WKE SEPTEMBER 2025

PROJECT ID: 1060-27-74

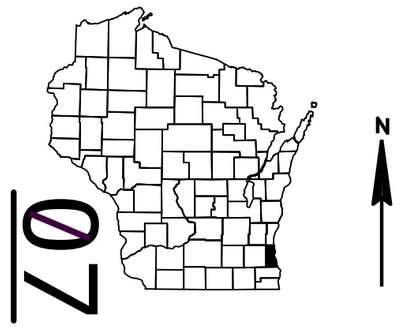
WITH: N/A

COUNTY: MILWAUKEE

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 = 994



DESIGN DESIGNATION			IH 94 AT 26TH STREET	W ST PAUL AVE
A.A.D.T.	2019	=	150,000	14,100
A.A.D.T.	2050	=	176,500	14,600
D.H.V.	2050	=	6,275 EB / 6,980 WB	640 EB / 820 WB
D.D.		=	47%/53%	44%/56%
T.		=	5.3%	3.8%
DESIGN SPEED		=	50 MPH	35 MPH
ESALS		=	XXXX	XXXX

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

I-94 EAST WEST, EARLY EAST LEG

30TH STREET TO 25TH STREET

IH 94

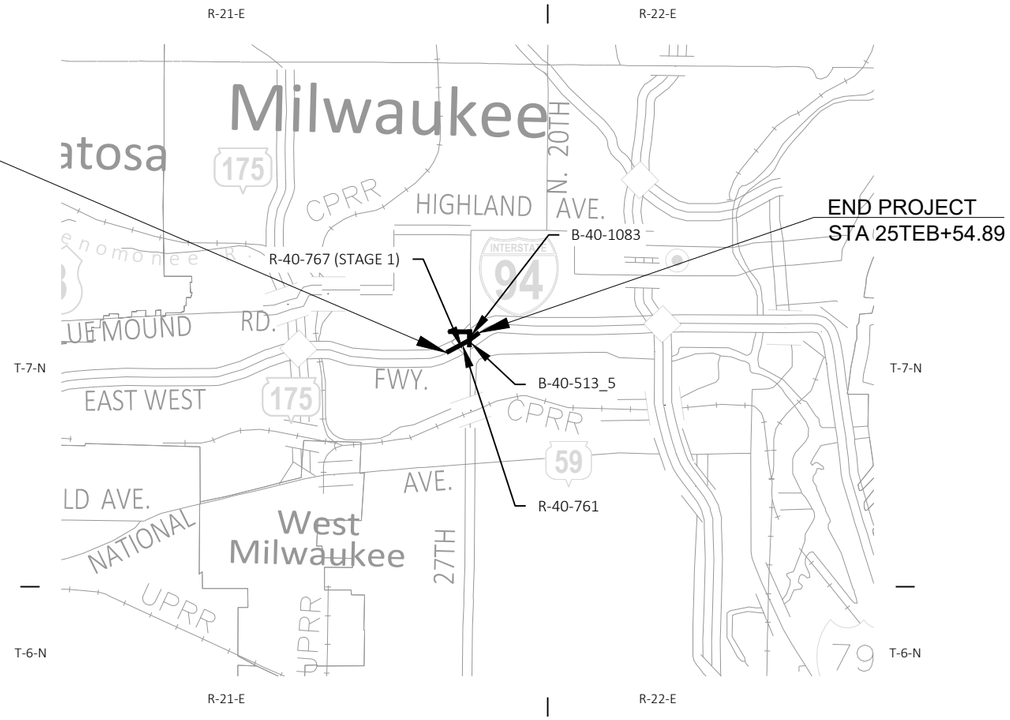
MILWAUKEE COUNTY

STATE PROJECT NUMBER
1060-27-74

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1060-27-74	WISC 2025597	1

BRIDGES
B-40-513_5
B-40-1083

RETAINING WALLS
R-40-761
R-40-767 (STAGE 1)



LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.276 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), MILWAUKEE COUNTY, NAD83 (2007), 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 (2007). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 9.

ORIGINAL PLANS PREPARED BY

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(414) 359-2300

WISCONSIN PROFESSIONAL ENGINEER
DANIEL BAUMANN
E-45498
MILWAUKEE, WI

4/29/2025 (Date) (Signature)

ORIGINAL PLANS PREPARED BY

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MILWAUKEE, WI 53212

WISCONSIN PROFESSIONAL ENGINEER
JOEL D. JURSS
E-32142
WAUKESHA, WI

4/30/2025 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	KAPUR & ASSOCIATES
Designer	JACOBS ENGINEERING
Project Manager	CHRISTOPHER ZACHARIAS, P.E.
Regional Examiner	
Regional Supervisor	WILLIAM S. MOHR, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 4/28/2025 (Signature)

E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\01 TI\10602709ELA-010101-TI.DWG PLOT DATE : 4/26/2025 8:00 PM PLOT BY : SCHARLAU, DAVE PLOT NAME :

ORIGINAL PLANS PREPARED BY

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(414) 359-2300

WISCONSIN
PAUL
KUTZ
E-37837
MILWAUKEE,
WI
PROFESSIONAL ENGINEER

4/29/2025
(Date) (Signature)

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL
BE RESPONSIBLE FOR THE FOLLOWING DESIGN

ROADWAY PLANS:
- FTMS

ORIGINAL PLANS PREPARED BY

kapur 7711 N. Port Washington Rd.
MILWAUKEE, WI 53217

WISCONSIN
KURT A.
FARRENKOPF
E-27600
MENOMONEE FALLS,
WI
PROFESSIONAL ENGINEER

4/23/2025
(Date) (Signature)

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL
BE RESPONSIBLE FOR THE FOLLOWING DESIGN

ROADWAY PLANS:
- WATERMAIN

ORIGINAL PLANS PREPARED BY

kapur 7711 N. Port Washington Rd.
MILWAUKEE, WI 53217

WISCONSIN
PRASAD S.
NARAYAN
E-26170
BROOKFIELD,
WI
PROFESSIONAL ENGINEER

4/29/25
(Date) (Signature)

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL
BE RESPONSIBLE FOR THE FOLLOWING DESIGN

ROADWAY PLANS:
- STORM SEWER

2

ORIGINAL PLANS PREPARED BY

Jacobs 1610 N. 2ND STREET #201
MILWAUKEE, WI 53212

WISCONSIN
TYLER
TKACHUK
E-45086
VERONA
WI
PROFESSIONAL ENGINEER

4/29/25
(Date) (Signature)

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL
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ROADWAY PLANS:
- LIGHTING

ORIGINAL PLANS PREPARED BY

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(414) 359-2300

WISCONSIN
MATTHEW
MAY
E-45043
MENOMONEE FALLS,
WI
PROFESSIONAL ENGINEER

4/29/25
(Date) (Signature)

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL
BE RESPONSIBLE FOR THE FOLLOWING DESIGN

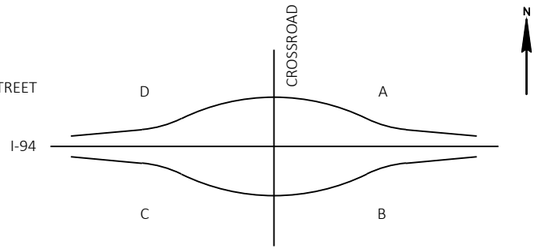
ROADWAY PLANS:
- CITY UNDERGROUND CONDUIT
- TRAFFIC SIGNALS

NOTE:
ADDITIONAL PROFESSIONAL ENGINEER
STAMPS SHOWN ON STRUCTURE PLAN SHEETS

REFERENCE LINE ALIGNMENT ABBREVIATIONS

ABBREVIATION	ROAD NAME	DESCRIPTION
EW	IH 94	FUTURE IH 94
TML	INTERIM IH 94	INTERIM IH 94 MAINLINE
TEB	TEMPORARY IH 94 EB	TEMPORARY IH 94 MAINLINE EB
TWB	TEMPORARY IH 94 WB	TEMPORARY IH 94 MAINLINE WB
TJD	INTERIM RAMP JD	INTERIM IH 94 WB ENTRANCE RAMP FROM 28TH STREET
TLC	INTERIM RAMP LC	INTERIM IH 94 EASTBOUND EXIT RAMP TO ST PAUL AVENUE/26TH STREET
J	N. 28TH STREET	28TH STREET
KN	N. 27TH STREET	27TH STREET (NORTH OF ST PAUL AVENUE)
KS	N. 27TH STREET	27TH STREET (SOUTH OF ST PAUL AVENUE)
SP	W. ST PAUL AVENUE	W. ST PAUL AVENUE
TSP	INTERIM W. ST PAUL AVENUE	W. ST PAUL AVENUE INTERIM CONNECTION

RAMP QUADRANT IDENTIFICATION



STANDARD ABBREVIATIONS

AEW	APRON END WALL
AGG	AGGREGATE
ASPH	ASPHALTIC
BAD	BASE AGGREGATE DENSE
BM	BENCH MARK
C&G	CURB AND GUTTER
C/L	CENTER OR CONSTRUCTION LINE
CMCP	CULVERT PIPE CORRUGATED METAL
CONC	CONCRETE
CP	CULVERT PIPE
CPRC	CULVERT PIPE REINFORCED CONCRETE
CSD	CONCRETE SURFACE DRAIN
CY	CUBIC YARD
D	DEGREE OF CURVE
DLMS	DYNAMIC LATE MERGE SYSTEM
Δ	DELTA
DISCH	DISCHARGE
EB	EASTBOUND
FE	FIELD ENTRANCE
FL	FLOW LINE
HMA	HOT MIX ASPHALT
INV	INVERT
L	LENGTH OF CURVE
LHF	LEFT HAND FORWARD
LP	LOW POINT
LT	LEFT
MIN	MINIMUM
M/L	MATCHLINE
MQIC	MARQUETTE INTERCHANGE
NB	NORTHBOUND
NC	NORMAL CROWN
PAVT	PAVEMENT
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PE	PRIVATE ENTRANCE
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
PLE	PERMANENT LIMITED EASEMENT
PRC	POINT OF REVERSE CURVE
PT	POINT OF TANGENT
QWS	QUEUE WARNING SYSTEM
R	RADIUS OF CURVE
R/L	REFERENCE LINE
R/W	RIGHT OF WAY
RC	REVERSE CROWN
RCAEW	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE
REQD	REQUIRED
RHF	RIGHT HAND FORWARD
RO	RUN OFF LENGTH
RRSP	RAILROAD SPIKE
RT	RIGHT
SALV	SALVAGED
SAPBC	SALVAGED ASPHALTIC PAVEMENT BASE COARSE
SB	SOUTHBOUND
SDD	STANDARD DETAIL DRAWING
SE	SUPER ELEVATION
SF	SQUARE FOOT
SIC	STADIUM INTERCHANGE
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
STA	STATION
SY	SQUARE YARD
T	TANGENT LENGTH
TLE	TEMPORARY LIMITED EASEMENT
VCL	VERTICAL CURVE LENGTH
VPC	POINT OF VERTICAL CURVE
VPI	POINT OF VERTICAL INTERSECTION
VPT	POINT OF VERTICAL TANGENT
WB	WESTBOUND

UTILITIES CONTACTS

AT&T LEGACY
COMMUNICATION LINE
KENNETH NINE
110 N. MAIN ST
CULVER, IN 46511
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KNINE@JMCEAINC.COM

AT&T WISCONSIN
COMMUNICATION LINE
JAY BULANEK
435 S 95TH ST
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JB5175@ATT.COM

ATC MANAGEMENT, INC.
ELECTRICITY-TRANSMISSION
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MILWAUKEE METROPOLITAN SEWERAGE DISTRICT
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SPENSER.DOONER@WE-ENERGIES.COM
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LORI.KETTER@WINDSTREAM.COM

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FAX: (414) 257-6501
KEVIN.KENT@MILWAUKEECOUNTYWI.GOV

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

GENERAL NOTES

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

THE LOCATIONS OF ROCK AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE ADDITIONAL AREAS OF ROCK THAT ARE NOT SHOWN.

GROUNDWATER MONITORING WELLS SHALL BE ABANDONED IN ACCORDANCE WITH WDNR. WELL LOCATIONS IDENTIFIED IN REMOVAL PLAN AND PAID FOR AS ABANDONING WELLS.

THE PRESENCE OR REMOVAL OF ANY REINFORCEMENT, REBAR OR WIRE MESH FOUND IN ANY EXISTING CONCRETE PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE REMOVING PAVEMENT ITEM.

BROKEN CONCRETE CONTAINING RE-BAR SHALL NOT BE USED AS RIPRAP OR HEAVY RIPRAP OR EBS BACKFILL.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE EARTHWORK, EBS IS MEASURED AND PAID FOR AS EXCAVATION COMMON. EXACT LOCATIONS OF EBS WILL BE DETERMINED BY THE ENGINEER.

PRIOR TO ORDERING DRAINAGE PIPES, THE CONTRACTOR SHALL FIELD VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN WITH THE ENGINEER.

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

EXISTING PIPE CULVERT SIZES SHOWN ARE APPROXIMATE AND THE CONTRACTOR WILL BASE ITS BID ON THE ACTUAL FIELD CONDITIONS.

MAINTAIN DRAINAGE OF THE EXISTING STORM SEWER SYSTEM OR CULVERT PIPE UNTIL THE PROPOSED STORM SEWER STRUCTURE/SYSTEM IS COMPLETELY FUNCTIONAL.

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

VERIFY EXISTING PAVEMENT ELEVATIONS AT ALL TIE-INS TO EXISTING PAVEMENT PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IF A DISCREPANCY IS FOUND BETWEEN PROPOSED PLAN ELEVATIONS AND EXISTING PAVEMENT ELEVATIONS.

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

CURB AND GUTTER GRADES ARE GIVEN TO THE FLANGE OF CURB AND GUTTER. CURB AND GUTTER RADII ARE MEASURED TO THE FLANGE OF THE CURB AND GUTTER.

CURVE DATA IS BASED ON THE RADIUS DEFINITION.

CONCRETE MEDIAN SLOPED NOSE SHALL BE CONSTRUCTED FOR ALL MEDIAN OPENINGS AT INTERSECTIONS WITH CURB & GUTTER. REFER TO PLAN DETAILS FOR SPECIFIC LOCATIONS.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 120 LB/SY/IN.

TACK COAT HAS BEEN ESTIMATED AT AN APPLICATION OF 0.05 GAL./SY. ON NEW SURFACES AND 0.07 GAL./SY. ON MILLED SURFACES AND SHALL BE PLACED BETWEEN THE LAYERS OF ASPHALTIC PAVEMENT.

EXACT LOCATION OF ALL DRIVEWAY ENTRANCES TO BE REVIEWED AND APPROVED BY THE ENGINEER.

EROSION CONTROL DEVICES ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER REQUIRED.

INLET PROTECTION IS REQUIRED AT ALL INLETS AS SHOWN ON THE EROSION CONTROL PLANS OR AS DIRECTED BY THE ENGINEER.

SEED, INSTALL EROSION MAT OR MULCH, MULCH AND FERTILIZE ALL SALVAGED TOPSOILED OR TOPSOIL AREAS WITHIN FIVE (5) WORKING DAYS AFTER GRADING WORK IS COMPLETED.

RESHAPE, RESTORE AND FINISH ALL PREVIOUSLY GRASSED AREAS DISTURBED BY OPERATIONS OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS AT NO EXPENSE TO THE DEPARTMENT.

DISTURBED AREAS SHALL BE FERTILIZED, SEEDED AND MULCHED OR FERTILIZED AND SODDED AS DIRECTED BY THE ENGINEER.

FERTILIZER SHALL NOT BE USED WITHIN 20 FEET OF NAVIGABLE WATERWAYS OR WETLANDS.

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS. STOCKPILE EXCESS MATERIAL OR SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOODPLAINS AND WATERWAYS. STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION. IF STOCKPILED MATERIAL IS LEFT FOR MORE THAN FOURTEEN (14) CALENDAR DAYS, SEED THE STOCKPILE WITH TEMPORARY SEED AND MULCH.

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

CROSS SECTIONS SHOWN INCLUDE THE THICKNESS OF TOPSOIL OR SALVAGED TOPSOIL WHERE REQUIRED. TOPSOIL OR SALVAGED TOPSOIL SHALL BE REPLACED WITH 6-INCH TYPICAL DEPTH.

STATIONING, DISTANCES, AND OFFSETS FOR SIGNS SHOWN IN THE PLANS ARE APPROXIMATE AND THE FINAL LOCATIONS OF SIGNS ARE TO BE DETERMINED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED THE ENGINEER.

CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER, THE COUNTY SURVEYOR, AND SEWRPC AT LEAST TWO (2) WEEKS PRIOR TO WORK NEAR ANY SECTION CORNER OR PUBLIC SURVEY MONUMENT.

FOR SECTION CORNER REPLACEMENT CONTACT ROB MERRY WITH SEWRPC AT (262) 953-4289 OR RMERRY@SEWRPC.OR AT LEAST TWO WEEKS BEFORE STARTING CONSTRUCTION OPERATIONS.

THE LOCATION 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.

(P) UTILITY LINETYPE INDICATES A UTILITY THAT WAS DRAWN BASED ON FACILITY MAPPING AND NOT FIELD LOCATED.

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

COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

ELEVATIONS ARE BASED ON NAVD88 (2007) NORTH AMERICAN VERTICAL DATUM TO CONVERT TO CITY OF MILWAUKEE DATUM SUBTRACT 580.40 FT.

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEWS
TYPICAL SECTIONS
CONSTRUCTION DETAILS
REMOVAL PLAN
PLAN DETAILS
PAVING GRADE
CURB RAMP DETAILS
FTMS PLAN
CONTOUR MAP
CROSS SECTION MATCHLINES
EROSION CONTROL
WATERMAIN
STORM SEWER
EXISTING UTILITY PLANS
SIGNING REMOVAL PLAN
PERMANENT SIGNING PLAN
LIGHTING
CITY UNDERGROUND CONDUIT PLANS
TRAFFIC SIGNALS
PAVEMENT MARKING
TRAFFIC CONTROL
STAGE CONSTRUCTION
DETOURS
FENCING
ALIGNMENT LAYOUT

ALL TYPES OF HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYERS:

PLAN DETAIL AND TYPICAL SECTION LEGEND CALL-OUT	HMA PAVEMENT	TOTAL LAYER PAVEMENT THICKNESS	LAYERS
AP01	4 MT 58-28 S 3 MT 58-28 S	5"	2" UPPER 3" LOWER
AP02	4 HT 58-28 H 3 HT 58-28 S 3 HT 58-28 S	7-1/2"	2" SURFACE 2-3/4" MIDDLE 2-3/4" LOWER
AP03	4 MT 58-28 S	2"	2" UPPER
AP05	4 MT 58-28 S	2-1/2"	2-1/2" UPPER

2

2

N

END CONSTRUCTION
STA 14J+60.00

END CONSTRUCTION
STA 27KN+49.97

W. CLYBOURN STREET

N. 32ND STREET

N. 31ST STREET

N. 30TH STREET

N. 29TH STREET

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

R/L J

R/L KN

30KN

END CONSTRUCTION
STA 219TSP+37.50

BEGIN CONSTRUCTION
STA 10J+50.42

R/L SP

BEGIN CONSTRUCTION
STA 10SP+28.48

R/L TSP

EXISTING B-40-57

W. ST PAUL AVENUE

15SP

220TSP

125TWB

30SP

25SP

R/L KS

EXISTING B-40-43

END PROJECT 1060-27-74
STA 25TEB+54.89

R/L TJD

EXISTING R-40-18

EXISTING R-40-10

430EW

25TLC

BEGIN CONSTRUCTION
STA 100TJD+72.50

120TWB

125TMB

R/L TWB

R/L TLC

EXISTING R-40-33

END CONSTRUCTION
STA 25TLC+00.85

R/L TML

RAMP LC

20TLC

R/L TEB

W. MT VERNON AVENUE

RAMP JD

115TWB

115TMB

115TEB

BEGIN PROJECT 1060-27-74
STA 10TEB+95.49

B-40-1083

GREVES STREET

N. 25TH STREET

B-40-513_5
(EXISTING)

BEGIN CONSTRUCTION
STA 21KS+22.83

20KS

R-40-767
(STAGE 1)

R-40-761

420EW

W. PARK HILL AVENUE

IH 94

CPKC RAILROAD

MENOMONEE RIVER

410EW

R/L EW

15KS

W. CANAL STREET

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SHEET 6	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-020201-PO.DWG
LAYOUT NAME - 01

PLOT DATE : 4/26/2025 8:01 PM PLOT BY : SCHARLAU, DAVE PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

LEGEND

PAVEMENT CONSTRUCTED IN FUTURE CONTRACT 1060-27-72

N

W. CLYBOURN STREET

N. 32ND STREET
N. 31ST STREET
N. 30TH STREET
N. 29TH STREET
N. 28TH STREET
N. 27TH STREET
N. 26TH STREET
N. 25TH STREET

W. ST PAUL AVENUE
W. MT VERNON AVENUE
W. PARK HILL AVENUE
W. CANAL STREET

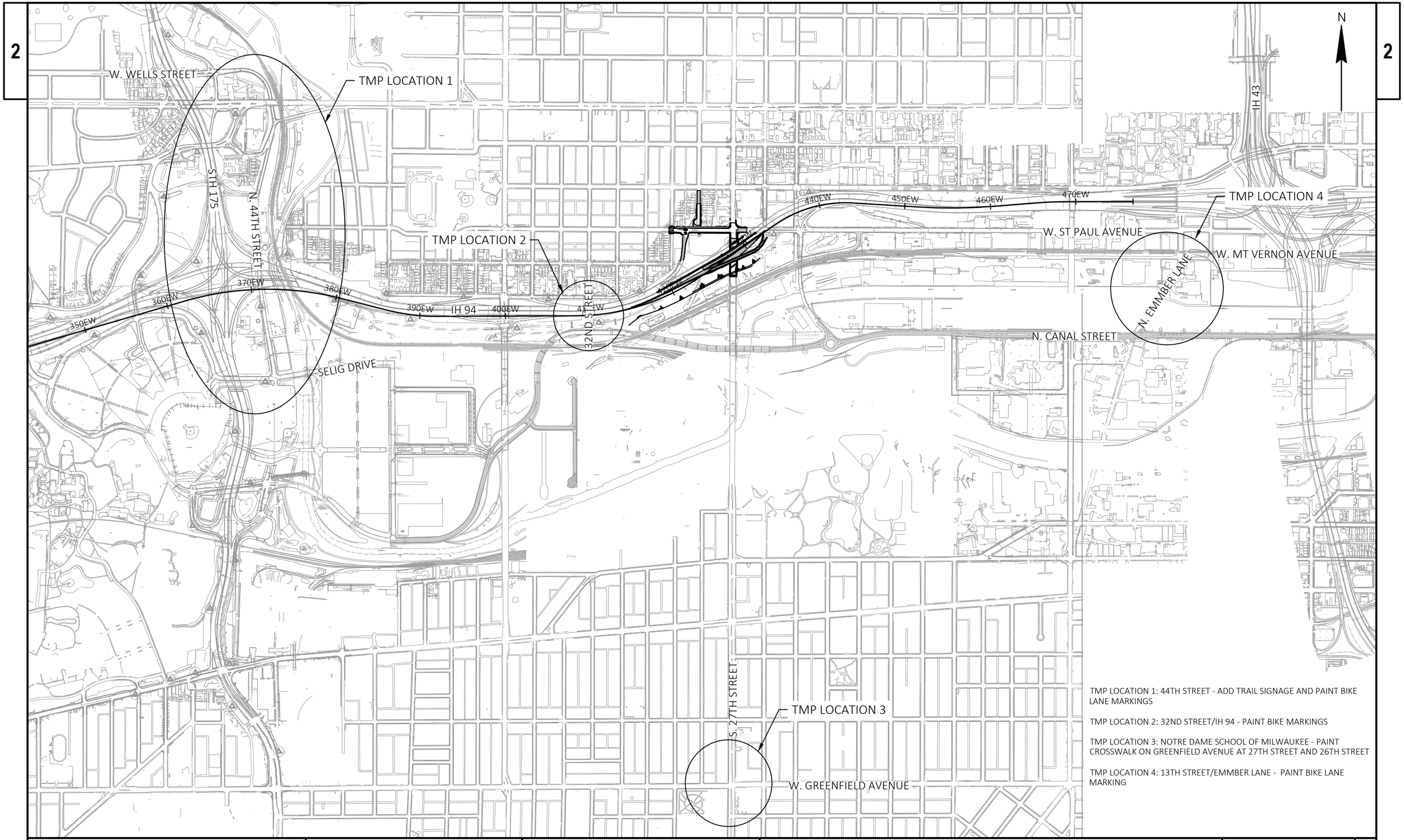
R/L J
R/L KN
R/L SP
R/L TSP
R/L KS
R/L TJD
R/L TWB
R/L TML
R/L TEB
R/L TLC
R/L EW

EXISTING B-40-43
EXISTING R-40-18
EXISTING R-40-10
EXISTING B-40-57
EXISTING R-40-33
B-40-1083
B-40-513_5 (EXISTING)
R-40-767 (STAGE 1)
R-40-761

15SP
30SP
25SP
15KS
20KS
30KN
35TEB
440EW
30TEB
220SBP
430EW
20TEB
20TLC
115TWB
115TEB
RAMP JD
FUTURE RAMP LC
FUTURE IH 94 WB
FUTURE IH 94 EB
420EW
GREVES STREET
CPKC RAILROAD
MENOMONEE RIVER

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PROJECT OVERVIEW - FUTURE CONTRACT 1060-27-72	SHEET 7	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-020201-PO.DWG
LAYOUT NAME - 02
PLOT DATE : 4/26/2025 8:01 PM
PLOT BY : SCHARLAU, DAVE
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42



TMP LOCATION 1: 44TH STREET - ADD TRAIL SIGNAGE AND PAINT BIKE LANE MARKINGS

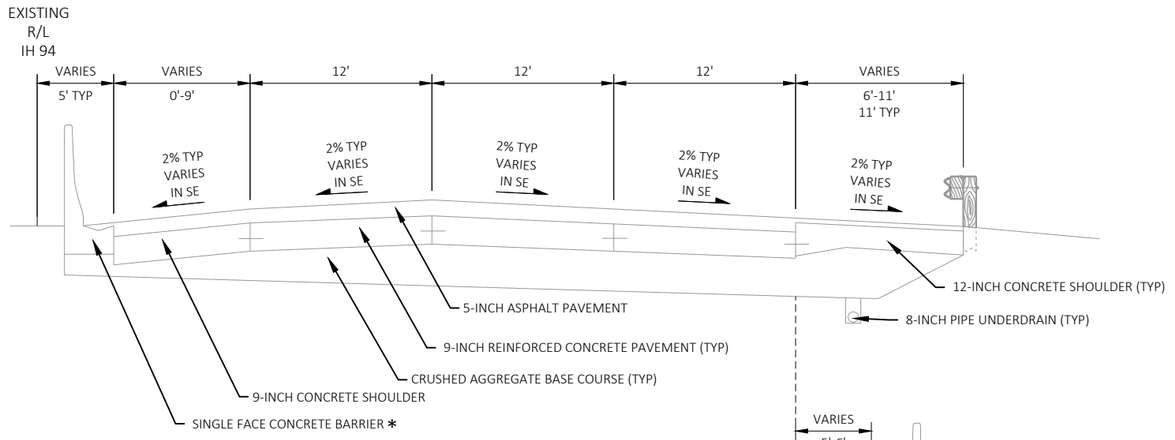
TMP LOCATION 2: 32ND STREET/IH 94 - PAINT BIKE MARKINGS

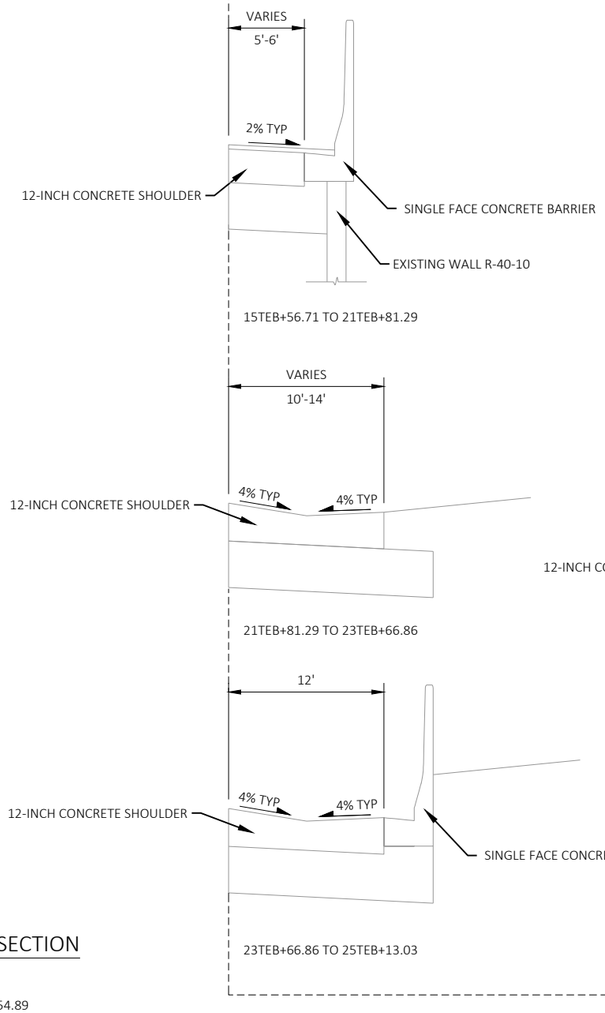
TMP LOCATION 3: NOTRE DAME SCHOOL OF MILWAUKEE - PAINT CROSSWALK ON GREENFIELD AVENUE AT 27TH STREET AND 26TH STREET

TMP LOCATION 4: 13TH STREET/EMMBER LANE - PAINT BIKE LANE MARKING

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PROJECT OVERVIEW - TMP LOCATIONS	SHEET 8	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-020201-PO.DWG
LAYOUT NAME - 03
PLOT DATE : 4/29/2025 7:44 PM
PLOT BY : CECELIA TICHELAAR
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42





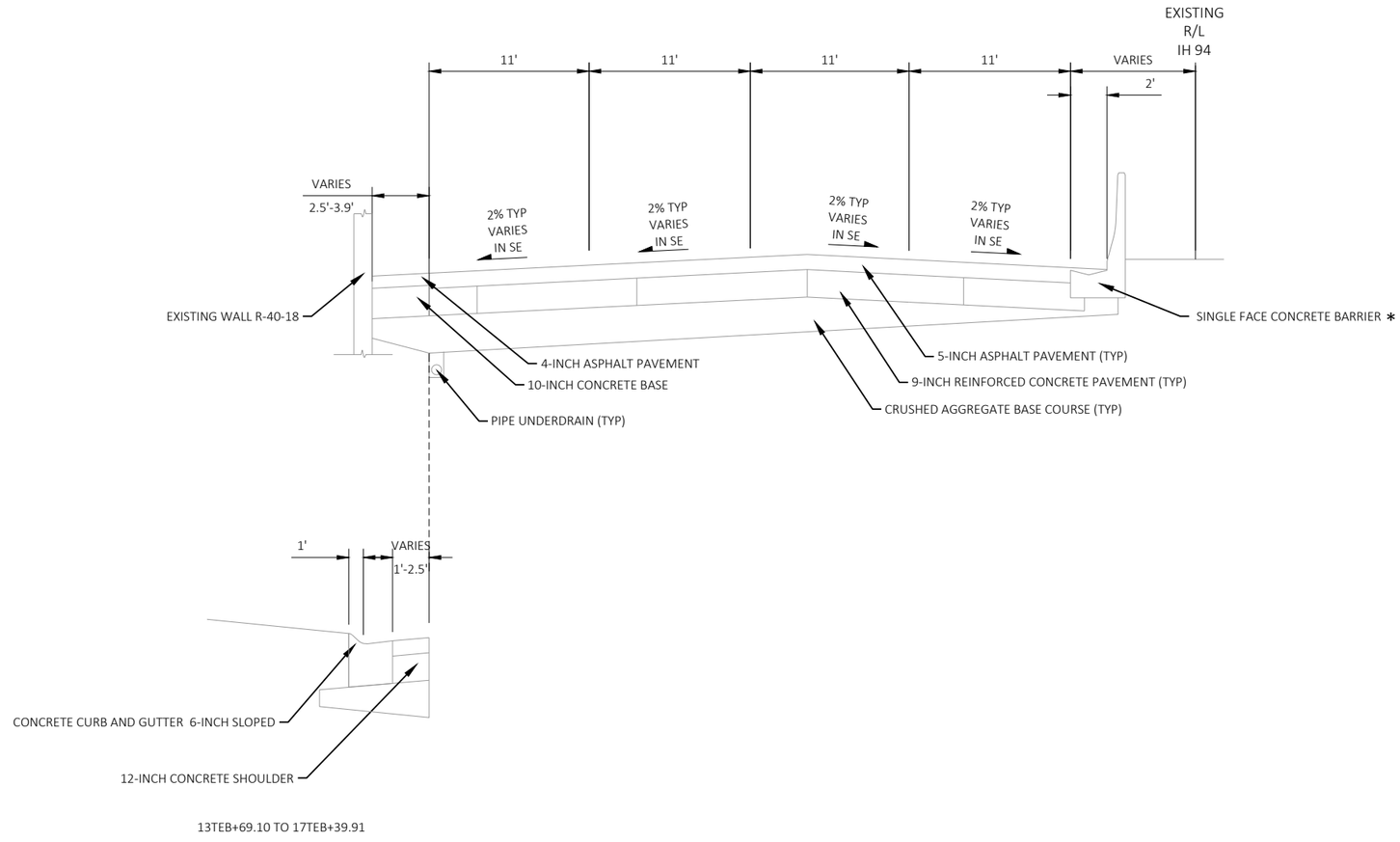
NOTE

* EB AND WB MEDIAN BARRIER COMBINES INTO A SINGLE BARRIER FROM STA 13TEB+75 TO STA 22TEB+00

TYPICAL EXISTING SECTION
IH 94 EB

10TEB+95.49 TO 25TEB+54.89

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 9	E



13TEB+69.10 TO 17TEB+39.91

NOTE

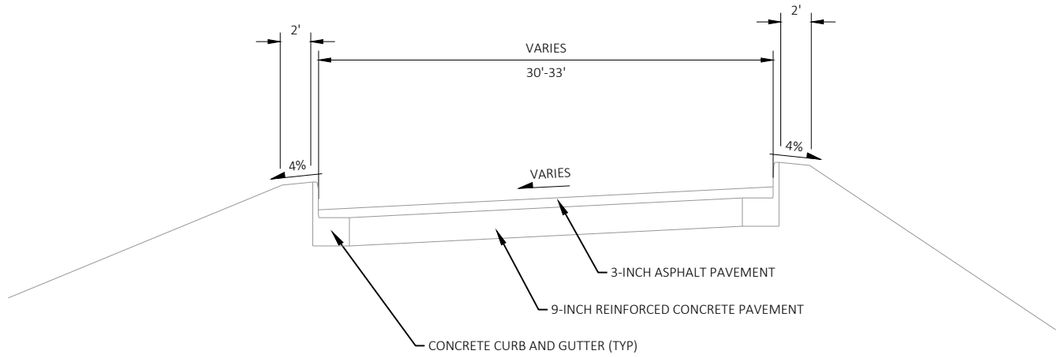
* EB AND WB MEDIAN BARRIER COMBINES INTO A SINGLE BARRIER
FROM STA 13TEB+75 TO STA 22TEB+00

TYPICAL EXISTING SECTION
IH 94 WB

10TEB+95.49 TO 25TEB+13.03

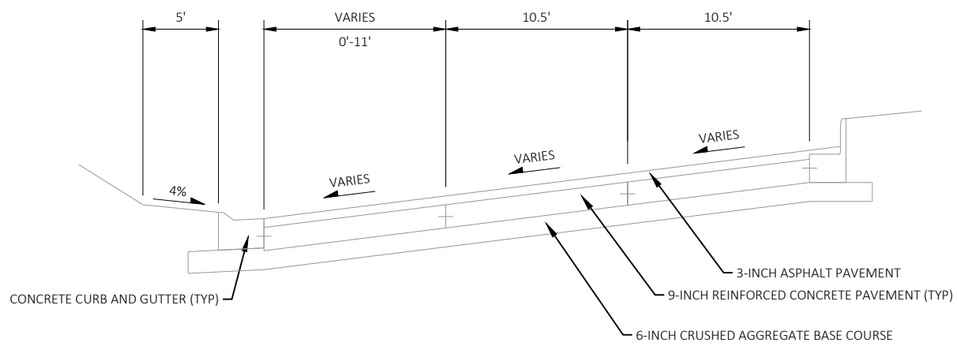
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 10	E

2



TYPICAL EXISTING SECTION
RAMP LC

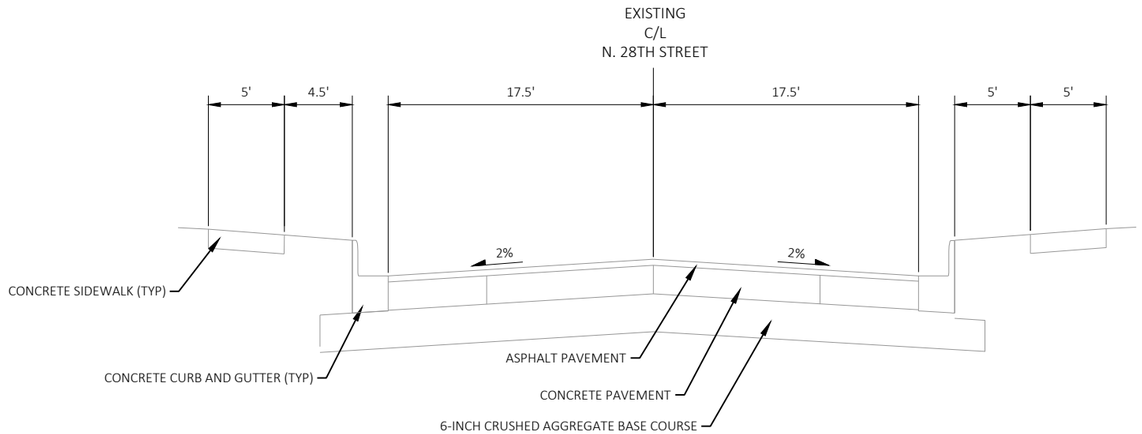
19TLC+69.56 TO 25TLC+59.67



TYPICAL EXISTING SECTION
RAMP JD

100TJD+72.50 TO 103TJD+37.24

2



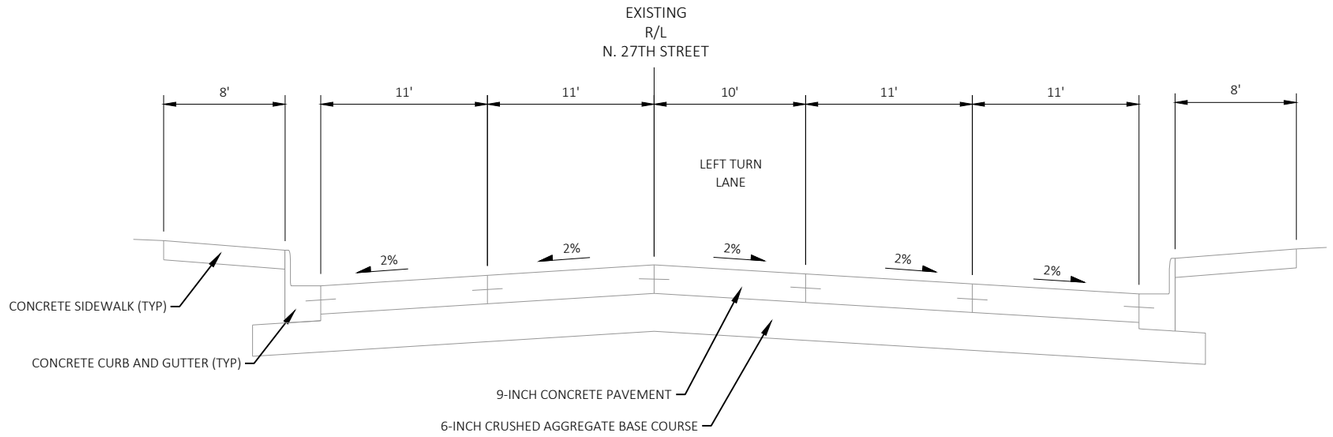
TYPICAL EXISTING SECTION
N. 28TH STREET

10J+50.42 TO 14J+60.00

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 12	E

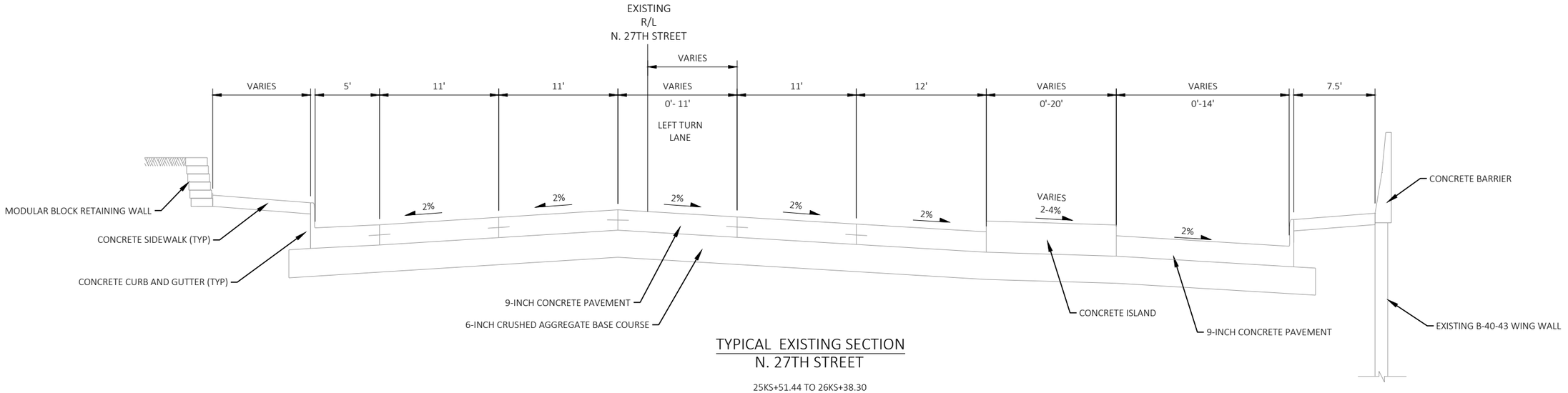
FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-020304-TS.DWG
LAYOUT NAME - 01
PLOT DATE : 4/26/2025 8:00 PM
PLOT BY : SCHARLAU, DAVE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



TYPICAL EXISTING SECTION
N. 27TH STREET

27KN+10.99 TO 27KN+50.08

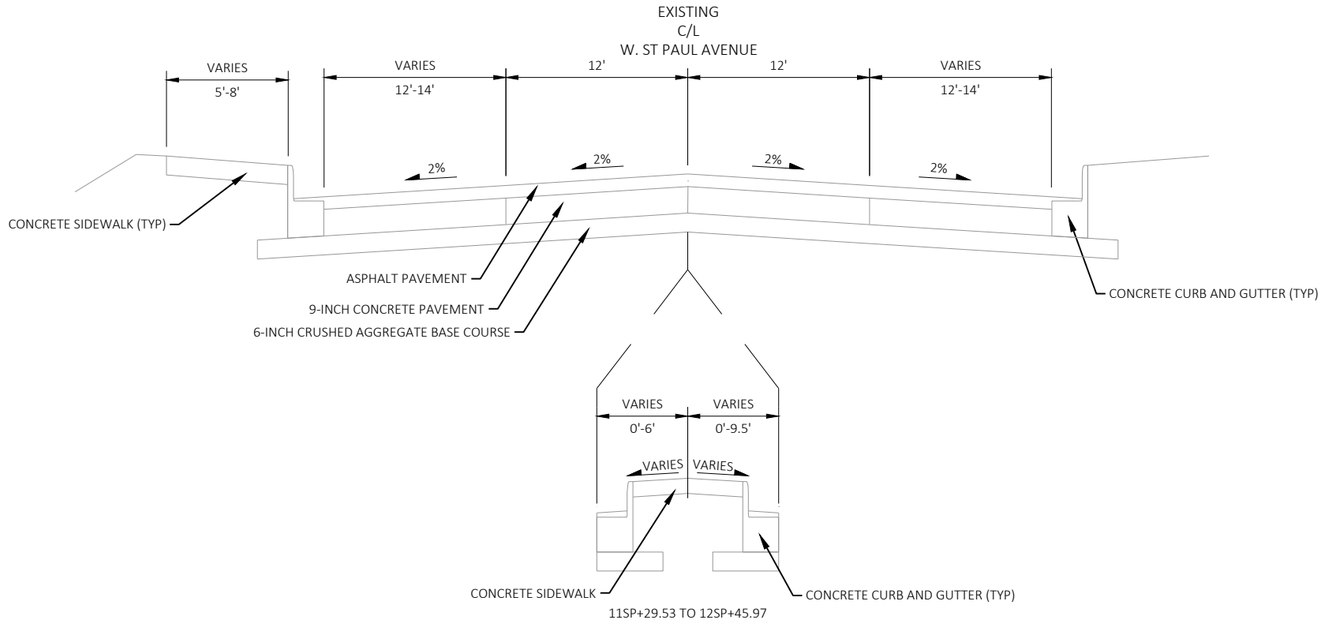


TYPICAL EXISTING SECTION
N. 27TH STREET

25KS+51.44 TO 26KS+38.30

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 13	E

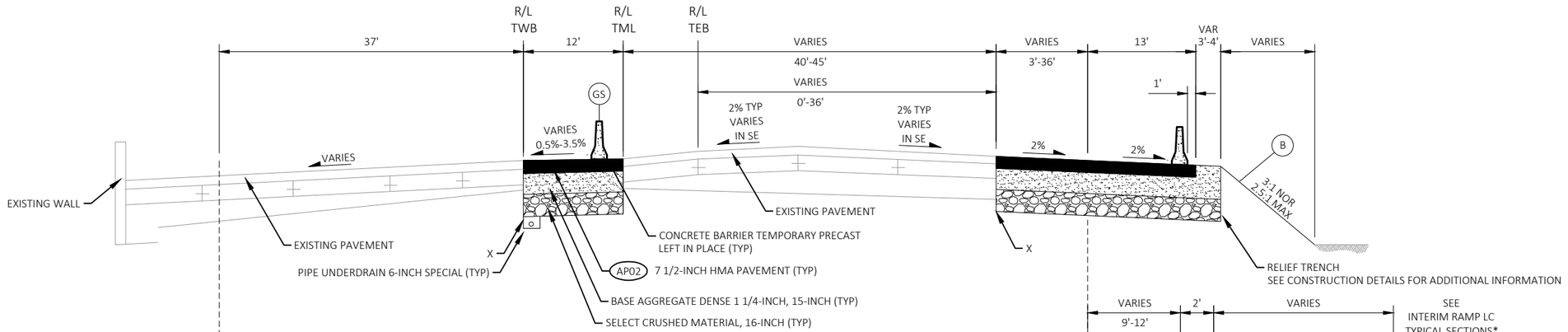
2

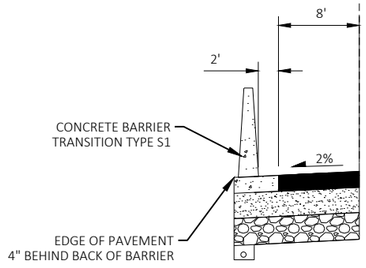


11SP+29.53 TO 12SP+45.97

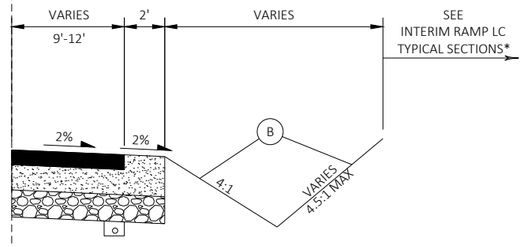
TYPICAL EXISTING SECTION
W. ST PAUL AVENUE

10SP+77.49 TO 18SP+34.32

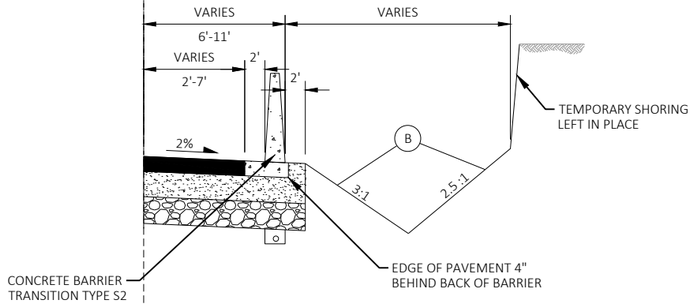




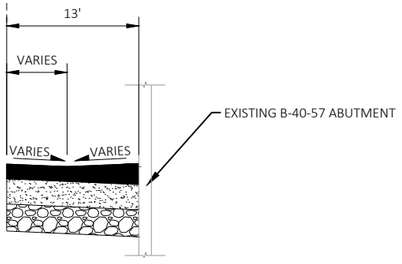
23TEB+00.10 TO 23TEB+21.00



23TEB+00.10 TO 23TEB+99.92



23TEB+99.92 TO 25TEB+13.03



25TEB+13.03 TO 25TEB+54.89

TYPICAL FINISHED SECTION
IH 94

10TEB+95.49 TO 17TEB+01.53

23TEB+00.10 TO 25TEB+54.89

NOTE

PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

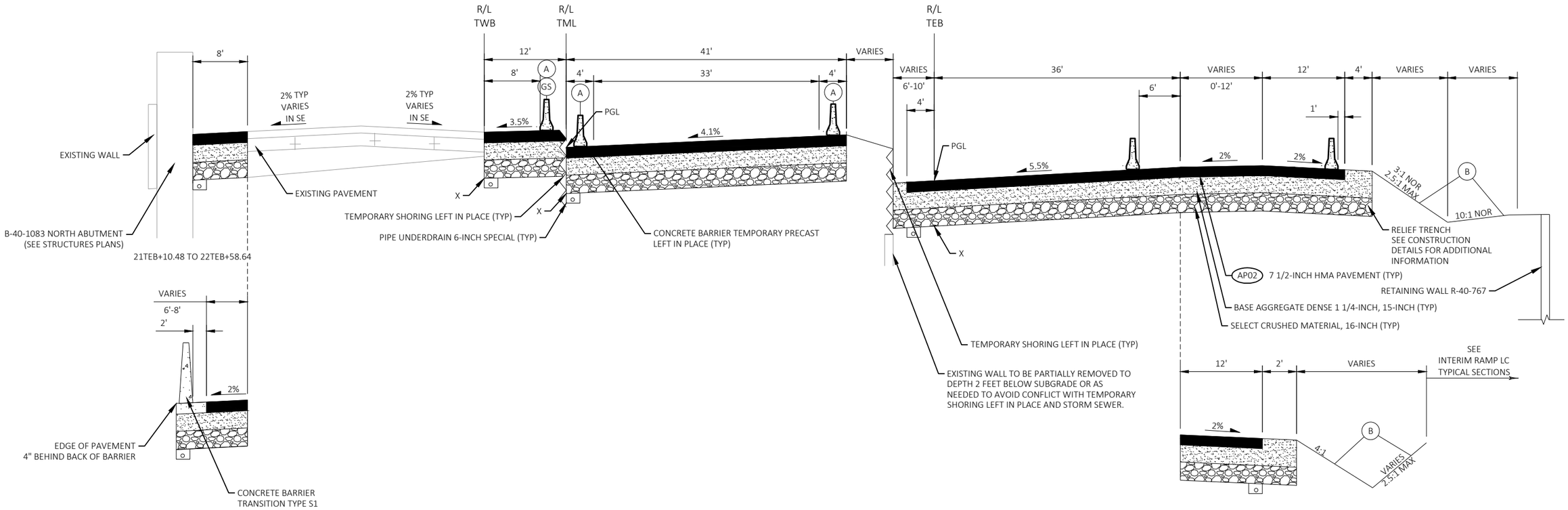
X = POINT REFERRED TO ON CROSS SECTION

(GS) GLARE SCREEN TEMPORARY LEFT IN PLACE

(B) 6" SALVAGED TOPSOIL, SEEDING MIXTURE NO. 20, & FERTILIZER TYPE B

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 15	E

2



TYPICAL FINISHED SECTION
IH 94

17TEB+01.53 TO 23TEB+00.10

NOTE

PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

X = POINT REFERRED TO ON CROSS SECTION

(GS) GLARE SCREEN TEMPORARY LEFT IN PLACE

(A) ANCHORING CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE
(SEE STAGING PLANS FOR STATION LIMITS)

(B) 6" SALVAGED TOPSOIL, SEEDING MIXTURE NO. 20, & FERTILIZER TYPE B

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 16	E

2

(A) CONCRETE SHOULDER LIMITS (NO MILL AND OVERLAY)

IH 94 EB: STA 378EW+10 TO STA 405EW+97, VARIES 2' - 10' (10' TYP)
STA 410EW+47 TO STA 424EW+47, VARIES 2' - 10' (10' TYP)
STA 432EW+94 TO STA 442EW+00, 10'
STA 445EW+00 TO STA 459EW+82, VARIES 2' - 10' (10' TYP)

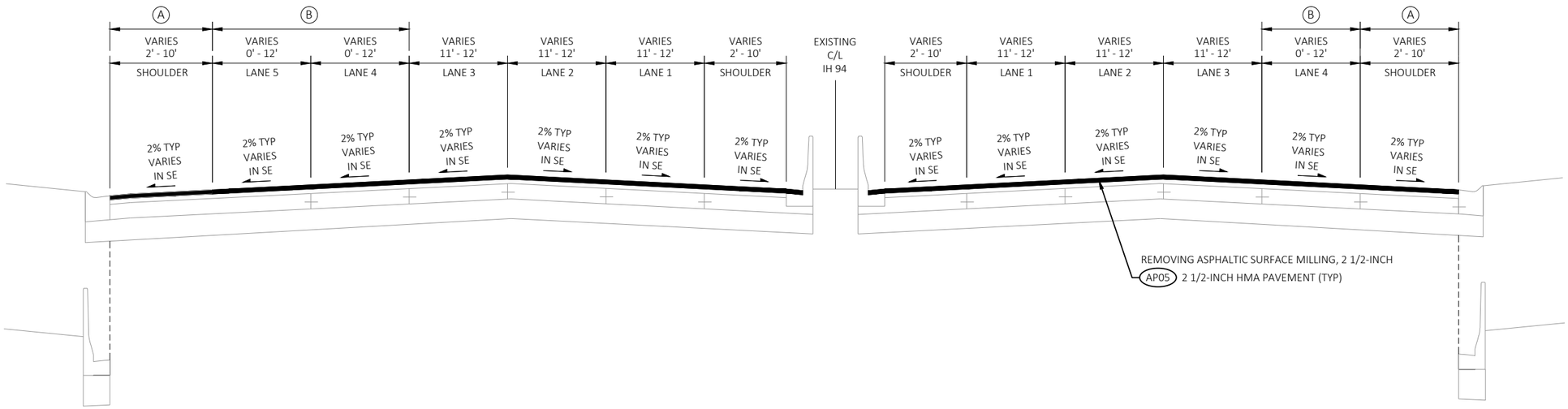
IH 94 WB: STA 374EW+78 TO STA 384EW+75, VARIES 2' - 10' (10' TYP)
STA 400EW+40 TO STA 405EW+97, 5'

(B) LANE 4 AND LANE 5 LIMITS

IH 94 EB 4 LANE SECTION: STA 379EW+95 TO STA 394EW+28
STA 405EW+97 TO STA 408EW+95
STA 441EW+99 TO STA 474EW+10

IH 94 WB 4 LANE SECTION: STA 374EW+40 TO STA 387EW+27
STA 391EW+32 TO STA 405EW+97
STA 418EW+95 TO STA 446EW+83

IH 94 WB 5 LANE SECTION: STA 387EW+27 TO STA 391EW+32
STA 405EW+97 TO STA 418EW+95
STA 446EW+83 TO STA 456EW+30

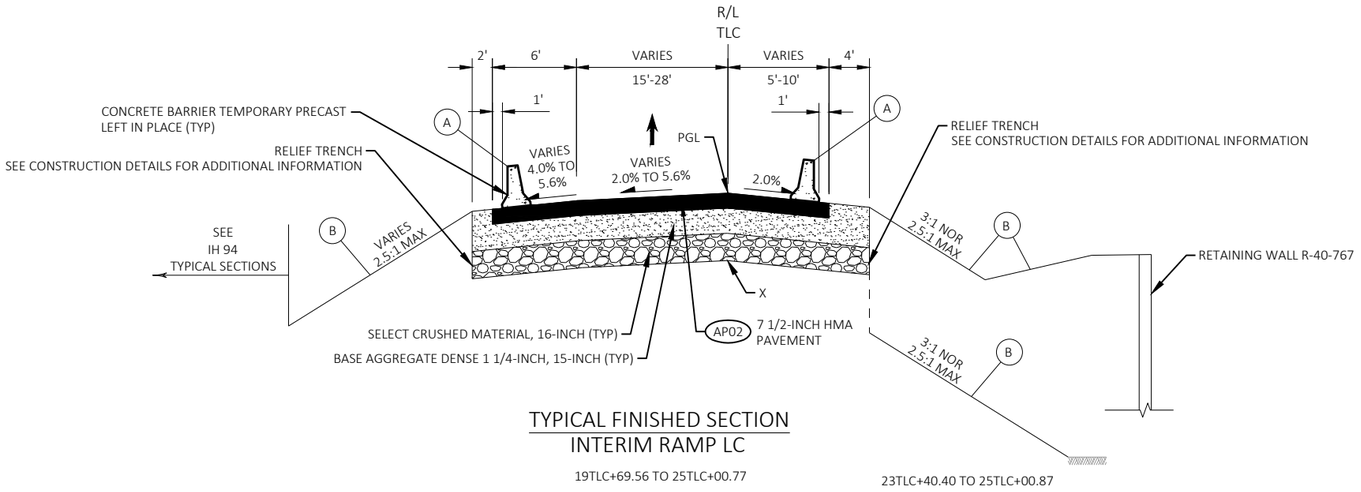


TYPICAL FINISHED SECTION
IH 94

MILL AND OVERLAY
(STADIUM INTERCHANGE MAINLINE STRUCTURES TO MARQUETTE INTERCHANGE STRUCTURES)

NOTE
MILL AND OVERLAY IH 94 HMA LANES AND HMA SHOULDERS FROM THE STADIUM INTERCHANGE (B-40-49/B-40-50) TO THE MARQUETTE INTERCHANGE (B-40-1222/B-40-1123/B-40-1311 B-40-1411). CONCRETE SHOULDERS DO NOT REQUIRE MILL AND OVERLAY.

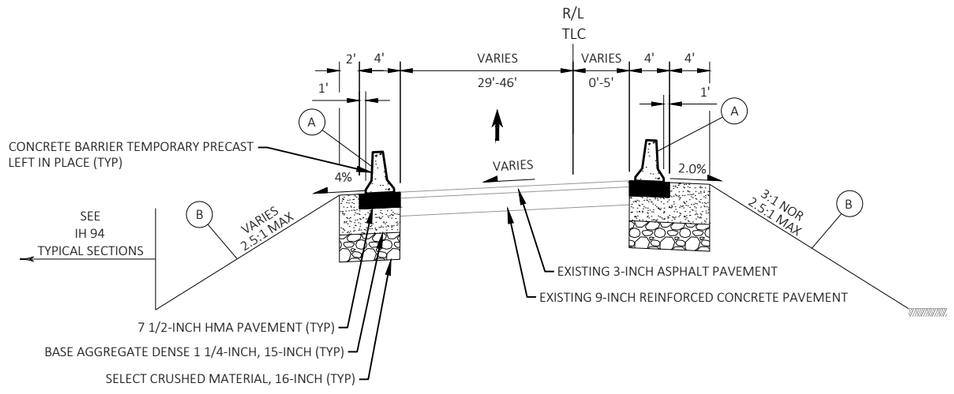
MILL AND OVERLAY ON RAMPS BEGINS/ENDS AT PHYSICAL GORE OR AS DIRECTED BY THE ENGINEER.



TYPICAL FINISHED SECTION
INTERIM RAMP LC

19TLC+69.56 TO 25TLC+00.77

23TLC+40.40 TO 25TLC+00.87



25TLC+00.77 TO 25TLC+65.64

25TLC+00.77 TO 25TLC+50.63

TYPICAL FINISHED SECTION
INTERIM RAMP LC

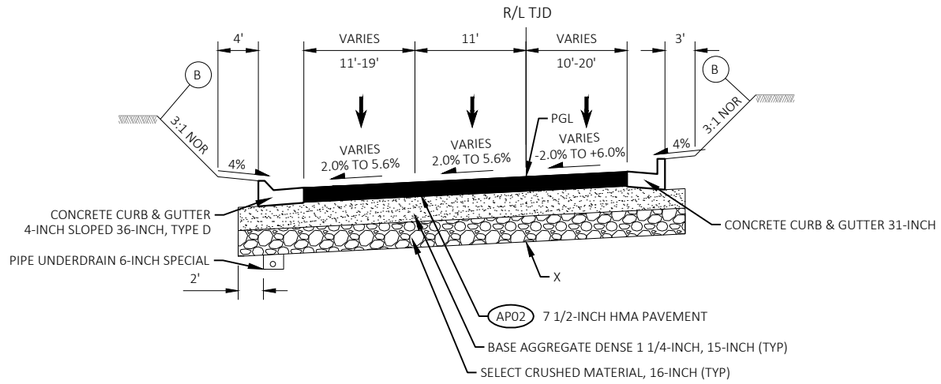
NOTES
PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION
X = POINT REFERRED TO ON CROSS SECTION

(A) ANCHORING CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE (SEE STAGING PLANS FOR STATION LIMITS)

(B) 6" SALVAGED TOPSOIL, SEEDING MIXTURE NO. 20, & FERTILIZER TYPE B

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 18	E

2



TYPICAL FINISHED SECTION
INTERIM RAMP JD

100TJD+72.50 TO 103TJD+37.24

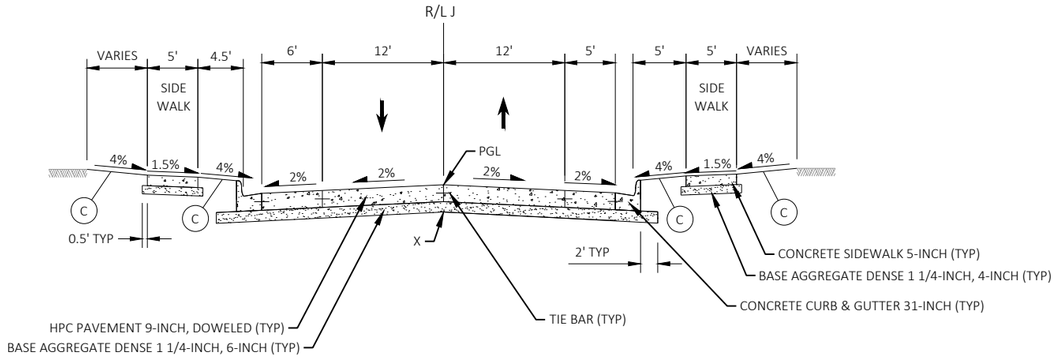
NOTES
PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION
X = POINT REFERRED TO ON CROSS SECTION

(A) ANCHORING CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE (SEE STAGING PLANS FOR STATION LIMITS)

(B) 6" SALVAGED TOPSOIL, SEEDING MIXTURE NO. 20, & FERTILIZER TYPE B

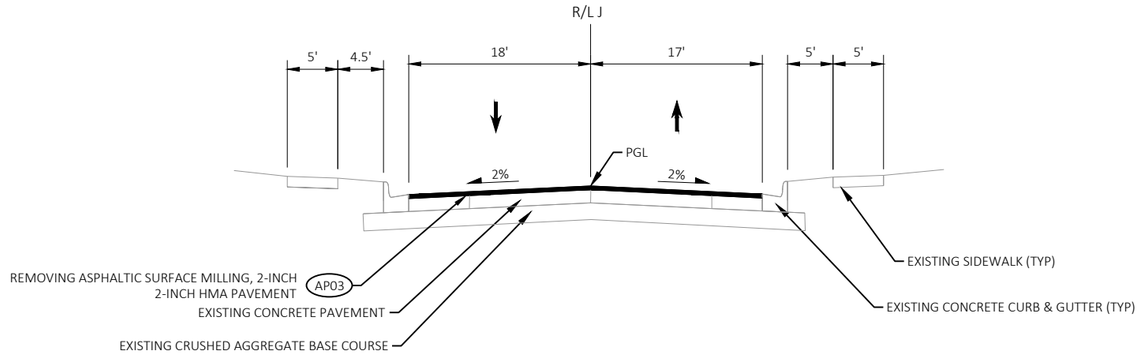
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 19	E

2



TYPICAL FINISHED SECTION
N. 28TH STREET

10J+53.00 TO 13J+05.00



TYPICAL FINISHED SECTION
N. 28TH STREET

13J+05.00 TO 14J+60.00

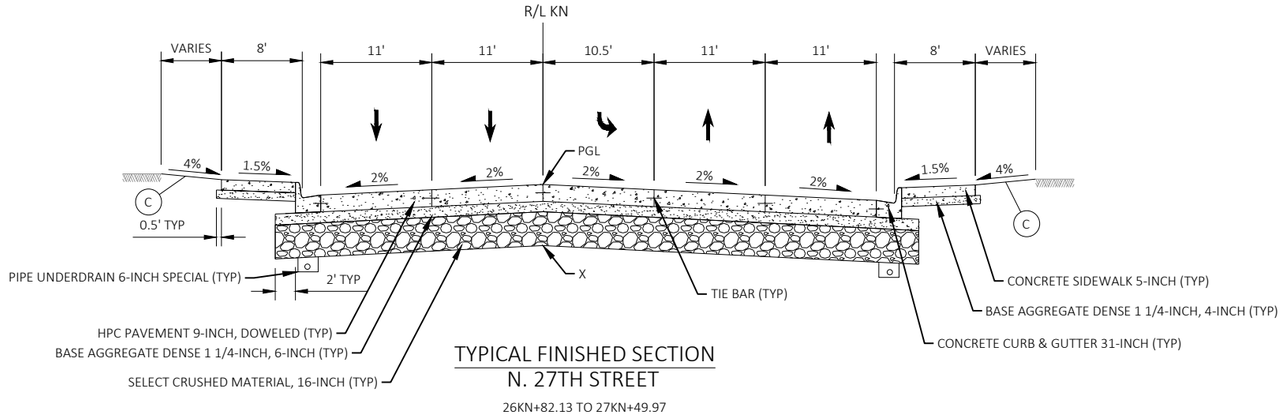
NOTES
PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION
X = POINT REFERRED TO ON CROSS SECTION

(C) 6" TOPSOIL, SOD LAWN, & FERTILIZER TYPE B

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 20	E

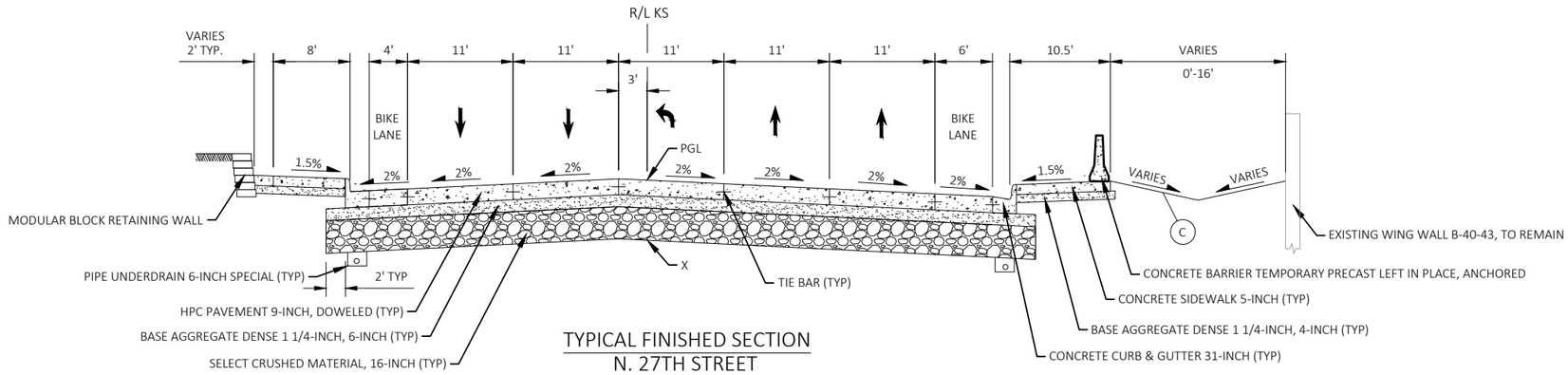
FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-020404-TS.DWG
LAYOUT NAME - 01
PLOT DATE : 7/17/2025 2:54 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1:15
WISDOT/CADDS SHEET 42

2



TYPICAL FINISHED SECTION
N. 27TH STREET

26KN+82.13 TO 27KN+49.97



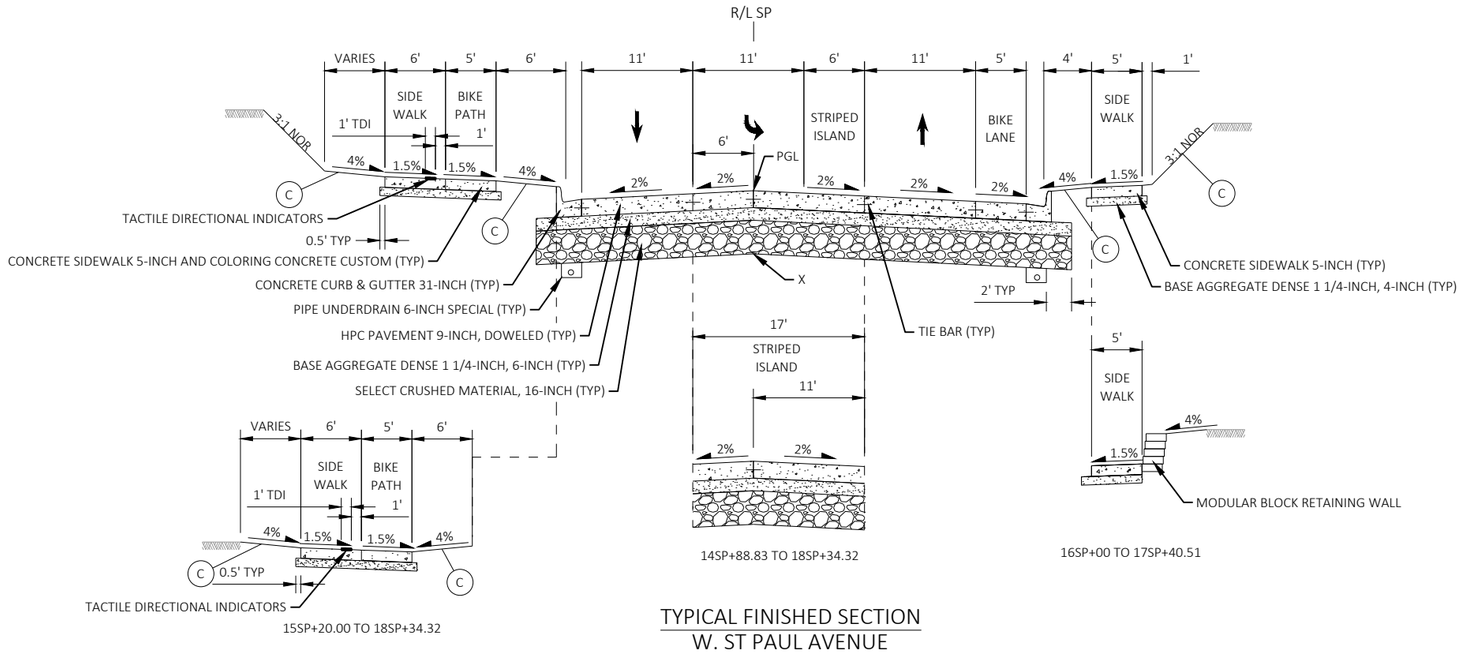
TYPICAL FINISHED SECTION
N. 27TH STREET

25KS+66.44 TO 26KS+38.30

NOTES
PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION
X = POINT REFERRED TO ON CROSS SECTION

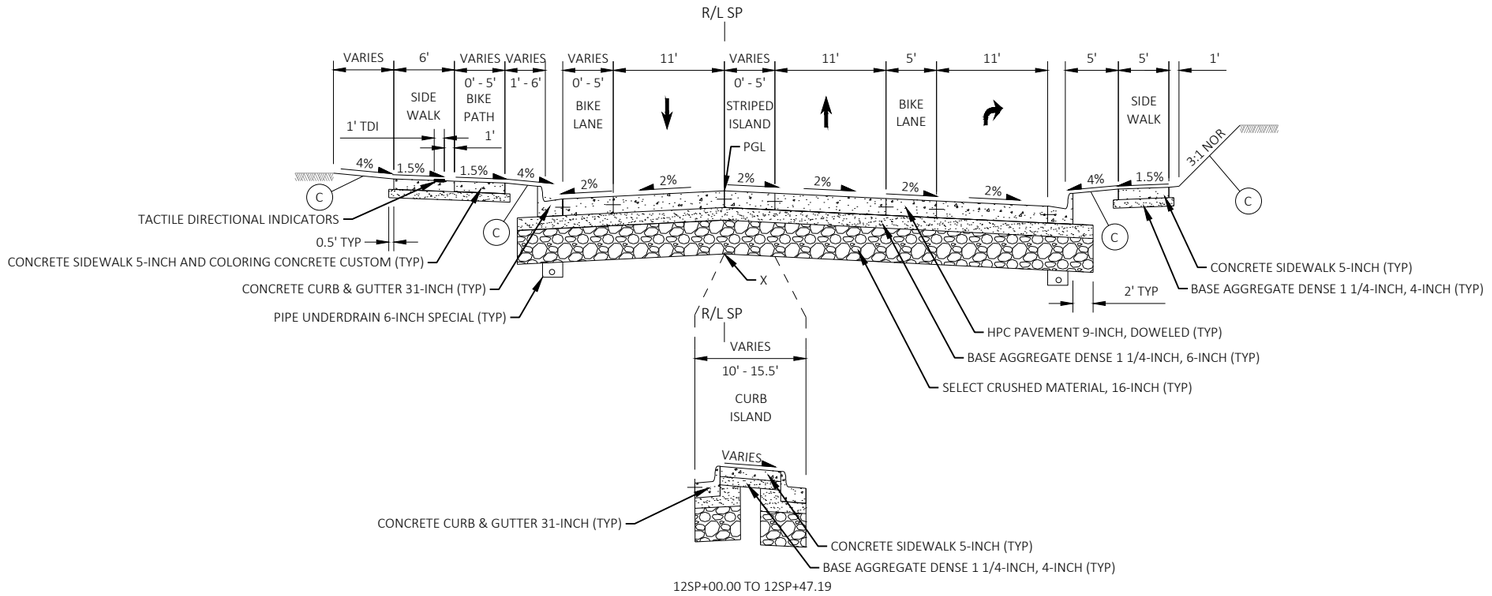
(C) 6" TOPSOIL, SOD LAWN, & FERTILIZER TYPE B

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 21	E



TYPICAL FINISHED SECTION
W. ST PAUL AVENUE

12SP+47.19 TO 18SP+34.32



TYPICAL FINISHED SECTION
W. ST PAUL AVENUE

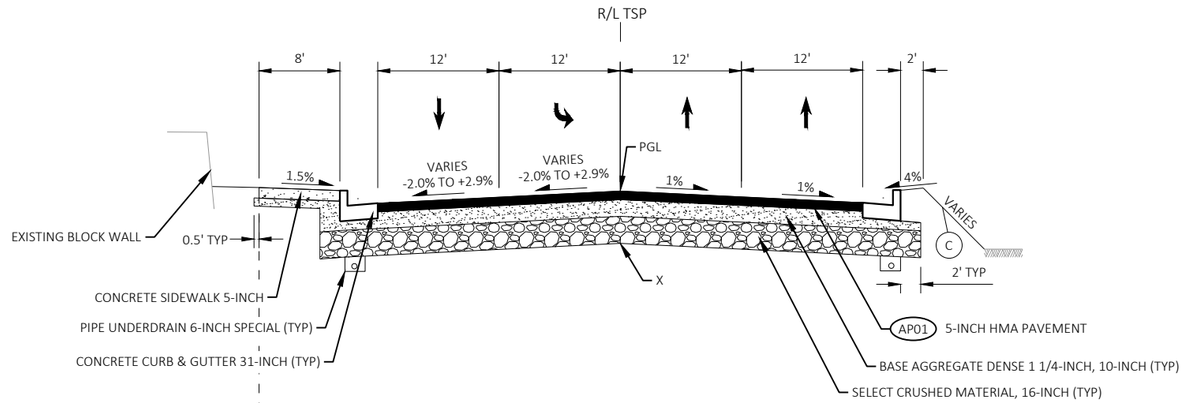
10SP+77.49 TO 12SP+47.19

NOTES
PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION
X = POINT REFERRED TO ON CROSS SECTION

(C) 6" TOPSOIL, SOD LAWN, & FERTILIZER TYPE B

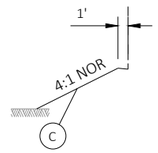
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 22	E

2



TYPICAL FINISHED SECTION
INTERIM W. ST PAUL AVENUE

218TSP+34.32 TO 219TSP+37.50



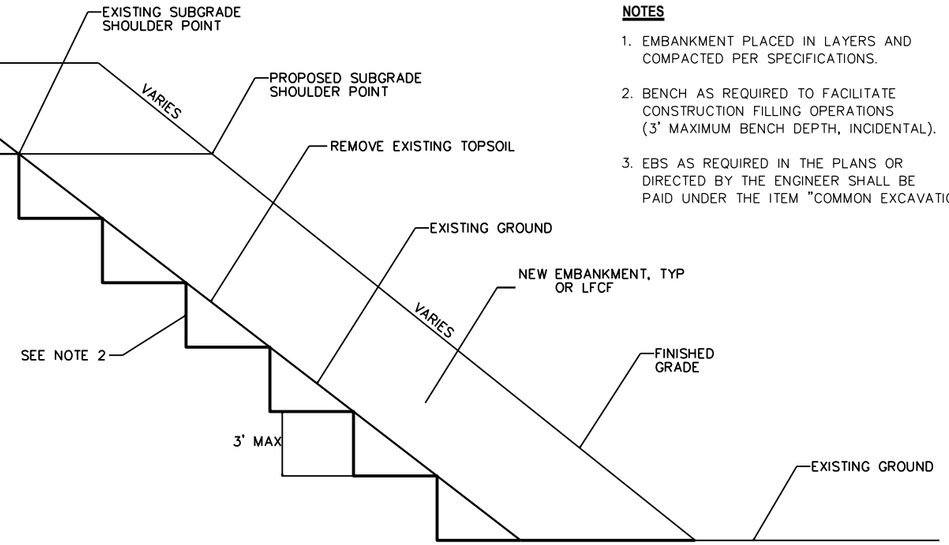
218TSP+73.33 TO 219TSP+37.50

NOTES
PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION
X = POINT REFERRED TO ON CROSS SECTION

(C) 6" TOPSOIL, SOD LAWN, & FERTILIZER TYPE B

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 23	E

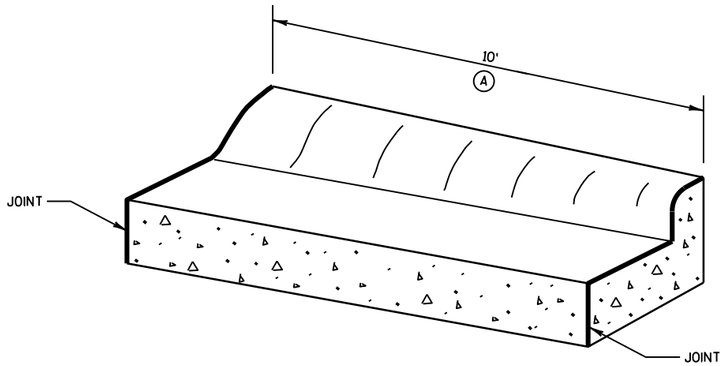
2



NOTES

1. EMBANKMENT PLACED IN LAYERS AND COMPACTED PER SPECIFICATIONS.
2. BENCH AS REQUIRED TO FACILITATE CONSTRUCTION FILLING OPERATIONS (3' MAXIMUM BENCH DEPTH, INCIDENTAL).
3. EBS AS REQUIRED IN THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE PAID UNDER THE ITEM "COMMON EXCAVATION".

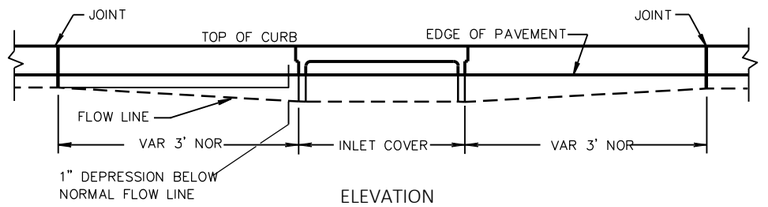
STEPPED EMBANKMENT



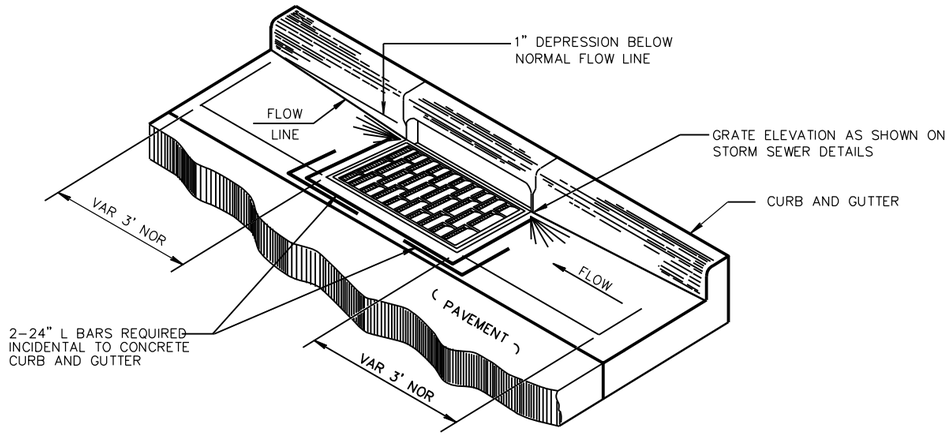
(A) 36" CURB & GUTTER TO 31" CURB & GUTTER
(TO BE MEASURED & PAID FOR AS CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D)

CURB & GUTTER TRANSITION

SEE PLAN DETAILS FOR LOCATIONS

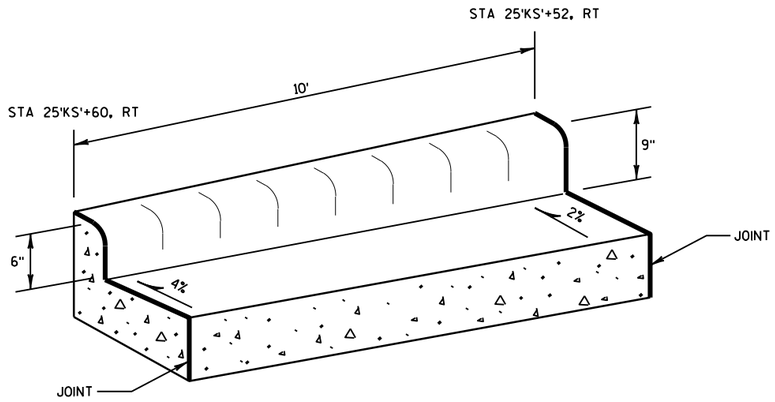


ELEVATION

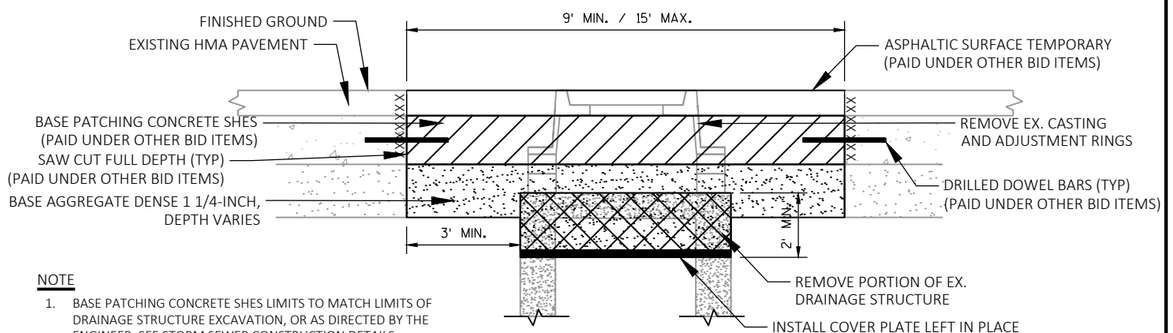


CURB AND GUTTER AT DEPRESSED INLETS

SEE STORM SEWER PLANS FOR LOCATIONS



CURB & GUTTER TRANSITION TO BRIDGE

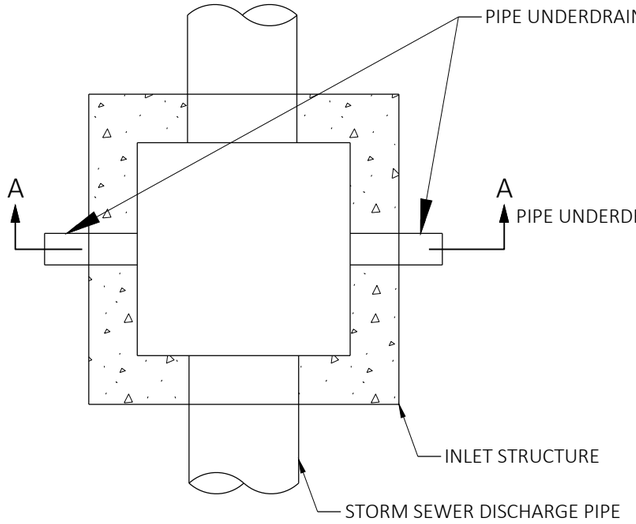


NOTE

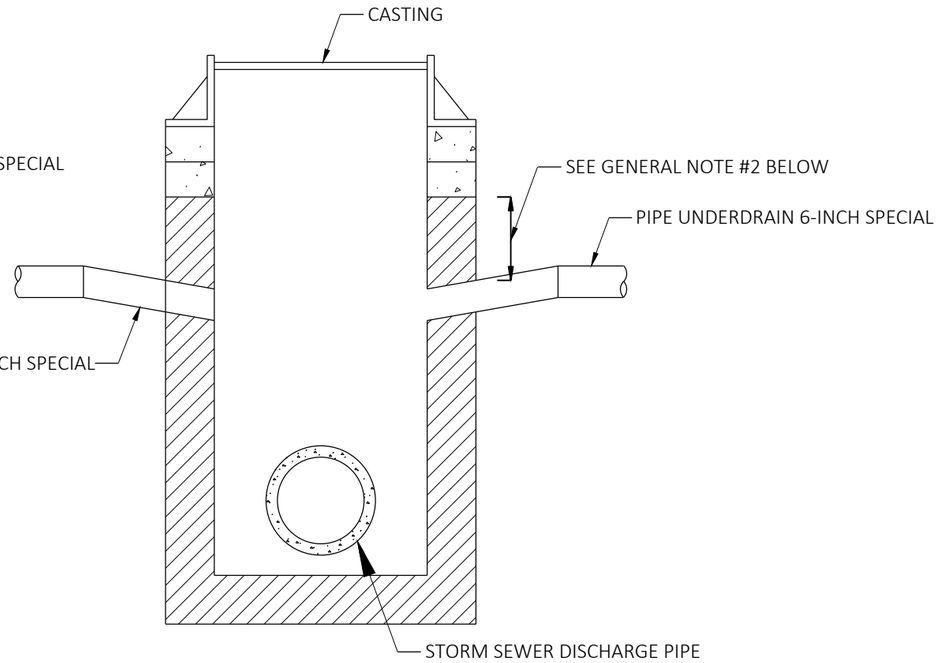
1. BASE PATCHING CONCRETE SHES LIMITS TO MATCH LIMITS OF DRAINAGE STRUCTURE EXCAVATION, OR AS DIRECTED BY THE ENGINEER. SEE STORM SEWER CONSTRUCTION DETAILS.
2. INSTALL CONCRETE BASE PATCH PER SDD 13C14, INCLUDING DIMENSIONS AND SPACING FOR DRILLED DOWEL BARS AND DRILLED TIE BARS (PAID UNDER OTHER BID ITEMS). TIE BARS NOT SHOWN.
3. ALL ITEMS ARE INCIDENTAL TO THE ITEM "COVER PLATE LEFT IN PLACE IN PAVEMENT" UNLESS OTHERWISE NOTED. AT LOCATIONS WITHIN FULL DEPTH PAVEMENT REPLACEMENT ALL NON-INCIDENTAL ITEMS ARE OMITTED.

COVER PLATE LEFT IN PLACE IN PAVEMENT

2



PLAN VIEW



SECTION A-A

UNDERDRAIN OUTFALL AT STORM SEWER STRUCTURE

NOTES:

1. CONNECTIONS TO INLETS OR MANHOLES IN MEDIAN SHALL USE PIPE UNDERDRAIN, 6-INCH SPECIAL.

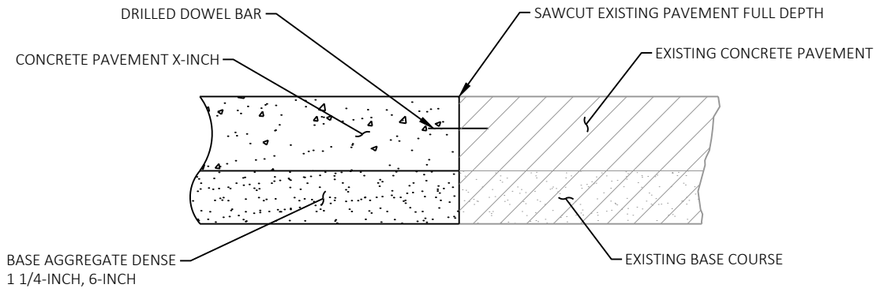
2. PROVIDE UNDERDRAIN OPENINGS TO ACCOMMODATE 6" UNDERDRAIN PIPE. SEE TYPICAL SECTIONS FOR PIPE UNDERDRAIN DEPTH AND LOCATIONS.

3. DRAIN TILES SHALL NOT BE ALLOWED IN THE ADJUSTMENT RING OF THE STRUCTURE OF INLETS OR SEWER ACCESS STRUCTURES

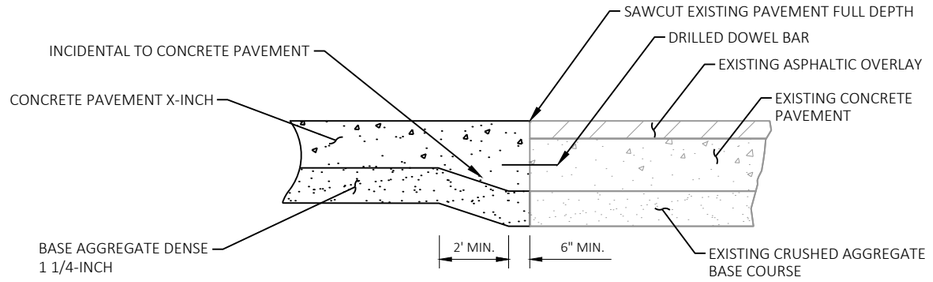
4. CORE HOLES SHALL PROVIDE FOR A MINIMUM OF 2" OF CONCRETE BETWEEN THE CUTOUT FOR A CONCRETE PIPE AND THE EDGE OF THE CORE HOLE.

5. CORE HOLES MAY HAVE 1" CLEARANCE FROM THE INSIDE WALLS OF A STRUCTURE.

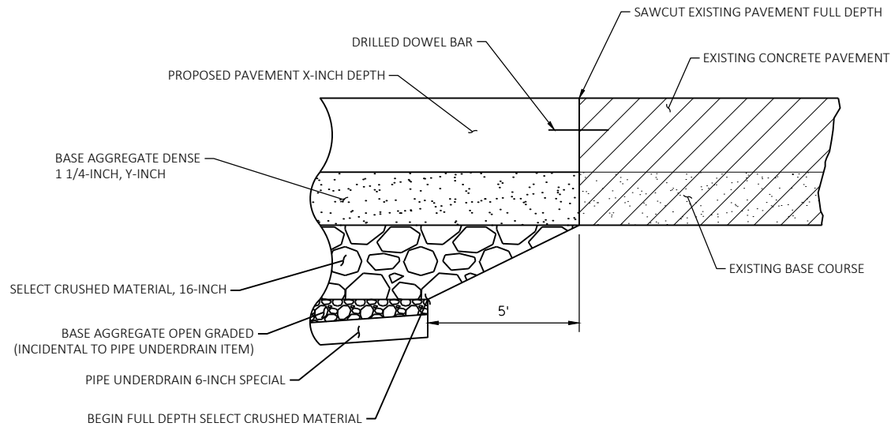
6. UNDERDRAIN CORING AND CONNECTIONS ARE INCIDENTAL TO THE STORM STRUCTURE.



MATCH AT EXISTING CONCRETE PAVEMENT



MATCH AT EXISTING CONCRETE PAVEMENT WITH ASPHALT OVERLAY



ROADWAY	X	Y
INTERIM RAMP TJD	7-1/2"	15"
INTERIM W ST PAUL AVENUE	5"	6"
TEB	7-1/2"	15"
TML	7-1/2"	15"

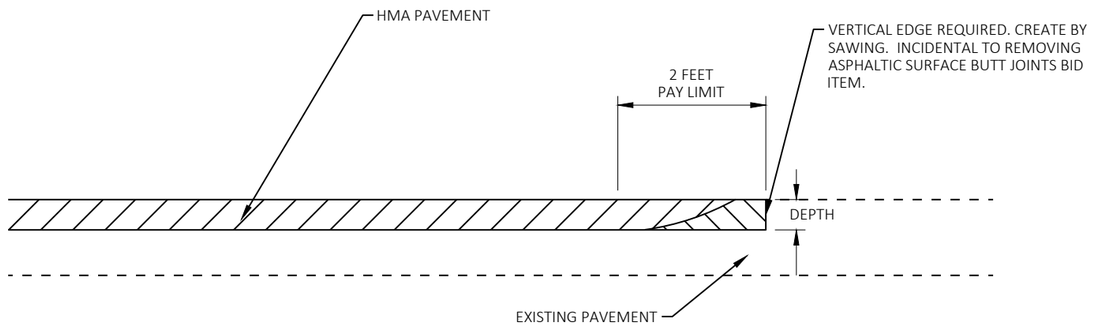
NOTES

1. BACKPITCH UNDERDRAIN TO NEAREST INLET. MINIMUM SLOPE OF UNDERDRAIN: 0.5%.
2. INSTALL UNDERDRAIN PARALLEL TO MATCH JOINT WHERE FULL DEPTH BREAKER RUN BEGINS.
3. SEE CONSTRUCTION DETAIL - "UNDERDRAIN OUTFALL AT STORM SEWER STRUCTURE" FOR ADDITIONAL DETAILS.
4. DOWEL BARS REQUIRED FOR CONCRETE PAVEMENT ONLY.

SELECT CRUSHED MATERIAL TRANSITION

NO EXISTING SELECT CRUSHED MATERIAL

INTERIM RAMP TJD: SOUTH CONSTRUCTION LIMITS
INTERIM W ST PAUL AVENUE: EAST CONSTRUCTION LIMITS
TEB: CONSTRUCTION LIMITS
TML: CONSTRUCTION LIMITS



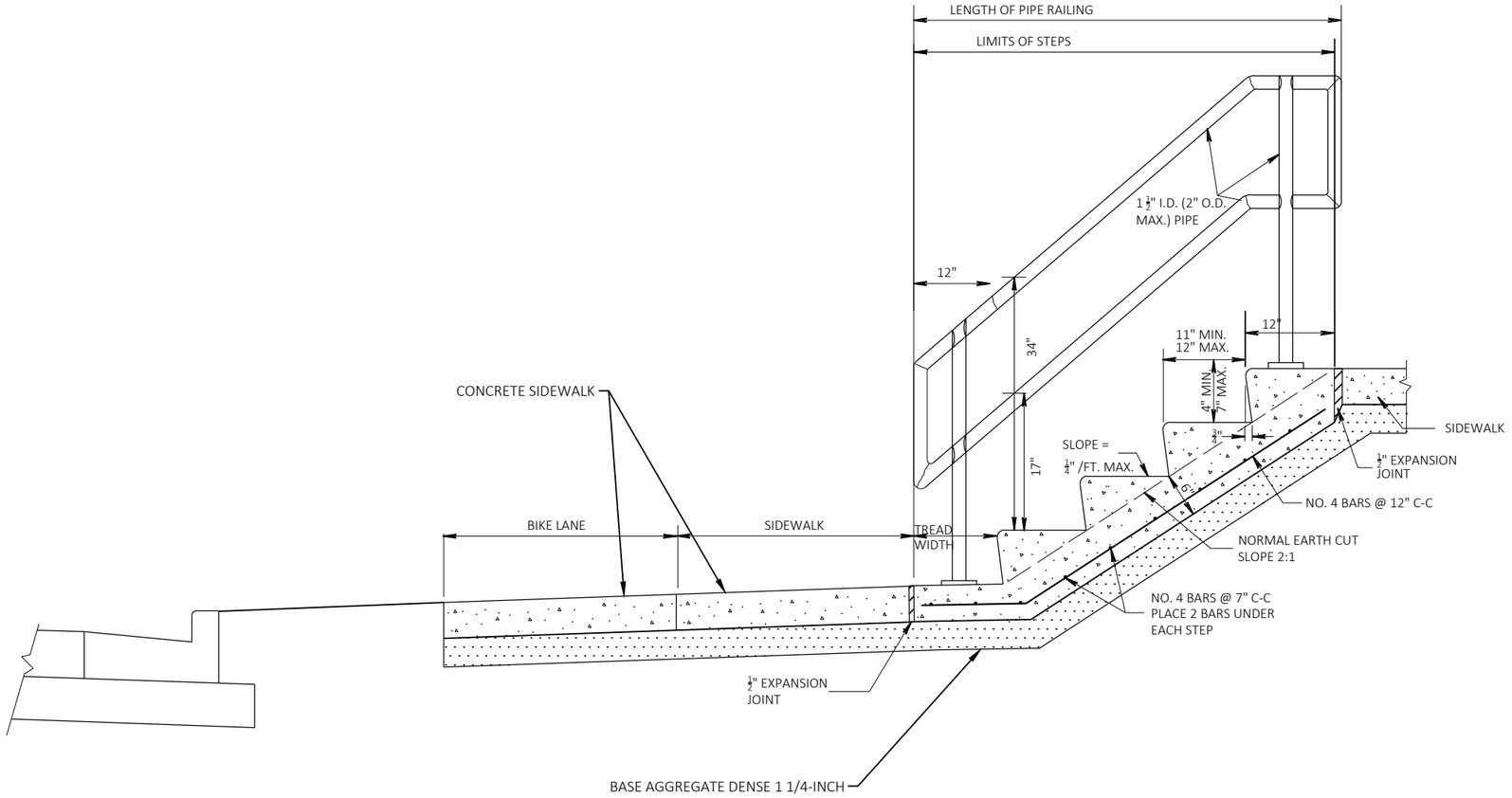
REMOVE MATERIAL UNDER ITEM 'REMOVING ASPHALTIC SURFACE BUTT JOINT'

REMOVING ASPHALTIC SURFACE MILLING

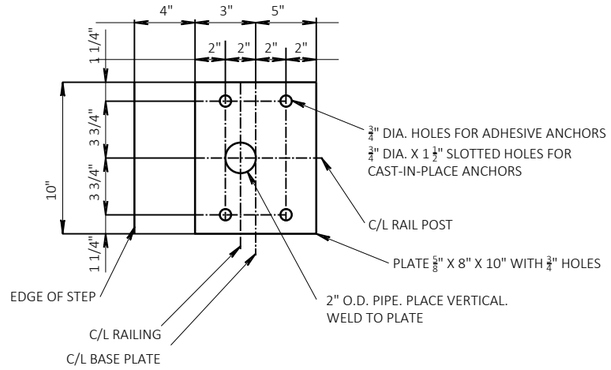
ROADWAY	DEPTH
IH 94 & RAMPS	2-1/2"
N. 28TH STREET	2"
N. 29TH STREET	2"

BUTT JOINT - NO CHANGE IN PROFILE

2



CONCRETE STEPS AND GALVANIZED PIPE RAILING DETAIL



RAIL MOUNTING DETAIL

NOTE:

THE EXACT LOCATION, WIDTHS, & NUMBER OF STEPS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

STEEL REINFORCEMENT AND PIPE RAILING NOT REQUIRED ON STEPS WITH 3 RISERS OR LESS.

PIPE RAILING AND MOUNT TO BE GALVANIZED STEEL

MINIMUM WIDTH OF STEP EQUALS 4 FEET.

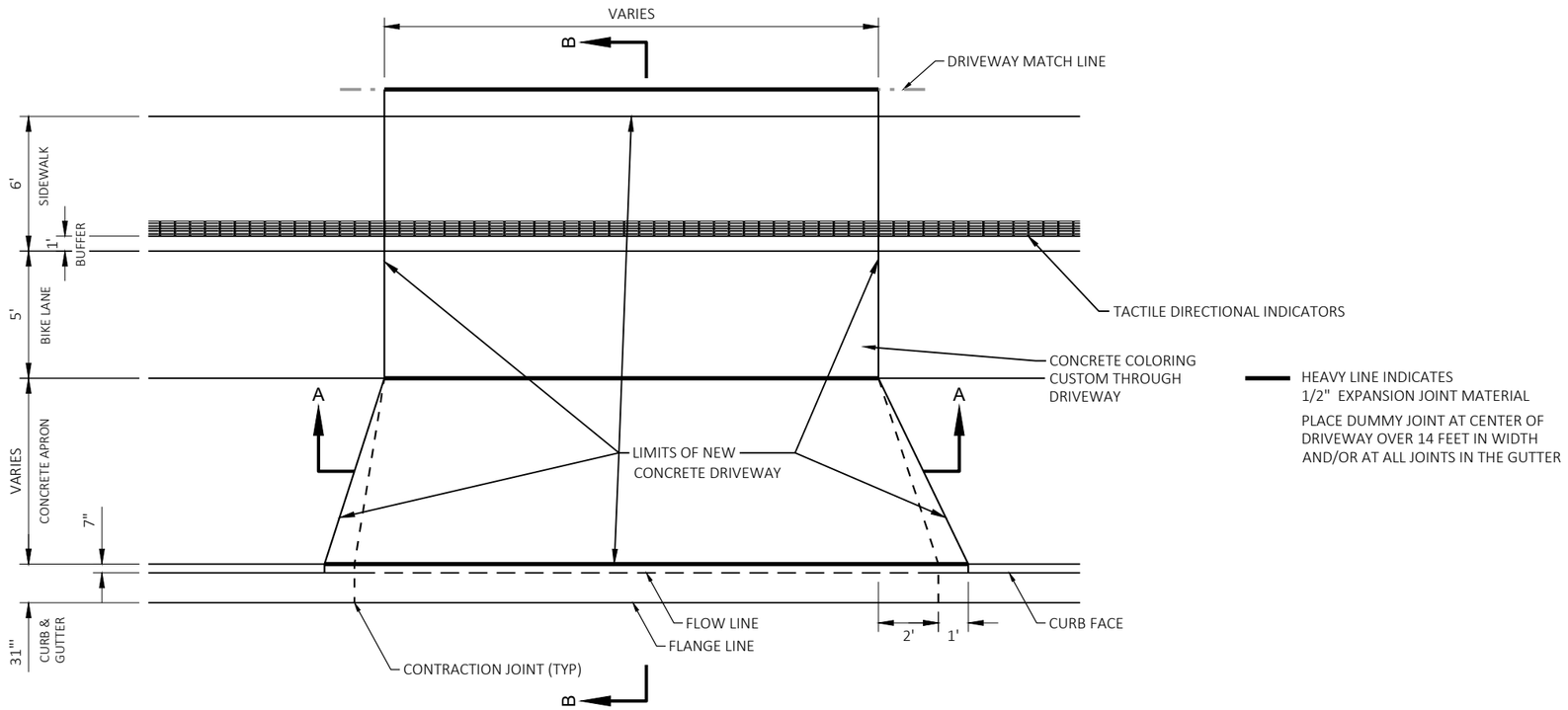
RAILING TO BE PLACED ON LEFT ASCENDING SIDE OF STEPS ONLY.

RAILING HEIGHTS ARE MEASURED FROM TOP OF STEP TO TOP OF RAIL AT STAIR NOSING.

TEMPORARY RAILING MAY BE NEEDED TO OPEN STAIRS AND IS INCIDENTAL TO GALVANIZED PIPE RAILING ITEM

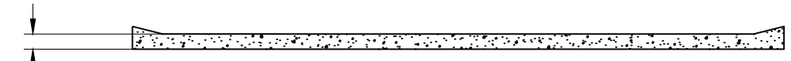
TREAD DEPTH AND HEIGHT TO BE UNIFORM. RAILING TO BE CONSISTENT HEIGHT ABOVE STEPS.

2

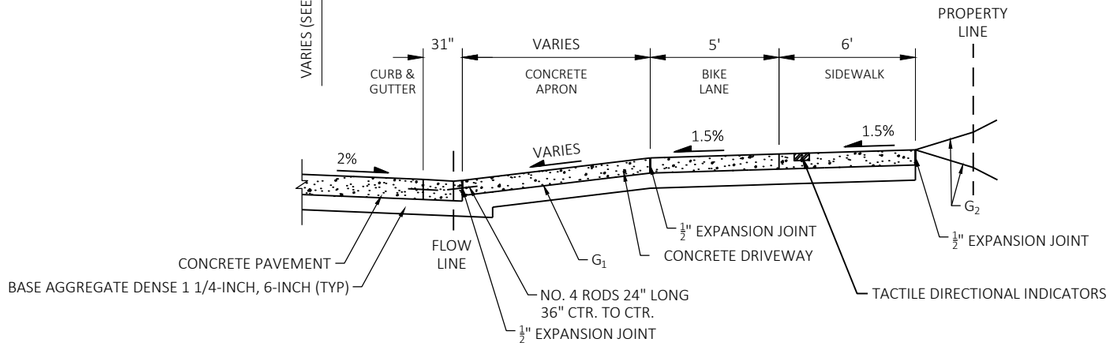


CONSTRUCTION NOTES

1. CONSTRUCTION TOLERANCE OF 0.5% FOR SIDEWALK AND BIKE LANE CROSS SLOPE. SLOPE SHALL NOT EXCEED 2%
2. PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.
3. SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY, FOR THICKNESS AS THE PLAN SHOWS.
4. CONCRETE APRON MEASURED AND PAID FOR AS CONCRETE DRIVEWAY, THICKNESS AS THE PLAN SHOWS.



SECTION A-A



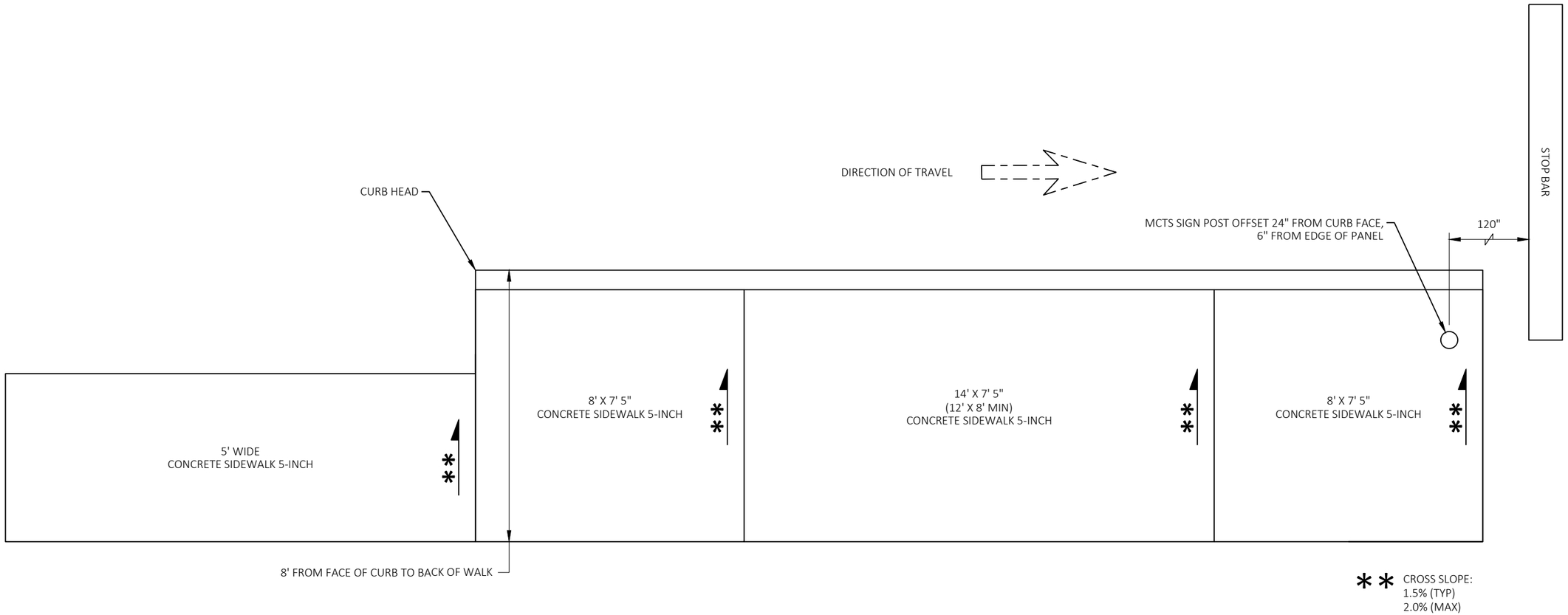
SECTION B-B

MAXIMUM DIFFERENCE BETWEEN G_1 & G_2 NOT TO EXCEED 15%
DESIRABLE MAXIMUM = 10%

MAXIMUM DIFFERENCE BETWEEN
G_1 & G_2 IN FILL = 14%
G_1 & G_3 = 14%

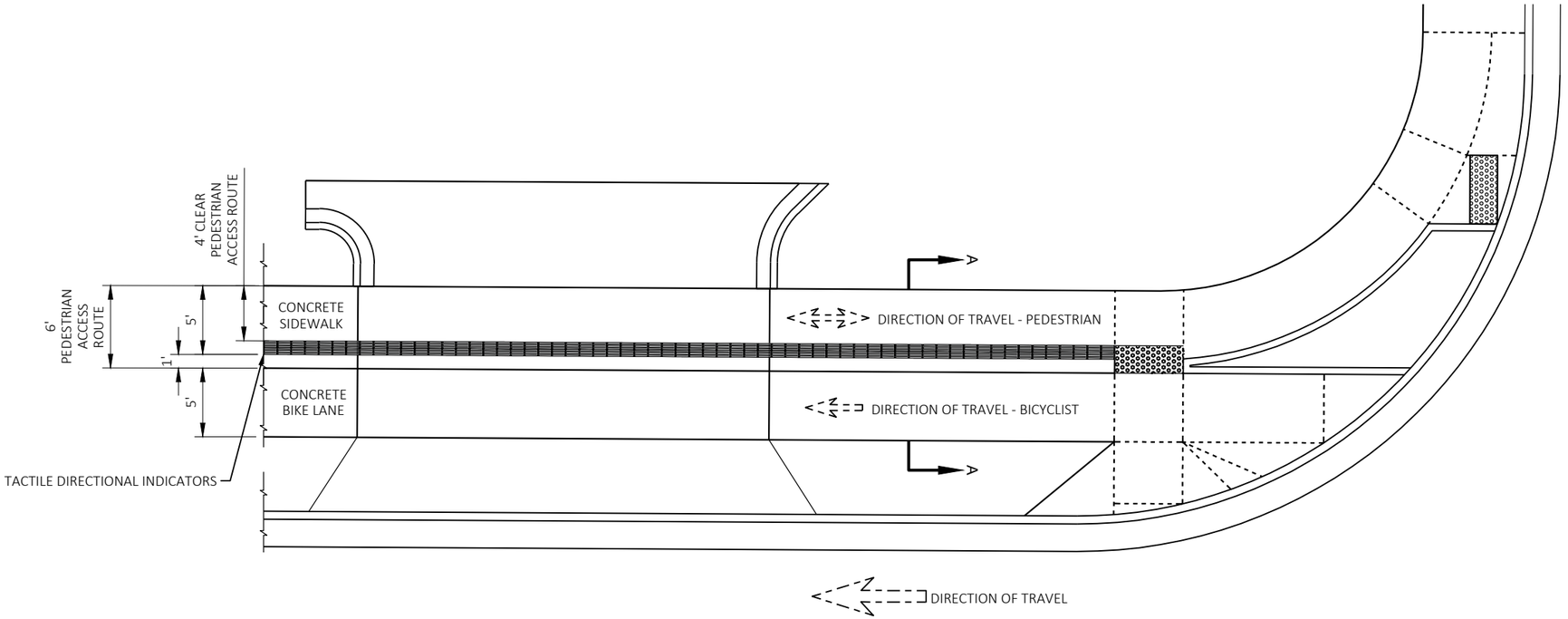
FLARED CONCRETE DRIVEWAY DETAIL

NOTE:
FOLLOW STANDARD SPECIFICATIONS FOR
JOINT SPACING AT BUS PADS

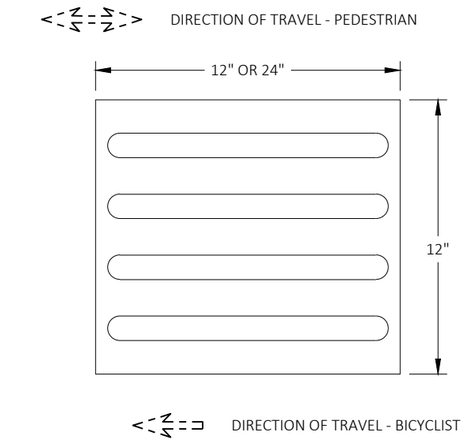


MCTS LOW FLOOR BUS STANDARD WALKWAY BOARDING PAD DETAIL

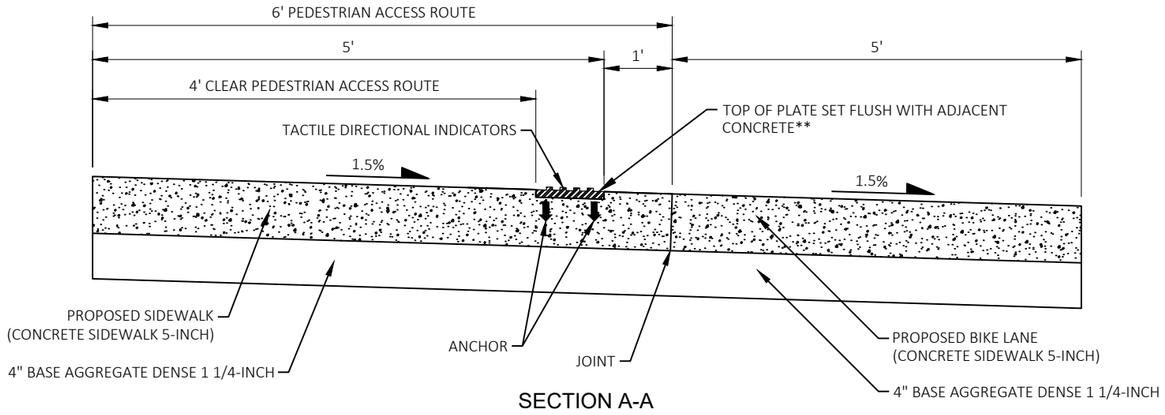
2



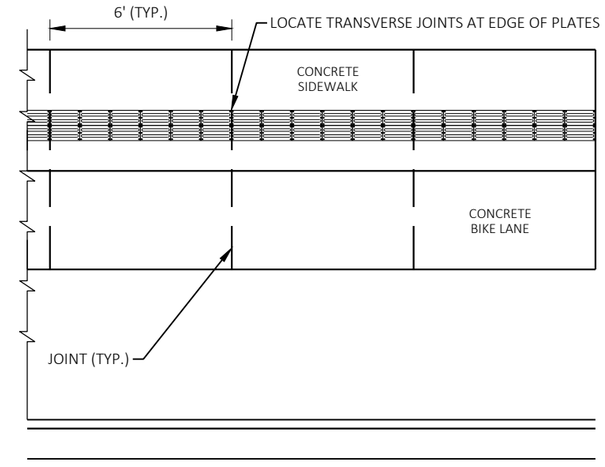
INTERSECTION EXAMPLE AT
ST PAUL AVENUE AND 27TH STREET



TOP VIEW OF TACTILE DIRECTIONAL INDICATORS



SECTION A-A



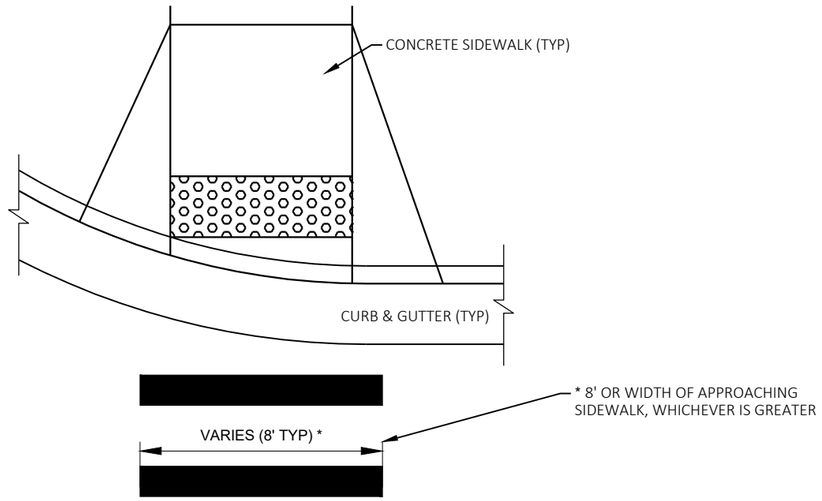
JOINTING DETAIL

NOTE:
* MAINTAIN A MINIMUM OF 4' PEDESTRIAN ACCESS ROUTE BETWEEN TDI AND EDGE OF PEDESTRIAN SIDEWALK

** EXCEPT SET TOP OF PLATE $\frac{1}{16}$" BELOW ADJACENT CONCRETE THROUGH DRIVEWAY

TACTILE DIRECTIONAL INDICATORS

SEE PLAN DETAILS FOR LOCATIONS

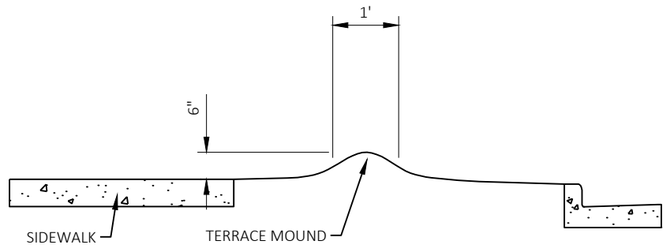


CONTINENTAL CROSSWALK
PAVEMENT MARKING DETAIL

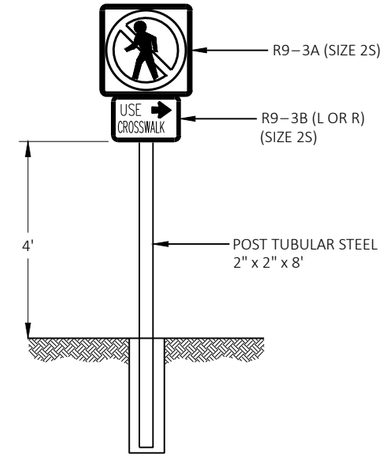
NOTES

* UNLESS OTHERWISE NOTED ON PLANS

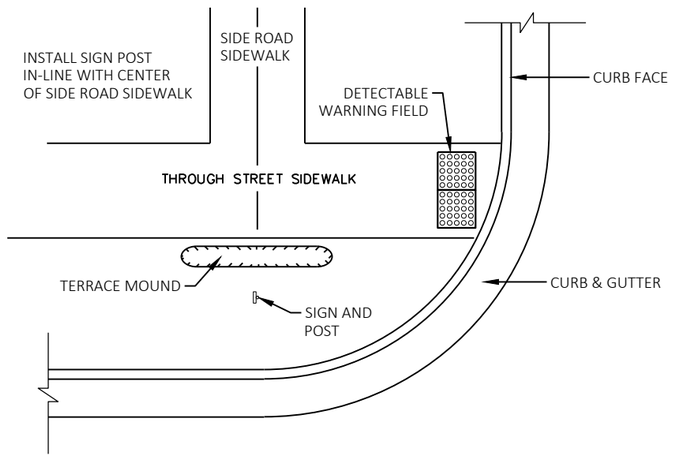
PAVEMENT MARKINGS SHOULD BE PARALLEL TO DIRECTION OF VEHICULAR TRAVEL EVEN WHEN CROSSWALK IS SKEWED



TERRACE MOUND DETAIL

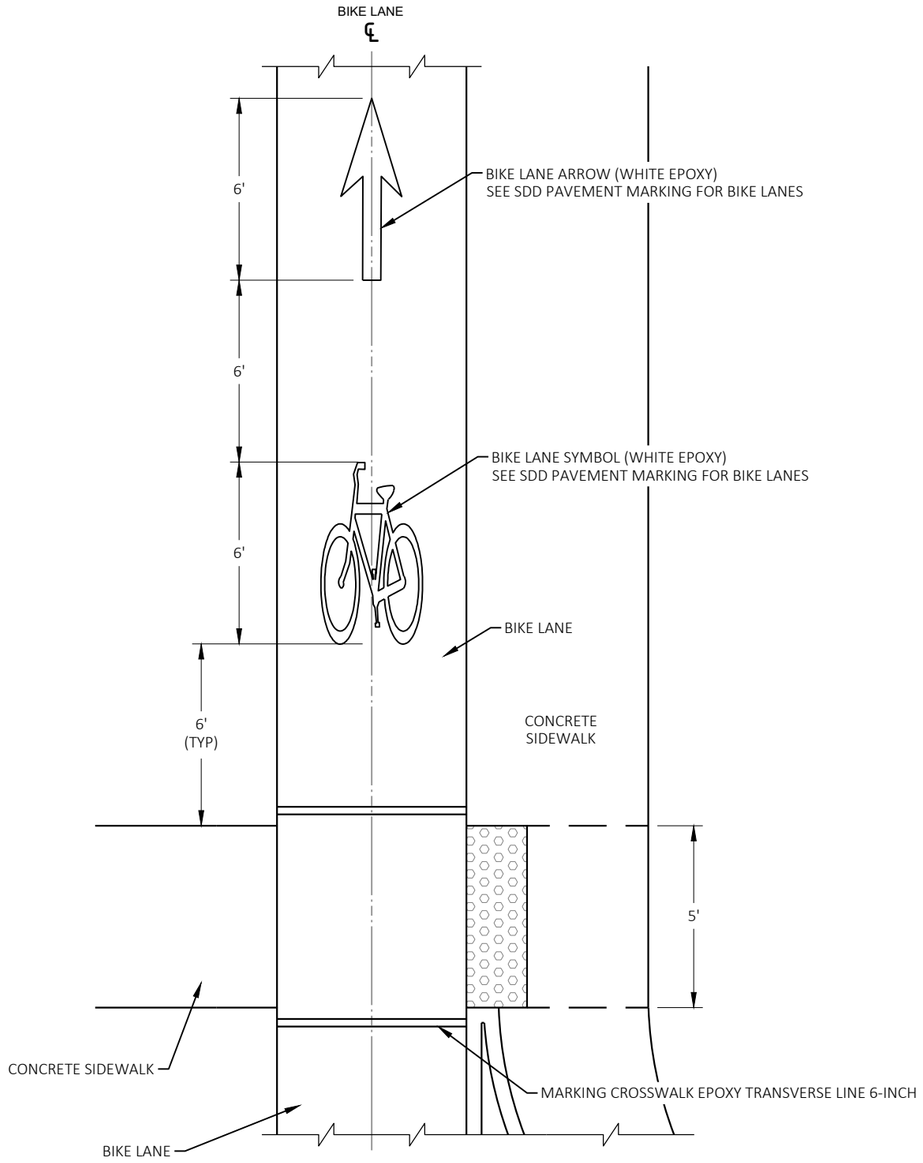


CROSSWALK CLOSURE SIGN

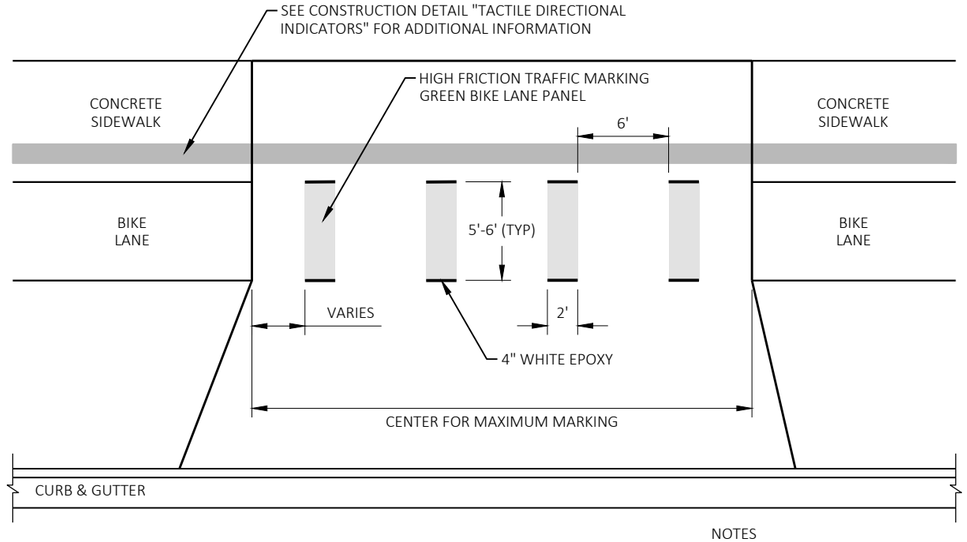


MOUND AND SIGN LOCATION DETAIL

NOTE: MOUND GRADING IS INCIDENTAL TO EXCAVATION COMMON



SIDEWALK / BIKE LANE CROSSWALK
PAVEMENT MARKING
DETAIL

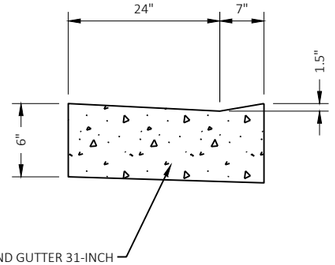


NOTES

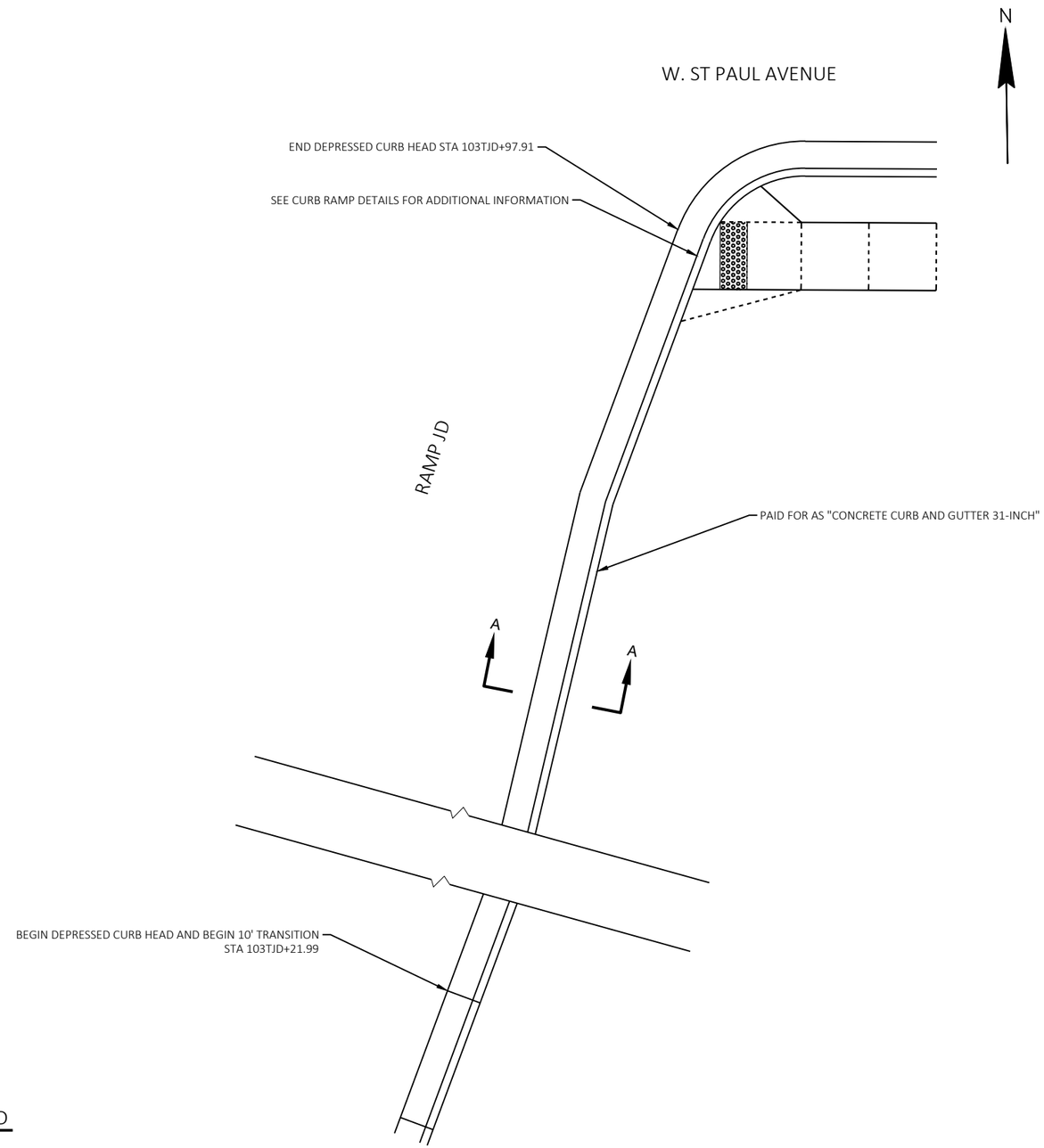
PAVEMENT MARKINGS SHOULD BE PARALLEL TO DIRECTION OF VEHICULAR TRAVEL EVEN WHEN CROSSWALK IS SKEWED

BIKE LANE CROSSING AT
COMMERCIAL DRIVEWAY
PAVEMENT MARKING DETAIL

2



SECTION A-A
DEPRESSED CURB

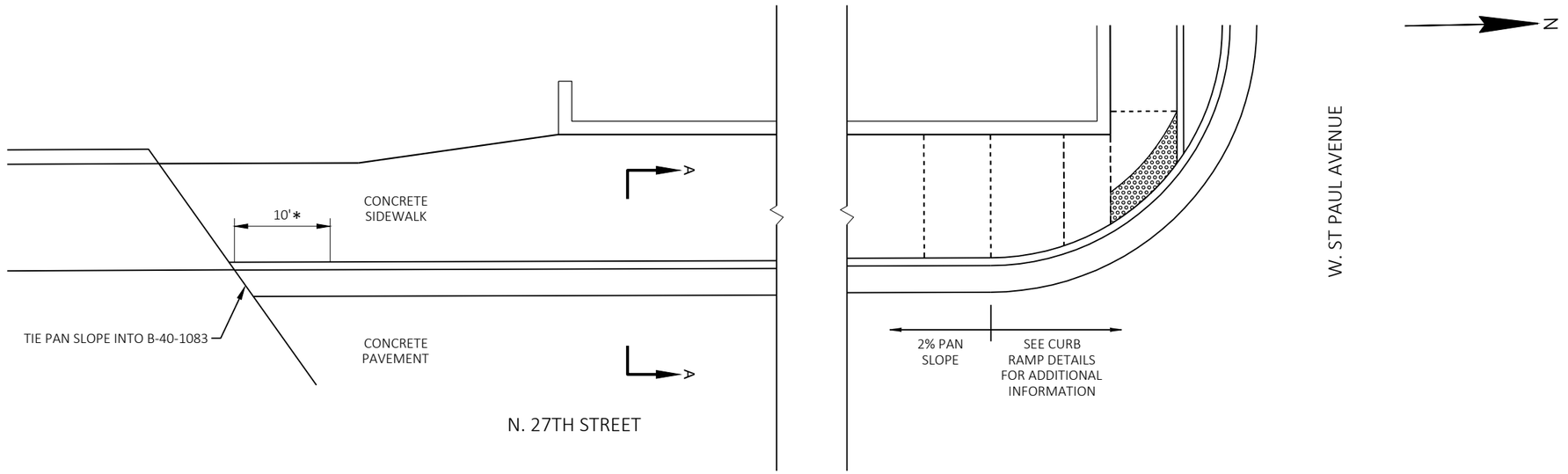


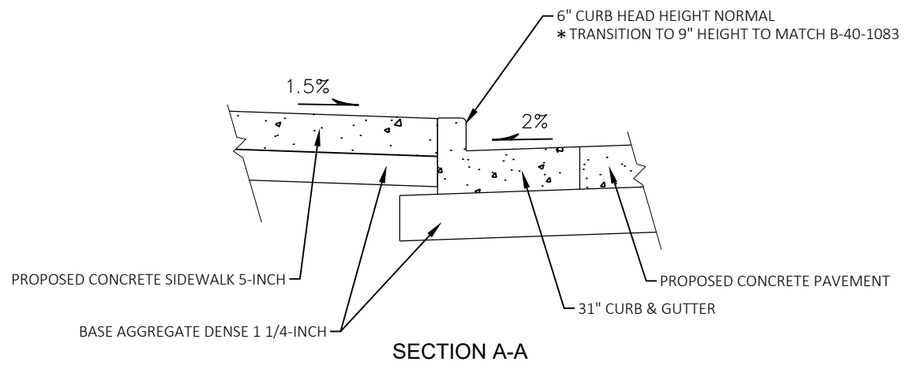
DEPRESSED CURB HEAD AT RAMP JD

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SHEET 34	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021001-CD.DWG
LAYOUT NAME - 10
PLOT DATE : 7/24/2025 3:58 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2





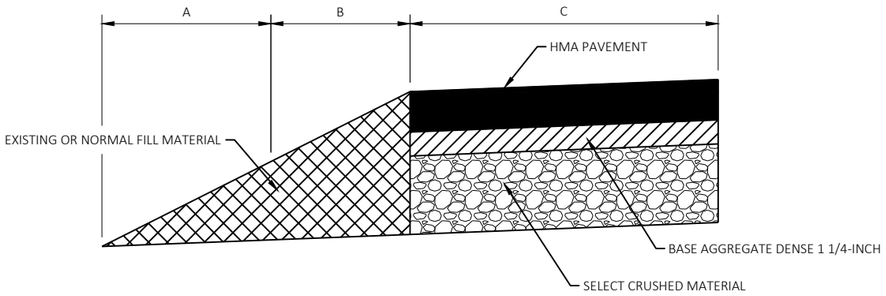
SECTION A-A

NOTE:
* CURB HEAD HEIGHT ON WEST SIDE OF 27TH STREET TO FOLLOW THE SAME TRANSITION LENGTH AS SHOWN FOR THE EAST SIDE. SEE CONSTRUCTION DETAILS.

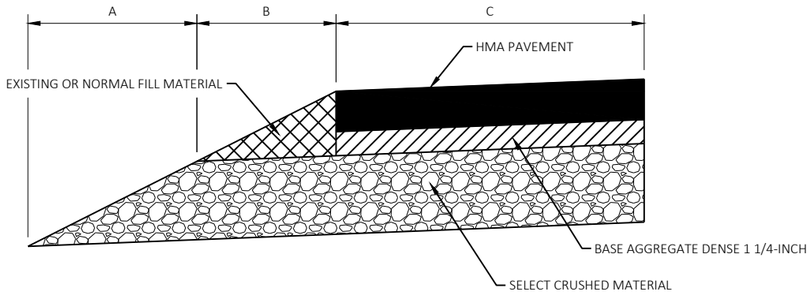
CURB AND GUTTER PAN SLOPE AND CURB HEAD HEIGHT TRANSITION DETAIL

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SHEET 35	E

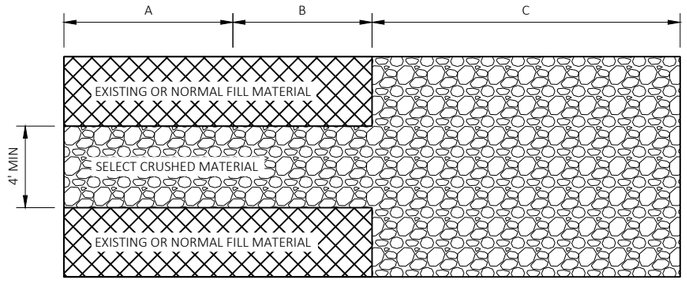
FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021001-CD.DWG
LAYOUT NAME - 10
PLOT DATE : 4/26/2025 8:01 PM
PLOT BY : SCHARLAU, DAVE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



TYPICAL HALF SECTION WITHOUT RELIEF TRENCH



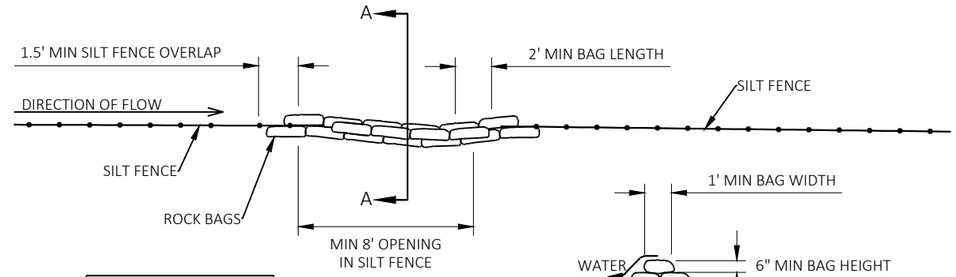
TYPICAL HALF SECTION WITH RELIEF TRENCH



RELIEF TRENCH PLAN VIEW

RELIEF TRENCH

STA 15TEB+00, RT
STA 18TEB+00, RT
STA 21TLC+00, RT
STA 22TLC+25, LT
STA 24TLC+00, RT
STA 24TLC+25, LT



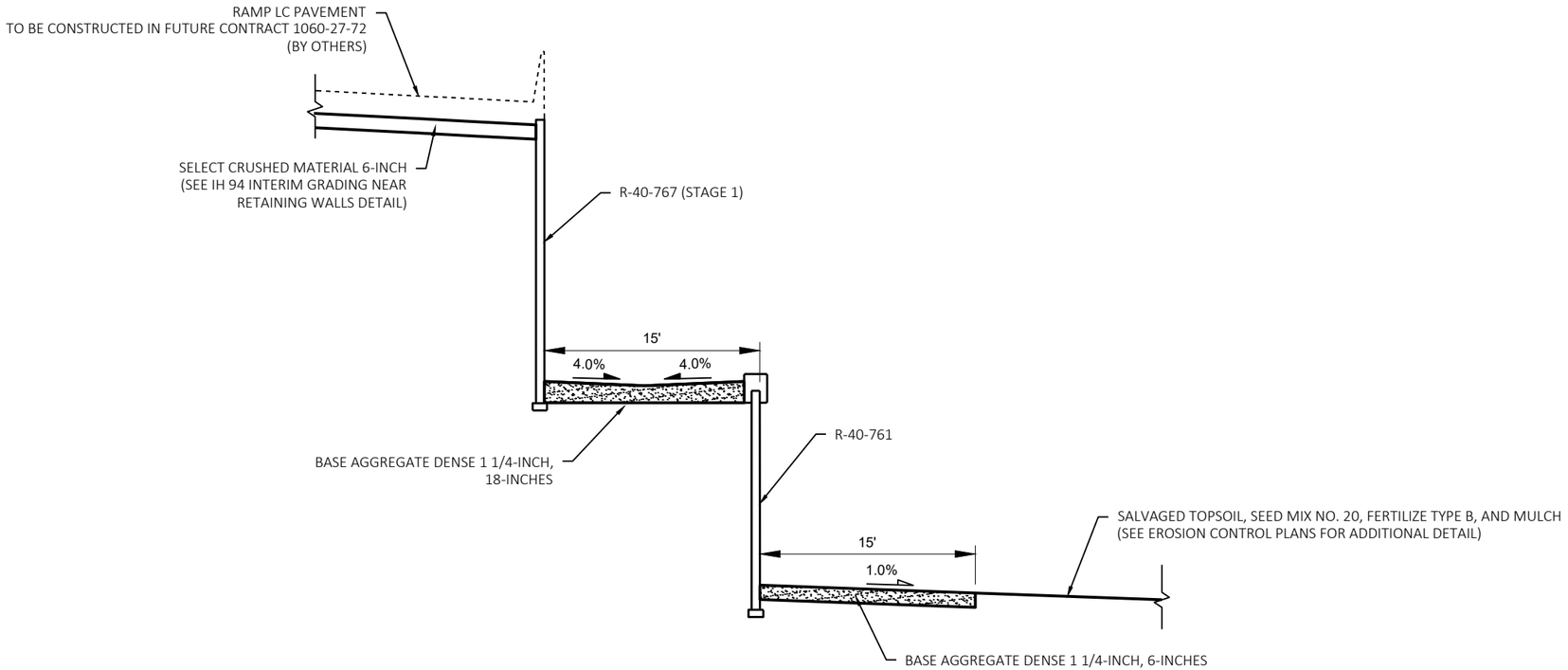
NOTE:
17 ROCK BAGS MINIMUM PER 8' OPENING.

TOP VIEW

SECTION A-A

ROCK BAGS USED FOR SILT FENCE RELIEF

2

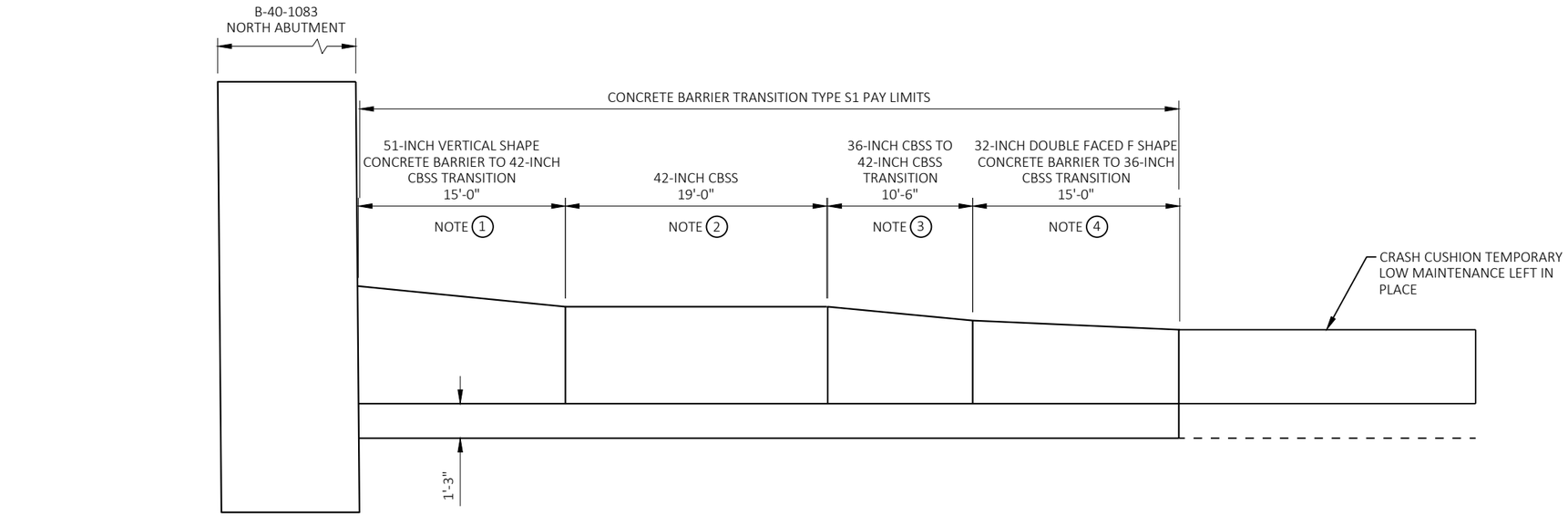


MAINTENANCE ACCESS PATH DETAIL

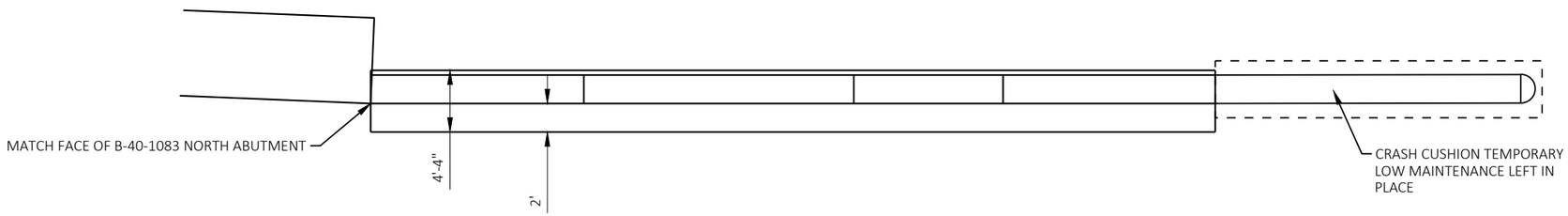
NOTES

PLACE BASE AGGREGATE DENSE 1 1/4-INCH, 6-INCHES AS SHOWN FOR THE ENTIRE LENGTH OF RETAINING WALL R-40-761

2



ELEVATION VIEW



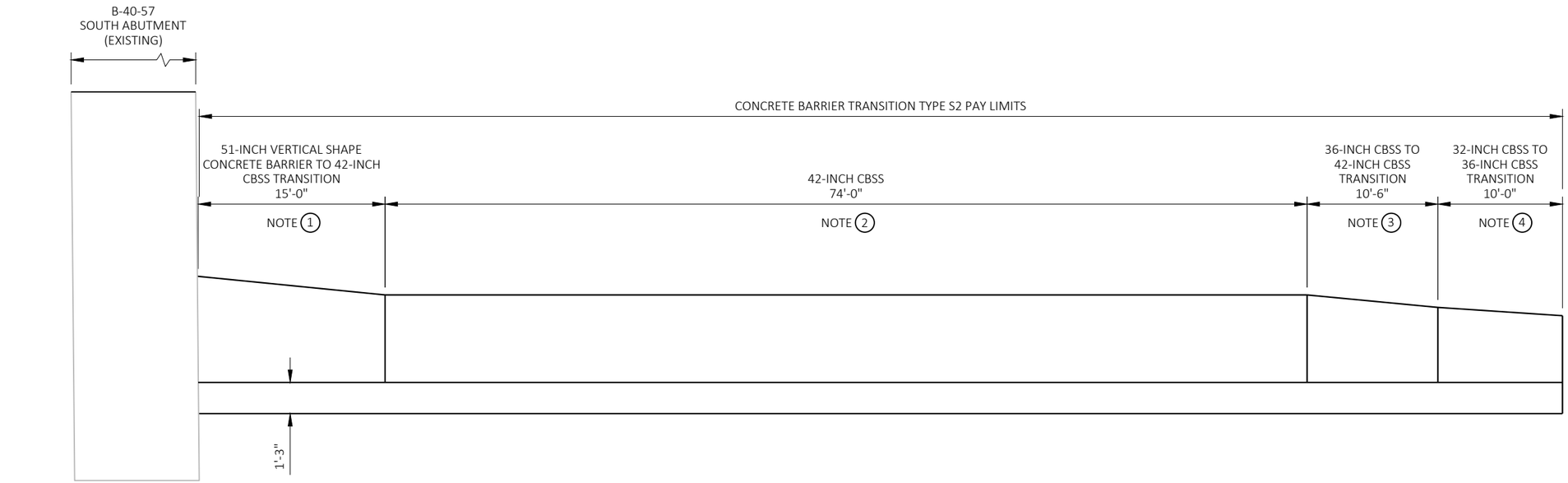
PLAN VIEW

CONCRETE BARRIER TRANSITION TYPE S1 DETAIL

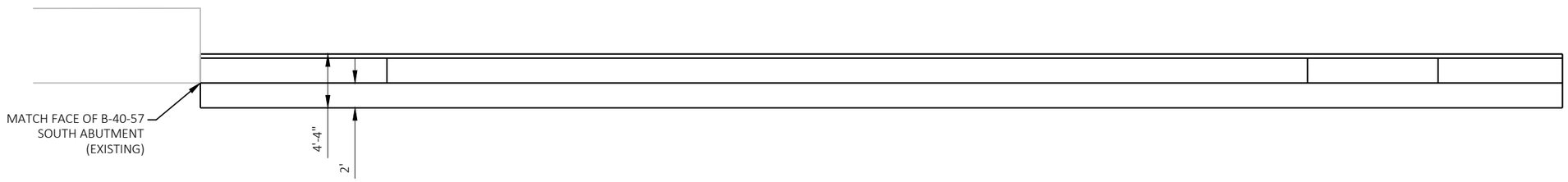
NOTES

MODIFY BAR STEEL NEAR INLETS PER SDD "SINGLE SLOPE ROADSIDE RETAINING WALL - PLACEMENT AND DRAINAGE"

1. SEE SDD "51-INCH VERTICAL SHAPE CONCRETE BARRIER TO 42-INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION FOR ADDITIONAL INFORMATION.
2. FOOTING REQUIRED THROUGH LIMITS OF 42-INCH CBSS. SEE SDD "CONCRETE BARRIER SINGLE SLOPE (CBSS)" FOR ADDITIONAL INFORMATION.
3. SEE SDD "36" SINGLE SLOPE CONCRETE BARRIER TO 42" SINGLE SLOPE CONCRETE BARRIER HEIGHT TRANSITION" FOR ADDITIONAL INFORMATION.
4. SEE SDD "32" SINGLE FACED F SHAPE CONCRETE BARRIER TO 36" SINGLE SLOPE CONCRETE BARRIER TRANSITION" FOR ADDITIONAL INFORMATION.



ELEVATION VIEW



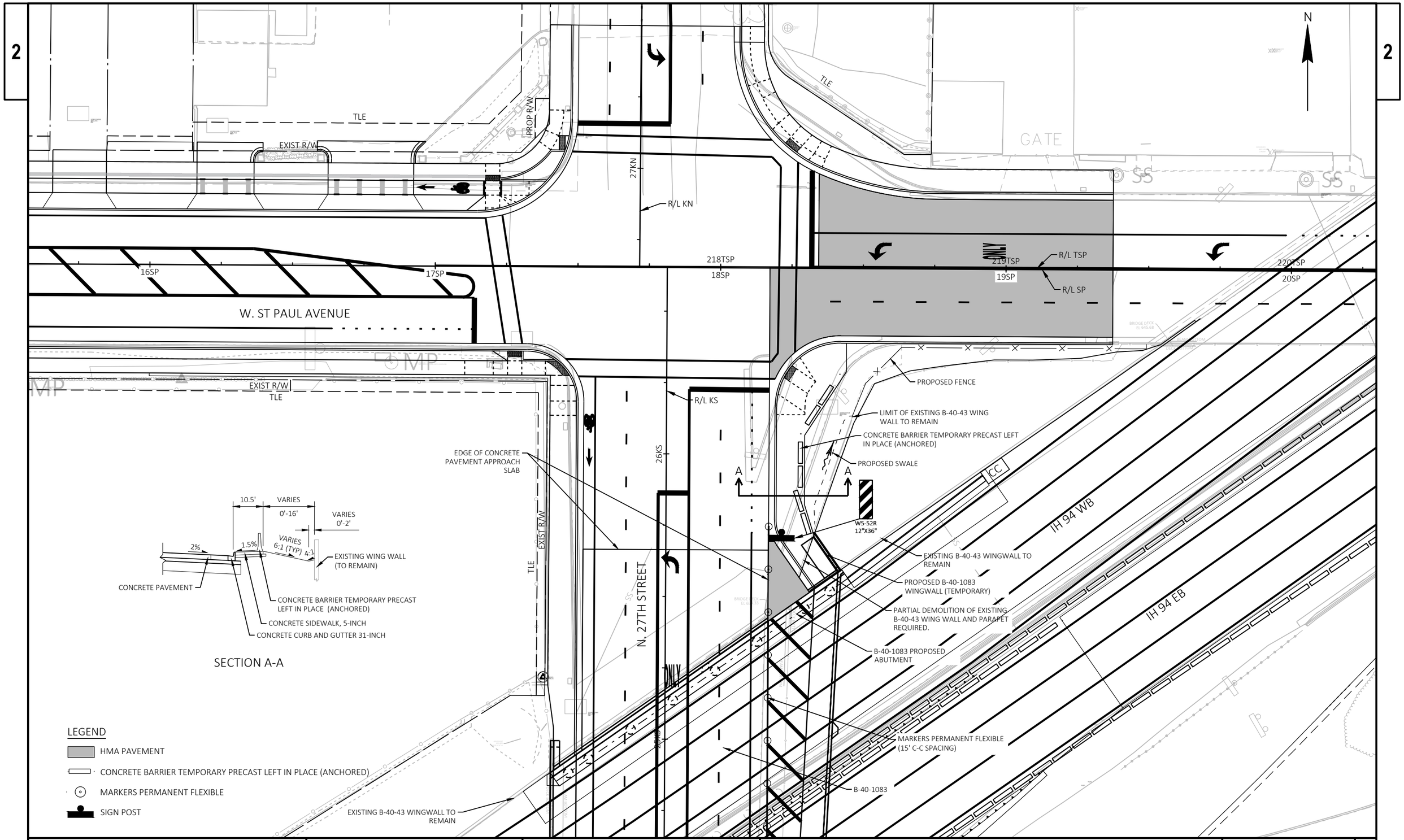
PLAN VIEW

CONCRETE BARRIER TRANSITION TYPE S2 DETAIL

NOTES

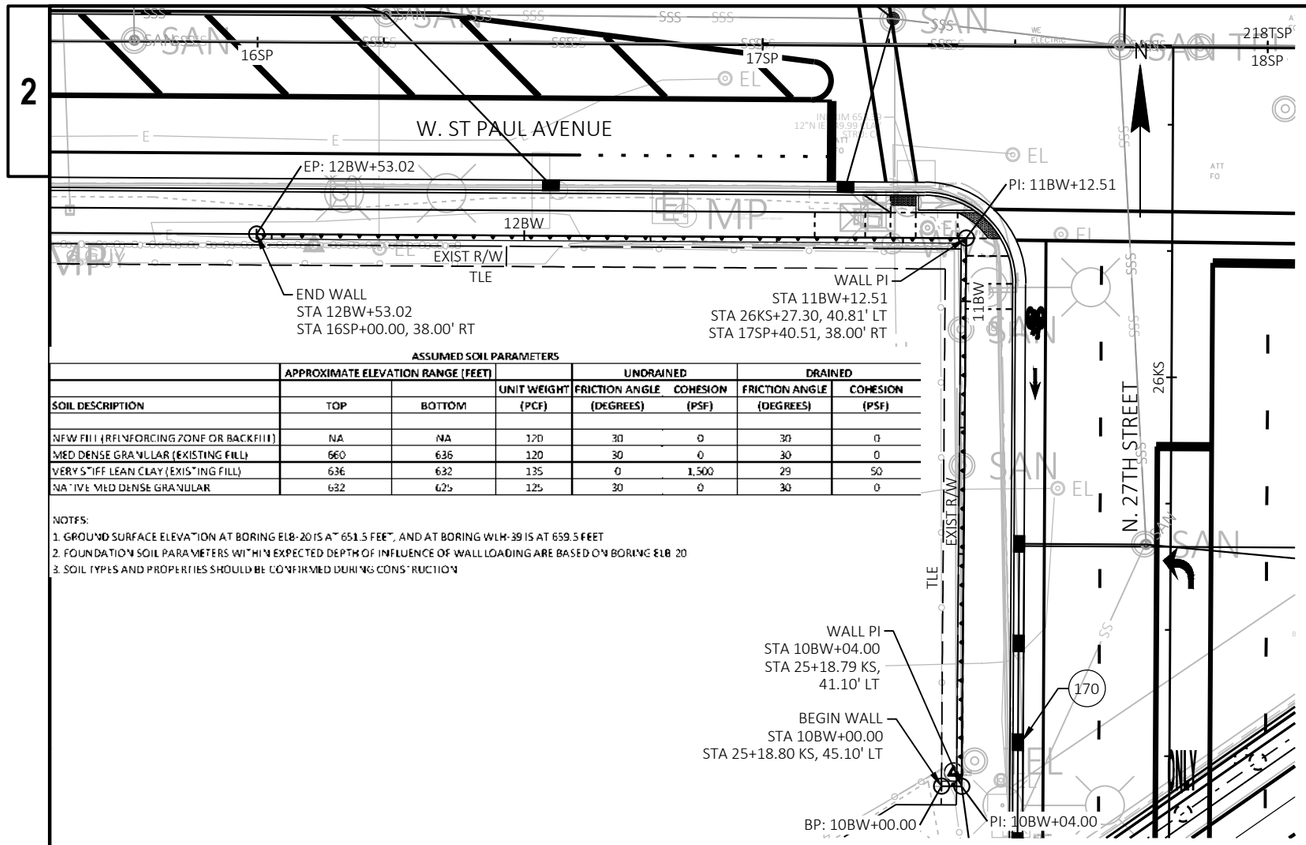
MODIFY BAR STEEL NEAR INLETS PER SDD "SINGLE SLOPE ROADSIDE RETAINING WALL - PLACEMENT AND DRAINAGE"

1. SEE SDD "51-INCH VERTICAL SHAPE CONCRETE BARRIER TO 42-INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION FOR ADDITIONAL INFORMATION.
2. FOOTING REQUIRED THROUGH LIMITS OF 42-INCH CBSS. SEE SDD "CONCRETE BARRIER SINGLE SLOPE (CBSS)" FOR ADDITIONAL INFORMATION.
3. SEE SDD "36" SINGLE SLOPE CONCRETE BARRIER TO 42" SINGLE SLOPE CONCRETE BARRIER HEIGHT TRANSITION" FOR ADDITIONAL INFORMATION.
4. SEE SDD "32" SINGLE SLOPE CONCRETE BARRIER TO 36" SINGLE SLOPE CONCRETE BARRIER HEIGHT TRANSITION" FOR ADDITIONAL INFORMATION.



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS - N. 27TH STREET SIDEWALK DETAIL	SHEET 40	E

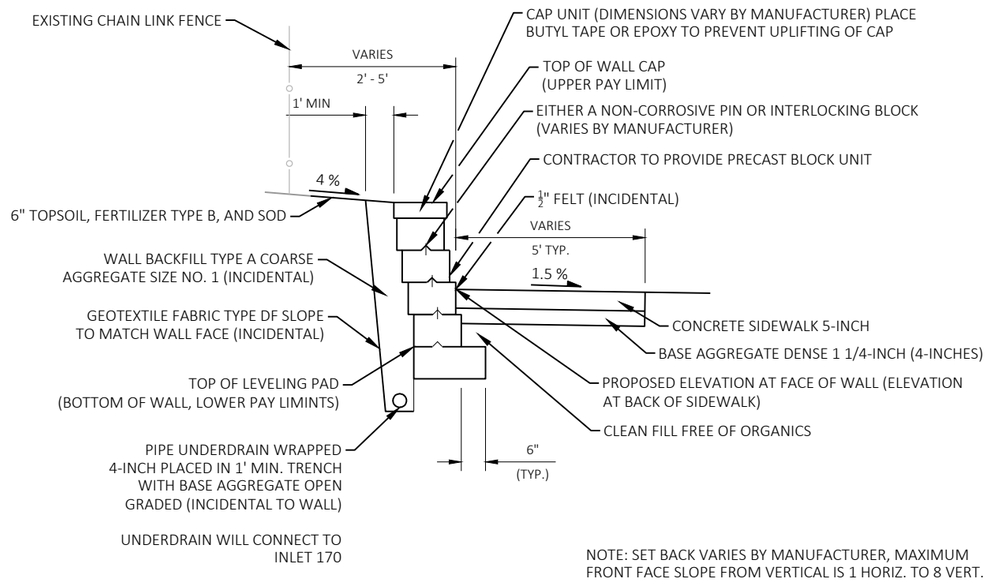
FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021002-CD.DWG
LAYOUT NAME - 01
PLOT DATE : 4/26/2025 8:02 PM
PLOT BY : SCHARLAU, DAVE
PLOT NAME :
PLOT SCALE : 1 IN:30 FT
WISDOT/CADDS SHEET 42



ASSUMED SOIL PARAMETERS

	APPROXIMATE ELEVATION RANGE (FEET)			UNDRAINED		DRAINED	
SOIL DESCRIPTION	TOP	BOTTOM	UNIT WEIGHT (PCF)	FRICTION ANGLE (DEGREES)	COHESION (PSF)	FRICTION ANGLE (DEGREES)	COHESION (PSF)
NEW FILL (REINFORCING ZONE OR BACKFILL)	NA	NA	120	30	0	30	0
MED DENSE GRANULAR (EXISTING FILL)	660	636	120	30	0	30	0
VERY STIFF LEAN CLAY (EXISTING FILL)	636	632	135	0	1,500	29	50
NATIVE MED DENSE GRANULAR	632	625	125	30	0	30	0

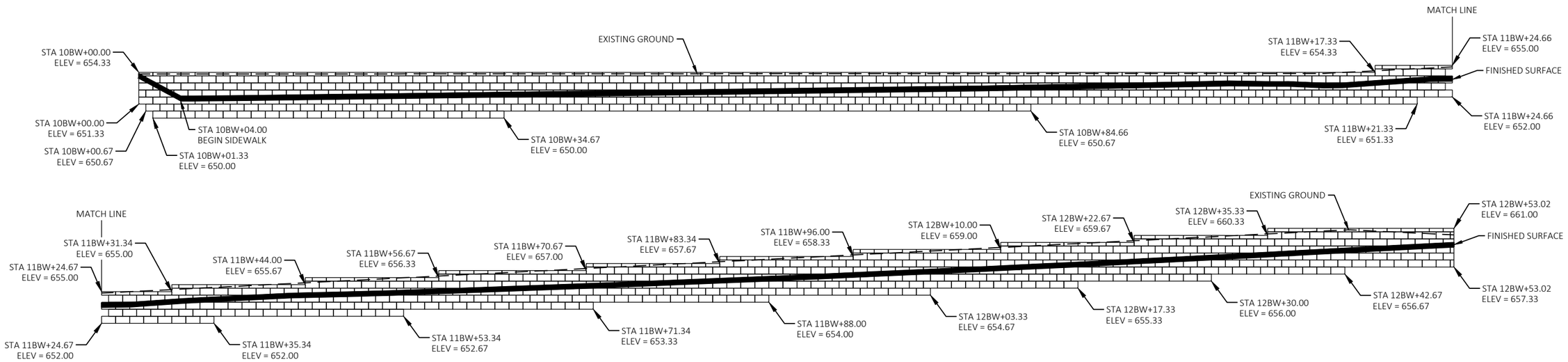
NOTES:
1. GROUND SURFACE ELEVATION AT BORING ELB-20 IS AT 651.5 FEET, AND AT BORING WLH-39 IS AT 659.5 FEET
2. FOUNDATION SOIL PARAMETERS WITHIN EXPECTED DEPTH OF INFLUENCE OF WALL LOADING ARE BASED ON BORING ELB-20
3. SOIL TYPES AND PROPERTIES SHOULD BE CONFIRMED DURING CONSTRUCTION



NOTE: SET BACK VARIES BY MANUFACTURER, MAXIMUM FRONT FACE SLOPE FROM VERTICAL IS 1 HORIZ. TO 8 VERT.

TYPICAL RETAINING WALL SECTION

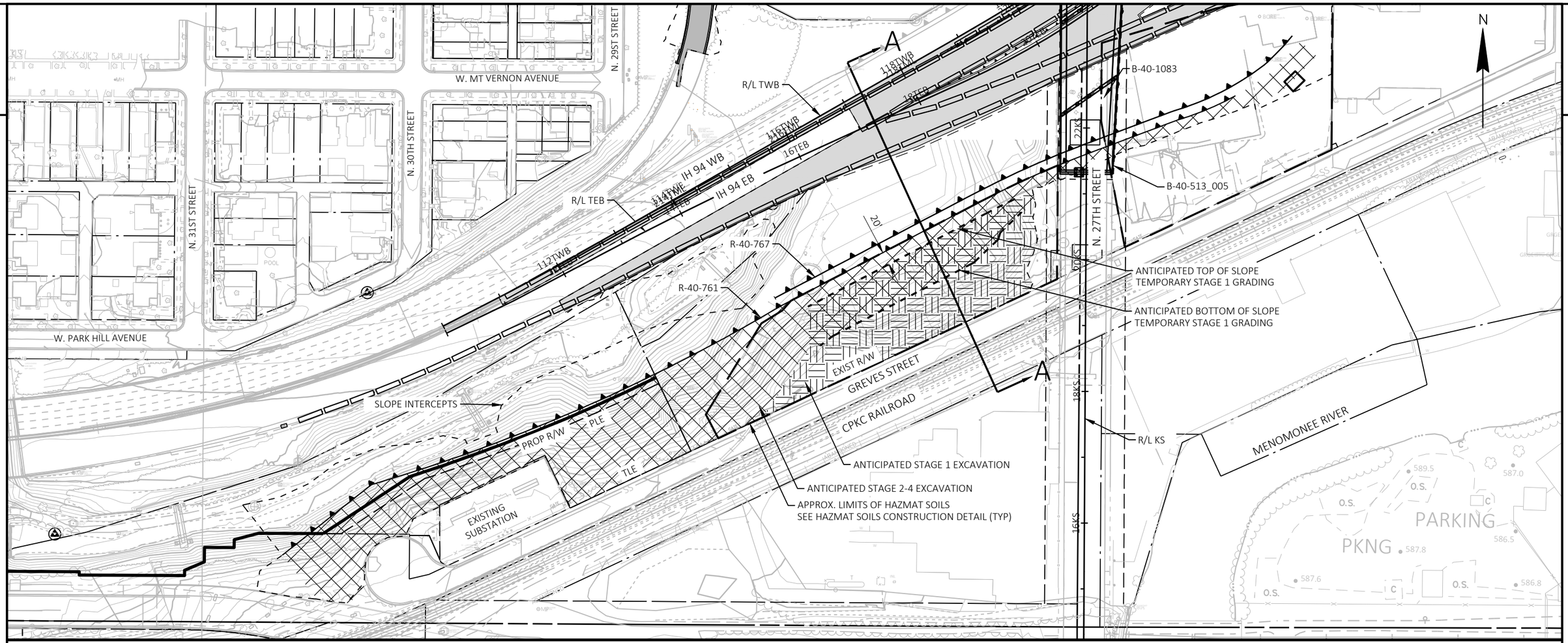
MODULAR BLOCK WALL
N.T.S.

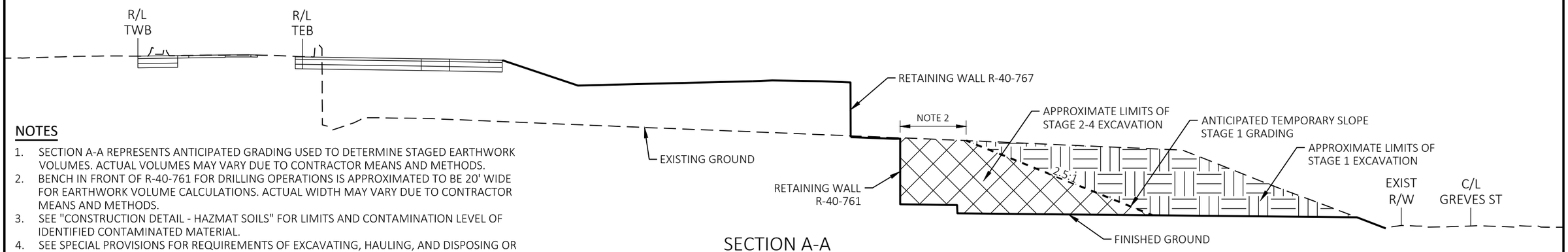


ELEVATION

LOOKING AT FRONT FACE OF WALL

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SHEET 41	E





NOTES

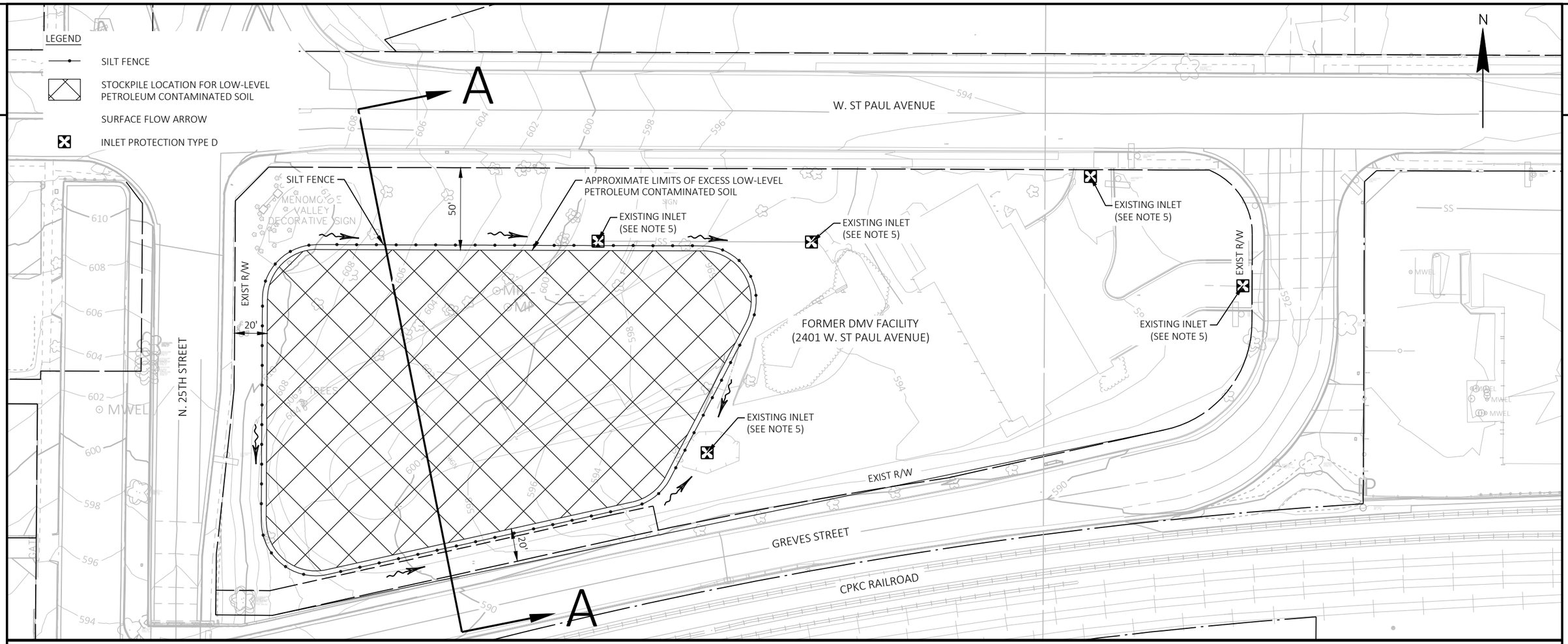
1. SECTION A-A REPRESENTS ANTICIPATED GRADING USED TO DETERMINE STAGED EARTHWORK VOLUMES. ACTUAL VOLUMES MAY VARY DUE TO CONTRACTOR MEANS AND METHODS.
2. BENCH IN FRONT OF R-40-761 FOR DRILLING OPERATIONS IS APPROXIMATED TO BE 20' WIDE FOR EARTHWORK VOLUME CALCULATIONS. ACTUAL WIDTH MAY VARY DUE TO CONTRACTOR MEANS AND METHODS.
3. SEE "CONSTRUCTION DETAIL - HAZMAT SOILS" FOR LIMITS AND CONTAMINATION LEVEL OF IDENTIFIED CONTAMINATED MATERIAL.
4. SEE SPECIAL PROVISIONS FOR REQUIREMENTS OF EXCAVATING, HAULING, AND DISPOSING OR REUSE OF CONTAMINATED SOIL.
5. EXISTING CONTOURS SHOWN ON 2' INTERVALS FOR REFERENCE ONLY.

SECTION A-A

GREVES STREET GRADING

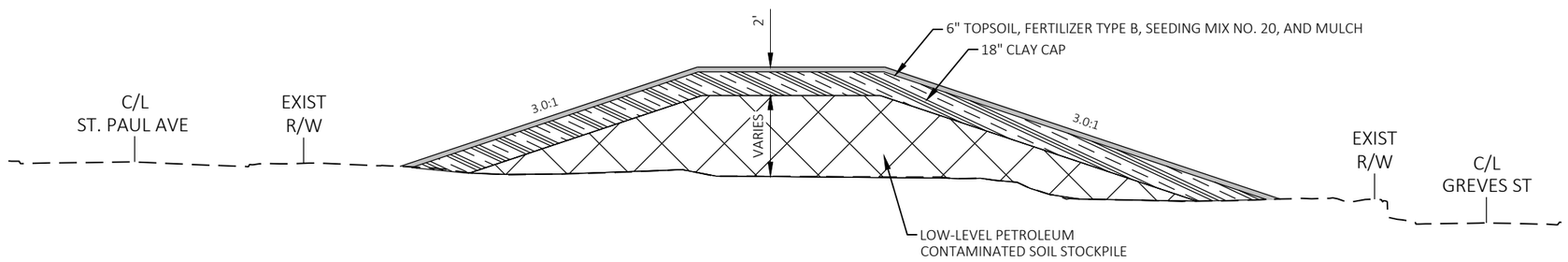
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SHEET 42	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021003-CD.DWG
LAYOUT NAME - 01
PLOT DATE : 6/5/2025 12:22 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1" = 150'
WISDOT/CADDS SHEET 42



NOTE:

1. EXISTING CONTOURS SHOWN ON 2' INTERVALS FOR REFERENCE ONLY.
2. DMV PARCEL HAS AN EXISTING CLAY CAP OUTSIDE OF PAVED AREAS. DO NOT EXCAVATE OR REMOVE PAVEMENT PRIOR TO PLACING LOW-LEVEL PETROLEUM CONTAMINATED SOIL STOCKPILE.
3. RESTORE THE GRADING SITE WITH 18" CLAY CAP, 6" TOPSOIL, SEEDING MIX NO. 20, FERTILIZER TYPE B, AND MULCH.
4. ESTIMATED RANGE OF VOLUME OF LOW-LEVEL PETROLEUM CONTAMINATED SOIL TO BE STOCKPILED ON DMV PARCEL IS 14,940-18,700 CY.
5. DO NOT PLACE FILL ON TOP OF EXISTING INLETS, INLET PROTECTION TYPE D REQUIRED. MAINTAIN EXISTING DRAINAGE. GRADE SITE TO DRAIN TO EXISTING INLETS.



SECTION A-A

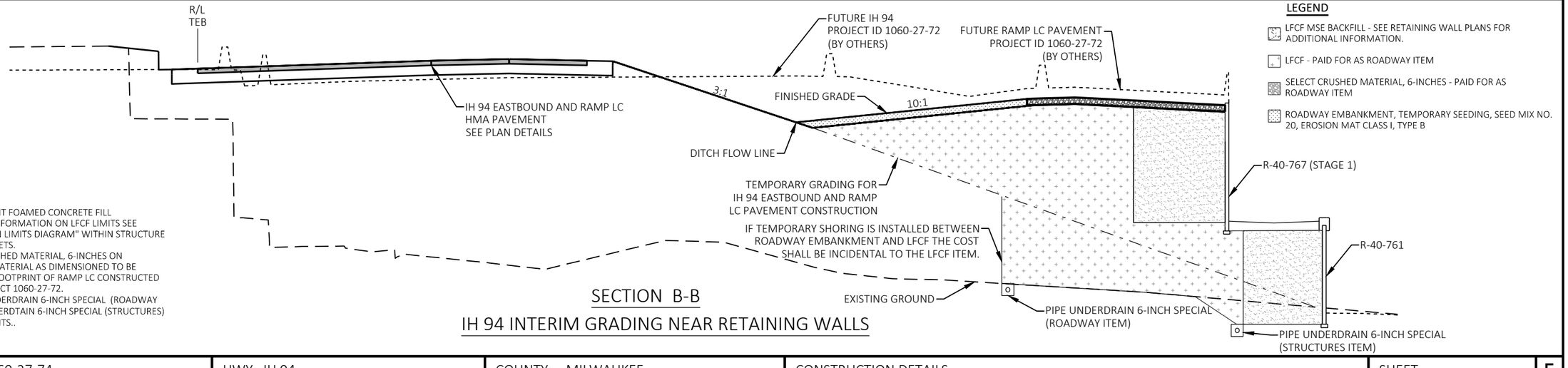
FORMER DMV PARCEL STOCKPILE

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SHEET 43	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021003-CD.DWG
LAYOUT NAME - 01 (2)
PLOT DATE : 7/23/2025 4:10 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:60 FT
WISDOT/CADDS SHEET 42

NOTE
STATION/OFFSET CALLOUTS ARE MEASURED FROM RETAINING WALL R-40-761 ALIGNMENT. SEE R-40-761 PLANS FOR ALIGNMENT INFORMATION.

N. 30TH STREET
W. MT VERNON AVE
IH 94 WB
IH 94 EB
R/L TWB
R/L TML
R/L TEB
R/L TSP
R/L KS
R/L R-40-761
112TWB
12TEB
114TWB
214TML
14TEB
116TWB
216TML
16TEB
118TWB
218TML
18TEB
120TWB
220TML
20TEB
122TWB
222TML
22TEB
124TWB
224TML
24TEB
261EB
B-40-1083
B-40-513_005
APPROX. DITCH LOW POINT
RAMP LC
DITCH FLOWLINE
+41.00
75.7' LT
+10.39
80.0' LT
+10.39
46.7' LT
+52.66
46.7' LT
R496'
+51.41
80.0' LT
SLOPE INTERCEPT
R-40-767 (STAGE 1)
WIRE FACE WALL
R-40-761
R-40-767 (STAGE 1)
R-40-767 (STAGE 1) WIRE FACE WALL
2004
2006
2008
2010
2012
2014
2016
PROP R/W
PLE
TLE
EXIST R/W
N. 27TH STREET
GREVES STREET
ABANDONED
GATE
SS
BORE
B
B



LEGEND

- LFCF MSE BACKFILL - SEE RETAINING WALL PLANS FOR ADDITIONAL INFORMATION.
- LFCF - PAID FOR AS ROADWAY ITEM
- SELECT CRUSHED MATERIAL, 6-INCHES - PAID FOR AS ROADWAY ITEM
- ROADWAY EMBANKMENT, TEMPORARY SEEDING, SEED MIX NO. 20, EROSION MAT CLASS I, TYPE B

NOTES

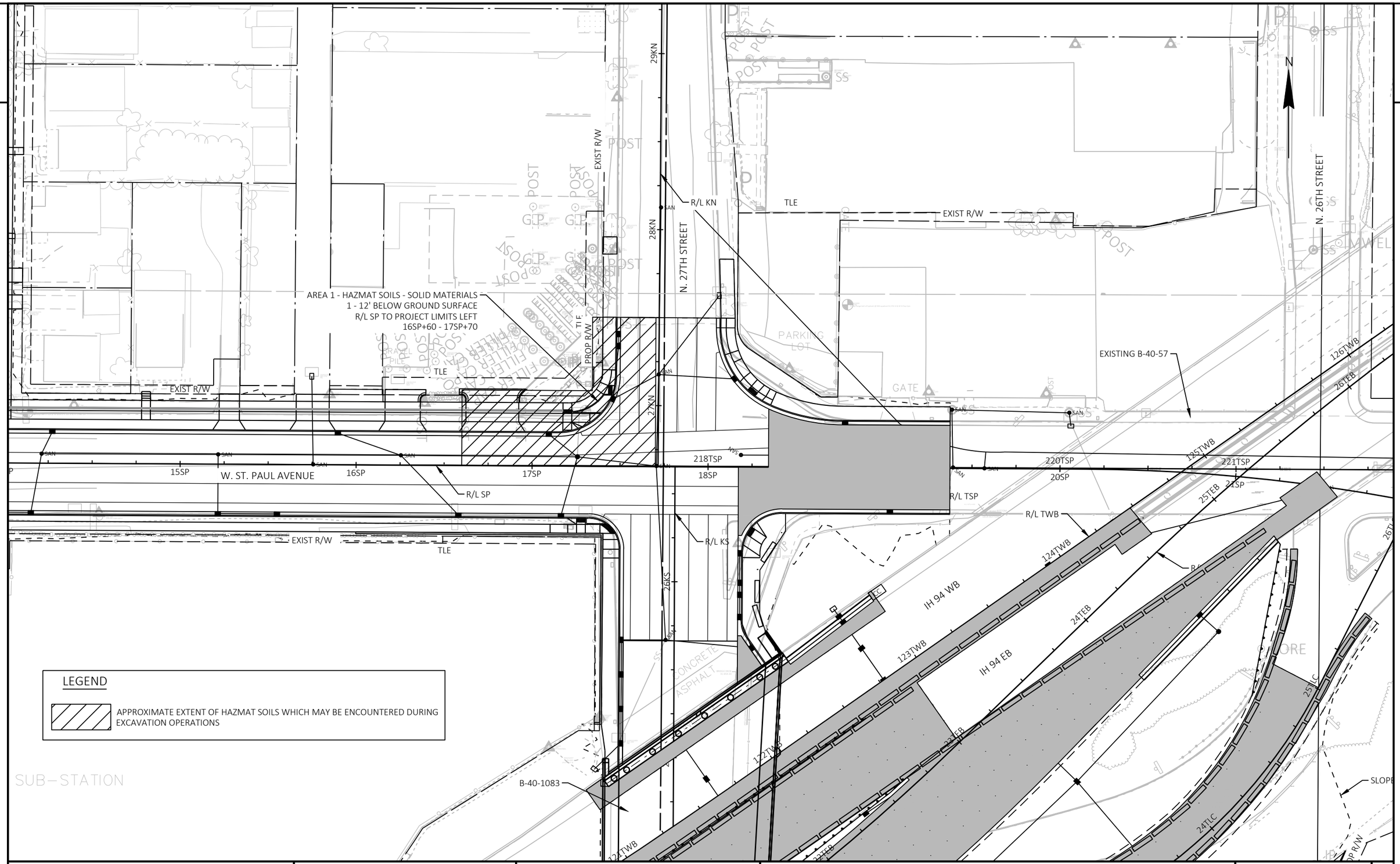
1. LFCF = LIGHTWEIGHT FOAMED CONCRETE FILL
2. FOR ADDITIONAL INFORMATION ON LFCF LIMITS SEE "WALL EXCAVATION LIMITS DIAGRAM" WITHIN STRUCTURE R-40-761 PLAN SHEETS.
3. PLACE SELECT CRUSHED MATERIAL, 6-INCHES ON DAMPPROOFING MATERIAL AS DIMENSIONED TO BE LOCATED WITHIN FOOTPRINT OF RAMP LC CONSTRUCTED IN FUTURE CONTRACT 1060-27-72.
4. CONNECT PIPE UNDERDRAIN 6-INCH SPECIAL (ROADWAY ITEM) TO PIPE UNDERDTAIN 6-INCH SPECIAL (STRUCTURES) ITEM) AT LOW POINTS..

SECTION B-B

IH 94 INTERIM GRADING NEAR RETAINING WALLS

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SHEET 44	E

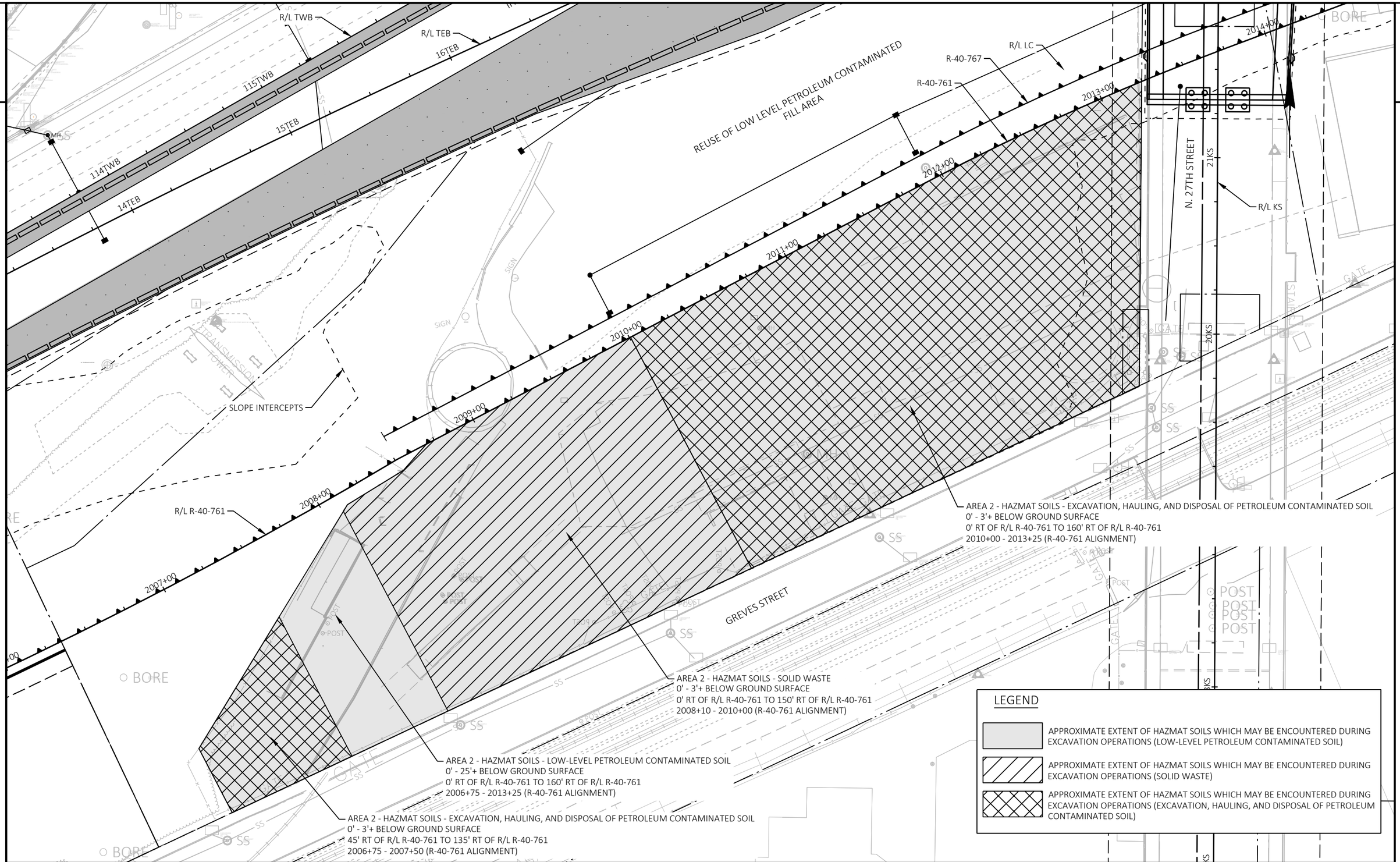
2



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAIL - HAZMAT SOILS	SHEET 45	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021004-CD.DWG
LAYOUT NAME - 01
PLOT DATE : 4/30/2025 8:36 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAIL - HAZMAT SOILS	SHEET 46	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021004-CD.DWG
LAYOUT NAME - 02
PLOT DATE : 4/29/2025 9:19 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

B-40-1083

R/L TWB

IH 94 WB

IH 94 EB

RAMP LC

R/L TLC

R/L LC

R-40-767

R-40-761

R/L KS

N. 27TH STREET

12TWB

120TWB

119TWB

22TEB

21TEB

20TEB

24TLC

23TLC

22TLC

21TLC

20TLC

22KS

21KS

2017+00

2016+00

2015+00

2014+00

2013+00

2012+00

BORE

SLOPE INTERCEPTS

PROP R/W

PLE

TLE

N

AREA 3 EXCLUDES:
0.5' - 2.5' BELOW GROUND SURFACE
147' RT TO 173' RT OF R/L TLC
23TLC+10 - 23TLC+24

EXIST R/W

SAN

SS

GREVES STREET

CPKC RAILROAD

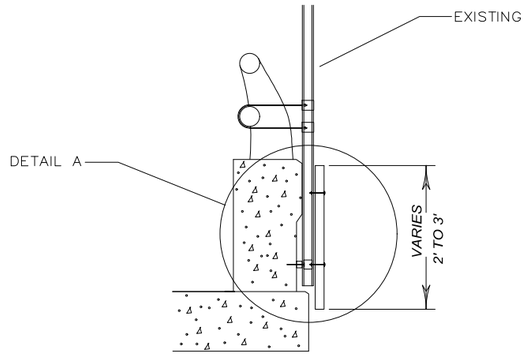
ABANDONED

AREA 3 - HAZMAT SOILS - SOLID MATERIALS
0.5' - 5'+ BELOW GROUND SURFACE
10' LT OF R/L TLC TO 285' RT OF R/L TLC
19TLC+90 - 24TLC+30

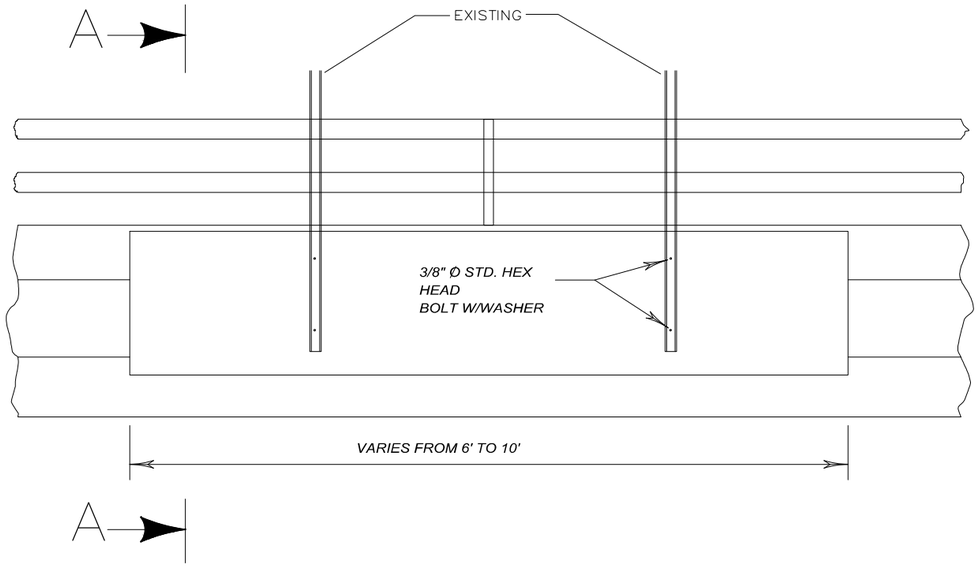
LEGEND

APPROXIMATE EXTENT OF HAZMAT SOILS WHICH MAY BE ENCOUNTERED DURING EXCAVATION OPERATIONS

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAIL - HAZMAT SOILS	SHEET 47	E



SECTION A–A
SIDE VIEW

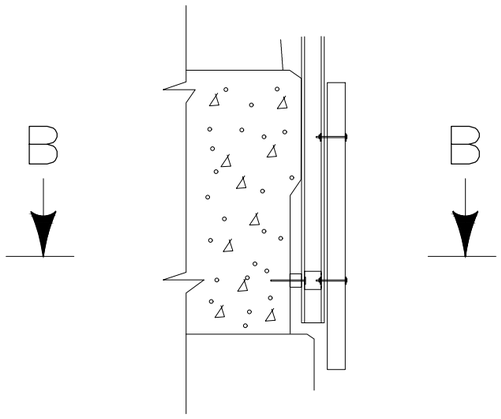


FRONT VIEW

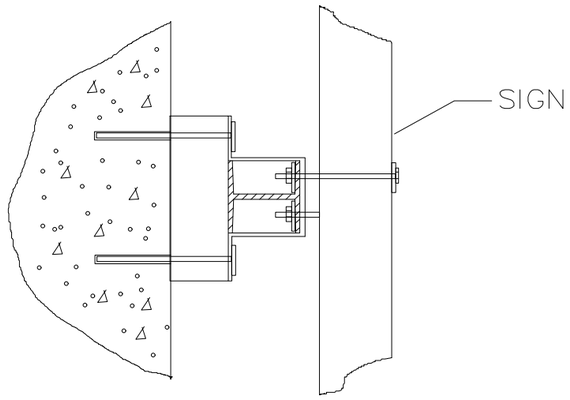
NOTES:

PROVIDE NEW BOLTS.

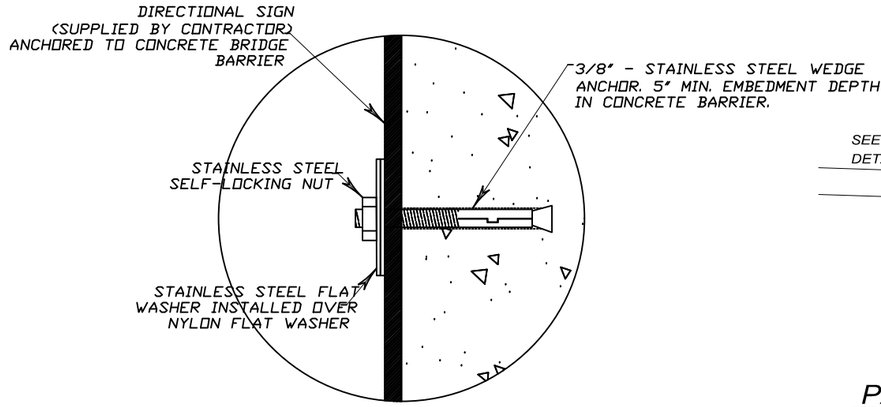
MOUNTING DETAIL COSTS ARE INCIDENTAL TO PAY ITEM "TYPE II SIGNS, REFLECTIVE".



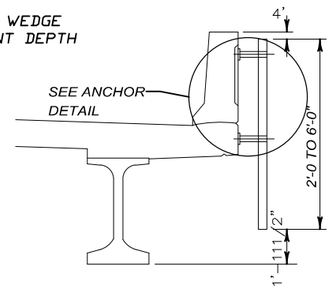
DETAIL A



SECTION B–B
TOP VIEW

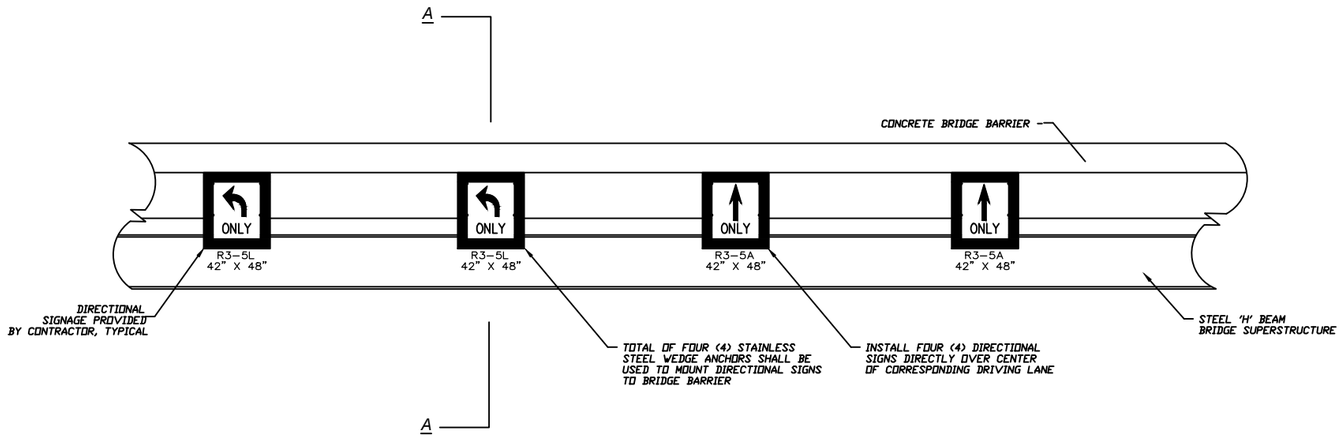


ANCHOR DETAIL
N.T.S.

