMS 20-FT
1	MONOTUBE ARMS 45-FT
1	MONOTUBE ARMS 45-FT SPECIAL
2	MONOTUBE ARMS 55-FT
6	LUMINAIRE ARMS STEEL 15-FT

REMOVING CONCRETE BASES

EXISTING BASE NO.	204.0195* REMOVING CONCRETE BASES EACH
CB1	1
SB1	1
SB2	1
SB3	1
SB4	1
SB5	1
SB6	1
SB7	1
SB8	1
SB9	1
SB10	1
SB11	1
SB12	1
SB13	1
SB14	1
LP1	1
SB15	1
SB16	1
LP2	1
SB17	1
SB18	1
SB19	1
SB20	1
LP3	1
TOTALS	24

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING TRAFFIC SIGNALS, REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE

LOCATION	204.9060.S.05 REMOVING TRAFFIC SIGNALS EACH	204.9060.S.10 REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE EACH
STH 164 & STH 190	1	1
TOTALS	1	1

INTERSECTION OF
STH 164 & STH 190
ALL ITEMS CATEGORY 0020

3

CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0615* CONDUIT SPECIAL 3-INCH LF
CB1	PB1	-	39	-
PB1	PB2	-	92	-
PB1	PB6	-	-	34
PB2	PB3	200	-	-
PB3	PB4	181	-	-
PB2	PB5	32	-	-
PB2	PB7	-	-	118
PB7	PB8	30	-	-
PB7	PB9	-	-	66
PB9	PB10	20	-	-
PB9	PB11	-	-	128
PB11	PB12	-	164	-
PB12	PB13	35	-	-
PB12	PB14	-	-	54
PB12	EXT1	14	-	-
EXT2	PB15	33	-	-
EXT3	PB16	61	-	-
PB12	PB17	-	-	152
PB12	I/C PB154-A	16	-	-
PB17	PB18	15	-	-
PB17	PB19	-	-	94
PB19	PB20	-	152	-
PB20	PB21	186	-	-
PB21	PB22	152	-	-
PB20	PB23	10	-	-
PB20	PB24	-	-	51
PB20	PB25	-	-	140
PB25	PB26	15	-	-
PB25	PB27	-	-	68
PB27	PB28	6	-	-
PB27	PB29	-	-	154
PB29	PB30	-	-	52
PB29	PB31	-	76	-
PB31	PB32	14	-	-
PB31	PB33	174	-	-
PB33	PB34	111	-	-
PB31	PB35	-	-	176
PB35	PB36	16	-	-
PB35	PB37	-	-	106
PB37	CB1	-	48	-

QUANTITIY CONTINUES...

CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0615* CONDUIT SPECIAL 3-INCH LF
PB6	SB1	22	-	-
PB6	SB2	6	-	-
PB1	SB3	6	-	-
PB9	SB4	-	16	-
PB9	SB5	5	-	-
PB9	LP2	203	-	-
PB11	SB6	-	10	-
PB13	SB7	13	-	-
PB14	SB8	11	-	-
PB14	SB9	24	-	-
PB17	SB10	7	-	-
PB17	SB11	-	32	-
PB19	SB12	-	28	-
PB20	SB13	32	-	-
PB24	SB14	4	-	-
PB24	SB15	16	-	-
PB27	SB16	-	6	-
PB28	SB17	21	-	-
PB28	SB18	44	-	-
PB28	LP1	194	-	-
PB29	SB19	-	9	-
PB30	SB20	5	-	-
PB30	SB21	18	-	-
PB31	SB22	13	-	-
PB35	SB23	6	-	-
PB35	SB24	21	-	-
PB37	SB25	-	9	-
TOTALS		1,992	681	1,393

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 1 OF 7

REMOVING PULL BOXES

PULL BOX NO.	653.0905* REMOVING PULL BOXES EACH
PB1	1
PB2	1
PB3	1
PB4	1
PB5	1
PB6	1
PB8	1
PB9	1
PB10	1
PB11	1
PB12	1
PB13	1
PB14	1
PB15	1
PB16	1
PB17	1
PB18	1
PB19	1
PB20	1
PB21	1
PB22	1
PB23	1
PB24	1
PB25	1
PB26	1
PB27	1
PB28	1
PB29	1
PB30	1
PB31	1
PB32	1
PB33	1
PB34	1
PB35	1
PB36	1
PB37	1
PB38	1
PB39	1
PB40	1
PB41	1
PB42	1
PB43	1
TOTALS	42

*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
PB1	84+29.1 WB	68.5' LT	-	1
PB2	84+71.5 WB	51.4' LT	-	1
PB3	86+71.1 WB	44.6' LT	1	-
PB4	88+47.8 WB	44.3' LT	1	-
PB5	84+40.1 WB	55.9' LT	1	-
PB6	84+18.4 WB	36.2' LT	-	1
PB7	84+72.5 WB	7.8' RT	-	1
PB8	84+42.4 WB	7.8' RT	1	-
PB9	84+69.8 EB	19.1' LT	-	1
PB10	84+50.0 EB	18.5' LT	1	-
PB11	84+69.4 EB	45.3' RT	-	1
PB12	84+17.7 EB	109.4' RT	-	1
PB13	84+25.7 EB	75.3' RT	1	-
PB14	84+03.2 EB	57.5' RT	-	1
PB15	84+09.2 EB	267.5' RT	1	-
PB16	83+96.1 EB	429.3' RT	1	-
PB17	83+42.0 EB	110.6' RT	-	1
PB18	83+41.7 EB	96.2' RT	1	-
PB19	82+94.9 EB	111.0' RT	-	1
PB20	82+41.9 EB	59.6' RT	-	1
PB21	80+56.0 EB	45.2' RT	1	-
PB22	79+03.5 EB	45.9' RT	1	-
PB23	82+46.0 EB	54.2' RT	1	-
PB24	82+84.0 EB	36.3' RT	-	1
PB25	82+39.1 EB	7.9' LT	-	1
PB26	82+54.3 EB	8.2' LT	1	-
PB27	82+41.9 WB	17.7' RT	-	1
PB28	82+35.5 WB	17.9' RT	1	-
PB29	82+41.1 WB	58.0' LT	-	1
PB30	82+92.5 WB	52.7' LT	-	1
PB31	82+67.9 WB	86.2' LT	-	1
PB32	82+74.6 WB	98.7' LT	1	-
PB33	82+79.7 WB	259.0' LT	1	-
PB34	82+80.4 WB	370.2' LT	1	-
PB35	83+56.3 WB	88.1' LT	-	1
PB36	83+56.3 WB	103.5' LT	1	-
PB37	84+09.4 WB	88.8' LT	-	1
		TOTALS	18	19

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL WIRE TRAFFIC SIGNALS

FROM	TO	655.0515* ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
CB1	SB1	112
SB1	SB2	52
SB2	SB3	86
SB3	SB4	232
SB4	SB5	45
SB5	SB6	119
SB6	SB7	196
SB7	SB8	169
SB8	SB9	59
SB9	SB10	217
SB10	SB11	63
SB11	SB12	147
SB12	SB13	173
SB13	SB14	127
SB14	SB15	44
SB15	SB16	249
SB16	SB17	73
SB17	SB18	89
SB18	SB19	192
SB19	SB20	106
SB20	SB21	47
SB21	SB22	177
SB22	SB23	147
SB23	SB24	51
SB24	SB25	123
SB25	CB1	52

QUANTITY CONTINUES...

ELECTRICAL WIRE TRAFFIC SIGNALS

FROM	TO	655.0515* ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
PB1	SB3	26
PB2	SB3	88
PB6	SB2	26
PB7	SB4	85
PB9	SB4	36
PB11	SB6	30
PB12	SB7	84
PB13	SB7	33
PB14	SB8	31
PB17	SB11	52
PB19	SB12	48
PB20	SB13	52
PB24	SB14	24
PB25	SB16	76
PB27	SB16	26
PB28	SB16	48
PB29	SB19	29
PB30	SB20	25
PB31	SB22	33
PB35	SB23	26
PB37	SB25	29
	TOTALS	4,054

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LOOP DETECTORS

LOOP NO.	HOME RUN PB	STATION	LOCATION	SIZE	NO. OF TURNS	SDD INSTALATION REF	652.0800* CONDUIT LOOP DETECTOR LF	655.0700* LOOP DETECTOR LEAD IN CABLE LF	655.0800* LOOP DETECTOR WIRE LF
11	PB26	82+42.8 EB	19.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	80	335	250
12	PB26	82+65.8 EB	19.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	335	232
13	PB28	82+42.0 EB	31.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	292	244
14	PB28	82+65.0 EB	31.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	292	256
15	PB32	82+86.7 WB	84.7' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	84	185	262
16	PB32	82+75.0 WB	63.2' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	90	185	280
21	PB4	88+50.3 WB	18.0' LT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	454	390
22	PB4	88+50.3 WB	6.0' LT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	454	490
23	PB3	86+73.3 WB	18.0' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	273	380
24	PB3	86+73.3 WB	6.0' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	273	480
25	PB8	84+38.1 WB	18.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	100	162	310
26	PB8	84+15.1 WB	18.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	102	162	316
27	PB8	84+38.8 WB	6.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	162	238
28	PB8	84+15.8 WB	6.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	162	244
31	PB18	83+62.8 EB	97.3' RT	6'X20'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	88	402	362
32	PB18	83+62.1 EB	74.3' RT	6'X20'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	88	402	362
33	PB18	93+51.4 EB	97.6' RT	6'X20'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	66	402	274
34	PB18	83+50.6 EB	74.5' RT	6'X20'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	66	402	274
35	PB23	82+55.4 EB	40.8' RT	6'X20'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	80	400	330
36	PB23	82+77.9 EB	51.0' RT	6'X20'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	84	400	346
41	PB34	82+99.5 WB	374.7' LT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	456	380
42	PB34	83+11.5 WB	375.0' LT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	92	456	470
43	PB33	83+04.0 WB	264.6' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	345	380
44	PB33	83+16.0 WB	264.9' LT	6'X6'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	345	480
45	PB30	83+12.8 WB	73.8' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	106	261	328
46	PB30	83+13.9 WB	50.8' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	90	261	280
47	PB30	83+24.4 WB	74.2' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	130	261	400
48	PB30	83+25.6 WB	51.2' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	114	261	352
51	PB10	84+52.8 WB	18.0' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	92	185	286
52	PB10	84+29.7 WB	18.0' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	92	185	286
53	PB10	84+53.5 WB	30.5' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	185	214
54	PB10	84+30.5 WB	30.5' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	185	220
55	PB13	84+11.3 EB	79.9' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	346	256
56	PB13	84+18.8 EB	56.8' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	346	244
61	PB22	79+00.7 EB	18.0' RT	6'X16'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	728	490
62	PB22	79+00.7 EB	6.0' RT	6'X16'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	120	728	610
63	PB21	80+53.0 EB	18.0' RT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	576	420
64	PB21	80+53.0 EB	6.0' RT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	108	576	550
65	PB24	82+58.2 EB	18.0' RT	6'X20'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	112	442	458
66	PB24	82+81.1 EB	18.0' RT	6'X20'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	84	442	346
67	PB26	82+57.3 EB	6.0' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	335	238
68	PB26	82+80.4 EB	6.0' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	335	244
71	PB36	83+34.0 WB	104.4' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	90	99	280
72	PB36	83+35.1 WB	81.4' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	90	99	280
73	PB36	83+45.5 WB	104.9' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	99	214
74	PB36	83+46.7 WB	81.8' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	99	214
75	PB5	84+42.0 WB	41.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	105	238
76	PB5	84+19.1 WB	49.8' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	105	226
81	PB16	83+77.9 EB	430.6' RT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	54	637	280
82	PB16	83+65.7 EB	429.7' RT	6'X12'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	637	350
83	PB15	83+87.0 EB	268.5' RT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	473	390
84	PB15	83+75.0 EB	268.0' RT	6'X8'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	473	490
85	PB14	83+85.2 EB	71.2' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	92	365	286
86	PB14	83+84.5 EB	48.2' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	88	365	274
87	PB14	83+73.6 EB	70.7' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	114	365	352
88	PB14	83+72.8 EB	47.7' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	114	365	352
						TOTALS	4,834	18,660	18,478

* 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

CONCRETE BASES

BASE NO.	STATION	LOCATION	654.0101* CONCRETE BASES TYPE 1 EACH	654.0102* CONCRETE BASES TYPE 2 EACH	654.0110* CONCRETE BASES TYPE 10 EACH	654.0113 CONCRETE BASES TYPE 13 EACH	654.0120* CONCRETE BASES TYPE 10-SPECIAL EACH	654.0217* CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
CB1	84+22.1 WB	79.1' LT	-	-	-	-	-	1
SB1	83+98.8 WB	45.3' LT	1	-	-	-	-	-
SB2	84+12.1 WB	35.9' LT	1	-	-	-	-	-
SB3	84+24.3 WB	66.0' LT	1	-	-	-	-	-
SB4	84+53.9 EB	16.9' LT	-	-	1	-	-	-
SB5	84+73.0 EB	15.0' LT	1	-	-	-	-	-
SB6	84+59.8 EB	47.5' RT	-	-	-	-	1	-
SB7	84+32.5 EB	64.2' RT	1	-	-	-	-	-
SB8	84+03.6 EB	46.6' RT	1	-	-	-	-	-
SB9	84+12.1 EB	35.4' RT	1	-	-	-	-	-
SB10	83+41.5 EB	104.0' RT	1	-	-	-	-	-
SB11	83+40.7 EB	79.2' RT	-	-	1	-	-	-
SB12	82+87.1 EB	84.9' RT	-	-	-	1	-	-
SB13	82+69.2 EB	66.7' RT	1	-	-	-	-	-
SB14	82+87.8 EB	37.0' RT	1	-	-	-	-	-
SB15	82+97.6 EB	42.5' RT	1	-	-	-	-	-
SB16	82+47.4 WB	15.8' RT	-	-	1	-	-	-
SB17	82+15.3 WB	11.9' RT	1	-	-	-	-	-
SB18	81+91.5 WB	11.7' RT	1	-	-	-	-	-
SB19	82+32.7 WB	57.9' LT	-	-	-	1	-	-
SB20	82+93.9 WB	48.0' LT	1	-	-	-	-	-
SB21	82+85.0 WB	36.8' LT	1	-	-	-	-	-
SB22	82+59.2 WB	76.4' LT	1	-	-	-	-	-
SB23	83+56.4 WB	82.5' LT	1	-	-	-	-	-
SB24	83+56.0 WB	108.3' LT	-	1	-	-	-	-
SB25	84+04.7 WB	96.0' LT	-	-	-	1	-	-
		TOTALS	17	1	3	3	1	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL WIRE LIGHTING

FROM	TO	655.0320* CABLE TYPE UF 2-10 AWG GROUNDED LF	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF
CB1	SB4	242	-
SB4	LUMIN	-	234
SB4	LP2	243	-
LP2	LUMIN	-	234
SB4	SB11	346	-
SB11	LUMIN	-	234
CB1	SB24	133	-
SB24	LUMIN	-	234
SB24	SB16	302	-
SB16	LUMIN	-	234
SB16	LP1	246	-
LP1	LUMIN	-	234
	TOTALS	1,512	1,404

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

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	-	112	-	-
SB1	HEAD 40	15	-	-	-
CB1	SB2	-	-	96	-
SB2	HEAD 10	19	-	-	-
SB2	HEAD 41	18	-	-	-
CB1	SB3	-	46	-	-
SB3	HEAD 16	19	-	-	-
CB1	SB4	-	-	-	242
SB4	HEAD 5	43	-	-	-
SB4	HEAD 6	31	-	-	-
SB4	HEAD 13	21	-	-	-
SB4	HEAD 26	21	-	-	-
CB1	SB5	-	231	-	-
SB5	HEAD 27	19	-	-	-
CB1	SB6	-	316	-	-
SB6	HEAD 2	67	-	-	-
SB6	HEAD 3	55	-	-	-
CB1	SB7	-	468	-	-
SB7	HEAD 25	19	-	-	-
CB1	SB8	-	-	485	-
SB8	HEAD 19	19	-	-	-
SB8	HEAD 43	18	-	-	-
CB1	SB9	-	498	-	-
SB9	HEAD 42	15	-	-	-
CB1	SB10	-	503	-	-
SB10	HEAD 9	19	-	-	-
CB1	SB11	-	-	-	528
SB11	HEAD 8	21	-	-	-
SB11	HEAD 22	21	-	-	-
SB11	HEAD 32	37	-	-	-
SB11	HEAD 33	21	-	-	-
CB1	SB12	-	587	-	-
SB12	HEAD 29	67	-	-	-
SB12	HEAD 30	55	-	-	-
CB1	SB13	-	531	-	-
SB13	HEAD 7	19	-	-	-

QUANTITY CONTINUES...

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	SB14	-	-	570	-
SB14	HEAD 1	19	-	-	-
SB14	HEAD 37	18	-	-	-
CB1	SB15	-	582	-	-
SB15	HEAD 44	15	-	-	-
CB1	SB16	-	-	369	-
SB16	HEAD 4	21	-	-	-
SB16	HEAD 14	42	-	-	-
SB16	HEAD 15	29	-	-	-
CB1	SB17	-	406	-	-
SB17	HEAD 35	19	-	-	-
CB1	SB18	-	429	-	-
SB18	HEAD 36	19	-	-	-
CB1	SB19	-	279	-	-
SB19	HEAD 11	77	-	-	-
SB19	HEAD 12	65	-	-	-
CB1	SB20	-	-	343	-
SB20	HEAD 28	19	-	-	-
SB20	HEAD 39	18	-	-	-
CB1	SB21	-	356	-	-
SB21	HEAD 38	15	-	-	-
CB1	SB22	-	229	-	-
SB22	HEAD 34	19	-	-	-
CB1	SB23	-	-	118	-
SB23	HEAD 17	19	-	-	-
SB23	HEAD 31	19	-	-	-
CB1	SB24	-	133	-	-
SB24	HEAD 18	21	-	-	-
CB1	SB25	-	-	52	-
SB25	HEAD 20	62	-	-	-
SB25	HEAD 21	50	-	-	-
SB25	HEAD 23	79	-	-	-
SB25	HEAD 24	71	-	-	-
	TOTALS	1,375	5,706	2,033	770

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

INTERSECTION OF
STH 164 & STH 190
ALL ITEMS CATEGORY 0020

3

ELECTRICAL SERCIVE METER BREAKER PEDESTAL

STH 164 AND STH 190

BASE NO.	656.0201.04 ELECTRICAL SERVICE METER BREAKER PEDESTAL EACH
CB1	1
TOTALS	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

SIGNAL MOUNTING HARDWARE

LOCATION	658.5070.06 SIGNAL MOUNTING HARDWARE EACH
STH 164 & STH 190	1
TOTALS	1

3

POLES AND ARMS

SIGNAL BASE NO.	657.0100* PEDESTAL BASES EACH	657.0255* TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0310* POLES TYPE 3 EACH	SPV.0060.04* INSTALL POLES TYPE 9-SPECIAL EACH	SPV.0060.05* INSTALL POLES TYPE 10 EACH	SPV.0060.19 INSTALL POLES TYPE 10 OVER HEIGHT EACH	SPV.0060.07 INSTALL POLES TYPE 12 EACH	SPV.0060.18 INSTALL POLES TYPE 12 OVER HEIGHT EACH	657.0420* TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FOOT EACH	657.0430* TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FOOT EACH	SPV.0060.08* INSTALL MONOTUBE ARMS 15-FT EACH	SPV.0060.09* INSTALL MONOTUBE ARMS 20-FT EACH	SPV.0060.14 INSTALL MONOTUBE ARMS 45-FT EACH	SPV.0060.15* INSTALL MONOTUBE ARMS 45-FT-SPECIAL EACH	SPV.0060.16 INSTALL MONOTUBE ARMS 55-FT EACH	657.0609* LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FOOT EACH	SPV.0060.17* INSTALL LUMINAIRE ARMS STEEL 15-FT EACH	659.1125* LUMINAIRES UTILITY LED C EACH	658.0500* PEDESTRIAN PUSH BUTTONS EACH
SB1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
SB2	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
SB3	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
SB4	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	2	2	-	
SB5	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
SB6	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
SB7	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
SB8	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	
SB9	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	
SB10	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
SB11	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	2	2	-	
SB12	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	
SB13	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
SB14	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	
SB15	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	
SB16	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	2	2	-	
SB17	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
SB18	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
SB19	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	
SB20	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	
SB21	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	
SB22	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
SB23	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
SB24	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2	-	
SB25	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	
TOTALS	17	1	1	1	2	1	1	2	13	4	1	2	1	1	2	2	6	8	8	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 6 OF 7

3

TRAFFIC SIGNAL FACES

SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0173* TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0416* PEDESTRIAN SIGNAL FACE 16-INCH EACH
1	SB14	1	-
2	SB6	1	-
3	SB6	1	-
4	SB16	1	-
5	SB4	1	-
6	SB4	1	-
7	SB13	1	-
8	SB11	1	-
9	SB10	1	-
10	SB2	1	-
11	SB19	1	-
12	SB19	1	-
13	SB4	1	-
14	SB16	1	-
15	SB16	1	-
16	SB3	1	-
17	SB23	1	-
18	SB24	1	-
19	SB8	1	-
20	SB25	1	-
21	SB25	1	-
22	SB11	1	-
23	SB25	1	-
24	SB25	1	-
25	SB7	1	-
26	SB4	1	-
27	SB5	1	-
28	SB20	1	-
29	SB12	1	-
30	SB12	1	-
31	SB23	1	-
32	SB11	1	-
33	SB11	1	-
34	SB22	1	-
35	SB17	1	-
36	SB18	1	-
37	SB14	-	1
38	SB21	-	1
39	SB20	-	1
40	SB1	-	1
41	SB2	-	1
42	SB9	-	1
43	SB8	-	1
44	SB15	-	1
	TOTALS	36	8

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL EVP DETECTOR CABLE

FROM	TO	655.0900* TRAFFIC SIGNAL EVP DETECTOR CABLE LF
CB1	SB19 (HEAD A)	352
CB1	SB6 (HEAD B)	380
CB1	SB12 (HEAD C)	656
CB1	SB25 (HEAD D)	131
	TOTALS	1,519

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LAMP, BALLAST, LED, SWITCH DISPOAL BY CONTRACTOR

FIXTURE TYPE	659.5000.S* LAMP, BALLAST, LED, SWITCH DISPOSAL BY CONTRACTOR EACH
LUMINAIRES, UTILITY, LED D	8
PEDESTRIAN SIGNAL - 16 INCH	4
TRAFFIC SIGNAL, THREE SECTION	32
	44

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS

LOCATION	661.0201.05 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS EACH	661.0300* GENERATORS DAY
STH 164 & STH 190	1	3
TOTALS	1	3

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRNSPT & INSTALL STATE FURN TRAFFIC SIGNAL CABINET

LOCATION	SPV.0060.23 TRNSPT & INSTALL STATE FURN TRAFFIC SIGNAL CABINET EACH
STH 164 & STH 190	1
TOTALS	1

TRNSPT TRAFFIC SIGNALS & INTER LIGHTING MATERIALS

LOCATION	SPV.0060.35 TRNSPT TRAFFIC SIGNALS & INTER LIGHTING MATERIALS EACH
STH 164 & STH 190	1
TOTALS	1

EMERGENCY VEHICLE PREEMPTION

LOCATION	SPV.0060.40 TEMPORARY EVP SYSTEM EACH	SPV.0060.29 TRNSPT & INSTALL STATE FURN EVP HEADS EACH
STH 164 & STH 190	1	1
TOTALS	1	1

REMOVE AND REINSTALL FIBER OPTIC PIGTAIL

LOCATION	SPV.0060.45 REMOVE AND REINSTALL FIBER OPTIC PIGTAIL EACH
STH 164 & STH 190	1
TOTALS	1

TEMPORARY VEHICLE DETECTION SYSTEM

LOCATION	SPV.0060.50 TEMPORARY VEHICLE DETECTION SYSTEM EACH
STH 164 & STH 190	1
TOTALS	1

3

3

LIGHTING - REMOVALS

204.0195	REMOVING CONCRETE BASES
204.9060.S.21	REMOVING LIGHTING UNITS
204.9060.S.22	REMOVING DISTRIBUTION CENTER
659.5000.S	LAMP, BALLAST, LED, SWITCH DISPOSAL BY CONTRACTOR

CATEGORY	STAGE	SYSTEM	DESCRIPTION	LOCATION	OFFSET	204.0195 REMOVING CONCRETE BASES	204.9060.S.21 REMOVING LIGHTING UNITS	204.9060.S.22 REMOVING DISTRIBUTION CENTER	659.5000.S.1001 LAMP, BALLAST, SWITCH DISPOSAL BY CONTRACTOR	COMMENTS
						EACH	EACH	EACH	EACH	
0030		CITY OF PEWAUKEE	--	53+99.73	41.77' RT	1	1	--	2	--
			--	55+09.30	82.61' LT	1	1	--	2	--
			--	56+12.30	18.48' LT	1	1	--	2	--
			--	68+57.13	41.27' RT	1	1	--	2	--
			--	71+12.53	21.48' RT	1	1	--	2	--
			HL-67-PC	84+41.17	67.53' LT	1	--	1	--	
0030					TOTALS	6	5	1	10	

3

3

LIGHTING - CONDUIT AND WIRE

652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
652.0615 CONDUIT SPECIAL 3-INCH
655.0620 ELECTRICAL WIRE LIGHTING 8 AWG
655.0625 ELECTRICAL WIRE LIGHTING 6 AWG

CATEGORY	STAGE	SYSTEM	CIRCUIT	FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	652.0615 CONDUIT SPECIAL 3-INCH	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG	COMMENTS
						LF	LF	LF	LF	
0030		CITY OF PEWAUKEE	A/N/B/GND	52+17.27, 45.49' RT	LPB-01	180	--	180	540	INTERCEPT EXISTING CONDUIT AT THE POLE BASE
				LPB-01	LPB-02	--	100	100	300	--
				LPB-02	LPB-03	--	110	110	330	--
				LPB-03	LPB-04	70	--	70	210	--
				LPB-04	LPB-05	--	90	90	270	--
				LPB-05	57+89.55, 18.74' RT	180	--	180	540	INTERCEPT EXISTING CONDUIT AT THE POLE BASE
				67+15.56, 45.43' RT	LPB-06	150	--	150	450	--
				LPB-06	LPB-07	--	60	60	180	--
				LPB-07	69+41.34, 173.28' RT	140	--	140	420	INTERCEPT EXISTING CONDUIT AT THE POLE BASE
				69+41.34, 173.28' RT	LPB-08	130	80	210	630	--
				LPB-08	LPB-09	--	80	80	240	--
				LPB-09	73+05.64, 19.43' RT	200	--	200	600	INTERCEPT EXISTING CONDUIT AT THE POLE BASE
0030					TOTALS	1,050	520	1,570	4,710	

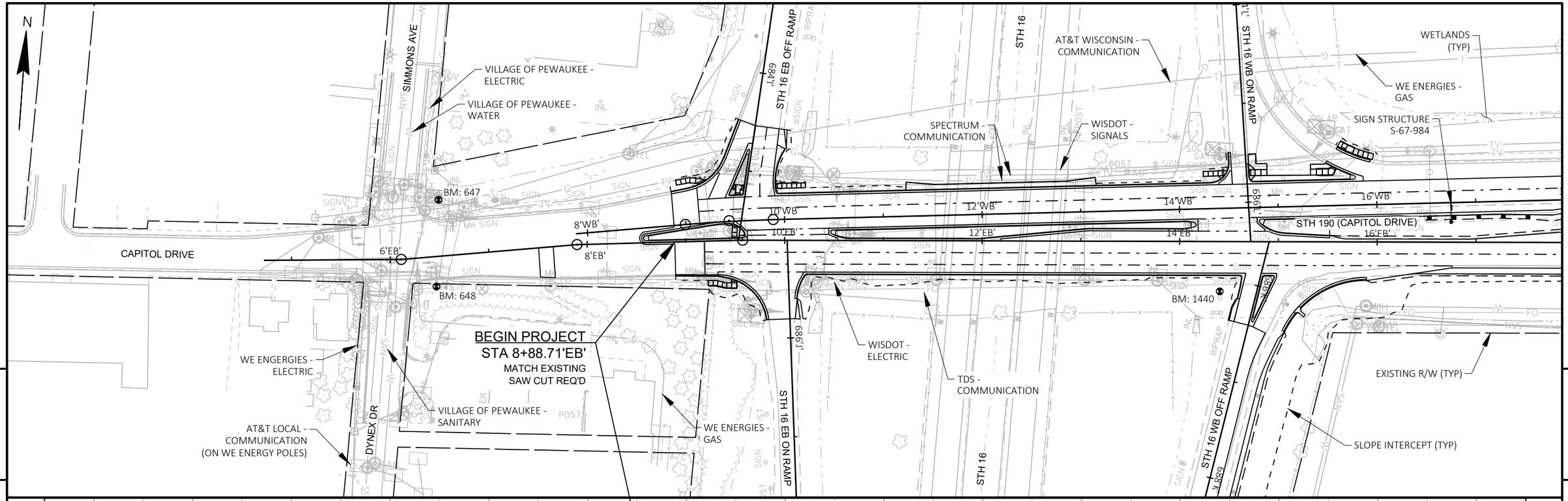
3

LIGHTING - PULL BOXES

653.0140 PULL BOXES STEEL 24X42-INCH
655.0615 ELECTRICAL WIRE LIGHTING 10 AWG

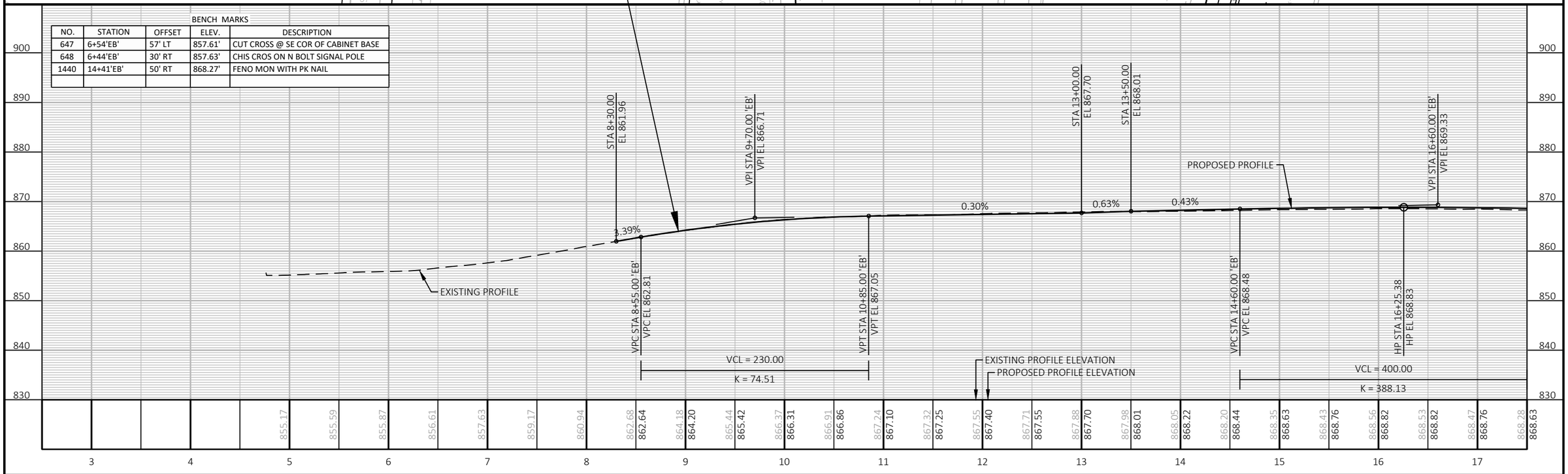
CATEGORY	STAGE	SYSTEM	DESCRIPTION	LOCATION	OFFSET	653.0140 PULL BOXES STEEL 24X42-INCH EACH	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	COMMENTS
0030		CITY OF PEWAUKEE	LPB-01	53+99.73	41.77' RT	1	180	--
			LPB-02	54+38.59	135.42' RT	1	290	--
			LPB-03	55+44.50	138.97' RT	1	340	--
			LPB-04	56+10.07	110.77' RT	1	270	--
			LPB-05	56+12.30	18.48' RT	1	180	--
			LPB-06	68+57.13	41.27' RT	1	150	--
			LPB-07	68+56.57	105.38' RT	1	140	--
			LPB-08	71+10.52	99.53' RT	1	210	--
			LPB-09	71+12.53	21.48' RT	1	200	--
0030					TOTALS	9	1,960	

SHEET 3 OF 3



BENCH MARKS

NO.	STATION	OFFSET	ELEV.	DESCRIPTION
647	6+54'EB'	57' LT	857.61'	CUT CROSS @ SE COR OF CABINET BASE
648	6+44'EB'	30' RT	857.63'	CHIS CROS ON N BOLT SIGNAL POLE
1440	14+41'EB'	50' RT	868.27'	FENO MON WITH PK NAIL

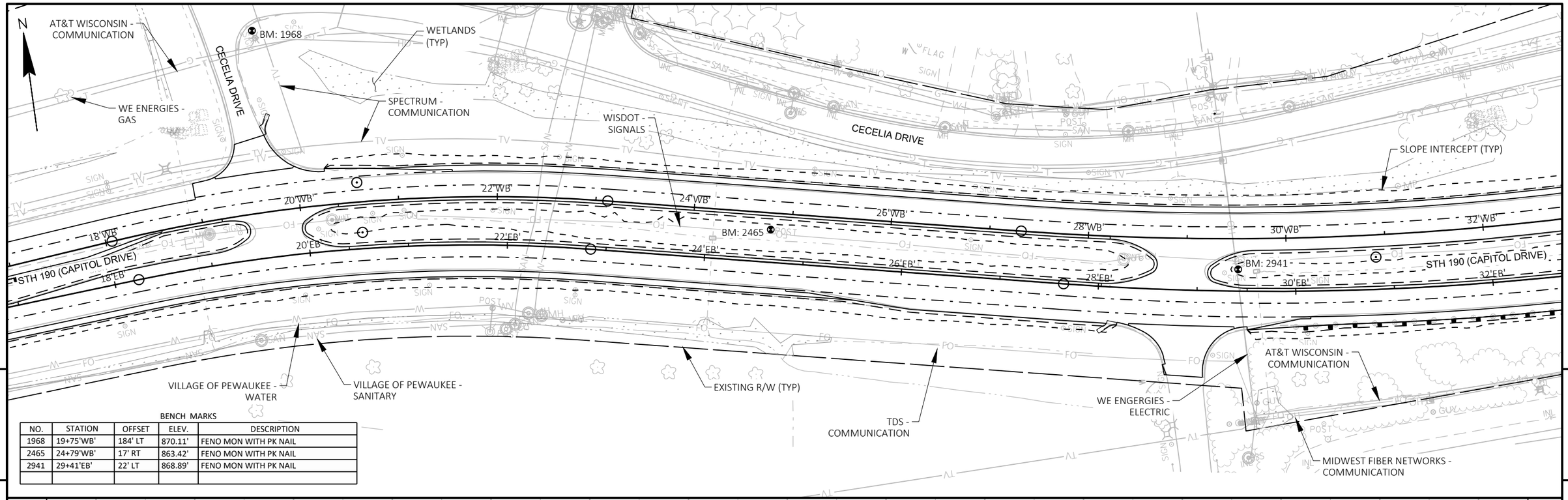


PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN AND PLOT: 'EB'	SHEET 387	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_050101-PP.DWG
LAYOUT NAME - pp_01

PLOT DATE : 7/28/2023 8:34 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

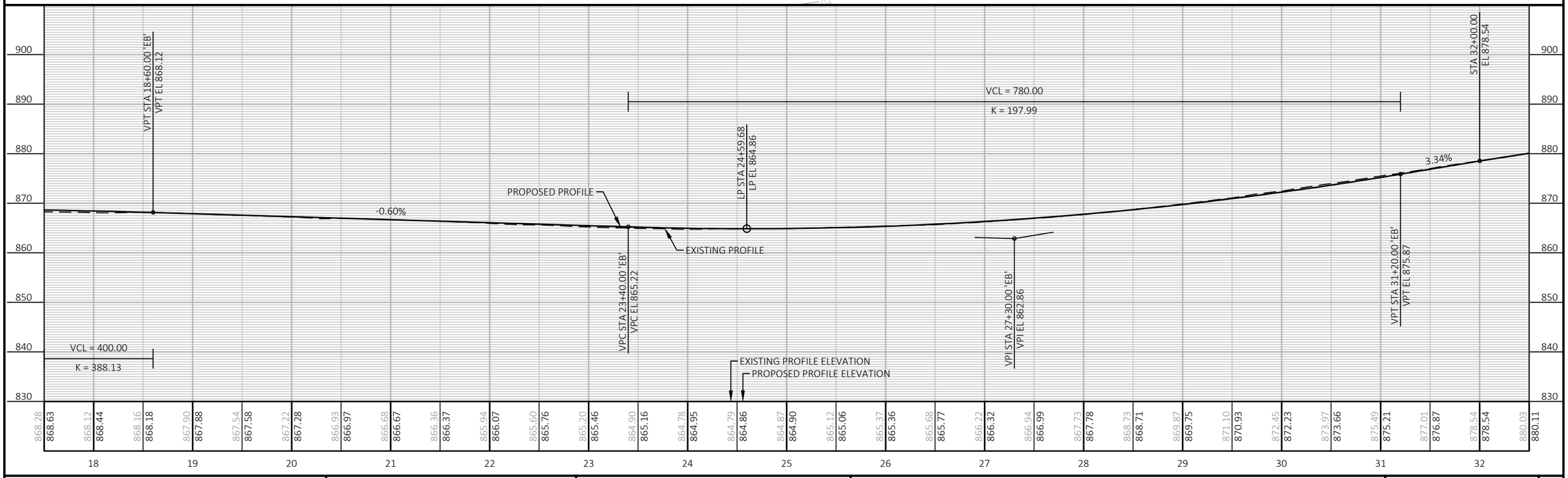


5

5

BENCH MARKS

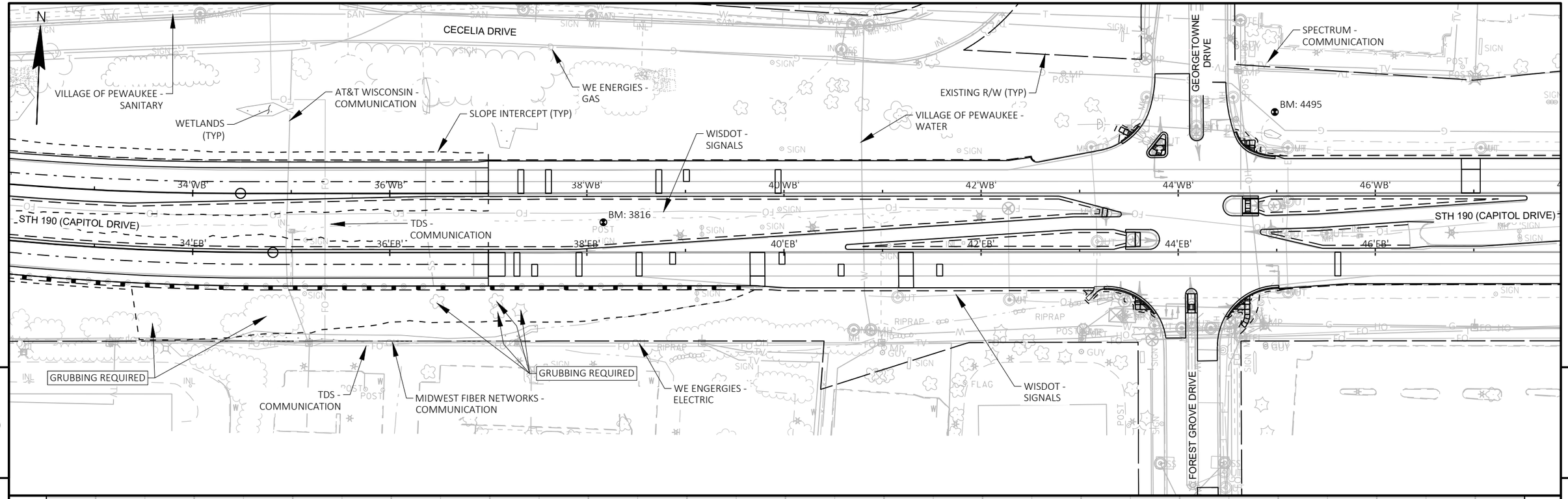
NO.	STATION	OFFSET	ELEV.	DESCRIPTION
1968	19+75'WB'	184' LT	870.11'	FENO MON WITH PK NAIL
2465	24+79'WB'	17' RT	863.42'	FENO MON WITH PK NAIL
2941	29+41'EB'	22' LT	868.89'	FENO MON WITH PK NAIL



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN AND PROFILE: 'EB'	SHEET 388	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_050101-PP.DWG
LAYOUT NAME - pp_02

PLOT DATE : 7/28/2023 8:34 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

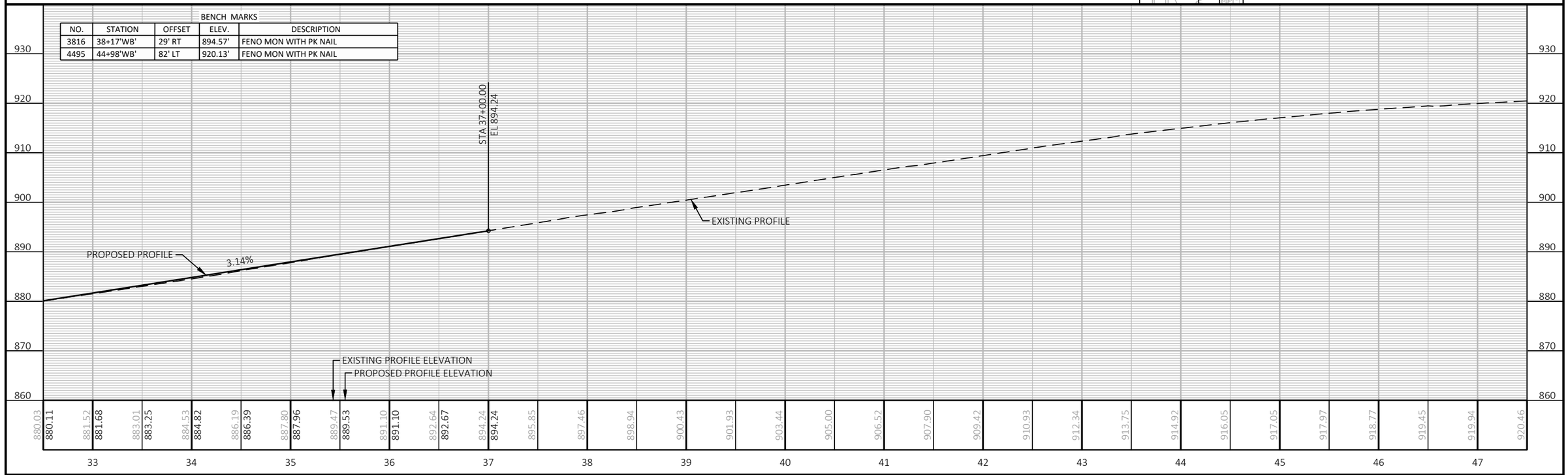


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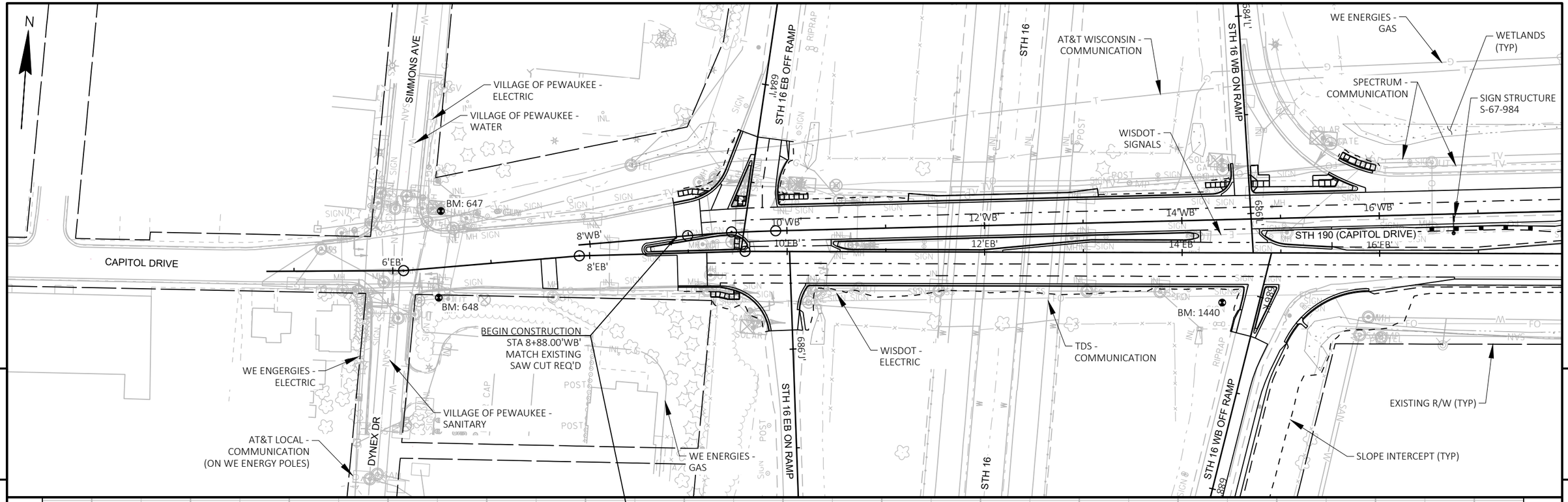
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BENCH MARKS

NO.	STATION	OFFSET	ELEV.	DESCRIPTION
3816	38+17'WB'	29' RT	894.57'	FENO MON WITH PK NAIL
4495	44+98'WB'	82' LT	920.13'	FENO MON WITH PK NAIL

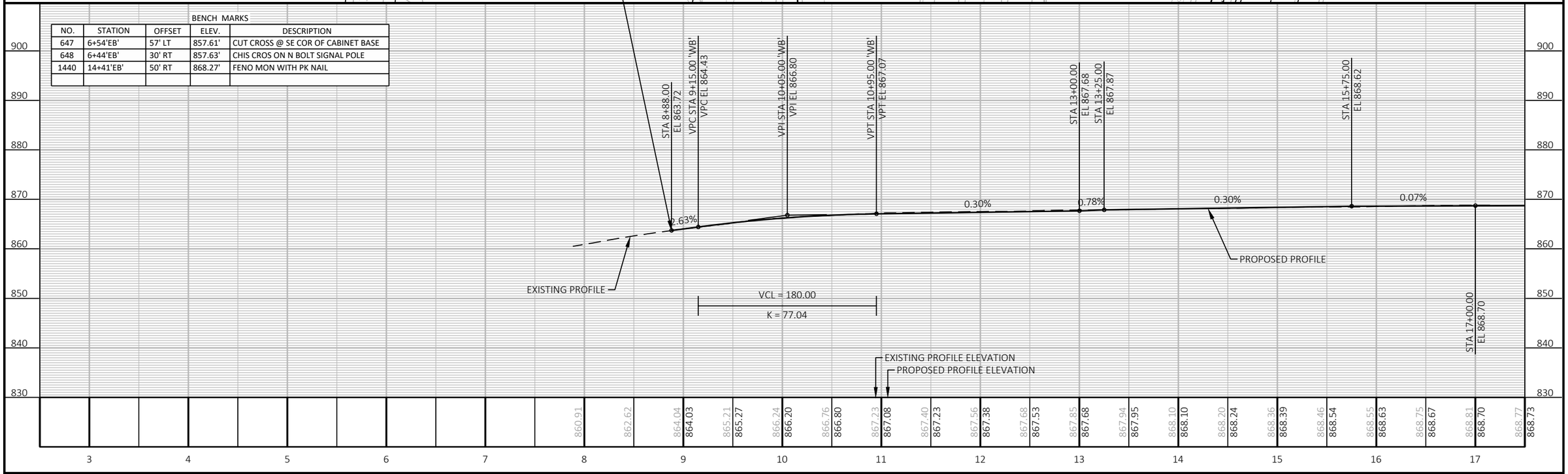


PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN AND PROFILE: 'EB'	SHEET 389	E



BENCH MARKS

NO.	STATION	OFFSET	ELEV.	DESCRIPTION
647	6+54'EB'	57' LT	857.61'	CUT CROSS @ SE COR OF CABINET BASE
648	6+44'EB'	30' RT	857.63'	CHIS CROS ON N BOLT SIGNAL POLE
1440	14+41'EB'	50' RT	868.27'	FENO MON WITH PK NAIL

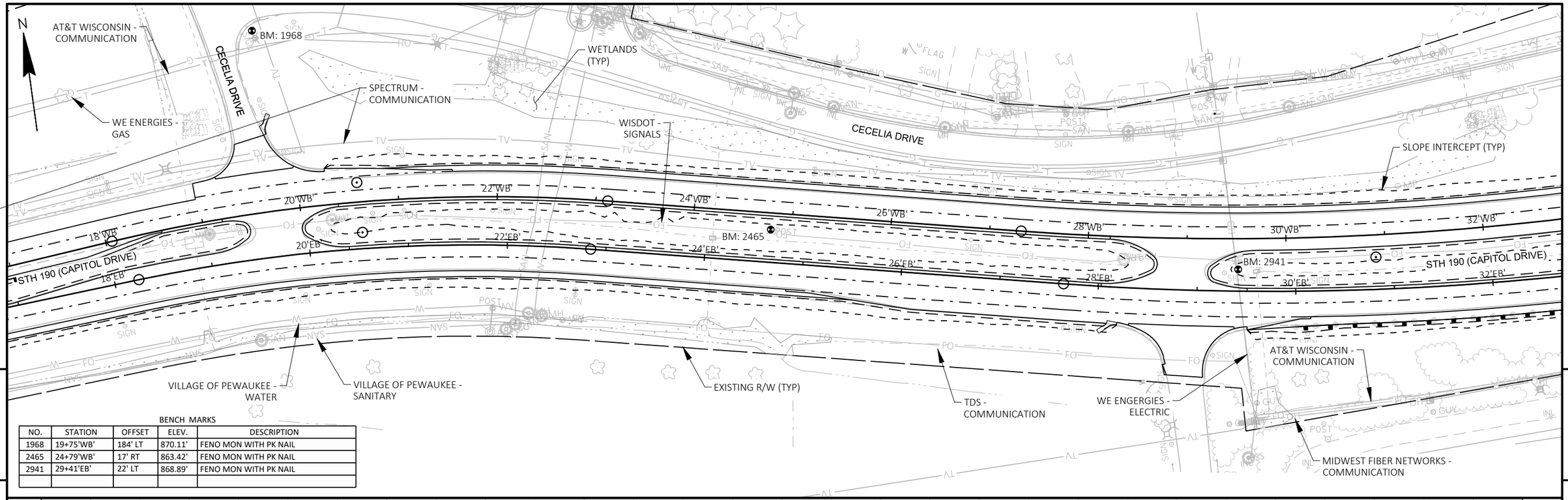


PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN AND PROFILE: 'WB'	SHEET 390	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_050101-PP.DWG
LAYOUT NAME - pp_04

PLOT DATE : 7/28/2023 8:34 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

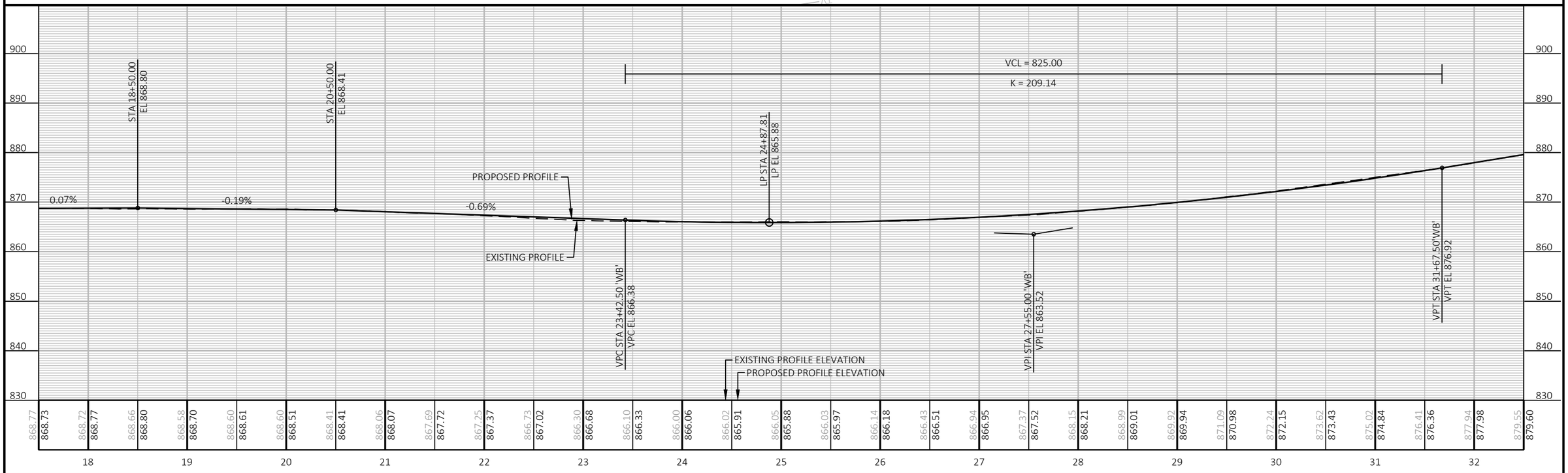


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BENCH MARKS

NO.	STATION	OFFSET	ELEV.	DESCRIPTION
1968	19+75'WB'	184' LT	870.11'	FENO MON WITH PK NAIL
2465	24+79'WB'	17' RT	863.42'	FENO MON WITH PK NAIL
2941	29+41'EB'	22' LT	868.89'	FENO MON WITH PK NAIL

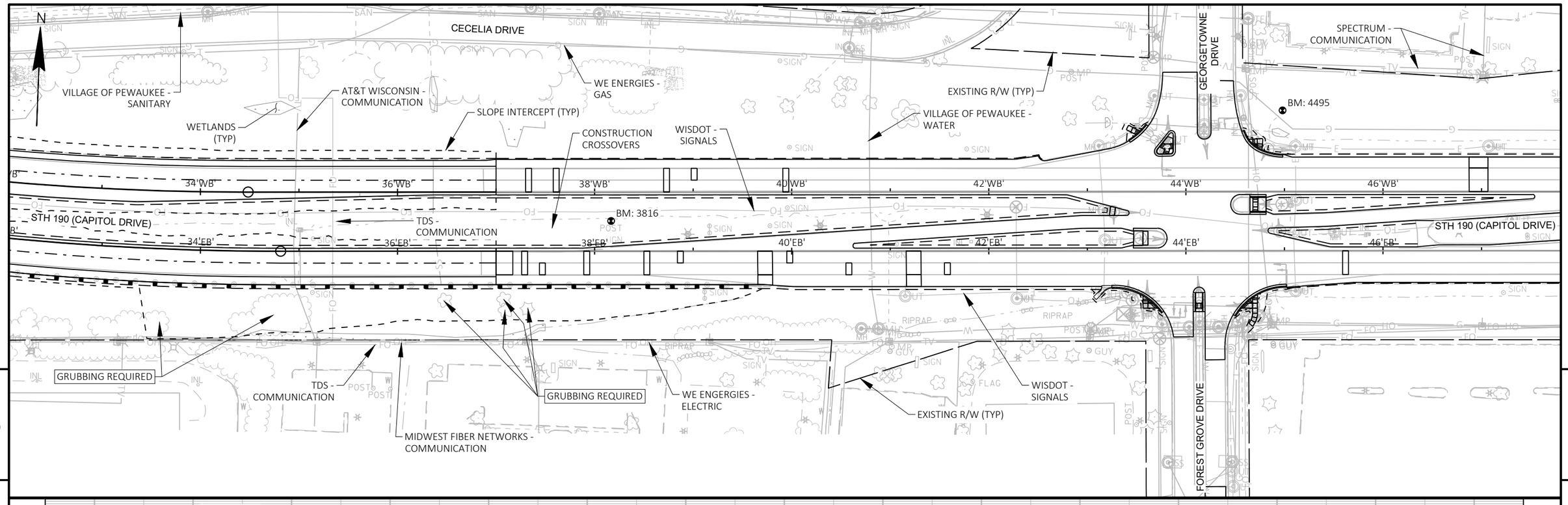


PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN AND PROFILE: 'WB'	SHEET 391	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_050101-PP.DWG
LAYOUT NAME - pp_05

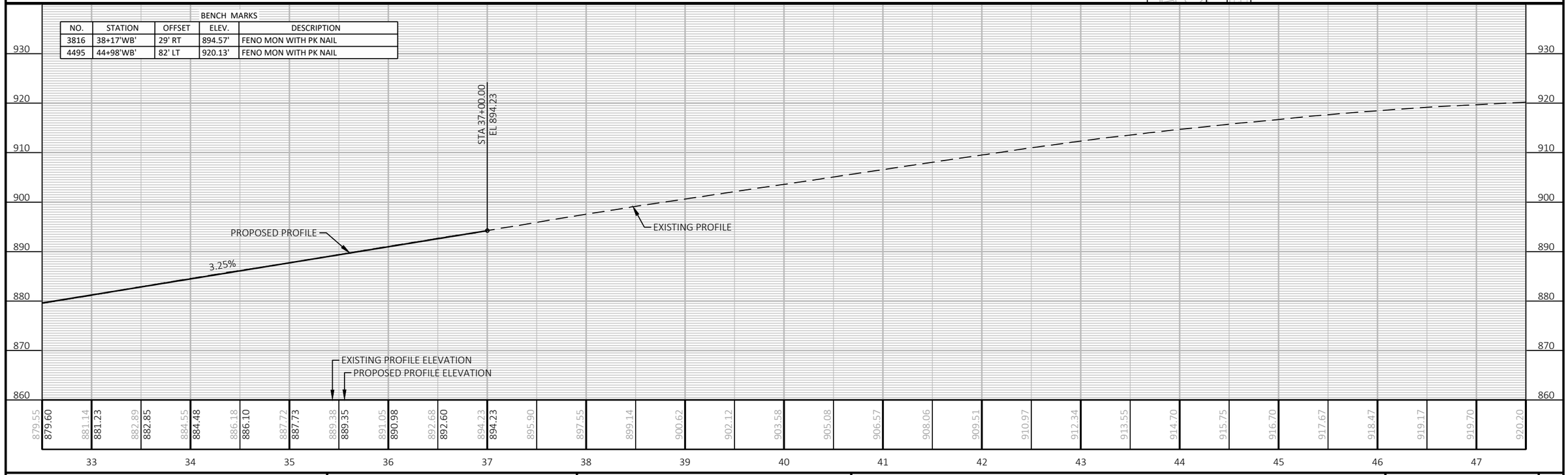
PLOT DATE : 7/28/2023 8:35 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



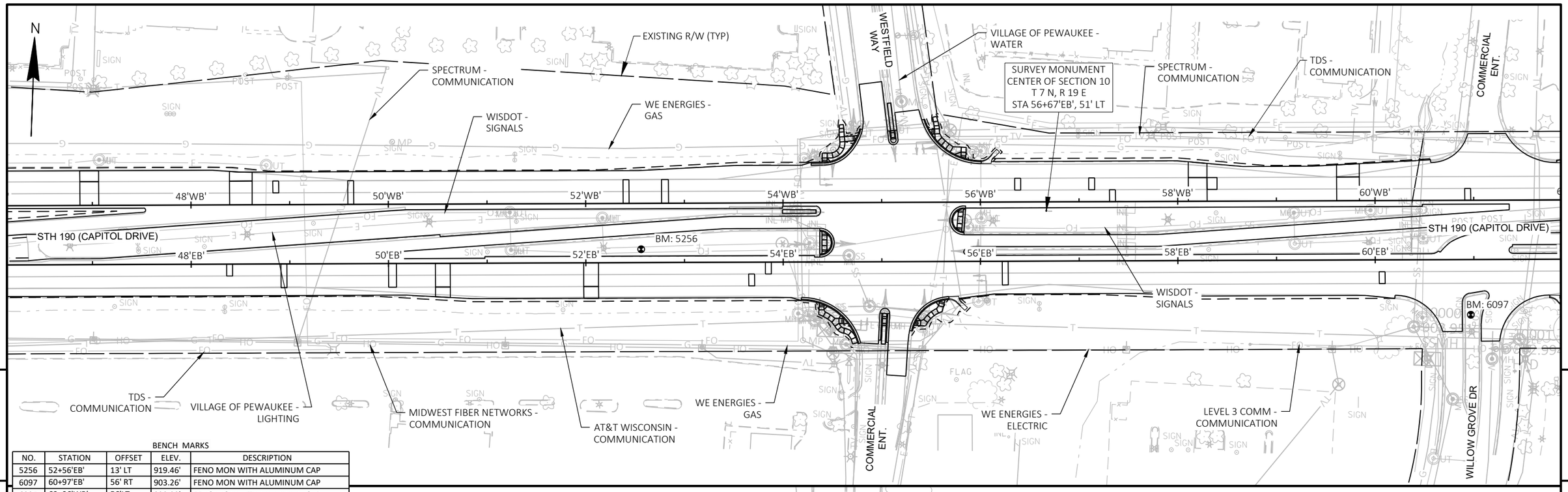
BENCH MARKS

NO.	STATION	OFFSET	ELEV.	DESCRIPTION
3816	38+17'WB'	29' RT	894.57'	FENO MON WITH PK NAIL
4495	44+98'WB'	82' LT	920.13'	FENO MON WITH PK NAIL



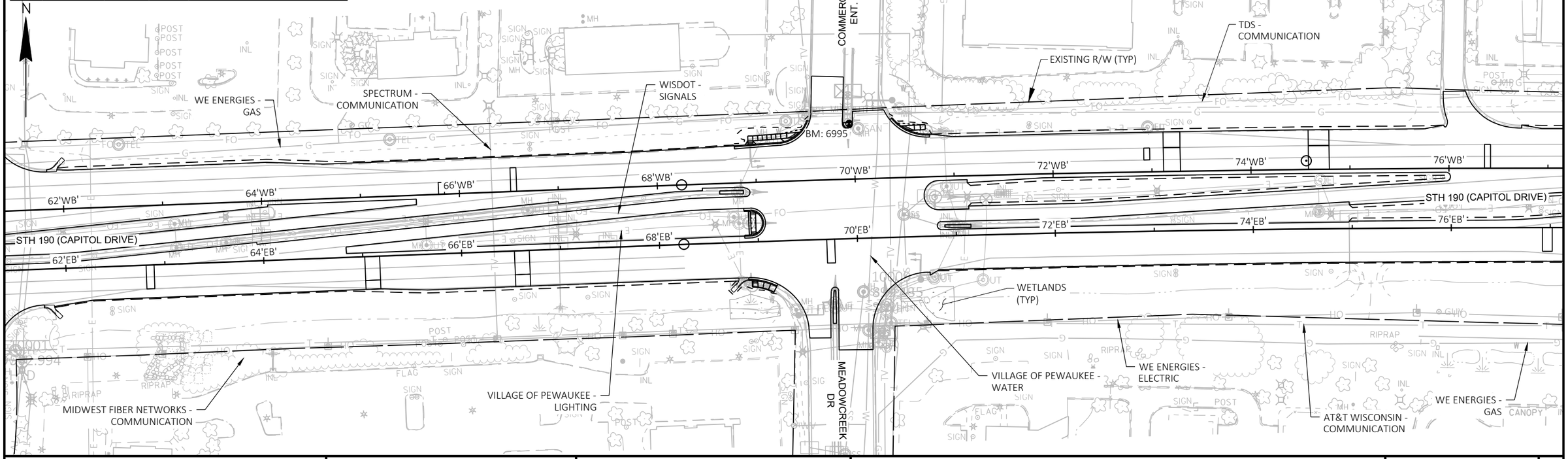
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN AND PROFILE: 'WB'	SHEET 392	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_050101-PP.DWG
LAYOUT NAME - pp_06
PLOT DATE : 7/28/2023 8:35 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

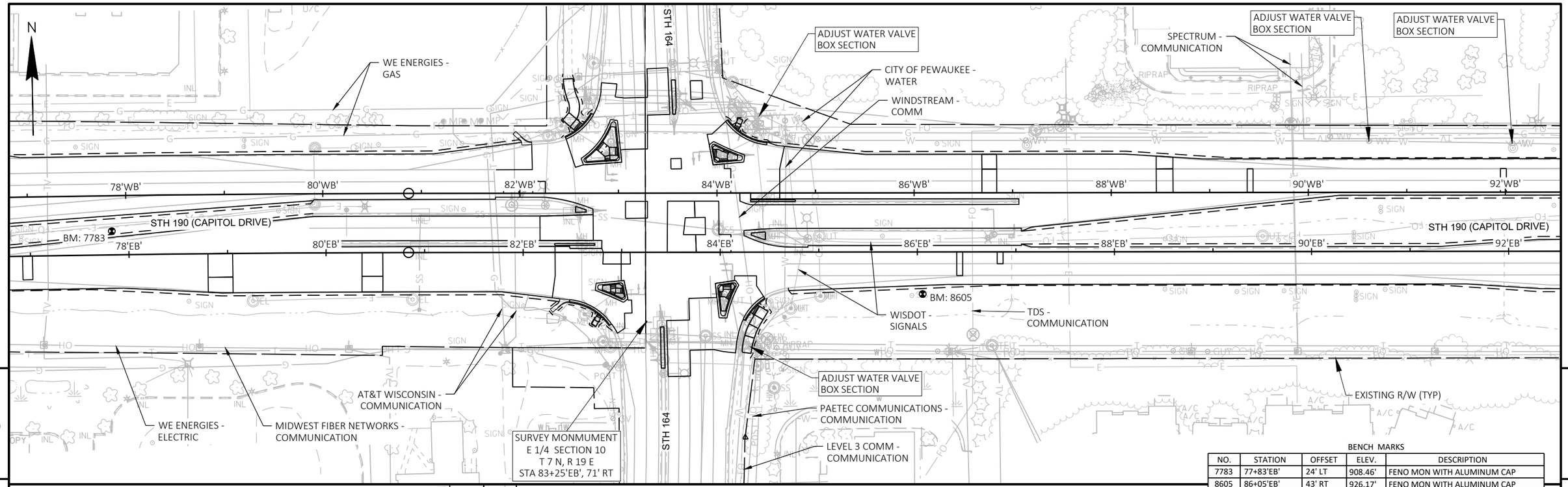


BENCH MARKS

NO.	STATION	OFFSET	ELEV.	DESCRIPTION
5256	52+56'EB'	13' LT	919.46'	FENO MON WITH ALUMINUM CAP
6097	60+97'EB'	56' RT	903.26'	FENO MON WITH ALUMINUM CAP
6995	69+96'WB'	56'LT	899.92'	FENO MON WITH ALUMINUM CAP



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN	SHEET 393	E

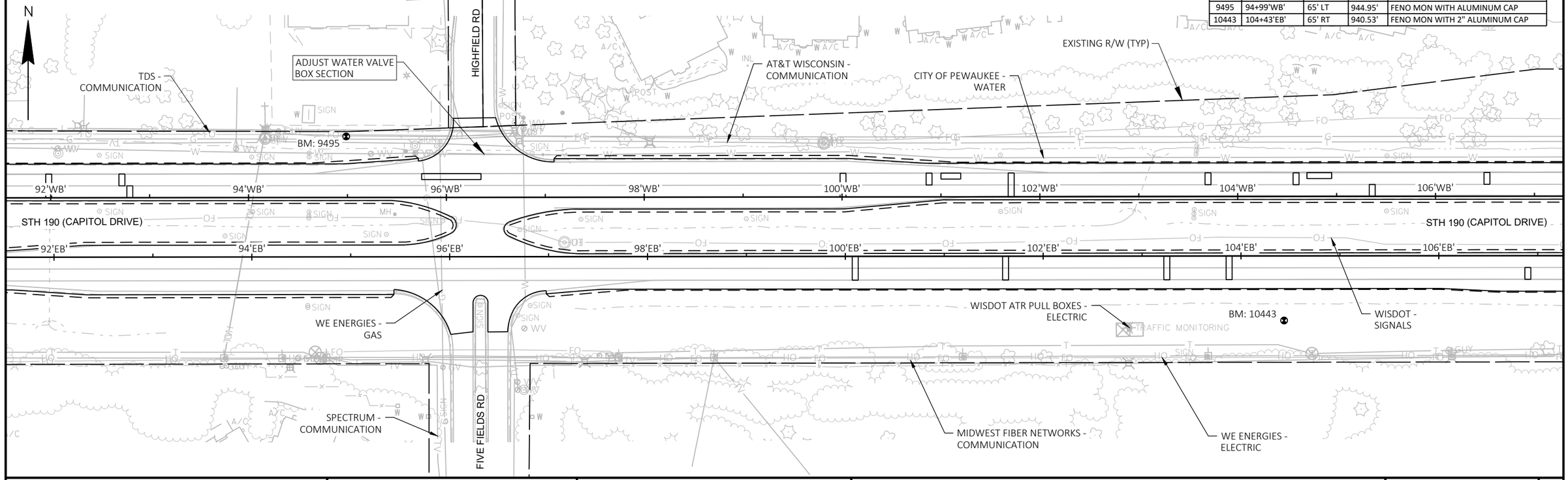


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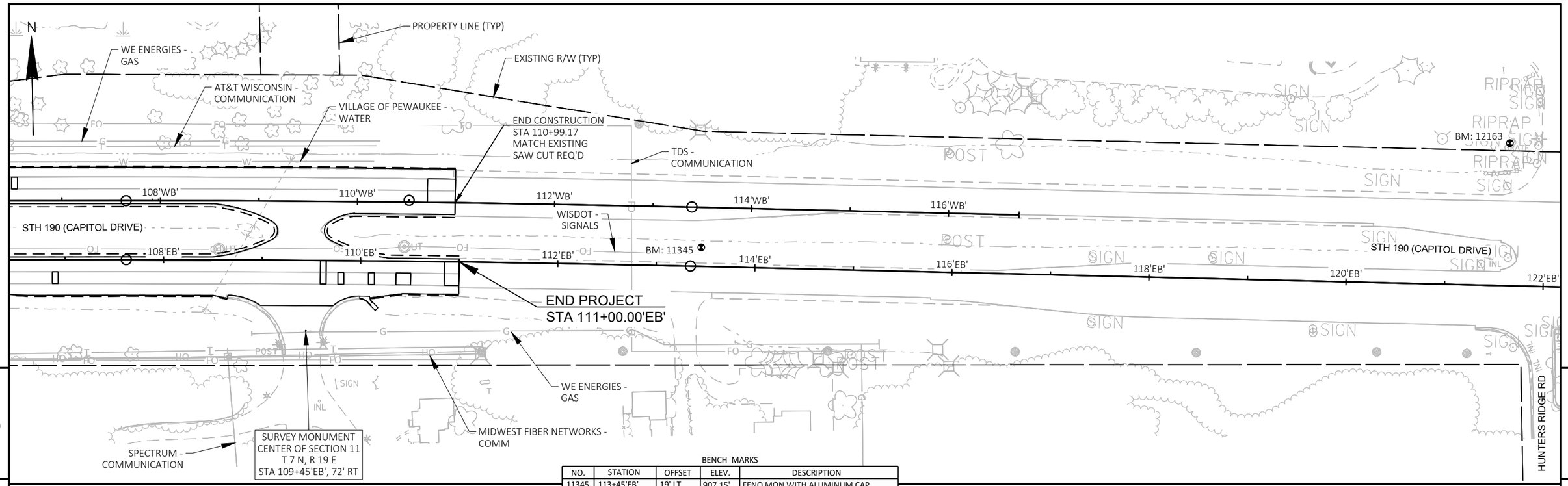
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BENCH MARKS

NO.	STATION	OFFSET	ELEV.	DESCRIPTION
7783	77+83'EB'	24' LT	908.46'	FENO MON WITH ALUMINUM CAP
8605	86+05'EB'	43' RT	926.17'	FENO MON WITH ALUMINUM CAP
9495	94+99'WB'	65' LT	944.95'	FENO MON WITH ALUMINUM CAP
10443	104+43'EB'	65' RT	940.53'	FENO MON WITH 2" ALUMINUM CAP



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN	SHEET 394	E



BENCH MARKS

NO.	STATION	OFFSET	ELEV.	DESCRIPTION
11345	113+45'EB'	19' LT	907.15'	FENO MON WITH ALUMINUM CAP
12163	121+63'EB'	145' LT	883.88'	CUT CROSS @ SW COR OF STRM INLET

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PLAN	SHEET 395	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_050102-PP.DWG
LAYOUT NAME - PP_09

PLOT DATE : 2/28/2023 1:47 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : ##########

Standard Detail Drawing List

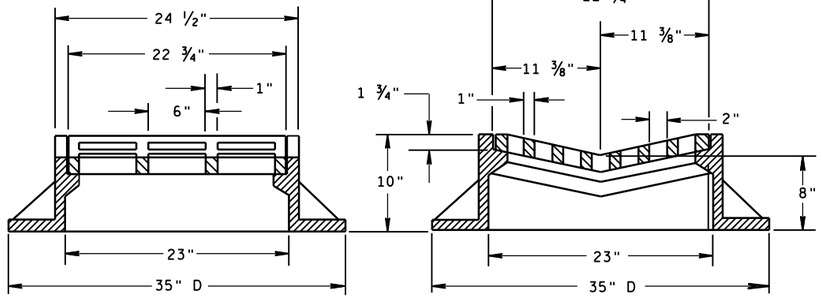
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08C08-02	INLETS MEDIAN 1 AND 2 GRATE
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F06-04	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
09B02-10	CONDUIT
09B04-12	PULL BOX
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C11-10	CONCRETE BASE TYPE 10
09C12-09A	CONCRETE BASE TYPE 13
09C12-09B	CONCRETE BASE TYPE 13
09C13-03	CONCRETE BASE TYPE 10 & TYPE 13 EXTENSION
09C15-01	CONCRETE BASE TYPE 10 SPECIAL
09C16-01	CONCRETE BASE TYPE 10 SPECIAL EXTENSION
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09E01-15B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-15C	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
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
09E08-09A	TYPE 9 POLE 15'-30' MONOTUBE ARM
09E08-09B	TYPE 9 SPECIAL POLE 35' MONOTUBE ARM
09E08-09C	TYPE 9 SPECIAL POLE 40' MONOTUBE ARM
09E08-09D	TYPE 9 SPECIAL POLE 45' MONOTUBE ARM
09E08-09E	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-09F	TYPE 10 SPECIAL POLE 35' MONOTUBE ARM
09E08-09G	TYPE 10 SPECIAL POLE 40' MONOTUBE ARM
09E08-09H	TYPE 10 SPECIAL POLE 45' MONOTUBE ARM
09E08-09I	TYPE 12 POLE 35'-55' MONOTUBE ARM
09E08-09J	TYPE 13 POLE 35'-55' MONOTBE ARM
09E08-09K	GENERAL NOTES,HARDWARE DETAILS FOR TYPE 9/10,9/10 SPECIAL,12 & 13 POLES W/MONOTUBE ARMS
09E12-01B	OVER HEIGHT TYPE 10 POLE 15'-30' MONOTUBE ARM
09E12-01C	OVER HEIGHT TYPE 12 POLE 35'-55' MONOTUBE ARM
09E12-01E	GENERAL NOTES AND HARDWARE DETAILS FOR OVER HEIGHT TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
09F15-04A	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
09G01-04A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04C	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
10A01-04	ELECTRICAL HANDHOLE WIRING
10A05-03	ELECTRICAL DETAILS GROUND MOUNT LIGHT POLES ISOLATED NEUTRAL SYSTEMS
10A11-03	ELECTRICAL DETAILS MEDIAN MOUNT LIGHT POLES ISOLATED NEUTRAL SYSTEMS

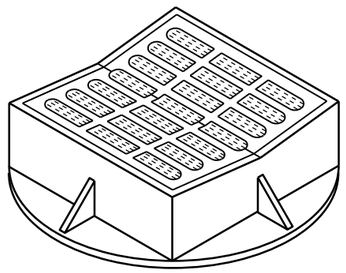
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Standard Detail Drawing List

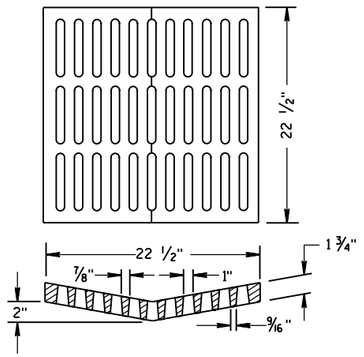
11B02-02	CONCRETE MEDIAN NOSE
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-17A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-17B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-17C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C13-11	URBAN DOWELED CONCRETE PAVEMENT
13C14-07A	BASE PATCHING CONCRETE
13C14-07B	BASE PATCHING CONCRETE
13C14-07C	BASE PATCHING CONCRETE
13C18-08A	CONCRETE PAVEMENT JOINTING
13C18-08B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-08C	CONCRETE PAVEMENT JOINT TYPES
13C18-08D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
13C18-08F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
13C19-03	HMA LONGITUDINAL JOINTS
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B47-05A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05D	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05E	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05F	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05G	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09D	ON RAMP LANE CLOSURE
15C02-09E	OFF RAMP LANE CLOSURE
15C02-09F	ADVANCED WIDTH RESTRICTION SIGNING
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-08A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-08B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C18-08C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
15C20-02	YIELD MARKING
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D06-06	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D11-09	TRAFFIC CONTROL, SINGLE LANE CROSSOVER
15D12-11A	TRAFFIC CONTROL, LANE CLOSURE
15D15-07A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
15D16-06	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-07A	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
15D30-09A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D40-05A	TRAFFIC CONTROL, FULL LANE SHIFT NON-FREEWAY OR MULTILANE DIVIDED 45 MPH AND UNDER
15D40-05B	TRAFFIC CONTROL, FULL LANE SHIFT MULTILANE DIVIDED 50 MPH AND OVER
15D40-05C	TRAFFIC CONTROL, PARTIAL LANE SHIFT NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER
15D40-05D	TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER

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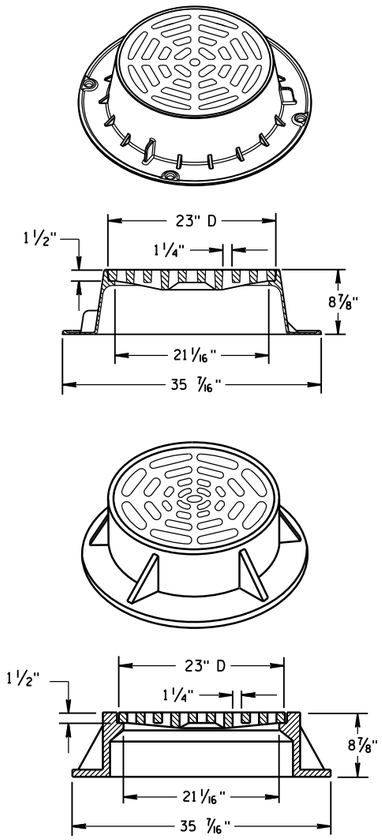


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

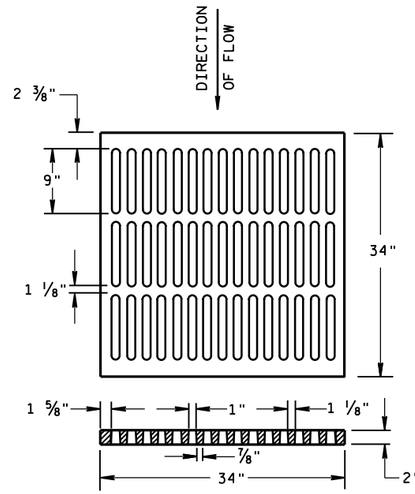
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

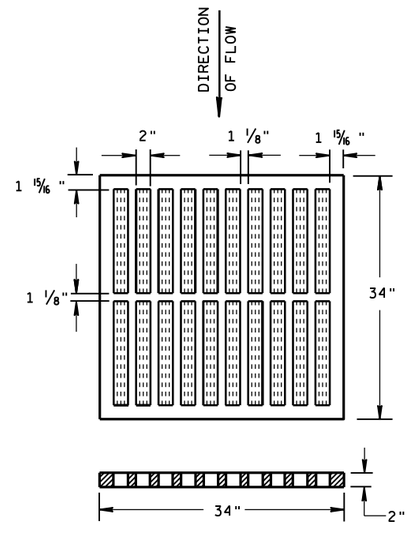
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



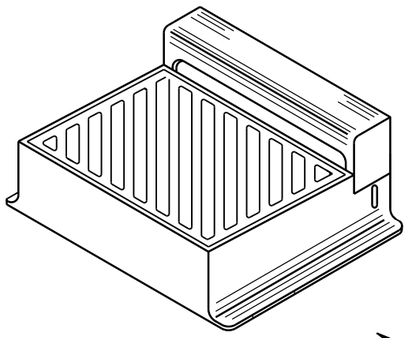
ALTERNATIVE TYPE "MS"

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



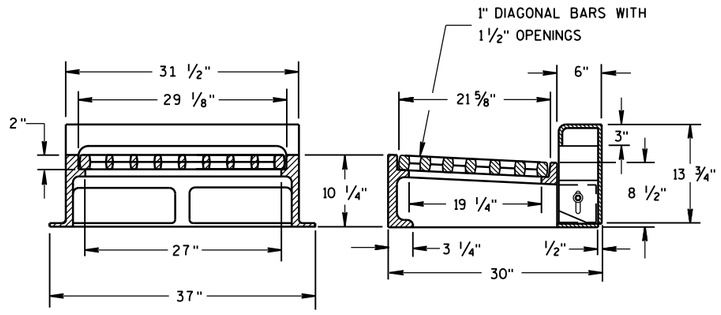
TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIRECTION OF FLOW

DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

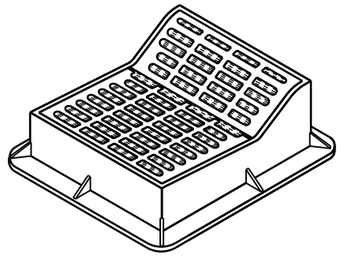
INLET COVERS
TYPE B, B-A, C,
MS, MS-A, & WM

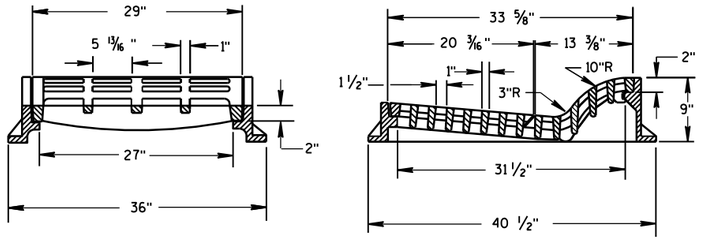
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

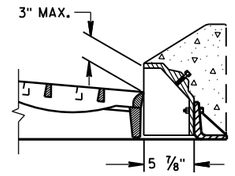
S.D.D. 8 A 5-19b





TYPE "F"

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



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

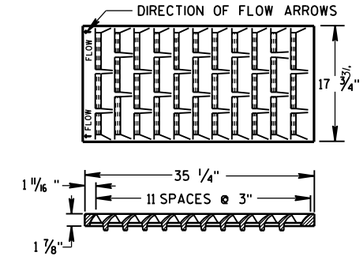
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

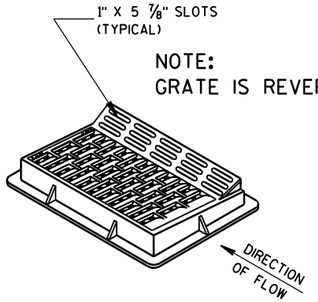
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

GENERAL NOTES

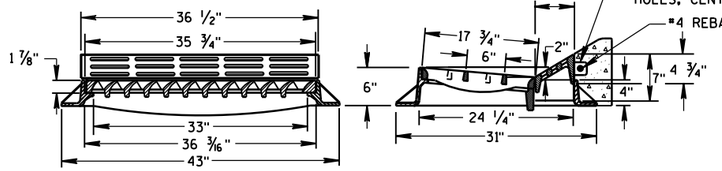
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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





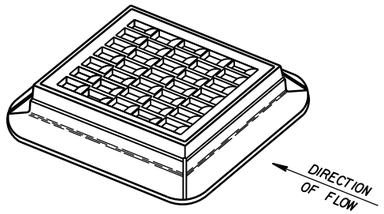
NOTE:
GRATE IS REVERSIBLE.

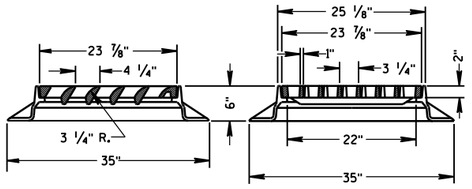


TYPE "HM"

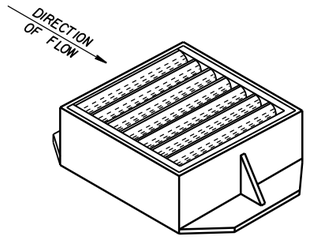
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

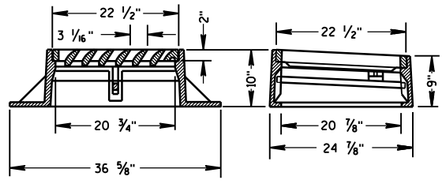
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



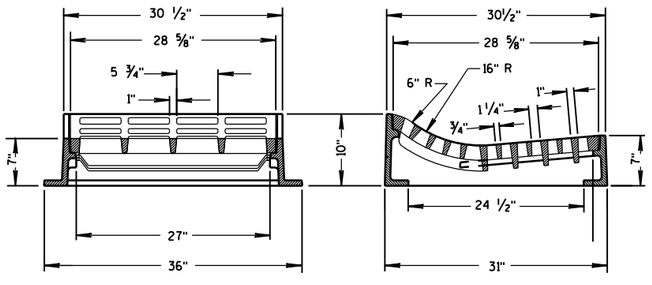


TYPE "S"



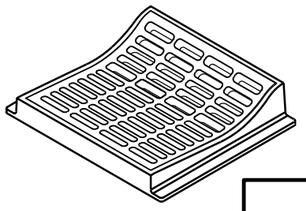


TYPE "V"



TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

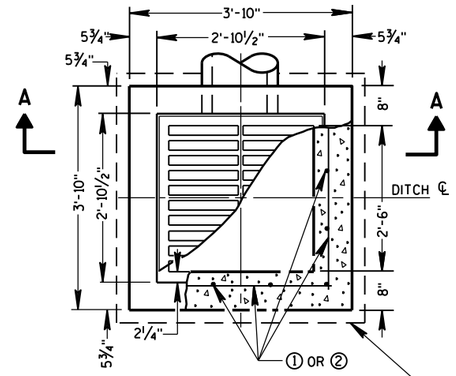
APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

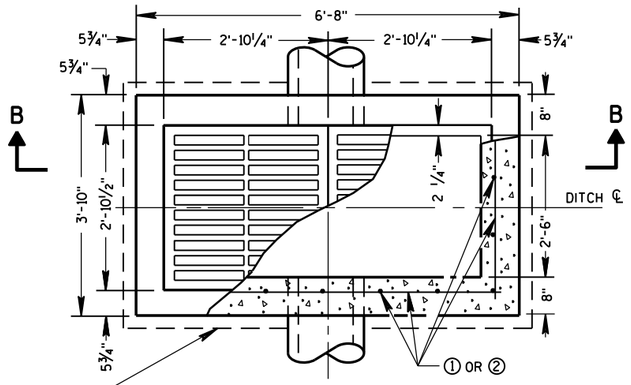
FHWA

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

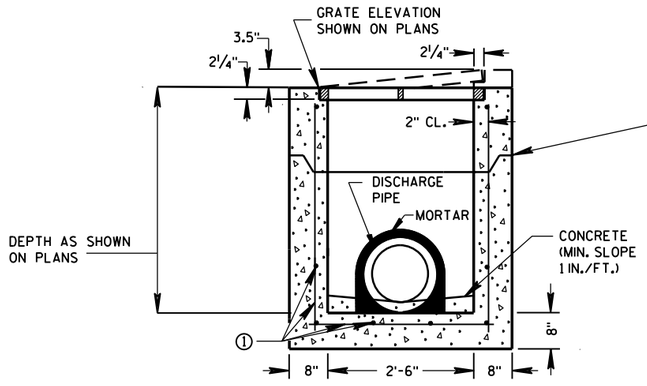


PLAN VIEW

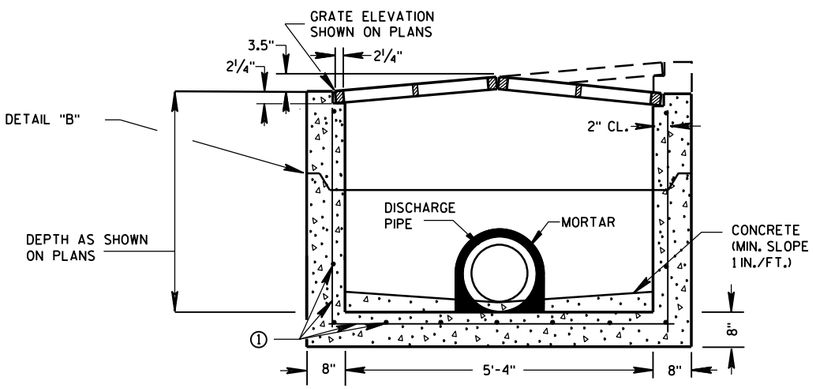


PLAN VIEW

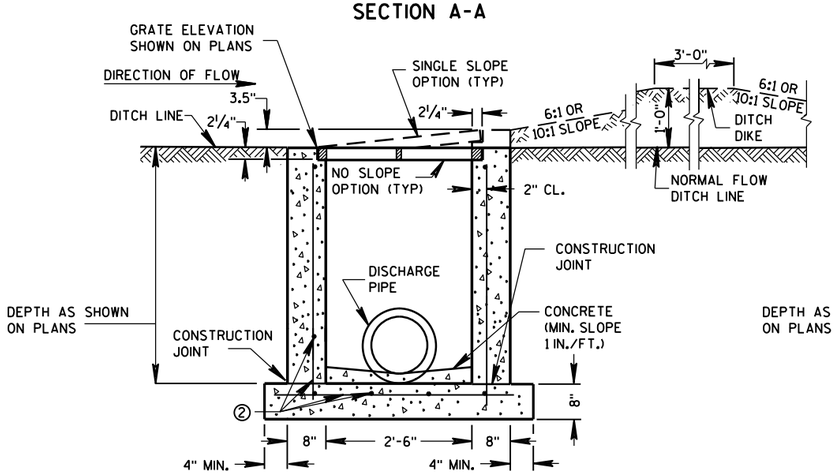
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



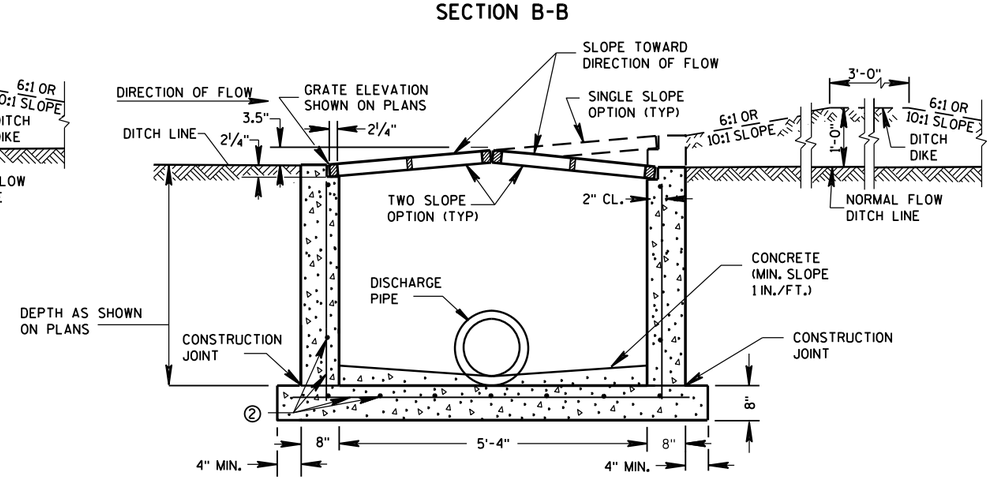
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

GENERAL NOTES

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

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

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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

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

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

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

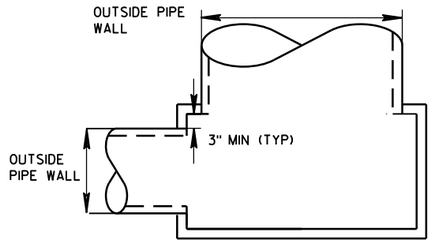
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

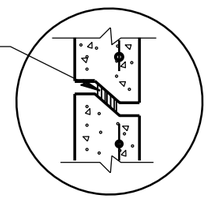
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

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



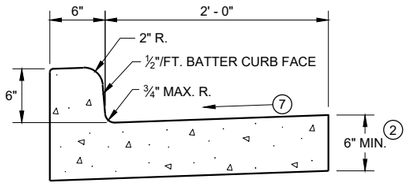
DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

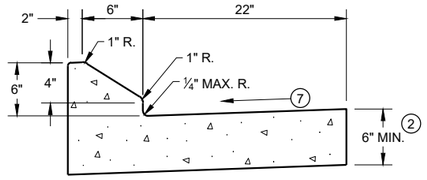
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVI ENT
FHWA

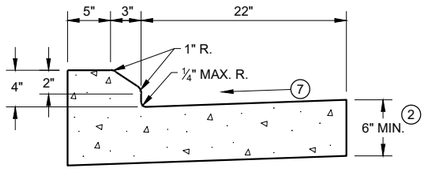
6
S.D.D. 8 C 8-2



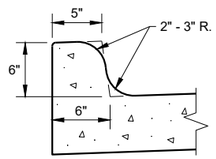
TYPES A (1) & D



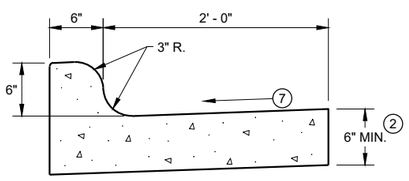
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

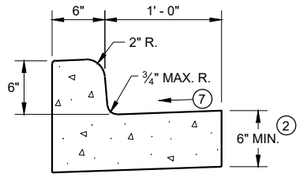


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



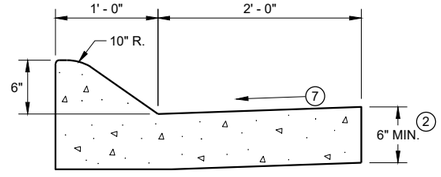
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

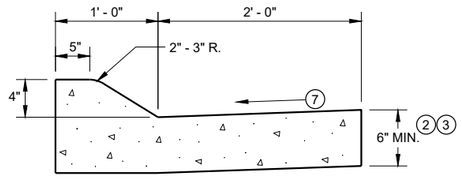


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

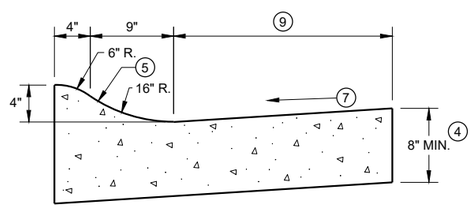


6" SLOPED CURB TYPES A (1) & D



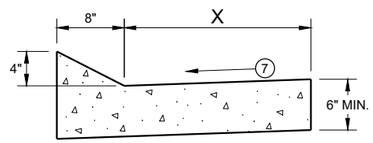
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

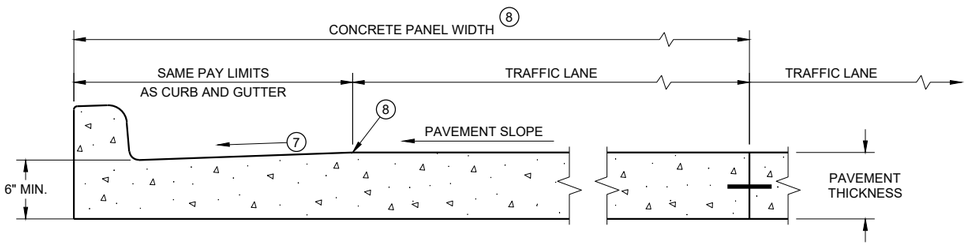


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

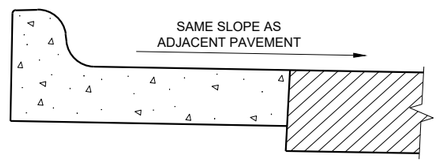
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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.

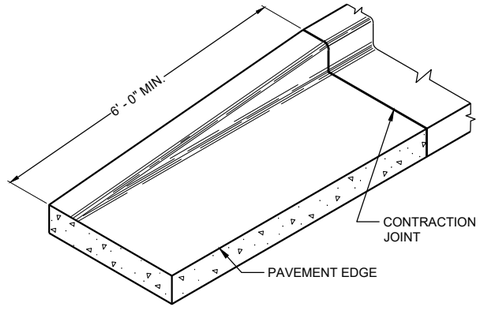
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(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

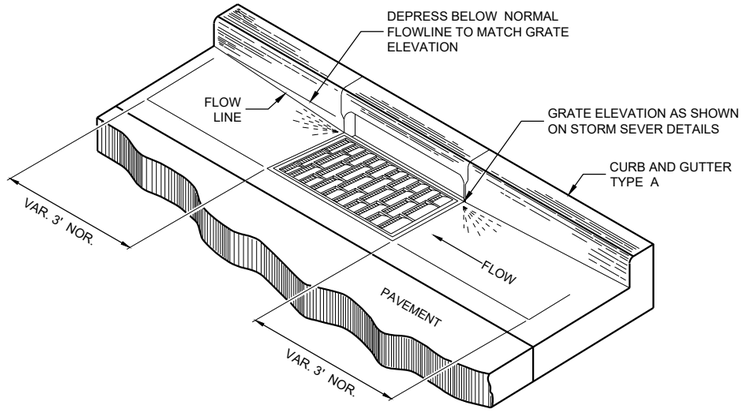
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D01 - 23a



END SECTIONCURB 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.

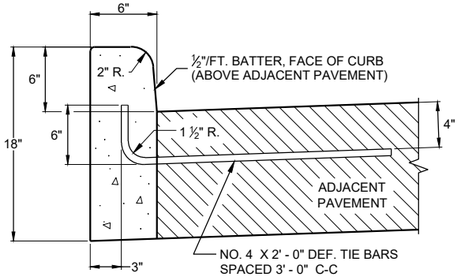
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

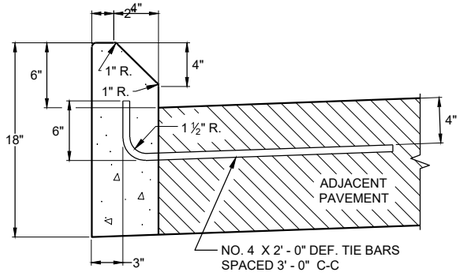
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(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.

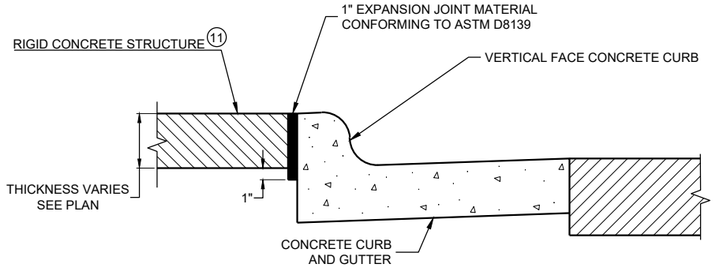


TYPES A (1) & D

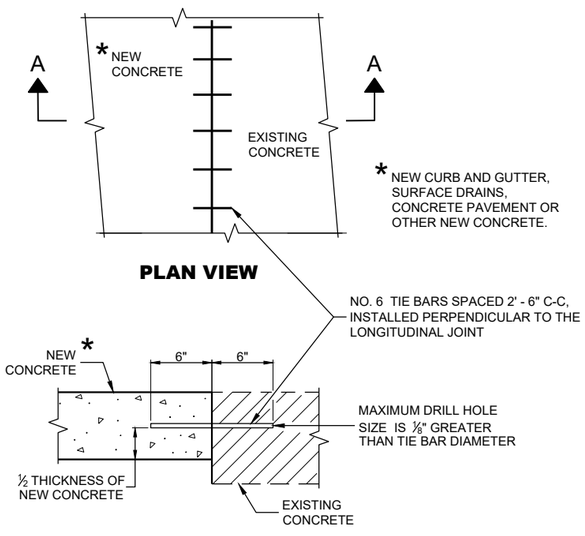


TYPES G (1) & J

CONCRETE CURB



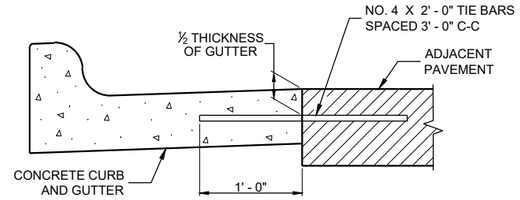
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



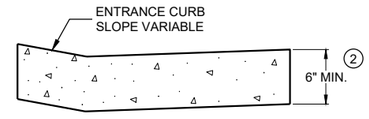
PLAN VIEW

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 DEVE ENGINEER

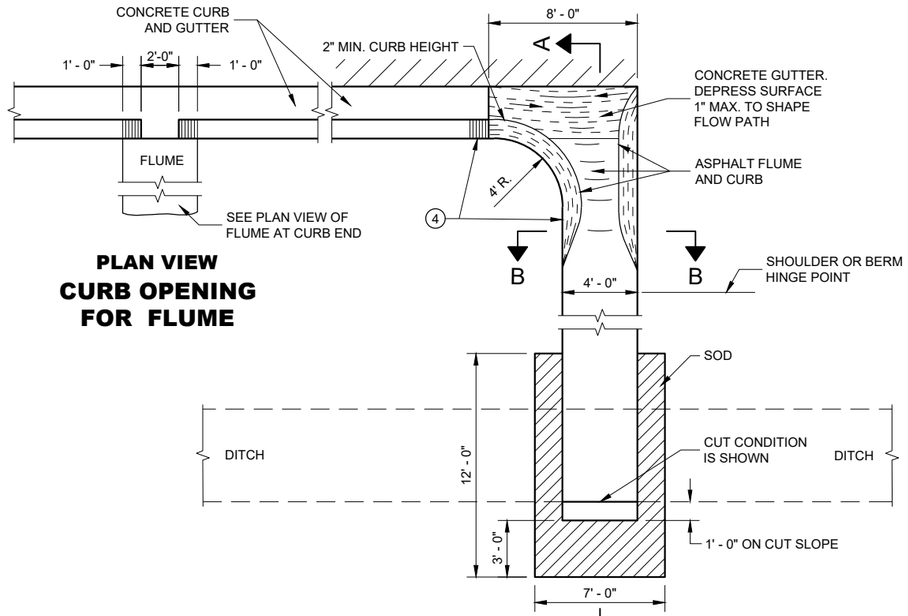
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SDD08D01 - 23b

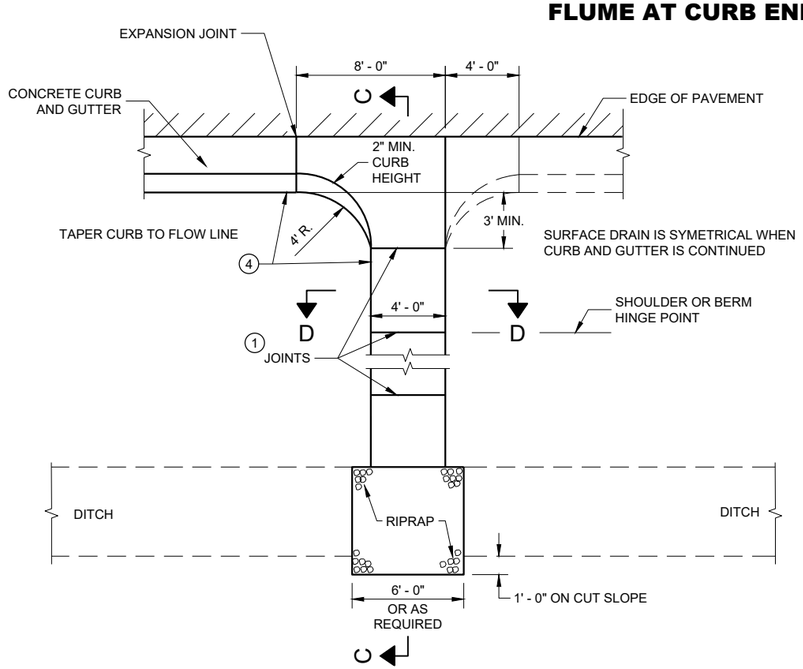
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



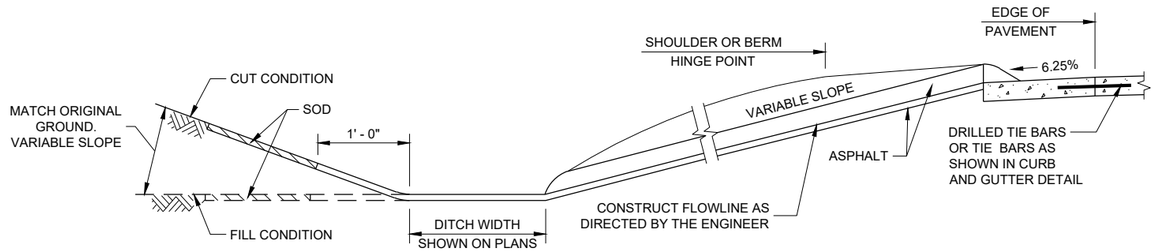
PLAN VIEW
CONCRETE SURFACE DRAIN

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.

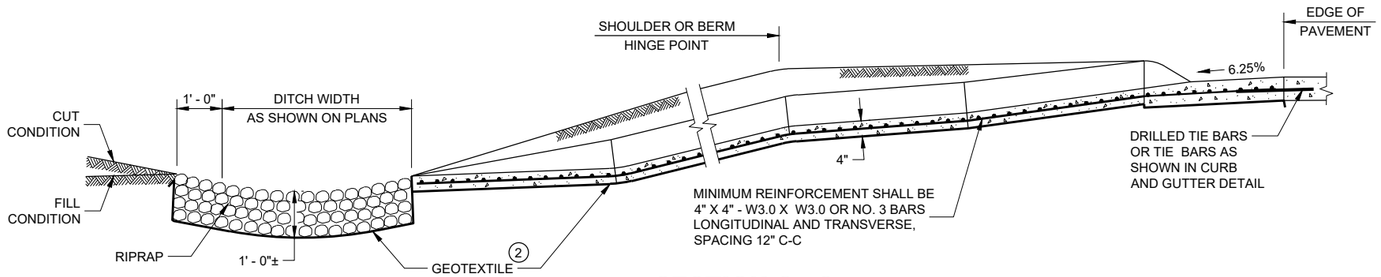
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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.

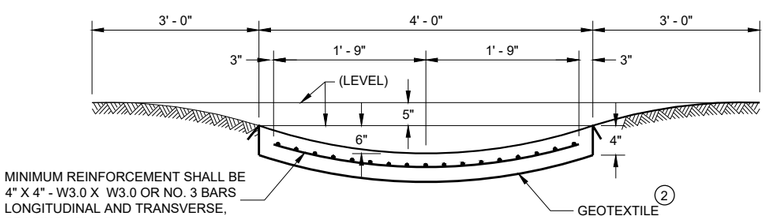


SECTION A - A

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

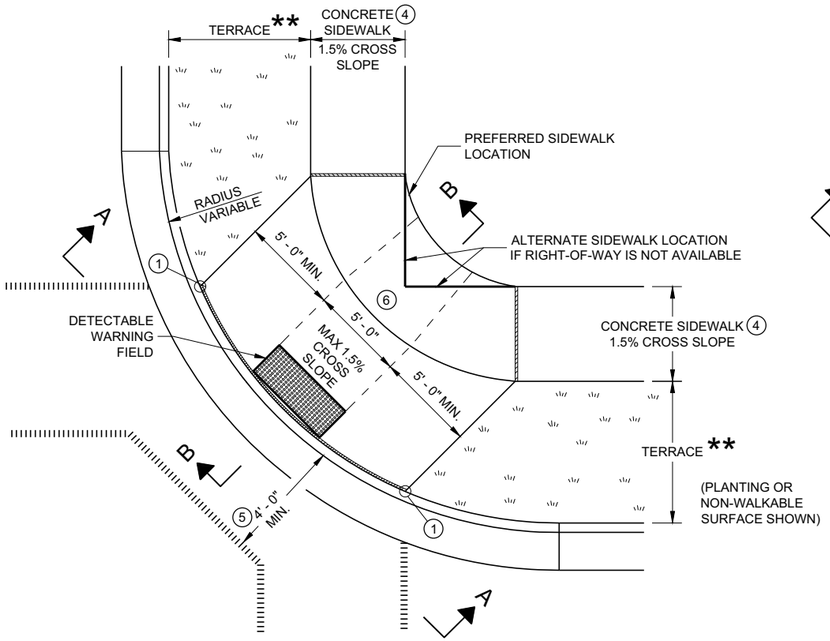
FHWA

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SDD 08D04 - 07

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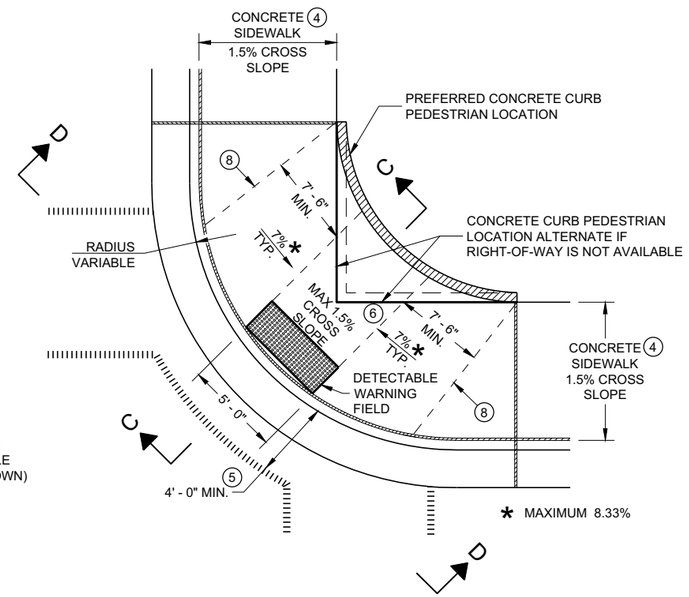
SDD 08D04 - 07



PLAN VIEW

CURB RAMP TYPE 1

(CENTER OF CORNER RADIUS)



PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

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.

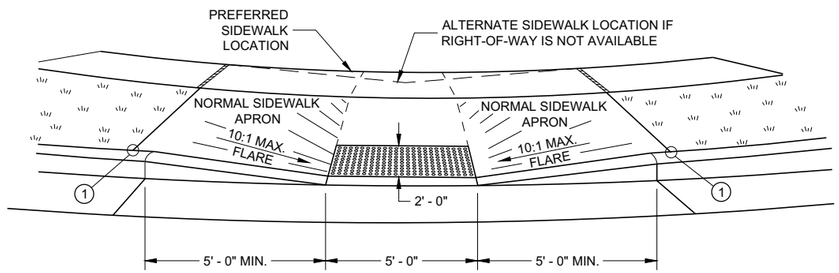
(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

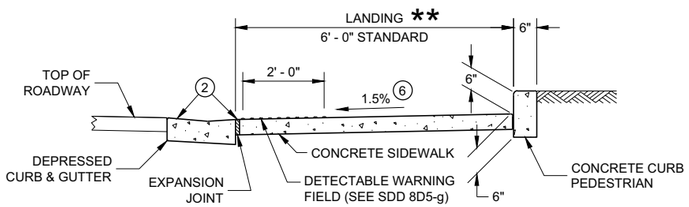
(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(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.



VIEW A - A FOR TYPE 1

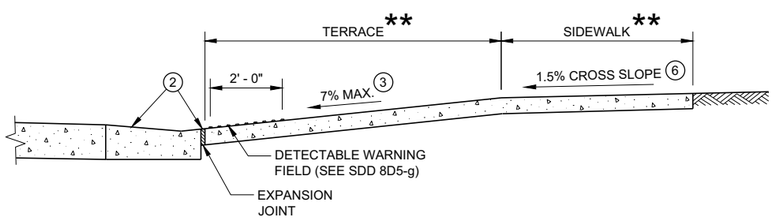


SECTION C - C FOR TYPE 1 - A

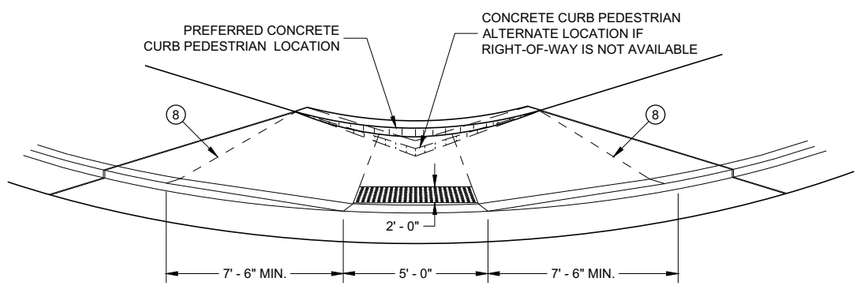
LEGEND

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

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



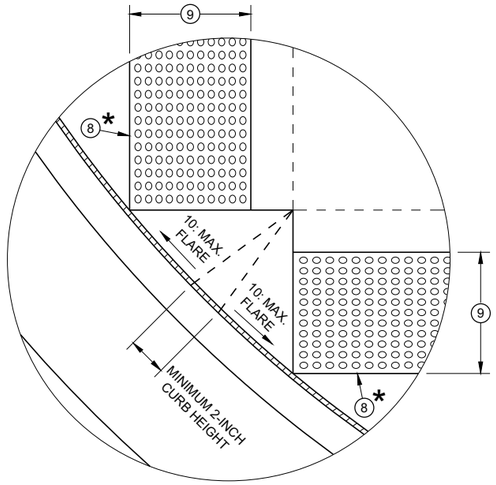
VIEW D - D FOR TYPE 1 - A

CURB RAMPS TYPE 1 AND 1-A

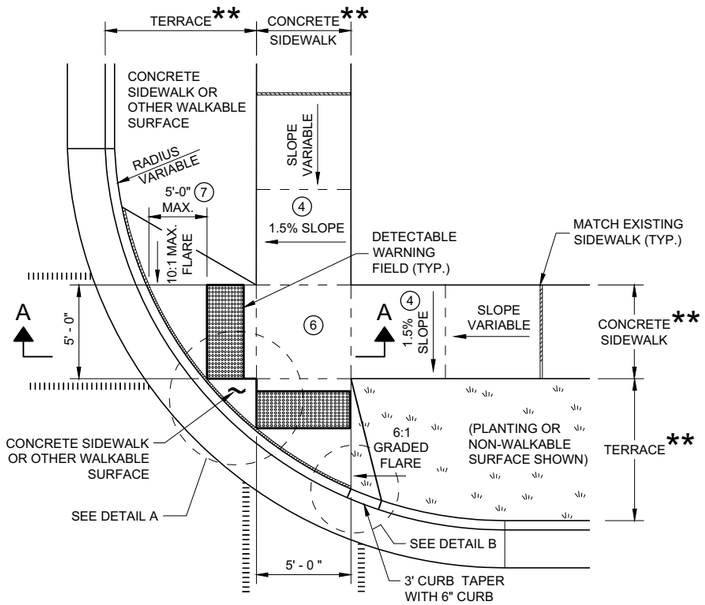
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 08D05 - 20a



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.

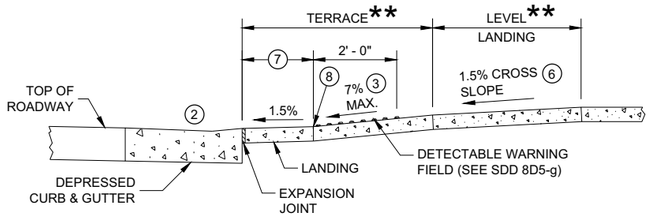
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(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.

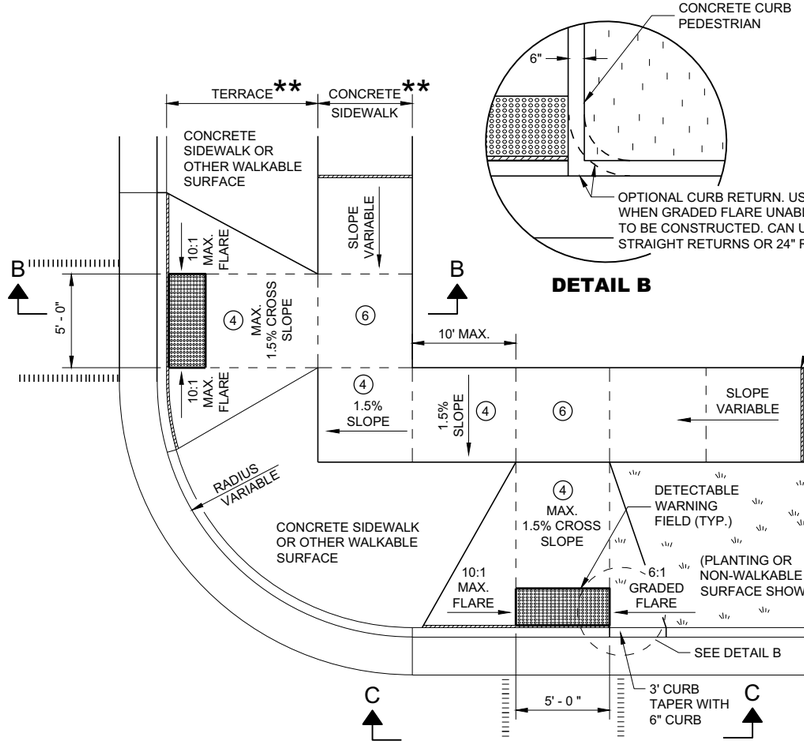
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

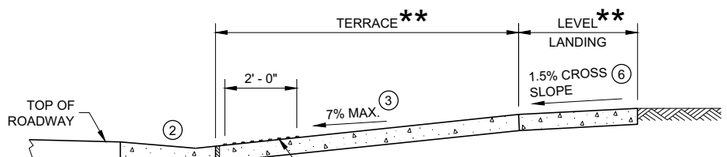
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS



DETAIL B

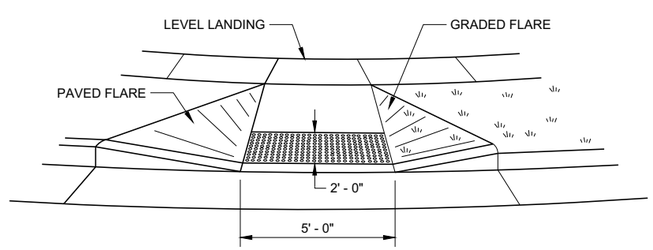
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3

LEGEND

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



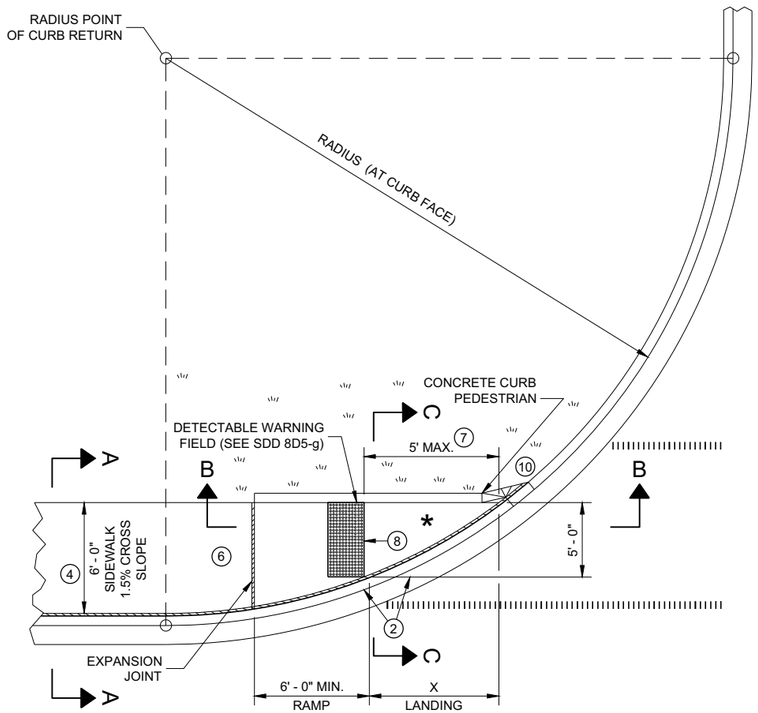
VIEW C - C FOR TYPE 3

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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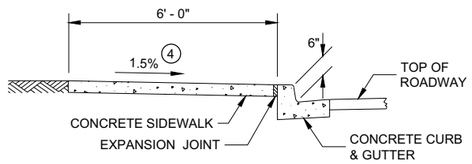


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

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

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.

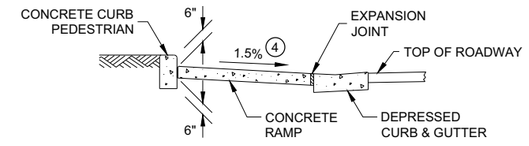
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

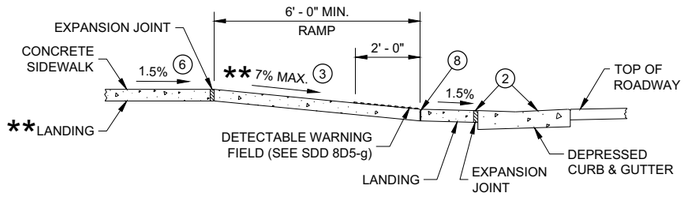
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



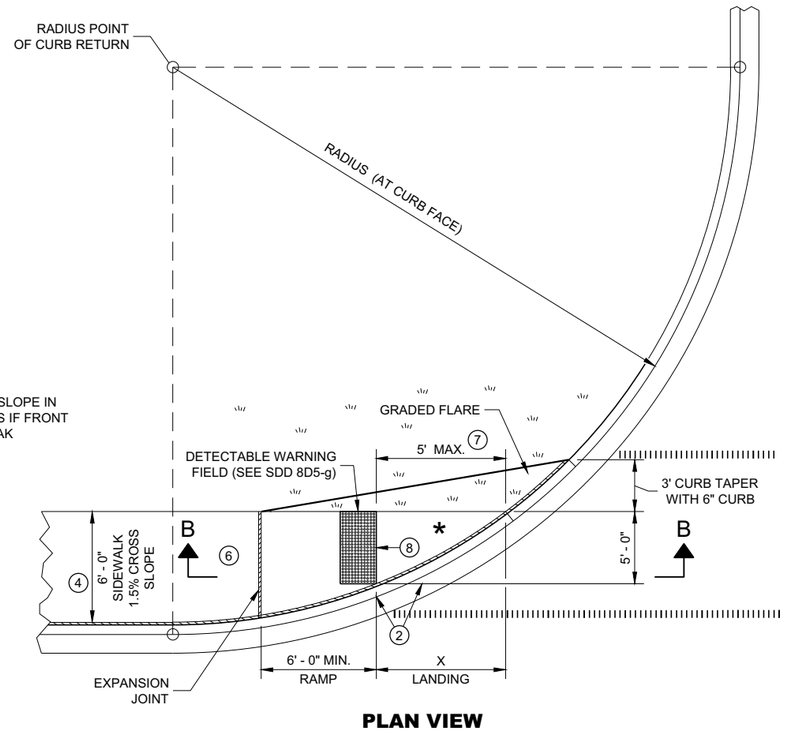
SECTION C - C FOR TYPE 4A



SECTION B - B FOR TYPE 4A AND TYPE 4A1

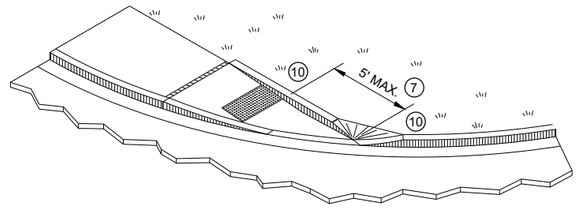
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

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

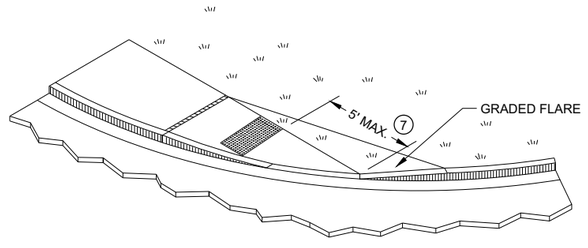


PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

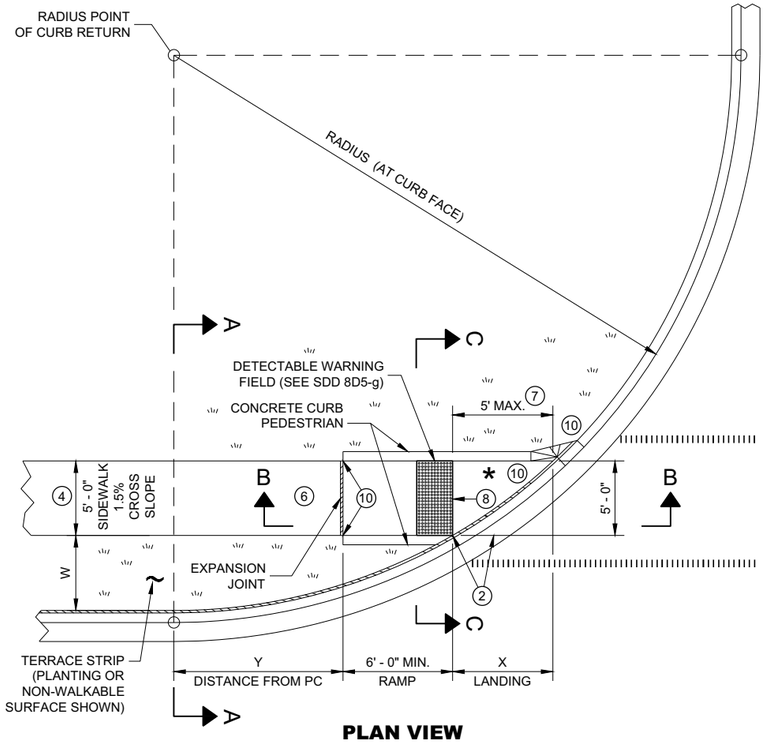
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SDD 08D05 - 20c

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SDD 08D05 - 20c

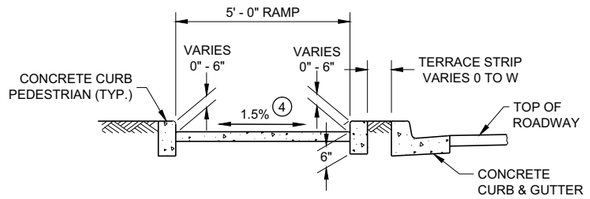


PLAN VIEW

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 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¼"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¼"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ¼"
20 FEET	5' - 9 ¾"	3' - 6 ½"	4' - 11 ½"	5' - 1 ¾"	4' - 3 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ¼"	10' - 9"
30 FEET			6' - 9 ¼"	7' - 11 ¼"	6' - 0 ¼"	9' - 8"	5' - 5"	11' - 1 ¾"	4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ¼"
40 FEET									6' - 1 ¾"	15' - 8 ½"	5' - 8"	17' - 2"	5' - 3"	18' - 5 ¾"	4' - 10 ¾"	19' - 8 ¼"
50 FEET															5' - 10 ¼"	23' - 2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C - C FOR TYPE 4B

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.

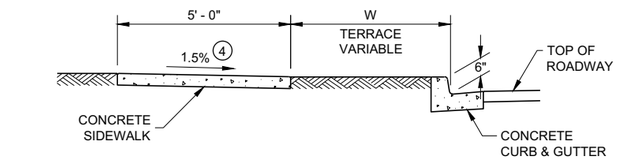
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

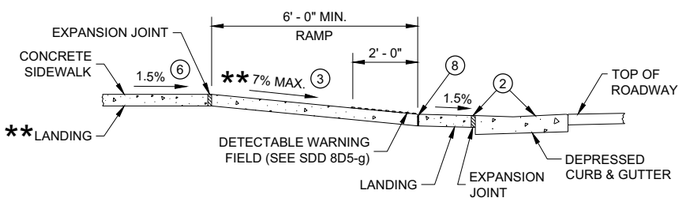
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

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

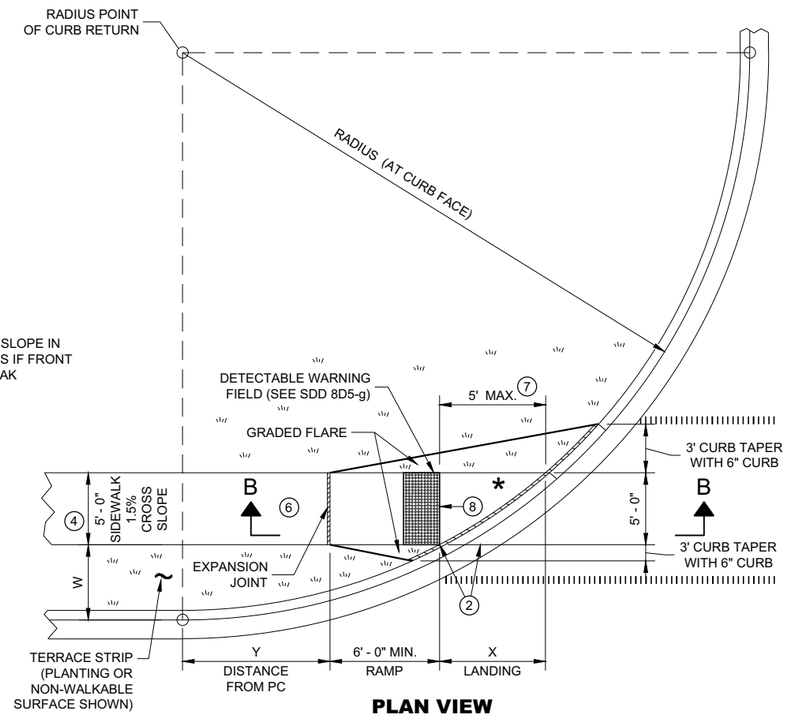


SECTION A - A FOR TYPE 4B



** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

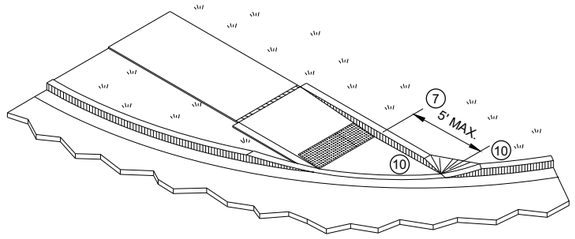
SECTION B - B FOR TYPE 4B AND TYPE 4B1



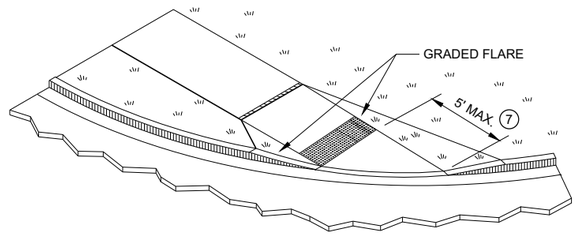
PLAN VIEW

CURB RAMP TYPE 4B1

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



ISOMETRIC VIEW FOR TYPE 4B



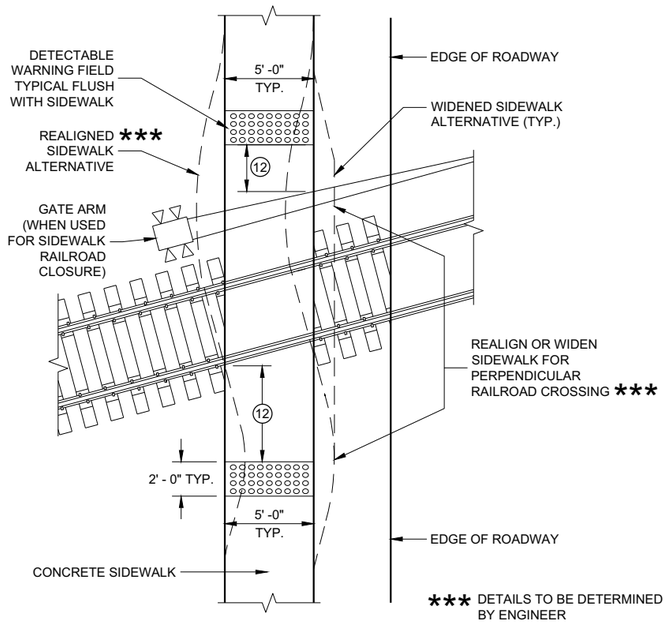
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

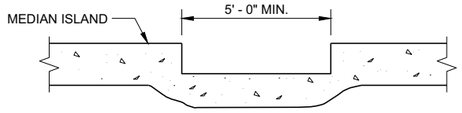
6

SDD 08D05 - 20d

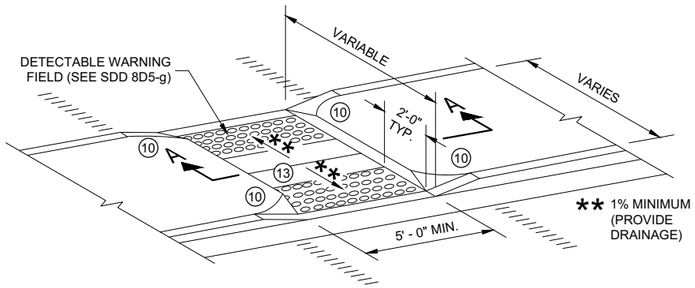


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



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 ½ - 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.

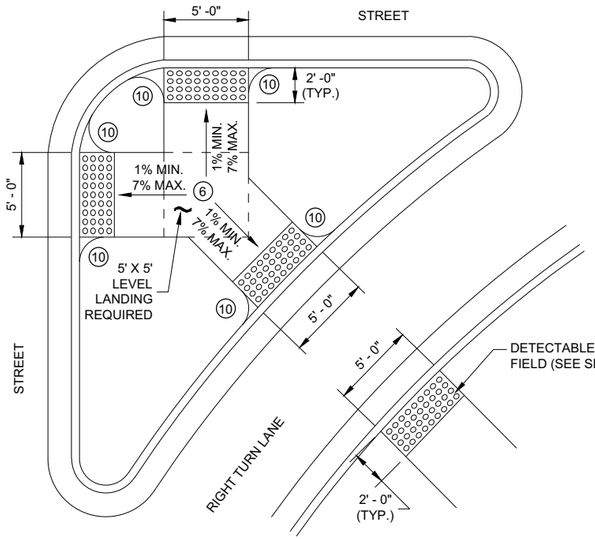
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(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. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF 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

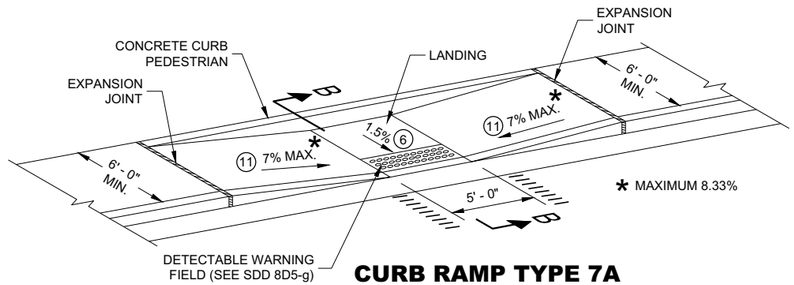
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

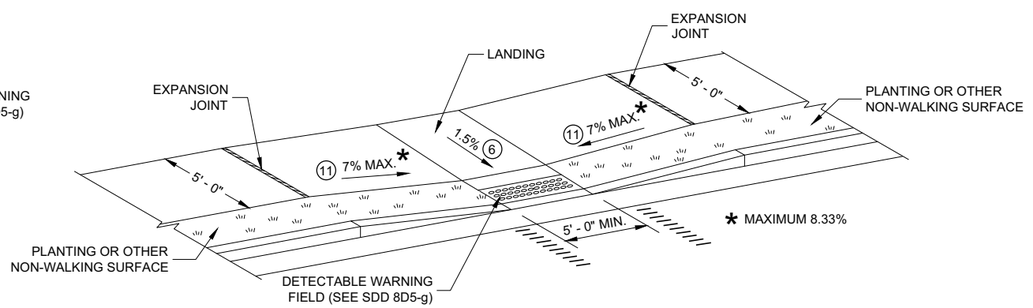
DETECTABLE WARNING AT ISLANDS

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



CURB RAMP TYPE 7A

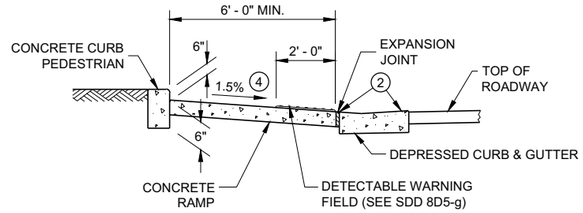
MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

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



SECTION B - B FOR TYPE 7A

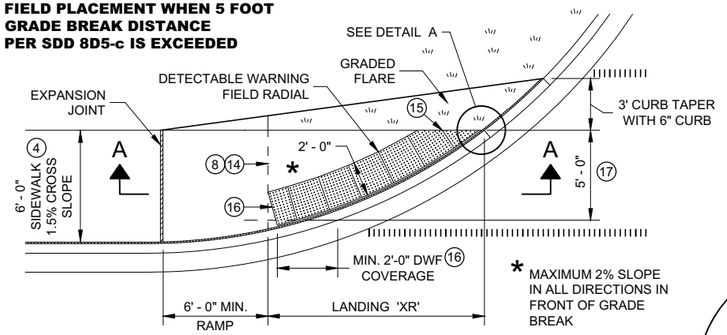
CURB RAMPS TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 08D05 - 20e

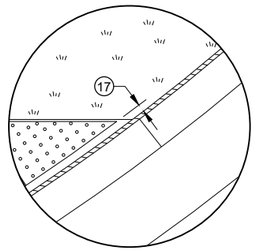
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



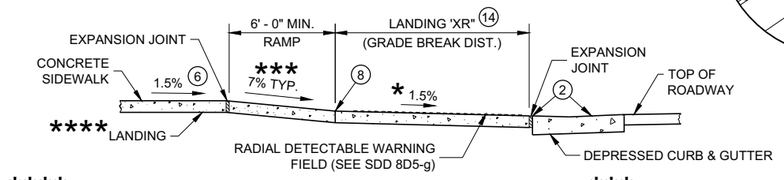
PLAN VIEW

CURB RAMP TYPE 4A1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL A

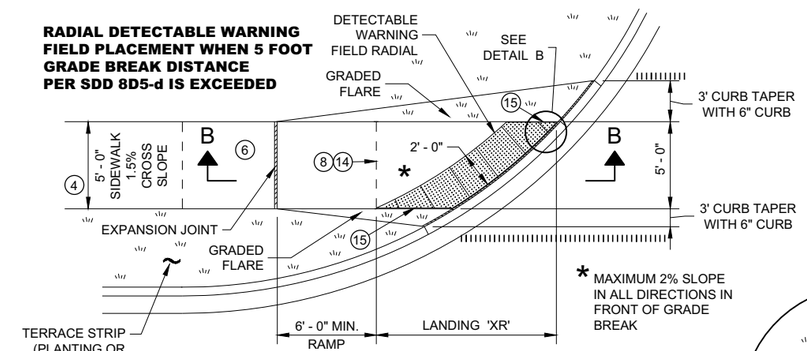


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1

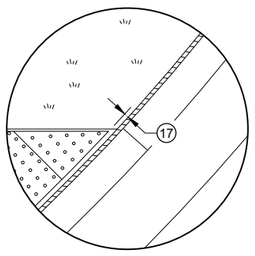
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



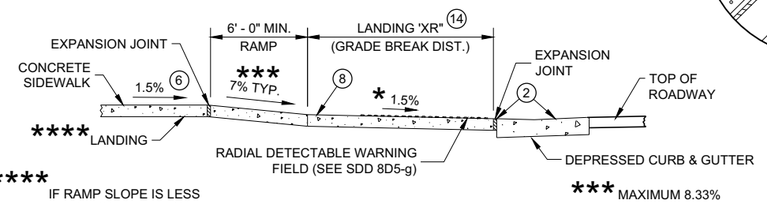
PLAN VIEW

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

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.

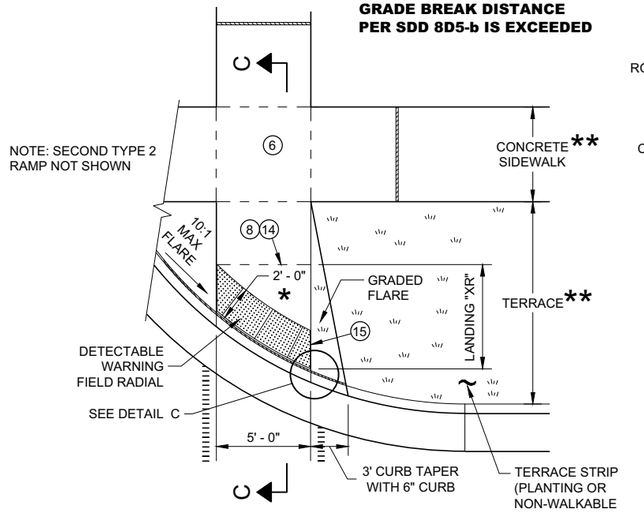
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(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 WITH IS ALLOWABLE IN FROM 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-b IS EXCEEDED

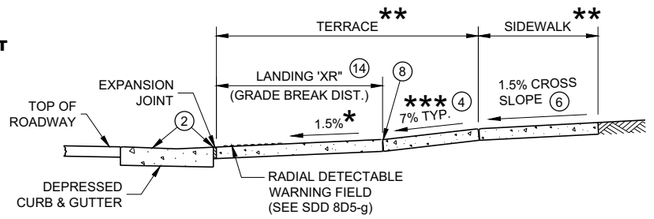


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

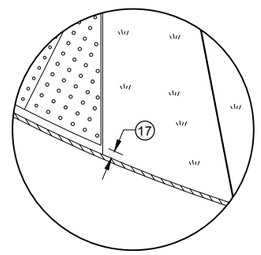


SECTION C - C FOR TYPE 2

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



DETAIL C

CURB RAMPS
RADIAL DETECTABLE WARNING FIELD APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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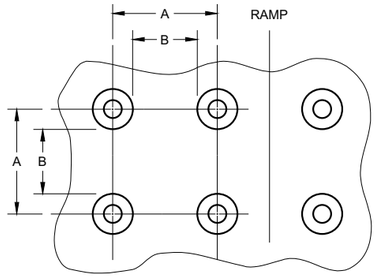
SDD 08D05 - 20f

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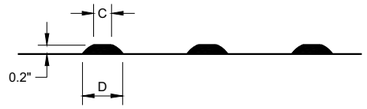
SDD 08D05 - 20f

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

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

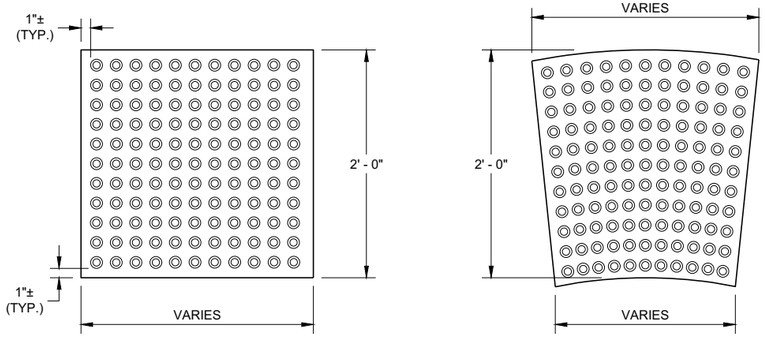


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

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.

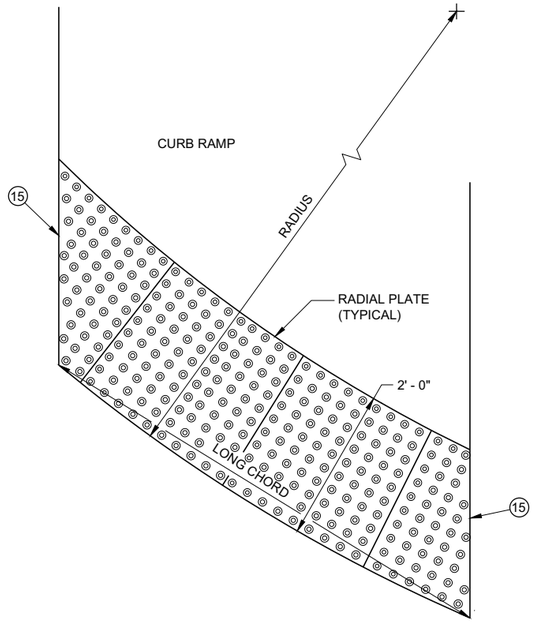
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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.

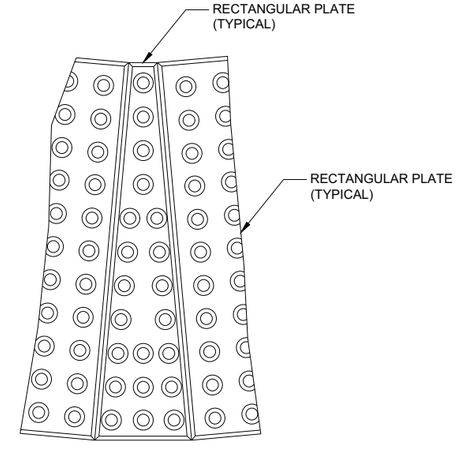
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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.