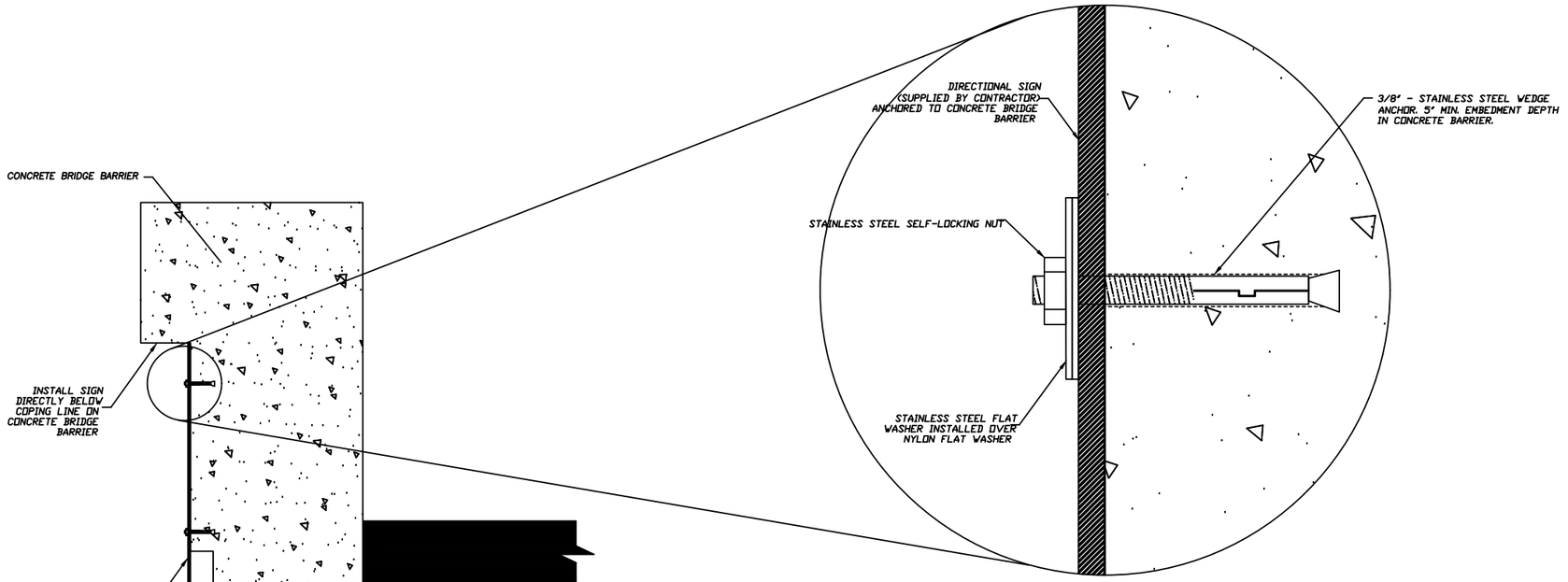


PARAPET OPTION
WITHOUT RAIL

PROJECT NO:1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGN MOUNTING DETAIL ON BRIDGE	SHEET 48 E



DIRECTIONAL SIGN MOUNTING ON BRIDGE
N.T.S.

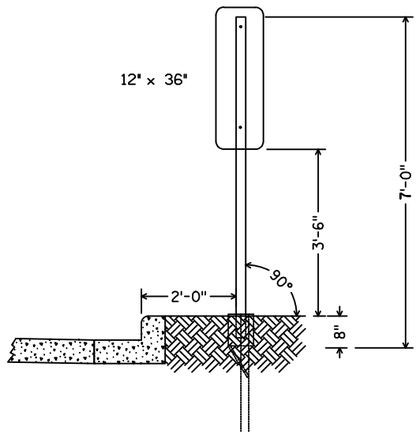


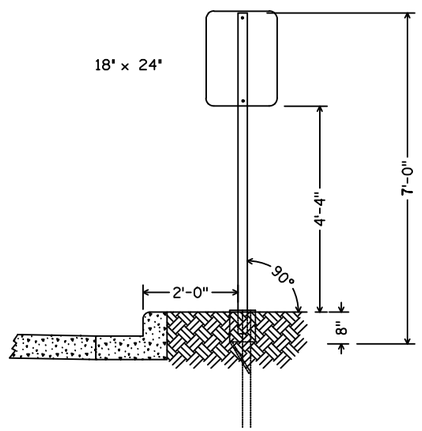
SECTION A-A
N.T.S.

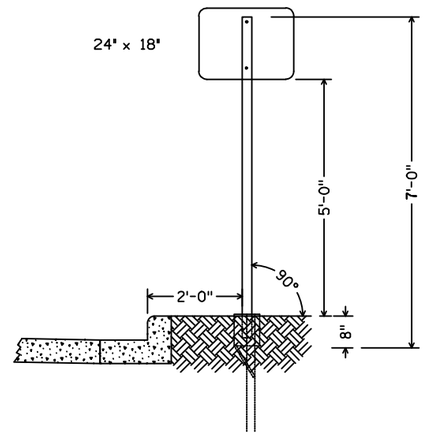
ANCHOR DETAIL
N.T.S.

PROJECT NO:1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGN MOUNTING DETAIL ON BRIDGE	SHEET 49 E

2

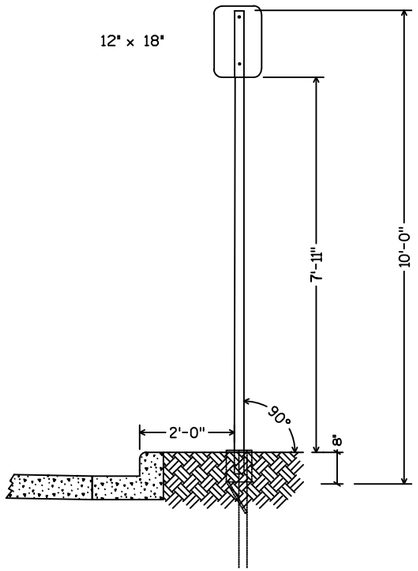


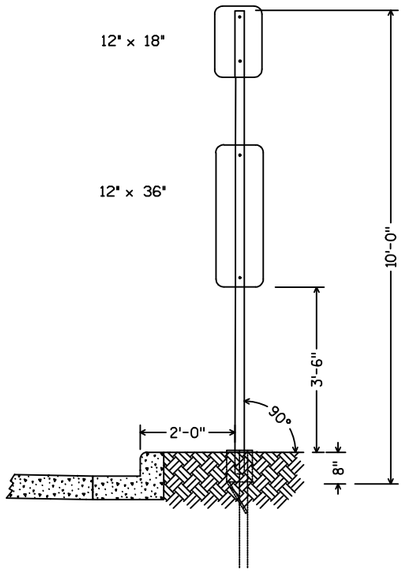


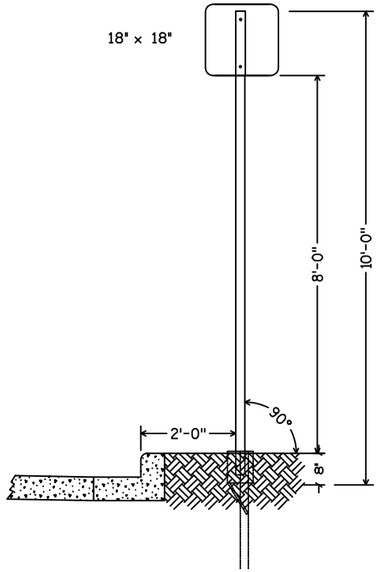


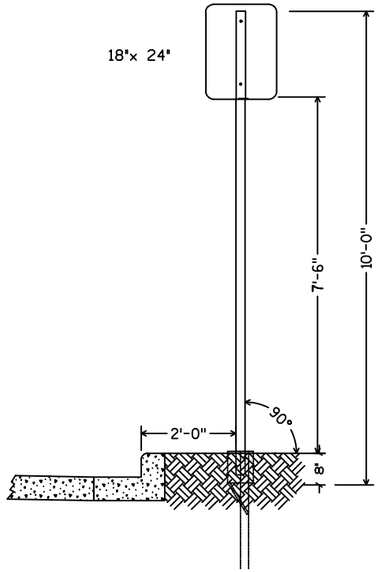
ROUND ALUMINUM SIGN POST SYSTEM 7'- 0" PIPE ASSEMBLIES

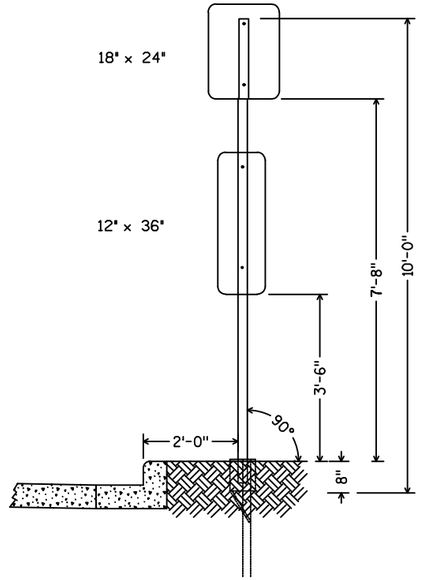
CITY SIGN MOUNTING DETAIL 1 OF 8

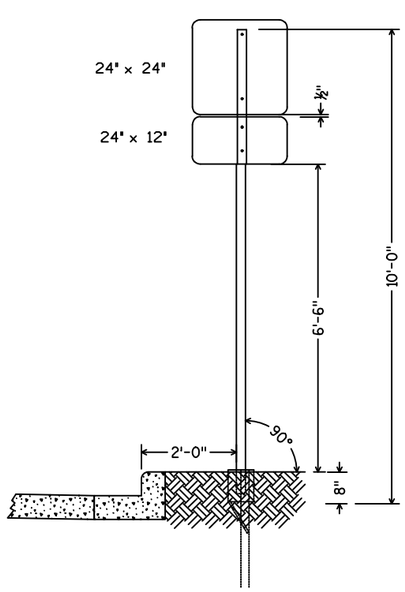


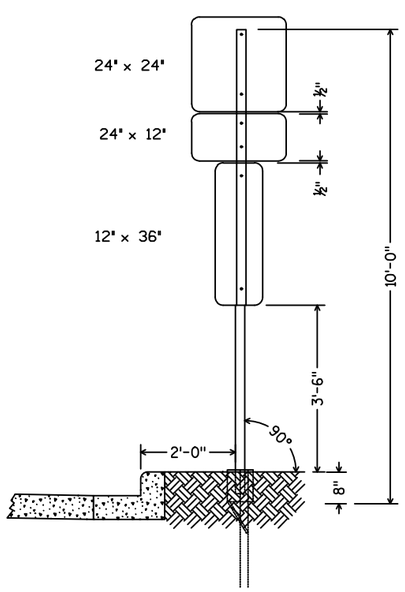


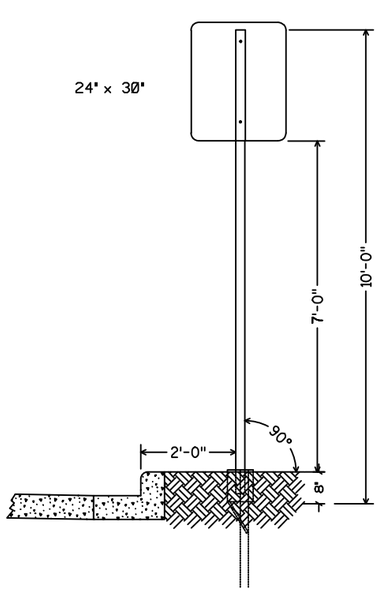


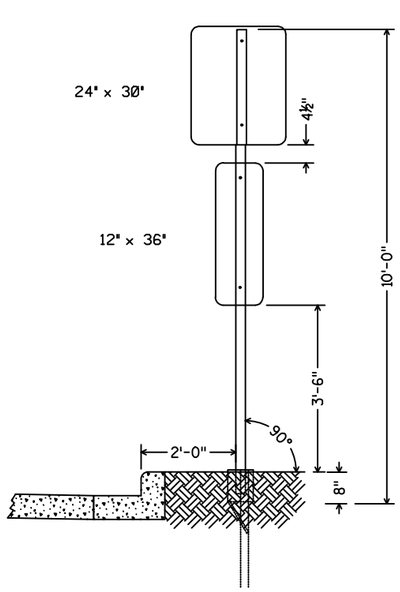


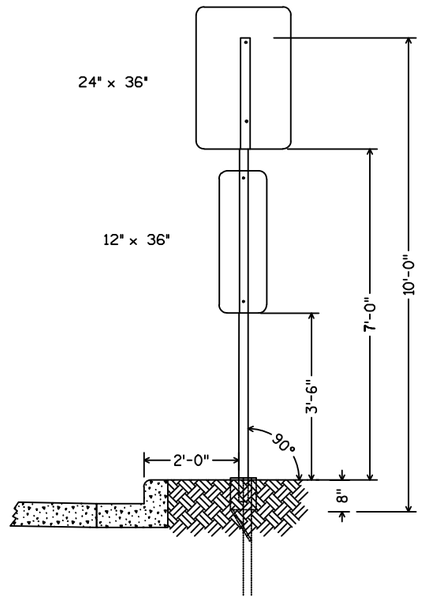










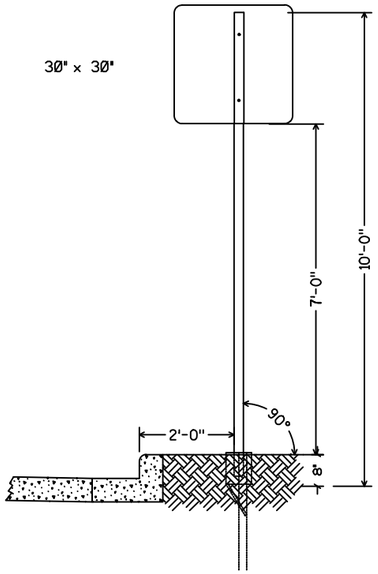


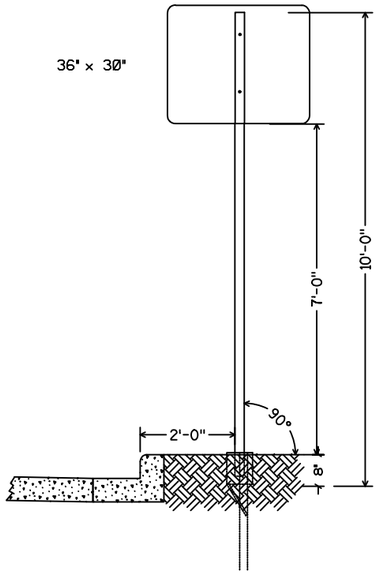
ROUND ALUMINUM SIGN POST SYSTEM 10'- 0" PIPE ASSEMBLIES

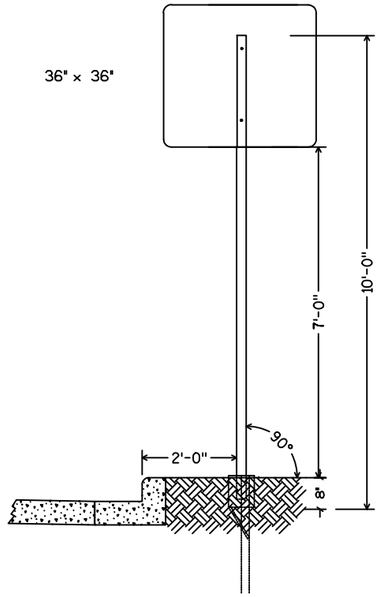
CITY SIGN MOUNTING DETAIL 2 OF 8

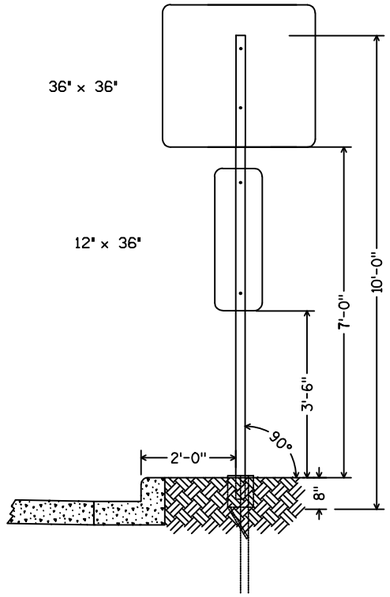
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SHEET 51 E

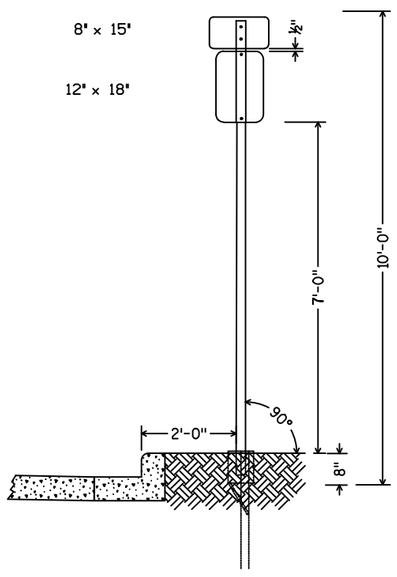
2

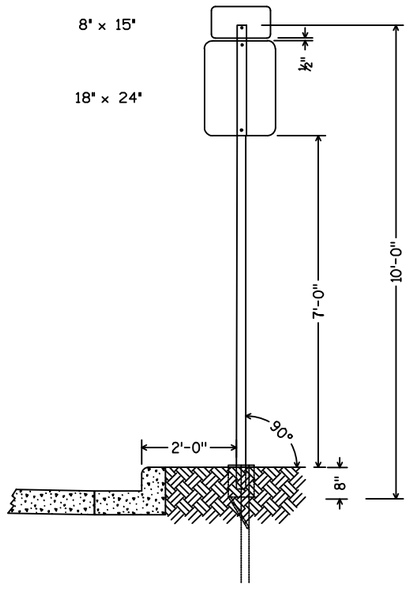


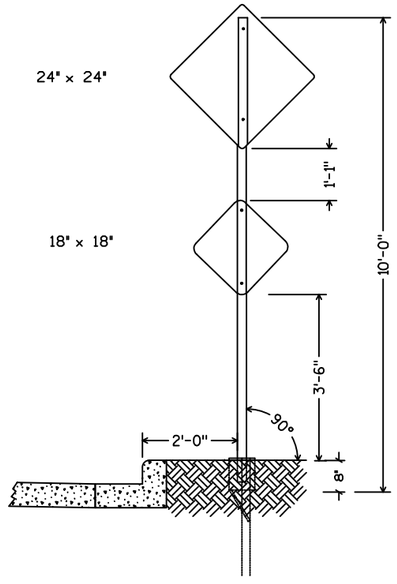


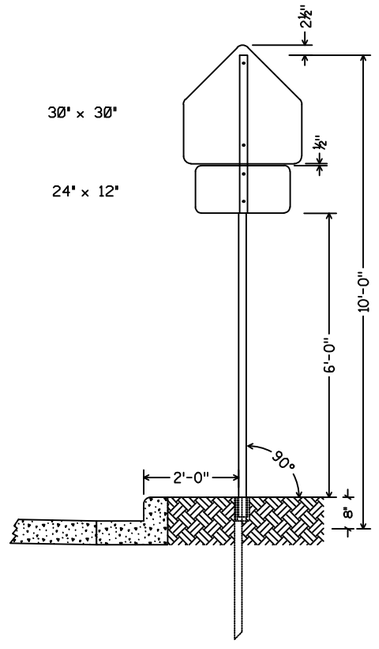






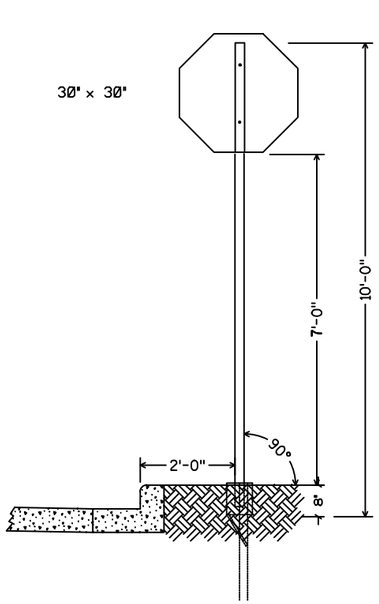


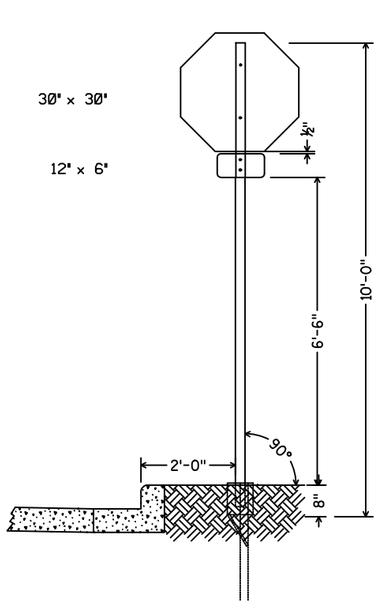


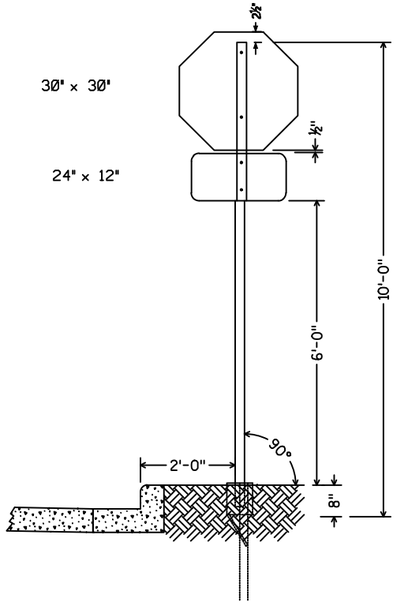


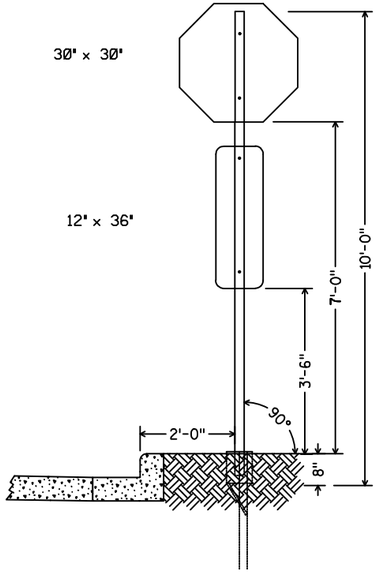
ROUND ALUMINUM SIGN POST SYSTEM 10'- 0" PIPE ASSEMBLIES

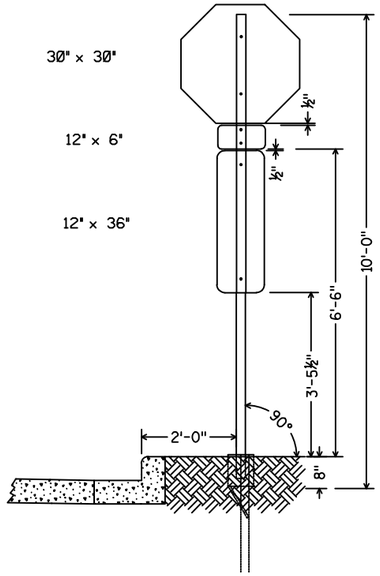
CITY SIGN MOUNTING DETAIL 3 OF 8

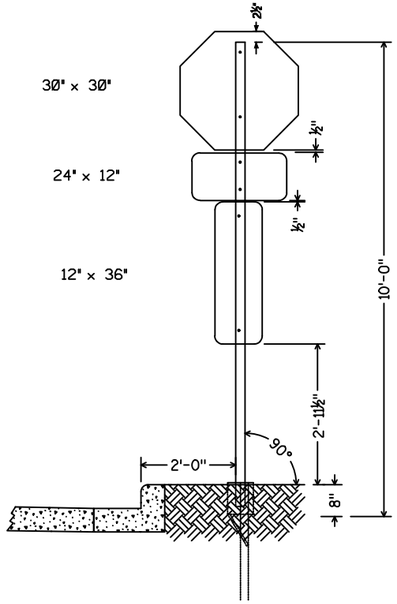


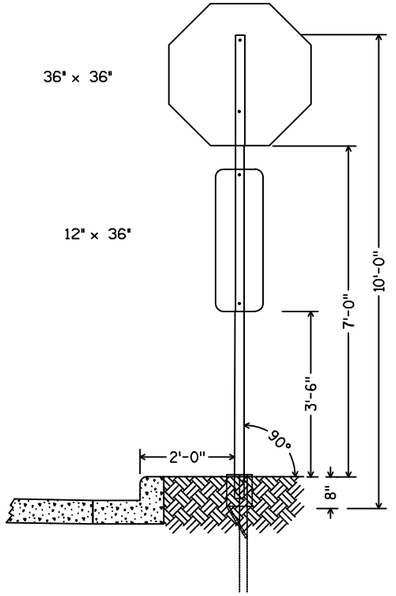










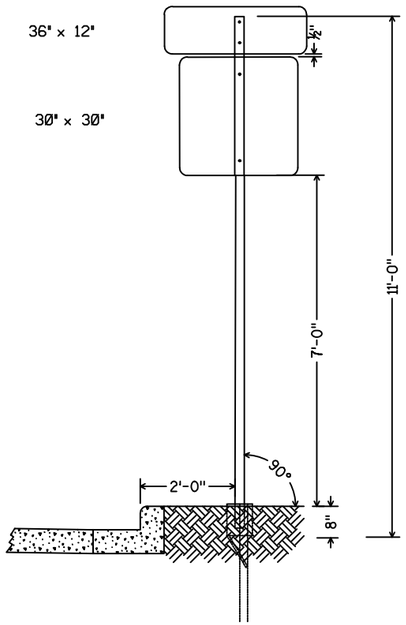


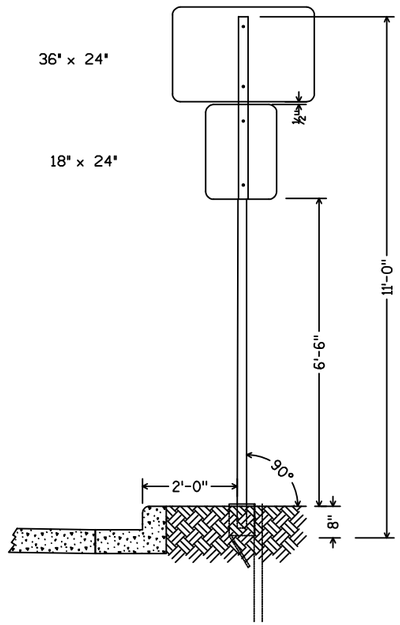
ROUND ALUMINUM SIGN POST SYSTEM 11'- 0" PIPE ASSEMBLIES

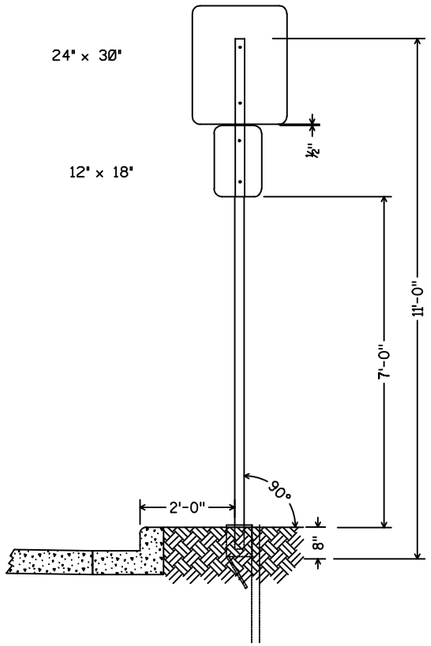
CITY SIGN MOUNTING DETAIL 4 OF 8

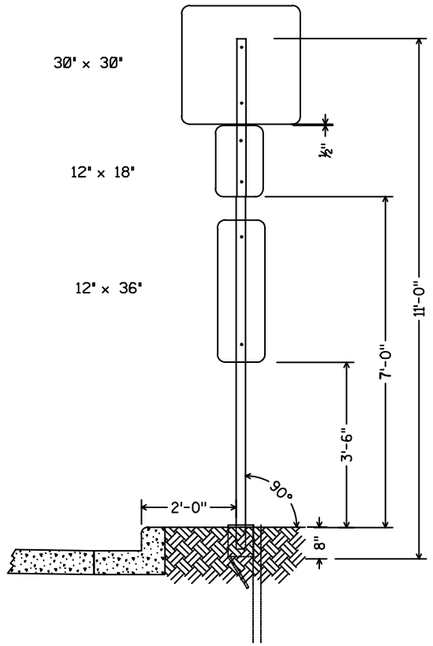
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SHEET 53 E

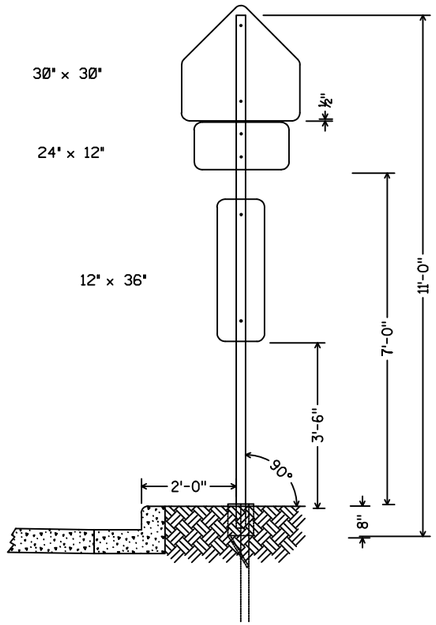
FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021006-CD.DWG
LAYOUT NAME - 06
PLOT DATE : 7/22/2025 9:26 AM PLOT BY : DAN BAUMANN PLOT NAME : ##########
WISDOT/CADDS SHEET 42

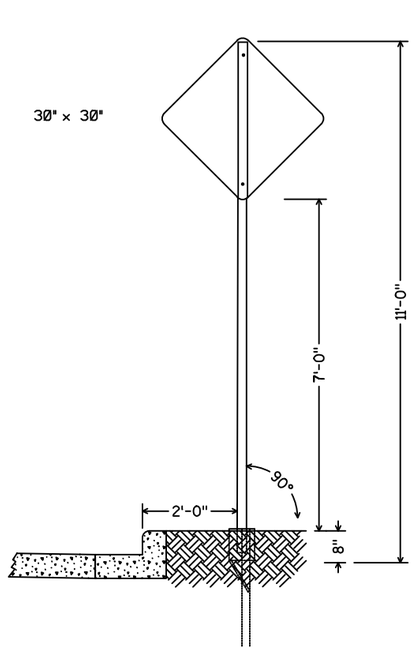


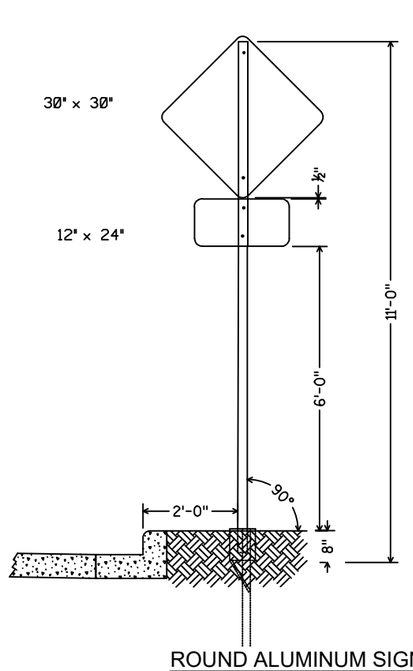


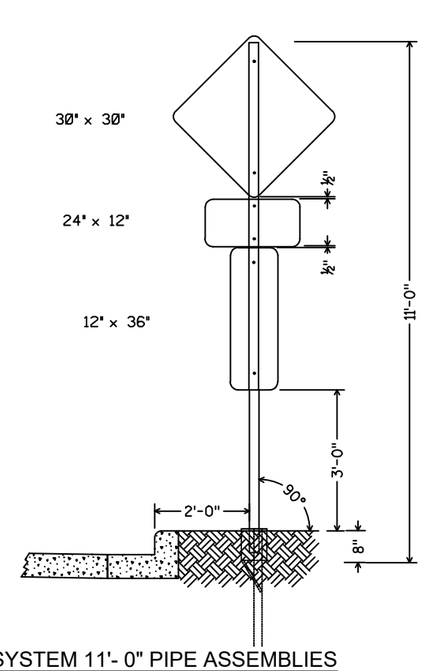


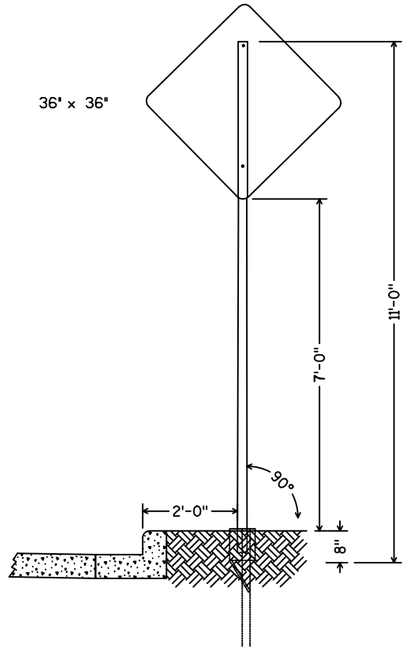












ROUND ALUMINUM SIGN POST SYSTEM 11'- 0" PIPE ASSEMBLIES

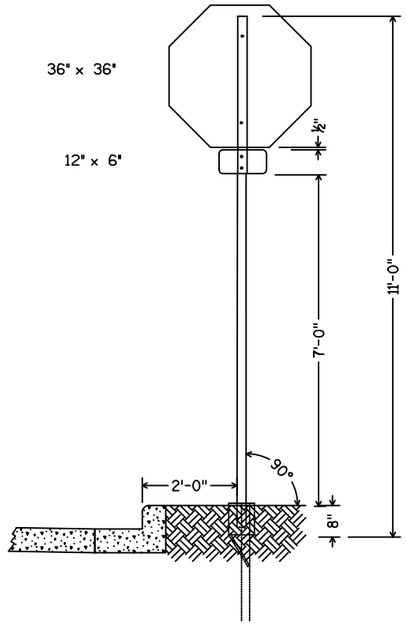
CITY SIGN MOUNTING DETAIL 5 OF 8

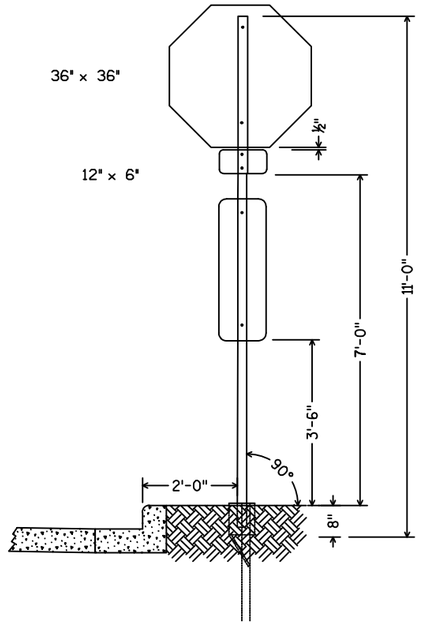
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SHEET 54 E

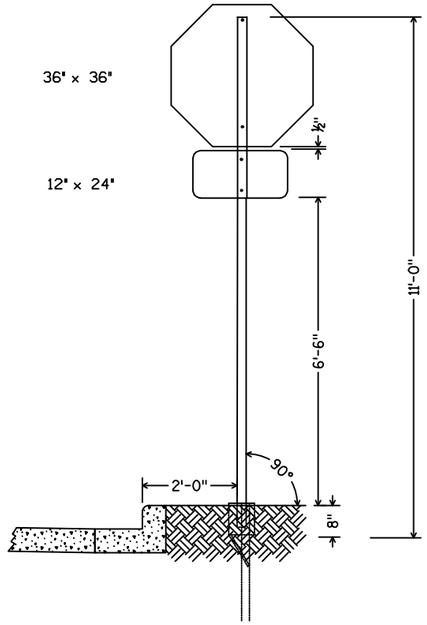
FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021006-CD.DWG
LAYOUT NAME - 07

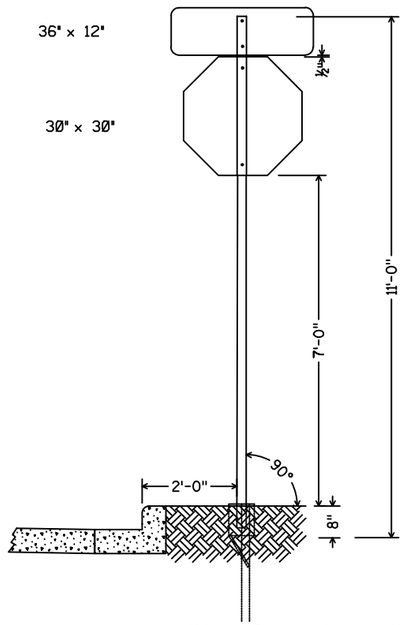
PLOT DATE : 7/22/2025 9:26 AM PLOT BY : DAN BAUMANN PLOT NAME : ##########

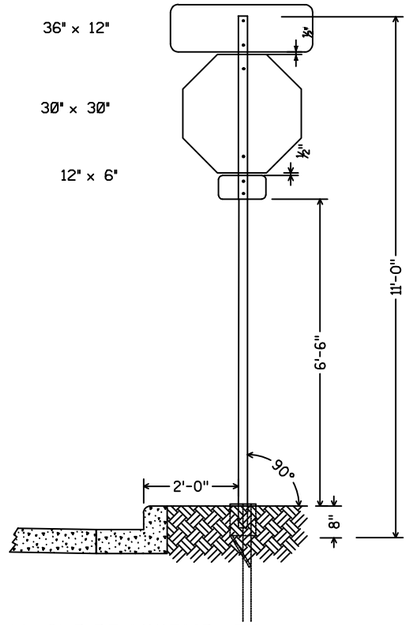
2









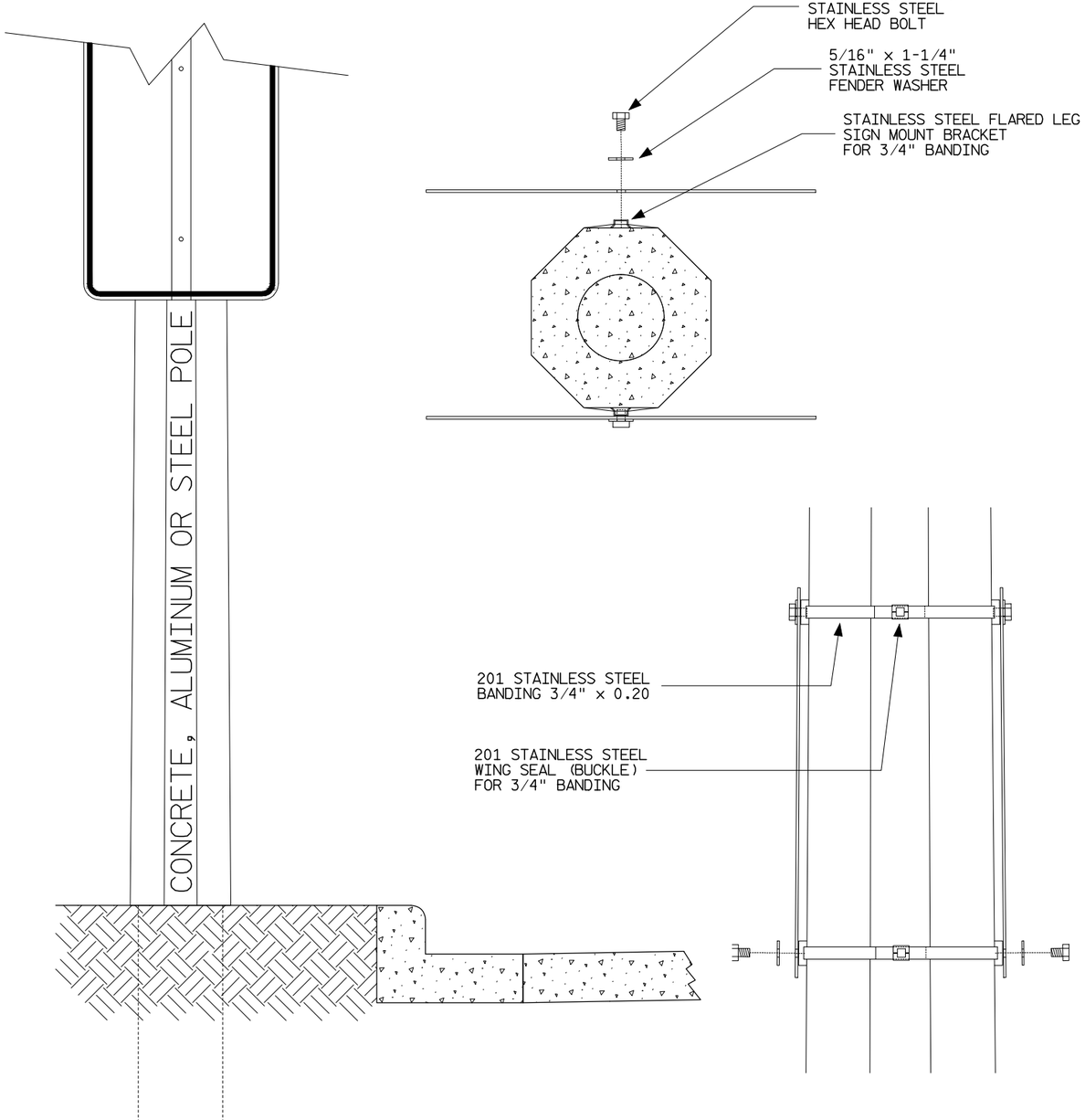


ROUND ALUMINUM SIGN POST SYSTEM 11'- 0" PIPE ASSEMBLIES

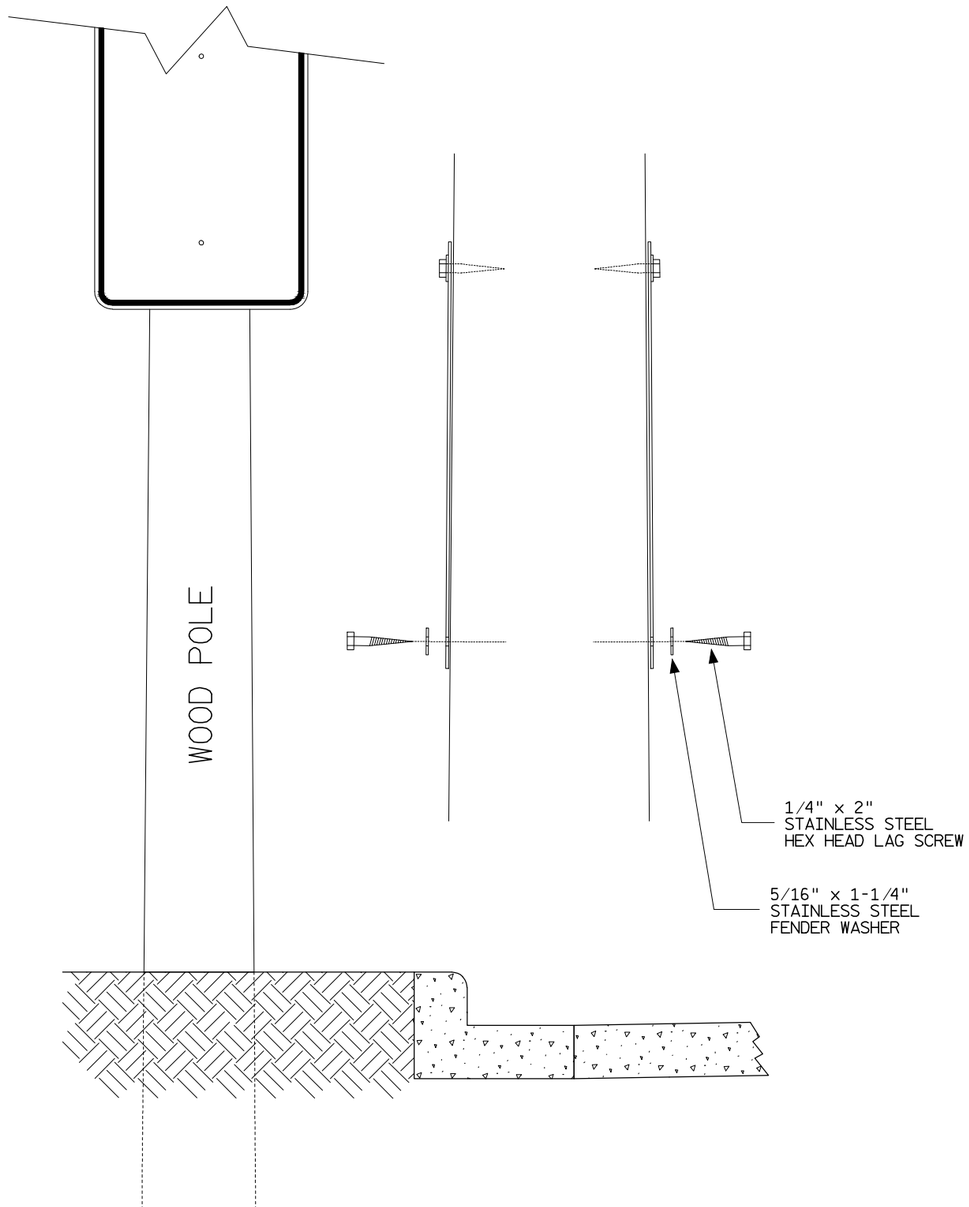
CITY SIGN MOUNTING DETAIL 6 OF 8

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SHEET 55 E

EXISTING CONCRETE, ALUMINUM OR STEEL POLE SIGN SYSTEM INSTALLATION



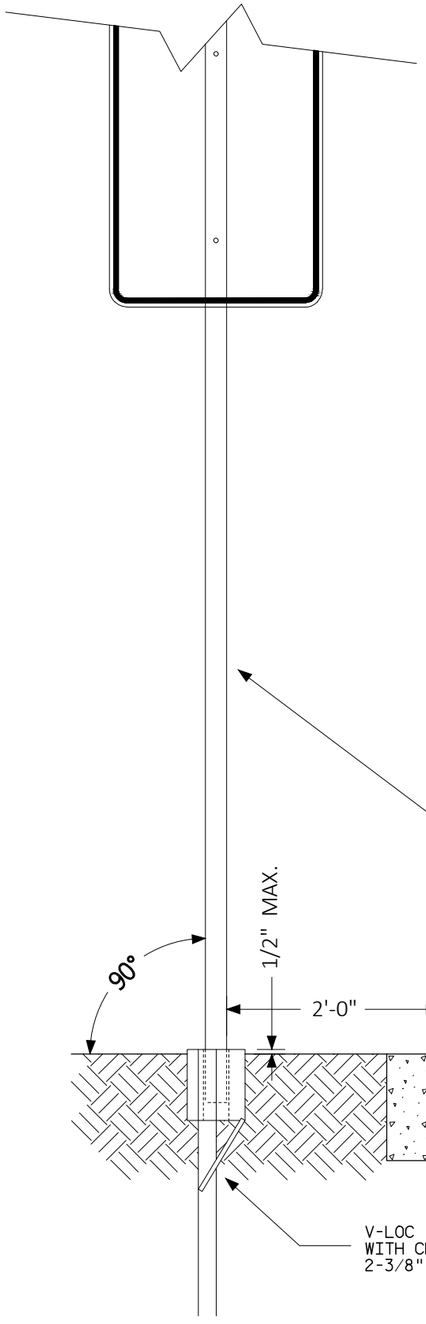
EXISTING WOOD POLE SIGN SYSTEM INSTALLATION

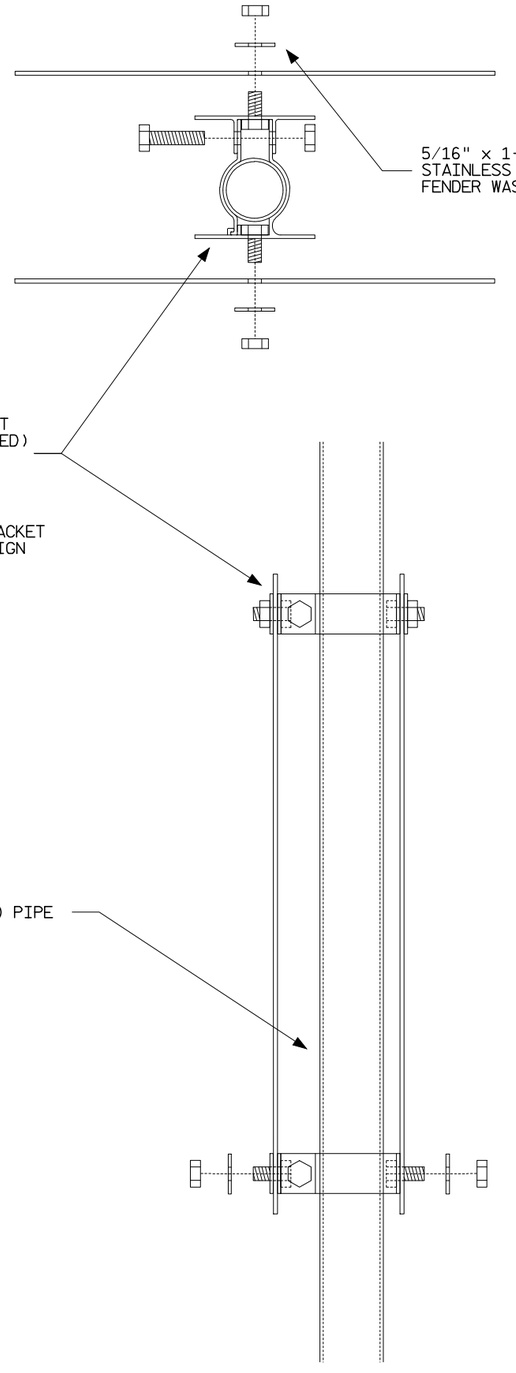


SIGN SYSTEM INSTALLATION – EXISTING POLE

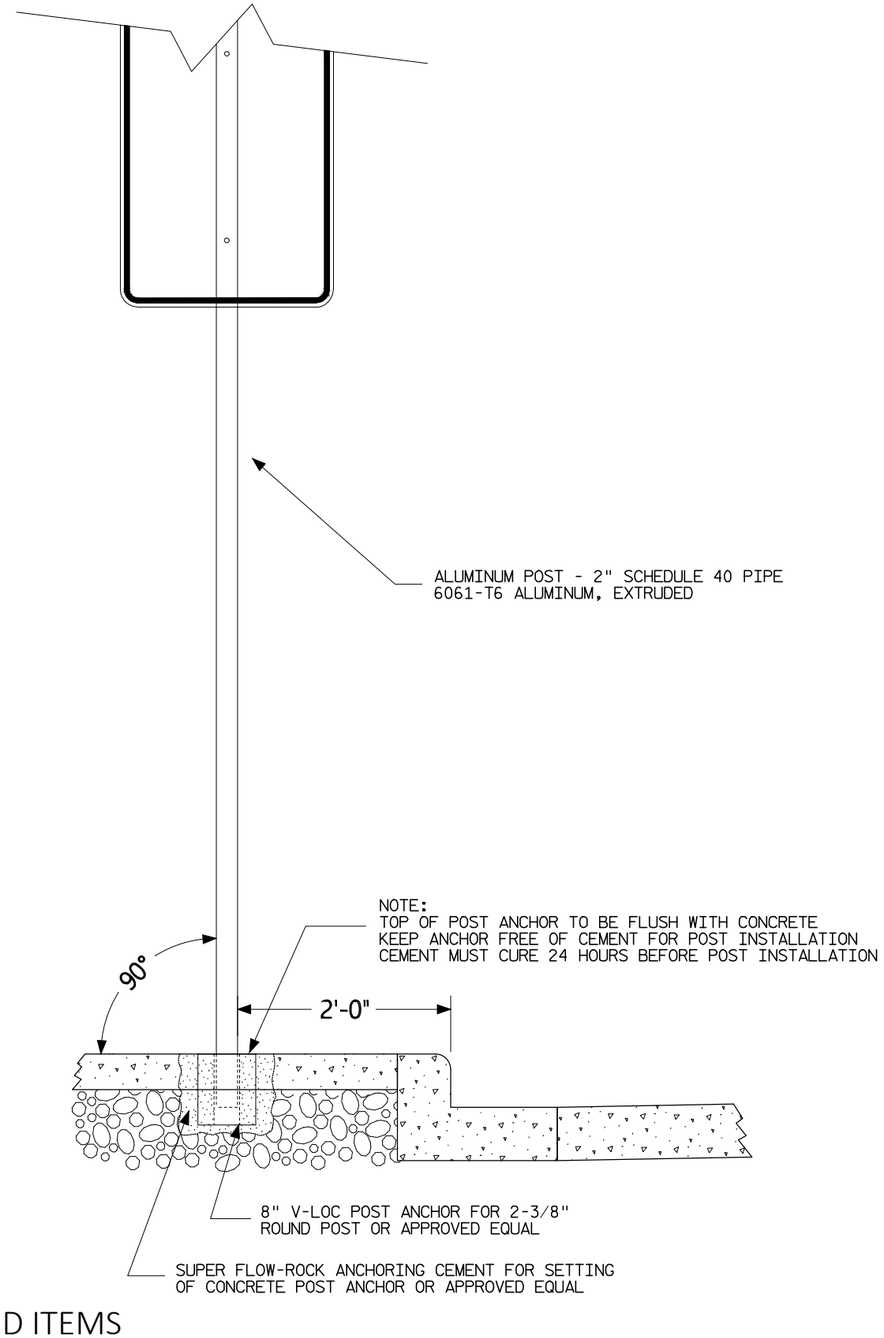
CITY SIGN MOUNTING DETAIL 7 OF 8

ROUND ALUMINUM SIGN POST SYSTEM FOR SOFT SURFACE INSTALLATION



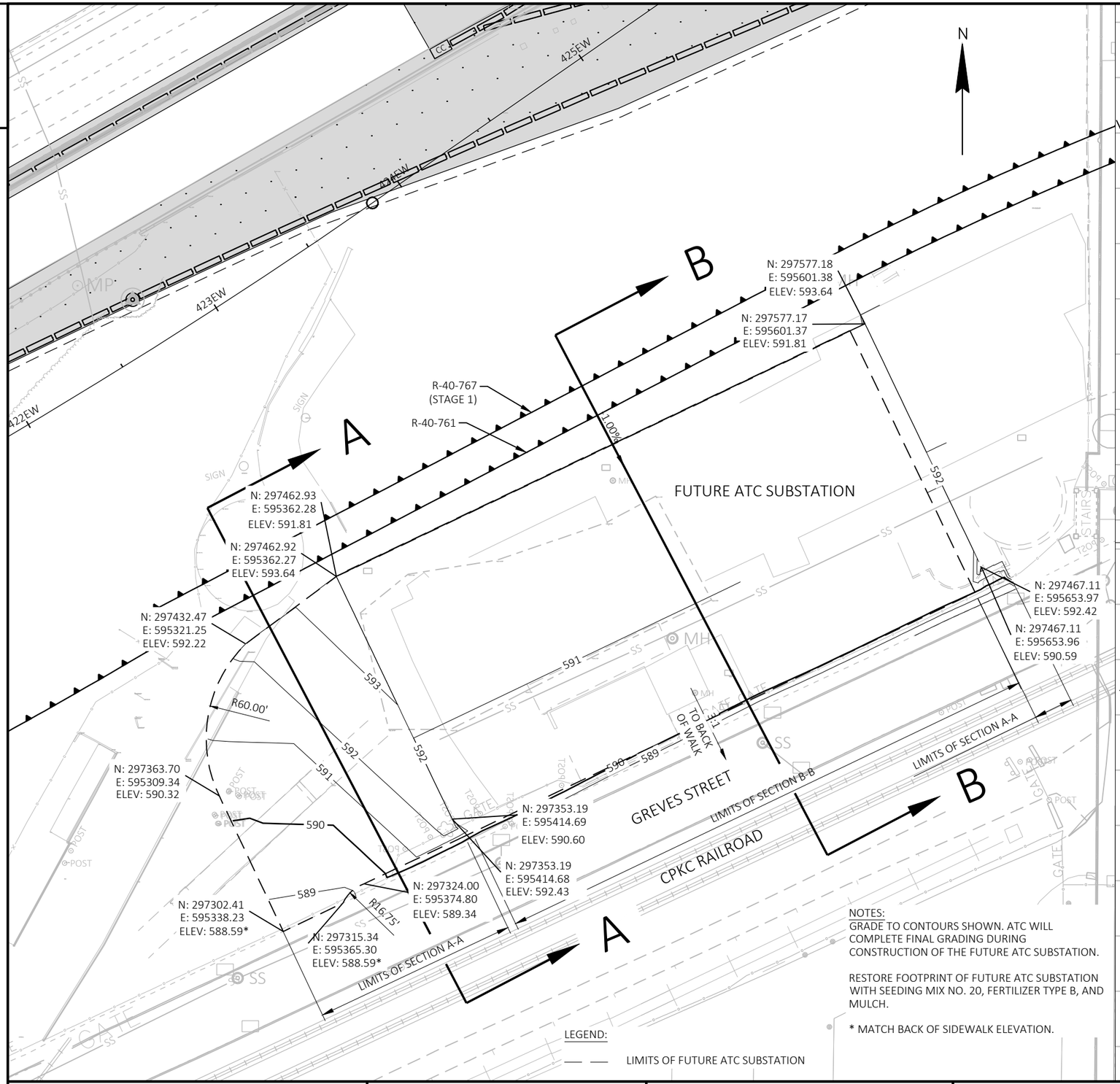


ROUND ALUMINUM SIGN POST SYSTEM FOR CONCRETE INSTALLATION



SIGN SYSTEM INSTALLATION – POST & PURCHASED ITEMS

CITY SIGN MOUNTING DETAIL 8 OF 8



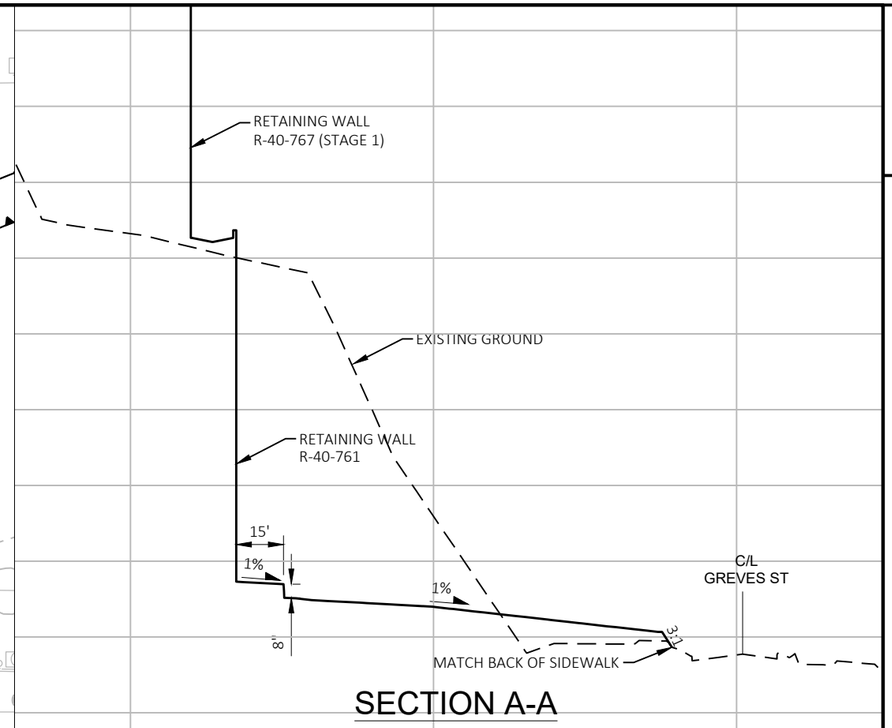
NOTES:
GRADE TO CONTOURS SHOWN. ATC WILL COMPLETE FINAL GRADING DURING CONSTRUCTION OF THE FUTURE ATC SUBSTATION.

RESTORE FOOTPRINT OF FUTURE ATC SUBSTATION WITH SEEDING MIX NO. 20, FERTILIZER TYPE B, AND MULCH.

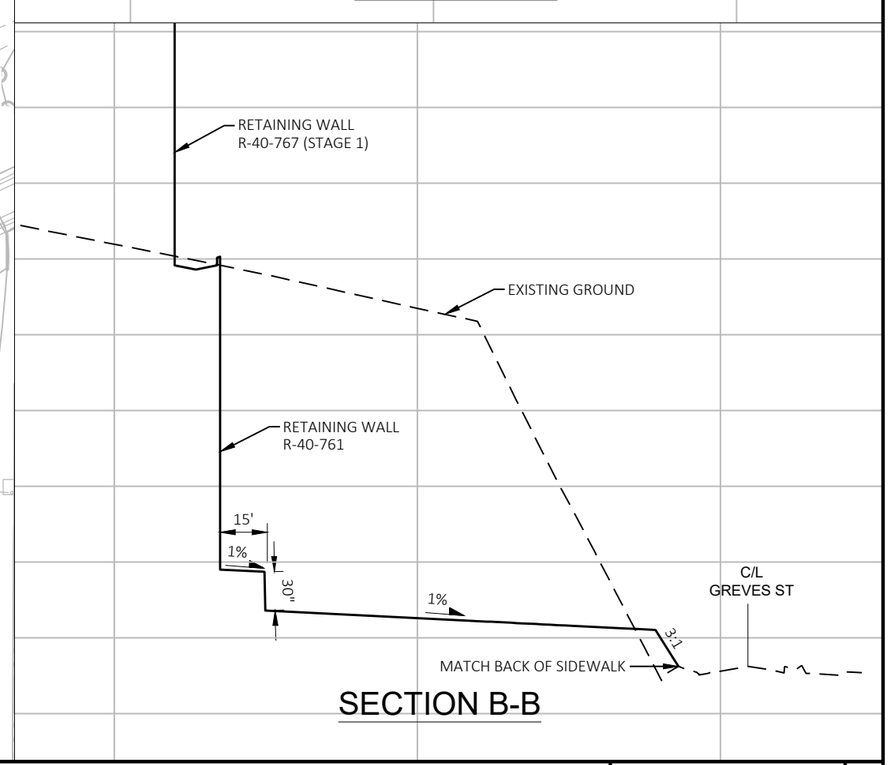
* MATCH BACK OF SIDEWALK ELEVATION.

LEGEND:

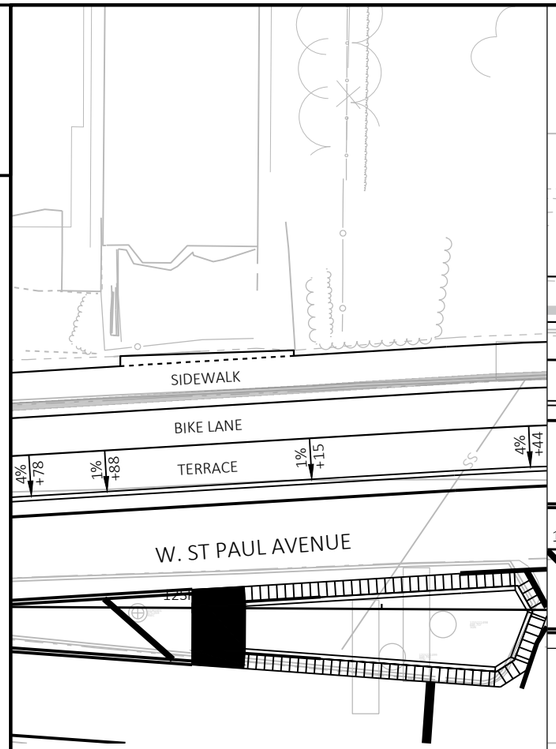
—— —— LIMITS OF FUTURE ATC SUBSTATION

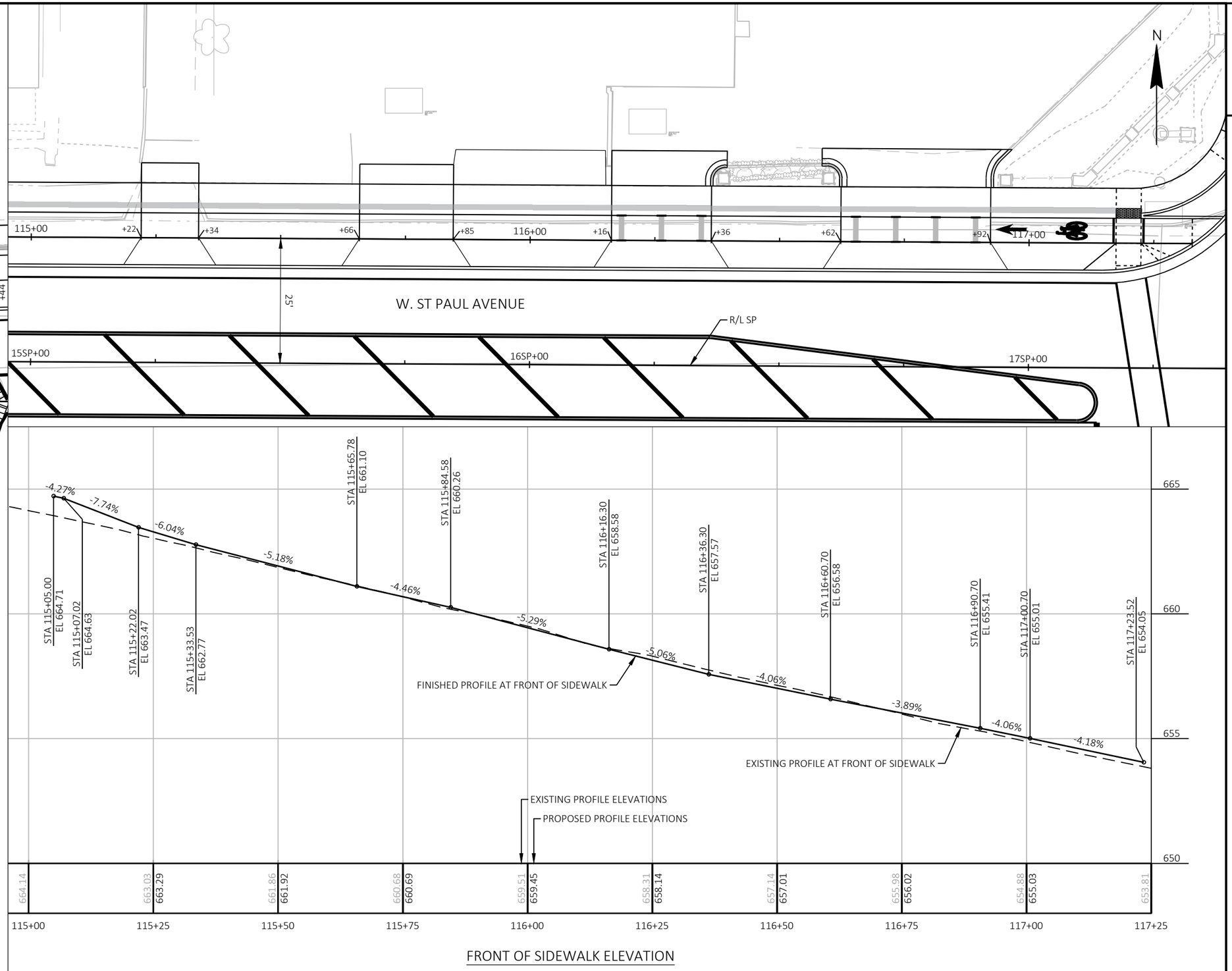


SECTION A-A



SECTION B-B





FRONT OF SIDEWALK ELEVATION

TERRACE SLOPE

STATION	SLOPE
STA 11SP+78	4%
STA 11SP+88	1%
STA 12SP+15	1%
STA 12SP+44	4%

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SHEET 59	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021010-CD.DWG
LAYOUT NAME - 01
PLOT DATE : 4/30/2025 8:50 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

2

PLACE BIKE LANE SYMBOL FOR SHARED LANE EVERY 250' ALONG N. 44TH STREET FROM SELIG DRIVE TO W. WELLS STREET.

63

N

LEGEND

PROPOSED SIGN MOUNTED ON POST

63 MARKING SYMBOL EPOXY, BIKE LANE FOR SHARED LANE

XXX SPECIAL SIGN DETAIL NUMBER

HANK AARON STATE TRAIL

TMP-05

Menomonee Line

107

24"X12"

TMP-06

Menomonee Line

109

24"X12"

63

TMP-04

Oak Leaf Trail

TMP-03

Menomonee Line

108

24"X12"

110

42"X8"

N. 44TH STREET

SELIG DRIVE

WZ

WZ 585.57
10/31/2024

WZ

WZ 585.71
10/31/2024

TMP-01

Menomonee Line

109

24"X12"

TMP-02

100

60"X36"

HANK AARON
State Trail

HANK AARON STATE TRAIL

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS - TMP IMPROVEMENTS LOCATION 1	SHEET 60	E

FILE NAME : C:\USERS\ECASTELLAN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021011-CD-TMP.DWG
LAYOUT NAME - 01

PLOT DATE : 4/29/2025 11:09 AM PLOT BY : ELIZABETH CASTELLAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

PROPOSED SIGN MOUNTED ON POST

63 MARKING SYMBOL EPOXY, BIKE LANE FOR SHARED LANE

XXX SPECIAL SIGN DETAIL NUMBER

N

TMP-07

Menomonee Line

107

24"X12"

W. BLUE MOUND ROAD

N. 44TH STREET

DO NOT PLACE A BIKE LANE SYMBOL FOR SHARED LANE ON SB N. 44TH STREET BETWEEN THE BLUE MOUND ROAD INTERSECTIONS

PLACE BIKE LANE SYMBOL FOR SHARED LANE EVERY 250' ALONG N. 44TH STREET FROM SELIG DRIVE TO W. WELLS STREET.

63

PLACE BIKE LANE SYMBOL FOR SHARED LANE EVERY 250' ALONG N. 44TH STREET FROM SELIG DRIVE TO W. WELLS STREET.

63

63

TMP-08

Menomonee Line

107

24"X12"

W. BLUE MOUND ROAD

SIGN

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS - TMP IMPROVEMENTS LOCATION 1	SHEET 61	E

FILE NAME : C:\USERS\ECASTELLAN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021011-CD-TMP.DWG
LAYOUT NAME - 02

PLOT DATE : 4/29/2025 11:10 AM PLOT BY : ELIZABETH CASTELLAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

PROPOSED SIGN MOUNTED ON POST

63 MARKING SYMBOL EPOXY, BIKE LANE FOR SHARED LANE

XXX SPECIAL SIGN DETAIL NUMBER

N

OAK LEAF TRAIL

TMP-11

Menomonee Line

109

24"X12"

TMP-10

107

24"X12"

Menomonee Line

TMP-09

Oak Leaf Trail

110

42"X8"

670

679

STH 175 SB

STH 175 NB

PLACE BIKE LANE SYMBOL FOR SHARED LANE EVERY 250' ALONG N. 44TH STREET FROM SELIG DRIVE TO W. WELLS STREET.

63

63

W. WELLS STREET

N. 46TH STREET

671.3

671.5

671.8

671.1

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS - TMP IMPROVEMENTS LOCATION 1	SHEET 62	E

FILE NAME : C:\USERS\ECASTELLAN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021011-CD-TMP.DWG
LAYOUT NAME - 03
PLOT DATE : 4/29/2025 11:10 AM PLOT BY : ELIZABETH CASTELLAN PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

PROPOSED SIGN MOUNTED ON POST

XXX SPECIAL SIGN DETAIL NUMBER

N. 32ND STREET

W. CANAL STREET

W. PARK HILL AVENUE

IH 94 EB

IH 94 WB

MWEL

MSEW

TMP-13

BICYCLES MAY USE SIDEWALK

216

30"X24"

TMP-12

BICYCLES MAY USE SIDEWALK

216

30"X24"

2

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS - TMP IMPROVEMENTS LOCATION 2 - STAGE 1	SHEET 63	E

FILE NAME : C:\USERS\ECASTELLAN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021011-CD-TMP.DWG
LAYOUT NAME - 04-01
PLOT DATE : 4/29/2025 11:11 AM
PLOT BY : ELIZABETH CASTELLAN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

2 MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)

3 MARKING LINE EPOXY 4-INCH (WHITE)

57 MARKING ARROW EPOXY, BIKE LANE (WHITE)

59 MARKING SYMBOL EPOXY, BIKE LANE (WHITE)

72 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)

74 MARKING CROSSWALK EPOXY BLOCK STYLE 12-INCH (WHITE)

N. 32ND STREET

W. CANAL STREET

W. PARK HILL AVENUE

IH 94 EB

IH 94 WB

41ST VIEW

5.5'

11'

11'

5.5'

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS - TMP IMPROVEMENTS LOCATION 2 - STAGE 2	SHEET 64	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021011-CD-TMP.DWG
LAYOUT NAME - 04-02
PLOT DATE : 4/26/2025 8:07 PM
PLOT BY : SCHARLAU, DAVE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

(72) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)

(74) MARKING CROSSWALK EPOXY BLOCK STYLE 12-INCH (WHITE)

N

S. 27TH STREET

S. 26TH STREET

W. GREENFIELD AVENUE

72

72

72

74

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS - TMP IMPROVEMENTS LOCATION 3	SHEET 65	E

LEGEND

3	MARKING LINE EPOXY 4-INCH (WHITE)
57	MARKING ARROW EPOXY, BIKE LANE (WHITE)
59	MARKING SYMBOL EPOXY, BIKE LANE (WHITE)
63	MARKING SYMBOL EPOXY, BIKE LANE FOR SHARED LANE (WHITE)

N

N. CANAL STREET

N. EMMBER LANE

584.9

584.6

T520

8'
5'
11'
11'
5'
8'

MH

INL

MATCHLINE (SEE NEXT SHEET)

2

MATCHLINE (SEE PREVIOUS SHEET)

N. EMMBER LANE

W. MT VERNON AVENUE

W. ST PAUL AVENUE

N. 13TH STREET

N

LEGEND

3	MARKING LINE EPOXY 4-INCH (WHITE)
57	MARKING ARROW EPOXY, BIKE LANE (WHITE)
59	MARKING SYMBOL EPOXY, BIKE LANE (WHITE)
63	MARKING SYMBOL EPOXY, BIKE LANE FOR SHARED LANE (WHITE)
	PROPOSED SIGN MOUNTED ON POST

TMP-14

RIGHT LANE ENDS

W9-1R
36"X36"

SIGN

SIGN

SIGN

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS - TMP IMPROVEMENTS LOCATION 4	SHEET 67 E

2

REMOVALS LEGEND

- CLEARING AND GRUBBING (STATION)
- CLEARING AND GRUBBING (ID)
- REMOVING ASPHALTIC PAVEMENT
- REMOVING CONCRETE PAVEMENT
- REMOVING ASPHALTIC SURFACE MILLING
- REMOVING CONCRETE SIDEWALK
- SAWING ASPHALT (XXXXXX)
- SAWING CONCRETE
- REMOVING FENCE
- REMOVING GUARD RAIL
- REMOVING CONCRETE BARRIER
- REMOVING CURB AND GUTTER
- ABANDONING MONITORING WELL

NOTE

SEE FTMS, WATERMAIN, STORM SEWER, SIGNING, LIGHTING, AND SIGNAL PLANS FOR OTHER REMOVALS.

2

N

N. 28TH STREET

14J

12J

R/L J

R/L SP

W. ST PAUL AVENUE

12SP

14SP

TJD

N. 31ST STREET

W. MT VERNON AVENUE

N. 30TH STREET

N. 29TH STREET

HOUSE OBSCURED

POOL

ABANDONED HOUSE

102TJD

R/L TJD

RAMP JD

R/L TWB

R/L TML

R/L TEB

IH 94 WB

IH 94 EB

111

112TWB

12TEB

113

114TWB

114TML

115

116TWB

116TML

117

118

I4TEB

16TEB

+51.12
23.21' RT

+50.62
20.63' RT

+88.10
-8.00' LT

MATCHLINE 18TEB+00

EW+28.65
7.85' LT

+74.24
32.53' RT

+74.24
42.82' RT

+63.95
50.77' RT

SLOPE INTERCEPT (TYP)

PARTIALLY REMOVE EX R-40-10. SEE TRAFFIC CONTROL - TEMPORARY SHORING (EX. R-40-10 PARTIAL REMOVAL).

ABANDONING WELL ELR-9/MW

ABANDONING WELL ELB-42A/MW

W. CANAL STREET

DIRT FOOT PATH

GRAVEL PILE

ENERGIES
GREVES SUBSTATION

GATE

EXISTING RETAINING WALL AND FENCE TO BE REMOVED BY OTHERS

GREVES STREET

ABANDONED

POST

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	REMOVAL PLAN - STAGE 1	SHEET 69	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021101-RM.DWG
LAYOUT NAME - 01-TEB-01

PLOT DATE : 7/10/2025 8:27 AM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

N. 25TH STREET

W. CLYBOURN STREET

W. ST PAUL AVENUE

IH 94 WB

IH 94 EB

RAMP LC

GREVES STREET

R/L KN

R/L SP

R/L TWB

R/L TML

R/L TEB

R/L TSP

R/L KS

R/L TLC

14SP

16SP

18SP

20SP

22SP

24SP

26SP

28SP

30SP

32TEB

28TEB

26TEB

24TEB

22TEB

20TLC

22TLC

24TLC

26TLC

18TSP

20TSP

22TSP

20KS

26KS

28KN

119

121

123

125

REMOVE EX. B-40-57 WINGWALL

EXISTING BRIDGE B-40-57

SAWING CONCRETE BARRIER

EXISTING BRIDGE B-40-43

REMOVE CURB AND GUTTER TO EXISTING PARAPET

PARTIALLY REMOVE EX R-40-10. SEE TRAFFIC CONTROL - TEMPORARY SHORING (EX. R-40-10 PARTIAL REMOVAL).

ABANDONING WELL ELB-85A/MW

EXISTING BRIDGE B-40-513_005

SLOPE INTERCEPT (TYP)

REMOVE EX. R-40-33 STA 22TLC+13 TO STA 24TLC+48

BUILDING TO BE REMOVED PRIOR TO THE START OF CONSTRUCTION BY OTHERS

MATCHLINE 18TEB+00

+49.83 -8.00' LT

+98.40 -12.65' LT

+47.70 -13.60' LT

+47.89 -20.20' LT

+62.27 -9.00' LT

+62.48 13.02' LT

+88.06 5.06' LT

+84.56 12.24' RT

+51.87 16.67' RT

+72.15 3.09' RT

+22.60 2.42' RT

+64.32 21.29' RT

+66.50 20.52' RT

+10.42 11.49' RT

+82.12 9.84' RT

+82.64 93.80' RT

+28.92 29.72' RT

+54.89 44.54' RT

+11.88 53.21' RT

+58.57 89.07' RT

+23.98 107.78' RT

+23.66 111.44' RT

+40.36 137.39' RT

+71.84 121.51' RT

+90.33 197.53' RT

+49.36 202.71' RT

+99.94 193.09' RT

+28.92 24.00' RT

+54.89 26.10' RT

+39.61 18.89' RT

+11.71 131.35' RT

+27.23 158.01' RT

+86.05 48.06' RT

+94.56 166.64' RT

+31.96 189.99' RT

+34.91 195.97' RT

+57.52 217.45' RT

+11.98 205.29' RT

+95.87 234.69' RT

+93.75 272.18' RT

+92.55 307.58' RT

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	REMOVAL PLAN - STAGE 1	SHEET 70	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021101-RM.DWG
LAYOUT NAME - 01-TEB-02

PLOT DATE : 7/11/2025 9:24 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

W. MT VERNON AVENUE

N. 31ST STREET

N. 30TH STREET

N. 29TH STREET

W. PARK HILL AVENUE

W. CANAL STREET

GREVES STREET

RAMP JD

IH 94 WB

IH 94 EB

R/L TJD

R/L TWB

R/L TML

R/L TEB

EXISTING RETAINING WALL R-40-18 (TO REMAIN)

SLOPE INTERCEPT (TYP)

SAWING CONCRETE BARRIER

TEB+95.19
14.40' LT

TEB+95.49
2.35' LT

16TEB

102TJD

HOUSE OBSCURED

POOL

ABANDONED HOUSE

DIRT FOOT PATH

GATE

GRAVEL PILE

WE ENERGIES GREVES SUBSTATION

ABANDONED

MATCHLINE 18TEB+00

N

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	REMOVAL PLAN - STAGE 2	SHEET 71	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021102-RM.DWG
LAYOUT NAME - 01-TEB-01

PLOT DATE : 4/26/2025 8:02 PM PLOT BY : SCHARLAU, DAVE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

N. 25TH STREET

W. CLYBOURN STREET

W. ST PAUL AVENUE

IH 94 WB

IH 94 EB

RAMP LC

GREVES STREET

MATCHLINE 18TEB+00

R/L KN

R/L SP

R/L TWB

R/L TML

R/L TEB

R/L TSP

R/L TLC

R/L KS

R/L SP

EXISTING RETAINING WALL R-40-18 (TO REMAIN)

EXISTING BRIDGE B-40-43

EXISTING BRIDGE B-40-57

EXISTING BRIDGE B-40-513_005

SAWING CONCRETE BARRIER

SLOPE INTERCEPT (TYP)

TEB+61.70
28.52' LT

TEB+60.69
9.47' LT

TEB+41.63
19.45' LT

TEB+40.57
12.44' LT

MONOMONEE VALLEY DECORATIVE SIGN

3 TREES

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	REMOVAL PLAN - STAGE 2	SHEET 72	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021102-RM.DWG
LAYOUT NAME - 01-TEB-02

PLOT DATE : 4/26/2025 8:02 PM PLOT BY : SCHARLAU, DAVE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N. 29TH STREET

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

W. ST PAUL AVENUE

IH 94 WB

IH 94 EB

RAMP JD

RAMP LC

J+60.45
0.00' RT

J+05.00
0.00'

J+05.80
24.95' LT

J+05.00
24.28' RT

DECORATIVE
FENCE TO REMAIN

R/L J

J+79.36
35.01' RT

J+75.36
35.01' RT

J+30.06
30.50' RT

J+27.63
30.48' RT

EXISTING FENCE AND
FENCE POSTS TO REMAIN

REMOVE, SALVAGE, AND RESET BOULDER

REMOVING STEPS RAILING

SP+20.33
40.35' LT

SP+33.07
40.47' LT

SP+37.57
40.47' LT

SP+16.27
40.33' LT

SP+54.44
39.80' LT

SP+50.48
44.00' LT

SP+78.14
44.00' LT

SP+90.35
33.19' LT

SP+57.94
39.80' LT

SP+39.75
38.03' LT

SP+13.40
34.09' LT

SP+24.63
26.78' LT

SP+28.48
20.54' LT

J+10.78
35.00' RT

J+02.83
34.99' RT

J+95.60
35.00' RT

J+87.60
35.00' RT

R/L SP

SP+77.97
41.00' LT

REMOVING STEPS RAILING

SP+82.97
41.00' LT

SP+22.01
40.00' LT

SP+33.51
40.00' LT

SP+65.78
40.00' LT

SP+85.00
43.00' LT

SP+15.00
43.00' LT

SP+14.35
1.22' LT

17SP

16SP

16SK

30KN

28KN

R/L KN

BUILDING TO BE REMOVED PRIOR TO THE
START OF CONSTRUCTION BY OTHERS

EXISTING BRIDGE B-40-57

EXISTING B-40-43
WING WALL (TO REMAIN)

SP+37.50
1.01' LT

18SP

20SP

220TSP

R/L TSP

28TEB

26TEB

125

22SP

26TLC

SEE STAGING PLANS FOR
PEDESTRIAN ACCOMMODATIONS
DURING STAGE 3

SP+28.51
20.69' RT

SP+76.85
48.04' RT

SP+50.87
48.04' RT

SP+39.56
53.63' RT

REMOVING CONCRETE BASE

SALVAGE RAMP GATE SYSTEM

TLE

SP+72.06
49.44' RT

SP+94.07
49.33' RT

REMOVING CONCRETE BASE

SALVAGE RAMP GATE SYSTEM

TLE

REMOVE RAILROAD TIE
RETAINING WALL
STA 16SP+61 TO
STA 17SP+35

REMOVING
LANDSCAPE ROCK

EXISTING SUBSTATION
FENCE TO REMAIN

REMOVE MODULAR
BLOCK RETAINING WALL
STA 25KS+18 TO
STA 26KS+26

SUB-STATION

EXISTING BRIDGE
B-40-513_005

EXISTING RETAINING WALL
R-40-18 (TO REMAIN)

SP+01.12
81.42' RT

123

121

SP+39.75
195.04' RT

R/L TJD

R/L TML

R/L TWB

R/L TLC

R/L KS

R/L TEB

EXISTING BRIDGE B-40-513_005

TJD+72.49
15.00' LT

TJD+45.95
19.93' LT

TJD+13.08
7.91' LT

TJD+11.80
12.75' LT

120TWB
220TML

118TWB
218TML

116TWB
216TML

122TWB
222TML

24KS

22KS

20TLC

20TEB

18TEB

22TEB

119

117

KN+95.60
24.37' LT

KN+95.60
32.37' LT

KN+85.60
32.37' LT

KN+85.60
24.37' LT

KN+49.97
24.44' LT

KN+83.50
34.01'RT

KN+49.97
34.86'RT

EXISTING GAS STATION
SIGN TO REMAIN

EXISTING LIMESTONE
WALL TO REMAIN.
DO NOT DISTURB.

SP+58.41
43.87' LT

SP+96.94
43.89' LT

SP+16.30
43.00' LT

SP+39.42
43.00' LT

SP+13.90
28.95' LT

SP+37.49
27.03' LT

SP+14.35
1.22' LT

SP+37.50
1.01' LT

218TSP

26KS

REMOVAL PLAN - STAGE 3C

MP

SS

BORE

GATE

POST

PARKING LOT

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	REMOVAL PLAN - STAGE 3	SHEET 73	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021103-RM.DWG
LAYOUT NAME - 02-SP-01

PLOT DATE : 7/2/2025 12:57 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

W. MT VERNON AVENUE

N. 31ST STREET

N. 30TH STREET

N. 29TH STREET

W. PARK HILL AVENUE

RAMP JD

102TJD

R/L TJD

EXISTING RETAINING WALL R-40-18 (TO REMAIN)

R/L TWB

R/L TML

R/L TEB

TEB+98.26
35.43' LT

TEB+01.53
0.03' LT

IH 94 WB

IH 94 EB

111

112TWB

112TEB

113

114TWB

114TML

114TMP

114TEB

115

116TWB

116TML

116TMP

16TEB

MATCHLINE 18TEB+00

N

SLOPE INTERCEPT (TYP)

REMOVING STRUCTURE - CIP CONCRETE RETAINING WALL STA 415EW+60 TO STA 416EW+83

W. CANAL STREET

GREVES STREET

WE ENERGIES GREVES SUBSTATION

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	REMOVAL PLAN - STAGE 4	SHEET 74	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021104-RM.DWG
LAYOUT NAME - 10602709ELA-021104-rm - 01-TEB-01

PLOT DATE : 7/11/2025 11:01 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

N. 25TH STREET

W. CLYBOURN STREET

W. ST PAUL AVENUE

GREVES STREET

IH 94 WB

IH 94 EB

RAMP LC

R/L KN

R/L SP

R/L TWB

R/L TML

R/L TEB

R/L TSP

R/L TLC

R/L KS

R/L SP

EXISTING RETAINING WALL R-40-18 (TO REMAIN)

EXISTING RETAINING WALL R-40-43 (TO REMAIN)

EXISTING BRIDGE B-40-43

EXISTING BRIDGE B-40-57

EXISTING BRIDGE B-40-513_005

SLOPE INTERCEPT (TYP)

TEB+06.20
41.11' LT

TEB+00.14
3.18' LT

TEB+23.66
111.44' RT

MATCHLINE 18TEB+00

MILWAUKEE VALLEY DECORATIVE SIGN

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	REMOVAL PLAN - STAGE 4	SHEET 75	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021104-RM.DWG
LAYOUT NAME - 10602709ELA-021104-rm - 01-TEB-02

PLOT DATE : 4/26/2025 8:03 PM PLOT BY : SCHARLAU, DAVE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

PLAN DETAIL LEGEND

- CP03 HPC PAVEMENT 9-INCH, DOWELED
- CP04 CONCRETE PAVEMENT REPLACEMENT
- AP01 HMA PAVEMENT 4 MT 58-28 S, 2-INCH, HMA PAVEMENT 3 MT 58-28 S, 3 INCH
- AP02 HMA PAVEMENT 4 HT 58-28 H, 2-INCH, HMA PAVEMENT 3 HT 58-28 S, 2 3/4-INCH, HMA PAVEMENT 3 HT 58-28 S, 2 3/4-INCH
- AP03 REMOVING ASPHALTIC SURFACE MILLING, 2-INCH HMA PAVEMENT 4 MT 58-28S, 2 -INCH,
- AP05 REMOVING ASPHALTIC SURFACE MILLING 2 1/2-INCH HMA PAVEMENT 4 MT 58-28S, 2 1/2-INCH
- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AG02 BASE AGGREGATE DENSE 1 1/4-INCH
- PV01 CONCRETE PAVEMENT APPROACH SLAB
- PV04 TACTILE DIRECTIONAL INDICATORS
- PV11 ASPHALTIC SURFACE, 5-INCH
- CG01 CURB RAMP TYPE 1
- CG03 CURB RAMP TYPE 2
- CG04 CURB RAMP TYPE 3
- CG07 CURB RAMP TYPE 4B
- CG10 CURB RAMP TYPE 6
- CG14 CONCRETE CURB PEDESTRIAN
- CG18 CONCRETE CURB AND GUTTER 31-INCH
- CG24 CONCRETE CURB AND GUTTER 18-INCH TYPE A
- CG33 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
- IIIIIII REVERSE SLOPE CURB AND GUTTER
- CM01 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CM02 CONCRETE MEDIAN SLOPED NOSE TYPE 2
- CM03 CONCRETE SIDEWALK 5-INCH
- CM05 CONCRETE STEPS
- CM08 COLORING CONCRETE CUSTOM
- DR02 CONCRETE DRIVEWAY 7-INCH
- DR06 CONCRETE DRIVEWAY HES 7-INCH
- CB25 CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE
- CB100 CONCRETE BARRIER TRANSITION TYPE S1
- CB101 CONCRETE BARRIER TRANSITION TYPE S2
- BG06 CRASH CUSHION TEMPORARY LOW MAINTENANCE LEFT IN PLACE
- SW01 SAWING ASPHALT
- SW02 SAWING CONCRETE
- LS01 SOD LAWN
- BS01 BUS STOP
- GS01 GLARE SCREENS TEMPORARY LEFT IN PLACE
- RG05 RAMP CLOSURE GATES 32-FT
- RG06 RAMP CLOSURE GATES 37-FT

NOTES:

CURB AND GUTTER RADIUS AND ANGLE POINT OFFSET ARE MEASURED TO FLANGE LINE, UNLESS OTHERWISE NOTED.

FULL WIDTH SIDEWALK DIMENSIONS AND TERRACE DIMENSIONS ARE MEASURED TO FACE OF CURB.

ADDITIONAL LAYOUT INFORMATION FOR CURB RAMPS IN CURB RAMP DETAIL SHEETS.

STORM SEWER INLETS AND MANHOLES SHOWN ALONG IH 94 WB NOT WITHIN THE PROPOSED PAVEMENT WILL REQUIRE SAWING CONCRETE, REMOVING CONCRETE PAVEMENT, SELECT CRUSHED MATERIAL, BASE AGGREGATE DENSE 1 1/4-INCH, AND HMA PAVEMENT.

NOTE

CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE STATION/OFFSET ARE CALLED OUT TO THE CENTER OF TEMPORARY BARRIER

LEGEND

HMA PAVEMENT

REMOVING ASPHALTIC SURFACE MILLING, 2 1/2-INCH
HMA PAVEMENT 4 MT 58-28S, 2 1/2-INCH

RAMP JD

R/L TJD

N

TRANSITION TO RIGID BARRIER (INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE)

TWB+98.02 0.00'

TWB+98.02 4.08' RT

TWB+15.81 0.00'

CB25

TWB+97.95 0.00'

R/L TWB

GS01

R/L TML

IH 94 WB

SW02

111TWB

112TWB

113TWB 213TML

114TWB 214TML

115TWB 215TML

116TW 216TM

AP02

MATCHLINE 10TEB+25

MATCHLINE 16TEB+00

11TEB

12TEB

13TEB

14TEB

15TEB

16T

BEGIN PROJECT
STA 10TEB+95.49
MATCH EXISTING
SAW CUT REQ'D

TWB+98.02 12.05' RT

TWB+15.81 12.00' RT

R/L TEB

TWB+97.95 12.00' RT

IH 94 EB

49'

TEB+74.24 32.53' RT

SW02

TEB+82.59 38.99' RT

TEB+43.01 47.00' RT

TEB+74.24 49.00' RT

FENCE CHAIN LINK - SEE FENCING PLAN FOR ADDITIONAL DETAILS

SLOPE INTERCEPT (TYP)

CB25

3'

AG02

AP02

"IH 94 INTERIM GRADING NEAR RETAINING WALLS"

SEE CONSTRUCTION DETAIL

FENCE SAFETY LEFT IN PLACE - SEE FENCING PLAN FOR ADDITIONAL DETAILS

SIGN

R-40-767 (STAGE 1)

R-40-761

SEE MAINTENANCE ACCESS PATH DETAIL

R/L TWB

R/L TEB

MATCHLINE 10TEB+25

IH 94 EB

N = 297251.737
E = 594532.640

N = 297276.249
E = 594596.771

CC

BG06

CB25

N

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 77	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021201-PD.DWG
LAYOUT NAME - 01-ELA1-01

PLOT DATE : 4/26/2025 8:05 PM PLOT BY : SCHARLAU, DAVE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

NOTES

- EACH TRAFFIC CONTROL BARRICADES TYPE III LEFT IN PLACE IS TO BE PROVIDED WITH TWO (2) TRAFFIC CONTROL WARNING LIGHTS TYPE A LEFT IN PLACE.
- USE SIGN R11-2L 48" X 30" (LANE CLOSED) AS TRAFFIC CONTROL SIGNS LEFT IN PLACE.

LEGEND

HMA PAVEMENT

REMOVING ASPHALTIC SURFACE MILLING, 2 1/2-INCH
HMA PAVEMENT 4 MT 58-28S, 2 1/2-INCH

EXISTING RETAINING WALL R-40-18 TO REMAIN

EX R-40-10 TO BE PARTIALLY REMOVED
SEE CONSTRUCTION DETAIL "EXISTING R-40-10 PARTIAL REMOVAL"

IH 94 WB

IH 94 EB

N 27TH STREET

RAMP LC

B-40-1083 NORTH ABUTMENT

TEMPORARY SHORING LEFT IN PLACE

TEMPORARY SHORING LEFT IN PLACE

TRAFFIC CONTROL BARRICADE TYPE III LEFT IN PLACE.

TRAFFIC CONTROL BARRICADE TYPE III LEFT IN PLACE AND TRAFFIC CONTROL SIGNS LEFT IN PLACE.

SEE POINT TABLE ON NEXT SHEET FOR ADDITIONAL POINT INFORMATION

BEG GS01
STA TWB+75.75
8.81' RT

END GS01
STA TWB+75.70
12.26' RT

7.2:1 TAPER

6:1 TAPER

12.5:1 TAPER

THRIE BEAM CONNECTION TO CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE

FENCE CHAIN LINK - SEE FENCING PLAN FOR ADDITIONAL DETAILS

FENCE SAFETY LEFT IN PLACE - SEE FENCING PLAN FOR ADDITIONAL DETAILS

SEE MAINTENANCE ACCESS PATH DETAIL

R-40-767 (STAGE 1)

R-40-761

"IH 94 INTERIM GRADING NEAR RETAINING WALLS"

SEE CONSTRUCTION DETAIL

MATCHLINE 16TEB+00

MATCHLINE 22TEB+00

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 78 E

RADIUS TABLE					
POINT	STATION	OFFSET	STATION	OFFSET	RADIUS
TEB-1	17TEB+06.42	2023.74 LT	N/A	N/A	210.32'
TLC-1	22TLC+88.45	300.00 LT	N/A	N/A	310'
TLC-2	23TLC+56.31	225.50 LT	N/A	N/A	205'
TLC-3	22TLC+98.03	300.00 LT	N/A	N/A	279'

N. 27TH STREET
B-40-1083 NORTH ABUTMENT
EXISTING B-40-43 WINGWALL TO REMAIN
W. ST PAUL AVENUE
EXISTING BRIDGE B-40-57
N. 26TH STREET
IH 94 WB
IH 94 EB
RAMP LC
TRANSITION TO RIGID BARRIER (INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE)
TRAFFIC CONTROL BARRICADE TYPE III LEFT IN PLACE AND TRAFFIC CONTROL SIGNS LEFT IN PLACE.
TEMPORARY SHORING LEFT IN PLACE
TRAFFIC CONTROL BARRICADE TYPE III LEFT IN PLACE.
TEMPORAY SHORING LEFT IN PLACE
EXISTING B-40-57 WINGWALL TO BE REMOVED
FENCE SAFETY LEFT IN PLACE - SEE FENCING PLAN FOR ADDITIONAL DETAILS
FENCE CHAIN LINK - SEE FENCING PLAN FOR ADDITIONAL DETAILS
SLOPE INTERCEPT (TYP)
MATCHLINE 22TEB+00

END PROJECT
STA 25TEB+54.89
MATCH EXISTING
SAW CUT REQ'D
EXISTING B-40-57 EAST ABUTMENT

END CONSTRUCTION
STA 25TLC+00.77
MATCH EXISTING
SAW CUT REQ'D

LEGEND
- HMA PAVEMENT
- REMOVING ASPHALTIC SURFACE MILLING, 2 1/2-INCH HMA PAVEMENT 4 MT 58-28S, 2 1/2-INCH

NOTES
- EACH TRAFFIC CONTROL BARRICADES TYPE III LEFT IN PLACE IS TO BE PROVIDED WITH TWO (2) TRAFFIC CONTROL WARNING LIGHTS TYPE A LEFT IN PLACE.
- USE SIGN R11-2L 48" X 30" (LANE CLOSED) AS TRAFFIC CONTROL SIGNS LEFT IN PLACE.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 79	E

2

N

BEGIN CONSTRUCTION
STA 10J+50.42

END CONSTRUCTION
BEGIN MILL AND OVERLAY
STA 13J+05.00
SAW CUT REQ'D

END MILL AND OVERLAY
STA 14J+60.00
MATCH EXISTING
BUTT JOINT REQ'D

REMOVE, SALVAGE
AND RESET BOULDER

SLOPE INTERCEPT (TYP)

N. 28TH STREET

W. CLYBOURN STREET

W. ST PAUL AVENUE

R/L TJD

R/L SP

R/L J

J+35.83
64.36' LT

J+35.84
59.36' LT

J+87.84
59.50' LT

J+52.95
17.91' LT

J+18.26
35.50' LT

J+48.57
18.00' LT

J+53.03
12.01' RT

J+58.03
17.00' RT

J+36.06
24.00' RT

J+36.08
29.00' RT

J+05.00
24.50' LT

J+05.00
18.00' LT

J+05.00
17.00' RT

J+05.00
24.00' RT

11J

12J

13J

14J

CM03

J-3

LS01

SW02

CG18

J-2

J-1

CP03

DR02

AP03

5'

18'

17'

14'

12SP

13SP

14SP

15SP

SAN

INL

MH

W

RADIUS TABLE					
POINT	STATION	OFFSET	STATION	OFFSET	RADIUS
J-1	10J+57.99	12.00 RT	N/A	N/A	5'
J-2	10J+87.93	18.00 LT	N/A	N/A	35'
J-3	11J+48.57	53.00 LT	N/A	N/A	35'

NOTE:
CURB AND GUTTER RADII ARE MEASURED
TO THE FLANGE OF THE CURB AND GUTTER.

LEGEND
HMA PAVEMENT

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 80	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021201-PD.DWG
LAYOUT NAME - 02-J-01
PLOT DATE : 4/26/2025 8:06 PM
PLOT BY : SCHARLAU, DAVE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

MATCHLINE 16SP+00

N

EXISTING RETAINING WALL
R-40-18 TO REMAIN

MINOR RETAINING WALL
SEE CONSTRUCTION DETAILS

EXISTING GAS STATION
SIGN TO REMAIN

END CONSTRUCTION
STA 27KN+49.97
MATCH EXISTING
SAW CUT REQ'D

END CONSTRUCTION
STA 219TSP+37.50
MATCH EXISTING
SAW CUT REQ'D

EXISTING B-40-43
WINGWALL TO REMAIN

FENCE CHAIN LINK -
SEE FENCING PLAN FOR
ADDITIONAL DETAILS

SLOPE INTERCEPT (TYP)

EXISTING BRIDGE B-40-57

B-40-1083

R-40-767 (STAGE 1)

N. 27TH STREET

W. ST PAUL AVENUE

IH 94 EB

IH 94 WB

RAMP LC

R/L KS

R/L TWB

R/L TML

R/L TEB

R/L TLC

R/L SP

R/L KN

R/L TSP

NOTE:
CURB AND GUTTER RADII ARE MEASURED TO THE FLANGE OF THE CURB AND GUTTER.

LEGEND

HMA PAVEMENT

REMOVING ASPHALTIC SURFACE MILLING, 2 1/2-INCH
HMA PAVEMENT 4 MT 58-28S, 2 1/2-INCH

RADIUS TABLE					
POINT	STATION	OFFSET	STATION	OFFSET	RADIUS
S1-1	26KS+18.30	49.00 LT	17SP+32.32	47.00 RT	20.00'
S1-2	27KN+17.13	57.00 LT	17SP+14.75	52.00 LT	35.00'
S1-3	27KN+94.98	104.34 RT	18SP+76.29	129.42 LT	105.00'
S1-4	27KN+44.97	82.50 LT	18SP+54.32	79.47 LT	50.00'
S1-5	26KS+16.68	61.00 RT	18SP+42.32	48.60 RT	25.00'
S1-6	25KS+77.01	51.00 RT	18SP+32.33	88.27 RT	15.00'
S1-7	27KN+20.15	51.00 LT	17SP+20.76	55.00 LT	19.00'
S1-8	16SP+97.81	37.92 LT	17KN+14.75	73.90 LT	5.50'
S1-9	16SP+59.43	37.63 LT	27KN+02.62	112.28 LT	3.00'
S1-10	16SP+39.10	37.21 LT	27KN+02.15	132.61 LT	3.00'

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 81	E

2

BEGIN CONSTRUCTION
STA 10SP+28.48
MATCH EXISTING
SAW CUT REQ'D

MATCH EXISTING.
BUTT JOINT REQUIRED.

N. 28TH STREET

W. ST PAUL AVENUE

N. 29TH STREET

MATCH EXISTING.
BUTT JOINT REQUIRED.

RAMP JD

CURB TRANSITION

FENCE CHAIN LINK -
SEE FENCING PLAN FOR
ADDITIONAL DETAILS

8:1 TAPER

SLOPE INTERCEPT (TYP)

CURB HEAD IS DEPRESSED FROM STA 103TJD+21.99
TO STA 103TJD+97.91. SEE CONSTRUCTION DETAIL FOR
ADDITIONAL INFORMATION.

NOTE:
CURB AND GUTTER RADII ARE MEASURED
TO THE FLANGE OF THE CURB AND GUTTER.

LEGEND
- HMA PAVEMENT
- CONCRETE PAVEMENT REPLACEMENT

RADIUS TABLE					
POINT	STATION	OFFSET	STATION	OFFSET	RADIUS
S2-1	10SP+35.45	33.00 LT	N/A	N/A	15'
S2-2	10SP+92.94	31.00 LT	N/A	N/A	15'
S2-3	12SP+73.86	583.00 RT	N/A	N/A	600'
S2-4	12SP+71.91	37.00 RT	N/A	N/A	10'
S2-5	14SP+80.18	210.13 RT	102TJD+45.00	270.00 RT	260'
S2-6	11SP+41.83	80.77 RT	103TJD+38.40	80.00 LT	50'
S2-7	10SP+91.86	42.36 RT	N/A	N/A	15'
S2-8	10SP+35.89	33.00 RT	N/A	N/A	15'
S2-9	12SP+23.35	53.38 RT	N/A	N/A	4'

MATCHLINE 16SP+00

MATCHLINE 101TJD+75

BEGIN CONSTRUCTION
STA 100TJD+72.50
MATCH EXISTING
SAW CUT REQ'D

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 82	E

2

B-40-50 (EXISTING)

WB RESURFACING BEGINS
STA 374EW+40
MILL 2 1/2" EXISTING HMA PAVEMENT
PLACE 2 1/2" HMA PAVEMENT 4 MT 58-28 S
BUTT JOINT REQ'D

W. MT VERNON AVENUE

N. 35TH STREET

N. 34TH STREET

N. 33RD STREET

N. 32ND STREET

N. 31ST STREET

N

48'

380EW

60'

MATCH EXISTING
BUTT JOINT REQ'D

AP05

48'

MATCH EXISTING
BUTT JOINT REQ'D

55'

MATCHLINE 415EW+00

EB RESURFACING BEGINS
STA 374EW+96
MILL 2 1/2" EXISTING HMA PAVEMENT
PLACE 2 1/2" HMA PAVEMENT 4 MT 58-28 S
BUTT JOINT REQ'D

390EW

400EW

410EW

44'

MENOMONEE RIVER

B-40-49 (EXISTING)

36'

MATCH EXISTING
BUTT JOINT REQ'D

AP05

MATCH EXISTING
BUTT JOINT REQ'D

STRUCTURE B-40-33
STA 408EW+95 TO STA 410EW+43
EXCEPTION TO MILL & OVERLAY LENGTH

CANAL STREET

CPKC RAILROAD

NOTES
MILL AND OVERLAY IH 94 HMA PAVEMENT.

MILL AND OVERLAY ON RAMPS BEGINS/ENDS AT
PHYSICAL GORE OR AS DIRECTED BY THE ENGINEER.

W. CLYBOURN STREET

N. 30TH STREET

N. 29TH STREET

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

AP05

48'

440EW

36'

MATCH EXISTING
BUTT JOINT REQ'D

60'

WB RESURFACING ENDS
STA 456EW+27
BUTT JOINT REQ'D

450EW

IH 94

460EW

48'

EB RESURFACING ENDS
STA 459EW+80
BUTT JOINT REQ'D

W. ST PAUL AVENUE

N

N. 25TH STREET

430EW

MATCH EXISTING
BUTT JOINT REQ'D

44'

AP05

GREVES STREET

420EW

36'

R-40-767 (STAGE 1)

R-40-761

MATCHLINE 415EW+00

CPKC RAILROAD

MENOMONEE RIVER

NOTES
MILL AND OVERLAY IH 94 HMA LANES.

MILL AND OVERLAY ON RAMPS BEGINS/ENDS AT
PHYSICAL GORE OR AS DIRECTED BY THE ENGINEER.

DRAINAGE STRUCTURES WITHIN TRAVEL LANES TO BE
"COVER PLATE LEFT IN PLACE IN PAVEMENT" (SEE
CONSTRUCTION DETAIL) BETWEEN STA 420EW+00 AND
STA 433EW+00 OR AS DIRECTED BY THE ENGINEER.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PLAN DETAILS - MILL AND OVERLAY	SHEET 83	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021202-PD.DWG
LAYOUT NAME - 01
PLOT DATE : 4/26/2025 8:07 PM
PLOT BY : SCHARLAU, DAVE
PLOT NAME :
PLOT SCALE : 1 IN:300 FT
WISDOT/CADDS SHEET 42

2

R/L TJD

IH 94 WB

R/L TWB

R/L TML

111TWB 112TWB 113TWB 114TWB 115TWB 116TW

213TML 214TML 215TML 216TM

11TEB 12TEB 13TEB 14TEB 15TEB 16T

IH 94 EB

R/L TEB

MATCHLINE 16TEB+00

656.16 655.67 655.13 654.58 653.88 653.15 652.44 651.62 650.71 649.78 648.84 647.94 647.16 646.31 645.51 644.56 643.65 642

656.26 655.78 655.26 654.72 654.02 653.30 652.61 651.82 650.86 649.86 648.83 647.82 646.91 645.67

2.8% 2.6% 2.5% 2.3% 2.1% 2.0% 2.0% 2.0% 1.3% 0.6% 0.1% 0.8% 1.5% 2.0%

656.00 655.52 655.00 654.46 653.76 653.04 652.35 651.56 650.60 649.60 648.57 647.56 646.65 645.67 644.84 643.86 642.90 642

2.0% 1.3% 2.0%

LEGEND

- - - - CROWN/GRADE BREAK

XXX.XX EXISTING ELEVATION

XXX.XX PROPOSED ELEVATION

NOTE:
SEE PAVING GRADE - TWB, PAVING GRADE - TML, AND PAVING GRADE - LOCAL ROADS FOR ADDITIONAL INFORMATION

R-40-767 (STAGE 1)

R-40-761

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVING GRADE - TEB & TLC	SHEET 84	E

FILE NAME : C:\USERS\NIMENNINGA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021211-PG.DWG
LAYOUT NAME - 01-ELA1-01
PLOT DATE : 4/30/2025 7:47 AM PLOT BY : NICK MENNINGA PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

IH 94 WB

IH 94 EB

N. 27TH STREET

MATCHLINE 16TEB+00

MATCHLINE 22TEB+00

R/L TWB

R/L TML

R/L TEB

R/L KS

R/L TLC

117TWB 118TWB 119TWB 120TWB 121TWB

217TML 218TML 219TML 220TML 221TML

17TEB 18TEB 19TEB 20TEB 21TEB 22

20TLC 21TLC 22TLC

23KS 24KS 25KS 22KS

RAMP LC

B-40-1083

R-40-767
(STAGE 1)

R-40-761

LEGEND

CROWN/GRADE BREAK

XXX.XX EXISTING ELEVATION

XXX.XX PROPOSED ELEVATION

NOTE:
SEE PAVING GRADE - TWB, PAVING GRADE - TML, AND PAVING GRADE - LOCAL ROADS FOR ADDITIONAL INFORMATION

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVING GRADE - TEB & TLC	SHEET 85	E

FILE NAME : C:\USERS\NIMENNINGA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021211-PG.DWG
LAYOUT NAME - 01-ELA1-02

PLOT DATE : 4/30/2025 7:48 AM PLOT BY : NICK MENNINGA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N. 27TH STREET

26KS

R/L KS

W. ST. PAUL AVENUE

19SP

219TSP

20SP

220TSP

IH 94 WB

122TWB

222TML

R/L TWB

123TWB

223TML

124TWB

224TML

125TWB

225TML

126TWB

R/L TML

IH 94 EB

R/L TEB

24TEB

25TEB

26TEB

27TEB

R/L SP

R/L TSP

MATCHLINE 22TEB+00

624.71

624.42

624.60

624.93

624.03

624.17

624.17

623.64

623.27

623.26

624.17

622.25

621.33

620.39

619.48

618.66

617.90

617.11

616.26

615.48

615.28

614.59

615.95

615.90

629.93

629.62

626.19

625.41

624.52

623.54

622.42

621.18

620.96

619.79

618.72

618.01

617.36

616.69

625.95

625.17

624.28

623.30

622.19

TEMPORARY SHORING LEFT IN PLACE

22SP

26TLC

23SP

627.20

627.44

627.57

627.74

627.87

627.54

627.67

627.88

628.08

628.39

628.20

628.61

628.79

629.11

629.28

629.71

629.86

630.32

630.45

630.86

630.98

631.34

631.45

631.75

631.85

632.10

632.18

632.38

629.64

629.98

630.58

631.14

RAMP LC

23TLC

24TLC

25TLC

R/L TLC

LEGEND

CROWN/GRADE BREAK

XXX.XX EXISTING ELEVATION

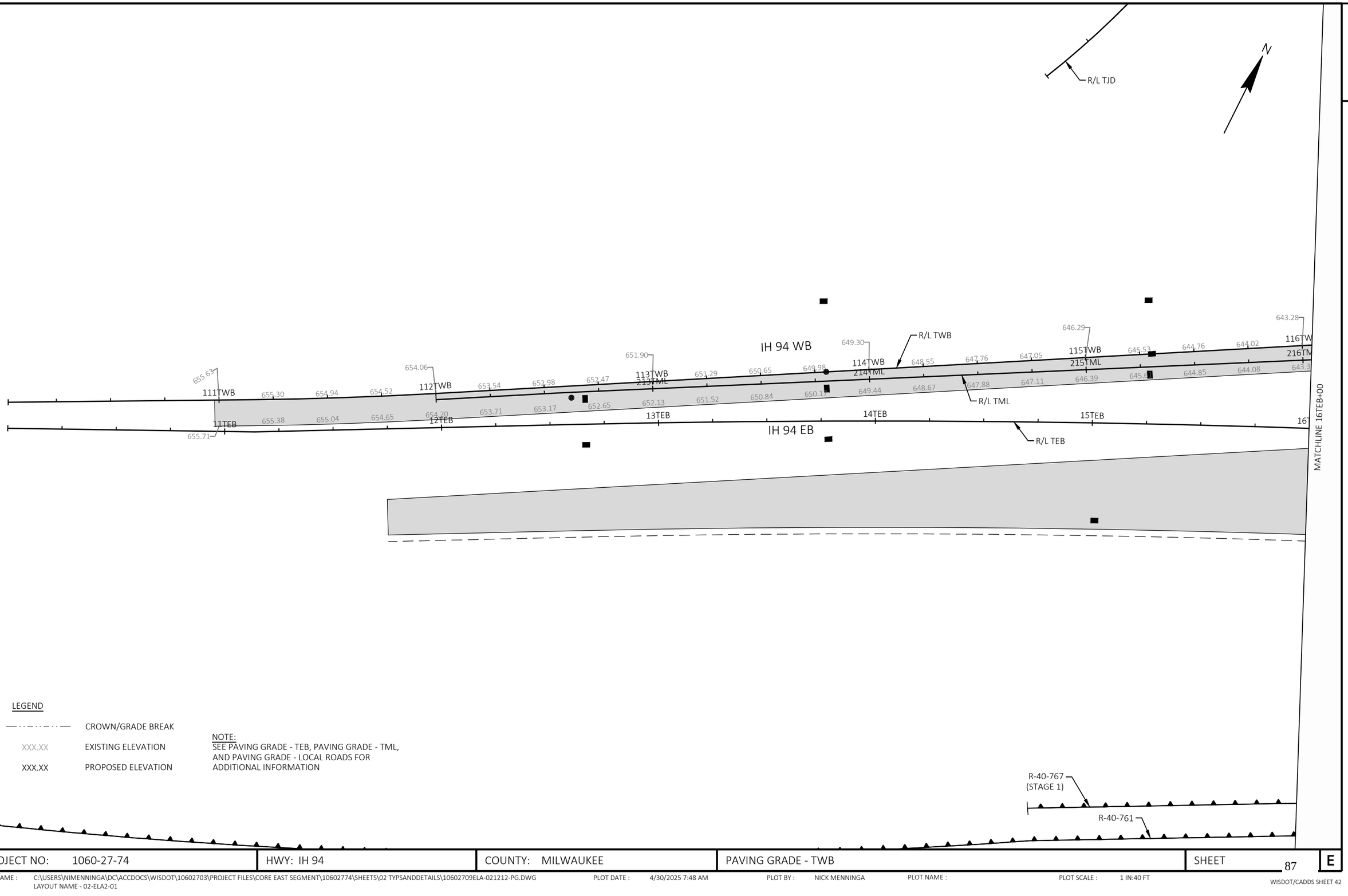
XXX.XX PROPOSED ELEVATION

NOTE:
SEE PAVING GRADE - TWB, PAVING GRADE - TML, AND PAVING GRADE - LOCAL ROADS FOR ADDITIONAL INFORMATION

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVING GRADE - TEB & TLC	SHEET 86	E

FILE NAME : C:\USERS\NIMENNINGA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021211-PG.DWG
LAYOUT NAME - 01-ELA1-03
PLOT DATE : 4/30/2025 7:48 AM
PLOT BY : NICK MENNINGA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



LEGEND

—·–·–·—	CROWN/GRADE BREAK
XXX.XX	EXISTING ELEVATION
XXX.XX	PROPOSED ELEVATION

NOTE:
SEE PAVING GRADE - TEB, PAVING GRADE - TML, AND PAVING GRADE - LOCAL ROADS FOR ADDITIONAL INFORMATION

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVING GRADE - TWB	SHEET 87	E

FILE NAME : C:\USERS\NIMENNINGA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021212-PG.DWG
LAYOUT NAME - 02-ELA2-01
PLOT DATE : 4/30/2025 7:48 AM
PLOT BY : NICK MENNINGA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

IH 94 WB

IH 94 EB

N

R/L TWB

R/L TML

R/L TEB

R/L KS

MATCHLINE 16TEB+00

MATCHLINE 22TEB+00

117TWB 118TWB 119TWB 120TWB 121TWB

217TML 218TML 219TML 220TML 221TML

17TEB 18TEB 19TEB 20TEB 21TEB 22

642.53 641.77 641.00 639.47 638.74 637.99 636.46 635.71 635.03 633.59 632.88 632.09 630.57 629.85 629.10 628.38 627.58 626.79 626.01

640.20 637.20 634.33 631.33

642.53 641.85 641.08 640.33 639.54 638.79 638.04 637.29 636.54 635.77 634.95 634.08 633.17 632.21 631.20 630.19 629.26 628.43 627.69 627.04 626.48 625.98 625.45

640.25

634.11 631.70 630.95 630.23 629.48 628.77 627.97 627.17 626.39

0.7% 0.9% 1.1% 1.7% 2.4% 3.2% 3.5%

640.37 639.77 639.12 638.62 638.15 637.74 637.14 636.47 635.76 635.03 634.30 633.50 632.73 631.95 631.21 630.43 629.68 628.85 628.02 627.19

640.34 639.70 638.98 638.34 637.72 637.10 636.47 635.83 635.19 634.51 633.78 633.09 632.31 631.52 630.74 630.03 629.29 628.49 627.68 626.91

25KS

24KS

N. 27TH STREET

B-40-1083 PIER 3

B-40-1083 PIER 2

20TLC 21TLC 22TLC

23KS

RAMP LC

R/L TLC

22KS

R-40-767
(STAGE 1)

R-40-761

LEGEND

CROWN/GRADE BREAK

XXX.XX EXISTING ELEVATION

XXX.XX PROPOSED ELEVATION

NOTE:
SEE PAVING GRADE - TEB, PAVING GRADE - TML, AND PAVING GRADE - LOCAL ROADS FOR ADDITIONAL INFORMATION

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVING GRADE - TWB	SHEET 88	E

FILE NAME : C:\USERS\NIMENNINGA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021212-PG.DWG
LAYOUT NAME - 02-ELA2-02

PLOT DATE : 4/30/2025 7:48 AM PLOT BY : NICK MENNINGA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

N. 27TH STREET

26KS

R/L KS

19SP

21STSP

W. ST. PAUL AVENUE

20SP

22DTSP

IH 94 WB

122TWB

625.30 624.49 623.65 623.93

123TWB

622.21 621.40 620.67 619.92 618.40

124TWB

619.21 617.68

125TWB

222TML 625.66 624.87 624.76 624.25 623.83 623.59 622.88

223TML

622.12 621.41 620.68 619.98 619.26 618.49 617.89

224TML

618.36 617.80

225TML

126TWB

626.41 625.44 624.42 623.51 622.80

626.11 625.25 624.36 623.50 622.85

3.5%

3.7%

R/L TWB

R/L TML

IH 94 EB

R/L TEB

EB

23TEB

24TEB

25TEB

25TML

26TEB

27TEB

R/L SP

R/L TSP

MATCHLINE 22TEB+00

MATCH EXISTING

TEMPORARY SHORING LEFT IN PLACE

22SP

26TLC

25TLC

23TLC

24TLC

RAMP LC

R/L TLC

23SP

LEGEND

CROWN/GRADE BREAK

XXX.XX EXISTING ELEVATION

XXX.XX PROPOSED ELEVATION

NOTE:
SEE PAVING GRADE - TEB, PAVING GRADE - TML, AND PAVING GRADE - LOCAL ROADS FOR ADDITIONAL INFORMATION

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVING GRADE - TWB	SHEET 89	E

FILE NAME : C:\USERS\NIMENNINGA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021212-PG.DWG
LAYOUT NAME - 02-ELA2-03
PLOT DATE : 4/30/2025 7:48 AM
PLOT BY : NICK MENNINGA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

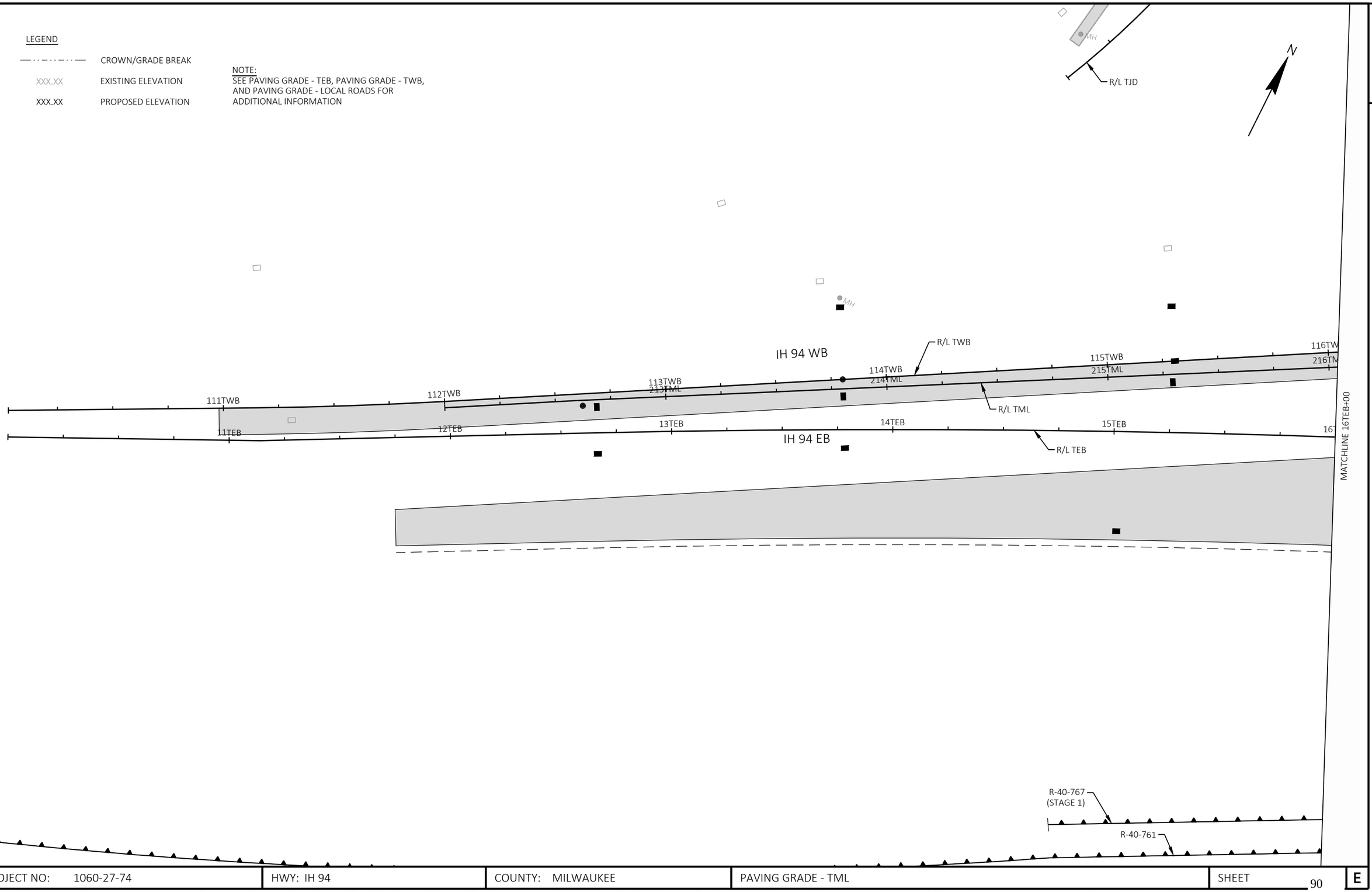
LEGEND

CROWN/GRADE BREAK

XXX.XX EXISTING ELEVATION

XXX.XX PROPOSED ELEVATION

NOTE:
SEE PAVING GRADE - TEB, PAVING GRADE - TWB, AND PAVING GRADE - LOCAL ROADS FOR ADDITIONAL INFORMATION



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVING GRADE - TML	SHEET 90	E

LEGEND

CROWN/GRADE BREAK

XXX.XX EXISTING ELEVATION

XXX.XX PROPOSED ELEVATION

NOTE:
SEE PAVING GRADE - TEB, PAVING GRADE - TWB, AND PAVING GRADE - LOCAL ROADS FOR ADDITIONAL INFORMATION

IH 94 WB

IH 94 EB

N. 27TH STREET

RAMP LC

R/L TWB

R/L TML

R/L TEB

R/L KS

R/L TLC

117TWB 118TWB 119TWB 120TWB 121TWB

217TML 218TML 219TML 220TML 221TML

17TEB 18TEB 19TEB 20TEB 21TEB 22

20TLC 21TLC 22TLC

22KS 23KS 24KS

MATCHLINE 16TEB+00

MATCHLINE 22TEB+00

B-40-1083

R-40-767
(STAGE 1)

R-40-761

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVING GRADE - TML	SHEET 91	E

FILE NAME : C:\USERS\NIMENNINGA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021213-PG.DWG
LAYOUT NAME - 02

PLOT DATE : 4/30/2025 7:49 AM PLOT BY : NICK MENNINGA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

CROWN/GRADE BREAK

XXX.XX EXISTING ELEVATION

XXX.XX PROPOSED ELEVATION

NOTE:
SEE PAVING GRADE - TEB, PAVING GRADE - TWB, AND PAVING GRADE - LOCAL ROADS FOR ADDITIONAL INFORMATION

N

N. 27TH STREET

26KS

R/L KS

19SP

219TSP

W. ST. PAUL AVENUE

20SP

220TSP

621.95

624.49

624.73

623.88

623.39

623.51

622.90

623.23

IH 94 WB

122TWB

123TWB

R/L TWB

124TWB

124TML

223TML

R/L TML

125TWB

225TML

126TWB

624.87

624.25

623.59

622.88

625.66

625.03

624.37

623.65

623.15

626.10

625.39

624.64

3.0%

26'

15'

1.9%

1.0%

IH 94 EB

R/L TEB

24TEB

25TEB

225TEB

26TEB

27TEB

23TEB

EB

R/L SP

R/L TSP

MATCHLINE 22TEB+00

TEMPORARY SHORING LEFT IN PLACE

26TLC

23SP

23TLC

25TLC

RAMP LC

24TLC

R/L TLC

23SP

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVING GRADE - TML	SHEET 92	E

FILE NAME : C:\USERS\NIMENNINGA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021213-PG.DWG
LAYOUT NAME - 03
PLOT DATE : 4/30/2025 7:49 AM PLOT BY : NICK MENNINGA PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

103TJD

104TJD

R/L TJD

RAMP JD

13SP

14SP

15SP

R/L SP

W ST. PAUL AVENUE

N. 28TH STREET

R/L J

11J

12J

13J

14J

5' 11' 11' 6' 11'

6' 12' 12' 6'

MILL AND OVERLAY,
MATCH EXISTING ELEVATIONS

NOTES:
SEE PAVING GRADE - TEB, PAVING GRADE - TWB, AND PAVING GRADE - TML FOR ADDITIONAL INFORMATION

PAVING GRADES ON MILL AND OVERLAY PORTION OF 28TH STREET ARE NOT PROVIDED. MATCH EXISTING.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVING GRADE - LOCAL ROADS	SHEET 93	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021214-PG.DWG
LAYOUT NAME - 01-J-01
PLOT DATE : 7/24/2025 3:59 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

CONCRETE PAVEMENT REPLACEMENT,
MATCH EXISTING ELEVATIONS

N. 28TH STREET

R/L J

N. 29TH STREET

R/L TJD

R/L SP

W. ST. PAUL AVENUE

RAMP JD

103TJD

102TJD

101TJD

11SP

12SP

13SP

14SP

15SP

16SP

MATCHLINE 16SP+40

MATCHLINE 101TJD+60

MATCHLINE 101TJD+60

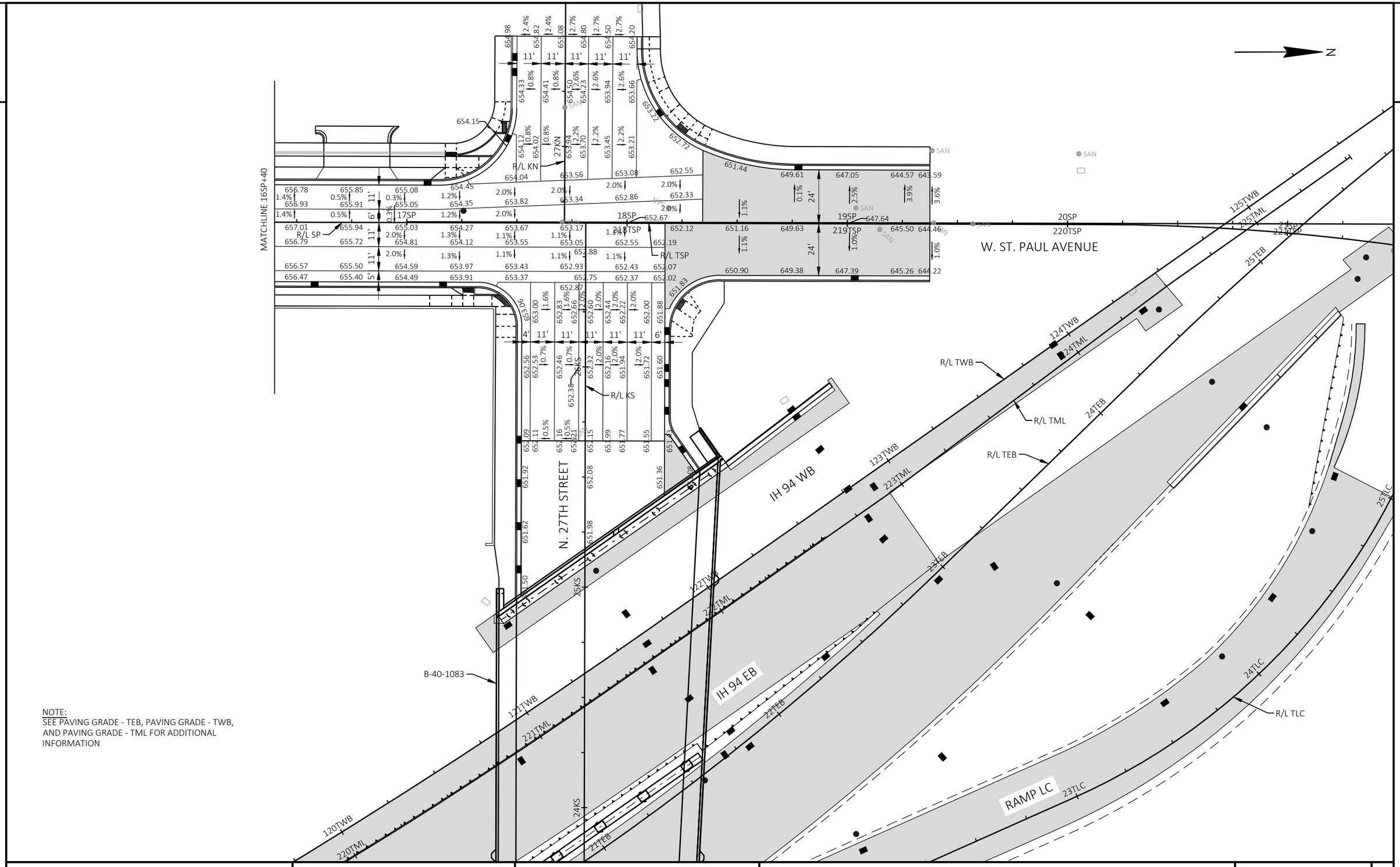
N

NOTES:
SEE PAVING GRADE - TEB, PAVING GRADE - TWB, AND PAVING GRADE - TML FOR ADDITIONAL INFORMATION

PAVING GRADES ARE NOT PROVIDED IN CONCRETE PAVEMENT REPLACEMENT PORTION OF W. ST. PAUL AVENUE. SURVEY EXISTING INTERSECTION PRIOR TO REMOVING PAVEMENT AND REPLACE PAVEMENT AT EXISTING ELEVATIONS.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVING GRADE - LOCAL ROADS	SHEET 94	E

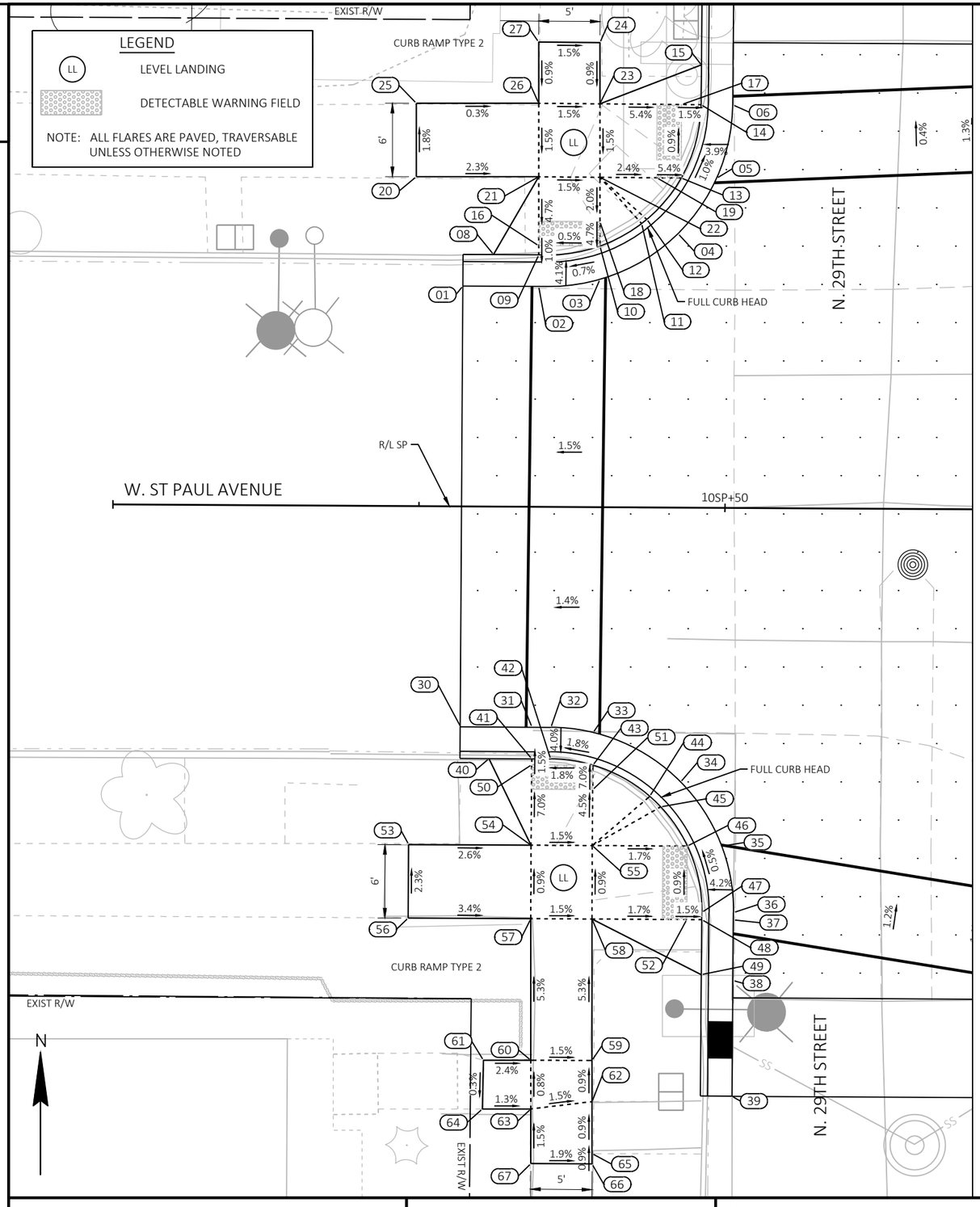
2



NOTE:
SEE PAVING GRADE - TEB, PAVING GRADE - TWB, AND PAVING GRADE - TML FOR ADDITIONAL INFORMATION

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVING GRADE - LOCAL ROADS	SHEET 95	E

FILE NAME : C:\USERS\NIMENNINGA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021214-PG.DWG
LAYOUT NAME - 03-SP-02
PLOT DATE : 4/30/2025 7:49 AM
PLOT BY : NICK MENNINGA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



SP-29-NW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
01	10+28.48	18.00' LT	669.32	298190.49	594997.24
02	10+34.68	18.00' LT	669.36	298190.45	595003.44
03	10+39.68	18.61' LT	669.38	298191.03	595008.44
04	10+46.04	22.38' LT	669.36	298194.77	595014.82
05	10+49.16	26.92' LT	669.32	298199.29	595017.97
06	10+50.45	32.91' LT	669.26	298205.28	595019.29
07	10+50.48	44.00' LT	669.05	298216.36	595019.38
08	10+30.98	20.58' LT	669.67	298193.06	594999.75
09	10+34.67	20.58' LT	669.35	298193.04	595003.44
10	10+39.66	21.32' LT	669.38	298193.75	595008.44
11	10+43.06	23.19' LT	669.78	298195.60	595011.85
12	10+43.48	23.53' LT	669.78	298195.93	595012.27
13	10+46.28	26.92' LT	669.33	298199.31	595015.09
14	10+47.86	32.92' LT	669.26	298205.30	595016.71

SP-29-NW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
15	10+47.87	36.16' LT	669.58	298208.54	595016.74
16	10+34.66	21.33' LT	669.36	298193.79	595003.44
17	10+46.28	32.92' LT	669.28	298205.31	595015.12
18	10+39.65	23.32' LT	669.48	298195.75	595008.44
19	10+44.28	26.93' LT	669.44	298199.33	595013.09
20	10+24.63	26.90' LT	669.85	298199.41	594993.44
21	10+34.63	26.96' LT	669.63	298199.41	595003.44
22	10+39.63	26.94' LT	669.55	298199.37	595008.44
23	10+39.60	32.94' LT	669.64	298205.37	595008.44
24	10+39.57	37.94' LT	669.68	298210.37	595008.44
25	10+24.60	32.90' LT	669.75	298205.41	594993.44
26	10+34.60	32.96' LT	669.72	298205.41	595003.44
27	10+34.57	37.96' LT	669.76	298210.41	595003.44

SP-29-SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
30	10+28.51	18.00' RT	669.52	298154.49	594997.07
31	10+34.34	18.00' RT	669.62	298154.46	595002.90
32	10+35.89	18.00' RT	669.65	298154.45	595004.44
33	10+39.34	18.40' RT	669.72	298154.02	595007.89
34	10+46.51	22.41' RT	669.82	298149.98	595015.03
35	10+49.89	27.63' RT	669.88	298144.74	595018.39
36	10+50.89	33.04' RT	669.91	298139.32	595019.35
37	10+50.89	33.63' RT	669.92	298138.73	595019.35
38	10+50.87	38.58' RT	669.94	298133.78	595019.30
39	10+50.85	48.04' RT	669.99	298124.32	595019.23
40	10+30.84	20.58' RT	669.98	298151.89	594999.37
41	10+34.34	20.58' RT	669.62	298151.87	595002.88
42	10+35.89	20.58' RT	669.64	298151.86	595004.43
43	10+39.34	21.07' RT	669.71	298151.36	595007.87
44	10+43.99	23.59' RT	670.22	298148.81	595012.51
45	10+44.89	24.44' RT	670.24	298147.95	595013.40
46	10+47.08	27.63' RT	669.88	298144.75	595015.58
47	10+48.30	33.03' RT	669.91	298139.34	595016.77
48	10+48.30	33.63' RT	669.91	298138.74	595016.77

SP-29-SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
49	10+48.29	38.13' RT	670.36	298134.25	595016.73
50	10+34.34	21.06' RT	669.62	298151.40	595002.87
51	10+39.33	23.07' RT	669.85	298149.36	595007.85
52	10+47.08	33.63' RT	669.93	298138.75	595015.55
53	10+24.32	27.63' RT	670.34	298144.88	594992.82
54	10+34.32	27.63' RT	670.08	298144.83	595002.82
55	10+39.32	27.63' RT	670.01	298144.80	595007.82
56	10+24.32	33.63' RT	670.48	298138.88	594992.78
57	10+34.33	33.63' RT	670.14	298138.83	595002.80
58	10+39.33	33.63' RT	670.06	298138.80	595007.80
59	10+39.40	45.18' RT	670.68	298127.24	595007.80
60	10+34.40	45.19' RT	670.75	298127.26	595002.80
61	10+30.54	45.21' RT	670.85	298127.26	594998.93
62	10+39.42	48.54' RT	670.71	298123.88	595007.80
63	10+34.42	49.17' RT	670.78	298123.29	595002.80
64	10+30.47	49.19' RT	670.84	298123.29	594998.84
65	10+39.44	52.79' RT	670.75	298119.64	595007.80
66	10+39.45	53.63' RT	670.75	298118.80	595007.80
67	10+34.45	53.63' RT	670.85	298118.82	595002.80

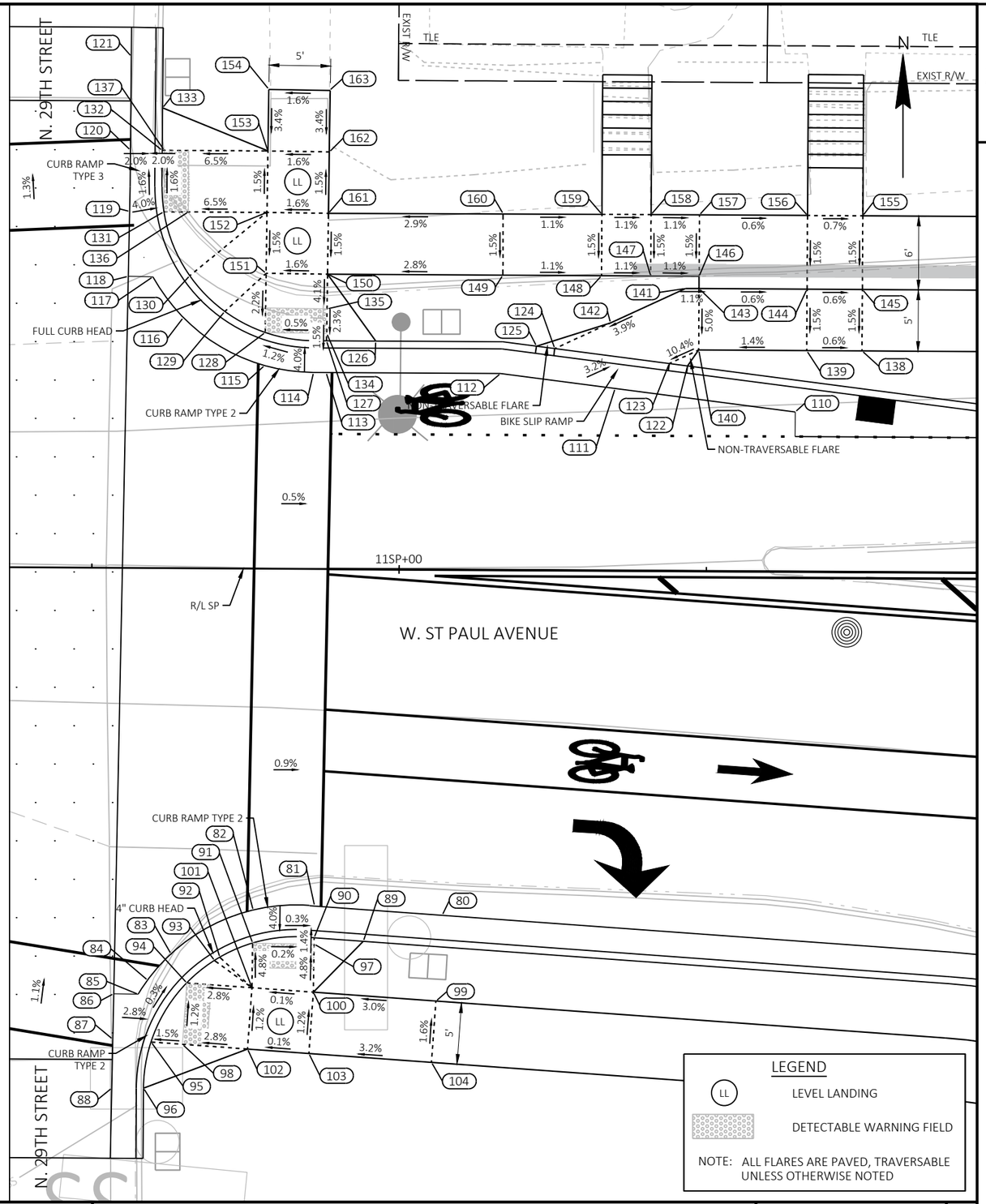
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 96	E

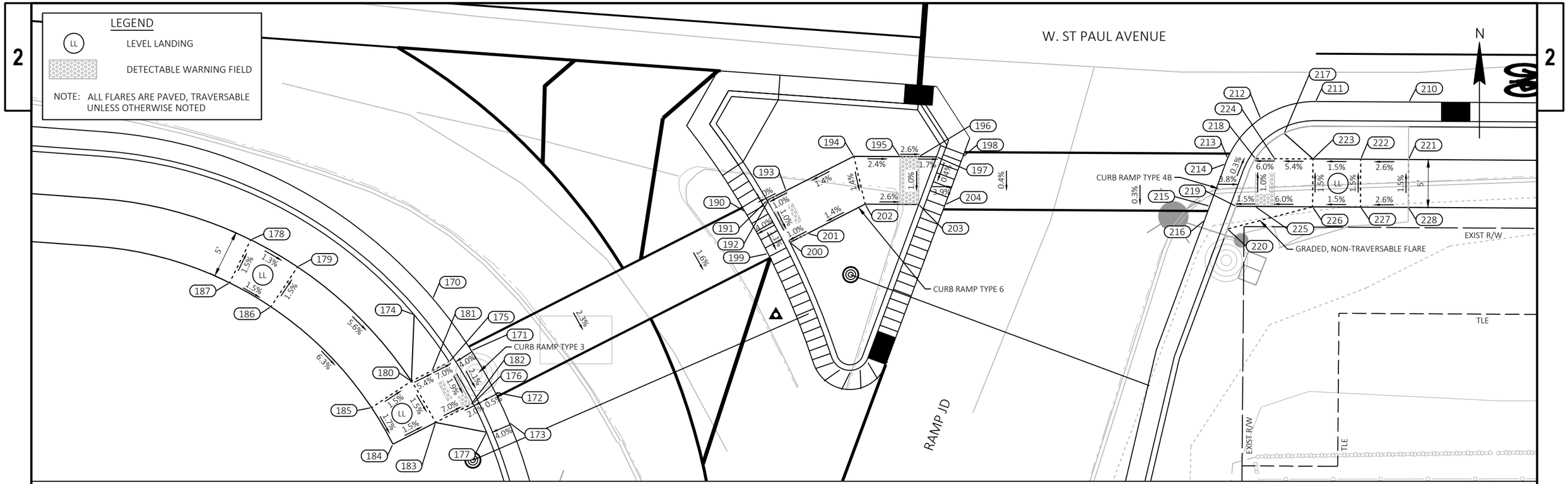
SP-29-NE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
110	11+32.16	13.00' LT	669.49	298184.89	595100.88
111	11+17.49	14.83' LT	669.66	298186.81	595086.23
112	11+08.16	16.00' LT	669.69	298188.03	595076.90
113	10+93.97	16.00' LT	669.75	298188.11	595062.71
114	10+92.94	16.00' LT	669.76	298188.12	595061.69
115	10+88.97	16.54' LT	669.75	298188.68	595057.72
116	10+82.32	20.41' LT	669.58	298192.59	595051.09
117	10+79.83	23.71' LT	669.49	298195.90	595048.63
118	10+77.83	23.74' LT	669.51	298195.94	595046.63
119	10+77.92	29.01' LT	669.37	298201.22	595046.74
120	10+77.95	34.01' LT	669.25	298206.21	595046.80
121	10+77.97	41.63' LT	669.12	298213.83	595046.86
122	11+23.38	16.70' LT	670.01	298188.64	595092.13
123	11+21.89	16.89' LT	669.61	298188.84	595090.64
124	11+12.56	18.05' LT	669.69	298190.06	595081.32
125	11+11.07	18.24' LT	670.11	298190.25	595079.83
126	10+97.99	18.58' LT	670.15	298190.67	595066.75
127	10+93.99	18.58' LT	669.75	298190.70	595062.75
128	10+89.00	19.23' LT	669.73	298191.37	595057.76
129	10+85.70	20.92' LT	670.06	298193.08	595054.47
130	10+82.82	23.80' LT	669.95	298195.98	595051.62
131	10+80.69	29.00' LT	669.37	298201.19	595049.51
132	10+80.53	34.00' LT	669.29	298206.19	595049.38
133	10+80.54	37.45' LT	669.62	298209.64	595049.41
134	10+94.00	19.18' LT	669.76	298191.29	595062.76
135	10+94.01	21.18' LT	669.81	298193.29	595062.79
136	10+82.69	29.00' LT	669.50	298201.18	595051.51

SP-29-NE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
137	10+80.69	34.00' LT	669.29	298206.19	595049.54
138	11+37.57	18.00' LT	669.97	298189.86	595106.32
139	11+33.07	18.00' LT	670.00	298189.89	595101.82
140	11+24.28	18.00' LT	669.88	298189.94	595093.03
141	11+23.17	23.00' LT	670.14	298194.94	595091.95
142	11+17.09	20.17' LT	669.88	298192.15	595085.86
143	11+24.28	23.00' LT	670.13	298194.94	595093.06
144	11+33.07	23.00' LT	670.08	298194.89	595101.85
145	11+37.57	23.00' LT	670.05	298194.86	595106.35
146	11+24.28	24.00' LT	670.15	298195.94	595093.07
147	11+20.33	24.00' LT	670.19	298195.96	595089.13
148	11+16.33	24.00' LT	670.24	298195.98	595085.13
149	11+08.31	24.00' LT	670.33	298196.03	595077.10
150	10+94.04	24.00' LT	669.92	298196.11	595062.83
151	10+89.04	24.05' LT	669.84	298196.19	595057.83
152	10+89.08	29.00' LT	669.92	298201.14	595057.91
153	10+89.13	34.00' LT	669.84	298206.14	595057.98
154	10+89.18	39.00' LT	670.01	298211.14	595058.05
155	11+37.57	29.00' LT	670.14	298200.86	595106.39
156	11+33.07	29.00' LT	670.17	298200.89	595101.89
157	11+24.28	29.00' LT	670.22	298200.94	595093.10
158	11+20.33	29.00' LT	670.27	298200.96	595089.16
159	11+16.33	29.00' LT	670.31	298200.98	595085.16
160	11+08.30	28.98' LT	670.40	298201.01	595077.12
161	10+94.08	28.95' LT	670.00	298201.06	595062.91
162	10+94.13	33.95' LT	669.92	298206.06	595062.98
163	10+94.11	38.95' LT	670.09	298211.06	595062.99

SP-29-SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
80	11+03.66	28.11' RT	669.60	298143.95	595072.15
81	10+93.29	27.42' RT	669.71	298144.70	595061.78
82	10+88.28	27.79' RT	669.72	298144.35	595056.78
83	10+81.63	31.39' RT	669.75	298140.79	595050.10
84	10+79.73	33.53' RT	669.76	298138.66	595048.20
85	10+78.98	34.68' RT	669.76	298137.52	595047.43
86	10+76.98	34.65' RT	669.72	298137.56	595045.43
87	10+76.92	38.36' RT	669.79	298133.86	595045.36
88	10+76.86	42.32' RT	669.82	298129.89	595045.28
89	10+97.25	30.27' RT	670.08	298141.82	595065.74
90	10+93.26	30.01' RT	669.71	298142.11	595061.74
91	10+88.26	30.48' RT	669.72	298141.67	595056.74
92	10+85.59	31.64' RT	669.99	298140.52	595054.07

SP-29-SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
93	10+85.17	31.90' RT	669.99	298140.26	595053.64
94	10+82.92	33.74' RT	669.75	298138.43	595051.38
95	10+80.04	38.56' RT	669.77	298133.63	595048.47
96	10+79.45	42.33' RT	670.24	298129.87	595047.86
97	10+93.26	30.53' RT	669.71	298141.59	595061.74
98	10+82.59	38.73' RT	669.80	298133.45	595051.02
99	11+03.20	35.10' RT	670.20	298136.96	595071.65
100	10+93.22	34.43' RT	669.90	298137.69	595061.68
101	10+88.22	34.10' RT	669.90	298138.05	595056.68
102	10+87.89	39.09' RT	669.96	298133.06	595056.32
103	10+92.89	39.42' RT	669.96	298132.70	595061.31
104	11+02.86	40.09' RT	670.28	298131.98	595071.29

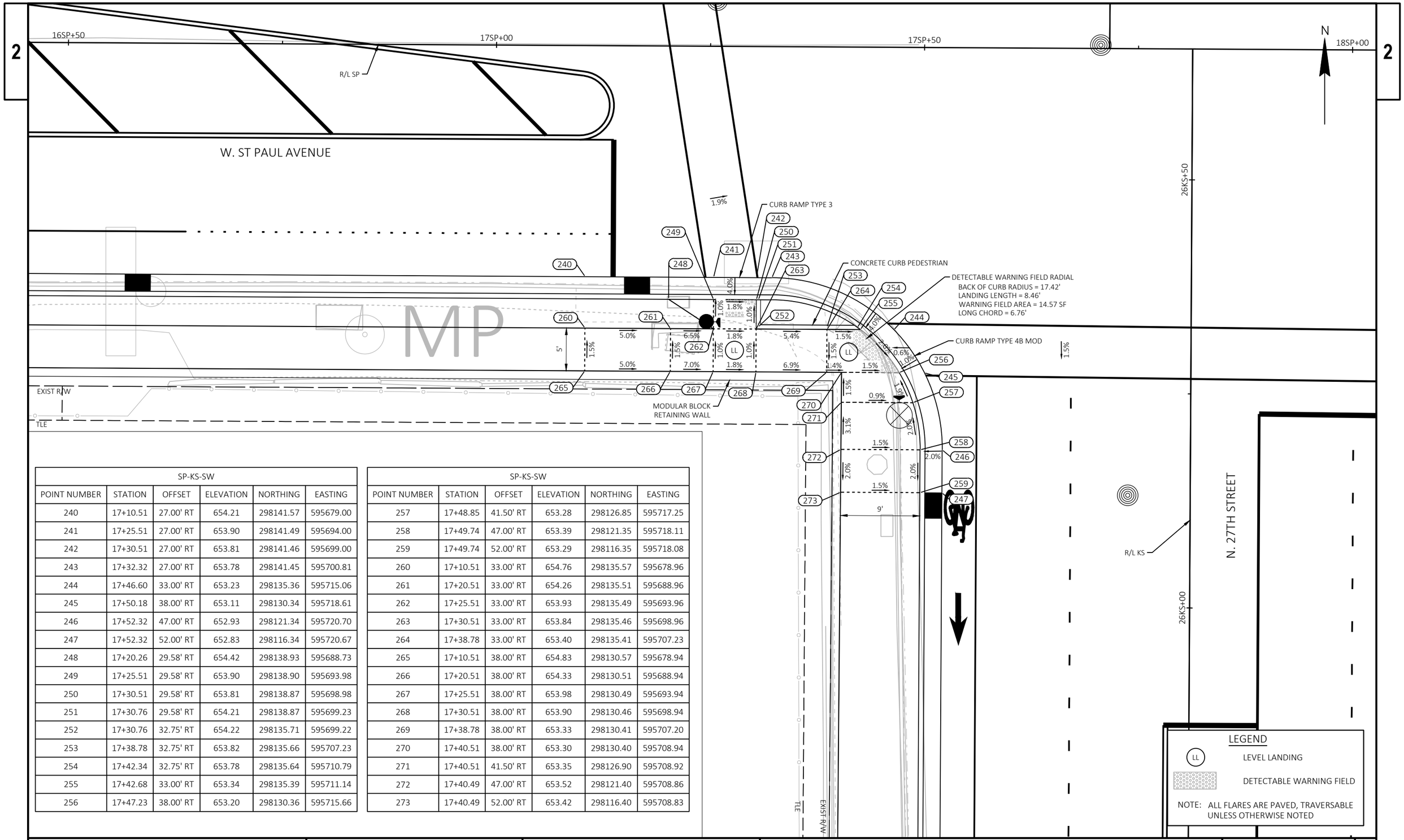




SP-JD-SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
170	11+79.71	48.13' RT	668.09	298123.49	595148.09
171	11+83.77	53.55' RT	667.89	298118.05	595152.12
172	11+86.29	57.88' RT	667.73	298113.71	595154.61
173	11+87.78	61.04' RT	667.62	298110.54	595156.08
174	11+77.75	49.82' RT	668.51	298121.82	595146.12
175	11+81.46	54.74' RT	667.90	298116.88	595149.80
176	11+83.99	59.06' RT	667.80	298112.54	595152.30
177	11+85.40	62.06' RT	668.04	298109.53	595153.70
178	11+60.63	42.09' RT	669.20	298129.64	595129.04
179	11+65.54	44.89' RT	669.12	298126.81	595133.93
180	11+77.51	56.77' RT	668.17	298114.87	595145.84
181	11+79.69	55.65' RT	668.04	298115.97	595148.02
182	11+83.75	59.18' RT	667.81	298112.42	595152.07
183	11+80.06	61.08' RT	668.10	298110.54	595148.36
184	11+75.61	63.36' RT	668.17	298108.28	595143.90
185	11+73.36	59.56' RT	668.25	298112.10	595141.67
186	11+62.78	49.06' RT	669.20	298122.65	595131.15
187	11+58.44	46.59' RT	669.27	298125.15	595126.83

SP-JD-Middle					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
190	12+12.31	38.85' RT	668.23	298132.59	595180.74
191	12+14.61	37.66' RT	668.31	298133.76	595183.04
192	12+14.80	37.56' RT	668.31	298133.86	595183.24
193	12+16.58	36.64' RT	668.33	298134.77	595185.03
194	12+23.65	33.00' RT	668.44	298138.37	595192.12
195	12+28.47	33.00' RT	668.33	298138.34	595196.94
196	12+30.47	33.00' RT	668.27	298138.33	595198.94
197	12+32.30	33.00' RT	668.24	298138.32	595200.76
198	12+35.05	33.00' RT	668.16	298138.30	595203.51
199	12+14.73	43.22' RT	668.18	298128.20	595183.14
200	12+17.03	42.04' RT	668.26	298129.37	595185.44
201	12+18.87	41.09' RT	668.28	298130.31	595187.29
202	12+24.87	38.00' RT	668.37	298133.36	595193.30
203	12+30.47	38.00' RT	668.22	298133.33	595198.91
204	12+33.22	38.00' RT	668.14	298133.31	595201.66

SP-JD-SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
210	12+81.66	27.00' RT	667.94	298144.04	595250.16
211	12+71.91	27.00' RT	667.99	298144.09	595240.41
212	12+66.18	28.81' RT	668.01	298142.32	595234.66
213	12+62.75	33.00' RT	668.02	298138.14	595231.21
214	12+62.52	33.57' RT	668.02	298137.57	595230.98
215	12+60.90	38.00' RT	668.03	298133.15	595229.33
216	12+60.36	39.49' RT	668.03	298131.67	595228.78
217	12+68.65	30.34' RT	667.99	298140.77	595237.13
218	12+65.66	33.00' RT	667.96	298138.13	595234.13
219	12+63.65	38.00' RT	667.98	298133.14	595232.08
220	12+62.79	40.37' RT	667.98	298130.77	595231.21
221	12+81.66	33.00' RT	668.50	298138.04	595250.13
222	12+76.66	33.00' RT	668.37	298138.06	595245.13
223	12+71.66	33.00' RT	668.29	298138.09	595240.13
224	12+67.66	33.00' RT	668.08	298138.12	595236.13
225	12+65.66	38.00' RT	668.01	298133.13	595234.10
226	12+71.66	38.00' RT	668.37	298133.09	595240.10
227	12+76.66	38.00' RT	668.44	298133.06	595245.10
228	12+81.66	38.00' RT	668.57	298133.04	595250.10



SP-KS-SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
240	17+10.51	27.00' RT	654.21	298141.57	595679.00
241	17+25.51	27.00' RT	653.90	298141.49	595694.00
242	17+30.51	27.00' RT	653.81	298141.46	595699.00
243	17+32.32	27.00' RT	653.78	298141.45	595700.81
244	17+46.60	33.00' RT	653.23	298135.36	595715.06
245	17+50.18	38.00' RT	653.11	298130.34	595718.61
246	17+52.32	47.00' RT	652.93	298121.34	595720.70
247	17+52.32	52.00' RT	652.83	298116.34	595720.67
248	17+20.26	29.58' RT	654.42	298138.93	595688.73
249	17+25.51	29.58' RT	653.90	298138.90	595693.98
250	17+30.51	29.58' RT	653.81	298138.87	595698.98
251	17+30.76	29.58' RT	654.21	298138.87	595699.23
252	17+30.76	32.75' RT	654.22	298135.71	595699.22
253	17+38.78	32.75' RT	653.82	298135.66	595707.23
254	17+42.34	32.75' RT	653.78	298135.64	595710.79
255	17+42.68	33.00' RT	653.34	298135.39	595711.14
256	17+47.23	38.00' RT	653.20	298130.36	595715.66

SP-KS-SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
257	17+48.85	41.50' RT	653.28	298126.85	595717.25
258	17+49.74	47.00' RT	653.39	298121.35	595718.11
259	17+49.74	52.00' RT	653.29	298116.35	595718.08
260	17+10.51	33.00' RT	654.76	298135.57	595678.96
261	17+20.51	33.00' RT	654.26	298135.51	595688.96
262	17+25.51	33.00' RT	653.93	298135.49	595693.96
263	17+30.51	33.00' RT	653.84	298135.46	595698.96
264	17+38.78	33.00' RT	653.40	298135.41	595707.23
265	17+10.51	38.00' RT	654.83	298130.57	595678.94
266	17+20.51	38.00' RT	654.33	298130.51	595688.94
267	17+25.51	38.00' RT	653.98	298130.49	595693.94
268	17+30.51	38.00' RT	653.90	298130.46	595698.94
269	17+38.78	38.00' RT	653.33	298130.41	595707.20
270	17+40.51	38.00' RT	653.30	298130.40	595708.94
271	17+40.51	41.50' RT	653.35	298126.90	595708.92
272	17+40.49	47.00' RT	653.52	298121.40	595708.86
273	17+40.49	52.00' RT	653.42	298116.40	595708.83

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 99	E

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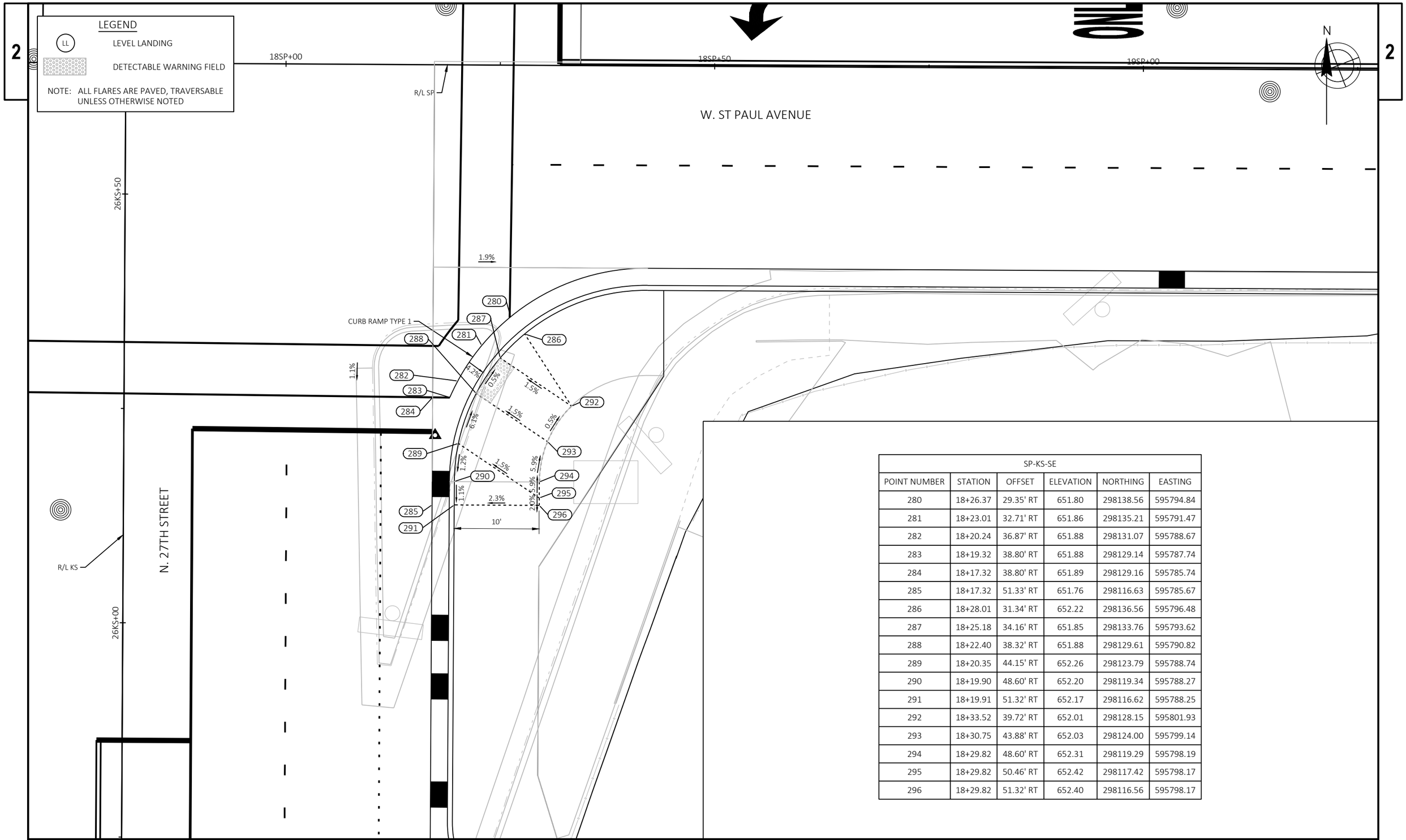
PLOT DATE : 4/26/2025 8:08 PM
PLOT BY : SCHARLAU, DAVE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



SP-KS-SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
280	18+26.37	29.35' RT	651.80	298138.56	595794.84
281	18+23.01	32.71' RT	651.86	298135.21	595791.47
282	18+20.24	36.87' RT	651.88	298131.07	595788.67
283	18+19.32	38.80' RT	651.88	298129.14	595787.74
284	18+17.32	38.80' RT	651.89	298129.16	595785.74
285	18+17.32	51.33' RT	651.76	298116.63	595785.67
286	18+28.01	31.34' RT	652.22	298136.56	595796.48
287	18+25.18	34.16' RT	651.85	298133.76	595793.62
288	18+22.40	38.32' RT	651.88	298129.61	595790.82
289	18+20.35	44.15' RT	652.26	298123.79	595788.74
290	18+19.90	48.60' RT	652.20	298119.34	595788.27
291	18+19.91	51.32' RT	652.17	298116.62	595788.25
292	18+33.52	39.72' RT	652.01	298128.15	595801.93
293	18+30.75	43.88' RT	652.03	298124.00	595799.14
294	18+29.82	48.60' RT	652.31	298119.29	595798.19
295	18+29.82	50.46' RT	652.42	298117.42	595798.17
296	18+29.82	51.32' RT	652.40	298116.56	595798.17

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 100	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021301-CR.DWG
LAYOUT NAME - 05
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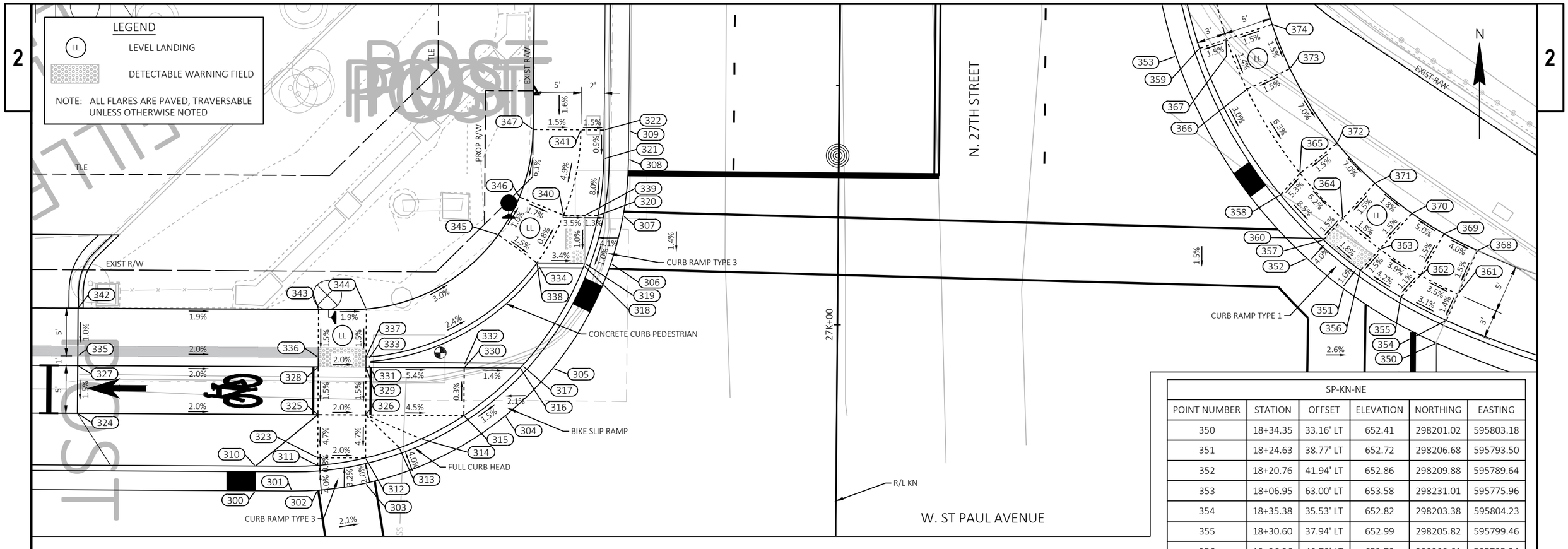
PLOT BY : SCHARLAU, DAVE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



SP-KN-NE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
350	18+34.35	33.16' LT	652.41	298201.02	595803.18
351	18+24.63	38.77' LT	652.72	298206.68	595793.50
352	18+20.76	41.94' LT	652.86	298209.88	595789.64
353	18+06.95	63.00' LT	653.58	298231.01	595775.96
354	18+35.38	35.53' LT	652.82	298203.38	595804.23
355	18+30.60	37.94' LT	652.99	298205.82	595799.46
356	18+26.36	40.70' LT	652.78	298208.61	595795.24
357	18+22.48	43.86' LT	652.87	298211.79	595791.38
358	18+17.96	48.56' LT	653.48	298216.52	595786.88
359	18+09.40	63.82' LT	654.00	298231.83	595778.41
360	18+22.63	44.04' LT	652.87	298211.96	595791.53
361	18+36.58	38.28' LT	652.87	298206.13	595805.44
362	18+32.65	40.23' LT	653.02	298208.10	595801.52
363	18+28.37	42.95' LT	652.82	298210.85	595797.26
364	18+24.48	46.10' LT	652.91	298214.02	595793.39
365	18+19.98	50.83' LT	653.32	298218.77	595788.92
366	18+14.38	59.57' LT	653.97	298227.55	595783.36
367	18+12.24	64.78' LT	654.04	298232.77	595781.26
368	18+38.58	42.86' LT	652.94	298210.70	595807.47
369	18+35.09	44.60' LT	653.10	298212.45	595803.99
370	18+31.73	46.70' LT	652.90	298214.58	595800.64
371	18+27.81	49.83' LT	652.99	298217.72	595796.74
372	18+23.85	54.00' LT	653.39	298221.92	595792.80
373	18+18.87	61.76' LT	654.04	298229.71	595787.87
374	18+16.98	66.38' LT	654.12	298234.34	595786.00

SP-KN-NW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
300	17+10.92	17.00' LT	654.80	298185.57	595679.66
301	17+14.75	17.00' LT	654.70	298185.55	595683.49
302	17+17.42	17.10' LT	654.64	298185.63	595686.17
303	17+22.42	17.85' LT	654.51	298186.35	595691.17
304	17+37.02	25.00' LT	654.24	298193.42	595705.81
305	17+41.97	30.00' LT	654.18	298198.39	595710.79
306	17+47.98	41.00' LT	654.15	298209.36	595716.86
307	17+49.23	46.00' LT	654.20	298214.35	595718.14
308	17+49.75	51.91' LT	654.26	298220.25	595718.69
309	17+49.76	54.92' LT	654.29	298223.27	595718.72
310	17+10.92	19.58' LT	655.21	298188.15	595679.68
311	17+17.42	19.69' LT	654.63	298188.22	595686.18
312	17+22.42	20.50' LT	654.54	298189.01	595691.19
313	17+25.96	21.58' LT	654.83	298190.07	595694.73
314	17+28.24	22.52' LT	654.79	298190.99	595697.01
315	17+32.69	25.00' LT	654.29	298193.44	595701.48

SP-KN-NW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
316	17+38.56	30.00' LT	654.19	298198.41	595707.37
317	17+38.79	30.25' LT	654.54	298198.66	595707.60
318	17+45.15	40.75' LT	654.56	298209.12	595714.03
319	17+45.24	41.00' LT	654.17	298209.37	595714.12
320	17+46.61	46.00' LT	654.20	298214.36	595715.51
321	17+47.17	51.91' LT	654.67	298220.27	595716.11
322	17+47.17	54.93' LT	654.70	298223.29	595716.13
323	17+17.42	20.50' LT	654.64	298189.04	595686.19
324	16+92.27	25.00' LT	655.35	298193.68	595661.06
325	17+17.42	25.00' LT	654.85	298193.53	595686.21
326	17+22.42	25.00' LT	654.75	298193.50	595691.21
327	16+92.27	30.00' LT	655.42	298198.68	595661.09
328	17+17.42	30.00' LT	654.93	298198.53	595686.24
329	17+22.42	30.00' LT	654.83	298198.50	595691.24
330	17+32.69	30.00' LT	654.28	298198.44	595701.51
331	17+22.67	30.25' LT	655.32	298198.75	595691.49

SP-KN-NW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
332	17+32.69	30.25' LT	654.78	298198.69	595701.51
333	17+22.67	30.83' LT	655.32	298199.33	595691.50
334	17+40.38	40.75' LT	654.83	298209.15	595709.26
335	16+92.27	31.00' LT	655.43	298199.68	595661.09
336	17+17.42	31.00' LT	654.94	298199.53	595686.25
337	17+22.42	31.06' LT	654.84	298199.56	595691.25
338	17+40.25	41.00' LT	654.34	298209.40	595709.13
339	17+45.24	46.00' LT	654.22	298214.37	595714.15
340	17+43.01	46.00' LT	654.29	298214.38	595711.91
341	17+44.76	54.94' LT	654.74	298223.31	595713.72
342	16+92.27	36.00' LT	655.48	298204.68	595661.12
343	17+17.42	36.00' LT	655.02	298204.53	595686.28
344	17+22.42	36.07' LT	654.92	298204.58	595691.28
345	17+36.19	43.92' LT	654.41	298212.34	595705.09
346	17+38.37	47.88' LT	654.37	298216.29	595707.29
347	17+39.76	54.95' LT	654.81	298223.35	595708.72

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 101	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021301-CR.DWG
LAYOUT NAME - 06
PLOT DATE : 4/26/2025 8:09 PM
PLOT BY : SCHARLAU, DAVE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

LEGEND

FTMS CONVENTIONAL SYMBOLS	PROPOSED	EXISTING
CSCP PULL BOX		
FTMS (ITS) CONDUIT		
COMMUNICATIONS VAULT, TYPE 1		CV
CONCRETE COMMUNICATIONS MANHOLE		M
ADVANCE FLASHER ASSEMBLY	FY	FY

FTMS STANDARD ABBREVIATIONS

CV	COMMUNICATIONS VAULT
PB	PULL BOX
EX	EXISTING
FOC	FIBER OPTIC CABLE
F.O.	FIBER OPTIC
S-F	STATE-FURNISHED
MH	MANHOLE

FTMS STAGING NOTES

ALL NEW CONDUIT AND FIBER OPTIC CABLE MUST BE INSTALLED AND SPLICED TO EXISTING FIBER OPTIC CABLES BEFORE REMOVING ANY EXISTING CABLE.

ALL FIBER OPTIC WORK, INCLUDING CONDUIT, CABLE INSTALLATION, SPLICING, AND CABLE REMOVALS MUST BE COMPLETED PRIOR TO ANY OTHER PROJECT WORK THAT MAY JEOPARDIZE THE EXISTING FIBER OPTIC CABLE.

FTMS GENERAL NOTES

1. THESE PLANS AND THE ASSOCIATED SPECIAL PROVISIONS REFLECT CONDITIONS KNOWN DURING THE DEVELOPMENT OF THE PLANS AND TECHNICAL SPECIAL PROVISIONS. ALL SCALES, DIMENSIONS AND LOCATIONS SHOWN IN THESE PLANS ARE APPROXIMATE. ACTUAL PHYSICAL FIELD CONDITIONS SHALL PROVIDE THE BASIS FOR THE APPLICATION OF WORK SHOWN IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE APPLICATION OF ALL WORK SHOWN IN THE PLANS TO THE ACTUAL PHYSICAL FIELD CONDITIONS TO PROVIDE A COMPLETE AND ACCEPTED PROJECT. IN THE EVENT THAT ACTUAL PHYSICAL FIELD CONDITIONS AFFECT OR PREVENT THE APPLICATION OR PROGRESSION OF ANY WORK SHOWN IN THE PLANS OR TECHNICAL SPECIAL PROVISIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY, AND PRIOR TO ANY FURTHER WORK ACTIVITY. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY LOCATION CHANGES OTHER THAN MINOR ADJUSTMENTS.
2. BE AWARE THAT ALL EXISTING UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES WITHIN THE SCOPE OF THIS PROJECT MAY NOT BE LOCATED IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES.
3. BE AWARE THAT NO TEST BORINGS WERE MADE WHERE CONDUITS, PULLBOXES, POLES, CABINET FOUNDATIONS, OR OTHER EQUIPMENT IS TO BE INSTALLED. THE CONTRACTOR IS FULLY RESPONSIBLE FOR EXAMINING THE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS.
4. NO TREES (AND/OR SHRUBS) SHALL BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.
5. AREAS WITHIN THE RIGHT-OF-WAY DISTURBED SPECIFICALLY FOR FTMS CONSTRUCTION SHALL BE RESTORED TO THE ORIGINAL CONDITION WITH TOPSOIL, FERTILIZER, SEED, AND EROSION MAT, AND SHALL BE INCLUDED IN THE COST OF INSTALLING FTMS ITEMS. RESTORATION FOR AREAS DISTURBED FOR OTHER CONSTRUCTION OPERATIONS BUT ALSO CONTAINING FTMS CONSTRUCTION SHALL BE DONE ACCORDING TO REQUIREMENTS AND PAYMENT PROVISIONS FOR THE OTHER CONSTRUCTION OPERATIONS.
6. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
7. DUE TO RAMP, LANE, SHOULDER CLOSURE RESTRICTIONS, AND WORK UNDER OTHER CONTRACTS, SOME WORK MAY BE REQUIRED TO BE PERFORMED AT NIGHT.
8. THE CONTRACTOR IS FULLY RESPONSIBLE FOR COORDINATING RAMP, LANE, SHOULDER, AND ROADWAY CLOSURES WITH OTHER CONTRACTS IN THE AREA.
9. THE CONTRACTOR SHALL CONTACT THE WISDOT STATEWIDE TRAFFIC MANAGEMENT CENTER AT (414)227-2166 FIVE (5) WORKING DAYS PRIOR TO ENTERING ANY EXISTING WISDOT FTMS OR ITS CABINET.
10. ALL LOOP DETECTORS ARE STATIONED TO CENTER OF LEADING EDGE AS APPROACHED BY NORMAL VEHICLE PATH.
11. HAND DIG TRENCHES CROSSING EXISTING CONDUIT CONTAINING FIBER OPTIC CABLE.
12. VISUALLY VERIFY DEPTHS OF EXISTING CONDUITS CONTAINING FIBER OPTIC CABLE PRIOR TO CROSSING BY DIRECTIONAL BORE OR SPECIAL METHOD.
13. PROPOSED LIGHTING PLANS, STORM SEWER PLANS, TRAFFIC SIGNAL PLANS, AND CITY UNDERGROUND CONDUIT SHOWN IN GRAYSHADE FOR PLAN CLARITY.

2

W. PARK HILL AVE.

I 94 WB

I 94 EB

N

MATCH LINE 389+25

EXCV385
(36) F.O. SPLICES IN NEW F.O. SPLICE ENCLOSURE

INSTALL IN EXISTING CONDUIT
(1) 36-COUNT FOC (S-F) AND
(1) NO. 10 AWG TRAFFIC SIGNAL WIRE

384EW+00
385EW+00
386EW+00
387EW+00
388EW+00
389EW+00

FIBER OPTIC STAGING NOTES:

ALL NEW CONDUIT AND FIBER OPTIC CABLE MUST BE INSTALLED AND SPLICED TO EXISTING FIBER OPTIC CABLES BEFORE REMOVING ANY EXISTING CABLE.

ALL FIBER OPTIC WORK, INCLUDING CONDUIT, CABLE INSTALLATION, SPLICING, AND CABLE REMOVALS MUST BE COMPLETED PRIOR TO ANY OTHER PROJECT WORK THAT MAY JEOPARDIZE THE EXISTING FIBER OPTIC CABLE.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	FTMS DESIGN SHEETS	SHEET 103	E

FILE NAME : C:\USERS\PKUTZ\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\DSGN\EDGELINE\FTMS\10602774_FTMS.DWG
LAYOUT NAME - 1
PLOT DATE : 4/25/2025 10:50 AM
PLOT BY : PAUL KUTZ
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

W. PARK HILL AVE.

I 94 WB

I 94 EB

EXCV391

EXCV392

INSTALL IN EXISTING CONDUIT
(1) 36-COUNT FOC (S-F) AND
(1) NO. 10 AWG TRAFFIC SIGNAL WIRE

MATCH LINE 389+25

MATCH LINE 394+50

390EW+00

391EW+00

392EW+00

393EW+00

394EW+00

N

FIBER OPTIC STAGING NOTES:

ALL NEW CONDUIT AND FIBER OPTIC CABLE MUST BE INSTALLED AND SPLICED TO EXISTING FIBER OPTIC CABLES BEFORE REMOVING ANY EXISTING CABLE.

ALL FIBER OPTIC WORK, INCLUDING CONDUIT, CABLE INSTALLATION, SPLICING, AND CABLE REMOVALS MUST BE COMPLETED PRIOR TO ANY OTHER PROJECT WORK THAT MAY JEOPARDIZE THE EXISTING FIBER OPTIC CABLE.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	FTMS DESIGN SHEETS	SHEET 104	E

2

2

W. PARK HILL AVE.

I 94 WB

I 94 EB

N. 35TH ST.

EXCVWIB615MLS
(EXISTING WISDOT / AT&T SHARED SYSTEM VAULT)
(1) INSTALL PROPOSED CONDUIT INTO EXISTING ITEM
(38) F.O. SPLICES IN NEW F.O. SPLICE ENCLOSURE (S-F)
(INCLUDE DROP SPLICE TO EX-CB-RM-40-0076)

EX-CB-RM-40-0076

(1) 2-INCH NONMETALLIC CONDUIT WITH
(1) 36-COUNT FOC (S-F) AND
(1) NO. 10 AWG TRAFFIC SIGNAL WIRE

INSTALL IN EXISTING CONDUIT
(1) 36-COUNT FOC (S-F) AND
(1) NO. 10 AWG TRAFFIC SIGNAL WIRE

EXCV399
(1) INSTALL PROPOSED CONDUIT INTO EXISTING ITEM

MATCH LINE 394+50

395EW+00 396EW+00 397EW+00 398EW+00 399EW+00 400EW+00

FIBER OPTIC STAGING NOTES:

ALL NEW CONDUIT AND FIBER OPTIC CABLE MUST BE INSTALLED AND SPLICED TO EXISTING FIBER OPTIC CABLES BEFORE REMOVING ANY EXISTING CABLE.

ALL FIBER OPTIC WORK, INCLUDING CONDUIT, CABLE INSTALLATION, SPLICING, AND CABLE REMOVALS MUST BE COMPLETED PRIOR TO ANY OTHER PROJECT WORK THAT MAY JEOPARDIZE THE EXISTING FIBER OPTIC CABLE.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	FTMS DESIGN SHEETS	SHEET 105	E

FIBER OPTIC STAGING NOTES:

ALL NEW CONDUIT AND FIBER OPTIC CABLE MUST BE INSTALLED AND SPLICED TO EXISTING FIBER OPTIC CABLES BEFORE REMOVING ANY EXISTING CABLE.

ALL FIBER OPTIC WORK, INCLUDING CONDUIT, CABLE INSTALLATION, SPLICING, AND CABLE REMOVALS MUST BE COMPLETED PRIOR TO ANY OTHER PROJECT WORK THAT MAY JEOPARDIZE THE EXISTING FIBER OPTIC CABLE.

EX-CB-HL-40-PH
(1) INSTALL PROPOSED CONDUIT INTO EXISTING ITEM
(INSTALL (1) 50-AMP BREAKER IN EMPTY SLOT IN EXISTING PANEL)

(1) 2-INCH METALLIC CONDUIT WITH
(1) CABLE AERIAL ALUM 4AWG QUADRUPLEX

PB412EW

MATCH LINE 415+46.81

N

N. 32ND ST.

410EW+00
411EW+00
412EW+00
413EW+00
414EW+00
415EW+00

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	FTMS DESIGN SHEETS	SHEET 106	E

FILE NAME : C:\USERS\PKUTZ\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\DSGN\EDGELINE\FTMS\10602774_FTMS.DWG
LAYOUT NAME - 4

PLOT DATE : 5/30/2025 10:41 AM PLOT BY : PAUL KUTZ PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N. 30TH ST.

I 94 WB

I 94 EB

N

(1) 2-INCH METALLIC CONDUIT WITH
(1) CABLE AERIAL ALUM 4AWG QUADRUPLEX

WP-PH-1
(SEE LIGHTING PLANS)

(1) CABLE AERIAL ALUM 4AWG QUADRUPLEX
(SEE LIGHTING PLANS FOR PROPOSED AERIAL INSTALLATION)

WP-PH-2
(SEE LIGHTING PLANS)

PB417EW

EXPB418EW
(1) INSTALL PROPOSED CONDUIT INTO EXISTING ITEM

EXDPH2/CPH2
(SEE LIGHTING PLANS)

REMOVE EXISTING POWER WIRES

EXMH417
RE-SPLICE EXISTING DROP SPLICE TO EX-CCTV-40-0013 / EX-DMS-40-0026
TO ONLY BE SPLICED TO EXISTING CABLE TO THE WEST AND
CUT EXISTING 72-COUNT CABLE TO THE EAST SO THAT IT MAY BE REMOVED
(2) F.O. SPLICES IN EXISTING F.O. SPLICE ENCLOSURE

REMOVE CABLES AND ABANDON CONDUIT

EXMBDMS400026
(1) REMOVE METER BREAKER PEDESTAL

(1) 2-INCH NONMETALLIC CONDUIT WITH
(1) CABLE AERIAL ALUM 4AWG QUADRUPLEX

EX-CB-CCTV-40-0013 / EX-DMS-40-0026

REMOVE EXISTING POWER WIRES
THEN INSTALL (1) CABLE AERIAL ALUM 4AWG QUADRUPLEX

MATCH LINE 415+46.81

416EW+00

417EW+00

418EW+00

419EW+00

420EW+00

421EW+00

GUY POLE

BORE

MBDMS400026 STAGING NOTES:

DO NOT REMOVE EXMBDMS400026 OR THE WIRES CONNECTED TO IT UNTIL WE-ENERGIES HAS DISCONNECTED POWER TO EXMBDMS400026.

FIBER OPTIC STAGING NOTES:

ALL NEW CONDUIT AND FIBER OPTIC CABLE MUST BE INSTALLED AND SPLICED TO EXISTING FIBER OPTIC CABLES BEFORE REMOVING ANY EXISTING CABLE.

ALL FIBER OPTIC WORK, INCLUDING CONDUIT, CABLE INSTALLATION, SPLICING, AND CABLE REMOVALS MUST BE COMPLETED PRIOR TO ANY OTHER PROJECT WORK THAT MAY JEOPARDIZE THE EXISTING FIBER OPTIC CABLE.

2

2

N

REMOVE CABLES AND ABANDON CONDUIT

EXMH424
(1) REMOVE MANHOLE

EXMH425
(1) REMOVE MANHOLE

I 94 WB

I 94 E

REMOVE CABLES AND ABANDON CONDUIT

422EW+00

423EW+00

MATCH LINE 421+25

EXMH423
(1) REMOVE MANHOLE

REMOVE CABLES AND ABANDON CONDUIT

FIBER OPTIC STAGING NOTES:

ALL NEW CONDUIT AND FIBER OPTIC CABLE MUST BE INSTALLED AND SPLICED TO EXISTING FIBER OPTIC CABLES BEFORE REMOVING ANY EXISTING CABLE.

ALL FIBER OPTIC WORK, INCLUDING CONDUIT, CABLE INSTALLATION, SPLICING, AND CABLE REMOVALS MUST BE COMPLETED PRIOR TO ANY OTHER PROJECT WORK THAT MAY JEOPARDIZE THE EXISTING FIBER OPTIC CABLE.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	FTMS DESIGN SHEETS	SHEET 108	E

2

EXFY424EW
(1) SALVAGE EXISTING ADVANCE FLASHER ASSEMBLY
(1) REMOVE EXISTING VIDEO DETECTION CAMERA
(1) REMOVE POLE

GATE

EXPB424EW
(1) REMOVE PULL BOX

REMOVE EXISTING CABLE TO QP424EW
SO THAT IT CAN BE RE-CONNECTED TO
FY424EW

FY424EW
(1) INSTALL SALVAGED ADVANCE FLASHER ASSEMBLY
(SIGN AND FLASHING SIGNAL) ON EXISTING LIGHT POLE

PB424EW

ATC SUB-STATION

MATCH LINE 426+39.30

(2) 2-INCH NONMETALLIC CONDUITS WITH
SALVAGED CABLES FROM EXFY424EW TO
FY424EW

QP424EW
CUT EXISTING CONDUITS AND CONNECT NEW
CONDUITS TO FY424EW

N

ON CONDUIT

426EW+00

2

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	FTMS DESIGN SHEETS	SHEET 109	E

2

N

REMOVE CABLES AND ABANDON CONDUIT

MATCH LINE 426+39.30

I 94 WB

I 94 EB

N. 27TH ST.

427EW+00

428EW+00

429EW+00

430EW+00

431E

SAN

TEL

BORE

FIBER OPTIC STAGING NOTES:

ALL NEW CONDUIT AND FIBER OPTIC CABLE MUST BE INSTALLED AND SPLICED TO EXISTING FIBER OPTIC CABLES BEFORE REMOVING ANY EXISTING CABLE.

ALL FIBER OPTIC WORK, INCLUDING CONDUIT, CABLE INSTALLATION, SPLICING, AND CABLE REMOVALS MUST BE COMPLETED PRIOR TO ANY OTHER PROJECT WORK THAT MAY JEOPARDIZE THE EXISTING FIBER OPTIC CABLE.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	FTMS DESIGN SHEETS	SHEET 110	E

FILE NAME : C:\USERS\PKUTZ\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\DSGN\EDGELINE\FTMS\10602774_FTMS.DWG
LAYOUT NAME - 8
PLOT DATE : 4/25/2025 10:59 AM PLOT BY : PAUL KUTZ PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

EX-CB-DMS-40-0050

REMOVE CABLES AND ABANDON CONDUIT

REMOVE CABLES AND ABANDON CONDUIT

N

N. 26TH ST.

W. ST. PAUL AVE.

I 94 WB

I 94 EB

435EW+00

434EW+00

433EW+00

432EW+00

MATCH LINE 431+00

FIBER OPTIC STAGING NOTES:

ALL NEW CONDUIT AND FIBER OPTIC CABLE MUST BE INSTALLED AND SPLICED TO EXISTING FIBER OPTIC CABLES BEFORE REMOVING ANY EXISTING CABLE.

ALL FIBER OPTIC WORK, INCLUDING CONDUIT, CABLE INSTALLATION, SPLICING, AND CABLE REMOVALS MUST BE COMPLETED PRIOR TO ANY OTHER PROJECT WORK THAT MAY JEOPARDIZE THE EXISTING FIBER OPTIC CABLE.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	FTMS DESIGN SHEETS	SHEET 111	E

2

W. CLYBOURN ST.

(1) 2-INCH NONMETALLIC CONDUIT WITH
(1) 36-COUNT FOC (S-F) AND
(1) NO. 10 AWG TRAFFIC SIGNAL WIRE

N

EXPB439
(10 INSTALL PROPOSED CONDUIT INTO EXISTING ITEM

INSTALL IN EXISTING CONDUIT
(1) 36-COUNT FOC (S-F) AND
(1) NO. 10 AWG TRAFFIC SIGNAL WIRE

EXPB438

EXMH436
RE-SPLICE EXISTING DROP SPLICE TO EX-DMS-40-0050

TO ONLY BE SPLICED TO NEW 36-COUNT FOC TO THE EAST,
CUT EXISTING 72-COUNT CABLE TO THE WEST SO THAT IT MAY BE REMOVED,
AND SPLICE NEW 36-COUNT FOC TO EAST TO EXISTING 72-COUNT FOC TO
THE EAST SO THAT THE EXISTING 72-COUNT FOC TO THE WEST MAY BE REMOVED
(36) F.O. SPLICES IN EXISTING F.O. SPLICE ENCLOSURE

INSTALL IN EXISTING CONDUIT
(1) 36-COUNT FOC (S-F) AND
(1) NO. 10 AWG TRAFFIC SIGNAL WIRE

MATCHLINE 435+50

MATCHLINE 439+25

I 94 WB

I 94 EB

N. 25TH ST.

436EW+00

437EW+00

438EW+00

439EW+00

FIBER OPTIC STAGING NOTES:

ALL NEW CONDUIT AND FIBER OPTIC CABLE MUST BE INSTALLED AND SPLICED TO EXISTING FIBER OPTIC CABLES BEFORE REMOVING ANY EXISTING CABLE.

ALL FIBER OPTIC WORK, INCLUDING CONDUIT, CABLE INSTALLATION, SPLICING, AND CABLE REMOVALS MUST BE COMPLETED PRIOR TO ANY OTHER PROJECT WORK THAT MAY JEOPARDIZE THE EXISTING FIBER OPTIC CABLE.

2

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	FTMS DESIGN SHEETS	SHEET 112	E

FILE NAME : C:\USERS\PKUTZ\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\DSGN\EDGELINE\FTMS\10602774_FTMS.DWG
LAYOUT NAME - 10

PLOT DATE : 4/25/2025 11:01 AM PLOT BY : PAUL KUTZ PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

(1) 2-INCH NONMETALLIC CONDUIT WITH
(1) 36-COUNT FOC (S-F) AND
(1) NO. 10 AWG TRAFFIC SIGNAL WIRE

EXCVWIB624MLL
(EXISTING WISDOT / AT&T SHARED SYSTEM VAULT)
(1) INSTALL PROPOSED CONDUIT INTO EXISTING ITEM
(36) F.O. SPLICES IN NEW F.O. SPLICE ENCLOSURE (S-F)

N

I 94 WB

I 94 EB

441EW+00

442EW+00

443EW+00

444EW+00

440EW+00

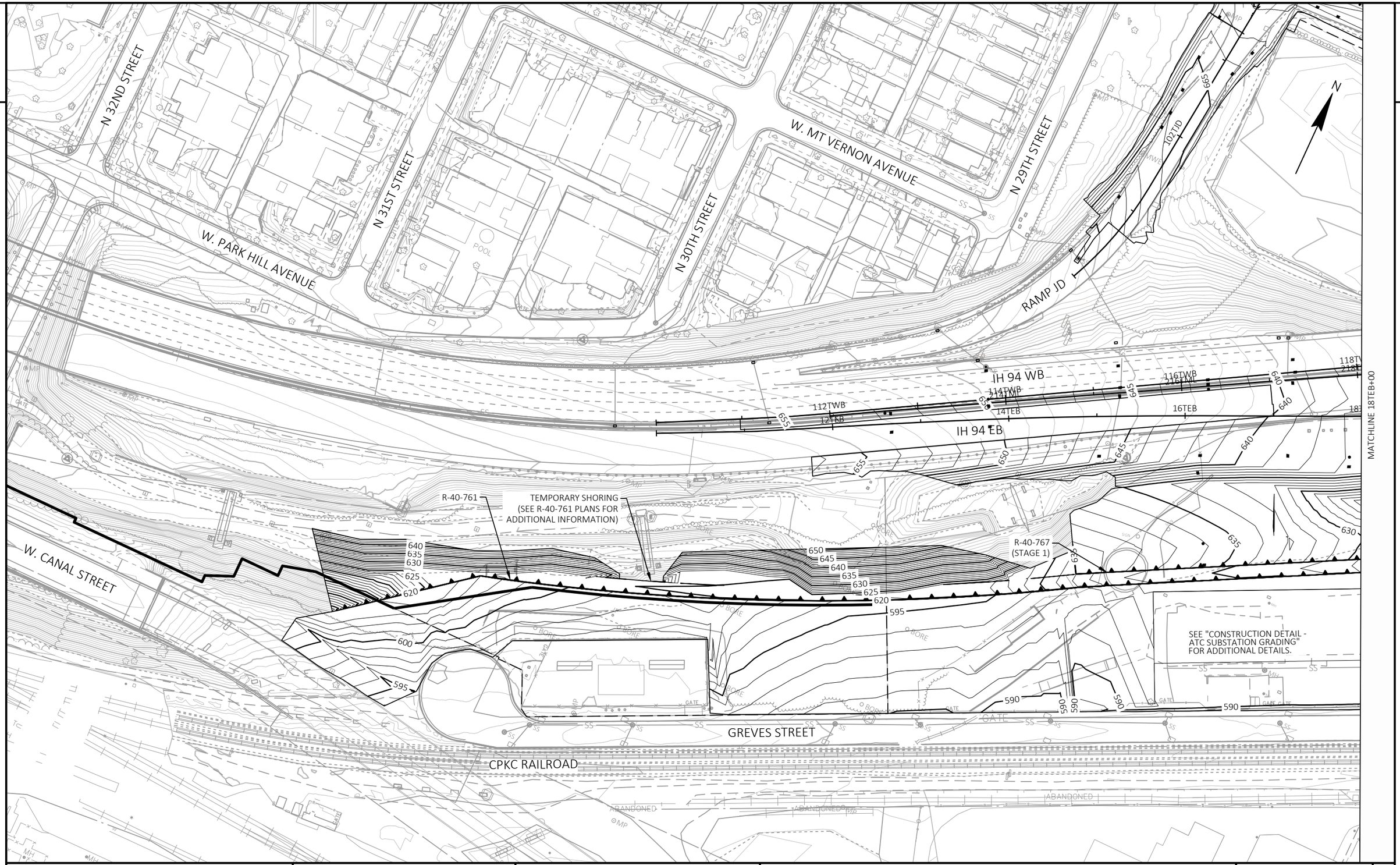
MATCH LINE 439+25

FIBER OPTIC STAGING NOTES:

ALL NEW CONDUIT AND FIBER OPTIC CABLE MUST BE INSTALLED AND SPLICED TO EXISTING FIBER OPTIC CABLES BEFORE REMOVING ANY EXISTING CABLE.