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

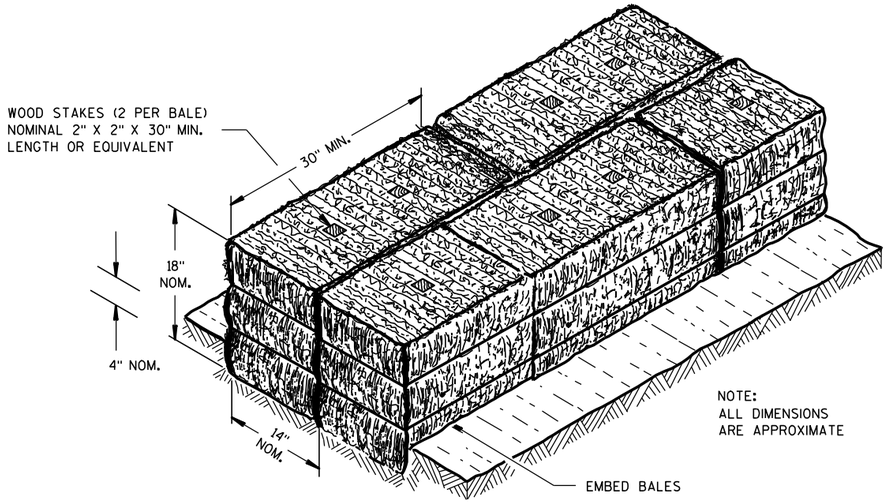
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

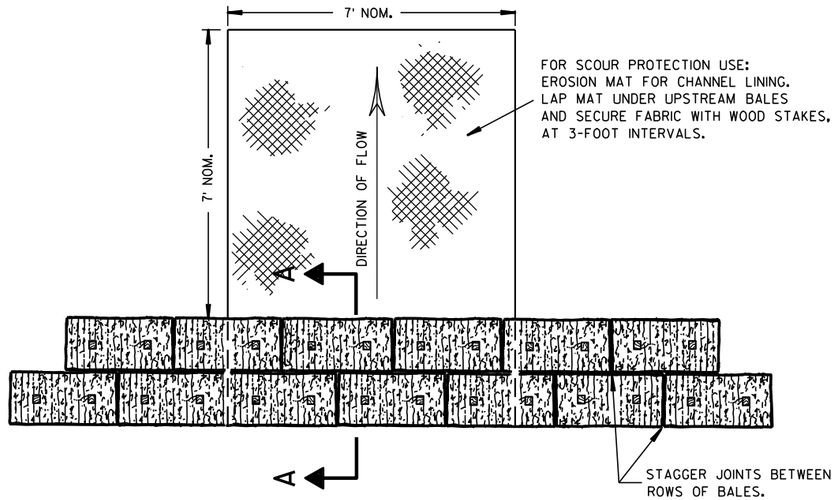
FHWA

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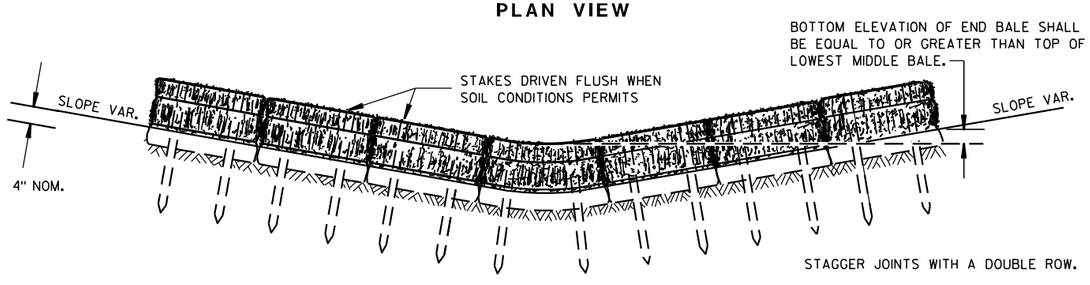
SDD 08D05 - 20g



SECTION A-A



PLAN VIEW



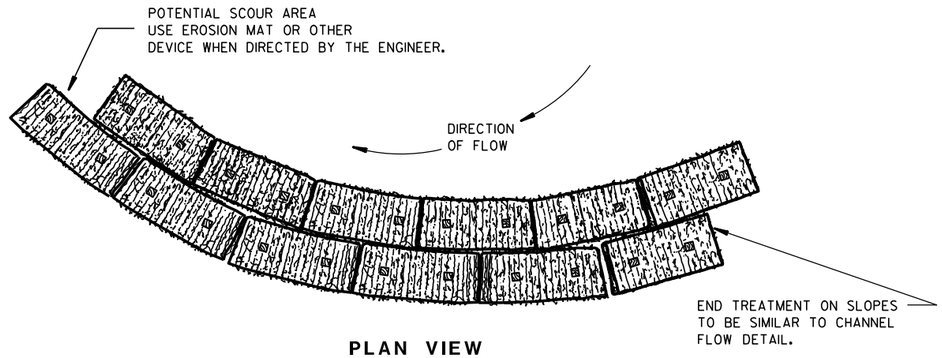
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

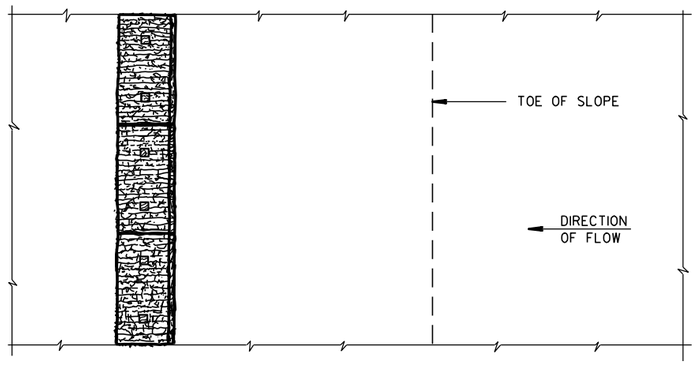
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

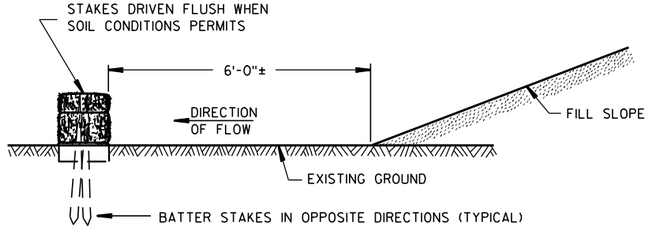


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

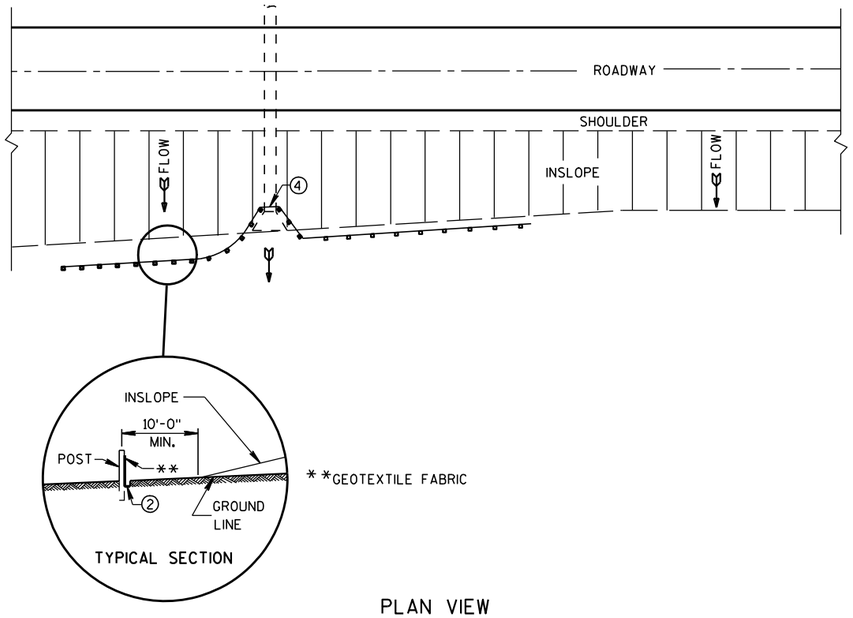
FHWA

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S.D.D. 8 E 8-3

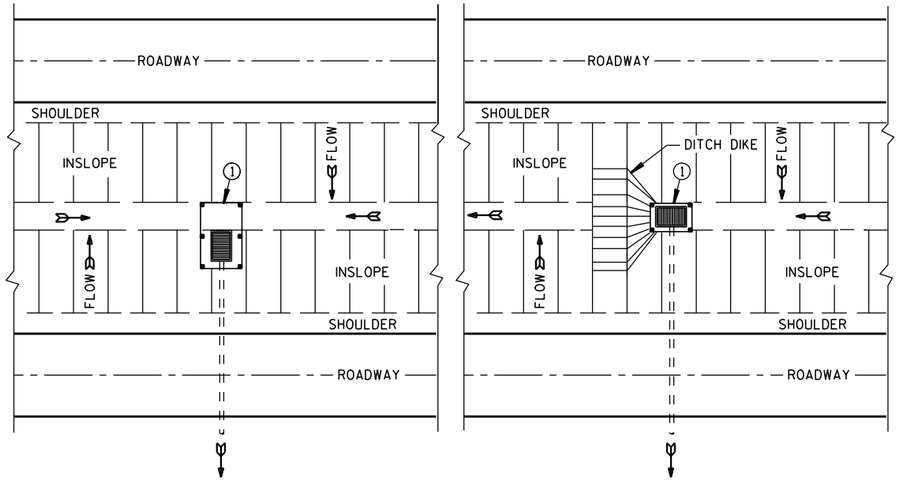
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

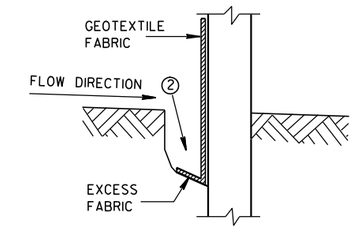
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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

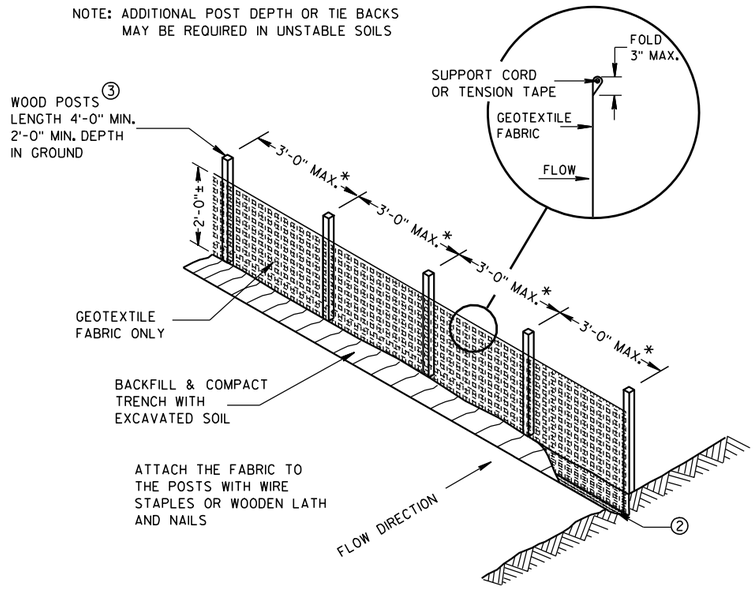
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

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

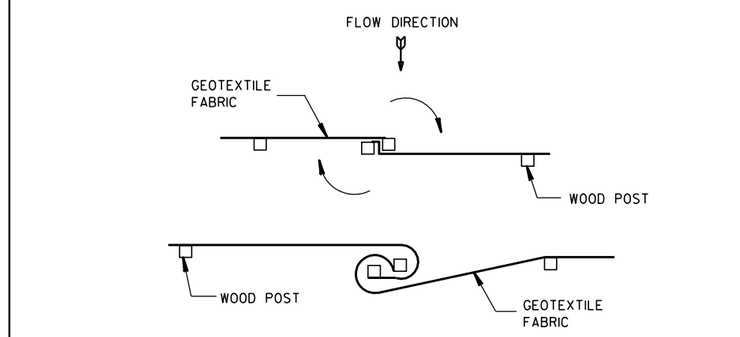


TRENCH DETAIL

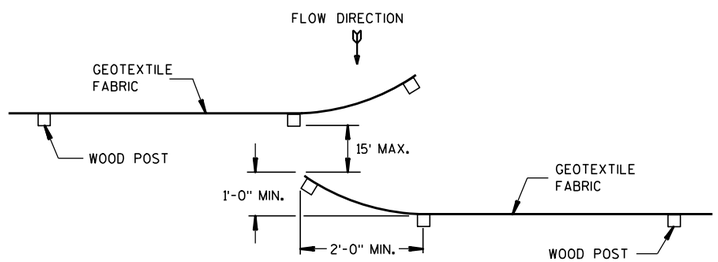


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

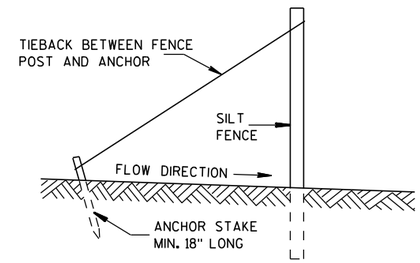


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

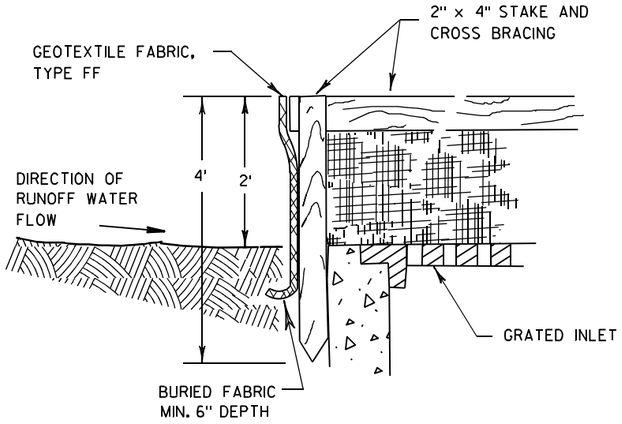
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

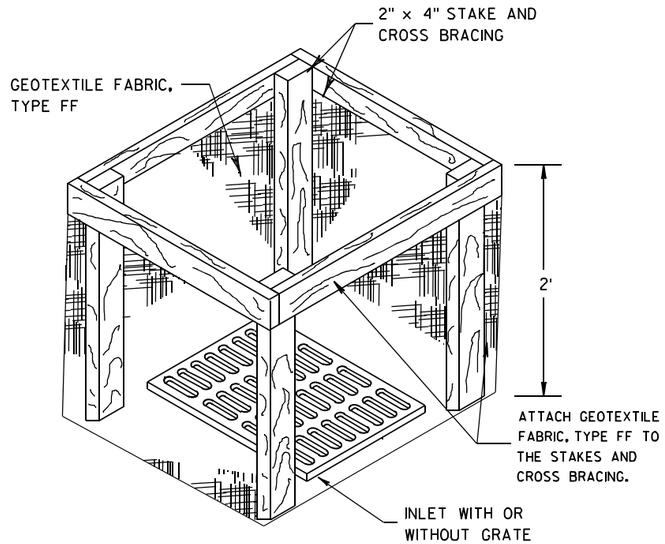
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S.D.D. 8 E 9-6

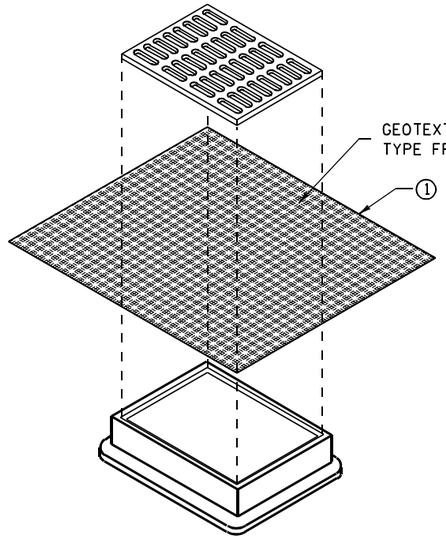
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S.D.D. 8 E 9-6



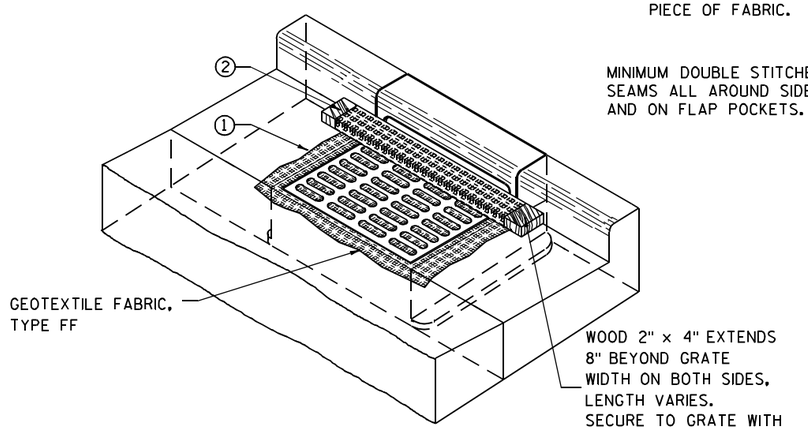


INLET PROTECTION, TYPE A

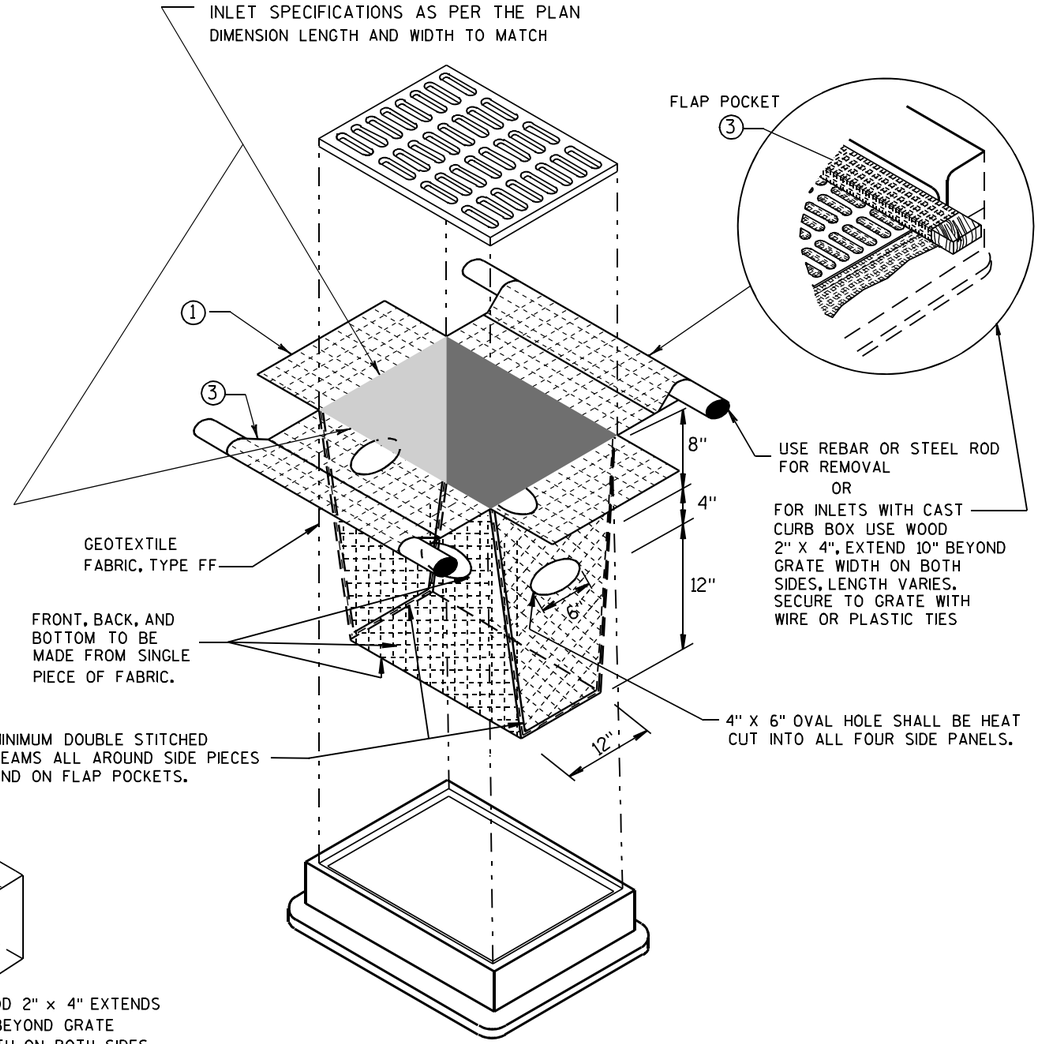


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

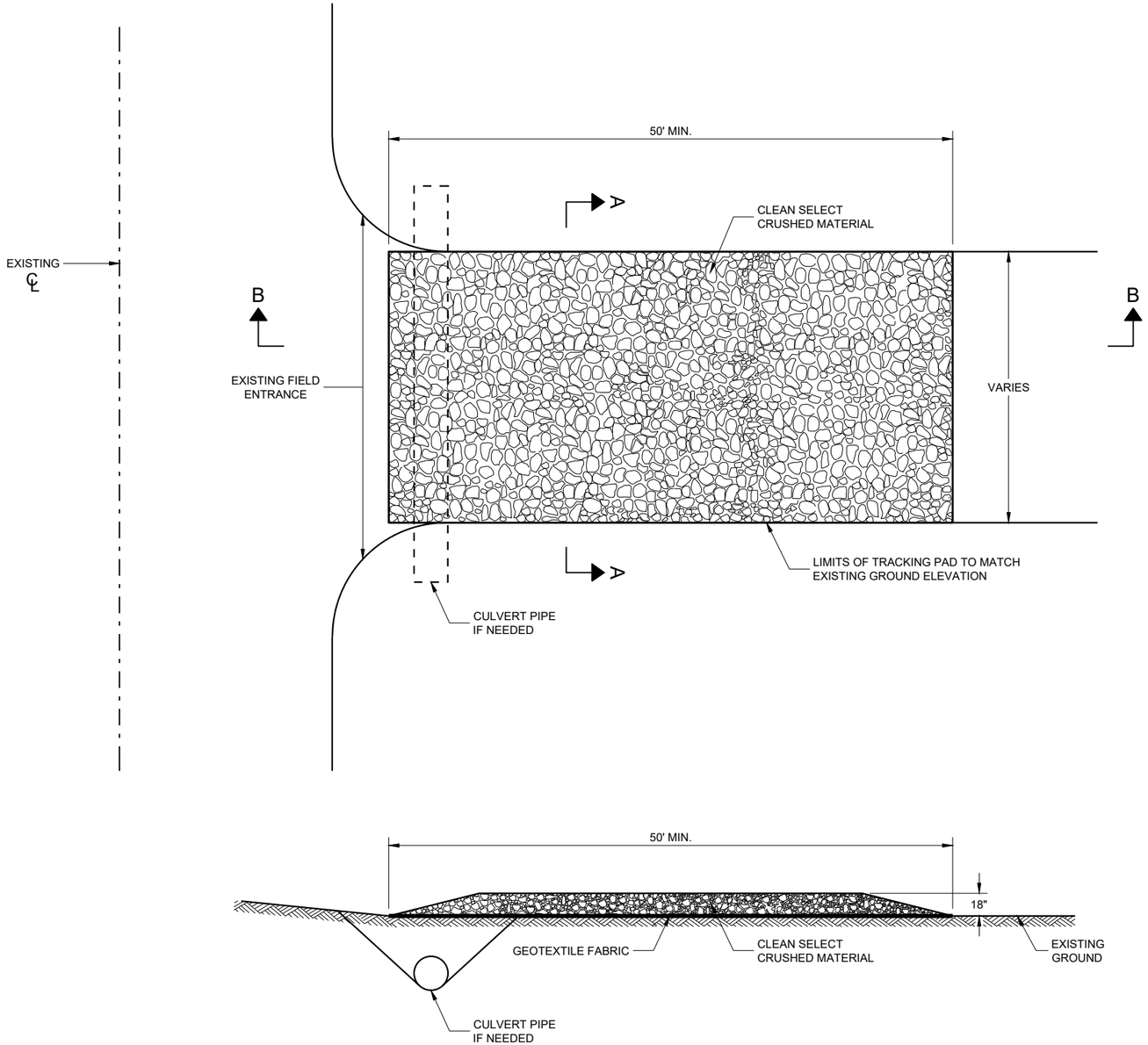
FHWA

6

S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



SECTION B - B

GENERAL NOTES

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

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

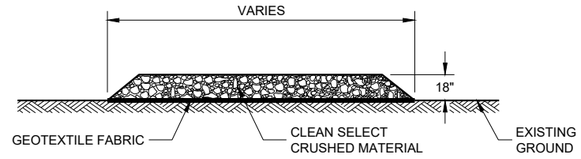
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A - A

6

SDD 08E14 - 01

TRACKING PAD

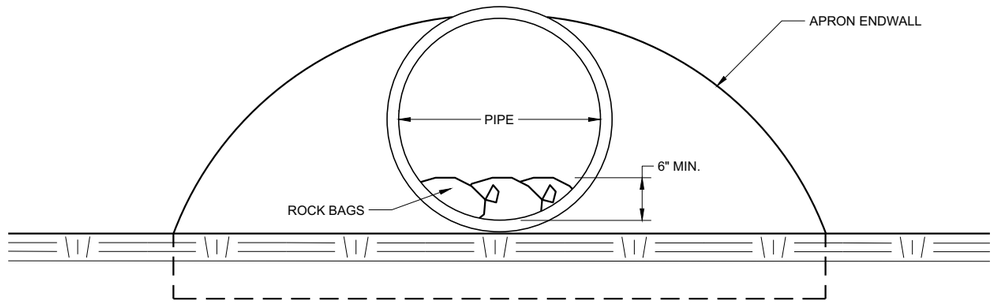
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVE ENGINEER

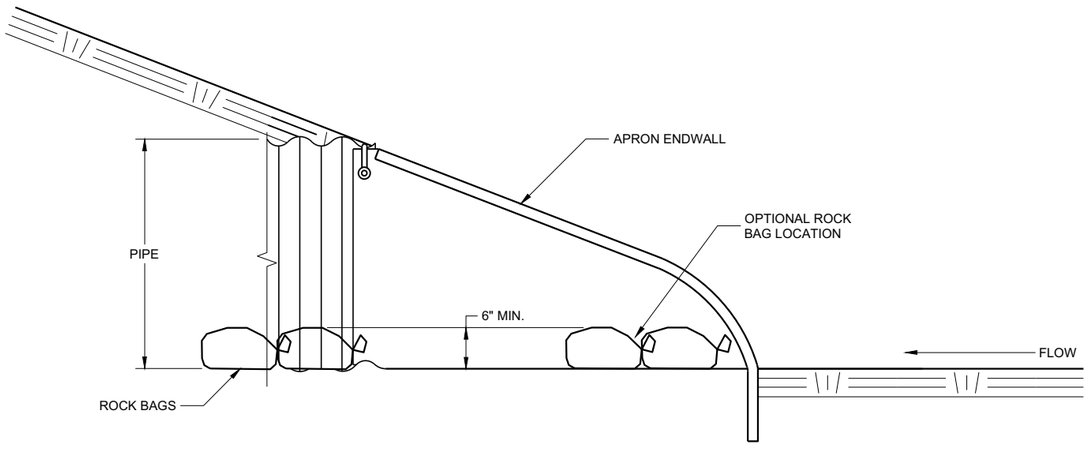
FHWA

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SDD 08E14 - 01



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

METAL APRON ENDWALLS

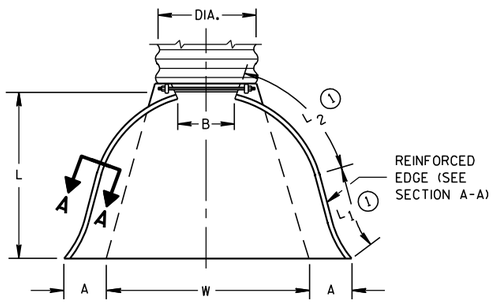
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

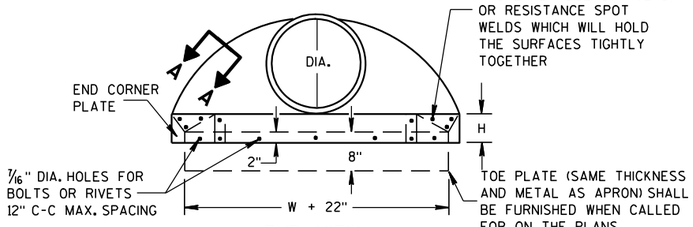
REINFORCED CONCRETE APRON ENDWALLS

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

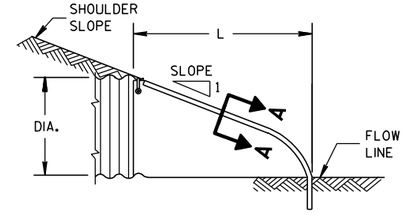
*MINIMUM
**MAXIMUM



PLAN VIEW

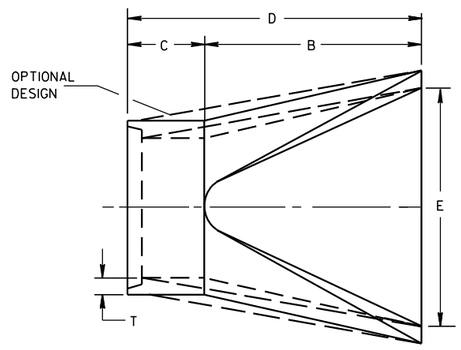


END VIEW

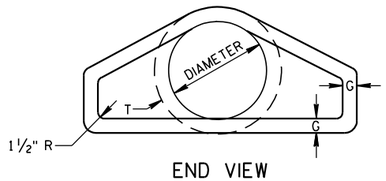


SIDE ELEVATION

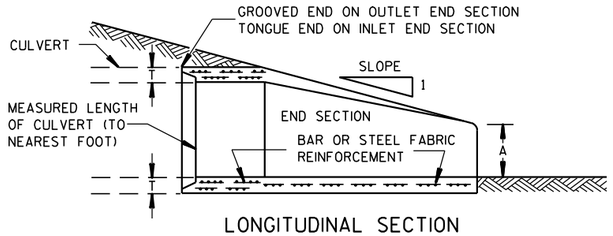
METAL ENDWALLS



PLAN

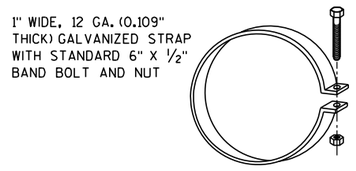


END VIEW



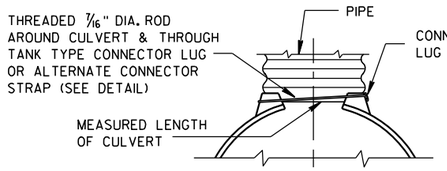
LONGITUDINAL SECTION

CONCRETE ENDWALLS

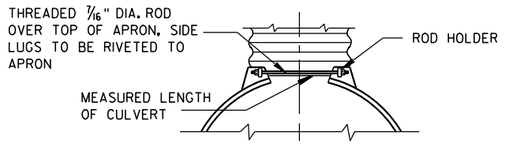


ALTERNATE FOR TYPE 1 CONNECTION

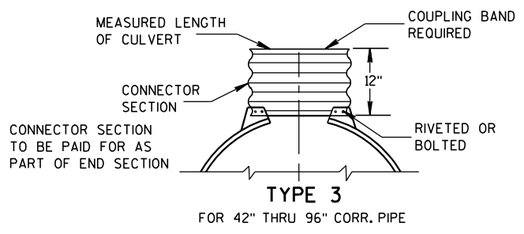
END SECTION CONNECTOR STRAP



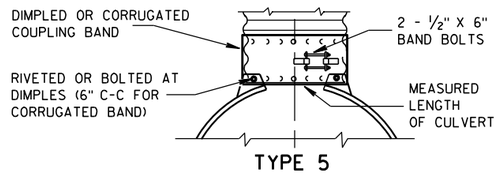
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

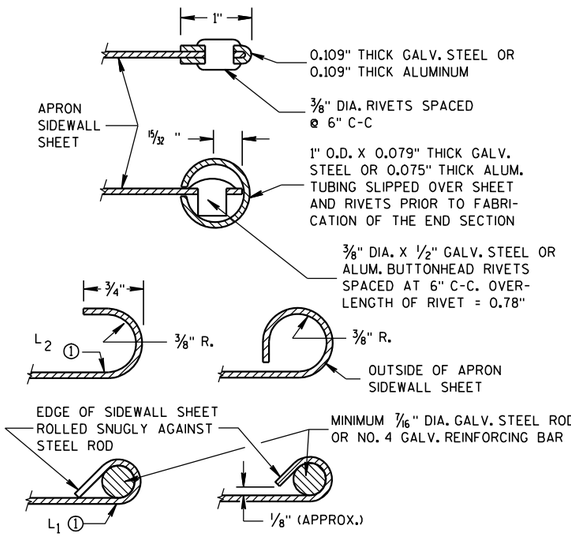
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

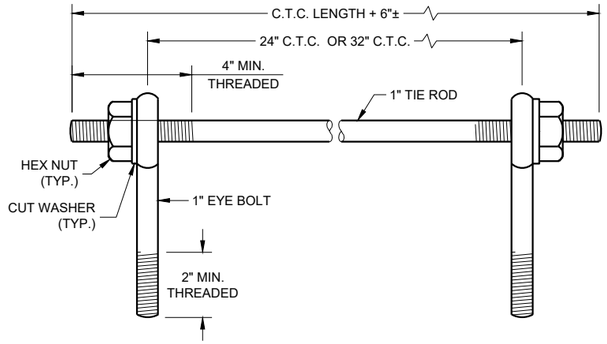
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

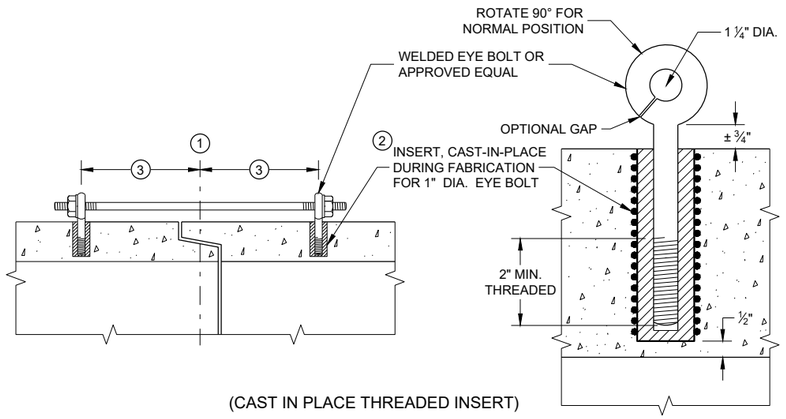
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

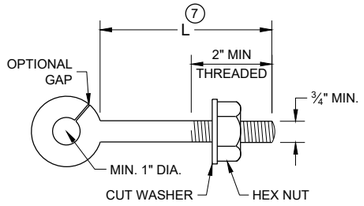
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

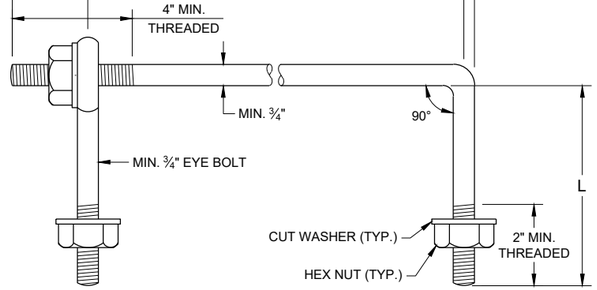
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

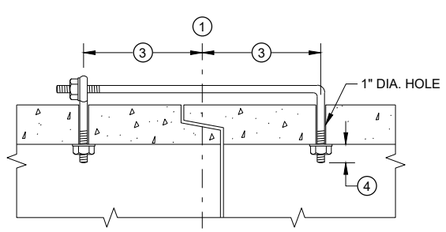


EYE BOLT (7)

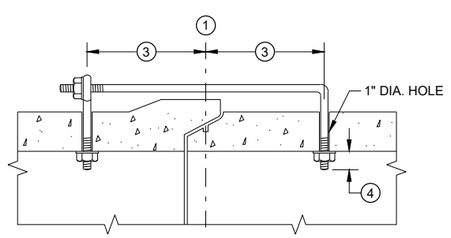
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

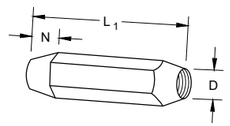
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

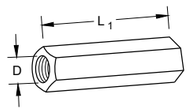
ADJUSTABLE TIE ROD TABLE

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



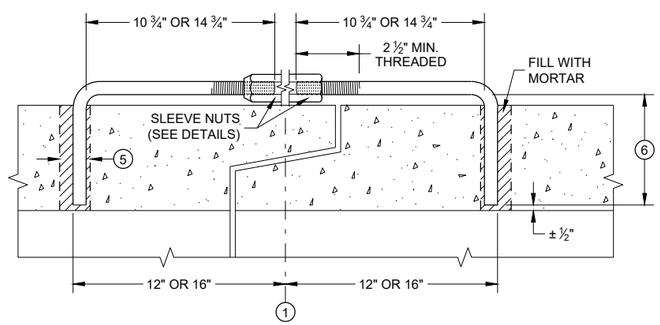
TAPERED



PLAIN

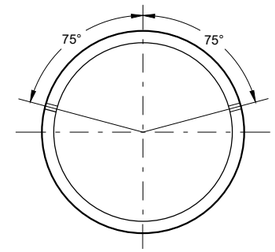
RIGHT AND LEFT THREADS

SLEEVE NUTS



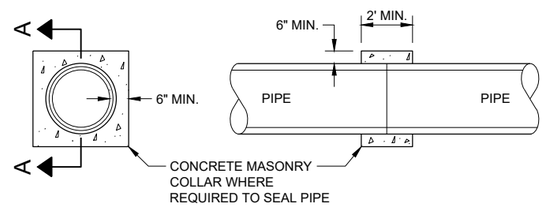
LONGITUDINAL SECTION

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

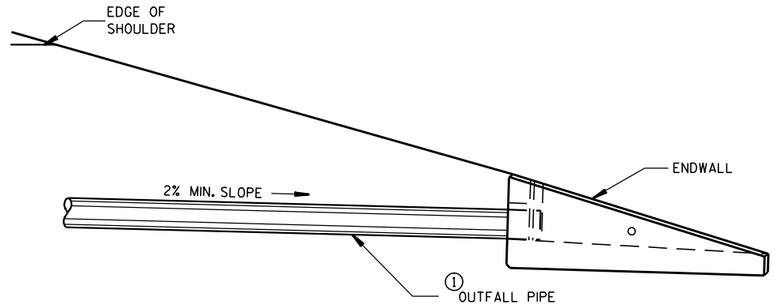
APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

SDD 08F04 - 08

SDD 08F04 - 08

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**4	6	12	5 1/4	9	8	32	36	11	2 3/8	6 1/2	4
6	8	14	7 1/4	11	10	42	44	13	3 5/8	8 1/2	6

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION 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.

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

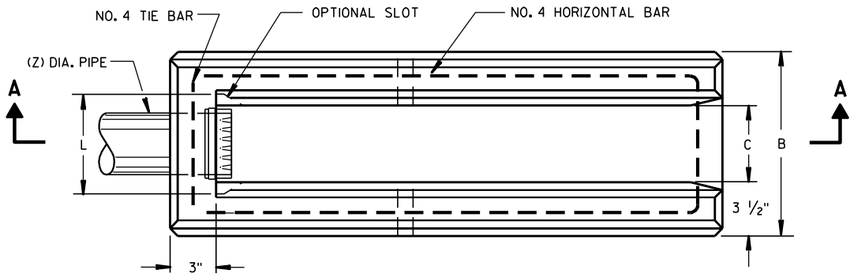
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

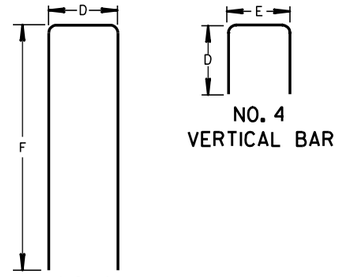
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

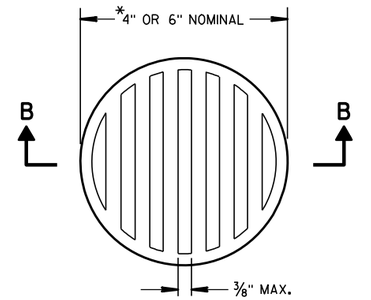
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



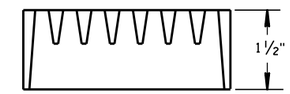
PLAN VIEW



BAR STEEL REINFORCEMENT DETAILS



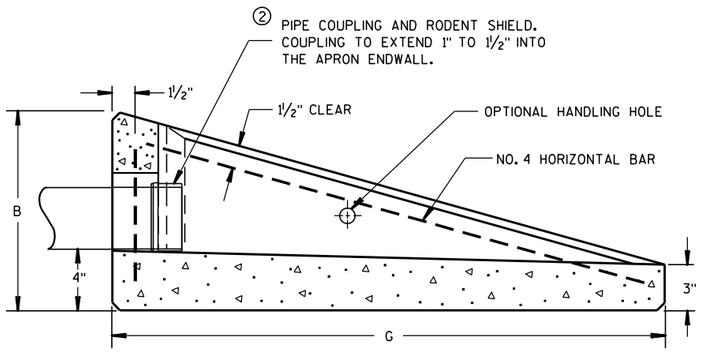
NOTE: ORIENT SHIELD SO SLOTS ARE VERTICAL.



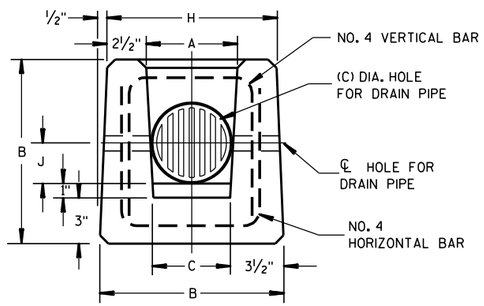
SECTION B-B

② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.



SECTION A-A



END VIEW

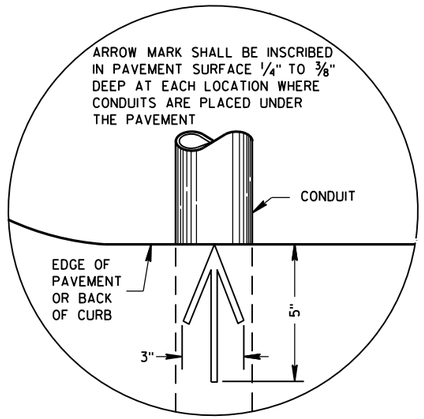
CONCRETE APRON ENDWALL FOR UNDERDRAIN

REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

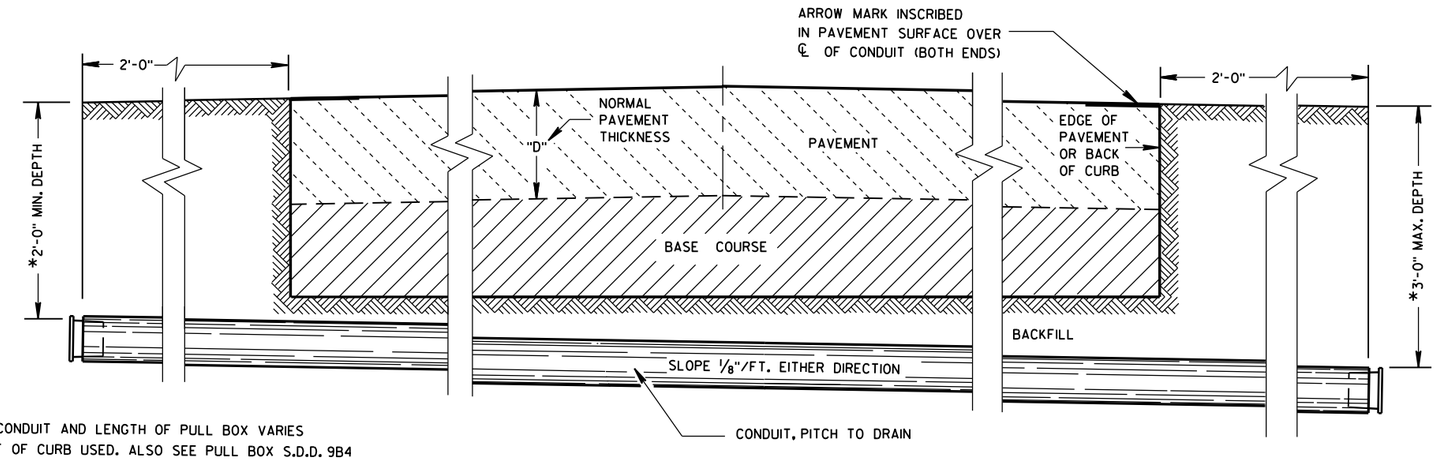
APPROVED
3/10/98 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 6-4



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

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

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

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

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

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

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

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

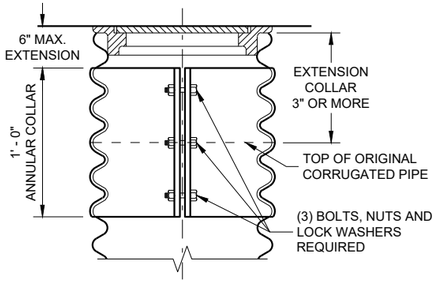
CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

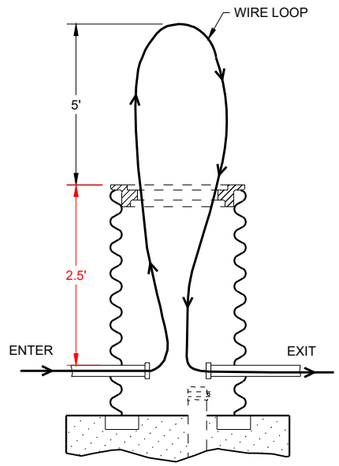
APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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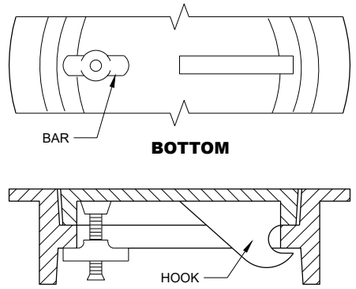
S.D.D. 9 B 2-10



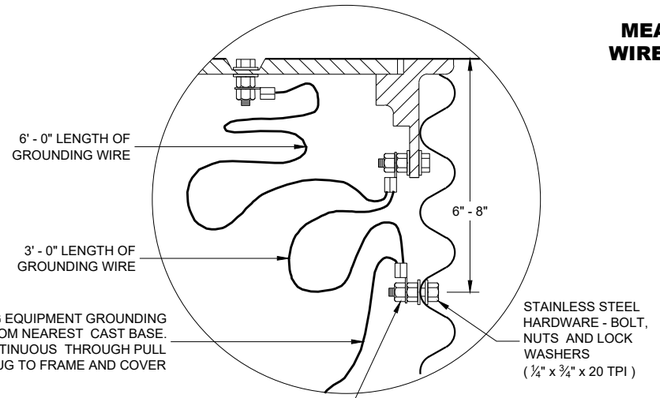
CORRUGATED PIPE EXTENDER



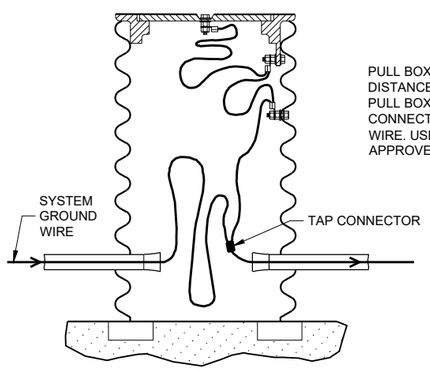
MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



ALTERNATE COVER (LOCKING)
TIGHTENING BAR TYPE

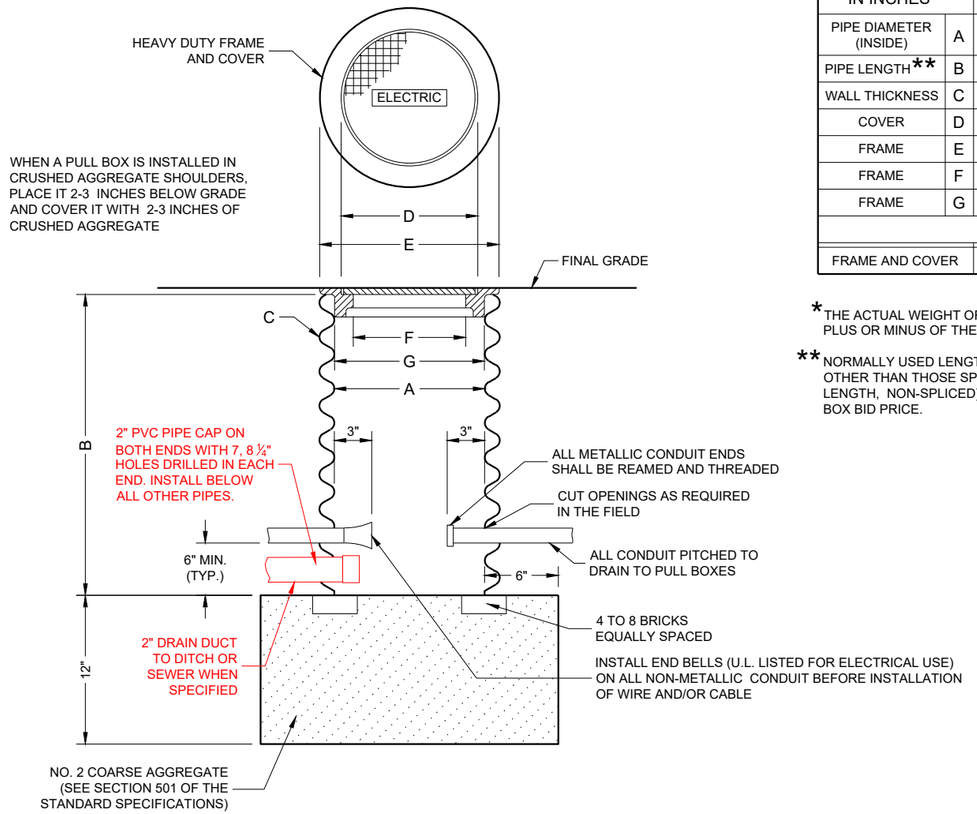


EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

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

ALL 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.

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
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 420

FHWA

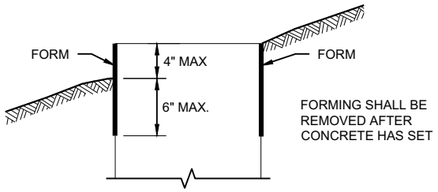
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FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



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.

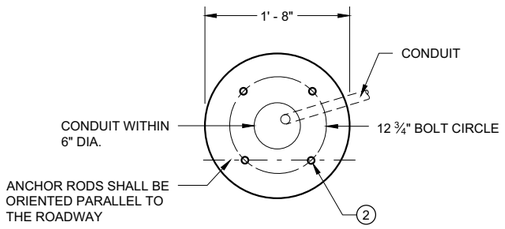
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

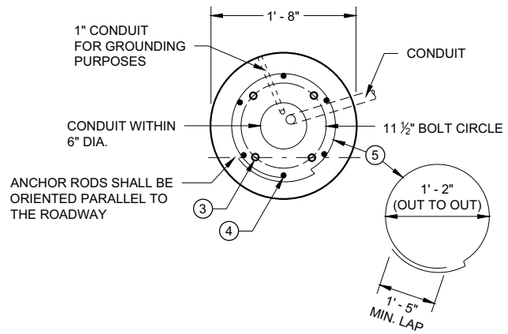
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

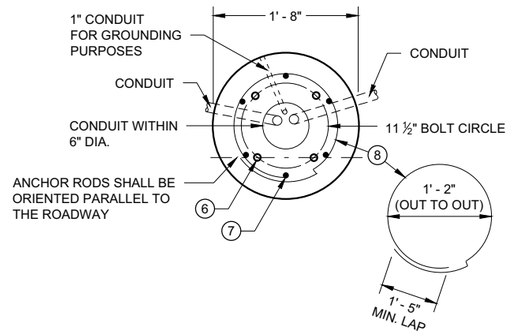
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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

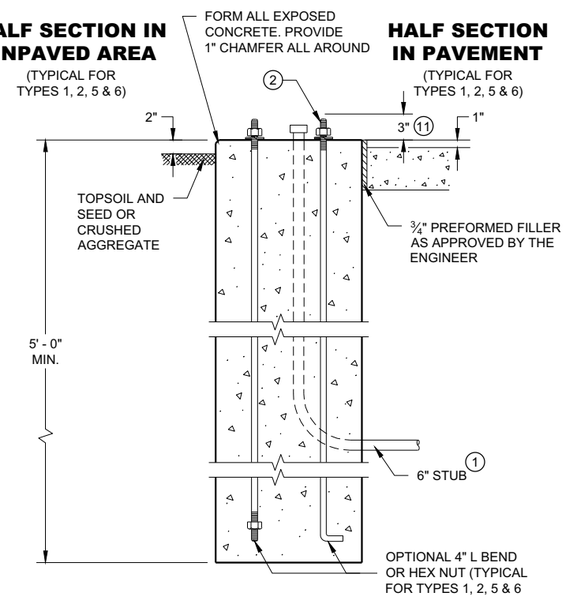
(10) ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

(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.

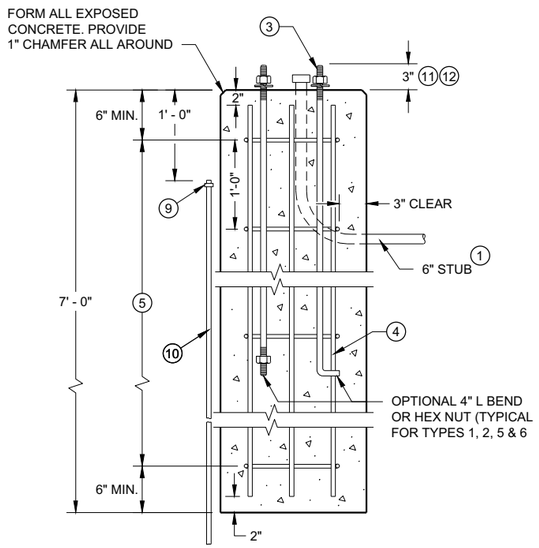
(12) FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

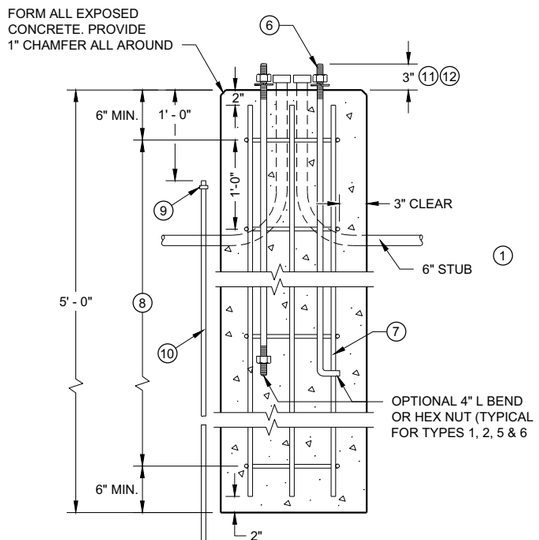
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



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
FHWA

6
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.

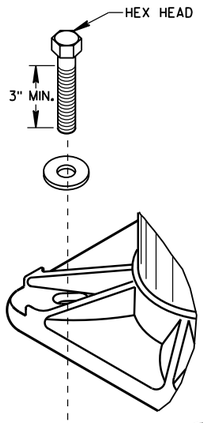
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

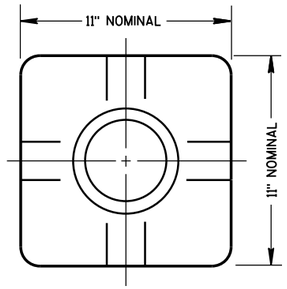
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

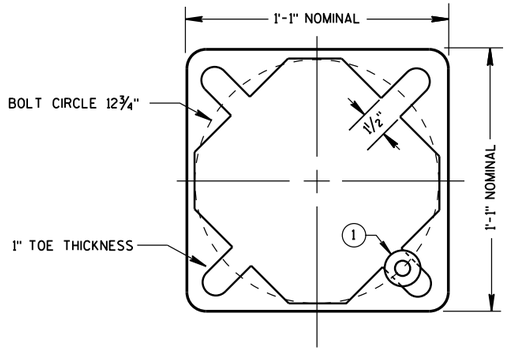
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

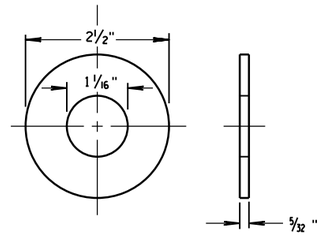




TOP VIEW
(PEDESTAL BASE)

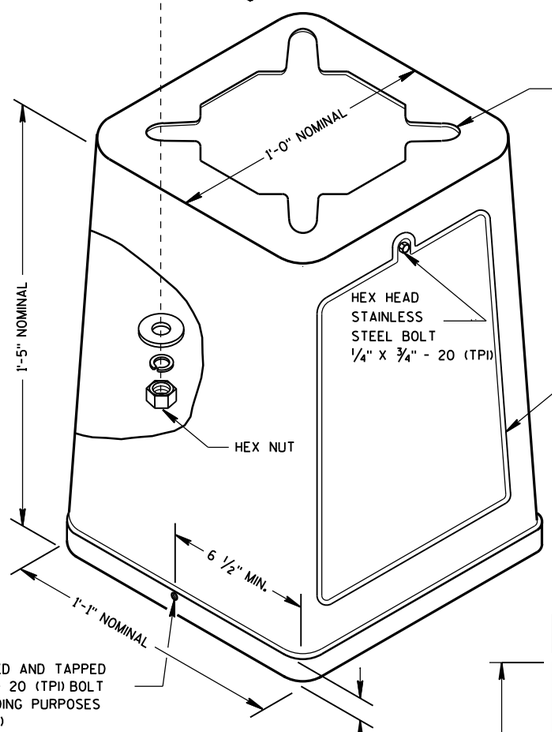


BOTTOM VIEW
(PEDESTAL BASE)

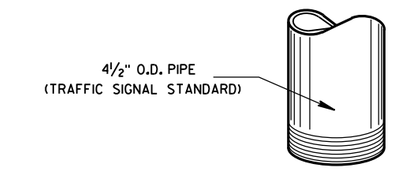


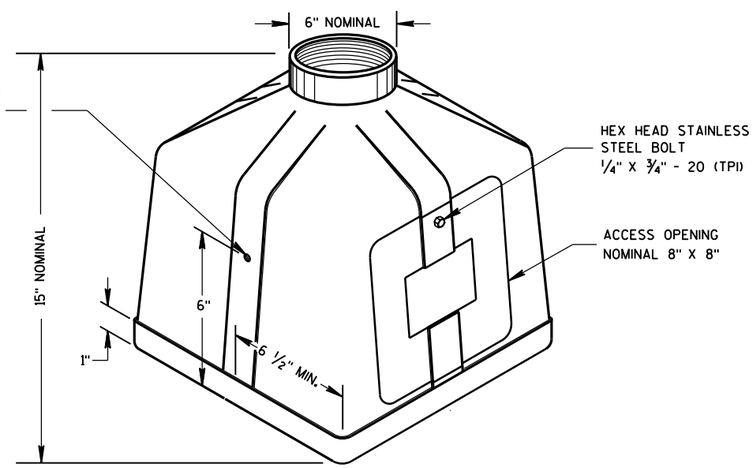
ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)



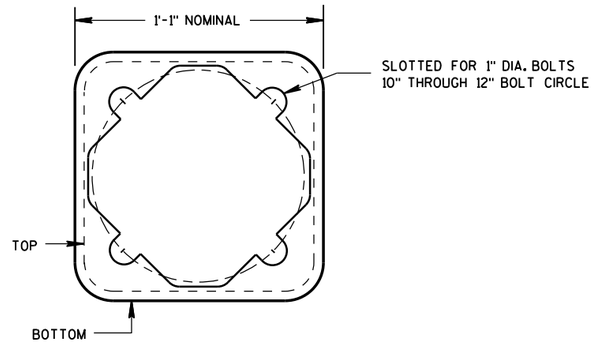
ISOMETRIC VIEW



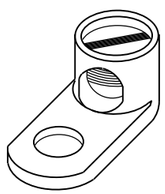


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

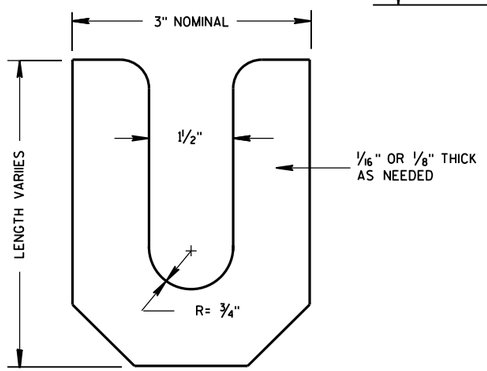


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

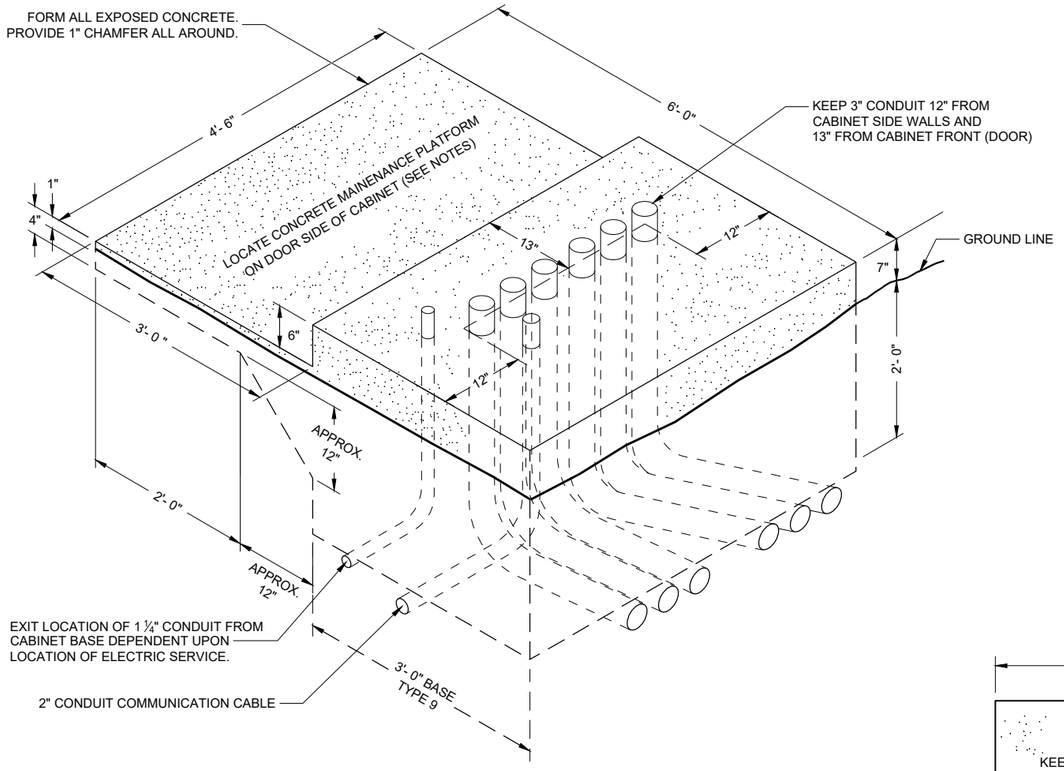
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 9 C 3-4

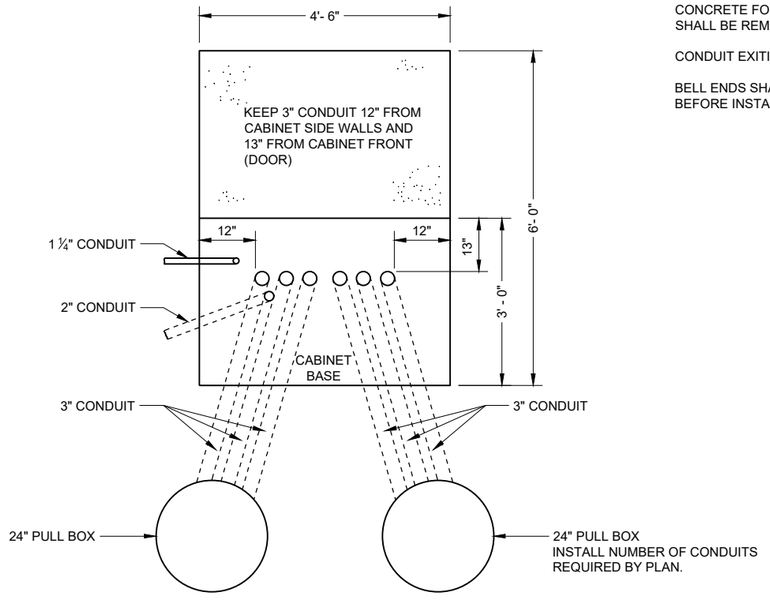
SDD 09C06 Concrete Control Cabinet Base, Type 9, Special



ISOMETRIC VIEW

TYPE 9 SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9 SPECIAL

GENERAL NOTES

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

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

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

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

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

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

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

CONDUIT EXITING THE CONCRETE BASE (SIX 3") SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

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

CONCRETE CONTROL CABINET BASE TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE

/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI 423

FHWA

6

SDD 09C06 - 07

GENERAL NOTES

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

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

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

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 TIMES THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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 OF CABLE OR WIRE.

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

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

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.

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER RUN) EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

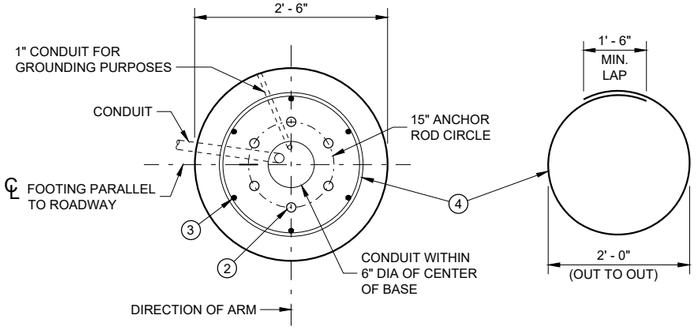
(2) (6) 1 ½ DIA. X 4' - 4" ANCHOR RODS

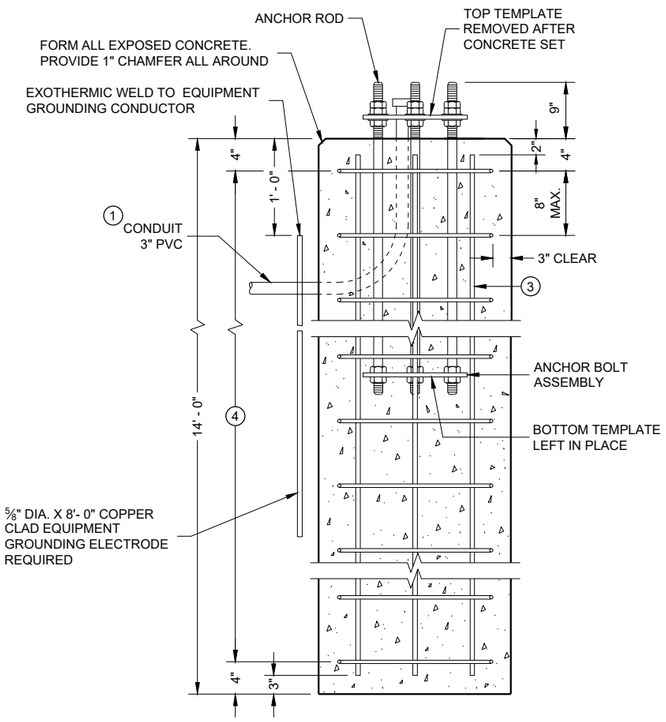
(3) (6) NO. 6 X 13' - 7" BAR STEEL REINFORCEMENT.

(4) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE .....fy = 55,000 p.s.i.
WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.

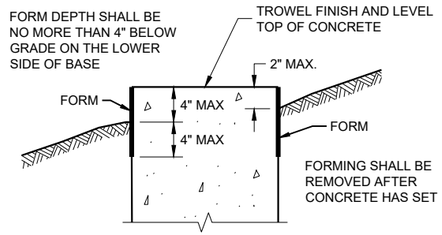
QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122



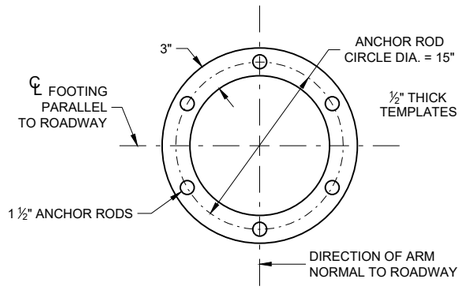


CONCRETE BASE, TYPE 10
(FOR TYPE 9, TYPE 10 AND OVER HEIGHT (OH) POLES)

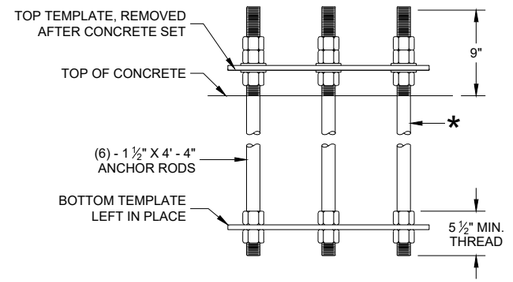
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE SDD 9C13 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demerbilek — WIND LOADED STRUCTU PROGRAM LEADER
FHWA

6

SDD 09C11 - 10

GENERAL NOTES

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

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS.

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

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

CONDUIT SIZE AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4 ½ INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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

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

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

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1-INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4-FOOT COIL OF WIRE ABOVE THE CONCRETE BASE, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL WAY SHALL BE 24-INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18-INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36-INCHES, (GREATER THAN 36-INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.

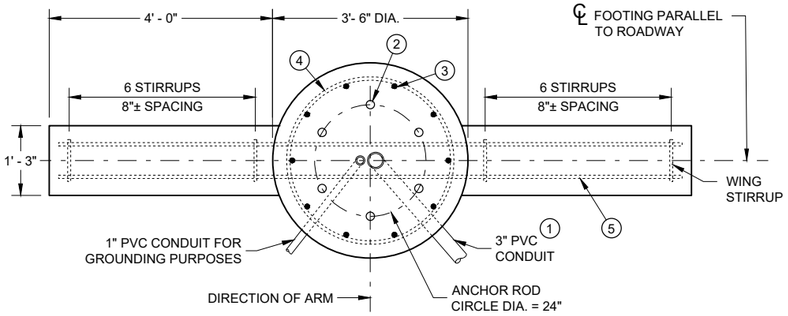
(2) (6) 1 ¾" DIA. X 7' - 2" ANCHOR RODS

(3) (10) NO. 6 X 14' - 1" BAR STEEL VERTICAL REINFORCEMENT.

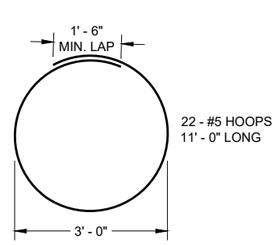
(4) (22) NO. 5 X 11'- 0" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

(5) (10) NO. 5 X 11' - 0" BAR STEEL HORIZONTAL REINFORCEMENT

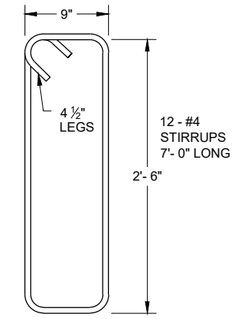
CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE .....fy = 55,000 p.s.i.
WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.



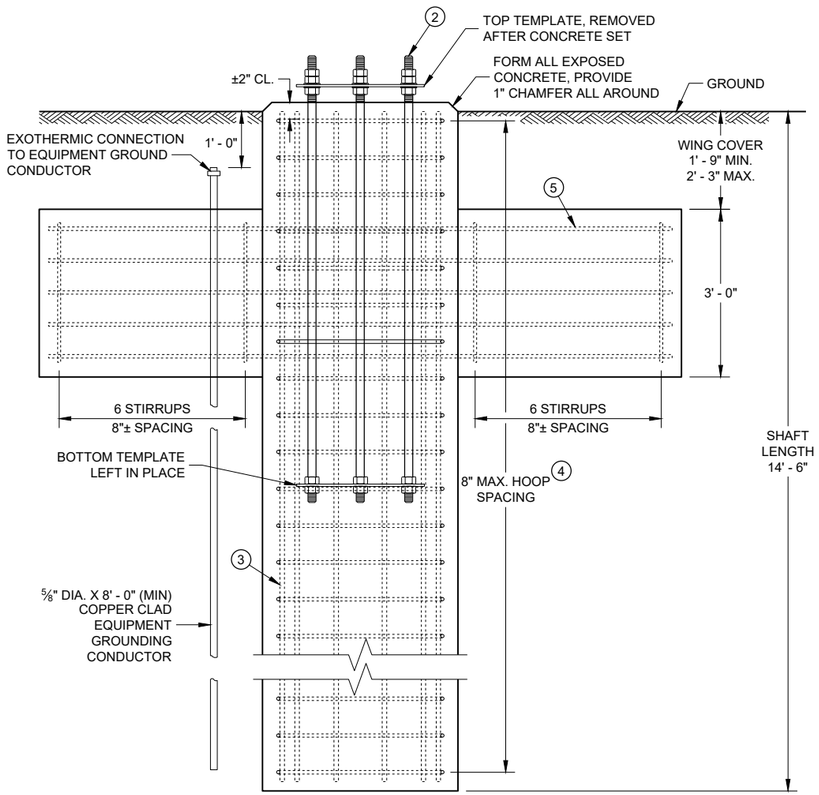
PLAN VIEW



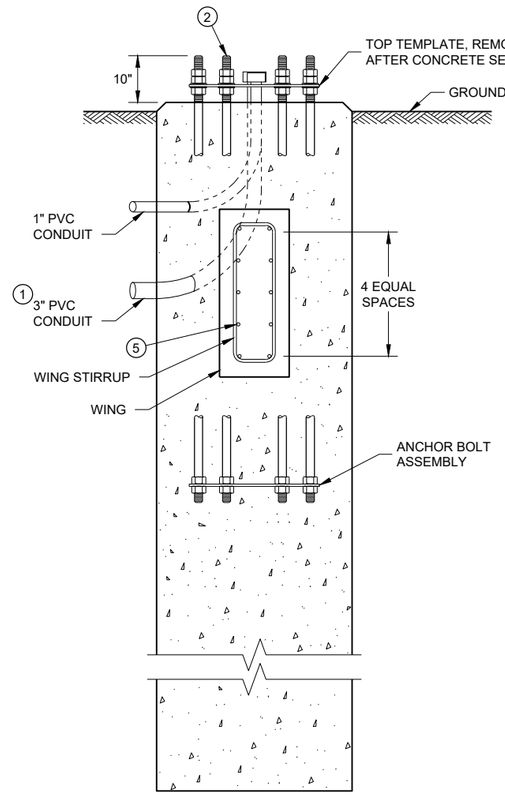
HOOP DETAIL



WING STIRRUP DETAIL



ELEVATION VIEW
(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)



(HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY)

CONCRETE BASE, TYPE 13
(FOR TYPE 12, TYPE 13 AND OVER HEIGHT (OH) POLES)

CONCRETE = 6.3 CUBIC YARD
H.S. REINFORCEMENT = 635 LBS.

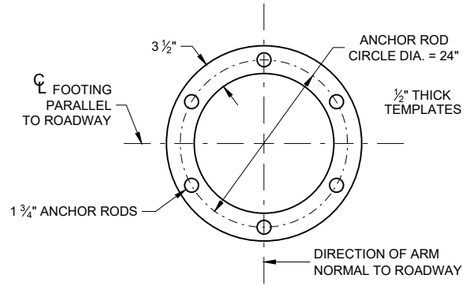
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE 9C13 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION

CONCRETE BASE TYPE 13

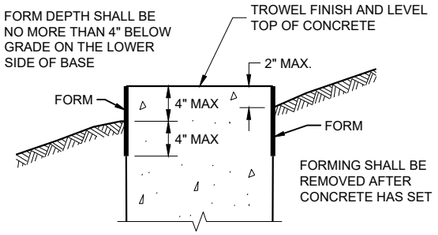
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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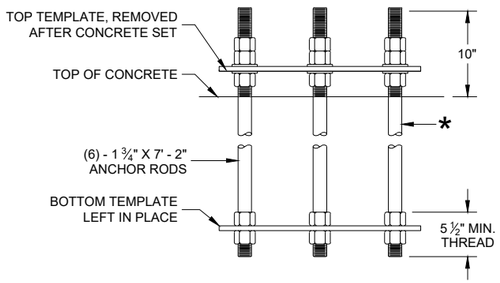
SDD 09C12 - 09a



TOP AND BOTTOM TEMPLATE



FORMING DETAIL



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 11" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017
DATE
/S/ Ahmet Demirbilek
WIND LOADED STRUCTU
PROGRAM LEADER

FHWA

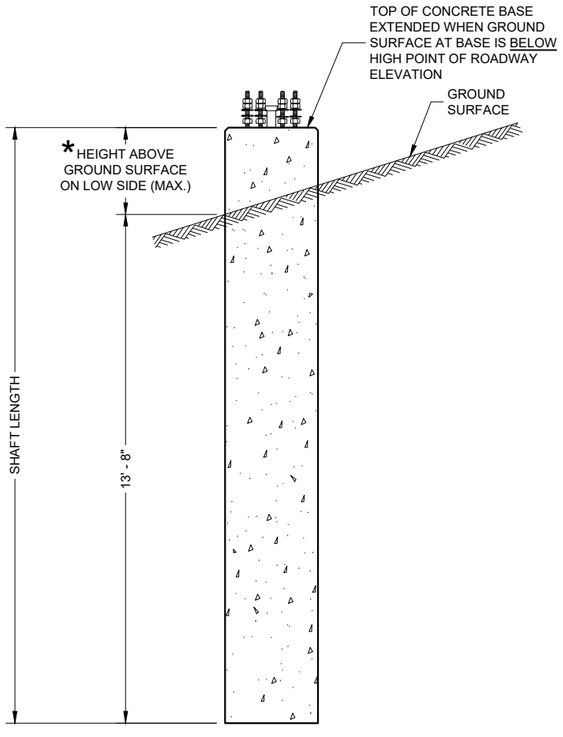
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SDD 09C12 - 09b

SDD 09C12 - 09b

REINFORCEMENT AND CONCRETE QUANTITIES ADJUSTED FOR EXTENDED TYPE 10 CONCRETE BASE

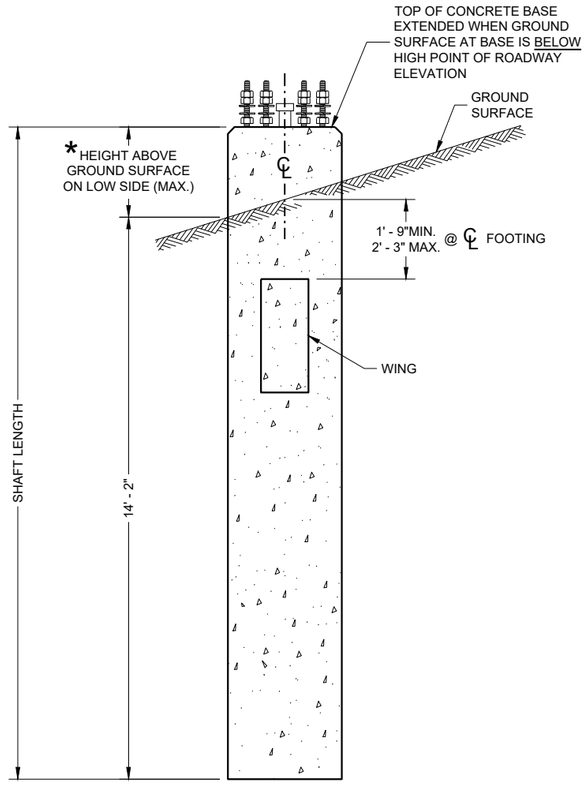
HEIGHT INCREASE REQUIRED	*HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAX.)	SHAFT LENGTH	LENGTH OF #6 VERTICAL REINF.	NO. OF #5 HOOPS	CU. YD. OF CONCRETE	LBS. OF HOOP BAR STEEL	LBS. OF VERTICAL STEEL
>0" TO 6"	10"	14' - 6"	14' - 1"	22	2.6	180	127
>6" TO 1' - 0"	1' - 4"	15' - 0"	14' - 7"	23	2.7	188	131
>1' - 0" TO 1' - 6"	1' - 10"	15' - 6"	15' - 1"	24	2.8	196	136
>1' - 6" TO 2 - 0"	2' - 4"	16' - 0"	15' - 7"	24	2.9	196	141



CONCRETE BASE TYPE 10 (EXTENDED)

REINFORCEMENT AND CONCRETE QUANTITIES ADJUSTED FOR EXTENDED TYPE 13 CONCRETE BASE

HEIGHT INCREASE REQUIRED	*HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAX.)	SHAFT LENGTH	LENGTH OF #6 VERTICAL REINF.	NO. OF #5 HOOPS	CU. YD. OF CONCRETE	LBS. OF H.S. BAR STEEL
>0" TO 6"	10"	15' - 0"	14' - 7"	23	6.5	654
>6" TO 1' - 0"	1' - 4"	15' - 6"	15' - 1"	24	6.6	673
>1' - 0" TO 1' - 6"	1' - 10"	16' - 0"	15' - 7"	24	6.8	680
>1' - 6" TO 2 - 0"	2' - 4"	16' - 6"	16' - 1"	25	7.0	699



CONCRETE BASE TYPE 13 (EXTENDED)

CONCRETE BASE TYPE 10 AND TYPE13 EXTENSION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 427

FHWA

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SDD 09C13 - 03

GENERAL NOTES

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

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

ORIENT ANCHOR RODS IN FOUNDATION AND PROVIDE ANCHOR RODS STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

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

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

FORM ALL EXPOSED CONCRETE CORNERS WITH 1" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 TIMES THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 ½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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 OF CABLE OR WIRE.

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

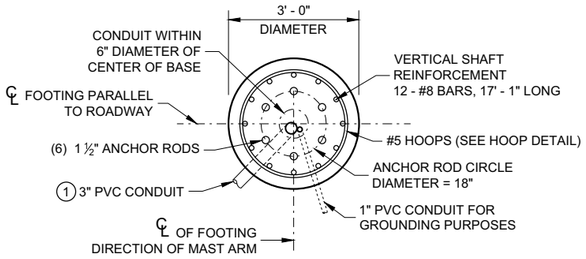
A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

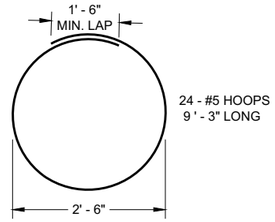
THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER RUN) EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

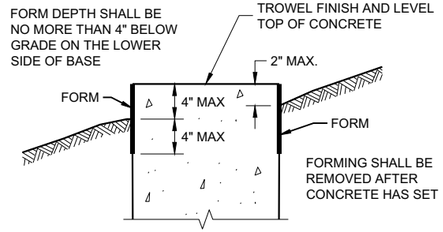
CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION).....fy = 55,000 p.s.i.
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.



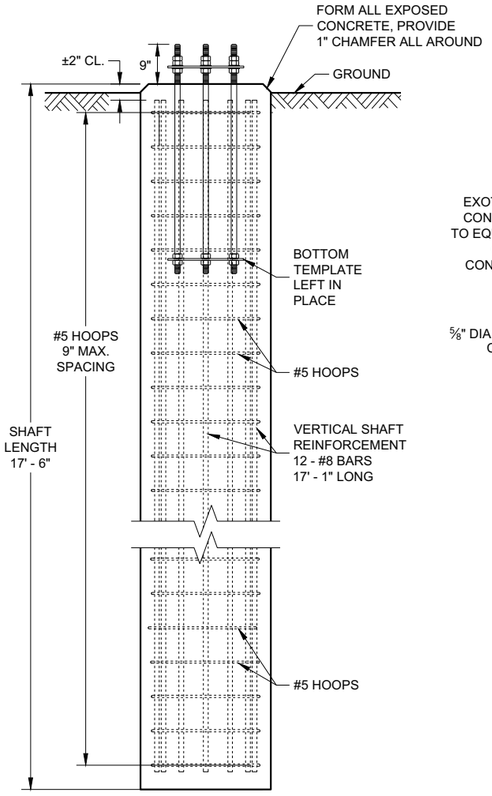
PLAN VIEW



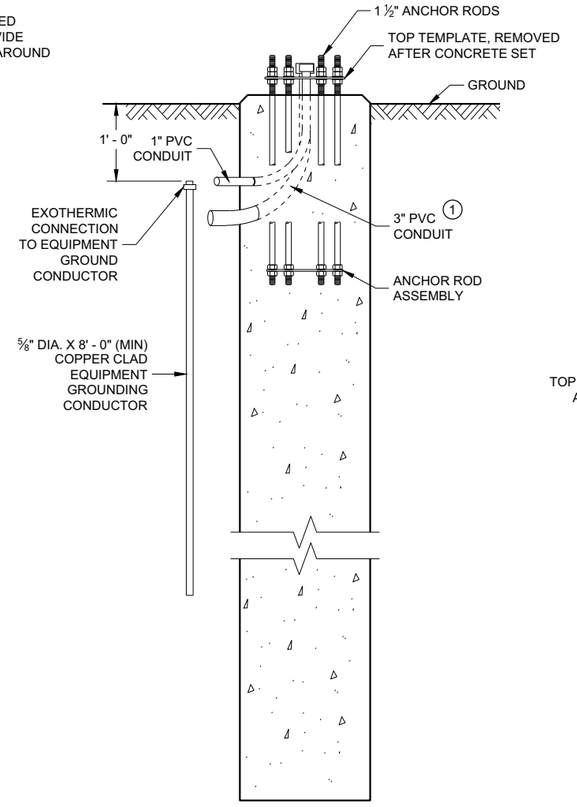
HOOP DETAIL



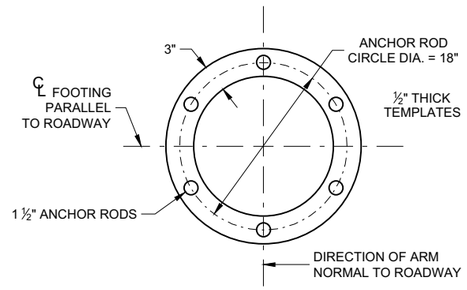
FORMING DETAIL



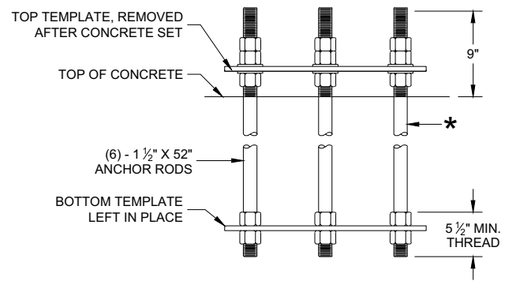
ELEVATION VIEW
(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)



SIDE VIEW
(HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY)



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE, TYPE 10 SPECIAL
(FOR TYPE 9 SPECIAL AND TYPE 10 SPECIAL POLES)

CONCRETE = 4.6 CUBIC YARD
H.S. REINFORCEMENT = 779 LBS.

FOR USE WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 10 SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 — DATE
/S/ Alex Crabtree — WIND LOADED STRUCTU PROGRAM LEADER
FHWA

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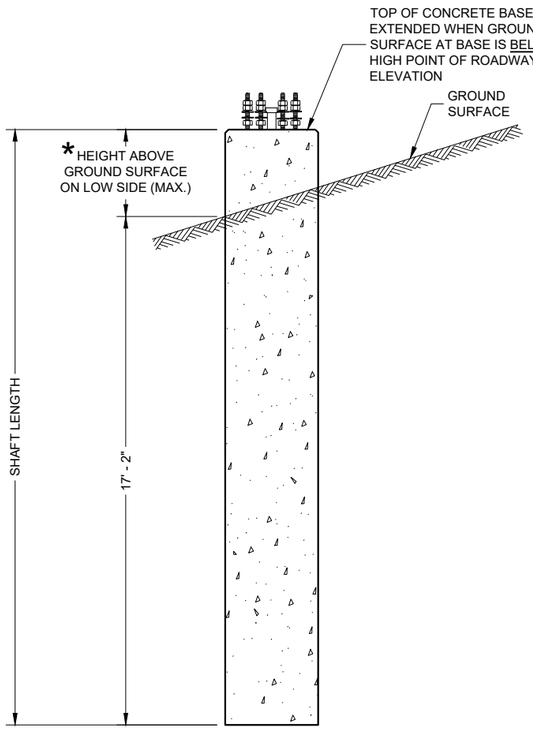
SDD 09C15 - 01

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SDD 09C15 - 01

REINFORCEMENT AND CONCRETE QUANTITIES
ADJUSTED FOR EXTENDED TYPE 10 SPECIAL CONCRETE BASE

HEIGHT INCREASE REQUIRED	*HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAX.)	SHAFT LENGTH	LENGTH OF #8 VERTICAL REINF.	NO. OF #5 HOOPS	CU. YD. OF CONCRETE	LBS. OF HOOP BAR STEEL	LBS. OF VERTICAL STEEL
>0" TO 6"	10"	18' - 0"	17' - 7"	25	4.7	241	563
>6" TO 1' - 0"	1' - 4"	18' - 6"	18' - 1"	25	4.8	241	579
>1' - 0" TO 1' - 6"	1' - 10"	19' - 0"	18' - 7"	26	5.0	251	595
>1' - 6" TO 2 - 0"	2' - 4"	19' - 6"	19' - 1"	27	5.1	260	611



CONCRETE BASE TYPE 10 SPECIAL (EXTENDED)

CONCRETE BASE TYPE 10 SPECIAL EXTENSION

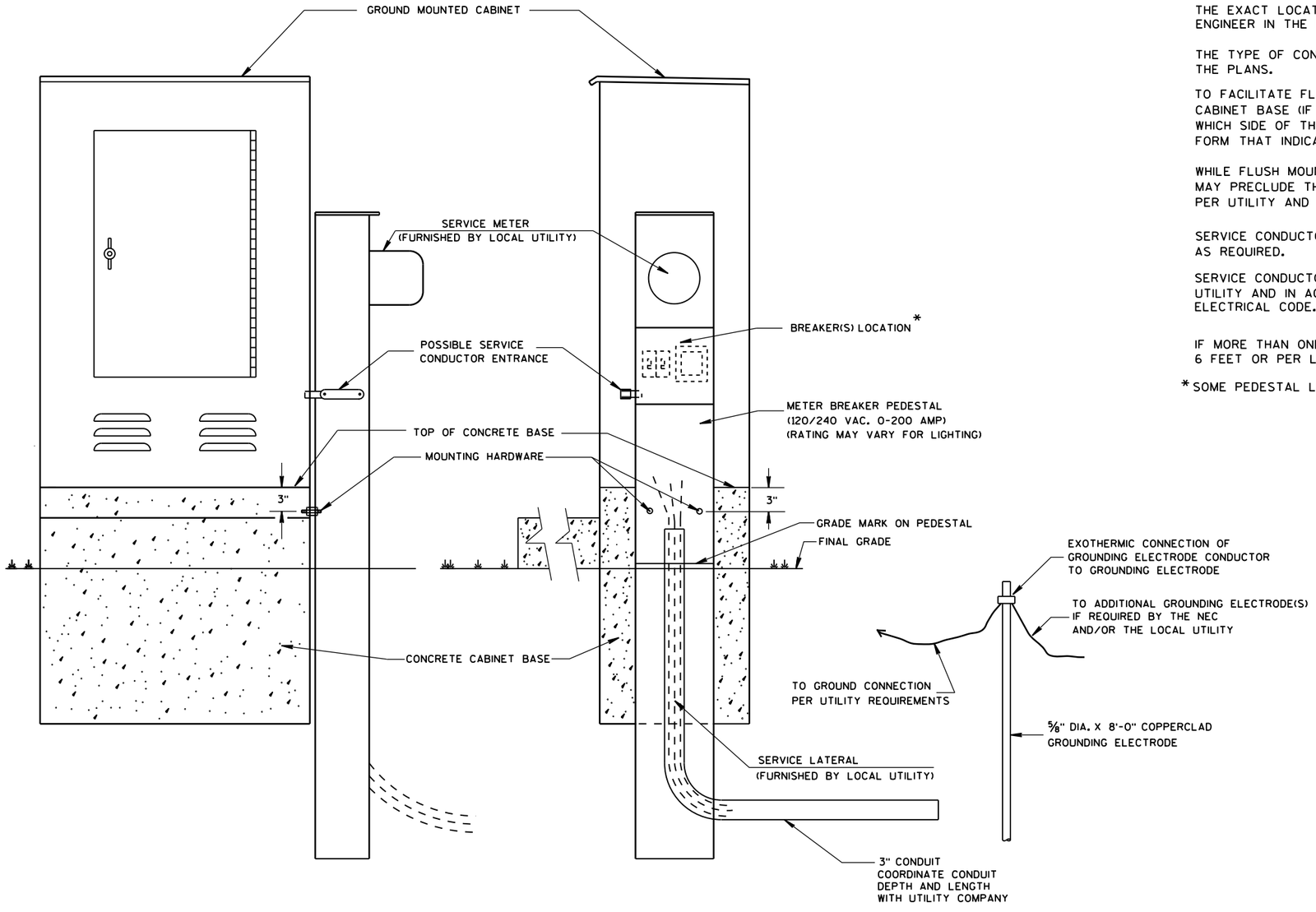
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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SDD 09C16-01



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

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S.D.D. 9 D 1-5

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S.D.D. 9 D 1-5

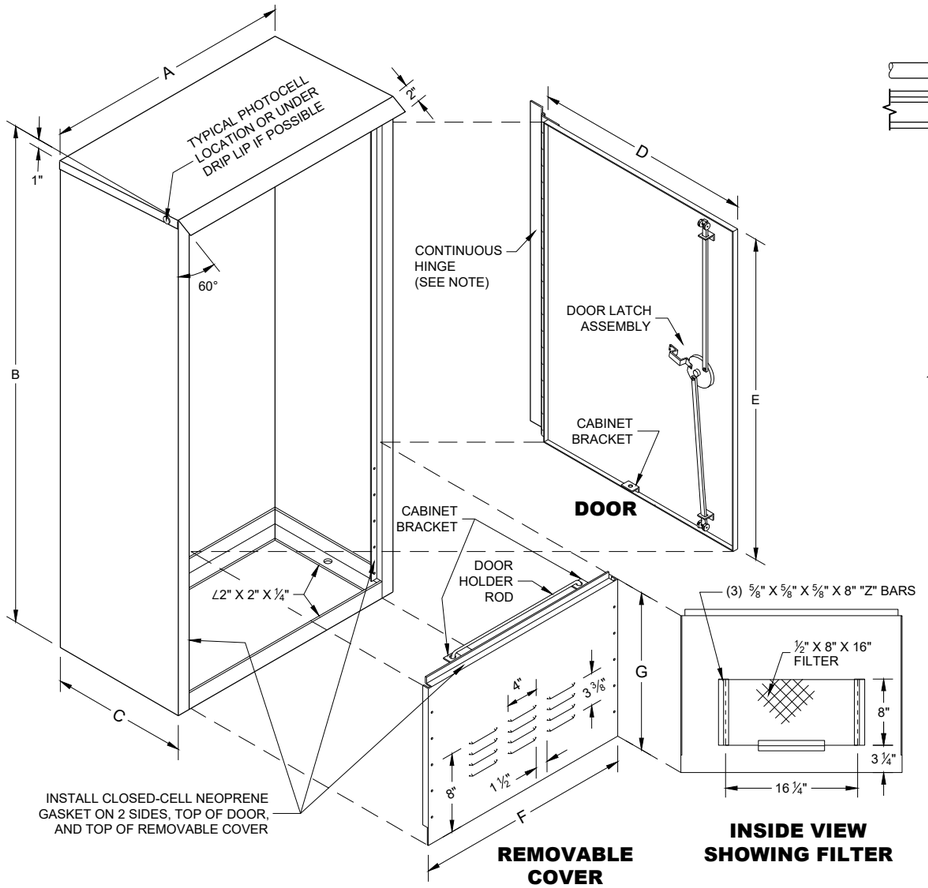
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

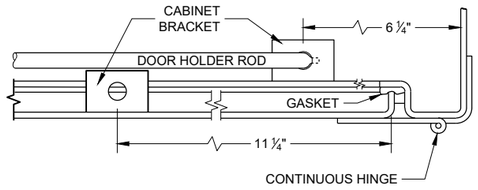
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

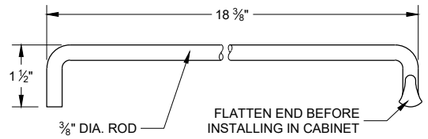
/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

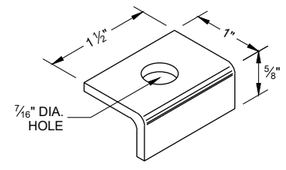




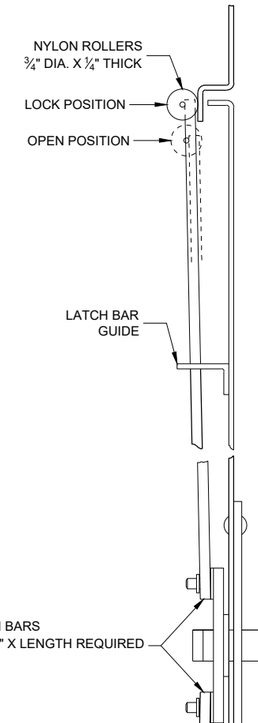
HINGE AND DOOR HOLDER

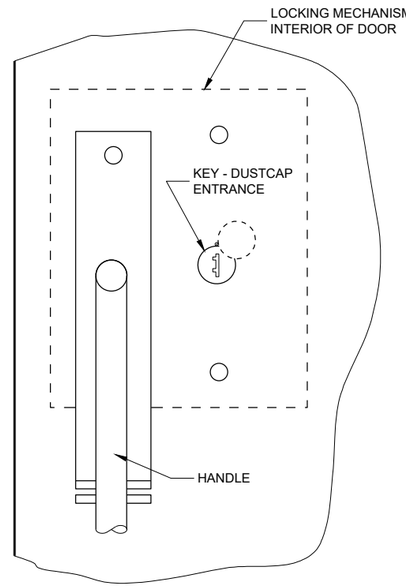


HOLDER ROD



CABINET BRACKET





SIDE VIEW **FRONT VIEW**

LATCH ASSEMBLY

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.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

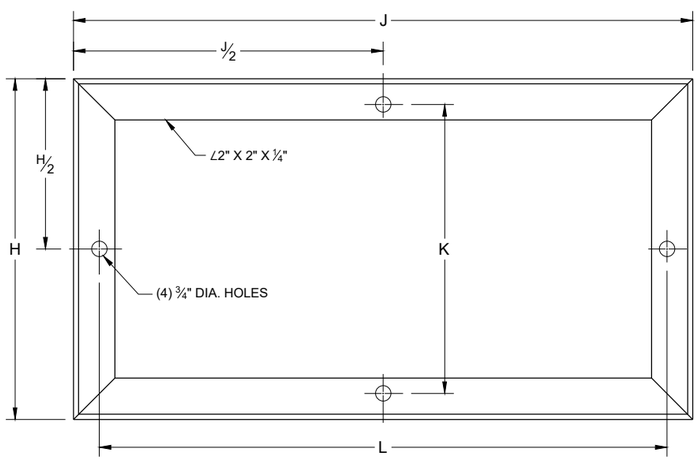
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH ¼" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH ¼" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH - NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

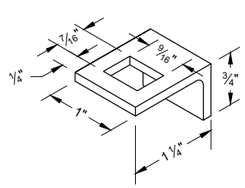
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 ½	16 ½	24
D	26 ½	34 ¾	33 ¾
E	38 ¾	38 ¾	38 ¾
F	26 ½	34 ¾	33 ¾
G	19	19	25
H	16 ½	16 ½	24
H/2	8 ¼	8 ¼	12
J	30	38	38
J/2	15	19	19
K	13 ¾	13 ¾	21 ¼
L	27 ½	35 ½	35 ½



LATCH BAR GUIDE

SIGNAL CONTROL CABINET

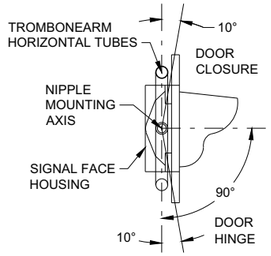
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE

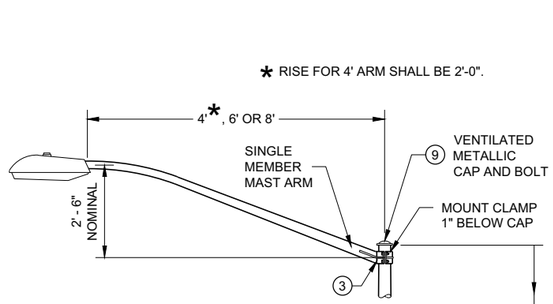
/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI

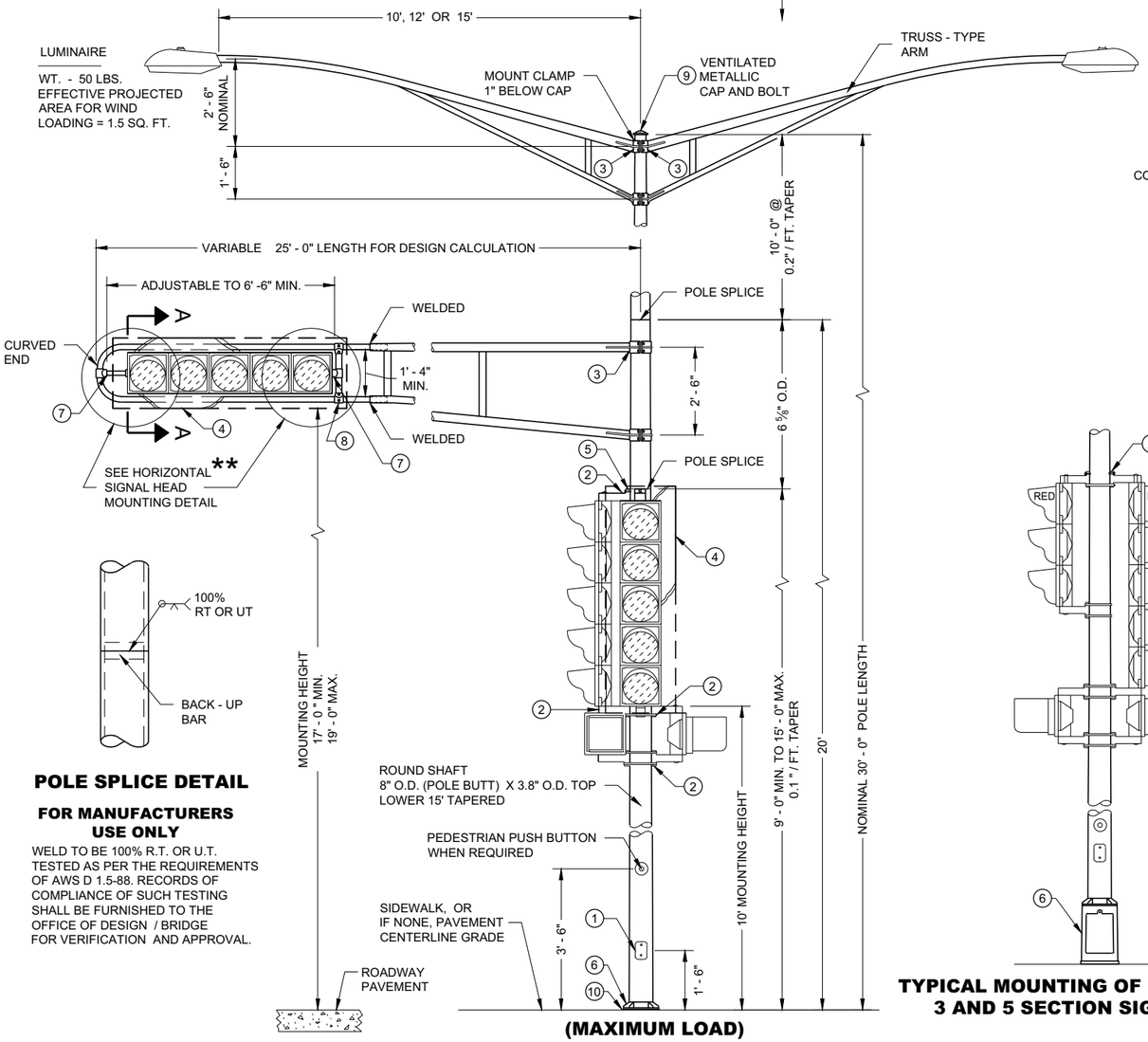
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SECTION A-A



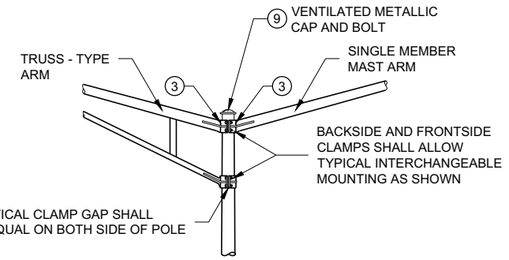


POLE SPLICE DETAIL

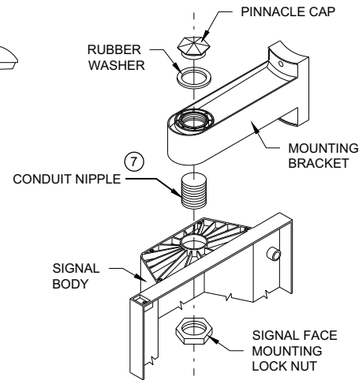
FOR MANUFACTURERS USE ONLY

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)

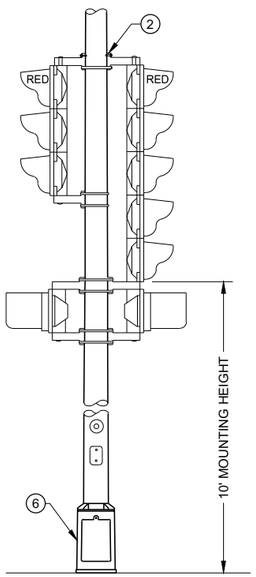


INTERCHANGEABLE MOUNTING DETAIL

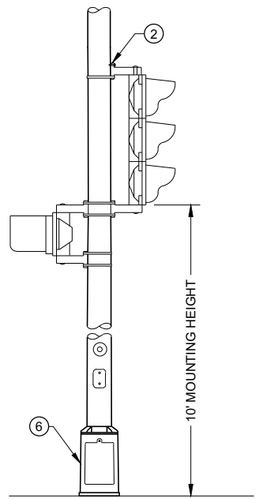


SIGNAL FACE MOUNTING DETAIL

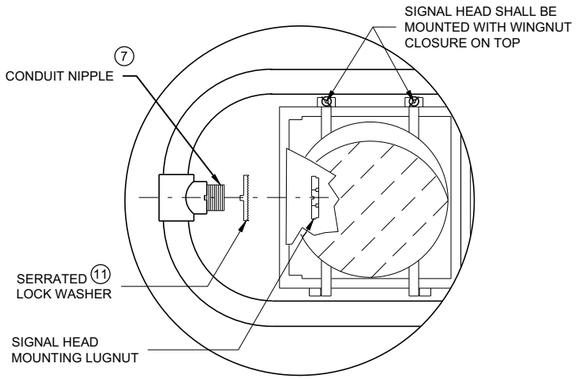
(BANDED)



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

TYPE 3 POLE MOUNTING CONFIGURATION

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 3/8 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 3/8" 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.

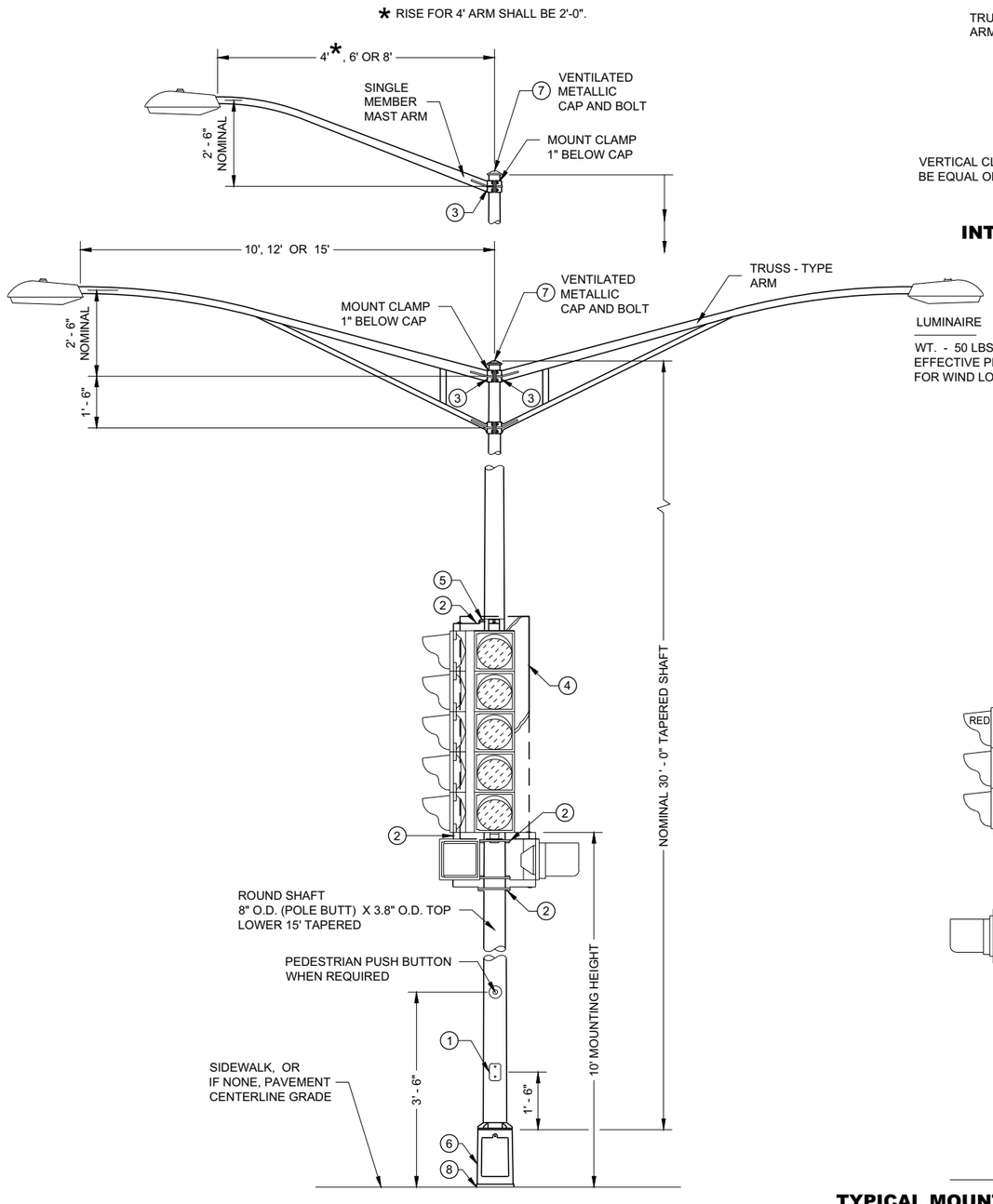
(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

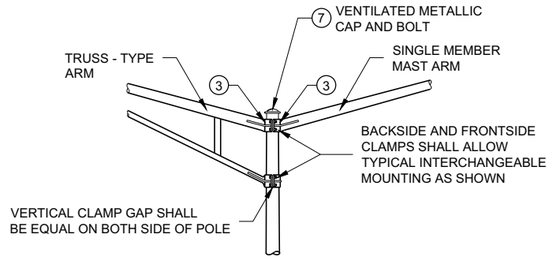
POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS TYPE 3 (HEAVY DUTY)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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(MAXIMUM LOAD)



INTERCHANGEABLE MOUNTING DETAIL

GENERAL NOTES

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

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

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.

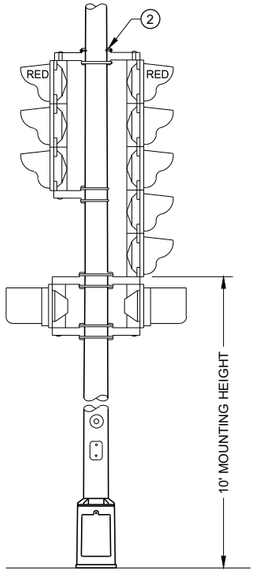
(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

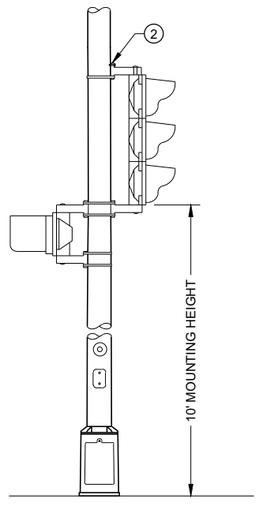
(7) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(8) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

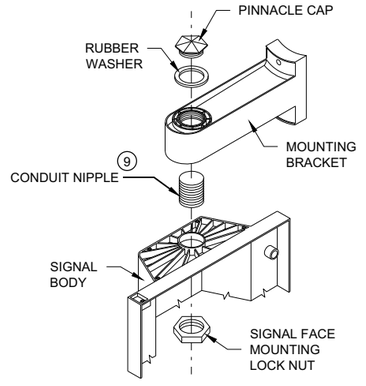
(9) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



SIGNAL FACE MOUNTING DETAIL
(BANDED)

TYPE 4 POLE MOUNTING CONFIGURATION

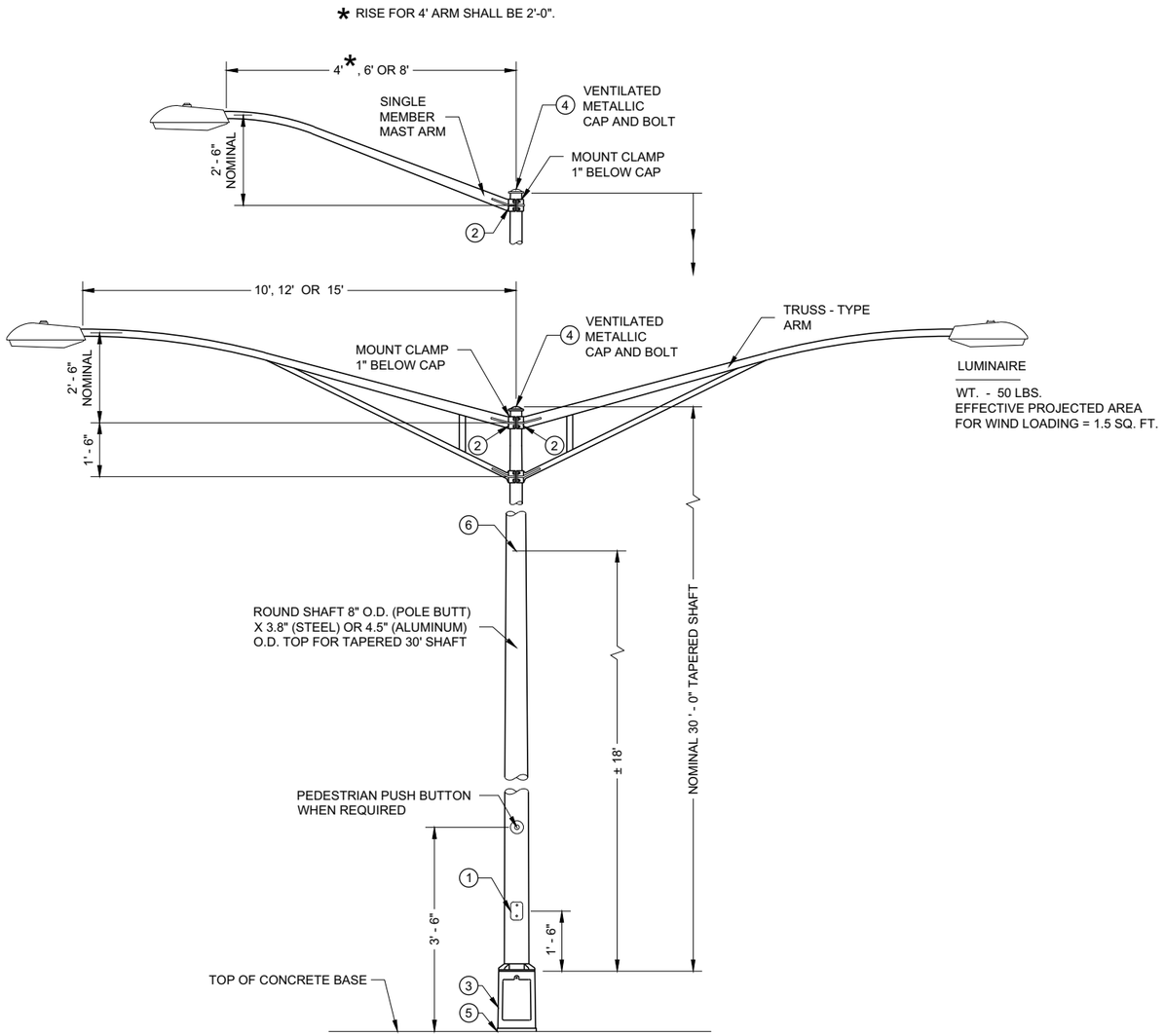
POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

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TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

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.

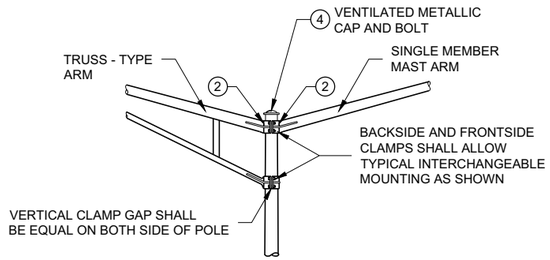
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.

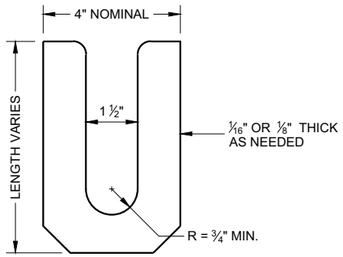


INTERCHANGEABLE MOUNTING DETAIL

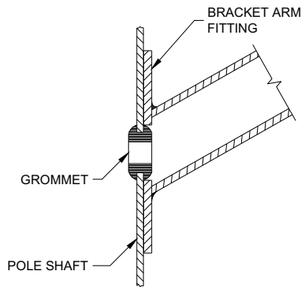
POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

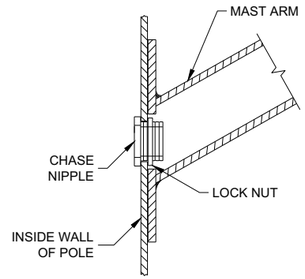
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SDD 09E01 - 15d



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.

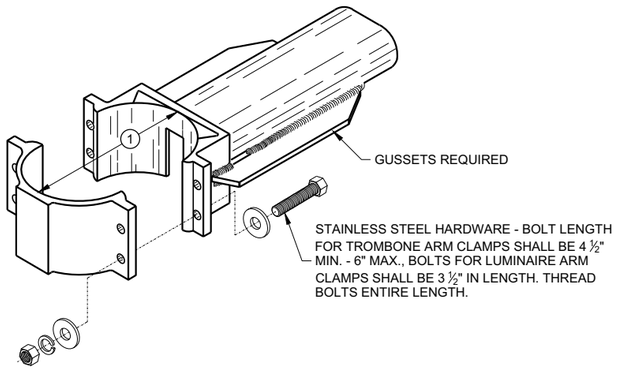
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

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

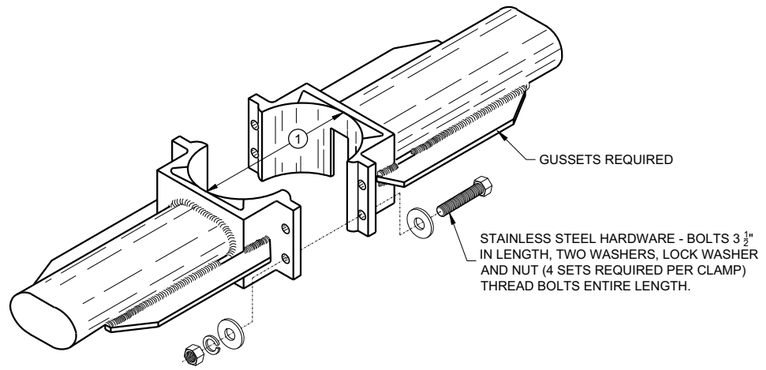
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(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.

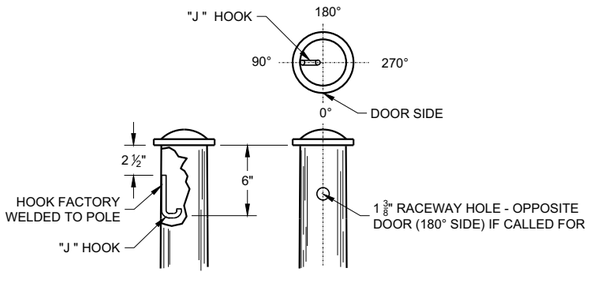
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



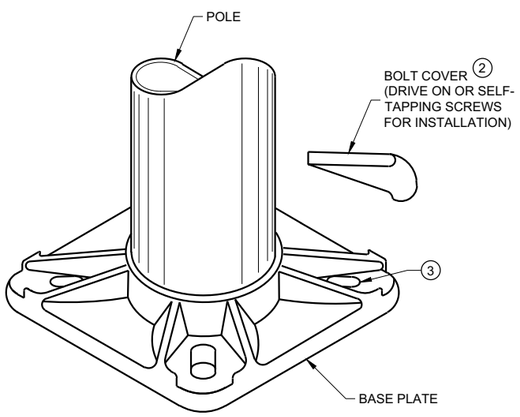
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



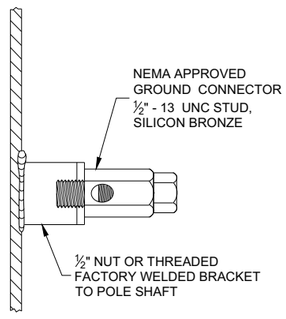
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

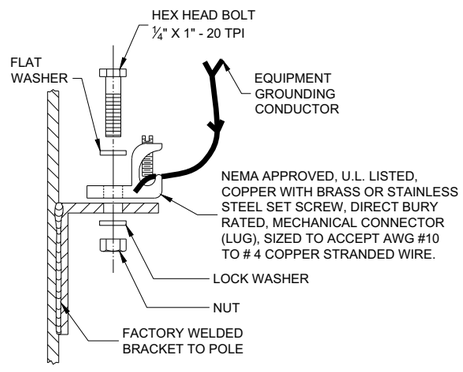


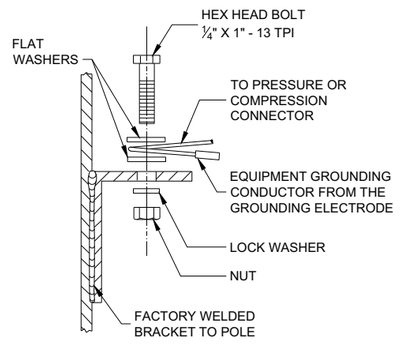
TYPICAL "J" HOOK LOCATION



BASE PLATE







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

HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 435

FHWA

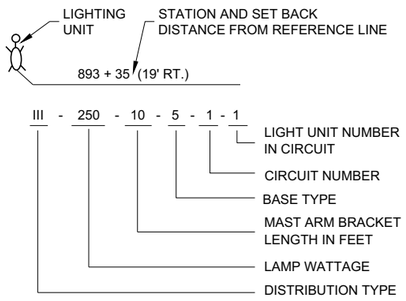
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SDD 09E01 - 15g

GENERAL NOTES

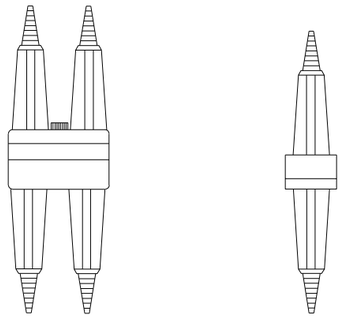
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

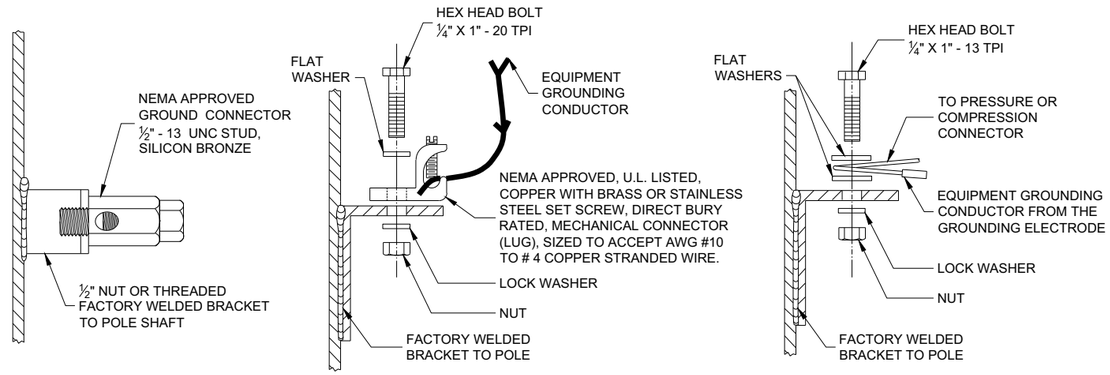


LIGHTING UNIT CODE
(TYPICAL)

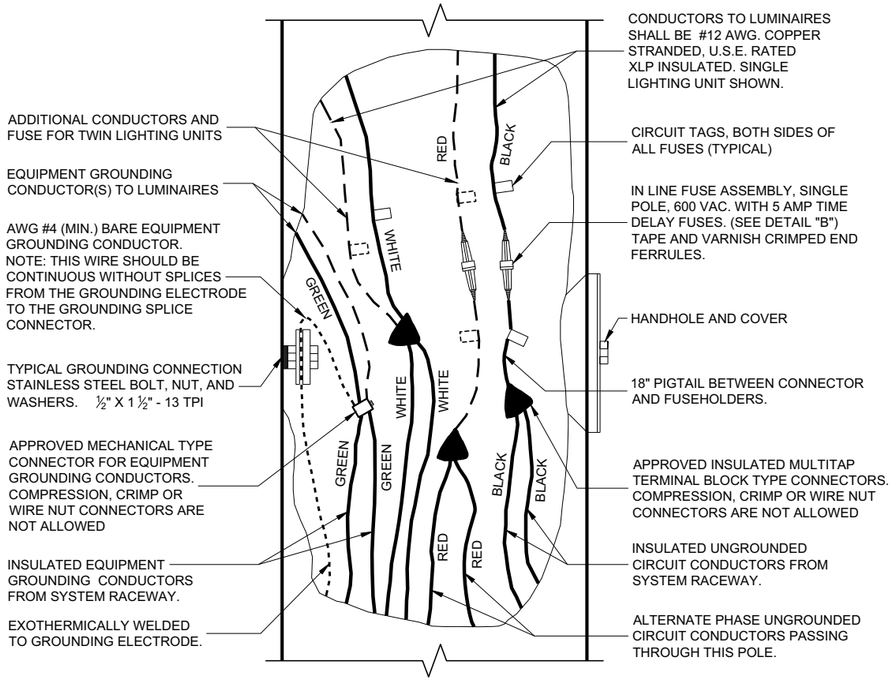


DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT

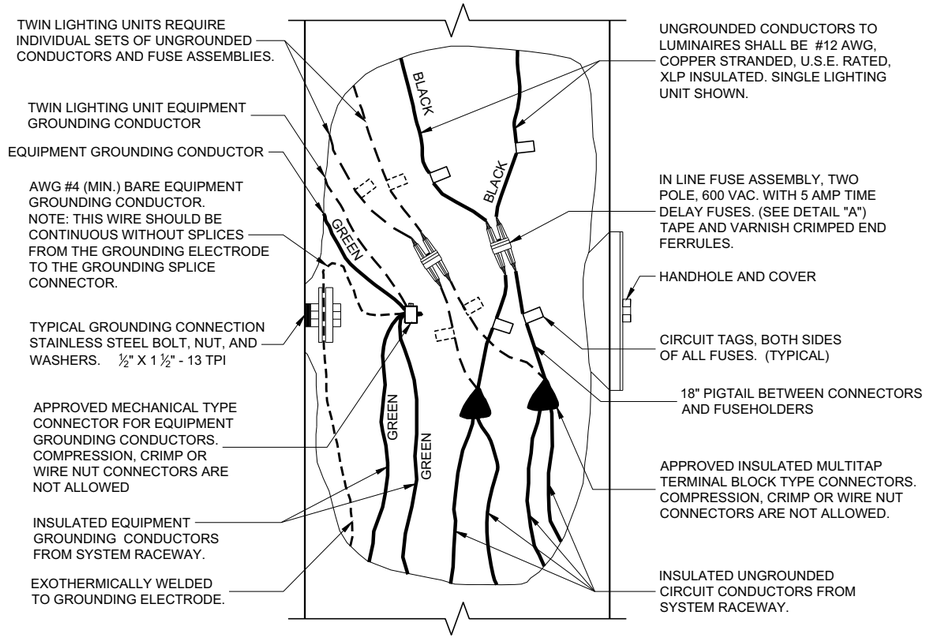
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



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



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR



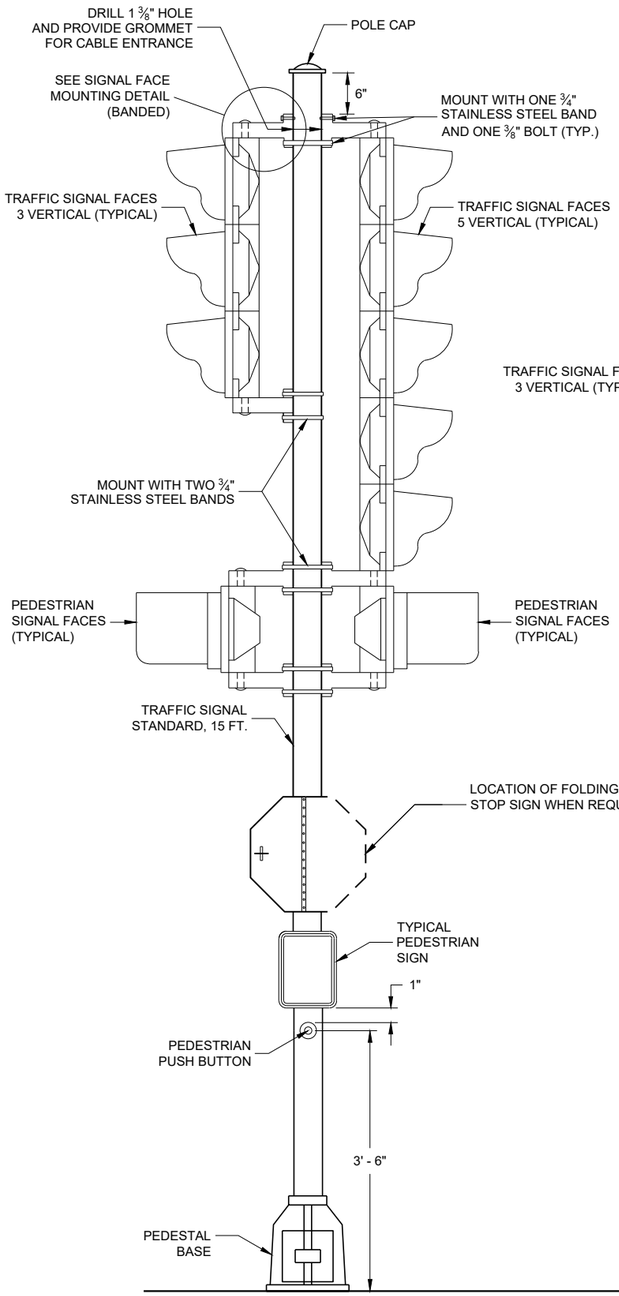
2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

NON - FREEWAY LIGHTING UNIT POLE WIRING

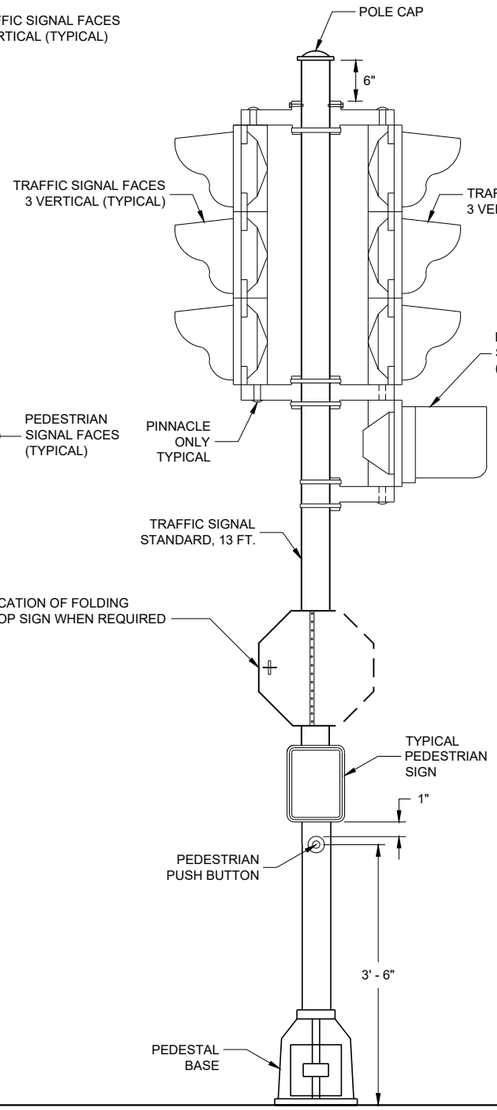
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 436

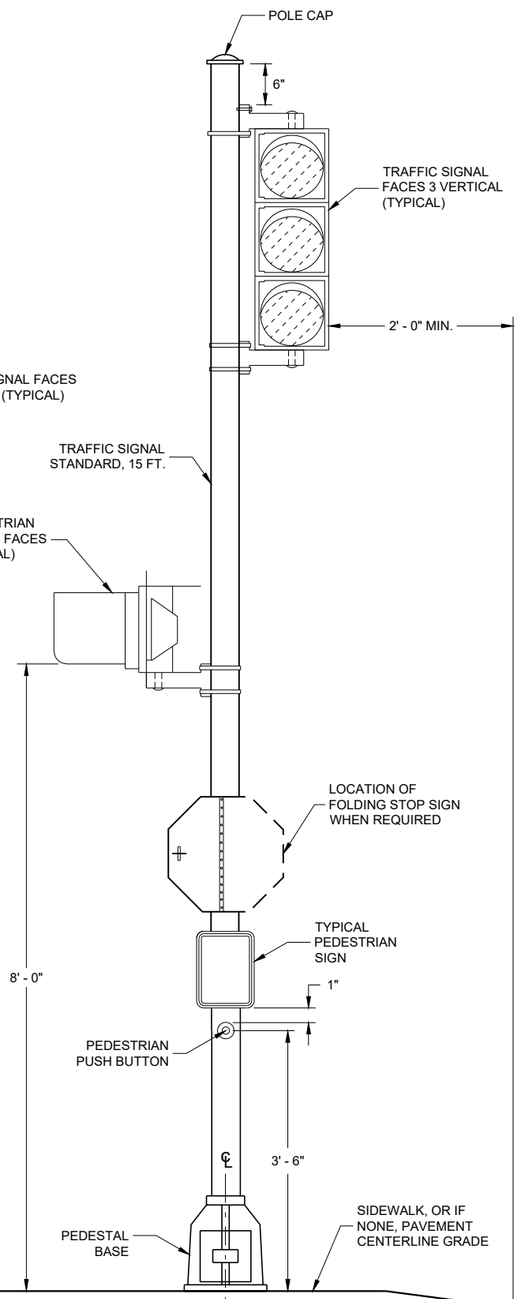
FHWA



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.

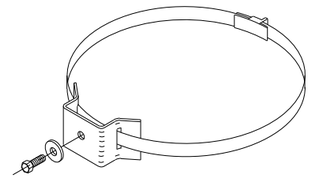
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

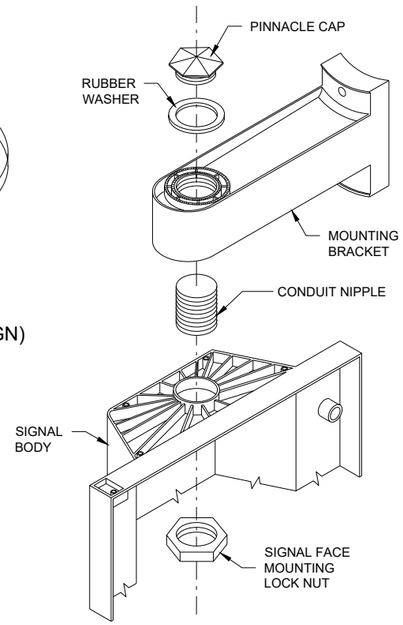
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



SIGNAL FACE MOUNTING DETAIL (BANDED)

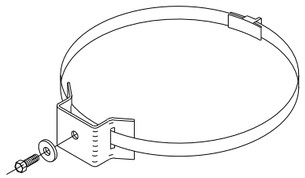
TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

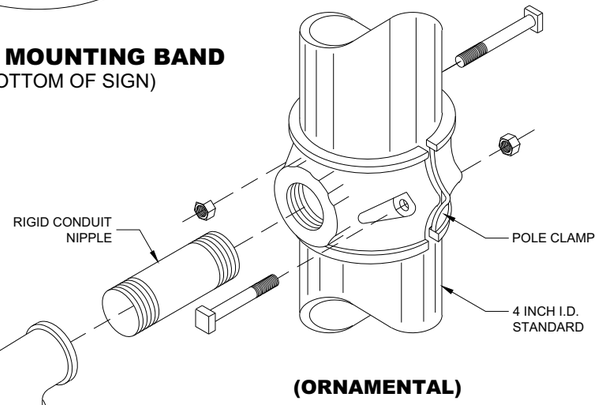
APPROVED
2/28/2013
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 437

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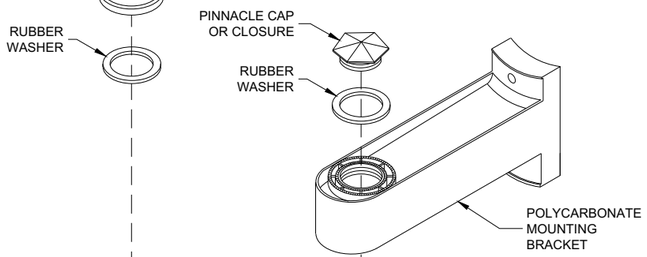
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SDD 09E06 - 05



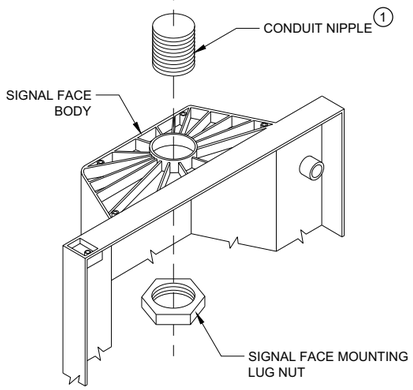
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



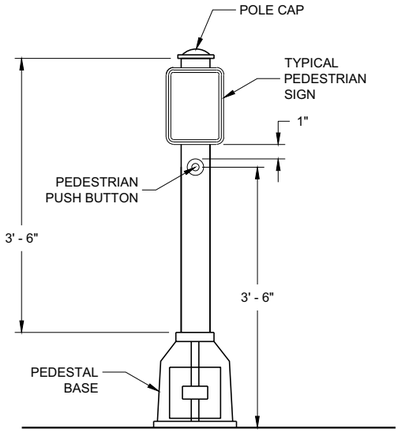
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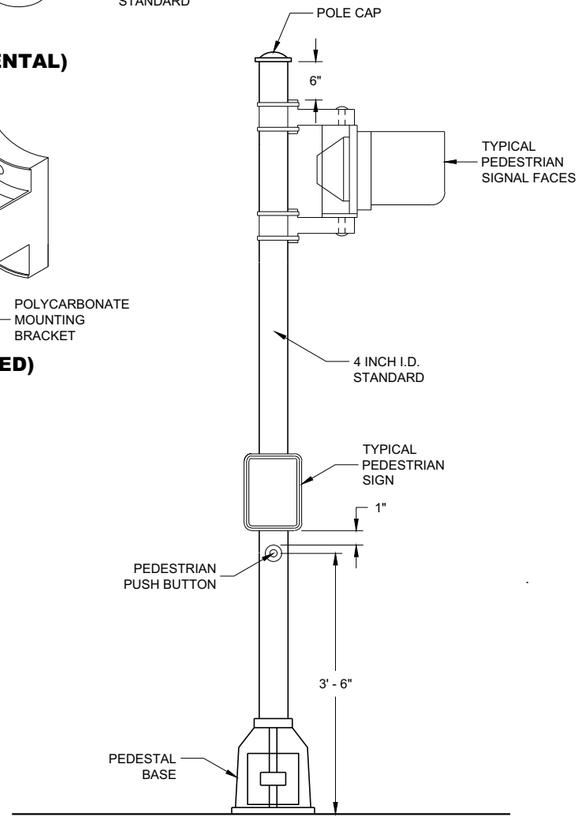
(BANDED)



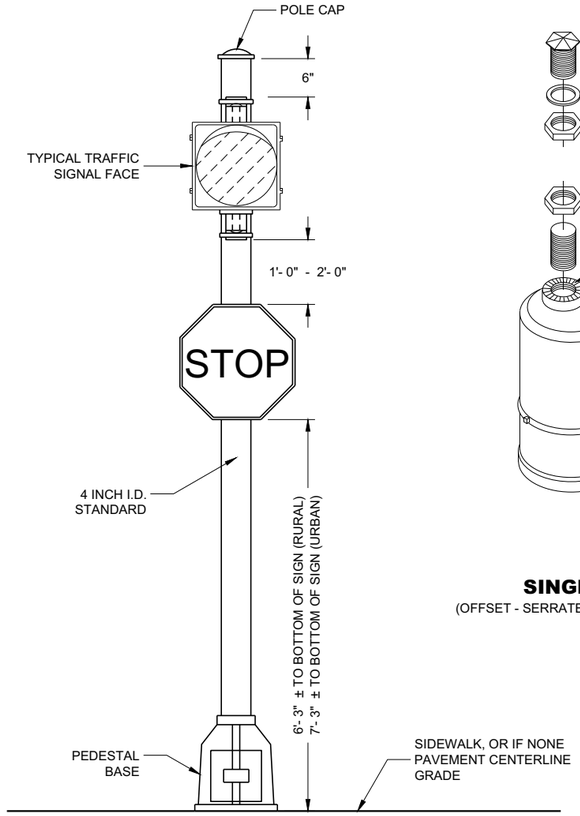
SIGNAL FACE MOUNTING DETAILS



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.

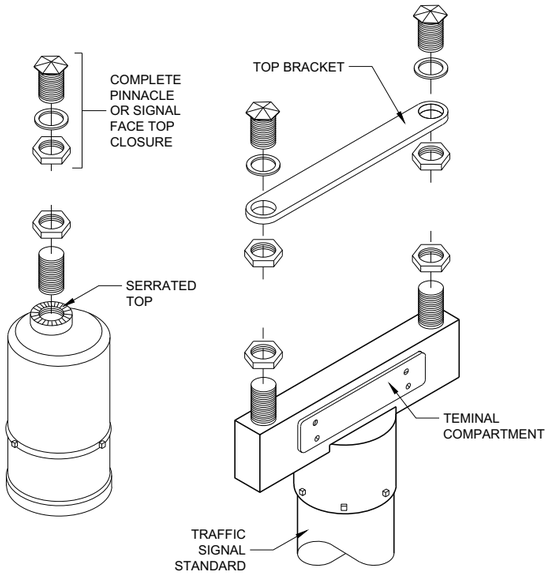
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

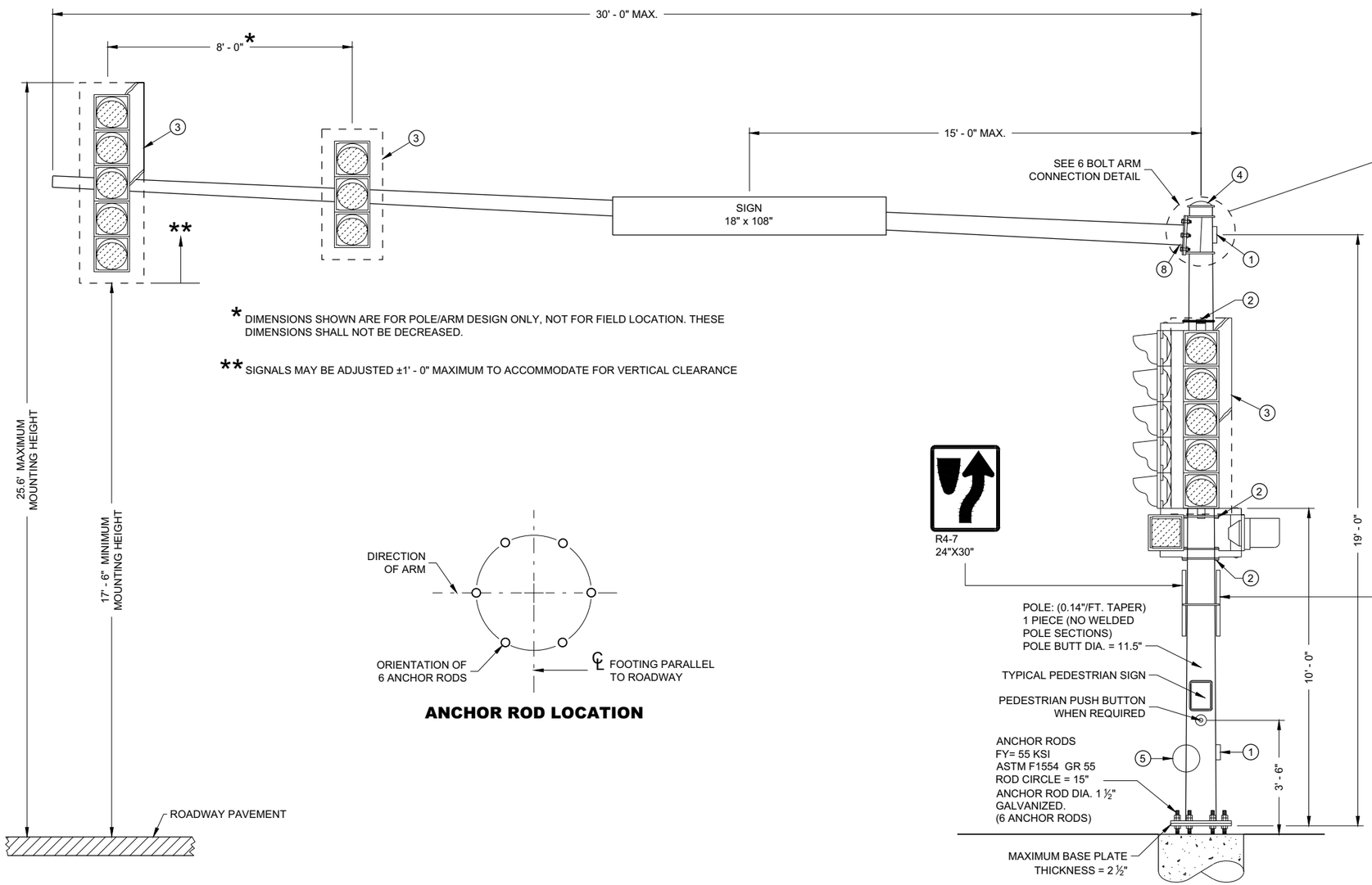
APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 438

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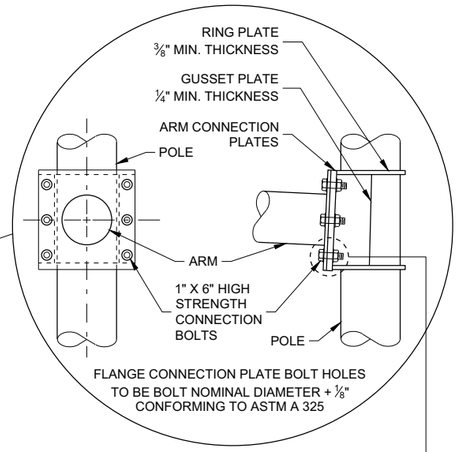
SDD 09E07 - 06



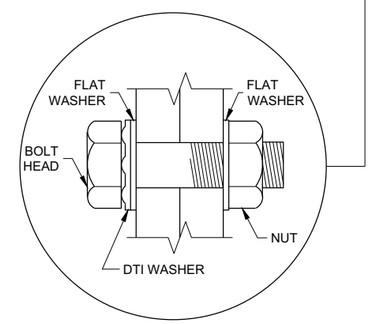
* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE

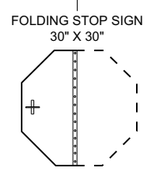
ANCHOR ROD LOCATION



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL



TYPE 9 POLE
15' - 30' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 9 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

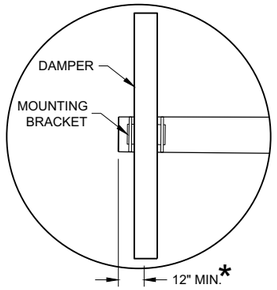
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

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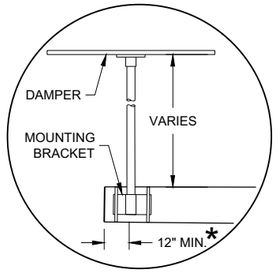
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SDD 09E08 - 09a

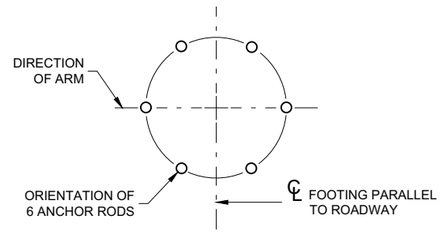


DUMBBELL VIBRATION DAMPER

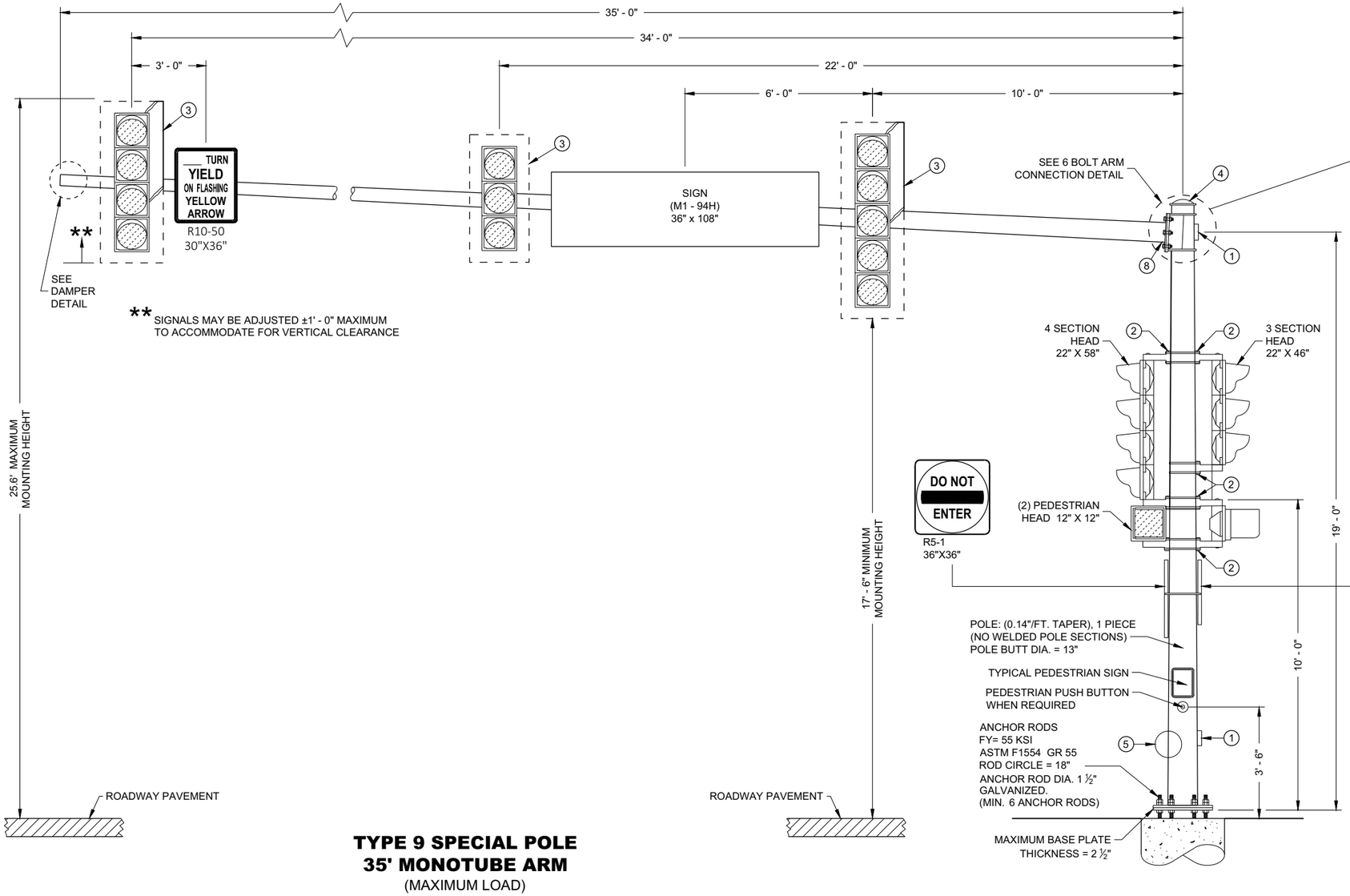


FLAT VIBRATION DAMPER

* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.

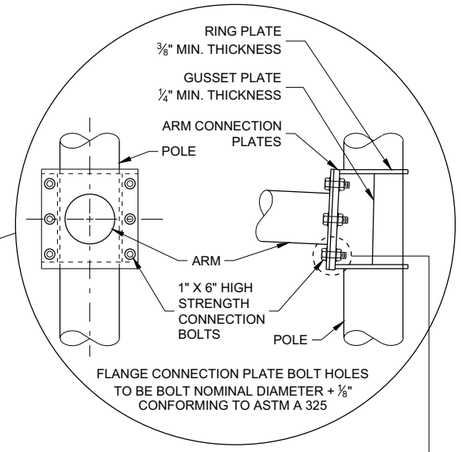


ANCHOR ROD LOCATION

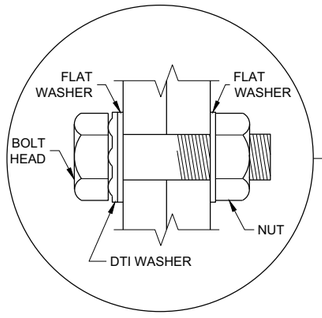


** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE

TYPE 9 SPECIAL POLE
35' MONOTUBE ARM
(MAXIMUM LOAD)



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 9 SPECIAL POLE
35' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

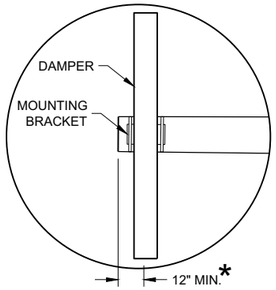
APPROVED
August 2020
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 440

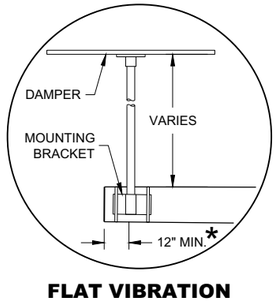
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SDD 09E08 - 09b

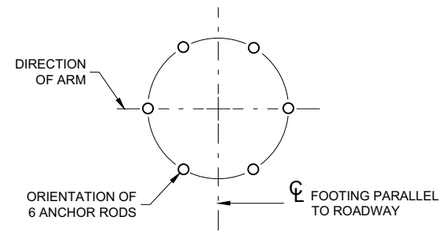


DUMBBELL VIBRATION DAMPER

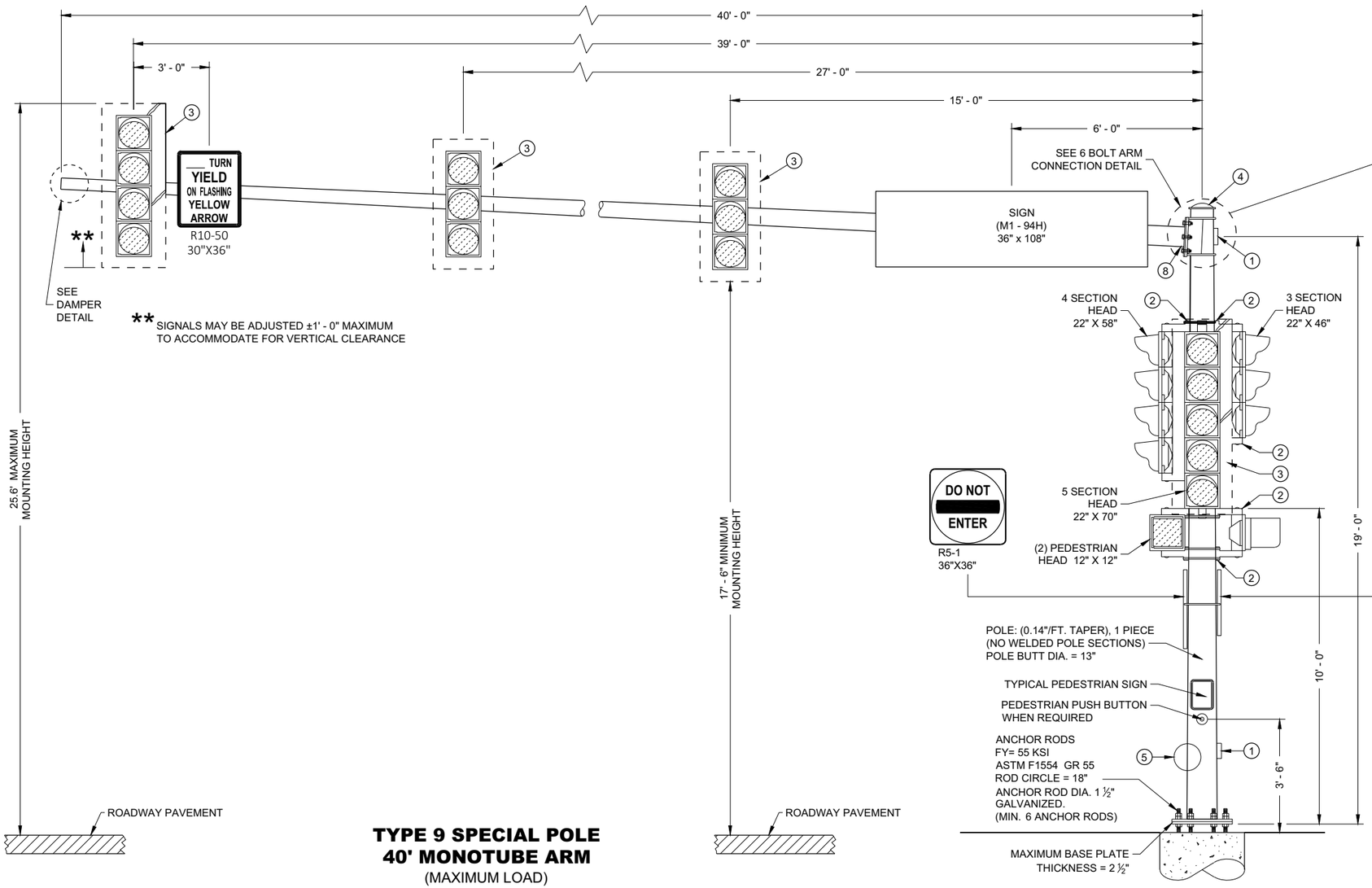


FLAT VIBRATION DAMPER

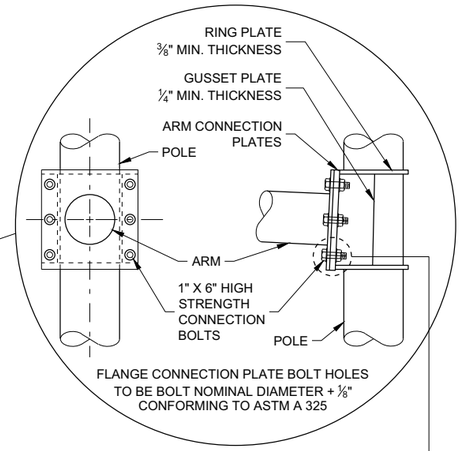
* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.