ALL FIBER OPTIC WORK, INCLUDING CONDUIT, CABLE INSTALLATION, SPLICING, AND CABLE REMOVALS MUST BE COMPLETED PRIOR TO ANY OTHER PROJECT WORK THAT MAY JEOPARDIZE THE EXISTING FIBER OPTIC CABLE.

2



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONTOUR MAP	SHEET 114	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021601-CM.DWG
LAYOUT NAME - 01-TEB-01

PLOT DATE : 7/25/2025 1:36 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

N. 25TH STREET

W. CLYBOURN STREET

W. ST. PAUL AVENUE

EXIST R/W

EXISTING BRIDGE B-40-57

EXISTING RETAINING WALL
R-40-18, TO REMAIN

B-40-1083

IH 94 WB

IH 94 EB

RAMP LC

R-40-767 (STAGE 1)
WIRE FACE WALL

R-40-761

R-40-767
(STAGE 1)

B-40-513_005

GREVES STREET

CPKC RAILROAD

MATCHLINE 18TEB+00

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONTOUR MAP	SHEET 115 E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021601-CM.DWG
LAYOUT NAME - 01-TEB-02

PLOT DATE : 7/25/2025 1:36 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N. 29TH STREET

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

W. ST. PAUL AVENUE

W. MT VERNON AVENUE

IH 94 WB

IH 94 EB

RAMP TLC

EXISTING BRIDGE B-40-57

EXISTING RETAINING WALL
R-40-18, TO REMAIN

B-40-1083

R-40-767
(STAGE 1)

R-40-761

EXIST R/W

N

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CONTOUR MAP	SHEET 116	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021601-CM.DWG
LAYOUT NAME - 02-SP-01
PLOT DATE : 7/25/2025 1:36 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

2

N

W. ST. PAUL AVENUE

N. 28TH STREET

N. 27TH STREET

N. 29TH STREET

N. 30TH STREET

W. MT VERNON AVENUE

RAMP JD

RAMP LC

SUB-STATION

EXISTING BRIDGE B-40-57

IH 94 WB

IH 94 EB

B-40-1083

EXISTING RETAINING WALL
R-40-18, TO REMAIN

R/L J

R/L KN

R/L SP

R/L TJD

R/L TWB

R/L TML

R/L TEB

R/L TLC

R/L KS

R-40-767
(STAGE 1)

R-40-761

B-40-513_005

SLOPE INTERCEPT (TYP)

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTION MATCHLINES	SHEET 117	E

2

LEGEND

- SOD LAWN
- EROSION MAT CLASS I, TYPE B
- EROSION MAT URBAN CLASS I, TYPE A
- CLAY CAP
- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- INLET PROTECTION PLACED IN PREVIOUS STAGE
- A B C D INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- SILT FENCE RELIEF (ROCK BAGS)
- SURFACE WATER FLOW

N

W. PARK HILL AVE
N. 31ST STREET
N. 30TH STREET
W. MT VERNON AVE
N. 29TH STREET
EXIST R/W
HOUSE OBSCURED
POOL
ABANDONED HOUSE
TLE
102TD
TRACKING PAD FOR STAGE 3 CONTRACTOR ACCESS
RAMP JD
R/L TWB
116TWB
114TWB
112TWB
110TWB
14TEB
16TEB
R/L TML
R/L TEB
IH 94 WB
IH 94 EB
MATCHLINE 18TEB+00
W. CANAL STREET
PROPOSED R/W
PLE
WE ENERGIES GREVES SUBSTATION
GREVES STREET
CPKC RAILROAD
ABANDONED
GATE
BORE
MP
SS
MH

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	EROSION CONTROL - EXISTING CONDITION	SHEET 118	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-022000-EC.DWG
LAYOUT NAME - 01-TEB-01
PLOT DATE : 7/10/2025 1:33 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- SOD LAWN
- EROSION MAT CLASS I, TYPE B
- EROSION MAT URBAN CLASS I, TYPE A
- CLAY CAP
- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- INLET PROTECTION PLACED IN PREVIOUS STAGE
- A B C D — INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- SILT FENCE RELIEF (ROCK BAGS)
- SURFACE WATER FLOW

2

2

N

W. CLYBOURN AVENUE

N. 27TH STREET

N. 26TH STREET

N. 25TH STREET

W. ST PAUL AVENUE

IH 94 WB

IH 94 EB

RAMP LC

GREVES STREET

CPKC RAILROAD

MATCHLINE 18TEB+00

R/L KN

EXIST R/W

28KN

18SP

218TSP

26KS

EXISTING BRIDGE B-40-57

29SP

220TSP

R/L TWB

126TWB

26TEB

R/L TEB

28TEB

30TEB

32TEB

EXISTING RETAINING WALL R-40-18; TO REMAIN

EXISTING BRIDGE B-40-43

124TWB

224TML

24TEB

122TWB

222TML

R/L TML

120TWB

220TML

R/L TSP

25SP

26TLC

24KS

22TEB

20TEB

20TLC

22TLC

24TLC

24SP

R/L SP

EXISTING RETAINING WALL R-40-10

EXISTING RETAINING WALL R-40-33

R/L KS

R/L TLC

22KS

EXISTING BRIDGE B-40-513_005

PROPOSED R/W

PLE

TLE

20KS

28SP

30SP

MONOMONEE VALLEY DECORATIVE SIGN

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	EROSION CONTROL - EXISTING CONDITION	SHEET 119	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-022000-EC.DWG
LAYOUT NAME - 01-TEB-02
PLOT DATE : 7/10/2025 1:33 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- SOD LAWN
- EROSION MAT CLASS I, TYPE B
- EROSION MAT URBAN CLASS I, TYPE A
- CLAY CAP
- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- INLET PROTECTION PLACED IN PREVIOUS STAGE
- A B C D — INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- SILT FENCE RELIEF (ROCK BAGS)
- SURFACE WATER FLOW

W. CLYBOURN AVENUE

N

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

N. 29TH STREET

W. MT VERNON AVE

W. ST PAUL AVENUE

AVENUE

IH 94 WB

IH 94 EB

RAMP JD

RAMP LC

EXIST R/W

TLE

GAS STATION

SUB–STATION

PARKING LOT

GATE

EXISTING BRIDGE B-40-57

EXISTING BRIDGE B-40-513_005

EXISTING RETAINING WALL R-40-18; TO REMAIN

EXISTING BRIDGE B-40-43

EXISTING RETAINING WALL R-40-33

EXISTING RETAINING WALL R-40-10

R/L J

R/L KN

R/L TJD

R/L TML

R/L TWB

R/L TEB

R/L TSP

R/L SP

R/L TLC

R/L KS

12SP 14SP 16SP 18SP 20SP 22SP

218TSP 220TSP

12TJ 14TJ 10TJD 10TJD

30KN 28KN 26KS 24KS

120TWB 122TWB 124TWB 118TWB

120TML 122TML 124TML 118TML

20TEB 22TEB 24TEB 18TEB

22TLC 24TLC 26TLC 20TLC

28TEB 26TEB

663.9 671.8 672.5 673.8

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	EROSION CONTROL - EXISTING CONDITION	SHEET 120	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-022000-EC.DWG
LAYOUT NAME - 02-SP-01
PLOT DATE : 7/10/2025 1:34 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- SOD LAWN
- EROSION MAT CLASS I, TYPE B
- EROSION MAT URBAN CLASS I, TYPE A
- CLAY CAP
- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- INLET PROTECTION PLACED IN PREVIOUS STAGE
- A B C D — INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- SILT FENCE RELIEF (ROCK BAGS)
- SURFACE WATER FLOW

NOTE:

USE MULCHING ON ALL DISTURBED AREAS OUTSIDE OF EROSION MAT LIMITS

N. 31ST STREET
N. 30TH STREET
W. MT VERNON AVE
N. 29TH STREET
HOUSE OBSCURED
POOL
ABANDONED HOUSE
EXIST R/W
RAMP JD
102 JD
TLE
IH 94 WB
IH 94 EB
112TWB
12TEB
114TWB
14TEB
16TEB
116TWB
R/L TWB
R/L TML
R/L TEB
118TWB
MATCHLINE 18TE8+00
W. CANAL STREET
PROPOSED R/W
PLE
WE ENERGIES GREVES SUBSTATION
SILT FENCE RELIEF
GREVES STREET
CPKC RAILROAD
R-40-767 (STAGE 1)
R-40-761
ABANDONED

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 121	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-022001-EC.DWG
LAYOUT NAME - 01-TEB-01

PLOT DATE : 7/10/2025 1:35 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

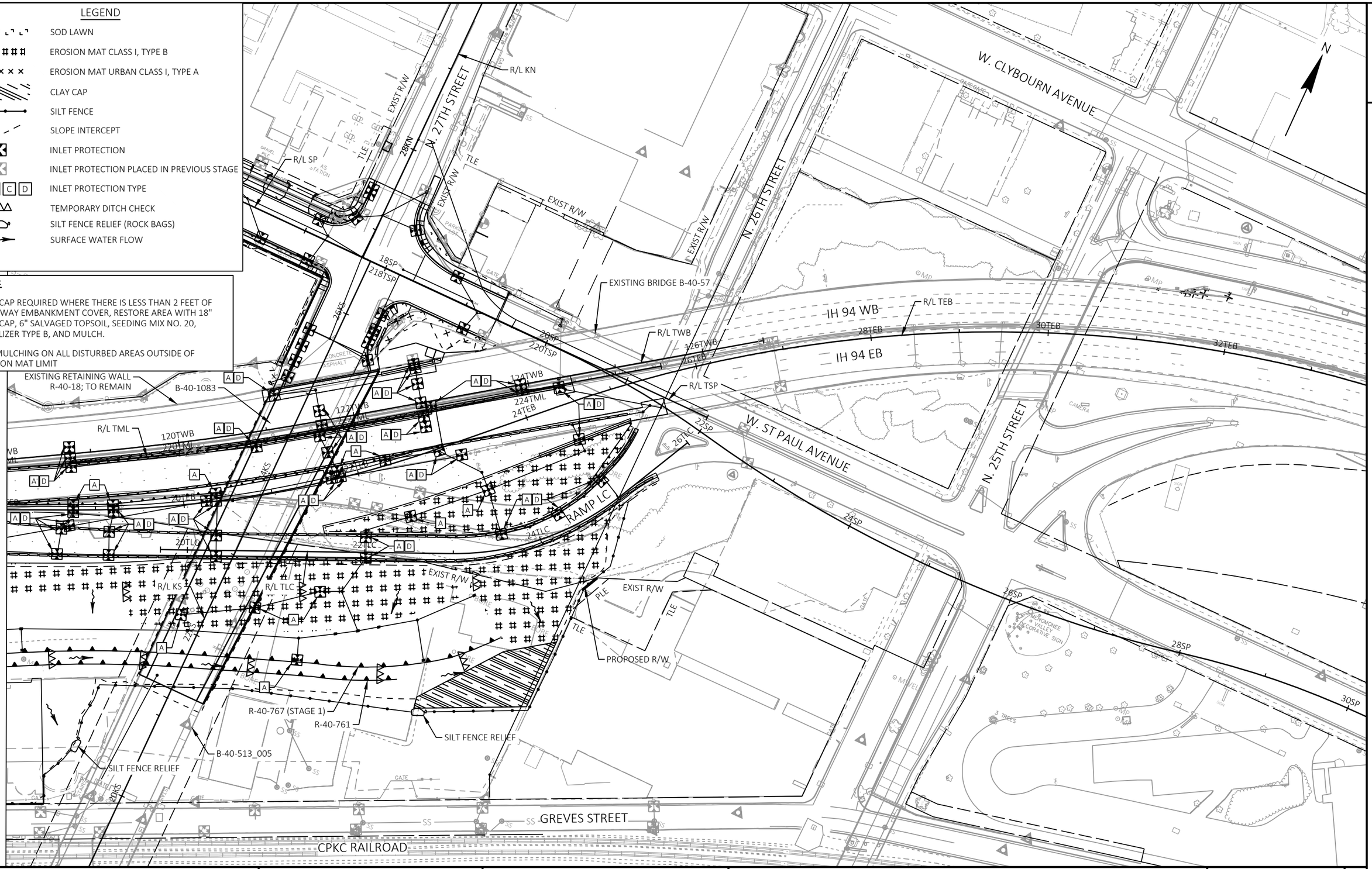
LEGEND

- SOD LAWN
- EROSION MAT CLASS I, TYPE B
- EROSION MAT URBAN CLASS I, TYPE A
- CLAY CAP
- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- INLET PROTECTION PLACED IN PREVIOUS STAGE
- A B C D — INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- SILT FENCE RELIEF (ROCK BAGS)
- SURFACE WATER FLOW

NOTE:

CLAY CAP REQUIRED WHERE THERE IS LESS THAN 2 FEET OF ROADWAY EMBANKMENT COVER, RESTORE AREA WITH 18" CLAY CAP, 6" SALVAGED TOPSOIL, SEEDING MIX NO. 20, FERTILIZER TYPE B, AND MULCH.

USE MULCHING ON ALL DISTURBED AREAS OUTSIDE OF EROSION MAT LIMIT



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 122	E

LEGEND

- SOD LAWN
- EROSION MAT CLASS I, TYPE B
- EROSION MAT URBAN CLASS I, TYPE A
- CLAY CAP
- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- INLET PROTECTION PLACED IN PREVIOUS STAGE
- A B C D — INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- SILT FENCE RELIEF (ROCK BAGS)
- SURFACE WATER FLOW

NOTE:

USE MULCHING ON ALL DISTURBED AREAS OUTSIDE OF EROSION MAT LIMITS

W. CLYBOURN AVENUE

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

N. 29TH STREET

W. MT VERNON AVE

W. ST PAUL AVENUE

IH 94 WB

IH 94 EB

EXIST R/W

SUB-STATION

GAS STATION

GRAVEL PILE

EXISTING BRIDGE B-40-57

EXISTING RETAINING WALL R-40-18; TO REMAIN

B-40-1083

R-40-761 (STAGE 1)

R-40-767

R/L J

R/L KN

R/L SP

R/L TSP

R/L TJD

R/L TML

R/L TWB

R/L TLC

R/L KS

R/L TEB

RAMP JD

RAMP LC

TLE

12SP

14SP

16SP

22SP

218SBP

218TSP

220SBP

220TSP

30KN

28KN

26KS

24KS

22TLC

20TLC

118TWB 24TML

120TWB 24TML

122TWB 24TML

124TWB 24TEB 24TML

24TLC

26TLC

28TEB

16TWB

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 123	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-022001-EC.DWG
LAYOUT NAME - 02-SP-01
PLOT DATE : 7/10/2025 1:35 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

FURNISH PIPE AND INSTALL

(DUCTILE IRON PUSH-ON RUBBER GASKET JOINT)

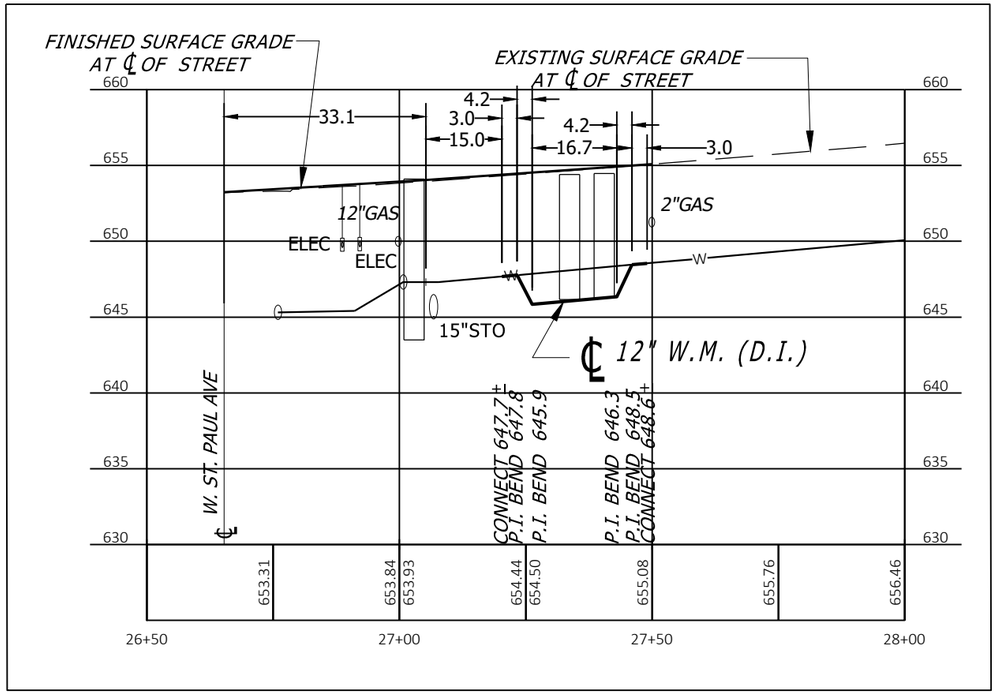
34 FT. - 12" WATER MAIN

ABANDONMENT OF WATER MAINS, VALVES, AND HYDRANTS

29 FT. - 12"-1934-L WATER MAIN

FOLLOWING IS A LIST OF THE FITTINGS SHOWN ON THIS CONSTRUCTION PLAN THAT WILL BE FURNISHED BY THE CONTRACTOR.

4 - BI2-45
2 - SLI2(DP)



GENERAL NOTES

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF MILWAUKEE "WATER MAIN INSTALLATION SPECIFICATIONS", DATED JANUARY 2, 1987. ADDITIONALLY, ALL WORK SHALL BE DONE IN ACCORDANCE WITH "THE MILWAUKEE WATER WORKS STANDARD PLAN NOTES REGARDING WATER MAIN CONSTRUCTION", WHICH IS ATTACHED AND MADE PART OF THESE WATER MAIN PLANS AND CONTRACT DOCUMENTS.

THE DEPARTMENT OF PUBLIC WORKS GENERAL SPECIFICATIONS, DATED JANUARY 31, 1992, LATEST REVISION, APPLIES TO THIS CONTRACT AND WILL SUPERSEDE ANY PART OF THE SPECIFICATIONS WHICH DIFFERS THEREFROM.

THE MILWAUKEE WATER WORKS WILL FURNISH WATER MAIN MATERIALS AS INDICATED IN SPECIFICATION SECTION 4.3.1. THE CONTRACTOR SHALL FURNISH TEMPORARY TEST CAPS AND PLUGS. THE CONTRACTOR SHALL FURNISH ALL OTHER ITEMS REQUIRED TO COMPLETE THIS PROJECT.

ELEVATION NOTE

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAVD'88(2007). TO CONVERT TO CITY OF MILWAUKEE DATUM SUBTRACT 580.29 FROM ELEVATIONS SHOWN.

VALVE BOX BASE ADAPTERS

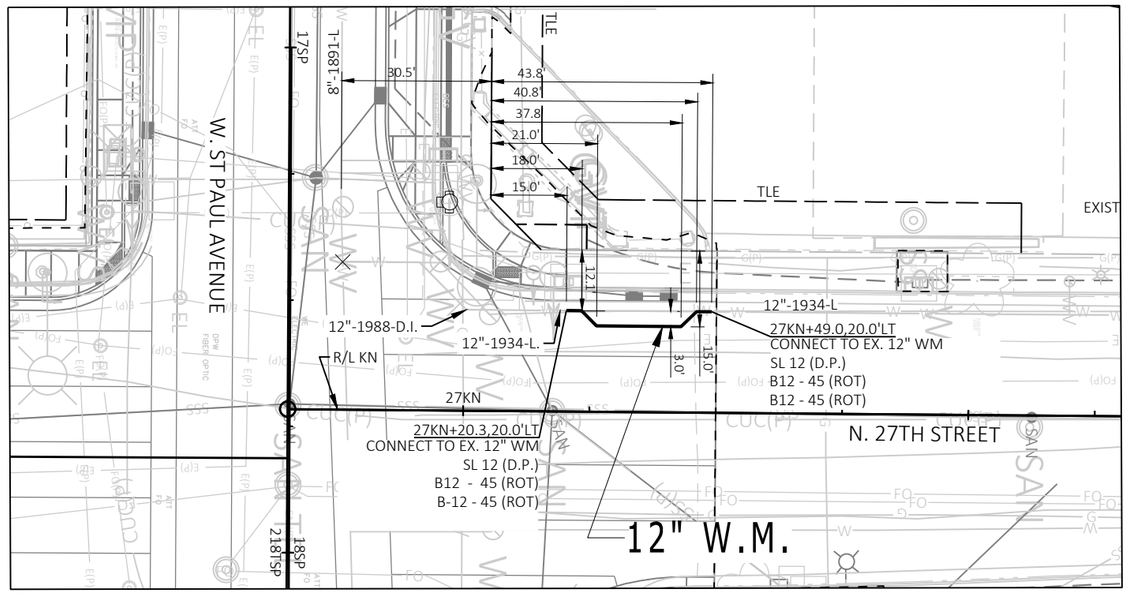
ALL VALVE BOXES SHALL BE INSTALLED ON GATE VALVES WITH THE USE OF THE VALVE BOX BASE ADAPTERS, "ADAPTOR II" AS MANUFACTURED BY ADAPTOR INC. OR AN APPROVED EQUAL. THE ADAPTER SHALL BE INSTALLED IN ADDITION TO THE HARDWOOD BLOCKING. COST OF THE ADAPTER SHALL BE INCLUDED IN THE UNIT BID PRICE TO FURNISH AND INSTALL WATER MAIN.

BACKFILL AND BEDDING MATERIAL

THE REQUIREMENTS FOR BACKFILL AND BEDDING MATERIAL SHALL BE AS STATED IN THE "THE MILWAUKEE WATER WORKS STANDARD PLAN NOTES REGARDING WATER MAIN CONSTRUCTION".

HYDRANTS

THE CONTRACTOR SHALL RETURN ALL ABANDONED HYDRANTS TO THE DPW FIELD HEADQUARTERS - INFRASTRUCTURE, OPERATIONS, WATER WORKS. CONTACT MR. BEN GLATZEL AT 414-708-2839 FOR ADDITIONAL INFORMATION.



CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND BEFORE YOU DIG. WISCONSIN STATUTE 182.0175 REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

NO.	BY	REVISION	DATE
1	____	_____	____
2	____	_____	____
3	____	_____	____

Milwaukee Water Works — **Water Engineering** Department of Public Works

WATER MAIN

IN **W. ST. PAUL AV.**
FROM N. 27TH ST.
TO N. 29TH ST.

SCALE HORIZONTAL	1"= 30'
SCALE VERTICAL	1"= 10'
1/4 SEC. NO.	401
PLAN DATE	7-18-25
DRAWN BY	KKC
CHECKED BY	SBJ
SURVEY BY	OTHER

APPROVED DATE

_____ MAINS DESIGN ENGINEER

_____ ENGINEER IN CHARGE

_____ SPECIAL_DEPUTY_COMMISSIONER_OF_PUBLIC_WORKS

PROGRAM NO.	2025-501	CONTRACT NO.	C.C. FILE NO.
PROJECT NO.	WT41025050	OFFICIAL NOTICE NO.	DATE ADOPTED

SHEET NO. 1 OF 2 PLAN FILE NO. **2025106**

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	N. 27TH STREET WATERMAIN

SHEET 124 E

FILE NAME :
LAYOUT NAME - 01-SP-WM-01

PLOT DATE : 7/21/2025 PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : ########

WISDOT/CADDS_SHEET_42

2

FURNISH PIPE AND INSTALL

(DUCTILE IRON PUSH-ON RUBBER GASKET JOINT)

34 FT. - 6 " WATER MAIN
13 FT. - 6" HYDRANT BRANCH

SERVICES

1 - CONNECT ORIGINAL SERVICE

INSTALL

1 - HYDRANT

REMOVE

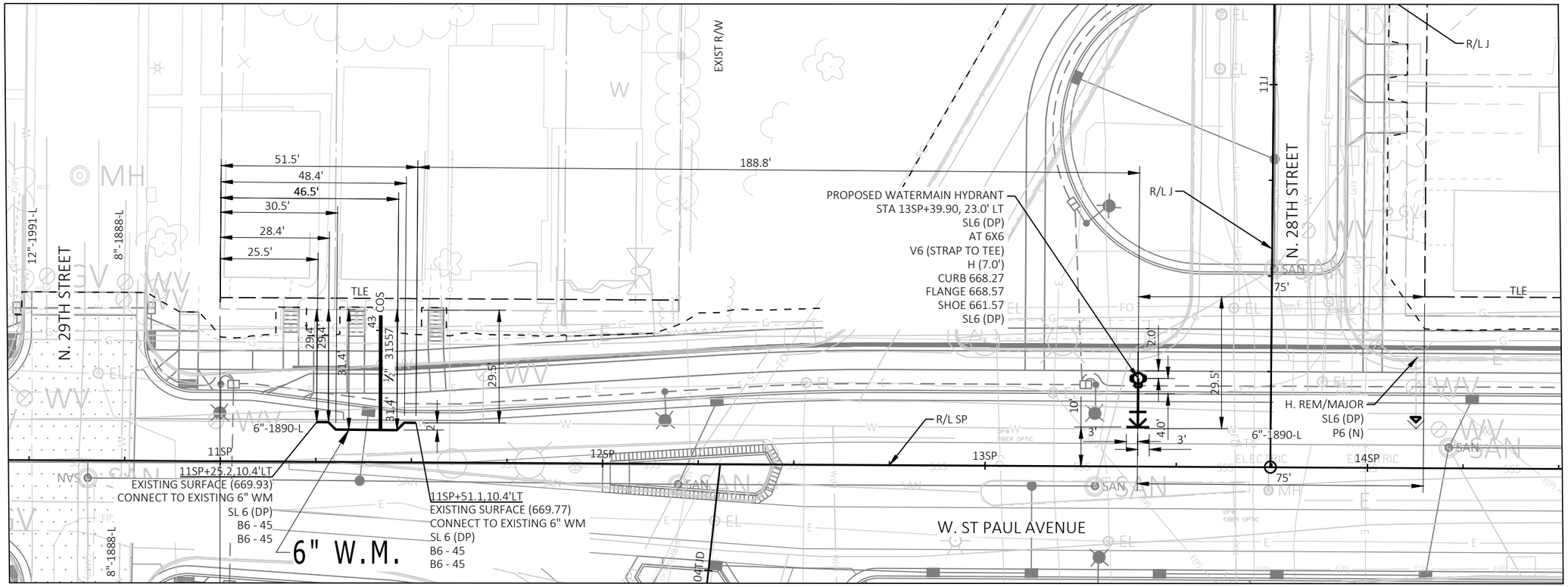
1 - HYDRANT / MAJOR

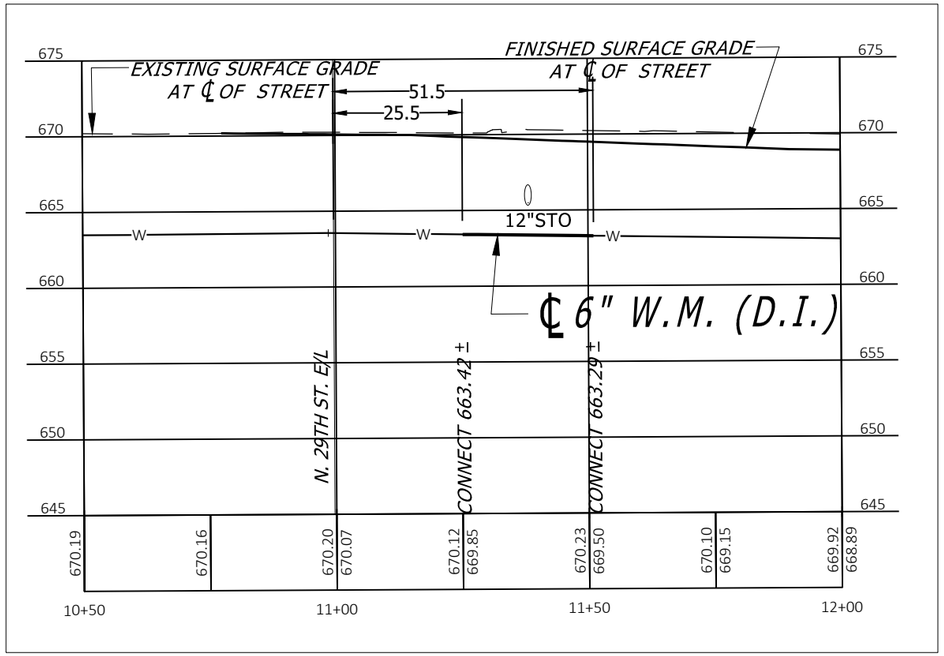
ABANDONMENT OF WATER MAINS, VALVES, AND HYDRANTS

32 FT. - 6"-1890-L WATER MAIN
1 - HYDRANT

FOLLOWING IS A LIST OF THE FITTINGS SHOWN ON THIS CONSTRUCTION PLAN THAT WILL BE FURNISHED BY THE CONTRACTOR.

1 - AT 6x6
4 - B6-45
1 - V6
1 - VB-DD
1 - P6
1 - H(7.0)
5 - SL6(DP)
1 - 1" CORPORATION STOP





N

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND BEFORE YOU DIG. WISCONSIN STATUTE 182.0175 REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

NO.	BY	REVISION	DATE
1	____	_____	____
2	____	_____	____
3	____	_____	____

Milwaukee Water Works — Water Engineering, Department of Public Works

WATER MAIN

IN W. ST. PAUL AV.
FROM N. 27TH ST.
TO N. 29TH ST.

SCALE HORIZONTAL	1"= 30'
SCALE VERTICAL	1"= 10'
1/4 SEC. NO.	401
PLAN DATE	7-18-25
DRAWN BY	KKC
CHECKED BY	SBJ
SURVEY BY	OTHER

APPROVED / DATE
_____ MAINS_DESIGN_ENGINEER
_____ ENGINEER_IN_CHARGE
_____ SPECIAL_DEPUTY_COMMISSIONERS_OF_PUBLIC_WORKS

PROGRAM NO. 2025-501	CONTRACT NO.	C.C. FILE NO.	
PROJECT NO. WT41025050	OFFICIAL NOTICE NO.	DATE ADOPTED	

SHEET NO. 2 OF 2 PLAN FILE NO. 2025106

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	W. ST. PAUL AVENUE WATERMAIN

SHEET 125 E

FILE NAME : LAYOUT NAME - 01-SP-WM-02

PLOT DATE : 7/21/2025 PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : ########## WISDOT/CADDS_SHEET_42

GENERAL DRAINAGE NOTES

LOCATION OF STRUCTURES REFER TO CENTER OF STRUCTURE OR AS NOTED ON PLAN.

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

UTILITY INFORMATION SHOWN ON THE PLANS IS APPROXIMATE. LOCATIONS SHOWN ARE TAKEN FROM EXISTING RECORDS AND BEST INFORMATION AVAILABLE FROM EXISTING PLANS. IT IS EXPECTED THAT THERE MAY BE DISCREPANCIES AND OMISSIONS IN THE LOCATION OF UTILITIES AND STRUCTURES SHOWN. VERIFY ALL LOCATIONS IN THE FIELD.

COORDINATE WITH DIGGERS HOTLINE TO FIELD LOCATE UTILITIES. SHEETING SHALL NOT GO THROUGH UTILITIES. ANY UTILITIES DAMAGED DUE TO CONTRACTOR ACTIVITIES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE COMPLETE SATISFACTION OF THE UTILITY FACILITY.

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

PROVIDE TEMPORARY POSITIVE DRAINAGE THROUGHOUT THE PROJECT DURING ALL PROJECT STAGES. PROVIDING TEMPORARY POSITIVE DRAINAGE IS INCIDENTAL TO CONSTRUCTION.

SUPPORTING UTILITIES DURING DRAINAGE CONSTRUCTION IS INCIDENTAL TO DRAINAGE PIPE AND/OR DRAINAGE STRUCTURE.

STORM STAGING LEGEND

- REMOVING INLETS
- REMOVE AND CAP EXISTING STRUCTURE
- REMOVING MANHOLES
- —RM 1— REMOVING STORM SEWER (BY STAGE)
- —2— PROPOSED STORM SEWER (BY STAGE)
- —AB 1— ABANDONING STORM SEWER (BY STAGE)

STORM SEWER LEGEND

- (E**) EXISTING DRAINAGE STRUCTURE
- (***) PROPOSED DRAINAGE STRUCTURE
- PROPOSED MANHOLE
- PROPOSED INLET
- PROPOSED STORM SEWER/CULVERT PIPE PLAN VIEW
- BOP BOTTOM OF PIPE
- TOP TOP OF PIPE
- DSVT DRAIN SLOTTED VANE TEMPORARY
- DSVP DRAIN SLOTTED VANE PERMANENT

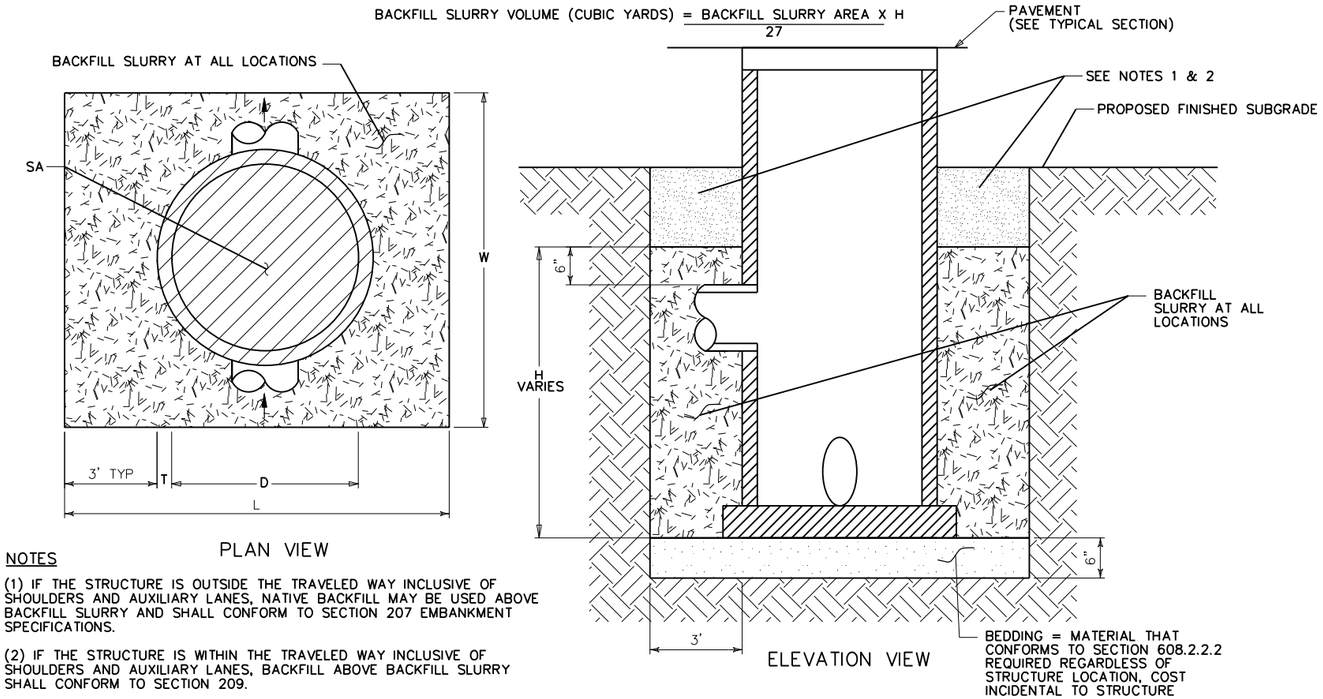
2

BACKFILL SLURRY STRUCTURES (FOR INFORMATION ONLY)

DESCRIPTION	DIAMETER / STR LENGTH D FT	RECTANGULAR STR WIDTH RW FT	WALL THICKNESS T INCH	SLAB THICKNESS ST INCH	STRUCTURE EXCAVATION LENGTH L FT	STRUCTURE EXCAVATION WIDTH W FT	STRUCTURE EXCAVATION AREA SF	STRUCTURE AREA SA SF	BACKFILL SLURRY AREA SF
INLETS 2x2.5-FT	2	2.5	5	5	8.83	9.33	82.44	9.44	73.00
INLETS 2x3-FT	2	3	5	5	8.83	9.83	86.86	10.86	76.00
INLETS MEDIAN 2 GRATE	2.5	5.33	8	8	9.83	12.66	124.52	25.54	98.98
INLETS 4-FT DIAMETER	4	—	5	6	10.83	10.83	117.36	18.34	99.02
CATCH BASINS 4-FT DIAMETER	4	—	5	6	10.83	10.83	117.36	18.34	99.02
CATCH BASINS 5-FT DIAMETER	5	—	6	8	12.00	12.00	144.00	28.26	115.74
MANHOLES 4-FT DIAMETER	4	—	4	6	10.67	10.67	113.78	17.10	96.68
MANHOLES 5-FT DIAMETER	5	—	5	8	11.83	11.83	140.03	26.71	113.32
MANHOLES 6-FT DIAMETER	6	—	6	8	13.00	13.00	169.00	38.47	130.54
MANHOLES 7-FT DIAMETER	7	—	7	8	14.17	14.17	200.69	52.36	148.34

H = UP TO 6" ABOVE THE TOP OF THE HIGHEST PIPE IN THE STRUCTURE

BACKFILL SLURRY VOLUME (CUBIC YARDS) = $\frac{\text{BACKFILL SLURRY AREA X H}}{27}$



NOTES

(1) IF THE STRUCTURE IS OUTSIDE THE TRAVELED WAY INCLUSIVE OF SHOULDERS AND AUXILIARY LANES, NATIVE BACKFILL MAY BE USED ABOVE BACKFILL SLURRY AND SHALL CONFORM TO SECTION 207 EMBANKMENT SPECIFICATIONS.

(2) IF THE STRUCTURE IS WITHIN THE TRAVELED WAY INCLUSIVE OF SHOULDERS AND AUXILIARY LANES, BACKFILL ABOVE BACKFILL SLURRY SHALL CONFORM TO SECTION 209.

(3) BACKFILL SLURRY IS CONSIDERED INCIDENTAL TO DRAINAGE STRUCTURES. NO SEPARATE PAYMENTS WILL BE MADE.

(4) WHEN TEMPORARY SUBGRADE IS HIGHER THAN PROPOSED FINISHED SUBGRADE, PROVIDE GRANULAR BACKFILL AT ALL LOCATIONS. COST FOR GRANULAR BACKFILL IS CONSIDERED INCIDENTAL TO CONSTRUCTION.

(5) AT DIRECTION OF ENGINEER, BACKFILL SLURRY CAN BE ELIMINATED IN HIGH EMBANKMENT AREAS.

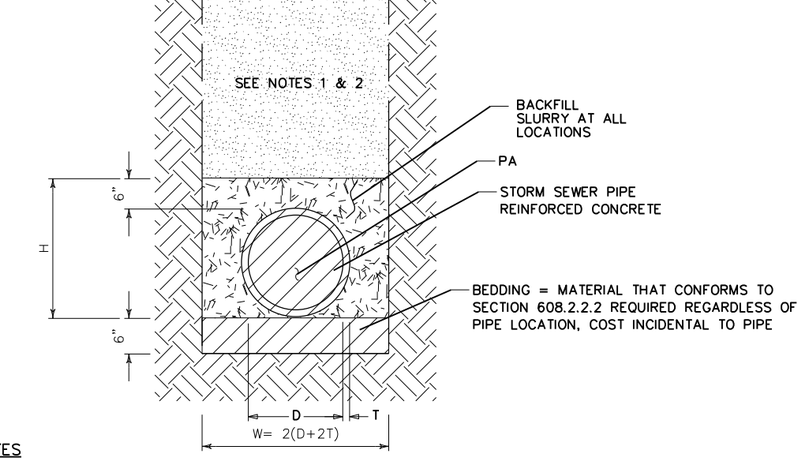
BACKFILL SLURRY DETAIL – STORM SEWER STRUCTURES

NOT REQUIRED FOR TEMPORARY INSTALLATION

BACKFILL SLURRY TRENCHES (FOR INFORMATION ONLY)

PIPE DIAMETER D INCHES	PIPE HEIGHT PH INCHES	PIPE WIDTH PW INCHES	Wall Thickness T Inches	Trench Width W FT	Height of Pipe Zone H (From pipe bottom to 6" above top of pipe)	Area of Pipe Zone SF	Area of Pipe PA SF	Backfill Slurry Area SF
12	12	12	2.00	2.67	1.83	4.89	1.40	3.49
15	15	15	2.25	3.25	2.13	6.91	2.07	4.83
18	18	18	2.50	3.83	2.42	9.26	2.89	6.38
24	24	24	3.00	5.00	3.00	15.00	4.91	10.09
30	30	30	3.50	6.17	3.58	22.10	7.47	14.63
42	42	42	4.50	8.50	4.75	40.38	14.19	26.19

BACKFILL SLURRY VOLUME (CUBIC YARDS) = $\frac{\text{(PIPE ZONE AREA – PIPE AREA) X PIPE PLAN LENGTH}}{27}$



NOTES

(1) IF THE PIPE IS OUTSIDE THE TRAVELED WAY INCLUSIVE OF SHOULDERS AND AUXILIARY LANES, NATIVE BACKFILL MAY BE USED ABOVE BACKFILL SLURRY AND SHALL CONFORM TO SECTION 207 EMBANKMENT SPECIFICATIONS.

(2) IF THE PIPE IS WITHIN THE TRAVELED WAY INCLUSIVE OF SHOULDERS AND AUXILIARY LANES, BACKFILL ABOVE BACKFILL SLURRY SHALL CONFORM TO SECTION 209.

(3) BACKFILL SLURRY IS CONSIDERED INCIDENTAL TO DRAINAGE PIPE. NO SEPARATE PAYMENTS WILL BE MADE.

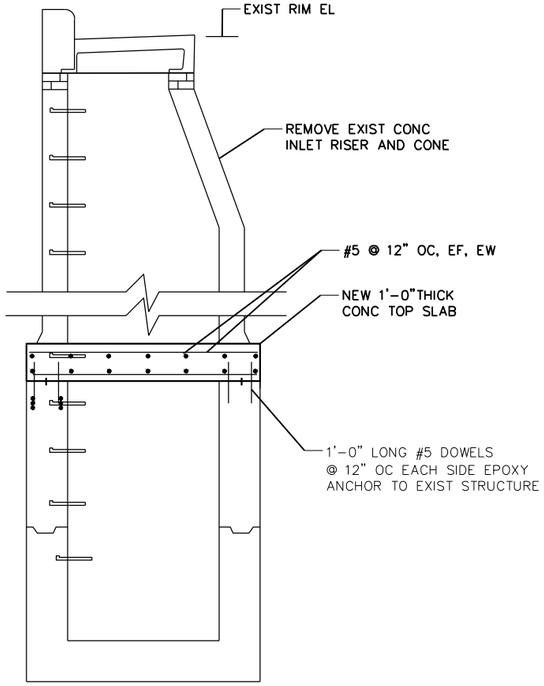
(4) WHEN TEMPORARY SUBGRADE IS HIGHER THAN PROPOSED FINISHED SUBGRADE, PROVIDE GRANULAR BACKFILL AT ALL LOCATIONS. COST FOR GRANULAR BACKFILL IS CONSIDERED INCIDENTAL TO CONSTRUCTION.

(5) AT DIRECTION OF ENGINEER, BACKFILL SLURRY CAN BE ELIMINATED IN HIGH EMBANKMENT AREAS.

BACKFILL SLURRY DETAIL – STORM SEWER TRENCH

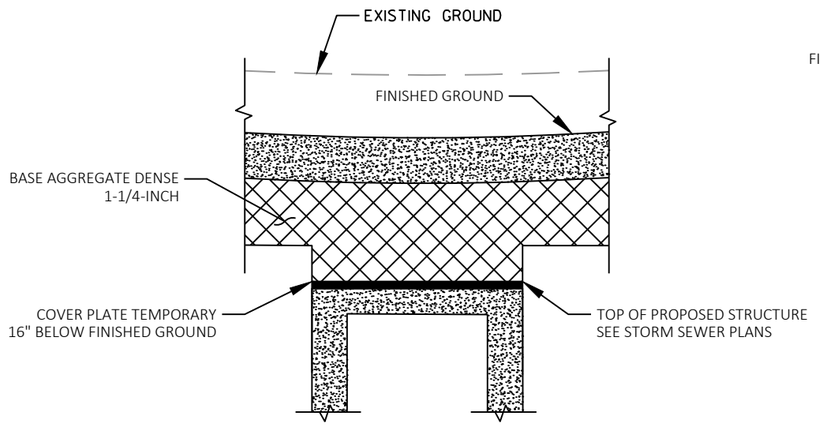
NOT REQUIRED FOR TEMPORARY INSTALLATION

2

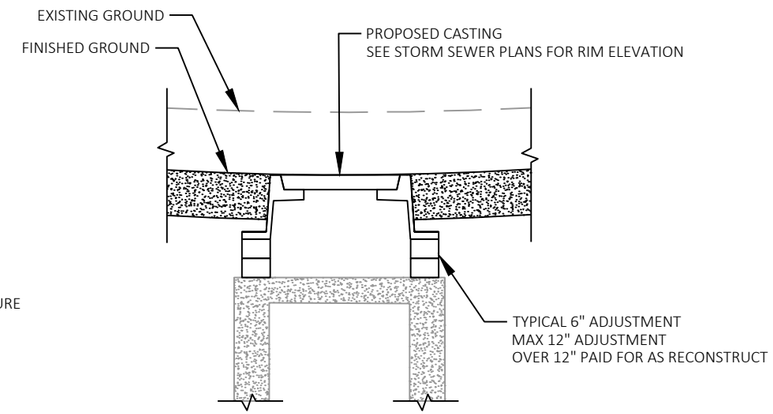


SECTION

REMOVE AND CAP EXISTING DRAINAGE STRUCTURE



COVER PLATE TEMPORARY



ADJUSTING MANHOLE / INLET COVERS

ADJUSTMENT WHEN FINISHED GROUND IS BELOW EXISTING GROUND

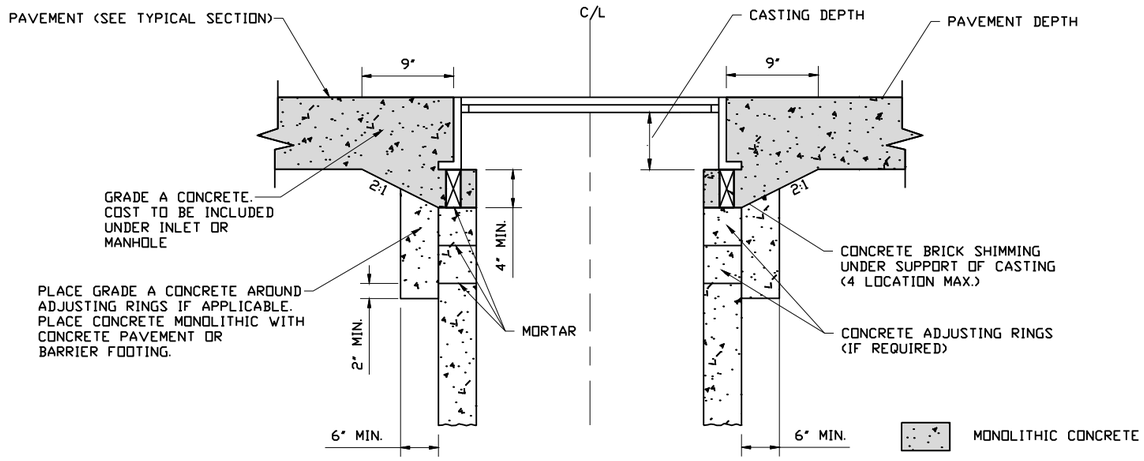
COVER PLATES TEMPORARY/ ADJUSTING MANHOLE / INLET COVERS DETAILS

SEE MONOLITHIC CONCRETE SHIMMING DETAIL FOR
ADDITIONAL FINAL ADJUSTMENT DETAILS.

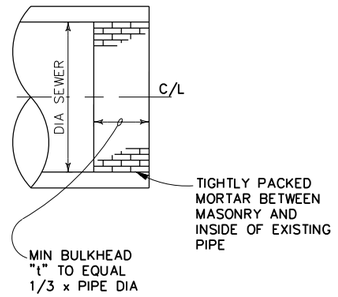
2

NOTES

1) PROVIDE MONOLITHIC CONCRETE SHIMMING FOR FINAL ADJUSTMENT OF DRAINAGE STRUCTURES LOCATED WITHIN THE ROADWAY CONCRETE PAVEMENT AND CONCRETE BARRIER.

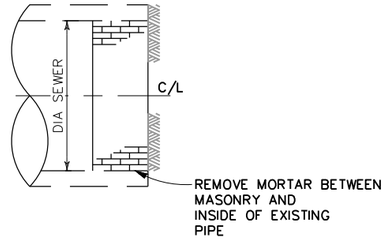


MONOLITHIC CONCRETE SHIMMING DETAIL



BULKHEAD PIPE MASONRY

ITEM TO BE PAID FOR UNDER ITEM "SEALING PIPES"

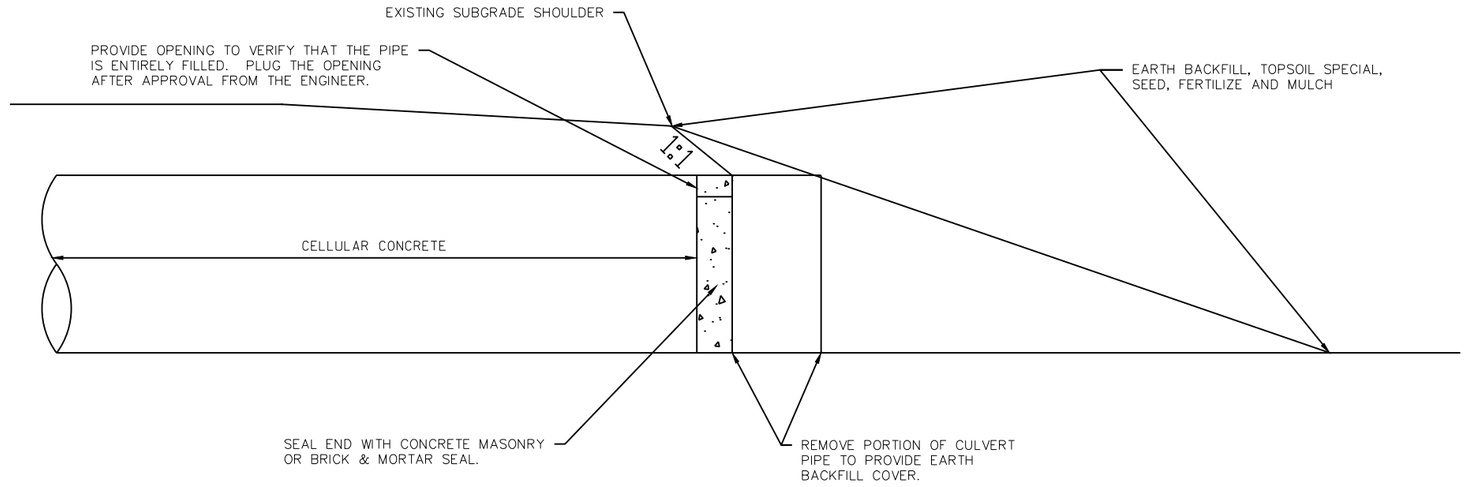


REMOVING BULKHEAD

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER - CONSTRUCTION DETAILS	SHEET 128	E

FILE NAME : C:\USERS\WWOLAK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022500_SS.DWG
LAYOUT NAME - 03
PLOT DATE : 7/25/2025 12:14 PM PLOT BY : WALTER A. WOLAK II PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

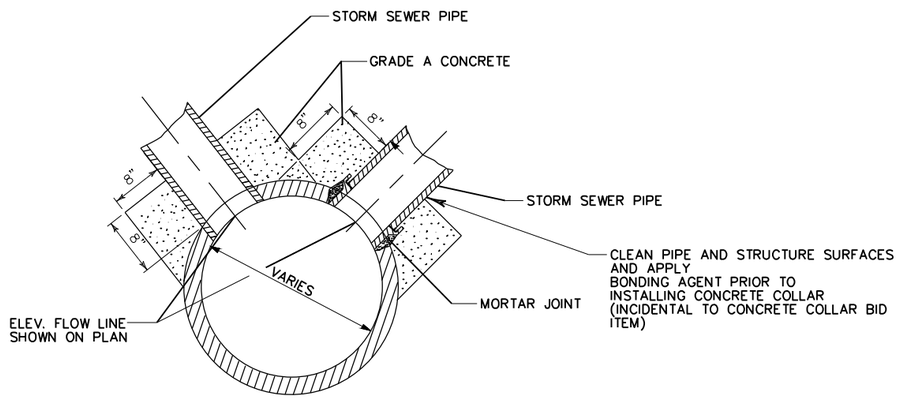
2



ABANDONING SEWER DETAIL

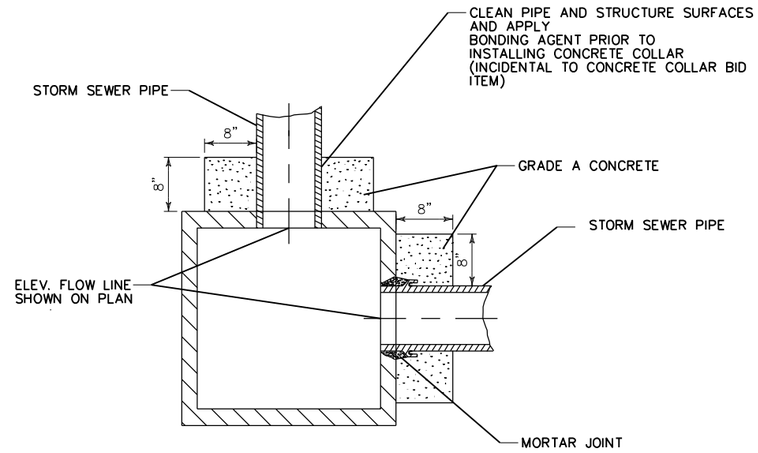
NOTE

RECONNECT STORM SEWER TO BE PAID AS A BID ITEM WHEN CONNECTING PROPOSED STORM SEWER PIPE/STRUCTURES TO EXISTING STORM SEWER PIPE/STRUCTURES



AT MANHOLE

INCIDENTAL TO NEW STRUCTURE AND NEW PIPE ITEMS

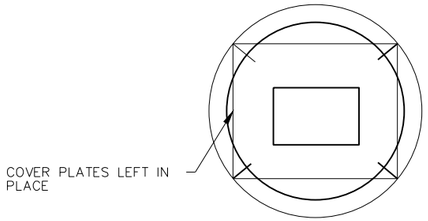


AT STORM SEWER INLET

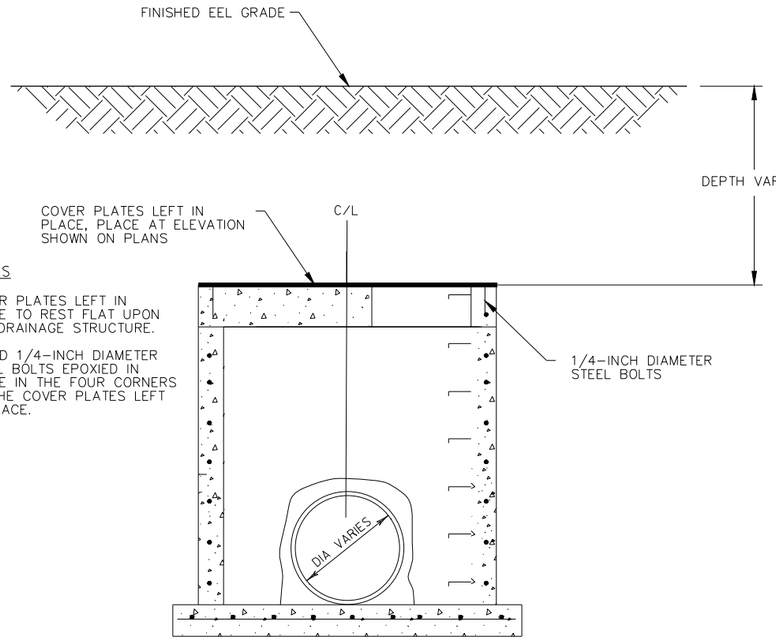
INCIDENTAL TO NEW STRUCTURE AND NEW PIPE ITEMS

CONCRETE COLLAR DETAIL

FOR LOCATIONS SEE MISCELLANEOUS QUANTITIES SHEETS



TOP VIEW



NOTES

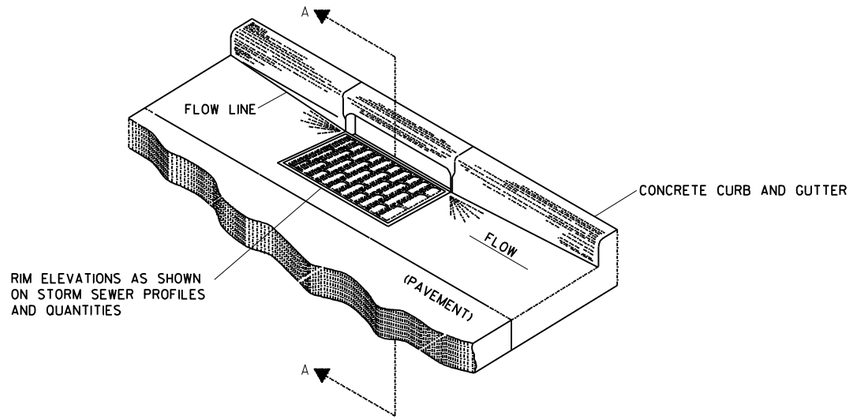
COVER PLATES LEFT IN PLACE TO REST FLAT UPON THE DRAINAGE STRUCTURE.

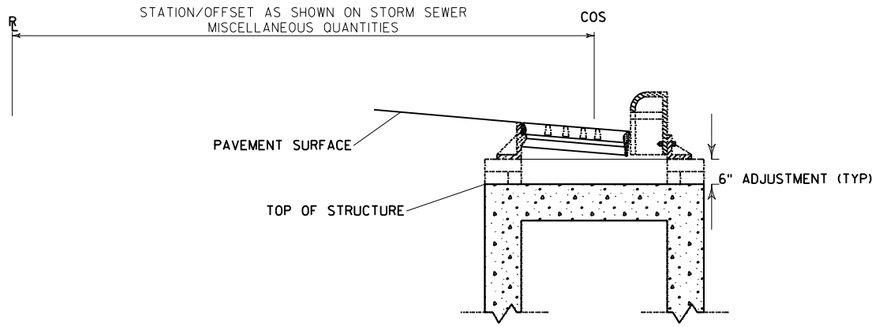
EMBED 1/4-INCH DIAMETER STEEL BOLTS EPOXIED IN PLACE IN THE FOUR CORNERS OF THE COVER PLATES LEFT IN PLACE.

COVER PLATES LEFT IN PLACE

NOTES

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



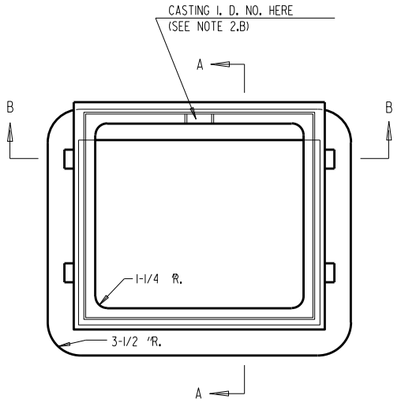


SECTION A-A

STORM SEWER STRUCTURES

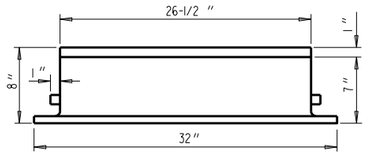
STATION/OFFSET LOCATION AND RIM ELEV

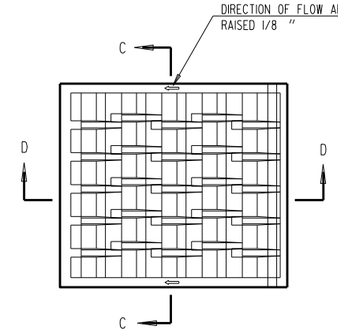
REPLACES SDD 08D01-23B - DETAIL OF CURB AND GUTTER AT INLETS



INLET FRAME - MS 51

WEIGHT 204 LBS.





INLET COVER - MS 57

WEIGHT 145 LBS

GENERAL NOTES

1. ALL EDGES ARE TO BE GROUND
2. ALL CASTINGS SHALL BEAR THE FOLLOWING IDENTIFICATION MARKS IN THE FORM OF LEGIBLE LETTERS OR NUMERALS RAISED 1/8 "

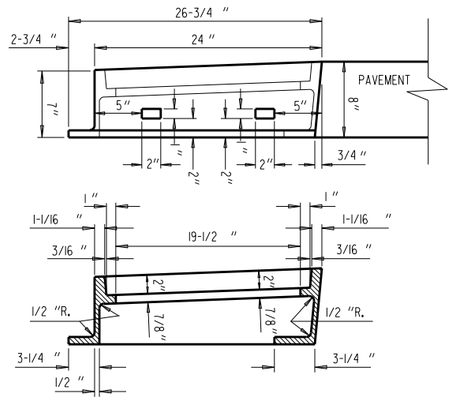
ON THE FRAME

a) ON THE UPPER FACE OF THE FLANGE IN 1 INCH HIGH LETTERS THE INITIALS OR MONOGRAM OF THE FOUNDRY, THE YEAR MADE AND THE SERIAL NUMBER OF THE INDIVIDUAL CASTING.

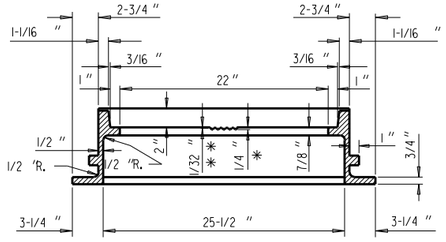
b) ON THE SEAT OF THE FRAME IN 1 INCH HIGH LETTERS, THE CASTING IDENTIFICATION NUMBER (51).

ON THE GRATE

c) ON THE UPPER SIDE OF THE GRATE IN 1 INCH HIGH LETTERS, THE INITIALS OR MONOGRAM OF THE FOUNDRY, THE YEAR MADE, THE CASTING IDENTIFICATION NUMBER (57) AND THE SERIAL NUMBER OF THE INDIVIDUAL CASTING.



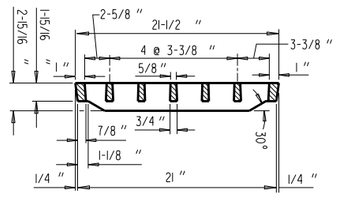
SECTION A-A



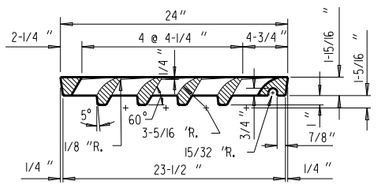
SECTION B-B

* DEPRESSION FOR LETTERS

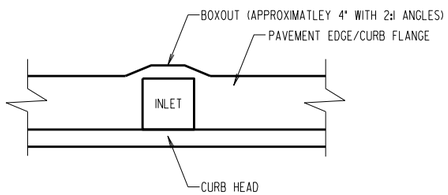
** CLEARANCE FROM TOP OF LETTERS TO FACE OF SEAT

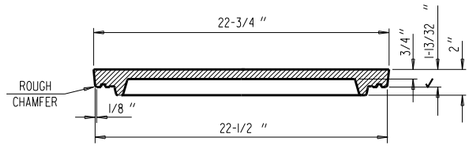


SECTION C-C

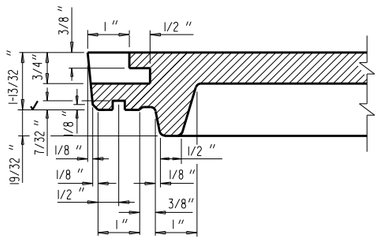


SECTION D-D

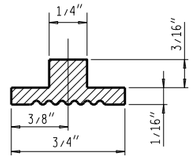


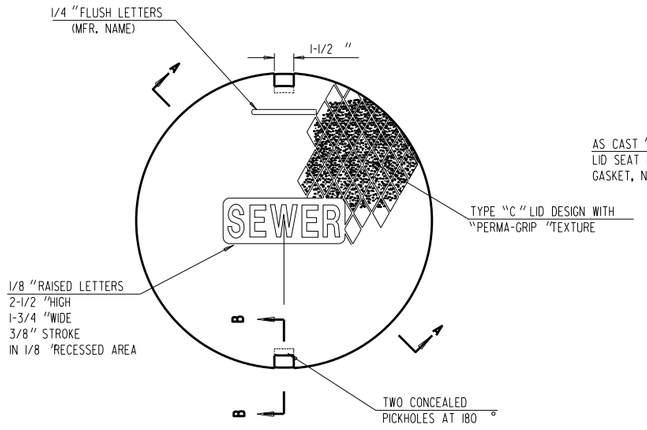


SECTION A-A

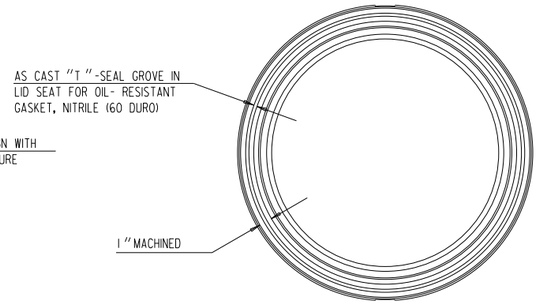


SECTION B-B





TOP VIEW



BOTTOM VIEW

NOTE:

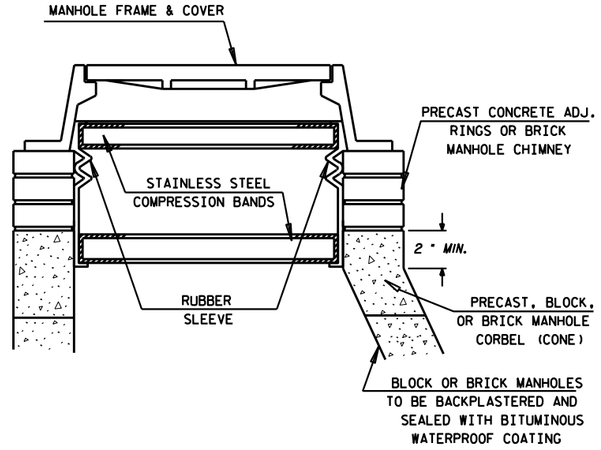
ALL CASTINGS SHALL BEAR THE FOLLOWING IDENTIFICATION MARKS IN THE FORM OF LEGIBLE LETTERS OR NUMERALS RAISED 1/8 "HAVING A DIGIT OR LETTER HEIGHT OF ONE INCH ON LOWER FACE OF LID:

1. THE INITIALS OR MONOGRAM OF THE FOUNDRY.
2. THE CONTRACT NUMBER AND YEAR MADE.
3. THE CASTING IDENTIFICATION NUMBER.
4. THE SERIAL NUMBER OF THE INDIVIDUAL CASTING.

NOTE: ALL EXTERIOR EDGES SHALL BE GROUND.

MANHOLE COVER - TYPE MS 58-A

LID - 107 LBS.



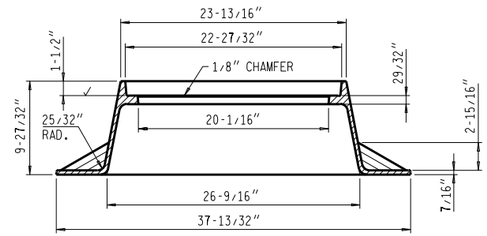
INTERNAL SANITARY MANHOLE SEAL

NOTE:

ALL CASTINGS SHALL BEAR THE FOLLOWING IDENTIFICATION MARKS IN THE FORM OF LEGIBLE LETTERS OR NUMERALS RAISED 1/8 "HAVING A DIGIT OR LETTER HEIGHT OF ONE INCH ON LOWER FACE OF LID:

1. THE INITIALS OR MONOGRAM OF THE FOUNDRY.
2. THE CONTRACT NUMBER AND YEAR MADE.
3. THE CASTING IDENTIFICATION NUMBER.
4. THE SERIAL NUMBER OF THE INDIVIDUAL CASTING.

NOTE: ALL EXTERIOR EDGES SHALL BE GROUND.



MANHOLE FRAME - TYPE MS 21

FRAME - 182 LBS.

2

W. CLYBOURN STREET

N. 29TH STREET

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

W. ST PAUL AVENUE

W. MT VERNON AVENUE

RAMP JD

RAMP LC

IH 94 WB

IH 94 EB

SUB-STATION

GAS STATION

PARKING LOT

R/L J

R/L SP

R/L TJD

R/L KN

R/L TSP

R/L TML

R/L KS

R/L TLC

R/L TEB

ERW

RM-3

REMOVE STAGE 3

11SP 12SP 13SP 14SP 15SP 16SP 17SP 18SP 19SP 20SP 21SP 22SP 23SP 24SP 25SP

218TSP 219TSP 220TSP 221TSP 225P

14J 13J 12J 11J

31KN 30KN 29KN 28KN 27KN 26KS 25KS 24KS 23KS 22KS

104TJD 103TJD 102TJD 101TJD

217TML 218TML 219TML 220TML 221TML 222TML 223TML 224TML 225TML

17TEB 18TEB 19TEB 20TEB 21TEB 22TEB 23TEB 24TEB 25TEB 26TEB 27TEB 28TEB 29TEB

17TLC 18TLC 19TLC 20TLC 21TLC 22TLC 23TLC 24TLC 25TLC 26TLC

N

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	EXISTING STORM SEWER REMOVALS: W. ST PAUL AVENUE - RAMP TJD - N. 28TH ST - N. 27TH ST	SHEET 133	E

FILE NAME : C:\USERS\WWOLAK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022502-SS-TML - REMOVALS.DWG
LAYOUT NAME - 03 - SP-TSP-REMOVALS
PLOT DATE : 7/25/2025 12:16 PM PLOT BY : WALTER A. WOLAK II PLOT NAME : PLOT SCALE : 1IN:100FT

2

2

N

W. ST PAUL AVENUE

W. MT VERNON AVENUE

N. 30TH STREET

N. 27TH STREET

SUB-STATION

RAMP JD

RAMP LC

W. GREVES STREET

IH 94 WB

IH 94 EB

R/L J

R/L KN

R/L TJD

R/L TSP

R/L TML

R/L TEB

R/L TLC

R/L KS

ERW

ABANDON STAGE 1A
(FILL WITH BACKFILL SLURRY FROM THE STRUCTURE FLOOR TO THE RIM.
BACKFILL SLURRY IS CONSIDERED INCIDENTAL TO ABANDONING THE STRUCTURE.)

REMOVE STAGE 1A

REMOVE STAGE 1B

REMOVE STAGE 2

REMOVE STAGE 3

RM-1A

RM-1B

RM-2

RM-3

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	EXISTING STORM SEWER REMOVALS: IH 94 TML	SHEET 134	E

FILE NAME : C:\USERS\WWOLAK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022502-SS-TML - REMOVALS.DWG
LAYOUT NAME - 05 - TML-REMOVALS
PLOT DATE : 7/25/2025 12:16 PM PLOT BY : WALTER A. WOLAK II PLOT NAME : PLOT SCALE : 1 IN:100 FT

PAUL

2

2

N

W. ST PAUL AVENUE

N. 29TH STREET

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

IH 94 WB

IH 94 EB

RAMP TJD

RAMP TLC

STAGE 3

CONNECT TO EXT.

ADJUST EXT. STRUCTURE

R/L J

R/L SP

R/L TJD

R/L KN

R/L TSP

R/L TML

R/L TEB

R/L TLC

R/L KS

R/L TWB

TLE

PRW

ERW

B-40-057

B-40-1083

EXISTING RETAINING WALL R-40-18 TO REMAIN

R-40-767 (STAGE 1)

R-40-761

ATC SUB-STATION

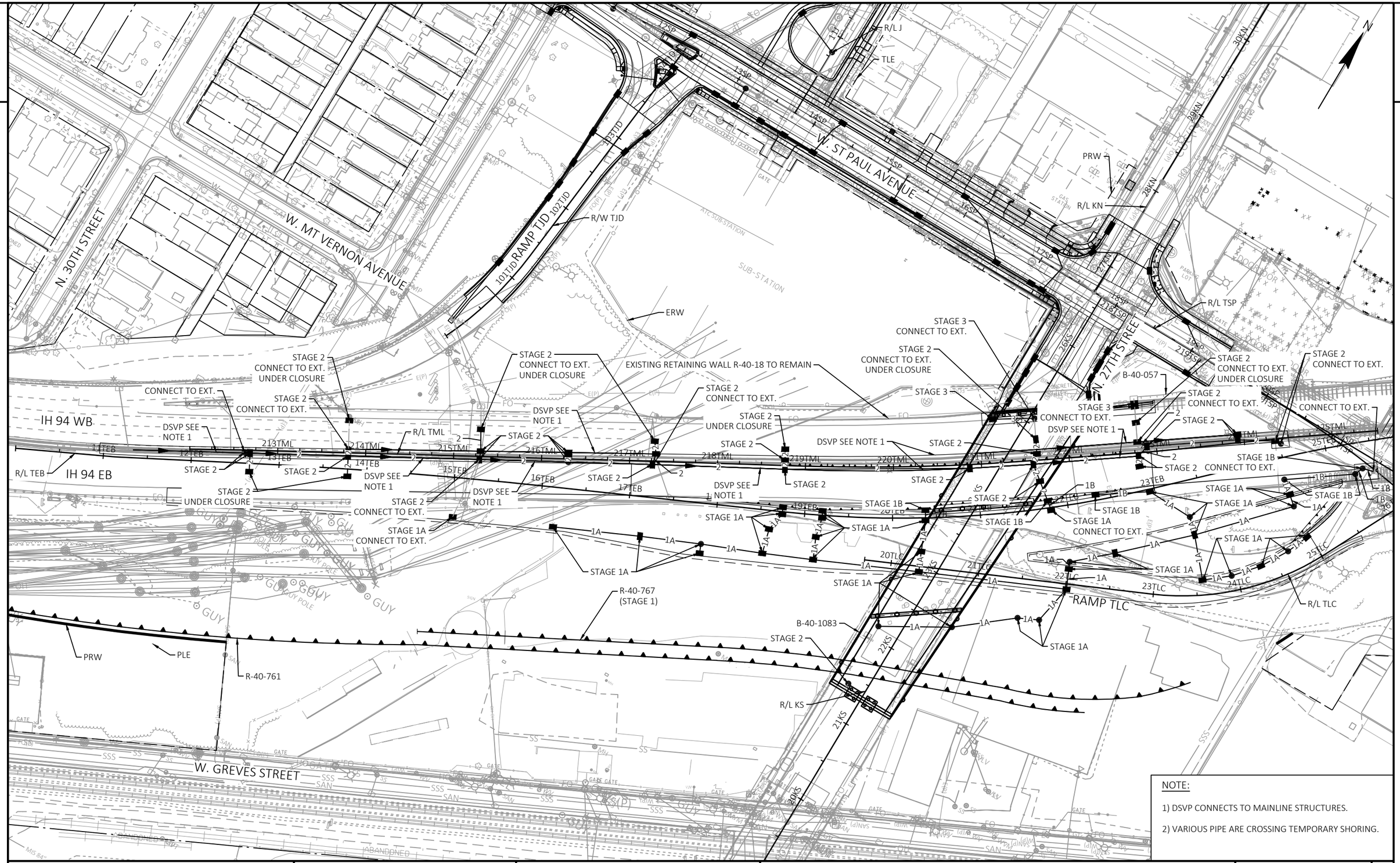
SUB-STATION

ABANDONED

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER STAGING PLAN: W. ST PAUL AVENUE - RAMP TJD - N. 28TH ST - N. 27TH ST	SHEET 135	E

FILE NAME : C:\USERS\WWOLAK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022502-SS-TML - STAGINGPLAN.DWG PLOT DATE : 7/25/2025 12:18 PM PLOT BY : WALTER A. WOLAK II PLOT NAME : PLOT SCALE : 1IN:100FT
LAYOUT NAME - 03 - SP-TSP-STAGING
WISDOT/CADDS SHEET 44

2



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER STAGING PLAN: IH 94 TML	SHEET 136	E

FILE NAME : C:\USERS\WWOLAK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022502-SS-TML - STAGINGPLAN.DWG
LAYOUT NAME - 05 - TML-STAGING
PLOT DATE : 7/25/2025 12:18 PM PLOT BY : WALTER A. WOLAK II PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 41

2

2

N

W. ST PAUL AVENUE

W. MT VERNON AVENUE

N. 30TH STREET

N. 27TH STREET

RAMP TJD

RAMP TLC

W. GREVES STREET

ATC SUB-STATION

SUB-STATION

ERW

PRW

PLE

R-40-761

R-40-767
(STAGE 1)

R/L KN

R/L KS

R/L LJ

TLE

STAGE 1A

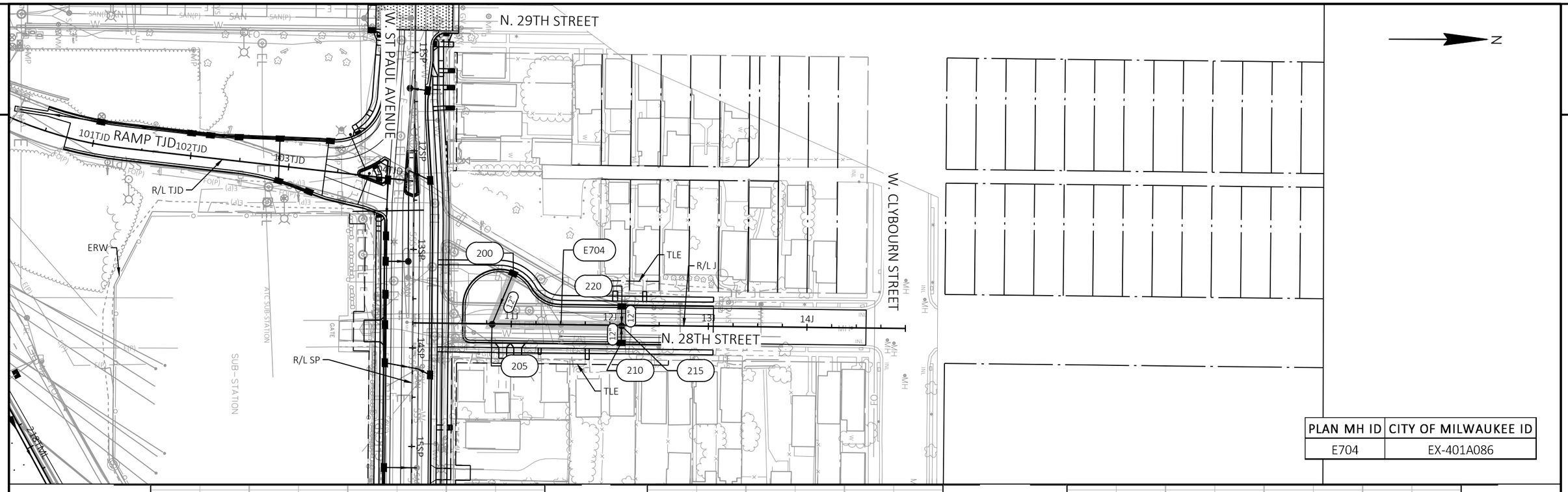
STAGE 1B

STAGE 4

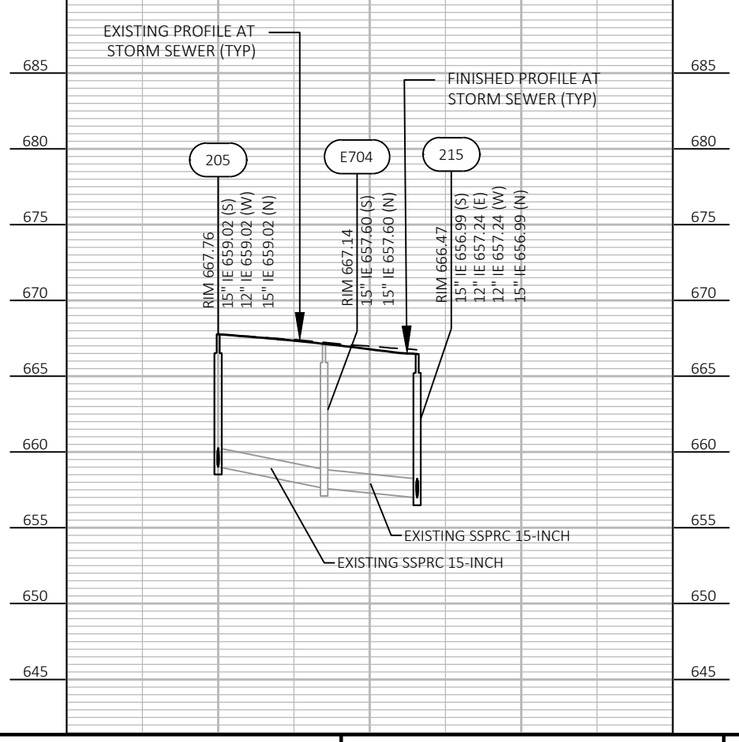
ABANDONED

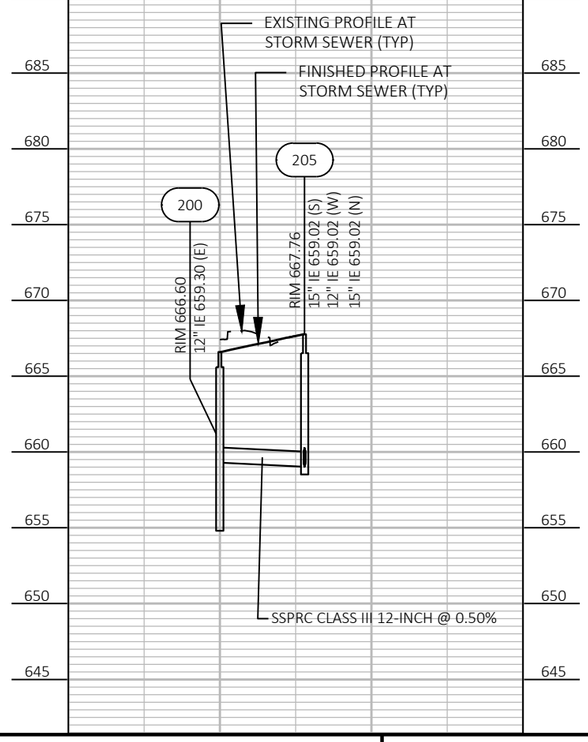
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER STAGING PLAN: EAST LEG - FINAL CONDITION	SHEET 137	E

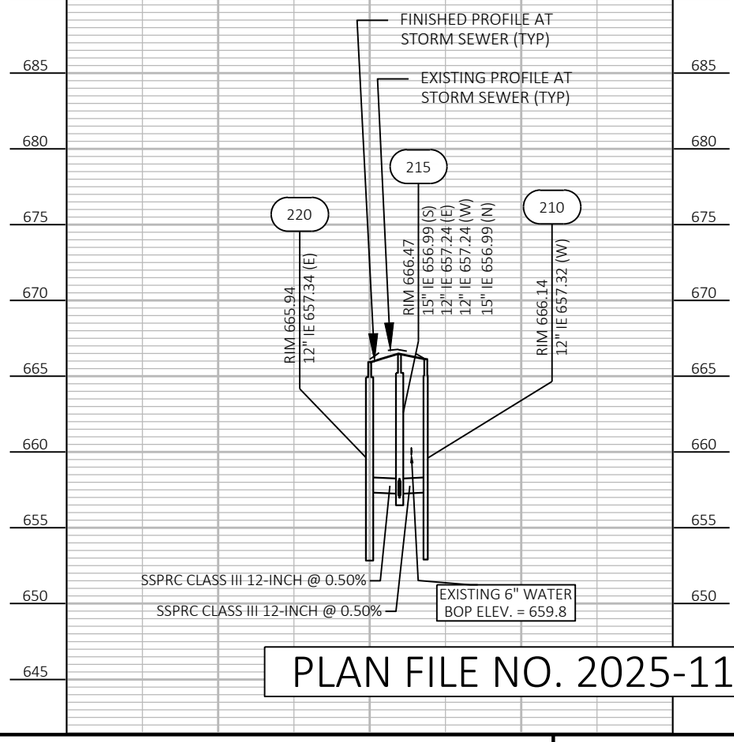
FILE NAME : C:\USERS\WWOLAK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022503-SS-TML - STAGINGPLAN.DWG PLOT DATE : 7/25/2025 12:20 PM PLOT BY : WALTER A. WOLAK II PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 11-FINAL-STAGING



PLAN MH ID	CITY OF MILWAUKEE ID
E704	EX-401A086

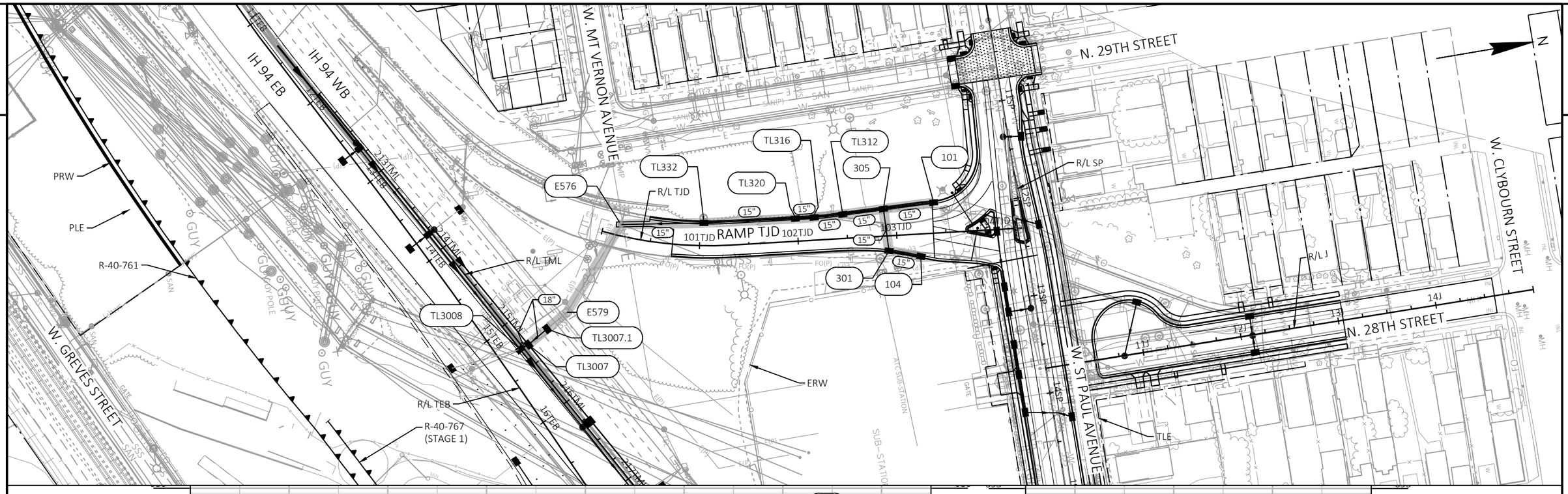


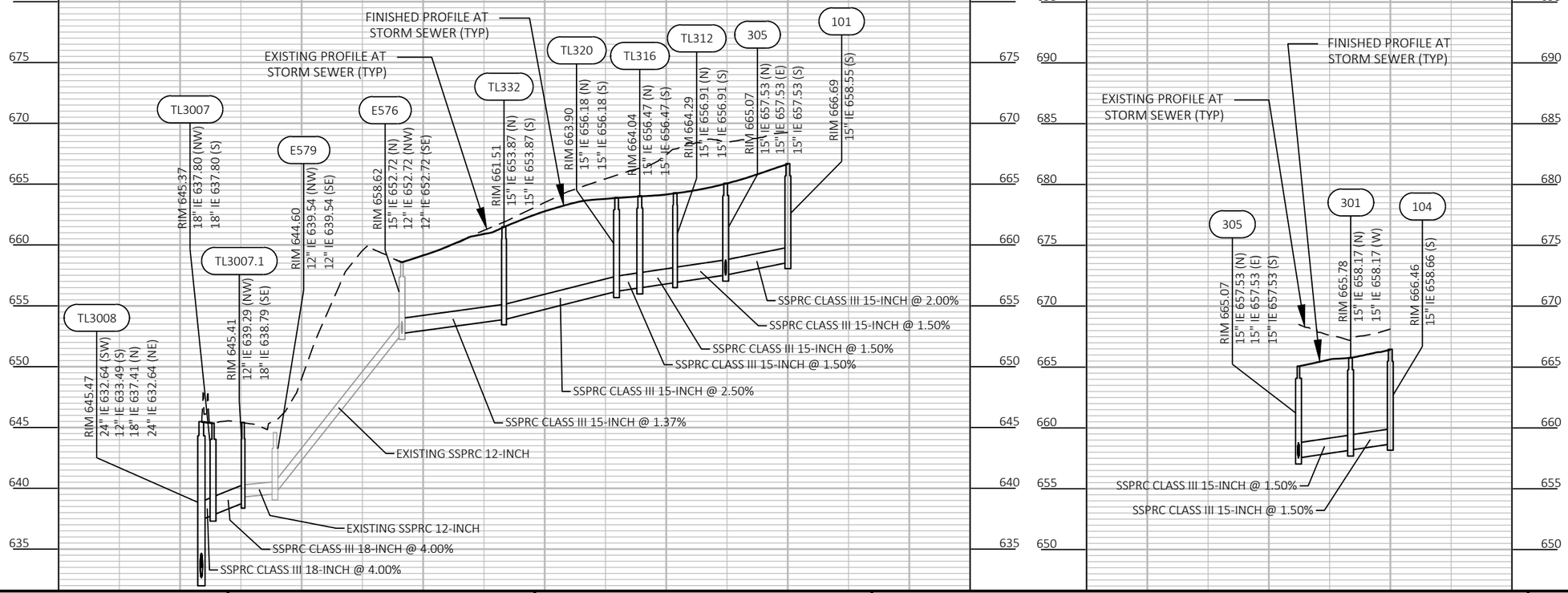




PLAN FILE NO. 2025-114

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER PLAN AND PROFILE: N. 28TH STREET	SHEET 138	E





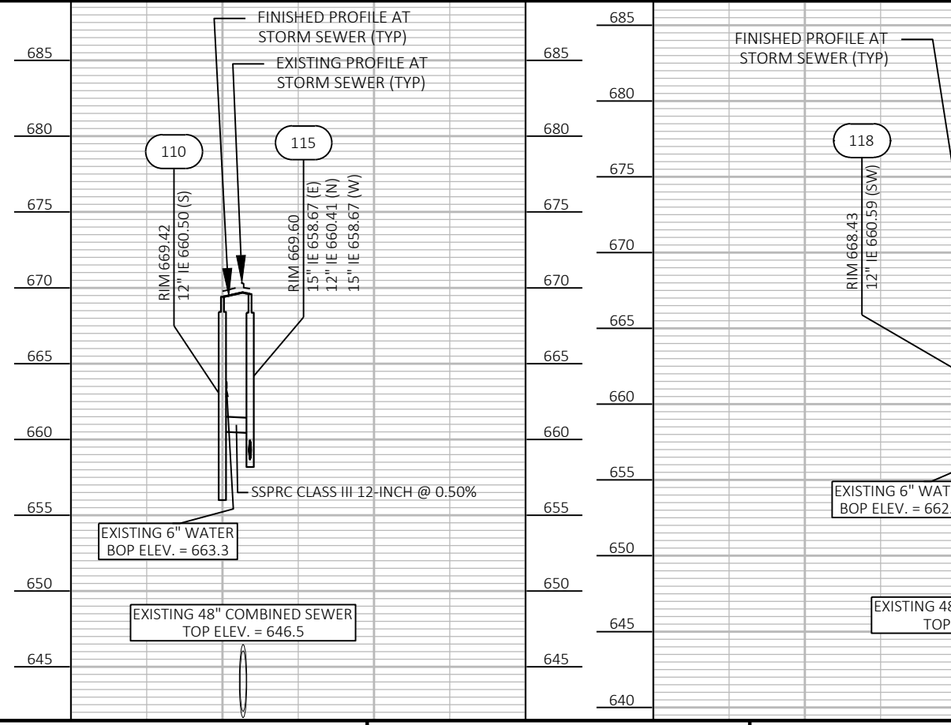
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER PLAN AND PROFILE: RAMP TJD	SHEET 139	E

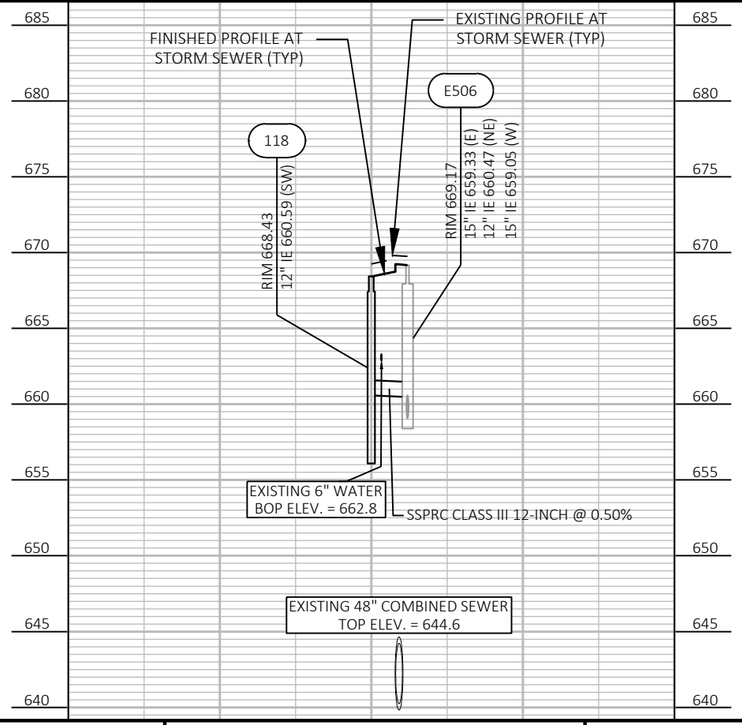
FILE NAME : C:\USERS\BMDODGE\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022505-SS-TML.DWG
LAYOUT NAME - 02 - TJD
PLOT DATE : 7/25/2025 12:44 PM
PLOT BY : BRANDON DODGE, EIT
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 41

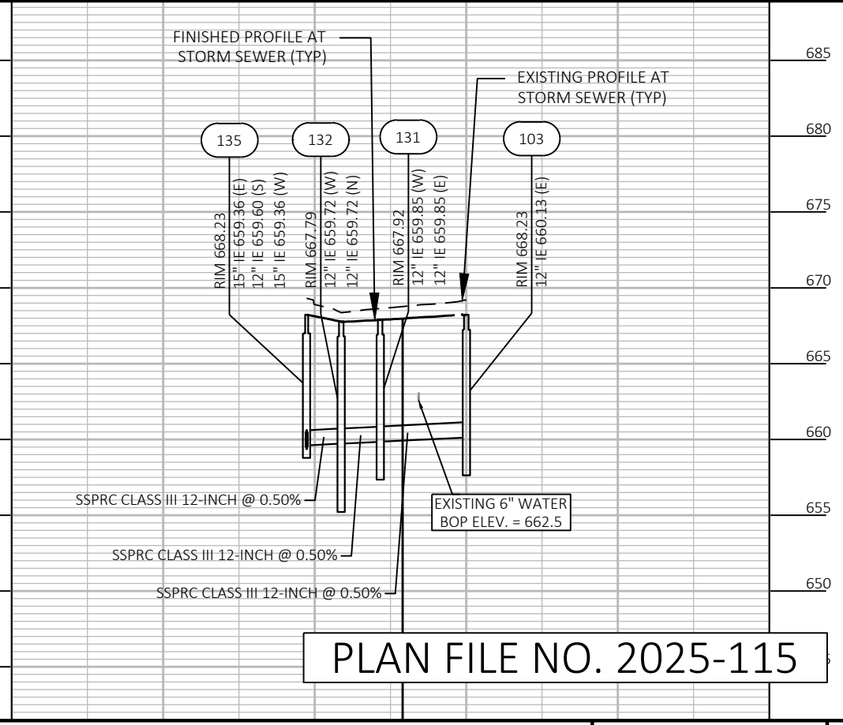
2

N. 29TH STREET
N. 28TH STREET
N. 27TH STREET
N. 26TH STREET
W. ST PAUL AVENUE
IH 94 WB
IH 94 EB
RAMP TJD
RAMP TLC
SUB-STATION
SUB-STATION
R/L J
R/L SP
R/L TJD
R/L KN
R/L TSP
R/L KS
R/L TML
R/L TEB
R/L TLC
TLE
TLE
TLE
PRW
ERW
B-40-057
110
115
118
135
E511
121
E514
124
E520
130
E523
157
E538
E541
160
E506
E705
E706
138
136
134
133
132
131
103
139
142
146
145
102TJD
103TJD
11SP
12SP
13SP
14SP
15SP
16SP
17SP
18SBP
19SBP
20SBP
21SBP
22SP
23SP
24SP
25SP
27KN
28KN
26KS
24KS
27TEB
28TEB
29TEB
25TML
24TEB
23TEB
24TLC
25TLC
23TLC
144"

PLAN MH ID	CITY OF MILWAUKEE ID
E506	EX-401D040
E511	EX-401D044
E514	EX-401D045
E520	EX-401D060
E523	EX-401D061
E538	EX-400B001
E541	EX-400B036



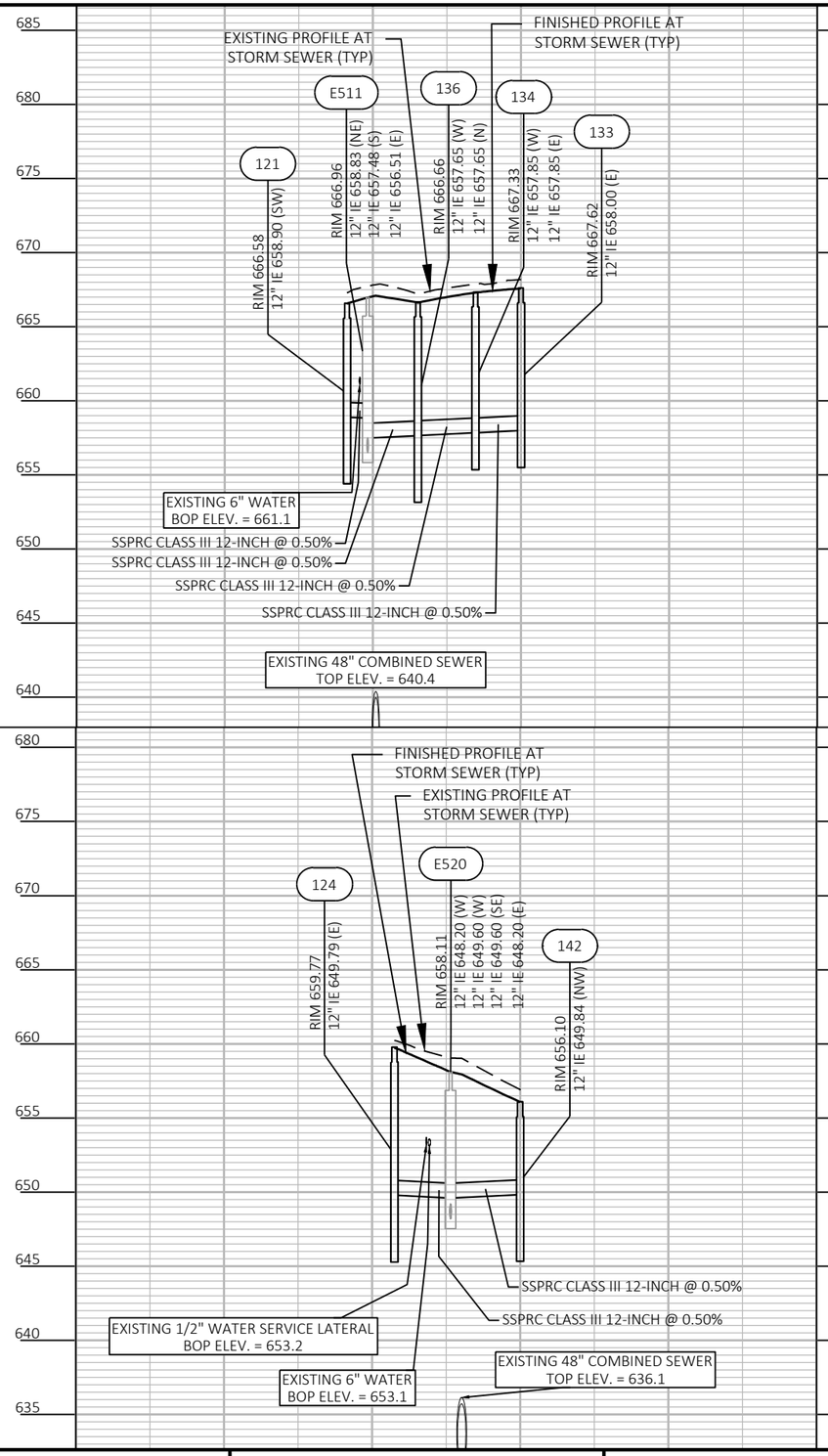


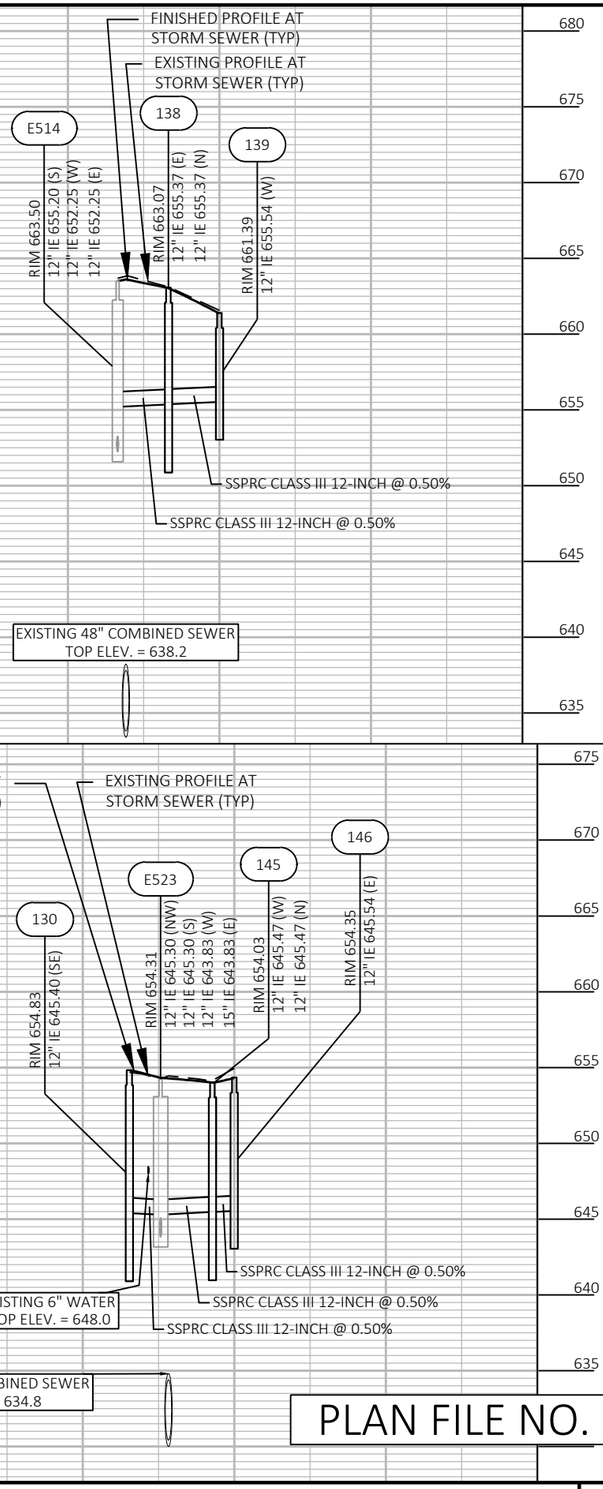


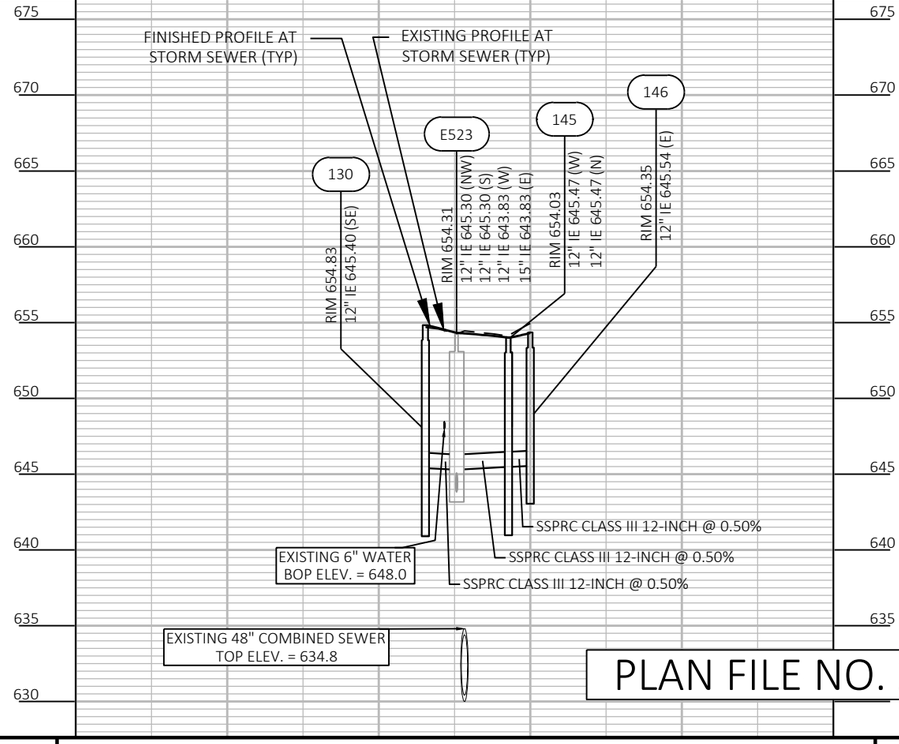
PLAN FILE NO. 2025-115

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER PLAN AND PROFILE: W. ST PAUL AVENUE	SHEET 140	E

FILE NAME : C:\USERS\BMDODGE\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022505-SS-TML.DWG
LAYOUT NAME - 03 - SP-TSP
PLOT DATE : 7/25/2025 12:45 PM
PLOT BY : BRANDON DODGE, EIT
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

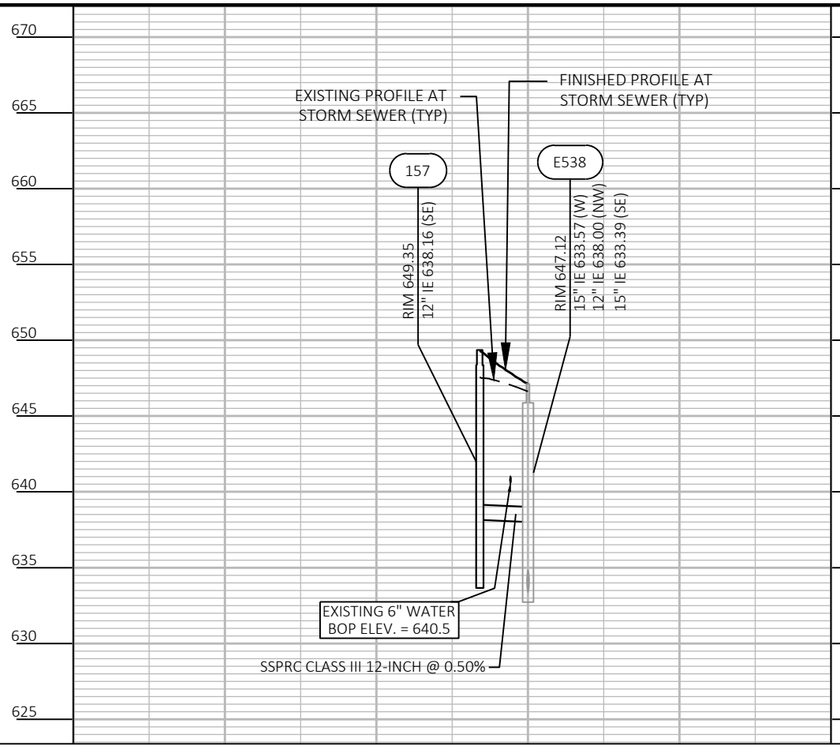


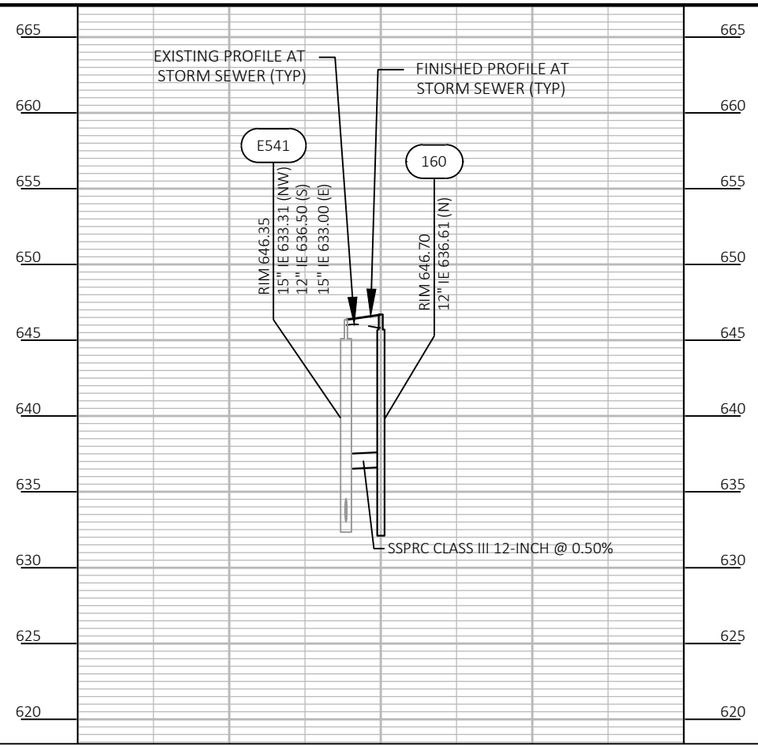




PLAN FILE NO. 2025-116

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER PLAN AND PROFILE: W. ST PAUL AVENUE	SHEET 141	E

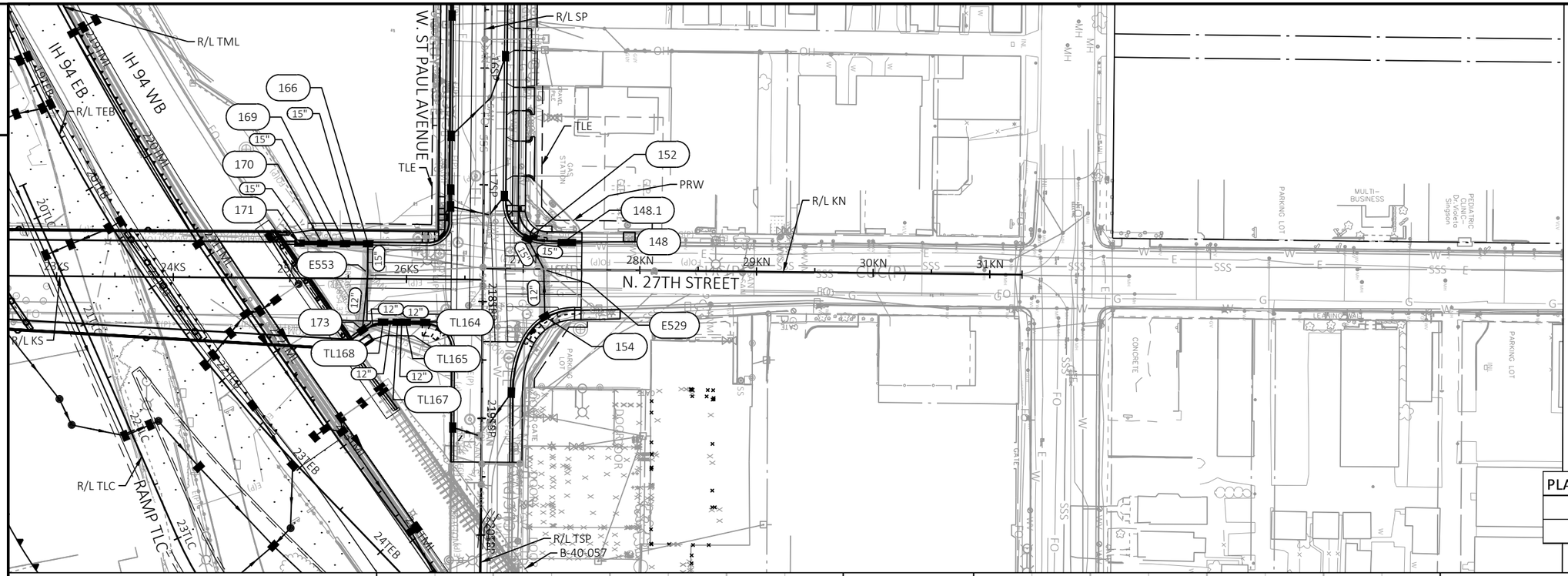




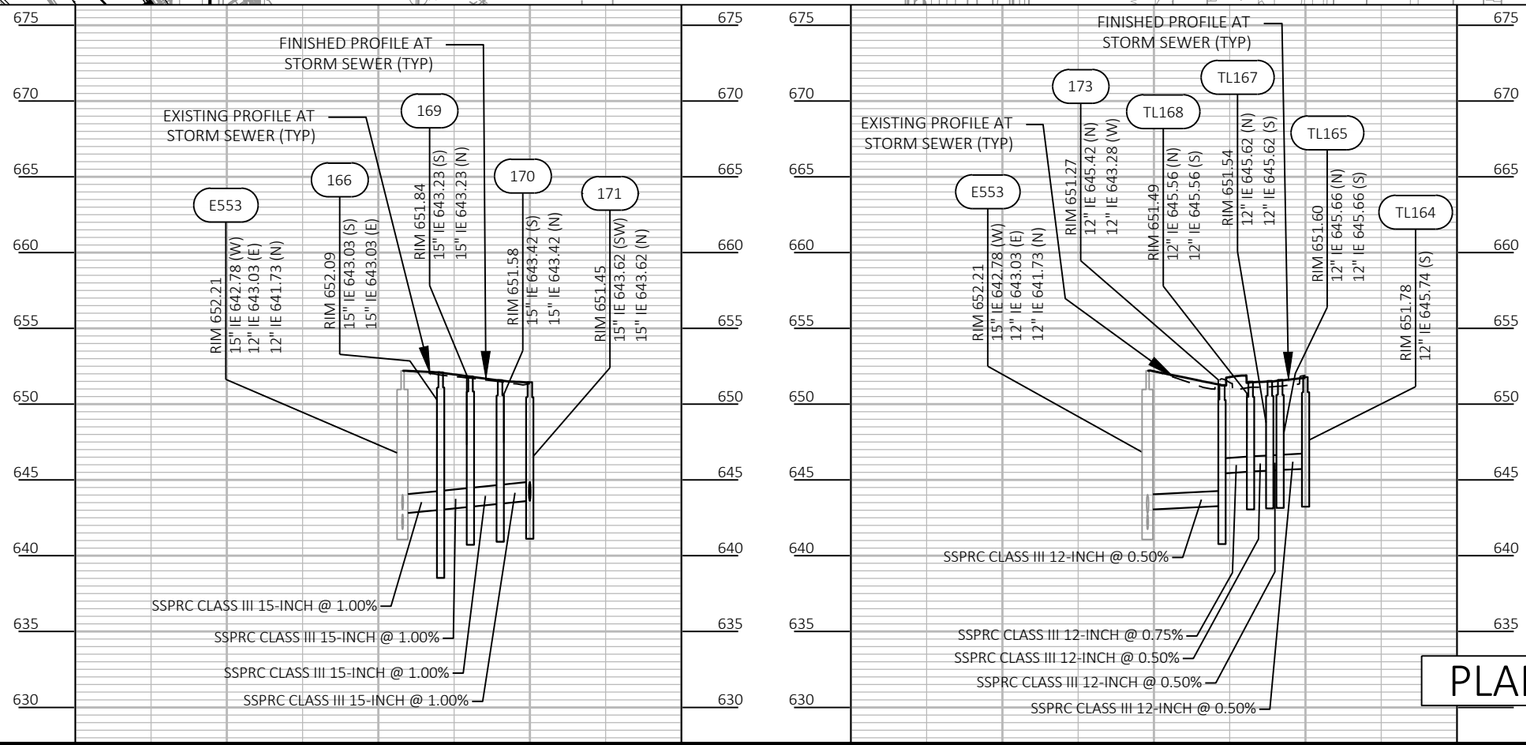
PLAN FILE NO. 2025-117

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER PLAN AND PROFILE: W. ST PAUL AVENUE	SHEET 142	E

FILE NAME : C:\USERS\BMDODGE\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022505-SS-TML.DWG
LAYOUT NAME - 03 - SP-TSP LAT-2
PLOT DATE : 7/25/2025 12:45 PM
PLOT BY : BRANDON DODGE, EIT
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 41

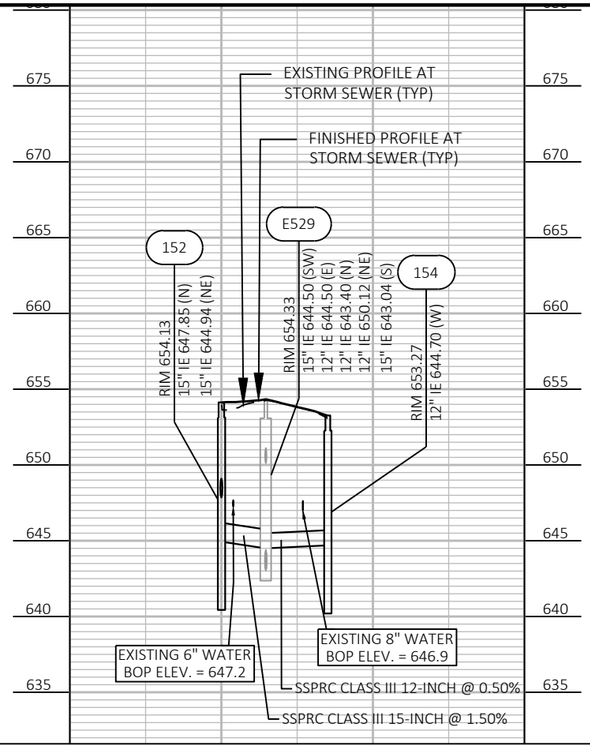


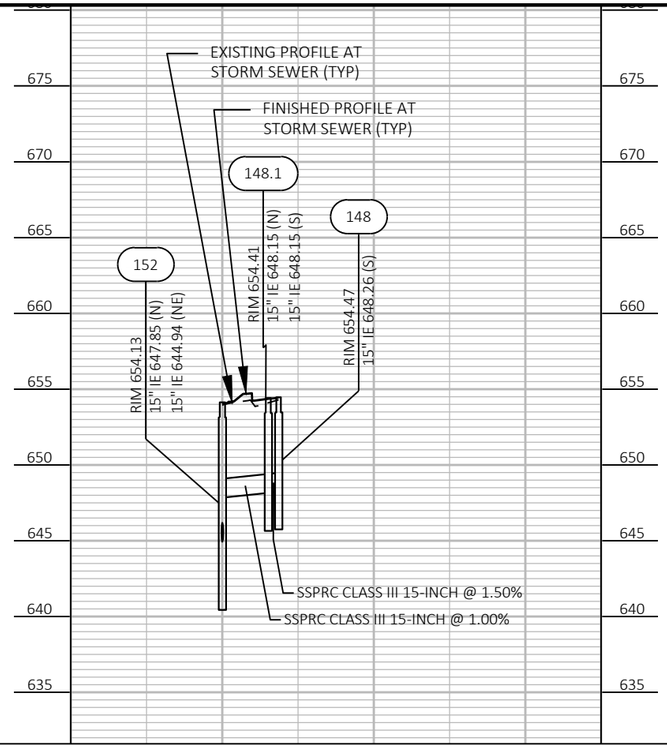
PLAN MH ID	CITY OF MILWAUKEE ID
E529	EX-401A029
E553	EX-401D053



PLAN FILE NO. 2025-118

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER PLAN AND PROFILE: N. 27TH STREET	SHEET 143	E



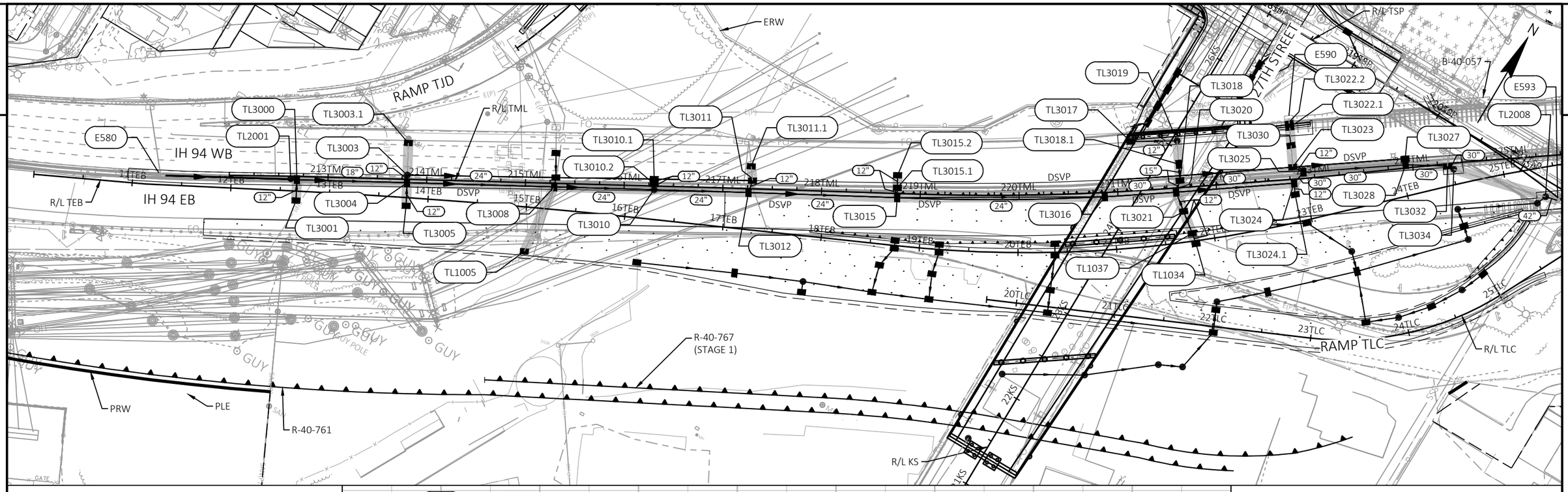


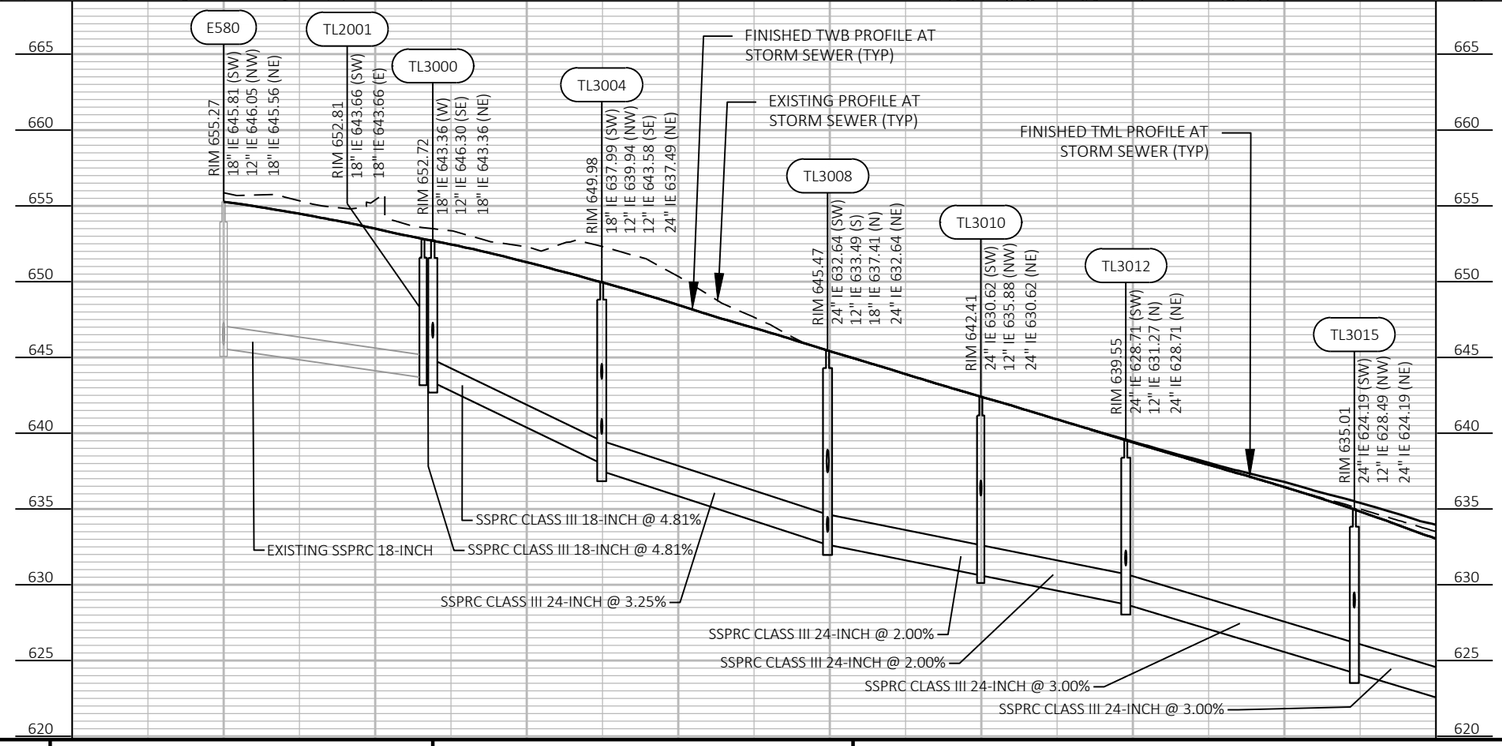
2

PLAN FILE NO. 2025-119

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER PLAN AND PROFILE: N. 27TH STREET	SHEET 144	E

FILE NAME : C:\USERS\BMDODGE\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022505-SS-TML.DWG
LAYOUT NAME - 04 - K LAT-1
PLOT DATE : 7/25/2025 12:50 PM
PLOT BY : BRANDON DODGE, EIT
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 41

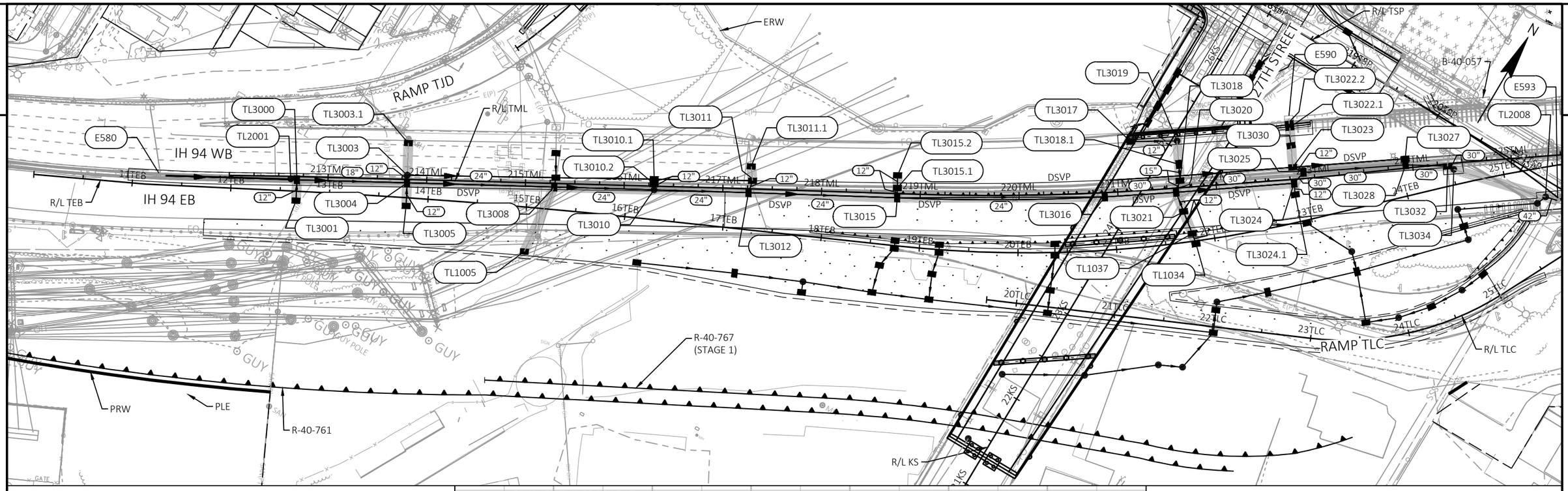


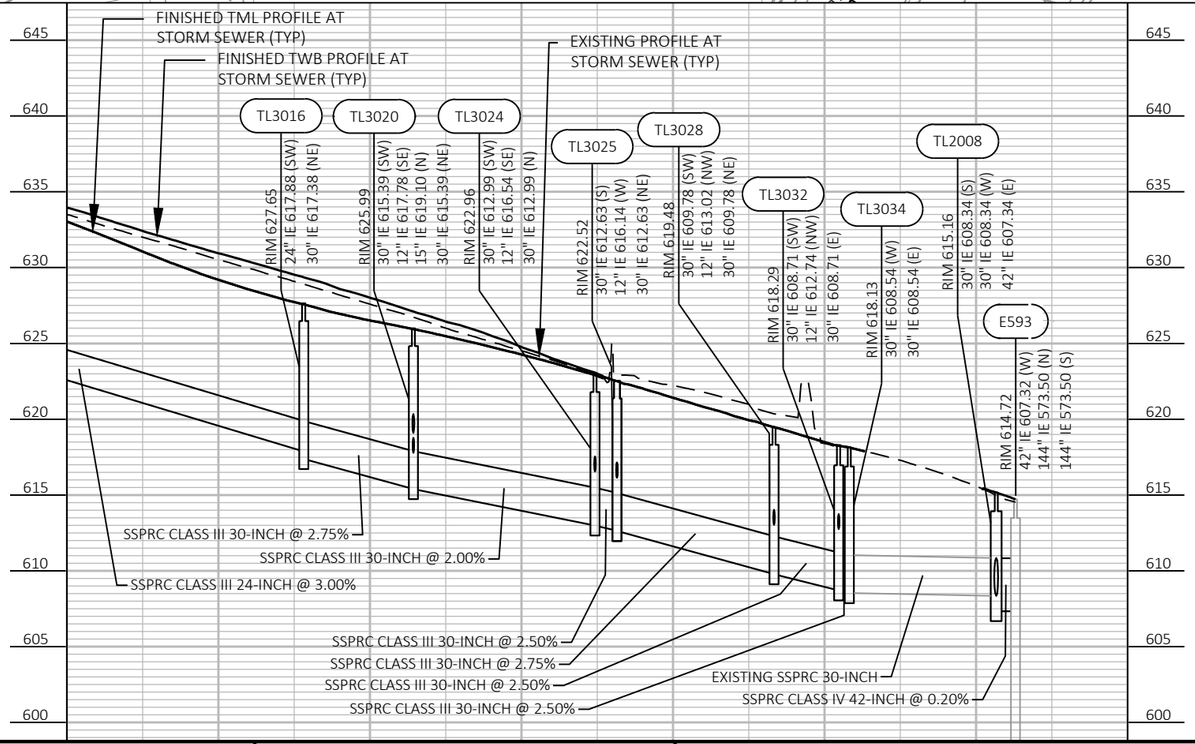


PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER PLAN AND PROFILE: IH 94 TML	SHEET 145	E

FILE NAME : C:\USERS\BMDODGE\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022505-SS-TML.DWG
LAYOUT NAME - 05 - TML
PLOT DATE : 7/25/2025 12:53 PM
PLOT BY : BRANDON DODGE, EIT
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 41

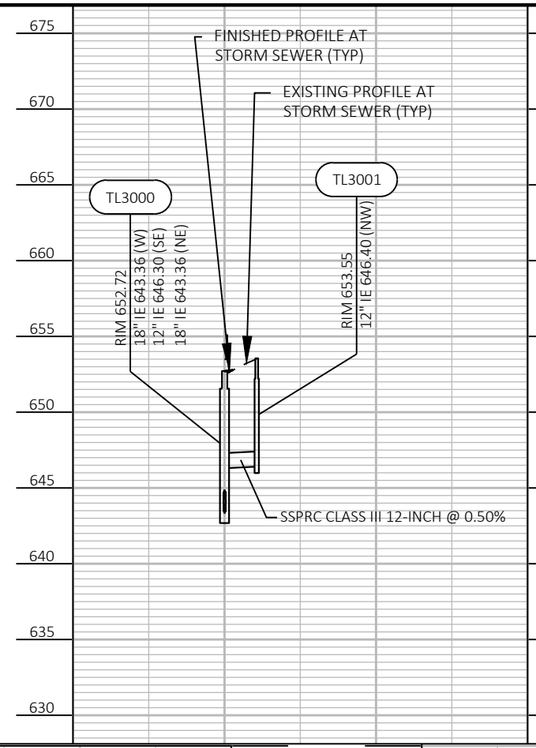
2

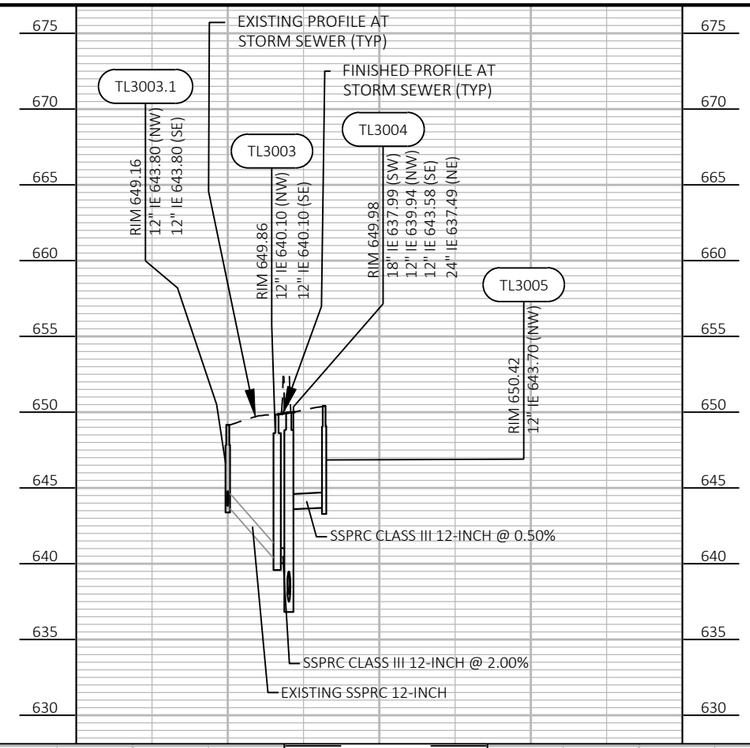


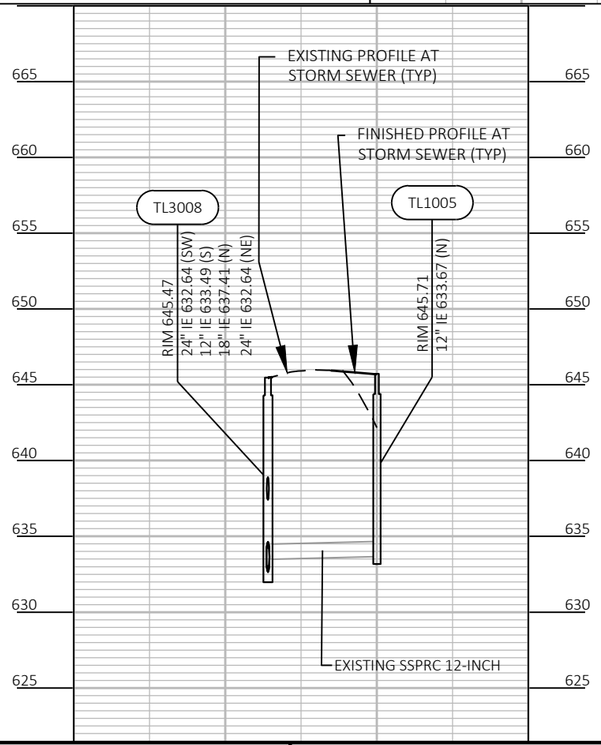


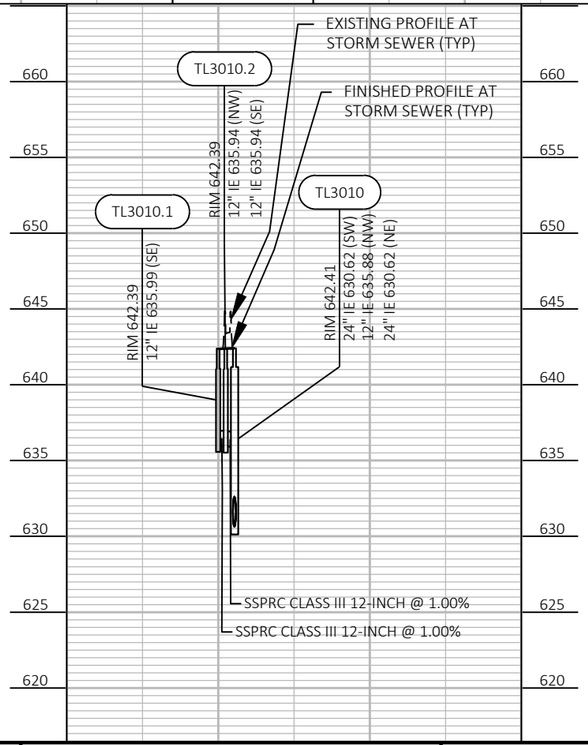
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER PLAN AND PROFILE: IH 94 TML	SHEET 146 E

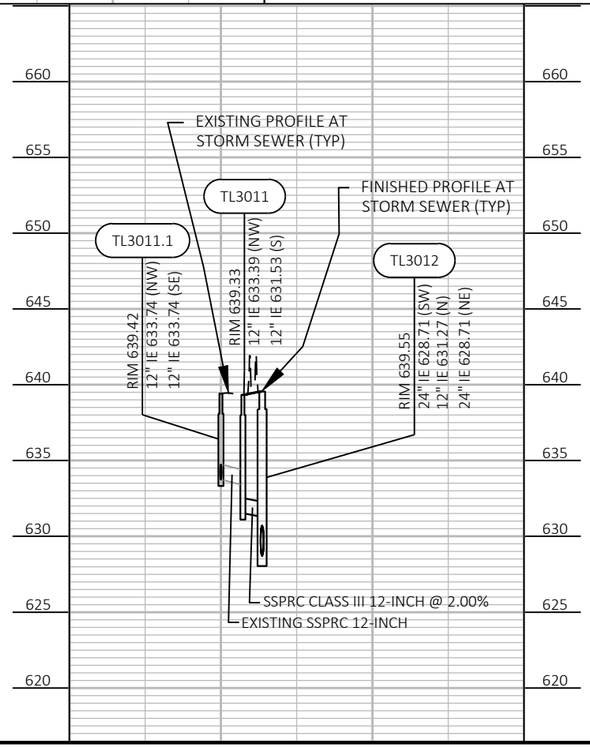
FILE NAME : C:\USERS\BMDODGE\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022505-SS-TML.DWG
LAYOUT NAME - 05 - TML (2)
PLOT DATE : 7/25/2025 12:53 PM
PLOT BY : BRANDON DODGE, EIT
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 41



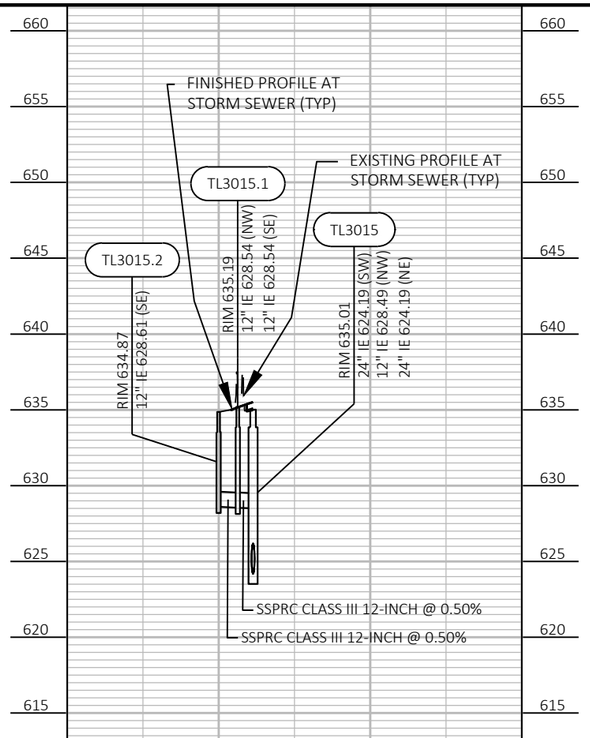


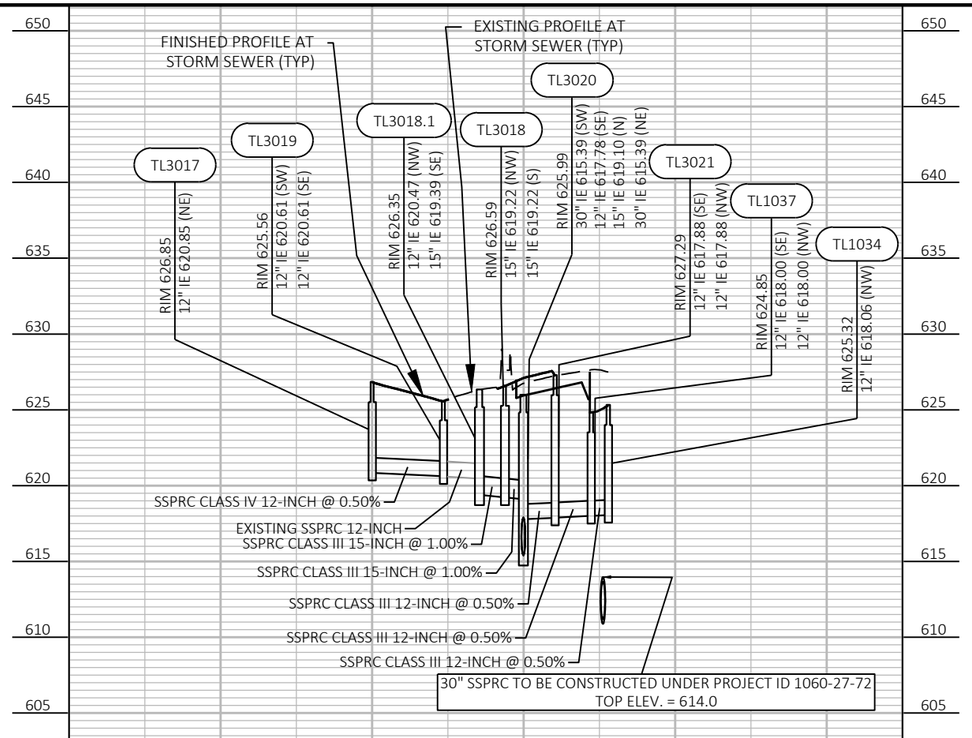


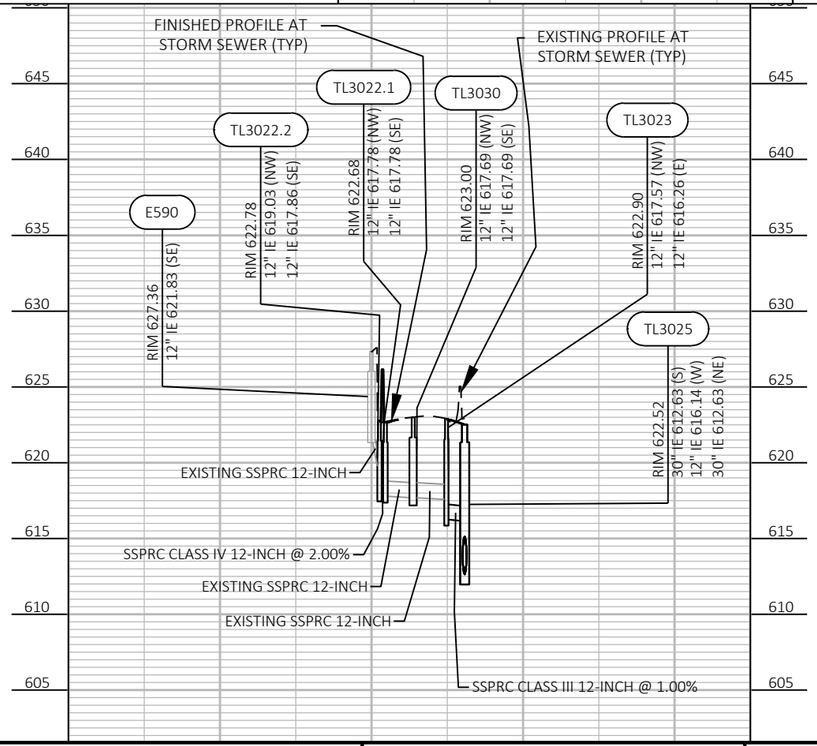


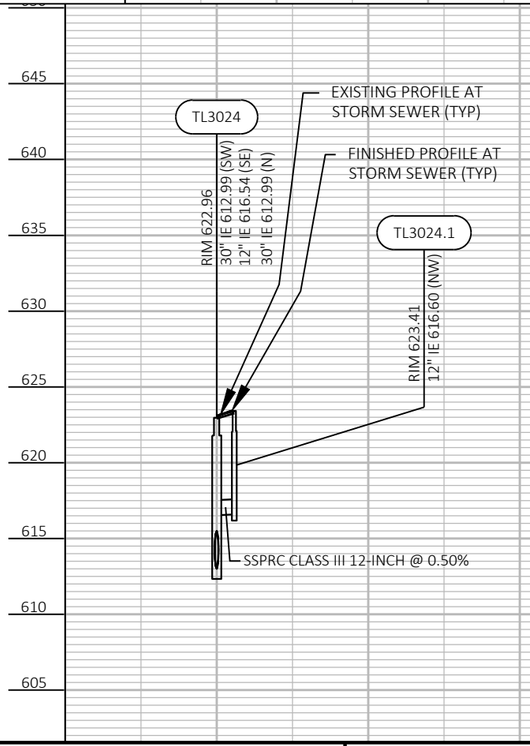


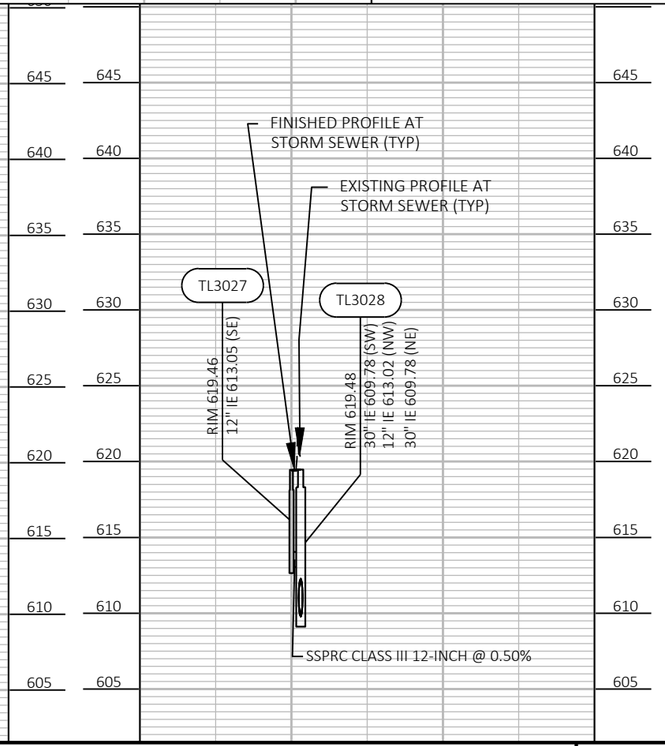
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER PLAN AND PROFILE: IH 94 TML	SHEET 147	E



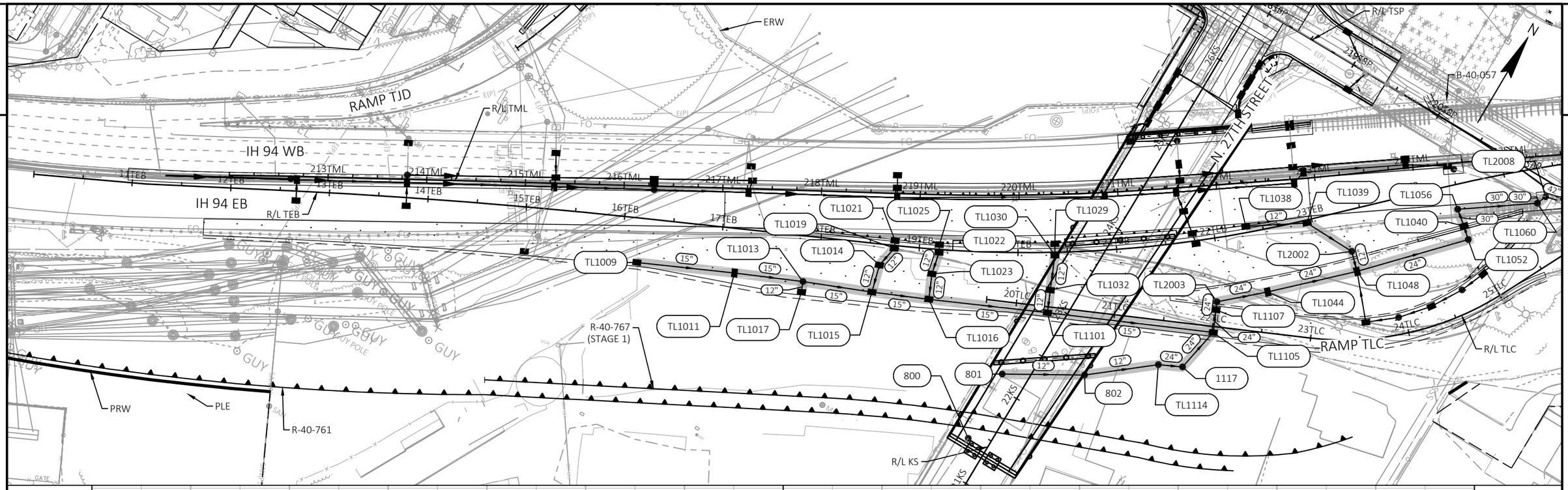


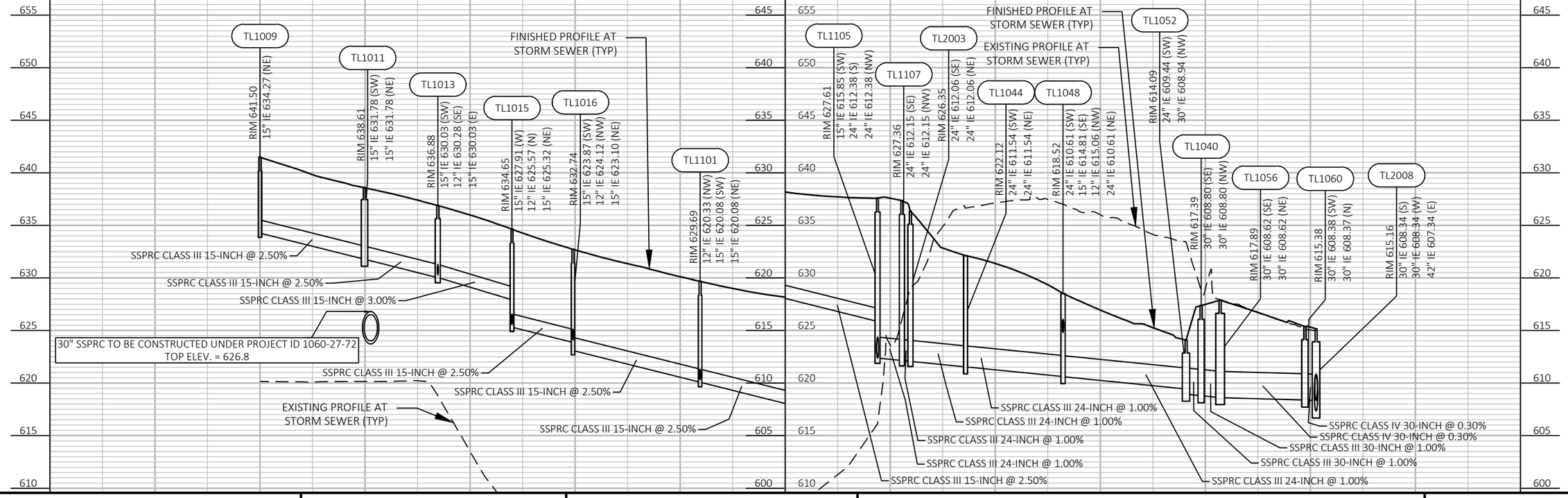






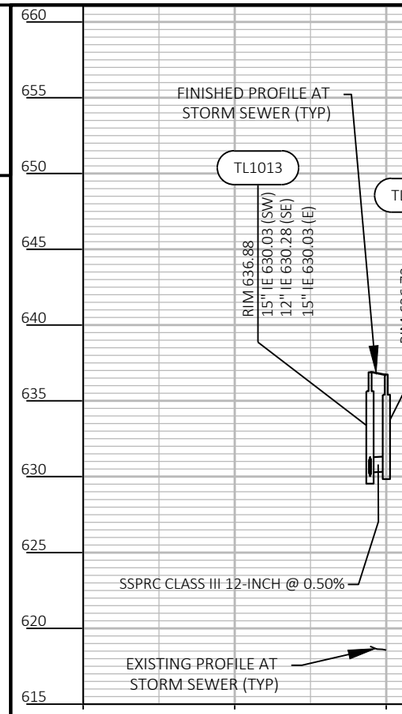
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER PLAN AND PROFILE: IH 94 TML	SHEET 148	E

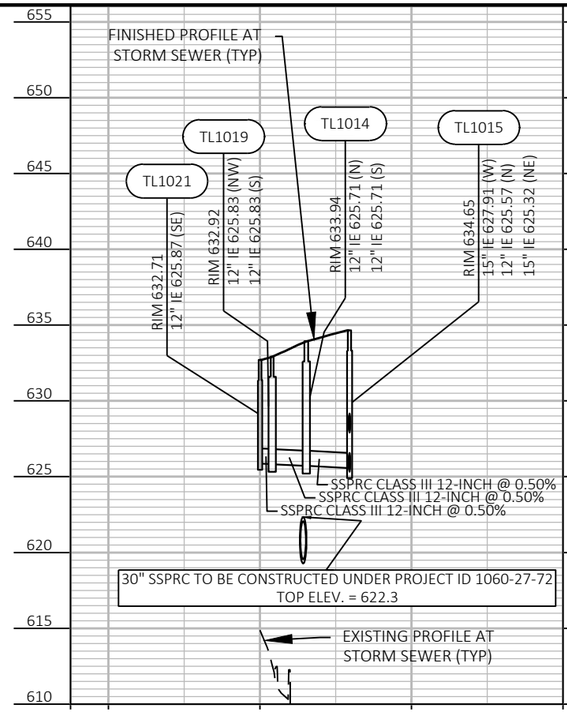


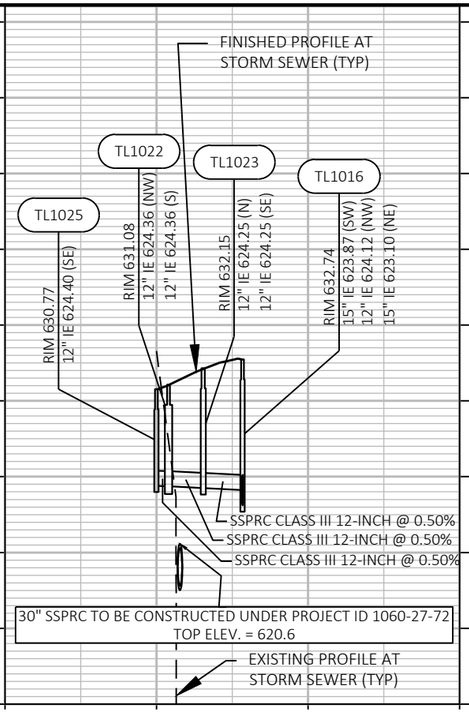


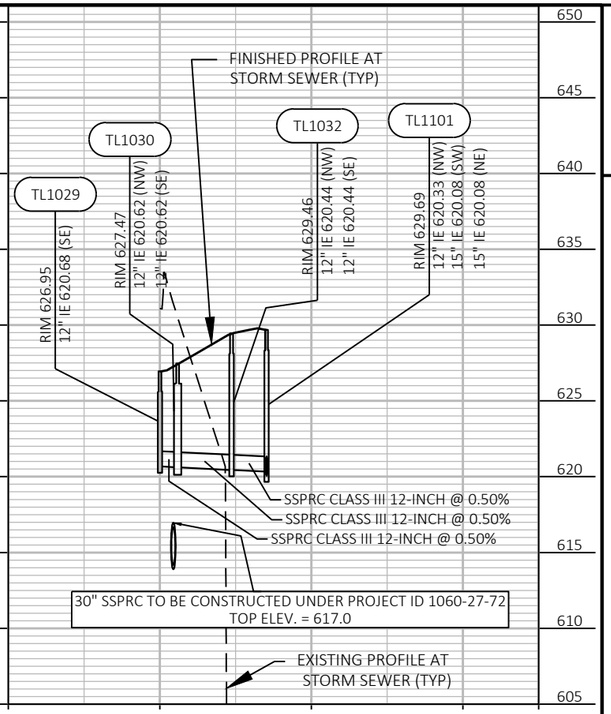
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER PLAN AND PROFILE: IH 94 TEB	SHEET 149	E

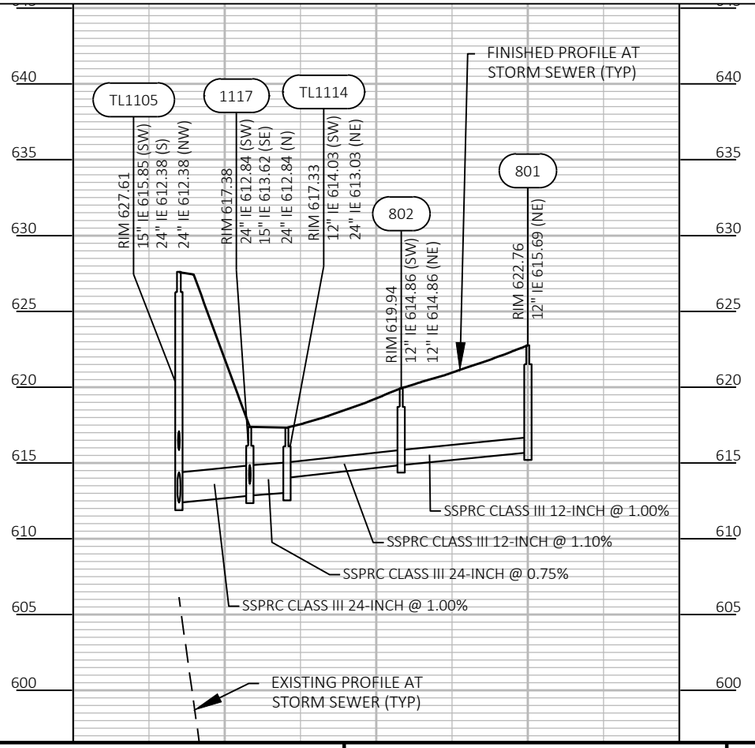
FILE NAME : C:\USERS\BMDODGE\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022505-SS-TML.DWG
LAYOUT NAME - 07 - TEB
PLOT DATE : 7/25/2025 12:55 PM
PLOT BY : BRANDON DODGE, EIT
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 41

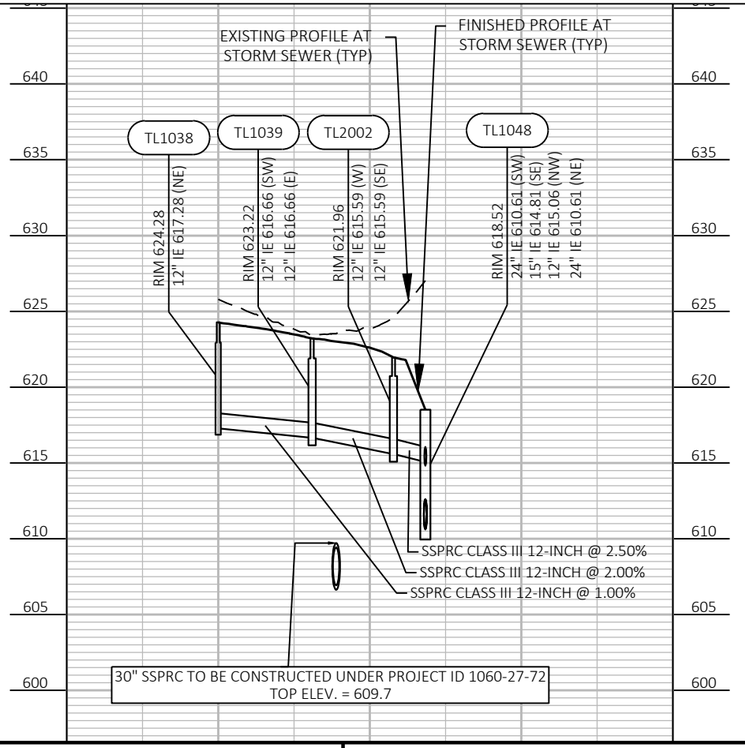


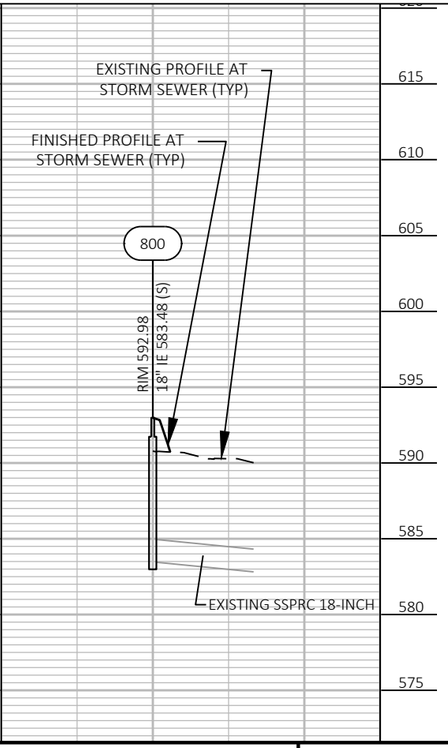






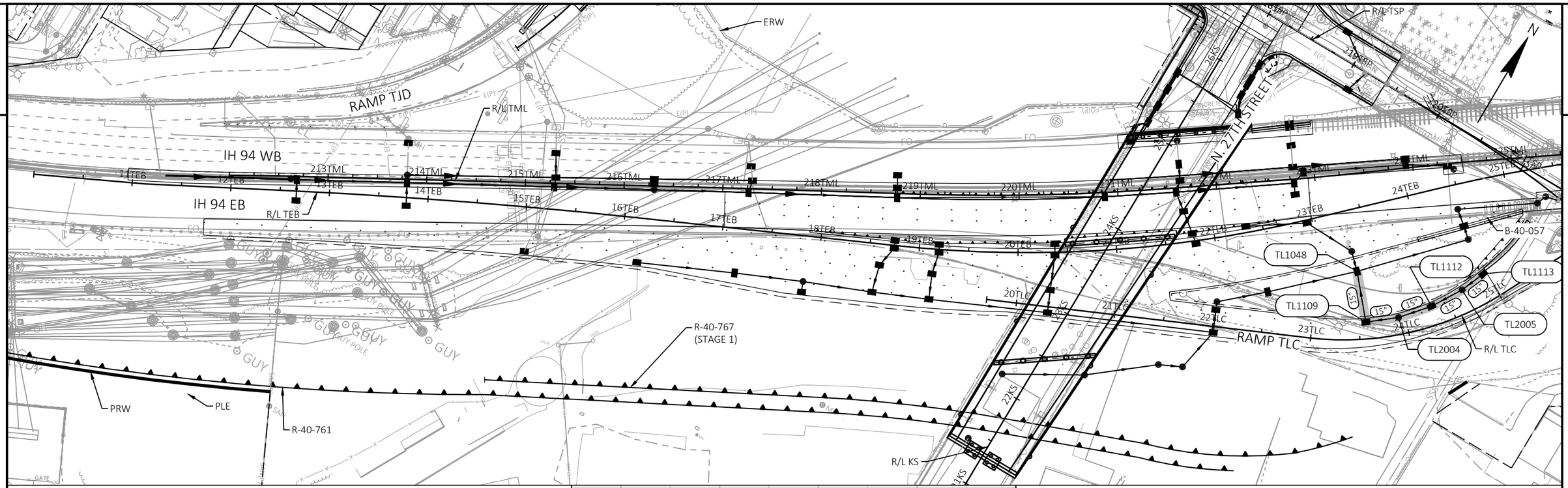


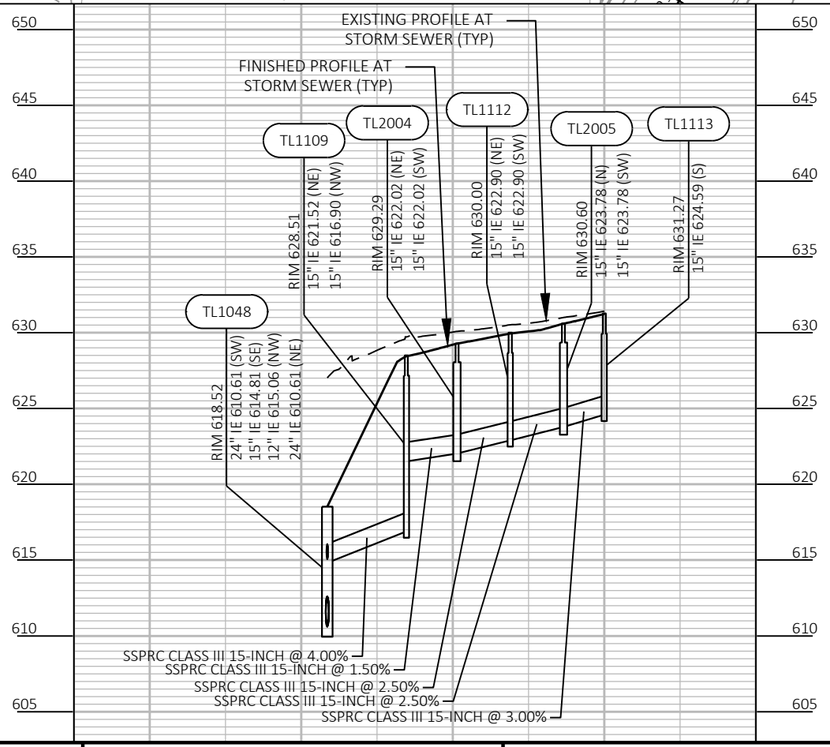




PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER PLAN AND PROFILE: IH 94 TEB	SHEET 150	E

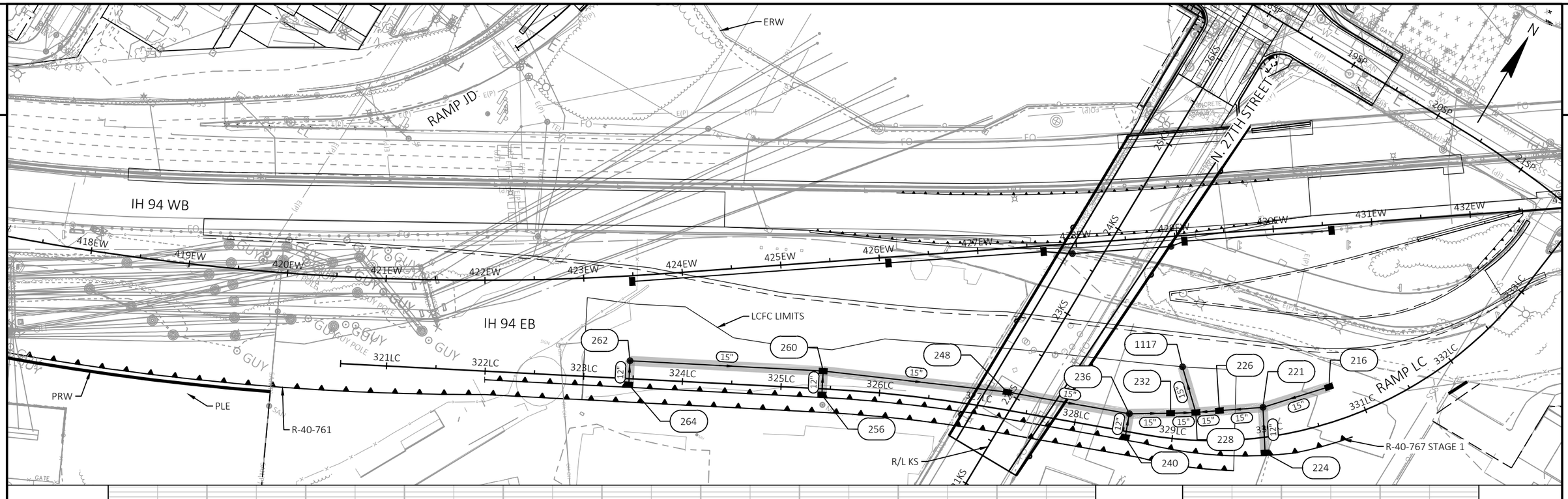
FILE NAME : C:\USERS\BMDODGE\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022505-SS-TML.DWG
LAYOUT NAME - 07 - TEB LAT-1
PLOT DATE : 7/25/2025 12:55 PM PLOT BY : BRANDON DODGE, EIT PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 41

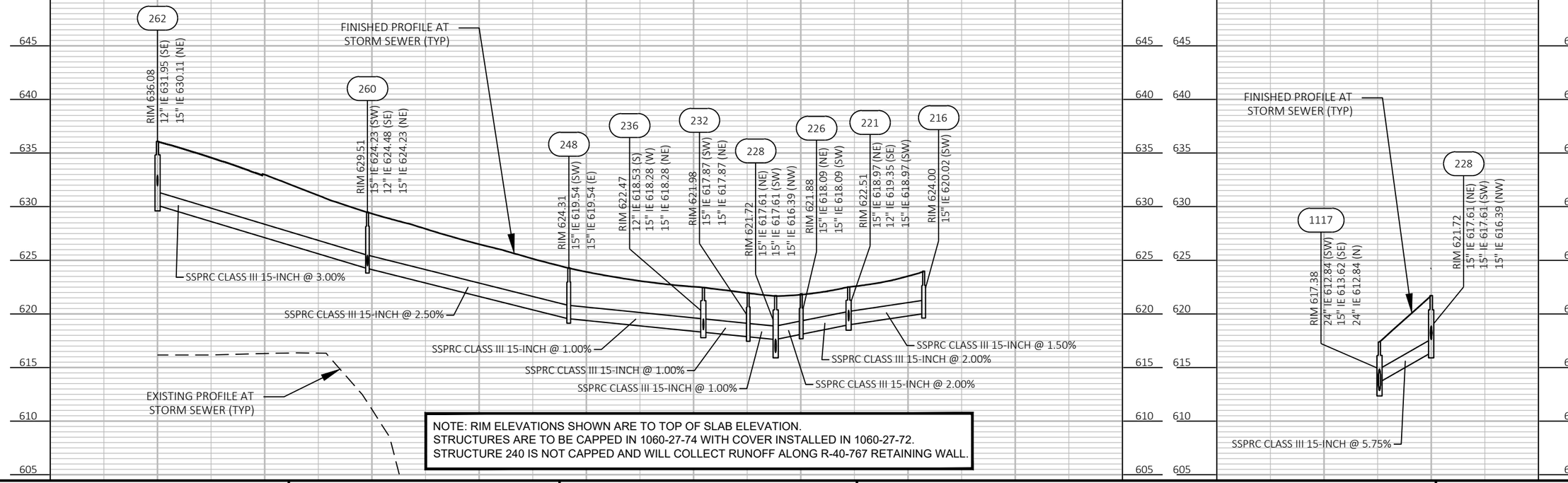




PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER PLAN AND PROFILE: RAMP TLC	SHEET 151	E

FILE NAME : C:\USERS\BMDODGE\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022505-SS-TML.DWG
LAYOUT NAME - 08 - TLC
PLOT DATE : 7/25/2025 12:57 PM
PLOT BY : BRANDON DODGE, EIT
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 41



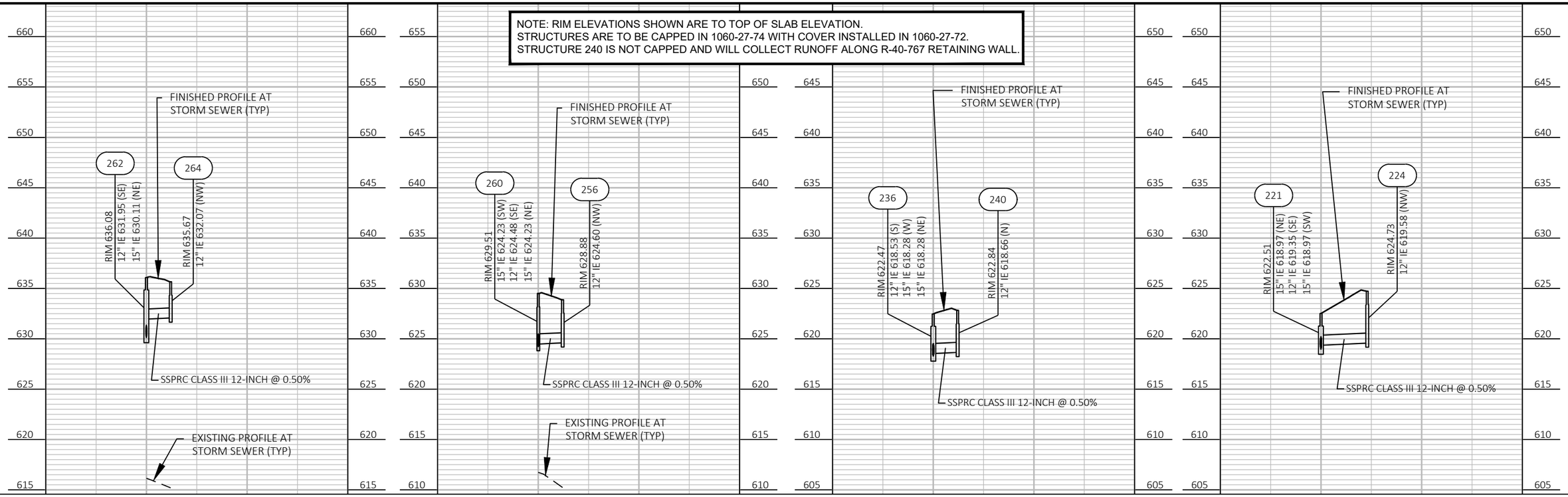


NOTE: RIM ELEVATIONS SHOWN ARE TO TOP OF SLAB ELEVATION.
STRUCTURES ARE TO BE CAPPED IN 1060-27-74 WITH COVER INSTALLED IN 1060-27-72.
STRUCTURE 240 IS NOT CAPPED AND WILL COLLECT RUNOFF ALONG R-40-767 RETAINING WALL.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER PLAN AND PROFILE: RAMP LC	SHEET 152 E

FILE NAME : C:\USERS\BMDODGE\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022506-SS-TML-FINAL.DWG
LAYOUT NAME - 09 - LC FINAL CONDITION
PLOT DATE : 7/25/2025 12:58 PM
PLOT BY : BRANDON DODGE, EIT
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 41

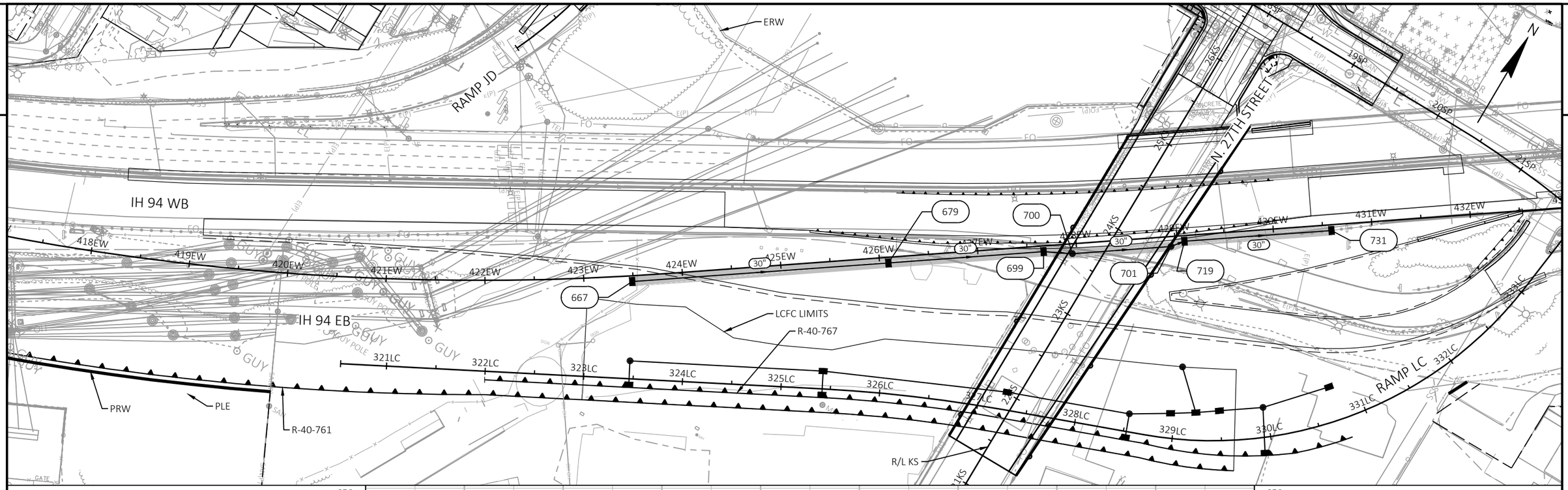
NOTE: RIM ELEVATIONS SHOWN ARE TO TOP OF SLAB ELEVATION.
STRUCTURES ARE TO BE CAPPED IN 1060-27-74 WITH COVER INSTALLED IN 1060-27-72.
STRUCTURE 240 IS NOT CAPPED AND WILL COLLECT RUNOFF ALONG R-40-767 RETAINING WALL.

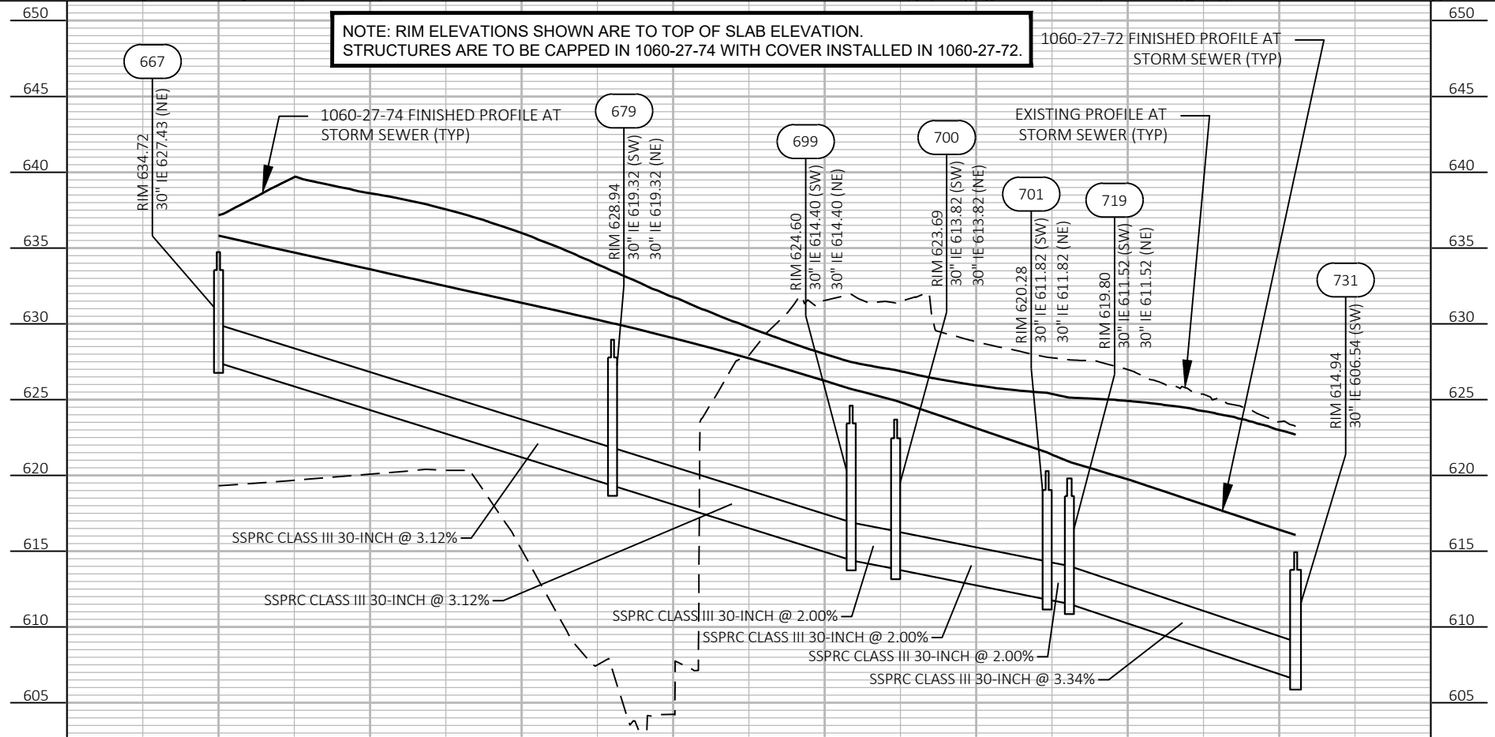


PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER PLAN AND PROFILE: RAMP LC	SHEET 153	E

FILE NAME : C:\USERS\BMDODGE\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022506-SS-TML-FINAL.DWG
LAYOUT NAME - 09 - LC FINAL CONDITION LAT-1
PLOT DATE : 7/25/2025 12:58 PM
PLOT BY : BRANDON DODGE, EIT
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 41

2



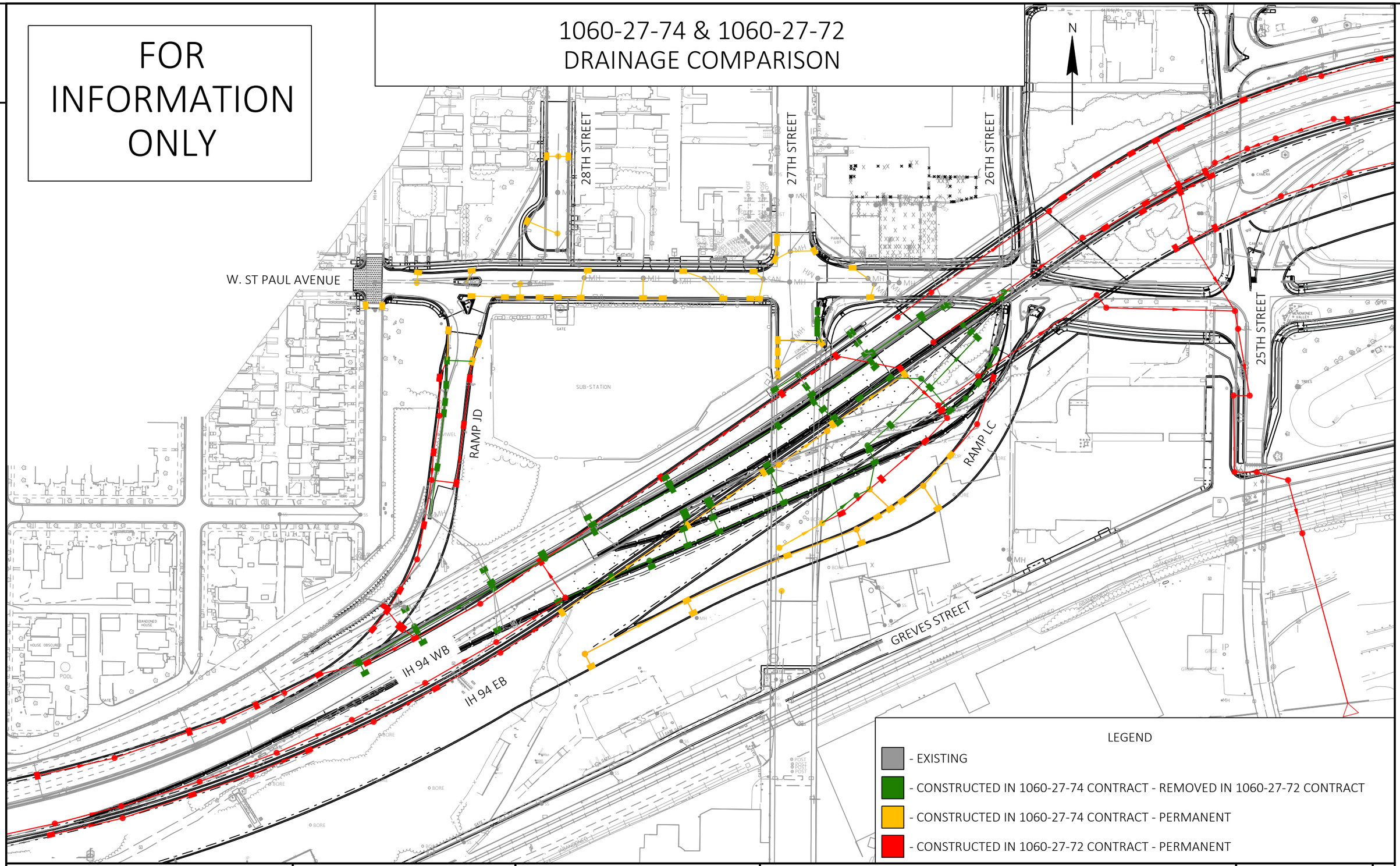


PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	STORM SEWER PLAN AND PROFILE: IH 94 EB	SHEET 154	E

2

FOR INFORMATION ONLY

1060-27-74 & 1060-27-72 DRAINAGE COMPARISON



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	1060-27-74 & 1060-27-72 DRAINAGE COMPARISON	SHEET 155	E

FILE NAME : C:\USERS\WWOLAK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\DRAINAGE\022510-SS-EELVELF-FINAL.DWG
LAYOUT NAME - EL-EEL-COMPARISON
PLOT DATE : 7/25/2025 12:12 PM PLOT BY : WALTER A. WOLAK II PLOT NAME : PLOT SCALE : 1 IN:150 FT

2

N 32ND STREET

N 31ST STREET

N 30TH STREET

N 29TH STREET

W. MT VERNON AVENUE

W. PARK HILL AVENUE

W. CANAL STREET

GREVES STREET

RAMP JD

IH 94 WB

IH 94 EB

112TWB

114TWB

116TWB

118TWB

12TEB

14TEB

16TEB

18TEB

MATCHLINE 18TEB+00

NOTE:

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

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	EXISTING UTILITY PLAN	SHEET 156	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023001-UP.DWG
LAYOUT NAME - 01-TEB-01

PLOT DATE : 4/26/2025 8:13 PM PLOT BY : SCHARLAU, DAVE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

MATCHLINE 18TEB+00

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

N. 25TH STREET

W. CLYBOURN STREET

W. ST. PAUL AVENUE

GREVES STREET

IH 94 WB

IH 94 EB

RAMP LC

120TWB 220TML

122TWB 222TML

124TWB 224TML

126TWB

28TEB

30TEB

32TEB

24TEB

22TEB

20TEB

24KS

22KS

20TLC

22TLC

24TLC

24SP

BORE

GATE

3 TREES

NOTE:

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

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	EXISTING UTILITY PLAN	SHEET 157	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023001-UP.DWG
LAYOUT NAME - 01-TEB-02

PLOT DATE : 4/26/2025 8:14 PM PLOT BY : SCHARLAU, DAVE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N. 29TH STREET

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

W. ST. PAUL AVENUE

W. MT VERNON AVENUE

IH 94 WB

IH 94 EB

RAMP JD

RAMP TLC

ATC SUB-STATION

BORE

GUY

EL

SAN

SSS

FO

E

W

G

OH

CUC(P)

30KN

28KN

26KS

24KS

22KS

102TJD

120TWB

118TWB

116TWB

124TWB

122TWB

20TEB

18TEB

24TEB

22TEB

20TLC

24TLC

22TLC

NOTE:

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

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	EXISTING UTILITY PLAN	SHEET 158	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023001-UP.DWG
LAYOUT NAME - 02-SP-01
PLOT DATE : 4/26/2025 8:14 PM
PLOT BY : SCHARLAU, DAVE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

2

LEGEND

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

LEFT EXIT 308 B

EXIT 308 C

175 SOUTH
Brewers Blvd
LEFT

NORTH.
175
RIGHT

1 MILE

ESTR

EAST 94 MILE 309 .4 ESTR

WEST 94 MILE 309 .4 ESTR

ESTR

W. MOUNT VERNON AVE

N. 31ST STREET

N. 30TH STREET

N. 29TH STREET

W. PARK HILL AVE

RAMP JD

IH 94 WB

IH 94 EB

MATCHLINE 424TEB+00

410EW

412EW

414EW

416EW

418EW

420EW

422EW

424

EXISTING DMS (S-40-430)
TO REMAIN

1-1R

EXIT 35 MPH

REMOVE

1-2R

REMOVE

NO PARKING ANY TIME

ESTR

Mitchell Park Domes

Potawatomi Casino

EXIT 309 B

ESTR

W.GREVES STREET

ABANDONED

ABANDONED

NOTES

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

SIGNING COORDINATOR	COUNTY(S)	PHONE #
BREE JOHNS-KONKEL	MILWAUKEE, RACINE, OZAUKEE, WASHINGTON	414-750-2814
CHUCK SALDIVAR	KENOSHA, 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 (GENERAL PHONE # 414-266-1164) 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 POSTS SIZES, FOR TYPE II SIGNS ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

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

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

SHEET 1 OF 8

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - REMOVALS - MAINLINE	SHEET 159	E

2

W. ST PAUL AVENUE

N. 27TH STREET

N. 26TH STREET

W. CLYBOURN AVENUE

N. 25TH STREET

W. GREVES STREET

IH 94 WB

IH 94 EB

27TH STREET

RAMP LC

MATCHLINE 424TEB+00

2-1R
EAST 94 MILE 309 .6
REMOVE

2-2R
WEST 94 MILE 309 .6
REMOVE

2-3R
27th Street
REMOVE

2-4R
50 MPH
REMOVE

2-5R
27TH STREET
REMOVE

2-6R
EXIT 309B
ES-1B
REMOVE

EXIT 309 B
26th Street
St Paul Ave

MOVE TYPE 1 SIGN
SEE PERMANENT SIGNING
PLANS FOR LOCATION
REPLACE STEEL POSTS

EAST 94 MILE 309 .7
ESTR

WEST 94 MILE 309 .7
ESTR

NO PARKING ANY TIME
ESTR

NO PARKING ANY TIME
ESTR

Downtown Exits

43	NORTH Kilbourn Ave	1 1/4
794	St Paul– J Lovell	1
794	Jackson– Van Buren St	2

MOVE TYPE 1 SIGN
SEE PERMANENT SIGNING
PLANS FOR LOCATION
REPLACE STEEL POSTS

LEGEND

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

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - REMOVALS - MAINLINE	SHEET 160	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023201-PS.DWG
LAYOUT NAME - 01-EW-03
PLOT DATE : 5/23/2025 8:30 AM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

EXIST R/W

N. 29TH STREET

CENTER LANE SIGNAL
ESTR

RIGHT LANE SIGNAL
ESTR

ESTR

STOP HERE ON RED
R10-6
ESTR

3-4R
RIDESHARE INFO CALL 1-800-455-POOL
REMOVE

RAMP JD

102TJD

104TJD

LEFT LANE SIGNAL
STOP HERE ON RED
R10-6
ON SP
ESTR

3-1R
PEDESTRIANS
BICYCLES
NON MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED
REMOVE

3-2R
LEFT LANE
BUSES
MOTORCYCLES
AND
2 OR MORE
OCCUPANT
CAR POOLS
ONLY
REMOVE

3-3R
RAMP METERED WHEN FLASHING
REMOVE

W. ST PAUL AVENUE

125P

14SP

16TEB

16TWB

LEGEND

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

SHEET 3 OF 8

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - REMOVALS - RAMPS	SHEET 161	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023202-PS.DWG
LAYOUT NAME - 01-TJD-01
PLOT DATE : 5/23/2025 8:30 AM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

IH 94 WB

IH 94 EB

RAMP LC

N. 27TH STREET

W. ST PAUL AVENUE

CONCRETE

120TWB

122TWB

124TWB

224ML

20SP

220TSP

428EW

430EW

432EW

24KS

20TEB

22TEB

24TEB

20TLC

22TLC

24TLC

22KS

BORE

4-1R

NO TRESPASSING
STATE OF WIS-OWNER
VIOLATORS WILL BE PROSECUTED
SEC.943.13 WIS STATUTES

REMOVE

4-2R

REMOVE

4-3R

ONLY ONLY

REMOVE

4-4R

WRONG WAY

REMOVE

4-5R

ONLY ONLY

REMOVE

MOVE
SEE PERMANENT SIGNING PLANS FOR LOCATION

Mitchell Domes

4-6R

ONLY ONLY

REMOVE

MOVE
SEE PERMANENT SIGNING PLANS FOR LOCATION

Potawatomi Casino

LEGEND

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

SHEET 4 OF 8

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - REMOVALS - RAMPS	SHEET 162	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023202-PS.DWG
LAYOUT NAME - 02-TLC-01

PLOT DATE : 5/23/2025 8:31 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

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

N

5-1R — WEST INTERSTATE 94 — J3-1 REMOVE

5-2R — STOP — R1-1 REMOVE

5-3R — ST. PAUL — REMOVE ON LIGHT POLE

5-4R — 28TH — REMOVE ON LIGHT POLE

5-5R — ONE WAY / ONE WAY — R6-2L REMOVE, R6-2R REMOVE

5-9R — NO PARKING ANY TIME — R7-1D REMOVE

6-10R — W12-1D REMOVE

6-12R — SPEED HUMP / SPEED HUMP, 5 MPH — W13-1 REMOVE; ON BACK SIDE

N. 28TH ST — ESTR

6-14R — ONE WAY / ONE WAY — R6-2L REMOVE, R6-2R REMOVE

5-7R — STOP — R1-1 REMOVE

5-8R — DO NOT ENTER — R5-1 REMOVE

5-6R — STOP — R1-1 REMOVE

6-11R — WEST INTERSTATE 94 — J3-1 REMOVE

6-13R — SPEED HUMP / SPEED HUMP, 5 MPH — W13-1 REMOVE; ON BACK SIDE

6-15R — WRONG WAY — R5-1A EMOVE

104TJD

12SP

14SP

12J

14J

N. 28TH STREET

W. ST PAUL AVENUE

W. CLYBOURN STREET

INL

MH

SHEET 5 OF 8

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - REMOVALS - LOCAL	SHEET 163	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023202-PS.DWG
LAYOUT NAME - 03-J-01

PLOT DATE : 5/23/2025 8:31 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

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

6-1R
SPEED LIMIT 30
R2-1
REMOVE ON LIGHT POLE

6-2R
TO WEST 94
TO EAST 94
J32-2
REMOVE ON LIGHT POLE

6-3R
REMOVE ON LIGHT POLE

SEE SHEET 8 OF 8 FOR SIGNING REMOVALS AT INTERSECTION

N. 27TH STREET

W. ST PAUL AVENUE

IH 94 EB

IH 94 WB

22KS

24KS

26KS

16SP

18SP

218TSP

428EW

430EW

207LC

221LC

120TWB

122TWB

BORE

CONCRETE

ASPHALT

GRAVEL PILE

GATE

SS

SHEET 6 OF 8

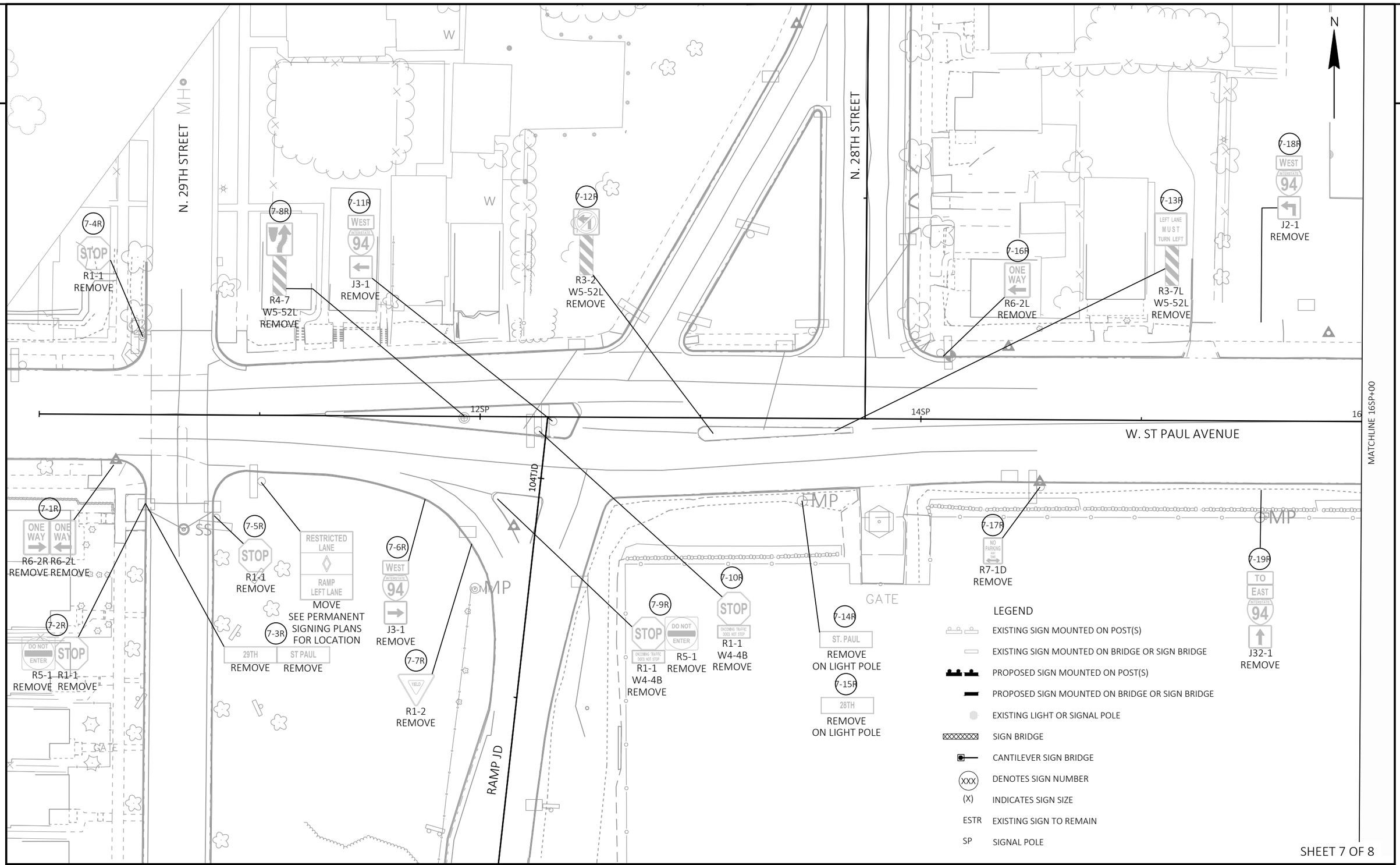
2

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - REMOVALS - LOCAL	SHEET 164	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023202-PS.DWG
LAYOUT NAME - 04-KS-01

PLOT DATE : 5/23/2025 8:31 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



SHEET 7 OF 8

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - REMOVALS - LOCAL	SHEET 165	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023202-PS.DWG
LAYOUT NAME - 06-SP-01
PLOT DATE : 5/23/2025 8:31 AM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N. 27TH STREET

N. 26TH STREET

28KN

MATCHLINE 16SP+00

16SP

18SP
218TSP

20SP
220TSP

22SP

26KS

W. ST PAUL AVENUE

IH 94 WB

IH 94 EB

8-1R
R7-1D
REMOVE

ST PAUL
MOVE
TO SIGNAL
WOOD POLE

8-2R
27TH
REMOVE

27TH
MOVE
TO SIGNAL
WOOD POLE

8-3R
ST PAUL
REMOVE

8-4R
BIKE LANE
BEGINS
REMOVE

8-5R
CURB LANE
BIKES ONLY
NO PARKING ANY TIME
SOUTH
57
REMOVE

8-6R
LEFT LANE MUST TURN LEFT
R3-7L
REMOVE

MCTS PURPLE LINE SIGN
MOVE
BY OTHERS
MCTS

8-7R
W12-1D
REMOVE

MCTS PURPLE LINE SIGN
MOVE
BY OTHERS
MCTS

8-8R
LEFT LANE MUST TURN LEFT
BIKE LANE ENDS
R3-7L
REMOVE
REMOVE

8-9R
27TH
REMOVE

8-10R
ST PAUL
REMOVE

8-11R
W12-1D
REMOVE

8-12R
REMOVE
ON
LIGHT
POLE

8-13R
STOP
R1-1
REMOVE

8-14R
STOP
R1-1
REMOVE

8-15R
NO PARKING ANY TIME
R7-1D
REMOVE

8-16R
TO WEST
INTERSTATE
94
J32-1
REMOVE

8-17R
NO PARKING ANY TIME
NO PARKING ANY TIME
R7-2L
R7-1R
REMOVE

ESTR

MP

SS

SS

SS

SS

SS

GATE

GATE

MAWEL

BORE

124TWB

124TWA

124TEB

124TEA

125TWB

125TWA

267TLC

430EW

LEGEND

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

SHEET 8 OF 8

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - REMOVALS - LOCAL	SHEET 166	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023202-PS.DWG
LAYOUT NAME - 06-SP-02

PLOT DATE : 5/23/2025 8:32 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

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

NOTES

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

SIGNING COORDINATOR	COUNTY(S)	PHONE #
BREE JOHNS-KONKEL	MILWAUKEE, RACINE, OZAUKEE, WASHINGTON	414-750-2814
CHUCK SALDIVAR	KENOSHA, 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 (GENERAL PHONE # 414-266-1164) 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 POSTS SIZES, FOR TYPE II SIGNS ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

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

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

N

35TH STREET

IH 94 WB

IH 94 EB

394EW 396EW 398EW 400EW 402EW 404EW 406EW 408EW

MATCHLINE 409TEB+00

15'-3"
W12-2 (5)
27TH ST
1-1 1-2 1-3 1-4
102
54"X18"
PLACE WEST OF 35TH ST EXIT

1-5
W4-1R (5)

1-6
W4-1L (2S)

1-7
WATCH FOR MERGING TRAFFIC
106
48"X48"

1-8
WATCH FOR MERGING TRAFFIC
105
36"X36"

SIGN

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - PERMANENT - MAINLINE	SHEET 167	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023211-PS.DWG
LAYOUT NAME - 01-EW-01

PLOT DATE : 5/23/2025 8:30 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

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

LEFT EXIT 308 B

175 SOUTH
Brewers Blvd
LEFT

EXIT 308 C

NORTH
175
RIGHT

1 MILE

ESTR

EAST 94 MILE 309 .4 ESTR

WEST 94 MILE 309 .4 ESTR

ESTR

RAMP JD

JH 94 WB

JH 94 EB

W. MOUNT VERNON AVE

W. PARK HILL AVE

N. 31ST STREET

N. 30TH STREET

N. 29TH STREET

32ND STREET

MATCHLINE 409TEB+00

MATCHLINE 424TEB+00

410EW

412EW

414EW

416EW

418EW

420EW

422EW

2-1 2-2 2-3 2-4 45 MPH W13-1 (5)

W24-18R (MOD) 103 48"X48"

2-5 W5-52R(5)

2-6 EXIT 30 MPH W13-2 (5)

Mitchell Park Domes
Potawatomi Casino
EXIT 309 B
ESTR

EXIT 309 B
26th Street
St Paul Ave

MOVE TYPE 1
E4-1
REPLACE STEEL POSTS
STA 419EW+20

2-7

2-8 14'-8" W12-2 (2S)

2-9 ON RAMP M4-50 (3)

NO PARKING ANY TIME ESTR

W. GREVES STREET

ABANDONED

GATE

SHEET 1 OF 8

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - PERMANENT - MAINLINE	SHEET 168	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023211-PS.DWG
LAYOUT NAME - 01-EW-02

PLOT DATE : 5/23/2025 8:31 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

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

N

N. 27TH STREET

N. 26TH STREET

N. 25TH STREET

W. ST PAUL AVENUE

W. GREVES STREET

IH 94 WB

IH 94 EB

RAMP TLC

RAMP LC

MATCHLINE 424TEB+00

MATCHLINE 438TEB+00

3-1 W5-52L(5)

3-2 W5-52R(5)

4' MOUNTING HEIGHT

3-3 EXIT 309B E5-1B W5-54(2S) W5-54(2S)

3-4 3-5 27 th St MOUNT ON BRIDGE 101 60"X21"

3-6 W5-52R(5)

3-7

EAST 94 MILE 309 .7 ESTR

WEST 94 MILE 309 .7 ESTR

NO PARKING ANY TIME ESTR

NO PARKING ANY TIME ESTR

Downtown Exits

43 NORTH Kilbourn Ave	1 1/4
794 St Paul– J Lovell	1
794 Jackson– Van Buren St	2

MOVE TYPE 1 SIGN
REPLACE STEEL POSTS
STA 430EW+85

SHEET 2 OF 8

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - PERMANENT - MAINLINE	SHEET 169	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023211-PS.DWG
LAYOUT NAME - 01-EW-03
PLOT DATE : 5/23/2025 9:06 AM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LAND-BORDERED BY CONCRETE BLOCKS

ASPHALT PARKING LOT

RUINS

N

4-1 4-2 4-3 4-4

W24-1bL

104
48"X48"

45 MPH
W13-1
(5)
AT STA
438EW+50

16'-3"
W12-2
(5)
4-5 4-6 4-7 4-8

27TH ST
102
54"X18"

IH 94 WB

IH 94 EB

440EW 442EW 444EW 446EW 448EW 450EW 452EW

MATCHLINE 438EB+00

30SP 32SP 34SP

GATE

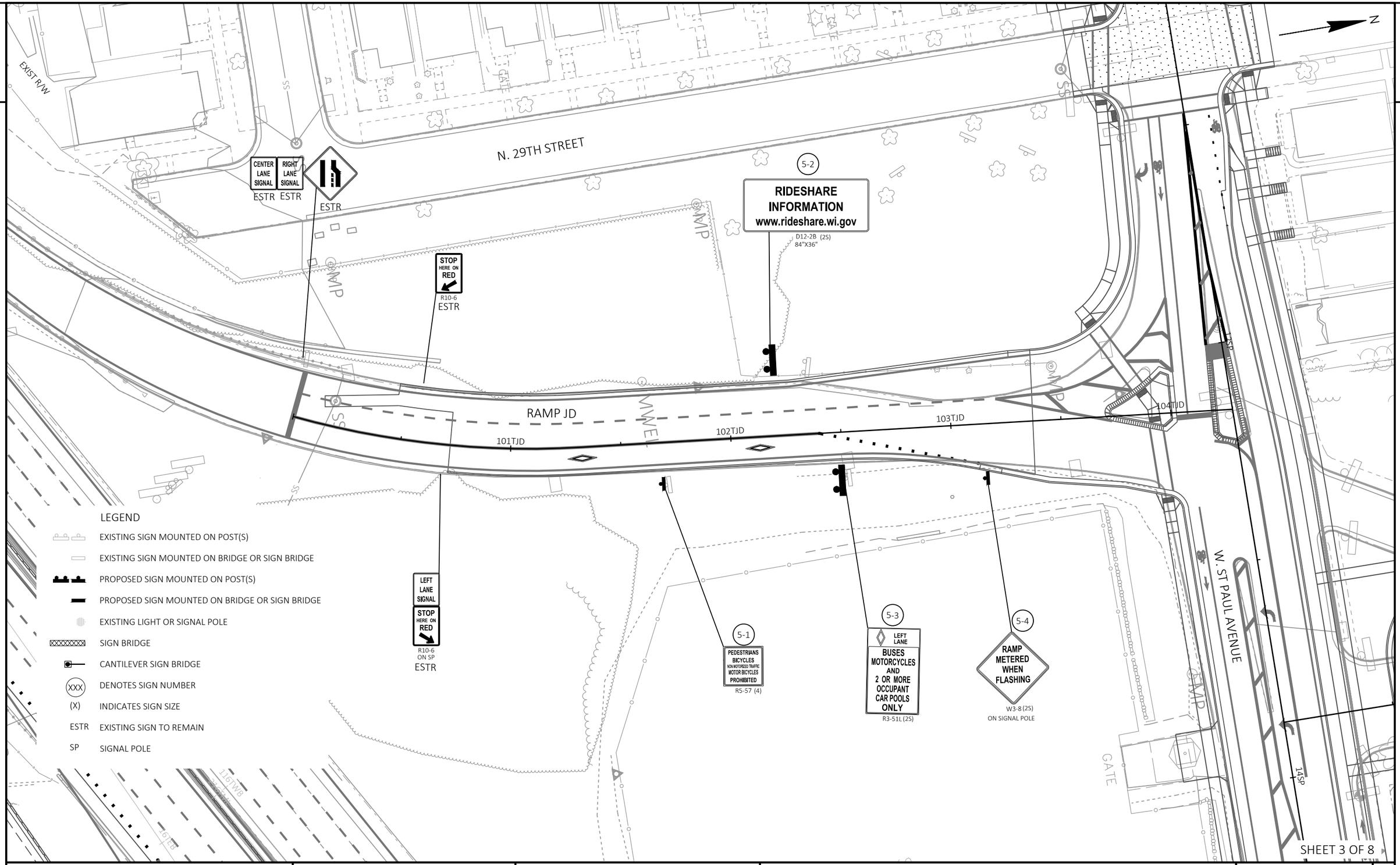
SHEET 2 OF 8

LEGEND

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

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - PERMANENT - MAINLINE	SHEET 170	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023211-PS.DWG
LAYOUT NAME - 01-EW-04
PLOT DATE : 5/23/2025 8:31 AM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - PERMANENT - RAMPS	SHEET 171 E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023212-PS.DWG
LAYOUT NAME - 01-TJD-01

PLOT DATE : 5/23/2025 8:30 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

IH 94 WB

IH 94 EB

W. ST PAUL AVENUE

N. 27TH STREET

RAMP LC

428EW

430EW

432EW

20TLC

21TLC

22TLC

23TLC

24TLC

25TLC

20TEB

22TEB

24TEB

120TWB

124TWB

224TMI

20SP

220TSP

20KS

22KS

BORE

CONCRETE

6-1
NO TRESPASSING
STATE OF WIS-OWNER
VIOLATORS WILL BE PROSECUTED
SEC 943.13 WIS STATUTES
R5-98 (2S)

6-2
W3-3 (2S)

6-4
WRONG WAY
R5-1A (3)

6-3
ONLY ONLY
R3-8 (2S)

6-5
WRONG WAY
R5-1A (3)

6-6
MOVE
Mitchell Domes
ONLY ONLY
R3-8 (2S)

6-7

6-8
MOVE
Potawatomi Casino
ONLY ONLY
R3-8 (2S)

6-9

LEGEND

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

SHEET 4 OF 8

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - PERMANENT - RAMPS	SHEET 172	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023212-PS.DWG
LAYOUT NAME - 02-TLC-01
PLOT DATE : 5/23/2025 8:31 AM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N

W. ST PAUL AVENUE

104TJD

14SP

W

INL

MH

N. 28TH STREET

11J

12J

13J

14J

W CLYBOURN AVENUE

N. 28TH ST
ESTR

7-1
7-2
7-3
W5-56(2S)
4-FT MOUNT
HEIGHT

7-4
NO PARKING ANY TIME
R7-1D(2S)

7-5
NO PARKING ANY TIME
R7-1D(2S)

7-6
NO PARKING ANY TIME
R7-1D(2S)

7-7
NO PARKING ANY TIME
R7-1L(2S)

7-8
NO PARKING ANY TIME
R7-1R(2S)

7-9
DEAD END
W14-1(2S)

STOP
R1-1 (2S)
7-10

LEGEND

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

SHEET 5 OF 8

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - PERMANENT - LOCAL	SHEET 173	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023212-PS.DWG
LAYOUT NAME - 03-J-01

PLOT DATE : 5/23/2025 8:31 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

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

8-1
SPEED LIMIT 30
R2-1(2S)
ON LIGHT POLE

8-2
TO WEST INTERSTATE 94
TO EAST INTERSTATE 94
J32-2
2S
ON LIGHT POLE

8-3
NO PARKING ANY TIME
R7-1D
2S

B-40-1083

N. 27TH STREET

W. ST PAUL AVENUE

ONLY

22KS

24KS

26KS

16SP

18SP

21BSP

20TLC

21TLC

22TLC

42'EW

43'EW

30'EW

25'MP

GRAVEL PILE

GAS STATION

CONCRETE

ASPHALT

BORE

SS

GATE

PARKING LOT

SHEET 6 OF 8

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - PERMANENT - LOCAL	SHEET 174	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023212-PS.DWG
LAYOUT NAME - 04-KS-01

PLOT DATE : 5/23/2025 8:31 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N. 29TH STREET

N. 28TH STREET

W. ST PAUL AVENUE

RAMP JD

104TJD

103TJD

MATCHLINE 16SP+00

12SP

14SP

9-1 ONE WAY R6-2L(2S)

9-2 ONE WAY R6-2R(2S)

9-3 STOP R1-1(2S)

9-4 29TH

9-5 ST PAUL

9-6 DO NOT ENTER R5-1C (2S)

9-7 STOP R1-1 (2S)

9-8 DO NOT ENTER R5-1C (2S)

9-9 STOP R1-1(2S)

9-10 RESTRICTED LANE RAMP LEFT LANE MOVE

9-11 WEST INTERSTATE 94 J2-1 (2S)

9-12 YIELD R1-2 (2S)

9-13 W12-1D(2S) 2-FT MOUNT HEIGHT

9-14 R4-7(2S) W5-52L(2S)

9-15 STOP R1-1(3) ONCOMING TRAFFIC DOES NOT STOP W4-4B(3)

9-16 WEST INTERSTATE 94 J2-1(2S)

9-17 NO PARKING ANY TIME R7-1D(2S)

9-18 STOP R1-1 (3) ONCOMING TRAFFIC DOES NOT STOP W4-4B(3)

9-19 DO NOT ENTER R5-1 C (3)

9-20 NO PARKING ANY TIME R7-1D(2S)

9-21 R9-3A(2S)

9-22 USE CROSSWALK R9-3BR(2S)

9-23 R9-3A(2S)

9-24 USE CROSSWALK R9-3BL(2S)

9-25 NO PARKING ANY TIME R7-1D(2S)

9-26 NO PARKING ANY TIME R7-1D(2S)

9-27 WEST INTERSTATE 94 J2-1 (2S)

9-28 TO EAST INTERSTATE 94 J32-1 (2S)

LEGEND

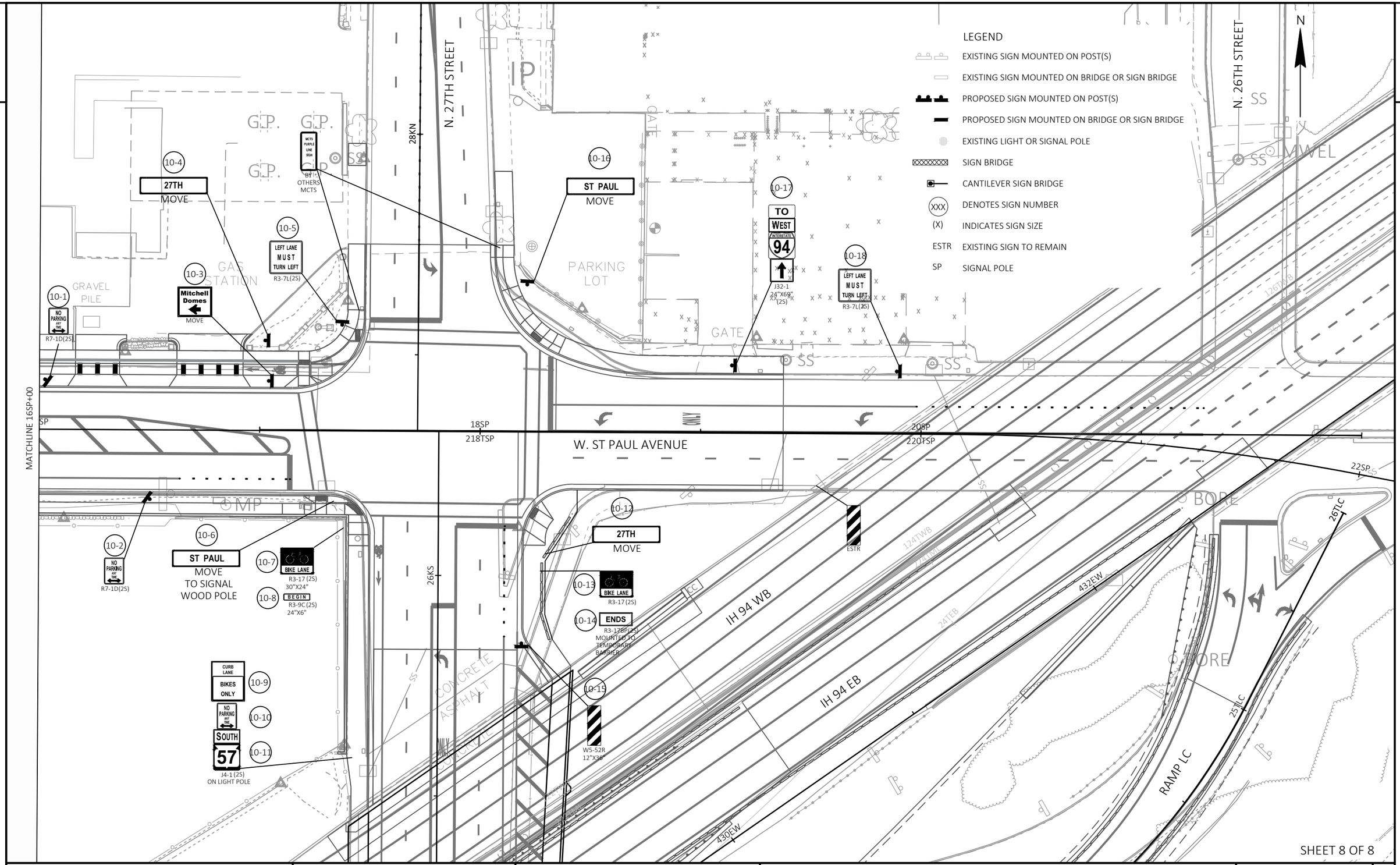
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING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

SHEET 7 OF 8

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - PERMANENT - LOCAL	SHEET 175	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023212-PS.DWG
LAYOUT NAME - 06-SP-01
PLOT DATE : 5/23/2025 8:32 AM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



SHEET 8 OF 8

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	SIGNING - PERMANENT - LOCAL	SHEET 176	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-023212-PS.DWG
LAYOUT NAME - 06-SP-02
PLOT DATE : 5/23/2025 8:32 AM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

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. TEMPORARY CONDUIT LATERALS SHALL BE DIRECTIONAL BORED UNDER PAVEMENT. PERMANENT LATERALS CAN BE TRENCHED UNTIL EDGE OF PAVEMENT, AND THEN DIRECTIONAL BORED UNDER ROADWAY. 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:	15-FT
EMBEDDED JUNCTION BOXES:	3-FT
DISTRIBUTION CENTER/LOAD CENTER:	15-FT
LIGHT POLE BASE	8-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.

TEMPORARY LEFT-IN-PLACE LIGHTING IS TO BE INSTALLED DURING STAGE 1 AFTER FILL FOR R-767 IS COMPLETE. TEMPORARY LEFT-IN-PLACE LIGHTING TO BE OPERATIONAL BEFORE EXISTING LIGHTING EQUIPMENT TO BE REMOVED.

MAINTAINING SYSTEM CONTINUITY SHALL BE INCIDENTAL TO THE "REMOVE EXISTING STREET LIGHTS" 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.

LEGEND - LIGHTING REMOVALS

- CONDUIT - 2" UNLESS OTHERWISE SHOWN
- XX — DENOTES THE REMOVAL STAGE NUMBER
- XXYZ — EXISTING SINGLE ARM FREEWAY LIGHTING UNIT
  X - CIRCUIT
  YY - DISTRIBUTION CENTER
  Z - POLE/LUMINAIRE ID NUMBER
- XYYZ — EXISTING TWIN ARM FREEWAY LIGHTING UNIT
  X - CIRCUIT
  YY - DISTRIBUTION CENTER
  Z - POLE/LUMINAIRE ID NUMBER
- XXYZ — EXISTING SINGLE ARM LOCAL LIGHTING UNIT
  XX - DISTRIBUTION CENTER
  Y - CIRCUIT (AS NOTED)
  Z - POLE/LUMINAIRE ID NUMBER
- DISTRIBUTION CENTER
- EXISTING TWIN ARM LOCAL LIGHTING UNIT
- EXISTING PULLBOX
- EXISTING UDL (UNDER DECK LIGHTING)
- PHOTOCELL

LEGEND - TEMPORARY LIGHTING LEFT-IN-PLACE

- LIGHTING CONTROL CABINET
- V, W / T-XYYZ — FLOOD LIGHT ON WOOD POLE
  V - STATION, W - OFFSET
  T - TEMPORARY LIGHTING
  X - CIRCUIT, YY - DISTRIBUTION CENTER,
  Z - POLE NUMBER
- V, W / WP-XX-Y — WOOD POLE
  V - STATION, W - OFFSET
  WP - WOOD POLE
  XX - DISTRIBUTION CENTER
  Y - POLE NUMBER
- V, W / T-PB-XX-YY — PULL BOX, 24" x 36"
  V - STATION, W - OFFSET
  T - TEMPORARY
  PB - PULLBOX
  XX - DISTRIBUTION CENTER
  YY - PULLBOX NUMBER
- EXISTING SINGLE ARM LOCAL LIGHTING UNIT
- EXISTING SINGLE ARM FREEWAY LIGHTING UNIT
- EXISTING TWIN ARM FREEWAY LIGHTING UNIT
- — OH — OVERHEAD CABLE (AERIAL ALUMINUM)
- CONDUIT, 2" UNLESS OTHERWISE NOTED
- CID (CABLE IN DUCT)
- X/Y — DENOTES THE CONSTRUCTION STAGE FOR INSTALLATION/REMOVAL
- E/Y — EXISTING TO BE REMOVED IN STAGE "Y"

LEGEND - FINAL LIGHTING

- CID (CABLE IN DUCT)
- CONDUIT, 2" UNLESS OTHERWISE NOTED
- PROPOSED SINGLE ARM FREEWAY LIGHTING UNIT
- PROPOSED TWIN ARM FREEWAY LIGHTING UNIT
- EXISTING SINGLE ARM FREEWAY LIGHTING UNIT TO REMAIN
- EXISTING SINGLE ARM LOCAL LIGHTING UNIT TO REMAIN
- PROPOSED SINGLE ARM LOCAL LIGHTING UNIT
- LIGHTING CONTROL CABINET
- PULL BOX 24" x 36"
- PULL BOX 24" x 42"
- ELECTRIC METER SOCKET
- SM — DENOTES STRUCTURE MOUNTED
- XX — DENOTES THE CONSTRUCTION STAGE FOR INSTALLATION
- STUBOUT
- LUMINAIRE IDENTIFICATION
  STATION - OFFSET
  LED-X-X(T)-4-XYYZ (TWO CALLOUTS IF TWIN)
  - LUMINAIRE NUMBER
  - LIGHTING CONTROL CABINET
  - CIRCUIT
  - LUMINAIRE ARM LENGTH
  - POLE TYPE, (T) WITH TRANSFORMER BASE BREAKAWAY
  - LUMINAIRE UTILITY CATEGORY
  - LUMINAIRE TYPE SOURCE (E.G. DEC = HISTORIC LANTERN)

  PLAQUE SEQUENCE INDENTIFICATION
- Ⓡ CONNECT TO RED CONDUCTOR
- Ⓑ CONNECT TO BLACK CONDUCTOR
- LOCAL UNDERDECK LUMINAIRE
- PROPOSED PULL BOX

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LIGHTING GENERAL NOTES AND LEGEND	SHEET 177	E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023301-LP.DWG
LAYOUT NAME - LP-1 General
PLOT DATE : 4/25/2025 11:09 AM PLOT BY : TKACHUK, TYLER PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

STREET LIGHTING GENERAL NOTES:

1. UNLESS OTHERWISE NOTED WITH INDIVIDUAL PAY ITEMS, ALL WORK SHALL BE INCIDENTAL TO THE STREET LIGHTING PAY ITEMS.
2. STREET LIGHTING SHALL BE INSTALLED IN COMPLIANCE WITH WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTIONS 652 TO 657 AND 659 EXCEPT:
3. ALL CHANGES OR ANY DEVIATIONS FROM PLANS AND ALLOWANCES IN THESE GENERAL NOTES MUST BE APPROVED BY STREET LIGHTING ENGINEERING. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS INCLUDING REPAIRS, REPLACEMENT OR RELOCATION ETC. OF THE STREET LIGHTING FACILITIES IF THE CONTRACTOR DOES ANY DEVIATION FROM THE STREET LIGHTING DESIGN WITHOUT THE STREET LIGHTING ENGINEERS SIGNED PERMISSION.
4. DETAILS OF CONSTRUCTION MATERIALS AND WORKMANSHIP NOT SHOWN ON THESE DRAWINGS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.
5. LOCATIONS OF THE HDPE AND NONMETALLIC PVC CONDUITS ARE IDENTIFIED IN THE PLANS WHERE THEY ARE REQUIRED. HOWEVER, INSTALLATION MAY REQUIRE INTEGRATION WITH EXISTING FIELD CONDITIONS. UNDER THE APPROVAL OF THE CITY OF MILWAUKEE DPW STREET LIGHTING, 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 TO ILLUSTRATE AS BUILT CONDITIONS.
6. CONDUIT INSTALLED BEHIND CURB SHALL BE INSTALLED A MINIMUM OF 6 INCHES BEHIND THE BACK OF CURB TO THE CENTER LINE OF CONDUIT, AND MINIMUM 24 INCHES DOWN MEASURED FROM THE TOP OF CURB OR FINISHED GRADE TO THE TOP OF CONDUIT. CONDUIT MAY BE INSTALLED 36 INCHES BEHIND THE CURB WHEN OTHER UTILITIES ARE DIRECTLY BEHIND THE CURB.
7. DEPTH OF CONDUIT INSTALLED BELOW STREETS, HIGHWAYS, AND ALLEYS SHALL BE 24-INCHES MINIMUM AND 36-INCHES MAXIMUM. (MEASURED FROM FINISHED FLANGE LINE).
8. CONDUIT LATERALS SHALL BE TRENCHED UNDER PAVEMENT BEFORE PAVEMENT CONSTRUCTION.
9. WHEN THERE IS MORE THAN ONE CONDUIT TO BE INSTALLED, PLACE ALL CONDUITS IN THE SAME TRENCH, OR BORE MULTIPLE CONDUITS TOGETHER AT THE SAME TIME.
10. CONDUIT INSTALLATION THAT REQUIRE TRENCHING SHALL NOT BE BACKFILLED PRIOR TO INSPECTION ON THE CONDUIT.
11. 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.
12. ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON ALL CONDUITS.
13. PRIOR TO CONDUIT ACCEPTANCE, ALL OPEN CONDUIT ENDS, AND UN-TERMINATED CONDUITS SHALL BE THOROUGHLY CLEANED AND BE CAPPED IMMEDIATELY AFTER INSTALLATION WITH THE APPROPRIATE CAST PLASTIC CAP WHICH FITS SNUGGLY ON THE CONDUIT, BUT EASILY REMOVED. DUCT TAPE OR ANY OTHER CAPPING METHOD IS NOT ACCEPTABLE.
14. ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.
15. PULL ROPE (3/8-INCH NYLON) SHALL BE INSTALLED IN ALL NEW CONDUIT.
16. CONDUIT RUNS SHALL BE THE SAME SIZE CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX-TO-PULL BOX OR JUNCTION BOX OR PULL BOX TO CONCRETE BASE, OR BASE-TO-BASE ET.)
17. UNLESS THE CONDUIT IS DESIGNED AND SHOWN WITH BENDS ON THE PLANS OR IF THE CONDUIT IS IN CLOSE PROXIMITY TO OBSTRUCTIONS (OSS, DRAINAGE STRUCTURES, ETC.), ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO CONCRETE BASE, AND PULL BOX TO ENCLOSURE. OTHER MODIFICATIONS MUST BE APPROVED BY THE STREET LIGHTING ENGINEER.
18. MINIMUM CONDUIT CLEARANCES FOR CONDUIT CROSSINGS AND PULL BOXES FROM THE FOLLOWING:

    FIRE HYDRANTS: 6-FT TREE TRUNKS: 10-FT END OF DRIVEWAY FLARES: 6-FT

    UNLESS OTHERWISE NOTED IN THE PLANS OR APPROVED BY THE STREET LIGHTING ENGINEER

STREET LIGHTING GENERAL NOTES:

19. HAND DIGGING MAY BE REQUIRED FOR LOCATIONS ADJACENT TO EXISTING GAS, STEAM, AND POWER LINES. HAND EXCAVATION WILL BE CONSIDERED INCIDENTAL TO THE BID ITEM BEING INSTALLED. COORDINATE ALL WORK NEAR THESE FACILITIES WITH WE ENERGIES.
20. INSTALL PULL BOXES/VAULTS AS SHOWN ON PLANS. IF FIELD CONDITIONS DO NOT ALLOW FOR PULL BOXES/VAULTS TO BE INSTALLED PER PLAN, A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS AND FIRE HYDRANTS SHOULD BE USED, OR OTHERWISE APPROVED BY THE STREET LIGHTING ENGINEER.
21. TYPICAL CONDUIT INSTALLATION FROM THE PULL BOX TO A DIRECT BURIED STREET LIGHT POLE IS AS FOLLOWS:

    USE A NYLON LIQUIDTIGHT CONNECTOR (UL APPROVED) TO CONNECT THE 1 1/2-INCH LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT LFNC-B (UL APPROVED) TO THE PULL BOX AND CONNECT TO STREET LIGHT POLE BY STUBBING UP A MINIMUM OF 6 INCHES OF THE LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (LFNC-B) INTO THE CABLE SLOT.
22. ALL CONDUITS AND JUNCTION BOXES EMBEDDED IN STRUCTURE SHALL BE PAID UNDER STRUCTURE PAY ITEMS. CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF EMBEDDED CONDUITS.
23. THE SUPPORT CHANNELS FOR INSTALLATION OF CONDUITS, LUMINAIRES, JUNCTION BOXES AND ENCLOSURES SHALL BE STAINLESS STEEL UNISTRUT P100 SERIES OR APPROVED EQUAL, CHANNELS SHALL BE SLOTTED OR PERFORATED.
24. ALL HDPE OR NONMETALLIC PVC CONDUITS THAT CONNECT TO PULL BOXES REQUIRE A PVC END BELL CONNECTOR INSIDE THE PULL BOX.
25. PROVIDE REMOVABLE SEALANT SUCH AS DUCT SEAL IN THE CONDUITS AT THE CABINETS, PULL BOXES AND JUNCTION BOXES TO AVOID CONDENSATION CAUSED BY AIRFLOW THROUGH THE CONDUITS DUE TO TEMPERATURE DIFFERENCE. THIS WORK SHALL BE INCIDENTAL TO ASSOCIATED CONDUIT PAY ITEM.
26. PROVIDE 3 INCH PVC SCHEDULE 40 CONDUIT ELBOWS IN ALL GROUND MOUNTED CONCRETE LIGHT BASES FOR CABLE IN DUCT TYPE INSTALLATION. THIS WORK IS INCIDENTAL TO CONCRETE BASES PAY ITEMS.
27. AT EACH SIGNAL STANDARD BASE PROVIDE 2 INCH PVC SCHEDULE 40 CONDUIT FROM PULL BOX TO SIGNAL STANDARD BASE. INSTALLATION OF PULL BOX AND CONDUIT ARE INCIDENTAL TO SIGNAL STANDARD BASE INSTALLATION WORK.
28. CONDUCTOR COLORS: 240/480, 1 PHASE - BLACK (HOT)/WHITE (NEUTRAL) // RED (HOT)/GRAY (NEUTRAL) / GREEN (GROUND)
29. INSTALL COMMON GROUND CONDUCTOR IN CONDUIT WHERE MULTIPLE BRANCH CIRCUITS CONDUCTORS ARE INSTALLED IN SAME CONDUIT AND SPLICE THE GROUND CONDUCTOR WITH TAP CONNECTOR IN PULLBOX.
30. PROVIDE MINIMUM CABLE/CONDUCTOR(S) SLACK AS NOTED BELOW:

    PULL BOXES: SEE DETAIL "TYPICAL WATERTIGHT MULTI-PORT CONNECTIONS"
    - CONNECTED WIRES TO LIGHT POLE IN PULL BOX MUST BE EXTENDED MINIMUM 3 FT. BEYOND TOP OF PULL BOX
    - UNCONNECTED WIRES THAT PASS THROUGH PULL BOX MUST HAVE A MINIMUM OF 6FT . SLACK COIL LEFT INSIDE PULL BOX.

    DISTRIBUTION CENTER / LOAD CENTER: EXTEND 10-FT.

    BREAK AWAY TRANSFORMER BASE: EXTEND 2-FT.
31. UNDERGROUND WIRE & CONDUIT SHOWN ON PLANS TO BE ABANDONED IN PLACE UNLESS DIRECTED BY THE ENGINEER. CONTRACTOR MAY CHOOSE TO REMOVE CONDUCTOR AT THEIR OWN EXPENSE.
32. LIGHT POLES INSTALLED BEHIND THE CURB NEED TO BE SET 30 INCHES BACK FROM FACE OF CURB TO CENTER OF POLE, SO TO MEET THE MINIMUM DISTANCE OF 24 INCHES FROM THE CURB FACE TO THE CURB SIDE FACE OF THE POLE.
33. ON ALL NEW STREET LIGHT POLES A PLAQUE WITH THE POLE NUMBER AS SHOWN ON THE PLANS SHALL BE AFFIXED ONTO THE POLE SHAFT.
34. ALL WIRE CONNECTIONS REQUIRE ANTI-OXIDANT TO BE APPLIED TO THE CONNECTIONS
35. ALL HARDWARE NUT AND BOLT CONNECTIONS REQUIRE ANTI-SEIZE TO BE APPLIED TO THEM

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STREET LIGHTING GENERAL NOTES:

36. COORDINATE NEW CONDUIT CONNECTIONS WITH EXISTING CONDUIT, DUCT PACKAGES, AND PULL BOXES/VAULTS/MANHOLES WITH CITY OF MILWAUKEE STREET LIGHTING. THE CITY REQUIRES THREE WORKING DAYS ADVANCED NOTICE. CONTACT ELECTRICAL SUPERVISOR
    STREET LIGHTING - NEAL KARWEIK (OFFICE 414-286-5943 (CELL) 414-708-4245
    STREET LIGHTING - WILLIE COTTON (OFFICE) 414-286-5997 (CELL) 414-708-1629
    STREET LIGHTING - DISPATCHER @ 414-286-3944
    TRAFFIC SIGNALS - RUDY GUTIERREZ (OFFICE) 414-286-5941 (CELL) 414-708-5148
    TRAFFIC SIGNALS - DISPATCHER @ 414-286-3687
37. IMMEDIATELY AFTER THE CONTRACTOR HAD COMPLETED ALL THE ELECTRICAL PULL BOXES / VAULTS, CONDUIT AND CONDUIT CONNECTIONS, AND JUST BEFORE ELECTRICAL WORK IS COVERED UP WITH CONCRETE, SOIL, OR ETC. THE CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SHOP SUPERVISORS FOR FINAL INSPECTION AND APPROVAL OF ALL WORK.
    STREET LIGHTING - NEAL KARWEIK (OFFICE 414-286-5943 (CELL) 414-708-4245
    STREET LIGHTING - WILLIE COTTON (OFFICE) 414-286-5997 (CELL) 414-708-1629
    STREET LIGHTING - DISPATCHER @ 414-286-3944
    TRAFFIC SIGNALS - RUDY GUTIERREZ (OFFICE) 414-286-5941 (CELL) 414-708-5148
    TRAFFIC SIGNALS - DISPATCHER @ 414-286-3687
38. CONTRACTOR SHALL SUPPLY AS-BUILT DRAWINGS FOR ALL WORK BEING DONE DETAILING THE FINAL PLACEMENT OF CONDUIT, CABLING, EQUIPMENT, AND GEOMETRIC MODIFICATIONS UNDER THE CONTRACT. PROVIDE (.PDF FORMAT) COPY CONFORMING TO CMM 1-65.14, OR RECORD ALL CHANGES IN RED INK ONLY ON THE AS-LET (DESIGN) PAPER DRAWINGS. THE CITY OF MILWAUKEE DPW ENGINEER WILL REJECT AS-BUILTS WITH INCOMPLETE OR INCORRECT CONTENT OR NOT CONFORMING TO CMM STANDARDS.
39. CONTRACTOR TO DELIVER THE FOLLOWING REMOVED STREET LIGHTING MATERIALS:
    -ALUMINUM AND WOOD POLES
    -LUMINAIRE BRACKET ARMS
    -LUMINAIRES
    -BREAKAWAY TRANSFORMER PEDESTALS
    -WIRING PEDESTALS (GREEN IN COLOR)
    TO CITY OF MILWAUKEE STREET LIGHTING YARD AT 1540 W. CANAL ST.
    CALL RICO LOPEZ AT 414-286-5983 (CANAL OFFICE) OR 414-286-6123 (DPW FIELD OFFICE) OR DISPATCHER AT 414-286-5944 THREE (3) WORKING DAYS BEFORE TO COORDINATE DELIVERY OF MATERIALS
40. CONTRACTOR WILL BE RESPONSIBLE FOR THE DISPOSAL OF CONCRETE POLES, CONCRETE BASES, AND WIRING.
41. CONTRACTOR SHALL DISPOSE OF REMOVED EXISTING LAMPS IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
42. ONLY WHEN THE CITY OF MILWAUKEE IS FURNISHING MATERIALS FOR A PROJECT THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE STREET LIGHTING SHOP YARD CONTACT PERSON FOUR (4) WORKING DAYS BEFORE, AND WILL NEED TO PROVIDE THE EXACT QUANTITY OF MATERIALS NEEDED. THE ADVANCE NOTICE WILL ALLOW THE SHOP TO GATHER THE REQUEST ITEMS FOR THE CONTRACTOR TO PICK UP AND SIGN FOR TAKING POSSESSION OF THE MATERIALS.

    THE CONTRACTOR WILL BE RESPONSIBLE FOR THE MATERIALS THAT THEY TAKE POSSESSION OF AND FOR THE ANY RETURNING OF ANY UNUSED MATERIALS BACK TO THE SHOP IN GOOD CONDITION. IF ANY MATERIALS COME BACK DAMAGED OR BROKEN THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACING THE BROKEN OR DAMAGED ITEMS.

    STREET LIGHTING SHOP YARD CONTACT PERSON:
    NEAL KARWEIK 414-286-5943 (OFFICE) 414-708-4245 (CELL)
    ALL THE MATERIALS MUST BE EITHER PICKED OR DROPPED OFF ALL AT ONE TIME.
    THE STREET LIGHTING SHOP YARD HOURS FOR PICKING UP MATERIALS IS FROM 8AM TO 2PM:
    MONDAY THROUGH FRIDAY.
    CONTRACTOR MUST BE OUT OF THE SHOP YARD BY 2PM NO LATER.

STREET LIGHTING GENERAL NOTES:

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AS-BUILT GUIDELINES:

PROVIDE AS-BUILT DRAWINGS DETAILING THE FINAL PLACEMENT OF CONDUIT, CABLING, EQUIPMENT, AND GEOMETRIC MODIFICATIONS UNDER THE CONTRACT. PROVIDE PDF COPY CONFORMING TO CMM 1-65.14, OR RECORD ALL CHANGES IN RED INK ONLY ON THE AS-LET (DESIGN) PAPER DRAWINGS. THE ENGINEER WILL REJECT AS-BUILTS WITH INCOMPLETE OR INCORRECT CONTENT OR NOT CONFORMING TO CMM STANDARDS.

UPON PROJECT COMPLETION, FOLLOW THE WISDOT REQUIREMENTS PER CMM 165.12 AS-BUILT PLANS, THE PROJECT ENGINEER AND/OR ELECTRICAL CONTRACTOR SHALL SUBMIT AN ELECTRONIC AS-BUILT PLAN. ANY CHANGES FROM THE AS-LET PLAN THAT WERE BUILT INTO THE PROJECT SHOULD BE RECORDED IN RED USING ADOBE ACROBAT PROFESSIONAL OR EQUIVALENT SOFTWARE. DO NOT SCAN FIELD NOTES TO CREATE THE DIGITAL AS-BUILT PLAN.

IF THERE IS A STRUCTURE DRAWING, INCLUDE ALL STRUCTURES DRAWING SHEETS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSERT ANY ADDENDUM OR REPLACEMENT DRAWING SHEETS. TO DO THIS, RENUMBER THEM SIMILARLY TO THE ORIGINAL DRAWING SHEET.

FOR EXAMPLE:

REVISED SHEET 5 WOULD REPLACE SHEET 5. HOWEVER, ALL THE ORIGINAL SHEETS SHALL REMAIN IN THE AS-BUILTS. IF THE SHEET HAS BEEN REPLACED CROSS IT OUT WITH AND X AND INDICATE THE NUMBER OF ITS REPLACEMENT SHEET IF ADDITIONAL SHEETS WERE ADDED, INSERT THEM IN THE ORIGINAL LOCATION AND LABEL THEM WITH THE PREVIOUS SHEET NUMBER FOLLOWED BY AN "A", "B", "C", ETC.

NOTE THE SHEET CHANGES ON THE TITLE SHEET UNDER THE ORDER OF SHEETS.

THE TITLE SHEET OF THE AS-BUILT DRAWING SHOULD INCLUDE THE FOLLOWING INFORMATION:

AS-BUILT DRAWING
SUPERVISOR:
PROJECT MANAGER:
CONTRACTOR LEADER:
CONTRACTOR COMPANY:
WORK STARTED:
WORK COMPLETED:

LINE OUT OR CROSS OUT ALL CHANGED INFORMATION AND WRITE-IN THE CORRECTED INFORMATION ABOVE THE ORIGINAL OR CLOSE TO IT WHEREVER POSSIBLE. USE BLANK SPACES ON THE DRAWING SO NOTES ARE NOT SUPERIMPOSED. DRAWINGS WITH EXCESSIVE DETAIL MAY REQUIRE AN ALTERNATE APPROACH. NUMBERED CHANGES OR ADDITIONS MAY BE SHOWN ON SUPPLEMENTAL NON-DRAWING SHEETS.

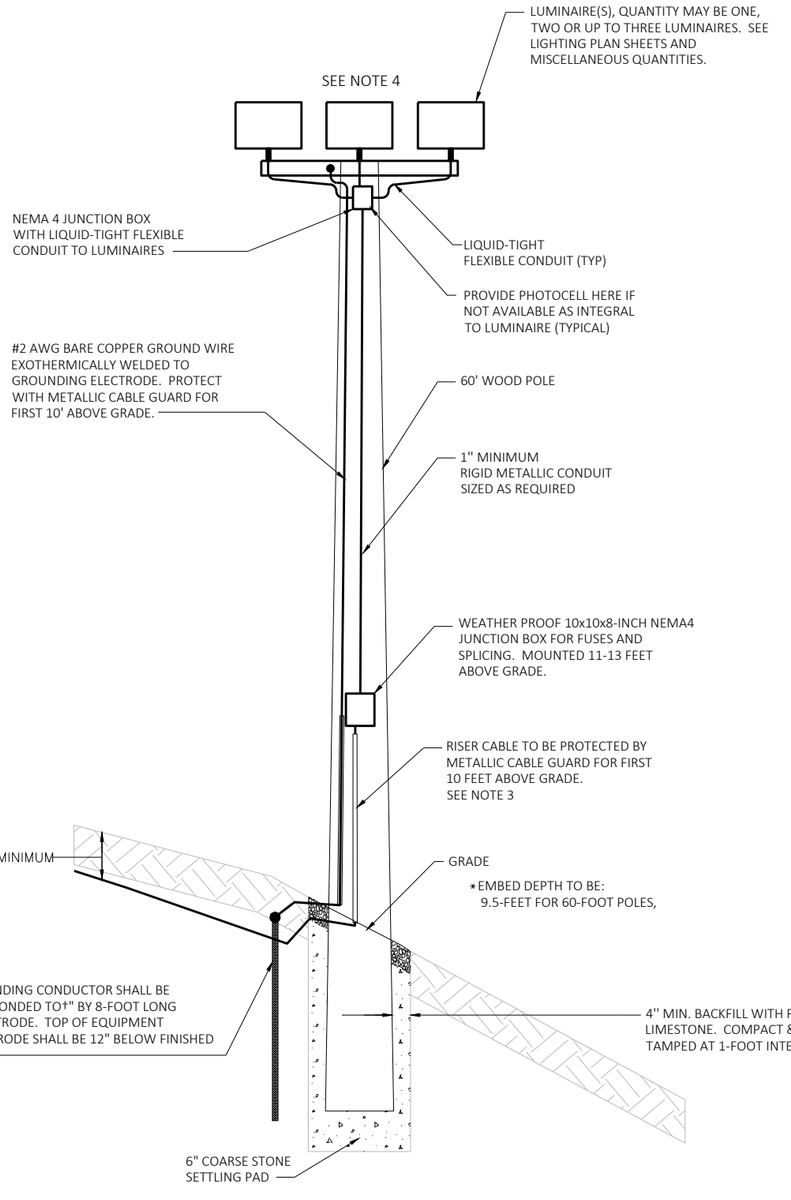
- LOCATE AND CLEARLY LABEL ALL CONDUIT RUNS, FITTINGS, SPLICE VAULTS, PULL BOXES, METER PEDESTALS, CONCRETE BASES, TRANSFORMERS, POLES AND OTHER APPURTENANCES IN TWO DIRECTIONS. SWING TIES SHOULD BE MADE FORM THE OBJECTS THAT ARE PERMANENT IN NATURE AND VISIBLE ON THE FINISHED SURFACE.
- STREET NAMES SHALL BE ON ALL SHEETS.
- SHOW ALL SIZES AND MATERIAL TYPES OF PIPES AND CONDUITS IF CHANGED OR MODIFIED FROM ORIGINAL DESIGN.
- ALL HORIZONTAL DISTANCES SHALL BE KNOWN TO THE NEAREST TENTH OF A FOOT (I.E., 205.3').
  ALL VERTICAL DISTANCES SHALL BE TO THE NEAREST INCH (I.E., 24").
- SHOW LOCATION AND ELEVATIONS ON CONDUIT AND FITTINGS WHERE CHANGES OR DEFLECTIONS IN DIRECTION OCCUR.
- SPECIAL DETAIL DRAWINGS MAY BE REQUIRED WHERE INSTALLATIONS ARE NOT SHOWN ON APPROVED CONSTRUCTION DRAWINGS FOR WHATEVER REASON OR WHERE REQUIRED FOR CLARITY.
- TYPICAL SERVICE INSTALLATION DETAILS WITH DEVIATIONS FROM ORIGINAL PLANS OR STANDARD DETAILS SHALL BE NOTED ON AS-BUILT DRAWINGS.
- NO ARBITRARY MARK-UPS WILL BE PERMITTED.

IF THERE ARE NO CORRECTIONS OR ADDITIONS TO THE AS-LET PLAN(S) PUT "NO CHANGE" ON THE SHEET WITH ALL OTHER REQUIRED AS-BUILT INFORMATION.

BY MAIL SEND TO:
CITY OF MILWAUKEE
INFRASTRUCTURE SERVICES DIVISION
TRANSPORTATION SECTION - CONSTRUCTION
CHIEF CONSTRUCTION ENGINEER TONY KOTECKI
841 NORTH BROADWAY, ROOM 701
MILWAUKEE, WISCONSIN 53202

BY EMAIL SEND TO:
CITY OF MILWAUKEE
INFRASTRUCTURE SERVICES DIVISION
TRANSPORTATION SECTION - CONSTRUCTION
CHIEF CONSTRUCTION ENGINEER TONY KOTECKI
AKOTEC@MILWAUKEE.GOV

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023301-LP.DWG
LAYOUT NAME - LP-3 LOCAL NOTES 2
PLOT DATE : 4/25/2025 11:09 AM PLOT BY : TKACHUK, TYLER PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

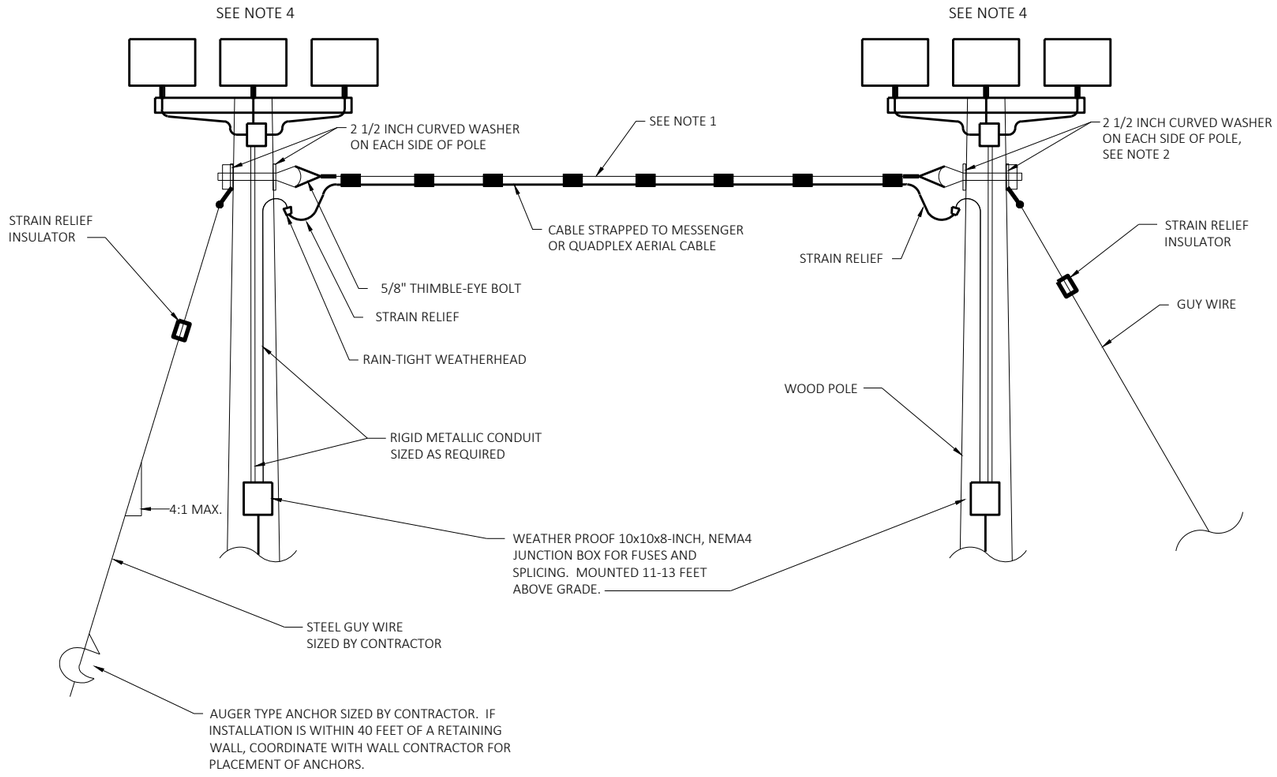


WOODEN POLE INSTALLATION DETAIL

SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
NTS

NOTES

1. MINIMUM CLEARANCE AT CENTER OF SPAN: 20-FT. ABOVE ROADWAY OR GRADE.
2. CONSTRUCT DEAD ENDS WITH SECONDARY RACK, CLEVISES, OR OTHER APPROVED METHOD.
3. SECURELY BAND OR CLAMP RISERS TO POLES. USE METALLIC CABLE GUARD TO PROTECT RISERS FOR 10-FEET ABOVE GRADE.
4. FOR CLARITY, LIGHTNING PROTECTION NOT SHOWN IN ITS ENTIRETY. PROVIDE AIR TERMINAL PROTRUDING 18" ABOVE HIGHEST FIXTURE WITH #2 AWG DOWN CONDUCTOR TO A†" X 8-FOOT COPPER CLAD ELECTRODE FOR LIGHTNING PROTECTION. DOWN CONDUCTOR MAY TRAVEL ONLY IN A DOWNWARD DIRECTION UNTIL IT IS CONNECTED TO THE GROUNDING ELECTRODE. LIGHTNING PROTECTION GROUNDING ELECTRODE TO BE BONDED TO EQUIPMENT GROUNDING ELECTRODE WITH BARE, SOLID #2 COPPER CONDUCTOR; EXOTHERMIC WELD LOWER, MECHANICAL ON UPPER END.
5. LUMINAIRES AND AERIAL CABLES ARE SEPARATE BID ITEMS AND ARE NOT PART OF THE BID ITEM "WOOD POLE LIGHTING 60-FOOT. THE REMAINING ITEMS SHOWN ARE INCIDENTAL TO BID ITEM "WOOD POLES LIGHTING 60-FOOT.



OVERHEAD WIRE DETAIL

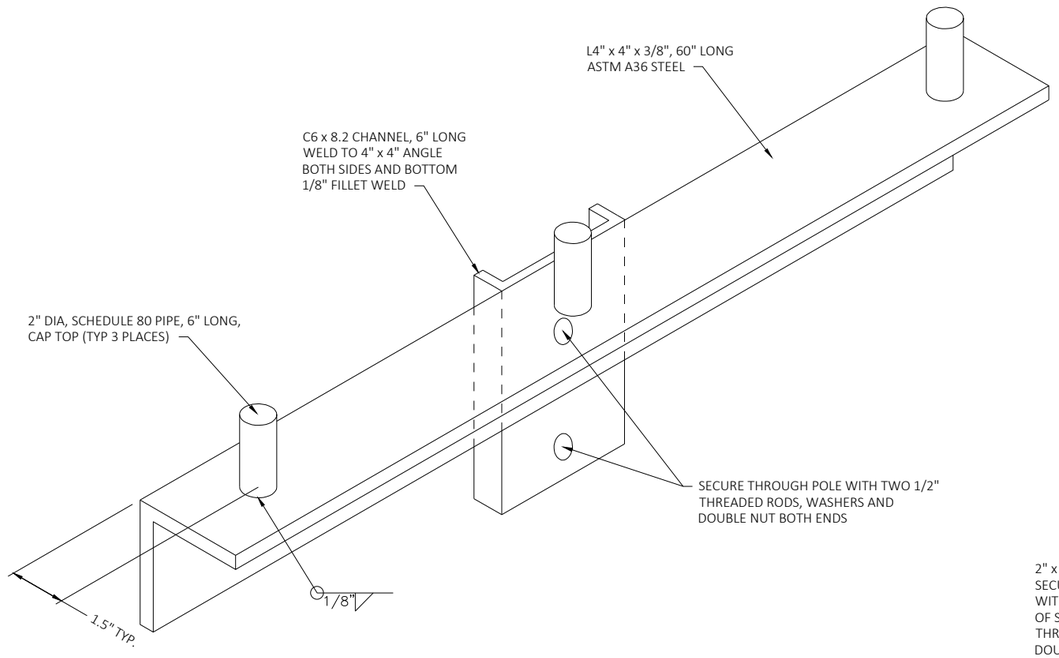
SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
NTS

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LIGHTING DETAILS	SHEET 180	E

2

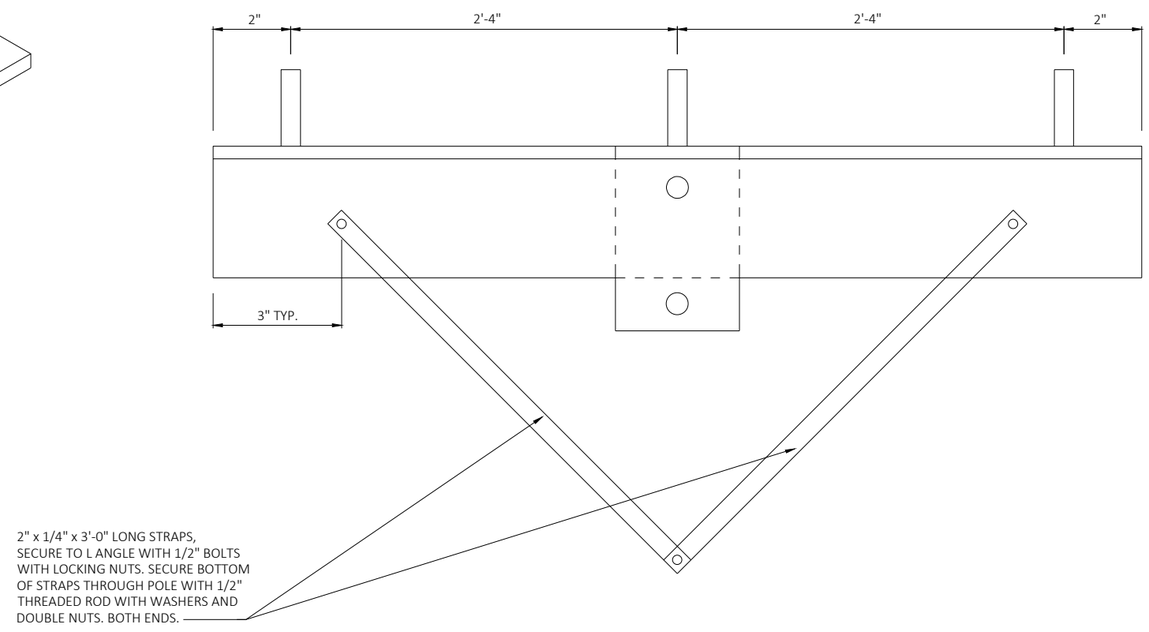
NOTES

1. HOT DIP GALVANIZE AFTER FABRICATION.
2. POLE WITH 2 OR 3 LUMINAIRES TO USE BRACKET AS SHOWN. PROVIDE ONLY THE CENTER PORTION WITH 4" L ANGLE, 6" LONG FOR A SINGLE FIXTURE.



ISOMETRIC VIEW

STRAPS NOT SHOWN FOR CLARITY



FRONT VIEW

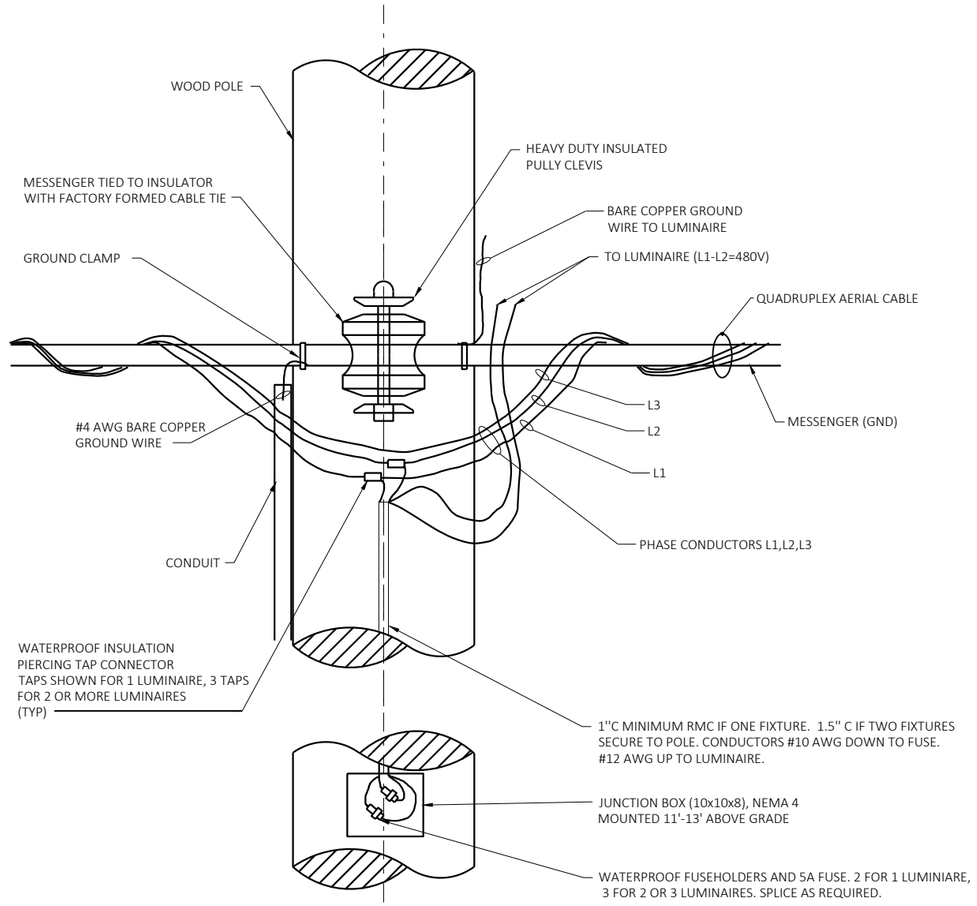
FLOODLIGHT MOUNTING BRACKET

NTS

2

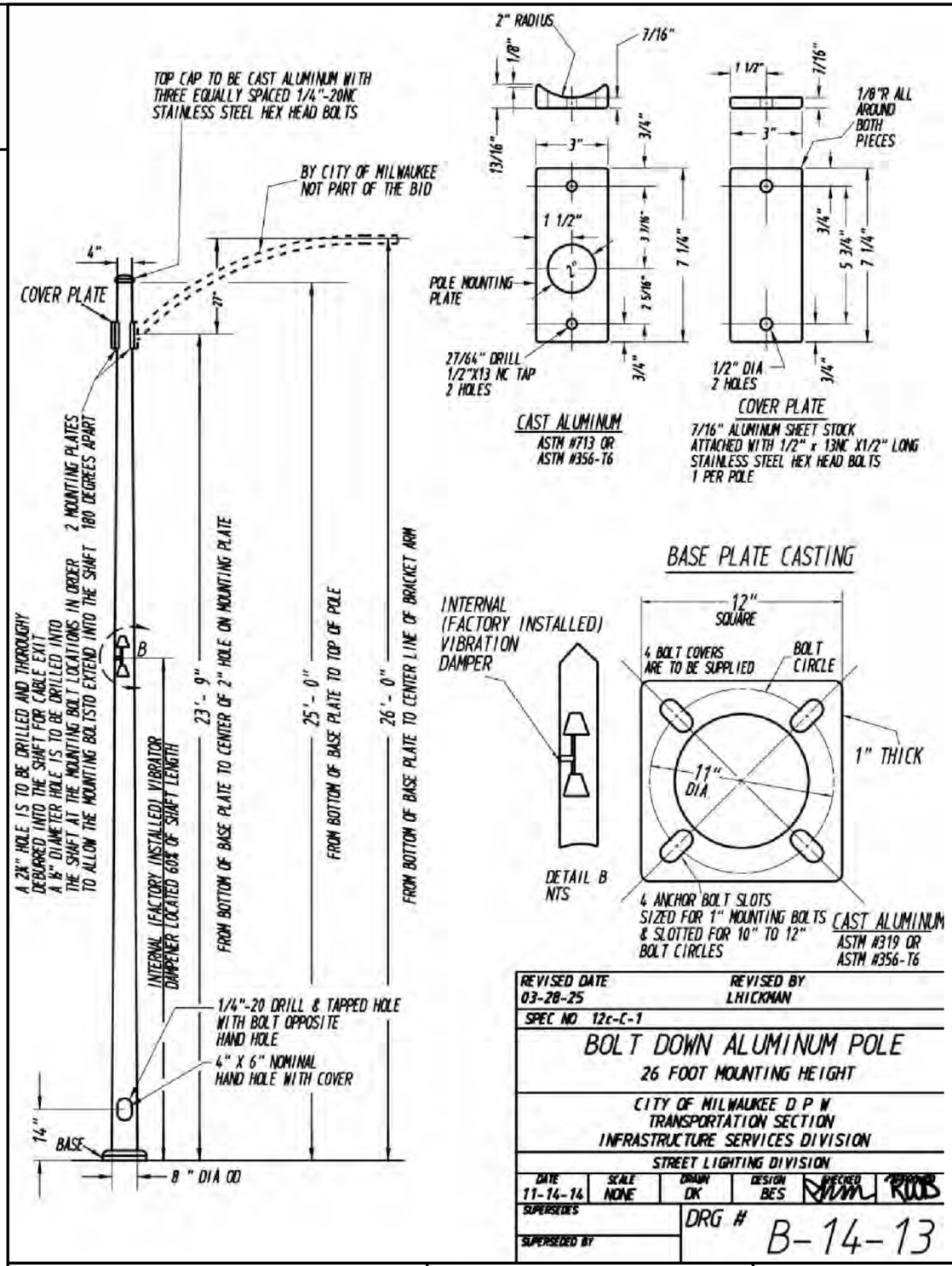
NOTES

1. IF TWO OR MORE CABLES ON A POLE ARE FOR THE SAME CIRCUIT, CONNECT THE EQUIPMENT GROUNDING CONDUCTOR AND GROUNDED CONDUCTOR (NEUTRAL) AT EACH POLE.
2. TAPS, CONDUIT, JUNCTION BOX, INSULATIOR, CLEVIS FUSE HOLDERS, WIRING TO/FROM JUNCTION BOX AND TO LUMINAIRE ARE PART OF THE BID ITEM "WOOD POLE LIGHTING 60-FOOT".



OVERHEAD CABLE SPLICE AT WOOD POLE-TEMPORARY 480V FIXTURES WIRED PHASE-PHASE

NTS



REVISED DATE	REVISED BY
03-28-25	LHICKMAN

SPEC NO 12c-C-1

BOLT DOWN ALUMINUM POLE
26 FOOT MOUNTING HEIGHT

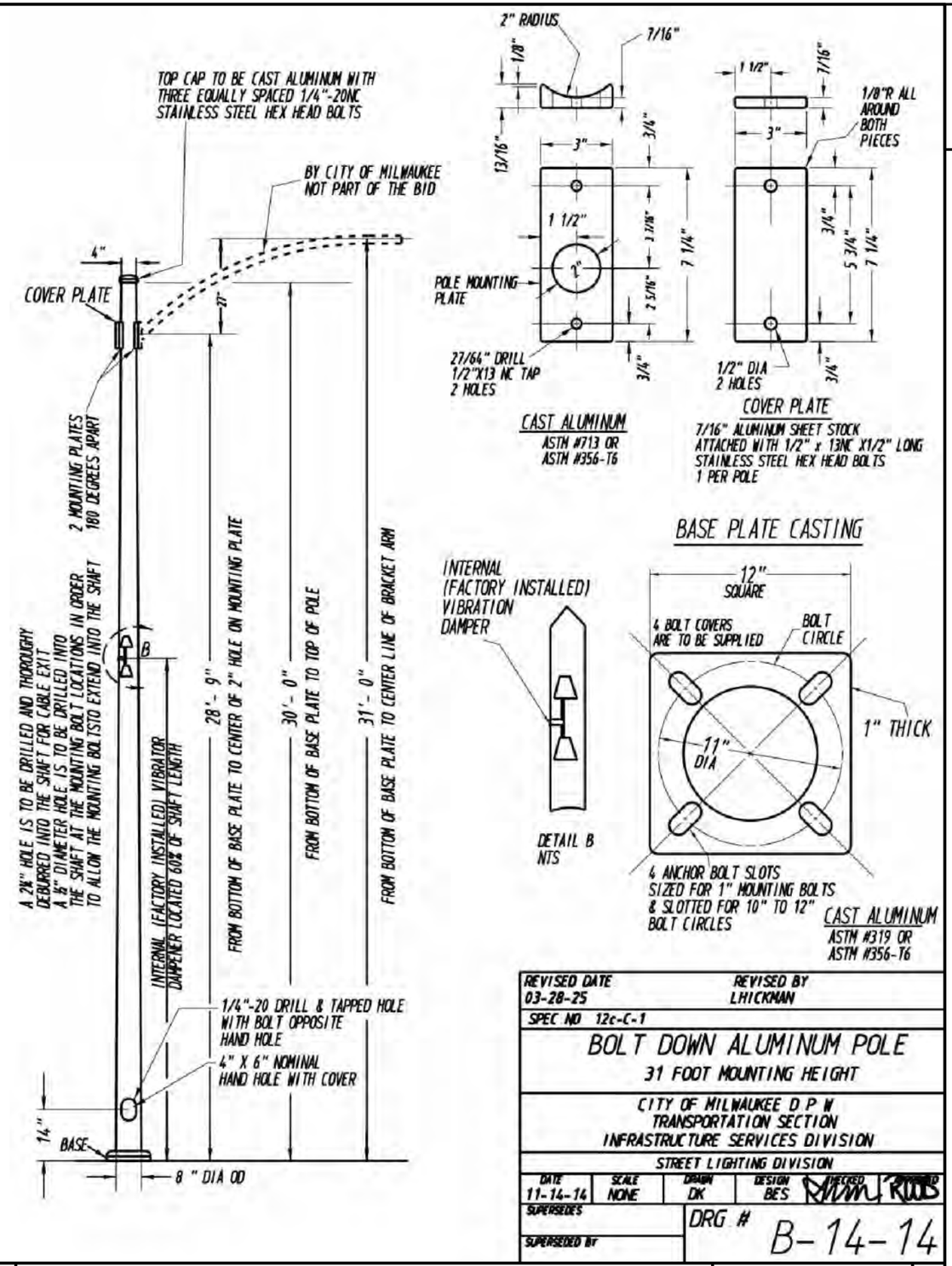
CITY OF MILWAUKEE D P W
TRANSPORTATION SECTION
INFRASTRUCTURE SERVICES DIVISION
STREET LIGHTING DIVISION

DATE	SCALE	DRAWN	DESIGN	CHECKED	APPROVED
11-14-14	NONE	DK	BES	MW	RWB

SUPERSEDES

SUPERSEDED BY

DRG # B-14-13



REVISED DATE	REVISED BY
03-28-25	LHICKMAN

SPEC NO 12c-C-1

BOLT DOWN ALUMINUM POLE
31 FOOT MOUNTING HEIGHT

CITY OF MILWAUKEE D P W
TRANSPORTATION SECTION
INFRASTRUCTURE SERVICES DIVISION
STREET LIGHTING DIVISION

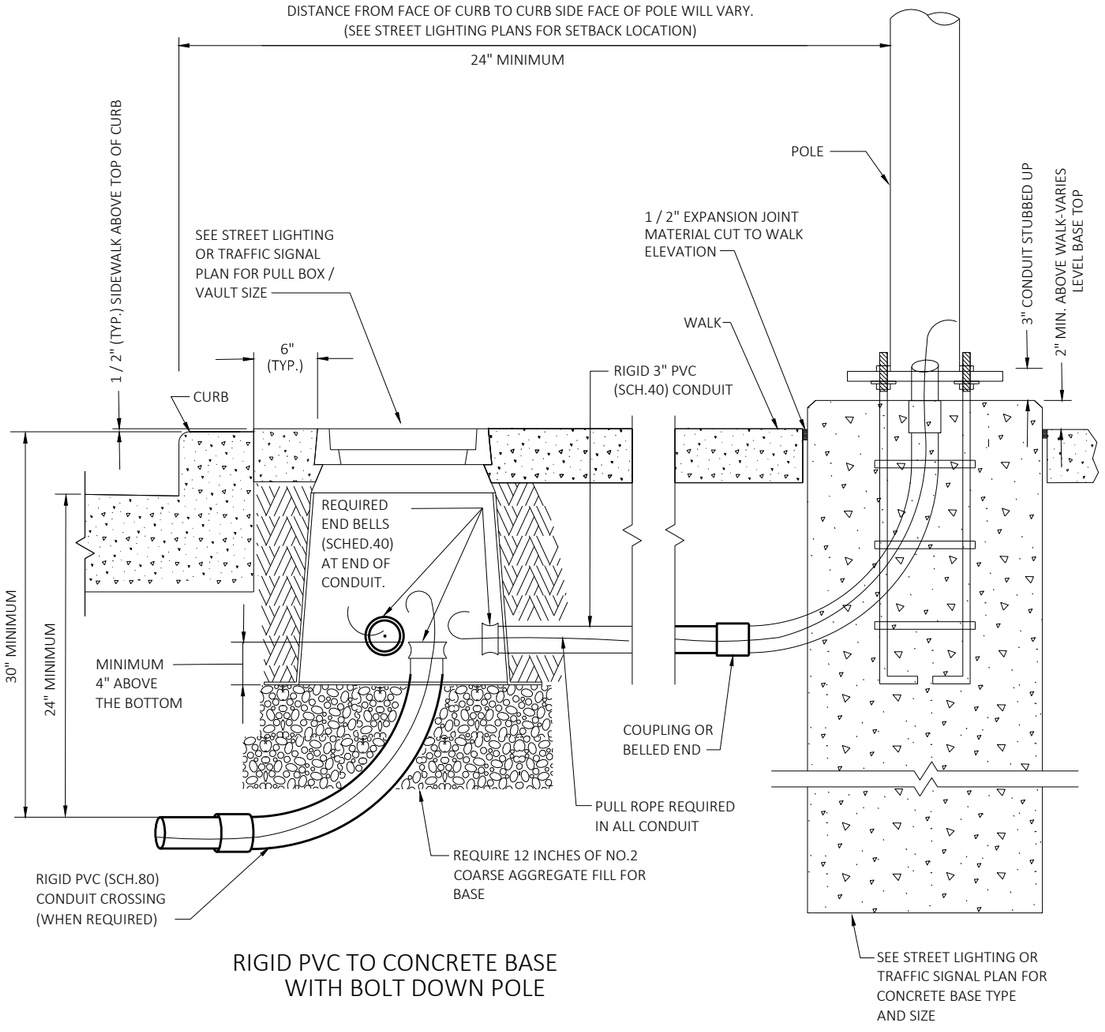
DATE	SCALE	DRAWN	DESIGN	CHECKED	APPROVED
11-14-14	NONE	DK	BES	MW	RWB

SUPERSEDES

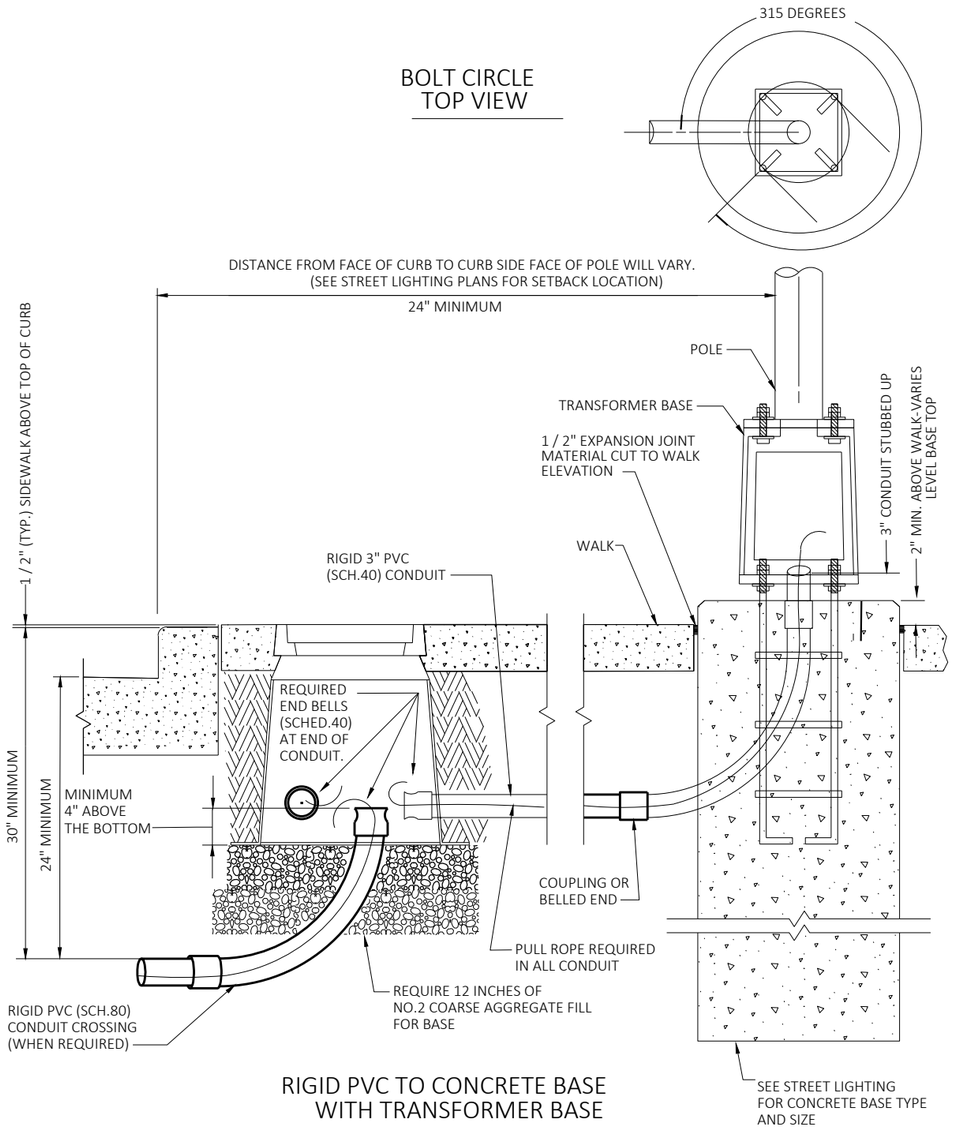
SUPERSEDED BY

DRG # B-14-14

2



RIGID PVC TO CONCRETE BASE
WITH BOLT DOWN POLE



RIGID PVC TO CONCRETE BASE
WITH TRANSFORMER BASE

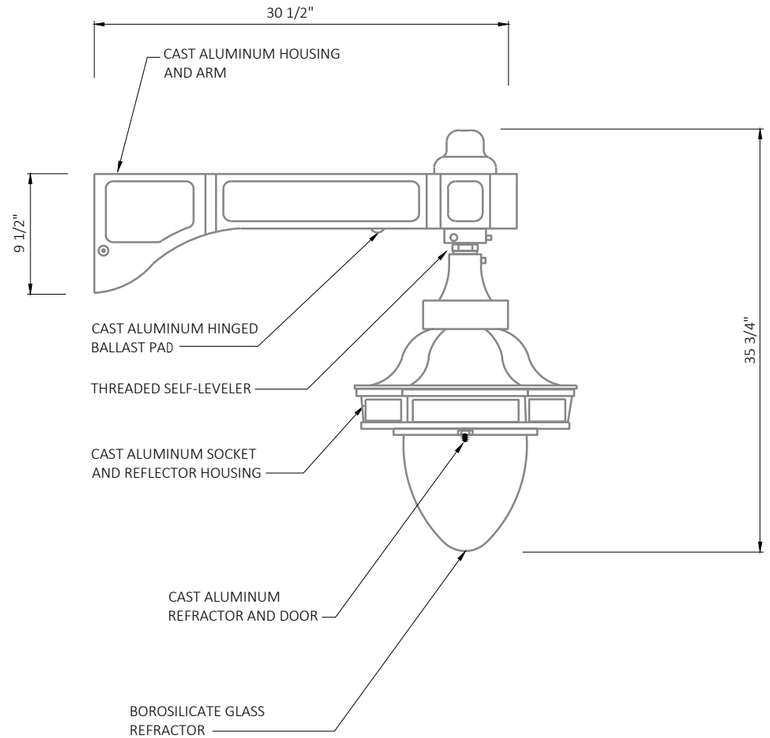
124 DETAIL

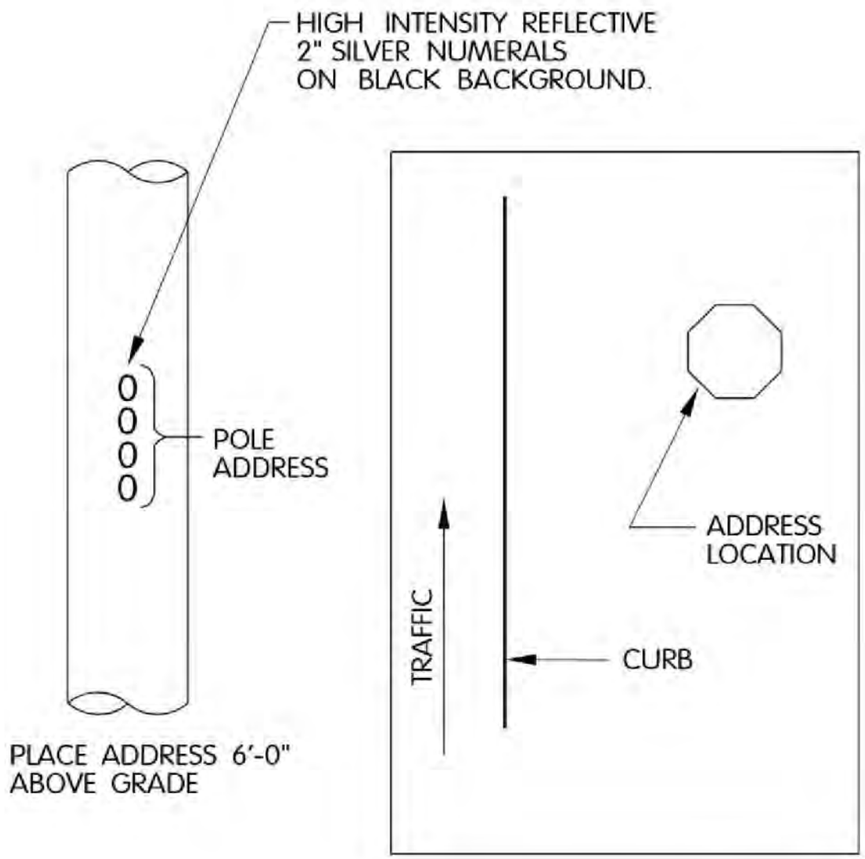
TYPICAL CONDUIT INSTALLATION
FROM PULL BOX / VAULT
TO CONCRETE BASE

NOT TO SCALE

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION

APPROVED REVISION BY: R.BERTRAN
APPROVED REVISION DATE: DEC.13-2023





CONTRACTOR FURNISHED AND INSTALLED

SUPERSEDES:

CITY OF MILWAUKEE – D.P.W.
INFRASTRUCTURE SERVICES DIVISION
TRANSPORTATION SECTION
TRAFFIC AND LIGHTING DESIGN

DATE	REVISIONS

MILWAUKEE LANTERN

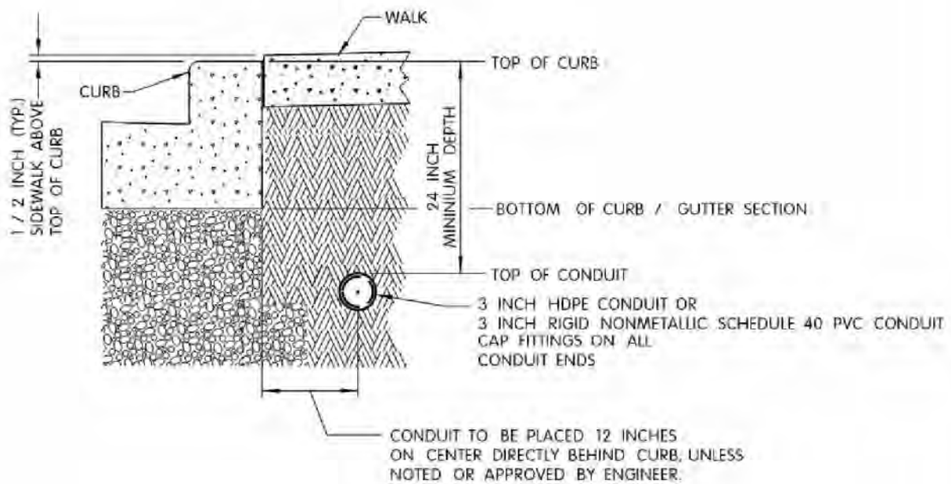
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY
EMBRY		-	-
DATE SIGNED 04-28-2020	DATE SIGNED	DATE SIGNED 04-28-2020	DATE SIGNED 04-28-2020

SCALE: N/A
DRG. # B-20-05
REVISED BY: REVISED DATE: SHEET OF

SHEET X OF X

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION
REVISION BY: JMAZUR REVISION DATE: 04-SEP-2024 17:04
APPROVED REVISION BY: RJBERTRAN APPROVED REVISION DATE: SEP1.09-2024

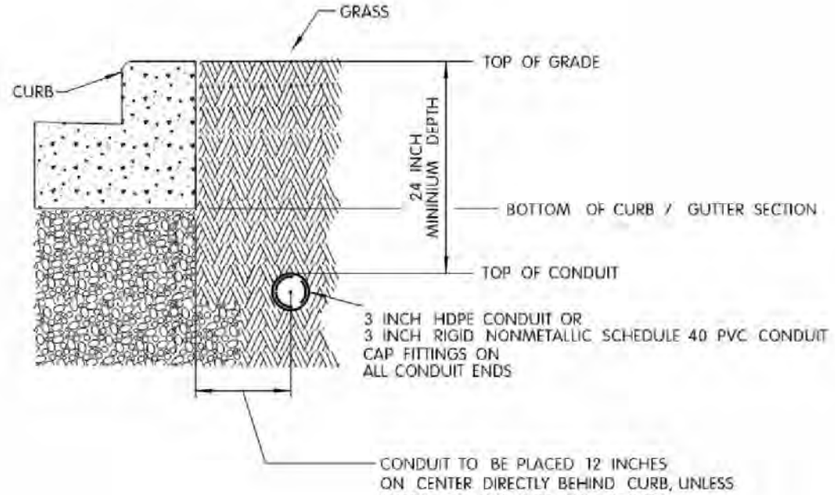
NOTE: 1.) KEEP AREA BEHIND CURB FREE OF DEBRIS AND CONCRETE OVERPOUR.



100 DETAIL "A" NOT TO SCALE

TYPICAL CONDUIT INSTALLATION
BEHIND CURB UNDER WALK

NOTE: 1.) KEEP AREA BEHIND CURB FREE OF DEBRIS AND CONCRETE OVERPOUR.



100 DETAIL "B" NOT TO SCALE

TYPICAL CONDUIT INSTALLATION
BEHIND CURB IN GRASS AREA

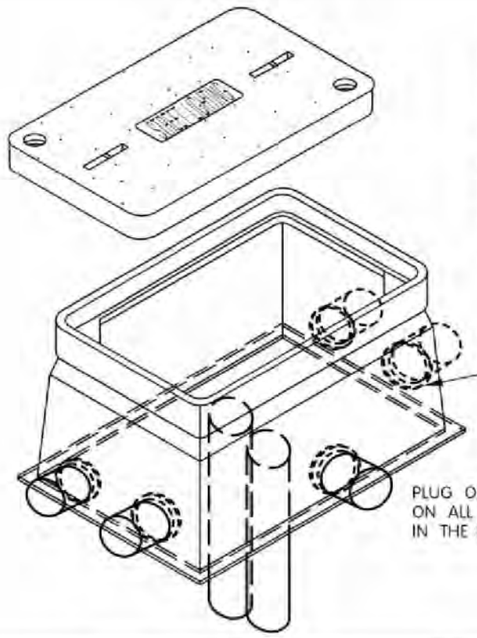
ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES. CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

SHEET X OF X

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION
REVISION BY: dkuwl REVISION DATE: 14-DEC-2023 09:26
APPROVED REVISION BY: R.BERTRAN APPROVED REVISION DATE: DEC 14-2023

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LIGHTING DETAILS	SHEET 186	E

2



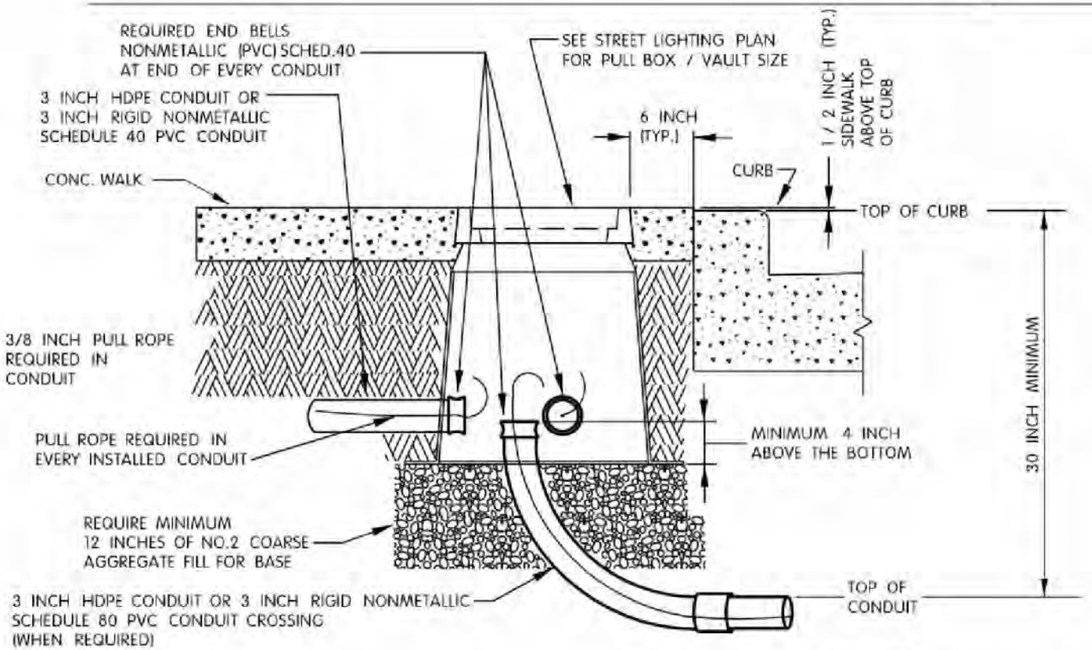
HEAVY DUTY COVER
W/ STREETLIGHTING LOGO
& W / 2 PENTA BOLTS
COLOR: GRAY
TIER 15 RATING (MINIMUM)

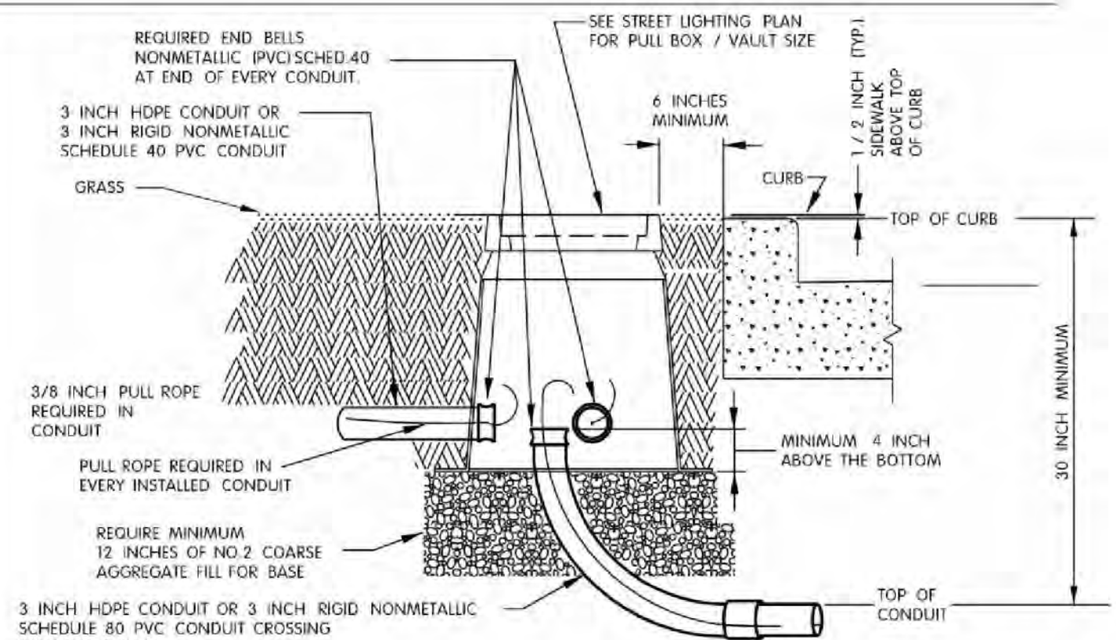
PULL BOX / VAULT
FLARED WALL
BOX W / NO BASE
COLOR: GRAY
TIER 15 RATING (MINIMUM)
(VARIOUS SIZES)

REQUIRED END BELLS
NONMETALLIC (PVC) SCHED 40
AT END OF EVERY CONDUIT.

PLUG OR CAP FITTINGS
ON ALL UNUSED CONDUITS
IN THE ENCLOSURE

3 INCH HDPE OR
3 INCH RIGID NONMETALLIC
SCHEDULE 40 PVC CONDUIT





112 DETAIL — NOT TO SCALE

TYPICAL PULL BOX / VAULT INSTALLATION
IN EITHER PAVEMENT OR GRASS AREAS

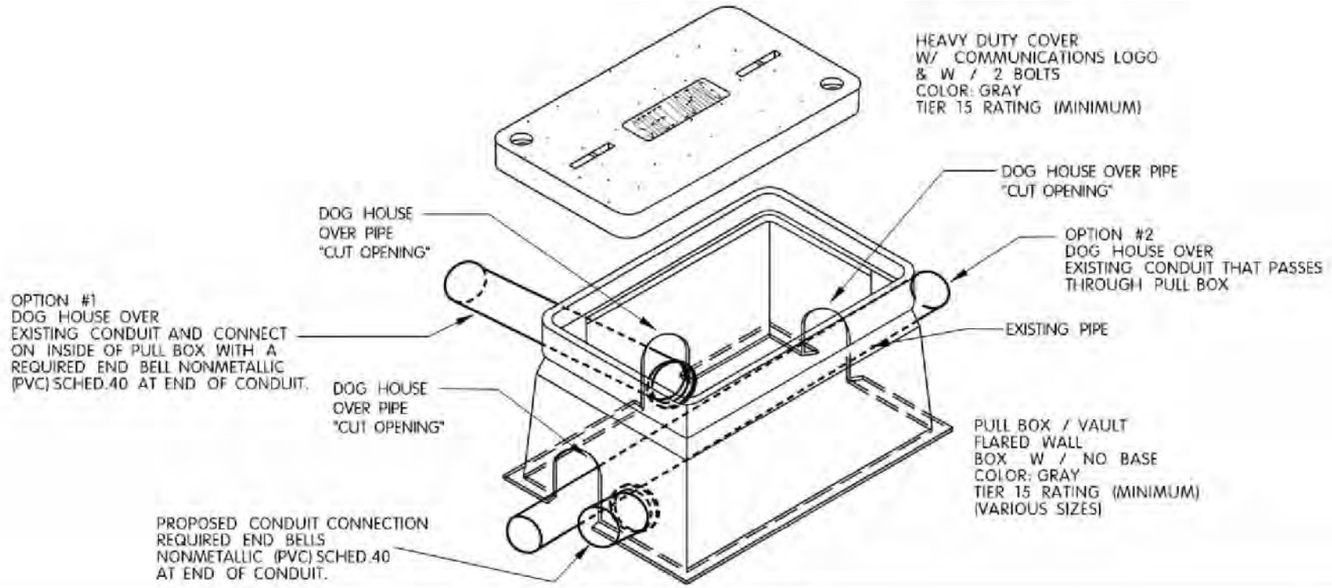
SHEET X OF X

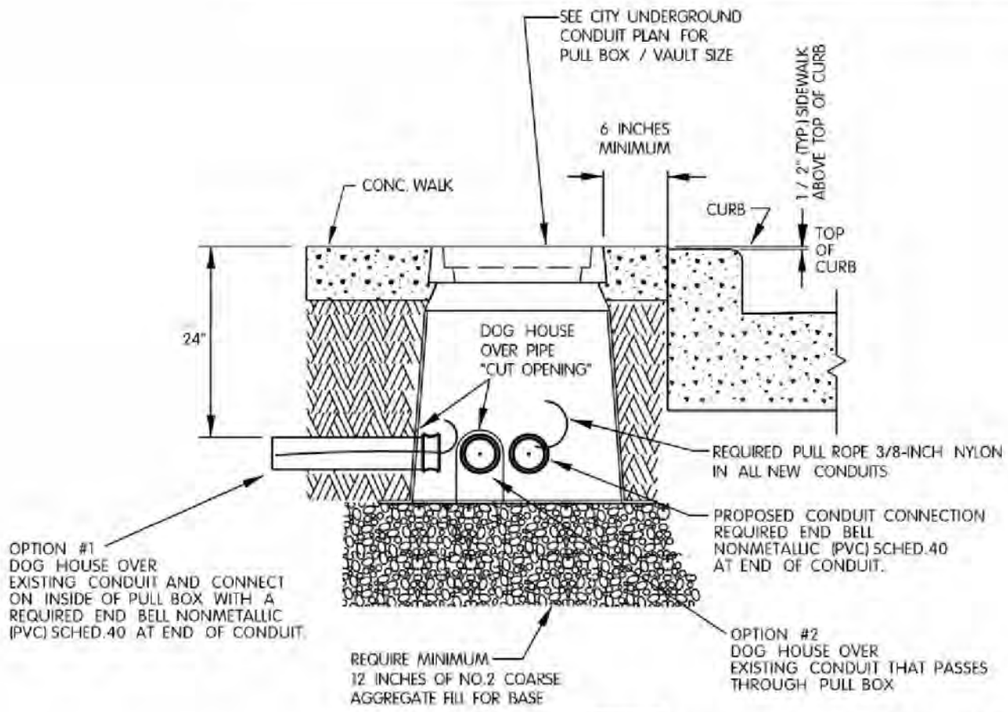
CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION

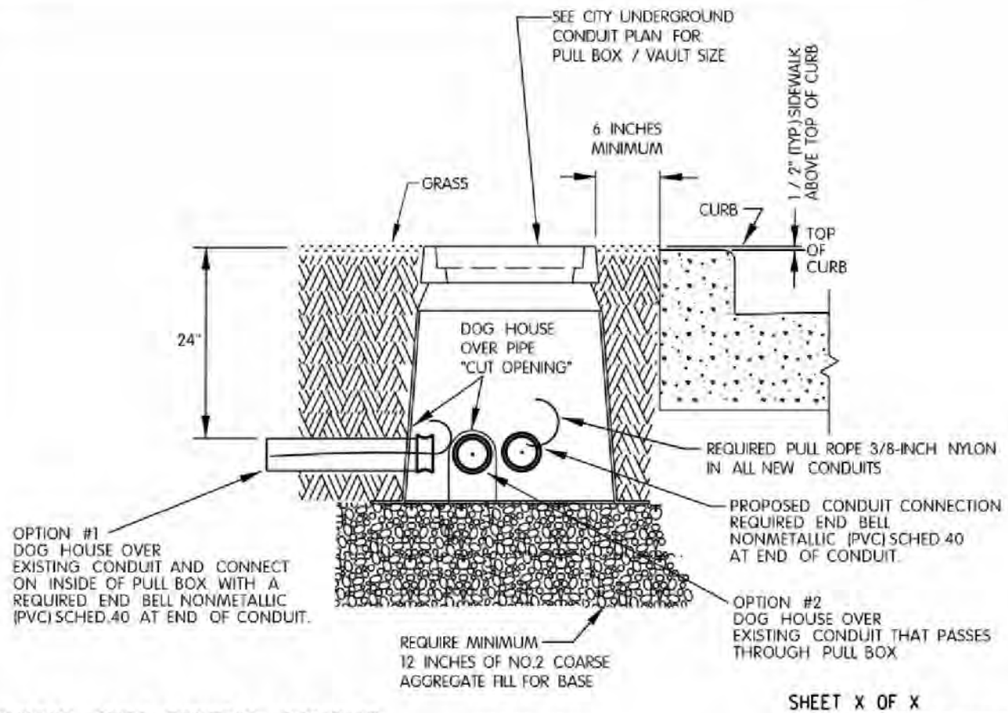
REVISION BY: dkohl — REVISION DATE: 14-DEC-2023 11:34
APPROVED REVISION BY: RBERTRAN — APPROVED REVISION DATE: DEC-13-2023

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES. CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

2







113 DETAIL FOR TYPES OF DOG HOUSING OVER EXISTING CONDUIT NOT TO SCALE

TYPICAL PULL BOX / VAULT INSTALLATION IN EITHER PAVEMENT OR GRASS AREAS

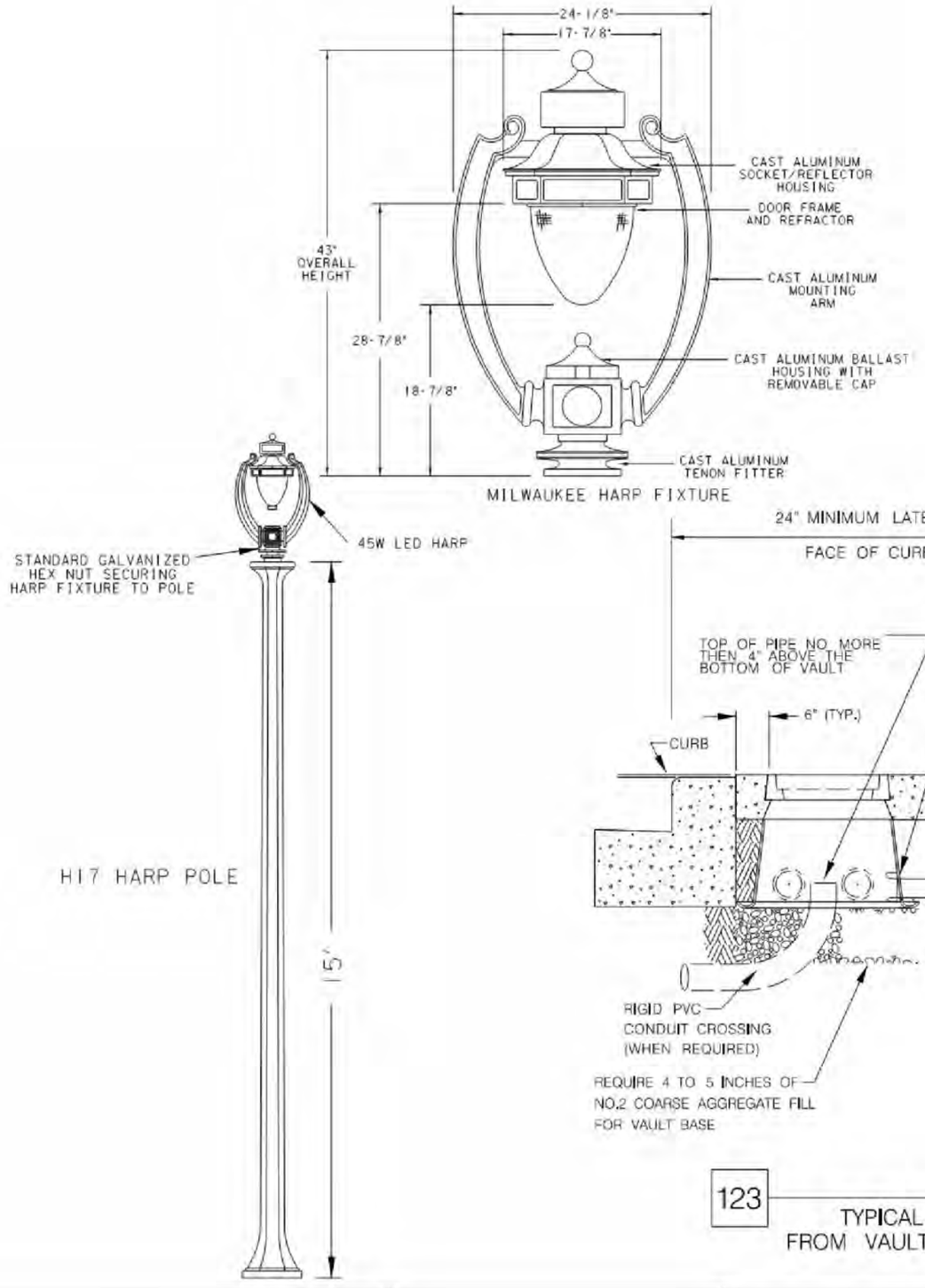
ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES. CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

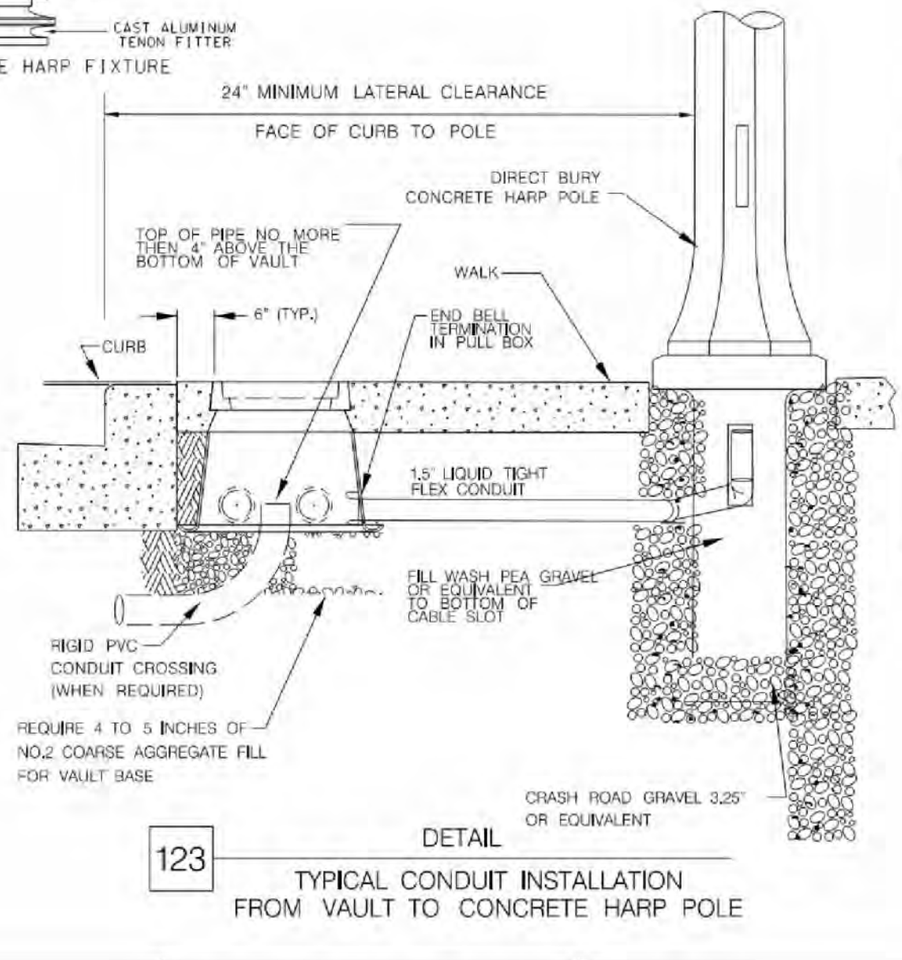
SHEET X OF X

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION
REVISION BY: dlingel REVISION DATE: 14-DEC-2023 07:22
APPROVED REVISION BY: R.BERTRAN APPROVED REVISION DATE: DEC.14-2023

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LIGHTING DETAILS	SHEET 188	E

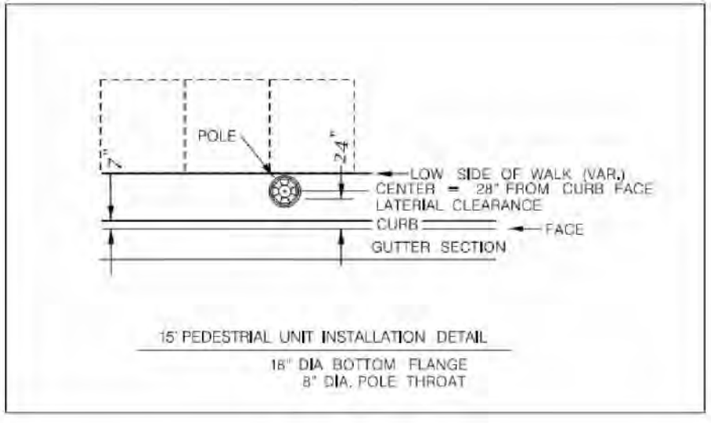
2





123 DETAIL

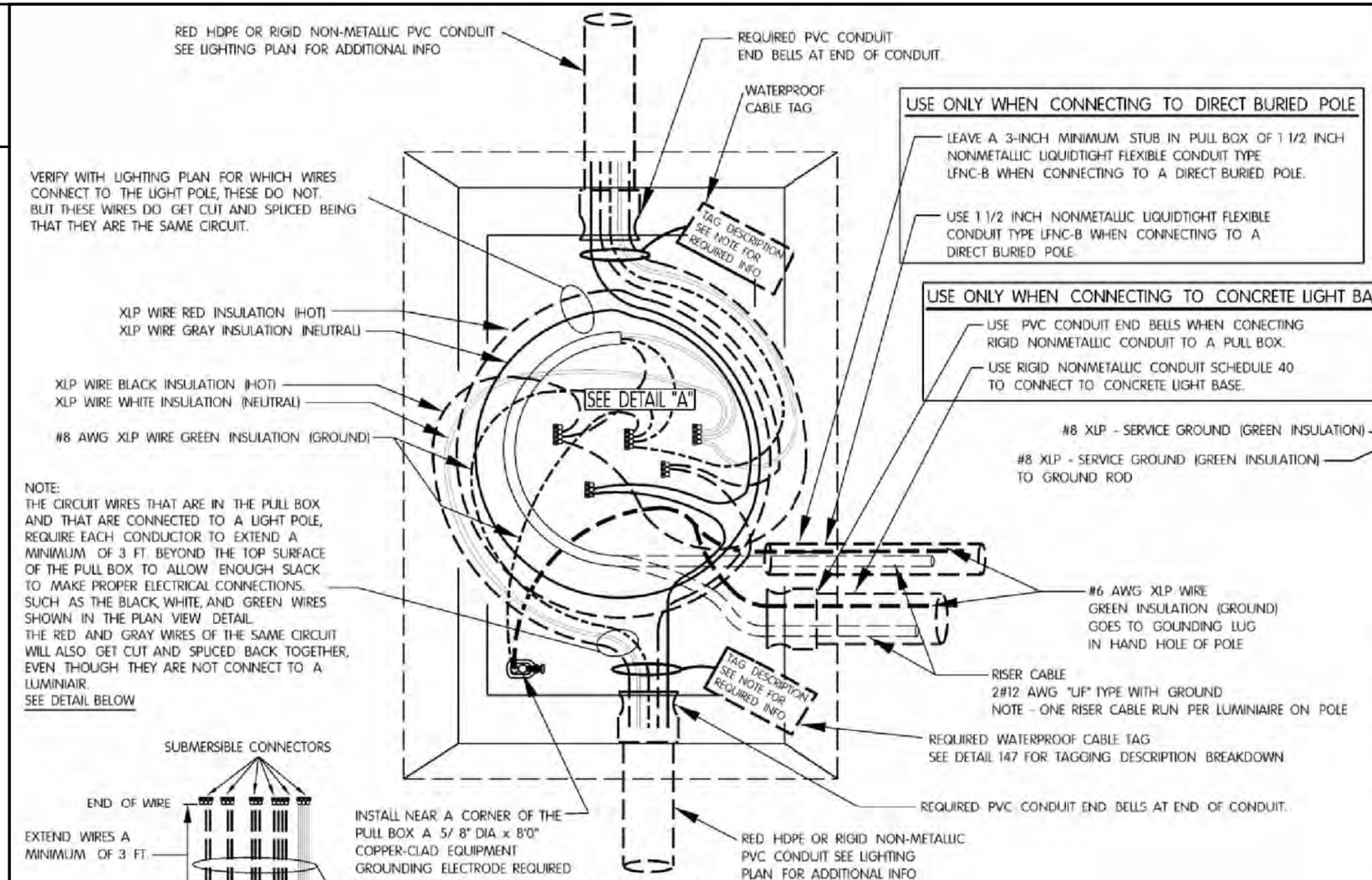
TYPICAL CONDUIT INSTALLATION FROM VAULT TO CONCRETE HARP POLE



15' PEDESTRIAL UNIT INSTALLATION DETAIL

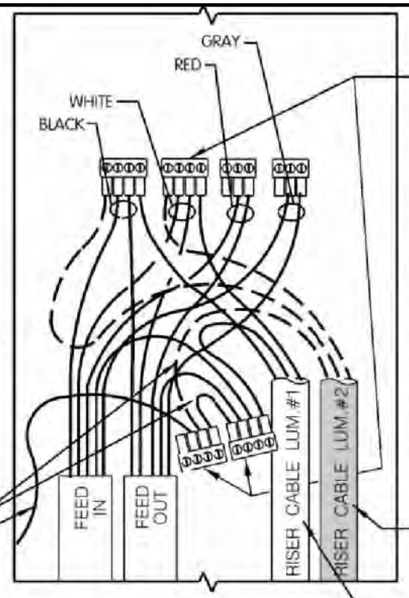
18" DIA BOTTOM FLANGE
8" DIA. POLE THROAT

2



PLAN VIEW

NOT TO SCALE



CIRCUIT MUST BE TAGGED AND IDENTIFIED INSIDE PULL BOX.

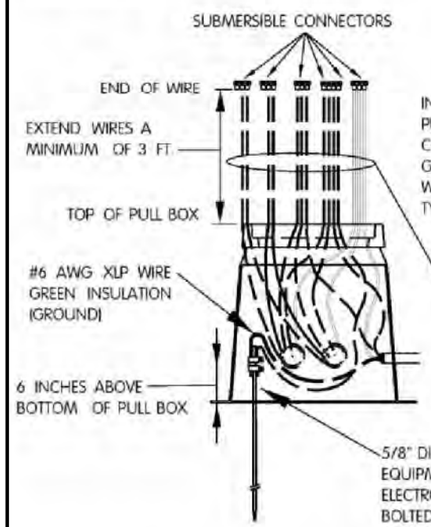
USE:
POLARIS EDGE CONNECTOR (ISPB2)
OR
MORRIS PRODUCTS SUBMERSIBLE INSULATED STREETLIGHTING CONNECTOR, OR
EQUAL
3 OR 4 PORT PRE-INSULATED CONNECTOR OR EQUAL
DESIGNED FOR USE IN BELOW GRADE BOXES, DIRECT BURIAL AND SUBMERSIBLE
CONDUCTORS RANGE FROM #2/0-#14
RATED FOR 600 VOLTS
DUAL RATED FOR CU. OR AL.
INSULATED WITH HIGH DIELECTRIC STRENGTH ABRASION AND CHEMICAL RESISTANT RUBBER
SET SCREWS OR APPROVED EQUAL
UL 486D LISTED FOR DIRECT BURIAL AND SUBMERSIBLE APPLICATIONS

"RISER CABLE"
2#12 AWG TYPE "UF" WITH GROUND
ONLY NEEDED IF POLE HAS A SECOND LUMINAIRE

"RISER CABLE"
2#12 AWG TYPE "UF" WITH GROUND
CABLE WITHOUT SPLICES TO HAND HOLE ON POLE (PER LUMINAIRE)

DETAIL "A"

CONNECTIONS WITHIN PULL BOX
NOT TO SCALE



IF THERE ARE TWO OR MORE CIRCUITS PASSING THROUGH A PULL BOX ONLY THE CIRCUIT THAT IS CONNECTED TO THE ADJACENT LIGHT POLE WILL HAVE THE CONDUCTORS CUT AND SPLICED IN THE PULL BOX. ALL OTHER CIRCUITS WILL ONLY PASS THROUGH WITHOUT BEING CUT / SPLICE, AND WILL BE REQUIRED TO HAVE A MINIMUM OF A 6 FT. COIL OF SLACK TO BE LEFT IN THE PULL BOX FOR EACH OF THE PASS THROUGH CIRCUITS.

NOTES:

WHEN WIRING A LUMINAIRE EITHER
BLACK (HOT) WITH WHITE (NEUTRAL) GO TOGETHER
OR
RED (HOT) WITH GRAY (NEUTRAL) GO TOGETHER

ALL WIRE CONNECTIONS REQUIRE ANTI-OXIDANT TO BE APPLIED TO THE CONNECTIONS.

ALL HARDWARE NUT AND BOLT CONNECTIONS REQUIRE ANTI SEIZE TO BE APPLIED TO THEM.

PULL ROPE SHALL BE INSTALLED IN ALL CONDUITS WITH AND WITHOUT CABLES.

CONTRACTOR SHALL SUPPLY AS-BUILT DRAWINGS (PDF FORMAT) FOR ALL THE WORK BEING DONE

PROVIDE MINIMUM WIRE SLACK FOR PULL BOXES: 3-FT ONE WAY IN OR OUT AND 6-FT FOR UNSPLICED CONDUCTORS/WIRES.

PROVIDE REMOVABLE SEALANT SUCH AS DUCT SEAL IN THE CONDUITS AT THE CABINETS, PULL BOXES AND JUNCTION BOXES TO AVOID CONDENSATION CAUSED BY AIRFLOW THROUGH THE CONDUITS DUE TO TEMPERATURE DIFFERENCE. THIS WORK SHALL BE INCIDENTAL TO ASSOCIATED CONDUIT PAY ITEM.

IMMEDIATELY AFTER THE CONTRACTOR HAS COMPLETED ALL THE ELECTRICAL PULL BOXES / VAULTS, CONDUIT AND CONDUIT CONNECTIONS, AND JUST BEFORE ELECTRICAL WORK IS COVERED UP WITH CONRETE, SOIL, OR ETC. THE CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SHOP MANAGERS FOR FINAL INSPECTION AND APPROVAL OF ALL WORK. THESE NAMES AND NUMBERS CAN BE FOUND ON THE STREET LIGHTING GENERAL NOTES SHEET.

142 DETAIL

TYPICAL WIRING CONNECTIONS AND EQUIPMENT GROUNDING

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES. CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

SHEET X OF X

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION

REVISION BY: dlozzi — REVISION DATE: 21-JAN-2025, 09:01
APPROVED REVISION BY: R.BERTRAN — APPROVED REVISION DATE: DEC.09-202

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LIGHTING DETAILS	SHEET 190	E

GENERAL NOTES

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

USE THIS DETAIL 142 IN CONJUNCTION WITH THIS DETAIL FOR ELECTRICAL WIRING.

USE EITHER THE POLARIS EDGE (ISPB2) OR MORRIS PRODUCT SUBMERSIBLE INSULATED CONNECTOR OR ELSE AN EQUAL CONNECTOR THAT IS 3 or 4 PORT PRE-INSULATED, THAT IS DESIGNED FOR USE IN BELOW GRADE BOXES, DIRECT BURIAL, AND SUBMERSIBLE. THE CONDUCTORS RANGE FROM #2/0 - #14 RATED FOR 600 VOLTS DUAL RATED FOR CU. or AL.

USE A IN-LINE FUSE HOLDER ASSEMBLY THAT NEEDS TO BE 600 VOLT RATED, AND UP TO 30 AMPS, 1-POLE BREAKAWAY, WITH COPPER CRIMP TERMINALS FOR LOAD, AND WIRE SIZE RANGE #12 TO #8 AWG.
PROVIDE A FAST ACTING 5 AMP 250 VOLT FUSES, FROM THE RECOMMENDED FUSE LIST FROM THE IN-LINE FUSE HOLDER MANUFACTURER.

USE WATERPROOF AND TEAR RESISTANT CABLE TAGS/LABELS AT EACH PULL BOX, TO IDENTIFY THE LINE SIDE OF EACH CIRCUIT USING A FADE-RESISANT WATERPROOF BLACK MARKER PEN AND PROVIDE THE FOLLOWING INFO:

CIRCUIT ID: (CIR.WD-E)
LINE SIDE COMING FROM UNTIL STREET LIGHT UNIT IS ON: (STREET NAME)
SIDE OF STREET LIGHT UNIT IS ON: (N,S,E,or W)
NUMBER OF STREET LIGHTING UNITS FROM NEAREST CROSSING STREET: (1,2,3,4,5)
DIRECTION FROM THE NEAREST CROSSING STREET: (N,S,E,or W)
NAME OF THE NEAREST CROSSING STREET: (STREET NAME)

EXAMPLE OF TAG INFO:

CIR.WD-E,
LINE SIDE FROM: W. CANAL ST. / N. / 1 / W. /OF POTAWATOMI CIR.

WIRING FOR SINGLE LUMINAIRE POLES IS SHOWN WITH SOLID LINES. WIRING FOR THE SECOND LUMINAIRE OF TWIN LUMINAIRE POLES IS SHOWN WITH DOTTED LINES.

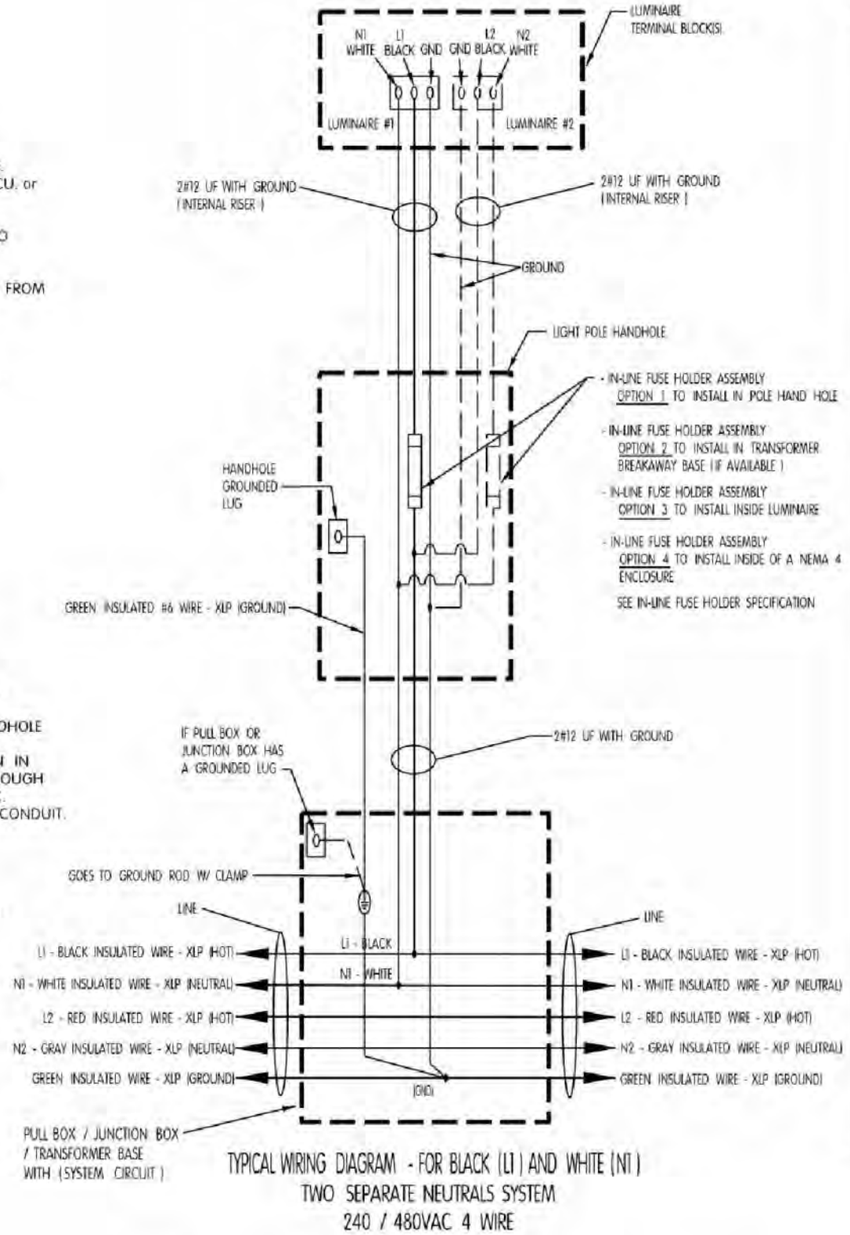
THE PLANS WILL SHOW WHICH CIRCUIT LEG(S) ARE CONNECTED TO EACH INSTALLATION.

USE 2#12UF WITH GROUND FROM THE PULL BOX / JUNCTION BOX TO THE POLE HANDHOLE

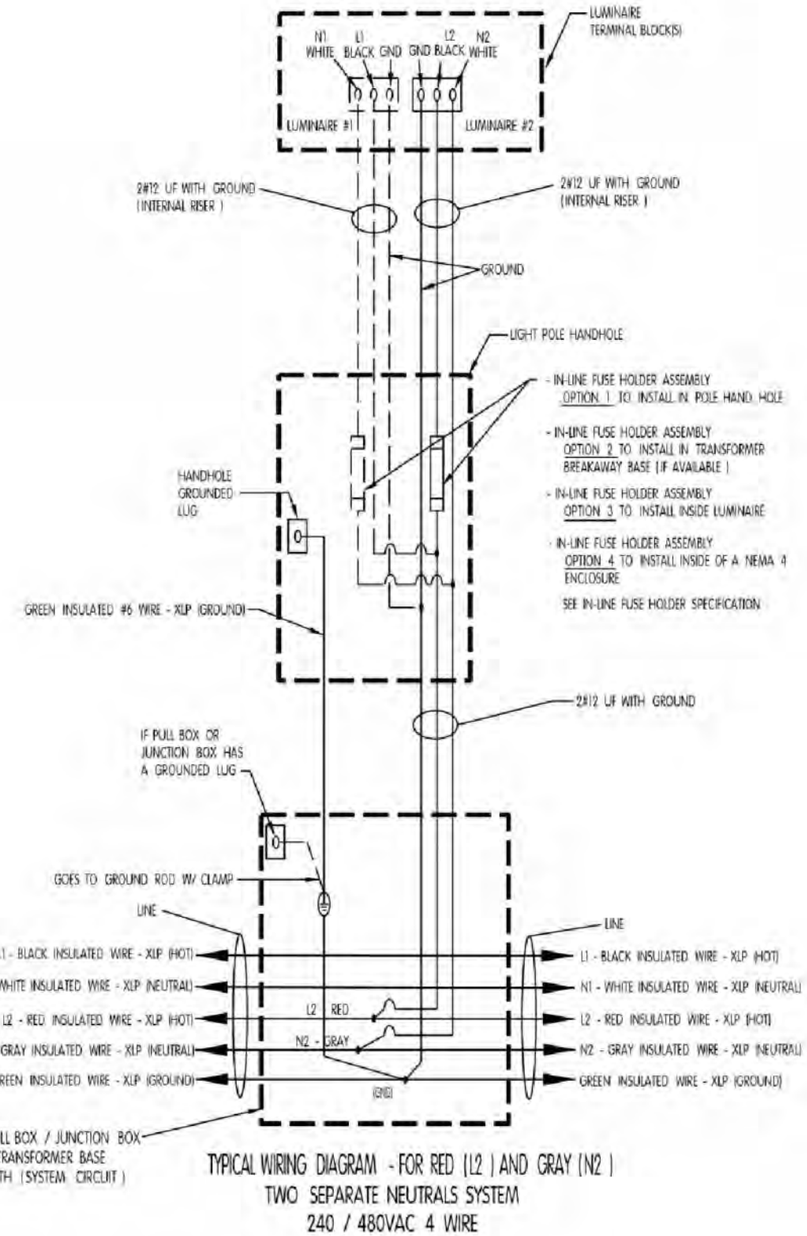
THE INTENT OF THE PULL BOX / JUNCTION BOX/ TRANSFORMER BASE SPLICES AS SHOWN IN THIS DETAIL IS FOR LIGHTING SYSTEMS WITH HEAVY LINE WIRE TOO LARGE TO PULL THROUGH THE CONDUIT INTO THE POLE HANDHOLE, DUE TO CONDUIT FILL REQUIREMENTS OF N.E.C. AND / OR THE STIFFNESS OF THE WIRE COMPARED TO THE NUMBER OF BENDS IN THE CONDUIT.

LEGEND

BLACK & RED	UNGROUNDED SYSTEM CIRCUIT CONDUCTORS (L1 & L2)
WHITE & GRAY (N)	GROUNDED SYSTEM CIRCUIT CONDUCTORS (N1 & N2)
GREEN (GND)	EQUIPMENT GROUNDING CONDUCTOR
	HANDHOLE GROUNDED LUG
	SINGLE-POLE (1P) FUSE ASSEMBLY
	UNFUSED LUMINAIRE
	TERMINAL
	SPLICE
	CONDUCTOR
	GROUND ROD



TYPICAL WIRING DIAGRAM - FOR BLACK (L1) AND WHITE (N1)
TWO SEPARATE NEUTRALS SYSTEM
240 / 480VAC 4 WIRE



TYPICAL WIRING DIAGRAM - FOR RED (L2) AND GRAY (N2)
TWO SEPARATE NEUTRALS SYSTEM
240 / 480VAC 4 WIRE

145 ELECTRICAL DETAILS STRUCTURE MOUNT
LIGHT POLES SEPARATED NEUTRALS SYSTEM

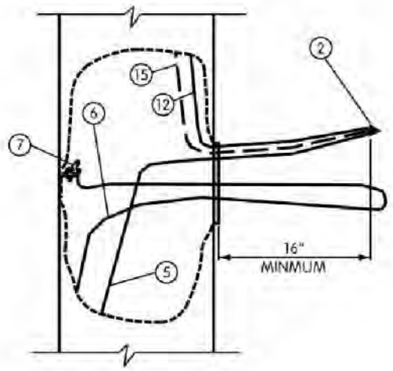
NOT TO SCALE

SHEET X OF X

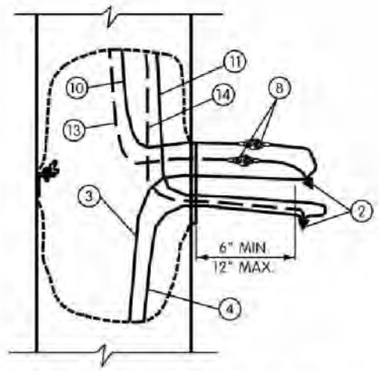
CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION
REVISION BY: ckeizel REVISION DATE: 30 DEC 2024 10:10
APPROVED REVISION BY: E.K. LEE APPROVED REVISION DATE: DEC 09-2024

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LIGHTING DETAILS	SHEET 191 E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023301-LP.DWG
LAYOUT NAME - LP-15
PLOT DATE : 4/25/2025 11:09 AM PLOT BY : TKACHUK, TYLER PLOT NAME : PLOT SCALE : ######

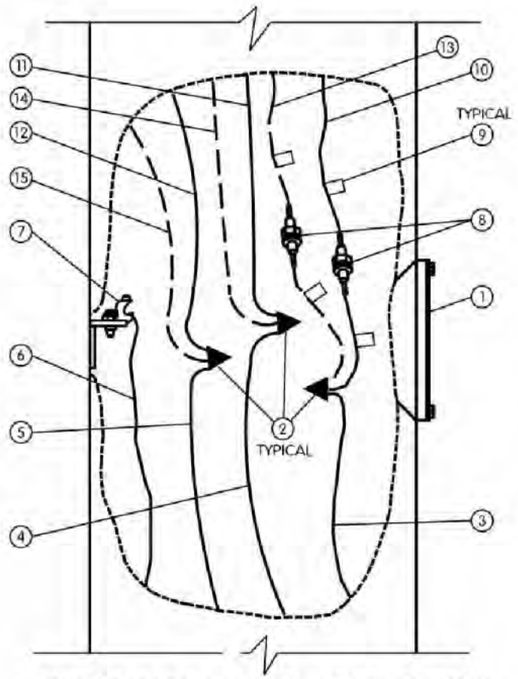


EQUIPMENT GROUNDING CONDUCTOR SLACK



UNGROUNDED CONDUCTOR SLACK (AND GROUNDED NEUTRAL SLACK IN GROUNDED NEUTRAL SYSTEM)

TYPICAL CONDUCTOR SLACK AT HANDHOLES

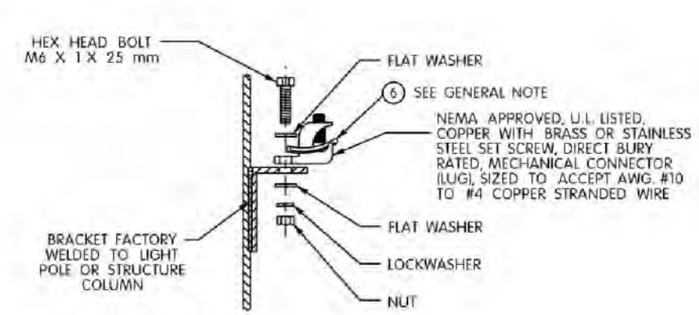


CUTAWAY HANDHOLE DETAIL

SEPARATED NEUTRAL SYSTEMS
SINGLE PHASE

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. SYSTEM UNGROUNDED LINE WIRE
4. SYSTEM GROUNDED LINE WIRE
5. SYSTEM GROUNDING LINE WIRE
6. EQUIPMENT GROUNDING CONDUCTOR
7. HANDHOLE GROUNDING LUG
8. FUSE ASSEMBLY, 1P OR 2P AS REQUIRED
9. CIRCUIT TAG (SEE GENERAL NOTE)
10. RISER UNGROUNDED POLE WIRE - LUMINAIRE #1
11. RISER GROUNDED POLE WIRE - LUMINAIRE #1
12. RISER SYSTEM GROUNDING WIRE - LUMINAIRE #1
13. RISER UNGROUNDED POLE WIRE - LUMINAIRE #2
14. RISER GROUNDED POLE WIRE - LUMINAIRE #2
15. RISER SYSTEM GROUNDING WIRE - LUMINAIRE #2



HANDHOLE GROUNDING LUG

(NUT, BOLT, WASHERS, AND LOCK WASHERS SHALL BE STAINLESS STEEL)

VARIOUS INSTALLATION OPTIONS

- IN-LINE FUSE HOLDER ASSEMBLY OPTION 1 TO INSTALL IN POLE HAND HOLE
- IN-LINE FUSE HOLDER ASSEMBLY OPTION 2 TO INSTALL IN TRANSFORMER BREAKAWAY BASE (IF AVAILABLE)
- IN-LINE FUSE HOLDER ASSEMBLY OPTION 3 TO INSTALL INSIDE LUMINAIRE
- IN-LINE FUSE HOLDER ASSEMBLY OPTION 4 TO INSTALL INSIDE OF A NEMA 4 ENCLOSURE

- 600 VOLT RATED, UP TO 30 AMPS, 1-POLE BREAKAWAY, SET SCREW TERMINALS FOR LOAD, WIRE SIZE RANGE #12 TO #8 AWG
- FAST ACTING 5 AMP 250 VOLT FUSE RECOMMENDED FROM FUSE LIST FROM IN-LINE FUSE HOLDER MANUFACTURER

SEE IN-LINE FUSE HOLDER SPECIFICATION

IN-LINE FUSE HOLDER ASSEMBLY

CONDUCTOR COLOR CODES

KEY	CONDUCTOR	COLOR
3	UNGROUNDED LINE WIRE	BLACK OR RED
4	GROUNDED LINE WIRE	WHITE OR GRAY
5	SYSTEM GROUNDING LINE WIRE	GREEN
6	GROUNDING ELECTRODE CONDUCTOR	GREEN
10	UNGROUNDED POLE WIRE	*
11	GROUNDED POLE WIRE	WHITE
12	SYSTEM GROUNDING POLE WIRE	GREEN

* FOLLOW COLOR CODING SHOWN IN THE PLANS. WHERE THE PLANS DO NOT SHOW COLOR CODING,

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 LUMINIAIRE 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.

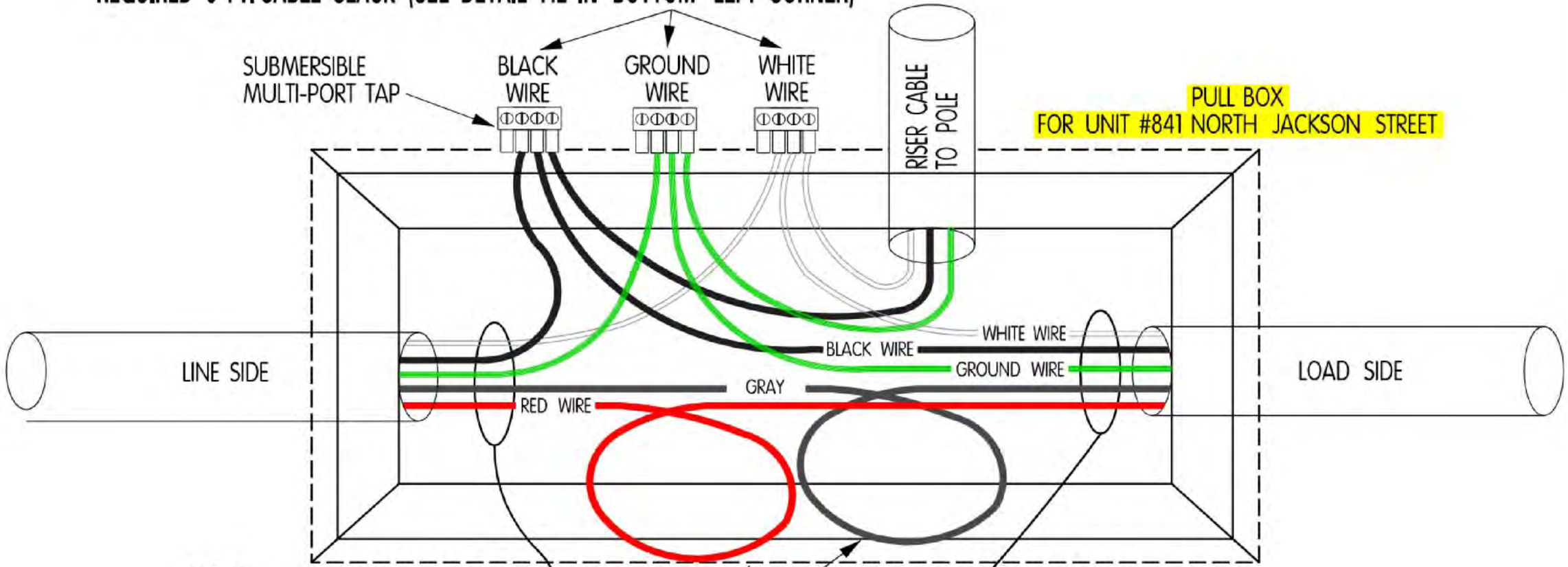
CIRCUIT TAGS SHALL BE INSTALLED IN ALL THE PULL BOXES AND WHERE INDICATED ON THE PLANS AND SPECIAL PROVISIONS.

146 ELECTRICAL HANDHOLE WIRING DETAIL — NOT TO SCALE

SHEET X OF X

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION
REVISION BY: dlrozel — REVISION DATE: 30-DEC-2024 10:16
APPROVED REVISION BY: E.K. LEE — APPROVED REVISION DATE: DEC 09-2024

REQUIRED 3 FT. CABLE SLACK (SEE DETAIL 142 IN BOTTOM LEFT CORNER)



TAG

CIR. ENCL.#3 EB-R
N. JACKSON ST./W /4 /S / E.WELLS ST..

TAG

CIR. ENCL.#3 EB-R
N. JACKSON ST./W /6 /N / E.KILBOURN AVE.

TAG DESCRIPTION BREAKDOWN - LINE SIDE

CIRCUIT ID: (CIR. ENCL.#3 EB-R)
LINE SIDE COMING FROM UNIT STREET LIGHT UNIT IS ON: (N. JACKSON ST.)
SIDE OF STREET LIGHT UNIT IS ON: (WEST SIDE)
NUMBER OF STREET LIGHTING UNITS FROM NEAREST CROSSING STREET: (COMING FROM UNIT 4)
DIRECTION FROM THE NEAREST CROSSING STREET: (TO THE SOUTH)
NAME OF THE NEAREST CROSSING STREET: (E. WELLS ST.)

TAG DESCRIPTION BREAKDOWN - LOAD SIDE

CIRCUIT ID: (CIR. ENCL.#3 EB-R)
LINE SIDE COMING FROM UNIT STREET LIGHT UNIT IS ON: (N. JACKSON ST.)
SIDE OF STREET LIGHT UNIT IS ON: (WEST SIDE)
NUMBER OF STREET LIGHTING UNITS FROM NEAREST CROSSING STREET: (GOING TO UNIT 6)
DIRECTION FROM THE NEAREST CROSSING STREET: (TO THE NORTH)
NAME OF THE NEAREST CROSSING STREET: (E. KILBOURN AVE.)

147 DETAIL
TYPICAL SCHEMATIC AND TAGGING

SHEET X OF X

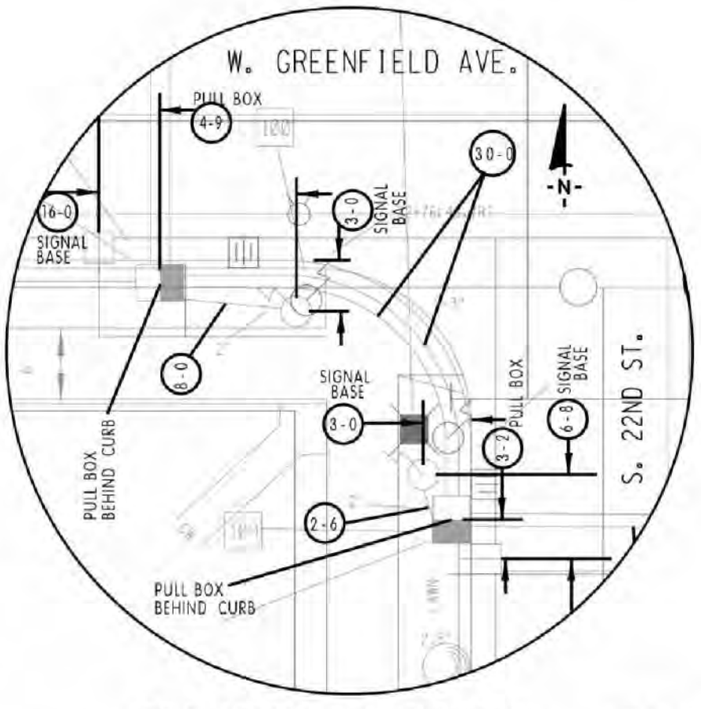
CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION
REVISION BY: dbazel REVISION DATE: 14-NOV-2023 07:25
APPROVED REVISION BY: RJEEPTRAN APPROVED REVISION DATE: AUG 14-2023

2

RECORD RETENTION GUIDELINES:

* CONTRACTOR TO LOCATE AND CLEARLY DIMENSION ALL OF THERE NEWLY INSTALLED CONDUIT RUNS, FITTINGS, SPLICE VAULTS, PULL BOXES, METER PEDESTALS, CONCRETE BASES, TRANSFORMERS, POLES AND OTHER APPURTENANCES IN TWO (2) DIRECTIONS. SWING TIES SHOULD BE MADE FROM OBJECTS THAT ARE PERMANENT IN NATURE AND VISIBLE ON THE FINISHED SURFACE.
* STREET NAMES SHALL BE ON ALL SHEETS.
* SHOW ALL SIZES AND MATERIAL TYPES OF PIPES AND CONDUITS, IF CHANGED OR MODIFIED FROM ORGINAL DESIGN.
* ALL HORIZONTAL DISTANCES SHALL BE SHOWN TO THE NEAREST TENTH OF A FOOT (I.E., 205.3'). ALL VERTICAL DISTANCES SHALL BE SHOWN TO THE NEAREST INCH (I.E. 24").
* SHOW LOCATION AND ELEVATIONS OF PIPES AND FITTINGS WHERE CHANGES OR DEFLECTIONS IN DIRECTION OCCUR.
* SPECIAL DETAIL DRAWINGS WILL BE SUPPLIED WHERE REQUIRED FOR CLARITY.
* DEVIATIONS FROM ORIGINAL PLANS OR STANDARD DETAILS SHALL BE NOTED ON AS-BUILT DRAWINGS.
* IF THERE ARE NO CORRECTIONS OR ADDITIONS TO THE AS-LET PLAN(S) PUT "NO CHANGE" ON THE SHEET.

SUPERVISOR: _____
PROJECT MANAGER: _____
CONTRACTOR LEADER: _____
CONTRACTOR COMPANY: _____
WORK STARTED: _____
WORK COMPLETED: _____



FIELD RECORD EXAMPLE DETAIL NOT TO SCALE

TYPICAL DIMENSIONING OF CONDUIT, PULL BOXES, AND CONCRETE BASES

MEASURING GUIDE LINES

IF CONDUIT IS NOT PLACED DIRECTLY BEHIND THE CURB IN THE ISLANDS & SIDE TERRACE AREAS, A MEASURED DISTANCE FROM THE FACE OF CURB TO THE CONDUIT WILL NEED TO BE PROVIDED.

PROVIDE A MEASURED DISTANCE OF UNINTERRUPTED CONDUIT RUNS

USE PERMANENT OBJECTS LIKE HYDRANTS, CATCH BASINS, OR EVEN CURB FACE LINES EXTENED TO MEASURE OFF WHEN LOCATING CONDUIT, PULL BOXES AND CONCRETE BASES

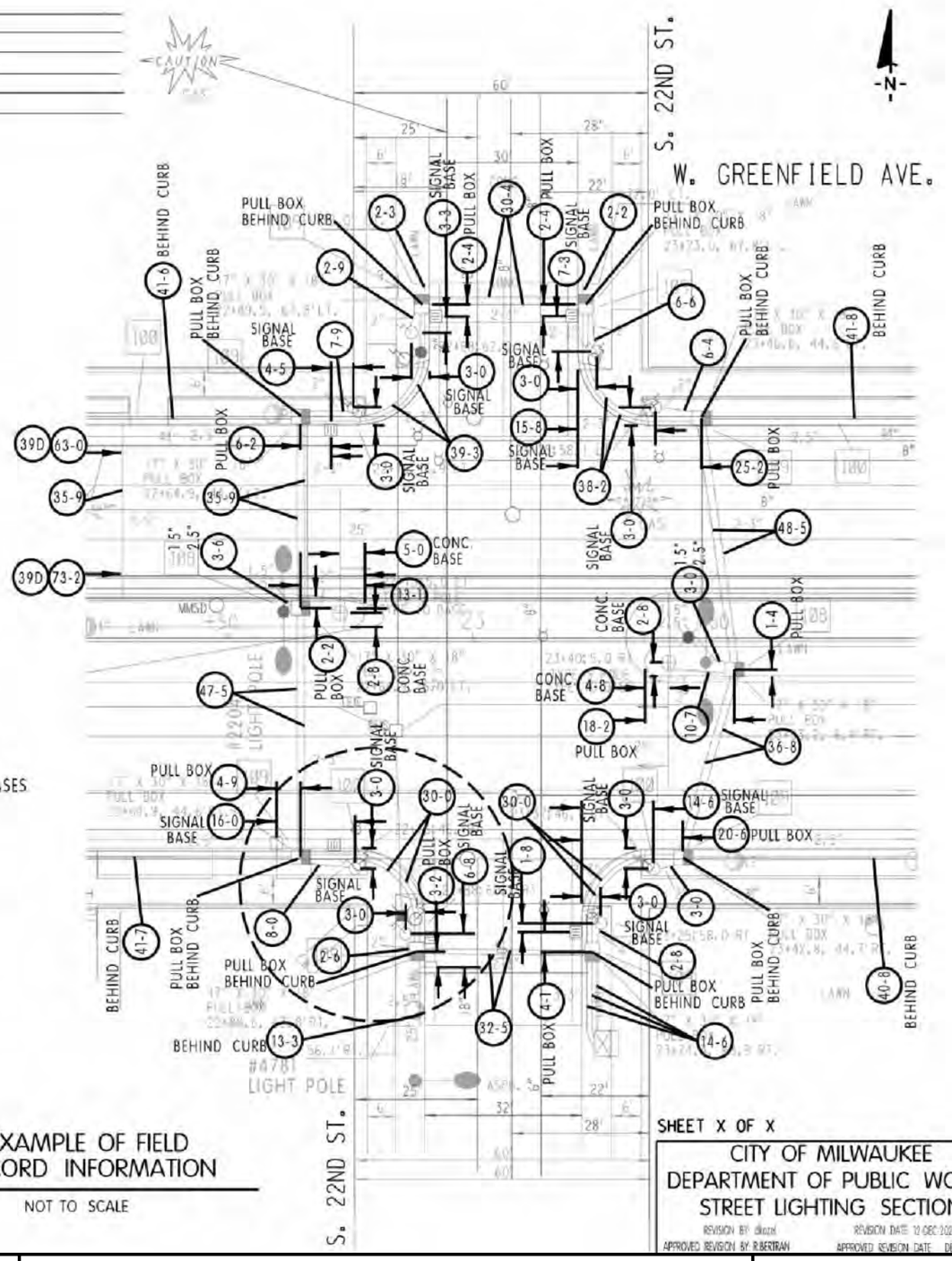
MEASURE TO OR FROM THE CENTERS OF OBJECTS FOR DISTANCE TAKING.

(39D) MEANS = CONDUIT IS 39" DEEP

(48-5) MEANS = LENGTH OF CONDUIT IS 48.5 FT. LONG (MEASURED TO NEAREST TENTH OF A FOOT)

OR

(25-6) MEANS = DISTANCE OF 25.6 FT. BETWEEN PERMANENT OBJECT OR CURB FACE TO CONDUIT, PULL BOX, AND CONCRETE BASE (MEASURED TO NEAREST TENTH OF A FOOT)



EXAMPLE OF FIELD RECORD INFORMATION

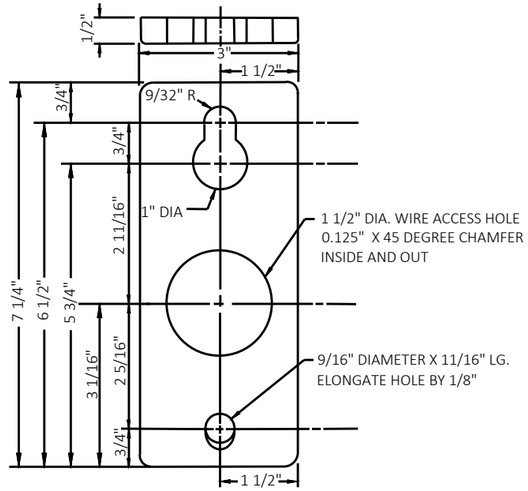
NOT TO SCALE

SHEET X OF X

CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
STREET LIGHTING SECTION
REVISION BY: RBERTRAN REVISION DATE: 10 DEC 2021 09:26
APPROVED REVISION BY: R.BERTRAN APPROVED REVISION DATE: DEC 13 2022

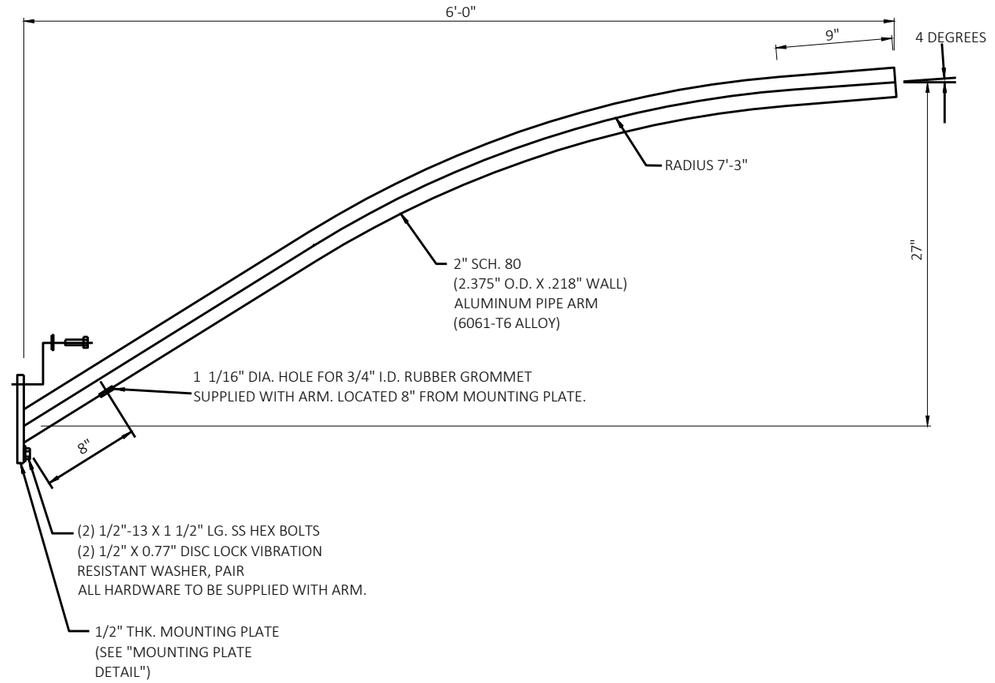
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LIGHTING DETAILS	SHEET 194	E

2



MOUNTING PLATE DETAIL "ES #436"
1/2" THK. ALUMINUM
(6061-T6 ALLOY)

NOTE:
1" I.D. RUBBER GROMMET PROVIDED
FOR USE IN POLE SHAFT



SPEC.NO.

6 FOOT ALUMINUM UPSWEEP BRACKET

MATERIAL: ALUMINUM ALLOY, FINISH: SATIN

CITY OF MILWAUKEE D.P.W.
TRANSPORTATION SECTION
INFRASTRUCTURE SERVICES DIVISION

STREET LIGHTING DIVISION

DATE	SCALE:	DRAWN	DESIGN	CHECKED	APPROVED
8/1/2022	NONE	DK			

SUPERSEDES C-80-2

SUPERSEDED BY

DRG.# C-87-76

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LIGHTING DETAILS	SHEET 195	E

2

I94 WB ON-RAMP JD

EXISTING TO REMAIN
DPH4

IH 94 WB

EXISTING TO REMAIN
DPH2

2 419EW+63
CPH3

419EW+63 2
DPH3

IH 94 EB

EXISTING TO REMAIN
CPH2

421EW+00 2
LPB-PH-1

2 422EW+27
DPH20

2 422EW+27
CPH20

417EW 418EW 419EW R/L EW 420EW 421EW 422EW 423

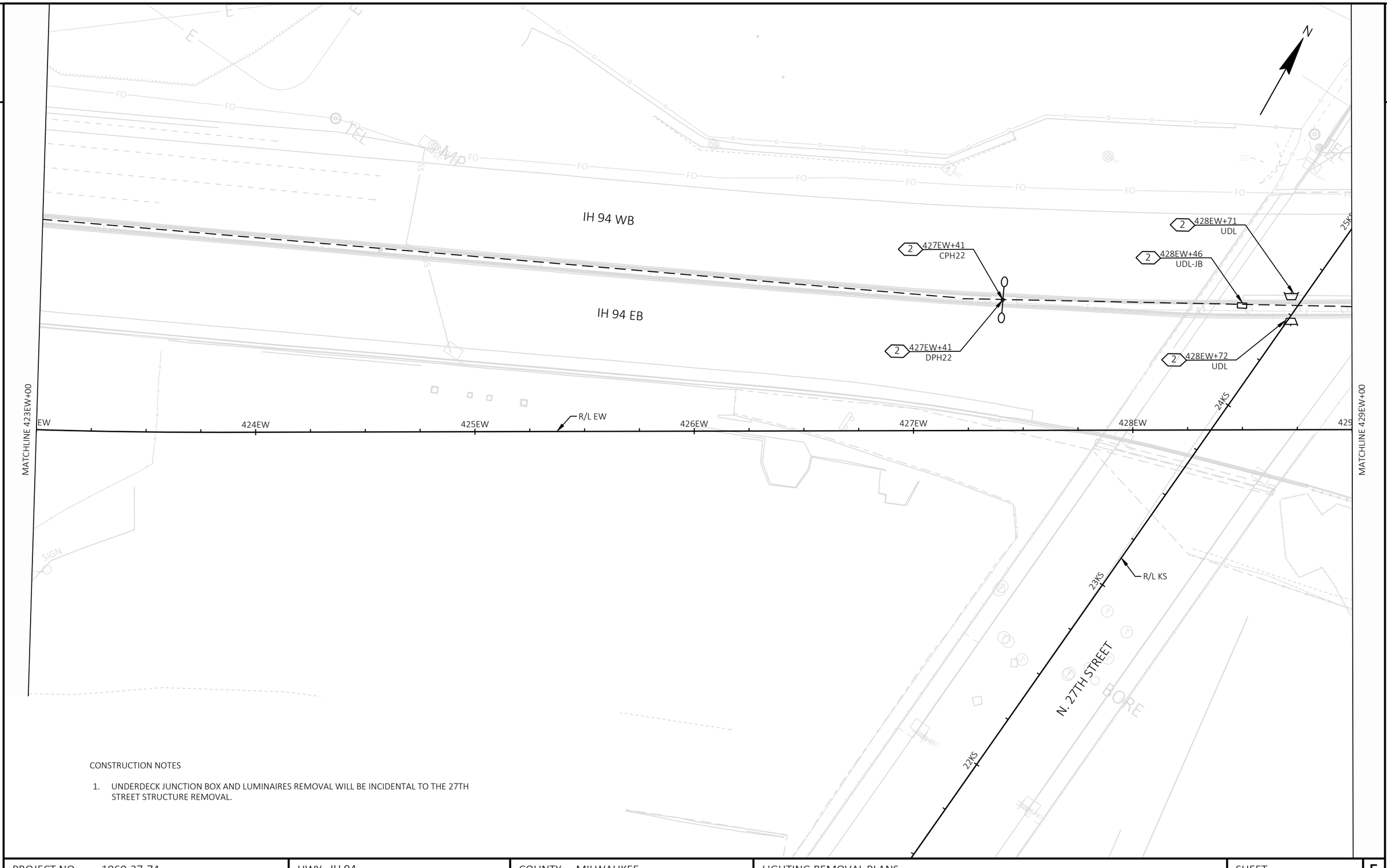
MATCHLINE 423EW+00

N

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LIGHTING REMOVAL PLANS	SHEET 196	E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023401-LR.DWG
LAYOUT NAME - ELA - (01)
PLOT DATE : 4/25/2025 11:09 AM
PLOT BY : TKACHUK, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



CONSTRUCTION NOTES

1. UNDERDECK JUNCTION BOX AND LUMINAIRES REMOVAL WILL BE INCIDENTAL TO THE 27TH STREET STRUCTURE REMOVAL.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LIGHTING REMOVAL PLANS	SHEET 197	E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023401-LR.DWG
LAYOUT NAME - ELA - (02)
PLOT DATE : 4/25/2025 11:09 AM
PLOT BY : TKACHUK, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N. 27TH STREET

26KS

19SP

20SP

21SP

22SP

23SP

24SP

N. 26TH ST

W. ST PAUL AVE

ST. PAUL AVE/26TH STREET RAMP LC

IH 94 WB

IH 94 EB

429EW+67
CPH23

429EW+67
DPH23

430EW+00
LPB-PH-2

431EW+27
DPH24

SEE NOTE 1

431EW+27
CPH24

EXISTING TO REMAIN
10 UDL C/D/PH

EXISTING TO REMAIN
UDL-JB

EXISTING TO REMAIN
CPH25/DPH25

R/L EW

R/L SP

MATCHLINE 429EW+00

429EW

430EW

431EW

432EW

433EW

434EW

435EW

429EW+22
CPH9

430+81
CPH8

431+75
CPH7

CONSTRUCTION NOTES

1. DISCONNECT ELECTRICAL WIRE BETWEEN CPH24/DPH24 AND UDL C/D/PH. UDL C/D/PH WILL BE CONNECTED TO DISTRIBUTION CENTER MT. SEE TEMPORARY LIGHTING LEFT-IN-PLACE PLAN.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LIGHTING REMOVAL PLANS	SHEET 198	E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023401-LR.DWG
LAYOUT NAME - ELA - (03)
PLOT DATE : 4/25/2025 11:09 AM
PLOT BY : TKACHUK, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

WB I-94

EB I-94

427EW

428EW

429EW

430EW

EXISTING JUNCTION BOX
SEE NOTE 1

21KS + 56
#275
3

3
23KS + 45
#319

19Ks + 99, 11' RT
EXISTING DISTRIBUTION
CENTER

N. 27TH STREET

R/L EW

R/L KS

19KS
20KS
21KS
22KS
23KS
24KS

EXISTING TO REMAIN
#320

SEE NOTE 1

22KS + 61
#310
3

3
24KS + 38
#324

MATCHLINE 24KS+90

GREVES ST

BORE

CONSTRUCTION NOTES

1. SEE LOCAL LIGHTING INSTALLATION PLAN FOR DIRECTION ON EXISTING ELECTRICAL WIRE IN EXISTING AND PROPOSED PARAPET.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LOCAL LIGHTING REMOVAL PLANS	SHEET 199	E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023402-LR.DWG
LAYOUT NAME - K - (01)
PLOT DATE : 4/25/2025 11:10 AM
PLOT BY : TKACHUK, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES

1. SEE TRAFFIC SIGNAL REMOVAL PLANS FOR CONCRETE BASE AND SIGNAL EQUIPMENT REMOVAL AT LIGHT POLES #2700, #400, #349, AND #350.

EXISTING TO REMAIN
#413

EXISTING
LIGHTING PULL BOX
EX-PB1

EXISTING TO REMAIN
#406

R/L KN

LIGHTING PULL BOX
EX-PB2

3 17SP + 26
#2700

27KN + 02 3
#400

EXISTING TO REMAIN
#2624

N

28KN

27KN

MATCHLINE 15KS+75

16SP

17SP

18SP

19SP

20SP

21SP

R/L SP

W. ST PAUL AVE

R/L KS

N. 27TH STREET

26KS

25KS

3 16SP + 20
#2717

3 26KS + 21
#349

26KS + 30 3
#350

25KS + 73 3
#340

3 25KS + 18
#331

432EW

R/L EW

431EW

MATCHLINE 24KS+90

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LOCAL LIGHTING REMOVAL PLANS	SHEET 200	E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023402-LR.DWG
LAYOUT NAME - K - (02)
PLOT DATE : 4/25/2025 11:10 AM
PLOT BY : TKACHUK, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N

N. 29TH STREET

N. 28TH STREET

W. ST PAUL AVE

MATCHLINE 15KS+75

14SP + 01
#434
3

13SP + 51
#416
3

13SP + 00
#2806
3

10SP + 17
#2900
3

15SP + 01
#2732
3

11SP + 60
#2826
3

10SP + 48
#345
3

13SP + 62
#2800
3

11SP

12SP

R/L SP

13SP

14SP

15SP

OH

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LOCAL LIGHTING REMOVAL PLANS	SHEET 201	E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023402-LR.DWG
LAYOUT NAME - SP - (01)

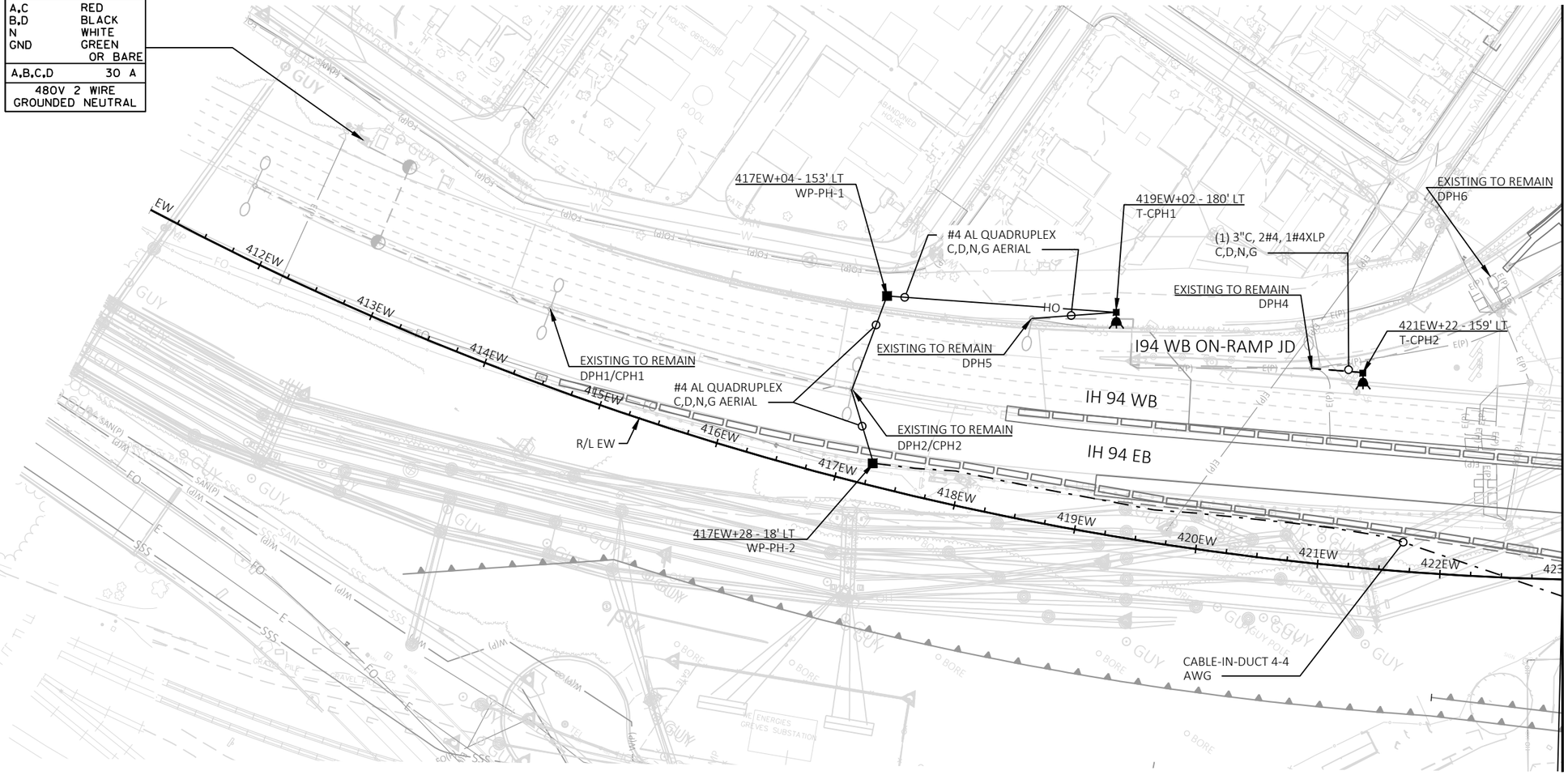
PLOT DATE : 4/25/2025 11:10 AM PLOT BY : TKACHUK, TYLER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

DISTRIBUTION CENTER

HL-40-PH	
A,C	RED
B,D	BLACK
N	WHITE
GND	GREEN OR BARE
A,B,C,D	30 A
480V 2 WIRE GROUNDED NEUTRAL	



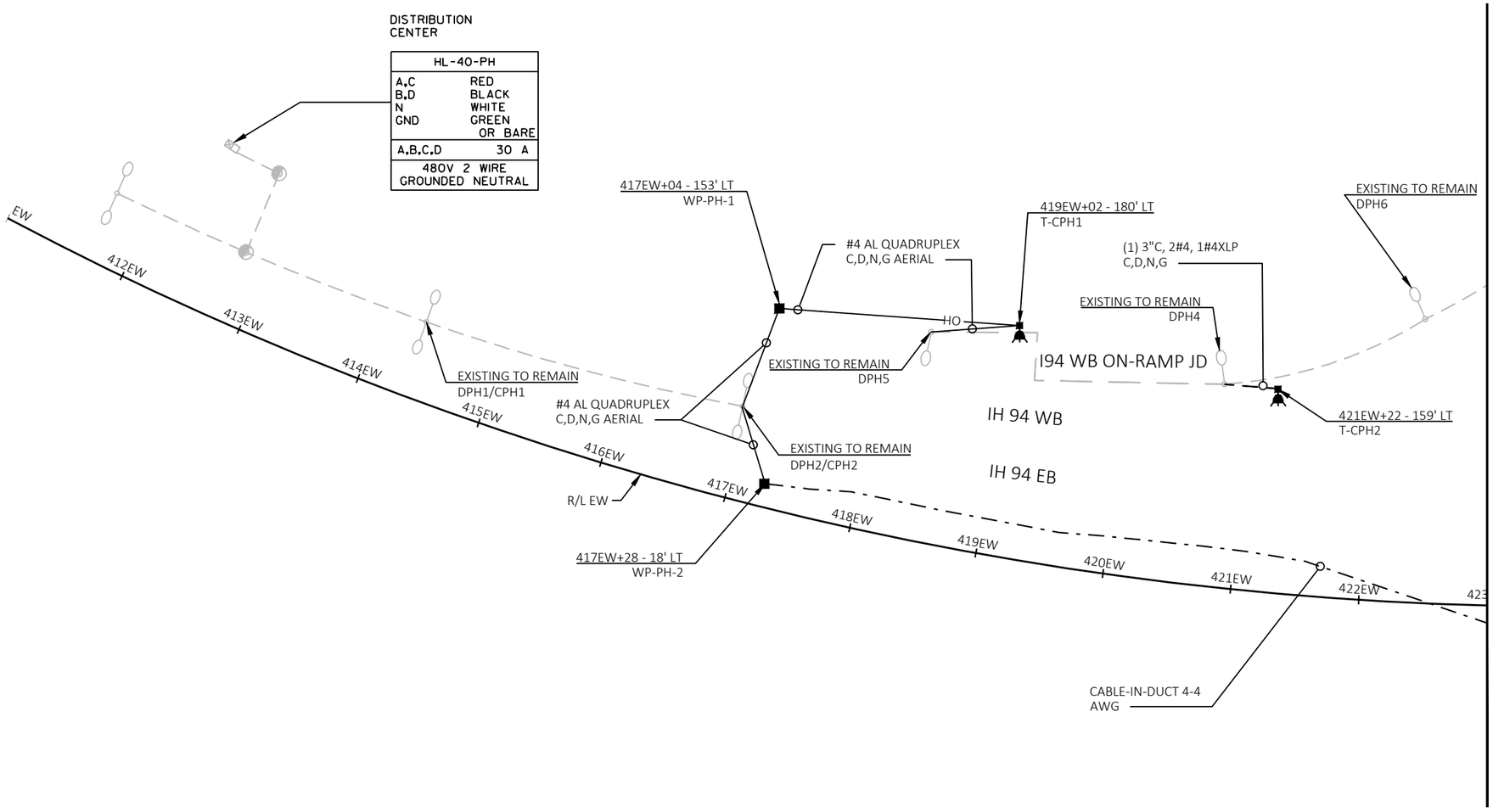
CONSTRUCTION NOTES

1. DPH5 TO REMAIN IN PLACE BUT DISCONNECT FROM EXISTING CIRCUITRY AND BYPASS TO CONNECT TO DPH4. T-CPH1 WILL BE REPLACING DPH5 FOR THE TEMPORARY LEFT-IN-PLACE LIGHTING PLAN.
2. ALL EXISTING LIGHTS ALONG I-94 WB ON RAMP JD SHALL REMAIN OPERATIONAL WITH NEW CIRCUITRY.
3. TEMPORARY FLOOD LIGHTS TO BE 480V.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TEMPORARY LIGHTING LEFT-IN-PLACE PLAN	SHEET 202	E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023601-LP.DWG
LAYOUT NAME - ELA - (01) 100
PLOT DATE : 4/25/2025 11:10 AM
PLOT BY : TKACHUK, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TEMPORARY LIGHTING LEFT-IN-PLACE PLAN - SCHEMATIC	SHEET 203	E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023603-LP.DWG
LAYOUT NAME - ELA - (01) 100
PLOT DATE : 4/25/2025 11:10 AM
PLOT BY : TKACHUK, TYLER
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

EXISTING TO REMAIN
DPH8

EXISTING TO REMAIN
DPH7

R/L SP

14SP

15SP

16SP

17SP

18SP

19SP

20SP

21SP

22SP

23SP

24SP

25SP

26KS

27KN

28KN

29KN

R/L KN

N. 27TH STREET

W. ST PAUL AVE

N. 26TH STREET

EXISTING
10 UDL
C/D/PH

EXISTING
CPH25/DPH25

EXISTING
CPH26/DPH26

SEE NOTE 1

IH 94 WB

IH 94 EB

IH 94 WB

IH 94 EB

MATCHLINE 423EW+00

423EW

424EW

425EW

426EW

427EW

428EW

429EW

430EW

431EW

432EW

433EW

434EW

435EW

436EW

#4 AL QUADRUPLEX
C,D,N,G AERIAL

OH

423EW+30 - 23' RT
T-DPH1

425EW+28 - 38' RT
T-CPH1

426EW+84 - 65' RT
T-DPH2

(1) 3"C, 3#4, 1#4XLP
PANEL#-C,D,N,G

21KS

22KS

24KS

R/L EW

ST. PAUL AVE/26TH STREET RAMP LC

429EW+06 - 108' RT
T-CPH2

#4 AL QUADRUPLEX
C,D,N,G AERIAL

430EW+77 - 131' RT
T-DPH3

#4 AL QUADRUPLEX
C,D,N,G AERIAL

432EW+46 - 124' RT
T-CPH3

R/L SP

433EW+47 - 82' RT
WP-PH-3

#4 AL QUADRUPLEX
C,D,N,G AERIAL

434EW+32 - 12' RT
WP-PH-4

#4 AL QUADRUPLEX
C,D,N,G AERIAL

N. 27TH STREET

19KS

20KS

CONSTRUCTION NOTES

1. COMPLETE SPLICE TO CONNECT EXISTING 10 UDL C/D/PH, CPH25/DPH25, AND CPH26/DPH26 TO DISTRIBUTION CENTER PH.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TEMPORARY LIGHTING LEFT-IN-PLACE PLAN	SHEET 204	E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023601-LP.DWG
LAYOUT NAME - ELA - (02) 100
PLOT DATE : 4/25/2025 11:10 AM
PLOT BY : TKACHUK, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

EXISTING TO REMAIN
DPH8

EXISTING TO REMAIN
DPH7

14SP
15SP
16SP
17SP
18SP
19SP
20SP
21SP
22SP
23SP
24SP
25SP

R/L SP

29KN
28KN
27KN
N. 27TH STREET

R/L KN

26K
25K
24K
23K
22K
21K
20K
19K

W. ST PAUL AVE

N. 26TH STREET

EXISTING
10 UDL
C/D/PH

EXISTING
CPH25/DPH25

EXISTING
CPH26/DPH26

SEE NOTE 1

IH 94 WB

IH 94 EB

IH 94 WB

IH 94 EB

MATCHLINE 423EW+00

423EW
424EW
425EW
426EW
427EW
428EW
429EW
430EW
431EW
432EW
433EW
434EW
435EW
436EW

R/L EW

#4 AL QUADRUPLEX
C,D,N,G AERIAL

OH

423EW+30 - 23' RT
T-DPH1

425EW+28 - 38' RT
T-CPH1

426EW+84 - 65' RT
T-DPH2

(1) 3"C, 3#4, 1#4XLP
PANEL#-C,D,N,G

ST. PAUL AVE/26TH STREET RAMP LC

429EW+06 - 108' RT
T-CPH2

#4 AL QUADRUPLEX
C,D,N,G AERIAL

#4 AL QUADRUPLEX
C,D,N,G AERIAL

430EW+77 - 131' RT
T-DPH3

#4 AL QUADRUPLEX
C,D,N,G AERIAL

432EW+46 - 124' RT
T-CPH3

433EW+47 - 82' RT
WP-PH-3

R/L SP

#4 AL QUADRUPLEX
C,D,N,G AERIAL

434EW+32 - 12' RT
WP-PH-4

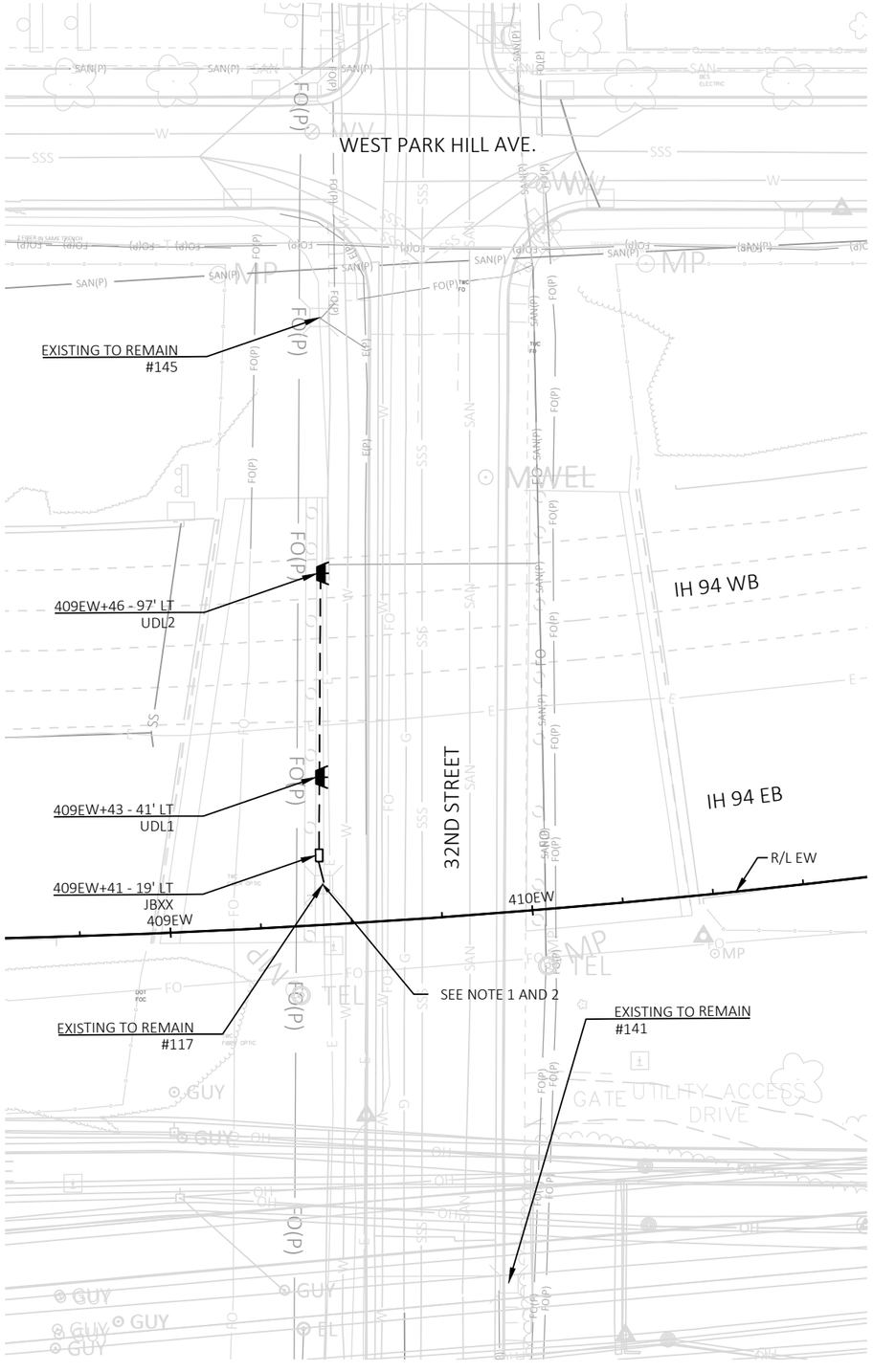
#4 AL QUADRUPLEX
C,D,N,G AERIAL

CONSTRUCTION NOTES

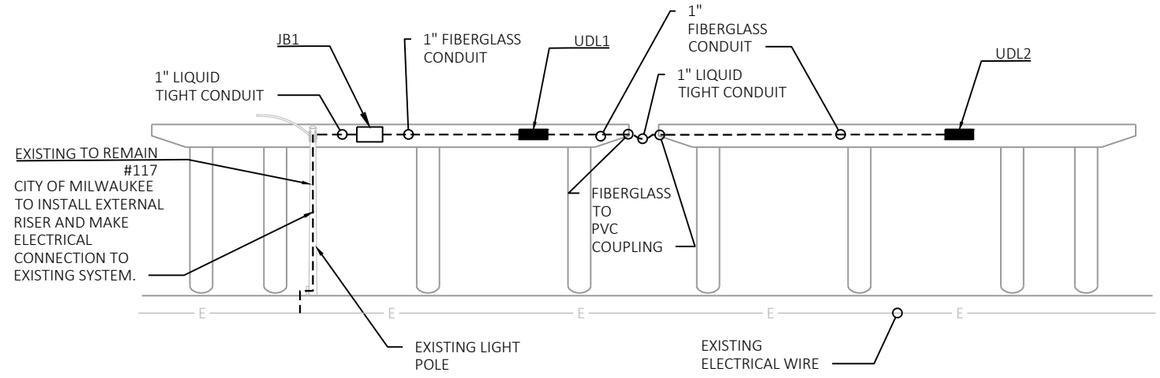
1. COMPLETE SPLICE TO CONNECT EXISTING 10 UDL C/D/PH, CPH25/DPH25, AND CPH26/DPH26 TO DISTRIBUTION CENTER PH.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TEMPORARY LIGHTING LEFT-IN-PLACE PLAN - SCHEMATIC	SHEET 205	E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023603-LP.DWG
LAYOUT NAME - ELA - (02) 100
PLOT DATE : 4/25/2025 11:10 AM
PLOT BY : TKACHUK, TYLER
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42



N



UNDER DECK LIGHTING INSTALLATION DETAIL

NTS

CONSTRUCTION NOTES

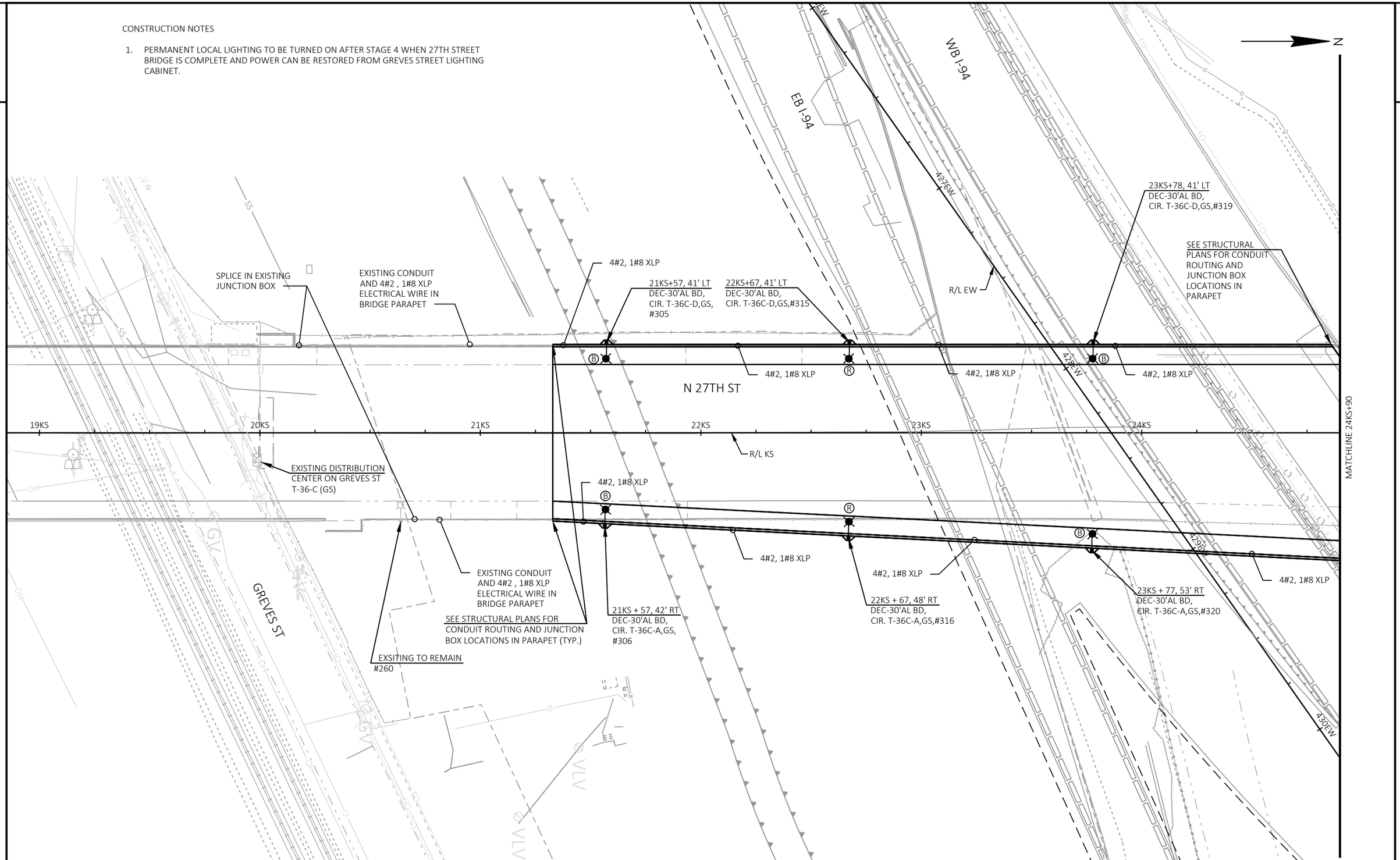
1. CONNECTIONS INTO EXISTING SYSTEM WILL BE MADE BY CITY OF MILWAUKEE.
2. EXTERNAL RISER CONNECTING INTO EXISTING SYSTEM COIL AND SECURE POLE BASE WITH SUFFICIENT ALLOWANCE TO MAKE CONNECTION. TAG WITH CIRCUIT ID. (CONNECTION MADE BY CITY OF MILWAUKEE INTO EXISTING PEDESTAL).
3. ADJUST UNDERDECK LUMINAIRE FIXTURES AND CONDUIT LOCATIONS IF NECESSARY TO ENSURE ATTACHMENT TO SOUND CONCRETE.
4. ELECTRICAL WIRE FROM JUNCTION BOX TO UNDERDECK LIGHTS WILL BE #10 AWG.
5. FOLLOW SDD 10A15-A ELECTRICAL DETAILS UNDERDECK LIGHTING.
6. UNDERDECK LUMINARIES SHALL HAVE A COLOR TEMPERATURE OF 3000K.
7. EXISTING BRIDGE STRUCTURE NUMBER IS B-40-0015.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TEMPORARY LIGHTING LEFT-IN-PLACE LOCAL PLAN	SHEET 206	E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023601-LP.DWG
LAYOUT NAME - ELA - (06) 100
PLOT DATE : 4/25/2025 11:11 AM PLOT BY : TKACHUK, TYLER PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES

1. PERMANENT LOCAL LIGHTING TO BE TURNED ON AFTER STAGE 4 WHEN 27TH STREET BRIDGE IS COMPLETE AND POWER CAN BE RESTORED FROM GREVES STREET LIGHTING CABINET.

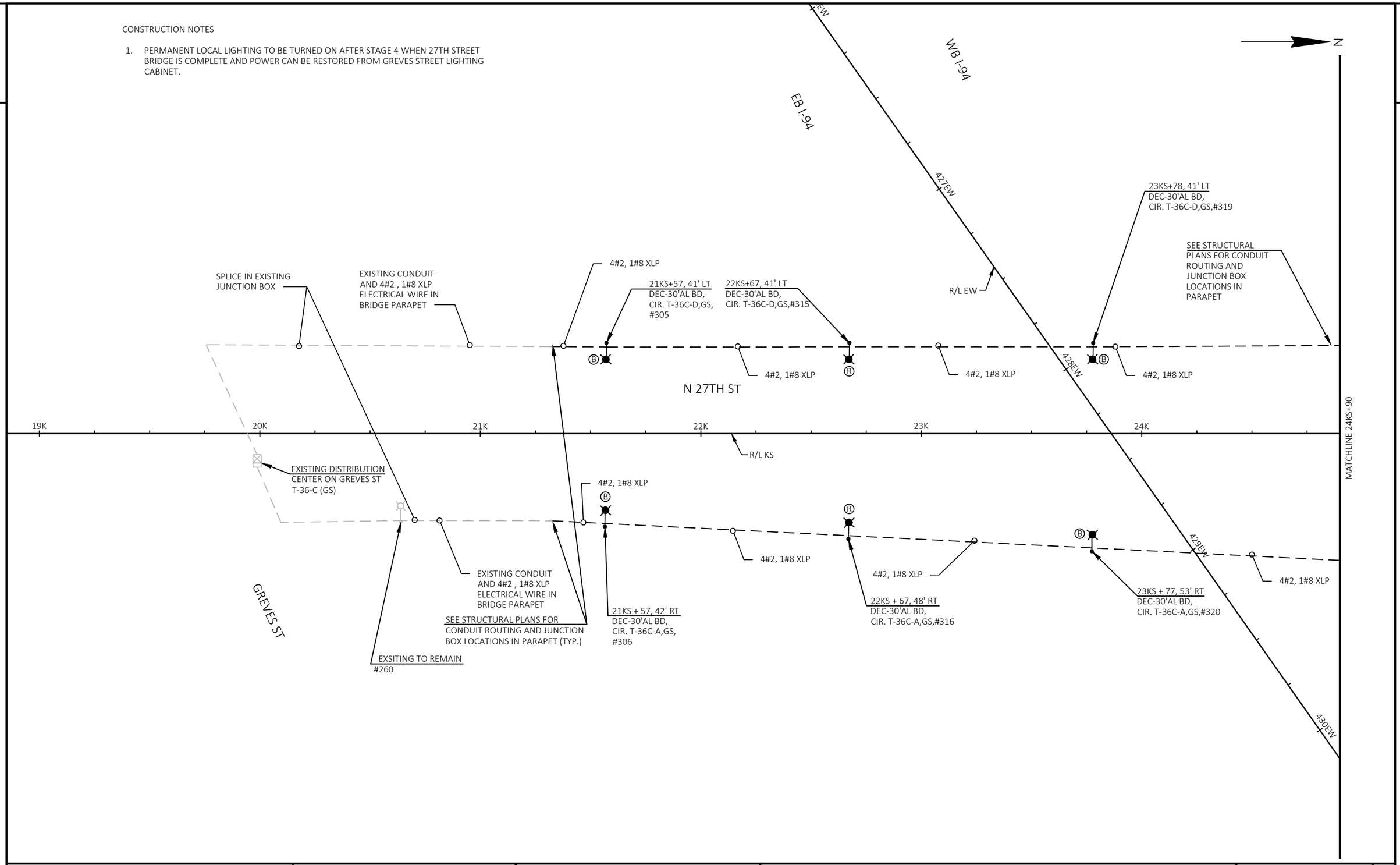


PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LOCAL LIGHTING INSTALLATION PLAN	SHEET 207	E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023602-LP.DWG
LAYOUT NAME - K - (01)
PLOT DATE : 4/25/2025 11:11 AM
PLOT BY : TKACHUK, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES

1. PERMANENT LOCAL LIGHTING TO BE TURNED ON AFTER STAGE 4 WHEN 27TH STREET BRIDGE IS COMPLETE AND POWER CAN BE RESTORED FROM GREVES STREET LIGHTING CABINET.



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LOCAL LIGHTING INSTALLATION PLAN - SCHEMATIC	SHEET 208	E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023604-LP.DWG
LAYOUT NAME - K - (01)
PLOT DATE : 4/25/2025 11:11 AM PLOT BY : TKACHUK, TYLER PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

CONSTRUCTION NOTES

1. SEE TRAFFIC SIGNAL PLAN FOR SHARED PULL BOXES AT THE INTERSECTION OF 27TH STREET AND ST PAUL AVE.
2. PERMANENT LOCAL LIGHTING TO BE TURNED ON AFTER STAGE 4 WHEN 27TH STREET BRIDGE IS COMPLETE AND POWER CAN BE RESTORED FROM GREVES STREET LIGHTING CABINET.
3. NOTE THAT THE CITY OF MILWAUKEE TO INSTALL AND MAINTAIN TEMPORARY WOOD POLE LIGHTING SYSTEM ALONG ST PAUL AVE AND 27TH STREET.
4. INSTALL PULL ROPE BETWEEN LP#2624 TO JUNCTION BOX LOCATED AT END OF STRUCTURE. NO ELECTRICAL WIRE INSTALLED IN THIS CONDUIT RUN DURING THIS PROJECT.
5. INSTALL PB-14M INTERCEPTING EXISTING ELECTRICAL WIRE TO LIGHT POLE #406. REWIRE AND SPLICE FROM PB-14M TO #406 FOLLOWING CITY OF MILWAUKEE STANDARDS. REWIRING INCLUDES 240V LIGHTING CIRCUIT AND 120V OUTLET CIRCUIT.