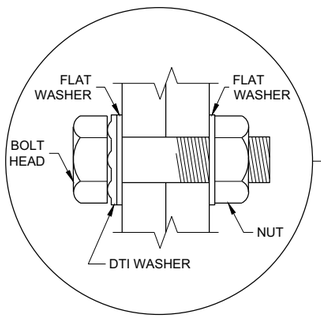
ANCHOR ROD LOCATION



TYPE 9 SPECIAL POLE 40' MONOTUBE ARM
(MAXIMUM LOAD)



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 9 SPECIAL POLE 40' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

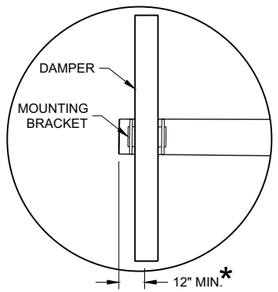
APPROVED
August 2020
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

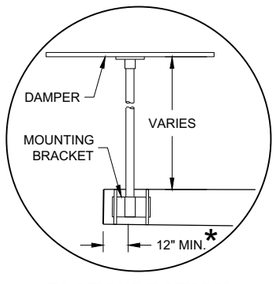
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SDD 09E08 - 09c

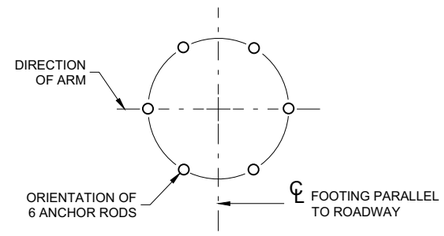


DUMBBELL VIBRATION DAMPER

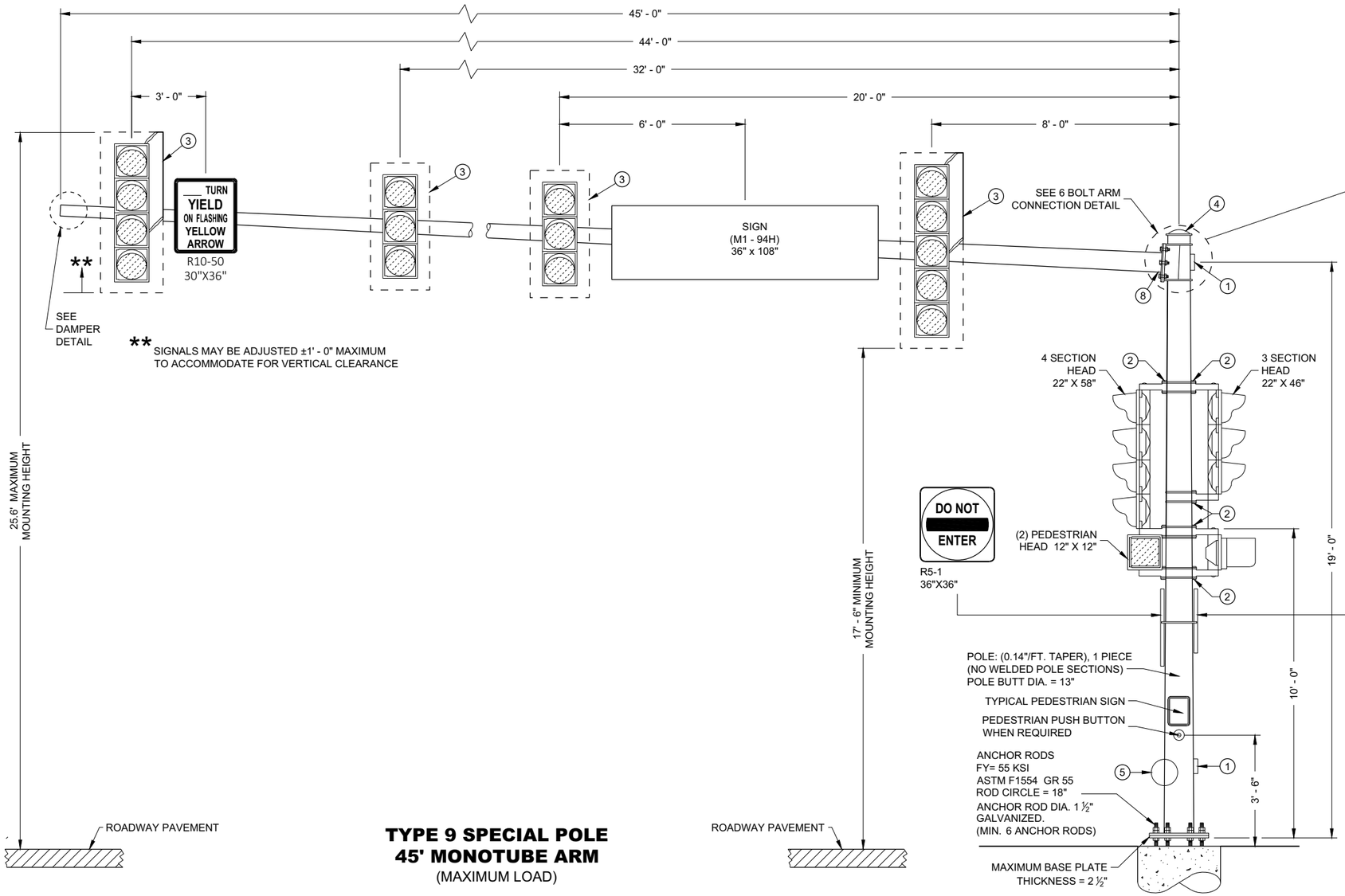


FLAT VIBRATION DAMPER

* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.

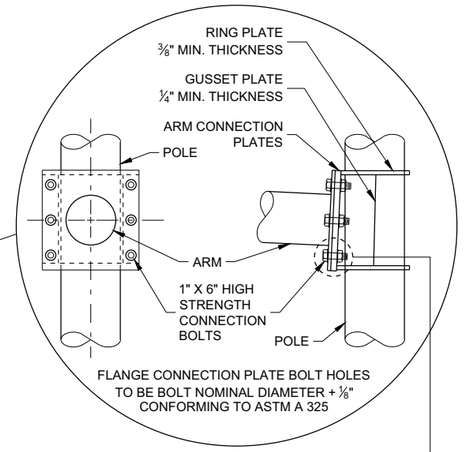


ANCHOR ROD LOCATION

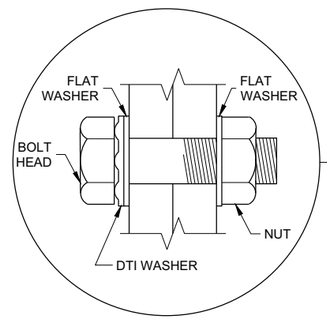


** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE

TYPE 9 SPECIAL POLE 45' MONOTUBE ARM
(MAXIMUM LOAD)



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 9 SPECIAL POLE 45' MONOTUBE ARM

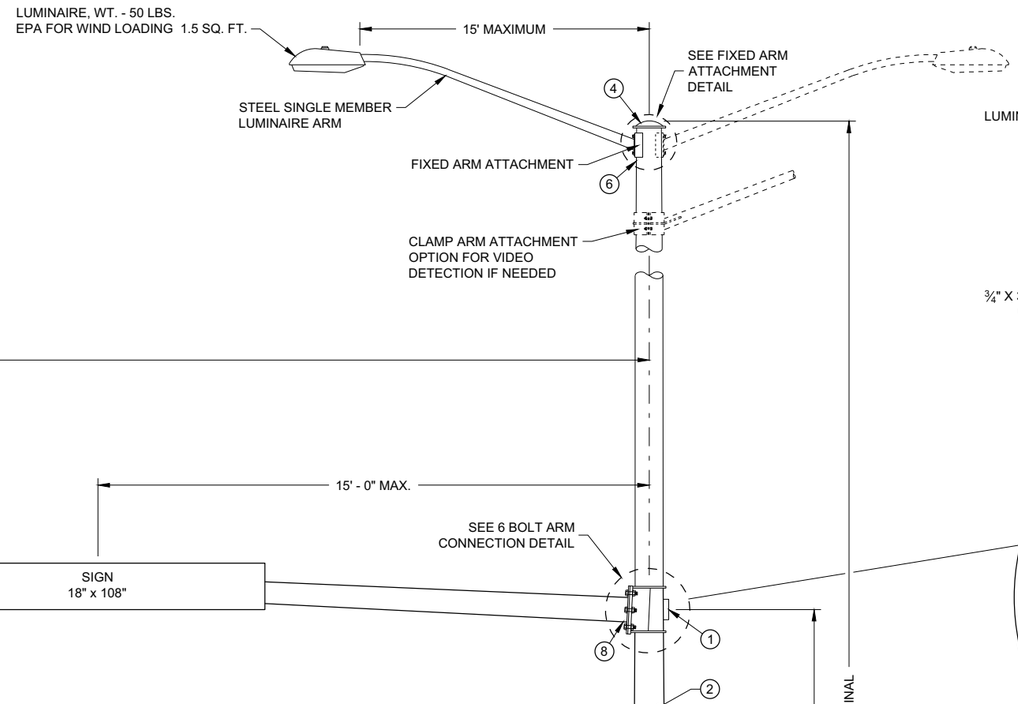
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 442

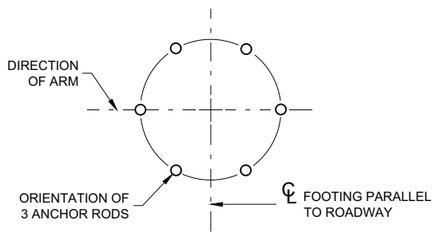
FHWA

SDD 09E08 - 09d
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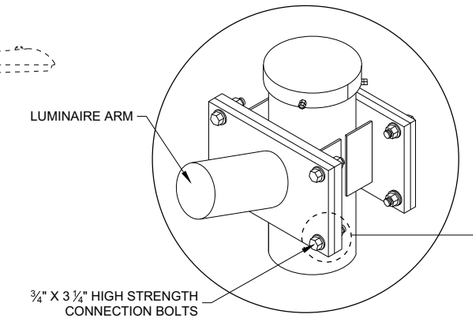


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

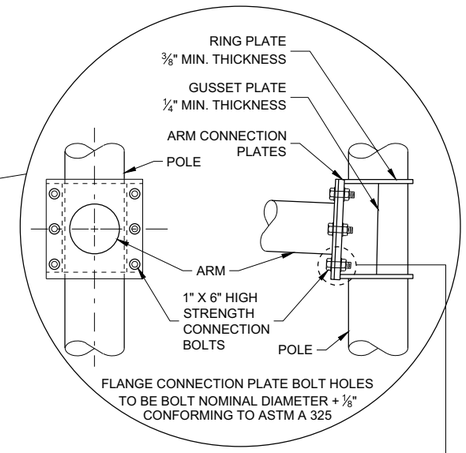
** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE



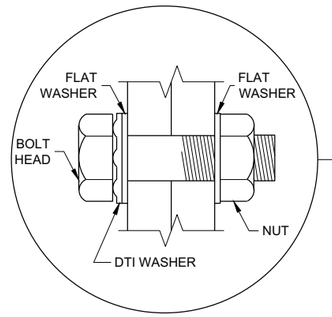
ANCHOR ROD LOCATION



FIXED ARM ATTACHMENT DETAIL



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 POLE
15' - 30' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 POLE
15' - 30' MONOTUBE ARM

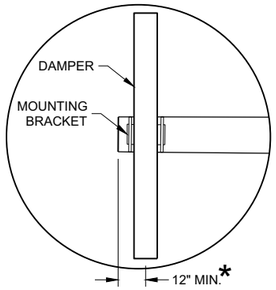
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

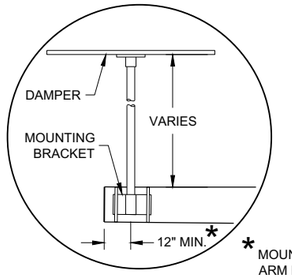
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 443

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SDD 09E08 - 09e

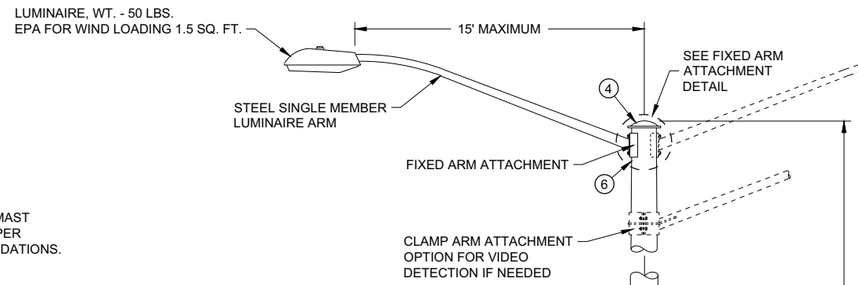


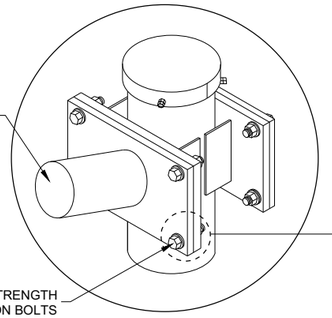
DUMBBELL VIBRATION DAMPER



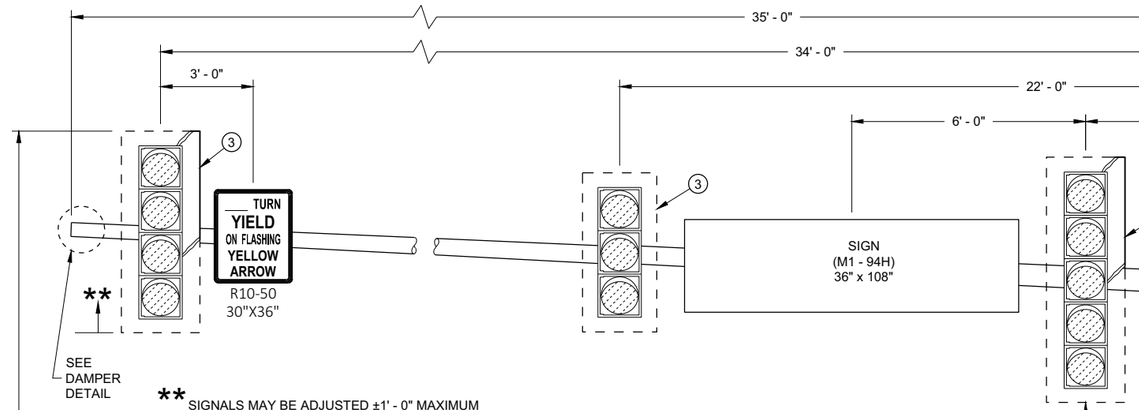
FLAT VIBRATION DAMPER

* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.

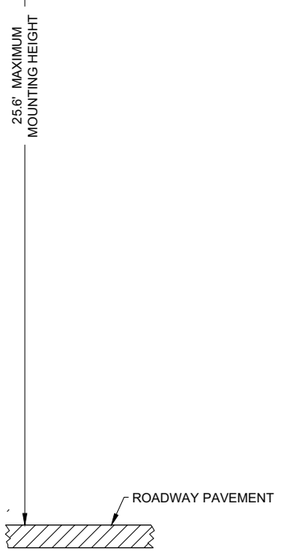


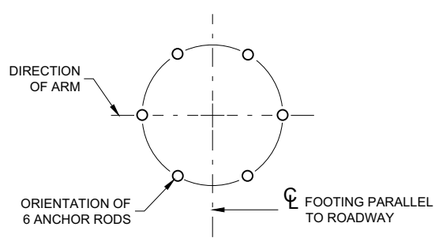


FIXED ARM ATTACHMENT DETAIL

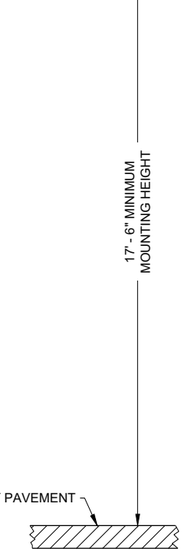


** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE

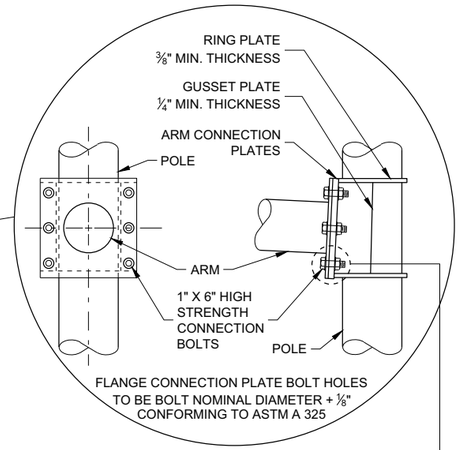




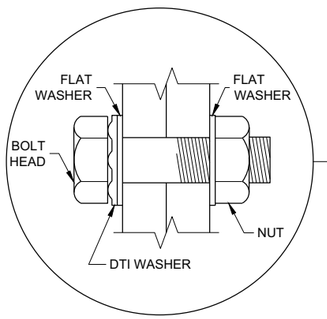
ANCHOR ROD LOCATION



TYPE 10 SPECIAL POLE
35' MONOTUBE ARM
(MAXIMUM LOAD)



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 SPECIAL POLE
35' MONOTUBE ARM

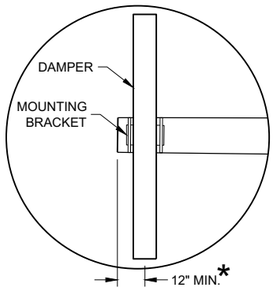
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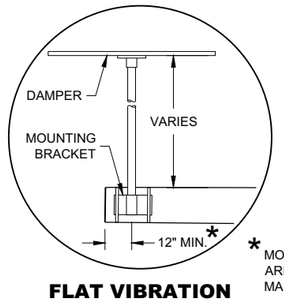
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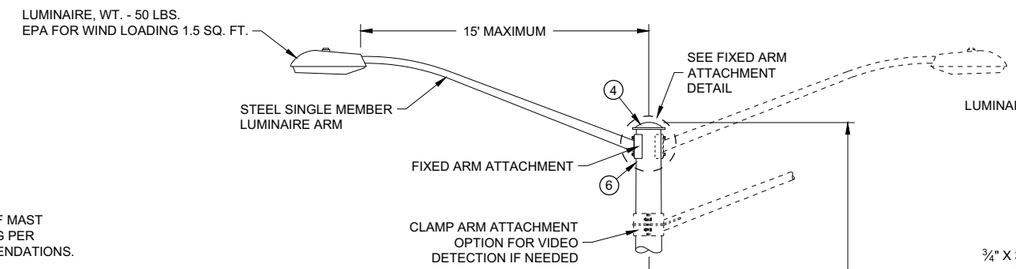


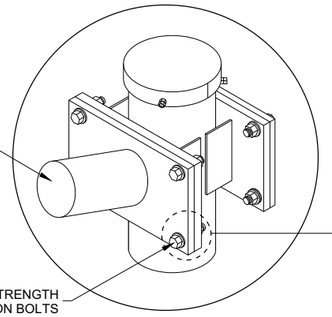
DUMBBELL VIBRATION DAMPER



FLAT VIBRATION DAMPER

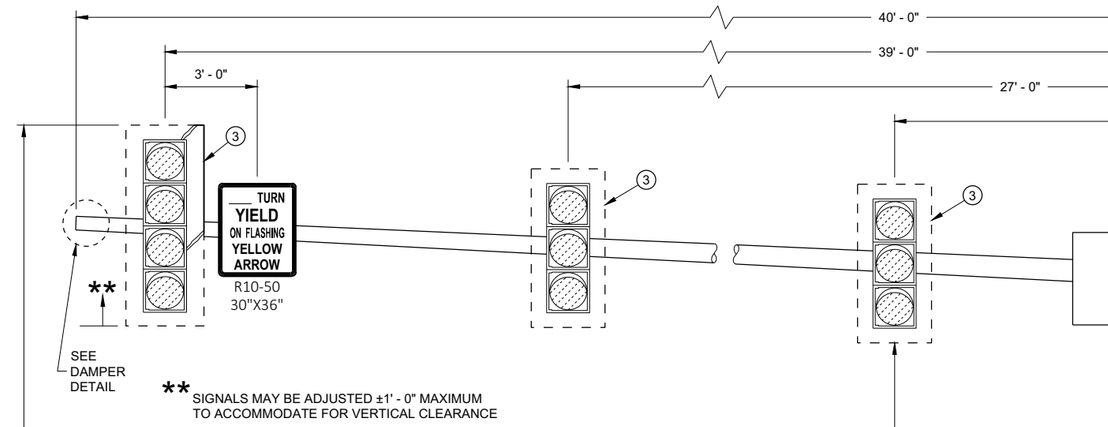
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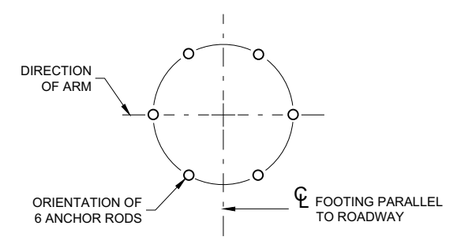




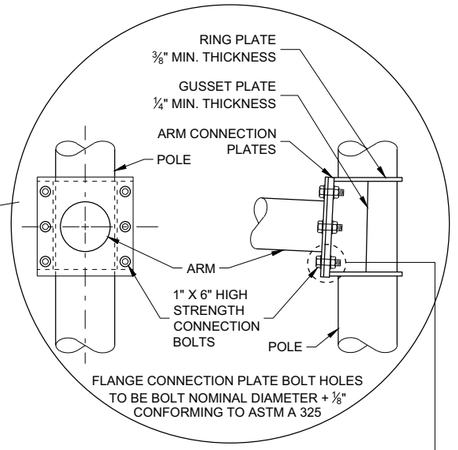
FIXED ARM ATTACHMENT DETAIL

** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE

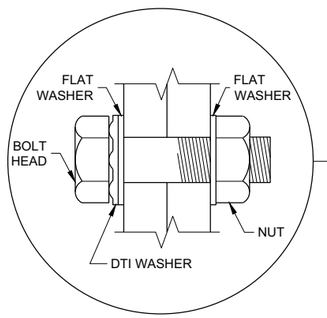




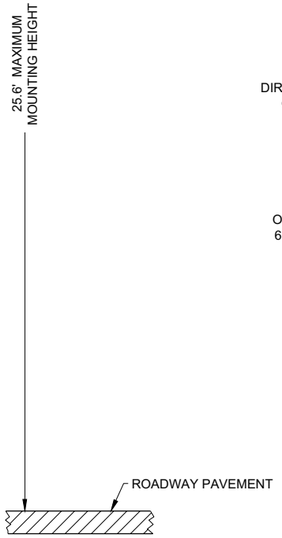
ANCHOR ROD LOCATION



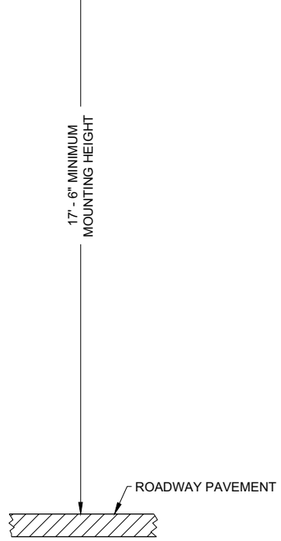
6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL



TYPE 10 SPECIAL POLE
40' MONOTUBE ARM
(MAXIMUM LOAD)



TYPE 10 SPECIAL POLE
40' MONOTUBE ARM

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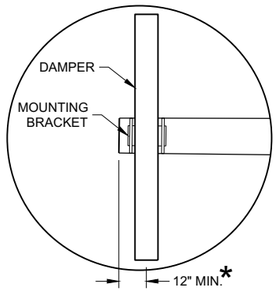
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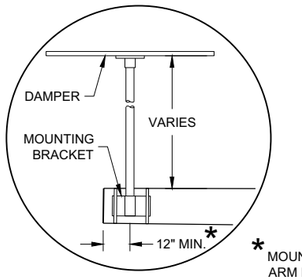
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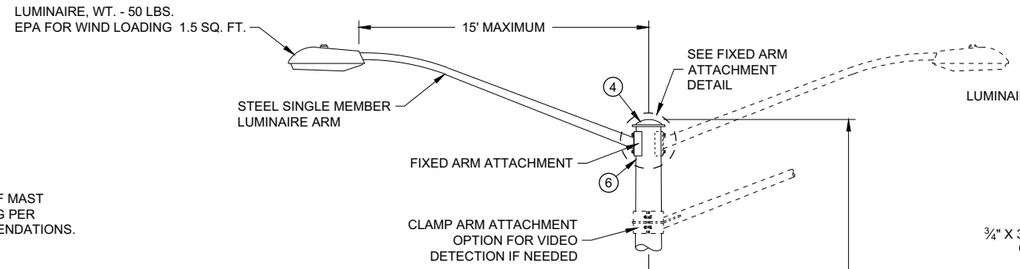


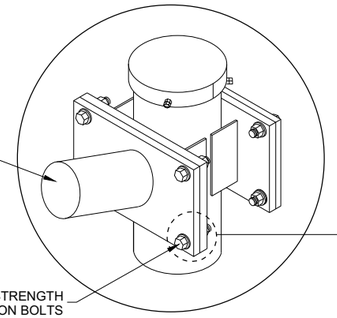
DUMBBELL VIBRATION DAMPER



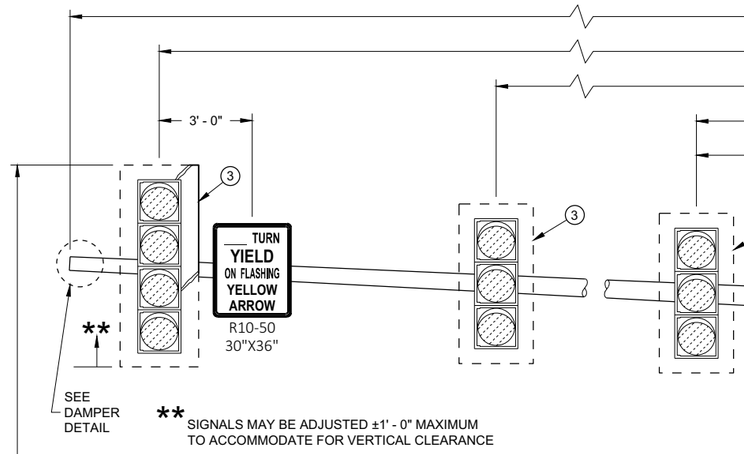
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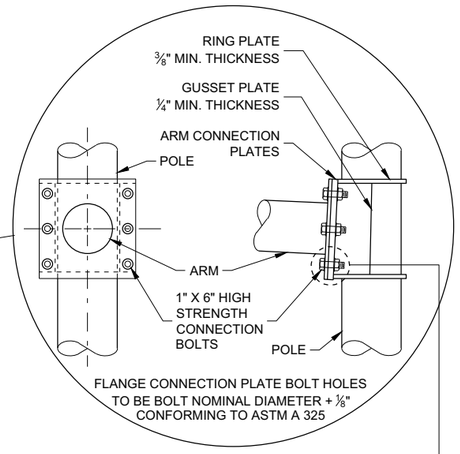
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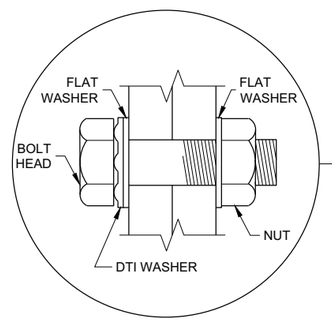


FIXED ARM ATTACHMENT DETAIL

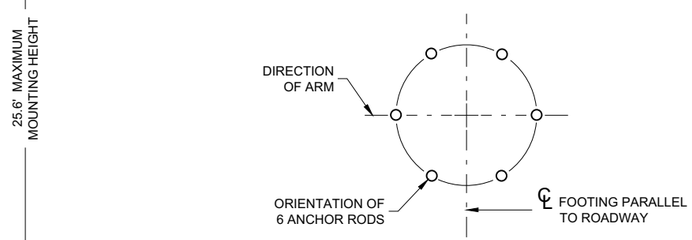




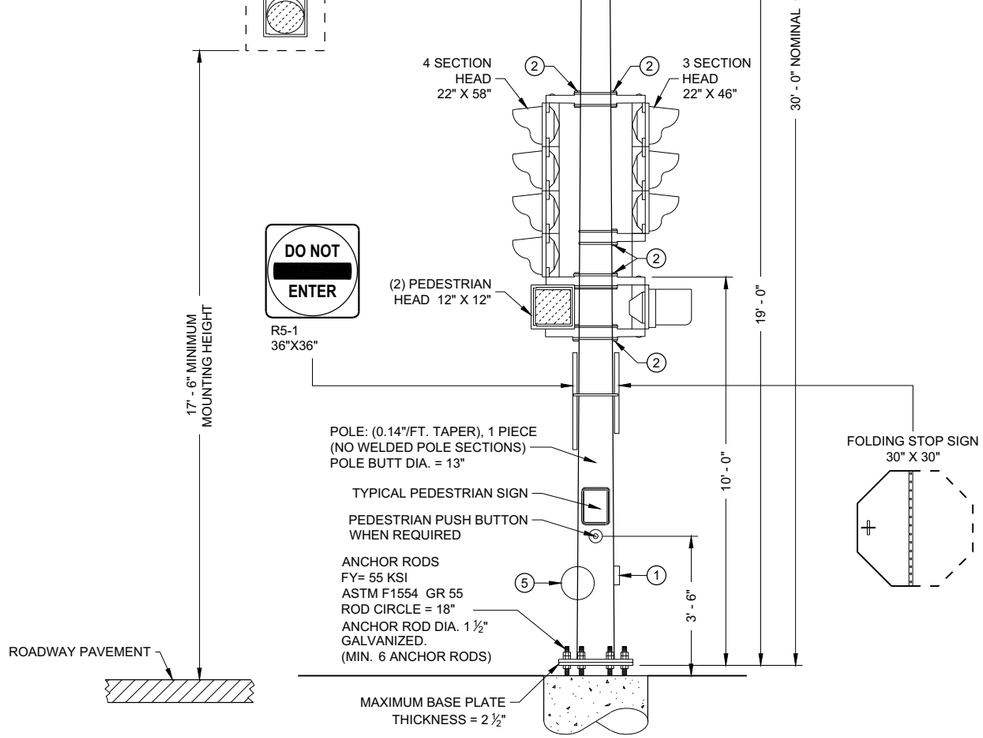
6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL



ANCHOR ROD LOCATION



TYPE 10 SPECIAL POLE
45' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 SPECIAL POLE
45' MONTUBE ARM

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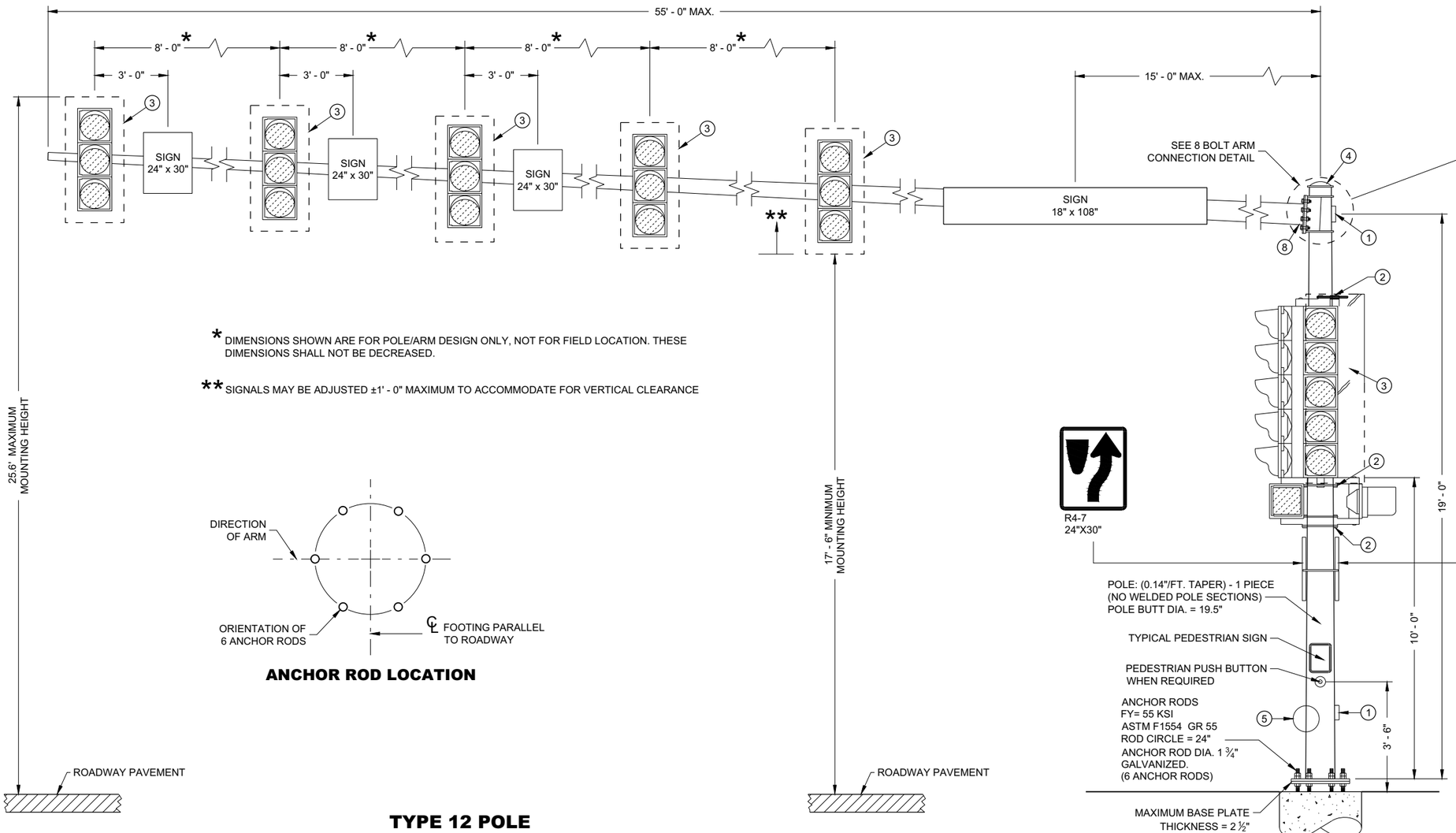
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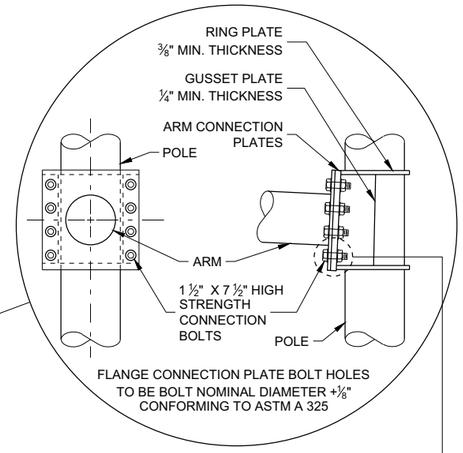
SDD 09E08 - 08h



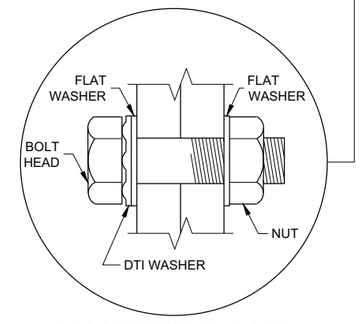
* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE

ANCHOR ROD LOCATION



8 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 12 POLE
35' - 55' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 12 POLE
35' - 55' MONOTUBE ARM

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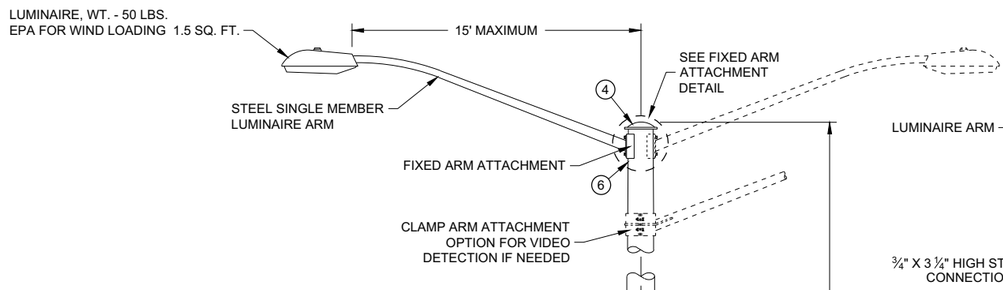
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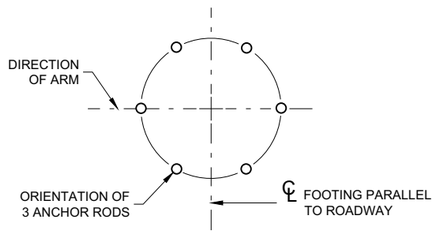
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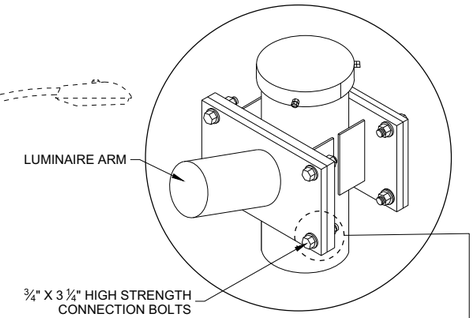


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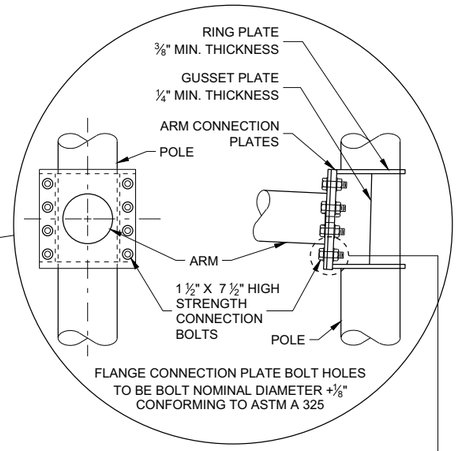
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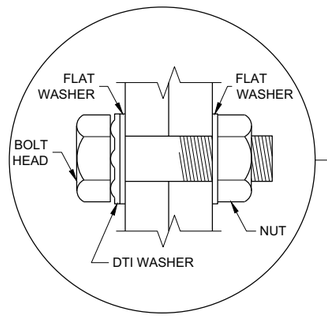
ANCHOR ROD LOCATION



FIXED ARM ATTACHMENT DETAIL



8 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 13 POLE
35' - 55' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 13 POLE
35' - 55' MONOTUBE ARM

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GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15 FOOT TO 30 FOOT.

POLE TYPES 9 SPECIAL AND 10 SPECIAL ARE FOR ARM LENGTHS 35 FOOT, 40 FOOT, AND 45 FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35 FOOT TO 55 FOOT.

MONOTUBE POLES AND ARMS SHALL BE GALVANIZED STEEL.

RING STIFFENED BUILT UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3% ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATION SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING INTERIM REVISIONS)" AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR THE LIGHTING STRUCTURES AS FOLLOWS:

CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.

CATEGORY II FATIGUE LOADS OF TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 SPECIAL AND TYPE 10 SPECIAL STRUCTURES. IN LIEU OF DESIGNING FOR GALLOPING, A VIBRATION DAMPER MITIGATION DEVICE IS REQUIRED TO BE SUPPLIED AND INSTALLED AT THE END OF THE MAST ARM.

CATEGORY II FATIGUE FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE12 AND TYPE 13 STRUCTURES.

115 MPH (700 YEAR MRI BASIC WIND SPEED).

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" STAINLESS STEEL BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR A S DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEAD AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HAND HOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING (SEE SPECIFICATION SECTION 658).

(3) SECURELY MOUNT BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HAND HOLD, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

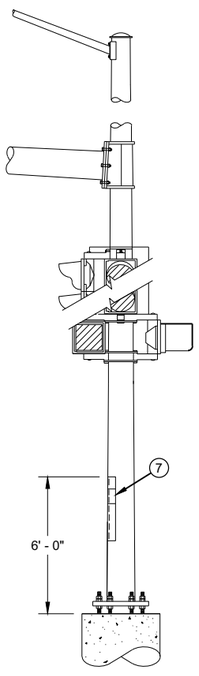
(6) FACTORY WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

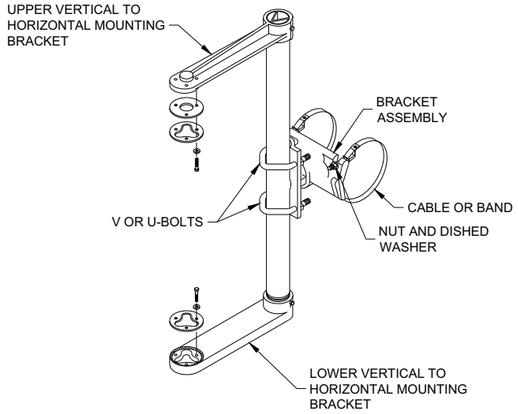
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 6' - 0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

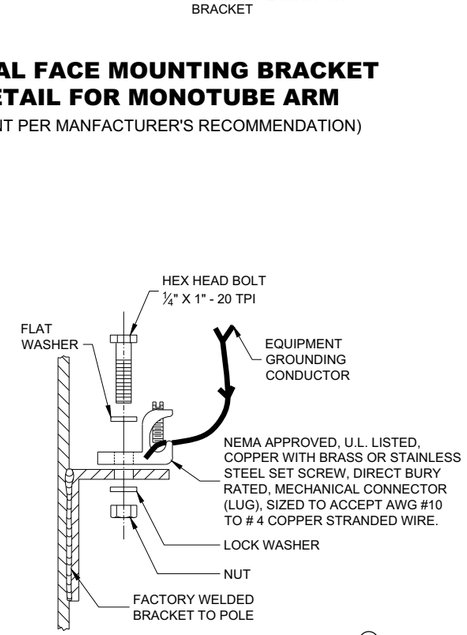


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



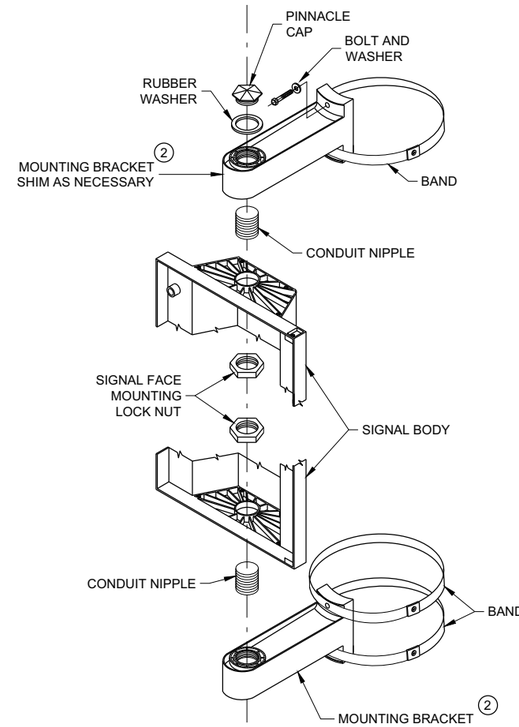
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANFACTURER'S RECOMMENDATION)

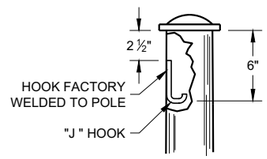


TYPICAL GROUNDING (5) CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



TYPICAL "J" HOOK (6) WIRE SUPPORT

GENERAL NOTES AND HARDWARE FOR TYPES 9,10, 9/10 SPECIAL, 12 AND 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

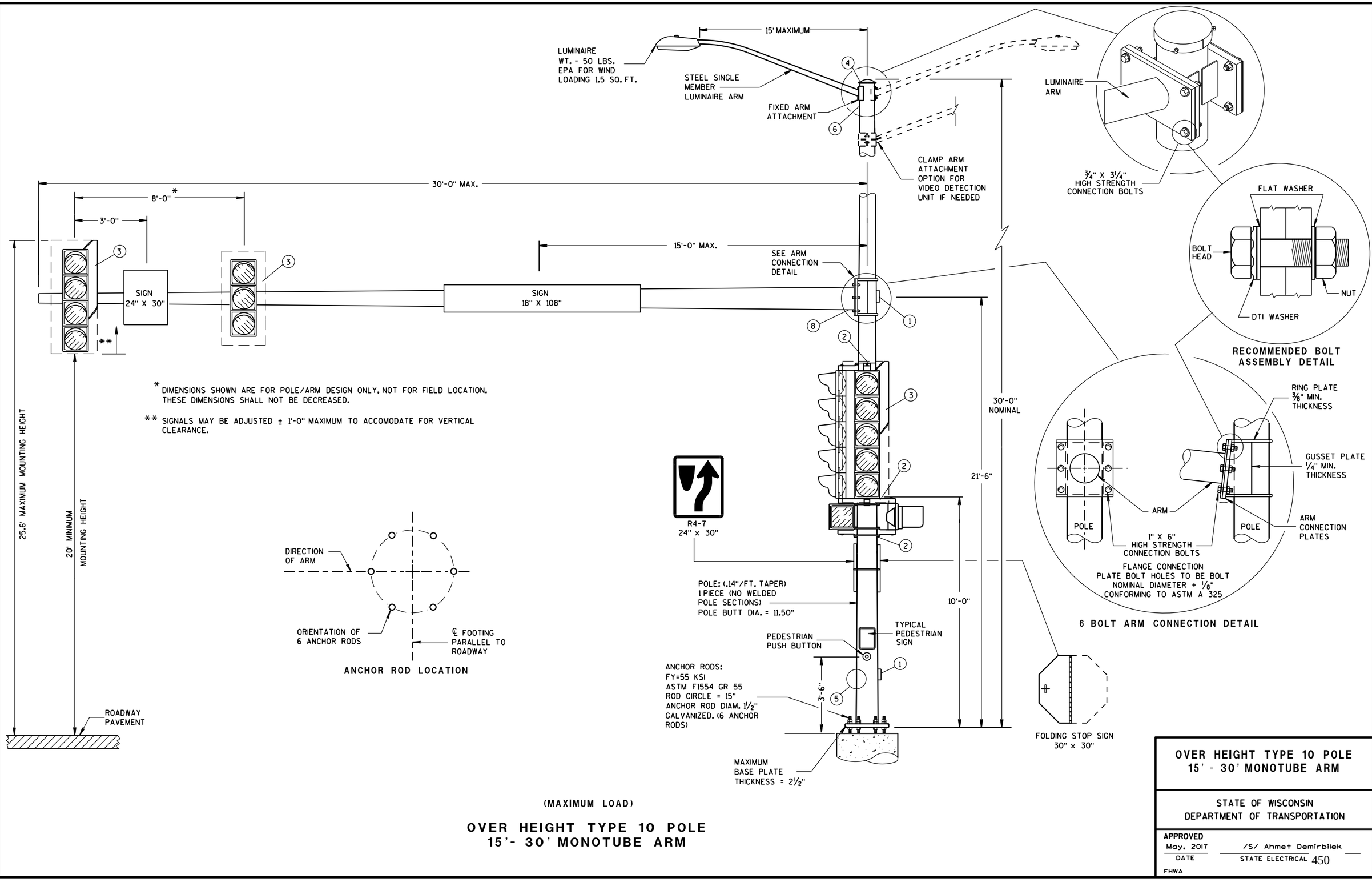
APPROVED
August 2020
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

FHWA

6

SDD 09E08 - 09k



* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

(MAXIMUM LOAD)

OVER HEIGHT TYPE 10 POLE
15'- 30' MONOTUBE ARM

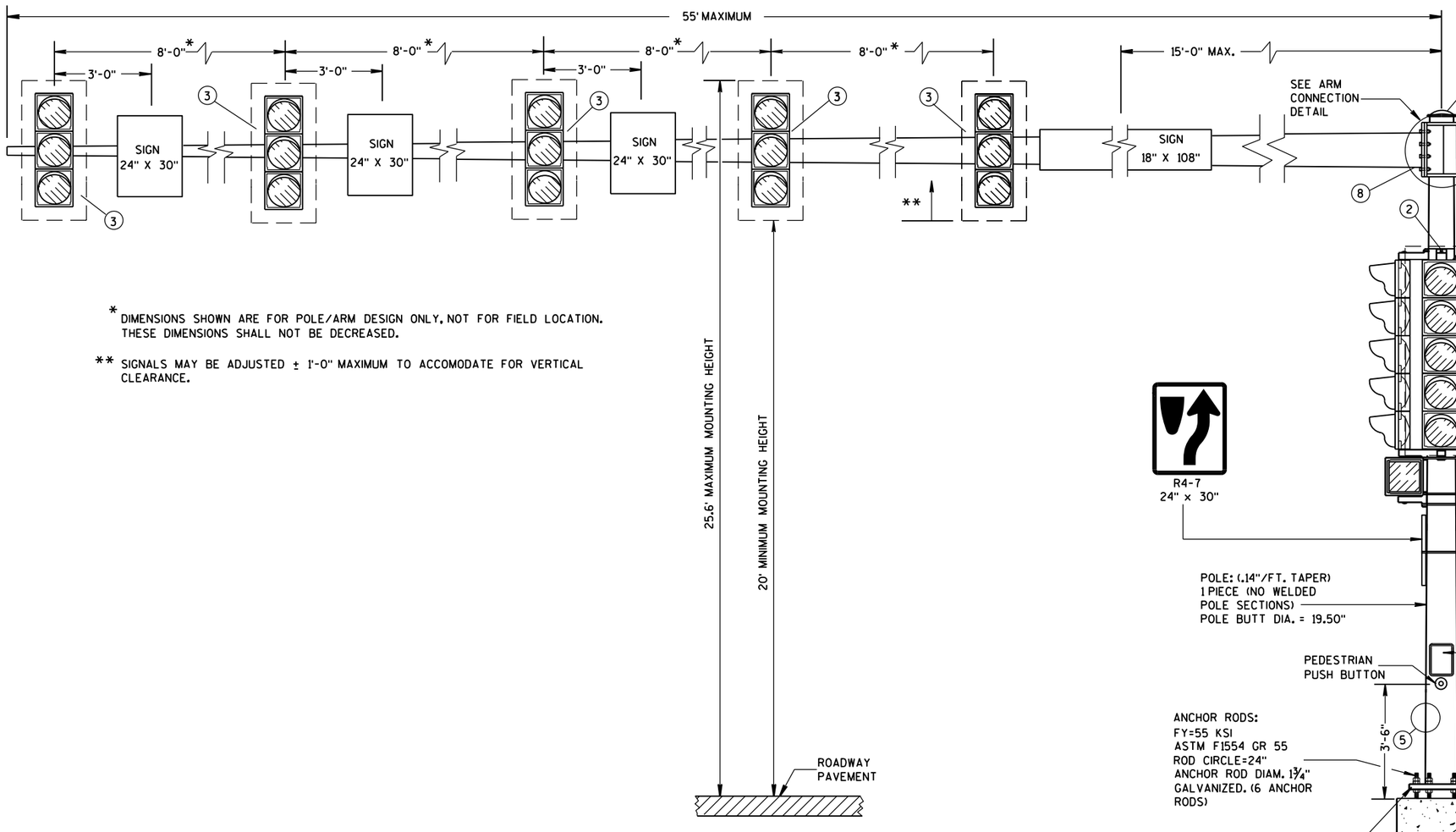
OVER HEIGHT TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

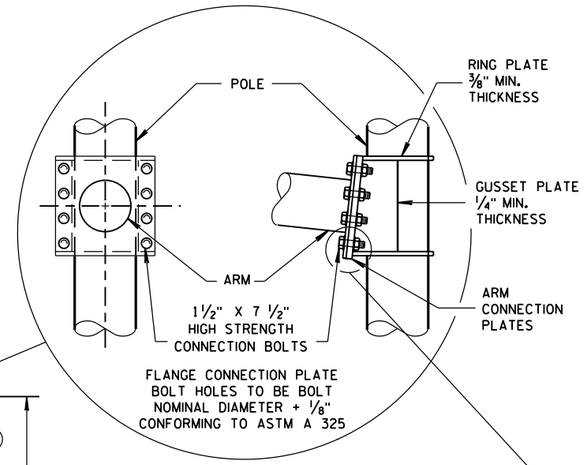
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S.D.D. 9 E 12-1b

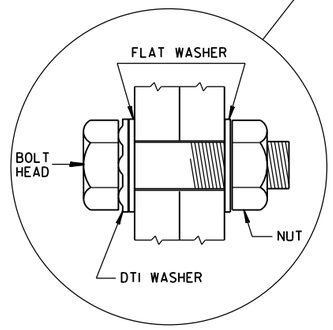


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

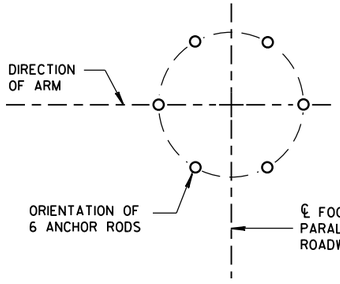
** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



8 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL



ANCHOR ROD LOCATION

(MAXIMUM LOAD)

OVER HEIGHT TYPE 12 POLE 35'- 55' MONOTUBE ARM

OVER HEIGHT TYPE 12 POLE 35' - 55' MONOTUBE ARM	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
May, 2017 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL
FHWA	451

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S.D.D. 9 E 12-1c

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S.D.D. 9 E 12-1c

GENERAL NOTES

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

OVER HEIGHT POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

OVER HEIGHT POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING 2017 INTERIM REVISIONS) AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

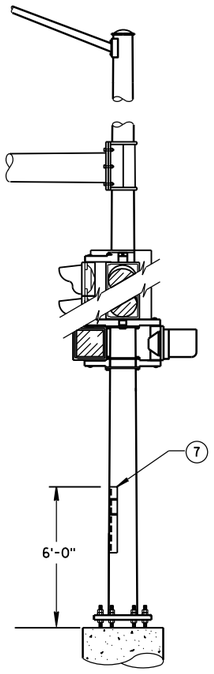
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

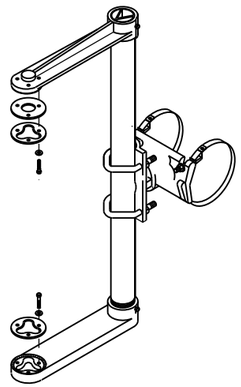
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

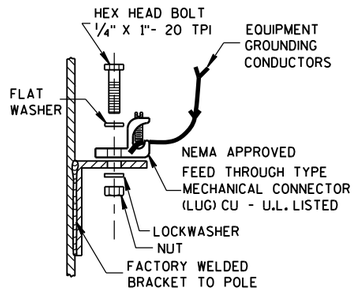


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



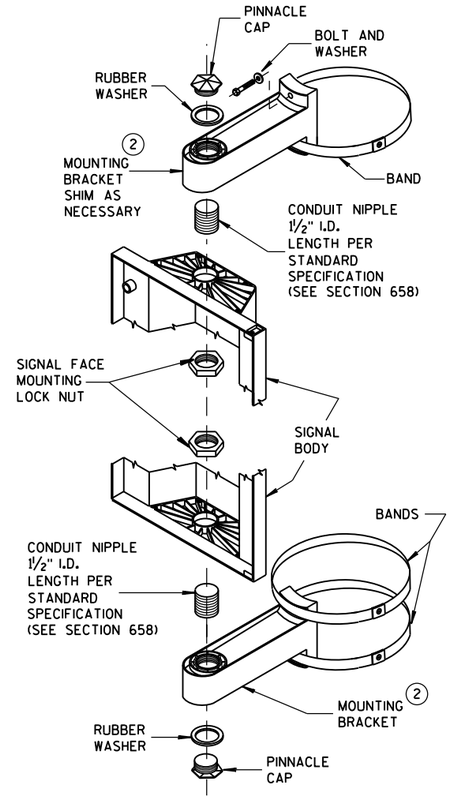
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANUFACTURER'S RECOMMENDATION)

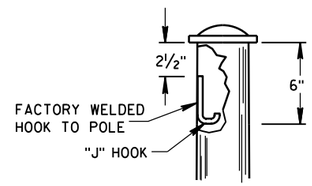


TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



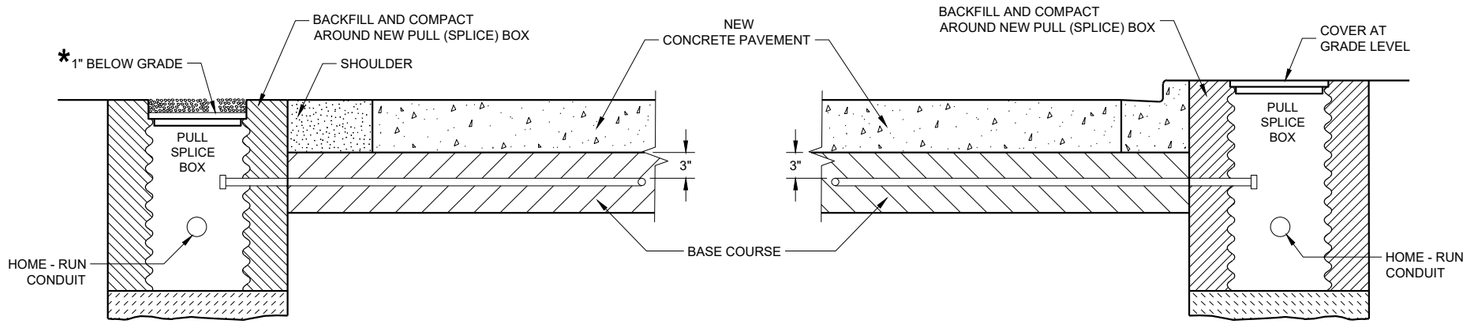
"J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE DETAILS FOR OVER HEIGHT TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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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.

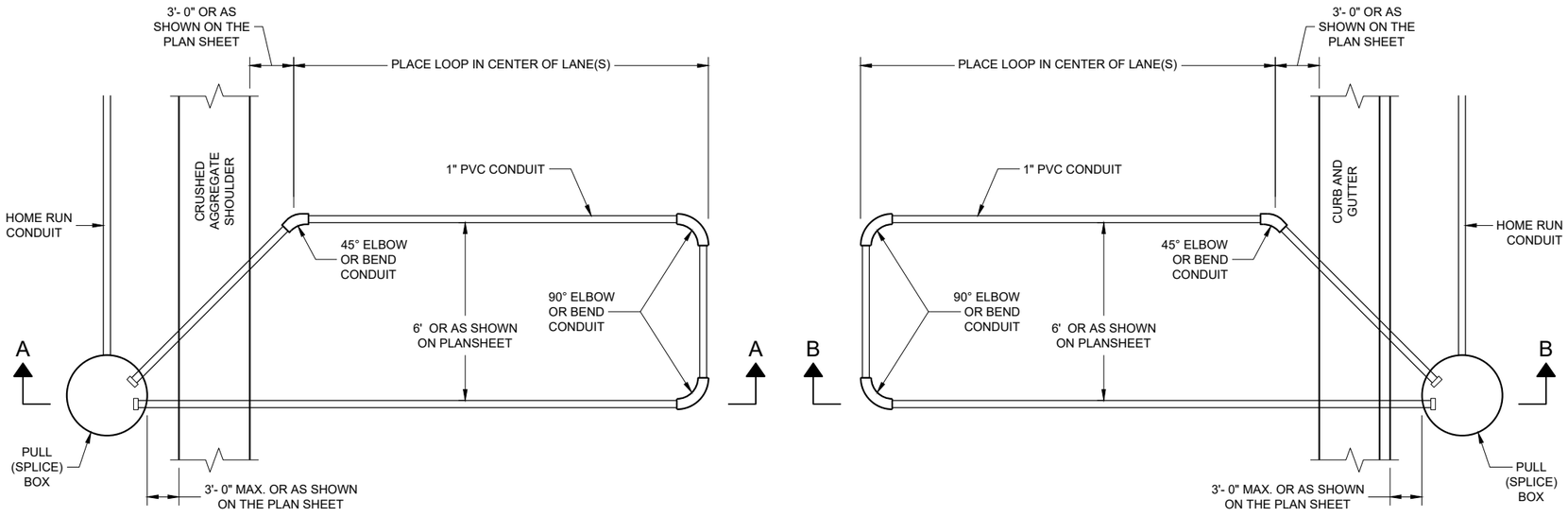
THE #12 AWG LOOP WIRE IN THE ROADSIDE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

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 18" OR 24" PULL (SPLICE) BOX

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

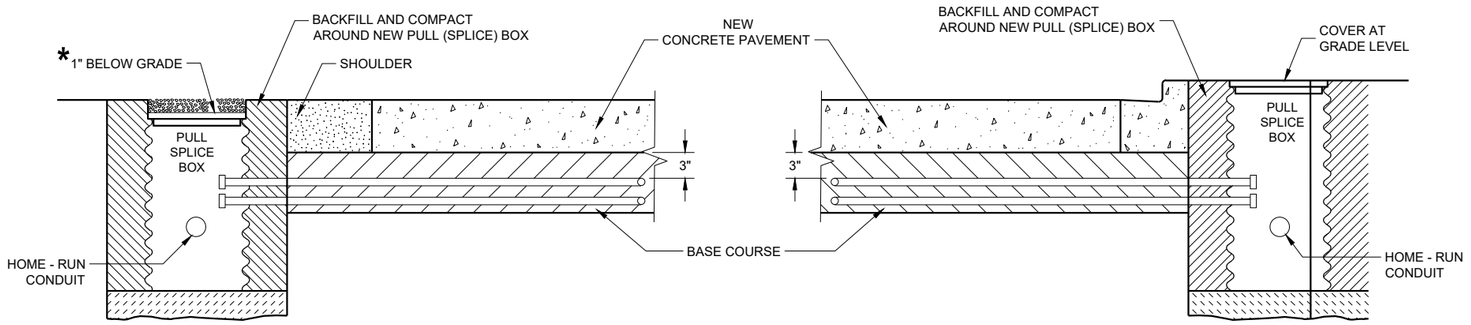
FHWA

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SDD 09F15 - 04a

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SDD 09F15 - 04a



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.

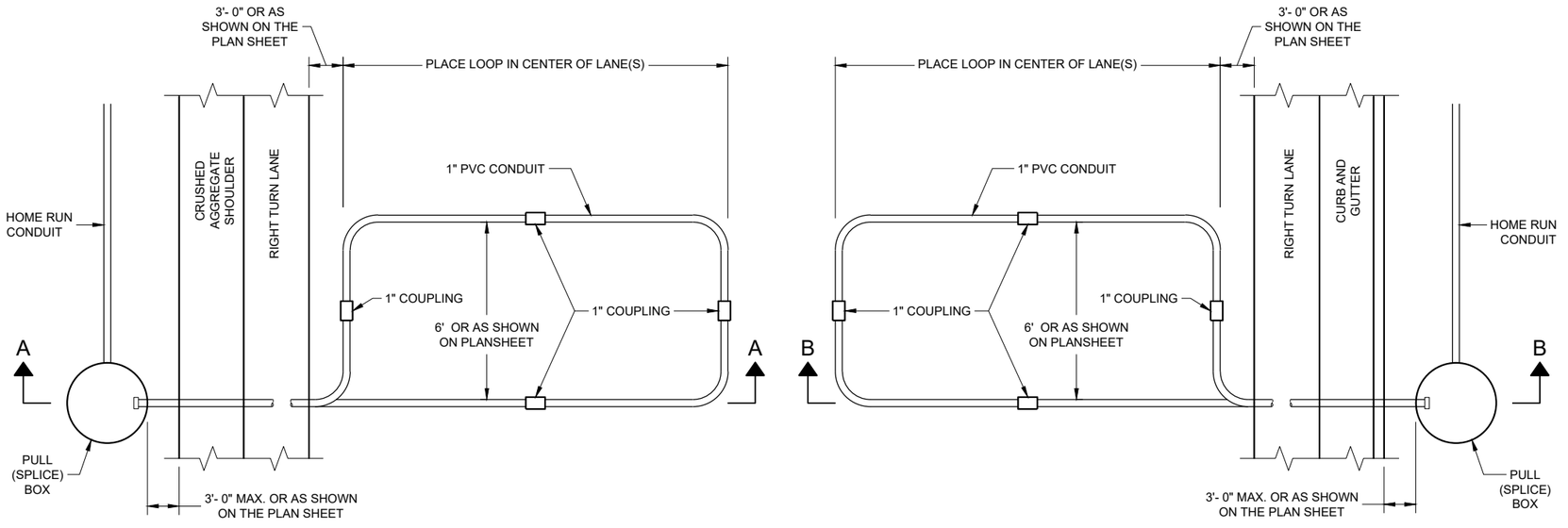
THE #12 AWG LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

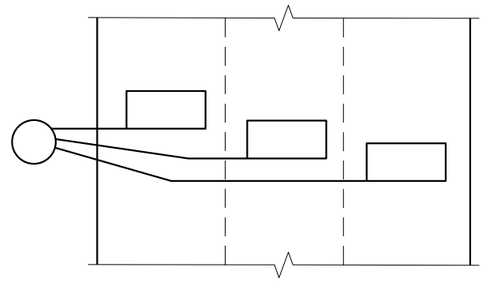
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE NON-SPLICED, CONTINUOUS LENGTH.

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)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI
FHWA

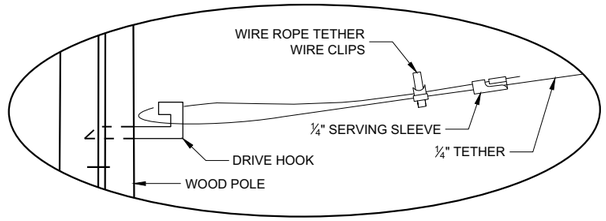
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SDD 09F15 - 04b

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SDD 09F15 - 04b

MINIMUM POLE LENGTHS	POLE BURIAL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

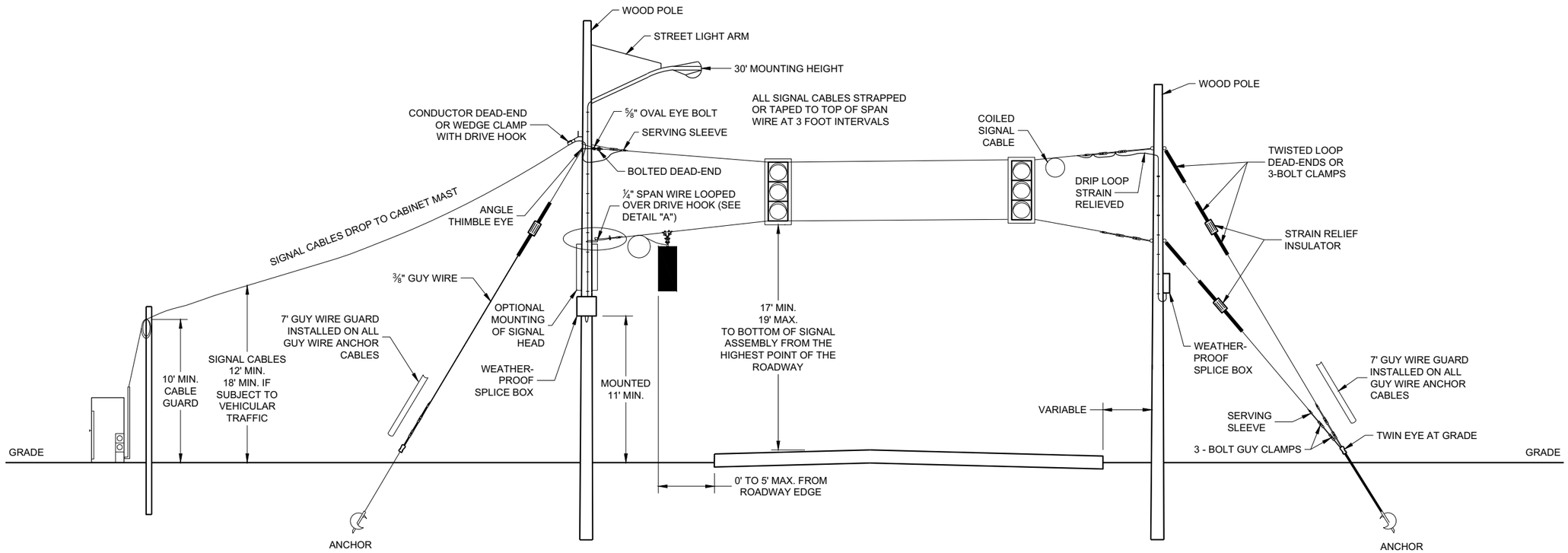


DETAIL "A"

GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.
2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE
/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI 455

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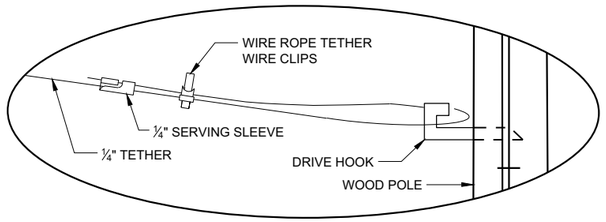
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SDD09G01 - 04a

SDD09G01 - 04a

MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

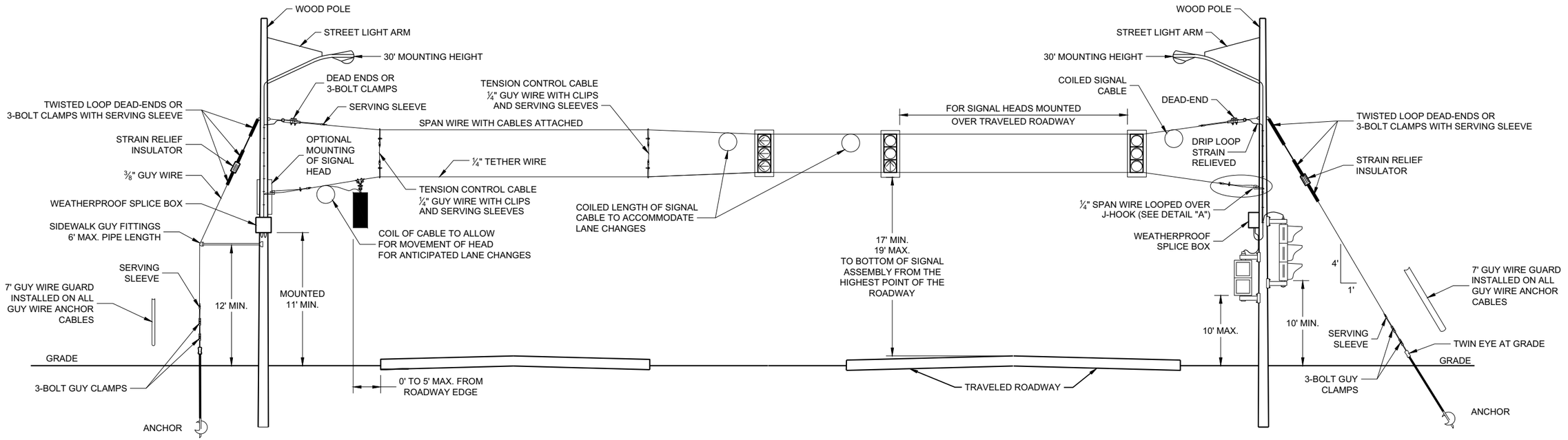


DETAIL "A"

GENERAL NOTES

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2. SIGNAL FACES:
   - A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   - B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   - C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   - D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   - E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
3. SPAN WIRE:
   - A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED
   - B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   - C. THE SIGNAL ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE

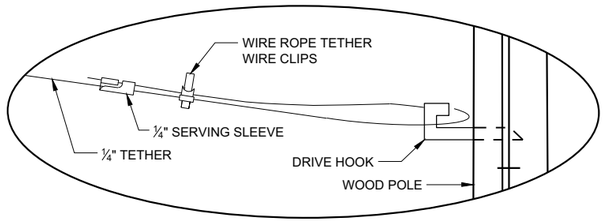
/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI

FHWA

SDD09G01 - 04b

SDD09G01 - 04b

MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

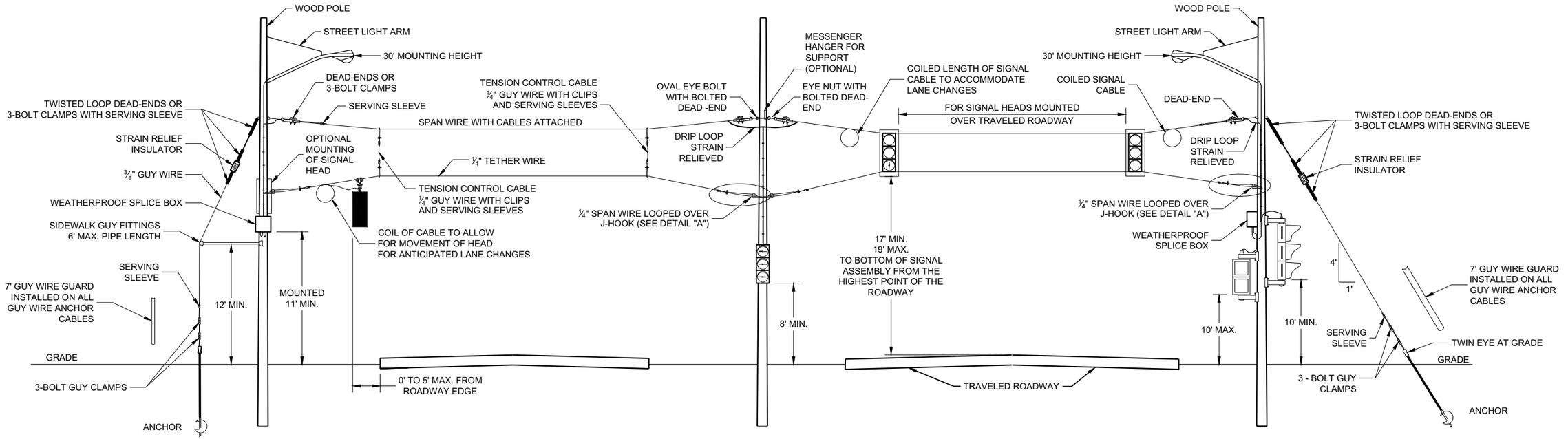


DETAIL "A"

GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.
2. SIGNAL FACES:
   - A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   - B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   - C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   - D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   - E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
3. SPAN WIRE:
   - A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED
   - B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   - C. THE SIGNAL ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE

/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI

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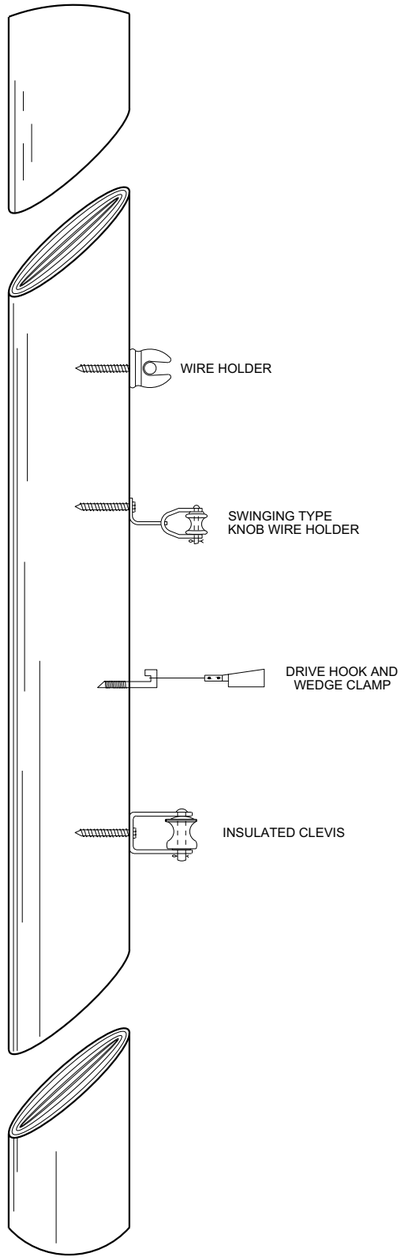
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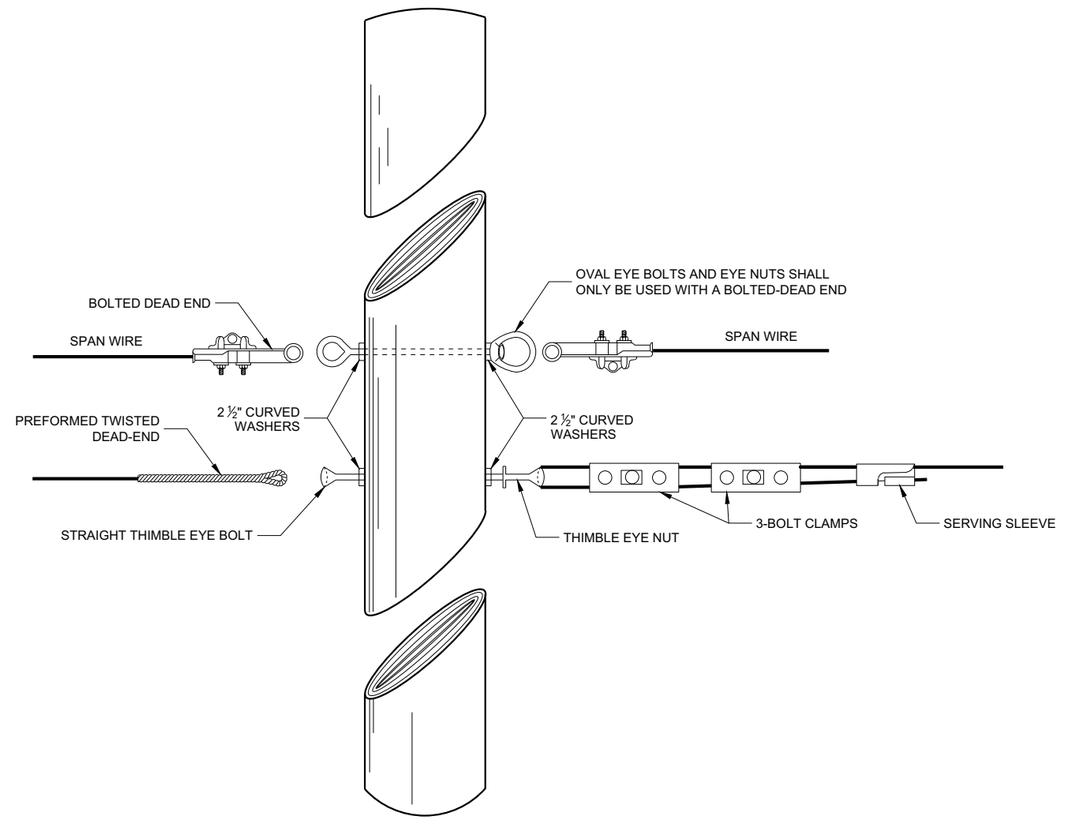
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SDD09G01 - 04c





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SDD 09G01 - 4d

SDD 09G01 - 4d

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2015
DATE

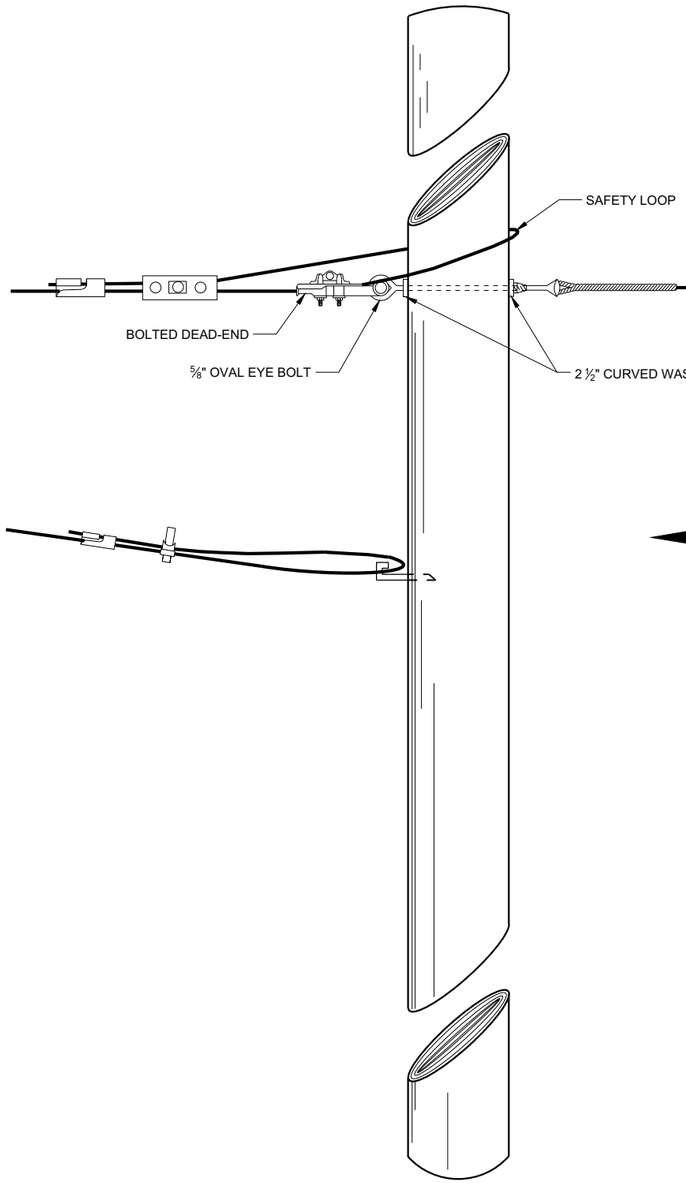
/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

458

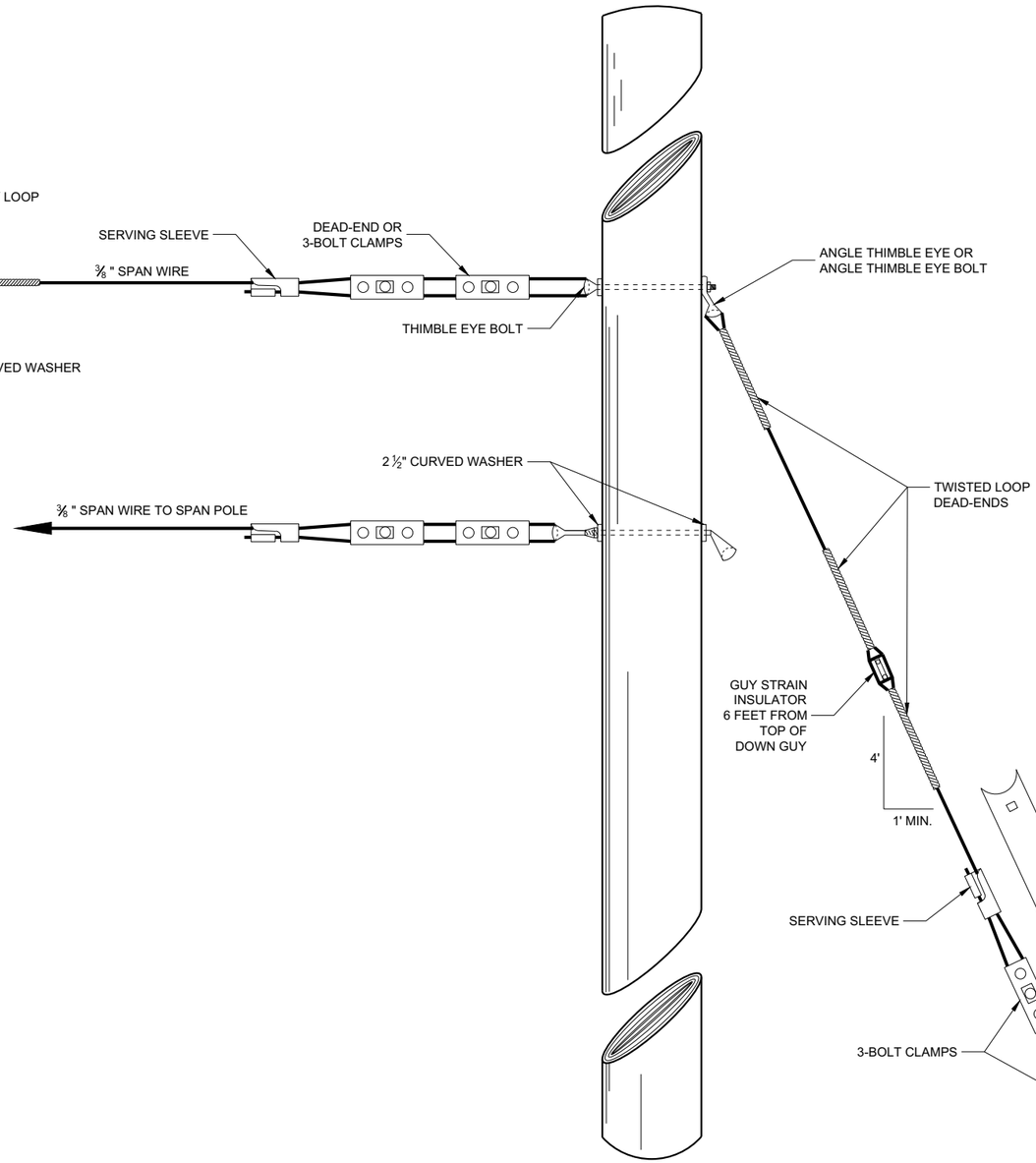
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GENERAL NOTES

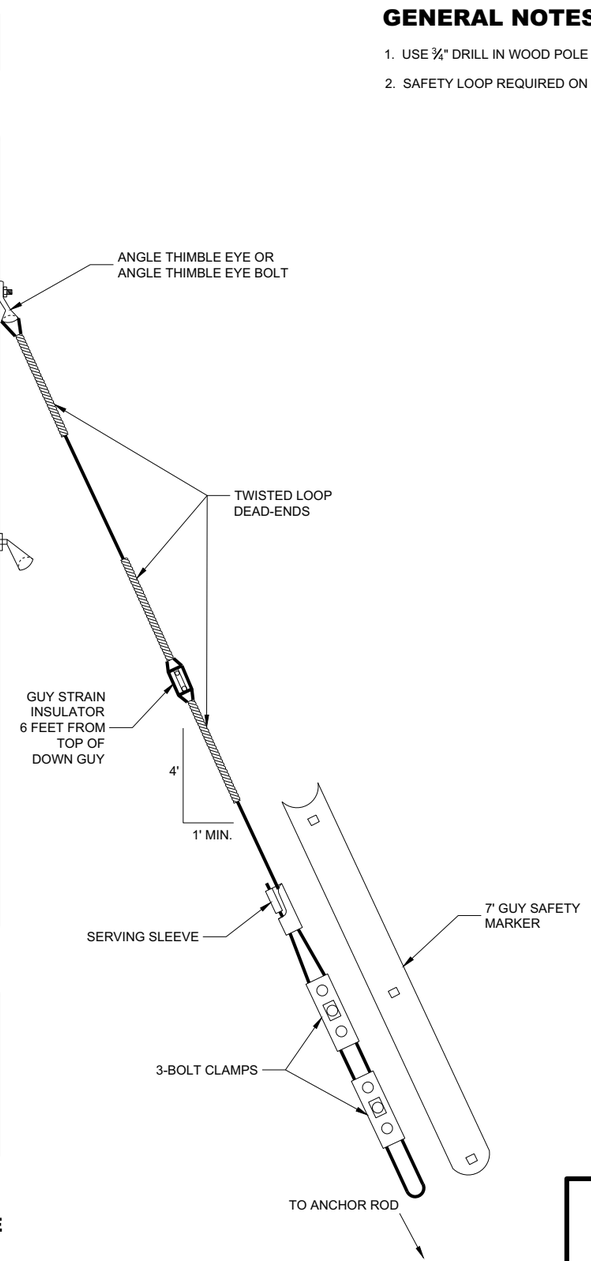
1. USE ¾" DRILL IN WOOD POLE TO PROVIDE FOR ⅝" BOLTS.
2. SAFETY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



SPAN WIRE POLE



GUY POLE



TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

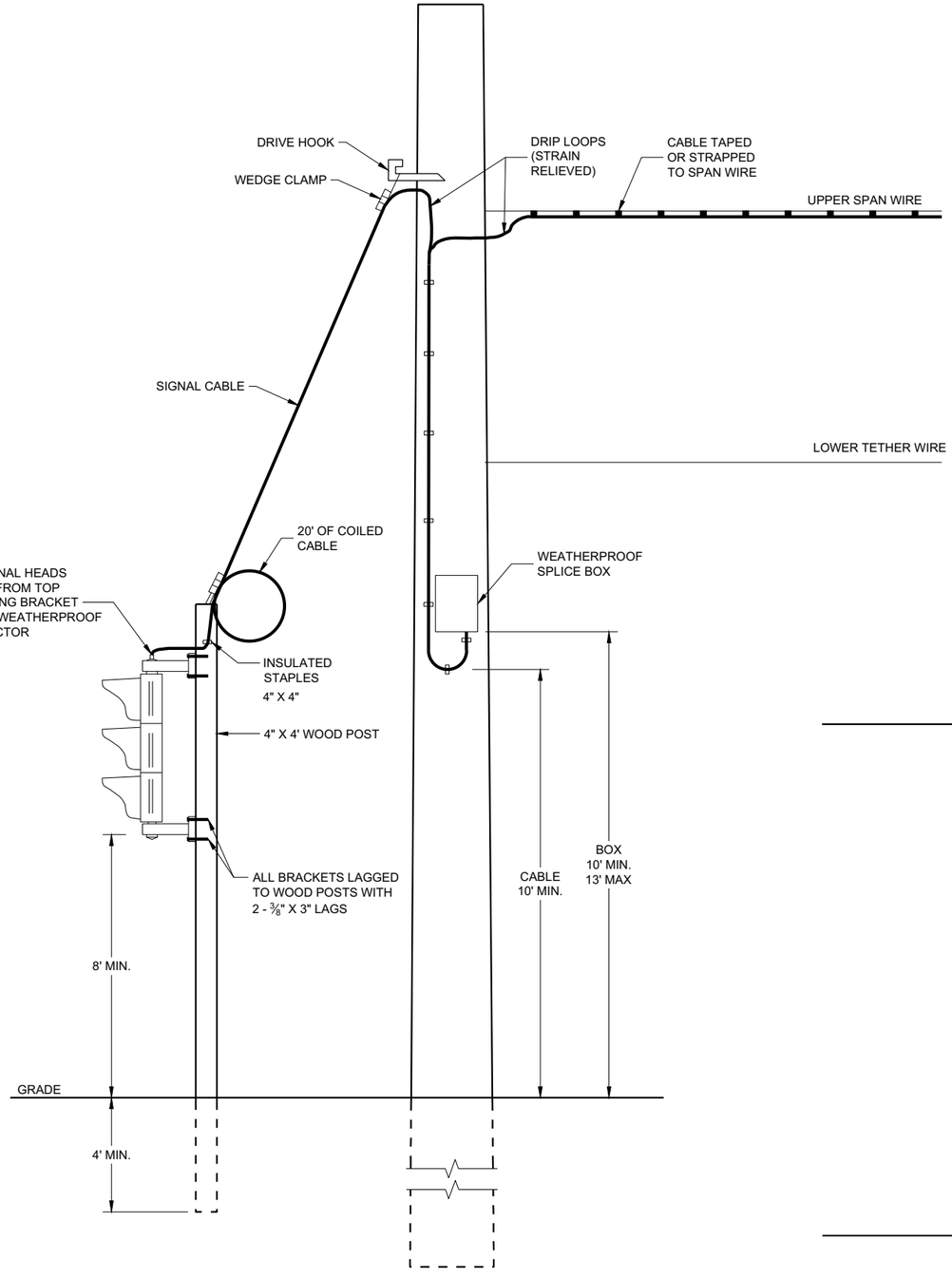
APPROVED
June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

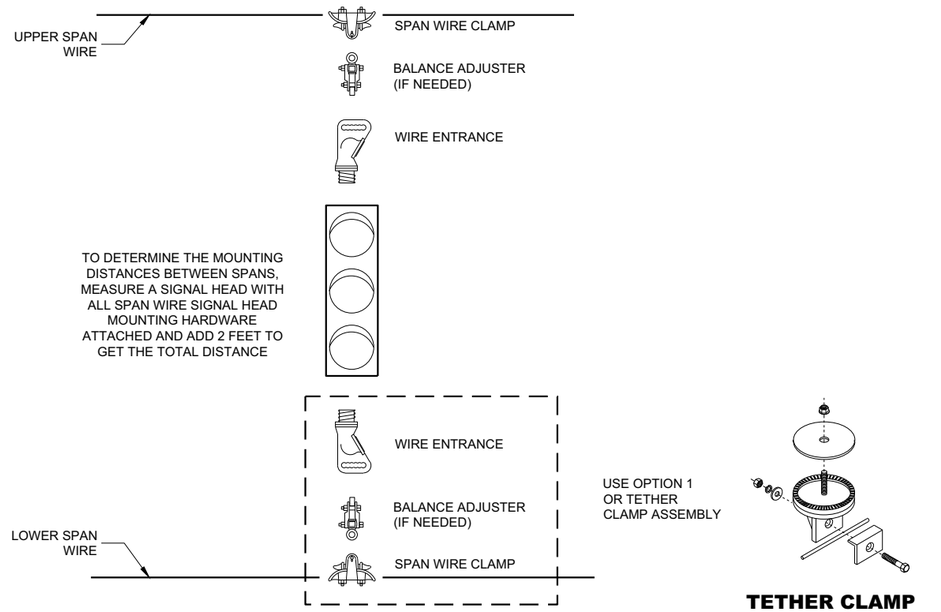
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SDD 09G01 - 4e



TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL

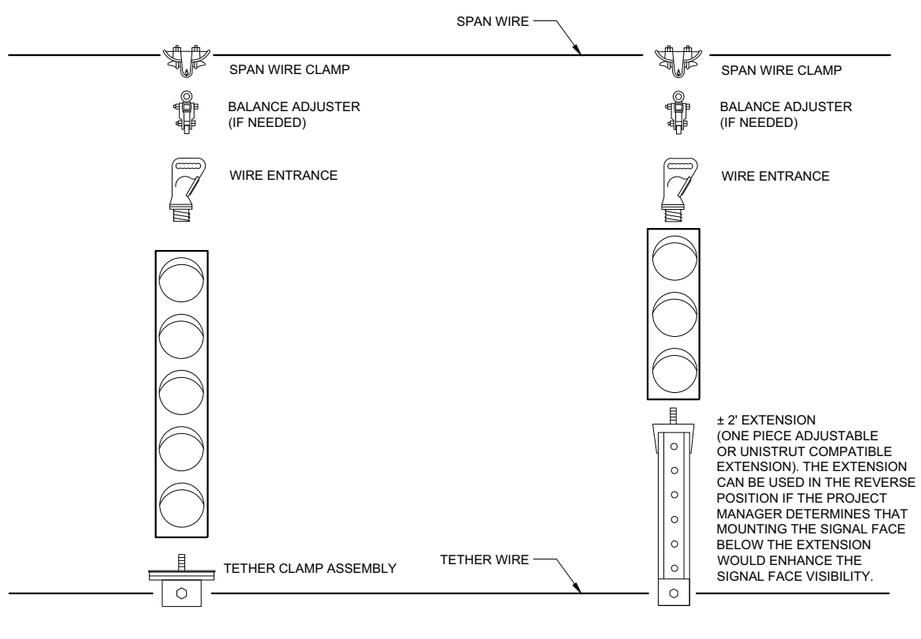


OPTION 1

USE OPTION 1 OR TETHER CLAMP ASSEMBLY

TETHER CLAMP ASSEMBLY OPTION

TYPICAL SPAN WIRE MOUNTING HARDWARE



5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE

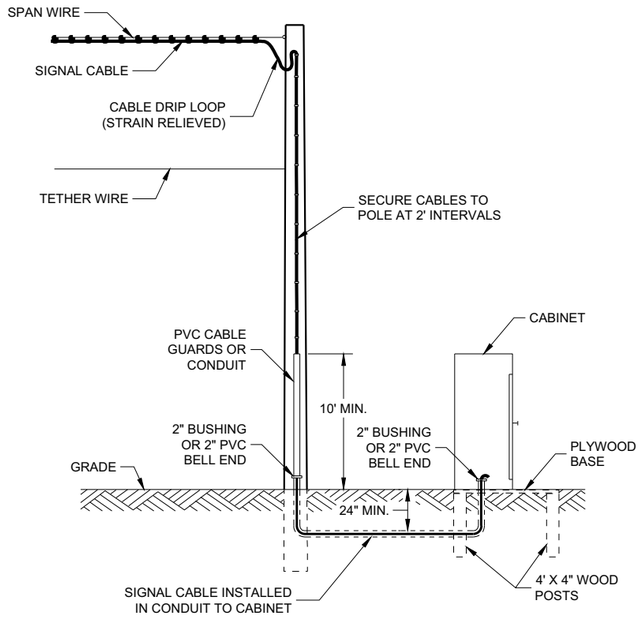
/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

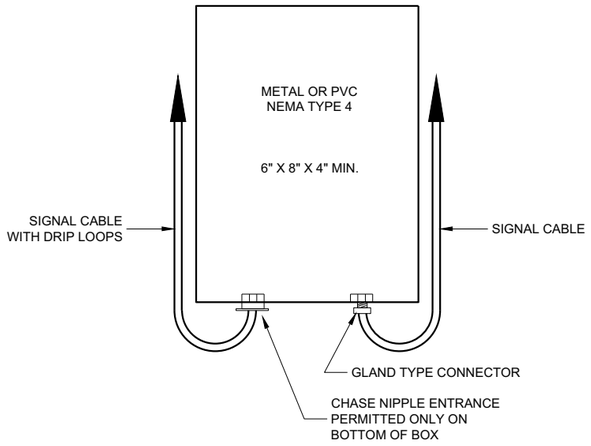
FHWA

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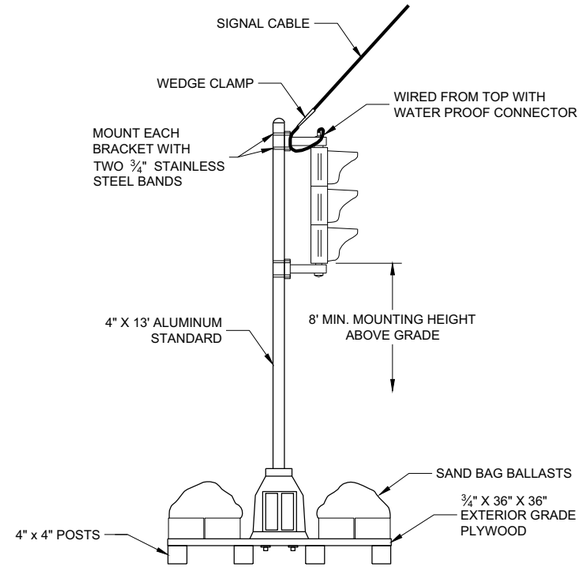
SDD 09G01 - 4f

SDD 09G01 - 4f

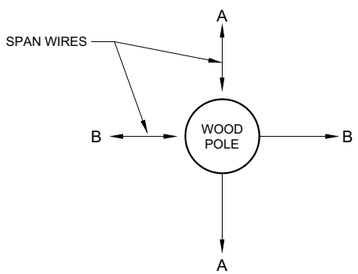




SPLICE BOX

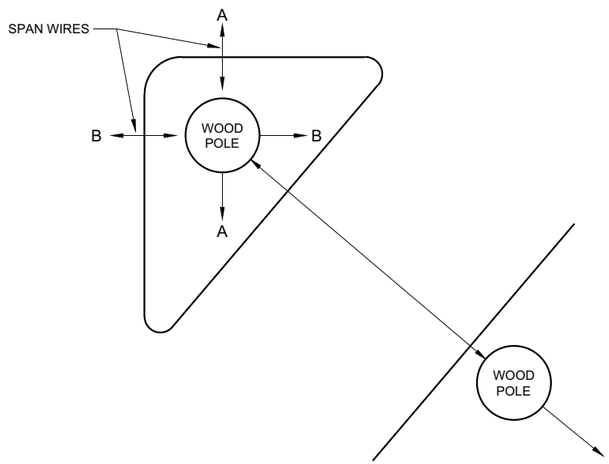


TYPICAL SKID TYPE TEMPORARY

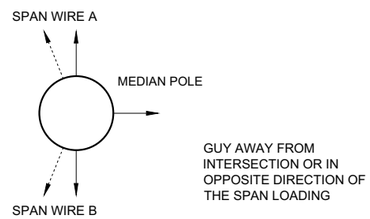


ALL DOWN OR SIDEWALK GUYS
SHALL BE INSTALLED IN THE
OPOSITE DIRECTION OF THE
STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



GUY AWAY FROM
INTERSECTION OR IN
OPPOSITE DIRECTION OF
THE SPAN LOADING

MEDIAN POLES

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

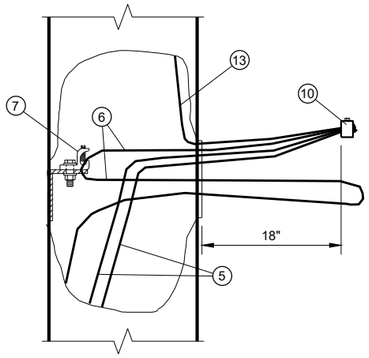
APPROVED
June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

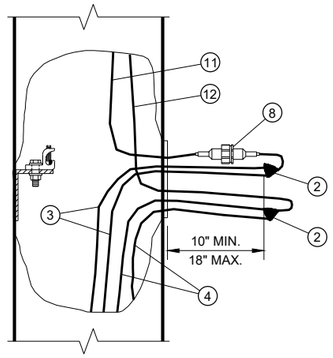
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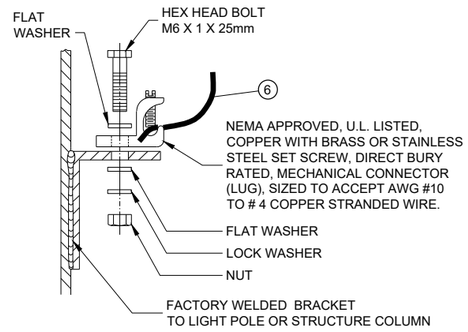


EQUIPMENT GROUNDING CONDUCTOR SLACK



UNGROUNDED CONDUCTOR SLACK (AND GROUNDED NEUTRAL SLACK IN GROUNDED NEUTRAL SYSTEM)

TYPICAL CONDUCTOR SLACK AT HANDHOLES



HANDHOLE GROUNDING LUG

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

GENERAL NOTES

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

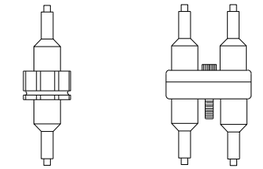
USE THIS DETAIL IN CONJUNCTION WITH THE ELECTRICAL DETAILS FOR THE APPLICATION, WHICH MAY BE A LIGHT POLE, SIGN BRIDGE, ETC.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

THREE POLE WIRES ARE SHOWN FOR A SINGLE LUMINAIRE LIGHT POLE. THREE ADDITIONAL POLE WIRES REQUIRED FOR TWIN LUMINAIRE LIGHT POLES ARE OMITTED FROM THE DRAWING FOR CLARITY. IN THE TWIN POLE CASE, BUNDLE EACH SET OF THREE WIRES WITH A NYLON CABLE TIE.

IN 3-PHASE SYSTEMS, THERE WILL BE ONE MORE UNGROUNDED LINE WIRE, WHICH IS OMITTED FROM THE DRAWING FOR CLARITY.

CIRCUIT TAGS SHALL BE INSTALLED ONLY WHERE REQUIRED IN THE SPECIAL PROVISIONS.



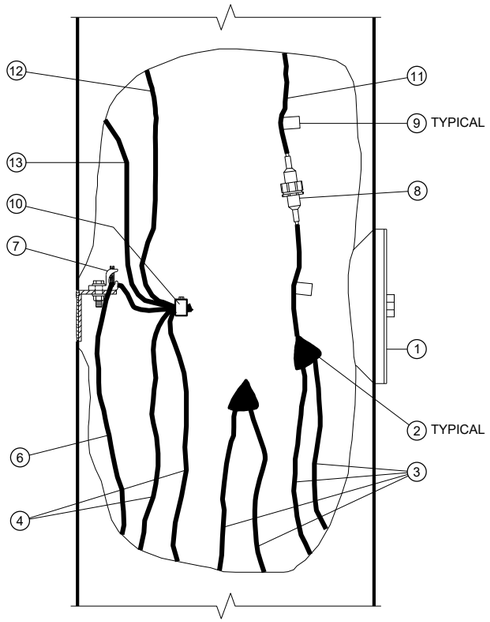
1 POLE (1P) 2 POLE (2P)

FUSE ASSEMBLIES

CONDUCTOR COLOR CODES

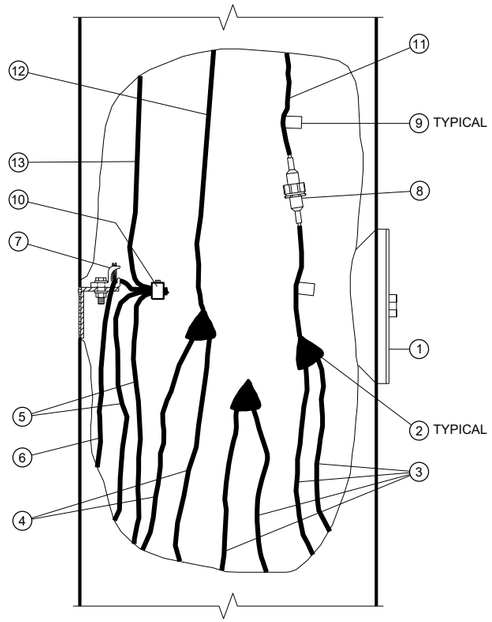
KEY	CONDUCTOR	COLOR
3	UNGROUNDED LINE WIRE	*
4	GROUNDED LINE WIRE	WHITE
5	SYSTEM GROUNDING LINE WIRE	GREEN
6	GROUNDING ELECTRODE CONDUCTOR	BARE
11	UNGROUNDED POLE WIRE	*
12	GROUNDED POLE WIRE	WHITE
13	EQUIPMENT GROUNDING POLE WIRE	GREEN

* FOLLOW COLOR CODING SHOWN IN THE PLANS. WHERE THE PLANS DO NOT SHOW COLOR CODING, USE BLACK FOR SINGLE LUMINAIRE POLES; BLACK AND RED FOR TWIN LUMINAIRE POLES.



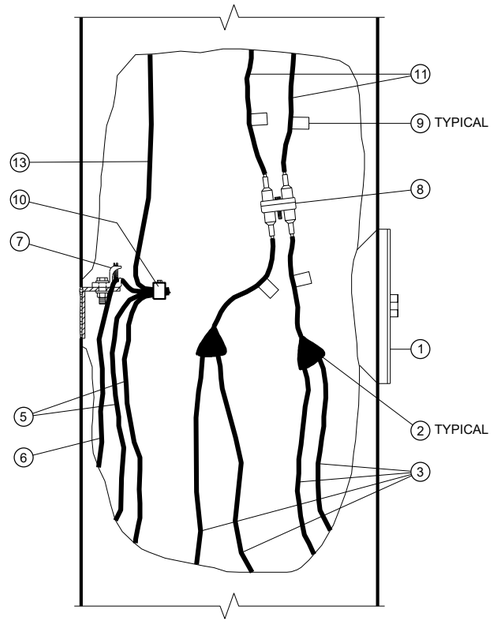
CUTAWAY HANDHOLE DETAIL

GROUNDED NEUTRAL SYSTEMS
1-ϕ



CUTAWAY HANDHOLE DETAIL

ISOLATED NEUTRAL SYSTEMS
1-ϕ SHOWN; 3-ϕ WYE SIMILAR
(SEE GENERAL NOTE)



CUTAWAY HANDHOLE DETAIL

PHASE TO PHASE SYSTEMS
1-ϕ SHOWN; 3-ϕ DELTA SIMILAR
(SEE GENERAL NOTE)

NOTE: REQUIRED CONDUCTOR SLACK NOT SHOWN ON "CUTAWAY HAND HOLE" DETAILS FOR DRAWING CLARITY, SEE "TYPICAL CONDUCTOR SLACK AT HANDHOLES" ON THIS SHEET.

1. HANDHOLE AND COVER
2. INSULATED SPLICE
3. UNGROUNDED LINE WIRE
4. GROUNDED LINE WIRE
5. SYSTEM GROUNDING LINE WIRE
6. GROUNDING ELECTRODE CONDUCTOR
7. HANDHOLE GROUNDING LUG
8. FUSE ASSEMBLY, 1P OR 2P AS REQUIRED
9. CIRCUIT TAG (SEE GENERAL NOTE)
10. REVERSIBLE PRESSURE OR COMPRESSION GROUNDING CONNECTOR (NOT INSULATED)
11. UNGROUNDED POLE WIRE
12. GROUNDED POLE WIRE
13. EQUIPMENT GROUNDING POLE WIRE

ELECTRICAL HANDHOLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 462

FHWA

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SDD 10A01 - 04

GENERAL NOTES

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

USE THIS DETAIL IN CONJUNCTION WITH THE DETAIL FOR ELECTRICAL HANDHOLE WIRING, SDD10A01.

USE TIME DELAY FUSE PER LUMINAIRE MANUFACTURER RECOMMENDATION.

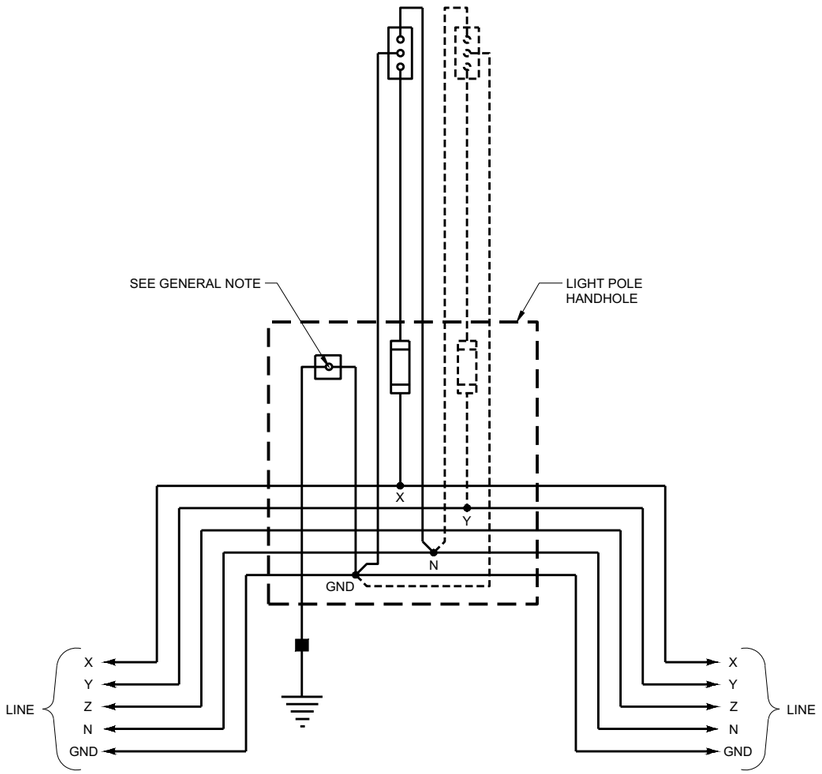
THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLD GROUNDING LUG TO THE CONNECTOR.

WIRING FOR SINGLE LUMINAIRE POLES IS SHOWN WITH SOLID LINES. WIRING FOR THE SECOND LUMINAIRE OF TWIN LUMINAIRE POLES IS SHOWN WITH DOTTED LINES.

THE PLANS WILL SHOW WHICH CIRCUIT LEG(S) ARE CONNECTED TO EACH INSTALLATION.

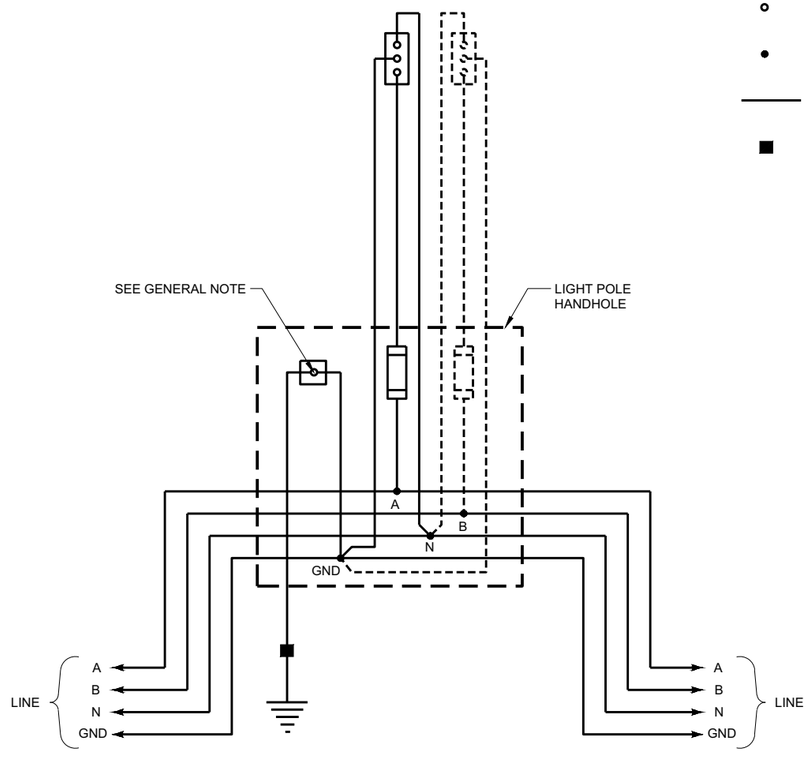
LEGEND

A,B,X,Y,Z	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
ϕ	PHASE (ELECTRICAL CURRENT)
	HANDHOLE GROUND LUG
	SINGLE-POLE (1P) FUSE ASSEMBLY
	UNFUSED LUMINAIRE
	EQUIPMENT GROUNDING ELECTRODE
	TERMINAL
	SPLICE
	CONDUCTOR
	EXOTHERMIC WELD



TYPICAL WIRING DIAGRAM

ISOLATED NEUTRAL SYSTEM
3 - ϕ 208Y / 120VAC OR 480Y / 277VAC 4 WIRE



TYPICAL WIRING DIAGRAM

ISOLATED NEUTRAL SYSTEM
1 - ϕ 120 / 240VAC OR 240 / 480VAC 3 WIRE

ELECTRICAL DETAILS
GROUND MOUNT LIGHT POLES
ISOLATED NEUTRAL SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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SDD 10A05 - 03

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SDD 10A05 - 03

GENERAL NOTES

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

USE THIS DETAIL IN CONJUNCTION WITH THE DETAIL FOR ELECTRICAL HANDHOLE WIRING, SDD10A01.

USE TIME DELAY FUSE PER LUMINAIRE MANUFACTURER RECOMMENDATION.

THE GROUNDING ELECTROCDE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLD GROUNDING LUG TO THE CONNECTOR.

WIRING FOR SINGLE LUMINAIRE POLES IS SHOWN WITH SOLID LINES. WIRING FOR THE SECOND LUMINAIRE OF TWIN LUMINAIRE POLES IS SHOWN WITH DOTTED LINES.

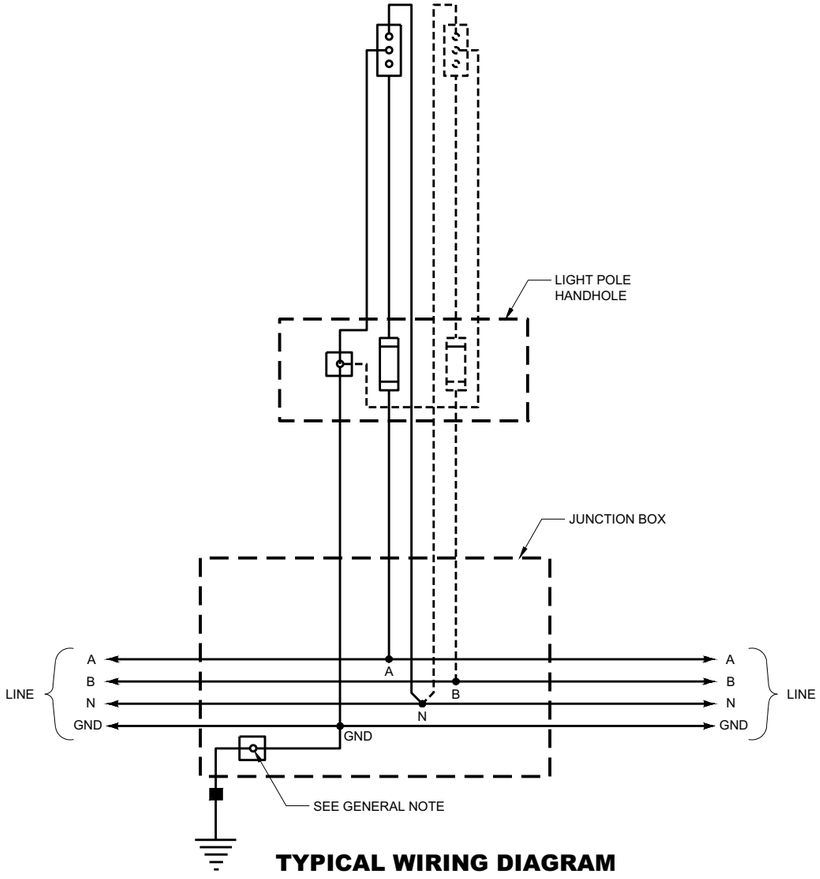
THE PLANS WILL SHOW WHICH CIRCUIT LEG(S) ARE CONNECTED TO EACH INSTALLATION.

WIRE SIZE FROM THE JUNCTION BOX TO THE POLE HANDHOLE SHALL EQUAL THE SIZE OF THE POLE WIRE.

THE INTENT OF JUNCTION BOX SPLICES AS SHOWN IN THIS DETAIL IS FOR LIGHTING SYSTEMS WITH HEAVY LINE WIRE TOO LARGE TO PULL THROUGH THE CONDUIT INTO THE POLE HANDHOLE, DUE TO CONDUIT FILL REQUIREMENTS OF N.E.C. AND / OR THE STIFFNESS OF THE WIRE COMPARED TO THE NUMBER OF BENDS IN THE CONDUIT. IN CASES WHERE LINE WIRE IS LIGHTER, SUCH AS SMALL ER SYSTEMS OR TOWARD THE FURTHEST END OF A LARGER SYSTEM PULL THE LINE WIRE INTO THE POLE HANDHOLE FOR SPLICING.

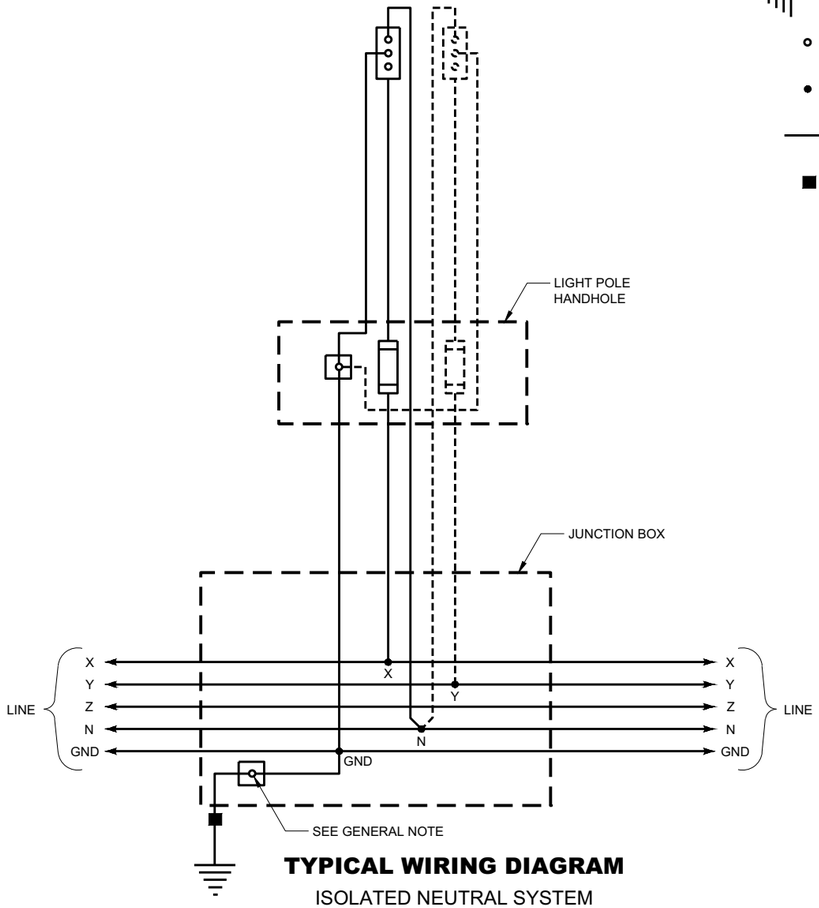
LEGEND

A,B,X,Y,Z	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
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	HANDHOLE GROUND LUG
	SINGLE-POLE (1P) FUSE ASSEMBLY
	UNFUSED LUMINAIRE
	EQUIPMENT GROUNDING ELECTRODE
	TERMINAL
	SPLICE
	CONDUCTOR
	EXOTHERMIC WELD



TYPICAL WIRING DIAGRAM

ISOLATED NEUTRAL SYSTEM
1 - ϕ 240 / 480VAC 3 WIRE



TYPICAL WIRING DIAGRAM

ISOLATED NEUTRAL SYSTEM
3 - ϕ 480Y / 277VAC 4 WIRE

ELECTRICAL DETAILS
MEDIAN MOUNT LIGHT POLES
ISOLATED NEUTRAL SYSTEMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 464

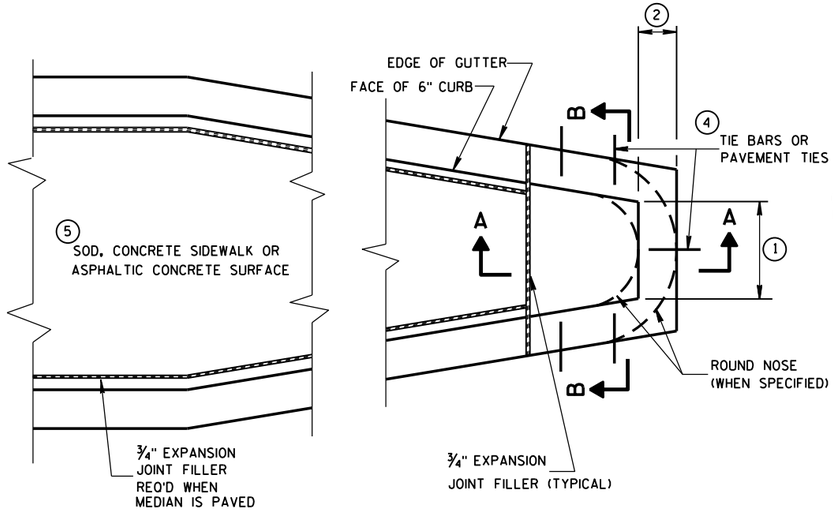
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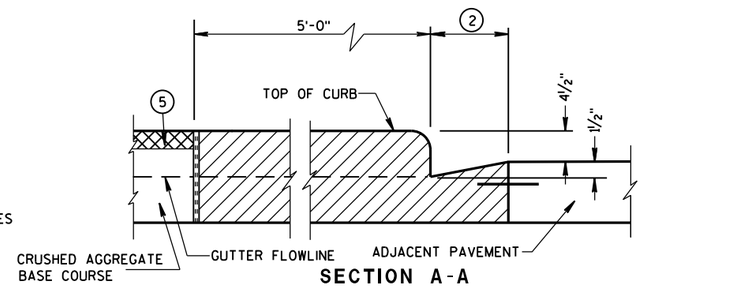
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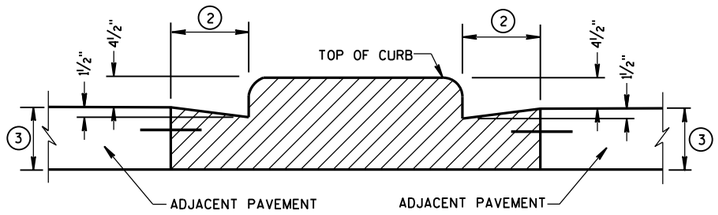
SDD 10A11 - 03

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SDD 10A11 - 03







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.

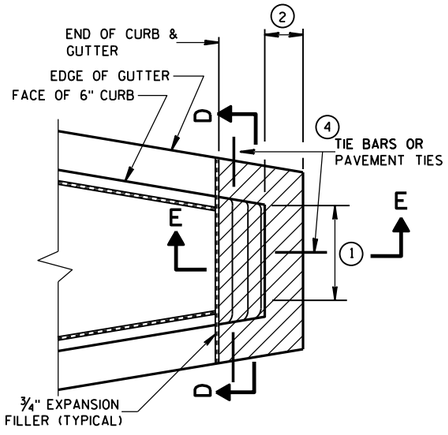
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

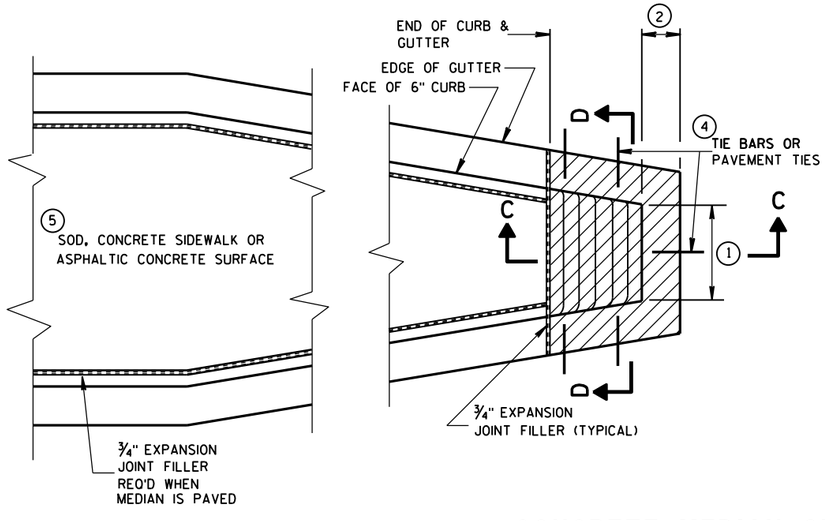
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

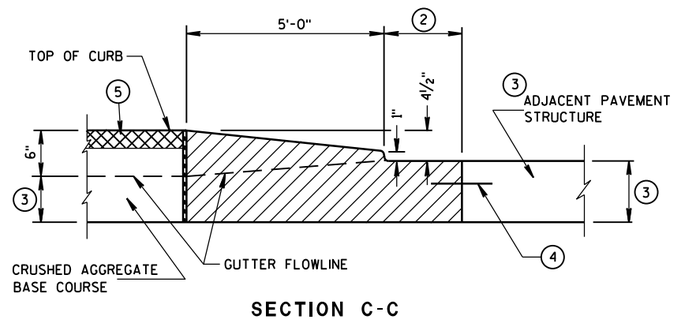
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

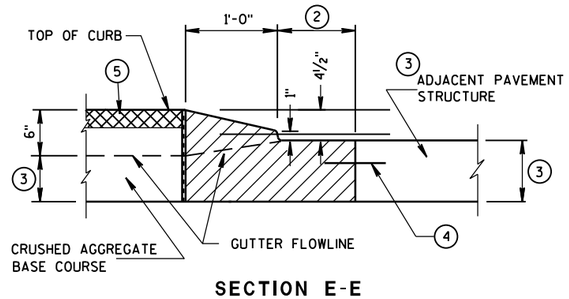
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

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



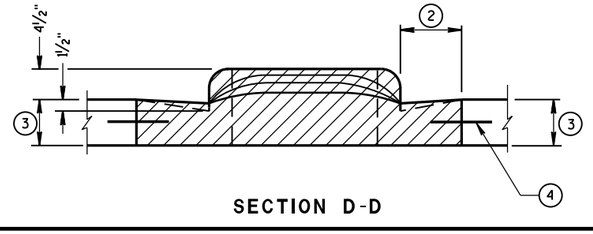






CONCRETE MEDIAN SLOPED NOSE TYPE 2

CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN NOSE

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DEPARTMENT OF TRANSPORTATION

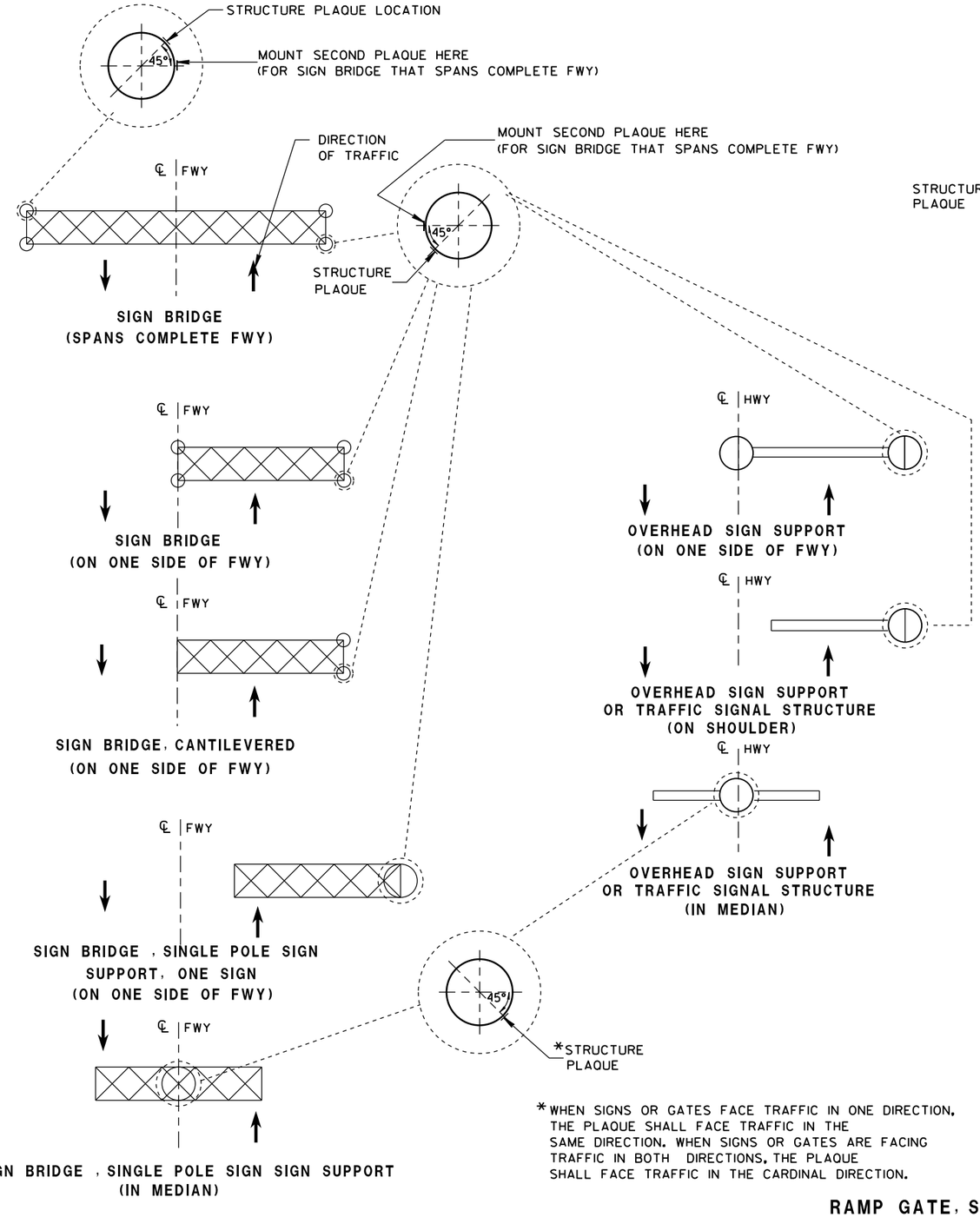
APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER
FHWA

6

S.D.D. 11 B 2-2

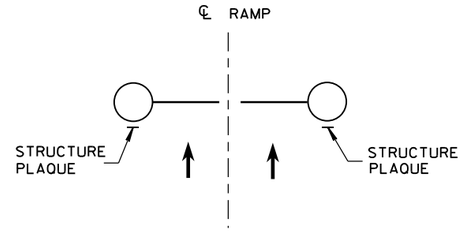
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S.D.D. 11 B 2-2

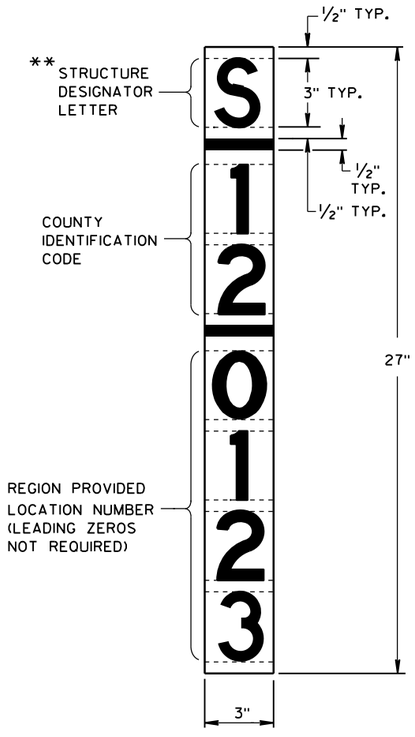


*WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES



RAMP GATE
(ACROSS FWY ON-RAMP)



** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

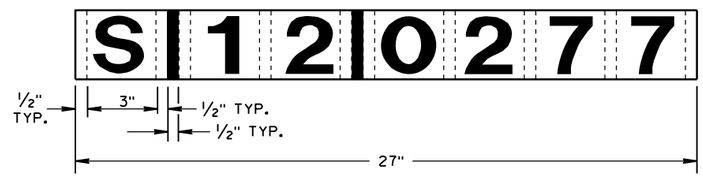
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

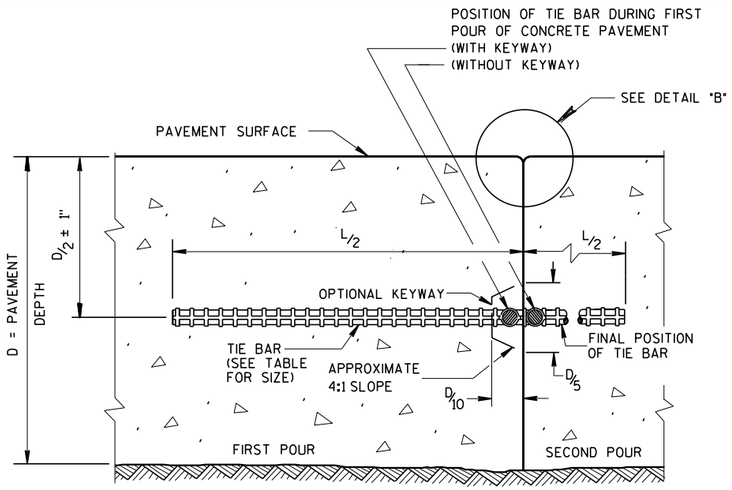
STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

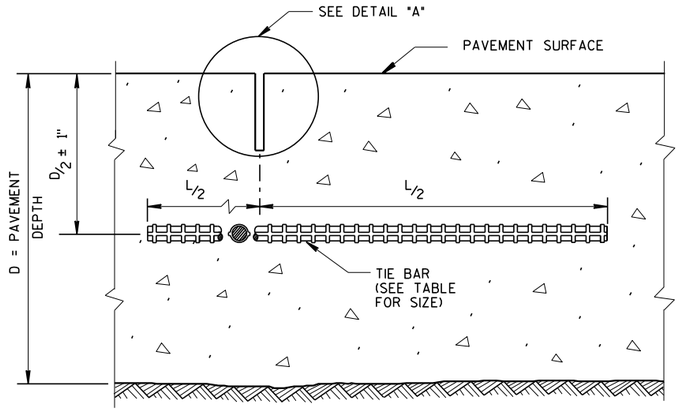
APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 12 A 4-3



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

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

PLAN VIEW

SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

DETAIL "C"

TIE BAR TABLE

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

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

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

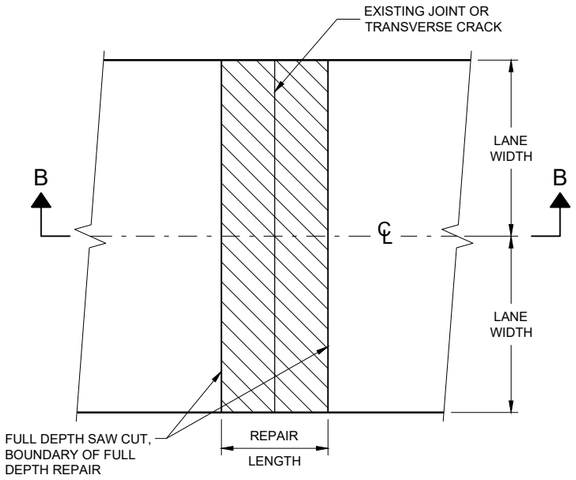
PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

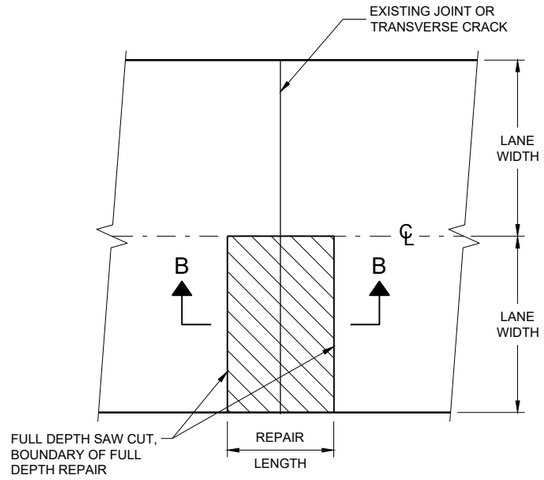
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE
/S/ Peter Kemp PE
PAVEMENT SUPE
FHWA

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S.D.D. 13 C 1-19



PLAN VIEW
(DOUBLE LANE REPAIR)



PLAN VIEW
(SINGLE LANE REPAIR)

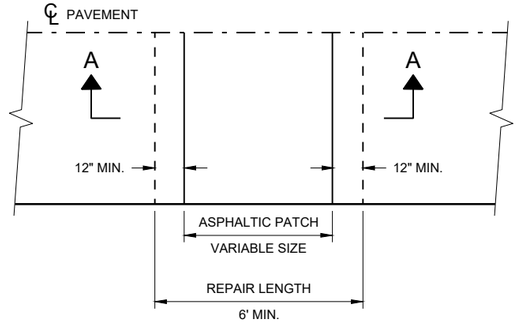
GENERAL NOTES

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.

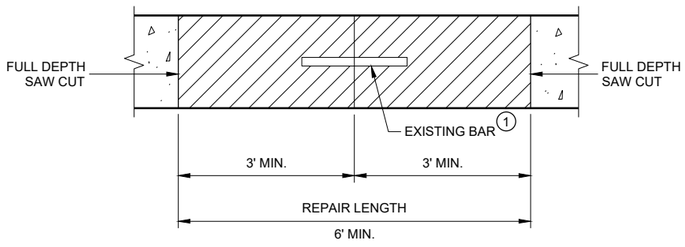
THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NON-DOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

(1) DOWEL BARS MAY NOT BE PRESENT.



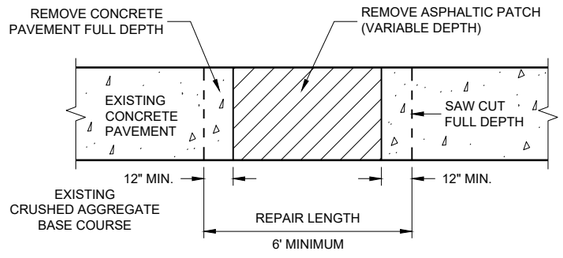
PLAN VIEW

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION B - B

CONCRETE REMOVAL



SECTION A - A

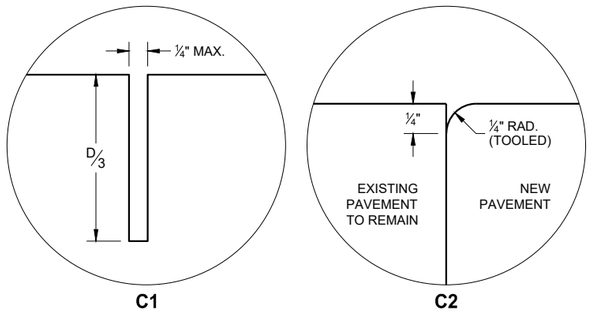
HMA PATCH REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

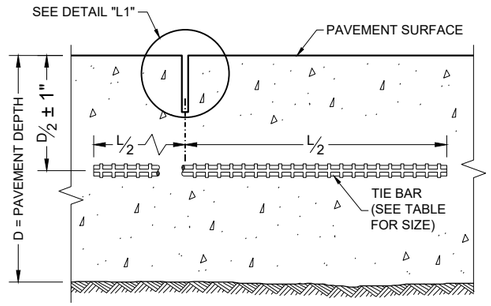
STATE OF WISCONSIN
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SDD13C09 - 17a

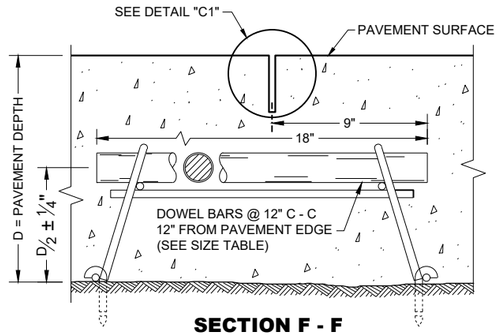


TRANSVERSE JOINTS



SECTION C - C

SAWED LONGITUDINAL JOINT



SECTION F - F

DOWELED CONTRACTION JOINT

GENERAL NOTES

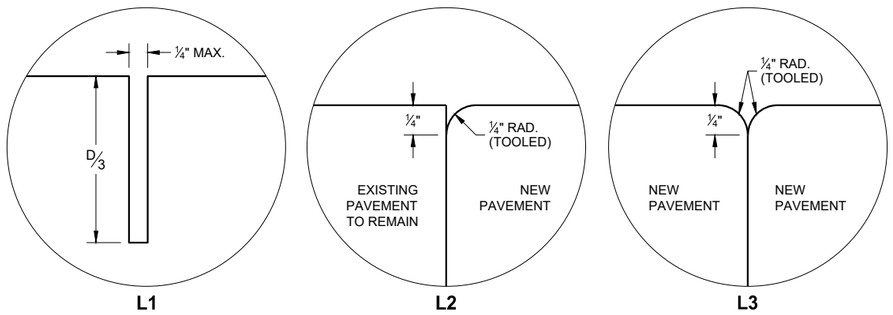
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

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

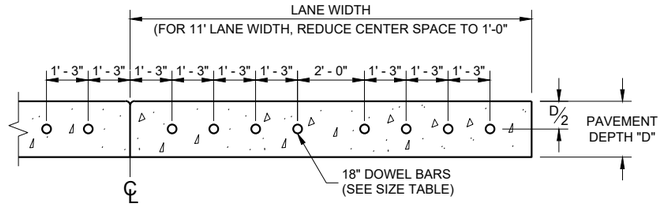
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

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

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

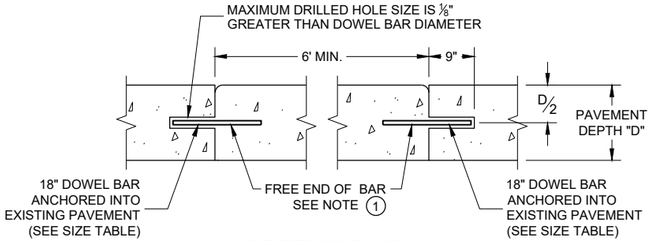


LONGITUDINAL JOINTS



SECTION E - E

DRILLED DOWEL BAR CONSTRUCTION JOINT



SECTION D - D

TIE BAR TABLE

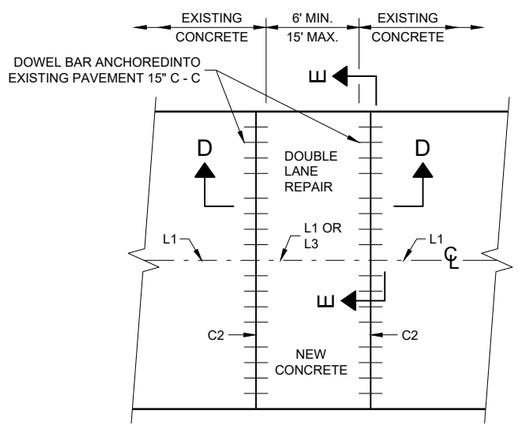
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

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

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

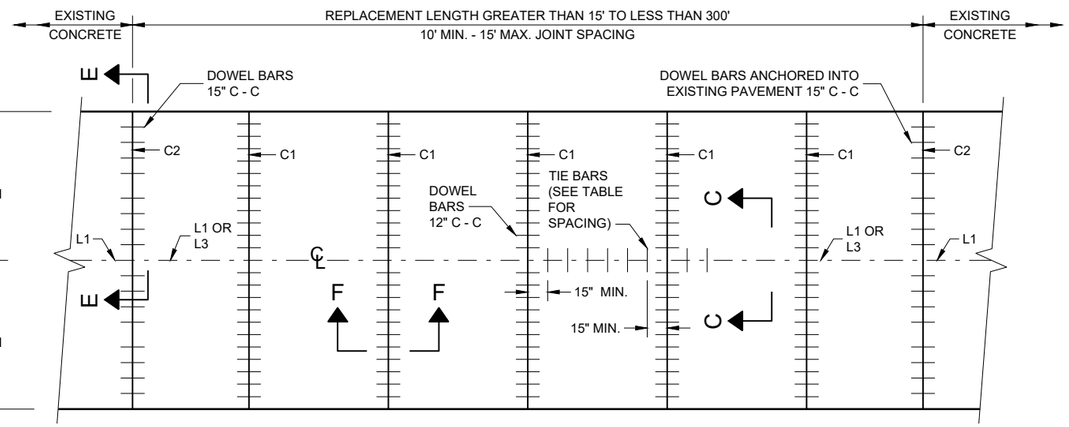
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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



PLAN VIEW

MULTILANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

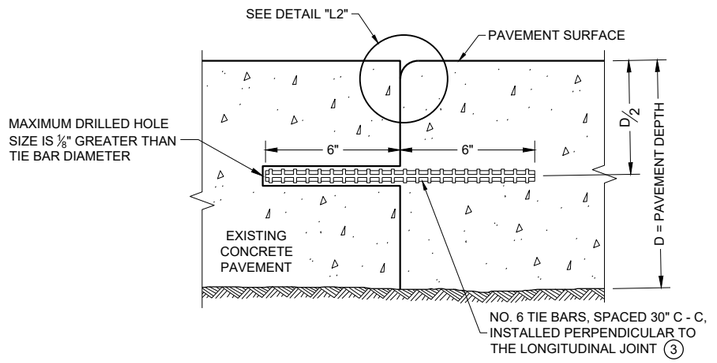
MULTILANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 13C09 - 17b
SDD 13C09 - 17b

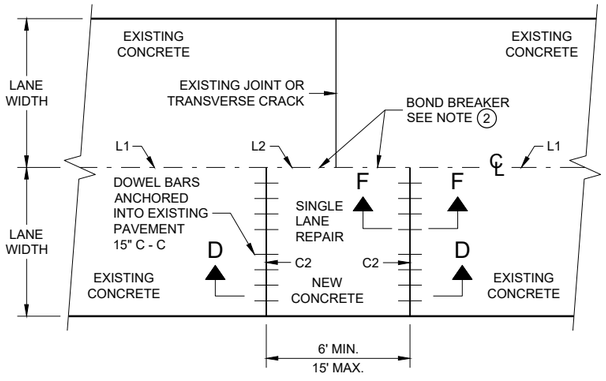


SECTION G - G

TIE BARS ANCHORED INTO EXISTING PAVEMENT

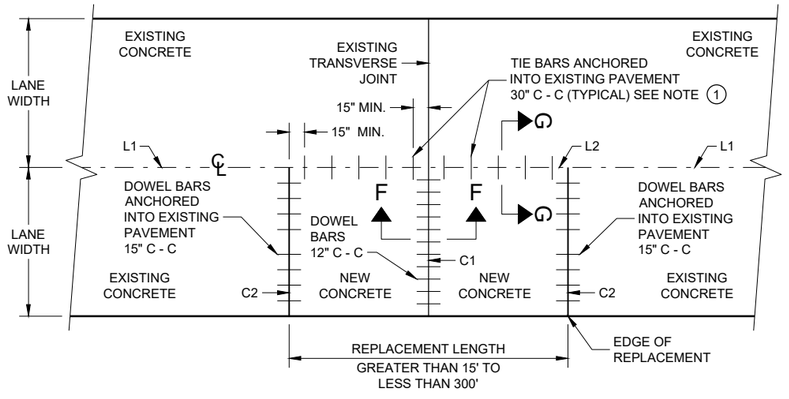
GENERAL NOTES

1. WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.
2. USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.
3. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE REPAIR AND REPLACEMENT

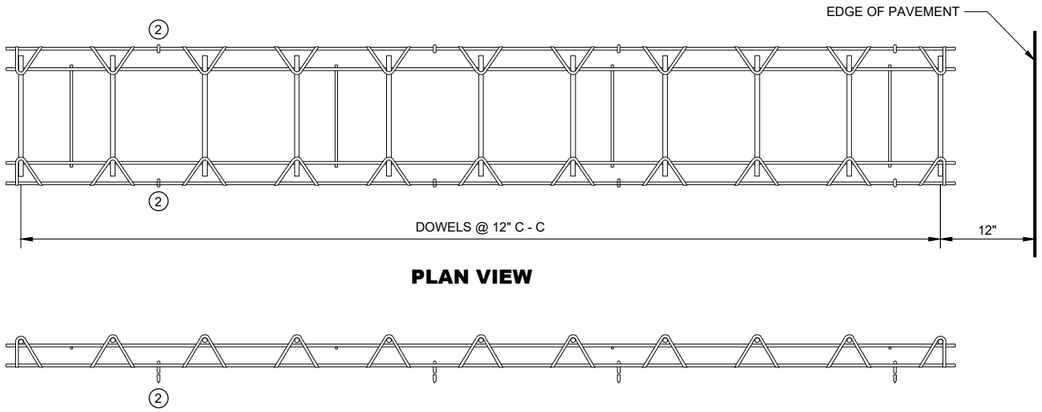
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

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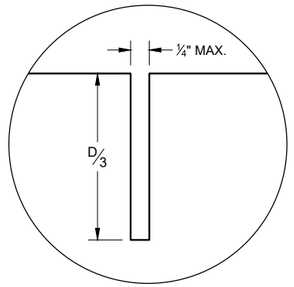
SDD 13C09 - 17c



PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY (1)



JOINT DETAIL

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

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

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

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

(1) OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.

(2) SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

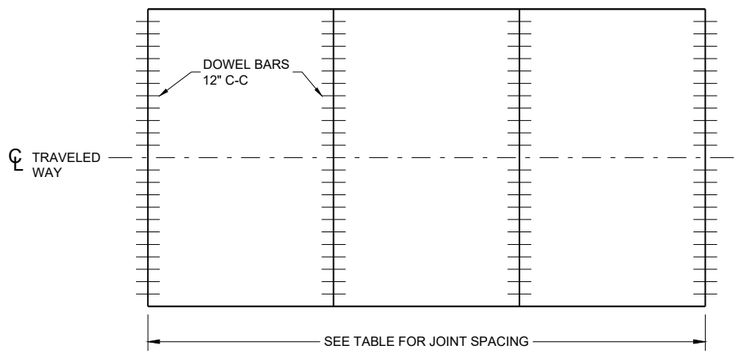
(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

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

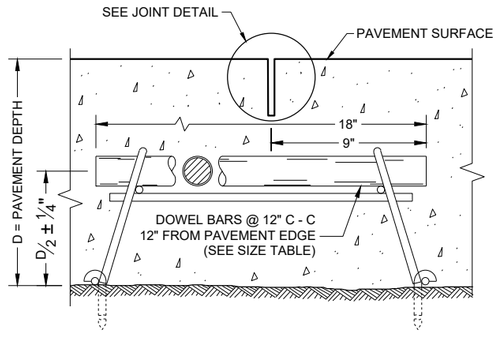
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED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

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

(7) ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



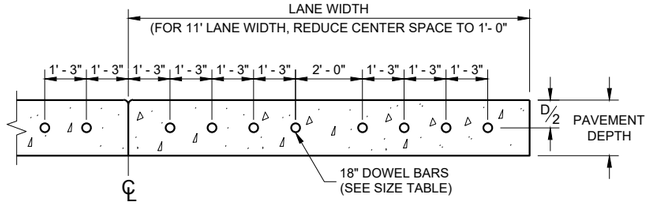
CONTRACTION JOINT LOCATIONS



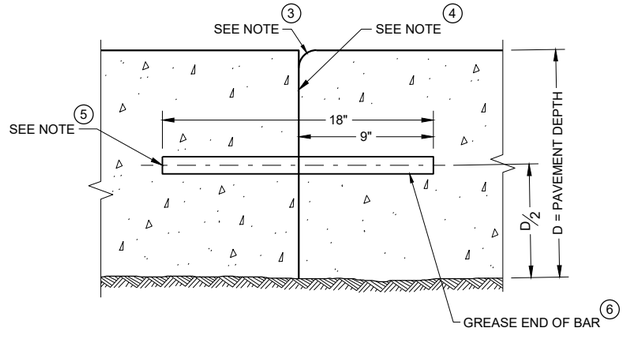
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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



DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



TRANSVERSE CONSTRUCTION JOINT

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

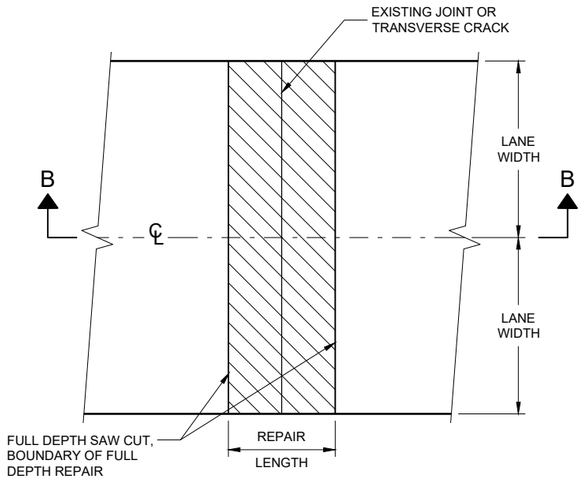
FHWA

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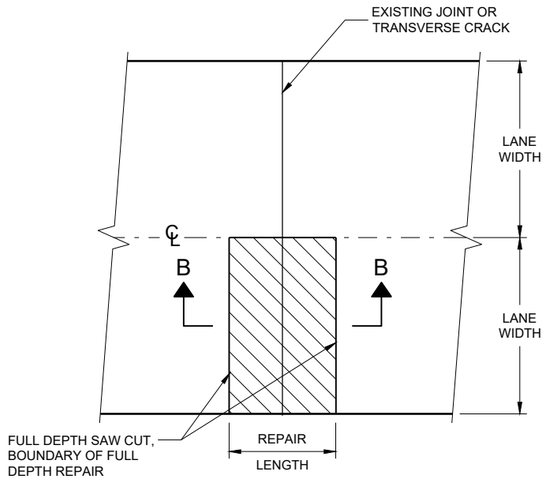
SDD 13C13 - 11

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SDD 13C13 - 11



PLAN VIEW
DOUBLE LANE REPAIR



PLAN VIEW
SINGLE LANE REPAIR

GENERAL NOTES

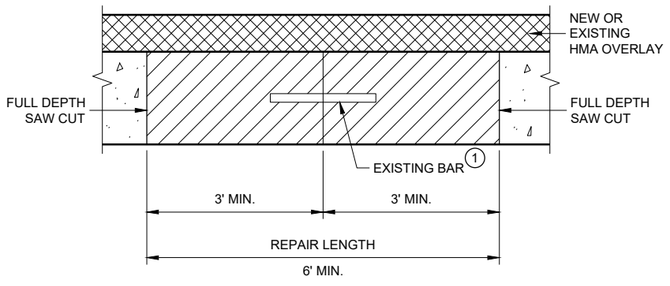
SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

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

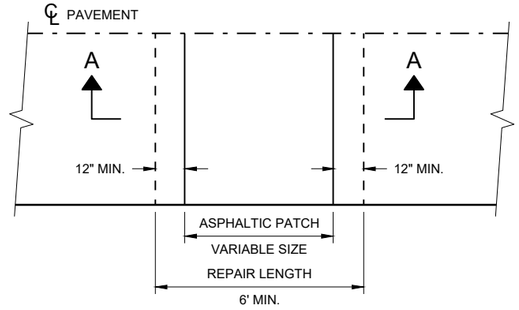
THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NON-DOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

(1) DOWEL BARS MAY NOT BE PRESENT.

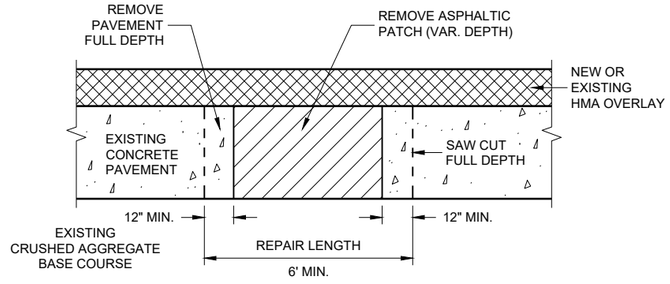
FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION B - B
CONCRETE REMOVAL



PLAN VIEW



SECTION A - A

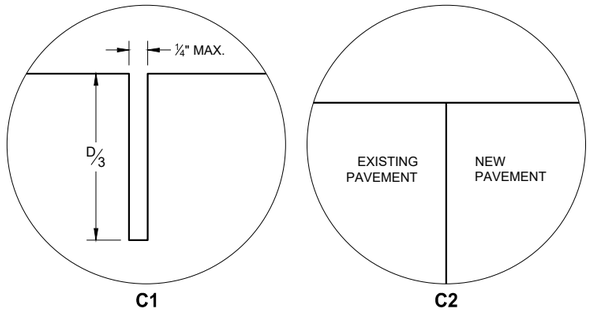
HMA PATCH REMOVAL

BASE PATCHING CONCRETE

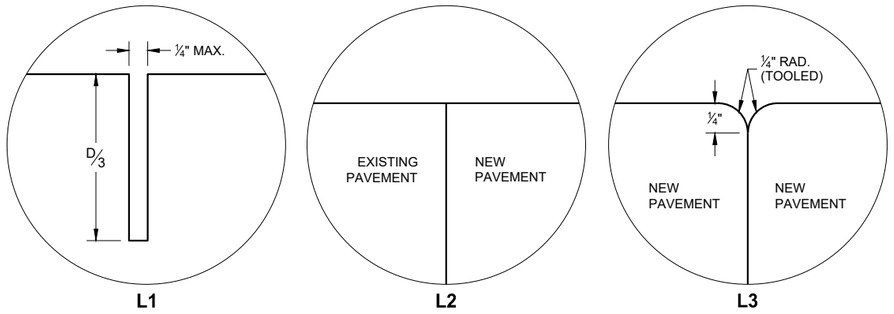
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA 472

SDD 13C14 - 07a

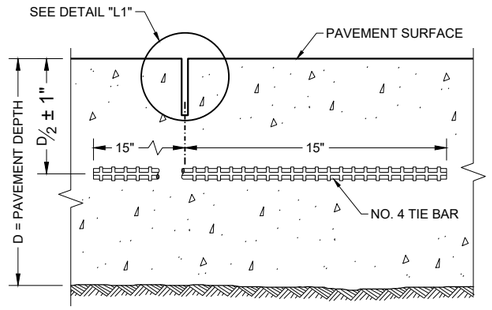
SDD 13C14 - 07a



TRANSVERSE JOINTS

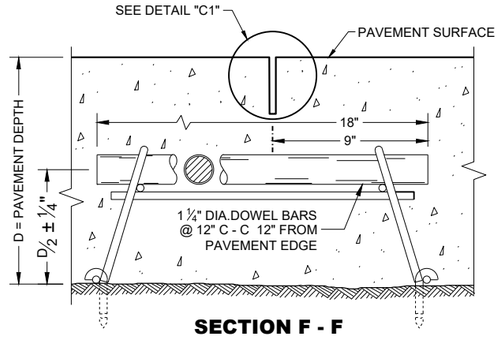


LONGITUDINAL JOINTS



SECTION C - C

SAWED LONGITUDINAL JOINT



SECTION F - F

CONTRACTION JOINT

GENERAL NOTES

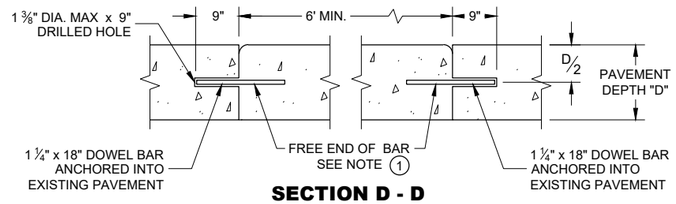
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE BASE PATCHES OF EXISTING NON-DOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

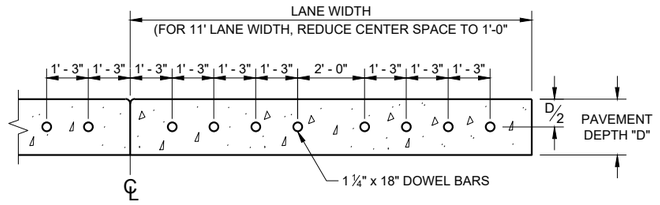
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

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.

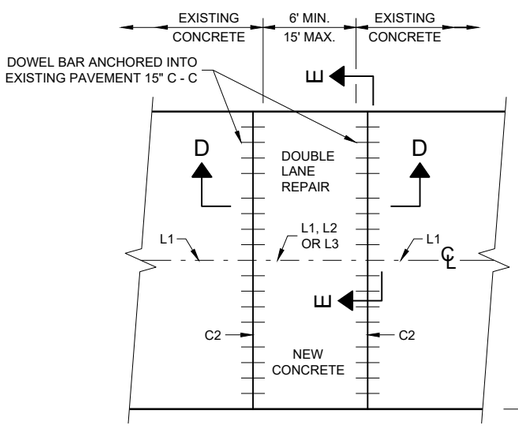


SECTION D - D



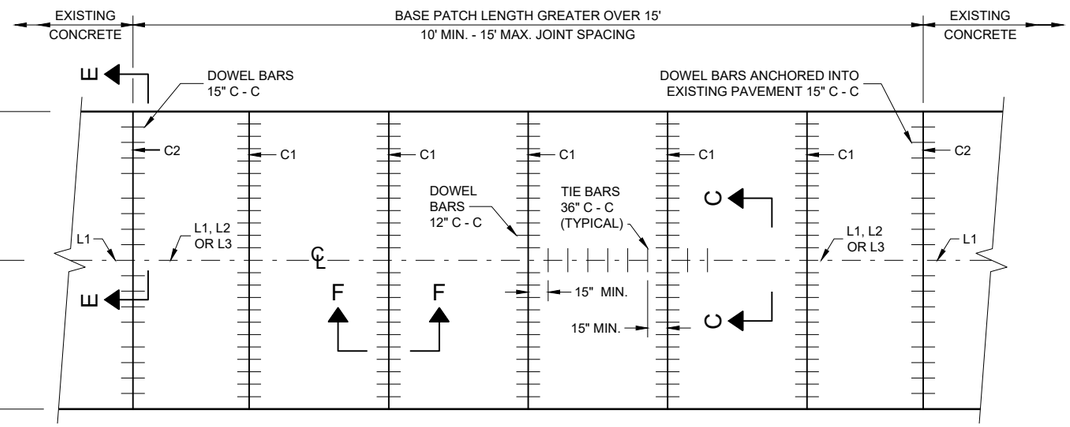
SECTION E - E

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

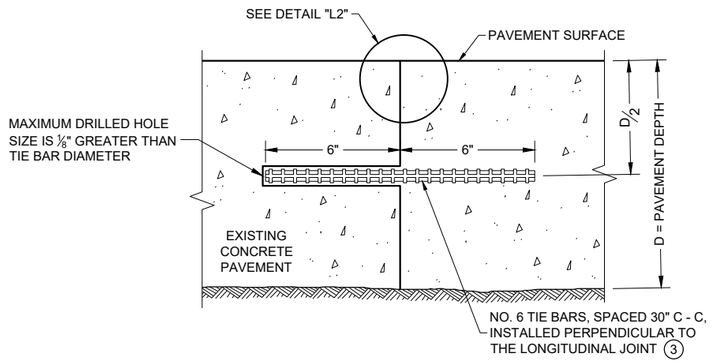
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA 473

SDD 13C14 - 07b

SDD 13C14 - 07b

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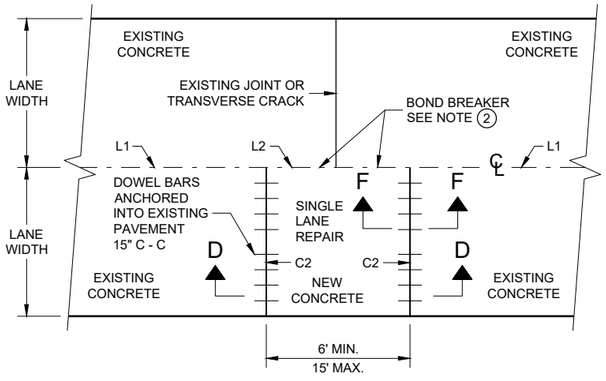


SECTION G - G

TIE BARS ANCHORED INTO EXISTING PAVEMENT

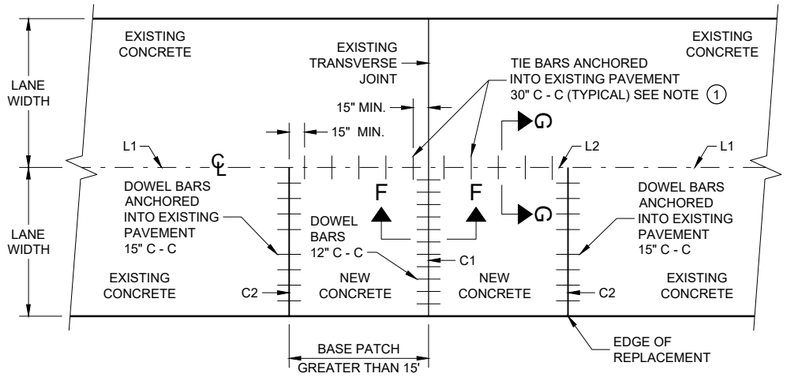
GENERAL NOTES

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

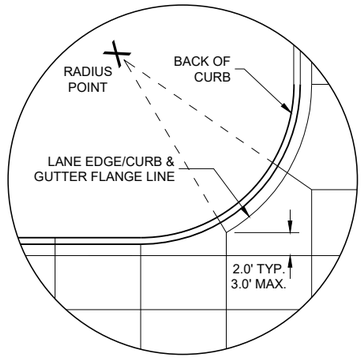
APPROVED
March 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVISOR

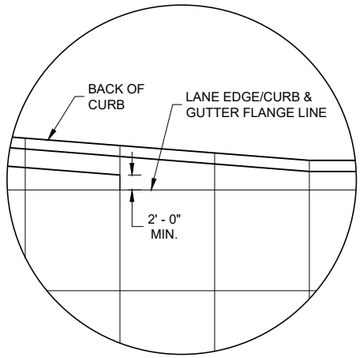
FHWA

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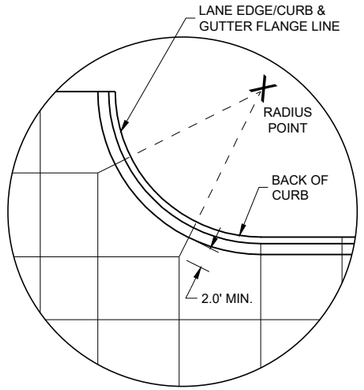
SDD 13C14 - 07c
SDD 13C14 - 07c



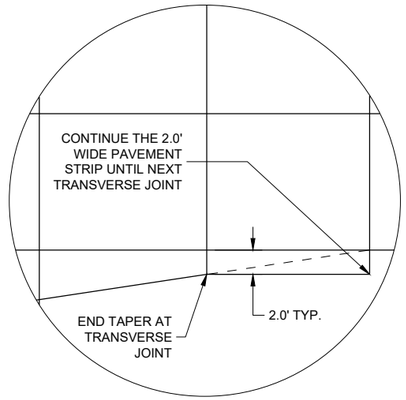
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

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

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

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

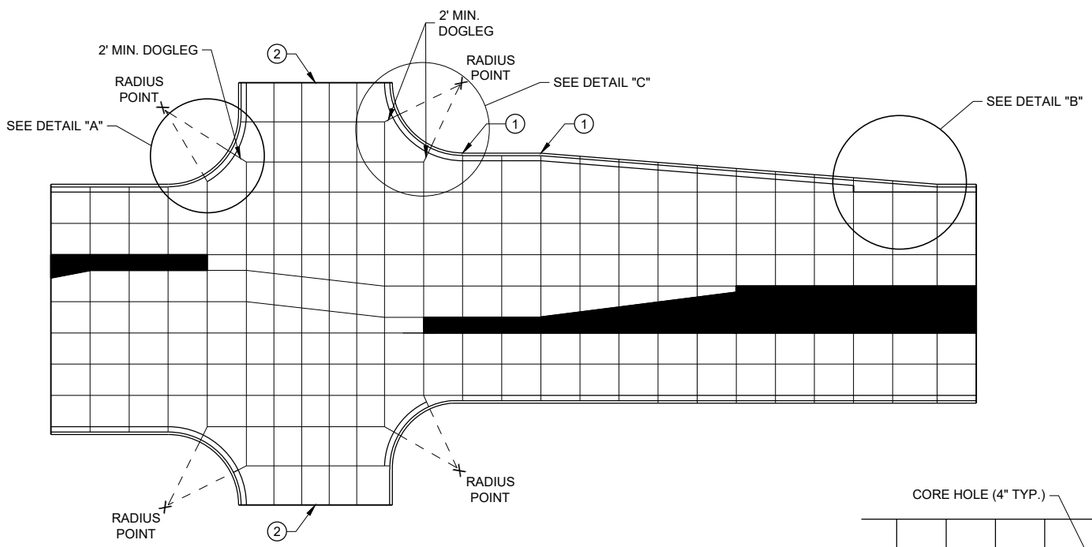
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.

(2) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.

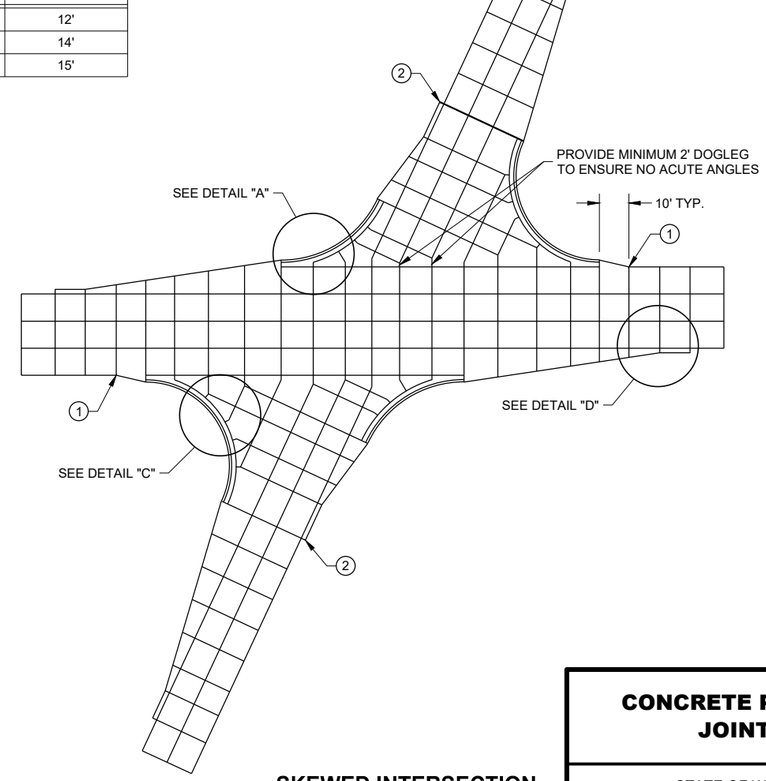
(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



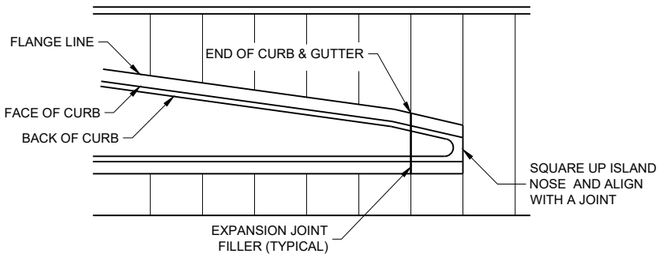
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

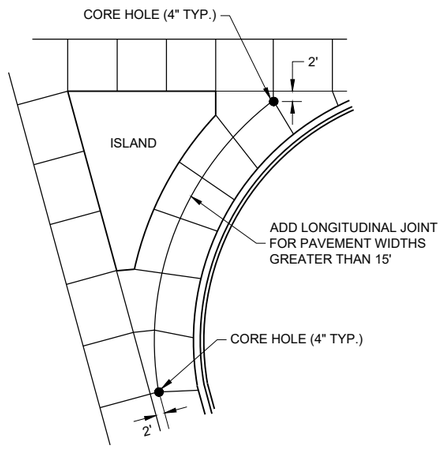
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

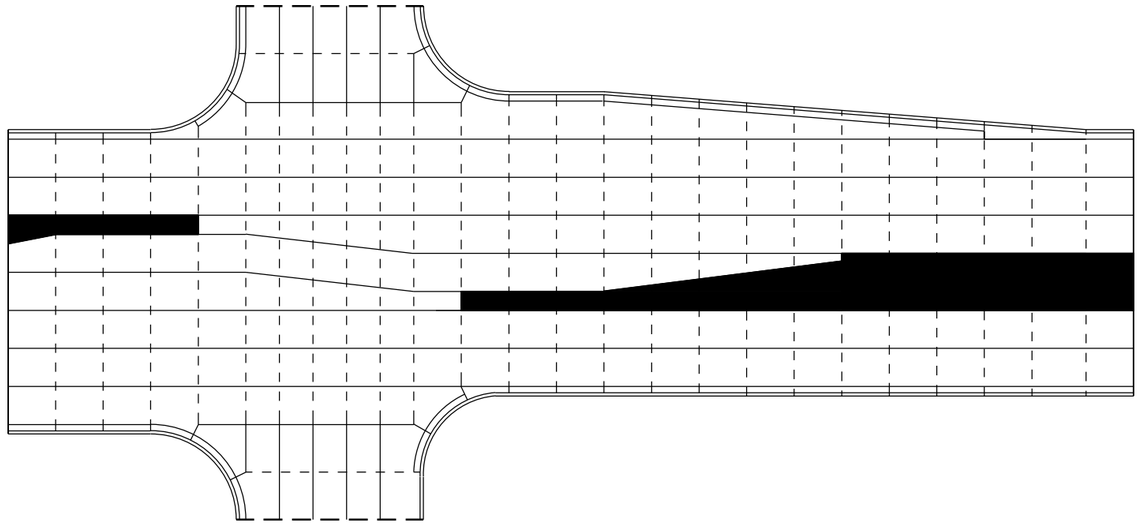
SDD 13C18 - 08a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

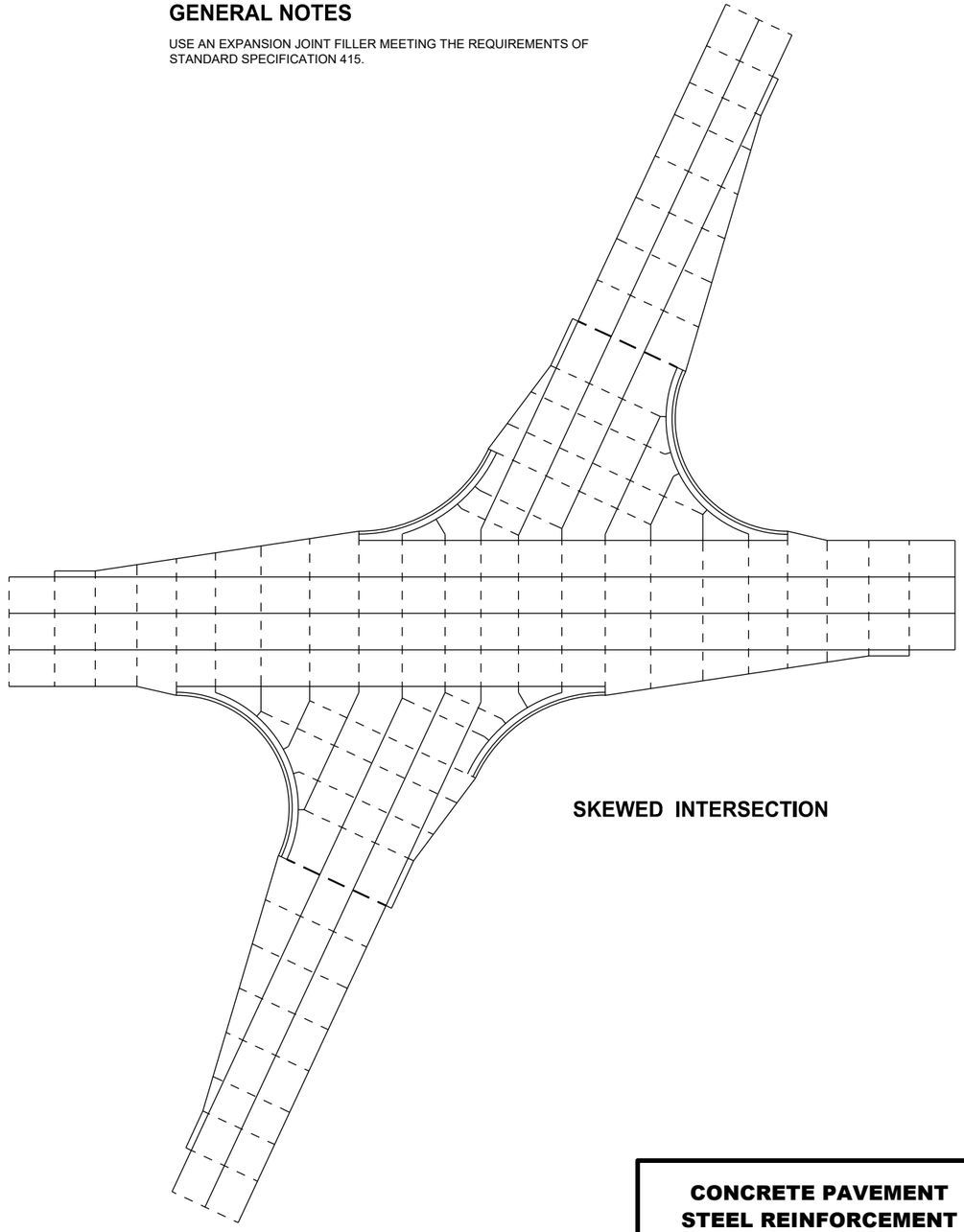
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

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



SKEWED INTERSECTION

6

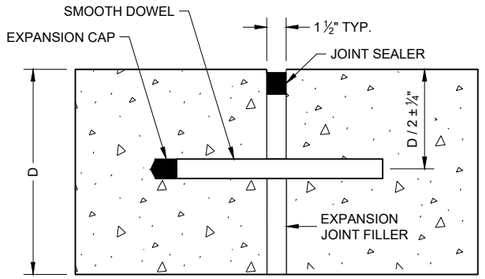
SDD 13C18 - 08b

CONCRETE PAVEMENT STEEL REINFORCEMENT

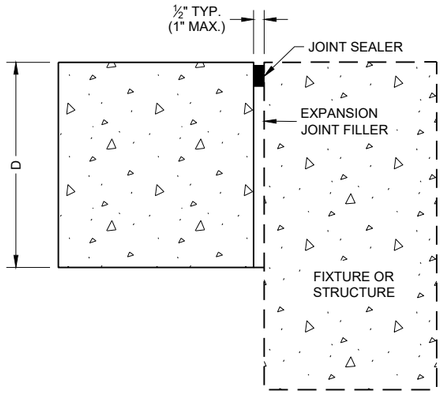
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 13C18 - 08b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

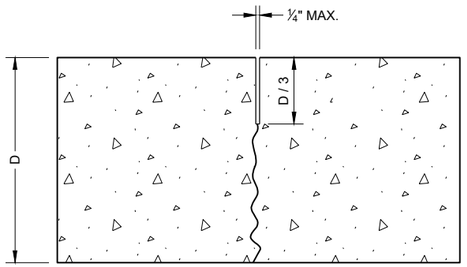
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

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

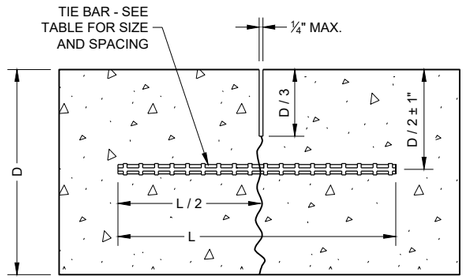
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



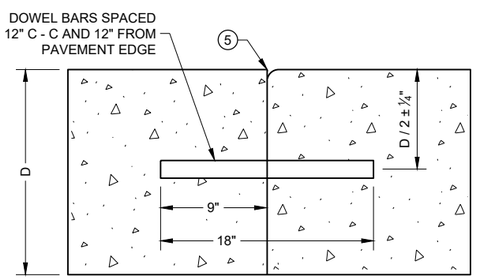
UNDOWELED TRANSVERSE



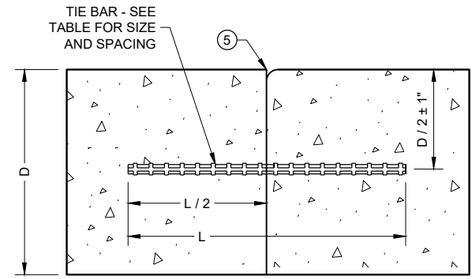
TIED LONGITUDINAL

DOWELED TRANSVERSE

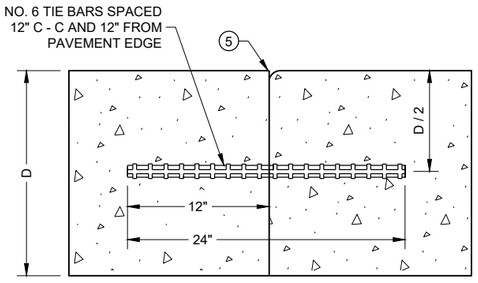
CONTRACTION JOINTS (2)



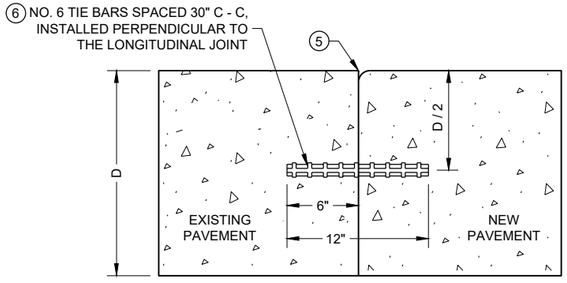
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



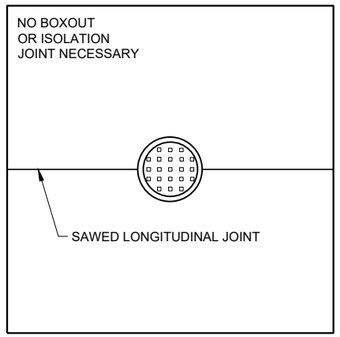
TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



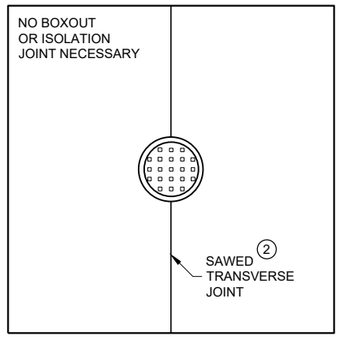
TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS (4)

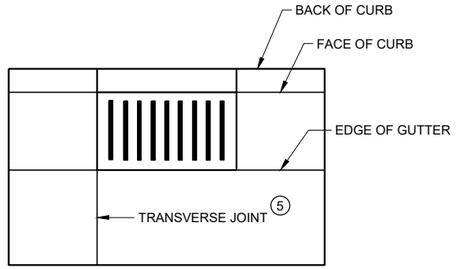
CONCRETE PAVEMENT JOINT TYPES



MANHOLE WITH LONGITUDINAL JOINT



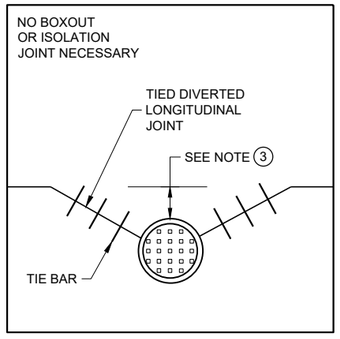
MANHOLE WITH TRANSVERSE JOINT



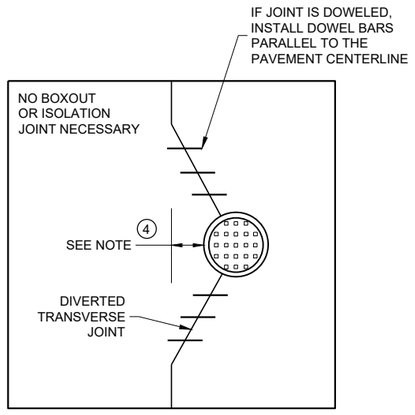
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

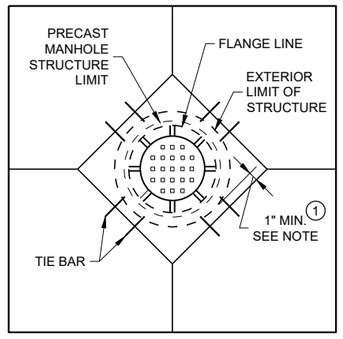
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISOR

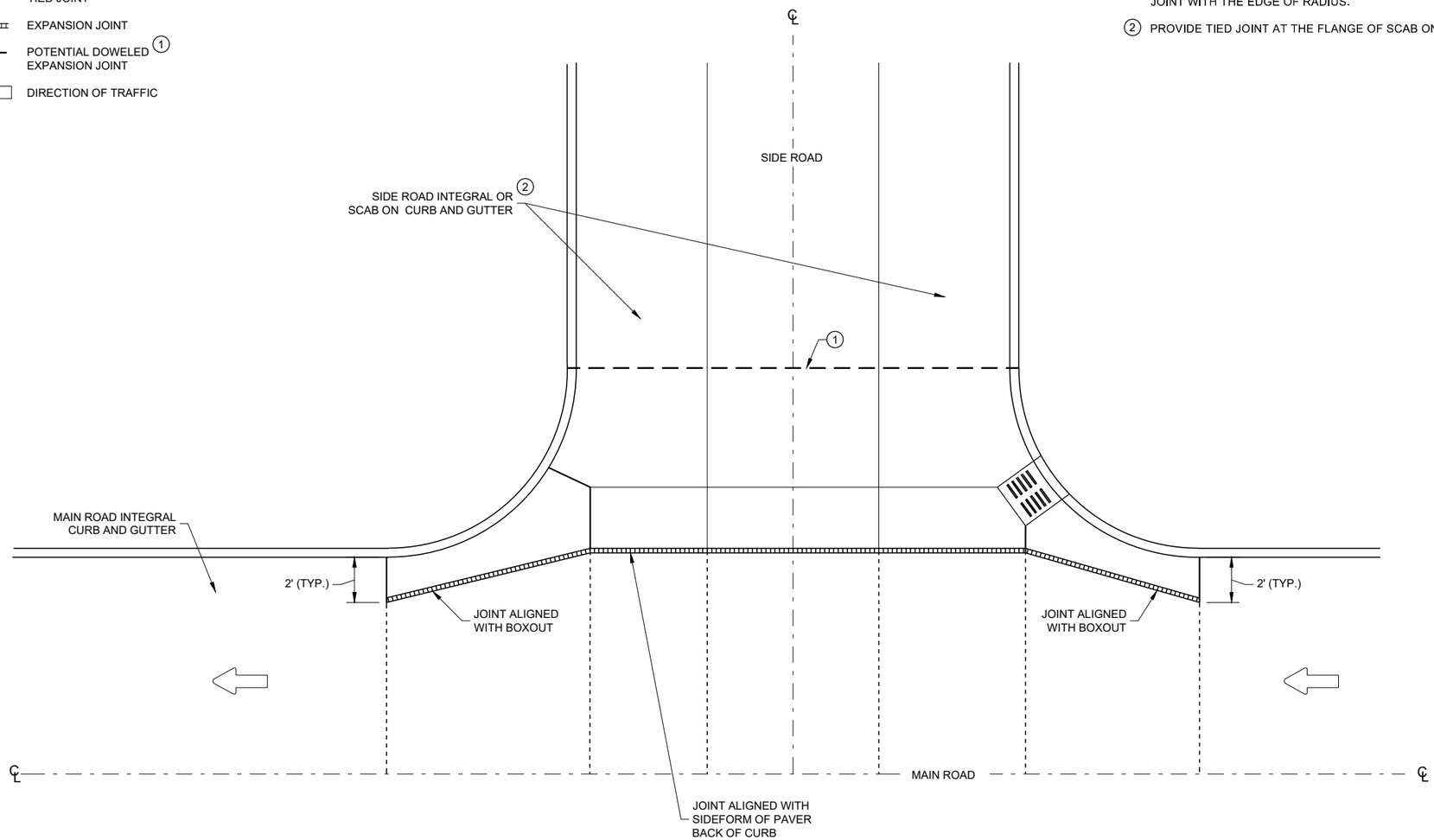
FHWA

6

SDD13C18 - 08d

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT (1)
- DIRECTION OF TRAFFIC



GENERAL NOTES

(1) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.

(2) PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.

INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

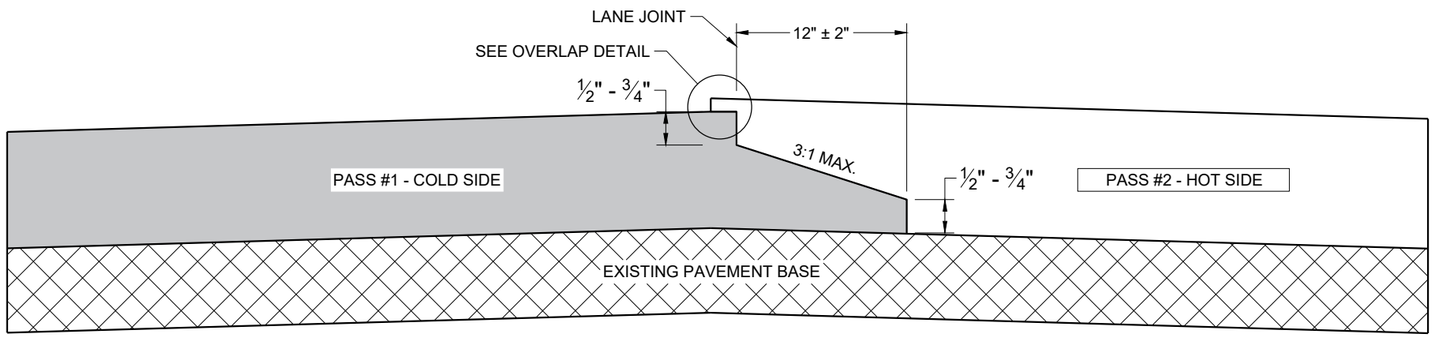
FHWA

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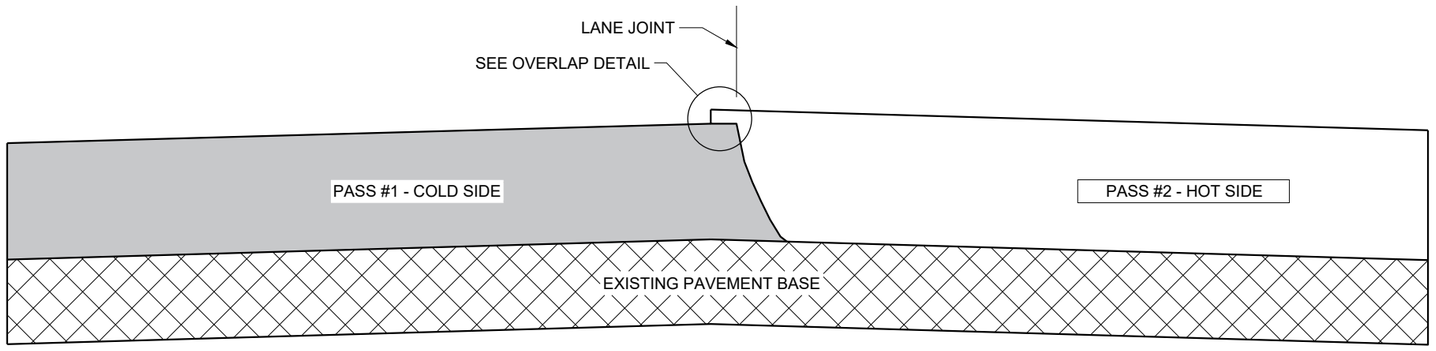
SDD 13C18 - 08f

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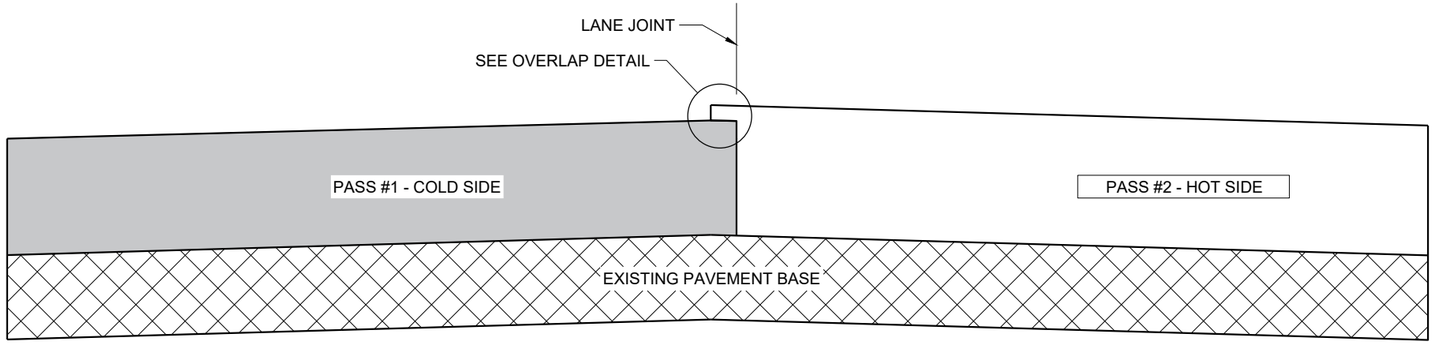
SDD 13C18 - 08f



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

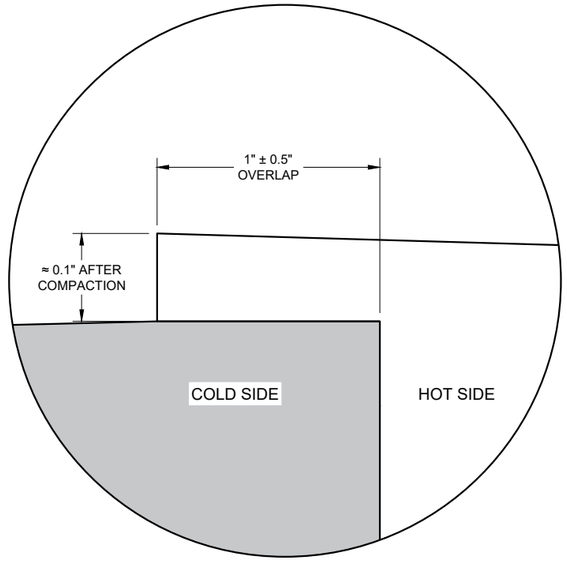
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

6

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

480

FHWA

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

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

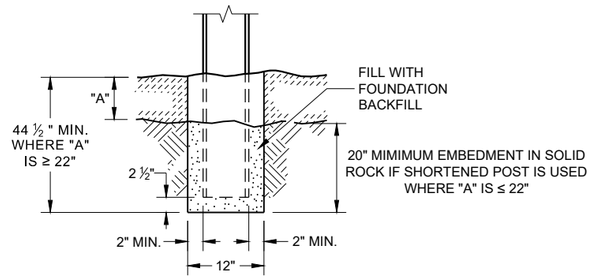
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

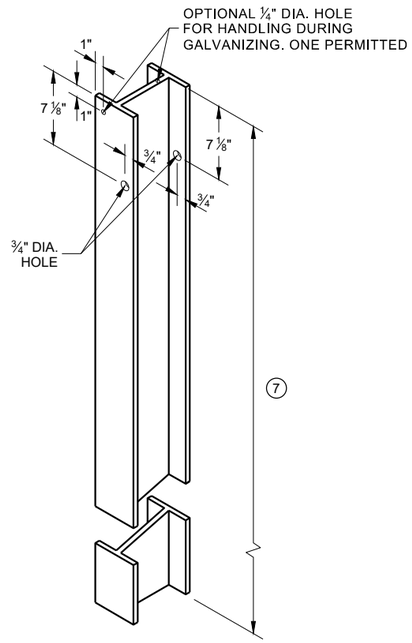
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

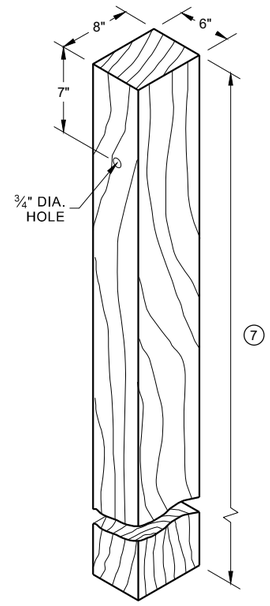
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



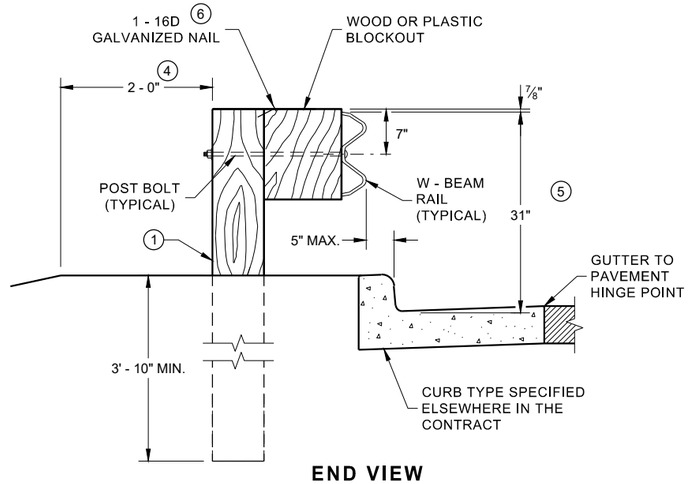
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



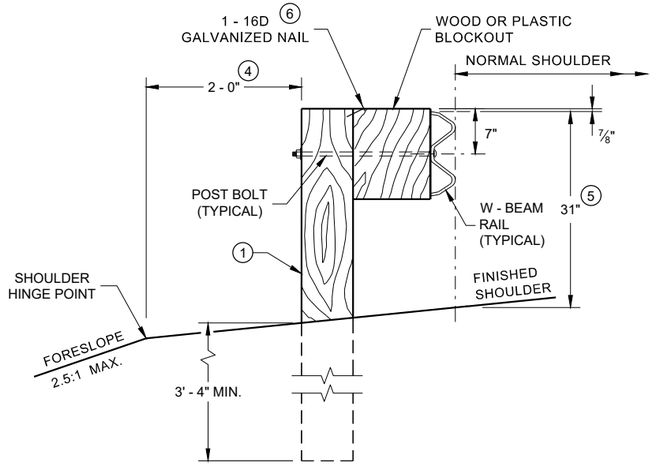
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



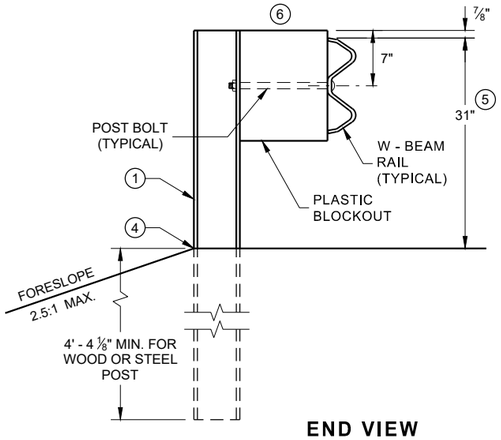
WOOD POST (6" X 8") NOMINAL (1)



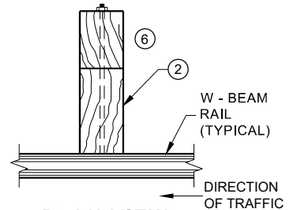
END VIEW
LOCATED ALONG A CURBED ROADWAY



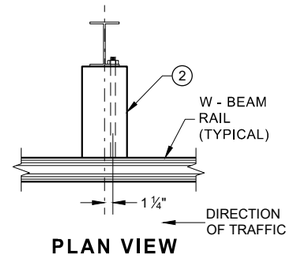
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



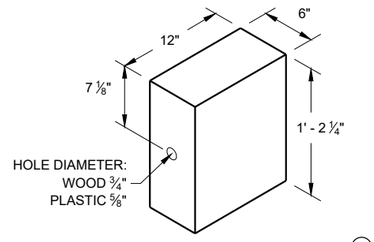
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

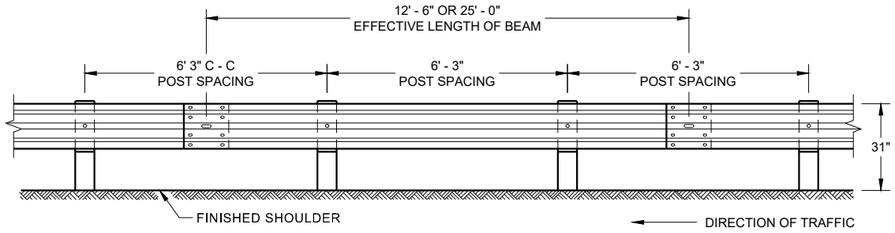
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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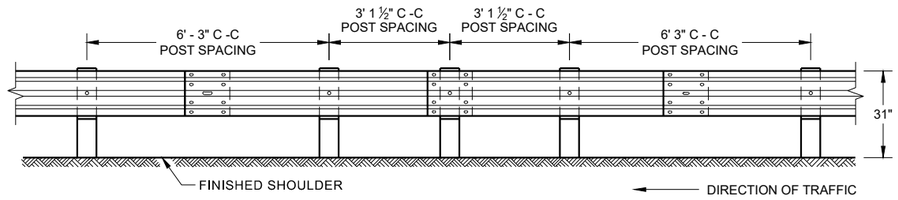
SDD 14B42 - 07a

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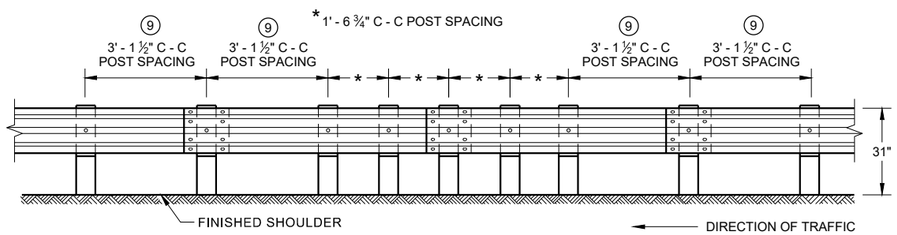
SDD 14B42 - 07a



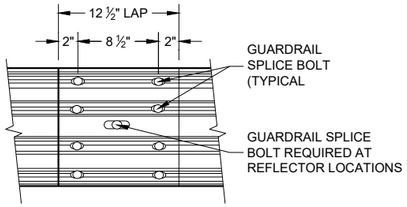
FRONT VIEW
POST SPACING STANDARD INSTALLATION



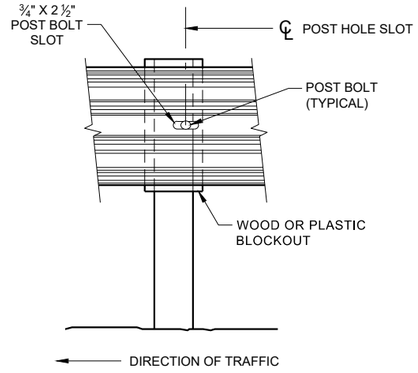
FRONT VIEW
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



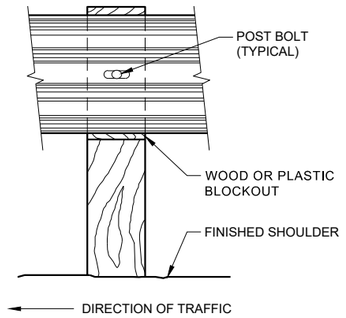
FRONT VIEW
QUARTER POST SPACING (QS)



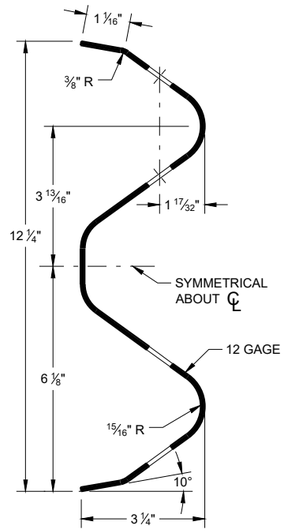
FRONT VIEW
MID-SPAN BEAM SPLICE



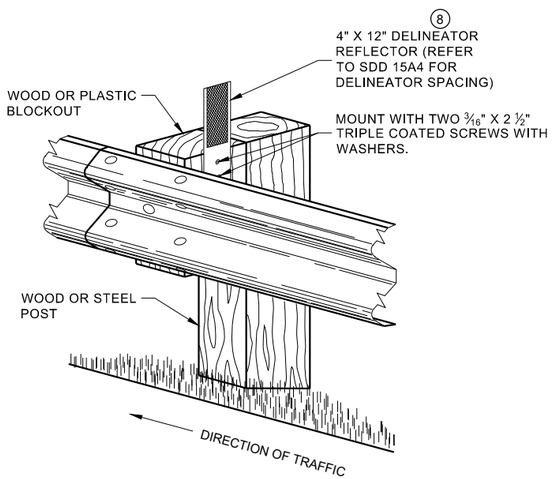
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

GENERAL NOTES

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

(9) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

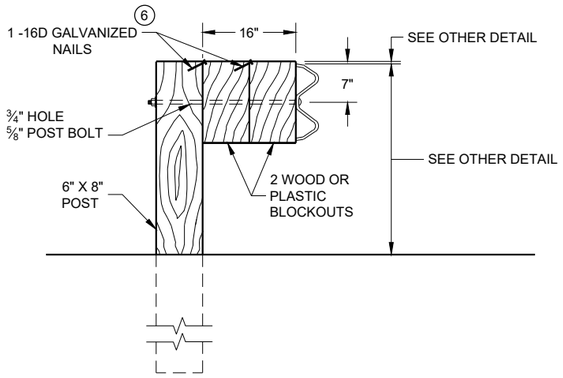
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B42 - 07b

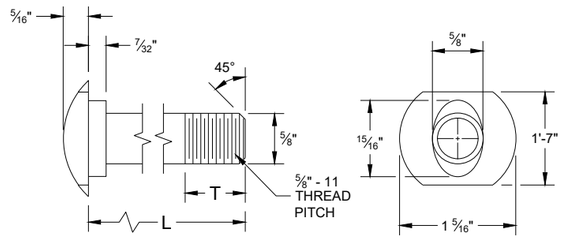


DETAIL FOR 16" BLOCKOUT DEPTH

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

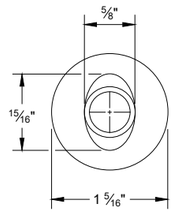
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3⁄16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

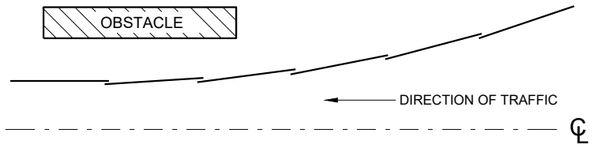


POST BOLT TABLE

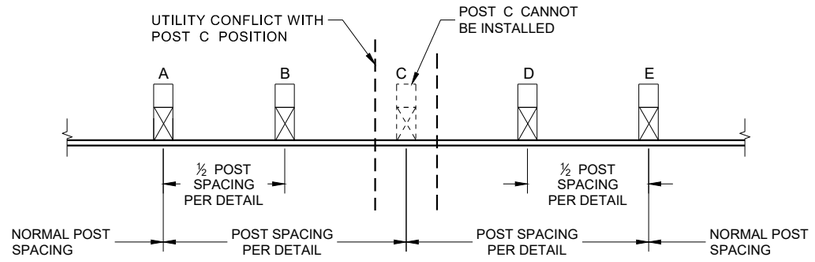
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



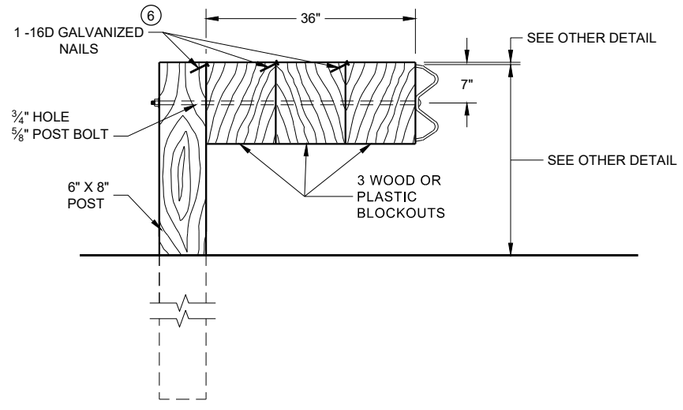
ALTERNATE BOLT HEAD



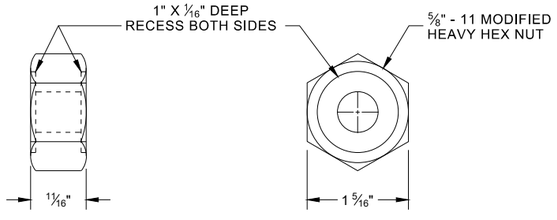
PLAN VIEW
BEAM LAPPING DETAIL



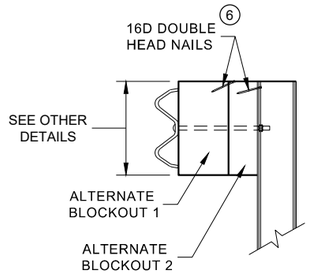
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



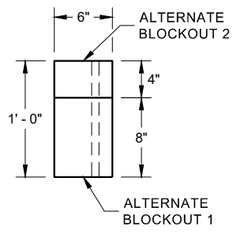
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

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

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

(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

GENERAL NOTES

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

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

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

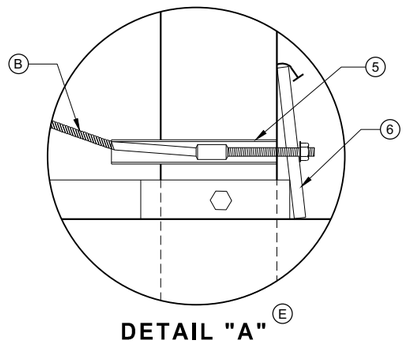
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

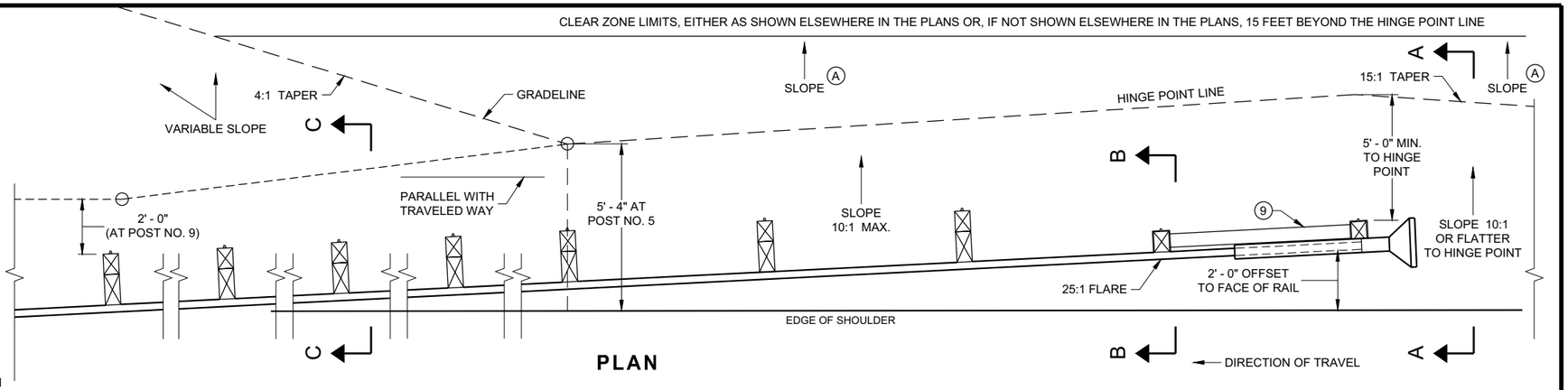
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

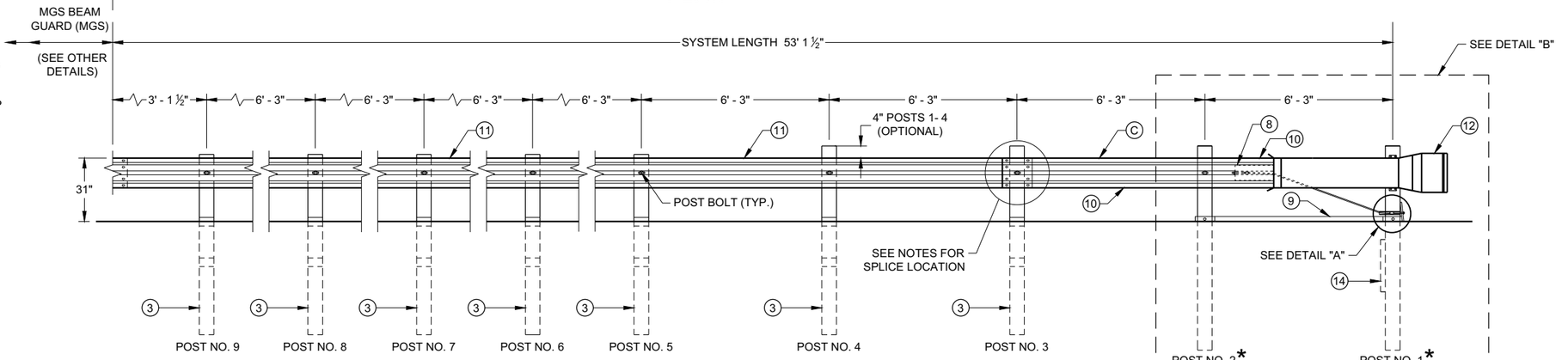
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



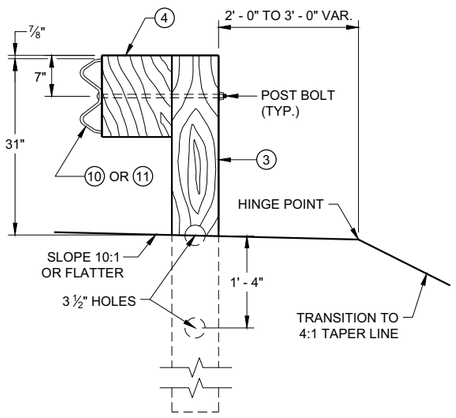
DETAIL "A" (E)



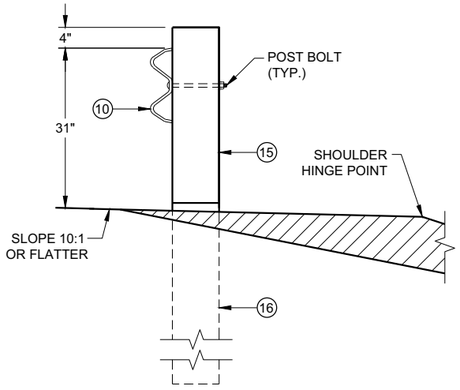
PLAN



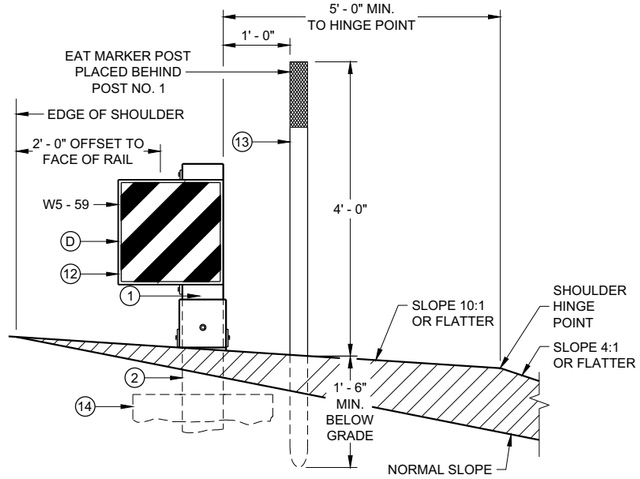
ELEVATION



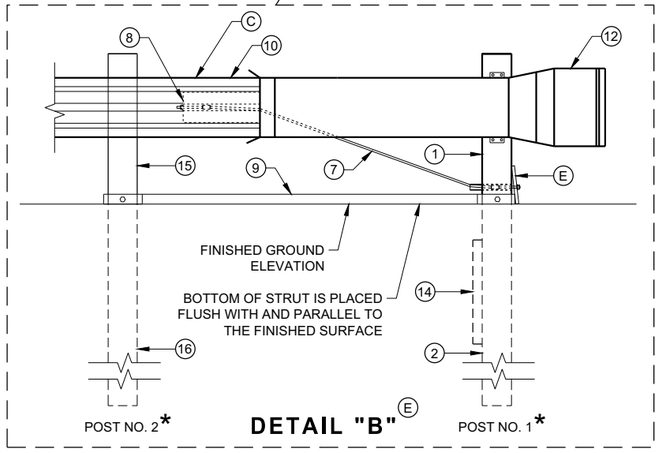
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



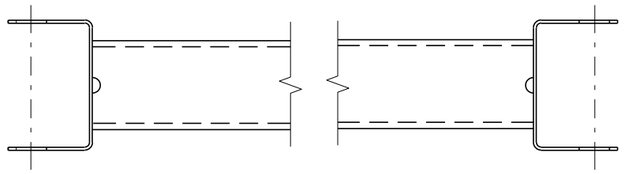
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

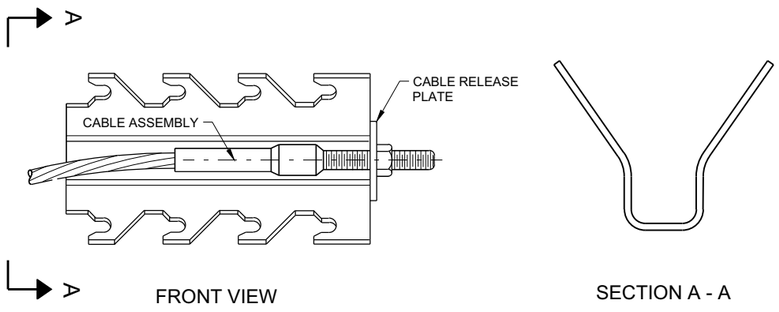
SDD 14B44 - 04a



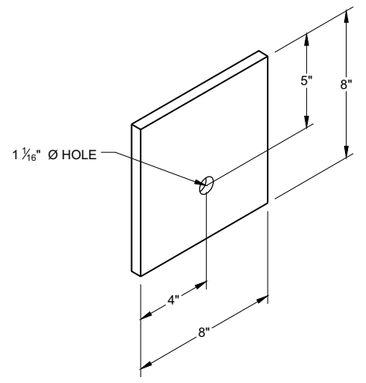
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	IMPACT HEAD
⑬	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
⑭	SOIL PLATE
⑮	UPPER POST NO. 2
⑯	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX ⑧ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

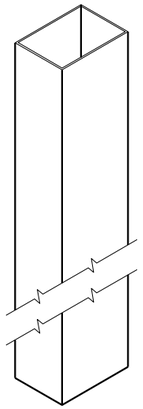
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SDD 14B44 - 04b

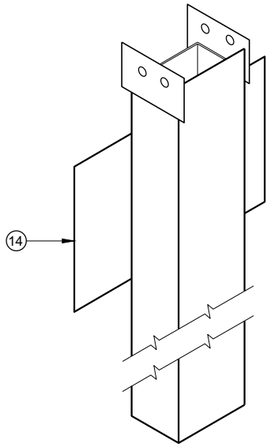
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

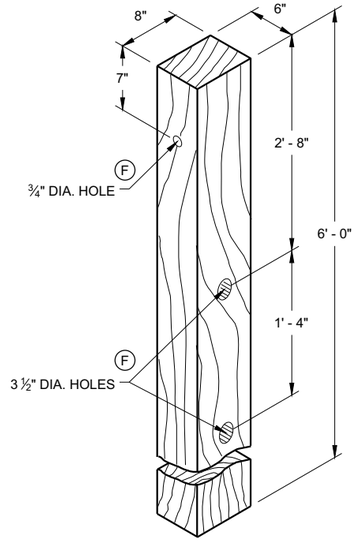
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



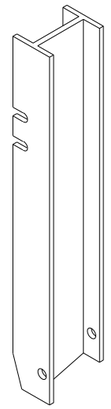
UPPER POST NO. 1 (1) (E)



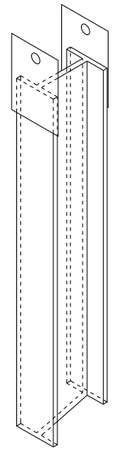
LOWER POST NO. 1 (2) (E)



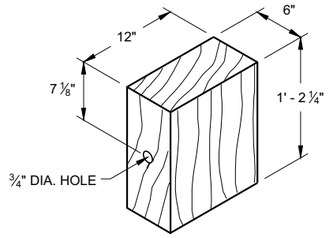
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



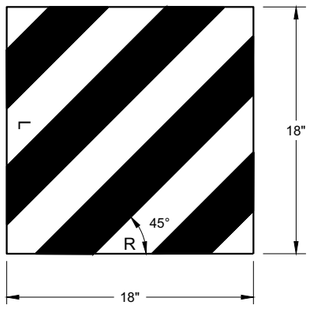
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

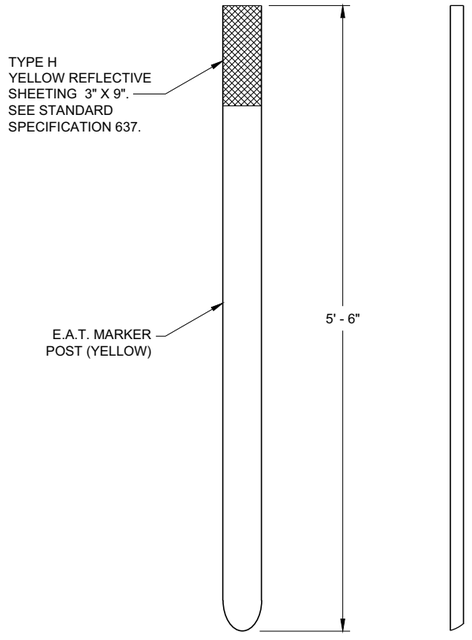


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



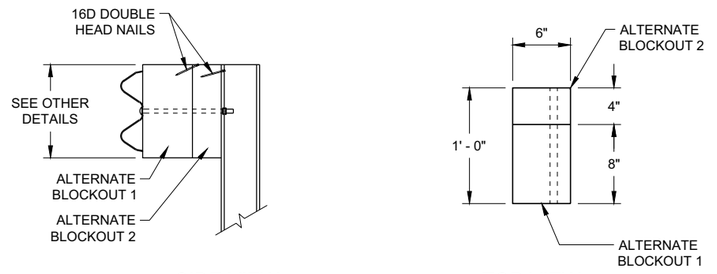
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

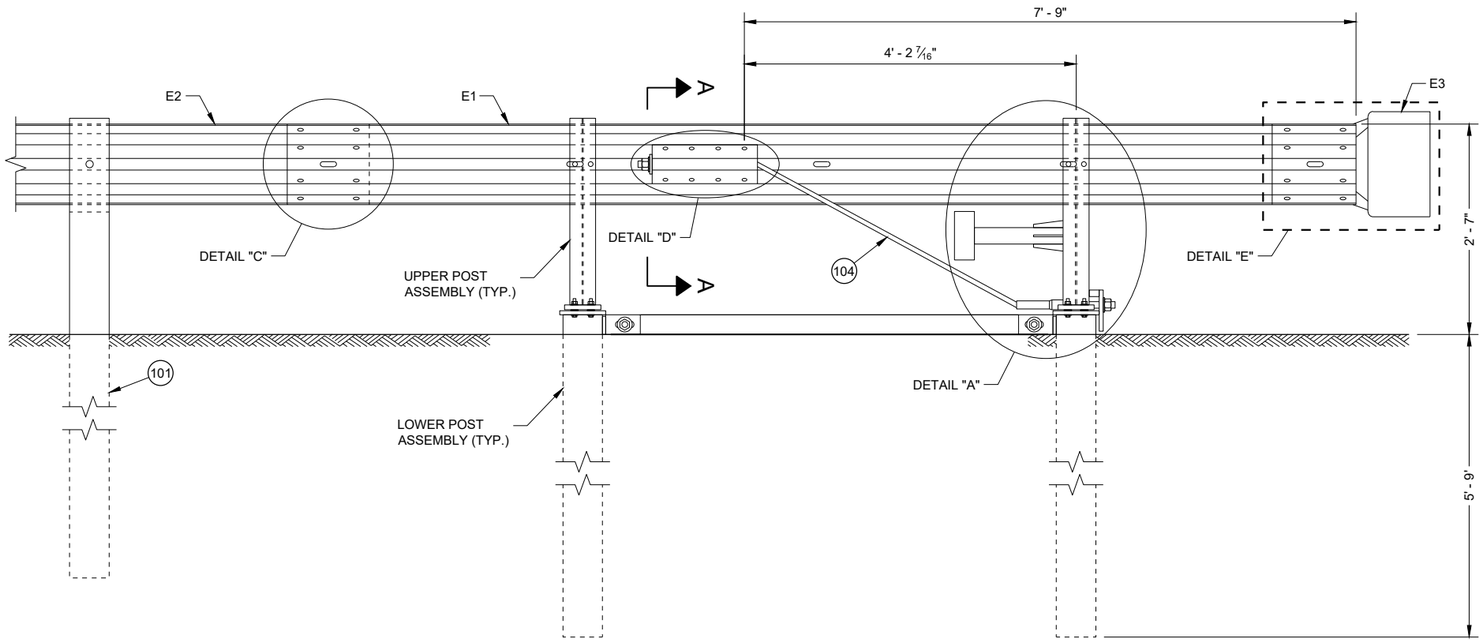
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

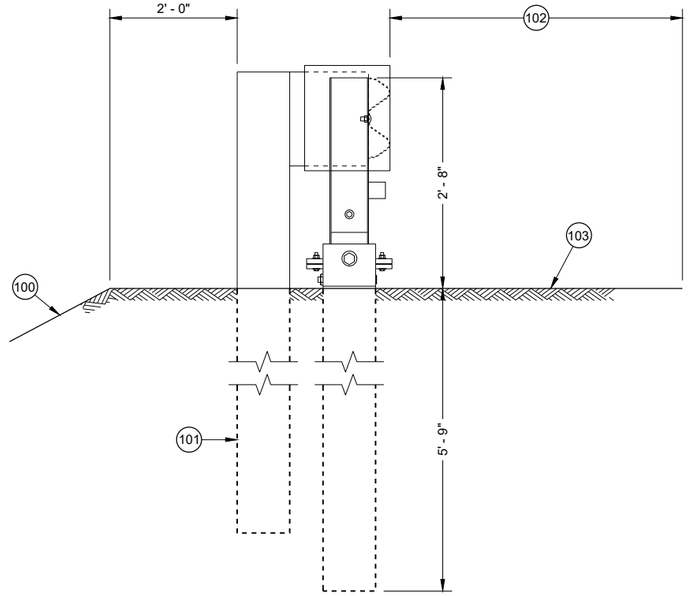
FHWA

6

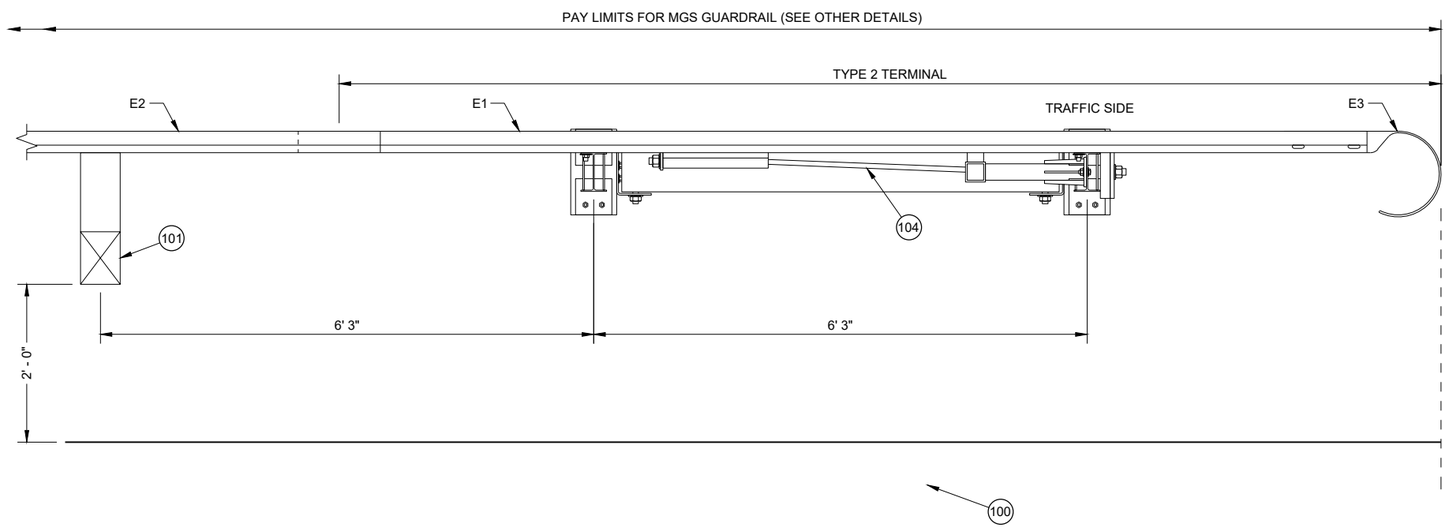
SDD 14B44 - 04c



BACK VIEW
TYPE 2 TERMINAL



SIDE VIEW
TYPE 2 TERMINAL



TOP VIEW
TYPE 2 TERMINAL

GENERAL NOTES

(100) MAXIMUM SLOPE IS 2.5:1.

(101) SEE SDD 14B42 FOR MORE INFORMATION.

(102) SHOULDER

(103) MAXIMUM SLOPE IS 10:1.

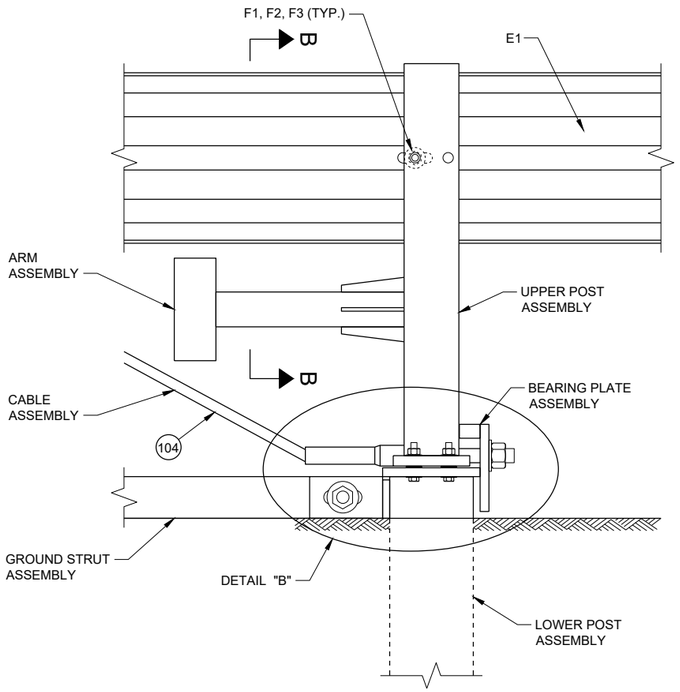
(104) AFTER ASSEMBLY, CABLE IS TO BE TIGHTENED WITHOUT TWISTING THE CABLE.

MIDWEST GUARDRAIL SYSTEM (MGS)
TYPE 2 TERMINAL

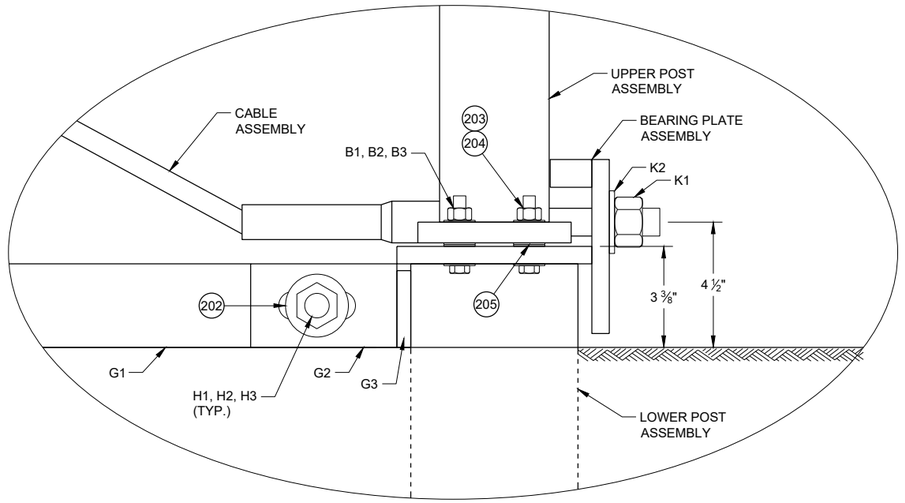
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

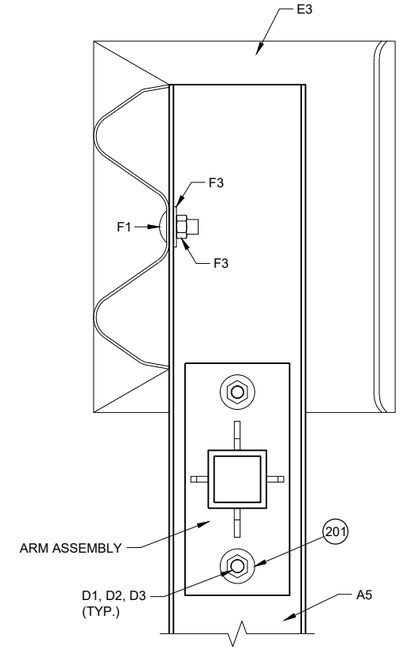
SDD 14B47 - 05a



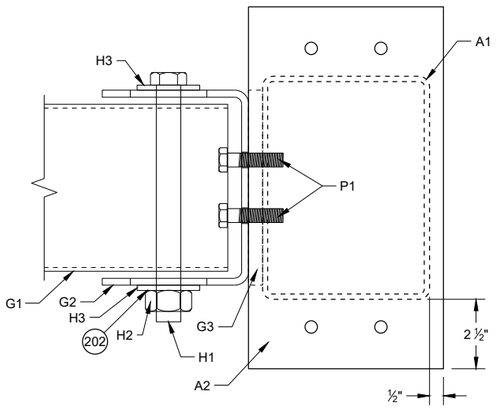
DETAIL "A"



DETAIL "B"

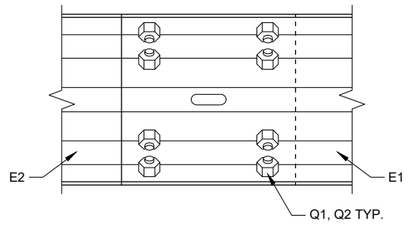


SECTION B - B



TOP VIEW

GROUND STRUT CONNECTION DETAIL



DETAIL "C"

GENERAL NOTES

200 INSTALL ONE WASHER UNDER BOLT HEAD AND RAIL AND ON WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

201 INSTALL ONE WASHER UNDER BOLT HEAD AND UPPER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND ARM PLATE.

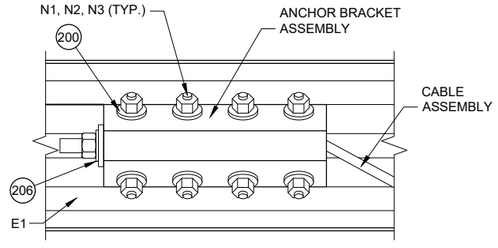
202 INSTALL ONE WASHER UNDER BOLT HEAD AND GROUND STRUT CONNECTOR AND ONE WASHER BETWEEN NUT AND GROUND STRUT CONNECTOR.

203 INSTALL ONE WASHER UNDER BOLT HEAD AND LOWER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND UPPER POST ASSEMBLY.

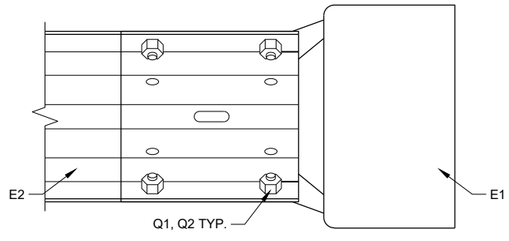
204 TORQUE VALUE IS BETWEEN 60 - 75 FT-LB.

205 TWO WASHERS BETWEEN UPPER AND LOWER POST ASSEMBLY.

206 INSTALL ONE WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.



DETAIL "D"



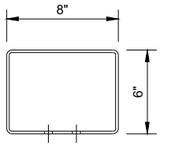
DETAIL "E"

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

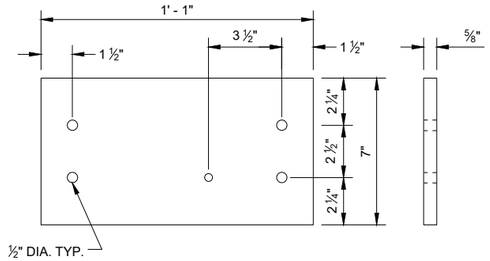
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

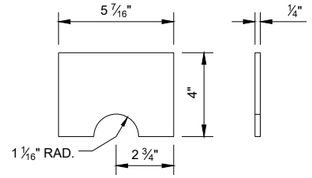
(300) TAP FOR 1/2" AFTER GALVANIZATION



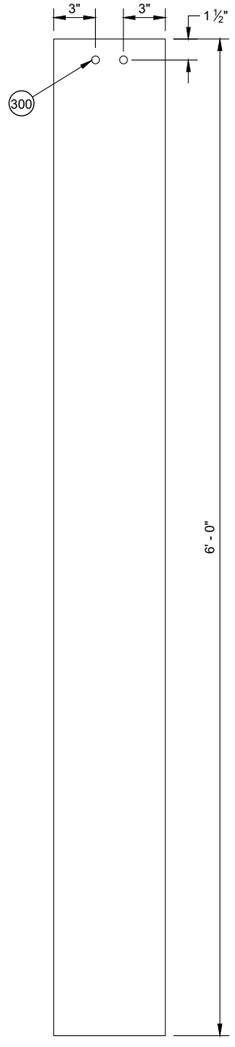
TOP VIEW



LOWER PLATE (A2)

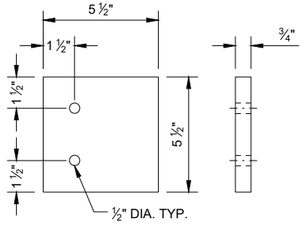


POST GUSSET (A3)

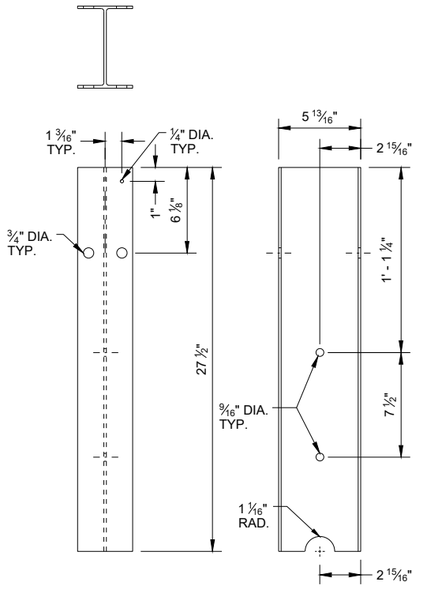


SIDE VIEW

FOUNDATION TUBE (A1)

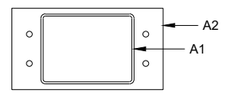


UPPER PLATE (A4)

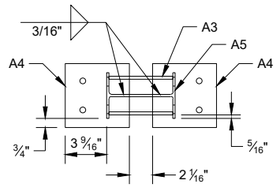


FRONT VIEW SIDE VIEW

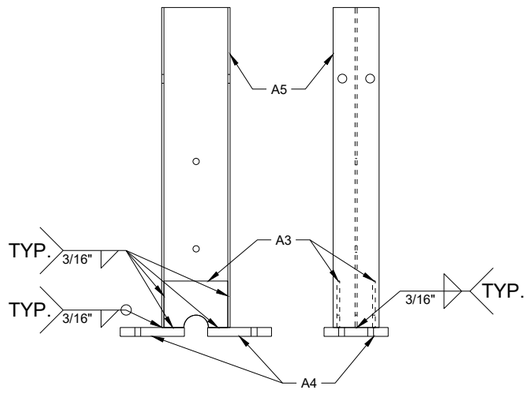
TYPE 2 POST (A5)



PLAN VIEW

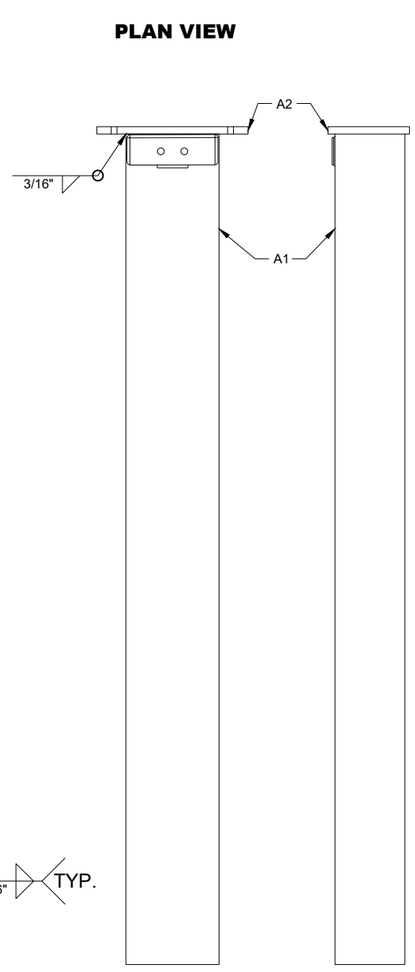


PLAN VIEW



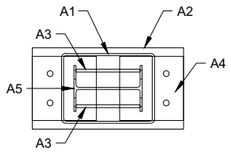
SIDE VIEW FRONT VIEW

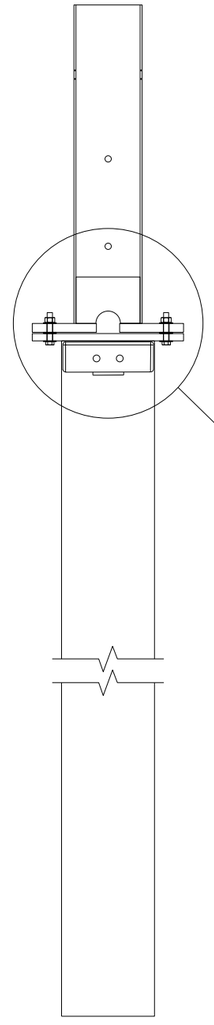
UPPER POST ASSEMBLY



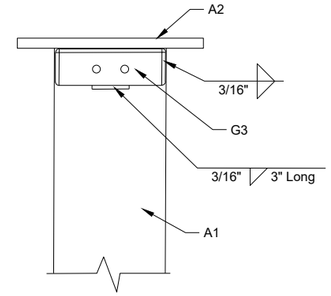
FRONT VIEW SIDE VIEW

LOWER POST ASSEMBLY

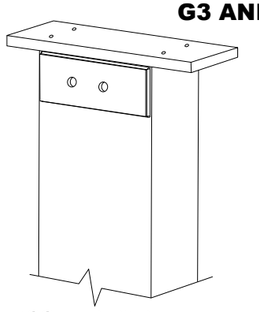




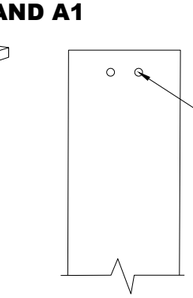
ASSEMBLED POST



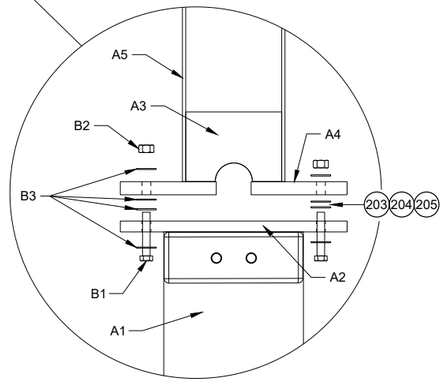
WELDING DETAIL G3 AND A1



ASSEMBLY DETAIL ISOMETRIC



A1



POST CONNECTION DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

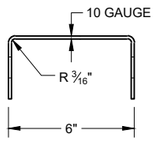
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

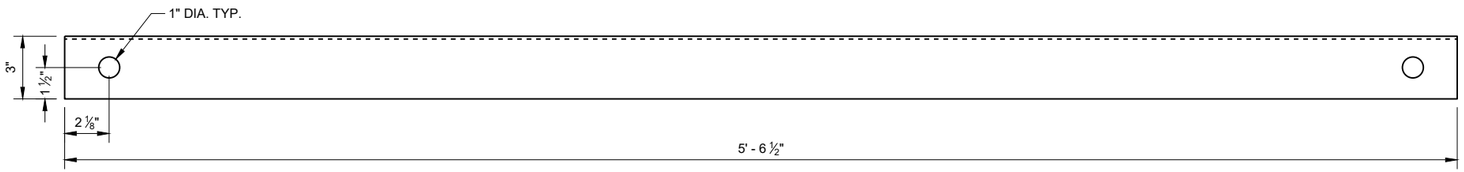
SDD14B47 - 05c

6

SDD14B47 - 05c

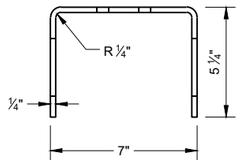


SIDE VIEW

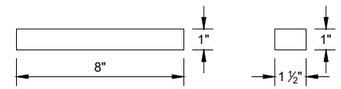


FRONT VIEW

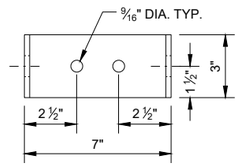
GROUND STRUT CHANNEL (G1)



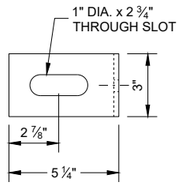
TOP VIEW



BEARING PLATE FLANGE (L2)

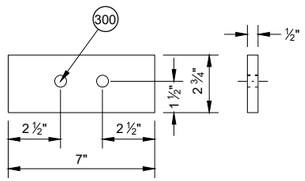


FRONT VIEW

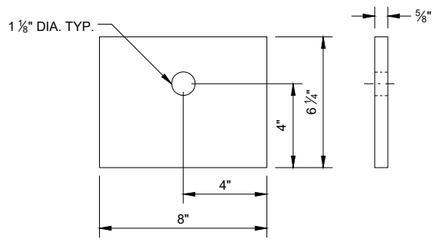


SIDE VIEW

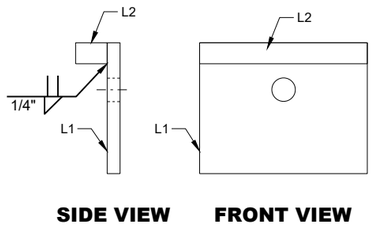
GROUND STRUT CONNECTOR (G2)



GROUND STRUT PLATE (G3)

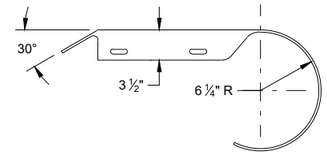


BEARING PLATE (L1)

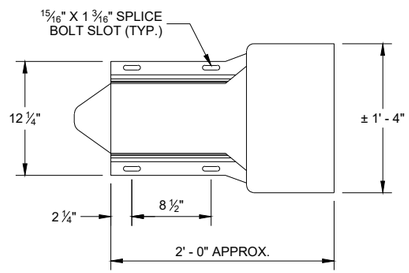


SIDE VIEW FRONT VIEW

BEARING PLATE ASSEMBLY

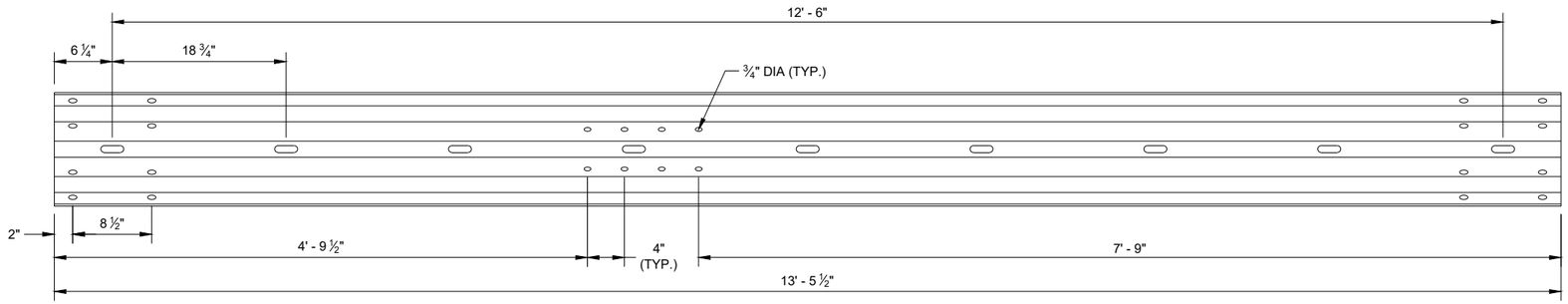


PLAN VIEW

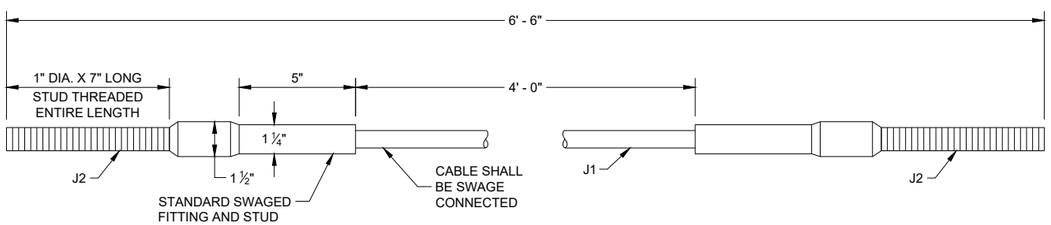


ELEVATION VIEW

ROUNDED BUFFER END (E3)



TYPE 2 GUARDRAIL (E1)

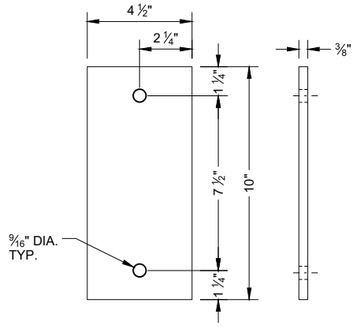


CABLE ASSEMBLY

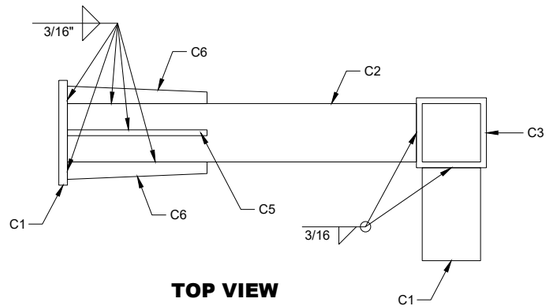
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MIDWEST GUARDRAIL SYSTEM (MGS)
TYPE 2 TERMINAL

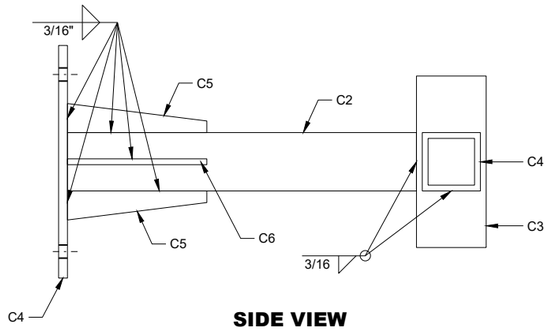
STATE OF WISCONSIN
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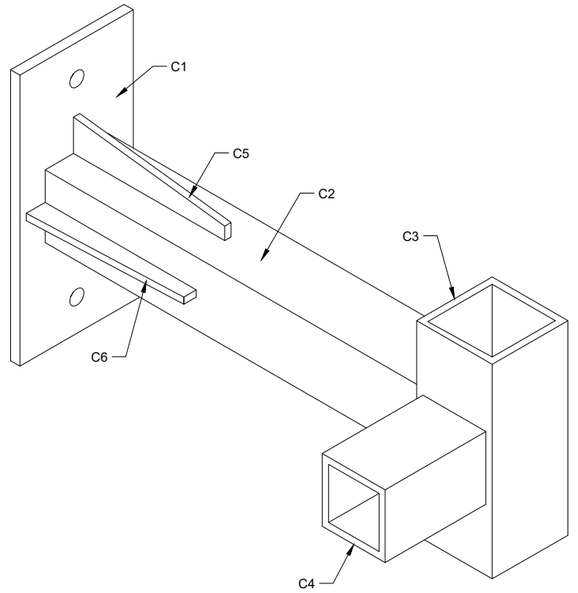
ARM PLATE (C1)



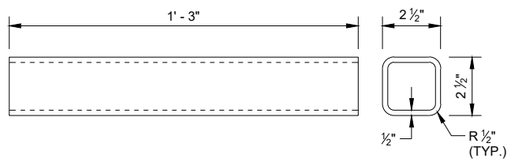
TOP VIEW
ARM ASSEMBLY



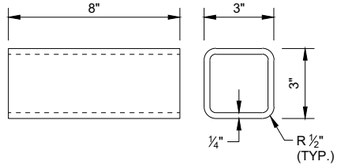
SIDE VIEW
ARM ASSEMBLY



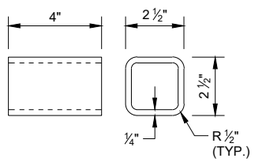
ISOMETRIC VIEW
ARM ASSEMBLY



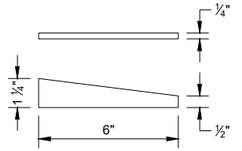
ARM TUBE 1 (C2)



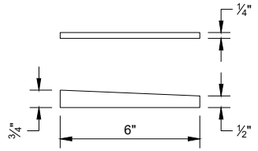
ARM TUBE 2 (C3)



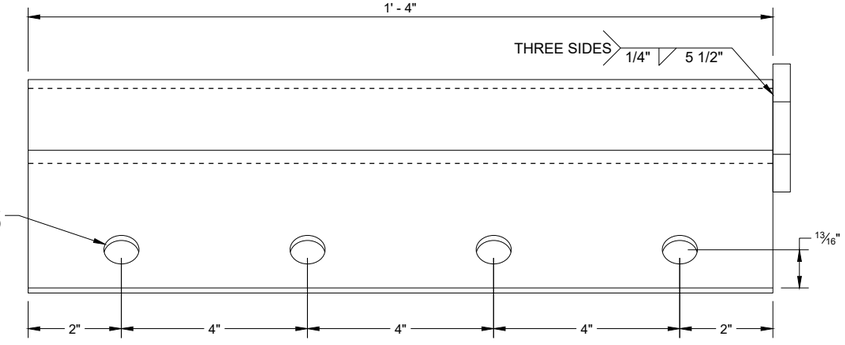
ARM TUBE 3 (C4)

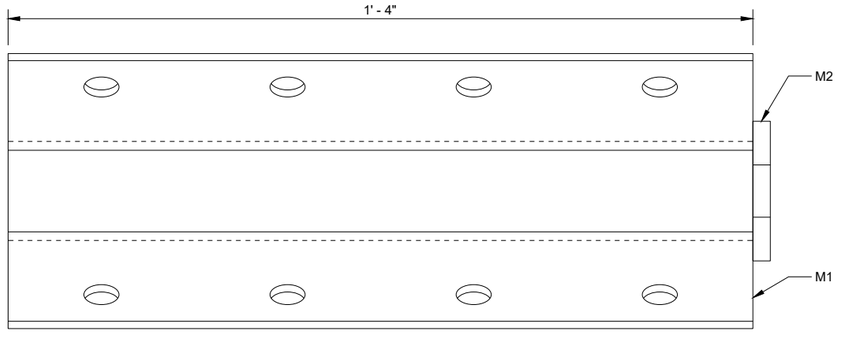


ARM GUSSET PLATE 1 (C5)

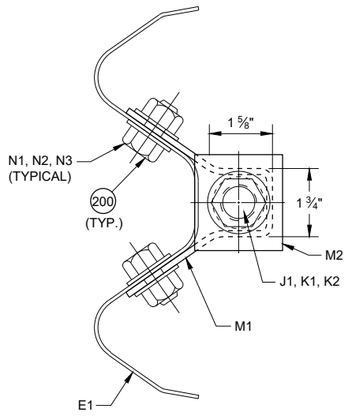


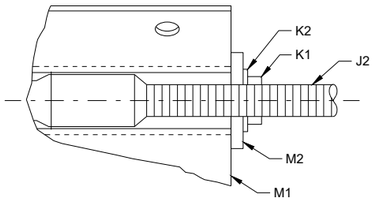
ARM GUSSET PLATE 2 (C6)



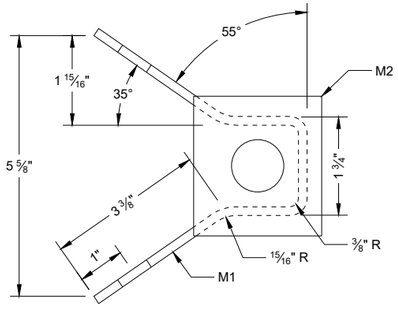


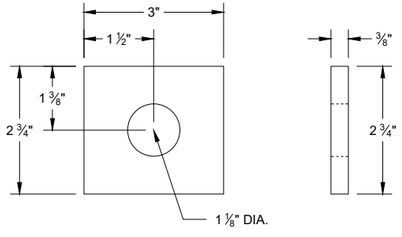
ANCHOR BRACKET (M1, M2)





SECTION A - A





ANCHOR BRACKET BEARING PLATE (M2)

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
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BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	TYPE 2 FOUNDATION TUBE	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
A2	LOWER 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	5/8" THICKNESS
A3	POST GUSSET	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	1/4" THICKNESS
A4	UPPER 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	3/4" THICKNESS
A5	TYPE 2 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, w6x9 or w6x8.5	
B1	BREAKAWAY 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 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.	7/16" DIA.
B2	BREAKAWAY 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)	7/16" DIA.
B3	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 / 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	
C1	ARM 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	3/8" THICKNESS
C2	ARM ASSEMBLY TUBE 1	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
C3	ARM ASSEMBLY TUBE 2	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 3" x 3" x 1/4"
C4	ARM ASSEMBLY TUBE 3	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 2 1/2" x 2 1/2" X 1/4"
C5	ARM ASSEMBLY GUSSET 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	1/4" THICKNESS
C6	ARM ASSEMBLY GUSSET 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	1/4" THICKNESS
D1	ARM ASSEMBLY 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	1/2" DIA.
D2	ARM ASSEMBLY 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)	1/2" DIA.
D3	ARM ASSEMBLY 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	1/2" DIA.
E1	TYPE 2 GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E2	BEAM GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E3	BEAM GUARD ROUNDED BUFFER END	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
F1	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 UNC UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
F2	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 ONLY)	5/8" DIA.
F3	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	
G1	GROUND STRUT CHANNEL	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	1/2" x 11 3/4" x 10 GAUGE
G2	GROUND STRUT CONNECTOR	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	1/4" THICKNESS
G3	GROUND STRUT 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	1/2" THICKNESS

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

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DEPARTMENT OF TRANSPORTA 492

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BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
H1	GROUND STRUT 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	7/8" DIA.
H2	GROUND STRUT 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)	7/8" DIA.
H3	GROUND STRUT 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 HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
J1	BCT CABLE	AASHTO M30 / ASTM A741 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS), 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS) TYPE II OR IIC, CLASS C ZINC COATED MIN. BREAKING STRENGTH OF 42.7 KIPS	**3/4" DIA.**
J2	BCT CABLE	UNC 1" ASTM A576 GRADE 1035 SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. 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."	
K1	CABLE ASSEMBLY 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	1" DIA.
K2	CABLE ASSEMBLY WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1	1" DIA.
L1	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	5/8" THICKNESS
L2	BEARING PLATE FLANGE	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	1" THICKNESS
M1	BEAM GUARD 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	
M2	BEAM GUARD ANCHOR 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	3/8" THICKNESS
N1	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 AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
N2	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)	5/8" DIA.
N3	ANCHOR BRACKET 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	
P1	FOUNDATION 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 ASTM A563DH OR SAE J995 GRADE 5	1/2" DIA.
Q1	SPLICE 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	
Q2	SPLICE 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	5/8" DIA.

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MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
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APPROVED

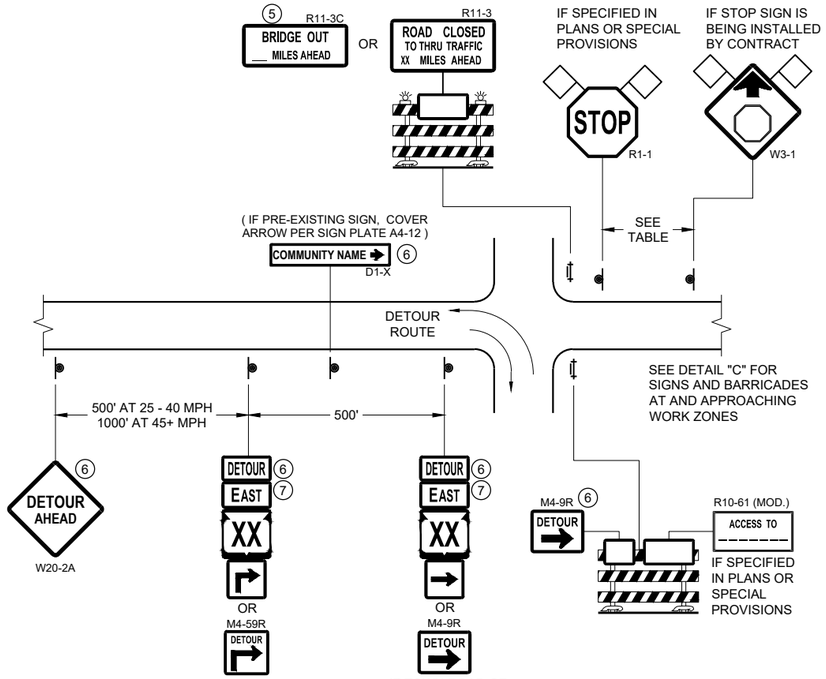
May 2023
DATE

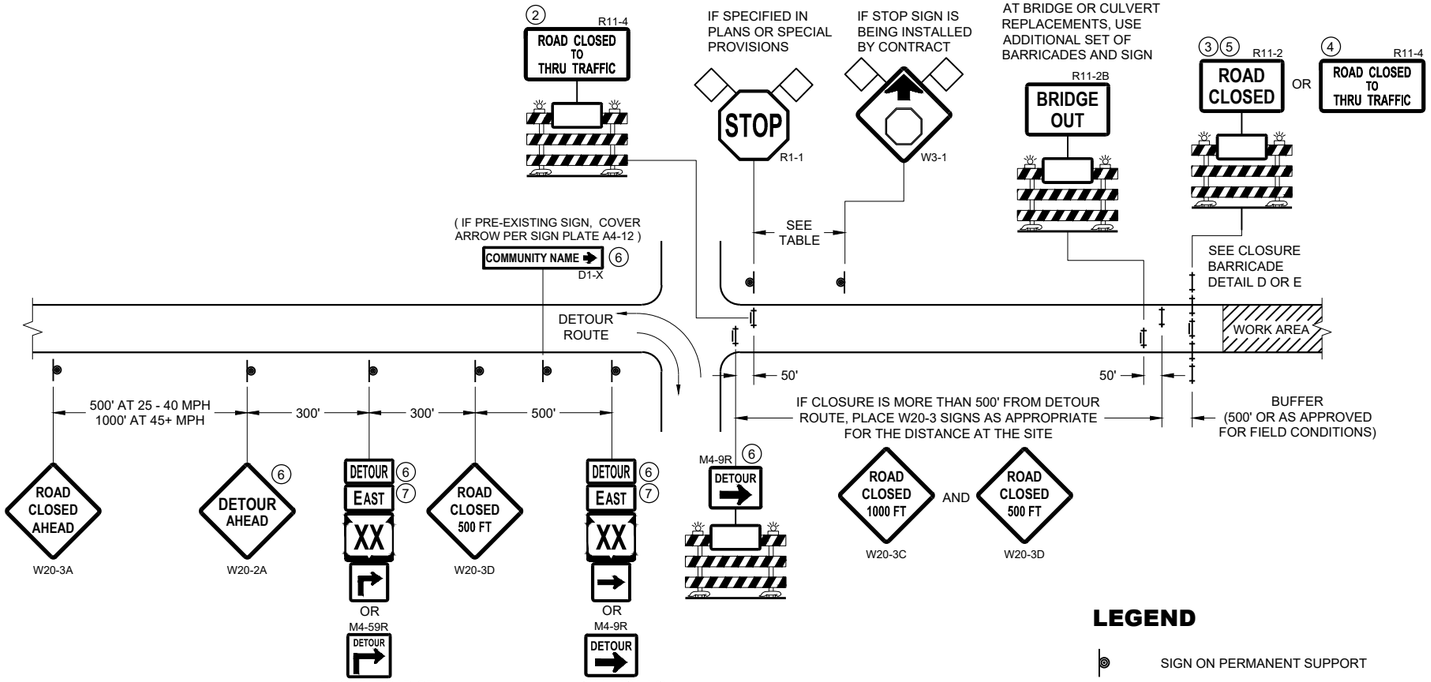
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

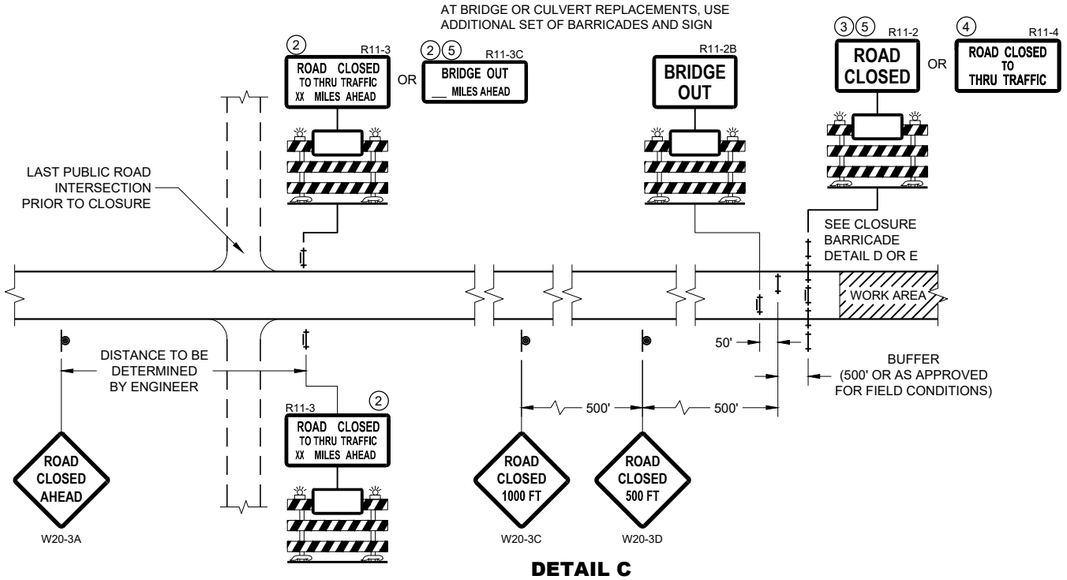
WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

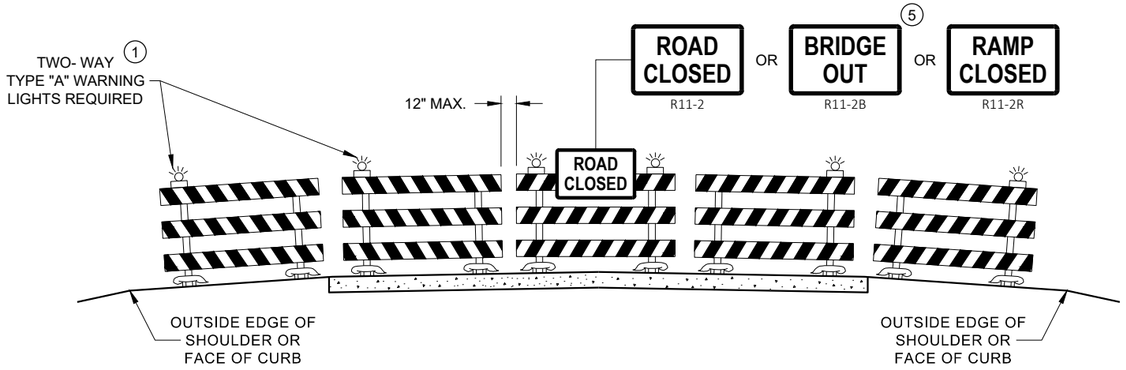
APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

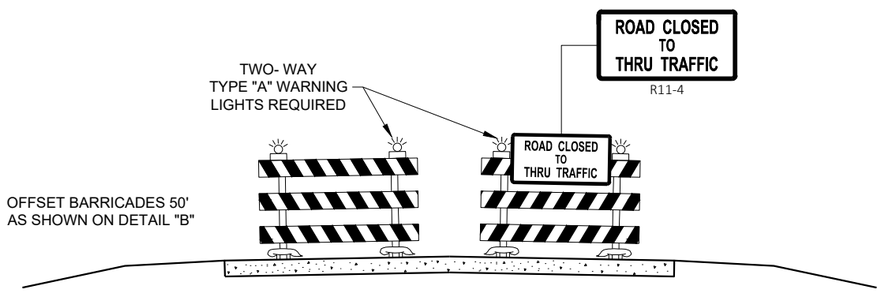
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SDD 15C02 - 09a

SDD 15C02 - 09a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

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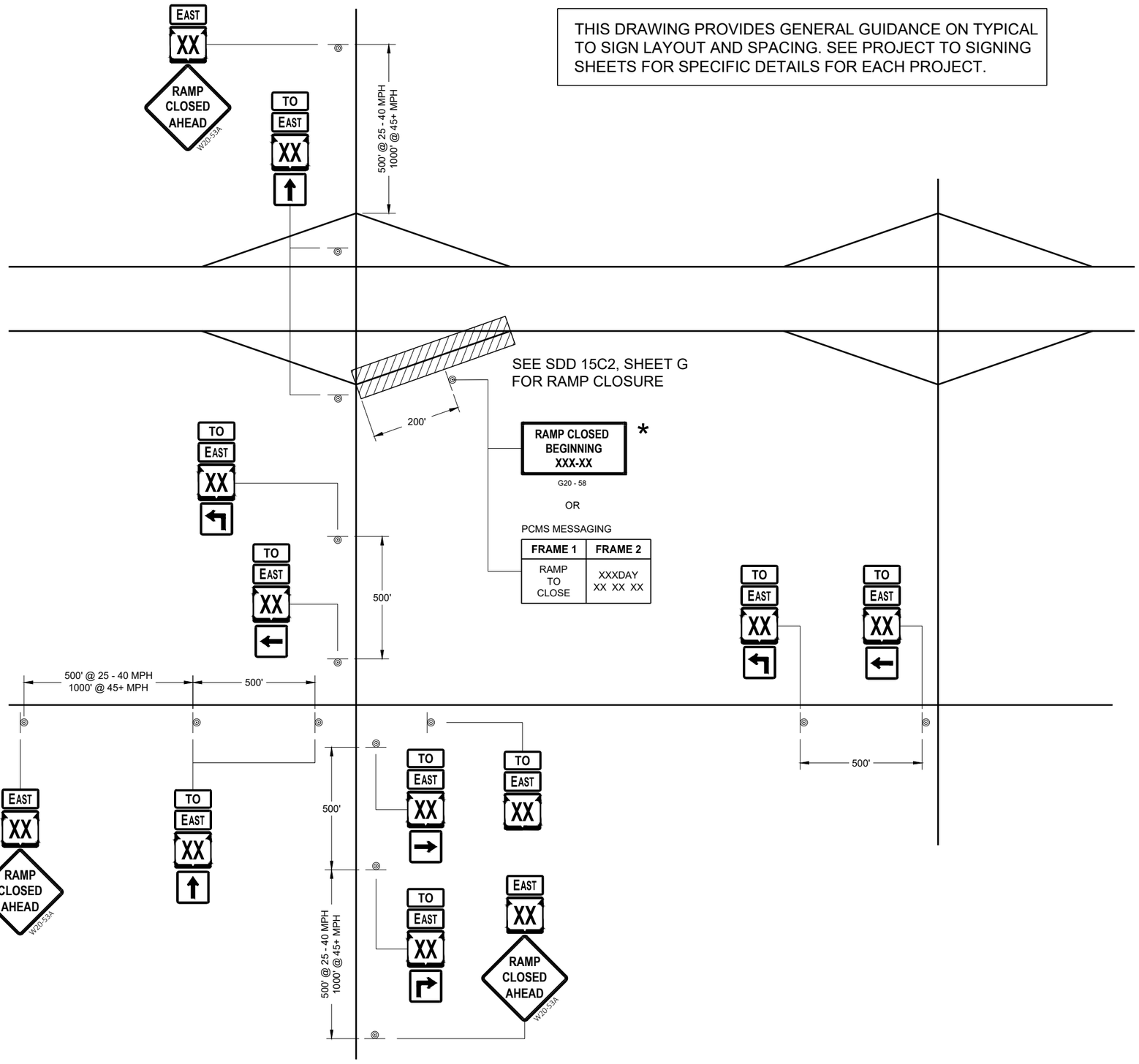
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May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C02 - 09b

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

LEGEND

SIGN ON PERMANENT SUPPORT

TO EAST — MO4 - 5, M3 - X

XX M1 - 6 OR XX M1 - 4 OR INTERSTATE XX M1 - 1

M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE TO ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOW:
- M3 - X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 1, M1 - 4, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).
- W20 - 53A SHALL BE 48" X 48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

ON RAMP LANE CLOSURE

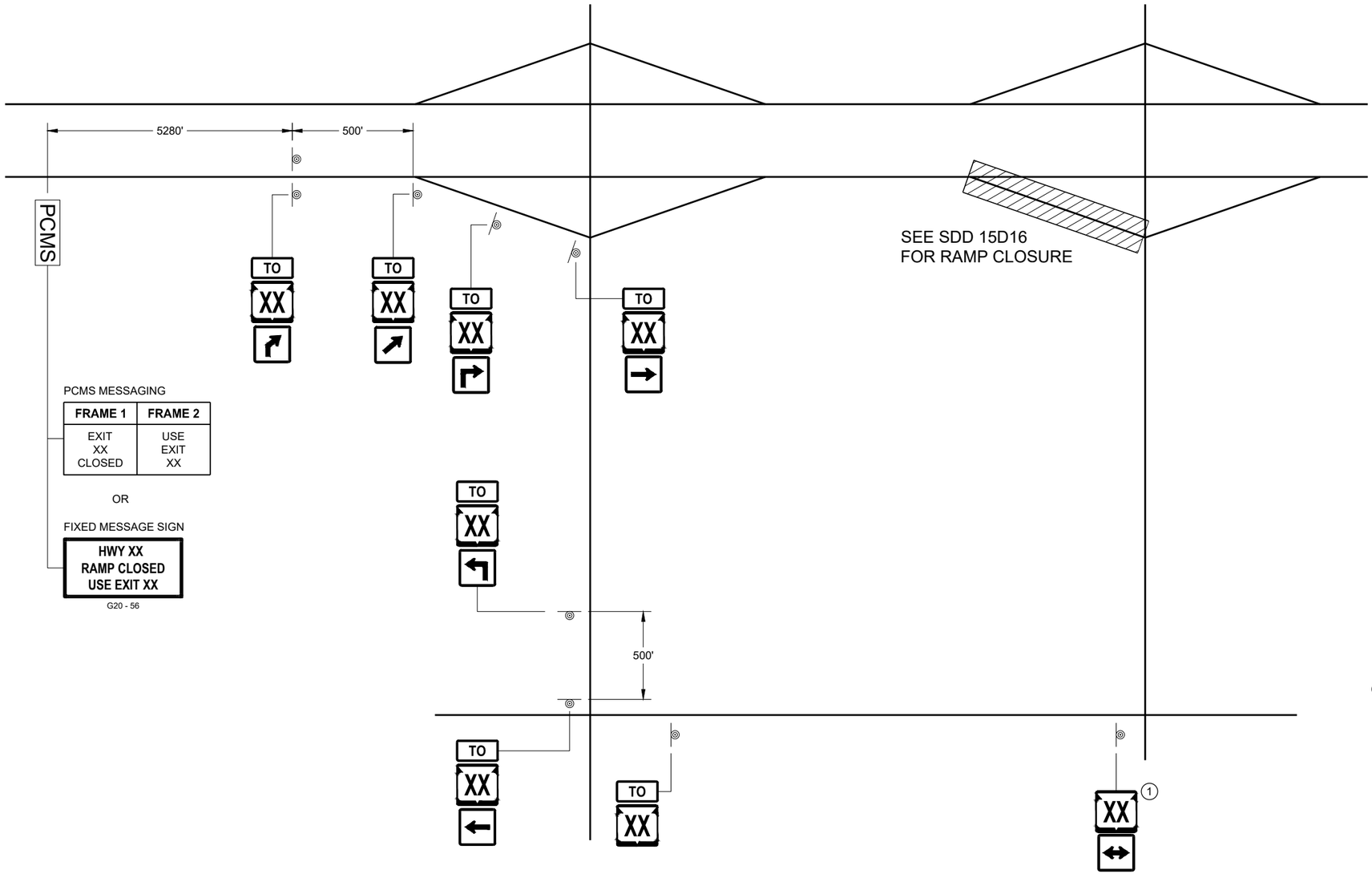
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DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

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SDD 15C02 - 09d

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL "TO" MO-4 SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.



PCMS MESSAGING

FRAME 1	FRAME 2
EXIT XX CLOSED	USE EXIT XX

OR

FIXED MESSAGE SIGN

HWY XX
RAMP CLOSED
USE EXIT XX

G20 - 56

LEGEND

SIGN ON PERMANENT SUPPORT

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

TO MO4 - 5

XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A

M05 - 1 OR M05 - 2 OR M06 - 1 OR M06 - 2 OR M06 - 4

GENERAL NOTES

SEE SDD 15D16 "TRAFFIC CONTROL, EXIT RAMP CLOSURE" DETAIL FOR TRAFFIC CONTROL AT EXIT RAMP CLOSURE.

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

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE "TO" MO-4 ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND "TO" MO-4 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

SIGN SIZES SHALL BE AS FOLLOW:
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 4, M1 - 5A, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).

(1) ONLY ADD IF THERE ARE NO EXISTING ROUTE MARKERS FOR THE INTERSECTING ROADWAY.

OFF RAMP
LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

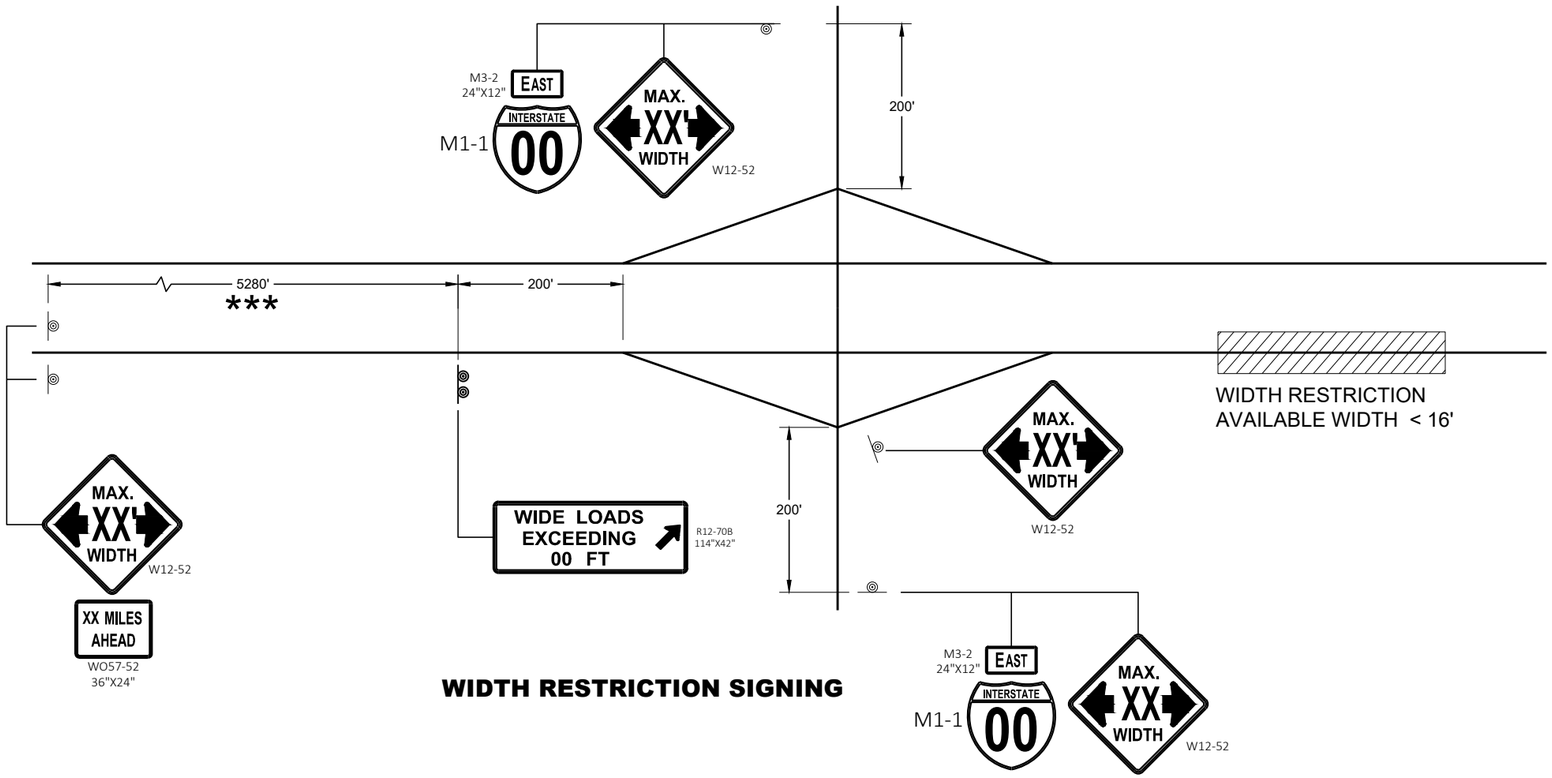
FHWA

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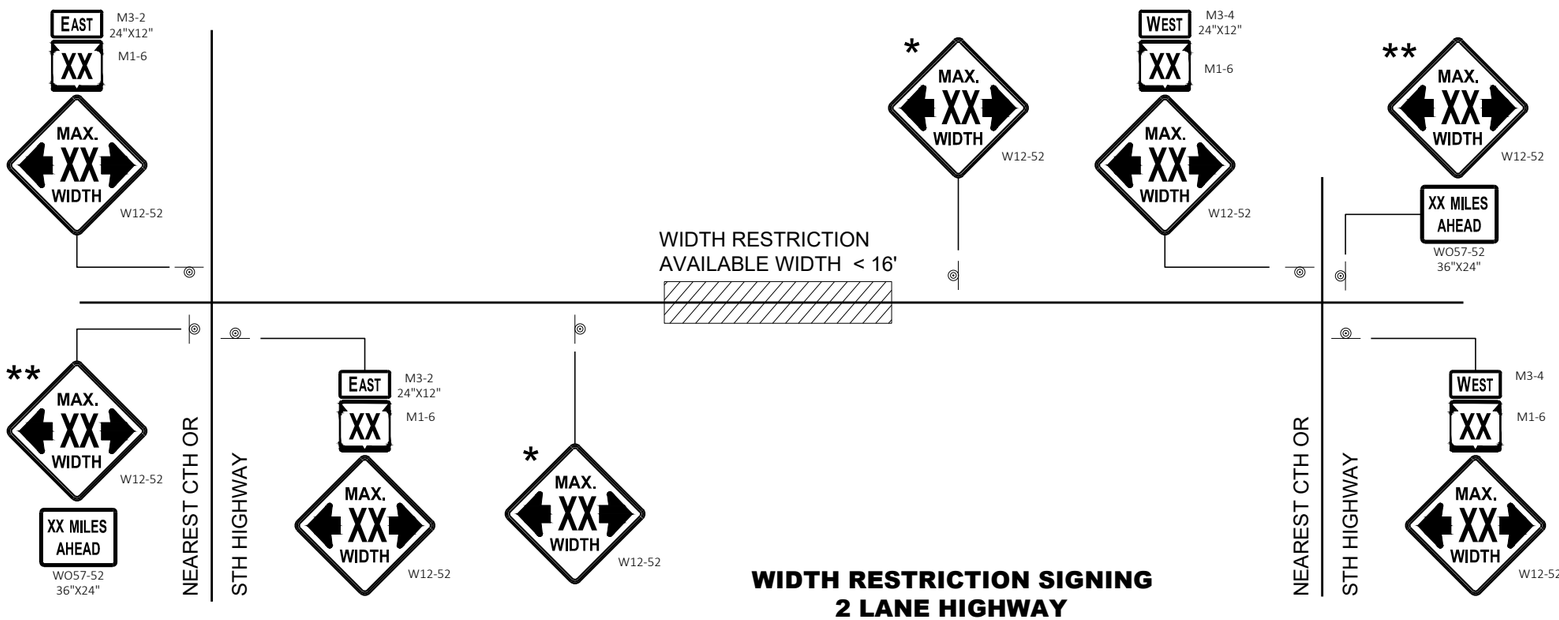
SDD 15C02 - 09e

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SDD 15C02 - 09e



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

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SDD 15C02 - 09f

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SDD 15C02 - 09f

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.

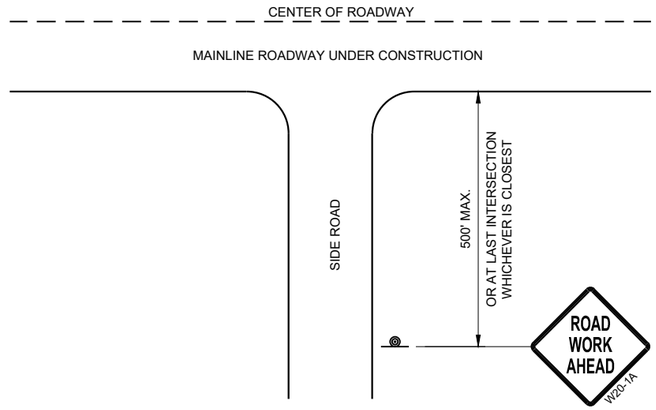
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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.



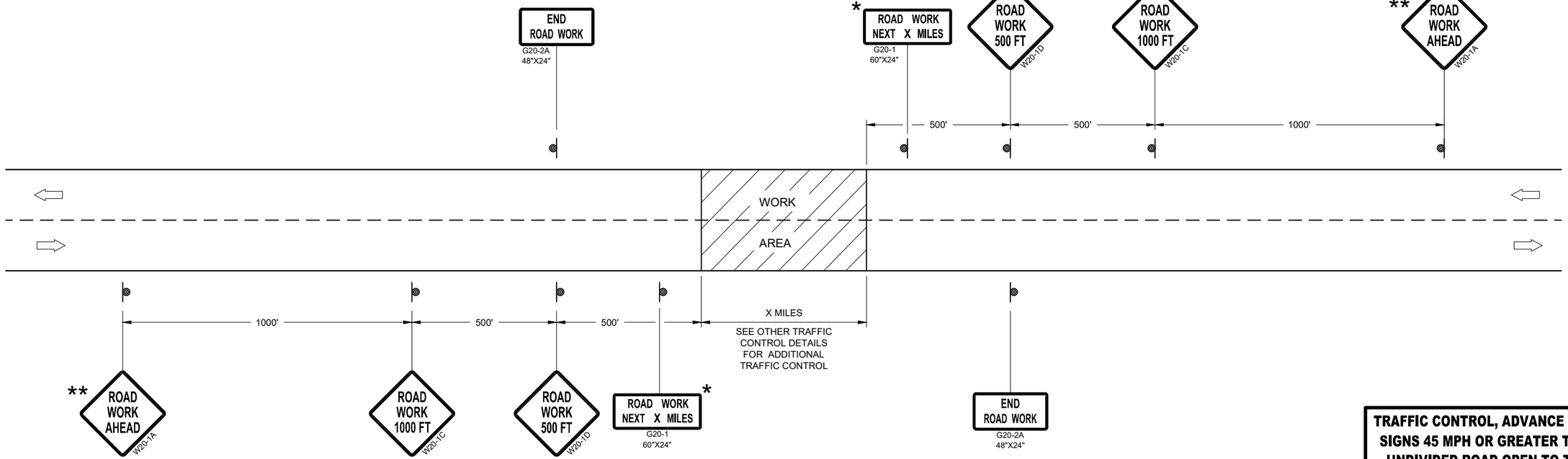
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

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

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6

SDD 15C04 - 05

GENERAL NOTES

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

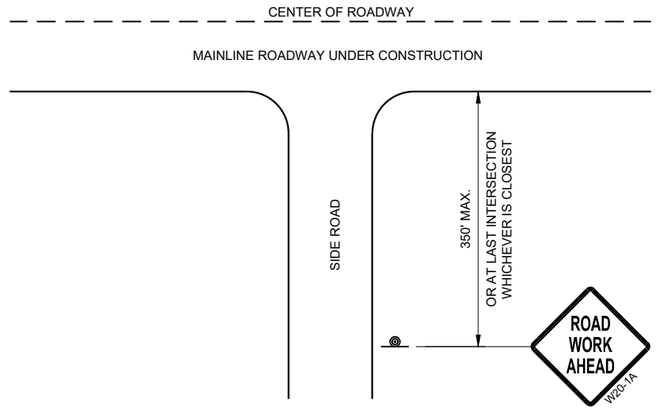
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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.