N

EXISTING LIGHTING PULL BOX

EXIST LIGHT POLE TO REMAIN #413

EXISTING LIGHTING PULL BOX EX-PB1

INSTALL CONDUIT INTO EXISTING ITEM

(1) 3"C (EMPTY) SPECIAL

(1) 3"C (EMPTY)

15SP + 95, 21' LT
DEC-25'AL BD,
CIR. T-36C-D,GS,#2645

(1) 3"C, 4#2, 1#8 XLP

MATCHLINE 15KS+75

16SP

17SP

28KN

27KN

18SP

19SP

20SP

21SP

27KN + 81, 36' RT
LIGHTING PULLBOX
PB-14M

SEE NOTE 5

EXISTING LIGHT POLE TO REMAIN #406

(1) 3"C (EMPTY) SPECIAL

R/L KN

R/L SP

W ST PAUL AVE

4#2, 1#8 XLP

R/L KS

15SP + 95, 31' RT
DEC-25'AL BD,
CIR. T-36C-D,GS,#2644

(1) 3"C, 4#2, 1#8 XLP

26KS

CC

SEE STRUCTURAL PLANS FOR CONDUIT ROUTING AND JUNCTION BOX LOCATIONS IN PARAPET

SEE NOTE 4

(1) 3"C, 4#2, 1#8 XLP

N 27TH ST

25KS + 03, 60' RT
DEC-30'AL BD,
CIR. T-36C- A,GS,#2624

25KS + 01, 33' LT
DEC-30'AL BD,
CIR. T-36C-D,GS,#331

24KS + 98, 33' LT
LIGHTING PULL BOX
PB-1M

25KS

432EW

431EW

R/L EW

MATCHLINE 24KS+90

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LOCAL LIGHTING INSTALLATION PLAN	SHEET 209	E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023602-LP.DWG
LAYOUT NAME - K - (02)
PLOT DATE : 4/25/2025 11:11 AM
PLOT BY : TKACHUK, TYLER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

EXISTING
LIGHTING PULL BOX

EXIST LIGHT POLE TO REMAIN
#413

EXISTING
LIGHTING PULL BOX
EX-PB1

(1) 3"C (EMPTY) SPECIAL

(1) 3"C (EMPTY)

15SP + 95, 21' LT
DEC-25'AL BD,
CIR. T-36C-D,GS,#2645

(1) 3"C, 4#2, 1#8 XLP

V7

V6

28KN

27KN

R/L KN

27KN + 81, 36' RT
LIGHTING PULLBOX
PB-14M

SEE NOTE 5

EXISTING LIGHT POLE TO REMAIN
#406

(1) 3"C (EMPTY) SPECIAL

CONSTRUCTION NOTES

1. SEE TRAFFIC SIGNAL PLAN FOR SHARED PULL BOXES AT THE INTERSECTION OF 27TH STREET AND ST PAUL AVE.
2. PERMANENT LOCAL LIGHTING TO BE TURNED ON AFTER STAGE 4 WHEN 27TH STREET BRIDGE IS COMPLETE AND POWER CAN BE RESTORED FROM GREVES STREET LIGHTING CABINET.
3. NOTE THAT THE CITY OF MILWAUKEE TO INSTALL AND MAINTAIN TEMPORARY WOOD POLE LIGHTING SYSTEM ALONG ST PAUL AVE AND 27TH STREET.
4. INSTALL PULL ROPE BETWEEN LP#2624 TO JUNCTION BOX LOCATED AT END OF STRUCTURE. NO ELECTRICAL WIRE INSTALLED IN THIS CONDUIT RUN DURING THIS PROJECT.
5. INSTALL PB-14M INTERCEPTING EXISTING ELECTRICAL WIRE TO LIGHT POLE #406. REWIRE AND SPLICE FROM PB-14M TO #406 FOLLOWING CITY OF MILWAUKEE STANDARDS. REWIRING INCLUDES 240V LIGHTING CIRCUIT AND 120V OUTLET CIRCUIT.

N

2

W ST PAUL AVE

MATCHLINE 15KS+75

16SP 17SP 18SP 19SP 20SP 21SP

R/L SP

4#2, 1#8 XLP

V5

R/L KS

15SP + 95, 31' RT
DEC-25'AL BD,
CIR. T-36C-D,GS,#2644

(1) 3"C, 4#2, 1#8 XLP

V4

26K

SEE STRUCTURAL
PLANS FOR CONDUIT
ROUTING AND
JUNCTION BOX
LOCATIONS IN
PARAPET

SEE NOTE 4

25KS + 03, 60' RT
DEC-30'AL BD,
CIR. T-36C- A,GS,#2624

N 27TH ST

(1) 3"C, 4#2, 1#8 XLP

25KS + 01, 33' LT
DEC-30'AL BD,
CIR. T-36C-D,GS,#331

24KS + 98, 33' LT
LIGHTING PULL BOX
PB-1M

25K

432EW

431EW

R/L EW

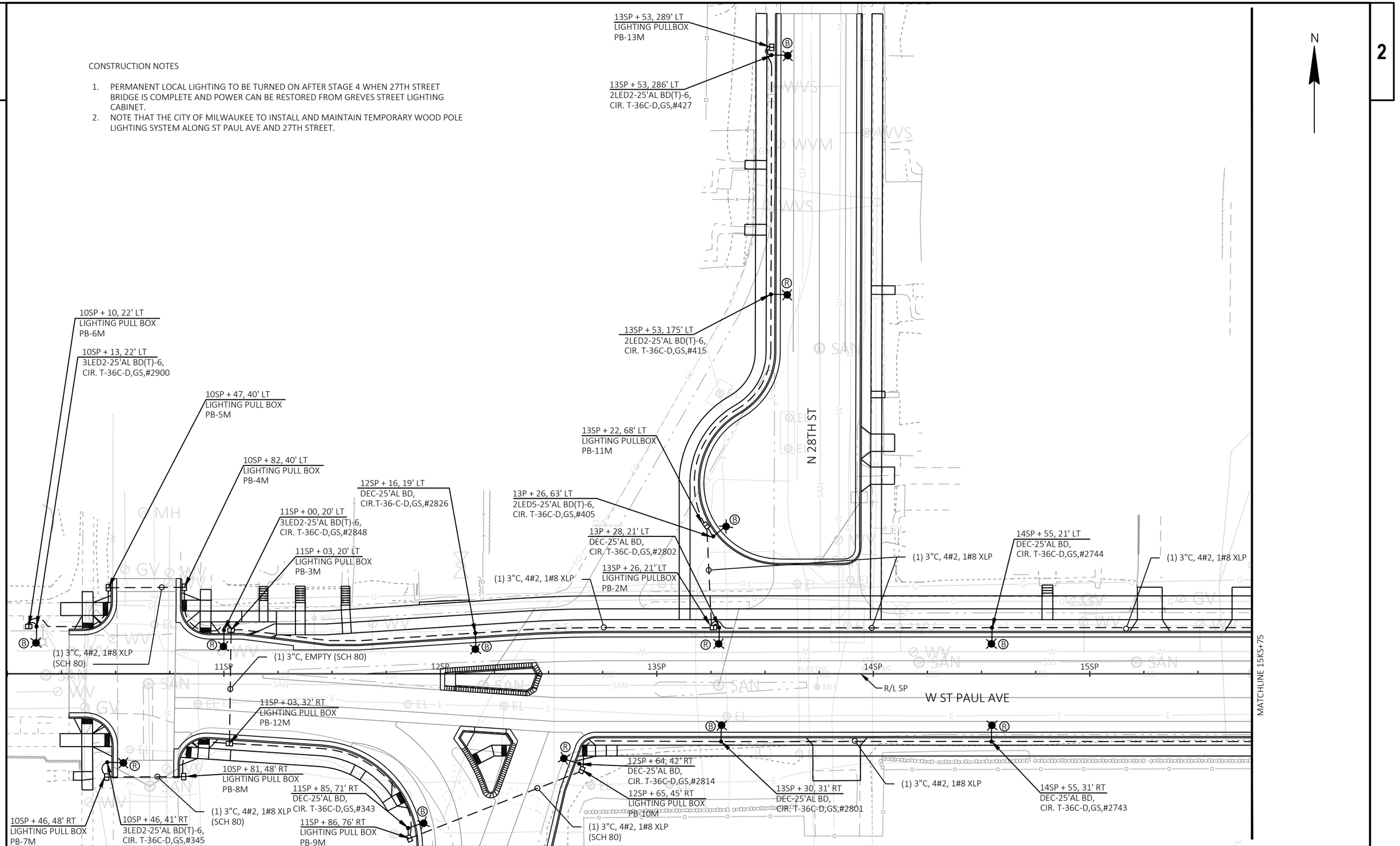
MATCHLINE 24KS+90

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	LOCAL LIGHTING INSTALLATION PLAN - SCHEMATIC	SHEET 210	E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023604-LP.DWG
LAYOUT NAME - K - (02)
PLOT DATE : 4/25/2025 11:11 AM PLOT BY : TKACHUK, TYLER PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES

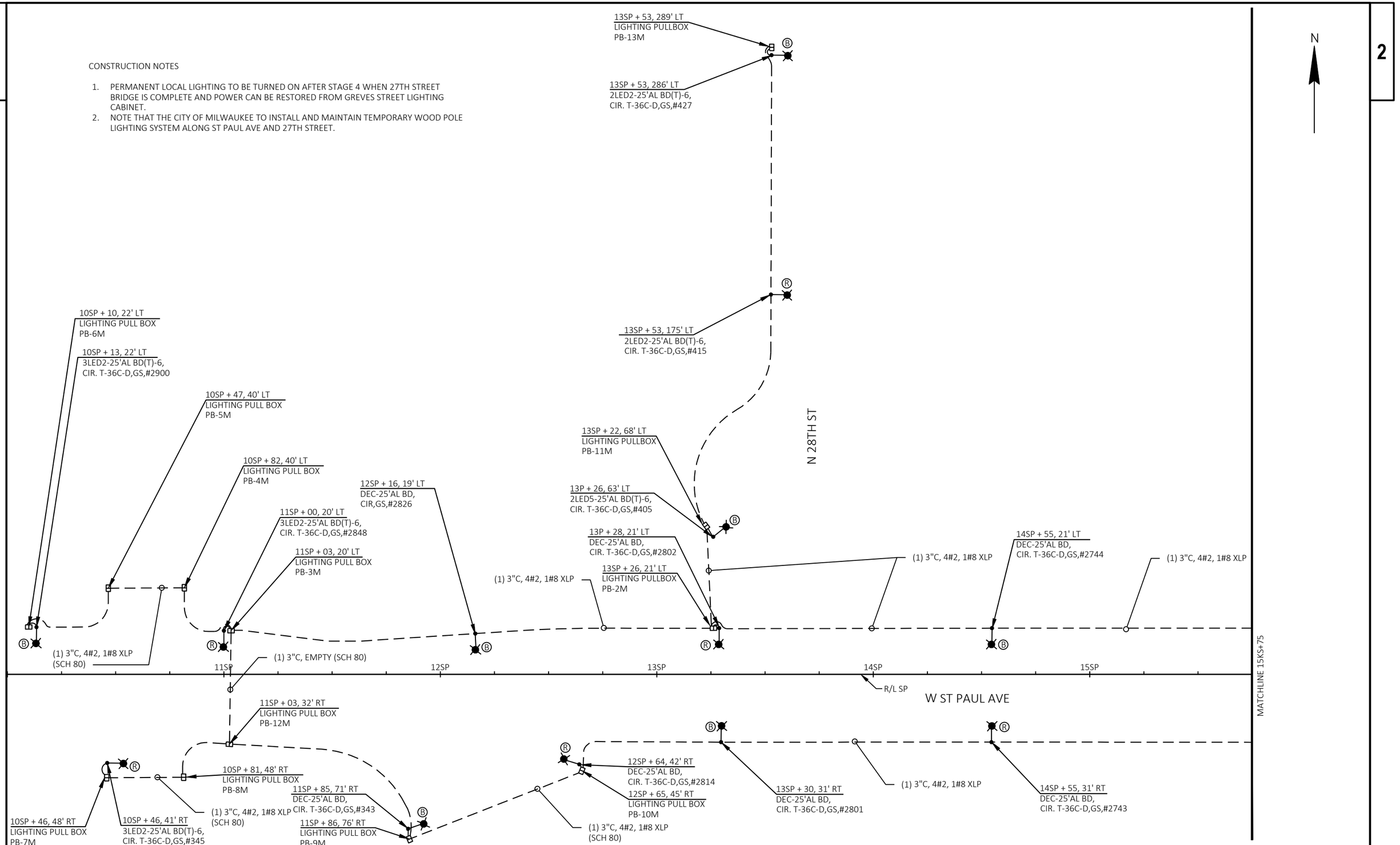
1. PERMANENT LOCAL LIGHTING TO BE TURNED ON AFTER STAGE 4 WHEN 27TH STREET BRIDGE IS COMPLETE AND POWER CAN BE RESTORED FROM GREVES STREET LIGHTING CABINET.
2. NOTE THAT THE CITY OF MILWAUKEE TO INSTALL AND MAINTAIN TEMPORARY WOOD POLE LIGHTING SYSTEM ALONG ST PAUL AVE AND 27TH STREET.



PROJECT NO: 1060-27-74	HWY: I-94	COUNTY: MILWAUKEE	LOCAL LIGHTING INSTALLATION PLAN	SHEET 211	E

CONSTRUCTION NOTES

1. PERMANENT LOCAL LIGHTING TO BE TURNED ON AFTER STAGE 4 WHEN 27TH STREET BRIDGE IS COMPLETE AND POWER CAN BE RESTORED FROM GREVES STREET LIGHTING CABINET.
2. NOTE THAT THE CITY OF MILWAUKEE TO INSTALL AND MAINTAIN TEMPORARY WOOD POLE LIGHTING SYSTEM ALONG ST PAUL AVE AND 27TH STREET.

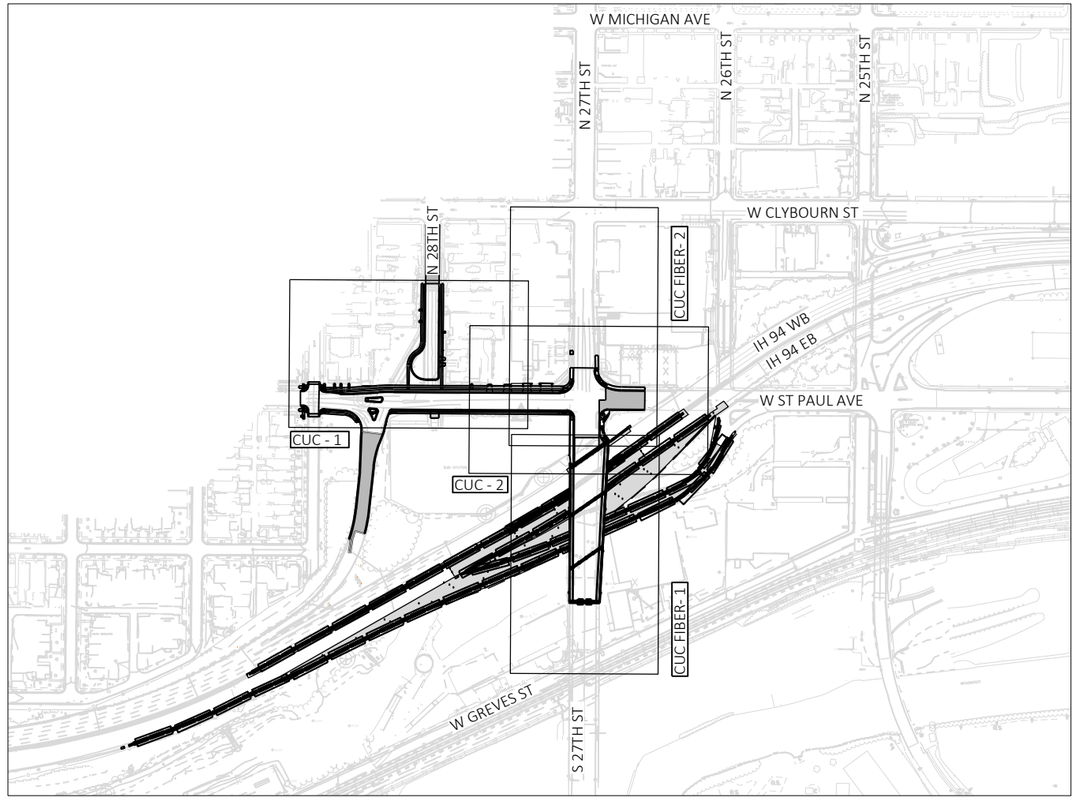


PROJECT NO: 1060-27-74	HWY: I-94	COUNTY: MILWAUKEE	LOCAL LIGHTING INSTALLATION PLAN - SCHEMATIC	SHEET 212	E

FILE NAME : C:\USERS\TKACHUT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\LIGHTING\10602709A-023604-LP.DWG
LAYOUT NAME - SP - (01)
PLOT DATE : 6/5/2025 4:03 PM
PLOT BY : TKACHUK, TYLER
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

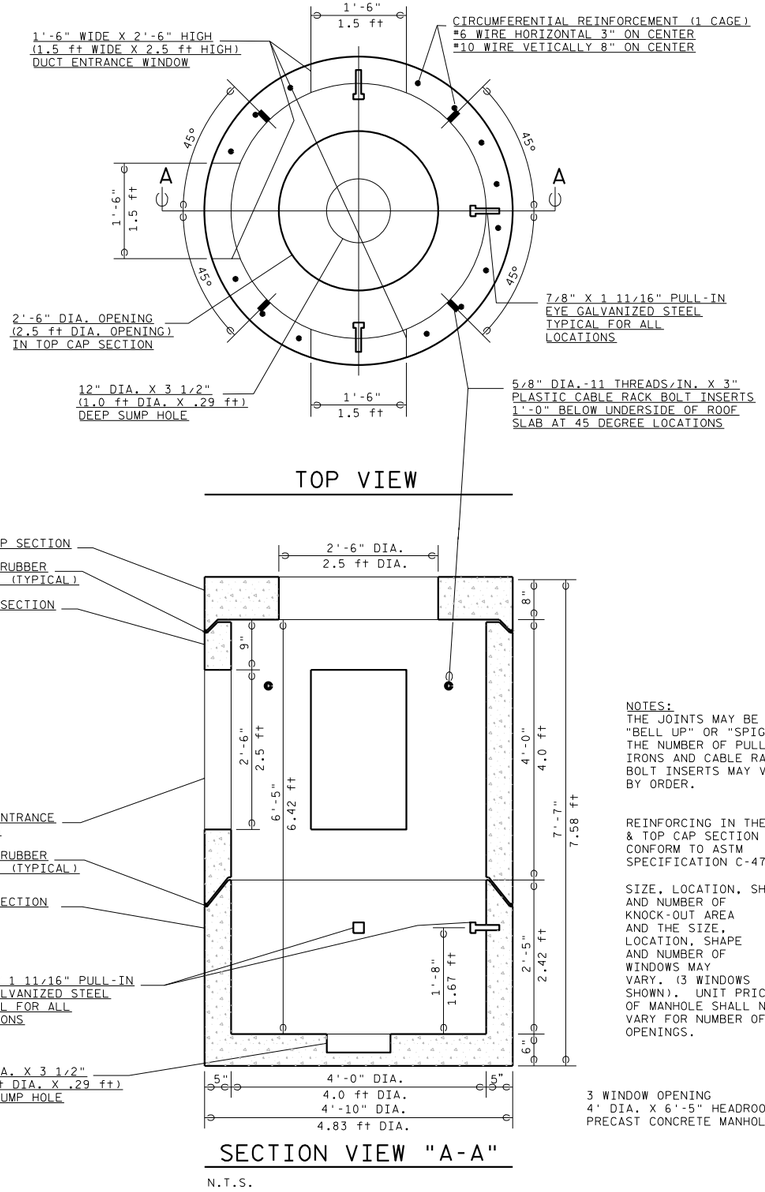
N



CUC: CITY UNDERGROUND CONDUIT PLANS
CUC FIBER: CITY UNDERGROUND CONDUIT - FIBER OPTIC

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CITY UNDERGROUND CONDUIT OVERVIEW	SHEET 213	E

FILE NAME : C:\USERS\MJMAY\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\DSGN\EDGELINE\CUC\ELA_CUC_OVERVIEW.DWG
LAYOUT NAME - CUC_Overview
PLOT DATE : 4/25/2025 11:18 AM PLOT BY : MATTHEW MAY PLOT NAME : PLOT SCALE : 1 IN:400 FT



TOP VIEW

NOTES:
THE JOINTS MAY BE EITHER "BELL UP" OR "SPIGOT UP". THE NUMBER OF PULL-IN IRONS AND CABLE RACK BOLT INSERTS MAY VARY BY ORDER.

REINFORCING IN THE FLOOR & TOP CAP SECTION SHALL CONFORM TO ASTM SPECIFICATION C-478.

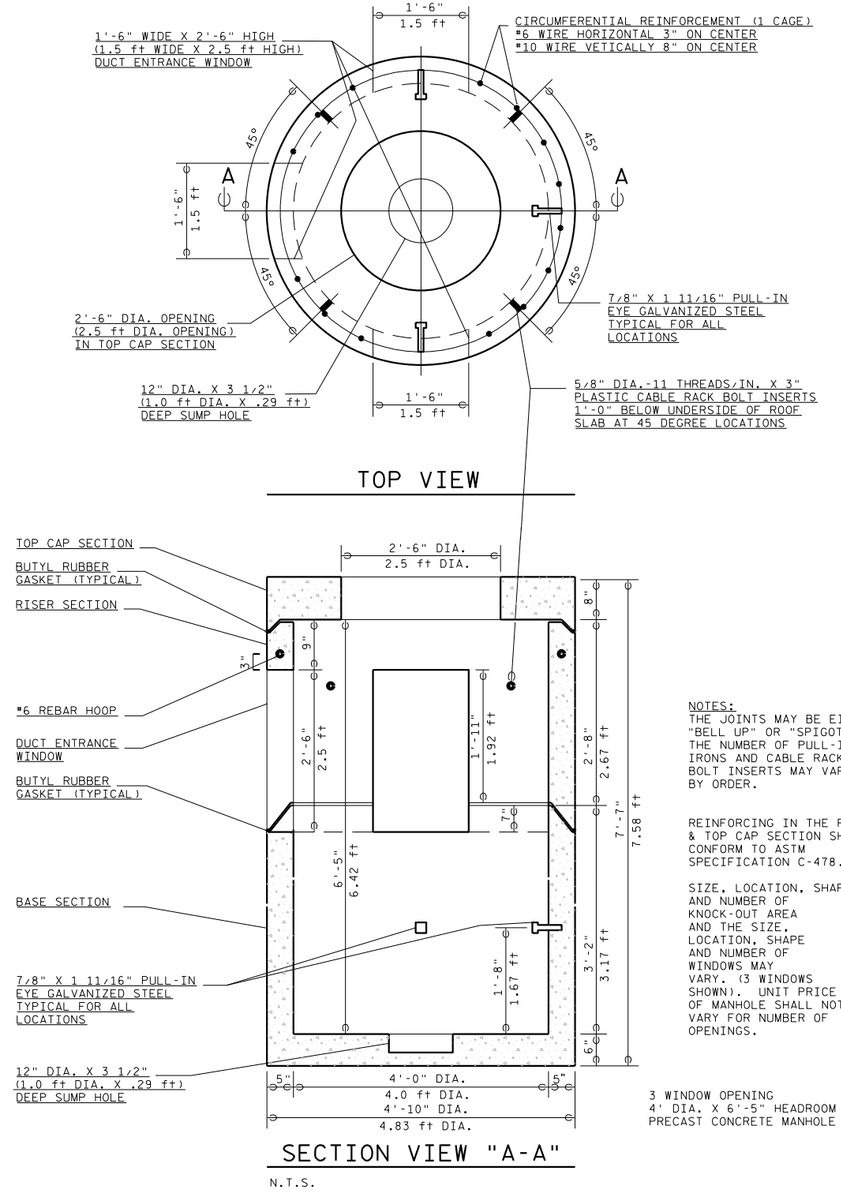
SIZE, LOCATION, SHAPE AND NUMBER OF KNOCK-OUT AREA AND THE SIZE, LOCATION, SHAPE AND NUMBER OF WINDOWS MAY VARY. (3 WINDOWS SHOWN). UNIT PRICE OF MANHOLE SHALL NOT VARY FOR NUMBER OF OPENINGS.

3 WINDOW OPENING
4' DIA. X 6'-5" HEADROOM
PRECAST CONCRETE MANHOLE

SECTION VIEW "A-A"

N.T.S.

MANHOLES TYPE TES 4-FT DIAMETER DETAIL



TOP VIEW

NOTES:
THE JOINTS MAY BE EITHER "BELL UP" OR "SPIGOT UP". THE NUMBER OF PULL-IN IRONS AND CABLE RACK BOLT INSERTS MAY VARY BY ORDER.

REINFORCING IN THE FLOOR & TOP CAP SECTION SHALL CONFORM TO ASTM SPECIFICATION C-478.

SIZE, LOCATION, SHAPE AND NUMBER OF KNOCK-OUT AREA AND THE SIZE, LOCATION, SHAPE AND NUMBER OF WINDOWS MAY VARY. (3 WINDOWS SHOWN). UNIT PRICE OF MANHOLE SHALL NOT VARY FOR NUMBER OF OPENINGS.

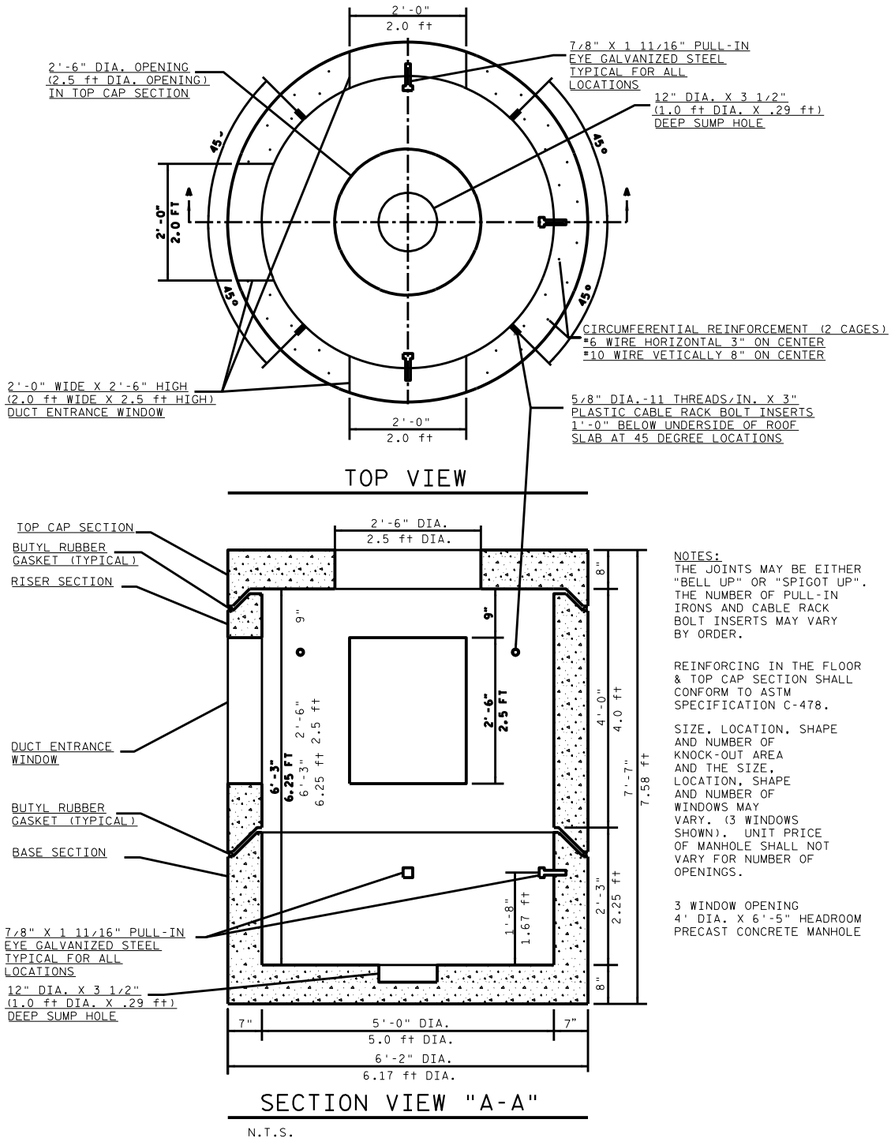
3 WINDOW OPENING
4' DIA. X 6'-5" HEADROOM
PRECAST CONCRETE MANHOLE

SECTION VIEW "A-A"

N.T.S.

MANHOLES TYPE TES DOGHOUSE 4-FT DIAMETER DETAIL

2



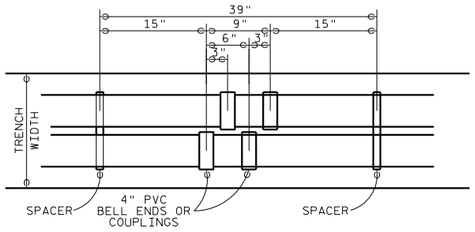
NOTES:
THE JOINTS MAY BE EITHER "BELL UP" OR "SPIGOT UP". THE NUMBER OF PULL-IN IRONS AND CABLE RACK BOLT INSERTS MAY VARY BY ORDER.

REINFORCING IN THE FLOOR & TOP CAP SECTION SHALL CONFORM TO ASTM SPECIFICATION C-478.

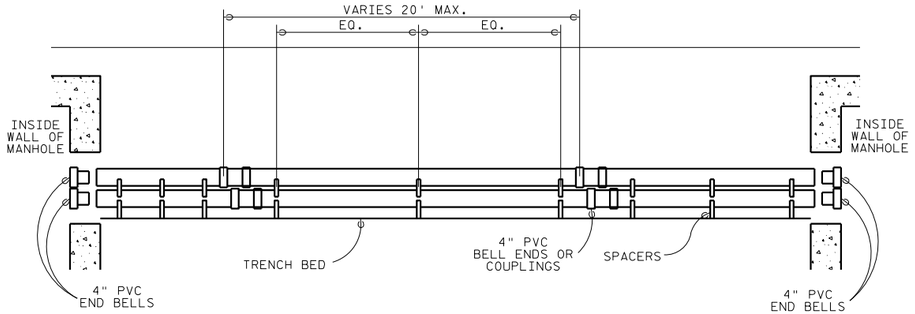
SIZE, LOCATION, SHAPE AND NUMBER OF KNOCK-OUT AREA AND THE SIZE, LOCATION, SHAPE AND NUMBER OF WINDOWS MAY VARY. (3 WINDOWS SHOWN). UNIT PRICE OF MANHOLE SHALL NOT VARY FOR NUMBER OF OPENINGS.

3 WINDOW OPENING
4' DIA. X 6'-5" HEADROOM
PRECAST CONCRETE MANHOLE

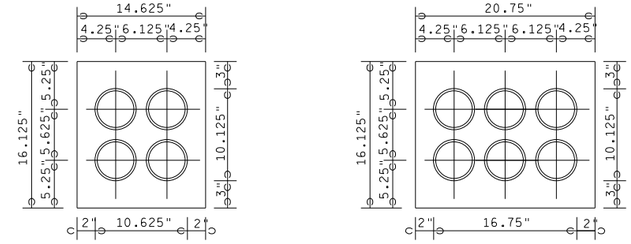
MANHOLES TYPE TES 5-FT DIAMETER DETAIL



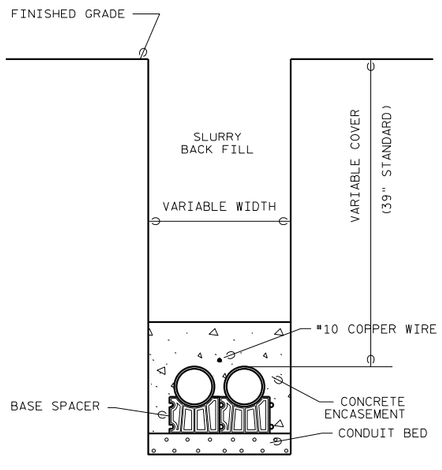
PLAN VIEW
N.T.S.

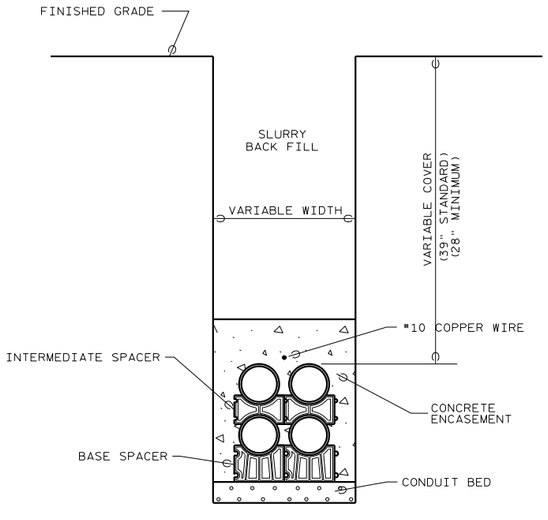


SECTION VIEW
N.T.S.

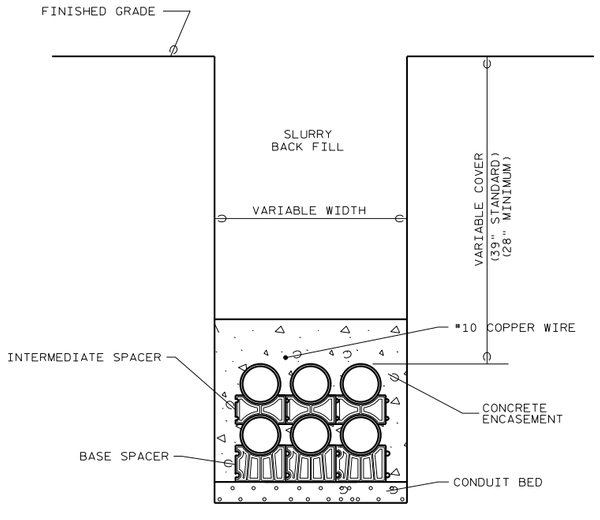


CROSS SECTION VIEW
N.T.S.



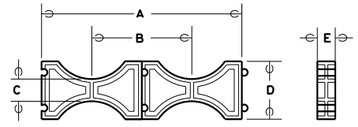


CROSS SECTION VIEW, TYP.
N.T.S.



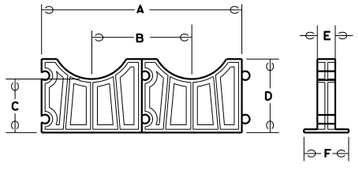
2-DUCT CONDUIT CEMENT ENCASED DB-60
4-DUCT CONDUIT CEMENT ENCASED DB-60
6-DUCT CONDUIT CEMENT ENCASED DB-60
DETAILS

COND.	3"	4"
A	10"	12 1/4"
B	5"	6 1/8"
C	1 1/2"	1 1/4"
D	5 1/4"	6 1/4"
E	1"	1"



INTERMEDIATE SPACER

COND.	3"	4"
A	10 1/4"	12 1/4"
B	5 1/8"	6 1/8"
C	3"	3"
D	4 3/4"	5.31"
E	1"	1"
F	3"	3"



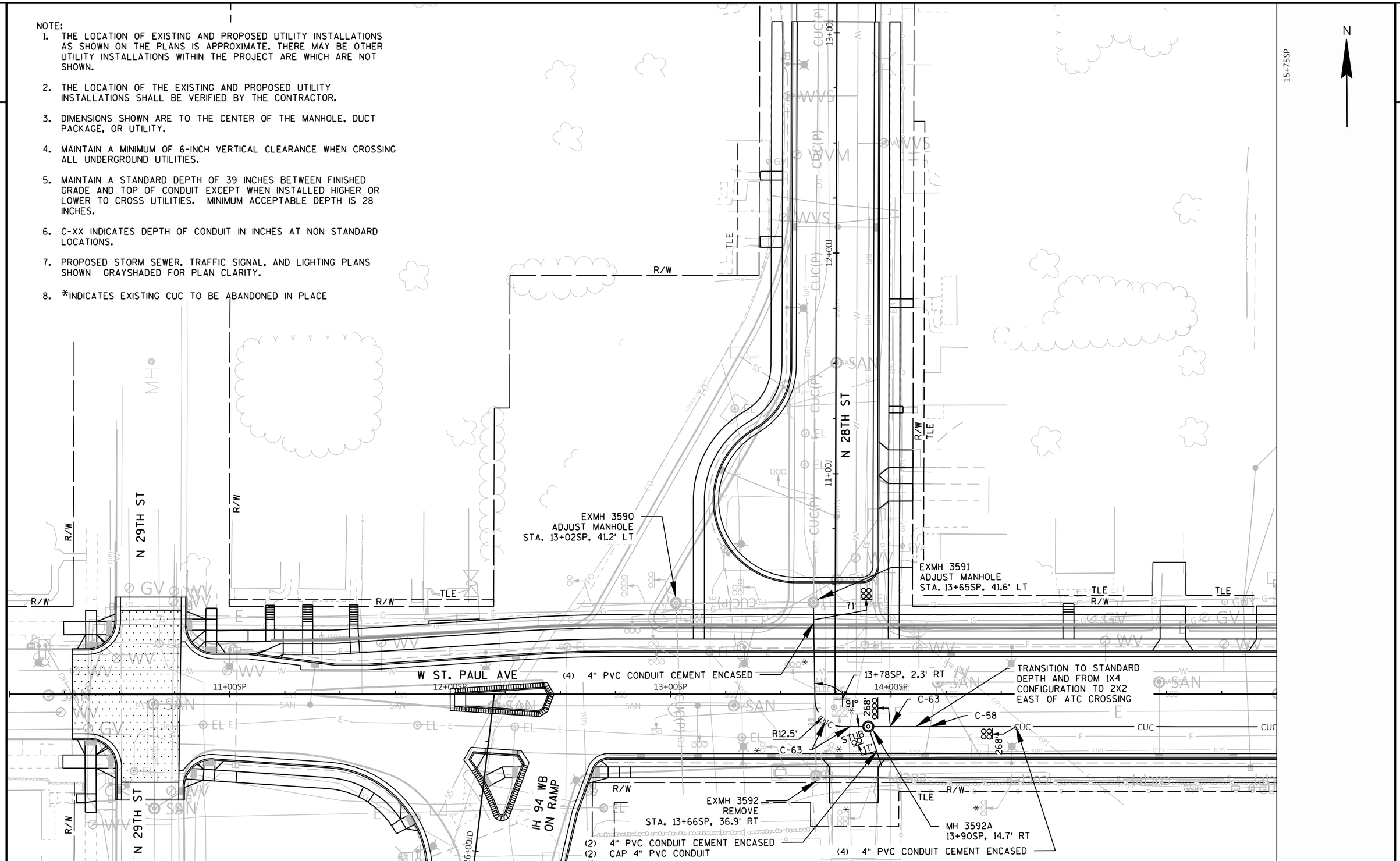
BASE SPACER

INTERMEDIATE AND BASE SPACER DETAIL

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CITY UNDERGROUND CONDUIT - CONSTRUCTION DETAILS	SHEET 216	E

NOTE:

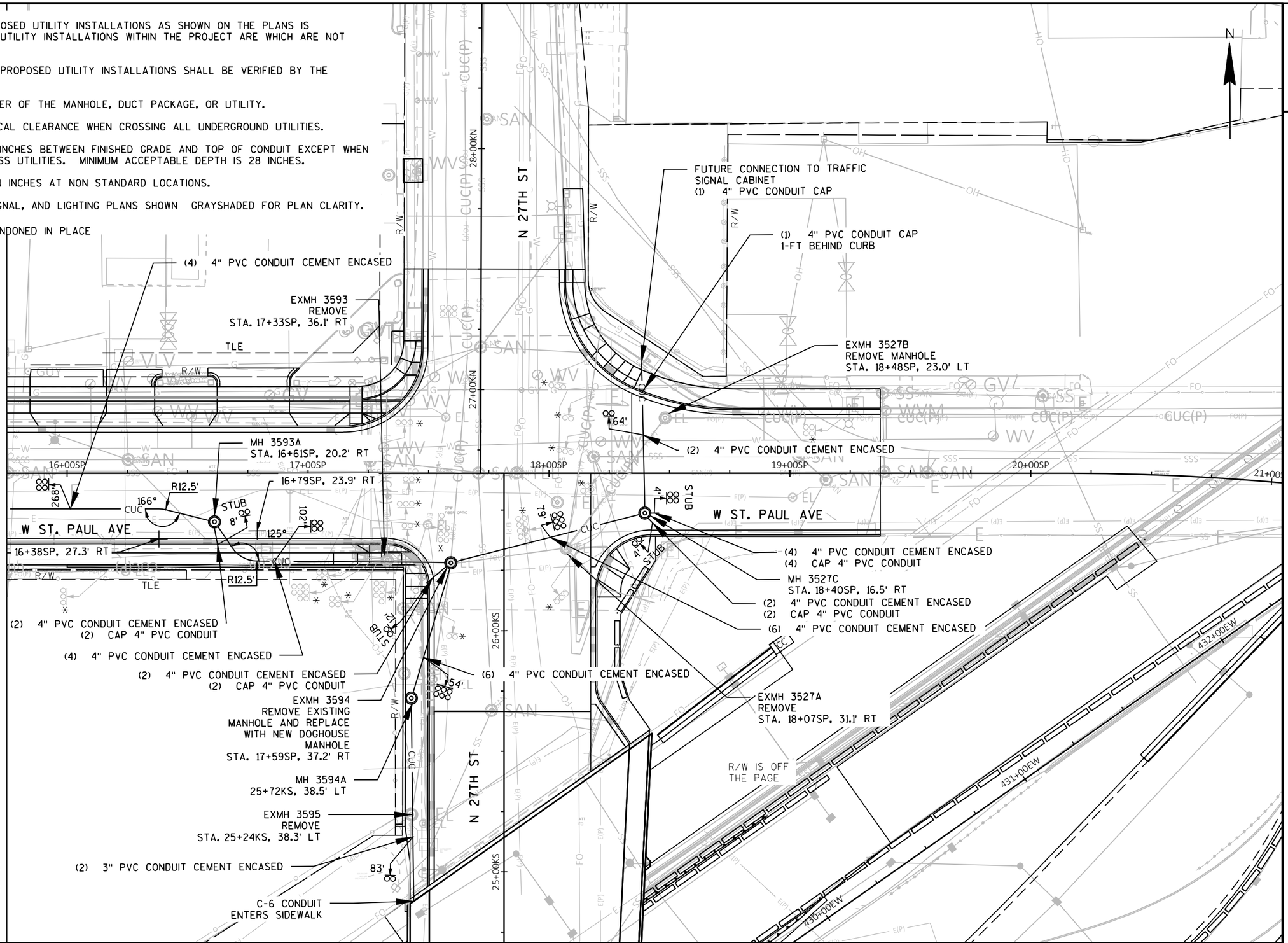
1. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT ARE WHICH ARE NOT SHOWN.
2. THE LOCATION OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS SHALL BE VERIFIED BY THE CONTRACTOR.
3. DIMENSIONS SHOWN ARE TO THE CENTER OF THE MANHOLE, DUCT PACKAGE, OR UTILITY.
4. MAINTAIN A MINIMUM OF 6-INCH VERTICAL CLEARANCE WHEN CROSSING ALL UNDERGROUND UTILITIES.
5. MAINTAIN A STANDARD DEPTH OF 39 INCHES BETWEEN FINISHED GRADE AND TOP OF CONDUIT EXCEPT WHEN INSTALLED HIGHER OR LOWER TO CROSS UTILITIES. MINIMUM ACCEPTABLE DEPTH IS 28 INCHES.
6. C-XX INDICATES DEPTH OF CONDUIT IN INCHES AT NON STANDARD LOCATIONS.
7. PROPOSED STORM SEWER, TRAFFIC SIGNAL, AND LIGHTING PLANS SHOWN GRAYSHADED FOR PLAN CLARITY.
8. *INDICATES EXISTING CUC TO BE ABANDONED IN PLACE



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CITY UNDERGROUND CONDUIT PLAN CUC-1	SHEET 217	E

NOTE:

1. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT ARE WHICH ARE NOT SHOWN.
2. THE LOCATION OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS SHALL BE VERIFIED BY THE CONTRACTOR.
3. DIMENSIONS SHOWN ARE TO THE CENTER OF THE MANHOLE, DUCT PACKAGE, OR UTILITY.
4. MAINTAIN A MINIMUM OF 6-INCH VERTICAL CLEARANCE WHEN CROSSING ALL UNDERGROUND UTILITIES.
5. MAINTAIN A STANDARD DEPTH OF 39 INCHES BETWEEN FINISHED GRADE AND TOP OF CONDUIT EXCEPT WHEN INSTALLED HIGHER OR LOWER TO CROSS UTILITIES. MINIMUM ACCEPTABLE DEPTH IS 28 INCHES.
6. C-XX INDICATES DEPTH OF CONDUIT IN INCHES AT NON STANDARD LOCATIONS.
7. PROPOSED STORM SEWER, TRAFFIC SIGNAL, AND LIGHTING PLANS SHOWN GRAYSHADED FOR PLAN CLARITY.
8. *INDICATES EXISTING CUC TO BE ABANDONED IN PLACE



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CITY UNDERGROUND CONDUIT PLAN CUC - 2	SHEET 218	E

FILE NAME : C:\USERS\MJMAY\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\DSGN\EDGELINE\CUC\27THANDST.PAUL_CUC.DWG
LAYOUT NAME - CUC_2
PLOT DATE : 4/25/2025 11:29 AM
PLOT BY : MATTHEW MAY
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

(1) EXISTING FIBER CABLE FROM JUNCTION BOX 1/2 TO MH 3594A

JB1 / JB2

EXMH 12GR

IH 94 EB OFF RAMP

IH 94 EB

IH 94 WB

N 27TH ST

W GREVES ST

20+00KS

21+00KS

22+00KS

23+00KS

24+00KS

25+00KS

25+60KS

427+00EW

428+00EW

429+00EW

430+00EW

NOTE:

1. EXISTING FIBER PULLED BACK AND COILED OUTSIDE CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION. RE-PULL THROUGH NEW CONDUIT AND COIL IN MH 3594A. CITY FORCES WILL DO SPLICING.
2. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT ARE WHICH ARE NOT SHOWN.
3. THE LOCATION OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS SHALL BE VERIFIED BY THE CONTRACTOR.
4. SEE CITY UNDERGROUND CONDUIT PLANS FOR CONDUIT INFORMATION.
5. PROPOSED STORM SEWER, TRAFFIC SIGNAL, AND LIGHTING PLANS SHOWN GRAYSHADED FOR PLAN CLARITY.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CITY UNDERGROUND CONDUIT CUC FIBER-1	SHEET 219	E

2

(1) EXISTING FOC TO MH 3594A

COIL 100' OF EXISTING FOC AND 100' OF 288-STRAND SMF. CITY FORCES WILL DO SPLICING.

(1) REMOVE 3"4/1"8 LTP SERVICE CABLE FROM W ST PAUL AVE TO W CLYBOURN ST

MH 3594A

EXMH 3594

(1) 1" SUBDUCT
(1) 288-STRAND SMF IN SUBDUCT
MH 3594A TO EXMH 3580C

(1) 1" SUBDUCT
(1) 288-STRAND SMF IN SUBDUCT
MH 3594A TO EXMH 3580C

EXMH 3580C

COIL 100' OF 288-STRAND SMF. CITY FORCES WILL DO SPLICING.

W ST. PAUL AVE

N 27TH ST

W CLYBOURN ST

R/W

CUC

CUC(P)

16+00SP

19+00SP

25+60KS

26+00KS

27+00KN

28+00KN

29+00KN

30+00KN

31+00KN

NOTE:

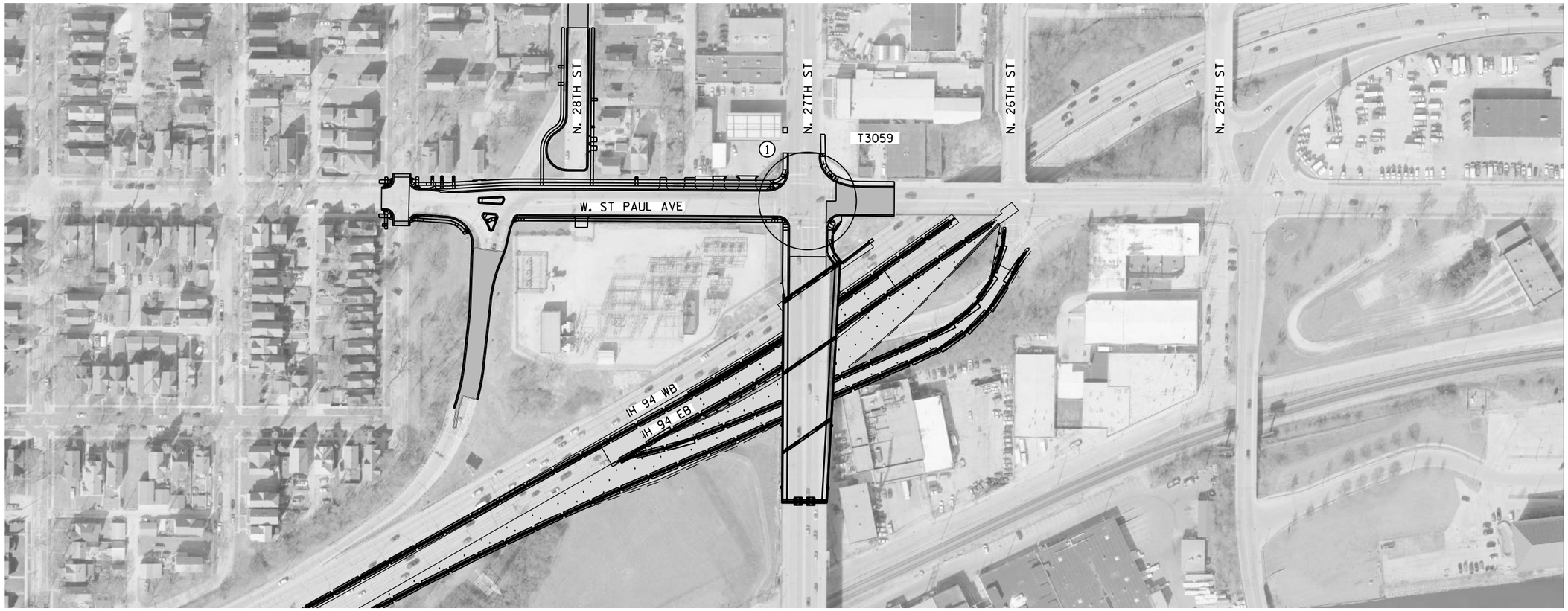
1. EXISTING FIBER PULLED BACK AND COILED OUTSIDE CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION. RE-PULL THROUGH NEW CONDUIT AND COIL IN MH 3594A. CITY FORCES WILL DO SPLICING.
2. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT ARE WHICH ARE NOT SHOWN.
3. THE LOCATION OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS SHALL BE VERIFIED BY THE CONTRACTOR.
4. SEE CITY UNDERGROUND CONDUIT PLANS FOR CONDUIT INFORMATION.
5. PROPOSED STORM SEWER, TRAFFIC SIGNAL, AND LIGHTING PLANS SHOWN GRAYSHADED FOR PLAN CLARITY.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CITY UNDERGROUND CONDUIT CUC FIBER-2	SHEET 220	E

FILE NAME : C:\USERS\MJMAY\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\DSGN\EDGELINE\CUC\27THANDST.PAUL_CUC_FIBER.DWG
LAYOUT NAME - FO_2
PLOT DATE : 4/25/2025 11:33 AM
PLOT BY : MATTHEW MAY
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N



LEGEND

◯ CITY OF MILWAUKEE OWNED TRAFFIC SIGNAL

① INSTALL TEMPORARY TRAFFIC SIGNAL

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TEMPORARY TRAFFIC SIGNAL PROJECT OVERVIEW	SHEET 221	E

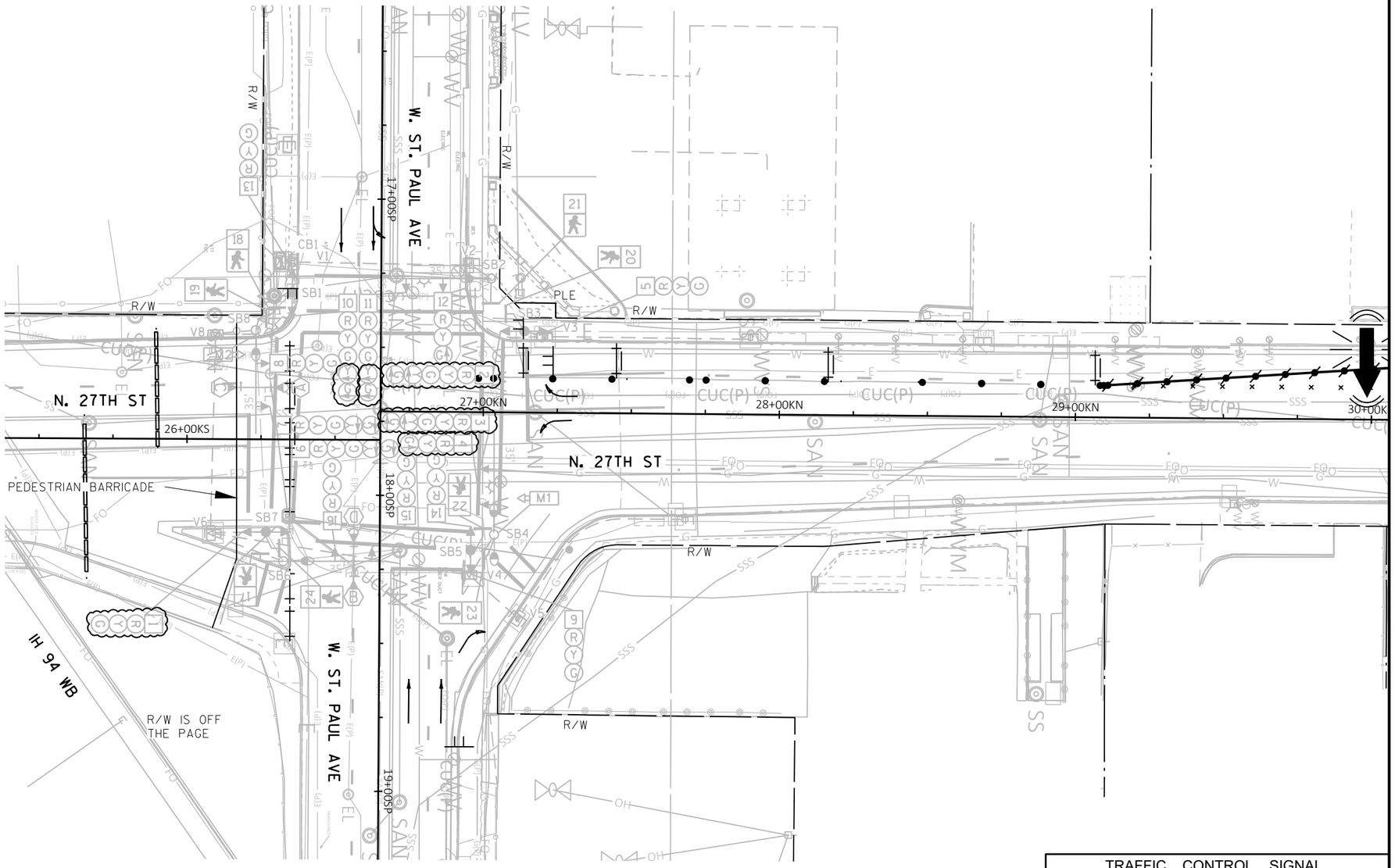
FILE NAME : C:\USERS\MJMAY\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\DSGN\EDGELINE\SIGNALS\I94-ELA_PO.DWG
LAYOUT NAME - I94-ELA_tmp_po
PLOT DATE : 4/25/2025 11:14 AM PLOT BY : MATTHEW MAY PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-45' ARM
- CITY OF MILWAUKEE LUMINAIRE
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- Y YELLOW ARROW
- AG G GREEN ARROW
- PEDESTRIAN HEAD
- CONFIRMATION LIGHT
- EVP DETECTOR HEAD
- X EVP DESIGNATOR
- WALK/DONT WALK INDICATOR 12" (COUNTDOWN TIMER)
- CITY OF MILWAUKEE TRAFFIC SIGNAL PULL BOX
- MX MICROWAVE DETECTION UNIT
- DIRECTION OF TRAFFIC
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING.



CONSTRUCTION NOTES:

1. THE CITY OF MILWAUKEE IS RESPONSIBLE FOR OPERATIONS AND MAINTENANCE OF EXISTING TRAFFIC SIGNAL DURING STAGES 1 AND 2.
2. THE CONTRACTOR IS RESPONSIBLE FOR COVERING THE SIGNAL INDICATIONS PER THE TEMPORARY TRAFFIC SIGNAL PLANS. COORDINATE TIMING CHANGES WITH THE CITY.

TRAFFIC CONTROL SIGNAL
W. ST. PAUL AVE & N. 27TH ST
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO. T3059

MUNICIPAL CONTACT: SCOTT REINBACHER
DESIGNED BY: HNTB
REVISED BY:

PAGE 1 OF 5

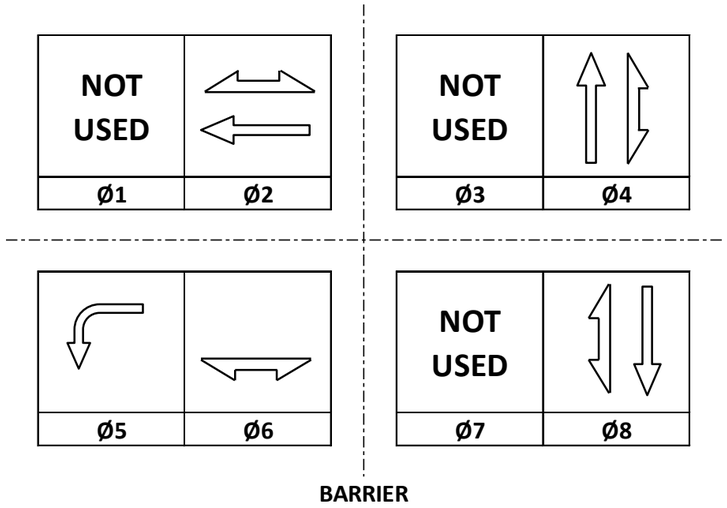
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGES 1-2	SHEET 222	E

FILE NAME : C:\USERS\MJMAY\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\DSGN\EDGELINE\SIGNALS\27THANDST.PAUL_ST_S1-2.DWG
LAYOUT NAME - 27THSTANDST.PAUL_ST_S1-2
PLOT DATE : 4/25/2025 10:36 AM
PLOT BY : MATTHEW MAY
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1		
Ø2	5,6,7,8	R
Ø3		
Ø4	9,10,11,12	R
Ø5	6,7	-
Ø6		
Ø7		
Ø8	13,14,15,16	R
Ø2P	19,20	
Ø4P	21,22	
Ø6P	23,24	
Ø8P	17,18	
OLA		
OLB		
OLC		
OLD		

RING 1

RING 2



CONTROLLER LOGIC

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

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

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

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	
IN SEPARATE CITY OF MILWAUKEE LIGHTING CABINET	X

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	C	D
MOVEMENT			
PHASE	2+5	4+8	8+4

AFTER PREEMPTION SEQUENCE 2+5, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+8 OR 8+4, CONTROLLER SHALL RETURN TO PHASES 4+8.

W ST. PAUL AVE & N 27TH ST
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO:	3059	CABINET TYPE:	EXIST
		CONTROLLER TYPE:	170
DATE:	05/25	PAGE NUMBER:	2 OF 5

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TEMPORARY SEQUENCE OF OPERATIONS – STAGES 1-2	SHEET NO:	E

FILE NAME: W:\JOBS\79081_I-94EW\TECHPROD\Traffic\Signals\1060-27-74_EarlyEastLeg\Sequence of Operations\Exist\TS1.xlsx PLOT DATE: 4/11/2025 PLOT NAME: TS1.xlsx PLOT BY: _____ PLOT SCALE: 1:1

LEGEND

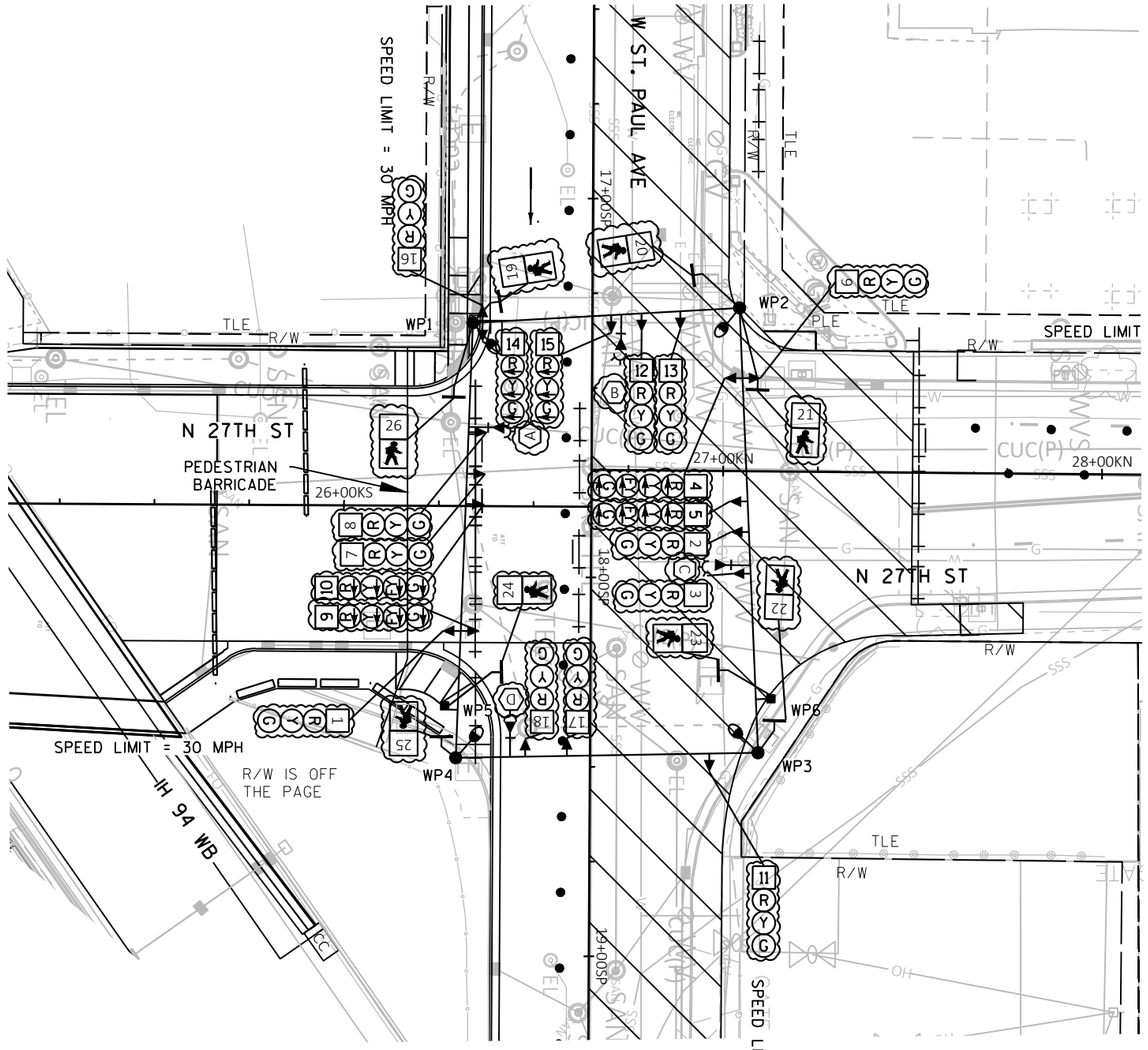
—OH— SPAN WIRE
● WOOD POLE, CLASS 4
■ WOOD POST OR SKID TYPE TEMPORARY
SIGNAL HEAD, OVERHEAD MOUNT
PEDETRIAN HEAD
WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
XX SIGNAL HEAD NUMBER
(R) RED CIRCULAR INDICATOR
(Y) YELLOW CIRCULAR INDICATOR
(G) GREEN CIRCULAR INDICATOR
(R) RED ARROW
(Y) YELLOW ARROW
(G) GREEN ARROW
TEMPORARY LUMINAIRE LED CATEGORY C
(X) EVP DESIGNATOR
EVP DETECTOR HEAD
CONFIRMATION LIGHT

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

DIRECTION OF TRAFFIC
WORK AREA
TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

CONSTRUCTION NOTES:

1. FINAL LOCATION OF WOOD POLES AND SIGNAL HEADS SHALL BE DIRECTED BY THE ENGINEER.
2. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POST OR POLE.
3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
4. CONTRACTOR TO ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
5. CONTRACTOR SHALL COORDINATE WITH THE WISDOT ELECTRICAL FIELD UNIT, (414) 266-1170, 5 WORKING DAYS PRIOR TO BEGINNING ANY WORK AT THE INTERSECTION.
6. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR.
7. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
8. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
9. INSTALL R1-1F FOLDING STOP SIGNS ON WP1, WP2, WP3, AND WP5.



SUMMARY OF SELECTED ITEMS FOR INFORMATION ONLY

QUANTITY	DESCRIPTION
4 EA	WOOD POLES, CLASS 4
382 LF	SPAN WIRE
2 EA	WOOD POST OR SKID TYPE TEMPORARY
18 EA	SIGNAL HEADS
8 EA	PEDESTRIAN HEADS
4 EA	LIGHTING LED-C
4 EA	R1-1F FOLDING STOP SIGN
1 LS	TEMPORARY EVP SYSTEM

TRAFFIC CONTROL SIGNAL
W ST. PAUL AVE & N 27TH ST
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO. T3059

MUNICIPAL CONTACT: SCOTT REINBACHER
DESIGNED BY: HNTB
REVISED BY:

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3C	SHEET 224	E

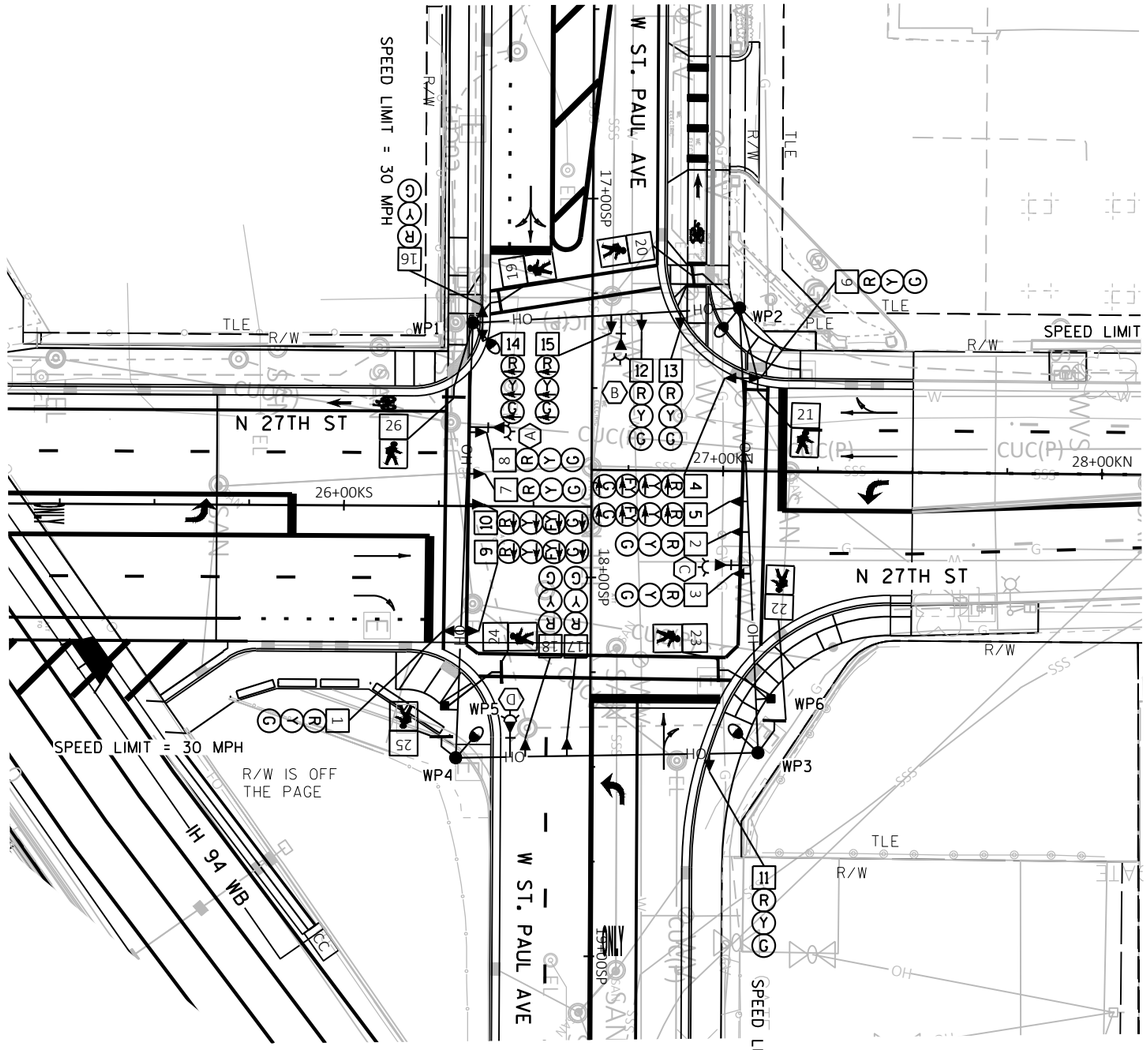
FILE NAME : C:\USERS\MJMAY\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\DSGN\EDGELINE\SIGNALS\27THANDST.PAUL_ST_S4.DWG
LAYOUT NAME - I94_27THSTREET_ELA_ST_S3B
PLOT DATE : 4/25/2025 10:38 AM PLOT BY : MATTHEW MAY PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- —OH— SPAN WIRE
- ● WOOD POLE, CLASS 4
- ■ WOOD POST OR SKID TYPE TEMPORARY
- ← SIGNAL HEAD, OVERHEAD MOUNT
- PEDETRIAN HEAD
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TEMPORARY LUMINAIRE LED CATEGORY C
- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD
- CONFIRMATION LIGHT
- DIRECTION OF TRAFFIC

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



CONSTRUCTION NOTES:

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. ALL TEMPORARY SIGNAL HEADS SHALL REMAIN OPERATIONAL AT THE CONCLUSION OF STAGE 5. REFER TO SPECIAL PROVISIONS FOR DIRECTION AT THE CONCLUSION OF THE PROJECT.

TRAFFIC CONTROL SIGNAL
W ST. PAUL AVE & N 27TH ST
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO. T3059

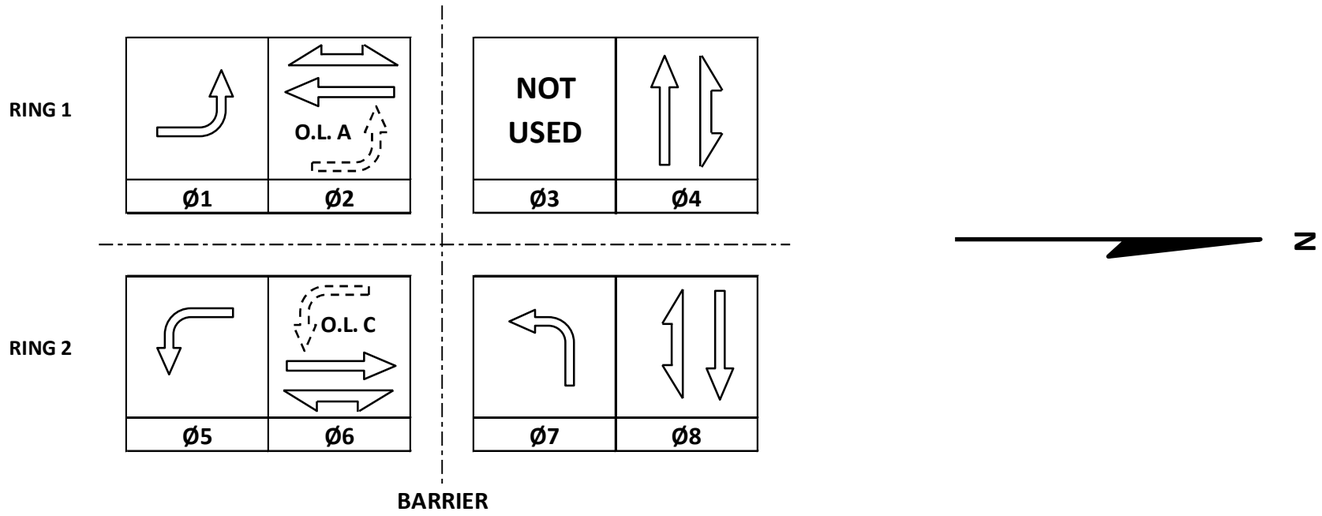
MUNICIPAL CONTACT: SCOT REINBACHER
DESIGNED BY: HNTB
REVISED BY:

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TEMPORARY TRAFFIC SIGNAL PLAN - LEFT IN PLACE	SHEET 225	E

FILE NAME : C:\USERS\MJMAY\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\DSGN\EDGELINE\SIGNALS\27THANDST.PAUL_ST_PREEL.DWG
LAYOUT NAME - I94_27THSTREET_ELA_ST_PREEL
PLOT DATE : 4/25/2025 11:05 AM PLOT BY : MATTHEW MAY PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

	HEAD NUMBERS	FLASH
Ø1	4,5	-
Ø2	6,7,8	R
Ø3		
Ø4	11,12,13	R
Ø5	9,10	-
Ø6	1,2,3	R
Ø7	14,15	R ←
Ø8	16,17,18	R
Ø2P	19,20	
Ø4P	21,22	
Ø6P	23,24	
Ø8P	25,26	
OLA	4,5	R ←
OLB		
OLC	9,10	R ←
OLD		



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	MAX	X
5		2	MAX	X
6		2	MAX	X
7		4	MAX	X
8		4	MAX	X

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

TYPE OF COORDINATION	
NONE	X
TBC	
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 CITY OF MILWAUKEE LIGHTING CABINET	

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	4+7	6+1	8+4

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+4, CONTROLLER SHALL RETURN TO PHASES 4+8.

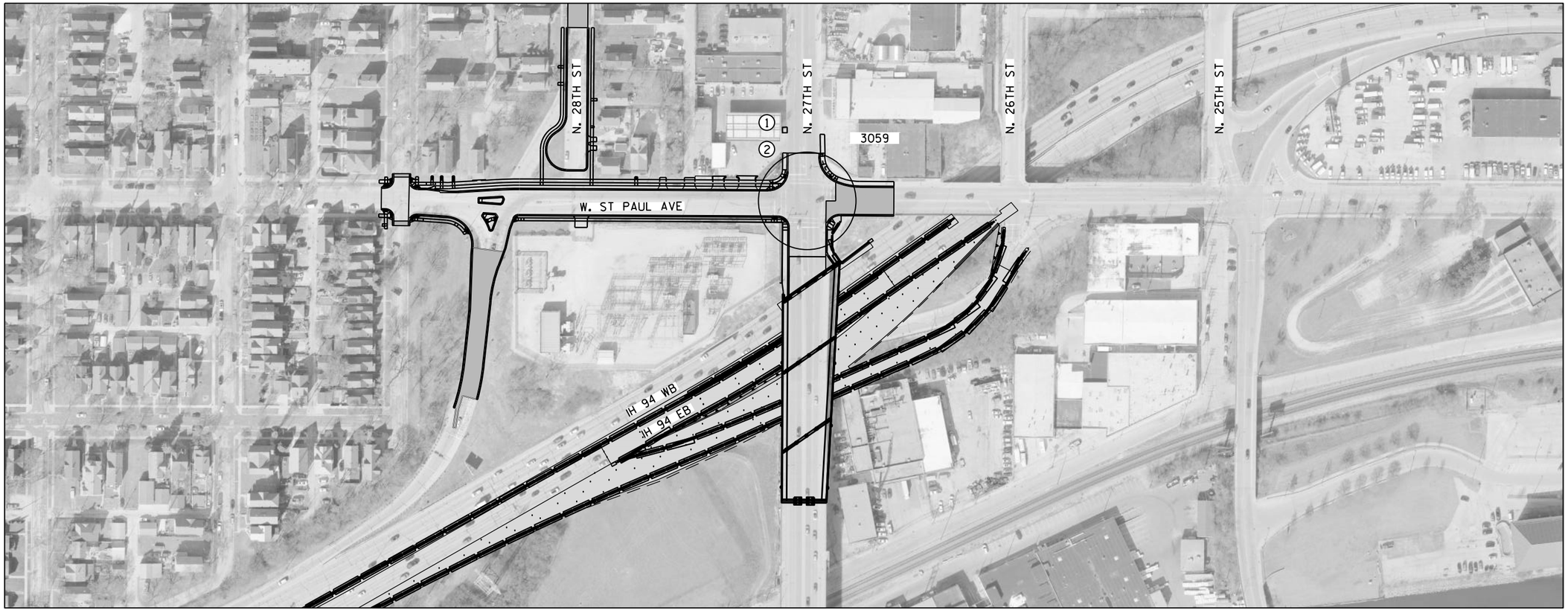
W ST. PAUL AVE & N 27TH ST
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO: T3059	CABINET TYPE: TEMP
	CONTROLLER TYPE: TEMP
DATE: 05/25	PAGE NUMBER: 5 OF 5

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TEMPORARY SEQUENCE OF OPERATIONS – LEFT IN PLACE	SHEET NO:	E

2

N



LEGEND

◯ CITY OF MILWAUKEE OWNED TRAFFIC SIGNAL

① REMOVE EXISTING TRAFFIC SIGNAL

② INSTALL PARTIAL PERMANENT TRAFFIC SIGNAL

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PROJECT OVERVIEW	SHEET 227	E

TRAFFIC SIGNAL GENERAL NOTES:

PRIOR TO CONSTRUCTION, THE LOCATION OF UNDERGROUND UTILITIES SHALL BE DETERMINED IN THE FIELD BY CONTACTING "DIGGERS HOTLINE."

THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE, IN CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

TRAFFIC SHALL BE INSTALLED IN COMPLIANCE WITH WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTIONS 652 TO 657 AND 659 EXCEPT:

ALL CHANGES OR ANY DEVIATIONS FROM PLANS MUST BE APPROVED BY CITY OF MILWAUKEE TRAFFIC ENGINEERING.

1. DETAILS OF CONSTRUCTION MATERIALS AND WORKMANSHIP NOT SHOWN ON THESE DRAWINGS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.
2. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS INCLUDING REPAIRS, REPLACEMENT OR RELOCATION ETC. OF TRAFFIC FACILITIES IF THE CONTRACTOR DOES ANY DEVIATION FROM THE TRAFFIC DESIGN WITHOUT THE TRAFFIC ENGINEERS SIGNED APPROVAL.
3. LOCATIONS OF THE HDPE AND NONMETALLIC PVC CONDUITS ARE IDENTIFIED IN THE PLANS WHERE THEY ARE REQUIRED. HOWEVER, INSTALLATION MAY REQUIRE INTEGRATION WITH EXISTING FIELD CONDITIONS. UNDER THE APPROVAL OF THE CITY OF MILWAUKEE DPW TRAFFIC, 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 TO ILLUSTRATE AS BUILT CONDITIONS.
4. CONDUIT INSTALLED BEHIND CURB AND UNDER DRIVEWAYS SHALL BE INSTALLED AT A DISTANCE OF MINIMUM OF 6 INCHES AWAY FROM THE BACK OF CURB TO THE CENTER LINE OF CONDUIT, AND MINIMUM 24 INCHES DOWN MEASURED FROM THE TOP OF CURB OR FINISHED GRADE TO THE TOP OF CONDUIT.
5. DEPTH OF CONDUIT INSTALLED BELOW STREETS, HIGHWAYS, AND ALLEYS SHALL BE 24-INCHES MINIMUM AND 36-INCHES MAXIMUM. (MEASURED FROM FINISHED FLANGE LINE) IF THE CONTRACTOR DOES ANY DEVIATION FROM THE TRAFFIC DESIGN WITHOUT THE TRAFFIC ENGINEERS SIGNED APPROVAL.
6. CONDUIT LATERALS SHALL BE TRENCHED UNDER PAVEMENT BEFORE PAVEMENT CONSTRUCTION.
7. WHEN THERE IS MORE THAN ONE CONDUIT TO BE INSTALLED, PLACE ALL CONDUITS IN THE SAME TRENCH, OR BORE MULTIPLE CONDUITS TOGETHER AT THE SAME TIME.
8. CONDUIT INSTALLATION THAT REQUIRE TRENCHING SHALL NOT BE BACKFILLED PRIOR TO INSPECTION ON THE CONDUIT.
9. ANY EXCEPTION TO THE MINIMUM OR MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE TRAFFIC SIGNALS MANAGER.
10. 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.
11. ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON ALL CONDUITS.
12. PRIOR TO CONDUIT ACCEPTANCE, ALL OPEN CONDUIT ENDS, AND UN-TERMINATED CONDUITS SHALL BE THOROUGHLY CLEANED AND BE CAPPED IMMEDIATELY AFTER INSTALLATION WITH THE APPROPRIATE CAST PLASTIC CAP WHICH FITS SNUGGLY ON THE CONDUIT, BUT EASILY REMOVED. DUCT TAPE OR ANY OTHER CAPPING METHOD IS NOT ACCEPTABLE.
13. ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. APPROVED LABEL FIRMLY ATTACHED.
14. PULL ROPE (3/8-INCH NYLON) SHALL BE INSTALLED IN ALL NEW CONDUIT.
15. CONDUIT RUNS SHALL BE THE SAME SIZE CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX-TO-PULL BOX OR JUNCTION BOX OR PULL BOX TO CONCRETE BASE, OR BASE-TO-BASE ETC.).
16. UNLESS THE CONDUIT IS DESIGNED AND SHOWN WITH BENDS ON THE PLANS, ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO CONCRETE BASE, AND PULL BOX TO ENCLOSURE. OTHERWISE IT MUST BE APPROVED BY THE TRAFFIC ENGINEER.

TRAFFIC SIGNAL GENERAL NOTES:

2

17. MINIMUM CONDUIT CLEARANCES FOR CONDUIT CROSSINGS AND PULL BOXES FROM THE FOLLOWING:
    FIRE HYDRANTS: 6-FT
    TREE TRUNKS: 10-FT
    END OF DRIVEWAY FLARES: 6-FT
    UNLESS NOTED OTHERWISE, OR APPROVED BY THE TRAFFIC ENGINEER.
18. HAND DIGGING MAY BE REQUIRED FOR LOCATIONS ADJACENT TO EXISTING GAS AND POWER LINES. HAND EXCAVATION SHOULD BE ANTICIPATED AND WILL BE CONSIDERED INCIDENTAL TO THE BID ITEM BEING INSTALLED. COORDINATE ALL WORK NEAR GAS LINES WITH WE ENERGIES.
19. TYPICAL RECTANGULAR PULL BOXES / VAULTS SHOULD BE INSTALLED AS SHOWN ON PLANS, BUT WHEN IT IS NOT POSSIBLE, A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS AND FIRE HYDRANTS SHOULD BE USED, OTHERWISE APPROVED BY THE TRAFFIC SIGNALS MANAGER.
20. ALL HDPE OR NONMETALLIC PVC CONDUITS THAT CONNECT TO PULL BOXES REQUIRE A PVC END BELL CONNECTOR INSIDE THE PULL BOX.
21. PROVIDE REMOVABLE SEALANT SUCH AS DUCT SEAL IN THE CONDUITS AT THE CABINETS, PULL BOXES AND JUNCTION BOXES TO AVOID CONDENSATION CAUSED BY AIRFLOW THROUGH THE CONDUITS DUE TO TEMPERATURE DIFFERENCE. THIS WORK SHALL BE INCIDENTAL TO ASSOCIATED CONDUIT PAY ITEM.
22. PROVIDE 3 INCH PVC SCHEDULE 40 CONDUIT ELBOWS IN ALL GROUND MOUNTED CONCRETE LIGHT BASES FOR CABLE IN DUCT TYPE INSTALLATION. THIS WORK IS INCIDENTAL TO CONCRETE BASES PAY ITEMS.
23. AT EACH SIGNAL STANDARD BASE PROVIDE 2 INCH PVC SCHEDULE 40 CONDUIT FROM PULL BOX TO SIGNAL STANDARD BASE. PROVIDE 3 INCH SCHEDULE 40 CONDUIT FROM PULL BOX TO SIGNAL BASE AT TYPE 2 BASES WITH SHARED LIGHTING INFRASTRUCTURE AND AT ALL MONOTUBE BASES.
24. UNDERGROUND WIRE & CONDUIT SHOWN ON PLANS TO BE ABANDONED IN PLACE UNLESS DIRECTED BY THE ENGINEER. CONTRACTOR MAY CHOOSE TO REMOVE CONDUCTOR AT THEIR OWN EXPENSE.
25. LIGHT POLES INSTALLED BEHIND THE CURB NEED TO BE SET 30 INCHES BACK FROM FACE OF CURB TO CENTER OF POLE, SO TO MEET THE MINIMUM DISTANCE OF 24 INCHES FROM THE CURB FACE TO THE CURB SIDE FACE OF THE POLE.
26. ALL WIRE CONNECTIONS REQUIRE ANTI-OXIDANT TO BE APPLIED TO THE CONNECTIONS.
27. ALL HARDWARE NUT AND BOLT CONNECTIONS REQUIRE ANTI SEIZE TO BE APPLIED TO THEM
28. COORDINATE NEW CONDUIT CONNECTIONS WITH EXISTING CONDUIT, DUCT PACKAGES, AND PULL BOXES/ VAULTS/ MANHOLES WITH CITY OF MILWAUKEE TRAFFIC. THE CITY REQUIRES THREE WORKING DAYS ADVANCED NOTICE.
    CONTACT ELECTRICAL SUPERVISOR TRAFFIC SIGNALS - RUDY GUTIERREZ (OFFICE) 414-286-5941 (CELL) 414-708-5148
    TRAFFIC SIGNALS - DISPATCHER @ 414-286-3687
29. IMMEDIATELY AFTER THE CONTRACTOR HAS COMPLETED ALL THE ELECTRICAL PULL BOXES / VAULTS, CONDUIT AND CONDUIT CONNECTIONS, AND JUST BEFORE ELECTRICAL WORK IS COVERED UP WITH CONCRETE, SOIL, OR ETC. THE CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SHOP SUPERVISORS FOR FINAL INSPECTION AND APPROVAL OF ALL WORK.
    TRAFFIC SIGNALS - RUDY GUTIERREZ (OFFICE) 414-286-5941 (CELL) 414-708-5148
    TRAFFIC SIGNALS - DISPATCHER @ 414-286-3687
30. CONTRACTOR SHALL SUPPLY AS-BUILT DRAWINGS FOR ALL WORK BEING DONE DETAILING THE FINAL PLACEMENT OF CONDUIT, CABLING, EQUIPMENT, AND GEOMETRIC MODIFICATIONS UNDER THE CONTRACT. PROVIDE (.PDF FORMAT) COPY CONFORMING TO CMM 165, OR RECORD ALL CHANGES IN RED INK ONLY ON THE AS-LET (DESIGN) PAPER DRAWINGS. THE CITY OF MILWAUKEE DPW ENGINEER WILL REJECT AS-BUILTS WITH INCOMPLETE OR INCORRECT CONTENT OR NOT CONFORMING TO CMM STANDARDS. CONTRACTOR SHALL DISPOSE OF REMOVED EXISTING LAMPS IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

2

TRAFFIC SIGNAL GENERAL NOTES:

AS BUILT GUIDELINES:

PROVIDE AS-BUILT DRAWINGS DETAILING THE FINAL PLACEMENT OF CONDUIT, CABLING, EQUIPMENT, AND GEOMETRIC MODIFICATIONS UNDER THE CONTRACT. PROVIDE PDF COPY CONFORMING TO CMM 165, OR RECORD ALL CHANGES IN RED INK ONLY ON THE AS-LET (DESIGN) PAPER DRAWINGS. THE ENGINEER WILL REJECT AS-BUILTS WITH INCOMPLETE OR INCORRECT CONTENT OR NOT CONFORMING TO CMM STANDARDS.

UPON PROJECT COMPLETION, FOLLOW THE WISDOT REQUIREMENTS PER CMM 165.12 AS-BUILT PLANS, THE PROJECT ENGINEER AND/OR ELECTRICAL CONTRACTOR SHALL SUBMIT AN ELECTRONIC AS-BUILT PLAN. ANY CHANGES FROM THE AS-LET PLAN THAT WERE BUILT INTO THE PROJECT SHOULD BE RECORDED IN RED USING ADOBE ACROBAT PROFESSIONAL OR EQUIVALENT SOFTWARE. DO NOT SCAN FIELD NOTES TO CREATE THE DIGITAL AS-BUILT PLAN.

IF THERE IS A STRUCTURE DRAWING, INCLUDE ALL STRUCTURES DRAWING SHEETS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSERT ANY ADDENDUM OR REPLACEMENT DRAWING SHEETS. TO DO THIS, RENUMBER THEM SIMILARLY TO THE ORIGINAL DRAWING SHEET.

FOR EXAMPLE:
REVISED SHEET 5 WOULD REPLACE SHEET 5. HOWEVER, ALL THE ORIGINAL SHEETS SHALL REMAIN IN THE AS-BUILT. IF THE SHEET HAS BEEN REPLACED CROSS IT OUT WITH AN X AND INDICATE THE NUMBER OF ITS REPLACEMENT SHEET. IF ADDITIONAL SHEETS WERE ADDED, INSERT THEM IN THE ORIGINAL LOCATION AND LABEL THEM WITH THE PREVIOUS SHEET NUMBER FOLLOWED BY AN "A", "B", "C", ETC.

NOTE THE SHEET CHANGES ON THE TITLE SHEET UNDER THE ORDER OF SHEETS.

THE TITLE SHEET OF THE AS-BUILT DRAWING SHOULD INCLUDE THE FOLLOWING INFORMATION:

AS-BUILT DRAWING
SUPERVISOR:
PROJECT MANAGER:
CONTRACTOR LEADER:
CONTRACTOR COMPANY:
WORK STARTED:
WORK COMPLETED:

LINE OUT OR CROSS OUT ALL CHANGED INFORMATION AND WRITE-IN THE CORRECTED INFORMATION ABOVE THE ORIGINAL OR CLOSE TO IT WHEREVER POSSIBLE. USE BLANK SPACES ON THE DRAWING SO NOTES ARE NOT SUPERIMPOSED. DRAWINGS WITH EXCESSIVE DETAIL MAY REQUIRE AN ALTERNATE APPROACH. NUMBERED CHANGES OR ADDITIONS MAY BE SHOWN ON SUPPLEMENTAL NON-DRAWING SHEETS.

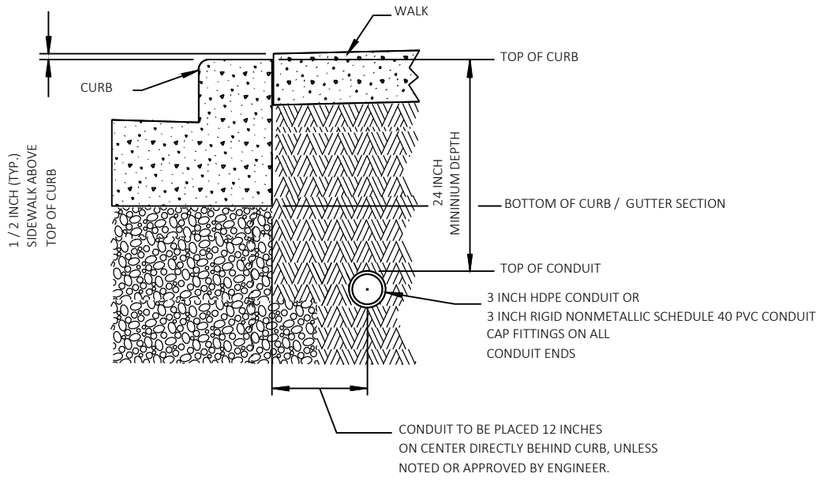
- LOCATE AND CLEARLY LABEL ALL CONDUIT RUNS, FITTINGS, SPLICE VAULTS, PULL BOXES, METER PEDESTALS, CONCRETE BASES, TRANSFORMERS, POLES AND OTHER APPURTENANCES IN TWO DIRECTIONS. SWING TIES SHOULD BE MADE FROM THE OBJECTS THAT ARE PERMANENT IN NATURE AND VISIBLE ON THE FINISHED SURFACE.
- STREET NAMES SHALL BE ON ALL SHEETS.
- SHOW ALL SIZES AND MATERIAL TYPES OF PIPES AND CONDUITS, IF CHANGED OR MODIFIED FROM ORIGINAL DESIGN.
- ALL HORIZONTAL DISTANCES SHALL BE SHOWN TO THE NEAREST TENTH OF A FOOT (I.E., 205.3'). ALL VERTICAL DISTANCES SHALL BE TO THE NEAREST INCH (I.E., 24")
- SHOW LOCATION AND ELEVATIONS ON CONDUIT AND FITTINGS WHERE CHANGES OR DEFLECTIONS IN DIRECTION OCCUR.
- SPECIAL DETAIL DRAWINGS MAY BE REQUIRED WHERE INSTALLATIONS ARE NOT SHOWN ON APPROVED CONSTRUCTION DRAWINGS FOR WHATEVER REASON OR WHERE REQUIRED FOR CLARITY.
- TYPICAL SERVICE INSTALLATION DETAILS WITH DEVIATIONS FROM ORIGINAL PLANS OR STANDARD DETAILS SHALL BE NOTED ON AS-BUILT DRAWINGS.
- NO ARBITRARY MARK-UPS WILL BE PERMITTED.

IF THERE ARE NO CORRECTIONS OR ADDITIONS TO THE AS-LET PLAN(S) PUT "NO CHANGE" ON THE SHEET WITH ALL OTHER REQUIRED AS-BUILT INFORMATION.

BY MAIL SEND TO:
CITY OF MILWAUKEE
INFRASTRUCTURE SERVICES DIVISION
TRANSPORTATION SECTION - CONSTRUCTION
CHIEF CONSTRUCTION ENGINEER
TONY KOTECKI
841 NORTH BROADWAY, ROOM 701
MILWAUKEE, WISCONSIN 53202

BY EMAIL SEND TO:
CITY OF MILWAUKEE
INFRASTRUCTURE SERVICES DIVISION
TRANSPORTATION SECTION - CONSTRUCTION
CHIEF CONSTRUCTION ENGINEER
TONY KOTECKI
AKOTEC@MILWAUKEE.GOV

NOTE: 1.) KEEP AREA BEHIND CURB FREE OF DEBRIS AND CONCRETE OVERPOUR.

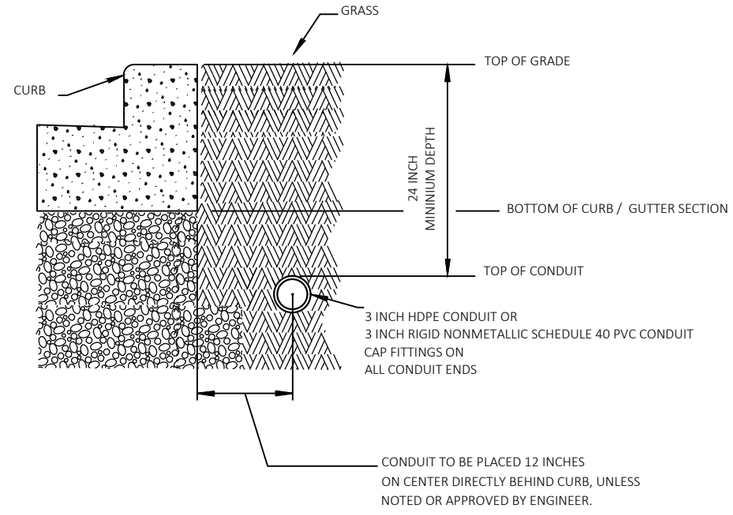


100 DETAIL "A"

TYPICAL CONDUIT INSTALLATION
BEHIND CURB UNDER WALK

NOT TO SCALE

NOTE: 1.) KEEP AREA BEHIND CURB FREE OF DEBRIS AND CONCRETE OVERPOUR.

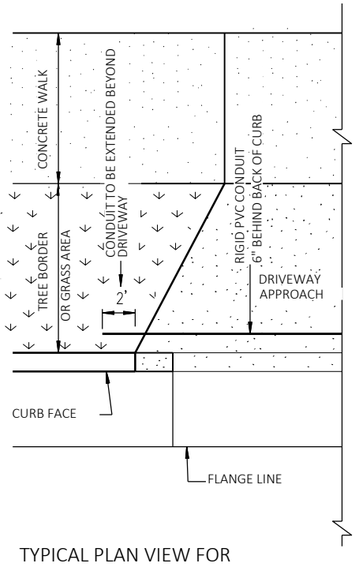


100 DETAIL "B"

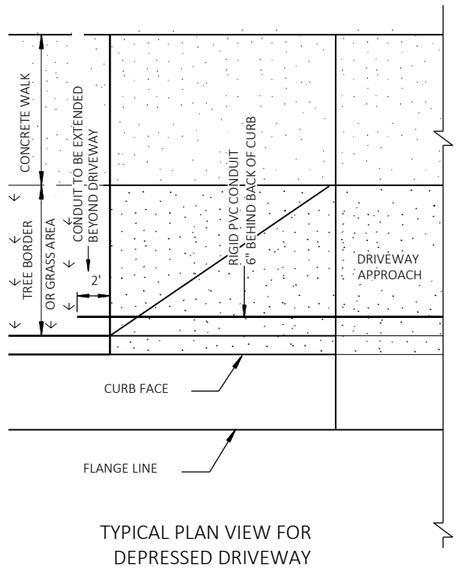
TYPICAL CONDUIT INSTALLATION
BEHIND CURB IN GRASS AREA

NOT TO SCALE

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM THE TRAFFIC SIGNALS MANAGER. CONTACT (414) 286-5941.



TYPICAL PLAN VIEW FOR
FLARED DRIVEWAY

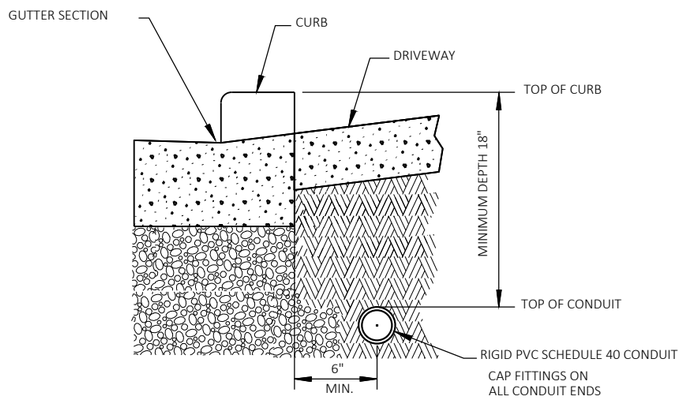


TYPICAL PLAN VIEW FOR
DEPRESSED DRIVEWAY

NOTE:

1.) KEEP AREA BEHIND CURB FREE OF DEBRIS AND CONCRETE OVERPOUR.

2.) CONDUIT TO BE PLACED APPROXIATELY 6 TO 12 INCHES ON CENTER DIRECTLY BEHIND CURB, UNLESS NOTED OR APPROVED BY ENGINEER.



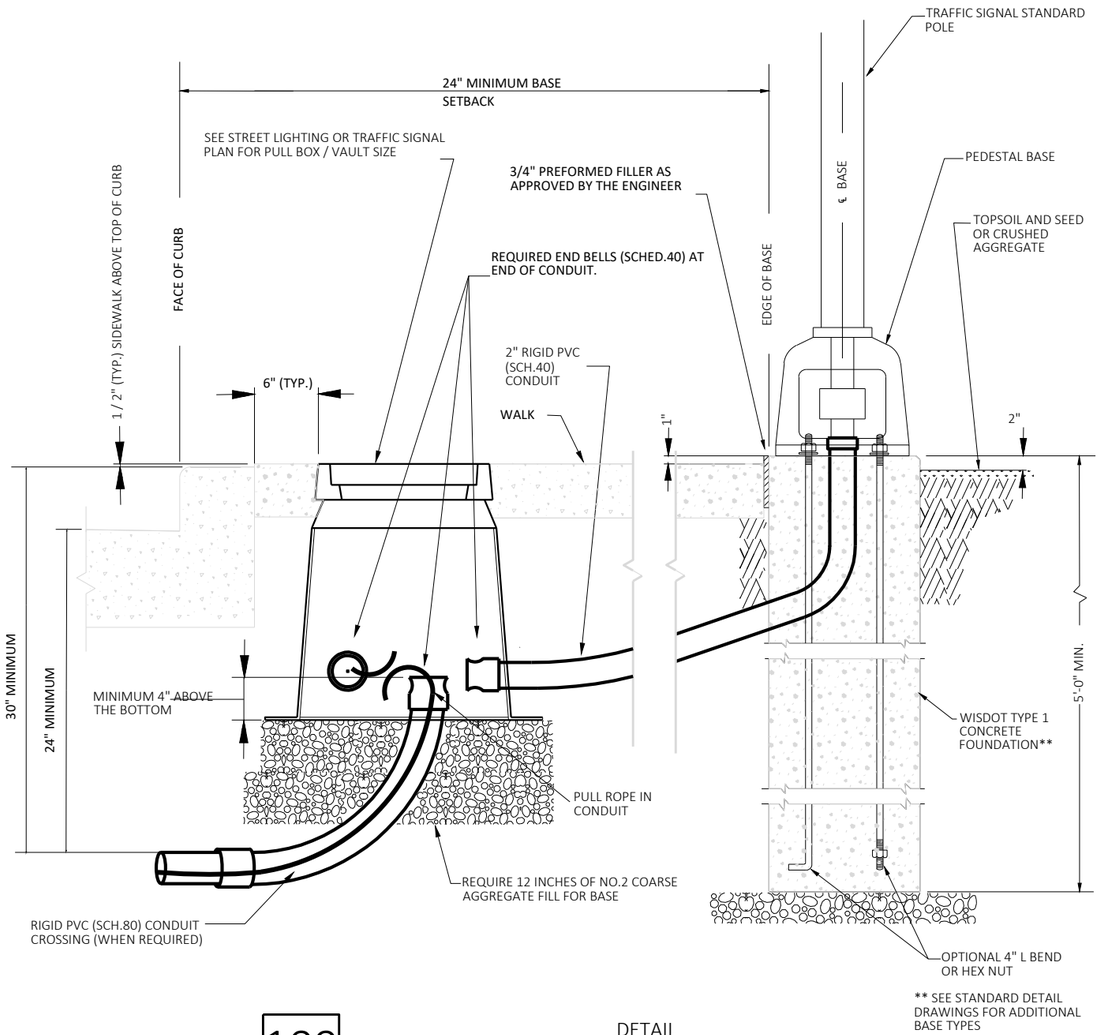
101

DETAIL

TYPICAL CONDUIT INSTALLATION
UNDER DRIVEWAYS OR PEDESTRIAN RAMPS

NOT TO SCALE

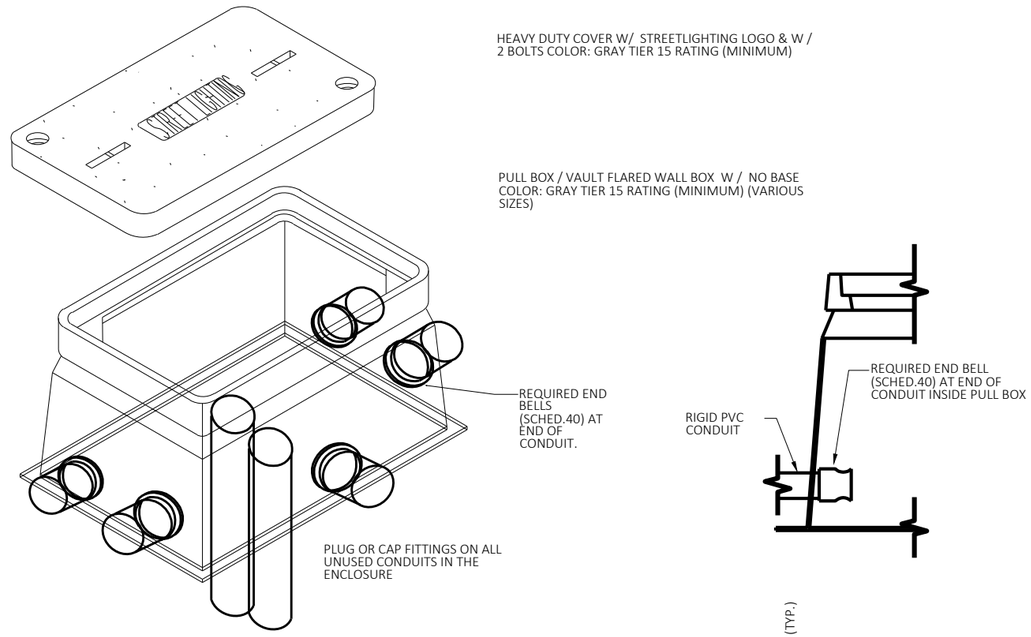
ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM THE TRAFFIC SIGNALS MANAGER. CONTACT (414) 286-5941.



109 DETAIL

TYPICAL CONDUIT INSTALLATION FROM PULL BOX / VAULT TO SIGNAL STANDARD AND TYPICAL BASE INSTALLATION

NOT TO SCALE



112 DETAIL

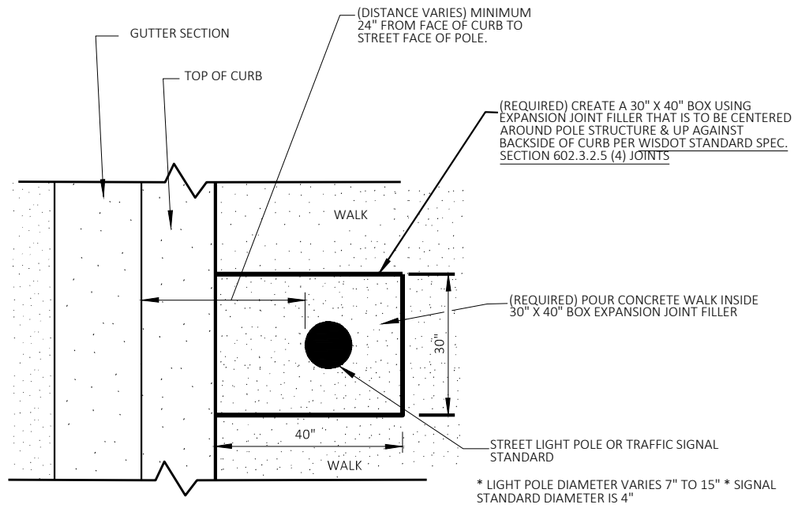
TYPICAL PULL BOX / VAULT INSTALLATION IN EITHER PAVEMENT OR GRASS AREAS

NOT TO SCALE

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM THE TRAFFIC SIGNALS MANAGER. CONTACT (414) 286-5941.

THE CONTRACTOR IS REQUIRED TO INSTALL EXPANSION JOINT FILLER INTO THE CONCRETE WALK, WHICH SHALL BE 1/2" WIDE MINIMUM TO BE USED TO CREATE A SEPARATION BETWEEN A SMALL CONCRETE AREA AROUND THE TRAFFIC & STREET LIGHTING FACILITIES AND THE REST OF THE CONCRETE WALK.

THE BOX SIZE OF THE AREA CREATED USING THE EXPANSION JOINT FILLER IS STANDARD AROUND LIGHT POLES AND TRAFFIC SIGNALS, BUT WILL VARY WHEN PLACED AROUND TRAFFIC & LIGHTING CONTROL CABINETS.



* LIGHT POLE DIAMETER VARIES 7" TO 15" * SIGNAL STANDARD DIAMETER IS 4"

NOT TO SCALE

122

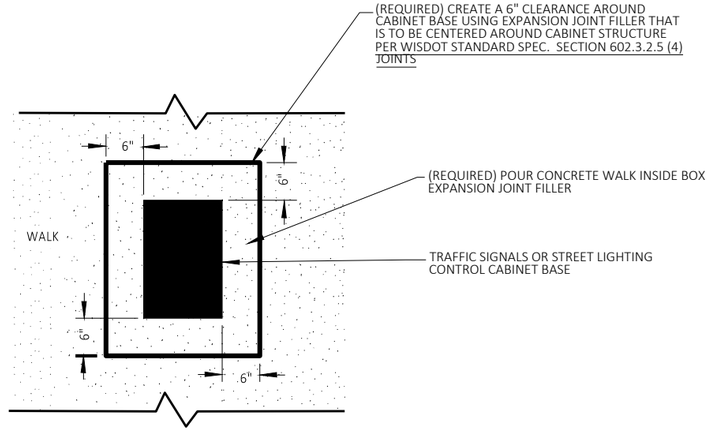
DETAIL VERSION #1

TYPICAL 30" X 40" BOX EXPANSION JOINT FILLER
AROUND STREET LIGHTING AND
TRAFFIC SIGNAL FACILITIES

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM THE TRAFFIC SIGNALS MANAGER. CONTACT (414) 286-5941.

THE CONTRACTOR IS REQUIRED TO INSTALL EXPANSION JOINT FILLER INTO THE CONCRETE WALK, WHICH SHALL BE 1/2" WIDE MINIMUM TO BE USED TO CREATE A SEPARATION BETWEEN A SMALL CONCRETE AREA AROUND THE TRAFFIC & STREET LIGHTING FACILITIES AND THE REST OF THE CONCRETE WALK.

THE BOX SIZE OF THE AREA CREATED USING THE EXPANSION JOINT FILLER IS STANDARD AROUND LIGHT POLES AND TRAFFIC SIGNALS, BUT WILL VARY WHEN PLACED AROUND TRAFFIC & LIGHTING CONTROL CABINETS.



122

DETAIL VERSION #2

NOT TO SCALE

TYPICAL BOX EXPANSION JOINT FILLER
AROUND TRAFFIC SIGNAL
OR STREET LIGHTING CONTROL CABINET

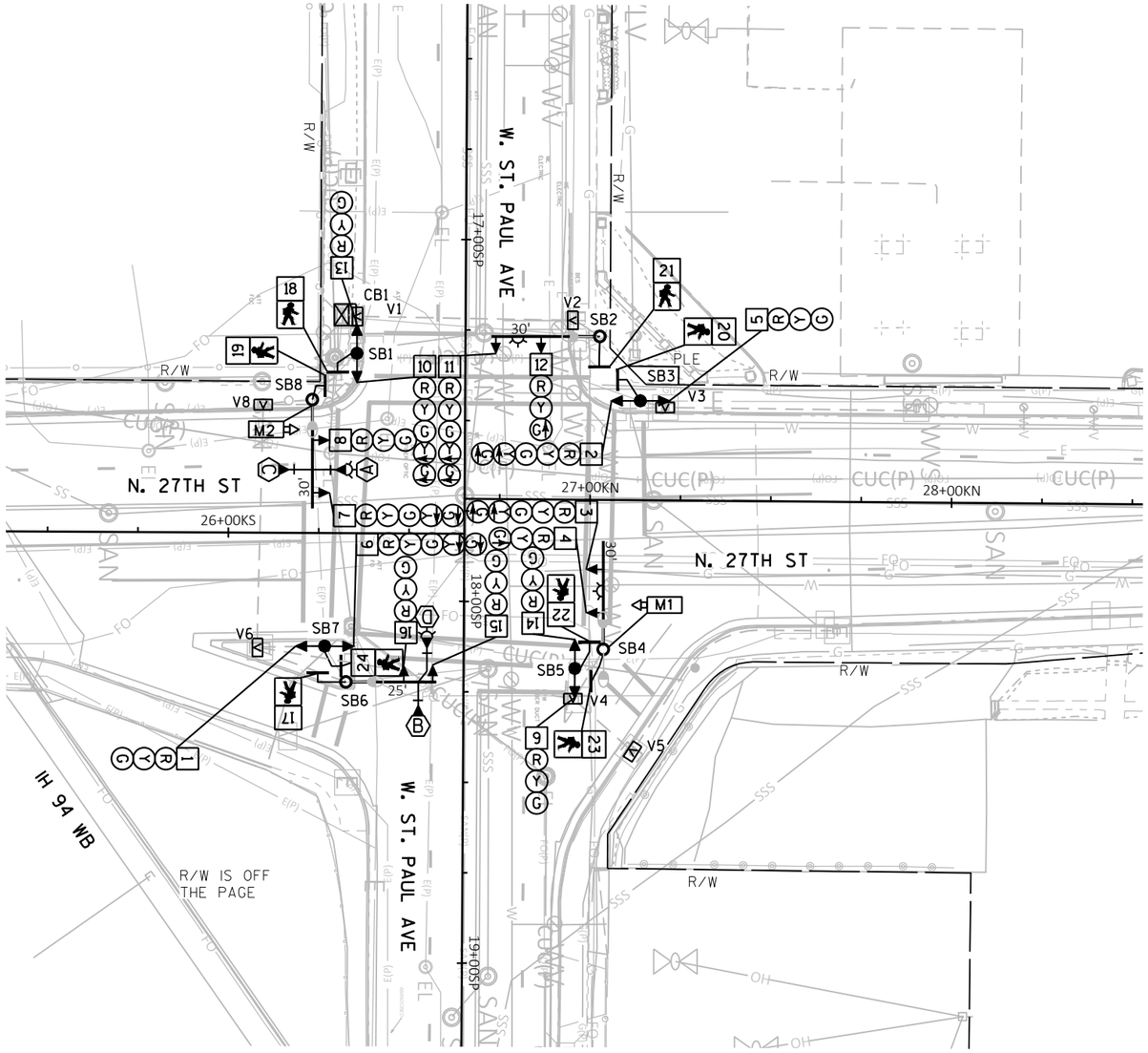
ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM THE TRAFFIC SIGNALS MANAGER. CONTACT (414) 286-5941.

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 25'-35' ARM
- CITY OF MILWAUKEE LUMINAIRE
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- Y YELLOW ARROW
- AG G GREEN ARROW
- PEDESTRIAN HEAD
- CONFIRMATION LIGHT
- EVP DETECTOR HEAD
- X EVP DESIGNATOR
- WALK/DONT WALK INDICATOR 12" (COUNTDOWN TIMER)
- CITY OF MILWAUKEE TRAFFIC SIGNAL PULL BOX
- MX MICROWAVE DETECTION UNIT

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING TO REMAIN. BOLD REPRESENTS ITEMS TO BE REMOVED.

N



CONSTRUCTION NOTES:
1. SEE LIGHTING REMOVAL PLANS FOR REMOVAL OF LUMINAIRES ON BASES SB2, SB4, SB6, AND SB8.

TRAFFIC CONTROL SIGNAL
W. ST. PAUL AVE & N. 27TH ST
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO. 3059

MUNICIPAL CONTACT: SCOTT REINBACHER
DESIGNED BY: HNTB
REVISED BY:

PAGE 1 OF 1

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 234	E

FILE NAME : C:\USERS\MJMAY\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\DSGN\EDGELINE\SIGNALS\27THANDST.PAUL_SR.DWG
LAYOUT NAME - 27THSTANDST.PAUL_SR
PLOT DATE : 4/25/2025 11:12 AM PLOT BY : MATTHEW MAY PLOT NAME : PLOT SCALE : 1 IN:40 FT

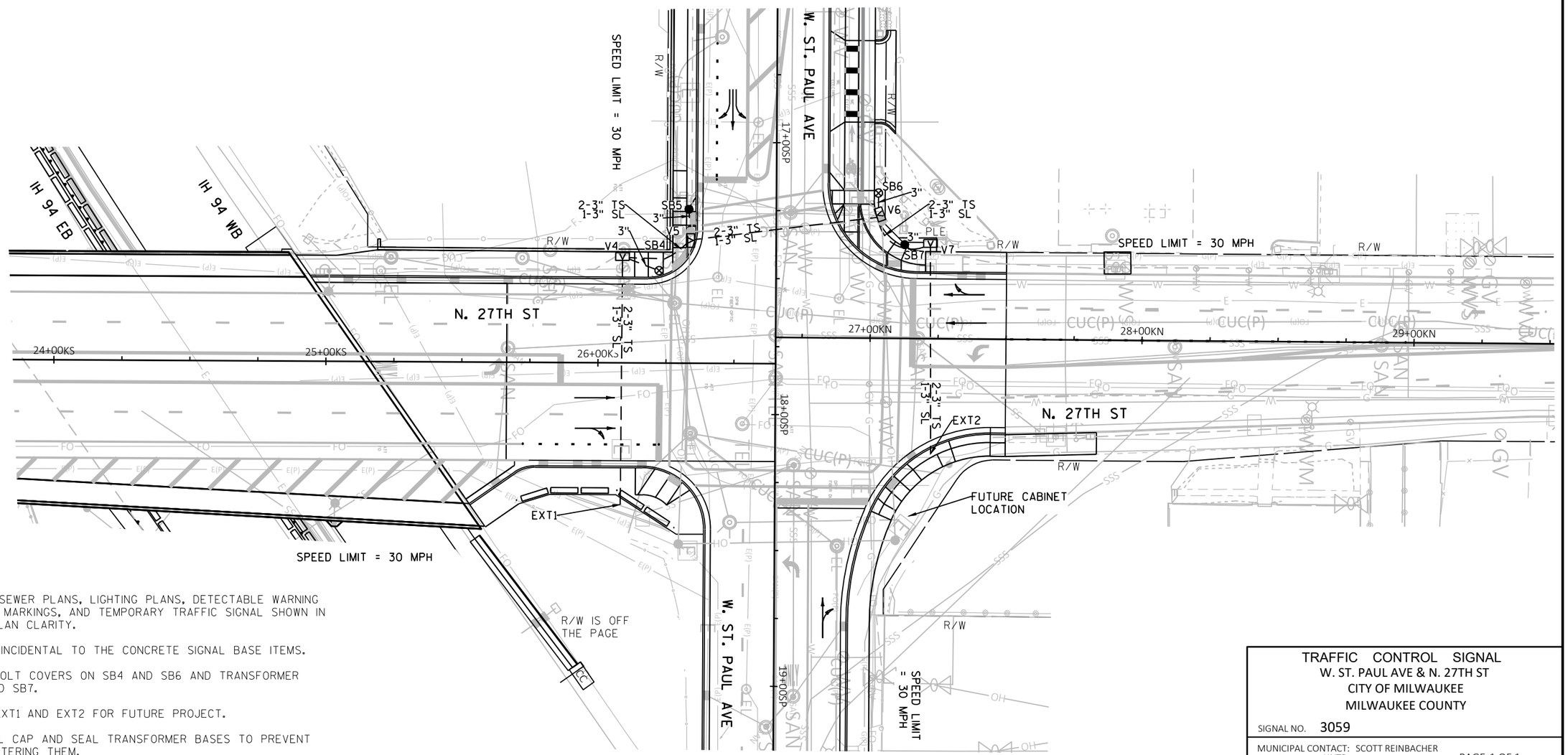
WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- CONDUIT 2", UNLESS OTHERWISE NOTED
- TRAFFIC SIGNAL BASE TYPE 2
- MONOTUBE BASE, TYPE 10 SPECIAL
- CITY OF MILWAUKEE TRAFFIC SIGNAL PULL BOX
- LANE DESIGNATION FOR INFORMATION ONLY

NOTE: ALL LENSES ARE 12-INCH
GRAY SHADE REPRESENTS EXISTING

N



CONSTRUCTION NOTES:

1. PROPOSED STORM SEWER PLANS, LIGHTING PLANS, DETECTABLE WARNING FIELDS, PAVEMENT MARKINGS, AND TEMPORARY TRAFFIC SIGNAL SHOWN IN GRAYSHADE FOR PLAN CLARITY.
2. ANY CASINGS ARE INCIDENTAL TO THE CONCRETE SIGNAL BASE ITEMS.
3. INSTALL ANCHOR BOLT COVERS ON SB4 AND SB6 AND TRANSFORMER BASES ON SB5 AND SB7.
4. CAP CONDUIT AT EXT1 AND EXT2 FOR FUTURE PROJECT.
5. CONTRACTOR SHALL CAP AND SEAL TRANSFORMER BASES TO PREVENT ANYTHING FROM ENTERING THEM.

TRAFFIC CONTROL SIGNAL
W. ST. PAUL AVE & N. 27TH ST
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO. 3059

MUNICIPAL CONTACT: SCOTT REINBACHER
DESIGNED BY: HNTB
REVISED BY:

PAGE 1 OF 1

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET 235	E

FILE NAME : C:\USERS\MJMAY\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\DSGN\EDGELINE\SIGNALS\27THANDST.PAUL_ELA_SP.DWG
LAYOUT NAME - I94_27THSTREET
PLOT DATE : 4/25/2025 10:59 AM
PLOT BY : MATTHEW MAY
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

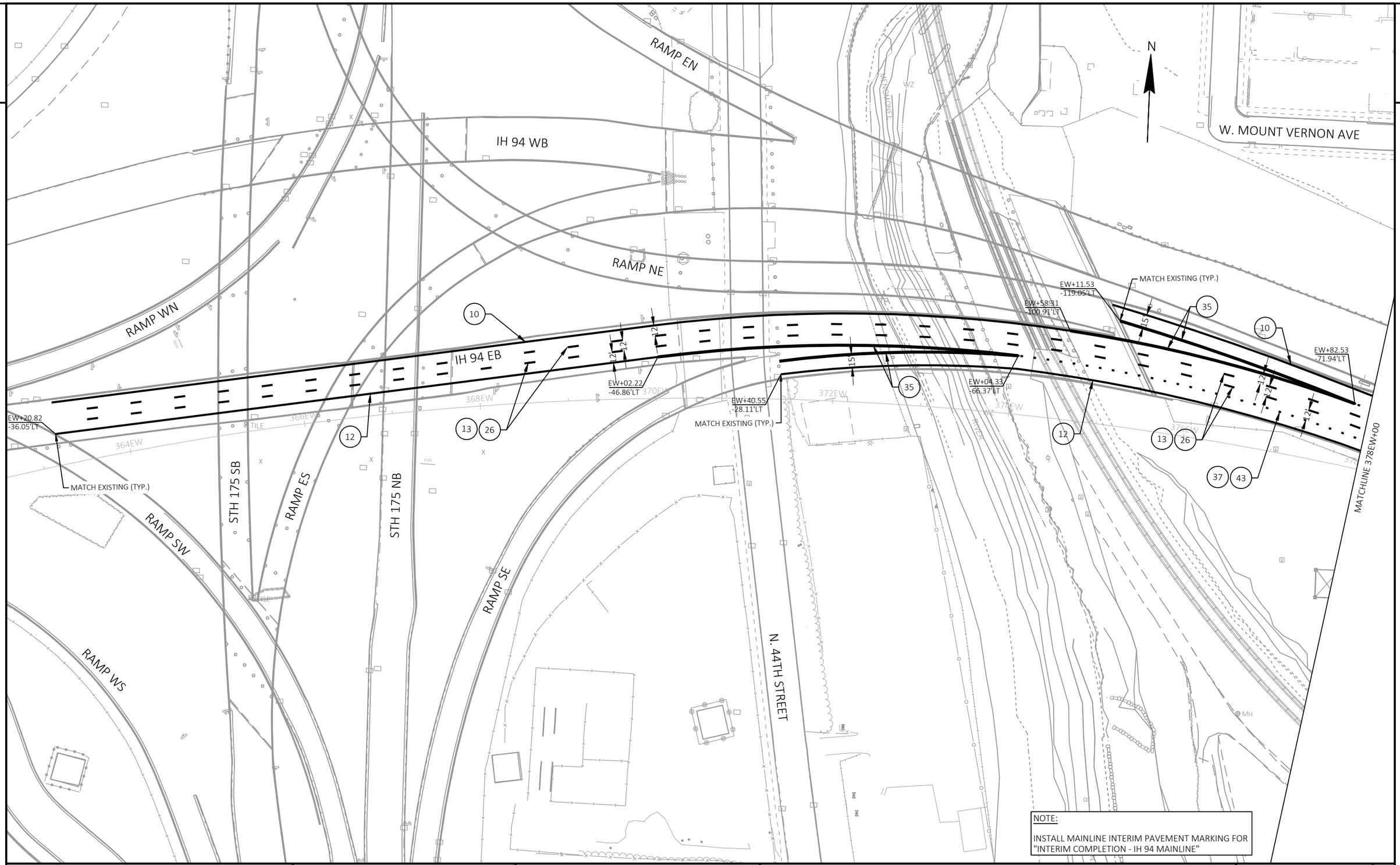
WISDOT/CADDS SHEET 42

2

PAVEMENT MARKING LEGEND

- 1 MARKING LINE EPOXY 4-INCH (YELLOW)
- 2 MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- 3 MARKING LINE EPOXY 4-INCH (WHITE)
- 4 MARKING LINE EPOXY 4-INCH (DASHED WHITE)(12.5' LINE 37.5' SKIP)
- 5 MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE)(3' LINE 9' SKIP)
- 7 MARKING LINE EPOXY 4-INCH (DASHED WHITE)(10' LINE 30' SKIP)
- 10 MARKING LINE EPOXY 6-INCH (YELLOW)
- 12 MARKING LINE EPOXY 6-INCH (WHITE)
- 13 MARKING LINE EPOXY 6-INCH (DASHED WHITE)(12.5' LINE 37.5' SKIP)
- 14 MARKING LINE EPOXY 6-INCH (DOT PATTERN WHITE)(3' LINE 9' SKIP)
- 26 MARKING EPOXY 6-INCH BLACK NON-GROOVED (DASHED BLACK)(12.5' LINE 37.5' SKIP)
- 30 MARKING LINE EPOXY 8-INCH (WHITE)
- 31 MARKING LINE EPOXY 8-INCH (DOT PATTERN WHITE)(3' LINE 9' SKIP)
- 35 MARKING LINE EPOXY 10-INCH (WHITE)
- 37 MARKING LINE EPOXY 10-INCH (DOT PATTERN WHITE)(3' LINE 9' SKIP)
- 43 MARKING LINE EPOXY 10-INCH BLACK NON-GROOVED (DASHED BLACK)(3' LINE 9' SKIP)
- 39 MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
- 51 MARKING ARROW EPOXY, TYPE 2 (WHITE)
- 52 MARKING ARROW EPOXY, TYPE 3 (WHITE)
- 53 MARKING ARROW EPOXY, TYPE 4 (WHITE)
- 57 MARKING ARROW EPOXY, BIKE LANE (WHITE)
- 58 MARKING WORD EPOXY, ONLY (WHITE)
- 59 MARKING SYMBOL EPOXY, BIKE LANE (WHITE)
- 60 MARKING SYMBOL EPOXY, PREFERENTIAL LANE (WHITE)
- 65 MARKING STOP LINE EPOXY 18-INCH (WHITE)
- 68 MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- 69 MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- 71 MARKING CHEVRON EPOXY 24-INCH (WHITE)
- 72 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- 76 MARKING CURB EPOXY (YELLOW)
- 77 MARKING ISLAND NOSE EPOXY (YELLOW)
- 78 HIGH FRICTION TRAFFIC MARKING GREEN BIKE LANE PANEL

2



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - MAINLINE (INTERIM)	SHEET 237	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024501-PM.DWG
LAYOUT NAME - 01-EW-01
PLOT DATE : 5/27/2025 4:48 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

N

N. 39TH STREET

N. 38TH STREET

W. PARK HILL AVE

IH 94 WB

IH 94 EB

MATCHLINE 378EW+00

MATCHLINE 393EW+00

14

EW+94.23
-48.59'LT

10

13

26

35

EW+41.65
-29.90'LT

EW+81.84
-13.36'LT

12

37

43

380EW

382EW

384EW

386EW

388EW

390EW

392EW

MWEL

MH

C.P. RAIL SYSTEM

NOTE:

INSTALL MAINLINE INTERIM PAVEMENT MARKING FOR "INTERIM COMPLETION - IH 94 MAINLINE"

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - MAINLINE (INTERIM)	SHEET 238	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024501-PM.DWG
LAYOUT NAME - 01-EW-02

PLOT DATE : 5/27/2025 4:48 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N. 37TH STREET

N. 36TH STREET

N. 35TH STREET

N. 34TH STREET

N. 33RD STREET

N

GAS STATION

W. PARK HILL AVE

IH 94 WB

IH 94 EB

12'

12'

12'

MATCHLINE 393EW+00

394EW

396EW

398EW

402EW

404EW

406EW

408

EW+93.81
-27.10'LT

EW+78.83
0.00'

35

12

13

26

EW+40.57
-17.18'LT

EW+46.08
-0.31'LT

35

EW+38.27
-15.11'LT

10

MATCHLINE 408EW+00

W. CANAL STREET

SIGN

NOTE:

INSTALL MAINLINE INTERIM PAVEMENT MARKING FOR "INTERIM COMPLETION - IH 94 MAINLINE"

2

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - MAINLINE (INTERIM)	SHEET 239	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024501-PM.DWG
LAYOUT NAME - 01-EW-03

PLOT DATE : 5/27/2025 4:48 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

N. 31ST STREET

N. 30TH STREET

N. 29TH STREET

W. MOUNT VERNON AVE

W. PARK HILL AVE

IH 94 WB

IH 94 EB

RAMP JD

N. 32ND STREET

W. CANAL STREET

GREVES STREET

MATCHLINE 408EW+00

MATCHLINE 423EW+00

EW+36.02
-1.95'LT

EW+65.02
-13.87'LT

EW+13.83
-138.24'LT

EW+15.81
-121.58'LT

EW+43.48
-106.66'LT

EW+44.37
-95.69'LT

EW+45.26
-84.73'LT

EW+46.13
-73.76'LT

EW+36.18
-150.53'LT

EW+36.95
-140.70'LT

EW+65.47
-27.65'LT

EB+82.77
21.40'RT

12

35

10

13

26

14

NOTE:

INSTALL MAINLINE INTERIM PAVEMENT MARKING FOR "INTERIM COMPLETION - IH 94 MAINLINE"

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - MAINLINE (INTERIM)	SHEET 240	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024501-PM.DWG
LAYOUT NAME - 01-EW-04

PLOT DATE : 5/27/2025 4:48 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

N. 27TH STREET

N. 26TH STREET

N. 25TH STREET

W. ST PAUL AVENUE

R/L SP

102TUD

B-40-1083

IH 94 WB

IH 94 EB

RAMP LC

GREVES STREET

ABANDONED

MELINOWA VALLEY DECORATIVE SP

MATCHLINE 423EW+00

MATCHLINE 437EW+50

TWB+52.28
-27.07'LT

TWB+52.24
-16.07'LT

TWB+52.19
-5.07'LT

+97.92
-12.48' LT

TEB+05.28
5.84'RT

TEB+94.27
-24.14'LT

TEB+95.09
-13.17'LT

TEB+08.81
20.44'RT

TEB+72.59
7.96'LT

+45.38
8.00' RT

TEB+19.56
4.92'RT

TEB+14.38
15.86'RT

TEB+71.61
23.65'RT

TEB+80.87
35.61'RT

12

10

35

13

26

NOTE:

INSTALL MAINLINE INTERIM PAVEMENT MARKING FOR "INTERIM COMPLETION - IH 94 MAINLINE"

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - MAINLINE (INTERIM)	SHEET 241	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024501-PM.DWG
LAYOUT NAME - 01-EW-05

PLOT DATE : 5/27/2025 4:49 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N. 25TH STREET

N. 22ND STREET

W. CLYBOURN AVENUE

IH 94 WB

IH 94 EB

W. ST PAUL AVENUE

+34EW

EW+08.85
-231.54'LT

EW+29.89
-221.41'LT

EW+56.73
-154.23'LT

EW+65.04
-142.10'LT

TEB+72.86
-90.72'LT

TEB+38.10
-93.58'LT

EW+34.31
-90.19'LT

EW+75.08
-107.32'LT

EW+77.52
-89.07'LT

EW+77.86
-81.26'LT

EW+09.41
-73.95'LT

EW+32.85
-36.05'LT

MATCH EXISTING (TYP)

EW+31.92
-1.06'LT

EW+43.90
-5.54'LT

MATCHLINE 437EW+50

MATCHLINE 452EW+35

NOTE:

INSTALL MAINLINE INTERIM PAVEMENT MARKING FOR "INTERIM COMPLETION - IH 94 MAINLINE"

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - MAINLINE (INTERIM)	SHEET 242	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024501-PM.DWG
LAYOUT NAME - 01-EW-06

PLOT DATE : 5/27/2025 4:49 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N. 20TH STREET

N. 19TH STREET

N. 18TH STREET

N. 17TH STREET

N

W. CLYBOURN AVENUE

IH 94 WB

IH 94 EB

W. ST PAUL AVENUE

MATCHLINE 452EW+35

31

3

1

MATCH EXISTING (TYP)

EW+28.13
-16.22'LT

12'

12'

12'

1'

1'

454EW

456EW

460EW

462EW

464EW

466EW

NOTE:

INSTALL MAINLINE INTERIM PAVEMENT MARKING FOR "INTERIM COMPLETION - IH 94 MAINLINE"

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - MAINLINE (INTERIM)	SHEET 243	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024501-PM.DWG
LAYOUT NAME - 01-EW-07

PLOT DATE : 5/27/2025 4:49 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

RAMP NW

RAMP NE

RAMP EN

MATCH EXISTING

MATCH EXISTING

MATCH EXISTING

MATCH EXISTING

3

3

3

30

30

30

4

31

1

5

12'

12'

12'

STH 175 SB

STH 175 NB

W. BLUEMOUND ROAD

N. 44TH STREET

MATCHLINE A

2

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - MAINLINE - STH 175	SHEET 244	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024501A-PM.DWG
LAYOUT NAME - 02-NN-05

PLOT DATE : 5/27/2025 4:49 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

W. WISCONSIN AVENUE

W. WELLS STREET

STH 175 SB

STH 175 NB

3

4

5

1

MATCH EXISTING

EXISTING PAVEMENT MARKINGS TO REMAIN (TYP.)

12'

12'

12'

MATCHLINE A

N. 45TH PLACE

MENOMONEE RIVER

W. MENOMONEE RIVER

TOWER

WALL

GATE

FOUND

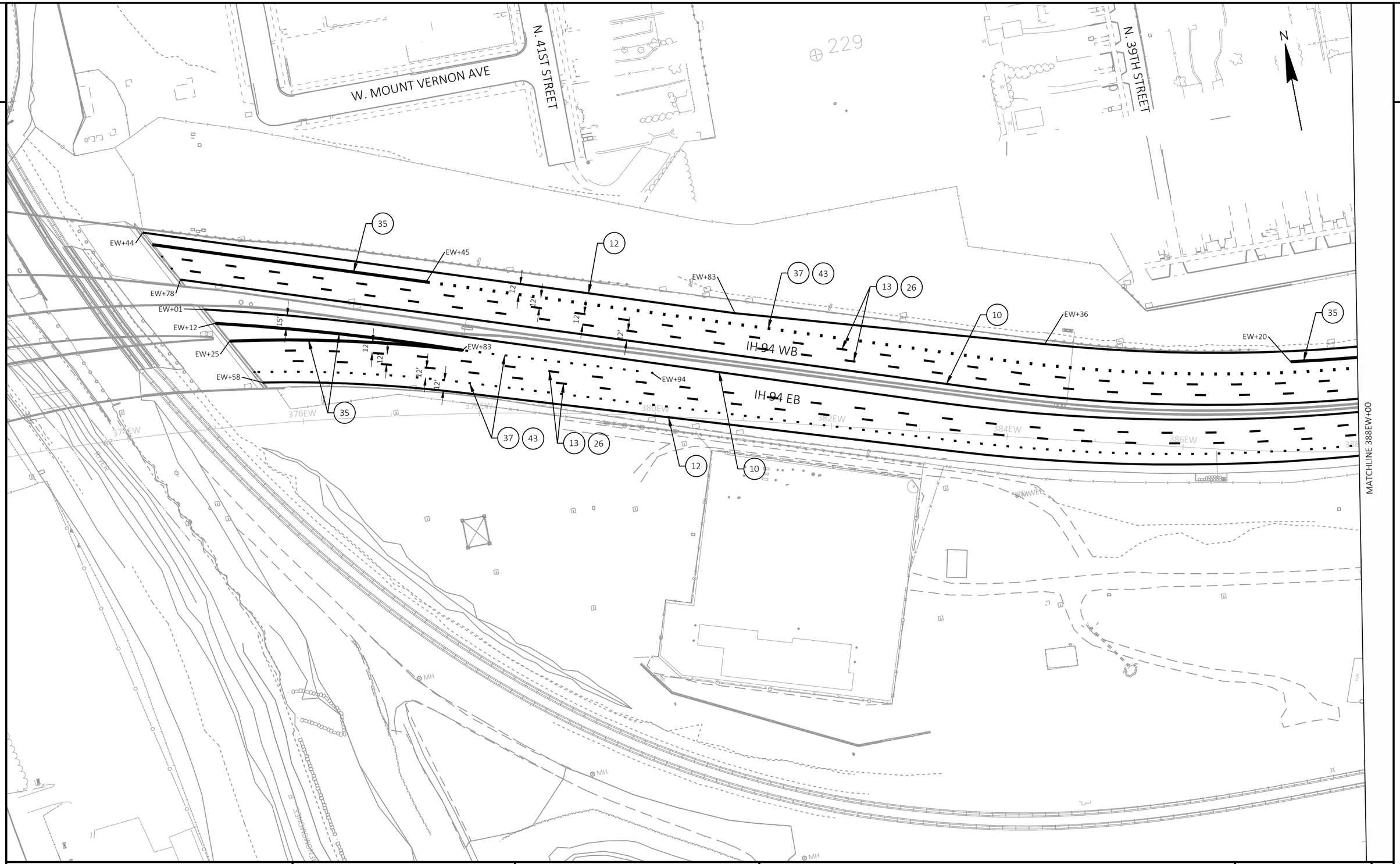
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - MAINLINE - STH 175	SHEET 245	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024501A-PM.DWG
LAYOUT NAME - 02-NN-06

PLOT DATE : 5/27/2025 4:49 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

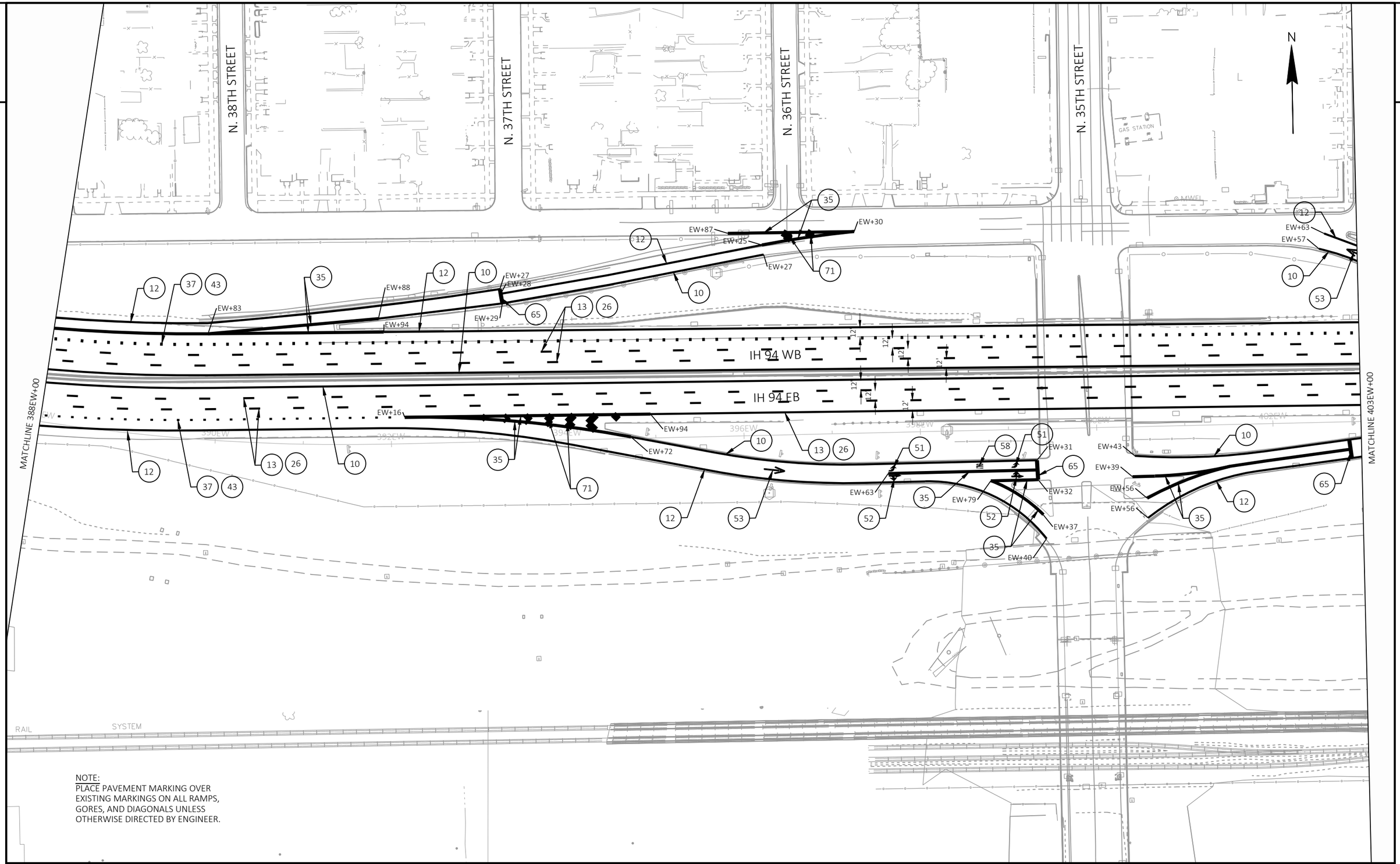


PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - MAINLINE (MILL AND OVERLAY)	SHEET 246	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024504-PM.DWG
LAYOUT NAME - 01-EW-01

PLOT DATE : 5/27/2025 4:49 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - MAINLINE (MILL AND OVERLAY)	SHEET 247	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024504-PM.DWG
LAYOUT NAME - 01-EW-02
PLOT DATE : 5/27/2025 4:49 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

NOTE:
PLACE PAVEMENT MARKING OVER EXISTING MARKINGS ON ALL RAMPS, GORES, AND DIAGONALS UNLESS OTHERWISE DIRECTED BY ENGINEER.

N. 34TH STREET
N. 33RD STREET
N. 31ST STREET
N. 30TH STREET
W. PARK HILL AVE
W. CANAL STREET
N. 32ND STREET
IH 94 WB
IH 94 EB
MATCHLINE 403EW+00
MATCHLINE 418EW+00
SIGN
ABANDONED

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - MAINLINE (MILL AND OVERLAY)	SHEET 248	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024504-PM.DWG
LAYOUT NAME - 01-EW-03
PLOT DATE : 5/27/2025 4:49 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

W. MOUNT VERNON AVE

N. 29TH STREET

W. ST PAUL AVENUE

N. 27TH STREET

N

MATCHLINE 418EW+00

MATCHLINE 433EW+00

RAMP JD

RAMP LC

IH 94 WB

IH 94 EB

MATCH EXISTING RAMP PAVEMENT MARKINGS

MATCH EXISTING RAMP PAVEMENT MARKINGS

MATCH EXISTING RAMP PAVEMENT MARKINGS

GREVES STREET

GREVES STREET

ABANDONED

ABANDONED

ABANDONED

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - MAINLINE (MILL AND OVERLAY)	SHEET 249 E

NOTE:
PLACE PAVEMENT MARKING OVER EXISTING MARKINGS ON ALL RAMPS, GORES, AND DIAGONALS UNLESS OTHERWISE DIRECTED BY ENGINEER.

N

W. CLYBOURN AVENUE

N. 26TH STREET

N. 25TH STREET

W. ST PAUL AVENUE

IH 94 WB

IH 94 EB

MENOMONEE VALLEY DECORATIVE SIGN

MATCHLINE 433EW+00

MATCHLINE 448EW+00

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - MAINLINE (MILL AND OVERLAY)	SHEET 250	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024504-PM.DWG
LAYOUT NAME - 01-EW-05
PLOT DATE : 5/27/2025 4:49 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

2

N

N. 22ND STREET

N. 20TH STREET

N. 19TH STREET

W. CLYBOURN AVENUE

W. ST PAUL AVENUE

IH 94 WB

IH 94 EB

MATCHLINE 448EW+00

71 35 12 EW+24 37 43 EW+09 13 26 EW+29 EW+28 EW+80 EW+78

10 12 13 26

12' 12' 12' 12'

11 11 11 11

452EW 460EW 462EW

SIGN SIGN

GATE

MH MWEL

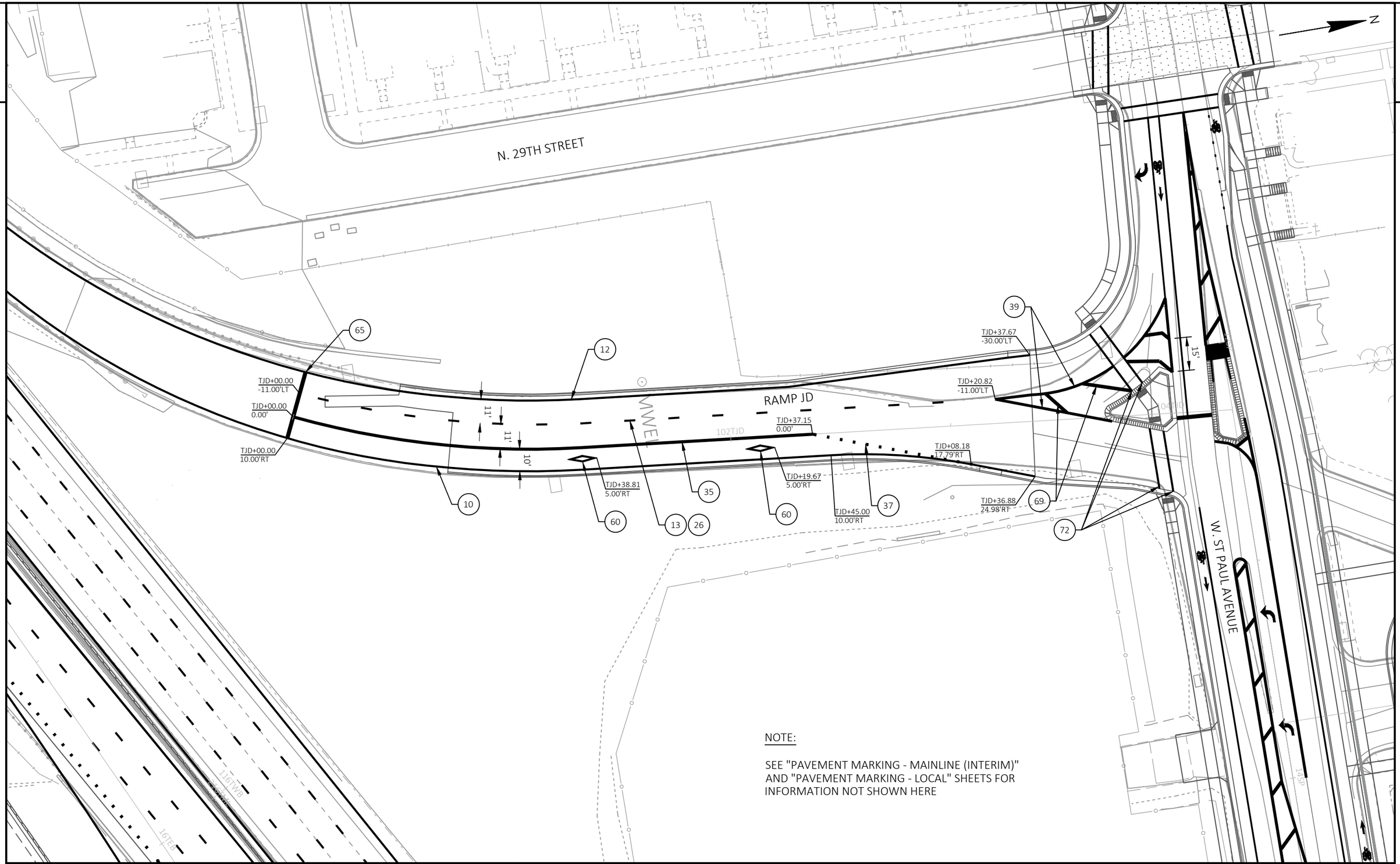
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - MAINLINE (MILL AND OVERLAY)	SHEET 251	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024504-PM.DWG
LAYOUT NAME - 01-EW-06

PLOT DATE : 5/27/2025 4:49 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



NOTE:

SEE "PAVEMENT MARKING - MAINLINE (INTERIM)" AND "PAVEMENT MARKING - LOCAL" SHEETS FOR INFORMATION NOT SHOWN HERE

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - RAMPS	SHEET 252	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024502-PM.DWG
LAYOUT NAME - 01-TJD-01
PLOT DATE : 7/24/2025 4:06 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

IH 94 WB

IH 94 EB

N. 27TH STREET

W. ST PAUL AVENUE

RAMP LC

15'

12'

SP+40.33
31.55'RT

SP+51.91
68.72'RT

SP+53.51
94.94'RT

SP+64.42
69.41'RT

SP+73.42
69.74'RT

SP+17.73
31.56'RT

51

35

65

52

10

12

53

NOTE:

SEE "PAVEMENT MARKING - MAINLINE (INTERIM)" AND "PAVEMENT MARKING - LOCAL" SHEETS FOR INFORMATION NOT SHOWN HERE

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - RAMPS	SHEET 253	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024502-PM.DWG
LAYOUT NAME - 02-TLC-01
PLOT DATE : 5/27/2025 4:48 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

W. ST PAUL AVENUE

N. 28TH STREET

W. CLYBOURN AVENUE

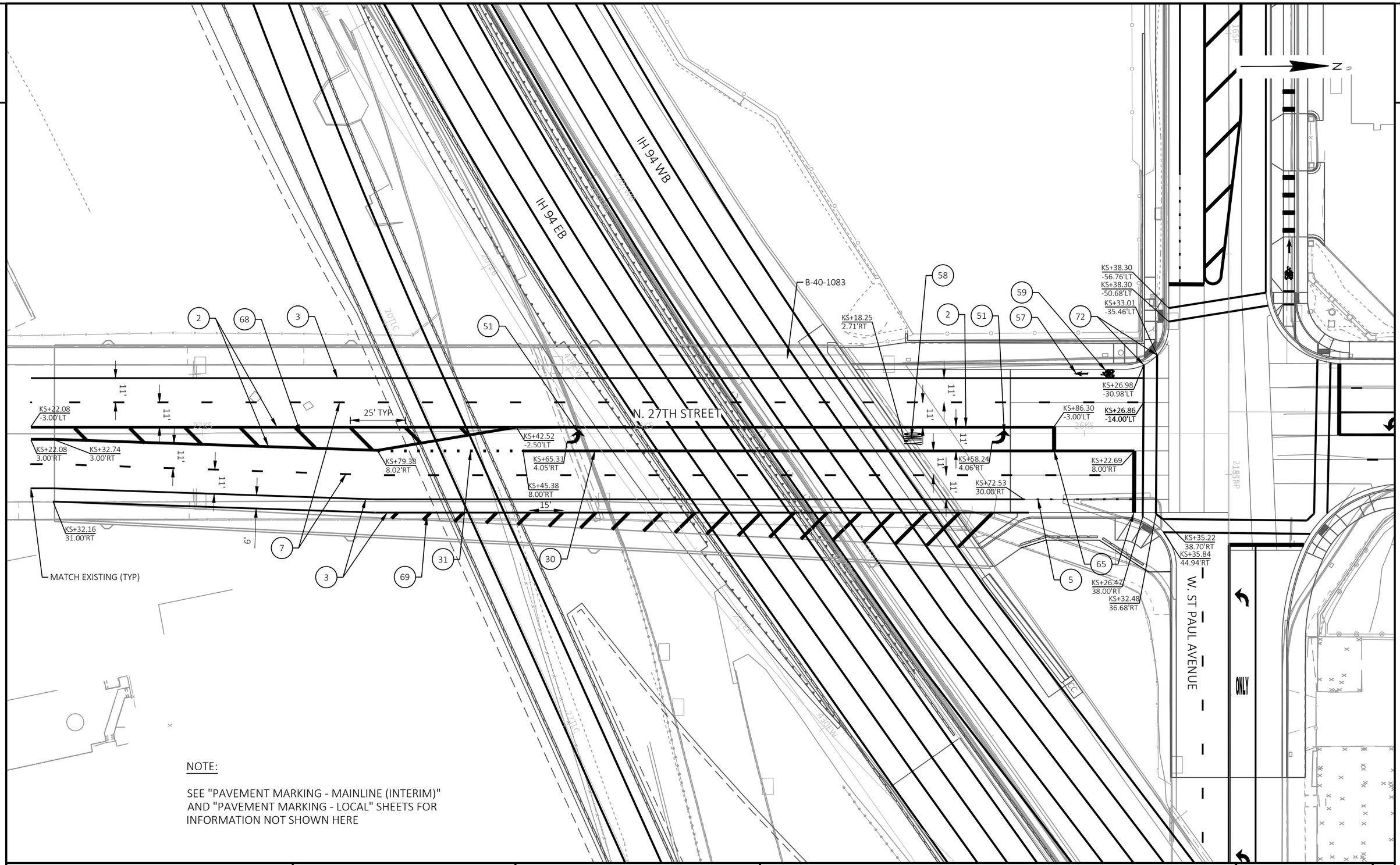
NOTE:

NO PROPOSED PAVEMENT MARKINGS ON 28TH STREET.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - LOCAL	SHEET 254	E

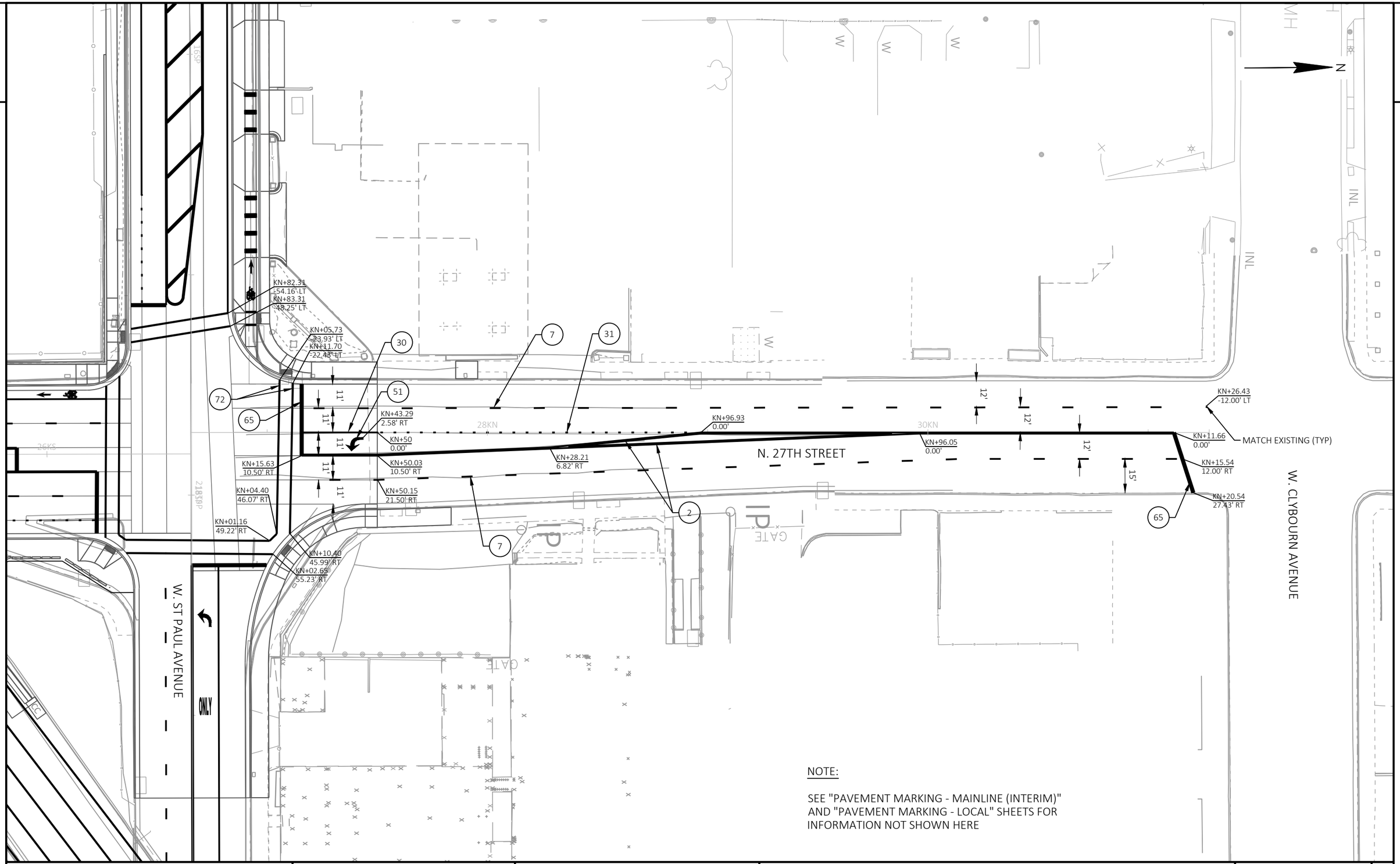
FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024502-PM.DWG
LAYOUT NAME - 03-J-01

PLOT DATE : 5/27/2025 4:48 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:40 FT



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - LOCAL	SHEET 255	E

2



NOTE:

SEE "PAVEMENT MARKING - MAINLINE (INTERIM)" AND "PAVEMENT MARKING - LOCAL" SHEETS FOR INFORMATION NOT SHOWN HERE

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - LOCAL	SHEET 256	E

2

N

N. 29TH STREET

N. 28TH STREET

W. ST PAUL AVENUE

RAMP JD

MH

TLE

W

72 59 5 2 3 30 69 57 59 2

SP+94.37 -11.00'LT

SP+94.21 0.01'RT

SP+94.04 11.44'RT

SP+93.97 16.44'RT

SP+48.16 -11.00'LT

SP+62.68 -11.00'LT

SP+63.04 0.00'LT

SP+35.34 -4.74'LT

SP+66.94 -16.61'LT

SP+62.26 -5.89'LT

SP+28.71 -3.14'LT

SP+80.83 -3.14'LT

SP+00.83 -6.00'LT

SP+88.83 -6.00'LT

25' TYP

11'

5'

17'

SP+26.08 16.06'RT

SP+75.87 21.90'RT

SP+99.69 7.45'RT

SP+09.37 24.14'RT

SP+30.80 20.55'RT

SP+42.88 9.08'RT

SP+71.91 22.00'RT

SP+00.83 5.00'RT R3'

SP+00.83 11.00'RT

SP+00.83 5.00'RT

SP+92.00 24.50'RT

SP+03.93 24.50'RT

R19

OUTLOT

77 76 68 68 39 69 65 59 51 3 57 59 51 3 68

72 59 51 3 57

MATCHLINE 16SP+00

NOTE:

SEE "PAVEMENT MARKING - RAMPS" SHEETS FOR INFORMATION NOT SHOWN HERE

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - LOCAL	SHEET 257	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024502-PM.DWG
LAYOUT NAME - 06-SP-01

PLOT DATE : 5/27/2025 4:49 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N. 27TH STREET

N. 26TH STREET

W. ST PAUL AVENUE

IH 94 WB

IH 94 EB

RAMP LC

MATCHLINE 16SP+00

SEE CONSTRUCTION DETAIL "BIKE LANE CROSSING AT COMMERCIAL DRIVEWAY PAVEMENT MARKING DETAIL" FOR HIGH FRICTION MARKING DETAIL

MATCH EXISTING (TYP)

NOTE:

SEE "PAVEMENT MARKING - MAINLINE (INTERIM)" AND "PAVEMENT MARKING - LOCAL" SHEETS FOR INFORMATION NOT SHOWN HERE

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PAVEMENT MARKING - LOCAL	SHEET 258 E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-024502-PM.DWG
LAYOUT NAME - 06-SP-02
PLOT DATE : 5/27/2025 4:49 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

GENERAL NOTES FOR TRAFFIC CONTROL

1) THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.
2) A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE WORK AREAS IF WARRANTED BY CONDITIONS OR AS DIRECTED BY THE ENGINEER. FLAGGING IS NOT PERMITTED ON FREEWAY LANES.
3) ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
4) "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
5) FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A TYPE C STEADY BURN WARNING LIGHT.
6) ALL TYPE III BARRICADES SHALL BE 8' WIDE, UNLESS OTHERWISE NOTED, AND BE EQUIPPED WITH TWO TYPE "A" (LOW INTENSITY FLASHING) LIGHTS.
7) DIMENSIONS TO CONCRETE BARRIER TEMPORARY PRECAST ARE TO THE FACE OF BARRIER ADJACENT TO TRAFFIC.
8) WORK AREAS SHOWN MAY NOT ILLUSTRATE ALL REMOVALS. SEE REMOVAL SHEETS FOR ADDITIONAL INFORMATION.
9) ALL TRAFFIC CONTROL SIGNS LOCATED IN MEDIANS SHALL BE MOUNTED ON CONCRETE BARRIER UNLESS OTHERWISE NOTED. SEE TRAFFIC CONTROL DETAILS.
10) WHEN A SEGMENT OF THE PROJECT IS NOT SHOWN ON THE STAGING PLANS, USE THE SAME TRAFFIC CONTROL AS THE PREVIOUS STAGE FOR THAT SEGMENT.
11) TRAFFIC CONTROL DRUM SPACING SHALL BE 50' UNLESS OTHERWISE NOTED.
12) 16" X 16" ORANGE FLAGS SHALL BE INCIDENTAL TO TRAFFIC CONTROL SIGN BID ITEM.
13) TEMPORARY RAISED PAVEMENT MARKERS WHERE SHOWN SHALL BE PLACED AS WEATHER PERMITS OR AS DIRECTED BY THE ENGINEER.
14) INSTALL PROPOSED TRAFFIC CONTROL SIGNS ON BOTH OUTSIDE SHOULDER AND MEDIAN SIDE OF ALL DIVIDED ROADWAYS.
15) CONCRETE BARRIER TEMPORARY PRECAST SHALL BE ANCHORED ONLY IN INSTANCES AS DEFINED IN STANDARD DETAIL DRAWING "CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6". THIS APPLIES WHERE ANCHORED BARRIER IS NOTED IN THE PLANS.
16) MAINTAIN 2/10 MILE MARKER SIGNS. MOVE EXISTING SIGNS OR PROVIDE TEMPORARY SIGNS AS NEEDED DURING STAGED TRAFFIC AND AS DIRECTED BY THE ENGINEER.
17) EXCEPT AS PROVIDED FOR WITH STSP 107-034, DO NOT PLACE ANY TRAFFIC CONTROL ITEMS WITHIN 50-FEET OF RAILROAD RIGHT-OF-WAY, INCLUDING ITEMS THAT COULD FOUL THE SAME AREA.
18) ALL PORTABLE TRAFFIC SENSORS AND PORTABLE CHANGEABLE MESSAGE SIGNS AND/OR FLASHING BEACON SIGNS REQUIRED TO IMPLEMENT A SMART WORK ZONE SYSTEM FOR THIS CONTRACT ARE TO BE INSTALLED, OPERATED, AND MAINTAINED UNDER PROJECT 1060-27-71. CONTRACTOR TO COORDINATE WITH PROJECT 1060-27-71 FOR ANY ADJUSTMENTS TO SMART WORK ZONE AS RESULT OF TRAFFIC CONTROL CHANGES.

TEMPORARY PAVEMENT MARKING LEGEND

2

100 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
101 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
109 TEMPORARY MARKING LINE EPOXY 6-INCH (YELLOW)
110 TEMPORARY MARKING LINE EPOXY 6-INCH (WHITE)
111 TEMPORARY MARKING LINE EPOXY 6-INCH (DASHED WHITE) (12.5' LINE, 37.5' SKIP)
112 TEMPORARY MARKING LINE BLACK EPOXY 6-INCH (DASHED BLACK) (12.5' LINE, 37.5' SKIP)
113 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
114 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
116 TEMPORARY MARKING LINE EPOXY 6-INCH (DOT PATTERN WHITE) (3' LINE, 9' SKIP)
129 TEMPORARY MARKING LINE EPOXY 10-INCH (WHITE)
147 TEMPORARY MARKING ARROW REMOVABLE TAPE, TYPE 2 (WHITE)
148 TEMPORARY MARKING ARROW REMOVABLE TAPE, TYPE 3 (WHITE)
150 TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

NOTE
- ANY TEMPORARY MARKINGS SHOWN IN STAGING PLANS IN DARK GRAY WERE INSTALLED IN PREVIOUS STAGE AND CAN REMAIN IN PLACE.

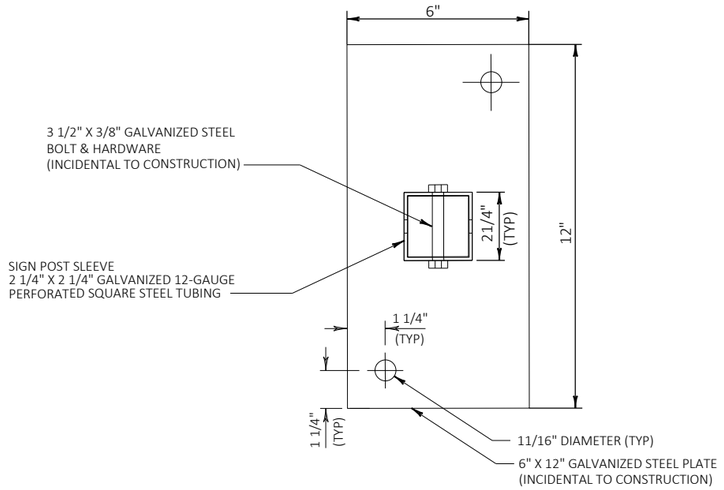
TRAFFIC CONTROL DEVICES LEGEND

TYPE II / III BARRICADE
TYPE II / III BARRICADE WTH ATTACHED SIGN
TRAFFIC CONTROL DRUM
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
CONNECTED ARROW BOARD
SIGN ON PERMANENT SUPPORT
SIGN ON TEMPORARY SUPPORT
TYPE A WARNING LIGHT (FLASHING)
TYPE C WARNING LIGHT (STEADY BURN)
CONCRETE BARRIER TEMPORARY PRECAST
CONCRETE BARRIER TEMPORARY PRECAST (INSTALLED IN PREVIOUS STAGE)

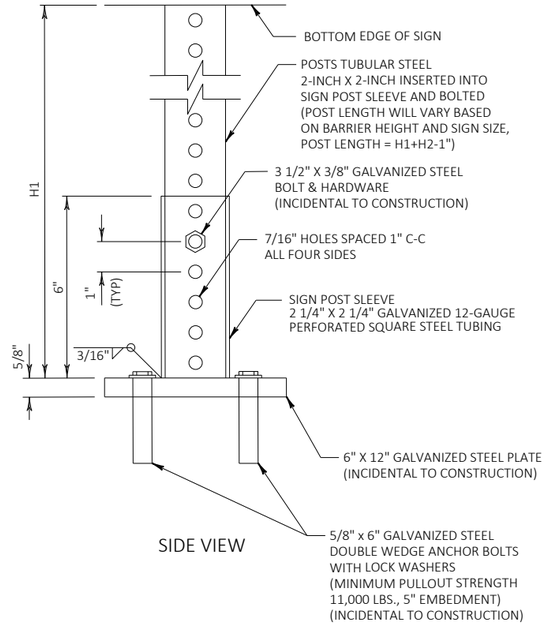
WORK AREA
TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
DIRECTION OF TRAFFIC
PCMS/MB PORTABLE CHANGEABLE MESSAGE SIGN
FMS FIXED MESSAGE SIGN
CC TEMPORARY CRASH CUSHION*
CC TEMPORARY CRASH CUSHION (INSTALLED IN PREVIOUS STAGE)
(S CONNECTED WORK ZONE START LOCATION MARKER
(E CONNECTED WORK ZONE END LOCATION MARKER
PORTABLE TRAFFIC SENSOR
FBS FLASHING BEACON SIGNS
FENCE TEMPORARY 6-FOOT

NOTE
* CRASH CUSHION TEMPORARY LOW MAINTENANCE LEFT IN PLACE TO BE USED AS NOTED IN THE PLAN

2

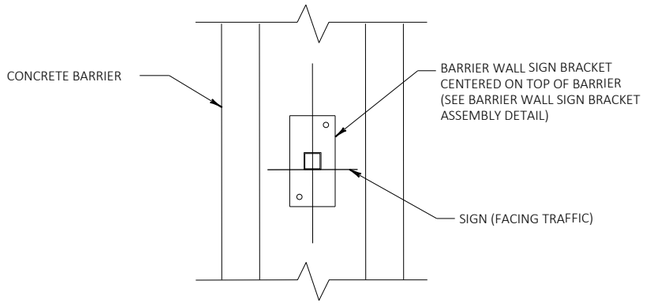


PLAN VIEW

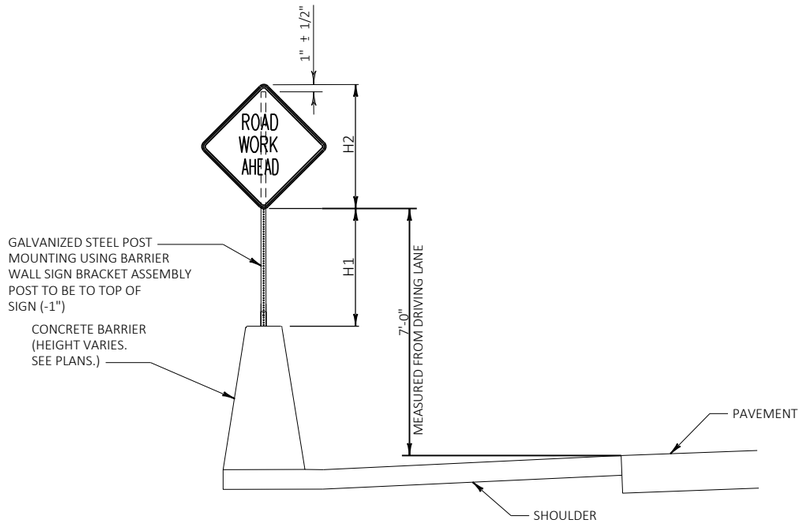


SIDE VIEW

BARRIER WALL SIGN BRACKET ASSEMBLY DETAIL



PLAN VIEW



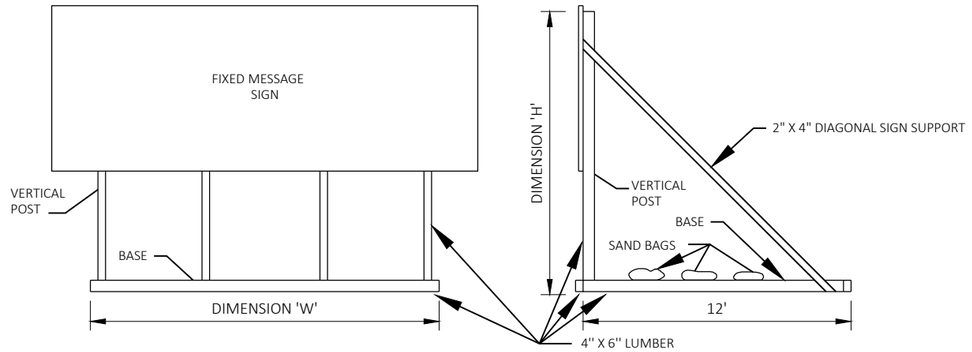
SIDE VIEW

MEDIAN BARRIER MOUNTING DETAIL

MOUNTING SIGNS TO MEDIAN BARRIER

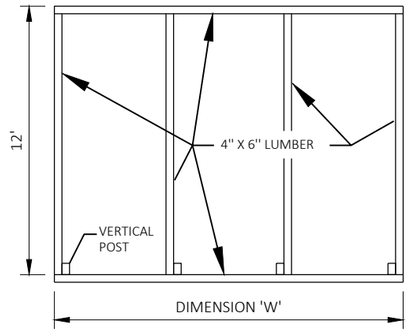
NOT TO SCALE

FIXED MESSAGE SIGN PORTABLE SUPPORT SPECIAL



FRONT VIEW

SIDE VIEW



BASE PLAN VIEW

ANTICIPATED DIMENSIONS & POSTS REQUIRED

(FOR INFORMATION ONLY, CONTRACTOR IS TO VERIFY)

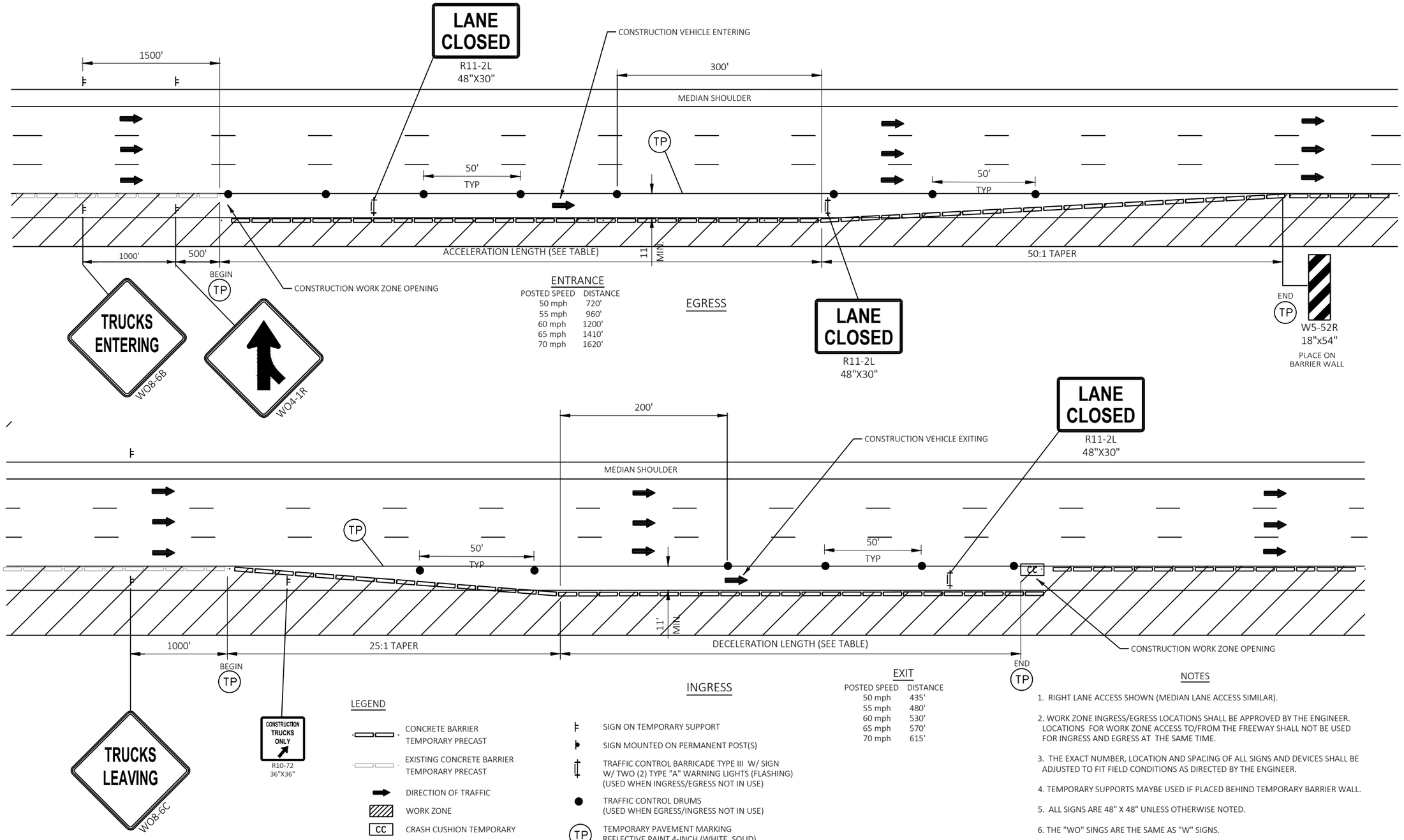
SIGN LOCATION /STAGE	'W' (FT)	'H' (FT)	NO. OF POSTS OF HEIGHT 'H'	SIGN MESSAGE
STA 24TEB+00 STAGE 1	15'	15'	4	DOWNTOWN EXITS | NORTH Kilbourn Ave 1 1/4 St Paul - J Lovell 1 Jackson - Van Buren 2
STA 391EW+00 STAGE 2	10'	13'	4	EXIT 309 A 35 th Street

NOTES

1. SEE TRAFFIC CONTROL SHEETS FOR SIGN LOCATIONS.
2. TWO DIAGONAL SUPPORTS SHALL BE INCLUDED AND AFFIXED TO THE OUTSIDE SUPPORTS.
3. DIAGONAL SUPPORTS, VERTICAL POSTS AND BASE LUMBER ARE ALL INCLUDED IN THE "FIXED MESSAGE SIGN PORTABLE SUPPORT" ITEM.
4. PROVIDE AN ADEQUATE NUMBER OF SAND BAGS TO HOLD THE SIGN IN PLACE. SAND BAGS ARE INCLUDED IN THE "FIXED MESSAGE SIGN PORTABLE SUPPORT" ITEM.
5. SEE "TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS" SIGN PLATE FOR ADDITIONAL REQUIREMENTS.

FIXED MESSAGE SIGN PORTABLE SUPPORT

NOTE:
THIS INSTALLATION METHOD ONLY ALLOWED
WHEN BEHIND BARRIER WALL OR GUARDRAIL
WHERE POSTS CANNONT BE INSTALLED INTO GROUND



LEGEND

- CONCRETE BARRIER TEMPORARY PRECAST
- EXISTING CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK ZONE
- CC — CRASH CUSHION TEMPORARY

INGRESS

- SIGN ON TEMPORARY SUPPORT
- SIGN MOUNTED ON PERMANENT POST(S)
- TRAFFIC CONTROL BARRICADE TYPE III W/ SIGN W/ TWO (2) TYPE "A" WARNING LIGHTS (FLASHING) (USED WHEN INGRESS/EGRESS NOT IN USE)
- TRAFFIC CONTROL DRUMS (USED WHEN EGRESS/INGRESS NOT IN USE)
- TP — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE, SOLID) (USE YELLOW, SOLID FOR MEDIAN INGRESS/EGRESS)

EXIT

POSTED SPEED	DISTANCE
50 mph	435'
55 mph	480'
60 mph	530'
65 mph	570'
70 mph	615'

NOTES

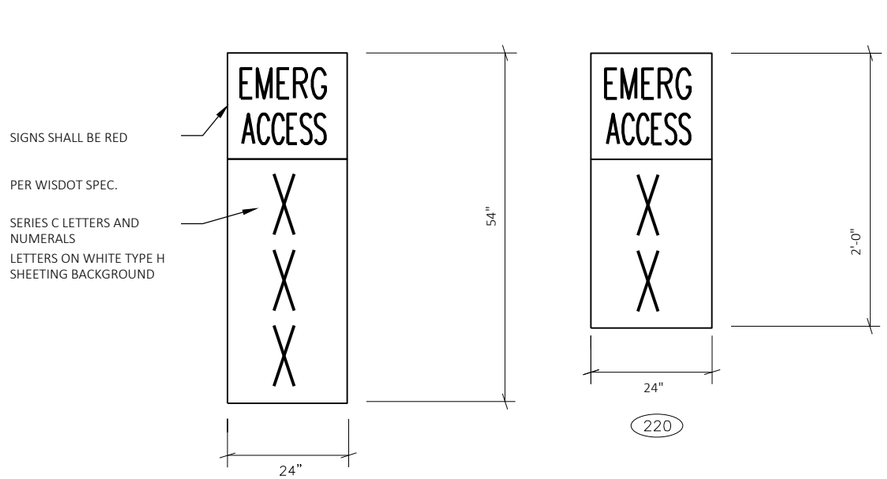
1. RIGHT LANE ACCESS SHOWN (MEDIAN LANE ACCESS SIMILAR).
2. WORK ZONE INGRESS/EGRESS LOCATIONS SHALL BE APPROVED BY THE ENGINEER. LOCATIONS FOR WORK ZONE ACCESS TO/FROM THE FREEWAY SHALL NOT BE USED FOR INGRESS AND EGRESS AT THE SAME TIME.
3. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
4. TEMPORARY SUPPORTS MAYBE USED IF PLACED BEHIND TEMPORARY BARRIER WALL.
5. ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
6. THE "WO" SINGS ARE THE SAME AS "W" SIGNS.
7. TRUCKS SHALL USE FLASHING YELLOW BEACON WHEN ENTERING AND EXITING LIVE TRAFFIC.
8. FREE FLOW TRAFFIC LANES SHALL BE A MINIMUM WIDTH OF ELEVEN FEET AND ACCOMMODATE A ONE FOOT SHY DISTANCE FROM TRAFFIC CONTROL DEVICES.
9. ITEMS ON THIS SHEET TO BE PAID USING STANDARD BID ITEMS.

WORK ZONE INGRESS/EGRESS - 6 LANE

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - CONSTRUCTION DETAIL	SHEET 262	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025010-TC.DWG
LAYOUT NAME - 03
PLOT DATE : 4/25/2025 10:08 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



XXX REPRESENTS ACCESS POINT NUMBERS, AND WILL CHANGE FROM LOCATION TO LOCATION.

EMERGENCY ACCESS SIGNS

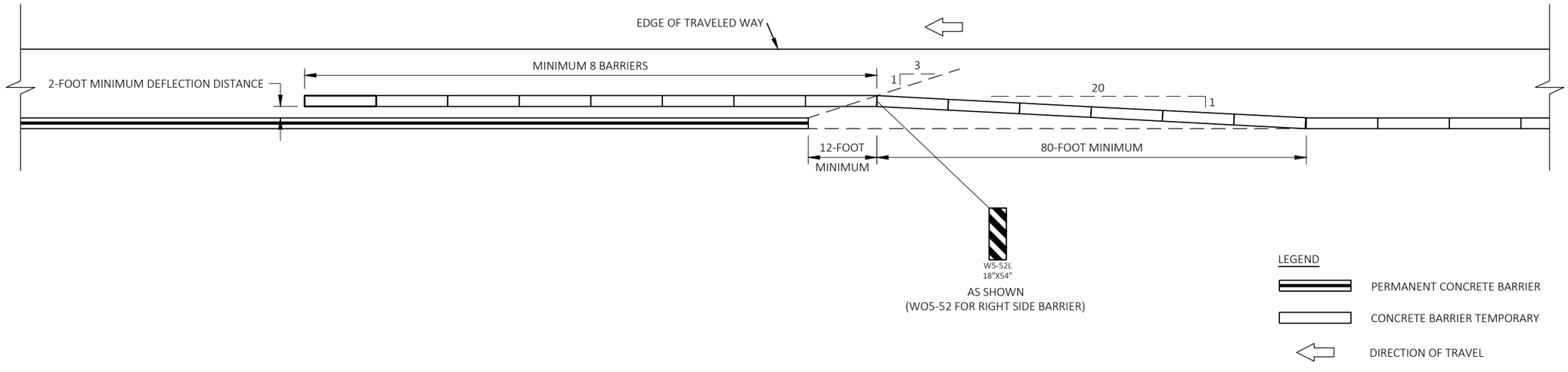
NOTES

1. AFTER SIGNS HAVE BEEN LOCATED IN THE FIELD, BUT BEFORE INSTALLATION, THE PROJECT ENGINEER SHALL VERIFY EACH SIGN LOCATION.
2. ALL SIGNS TO BE MOUNTED ON WOODEN POST SUPPORTS (4"x6"). THE NUMBER OF POSTS REQUIRED FOR EACH LAYOUT IS SHOWN. STEEL POSTS (2"X2") MAY BE USED FOR SIGNS ON SURFACE STREETS. SIGNS WHERE NO POSTS ARE SHOWN TO BE MOUNTED ON EXISTING SIGNS. FOR SIGNS MOUNTED ON POSTS, USE POSTS FROM FHWA LIST OF ACCEPTED BREAKAWAY SIGN SUPPORTS. SEE SECTION 643 FOR FURTHER INFORMATION.
3. SIGNS ON THIS SHEET TO BE PAID UNDER THE ITEM "TRAFFIC CONTROL SIGNS FIXED MESSAGE".
4. ALL SIGNS SHALL HAVE CAPITAL LETTERS AND NUMERALS: 10" CAPS SHALL BE SERIES "D", 4" CAPS SHALL BE SERIES "C" UNLESS OTHERWISE NOTED.
5. SIGN BASE MATERIAL SHALL BE ACCORDING TO SECTION 637.2.1.2.
6. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

(XXX) = FIXED MESSAGE SIGN NUMBER

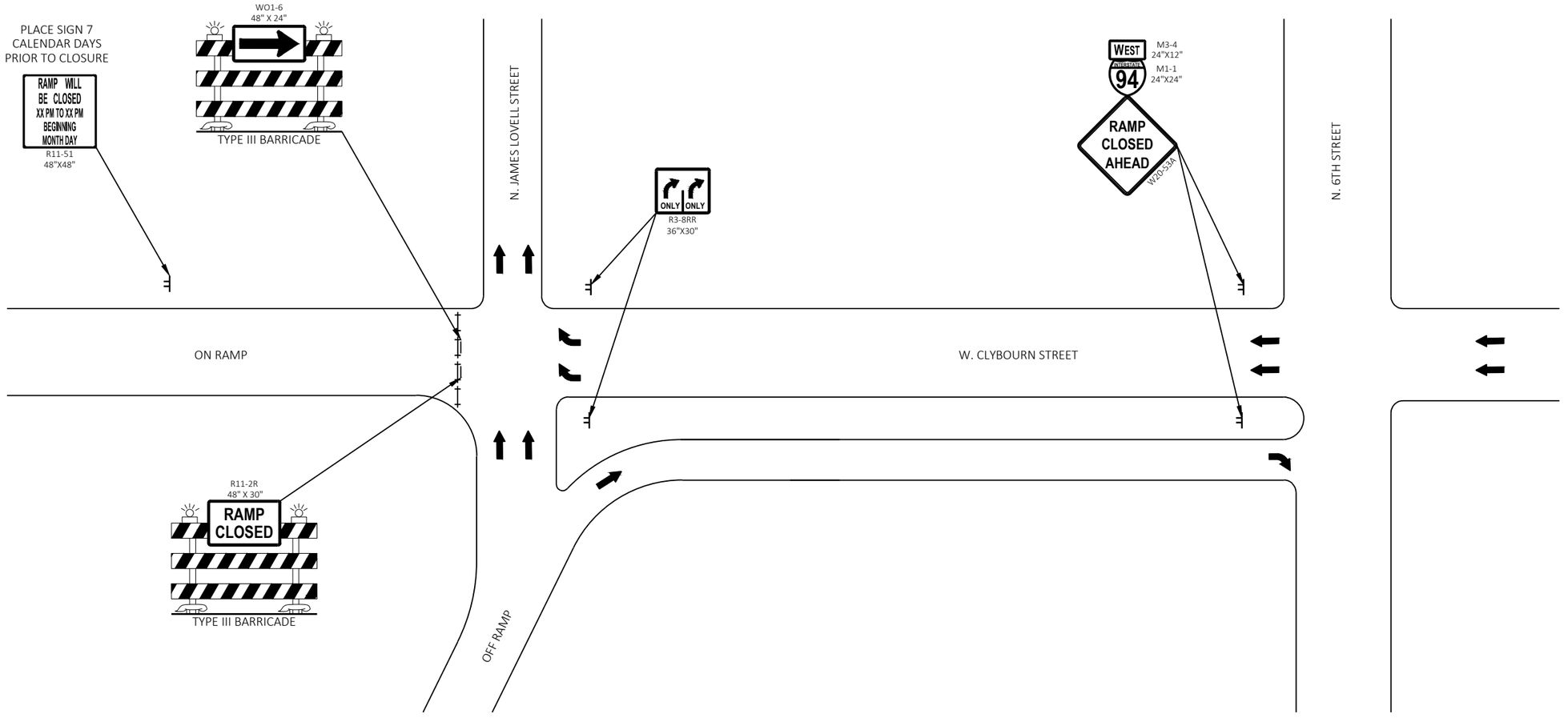
WORK ZONE EMERGENCY ACCESS SIGNS

2



TEMPORARY PROTECTION OF CONCRETE BARRIER END

2



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH 2 TYPE "A" WARNING LIGHT (FLASHING)
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL NOTES

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

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

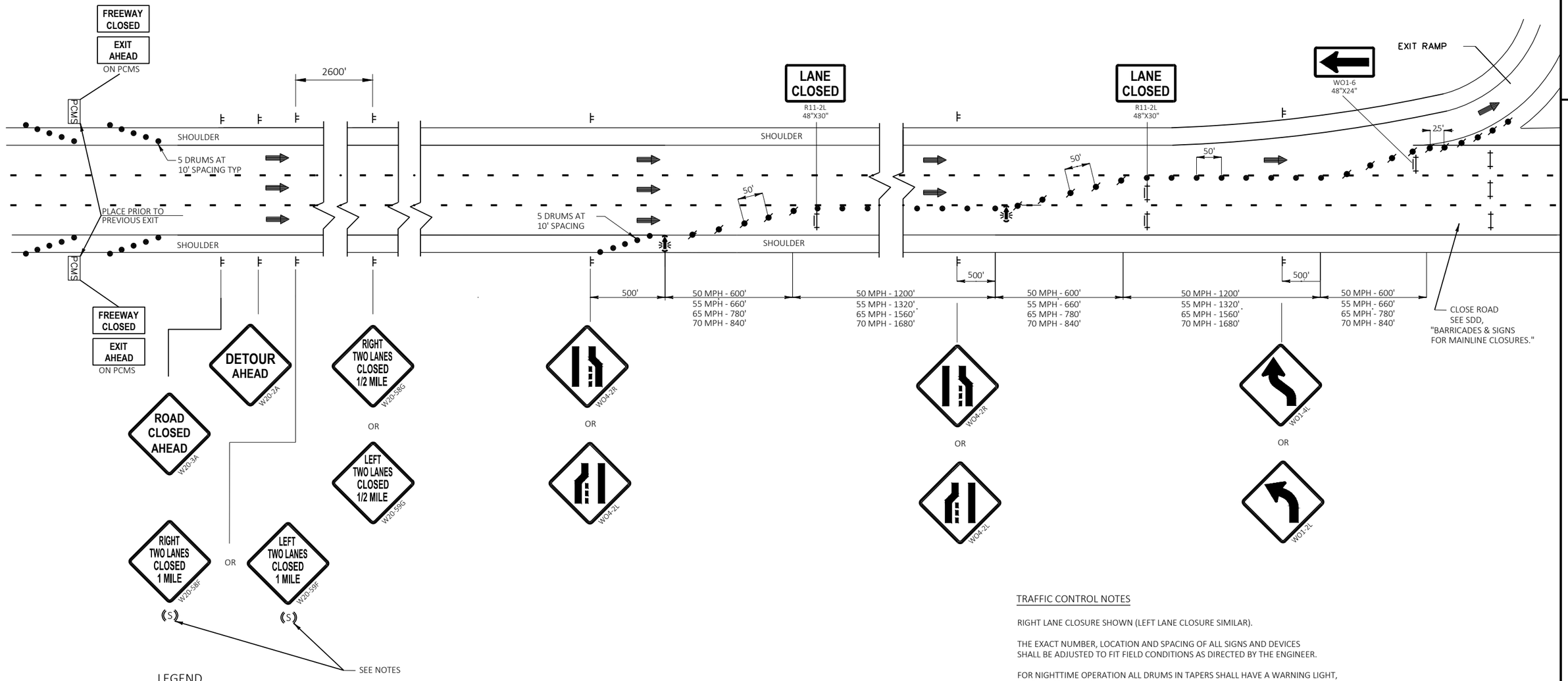
"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SHORT TERM DEFINED AS 7 DAYS/NIGHTS OR LESS. FOR NIGHT TIME OPERATIONS ALL DRUMS IN TAPERS SHALL HAVE WANING LIGHT, TYPE C (STEADY BURN). MAY BE APPLIED TO ARTERIALS OR LOCAL ROADS.

TRAFFIC CONTROL FOR W. CLYBOURN STREET ENTRANCE RAMP CLOSURE (SHORT TERM ONLY)

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - CONSTRUCTION DETAIL	SHEET 265	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025010-TC.DWG
LAYOUT NAME - 05
PLOT DATE : 4/25/2025 10:08 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH TWO (2) TYPE "A" WARNING LIGHTS (FLASHING)
- TYPE III BARRICADE WITH SIGN WITH TWO (2) TYPE "A" WARNING LIGHTS (FLASHING)
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONNECTED ARROW BOARD
- CONNECTED WORK ZONE START/END LOCATION MARKER
- DIRECTION OF TRAFFIC
- PCMS TRAFFIC CONTROL SIGN PORTABLE CHANGEABLE MESSAGE BOARD
- WORK AREA

THREE LANE FULL FREEWAY CLOSURE

TRAFFIC CONTROL NOTES

RIGHT LANE CLOSURE SHOWN (LEFT LANE CLOSURE SIMILAR).

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

FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A WARNING LIGHT, TYPE C (STEADY BURN).

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

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

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

IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1000' ACROSS EACH CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

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' IN FRONT OF DRUMS, WITH LANE CLOSED SIGN.

REFER TO DETOUR ROUTES FOR TRAFFIC CLOSING SIGNS.