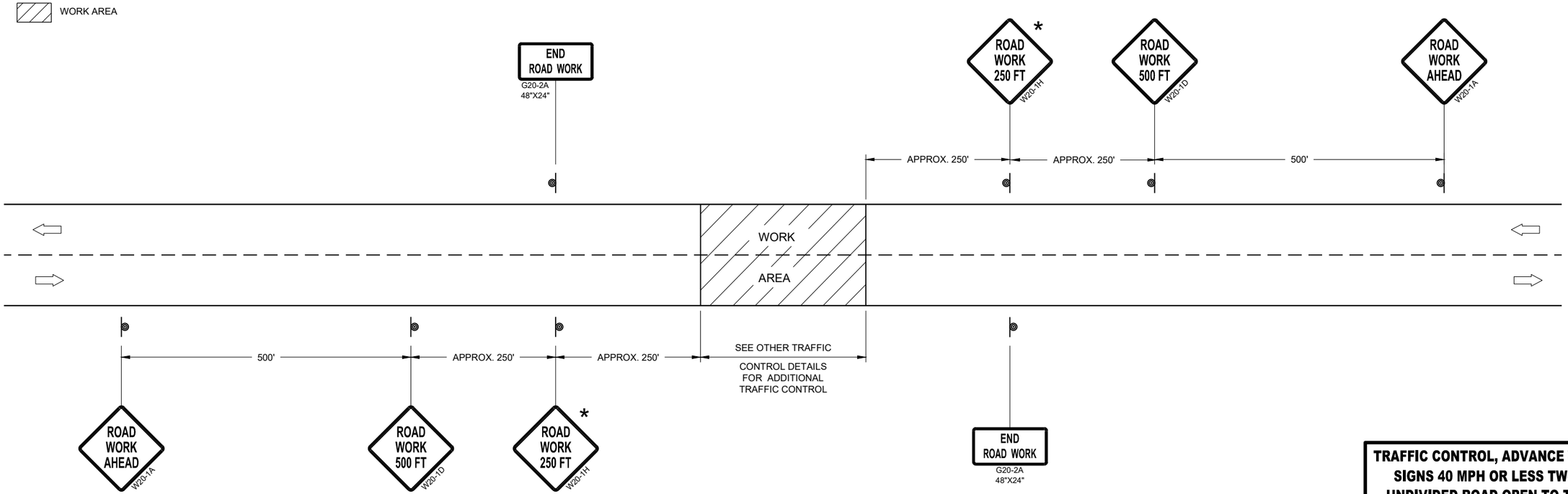
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

500

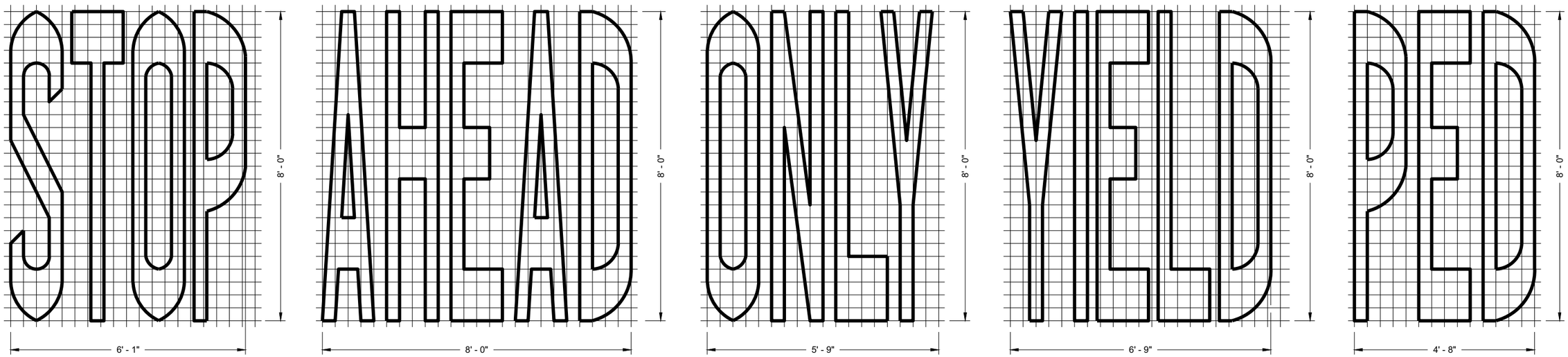
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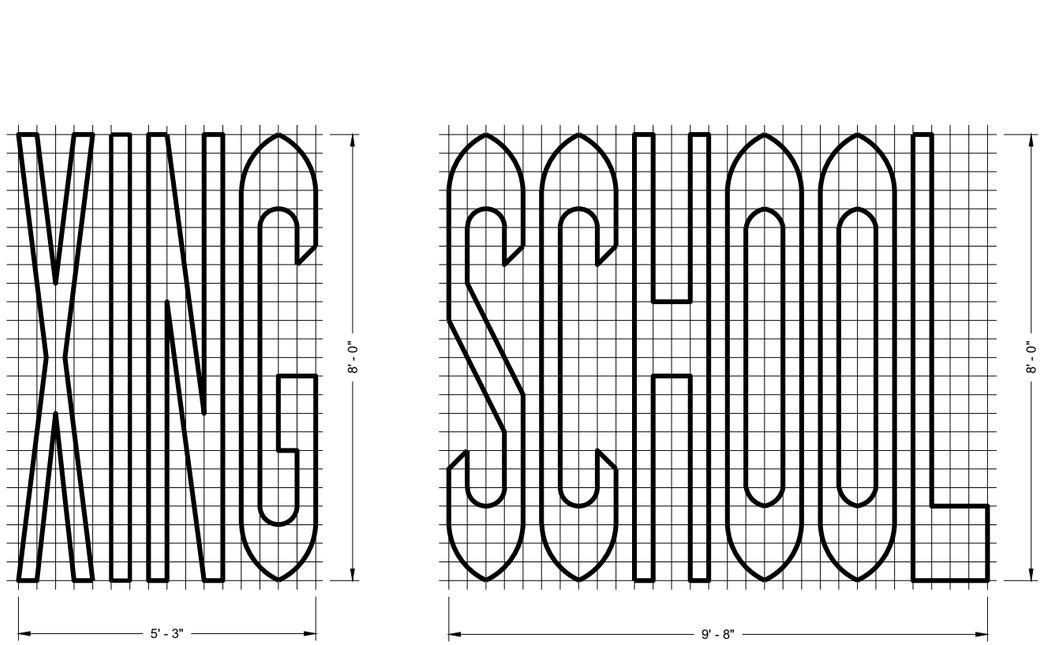
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SDD 15C05 - 05

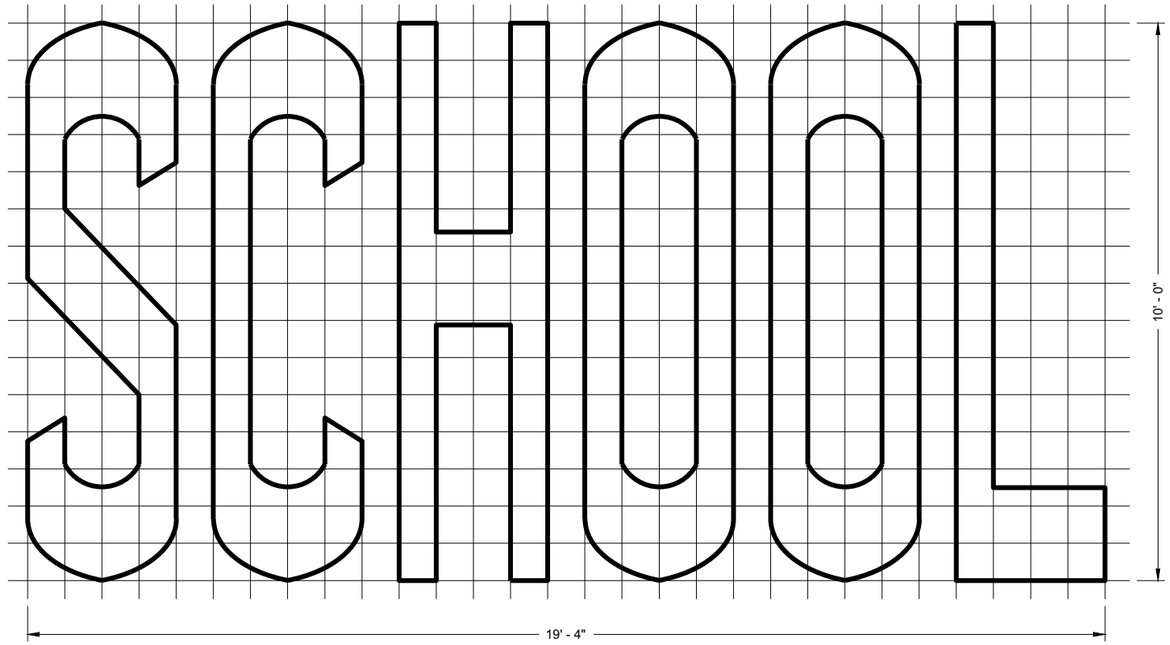
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SDD 15C05 - 05





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 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

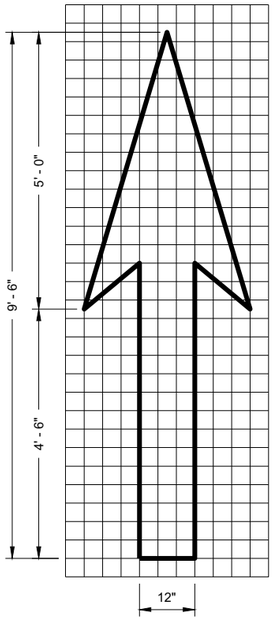
SDD 15C07 - 15b

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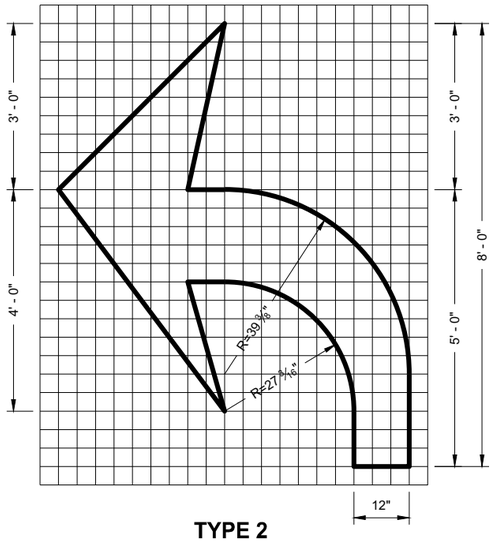
SDD 15C07 - 15b

GENERAL NOTES

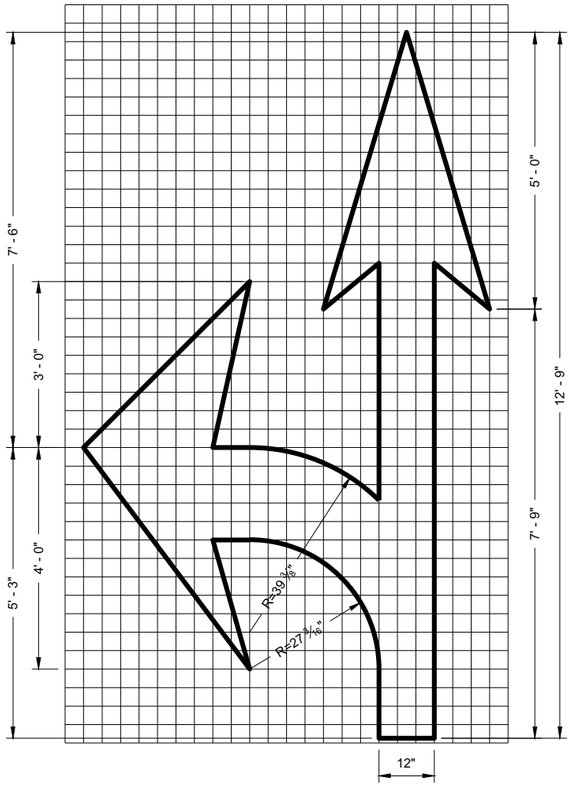
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



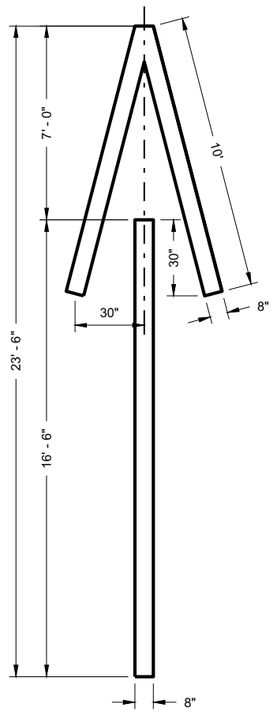
TYPE 1



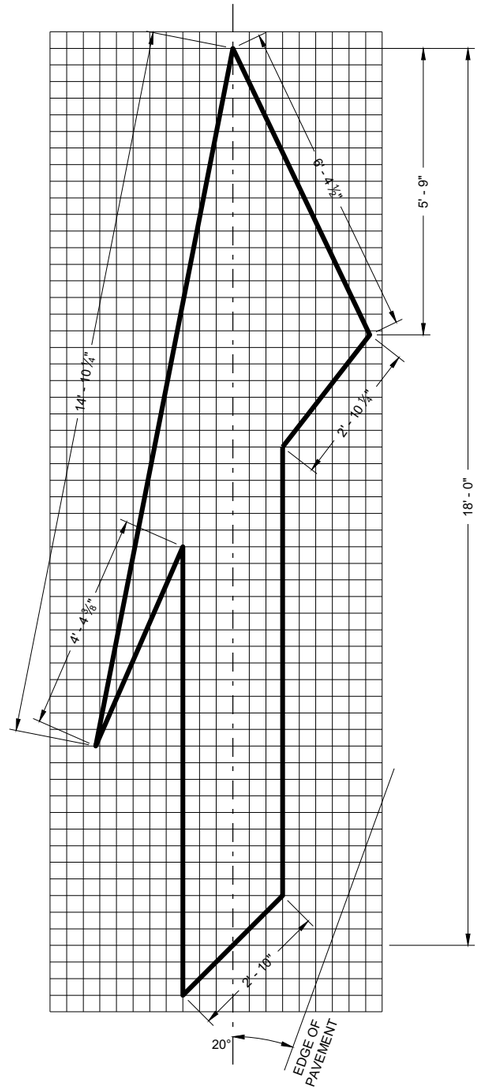
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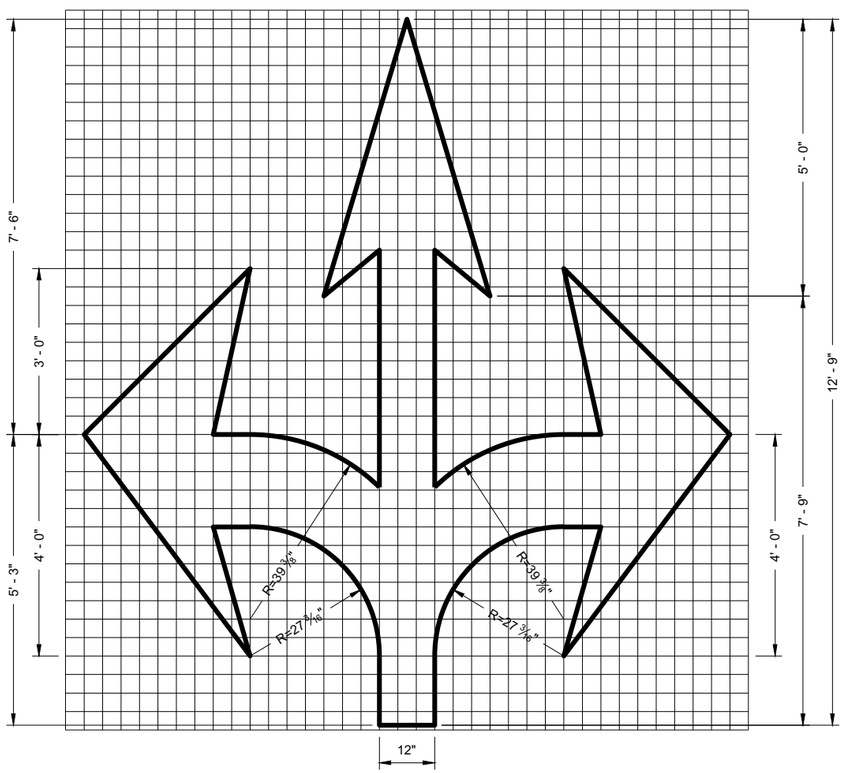
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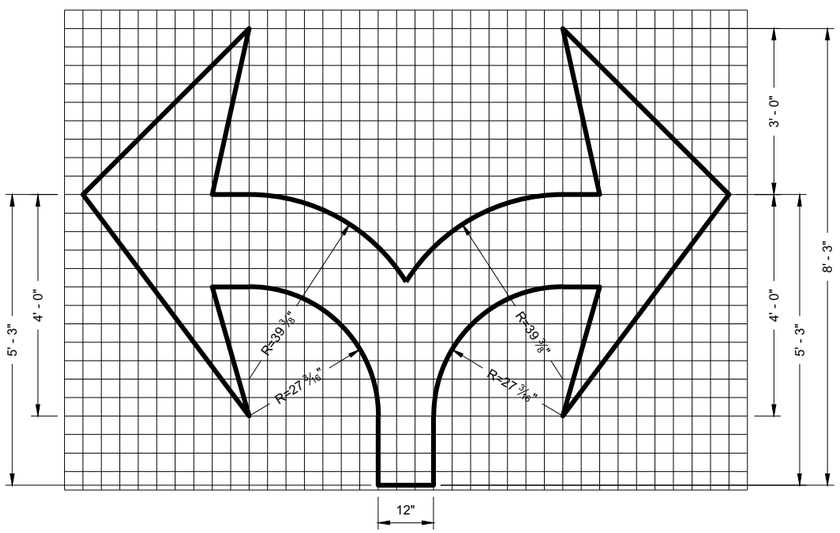
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

502

6

SDD 15C07 - 15c

6

SDD 15C07 - 15c

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

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

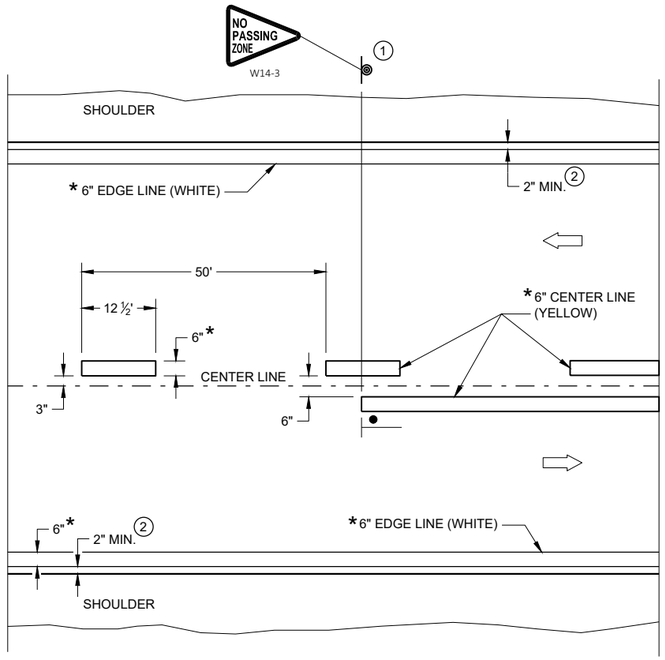
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

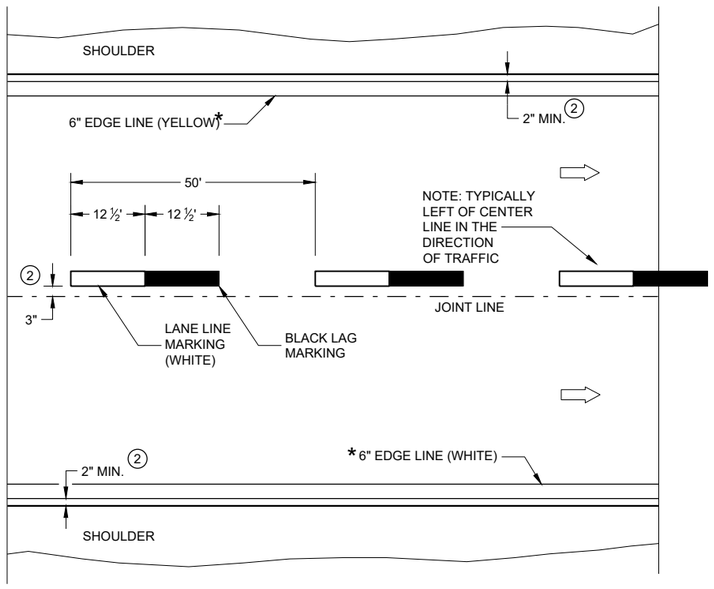
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

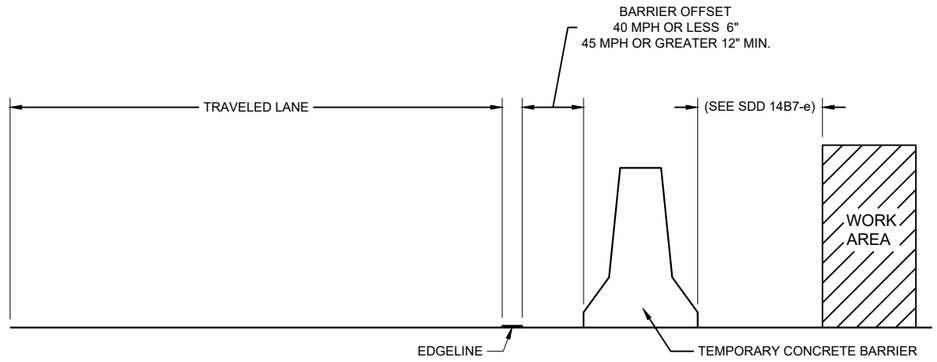
PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER
FHWA

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SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGELINE

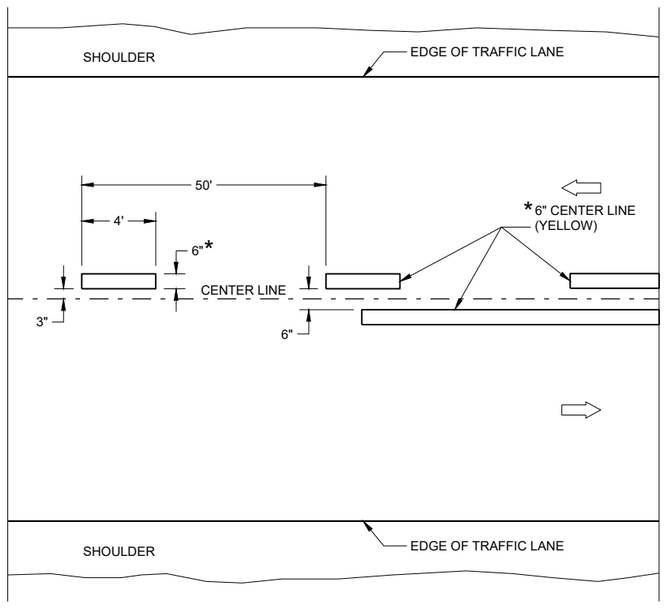
GENERAL NOTES

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

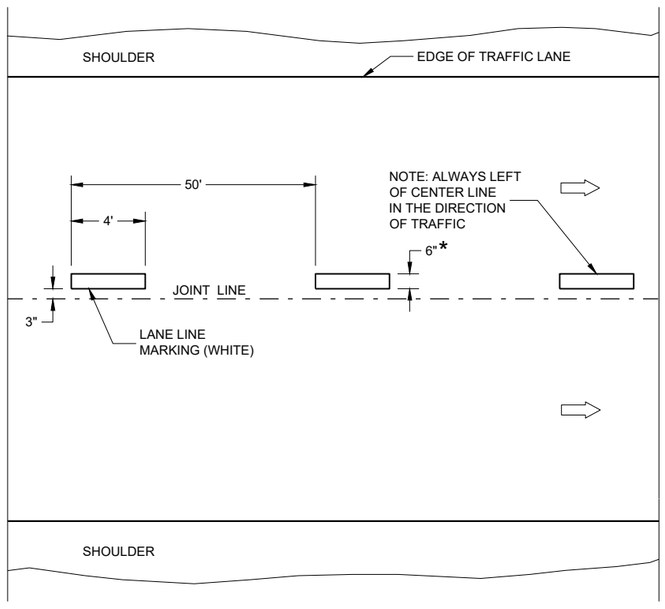
LEGEND

⇨ DIRECTION OF TRAFFIC

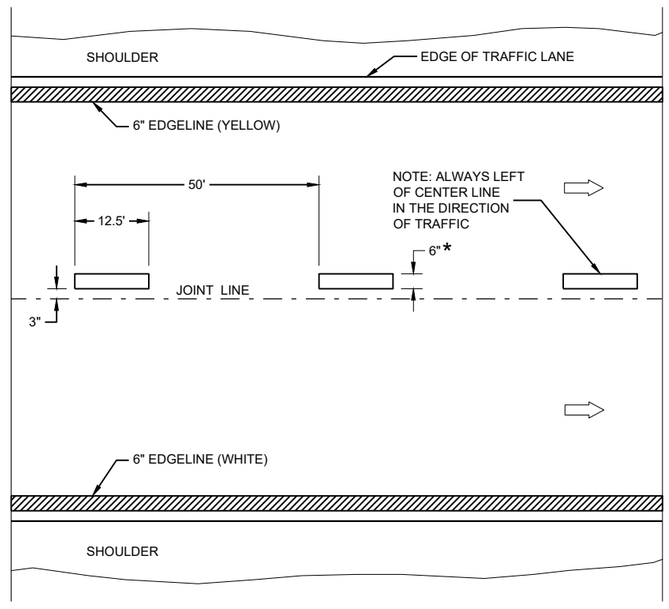
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



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 SIGNING AND M ENGINEER

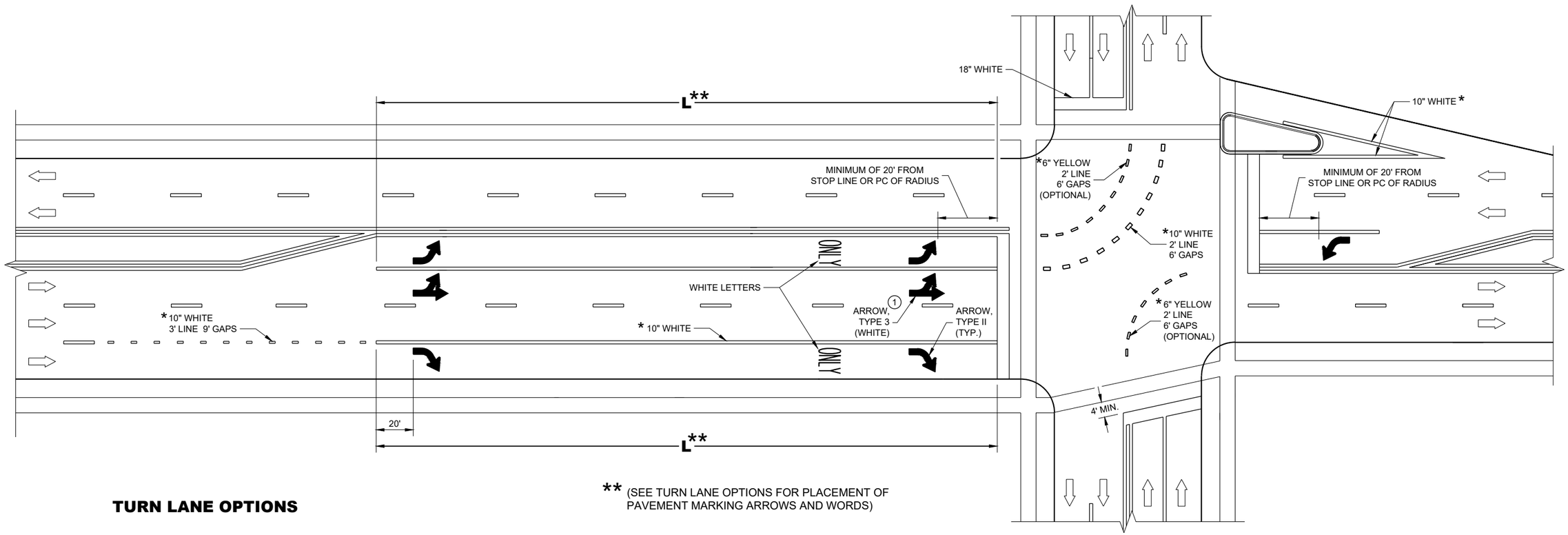
FHWA

6

SDD 15C08-23b

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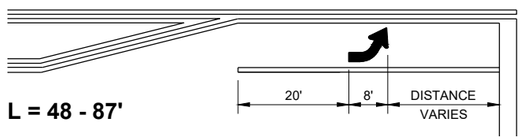
SDD 15C08-23b



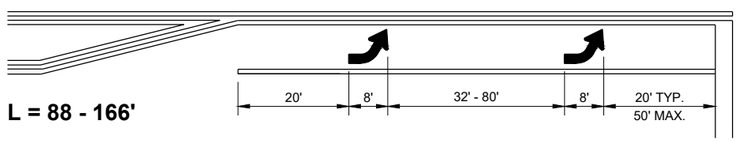
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

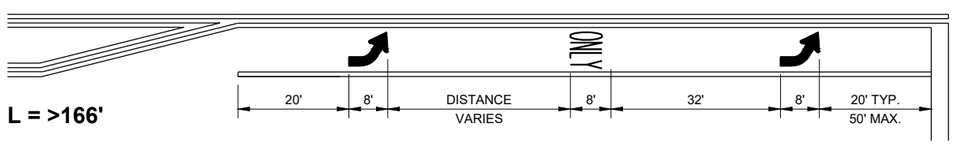
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



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

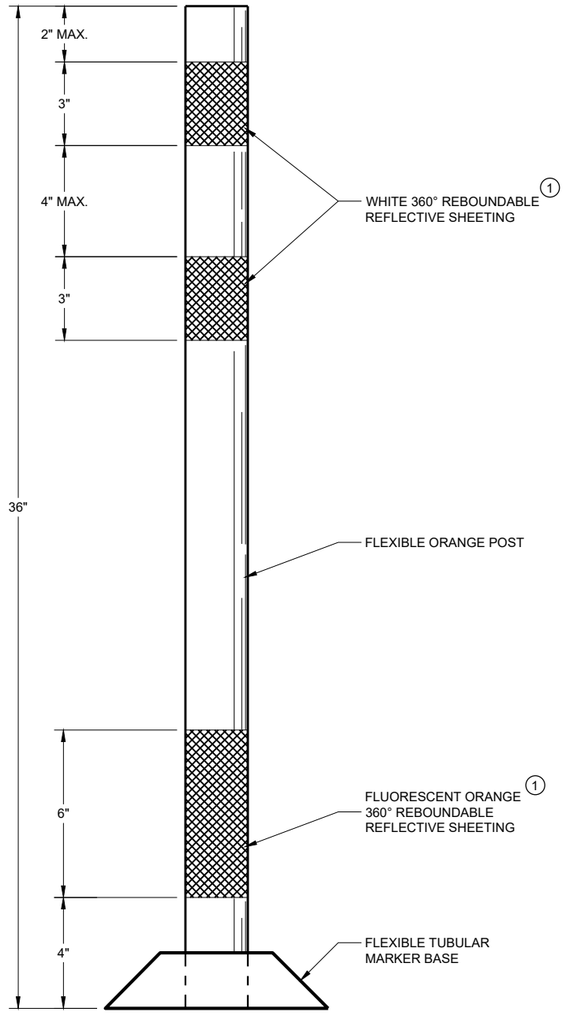
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08-23d



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND 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 FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

506

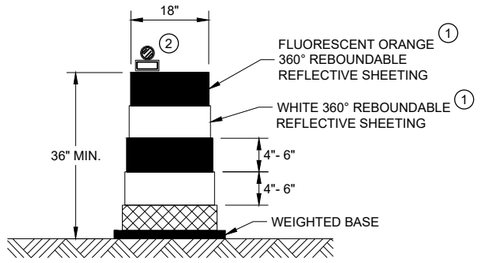
FHWA

6

SDD 15C11 - 10a

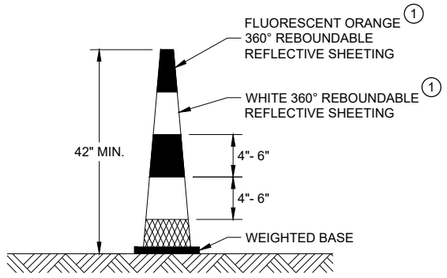
GENERAL NOTES

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

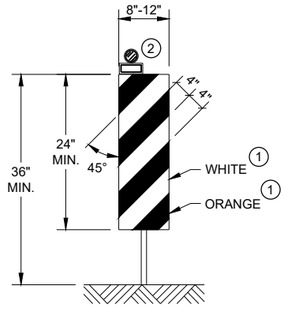
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

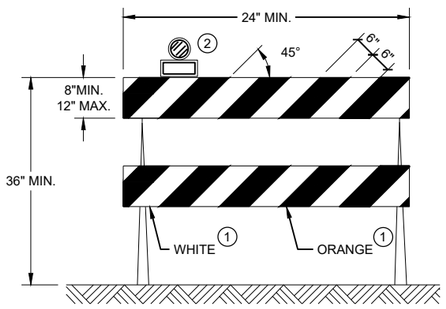
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



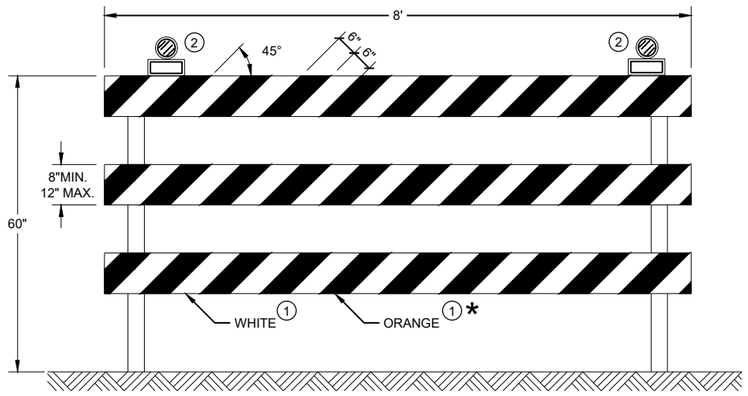
VERTICAL PANEL

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

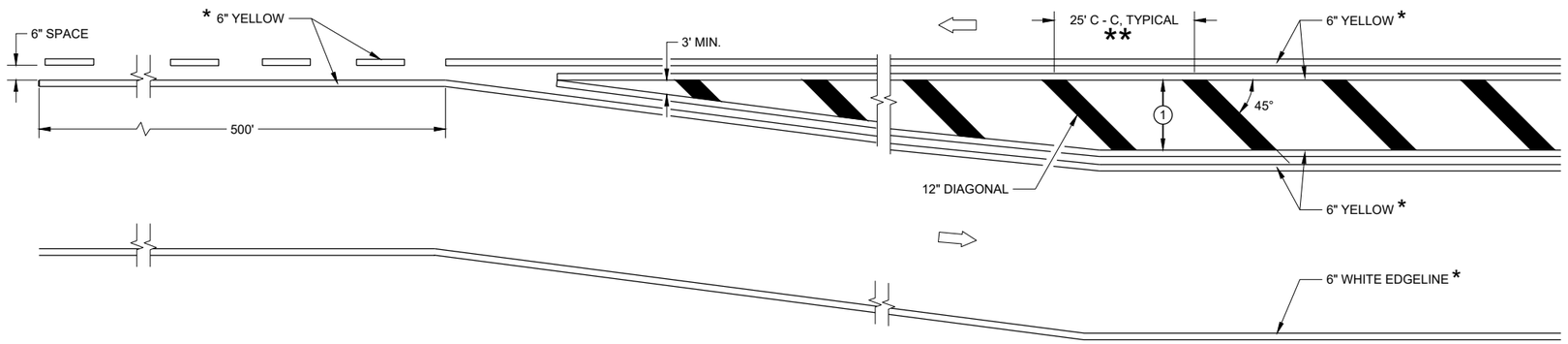
/S/ Andrew Heidtke
WORK ZONE ENGINEE

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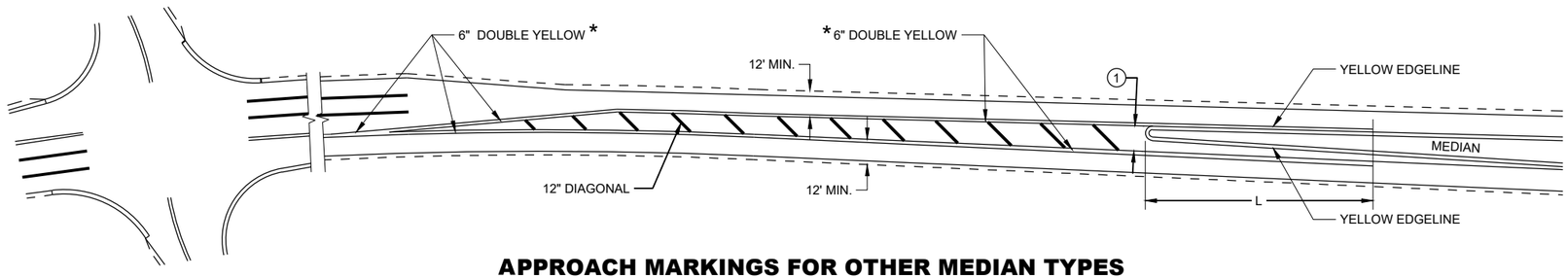
MEDIAN ISLAND DETAIL

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.

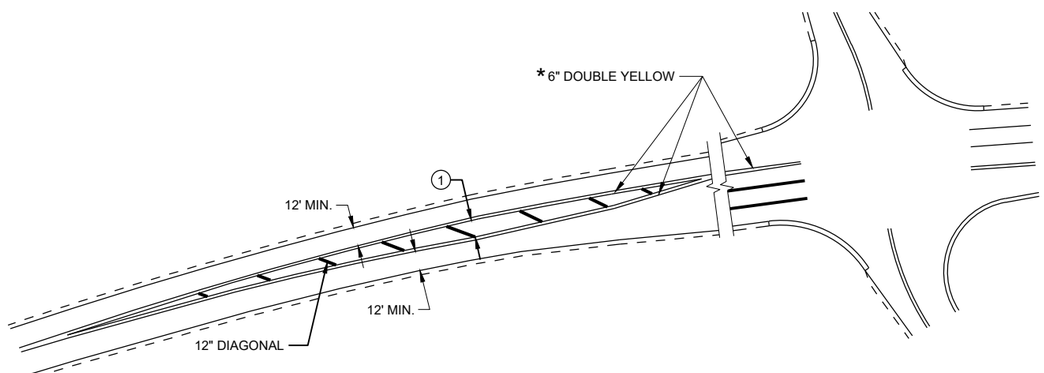
⇨ DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



APPROACH MARKINGS FOR OTHER MEDIAN TYPES

SPEED LIMIT	L
<35 MPH	5'
35> MPH	50'



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

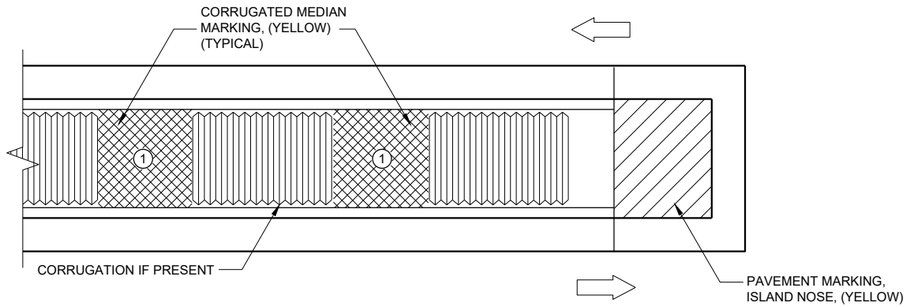
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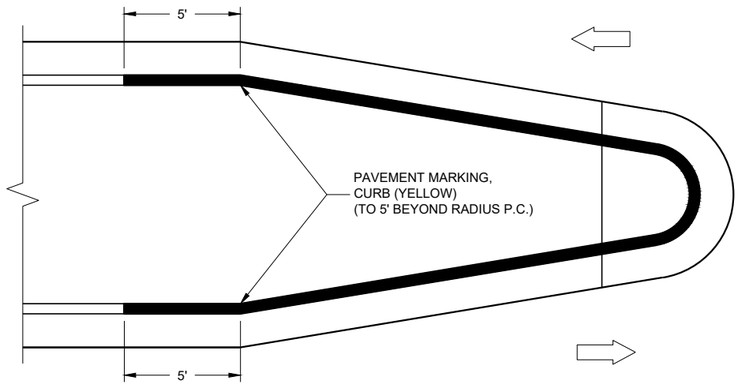
SDD 15C18-08a

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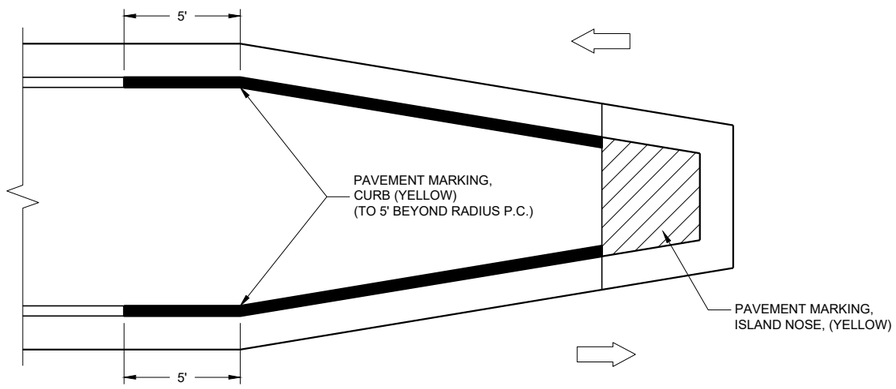
SDD 15C18-08a



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

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

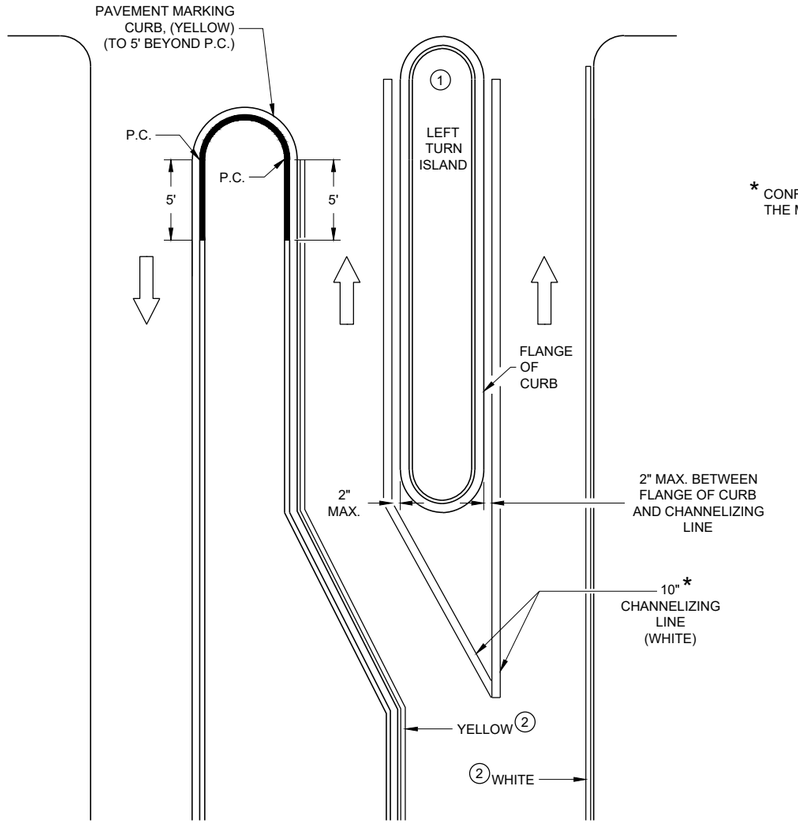
May 2023
DATE

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STATE SIGNING AND MAF ENGINEER

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SDD 15C18-08b

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



* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEFT TURN & MEDIAN ISLAND

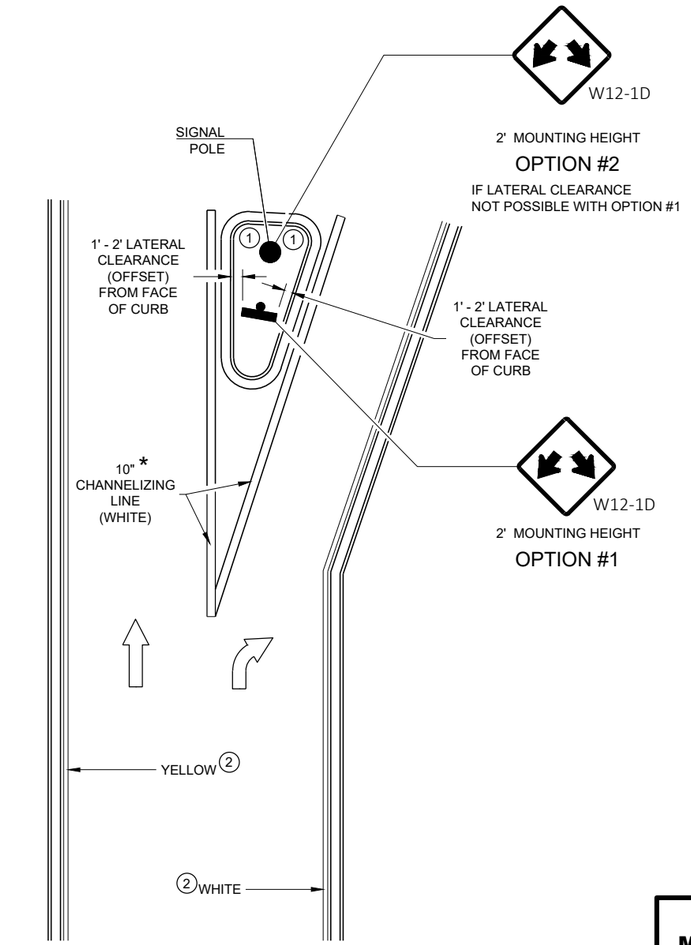
GENERAL NOTES

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.

DIRECTION OF TRAVEL



RIGHT TURN ISLAND

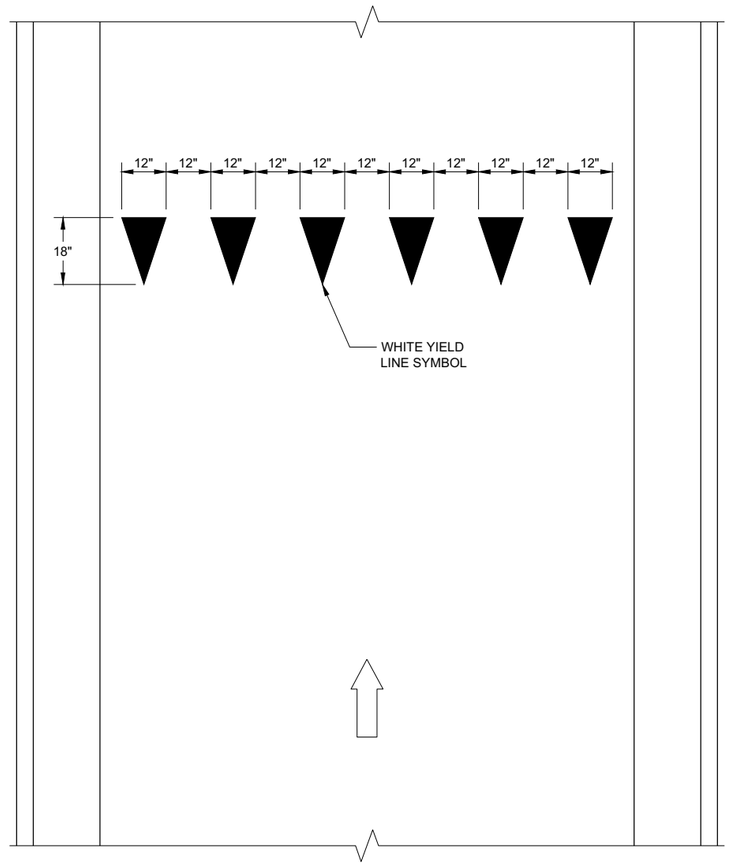
MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

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/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER

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SDD 15C18-08c

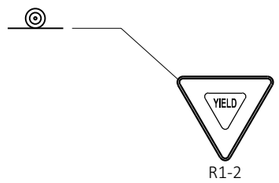


YIELD LINE

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

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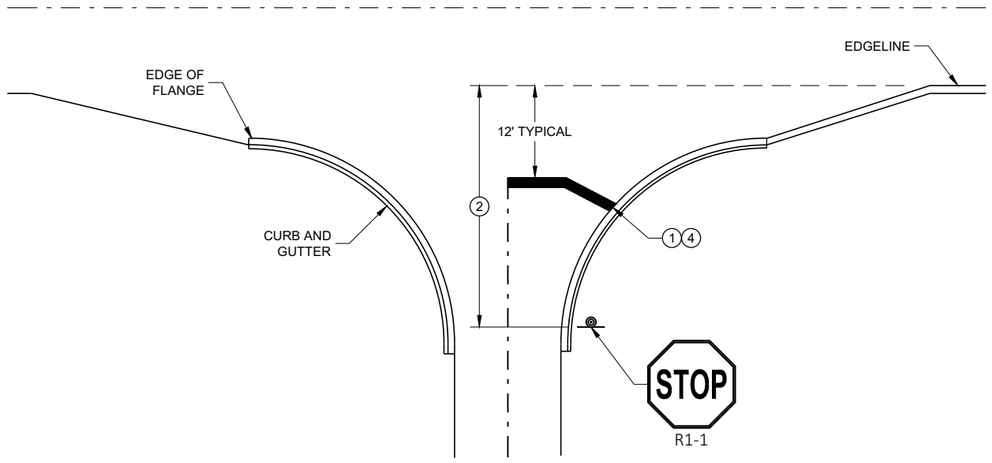
SDD 15C20 - 02

SDD 15C20 - 02

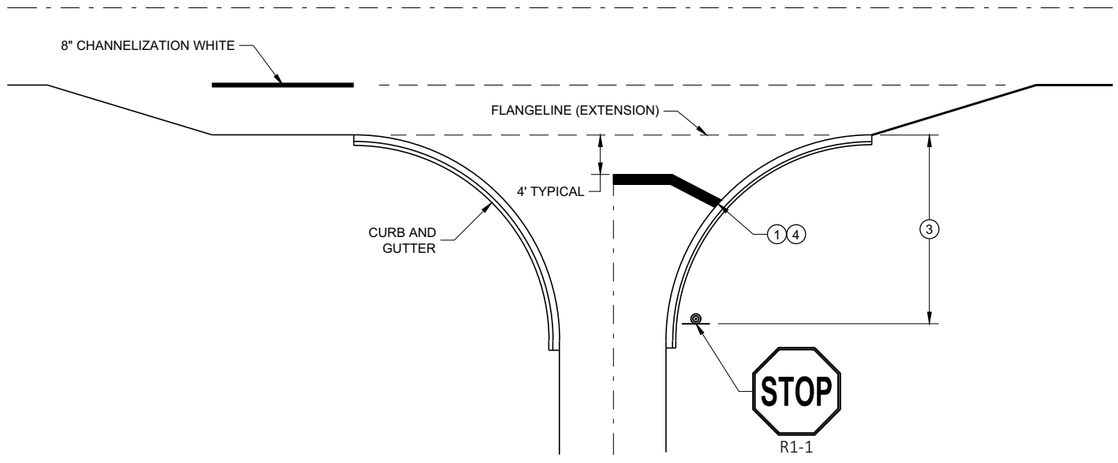
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

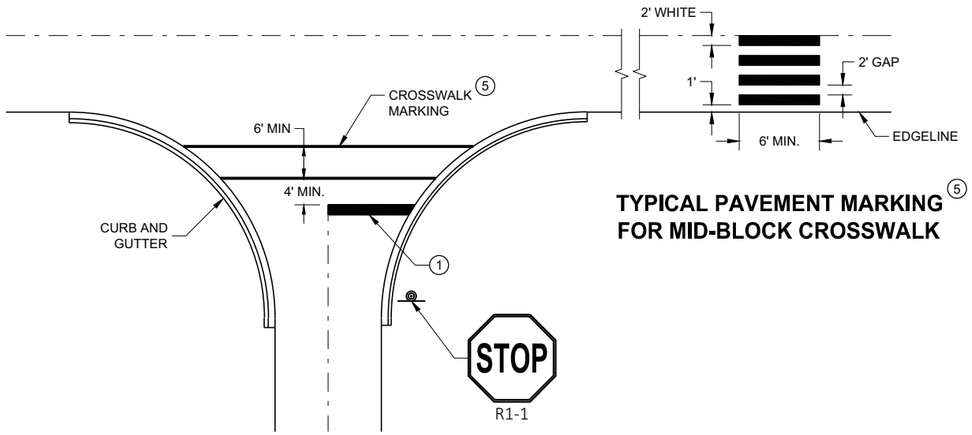
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE 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 INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

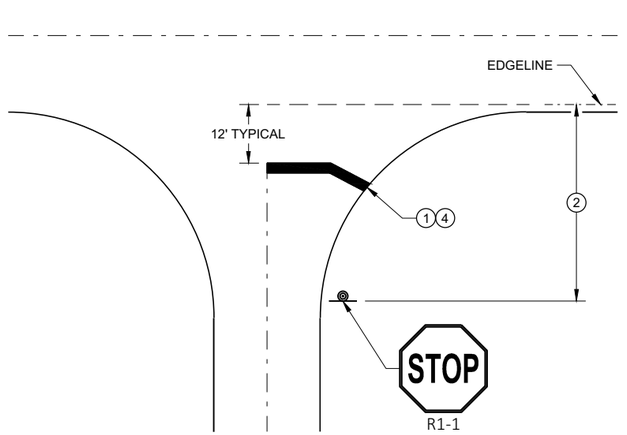


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING

TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
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/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

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LEGEND

SIGN ON PERMANENT SUPPORT

DELINEATOR, FLEXIBLE/TUBULAR MARKER

DIRECTION OF TRAFFIC

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"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 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50 FOOT SPACING.

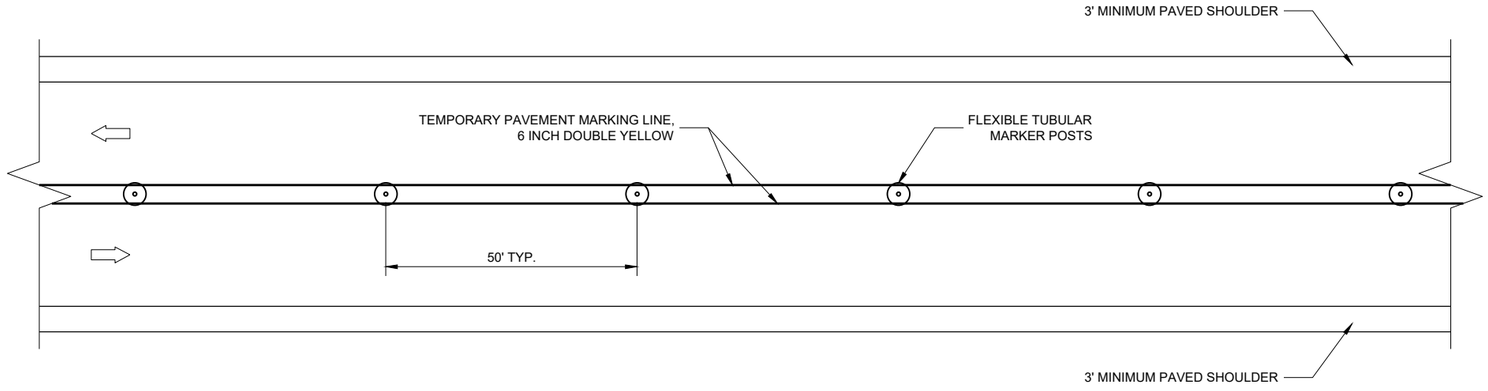
COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING LINE, 6 INCH DOUBLE YELLOW.





1. THE WO6-3 AND WO57-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND / OR 500 FEET BEYOND ANY SIDE ROAD. THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE WO6-3 AND THE WO57-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN THE SIGNS.

2. CONVENTIONAL: 24" X 30"
FREEWAY AND EXPRESSWAY: 36" X 48"



TWO LANE, TWO WAY OPERATION

6

SDD 15D06-06

TRAFFIC CONTROL
TWO LANE TWO WAY OPERATION

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APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

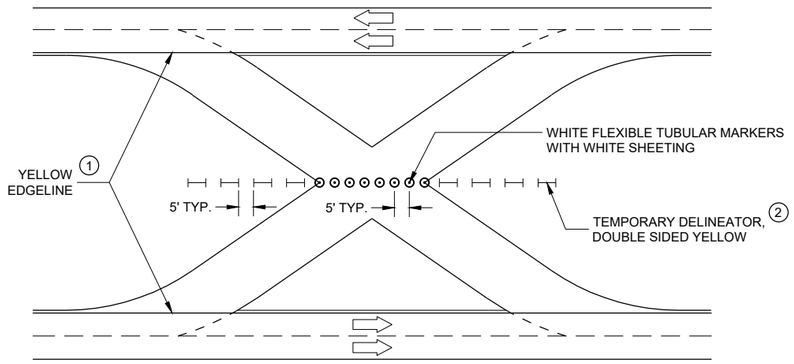
FHWA

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SDD 15D06-06

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- DELINEATOR FLEXIBLE / TUBULAR MARKER
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGELINE MARKING
- TEMPORARY DELINEATOR (DOUBLE SIDED)
- TYPE "A" WARNING LIGHT (FLASHING)
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKINGS
- WORK AREA



TRAFFIC CONTROL FOR CROSSOVER THAT IS NOT IN USE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"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.

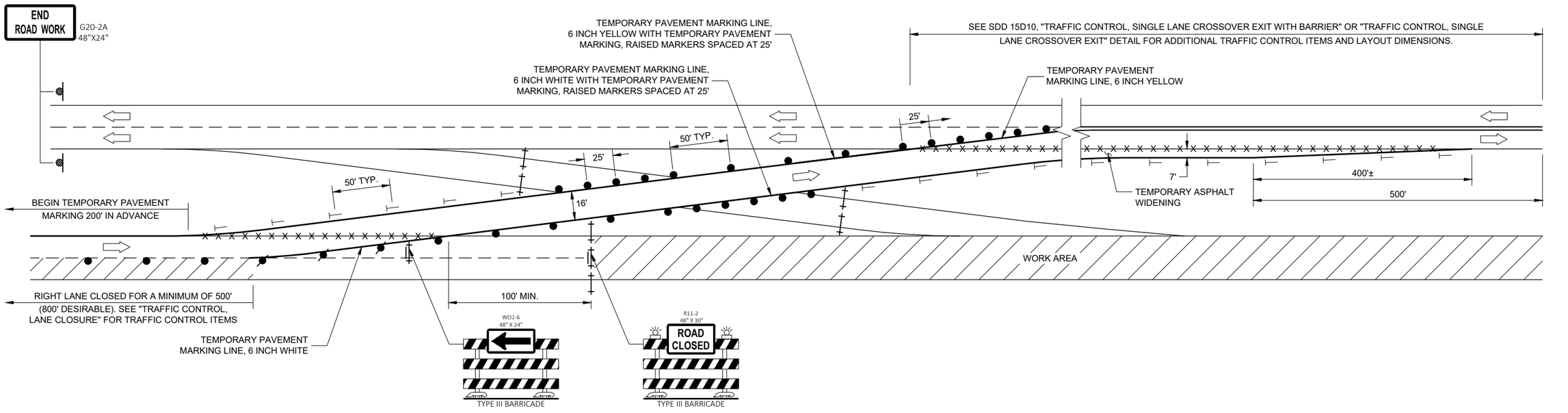
THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

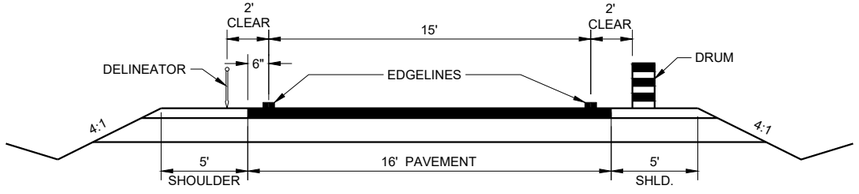
THE SPACING BETWEEN PROPOSED SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

REVERSE DEVICES WHEN OTHER LEG OF CROSSOVER IS IN USE.

(1) FOR PERMANENT CROSSOVER, PAVEMENT MARKING SHOULD CONFORM TO SECTION 646 OF THE STANDARD SPECIFICATIONS.

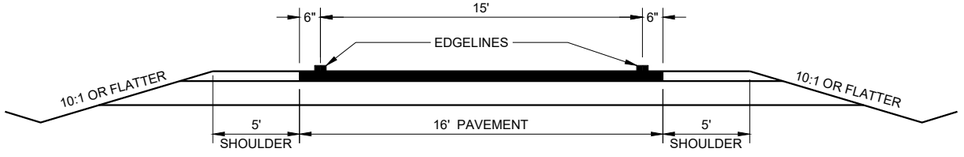
(2) FOR PERMANENT CROSSOVER, INSTALL PERMANENT DELINEATORS ACCORDING TO SECTION 633 OF THE STANDARD SPECIFICATIONS.





TYPICAL TEMPORARY CROSSOVER ROADWAY DIMENSIONS

(SEE PLAN FOR ROADWAY DESIGN ELEMENTS)



TYPICAL CROSSOVER TO REMAIN IN PLACE ROADWAY DIMENSIONS

(SEE PLAN FOR ROADWAY DESIGN ELEMENTS)

TRAFFIC CONTROL, SINGLE LANE CROSSOVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6
SDD 15D11-09

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.

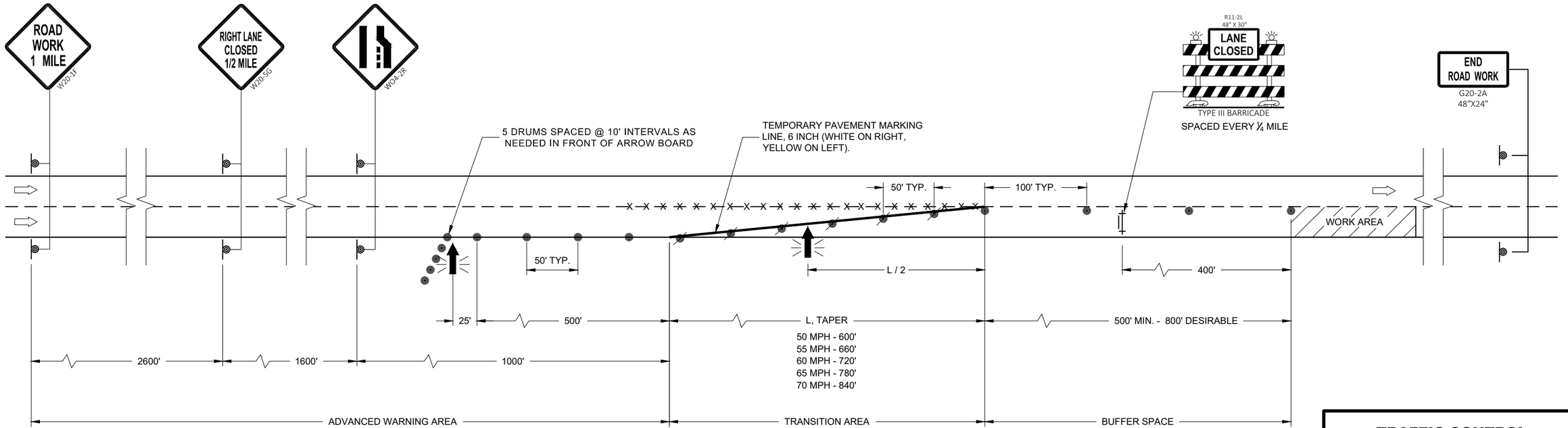
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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
- FLASHING ARROW BOARD



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D12 - 11a

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SDD 15D12 - 11a

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A 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.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

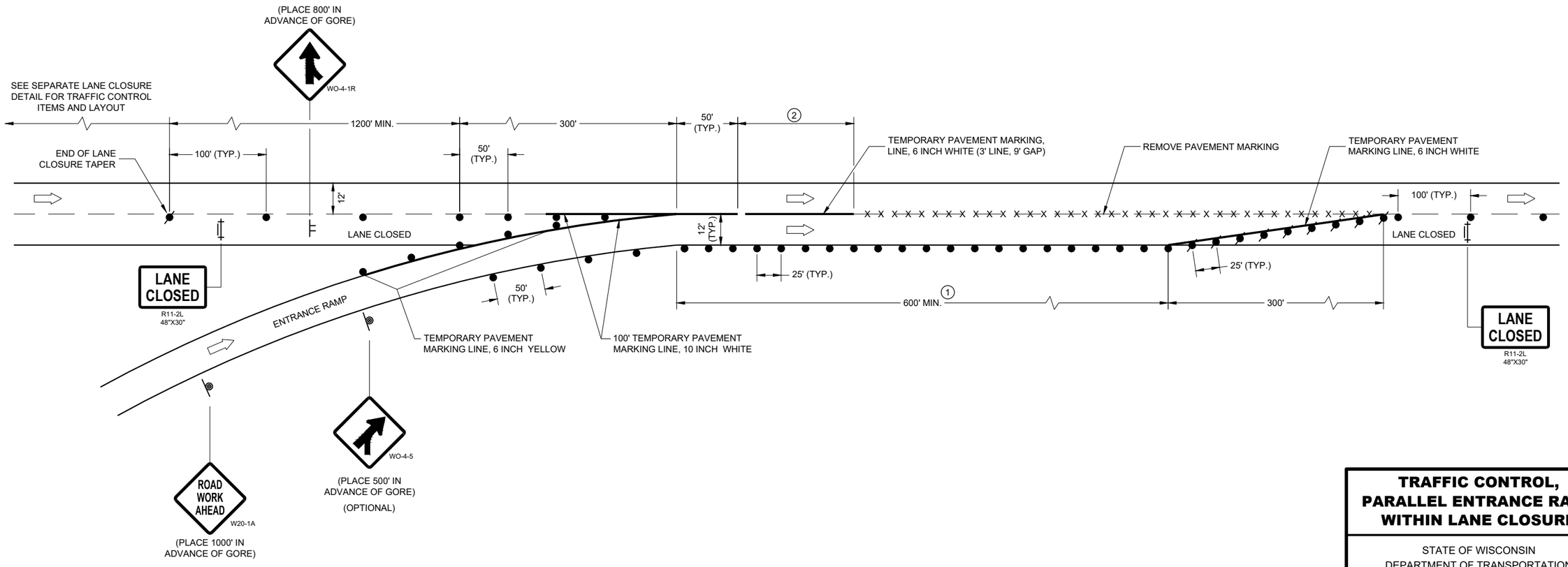
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

(1) EXTEND THE LENGTH OF THE MERGE ARE IF THE ENTERING (DESIGN) SPEED IS LESS THAN 50MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.

(2) END TEMPORARY PAVEMENT MARKING LINE AT ½ THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.



TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D15-07a

6

SDD 15D15-07a

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A 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 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.

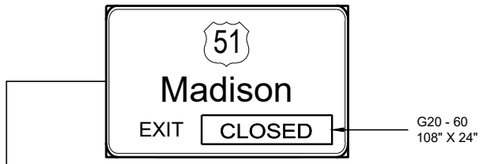
PLACE TEMPORARY PAVEMENT MARKING LINE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROP OFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN WORK IS NOT IN PROGRESS.

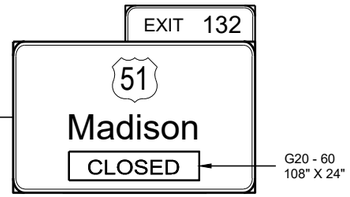
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

(1) W20 - 1A AND G20 - 2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

(2) PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



OR

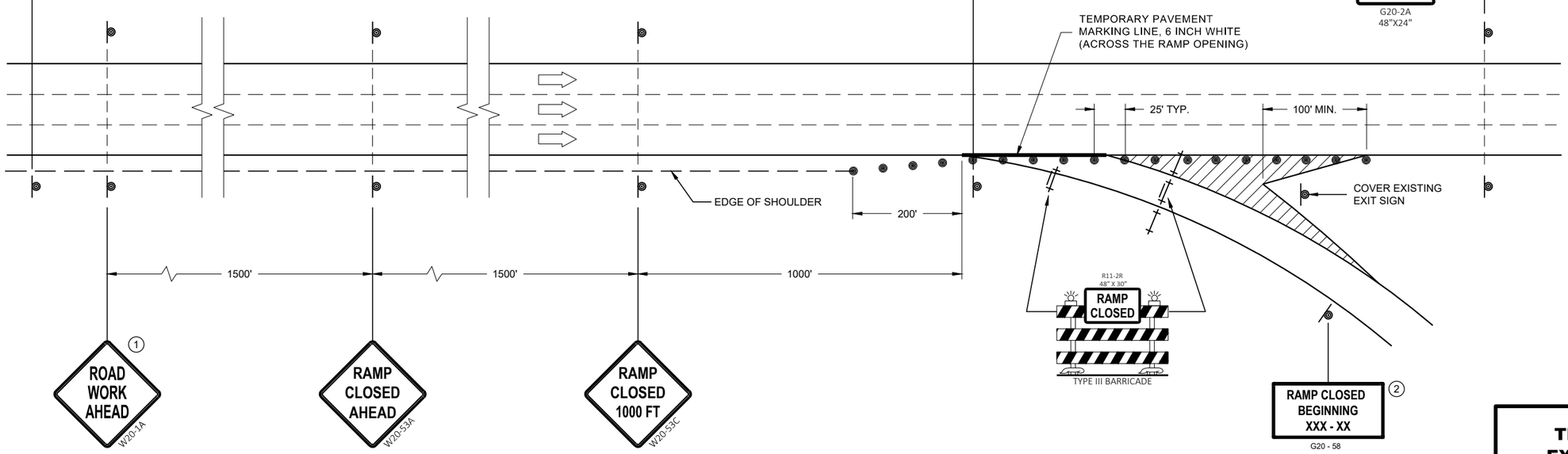


PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN



COVER ARROW ON EXISTING E4 - 1 SIGN (COVERING SIGNS TYPE I)

G20 - 61
120 ' X 30"



OR

PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 15D16-06

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)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

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.

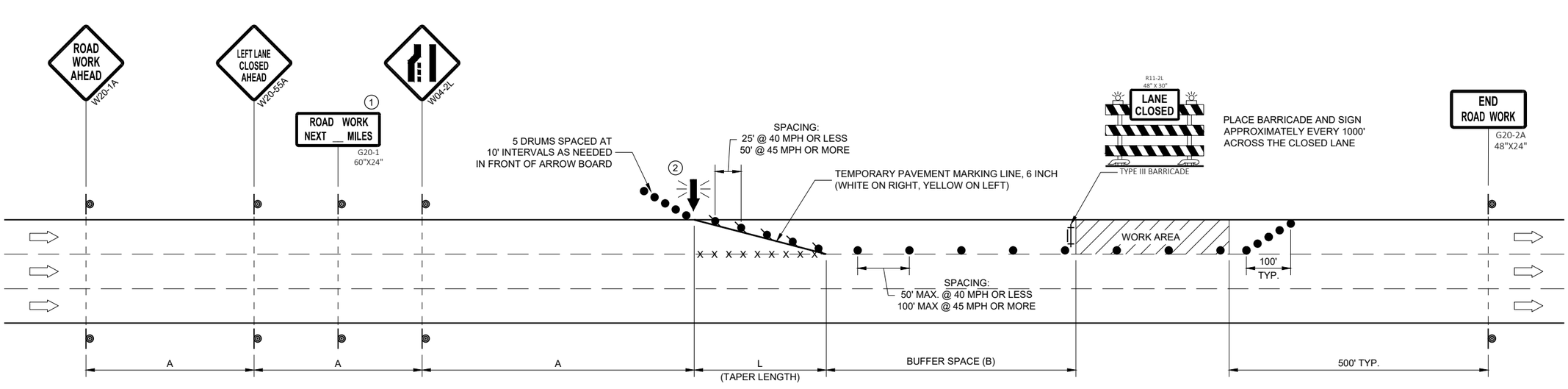
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

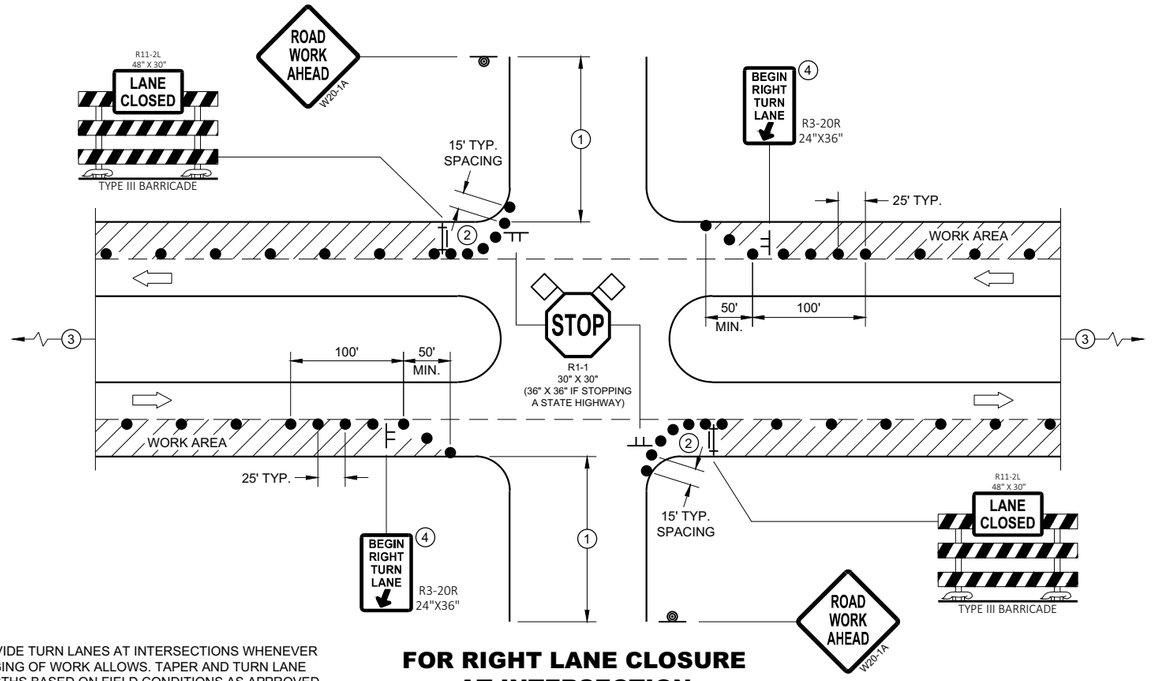
APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

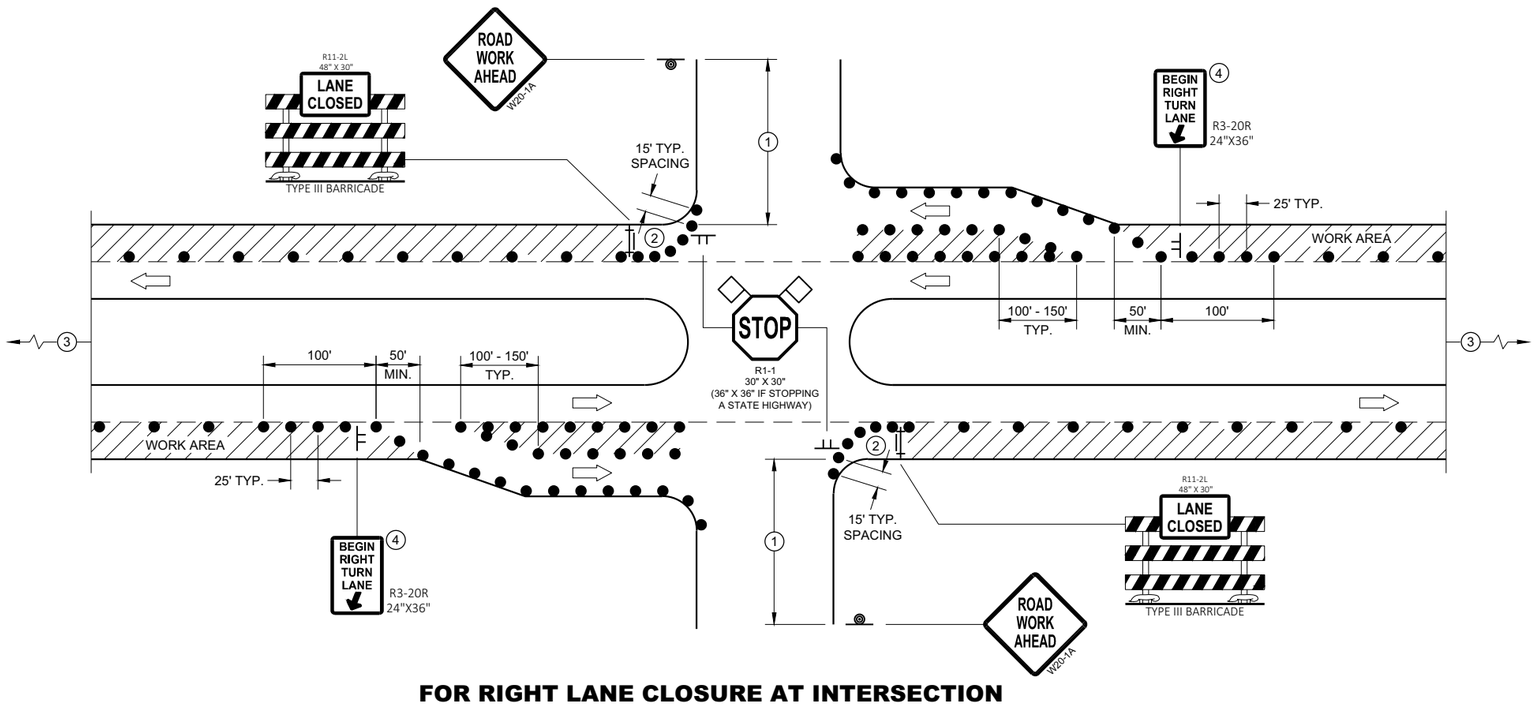
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SDD 15D20-07a



FOR RIGHT LANE CLOSURE AT INTERSECTION

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 (WITH RIGHT TURN BAY OPEN)

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.

LEGEND

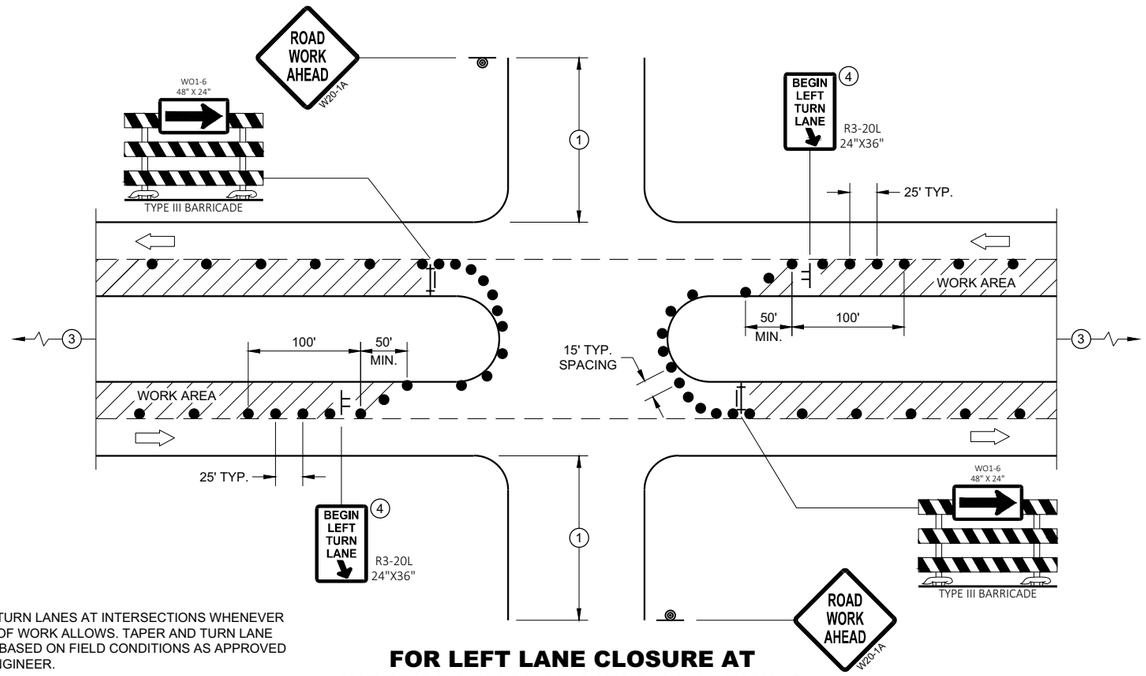
- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D21 - 07a
SDD15D21 - 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.

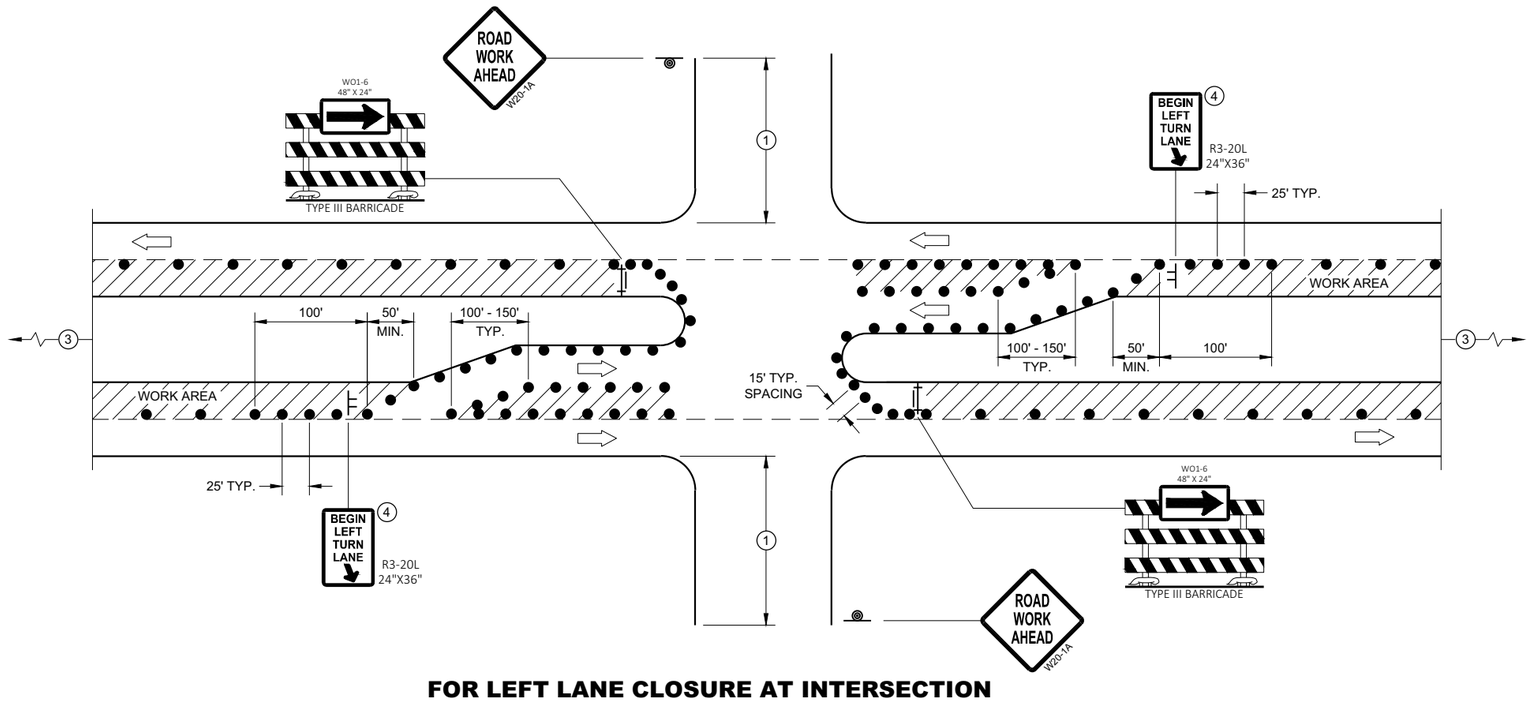
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(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

GENERAL NOTES

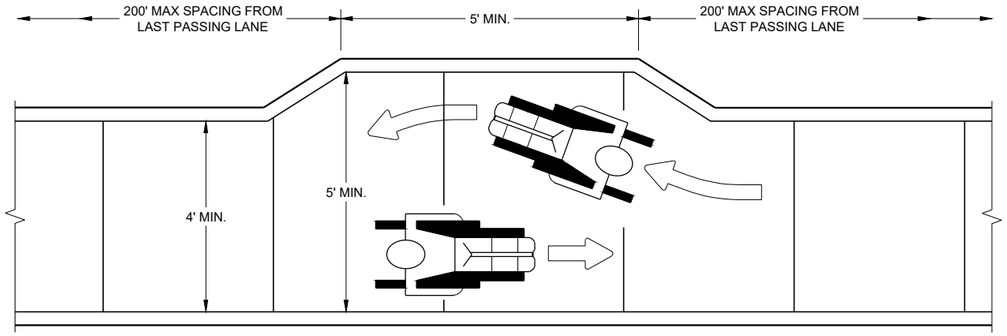
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

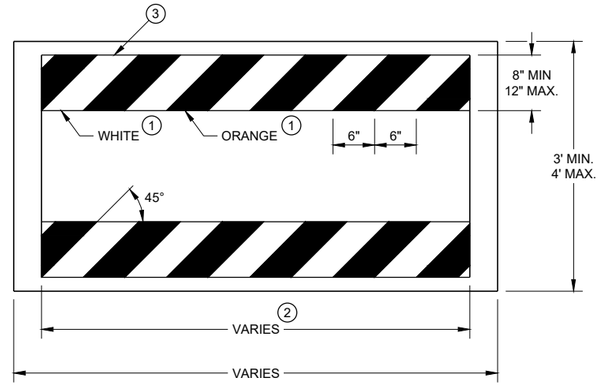
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

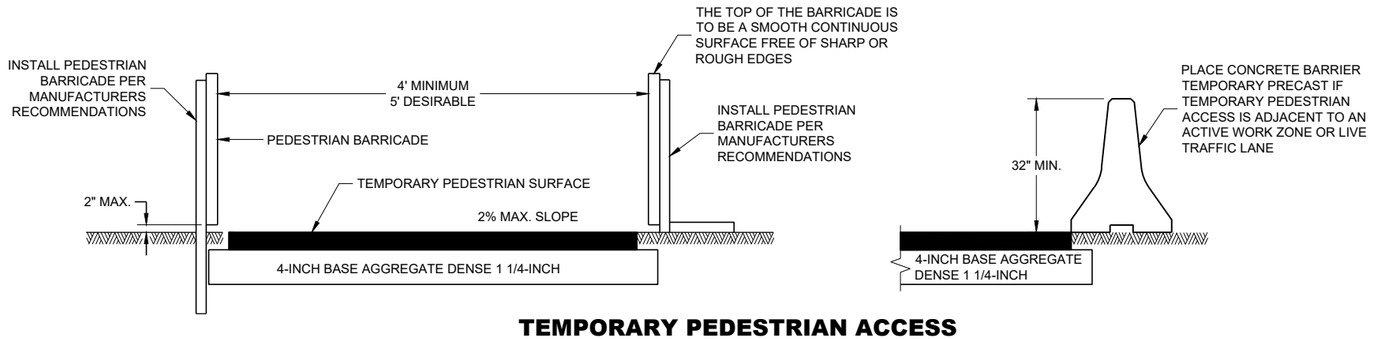
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN BARRICADE*



TEMPORARY PEDESTRIAN ACCESS

6

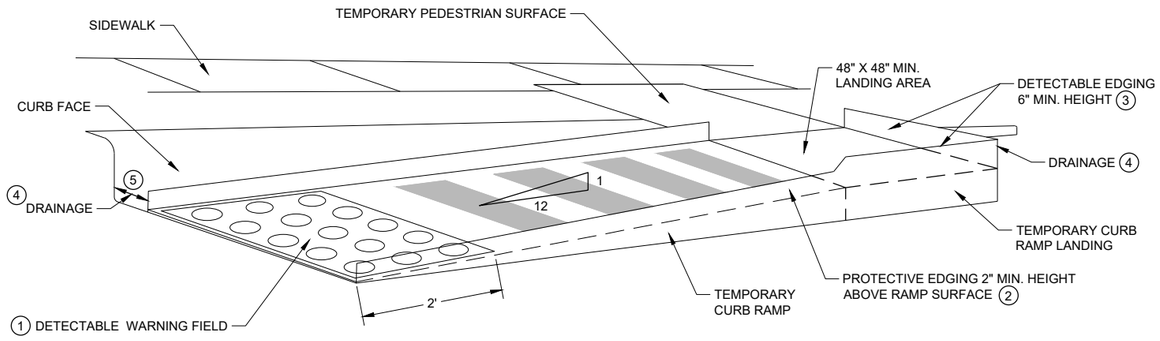
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TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA



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.

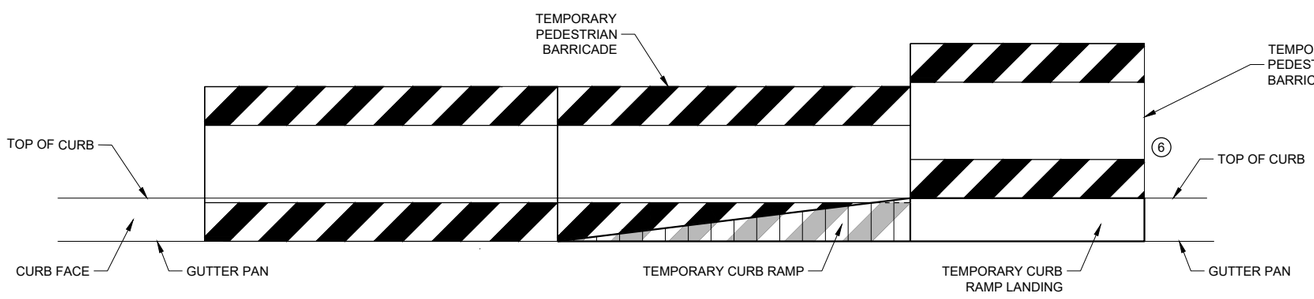
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

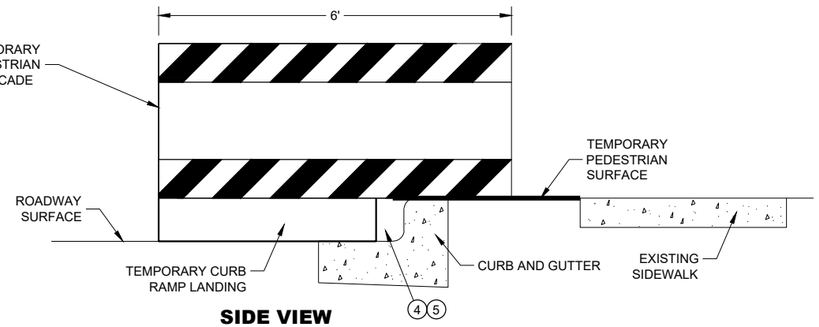
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(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

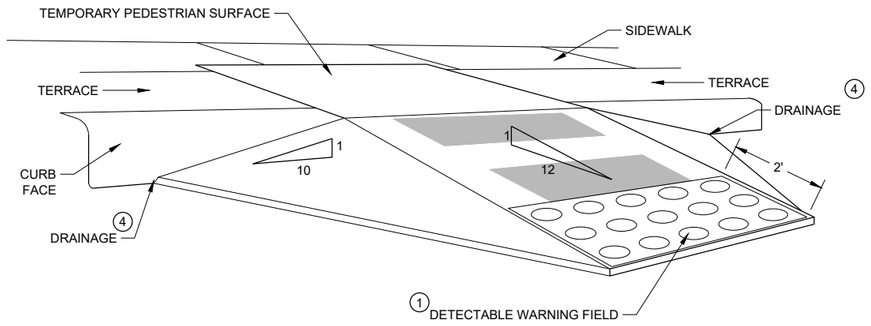
TEMPORARY CURB RAMP PARALLEL TO CURB

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

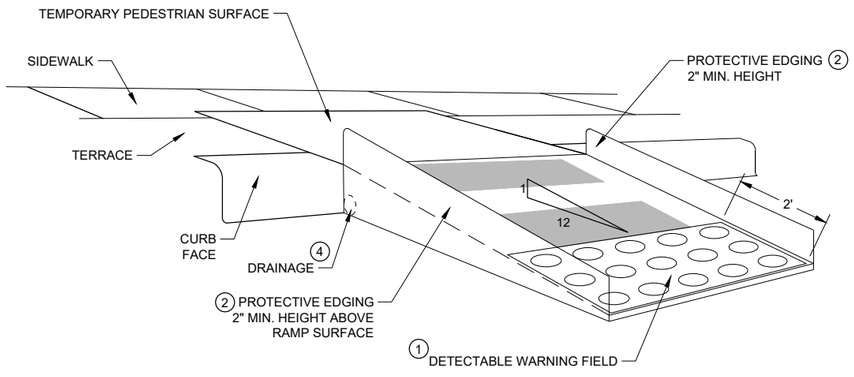
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 15D30 - 09b



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.

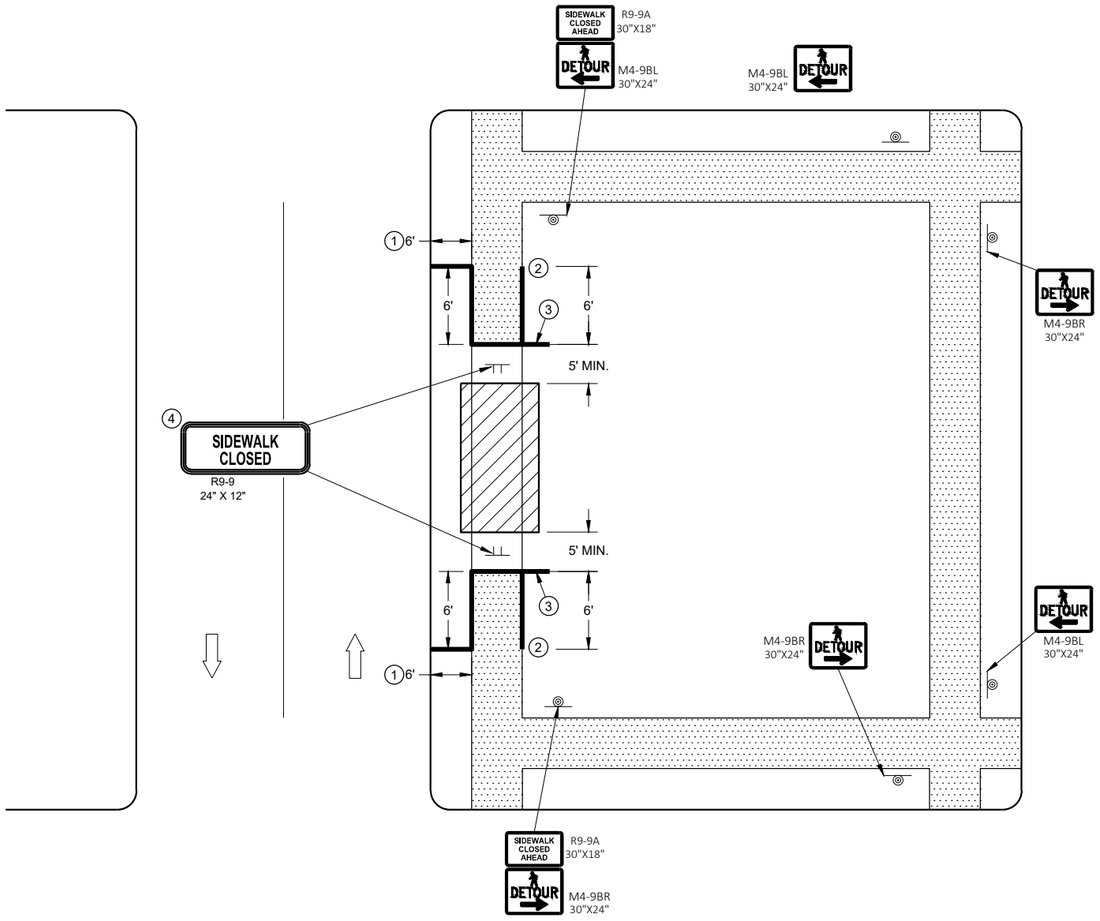
(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

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

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

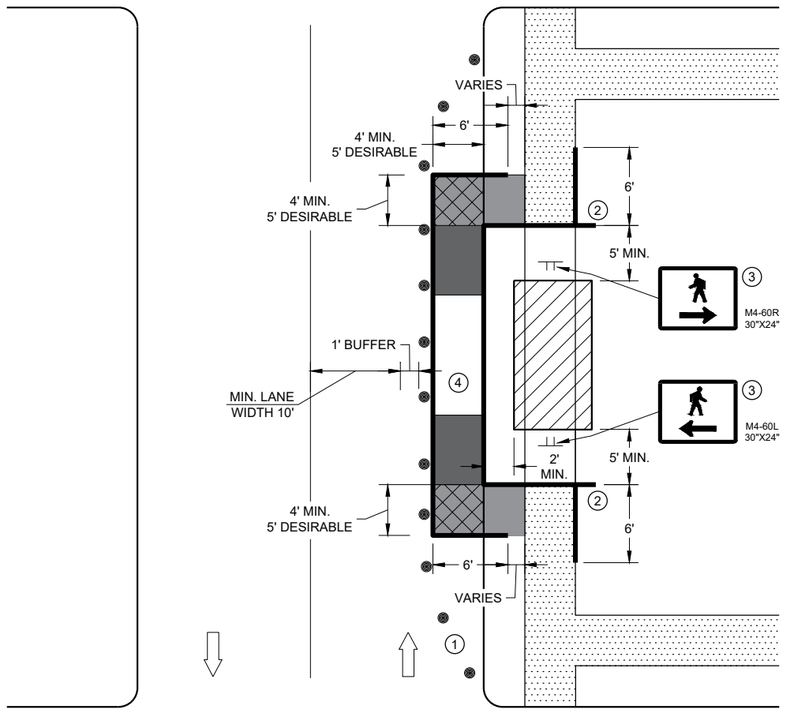
GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

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 SURACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.



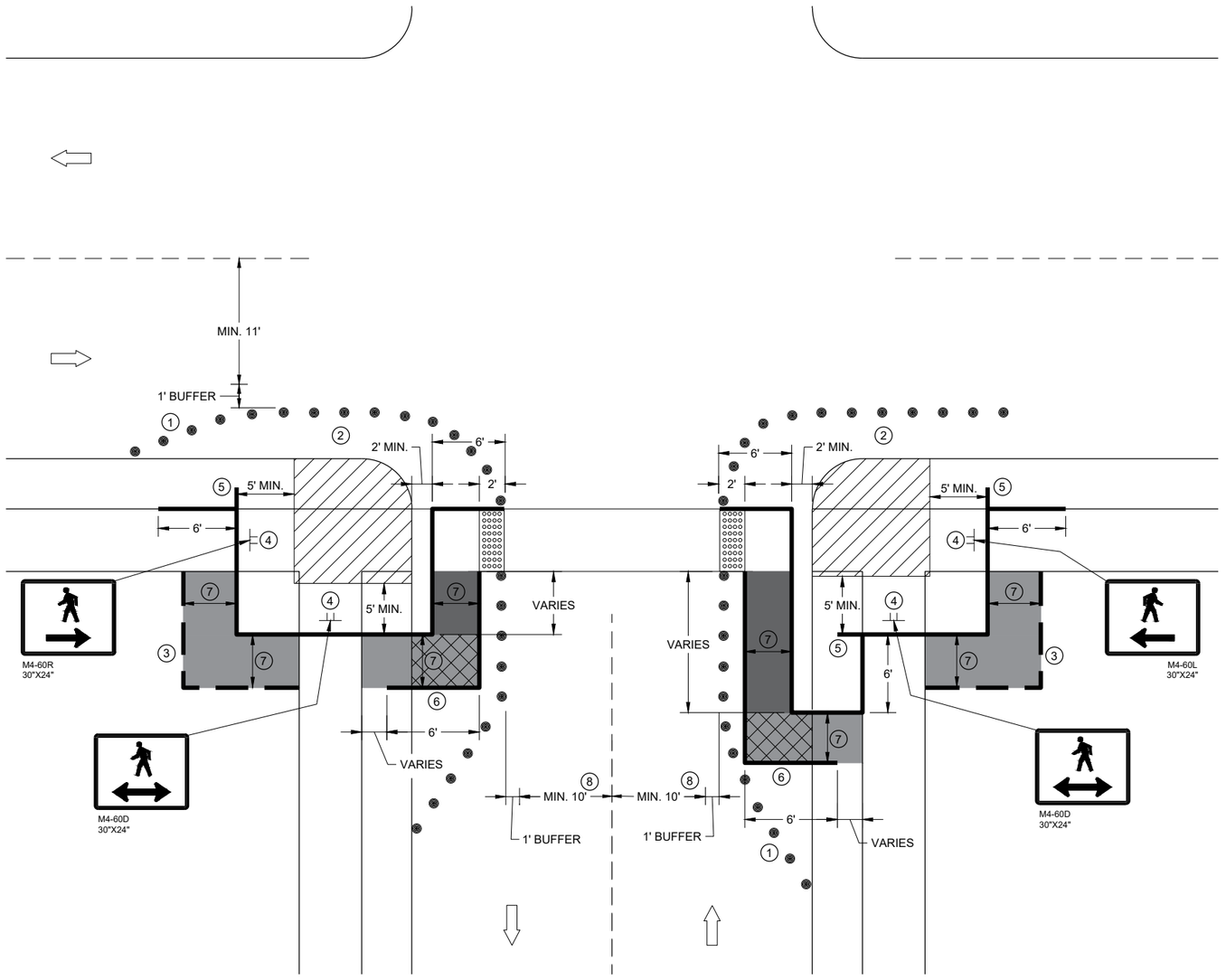
SIDEWALK DIVERSION, SINGLE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 15D30 - 09h



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.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

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.

(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.

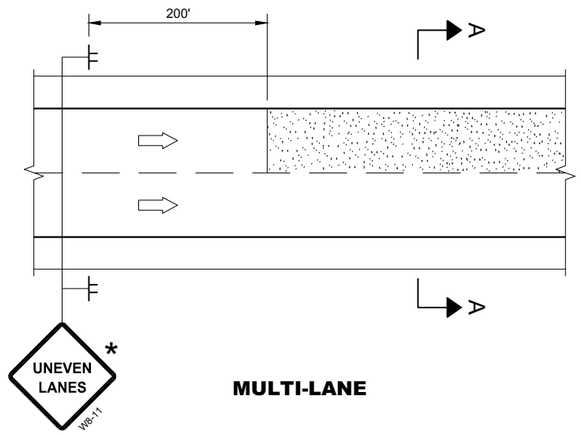
LEGEND

- 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

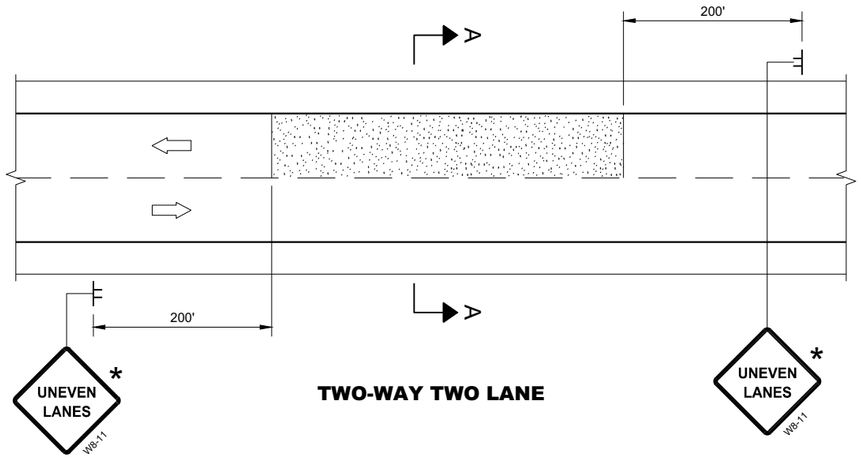
TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

SDD 15D30 - 09i

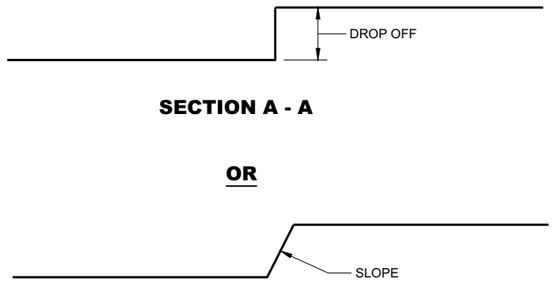
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MULTI-LANE

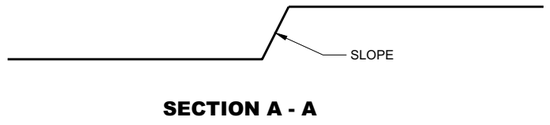


TWO-WAY TWO LANE

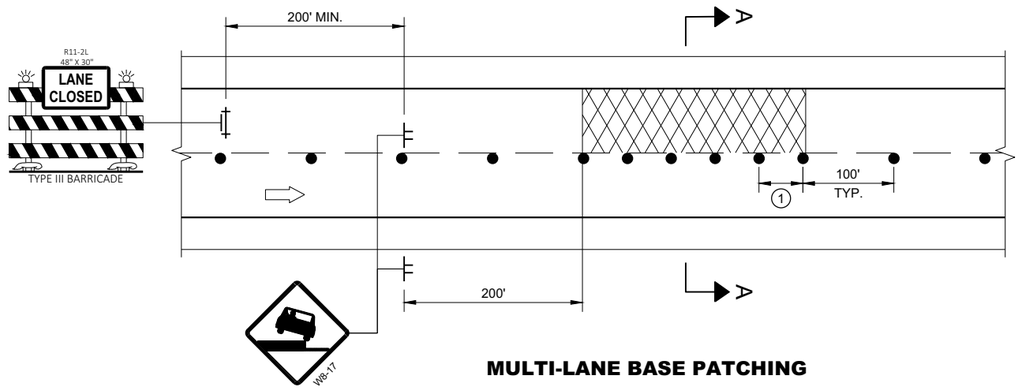


SECTION A - A

OR



SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

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.

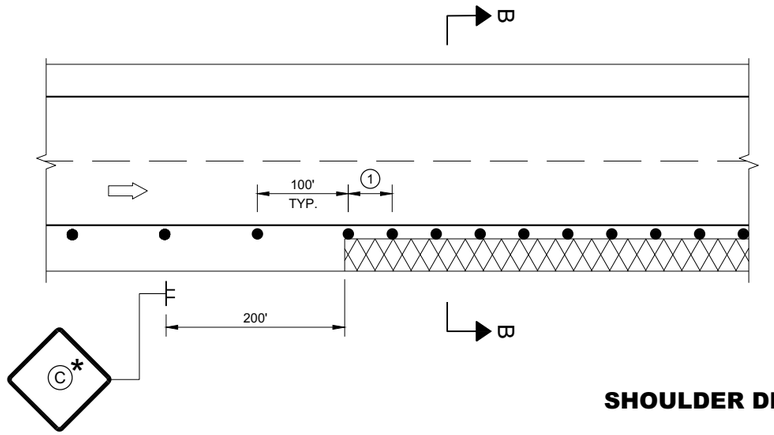
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

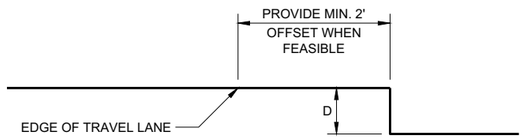
(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

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



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

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SDD 15D39 - 02

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)					BUFFER SPACE (B) FEET
		10	11	12	13	14	
25	200	52	57	63	68	73	55
30	200	75	83	90	98	105	85
35	350	102	112	123	133	143	120
40	350	133	147	160	173	187	170
45	500	225	248	270	293	315	220

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) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

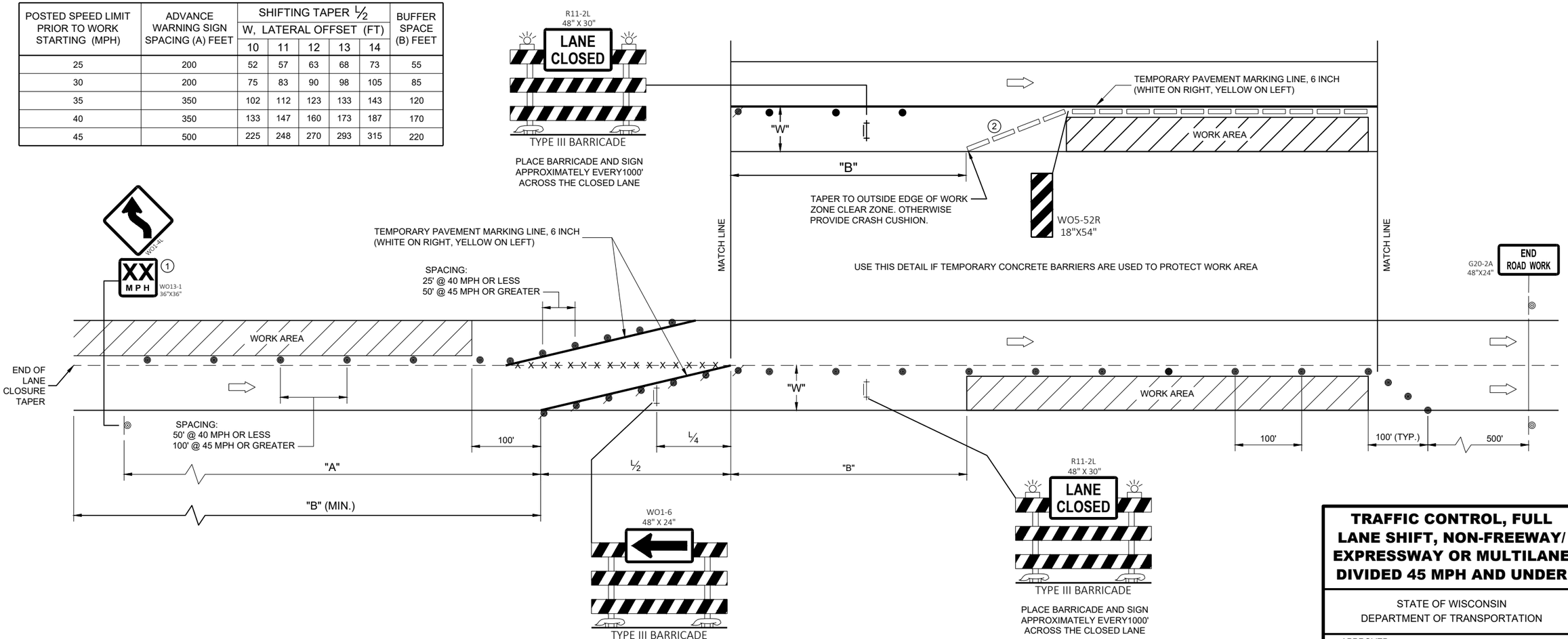
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

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

(1) USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

(2) BARRIER FLARE RATE: 6:1 @ 40 MPH OR LESS
8:1 @ 45 MPH OR GREATER



TRAFFIC CONTROL, FULL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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SDD 15D40-05a

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SDD 15D40-05a

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)				
	10	11	12	13	14
50	250	275	300	325	350
55	275	303	330	358	385
60	300	330	360	390	420
65	325	358	390	423	455
70	350	385	420	455	490

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) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

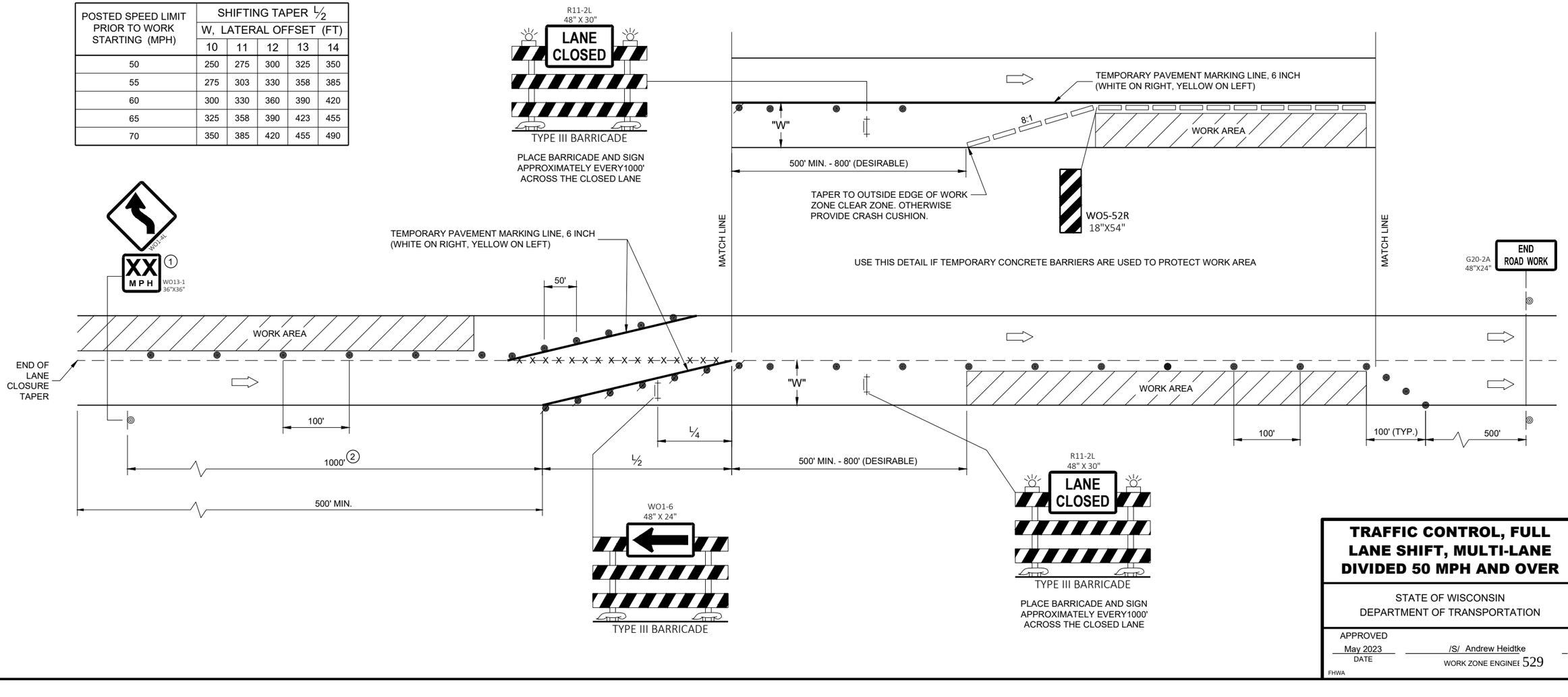
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT 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 ½ 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.

(1) USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

(2) IF BEGINNING OF LANE SHIFT IS 1200' OF LESS FROM THE END OF THE LANE CLOSURE TAPER, PLACE THE WO1-4L SIGN 200 FEET AFTER THE END OF THE LANE CLOSURE TAPER.



TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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SDD 15D40-05b

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SDD 15D40-05b

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

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) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT LEFT - REVERSE FOR SHIFTING RIGHT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

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

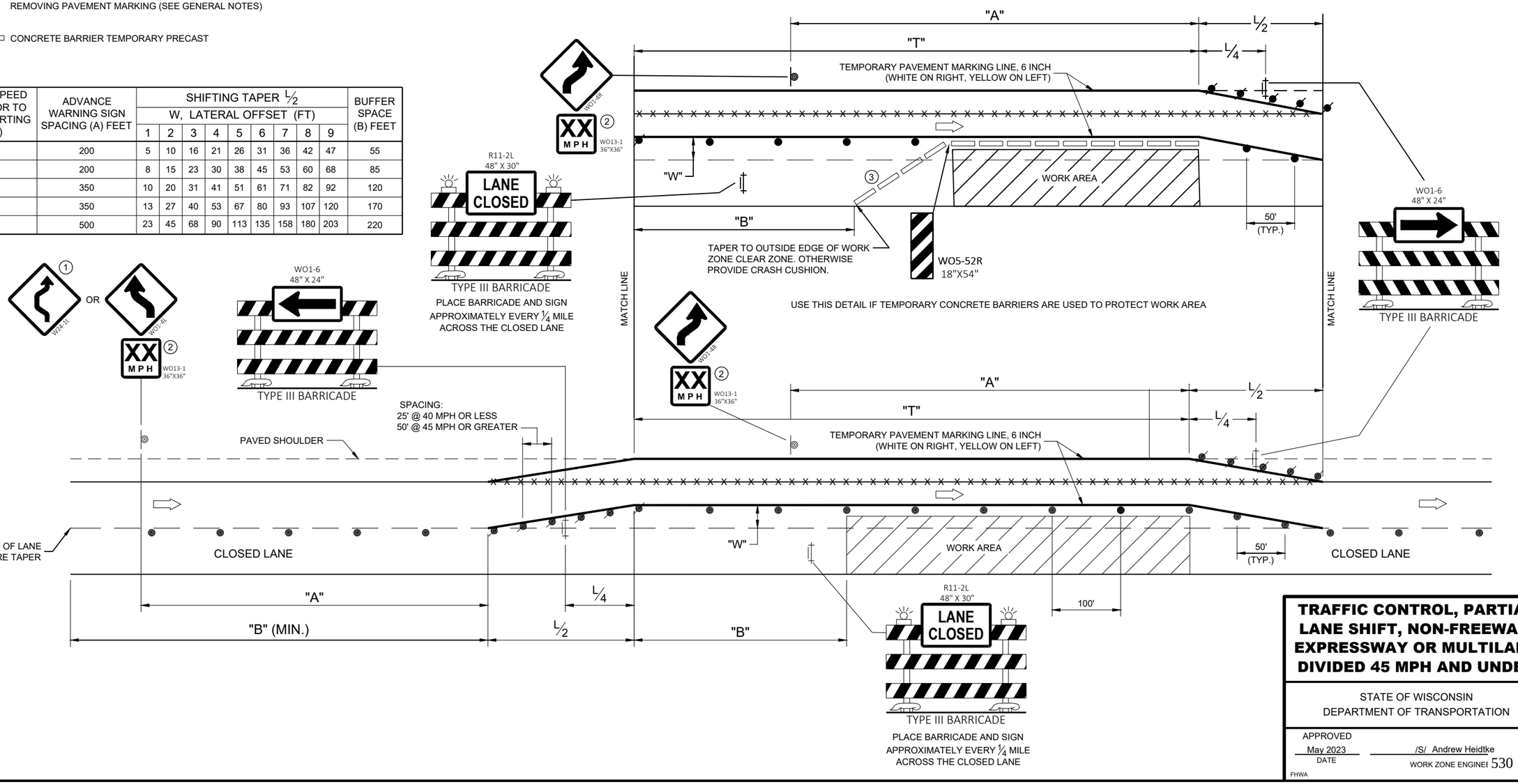
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP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

(1) USE ONLY WHEN T<600', OMIT WO1-4R.

(2) IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

(3) BARRIER FLARE RATE: 6:1 @ 40 MPH OR LESS
8:1 @ 45 MPH OR GREATER

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)									BUFFER SPACE (B) FEET
		1	2	3	4	5	6	7	8	9	
25	200	5	10	16	21	26	31	36	42	47	55
30	200	8	15	23	30	38	45	53	60	68	85
35	350	10	20	31	41	51	61	71	82	92	120
40	350	13	27	40	53	67	80	93	107	120	170
45	500	23	45	68	90	113	135	158	180	203	220



TRAFFIC CONTROL, PARTIAL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D40-05c

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)								
	1	2	3	4	5	6	7	8	9
50	25	50	75	100	125	150	175	200	225
55	28	55	83	110	138	165	193	220	248
60	30	60	90	120	150	180	210	240	270
65	33	65	98	130	163	195	228	260	293
70	35	70	105	140	175	210	245	280	315

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) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT LEFT - REVERSE FOR SHIFTING RIGHT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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

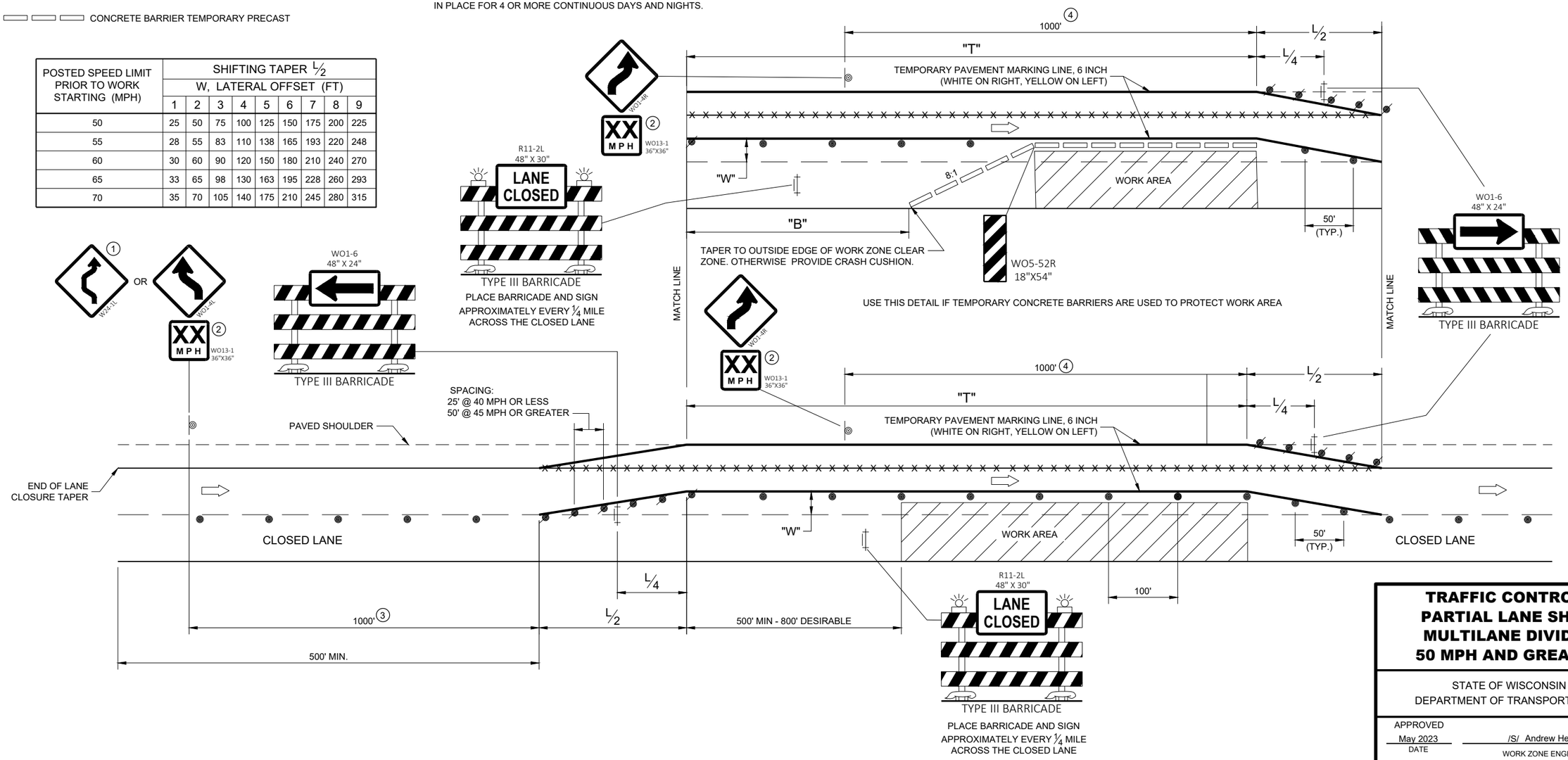
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

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

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1. USE ONLY WHEN T<600', OMIT WO1-4R.
2. IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.
3. IF THE BEGINNING OF LANE SHIFT TAPER IS 1200 FEET OR LESS FROM END OF LANE CLOSURE TAPER, PLACE THE WO1-4L SIGN 200 FEET AFTER THE END OF THE LANE CLOSURE TAPER.
4. IF THE BEGINNING OF THE SECOND LANE SHIFT TAPER IS 1200 FEET OR LESS FROM END OF THE FIRST LANE CLOSURE TAPER, PLACE THE WO1-4L SIGN 200 FEET AFTER THE END OF THE FIRST LANE CLOSURE TAPER.



TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

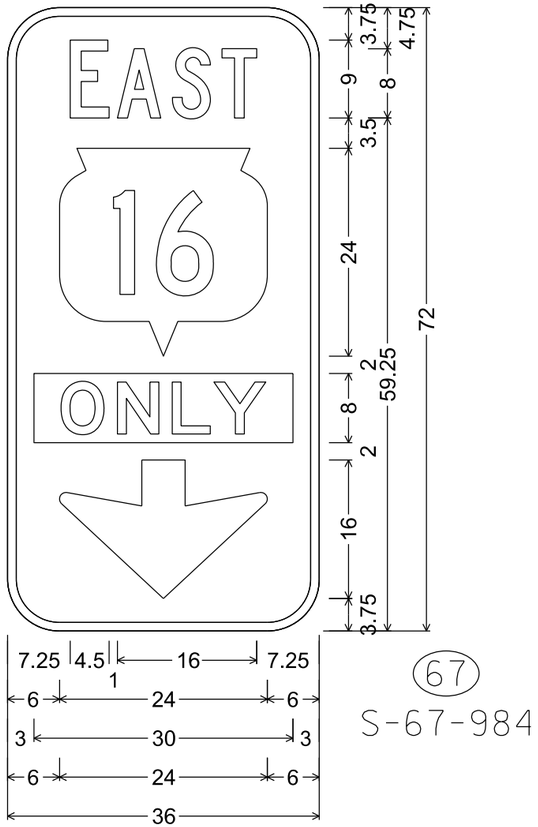
FHWA

SDD 15D40-05d

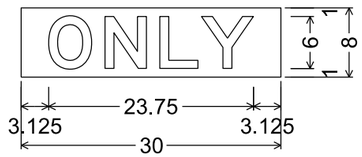
SDD 15D40-05d

NOTES

1. Sign is Type II - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - As noted
4. ONLY plaque on Yellow Type F Reflective sheeting with Black Non-Reflective Message



D16-1A; 6.000" Radius, 1.000" Border,
"EAST", C



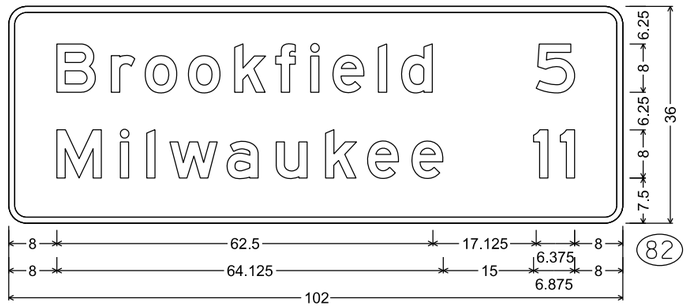
No border, Black on Fluorescent yellow;
"ONLY", E

67
S-67-984

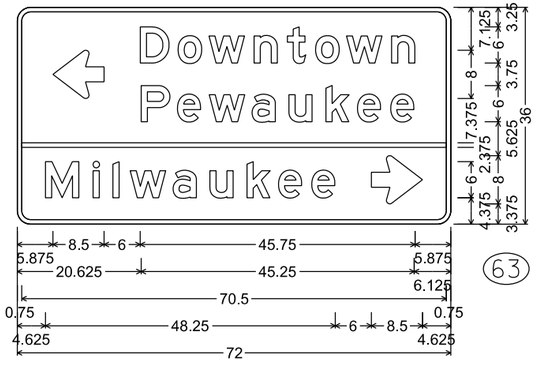
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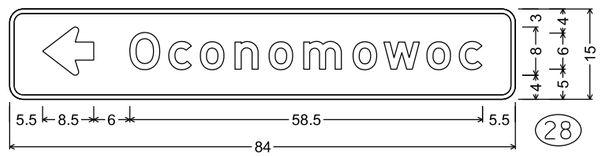
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET NO: 532	E



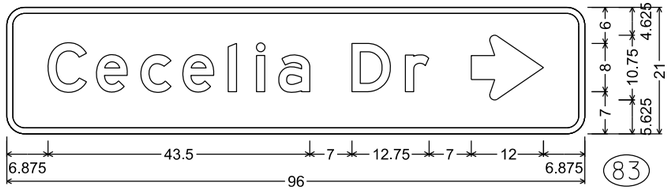
D2-2; 3.000" Radius, 1.000" Border



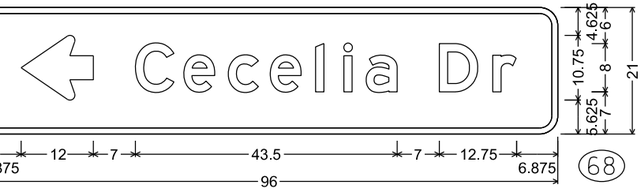
D1-3; 2.250" Radius, 0.750" Border



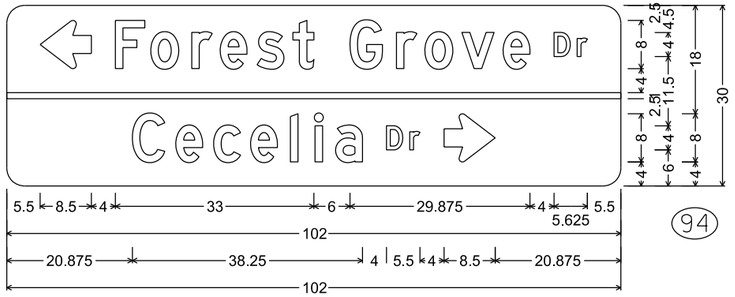
D1-1; 2.250" Radius, 0.750" Border



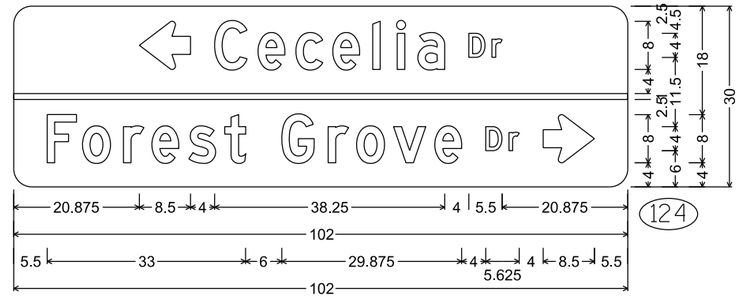
D1-1; 3.000" Radius, 1.000" Border



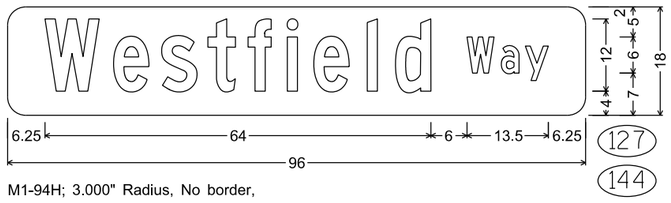
D1-1; 3.000" Radius, 1.000" Border



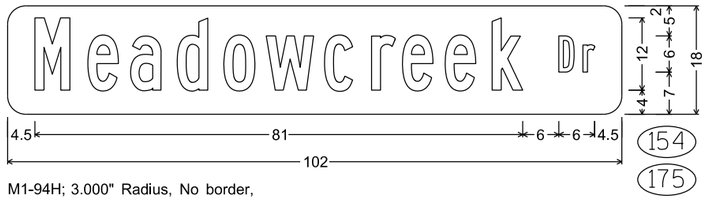
M1-94H; 3.000" Radius, No border,
"Forest", D; "Grove", D; "Dr", D; "Cecelia", D; "Dr", D



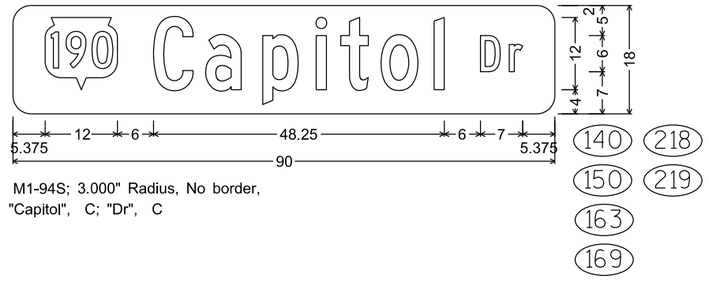
M1-94H; 3.000" Radius, No border,
"Cecelia", D; "Dr", D; "Forest", D; "Grove", D; "Dr", D



M1-94H; 3.000" Radius, No border,
"Westfield", C; "Way", C



M1-94H; 3.000" Radius, No border,
"Meadowcreek", B; "Dr", B



M1-94S; 3.000" Radius, No border,
"Capitol", C; "Dr", C

7

7

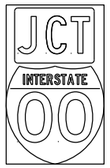
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FILE NAME : C:\CAEfiles\Projects\tr_d2_2405b622.DGN PLOT DATE : 28-NOV 2022 3:48 PLOT BY : mscj9h PLOT NAME : PLOT SCALE :

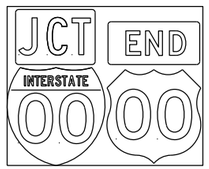
NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted

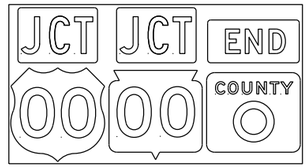
TYPICAL ASSEMBLIES



J1-1



J1-2



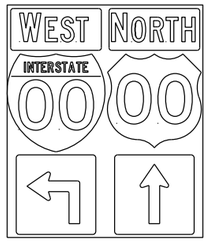
J1-3



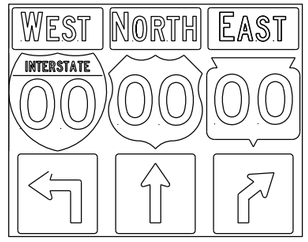
JR1-1



J2-1



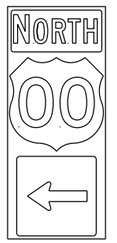
J2-2



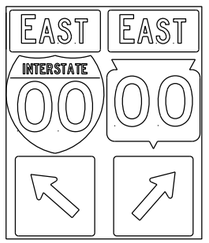
J2-3



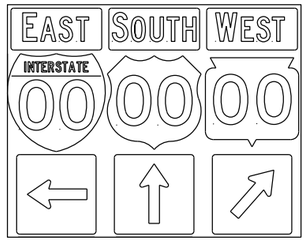
JV
(Typical Vertical J-Assembly
See Note 10 and 11)



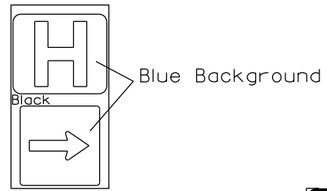
J3-1



J3-2



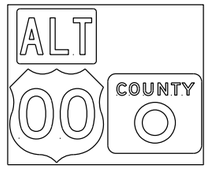
J3-3



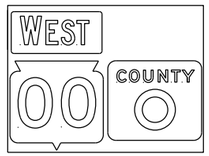
JH-1



J4-1



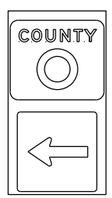
J4-2



J4-2



J12-1



J13-1



J32-1



J33-1



J22-1



J23-1



JR13-1

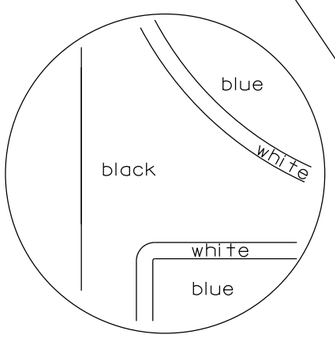


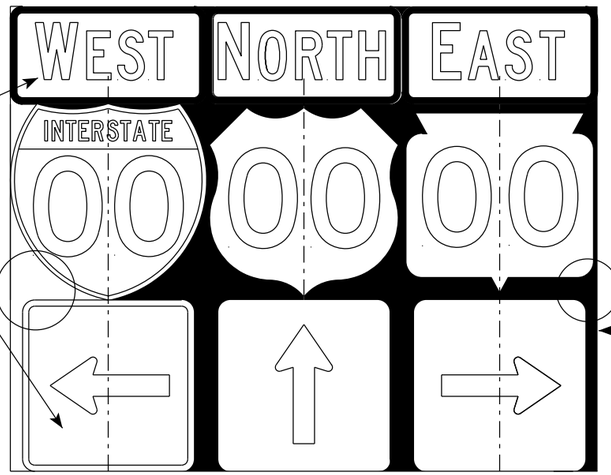
JR23-1

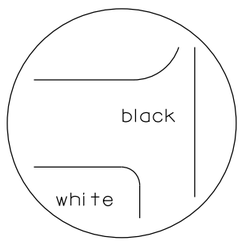


JR99-1

[blue background with interstate]







[black background]

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/21 PLATE NO. A2-1S.9

PROJECT NO:

SHEET NO: 534 E

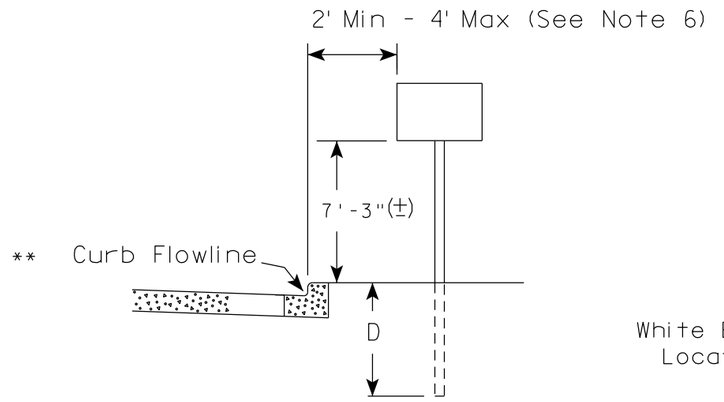
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WISDOT/CADDS SHEET 42

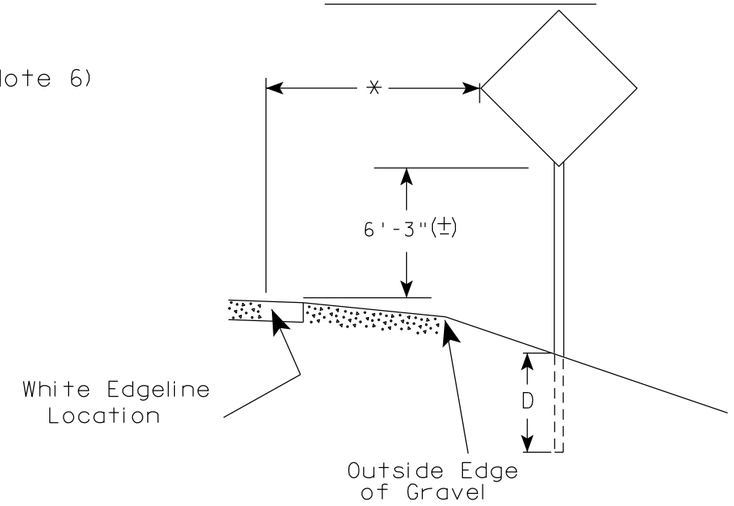
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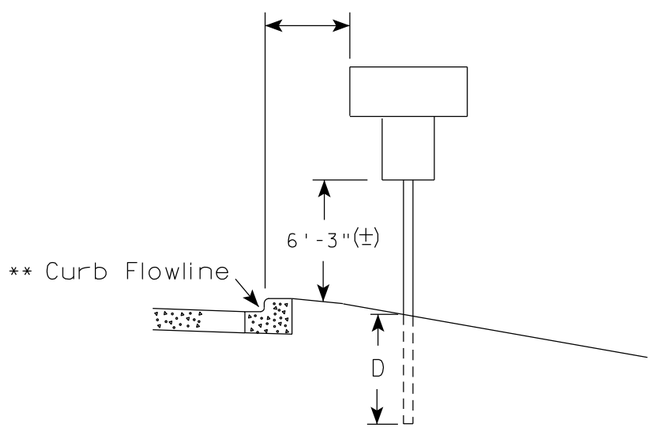
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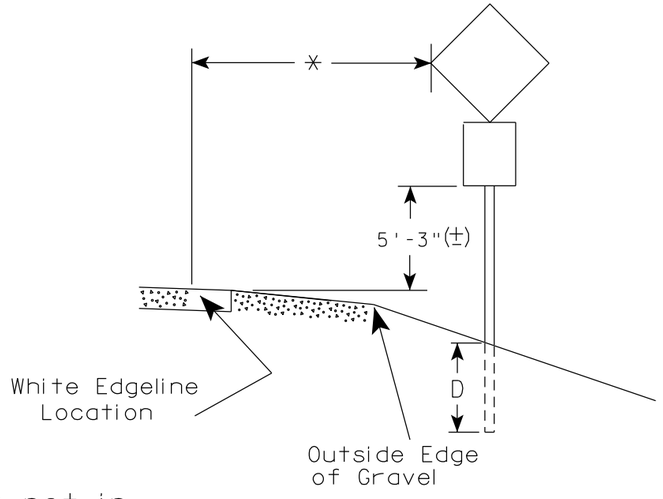
URBAN AREA



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" (±). 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. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

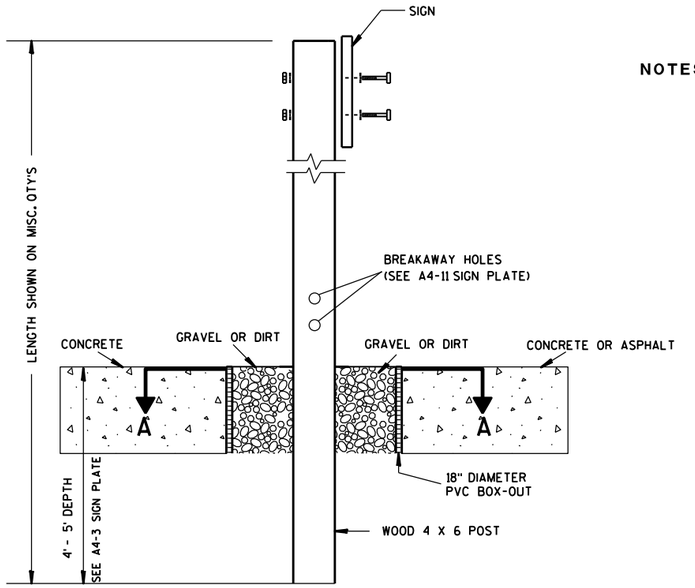
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

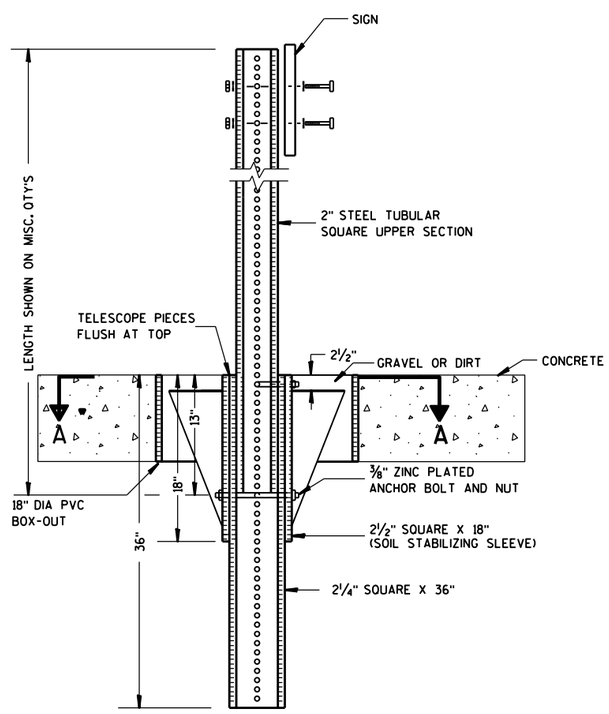
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 535	E



ELEVATION VIEW

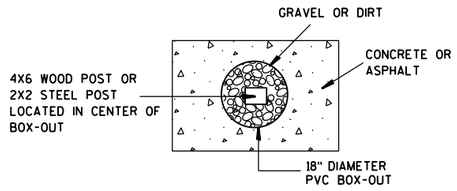
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

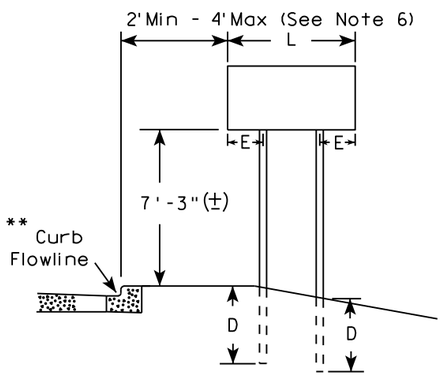
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

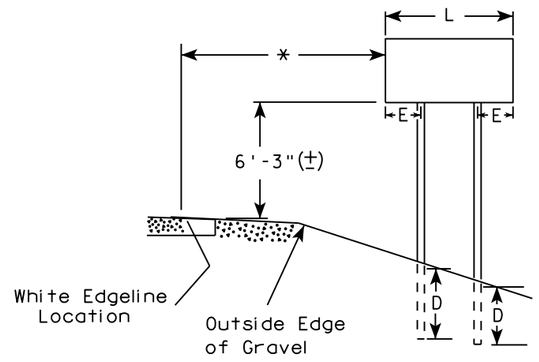
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

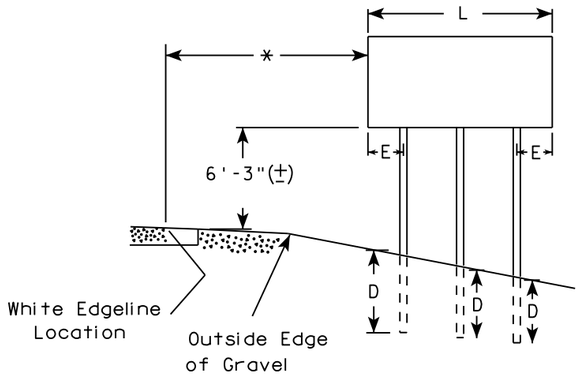
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

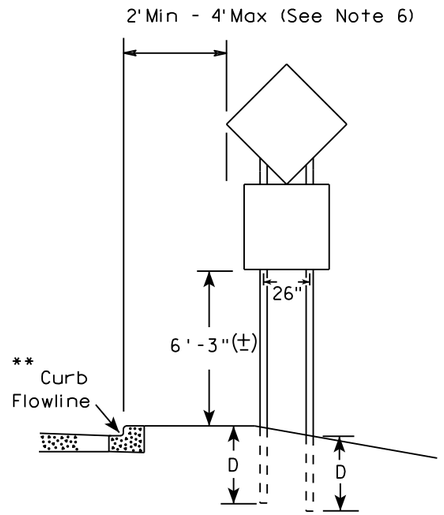
URBAN AREA



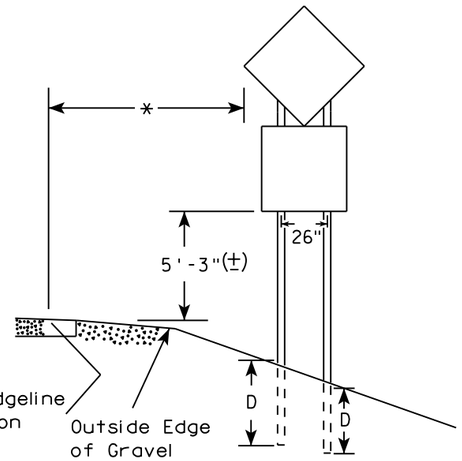
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

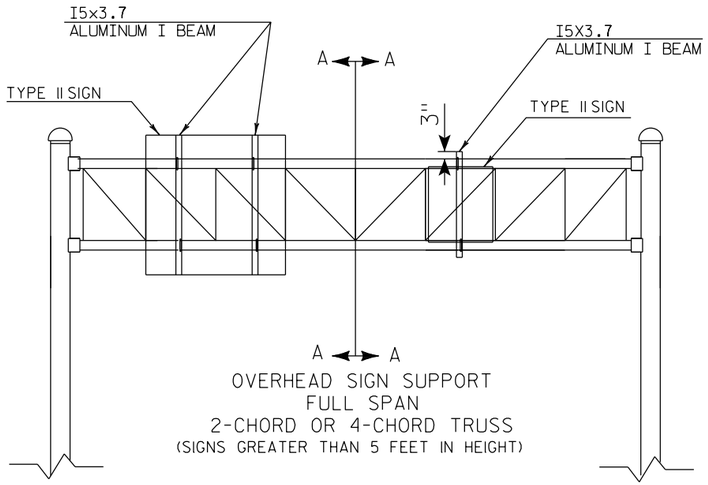
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

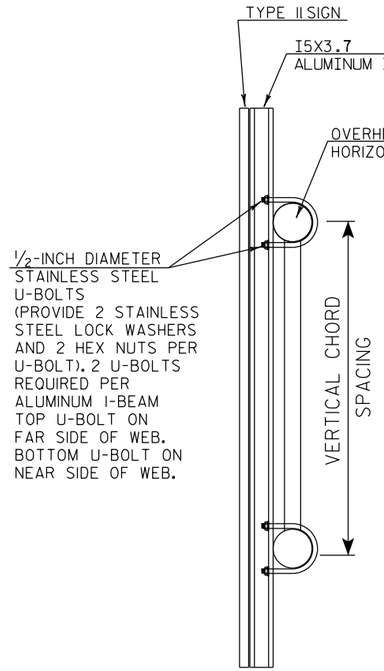
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

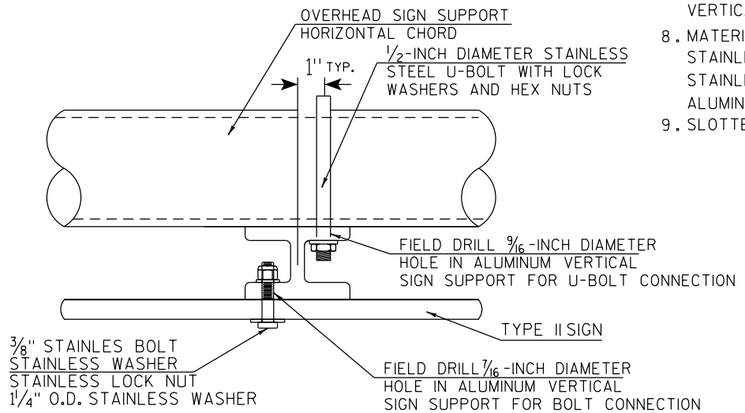
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 537	E



OVERHEAD SIGN SUPPORT
FULL SPAN
2-CHORD OR 4-CHORD TRUSS
(SIGNS GREATER THAN 5 FEET IN HEIGHT)



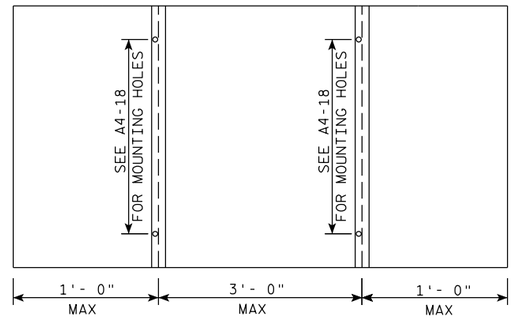
CUT SECTION A-A



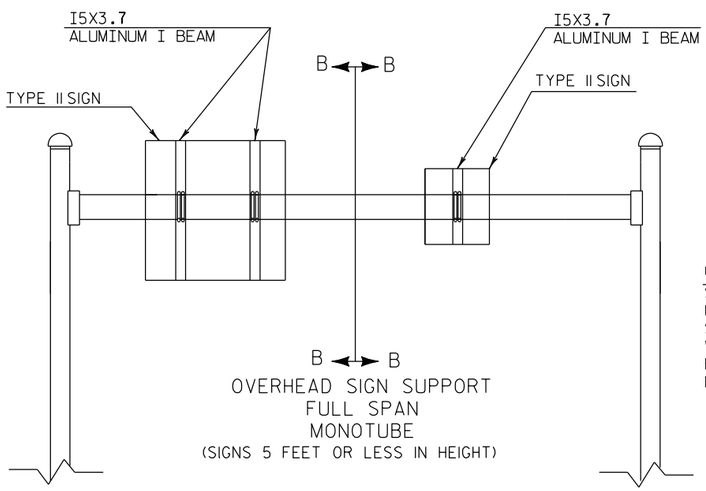
TYPICAL SIGN CONNECTION FOR
2-CHORD OR 4-CHORD TRUSS
PLAN VIEW

GENERAL NOTES

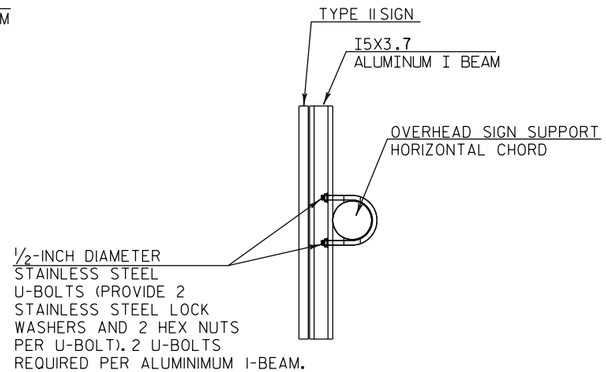
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
2. USE STAINLESS BOLTS AT BOLT HOLES IN SIGN PANEL PER SIGN PLATE A4-18.
3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE CHORDS OF THE OVERHEAD SIGN STRUCTURE.
5. DIAMETER OF U-BOLTS SHALL BE AS SHOWN.
6. THE LENGTH OF THE ALUMINUM VERTICAL SIGN SUPPORT BEAMS SHALL BE THE SAME AS THE HEIGHT OF THE SIGN THEY ARE SUPPORTING. BEAM LENGTHS MAY BE LONGER FOR PROPER ATTACHMENT TO CHORDS.
7. SEE DETAIL BELOW FOR SPACING OF ALUMINUM VERTICAL SIGN SUPPORTS
8. MATERIAL NOTES:
   STAINLESS STEEL U-BOLTS, BOLTS, AND LOCKWASHERS ASTM 304.
   STAINLESS STEEL HEX NUTS ASTM A276.
   ALUMINUM I-BEAMS ARE 6061-T6.
9. SLOTTED HOLES IN I-BEAMS ARE NOT ALLOWED



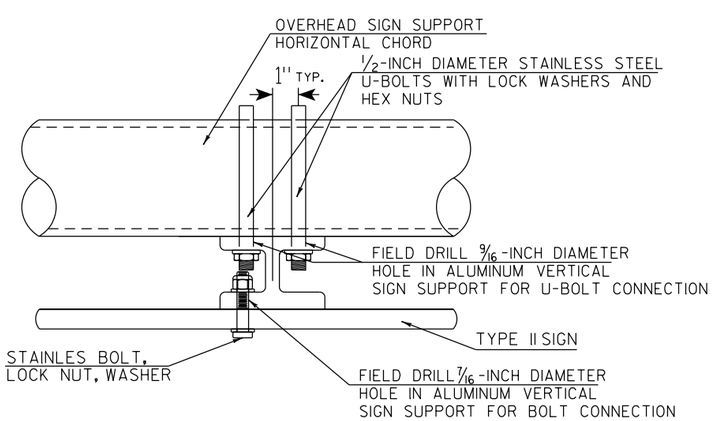
SPACING OF I5X3.7 ALUMINUM
MULTIPLE VERTICAL SIGN SUPPORTS



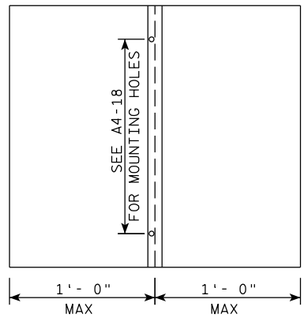
OVERHEAD SIGN SUPPORT
FULL SPAN
MONOTUBE
(SIGNS 5 FEET OR LESS IN HEIGHT)



CUT SECTION B-B



TYPICAL SIGN CONNECTION FOR
MONOTUBE
PLAN VIEW



SPACING OF I5X3.7 ALUMINUM
SINGLE VERTICAL SIGN SUPPORT

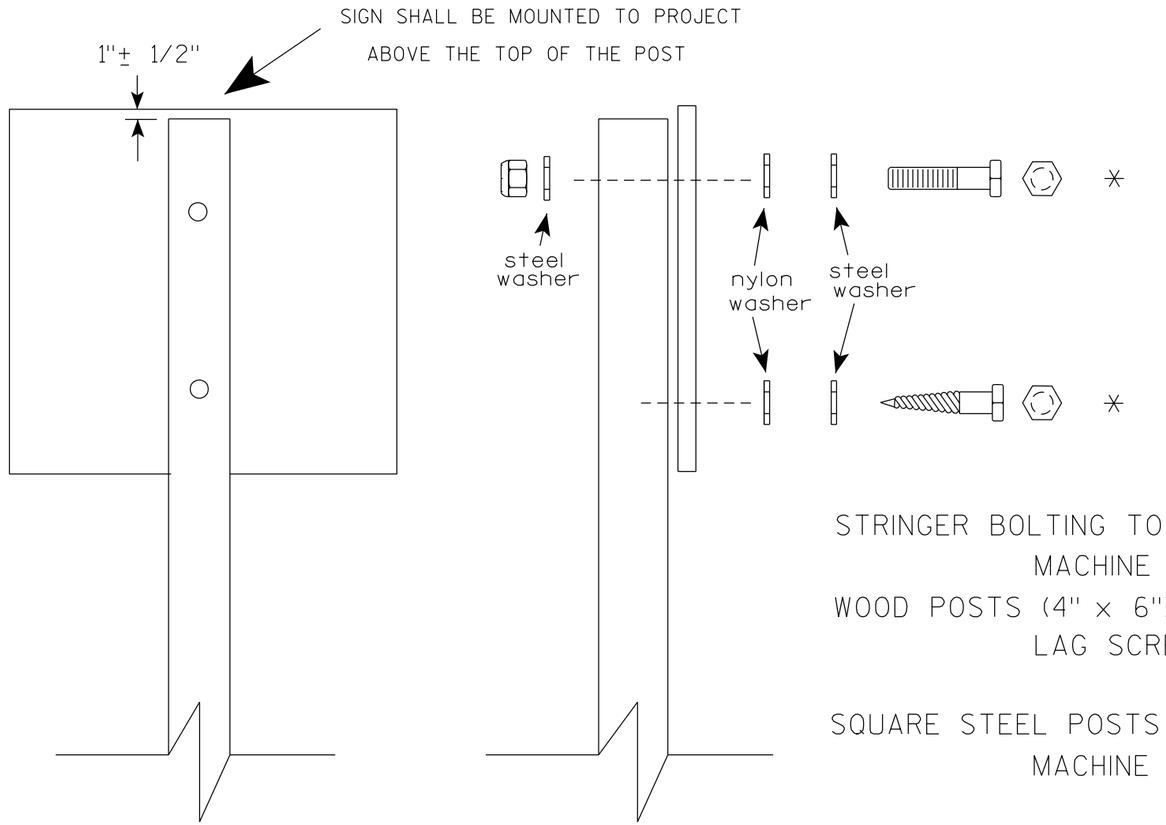
TYPE II SIGN CONNECTION
TO OVERHEAD SIGN SUPPORT

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/07/20 PLATE NO. A4-7B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 538	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

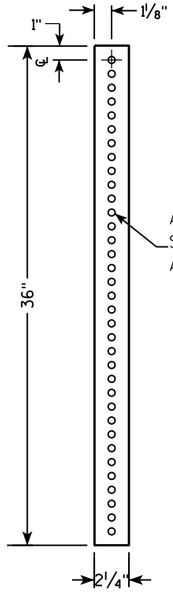
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

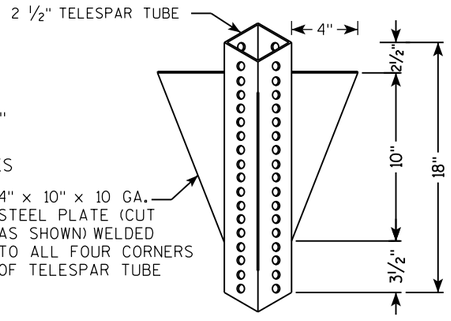
SHEET NO: 539 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

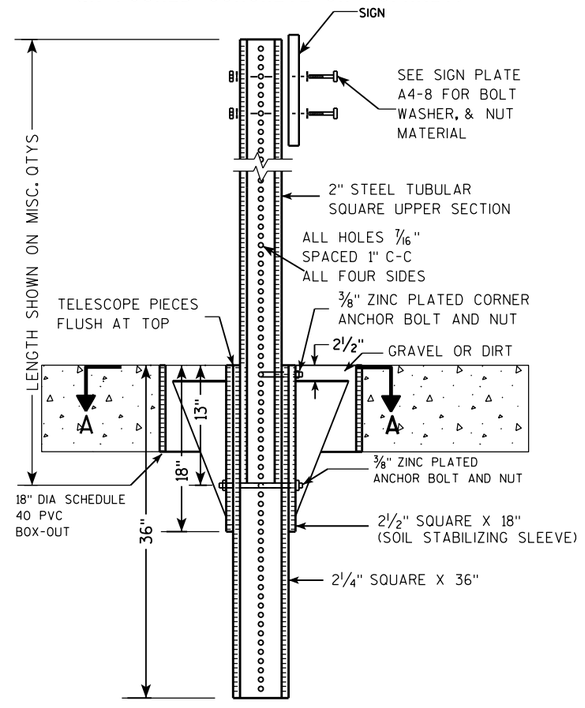
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



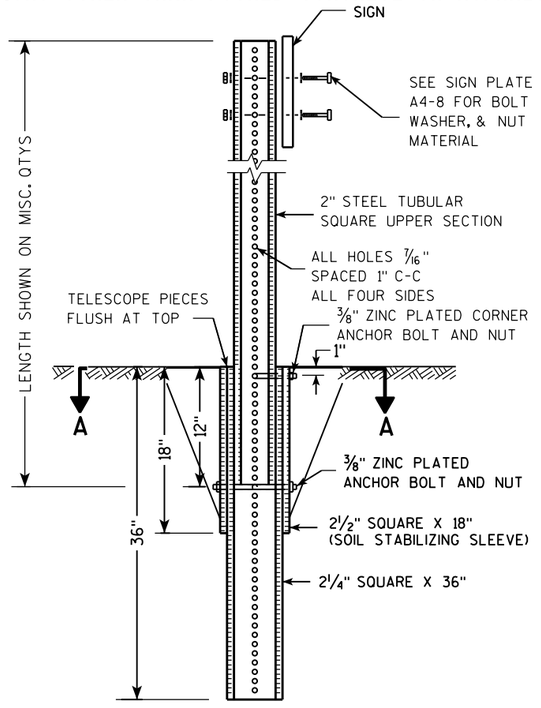
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

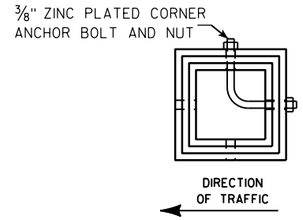


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

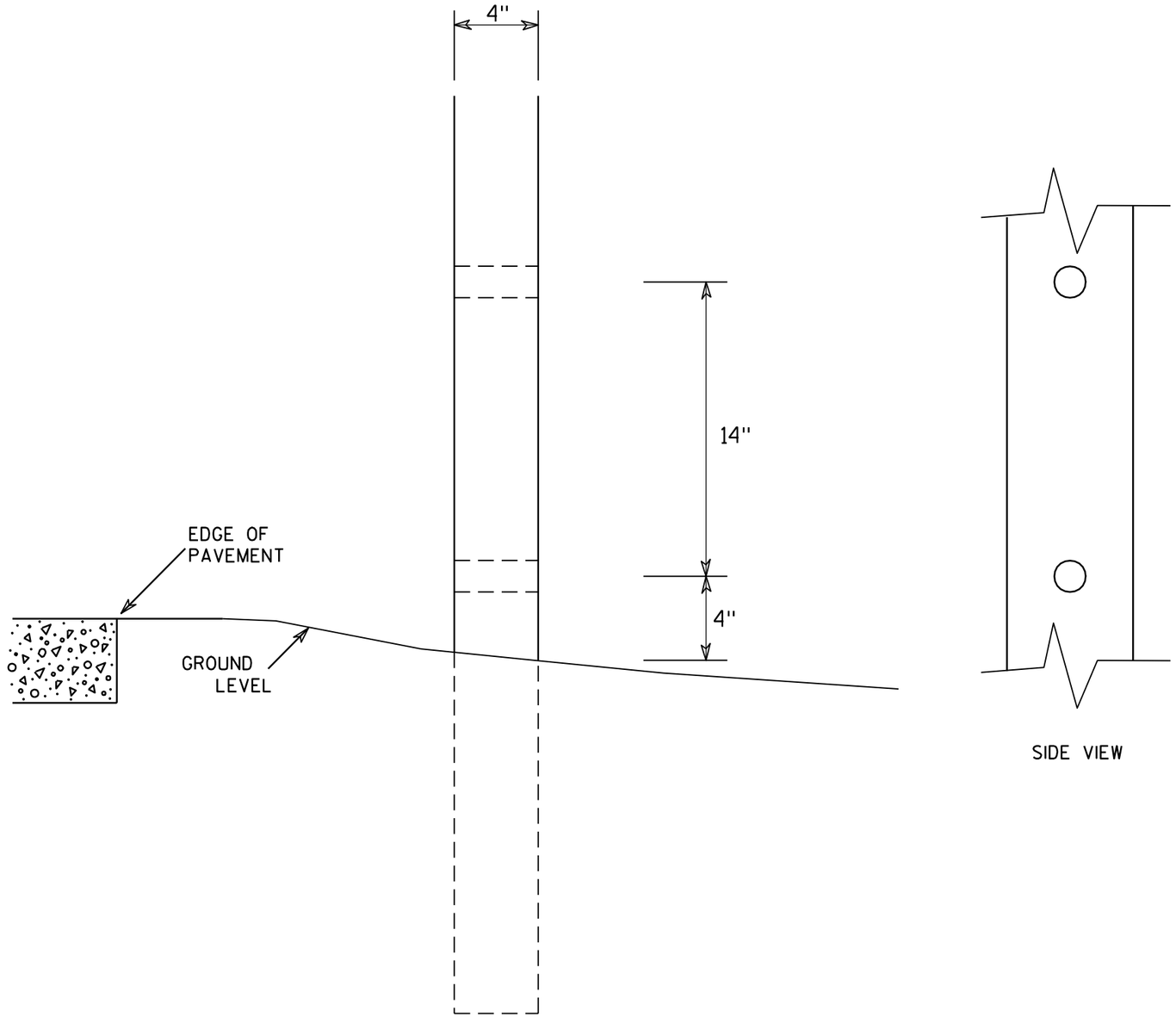
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 540 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

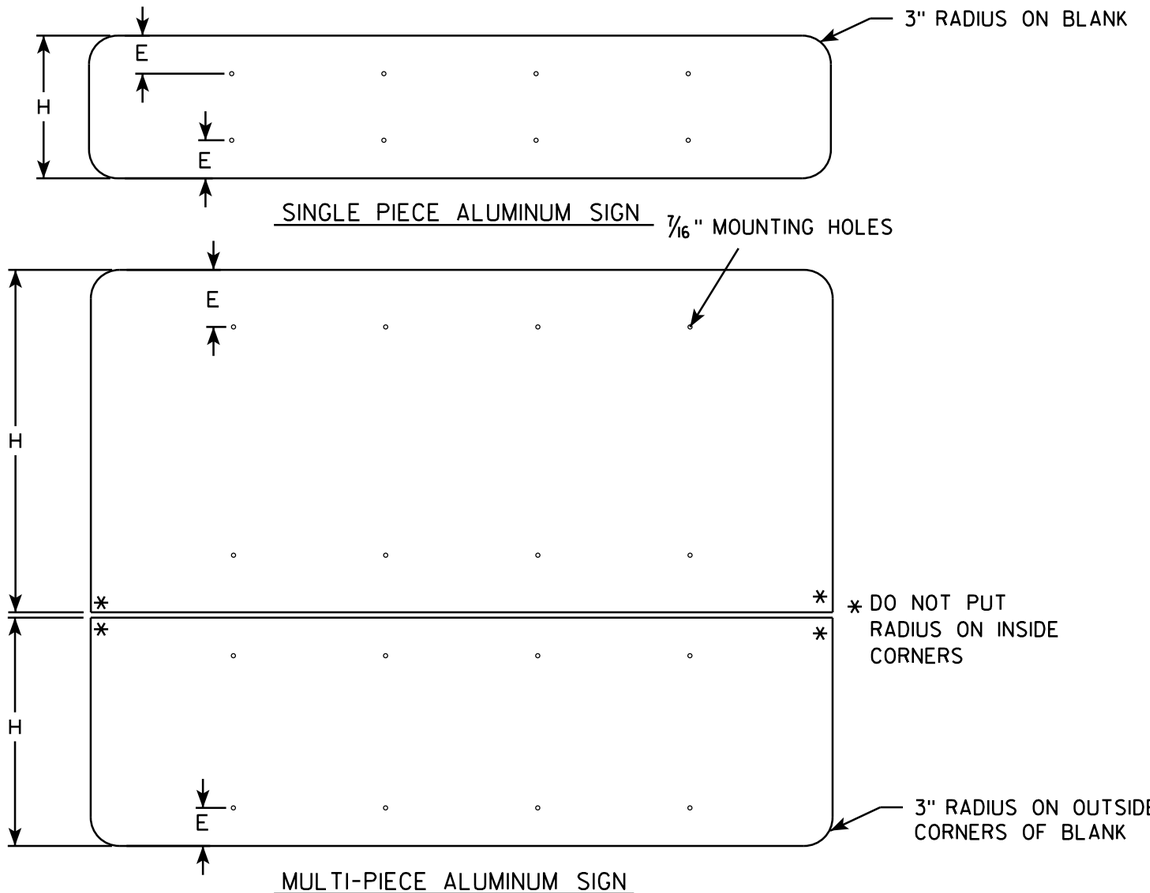
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

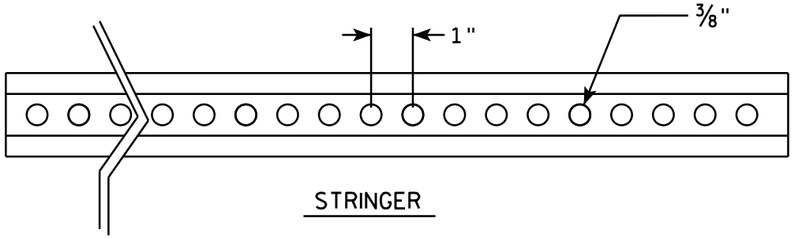
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 541	E



GENERAL NOTES

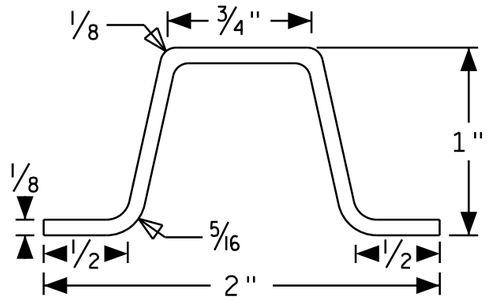
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

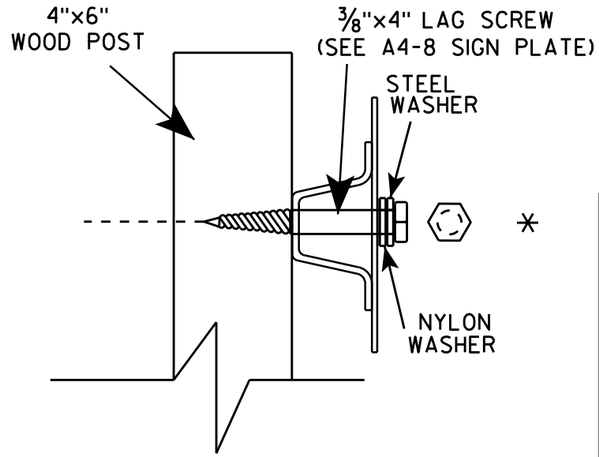


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

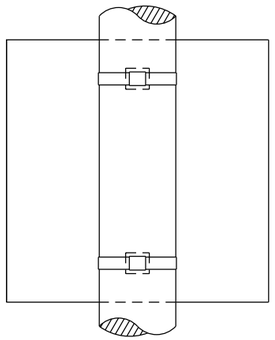
DATE 4/26/16 PLATE NO A4-18.1

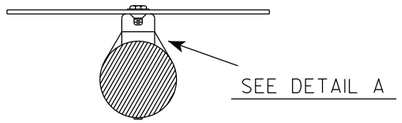
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

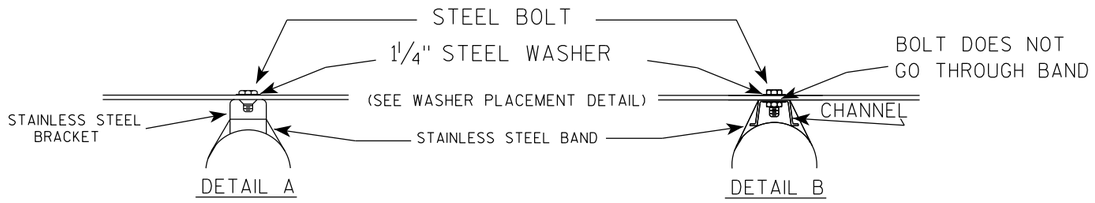
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

BANDING

SINGLE SIGN



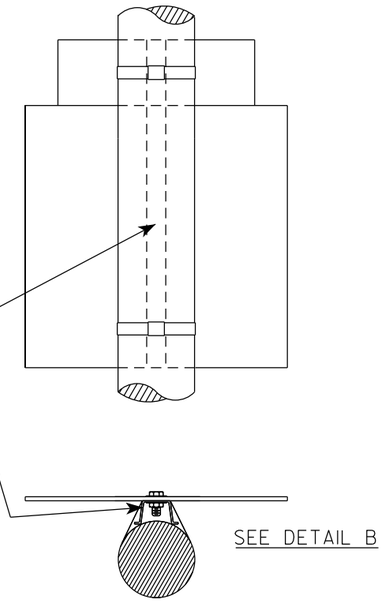




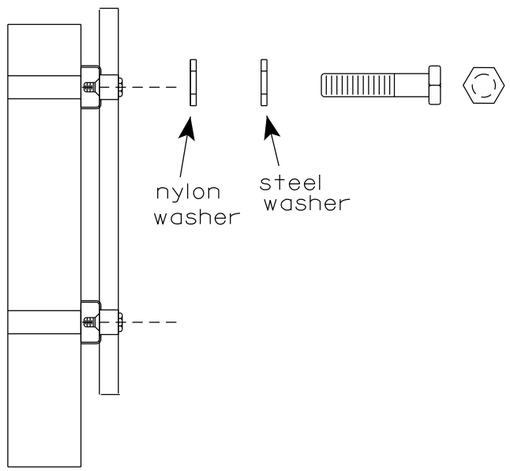
GENERAL NOTES

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

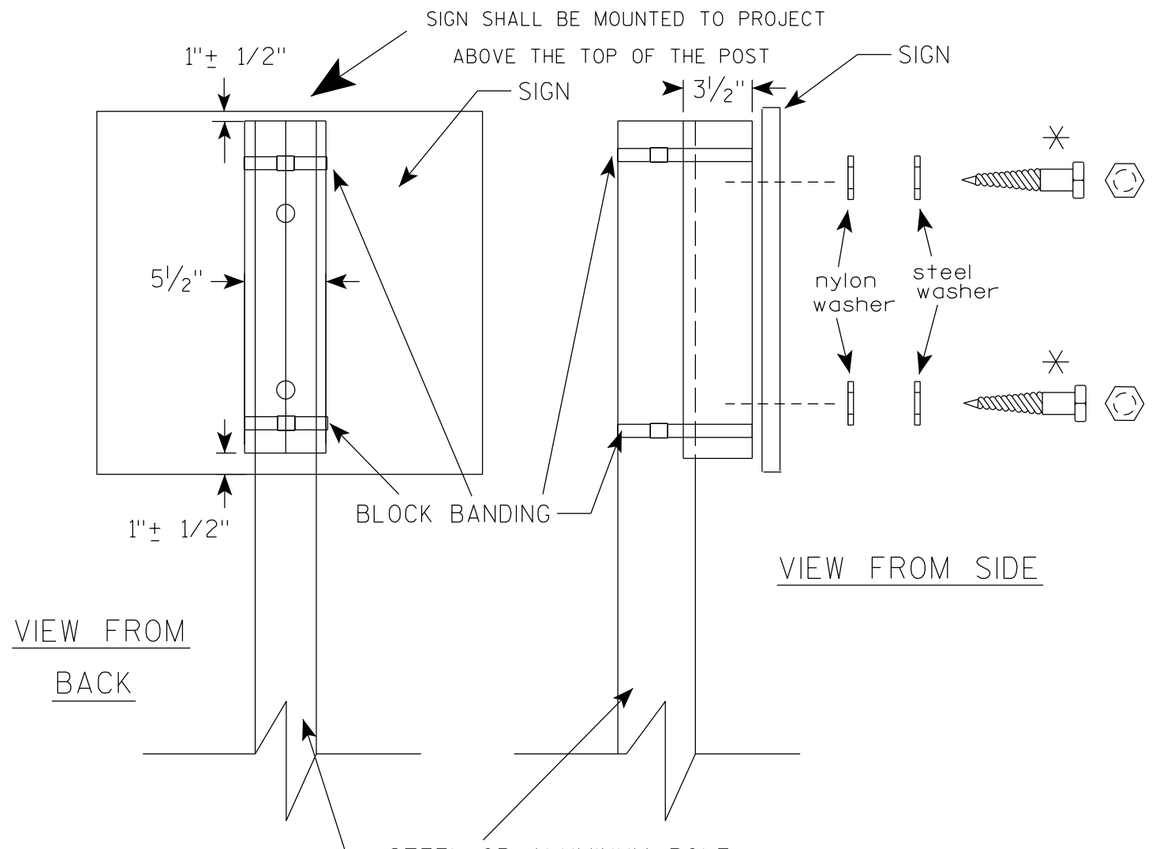
DATE 6/10/19 PLATE NO. A5-9.4

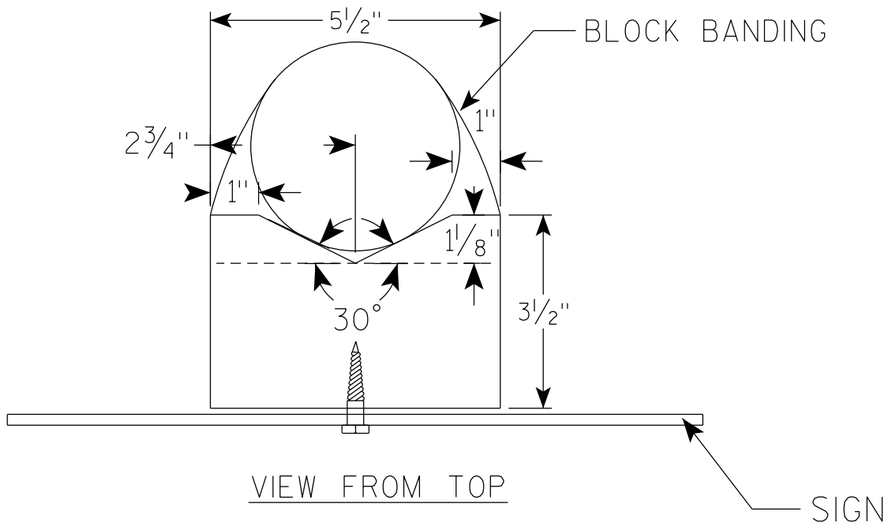
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 543	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





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)

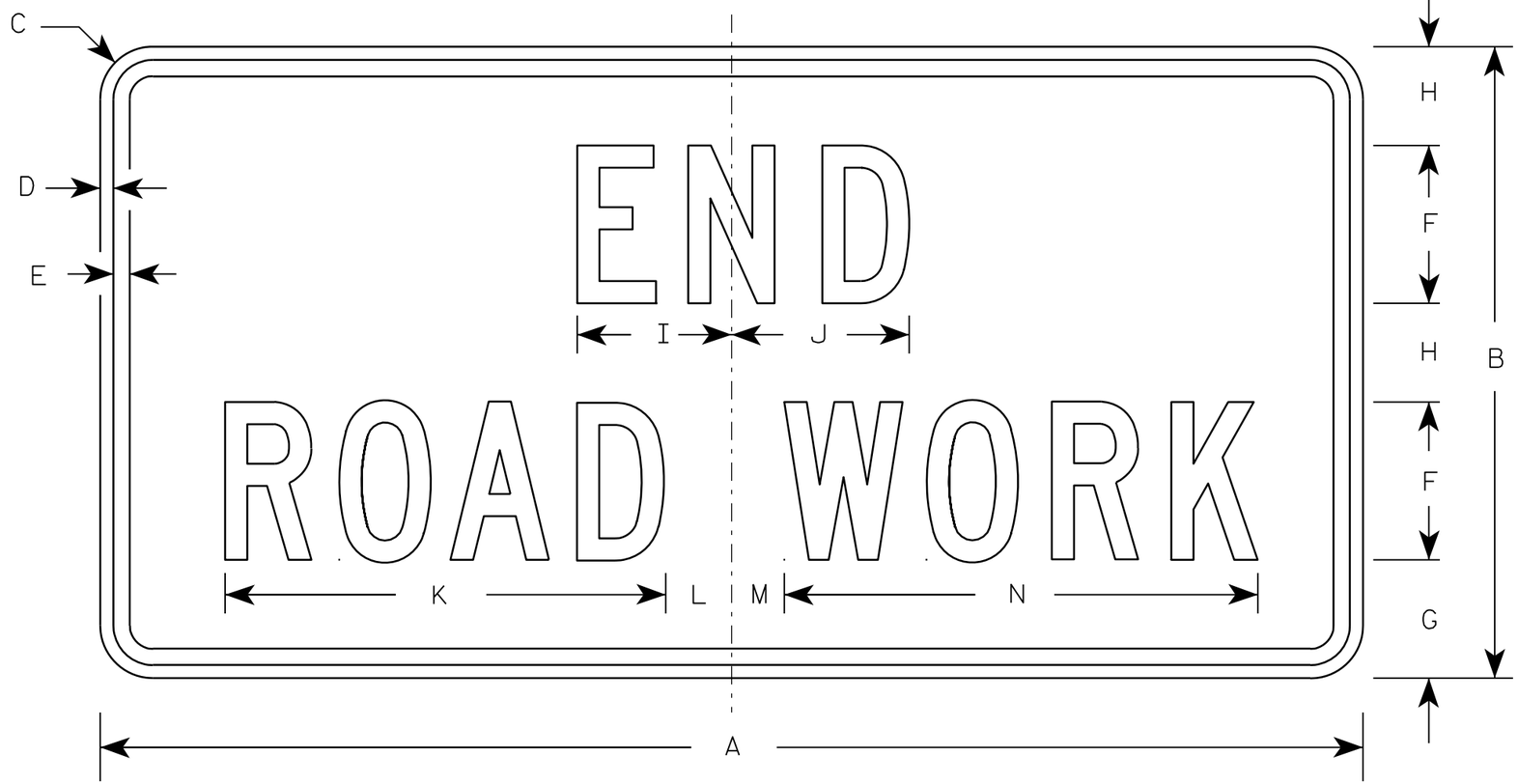
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 544 E



G20-2A

NOTES

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

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 545	E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - E
4. Material shall be .040 aluminmum



G20-60

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																											
3																											
4	108	24				12	6	14 7/8	78 1/4																		18.0
5																											

STANDARD SIGN
G20-60

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/15 PLATE NO G20-60.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

7

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\G2060.DGN PLOT DATE : 13-MAY-2015 08:46 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 20.431338:1.000000
WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - E



G20-61

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																											
3																											
4	120	30	6		2	12	9	21	78 1/4	20 3/4																	25.0
5																											

STANDARD SIGN
G20-61

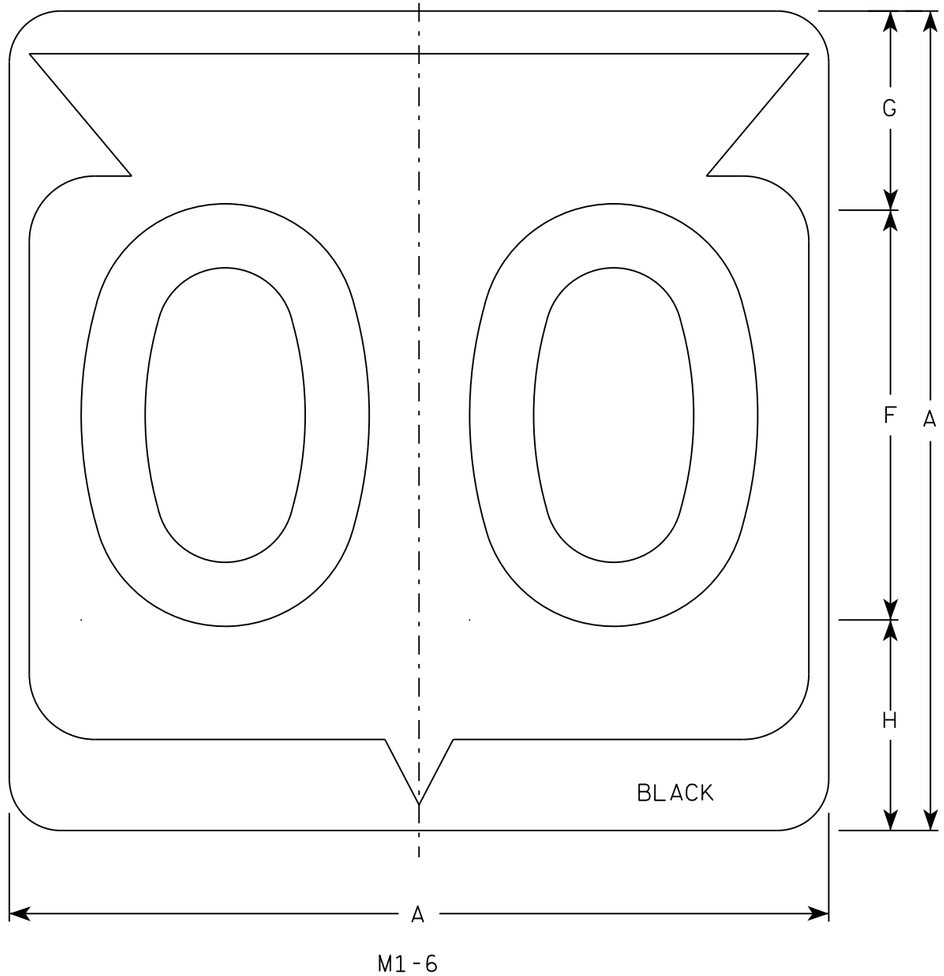
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO G20-61.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

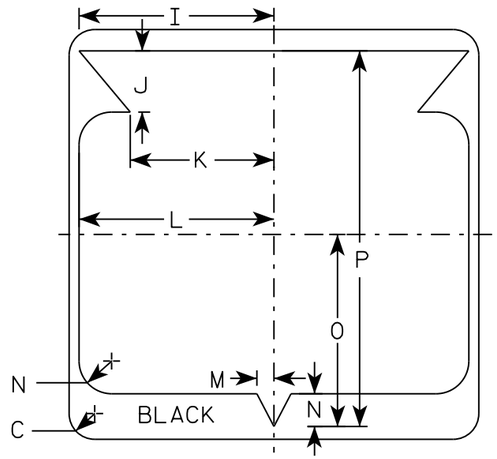
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\G2061.DGN PLOT DATE : 07-MAY-2015 13:47 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 20.431338:1.000000 WISDOT/CADDS SHEET 42



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
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		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

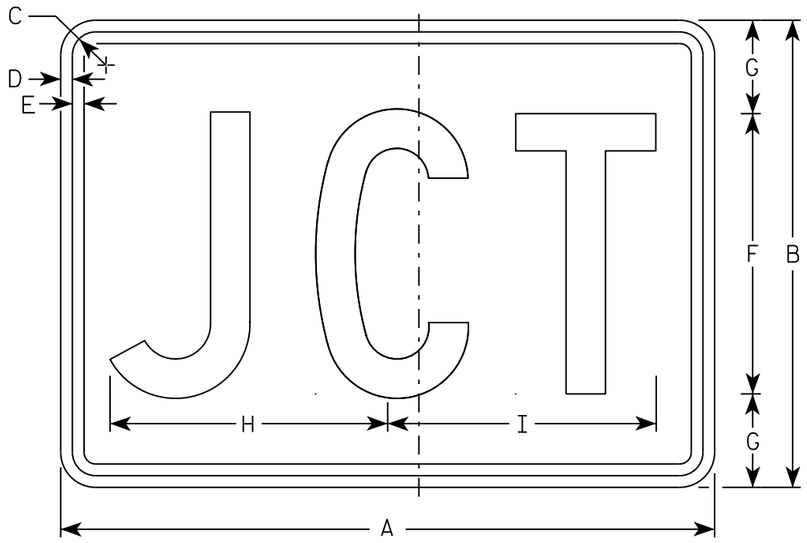
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

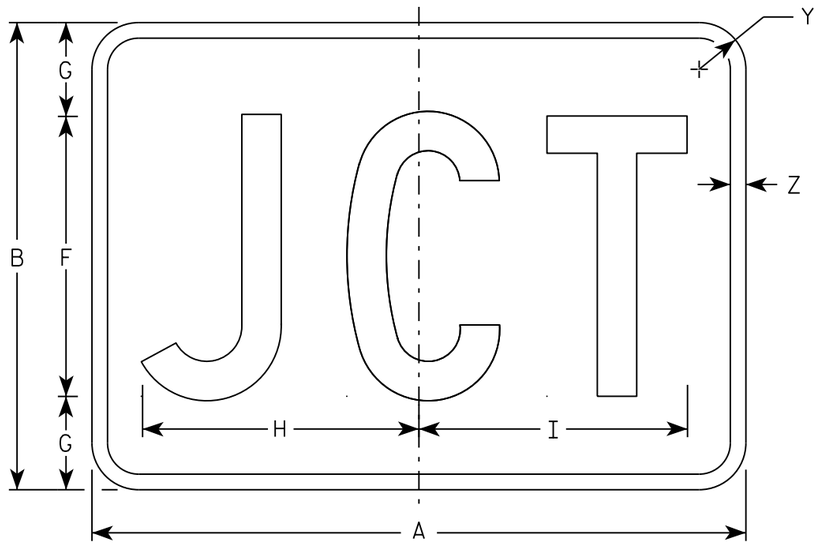
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 548 E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

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

STANDARD SIGN
M2-1

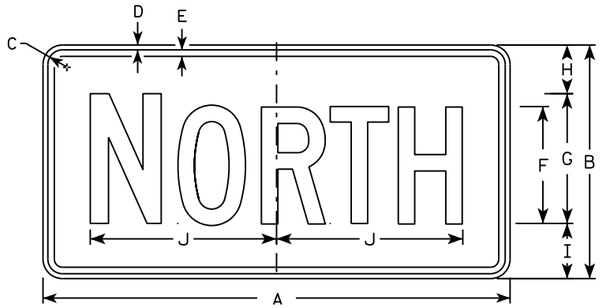
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

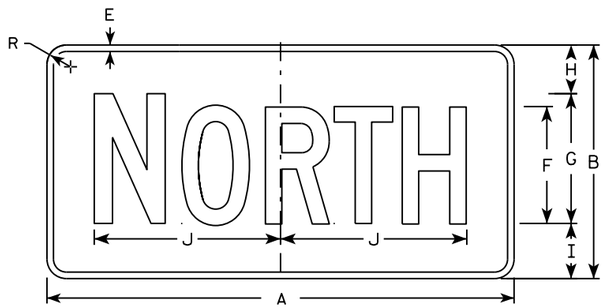
DATE 10/15/15 PLATE 549 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



M3-1
MM3-1
MP3-1



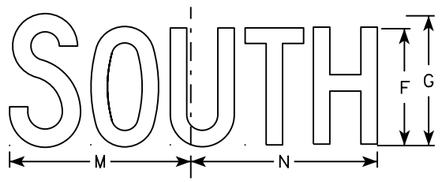
MB3-1
MK3-1
MN3-1



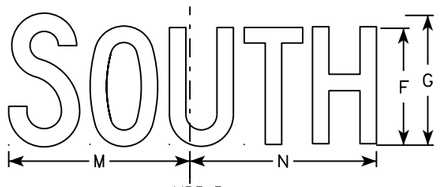
M3-2
MM3-2
MP3-2



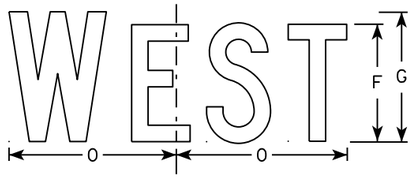
MB3-2
MK3-2
MN3-2



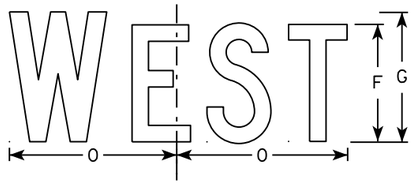
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

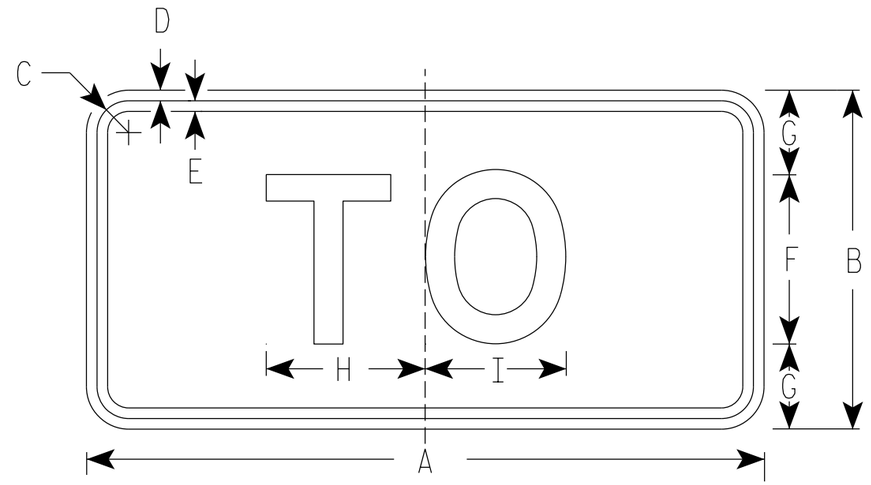
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

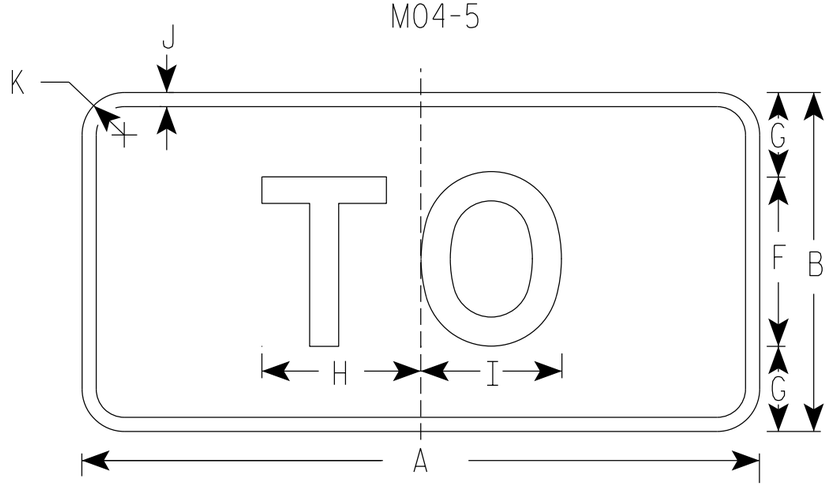
DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-5
MM4-5
MP4-5
M04-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

   M04-5 Background - Orange Type F Reflective
   Message - Black

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	5 3/8	5 1/4	1/2	1 1/2																2.00
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5

STANDARD SIGN
M4-5

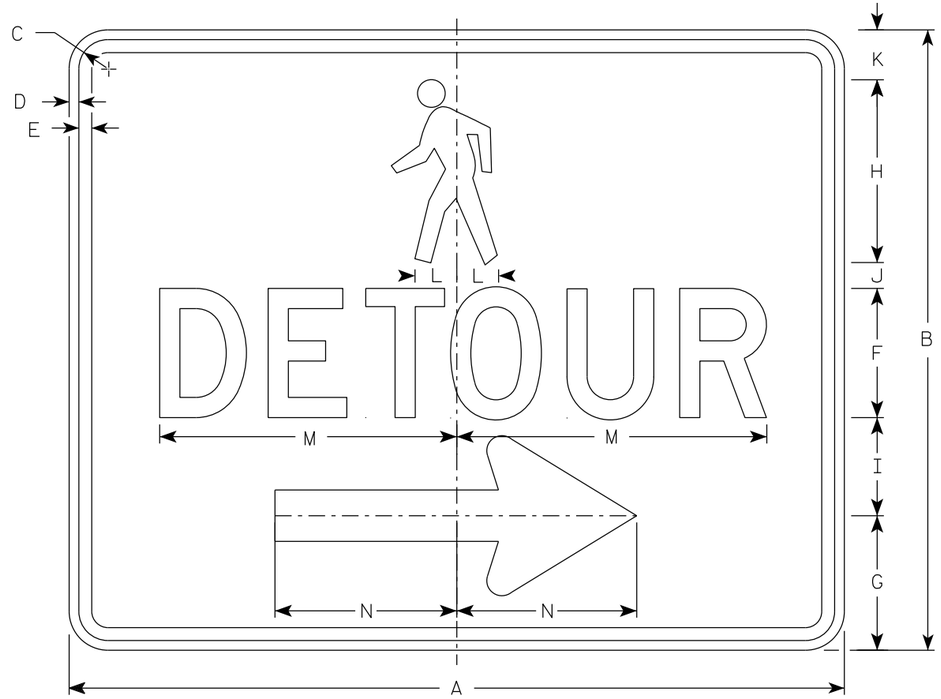
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/7/19 PLATE NO. M4-5.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 551 | E

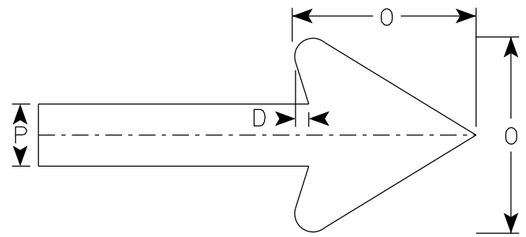
7



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																											
2	30	24	1 1/8	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											5.00
3																											
4																											
5																											

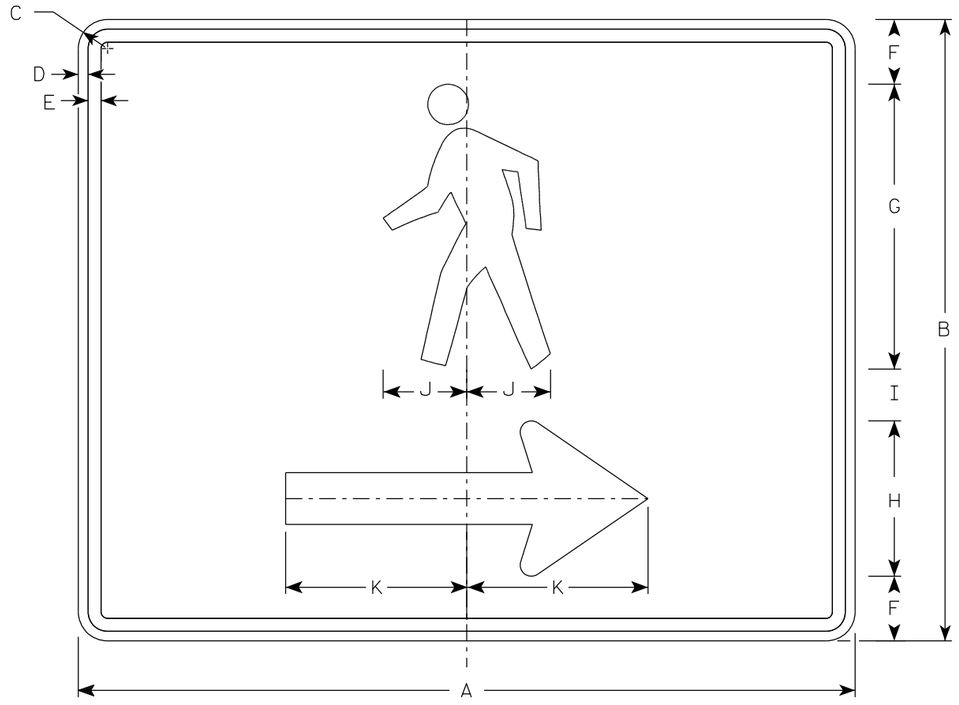
STANDARD SIGN
M4-9B L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 7/1/19 PLATE NO. M4-9B.2

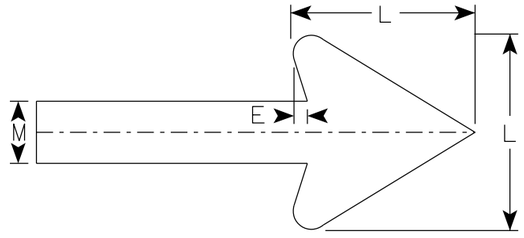
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 552 | E



M4-60R

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.



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																											
2	30	24	1 1/8	3/8	1/2	2 1/2	11	6	2	3 1/4	7	6	2														5.00
3																											
4																											
5																											

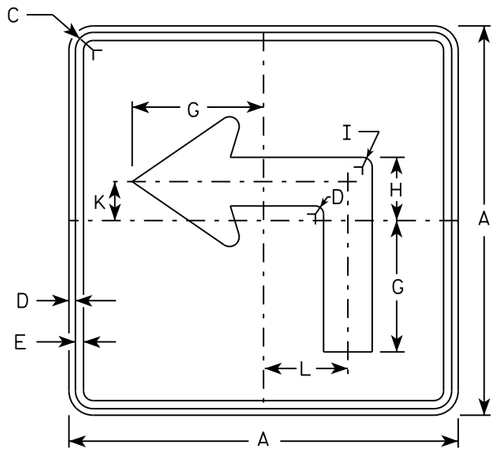
STANDARD SIGN
M4-60 L&R

WISCONSIN DEPT OF TRANSPORTATION

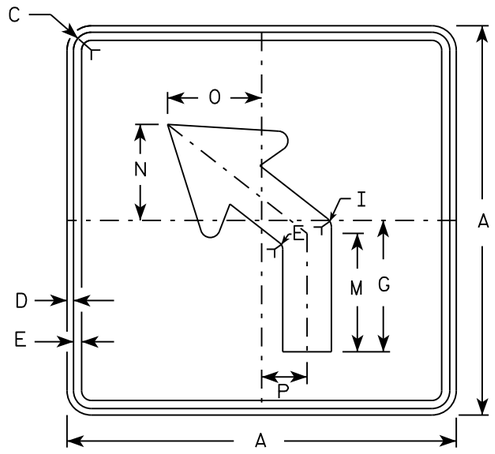
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/16/2021 PLATE NO. M4-60.1

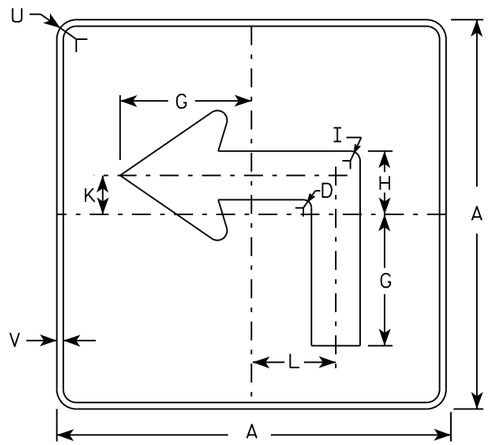
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 553 | E



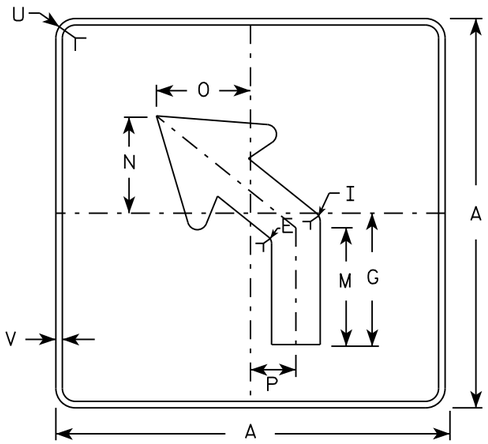
M5-1L
MM5-1L
MO5-1L
MP5-1L



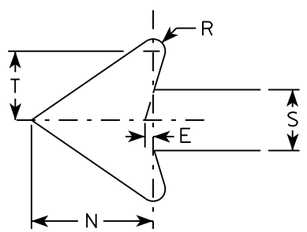
M5-2L
MM5-2L
MO5-2L
MP5-2L



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 - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

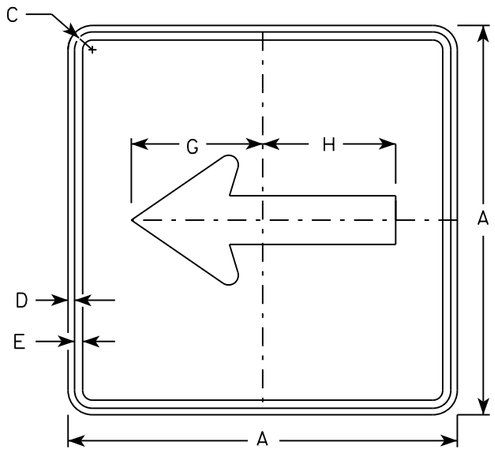
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

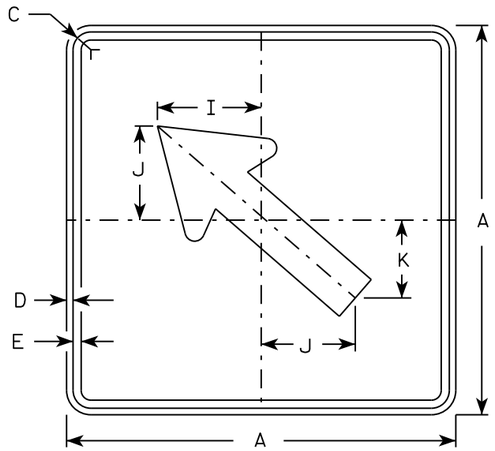
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



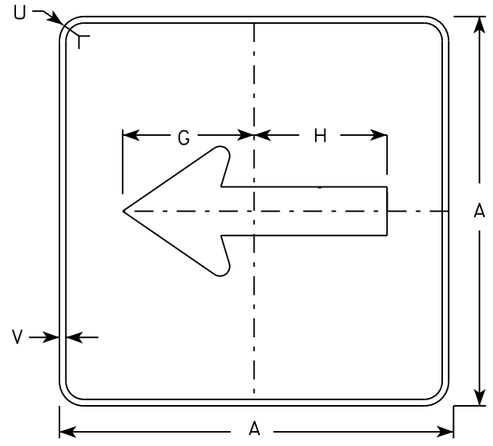
M6-1
MM6-1
MO6-1
MP6-1



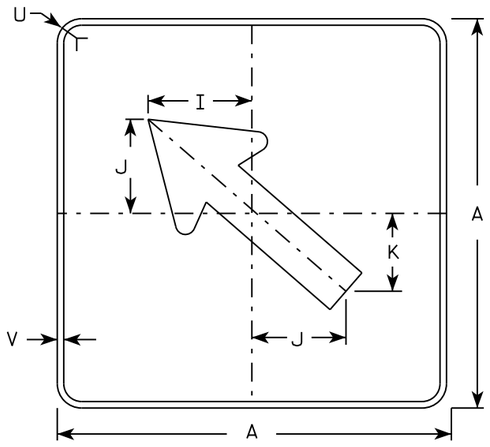
M6-2
MM6-2
MO6-2
MP6-2

NOTES

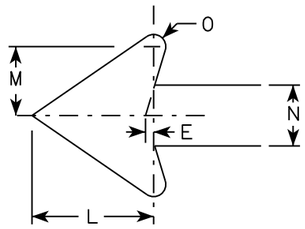
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

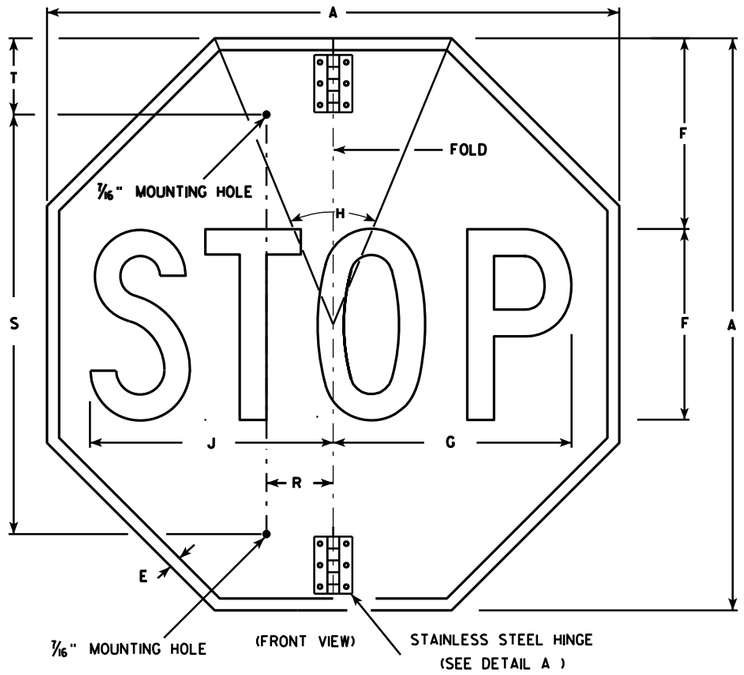
WISCONSIN DEPT OF TRANSPORTATION

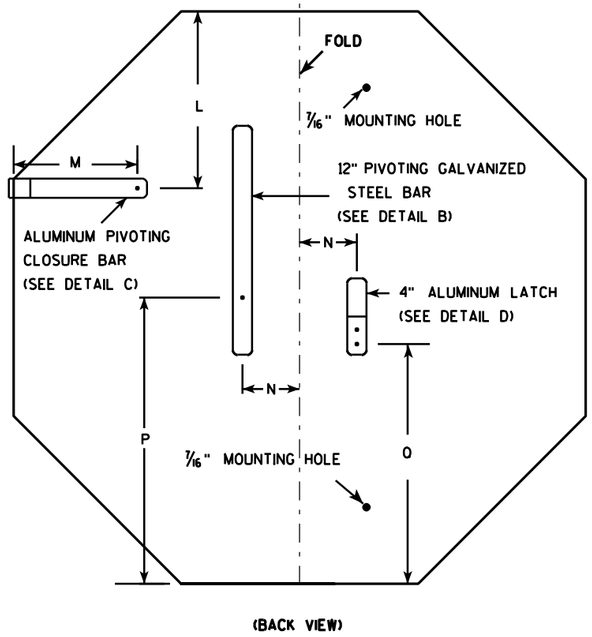
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLAT 555 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

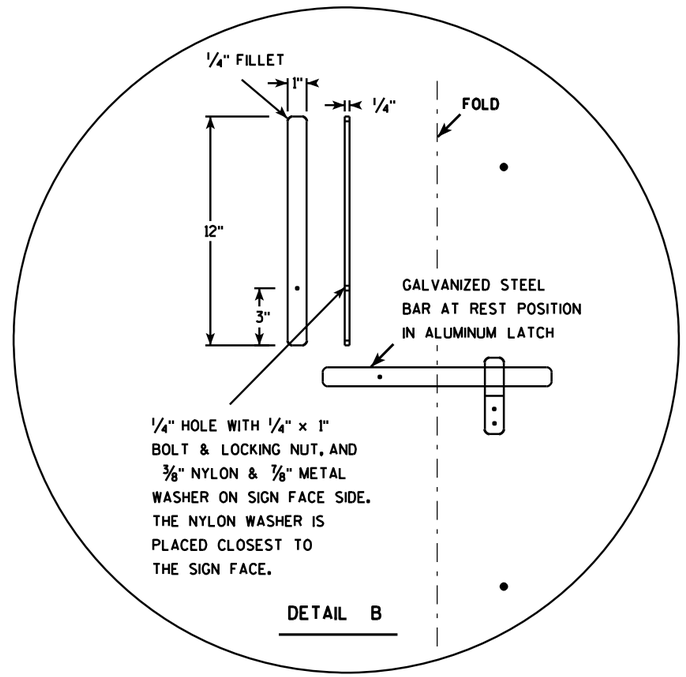
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



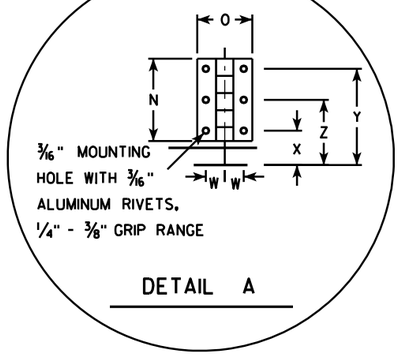


NOTES

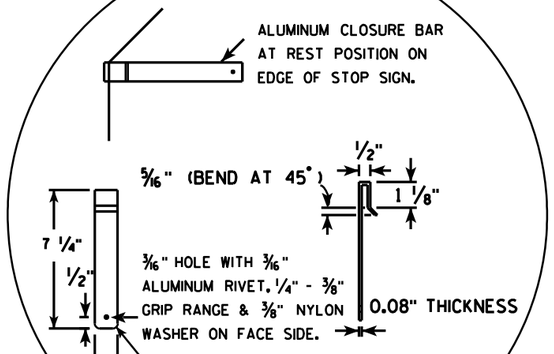
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



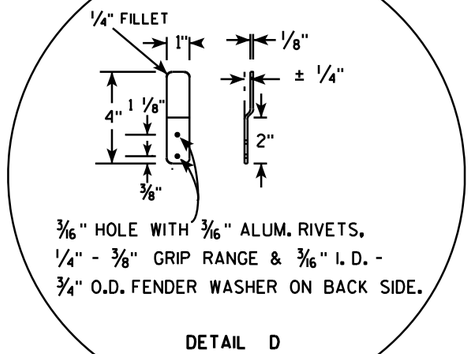
DETAIL B



DETAIL A



DETAIL C



DETAIL D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

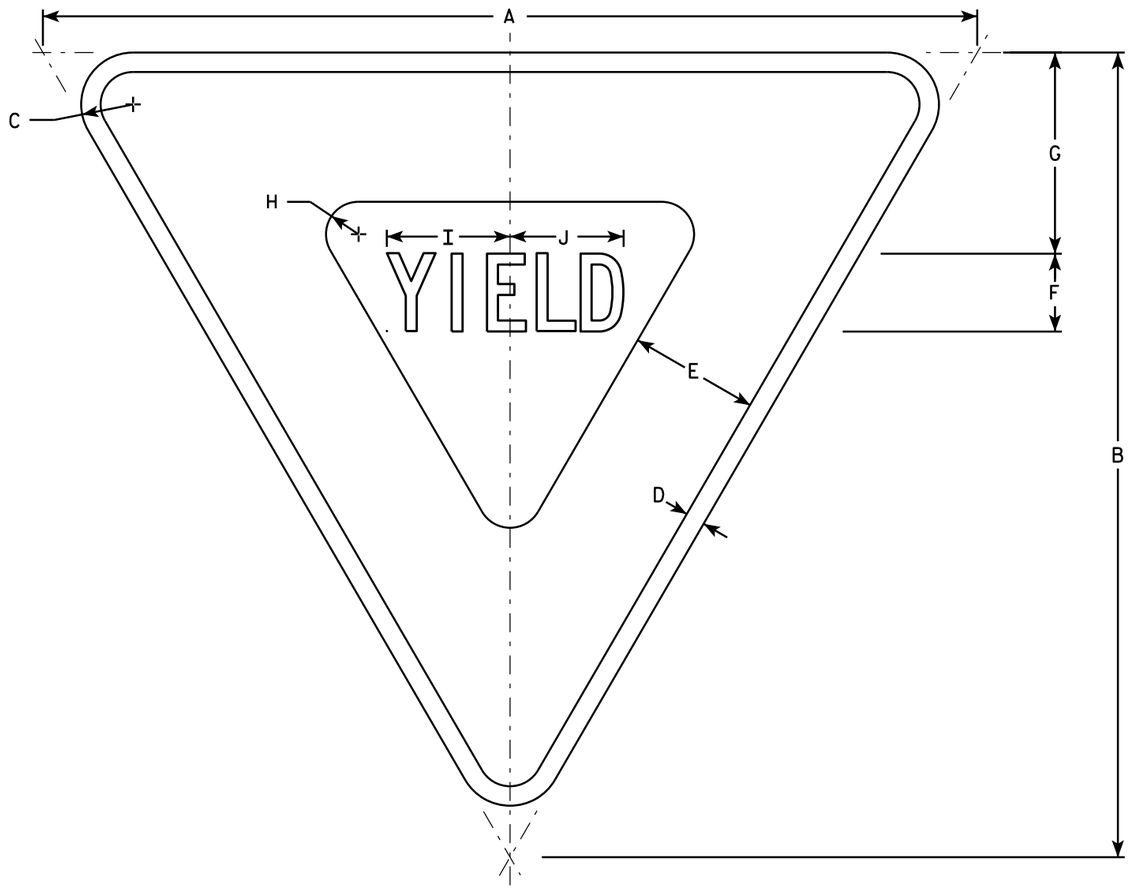
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 556	E



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

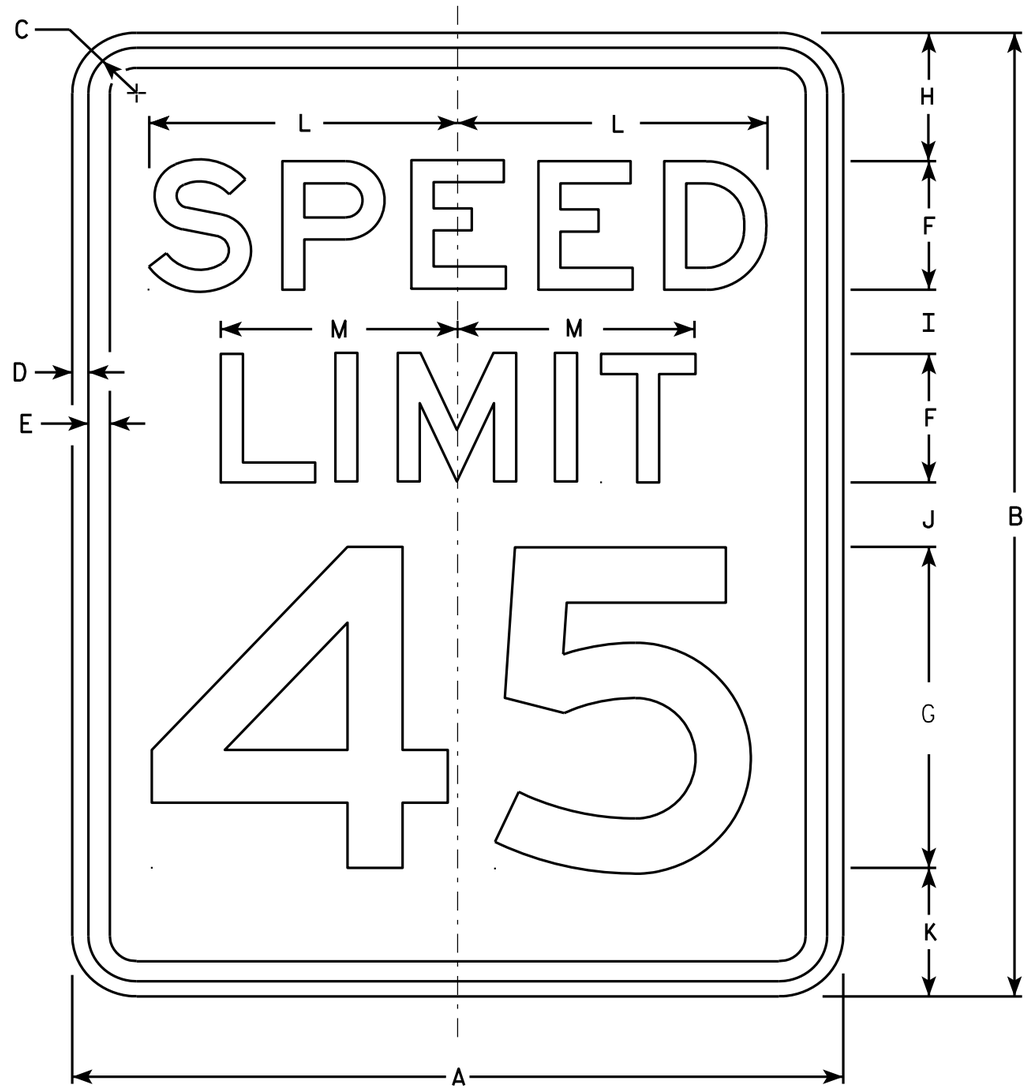
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

PROJECT NO: | HWY: | COUNTY: | | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R2-1

NOTES

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

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

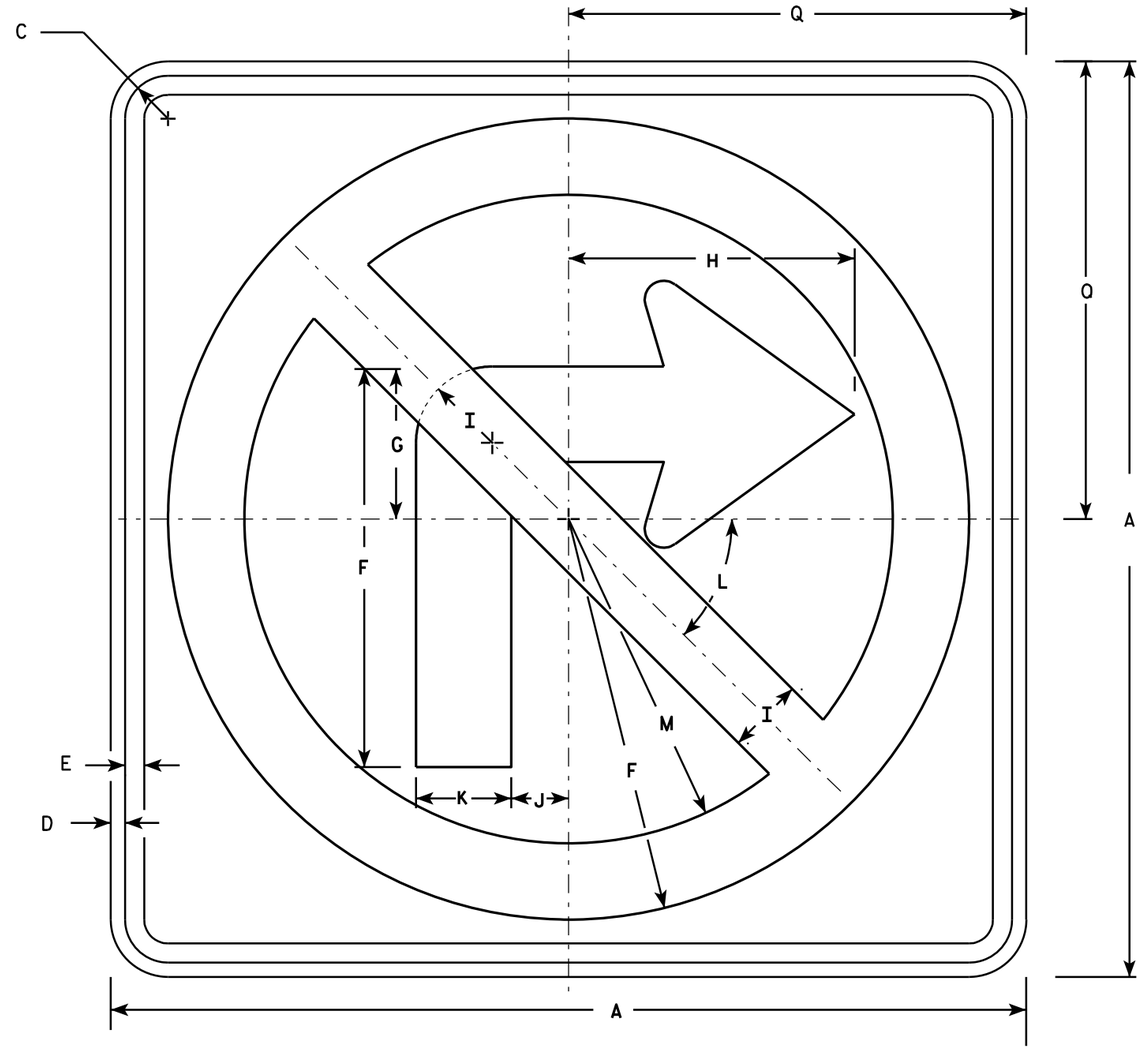
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

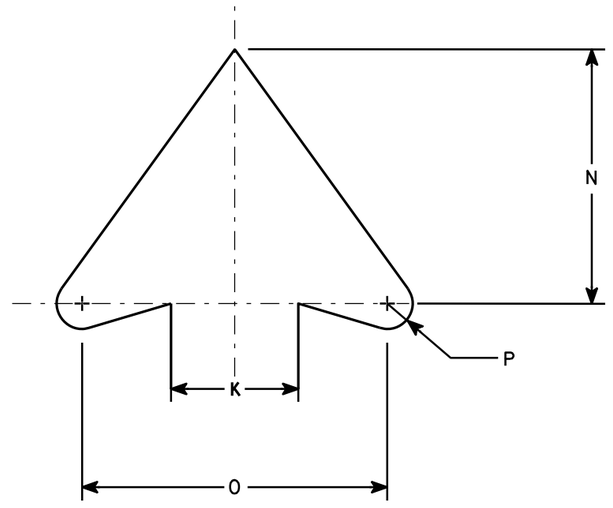
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 558	E



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

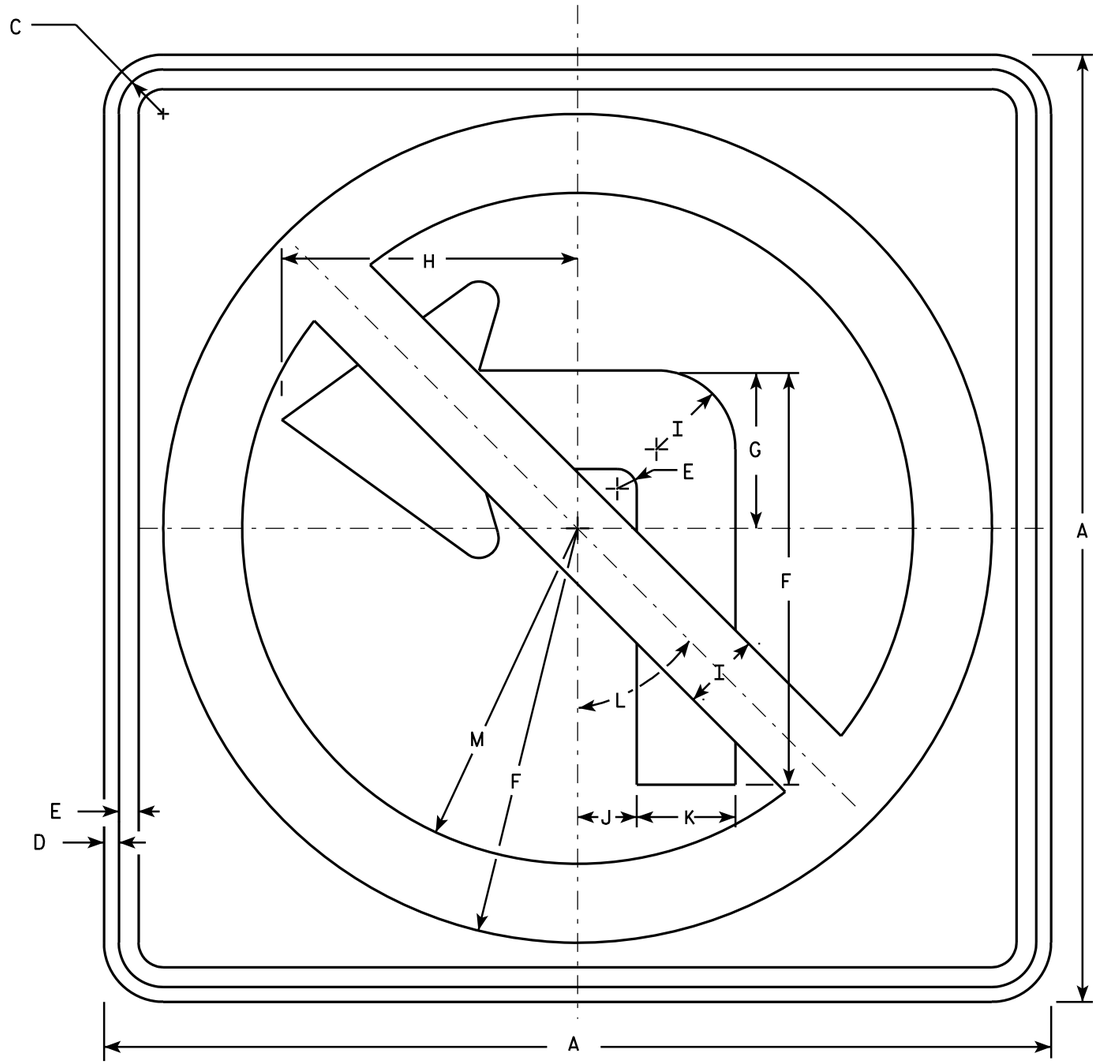
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

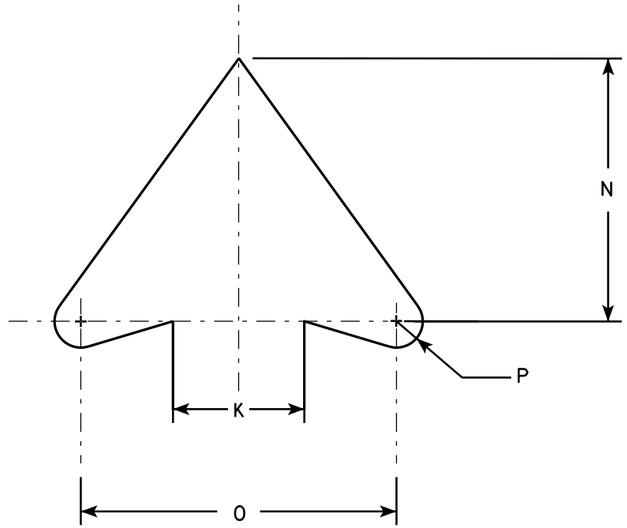
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 559	E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

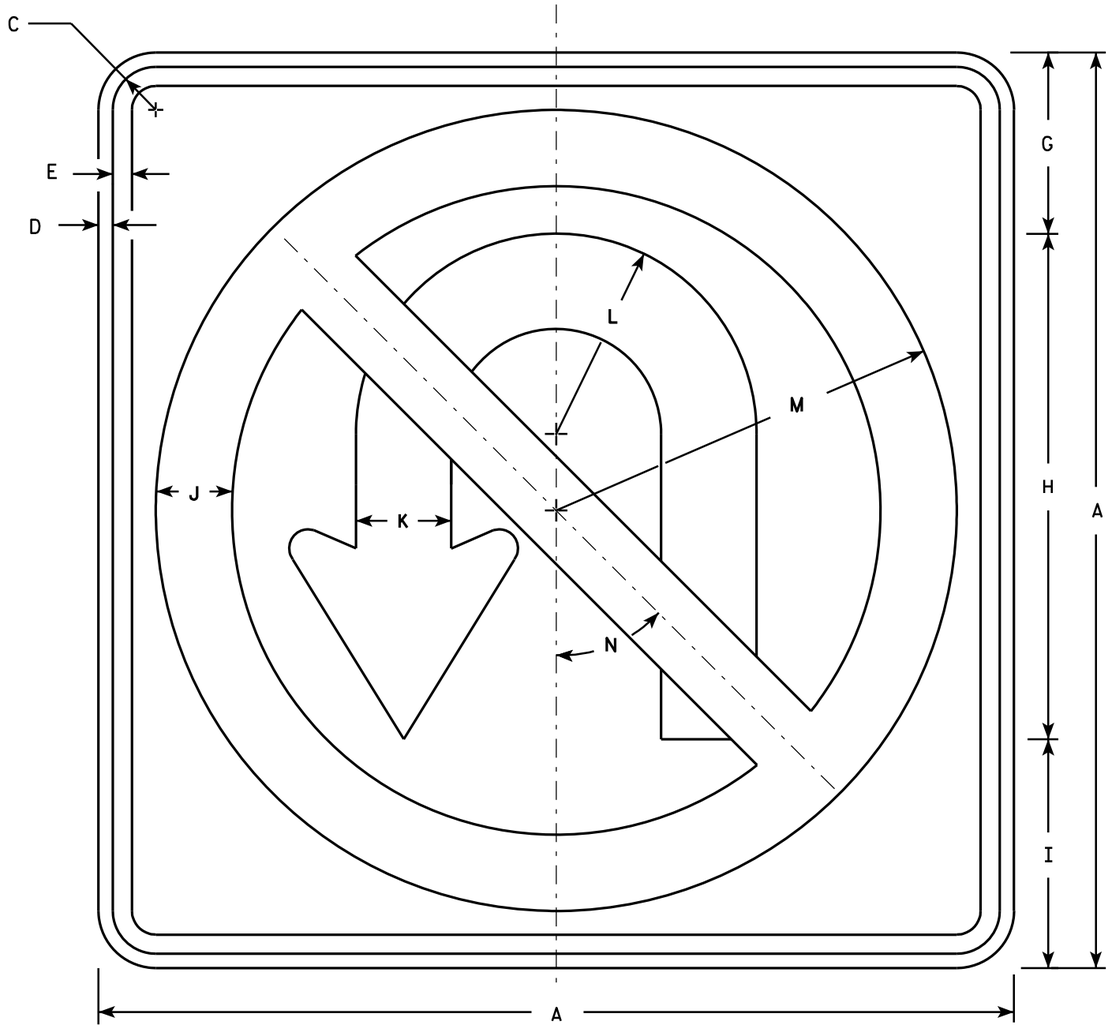
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

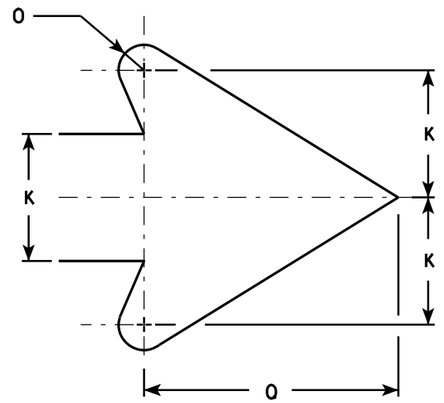
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 560	E



R3-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		4 3/4	13 1/4	6	2	2 1/2	5 1/4	10 1/2	45°	1/2		5										4.0
2M	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
3	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
4	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
5	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0

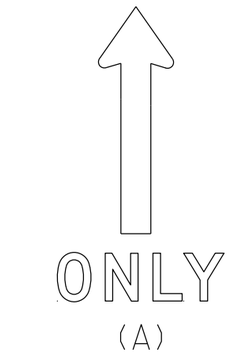
STANDARD SIGN
R3-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-4.11

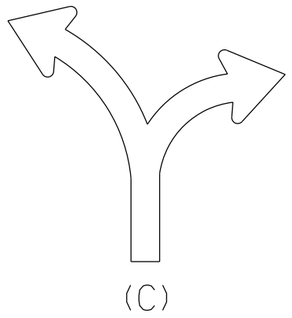
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 561	E

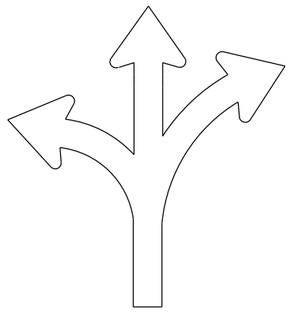


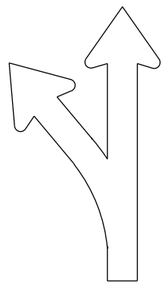
(A)

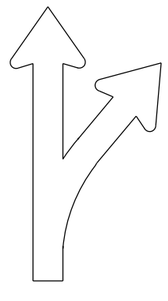


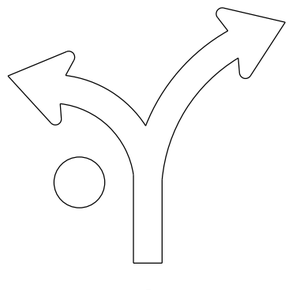
(B)

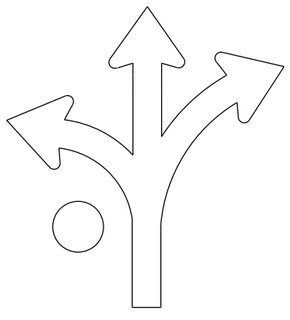

(C)

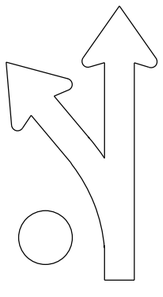

(D)


(E)


(F)

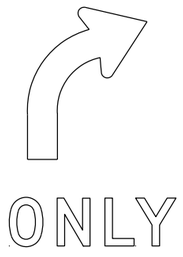

(G)


(H)

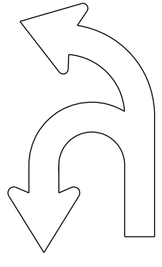

(I)



(L)



(R)


(U)

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,H 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 5/21/19 PLATE NO. R3-8.1

7

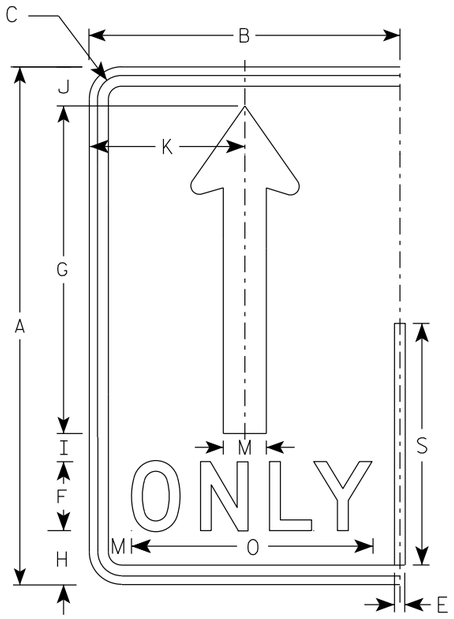
7

PROJECT NO:

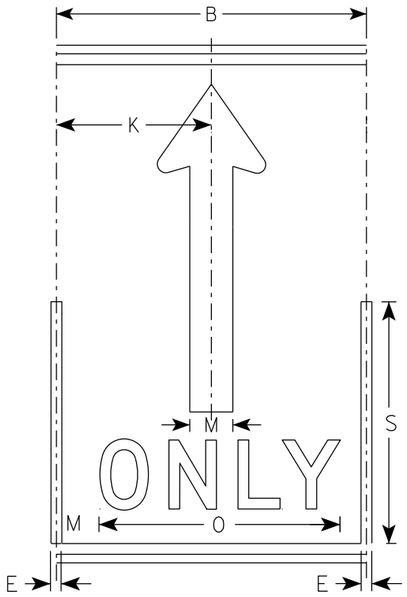
SHEET NO: 562 E

NOTES

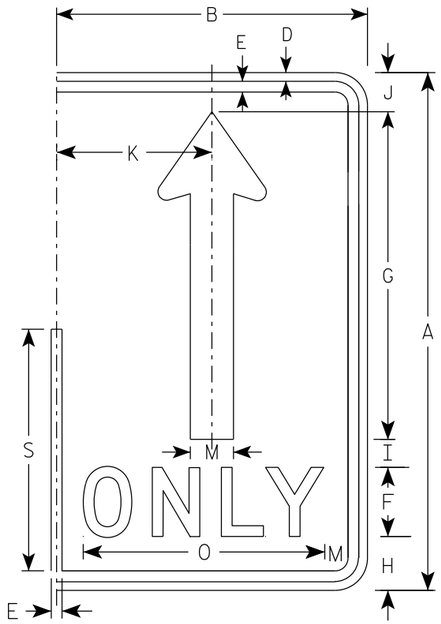
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



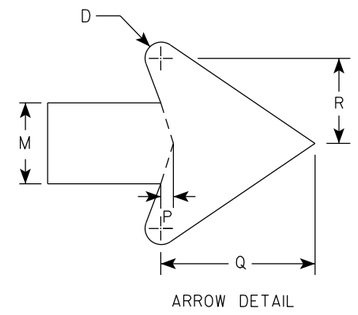
(A)



(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 3/8	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 3/8	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 3/8	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

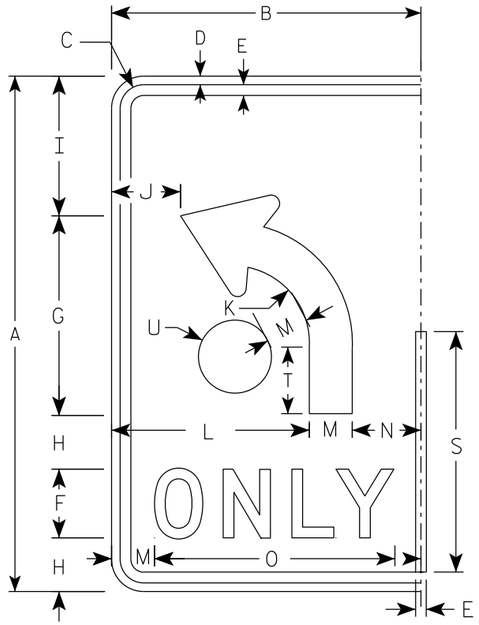
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

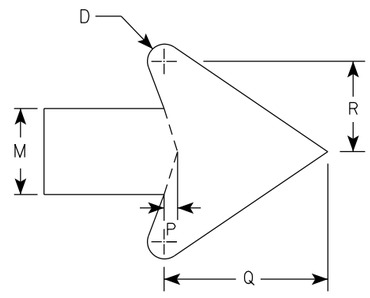
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 563 | E

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 3/8	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 3/8	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 3/8	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

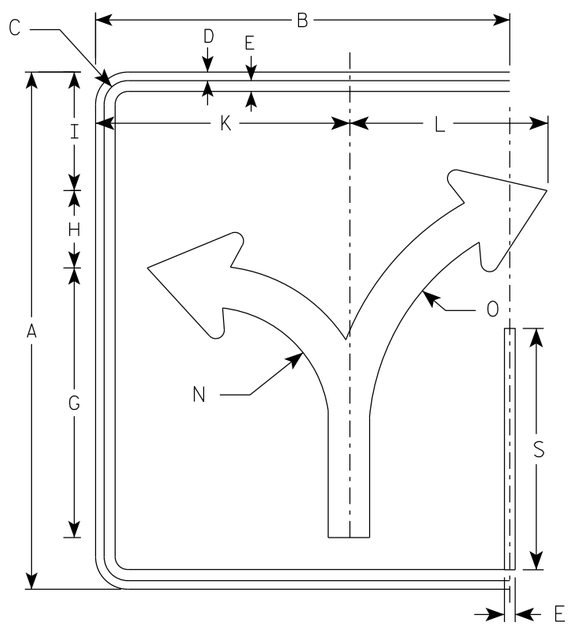
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

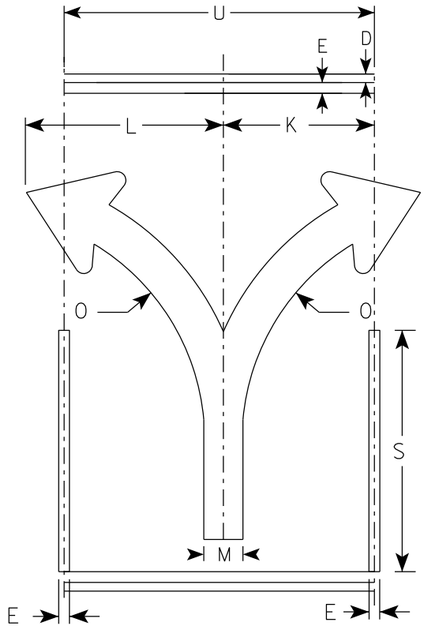
SHEET NO: 564 E

NOTES

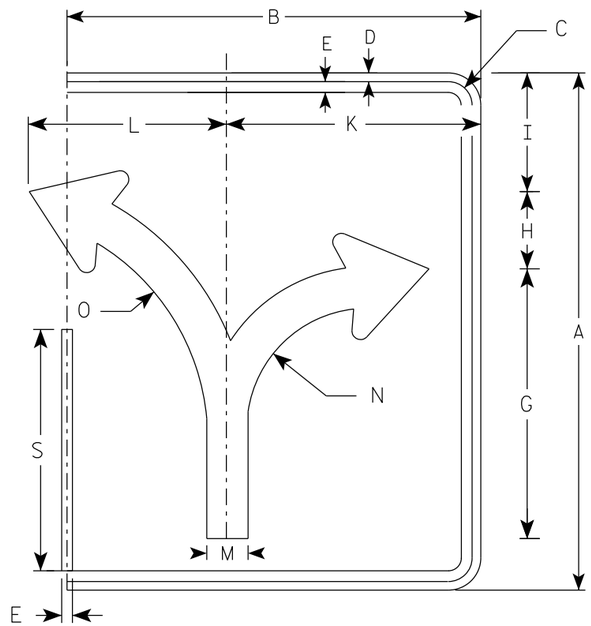
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



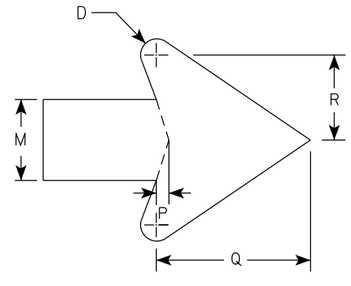
(C)



(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 3/8	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 3/8	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 3/8	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

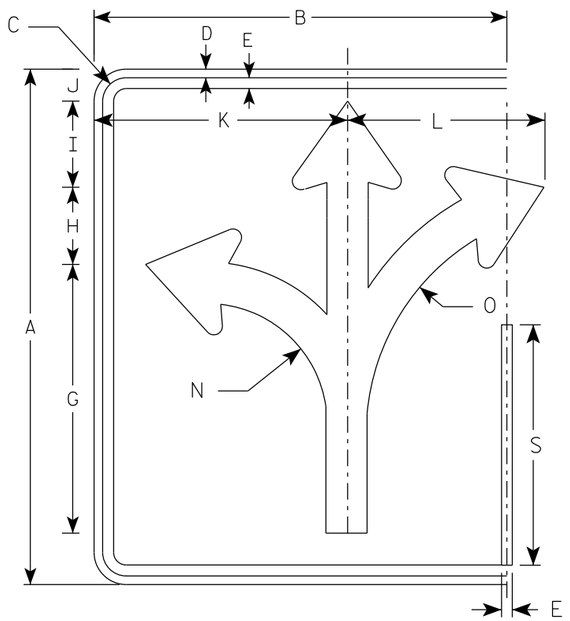
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

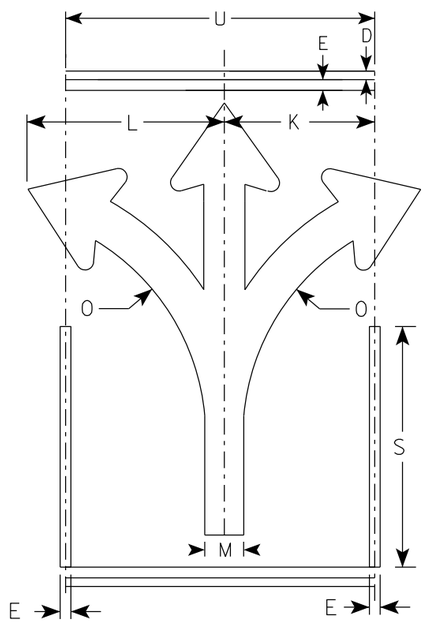
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 565 | E

NOTES

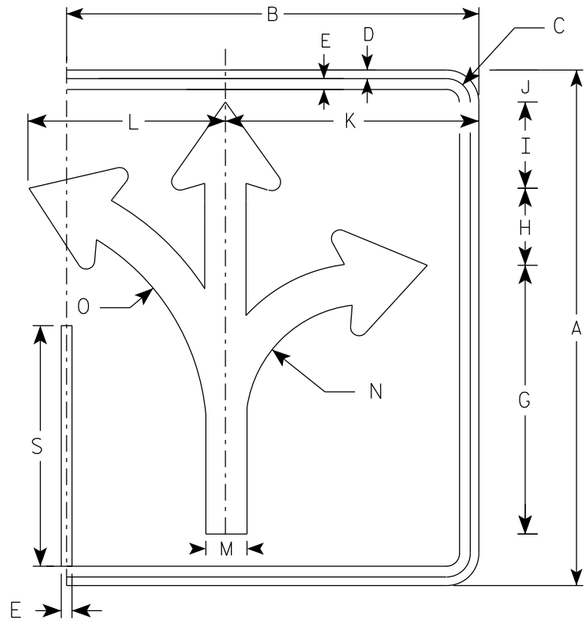
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



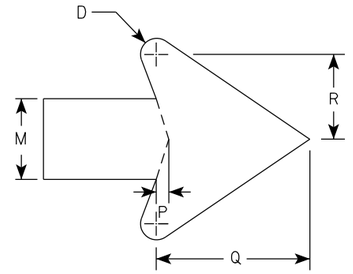
(D)



(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 3/8	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 3/8	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 3/8	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

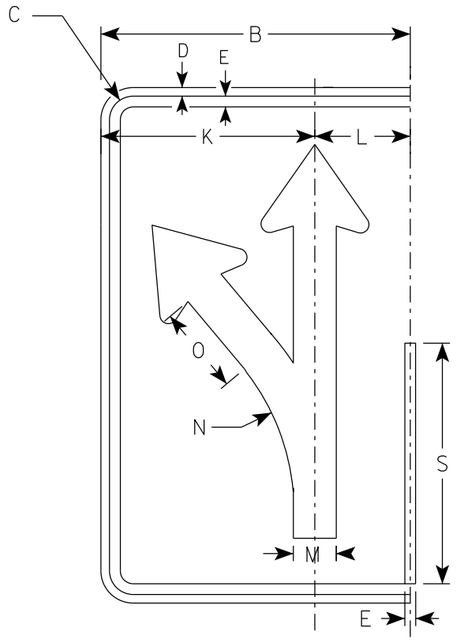
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

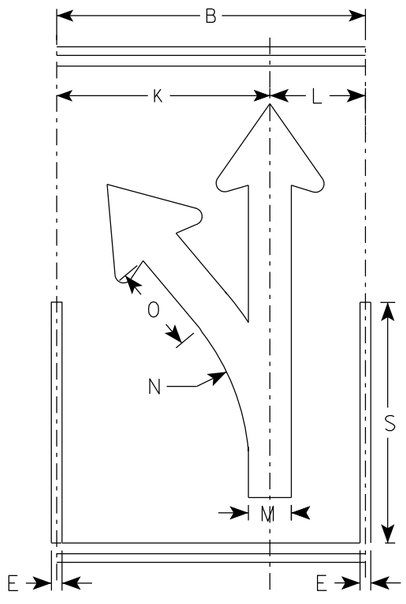
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 566 | E

NOTES

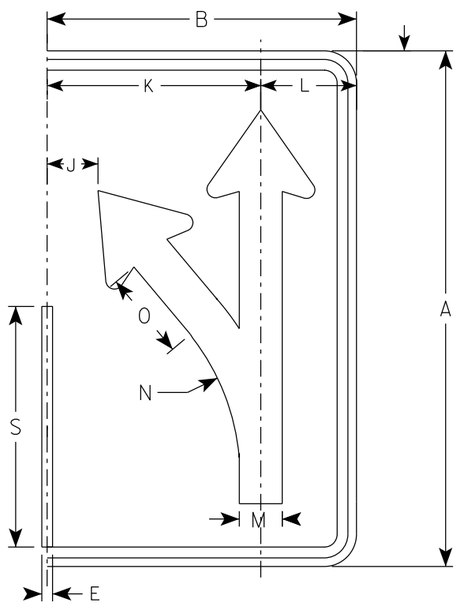
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



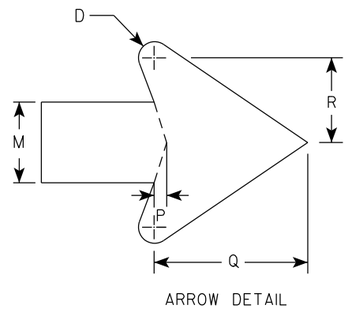
(E)



(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 3/8	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 3/8	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 3/8	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

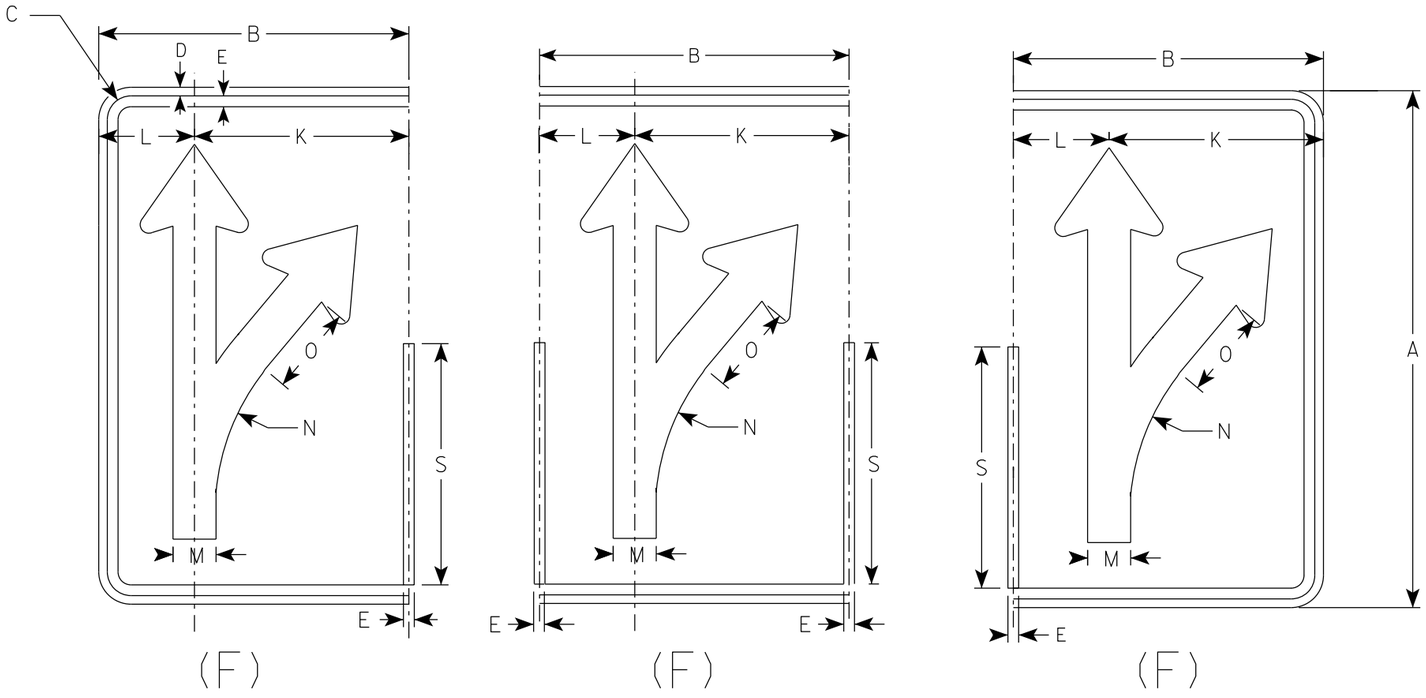
APPROVED Matthew R Rauch
For State Traffic Engineer

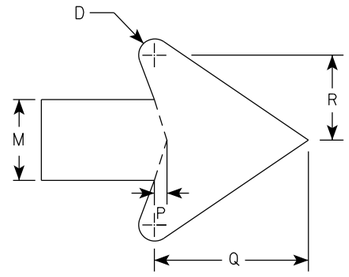
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 567 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None





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 3/8	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 3/8	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 3/8	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

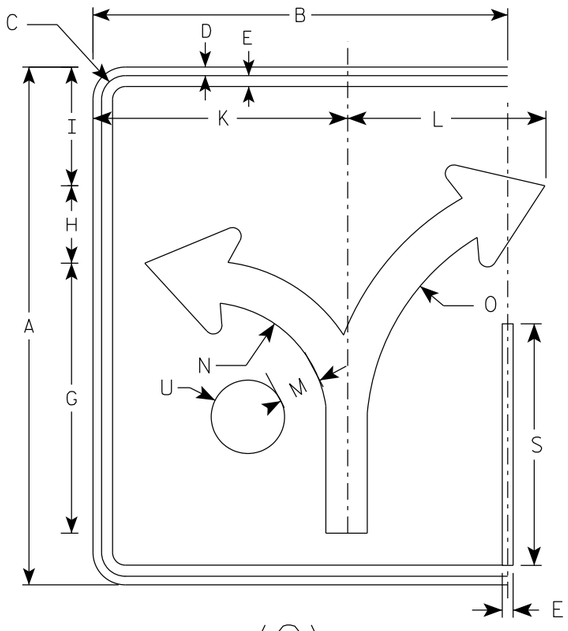
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

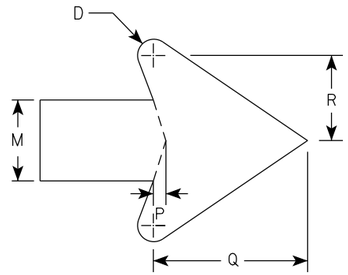
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 568 | E

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 3/8	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 3/8	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 3/8	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 (G) Arrow

WISCONSIN DEPT OF TRANSPORTATION

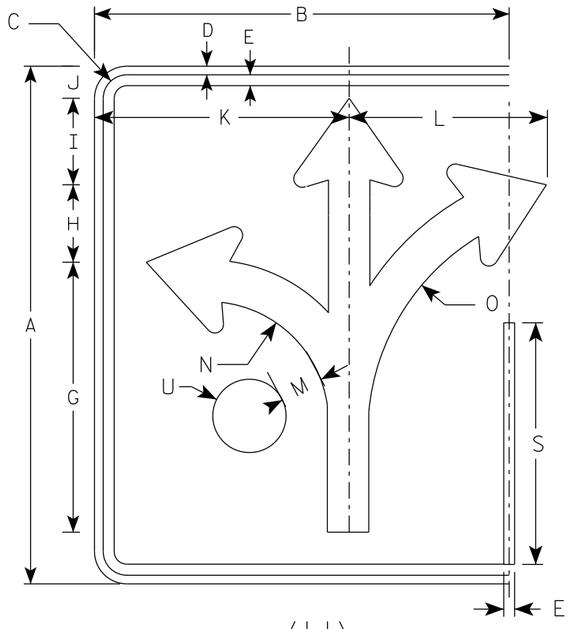
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

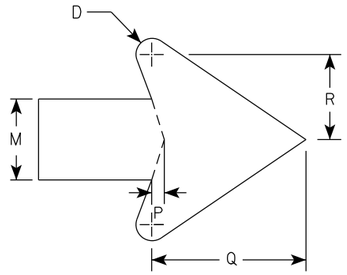
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 569 | E

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	24	1 3/8	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 3/8	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 3/8	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 (H) Arrow

WISCONSIN DEPT OF TRANSPORTATION

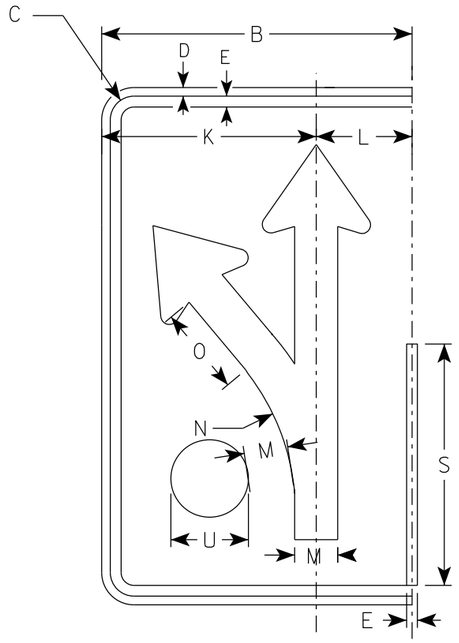
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

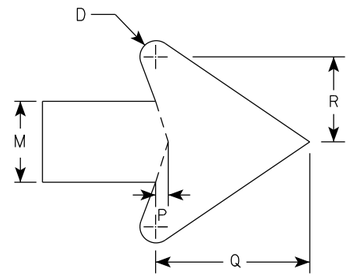
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 570	E

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 3/8	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 3/8	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 3/8	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 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

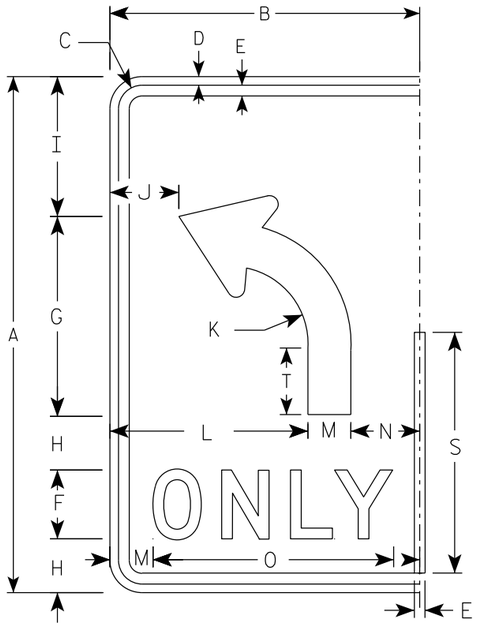
APPROVED Matthew R Rauch
For State Traffic Engineer

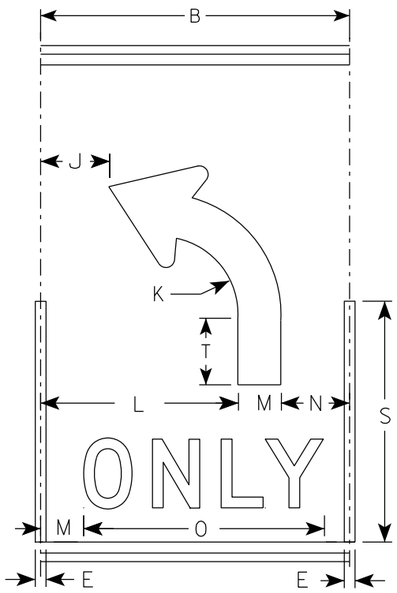
DATE 5/21/19 PLATE NO. R3-8.1

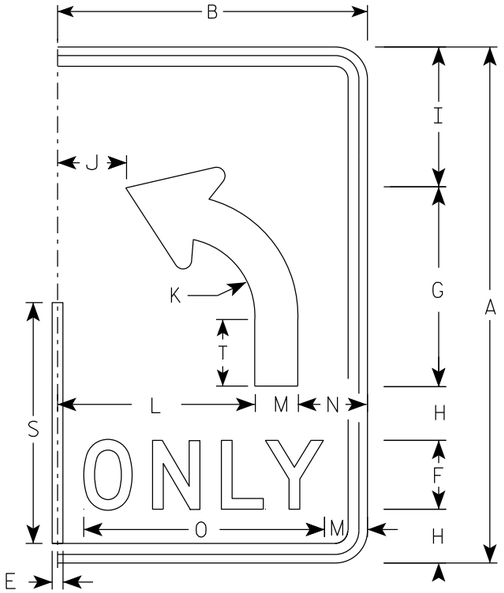
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 571 | E

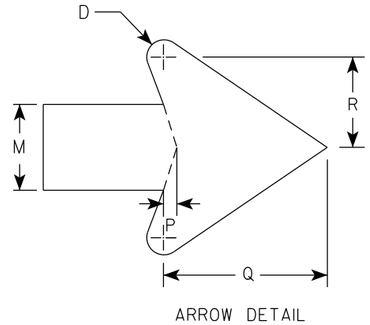
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - 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	Area sq. ft.
1																											
2S	30	18	1 3/8	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 3/8	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 3/8	1/2	5/8	5	14	3 1/2	9 3/4		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 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

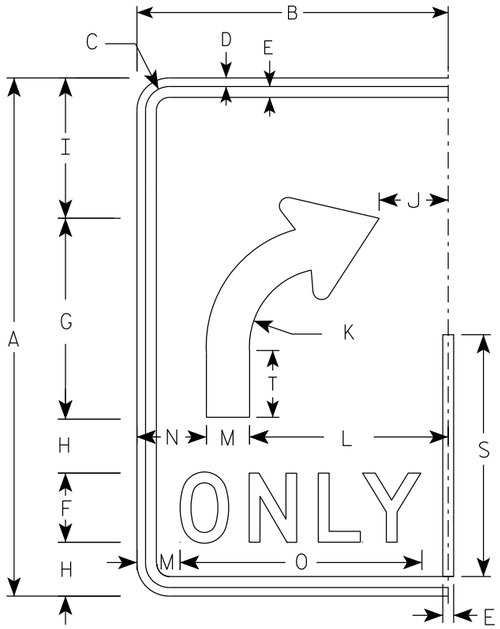
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

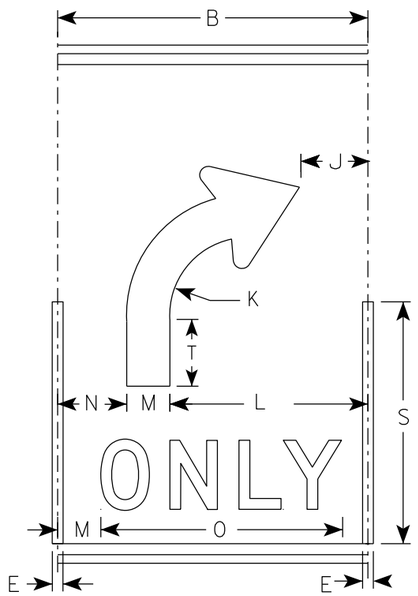
SHEET NO: 572 E

NOTES

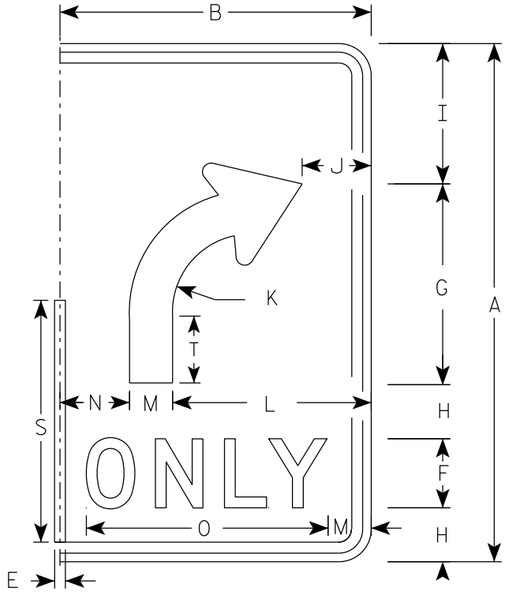
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



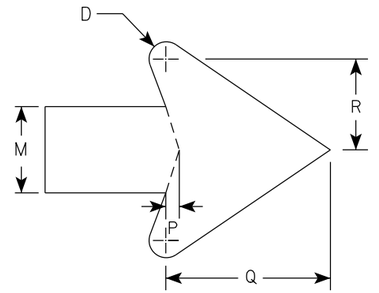
(R)



(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 3/8	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 3/8	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 3/8	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

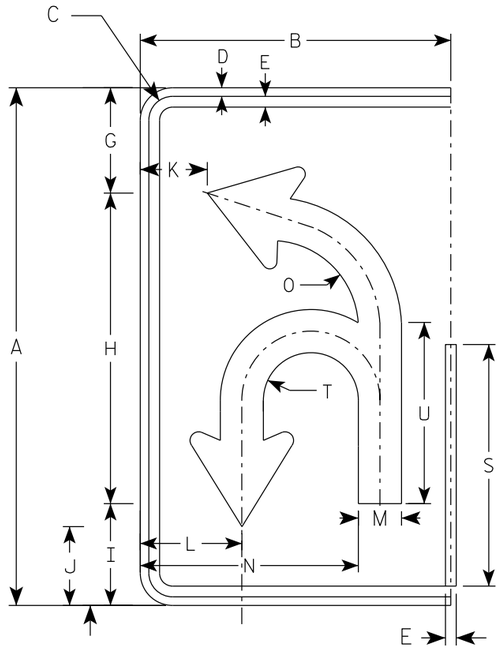
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

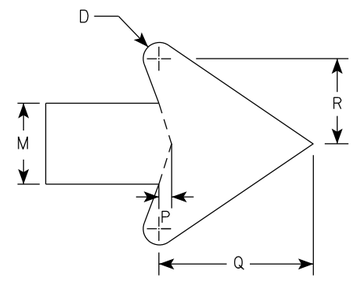
SHEET NO: 573 **E**

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(U)



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 3/8	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 3/8	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 3/8	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

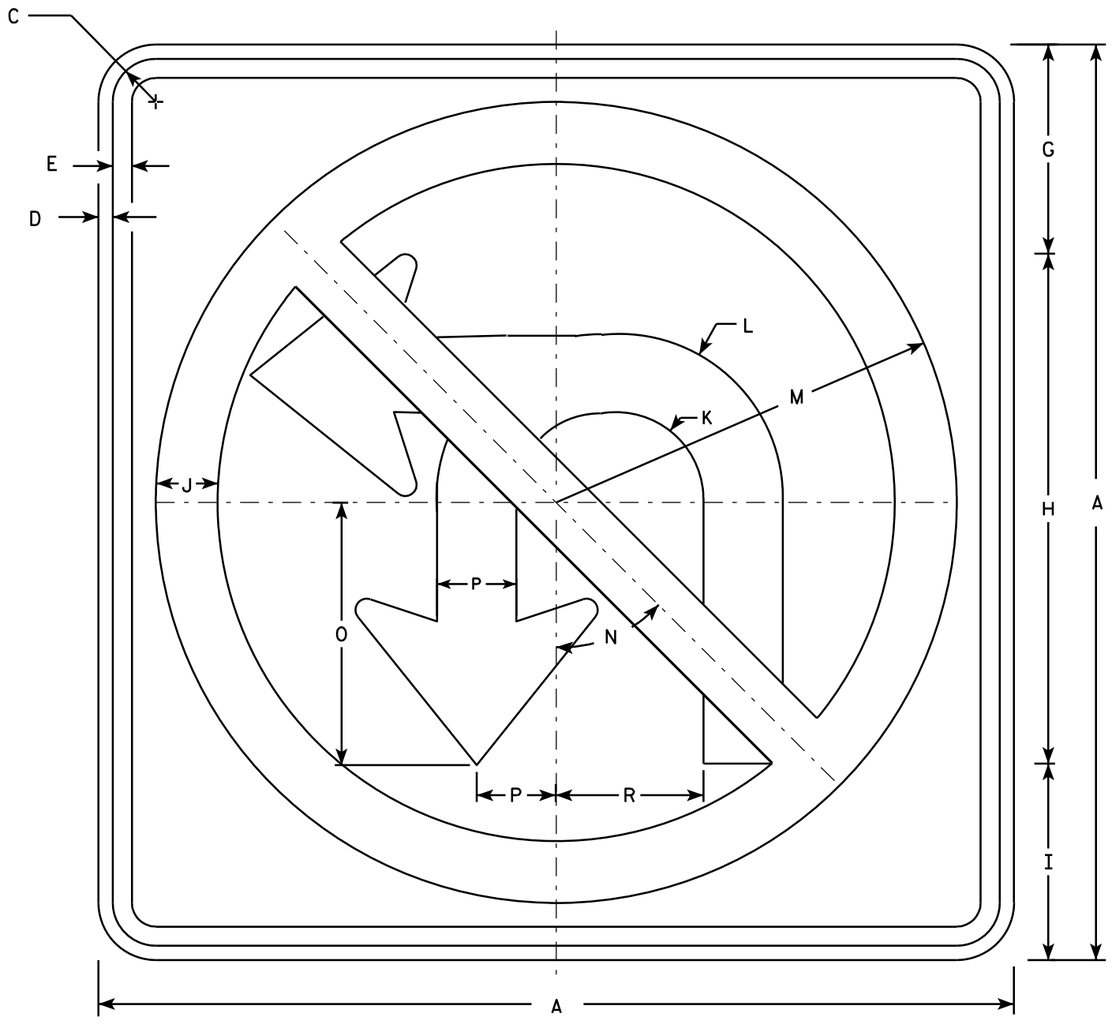
STANDARD SIGN
R3-8 (U) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 574 | E



R3-18

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		5 1/2	13 3/8	5 1/8	1 5/8	2 1/4	4 1/4	10 1/2	45°	6 7/8	2 1/8		3 7/8									4.0
2M	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45°	10 3/8	3 1/8		5 3/4									9.0
3	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45	10 3/8	3 1/8		5 3/4									9.0
4	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45	10 3/8	3 1/8		5 3/4									9.0
5	48		2 1/4	3/4	1		11	26 3/4	10 1/4	3 1/4	4 5/8	8 5/8	21	45°	13 3/4	4 1/8		7 3/4									16.0

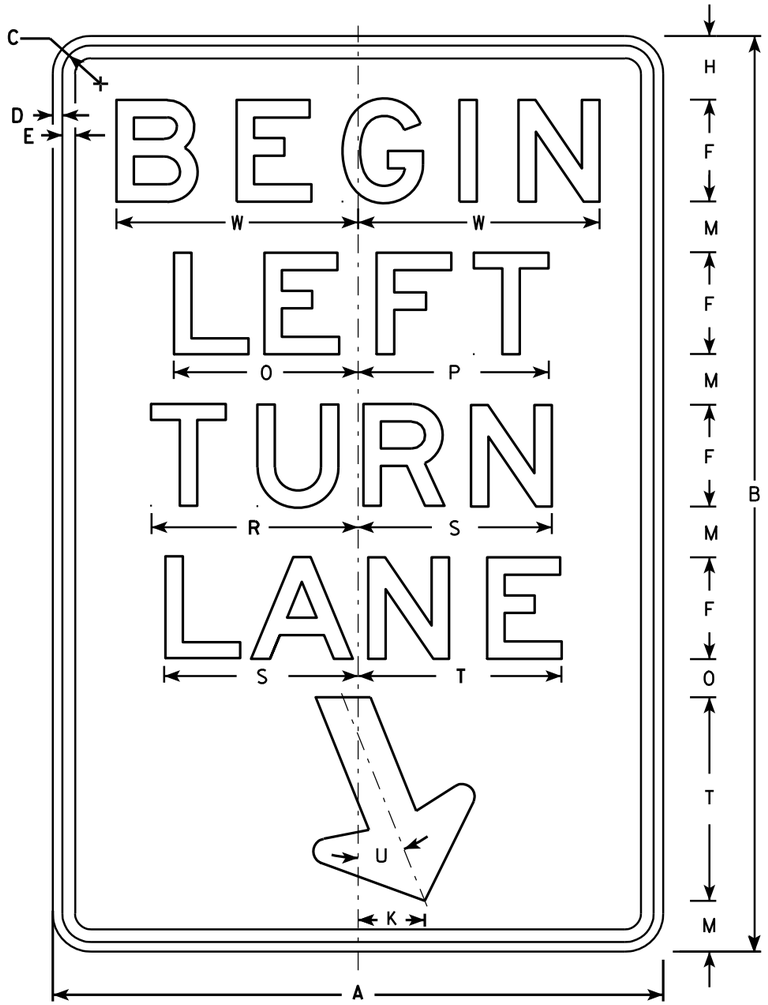
STANDARD SIGN
R3-18

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/10 PLATE NO. R3-18.2

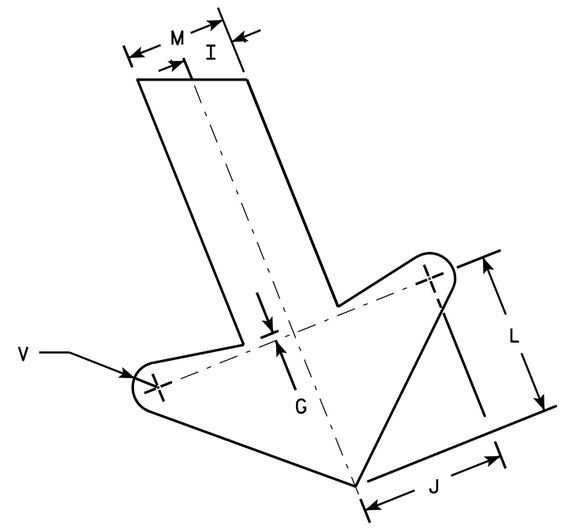
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 575	E



R3-20L

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

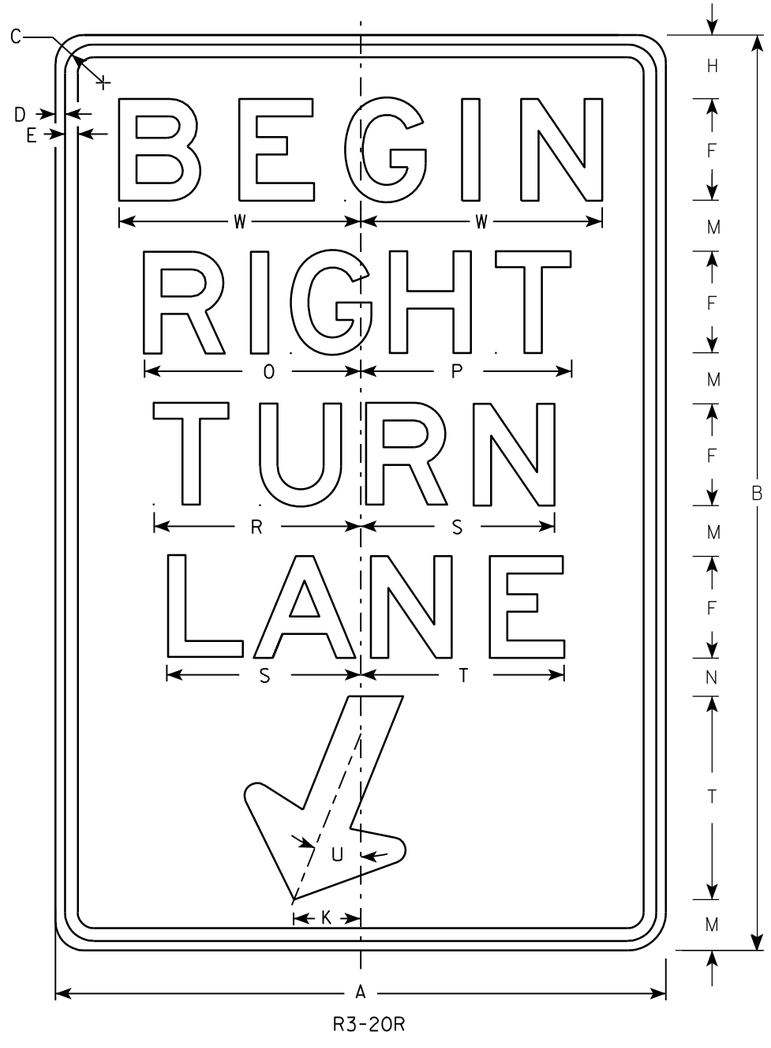
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

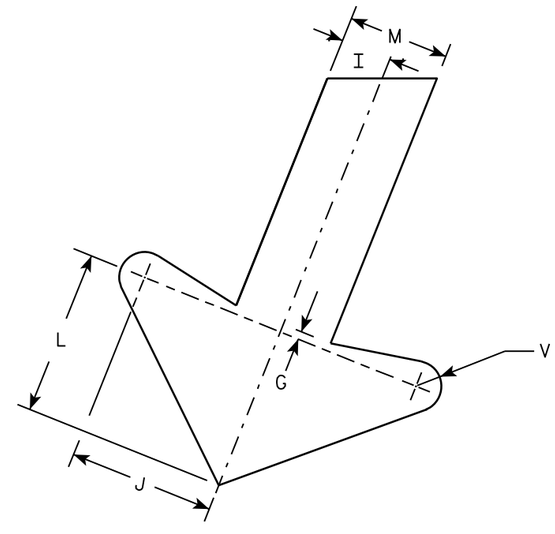
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 576 | E



R3-20R

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

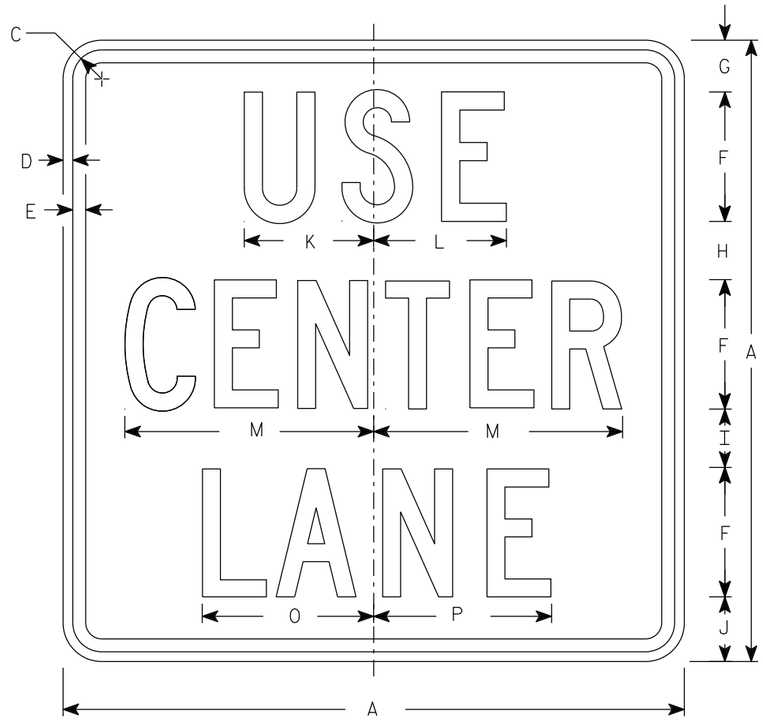
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

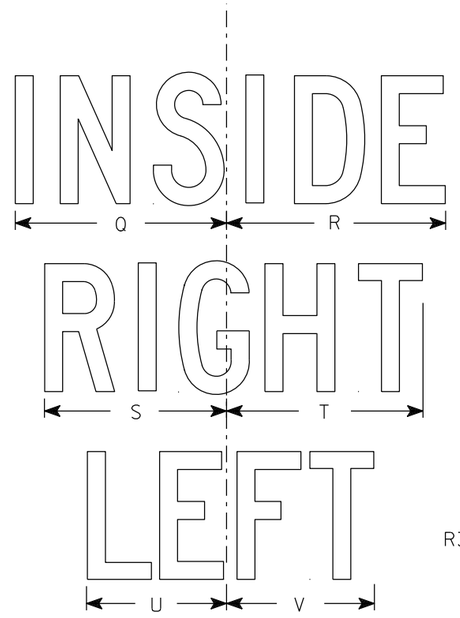
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 577 | E



R3-54C

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R3-54I

R3-54R

R3-54L

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

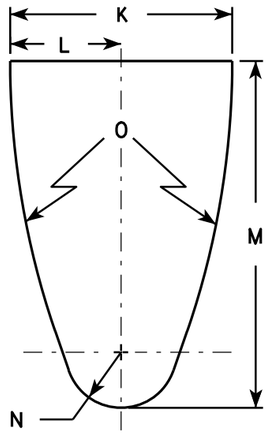
STANDARD SIGN
R3-54C, I ,L & R

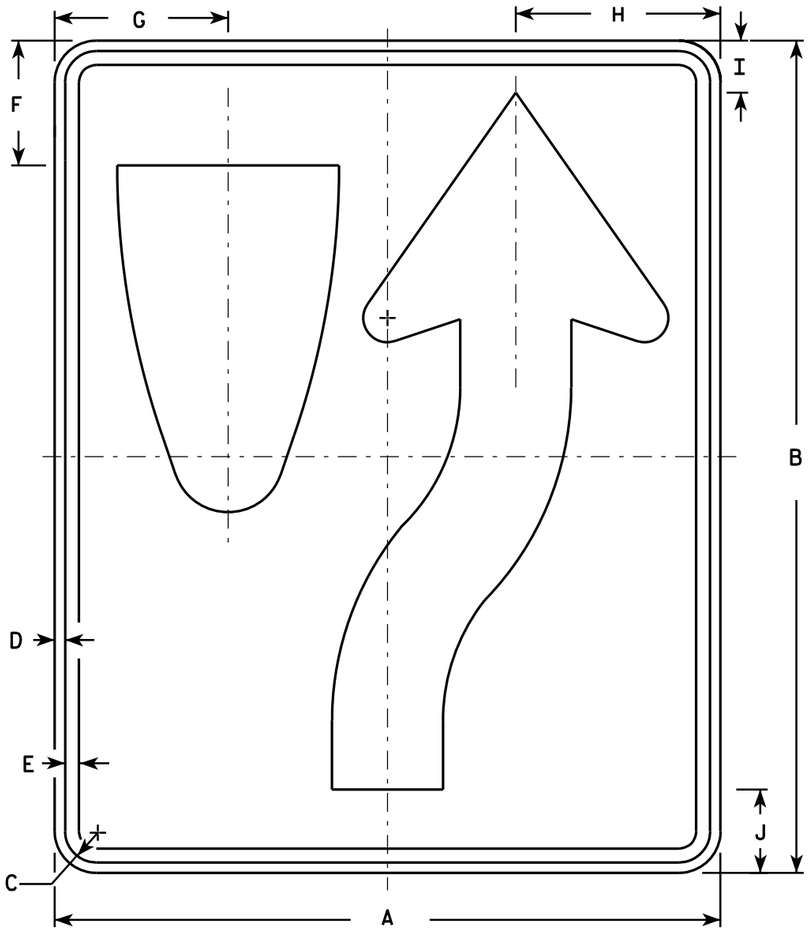
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/21 PLATE NO. R3-54.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 578 | E

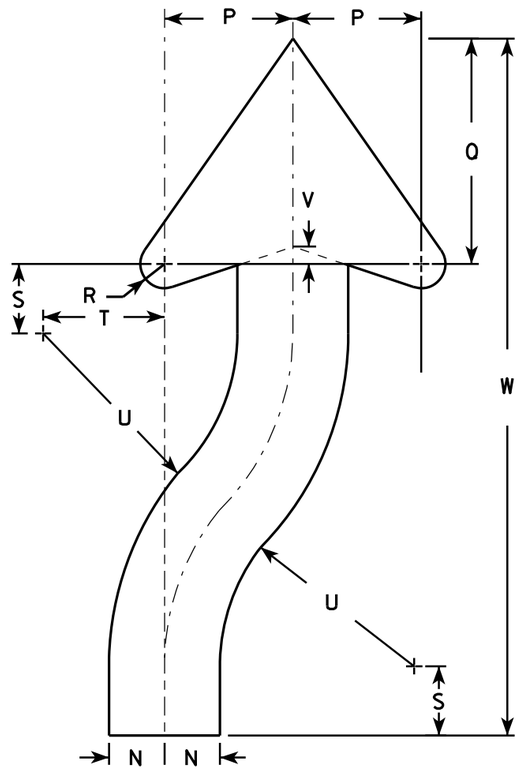




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

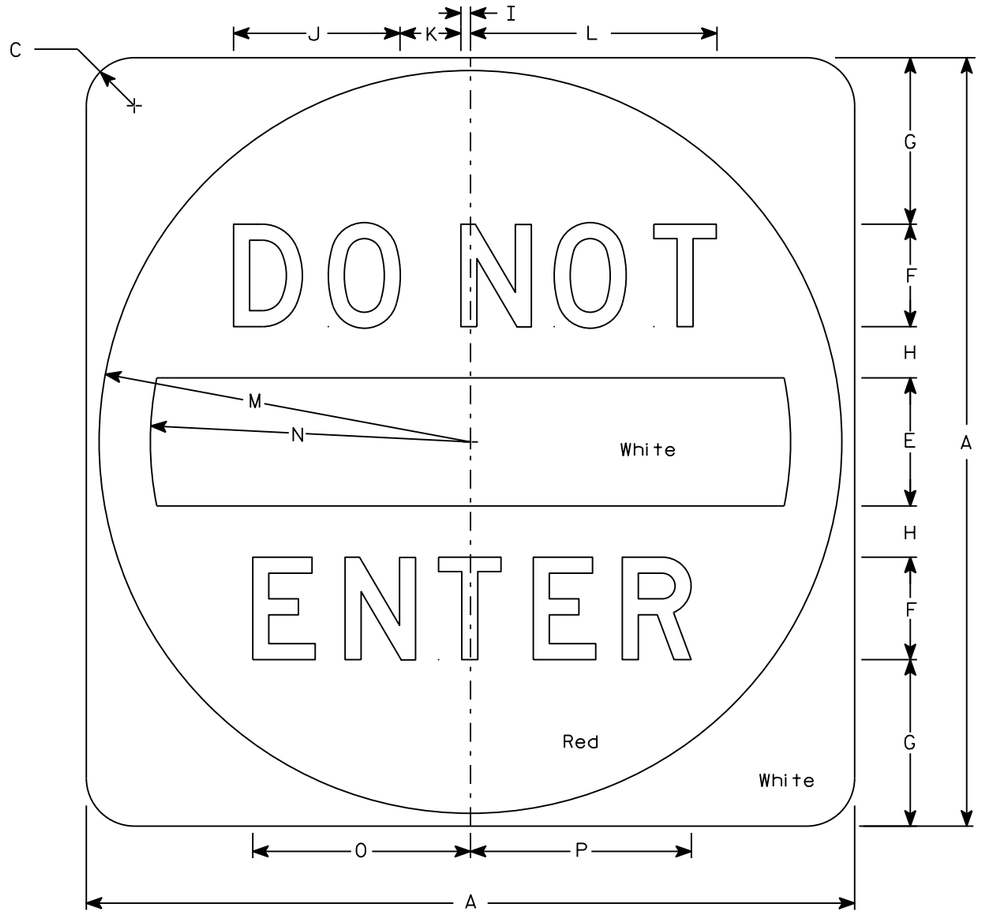
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 579	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

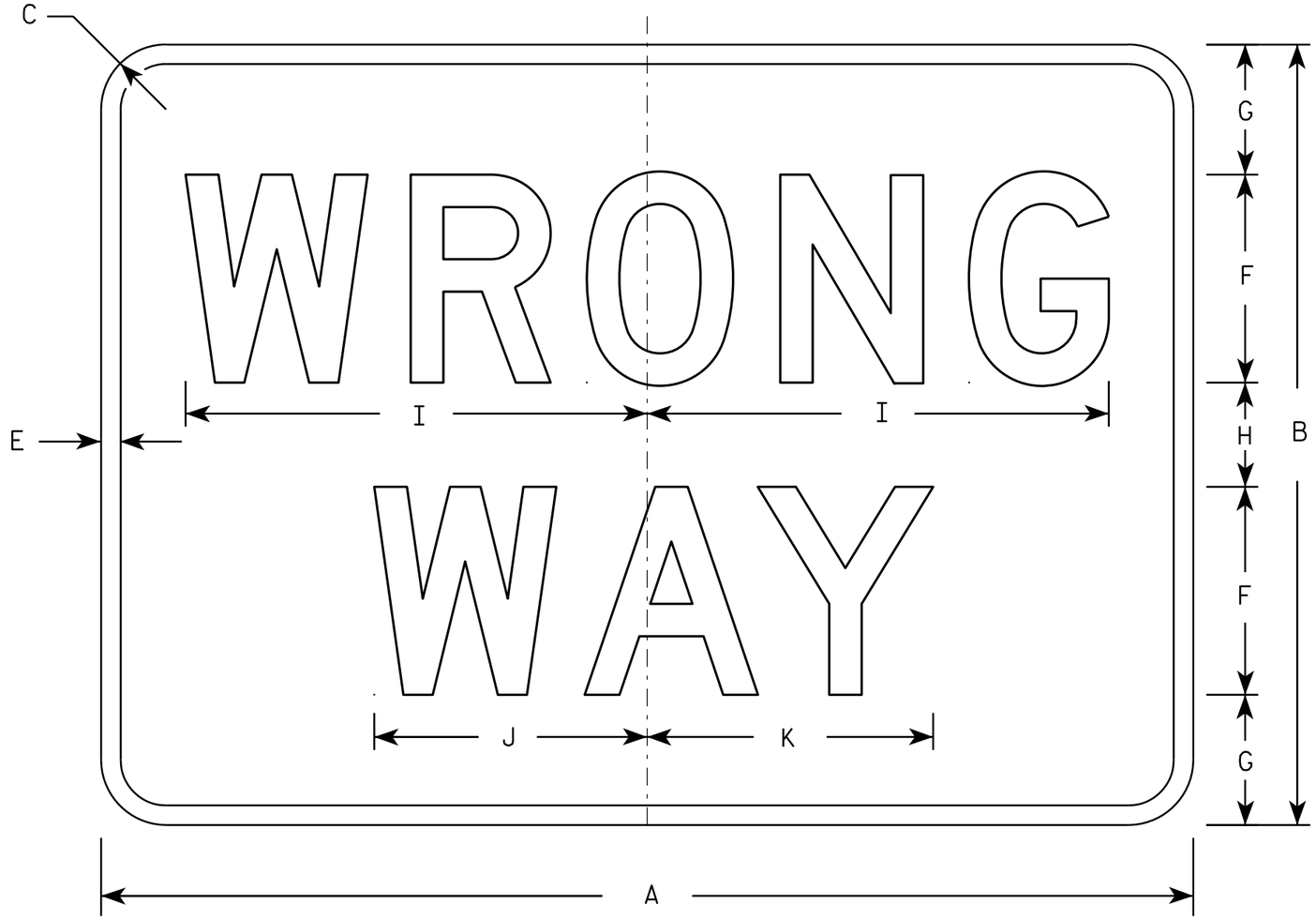
STANDARD SIGN
R5-1

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: 580 | E



R5-1A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

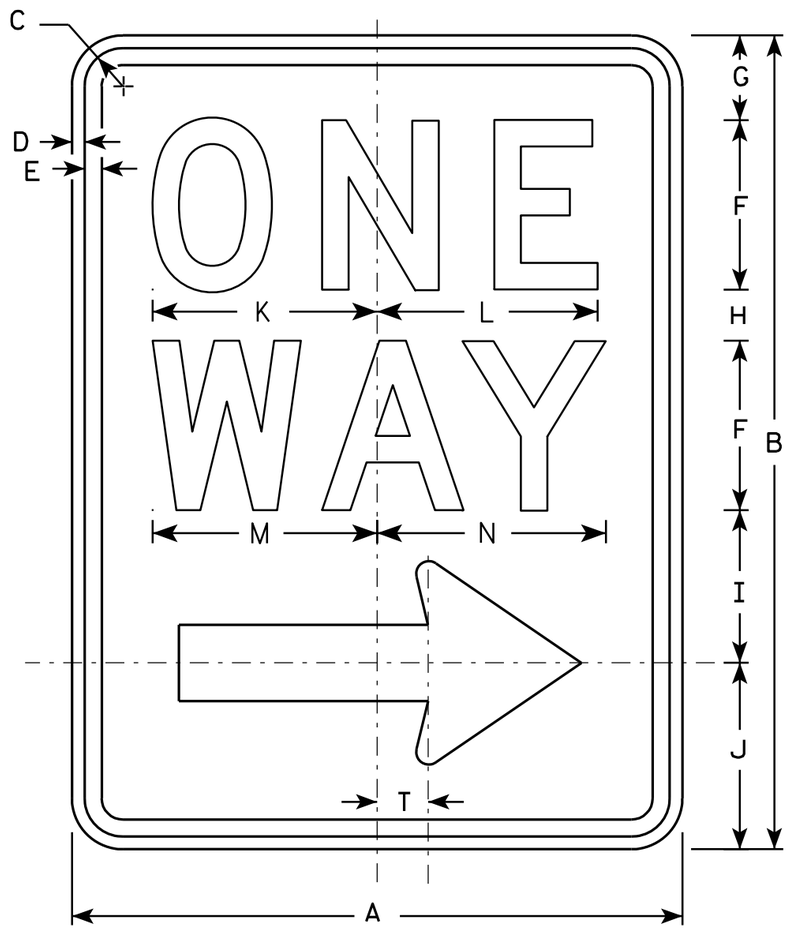
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

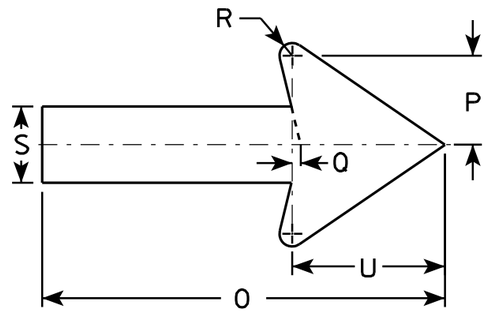
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 581 | E



R6-2R

NOTES

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



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

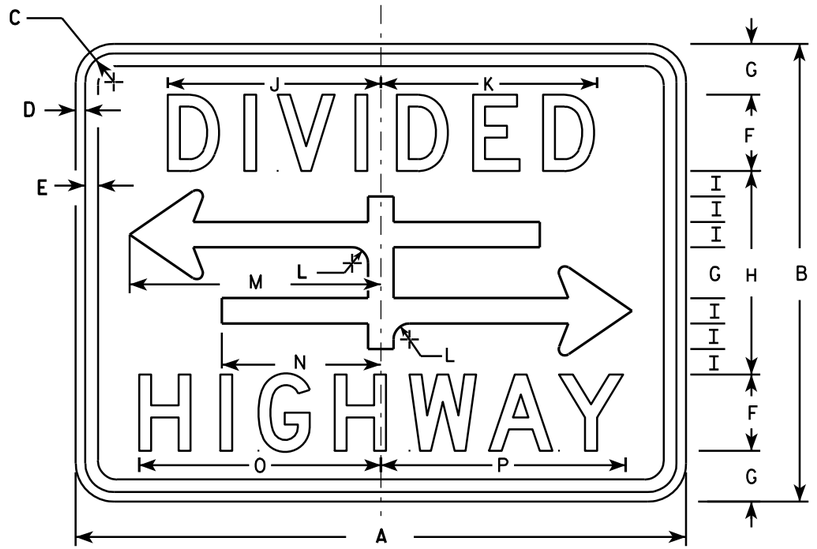
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

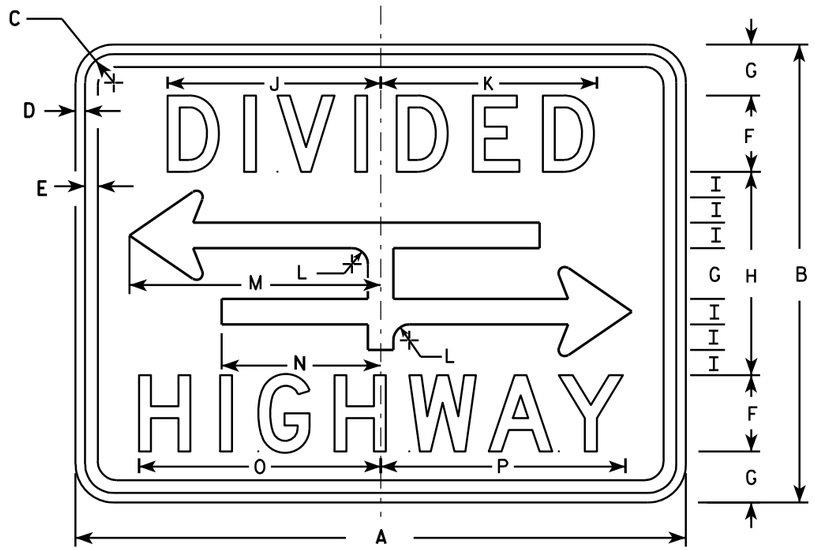
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 582	E



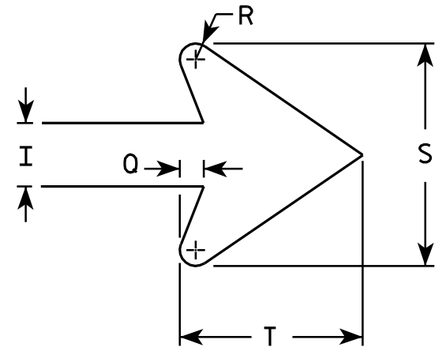
R6-3

NOTES

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



R6-3A



ARROW DETAIL

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

STANDARD SIGN
R6-3 & R6-3A

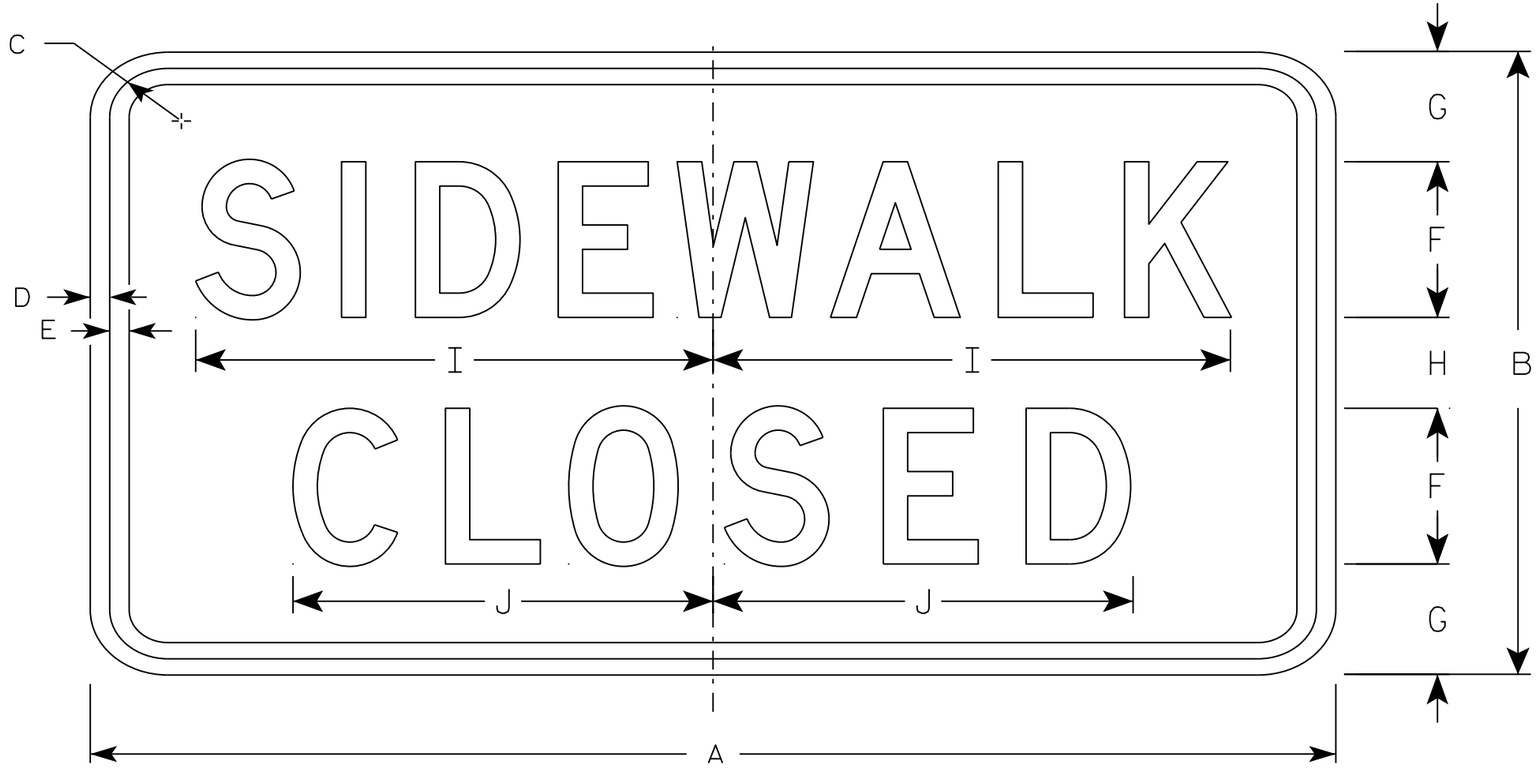
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 583 E



R9-9

NOTES

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

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

STANDARD SIGN
R9-9

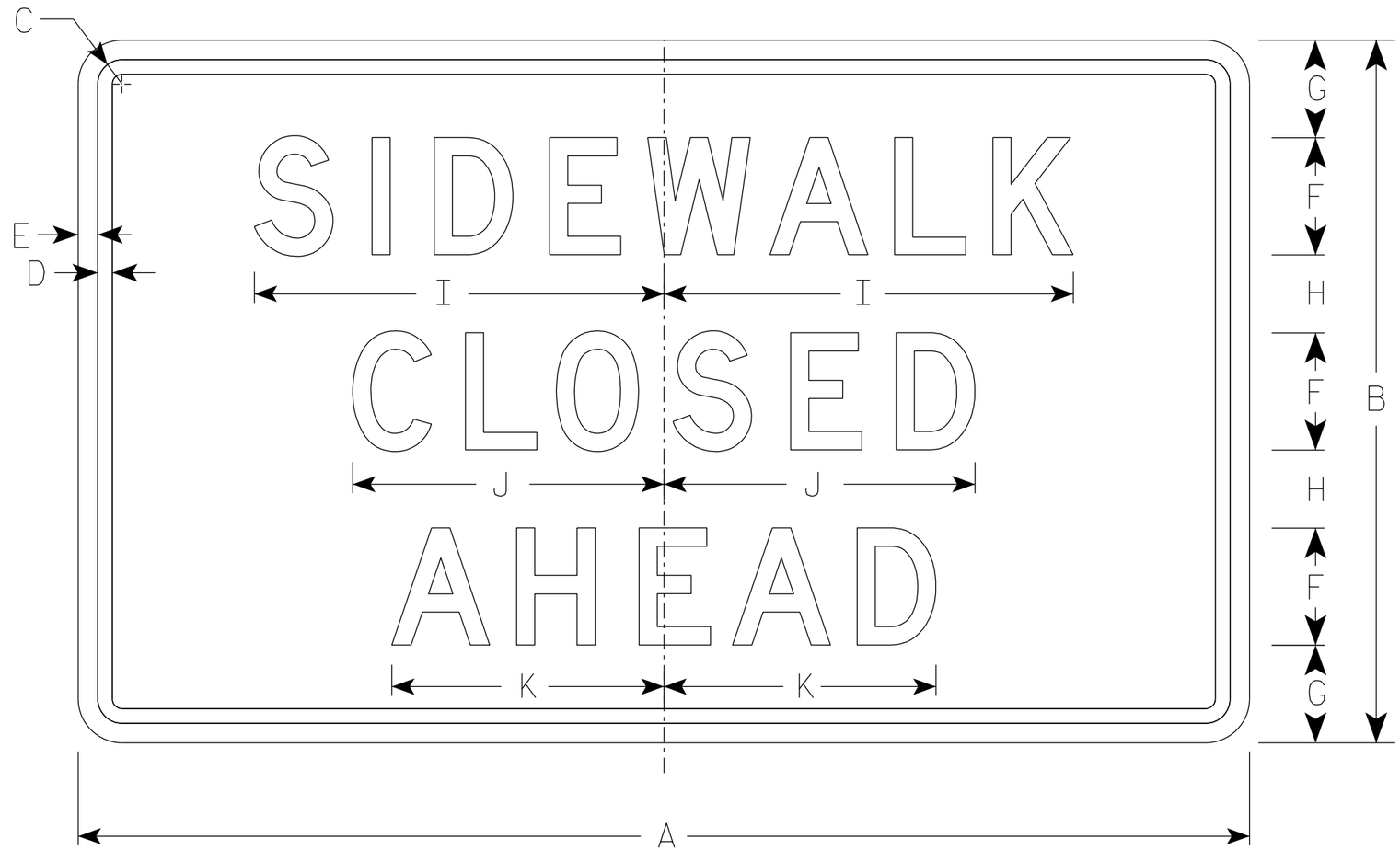
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 584 R9-9.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R9-9A

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.

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 1/8	3/8	1/2	3	2 1/2	2	10 1/2	8	7																3.75
2M	30	18	1 1/8	3/8	1/2	3	2 1/2	2	10 1/2	8	7																3.75
3																											
4																											
5																											

STANDARD SIGN
R9-9A

WISCONSIN DEPT OF TRANSPORTATION

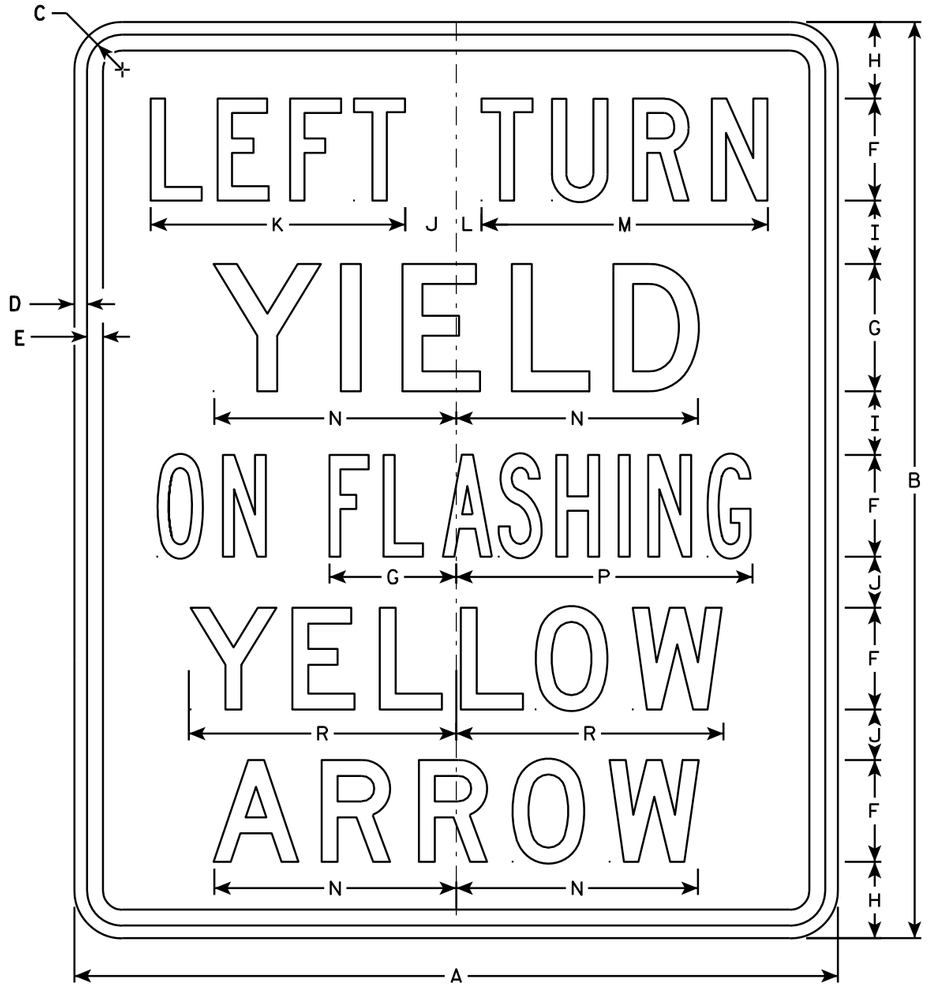
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/31/2020 PLATE NO. R9-9A.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 585 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R99A.DGN PLOT DATE : 31-AUG-2020 3:26 PLOT BY : dotc4c PLOT SCALE : $$.....plotscale.....$$

7

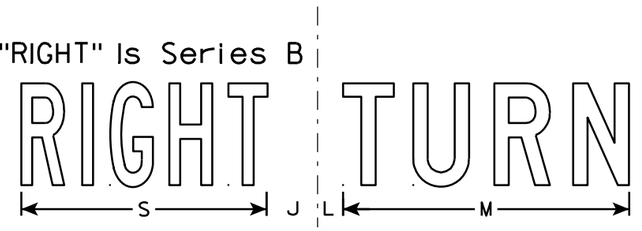


R10-50L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series C.
   Lines 2, 4 and 5 are Series D.
   Line 3 is Series B.

"RIGHT" Is Series B



R10-50R

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
2M	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
3																											
4																											
5																											

STANDARD SIGN
R10-50

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/11/13 PLATE NO. R10-50.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 586	E



R10-71



R10-71L

NOTES

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



R10-71R

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	R10-71L&R Area sq. ft.	R10-71 Area sq. ft.
1																												
2S	72	36	2 1/4	3/4	1	18	5	4	6	20 5/8	11 3/4	9 1/8	8 1/2	12 7/8	9 7/8	16 1/8	23 7/8	30	5 5/8	26 3/4	66	23 5/8	8 3/4	13	26 7/8	27	18.0	16.5
2M	72	36	2 1/4	3/4	1	18	5	4	6	20 5/8	11 3/4	9 1/8	8 1/2	12 7/8	9 7/8	16 1/8	23 7/8	30	5 5/8	26 3/4	66	23 5/8	8 3/4	13	26 7/8	27	18.0	16.5
3																												
4																												
5																												

STANDARD SIGN
R10-71

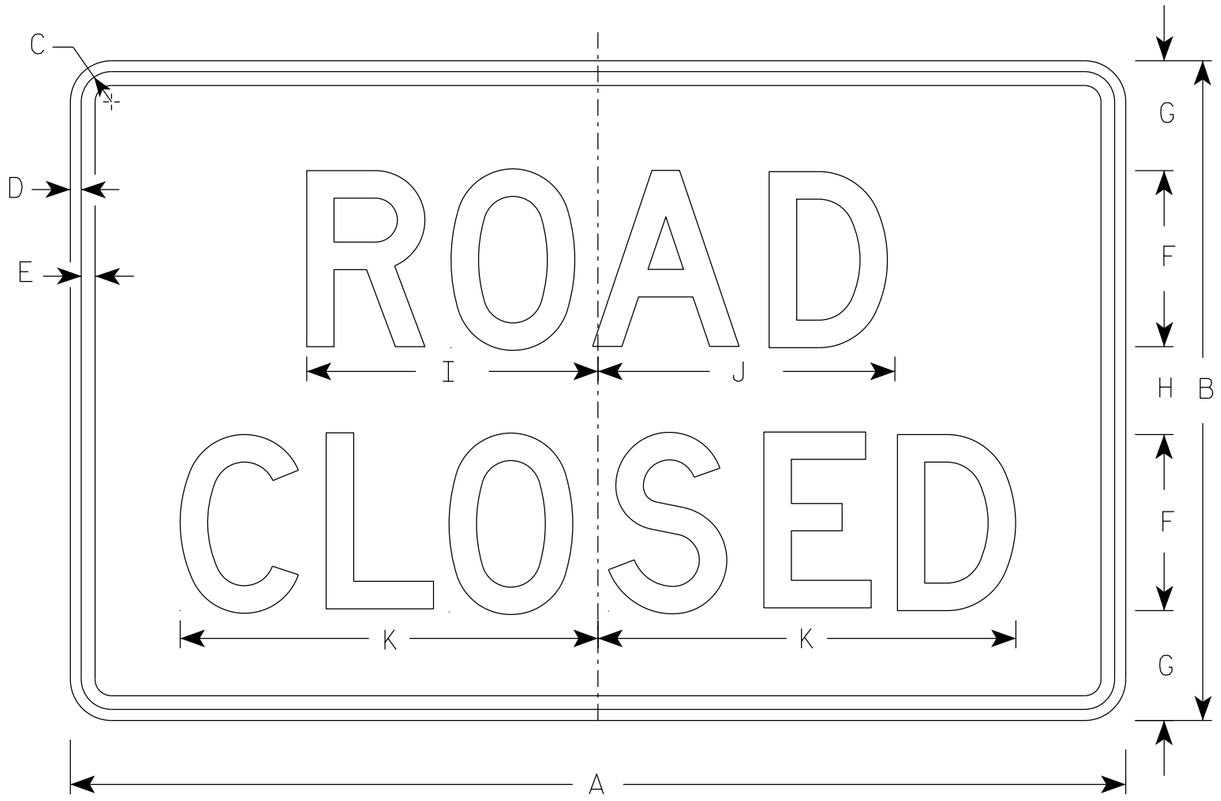
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/4/11 PLATE NO. R10-71.3

PROJECT NO:

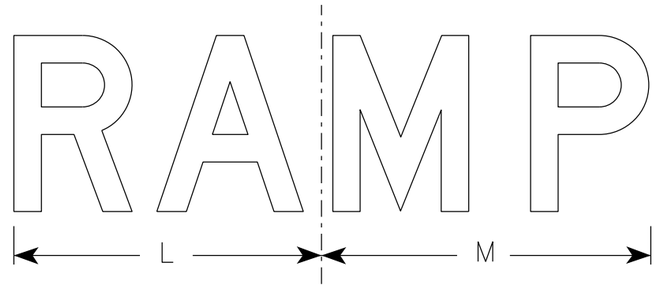
SHEET NO: 587 E



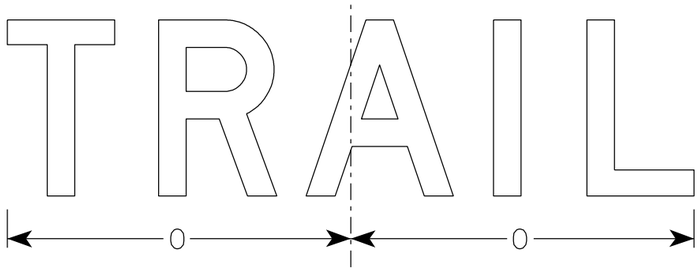
R11-2

NOTES

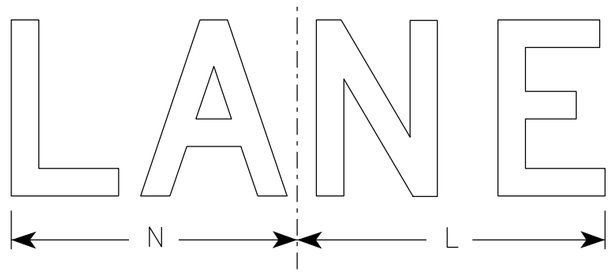
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the 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 3/8	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 3/8	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 3/8	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 3/8	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 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

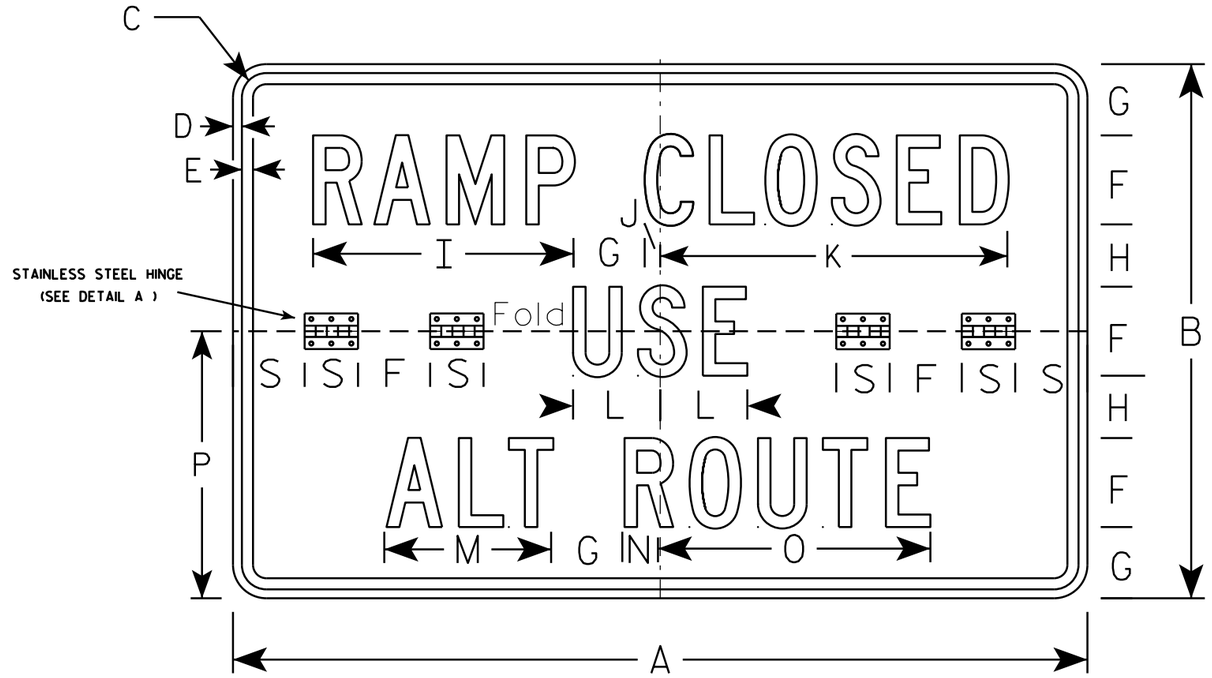
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

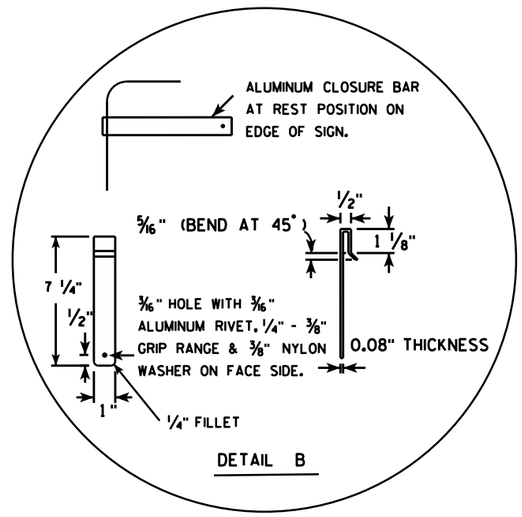
DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 588	E



R11-54F

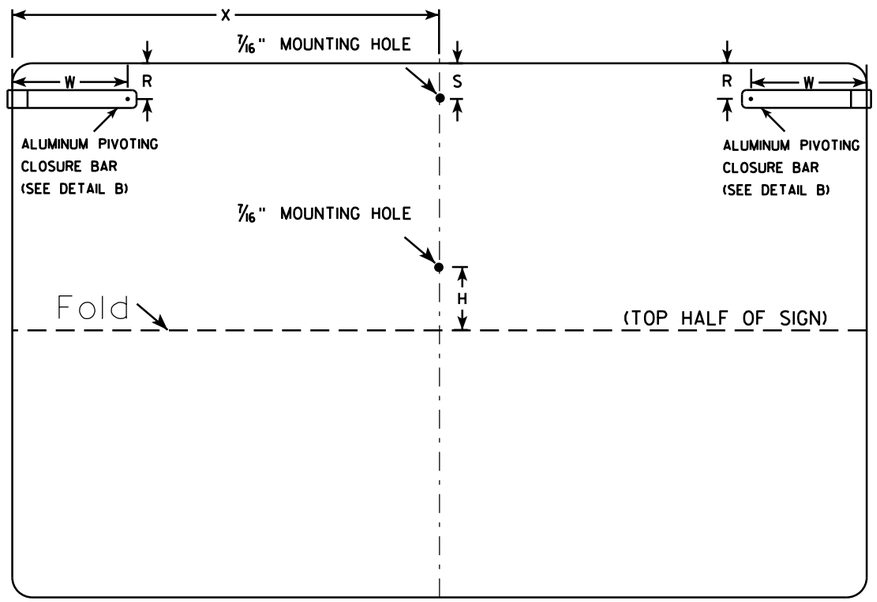
DETAIL A



DETAIL B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - C
4. Sign Base Material shall be aluminum, corners and borders shall be rounded.
5. All hardware used on the folding sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.
6. Refer to plate A5-3A for sign blank layout.