REFER TO TRAFFIC CONTROL PLANS FOR LOCATIONS OF CONNECTED WORK ZONE START AND END LOCATION MARKERS. INSTALL CONNECTED WORK ZONE START LOCATION MARKERS WITH FULL CLOSURE ONLY IF NOT INSTALLED WITH STAGE TRAFFIC CONTROL.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - CONSTRUCTION DETAIL	SHEET 266	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025010-TC.DWG
LAYOUT NAME - 06
PLOT DATE : 4/25/2025 12:58 PM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

N

W. WISCONSIN AVENUE

W. MICHIGAN AVENUE

W. CLYBOURN STREET

W. ST PAUL AVENUE

GREVES STREET

CPKC RAILROAD

N. 25TH STREET

N. 24TH STREET

N. 23RD STREET

N. 22ND STREET

N. 21ST STREET

N. 20TH STREET

N. 19TH STREET

N. 18TH STREET

N. 17TH STREET

N. 16TH STREET

N. EMMBER LANE

WO1-6
48" X 24"

TYPE III BARRICADE
TYP

50'
TYP

1000'

1600'

RAMP MA

IH 94 WB

IH 94 FB

RAMP MB

R/L EW

440EW

445EW

450EW

455EW

460EW

465EW

470EW

475EW

CLOSE MQIC RAMP N-W
AND RAMP S-W SEE SDD
"TRAFFIC CONTROL,
SYSTEM RAMP CLOSURE"

LEFT
THREE LANES
CLOSED
1/2 MILE
W20-5SG

42"X9"
209

CLOSE IH 794 WB LANE 1;
SEE "TRAFFIC CONTROL - IH 794 WB
SINGLE LANE CLOSURE" DETAIL FOR
ADDITIONAL SIGNING AND DEVICES

NOTE

- REVISE INSTALLED PCMS FRAMES AT N. JACKSON STREET RAMP TO THE FOLLOWING:
  FRAME 1: I-94 WEST CLOSED
  FRAME 2: AT 25TH ST

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - IH 94 WB FULL CLOSURE SINGLE LANE TO N. 25TH STREET RAMP	SHEET 267	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025025-TC.DWG
LAYOUT NAME - 01
PLOT DATE : 4/25/2025 10:10 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:300 FT
WISDOT/CADDS SHEET 42

2

N. 37TH STREET

N. 36TH STREET

N. 35TH STREET

N. 34TH STREET

N. 33RD STREET

N

EAST
INTERSTATE
94
M3-2
24"X12"
M1-1
24"X24"

RAMP CLOSED AHEAD
W20-53A

PLACE SIGNS AT SOUTH AND EAST LEGS OF W. CLYBOURN AVENUE INTERSECTION

W. PARK HILL AVENUE

RAMP GD

COVERING SIGNS TYPE II

25' TYP

RAMP GA

IH-94 WB

IH-94 EB

ONLY | ONLY | ONLY
R3-8LLR
54"X30"

COVERING SIGNS TYPE II

25' TYP

RAMP CLOSED
R11-2R
48"X30"

RAMP GC

200'

RAMP GB

15' TYP

PCMS

COVERING SIGNS TYPE II

R3-1
24"X24"

R3-1
24"X24"

COVERING SIGNS TYPE II

15' TYP

RAMP CLOSED
R11-2R
48"X30"

FRAME 1	FRAME 2
RAMP TO CLOSE	XXX DAY XX XX XX

PLACE MESSAGE BOARD 7 CALENDAR DAYS PRIOR TO CLOSURE

DOT RR CROSSING #386510V

COVERING SIGNS TYPE II

EAST
INTERSTATE
94
M3-2
24"X12"
M1-1
24"X24"

W. CANAL STREET

SIGN

COVERING SIGNS TYPE II

RAMP CLOSED AHEAD
W20-53A

CPKC RAILROAD

PLACE SIGNS AT WEST, SOUTH, AND EAST LEGS OF W. NATIONAL AVENUE INTERSECTION

NOTE:
SEE DETOUR PLANS FOR RAMP GB CLOSURE ALTERNATE ROUTE

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - RAMP GB CLOSURE DETAIL (LONG TERM)	SHEET 268	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025020-TC.DWG
LAYOUT NAME - 01
PLOT DATE : 4/25/2025 10:11 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

W. ST. PAUL AVENUE

W. CLYBOURN STREET

W. MICHIGAN STREET

IH-94 WB

IH-94 EB

RAMP LC

END ROAD WORK (E)
G20-2A
48"X24"

ROAD WORK AHEAD (S)
W20-1A

SEE DETOUR PLANS FOR ALTERNATE ROUTE (TYP)

COVERING SIGNS TYPE II

NO PARKING ANY TIME
R7-1R
18"X24"

LANE CLOSED
R11-2L
48"X30"

NO PARKING ANY TIME
R7-1L
18"X24"

R3-1
24"X24"

BRIDGE OUT
R11-2B
48"X30"

WO1-7
48"X24"

101

150

50' TYP

25' TYP

50'

180'

ONLY ONLY
R3-8LR
36"X30"

R3-2
24"X24"

PLACE DRUMS TO ALLOW ACCESS TO DRIVEWAYS AT ALL TIMES

SEE "TRAFFIC CONTROL - N. 27TH STREET BRIDGE CLOSURE" DETAIL FOR ADDITIONAL SIGNING AND DEVICES

COVERING SIGNS TYPE II

ROAD WORK AHEAD (S)
W20-1A

COVER SIGN AT NORTH LEG OF N. 25TH STREET INTERSECTION

COVERING SIGNS TYPE II

END ROAD WORK (E)
G20-2A
48"X24"

NO ACCESS TO 27TH ST VIADUCT
200
72"X36"

WO4-2R

RIGHT LANE CLOSED AHEAD
W20-5A

ROAD CLOSED 1000 FT
W20-3C

ROAD CLOSED AHEAD (S)
W20-3A

END ROAD WORK (E)
G20-2A
48"X24"

NOTES:

- SEE DETOUR PLANS FOR 27TH STREET CLOSURE ALTERNATE ROUTE
- COVER EXISTING REGULATORY PARKING SIGNS ON N. 27TH ST BETWEEN W. CLYBOURN AVE AND W. ST PAUL AVE (THREE INSTANCES)
- DETAIL SHOWS EXISTING CONDITIONS. FIT TRAFFIC CONTROL DEVICES ACCORDINGLY FOR USE IN STAGE FOUR WITH FINAL CONFIGURATION.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - N. 27TH STREET CLOSURE DETAIL	SHEET 269	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025021-TC.DWG
LAYOUT NAME - 01 (N)
PLOT DATE : 4/25/2025 10:12 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

S. 28TH STREET

W. PIERCE STREET

W. EVERGREEN LANE

S. LAYTON BOULEVARD/STH 57/S. 27TH STREET

S. 26TH STREET

ROAD CLOSED 1000 FT
W20-3C

LEFT LANE CLOSED AHEAD
W20-5A

PLACE SIGNS AT W. MINERAL STREET INTERSECTION

ROAD CLOSED AHEAD (S)
W20-3A

COVERING SIGNS TYPE II

NO ACCESS TO 27TH ST VIADUCT
200
72"X36"

W04-2L

(E) END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1A

R3-2
24"X24"

180'

FROM FLANGE

1'

100

25' TYP

50' TYP

FROM FLANGE

12'

150

ROAD CLOSED 500 FT
W20-3D

ONLY ONLY
R3-8LR
36"X30"

LANE CLOSED
R11-2L
48"X30"

R3-1
24"X24"

BRIDGE OUT
R11-2B
48"X30"

SEE DETOUR PLAN FOR PEDESTRIAN ACCOMMODATIONS

SEE "TRAFFIC CONTROL - N. 27TH STREET BRIDGE CLOSURE" DETAIL FOR ADDITIONAL SIGNING AND DEVICES

PEDESTRIAN BARRICADE, TYP
SEE DETOUR PLANS FOR ALTERNATE ROUTE

SIDEWALK CLOSED
R9-9
24"X12"

W5-56
18"X18"

25'

25'

W5-56
18"X18"
CONCRETE BARRIER TEMPORARY PRECAST

FENCE TEMPORARY 6-FOOT

MITCHELL PARK DOMES

NOTE:
SEE DETOUR PLANS FOR 27TH STREET CLOSURE ALTERNATE ROUTE

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 27TH STREET CLOSURE DETAIL	SHEET 270	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025021-TC.DWG
LAYOUT NAME - 02 (S)
PLOT DATE : 4/25/2025 10:13 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

N

R11-2B
48" X 30"
BRIDGE OUT
TYPE III BARRICADE

MH

IH 94 EB

IH 94 WB

W. ST PAUL AVENUE

SEE "TRAFFIC CONTROL - N. 27TH STREET CLOSURE" DETAIL

SEE "DETOUR - 27TH STREET VIADUCT CLOSED - PEDESTRIAN" DETAIL FOR ALTERNATE ROUTE

SIDEWALK CLOSED
R9-9
24"X12"

CONCRETE BARRIER TEMPORARY PRECAST

B-40-513_5

25'

25'

37.5'

N. 27TH STREET

BORE

BORE

W5-56
18"X18"

W5-56
18"X18"

CONCRETE BARRIER TEMPORARY PRECAST

FENCE TEMPORARY 6-FOOT

PEDESTRIAN BARRICADE, TYP
SEE "DETOUR - 27TH STREET VIADUCT CLOSED - PEDESTRIAN" DETAIL FOR ALTERNATE ROUTE

SIDEWALK CLOSED
R9-9
24"X12"

SEE "DETOUR - 27TH STREET VIADUCT CLOSED - PEDESTRIAN" DETAIL FOR ALTERNATE ROUTE

RAMP LC

SS

SS

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - N. 27TH STREET BRIDGE CLOSURE	SHEET 271	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025026-TC.DWG
LAYOUT NAME - 01
PLOT DATE : 4/25/2025 10:13 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

N. 30TH STREET

N. 29TH STREET

N. 28TH STREET

N. 27TH STREET

W. ST PAUL AVENUE

W. MT VERNON AVENUE

RAMP JD

RAMP LC

IH 94 WB

IH 94 EB

M3-4 24"X12"
M1-1 24"X24"
WEST INTERSTATE 94

PLACE SIGNS AT WEST, SOUTH, AND EAST LEGS OF W. CLYBOURN AVE. INTERSECTION

RAMP CLOSED AHEAD W20-53A

COVERING SIGNS TYPE II

RAMP CLOSED R11-2R 48"X30"

R3-2 24"X24"

109

NO PARKING ANY TIME R7-1R 18"X24"

NO PARKING ANY TIME R7-1L 18"X24"

TO EAST INTERSTATE 94

25' TYP

12SP

16SP

18SP

20SP

22SP

180' TAPER

15' TYP

110

200'

R/L SP

END ROAD WORK G20-2A 48"X24"

W04-2L

LEFT LANE CLOSED AHEAD W20-5A

ROAD WORK AHEAD W20-1A

COVER SIGNS ON WEST AND EAST LEGS OF N. 25TH STREET INTERSECTION

COVER SIGN ON SOUTH LEG OF N. 25TH STREET INTERSECTION

PCMS

FRAME 1	FRAME 2
RAMP TO CLOSE	XXX DAY XX XX XX

PLACE MESSAGE BOARD 7 CALENDAR DAYS PRIOR TO CLOSURE

NOTE:

- UTILIZE DETAIL ONLY IF RAMP JD CLOSURE IS REQUIRED PRIOR TO W. ST PAUL AVENUE CLOSURE

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - RAMP JD CLOSURE DETAIL (LONG TERM)	SHEET 272	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025023-TC.DWG
LAYOUT NAME - 01

PLOT DATE : 4/30/2025 9:57 AM PLOT BY : PESCHEL, KYLE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

IH-94 WB

IH-94 EB

RAMP MB

ROAD CLOSED AHEAD
W20-3A

ACCESS TO LOCAL BUSINESSES
R10-71
66"X36"

SIDEWALK CLOSED AHEAD
R9-9A
30"X18"

W. ST PAUL AVENUE

ROAD CLOSED 1000 FT
W20-3C

ACCESS TO LOCAL BUSINESSES
R10-71R
72"X36"

LOWER 25TH STREET

N. 25TH STREET

RAMP LC

RAMP JD

IH 94 WB

IH 94 EB

SIDEWALK CLOSED
R9-9
24"X12"

ROAD CLOSED 500 FT
W20-3D

TEMPORARY PEDESTRIAN BARRICADE

INSTALL FENCE SAFETY AT STAIRWELL

GREVES STREET

CPKC RAILROAD

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

DOT RR CROSSING #386506F [GREVES STREET]

ABANDONED

RIVER

MENOMONEE

WALL

O.S.

PKNG

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - GREVES STREET CLOSURE DETAIL	SHEET 273	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025027-TC.DWG
LAYOUT NAME - 01
PLOT DATE : 4/25/2025 10:14 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1" = 150'
WISDOT/CADDS SHEET 42

2

2

N

N. 19TH STREET
N. 18TH STREET
N. 17TH STREET
N. 16TH STREET
N. 13TH STREET
N. JAMES LOVELL STREET
N. 6TH STREET
N. 2ND STREET
N. WATER STREET
N. BROADWAY AVENUE
N. MILWAUKEE STREET
N. JEFFERSON STREET
N. JACKSON STREET
N. VAN BUREN STREET

1320'
SPACING BETWEEN BARRICADES, TYP.

TRAFFIC CONTROL DRUMS
100' SPACING (TYP)

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE
TYP

W. MICHIGAN STREET
E. MICHIGAN STREET
W. CLYBOURN STREET
IH 794 WB
IH 794 EB
W. ST PAUL AVENUE

460EW
470EW
R/L EW

SEE RESPECTIVE STAGING
DETAILS FOR TRAFFIC CONTROL
WEST OF STA 461EW+00.

MILWAUKEE RIVER
W. CANAL STREET
SOUTH MENOMONEE CANAL

IH 43 SB
IH 43 NB

* 114

NOTES

- ANY MARKINGS OR DEVICES NOTATED WITH AN ASTERISK (*) ARE ONLY TO BE UTILIZED FOR LONG TERM LANE CLOSURES.
- ALL PORTABLE CHANGEABLE MESSAGE SIGNS, FLASHING BEACON SIGNS AND PORTABLE TRAFFIC SENSORS REQUIRED TO IMPLEMENT A QUEUE WARNING SYSTEM FOR WESTBOUND TRAFFIC TO BE INSTALLED, OPERATED AND MAINTAINED UNDER PROJECT 1060-27-71. CONTRACTOR TO COORDINATE WITH PROJECT 1060-27-71 FOR ANY ADJUSTMENTS TO SMART WORK ZONE AS A RESULT OF TRAFFIC CONTROL CHANGES.

SCALE, FEET 0 100 200

PARKING LANE ON WEST SIDE OF STREET BETWEEN E. MICHIGAN STREET AND E. CLYBOURN STREET

E. MICHIGAN STREET
E. CLYBOURN STREET
IH 794 WB
IH 794 EB

I-94 WB RAMP
LEFT LANE
CLOSED AHEAD
203
72"X36"

FRAME 1	FRAME 2
LFT RAMP LANE CLOSED	MERGE ON RAMP

PCMS
20' TYP
15' TYP
100' TYP
50' TYP
600' TAPER
346' FROM NEAREST JOINT

ROAD WORK AHEAD W20-3A
LEFT LANE CLOSED AHEAD W20-5SA
W9A-2L

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - IH 794 WB SINGLE LANE CLOSURE DETAIL	SHEET 274	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025024-TC.DWG
LAYOUT NAME - 01-Jackson
PLOT DATE : 4/28/2025 12:41 PM PLOT BY : PESCHEL, KYLE PLOT NAME : PLOT SCALE : 1 IN:650 FT
WISDOT/CADDS SHEET 42

2

N

N. 24TH STREET
N. 23RD STREET
N. 22ND STREET
N. 21ST STREET
W. WISCONSIN AVENUE
N. 20TH STREET
N. 19TH STREET
N. 17TH STREET
N. 16TH STREET

EXIT 309 B
Clybourn St
25th St

RIGHT LANE EXIT ONLY

COVERING SIGNS TYPE I
EX. OVERHEAD SIGN ABOVE LANE 5

218
180" X 36"

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE
TYP

SEE STAGE 3A TRAFFIC CONTROL PLANS

W. CLYBOURN STREET

25'
TYP
200'
100'
TYP
50'

IH 94 WB
EB

445EW
450EW
455EW
460EW
465EW
470EW
475EW

110
129
116
113
150

R/L EW

EXIT
E5-1
48"X48"

W. ST PAUL AVENUE

GREVES STREET

CPKC RAILROAD

RIGHT LANE
MUST EXIT
R3-33R
78"X36"

WO1-6
48" X 24"
TYPE III BARRICADE

CLOSE IH 794 WB LANE 1;
SEE "TRAFFIC CONTROL - IH 794 WB
SINGLE LANE CLOSURE" DETAIL FOR
ADDITIONAL SIGNING AND DEVICES

PCMS MESSAGING

FRAME 1	FRAME 2
RIGHT LN MUST EXIT	TO 25TH STREET

EXIT ONLY
3/4 MILE

EX. OVERHEAD SIGN ABOVE
RAMP N-W LANE 2

250'
600'
250'
SHIFTING TAPER
50'
TYP

RAMP N-W
RAMP S-W

CLOSE MQIC RAMP S-W
SEE SDD "TRAFFIC
CONTROL, SYSTEM RAMP
CLOSURE"

1000'
4200'

WO1-4BL
50
MPH
WO13-1
36"X36"

WEST
INTERSTATE
94
M3-4
36"X18"
M1-1
36"X36X
ROAD
WORK
1 MILE
W20-1F

ADVANCED SIGNING (PLACE ON RAMP N-W AND IH43 SB)

N. EMMBER LANE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

NOTE:

INSTALL TRAFFIC CONTROL FOR WB LANE 5 CLOSURE WITH STAGE 3A ONLY.

SEE "DETOUR - IH 43 NB TO IH 94 WB (RAMP S-W) CLOSED" FOR ADDITIONAL SIGNING AND DETAILS.

RECREATION AREA
BLEACHERS

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - IH 43 NB TO IH 94 WB (RAMP S-W) CLOSURE DETAIL (LONG TERM)	SHEET 275	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025030-TC.DWG
LAYOUT NAME - 01
PLOT DATE : 5/6/2025 9:11 AM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:300 FT

2

2

N

N. 35TH STREET

W. LISBON AVENUE

W. WALNUT AVENUE

N. DR. MARTIN LUTHER KING JR. DRIVE

W. MCKINNLEY AVENUE

N. 6TH STREET

N. 27TH STREET

W. WISCONSIN AVENUE

N. 25TH STREET

W. MICHIGAN STREET

W. CLYBOURN STREET

IH 94

N. 35TH STREET

W. ST PAUL AVENUE

N. 16TH STREET

N. 13TH STREET

GREVES STREET

W. CANAL STREET

STH 175 / BREWERS BOULEVARD

S. 27TH STREET

S. 6TH STREET

W. NATIONAL AVENUE

LEGEND

APPROVED MUNICIPAL ROUTES

APPROVED OSOW ROUTES

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - LOCAL ROAD HAUL ROUTES OVERVIEW PLAN	SHEET 276	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025050-TC.DWG
LAYOUT NAME - 01
PLOT DATE : 4/25/2025 10:16 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:1750 FT
WISDOT/CADDS SHEET 42

2

N

N. 35TH STREET

W. LISBON AVENUE

W. WALNUT AVENUE

N. DR. MARTIN LUTHER KING JR. DRIVE

W. MCKINNLEY AVENUE

N. 6TH STREET

N. 27TH STREET

W. WISCONSIN AVENUE

N. 25TH STREET

W. MICHIGAN STREET

W. CLYBOURN STREET

IH 94

N. 16TH STREET

N. 13TH STREET

CPKC RAILROAD

GREVES STREET

W. CANAL STREET

STH 175 / BREWERS BOULEVARD

N. 35TH STREET

W. ST PAUL AVENUE

S. 27TH STREET

S. 6TH STREET

W. NATIONAL AVENUE

4

3

1

2

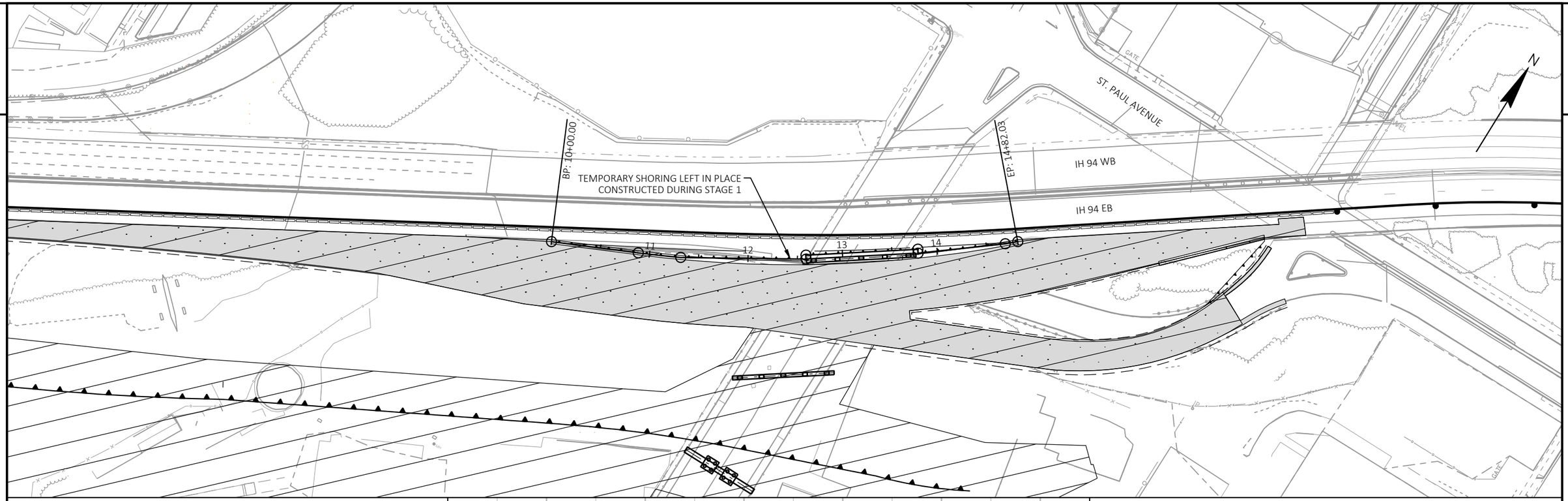
NOTE:
EXCEPT AS PROVIDED FOR WITH STSP 107-034, DO NOT PLACE ANY ITEMS WITHIN 50-FEET OF THE RAILROAD RIGHT-OF-WAY, INCLUDING ITEMS THAT COULD FOUL THE SAME AREA. INCLUDING BUT NOT LIMITED TO SIGNING, EQUIPMENT, OR MATERIAL. THIS INCLUDES AT-GRADE CROSSINGS AND STRUCTURES WITH RR UNDER OR OVER. IF THIS IS NOT ADHERED TO, ADDITIONAL RAILROAD PROTECTIVE LIABILITY INSURANCE WILL BE REQUIRED OF THE CONTRACTOR AND INCIDENTAL TO THE PROJECT.

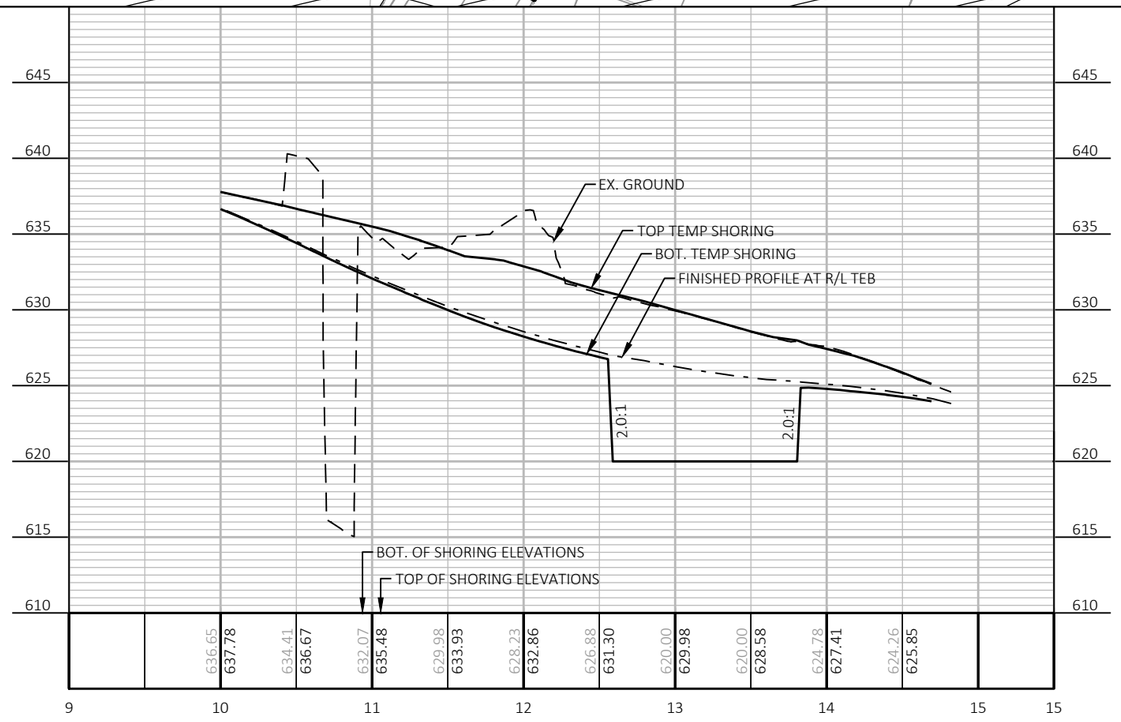
THE NOTED CROSSINGS ARE SUBJECT TO ADDITIONAL REQUIREMENTS AS COVERED IN THE SPECIAL PROVISIONS.

NO.	ROUTE NAME	CROSSING ID
1	GREVES STREET	386506F
2	27TH STREET	386505Y
3	35TH STREET	386510V
4	I-94	386511C

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - CPKC RAILROAD CROSSINGS	SHEET 277	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025051-TC.DWG
LAYOUT NAME - 01
PLOT DATE : 4/25/2025 10:16 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:1750 FT
WISDOT/CADDS SHEET 42

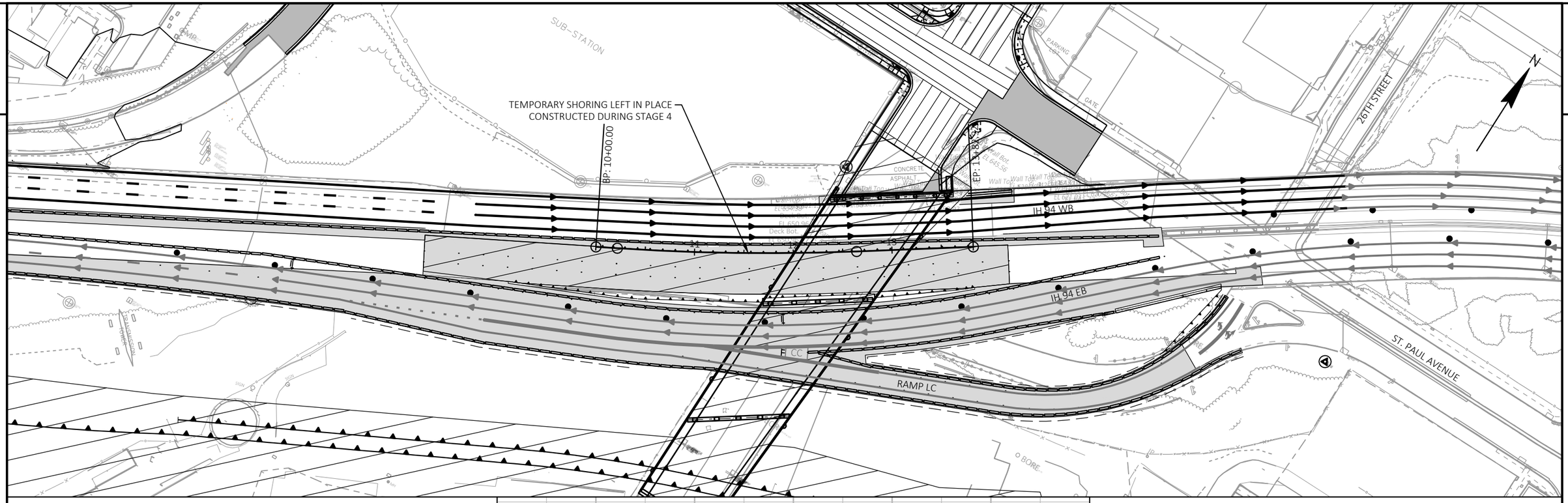




NOTE:
TOP AND BOTTOM OF SHORING LINES DEPICT EXPOSED FACE OF SHORING

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - TEMPORARY SHORING LEFT IN PLACE (IH 94 EB)	SHEET 278	E

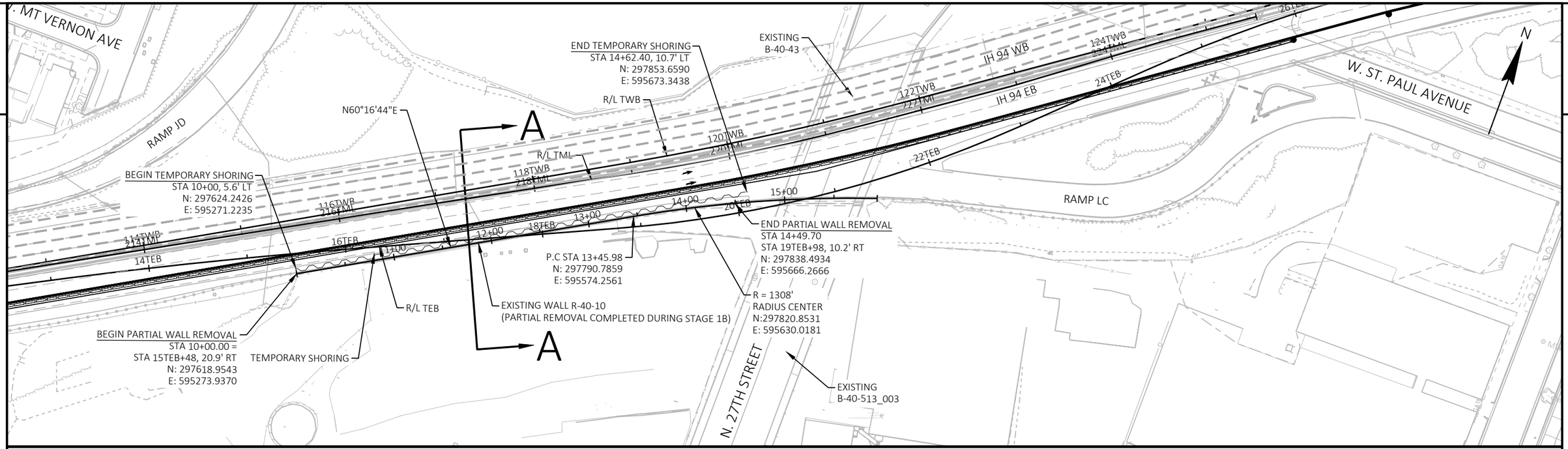
FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025060-TC.DWG
LAYOUT NAME - 01
PLOT DATE : 4/25/2025 10:17 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

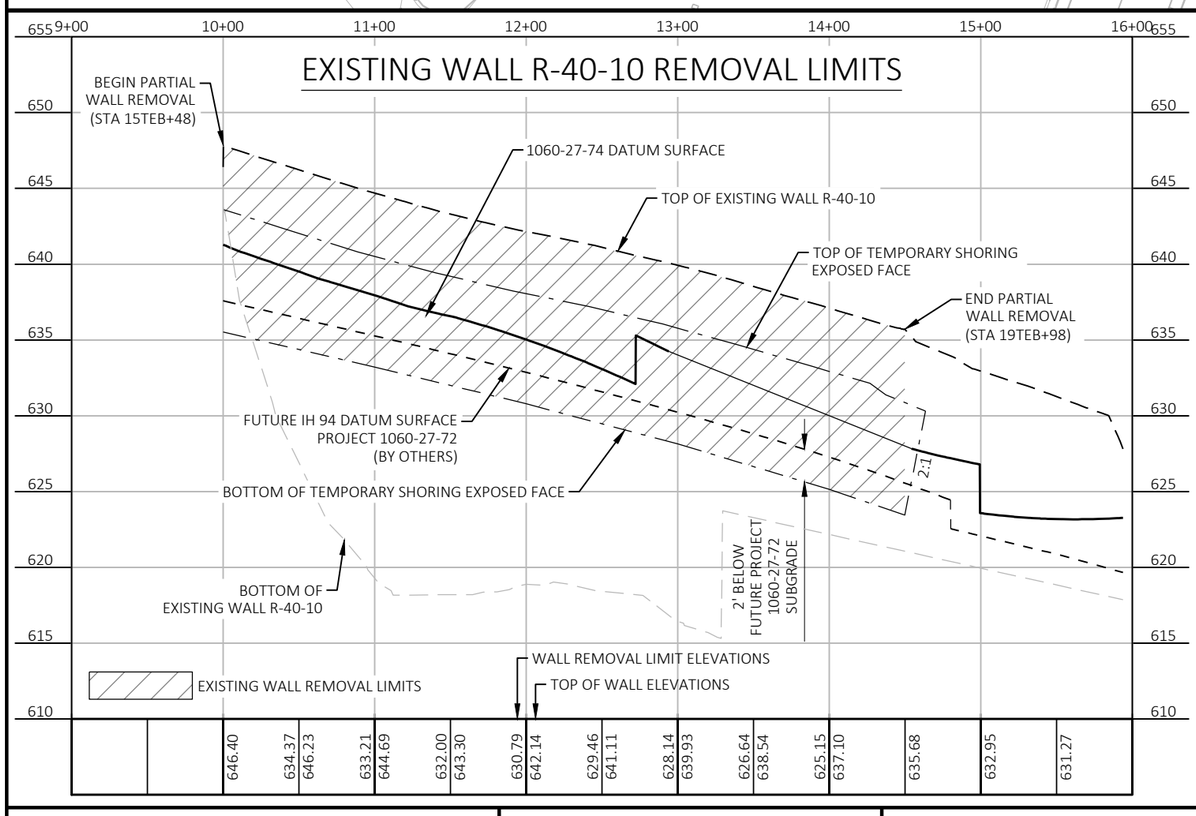


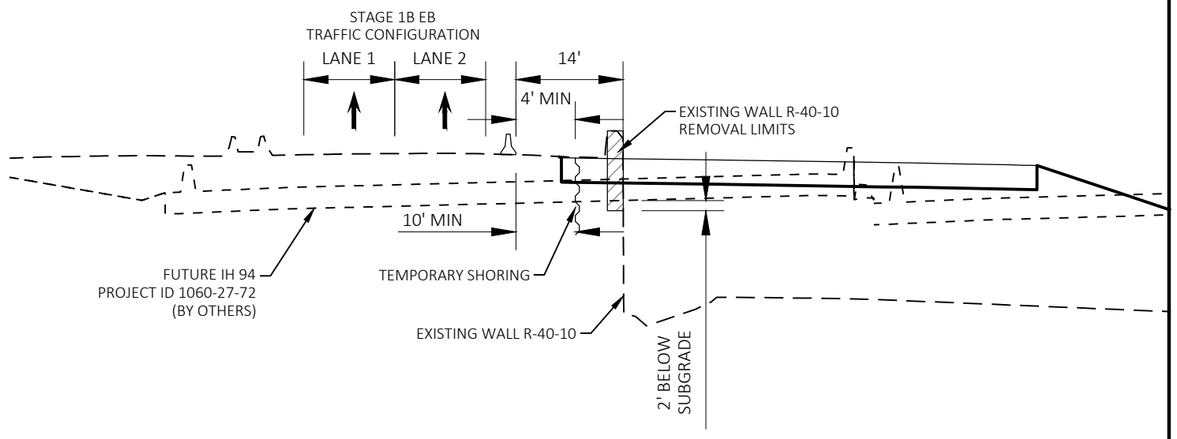
NOTE:
TOP AND BOTTOM OF SHORING LINES DEPICT EXPOSED FACE OF SHORING

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - TEMPORARY SHORING LEFT IN PLACE (IH 94 WB)	SHEET 279	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025062-TC.DWG
LAYOUT NAME - 03
PLOT DATE : 4/25/2025 10:18 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42







SECTION A-A

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - TEMPORARY SHORING (EX. R-40-10 PARTIAL REMOVAL)	SHEET 280	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025064-TC.DWG
LAYOUT NAME - 01
PLOT DATE : 4/25/2025 10:19 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

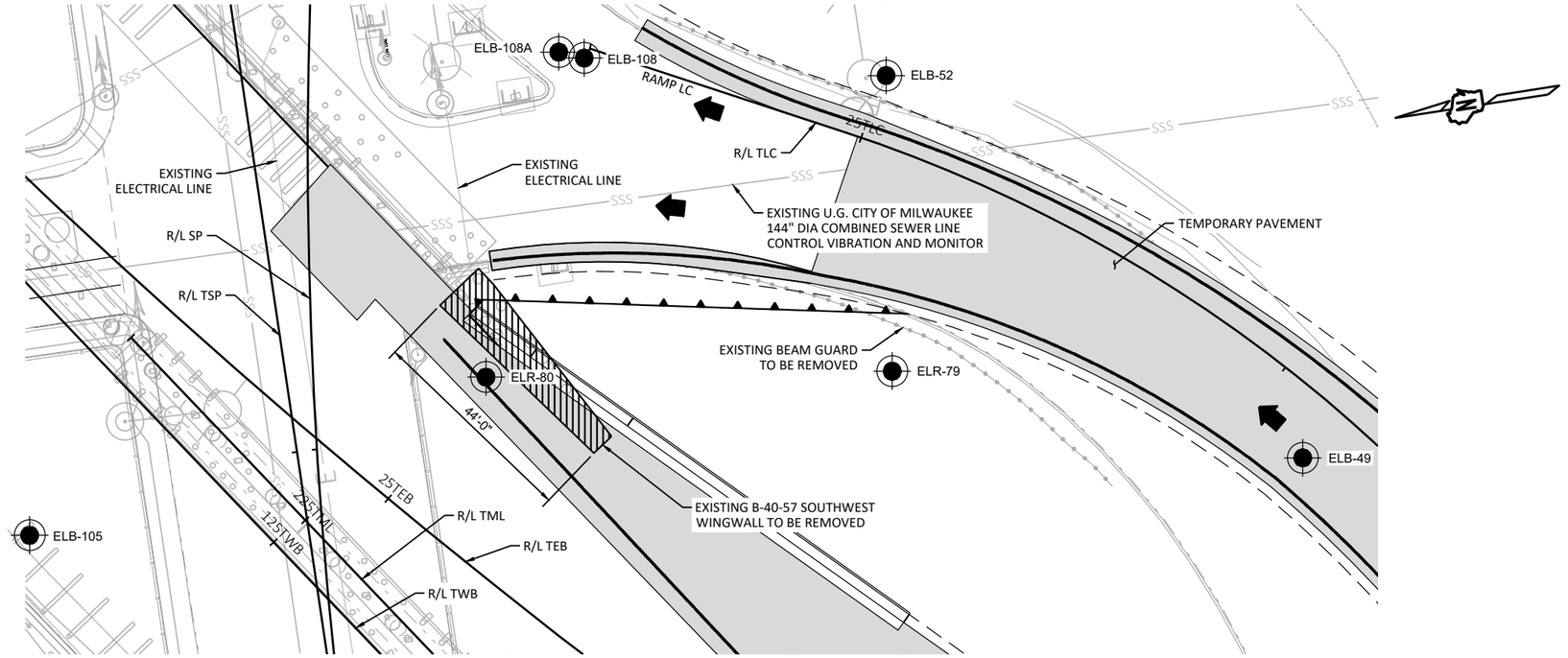
2

TEMPORARY SHORING LEFT-IN-PLACE ELEVATIONS

STATION	FINISHED GRADE ELEV	EXISTING GROUND ELEV
24+37.00	629.42	631.11
24+67.00	623.99	630.86
24+97.00	619.58	630.91
25+27.00	615.18	632.87
25+28.71	614.86	616.03

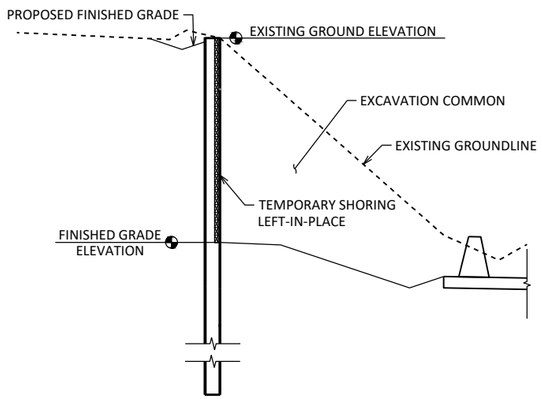
ALIGNMENT LAYOUT

P.I. STATION	NORTHING	EASTING	DISTANCE	BEARING
24+37.00	298037.92	596077.72		
			87.68	N10°36'38.73"E
25+24.68	298124.10	596093.86		
			4.03	N37°16'40.88"E
25+28.71	298127.31	596091.42		



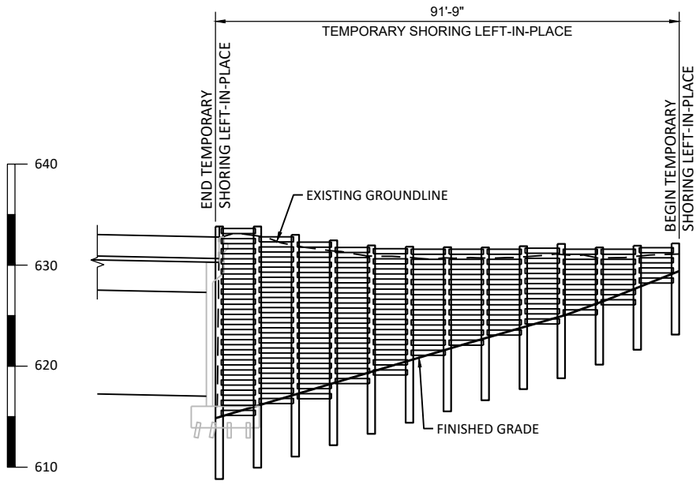
PLAN

STATIONS AND OFFSETS ARE GIVEN TO FRONT FACE OF TEMPORARY SHORING LEFT-IN-PLACE



TYPICAL SECTION

(LOOKING SOUTH)



ELEVATION

LOOKING EAST AT FRONT FACE OF TEMPORARY SHORING LEFT-IN-PLACE

NOTES:

TEMPORARY SHORING LEFT-IN-PLACE TO BE PAID UNDER BID ITEM 511.2200.0057 "TEMPORARY SHORING LEFT-IN-PLACE (B-40-57)"

WINGWALL REMOVAL TO BE PAID UNDER BID ITEM 203.0220 "REMOVING STRUCTURE (B-40-57)"

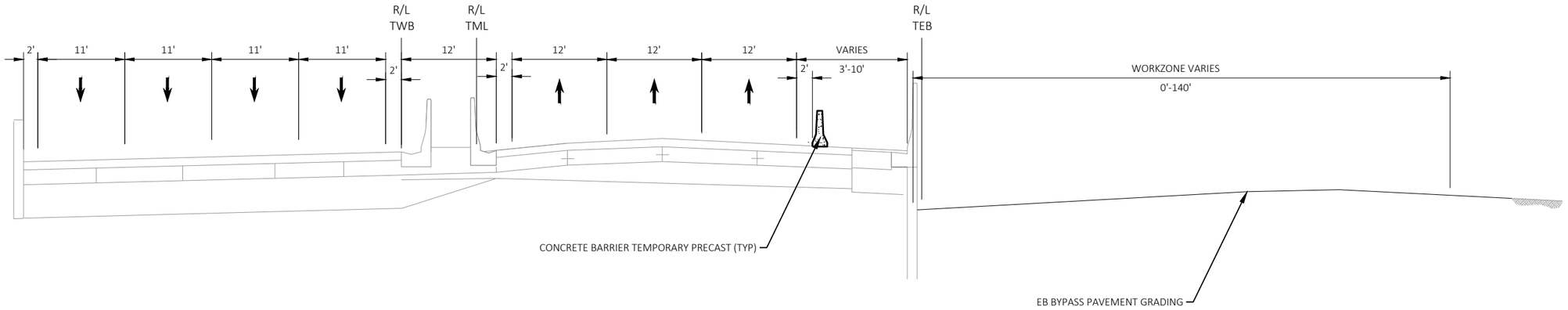
VIBRATION CONTROL AND MONITORING OF THE EXISTING CITY OF MILWAUKEE COMBINED SEWER LINE IS TO BE PAID UNDER BID ITEM SPV.0060.0200 "VIBRATION CONTROL AND MONITORING OF 122-INCH COMBINED SEWER"

SEE GEOTECHNICAL INVESTIGATION INFORMATION FOR SOIL BORING DATA

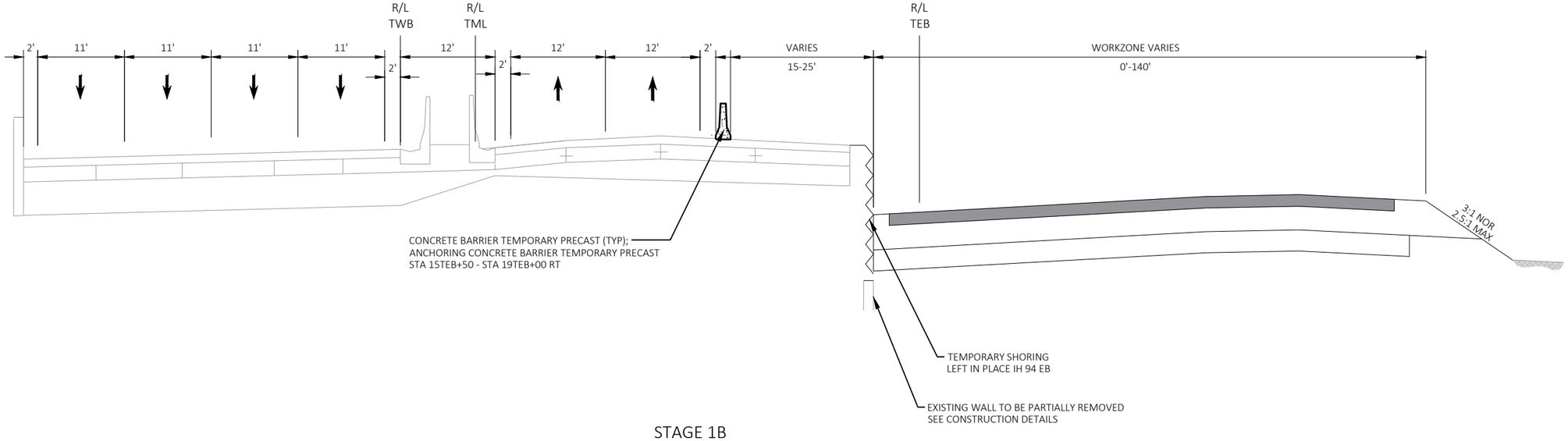
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - TEMPORARY SHORING (B-40-57)	SHEET 281	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-021009-CD.DWG
LAYOUT NAME - 01
PLOT DATE : 4/30/2025 4:52 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:30 FT
WISDOT/CADDS SHEET 42

2



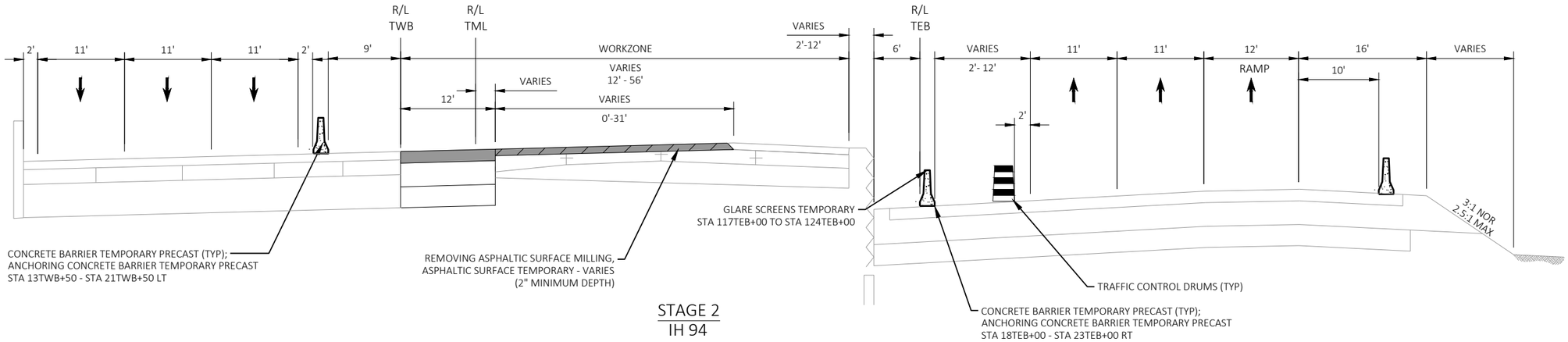
STAGE 1A
IH 94



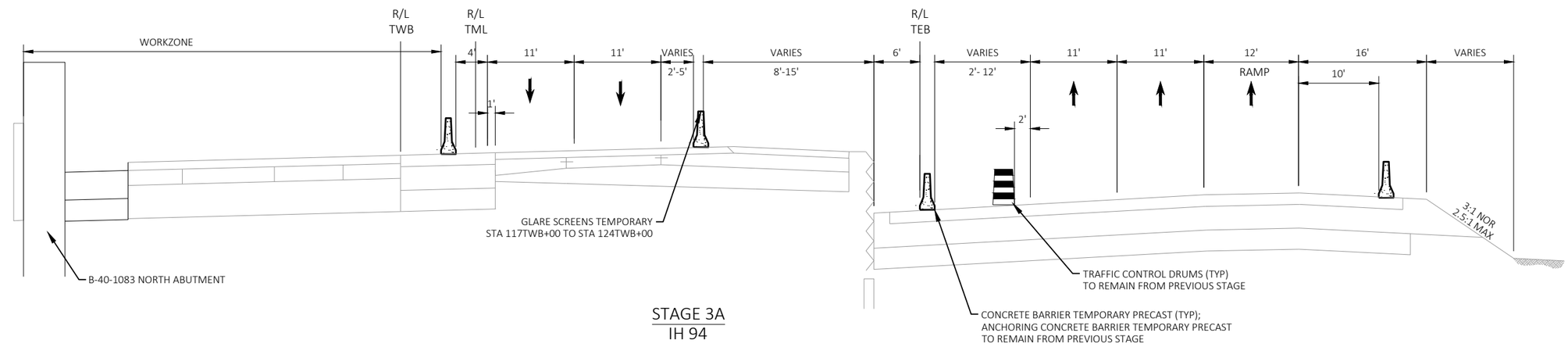
STAGE 1B
IH 94

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 282	E

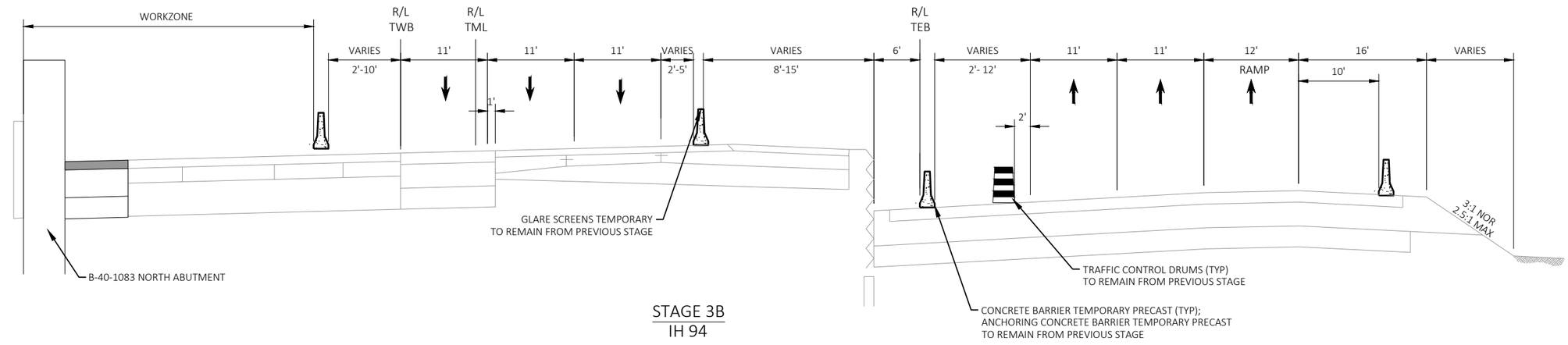
FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025101-S1.DWG
LAYOUT NAME - 01a-01b_94
PLOT DATE : 4/25/2025 10:06 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1:15
WISDOT/CADDS SHEET 42



STAGE 2
IH 94



STAGE 3A
IH 94

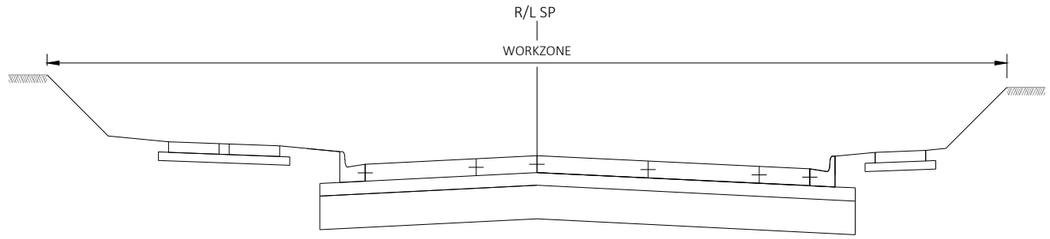


STAGE 3B
IH 94

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 283	E

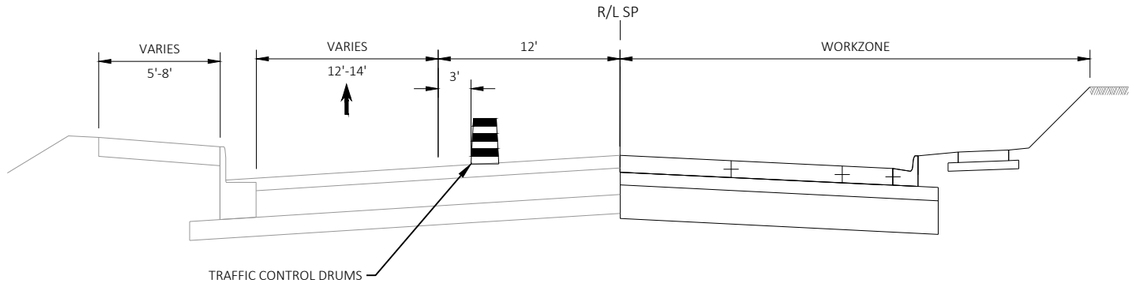
FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025201-S2-3.DWG
LAYOUT NAME - 02-03a-03b_94
PLOT DATE : 4/25/2025 10:06 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1:15
WISDOT/CADDS SHEET 42

2



STAGE 3A/B
W. ST PAUL AVENUE

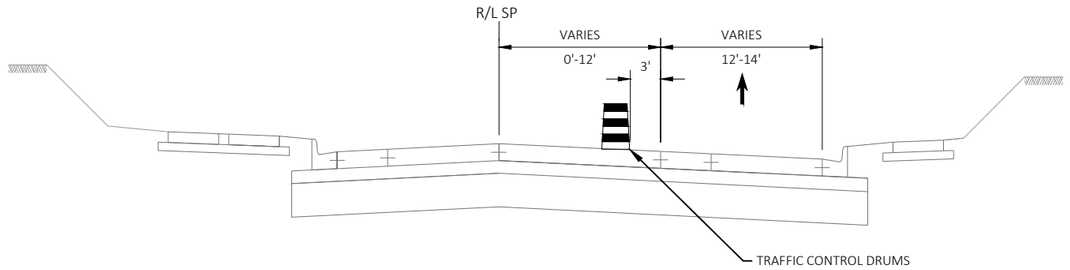
10SP+28.48 TO 16SP+12.82



STAGE 3A/B
W. ST PAUL AVENUE

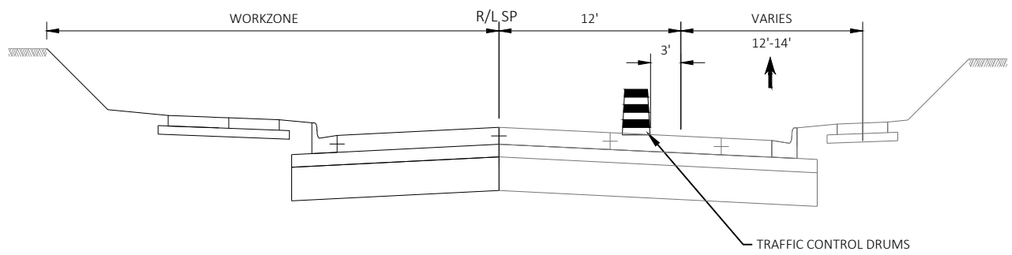
16SP+12.82 TO 18SP+34.32

2



STAGE 3C
W. ST PAUL AVENUE

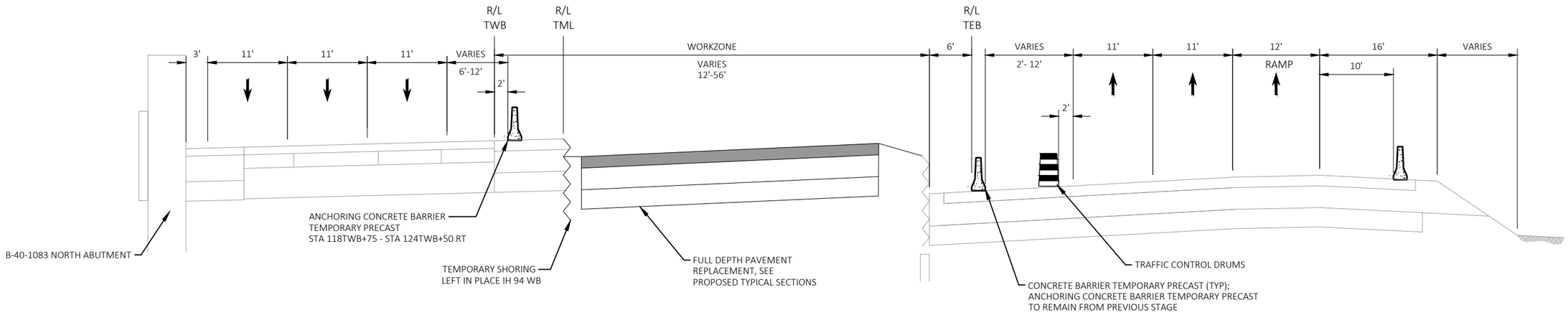
10SP+28.48 TO 16SP+12.82



STAGE 3C
W. ST PAUL AVENUE

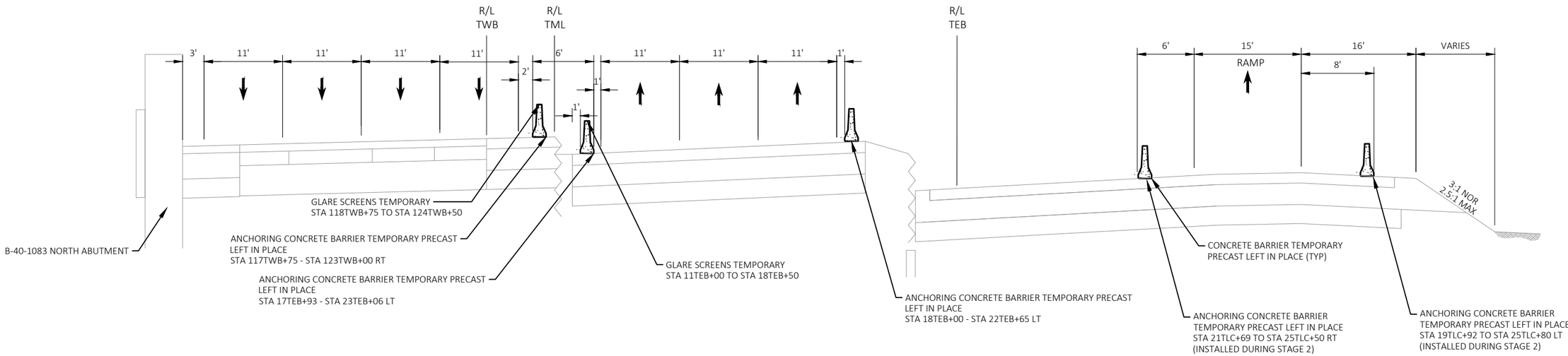
16SP+12.82 TO 18SP+34.32

2



STAGE 4
IH 94

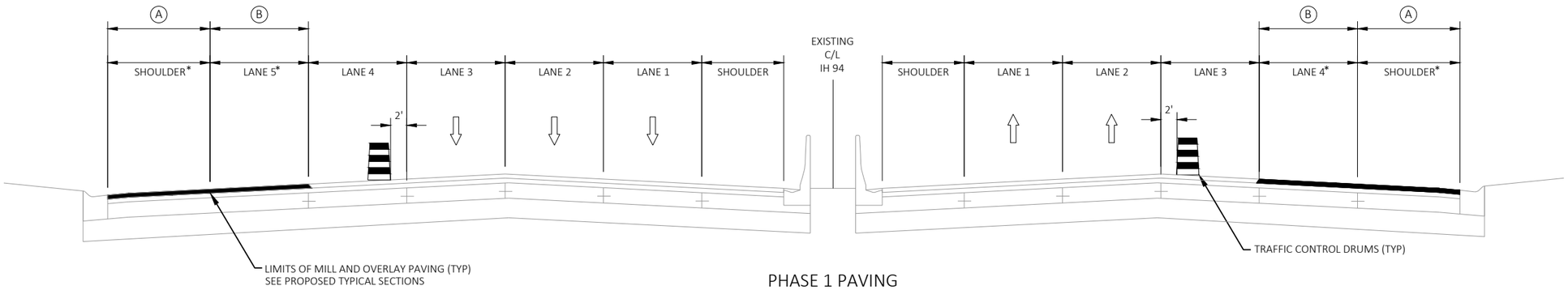
NOTE: WORK ZONE INCLUDES
B-40-1083 SUPERSTRUCTURE
AND DECK



FINAL CONFIGURATION
IH 94

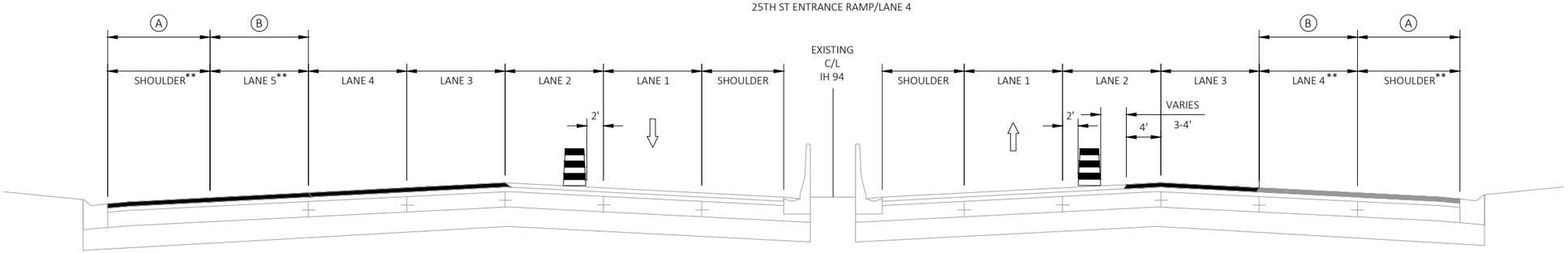
Ⓐ CONCRETE SHOULDER LIMITS (SEE PROPOSED TYPICAL SECTIONS FOR STATION RANGES)

Ⓑ EB LANE 4 AND WB LANE 5 LIMITS (SEE PROPOSED TYPICAL SECTIONS FOR STATION RANGES)



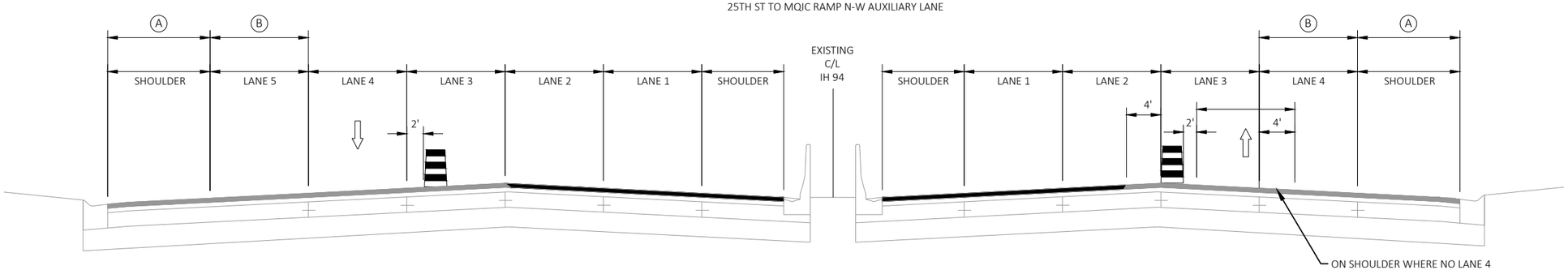
PHASE 1 PAVING

*EB: 35TH ST TO 28TH ST AUXILIARY LANE
WB: SIC RAMP S-E TO 35TH ST AUXILIARY LANE
25TH ST ENTRANCE RAMP/LANE 4



PHASE 2 PAVING

**EB: 35TH ST ENTRANCE
WB: 35TH ST TO SIC RAMP E-N AUXILIARY LANE
25TH ST TO MQIC RAMP N-W AUXILIARY LANE



PHASE 3 PAVING

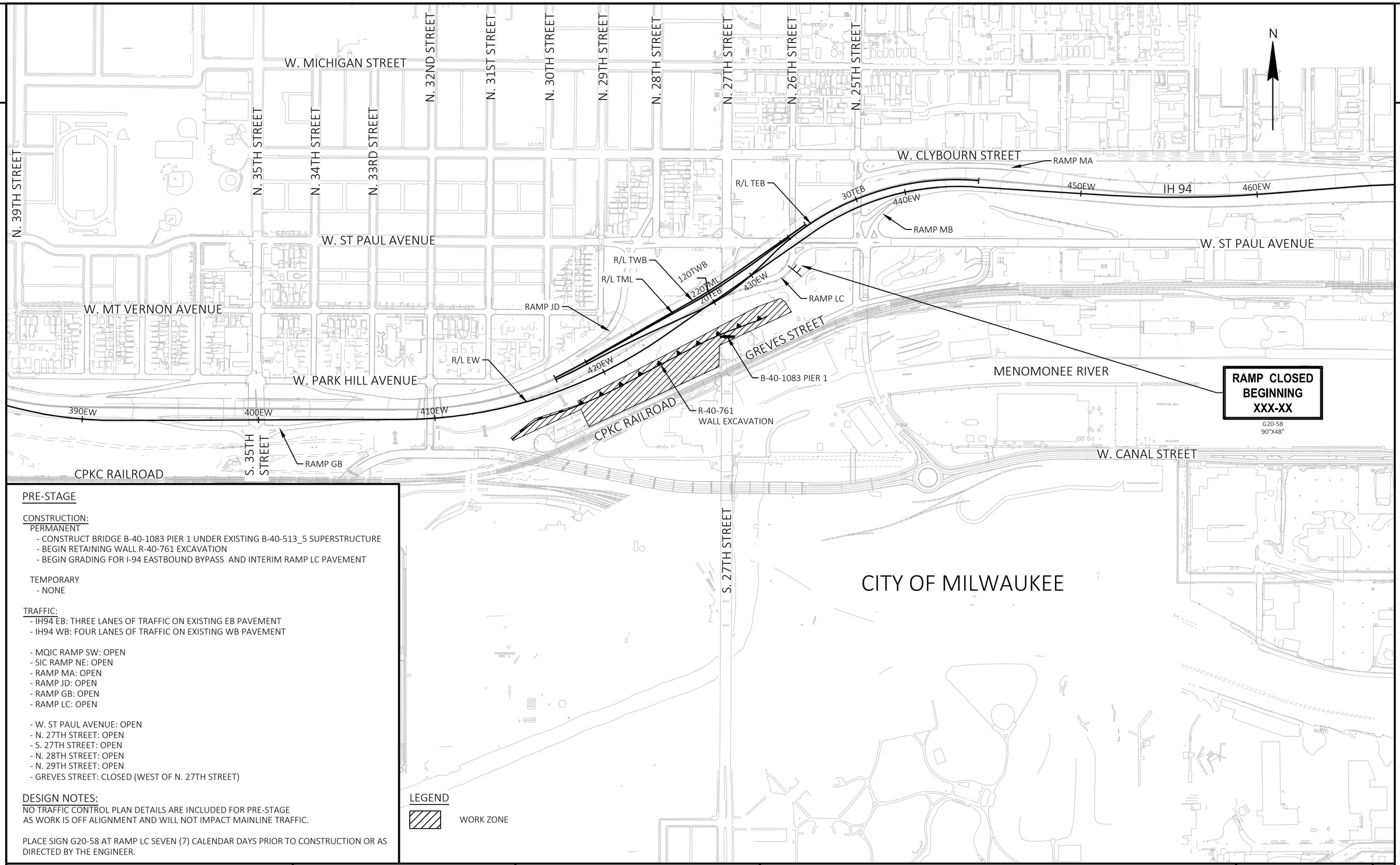
STAGE 5 (2027 CONSTRUCTION YEAR)
IH 94

MILL AND OVERLAY
FROM STADIUM INTERCHANGE BRIDGES
TO MARQUETTE INTERCHANGE WEST PAVEMENT LIMITS

NOTE
PHASED PAVING SEQUENCE IS APPLIED PER DIRECTION.
EASTBOUND AND WESTBOUND PAVING OPERATION MAY OCCUR AT DIFFERENT TIMES.
ALL WORK TO BE COMPLETED UNDER NIGHTTIME / OFF PEAK LANE CLOSURES AND
MUST BE SEQUENCED SUCH THAT ALL LANES ARE OPEN TO TRAFFIC DURING PEAK HOURS.
NO DRIVING ON MILLED SURFACE WILL BE PERMITTED.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 287	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-025501-S5.DWG
LAYOUT NAME - 01
PLOT DATE : 4/25/2025 12:56 PM PLOT BY : PESCHEL, KYLE PLOT NAME : PLOT SCALE : 1:15
WISDOT/CADDS SHEET 42



PRE-STAGE

CONSTRUCTION:

PERMANENT

- CONSTRUCT BRIDGE B-40-1083 PIER 1 UNDER EXISTING B-40-513_5 SUPERSTRUCTURE
- BEGIN RETAINING WALL R-40-761 EXCAVATION
- BEGIN GRADING FOR I-94 EASTBOUND BYPASS AND INTERIM RAMP LC PAVEMENT

TEMPORARY

- NONE

TRAFFIC:

- IH94 EB: THREE LANES OF TRAFFIC ON EXISTING EB PAVEMENT
- IH94 WB: FOUR LANES OF TRAFFIC ON EXISTING WB PAVEMENT

- MQIC RAMP SW: OPEN
- SIC RAMP NE: OPEN
- RAMP MA: OPEN
- RAMP JD: OPEN
- RAMP GB: OPEN
- RAMP LC: OPEN

- W. ST PAUL AVENUE: OPEN
- N. 27TH STREET: OPEN
- S. 27TH STREET: OPEN
- N. 28TH STREET: OPEN
- N. 29TH STREET: OPEN
- GREVES STREET: CLOSED (WEST OF N. 27TH STREET)

DESIGN NOTES:

NO TRAFFIC CONTROL PLAN DETAILS ARE INCLUDED FOR PRE-STAGE
AS WORK IS OFF ALIGNMENT AND WILL NOT IMPACT MAINLINE TRAFFIC.

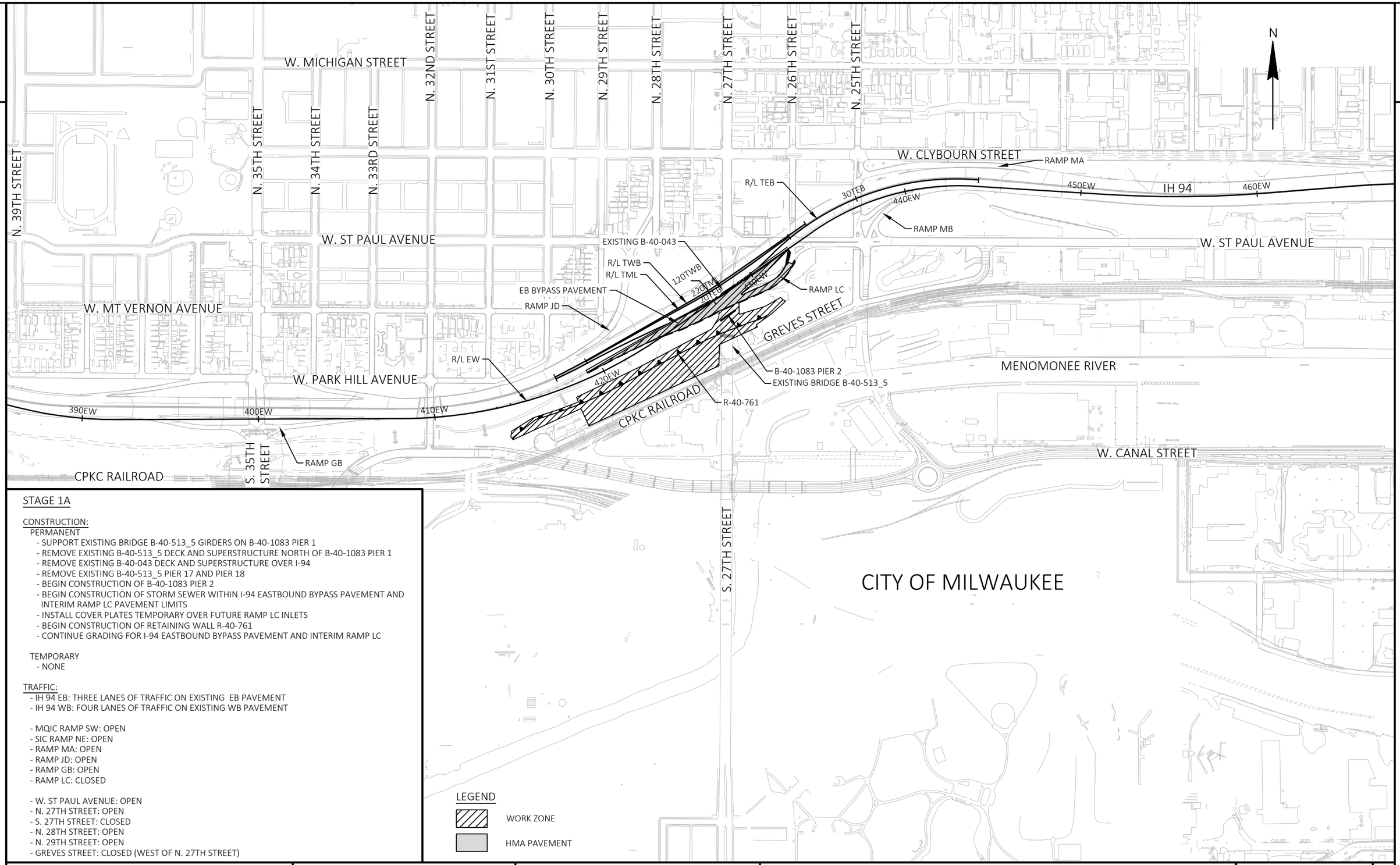
PLACE SIGN G20-58 AT RAMP LC SEVEN (7) CALENDAR DAYS PRIOR TO CONSTRUCTION OR AS DIRECTED BY THE ENGINEER.

LEGEND

WORK ZONE

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL OVERVIEW - PRE-STAGE	SHEET 288	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026001-S0.DWG
LAYOUT NAME - 01
PLOT DATE : 5/12/2025 11:33 AM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42



STAGE 1A

CONSTRUCTION:

PERMANENT

- SUPPORT EXISTING BRIDGE B-40-513_5 GIRDERS ON B-40-1083 PIER 1
- REMOVE EXISTING B-40-513_5 DECK AND SUPERSTRUCTURE NORTH OF B-40-1083 PIER 1
- REMOVE EXISTING B-40-043 DECK AND SUPERSTRUCTURE OVER I-94
- REMOVE EXISTING B-40-513_5 PIER 17 AND PIER 18
- BEGIN CONSTRUCTION OF B-40-1083 PIER 2
- BEGIN CONSTRUCTION OF STORM SEWER WITHIN I-94 EASTBOUND BYPASS PAVEMENT AND INTERIM RAMP LC PAVEMENT LIMITS
- INSTALL COVER PLATES TEMPORARY OVER FUTURE RAMP LC INLETS
- BEGIN CONSTRUCTION OF RETAINING WALL R-40-761
- CONTINUE GRADING FOR I-94 EASTBOUND BYPASS PAVEMENT AND INTERIM RAMP LC

TEMPORARY

- NONE

TRAFFIC:

- IH 94 EB: THREE LANES OF TRAFFIC ON EXISTING EB PAVEMENT
- IH 94 WB: FOUR LANES OF TRAFFIC ON EXISTING WB PAVEMENT

- MQIC RAMP SW: OPEN
- SIC RAMP NE: OPEN
- RAMP MA: OPEN
- RAMP JD: OPEN
- RAMP GB: OPEN
- RAMP LC: CLOSED

- W. ST PAUL AVENUE: OPEN
- N. 27TH STREET: OPEN
- S. 27TH STREET: CLOSED
- N. 28TH STREET: OPEN
- N. 29TH STREET: OPEN
- GREVES STREET: CLOSED (WEST OF N. 27TH STREET)

LEGEND

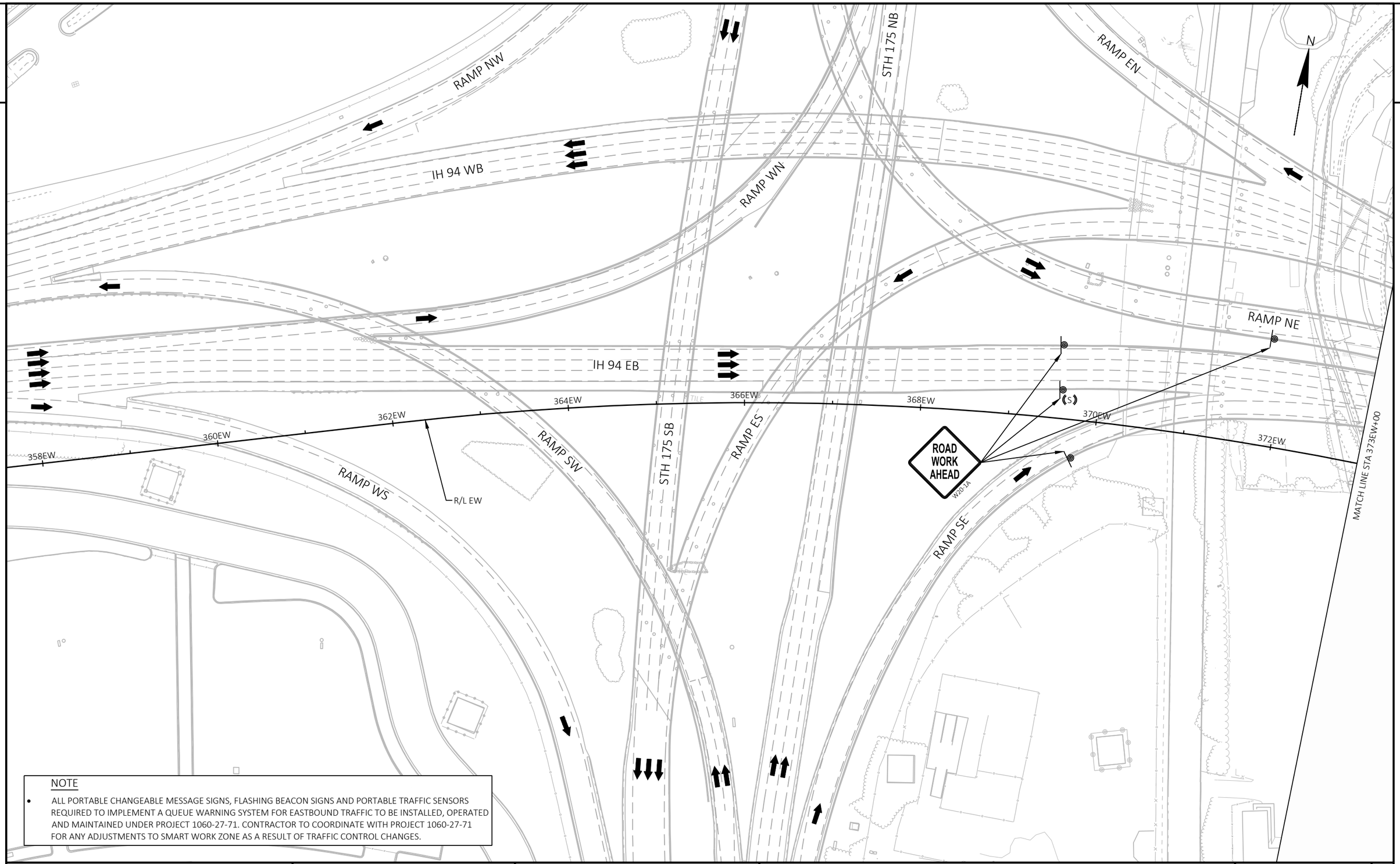
WORK ZONE

HMA PAVEMENT

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL OVERVIEW - STAGE 1A	SHEET 289	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026101-S1A.DWG
LAYOUT NAME - 01
PLOT DATE : 5/28/2025 11:13 AM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

2



NOTE

- ALL PORTABLE CHANGEABLE MESSAGE SIGNS, FLASHING BEACON SIGNS AND PORTABLE TRAFFIC SENSORS REQUIRED TO IMPLEMENT A QUEUE WARNING SYSTEM FOR EASTBOUND TRAFFIC TO BE INSTALLED, OPERATED AND MAINTAINED UNDER PROJECT 1060-27-71. CONTRACTOR TO COORDINATE WITH PROJECT 1060-27-71 FOR ANY ADJUSTMENTS TO SMART WORK ZONE AS A RESULT OF TRAFFIC CONTROL CHANGES.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 1A	SHEET 290	E

2

2

35 th Street 1/4
26 th Street CLOSED
13 th Street 2

G20-62
48"X24"

N

RAMP NE

IH 94 WB

IH 94 EB

374EW

376EW

378EW

380EW

382EW

384EW

386EW

388

MATCH LINE STA 373EW+00

MATCH LINE STA 388EW+00

SUBSTATION

R/L EW

GATE

GATE

W21-62Q
30"X48"

WORK ZONE

R2-1
48"X60"

SPEED LIMIT 50

W21-62R
30"X48"

FINES DOUBLE

WORK ZONE

NO HANDHELD PHONES WHILE DRIVING

G20-58
102"X66"

W21-62
96"X48"

FINES DOUBLE IN WORK ZONES

Give 'em a BRAKE SLOW DOWN

$200 MINIMUM

W21-62P
96"X12"

CPKC RAILROAD

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 1A	SHEET 291	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026102-S1A.DWG
LAYOUT NAME - 01-EW-02

PLOT DATE : 4/25/2025 10:11 AM PLOT BY : AMBER WALTERS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

N. 38TH STREET

N. 37TH STREET

N. 36TH STREET

N. 35TH STREET

CANOPY

GATE

W. PARK HILL AVENUE

RAMP GD

IH 94 WB

IH 94 EB

MATCH LINE STA 388EW+00

MATCH LINE STA 403EW+00

390EW

392EW

394EW

396EW

398EW

400EW

402EW

RAMP GC

RAMP GB

R/L EW

RIGHT SHOULDER CLOSED AHEAD

W21-5B

RAMP CLOSED AHEAD

W20-53A

26TH ST

215

48"X18"

ROAD WORK AHEAD

W20-1A

RUINS

EXIT 309 B

26th Street

St Paul Ave

RAMP CLOSED

G20-63

72"X12"

RAIL SYSTEM

CPKC RAILROAD

S. 35TH STREET

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 1A	SHEET 292	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026102-S1A.DWG
LAYOUT NAME - 01-EW-03

PLOT DATE : 4/25/2025 10:11 AM PLOT BY : AMBER WALTERS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N. 34TH STREET

N. 33RD STREET

N. 32ND STREET

N. 31ST STREET

N. 30TH STREET

W. PARK HILL AVENUE

RUINS

A/C

GATE

POOL

G20-62
48"X24"

26 th Street CLOSED
13 th Street 1
43 794
1 1/4

W5-52R

RAMP GA

MATCH LINE STA 403EW+00

404EW

RAMP GB

406EW

408EW

410EW

412EW

R/L EW

IH 94 WB

IH 94 EB

EW+59.93
-6.44'LT

414EW

CC

17.0:1 TAPER

416EW

36d

2

418

MATCH LINE STA 418EW+00

50'
TYP

EW+20.22
-12.67'LT

CRASH CUSHION TEMPORARY LOW
MAINTENANCE LEFT IN PLACE

RIGHT SHOULDER CLOSED
W21.5A

RAMP CLOSED 1000 FT
W20.3C

R-40-761

W. CANAL STREET

GREVES STREET

ABANDONED

SIGN

CPKC RAILROAD

MH

Mitchell Park Domes

Potowatomi Casino

EXIT 310 A

213
72"X24"

REMOVE FMS/SIGN COVERING UPON
THE COMPLETION OF STAGE 4

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 1A	SHEET 293	E

2

2

W. MT VERNON AVENUE

N. 29TH STREET

W. ST PAUL AVENUE

N. 27TH STREET

N

27TH STREET CLOSED SOUTH OF ST PAUL AVENUE SEE "TRAFFIC CONTROL - N. 27THTH STREET CLOSURE" DETAIL

EXISTING B-40-513_5/B-40-43 SUBSTRUCTURE (PIER 18)

REMOVE SIGN

EXIT 309B

110

RAMP JD

R/L TWB

R/L TEB

R/L TML

IH 94 WB

IH 94 EB

112TWB

12TEB

114TWB

214TML

14TEB

116TWB

216TML

16TEB

118TWB

218TML

18TEB

120TWB

220TML

20TEB

122TWB

222TML

22TEB

124TWB

224TML

24TEB

36'

2'

5'

TML+13.61
36.11'RT

TML+08.46
37.02'RT

MATCH LINE STA 418EW+00

MATCH LINE STA 433EW+00

420EW

422EW

424EW

426EW

428EW

430EW

432EW

R/L EW

20TLC

RAMP LC

22TLC

24TLC

R/L TLC

B-40-1083 PIER 2

EW+48.18
-6.64' LT

R-40-761

CPKC RAILROAD

ABANDONED

ABANDONED

GATE

REMOVE SIGN

EXIT 309 B

26th Street
St Paul Ave

N. 27TH STREET

PLACE SIGN ON PORTABLE SUPPORT

Downtown Exits

43 NORTH Kilbourn Ave 1 ¼

794 St Paul - J Lovell 1

794 Jackson - Van Buren St 2

GREVES STREET CLOSED; SEE "TRAFFIC CONTROL - GREVES STREET CLOSURE" DETAIL FOR ADDITIONAL SIGNING AND DEVICES

GREVES STREET

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 1A	SHEET 294	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026102-S1A.DWG
LAYOUT NAME - 01-EW-05

PLOT DATE : 4/29/2025 10:28 PM PLOT BY : PESCHEL, KYLE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

W. CLYBOURN STREET

N. 26TH STREET

N. 25TH STREET

RAMP MA

IH 94 WB

IH 94 EB

RAMP MB

32TEB

34TEB

36TEB

30TEB

28TEB

26TEB

126TWB

R/L TWB

R/L TEB

19'

438EW

440EW

442EW

444EW

446EW

448EW

436EW

434EW

R/L EW

500'

(E)

END
ROAD WORK

G20-2A
48"X24"

MATCH LINE STA 433EW+00

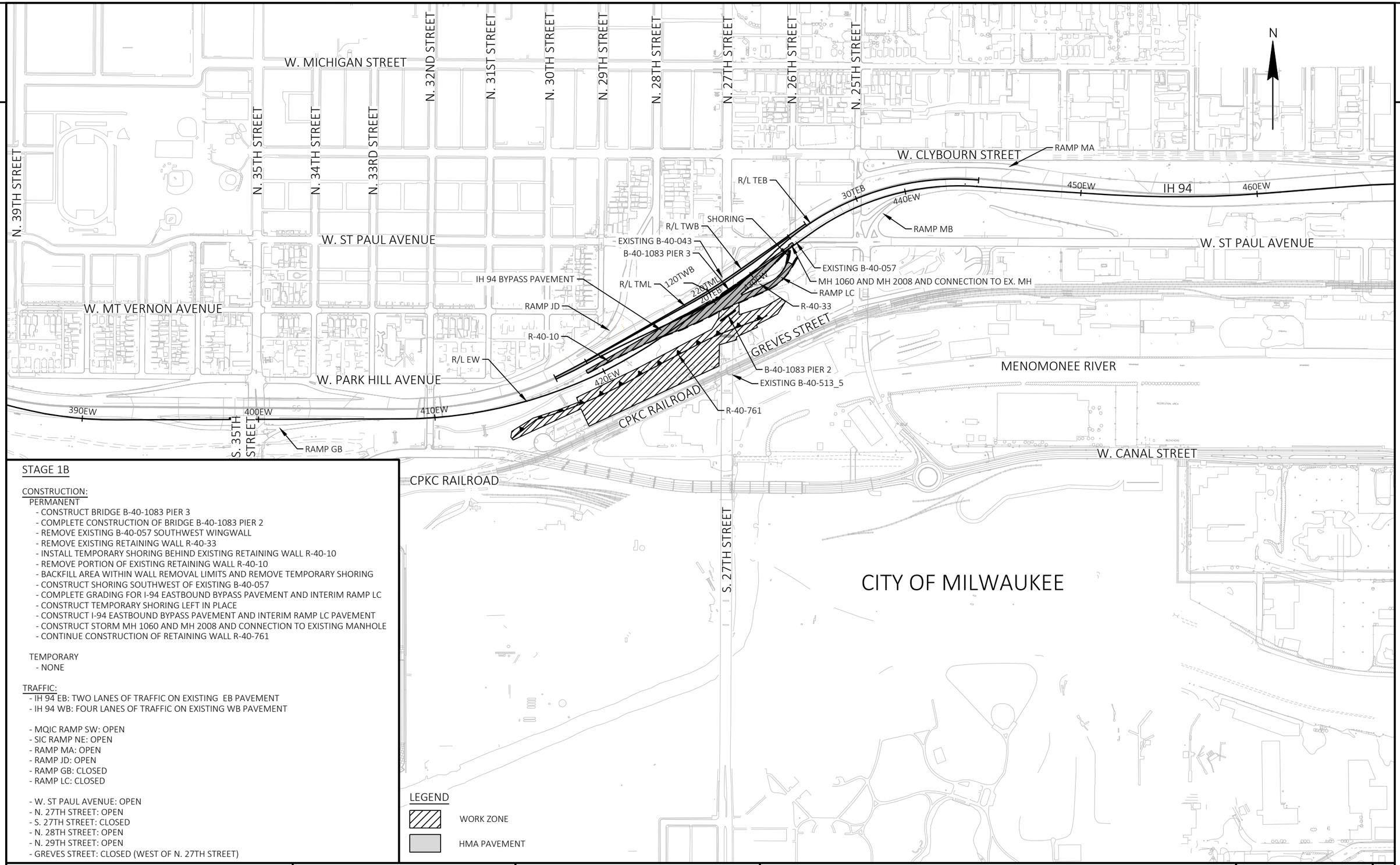
W. ST PAUL AVENUE

N. 25TH STREET

GREVES STREET

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 1A	SHEET 295	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026102-S1A.DWG
LAYOUT NAME - 01-EW-06
PLOT DATE : 4/25/2025 10:12 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



STAGE 1B

CONSTRUCTION:

PERMANENT

- CONSTRUCT BRIDGE B-40-1083 PIER 3
- COMPLETE CONSTRUCTION OF BRIDGE B-40-1083 PIER 2
- REMOVE EXISTING B-40-057 SOUTHWEST WINGWALL
- REMOVE EXISTING RETAINING WALL R-40-33
- INSTALL TEMPORARY SHORING BEHIND EXISTING RETAINING WALL R-40-10
- REMOVE PORTION OF EXISTING RETAINING WALL R-40-10
- BACKFILL AREA WITHIN WALL REMOVAL LIMITS AND REMOVE TEMPORARY SHORING
- CONSTRUCT SHORING SOUTHWEST OF EXISTING B-40-057
- COMPLETE GRADING FOR I-94 EASTBOUND BYPASS PAVEMENT AND INTERIM RAMP LC
- CONSTRUCT TEMPORARY SHORING LEFT IN PLACE
- CONSTRUCT I-94 EASTBOUND BYPASS PAVEMENT AND INTERIM RAMP LC PAVEMENT
- CONSTRUCT STORM MH 1060 AND MH 2008 AND CONNECTION TO EXISTING MANHOLE
- CONTINUE CONSTRUCTION OF RETAINING WALL R-40-761

TEMPORARY

- NONE

TRAFFIC:

- IH 94 EB: TWO LANES OF TRAFFIC ON EXISTING EB PAVEMENT
- IH 94 WB: FOUR LANES OF TRAFFIC ON EXISTING WB PAVEMENT

- MQIC RAMP SW: OPEN
- SIC RAMP NE: OPEN
- RAMP MA: OPEN
- RAMP JD: OPEN
- RAMP GB: CLOSED
- RAMP LC: CLOSED

- W. ST PAUL AVENUE: OPEN
- N. 27TH STREET: OPEN
- S. 27TH STREET: CLOSED
- N. 28TH STREET: OPEN
- N. 29TH STREET: OPEN
- GREVES STREET: CLOSED (WEST OF N. 27TH STREET)

LEGEND

WORK ZONE

HMA PAVEMENT

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL OVERVIEW - STAGE 1B	SHEET 296	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026111-S1B.DWG
LAYOUT NAME - 01
PLOT DATE : 5/12/2025 11:33 AM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

2

2

RAMP NW

IH 94 WB

RAMP WN

STH 175 NB

RAMP EN

N

MENOMONEE

RAMP NE

IH 94 EB

358EW

360EW

362EW

364EW

366EW

368EW

370EW

372EW

RAMP WS

RAMP SW

STH 175 SB

RAMP ES

RIGHT LANE CLOSED 1/2 MILE

W20-5G

ROAD WORK 1 MILE

W20-1F

RAMP SE

2600'

MATCH LINE STA 373EW+00

NOTE

- ALL COVERING SIGN ITEMS SHOWN IN THIS STAGE WERE COMPLETED AND PAID FOR IN STAGE 1A.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 1B	SHEET 297	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026112-S1B.DWG
LAYOUT NAME - 01-EW-01

PLOT DATE : 4/25/2025 10:10 AM PLOT BY : AMBER WALTERS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

35 th Street 1/4
26 th Street CLOSED
13 th Street 2

N

RAMP NE

IH 94 WB

IH 94 EB

374EW

376EW

378EW

380EW

382EW

384EW

386EW

388EW

MATCH LINE STA 373EW+00

MATCH LINE STA 388EW+00

RIVER

SUBSTATION

GATE

GATE

W21-62Q
30"X48"
WORK ZONE

R2-1
48"X60"
SPEED LIMIT 50

W21-62R
30"X48"
FINES DOUBLE

WORK ZONE
NO HANDHELD PHONES WHILE DRIVING
G20-58
102"X66"

W21-62
96"X48"
FINES DOUBLE IN WORK ZONES
Give 'em a BRAKE SLOW DOWN
$200 MINIMUM
W21-62P
96"X12"

CPKC RAILROAD

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 1B	SHEET 298	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026112-S1B.DWG
LAYOUT NAME - 01-EW-02
PLOT DATE : 4/25/2025 10:11 AM PLOT BY : AMBER WALTERS PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

N. 38TH STREET

N. 37TH STREET

N. 36TH STREET

N. 35TH STREET

GAS STATION CANOPY

GATE

W. PARK HILL AVENUE

RAMP GD

IH 94 WB

IH 94 EB

600' TAPER

50' TYP

100' TYP

MATCH LINE STA 388EW+00

388EW

390EW

392EW

394EW

396EW

398EW

400EW

402EW

MATCH LINE STA 403EW+00

R/L EW

RAMP GC

EW+83.28
-21.24'LT

110

RAMP GB

RAMP GB CLOSED; SEE "TRAFFIC CONTROL - RAMP GB CLOSURE (LONG TERM)" DETAIL FOR ADDITIONAL SIGNING AND DEVICES

W04-2R

RAMP CLOSED AHEAD

W20-53A

26TH ST

215

48"X18"

RUINS

EXIT 309 B

26th Street
St Paul Ave

RAMP CLOSED

RAIL SYSTEM

CPKC RAILROAD

S. 35TH STREET

NOTE

- ALL PORTABLE CHANGEABLE MESSAGE SIGNS AND PORTABLE TRAFFIC SENSORS REQUIRED TO IMPLEMENT A DYNAMIC LATE MERGE SYSTEM FOR EASTBOUND TRAFFIC TO BE INSTALLED, OPERATED AND MAINTAINED UNDER PROJECT 1060-27-71. CONTRACTOR TO COORDINATE WITH PROJECT 1060-27-71 FOR ANY ADJUSTMENTS TO SMART WORK ZONE AS A RESULT OF TRAFFIC CONTROL CHANGES.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 1B	SHEET 299	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026112-S1B.DWG
LAYOUT NAME - 01-EW-03
PLOT DATE : 4/25/2025 10:11 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

N

N. 34TH STREET

N. 33RD STREET

N. 32ND STREET

N. 31ST STREET

N. 30TH STREET

W. PARK HILL AVENUE

26 th Street CLOSED
13 th Street 1
43 794 1 1/4

W5-52R

RAMP GA

600' TAPER

50' TYP

100' TYP

404EW

406EW

408EW

410EW

412EW

414EW

416EW

IH 94 WB

IH 94 EB

110

9.3:1 TAPER

24"

2

MATCH LINE STA 403EW+00

MATCH LINE STA 418EW+00

RAMP GB

EW+83.31
-26.67'LT

R/L EW

EW+54.57
-37.91'LT

R-40-761

RAMP GB CLOSED; SEE "TRAFFIC CONTROL - RAMP GB CLOSURE (LONG TERM)" DETAIL FOR ADDITIONAL SIGNING AND DEVICES

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

W. CANAL STREET

GREVES STREET

CPKC RAILROAD

SIGN

POOL

GATE

BORE

ABANDONED

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 1B	SHEET 300	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026112-S1B.DWG
LAYOUT NAME - 01-EW-04

PLOT DATE : 4/25/2025 10:11 AM PLOT BY : AMBER WALTERS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

W. MT VERNON AVENUE

N. 29TH STREET

W. ST PAUL AVENUE

N. 27TH STREET

N

COORDINATE CHANGES TO VEHICLE DETECTION WITH TMC

27TH STREET CLOSED SOUTH OF ST PAUL AVENUE SEE "TRAFFIC CONTROL - N. 27THTH STREET CLOSURE" DETAIL

PARTIAL REMOVAL OF EXISTING WALL R-40-10; SEE CONSTRUCTION DETAIL "EXISTING R-40-10 PARTIAL REMOVAL"

TEMPORARY SHORING LEFT IN PLACE (TYP)

ANCHORING CONCRETE BARRIER TEMPORARY PRECAST 50 LF ADJACENT TO STORM SEWER WORK

TEMPORARY SHORING LEFT IN PLACE (TYP)

RAMP JD

110

IH 94 WB

IH 94 EB

R/L TWB

R/L TEB

R/L TML

112TWB

12TEB

114TWB

214TML

14TEB

116TWB

216TML

16TEB

118TWB

218TML

18TEB

TEB+52.15
-30.31'LT

120TWB

220TML

20TEB

B-40-1083 PIER 3

122TWB

222TML

22TEB

TEB+52.23
-17.57'LT

124TWB

224TML

24TEB

24'

2'

MATCH LINE STA 418EW+00

EW

EW+21.26
-57.90'LT

420EW

422EW

424EW

426EW

428EW

430EW

432EW

R/L EW

RAMP LC

20TLC

22TLC

24TLC

R/L TLC

B-40-1083 PIER 2

MATCH LINE STA 433EW+00

CPKC RAILROAD

R-40-761

ABANDONED

ABANDONED

N. 27TH STREET

INSTALLED ON PORTABLE SUPPORT IN STAGE 1A

Downtown Exits	
43 NORTH Kilbourn Ave	1 ¼
794 St Paul - J Lovell	1
794 Jackson - Van Buren St	2

GREVES STREET CLOSED; SEE "TRAFFIC CONTROL - GREVES STREET CLOSURE" DETAIL FOR ADDITIONAL SIGNING AND DEVICES

GREVES STREET

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 1B	SHEET 301	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026112-S1B.DWG
LAYOUT NAME - 01-EW-05

PLOT DATE : 4/29/2025 9:45 PM PLOT BY : PESCHEL, KYLE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

W. CLYBOURN STREET

N. 26TH STREET

N. 25TH STREET

110

RAMP MA

IH 94 WB

IH 94 EB

32TEB

34TEB

36TEB

30TEB

28TEB

26TEB

126TWB

R/L TWB

R/L TEB

24'

438EW

440EW

442EW

444EW

446EW

448EW

15' TYP

RAMP MB

436EW

434EW

100' TYP

500'

R/L EW

EXISTING B-40-53

MATCH LINE STA 433EW+00

TEB+89.88
25.21'RT

TEB+32.06
24.00'RT

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

END ROAD WORK

(E)

G20-2A
48"X24"

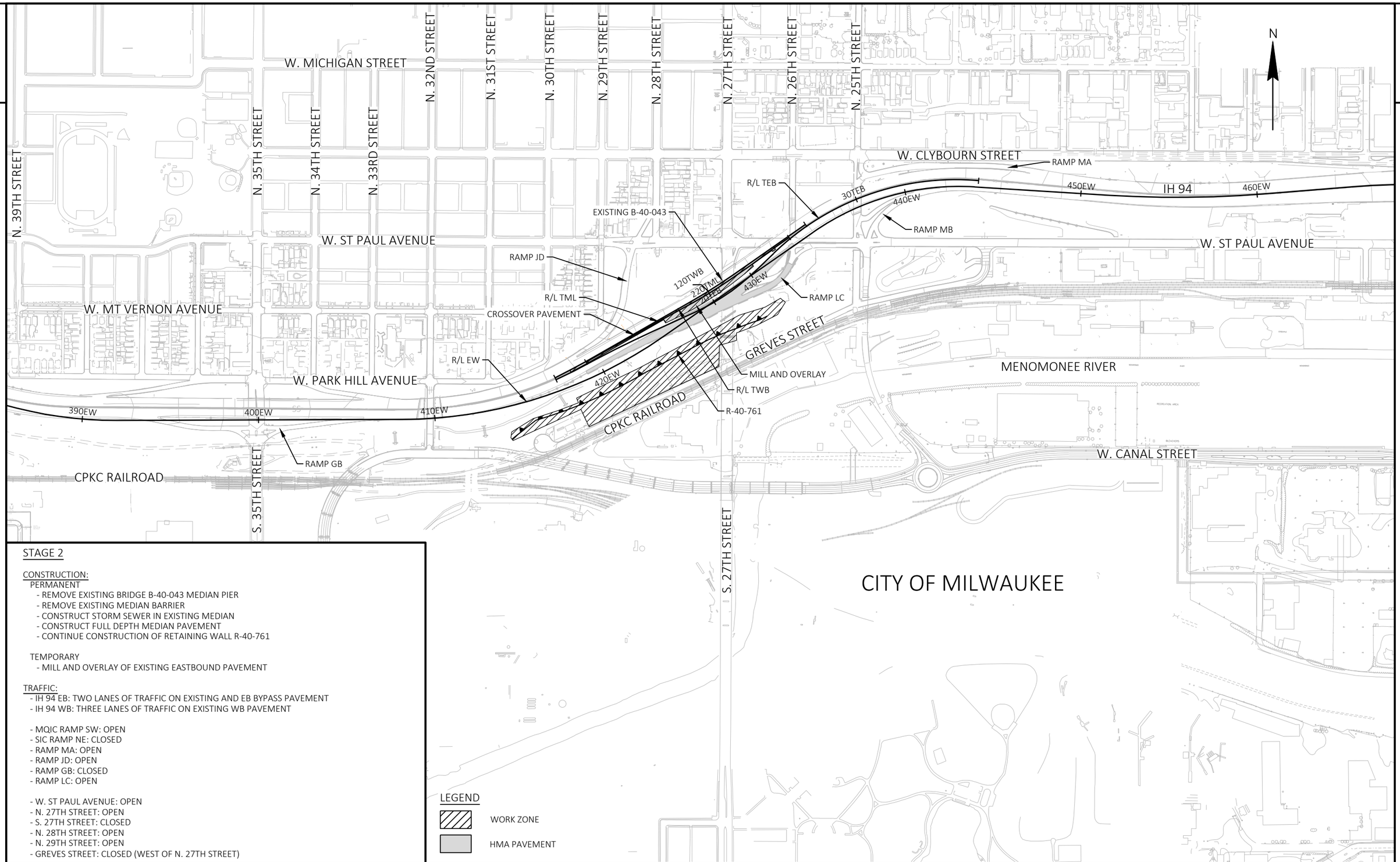
W. ST PAUL AVENUE

N. 25TH STREET

GREVES STREET

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 1B	SHEET 302	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026112-S1B.DWG
LAYOUT NAME - 01-EW-06
PLOT DATE : 4/25/2025 10:12 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



STAGE 2

CONSTRUCTION:

PERMANENT
- REMOVE EXISTING BRIDGE B-40-043 MEDIAN PIER
- REMOVE EXISTING MEDIAN BARRIER
- CONSTRUCT STORM SEWER IN EXISTING MEDIAN
- CONSTRUCT FULL DEPTH MEDIAN PAVEMENT
- CONTINUE CONSTRUCTION OF RETAINING WALL R-40-761

TEMPORARY
- MILL AND OVERLAY OF EXISTING EASTBOUND PAVEMENT

TRAFFIC:
- IH 94 EB: TWO LANES OF TRAFFIC ON EXISTING AND EB BYPASS PAVEMENT
- IH 94 WB: THREE LANES OF TRAFFIC ON EXISTING WB PAVEMENT

- MQIC RAMP SW: OPEN
- SIC RAMP NE: CLOSED
- RAMP MA: OPEN
- RAMP JD: OPEN
- RAMP GB: CLOSED
- RAMP LC: OPEN

- W. ST PAUL AVENUE: OPEN
- N. 27TH STREET: OPEN
- S. 27TH STREET: CLOSED
- N. 28TH STREET: OPEN
- N. 29TH STREET: OPEN
- GREVES STREET: CLOSED (WEST OF N. 27TH STREET)

LEGEND

WORK ZONE

HMA PAVEMENT

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL OVERVIEW - STAGE 2	SHEET 303	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026201-S2.DWG
LAYOUT NAME - 01
PLOT DATE : 5/12/2025 11:40 AM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

2

2

N

RAMP NW

1060-27-71 TRAFFIC CONTROL
(BY OTHERS)

IH 94 WB

STH 175 NB

RAMP EN

RAMP WN

RAMP NE CLOSED

600' TAPER

RAMP NE

100' TYP

EW+20.82
-36.05'LT

50' TYP

IH 94 EB

EW+13.89
-49.94'LT

358EW

360EW

362EW

364EW

366EW

368EW

370EW

372EW

110

EW+41.21
-27.20'LT

MATCH LINE STA 373EW+00

RAMP WS

RAMP SW

STH 175 SB

RAMP ES

RAMP SE

NOTE

- ALL PORTABLE CHANGEABLE MESSAGE SIGNS AND PORTABLE TRAFFIC SENSORS REQUIRED TO IMPLEMENT A DYNAMIC LATE MERGE SYSTEM FOR EASTBOUND TRAFFIC TO BE INSTALLED, OPERATED AND MAINTAINED UNDER PROJECT 1060-27-71. CONTRACTOR TO COORDINATE WITH PROJECT 1060-27-71 FOR ANY ADJUSTMENTS TO SMART WORK ZONE AS RESULT OF TRAFFIC CONTROL CHANGES.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 2	SHEET 304	E

2

2

N

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

MATCH LINE STA 373EW+00

MATCH LINE STA 388EW+00

IH 94 WB

IH 94 EB

EW+57.29
-100.20'LT

25'
TYP

EW+75.73
-75.49'LT

374EW

376EW

EW+88.22
-47.35'LT

378EW

380EW

382EW

384EW

386EW

110

116

111

112

TYP

109

EW+51.35
-3.86'LT

CC

EW+41.43
20.79'RT

EW+63.08
19.04'RT

EW+42.19
6.30'RT

W5-52R

PLACE SIGN ON PORTABLE SUPPORT

EXIT 309 A
35 th Street
RIGHT LANE MUST EXIT

EXIT 309 A
35 th Street

COVERING SIGNS TYPE I

218
180"X36"

SUBSTATION

GATE

CPKC RAILROAD

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 2	SHEET 305	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026202-S2.DWG
LAYOUT NAME - 01-EW-02
PLOT DATE : 5/12/2025 11:40 AM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

N

N. 38TH STREET

N. 37TH STREET

N. 36TH STREET

N. 35TH STREET

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

ROAD NARROWS

W05-1
48"X48"

W. PARK HILL AVENUE

RAMP GD

111 112 109 TYP

129

110

27.5:1
SHIFTING AND MERGING TAPER

IH 94 WB

IH 94 EB

EW+08.13
-61.74'LT

EW+82.26
-29.83'LT

EW+71.13
-54.75'LT

12'

12'

EW+21.43
-64.05'LT

EW+21.33
-45.18'LT

11'

11'

110 111 112 TYP

50'
TYP

MATCH LINE STA 388EW+00

EW

390EW

392EW

394EW

396EW TYP

398EW

400EW

402EW

100'
TYP

50'
TYP

100'
TYP

25'
TYP

25'
TYP

16'

R899'

RAMP GC

RAMP GB

EW+41.76
-32.04'LT

EW+29.36
-43.21'LT

EW+81.81
-13.37'LT

EW+72.91
-19.25'LT

EW+78.81
-0.05'LT

R/L EW

EW+70.99
-31.09'LT

MATCH LINE STA 403EW+00

110

116

WO1-6
48" X 24"

TYPE III BARRICADE

RUINS

RAMP GB CLOSED; SEE "TRAFFIC CONTROL - RAMP GB CLOSURE (LONG TERM)" DETAIL FOR ADDITIONAL SIGNING AND DEVICES

WO1-4BR

45
MPH

WO13-1
36"X36"

EXIT

E5-1
48"X48"

EXIT 309 B

26th Street
St Paul Ave
½ MILE

UNCOVER SIGN UPON COMPLETION OF STAGE 1B

RAIL SYSTEM

CPKC RAILROAD

S. 35TH STREET

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 2	SHEET 306	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026202-S2.DWG
LAYOUT NAME - 01-EW-03

PLOT DATE : 5/12/2025 11:41 AM

PLOT BY : PESCHEL, KYLE

PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N. 34TH STREET

N. 33RD STREET

N. 32ND STREET

N. 31ST STREET

N. 30TH STREET

END ROAD WORK (E)
G20-2A
48"X24"

W. PARK HILL AVENUE

26 th Street 1/4
13 th Street 1
43 794 1 1/4

UNCOVER SIGN UPON COMPLETION OF STAGE 1B

N

POOL

GATE

RAMP GA

109 111 112 110 TYP

109

R1950'

R1928'

R1970'

EW+17.89
-67.81'LT

IH 94 WB

MATCH LINE STA 403EW+00

11' 11'

50' TYP

404EW

RAMP GB

406EW

408EW

410EW

412EW

414EW

416EW

418

MATCH LINE STA 418EW+00

19.1:1 TAPER

11' 11'

R/L EW

100' TYP

EW+63.65
-33.02'LT

100' TYP

EW+13.99
-13.25'LT

W5-52R

R-40-761

RAMP GB CLOSED; SEE "TRAFFIC CONTROL - RAMP GB CLOSURE (LONG TERM)" DETAIL FOR ADDITIONAL SIGNING AND DEVICES

W24-1AR

45 MPH
WO13-1
36"X36"

W. CANAL STREET

SIGN

CPKC RAILROAD

ABANDONED

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 2	SHEET 307	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026202-S2.DWG
LAYOUT NAME - 01-EW-04
PLOT DATE : 4/25/2025 10:11 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

RAMP JD CLOSED; SEE "TRAFFIC CONTROL - RAMP JD CLOSURE" DETAIL

W. MT VERNON AVENUE

N. 29TH STREET

W. ST PAUL AVENUE

N. 27TH STREET

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

W5-52L

N

27TH STREET CLOSED SOUTH OF ST PAUL AVENUE
SEE "TRAFFIC CONTROL - N. 27THTH STREET CLOSURE" DETAIL

COORDINATE CHANGES TO VEHICLE DETECTION WITH TMC

ASPHALTIC SURFACE TEMPORARY

THRIE BEAM CONNECTION FROM SECOND SEGMENT OF CONCRETE BARRIER TEMPORARY PRECAST ALONG MAINLINE TO FIRST SECTION ALONG RAMP LC

TRANSITION TO RIGID BARRIER

WO1-6
48" X 24"
TYPE III BARRICADE

RAMP JD

IH 94 WB

IH 94 EB

EXISTING B-40-43 (PIER 19)

R1244'

R6113'

MATCH LINE STA 418EW+00

MATCH LINE STA 433EW+00

23.2:1 TAPER

12.0:1 TAPER

23.8:1 TAPER

22.2:1 TAPER

100' TYP

RAMP LC

R/L TWB
R/L TEB
R/L EW
R/L TML
R/L TLC

CC

TEB+72.40 10.08'RT
TEB+72.45 12.90'RT
TWB+65.21 -10.62'LT
TWB+58.11 -7.91'LT
TWB+57.71 -6.83'LT
TWB+53.88 -4.21'LT
TWB+53.86 -2.14'LT
TWB+76.19 -7.72'LT
TWB+76.25 -5.66'LT
TWB+64.90 -6.81'LT
TWB+10.34 -5.66'LT
TWB+72.38 -6.70'LT
TEB+59.15 1.78'RT
TEB+46.87 13.97'RT
TEB+42.28 24.99'RT
TEB+37.61 36.00'RT
TEB+96.50 1.94'RT
TEB+44.60 1.77'RT
TEB+76.59 1.94'RT
TEB+82.59 38.05'RT
TEB+72.97 34.89'RT
TEB+43.41 46.08'RT
TEB+59.35 36.00'RT
TEB+57.97 35.93'RT
TEB+20.91 36.19'RT
TEB+18.17 46.06'RT
TEB+68.17 58.06'RT
TEB+68.71 47.00'RT
TEB+76.58 58.06'RT
TEB+76.58 48.00'RT
TEB+58.02 48.00'RT
TEB+90.66 36.00'RT
TEB+98.54 58.06'RT
TEB+91.71 41.06'RT
TEB+62.46 43.92'RT
TLC+53.96 -18.06'LT
TEB+67.68 36.00'RT
TEB+67.69 41.94'RT
TLC+68.63 -14.00'LT
TLC+88.45 7.06'RT
TLC+98.03 -14.00'LT
TEB+96.54 41.06'RT
TLC+98.03 -18.06'LT
TEB+96.52 36.00'RT
TLC+68.39 -14.36'LT
TLC+86.29 -18.06'LT
TLC+98.81 1.94'RT
TLC+50.15 6.49'RT
TLC+98.07 -28.50'LT

110 111 112 109 116 129 146 147

ANCHORING CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE (TYP)

R-40-761

GREVES STREET

CPKC RAILROAD

ABANDONED

GATE

EXIT

E5-1
48"X48"
INSTALLED ON PERMANENT SUPPORTS

Downtown Exits
43 NORTH Kilbourn Ave 1 1/4
794 St Paul - J Lovell 1
794 Jackson - Van Buren St 2

INSTALLED ON PERMANENT SUPPORTS
EXIT 309 B
26th Street
St Paul Ave

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

GREVES STREET CLOSED; SEE "TRAFFIC CONTROL - GREVES STREET CLOSURE" DETAIL FOR ADDITIONAL SIGNING AND DEVICES

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 2	SHEET 308	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026202-S2.DWG
LAYOUT NAME - 01-EW-05
PLOT DATE : 4/29/2025 9:45 PM PLOT BY : PESCHEL, KYLE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

N

W. CLYBOURN STREET

N. 26TH STREET

N. 25TH STREET

RAMP MA

IH 94 WB

IH 94 EB

RAMP MB

W. ST PAUL AVENUE

GREVES STREET

100' TYP

109

110

TWB+39.34
-11.71'LT

R/L TWB

R/L TEB

R/L EW

26TEB

28TEB

30TEB

32TEB

34TEB

36TEB

12'

12'

434EW

436EW

438EW

440EW

442EW

444EW

446EW

448EW

TEB+75.72
12.00'RT

EW+75.95
-65.56'LT

EW+65.70
-61.62'LT

R145.1'

R145.4'

500'

END ROAD WORK (E)
G20-2A
48"X24"

MATCH LINE STA 433EW+00

MATCH LINE STA 448EW+00

TWO EB LANES WIDEN THROUGH CURVE FROM 11' TO 12', MATCHING EXISTING TO EAST

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 2	SHEET 309	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026202-S2.DWG
LAYOUT NAME - 01-EW-06
PLOT DATE : 4/25/2025 10:12 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

N. 22ND STREET

N. 20TH STREET

N. 19TH STREET

N. 18TH STREET

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

N

W. CLYBOURN STREET

SIGN

SIGN

MATCH LINE STA 448EW+00

EW

450EW

452EW

454EW

456EW

458EW

460EW

462EW

EW+59.50
-37.94'LT

100'
TYP

109

EW+28.00
-27.33'LT

109

114

EW+11.39
-24.91'LT

114

EW+00.00
-25.00'LT

IH 94 WB

IH 94 EB

R/L EW

SEE "TRAFFIC CONTROL - IH 794 WB SINGLE LANE CLOSURE" DETAIL FOR ADDITIONAL SIGNING, DEVICES, AND MARKINGS

GATE

W. ST PAUL AVENUE

NOTE

- ALL PORTABLE CHANGEABLE MESSAGE SIGNS, FLASHING BEACON SIGNS AND PORTABLE TRAFFIC SENSORS REQUIRED TO IMPLEMENT A QUEUE WARNING SYSTEM FOR WESTBOUND TRAFFIC TO BE INSTALLED, OPERATED AND MAINTAINED UNDER PROJECT 1060-27-71. CONTRACTOR TO COORDINATE WITH PROJECT 1060-27-71 FOR ANY ADJUSTMENTS TO SMART WORK ZONE AS RESULT OF TRAFFIC CONTROL CHANGES.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 2	SHEET 310	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026202-S2.DWG
LAYOUT NAME - 01-EW-07
PLOT DATE : 5/13/2025 1:28 PM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

END ROAD WORK
G20-2A
48"X24"

RAMP NW

R11-2R
48" X 30"
RAMP CLOSED
TYPE III BARRICADE

1060-27-71 TRAFFIC CONTROL
(BY OTHERS)

RAMP NE

STH 175 SB

25'
(TYP)

STH 175 NB

W. BLUEMOUND ROAD

250'

300' SHIFTING TAPER

100'
(TYP)

50'
(TYP)

MATCHLINE A

109

110

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

RAMP EN

LEFT
EXIT 38 A
INTERSTATE 94 EAST
Downtown

COVERING SIGNS TYPE I

G20-63
102"X24"
RAMP CLOSED

44TH STREET

NOTE

THE SIC RAMP NW TO BE CLOSED BY PROJECT 1060-27-71.
CONTRACTOR TO COORDINATE WITH PROJECT 1060-27-71 FOR TRAFFIC CONTROL DEVICE LOCATION AND SPACING TO ENSURE NO CONFLICTS FOR SIMULATANEOUS CLOSURE OF RAMP NW AND RAMP NE.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 2	SHEET 311	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026203-S2.DWG
LAYOUT NAME - 02-NN-05
PLOT DATE : 5/12/2025 11:41 AM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

2

N

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

WO1-4BR

50
MPH
WO13-1
36"X36"

EAST
WEST
INTERSTATE
94
M3-2
36"X18"
M3-4
36"X18"
M1-1
36"X36"

RAMP CLOSED 1000 FT
W20-5SC

W. WISCONSIN AVENUE

W. WELLS STREET

600' TAPER

50' (TYP)

300' SHIFTING TAPER

STH 175 SB

STH 175 NB

100' (TYP)

250'

355'

110

MATCHLINE A

MATCHLINE B

WO1-6
48" X 24"
TYPE III BARRICADE

INTERSTATE
94
EAST
Downtown
RAMP CLOSED

G20-63
102"X24"

TOWER

WALL

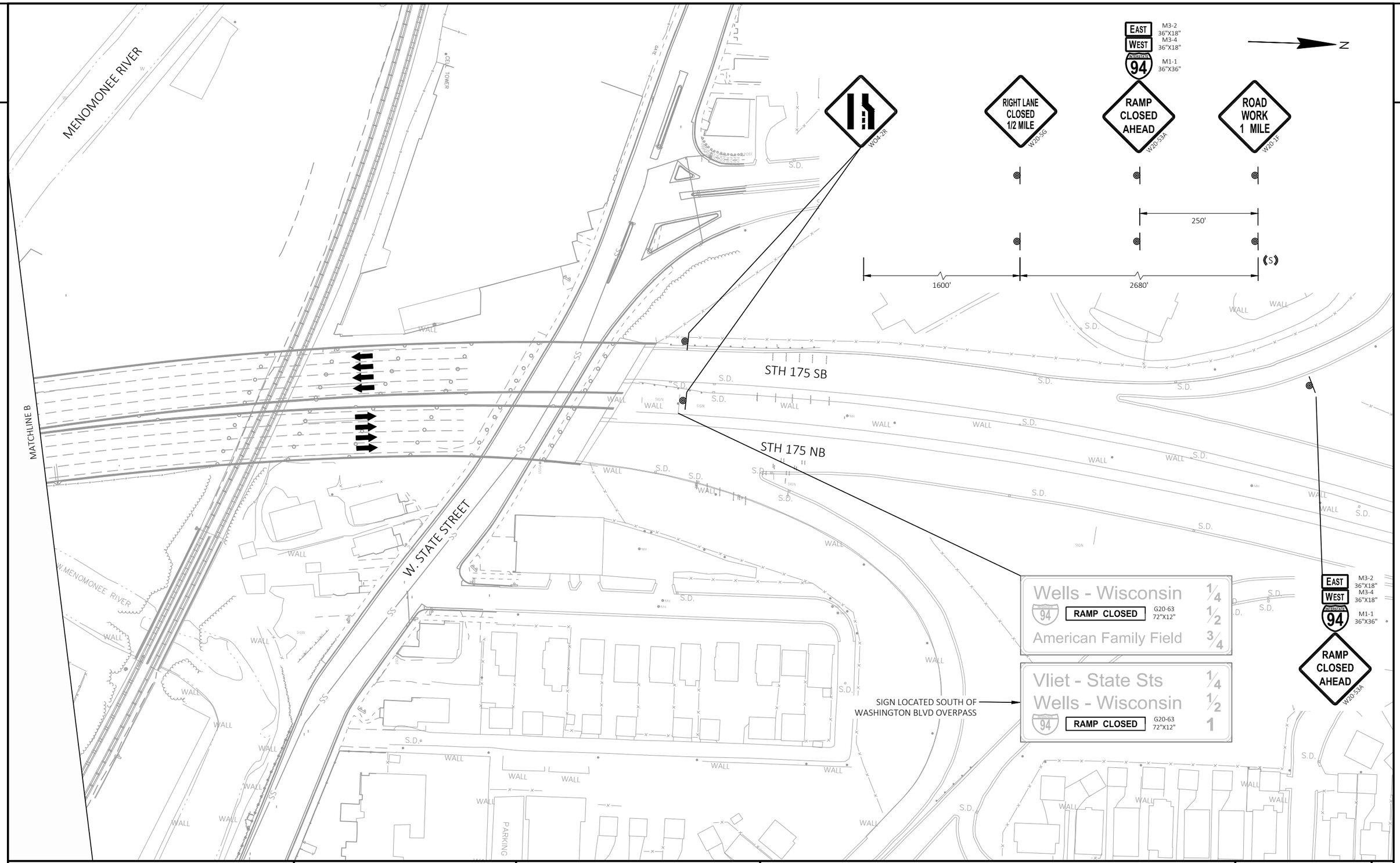
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 2	SHEET 312	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026203-S2.DWG
LAYOUT NAME - 02-NN-06

PLOT DATE : 5/12/2025 11:41 AM PLOT BY : PESCHEL, KYLE PLOT NAME : PLOT SCALE : 1 IN:100 FT

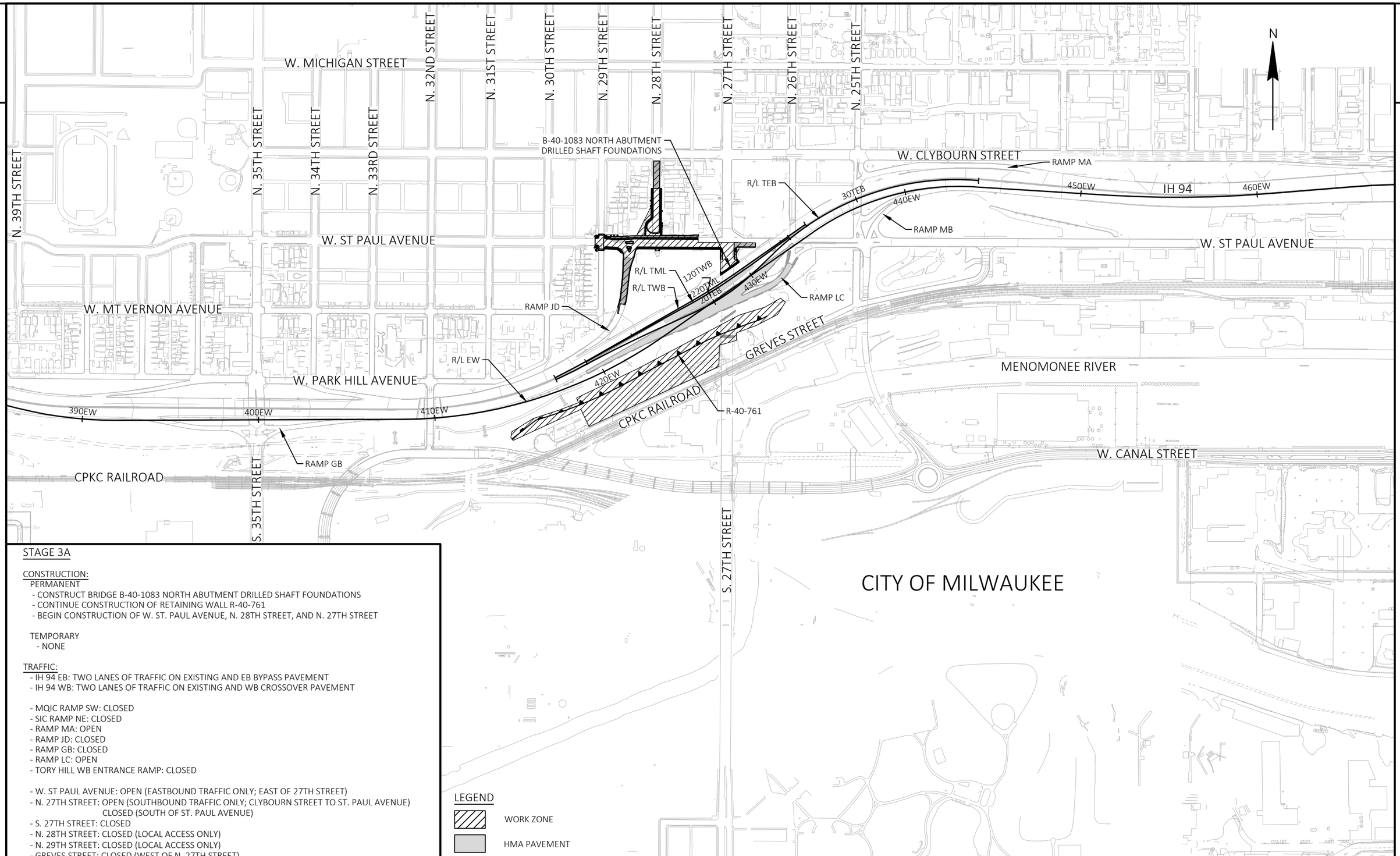
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 2	SHEET 313 E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026203-S2.DWG
LAYOUT NAME - 02-NN-07
PLOT DATE : 5/12/2025 11:41 AM PLOT BY : PESCHEL, KYLE PLOT NAME : PLOT SCALE : 1 IN:100 FT



STAGE 3A

CONSTRUCTION:

PERMANENT

- CONSTRUCT BRIDGE B-40-1083 NORTH ABUTMENT DRILLED SHAFT FOUNDATIONS
- CONTINUE CONSTRUCTION OF RETAINING WALL R-40-761
- BEGIN CONSTRUCTION OF W. ST. PAUL AVENUE, N. 28TH STREET, AND N. 27TH STREET

TEMPORARY

- NONE

TRAFFIC:

- IH 94 EB: TWO LANES OF TRAFFIC ON EXISTING AND EB BYPASS PAVEMENT
- IH 94 WB: TWO LANES OF TRAFFIC ON EXISTING AND WB CROSSOVER PAVEMENT

- MQIC RAMP SW: CLOSED
- SIC RAMP NE: CLOSED
- RAMP MA: OPEN
- RAMP JD: CLOSED
- RAMP GB: CLOSED
- RAMP LC: OPEN
- TORY HILL WB ENTRANCE RAMP: CLOSED

- W. ST PAUL AVENUE: OPEN (EASTBOUND TRAFFIC ONLY; EAST OF 27TH STREET)
- N. 27TH STREET: OPEN (SOUTHBOUND TRAFFIC ONLY; CLYBOURN STREET TO ST. PAUL AVENUE)
  CLOSED (SOUTH OF ST. PAUL AVENUE)
- S. 27TH STREET: CLOSED
- N. 28TH STREET: CLOSED (LOCAL ACCESS ONLY)
- N. 29TH STREET: CLOSED (LOCAL ACCESS ONLY)
- GREVES STREET: CLOSED (WEST OF N. 27TH STREET)

LEGEND

WORK ZONE

HMA PAVEMENT

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL OVERVIEW - STAGE 3A	SHEET 314	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026301-S3A.DWG
LAYOUT NAME - 01
PLOT DATE : 5/12/2025 11:33 AM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

2

2

N. 38TH STREET

N. 37TH STREET

N. 36TH STREET

N. 35TH STREET

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

ROAD NARROWS
W05-1
48"X48"

W. PARK HILL AVENUE

RAMP GD

IH 94 WB

IH 94 EB

388EW

390EW

392EW

394EW

396EW TYP

398EW

400EW

402EW

25' TYP

100' TYP

50' TYP

RAMP GB

RAMP GC

R/L EW

MATCH LINE STA 403EW+00

WO1-6
48" X 24"
TYPE III BARRICADE

RAMP GB CLOSED; SEE "TRAFFIC CONTROL - RAMP GB CLOSURE DETAIL (LONG TERM)" FOR ADDITIONAL SIGNING AND DEVICES

RUINS

W01-4BR

45 MPH
WO13-1
36"X36"

EXIT
E5-1
48"X48"

RAIL SYSTEM

CPKC RAILROAD

S. 35TH STREET

NOTE

- TRAFFIC CONTROL DEVICES AND SIGNS WEST OF STA 388EW+00 TO MATCH STAGE 2.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 3A	SHEET 315	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026302-S3A.DWG
LAYOUT NAME - 01-EW-01

PLOT DATE : 5/12/2025 11:34 AM PLOT BY : PESCHEL, KYLE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

N. 34TH STREET

N. 33RD STREET

N. 32ND STREET

N. 31ST STREET

N. 30TH STREET

W. PARK HILL AVENUE

END ROAD WORK (E)
G20-2A
48"X24"

RAMP GA

RAMP GB

MATCH LINE STA 403EW+00

MATCH LINE STA 418EW+00

50' TYP

404EW

406EW

408EW

410EW

412EW

414EW

416EW

418

100' TYP

100' TYP

R/L EW

EW+17.89
-67.81'LT

EW+39.73
-122.71'LT

EW+43.70
-107.65'LT

IH 94 WB

IH 94 EB

CC TO ET TAPER

1'

1'

1'

111

109

110

W5-52R

R-40-761

RAMP GB CLOSED; SEE "TRAFFIC CONTROL - RAMP GB CLOSURE (LONG TERM)" DETAIL FOR ADDITIONAL SIGNING AND DEVICES

ST PAUL AVE
WEST
CLOSED

212
108"X60"

W21-1AR

45
MPH
WO13-1
36"X36"

W. CANAL STREET

CPKC RAILROAD

ABANDONED

MH

MH

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 3A	SHEET 316	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026302-S3A.DWG
LAYOUT NAME - 01-EW-02
PLOT DATE : 4/25/2025 10:11 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

W. MT VERNON AVENUE

N. 29TH STREET

W. ST PAUL AVENUE

N. 27TH STREET

N

COVERING SIGNS TYPE II *

RAMP JD

25' TYP

R/L TWB

R/L TEB

TWB+67.96 -35.15'LT

110

109

R/L TML

TWB+22.76 -11.43'LT

TWB+20.99 32.54'RT

GLARE SCREENS TEMPORARY

R1907'

100' TYP

TWB+41.02 -10.42'LT

TWB+41.39 6.68'RT

B-40-1083 NORTH ABUTMENT

W5-52R

TWB+11.06 -0.18'LT

TWB+91.29 24.45'RT

TWB+82.89 -32.70'LT

TWB+32.53 -38.75'LT

TWB+58.45 -0.57'LT

CC

15:1 TAPER

112TWB 212TML 12TEB

114TWB 214TML 14TEB

116TWB 216TML 16TEB

118TWB 218TML 18TEB

120TWB 220TML

122TWB 222TML

124TWB 224TML

IH 94 WB

IH 94 EB

12.0:1 TAPER

17.7:1 TAPER

TWB+07.89 17.62'RT

MATCH LINE STA 418EW+00

MATCH LINE STA 433EW+00

420EW

422EW

424EW

426EW

428EW

430EW

432EW

20TEB

22TEB

24TEB

TWB+48.54 14.41'RT

COORDINATE CHANGES TO VEHICLE DETECTION WITH TMC

R/L EW

GLARE SCREENS TEMPORARY

20TLC

22TLC

24TLC

RAMP LC

R/L TLC

W5-52L

WO1-6 48" X 24"

TYPE III BARRICADE

R-40-761

GREVES STREET

CPKC RAILROAD

ABANDONED

R11-2L 48" X 30"

LANE CLOSED

TYPE III BARRICADE

N. 27TH STREET

EXIT

E5-1 48"X48"

GREVES STREET CLOSED; SEE "TRAFFIC CONTROL - GREVES STREET CLOSURE" DETAIL FOR ADDITIONAL SIGNING AND DEVICES

NOTE:

* IF "TRAFFIC CONTROL - RAMP JD CLOSURE DETAIL (LONG TERM)" IS UTILIZED PRIOR TO STAGE 3 BEGINNING, SIGNS MAY BE COVERED ALREADY.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 3A	SHEET 317	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026302-S3A.DWG
LAYOUT NAME - 01-EW-03
PLOT DATE : 4/29/2025 9:45 PM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

W. CLYBOURN STREET

N. 26TH STREET

N. 25TH STREET

W. ST PAUL AVENUE

GREVES STREET

RAMP MA

RAMP MB

IH 94 WB

IH 94 EB

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

W24-1AL
45
MPH
WO13-1
36"X36"

110
EW+34.30
-93.38'LT

R/L TWB

R/L TEB

R/L EW

EW+86.23
-73.51'LT

MATCH LINE STA 433EW+00

109

R1553'

11'

100'
TYP

25'
TYP

500'

END
ROAD WORK
(E)
G20-2A
48"X24"

26TEB
28TEB
30TEB
32TEB
34TEB
36TEB

434EW
436EW
438EW
440EW
442EW
444EW
446EW
448EW

SEE "TRAFFIC CONTROL - IH 43 SB TO IH 94 WB (RAMP N-W) CLOSED" DETAIL FOR ADDITIONAL SIGNING, DEVICES, AND MARKINGS

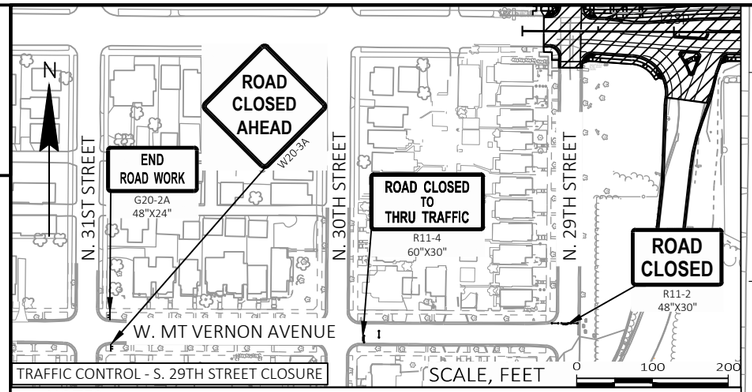
SEE "TRAFFIC CONTROL - IH 794 WB SINGLE LANE CLOSURE" DETAIL FOR ADDITIONAL SIGNING, DEVICES, AND MARKINGS

NOTE

- ALL PORTABLE CHANGEABLE MESSAGE SIGNS, FLASHING BEACON SIGNS AND PORTABLE TRAFFIC SENSORS REQUIRED TO IMPLEMENT A QUEUE WARNING SYSTEM FOR WESTBOUND TRAFFIC TO BE INSTALLED, OPERATED AND MAINTAINED UNDER PROJECT 1060-27-71. CONTRACTOR TO COORDINATE WITH PROJECT 1060-27-71 FOR ANY ADJUSTMENTS TO SMART WORK ZONE AS RESULT OF TRAFFIC CONTROL CHANGES.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 3A	SHEET 318	E

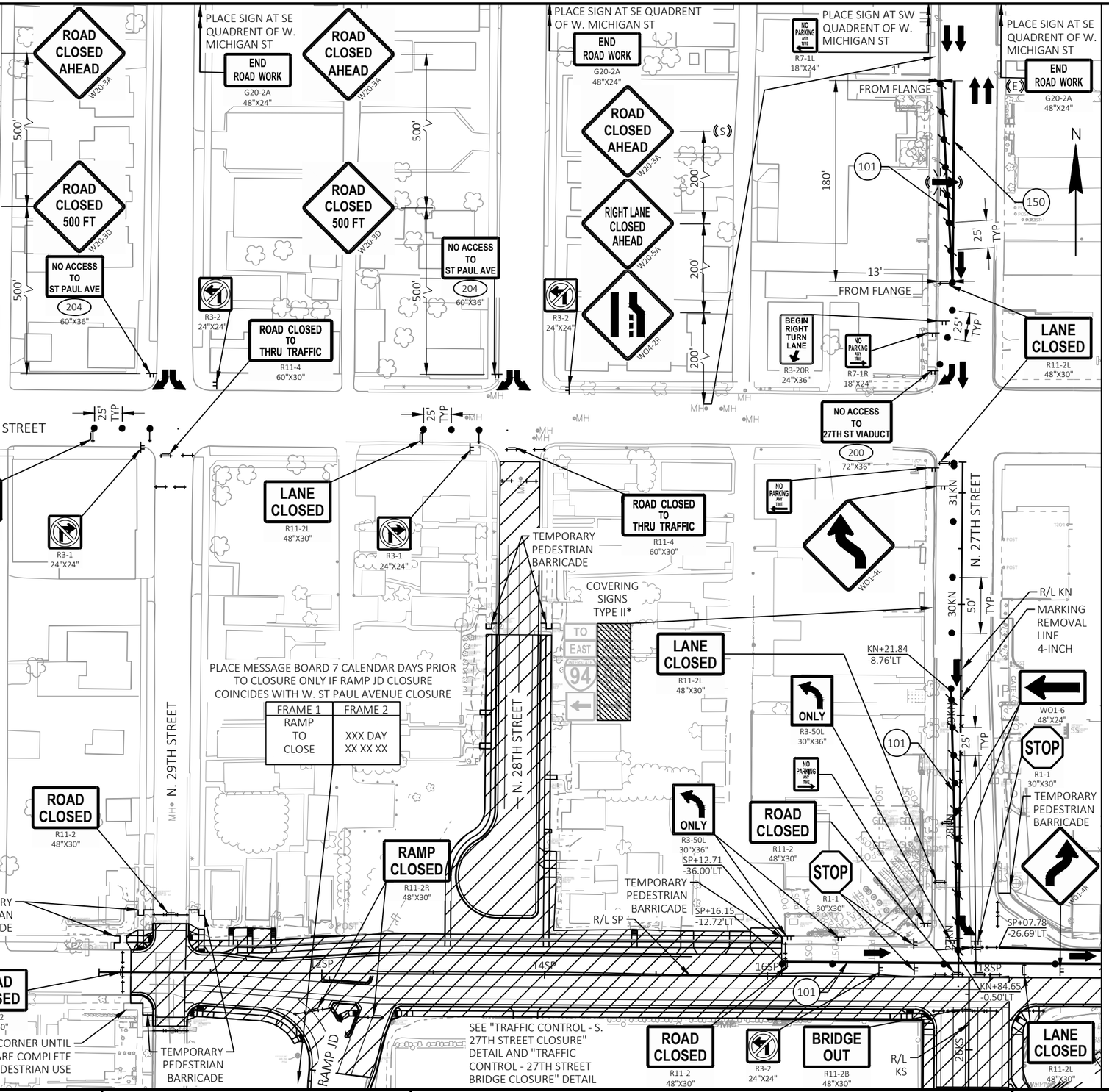
FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026302-S3A.DWG
LAYOUT NAME - 01-EW-04
PLOT DATE : 4/28/2025 1:30 PM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



NOTES:

* IF "TRAFFIC CONTROL - RAMP JD CLOSURE DETAIL (LONG TERM)" IS UTILIZED PRIOR TO STAGE 3 BEGINNING, SIGNS MAY BE COVERED ALREADY.

- EXISTING REGULATORY PARKING SIGNS BETWEEN W. ST PAUL AVE AND W. CLYBOURN AVE TO REMAIN COVERED DURING STAGE 3. COVER EXISTING REGULATORY PARKING SIGNS BETWEEN W. CLYBOURN AVE AND W. MICHIGAN ST (TWO INSTANCES).



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 3A	SHEET 319	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026303-S3A.DWG
LAYOUT NAME - 02
PLOT DATE : 4/29/2025 11:45 PM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

MATCH LINE STA 195SP+00

END ROAD WORK
G20-2A
48"X24"

PLACE SIGN AT NE QUADRENT OF N. 26TH STREET

ROAD WORK AHEAD
W20-1A

ROAD WORK AHEAD
W20-1A

N. 26TH STREET

N. 25TH STREET

W. CLYBOURN STREET

RAMP MA

IH-94 WB

IH-94 EB

RAMP MB

N

500'

500'

ROAD CLOSED 500 FT
W20-3D

ROAD CLOSED 1000 FT
W20-3C

ROAD CLOSED AHEAD
W20-3A

COVERING SIGNS TYPE II*

WO1-6
48"X24"

TEMPORARY PEDESTRIAN BARRICADE

ONLY
R3-50R
30"X36"

WO1-6
48"X24"

WO1-4R

200'

COVERING SIGNS TYPE II

LANE CLOSED
R11-2L
48"X30"

LANE CLOSED
R11-2L
48"X30"

WO1-6
48"X24"

SP+05.27
-24.49'LT

DO NOT ENTER
R5-1
30"X30"

SP+00.25
-2.76'LT

SP+22.97
-49.41'LT

101

25' TYP.

140'

50' TYP

15' TYP.

SP+36.39
-53.91'LT

SP+18.93
-41.76'LT

R/L SP

W. ST PAUL AVENUE

30SP

32SP

15' TYP.

20SP

SP+99.72
-9.23'RT

100

101

DO NOT ENTER
R5-1
30"X30"

22SP

15' TYP.

SP+23.94
-37.45'LT

100

24SP

MARKING REMOVAL LINE 4-INCH

26SP

28SP

MENOMONEE VALLEY DECORATIVE SIGN

MARKING REMOVAL LINE 4-INCH

SP+03.72
-12.59'LT

COVERING SIGNS TYPE II

RAMP LC

COVERING SIGNS TYPE I

St Paul Ave EAST

COVERING SIGNS TYPE II

R3-2
24"X24"

COVERING SIGNS TYPE II*

N. 25TH STREET

EAST 94

COVERING SIGNS TYPE II*

END ROAD WORK
G20-2A
48"X24"

COVERING SIGNS TYPE II*

LANE CLOSED
R11-2L
48"X30"

25' TYP.

COVERING SIGNS TYPE II

ONLY ONLY
R3-8AR
36"X30"

TO EAST 94

COVERING SIGNS TYPE II*

GREVES STREET

ABANDONED

ABANDONED

ABANDONED

ABANDONED

BORE

BORE

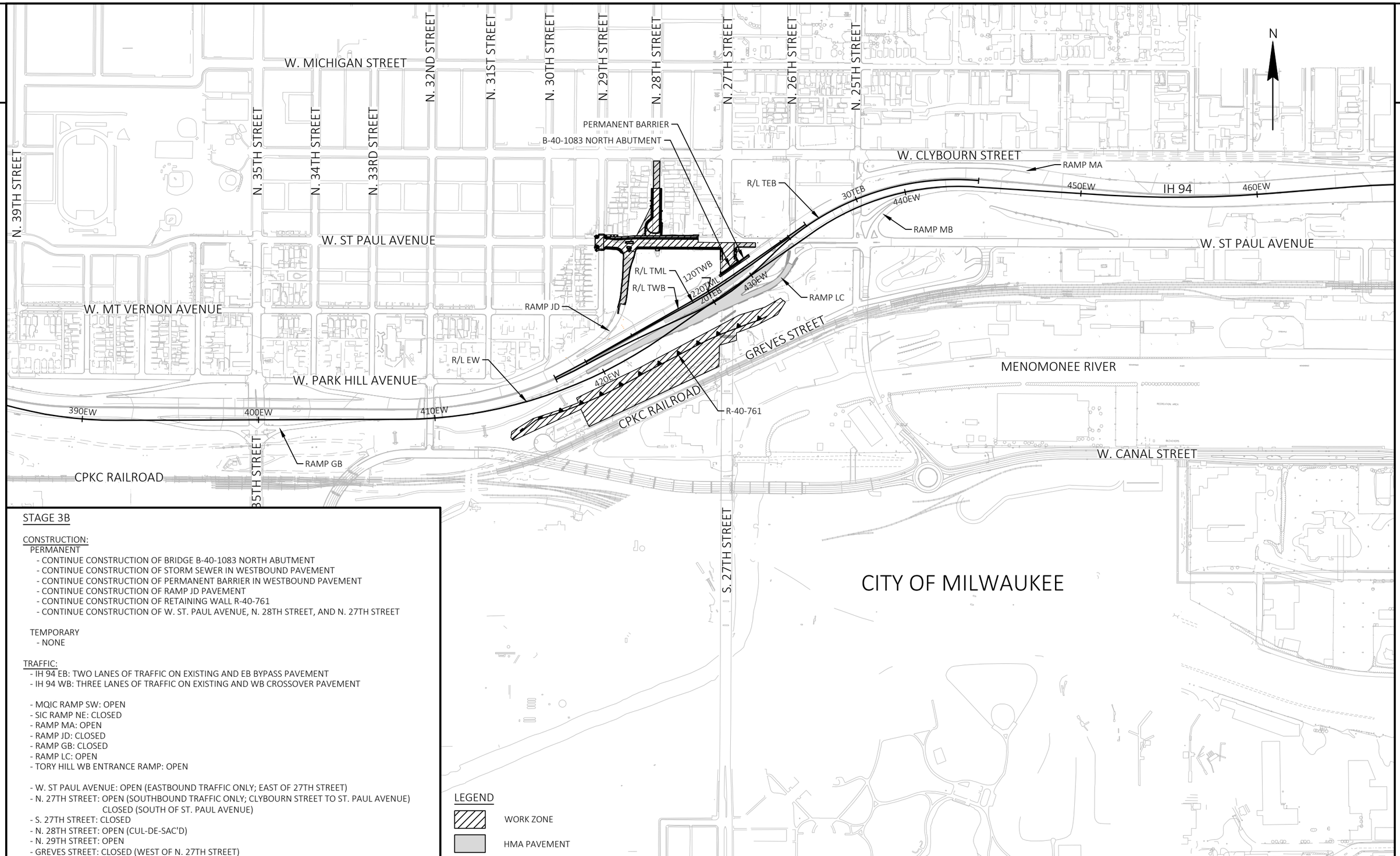
BORE

NOTE:

* IF "TRAFFIC CONTROL - RAMP JD CLOSURE DETAIL (LONG TERM)" IS UTILIZED PRIOR TO STAGE 3 BEGINNING, SIGNS MAY BE COVERED ALREADY.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 3A	SHEET 320	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026303-S3A.DWG
LAYOUT NAME - 03
PLOT DATE : 4/25/2025 10:18 AM PLOT BY : AMBER WALTERS PLOT NAME : PLOT SCALE : 1 IN:100 FT



STAGE 3B

CONSTRUCTION:

PERMANENT

- CONTINUE CONSTRUCTION OF BRIDGE B-40-1083 NORTH ABUTMENT
- CONTINUE CONSTRUCTION OF STORM SEWER IN WESTBOUND PAVEMENT
- CONTINUE CONSTRUCTION OF PERMANENT BARRIER IN WESTBOUND PAVEMENT
- CONTINUE CONSTRUCTION OF RAMP JD PAVEMENT
- CONTINUE CONSTRUCTION OF RETAINING WALL R-40-761
- CONTINUE CONSTRUCTION OF W. ST. PAUL AVENUE, N. 28TH STREET, AND N. 27TH STREET

TEMPORARY

- NONE

TRAFFIC:

- IH 94 EB: TWO LANES OF TRAFFIC ON EXISTING AND EB BYPASS PAVEMENT
- IH 94 WB: THREE LANES OF TRAFFIC ON EXISTING AND WB CROSSOVER PAVEMENT

- MQIC RAMP SW: OPEN
- SIC RAMP NE: CLOSED
- RAMP MA: OPEN
- RAMP JD: CLOSED
- RAMP GB: CLOSED
- RAMP LC: OPEN
- TORY HILL WB ENTRANCE RAMP: OPEN

- W. ST PAUL AVENUE: OPEN (EASTBOUND TRAFFIC ONLY; EAST OF 27TH STREET)
- N. 27TH STREET: OPEN (SOUTHBOUND TRAFFIC ONLY; CLYBOURN STREET TO ST. PAUL AVENUE)
  CLOSED (SOUTH OF ST. PAUL AVENUE)
- S. 27TH STREET: CLOSED
- N. 28TH STREET: OPEN (CUL-DE-SAC'D)
- N. 29TH STREET: OPEN
- GREVES STREET: CLOSED (WEST OF N. 27TH STREET)

LEGEND

WORK ZONE

HMA PAVEMENT

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL OVERVIEW - STAGE 3B	SHEET 321	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026311-S3B.DWG
LAYOUT NAME - 01
PLOT DATE : 5/12/2025 11:36 AM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

2

2

N

W. MT VERNON AVENUE

N. 30TH STREET

N. 29TH STREET

W. ST PAUL AVENUE

N. 27TH STREET

LOCAL ROAD TRAFFIC CONTROL
SAME AS PRIOR STAGE

COVERING
SIGNS
TYPE II *

WO1-6
48" X 24"

TYPE III BARRICADE

W5-52R

TWB+01.66
-22.81'LT

B-40-1083 NORTH ABUTMENT

TWB+82.89
-32.70'LT

TWB+32.53
-38.75'LT

GLARE SCREENS TEMPORARY

TWB+41.02
-10.42'LT

TWB+12.22
-17.42'LT

R/L TWB

R/L TEB

RAMP JD

R/L TML

TWB+22.76
-11.43'LT

TWB+20.99
32.54'RT

112TWB
12TEB

114TWB
214TML
14TEB

116TWB
216TML
16TEB

118TWB
218TML

120TWB
220TML

122TWB
222TML

124TWB
224TML

IH 94 WB

IH 94 EB

18TEB

20TEB

22TEB

24TEB

TWB+07.89
17.62'RT

17.7:1 TAPER

23.2:1 TAPER

12.0:1 TAPER

418EW

420EW

422EW

424EW

426EW

428EW

430EW

432EW

20TLC

22TLC

24TLC

RAMP LC

R/L TLC

MATCH LINE STA 433EW+00

COORDINATE CHANGES TO VEHICLE
DETECTION WITH TMC

R/L EW

GLARE SCREENS TEMPORARY

W5-52L

R-40-761

GREVES STREET

CPKC RAILROAD

ABANDONED

GATE

R11-2L
48" X 30"

LANE
CLOSED

TYPE III BARRICADE

N. 27TH STREET

EXIT

E5-1
48"X48"

GREVES STREET CLOSED; SEE "TRAFFIC CONTROL - GREVES STREET CLOSURE" DETAIL FOR ADDITIONAL SIGNING AND DEVICES

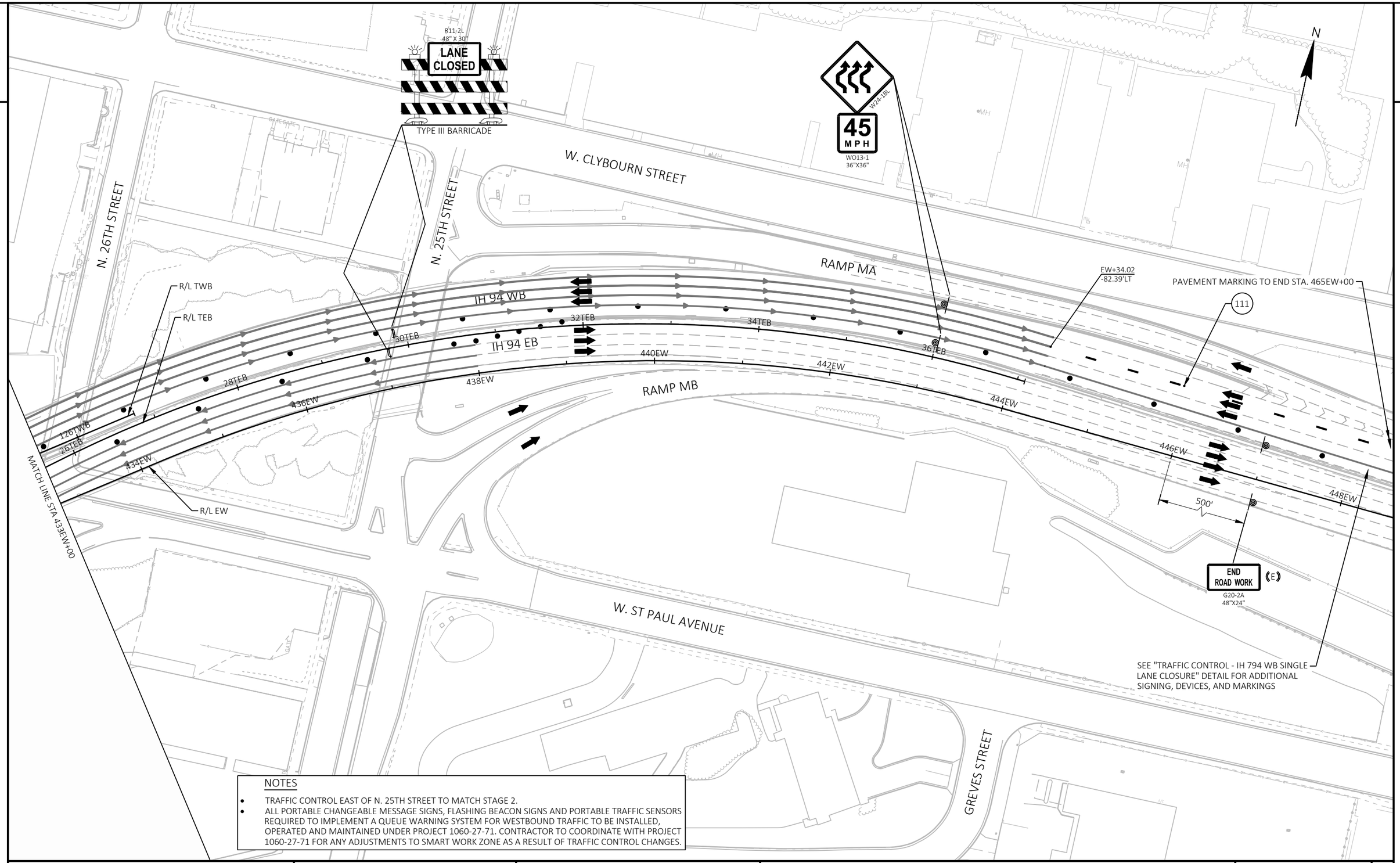
NOTES

- TRAFFIC CONTROL WEST OF N. 27TH STREET UNCHANGED FROM PRIOR STAGE.
- IF "TRAFFIC CONTROL - RAMP JD CLOSURE DETAIL (LONG TERM)" IS UTILIZED PRIOR TO STAGE 3 BEGINNING, SIGNS MAY BE COVERED ALREADY.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 3B	SHEET 322	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026312-S3B.DWG
LAYOUT NAME - 01-EW-03
PLOT DATE : 4/29/2025 11:46 PM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

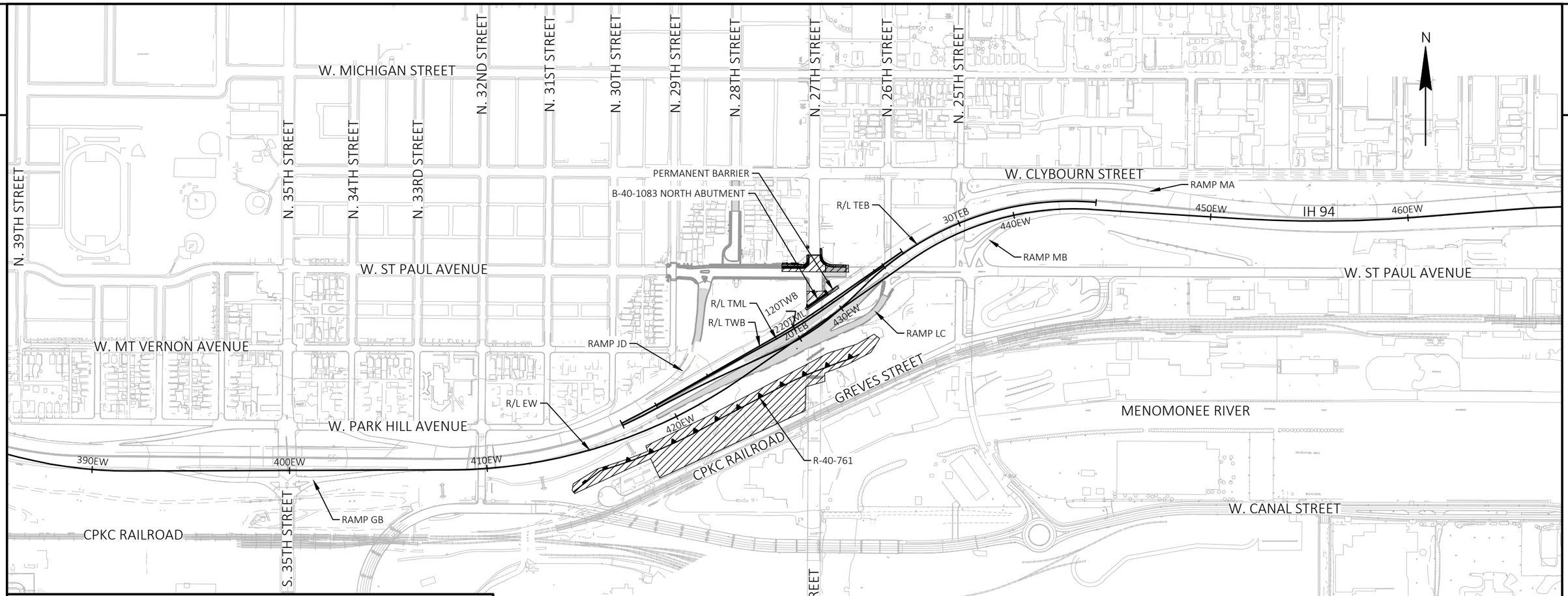


NOTES

- TRAFFIC CONTROL EAST OF N. 25TH STREET TO MATCH STAGE 2.
- ALL PORTABLE CHANGEABLE MESSAGE SIGNS, FLASHING BEACON SIGNS AND PORTABLE TRAFFIC SENSORS REQUIRED TO IMPLEMENT A QUEUE WARNING SYSTEM FOR WESTBOUND TRAFFIC TO BE INSTALLED, OPERATED AND MAINTAINED UNDER PROJECT 1060-27-71. CONTRACTOR TO COORDINATE WITH PROJECT 1060-27-71 FOR ANY ADJUSTMENTS TO SMART WORK ZONE AS A RESULT OF TRAFFIC CONTROL CHANGES.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 3B	SHEET 323	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026312-S3B.DWG
LAYOUT NAME - 01-EW-04
PLOT DATE : 4/25/2025 10:19 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



STAGE 3C

CONSTRUCTION:

PERMANENT

- COMPLETE CONSTRUCTION OF BRIDGE B-40-1083 NORTH ABUTMENT
- COMPLETE CONSTRUCTION OF STORM SEWER IN WESTBOUND PAVEMENT
- COMPLETE CONSTRUCTION OF PERMANENT BARRIER IN WESTBOUND PAVEMENT
- COMPLETE CONSTRUCTION OF RAMP JD PAVEMENT
- CONTINUE CONSTRUCTION OF RETAINING WALL R-40-761
- CONSTRUCT NORTH LEG OF INTERSECTION FOR W. ST. PAUL AVENUE AND N. 27TH STREET

TEMPORARY

- NONE

TRAFFIC:

- IH 94 EB: TWO LANES OF TRAFFIC ON EXISTING AND EB BYPASS PAVEMENT
- IH 94 WB: THREE LANES OF TRAFFIC ON EXISTING AND WB CROSSOVER PAVEMENT

- MQIC RAMP SW: OPEN
- SIC RAMP NE: CLOSED
- RAMP MA: OPEN
- RAMP JD: CLOSED
- RAMP GB: CLOSED
- RAMP LC: OPEN

- W. ST PAUL AVENUE: OPEN (EASTBOUND TRAFFIC ONLY; EAST OF 27TH STREET)
- N. 27TH STREET: CLOSED
- S. 27TH STREET: CLOSED
- N. 28TH STREET: OPEN (CUL-DE-SAC'D)
- N. 29TH STREET: OPEN
- GREVES STREET: CLOSED (WEST OF N. 27TH STREET)

LEGEND

WORK ZONE

HMA PAVEMENT

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL OVERVIEW - STAGE 3C	SHEET 324	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026321-S3C.DWG
LAYOUT NAME - 01
PLOT DATE : 5/12/2025 11:36 AM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

2

NOTES:

- EXISTING REGULATORY PARKING SIGNS BETWEEN W. ST PAUL AVE AND W. MICHIGAN ST TO REMAIN COVERED DURING STAGE 3B.

TEMPORARY AUDIBLE MESSAGE DEVICES MESSAGING PLAN:

INTERSECTION	LOCATION	MESSAGE
29TH ST & ST. PAUL AVE	NW CORNER	ATTENTION SOUTHBOUND 29TH STREET PEDESTRIANS. YOU ARE AT THE NORTHWEST CORNER OF 29TH STREET AND SAINT PAUL AVENUE. THE SOUTHWEST CORNER OF 29TH STREET AND SAINT PAUL AVENUE IS CLOSED. CROSS 29TH STREET TO CONTINUE SOUTHBOUND.
29TH ST & ST. PAUL AVE	SW CORNER	ATTENTION NORTHBOUND 29TH STREET PEDESTRIANS. YOU ARE AT THE SOUTHWEST CORNER OF 29TH STREET AND SAINT PAUL AVENUE. THE SOUTHWEST CORNER OF 29TH STREET AND SAINT PAUL AVENUE IS CLOSED. CROSS 29TH STREET TO CONTINUE NORTHBOUND.

N

W. CLYBOURN STREET

W. ST PAUL AVENUE

N. 31ST STREET

N. 30TH STREET

N. 29TH STREET

N. 28TH STREET

N. 27TH STREET

ROAD CLOSED AHEAD W20-3A

RIGHT LANE CLOSED AHEAD W20-5A

W04-2R

200'

200'

200'

NO PARKING ANY TIME R7-1L 18"X24"

SIGN PLACED DURING PREVIOUS STAGE TO REMAIN IN PLACE

SIGN PLACED DURING PREVIOUS STAGE TO REMAIN IN PLACE

END ROAD WORK G20-2A 48"X24"

25' TYP

25' TYP

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

R7-1R 18"X24"

NO PARKING ANY TIME

LANE CLOSED R11-2L 48"X30"

NO ACCESS TO ST PAUL AVE 204 60"X36"

ROAD CLOSED TO THRU TRAFFIC R11-4 60"X30"

31KN

30KN

R/L KN

50' TYP

29KN

28KN

COVERING SIGNS TYPE II

TEMPORARY PEDESTRIAN BARRICADE

ROAD CLOSED R11-2 48"X30"

R7-1R 18"X24"

ROAD CLOSED R11-2 48"X30"

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1A

M4-60L 30"X24"

LANE CLOSED R11-2L 48"X30"

TEMPORARY PEDESTRIAN BARRICADE

RAMP CLOSED R11-2R 48"X30"

TEMPORARY PEDESTRIAN BARRICADE

R/L SP

SP+12.71 36.00'LT

27KN

12SP

14SP

16SP

18SP

50' TYP

TEMPORARY PEDESTRIAN SURFACE

M4-60R 30"X24"

TEMPORARY DETECTABLE WARNING FIELD

TEMPORARY CURB RAMP

RAMP JD

RAMP CLOSED R11-2R 48"X30"

SEE "TRAFFIC CONTROL - S. 27TH ST. CLOSURE" DETAIL AND "TRAFFIC CONTROL - 27TH STREET BRIDGE CLOSURE" DETAIL

ONLY R3-50A 30"X36"

BRIDGE OUT R11-2B 48"X30"

26KS

R/L KS

MATCH LINE STA 19SP+00

2

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 3C	SHEET 325	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026323-S3.DWG
LAYOUT NAME - 01
PLOT DATE : 4/28/2025 2:39 PM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

N

W. CLYBOURN STREET

N. 26TH STREET

N. 25TH STREET

RAMP MA

IH-94 WB

IH-94 EB

RAMP MB

ROAD WORK AHEAD
W20-1A

TEMPORARY PEDESTRIAN BARRICADE TO REMAIN IN PLACE FROM PREVIOUS STAGE

ROAD CLOSED
R11-2
48"X30"

WO1-6
48"X24"

ONLY
R3-50R
30"X36"

LANE CLOSED
R11-2L
48"X30"

SP+22.97
-49.41'LT

SP+23.94
-37.45'LT

SP+20.32
-41.92'LT

SP+36.39
-53.91'LT

101

150

100

25' TYP

140'

50' TYP

200'

15' TYP.

20SP

100'

22SP

24SP

26SP

28SP

30SP

32SP

W. ST PAUL AVENUE

15' TYP.

DO NOT ENTER
R5-1
30"X30"

St Paul Ave
EAST

WO1-6
48"X24"

WO1-4R

LANE CLOSED
R11-2L
48"X30"

R3-2
24"X24"

ONLY ONLY
R3-8AR
36"X30"

LANE CLOSED
R11-2L
48"X30"

500'

500'

ROAD CLOSED 500 FT
W20-3D

ROAD CLOSED 1000 FT
W20-3C

ROAD CLOSED AHEAD
W20-3A

R/L SP

MENOMONEE VALLEY DECORATIVE SIGN

3 TREES

END ROAD WORK
G20-2A
48"X24"

EAST
INTERSTATE
94

TO
EAST
INTERSTATE
94

GREVES STREET

ABANDONED

ABANDONED

ABANDONED

ABANDONED

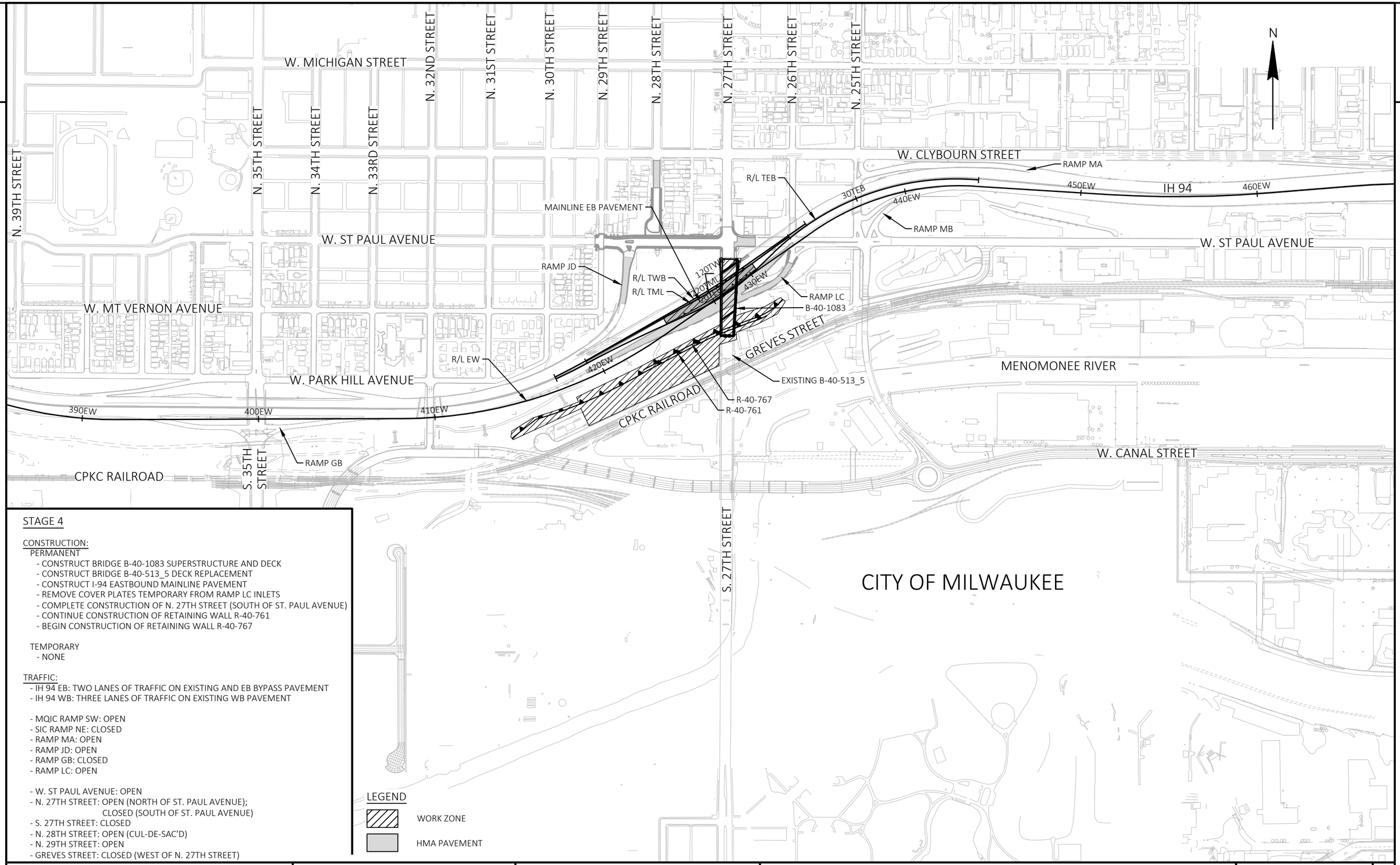
MATCH LINE STA 195P+00

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 3C	SHEET 326	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026323-S3.DWG
LAYOUT NAME - 02

PLOT DATE : 4/25/2025 10:22 AM PLOT BY : AMBER WALTERS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42



STAGE 4

CONSTRUCTION:

PERMANENT

- CONSTRUCT BRIDGE B-40-1083 SUPERSTRUCTURE AND DECK
- CONSTRUCT BRIDGE B-40-513_5 DECK REPLACEMENT
- CONSTRUCT I-94 EASTBOUND MAINLINE PAVEMENT
- REMOVE COVER PLATES TEMPORARY FROM RAMP LC INLETS
- COMPLETE CONSTRUCTION OF N. 27TH STREET (SOUTH OF ST. PAUL AVENUE)
- CONTINUE CONSTRUCTION OF RETAINING WALL R-40-761
- BEGIN CONSTRUCTION OF RETAINING WALL R-40-767

TEMPORARY

- NONE

TRAFFIC:

- IH 94 EB: TWO LANES OF TRAFFIC ON EXISTING AND EB BYPASS PAVEMENT
- IH 94 WB: THREE LANES OF TRAFFIC ON EXISTING WB PAVEMENT

- MQIC RAMP SW: OPEN
- SIC RAMP NE: CLOSED
- RAMP MA: OPEN
- RAMP JD: OPEN
- RAMP GB: CLOSED
- RAMP LC: OPEN

- W. ST PAUL AVENUE: OPEN
- N. 27TH STREET: OPEN (NORTH OF ST. PAUL AVENUE); CLOSED (SOUTH OF ST. PAUL AVENUE)
- S. 27TH STREET: CLOSED
- N. 28TH STREET: OPEN (CUL-DE-SAC'D)
- N. 29TH STREET: OPEN
- GREVES STREET: CLOSED (WEST OF N. 27TH STREET)

LEGEND

WORK ZONE

HMA PAVEMENT

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL OVERVIEW - STAGE 4	SHEET 327	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026401-S4.DWG
LAYOUT NAME - 01
PLOT DATE : 7/11/2025 3:05 PM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

2

2

N

N. 38TH STREET

N. 37TH STREET

N. 36TH STREET

N. 35TH STREET

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

ROAD NARROWS
W05-1
48"X48"

W. PARK HILL AVENUE

RAMP GD

IH 94 WB

IH 94 EB

388EW

390EW

392EW

394EW

396EW

398EW

400EW

402EW

25' TYP

100' TYP

50' TYP

RAMP GC

RAMP GB

MATCHLINE 403EW+00

R/L EW

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

WO1-6
48" X 24"
TYPE III BARRICADE

RAMP GB CLOSED; SEE "TRAFFIC CONTROL - RAMP GB CLOSURE DETAIL (LONG TERM)" FOR ADDITIONAL SIGNING AND DEVICES

RUINS

WO1-4BR

45 MPH
WO13-1
36"X36"

EXIT
E5-1
48"X48"

RAIL SYSTEM

CPKC RAILROAD

S. 35TH STREET

NOTE

- TRAFFIC CONTROL DEVICES AND SIGNS WEST OF STA 388EW+00 TO MATCH STAGE 2.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 4	SHEET 328	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026402-S4.DWG
LAYOUT NAME - 01-EW-01

PLOT DATE : 5/12/2025 11:34 AM PLOT BY : PESCHEL, KYLE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

N. 34TH STREET

N. 33RD STREET

N. 32ND STREET

N. 31ST STREET

N. 30TH STREET

END ROAD WORK
G20-2A
48"X24"

W. PARK HILL AVENUE

RAMP GA

50'
TYP

MATCHLINE 403EW+00

404EW

RAMP GB

406EW

408EW

R/L EW

100'
TYP

410EW

100'
TYP

412EW

IH 94 WB

IH 94 EB

EW+45.62
-85.73'LT

414EW

CG 10:1 TAPER

416EW

MATCHLINE 418EW+00

W5-52R

RAMP GB CLOSED; SEE "TRAFFIC CONTROL - RAMP GB CLOSURE (LONG TERM)" DETAIL FOR ADDITIONAL SIGNING AND DEVICES

W24-1AR

45
MPH
WO13-1
36"X36"

R-40-761

W. CANAL STREET

SIGN

CPKC RAILROAD

ABANDONED

MH

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 4	SHEET 329	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026402-S4.DWG
LAYOUT NAME - 01-EW-02

PLOT DATE : 7/11/2025 3:05 PM PLOT BY : PESCHEL, KYLE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

W. MT VERNON AVENUE

N. 29TH STREET

RAMP JD

W. ST PAUL AVENUE

N. 27TH STREET

N

27TH STREET CLOSED SOUTH OF ST PAUL AVENUE
SEE "TRAFFIC CONTROL - N. 27THTH STREET CLOSURE" DETAIL

TEMPORARY SHORING LEFT IN PLACE (TYP)

100'
TYP

200' SHIFT TAPER

COORDINATE CHANGES TO VEHICLE DETECTION WITH TMC

111 112 TYP

109 110

R2279'

TWB+97.99
3.15'RT

TWB+98.09
2.40'RT

R/L TWB

R/L TEB

R/L TML

TWB+52.19
-5.07'LT

11'

11'

11'

TWB+97.35
2.21'RT

TWB+52.24
-5.00'LT

TWB+69.70
2.16'RT

TWB+50.18
-3.84'LT

TWB+44.37
3.70'LT

TWB+44.16
-10.68'LT

111TWB
12TEB

114TWB
214TML

116TWB
216TML

14TEB

16TEB

IH 94 WB

IH 94 EB

18TEB

120TWB
220TML

122TWB
222TML

12TWB
24TML

TWB+90.65
-5.85'LT

24TEB

MATCHLINE 418EW+00

EW

420EW

422EW

424EW

426EW

428EW

20TEB

22TEB

430EW

432EW

MATCHLINE 433EW+00

23:2 TAPER

R/L EW

20TLC

CC

22TLC

24TLC

RAMP LC

R/L TLC

B-40-1083

R-40-761

R-40-761

GREVES STREET

CPKC RAILROAD

ABANDONED

ABANDONED

GATE

WO1-6
48" X 24"

TYPE III BARRICADE

N. 27TH STREET

EXIT

E5-1
48"X48"

EXISTING B-40-513 5

GREVES STREET CLOSED; SEE "TRAFFIC CONTROL - GREVES STREET CLOSURE" DETAIL FOR ADDITIONAL SIGNING AND DEVICES

R11-2L
48" X 30"

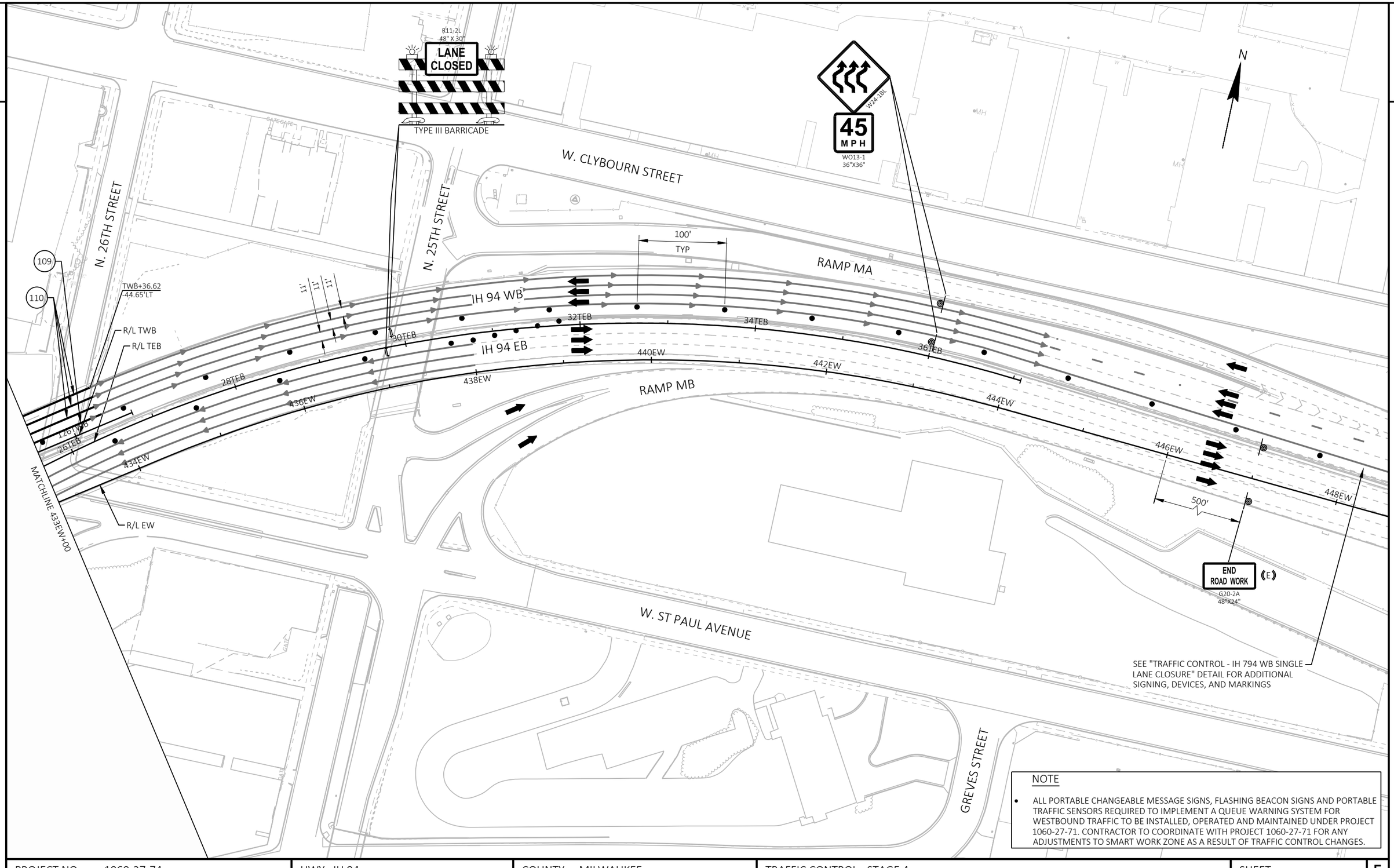
LANE CLOSED

TYPE III BARRICADE

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 4	SHEET 330	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026402-S4.DWG
LAYOUT NAME - 01-EW-03
PLOT DATE : 4/29/2025 10:35 PM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



SEE "TRAFFIC CONTROL - IH 794 WB SINGLE LANE CLOSURE" DETAIL FOR ADDITIONAL SIGNING, DEVICES, AND MARKINGS

NOTE

- ALL PORTABLE CHANGEABLE MESSAGE SIGNS, FLASHING BEACON SIGNS AND PORTABLE TRAFFIC SENSORS REQUIRED TO IMPLEMENT A QUEUE WARNING SYSTEM FOR WESTBOUND TRAFFIC TO BE INSTALLED, OPERATED AND MAINTAINED UNDER PROJECT 1060-27-71. CONTRACTOR TO COORDINATE WITH PROJECT 1060-27-71 FOR ANY ADJUSTMENTS TO SMART WORK ZONE AS A RESULT OF TRAFFIC CONTROL CHANGES.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 4	SHEET 331	E

FILE NAME : C:\USERS\AWALTERS\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026402-S4.DWG
LAYOUT NAME - 01-EW-04
PLOT DATE : 4/25/2025 10:11 AM
PLOT BY : AMBER WALTERS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

N

W. MICHIGAN STREET

N. 44TH STREET

N. 40TH STREET

N. 39TH STREET

N. 35TH STREET

N. 34TH STREET

N. 33RD STREET

N. 32ND STREET

N. 31ST STREET

N. 30TH STREET

N. 29TH STREET

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

N. 25TH STREET

N. 20TH STREET

W. CLYBOURN STREET

RAMP MA

430EW

440EW

IH 94

460EW

W. ST PAUL AVENUE

W. ST PAUL AVENUE

RAMP JD

430EW

RAMP LC

W. MT VERNON AVENUE

GREVES STREET

370EW

IH 94 WB MILL AND OVERLAY

380EW

R/L EW

420EW

W. PARK HILL AVENUE

MENOMONEE RIVER

390EW

400EW

410EW

R-40-761

R-40-767

CPKC RAILROAD

IH 94 EB MILL AND OVERLAY

RAMP GB

W. CANAL STREET

CPKC RAILROAD

S. 35TH STREET

S. 27TH STREET

CITY OF MILWAUKEE

STAGE 5 (2027 CONSTRUCTION YEAR)

CONSTRUCTION:

PERMANENT

- MILL AND OVERLAY IH 94 EB AND IH 94 WB MAINLINE PAVEMENT BETWEEN THE STADIUM INTERCHANGE STRUCTURES AND THE MARQUETTE INTERCHANGE WEST PAVEMENT LIMITS
- COMPLETE CONSTRUCTION OF RETAINING WALLS R-40-761 AND R-40-767

TEMPORARY

- NONE

TRAFFIC:

- IH 94 EB: NIGHTTIME OR OFF PEAK LANE CLOSURES, AS DIRECTED BY ENGINEER
- IH 94 WB: NIGHTTIME OR OFF PEAK LANE CLOSURES, AS DIRECTED BY ENGINEER

- MQIC RAMP SW: OPEN
- SIC RAMP NE: OPEN
- RAMP MA: OPEN
- RAMP JD: OPEN
- RAMP GB: OPEN
- RAMP LC: OPEN

- W. ST PAUL AVENUE: OPEN
- N. 27TH STREET: OPEN
- S. 27TH STREET: OPEN
- N. 28TH STREET: OPEN (CUL-DE-SAC'D)
- N. 29TH STREET: OPEN
- GREVES STREET: OPEN

LEGEND

WORK ZONE

HMA PAVEMENT

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL OVERVIEW - STAGE 5	SHEET 332	E

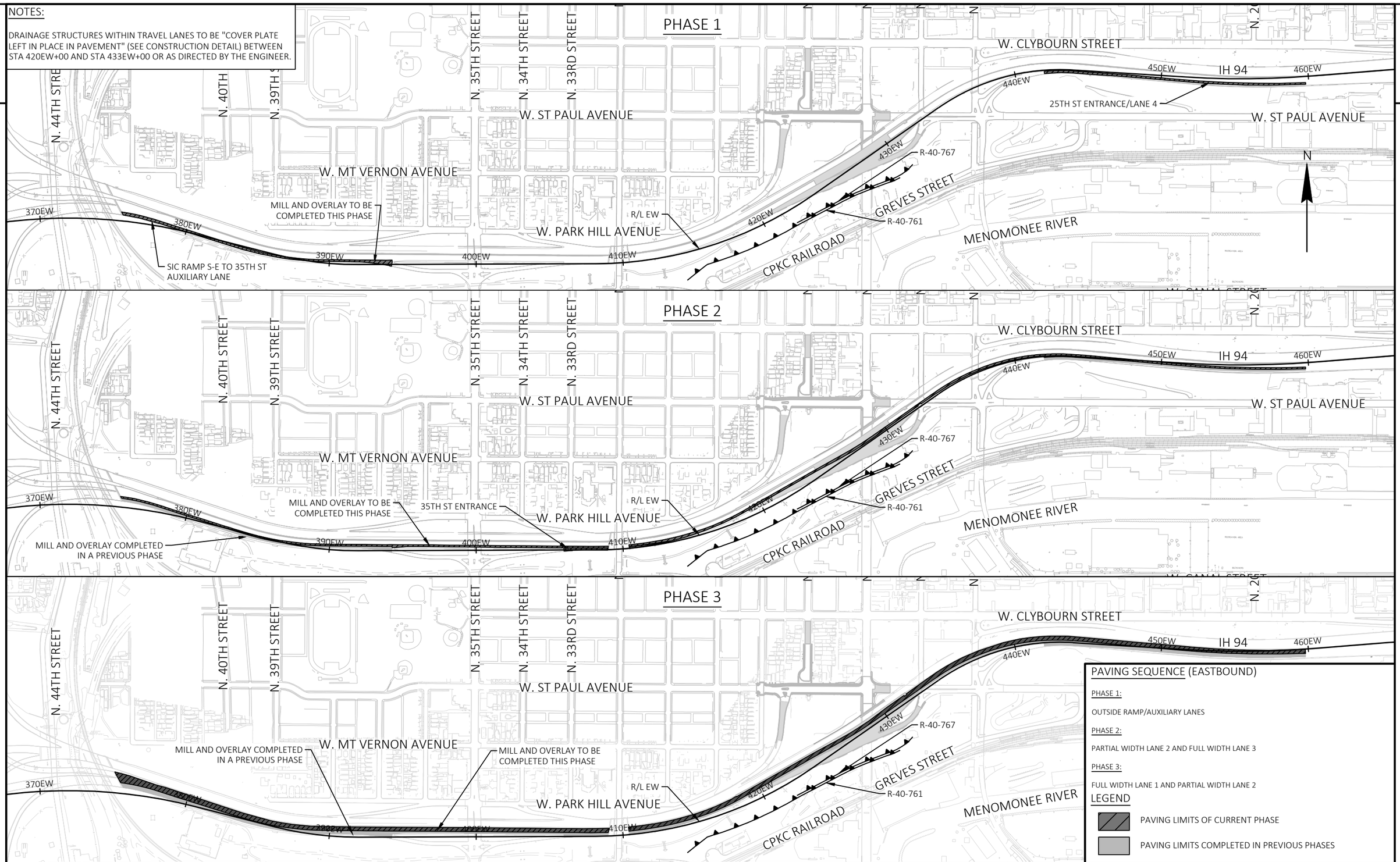
FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026501-S5.DWG
LAYOUT NAME - 01

PLOT DATE : 5/12/2025 11:34 AM PLOT BY : PESCHEL, KYLE PLOT NAME : PLOT SCALE : 1 IN:600 FT

WISDOT/CADDS SHEET 42

NOTES:

DRAINAGE STRUCTURES WITHIN TRAVEL LANES TO BE "COVER PLATE LEFT IN PLACE IN PAVEMENT" (SEE CONSTRUCTION DETAIL) BETWEEN STA 420EW+00 AND STA 433EW+00 OR AS DIRECTED BY THE ENGINEER.

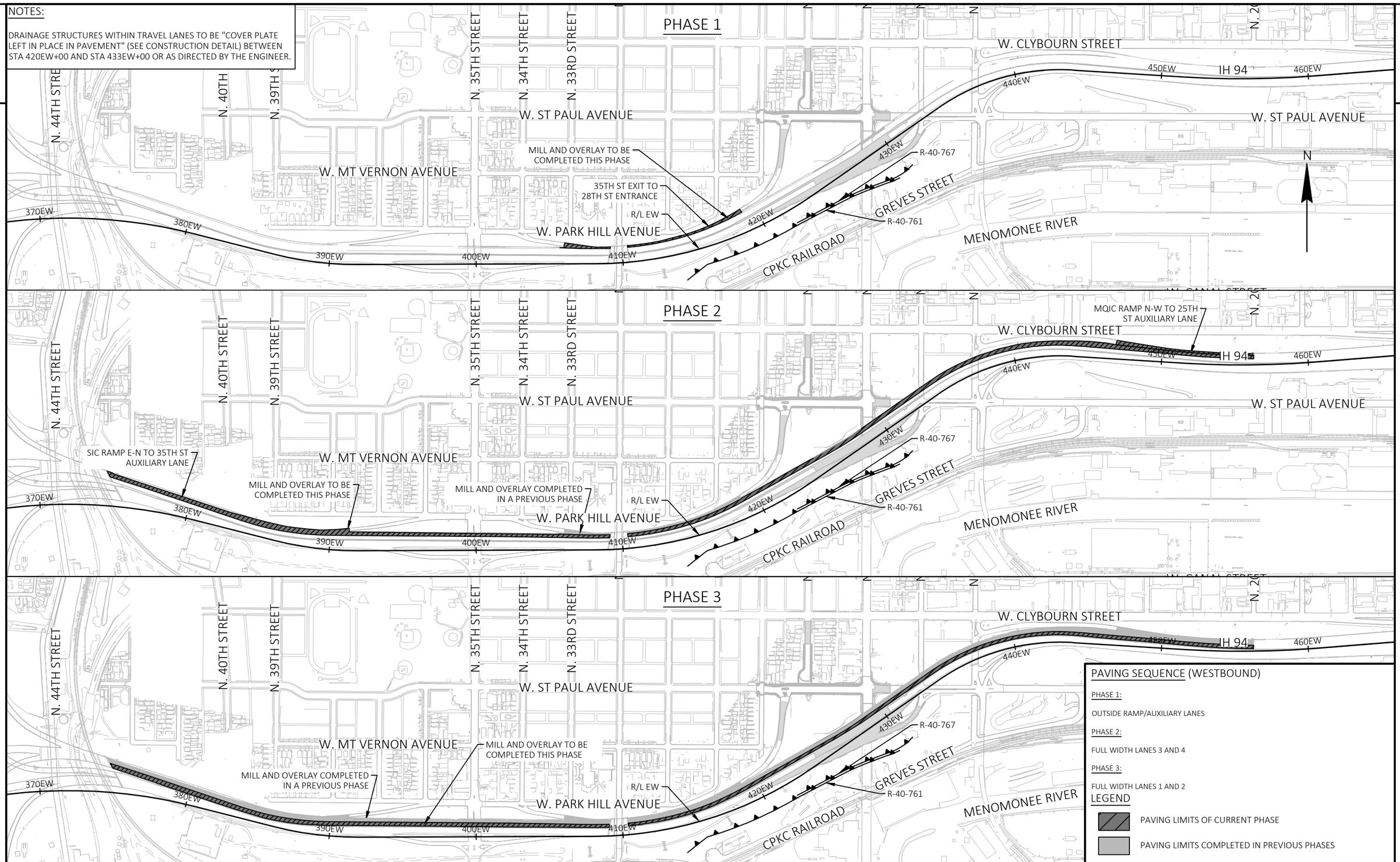


PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 5 MILL AND OVERLAY PAVING SEQUENCE (EASTBOUND)	SHEET 333	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026501-S5.DWG
LAYOUT NAME - 02
PLOT DATE : 4/25/2025 1:26 PM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:600 FT
WISDOT/CADDS SHEET 42

NOTES:

DRAINAGE STRUCTURES WITHIN TRAVEL LANES TO BE "COVER PLATE LEFT IN PLACE IN PAVEMENT" (SEE CONSTRUCTION DETAIL) BETWEEN STA 420EW+00 AND STA 433EW+00 OR AS DIRECTED BY THE ENGINEER.



PAVING SEQUENCE (WESTBOUND)

PHASE 1:

OUTSIDE RAMP/AUXILIARY LANES

PHASE 2:

FULL WIDTH LANES 3 AND 4

PHASE 3:

FULL WIDTH LANES 1 AND 2

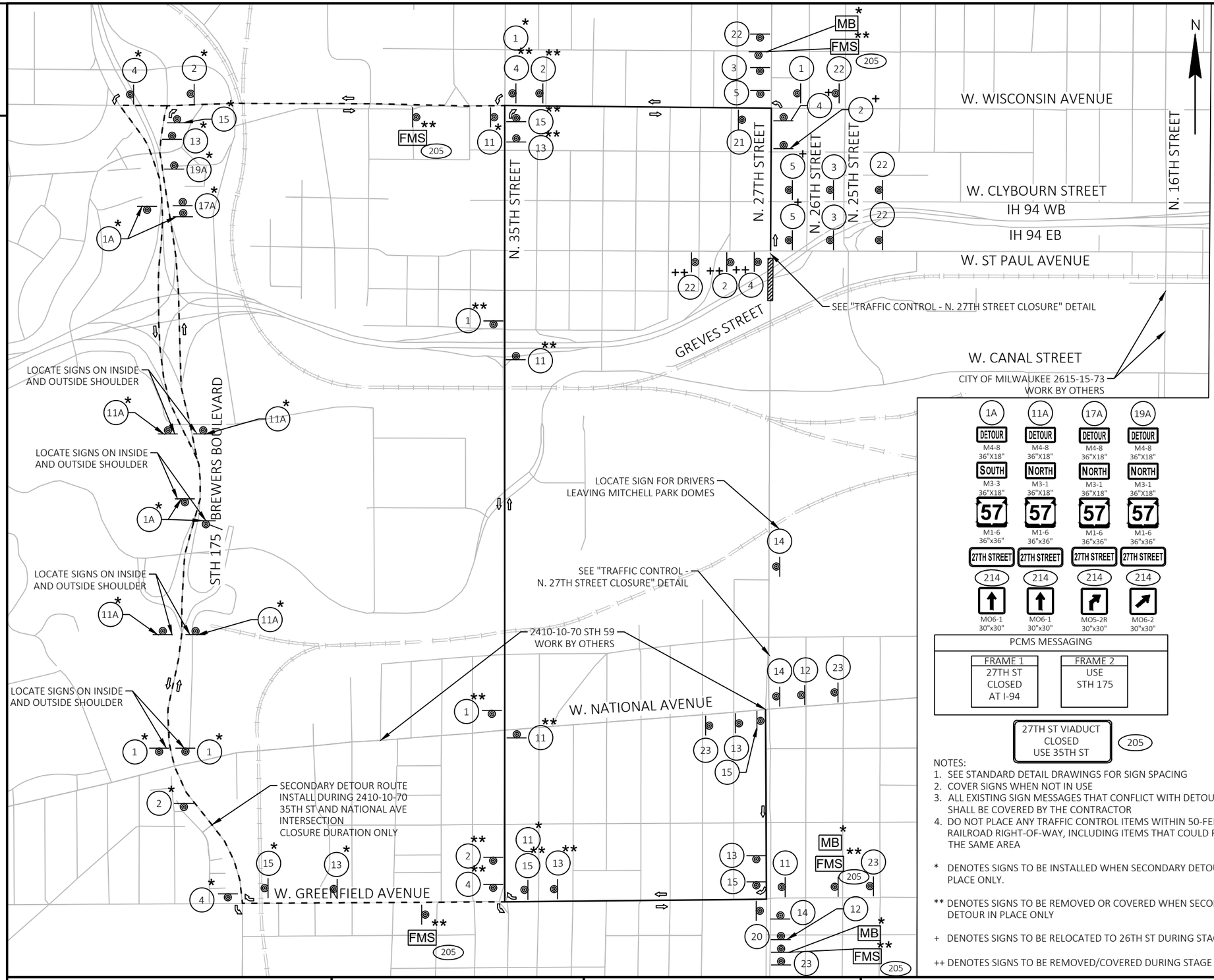
LEGEND

PAVING LIMITS OF CURRENT PHASE

PAVING LIMITS COMPLETED IN PREVIOUS PHASES

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 5 MILL AND OVERLAY PAVING SEQUENCE (WESTBOUND)	SHEET 334	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\STAGING\10602709ELA-026501-S5.DWG
LAYOUT NAME - 03
PLOT DATE : 4/25/2025 1:26 PM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:600 FT
WISDOT/CADDS SHEET 42



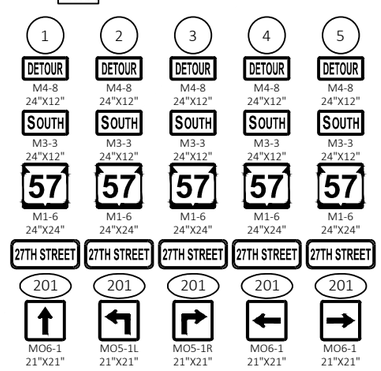
LEGEND

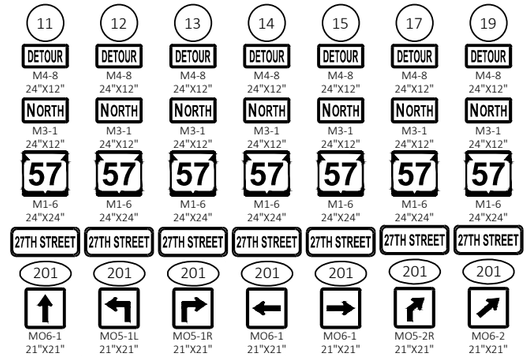
- CONNECTED ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- DETOUR ROUTE
- SECONDARY DETOUR ROUTE
- WORK AREA
- XXXX RAMP OR ROAD CLOSURE
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- FMS FIXED MESSAGE SIGN

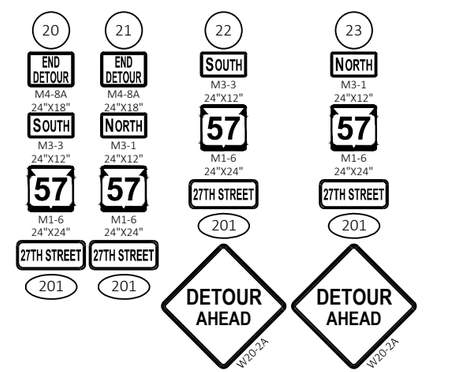
PCMS MESSAGING

FRAME 1	FRAME 2
27TH ST CLOSED AT I-94	USE STH 175

27TH ST VIADUCT CLOSED USE 35TH ST 205







NOTES:

1. SEE STANDARD DETAIL DRAWINGS FOR SIGN SPACING
2. COVER SIGNS WHEN NOT IN USE
3. ALL EXISTING SIGN MESSAGES THAT CONFLICT WITH DETOUR SIGNS SHALL BE COVERED BY THE CONTRACTOR
4. DO NOT PLACE ANY TRAFFIC CONTROL ITEMS WITHIN 50-FEET OF RAILROAD RIGHT-OF-WAY, INCLUDING ITEMS THAT COULD FOUL THE SAME AREA

* DENOTES SIGNS TO BE INSTALLED WHEN SECONDARY DETOUR IN PLACE ONLY.