(BACK VIEW)

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	5	4	3 1/2	14 5/8	7/8	19 1/2	4 7/8	9 3/8	2	15 1/4	15		2	3	2 5/8	1 1/4	11/16	6 1/2	24			10.0
2M	48	30	1 3/8	1/2	5/8	5	4	3 1/2	14 5/8	7/8	19 1/2	4 7/8	9 3/8	2	15 1/4	15		2	3	2 5/8	1 1/4	11/16	6 1/2	24			10.0
3																											
4																											
5																											

STANDARD SIGN
R11-54F

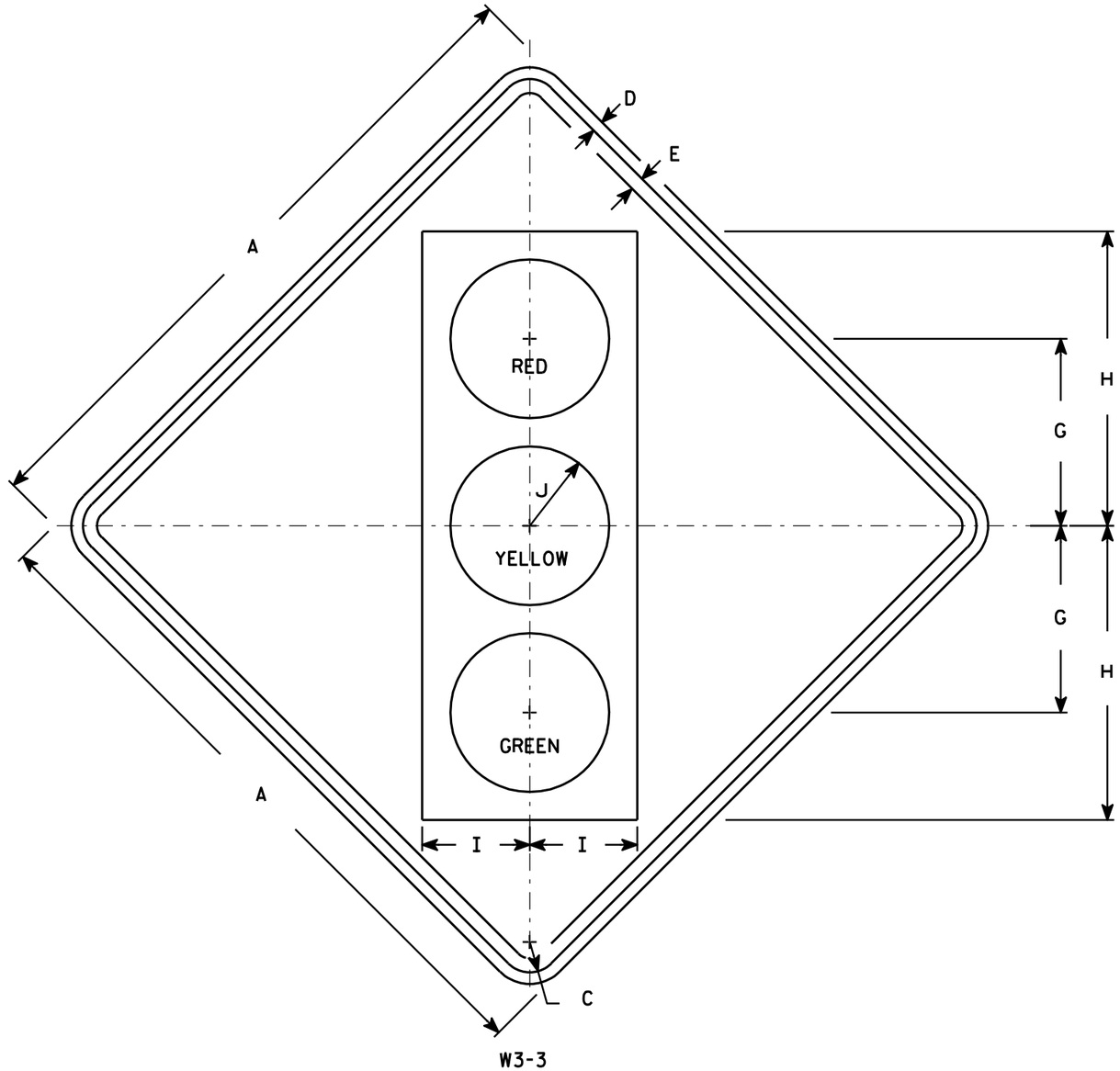
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/28/14 PLATE NO. R11-54F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R1154F.DGN PLOT DATE : 28-MAY-2014 14:15 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 8.511110:1.000000
WISDOT/CADDS SHEET 42



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

STANDARD SIGN
W3-3

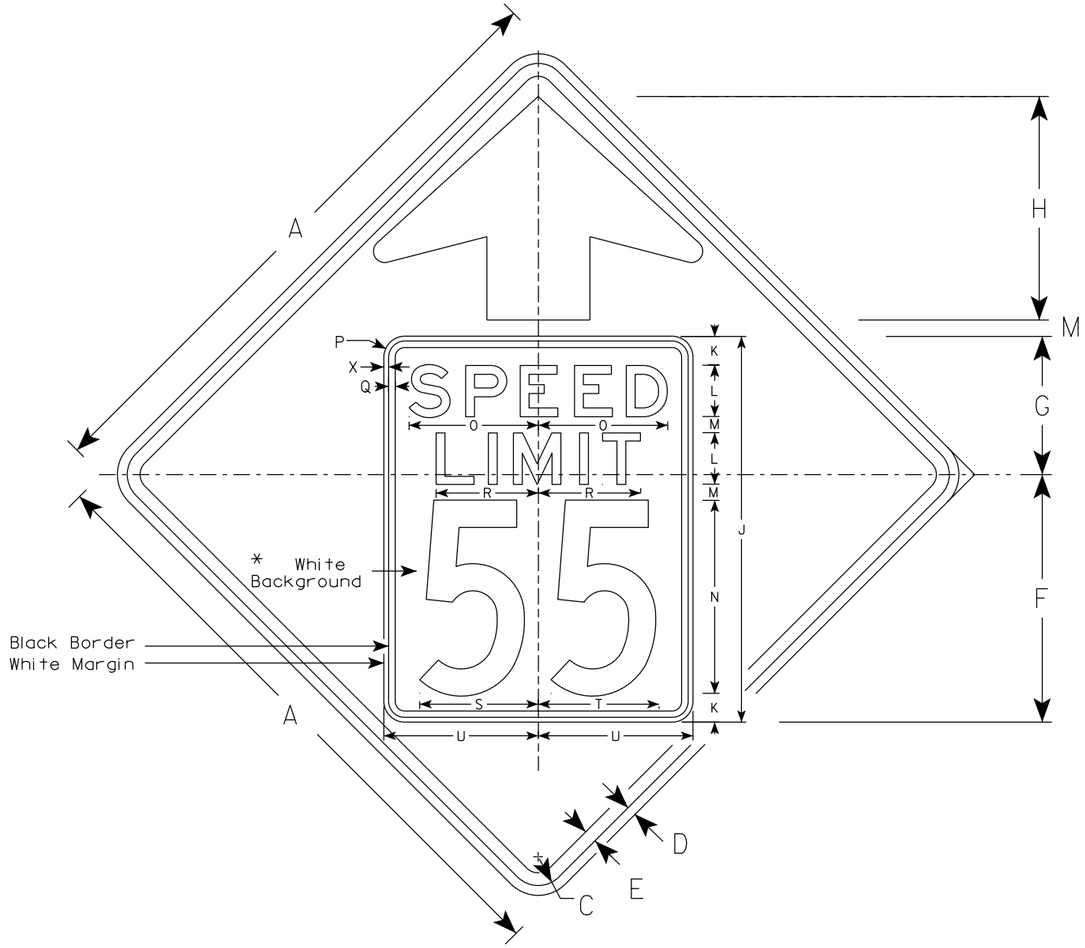
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 590 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W33.DGN PLOT DATE : 07-JUN-2010 13:07 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 7.448805:1.000000
WISDOT/CADDS SHEET 42

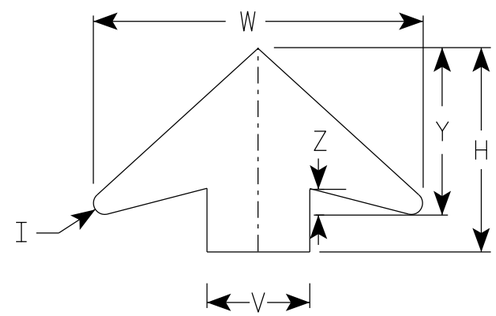


W3-5

NOTES

1. Sign is Type II - See Note 2 for Sheeting Type
2. Color: *
   Background - Yellow* (Type F Reflective)
   Message - Black
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background with black message (Type SH Reflective)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2M	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
3	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W3-5

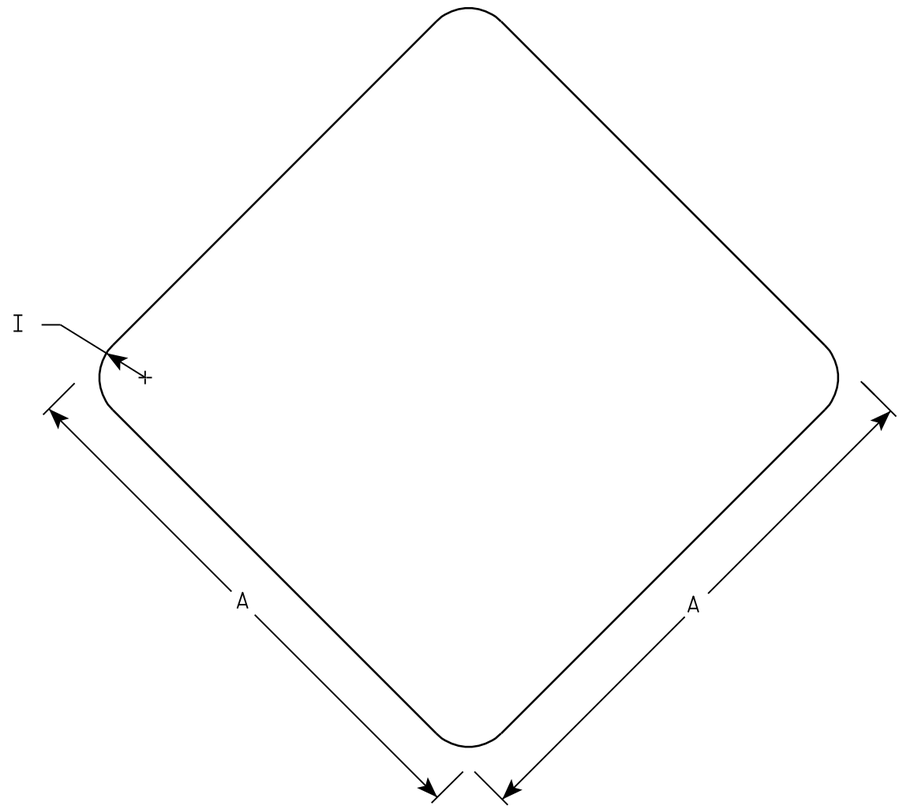
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew L Rauch
for State Traffic Engineer

DATE 7/27/2020 PLATE NO. W3-5.6

PROJECT NO:

SHEET NO: 591 E



W5-54

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners 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	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

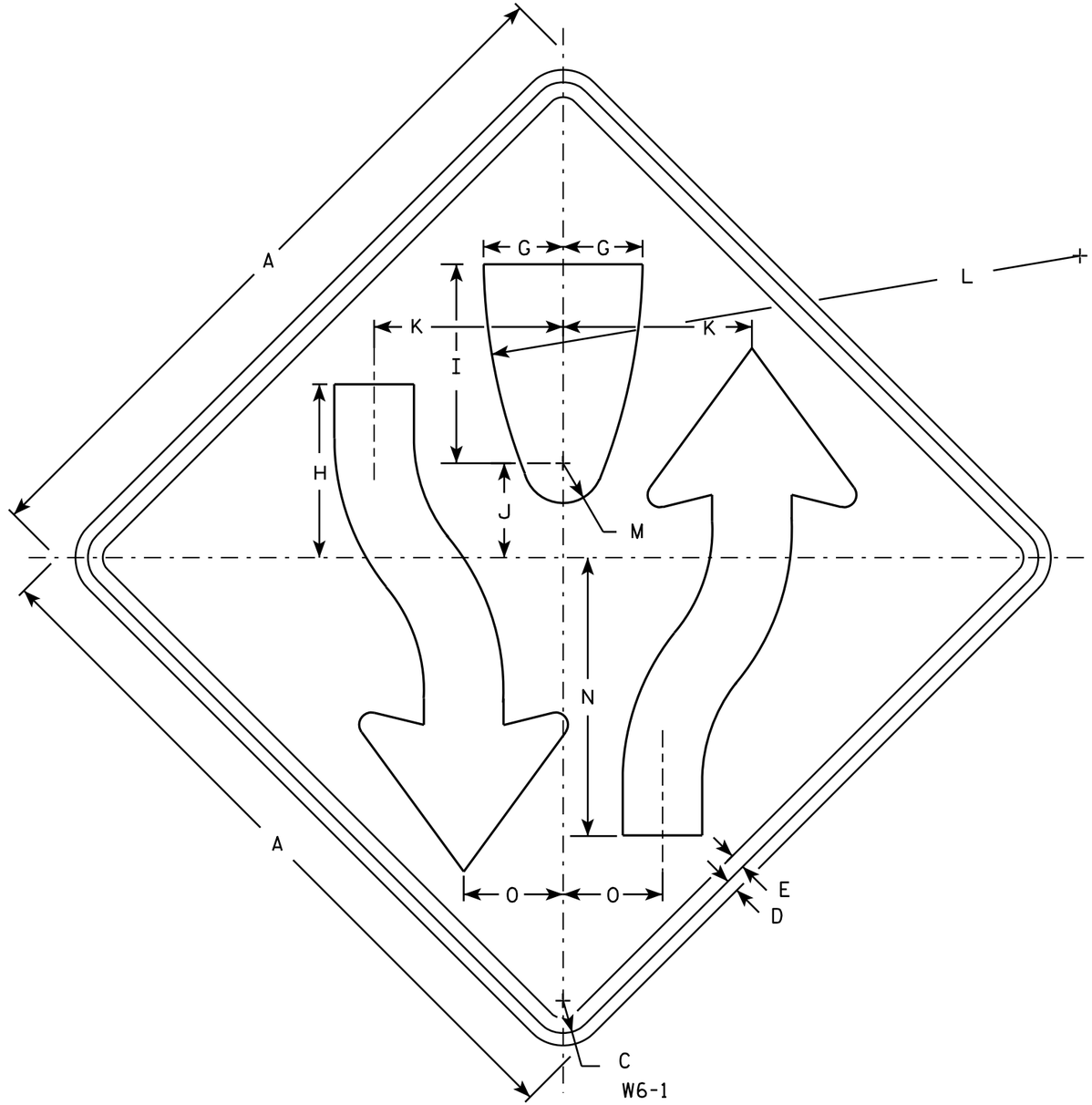
STANDARD SIGN
W5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

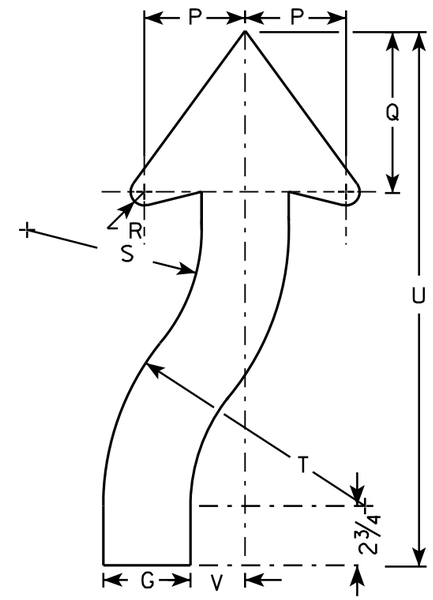
DATE 11/3/10 PLATE NO. W5-54.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 592 | E



NOTES

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



ARROW DETAIL

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

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

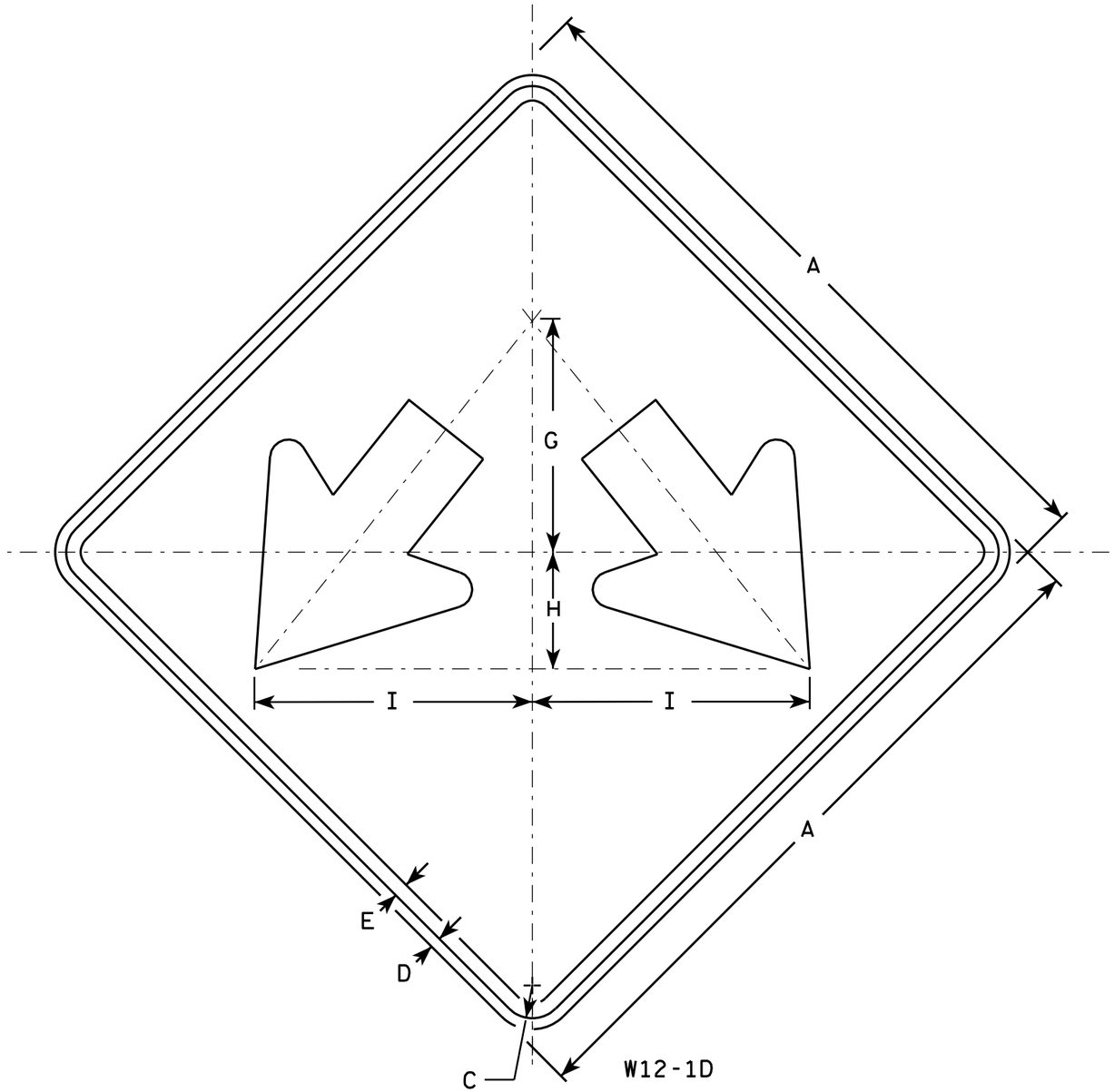
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 593 | E

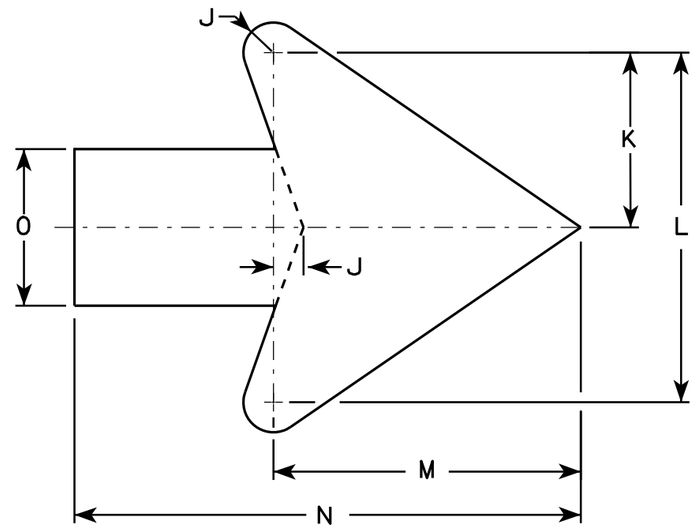
7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000
WISDOT/CADDS SHEET 42



NOTES

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



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

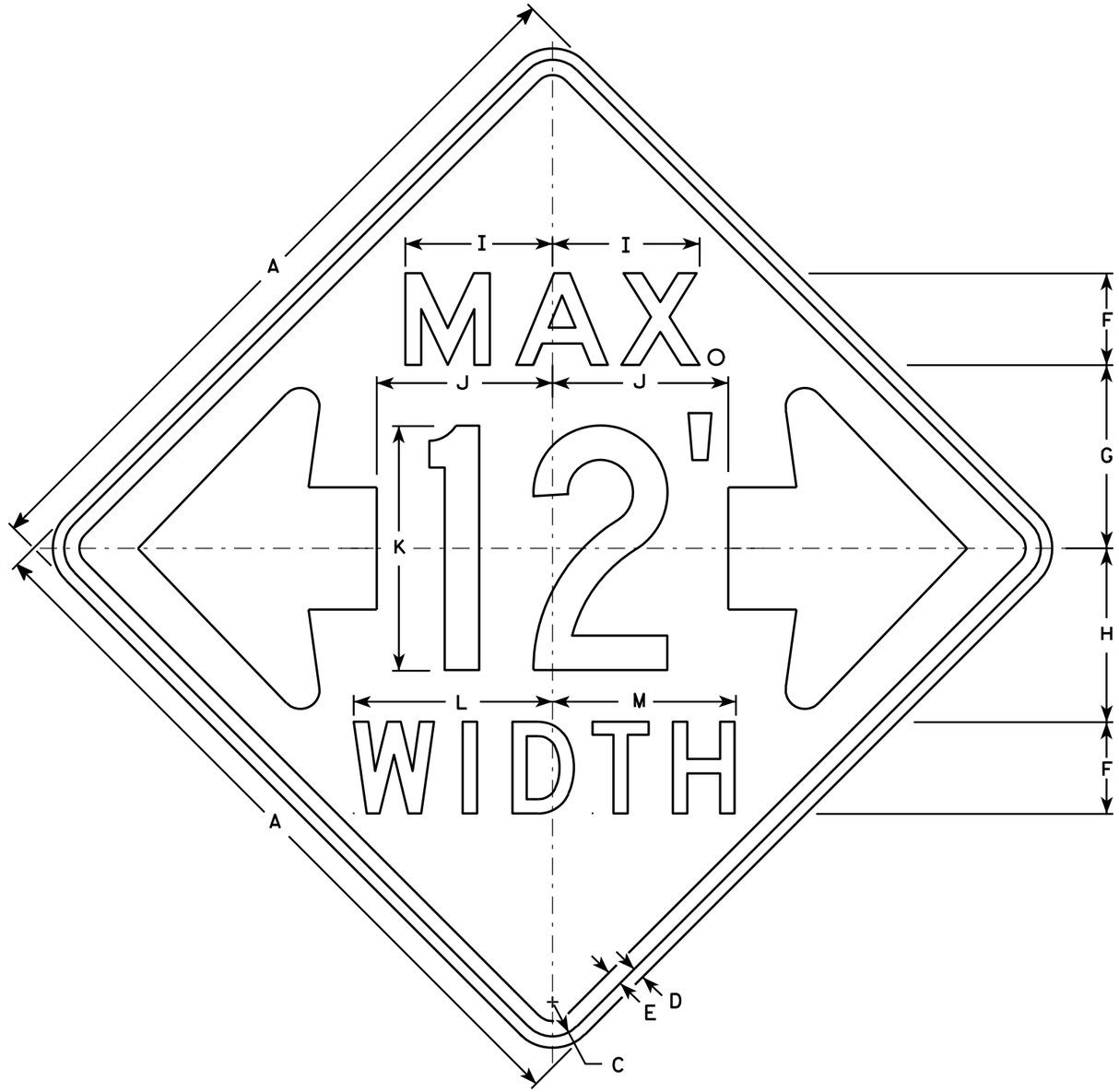
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

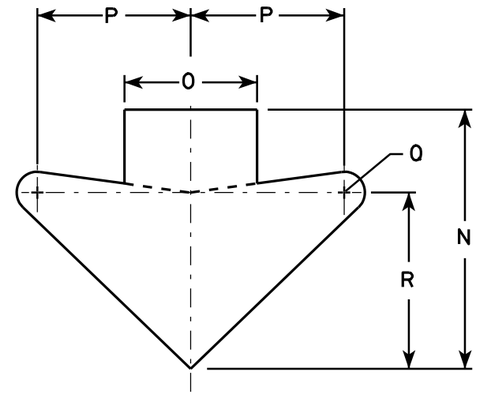
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 594	E



W12-52

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

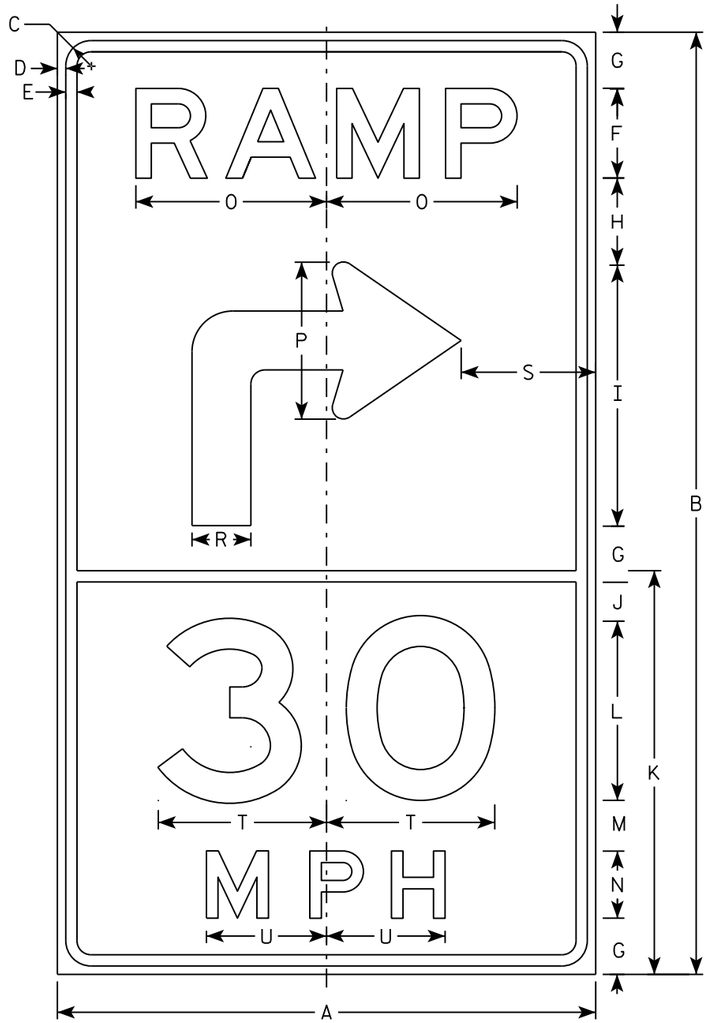
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 595 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W1252.DGN PLOT DATE : 16-MAR-2011 14:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.137199:1.000000



W13-3D

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - E
4. Substitute appropriate numeral and optically center.
5. For use with ramp speeds of 30 MPH or less.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	60	1 5/8	3/4	5/8	6	3 1/2	4 1/2	17 1/2	3 1/2	25 3/4	10	3	5	12 3/4	10 1/2		4	9	10	8 1/2						15.0
2M	36	60	1 5/8	3/4	5/8	6	3 1/2	4 1/2	17 1/2	3 1/2	25 3/4	10	3	5	12 3/4	10 1/2		4	9	10	8 1/2						15.0
3	36	60	1 5/8	3/4	5/8	6	3 1/2	4 1/2	17 1/2	3 1/2	25 3/4	10	3	5	12 3/4	10 1/2		4	9	10	8 1/2						15.0
4	48	84	2 1/4	3/4	1	8	7 1/4	7	23 1/4	3 1/2	36	16	4 1/2	6	17	14		5 1/4	12	15	10 3/4						28.0
5	48	84	2 1/4	3/4	1	8	7 1/4	7	23 1/4	3 1/2	36	16	4 1/2	6	17	14		5 1/4	12	15	10 3/4						28.0

STANDARD SIGN
W13-3D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

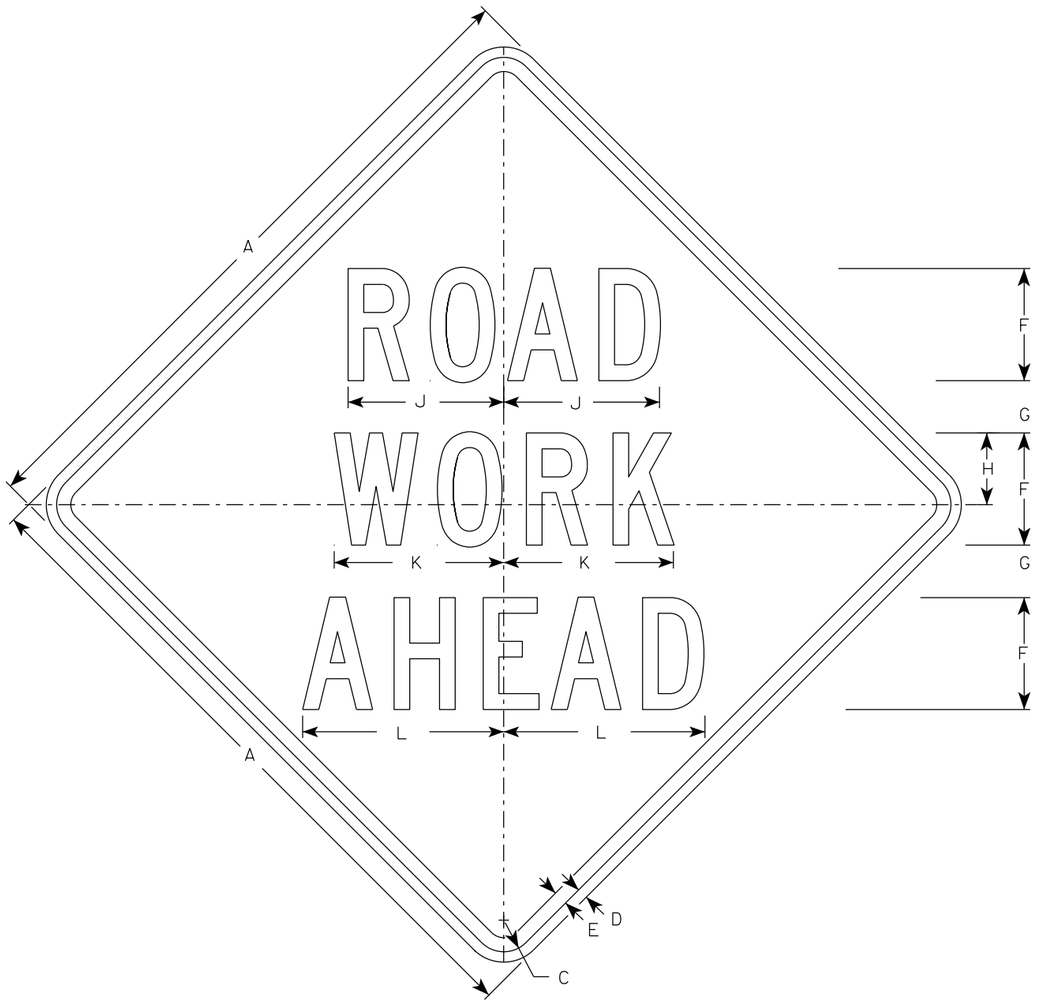
DATE 8/1/16 PLATE NO W13-3D.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

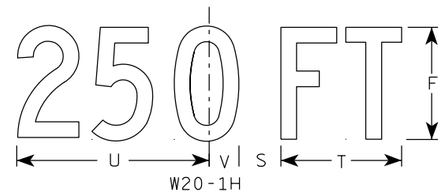
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W133D.DGN PLOT DATE : 01-AUG-2016 11:34 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 13.506629:1.000000

NOTES

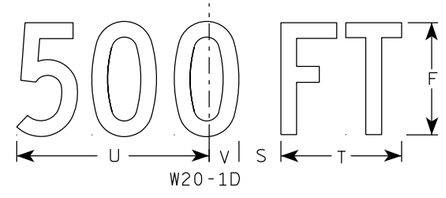
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1A



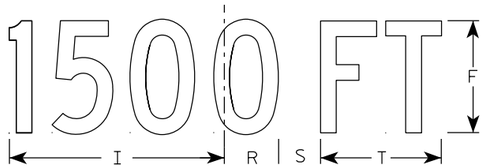
W20-1H



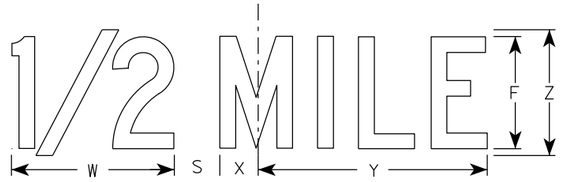
W20-1D



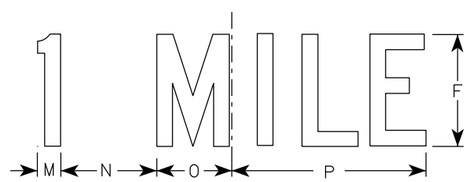
W20-1C



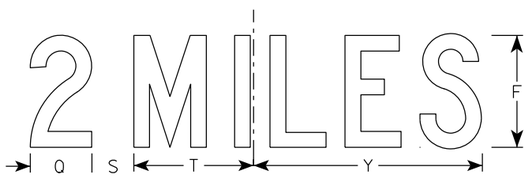
W20-1B



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		1 5/8	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		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

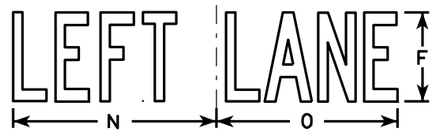
WISDOT/CADDS SHEET 42

7

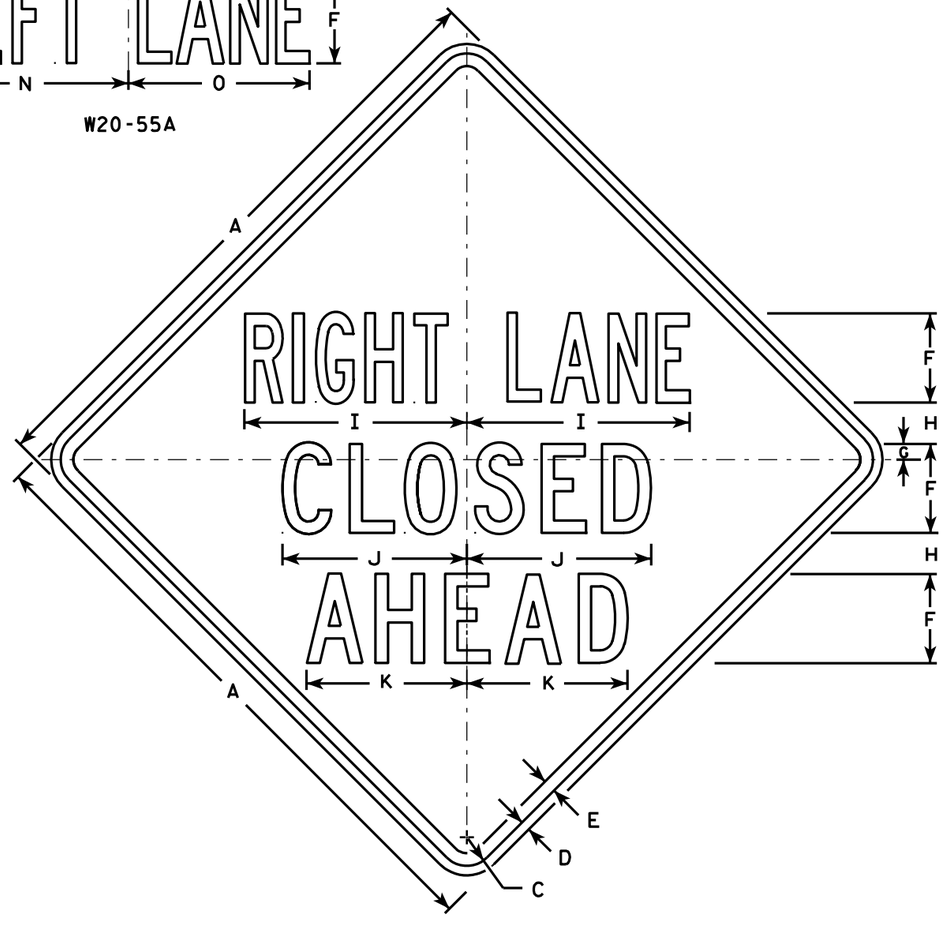
7



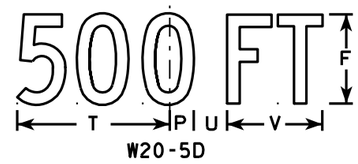
W20-56A



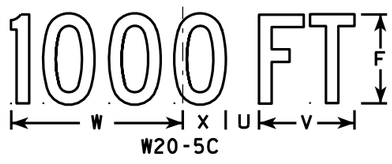
W20-55A



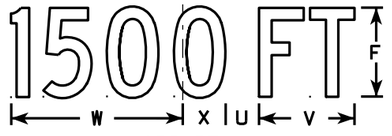
W20-5A



W20-5D



W20-5C



W20-5B



W20-5G



W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

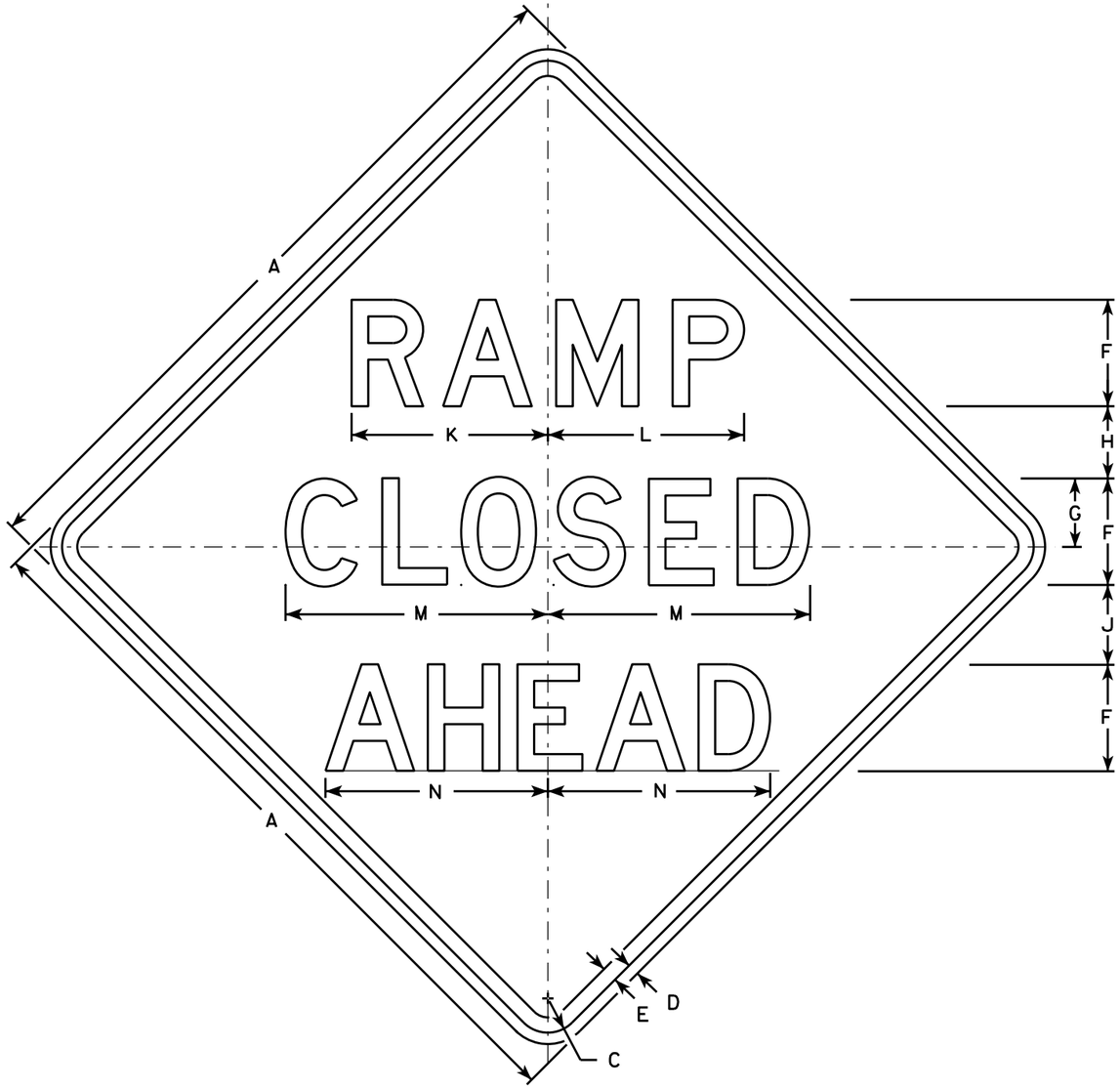
DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 598	E

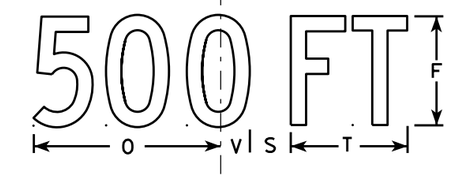
7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000

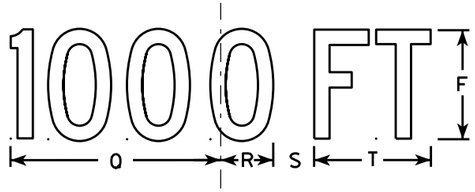
WISDOT/CADDS SHEET 42



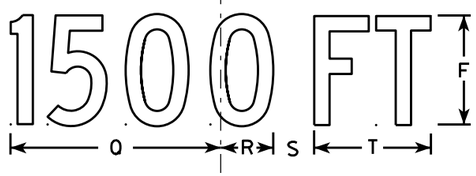
W20-53A



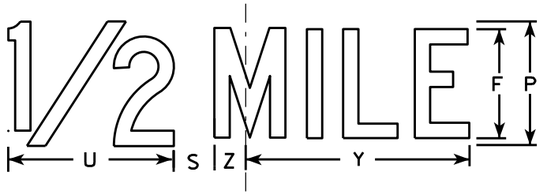
W20-53D



W20-53C



W20-53B



W20-53G



W20-53F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. 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		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	9 1/4	9 1/4	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		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	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		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	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		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	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		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	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		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	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
W20-53A,B,C,D,F,G

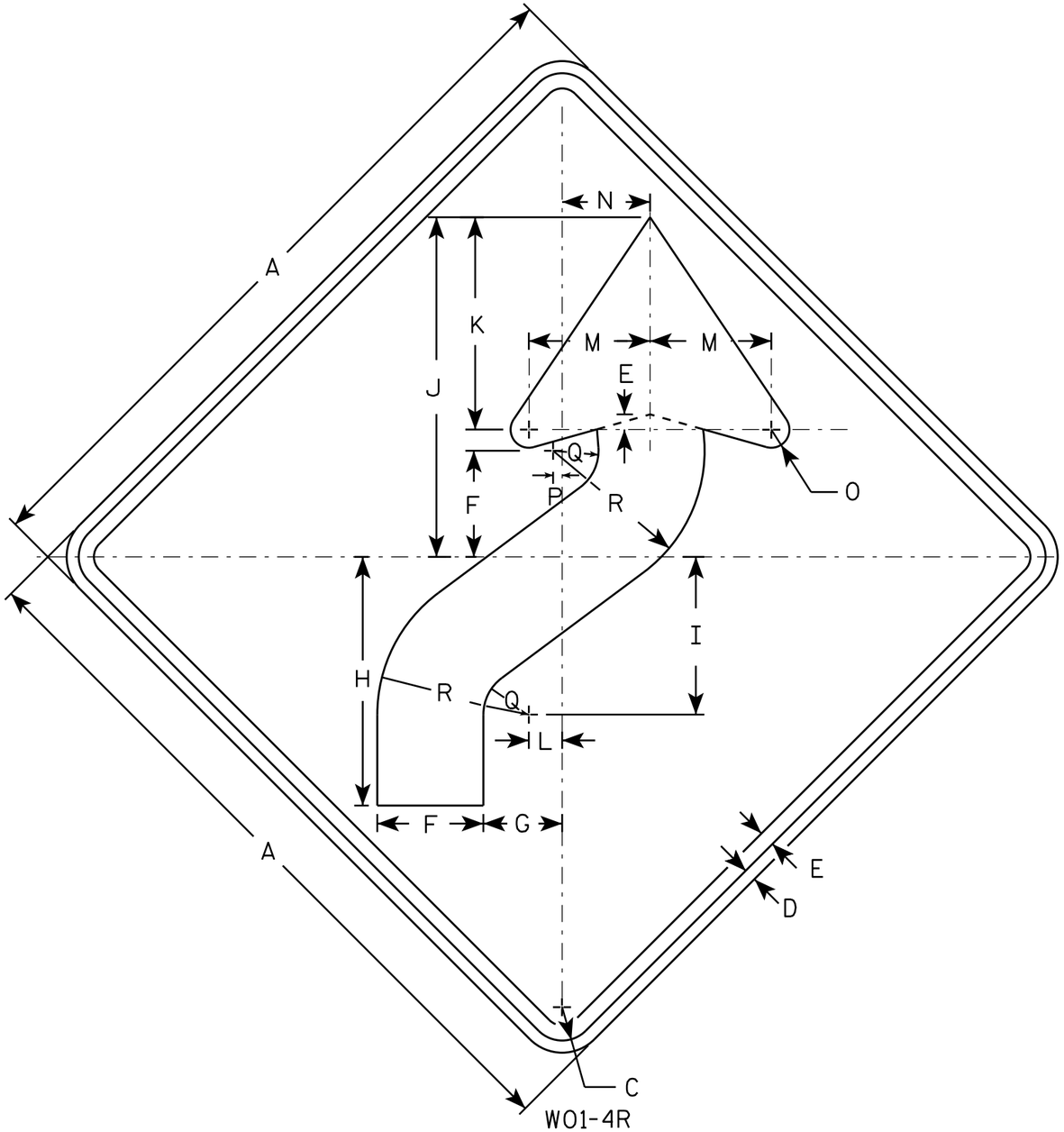
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/27/15 PLATE NO. W20-53.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W2053.DGN PLOT DATE : 27-MAY-2015 19:40 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.729210:1.000000
WISDOT/CADDS SHEET 42



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

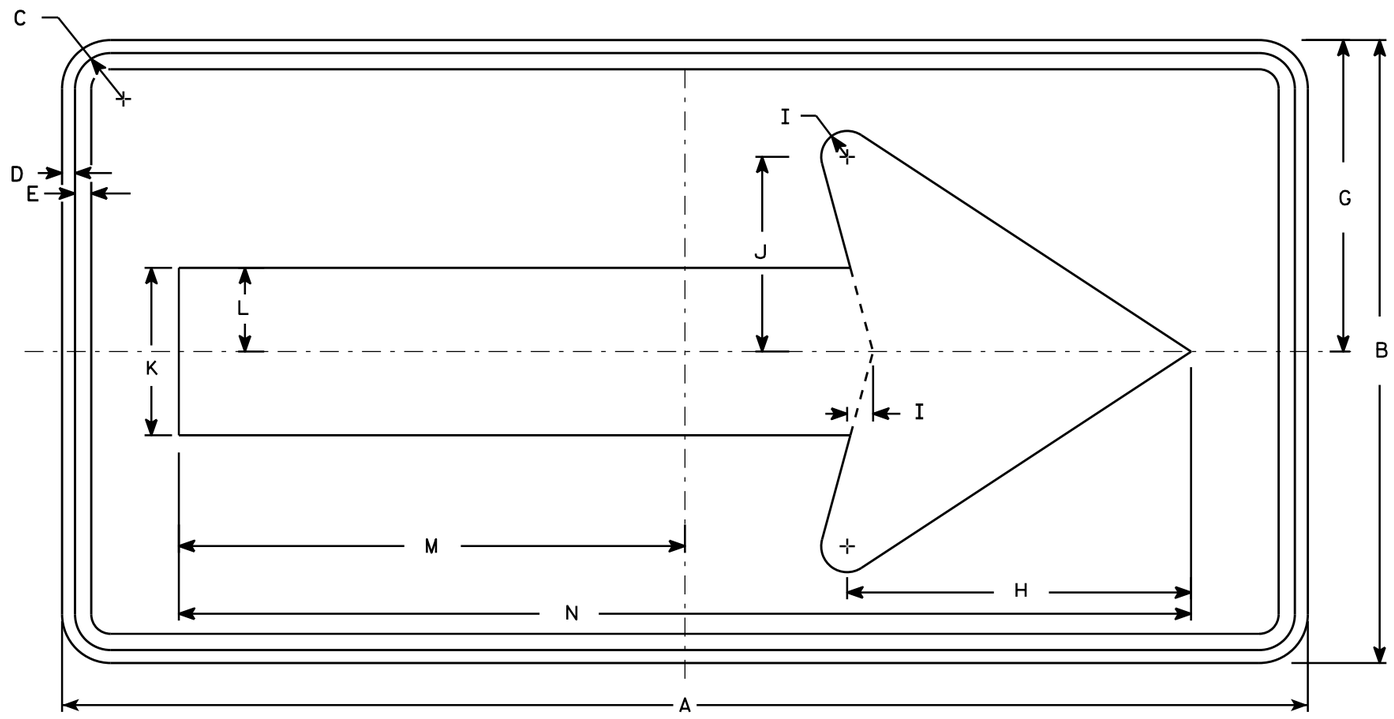
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000



W01-6

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

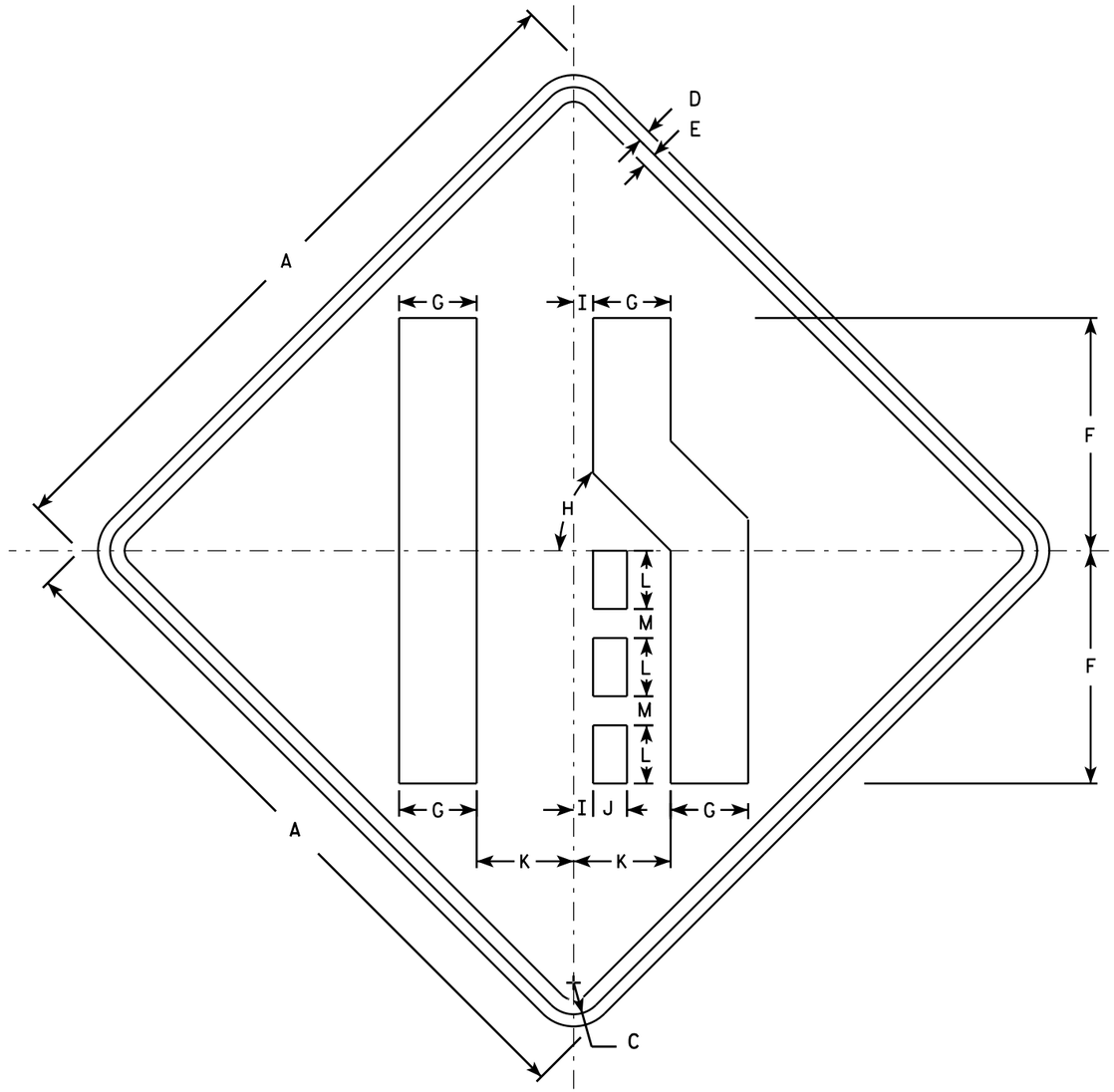
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

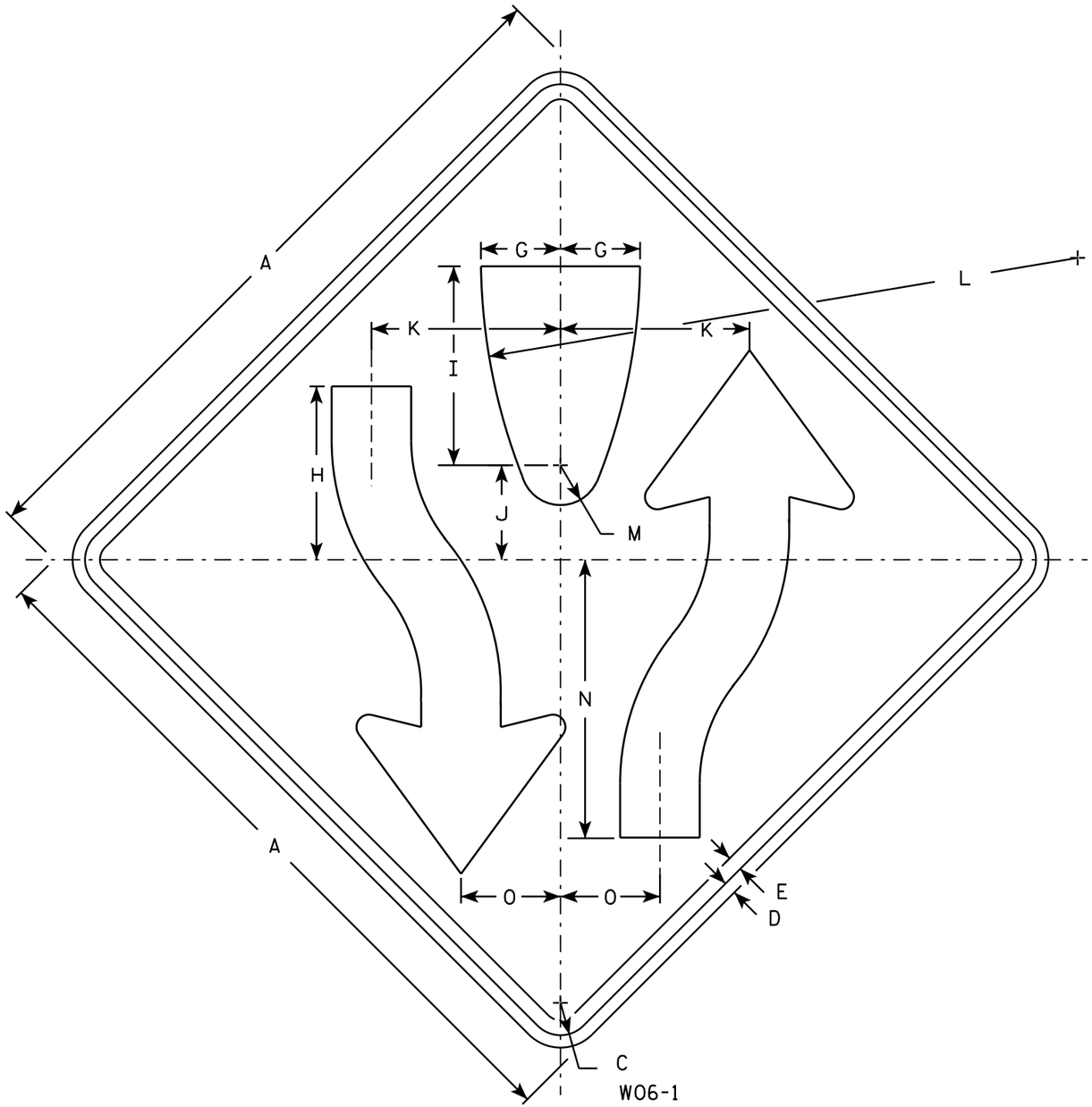
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 602 W04-2.1

PROJECT NO:

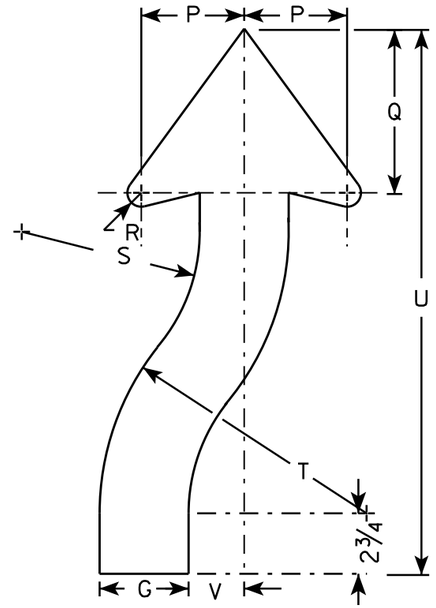
SHEET NO: E



W06-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W06-2 same as W06-1 but is rotated 180° when mounted.



ARROW DETAIL

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

STANDARD SIGN
W06-1 & W06-2

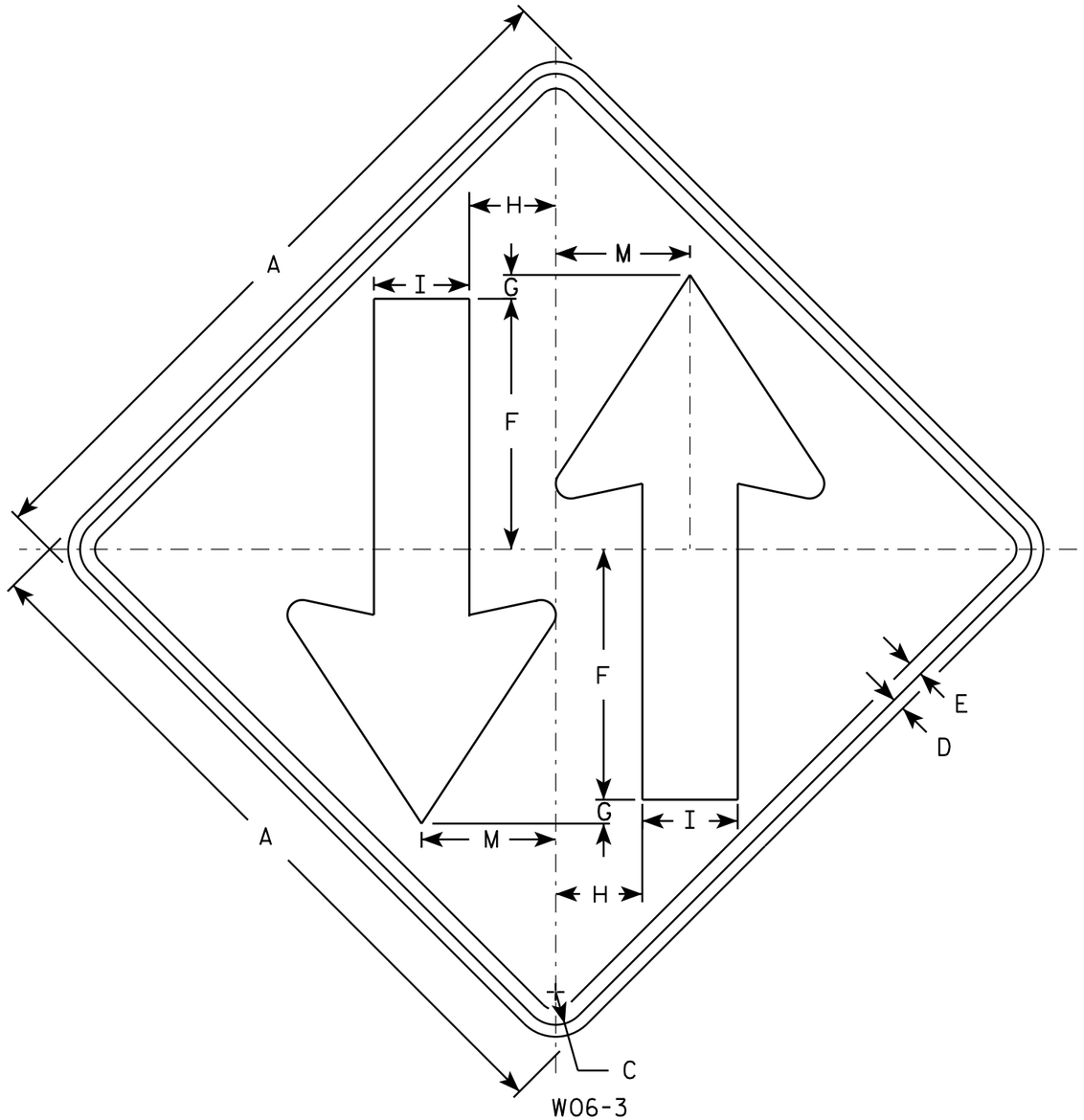
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE NO W06-1.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

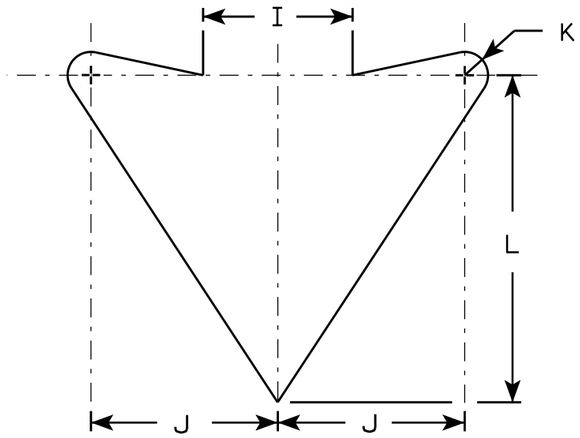
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W061.DGN PLOT DATE : 20-NOV-2013 12:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.810449:1.000000
WISDOT/CADDS SHEET 42



W06-3

NOTES

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



ARROW DETAIL

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

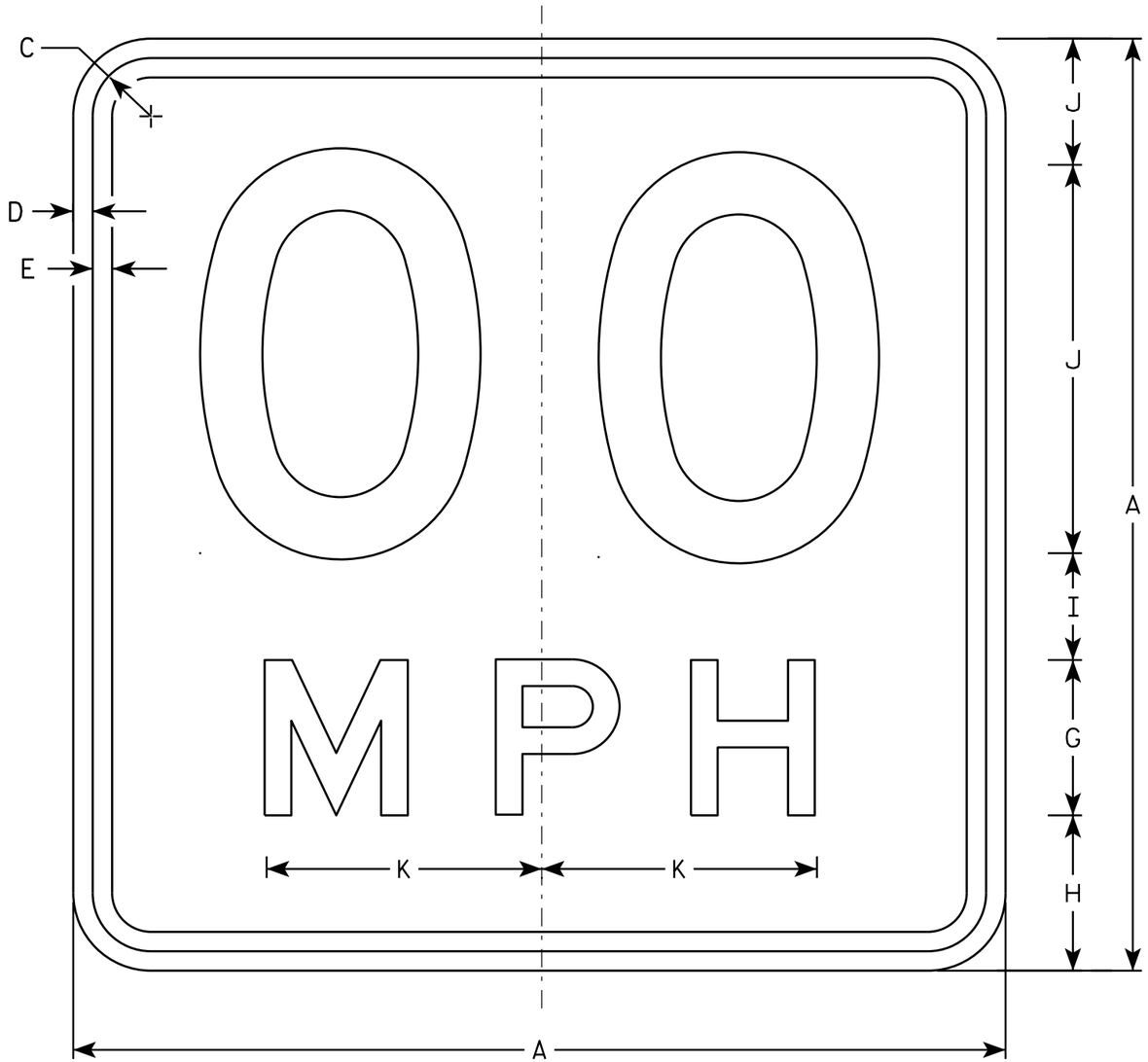
STANDARD SIGN
W06-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 604 W06-3.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W013-1

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	7 1/8																4.00
2S	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
2M	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
3	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

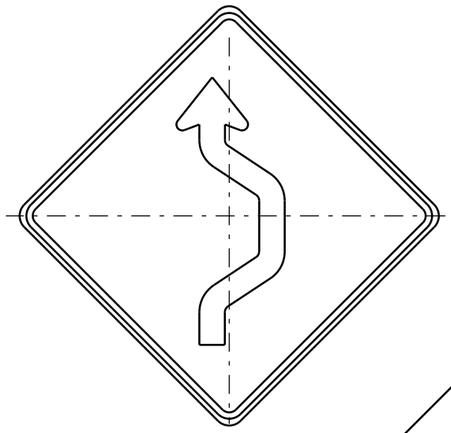
STANDARD SIGN
W013-1

WISCONSIN DEPT OF TRANSPORTATION

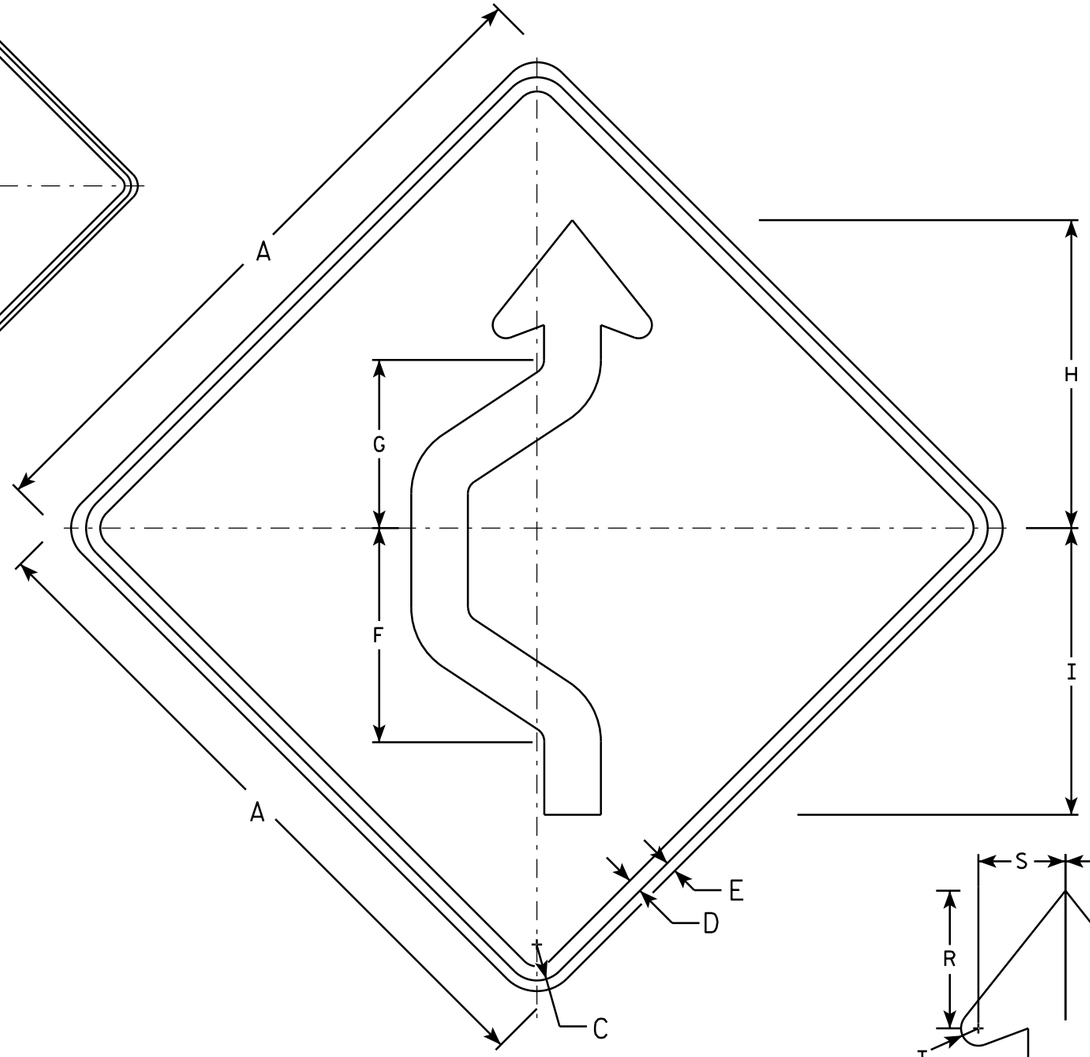
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/13 PLATE 605 W013-1.1

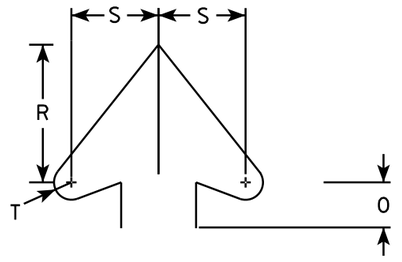
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



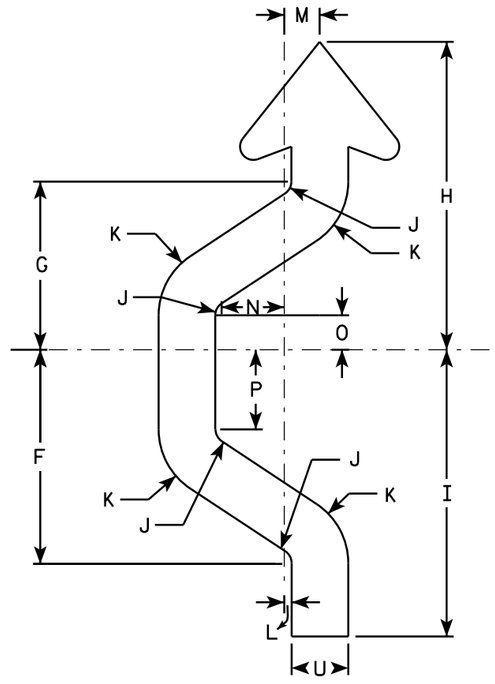
W024-1R



W024-1L



Arrowhead Detail



Arrow Detail

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W024-1R is the same as W024-1L except reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	5/8	1/2	11 3/8	8 7/8	16 3/8	15 1/4	3/4	3 3/4	3/8	2	3 3/8	1 7/8	4 1/4		5 1/2	3 1/2	5/8	3						9
2S	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
2M	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
3	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
4	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
5	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16

STANDARD SIGN
W024-1 L & R

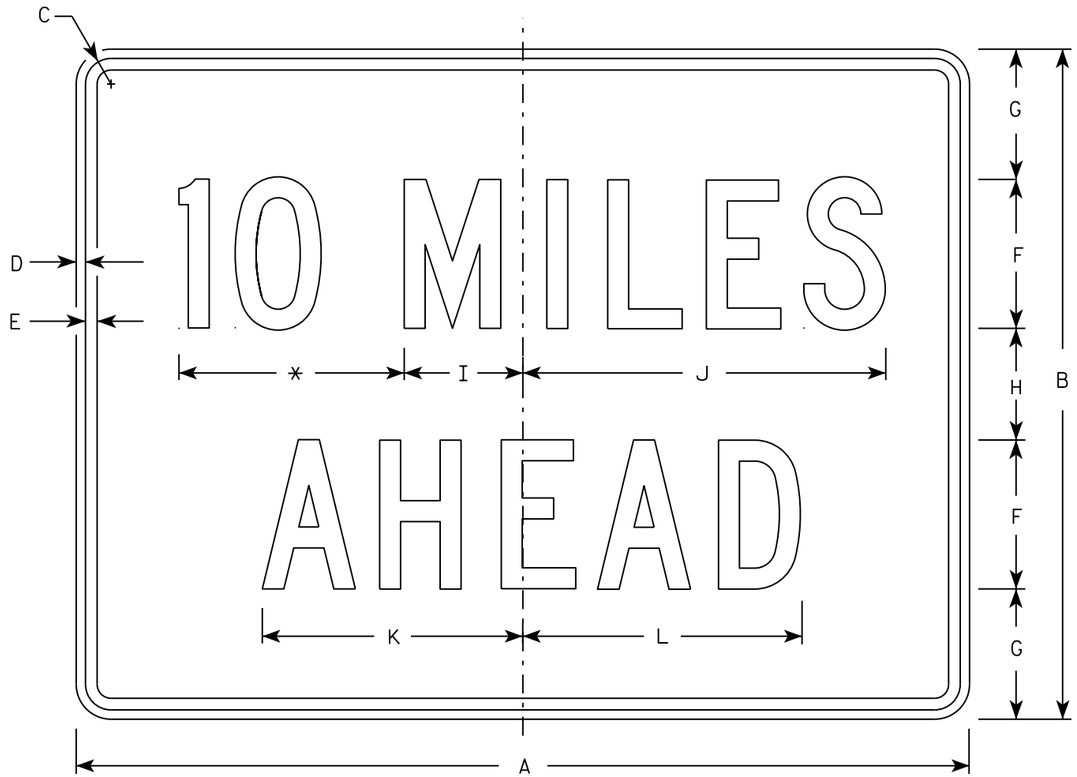
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

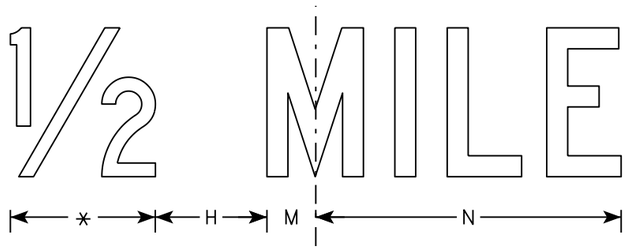
DATE 9/25/2013 PLATE NO. W024-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W0241.DGN PLOT DATE : 25-SEP-2013 13:08 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 10.702132:1.000000
WISDOT/CADDS SHEET 42



W057-52



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.
5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.

* See note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
2S	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
2M	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
3	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
4	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
5	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0

STANDARD SIGN
W057-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W057-52.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 607	E

DESIGN DATA

CONTRACTOR DESIGNED OVERHEAD SIGN STRUCTURES SHALL BE DESIGNED ACCORDING TO THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", 1ST EDITION AND INTERIM SPECIFICATIONS, AND THE WISDOT BRIDGE MANUAL.

STANDARD FOUNDATIONS DESIGNED ACCORDING TO THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION.

DEAD LOAD: WT. OF SIGN AND SUPPORTING STRUCTURE.
ICE LOAD: 3 PSF TO ONE FACE OF SIGN & SURFACE OF MEMBERS.
WIND PRESSURE: 115 MPH (3-SEC. GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS. (700 YEAR MEAN RECURRENCE INTERVAL)

WIND COMPONENTS	NORMAL	TRANSVERSE
LOAD CASE 1:	1.00	0.00
LOAD CASE 2:	0.00	1.00
LOAD CASE 3:	0.75	0.75

LOAD COMBINATIONS	
STRENGTH I:	1.25 DC + 1.6 LL
EXTREME I (MAX DC):	1.1 DC + 1.0 W + 1.0 ICE
EXTREME I (MIN DC):	0.9 DC + 1.0 W
SERVICE I:	1.0 DC + 1.0 W
FATIGUE I:	1.0 NWG (NATURAL WIND GUST VIBRATION)
	1.0 TRG (TRUCK INDUCED GUST VIBRATION)
	1.0 GVW (GALLOPING - CANTILEVER ONLY)

MATERIAL PROPERTIES

CONCRETE MASONRY.....f'c = 3,500 psi

HIGH STRENGTH STEEL
REINFORCEMENT, GRADE 60.....fy = 60,000 psi

HIGH STRENGTH BOLTS - A325.....fy = 92,000 psi

ANCHOR RODS - ASTM F1554 GRADE 55.....fy = 55,000 psi

HEAVY HEX NUTS FOR ANCHOR RODS - ASTM A563A

WASHERS FOR ANCHOR RODS - ASTM F436

FOUNDATION DATA

SIGN STRUCTURE FOUNDATIONS ARE SUPPORTED ON DRILLED SHAFTS THAT HAVE BEEN DESIGNED FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 24° (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 750 PSF (COHESIVE SOILS) AND A UNIT WEIGHT OF 125 PCF. THE GROUND WATER TABLE FOR DESIGN IS ASSUMED TO BE AT A DEPTH OF 10'-0" BELOW THE GROUND SURFACE. ACTUAL WATER LEVEL AT SITE MAY VARY. THE REGION GEOTECHNICAL ENGINEER SHALL VISUALLY INSPECT THE SUBSURFACE SOILS DURING DRILLING OF THE SHAFT HOLE TO CONFIRM THESE PROPERTIES PRIOR TO PLACEMENT OF THE DRILLED SHAFT CONCRETE.

TOTAL ESTIMATED QUANTITIES

BID ITEM NO.	BID ITEM	UNIT	S-67-0984
531.2035	DRILLING SHAFT 36-INCH	LF	18
531.5310	FOUNDATION SINGLE-SHAFT TYPE TC-1	EA	1
532.5310	TRUSS CANTILEVER 2-CHORD TYPE 1 (S-67-0984)	EA	1

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALTERNATE DESIGNS ARE NOT ALLOWED.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), WAUKESHA COUNTY ZONE, NAD 83 (2011). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2012).

ALL REINFORCING BARS ARE IN ENGLISH UNITS. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

SIGN BRIDGE ID PLAQUES SHALL BE CONSIDERED INCIDENTAL TO THE TRUSS OR MONOTUBE BID ITEMS FOR EACH APPLICABLE SIGN STRUCTURE IN THE PLAN SET. LOCATE THE ID PLAQUE ON THE FREEWAY SIDE OF THE SUPPORT COLUMN SO THAT IT CAN BE SEEN FROM THE ROADWAY. FABRICATE AND INSTALL THE ID PLAQUE IN ACCORDANCE WITH S.D.D. 12 A 4-3.

UNLESS DETAILED OTHERWISE IN THE PLANS, ALL H.S. BOLTED CONNECTIONS SHALL BE MADE WITH ¾" DIA A325 GALVANIZED BOLTS. FIELD CONNECTIONS SHALL BE INSTALLED WITH DTI WASHERS.

WELDED CONNECTIONS CAN BE USED IN LIEU OF BOLTED CONNECTIONS, IF A TRUSS UNIT CAN BE GALVANIZED IN ONE PIECE.

WELD TEST AS PER AWS D1.1.

SEE SIGN PLATE NO. A4-6, A4-7A & A4-7B OF THE SIGN PLATE MANUAL FOR INSTRUCTIONS ON CENTERING SIGNS VERTICALLY ON THE TRUSS.

SIGNS OR BLANKS SHALL BE INSTALLED ON TRUSS AT TIME OF ERECTION. BLANKS SHALL BE 1/4 THE LENGTH OF THE CANTILEVER SPAN, 2'-0" DEEPER THAN THE C/L TO C/L OF CHORDS, AND SHALL BE CENTERED ON THE BRIDGE. SIGNS SHALL BE AS DESIGNATED ON THE PLANS.

THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION OF THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PER THE REQUIREMENTS IN THE STANDARD SPECIFICATIONS PRIOR TO FABRICATION OF THE STRUCTURE. CONTRACTOR SHALL SHOW SIGNS ON THE SHOP DRAWINGS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DRILLING OR EXCAVATING AND MAINTAINING A STABLE AND OPEN HOLE FOR SUBSEQUENT INSTALLATION OF CONCRETE MASONRY FOR THE DRILLED SHAFTS. PARTIAL OR FULL DEPTH TEMPORARY CASING MAY BE REQUIRED TO MAINTAIN THE STABILITY OF THE EXCAVATED HOLE FOR THE SIGN SUPPORT PRIOR TO FILLING THE HOLE WITH CONCRETE. PERMANENT CASING MADE FROM STEEL OR CORRUGATED METAL PIPE MAY BE USED IN LIEU OF TEMPORARY CASING. TEMPORARY/PERMANENT CASING, IF USED, SHALL BE INCIDENTAL TO THE BID ITEM "DRILLING SHAFT (DIA.)".

STRUCTURE DATA

SIGN STR	ACTUAL SIGN AREA	ACTUAL SIGN DEPTH	STANDARD TYPE
S-67-0984	18 SF	6'-0"	TC1

LIST OF DRAWINGS

1. GENERAL NOTES & DESIGN DATA
2. LAYOUT S-67-0984

LIST OF OSS STANDARD DESIGN DRAWINGS

3. I. MONOTUBE & 2-CHORD TRUSS DETAILS 1
4. II. MONOTUBE & 2-CHORD TRUSS DETAILS 2
5. III. MONOTUBE & 2-CHORD TRUSS ELECTRICAL DETAILS
6. IV. MONOTUBE & 2-CHORD TRUSS FOUNDATIONS

STATE PROJECT NUMBER

2025-07-73

TRAFFIC VOLUME

A.D.T. (2045) = 28,300
R.D.S. = 30-60 MPH

STRUCTURE DESIGN CONTACTS:
AARON BONK (608) 261-0261
ARLEN BEAUDETTE (715) 834-3161

THESE ARE STANDARD DESIGN PLANS, DEVELOPED AND MAINTAINED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION. THE DESIGNER CERTIFIES THAT THE DESIGN AND PLAN DETAILS CHOSEN ARE CONSISTENT WITH THE GUIDANCE PROVIDED IN THE CURRENT WISCONSIN BRIDGE MANUAL CHAPTER 39.

WISCONSIN
ARLEN E. BEAUDETTE
E-36829
EAU CLAIRE, WI
PROFESSIONAL ENGINEER

02/23/2023

NO.	DATE	REVISION	BY

AYRES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

ACCEPTED SDR 09/06/23
CHIEF STRUCTURES DESIGN ENGINEER DATE

MONOTUBE AND 2-CHORD TRUSS PLANS

CANTILEVER OVERHEAD SIGN STRUCTURE

COUNTY	TOWN/CITY/VILLAGE
WAUKESHA	PEEWAUKEE

DESIGN SPEC.
AASHTO LRFDLTS-1 W/INTERIMS

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
BOS	BOS	CLP	AEB

GENERAL NOTES & DESIGN DATA

SHEET 1 OF 2

608

8

8

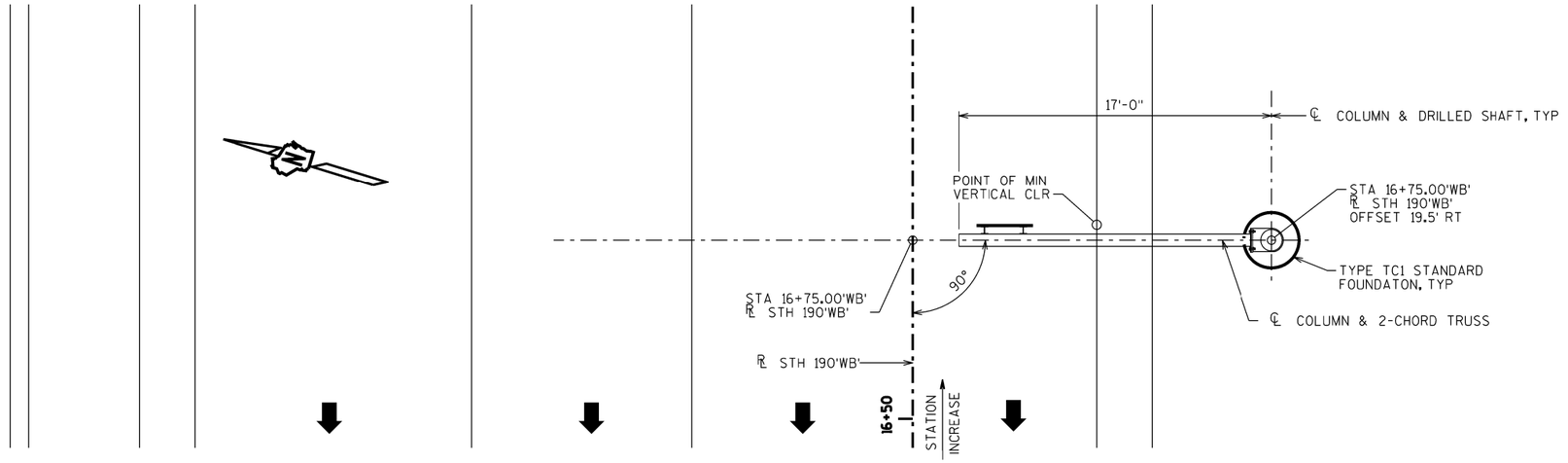
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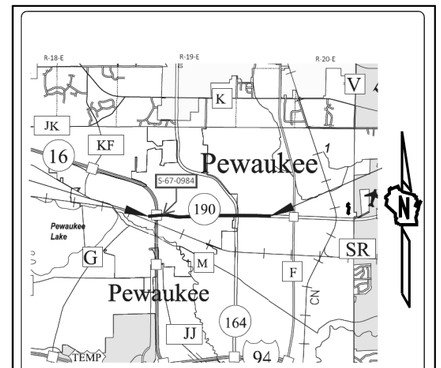
DATE:

STATE PROJECT NUMBER

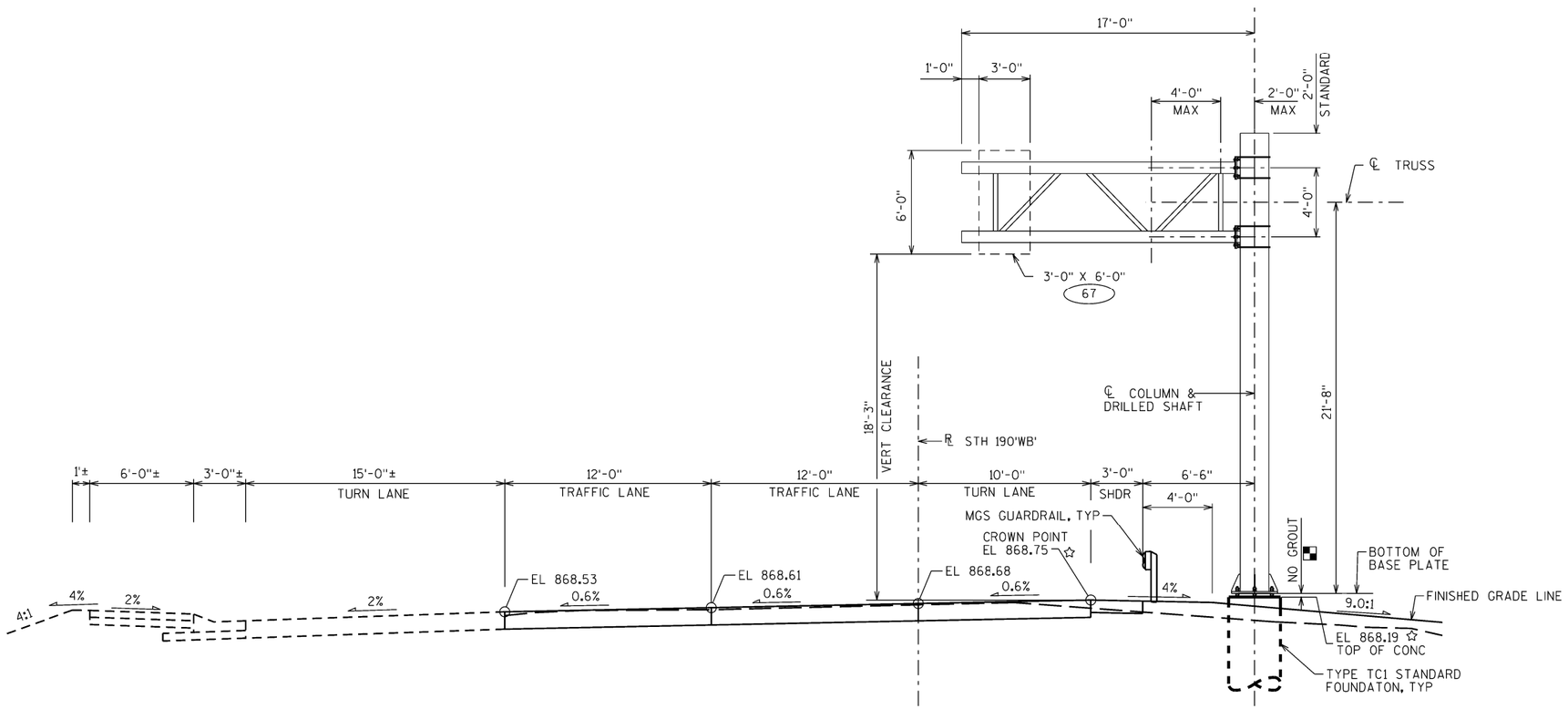
2025-07-73



PLAN



LOCATION MAP



ELEVATION

STA 16+75.00'WB'
(LOOKING UPSTATION AT BACK OF SIGN)

NOTE

POINT OF MIN VERTICAL CLEARANCE
STA 16+75.00'WB', 10.0' RIGHT
EL 868.75

LEGEND

☆ ELEVATIONS GIVEN ALONG ℄ 2-CHORD TRUSS

(XXX) SIGN NUMBERS (PERMANENT SIGNING PLAN)

STANDOFF DIMENSION IS ASSUMED TO BE 2½", BUT IS A MAXIMUM OF 2 X ANCHOR ROD DIAMETER. SEE FOUNDATION DETAILS SHEET AND SHOP DRAWINGS FOR MORE INFORMATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-67-0984

DRAWN BY CLP | PLANS CK'D. AEB

GENERAL LAYOUT
S-67-0984

SHEET 2 OF 2

609

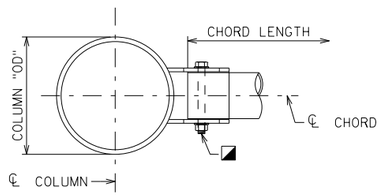
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8

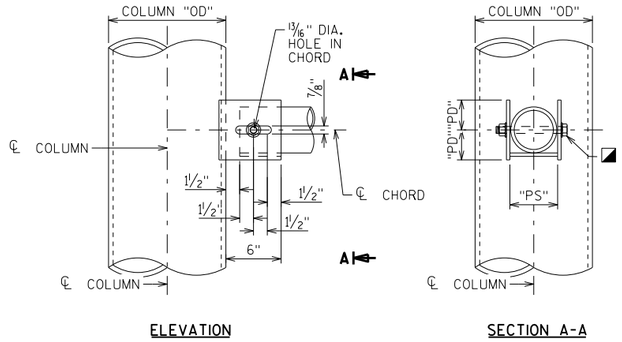
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STATE PROJECT NUMBER

STANDARD



PLAN



ELEVATION SECTION A-A

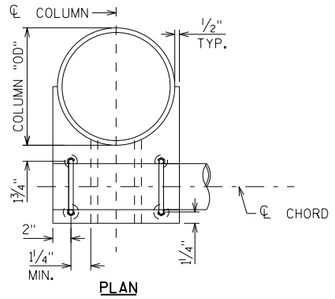
FULL SPAN SADDLE CONNECTION

PREFERRED

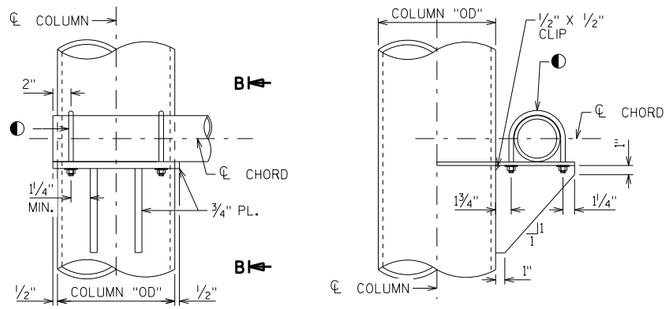
¾" GALVANIZED A325 OR A449 HEAVY HEX BOLT, NUT, WASHER

"PD" = (CHORD "OD")/2 + ¾"

"PS" = CHORD "OD" + 3/16"



PLAN

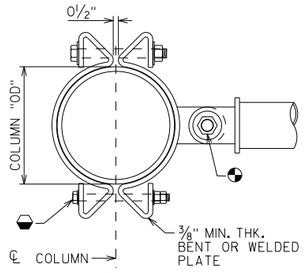


ELEVATION SECTION B-B

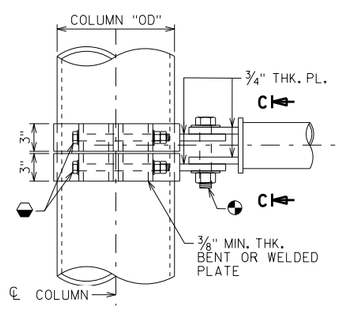
FULL SPAN STIFFENED BEARING CONNECTION

ALTERNATE 1

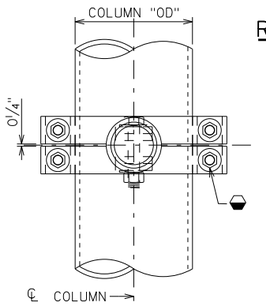
◐ (2) - ½" MIN. GALVANIZED U-BOLT, NUT, WASHER AND LOCK WASHER



PLAN



ELEVATION



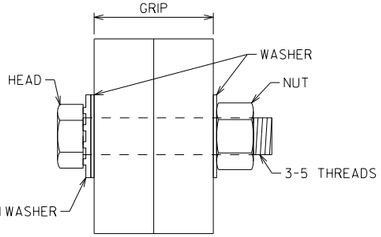
SECTION C-C

FULL SPAN CLAMP CONNECTION

ALTERNATE 2 - TAPERED COLUMNS ONLY

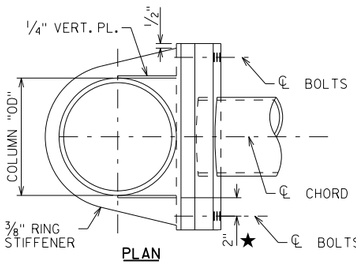
◔ 1¼" GALVANIZED A325 HEAVY HEX BOLT, NUT AND WASHER

⬣ 1" GALVANIZED A449 HEAVY HEX BOLT, NUT AND WASHER

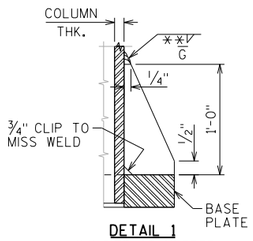


RECOMMENDED BOLT DETAIL WITH DTI

NUT IS THE TURNED ELEMENT

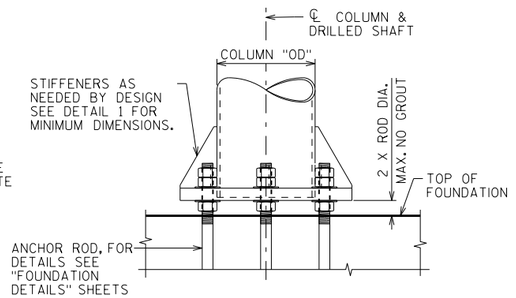


PLAN



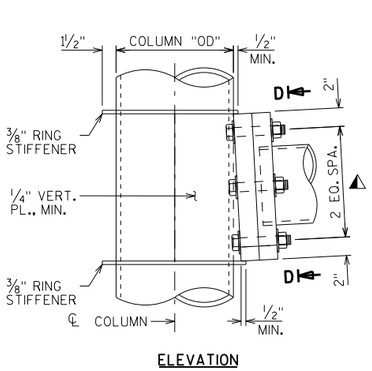
DETAIL 1

** SIZE AS NEEDED

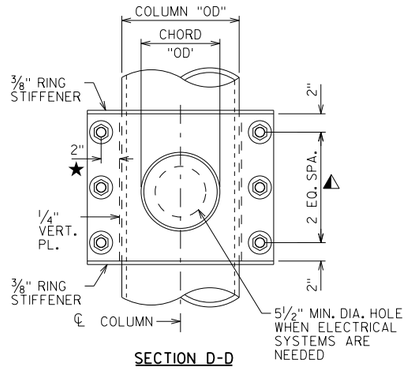


BASE PLATE & COLUMN DETAIL

LOOKING AT FRONT FACE OF STRUCTURE



ELEVATION

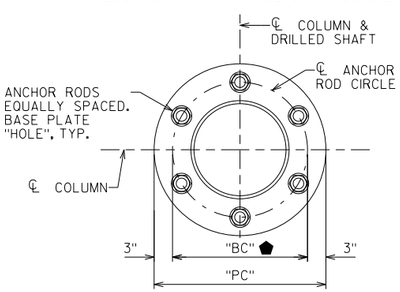


SECTION D-D

CANTILEVER POST TO CHORD CONNECTION

◭ MIN. CONNECTION = (6) - 1" GALVANIZED F3125 GRADE A325 BOLTS, NUT, WASHER AND DTI

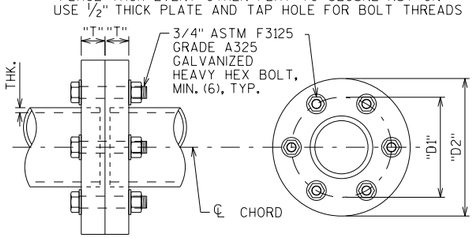
★ MIN. DIMENSION MEASURED FROM EXT. FACE OF VERT. PLATE



BASE PLATE

PLAN

⬟ "BC" = POLE OD + 6"

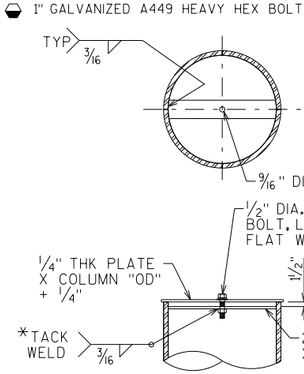


CHORD SPLICE DETAIL

"D1" = CHORD "OD" + 3"

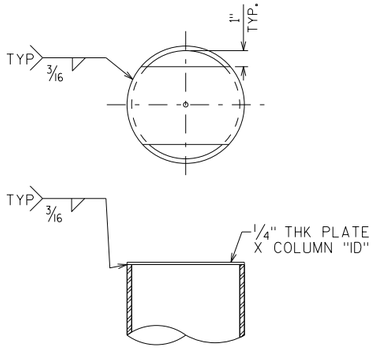
"D2" = CHORD "OD" + 6"

"T" = BY DESIGN



COLUMN/CHORD CAP DETAIL

* PLACE TACK EVERY OTHER FLAT TO SECURE NUT OR USE ½" THICK PLATE AND TAP HOLE FOR BOLT THREADS



CHORD CAP DETAIL

NOTES:

MINIMUM VALUES SHOWN

ALL CONNETIONS ARE TO BE DESIGNED FOR ACTUAL STRUCTURE LOADS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: MARCH 2021

DRAWN BY BOS | PLANS CK'D. BOS

MONOTUBE & 2-CHORD TRUSS DETAILS 1

SHEET 1 OF IV

610

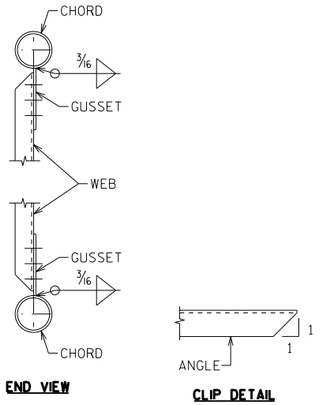
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8

STATE PROJECT NUMBER

STANDARD

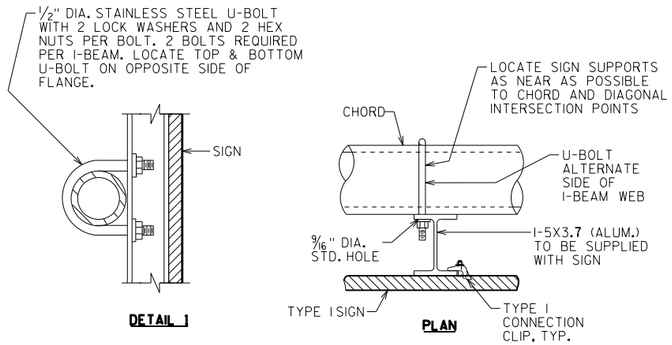


END VIEW

CLIP DETAIL

TRUSS CONNECTION DETAILS

BOLTED CONNECTIONS SHOWN, NUMBER OF BOLTS BY DESIGN
WELDED CONNECTIONS SIMILAR



DETAIL 1

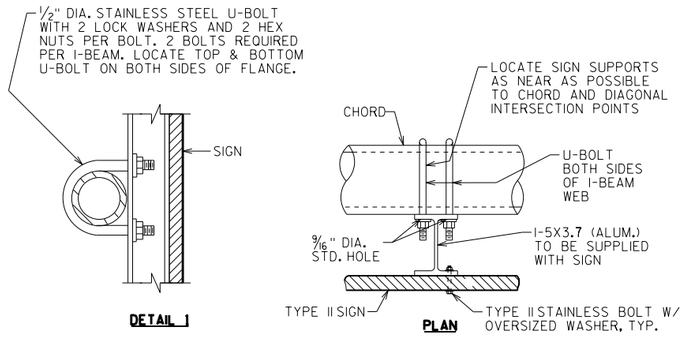
PLAN

2-CHORD TRUSS SIGN CONNECTION

SEE SIGN PLATE MANUAL A4-7A FOR DETAILS

ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH THE SIGN PANEL

HARDWARE TO BE SUPPLIED BY THE CONTRACTOR



DETAIL 1

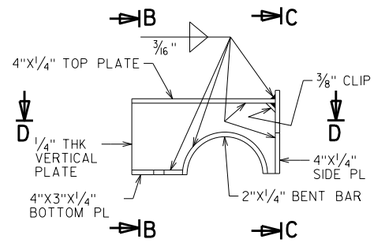
PLAN

MONOTUBE SIGN CONNECTION

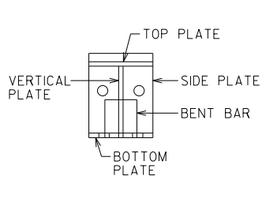
SEE SIGN PLATE MANUAL A4-7B FOR DETAILS

ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH THE SIGN PANEL

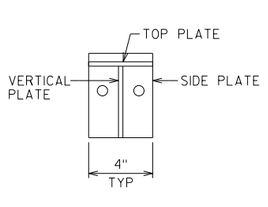
HARDWARE TO BE SUPPLIED BY THE CONTRACTOR



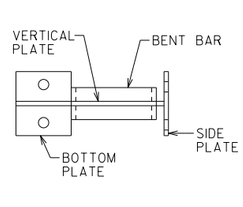
ELEVATION



SECTION B-B



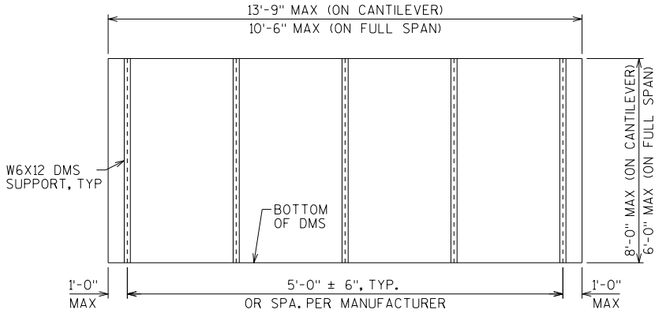
SECTION C-C



SECTION D-D

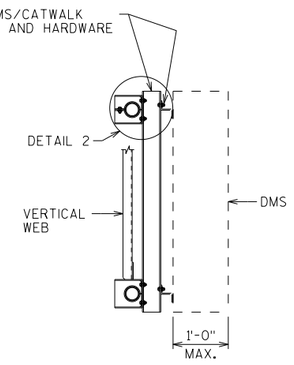
DMS WELDED PLATE CONNECTION DETAILS

TOP PLATE CLAMP SHOWN
BOTTOM PLATE CLAMP SIMILAR



DMS MOUNTING POST SPACING DETAIL

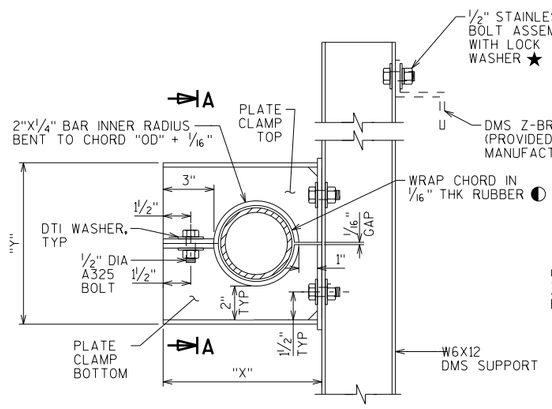
POST SPACING MAY BE ADJUSTED AS REQUIRED IF CONFLICT WITH TRUSS IS ENCOUNTERED.



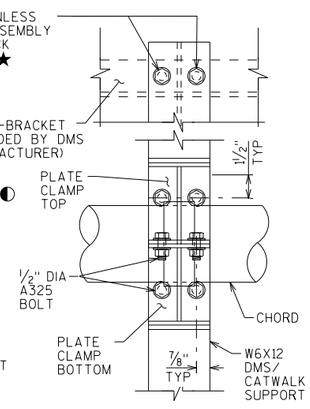
SECTION THRU TRUSS

FOR DMS/CATWALK CONNECTION

★ W6X12 SUPPORTS AND HARDWARE ARE TO BE SUPPLIED BY THE CONTRACTOR. 1/2" STAINLESS BOLT, NUT, WASHER AND LOCK WASHER REQUIRED, 4 PER W6X12.



DETAIL 2

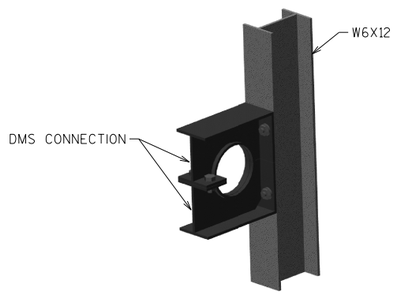


SECTION A-A

CHORD OUTER DIA	"X"	"Y"
"OD"	"OD"+4 13/16"	"OD"+5 1/16"

TYPICAL DMS CONNECTION

◐ NEOPRENE, GRADE 45±5, OTHERWISE MEETING THE REQUIREMENTS OF STD SPEC 506.2.6.1



3-D VIEW DMS CONNECTION

CHORD NOT SHOWN FOR CLARITY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: APRIL 2021

DRAWN BY BOS | PLANS CK'D. BOS

MONOTUBE & 2-CHORD TRUSS DETAILS 2

SHEET 11 OF IV

611

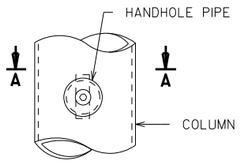
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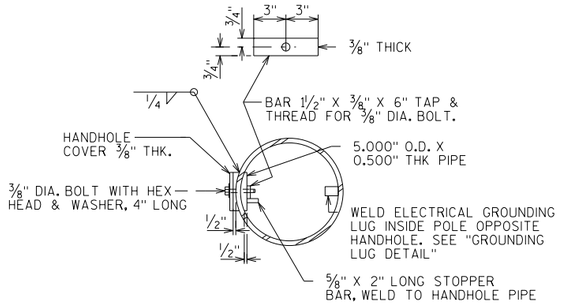
8

STATE PROJECT NUMBER

STANDARD



HANDHOLE DETAILS

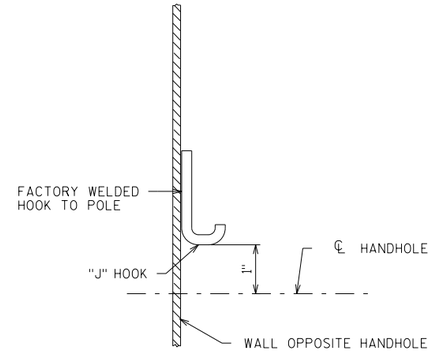


SECTION A-A

HANDHOLE NOTES

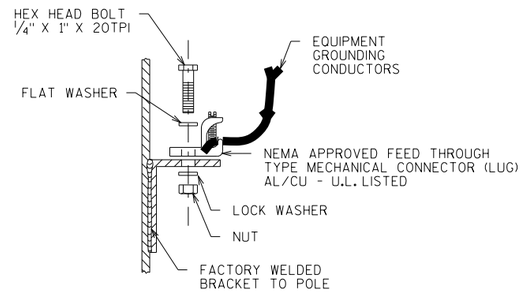
HANDHOLES SHALL BE LOCATED IN ONE COLUMN OF THE SIGN STRUCTURE IF ELECTRICALLY OPERATED DEVICES ARE INSTALLED ON/IN THE STRUCTURE. COLUMNS WITH HANDHOLES SHALL BE NEAR THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE ELECTRICAL SERVICE ENTRANCE WITH THE REGION TRAFFIC SECTION PRIOR TO FABRICATION OF THE SIGN COLUMNS AND MEMBERS. CONDUIT (AS REQ'D.) SHALL BE LOCATED, PLACED AND SIZED AS SHOWN ON THE ELECTRICAL PLAN DETAIL SHEETS.

UNLESS NOTED OTHERWISE, ALL HANDHOLE ELEMENTS TO BE GALVANIZED PER THE WISDOT STANDARD SPECIFICATIONS.



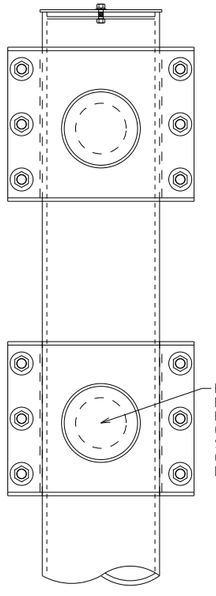
TYPICAL "J" HOOK LOCATION

THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF ALL COLUMNS CONTAINING ELECTRICAL WIRING. THE "J" HOOK SHALL BE ATTACHED ABOVE THE CENTERLINE OF THE UPPER HANDHOLE AND MOUNTED DIRECTLY OPPOSITE THE HANDHOLE AS SHOWN IN THE DRAWING.

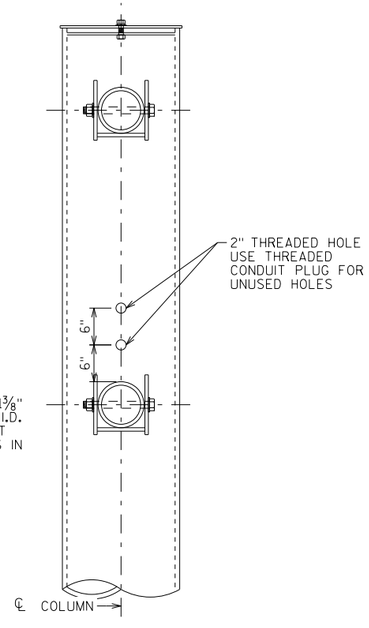


GROUNDING LUG DETAIL

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



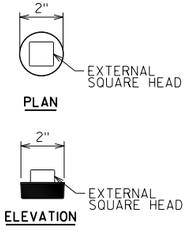
2-CHORD CANTILEVER



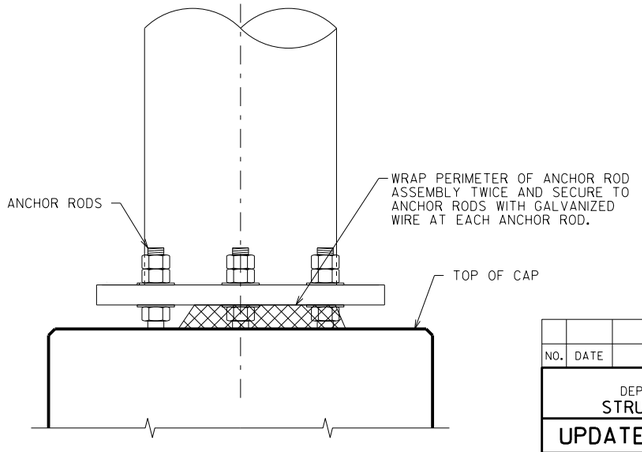
2-CHORD FULL SPAN

SADDLE CONNECTIONS SHOWN, BEARING AND CLAMP CONNECTIONS SIMILAR

CONDUIT HOLE LOCATIONS



CONDUIT PLUG DETAILS



RODENT SCREEN

(ONLY REQ'D. WHEN ELECTRICAL DEVICES ARE INSTALLED)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: MARCH 2021

DRAWN BY BOS | PLANS CK'D. BOS

MONOTUBE & 2-CHORD TRUSS ELECTRICAL DETAILS

SHEET III OF IV

612

SCALE = 1.00

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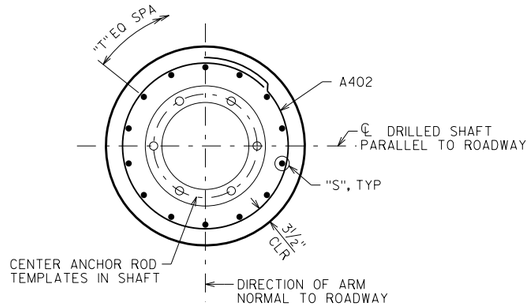
8

STATE PROJECT NUMBER

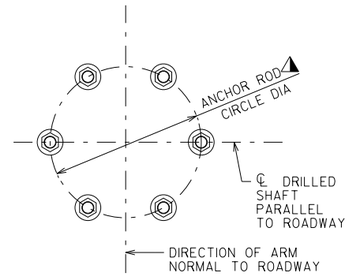
STANDARD

FOUNDATION & REINFORCING DATA

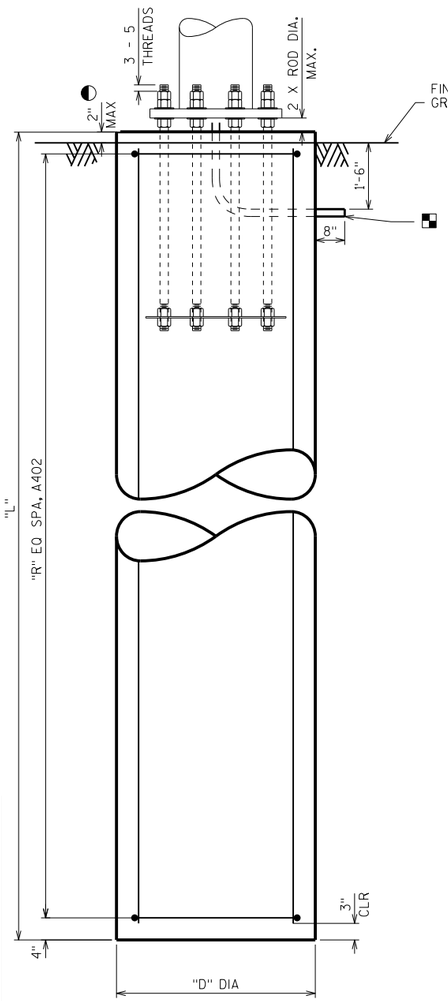
STANDARD FOUNDATION TYPE	SHAFT VARIABLES					
	"D"	"L"	"R"	"S"	"T"	"BC" MAX
MFI	2'-0"	12'-0"	12	A801	6	12"
MFII	2'-6"	13'-0"	13	A801	10	17"
MCI/MCII/TFI	2'-6"	17'-0"	17	A801	10	17"
TCI	3'-0"	18'-0"	18	A801	14	22"
TFII	3'-0"	20'-0"	20	A801	14	22"
MCIII/TCII/TFIII	3'-6"	18'-0"	18	A901	14	28"
MCIV/TFIV	3'-6"	23'-0"	23	A901	14	28"
TCIII	4'-0"	23'-0"	23	A1001	14	34"
TCIV	4'-0"	28'-0"	28	A1001	14	34"



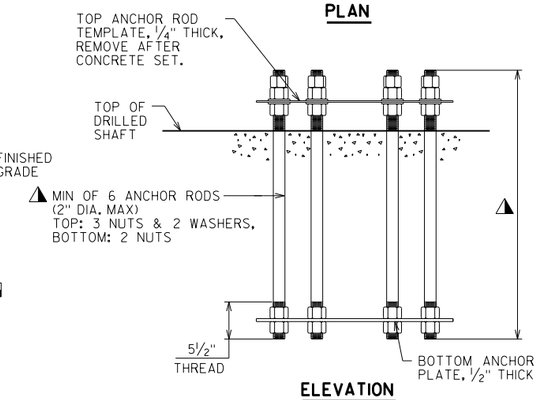
PLAN



PLAN



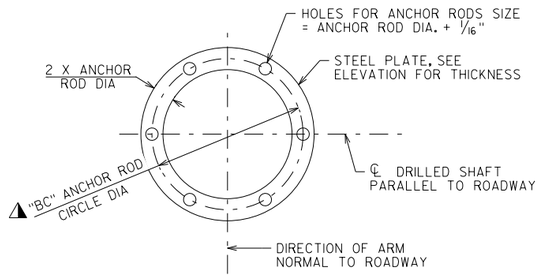
ELEVATION



ELEVATION

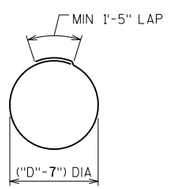
ANCHOR ROD ASSEMBLY DETAILS

△ ANCHOR ROD NUMBER, DIAMETER, LENGTH & ORIENTATION AS SHOWN ON FABRICATION DRAWING.



ANCHOR PLATE/TOP TEMPLATE

PLAN



A402

NOTE:
THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BILL OF BARS - STANDARD FOUNDATIONS

STANDARD FOUNDATION MFI

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		6	11'-7"			DRILLED SHAFT - VERTICAL
A402		13	5'-10"	X		DRILLED SHAFT - HORIZONTAL

STANDARD FOUNDATION MFII

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		10	12'-7"			DRILLED SHAFT - VERTICAL
A402		14	7'-5"	X		DRILLED SHAFT - HORIZONTAL

STANDARD FOUNDATION MCI/MCII/TFI

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		10	16'-7"			DRILLED SHAFT - VERTICAL
A402		18	7'-5"	X		DRILLED SHAFT - HORIZONTAL

STANDARD FOUNDATION TCI

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		14	17'-7"			DRILLED SHAFT - VERTICAL
A402		19	9'-0"	X		DRILLED SHAFT - HORIZONTAL

STANDARD FOUNDATION TFII

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		14	19'-7"			DRILLED SHAFT - VERTICAL
A402		21	9'-0"	X		DRILLED SHAFT - HORIZONTAL

STANDARD FOUNDATION MCIII/TCII/TFIII

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A901		14	17'-7"			DRILLED SHAFT - VERTICAL
A402		19	10'-6"	X		DRILLED SHAFT - HORIZONTAL

STANDARD FOUNDATION MCIV/TFIV

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A901		14	22'-7"			DRILLED SHAFT - VERTICAL
A402		24	10'-6"	X		DRILLED SHAFT - HORIZONTAL

STANDARD FOUNDATION TCIII

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	22'-7"			DRILLED SHAFT - VERTICAL
A402		24	12'-2"	X		DRILLED SHAFT - HORIZONTAL

STANDARD FOUNDATION TCIV

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	27'-7"			DRILLED SHAFT - VERTICAL
A402		29	12'-2"	X		DRILLED SHAFT - HORIZONTAL

ESTIMATED QUANTITIES - FOUNDATIONS

STANDARD FOUNDATION TYPE	CONCRETE MASONRY (CY)	STEEL REINFORCEMENT HS (LBS)	FOUNDATION DRILLING (LF)				
			24" DIA.	30" DIA.	36" DIA.	42" DIA.	48" DIA.
MFI	2	240	12				
MFII	3	410		13			
MCI/MCII/TFI	4	540		17			
TCI	5	780			18		
TFII	6	860			20		
MCIII/TCII/TFIII	7	970				18	
MCIV/TFIV	9	1,250				23	
TCIII	11	1,560					23
TCIV	13	1,900					28

✳✳ QUANTITIES ARE FOR INFORMATION ONLY AND ARE BASED ON STANDARD STRUCTURE DIMENSIONS

NOTES

CENTER ANCHOR ROD ASSEMBLY ON DRILLED SHAFT AND MAKE SURE IT IS PLUMB. MAINTAIN ANCHOR ROD PROJECTION ABOVE FOOTING AS DETAILED. ANCHOR ROD ASSEMBLY SHALL BE RIGIDLY SECURED IN POSITION DURING AND AFTER CONCRETE PLACEMENT. DO NOT WELD THE ANCHOR RODS.

◐ FOR OVERHEAD SIGN STRUCTURES THAT ARE INSTALLED ADJACENT TO SIDEWALKS, THE TOP OF THE SHAFT SHALL BE POURED FLUSH WITH THE FINISHED GRADE.

◪ 2" DIA NONMETALLIC CONDUITS, INSTALL ONLY WITH DMS. EXTEND CONDUITS AS SHOWN AND CAP OR SEAL EACH END WITH A SUITABLE REMOVABLE PLUG. PLACE CONDUITS UNDER COLUMN ADJACENT TO THE DMS. CONDUITS INCIDENTAL TO THE FOUNDATION BID ITEMS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: MARCH 2021

DRAWN BY BOS | PLANS CK'D. BOS

MONOTUBE & 2-CHORD TRUSS FOUNDATIONS

SHEET IV OF IV

613

SCALE = 1.67

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CAPITOL DR / STH 190 EB

CATEGORY	STAGE	STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
					CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
								NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.25	NOTE 8
0010	2	09+18	918.52	0.00	116.70	0.00	0.00	0	0	0	0	0	0
		09+50	950.00	31.48	119.95	0.00	0.58	138	0	0	138	0	138
		10+00	1000.00	50.00	216.04	0.00	0.00	311	0	1	449	1	448
		10+50	1050.00	50.00	109.83	0.00	0.01	302	0	0	751	1	750
		11+00	1100.00	50.00	116.63	0.00	0.08	210	0	0	961	1	960
		11+50	1150.00	50.00	109.37	0.00	0.24	209	0	0	1,170	1	1,169
		12+00	1200.00	50.00	113.40	0.00	0.01	206	0	0	1,376	1	1,375
		12+50	1250.00	50.00	124.80	0.00	0.00	221	0	0	1,597	1	1,596
		13+00	1300.00	50.00	136.70	0.00	0.00	242	0	0	1,839	1	1,838
		13+50	1350.00	50.00	132.26	0.00	0.00	249	0	0	2,088	1	2,087
		14+00	1400.00	50.00	126.38	0.00	0.20	239	0	0	2,327	1	2,326
		14+50	1450.00	50.00	128.16	0.00	0.00	236	0	0	2,563	1	2,562
		15+00	1500.00	50.00	100.73	0.00	0.35	212	0	0	2,775	1	2,774
		15+50	1550.00	50.00	132.37	0.00	15.93	216	0	15	2,991	20	2,971
		16+00	1600.00	50.00	103.84	0.00	35.17	219	0	47	3,210	79	3,131
		16+50	1650.00	50.00	93.98	0.00	4.78	183	0	37	3,393	125	3,268
		17+00	1700.00	50.00	92.55	0.00	4.72	173	0	9	3,566	136	3,430
		17+50	1750.00	50.00	95.43	0.00	4.12	174	0	8	3,740	146	3,594
		18+00	1800.00	50.00	103.21	0.00	3.13	184	0	7	3,924	155	3,769
		18+50	1850.00	50.00	123.20	0.00	13.23	210	0	15	4,134	174	3,960
		19+00	1900.00	50.00	133.03	0.00	7.16	237	0	19	4,371	198	4,174
		19+50	1950.00	50.00	154.43	0.00	0.02	266	0	7	4,637	206	4,431
		20+00	2000.00	50.00	144.52	0.00	0.03	277	0	0	4,914	206	4,708
		20+50	2050.00	50.00	115.80	0.00	0.02	241	0	0	5,155	206	4,949
		21+00	2100.00	50.00	117.65	0.00	0.02	216	0	0	5,371	206	5,165
		21+50	2150.00	50.00	112.56	0.00	0.03	213	0	0	5,584	206	5,378
		22+00	2200.00	50.00	109.51	0.00	0.01	206	0	0	5,790	206	5,584
		22+50	2250.00	50.00	100.03	0.00	0.02	194	0	0	5,984	206	5,778
		23+00	2300.00	50.00	92.78	0.00	0.02	179	0	0	6,163	206	5,957
		23+50	2350.00	50.00	95.76	0.00	0.01	175	0	0	6,338	206	6,132
		24+00	2400.00	50.00	98.35	0.00	0.01	180	0	0	6,518	206	6,312
		24+50	2450.00	50.00	102.99	0.00	0.02	186	0	0	6,704	206	6,498
		25+00	2500.00	50.00	105.58	0.00	0.02	193	0	0	6,897	206	6,691
		25+50	2550.00	50.00	114.07	0.00	0.02	203	0	0	7,100	206	6,894
		26+00	2600.00	50.00	122.47	0.00	0.00	219	0	0	7,319	206	7,113
		26+50	2650.00	50.00	119.25	0.00	0.02	224	0	0	7,543	206	7,337
		27+00	2700.00	50.00	114.47	0.00	0.03	216	0	0	7,759	206	7,553
		27+50	2750.00	50.00	116.76	0.00	0.03	214	0	0	7,973	206	7,767
		28+00	2800.00	50.00	117.63	0.00	0.02	217	0	0	8,190	206	7,984
		28+50	2850.00	50.00	137.26	0.00	0.00	236	0	0	8,426	206	8,220
		29+00	2900.00	50.00	154.65	0.00	0.00	270	0	0	8,696	206	8,490
		29+50	2950.00	50.00	121.30	0.00	0.02	256	0	0	8,952	206	8,746
		30+00	3000.00	50.00	146.82	0.00	0.00	248	0	0	9,200	206	8,994
		30+50	3050.00	50.00	141.46	0.00	0.00	267	0	0	9,467	206	9,261
		31+00	3100.00	50.00	138.96	0.00	0.00	260	0	0	9,727	206	9,521
		31+50	3150.00	50.00	130.13	0.00	0.00	249	0	0	9,976	206	9,770
		32+00	3200.00	50.00	121.01	0.00	0.00	233	0	0	10,209	206	10,003
		32+50	3250.00	50.00	117.54	0.00	0.00	221	0	0	10,430	206	10,224
		33+00	3300.00	50.00	111.71	0.00	0.00	212	0	0	10,642	206	10,436
		33+50	3350.00	50.00	107.85	0.00	48.23	203	0	45	10,845	263	10,583
		34+00	3400.00	50.00	103.11	0.00	22.09	195	0	65	11,040	344	10,696
		34+50	3450.00	50.00	105.30	0.00	66.96	193	0	82	11,233	446	10,787
		35+00	3500.00	50.00	108.61	0.00	57.44	198	0	115	11,431	590	10,841
		35+50	3550.00	50.00	112.47	0.00	41.90	205	0	92	11,636	705	10,931
		36+00	3600.00	50.00	117.57	0.00	26.07	213	0	63	11,849	784	11,065
		36+50	3650.00	50.00	114.36	0.00	22.19	215	0	45	12,064	840	11,224
		37+00	3700.00	50.00	112.74	0.00	22.58	210	0	41	12,274	891	11,383
		37+50	3750.00	50.00	1.03	0.00	23.66	105	0	43	12,379	945	11,434
		38+00	3800.00	50.00	0.42	0.00	33.31	1	0	53	12,380	1,011	11,369
		38+50	3850.00	50.00	0.46	0.00	25.19	1	0	54	12,381	1,079	11,302
		39+00	3900.00	50.00	0.31	0.00	20.83	1	0	43	12,382	1,133	11,250
		39+50	3950.00	50.00	0.57	0.00	4.67	1	0	24	12,383	1,163	11,221
		39+72	3972.36	22.36	1.42	0.00	0.00	1	0	2	12,384	1,165	11,219
					STAGE 2 SUBTOTAL 0010			12,384	0	932			

CAPITOL DR / STH 190 WB

CATEGORY	STAGE	STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
					CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
								NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
0010	3	09+17	917.28	0.00	115.50	0.00	0.08	0	0	0	0	0	0
		09+50	950.00	32.72	199.70	0.00	3.44	191	0	2	191	3	189
		10+00	1000.00	50.00	172.45	0.00	0.01	345	0	3	536	6	530
		10+50	1050.00	50.00	112.90	0.00	0.04	264	0	0	800	6	794
		11+00	1100.00	50.00	117.83	0.00	0.00	214	0	0	1,014	6	1,008
		11+50	1150.00	50.00	119.83	0.00	0.00	220	0	0	1,234	6	1,228
		12+00	1200.00	50.00	120.13	0.00	0.00	222	0	0	1,456	6	1,450
		12+50	1250.00	50.00	117.06	0.00	0.00	220	0	0	1,676	6	1,670
		13+00	1300.00	50.00	119.06	0.00	0.00	219	0	0	1,895	6	1,889
		13+50	1350.00	50.00	109.39	0.00	0.09	212	0	0	2,107	6	2,101
		14+00	1400.00	50.00	109.56	0.00	0.08	203	0	0	2,310	6	2,304
		14+50	1450.00	50.00	98.26	0.00	0.00	192	0	0	2,502	6	2,496
		15+00	1500.00	50.00	113.08	0.00	0.26	196	0	0	2,698	6	2,692
		15+50	1550.00	50.00	101.34	0.00	2.71	199	0	3	2,897	10	2,887
		16+00	1600.00	50.00	86.66	0.00	12.50	174	0	14	3,071	28	3,044
		16+50	1650.00	50.00	88.58	0.00	11.26	162	0	22	3,233	55	3,178
		17+00	1700.00	50.00	92.56	0.00	11.52	168	0	21	3,401	81	3,320
		17+50	1750.00	50.00	91.84	0.00	9.20	171	0	19	3,572	105	3,467
		18+00	1800.00	50.00	90.92	0.00	8.41	169	0	16	3,741	125	3,616
		18+50	1850.00	50.00	74.81	0.00	9.13	153	0	16	3,894	145	3,749
		19+00	1900.00	50.00	115.43	0.00	8.27	176	0	16	4,070	165	3,905
		19+50	1950.00	50.00	155.56	0.00	0.00	251	0	8	4,321	175	4,146
		20+00	2000.00	50.00	163.32	0.00	0.00	295	0	0	4,616	175	4,441
		20+50	2050.00	50.00	119.00	0.00	0.00	261	0	0	4,877	175	4,702
		21+00	2100.00	50.00	114.74	0.00	0.01	216	0	0	5,093	175	4,918
		21+50	2150.00	50.00	107.88	0.00	0.01	206	0	0	5,299	175	5,124
		22+00	2200.00	50.00	98.53	0.00	0.00	191	0	0	5,490	175	5,315
		22+50	2250.00	50.00	90.38	0.00	0.00	175	0	0	5,665	175	5,490
		23+00	2300.00	50.00	90.78	0.00	0.20	168	0	0	5,833	175	5,658
		23+50	2350.00	50.00	95.80	0.00	1.10	173	0	1	6,006	176	5,830
		24+00	2400.00	50.00	99.75	0.00	0.00	181	0	1	6,187	178	6,010
		24+50	2450.00	50.00	105.72	0.00	0.00	190	0	0	6,377	178	6,200
		25+00	2500.00	50.00	116.27	0.00	0.03	206	0	0	6,583	178	6,406
		25+50	2550.00	50.00	113.76	0.00	0.02	213	0	0	6,796	178	6,619
		26+00	2600.00	50.00	110.55	0.00	0.00	208	0	0	7,004	178	6,827
		26+50	2650.00	50.00	106.81	0.00	0.03	201	0	0	7,205	178	7,028
		27+00	2700.00	50.00	102.76	0.00	0.01	194	0	0	7,399	178	7,222
		27+50	2750.00	50.00	103.11	0.00	0.02	191	0	0	7,590	178	7,413
		28+00	2800.00	50.00	105.27	0.00	0.00	193	0	0	7,783	178	7,606
		28+50	2850.00	50.00	126.05	0.00	0.00	214	0	0	7,997	178	7,820
		29+00	2900.00	50.00	159.29	0.00	0.01	264	0	0	8,261	178	8,084
		29+50	2950.00	50.00	143.93	0.00	0.00	281	0	0	8,542	178	8,365
		30+00	3000.00	50.00	140.35	0.00	0.00	263	0	0	8,805	178	8,628
		30+50	3050.00	50.00	146.04	0.00	0.01	265	0	0	9,070	178	8,893
		31+00	3100.00	50.00	143.10	0.00	0.01	268	0	0	9,338	178	9,161
		31+50	3150.00	50.00	136.98	0.00	0.02	259	0	0	9,597	178	9,420
		32+00	3200.00	50.00	134.50	0.00	0.00	251	0	0	9,848	178	9,671
		32+50	3250.00	50.00	129.03	0.00	0.01	244	0	0	10,092	178	9,915
		33+00	3300.00	50.00	131.96	0.00	0.00	242	0	0	10,334	178	10,157
		33+50	3350.00	50.00	136.48	0.00	0.00	249	0	0	10,583	178	10,406
		34+00	3400.00	50.00	131.96	0.00	0.00	249	0	0	10,832	178	10,655
		34+50	3450.00	50.00	126.24	0.00	0.00	239	0	0	11,071	178	10,894
		35+00	3500.00	50.00	117.93	0.00	0.00	226	0	0	11,297	178	11,120
		35+50	3550.00	50.00	118.08	0.00	0.00	219	0	0	11,516	178	11,339
		36+00	3600.00	50.00	119.61	0.00	0.00	220	0	0	11,736	178	11,559
		36+50	3650.00	50.00	117.30	0.00	0.00	219	0	0	11,955	178	11,778
		37+00	3700.00	50.00	107.89	0.00	0.00	209	0	0	12,164	178	11,987
						STAGE 3 TOTAL 0010		12,164	0	142			

9

9

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	EARTHWORK DATA	SHEET 615	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090101-EW.DWG
LAYOUT NAME - 02

PLOT DATE : 1/23/2023 7:11 AM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1" = 1'

STH 16 WB OFF RAMP

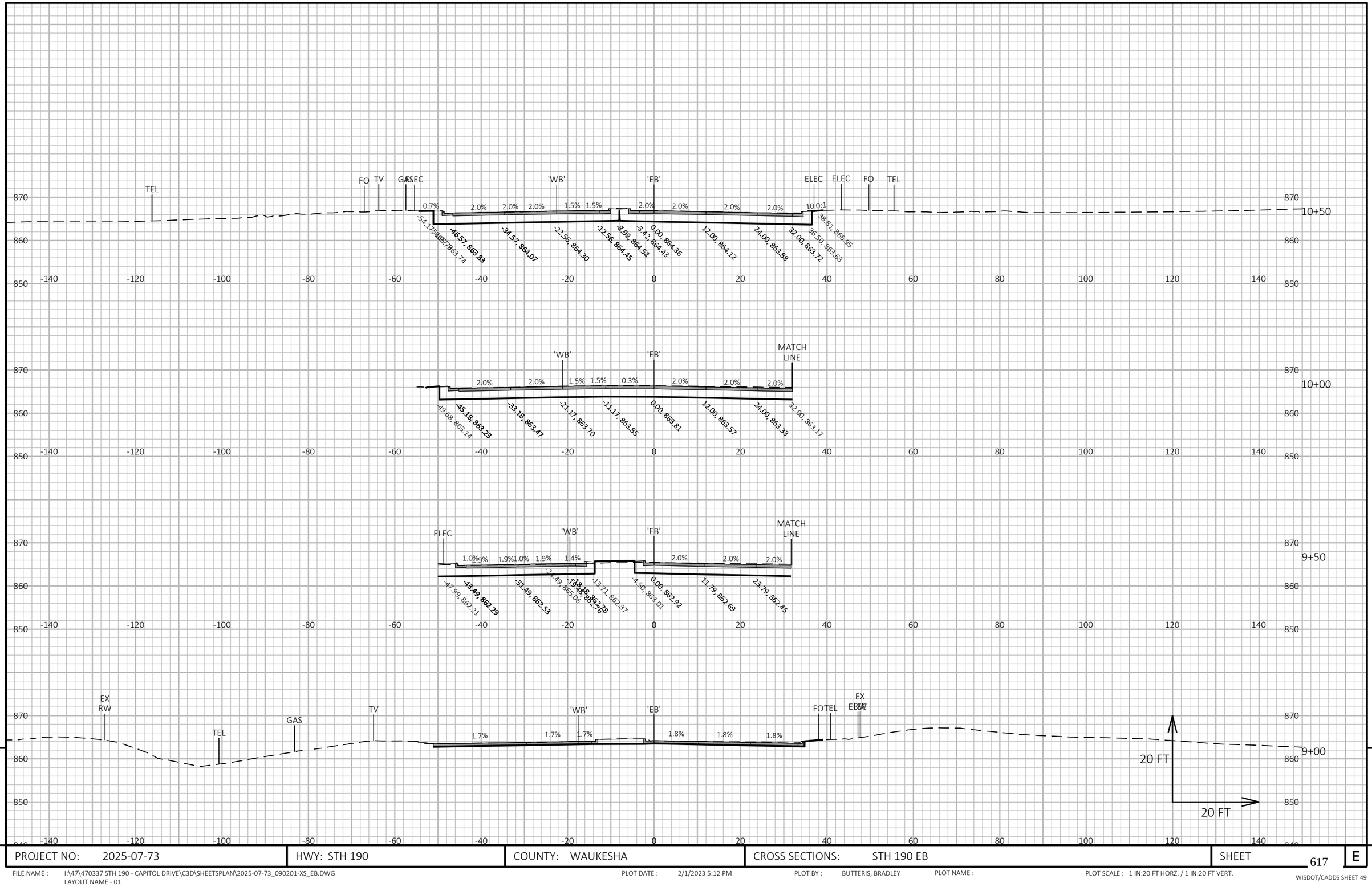
CATEGORY	STAGE	STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
					CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
								NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.25	NOTE 8
0010	2	686+00	68600.00	0.00	184.83	0.00	29.02	0	0	0	0	0	0
		686+50	68650.00	50.00	33.72	0.00	38.79	202	0	63	202	79	123
		687+00	68700.00	50.00	36.89	0.00	38.99	65	0	72	267	169	98
		687+50	68750.00	50.00	37.24	0.00	39.82	69	0	73	336	260	76
		688+00	68800.00	50.00	30.17	0.00	64.45	62	0	97	398	381	17
		688+50	68850.00	50.00	32.87	0.00	61.50	58	0	117	456	528	-72
		689+00	68900.00	50.00	31.52	0.00	73.46	60	0	125	516	684	-168
		689+50	68950.00	50.00	38.41	0.00	92.58	65	0	154	581	876	-295
		690+00	69000.00	50.00	35.82	0.00	40.89	69	0	124	650	1,031	-381
		690+50	69050.00	50.00	33.88	0.00	16.46	65	0	53	715	1,098	-383
		691+00	69100.00	50.00	30.24	0.00	8.57	59	0	23	774	1,126	-352
		691+06	69106.06	6.06	30.49	0.00	9.63	7	0	2	781	1,129	-348
						STAGE 2 SUBTOTAL 0010		781	0	903			

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

9

9

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	EARTHWORK DATA	SHEET 616	E



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 617	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 01

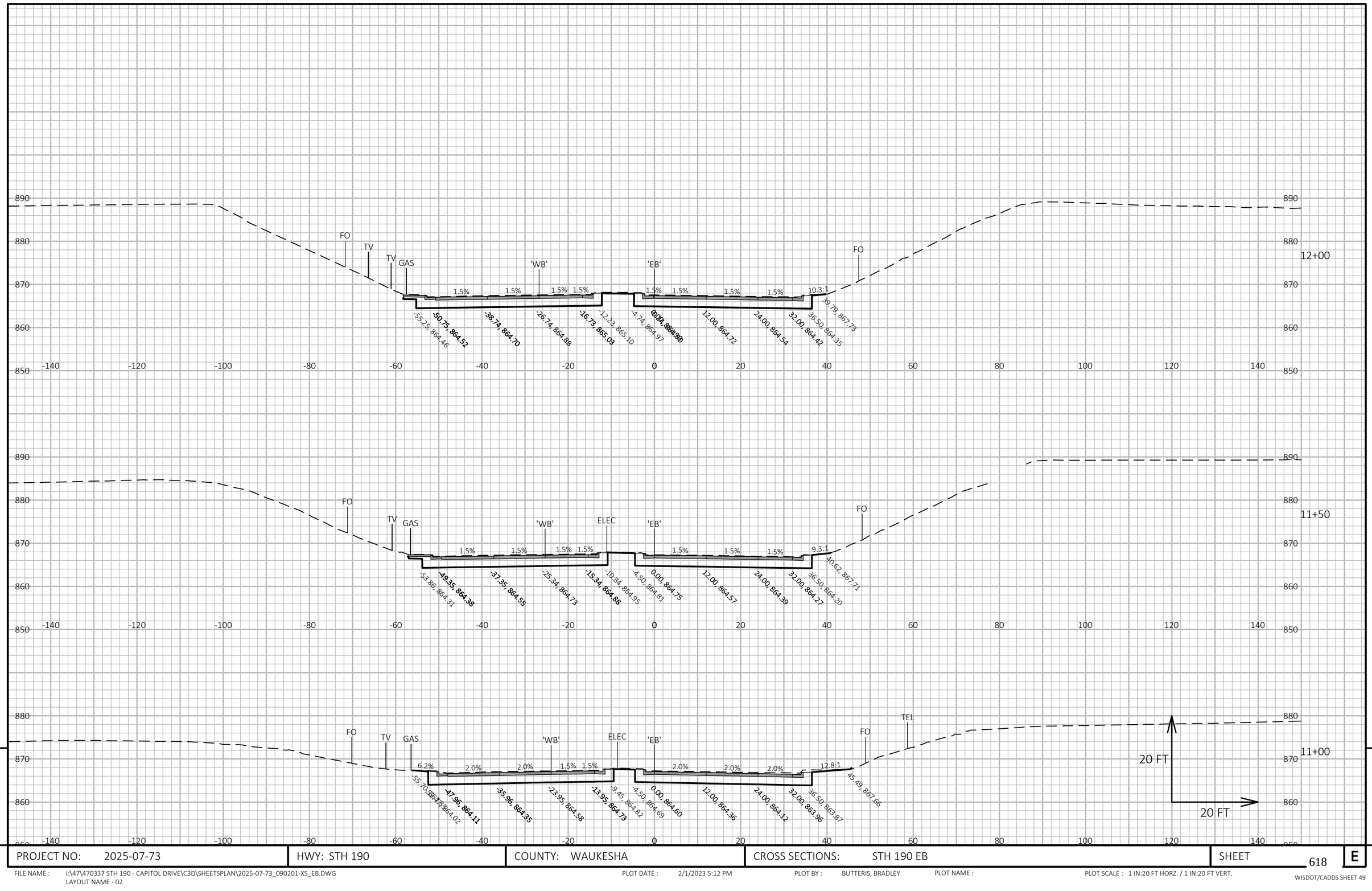
PLOT DATE : 2/1/2023 5:12 PM

PLOT BY : BUTTERIS, BRADLEY

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 618	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 02

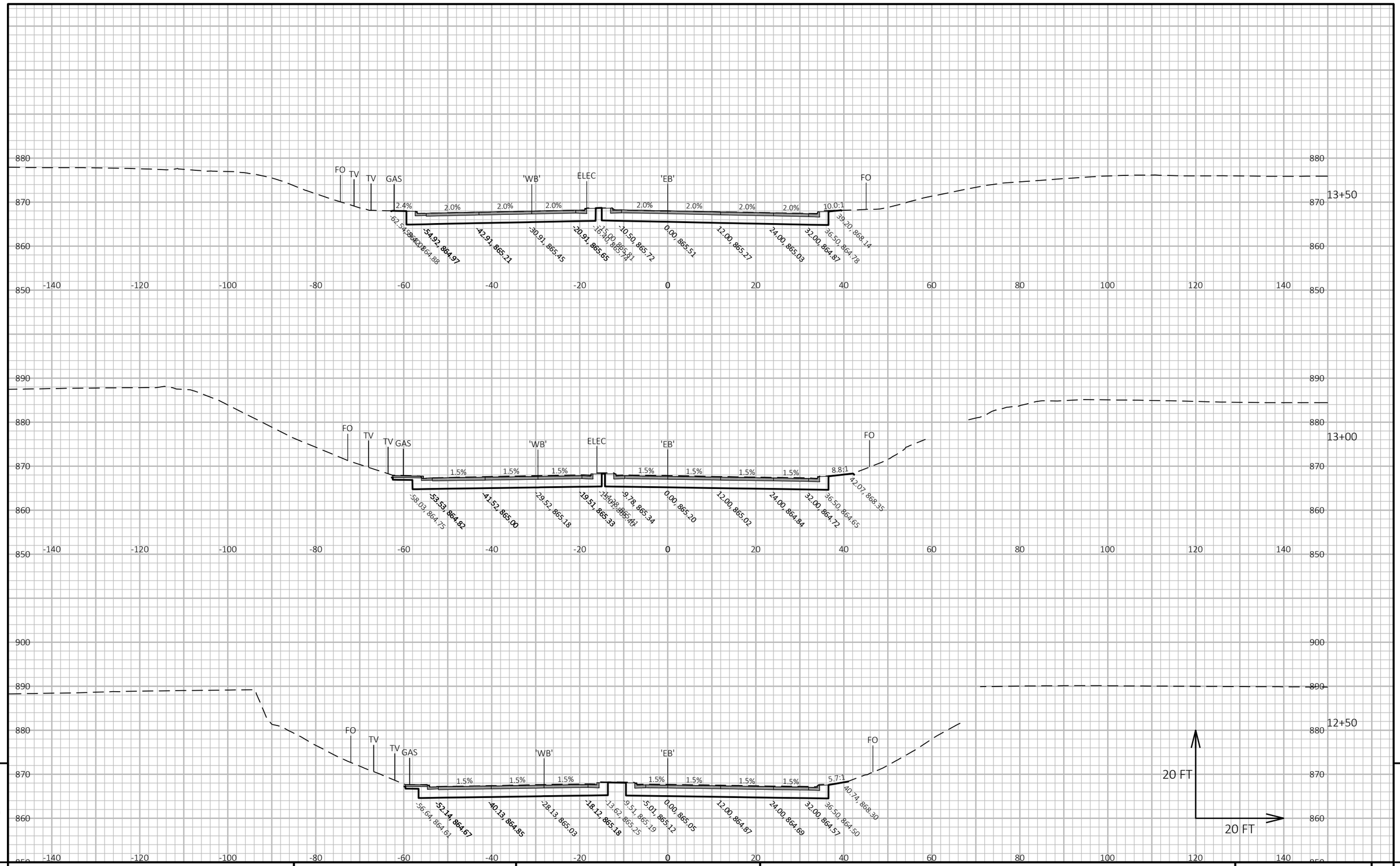
PLOT DATE : 2/1/2023 5:12 PM

PLOT BY : BUTTERIS, BRADLEY

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

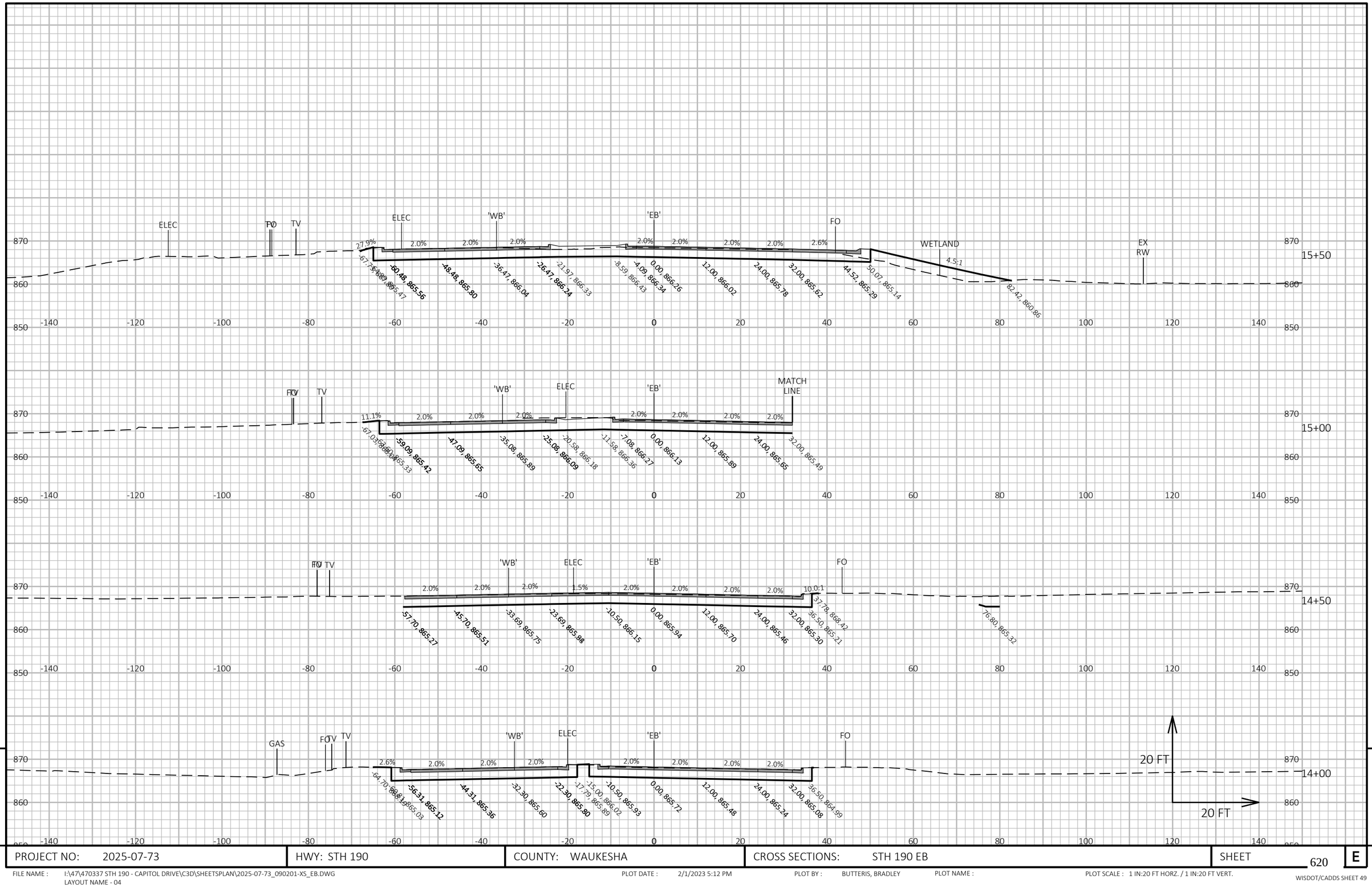
9

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 619	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 03

PLOT DATE : 2/1/2023 5:12 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 620	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 04