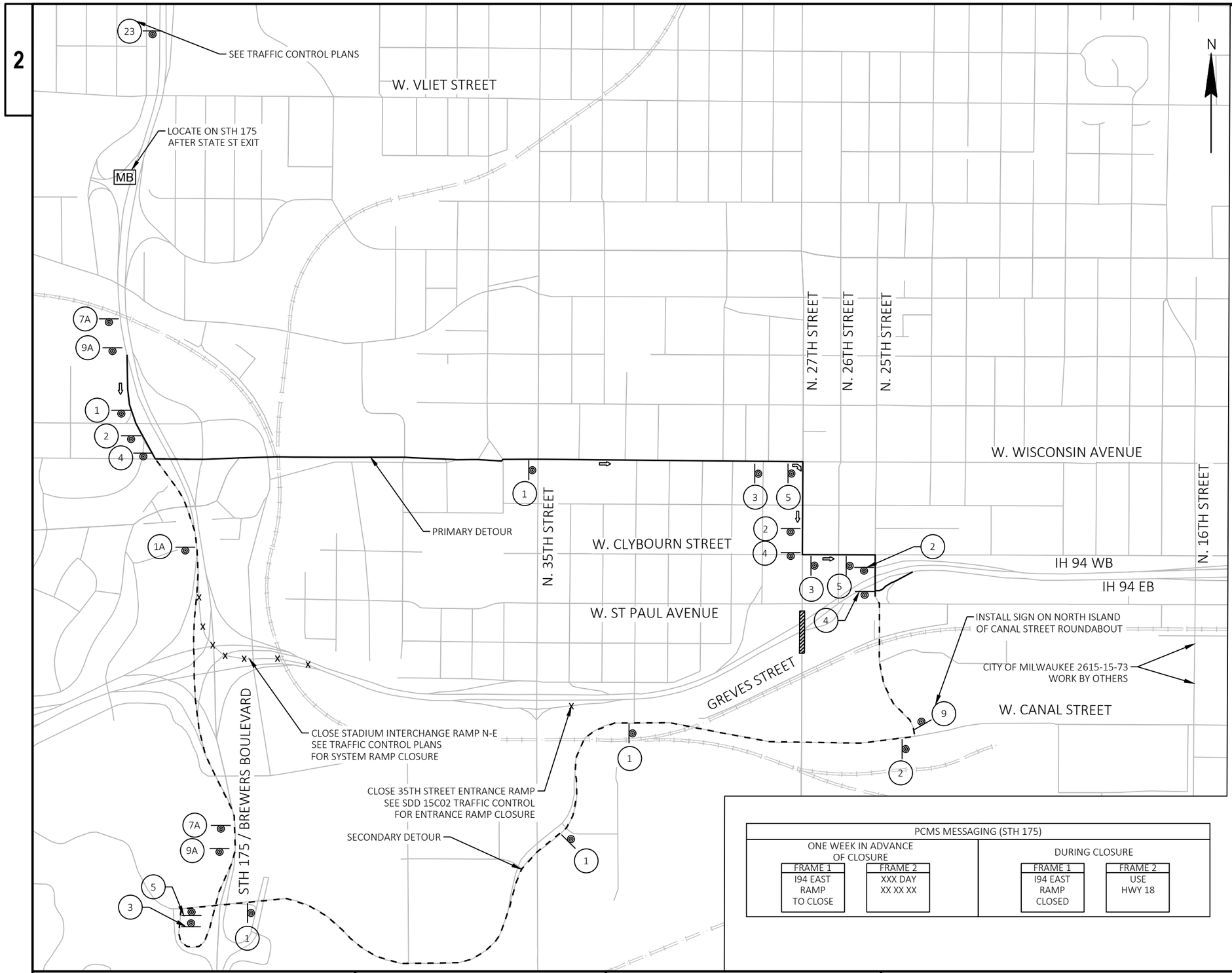
** DENOTES SIGNS TO BE REMOVED OR COVERED WHEN SECONDARY DETOUR IN PLACE ONLY

\+ DENOTES SIGNS TO BE RELOCATED TO 26TH ST DURING STAGE 3

++ DENOTES SIGNS TO BE REMOVED/COVERED DURING STAGE 3

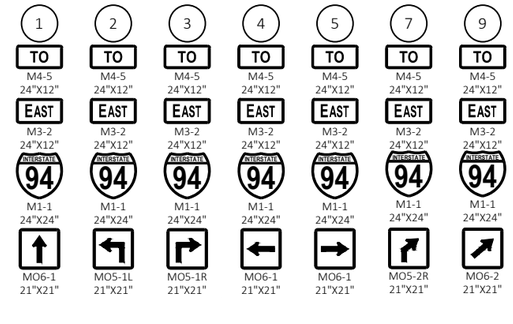
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	DETOUR - 27TH STREET VIADUCT CLOSED	SHEET 335	E

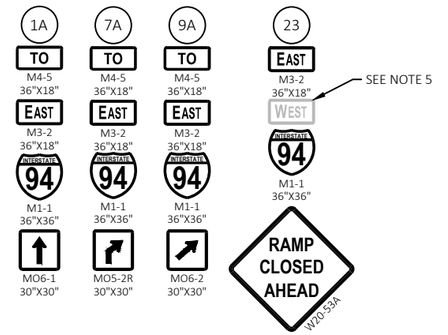
FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-027001-DT.DWG
LAYOUT NAME - 027001-dt
PLOT DATE : 4/26/2025 8:18 PM
PLOT BY : SCHARLAU, DAVE
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42



LEGEND

- CONNECTED ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- DETOUR ROUTE
- SECONDARY DETOUR ROUTE
- WORK AREA
- XXXX — RAMP OR ROAD CLOSURE
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- FMS — FIXED MESSAGE SIGN





PCMS MESSAGING (STH 175)			
ONE WEEK IN ADVANCE OF CLOSURE		DURING CLOSURE	
FRAME 1	FRAME 2	FRAME 1	FRAME 2
I94 EAST RAMP TO CLOSE	XXX DAY XX XX XX	I94 EAST RAMP CLOSED	USE HWY 18

NOTES:
1. SEE STANDARD DETAIL DRAWINGS FOR SIGN SPACING
2. COVER SIGNS WHEN NOT IN USE
3. ALL EXISTING SIGN MESSAGES THAT CONFLICT WITH DETOUR SIGNS SHALL BE COVERED BY THE CONTRACTOR
4. DO NOT PLACE ANY TRAFFIC CONTROL ITEMS WITHIN 50-FEET OF RAILROAD RIGHT-OF-WAY, INCLUDING ITEMS THAT COULD FOUL THE SAME AREA
5. STH 175 SB TO IH 94 WB (RAMP N-W) IS CLOSED BY OTHERS UNDER PROJECT 1060-27-71 CONCURRENT TO STH 175 SB TO IH 94 EB (RAMP N-E) CLOSURE WITH THIS PROJECT. COORDINATE DETOUR SIGNS BETWEEN BOTH PROJECTS TO ACCOMMODATE CONCURRENT RAMP CLOSURES.

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	DETOUR - STH 175 SB TO IH 94 EB (RAMP N-E) CLOSED	SHEET 336	E

2

2

N

W. WISCONSIN AVENUE

N. 35TH STREET

N. 27TH STREET

N. 26TH STREET

N. 25TH STREET

N. 16TH STREET

W. CLYBOURN STREET

IH 94 WB

IH 94 EB

W. ST PAUL AVENUE

GREVES STREET

W. CANAL STREET

W. NATIONAL AVENUE

W. GREENFIELD AVENUE

STH 175 / BREWERS BOULEVARD

DO NOT PLACE TRAFFIC CONTROL DEVICES W/IN 50-FT OF RR R/W (DOT RR CROSSING #386510V)

SEE "TRAFFIC CONTROL - RAMP GB CLOSURE (LONG TERM)" DETAIL

CITY OF MILWAUKEE 2615-15-73 WORK BY OTHERS

2410-10-70 STH 59 WORK BY OTHERS

LEGEND

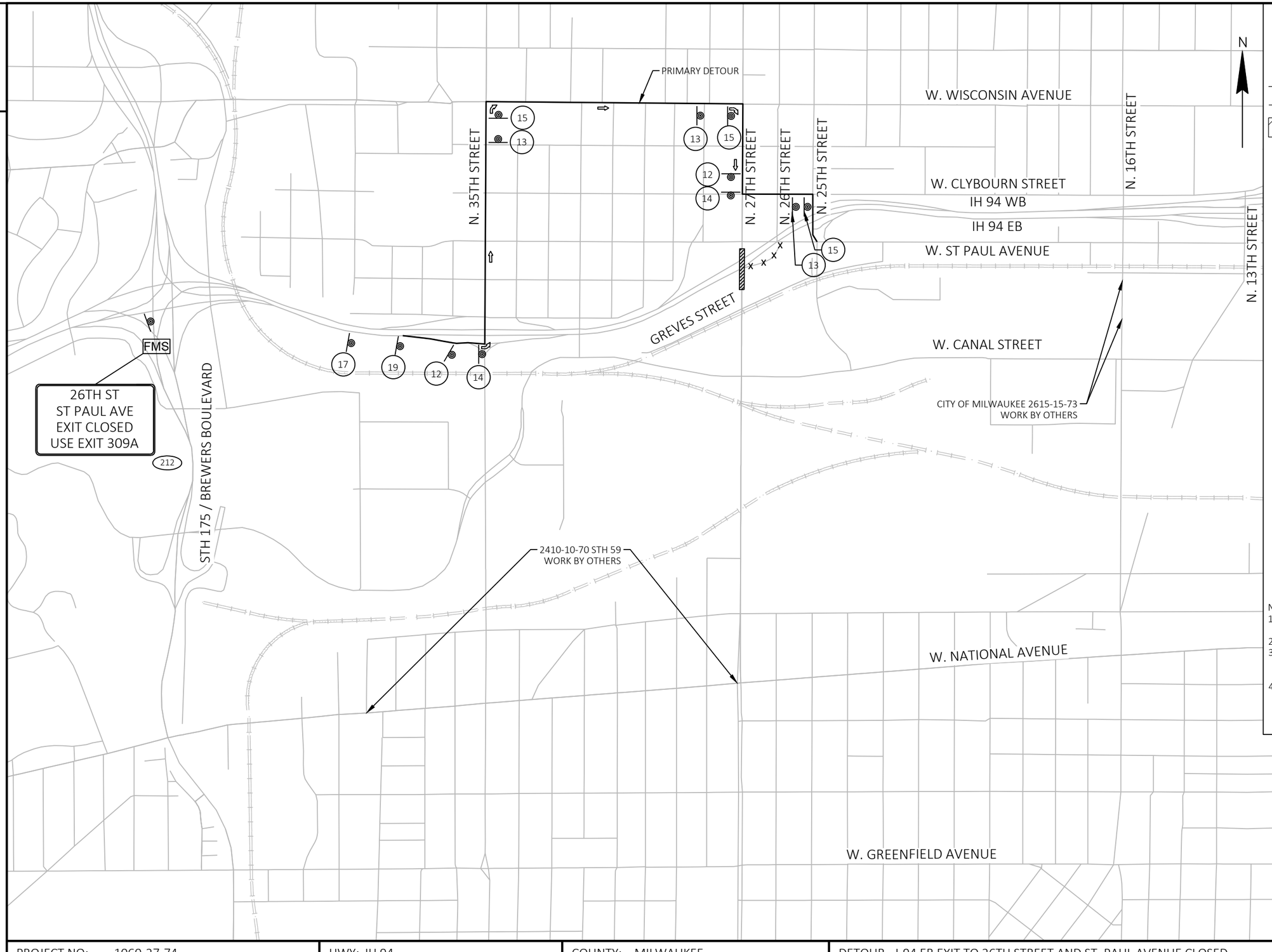
- CONNECTED ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- DETOUR ROUTE
- SECONDARY DETOUR ROUTE
- WORK AREA
- XXXX RAMP OR ROAD CLOSURE
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- FMS FIXED MESSAGE SIGN

1 / 2 / 3 / 4 / 5
TO M4-5 24"X12"
EAST M3-2 24"X12"
INTERSTATE 94 M1-1 24"X24"
MO6-1 21"X21" / MO5-1L 21"X21" / MO5-1R 21"X21" / MO6-1 21"X21"

23
EAST M3-2 24"X12"
INTERSTATE 94 M1-1 24"X24"
RAMP CLOSED AHEAD W20-5A

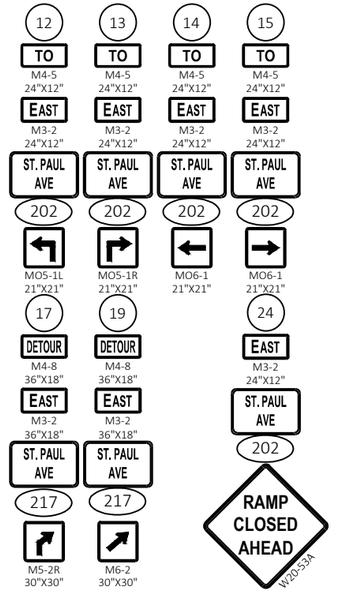
NOTES:
1. SEE STANDARD DETAIL DRAWINGS FOR SIGN SPACING
2. COVER SIGNS WHEN NOT IN USE
3. ALL EXISTING SIGN MESSAGES THAT CONFLICT WITH DETOUR SIGNS SHALL BE COVERED BY THE CONTRACTOR
4. DO NOT PLACE ANY TRAFFIC CONTROL ITEMS WITHIN 50-FEET OF RAILROAD RIGHT-OF-WAY, INCLUDING ITEMS THAT COULD FOUL THE SAME AREA

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	DETOUR - 35TH ST ENTRANCE TO I-94 EB CLOSED	SHEET 337	E



LEGEND

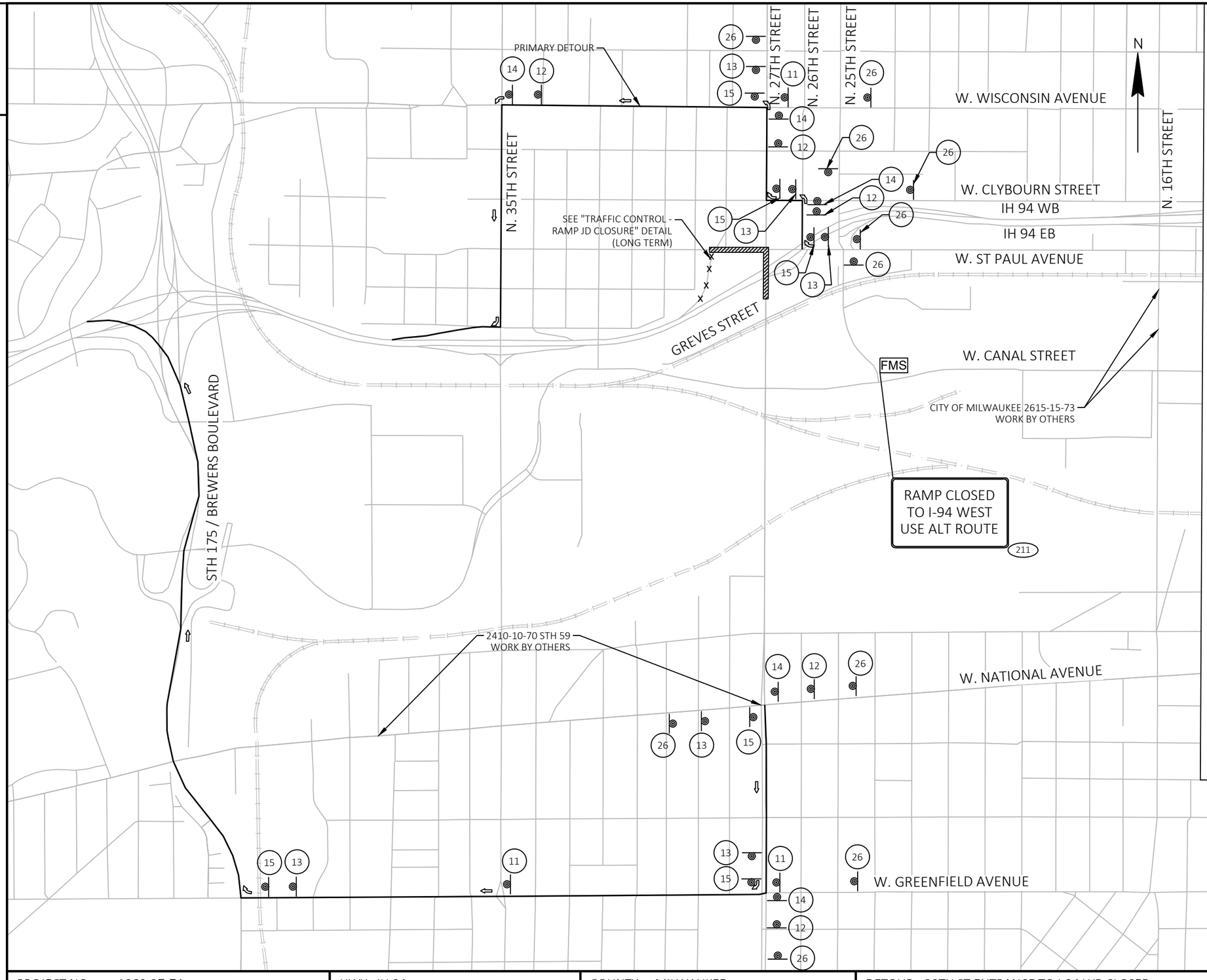
- CONNECTED ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- DETOUR ROUTE
- SECONDARY DETOUR ROUTE
- WORK AREA
- XXXX RAMP OR ROAD CLOSURE
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- FMS FIXED MESSAGE SIGN



NOTES:

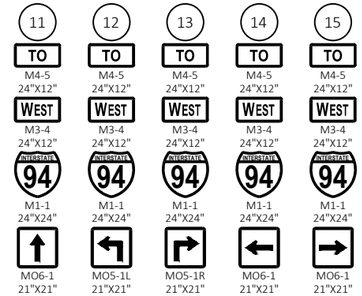
1. SEE STANDARD DETAIL DRAWINGS FOR SIGN SPACING
2. COVER SIGNS WHEN NOT IN USE
3. ALL EXISTING SIGN MESSAGES THAT CONFLICT WITH DETOUR SIGNS SHALL BE COVERED BY THE CONTRACTOR
4. DO NOT PLACE ANY TRAFFIC CONTROL ITEMS WITHIN 50-FEET OF RAILROAD RIGHT-OF-WAY, INCLUDING ITEMS THAT COULD FOUL THE SAME AREA

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	DETOUR - I-94 EB EXIT TO 26TH STREET AND ST. PAUL AVENUE CLOSED	SHEET 338	E



LEGEND

- CONNECTED ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- DETOUR ROUTE
- SECONDARY DETOUR ROUTE
- WORK AREA
- XXXX RAMP OR ROAD CLOSURE
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- FMS FIXED MESSAGE SIGN



NOTES:
1. SEE STANDARD DETAIL DRAWINGS FOR SIGN SPACING
2. COVER SIGNS WHEN NOT IN USE
3. ALL EXISTING SIGN MESSAGES THAT CONFLICT WITH DETOUR SIGNS SHALL BE COVERED BY THE CONTRACTOR
4. DO NOT PLACE ANY TRAFFIC CONTROL ITEMS WITHIN 50-FEET OF RAILROAD RIGHT-OF-WAY, INCLUDING ITEMS THAT COULD FOUL THE SAME AREA

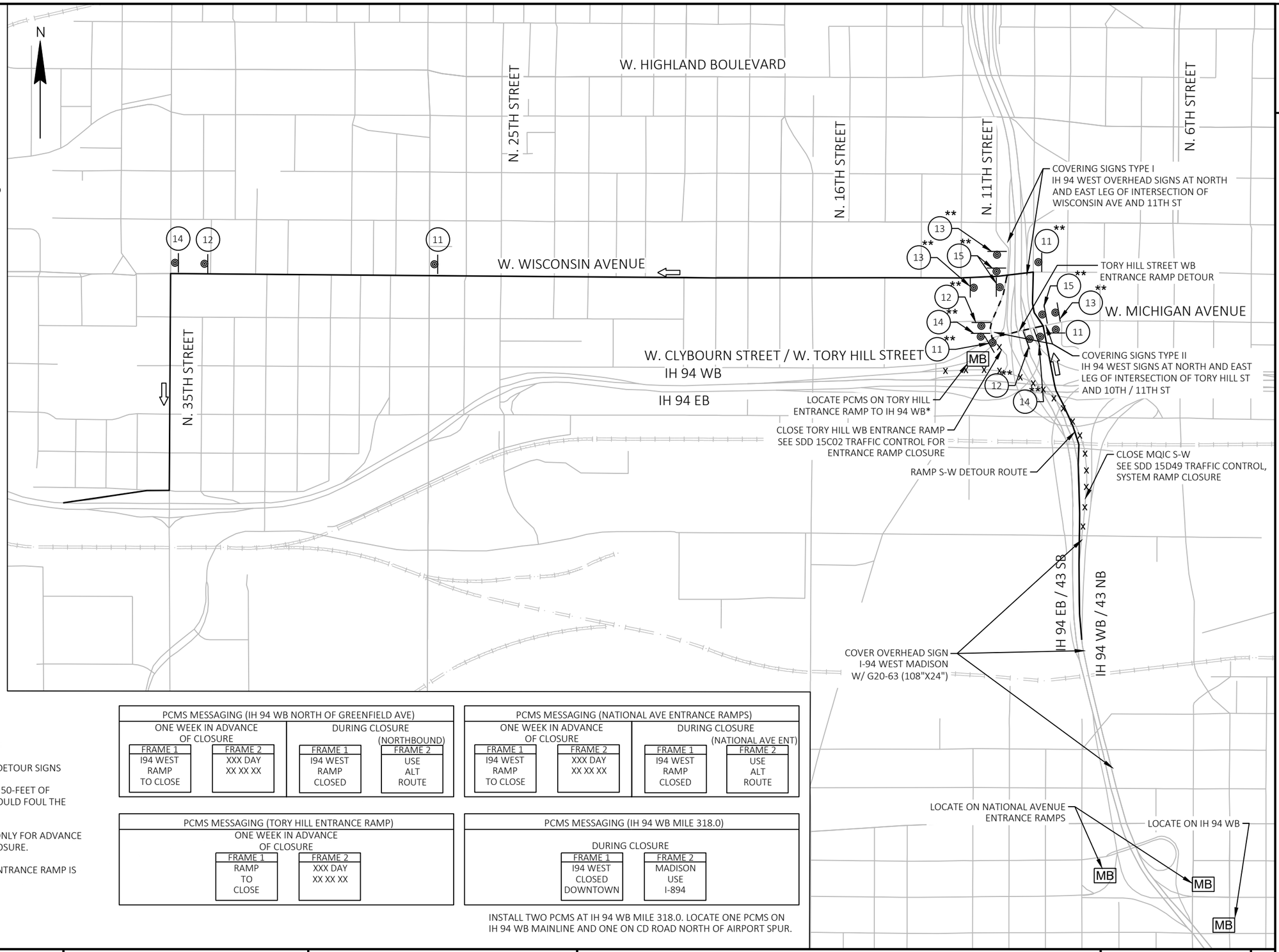
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	DETOUR - 28TH ST ENTRANCE TO I-94 WB CLOSED	SHEET 339	E

2

LEGEND

- CONNECTED ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- DETOUR ROUTE
- SECONDARY DETOUR ROUTE
- WORK AREA
- XXXX — RAMP OR ROAD CLOSURE
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- FMS — FIXED MESSAGE SIGN

11	12	13	14	15
TO	TO	TO	TO	TO
M4-5 24"X12"	M4-5 24"X12"	M4-5 24"X12"	M4-5 24"X12"	M4-5 24"X12"
WEST	WEST	WEST	WEST	WEST
M3-4 24"X12"	M3-4 24"X12"	M3-4 24"X12"	M3-4 24"X12"	M3-4 24"X12"
INTERSTATE 94	INTERSTATE 94	INTERSTATE 94	INTERSTATE 94	INTERSTATE 94
M1-1 24"X24"	M1-1 24"X24"	M1-1 24"X24"	M1-1 24"X24"	M1-1 24"X24"
MO6-1 21"X21"	MO5-1L 21"X21"	MO5-1R 21"X21"	MO6-1 21"X21"	MO6-1 21"X21"



NOTES:
1. SEE STANDARD DETAIL DRAWINGS FOR SIGN SPACING
2. COVER SIGNS WHEN NOT IN USE
3. ALL EXISTING SIGN MESSAGES THAT CONFLICT WITH DETOUR SIGNS SHALL BE COVERED BY THE CONTRACTOR
4. DO NOT PLACE ANY TRAFFIC CONTROL ITEMS WITHIN 50-FEET OF RAILROAD RIGHT-OF-WAY, INCLUDING ITEMS THAT COULD FOUL THE SAME AREA

* TORY HILL ENTRANCE RAMP PCMS TO BE INSTALLED ONLY FOR ADVANCE WARNING PERIOD. REMOVE PCMS DURING RAMP CLOSURE.

** DENOTES SIGNS TO BE INSTALLED WHEN TORY HILL ENTRANCE RAMP IS CLOSED.

PCMS MESSAGING (IH 94 WB NORTH OF GREENFIELD AVE)

ONE WEEK IN ADVANCE OF CLOSURE		DURING CLOSURE (NORTHBOUND)	
FRAME 1	FRAME 2	FRAME 1	FRAME 2
I94 WEST RAMP TO CLOSE	XXX DAY XX XX XX	I94 WEST RAMP CLOSED	USE ALT ROUTE

PCMS MESSAGING (NATIONAL AVE ENTRANCE RAMPS)

ONE WEEK IN ADVANCE OF CLOSURE		DURING CLOSURE (NATIONAL AVE ENT)	
FRAME 1	FRAME 2	FRAME 1	FRAME 2
I94 WEST RAMP TO CLOSE	XXX DAY XX XX XX	I94 WEST RAMP CLOSED	USE ALT ROUTE

PCMS MESSAGING (TORY HILL ENTRANCE RAMP)

ONE WEEK IN ADVANCE OF CLOSURE

FRAME 1	FRAME 2
RAMP TO CLOSE	XXX DAY XX XX XX

PCMS MESSAGING (IH 94 WB MILE 318.0)

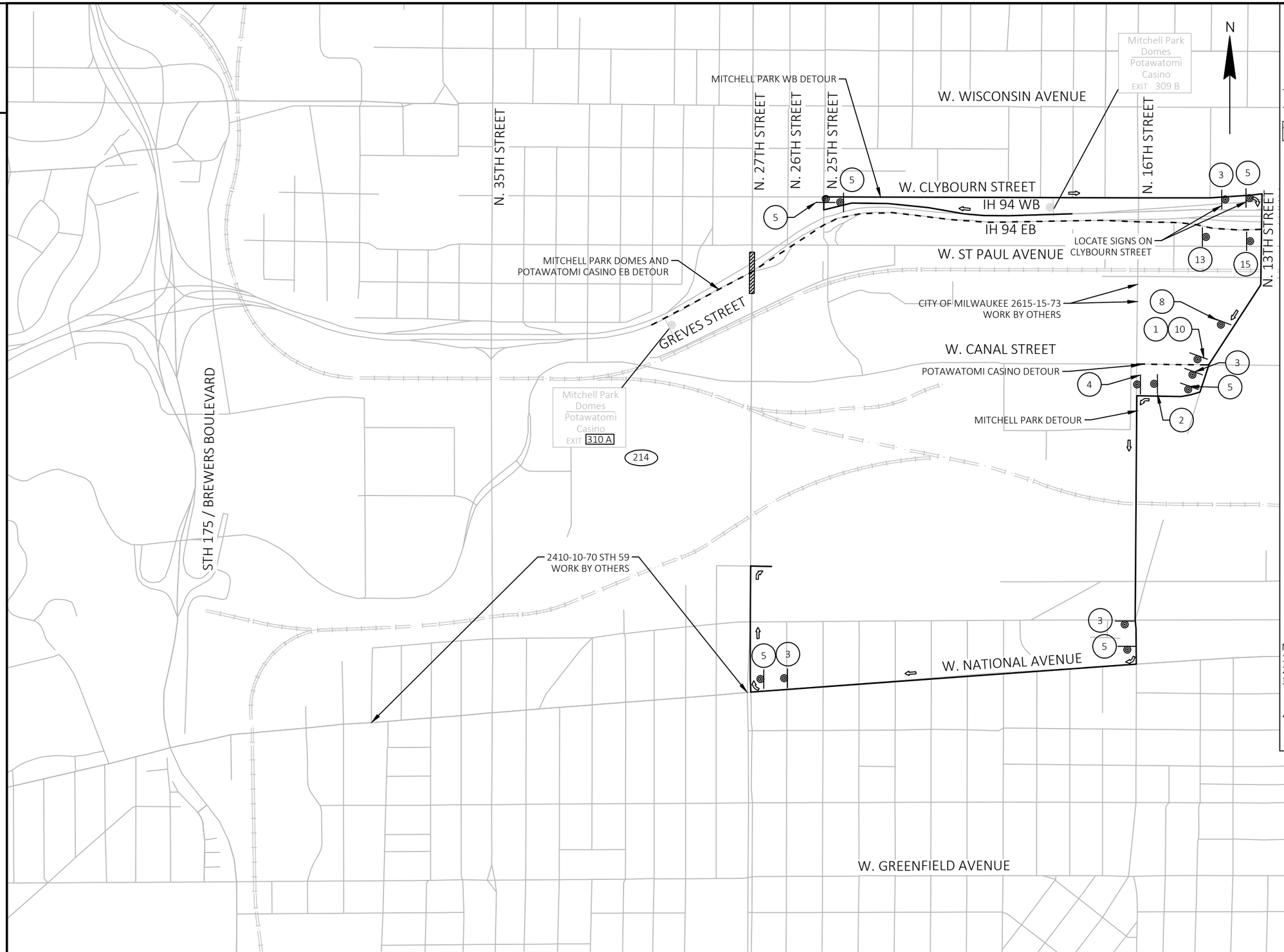
DURING CLOSURE

FRAME 1	FRAME 2
I94 WEST CLOSED DOWNTOWN	MADISON USE I-894

INSTALL TWO PCMS AT IH 94 WB MILE 318.0. LOCATE ONE PCMS ON IH 94 WB MAINLINE AND ONE ON CD ROAD NORTH OF AIRPORT SPUR.

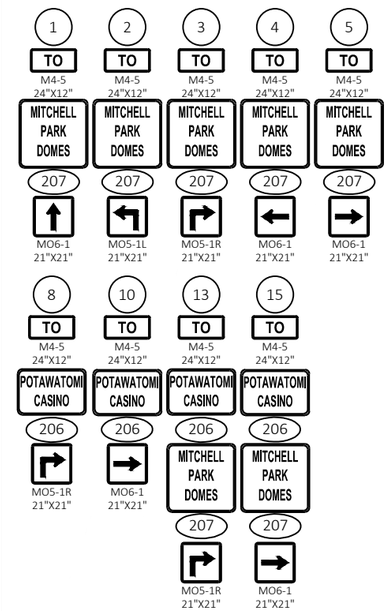
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	DETOUR - IH 43 NB TO IH 94 WB (RAMP S-W) CLOSED	SHEET 340	E

FILE NAME : C:\USERS\PESCHEK\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-027007-DT.DWG
LAYOUT NAME - 027007-dt
PLOT DATE : 5/6/2025 8:56 AM
PLOT BY : PESCHEL, KYLE
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42



LEGEND

- CONNECTED ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- DETOUR ROUTE
- SECONDARY DETOUR ROUTE
- WORK AREA
- XXXX RAMP OR ROAD CLOSURE
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- FMS FIXED MESSAGE SIGN

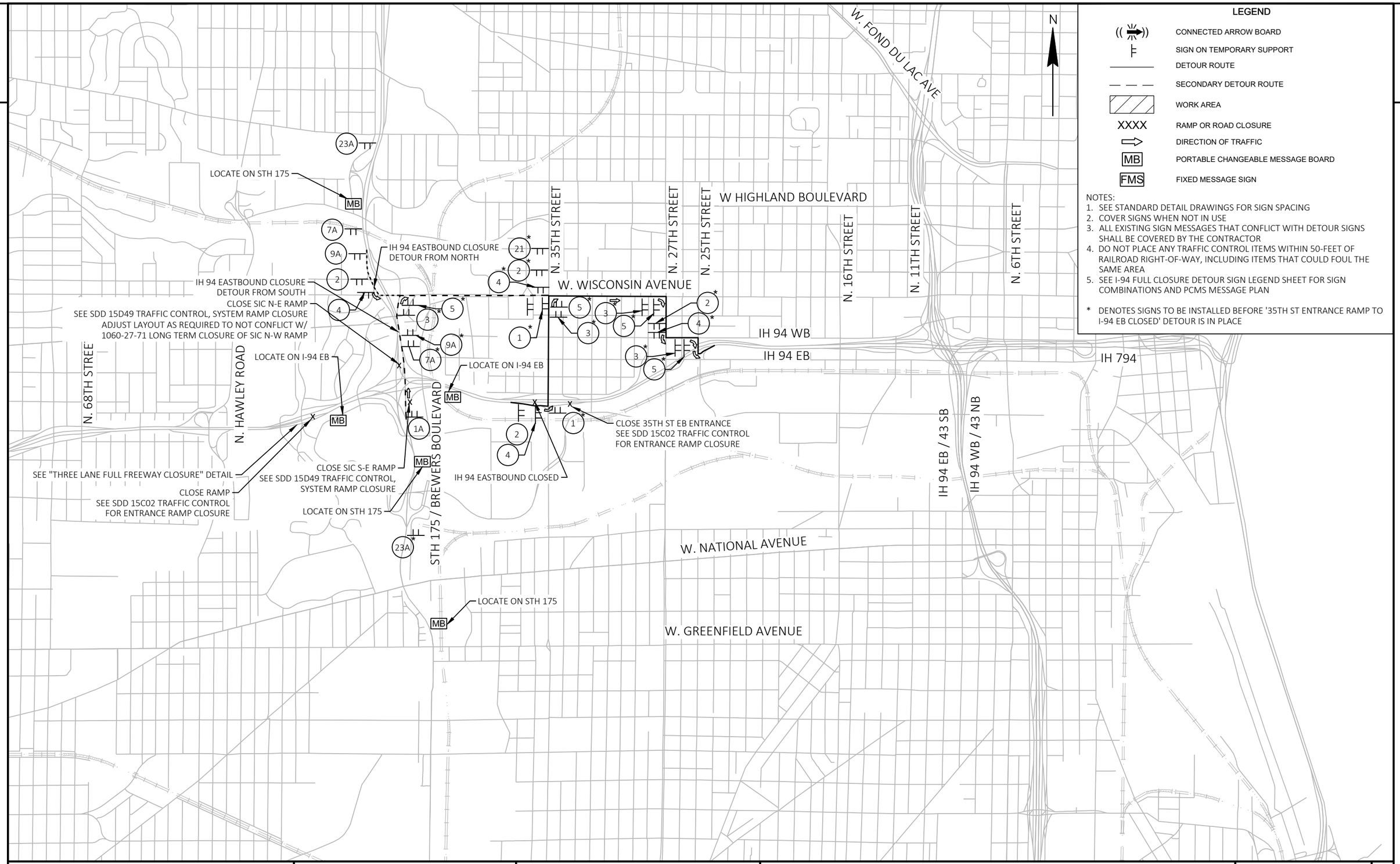


NOTES:
1. SEE STANDARD DETAIL DRAWINGS FOR SIGN SPACING
2. COVER SIGNS WHEN NOT IN USE
3. ALL EXISTING SIGN MESSAGES THAT CONFLICT WITH DETOUR SIGNS SHALL BE COVERED BY THE CONTRACTOR
4. DO NOT PLACE ANY TRAFFIC CONTROL ITEMS WITHIN 50-FEET OF RAILROAD RIGHT-OF-WAY, INCLUDING ITEMS THAT COULD FOUL THE SAME AREA

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	DETOUR - MITCHELL PARK DOMES AND POTAWATOMI CASINO	SHEET 341	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-027010-DT.DWG
LAYOUT NAME - 027010-dt
PLOT DATE : 4/26/2025 8:19 PM
PLOT BY : SCHARLAU, DAVE
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42

2



LEGEND

- CONNECTED ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- DETOUR ROUTE
- SECONDARY DETOUR ROUTE
- WORK AREA
- XXXX — RAMP OR ROAD CLOSURE
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- FMS — FIXED MESSAGE SIGN

NOTES:
1. SEE STANDARD DETAIL DRAWINGS FOR SIGN SPACING
2. COVER SIGNS WHEN NOT IN USE
3. ALL EXISTING SIGN MESSAGES THAT CONFLICT WITH DETOUR SIGNS SHALL BE COVERED BY THE CONTRACTOR
4. DO NOT PLACE ANY TRAFFIC CONTROL ITEMS WITHIN 50-FEET OF RAILROAD RIGHT-OF-WAY, INCLUDING ITEMS THAT COULD FOUL THE SAME AREA
5. SEE I-94 FULL CLOSURE DETOUR SIGN LEGEND SHEET FOR SIGN COMBINATIONS AND PCMS MESSAGE PLAN

* DENOTES SIGNS TO BE INSTALLED BEFORE '35TH ST ENTRANCE RAMP TO I-94 EB CLOSED' DETOUR IS IN PLACE

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	DETOUR - FULL EASTBOUND FREEWAY CLOSURE	SHEET 342	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-027050-DT.DWG
LAYOUT NAME - 027050-dt
PLOT DATE : 4/26/2025 8:19 PM
PLOT BY : SCHARLAU, DAVE
PLOT NAME :
PLOT SCALE : 1 IN:2000 FT
WISDOT/CADDS SHEET 42

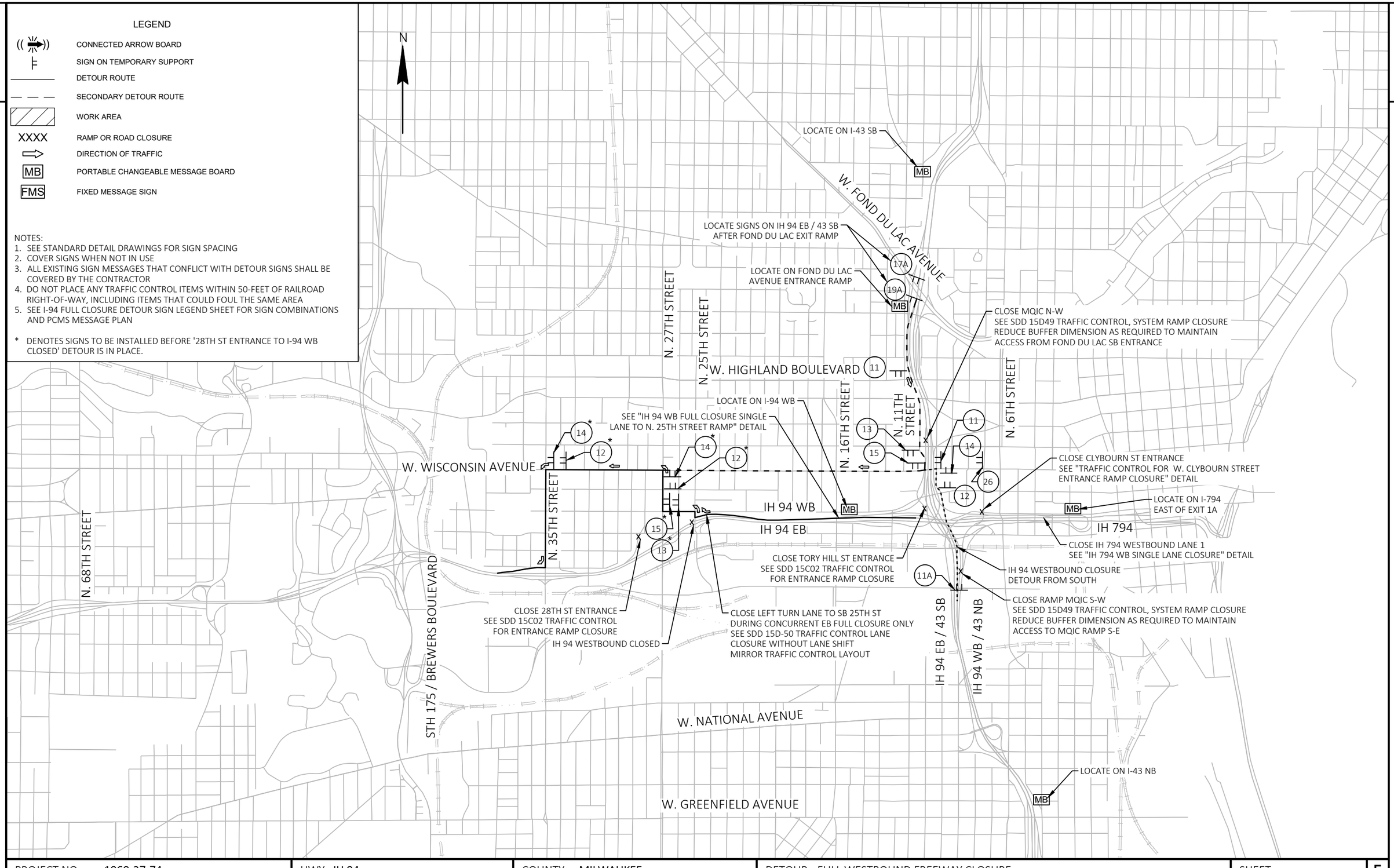
2

LEGEND

- CONNECTED ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- DETOUR ROUTE
- SECONDARY DETOUR ROUTE
- WORK AREA
- XXXX — RAMP OR ROAD CLOSURE
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- FMS — FIXED MESSAGE SIGN

NOTES:
1. SEE STANDARD DETAIL DRAWINGS FOR SIGN SPACING
2. COVER SIGNS WHEN NOT IN USE
3. ALL EXISTING SIGN MESSAGES THAT CONFLICT WITH DETOUR SIGNS SHALL BE COVERED BY THE CONTRACTOR
4. DO NOT PLACE ANY TRAFFIC CONTROL ITEMS WITHIN 50-FEET OF RAILROAD RIGHT-OF-WAY, INCLUDING ITEMS THAT COULD FOUL THE SAME AREA
5. SEE I-94 FULL CLOSURE DETOUR SIGN LEGEND SHEET FOR SIGN COMBINATIONS AND PCMS MESSAGE PLAN

* DENOTES SIGNS TO BE INSTALLED BEFORE '28TH ST ENTRANCE TO I-94 WB CLOSED' DETOUR IS IN PLACE.



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	DETOUR - FULL WESTBOUND FREEWAY CLOSURE	SHEET 343	E

EASTBOUND SIGN AND PCMS LEGEND

1 — DETOUR M4-8 24"X12" / EAST M3-2 24"X12" / INTERSTATE 94 M1-1 24"X24" / MO6-1 21"X21"

2 — DETOUR M4-8 24"X12" / EAST M3-2 24"X12" / INTERSTATE 94 M1-1 24"X24" / MO5-1L 21"X21"

3 — DETOUR M4-8 24"X12" / EAST M3-2 24"X12" / INTERSTATE 94 M1-1 24"X24" / MO5-1R 21"X21"

4 — DETOUR M4-8 24"X12" / EAST M3-2 24"X12" / INTERSTATE 94 M1-1 24"X24" / MO6-1 21"X21"

5 — DETOUR M4-8 24"X12" / EAST M3-2 24"X12" / INTERSTATE 94 M1-1 24"X24" / MO6-1 21"X21"

6 — DETOUR M4-8 24"X12" / EAST M3-2 24"X12" / INTERSTATE 94 M1-1 24"X24" / MO5-2L 21"X21"

7 — DETOUR M4-8 24"X12" / EAST M3-2 24"X12" / INTERSTATE 94 M1-1 24"X24" / MO5-2R 21"X21"

8 — DETOUR M4-8 24"X12" / WEST M3-4 24"X12" / INTERSTATE 94 M1-1 24"X24" / MO6-2 21"X21"

9 — DETOUR M4-8 24"X12" / EAST M3-2 24"X12" / INTERSTATE 94 M1-1 24"X24" / MO6-2 21"X21"

21 — EAST M3-2 24"X12" / INTERSTATE 94 M1-1 24"X24" / DETOUR AHEAD W20-2A

23 — EAST M3-2 24"X12" / INTERSTATE 94 M1-1 24"X24" / RAMP CLOSED AHEAD W20-53A

1A — DETOUR M4-8 36"X18" / EAST M3-2 36"X18" / INTERSTATE 94 M1-1 36"X36" / MO6-1 30"X30"

7A — DETOUR M4-8 36"X18" / EAST M3-2 36"X18" / INTERSTATE 94 M1-1 36"X36" / MO5-2R 30"X30"

9A — DETOUR M4-8 36"X18" / EAST M3-2 36"X18" / INTERSTATE 94 M1-1 36"X36" / MO6-2 30"X30"

23A — EAST M3-2 36"X18" / INTERSTATE 94 M1-1 36"X36" / RAMP CLOSED AHEAD W20-53A

PCMS MESSAGING (I-94)

ONE WEEK IN ADVANCE OF CLOSURE		DURING CLOSURE	
FRAME 1	FRAME 2	FRAME 1	FRAME 2
FREEWAY TO CLOSE	XXX DAY XX XX XX	FREEWAY CLOSED	EXIT AHEAD

PCMS MESSAGING (STH 175/BREWERS BOULEVARD)

ONE WEEK IN ADVANCE OF CLOSURE		DURING CLOSURE	
FRAME 1	FRAME 2	FRAME 1	FRAME 2
I94 EAST RAMP TO CLOSE	XXX DAY XX XX XX	I94 EAST RAMP CLOSED	USE HWY 18

WESTBOUND SIGN AND PCMS LEGEND

11 — DETOUR M4-8 24"X12" / WEST M3-4 24"X12" / INTERSTATE 94 M1-1 24"X24" / MO6-1 21"X21"

12 — DETOUR M4-8 24"X12" / WEST M3-4 24"X12" / INTERSTATE 94 M1-1 24"X24" / MO5-1L 21"X21"

13 — DETOUR M4-8 24"X12" / WEST M3-4 24"X12" / INTERSTATE 94 M1-1 24"X24" / MO5-1R 21"X21"

14 — DETOUR M4-8 24"X12" / WEST M3-4 24"X12" / INTERSTATE 94 M1-1 24"X24" / MO6-1 21"X21"

15 — DETOUR M4-8 24"X12" / WEST M3-4 24"X12" / INTERSTATE 94 M1-1 24"X24" / MO6-1 21"X21"

16 — DETOUR M4-8 24"X12" / WEST M3-4 24"X12" / INTERSTATE 94 M1-1 24"X24" / MO5-2L 21"X21"

17A — DETOUR M4-8 36"X18" / WEST M3-4 36"X18" / INTERSTATE 94 M1-1 36"X36" / MO5-2R 30"X30"

18 — DETOUR M4-8 24"X12" / WEST M3-4 24"X12" / INTERSTATE 94 M1-1 24"X24" / MO6-2 21"X21"

19A — DETOUR M4-8 36"X18" / WEST M3-4 36"X18" / INTERSTATE 94 M1-1 36"X36" / MO6-2 30"X30"

24 — WEST M3-4 24"X12" / INTERSTATE 94 M1-1 24"X24" / DETOUR AHEAD W20-2A

26 — WEST M3-4 24"X12" / INTERSTATE 94 M1-1 24"X24" / RAMP CLOSED AHEAD W20-53A

11A — DETOUR M4-8 36"X18" / WEST M3-4 36"X18" / INTERSTATE 94 M1-1 36"X36" / MO6-1 30"X30"

PCMS MESSAGING (I-94)

ONE WEEK IN ADVANCE OF CLOSURE		DURING CLOSURE	
FRAME 1	FRAME 2	FRAME 1	FRAME 2
FREEWAY TO CLOSE	XXX DAY XX XX XX	FREEWAY CLOSED	EXIT AHEAD

PCMS MESSAGING (I-794)

ONE WEEK IN ADVANCE OF CLOSURE		DURING CLOSURE	
FRAME 1	FRAME 2	FRAME 1	FRAME 2
I94 WEST RAMP TO CLOSE	XXX DAY XX XX XX	I94 WEST CLOSED	EXIT AHEAD

PCMS MESSAGING (I-43)

ONE WEEK IN ADVANCE OF CLOSURE		DURING CLOSURE		
			(NORTHBOUND)	
FRAME 1	FRAME 2	FRAME 1	FRAME 2	
I94 WEST RAMP TO CLOSE	XXX DAY XX XX XX	I94 WEST RAMP CLOSED	USE EXIT 72 A	
			(SOUTHBOUND)	
			FRAME 2	
			USE EXIT 72 E	
			(FOND DU LAC ENT)	
			FRAME 2	
			USE ALT ROUTE	

2

2

N

N. 35TH STREET

N. 32ND STREET

N. 27TH STREET

N. 26TH STREET

N. 25TH STREET

N. 16TH STREET

N. 13TH STREET

W. WISCONSIN AVENUE

W. CLYBOURN STREET

IH 94 WB

IH 94 EB

W. ST PAUL AVENUE

GREVES STREET

W. CANAL STREET

W. ROUNDHOUSE ROAD

STH 175 / BREWERS BOULEVARD

VALLEY PASSAGE PEDESTRIAN BRIDGE

HAST SPUR TRAILHEAD

S. 37TH STREET

S. 35TH STREET

S. 27TH STREET

W. PIERCE STREET

W. NATIONAL AVENUE

27TH ST. VIADUCT CLOSED TO PEDESTRIANS

208
30"X18"

DETOUR
M4-9BL
30"X24"

DETOUR
M4-9BR
30"X24"

SIDEWALK CLOSED
R9-9
24"X12"

SIDEWALK CLOSED AHEAD
R9-9A
30"X18"

GENERAL NOTES

LOCATION AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS DETOUR SHALL BE COVERED AS DIRECTED BY THE ENGINEER.

DETOUR SIGNS SHALL BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE OR AS DIRECTED BY THE ENGINEER.

ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDED IN THE PLAN.

SEE "TEMPORARY AUDIBLE MESSAGE DEVICE MESSAGING PLAN" FOR CONTENT OF MESSAGES TO BE RECORDED.

SEE STAGING PLAN FOR ADDITIONAL PEDESTRIAN ACCOMMODATIONS.

LEGEND

- EXISTING SIGN ON PERMANENT SUPPORT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CLOSURE
- DETOUR ROUTE
- SECONDARY DETOUR ROUTE
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	DETOUR - 27TH STREET VIADUCT CLOSED - PEDESTRIAN	SHEET 345	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-027080-DT.DWG
LAYOUT NAME - 027080-dt
PLOT DATE : 4/26/2025 8:19 PM PLOT BY : SCHARLAU, DAVE PLOT NAME : PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42

2

2

N

W. WISCONSIN AVENUE

W. MICHIGAN AVENUE

W. CLYBOURN STREET

W. ST PAUL AVENUE

W. CANAL STREET

GREVES STREET

IH 94 WB

IH 94 EB

N. 35TH STREET

N. 30TH STREET

N. 29TH STREET

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

N. 25TH STREET

SEE 27TH STREET PEDESTRIAN DETOUR

WORK AREA

SIDEWALK CLOSED
R9-9
24"X12"

M4-60R
30"X24"

M4-60L
30"X24"

GENERAL NOTES

LOCATION AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS DETOUR SHALL BE COVERED AS DIRECTED BY THE ENGINEER.

DETOUR SIGNS SHALL BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE OR AS DIRECTED BY THE ENGINEER.

ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDED IN THE PLAN.

SEE "TEMPORARY AUDIBLE MESSAGE DEVICE MESSAGING PLAN" FOR CONTENT OF MESSAGES TO BE RECORDED.

SEE STAGING PLAN FOR ADDITIONAL PEDESTRIAN ACCOMMODATIONS.

LEGEND

- EXISTING SIGN ON PERMANENT SUPPORT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CLOSURE
- DETOUR ROUTE
- SECONDARY DETOUR ROUTE
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	DETOUR - ST. PAUL AVENUE CLOSED - PEDESTRIAN	SHEET 346	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-027081-DT.DWG
LAYOUT NAME - 027081dt
PLOT DATE : 4/26/2025 8:19 PM PLOT BY : SCHARLAU, DAVE PLOT NAME : PLOT SCALE : 1 IN:400 FT
WISDOT/CADDS SHEET 42

TEMPORARY AUDIBLE MESSAGE DEVICE MESSAGING PLAN:

DETOUR - 27TH STREET VIADUCT CLOSED

INTERSECTION	LOCATION	MESSAGE
S. 27TH ST. & W. PIERCE ST.	NW CORNER	ATTENTION NORTHBOUND 27TH STREET PEDESTRIANS. YOU ARE AT THE NORTHWEST CORNER OF 27TH STREET AND PIERCE STREET. 27TH STREET IS CLOSED AT EVERGREEN LANE. A PEDESTRIAN DETOUR ROUTE IS AVAILABLE VIA PIERCE STREET. HEAD WEST ON PIERCE STREET TO THE HANK AARON STATE TRAIL SPUR TRAILHEAD LOCATED AT 37TH STREET.
S. 27TH ST. & W. PIERCE ST.	NE CORNER	ATTENTION NORTHBOUND 27TH STREET PEDESTRIANS. YOU ARE AT THE NORTHEAST CORNER OF 27TH STREET AND PIERCE STREET. 27TH STREET IS CLOSED AT EVERGREEN LANE. A PEDESTRIAN DETOUR ROUTE IS AVAILABLE VIA PIERCE STREET. CROSS 27TH STREET AND CONTINUE WEST ON PIERCE STREET TO THE HANK AARON STATE TRAIL SPUR TRAILHEAD LOCATED AT 37TH STREET.
S. 37TH ST. & W. PIERCE ST.	NE CORNER	ATTENTION 27TH STREET DETOUR PEDESTRIANS. YOU ARE AT THE NORTHEAST CORNER OF 37TH STREET AND PIERCE STREET - LOCATION OF THE HANK AARON TRAIL SPUR TRAILHEAD. NORTHBOUND PEDESTRIANS, TURN RIGHT ON THE HANK AARON STATE TRAIL SPUR AND CONTINUE NORTH TO CANAL STREET. SOUTHBOUND PEDESTRIANS, TURN LEFT ON PIERCE STREET AND CONTINUE EAST TO 27TH STREET.
HANK AARON STATE TRAIL SPUR & W. CANAL ST.	S OF CANAL ST	ATTENTION 27TH STREET DETOUR PEDESTRIANS. YOU ARE AT THE INTERSECTION OF CANAL STREET AND THE HANK AARON STATE TRAIL SPUR. NORTHBOUND PEDESTRIANS, TURN RIGHT AND CONTINUE EAST ON CANAL STREET TO ROUNDHOUSE ROAD. SOUTHBOUND PEDESTRIANS, TURN LEFT AND CONTINUE SOUTH ON THE HANK AARON STATE TRAIL SPUR TO PIERCE STREET.
W. CANAL ST. & W. ROUNDHOUSE RD.	SW CORNER	ATTENTION 27TH STREET DETOUR PEDESTRIANS. YOU ARE AT THE SOUTHWEST CORNER OF CANAL STREET AND ROUNDHOUSE ROAD. NORTHBOUND PEDESTRIANS, TURN LEFT AND CROSS CANAL STREET. SOUTHBOUND PEDESTRIANS, TURN RIGHT AND CONTINUE WEST ON CANAL STREET TO THE HANK AARON STATE TRAIL SPUR.
W. CANAL ST. & W. ROUNDHOUSE RD.	NW CORNER	ATTENTION 27TH STREET DETOUR PEDESTRIANS. YOU ARE AT THE NORTHWEST CORNER OF CANAL STREET AND ROUNDHOUSE ROAD. NORTHBOUND PEDESTRIANS, TURN RIGHT AND CONTINUE EAST ON CANAL STREET TO 32ND STREET. SOUTHBOUND PEDESTRIANS, TURN LEFT AND CROSS CANAL STREET.
N. 32ND ST. & W. CANAL ST.	NW CORNER	ATTENTION 27TH STREET DETOUR PEDESTRIANS. YOU ARE AT THE NORTHWEST CORNER OF 32ND STREET AND CANAL STREET. NORTHBOUND PEDESTRIANS, TURN LEFT AND CONTINUE NORTH 32ND STREET TO CLYBOURN STREET. SOUTHBOUND PEDESTRIANS, TURN RIGHT AND CONTINUE WEST ON CANAL STREET TO ROUNDHOUSE ROAD.
N. 32ND ST. & W. CLYBOURN ST.	SW CORNER	ATTENTION 27TH STREET DETOUR PEDESTRIANS. YOU ARE AT THE SOUTHWEST CORNER OF 32ND STREET AND CLYBOURN STREET NORTHBOUND PEDESTRIANS, TURN RIGHT AND CONTINUE EAST ON CLYBOURN STREET TO 27TH STREET. SOUTHBOUND PEDESTRIANS, TURN LEFT ON 32ND STREET AND CONTINUE SOUTH TO CANAL STREET.
N. 27TH ST. & W. CLYBOURN ST.	SE CORNER	ATTENTION SOUTHBOUND 27TH STREET PEDESTRIANS. YOU ARE AT THE SOUTHEAST CORNER OF 27TH STREET AND CLYBOURN STREET. 27TH STREET IS CLOSED AT SAINT PAUL AVENUE. A PEDESTRIAN DETOUR ROUTE IS AVAILABLE VIA CLYBOURN STREET. CROSS 27TH STREET AND CONTINUE WEST ON CLYBOURN STREET TO 32ND STREET. ATTENTION SAINT PAUL AVENUE DETOUR PEDESTRIANS, CONTINUE ALONG CLYBOURN STREET.
N. 27TH ST. & W. CLYBOURN ST.	SW CORNER	ATTENTION SOUTHBOUND 27TH STREET PEDESTRIANS. YOU ARE AT THE SOUTHWEST CORNER OF 27TH STREET AND CLYBOURN STREET. 27TH STREET IS CLOSED AT SAINT PAUL AVENUE. A PEDESTRIAN DETOUR ROUTE IS AVAILABLE VIA CLYBOURN STREET. HEAD WEST ON CLYBOURN STREET TO 32ND STREET. SAINT PAUL AVENUE DETOUR PEDESTRIANS, CONTINUE ALONG CLYBOURN STREET.

DETOUR - ST. PAUL AVENUE CLOSED

INTERSECTION	LOCATION	MESSAGE
N. 30TH ST. & W. ST. PAUL AVE.	NE CORNER	ATTENTION EASTBOUND SAINT PAUL AVENUE PEDESTRIANS. YOU ARE AT THE NORTHEAST CORNER OF 30TH STREET AND SAINT PAUL AVENUE. SAINT PAUL AVENUE IS CLOSED AT 29TH STREET. A PEDESTRIAN DETOUR ROUTE IS AVAILABLE VIA CLYBOURN STREET. HEAD NORTH ON 30TH STREET TO CLYBOURN STREET.
N. 30TH ST. & W. ST. PAUL AVE.	SE CORNER	ATTENTION EASTBOUND SAINT PAUL AVENUE PEDESTRIANS. YOU ARE AT THE SOUTHEAST CORNER OF 30TH STREET AND SAINT PAUL AVENUE. SAINT PAUL AVENUE IS CLOSED AT 29TH STREET. A PEDESTRIAN DETOUR ROUTE IS AVAILABLE VIA CLYBOURN STREET. CROSS SAINT PAUL AVENUE AND CONTINUE NORTH ON 30TH STREET TO CLYBOURN STREET.
N. 30TH ST. & W. CLYBOURN ST.	SE CORNER	ATTENTION SAINT PAUL AVENUE DETOUR PEDESTRIANS. YOU ARE AT THE SOUTHEAST CORNER OF 30TH STREET AND CLYBOURN STREET. EASTBOUND PEDESTRIANS, TURN RIGHT ON CLYBOURN STREET AND CONTINUE EAST TO 26TH STREET. WESTBOUND PEDESTIRANS, TURN LEFT ON 30TH STREET AND CONTINUE SOUTH TO SAINT PAUL AVENUE. ATTENTION 27TH STREET DETOUR PEDESTRIANS, CONTINUE ALONG CLYBOURN STREET.
N. 26TH ST. & W. CLYBOURN ST.	SW CORNER	ATTENTION SAINT PAUL AVENUE DETOUR PEDESTRIANS. YOU ARE AT THE SOUTHEAST CORNER OF 26TH STREET AND CLYBOURN STREET. EASTBOUND PEDESTRIANS, TURN RIGHT ON 26TH STREET AND CONTINUE SOUTH TO SAINT PAUL AVENUE. WESTBOUND PEDESTIRANS, TURN LEFT ON CLYBOURN STREET AND CONTINUE WEST TO 30TH STREET.
N. 26TH ST. & W. ST. PAUL AVE.	NW CORNER	ATTENTION WESTBOUND SAINT PAUL AVENUE PEDESTRIANS. YOU ARE AT THE NORTHWEST CORNER OF 26TH STREET AND CLYBOURN STREET. SAINT PAUL AVENUE IS CLOSED AT 26TH STREET. A PEDESTRIAN DETOUR ROUTE IS AVAILABLE VIA CLYBOURN STREET. HEAD NORTH ON 26TH STREET TO CLYBOURN STREET.

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-027090-DT.DWG
LAYOUT NAME - 027090-dt
PLOT DATE : 4/26/2025 8:19 PM PLOT BY : SCHARLAU, DAVE PLOT NAME : PLOT SCALE : ############
WISDOT/CADDS SHEET 42

2

N. 28TH STREET

N. 27TH STREET

N. 26TH STREET

W. ST. PAUL AVENUE

RAMP JD

RAMP LC

IH 94 WB

IH 94 EB

GREVES STREET

SUB-STATION

12SP

14SP

16SP

18SP

21&1SP

20SP

22OTSP

22SP

102TJD

TJD+37.71
-45.00' LT

TJD+04.41
-45.00' LT

MATCH EXISTING FENCE

26KS

KS+22.07
-45.04' LT

KS+01.80
-39.90' LT

MATCH PROPOSED PARAPET

B-40-1083

SP+47.73
53.07' RT

SP+53.12
41.08' RT

SP+68.73
28.58' RT

SP+40.73
28.54' RT

MATCH EXISTING WINGWALL

GATES CHAIN LINK 4-FT

MATCH EXISTING WINGWALL

30KN

28KN

126TWB

126TEB

124TWB

122TWB

120TWB

118TWB

116TWB

114TWB

112TWB

12TEB

14TEB

16TEB

18TEB

20TEB

22TEB

24TEB

24KS

20KS

26TLC

22TLC

20TLC

24TLC

TEB+42.20
142.04' RT

GATES CHAIN LINK 12-FT

TEB+58.60
204.10' RT

TEB+90.33
197.53' RT

MATCH EXISTING FENCE

TIE INTO EXISTING FENCE

TEB+63.95
50.77' RT

TEB+64.24
58.00' RT

TEB+82.49
58.00' RT

TEB+17.69
58.00' RT

TEB+67.69
70.00' RT

TEB+76.58
70.00' RT

TEB+88.98
70.00' RT

TEB+57.58
132.69' RT

TEB+94.46
144.02' RT

TEB+82.85
205.39' RT

TEB+82.49
157.76' RT

20'

20'

R-40-767 (STAGE 1)

R-40-761

BORE

GATE

SS

MH

LEGEND

FENCE CHAIN LINK

FENCE SAFETY LEFT IN PLACE

NOTE:
ALL FENCE IS 6-FT UNLESS OTHERWISE NOTED

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	FENCING	SHEET 348	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-027101-FN.DWG
LAYOUT NAME - 01-TEB-02

PLOT DATE : 4/26/2025 8:20 PM PLOT BY : SCHARLAU, DAVE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

2659.88'
S0° 10' 55"E

370EW
CURVE EW7
375EW
R/L EW
365EW
380EW
360EW
S75° 42' 48"E
385EW
N73° 48' 41"E
355EW
P.C. 362+08.98
PT: 380+62.10

S89° 49' 21"E
2659.15'
S89° 49' 21"E
2659.15'

T 7 N
R 21 E
25 36
26 35

Y = 296965.139
X = 590421.122

2030.47'
S0° 00' 02"W

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT	SHEET 349	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-027201-AD.DWG
LAYOUT NAME - 00

PLOT DATE : 4/26/2025 8:19 PM PLOT BY : SCHARLAU, DAVE PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

2

T 7 N
25 25
25 25
R 21 E

Y = 299468.996
X = 593087.515

N

W

R/L EW

390EW
CURVE EW8

395EW

400EW

N89° 47' 08"W

N89° 47' 08"E

405EW

410EW

415EW
CURVE EW9

PC: 386EW+21.61

PT: 391EW+99.42

1332.31'
N89° 54' 25"W

PC: 408EW+14.64

S89° 39' 30"E
2659.02'

T 7 N
26 25
35 36
R 21 E

Y = 296963.103
X = 591674.447

T 7 N
25 25
36 36
R 21 E

Y = 296960.828
X = 593074.031

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT	SHEET 350	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-027201-AD.DWG
LAYOUT NAME - 01

PLOT DATE : 4/26/2025 8:19 PM PLOT BY : SCHARLAU, DAVE PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

2

BEGIN PROJECT 1060-27-74
STA 10TEB+95.49
= STA 419EW+07.65, 79.38'LT
X=594860.27
Y=297434.88

END PROJECT 1060-27-74
STA 25TEB+54.89
X=596097.951
Y=298185.430

Y = 299687.958
X = 595756.000

Y = 296944.971
X = 595732.999

Y = 296938.987
X = 598372.274

T 7 N
25 30
25 30
R21E R22E

T 7 N
25 30
36 31
R21E R22E

T 7 N
30 30
31 31
R 22 E

N

EP: 14J+99.92
N0° 28' 50"E
R/L J
BP: 10J+00.00
BP: 10SP+00.00
EP: 104TJD+27.99
R/L SP
15SP
N6° 18' 43"E
R/L TJD
PT: 101TJD+32.26
CURVE TJD1
BP: 100TJD+00.00
BP: 212TML+00.00
PT: 111TWB+97.95
CURVE TWB1
PC: 111TWB+15.81
PI: 212TML+58.39
PC: 12TEB+59.35
R/L TEB
115TWB
215TML
15TEB
N62° 49' 05"E
BP: 110TWB+02.81
BP: 10TEB+00.00
N64° 16' 54"E
N62° 06' 20"E
CURVE TEB1
415EW
CURVE EW9
420EW
PI: 11TEB+13.86
PC: 118TWB+97.27
PC: 218TML+97.46
R/L TWB
R/L TML
PI: 216TML+97.46
N60° 16' 27"E
N60° 55' 01"E
N61° 14' 05"E
425EW
PT: 16TEB+18.57
PT: 423EW+85.00
N65° 32' 09"E
PC: 18TEB+76.58
BP: 19TLC+69.56
20TLC
N66° 09' 58"E
R/L TLC
PC: 22TLC+98.03
BP: 217TSP+00.00
BP: 26KN+65.28
EP: 26KS+65.29
N0° 28' 50"E
30KN
EP: 31KN+27.70
R/L KN
R/L TSP
PC: 20SP+15.22
PC: 24TEB+37.61
PI: 224TML+52.15
N55° 03' 28"E
EP: 225TML+52.09
EP: 126TWB+69.57
125TWB
PI: 222TML+93.25
PT: 22TEB+96.52
PT: 121TWB+69.66
PT: 221TML+39.99
CURVE TWB2
CURVE TML1
120TWB
220TML
15KS
220TSP
20SP
225TML
N55° 03' 28"E
N53° 25' 00"E
N55° 10' 47"E
N45° 58' 27"E
430EW
CURVE TEB2
20TEB
25TEB
CURVE SP1
EP: 222TSP+00.00
PRC: 22SP+07.11
25TLC
CURVE TLC1
EP: 26TLC+00.00
N26° 52' 08"E
PT: 25TLC+03.79
435EW
PC: 434EW+28.55
CURVE EW10
440EW
30TEB
CURVE TEB3
35TEB
PT: 443EW+96.51
EP: 37TEB+08.48
445EW
25SP
CURVE SP2
PRC: 28SP+09.70
CURVE SP3
30SP
PT: 30SP+15.38
EP: 34SP+22.76
20KS
N0° 19' 01"E
R/L KS
15KS
S89° 39' 30"E
2659.02'
BP: 12KS+04.88

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT	SHEET 351	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-027201-AD.DWG
LAYOUT NAME - 02
PLOT DATE : 4/26/2025 8:19 PM
PLOT BY : SCHARLAU, DAVE
PLOT NAME :
PLOT SCALE : 1 IN:200 FT

2

T 7 N
30 30
30 30
R 22 E

Y = 299579.769
X = 598383.964

N

S86° 27' 58"E
450EW
455EW
CURVE EW11
R/L EW
460EW
N85° 24' 23"E
465EW
CURVE EW12
470EW
N89° 52' 32"E
475EW

PC: 451EW+63.08
PT: 460EW+43.97
PC: 465EW+43.16
PT: 468EW+66.87
EP: 476EW+67.31

Y = 296864.466
X = 598379.084

T 7 N
30 30
31 31
R 22 E

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT	SHEET 352	E

FILE NAME : C:\USERS\DSCHARLA\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-027201-AD.DWG
LAYOUT NAME - 03
PLOT DATE : 4/26/2025 8:19 PM
PLOT BY : SCHARLAU, DAVE
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

CURVE DATA												
CURVE NO.	PI	EASTING	NORTHING	Δ	D	T	L	E	R	PC	PT	SUPERELEVATION RATE
EW7	371EW+58.02	590,254.59	297,603.11	30°28'31"	1°38'40"	949.04	1853.12	126.95	3484.00	362EW+08.98	380EW+62.10	-
EW8	389EW+12.06	591,997.96	297,159.16	14°30'04"	2°30'35"	290.45	577.81	18.40	2283.00	386EW+21.61	391EW+99.42	-
EW9	416EW+24.59	594,713.57	297,169.32	34°36'21"	2°12'13"	809.96	1570.37	123.24	2600.00	408EW+14.64	423EW+85.00	-
EW10	439EW+31.45	596,648.06	298,514.84	38°21'15"	3°57'45"	502.90	967.96	84.96	1446.00	434EW+28.55	443EW+96.51	-
EW11	456EW+04.27	598,355.46	298,409.40	8°07'39"	0°55'21"	441.18	880.89	15.65	6210.00	451EW+63.08	460EW+43.97	-
EW12	467EW+05.10	599,454.23	298,497.68	4°28'09"	1°22'50"	161.94	323.71	3.16	4150.00	465EW+43.16	468EW+66.87	-
TEB1	14TEB+39.02	595,165.22	297,592.86	3°25'49"	0°57'18"	179.66	359.22	2.69	6000.00	12TEB+59.35	16TEB+18.57	N/A
TEB2	20TEB+88.61	595,756.59	297,861.92	19°33'42"	4°39'29"	212.03	419.94	18.14	1230.00	18TEB+76.58	22TEB+96.52	5.5%
TEB3	31TEB+14.90	596,497.48	298,578.04	49°02'02"	3°51'30"	677.28	1270.87	147.16	1485.00	24TEB+37.61	37TEB+08.48	N/A
TML1	220TML+18.84	595,662.16	297,888.39	6°03'18"	2°29'48"	121.38	242.53	3.21	2295.00	218TML+97.46	221TML+39.99	4.1%
TWB1	111TWB+56.88	594,907.13	297,472.49	2°32'39"	3°05'49"	41.08	82.14	0.46	1850.00	111TWB+15.81	111TWB+97.95	N/A
TWB2	120TWB+33.56	595,668.46	297,907.20	5°12'58"	1°54'54"	136.29	272.39	3.10	2992.00	118TWB+97.27	121TWB+69.66	N/A

CURVE DATA												
CURVE NO.	PI	EASTING	NORTHING	Δ	D	T	L	E	R	PC	PT	SUPERELEVATION RATE
TJD1	100TJD+66.73	595,159.53	297,811.06	18°51'04"	14°15'10"	66.73	132.26	5.50	402.00	100TJD+00.00	101TJD+32.26	5.6%
TLC1	24TLC+05.14	596,068.44	297,949.83	39°17'49"	19°05'55"	107.11	205.76	18.55	300.00	22TLC+98.03	25TLC+03.79	5.8%

CURVE DATA												
CURVE NO.	PI	EASTING	NORTHING	Δ	D	T	L	E	R	PC	PT	SUPERELEVATION RATE
SP1 *	21SP+11.46	596,080.10	298,166.27	10°59'41"	5°43'46"	96.24	191.89	4.62	1000.00	20SP+15.22	22SP+07.11	-
SP2 *	25SP+12.49	596,473.90	298,087.41	22°55'32"	3°48'16"	305.38	602.59	30.65	1506.00	22SP+07.11	28SP+09.70	-
SP3 *	29SP+12.90	596,874.14	298,169.58	11°47'04"	5°43'46"	103.20	205.68	5.31	1000.00	28SP+09.70	30SP+15.38	-

* ALIGNMENT AND CURVE DATA INCLUDED FOR INFORMATION ONLY

2

N

W. CLYBOURN STREET

N. 28TH STREET

N. 26TH STREET

N. 25TH STREET

N. 29TH STREET

N. 30TH STREET

N. 31ST STREET

N. 27TH STREET

W. ST PAUL AVENUE

W. MT VERNON AVENUE

W. PARK HILL AVENUE

W. CANAL STREET

GREVES STREET

CPKC RAILROAD

MENOMONEE RIVER

IH 94 WB

IH 94 EB

BM119

CP19

BM214

BM213

BM121

BM120

CP20

BM402

CP302

CP22

BM123

CP23

BM122

CP24

BM124

30KN

15SP

20SBP

12STWB

35TEB

440EW

30TEB

435EW

25SP

30SP

25KS

430EW

25TLC

20TWB

15TWB

20TEB

20TLC

11STWB

15TEB

425EW

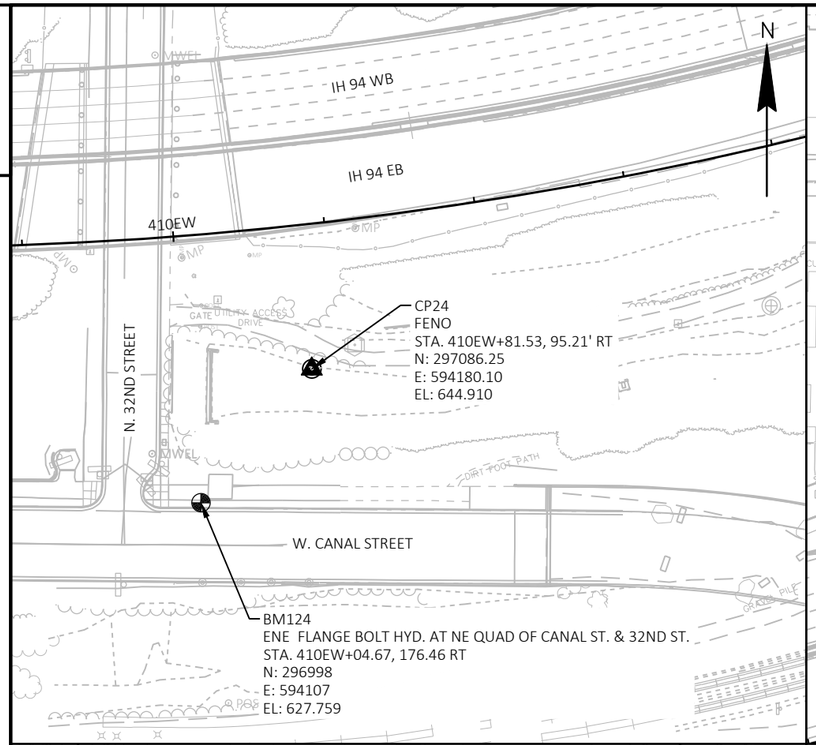
20KS

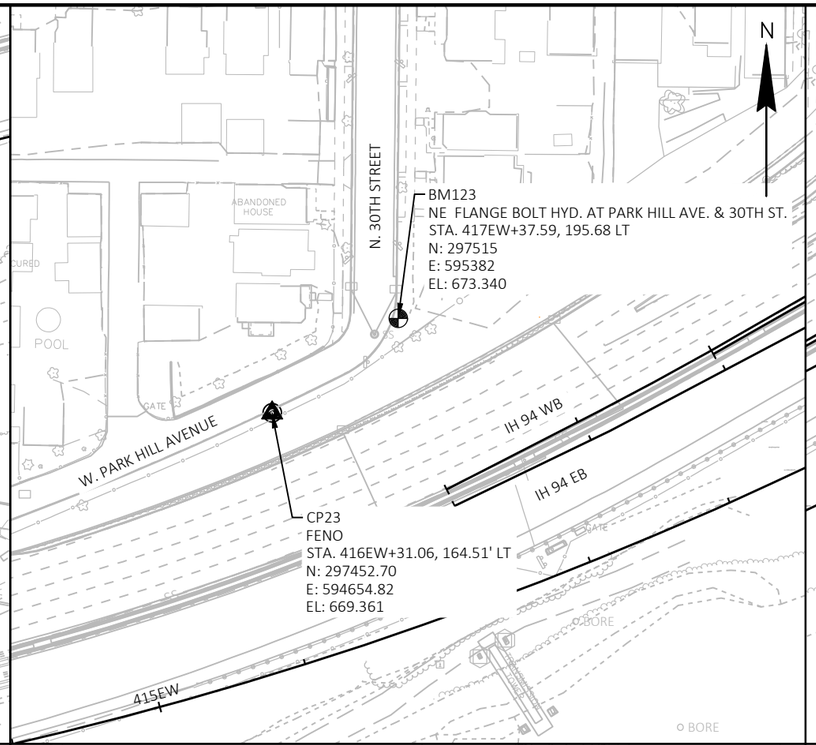
420EW

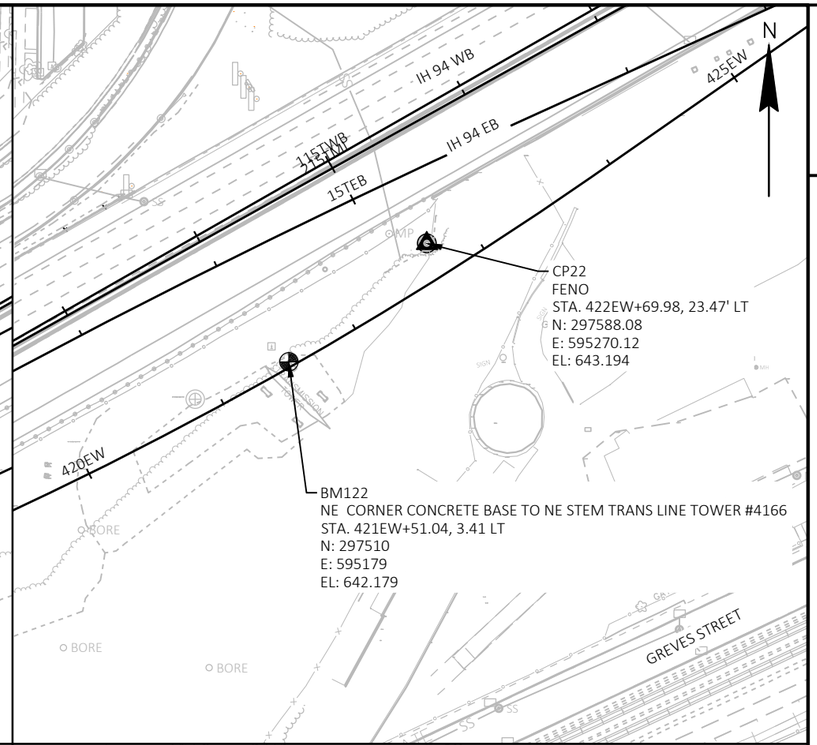
415EW

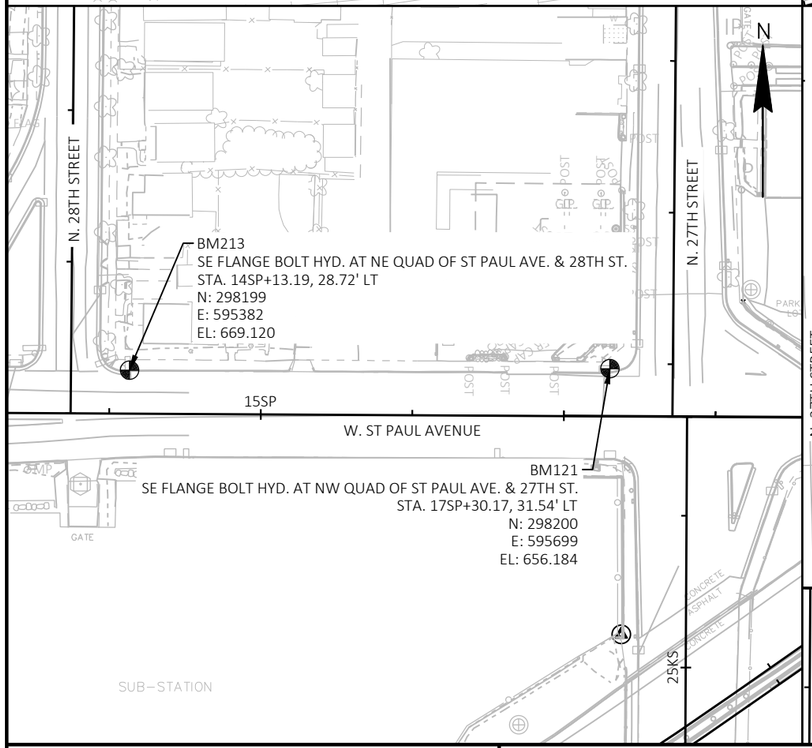
410EW

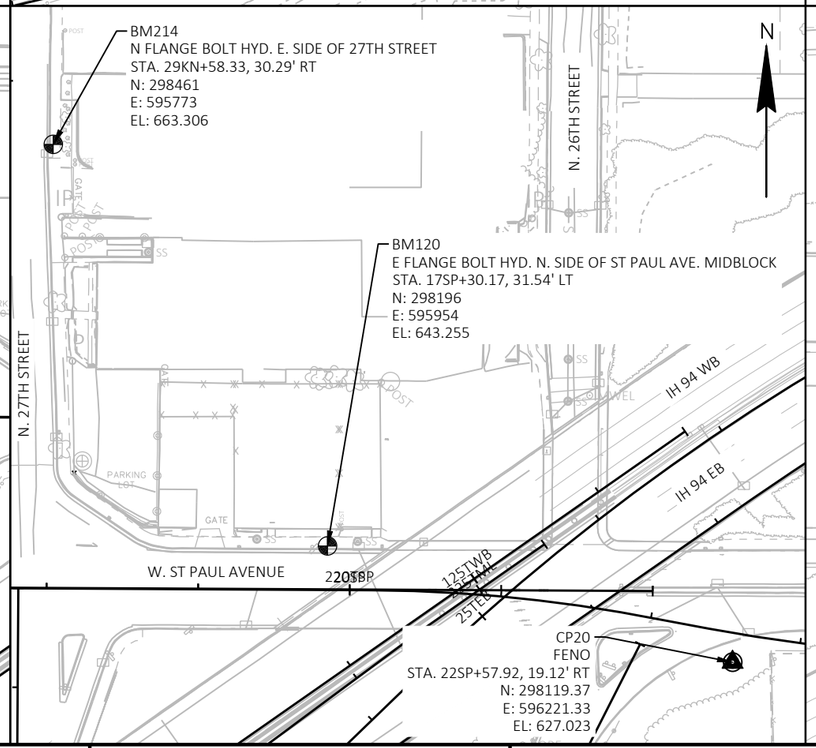
15KS

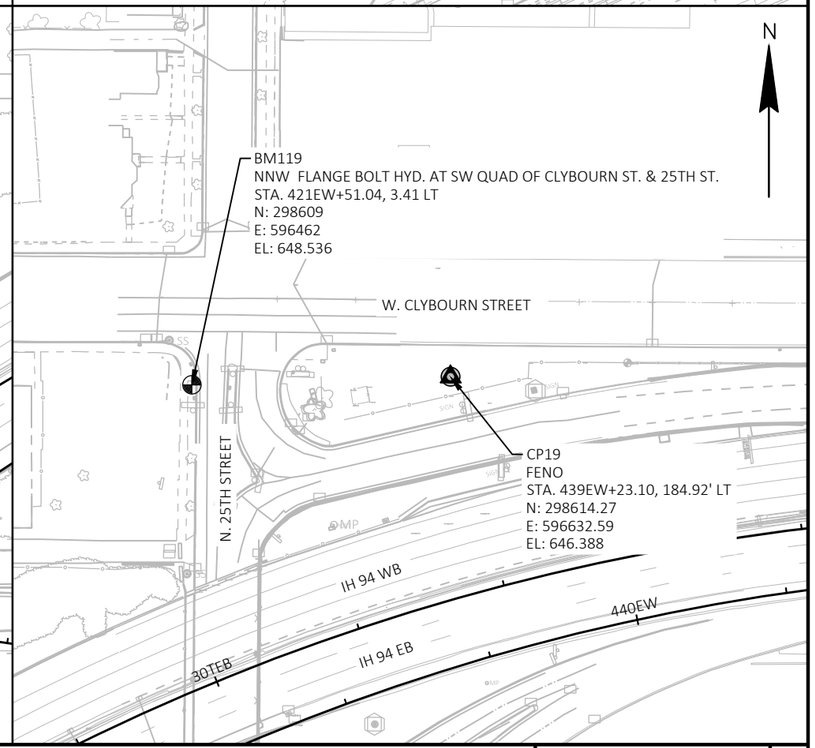








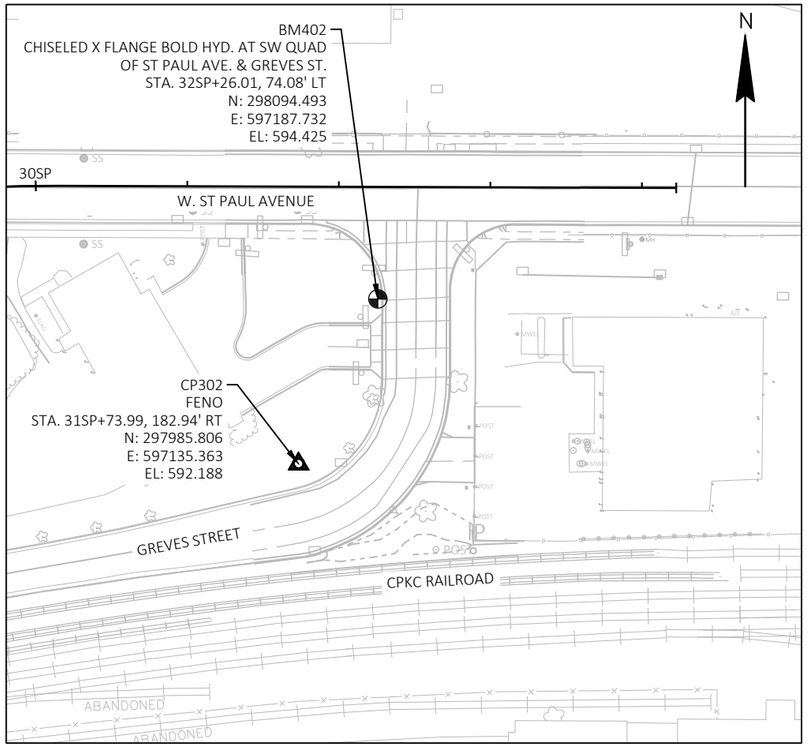




PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT - SURVEY CONTROL	SHEET 355	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-027203-AD.DWG
LAYOUT NAME - 02
PLOT DATE : 4/29/2025 8:34 AM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT - SURVEY CONTROL	SHEET 356	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\02 TYPSANDDETAILS\10602709ELA-027203-AD.DWG
LAYOUT NAME - 03

PLOT DATE : 4/29/2025 9:00 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : ##########

Estimate Of Quantities

1060-27-74

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	23.000	23.000
0004	201.0120	Clearing	ID	140.000	140.000
0006	201.0205	Grubbing	STA	23.000	23.000
0008	201.0220	Grubbing	ID	140.000	140.000
0010	203.0220	Removing Structure (structure) 0010. R-40-10	EACH	1.000	1.000
0012	203.0220	Removing Structure (structure) 0033. R-40-33	EACH	1.000	1.000
0014	203.0220	Removing Structure (structure) 0043. B-40-43	EACH	1.000	1.000
0016	203.0220	Removing Structure (structure) 0057. B-40-57	EACH	1.000	1.000
0018	203.0220	Removing Structure (structure) 0513. B-40-513	EACH	1.000	1.000
0020	203.0220	Removing Structure (structure) 1000. CIP Concrete Retaining Wall 415EW+60 - 416EW+83	EACH	1.000	1.000
0022	204.0100	Removing Concrete Pavement	SY	18,770.000	18,770.000
0024	204.0110	Removing Asphaltic Surface	SY	4,290.000	4,290.000
0026	204.0115	Removing Asphaltic Surface Butt Joints	SY	170.000	170.000
0028	204.0120	Removing Asphaltic Surface Milling	SY	95,720.000	95,720.000
0030	204.0150	Removing Curb & Gutter	LF	130.000	130.000
0032	204.0155	Removing Concrete Sidewalk	SY	1,560.000	1,560.000
0034	204.0157	Removing Concrete Barrier	LF	2,170.000	2,170.000
0036	204.0165	Removing Guardrail	LF	1,400.000	1,400.000
0038	204.0170	Removing Fence	LF	2,840.000	2,840.000
0040	204.0195	Removing Concrete Bases	EACH	26.000	26.000
0042	204.0210	Removing Manholes	EACH	14.000	14.000
0044	204.0220	Removing Inlets	EACH	38.000	38.000
0046	204.0245	Removing Storm Sewer (size) 0001. 12-Inch	LF	1,321.000	1,321.000
0048	204.0245	Removing Storm Sewer (size) 0002. 15-Inch	LF	1.000	1.000
0050	204.0245	Removing Storm Sewer (size) 0003. 18-Inch	LF	238.000	238.000
0052	204.0245	Removing Storm Sewer (size) 0004. 21-Inch	LF	351.000	351.000
0054	204.0245	Removing Storm Sewer (size) 0005. 24-Inch	LF	428.000	428.000
0056	204.0245	Removing Storm Sewer (size) 0006. 27-Inch	LF	276.000	276.000
0058	204.0245	Removing Storm Sewer (size) 0007. 30-Inch	LF	20.000	20.000
0060	204.0250	Abandoning Manholes	EACH	1.000	1.000
0062	204.0265	Abandoning Wells	EACH	3.000	3.000
0064	204.0291.S	Abandoning Sewer	CY	5.000	5.000
0066	204.9001.S	Removing Advance Flasher Assemblies Type 1	EACH	1.000	1.000
0068	204.9060.S	Removing (item description) 0001. Steps Railing	EACH	2.000	2.000
0070	204.9060.S	Removing (item description) 1002. Lighting Units	EACH	35.000	35.000
0072	204.9060.S	Removing (item description) 3101. Traffic Signals W St Paul Ave & N 27th St	EACH	1.000	1.000
0074	204.9165.S	Removing (item description) 0002. Landscape Rock	SF	1,360.000	1,360.000
0076	205.0100	Excavation Common	CY	70,498.000	70,498.000
0078	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	1,415.000	1,415.000
0080	206.1001	Excavation for Structures Bridges (structure) 1083. B-40-1083	EACH	1.000	1.000
0082	206.3001	Excavation for Structures Retaining Walls (structure) 0761. R-40-761	EACH	1.000	1.000
0084	209.0200.S	Backfill Controlled Low Strength	CY	40.000	40.000
0086	210.1500	Backfill Structure Type A	TON	2,790.000	2,790.000
0088	213.0100	Finishing Roadway (project) 0001. 1060-27-74	EACH	1.000	1.000
0090	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	23,680.000	23,680.000
0092	312.0110	Select Crushed Material	TON	29,470.000	29,470.000
0094	390.0100	Removing Pavement for Base Patching	CY	610.000	610.000
0096	390.0201	Base Patching Asphaltic	TON	100.000	100.000

1060-27-74

Line	Item	Item Description	Unit	Total	Qty
0098	390.0405	Base Patching Concrete SHES	CY	110.000	110.000
0100	405.0200	Coloring Concrete Custom	CY	49.000	49.000
0102	415.0210	Concrete Pavement Gaps	EACH	4.000	4.000
0104	415.0410	Concrete Pavement Approach Slab	SY	345.000	345.000
0106	416.0610	Drilled Tie Bars	EACH	420.000	420.000
0108	416.0620	Drilled Dowel Bars	EACH	550.000	550.000
0110	416.1715	Concrete Pavement Repair SHES	SY	360.000	360.000
0112	416.1720	Concrete Pavement Replacement	SY	333.000	333.000
0114	416.1725	Concrete Pavement Replacement SHES	SY	10.000	10.000
0116	450.1100.S	Asphaltic Mixture For Extreme Conditions	TON	50.000	50.000
0118	450.4000	HMA Cold Weather Paving	TON	700.000	700.000
0120	455.0605	Tack Coat	GAL	15,791.000	15,791.000
0122	460.2000	Incentive Density HMA Pavement	DOL	13,030.000	13,030.000
0124	460.6223	HMA Pavement 3 MT 58-28 S	TON	110.000	110.000
0126	460.6224	HMA Pavement 4 MT 58-28 S	TON	14,494.000	14,494.000
0128	460.7223	HMA Pavement 3 HT 58-28 S	TON	4,570.000	4,570.000
0130	460.7424	HMA Pavement 4 HT 58-28 H	TON	1,670.000	1,670.000
0132	465.0105	Asphaltic Surface	TON	7.000	7.000
0134	465.0125	Asphaltic Surface Temporary	TON	720.000	720.000
0136	495.1000.S	Cold Patch	TON	100.000	100.000
0138	501.1000.S	Ice Hot Weather Concreting	LB	47,210.000	47,210.000
0140	502.0100	Concrete Masonry Bridges	CY	1,382.000	1,382.000
0142	502.0110.S	Concrete Masonry Soldier Pile Footings 0761. R-40-761	CY	2,050.000	2,050.000
0144	502.0120.S	Non-Shrink Grout	CF	6.000	6.000
0146	502.3101	Expansion Device	LF	200.000	200.000
0148	502.3200	Protective Surface Treatment	SY	4,019.000	4,019.000
0150	502.3210	Pigmented Surface Sealer	SY	338.000	338.000
0152	502.4206	Adhesive Anchors No. 6 Bar	EACH	160.000	160.000
0154	504.0500	Concrete Masonry Retaining Walls	CY	1,615.000	1,615.000
0156	505.0400	Bar Steel Reinforcement HS Structures	LB	87,160.000	87,160.000
0158	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	650,100.000	650,100.000
0160	505.0910	Bar Couplers No. 10	EACH	348.000	348.000
0162	506.0605	Structural Steel HS	LB	1,153,680.000	1,153,680.000
0164	506.3015	Welded Stud Shear Connectors 7/8x6-Inch	EACH	16,746.000	16,746.000
0166	506.3020	Welded Stud Shear Connectors 7/8x7-Inch	EACH	54.000	54.000
0168	506.3035	Welded Stud Shear Connectors 7/8x10-Inch	EACH	7,952.000	7,952.000
0170	506.5000	Bearing Assemblies Fixed (structure) 1083. B-40-1083	EACH	22.000	22.000
0172	506.6000	Bearing Assemblies Expansion (structure) 0513. B-40-513_5	EACH	9.000	9.000
0174	506.6000	Bearing Assemblies Expansion (structure) 1083.B-40-1083	EACH	21.000	21.000
0176	509.1500	Concrete Surface Repair	SF	250.000	250.000
0178	511.1200	Temporary Shoring (structure) 0010. R-40-10	SF	3,420.000	3,420.000
0180	511.1200	Temporary Shoring (structure) 0761. R-40-761	SF	568.000	568.000
0182	511.2200	Temporary Shoring Left in Place (structure) 0057. B-40-57	SF	1,000.000	1,000.000
0184	511.2200	Temporary Shoring Left in Place (structure) 0761. R-40-761	SF	223.000	223.000
0186	511.2300	Temporary Shoring Left in Place (location) 0001. IH 94 EB	SF	3,300.000	3,300.000
0188	511.2300	Temporary Shoring Left in Place (location) 0002. IH 94 WB	SF	900.000	900.000
0190	512.0500	Piling Steel Sheet Permanent Delivered	SF	225.000	225.000
0192	512.0600	Piling Steel Sheet Permanent Driven	SF	225.000	225.000
0194	513.2001	Railing Pipe 0761. R-40-761	LF	1,615.000	1,615.000

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Line	Item	Item Description	Unit	Total	Qty
0196	513.4091	Railing Tubular Screening	LF	826.000	826.000
0198	514.0450	Floor Drains Type WF	EACH	5.000	5.000
0200	514.2608	Downspout 8-Inch	LF	270.000	270.000
0202	516.0100	Dampproofing	SY	7,442.000	7,442.000
0204	516.0500	Rubberized Membrane Waterproofing	SY	30.000	30.000
0206	517.0601	Painting Epoxy System (structure) 0513. B-40-513_5	EACH	1.000	1.000
0208	517.0601	Painting Epoxy System (structure) 0761. R-40-761	EACH	1.000	1.000
0210	517.0601	Painting Epoxy System (structure) 1083. B-40-1083	EACH	1.000	1.000
0212	517.0901.S	Preparation and Coating of Top Flanges (structure) 0513. B-40-513_5	EACH	1.000	1.000
0214	517.1801.S	Structure Repainting Recycled Abrasive (structure) 0513. B-40-513_5	EACH	1.000	1.000
0216	517.4501.S	Negative Pressure Containment and Collection of Waste Materials (structure) 0513. B-40-513_5	EACH	1.000	1.000
0218	517.6001.S	Portable Decontamination Facility	EACH	1.000	1.000
0220	531.1100	Concrete Masonry Ancillary Structures Type NS	CY	5.000	5.000
0222	531.1140	Steel Reinforcement HS Ancillary Structures Type NS	LB	720.000	720.000
0224	531.2024	Drilling Shaft 24-Inch	LF	40.000	40.000
0226	601.0331	Concrete Curb & Gutter 31-Inch	LF	3,023.000	3,023.000
0228	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	22.000	22.000
0230	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	287.000	287.000
0232	601.0600	Concrete Curb Pedestrian	LF	56.000	56.000
0234	602.0410	Concrete Sidewalk 5-Inch	SF	17,550.000	17,550.000
0236	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	170.000	170.000
0238	602.0615	Curb Ramp Detectable Warning Field Radial Natural Patina	SF	15.000	15.000
0240	602.0815	Concrete Driveway 7-Inch	SY	155.000	155.000
0242	602.0865	Concrete Driveway HES 7-Inch	SY	140.000	140.000
0244	602.1500	Concrete Steps	SF	135.000	135.000
0246	603.8000	Concrete Barrier Temporary Precast Delivered	LF	9,312.500	9,312.500
0248	603.8125	Concrete Barrier Temporary Precast Installed	LF	17,137.500	17,137.500
0250	603.8500	Anchoring Concrete Barrier Temporary Precast	LF	2,275.000	2,275.000
0252	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	1,579.000	1,579.000
0254	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	2,107.000	2,107.000
0256	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	152.000	152.000
0258	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	1,072.000	1,072.000
0260	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	1,103.000	1,103.000
0262	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	51.000	51.000
0264	608.0430	Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	LF	92.000	92.000
0266	608.0442	Storm Sewer Pipe Reinforced Concrete Class IV 42-Inch	LF	13.000	13.000
0268	611.0530	Manhole Covers Type J	EACH	16.000	16.000
0270	611.0612	Inlet Covers Type C	EACH	2.000	2.000
0272	611.0624	Inlet Covers Type H	EACH	3.000	3.000
0274	611.0627	Inlet Covers Type HM	EACH	5.000	5.000
0276	611.0642	Inlet Covers Type MS	EACH	4.000	4.000
0278	611.0654	Inlet Covers Type V	EACH	47.000	47.000
0280	611.0656	Inlet Covers Type VV-B	EACH	12.000	12.000
0282	611.1004	Catch Basins 4-FT Diameter	EACH	33.000	33.000
0284	611.1005	Catch Basins 5-FT Diameter	EACH	2.000	2.000
0286	611.2004	Manholes 4-FT Diameter	EACH	21.000	21.000
0288	611.2005	Manholes 5-FT Diameter	EACH	20.000	20.000
0290	611.2006	Manholes 6-FT Diameter	EACH	3.000	3.000

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Line	Item	Item Description	Unit	Total	Qty
0292	611.2007	Manholes 7-FT Diameter	EACH	1.000	1.000
0294	611.3004	Inlets 4-FT Diameter	EACH	23.000	23.000
0296	611.3220	Inlets 2x2-FT	EACH	1.000	1.000
0298	611.3225	Inlets 2x2.5-FT	EACH	37.000	37.000
0300	611.3230	Inlets 2x3-FT	EACH	2.000	2.000
0302	611.3902	Inlets Median 2 Grate	EACH	2.000	2.000
0304	611.8110	Adjusting Manhole Covers	EACH	16.000	16.000
0306	611.8115	Adjusting Inlet Covers	EACH	4.000	4.000
0308	611.8120.S	Cover Plates Temporary	EACH	12.000	12.000
0310	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	455.000	455.000
0312	612.0208	Pipe Underdrain Unperforated 8-Inch	LF	85.000	85.000
0314	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	185.000	185.000
0316	612.0806	Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	EACH	4.000	4.000
0318	614.0905	Crash Cushions Temporary	EACH	5.000	5.000
0320	616.0206	Fence Chain Link 6-FT	LF	1,770.000	1,770.000
0322	616.0329	Gates Chain Link (width) 0001. 4-FT	EACH	1.000	1.000
0324	616.0329	Gates Chain Link (width) 0002. 12-FT	EACH	1.000	1.000
0326	616.0700.S	Fence Safety	LF	9.000	9.000
0328	619.1000	Mobilization	EACH	1.000	1.000
0330	620.0300	Concrete Median Sloped Nose	SF	189.000	189.000
0332	623.0200	Dust Control Surface Treatment	SY	27,800.000	27,800.000
0334	624.0100	Water	MGAL	376.000	376.000
0336	625.0100	Topsoil	SY	8,010.000	8,010.000
0338	625.0500	Salvaged Topsoil	SY	19,930.000	19,930.000
0340	627.0200	Mulching	SY	22,830.000	22,830.000
0342	628.1104	Erosion Bales	EACH	10.000	10.000
0344	628.1504	Silt Fence	LF	3,810.000	3,810.000
0346	628.1520	Silt Fence Maintenance	LF	3,810.000	3,810.000
0348	628.1905	Mobilizations Erosion Control	EACH	35.000	35.000
0350	628.1910	Mobilizations Emergency Erosion Control	EACH	26.000	26.000
0352	628.2004	Erosion Mat Class I Type B	SY	18,550.000	18,550.000
0354	628.2006	Erosion Mat Urban Class I Type A	SY	1,350.000	1,350.000
0356	628.6510	Soil Stabilizer Type B	ACRE	5.000	5.000
0358	628.7005	Inlet Protection Type A	EACH	130.000	130.000
0360	628.7020	Inlet Protection Type D	EACH	225.000	225.000
0362	628.7504	Temporary Ditch Checks	LF	245.000	245.000
0364	628.7560	Tracking Pads	EACH	4.000	4.000
0366	628.7570	Rock Bags	EACH	125.000	125.000
0368	629.0210	Fertilizer Type B	CWT	20.000	20.000
0370	630.0120	Seeding Mixture No. 20	LB	1,930.000	1,930.000
0372	630.0200	Seeding Temporary	LB	1,160.000	1,160.000
0374	630.0500	Seed Water	MGAL	470.000	470.000
0376	631.0300	Sod Water	MGAL	16.000	16.000
0378	631.1000	Sod Lawn	SY	1,500.000	1,500.000
0380	633.5350	Markers Permanent Flexible	EACH	20.000	20.000
0382	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	48.000	48.000
0384	635.0200	Sign Supports Structural Steel HS	LB	1,600.000	1,600.000
0386	637.2210	Signs Type II Reflective H	SF	522.100	522.100
0388	637.2215	Signs Type II Reflective H Folding	SF	20.720	20.720

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Line	Item	Item Description	Unit	Total	Qty
0390	637.2220	Signs Type II Reflective SH	SF	6.750	6.750
0392	637.2230	Signs Type II Reflective F	SF	531.000	531.000
0394	638.2101	Moving Signs Type I	EACH	2.000	2.000
0396	638.2102	Moving Signs Type II	EACH	63.000	63.000
0398	638.2602	Removing Signs Type II	EACH	80.000	80.000
0400	638.3000	Removing Small Sign Supports	EACH	57.000	57.000
0402	638.3100	Removing Structural Steel Sign Supports	EACH	4.000	4.000
0404	643.0300	Traffic Control Drums	DAY	159,650.000	159,650.000
0406	643.0410	Traffic Control Barricades Type II	EACH	7,225.000	7,225.000
0408	643.0420	Traffic Control Barricades Type III	DAY	38,550.000	38,550.000
0410	643.0705	Traffic Control Warning Lights Type A	DAY	77,070.000	77,070.000
0412	643.0715	Traffic Control Warning Lights Type C	DAY	40,790.000	40,790.000
0414	643.0810.S	Connected Arrow Board	DAY	2,400.000	2,400.000
0416	643.0900	Traffic Control Signs	DAY	249,210.000	249,210.000
0418	643.0910	Traffic Control Covering Signs Type I	EACH	45.000	45.000
0420	643.0920	Traffic Control Covering Signs Type II	EACH	325.000	325.000
0422	643.1000	Traffic Control Signs Fixed Message	SF	925.000	925.000
0424	643.1050	Traffic Control Signs PCMS	DAY	2,430.000	2,430.000
0426	643.1220.S	Connected Work Zone Start and End Location Markers	DAY	1,435.000	1,435.000
0428	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	3,170.000	3,170.000
0430	643.3170	Temporary Marking Line Epoxy 6-Inch	LF	51,300.000	51,300.000
0432	643.3175	Temporary Marking Line Black Epoxy 6-Inch	LF	1,625.000	1,625.000
0434	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	14,915.000	14,915.000
0436	643.3270	Temporary Marking Line Epoxy 10-Inch	LF	2,740.000	2,740.000
0438	643.3550	Temporary Marking Arrow Removable Tape	EACH	3.000	3.000
0440	643.3760	Temporary Marking Raised Pavement Marker Type I	EACH	265.000	265.000
0442	643.3960	Temporary Marking Removable Mask Out Tape 6-Inch	LF	2,300.000	2,300.000
0444	643.4100	Traffic Control Interim Lane Closure	EACH	528.000	528.000
0446	643.5000	Traffic Control	EACH	1.000	1.000
0448	644.1410	Temporary Pedestrian Surface Asphalt	SF	250.000	250.000
0450	644.1430	Temporary Pedestrian Surface Plate	SF	100.000	100.000
0452	644.1601	Temporary Pedestrian Curb Ramp	DAY	25.000	25.000
0454	644.1605	Temporary Pedestrian Detectable Warning Field	SF	15.000	15.000
0456	644.1810	Temporary Pedestrian Barricade	LF	650.000	650.000
0458	644.1900.S	Temporary Audible Message Devices	DAY	3,510.000	3,510.000
0460	645.0111	Geotextile Type DF Schedule A	SY	120.000	120.000
0462	646.1020	Marking Line Epoxy 4-Inch	LF	23,887.000	23,887.000
0464	646.2020	Marking Line Epoxy 6-Inch	LF	92,546.000	92,546.000
0466	646.3020	Marking Line Epoxy 8-Inch	LF	2,530.000	2,530.000
0468	646.4020	Marking Line Epoxy 10-Inch	LF	13,923.000	13,923.000
0470	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	177.000	177.000
0472	646.5020	Marking Arrow Epoxy	EACH	40.000	40.000
0474	646.5120	Marking Word Epoxy	EACH	7.000	7.000
0476	646.5220	Marking Symbol Epoxy	EACH	63.000	63.000
0478	646.6120	Marking Stop Line Epoxy 18-Inch	LF	392.000	392.000
0480	646.7120	Marking Diagonal Epoxy 12-Inch	LF	697.000	697.000
0482	646.7220	Marking Chevron Epoxy 24-Inch	LF	287.000	287.000
0484	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	1,617.000	1,617.000
0486	646.8120	Marking Curb Epoxy	LF	20.000	20.000

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Line	Item	Item Description	Unit	Total	Qty
0488	646.8220	Marking Island Nose Epoxy	EACH	1.000	1.000
0490	646.9000	Marking Removal Line 4-Inch	LF	2,100.000	2,100.000
0492	646.9010	Marking Removal Line Water Blasting 4-Inch	LF	2,280.000	2,280.000
0494	646.9050	Marking Removal Line Grooved Permanent Tape 4-Inch	LF	2,060.000	2,060.000
0496	646.9100	Marking Removal Line 8-Inch	LF	90.000	90.000
0498	646.9300	Marking Removal Special Marking	EACH	3.000	3.000
0500	652.0125	Conduit Rigid Metallic 2-Inch	LF	102.000	102.000
0502	652.0210	Conduit Rigid Nonmetallic Schedule 40 1-Inch	LF	420.000	420.000
0504	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	2,450.000	2,450.000
0506	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	4,178.000	4,178.000
0508	652.0335	Conduit Rigid Nonmetallic Schedule 80 3-Inch	LF	206.000	206.000
0510	652.0615	Conduit Special 3-Inch	LF	39.000	39.000
0512	652.0700.S	Install Conduit into Existing Item	EACH	8.000	8.000
0514	653.0140	Pull Boxes Steel 24x42-Inch	EACH	3.000	3.000
0516	653.0222	Junction Boxes 18x12x6-Inch	EACH	11.000	11.000
0518	653.0905	Removing Pull Boxes	EACH	12.000	12.000
0520	654.0102	Concrete Bases Type 2	EACH	2.000	2.000
0522	654.0105	Concrete Bases Type 5	EACH	18.000	18.000
0524	654.0120	Concrete Bases Type 10-Special	EACH	2.000	2.000
0526	655.0144	Cable In Duct 4-4 AWG	LF	606.000	606.000
0528	655.0305	Cable Type UF 2-12 AWG Grounded	LF	800.000	800.000
0530	655.0320	Cable Type UF 2-10 AWG Grounded	LF	30.000	30.000
0532	655.0510	Electrical Wire Traffic Signals 12 AWG	LF	407.000	407.000
0534	655.0630	Electrical Wire Lighting 4 AWG	LF	829.000	829.000
0536	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	20.000	20.000
0538	659.0601	Underdeck Lighting (structure) 0015. B-40-0015	EACH	1.000	1.000
0540	659.1215	Luminaires Underdeck LED C	EACH	2.000	2.000
0542	659.5000.S	Lamp, Ballast, LED, Switch Disposal by Contractor	EACH	60.000	60.000
0544	661.0201	Temporary Traffic Signals for Intersections (location) 3101. W St Paul Ave & N 27th St Left In Place	EACH	1.000	1.000
0546	662.1032.S	Ramp Closure Gates 32-FT	EACH	1.000	1.000
0548	662.1037.S	Ramp Closure Gates 37-FT	EACH	1.000	1.000
0550	670.0101	Field System Integrator	EACH	1.000	1.000
0552	670.0201	ITS Documentation	EACH	1.000	1.000
0554	674.0300	Remove Cable	LF	2,090.000	2,090.000
0556	674.0400	Reinstall Cable	LF	60.000	60.000
0558	678.0036	Install Fiber Optic Cable Outdoor Plant 36-CT	LF	490.000	490.000
0560	678.0300	Fiber Optic Splice	EACH	112.000	112.000
0562	678.0501	Communication System Testing	EACH	1.000	1.000
0564	690.0150	Sawing Asphalt	LF	4,210.000	4,210.000
0566	690.0250	Sawing Concrete	LF	6,170.000	6,170.000
0568	715.0502	Incentive Strength Concrete Structures	DOL	38,578.000	38,578.000
0570	715.0603	Incentive Strength Concrete Barrier	DOL	169.000	169.000
0572	715.0715	Incentive Flexural Strength Concrete Pavement	DOL	2,004.000	2,004.000
0574	801.0117	Railroad Flagging Reimbursement	DOL	200,000.000	200,000.000
0576	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	14,000.000	14,000.000
0578	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	45,000.000	45,000.000
0580	SPV.0035	Special 0001. Roadway Embankment	CY	84,466.000	84,466.000
0582	SPV.0035	Special 0004. Excavation, Hauling, and Reuse of Low-Level Petroleum Contaminated Soil	CY	37,200.000	37,200.000

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Line	Item	Item Description	Unit	Total	Qty
0584	SPV.0035	Special 0005. Clay Cap	CY	4,270.000	4,270.000
0586	SPV.0035	Special 0006. Lightweight Foamed Concrete Fill Grade 1	CY	19,333.000	19,333.000
0588	SPV.0035	Special 0007. Lightweight Foamed Concrete Fill Grade 2	CY	4,546.000	4,546.000
0590	SPV.0035	Special 4000. HPC Masonry Structures	CY	1,247.000	1,247.000
0592	SPV.0060	Special 0001. Baseline CPM Progress Schedule	EACH	1.000	1.000
0594	SPV.0060	Special 0002. Monthly CPM Progress Schedule Updates	EACH	23.000	23.000
0596	SPV.0060	Special 0010. Remove, Salvage and Reset Boulder	EACH	1.000	1.000
0598	SPV.0060	Special 0108. Concrete Barrier Transition Type S1	EACH	1.000	1.000
0600	SPV.0060	Special 0109. Concrete Barrier Transition Type S2	EACH	1.000	1.000
0602	SPV.0060	Special 0122. Sawing Concrete Barrier	EACH	5.000	5.000
0604	SPV.0060	Special 0123. Salvage Ramp Gate	EACH	2.000	2.000
0606	SPV.0060	Special 0129. Survey Project (1060-27-74)	EACH	1.000	1.000
0608	SPV.0060	Special 0150. Round Aluminum Sign Post System in Soft Surface 7-Foot	EACH	3.000	3.000
0610	SPV.0060	Special 0151. Round Aluminum Sign Post System in Soft Surface 10-Foot	EACH	38.000	38.000
0612	SPV.0060	Special 0152. Round Aluminum Sign Post System in Soft Surface 11-Foot	EACH	3.000	3.000
0614	SPV.0060	Special 0158. Round Aluminum Sign Post System in Concrete Surface 7-Foot	EACH	1.000	1.000
0616	SPV.0060	Special 0159. Round Aluminum Sign Post System in Concrete Surface 10-Foot	EACH	1.000	1.000
0618	SPV.0060	Special 0160. Round Aluminum Sign Post System in Concrete Surface 11-Foot	EACH	2.000	2.000
0620	SPV.0060	Special 0170. Exposing Existing Infrastructure Paved Area	EACH	15.000	15.000
0622	SPV.0060	Special 0171. Exposing Existing Infrastructure Unpaved Area	EACH	15.000	15.000
0624	SPV.0060	Special 0200. Vibration Control and Monitoring of 122-Inch Combined Sewer	EACH	1.000	1.000
0626	SPV.0060	Special 0552. Crash Cushions Temporary Low Maintenance Left In Place	EACH	3.000	3.000
0628	SPV.0060	Special 0554. Emergency Response to Traffic Incident Involving Conc Barrier Temp Precast	EACH	5.000	5.000
0630	SPV.0060	Special 0555. Emergency Response to Traffic Incident Involving Crash Cushion	EACH	5.000	5.000
0632	SPV.0060	Special 0556. Emergency Response to Pavement Repair	EACH	10.000	10.000
0634	SPV.0060	Special 0557. Fixed Message Sign Portable Support Special	EACH	2.000	2.000
0636	SPV.0060	Special 0559. Maintain and Repair Existing Crash Cushion	EACH	1.000	1.000
0638	SPV.0060	Special 0560. Maintain and Repair Existing Sand Barrel Arrays	EACH	1.000	1.000
0640	SPV.0060	Special 0564. Traffic Control Close-Open Freeway to Freeway System Ramp	EACH	136.000	136.000
0642	SPV.0060	Special 0565. Traffic Control Close-Open Freeway Entrance Ramp	EACH	184.000	184.000
0644	SPV.0060	Special 0566. Traffic Control Full Freeway Closure	EACH	46.000	46.000
0646	SPV.0060	Special 0567. Traffic Control Signs Left In Place	EACH	4.000	4.000
0648	SPV.0060	Special 0569. Traffic Control Warning Lights Type A Left In Place	EACH	12.000	12.000
0650	SPV.0060	Special 0570. Traffic Control Barricades Type III Left In Place	EACH	6.000	6.000
0652	SPV.0060	Special 0571. Traffic Control Local Road Lane Closure	EACH	50.000	50.000
0654	SPV.0060	Special 0572. Thrie Beam Connection to Concrete Barrier Temporary Precast	EACH	1.000	1.000
0656	SPV.0060	Special 1001. Poles Wood 60-FT	EACH	4.000	4.000
0658	SPV.0060	Special 1002. Wood Pole Lighting 60-Ft	EACH	8.000	8.000
0660	SPV.0060	Special 1004. Luminaires Utility Floodlight	EACH	8.000	8.000
0662	SPV.0060	Special 1005. Poles Type 30-AL-BD	EACH	8.000	8.000
0664	SPV.0060	Special 1006. Poles Type 25-AL-BD	EACH	15.000	15.000
0666	SPV.0060	Special 1010. Luminaire Historic Milwaukee Lantern LED3	EACH	17.000	17.000
0668	SPV.0060	Special 1013. Inline 5A Fast Acting Fuse With Holder	EACH	24.000	24.000
0670	SPV.0060	Special 1014. Luminaire Arms Single Member 6-Ft.	EACH	6.000	6.000
0672	SPV.0060	Special 1017. Luminaire Utility 2LED	EACH	3.000	3.000
0674	SPV.0060	Special 1018. Luminaire Utility 3LED	EACH	3.000	3.000
0676	SPV.0060	Special 1020. Pull Boxes 17-Inch X 30-Inch X 24-Inch	EACH	18.000	18.000
0678	SPV.0060	Special 1023. Submersible Multitap 3-Port Pre-Insulated Connector	EACH	58.000	58.000

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Line	Item	Item Description	Unit	Total	Qty
0680	SPV.0060	Special 1024. Submersible Multitap 4-Port Pre-Insulated Connector	EACH	84.000	84.000
0682	SPV.0060	Special 1034. Maintenance of Lighting System (1060-27-74)	EACH	1.000	1.000
0684	SPV.0060	Special 1044. Lighting Systems Integrator Project (1060-27-74)	EACH	1.000	1.000
0686	SPV.0060	Special 1060. Lighting Equipment Painting Project 1060-27-74	EACH	1.000	1.000
0688	SPV.0060	Special 2000. Removing Electrical Service Meter Breaker Pedestal	EACH	1.000	1.000
0690	SPV.0060	Special 2050. Enter Existing Splice Enclosure	EACH	1.000	1.000
0692	SPV.0060	Special 2057. Salvaged Signal Assembly Advance Flashed Type 2	EACH	1.000	1.000
0694	SPV.0060	Special 3101. Removing Monotube Concrete Bases	EACH	4.000	4.000
0696	SPV.0060	Special 3143. Temporary EVP System Left In Place W St Paul Ave & N 27th St	EACH	1.000	1.000
0698	SPV.0060	Special 3145. Monotube Base Anchor Bolt Cover Type 10 Special	EACH	2.000	2.000
0700	SPV.0060	Special 3146. Covering Traffic Signal Heads	EACH	6.000	6.000
0702	SPV.0060	Special 4000. Anchor Assemblies Light Poles on Structures	EACH	7.000	7.000
0704	SPV.0060	Special 4010. Bridge Jacking B-40-513_5	EACH	1.000	1.000
0706	SPV.0060	Special 4100. Thermal Integrity Profile (TIP) Testing, Drilled Shaft Foundation 34.65-In	EACH	17.000	17.000
0708	SPV.0060	Special 4110. Thermal Integrity Profile (TIP) Testing, Drilled Shaft Foundation 59.06-In	EACH	10.000	10.000
0710	SPV.0060	Special 4200. Crosshole Sonic Log (CSL) Testing, Drilled Foundation Shaft 34.65-Inch	EACH	17.000	17.000
0712	SPV.0060	Special 4210. Crosshole Sonic Log (CSL) Testing, Drilled Foundation Shaft 59.06-Inch	EACH	10.000	10.000
0714	SPV.0060	Special 4400. Tieback Anchors	EACH	472.000	472.000
0716	SPV.0060	Special 4410. Tieback Anchors Performance Tests	EACH	31.000	31.000
0718	SPV.0060	Special 4600. Trial Drilled Foundation Shaft 34.65-Inch	EACH	1.000	1.000
0720	SPV.0060	Special 4700. Underdeck Utility Structure B-40-1083	EACH	1.000	1.000
0722	SPV.0060	Special 4800. Retaining Wall Instrumentation R-40-761	EACH	1.000	1.000
0724	SPV.0060	Special 4810. Retaining Wall Instrumentation R-40-767	EACH	1.000	1.000
0726	SPV.0060	Special 4900. Embedded Galvanic Anodes	EACH	136.000	136.000
0728	SPV.0060	Special 5000. Installing Hydrant	EACH	1.000	1.000
0730	SPV.0060	Special 5001. Removing Hydrant/Major	EACH	1.000	1.000
0732	SPV.0060	Special 5002. Installing Hydrant - Alteration	EACH	1.000	1.000
0734	SPV.0060	Special 5003. Adjusting Water Valve Boxes	EACH	24.000	24.000
0736	SPV.0060	Special 5004. Connect Original Service (C.O.S.)	EACH	1.000	1.000
0738	SPV.0060	Special 5200. Manholes Type TES 4-FT Diameter	EACH	3.000	3.000
0740	SPV.0060	Special 5201. Manholes Type TES Doghouse 4-FT Diameter	EACH	1.000	1.000
0742	SPV.0060	Special 5202. Manholes Type TES 5-FT Diameter	EACH	1.000	1.000
0744	SPV.0060	Special 5204. Removing CUC Manholes	EACH	1.000	1.000
0746	SPV.0060	Special 5210. Install Cement Encased Conduit Into Existing Manhole	EACH	1.000	1.000
0748	SPV.0060	Special 5212. Adjusting TES Manhole	EACH	2.000	2.000
0750	SPV.0060	Special 8003. Reconnect Storm Sewer	EACH	47.000	47.000
0752	SPV.0060	Special 8005. Sealing Storm Structure	EACH	14.000	14.000
0754	SPV.0060	Special 8007. Cover Plates Left in Place	EACH	20.000	20.000
0756	SPV.0060	Special 8009. Manhole Cover Type MS 58A	EACH	5.000	5.000
0758	SPV.0060	Special 8010. Inlet Cover Type MS 57	EACH	34.000	34.000
0760	SPV.0060	Special 8100. Cover Plates Left In Place In Pavement	EACH	12.000	12.000
0762	SPV.0075	Special 0203. Pavement Cleanup Project (1060-27-74)	HRS	1,500.000	1,500.000
0764	SPV.0075	Special 4000. Obstructions, Drilled Foundation Shaft	HRS	40.000	40.000
0766	SPV.0075	Special 4010. Obstructions Foundation Drilling	HRS	120.000	120.000
0768	SPV.0085	Special 4000. Structural Steel HS Soldier Piles Delivered	LB	1,616,194.000	1,616,194.000
0770	SPV.0085	Special 4010. Structural Steel HS Soldier Piles Installed	LB	1,460,116.000	1,460,116.000
0772	SPV.0090	Special 0260. Pipe Underdrain 6-Inch Special	LF	8,850.000	8,850.000
0774	SPV.0090	Special 0263. Removing Modular Block Retaining Wall	LF	108.000	108.000
0776	SPV.0090	Special 0264. Removing Railroad Tie Retaining Wall	LF	74.000	74.000

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Line	Item	Item Description	Unit	Total	Qty
0778	SPV.0090	Special 0272. Marking Line Epoxy Block Style 12-Inch	LF	144.000	144.000
0780	SPV.0090	Special 0274. Marking Epoxy 6-Inch Black Non Grooved	LF	11,734.000	11,734.000
0782	SPV.0090	Special 0275. Marking Epoxy 10-Inch Black Non Grooved	LF	2,370.000	2,370.000
0784	SPV.0090	Special 0280. Fence Safety Left In Place	LF	1,025.000	1,025.000
0786	SPV.0090	Special 0285. Galvanized Pipe Railing	LF	30.000	30.000
0788	SPV.0090	Special 0701. Anchoring Concrete Barrier Temporary Precast Left in Place	LF	2,550.000	2,550.000
0790	SPV.0090	Special 0702. Concrete Barrier Temporary Precast Left In Place	LF	5,300.000	5,300.000
0792	SPV.0090	Special 0703. Fence Temporary 6-Foot	LF	175.000	175.000
0794	SPV.0090	Special 0704. Glare Screens Temporary	LF	1,600.000	1,600.000
0796	SPV.0090	Special 0705. Glare Screens Temporary Left In Place	LF	1,652.000	1,652.000
0798	SPV.0090	Special 1005. Liquidtight Flexible Nonmetallic 1 1/2 inch Conduit	LF	5.000	5.000
0800	SPV.0090	Special 1012. Electrical Cable Type 4#2/1#8 XLP	LF	3,872.000	3,872.000
0802	SPV.0090	Special 1013. Cable Aerial Aluminum 4 AWG Quadruplex Left In Place	LF	2,110.000	2,110.000
0804	SPV.0090	Special 4100. Drilled Foundation Shaft 34.65-Inch	LF	800.000	800.000
0806	SPV.0090	Special 4110. Drilled Foundation Shaft 59.06-Inch	LF	415.000	415.000
0808	SPV.0090	Special 4200. Foundation Drilling	LF	12,350.000	12,350.000
0810	SPV.0090	Special 4300. Remove Existing Steel Piling	LF	40.000	40.000
0812	SPV.0090	Special 5000. Ductile Iron (DI) AWWA C-151 Class 55 Watermain 6-Inch	LF	34.000	34.000
0814	SPV.0090	Special 5001. Ductile Iron (DI) AWWA C-151 Class 55 Watermain 12-Inch	LF	34.000	34.000
0816	SPV.0090	Special 5002. Ductile Iron Hydrant Branch 6-Inch	LF	13.000	13.000
0818	SPV.0090	Special 5200. 2-Duct Conduit Cement Encased 4-Inch Conduit DB-60	LF	105.000	105.000
0820	SPV.0090	Special 5201. 4-Duct Conduit Cement Encased 4-Inch Conduit DB-60	LF	445.000	445.000
0822	SPV.0090	Special 5202. 6-Duct Conduit Cement Encased 4-Inch Conduit DB-60	LF	133.000	133.000
0824	SPV.0090	Special 5203. 2-Duct Conduit Cement Encased 3-Inch Conduit DB-60	LF	83.000	83.000
0826	SPV.0090	Special 5210. Conduit Subduct 1-Inch	LF	606.000	606.000
0828	SPV.0090	Special 5215. Furnish Municipal Fiber Optic Cable 288 Count	LF	786.000	786.000
0830	SPV.0090	Special 5216. Install Fiber Optic Cable Outdoor Plant 288-Ct	LF	1,465.000	1,465.000
0832	SPV.0090	Special 5217. Removing Service Cable	LF	706.000	706.000
0834	SPV.0090	Special 8002. Drain Slotted Vane Permanent	LF	1,793.000	1,793.000
0836	SPV.0110	Special 4000. Timber Lagging	MBM	10.000	10.000
0838	SPV.0135	Special 0301. Vibration Monitoring	MON	24.000	24.000
0840	SPV.0165	Special 0400. Tactile Directional Indicator	SF	600.000	600.000
0842	SPV.0165	Special 0401. High Friction Traffic Marking Green Bike Lane Panel	SF	70.000	70.000
0844	SPV.0165	Special 0410. Wall Modular Block Gravity Landscape	SF	762.000	762.000
0846	SPV.0165	Special 4000. Geocomposite Drain Board	SF	30,533.000	30,533.000
0848	SPV.0165	Special 4100. Temporary Wall Wire Faced Mechanically Stabilized Earth LFCF R-40-767	SF	1,895.000	1,895.000
0850	SPV.0165	Special 4761. Wall Concrete Panel Mechanically Stabilized Earth LFCF R-40-761	SF	4,726.000	4,726.000
0852	SPV.0165	Special 4767. Wall Concrete Panel Mechanically Stabilized Earth LFCF R-40-767	SF	21,190.000	21,190.000
0854	SPV.0180	Special 0421. HPC Pavement 9-Inch	SY	6,280.000	6,280.000
0856	SPV.0195	Special 0443. HMA Longitudinal Joint Repair	TON	50.000	50.000
0858	SPV.0195	Special 0444. HMA Transverse Joint Repair	TON	25.000	25.000
0860	SPV.0195	Special 0446. Management of Solid Waste - St Paul Ave / 27th St	TON	930.000	930.000
0862	SPV.0195	Special 0447. Management of Solid Waste - Greves St, East of 27th St	TON	975.000	975.000
0864	SPV.0195	Special 0448. Management of Solid Waste - Greves St, West of 27th St	TON	510.000	510.000

CLEARING AND GRUBBING ITEMS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	201.0105 CLEARING STA	201.0120 CLEARING ID	201.0205 GRUBBING STA	202.0220 GRUBBING ID
1	**MAINLINE**								
	IH 94								
		413EW+78	-	16TEB+75	RT	12	--	12	--
		18TEB+77	-	24TEB+99	RT	7	--	7	--
		10TEB+12	-	10TEB+33	LT	1	--	1	--
	LOCAL ROADS								
	N 28TH STREET								
		12J+59			21' RT	--	3	--	3
		12J+49			23' LT	--	32	--	32
		12J+29			22' RT	--	6	--	6
		12J+21			23' LT	--	26	--	26
		12J+03			22' RT	--	26	--	26
		11J+69			22' RT	--	26	--	26
		11J+20			22' RT	--	3	--	3
		10J+48			22' RT	--	16	--	16
	N 27TH STREET								
		27KN+57			36' RT	--	2	--	2
	SUBTOTAL					**20**	**140**	**20**	**140**
3	**LOCAL ROADS**								
	W ST PAUL AVENUE								
		14SP+05	-	16SP+60	RT	3	--	3	--
	SUBTOTAL					**3**	**--**	**3**	**--**
	TOTAL					**23**	**140**	**23**	**140**

REMOVING STRUCTURE

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	203.0220.0010 REMOVING STRUCTURE R-40-10 EACH	203.0220.0033 REMOVING STRUCTURE R-40-33 EACH	203.0220.0057 REMOVING STRUCTURE B-40-57 EACH	203.0220.1000 REMOVING STRUCTURE CIP CONCRETE RETAINING WALL 415EW+60 - 416EW+83 EACH
1	**MAINLINE**								
	IH 94								
		15TEB+48	-	19TEB+98	RT	1	--	--	--
		22TEB+13	-	24TEB+48	RT	--	1	--	--
		24TEB+71	-	25TEB+12	RT	--	--	1	--
	SUBTOTAL					**1**	**1**	**1**	**--**
4	**MAINLINE**								
	IH 94								
		415EW+60	-	416EW+83	RT	--	--	--	1
	SUBTOTAL					**--**	**--**	**--**	**1**
	TOTAL					**1**	**1**	**1**	**1**

CATEGORY 1000 UNLESS OTHERWISE NOTED

REMOVING CONCRETE PAVEMENT

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.0100 REMOVING CONCRETE PAVEMENT SY
1	**MAINLINE**					
	IH 94	11TEB+74	-	25TEB+55	LT/RT	1,440
	RAMPS					
	RAMP LC	21TEB+39	-	24TEB+59	LT/RT	1,668
	SUBTOTAL					**3,108**
2	**MAINLINE**					
	IH 94	10TEB+95	-	24TEB+62	LT	1,762
	SUBTOTAL					**1,762**
3	**MAINLINE**					
	IH 94	21TEB+11	-	23TEB+24	LT	304
	LOCAL ROADS					
	W ST PAUL AVENUE	10SP+25	-	19SP+49	LT/RT	5,376
	N 28TH STREET	10J+39	-	13J+05	LT/RT	1,668
	N 27TH STREET	24KS+96	-	26KS+32	LT/RT	945
	RAMPS					
	RAMP JD	100TJD+63	-	103TJD+37	LT/RT	1,049
	SUBTOTAL					**9,342**
3B	**LOCAL ROADS**					
	W ST PAUL AVENUE	16SP+13	-	19SP+49	LT/RT	1,531
	SUBTOTAL					**1,531**
4	**MAINLINE**					
	IH 94	17TEB+02	-	22TEB+06	LT	2,488
	SUBTOTAL					**2,488**
	UNDISTRIBUTED					**539**
	TOTAL					**18,770**

REMOVING ASPHALT

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0120* REMOVING ASPHALTIC SURFACE MILLING SY
1	**MAINLINE**						
	IH 94	22TEB+94	-	23TEB+93	RT	4,260	--
	SUBTOTAL					**4,260**	**--**
2	**MAINLINE**						
	IH 94	17TEB+00	-	23TEB+06	LT	--	1,760
	SUBTOTAL					**--**	**1,760**
3	**LOCAL ROADS**						
	N 28TH STREET	13J+05	-	14J+60	RT/LT	--	620
	W ST PAUL AVENUE	15SP+84	-	16SP+15	LT	30	--
	N 29TH STREET	-	-	-	RT/LT	--	50
	SUBTOTAL					**30**	**670**
	IH 94 MILL/OVERLAY	STADIUM INTERCHANGE	-	MARQUETTE INTERCHANGE		--	92,290
	TOTAL					**4,290**	**94,720**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CATEGORY 1000 UNLESS OTHERWISE NOTED

REMOVING ASPHALTIC SURFACE BUTT JOINT

STAGE	ROADWAY	STATION	OFFSET	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINT SY
2	**MAINLINE**			
	IH 94			
		17TEB+00	LT	5
		23TEB+06	LT	3
3	**LOCAL ROADS**			
	N 28TH STREET			
		14J+60	LT/RT	8
	N 29TH STREET			
			LT/RT	12
5	**MAINLINE**			
	IH 94 EB			
		374EW+96	LT	27
		394EW+25	RT/LT	6
		409EW+00	LT	12
		410EW+42	LT	12
		459EW+80	RT	12
	IH 94 WB			
		374EW+40	LT	19
		391EW+33	LT	3
		409EW+12	LT	12
		410EW+42	LT	12
		418EW+93	LT	5
		446EW+87	LT	7
		456EW+27	LT	13
TOTALS				**170**

REMOVING CONCRETE BASES

STAGE	ROADWAY	STATION	OFFSET	204.0195* REMOVING CONCRETE BASES EACH
3	**LOCAL ROADS**			
	W ST PAUL AVE			
		11SP+80	70' RT	1
		12SP+62	42' RT	1
		11SP+83	52' RT	1
TOTAL				**3**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ABANDONING WELLS

STAGE	ROADWAY	STATION	OFFSET	204.0265 ABANDONING WELLS EACH
1	**MAINLINE**			
	IH 94			
		10TEB+80	207' RT	1
		15TEB+49	202' RT	1
		18TEB+03	96' RT	1
TOTAL				**3**

CATEGORY 1000 UNLESS OTHERWISE NOTED

REMOVING CONCRETE SIDEWALK

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.0155 REMOVING CONCRETE SIDEWALK SY	204.9060.S.0001 REMOVING STEPS RAILING EACH	REMARKS
3	**LOCAL ROADS**							
	W ST PAUL AVENUE							
		10SP+25	-	19SP+49	LT/RT	672	2	
	N 28TH STREET							
		10J+39	-	13J+05	LT/RT	336	--	
	N 27TH STREET							
		24KS+96	-	26KS+32	LT/RT	177	--	
	SUBTOTAL					**1,185**	**2**	
3B	**LOCAL ROADS**							
	W ST PAUL AVENUE							
		16SP+13	-	19SP+49	LT	375	--	INCLUDES N. 27TH ST
	SUBTOTAL					**375**	**--**	
	TOTAL					**1,560**	**2**	

REMOVING LANDSCAPE ROCK

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.9165.S.0002 REMOVING LANDSCAPE ROCK SF
3	**LOCAL ROADS**					
	W ST PAUL AVENUE					
		14SP+05	-	16SP+60	RT	1,360
	TOTALS					**1,360**

REMOVING CONCRETE BARRIER

STAGE	ROADWAY	STATION	OFFSET	TO	STATION	OFFSET	204.0157 REMOVING CONCRETE BARRIER LF	SPV.0060.0122 SAWING CONCRETE BARRIER EACH
1	**MAINLINE**							
	IH 94							
		19TEB+98	10.7'LT	-	21TEB+39	18.1'RT	145	--
		23TEB+66	20.9'RT	-	25TEB+12	41.3'RT	145	1
2	**MAINLINE**							
	IH 94							
		110TWB+98	4.2'RT	-	113TWB+74	4.2'RT	277	1
		110TWB+98	8.4'RT	-	113TWB+74	8.4'RT	277	1
		113TWB+74	6.3'RT	-	120TWB+78	6.3'RT	705	--
		120TWB+78	8.4'RT	-	124TWB+49	8.4'RT	373	1
		122TWB+02	4.2'RT	-	124TWB+49	4.2'RT	248	1
	TOTAL						**2,170**	**5**

REMOVING GUARDRAIL

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.0165 REMOVING GUARDRAIL LF
1	**MAINLINE**					
	IH 94					
		415EW+29	-	15TEB+51	RT	757
		21TEB+40	-	25TEB+12	RT/LT	83
	RAMP LC					
		21TLC+37	-	25TLC+49	LT/RT	418
		24TLC+15	-	25TLC+59	LT	142
	TOTAL					**1,400**

CATEGORY 1000 UNLESS OTHERWISE NOTED

REMOVING CURB AND GUTTER

STAGE	ROADWAY	STATION	-	STATION	OFFSET	204.0150 REMOVING CURB AND GUTTER LF
1	**RAMPS**					
	RAMP LC					
		25TLC+00	-	25TLS+58	LT	70
		25TLC+00	-	25TLC+51	RT	53
	LOCAL ROADS					
	W ST PAUL AVENUE					
		18SP+74			LT	7
	TOTAL					**130**

REMOVING FENCE

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.0170 REMOVING FENCE LF
1	**MAINLINE**					
	IH 94					
		11TEB+64	-	15TEB+51	RT	387
		12TEB+81	-	20TEB+07	RT	1,415
		20TEB+86	-	26TEB+41	RT	606
	SUBTOTAL					**2,408**
3	**LOCAL ROADS**					
	W ST PAUL AVENUE					
		18SP+48	-	19SP+41	RT	106
	RAMP JD					
		103TJD+48	-	102TJD+04	RT	159
	N 27TH STREET					
		24KS+96	-	25KS+22	RT	27
	SUBTOTAL					**292**
4	**MAINLINE**					
	IH 94					
		415EW+61	-	416EW+82	RT	140
	SUBTOTAL					**140**
	TOTAL					**2,840**

SAWING ITEMS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	690.0150* SAWING ASPHALT LF	690.0250* SAWING CONCRETE LF
1	**MAINLINE**						
	IH 94						
		11TEB+74	-	25TEB+55	LT/RT	880	1,412
	RAMPS						
	RAMP LC						
		25LC+00	-	2LC+65	LT/RT	--	153
	SUBTOTAL					**880**	**1,565**
2	**MAINLINE**						
	IH 94						
		10TEB+95	-	24TEB+62	LT	--	2,745
	SUBTOTAL					**--**	**2,745**
3	**MAINLINE**						
	IH 94						
		121TWB+02	-	123TWB+00	LT	--	292
	RAMPS						
	RAMP JD						
		100TJD+12	-	100TJD+72	LT/RT	--	130
	LOCAL ROADS						
	W ST PAUL AVENUE						
		10SP+23	-	19SP+49	LT/RT	35	554
	N 28TH STREET						
		10J+39	-	13J+05	LT/RT	--	79
		14J+60	-	14J+60	LT/RT	38	--
	N 29TH STREET						
		-	-	-	LT/RT	57	53
	SUBTOTAL					**130**	**1,108**
3B	**LOCAL ROADS**						
	W ST PAUL AVENUE						
		16SP+13	-	19SP+49	LT/RT	--	202
	SUBTOTAL					**--**	**202**
	TOTALS					**1,010**	**5,620**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

CATEGORY 1000 UNLESS OTHERWISE NOTED

3

REMOVE, SALVAGE AND RESET BOULDER

STAGE	ROADWAY	STATION	OFFSET	SPV.0060.0010 REMOVE, SALVAGE AND RESET BOULDER EACH
3	**LOCAL ROADS**			
	W ST PAUL AVE			
		13SP+31	57' LT	1
	TOTAL			**1**

SALVAGE RAMP GATE

STAGE	ROADWAY	STATION	OFFSET	SPV.0060.0123 SALVAGE RAMP GATE EACH
3	**LOCAL ROADS**			
	W ST PAUL AVE			
		12SP+62	42' RT	1
		11SP+83	52' RT	1
	TOTAL			**2**

REMOVING RETAINING WALL

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	SPV.0090.0263 REMOVING MODULAR BLOCK RETAINING WALL LF	SPV.0090.0264 REMOVING RAILROAD TIE RETAINING WALL LF
3	**LOCAL ROADS**						
	W ST PAUL AVE						
		16SP+61	-	17SP+35	RT	--	74
		25KS+18	-	26KS+26	RT	108	--
	TOTAL					**108**	**74**

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CONTAMINATED SOIL MANAGEMENT

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	205.0501.S EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL TON	SPV.0035.0004 EXCAVATION, HAULING, AND REUSE OF LOW-LEVEL PETROLEUM CONTAMINATED SOIL CY	SPV.0195.0446 MANAGEMENT OF SOLID WASTE - ST PAUL AVE / 27TH ST TONS	SPV.0195.0447 MANAGEMENT OF SOLID WASTE - GREVES ST, EAST OF 27TH ST TONS	SPV.0195.0448 MANAGEMENT OF SOLID WASTE - GREVES ST, WEST OF 27TH ST TONS	COMMENTS
1	**RAMPS**										
	RAMP TLC										
		19TLC+90	-	24TLC+30	12' LT - 285' RT	--	--	--	975	--	0.5' TO 5'+ BELOW GRADE
	R-40-761										
		2006+75	-	2013+25	0' RT - 160' RT	--	32,800	--	--	--	0' TO 25' BELOW GRADE
		2006+75	-	2007+50	45' RT - 135' RT	--	--	--	--	--	0' TO 3'+ BELOW HISTORIC PAVEMENT STRUCTURE OF FORMER RED STAR YEAST SITE
		2008+10	-	2010+00	0' RT - 150' RT	--	--	--	--	510	0' TO 3'+ BELOW HISTORIC PAVEMENT STRUCTURE OF FORMER RED STAR YEAST SITE. INCLUDES QUANTITY FOR R-40-761 DRILLED SHAFTS
		2010+00	-	2013+25	0' RT - 160' RT	1,415	--	--	--	--	FOR R-40-761 DRILLED SHAFTS
3B	**LOCAL ROADS**										
	W ST PAUL AVENUE										
		16SP+60	-	17SP+70	0' - 85' LT	--	--	930	--	--	1' TO 12' BELOW GRADE
	UNDISTRIBUTED - OVEREXCAVATION (SUBSTATION FOOTPRINT)					--	4,400	--	--	--	EXCAVATION BELOW SUBSTATION SUBGRADE AS DIRECTED BY WISDOT BTS ENVIRONMENTAL CONSULTANT
	TOTAL					**1,415**	**37,200**	**930**	**975**	**510**	

CATEGORY 1000 UNLESS OTHERWISE NOTED

DIVISION	FROM/TO STATION	205.0100 EXCAVATION COMMON (1)(2) CUT (CY)	205.0100 EXCAVATION COMMON (1)(2) EBS EXCAVATION (3) (CY)	312.0110 * SELECT CRUSHED MATERIAL (TON)	(FOR INFORMATION ONLY) EXCAVATION, HAULING, AND REUSE OF LOW-LEVEL PETROLEUM CONTAMINATED SOIL (4) (CY)	SPV.0035.0006 LIGHTWEIGHT FOAMED CONCRETE FILL GRADE 1 (CY)	SPV.0035.0007 LIGHTWEIGHT FOAMED CONCRETE FILL GRADE 2 (CY)	SPV.0035.0001 ROADWAY EMBANKMENT (5)(6) (CY)
STAGE 1								
STG 1-RET WALL	2000+00.00AH/2017+41.00BK	0	0	0	17,860	0	0	0
STG 1-TEB	11+74.25AH/25+11.28BK	7,489	0	0	0	0	0	37,464
STG 1-TLC	20+24.49AH/25+00.00BK	740	0	0	0	0	0	27,411
STAGE 1 SUBTOTAL		8,229	0	0	17,860	0	0	64,875
STAGE 2								
STG 2-TWB	110+98.05AH/124+49.55BK	2,440	0	0	0	0	0	0
STG 2-4 RET WALL	2000+00.00AH/2017+41.00BK	41,898	0	0	14,940	19,333	4,546	0
STG 2-4 DMV SITE	-	0	0	0	0	0	0	14,940
STAGE 2 SUBTOTAL		44,338	0	0	14,940	19,333	4,546	14,940
STAGE 3								
STG 3A-TWB	110+98.05/124+49.55	236	0	0	0	0	0	0
STG 3A-SP	10+78.00AH/18+34.00BK	4,212	0	0	0	0	0	26
STG 3A-TSP	218+36.00AH/219+49.32BK	207	0	0	0	0	0	6
STG 3A-J	10+60.00AH/13+05.00BK	793	0	0	0	0	0	65
STG 3A-TJD	100+72.54AH/103+99.99BK	2,919	0	0	0	0	0	6
STG 3A-KS	25+58.00AH/26+35.00BK	541	0	0	0	0	0	129
STG 3C-KN	26+87.00AH/27+49.50BK	346	0	0	0	0	0	0
STG 3C-SP	16+13.33AH/18+34.00BK	493	0	0	0	0	0	2
STG 3C-TSP	218+34.37AH/219+37.50BK	203	0	0	0	0	0	17
STAGE 3 SUBTOTAL		9,950	0	0	0	0	0	251
STAGE 4								
STG 4-TML	217+02.26AH/222+93.32BK	3,981	0	0	0	0	0	0
STAGE 4 SUBTOTAL		3,981	0	0	0	0	0	0
UNDISTRIBUTED		0	4,000	7,200	0	0	0	0
RESTORE OVEREXCAVATION (SUBSTATION FOOTPRINT) (7)		0	0	0	4,400	0	0	4,400
GRAND TOTAL		66,498	4,000	7,200	37,200	19,333	4,546	84,466
		70,498						

NOTES:

(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100

(2) ALL EXISTING PAVEMENTS SHALL BE REMOVED PER MODIFIED STANDARD SPEC 205.3.2(5). CUT VOLUME INCLUDED CONCRETE AND ASPHALTIC SURFACE MATERIAL.

(3) EBS EXCAVATION TO BE BACKFILLED WITH SELECT CRUSHED MATERIAL. ALL EBS MATERIAL IS ASSUMED TO BE WASTED OFFSITE.

(4) SEE "CONTAMINATED SOIL MANAGEMENT" MISCELLANEOUS QUANTITY TABLE FOR ADDITIONAL INFORMATION.

(5) ROADWAY EMBANKMENT = UNEXPANDED FILL

(6) EMBANKMENT VOLUME IS BASED ON THE EXISTING SURFACE AND DOES NOT ACCOUNT FOR REMOVAL OF EXISTING CONCRETE AND ASPHALTIC PAVEMENTS.

(7) RESTORE OVEREXCAVATION (SUBSTATION FOOTPRINT) QUANTITY TO BE USED TO RESTORE GRADING TO FINAL GRADE AS DETERMINED BY ENGINEER AND WISDOT BTS ENVIRONMENTAL CONSULTANT.

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

BASE AND SUBBASE ITEMS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	305.0120* BASE AGGREGATE DENSE 1 1/4-INCH TON	312.0110* SELECT CRUSHED MATERIAL TON
1	**RAMPS**						
	RAMP LC						
		21TLC+34	-	25TLC+02	LT/RT	1,570	1,260
	MAINLINE						
	IH 94 EB						
		11TEB+74	-	25TEB+13	LT/RT	7,530	6,030
	SUBTOTAL					9,100	7,290
2	**MAINLINE**						
	IH 94 EB						
		10TEB+95	-	24TEB+61	LT	1,820	1,460
	SUBTOTAL					1,820	1,460
3	**RAMPS**						
	RAMP JD						
		100TJD+63	-	103TJD+37	LT/RT	1,310	1,050
	LOCAL ROADS						
	W ST PAUL AVENUE						
		10SP+28	-	18SP+34	LT/RT	1,840	3,610
		218TSP+17	-	219TSP+49	RT	250	360
	N 27TH STREET						
		24KS+87	-	26KS+35	LT/RT	340	670
	N 28TH STREET						
		10J+36	-	13J+05	LT/RT	610	--
	MAINLINE						
	IH 94 WB						
		21TEB+10	-	23TEB+24	LT	220	180
	SUBTOTAL					4,570	5,870
3B	**LOCAL ROADS**						
	W ST PAUL AVENUE						
		16SP+13	-	18SP+34	LT	340	670
		218TSP+34	-	219TSP+49	LT	240	310
	N 27TH STREET						
		27KN+17	-	27KN+50	LT/RT	120	200
	SUBTOTAL					700	1,180

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

BASE AND SUBBASE ITEMS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	305.0120* BASE AGGREGATE DENSE 1 1/4-INCH TON	312.0110* SELECT CRUSHED MATERIAL TON
4	**MAINLINE**						
	IH 94 EB						
		21TEB+10	-	23TEB+21	LT/RT	2,710	2,160
	SUBTOTAL					2,710	2,160
	IH 94 WB PAVEMENT RESTORATION					100	80
	MAINTENANCE ACCESS PATH (R-40-761)					900	--
	MAINTENANCE ACCESS PATH (R-40-767)					1,280	--
	LFCF DAMPROOFING PROTECTION					--	4,230
	TOTALS					21,180	22,270

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

FINISHING ROADWAY 1060-27-74

LOCATION	213.0100.0001 EACH
PROJECT 1060-27-74	1
TOTAL	**1**

CATEGORY 1000 UNLESS OTHERWISE NOTED

CONCRETE PAVEMENT ITEMS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	415.0210 CONCRETE PAVEMENT GAPS EACH	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	SPV.0180.0421 HPC PAVEMENT 9-INCH SY
3	**LOCAL ROADS**								
	W ST PAUL AVE								
		10SP+28	-	10SP+78	LT/RT	--	--	333	--
		10SP+78	-	18SP+17	LT/RT	--	--	--	3,748
						2	--	--	--
	N 27TH STREET								
		24KS+96	-	25KS+66	LT/RT	--	345	--	--
		25KS+66	-	26KS+18	LT/RT	--	--	--	376
	N 28TH STREET								
		10J+51	-	13J+05	LT/RT	--	--	--	1,206
	SUBTOTAL					2	345	333	5,330
3B	**LOCAL ROADS**								
	W ST PAUL AVE								
		16SP+13	-	18SP+34	LT/RT	--	--	--	744
						2	--	--	--
	N 27TH STREET								
		27KN+17	-	27KN+50	LT/RT	--	--	--	206
	SUBTOTAL					2	--	--	950
	TOTALS					**4**	**345**	**333**	**6,280**

DRIVEWAY ITEMS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	465.0105 ASPHALTIC SURFACE TON	602.0815 CONCRETE DRIVEWAY 7-INCH SY	602.0865 CONCRETE DRIVEWAY HES 7-INCH SY
3	**LOCAL ROADS**							
	W ST PAUL AVE							
		13SP+69	-	16SP+15	LT/RT	7	123	--
	N 28TH STREET							
		10J+84	-	11J+14	RT	--	32	--
	SUBTOTAL					**7**	**155**	**--**
3B	**LOCAL ROADS**							
	W ST PAUL AVE							
		16SP+13	-	16SP+96	LT	--	--	140
	SUBTOTAL					**--**	**--**	**140**
	TOTALS					**7**	**155**	**140**

CATEGORY 1000 UNLESS OTHERWISE NOTED

3

ASPHALT PAVEMENT ITEMS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	450.4000 HMA COLD WEATHER PAVING TON	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	460.7223 HMA PAVEMENT 3 HT 58-28 S TON	460.7424 HMA PAVEMENT 4 HT 58-28 H TON	465.0125* ASPHALTIC SURFACE TEMPORARY TON
1	**RAMPS**											
	RAMP LC											
		21TLC+34	-	25TLC+66	RT/LT	--	129	--	--	423	155	--
	MAINLINE											
	IH 94 EB											
		11TEB+74	-	25TEB+55	RT/LT	--	676	--	--	2,229	812	--
	SUBTOTAL					--	805	--	--	2,652	967	--
2	**MAINLINE**											
	IH 94 EB OVERLAY											
		17TEB+02	-	23TEB+00	LT	--	247	--	--	--	--	420
	IH 94 EB											
		10TEB+95	-	24TEB+61	LT	--	132	--	--	434	159	--
	SUBTOTAL					--	379	--	--	434	159	420
3	**RAMPS**											
	RAMP JD											
		100TJD+73	-	103TJD+37	RT/LT	--	108	--	--	355	131	--
	LOCAL ROADS											
	W ST PAUL AVENUE											
		218TSP+17	-	219TSP+49	RT	--	29	53	35	--	--	--
	N 29TH STREET											
		10SP+28	-	10SP+78	RT/LT	--	4	--	5	--	--	--
	N 28TH STREET											
		13J+05	-	14J+60	RT/LT	--	62	--	73	--	--	--
	N 27TH STREET											
		25KS+42	-	25KS+70	RT	--	2	4	3	--	--	--
	MAINLINE											
	IH 94 WB											
		21TEB+10	-	23TEB+21	LT	--	18	--	--	58	22	--
	SUBTOTAL					--	223	57	116	413	153	--
3B	**LOCAL ROADS**											
	W ST PAUL AVENUE											
		218TSP+34	-	219TSP+49	LT	--	29	53	35	--	--	--
	SUBTOTAL					--	29	53	35	--	--	--

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CATEGORY 1000 UNLESS OTHERWISE NOTED

3

ASPHALT PAVEMENT ITEMS (CONTINUED)

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	450.4000 HMA COLD WEATHER PAVING TON	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	460.7223 HMA PAVEMENT 3 HT 58-28 S TON	460.7424 HMA PAVEMENT 4 HT 58-28 H TON	465.0125* ASPHALTIC SURFACE TEMPORARY TON
4	**MAINLINE**											
	IH 94 EB											
		17TEB+02	-	23TEB+05	LT	--	315	--	--	1,038	379	--
	SUBTOTAL					--	315	--	--	1,038	379	--
	IH 94 WB PAVEMENT RESTORATION					--	10	--	--	33	12	--
	IH 94 MILL/OVERLAY	STADIUM INTERCHANGE	-	MARQUETTE INTERCHANGE		--	12,920	--	13,843	--	--	--
	UNDISTRIBUTED					700	--	--	--	--	--	--
	TOTALS					**700**	**14,681**	**110**	**13,994**	**4,570**	**1,670**	**420**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

DRILLED BAR ITEMS

STAGE	ROADWAY	STATION	OFFSET	416.0620* DRILLED DOWEL BARS EACH
3	**LOCAL ROADS**			
	W ST PAUL AVE			
		10SP+28	18' LT - 18' RT	20
		16SP+13	17'LT - 0' LT	10
	TOTAL			**30**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CATEGORY 1000 UNLESS OTHERWISE NOTED

CONCRETE CURB AND GUTTER AND NOSE ITEMS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	601.0331 CONCRETE CURB & GUTTER 31-INCH LF	601.0405 CONCRETE CURB & GUTTER 18-INCH TYPE A LF	601.0553 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D LF	601.0600 CONCRETE CURB PEDESTRIAN LF	620.0300 CONCRETE MEDIAN SLOPED NOSE TYPE 1 SF	620.0300 CONCRETE MEDIAN SLOPED NOSE TYPE 2 SF
3A-3B	**RAMPS**										
	RAMP JD	100TJD+73	-	103TJD+38	LT/RT	266	--	287	--	--	--
	LOCAL ROADS										
	W ST PAUL AVE	10SP+28	-	16SP+13	LT/RT	1508	--	--	14	141	48
	TEMPORAY ST PAUL AVE	218TSP+19	-	219TSP+38	RT	131	--	--	--	--	--
	28TH ST	10J+51	-	13J+05	LT/RT	576	--	--	--	--	--
	S 27TH ST	24KS+94	-	26KS+18	LT/RT	192	--	--	--	--	--
	SUBTOTAL					**2,673**	**0**	**287**	**14**	**189**	
3C	**LOCAL ROADS**										
	W ST PAUL AVE	16SP+13	-	17SP+48	LT	153	22	--	--	--	--
	TEMPORAY ST PAUL AVE	218TSP+19	-	219TSP+38	LT	104	--	--	--	--	--
	N 27TH ST	26KN+96	-	27KN+50	LT/RT	93	--	--	42	--	--
	SUBTOTAL					**350**	**22**	**--**	**42**	**--**	
	TOTALS					**3,023**	**22**	**287**	**56**	**189**	

CONCRETE BARRIER TRANSITION ITEMS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	SPV.0060.0108 CONCRETE BARRIER TRANSITION TYPE S1 EACH	SPV.0060.0109 CONCRETE BARRIER TRANSITION TYPE S2 EACH
1	**MAINLINE**						
	IH 94 EB	24TEB+51	-	24TEB+76	RT	--	1
	SUBTOTAL					--	1
3	**MAINLINE**						
	IH 94 WB	122TWB+39	-	122TWB+99	LT	1	--
	SUBTOTAL					1	--
	TOTALS					**1**	**1**

CATEGORY 1000 UNLESS OTHERWISE NOTED

3

CONCRETE SIDEWALK ITEMS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	405.0200 COLORING CONCRETE CUSTOM CY	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATRUAL PATINA SF	602.0615 CURB RAMP DETECTABLE WARNING FIELD RADIAL NATURAL PATINA SF	602.1500 CONCRETE STEPS SF	SPV.0090.0285 GALANIZED PIPE RAILING LF	SPV.0165.0400 TACTILE DIRECTIONAL INDICATORS SF
3	**LOCAL ROADS**											
	W ST PAUL AVE											
		10SP+28	-	17SP+47	LT/RT	44	9,789	130	15	135	30	495
	N 27TH ST											
		24KS+87	-	26KS+27	LT/RT	--	2,050	10	--	--	--	--
	N 28TH ST											
		10J+36	-	13J+05	LT/RT	--	2,747	--	--	--	--	--
	SUBTOTAL					**44**	**14,586**	**140**	**15**	**135**	**30**	**495**
3B	**LOCAL ROADS**											
	W ST PAUL AVE											
		16SP+36	-	17SP+39	LT	5	754	10	--	--	--	105
		218TSP+35	-	219TSP+49	LT	--	908	--	--	--	--	--
	N 27TH ST											
		26KN+96	-	27KN+50	LT/RT	--	1,302	20	--	--	--	--
	SUBTOTAL					**5**	**2,964**	**30**	**--**	**--**	**--**	**105**
	TOTALS					**49**	**17,550**	**170**	**15**	**135**	**30**	**600**

CATEGORY 1000 UNLESS OTHERWISE NOTED

PIPE UNDERDRAIN ITEMS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	SPV.0090.0260* PIPE UNDERDRAIN 6-INCH SPECIAL LF
1	**MAINLINE**					
	IH 94					
		21TEB+48	-	25TEB+12	RT/LT	2,040
	SUBTOTAL					**2,040**
2	**MAINLINE**					
	IH 94					
		10TEB+95	-	25TEB+13	LT	1,350
	SUBTOTAL					**1,350**
3	**RAMPS**					
	RAMP JD					
		100TJD+73	-	103TJD+37	RT/LT	265
	LOCAL ROADS					
	W ST PAUL AVENUE					
		10SP+78	-	19SP+49	RT/LT	1,525
	MAINLINE					
	IH 94 WB					
		21TEB+10	-	23TEB+24	LT	200
	SUBTOTAL					**1,990**
3B	**LOCAL ROADS**					
	W ST PAUL AVENUE					
		16SP+13	-	19SP+49	LT	370
	SUBTOTAL					**370**
4	**MAINLINE**					
	IH 94 EB					
		17TEB+02	-	23TEB+00	LT	600
	SUBTOTAL					**600**
	TOTALS					**6,350**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

FENCING ITEMS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	616.0206 FENCE CHAIN LINK 6-FT LF	SPV.0090.0280 FENCE SAFETY LEFT IN PLACE LF	616.0329.0001 GATES CHAIN LINK 4-FT EACH	616.0329.0002 GATES CHAIN LINK 12-FT EACH
1	**MAINLINE**								
	IH 94 EB								
		11TEB+64	-	25TEB+90	RT	1,506	--	--	1
		14TEB+82	-	22TEB+94	RT	--	1,025	--	--
3	**RAMPS**								
	RAMP JD								
		102TEB+04	-	103TJD+38	LT	134	--	--	--
	LOCAL ROADS								
	W ST PAUL AVE								
		218TSP+48	-	219TSP+49	RT	109	--	1	--
	N 27TH ST								
		25KS+69	-	26KS+26	RT	--	--	--	--
		25KS+02	-	25KS+22	LT	21	--	--	--
	TOTALS					**1,770**	**1,025**	**1**	**1**

SURVEY PROJECT

STAGE	LOCATION	SPV.0060.0129 SURVEY PROJECT 1060-27-74 EACH
ALL	PROJECT 1060-27-74	1
	TOTAL	**1**

CATEGORY 1000 UNLESS OTHERWISE NOTED

3

MOBILIZATION

STAGE	LOCATION	619.1000 MOBILIZATION EACH
ALL	PROJECT 1060-27-74	1
	TOTAL	**1**

WALL MODULAR BLOCK

STAGE	ROADWAY	STATION	-	STATION	OFFSET	SPV.0165.0410 WALL MODULAR BLOCK GRAVITY LANDSCAPE SF
3	**LOCAL ROADS**					
	N. 27TH STREET	25KS+19	-	26KS+27	LT	370
	W. ST PAUL AVENUE	16SP+00	-	17SP+41	RT	392
	TOTAL					**762**

3

MARKERS PERMANENT FLEXIBLE

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	633.5350 MARKERS PERMANENT FLEXIBLE EACH
3	**LOCAL ROADS**					
	N 27TH STREET	25KS+75	-	24KS+70	RT	20
	TOTAL					**20**

RAMP CLOSURE GATES

STAGE	ROADWAY	STATION	OFFSET	662.1032.S RAMP CLOSURE GATES 32-FT EACH	662.1037.S RAMP CLOSURE GATES 37-FT EACH	654.0105* CONCRETE BASES TYPE 5 EACH	657.0255* TRANSFORMER BASES BREAKAWAY 11-1/2-INCH BOLT CIRCLE EACH
1	**RAMPS**						
	RAMP JD	103TJD+48	30' LT	--	1	1	1
		103TJD+82	3' LT	1	--	1	1
	TOTALS			**1**	**1**	**2**	**2**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

COVER PLATES LEFT IN PLACE IN PAVEMENT

STAGE	ROADWAY	STATION	TO	STATION	390.0100* REMOVING PAVEMENT FOR BASE PATCHING CY	390.0405 BASE PATCHING CONCRETE SHES CY	416.0610* DRILLED TIE BARS EACH	416.0620* DRILLED DOWEL BARS EACH	455.0605* TACK COAT GAL	465.0125* ASPHALTIC SURFACE TEMPORARY TON	690.0250* SAWING CONCRETE LF	SPV.0060.8100 COVER PLATES LEFT IN PLACE IN PAVEMENT EACH	NOTES
	MAINLINE												
		420EW+00	-	433EW+00	110	110	50	290	40	100	700	12	TWO LOCATIONS W/IN FULL DEPTH PAVEMENT REPLACEMENT ITEMS NOT INCIDENTAL TO THE COVER PLATES LEFT IN PLACE IN PAVEMENT ITEM ARE OMITTED AT THESE LOCATIONS
	TOTAL				**110**	**110**	**50**	**290**	**40**	**100**	**700**	**12**	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CATEGORY 1000 UNLESS OTHERWISE NOTED

3

DUST CONTROL SURFACE TREATMENT

STAGE	LOCATION	623.0200 DUST CONTROL SURFACE TREATMENT SY
ALL	PROJECT WIDE	27,800
	TOTAL	**27,800**

WATER

STAGE	LOCATION	624.0100 WATER MGAL
ALL	PROJECT-BASE AGGREGATE	22
	PROJECT-EXCAVATION	354
	TOTAL	**376**

3

EROSION CONTROL ITEMS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	628.1104 EROSION BALES EACH	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2004 EROSION MAT CLASS I TYPE B SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	628.6510 SOIL STABILIZER TYPE B ACRE	628.7504 TEMPORARY DITCH CHECKS LF	628.7570 ROCK BAGS EACH	SPV.0035.0005 CLAY CAP CY
4	**MAINLINE**													
	IH 94	413EW+54	-	25TEB+12	LT/RT	7	2,233	2,233	14,070	--	3	196	100	361
	RAMPS													
	RAMP JD	100TJD+73	-	103TJD+37	LT/RT	--	--	--	760	--	1	--	--	--
	LOCAL ROADS													
	W ST PAUL AVENUE	10SP+24	-	19SP+49	LT/RT	--	104	104	--	593	--	--	--	--
	N 28TH STREET	10J+36	-	13J+05	LT/RT	--	--	--	--	485	--	--	--	--
	SUBTOTAL					7	2,337	2,337	14,830	1,078	4	196	100	361
	UNDISTRIBUTED	DMV PARCEL				--	880	880	--	--	--	--	--	2,570
	UNDISTRIBUTED	PROJECT				**3**	**593**	**593**	**3,720**	**272**	**1**	**49**	**25**	**89**
	UNDISTRIBUTED	EXCAVATION, HAULING, AND REUSE OF LOW-LEVEL PETROLEUM CONTAMINATED				--	--	--	--	--	--	--	--	1,250
	TOTALS					**10**	**3,810**	**3,810**	**18,550**	**1,350**	**5**	**245**	**125**	**4,270**

CATEGORY 1000 UNLESS OTHERWISE NOTED

3

MOBILIZATION EROSION CONTROL ITEMS

STAGE	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
ALL	PROJECT	35	26
TOTALS		**35**	**26**

TRACKING PADS

STAGE	LOCATION	628.7560 TRACKING PADS EACH
ALL	PROJECT	4
TOTALS		**4**

EXPOSING EXISTING INFRASTRUCTURE

STAGE	LOCATION	SPV.0060.0170 EXPOSING EXISTING INFRASTURCTURE PAVED AREA EACH	SPV.0060.0171 EXPOSING EXISTING INFRASTURCTURE UNPAVED AREA EACH
ALL	PROJECT	15	15
TOTALS		**15**	**15**

3

RESTORATION ITEMS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY
4	**MAINLINE**													
	IH 94	413EW+54	-	25TEB+12	LT/RT	--	15,190	14,150	13.2	1,320	792	328	--	--
	RAMPS													
	RAMP JD	100TJD+73	-	103TJD+37	LT/RT	--	760	--	0.3	34	21	8	--	--
	LOCAL ROADS													
	W ST PAUL AVENUE	10SP+28	-	19SP+38	LT/RT	1,350	--	--	0.3	--	--	--	8	760
	N 28TH STREET	10J+36	-	13J+05	LT/RT	920	--	--	0.2	--	--	--	5	440
	SUBTOTAL					2,270	15,950	14150	14.0	1,354	813	336	13	1,200
	UNDISTRIBUTED	DMV PARCEL				5,140	--	5,140	2.3	232	139	57	--	--
	UNDISTRIBUTED	PROJECT				600	3,980	3,540	3.7	344	208	77	3	300
	TOTALS					**8,010**	**19,930**	**22,830**	**20.0**	**1,930**	**1,160**	**470**	**16**	**1,500**

CATEGORY 1000 UNLESS OTHERWISE NOTED

INLET PROTECTION ITEMS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	628.7005 INLET PROTECTION TYPE A EACH	628.7020 INLET PROTECTION TYPE D EACH
1	**MAINLINE**						
	IH 94	413EW+54	-	27TEB+00	LT/RT	29	31
	RAMPS						
	RAMP JD	110TEB+00	-	104TJD+00	LT/RT	--	10
	RAMP LC	20TLC+00	-	25TLC+00	LT/RT	5	8
	LOCAL ROADS						
	GREVES ST	415EW+98	-	23TEB+85	RT	--	23
	W ST PAUL AVENUE	10SP+00	-	23SP+00	LT/RT	--	13
	N 28TH STREET	10J+00	-	14J+82	LT/RT	--	7
	N 27TH STREET	20KS+00	-	27KS+00	LT/RT	--	2
		27KN+00	-	29KN+00	LT/RT	--	2
	SUBTOTAL					**34**	**96**
2	**MAINLINE**						
	IH 94	11TEB+25	-	27TEB+00	LT/RT	21	23
	SUBTOTAL					**21**	**23**

INLET PROTECTION ITEMS (CONTINUED)

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	628.7005 INLET PROTECTION TYPE A EACH	628.7020 INLET PROTECTION TYPE D EACH
3	**MAINLINE**						
	IH 94	22TEB+50	-	24TEB+00	LT/RT	6	9
	RAMPS						
	RAMP JD	110TEB+00	-	104TJD+00	LT/RT	8	8
	LOCAL ROADS						
	W ST PAUL AVENUE	10SP+00	-	17PS+50	LT/RT	14	16
	N 28TH STREET	10J+00	-	12J+20	LT/RT	3	3
	N 27TH STREET	20KS+00	-	27KS+00	LT/RT	9	9
	SUBTOTAL					**40**	**45**
3B	**LOCAL ROADS**						
	W ST PAUL AVENUE	17SP+00	-	18SP+75	LT/RT	3	3
	N 27TH STREET	27KN+00	-	29KN+00	LT/RT	4	4
	SUBTOTAL					**7**	**7**
	UNDISTRIBUTED	DMV PARCEL				--	5
	UNDISTRIBUTED	PROJECT				**28**	**49**
	TOTALS					**130**	**225**

3

CATEGORY 1000 UNLESS OTHERWISE NOTED

PAVEMENT MARKING ITEMS

STAGE	ROADWAY	STATION	TO	STATION	646.1020 MARKING LINE EPOXY 4-INCH WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH YELLOW LF	646.1020 MARKING LINE EPOXY 4-INCH 3-FT LINE 9-FT SKIP WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH 12.5-FT LINE 37.5-FT SKIP WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH 10-FT LINE 30-FT SKIP WHITE LF	646.2020 MARKING LINE EPOXY 6-INCH WHITE LF	646.2020 MARKING LINE EPOXY 6-INCH YELLOW LF	646.2020 MARKING LINE EPOXY 6-INCH 3-FT LINE 9-FT SKIP WHITE LF	646.2020 MARKING LINE EPOXY 6-INCH 12.5-FT LINE 37.5-FT SKIP WHITE LF	646.3020 MARKING LINE EPOXY 8-INCH WHITE LF	646.3020 MARKING LINE EPOXY 8-INCH 3-FT LINE 9-FT SKIP WHITE LF	646.4020 MARKING LINE EPOXY 10-INCH SOLID WHITE LF	646.4020 MARKING LINE EPOXY 10-INCH 3-FT LINE 9-FT SKIP LF	646.4040 MARKING LINE GROOVED WET REF EPOXY 10-INCH WHITE LF	SPV.0090.0274 MARKING EPOXY 6-INCH BLACK NON GROOVED LF	SPV.0090.0275 MARKING EPOXY 10-INCH BLACK NON GROOVED LF	SPV.0165.0401 HIGH FRICTION TRAFFIC MARKING GREEN BIKE LANE PANEL SF
4	**MAINLINE**																				
	IH 94 EB	398EW+83	-	444EW+33	--	--	--	--	--	8,301	8,095	108	3,659	--	--	3,062	462	--	3,659	462	--
	IH 94 WB	417EW+16	-	467EW+76	--	--	--	--	--	8,495	2,800	--	620	--	--	211	--	--	620	--	--
		444EW+33	-	456EW+28	888	1,194	--	894	--	--	--	--	--	532	104	--	--	--	--	--	--
	STH 175 SB				2,293	2,575	107	619	--	1,996	--	--	--	--	518	--	--	--	--	--	--
	RAMPS																				
	RAMP JD	417JD+14	-	103TJD+38	--	--	--	--	--	824	640	--	--	--	--	211	--	--	--	--	--
		100TJD+00	-	103TJD+21	--	--	--	--	--	--	--	--	79	--	--	240	18	177	--	--	--
	RAMP LC	13TEB+91	-	25TLC+00	--	--	--	--	--	1,244	760	--	--	--	--	301	--	--	--	--	--
	RAMP MA	437EW+65	-	449EW+78	1,263	929	--	--	--	--	--	--	--	620	--	--	--	--	--	--	--
	LOCAL ROADS																				
	W ST PAUL AVE	10SP+94	-	21SP+29	1,209	2,681	26	--	75	--	--	--	--	359	33	--	--	--	--	--	70
	S 27TH STREET	21KS+22	-	26KS+27	1,398	1,371	13	--	251	--	--	--	--	277	17	--	--	--	--	--	--
		27KN+05	-	31KN+26	--	1,087	--	--	204	--	--	--	--	34	37	--	--	--	--	--	--
5	**MAINLINE**																				
	IH 94 EB	375EW+00	-	459EW+80	--	--	--	--	--	9,243	8,481	--	4,114	--	--	3,222	1,367	--	4,114	1,367	--
	IH 94 WB	374EW+44	-	456EW+29	--	--	--	--	--	14,585	8,155	--	3,343	--	--	2,552	541	--	3,343	541	--
	RAMPS																				
	RAMP GA	402EW+57	-	405EW+99	--	--	--	--	--	348	286	--	--	--	--	66	--	--	--	--	--
	RAMP GB	400EW+39	-	405EW+97	--	--	--	--	--	556	407	--	--	--	--	500	--	--	--	--	--
	RAMP GC	394EW+27	-	399EW+31	--	--	--	--	--	543	463	--	--	--	--	339	--	--	--	--	--
	RAMP GD	391EW+34	-	397EW+30	--	--	--	--	--	493	443	--	--	--	--	300	--	--	--	--	--
	RAMP MA	437EW+62	-	446EW+85	--	--	--	--	--	1,145	947	--	--	--	--	150	--	--	--	--	--
	RAMP MB	436EW+98	-	442EW+00	--	--	--	--	--	648	669	--	58	--	--	380	--	--	--	--	--
PRESTAGE	**TMP**																				
	LOCATION 2		-		314	322	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	LOCATION 4		-		3,198	976	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	TOTALS						**23,887**					**92,546**			**2,530**		**13,923**	**177**	**11,734**	**2,370**	**70**

CATEGORY 1000 UNLESS OTHERWISE NOTED

3

PAVEMENT MARKING ITEMS (CONTINUED)

STAGE	ROADWAY	STATION	TO	STATION	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	646.5220 MARKING SYMBOL EPOXY EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH YELLOW LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH WHITE LF	646.722 MARKING CHEVRON EPOXY 24-INCH LF	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH LF	646.8120 MARKING CURB EPOXY LF	646.8220 MARKING ISLAND NOSE EPOXY EACH	SPV.0090.0272 MARKING LINE EPOXY BLOCK STYLE 12-INCH LF
4	**RAMPS**														
	RAMP JD	100TJD+00	-	104TJD+02	--	--	2	31	--	71	--	120	--	--	--
	RAMP LC	19TLC+70	-	25TLC+00	4	--	--	44	--	--	--	--	--	--	--
	RAMP MA	437EW+65	-	449EW+78	3	2	--	26	--	--	--	--	--	--	--
	LOCAL ROADS														
	W ST PAUL AVENUE	10SP+34	-	21SP+29	9	1	5	66	293	7	--	517	20	1	--
	N 27TH STREET	21KS+22.09	-	26KS+26.94	3	1	1	39	81	245	--	141	--	--	--
		27KN+05	-	31KN+26	1	--	--	61	--	--	--	138	--	--	--
5	**MAINLINE**														
	IH 94 EB	375EW+00	-	459EW+80	--	--	--	--	--	--	93	--	--	--	--
	IH 94 WB	374EW+44	-	456EW+29	--	--	--	--	--	--	172	--	--	--	--
	RAMPS														
	RAMP GA	402EW+57	-	405EW+99	2	--	--	--	--	--	--	--	--	--	--
	RAMP GB	400EW+39	-	405EW+97	--	--	--	21	--	--	--	--	--	--	--
	RAMP GC	394EW+27	-	399EW+31	5	1	--	22	--	--	--	--	--	--	--
	RAMP GD	391EW+34	-	397EW+30	--	--	--	16	--	--	22	--	--	--	--
	RAMP MA	437EW+62	-	446EW+85	3	2	--	27	--	--	--	--	--	--	--
	RAMP MB	436EW+98	-	442EW+00	--	--	--	38	--	--	--	--	--	--	--
PRESTAGE	**TMP**														
	LOCATION 1				--	--	41	--	--	--	--	--	--	--	--
	LOCATION 2				2	--	2	--	--	--	--	51	--	--	36
	LOCATION 3				--	--	--	--	--	--	--	651	--	--	108
	LOCATION 4				8	--	12	--	--	--	--	--	--	--	--
	TOTALS				**40**	**7**	**63**	**392**	**697**		**287**	**1,617**	**20**	**1**	**144**

CATEGORY 1000 UNLESS OTHERWISE NOTED

MARKING REMOVAL LINE

STAGE	ROADWAY	STATION	TO	STATION	646.9010 MARKING REMOVAL LINE WATER BLASTING 4-INCH LF	646.9050 MARKING REMOVAL LINE GROOVED PERMANENT TAPE 4-INCH LF
1	**MAINLINE**					
	IH 94 EB					
		398EW+83	-	408EW+36	2280	2060
	TOTALS				**2,280**	**2,060**

PAVEMENT CLEANUP PROJECT 1060-27-74

STAGE	LOCATION	SPV.0075.0203 PAVEMENT CLEANUP PROJECT 1060-27-74 HRS
ALL	PROJECT 1060-27-74	1,500
	TOTAL	**1,500**

3

CATEGORY 1000 UNLESS OTHERWISE NOTED

TYPE I & II PERMANENT SIGNING REMOVALS 1060-27-74

SIGN NO	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II EACH	638.3000* REM SMALL SIGN SUPPORTS EACH	REMARKS NEW SIGN LOCATION
1-1R	W13-2	EXIT SPEED 35 MPH	1	1	
1-2R	R5-98	NO TRESSPASSING	1		ON FENCE
2-1R	D10-5	EAST 94 MILE 309.6	1		ON LIGHTPOST
2-2R	D10-5	WEST 94 MILE 309.6	1		ON LIGHTPOST
2-3R	NONE	27TH STREET	1		ON BRIDGE
2-4R	W1-2-R		2		INCLUDES W13-1, ON BRIDGE
2-5R	NONE	27TH STREET	1		ON BRIDGE
2-6R	E5-1B	EXIT 309B	3	3	INCLUDES 2 x W5-54
3-1R	R5-57		1	1	
3-2R	R3-51L		1	1	
3-3R	W3-8		1	1	
3-4R	D12-2B		1	2	
4-1R	R5-98		1	1	
4-2R	W3-3		1	1	
4-3R	R3-8		1		ON LIGHTPOST
4-4R	R5-1A		1	1	
4-5R	R3-8		1	2	
4-6R	R3-8		1	2	
5-1R	J3-1		3	1	
5-2R	R1-1		1	1	
5-3R	NONE	ST PAUL	1		ON LIGHTPOST
5-4R	NONE	28TH	1		ON LIGHTPOST
5-5R	R6-1-L		1	1	INCLUDES R6-1-R
5-6R	R1-1		1	1	
5-7R	R1-1		1	1	
5-8R	R5-1		1		ON SAME POST AS 5-7R
5-9R	R7-1-D		1	1	
5-10R	W12-1		1		ON LIGHTPOST
5-11R	J3-1		3		ON LIGHTPOST
5-12R	W13-1		1	1	INCLUDES 2 SPEED HUMP SIGNS
5-13R	W13-1		1	1	INCLUDES 2 SPEED HUMP SIGNS
5-14R	R6-2L		1	1	INCLUDES R6-2R
5-15R	R5-1A		1	1	
6-1R	R2-1		1		ON LIGHTPOST
6-2R	J32-2		1		ON LIGHTPOST

CATEGORY 1000 UNLESS OTHERWISE NOTED

TYPE I & II PERMANENT SIGNING REMOVALS (CONTINUED) 1060-27-74

SIGN NO	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II EACH	638.3000* REM SMALL SIGN SUPPORTS EACH	REMARKS NEW SIGN LOCATION
6-3R	NONE		1		NO PARKING WITH SYMBOL, ON LIGHTPOST
7-1R	R6-2L		1	1	INCLUDES R6-2R
7-2R	R1-1		1		INCLUDES R5-1, ON LIGHTPOST
7-3R	NONE	ST PAUL AND 29TH	1		ON LIGHTPOST
7-4R	R1-1		1	1	
7-5R	R1-1		1	1	
7-6R	J3-1		1	1	
7-7R	R1-2		1	1	
7-8R	R4-7		1		INCLUDES W5-52-L, ON LIGHTPOST
7-9R	R1-1		1	1	INCLUDES W4-4-B, R5-1
7-10R	R1-1		1	1	INCLUDES W4-4-B
7-11R	J3-1		1	1	
7-12R	R3-2		1	1	INCLUDES W5-52-L
7-13R	R3-7-L		1	1	INCLUDES W5-52L
7-14R	NONE	ST PAUL	1		ON LIGHTPOST
7-15R	NONE	28TH	1		
7-16R	R6-2L		1	1	
7-17R	R7-1D		1	1	
7-18R	J2-1		1		ON POWER POLE
7-19R	J32-1		1		ON POWER POLE
8-1R	R7-1D		1	1	
8-2R	NONE	27TH	1		ON SIGNAL POST
8-3R	NONE	ST PAUL	1		ON SIGNAL POST
8-4R	R3-17		1		INCLUDES "BEGINS", ON SIGNAL POST
8-5R	R17-1-D		3		CURB LANE BIKES ONLY, M3-3, M1-6, ON LIGHTPOST
8-6R	R3-7-L		1		ON SIGNAL POST
8-7R	W12-1-D		1	1	
8-8R	R3-7-L		1		INCLUDES R3-17-B, ON SIGNAL POST
8-9R	NONE	ST PAUL	1		ON SIGNAL POST
8-11R	W12-1D		1		ON SIGNAL POST
8-12R	NONE		1		NO PARKING WITH SYMBOL, ON LIGHTPOST
8-13R	R1-1		1	1	
8-14R	R1-1		1	1	
8-15R	R7-1D		1	1	
8-16R	J32-1		1		ON LIGHTPOST
8-17R	R7-2R		1	1	INCLUDES R7-2L
		TOTAL	**80**	**44**	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 2 OF 2

CATEGORY 1000 UNLESS OTHERWISE NOTED

TYPE I & II PERMANENT SIGNING 1060-27-74

SIGN NO	SIGN CODE & SIZE	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	634.0620 POSTS WOOD 4"x6"x20' EACH	SPV.0060.0150 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 7-FOOT EACH	SPV.0060.0151 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 10-FOOT EACH	SPV.0060.0152 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 11-FOOT EACH	SPV.0060.0158 ROUND ALUMINUM SIGN POST SYSTEM IN CONCRETE SURFACE 7-FOOT EACH	SPV.0060.0159 ROUND ALUMINUM SIGN POST SYSTEM IN CONCRETE SURFACE 10-FOOT EACH	SPV.0060.0160 ROUND ALUMINUM SIGN POST SYSTEM IN CONCRETE SURFACE 11-FOOT EACH	638.2101 MOVING SIGNS TYPE I EACH	638.2102* MOVING SIGNS TYPE II EACH	638.3000* REMOVING SMALL SIGN SUPPORTS EACH	638.3100 REMOVING STRUCTURAL STEEL SIGN SUPPORTS EACH	531.1100 (EST) CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS CY	531.1140 (EST) STEEL REINFORCEMENT HS ANCILLARY STRUCTURES TYPE NS LB	531.2024 (EST) DRILLING SHAFT 24-INCH LF	635.0200 (EST) SIGN SUPPORTS STRUCTURAL STEEL HS LB	MOUNT ON SAME POST AS SIGN #	REMARKS NEW SIGN LOCATION
1-1	W12-2	15'-3"	48	48			32.00		1															1-3	VERTICAL CLEARANCE SURVEY INCIDENTAL TO PROJECT
1-2	W12-2	15'-3"	48	48			32.00		1															1-4	VERTICAL CLEARANCE SURVEY INCIDENTAL TO PROJECT
1-3	NONE	27TH ST	54	18			13.50																	1-1	
1-4	NONE	27TH ST	54	18			13.50																	1-2	
1-5	W4-1R(5)		48	48	16.00				1																
1-6	W4-1L(2S)		36	36	9.00				1																
1-7	NONE	WATCH FOR MERGING TRAFFIC	48	48	16.00				1																
1-8	NONE	WATCH FOR MERGING TRAFFIC	36	36	9.00				1																
2-1	W24-1BR(MOD) (5)		48	48			32.00		1															2-3	
2-2	W24-1BR(MOD) (5)		48	48			32.00		1															2-4	
2-3	W13-1 (5)	45 MPH	36	36			18.00																	2-1	
2-4	W13-1 (5)	45 MPH	36	36			18.00																	2-2	
2-5	W5-52R (5)		18	54			6.75		1																
2-6	W13-2 (5)	30 MPH	48	60			20.00		1																
2-7	E4-1A	EXIT 309B/26TH STREET/ST PAUL AVE														1			2	2.4	360	20	800		MOVE, STEEL POST TYPE W12X26
2-8	W12-2	14'-8"	36	36			9.00		1															2-9	VERTICAL CLEARANCE SURVEY INCIDENTAL TO PROJECT
2-9	M4-50		36	18			4.50																	2-8	
3-1	W5-52L (5)		18	54			6.75		1																
3-2	W5-52R (5)		18	54			6.75		1																
3-3	E5-1B	309B	114	60	47.50				3																
	W5-54 (2S)		18	18			2.25																		
	W5-54 (2S)		18	18			2.25																		
3-4	NONE	27TH ST	60	21	8.75																				ON BRIDGE
3-5	NONE	27TH ST	60	21	8.75																				ON BRIDGE
3-6	W5-52R (5)		18	54			6.75		1																
3-7	NONE	DOWNTOWN EXITS														1			2	2.4	360	20	800		MOVE, STEEL POST TYPE W12X26
4-1	W24-1BL(MOD) (5)		48	48			32.00		1															4-3	
4-2	W24-1BL(MOD) (5)		48	48			32.00		1															4-4	
4-3	W13-1 (5)	45 MPH	36	36			18.00																	4-1	
4-4	W13-1 (5)	45 MPH	36	36			18.00																	4-2	
4-5	W12-2	16'-3"	48	48			32.00		1															4-7	VERTICAL CLEARANCE SURVEY INCIDENTAL TO PROJECT
4-6	W12-2	16'-3"	48	48			32.00		1															4-8	VERTICAL CLEARANCE SURVEY INCIDENTAL TO PROJECT
4-7	NONE	27TH ST	54	18			13.50																	4-5	
4-8	NONE	27TH ST	54	18			13.50																	4-6	
5-1	R5-57 (4)		36	36	9.00				1										1						
5-2	D12-2B (2S)	RIDESHARE	84	36	21.00				2										2						
5-3	R3-51L (2S)		48	78	26.00				2										2						
5-4	W3-8 (2S)		48	48			32.00																		ON SIGNAL POLE
6-1	R5-98 (2S)		42	24	7.00				1										1						
6-2	W3-3 (2S)		36	36			18.00		1										1						
6-3	R3-8 (2S)		54	30	11.25				2																L, E, R
6-4	R5-1A (3)		42	30	8.75				1										1						
6-5	R5-1A (3)		42	30	8.75				1																
6-6	NONE	MITCHELL DOMES							2									1	2					6-7	MOVE
6-7	R3-8 (2S)		54	30	11.25																			6-6	L, E, R
6-8	NONE	POTAWATOMI CASINO							2									1	2					6-9	MOVE
6-9	R3-8 (2S)		54	30	11.25																			6-8	L, E, R
7-1	W5-56 (2S)		18	18		2.25				1															4-FT MOUNT HEIGHT
7-2	W5-56 (2S)		18	18		2.25				1															4-FT MOUNT HEIGHT
7-3	W5-56 (2S)		18	18		2.25				1															4-FT MOUNT HEIGHT

SHEET 1 OF 3

CATEGORY 1000 UNLESS OTHERWISE NOTED

TYPE I & II PERMANENT SIGNING (CONTINUED) 1060-27-74

SIGN NO	SIGN CODE & SIZE	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	634.0620 POSTS WOOD 4"x6"x20' EACH	SPV.0060.0150 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 7-FOOT EACH	SPV.0060.0151 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 10-FOOT EACH	SPV.0060.0152 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 11-FOOT EACH	SPV.0060.0158 ROUND ALUMINUM SIGN POST SYSTEM IN CONCRETE SURFACE 7-FOOT EACH	SPV.0060.0159 ROUND ALUMINUM SIGN POST SYSTEM IN CONCRETE SURFACE 10-FOOT EACH	SPV.0060.0160 ROUND ALUMINUM SIGN POST SYSTEM IN CONCRETE SURFACE 11-FOOT EACH	638.2101 MOVING SIGNS TYPE I EACH	638.2102* MOVING SIGNS TYPE II EACH	638.3000* REMOVING SMALL SIGN SUPPORTS EACH	638.3100 REMOVING STRUCTURAL STEEL SIGN SUPPORTS EACH	531.1100 (EST) CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS CY	531.1140 (EST) STEEL REINFORCEMENT HS ANCILLARY STRUCTURES TYPE NS LB	531.2024 (EST) DRILLING SHAFT 24-INCH LF	635.0200 (EST) SIGN SUPPORTS STRUCTURAL STEEL HS LB	MOUNT ON SAME POST AS SIGN #	REMARKS NEW SIGN LOCATION
7-4	R7-1D (2S)		18 x 24	3.00						1														
7-5	R7-1D (2S)		18 x 24	3.00						1														
7-6	R7-1D (2S)		18 x 24	3.00						1														
7-7	R7-1L (2S)		18 x 24	3.00						1														
7-8	R7-1R(2S)		18 x 24	3.00						1														
7-9	W14-1 (2S)		30 x 30			6.25					1													
7-10	R1-1 (2S)		30 x 30	5.18						1														
8-1	R2-1 (2S)		24 x 30	5.00																				ON LIGHT POST
8-2	J32-2 (2S)		48 x 69	23.00																				ON LIGHT POST
	MB4-5		24 x 12																				8-3	
	MB3-4		24 x 12																				8-3	
	M1-1	IH 94	24 x 24																				8-3	
	MB5-1-L		21 x 21																				8-3	
	MB4-5		24 x 12																				8-3	
	MB3-2		24 x 12																				8-3	
	M1-1	IH 94	24 x 24																				8-3	
	MB5-1-R		21 x 21																				8-3	
8-3	R7-1D (2S)		18 x 24	3.00																			8-2	ON LIGHT POST
9-1	R6-2L (2S)		24 x 30	5.00						1													9-2	
9-2	R6-2R (2S)		24 x 30	5.00																			9-1	
9-3	R1-1 (2S)		30 x 30	5.18						1														
9-4	NONE	29TH									1												9-5, 9-6, 9-7	
9-5	NONE	ST PAUL																					9-4, 9-6, 9-7	
9-6	R5-1C (2S)		30 x 30	6.25																			9-4, 9-5, 9-7	CLIPPED CORNERS
9-7	R1-1 (2S)		30 x 30	5.18																			9-4, 9-5, 9-6	
9-8	R5-1C (2S)		30 x 30	6.25						1													9-9	CLIPPED CORNERS
9-9	R1-1 (2S)		30 x 30	5.18																			9-8	
9-10	NONE	RESTRICTED LANE/RAMP LEFT LANE								1						1	1							MOVE
9-11	J2-1 (2S)		24 x 57	9.50				1																
	MB3-4		24 x 12																					
	M1-1	IH 94	24 x 24																					
	MB6-1		21 x 21																					
9-12	R1-2 (2S)		36 x 31	3.88				1																
9-13	W12-1D (2S)		24 x 24			4		1																2-FT MOUNT HEIGHT
9-14	R4-7 (2S)		24 x 30	5.00										1										
	W5-52L		12 x 36			3.00																		
9-15	R1-1 (3)		36 x 36	7.46											1									
	W4-4-B (3)		42 x 15			4.38																		
9-16	J2-1 (2S)		24 x 57	9.50				1																
	MB3-4		24 x 12																					
	M1-1	IH 94	24 x 24																					
	MB6-1		21 x 21																					
9-17	R7-1D (2S)		18 x 24	3.00						1														
9-18	R1-1 (3)		36 x 36	7.46							1				1								9-19	
	W4-4-B (3)		42 x 15			4.38																	9-19	
9-19	R5-1C (3)		36 x 36	9.00																			9-18	CLIPPED CORNERS
9-20	R7-1D (2S)		18 x 24	3.00						1														
9-21	R9-3A (2S)		24 x 24	4.00						1														
9-22	R9-3BR (2S)		18 x 12	1.50																			9-21	
9-23	R9-3A (2S)		24 x 24	4.00						1														

SHEET 2 OF 3

CATEGORY 1000 UNLESS OTHERWISE NOTED

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	MISCELLANEOUS QUANTITIES	SHEET: 390 E

FILE NAME : PLOT DATE : June 12, 2025 PLOT BY : JACOBS PLOT NAME : PLOT SCALE : 1:1

TYPE I & II PERMANENT SIGNING (CONTINUED) 1060-27-74

SIGN NO	SIGN CODE & SIZE	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	634.0620 POSTS WOOD 4"x6"x20' EACH	SPV.0060.0150 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 7-FOOT EACH	SPV.0060.0151 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 10-FOOT EACH	SPV.0060.0152 ROUND ALUMINUM SIGN POST SYSTEM IN SOFT SURFACE 11-FOOT EACH	SPV.0060.0158 ROUND ALUMINUM SIGN POST SYSTEM IN CONCRETE SURFACE 7-FOOT EACH	SPV.0060.0159 ROUND ALUMINUM SIGN POST SYSTEM IN CONCRETE SURFACE 10-FOOT EACH	SPV.0060.0160 ROUND ALUMINUM SIGN POST SYSTEM IN CONCRETE SURFACE 11-FOOT EACH	638.2101 MOVING SIGNS TYPE I EACH	638.2102* MOVING SIGNS TYPE II EACH	638.3000* REMOVING SMALL SIGN SUPPORTS EACH	638.3100 REMOVING STRUCTURAL STEEL SIGN SUPPORTS EACH	531.1100 (EST) CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS CY	531.1140 (EST) STEEL REINFORCEMENT HS ANCILLARY STRUCTURES TYPE NS LB	531.2024 (EST) DRILLING SHAFT 24-INCH LF	635.0200 (EST) SIGN SUPPORTS STRUCTURAL STEEL HS LB	MOUNT ON SAME POST AS SIGN #	REMARKS NEW SIGN LOCATION
9-24	R9-3BL (2S)		18 12	1.50																				9-23	
9-25	R7-1D (2S)		18 24	3.00						1															
9-26	R7-1D (2S)		18 24	3.00						1															
9-27	J2-1 (2S)		24 57	9.50				1																	
	MB3-4		24 12																						
	M1-1	IH 94	24 24																						
	MB5-1L		21 21																						
9-28	J32-1 (2S)		24 69	11.50				1																	
	MB3-2		24 12																						
	M1-1	IH 94	24 24																						
	MB6-1		21 21																						
10-1	R7-1D (2S)		18 24	3.00						1															
10-2	R7-1D (2S)		18 24	3.00						1															
10-3	NONE	MITCHELL DOMES								1							1								MOVE
10-4	NONE	27TH STREET								1							1								MOVE
10-5	R3-7L (2S)		30 30	6.25						1															
10-6	NONE	ST PAUL															1								MOVE TO SIGNAL WOOD POLE
10-7	R3-17 (2S)		30 24	5.00						1														10-8	
10-8	R3-9C (2S)		24 6	1.00																				10-7	
10-9	R3-52 (MOD)	CURB LANE BIKES ONLY	30 36	7.50																				10-10, 10-11	ON LIGHT POST
10-10	R7-1D		18 24	3.00																				10-9, 10-11	ON LIGHT POST
10-11	J4-1 (2S)		24 36	6.00																				10-9, 10-10	ON LIGHT POST
10-12	NONE	27TH															1								MOVE
10-13	R3-17 (2S)		30 24	5.00																				10-14	MOUNTING TO BARRIER IS INCIDENTAL
10-14	R3-17BP (2S)		30 12	2.50																				10-13	MOUNTING TO BARRIER IS INCIDENTAL
10-15	W5-52R		12 36			3.00						1													
10-16	NONE	ST PAUL								1							1								MOVE
10-17	J32-1 (2S)		24 69	11.50				1																	
	MB3-3																								
	M1-1	IH 94																							
	MB1-6																								
10-18	R3-7L (2S)		30 30	6.25						1															
TMP-01	NONE	MENOMONEE LINE (LEFT)	24 12	2.00						1															
TMP-02	D7-95R	HANK AARON STATE TRAIL	60 36	15.00						1															
TMP-03	NONE	MENOMONEE LINE (RIGHT)	24 12	2.00						1															
TMP-04	NONE	OAK LEAF TRAIL	42 8	2.33						1															
TMP-05	NONE	MENOMONEE LINE	24 12	2.00						1															
TMP-06	NONE	MENOMONEE LINE (LEFT)	24 12	2.00						1															
TMP-07	NONE	MENOMONEE LINE	24 12	2.00						1															
TMP-08	NONE	MENOMONEE LINE	24 12	2.00						1															
TMP-09	NONE	OAK LEAF TRAIL	42 8	2.00						1															
TMP-10	NONE	MENOMONEE LINE	24 12	2.00						1															
TMP-11	NONE	MENOMONEE LINE (LEFT)	24 12	2.00						1															
TMP-12	R4-11(MOD)	BIKE MAY USE OTHER SIDEWALK	30 30	6.25						1															
TMP-13	R4-11(MOD)	BIKE MAY USE SIDEWALK	30 30	6.25						1															
TMP-14	W9-1R		36 36			9.00				1															
		UNDISTRIBUTED					20.72	5																	
		TOTAL		**522.10**	**6.75**	**531.00**	**20.72**	**48**	**3**	**38**	**3**	**1**	**1**	**2**	**2**	**8**	**13**	**4**	**5**	**720**	**40**	**1600**			