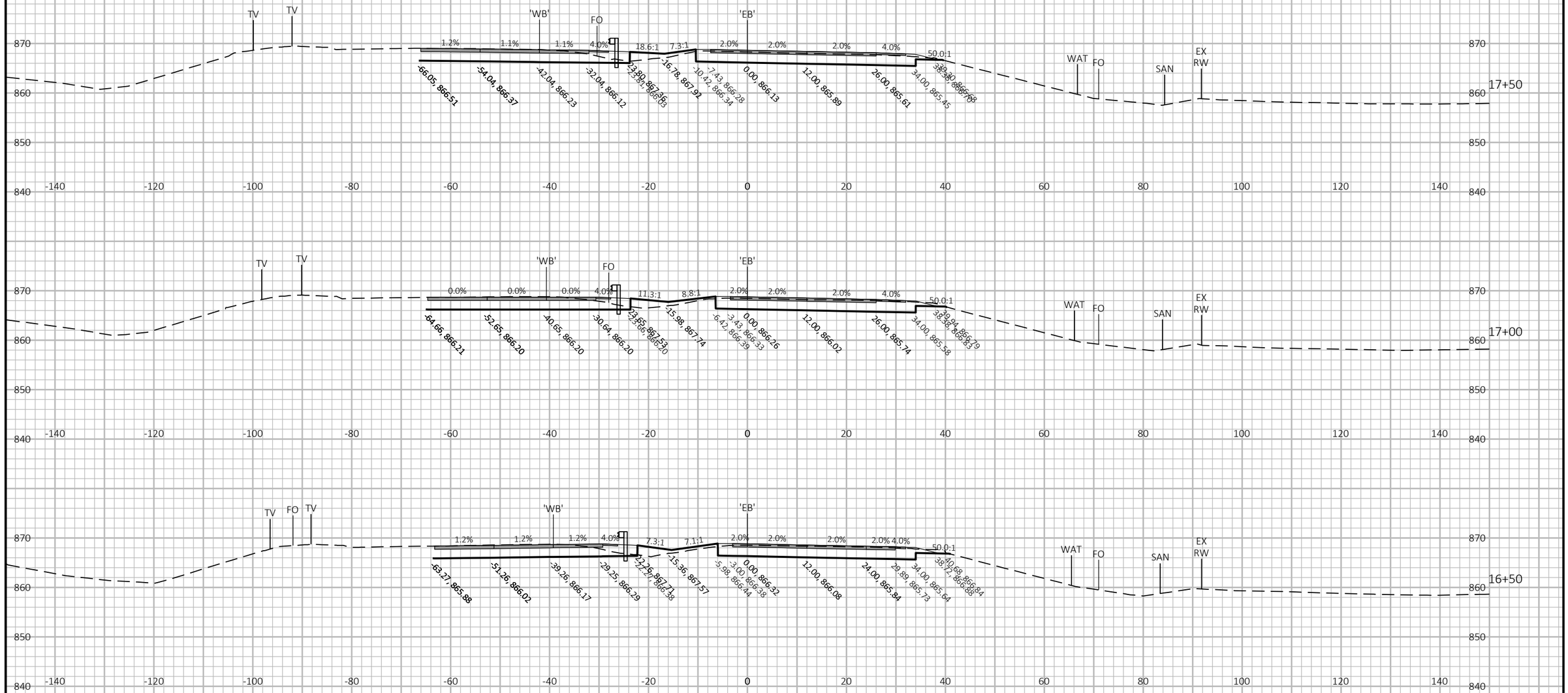
PLOT DATE : 2/1/2023 5:12 PM

PLOT BY : BUTTERIS, BRADLEY

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 621	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 05

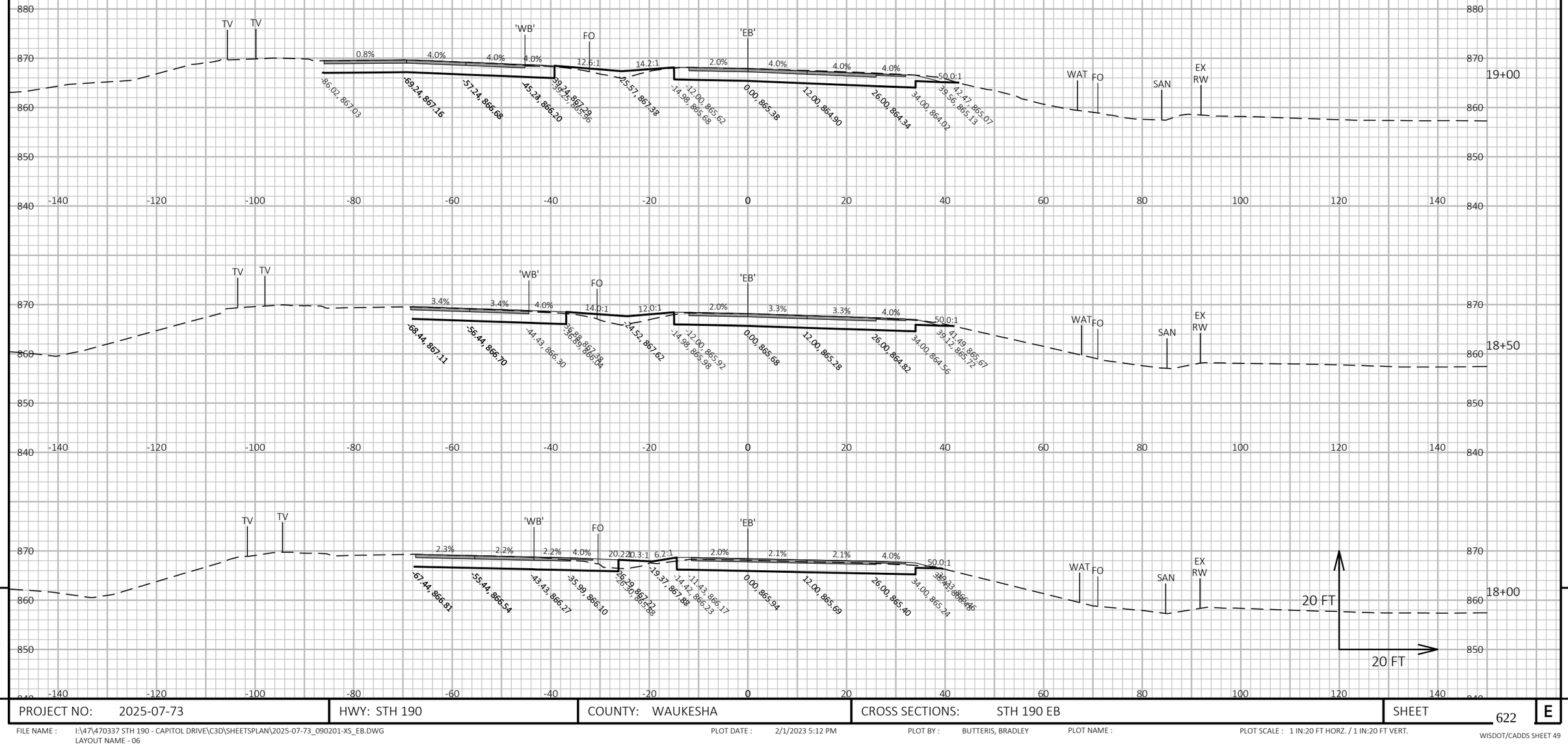
PLOT DATE : 2/1/2023 5:12 PM

PLOT BY : BUTTERIS, BRADLEY

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

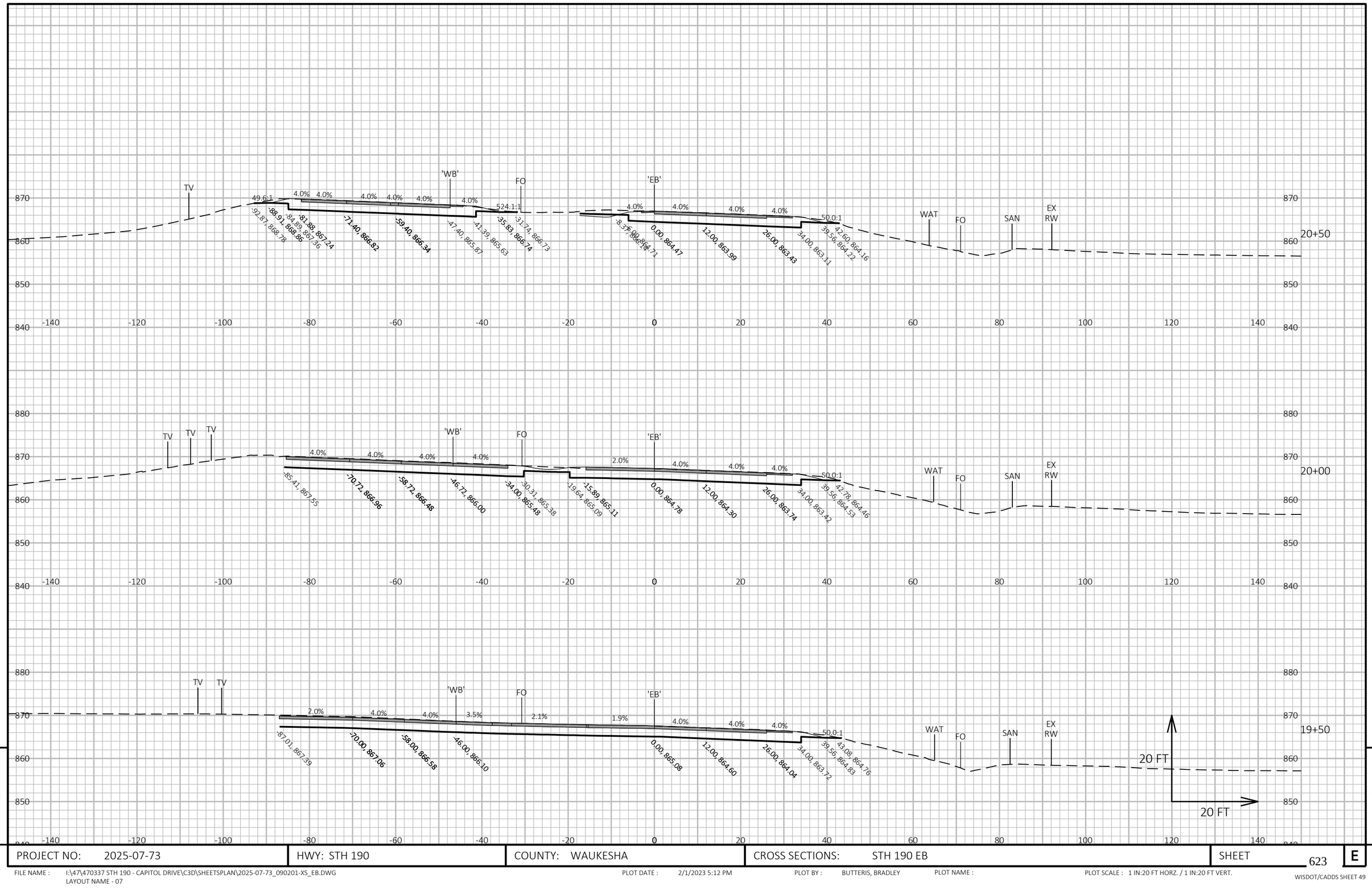


PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 622 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 06

PLOT DATE : 2/1/2023 5:12 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

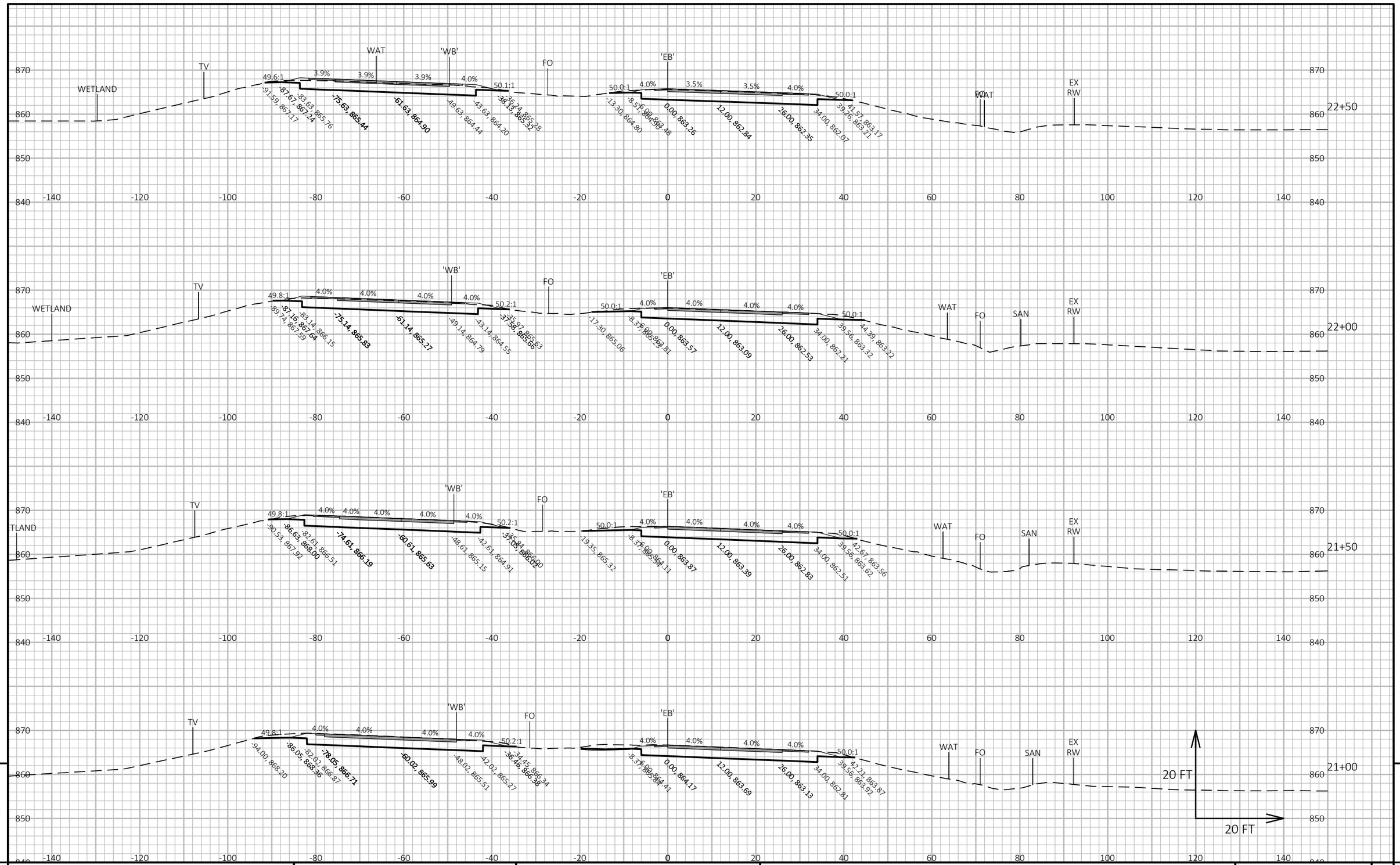


PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 623	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 07

PLOT DATE : 2/1/2023 5:12 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 624	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 08

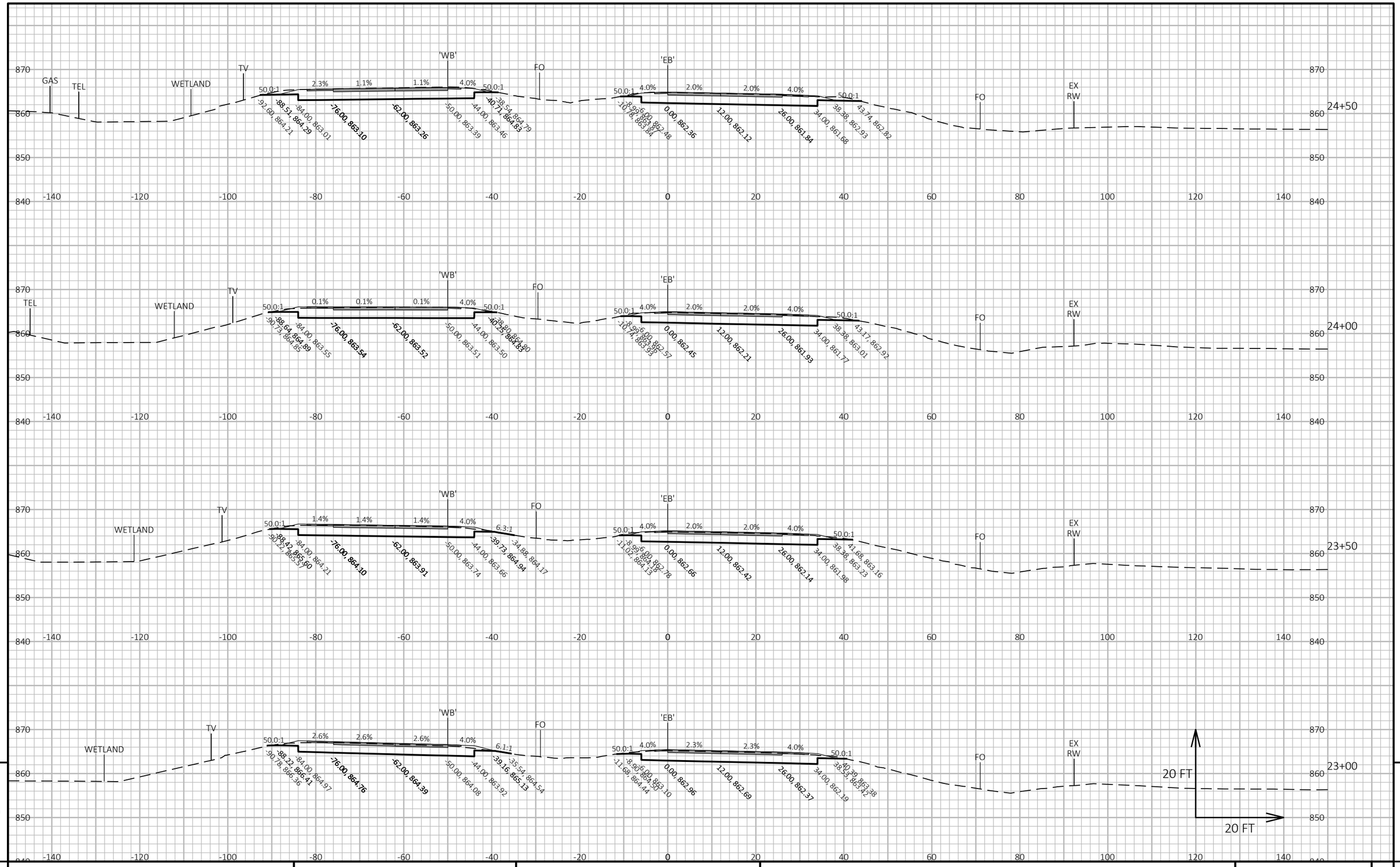
PLOT DATE : 2/1/2023 5:12 PM

PLOT BY : BUTTERIS, BRADLEY

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 625	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 09

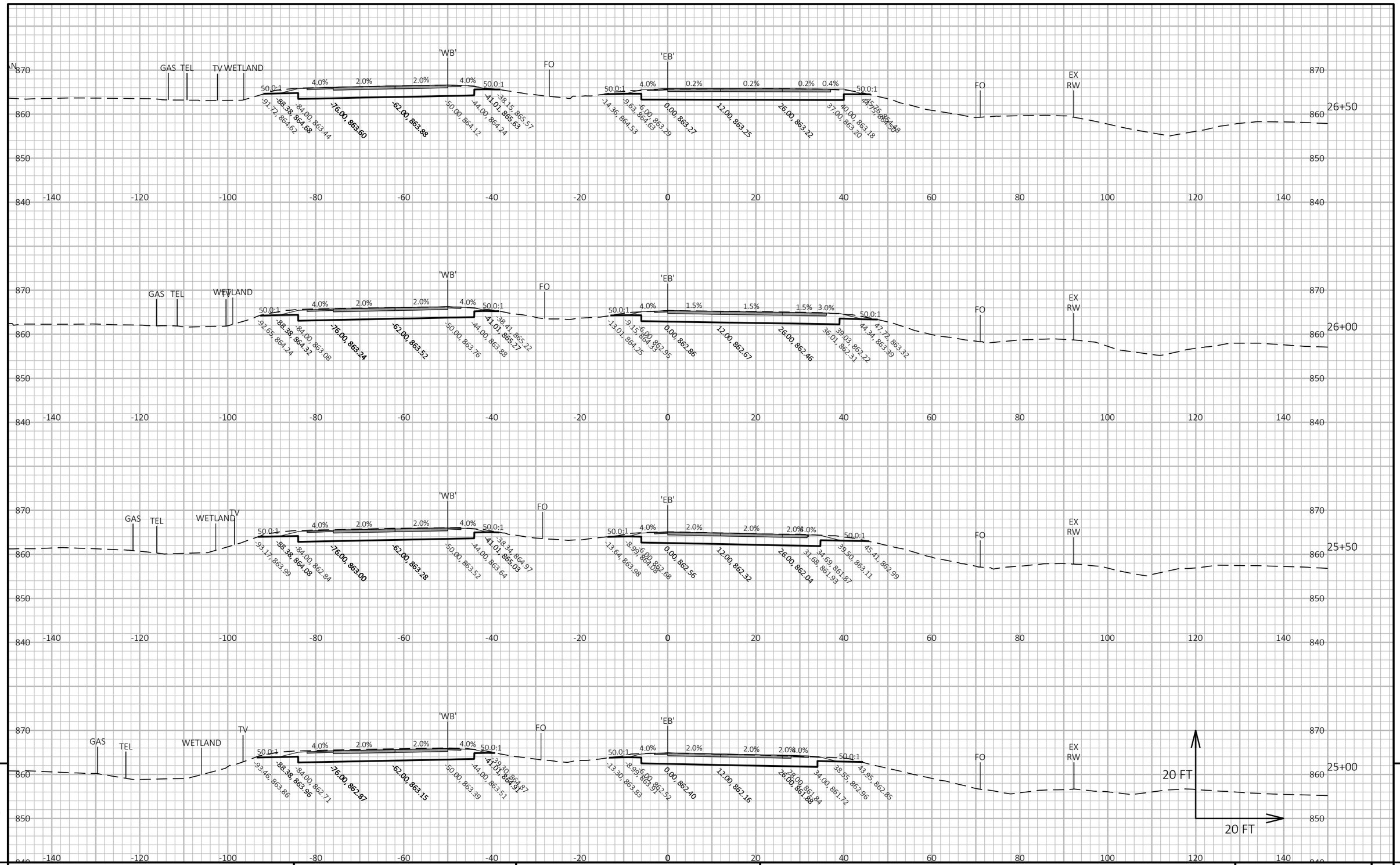
PLOT DATE : 2/1/2023 5:12 PM

PLOT BY : BUTTERIS, BRADLEY

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

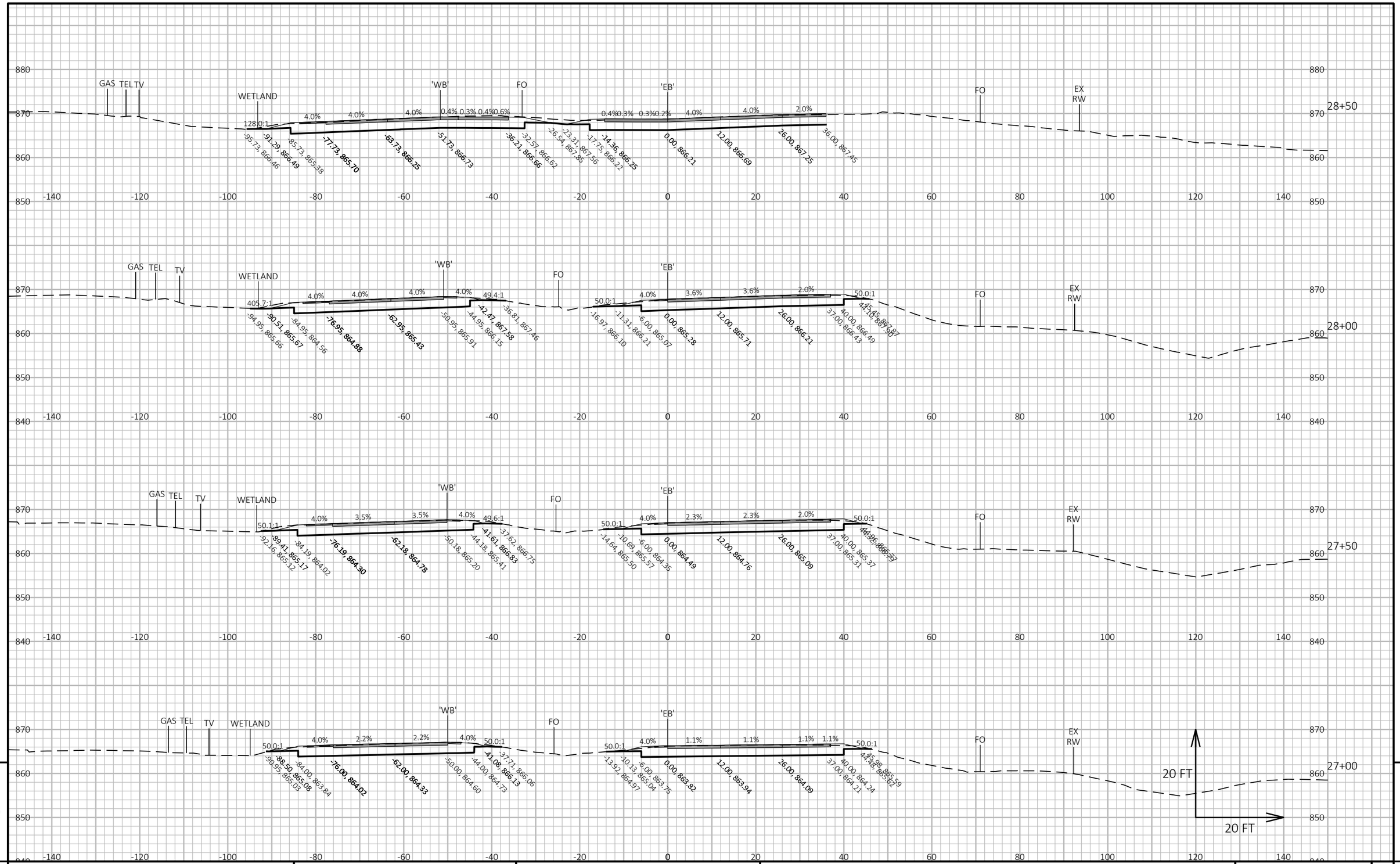


PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 626	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 10

PLOT DATE : 2/1/2023 5:12 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

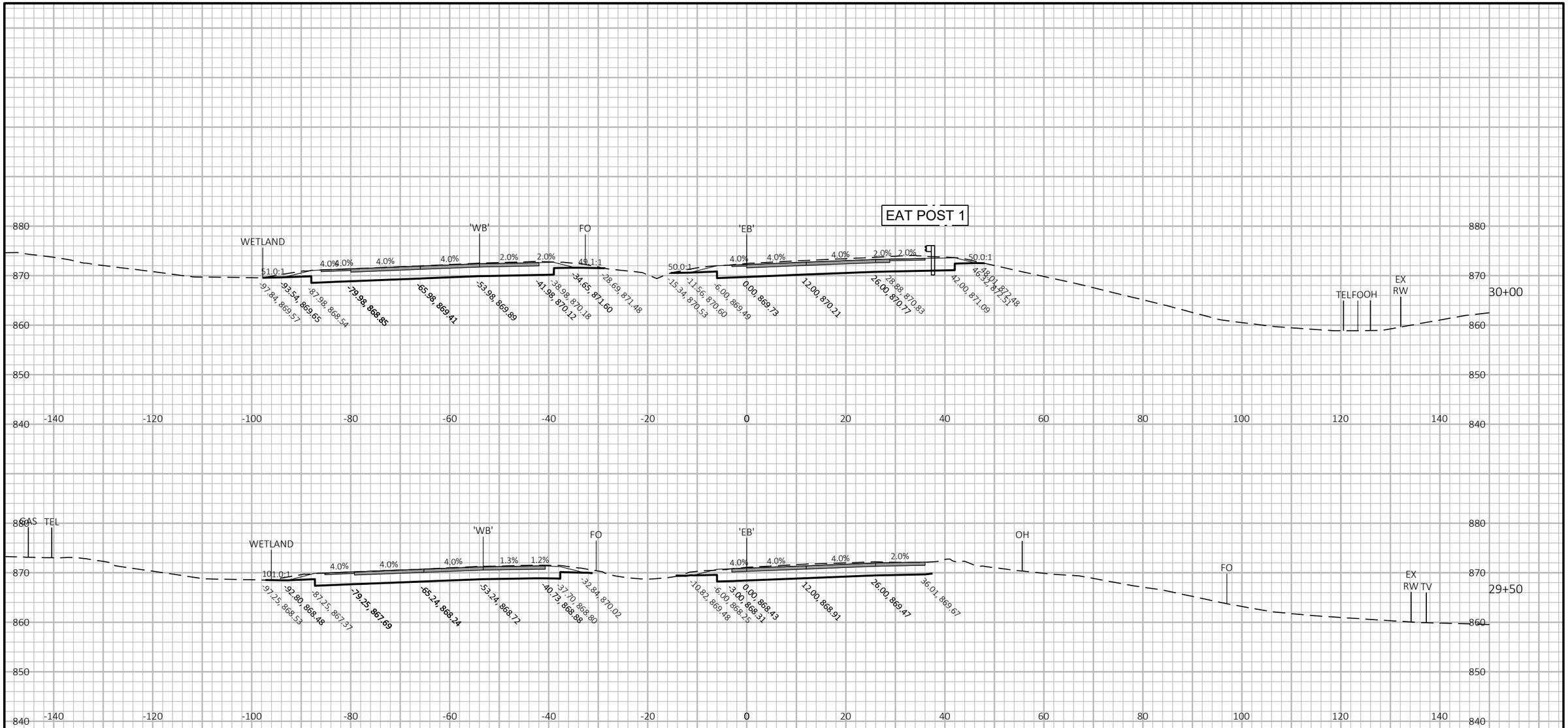


9	PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 627 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 11

PLOT DATE : 2/1/2023 5:12 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 628	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 12

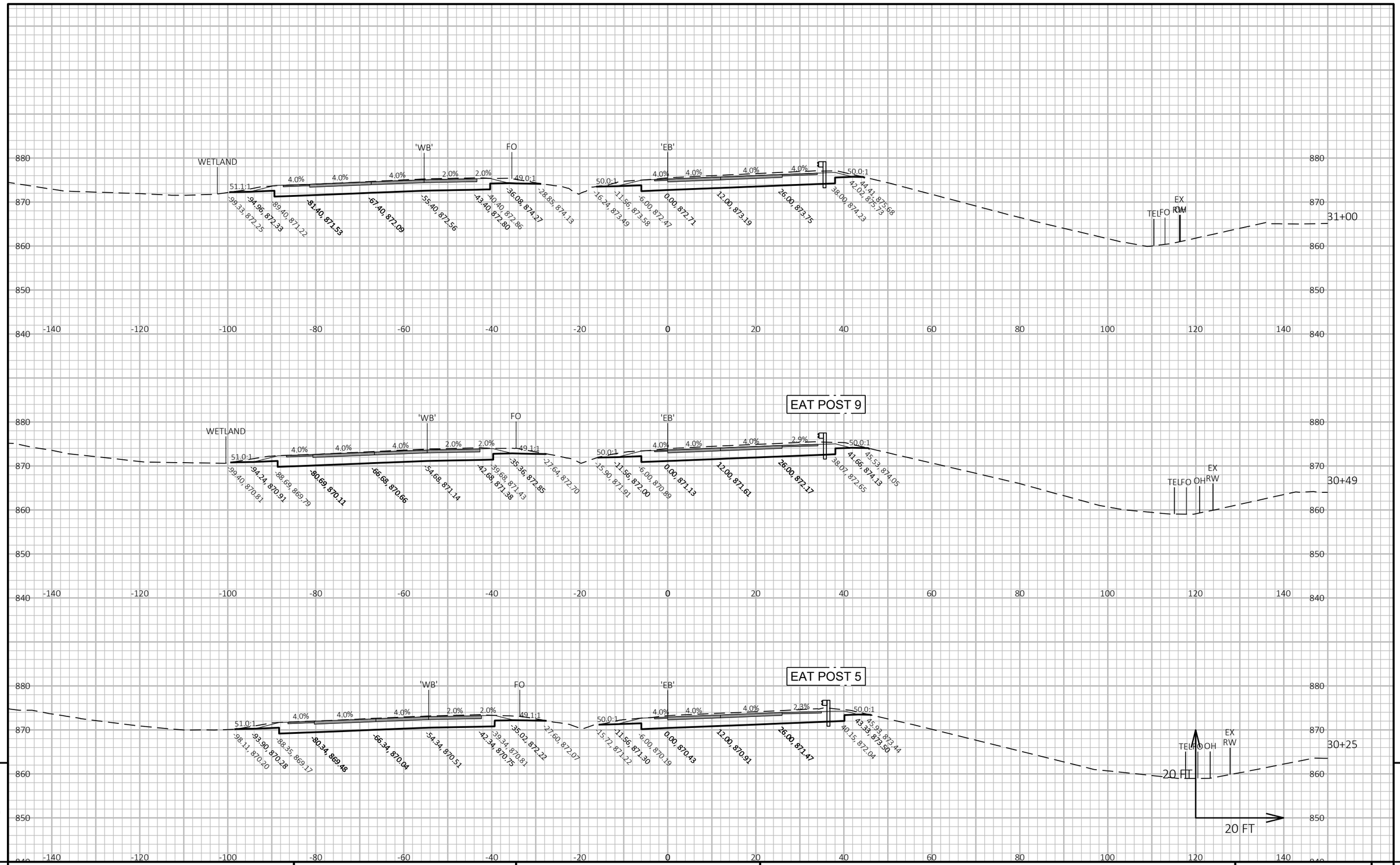
PLOT DATE : 2/1/2023 5:12 PM

PLOT BY : BUTTERIS, BRADLEY

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

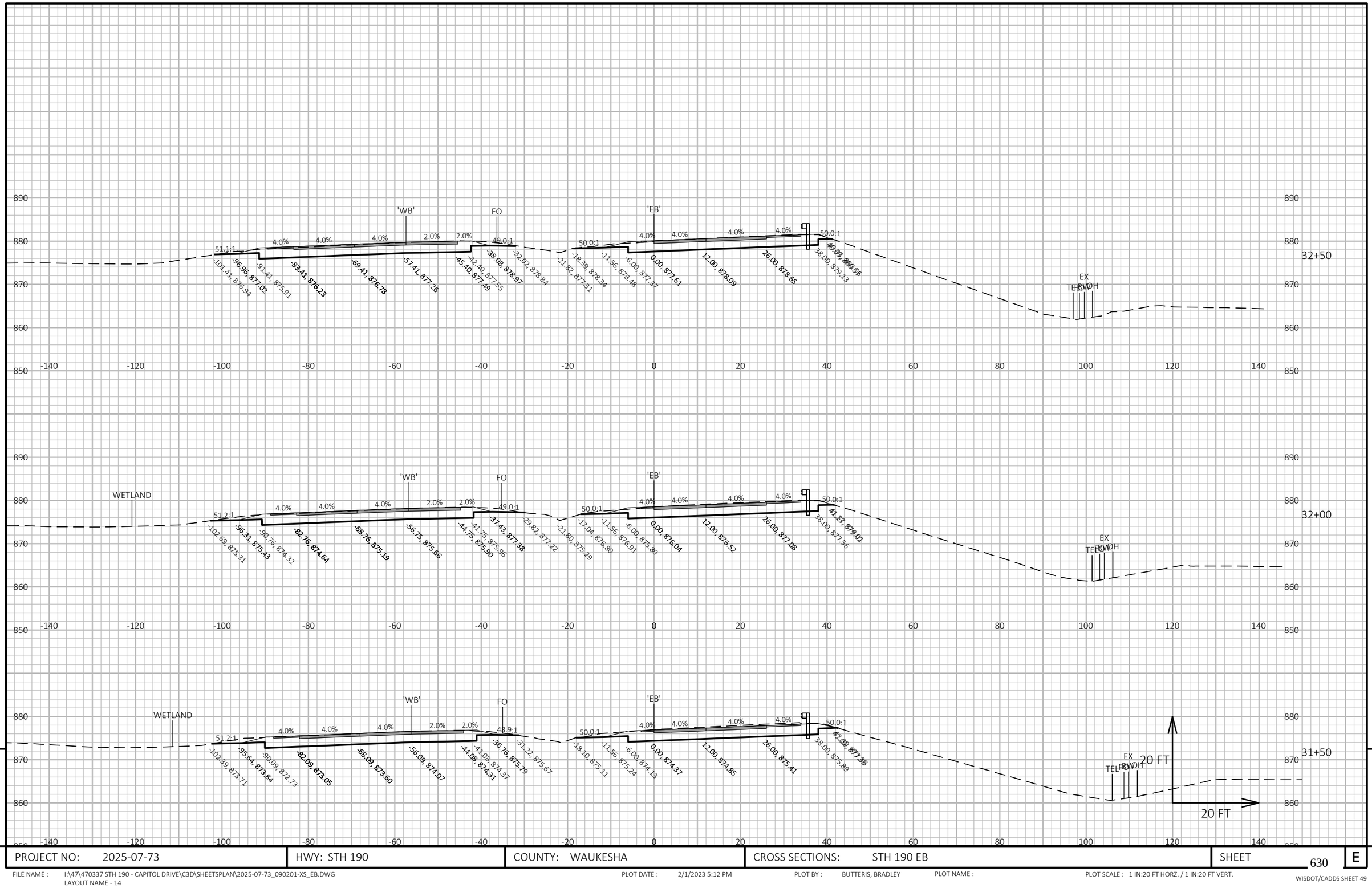
9

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 629	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 13

PLOT DATE : 2/1/2023 5:12 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

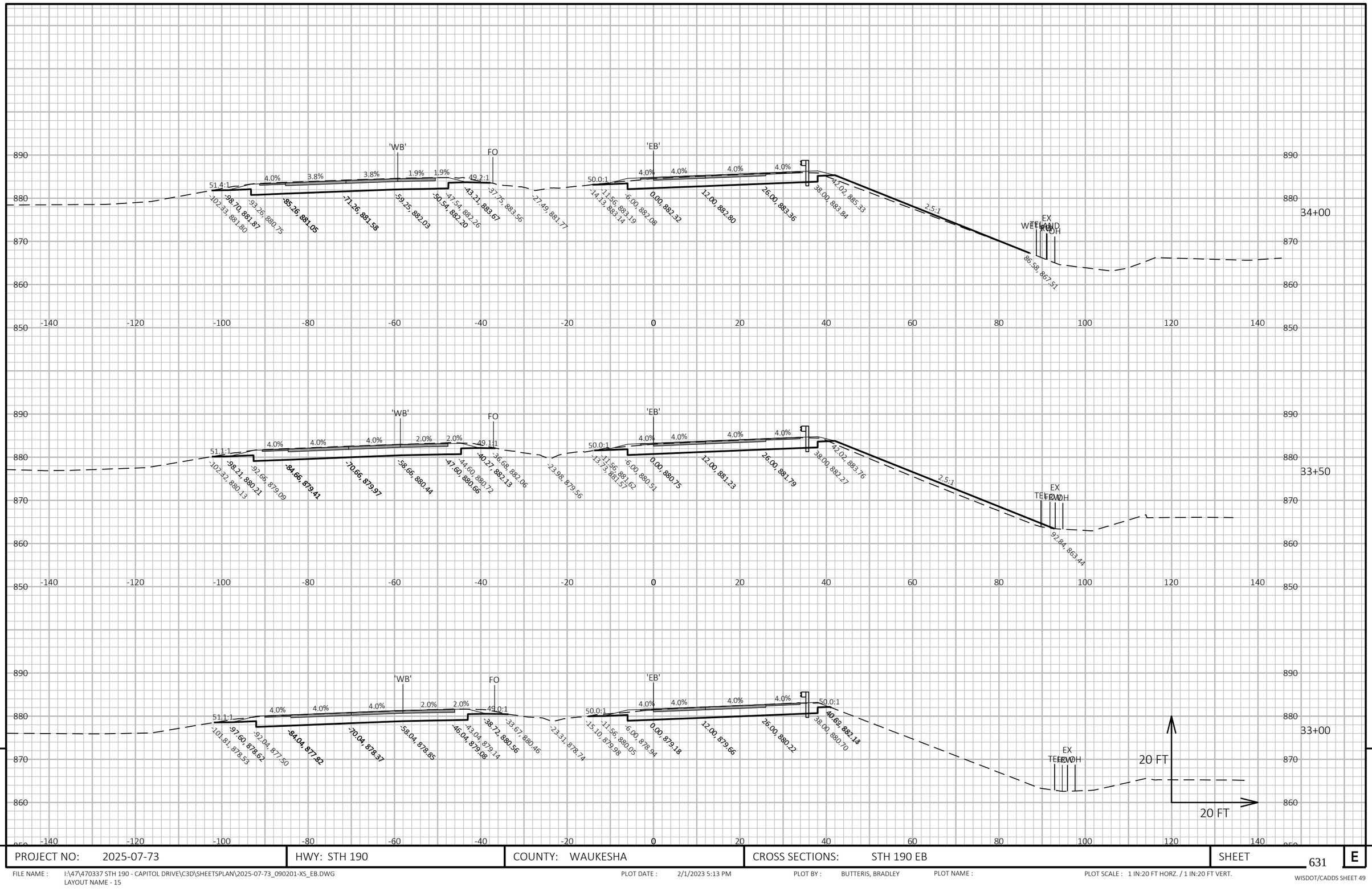
9

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 630	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 14

PLOT DATE : 2/1/2023 5:12 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 631 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 15

PLOT DATE : 2/1/2023 5:13 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

9

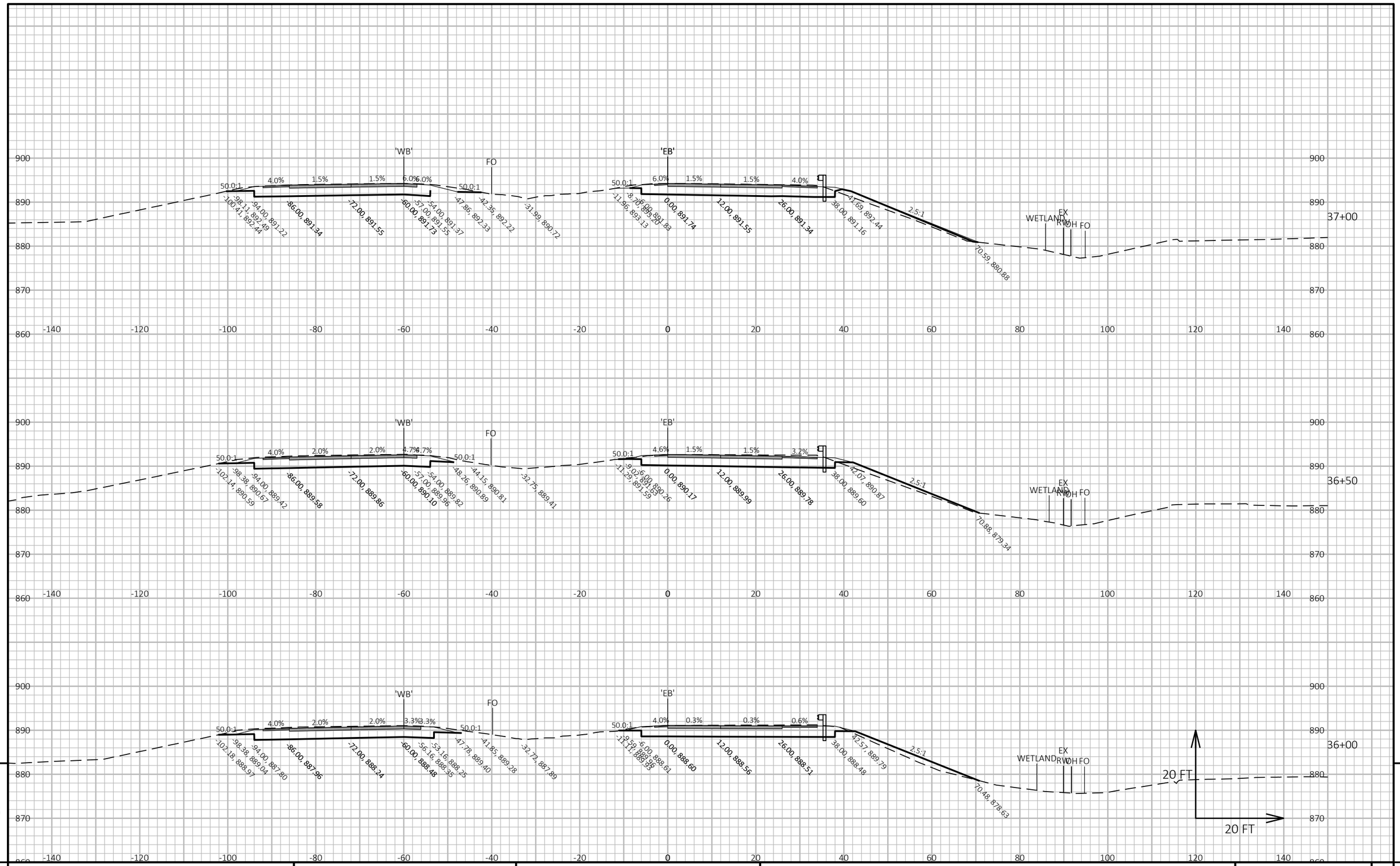
9

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 632	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 16

PLOT DATE : 2/1/2023 5:13 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

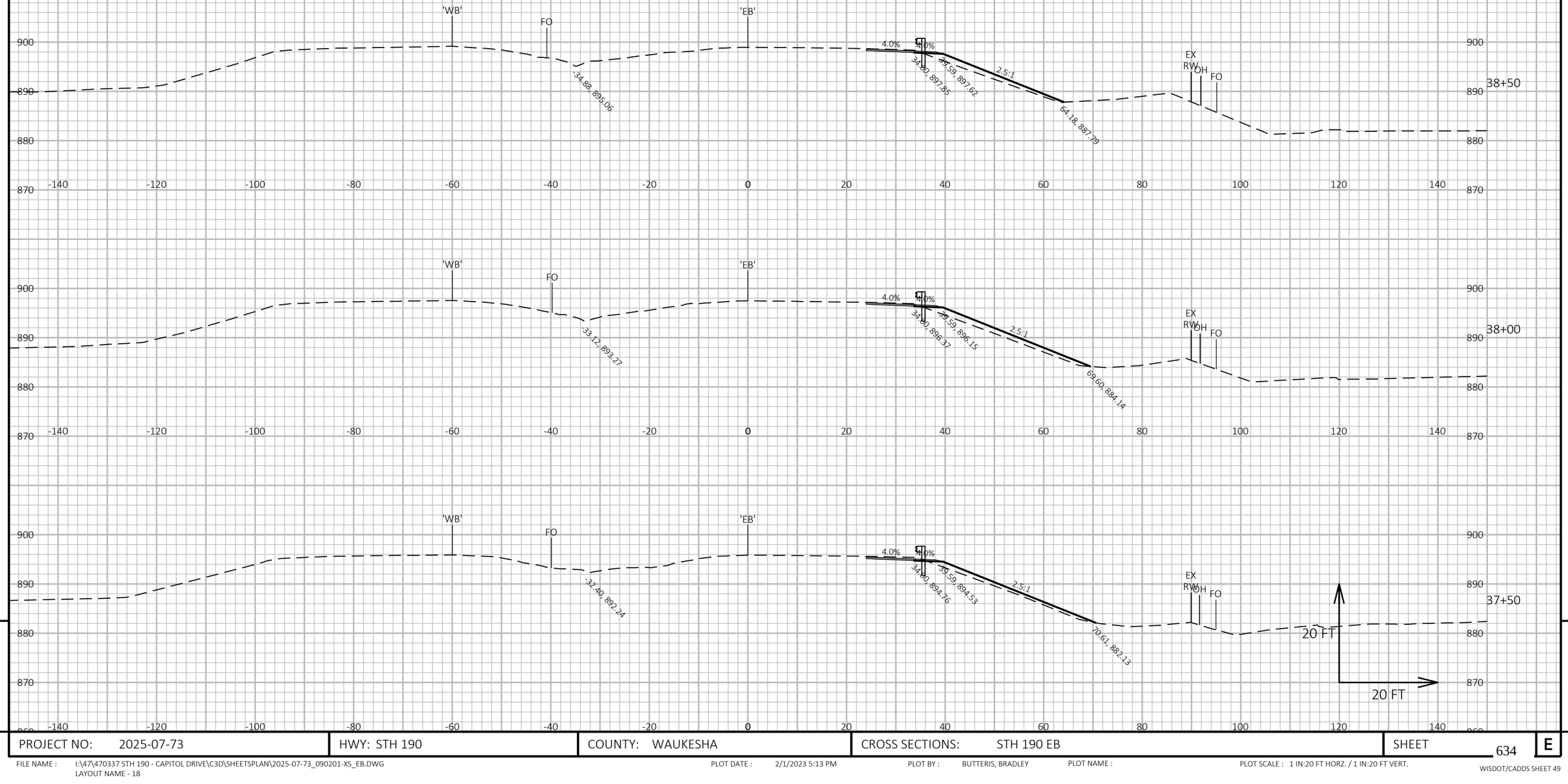
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PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 633	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 17

PLOT DATE : 2/1/2023 5:13 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

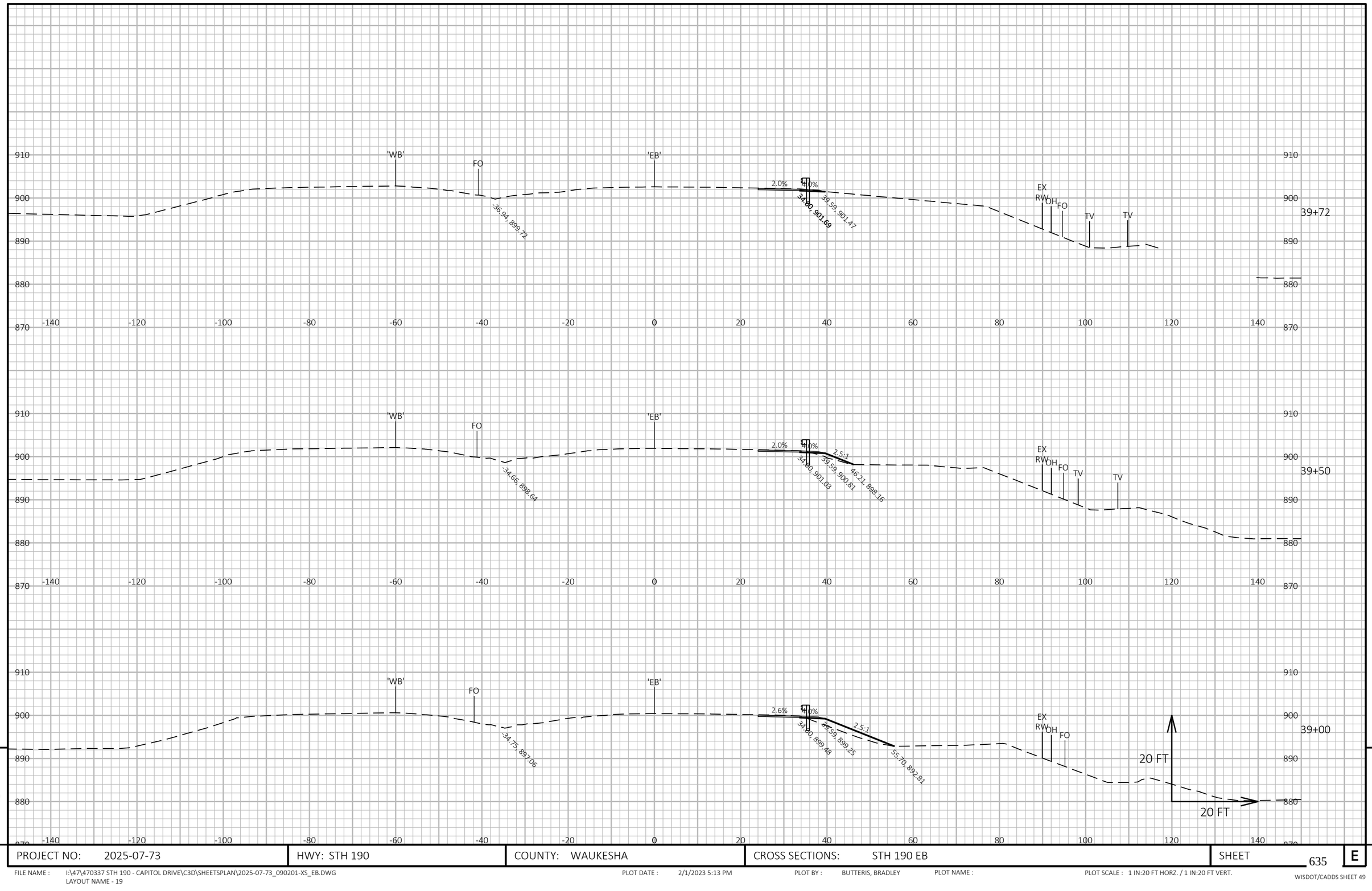
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PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 634	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 18

PLOT DATE : 2/1/2023 5:13 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

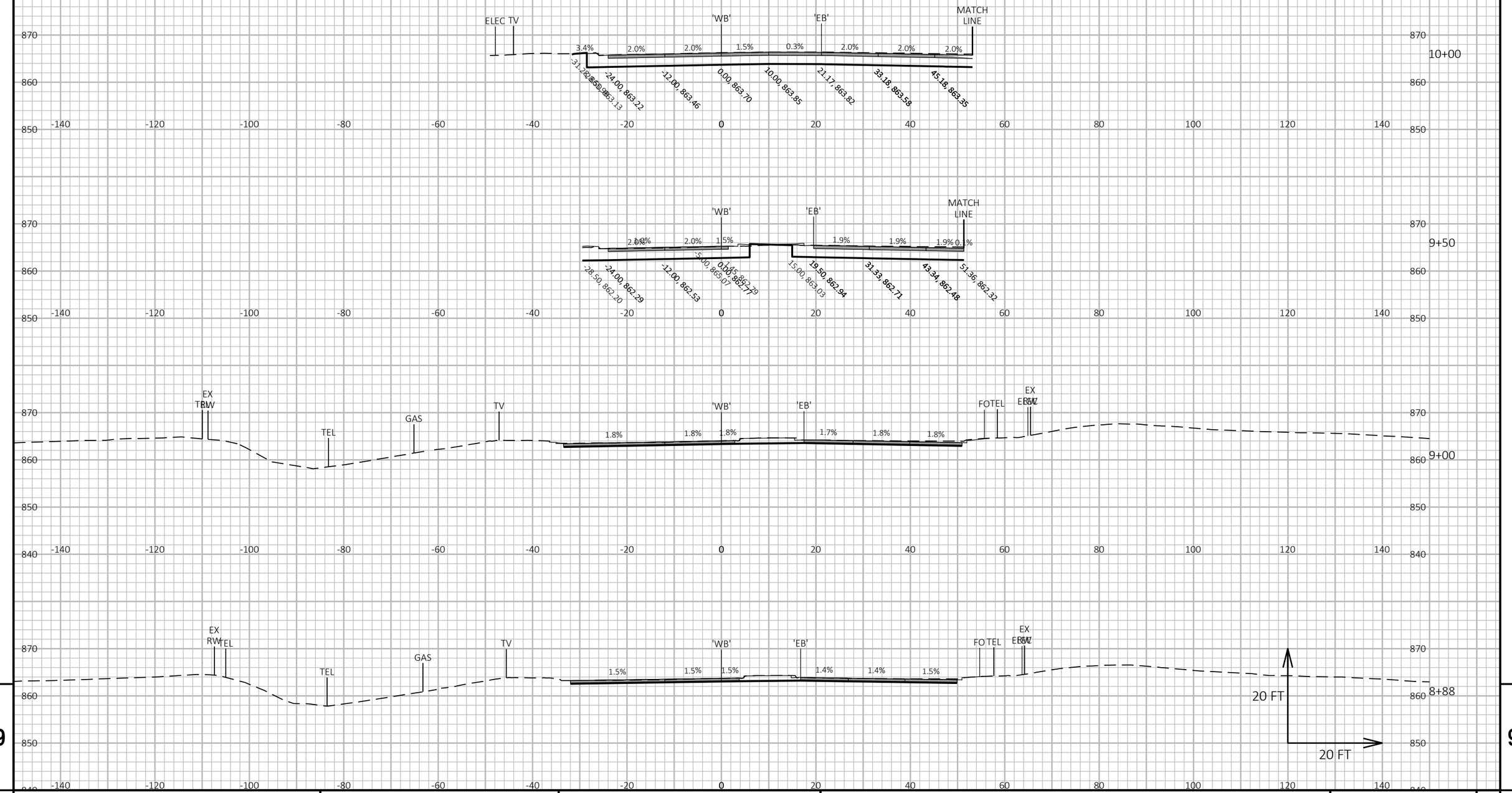
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PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB	SHEET 635	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090201-XS_EB.DWG
LAYOUT NAME - 19

PLOT DATE : 2/1/2023 5:13 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



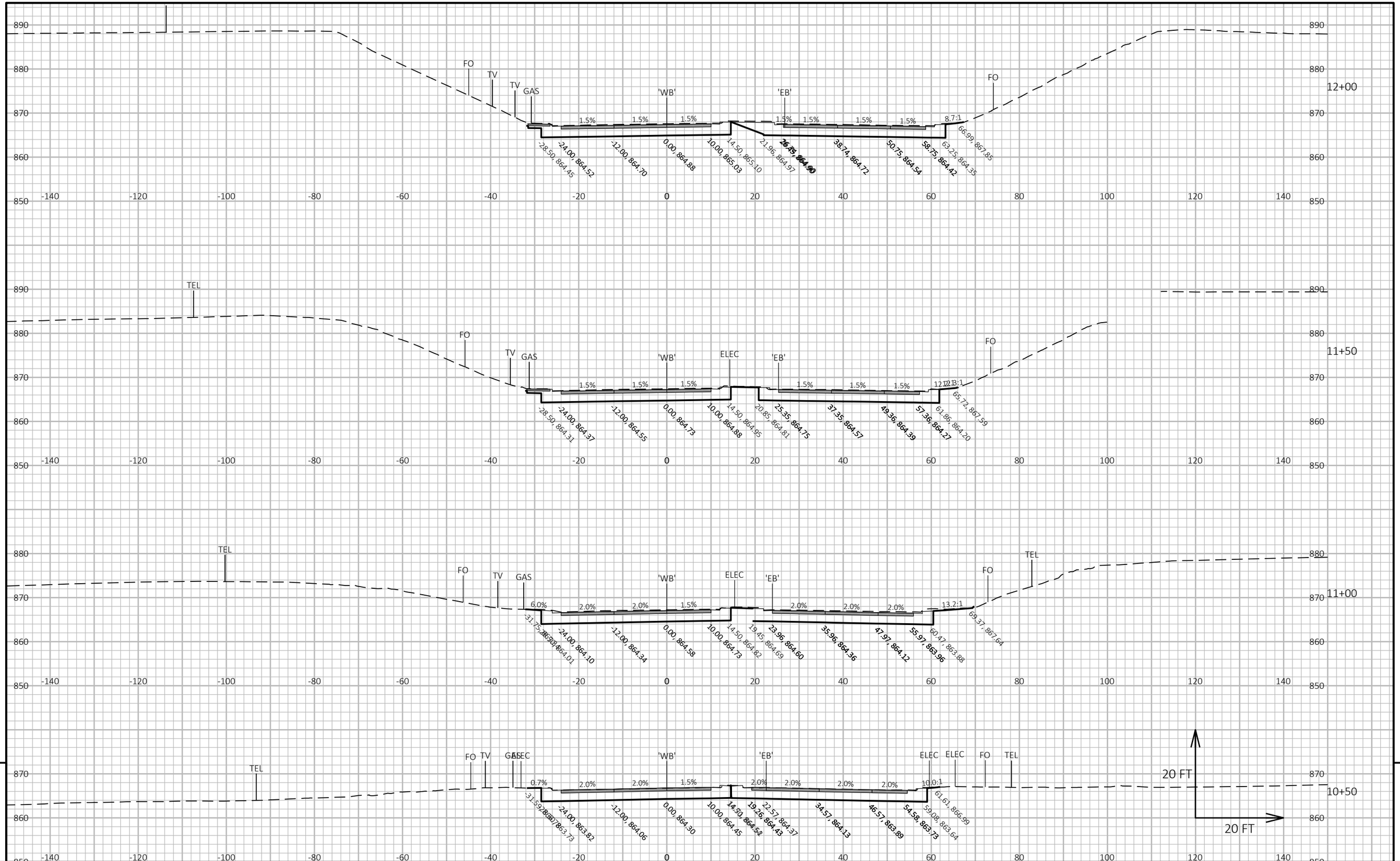
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PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB	SHEET 636	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090202-XS_WB.DWG
LAYOUT NAME - 01

PLOT DATE : 2/1/2023 5:06 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

9

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB	SHEET 637	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090202-XS_WB.DWG
LAYOUT NAME - 02

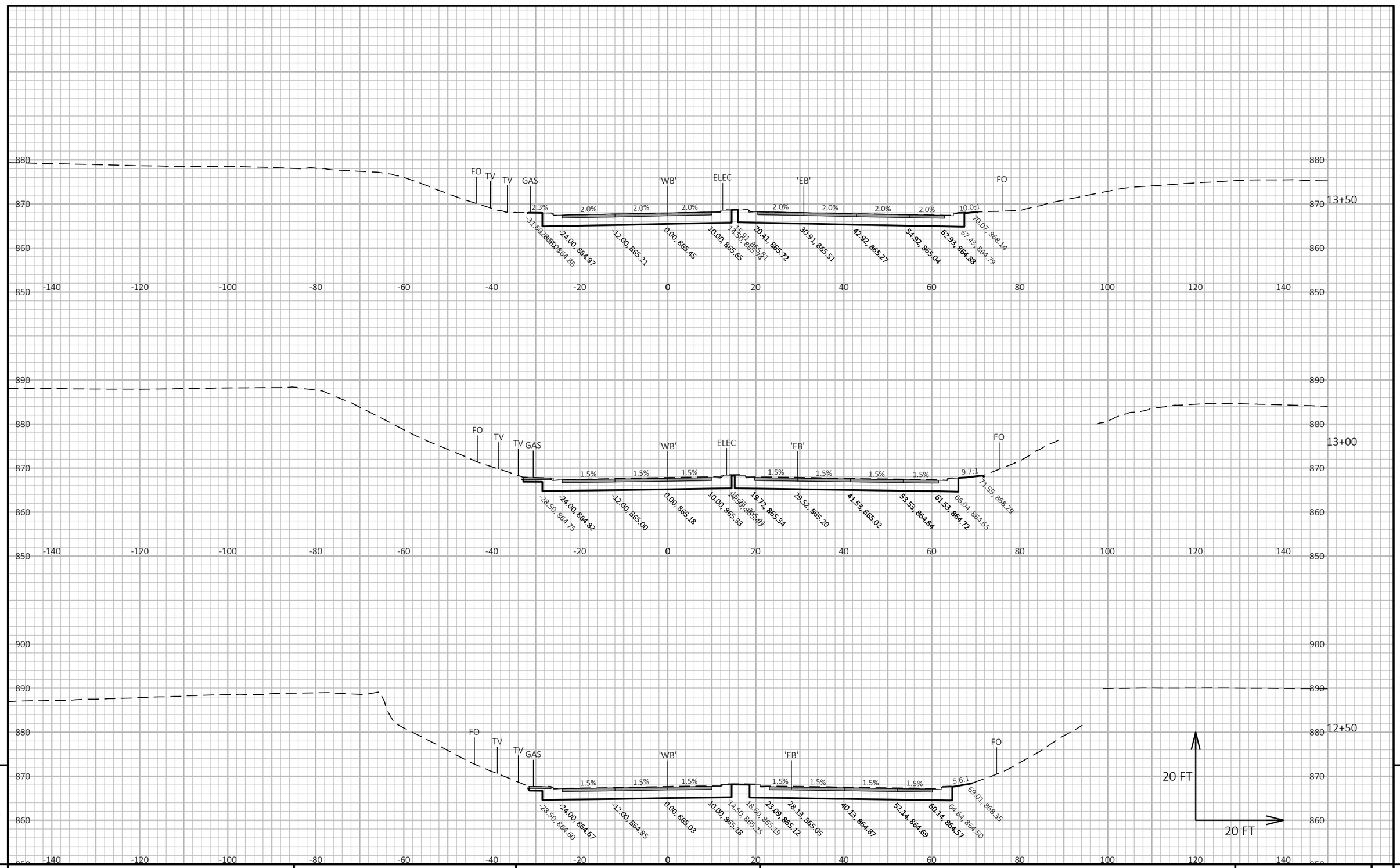
PLOT DATE : 2/1/2023 5:06 PM

PLOT BY : BUTTERIS, BRADLEY

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB	SHEET 638	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090202-XS_WB.DWG
LAYOUT NAME - 03

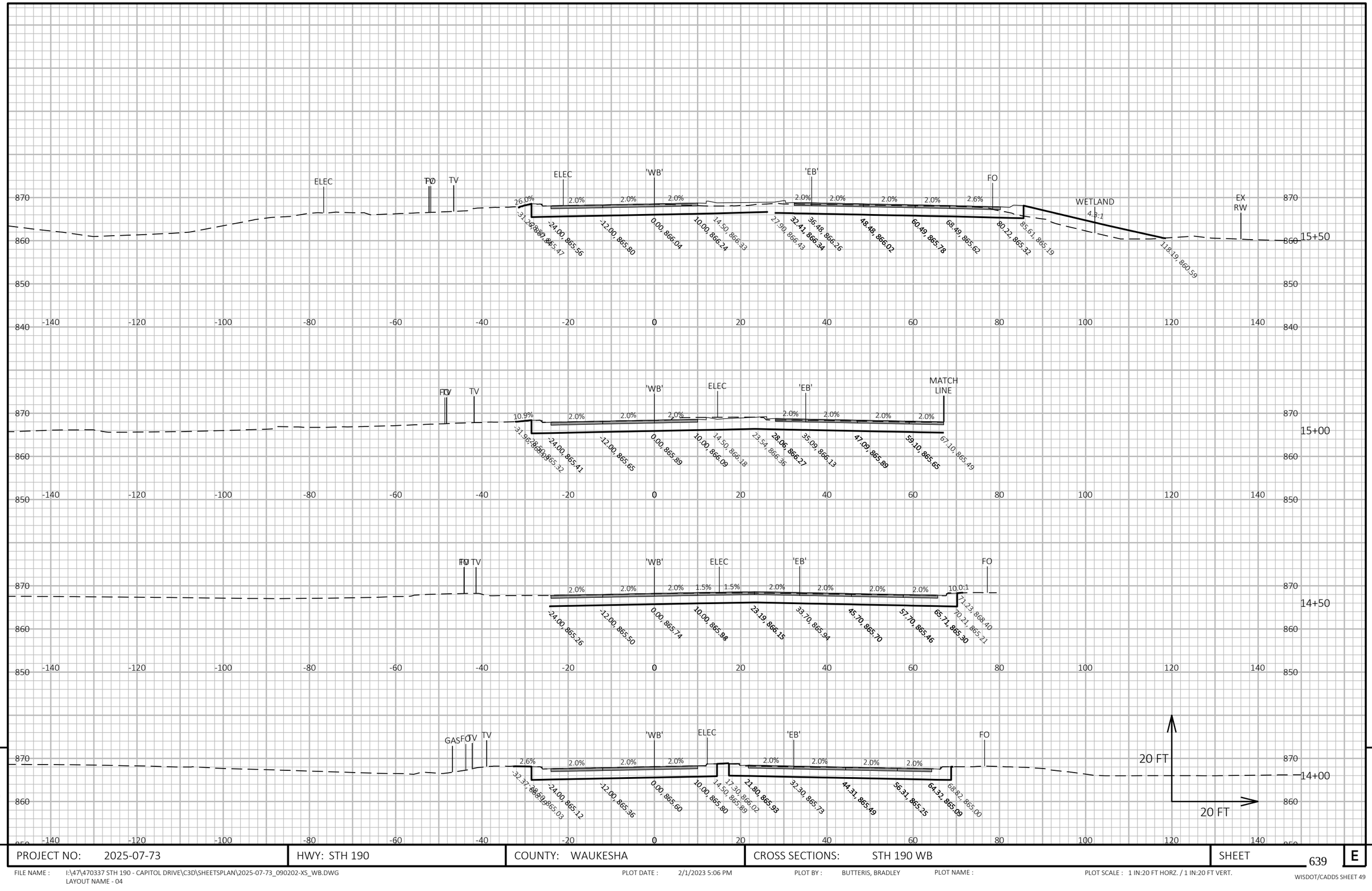
PLOT DATE : 2/1/2023 5:06 PM

PLOT BY : BUTTERIS, BRADLEY

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9 9

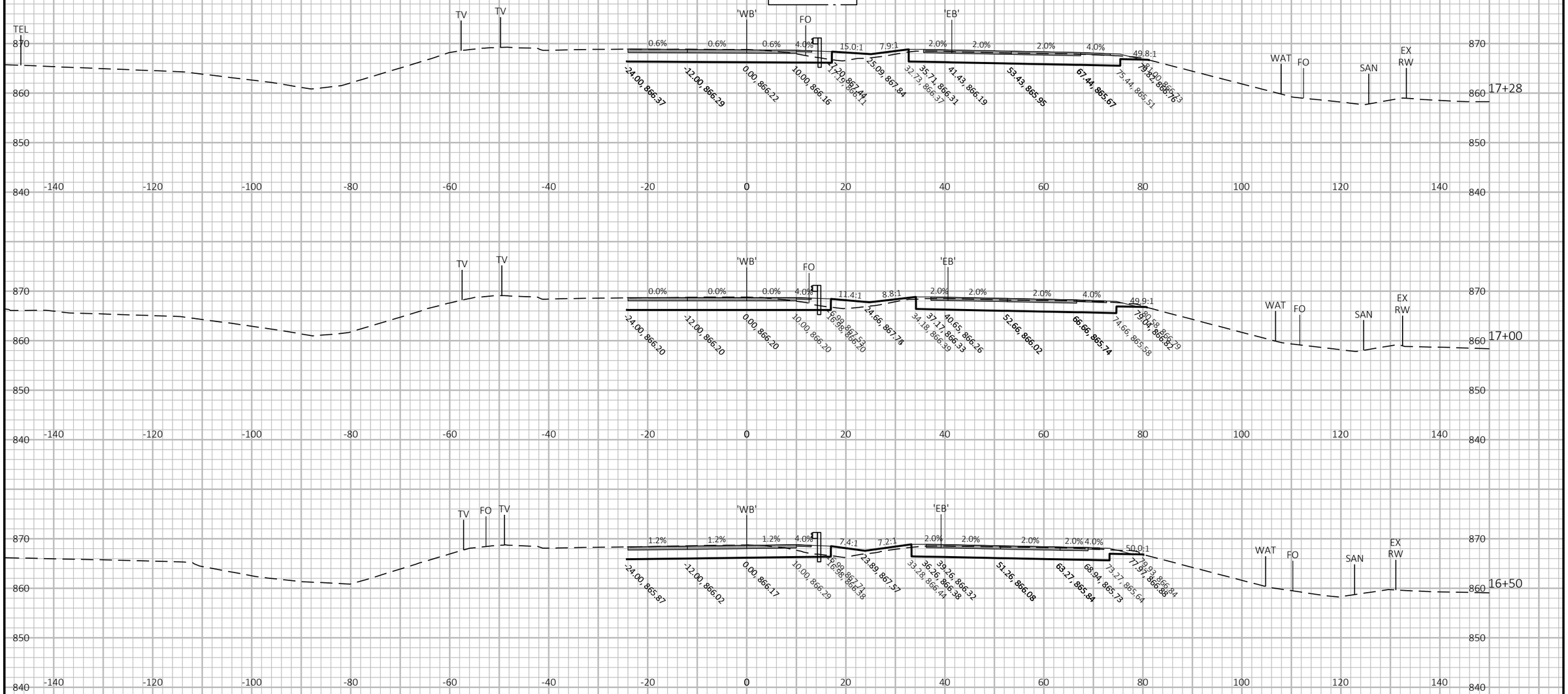
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB	SHEET 639	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090202-XS_WB.DWG
LAYOUT NAME - 04

PLOT DATE : 2/1/2023 5:06 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST 9



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PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB	SHEET 640	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090202-XS_WB.DWG
LAYOUT NAME - 05

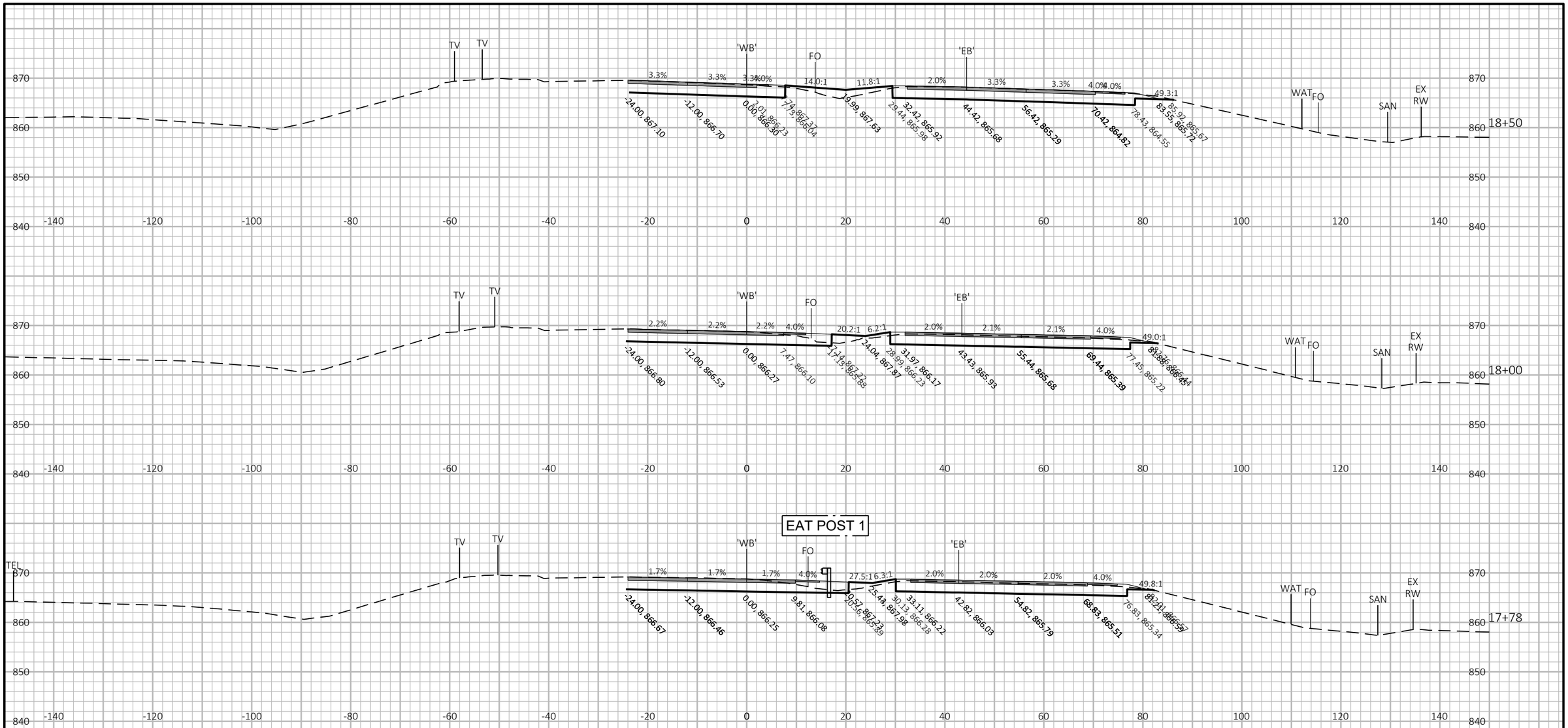
PLOT DATE : 2/1/2023 5:06 PM

PLOT BY : BUTTERIS, BRADLEY

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

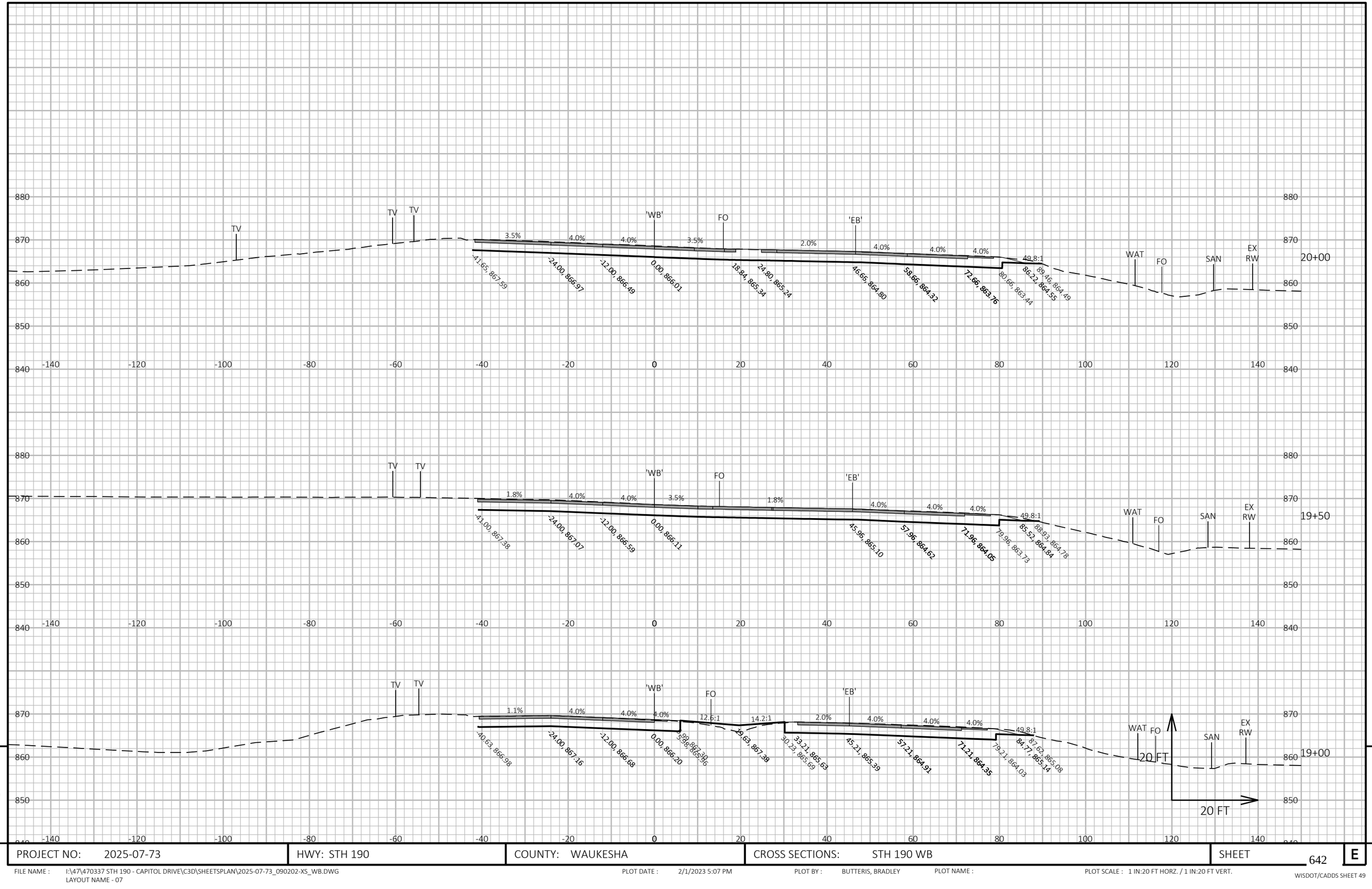


PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB	SHEET 641 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090202-XS_WB.DWG
LAYOUT NAME - 06

PLOT DATE : 2/1/2023 5:07 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB	SHEET 642	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090202-XS_WB.DWG
LAYOUT NAME - 07

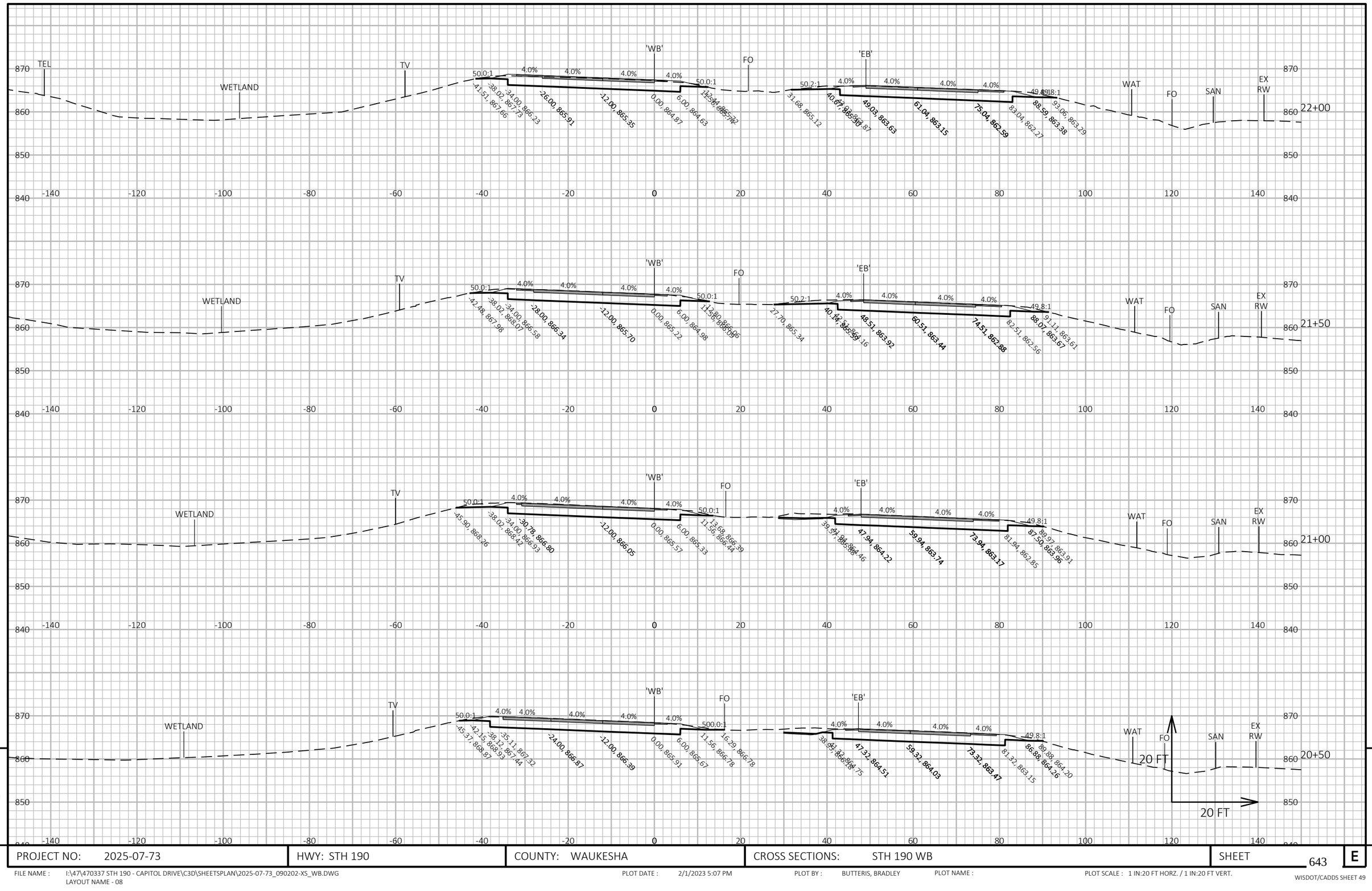
PLOT DATE : 2/1/2023 5:07 PM

PLOT BY : BUTTERIS, BRADLEY

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB	SHEET 643 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090202-XS_WB.DWG
LAYOUT NAME - 08

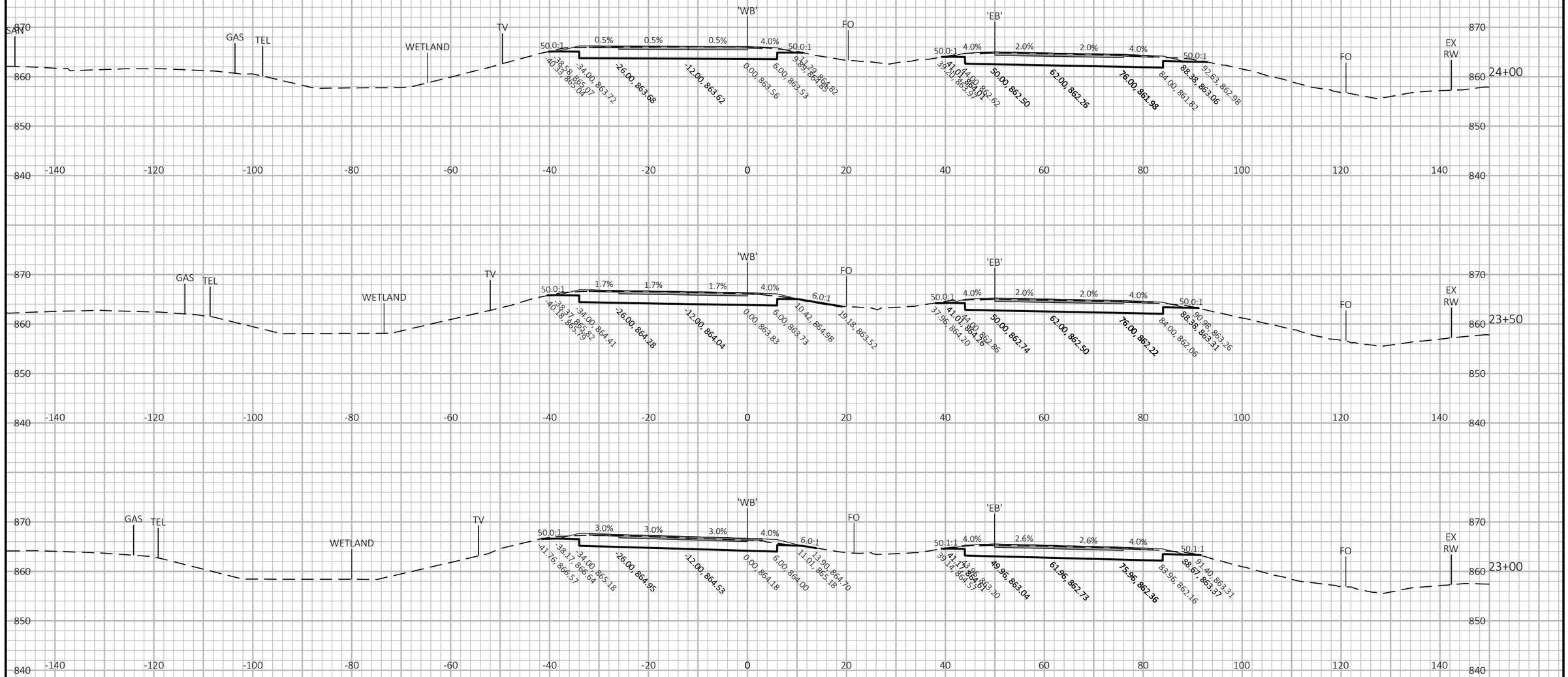
PLOT DATE : 2/1/2023 5:07 PM

PLOT BY : BUTTERIS, BRADLEY

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB	SHEET 644 E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090202-XS_WB.DWG
LAYOUT NAME - 09

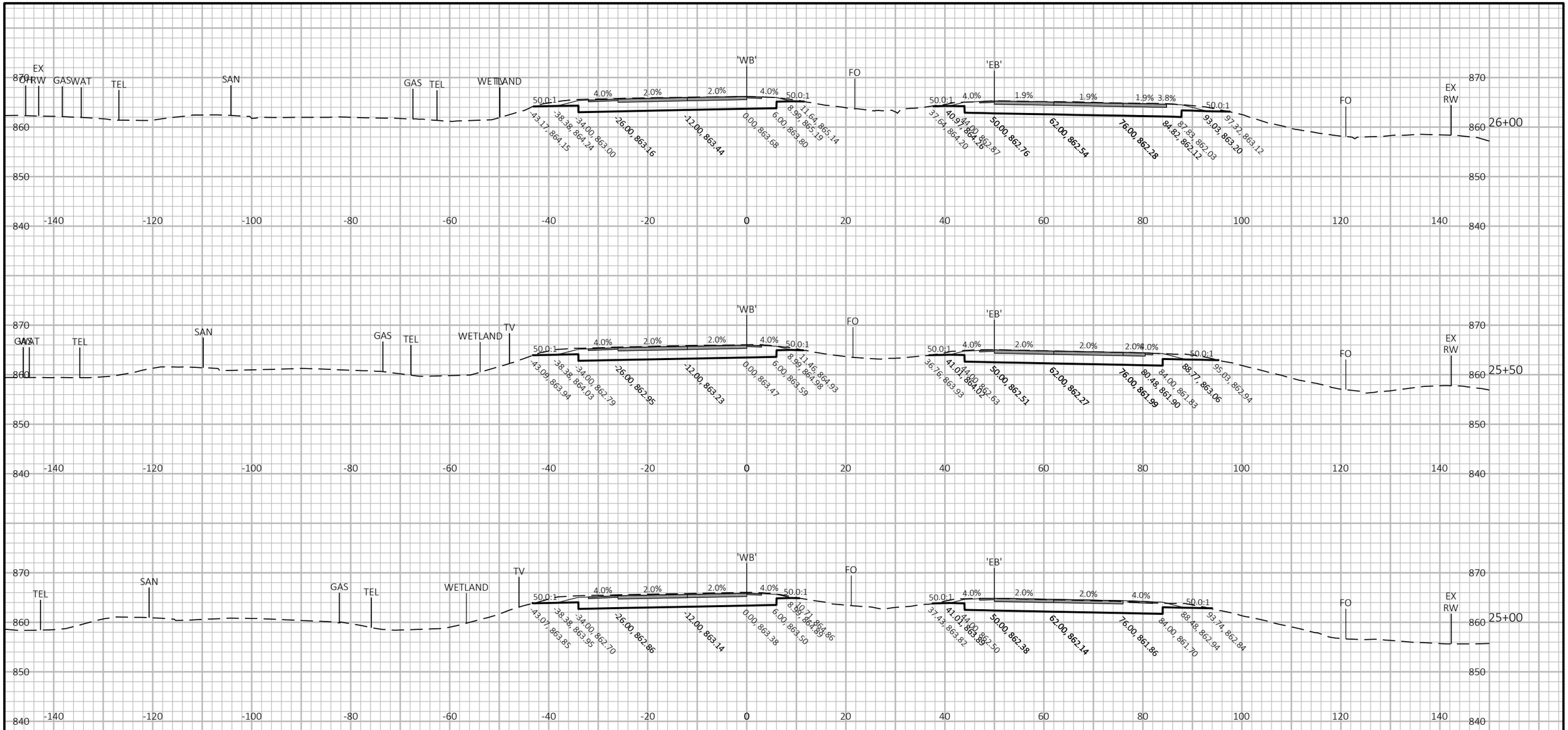
PLOT DATE : 2/1/2023 5:07 PM

PLOT BY : BUTTERIS, BRADLEY

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB	SHEET 645	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090202-XS_WB.DWG
LAYOUT NAME - 10

PLOT DATE : 2/1/2023 5:07 PM

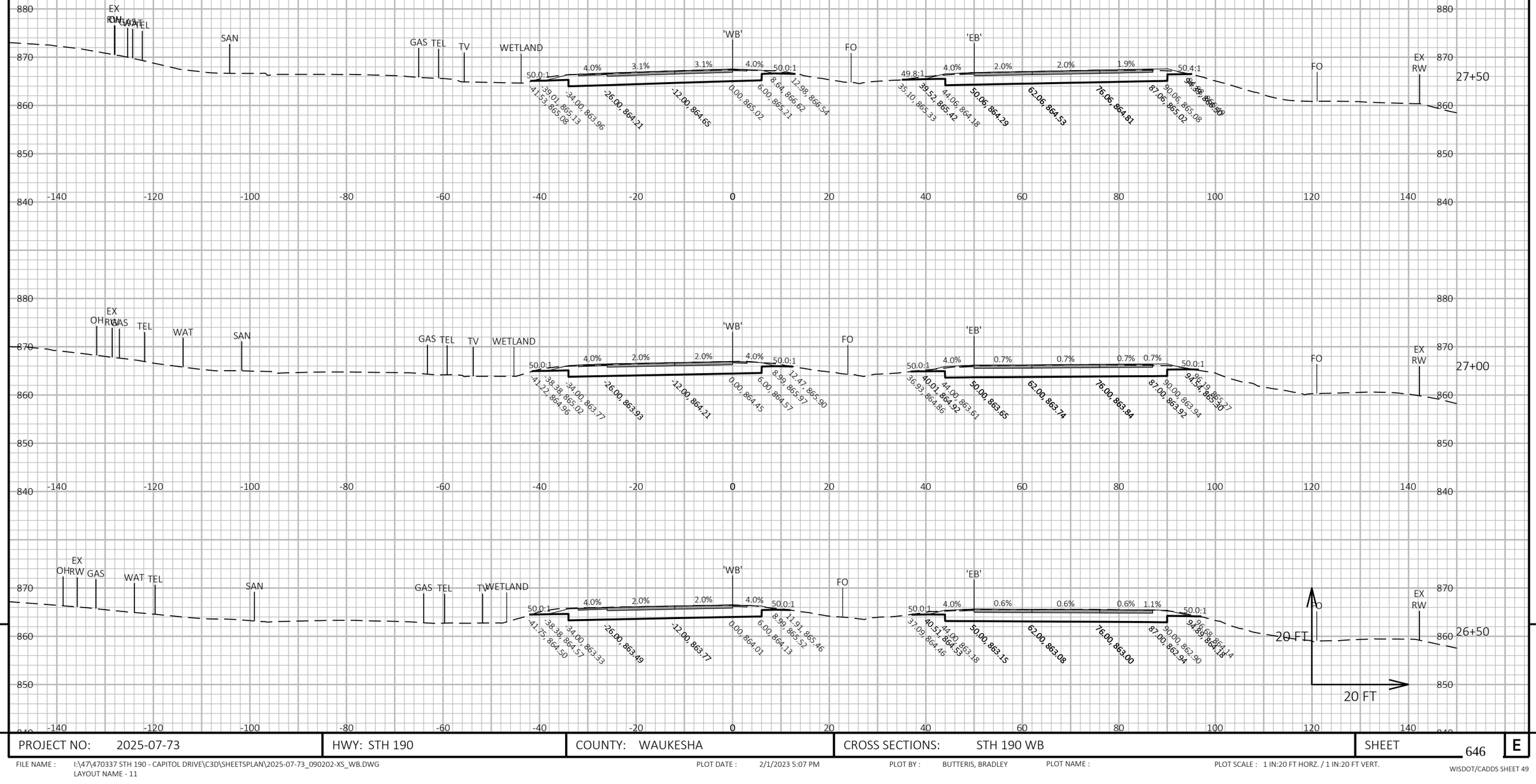
PLOT BY : BUTTERIS, BRADLEY

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB	SHEET 646	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090202-XS_WB.DWG
LAYOUT NAME - 11

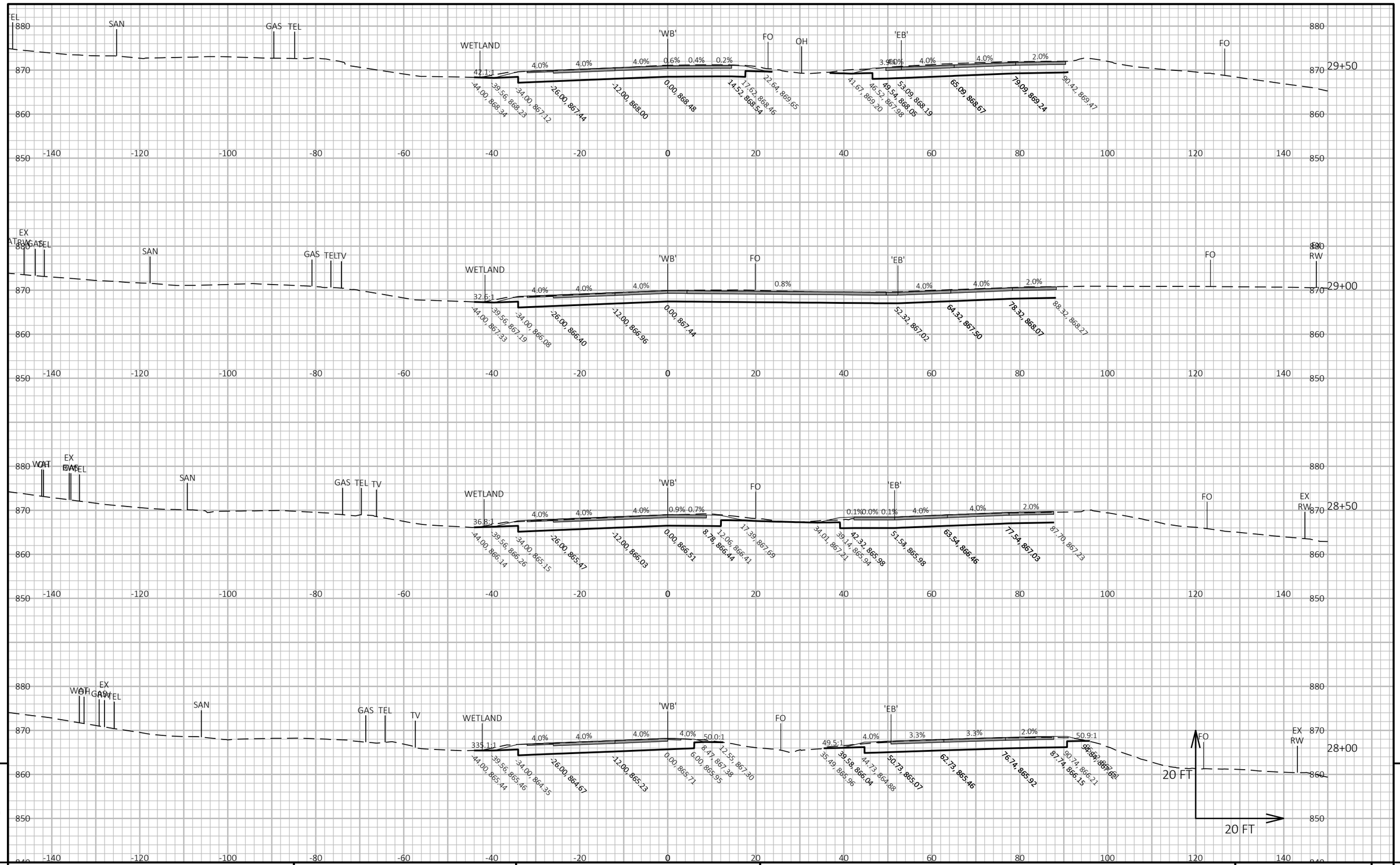
PLOT DATE : 2/1/2023 5:07 PM

PLOT BY : BUTTERIS, BRADLEY

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB	SHEET 647	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090202-XS_WB.DWG
LAYOUT NAME - 12

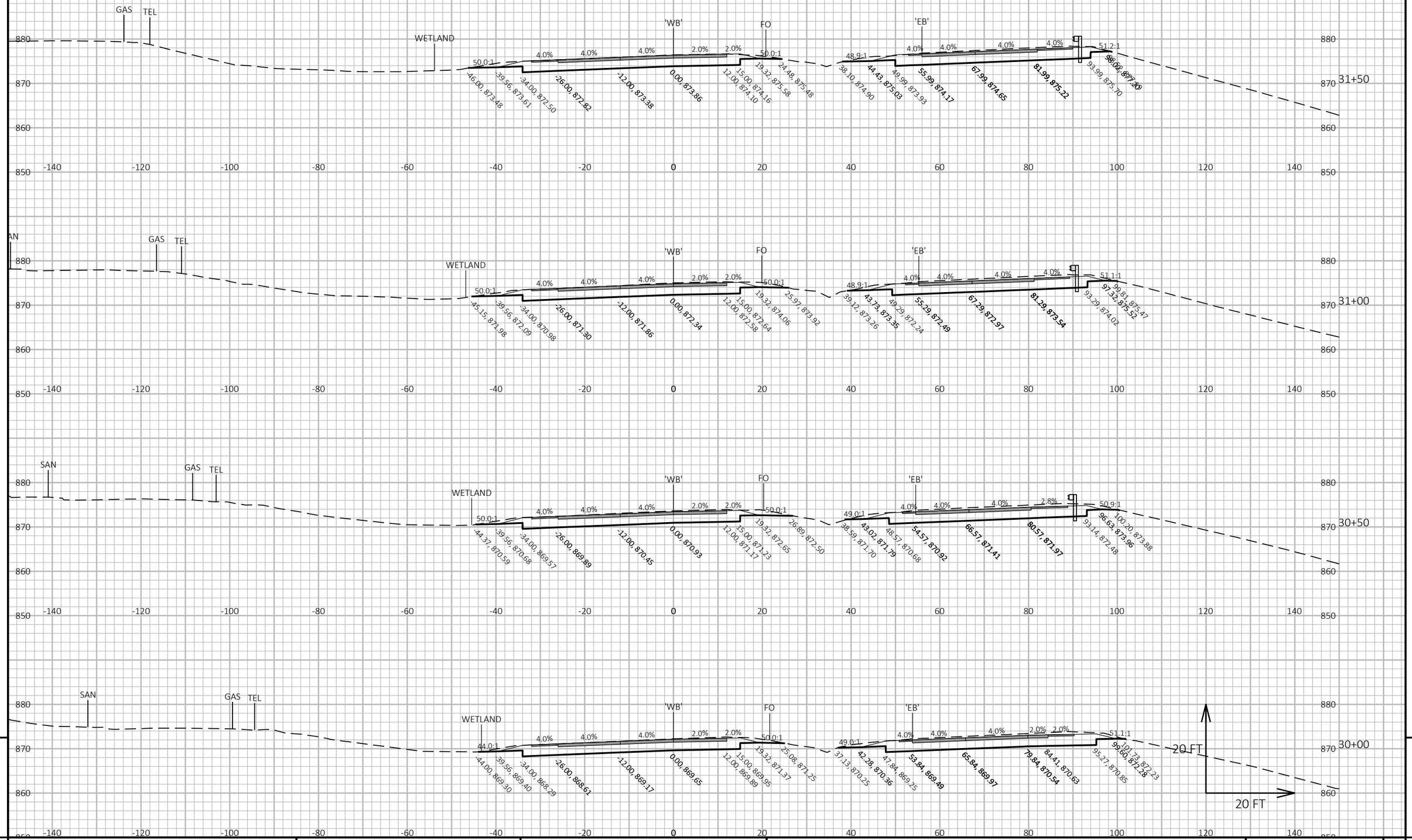
PLOT DATE : 2/1/2023 5:07 PM

PLOT BY : BUTTERIS, BRADLEY

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

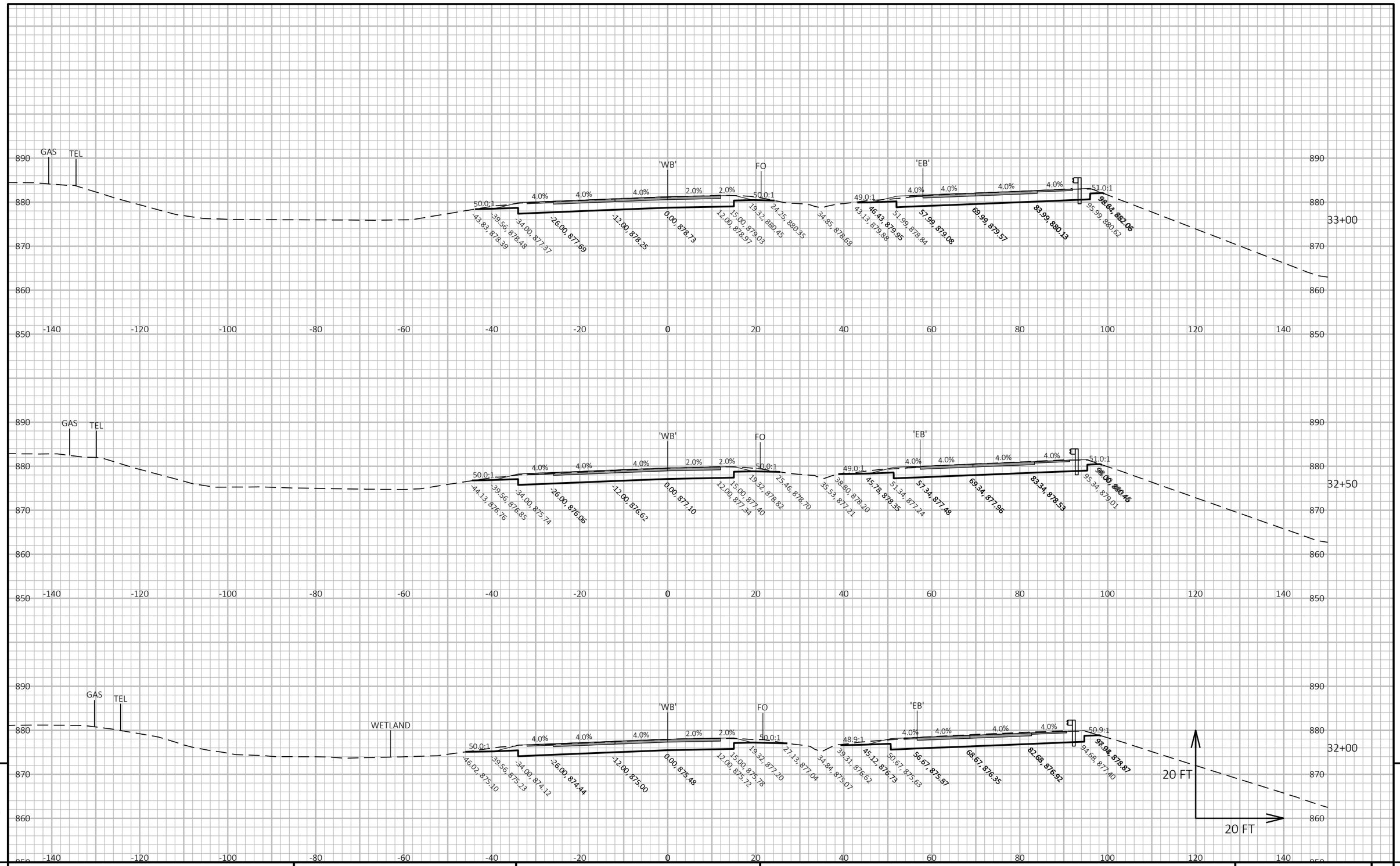


PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB	SHEET 648	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090202-XS_WB.DWG
LAYOUT NAME - 13

PLOT DATE : 2/1/2023 5:07 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB	SHEET 649	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090202-XS_WB.DWG
LAYOUT NAME - 14

PLOT DATE : 2/1/2023 5:07 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

TEL
'WB'
FO
'EB'
WETLAND
EX
34+50
50.0:1
4.0%
2.6%
2.6%
0.7%
0.7%
50.0:1
-38.72, 883.92
-34.00, 882.71
-42.00, 883.85
-26.00, 882.92
-12.00, 883.29
0.00, 883.60
7.23, 883.65
10.22, 883.67
14.78, 885.03
21.73, 884.90
31.59, 883.54
49.1:1
4.0%
3.5%
3.5%
3.5%
42.39, 884.70
48.57, 884.83
53.83, 883.68
59.83, 883.89
71.83, 884.30
85.83, 884.79
97.83, 885.21
101.93, 886.68
2.5:1
144.90, 869.51
GAS
TEL
'WB'
FO
'EB'
WETLAND
34+00
4.0%
3.9%
3.9%
2.0%
2.0%
50.0:1
-43.20, 881.71
-39.48, 881.78
-34.00, 880.66
-26.00, 880.97
-12.00, 881.51
0.00, 881.98
8.77, 882.15
11.78, 882.21
16.10, 883.63
21.54, 883.52
31.75, 881.73
49.1:1
4.0%
4.0%
4.0%
4.0%
45.09, 883.10
47.68, 883.15
53.23, 882.04
59.23, 882.28
71.24, 882.77
85.24, 883.33
97.24, 883.87
101.26, 885.31
2.5:1
145.84, 867.50
GAS
TEL
'WB'
FO
'EB'
33+50
20 FT
20 FT
4.0%
4.0%
4.0%
2.0%
2.0%
50.0:1
-43.69, 880.02
-39.56, 880.10
-34.00, 878.99
-26.00, 879.31
-12.00, 879.87
0.00, 880.35
11.20, 880.58
14.20, 880.64
18.52, 882.06
21.97, 881.99
34.68, 879.51
49.0:1
4.0%
4.0%
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4.0%
44.79, 881.50
47.06, 881.55
52.62, 880.44
58.62, 880.68
70.62, 881.17
84.62, 881.73
96.62, 882.22
100.44, 883.70
2.5:1
146.14, 865.48
9
9
PROJECT NO: 2025-07-73
HWY: STH 190
COUNTY: WAUKESHA
CROSS SECTIONS: STH 190 WB
SHEET 650
E
FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090202-XS_WB.DWG
LAYOUT NAME - 15
PLOT DATE : 2/1/2023 5:07 PM
PLOT BY : BUTTERIS, BRADLEY
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49

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PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB	SHEET 651	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090202-XS_WB.DWG
LAYOUT NAME - 16

PLOT DATE : 2/1/2023 5:07 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

9

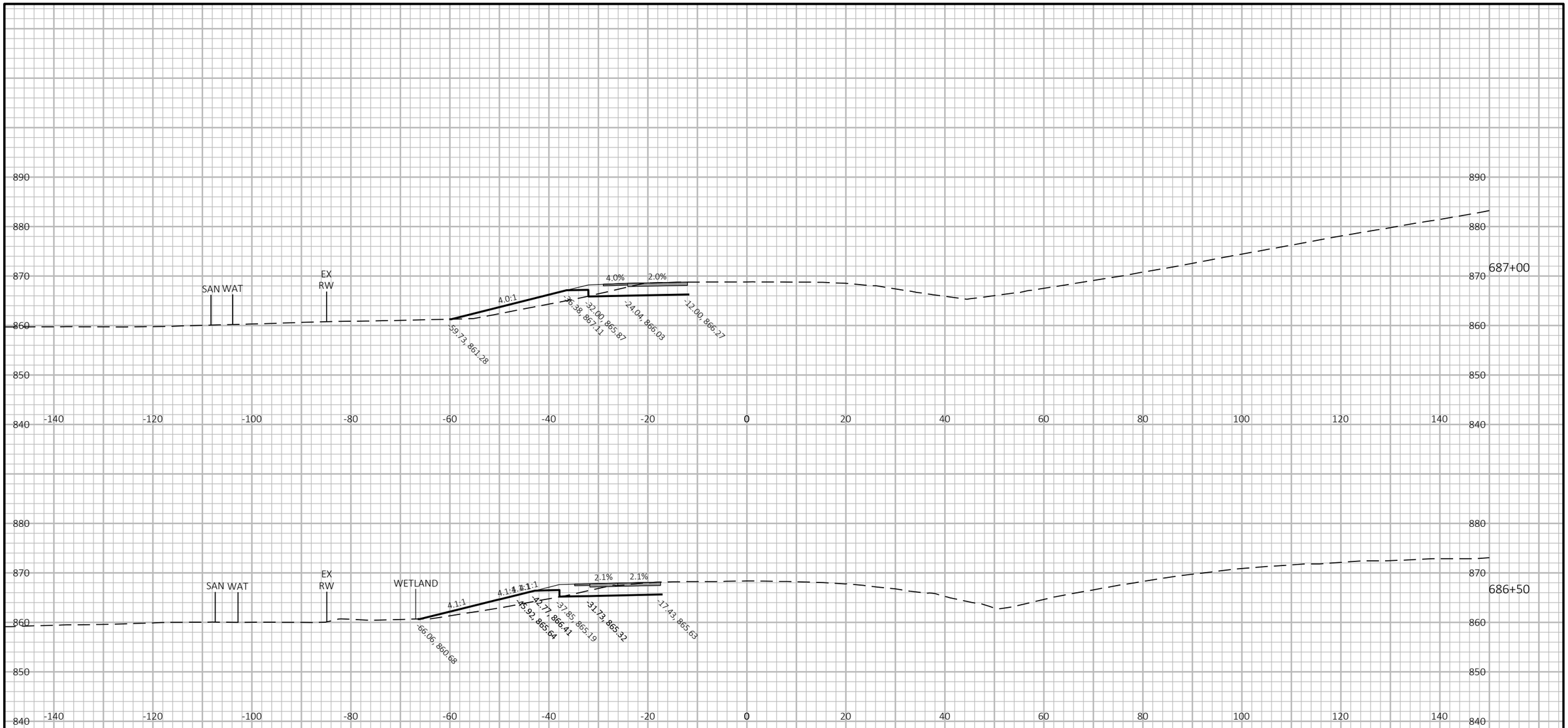
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PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB	SHEET 652	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090202-XS_WB.DWG
LAYOUT NAME - 17

PLOT DATE : 2/1/2023 5:07 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 16 WB OFF RAMP	SHEET 653	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090203-XS_16 OFF RAMP.DWG
LAYOUT NAME - 01

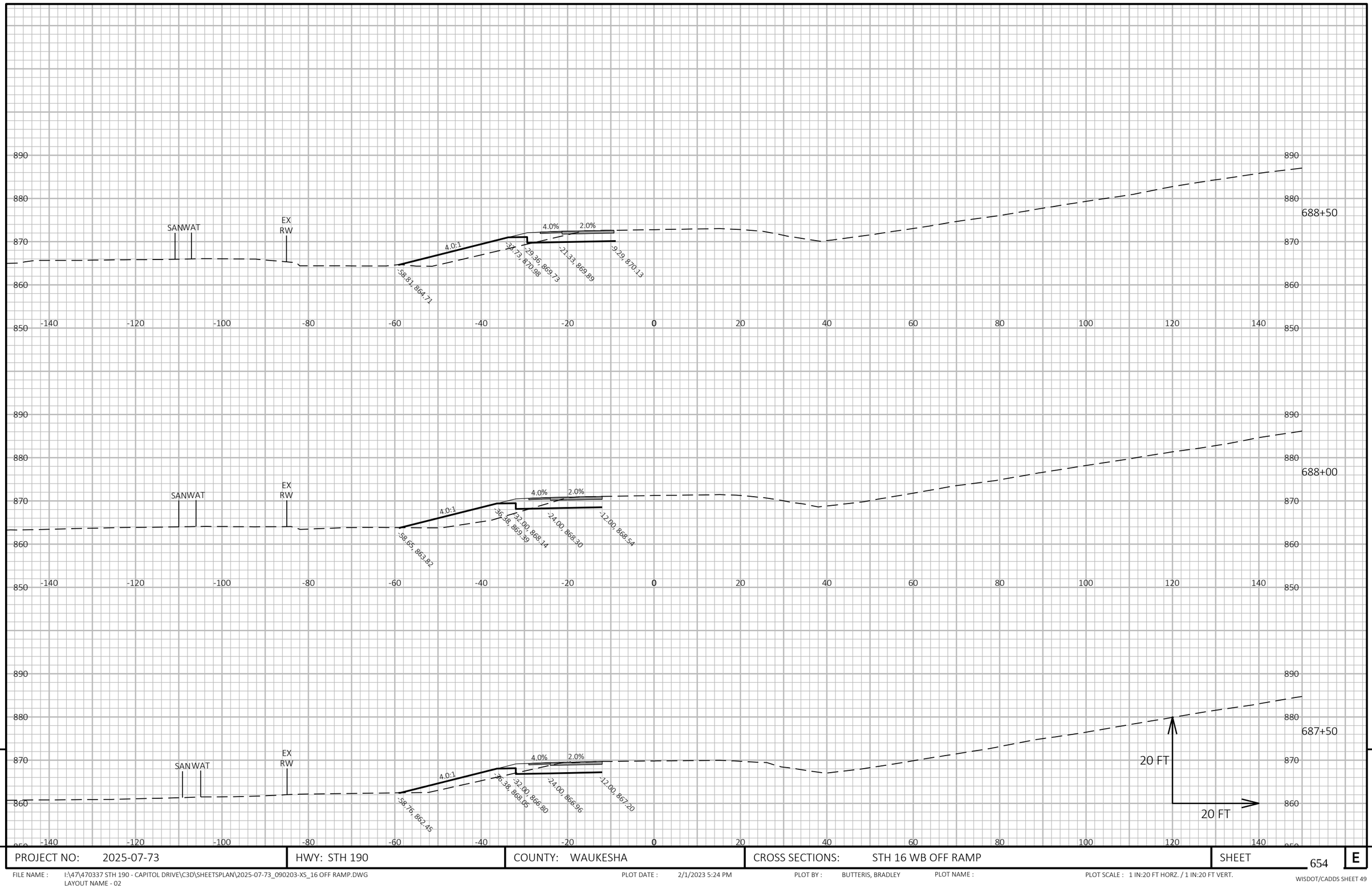
PLOT DATE : 2/1/2023 5:24 PM

PLOT BY : BUTTERIS, BRADLEY

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

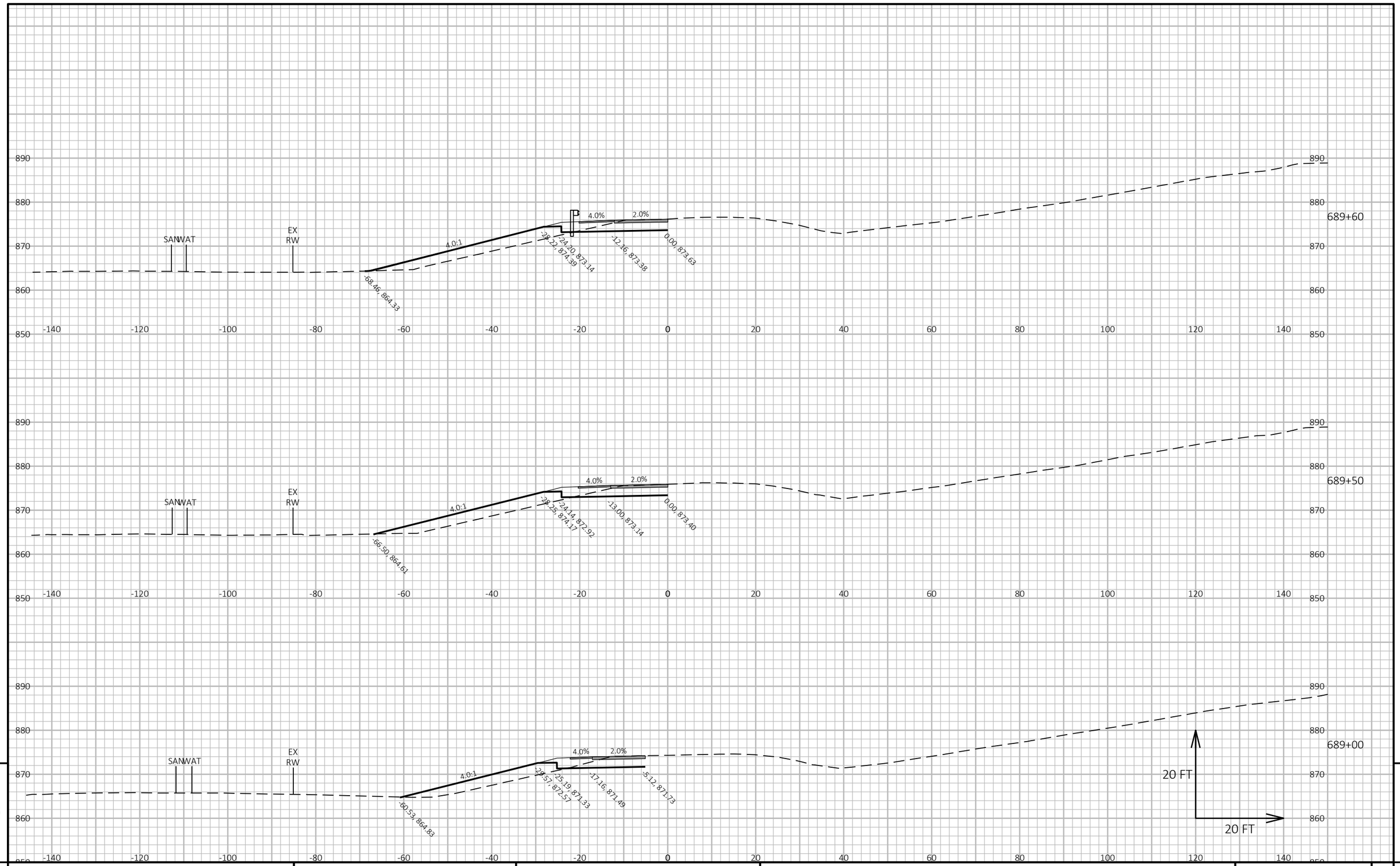
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PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 16 WB OFF RAMP	SHEET 654	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090203-XS_16 OFF RAMP.DWG
LAYOUT NAME - 02

PLOT DATE : 2/1/2023 5:24 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

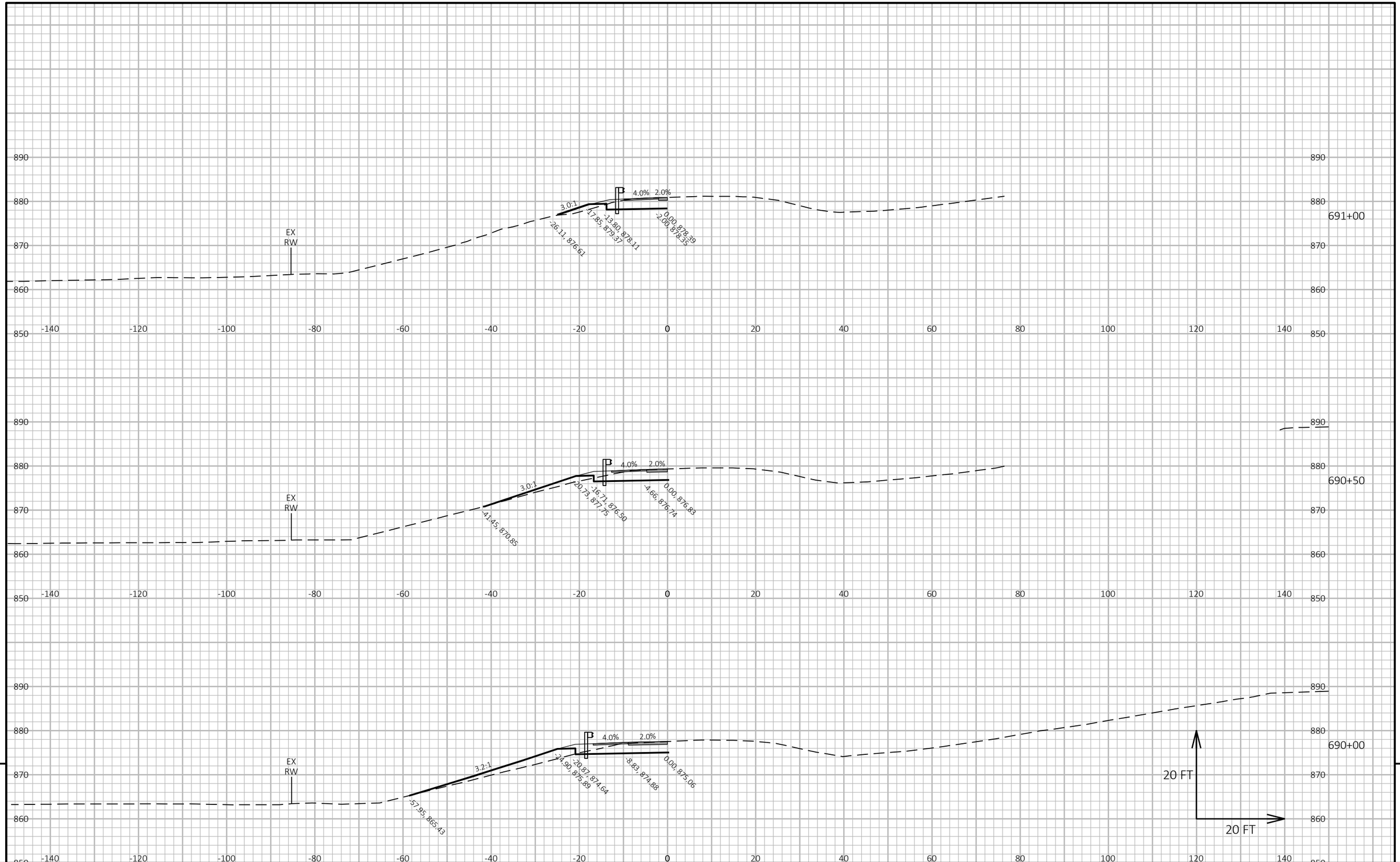
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PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 16 WB OFF RAMP	SHEET 655	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090203-XS_16 OFF RAMP.DWG
LAYOUT NAME - 03

PLOT DATE : 2/1/2023 5:24 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

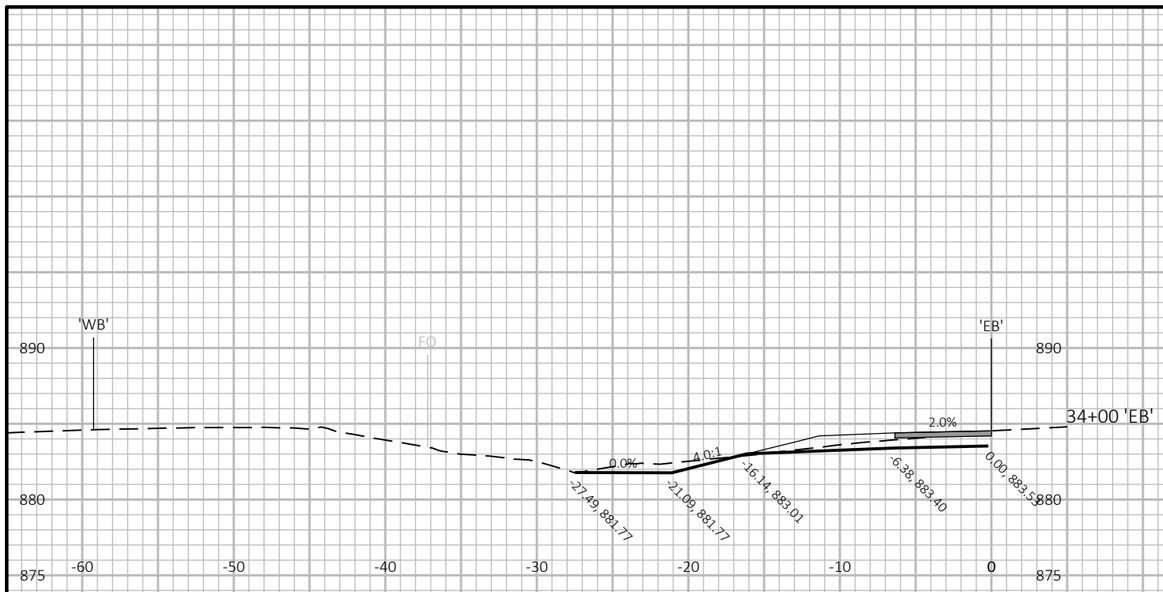
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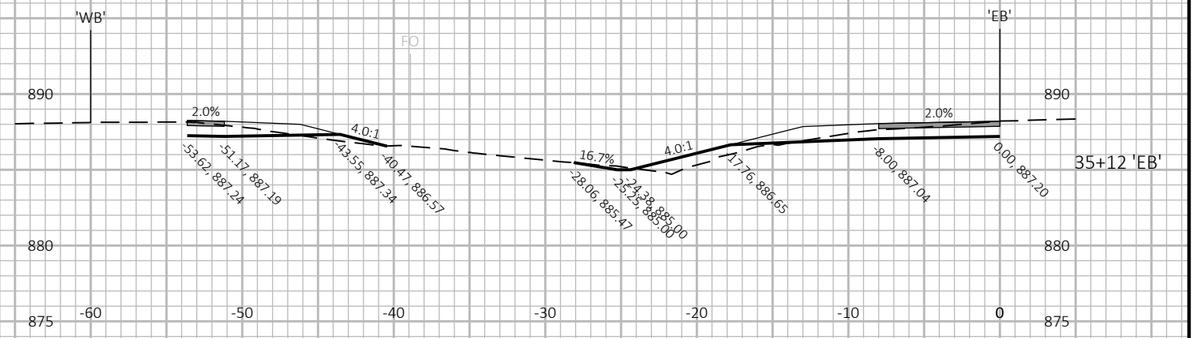
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: STH 16 WB OFF RAMP	SHEET 656	E

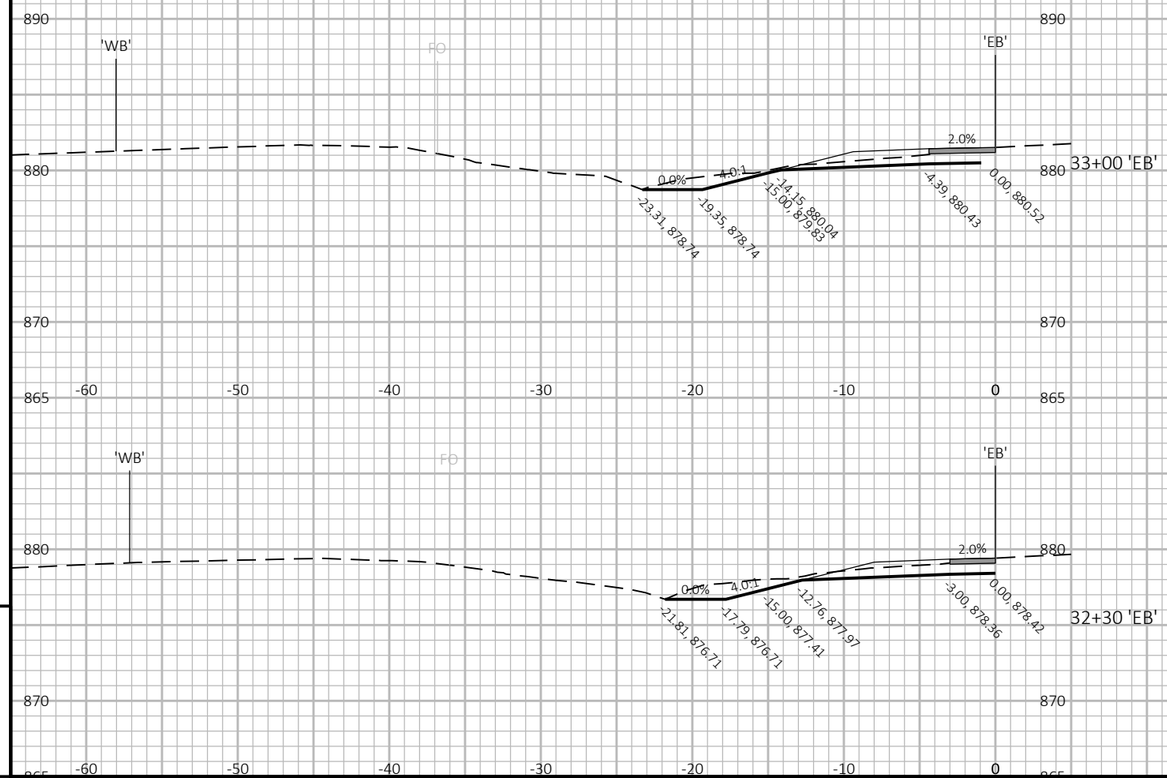
FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090203-XS_16 OFF RAMP.DWG
LAYOUT NAME - 04

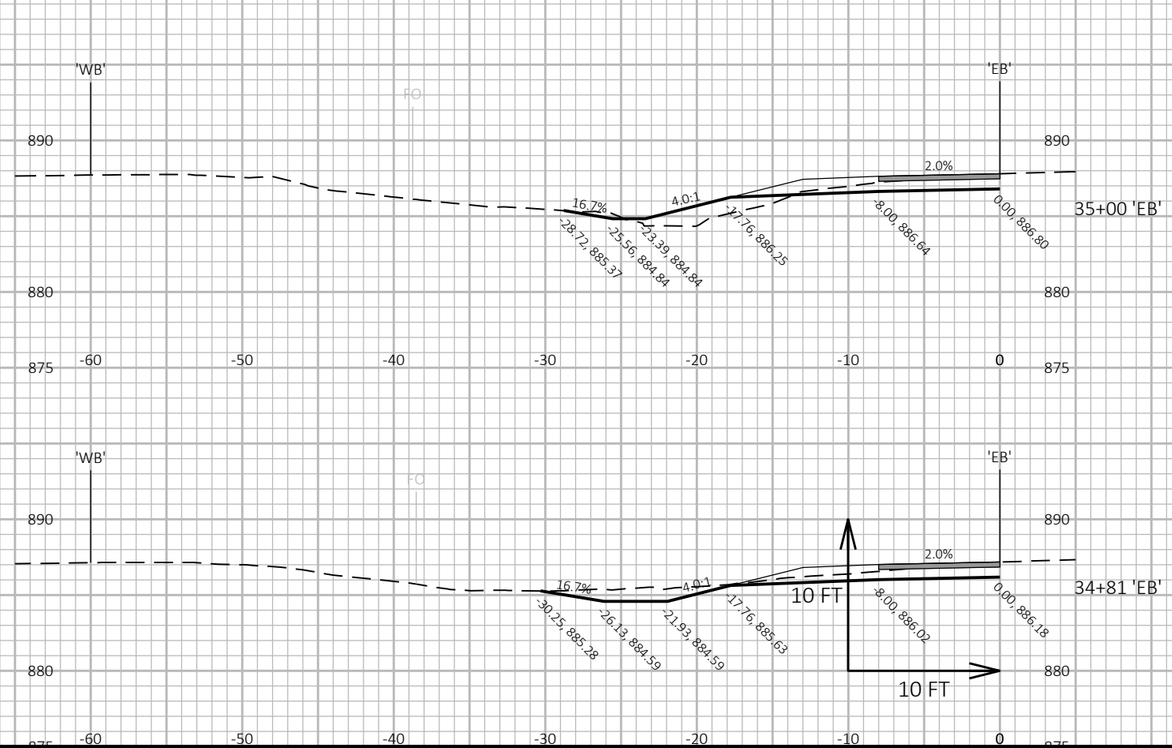
PLOT DATE : 2/1/2023 5:24 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49









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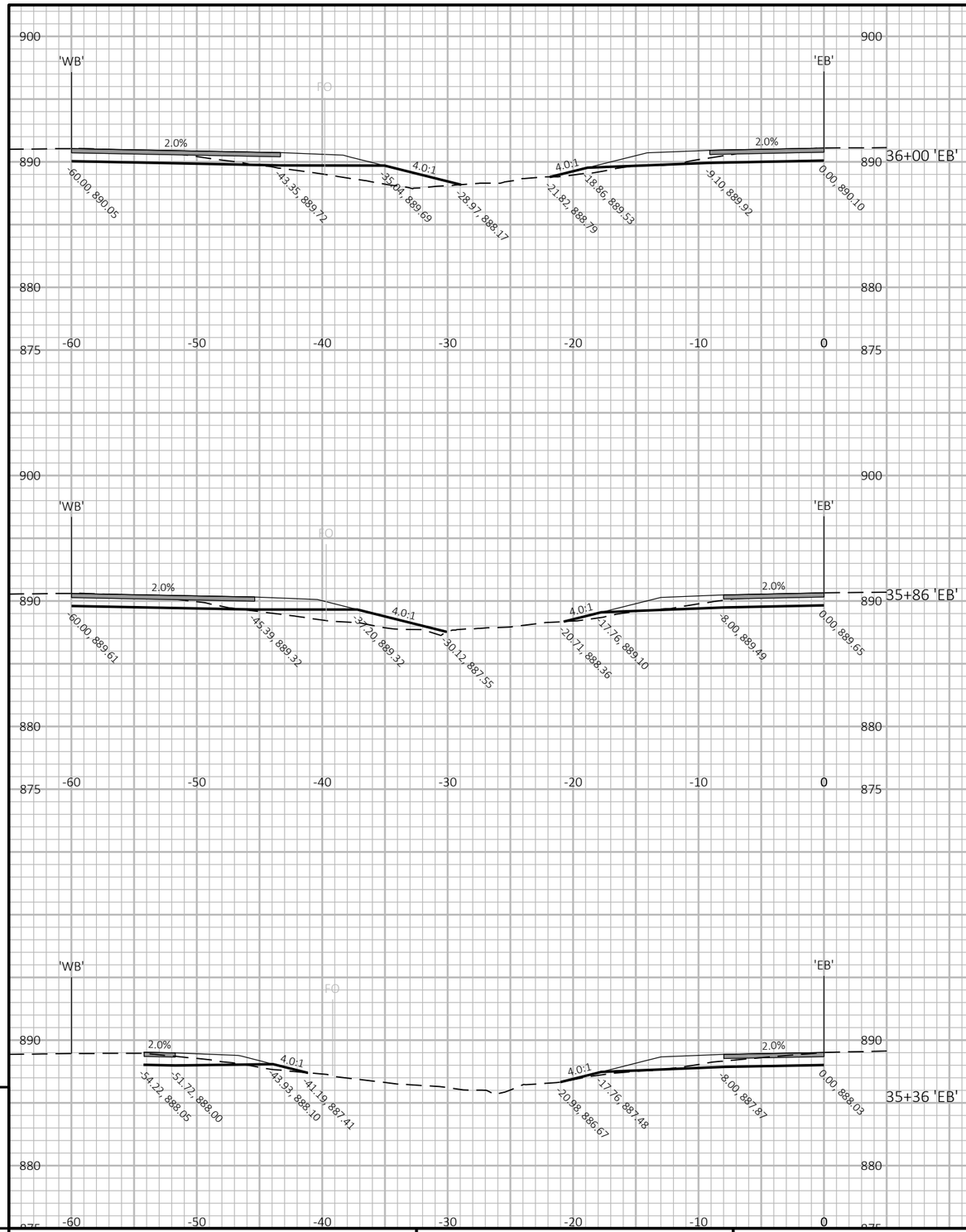
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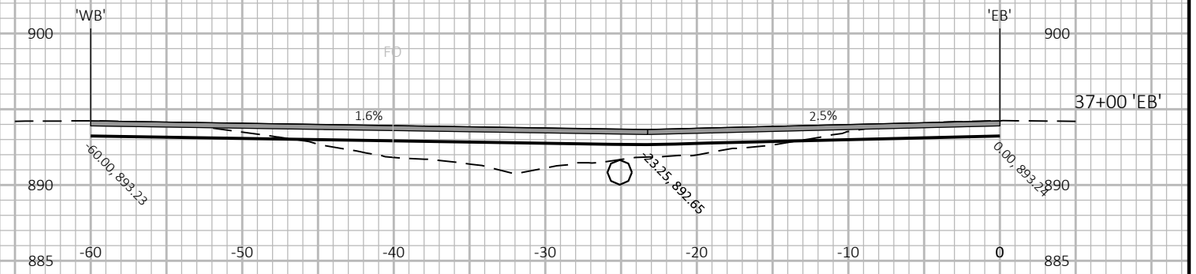
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: TEMPORARY CROSSOVER	SHEET 657	E

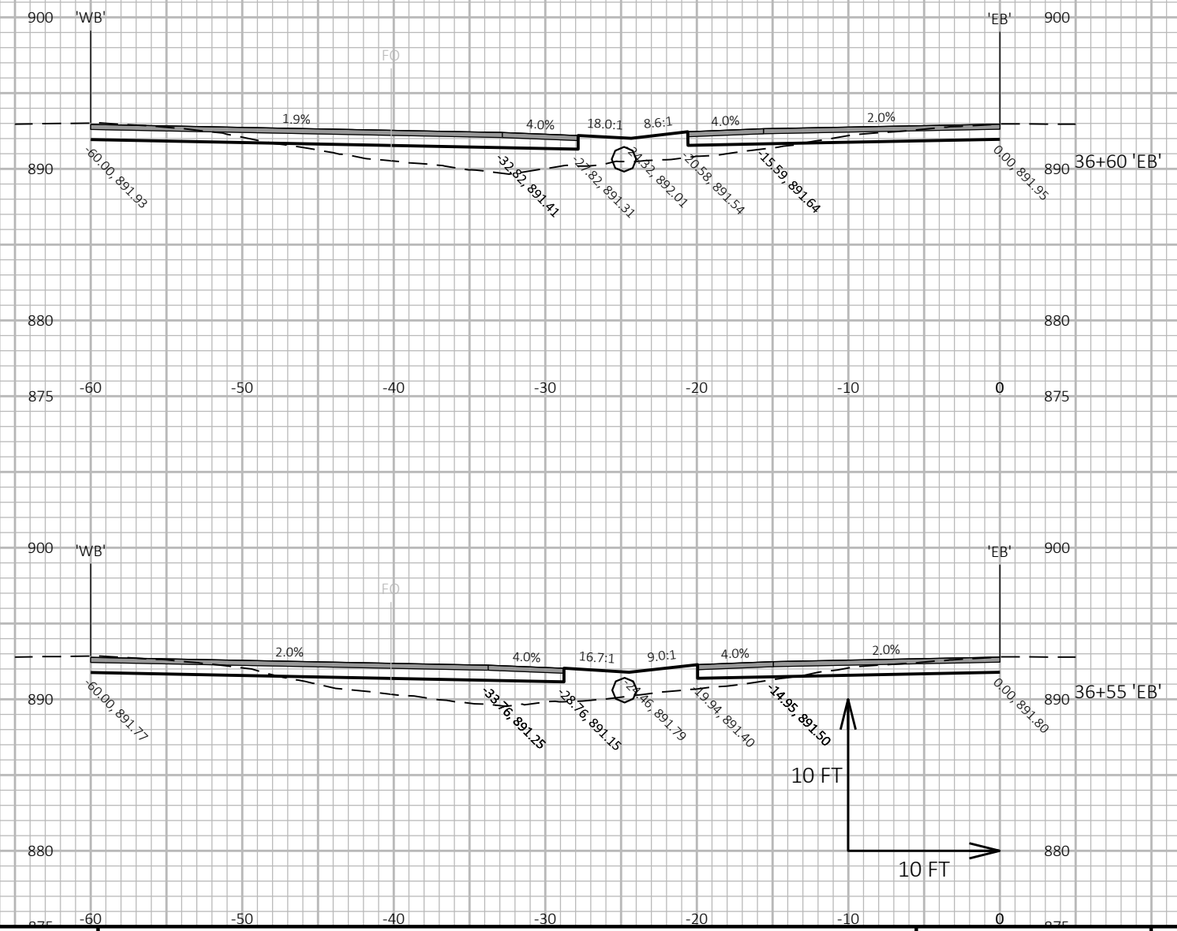
FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090203-XS_TRAFFIC CROSSOVER.DWG
LAYOUT NAME - XO-1

PLOT DATE : 1/21/2023 1:32 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







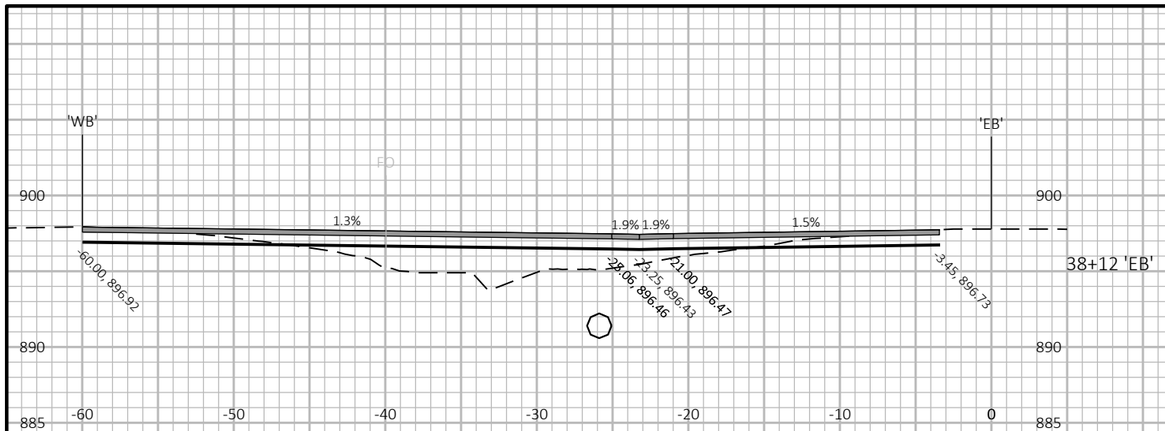
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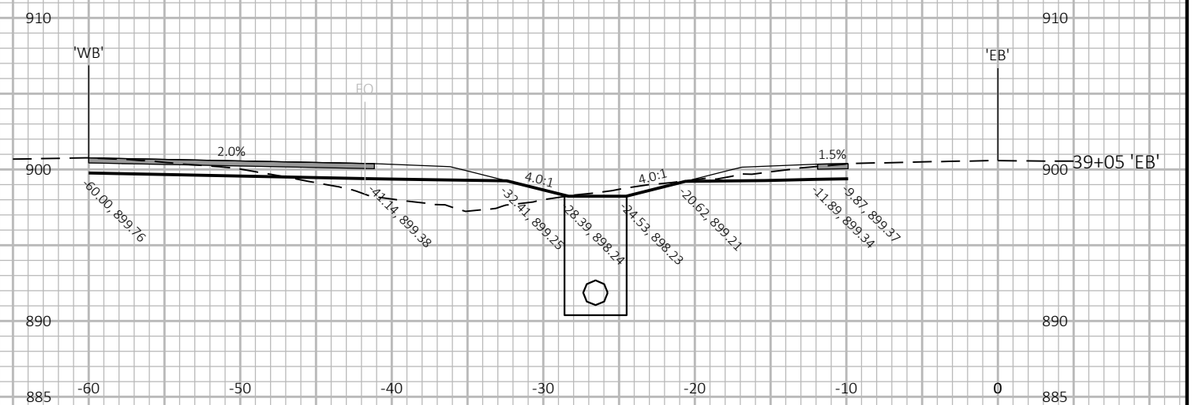
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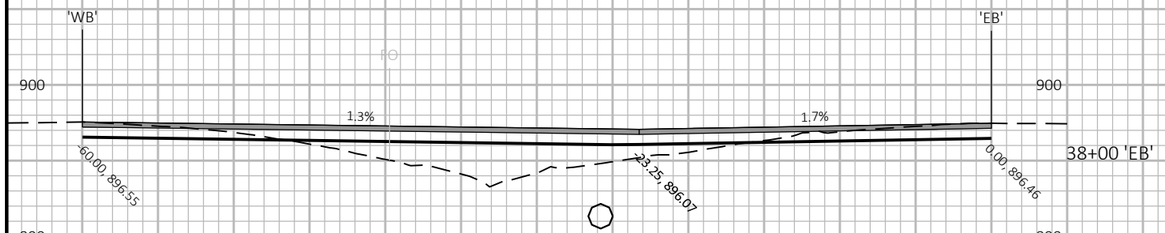
PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: TEMPORARY CROSSOVER	SHEET 658	E

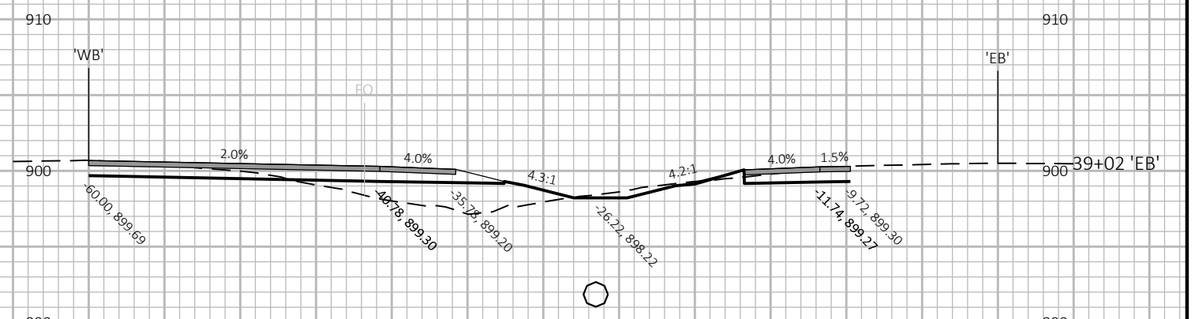
FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090203-XS_TRAFFIC CROSSOVER.DWG
LAYOUT NAME - XO-2

PLOT DATE : 1/21/2023 1:32 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

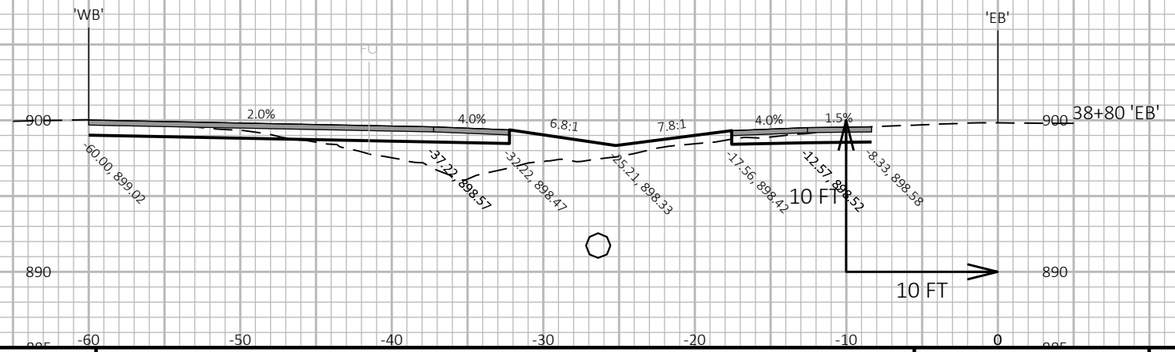












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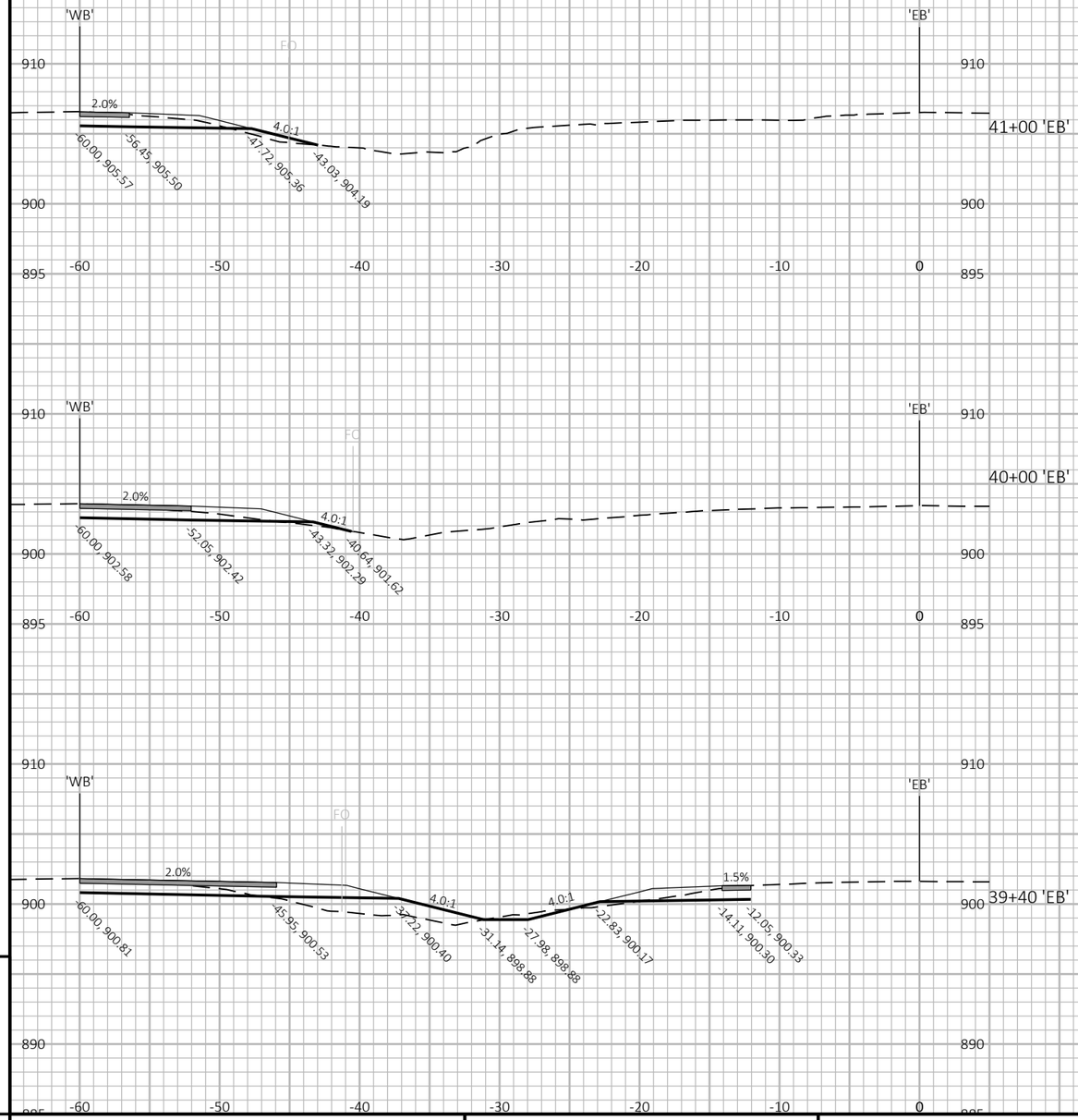
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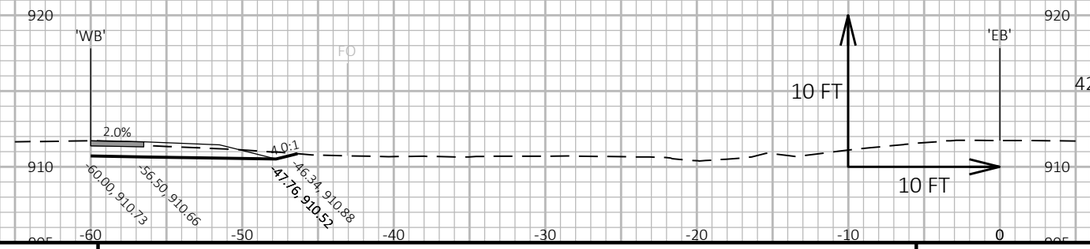
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FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090203-XS_TRAFFIC CROSSOVER.DWG
LAYOUT NAME - XO-3

PLOT DATE : 1/21/2023 1:32 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





9

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PROJECT NO: 2025-07-73	HWY: STH 190	COUNTY: WAUKESHA	CROSS SECTIONS: TEMPORARY CROSSOVER	SHEET 660	E

FILE NAME : I:\47\470337 STH 190 - CAPITOL DRIVE\C3D\SHEETSPLAN\2025-07-73_090203-XS_TRAFFIC CROSSOVER.DWG
LAYOUT NAME - XO-4

PLOT DATE : 1/21/2023 1:32 PM PLOT BY : BUTTERIS, BRADLEY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

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