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CATEGORY 1000 UNLESS OTHERWISE NOTED

REMOVING MANHOLES

STAGE	ROADWAY	STATION	OFFSET	204.0210 REMOVING MANHOLES EACH
1A	MAINLINE RETAINING WALL R-40-761			
		419EW+92	136' RT	1
		419EW+90	230' RT	1
SUBTOTAL				2
1B	MAINLINE INTERIM 94EB			
		24TEB+64.45	32.55' RT	1
SUBTOTAL				1
2	MAINLINE INTERIM 94WB			
		115TWB+30.70	6.04' RT	1
SUBTOTAL				1
2	MAINLINE BRIDGE B-40-1083			
		22KS+54.21	9.30' RT	1
		21KS+96.59	18.17' LT	1
SUBTOTAL				2
TOTAL				6

ABANDONING MANHOLES

STAGE	ROADWAY	STATION	OFFSET	204.0250 ABANDONING MANHOLES EACH	NOTES
1A	MAINLINE RETAINING WALL R-40-761				
		419EW+93	39' RT	1	FILL WITH BACKFILL SLURRY FROM THE STRUCTURE FLOOR TO THE RIM. BACKFILL SLURRY IS CONSIDERED INCIDENTAL TO ABANDONING THE STRUCTURE
SUBTOTAL				1	
TOTAL				1	

REMOVING INLETS

STAGE	ROADWAY	STATION	OFFSET	204.0220 REMOVING INLETS EACH
1A	MAINLINE INTERIM 94EB			
		14TEB+93.58	67.45' RT	1
		21TEB+86.74	32.68' RT	1
		22TEB+09.59	43.74' RT	1
		22TEB+59.51	40.84' RT	1
	SUBTOTAL			4
1B	MAINLINE TEMPORARY 94EB			
		217TML+46.43	39.78' RT	1
	SUBTOTAL			1
2	MAINLINE INTERIM 94WB			
		113TWB+80.11	6.10' RT	1
		113TWB+80.22	11.07' RT	1
		117TWB+18.14	6.28' RT	1
		117TWB+21.13	1.08' RT	1
		117TWB+29.96	1.06' RT	1
		117TWB+30.67	6.32' RT	1
		117TWB+31.29	11.52' RT	1
		120TWB+05.57	13.92' RT	1
		120TWB+14.66	11.45' RT	1
		121TWB+57.96	13.48' RT	1
		121TWB+62.61	0.15' LT	1
		121TWB+71.69	2.18' RT	1
		122TWB+77.47	6.24' RT	1
		124TWB+26.79	6.39' RT	1
		124TWB+33.75	12.13' RT	1
	SUBTOTAL			15
3	MAINLINE INTERIM 94WB			
		121TWB+62.59	41.44' LT	1
		122TWB+77.41	41.80' LT	1
	SUBTOTAL			2
3	RAMPS RAMP TJD			
		101TJD+17.28	16.36' RT	1
		102TJD+49.98	13.42' RT	1
		103TJD+52.90	22.87' RT	1
	SUBTOTAL			3
3	LOCAL ROADS ST. PAUL AVENUE			
		11SP+94.73	54.86' RT	1
		12SP+43.68	30.38' LT	1
		13SP+37.93	30.17' LT	1
		14SP+40.36	28.03' RT	1
		17SP+26.95	28.39' LT	1
		17SP+30.52	27.2' RT	1
	TEMPORARY ST. PAUL AVENUE			
		218+38.39	43.37' RT	1
		219+31.71	23.99' RT	1
	28TH STREET			
		10J+79.08	18.74' RT	1
		11J+52.31	44.13' LT	1
		11J+36.57	20.49' LT	1
	27TH STREET			
		25KS+09.04	28.97' LT	1
		27KN+10.93	23.76' LT	1
	SUBTOTAL			13
	TOTAL			38

* REMOVING COVER PLATE LEFT IN PLACE INCIDENTAL TO REMOVING INLET

STORM SEWER PIPE REMOVALS

STAGE	ROADWAY	STATION	OFFSET	TO	STATION	OFFSET	204.0245.0001 REMOVING STORM SEWER 12-INCH LF	204.0245.0002 REMOVING STORM SEWER 15-INCH LF	204.0245.0003 REMOVING STORM SEWER 18-INCH LF	204.0245.0004 REMOVING STORM SEWER 21-INCH LF	204.0245.0005 REMOVING STORM SEWER 24-INCH LF	204.0245.0006 REMOVING STORM SEWER 27-INCH LF	204.0245.0007 REMOVING STORM SEWER 30-INCH LF
1A	MAINLINE INTERIM 94EB												
		14TEB+93.58	67' RT	--	15TEB+01.75	45' RT	24	---	---	---	---	---	---
		21TEB+86.74	33' RT	--	21TEB+80.48	3' RT	30	---	---	---	---	---	---
		22TEB+09.59	44' RT	--	21TEB+86.74	33' RT	26	---	---	---	---	---	---
		22TEB+59.51	41' RT	--	22TEB+09.59	44' RT	52	---	---	---	---	---	---
	RETAINING WALL R-40-761												
		419EW+92	116' RT	--	419EW+92	136' RT	20	---	---	---	---	---	---
		419EW+92	136' RT	--	419EW+90	230' RT	94	---	---	---	---	---	---
	SUBTOTAL						246	--	--	--	--	--	--
1B	MAINLINE TEMPORARY 94EB												
		21TEB+80.48	3' RT	--	21TEB+78.10	8' LT	11	---	---	---	---	---	---
		24TEB+64.45	33' RT	--	24TEB+60.47	22' RT	11	---	---	---	---	---	---
		25TEB+37.76	30' RT	--	25TEB+49.42	36' RT	---	---	---	---	---	---	13
	SUBTOTAL						22	--	--	--	--	--	13
2	MAINLINE INTERIM 94WB												
		112TWB+62.24	5' RT	--	113TWB+80.11	6' RT	---	---	118	---	---	---	---
		113TWB+80.23	0' RT	--	113TWB+80.11	6' RT	6	---	---	---	---	---	---
		113TWB+80.22	11' RT	--	113TWB+80.11	6' RT	5	---	---	---	---	---	---
		113TWB+80.11	6' RT	--	115TWB+30.70	6' RT	---	---	---	151	---	---	---
		115TWB+30.44	25' LT	--	115TWB+30.70	6' RT	31	---	---	---	---	---	---
		115TWB+29.16	10' RT	--	115TWB+30.70	6' RT	4	---	---	---	---	---	---
		115TWB+30.70	6' RT	--	117TWB+30.67	6' RT	---	---	---	200	---	---	---
		117TWB+18.14	6' RT	--	117TWB+21.13	1' RT	6	---	---	---	---	---	---
		117TWB+21.13	1' RT	--	117TWB+30.67	6' RT	11	---	---	---	---	---	---
		117TWB+29.85	0' RT		117TWB+29.96	1' RT	1	---	---	---	---	---	---
		117TWB+29.96	1' RT		117TWB+30.67	6' RT	5	---	---	---	---	---	---
		117TWB+45.72	48' RT	--	117TWB+31.29	12' RT	40	---	---	---	---	---	---
		117TWB+31.29	12' RT	--	117TWB+30.67	6' RT	5	---	---	---	---	---	---
		117TWB+30.67	6' RT	--	120TWB+05.57	14' RT	---	---	---	---	275	---	---
		120TWB+14.66	11' RT	--	120TWB+05.57	14' RT	9	---	---	---	---	---	---
		120TWB+05.57	14' RT	--	121TWB+57.96	13' RT	---	---	---	---	153	---	---
		121TWB+62.60	12' LT	--	121TWB+62.61	0' LT	12	---	---	---	---	---	---
		121TWB+71.69	2' RT	--	121TWB+62.61	0' LT	9	---	---	---	---	---	---
		121TWB+62.61	0' LT	--	121TWB+57.96	13' RT	14	---	---	---	---	---	---
		121TWB+70.91	59' RT	--	121TWB+57.96	13' RT	48	---	---	---	---	---	---
		121TWB+57.96	13' RT	--	122TWB+77.47	6' RT	---	---	---	---	---	120	---
		122TWB+77.46	0' RT	--	122TWB+77.47	6' RT	6	---	---	---	---	---	---
		122TWB+77.47	6' RT	--	124TWB+33.75	12' RT	---	---	---	---	---	156	---
		124TWB+26.79	6' RT	--	124TWB+33.75	12' RT	9	---	---	---	---	---	---
		124TWB+33.75	12' RT	--	124TWB+39.89	14' RT	---	---	---	---	---	---	7
	SUBTOTAL						221	--	118	351	428	276	7
2	MAINLINE BRIDGE B-40-1083												
		22KS+54.21	9' RT	--	21KS+96.59	18' LT	---	---	64	---	---	---	---
		21KS+96.59	18' LT	--	21KS+40.24	21' LT	---	---	56	---	---	---	---
	SUBTOTAL						--	--	120	--	--	--	--

STORM SEWER PIPE REMOVALS

STAGE	ROADWAY	STATION	OFFSET	TO	STATION	OFFSET	204.0245.0001 REMOVING STORM SEWER 12-INCH LF	204.0245.0002 REMOVING STORM SEWER 15-INCH LF	204.0245.0003 REMOVING STORM SEWER 18-INCH LF	204.0245.0004 REMOVING STORM SEWER 21-INCH LF	204.0245.0005 REMOVING STORM SEWER 24-INCH LF	204.0245.0006 REMOVING STORM SEWER 27-INCH LF	204.0245.0007 REMOVING STORM SEWER 30-INCH LF
3	MAINLINE												
	INTERIM 94WB												
		121TWB+62.59	41' LT	--	121TWB+62.59	35' LT	6	---	---	---	---	---	---
		122TWB+77.32	44' LT	--	122TWB+77.41	42' LT	2	---	---	---	---	---	---
		122TWB+77.41	42' LT	--	122TWB+77.41	40' LT	1	---	---	---	---	---	---
	SUBTOTAL						9	--	--	--	--	--	--
3	RAMPS												
	RAMP TJD												
		103TJD+52.90	23' RT	--	102TJD+49.98	13' RT	103	---	---	---	---	---	---
		102TJD+49.98	13' RT	--	101TJD+17.28	16' RT	133	---	---	---	---	---	---
		101TJD+17.28	16' RT	--	100TJD+17.14	12' LT	104	---	---	---	---	---	---
	SUBTOTAL						340	--	--	--	--	--	--
3	LOCAL ROADS												
	ST. PAUL AVENUE												
		11SP+94.73	55' RT	--	12SP+19.77	5' RT	56	---	---	---	---	---	---
		12SP+43.68	30' LT	--	12SP+19.77	5' RT	43	---	---	---	---	---	---
		13SP+37.93	30' LT	--	13SP+28.76	5' RT	37	---	---	---	---	---	---
		14SP+40.36	28' RT	--	14SP+21.24	5' LT	38	---	---	---	---	---	---
		17SP+26.95	28' LT	--	17SP+25.75	5' LT	23	---	---	---	---	---	---
		17SP+30.52	28' RT	--	17SP+25.75	5' LT	33	---	---	---	---	---	---
	TEMPORARY ST. PAUL AVENUE												
		218TSP+38.39	43' RT	--	218TSP+18.63	7' LT	54	---	---	---	---	---	---
		219TSP+31.71	24' RT	--	219TSP+39.18	0' LT	25	---	---	---	---	---	---
	28TH STREET												
		10J+79.08	19' RT	--	10J+51.84	1' RT	33	---	---	---	---	---	---
		11J+52.31	44' LT	--	11J+36.57	20' LT	28	---	---	---	---	---	---
		11J+36.57	20' LT	--	11J+50.48	0' RT	25	---	---	---	---	---	---
	27TH STREET												
		25KS+08.04	30' LT	--	25KS+09.04	29' LT	---	1	---	---	---	---	---
		25KS+09.04	29' LT	--	25KS+66.86	5' LT	63	---	---	---	---	---	---
		27KN+10.93	24' LT	--	27KN+17.67	0' LT	25	---	---	---	---	---	---
	SUBTOTAL						483	1	--	--	--	--	--
	TOTALS						1,321	1	238	351	428	276	20

ABANDONING SEWER

STAGE	ROADWAY	STATION	OFFSET	TO	STATION	OFFSET	PIPE ID INCH	INSIDE RADIUS LF	LENGTH LF	204.0291.S ABANDONING SEWER CY
1A	MAINLINE									
	RETAINING WALL R-40-761									
		419EW+93	39' RT	--	419EW+92	116' RT	12	0.5	76	2
		419EW+90	230' RT	--	420EW+06	266' RT	15	0.63	40	2
	SUBTOTAL									4
1B	MAINLINE									
	INTERIM 94EB									
		224TML+55.35	42' RT	--	224TML+34.88	4' RT	12	0.5	43	1
	SUBTOTAL									1
	TOTALS									5

RECONNECT STORM SEWER

STAGE	ROADWAY	STRUCTURE ID	STATION	OFFSET	SPV.0060.8003 RECONNECT STORM SEWER EACH
1A	MAINLINE				
	TEMPORARY 94EB				
		1005	15TEB+01.75	45.06' RT	1
		1034	21TEB+80.48	2.94' RT	1
	SUBTOTAL				2
1B	MAINLINE				
	TEMPORARY 94EB				
		2008	225TML+31.70	41.41' RT	1
		E593	225TML+43.55	45.95' RT	1
	SUBTOTAL				2
2	MAINLINE				
	INTERIM 94WB				
		2001	212TML+62.27	2.46' RT	1
		3003	213TML+80.19	4.27' LT	1
		3003.1	213TML+80.45	36.81' LT	2
		3007.1	215TML+30.12	30.69' LT	1
		3008	215TML+29.21	3.57' RT	1
		3011	217TML+29.74	8.37' LT	1
		3011.1	117TWB+28.29	14.42' LT	2
		3018.1	221TML+63.76	23.79' LT	1
		3030	222TML+78.54	34.39' LT	2
		3023	222TML+78.61	12.37' LT	1
	TEMPORARY 94EB				
		3032	224TML+35.03	2.53' RT	1
		3034	224TML+40.94	6.32' RT	1
	BRIDGE B-40-1038				
		800	21KS+40.24	21.35' LT	1
	SUBTOTAL				16
3	MAINLINE				
	INTERIM 94WB				
		3019	221TML+63.75	47.56' LT	1
		3022.1	222TML+78.48	52.31' LT	1
		3022.2	222TML+78.40	56.19' LT	1
	SUBTOTAL				3

3

RECONNECT STORM SEWER

STAGE	ROADWAY	STRUCTURE ID	STATION	OFFSET	SPV.0060.8003 RECONNECT STORM SEWER EACH
3	RAMPS				
	RAMP TJD				
		E576	100TJD+17.24	11.46' LT	1
	SUBTOTAL				1
3	LOCAL ROADS				
	28TH STREET				
		205	10J+80.51	0.48' RT	2
		215	12J+11.91	0.69' RT	2
	ST. PAUL AVENUE				
		115	11SP+36.45	4.91' RT	2
		E506	12SP+19.77	5.32' RT	1
		135	13SP+12.24	5.19' RT	2
		E511	14SP+21.24	5.39' LT	2
		E514	15SP+21.59	5.53' LT	1
		E520	16SP+25.42	5.66' LT	2
		E523	17SP+25.75	5.38' LT	2
	TEMPORARY ST. PAUL AVENUE				
		E538	219TSP+03.90	6.72' LT	1
		E541	219TSP+14.77	3.024' RT	1
	27TH STREET				
		171	25KS+08.04	30' LT	1
		E553	25KS+66.86	4.87' LT	2
		E529	27KN+17.67	0.14' LT	2
	SUBTOTAL				23
	TOTAL				47

ADJUSTING STRUCTURES

STAGE	LOCATION	STRUCTURE ID	STATION	OFFSET FT	EXISTING RIM ELEVATION	TO	PROPOSED RIM ELEVATION	611.8110 ADJUSTING MANHOLE COVERS EACH	611.8115 ADJUSTING INLET COVERS EACH
2	MAINLINE								
	INTERIM 94WB								
		E580	11TEB+28.49	9' LT	655.32		655.27	---	1
		E606	24TEB+48.63	30' LT	618.26		618.13	---	1
	SUBTOTAL							---	2
3	LOCAL ROADS								
	ST. PAUL AVENUE								
		E503	10SP+65.37	5' RT	670.14		670.14	1	---
		E506	12SP+19.77	5' RT	669.81		669.17	1	---
		E509	13SP+28.76	5' RT	669.31		668.14	1	---
		E510	15SP+75.59	0' LT	661.57		660.85	1	---
		E511	14SP+21.24	5' LT	667.92		666.96	1	---
		E514	15SP+21.59	6' LT	663.96		663.50	1	---
		E520	16SP+25.42	6' LT	659.08		658.11	1	---
		E523	17SP+25.75	5' LT	654.19		654.31	1	---
		E526	17SP+70.57	0' LT	653.08		653.27	1	---
		E535	18SP+18.63	7' LT	652.02		652.42	1	---
		E541	219TSP+14.77	3' RT	645.86		646.35	1	---
		E705	10SP+49.86	43' RT	669.91		669.96	---	1
		E706	10SP+77.86	44' RT	669.77		669.77	---	1
	TEMPORARY ST. PAUL AVENUE								
		E538	219TSP+03.90	7' LT	646.33		647.12	1	---
	28TH STREET								
		E700	10J+51.84	1' RT	667.95		667.92	1	---
		E704	11J+50.43	0' RT	667.33		667.14	1	---
	27TH STREET								
		E553	25KS+66.86	5' LT	652.38		652.21	1	---
		E529	27KN+17.67	0' LT	654.22		654.33	1	---
	SUBTOTAL							16	2
	TOTALS							16	4

STORM SEWER SUMMARY TABLE - COVERS								
611.0530 MANHOLE COVERS TYPE J	SPV.0060.8009 MANHOLE COVER TYPE MS 58A	611.0612 INLET COVERS TYPE C	611.0624 INLET COVERS TYPE H	611.0627 INLET COVERS TYPE HM	611.0642 INLET COVERS TYPE MS	611.0654 INLET COVERS TYPE V	611.0656 INLET COVERS TYPE VV-B	SPV.0060.8010 INLET COVER TYPE MS 57
EA	EA	EA	EA	EA	EA	EA	EA	EA
16	5	2	3	5	4	47	12	34

STORM SEWER SUMMARY TABLE - STRUCTURES									
611.1004 CATCH BASINS 4-FT DIAMETER	611.1005 CATCH BASINS 5-FT DIAMETER	611.2004 MANHOLES 4-FT DIAMETER	611.2005 MANHOLES 5-FT DIAMETER	611.2006 MANHOLES 6-FT DIAMETER	611.2007 MANHOLES 7-FT DIAMETER	611.3004 INLETS 4-FT DIAMETER	611.3220 INLETS 2X2-FT	611.3225 INLETS 2X2.5-FT	611.3230 INLETS 2X3-FT	611.3902 INLETS MEDIAN 2 GRATE
EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
33	2	21	20	3	1	23	1	37	2	2

STORM SEWER SUMMARY TABLE - PIPES							
608.0312 SSPRC CLASS III 12-INCH	608.0315 SSPRC CLASS III 15-INCH	608.0318 SSPRC CLASS III 18-INCH	608.0324 SSPRC CLASS III 24-INCH	608.0330 SSPRC CLASS III 30-INCH	608.0412 SSPRC CLASS IV 12-INCH	608.0430 SSPRC CLASS IV 30-INCH	608.0442 SSPRC CLASS IV 42-INCH
LF	LF	LF	LF	LF	LF	LF	LF
1579	2107	152	1072	1103	51	92	13

STORM SEWER STRUCTURES											STORM SEWER PIPES									
ROADWAY	STRUCTURE NO.	STRUCTURE STAGE	COVER STAGE	STATION	OFFSET (FT)	LOCATION	RIM ELEV	STRUCTURE TYPE	INLET/MANHOLE COVERS TYPE	STRUCTURE DEPTH (FT)	STRUCTURE COMMENTS	PIPE STAGE	FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE	PLAN LENGTH (FT)	PIPE CLASS	PIPE SIZE (INCH)	PIPE COMMENTS
TJD	101	3	3	103TJD+39.19	31.00	LT	666.69	INLETS 4-FT DIAMETER	H	8.14	---	3	101	305	658.55	657.53	2.00 %	51	III	15	---
TJD	103	3	3	104TJD+01.53	1.76	RT	668.23	CATCH BASINS 4-FT DIAMETER	MS 57	10.10	---	3	103	131	660.13	659.85	0.50 %	57	III	12	---
TJD	104	3	3	103TJD+23.20	22.59	RT	666.46	INLETS 4-FT DIAMETER	H	7.80	---	3	104	301	658.66	658.17	1.50 %	33	III	15	---
SP	110	3	3	11SP+38.71	13.19	LT	669.42	CATCH BASINS 4-FT DIAMETER	MS 57	12.92	---	3	110	115	660.50	660.41	0.50 %	18	III	12	---
SP	115	3	3	11SP+36.45	4.91	RT	669.60	MANHOLES 4-FT DIAMETER	58A	10.92	---	---	---	---	--	---	---	---	---	---	---
SP	118	3	3	12SP+29.77	16.40	LT	668.43	CATCH BASINS 4-FT DIAMETER	MS 57	11.85	---	3	118	E506	660.59	660.47	0.50 %	24	III	12	---
SP	121	3	3	14SP+27.30	18.00	LT	666.58	CATCH BASINS 4-FT DIAMETER	MS 57	11.68	---	3	121	E511	658.90	658.83	0.50 %	14	III	12	---
SP	124	3	3	15SP+89.58	18.00	LT	659.77	CATCH BASINS 4-FT DIAMETER	MS 57	13.99	---	3	124	E520	649.79	649.60	0.50 %	38	III	12	---
SP	130	3	3	17SP+09.43	18.00	LT	654.83	CATCH BASINS 4-FT DIAMETER	MS 57	13.43	---	3	130	E523	645.40	645.30	0.50 %	21	III	12	---
SP	131	3	3	12SP+86.57	28.00	RT	667.92	CATCH BASINS 4-FT DIAMETER	MS 57	10.07	---	3	131	132	659.85	659.72	0.50 %	26	III	12	---
SP	132	3	3	13SP+12.27	28.00	RT	667.79	CATCH BASINS 4-FT DIAMETER	MS 57	12.07	---	3	132	135	659.72	659.60	0.50 %	23	III	12	---
SP	133	3	3	13SP+45.77	28.00	RT	667.62	CATCH BASINS 4-FT DIAMETER	MS 57	11.62	---	3	133	134	658.00	657.85	0.50 %	31	III	12	---
SP	134	3	3	13SP+76.47	28.00	RT	667.33	CATCH BASINS 4-FT DIAMETER	MS 57	11.49	---	3	134	136	657.85	657.65	0.50 %	39	III	12	---
SP	135	3	3	13SP+12.24	5.19	RT	668.23	MANHOLES 4-FT DIAMETER	58A	8.94	---	---	---	---	--	---	---	---	---	---	---
SP	136	3	3	14SP+15.36	28.00	RT	666.66	CATCH BASINS 4-FT DIAMETER	MS 57	13.01	---	3	136	E511	657.65	657.48	0.50 %	34	III	12	---
SP	138	3	3	15SP+21.59	28.00	RT	663.07	CATCH BASINS 4-FT DIAMETER	MS 57	11.70	---	3	138	E514	655.37	655.20	0.50 %	34	III	12	---
SP	139	3	3	15SP+55.21	28.00	RT	661.39	CATCH BASINS 4-FT DIAMETER	MS 57	7.86	---	3	139	138	655.54	655.37	0.50 %	34	III	12	---
SP	142	3	3	16SP+58.24	28.00	RT	656.10	CATCH BASINS 4-FT DIAMETER	MS 57	10.27	---	3	142	E520	649.84	649.60	0.50 %	47	III	12	---
SP	145	3	3	17SP+18.76	28.00	RT	654.03	CATCH BASINS 4-FT DIAMETER	MS 57	12.56	---	3	145	E523	645.47	645.30	0.50 %	34	III	12	---
SP	146	3	3	17SP+04.27	28.00	RT	654.35	CATCH BASINS 4-FT DIAMETER	MS 57	10.81	---	3	146	145	645.54	645.47	0.50 %	14	III	12	---
KN	148	3	3	27KN+40.50	23.00	LT	654.47	CATCH BASINS 4-FT DIAMETER	MS 57	8.22	---	3	148	148.1	648.26	648.19	1.50 %	7	III	15	---
KN	148.1	3	3	27KN+33.67	23.00	LT	654.41	CATCH BASINS 4-FT DIAMETER	MS 57	8.26	---	3	148.1	152	648.15	647.85	1.00 %	30	III	15	---
KN	152	3	3	27KN+03.53	25.84	LT	654.13	CATCH BASINS 4-FT DIAMETER	MS 57	13.19	---	3	152	E529	644.94	644.50	1.50 %	29	III	15	---
TSP	154	3	3	218TSP+12.52	53.08	LT	653.27	CATCH BASINS 4-FT DIAMETER	MS 57	12.56	---	3	154	E529	644.70	644.50	1.00 %	41	III	12	---
TSP	157	3	3	218TSP+77.79	25.00	LT	649.35	CATCH BASINS 4-FT DIAMETER	MS 57	15.19	---	3	157	E538	638.16	638.00	0.50%	32	III	12	---
TSP	160	3	3	219TSP+08.05	25.00	RT	646.70	CATCH BASINS 4-FT DIAMETER	MS 57	14.09	---	3	160	E541	636.62	636.50	1.00 %	23	III	12	---
KS	166	3	3	25KS+66.86	30.00	LT	652.09	CATCH BASINS 4-FT DIAMETER	MS 57	13.06	---	3	166	E553	643.03	642.78	1.00 %	25	III	15	---
KS	169	3	3	25KS+47.15	30.00	LT	651.84	CATCH BASINS 4-FT DIAMETER	MS 57	10.61	---	3	169	166	643.23	643.03	1.00 %	20	III	15	---
KS	170	3	3	25KS+27.60	30.00	LT	651.58	CATCH BASINS 4-FT DIAMETER	MS 57	10.16	---	3	170	169	643.42	643.23	1.00 %	20	III	15	---
KS	171	3	3	25KS+08.04	30.00	LT	651.45	CATCH BASINS 4-FT DIAMETER	MS 57	9.83	CONSTRUCT PRIOR TO B-40-1083 NORTH ABUTMENT TIE BACKS	3	171	170	643.62	643.42	1.00 %	20	III	15	---
KS	173	3	3	25KS+62.61	44.02	RT	651.27	CATCH BASINS 4-FT DIAMETER	MS 57	9.99	CONSTRUCT PRIOR TO B-40-1083 NORTH ABUTMENT TIE BACKS	3	173	E553	643.28	643.03	0.50 %	49	III	12	---
J	200	3	3	11J+01.39	51.40	LT	666.60	CATCH BASINS 4-FT DIAMETER	MS 57	11.31	---	3	200	205	659.30	659.02	0.50 %	56	III	12	---
J	205	3	3	10J+80.51	0.48	RT	667.76	MANHOLES 4-FT DIAMETER	58A	8.75	---	---	---	---	--	---	---	---	---	---	---
J	210	3	3	12J+11.79	18.00	RT	666.14	INLETS 2x2-FT	MS 57	12.82	---	3	210	215	657.32	657.24	0.50 %	17	III	12	---
J	215	3	3	12J+11.91	0.69	RT	666.47	MANHOLES 4-FT DIAMETER	58A	9.48	---	---	---	---	--	---	---	---	---	---	---
R-40-767-ELA	216	4	1064-27-72	1008R-40-767-ELA+80.05	55.81	LT	624.00*	INLETS 2x2.5-FT	NO COVER	3.98	V COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	4	216	221	620.02	618.97	1.50 %	70	III	15	---
J	220	3	3	12J+11.91	19.00	LT	665.94	CATCH BASINS 4-FT DIAMETER	MS 57	12.60	---	3	220	215	657.34	657.24	0.50 %	20	III	12	---
R-40-767-ELA	221	4	1064-27-72	1007R-40-767-ELA+95.63	48.73	LT	622.51*	MANHOLES 4-FT DIAMETER	NO COVER	3.54	J COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	4	221	226	618.97	618.09	2.00 %	44	III	15	---
R-40-767-ELA	224	4	1064-27-72	1007R-40-767-ELA+95.63	2.69	LT	624.73*	INLETS 2x2.5-FT	NO COVER	5.15	V COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	4	224	221	619.58	619.35	0.50 %	46	III	12	---
R-40-767-ELA	226	4	1064-27-72	1007R-40-767-ELA+46.03	44.98	LT	621.88*	INLETS 2x2.5-FT	NO COVER	3.79	V COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	4	226	228	618.09	617.61	2.00 %	24	III	15	---
R-40-767-ELA	228	4	1064-27-72	1007R-40-767-ELA+19.84	40.76	LT	621.72*	INLETS 4-FT DIAMETER	NO COVER	5.33	V COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	4	228	1117	616.39	613.62	5.75 %	48	III	15	---
R-40-767-ELA	232	4	1064-27-72	1006R-40-767-ELA+92.20	35.88	LT	621.98*	INLETS 2x2.5-FT	NO COVER	4.11	V COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	4	232	228	617.87	617.61	1.00 %	26	III	15	---
R-40-767-ELA	236	4	1064-27-72	1006R-40-767-ELA+51.88	26.90	LT	622.47*	MANHOLES 4-FT DIAMETER	NO COVER	4.18	J COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	4	236	232	618.28	617.87	1.00 %	42	III	15	---
R-40-767-ELA	240	4	4	1006R-40-767-ELA+51.88	2.69	LT	622.84*	INLETS 2x2.5-FT	V	4.18	COVER INSTALLED AT SLAB ELEVATION	4	240	236	618.66	618.53	0.50 %	24	III	12	---
R-40-767-ELA	248	4	1064-27-72	1005R-40-767-ELA+26.38	26.81	LT	624.31*	INLETS 2x2.5-FT	NO COVER	4.77	V COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	4	248	236	619.54	618.28	1.00 %	125	III	15	---
R-40-767-ELA	256	4	1064-27-72	1003R-40-767-ELA+41.79	2.69	LT	628.88*	INLETS 2x2.5-FT	NO COVER	4.27	V COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	4	256	260	624.60	624.48	0.50 %	24	III	12	---
R-40-767-ELA	260	4	1064-27-72	1003R-40-767-ELA+41.79	26.81	LT	629.51*	INLETS 2x2.5-FT	NO COVER	5.27	V COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	4	260	248	624.23	619.54	2.50 %	188	III	15	---
R-40-767-ELA	262	4	1064-27-72	1001R-40-767-ELA+45.96	26.81	LT	636.08*	MANHOLES 4-FT DIAMETER	NO COVER	5.97	J COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	4	262	260	630.11	624.23	3.00 %	196	III	15	---
R-40-767-ELA	264	4	1064-27-72	1001R-40-767-ELA+45.96	2.69	LT	635.67*	INLETS 2x2.5-FT	NO COVER	3.60	V COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	4	264	262	632.07	631.95	0.50 %	24	III	12	---
TJD	301	3	3	102TJD+91.30	15.17	RT	665.78	INLETS 4-FT DIAMETER	H	7.61	---	3	301	305	658.17	657.53	1.50 %	43	III	15	---
TJD	305	3	3	102TJD+88.10	27.52	LT	665.07	INLETS 4-FT DIAMETER	HM	7.54	---	3	305	TL312	657.53	656.91	1.50 %	42	III	15	---
TML	667	1A	1064-27-72	216TML+10.86	97.21	RT	634.72*	MANHOLES 5-FT DIAMETER	NO COVER	7.29	VV-B COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	1A	667	679	627.43	619.32	3.12 %	260	III	30	---
TML	679	1A	1064-27-72	218TML+69.98	70.51	RT	628.94*	MANHOLES 5-FT DIAMETER	NO COVER	9.62	VV-B COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	1A	679	699	619.32	614.40	3.12 %	158	III	30	---
TML	699	1A	1064-27-72	220TML+23.65	57.44	RT	624.60*	MANHOLES 5-FT DIAMETER	NO COVER	10.20	VV-B COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	1A	699	700	614.40	613.82	2.00 %	29	III	30	---
TML	700	1A	1064-27-72	220TML+51.98	60.40	RT	623.69*	MANHOLES 5-FT DIAMETER	NO COVER	9.87	J COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	1A	700	701	613.82	611.82	2.00 %	100	III	30	---
TML	701	1A	1064-27-72	221TML+49.69	58.67	RT	620.28*	MANHOLES 5-FT DIAMETER	NO COVER	8.46	J COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	1A	701	719	611.82	611.52	2.00 %	15	III	30	---
TML	719	1A	1064-27-72	221TML+63.76	54.42	RT	619.80*	MANHOLES 5-FT DIAMETER	NO COVER	8.28	VV-B COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	1B	719	731	611.52	606.54	3.34 %	149	III	30	---

*TOP OF SLAB ELEVATION

3

STORM SEWER STRUCTURES											STORM SEWER PIPES									
ROADWAY	STRUCTURE NO.	STRUCTURE STAGE	COVER STAGE	STATION	OFFSET (FT)	LOCATION	RIM ELEV	STRUCTURE TYPE	INLET/MANHOLE COVERS TYPE	STRUCTURE DEPTH (FT)	STRUCTURE COMMENTS	PIPE STAGE	FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE	PLAN LENGTH (FT)	PIPE CLASS	PIPE SIZE (INCH)	PIPE COMMENTS
TML	731	1B	1064-27-72	223TML+11.35	55.00	RT	614.94*	MANHOLES 6-FT DIAMETER	NO COVER	8.40	VV-B COVER INSTALLED IN EAST LEG CONTRACT (1060-27-72)	---	---	---	--	---	---	---	---	---	---
KS	800	2	2	21KS+40.24	21.35	LT	592.98	MANHOLES 4-FT DIAMETER	58A	9.50	PIER 1 FLOOR DRAIN DOWNSPOUT CONNECTION	---	---	---	--	---	---	---	---	---	---
TLC	801	1A	2	19TLC+93.99	73.23	RT	622.76	MANHOLES 4-FT DIAMETER	J	7.06	PIER 2 FLOOR DRAIN DOWNSPOUT CONNECTION	1A	801	802	615.69	614.86	1.00 %	84	III	12	---
TLC	802	1A	2	20TLC+77.09	64.18	RT	619.94	MANHOLES 4-FT DIAMETER	J	5.08	PIER 2 FLOOR DRAIN DOWNSPOUT CONNECTION	1A	802	TL1114	614.86	614.03	1.10 %	75	III	12	---
TLC	1117	1A	1A	21TLC+74.50	44.35	RT	617.38	MANHOLES 4-FT DIAMETER	J	4.53	---	1A	1117	TL1105	612.84	612.38	1.00 %	47	III	24	---
KS	TL164	3	3	26KS+16.39	37.00	RT	651.78	CATCH BASINS 4-FT DIAMETER	MS 57	8.04	---	3	TL164	TL165	645.74	645.66	0.50 %	17	III	12	---
KS	TL165	3	3	25KS+99.61	37.00	RT	651.60	CATCH BASINS 4-FT DIAMETER	MS 57	7.94	---	3	TL165	TL167	645.66	645.62	0.50 %	7	III	12	---
KS	TL167	3	3	25KS+92.78	37.00	RT	651.54	CATCH BASINS 4-FT DIAMETER	MS 57	7.91	---	3	TL167	TL168	645.62	645.56	0.50 %	13	III	12	---
KS	TL168	3	3	25KS+80.16	37.00	RT	651.49	CATCH BASINS 4-FT DIAMETER	MS 57	7.93	---	3	TL168	173	645.56	645.42	0.75 %	19	III	12	---
TJD	TL312	3	3	102TJD+46.67	24.42	LT	664.29	INLETS 2x3-FT	HM	7.38	---	3	TL312	TL316	656.91	656.47	1.50 %	29	III	15	---
TJD	TL316	3	3	102TJD+17.64	23.00	LT	664.04	INLETS 4-FT DIAMETER	HM	7.57	---	3	TL316	TL320	656.47	656.18	1.50 %	19	III	15	---
TJD	TL320	3	3	101TJD+98.52	23.00	LT	663.90	INLETS 4-FT DIAMETER	HM	7.72	---	3	TL320	TL332	656.18	653.87	3.00 %	93	III	15	---
TJD	TL332	3	3	101TJD+04.22	23.00	LT	661.51	INLETS 2x3-FT	HM	7.64	---	3	TL332	E576	653.87	652.72	1.37 %	84	III	15	---
TEB	TL1005	1A	1A	15TEB+01.75	45.06	RT	645.71	INLETS 4-FT DIAMETER	V	12.04	---	---	---	---	---	---	---	---	---	---	---
TEB	TL1009	1A	1A	16TEB+17.18	45.06	RT	641.50	INLETS 2x2.5-FT	V	7.24	---	1A	TL1009	TL1011	634.27	631.78	2.50 %	99	III	15	---
TEB	TL1011	1A	1A	17TEB+16.65	45.06	RT	638.61	MANHOLES 5-FT DIAMETER	VV-B	6.83	---	1A	TL1011	TL1013	631.78	630.03	2.50 %	70	III	15	---
TEB	TL1013	1A	1A	17TEB+86.45	46.37	RT	636.88	MANHOLES 4-FT DIAMETER	J	6.85	---	1A	TL1013	TL1015	630.03	627.91	3.00 %	71	III	15	---
TEB	TL1014	1A	1A	18TEB+61.69	21.37	RT	633.94	INLETS 4-FT DIAMETER	V	8.23	---	1A	TL1014	TL1015	625.71	625.57	0.50 %	28	III	12	---
TEB	TL1015	1A	1A	18TEB+57.01	49.47	RT	634.65	INLETS 2x2.5-FT	V	9.33	---	1A	TL1015	TL1016	625.32	623.87	2.50 %	58	III	15	---
TEB	TL1016	1A	1A	19TEB+13.59	51.04	RT	632.74	INLETS 2x2.5-FT	V	9.64	---	1A	TL1016	TL1101	623.10	620.08	2.50 %	121	III	15	---
TEB	TL1017	1A	1A	17TEB+86.14	57.06	RT	636.73	INLETS 4-FT DIAMETER	V	6.39	---	1A	TL1017	TL1013	630.34	630.28	0.50 %	11	III	12	---
TEB	TL1019	1A	1A	18TEB+74.77	2.94	RT	632.92	INLETS 4-FT DIAMETER	V	7.10	---	1A	TL1019	TL1014	625.83	625.71	0.50 %	23	III	12	---
TEB	TL1021	1A	1A	18TEB+74.77	5.06	LT	632.71	INLETS 2x2.5-FT	V	6.84	---	1A	TL1021	TL1019	625.87	625.83	0.50 %	8	III	12	---
TEB	TL1022	1A	1A	19TEB+20.23	2.94	RT	631.08	INLETS 4-FT DIAMETER	V	6.72	---	1A	TL1022	TL1023	624.36	624.25	0.50 %	23	III	12	---
TEB	TL1023	1A	1A	19TEB+14.71	25.09	RT	632.15	INLETS 2x2.5-FT	V	7.90	---	1A	TL1023	TL1016	624.25	624.12	0.50 %	26	III	12	---
TEB	TL1025	1A	1A	19TEB+20.05	5.06	LT	630.77	INLETS 2x2.5-FT	V	6.37	---	1A	TL1025	TL1022	624.40	624.36	0.50 %	8	III	12	---
TEB	TL1029	1B	1B	20TEB+37.61	8.77	LT	626.95	INLETS 2x2.5-FT	V	6.27	---	1B	TL1029	TL1030	620.68	620.62	0.50 %	12	III	12	---
TEB	TL1030	1A	1A	20TEB+37.41	2.94	RT	627.47	INLETS 4-FT DIAMETER	V	7.07	---	1A	TL1030	TL1032	620.62	620.44	0.50 %	36	III	12	---
TEB	TL1032	1A	1A	20TEB+31.99	38.07	RT	629.46	INLETS 2x2.5-FT	V	9.26	---	1A	TL1032	TL1101	620.44	620.33	0.50 %	23	III	12	---
TEB	TL1034	1A	1A	21TEB+80.48	2.94	RT	625.32	INLETS 4-FT DIAMETER	V	7.27	PIER 3 FLOOR DRAIN DOWNSPOUT CONNECTION	1B	TL1034	TL1037	618.06	618.00	0.50 %	11	III	12	---
TEB	TL1037	1B	1B	21TEB+78.10	8.00	LT	624.85	INLETS 4-FT DIAMETER	V	6.85	---	2	TL1037	TL3021	618.00	617.88	0.50 %	24	III	12	---
TEB	TL1038	1B	1B	22TEB+33.13	6.22	LT	624.28	INLETS 2x2.5-FT	V	7.00	---	1B	TL1038	TL1039	617.28	616.66	1.00 %	62	III	12	---
TEB	TL1039	1A	1A	22TEB+94.50	2.94	RT	623.22	INLETS 4-FT DIAMETER	V	6.68	---	1A	TL1039	TL2002	616.66	615.59	2.00 %	54	III	12	---
TEB	TL1040	1A	1A	24TEB+48.76	42.84	RT	617.39	CATCH BASINS 5-FT DIAMETER	V	8.60	---	1A	TL1040	TL1056	608.80	608.62	1.00 %	18	III	30	---
TEB	TL1044	1A	1A	22TEB+42.44	63.00	RT	622.12	INLETS MEDIAN 2 GRATE	2G-MS	10.58	---	1A	TL1044	TL1048	611.54	610.61	1.00 %	93	III	24	---
TEB	TL1048	1A	1A	23TEB+32.50	62.50	RT	618.52	INLETS MEDIAN 2 GRATE	2G-MS	7.91	---	1A	TL1048	TL1052	610.61	609.44	1.00 %	117	III	24	---
TEB	TL1052	1A	1A	24TEB+50.00	57.11	RT	614.09	MANHOLES 6-FT DIAMETER	C	5.15	---	1A	TL1052	TL1040	608.94	608.80	1.00 %	14	III	30	---
TEB	TL1056	1B	1B	24TEB+46.29	24.98	RT	617.89	MANHOLES 7-FT DIAMETER	J	9.27	---	1B	TL1056	TL1060	608.62	608.38	0.30 %	81	IV	30	LESS THAN 2' COVER FROM TEB SUBGRADE
TEB	TL1060	1B	1B	25TEB+28.21	34.93	RT	615.38	MANHOLES 5-FT DIAMETER	J	7.00	---	1B	TL1060	TL2008	608.38	608.34	0.30 %	11	IV	30	LESS THAN 2' COVER FROM TEB SUBGRADE
TLC	TL1101	1A	1A	20TLC+32.44	6.06	RT	629.69	INLETS 2x2.5-FT	V	9.61	---	1A	TL1101	TL1105	620.08	615.85	2.50 %	169	III	15	---
TLC	TL1105	1A	1A	22TLC+01.38	6.06	RT	627.61	INLETS 4-FT DIAMETER	V	15.23	---	1A	TL1105	TL1107	612.38	612.15	1.00 %	23	III	24	---
TLC	TL1107	1A	1A	22TLC+01.38	17.06	LT	627.36	INLETS 4-FT DIAMETER	V	15.22	---	1A	TL1107	TL2003	612.15	612.06	1.00 %	8	III	24	---
TLC	TL1109	1A	1A	23TLC+57.40	17.06	LT	628.51	INLETS 2x2.5-FT	V	11.61	---	1A	TL1109	TL1048	616.90	614.81	4.00 %	52	III	15	---
TLC	TL1112	1A	1A	24TLC+30.21	19.57	LT	630.00	INLETS 2x2.5-FT	V	7.10	---	1A	TL1112	TL2004	622.90	622.02	2.50 %	35	III	15	---
TLC	TL1113	1A	1A	24TLC+96.90	27.31	LT	631.27	INLETS 2x2.5-FT	V	6.69	---	1A	TL1113	TL2005	624.59	623.78	3.00 %	27	III	15	---
TLC	TL1114	1A	1A	21TLC+50.00	44.91	RT	617.33	MANHOLES 4-FT DIAMETER	C	4.30	---	1A	TL1114	1117	613.03	612.85	1.00 %	25	III	24	---
TML	TL2001	2	2	212TML+62.27	2.46	RT	652.81	MANHOLES 4-FT DIAMETER	J	9.15	---	2	TL2001	TL3000	643.66	643.36	4.81 %	6	III	18	---
TEB	TL2002	1A	1A	23TEB+31.86	41.49	RT	621.96	MANHOLES 4-FT DIAMETER	J	6.38	---	1A	TL2002	TL1048	615.59	615.06	2.50 %	21	III	12	---
TEB	TL2003	1A	1A	21TEB+92.55	64.18	RT	626.35	MANHOLES 4-FT DIAMETER	J	14.28	---	1A	TL2003	TL1044	612.06	611.54	1.00 %	52	III	24	---
TLC	TL2004	1A	1A	23TLC+92.83	17.24	LT	629.29	MANHOLES 4-FT DIAMETER	J	7.26	---	1A	TL2004	TL1109	622.02	621.52	1.50 %	33	III	15	---
TLC	TL2005	1A	1A	24TLC+67.87	23.35	LT	630.60	MANHOLES 4-FT DIAMETER	J	6.82	---	1A	TL2005	TL1112	623.78	622.90	2.50 %	35	III	15	---
TML	TL2008	1B	1B	225TML+31.70	41.41	RT	615.16	MANHOLES 6-FT DIAMETER	J	7.82	---	1B	TL2008	E593	607.34	607.32	0.20 %	13	IV	42	LESS THAN 2' COVER FROM TEB SUBGRADE
TML	TL3000	2	2	212TML+68.63	3.30	RT	652.72	MANHOLES 5-FT DIAMETER	VV-B	9.37	---	2	TL3000	TL3004	643.36	637.99	4.81 %	111	III	18	---
TML	TL3001	2	2	212TML+68.19	24.43	RT	653.55	INLETS 2x2.5-FT	V	7.14	CONSTRUCT UNDER CLOSURE	2	TL3001	TL3000	646.40	646.30	0.50 %	21	III	12	---
TML	TL3003	2	2	213TML+80.19	4.27	LT	649.86	MANHOLES 4-FT DIAMETER	J	9.76	---	2	TL3003	TL3004	640.10	639.94	2.00 %	8	III	12	---
TML	TL3003.1	2	2	213TML+80.45	36.81	LT	649.16	INLETS 2x2.5-FT	V	5.36	---	---	---	---	---	---	---	---	---	---	---
TML	TL3004	2	2	213TML+80.12	3.41	RT	649.98	MANHOLES 5-FT DIAMETER	VV-B	12.49	---	2	TL3004	TL3008	637.49	632.64	3.25 %	149	III	24	---

*TOP OF SLAB ELEVATION

STORM SEWER STRUCTURES											STORM SEWER PIPES								
ROADWAY	STRUCTURE NO.	STRUCTURE STAGE	COVER STAGE	STATION	OFFSET (FT)	LOCATION	RIM ELEV	STRUCTURE TYPE	INLET/MANHOLE COVERS TYPE	STRUCTURE DEPTH (FT)	STRUCTURE COMMENTS	PIPE STAGE	FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE	PLAN LENGTH (FT)	PIPE CLASS	PIPE SIZE (INCH)	PIPE COMMENTS
TML	TL3005	2	2	213TML+79.83	26.76	RT	650.42	INLETS 2x2.5-FT	V	6.72	CONSTRUCT UNDER CLOSURE	2	TL3005	TL3004	643.70	643.58	0.50 %	23	III	12	---
TML	TL3007	2	2	215TML+30.60	5.96	LT	645.37	INLETS 4-FT DIAMETER	V	7.57	---	2	TL3007	TL3008	637.80	637.41	4.00 %	10	III	18	---
TML	TL3007.1	2	2	215TML+30.12	30.69	LT	645.41	INLETS 2x2.5-FT	V	6.62	CONSTRUCT UNDER CLOSURE	2	TL3007.1	TL3007	638.79	637.80	4.00 %	25	III	18	---
TML	TL3008	2	2	215TML+29.21	3.57	RT	645.47	MANHOLES 5-FT DIAMETER	VV-B	12.83	---	2	TL3008	TL3010	632.64	630.62	2.00 %	101	III	24	---
TML	TL3010	2	2	216TML+30.27	3.68	RT	642.41	MANHOLES 4-FT DIAMETER	J	11.90	---	2	TL3010	TL3012	630.62	628.71	2.00 %	96	III	24	---
TML	TL3010.1	2	2	216TML+30.21	7.08	LT	642.39	INLETS 2x2.5-FT	V	6.39	---	2	TL3010.1	TL3010.2	635.99	635.94	1.00 %	5	III	12	---
TML	TL3010.2	2	2	216TML+30.23	2.14	LT	642.39	INLETS 2x2.5-FT	V	6.45	---	2	TL3010.2	TL3010	635.94	635.88	1.00 %	6	III	12	---
TML	TL3011	2	2	217TML+29.74	8.37	LT	639.33	INLETS 2x2.5-FT	V	7.80	---	2	TL3011	TL3012	631.53	631.27	2.00 %	13	III	12	---
TWB	TL3011.1	2	2	117TWB+28.29	14.42	LT	639.42	INLETS 2x2.5-FT	V	5.68	CONSTRUCT UNDER CLOSURE	---	---	---	--	---	---	---	---	---	---
TML	TL3012	2	2	217TML+26.04	3.82	RT	639.55	MANHOLES 5-FT DIAMETER	VV-B	10.84	---	2	TL3012	TL3015	628.71	624.19	3.00 %	151	III	24	---
TML	TL3015	2	2	218TML+76.76	4.20	RT	635.01	MANHOLES 5-FT DIAMETER	VV-B	10.82	---	2	TL3015	TL3016	624.19	617.88	3.00 %	210	III	24	---
TML	TL3015.1	2	2	218TML+76.59	5.90	LT	635.19	INLETS 2x2.5-FT	V	6.65	---	2	TL3015.1	TL3015	628.54	628.49	0.50 %	10	III	12	---
TML	TL3015.2	2	2	218TML+76.38	18.54	LT	634.87	INLETS 2x2.5-FT	V	6.26	CONSTRUCT UNDER CLOSURE	2	TL3015.2	TL3015.1	628.61	628.54	0.50 %	13	III	12	---
TML	TL3016	2	2	220TML+86.71	4.25	RT	627.65	MANHOLES 5-FT DIAMETER	VV-B	10.27	---	2	TL3016	TL3020	617.38	615.39	2.75 %	72	III	30	---
TML	TL3017	3	3	221TML+16.26	50.08	LT	626.85	INLETS 4-FT DIAMETER	V	6.00	---	3	TL3017	TL3019	620.85	620.61	0.50 %	47	IV	12	LESS THAN 2' COVER FROM TWB SUBGRADE
TML	TL3018	2	2	221TML+63.76	7.20	LT	626.59	INLETS 4-FT DIAMETER	V	7.37	---	2	TL3018	TL3020	619.22	619.10	1.00 %	12	III	15	---
TML	TL3018.1	2	2	221TML+63.76	23.79	LT	626.35	MANHOLES 5-FT DIAMETER	VV-B	6.96	CONSTRUCT UNDER CLOSURE	2	TL3018.1	TL3018	619.39	619.22	1.00 %	17	III	15	---
TML	TL3019	3	3	221TML+63.75	47.56	LT	625.56	MANHOLES 4-FT DIAMETER	J	4.94	---	---	---	---	--	---	---	---	---	---	---
TML	TL3020	2	2	221TML+58.93	4.19	RT	625.99	MANHOLES 5-FT DIAMETER	VV-B	10.60	---	2	TL3020	TL3024	615.39	612.99	2.00 %	120	III	30	---
TML	TL3021	2	2	221TML+65.12	24.19	RT	627.29	INLETS 4-FT DIAMETER	V	9.41	---	2	TL3021	TL3020	617.88	617.78	0.50 %	21	III	12	---
TML	TL3022.1	3	3	222TML+78.47	52.67	LT	622.68	INLETS 2x2.5-FT	V	4.90	---	---	---	---	---	---	---	---	---	---	---
TML	TL3022.2	3	3	222TML+78.38	56.54	LT	622.78	INLETS 2x2.5-FT	V	4.92	---	3	TL3022.2	TL3022.1	617.86	617.78	2.00 %	4	IV	12	LESS THAN 2' COVER FROM TWB SUBGRADE
TML	TL3023	2	2	222TML+78.61	12.37	LT	622.90	INLETS 2x2.5-FT	V	6.64	---	2	TL3023	TL3025	616.26	616.14	1.00 %	12	III	12	---
TML	TL3024	2	2	222TML+78.82	3.80	RT	622.96	MANHOLES 5-FT DIAMETER	VV-B	9.97	---	2	TL3024	TL3025	612.99	612.63	2.50 %	14	III	30	---
TML	TL3024.1	2	2	222TML+79.04	15.46	RT	623.41	INLETS 2x2.5-FT	V	6.82	---	2	TL3024.1	TL3024	616.60	616.54	0.50 %	12	III	12	---
TML	TL3025	2	2	222TML+89.02	6.47	LT	622.52	MANHOLES 5-FT DIAMETER	VV-B	9.89	---	2	TL3025	TL3028	612.63	609.78	2.75 %	104	III	30	---
TML	TL3027	2	2	223TML+93.07	9.55	LT	619.46	INLETS 2x2.5-FT	V	6.41	---	2	TL3027	TL3028	613.05	613.02	0.50 %	6	III	12	---
TML	TL3028	2	2	223TML+92.89	3.48	LT	619.48	MANHOLES 5-FT DIAMETER	VV-B	9.70	---	2	TL3028	TL3032	609.78	608.71	2.50 %	43	III	30	---
TML	TL3030	2	2	222TML+78.54	34.39	LT	623.00	INLETS 4-FT DIAMETER	V	5.32	CONSTRUCT UNDER CLOSURE	---	---	---	--	---	---	---	---	---	---
TML	TL3032	2	2	224TML+35.03	2.53	RT	618.29	CATCH BASINS 5-FT DIAMETER	V	9.58	---	2	TL3032	TL3034	608.71	608.54	2.50 %	7	III	30	---
TML	TL3034	2	2	224TML+40.94	6.32	RT	618.13	MANHOLES 5-FT DIAMETER	J	9.59	---	---	---	---	---	---	---	---	---	---	---

*TOP OF SLAB ELEVATION

DRAIN SLOTTED VANE (PERMANENT)

STAGE	ROADWAY	STATION UPSTREAM END	OFFSET UPSTREAM END	CONNECT TO STORM SEWER STRUCTURE	SPV.0090.8002 DRAIN SLOTTED VANE PERMANENT LF
2	MAINLINE INTERIM 94WB				
		113TWB+80.23	0' LT	TL3007	150
		115TWB+30.65	0' LT	TL3010.1	100
		116TWB+30.26	0' LT	TL3011	100
		120TWB+91.77	0' LT	TL3023	186
		123TWB+91.58	0' LT	TL3027	114
		111TWB+35.71	5.73' RT	TL3000	133
		212TML+68.63	3.30' RT	TL3004	111
		213TML+80.12	3.41' RT	TL3008	149
		215TML+29.21	3.57' RT	TL3010	101
		216TML+30.27	3.68' RT	TL3012	96
		217TML+26.04	3.82' RT	TL3015	151
		218TML+76.76	4.20' RT	TL3016	210
		220TML+86.71	4.25' RT	TL3020	72
		221TML+58.93	4.19' RT	TL3024	120
SUBTOTAL					1,793
TOTAL					1,793

3

3

SEALING STORM STRUCTURE

STAGE	ROADWAY	STATION	OFFSET	SPV.0060.8005 SEALING STORM STRUCTURE EACH
3	RAMPS			
	RAMP TJD			
		100TJD+17.24	11.56' LT	1
	SUBTOTAL			1
3	LOCAL ROADS			
	ST. PAUL AVENUE			
		12SP+19.77	5.32' RT	2
		13SP+28.76	5.17' RT	1
		14SP+21.24	5.39' LT	1
		17SP+25.75	5.38' LT	2
		18SP+18.63	6.94' LT	1
	TEMPORARY ST. PAUL AVENUE			
		219TSP+39.18	0.07' LT	1
	28TH STREET			
		10J+51.84	0.58' RT	1
		11J+50.43	0.26' RT	1
	27TH STREET			
		25KS+66.86	4.87' LT	1
		27KN+17.67	0.14' LT	2
	SUBTOTAL			13
	TOTAL			14

COVER PLATE TEMPORARY

STAGE	ROADWAY	STRUCTURE ID	STATION	OFFSET	611.8120.S COVER PLATES TEMPORARY EACH	NOTES
2	MAINLINE					
	INTERIM 94WB					
		TL1011	17TEB+16.65	45.06' RT	1	INSTALL STAGE 1A UNTIL STAGE 4
		TL1013	17TEB+86.45	46.37' RT	1	INSTALL STAGE 1A UNTIL STAGE 4
		TL1014	18TEB+61.69	21.37' RT	1	INSTALL STAGE 1A UNTIL STAGE 4
		TL1015	17TEB+57.01	49.47' RT	1	INSTALL STAGE 1A UNTIL STAGE 4
		TL1016	19TEB+13.59	51.04' RT	1	INSTALL STAGE 1A UNTIL STAGE 4
		TL1023	19TEB+14.71	25.09' RT	1	INSTALL STAGE 1A UNTIL STAGE 4
		TL1032	20TEB+31.99	38.07' RT	1	INSTALL STAGE 1A UNTIL STAGE 4
		TL3012	217TML+26.04	3.82' RT	1	INSTALL STAGE 2 UNTIL STAGE 4
		TL3015	218TML+76.76	4.20' RT	1	INSTALL STAGE 2 UNTIL STAGE 4
		TL3016	220TML+86.71	4.25' RT	1	INSTALL STAGE 2 UNTIL STAGE 4
		TL3020	221TML+58.93	4.19' RT	1	INSTALL STAGE 2 UNTIL STAGE 4
		TL3024	222TML+78.82	3.80' RT	1	INSTALL STAGE 2 UNTIL STAGE 4
	SUBTOTALS				12	
	TOTALS				12	

3

COVER PLATES LEFT IN PLACE

STAGE	ROADWAY	STRUCTURE ID	STATION	OFFSET	FUTURE CASTING	TOP OF SLAB ELEVATION	SPV.0060.8007 COVER PLATES LEFT IN PLACE EACH	NOTES
1A	MAINLINE FINAL IH 94 CONDITION							
		667	216TML+10.86	97.21' RT	VV-B	634.72	1	
		679	218TML+69.98	70.51' RT	VV-B	628.94	1	
		699	220TML+23.65	57.44' RT	VV-B	624.60	1	
		700	220TML+51.98	60.40' RT	J	623.69	1	
		701	221TML+49.69	58.67' RT	J	620.28	1	
		719	221TML+63.76	54.42' RT	VV-B	619.80	1	
	SUBTOTALS						6	
1B	MAINLINE FINAL IH 94 CONDITION							
		731	223TML+11.35	55.00' RT	VV-B	614.936	1	
	SUBTOTALS						1	
4	MAINLINE TEMPORARY 94EB							
		TL1017	17TEB+86.14	57.06' RT	V	635.48	1	
	SUBTOTALS						1	
4	MAINLINE RAMP LC							
		216	1008R-40-767-ELA+80.05	55.81' LT	V	624.00	1	
		221	1007R-40-767-ELA+95.63	48.73' LT	J	622.51	1	
		224	1007R-40-767-ELA+95.63	2.69' LT	V	624.73	1	
		226	1007R-40-767-ELA+46.03	44.98' LT	V	621.88	1	
		228	1007R-40-767-ELA+19.84	40.76' LT	V	621.72	1	
		232	1006R-40-767-ELA+92.20	35.88' LT	V	621.98	1	
		236	1006R-40-767-ELA+51.88	26.90' LT	J	622.47	1	
		248	1005R-40-767-ELA+26.38	26.81' LT	V	624.31	1	
		256	1003R-40-767-ELA+41.79	2.69' LT	V	628.88	1	
		260	1003R-40-767-ELA+41.79	26.81' LT	V	629.51	1	
		262	1001R-40-767-ELA+45.96	26.81' LT	J	636.08	1	
		264	1001R-40-767-ELA+45.96	2.69' LT	V	635.67	1	
	SUBTOTALS						12	
	TOTALS						20	

EMERGENCY PAVEMENT REPAIR ITEMS

STAGE	LOCATION	* 204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	* 390.0100 REMOVING PAVEMENT FOR BASE PATCHING CY	390.0201 BASE PATCHING ASPHALTIC TON	* 416.0610 DRILLED TIE BARS EACH	* 416.0620 DRILLED DOWEL BARS EACH	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	450.1100.S ASPHALTIC MIXTURE FOR EXTREME CONDITIONS TON	* 455.0605 TACK COAT GAL	* 460.6224 HMA PAVEMENT 4 MT 58-28 S TON	* 465.0125 ASPHALTIC SURFACE TEMPORARY TON	495.1000.S COLD PATCH TON	* 690.0105 SAWING ASPHALT LF	* 690.0250 SAWING CONCRETE LF	SPV.0060.0556 EMERGENCY RESPONSE TO PAVEMENT REPAIR EACH	SPV.0195.0443 HMA LONGITUDINAL JOINT REPAIR TON	SPV.0195.0444 HMA TRANSVERSE JOINT REPAIR TON
ALL	PROJECT 1060-27-74	1000	2,500	500	100	370	230	360	10	50	1,070	500	200	100	3,200	550	10	50	25
	TOTALS	1,000	2,500	500	100	370	230	360	10	50	1,070	500	200	100	3,200	550	10	50	25

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TEMPORARY SHORING ITEMS

STAGE	LOCATION	STATION	TO	STATION	OFFSET	511.1200.0010 TEMPORARY SHORING (R-40-10) SF	511.2200.0057 TEMPORARY SHORING LEFT IN PLACE (B-40-57) SF	511.2300.0001 TEMPORARY SHORING LEFT IN PLACE (IH 94 EB) SF	511.2300.0002 TEMPORARY SHORING LEFT IN PLACE (IH 94 WB) SF
1	IH 94 EB	15TEB+48	-	20TEB+12	RT	3,420	--	--	--
1	IH 94 EB	17TEB+90	-	22TEB+64	RT	--	--	3,300	--
1	RAMP LC	24TEB+30	-	25TEB+11	RT	--	1,000	--	--
4	IH 94 WB	218TWB+75	-	222TWB+57	RT	--	--	--	900
					TOTALS	3,420	1,000	3,300	900

CATEGORY 1000 UNLESS OTHERWISE NOTED

TEMPORARY BARRIER AND CRASH CUSHION ITEMS

STAGE	LOCATION	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF	603.8500 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST LF	614.0905 CRASH CUSHIONS TEMPORARY EACH	SPV.0060.0552 CRASH CUSHIONS TEMPORARY LOW MAINTENANCE LEFT IN PLACE EACH	SPV.0060.0572 THRIE BEAM CONNECTION TO CONCRETE BARRIER TEMPORARY PRECAST EACH	SPV.0090.0701 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE LF	SPV.0090.0702 CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE LF	BACK WIDTH FT**	OBJECT MARKING PATTERN**	CRASH TEST LEVEL**	DIRECTION OF TRAVEL**	TRAFFIC LOCATION**	CRASH CUSHION SHIELDS**
1A															
	IH 94 EB	1,800	1,800	350	--	1	--	--	--	2	OM-3R	TL-3	UNIDIRECTIONAL	L	TEMP CONC BARRIER
	N. 27TH ST.	112.5	112.5	--	--	--	--	--	--	--	--	--	--	--	--
	S. 27TH ST.	50.0	50.0	--	--	--	--	--	--	--	--	--	--	--	--
1B															
	IH 94 EB	75	1,875	50	--	--	--	--	--	--	--	--	--	--	--
2															
	IH 94 EB	2,850	4,250	500	3	--	1	975	1,850	2;2;4	OM-3R;OM-3R; OM-3L	TL-3	UNIDIRECTIONAL	L;L; R	TEMP CONC BARRIER
	IH 94 WB	1,450	1,450	800	1	--	--	--	--	2	OM-3L	TL-3	UNIDIRECTIONAL	R	TEMP CONC BARRIER
3A															
	IH 94 WB	975	2,425	--	1	--	--	--	--	2	OM-3R	TL-3	UNIDIRECTIONAL	L	TEMP CONC BARRIER
3B															
	IH 94 WB	--	350	--	--	--	--	--	--	--	--	--	--	--	--
4															
	IH 94 WB	--	1,375	575	--	--	--	--	--	--	--	--	--	--	--
FINAL															
	IH 94 EB	2,000.0	2,812.5	--	--	1	--	987.5	2,812.5	2	OM-3C	TL-3	UNIDIRECTIONAL	L & R	TEMP CONC BARRIER
	IH 94 WB	--	575	--	--	1	--	525	575	2	OM-3R	TL-3	UNIDIRECTIONAL	L	TEMP CONC BARRIER
	N. 27TH ST.	--	62.5	--	--	--	--	62.5	62.5	--	--	--	--	--	--
	TOTALS	9,312.5	17,137.5	2,275.0	5	3	1	2,550.0	5,300.0						

** FOR INFORMATION PURPOSES ONLY

TRAFFIC CONTROL FENCING ITEMS

ROADWAY	616.0700.S FENCE SAFETY LF	SPV.0090.0703 FENCE TEMPORARY 6-FOOT LF
IH 94	9	175
TOTAL	9	175

CATEGORY 1000 UNLESS OTHERWISE NOTED

TRAFFIC CONTROL ITEMS

STAGE	LOCATION	STAGE DURATION DAYS	* 638.2102 MOVING SIGNS TYPE II EACH	* 643.0300 TRAFFIC CONTROL DRUMS EACH**	DAY	* 643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH**	DAY	* 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH**	DAY	* 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH**	DAY	* 643.0810.S CONNECTED ARROW BOARD EACH**	DAY	* 643.0900 TRAFFIC CONTROL SIGNS EACH**	DAY	* 643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	** NUMBER OF CYCLES	** NUMBER OF SIGNS	* 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	** NUMBER OF CYCLES	** NUMBER OF SIGNS	* 643.1050 TRAFFIC CONTROL SIGNS PCMS EACH**	DAY	* 643.1220.S CONNECTED WORK ZONE START AND END LOCATION MARKERS EACH**	DAY
1A		45																							
	IH 94 EB		--	4	180	--	--	--	--	--	--	--	--	29	1,305	5	1	5	--	--	--	--	--	1	45
	RAMP LC		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	N. 27TH ST		--	14	630	11	495	22	990	8	360	1	45	29	1,305	--	--	--	3	1	3	--	--	--	--
	S. 27TH ST		--	11	495	12	540	24	1,080	8	360	1	45	24	1,080	--	--	--	3	1	3	--	--	--	--
	GREVES ST		--	--	--	2	90	4	180	--	--	--	--	8	360	--	--	--	--	--	--	--	--	--	--
1B		75																							
	IH 94 EB		--	60	4,500	2	150	4	300	13	975	--	--	29	2,175	--	--	--	--	--	--	--	--	1	75
	RAMP GB		--	14	630	7	315	14	630	6	270	--	--	29	1,305	--	--	--	11	1	11	1	7	--	--
	N. 27TH ST		--	14	1,050	11	825	22	1,650	8	600	1	75	29	2,175	6	1	6	--	--	--	--	--	--	--
	S. 27TH ST		--	11	825	12	900	24	1,800	8	600	1	75	24	1,800	3	1	3	--	--	--	--	--	--	--
	GREVES ST		--	--	--	2	150	4	300	--	--	--	--	8	600	--	--	--	--	--	--	--	--	--	--
2		30																							
	IH 94 EB		--	120	3,600	5	150	10	300	13	390	--	--	22	660	--	--	--	--	--	--	--	--	1	30
	IH 94 WB		--	42	1,260	3	90	6	180	--	--	--	--	4	120	--	--	--	--	--	--	--	--	1	30
	RAMP GB		--	14	630	7	315	14	630	6	270	--	--	29	1,305	--	--	--	--	--	--	1	7	--	--
	RAMP JD		--	58	1,740	13	390	26	780	15	450	1	30	34	1,020	--	--	--	31	1	31	1	7	1	30
	STH 175 SB		--	86	2,580	9	270	18	540	68	2,040	1	30	41	1,230	5	1	5	--	--	--	--	--	1	30
	N. 27TH ST		--	14	420	11	330	22	660	8	240	1	30	29	870	--	--	--	--	--	--	--	--	--	--
	S. 27TH ST		--	11	330	12	360	24	720	8	240	1	30	24	720	--	--	--	--	--	--	--	--	--	--
	N. JACKSON ST		--	13	390	--	--	--	--	5	150	--	--	7	210	--	--	--	--	--	--	--	--	--	--
	GREVES ST		--	--	--	2	60	4	120	--	--	--	--	8	240	--	--	--	--	--	--	--	--	--	--
3A		90																							
	IH 94 EB		--	120	10,800	5	450	10	900	13	1,170	--	--	22	1,980	--	--	--	--	--	--	--	--	1	90
	IH 94 WB		--	18	1,620	1	90	2	180	--	--	--	--	9	810	--	--	--	--	--	--	--	--	1	90
	STH 175 SB		--	86	7,740	9	810	18	1,620	68	6,120	1	90	41	3,690	--	--	--	--	--	--	--	--	1	90
	S. 27TH ST		--	11	990	12	1,080	24	2,160	8	720	1	90	24	2,160	--	--	--	--	--	--	--	--	--	--
	N. JACKSON ST		--	13	1,170	--	--	--	--	5	450	--	--	7	630	--	--	--	--	--	--	--	--	--	--
	GREVES ST		--	--	--	2	180	4	360	--	--	--	--	8	720	--	--	--	--	--	--	--	--	--	--
		60																							
	W. ST. PAUL AVE		--	112	6,720	38	2,280	76	4,560	14	840	--	--	54	3,240	2	1	2	3	1	3	--	--	2	120
	N. 27TH ST		--	26	1,560	14	840	28	1,680	18	1,080	1	60	25	1,500	--	--	--	4	1	4	--	--	2	120
	RAMP JD		--	--	--	5	300	10	600		--	--	--	2	120	--	--	--	--	--	--	--	--	--	--
3B		30																							
	W. ST. PAUL AVE		--	74	2,220	17	510	34	1,020	5	150	--	--	24	720	--	--	--	--	--	--	--	--	2	60
	N. 27TH ST		--	23	690	17	510	34	1,020	8	240	1	30	26	780	--	--	--	4	1	4	--	--	2	60
	RAMP JD		--	9	270	5	150	10	300	--	--	--	--	2	60	--	--	--	--	--	--	--	--	--	--
4		45																							
	IH 94 EB		--	120	5,400	5	225	10	450	13	585	--	--	22	990	--	--	--	--	--	--	--	--	1	45
	IH 94 WB		--	16	720	1	45	2	90	--	--	--	--	8	360	--	--	--	--	--	--	--	--	1	45
	RAMP GB		--	14	630	7	315	14	630	6	270	--	--	29	1,305	--	--	--	11	1	11	1	7	--	--
	RAMP JD		--	58	2,610	13	585	26	1,170	15	675	1	45	34	1,530	--	--	--	31	1	31	1	7	1	45

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
** FOR INFORMATION PURPOSES ONLY

CATEGORY 1000 UNLESS OTHERWISE NOTED

3

TRAFFIC CONTROL ITEMS (CONTINUED)

STAGE	LOCATION	STAGE DURATION DAYS	* 638.2102 MOVING SIGNS TYPE II EACH	* 643.0300 TRAFFIC CONTROL DRUMS EACH**	DAY	* 643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH**	DAY	* 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH**	DAY	* 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH**	DAY	* 643.0810.S CONNECTED ARROW BOARD EACH**	DAY	* 643.0900 TRAFFIC CONTROL SIGNS EACH**	DAY	* 643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	** NUMBER OF CYCLES	** NUMBER OF SIGNS	* 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	** NUMBER OF CYCLES	** NUMBER OF SIGNS	* 643.1050 TRAFFIC CONTROL SIGNS PCMS EACH**	DAY	* 643.1220.S CONNECTED WORK ZONE START AND END LOCATION MARKERS EACH**	DAY
4		45																							
	STH 175 SB		--	86	3,870	9	405	18	810	68	3,060	1	45	41	1,845	--	--	--	--	--	--	--	--	1	45
	N. 27TH ST		--	14	630	11	495	22	990	8	360	1	45	29	1,305	--	--	--	3	1	3	--	--	--	--
	S. 27TH ST		--	11	495	12	540	24	1,080	8	360	1	45	24	1,080	--	--	--	3	1	3	--	--	--	--
	N. JACKSON ST		--	13	585	--	--	--	--	5	225	--	--	7	315	--	--	--	--	--	--	--	--	--	--
	GREVES ST		--	--	--	2	90	4	180	--	--	--	--	8	360	--	--	--	--	--	--	--	--	--	--
5																									
	IH 94 EB	14	--	268	3,752	36	504	118	1,652	72	1,008	3	42	86	1,204	--	--	--	--	--	--	3	42	4	56
	IH 94 WB	14	--	338	4,732	44	616	178	2,492	88	1,232	4	56	103	1,442	--	--	--	--	--	--	4	56	6	84
	UNDISTRIBUTED		5		7,686		1,700		3,546		2,560		162		4,694	4	1	4	18	1	18		27		85
		TOTALS	5		84,150		18,150		38,350		28,050		1,070		51,320	25			125				160		1,275

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
** FOR INFORMATION PURPOSES ONLY

TRAFFIC CONTROL (DETOUR) ITEMS

STAGE	LOCATION	STAGE DURATION DAYS	* 638.2102 MOVING SIGNS TYPE II EACH	* 643.0300 TRAFFIC CONTROL DRUMS EACH**	DAY	643.0410 TRAFFIC CONTROL BARRICADES TYPE II EACH**	DAY	* 643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH**	DAY	* 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH**	DAY	* 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH**	DAY	* 643.0810.S CONNECTED ARROW BOARDS EACH**	DAY	* 643.0900 TRAFFIC CONTROL SIGNS EACH**	DAY	* 643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	** NUMBER OF CYCLES	** NUMBER OF SIGNS	* 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	** NUMBER OF CYCLES	** NUMBER OF SIGNS	* 643.1050 TRAFFIC CONTROL SIGNS PCMS EACH**	DAY
ALL	27TH STREET VIADUCT CLOSED	315	4	47	14,805	--	--	15	4,725	35	11,025	--	--	2	630	297	93,555	--	--	--	72	1	72	2	630
	27TH STTREET VIADUCT SECONDARY	30	--	--	--	--	--	--	--	--	--	--	--	--	--	72	2,160	--	--	--	--	--	--	--	--
2,3,4	STH 175 SB TO IH 94 EB CLOSED	172	--	86	14,792	--	--	14	2,408	58	9,976	--	--	1	172	120	20,640	--	--	--	--	--	--	2	344
1B, 2, 4	35TH STREET ENTRANCE TO 1-94 EB CLOSED	150	--	19	2,850	--	--	6	900	6	900	--	--	--	--	77	11,550	--	--	--	--	--	--	1	150
1A, 1B	I-94 EB EXIT TO 26TH STREET CLOSED	90	--	--	--	--	--	--	--	--	--	--	--	--	--	30	2,700	--	--	--	40	1	40	--	--
3, 4	28TH STREET ENTRANCE TO I-94 WB CLOSED	135	--	70	9,450	--	--	13	1,755	13	1,755	--	--	1	135	157	21,195	--	--	--	--	--	--	1	135
3A	IH 43 NB TO IH 94 WB CLOSED	14	--	224	3,136	--	--	15	210	66	924	77	1,078	2	28	58	812	2	1	2	7	1	7	7	98
ALL	MITCHELL PARK DOMES AND POTAWATOMI	315	--	--	--	--	--	13	4,095	--	--	--	--	--	--	34	10,710	--	--	--	--	--	--	--	--
1A, 1B	POTAWATOMI CASINO	90	--	--	--	--	--	--	--	--	--	--	--	--	--	32	2,880	--	--	--	--	--	--	--	--
1	FULL EASTBOUND FREEWAY CLOSURE	5	--	331	1,655	--	--	39	195	140	700	--	--	8	40	200	1,000	--	--	--	--	--	--	11	55
2,3,4	FULL EASTBOUND FREEWAY CLOSURE	15	--	--	--	--	--	--	--	--	--	--	--	--	--	138	2,070	--	--	--	--	--	--	--	--
5	FULL EASTBOUND FREEWAY CLOSURE	3	--	331	993	--	--	39	117	140	420	--	--	8	24	200	600	--	--	--	--	--	--	11	33
1	FULL WESTBOUND FREEWAY CLOSURE	5	--	448	2,240	--	--	54	270	170	850	--	--	3	15	170	850	--	--	--	--	--	--	9	45
2,3,4	FULL WESTBOUND FREEWAY CLOSURE	15	--	--	--	--	--	--	--	--	--	--	--	--	--	146	2,190	--	--	--	--	--	--	--	--
5	FULL WESTBOUND FREEWAY CLOSURE	3	--	448	1,344	--	--	54	162	170	510	--	--	3	9	170	510	--	--	--	--	--	--	9	27
ALL	27TH STREET VIADUCT CLOSED - PEDESTRIAN	315	--	--	--	14	4,410	--	--	--	--	--	--	--	--	24	7,560	--	--	--	--	--	--	--	--
3, 4	ST. PAUL AVENUE CLOSED - PEDESTRIAN	165	--	--	--	11	1,815	--	--	--	--	--	--	--	--	18	2,970	--	--	--	--	--	--	--	--
	UNDISTRIBUTED		46	--	1,735	--	1,000	--	1,163	--	2,940	--	1,922	--	47	--	6,048	8	--	--	81	--	--	--	553
		TOTALS	50		53,000		7,225		16,000		30,000		3,000		1,100		190,000	10			200				2,070

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
** FOR INFORMATION PURPOSES ONLY

NOTE: TEMPORARY AUDIBLE MESSAGE DEVICES INCLUDED IN PEDESTRIAN ACCOMODATION MQ TABLE

CATEGORY 1000 UNLESS OTHERWISE NOTED

TRAFFIC CONTROL (CONSTRUCTION DETAIL) ITEMS

STAGE	LOCATION	STAGE DURATION DAYS	* 643.0300 TRAFFIC CONTROL DRUMS EACH**	DAY	* 643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH**	DAY	* 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH**	DAY	* 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH**	DAY	* 643.0810.S CONNECTED ARROW BOARD EACH**	DAY	* 643.0900 TRAFFIC CONTROL SIGNS EACH**	DAY	* 643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	** NUMBER OF CYCLES	** NUMBER OF SIGNS	* 643.1050 TRAFFIC CONTROL SIGNS PCMS EACH**	DAY	* 643.1220.S CONNECTED WORK ZONE START AND END LOCATION MARKERS EACH**	DAY	REMARKS
VAR																						
	EB FULL FREEWAY CLOSURE	23	45	1,035	6	138	12	276	20	460	1	23	17	391	--	--	--	4	60	--	--	
	WB FULL FREEWAY CLOSURE	23	180	4,140	14	322	28	644	90	2,070	1	23	5	115	--	--	--	4	60	--	--	IH 94 WB SINGLE LANE TO N. 25TH STREET RAMP
	CLOSE FREEWAY SYSTEM RAMP	136	60	8,160	6	816	12	1,632	30	4,080	1	136	13	1,768	--	--	--	1	15	1	136	
	CLOSE FREEWAY ENTRANCE RAMP	161	21	3,381	6	966	12	1,932	4	644	--	--	15	2,415	--	--	--	--	--	--	--	
	W. CLYBOURN ST ENTRANCE RAMP CLOSURE DETAIL	23	--	--	4	92	8	184	--	--	--	--	11	253	--	--	--	--	--	--	--	
	IH 43 NB TO IH 94 WB (RAMP S-W) CLOSURE DETAIL	14	268	3,752	12	168	24	336	110	1,540	1	14	31	434	2	1	2	2	28	1	14	
	EXTENDED WEEKEND CLOSURE DETAIL	30	--	--	10	300	20	600	--	--	--	--	20	600	--	--	--	--	--	--	--	
	WORK ZONE INGRESS/EGRESS - 6 LANE	285	--	--	4	1,140	8	2,280	--	--	--	--	4	1,140	--	--	--	--	--	--	--	
	UNDISTRIBUTED			2,032		458		836		946		34		774	8	1	8		37		10	
	TOTALS			22,500		4,400		8,720		9,740		230		7,890	10				200		160	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
** FOR INFORMATION PURPOSES ONLY

FREEWAY CLOSURE ITEMS

STAGE	LOCATION	643.4100 TRAFFIC CONTROL INTERIM LANE CLOSURE EACH	SPV.0060.0564 TRAFFIC CONTROL CLOSE-OPEN FREEWAY TO FREEWAY SYSTEM RAMP EACH	SPV.0060.0565 TRAFFIC CONTROL CLOSE-OPEN FREEWAY ENTRANCE RAMP EACH	SPV.0060.0566 TRAFFIC CONTROL FULL FREEWAY CLOSURE EACH	SPV.0060.0571 TRAFFIC CONTROL LOCAL ROAD LANE CLOSURES EACH
1-4	IH 94 EB	250	40	40	20	--
	IH 94 WB	250	40	60	20	--
	LOCAL ROADS	--	--	--	--	50
5	IH 94 EB	14	28	28	3	--
	IH 94 WB	14	28	56	3	--
	TOTALS	528	136	184	46	50

CATEGORY 1000 UNLESS OTHERWISE NOTED

FILE NAME : ...ACCDocs\WisDOT\10602703\Project Files\Core East Segment\10602774\sheets\03 mqs\030201-mq_traffic control.pptx" PLOT DATE : July 10, 2025 PLOT BY : JACOBS PLOT NAME : PLOT SCALE : 1:1

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FIXED MESSAGE SIGN ITEMS

STAGE	LOCATION	SIGN NO.	NUMBER REQUIRED	SIGN SIZE W X H FT X FT	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	SIGN MESSAGE
1A	IH 94 EB	213	1	6.0 X 2.0	12	310 A
	27TH STREET	200	3	6.0 X 3.0	54	NO ACCESS TO 27TH ST VIADUCT
	IH 94 EB	215	2	3.0 X 1.5	6	26TH ST
2	E CLYBOURN STREET	203	1	6.0 X 3.0	18	I-94 WEST RAMP LEFT LANE CLOSED AHEAD
2/3A	STH 175 SB / IH 94 WB	218	3	15.0 X 1.5	68	RIGHT LANE EXIT ONLY
3A	IH 94 EB	212	1	9.0 X 5.0	45	ST PAUL AVE WEST CLOSED
	28TH STREET	204	1	5.0 X 3.0	15	NO ACCESS TO ST PAUL AVE
	29TH STREET	204	1	5.0 X 3.0	15	NO ACCESS TO ST PAUL AVE
3C	27TH STREET	204	1	5.0 X 3.0	15	NO ACCESS TO ST PAUL AVE
VARIOUS	IH 94 WB	209	1	3.5 X 0.75	2.625	THREE LANES
DETOURS	VARIOUS	201	57	2.0 X 1.0	114	27TH ST
	VARIOUS	202	10	2.0 X 1.5	30	ST PAUL AVE
	VARIOUS	205	5	4.0 X 2.0	40	27TH ST VIADUCT CLOSED USE 35TH ST
	VARIOUS	206	4	2.0 X 1.25	10.0	POTAWATOMI CASINO
	VARIOUS	207	15	2.0 X 2.0	60	MITCHELL PARK DOMES
	27TH STREET	208	7	2.5 X 1.5	26.25	27TH ST VIADUCT CLOSED TO PEDESTRIANS
	CANAL STREET	210	1	5.5 X 3.0	16.5	RAMP CLOSED TO I-94 WEST USE ALT ROUTE
	IH 94 EB	211	1	10.5 X 6.0	63	26TH ST ST PAUL AVE EXIT CLOSED USE EXIT 309A
	VARIOUS	214	12	4.0 X 1.5	72	27TH ST
	VARIOUS	217	2	3.0 X 2.0	12	ST PAUL AVE
MITIGATION	32ND STREET	216	2	2.5 X 2.0	10	BICYCLES MAY USE SIDEWALK
UNDISTRIBUTED					221	
				TOTALS	925	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CATEGORY 1000 UNLESS OTHERWISE NOTED

FILE NAME : ...ACCDocs\WisDOT\10602703\Project Files\Core East Segment\10602774\sheets\03 mqs\030201-mq_traffic control.pptx" PLOT DATE : May 12, 2025 PLOT BY : JACOBS PLOT NAME : PLOT SCALE : 1:1

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TEMPORARY PAVEMENT MARKING ITEMS

STAGE	LOCATION	STATION	TO	STATION	643.3150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH YELLOW LF	643.3150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH WHITE LF	643.3170 TEMPORARY MARKING LINE EPOXY 6-INCH YELLOW LF	643.3170 TEMPORARY MARKING LINE EPOXY 6-INCH WHITE LF	643.3170 TEMPORARY MARKING LINE EPOXY 6-INCH DASHED WHITE 12.5' LINE, 37.5' SKIP LF	643.3170 TEMPORARY MARKING LINE EPOXY 6-INCH DOT PATTERN WHITE 3' LINE, 9' SKIP LF	643.3175 TEMPORARY MARKING LINE BLACK EPOXY 6-INCH DASHED BLACK 12.5' LINE, 37.5' SKIP LF	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH YELLOW LF	643.3270 TEMPORARY MARKING LINE EPOXY 10-INCH WHITE LF	643.3550 TEMPORARY MARKING ARROW REMOVABLE TAPE EACH	643.3760 TEMPORARY MARKING RAISED PAVEMENT MARKER TYPE I EACH	643.3960 TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH LF	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9100 MARKING REMOVAL LINE 8-INCH LF	646.9300 MARKING REMOVAL SPECIAL MARKING EACH
1A																			
	IH 94 EB	426EW+56	-	428EW+54	--	--	--	198	--	--	--	--	--	--	--	--	--	--	--
	N. 27TH ST.	29KN+10	-	30KN+90	--	180	--	--	--	--	--	--	--	--	--	--	180	--	--
	S. 27TH ST.				180	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1B																			
	IH 94 EB	398EW+83	-	443EW+41	--	--	--	4,448	--	--	--	--	--	--	--	--	--	--	--
2																			
	IH 94 EB	362EW+21	-	438EW+00	--	--	6,350	11,960	1,000	463	1,000	--	1,107	--	116	--	800	--	--
	IH 94 WB	410EW+18	-	JACKSON RAMP	--	--	4,694	--	--	--	--	8,300	--	--	--	--	150	--	--
	RAMP LC	20TLC+00	-	END	--	--	394	890	--	--	--	--	248	2	--	--	--	73	2
	RAMP JD				650	263	--	--	--	--	--	--	--	--	--	--	--	--	--
	STH 175 SB	SIC RAMP NE	-	WELLS ST	--	--	1,000	3,105	--	--	--	--	--	--	24	--	300	--	--
3A																			
	IH 94 WB	415EW+40	-	444EW+34	--	--	1,722	9,140	163	--	163	5,900	1,250	--	76	1,800	--	--	--
	W. ST. PAUL AVE.	22SP+23	-	23SP+36	385	594	--	--	--	--	--	--	--	--	--	--	389	--	--
	N. 27TH ST.				--	418	--	--	--	--	--	--	--	--	--	180	238	--	--
3B																			
	W. ST. PAUL AVE.	22SP+23	-	23SP+36	95	110	--	--	--	--	--	--	--	--	--	118	--	--	--
	N. 27TH ST.				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4																			
	IH 94 WB	417EW+10	-	433EW+90	--	--	1,712	3,470	413	--	413	--	--	--	32	--	--	--	--
	UNDISTRIBUTED				135	161	--	128	50	--	48	715	135	1	17	22	43	17	1
				TOTALS	3,170				51,300		1,625	14,915	2,740	3	265	2,300	2,100	90	3

TEMPORARY PEDESTRIAN ITEMS

STAGE	LOCATION	STAGE DURATION DAYS	644.1410 TEMPORARY PEDESTRIAN SURFACE ASPHALT SF	644.1430 TEMPORARY PEDESTRIAN SURFACE PLATE SF	644.1601 TEMPORARY PEDESTRIAN CURB RAMP EACH	644.1605 TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD SF	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF	644.1900.S TEMPORARY AUDIBLE MESSAGE DEVICE EACH**	644.1900.S TEMPORARY AUDIBLE MESSAGE DEVICE DAY
ALL	27TH STREET VIADUCT - PEDESTRIAN	315	--	--	--	--	107	10	3,150
3A	ST. PAUL AVENUE - PEDESTRIAN	60	--	--	--	--	187	5	300
3B	ST. PAUL AVENUE - PEDESTRIAN	30	44	--	1	12	226	2	60
ALL	GREVES STREET - PEDESTRIAN	315	--	--	--	--	8	--	--
	UNDISTRIBUTED		206	100	24	3	123	--	--
		TOTALS	250	100	25	15	650		3,510

** FOR INFORMATION PURPOSES ONLY

TRAFFIC CONTROL

PROJECT	643.5000 EACH
1060-27-74	1
TOTAL	1

CATEGORY 1000 UNLESS OTHERWISE NOTED

3

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TRAFFIC CONTROL TO REMAIN IN PLACE ITEMS

STAGE	LOCATION	SPV.0060.0567 TRAFFIC CONTROL SIGNS LEFT IN PLACE EACH	SPV.0060.0569 TRAFFIC CONTROL WARNING LIGHTS TYPE A LEFT IN PLACE EACH	SPV.0060.0570 TRAFFIC CONTROL BARRICADES TYPE III LEFT IN PLACE EACH
FINAL				
	IH 94 EB	4	12	6
	TOTALS	4	12	6

CPM PROGRESS SCHEDULE ITEMS

PROJECT	SPV.0060.0001 BASELINE CPM PROGRESS SCHEDULE EACH	SPV.0060.0002 MONTHLY CPM PROGRESS SCHEDULE UPDATES EACH
1060-27-74	1	23
TOTALS	1	23

VIBRATION MONITORING ITEMS

LOCATION	SPV.0060.0200 VIBRATION CONTROL AND MONITORING OF 122-INCH COMBINED SEWER EACH	SPV.0135.0301 VIBRATION MONITORING MON
PROJECT 1060-27-74	1	24
TOTALS	1	24

EMERGENCY RESPONSE TO TRAFFIC INCIDENT ITEMS

STAGE	LOCATION	SPV.0060.0554 EMERGENCY RESPONSE TO TRAFFIC INCIDENT INVOLVING CONCRETE BARRIER TEMPORARY PRECAST EACH	SPV.0060.0555 EMERGENCY RESPONSE TO TRAFFIC INCIDENT INVOLVING CRASH CUSHION EACH
ALL	IH 94	5	5
	TOTAL	5	5

MAINTAIN AND REPAIR EXISTING HAZARD SHIELDING ITEMS

STAGE	LOCATION	SPV.0060.0559 MAINTAIN AND REPAIR EXISTING CRASH CUSHIONS EACH	SPV.0060.0560 MAINTAIN AND REPAIR EXISTING SAND BARREL ARRAYS EACH	REMARKS
ALL	IH 94 EB	1	--	EX. S-40-017; 'EXIT 309A 35TH STREET EXIT ONLY' OH SIGN
	IH 94 WB	--	1	EXIT 308B TO 25TH STREET'
	TOTALS	1	1	

CATEGORY 1000 UNLESS OTHERWISE NOTED

GLARE SCREEN ITEMS

STAGE	STATION	TO	STATION	SPV.0090.0704 GLARE SCREENS TEMPORARY LF	SPV.0090.0705 GLARE SCREENS TEMPORARY LEFT IN PLACE LF
3A	11TEB+00	-	17TEB+00	600	--
	117TWB+00	-	124TWB+00	700	--
4	110TWB+98	-	118TWB+75	--	777
	118TWB+75	-	124TWB+50	--	575
UNDISTRIBUTED				300	300
			TOTALS	1,600	1,652

FIXED MESSAGE SIGN PORTABLE SUPPORT SPECIAL

STAGE	LOCATION	SPV.0060.0557 EACH	SIGN DESCRIPTION
1	IH 94 EB	1	EX. GUIDE SIGN; EXIT 309B
3	IH 94 EB	1	EX. GUIDE SIGN; DOWNTOWN EXITS
	TOTAL 0010	2	

CATEGORY 1000 UNLESS OTHERWISE NOTED

FILE NAME : ...ACCDocs\WisDOT\10602703\Project Files\Core East Segment\10602774\sheets\03 mqs\030201-mq_traffic control.pptx" PLOT DATE : April 28, 2025 PLOT BY : JACOBS PLOT NAME : PLOT SCALE : 1:1

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LIGHTING REMOVAL

CATEGORY	STAGE	DESCRIPTION	204.0195* REMOVING CONCRETE BASES EACH	204.9060.S.1002 REMOVING LIGHTING UNITS EACH	653.0905 REMOVING PULL BOXES EACH	659.5000.S* LAMP, BALLAST, LED SWITCH DISPOSAL BY CONTRACTOR EACH	COMMENTS
1100							
	2	CPH3/DPH3	1	2		2	
	2	LPB-PH-1			1		
	2	CPH20/DPH20	1	2		2	
	2	CPH22/DPH22	1	2		2	
	2	CPH23/DPH23	1	2		2	
	2	LPB-PH-2			1		
	2	CPH24/DPH24	1	2		2	
	2	UNDERDECK LIGHTING				2	
	2	CPH9	1	1		1	
	2	CPH8	1	1		1	
	2	CPH7	1	1		1	
	3	#275		1		1	
	3	#319		1		1	
	3	#310		1		1	
	3	#324		1		1	
	3	#331	1	1		1	
	3	#349		1		1	CONCRETE BASE SEE SIGNAL M.O. SHEET
	3	#2717	1	1		1	
	3	#2700		1		1	CONCRETE BASE SEE SIGNAL M.O. SHEET
	3	#400		2		2	CONCRETE BASE SEE SIGNAL M.O. SHEET
	3	#350		1		1	CONCRETE BASE SEE SIGNAL M.O. SHEET
	3	#340	1	1		1	
	3	#2800	1	1		1	
	3	#2826	1	2		2	
	3	#2900	1	1		1	
	3	#2806	1	1		1	
	3	#416	1	2		2	
	3	#434	1	1		1	
	3	#2732	1	1		1	
	3	#345	1	1		1	
	3	EX-PB2			1		
		TOTALS	**18**	**35**	**3**	**35**	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LIGHTING EQUIPMENT 32ND STREET

CATEGORY	STAGE	DESCRIPTION	STA	OFF	659.1215 LUMINAIRES UNDERDECK LED C EACH	659.0601 UNDERDECK LIGHTING B-40-0015 EACH	COMMENTS
1100	1						
		UDL1			1		EXISTING STRUCTURE MOUNTED B-40-0015
		UDL2			1		EXISTING STRUCTURE MOUNTED B-40-0015
		32TH BRIDGE				1	
		TOTALS			**2**	**1**	

ALL ITEMS ARE CATEGORY 1100

LIGHTING EQUIPMENT - TEMPORARY LIGHTING

CATEGORY	STAGE	DESC	STA	OFF	SPV.0060.1001 POLES WOOD 60-FT EACH	SPV.0060.1002 WOOD POLE LIGHTING 60-FT EACH	SPV.0060.1004 LUMINAIRES UTILITY FLOODLIGHT EACH	NOTES
1100	1A-1B							
		WP-PH1	417EW+04	153'LT	1			HL-40-PH
		T-CPH1	419EW+02	180'LT		1	1	HL-40-PH
		T-CPH2	421EW+22	159'LT		1	1	HL-40-PH
		WP-PH2	417EW+28	18'LT	1			HL-40-PH
		T-DPH1	423EW+30	23'RT		1	1	HL-40-PH
		T-CPH1	425EW+28	38'RT		1	1	HL-40-PH
		T-DPH2	426EW+84	65'RT		1	1	HL-40-PH
		T-CPH2	429EW+06	108'RT		1	1	HL-40-PH
		T-DPH3	430EW+77	131'RT		1	1	HL-40-PH
		T-CPH3	432EW+46	124'RT		1	1	HL-40-PH
		WP-PH3	433EW+47	82'RT	1			HL-40-PH
		WP-PH4	434EW+32	12'RT	1			HL-40-PH
		TOTALS			**4**	**8**	**8**	

TEMPORARY LEFT-IN-PLACE LIGHTING CONDUIT AND CABLE

CATEGORY	STAGE	LOC.	TO	LOC.	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	655.0144 CABLE IN DUCT 4-4 AWG LF	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG LF	SPV.0090.1013* CABLE AERIAL ALUM 4AWG QUADRUPLEX LEFT IN PLACE LF	COMMENTS
1100	1								
		CPH2/DPH2		WP-PH-1				80	TEMPORARY LEFT-IN-PLACE (HL-40-PH)
		WP-PH-1		T-CPH1				187	TEMPORARY LEFT-IN-PLACE (HL-40-PH)
		T-CPH1		DPH5				70	TEMPORARY LEFT-IN-PLACE (HL-40-PH)
		DPH4		T-CPH2	40		160		TEMPORARY LEFT-IN-PLACE (HL-40-PH)
		CPH2/DPH2		WP-PH-2				64	TEMPORARY LEFT-IN-PLACE (HL-40-PH)
		WP-PH-2		T-DPH1		606			TEMPORARY LEFT-IN-PLACE (HL-40-PH)
		T-DPH1		T-CPH1				197	TEMPORARY LEFT-IN-PLACE (HL-40-PH)
		T-CPH1		T-DPH2				157	TEMPORARY LEFT-IN-PLACE (HL-40-PH)
		T-DPH2		T-CPH2	223		669		TEMPORARY LEFT-IN-PLACE (HL-40-PH)
		T-CPH2		T-DPH3				169	TEMPORARY LEFT-IN-PLACE (HL-40-PH)
		T-DPH3		T-CPH3				168	TEMPORARY LEFT-IN-PLACE (HL-40-PH)
		T-CPH3		WP-PH-3				110	TEMPORARY LEFT-IN-PLACE (HL-40-PH)
		WP-PH-3		WP-PH-4				110	TEMPORARY LEFT-IN-PLACE (HL-40-PH)
		WP-PH-4		CPH25/DPH25				68	TEMPORARY LEFT-IN-PLACE (HL-40-PH)
				TOTALS	**263**	**606**	**829**	**1,380**	--

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LIGHTING CONDUIT AND CABLE LOCAL

CATEGORY	STAGE	LOC.	TO	LOC.	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0335 CONDUIT RIGID NONMETALLIC SCHEDULE 80 3-INCH LF	652.062 CONDUIT SPECIAL 3-INCH LF	SPV.0090.1005 LIQUIDTIGHT FLEX. NONMETALLIC 1 1/2 INCH CONDUIT LF	SPV.0090.1012 ELECTRICAL CABLE TYPE 4#2/1#8 XLP LF	SPV.0060.1023 SUBMERSIBLE MULTITAP 3-PORT PRE-INSULATED CONNECTOR EACH	SPV.0060.1024 SUBMERSIBLE MULTITAP 4-PORT PRE-INSULATED CONNECTOR EACH	COMMENTS
1100	3											
		EX-JB		#305					164	4	6	
		#305		#315					132	2	3	
		#315		#319					132	2	3	
		#319		PB-1M	14				139	2	3	
		PB-1M		#331	4				27			
		#331		V4	110				133			
		V4		V5					60	2	3	SHARED SIGNAL/LIGHTING PULL BOX
		V5		#2644	142				165	2	3	SHARED SIGNAL/LIGHTING PULL BOX
		#2644		#2743	140				156	2	3	
		#2743		#2801	124				140	2	3	
		#2801		PB-10M	73				96	2	3	
		PB-10M		#2814	3				26			
		PB-10M		PB-9M		86			116	2	3	
		PB-9M		#343	5				28			
		PB-9M		PB-12M	106				136			
		PB-12M		PB-8M	30				58			
		PB-8M		PB-7M		35			65	2	3	
		PB-7M		#345	7				28			
		V5		V6					100	2	3	SHARED SIGNAL/LIGHTING PULL BOX
		V6		#2645	137				160	2	3	SHARED SIGNAL/LIGHTING PULL BOX
		#2645		#2744	140				156	2	3	
		#2744		PB-2M	128				151	2	3	
		PB-2M		#2802	2				25			
		PB-2M		PB-11M	44				74	2	3	
		PB-11M		#405	5				28			
		PB-11M		#415	124				147	2	3	
		#415		PB-13M	113				136	2	3	
		PB-13M		#427	4				27			
		PB-2M		#2826	114				137	2	3	
		#2826		PB-3M	113				136			
		PB-3M		#2848	3				26	2	3	
		PB-3M		PB-4M	36				66			
		PB-4M		PB-5M		35			65			
		PB-4M		PB-6M	52				82	2	3	
		PB-6M		#2900	3				26			
		V7		EX-PB1	29		39					CONDUIT EMPTY (PULL ROPE ONLY)
		PB-3M		PB-12M		50						CONDUIT EMPTY (PULL ROPE ONLY)
		PB-14M		#406				5		4	3	
		PB-14M		STUB	18							CONDUIT EMPTY (PULL ROPE ONLY)
		#260		#306	93				115	4	6	
		#306		#316	111				133	2	3	
		#316		#320	111				133	2	3	
		#320		#2624	126				148	2	3	
		#2624		JB	0				0			JUNCTION BOX END OF STRUCTURE (PULL ROPE ONLY)
		TOTALS			**2,250**	**206**	**39**	**5**	**3,872**	**58**	**84**	**--**

ALL ITEMS ARE CATEGORY 1100

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

LIGHTING EQUIPMENT LOCAL

STAGE	LOC.	STA	OFF	654.0105* CONCRETE BASE TYPE 5 EACH	657.0255* TRANSFORMER BASES BREAKAWAY 11 1/2 INCH BOLT CIRCLE EACH	SPV.0060.1010 LUMINAIRE HISTORIC MILWAUKEE LANTERN LED3 EACH	SPV.0060.1005 POLES TYPE 30-AL-BD EACH	SPV.0060.1006 POLES TYPE 25-AL-BD EACH	SPV.0060.1017 LUMINAIRE UTILITY 2LED EACH	SPV.0060.1018 LUMINAIRE UTILITY 3LED EACH	SPV.0060.1014 LUMINAIRE ARMS SINGLE MEMBER 6-FT. EACH	SPV.0060.1013 INLINE 5A FAST ACTING FUSE WITH HOLDER EACH	655.0305 CABLE TYPE UF 2-12 AWG GROUNDED LF	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED LF	COMMENTS
4	#305**	21KS+57	41'LT			1	1					1	35		STRUCTURE MOUNTED B-40-1083
4	#315**	22KS+67	41'LT			1	1					1	35		STRUCTURE MOUNTED B-40-1083
4	#319**	23KS+78	41'LT			1	1					1	35		STRUCTURE MOUNTED B-40-1083
4	#306**	21KS+57	42'RT			1	1					1	35		STRUCTURE MOUNTED B-40-1083
4	#316**	22KS+67	48'RT			1	1					1	35		STRUCTURE MOUNTED B-40-1083
4	#320**	23KS+77	53'RT			1	1					1	35		STRUCTURE MOUNTED B-40-1083
4	#331**	25KS+01	33'LT	1	1	1	1					1	35		
4	#2624**	25KS+03	60'RT			1	1					1	35		STRUCTURE MOUNTED B-40-1083
3	#2645**	15SP+95	21'LT	1	1	1		1				1	35		
3	#2644**	15SP+95	31'RT	1	1	1		1				1	35		
3	#2744**	14SP+55	21'LT	1	1	1		1				1	30		
3	#2802**	13SP+28	21'LT	1	1	1		1				1	30		
3	#405	13SP+26	63'LT	1	1			1	1		1	1	35		
3	#415	13SP+53	175'LT	1	1			1	1		1	1	35		
3	#427	13SP+53	286'LT	1	1			1	1		1	1	35		
3	#2826**	12SP+16	19'LT	1	1	1		1				1	30		
3	#2848	11SP+03	20'LT	1	1			1		1	1	1	35		
3	#2900	10SP+10	22'LT	1	1			1		1	1	1	35		
3	#345	10SP+46	41'RT	1	1			1		1	1	1	35		
3	#343**	11SP+86	71'RT	1	1	1		1				1	30		
3	#2814**	12SP+64	42'RT	1	1	1		1				1	30		
3	#2801**	13SP+30	31'RT	1	1	1		1				1	30		
3	#2743**	14SP+55	31'RT	1	1	1		1				1	30		
3	#406	EXISTING	-									1	30	30	
TOTALS CATEGORY 1100				**16**	**16**	**-**	**8**	**15**	**3**	**3**	**6**	**24**	**800**	**30**	
TOTALS CATEGORY 8100				**-**	**-**	**17**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

** LIGHT POLE EQUIPMENT SHALL BE BLACK. SEE SEPARATE BID ITEM FOR LIGHTING EQUIPMENT PAINTING.

ALL ITEMS ARE CATEGORY 1100 UNLESS OTHERWISE NOTED

LIGHTING EQUIPMENT PULL BOXES LOCAL

CATEGORY	STAGE	PULL BOX NO.	STATION	OFFSET	SPV.0060.1020* PULL BOXES 17X30X24 EACH	652.0700.S* INSTALL CONDUIT INTO EXISTING ITEM EACH
1100	3					
		PB-1M	24KS+98	33'LT	1	
		PB-2M	13SP+26	21'LT	1	
		PB-3M	11SP+03	20'LT	1	
		PB-4M	10SP+82	40'LT	1	
		PB-5M	10SP+47	40'LT	1	
		PB-6M	10SP+10	22'LT	1	
		PB-7M	10SP+46	48'RT	1	
		PB-8M	10SP+81	48'RT	1	
		PB-9M	11SP+86	76'RT	1	
		PB-10M	12SP+65	45'RT	1	
		PB-11M	13SP+22	68'RT	1	
		PB-12M	11SP+03	32'RT	1	
		PB-13M	13SP+53	289'LT	1	
		PB-14M	27KN+81	36'RT	1	
		EXPB-1	EXISTING	-		1
		TOTALS			**14**	**1**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LIGHTING SYSTEMS

CATEGORY	STAGE	DESCRIPTION	LOC	SPV.0060.1034 MAINTENANCE OF LIGHTING SYSTEMS EACH	SPV.0060.1044 LIGHTING SYSTEM INTEGRATOR EACH
1100	1-3	PROJECT (1060-27-74)	W ST PAUL AVE & 27TH ST	1	1
			TOTALS	**1**	**1**

LIGHTING EQUIPMENT PAINTING LOCAL

CATEGORY	STAGE	DESCRIPTION	SPV.0060.1060 LIGHTING EQUIPMENT PAINTING EACH
8100	3-4	Project (1060-27-74)	1
		TOTALS	**1**

ALL ITEMS ARE CATEGORY 1100 UNLESS OTHERWISE NOTED

FTMS REMOVALS

CATEGORY	ROADWAY	ITEM ID.	LINEAR DISTANCE	204.0210 REMOVING MANHOLES EACH	204.9001.S REMOVING ADVANCE FLASHER ASSEMBLIES TYPE 1 EACH	653.0905 REMOVING PULL BOXES EACH	674.0300 REMOVE CABLE LF	SPV.0060.2000 REMOVING ELECTRICAL SERVICE METER BREAKER PEDESTAL EACH
1300	IH 94							
		EXMH417 - EXMH423	555	--	--	--	555	--
		EXMBDMS400026	--	--	--	--	--	1
		EXMBDMS400026 - EXPB417	10	--	--	--	10	--
		EXPB417 - EXDMS400026	20	--	--	--	20	--
		EXMH423	--	1	--	--	--	--
		EXMH423 - EXMH424	120	--	--	--	120	--
		EXMH424	--	1	--	--	--	--
		EXMH424 - EXMH425	165	--	--	--	165	--
		EXMH425	--	1	--	--	--	--
		EXMH425 - EXMH436	1150	--	--	--	1150	--
		EXFY424EW	--	--	1	--	--	--
		EXPB424EW	--	--	--	1	--	--
		EXFY424EW - EXPB424EW	20	--	--	--	20	--
		EXPB424EW - QP424EW	50	--	--	--	50	--
		TOTALS		3	1	1	2090	1

MISCELLANEOUS ITEMS

CATEGORY	ROADWAY	670.0101 FIELD SYSTEM INTEGRATOR EACH	670.0201 ITS DOCUMENTATION EACH	678.0501 COMMUNICATION SYSTEM TESTING EACH
1300	IH 94 PROJECT	1	1	1
	TOTALS	1	1	1

3

PROPOSED FTMS ITEMS

CATEGORY	ROADWAY	ITEM ID.	LOCATION STATION	LOCATION OFFSET	LENGTH	652.0125 CONDUIT RIGID METALLIC 40 2-INCH LF	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH	653.0140 PULL BOXES STEEL 24 X 42 - INCH EACH	674.0400 REINSTALL CABLE LF	678.0036 INSTALL FIBER OPTIC OUTDOOR PLANT 36-CT LF	678.0300 FIBER OPTIC SPLICE EACH	SPV.0090.1013* CABLE AERIAL ALUMINUM 4 AWG QUADRUPLEX LEFT IN PLACE LF	SPV.0060.2050 ENTER EXISTING SPLICE ENCLOSURE EACH	SPV.0060.2057 SALVAGED SIGNAL ASSEMBLY ADVANCE FLASHER TYPE 2 EACH
1300	IH 94														
		EXCV385	--		--	--	--	--	--	--	--	36	--	--	--
		EXCV399	--		--	--	--	1	--	--	50	--	--	--	--
		EXCV399 - EXCVWIB615MLS	--		--	--	65	--	--	--	65	--	--	--	--
		EXCVWIB615MLS	--		--	--	--	1	--	--	100	38	--	--	--
		EXMH436	--		--	--	--	--	--	--	--	2	--	1	--
		EXPB417	--		--	--	--	1	--	--	--	--	--	--	--
		EX-CB-HL-40-PH	--		--	--	--	1	--	--	--	--	--	--	--
		EX-CB-HL-40-PH - PB412EW	--		25	25	25	--	--	--	--	--	25	--	--
		PB412EW	412EW+57	130' LT	--	--	--	--	1	--	--	--	--	--	--
		PB412EW - PB417EW	--		410	--	410	--	--	--	--	--	410	--	--
		PB417EW	416EW+84	150' LT	--	--	--	--	1	--	--	--	--	--	--
		PB417EW - WP-PH-1	--		20	--	20	--	--	--	--	--	50	--	--
		WP-PH-1 - EXDPH2/CPH2	--		80	--	--	--	--	--	--	--	80	--	--
		EXDPH2/CPH2 - WP-PH-2	--		65	--	--	--	--	--	--	--	65	--	--
		WP-PH-2 - EXPB418EW	--		55	--	--	--	--		--	--	85	--	--
		EXPB418EW	--		--	--	--	1	--	--	--	--	--	--	--
		EXPB418EW - EX-CB-CCTV-40-0013 / EX-DMS-40-0026	--		15	--	--	--	--	--	--	--	15	--	--
		EXPB439	--		--	--	--	1	--	--	50	--	--	--	--
		EXPB439 - EXCVWIB624MLL	--		--	--	125	--	--	--	125	--	--	--	--
		EXWIB624BLL	--		--	--	--	1	--	--	100	36	--	--	--
		PB424EW	424EW+78	421' LT	--	--	--	--	1	--	--	--	--	--	--
		FY424EW	--		--	--	--	--	--	--	--	--	--	--	1
		PB424EW - FY424EW	--		15	--	30	--	--	15	--	--	--	--	--
		PB424EW - QP424EW	--		45	--	90	--	--	45	--	--	--	--	--
TOTALS						25	765	7	3	60	490	112	730	1	1

* - ADDITIONAL QUANTITIES FOUND ELSEWHERE

REMOVING CONCRETE BASES

EXISTING BASE NO.	204.0195* REMOVING CONCRETE BASES EACH	SPV.0060.3101 REMOVING MONOTUBE CONCRETE BASES EACH
CB1	1	--
SB1	1	--
SB2	--	1
SB3	1	--
SB4	--	1
SB5	1	--
SB6	--	1
SB7	1	--
SB8	--	1
TOTAL	5	4

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL REMOVALS
W ST PAUL AVE & N 27TH ST

LOCATION	204.9060.S.3101 REMOVE TRAFFIC SIGNALS EACH
W ST PAUL AVE & N 27TH ST	1
TOTAL	1

ALL ITEMS CATEGORY 1500

CONDUIT

FROM	TO	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF
EXT1	V4	273
V4	V5	84
V5	V6	210
V6	V7	81
V7	EXT2	231
	SUBTOTALS	879

FROM	TO	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF
V4	SB4	14
V5	SB5	11
V6	SB6	8
V7	SB7	8
	SUBTOTALS	41
	TOTALS	920

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVE TRAFFIC SIGNAL PULL BOX

EXISTING PULL BOX NO.	653.0905* REMOVING PULL BOXES EACH
V1	1
V2	1
V3	1
V4	1
V5	1
V6	1
V7	1
V8	1
TOTAL	8

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL VAULTS

PULL BOX NO.	STATION	LOCATION	SPV.0060.1020* PULL BOXES 17-INCH X 30-INCH X 24-INCH EACH
V4	17+42.2 SP	56.5' RT	1
V5	17+36.1 SP	31.5' RT	1
V6	17+26.1 SP	38.1' LT	1
V7	17+36.7 SP	56.7' LT	1
		TOTALS	4

*** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD
* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL ITEMS CATEGORY 1500

3

CONCRETE BASES

BASE NO.	STATION	LOCATION	654.0102* CONCRETE BASES TYPE 2 EACH	654.0120 CONCRETE BASES TYPE 10 SPECIAL EACH
SB4	17+47.3 SP	43.0' RT	--	1
SB5	17+24.7 SP	32.1' RT	1	--
SB6	17+18.3 SP	37.5' LT	--	1
SB7	17+37.3 SP	47.3' LT	1	--
		TOTALS	2	2

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
*** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

TRACER WIRE

FROM	TO	655.0510 ELECTRICAL WIRE TRAFFIC SIGNALS 12 AWG LF
EXT1	V4	99
V4	V5	36
V4	SB4	22
V5	SB5	19
V5	V6	78
V6	SB6	16
V6	V7	35
V7	SB7	17
V7	EXT2	85
	TOTALS	407

ALL ITEMS CATEGORY 1500

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	MISCELLANEOUS QUANTITIES	SHEET:	E

CAST BASES AND POLES

SIGNAL BASE NO.	657.0255* TRANSFORMER BASES BREAKAWAY 11 1/2 INCH BOLT CIRCLE EACH	SPV.0060.3145 MONOTUBE BASE ANCHOR BOLT COVER TYPE 10 SPECIAL EACH
SB4	--	1
SB5**	1	--
SB6	--	1
SB7**	1	--
TOTALS	2	2

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
** TRANSFORMER BASES SHALL BE BLACK. SEE ITEM SPV.0060.1060 LIGHTING EQUIPMENT PAINTING PROJECT (1060-27-74)

LAMP, BALLAST, LED, SWITCH DISPOSAL

FIXTURE TYPE	659.5000.S* LAMP, BALLAST, LED, SWITCH DISPOSAL BY CONTRACTOR EACH
TRAFFIC SIGNAL, TWO SECTION	8
TRAFFIC SIGNAL, THREE SECTION	10
TRAFFIC SIGNAL, FIVE SECTION	6
MERCURY SWITCHES	1
TOTAL	25

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

LAMP, BALLAST, LED, SWITCH DISPOSAL (FOR INFORMATION ONLY)

SIGNAL BASE NO.	TRAFFIC SIGNAL, TWO SECTION EACH	TRAFFIC SIGNAL, THREE SECTION EACH	TRAFFIC SIGNAL, FIVE SECTION EACH	MERCURY SWITCHES EACH
SB1	1	1	1	--
SB2	1	1	1	--
SB3	1	1	1	--
SB4	1	1	1	--
SB5	1	2	--	--
SB6	1	2	--	--
SB7	1	1	1	--
SB8	1	1	1	--
CB1	--	--	--	1
TOTAL	8	10	6	1

ALL ITEMS CATEGORY 1500

3

TEMPORARY TRAFFIC SIGNALS
W ST PAUL AVE & N 27TH ST LEFT IN PLACE

LOCATION	661.0201.3101 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS EACH
W ST PAUL AVE & N 27TH ST LEFT IN PLACE	1
TOTAL	1

TEMPORARY EVP SYSTEM LEFT IN PLACE
W ST PAUL AVE & N 27TH ST

LOCATION	SPV.0060.3143 TEMPORARY EVP SYSTEM LEFT IN PLACE EACH
W ST PAUL AVE & N 27TH ST	1
TOTAL	1

3

COVERING TRAFFIC SIGNAL HEAD

EXISTING TRAFFIC SIGNAL HEAD	SPV.0060.3146 COVERING TRAFFIC SIGNAL HEADS EACH
1	1
2	1
3	1
4	1
10	1
11	1
TOTAL	6

ALL ITEMS CATEGORY 1500

CITY OF MILWAUKEE - WATER

CATEGORY	STAGE	ROADWAY	STATION	OFFSET	TO	STATION	OFFSET	SPV.0060.5000 INSTALLING HYDRANT EACH	SPV.0060.5001 REMOVING HYDRANT/MAJOR EACH	SPV.0060.5002 INSTALLING HYDRANT - ALTERATION EACH	SPV.0060.5003 ADJUSTING WATER VALVE BOXES EACH	SPV.0060.5004 CONNECT ORIGINAL SERVICE (C.O.S.) EACH	SPV.0090.5000 DUCTLE IRON (DI) AWWA C-151 CLASS 55 WATER MAIN 6-INCH LF	SPV.0090.5001 DUCTLE IRON (DI) AWWA C-151 CLASS 55 WATER MAIN 12-INCH LF	SPV.0090.5002 DUCTILE IRON HYDRANT BRANCH 6-INCH LF
7000															
		W. ST PAUL AVE.													
			11SP+25.20	10.4'LT		11SP+51.10	10.4'LT	--	--	--	--	--	28	--	--
			11SP+41.83	8.4'LT				--	--	--	--	1	--	--	--
			13SP+39.90	23.0'LT				1	--	--	--	--	6	--	13
			14SP+12.89	28.98'LT				--	1	--	--	--	--	--	--
		N. 27TH ST.													
			27KN+20.3	20'0'LT		27KN+49.0	20.0'LT	--	--	--	--	--	--	34	--
		UNDISTRIBUTED						--	--	1	24	--	--	--	--
							TOTALS	1	1	1	24	1	34	34	13

3

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

3

CUC MANHOLES

ROADWAY	MANHOLE ID	LOCATION STATION	LOCATION OFFSET	204.0210* REMOVING MANHOLES EACH	SPV.0060.5200 MANHOLES TYPE TES 4-FT DIAMETER EACH	SPV.0060.5201 MANHOLES TYPE TES DOGHOUSE 4-FT DIAMETER EACH	SPV.0060.5202 MANHOLES TYPE TES 5-FT DIAMETER EACH	SPV.0060.5204 REMOVING CUC MANHOLES EACH	SPV.0060.5210 INSTALL CEMENT ENCASED CONDUIT INTO EXISTING MANHOLE EACH	SPV.0060.5212 ADJUSTING TES MANHOLE EACH
W ST. PAUL AVE	MH 3592A	13+90SP	14.7' RT	--	--	--	1	--	--	--
W ST. PAUL AVE	MH 3592	13+66SP	36.9' RT	1	--	--	--	--	--	--
W ST. PAUL AVE	EXMH 3590	13+02SP	41.2' LT	--	--	--	--	--	--	1
W ST. PAUL AVE	EXMH 3591	13+65SP	41.6' LT	--	--	--	--	--	1	1
W ST. PAUL AVE	MH 3593A	16+61SP	20.2' RT	--	1	--	--	--	--	--
W ST. PAUL AVE	EXMH 3593	17+33SP	36.1' RT	1	--	--	--	--	--	--
W ST. PAUL AVE	EXMH 3594	17+59SP	37.2' RT	--	--	1	--	1	--	--
W ST. PAUL AVE	EXMH 3527A	18+07SP	31.1' RT	1	--	--	--	--	--	--
W ST. PAUL AVE	EXMH 3527B	18+48SP	23.0' LT	1	--	--	--	--	--	--
W ST. PAUL AVE	MH 3527C	18+40SP	16.5' RT	--	1	--	--	--	--	--
N 27TH ST	MH 3594A	25+72KS	38.5' LT	--	1	--	--	--	--	--
N 27TH ST	EXMH 3595	25+24KS	38.3' LT	1	--	--	--	--	--	--
			TOTAL	5	3	1	1	1	1	2

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONDUIT

ROADWAY	FROM	TO	SPV.0090.5200 2-DUCT CONDUIT CEMENT ENCASED 4-INCH CONDUIT DB-60 LF	SPV.0090.5201 4-DUCT CONDUIT CEMENT ENCASED 4-INCH CONDUIT DB-60 LF	SPV.0090.5202 6-DUCT CONDUIT CEMENT ENCASED 4-INCH CONDUIT DB-60 LF	SPV.0090.5203 2-DUCT CONDUIT CEMENT ENCASED 3-INCH CONDUIT DB-60 LF
W ST. PAUL AVE	STUB	MH 3592A	17	--	--	--
W ST. PAUL AVE	EXMH 3591	MH 3592A	--	71	--	--
W ST. PAUL AVE	MH 3592A	MH 3593A	--	268	--	--
W ST. PAUL AVE	MH 3593A	STUB	8	--	--	--
W ST. PAUL AVE	MH 3593A	EXMH 3594	--	102	--	--
W ST. PAUL AVE	EXMH 3594	MH 3527C	--	--	79	--
W ST. PAUL AVE	MH 3527C	STUB FOR CB1	64	--	--	--
W ST. PAUL AVE	MH 3527C	STUB	--	4	--	--
W ST. PAUL AVE	MH 3527C	STUB	4	--	--	--
N 27TH ST	EXMH 3594	MH 3594A	--	--	54	--
N 27TH ST	EXMH 3594	STUB	12	--	--	--
N 27TH ST	MH 3594A	STRUCTURE B40-1083	--	--	--	83
		TOTALS	105	445	133	83

ALL ITEMS CATEGORY 7010
UNLESS NOTED OTHERWISE

pw:\\ProjectWiseAMER.jacobs.com:DEN003\Documents\D3393900 - I-94 East-West Data Collection\Work in Progress\I-94 East-West\J. Road Plans\Design\CUC\EarlyEastLegCUC_mq.xlsx PLOT DATE : 4/25/2025 11:45:45 AM PLOT BY : HNTB PLOT NAME : 030241_mq_sp1 PLOT SCALE : 1:1

3

3

FIBER OPTIC CABLE

ROADWAY	FROM	TO	SPV.0090.5210 CONDUIT SUBDUCT 1-INCH LF	SPV.0090.5215 FURNISH MUNICIPAL FIBER OPTIC CABLE 288 COUNT LF	SPV.0090.5216 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 288-CT LF
N 27TH ST	JUNCTION BOX 1/2	MH 3594A	--	--	679
N 27TH ST	MH 3594A	EXMH 3580C	606	786	786
	TOTALS		606	786	1465

REMOVING SERVICE CABLE

ROADWAY	FROM	TO	SPV.0090.5217 REMOVING SERVICE CABLE LF
N 27TH ST	W ST PAUL AVE TRAFFIC SIGNAL CABINET	W CLYBOURN ST TRAFFIC SIGNAL CABINET	706
		TOTALS	706

ALL ITEMS CATEGORY 7010
UNLESS NOTED OTHERWISE

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	MISCELLANEOUS QUANTITIES	SHEET:	E

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
LOT, TIE, AND OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMP. LIMITED EASEMENT AREA
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
BUILDING (TO BE REMOVED)
BRIDGE

PARCEL NUMBER 25
SECTION CORNER
NOTATION FOR COMBUSTIBLE FLUIDS
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES
UTILITY NUMBER 40
R/W MONUMENT
NON-MONUMENTED R/W POINT
FOUND IRON PIN
VALVE (GAS, WATER, ETC.)
SIGN
OFF-PREMISE SIGN
ACCESS CONTROLLED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
NATIONAL GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
PARALLEL OFFSETS

CONVENTIONAL UTILITY SYMBOLS

	NON-COMPENSABLE	COMPENSABLE
WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
ELECTRIC TOWER	☒	
POWER POLE	○	●
TELEPHONE POLE	⌀	⌀
TELEPHONE PEDESTAL	⌑	⌑

CURVE DATA ABBREVIATIONS

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ /DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	OUTLOT	OL
ACRES	AC	PAGE	P
AHEAD	AH	POINT OF TANGENCY	PT
ALUMINUM	ALUM	PROPERTY LINE	PL
AND OTHERS	ET AL	RECORDED AS	(100')
BACK	BK	REEL / IMAGE	R/I
BLOCK	BLK	REFERENCE LINE	R/L
CENTERLINE	C/L	PERMANENT LIMITED EASEMENT	PLE
CERTIFIED SURVEY MAP	CSM	POINT OF BEGINNING	POB
CONCRETE	CONC	POINT OF CURVATURE	PC
COUNTY	CO	POINT OF COMPOUND CURVE	PCC
COUNTY TRUNK HIGHWAY	CTH	POINT OF INTERSECTION	PI
DISTANCE	DIST	REMAINING	REM
CORNER	COR	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
DOCUMENT NUMBER	DOC	RIGHT	RT
EASEMENT	EASE	RIGHT OF WAY	R/W
EXISTING	EX	SECTION	SEC
GAS VALVE	GV	SEPTIC VENT	SEPV
GRID NORTH	GN	SQUARE FEET	SF
HIGHWAY EASEMENT	HE	STATE TRUNK HIGHWAY	STH
IDENTIFICATION	ID	STATION	STA
LAND CONTRACT	LC	TELEPHONE PEDESTAL	TP
LEFT	LT	TEMPORARY LIMITED EASEMENT	TLE
MONUMENT	MON	TRANSPORTATION PROJECT PLAT	TPP
NATIONAL GEODETIC SURVEY	NGS	UNITED STATES HIGHWAY	USH
NUMBER	NO	VOLUME	V

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE BASED ON THE WISCONSIN COUNTY COORDINATE SYSTEM, MILWAUKEE COUNTY ZONE, NAD-83 (2007) ADJUSTMENT (IN US SURVEY FEET). COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 3/4"X24" REBAR) AND WILL BE PLACED PRIOR TO COMPLETION OF THE PROJECT.

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FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

INFORMATION FOR BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON DETAIL SHEETS.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINE.

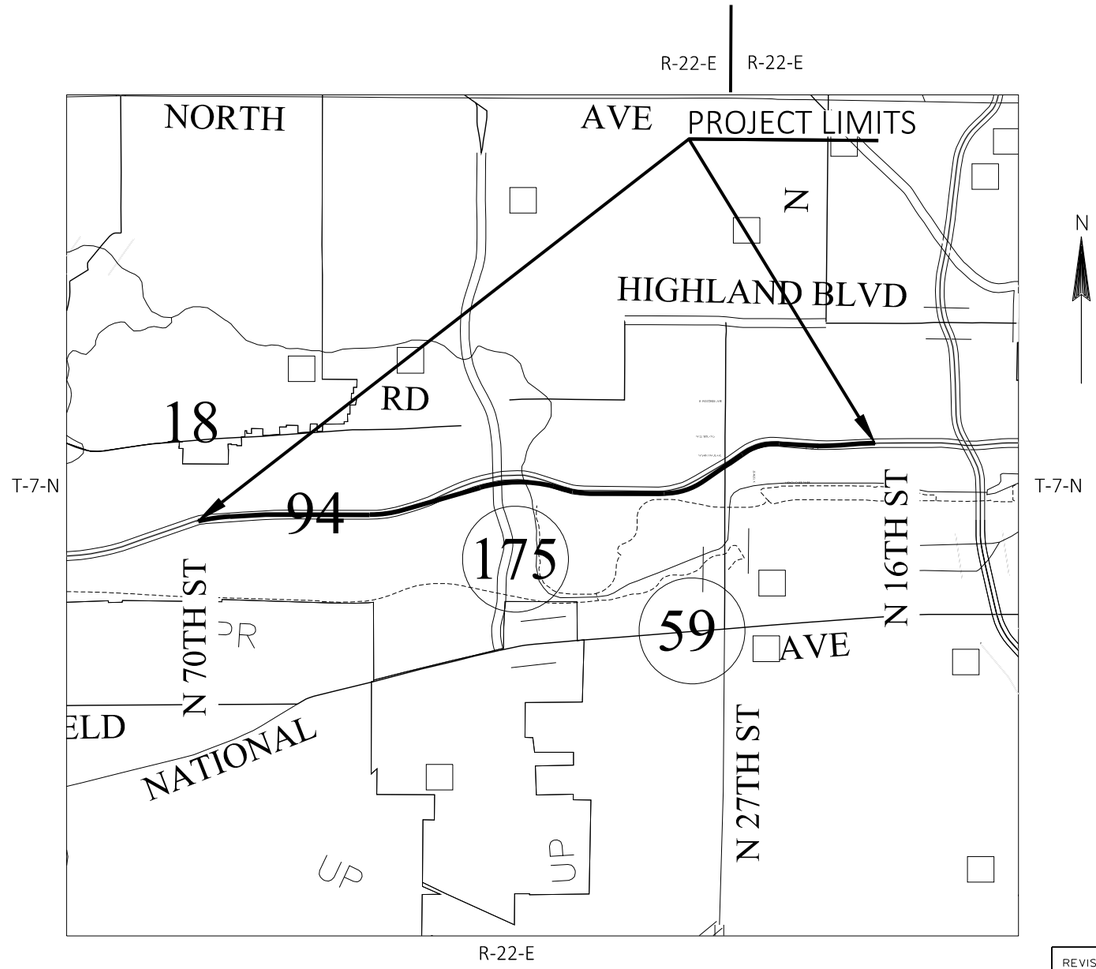
R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
1060-27-21	4.01	--

PLAT OF RIGHT OF WAY REQUIRED FOR
I-94 EAST - WEST FREEWAY

70th ST. -16th ST.

IH-94 MILWAUKEE COUNTY

CONSTRUCTION PROJECT NUMBER



N

LAYOUT
SCALE 0 500 1000 FT

THIS PLAT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES AND ACCESS RIGHTS.

REVISION DATE
09/12/2023
08/27/2024
09/05/2024
09/16/2024
10/21/2024
07/09/2025

kapur all in
7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
414.751.7200
kapurinc.com

ORIGINAL PLANS PREPARED BY

WISCONSIN BRIAN M. DODGE S-2848 WAUKESHA, WI LAND SURVEYOR

06/10/2022 (Date)

Brian M. Dodge
BRIAN M. DODGE
KAPUR & ASSOCIATES
P.L.S. NUMBER 2848

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED FOR THE DEPARTMENT
DATE: 06/15/22 Robert J. Duffke (Signature)

FILE NAME : S:\DOT\DOT_SE\210430-ID1060-27-03_I94 EW NEPA CONTRACT\SURVEY\DWG\1060-27-21_EARLY_ACQUISITION\1060-27-21_RW PLAT_ TITLE.DWG DATE : 7/9/2025 5:15 PM
LAYOUT NAME - 1060-27-21_RW PLAT_ TITLE - TITLE 4.01
PLOT BY : BRIAN DODGE, PS PLOT NAME :

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

* = DENOTES AREA IS CALCULATED

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	R/W ACRE(S) REQUIRED (ACRES)			TLE AREA (ACRES)	PARCEL NUMBER
				NEW	EXISTING	TOTAL		
1	4.04	WISCONSIN ELECTRIC POWER CO C/O REAL ESTATE DEPT.	FEE	0.533		0.533		1
2	4.05	SYLVAN HOLDINGS LLC	FEE	0.336		0.336		2
3(5)	4.05	2612 GREVES LLC	FEE	2.280		2.280		3(5)
4	4.05	DOGS WORLD LLC C/O SUE STEINBACH	FEE	0.706		0.706		4
5	4.06	2326 LLC	FEE, TLE	1.871		1.871	0.982	5
6(2)	4.07	THOMAS & JANE ABSHIRE	FEE	0.130		0.130		6(2)
7(3)	4.04, 4.05	RED STAR PROPERTY, LLC	FEE	0.512 *		0.512 *		7(3)
20(6)	4.05	RVS 2-0 LLC	TLE				0.144	20(6)

UTILITY NUMBER	SHEET NUMBER	OWNER'S NAME	INTEREST REQUIRED	UTILITY NUMBER
500(3)	4.04, 4.05, 4.06	WE-ENERGIES - ELECTRIC	RELEASE OF RIGHTS	500(3)
501(7)	4.05	WE-ENERGIES - GAS	RELEASE OF RIGHTS	501(7)
504	4.05	AT&T WISCONSIN	RELEASE OF RIGHTS	504
505	4.04	ATC	RELEASE OF RIGHTS	505
525(7)	4.04, 4.05	CITY OF MILWAUKEE - COMBINED SEWER	RELEASE OF RIGHTS	525(7)
522	4.05	CITY OF MILWAUKEE - WATER	RELEASE OF RIGHTS	522
571	4.05	MMSD	RELEASE OF RIGHTS	571

GN

R-21-E | R-22-E

4

4

T-7-N

T-7-N

4.07

4.04

4.05

4.06

W. FAIRVIEW AVENUE

W. DIXON STREET

W. CLYBOURN ST.

W. SAINT PAUL AVE.

W. GREEVES STREET

STORY HILL

Calumet Park

MOUNT VERNON

IH94

68TH STREET

67TH STREET

66TH STREET

65TH STREET

64TH STREET

63TH STREET

62TH STREET

61TH STREET

60TH STREET

51ST STREET

N.35TH STREET

N.30TH STREET

27TH STREET

NW-SW | NE-SW | NW-SE | NE-SE | NW-SW | NE-SW | NW-SE | NE-SE | NW-SW

SW-SW | SE-SW | SW-SE | SE-SW | SW-SE | SE-SW | SW-SE | SW-SW

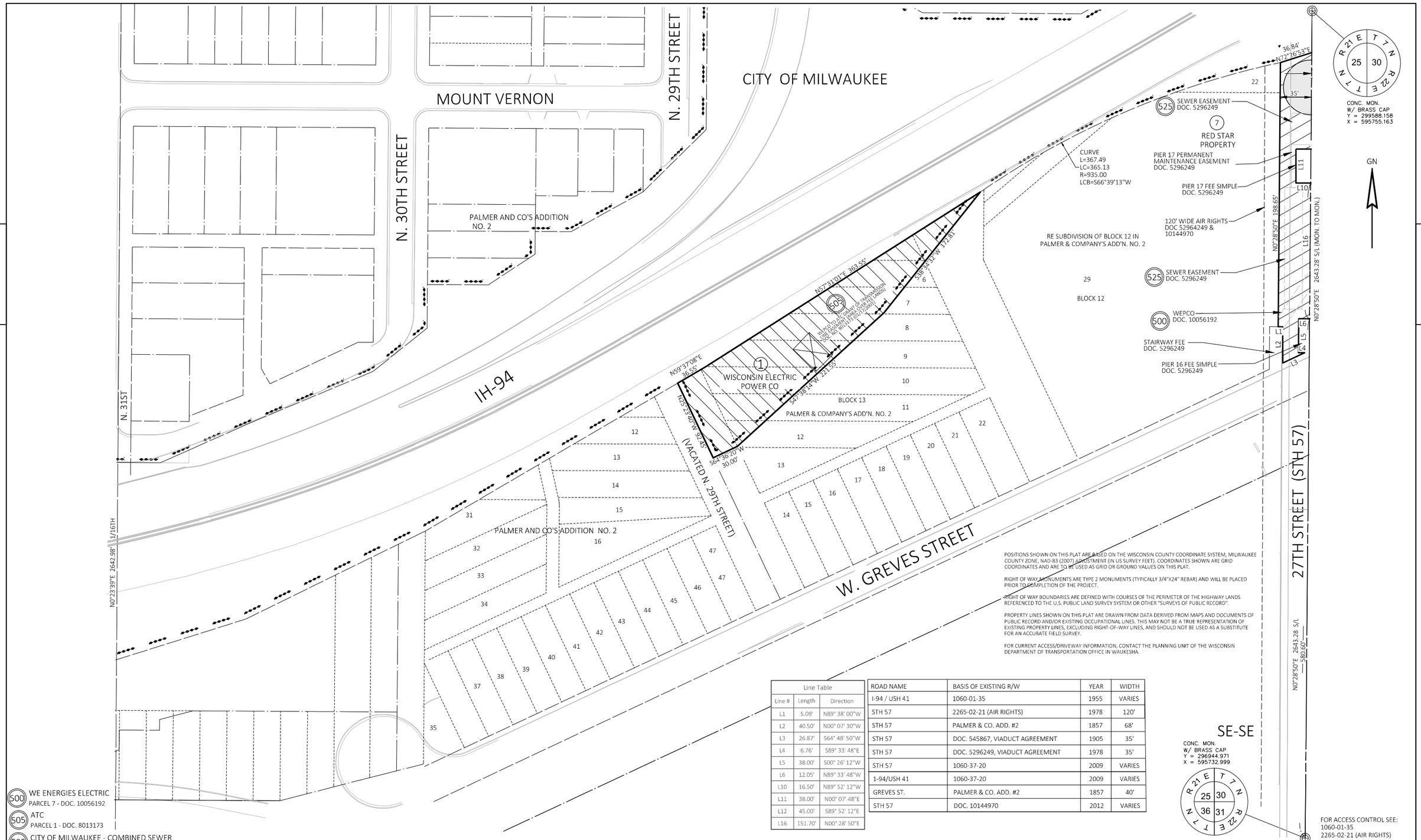
NW-NE | NW-NW | NE-NW | NW-NE | NE-NE | NW-NW | NE-NW | NW-NE | NE-NE

SW-NE | SE-NE | SW-NW | SE-NW | SW-NE | SE-NE | SW-NW | SE-NW | SW-NE | SE-NE

REVISION DATE 09/16/2024 09/12/2023 10/21/2024 08/27/2024 07/09/2025 09/05/2024	DATE 06/10/2022 GRID FACTOR	SCALE, FEET 0 200 400	HWY: I-94 COUNTY: MILWAUKEE	STATE R/W PROJECT NUMBER 1060-27-21 CONSTRUCTION PROJECT NUMBER	PLAT SHEET 4. 03 PS&E SHEET 429 E

FILE NAME : 1060-27-21_RW PLAT_DETAIL.DWG
LAYOUT NAME - 4.03

PLOT DATE : 7/9/2025 5:15 PM PLOT BY : BRIAN DODGE, PS PLOT NAME : PLOT SCALE : 1 IN:500 FT



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FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

Line Table		
Line #	Length	Direction
L1	5.09'	N89° 38' 00"W
L2	40.50'	N00° 07' 30"W
L3	26.87'	S64° 48' 50"W
L4	6.76'	S89° 33' 48"E
L5	38.00'	S00° 26' 12"W
L6	12.05'	N89° 33' 48"W
L10	16.50'	N89° 52' 12"W
L11	38.00'	N00° 07' 48"E
L12	45.00'	S89° 52' 12"E
L16	151.70'	N00° 28' 50"E

ROAD NAME	BASIS OF EXISTING R/W	YEAR	WIDTH
I-94 / USH 41	1060-01-35	1955	VARIES
STH 57	2265-02-21 (AIR RIGHTS)	1978	120'
STH 57	PALMER & CO. ADD. #2	1857	68'
STH 57	DOC. 545867, VIADUCT AGREEMENT	1905	35'
STH 57	DOC. 5296249, VIADUCT AGREEMENT	1978	35'
STH 57	1060-37-20	2009	VARIES
1-94/USH 41	1060-37-20	2009	VARIES
GREVES ST.	PALMER & CO. ADD. #2	1857	40'
STH 57	DOC. 10144970	2012	VARIES

REVISION DATE			
09/12/2023	09/16/2024		
08/27/2024	10/21/2024		
09/05/2024	07/09/2025		

DATE 06/10/2022

GRID FACTOR

SCALE, FEET 0 50 100

HWY: I-94

COUNTY: MILWAUKEE

STATE R/W PROJECT NUMBER 1060-27-21

CONSTRUCTION PROJECT NUMBER

PLAT SHEET 4. 04

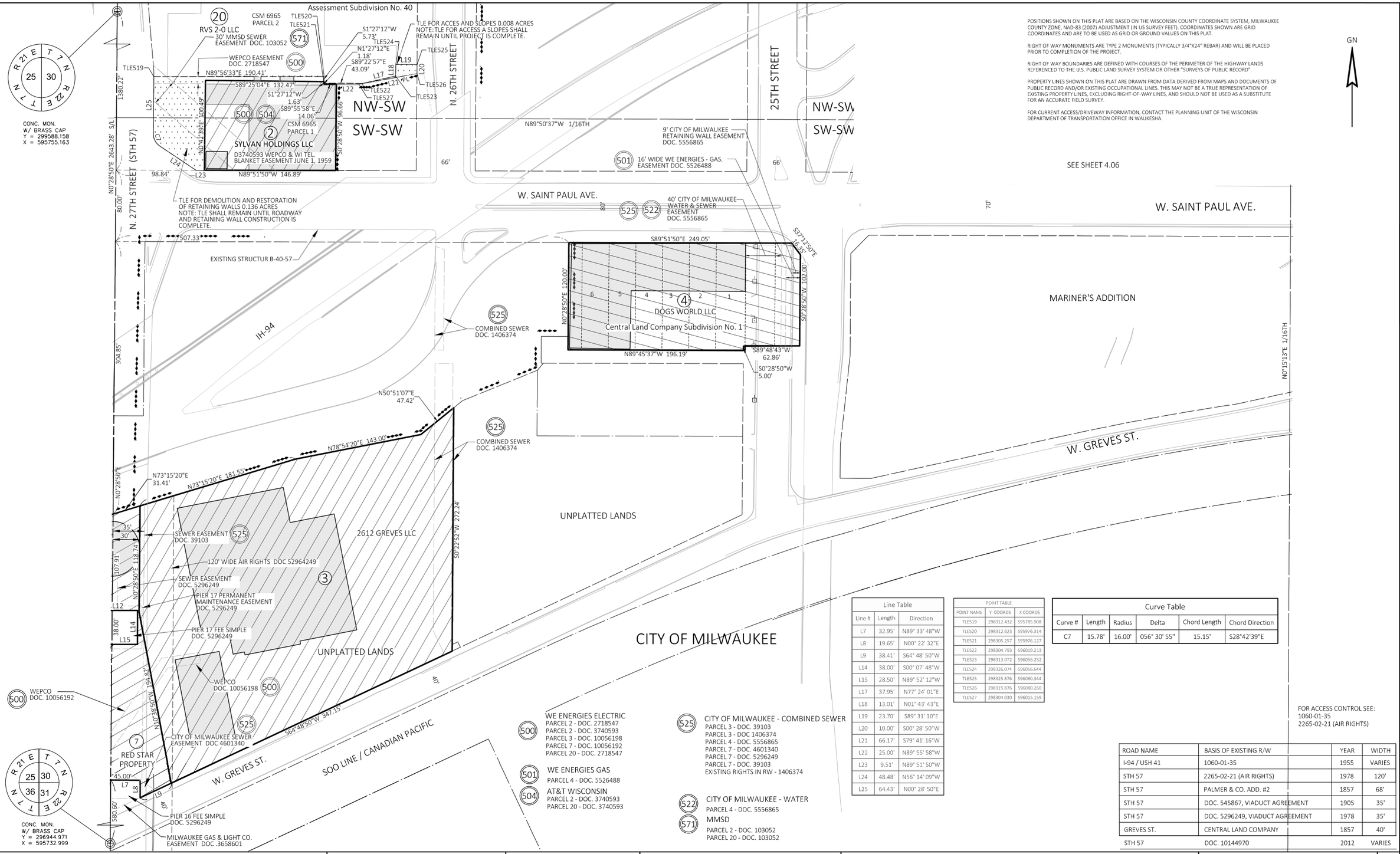
PS&E SHEET 430

E

FILE NAME : 1060-27-21_RW PLAT_DETAIL.DWG
LAYOUT NAME - 4.04

PLOT DATE : 7/9/2025 5:15 PM PLOT BY : BRIAN DODGE, PS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 75



Line Table		
Line #	Length	Direction
L7	32.95'	N89° 33' 48"W
L8	19.65'	N00° 22' 32"E
L9	38.41'	S64° 48' 50"W
L14	38.00'	S00° 07' 48"W
L15	28.50'	N89° 52' 12"W
L17	37.95'	N77° 24' 01"E
L18	13.01'	N01° 43' 43"E
L19	23.70'	S89° 31' 10"E
L20	10.00'	S00° 28' 50"W
L21	66.17'	S79° 41' 16"W
L22	25.00'	N89° 55' 58"W
L23	9.51'	N89° 51' 50"W
L24	48.48'	N56° 14' 09"W
L25	64.43'	N00° 28' 50"E

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
TLE519	298312.432	595785.908
TLE520	298312.623	595976.314
TLE521	298305.257	595976.127
TLE522	298304.793	596019.213
TLE523	298313.072	596056.252
TLE524	298326.074	596056.644
TLE525	298325.876	596080.344
TLE526	298315.876	596080.260
TLE527	298304.030	596015.159

Curve Table					
Curve #	Length	Radius	Delta	Chord Length	Chord Direction
C7	15.78'	16.00'	056° 30' 55"	15.15'	S28°42'39"E

FOR ACCESS CONTROL SEE:
1060-01-35
2265-02-21 (AIR RIGHTS)

ROAD NAME	BASIS OF EXISTING R/W	YEAR	WIDTH
I-94 / USH 41	1060-01-35	1955	VARIES
STH 57	2265-02-21 (AIR RIGHTS)	1978	120'
STH 57	PALMER & CO. ADD. #2	1857	68'
STH 57	DOC. 545867, VIADUCT AGREEMENT	1905	35'
STH 57	DOC. 5296249, VIADUCT AGREEMENT	1978	35'
GREVES ST.	CENTRAL LAND COMPANY	1857	40'
STH 57	DOC. 10144970	2012	VARIES

REVISION DATE				
09/12/2023	10/21/2024			
08/27/2024	07/09/2025			
09/05/2024				

DATE 06/10/2022
GRID FACTOR

SCALE, FEET 0 50 100

HWY: I-94
COUNTY: MILWAUKEE

STATE R/W PROJECT NUMBER 1060-27-21
CONSTRUCTION PROJECT NUMBER

PLAT SHEET 4. 05
PS&E SHEET 431 E

FILE NAME : 1060-27-21_RW PLAT_DETAIL.DWG
LAYOUT NAME - 4.05
PLOT DATE : 7/9/2025 5:15 PM
PLOT BY : BRIAN DODGE, PS
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 75

4

W. CLYBOURN ST.

I-94

CITY OF MILWAUKEE

GN

T 7 N
30
R 22 E

CONC. MON.
W/ BRASS CAP
Y = 299579.769
X = 598383.964

POINT NAME	Y COORDS	X COORDS
PRW500	298212.490	596656.291
PRW501	298293.718	596981.810
PRW502	298329.829	597184.207
PRW503	298344.551	597328.267
TLE504	298205.253	596663.483
TLE505	298262.514	597228.741
TLE506	298336.754	597229.070
ERW507	298252.070	596616.963
ERW508	298304.613	596636.276
ERW509	298416.273	596809.270
ERW510	298425.895	596837.234
ERW511	298427.498	597049.875
ERW512	298447.577	597106.384
ERW513	298439.930	597167.890
ERW514	298404.964	597216.661
ERW515	298404.307	597251.370
ERW516	298383.377	597251.277
TLE517	298240.737	597182.644
TLE518	298203.597	597182.480

LIMITED HIGHWAY EASEMENT STATE HIGHWAY COMMISSION FROM MILWAUKEE GAS LIGHT CO. 2/27/1958) DOC. 3640690

AWARDS OF DAMAGES FEE & PERMANENT MAINTANCE EASEMENT BY CITY OF MILWAUKEE FOR N 25TH ST ON-RAMP DOC. 5185179

LIMITED HIGHWAY EASEMENT STATE HIGHWAY COMMISSION FROM MILWAUKEE GAS LIGHT CO. 2/27/1958 DOC. 3640691

ERW509 — N70°55'19"E 29.57' — ERW510 — N89°34'47"E 212.66' — ERW511 — N70°26'21"E 59.97' — ERW512 — S82°54'47"E 61.98' — ERW513 — S54°21'41"E 60.01' — ERW514 — S88°54'57"E 34.72' — ERW515 — S0°15'13"W 20.93' — ERW516

PL — C2

5
2326 LLC

BILLBOARD 5-1

ERW508 — N20°10'54"E 55.98'

ERW507 — N44°49'02"W 55.80'

PRW500 — N44°49'02"W 10.20' — TLE504

PRW501 — C3 — N79°53'03"E 205.59'

PRW502 — C5 — C6 — S63°14'17"E 86.23' — PRW503 — N63°14'17"W 25.52'

TLE506 — N0°15'13"E 74.24'

TLE505 — N64°42'46"E 50.98'

TLE517 — 26

DISCONTINUED MILWAUKEE CO. LEASE TO BADGER TRUCK CENTER, INC.

N78°30'16"W 305.87'

MARINER'S ADDITION

BLOCK 5

NW-SW
SW-SW
NE-SW
SE-SW

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

5-2 BILLBOARD

N0°15'13"E 70.00'

N89°50'37"W 1/16TH

N89°49'02"W 519.00'

N89°49'02"W 727.38'

468.00'

66'

70'

TLE FOR BUILDING REMOVAL AND CONSTRUCTION STAGING

N0°15'13"E 37.14' — TLE518

WEPCO EASEMENT APRIL 4, 1965 DOC. 4169775

500

W. SAINT PAUL AVE.

S0°15'13"W 2640.81' S/L

1380.00'

1260.81'

MARINER'S ADDITION

ROAD NAME	BASIS OF EXISTING R/W	YEAR	WIDTH
I-94 / USH 41	1060-01-26	1955	VARIES
ST. PAUL AVE.	MARINER'S ADDITION	1902	70'
25TH STREET	CENTRAL LAND COMPANY	1891	33'

FOR ACCESS CONTROL SEE:
1060-01-26

N0°15'13"E 1/16TH

W. GREVES ST.

SOO LINE / CANADIAN PACIFIC

Curve Table

Curve #	Length	Radius	Delta	Chord Length	Chord Direction
C2	207.89'	432.74'	027° 31' 32"	205.90'	N57°09'34"E
C3	335.92'	1928.00'	009° 58' 59"	335.50'	S75°59'20"W
C5	45.40'	970.00'	002° 40' 54"	45.39'	S81°13'30"W
C6	144.94'	970.00'	008° 33' 42"	144.81'	S84°09'54"W

SIGN NUMBER	OWNER	OASIS NUMBER*	PERMIT NO.
5-1	CLEAR CHANNEL		16306
5-2	CLEAR CHANNEL		17091

*OASIS = OUTDOOR ADVERTISING SIGN INVENTORY SYSTEM

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500 WE ENERGIES ELECTRIC
PARCEL 5 - DOC. 416977

T 7 N
30
31
R 22 E

CONC. MON.
W/ BRASS CAP
Y = 296938.987
X = 598372.274

REVISION DATE			
09/16/2024			
09/12/2023	10/21/2024		
08/27/2024	07/09/2025		
09/05/2024			

DATE 06/10/2022

GRID FACTOR

SCALE, FEET
0 50 100

HWY: I-94

COUNTY: MILWAUKEE

STATE R/W PROJECT NUMBER 1060-27-21

CONSTRUCTION PROJECT NUMBER

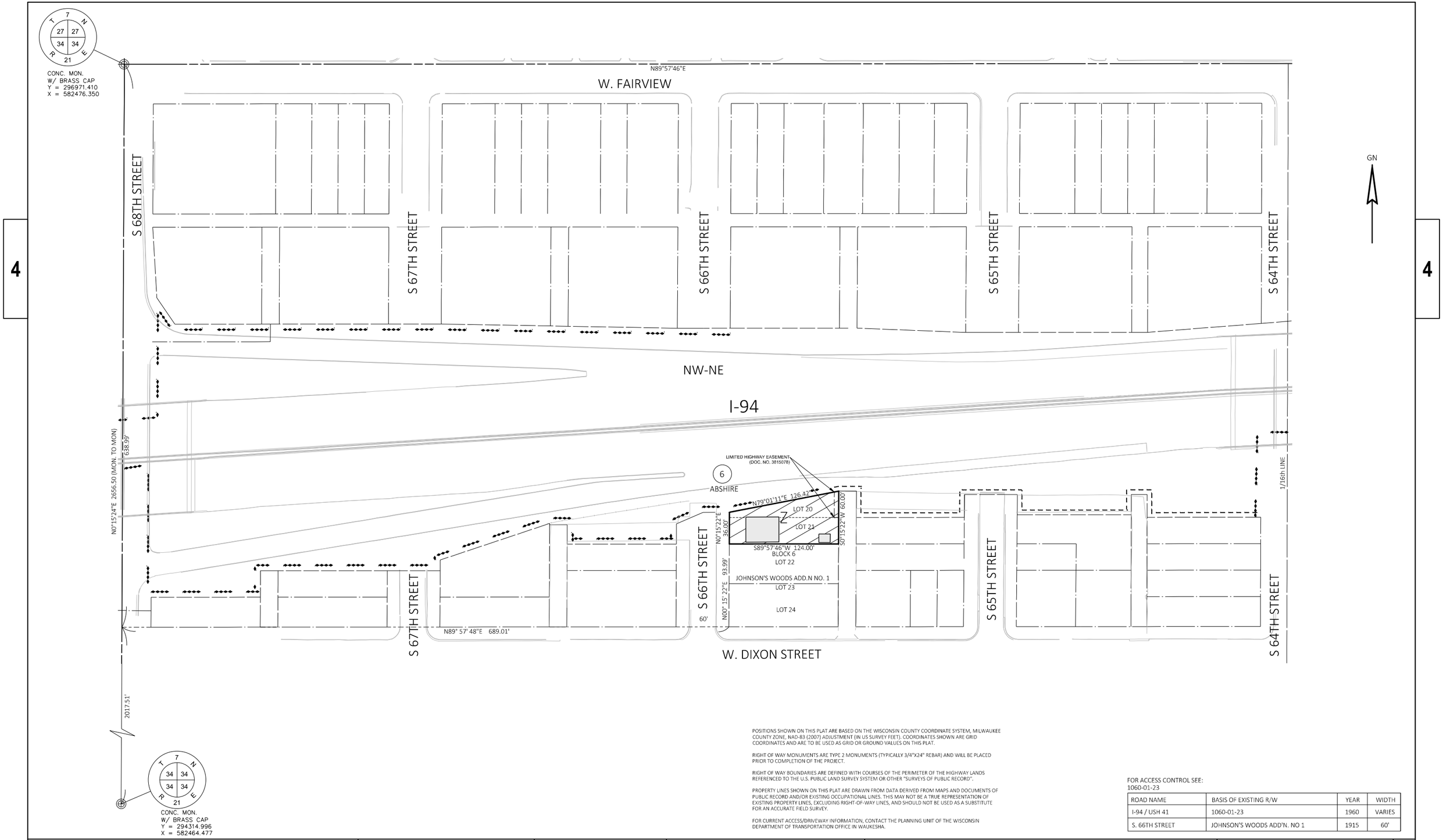
PLAT SHEET 4. 06

PS&E SHEET 432

E

FILE NAME : 1060-27-21_RW PLAT_DETAIL.DWG
LAYOUT NAME - 4.06

PLOT DATE : 7/9/2025 5:15 PM PLOT BY : BRIAN DODGE, PS PLOT NAME : PLOT SCALE : 1 IN:50 FT



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FOR ACCESS CONTROL SEE:
1060-01-23

ROAD NAME	BASIS OF EXISTING R/W	YEAR	WIDTH
I-94 / USH 41	1060-01-23	1960	VARIES
S. 66TH STREET	JOHNSON'S WOODS ADD'N. NO 1	1915	60'

REVISION DATE			
09/12/2023	09/16/2024		
08/27/2024	10/21/2024		
09/05/2024	07/09/2025		

DATE 06/10/2022

GRID FACTOR

SCALE, FEET
0 50 100

HWY: I-94

COUNTY: MILWAUKEE

STATE R/W PROJECT NUMBER 1060-27-21

CONSTRUCTION PROJECT NUMBER

PLAT SHEET 4. 07

PS&E SHEET 433

E

FILE NAME : 1060-27-21_RW PLAT_DETAIL.DWG
LAYOUT NAME - 4.07

PLOT DATE : 7/9/2025 5:15 PM PLOT BY : BRIAN DODGE, PS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 75

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE (P.L.)
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) — W (TYPE)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING — TO BE REMOVED
BRIDGE — CULVERT

SECTION CORNER SYMBOL (18 / 23 24 26 25 / 9)
SECTION CORNER MONUMENT
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) IP
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN — SIGN
OFF-PREMISE SIGN #1-25 — SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	□
TELEPHONE POLE	●	⌀
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)	✱	✳

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)

PARCEL NUMBER 25 — UTILITY NUMBER 40
PARALLEL OFFSETS

CONVENTIONAL UTILITY SYMBOLS

WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS
ELECTRIC TOWER	⊠

	NON-COMPENSABLE	COMPENSABLE
POWER POLE	☃	☃
TELEPHONE POLE	⌀	●
TELEPHONE PEDESTAL	✳	✱

CURVE DATA ABBREVIATIONS

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ /DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	OUTLOT	OL
ACRES	AC	PAGE	P
AHEAD	AH	POINT OF TANGENCY	PT
ALUMINUM	ALUM	PROPERTY LINE	PL
AND OTHERS	ET AL	RECORDED AS	(100')
BACK	BK	REEL / IMAGE	R/I
BLOCK	BLK	REFERENCE LINE	R/L
CENTERLINE	C/L	PERMANENT LIMITED EASEMENT	PLE
CERTIFIED SURVEY MAP	CSM	POINT OF BEGINNING	POB
CONCRETE	CONC	POINT OF CURVATURE	PC
COUNTY	CO	POINT OF COMPOUND CURVE	PCC
COUNTY TRUNK HIGHWAY	CTH	POINT OF INTERSECTION	PI
DISTANCE	DIST	REMAINING	REM
CORNER	COR	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
DOCUMENT NUMBER	DOC	RIGHT	RT
EASEMENT	EASE	RIGHT OF WAY	R/W
EXISTING	EX	SECTION	SEC
GAS VALVE	GV	SEPTIC VENT	SEPV
GRID NORTH	GN	SQUARE FEET	SF
HIGHWAY EASEMENT	HE	STATE TRUNK HIGHWAY	STH
IDENTIFICATION	ID	STATION	STA
LAND CONTRACT	LC	TELEPHONE PEDESTAL	TP
LEFT	LT	TEMPORARY LIMITED EASEMENT	TLE
MONUMENT	MON	TRANSPORTATION PROJECT PLAT	TPP
NATIONAL GEODETIC SURVEY	NGS	UNITED STATES HIGHWAY	USH
NUMBER	NO	VOLUME	V

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), MILWAUKEE COUNTY, NAD 83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, CENTERLINE OF EXISTING PAVEMENTS AND/OR EXISTING OCCUPATIONAL LINES. RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD. DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

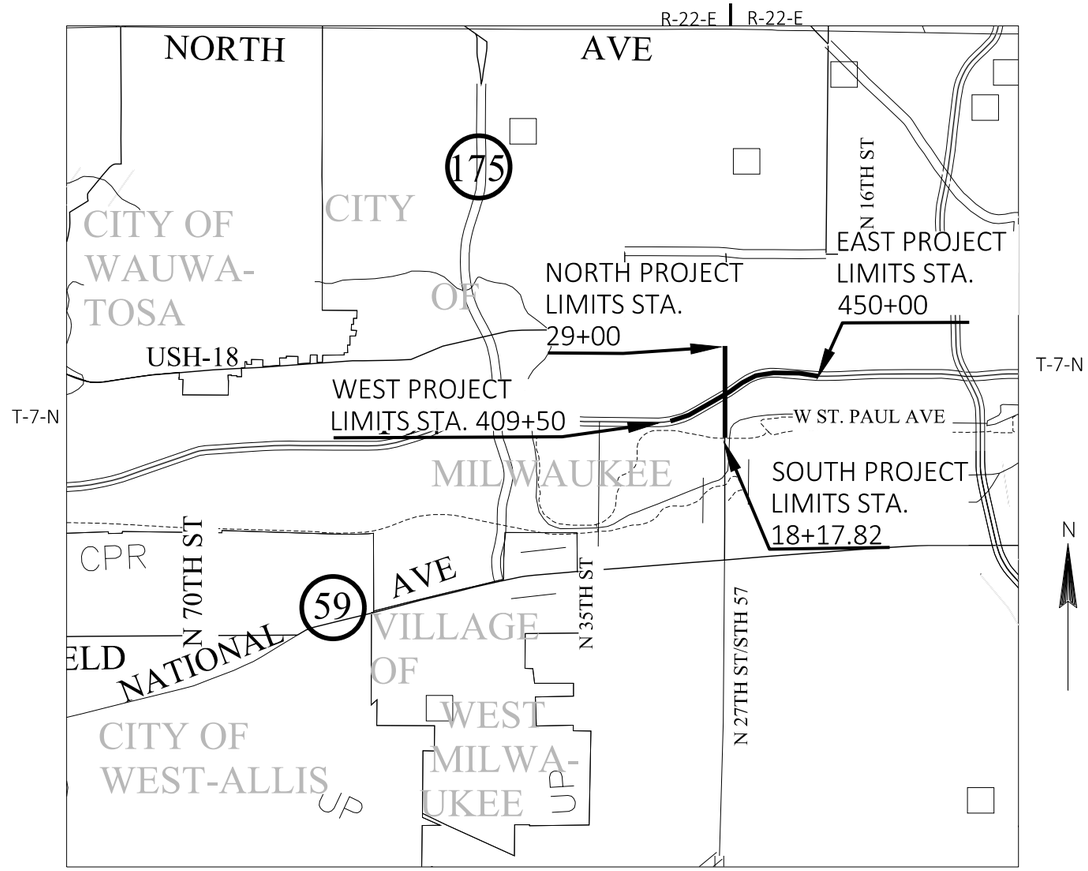
A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

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

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN



LAYOUT
SCALE 0 500 1000 FT

THIS PLAT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES AND ACCESS RIGHTS.

R/W PROJECT NUMBER 1060-27-24	SHEET NUMBER	TOTAL SHEETS
	4.01	

PLAT OF RIGHT OF WAY REQUIRED FOR
STH 57/IH 94 OVERPASS
(I-94 EAST - WEST FREEWAY)
GREVES ST. - CLYBOURN ST.
(35TH ST. - 16TH ST.)

STH 57/IH 94 — MILWAUKEE COUNTY

CONSTRUCTION PROJECT NUMBER: 1060-27-74

REVISION DATE
4/28/2025
7/1/2025

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED FOR THE DEPARTMENT

DATE: 10/09/2024 (Signature)

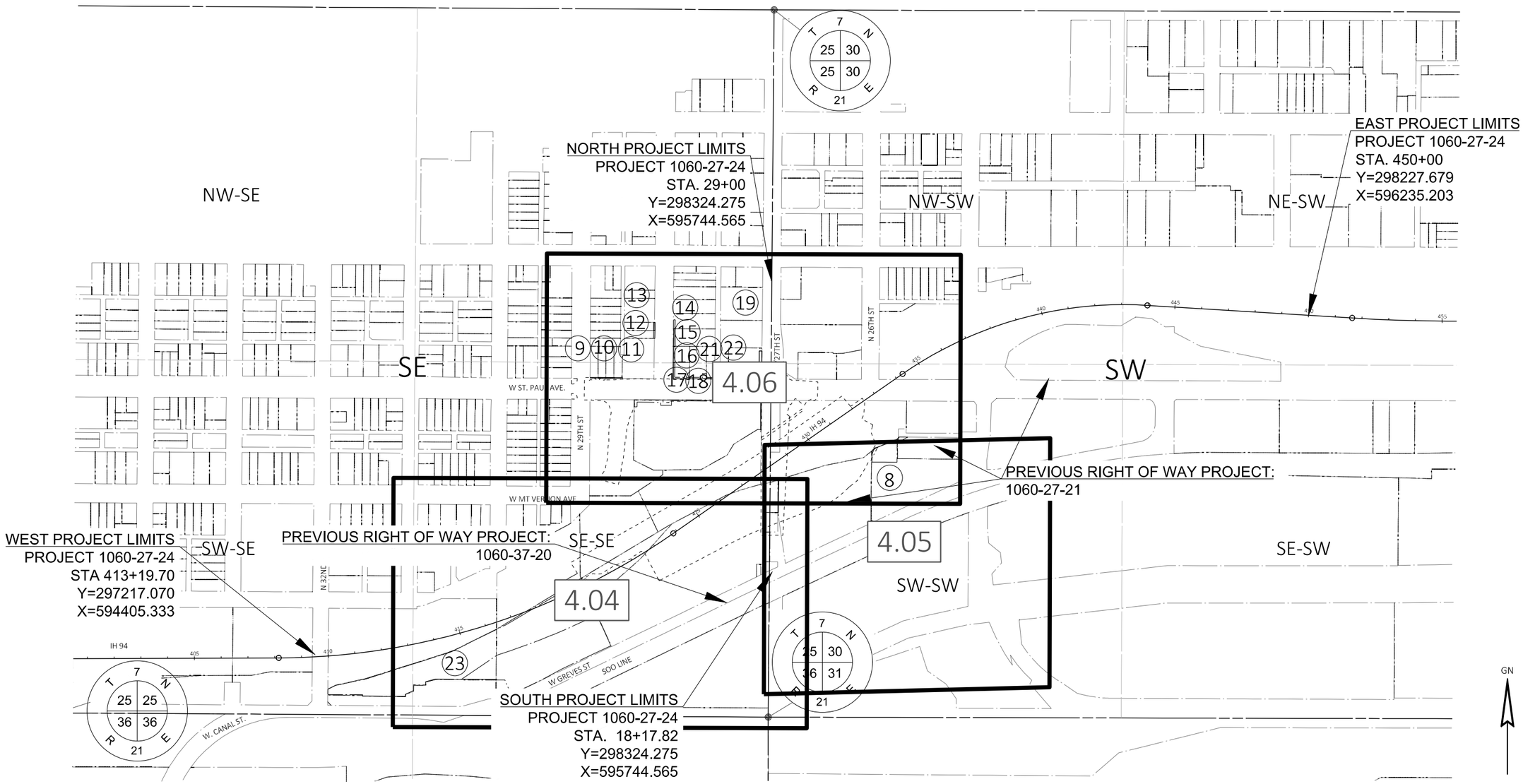
SCHEDULE OF LANDS & INTERESTS REQUIRED

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

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	*OWNER	INTEREST REQUIRED	R/W ACRE(S) REQUIRED (SQ FT)			TLE AREA (SQ FT)	PLE AREA (SQ FT)
				NEW	EXISTING	TOTAL		
8	4.05	ALMACEN DEVELOPMENT LLC	FEE,PLE,TLE	59	--	59	6223	347
9	4.06	QUALITY ESTATES LLC	TLE				90	
10	4.06	JOSE AGUILA-ESPINOSA	TLE				180	
11	4.06	DALE R MILHANS AND ELIZABETH L. MILHANS	TLE				90	
12	4.06	OSCAR CHAVEZ	TLE				300	
13	4.06	MONIRA LOZANO	TLE				300	
14	4.06	RESIDENCE GURU LLC	TLE				165	
15	4.06	MILO W HETH	TLE				335	
16	4.06	ROMEO ZARATE CRUZ	TLE				300	
17	4.06	TERRY L. BROOKS AND THE ESTATE OF PAUL H. BROOKS, DECEASED	TLE				585	
18	4.06	AHMAD YASIN	TLE				535	
19	4.06	DREAMLAND PETROLEUM COMPANY	PLE, TLE				2156	58
20	4.06	DREAMLAND PETROLEUM COMPANY	TLE				155	
21	4.06	DREAMLAND PETROLEUM COMPANY	TLE				150	
22	4.06	DREAMLAND PETROLEUM COMPANY	TLE				150	
23(3)	4.04, 4.06	WISCONSIN ELECTRIC POWER COMPANY	FEE,PLE,TLE	100252	--	100252	3733	60690

PARCEL NUMBER	SHEET NUMBER	*OWNER	INTEREST REQUIRED
500	4.05,4.06	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
501 (3)	4.06	ELIMINATED	
504 (3)	4.06	AT&T - TELEPHONE	RELEASE OF RIGHTS
505	4.04, 4.06	AMERICAN TRANSMISSION COMPANY (ATC)	RELEASE OF RIGHTS
521 (3)	4.04	ELIMINATED	
522 (3)	4.06	ELIMINATED	
525 (3)	4.04	CITY OF MILWAUKEE - COMBINED SEWER	RELEASE OF RIGHTS
571	4.04	MILWAUKEE METROPOLITAN SEWER DISTRICT (MMSD)	RELEASE OF RIGHTS
UA 622	4.04, 4.05, 4.06	CITY OF MILWAUKEE - WATER	UTILITY AGREEMENT
UA 623 (3)	4.04, 4.05, 4.06	CITY OF MILWAUKEE - COMLN	UTILITY AGREEMENT
UA 624 (3)	4.04, 4.05, 4.06	CITY OF MILWAUKEE - CONDUIT	UTILITY AGREEMENT
UA 625 (3)	4.04, 4.05, 4.06	CITY OF MILWAUKEE - COMBINED SEWER	UTILITY AGREEMENT
UA 671 (3)	4.04	MILWAUKEE METROPOLITAN SEWER DISTRICT (MMSD)	UTILITY AGREEMENT



REVISION DATE 4/28/2025 7/1/2025	DATE 10/09/2024	SCALE, FEET 0 200 400	HWY: STH 57/IH 94	STATE R/W PROJECT NUMBER 1060-27-24	PLAT SHEET 4.03
	GRID FACTOR		COUNTY: MILWAUKEE	CONSTRUCTION PROJECT NUMBER 1060-27-74	PS&E SHEET 436 E

FILE NAME : 10602724_SCHEDULE.DWG
LAYOUT NAME - 4.03
PLOT DATE : 7/8/2025 12:42 PM PLOT BY : PECK, MATTHEW PLOT NAME : PLOT SCALE :

HWY	BASIS OF EXISTING R/W	WIDTH	YEAR
W. GREVES ST.	PALMER AND CO'S ADDITION NO 2	VARIES	1857
27TH ST.	RE SUB OF PALMER AND CO'S ADDITION NO. 2 BLOCK 12	70'	1884
CANAL ST.	CONTINUATION OF MERRILLS PARK	VARIES	1887
N. 32ND ST.	CONTINUATION OF MERRILLS PARK	60'	1887
IH 94	1060-01-35 / UI 5725(2)	VARIES	1969
IH 94	T 5725(4)	VARIES	1955
N. 27TH ST.	2265-02-21	120'	1978
CANAL ST.	2984-25-29	VARIES	2004
IH 94	1060-37-20	VARIES	2009
IH 94	1060-27-21	VARIES	2022

(571) MILWAUKEE METROPOLITAN SEWERAGE DISTRICT
PARCEL 23 - DOC. NO. 08810473

(525) CITY OF MILWAUKEE - COMBINED SEWER
PARCEL 23 - DOC. NO. 5510012,
DOC. NO. 5522874, DOC. NO 4685932

(505) AMERICAN TRANSMISSION COMPANY
PARCEL 23 - DOC. NO. 8013173

(UA671) MMSD - SEWER

(UA622) CITY OF MILWAUKEE - WATER

(UA624) CITY OF MILWAUKEE - CONDUIT

(UA623) CITY OF MILWAUKEE - COMLN

(UA625) CITY OF MILWAUKEE - COMBINED SEWER

POSITIONS SHOWN ON THIS PLAT ARE BASED ON THE WISCONSIN COUNTY COORDINATE SYSTEM, MILWAUKEE COUNTY ZONE, NAD-83 (2007) ADJUSTMENT (IN US SURVEY FEET). COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

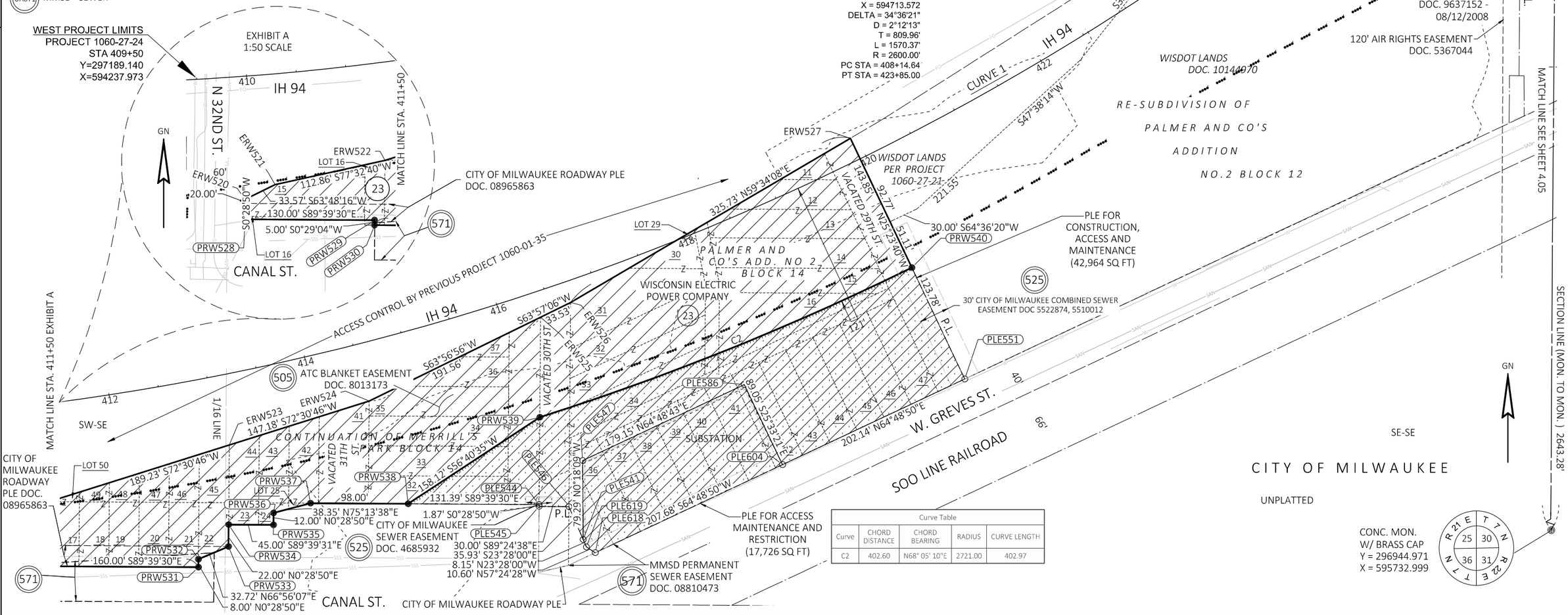
RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 3/4"X24" REBAR) AND WILL BE PLACED PRIOR TO COMPLETION OF THE PROJECT.

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

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

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

TLE FOR CONSTRUCTION STAGING, ACCESS, SLOPES AND CONSTRUCTION OPERATIONS, UNLESS OTHERWISE NOTED.



Curve Table				
Curve	CHORD DISTANCE	CHORD BEARING	RADIUS	CURVE LENGTH
C2	402.60	N68° 05' 10"E	2721.00	402.97

4

4

REVISION DATE	DATE 10/09/2024	SCALE, FEET 0 50 100	HWY: STH 57 / IH 94	STATE R/W PROJECT NUMBER 1060-27-24	PLAT SHEET 4.04	
4/28/2025 7/1/2025	GRID FACTOR		COUNTY: MILWAUKEE	CONSTRUCTION PROJECT NUMBER 1060-27-74	PS&E SHEET 437	E

FILE NAME : 10602724_EASTADV_DETAILS.DWG
LAYOUT NAME - 4.04
PLOT DATE : 7/8/2025 12:42 PM
PLOT BY :
PLOT NAME :
P SCALE :
WISDOT/CADDS SHEET 75

HWY	BASIS OF EXISTING R/W	WIDTH	YEAR
ST PAUL AVE	CENTRAL LAND COMPANY SUBDIVISION NO. 1	40'	1884
IH 94	1060-01-35 / UI 5725(2)	VARIES	1969
IH 94	T 5725(4)	VARIES	1955
27TH ST	2265-02-21	120'	1978
IH 94	1060-27-21	VARIES	2022

POSITIONS SHOWN ON THIS PLAT ARE BASED ON THE WISCONSIN COUNTY COORDINATE SYSTEM, MILWAUKEE COUNTY ZONE, NAD-83 (2007) ADJUSTMENT (IN US SURVEY FEET). COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

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FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

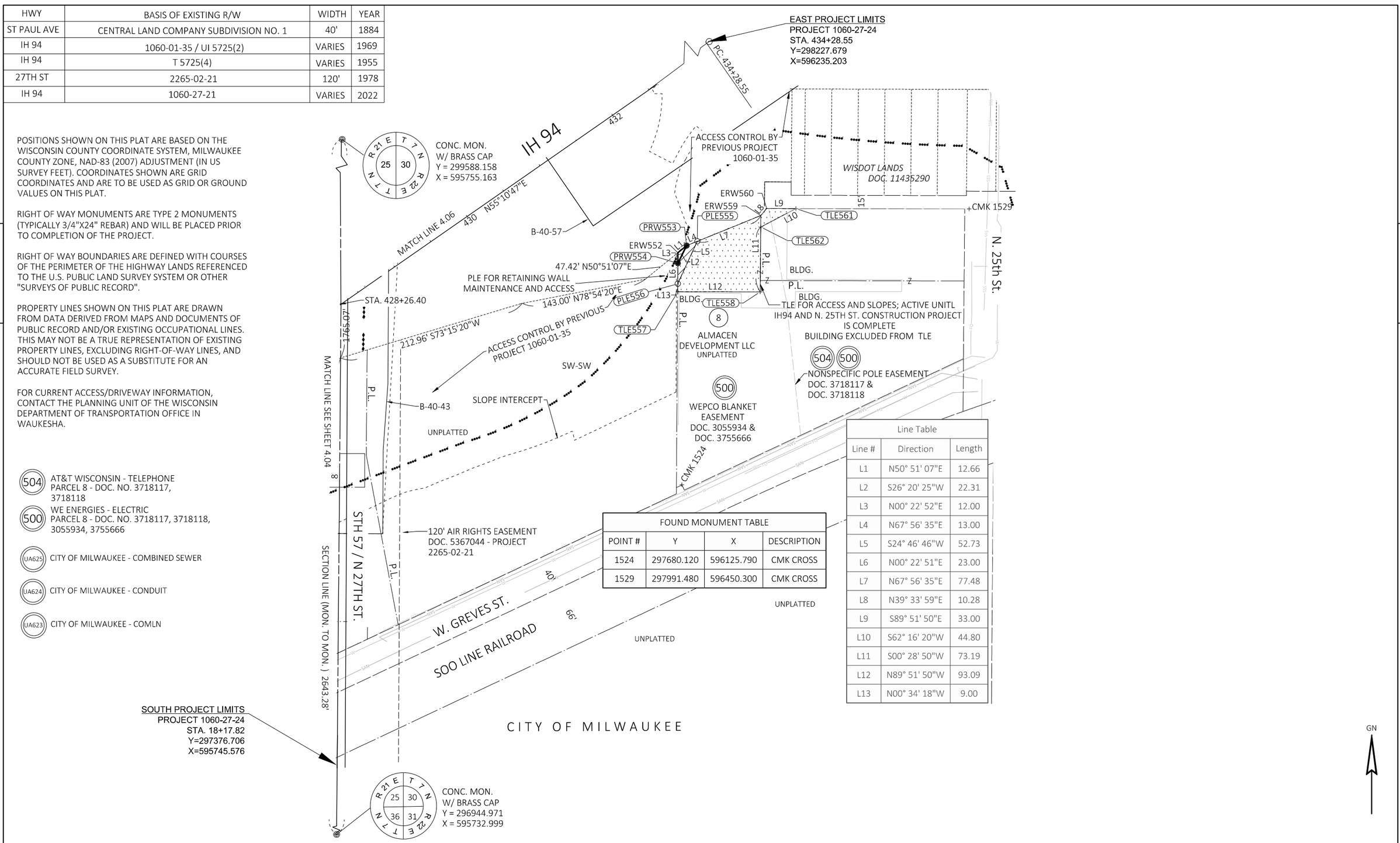
(504) AT&T WISCONSIN - TELEPHONE
PARCEL 8 - DOC. NO. 3718117, 3718118

(500) WE ENERGIES - ELECTRIC
PARCEL 8 - DOC. NO. 3718117, 3718118, 3055934, 3755666

(UA625) CITY OF MILWAUKEE - COMBINED SEWER

(UA624) CITY OF MILWAUKEE - CONDUIT

(UA623) CITY OF MILWAUKEE - COMLN



FOUND MONUMENT TABLE			
POINT #	Y	X	DESCRIPTION
1524	297680.120	596125.790	CMK CROSS
1529	297991.480	596450.300	CMK CROSS

Line Table		
Line #	Direction	Length
L1	N50° 51' 07"E	12.66
L2	S26° 20' 25"W	22.31
L3	N00° 22' 52"E	12.00
L4	N67° 56' 35"E	13.00
L5	S24° 46' 46"W	52.73
L6	N00° 22' 51"E	23.00
L7	N67° 56' 35"E	77.48
L8	N39° 33' 59"E	10.28
L9	S89° 51' 50"E	33.00
L10	S62° 16' 20"W	44.80
L11	S00° 28' 50"W	73.19
L12	N89° 51' 50"W	93.09
L13	N00° 34' 18"W	9.00

REVISION DATE	DATE	SCALE, FEET	HWY: STH 57/IH 94	STATE R/W PROJECT NUMBER 1060-27-24	PLAT SHEET 4.05	
4/28/2025 7/1/2025	10/09/2024	0 50 100	COUNTY: MILWAUKEE	CONSTRUCTION PROJECT NUMBER 1060-27-74	PS&E SHEET 438	E
	GRID FACTOR					

FILE NAME : 10602724_EASTADV_DETAILS.DWG
LAYOUT NAME - 4.05
PLOT DATE : 7/8/2025 12:43 PM
PLOT BY :
PLOT NAME :
P SCALE :
WISDOT/CADDS SHEET 75

505 AMERICAN TRANSMISSION COMPANY
PARCEL 23 - DOC. NO. 8013173

UA625 CITY OF MILWAUKEE - COMBINED SEWER

UA622 CITY OF MILWAUKEE - WATER

UA624 CITY OF MILWAUKEE - CONDUIT

UA623 CITY OF MILWAUKEE - COMLN

NORTH PROJECT LIMITS
PROJECT 1060-27-24
STA. 29+00
Y=298402.932
X=595741.724

CONC. MON.
W/ BRASS CAP
Y = 299588.158
X = 595755.163

DETAIL A
1"=40'

9'x5' PLE FOR SIGNAL MAINTENANCE

PALMER AND CO'S ADDITION

BUILDINGS EXCLUDED FROM TLE

BLOCK 8

BLOCK 7

BLOCK 11

RE-SUBDIVISION OF BLOCK 12 IN PALMER AND CO'S ADDITION BLOCK 12

CSM 7979

CSM 8559 Doc. 10308211 LOT 1

DREAMLAND PETROLEUM CO

TLE FOR ACCESS, SIGNALS, AND ROADWAY IMPROVEMENTS

BUILDINGS. SIGNS AND WALLS EXCLUDED FROM TLE

RESIDENCE GURU LLC

LOZANO

CHAVEZ

HETH

ZARATE

YASIN

BROOKS

QUALITY ESTATES LLC

AGUILA-ESPINOSA

MILHAUS

WISCONSIN ELECTRIC POWER CO.

TLE FOR GRADING AND SIDEWALK IMPROVEMENTS (3733 SQ.FT)

FENCE EXCLUDED FROM TLE

ATC BLANKET EASEMENT
DOC. 8013173

ACCESS CONTROL BY PREVIOUS PROJECT 1060-01-35

SEE DETAIL A

SLOPE INTERCEPT

1/16 Line

NE-SE

SE-SE

SW-SW

NW-SW

EXISTING TLE FROM PROJECT 1060-27-21; ACTIVE UNTIL IH 94 AND W ST PAUL CONSTRUCTION IS COMPLETE

N. 29TH ST.

N. 28TH ST.

N. 26TH ST.

W ST PAUL AVE

VACATED 28 ST.

STH 57 / N 27TH ST.

IH 94

SECTION LINE (MON. TO MON.) 2643.28'

CURVE 2
PI STA = 21+11.46
Y = 298166.268
X = 596080.099
DELTA = 10°59'41"
D = 5°43'46"
T = 96.24'
L = 191.89'
R = 1000.00'
PC STA = 20+15.22
PT STA = 22+07.11

EAST PROJECT LIMITS
PROJECT 1060-27-24
STA. 450+00
Y = 298446.643
X =597752.345

MATCH LINE 4.05

MATCH LINE 4.04

CONC. MON.
W/ BRASS CAP
Y = 296944.971
X = 595732.999

GN

CITY OF MILWAUKEE

FOUND MONUMENT TABLE			
POINT #	Y	X	DESCRIPTION
1491	297904.067	595233.049	IP
1492	298360.410	595309.720	IP 2IN IRON BAR
1495	298209.500	595377.510	IP 0.5IN REBAR
1496	298330.250	595378.890	IP1
1497	298204.920	595440.350	CMK CROSS
1498	298204.600	595502.450	CMK CROSS
1500	298499.470	595713.590	CMK CROSS
1501	298428.300	595714.910	CMK CROSS
1512	298318.190	595780.920	CMK CROSS
1514	298230.670	595789.710	CMK CROSS
1515	298234.820	595792.530	CMK CROSS
1516	298202.790	595832.750	CMK CROSS
1517	298207.850	595832.850	CMK CROSS

HWY	BASIS OF EXISTING R/W	WIDTH	YEAR
27TH ST	PALMER AND CO'S ADDITION	70'	1857
28TH ST	PALMER AND CO'S ADDITION	70'	1857
ST PAUL AVE	RE-SUBDIVISION OF BLOCK 12 IN PALMER AND CO'S ADDITION	70'	1884
IH 94	1060-01-35 / UI 5725(2)	VARIES	1952
27TH ST	2265-02-21	120'	1978
ST PAUL AVE	2265-02-21	VARIES	1978
IH 94	1060-27-20	VARIES	2014

TLE FOR SLOPES, SIDEWALK IMPROVEMENTS AND CONSTRUCTION UNLESS OTHERWISE NOTED

POSITIONS SHOWN ON THIS PLAT ARE BASED ON THE WISCONSIN COUNTY COORDINATE SYSTEM, MILWAUKEE COUNTY ZONE, NAD-83 (2007) ADJUSTMENT (IN US SURVEY FEET). COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 3/4"X24" REBAR) AND WILL BE PLACED PRIOR TO COMPLETION OF THE PROJECT.

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FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

REVISION DATE
4/28/2025
7/1/2025

DATE 10/09/2024

GRID FACTOR

SCALE, FEET
0 50 100

HWY: STH 59/IH 94

COUNTY: MILWAUKEE

STATE R/W PROJECT NUMBER 1060-27-24

CONSTRUCTION PROJECT NUMBER 1060-27-74

PLAT SHEET 4.06

PS&E SHEET 439

E

FILE NAME : 10602724_EASTADV_DETAILS.DWG
LAYOUT NAME - 4.06

PLOT DATE : 7/8/2025 12:43 PM

PLOT BY :

PLOT NAME :

P SCALE :

WISDOT/CADDS SHEET 75

SHEET 4.04

ERW POINT TABLE				
POINT NAME	Y	X	STATION	OFFSET
ERW520	297049.786	594087.430	409+89.83	123.37
ERW521	297064.607	594117.555	410+19.66	110.91
ERW522	297088.950	594227.763	411+27.47	98.06
ERW523	297145.812	594408.246	413+08.84	70.46
ERW524	297190.038	594548.622	414+51.98	58.13
ERW525	297274.168	594720.724	416+37.82	25.69
ERW526	297288.894	594750.852	416+70.79	21.41
ERW527	297453.618	595031.828	419+93.80	22.55

PRW POINT TABLE				
POINT NAME	Y	X	STATION	OFFSET
PRW528	297029.787	594087.262	409+88.33	143.31
PRW529	297029.012	594217.260	411+10.64	156.29
PRW530	297024.012	594217.218	411+10.05	161.26
PRW531	297023.058	594377.216	412+58.34	185.47
PRW532	297031.057	594377.283	412+59.71	177.60
PRW533	297043.878	594407.391	412+89.63	170.40
PRW534	297065.877	594407.576	412+93.65	148.82
PRW535	297065.609	594452.575	413+35.28	157.84
PRW536	297077.608	594452.676	413+37.68	146.12
PRW537	297087.388	594489.759	413+73.96	144.35
PRW538	297086.803	594587.758	414+63.72	167.85
PRW539	297173.670	594719.881	416+06.82	121.00
PRW540	297323.929	595093.394	419+91.87	121.00

PLE POINT TABLE				
POINT NAME	Y	X	STATION	OFFSET
PLE541	297050.882	594763.438	416+10.67	251.22
PLE544	297086.020	594719.146	415+81.50	204.42
PLE545	297084.152	594719.130	415+80.98	206.20
PLE546	297083.843	594749.129	416+07.37	215.47
PLE551	297212.105	595146.479	419+90.37	244.77
PLE604	297126.080	594963.552	418+05.73	248.65
PLE618	297037.697	594775.613	416+17.54	267.50
PLE619	297043.406	594766.684	416+11.41	259.33

SHEET 4.05

ERW POINT TABLE				
POINT NAME	Y	X	STATION	OFFSET
ERW552	297941.962	596121.398	431+71.98	169.58
ERW559	297983.932	596215.072	432+72.84	188.61
ERW560	297991.855	596221.618	432+82.74	185.84

PLE POINT TABLE				
POINT NAME	Y	X	STATION	OFFSET
PLE555	297954.837	596143.265	431+97.28	171.49
PLE556	297906.962	596121.165	431+51.80	198.18

PRW POINT TABLE				
POINT NAME	Y	X	STATION	OFFSET
PRW553	297949.955	596131.216	431+84.60	168.62
PRW554	297929.962	596121.318	431+65.06	179.38

TLE POINT TABLE				
POINT NAME	Y	X	STATION	OFFSET
TLE557	297897.962	596121.255	431+46.74	205.62
TLE558	297897.741	596214.349	432+23.04	258.95
TLE561	297991.776	596254.618	433+09.79	204.75
TLE562	297970.932	596214.963	432+65.33	199.22

SHEET 4.06

ERW POINT TABLE				
POINT NAME	Y	X	STATION	OFFSET
ERW563	298211.878	595068.599	10+99.72	39.80
ERW564	298211.189	595188.597	12+19.72	39.80
ERW565	298360.495	595309.853	13+40.11	189.80
ERW566	298420.493	595310.356	13+40.27	249.80
ERW567	298430.090	595380.439	14+10.30	259.80
ERW568	298210.097	595378.595	14+09.72	39.80
ERW569	298209.207	595533.593	15+64.72	39.80
ERW570	298209.293	595553.594	15+84.72	40.00
ERW571	298208.460	595698.592	17+29.72	40.00
ERW572	298218.402	595708.676	17+39.74	50.00
ERW579	298131.015	595232.926	12+64.50	40.12
ERW581	298128.259	595707.812	17+39.40	40.15
ERW582	298018.213	595706.997	17+39.22	150.20

TLE POINT TABLE				
POINT NAME	Y	X	STATION	OFFSET
TLE573	298313.399	595709.472	17+40.00	145.00
TLE587	298214.878	595068.624	10+99.72	42.80
TLE588	298214.189	595188.614	12+19.72	42.80
TLE589	298360.552	595299.853	13+30.11	189.80
TLE590	298420.550	595300.357	13+30.27	249.80
TLE591	298430.062	595385.439	14+15.30	259.80
TLE592	298215.068	595383.637	14+14.73	44.80
TLE593	298214.471	595487.635	15+18.73	44.80
TLE594	298229.471	595487.761	15+18.77	59.80
TLE595	298229.384	595502.761	15+33.77	59.80
TLE596	298214.385	595502.635	15+33.73	44.80
TLE597	298214.207	595533.635	15+64.73	44.80
TLE598	298214.293	595553.635	15+84.73	45.00
TLE599	298214.115	595583.585	16+14.68	44.99

TLE POINT TABLE				
POINT NAME	Y	X	STATION	OFFSET
TLE600	298219.121	595583.627	16+14.69	50.00
TLE601	298218.524	595687.435	17+18.50	50.00
TLE602	298229.694	595698.764	17+29.77	61.23
TLE603	298313.457	595699.473	17+30.00	145.00
TLE605	298106.016	595232.717	12+64.44	65.12
TLE606	298105.959	595242.717	12+74.44	65.12
TLE607	298121.958	595242.851	12+74.48	49.12
TLE608	298121.447	595331.849	13+63.48	49.12
TLE609	298110.447	595331.780	13+63.48	60.12
TLE610	298110.217	595371.780	14+03.48	60.12
TLE611	298126.217	595371.880	14+03.48	44.12
TLE612	298124.305	595702.782	17+34.39	44.13
TLE613	298018.242	595701.997	17+34.22	150.20

PLE POINT TABLE				
POINT NAME	Y	X	STATION	OFFSET
PLE583	298227.402	595708.728	429+96.18	300.39
PLE584	298227.431	595703.751	429+92.12	303.26
PLE585	298213.431	595703.634	429+84.03	291.83

4

4

REVISION DATE
4/28/2025
7/1/2025

DATE 10/09/2024

GRID FACTOR

SCALE, FEET
0 50 100

HWY: STH 57/IH 94
COUNTY: MILWAUKEE

STATE R/W PROJECT NUMBER 1060-27-24
CONSTRUCTION PROJECT NUMBER 1060-27-74

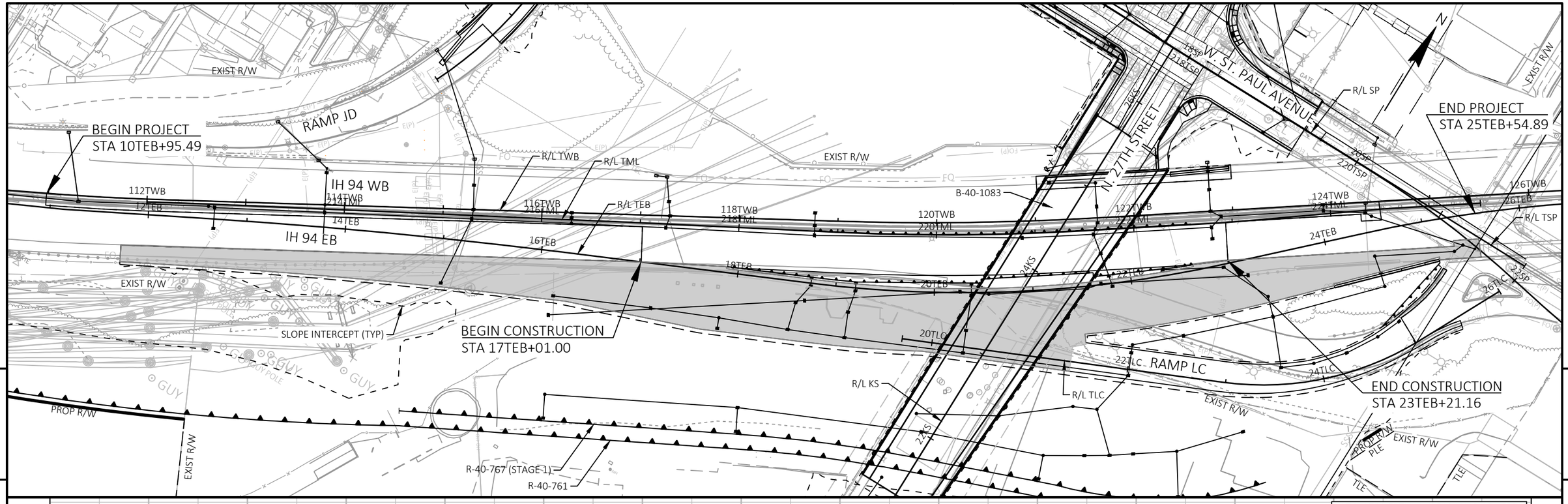
PLAT SHEET 4.07
PS&E SHEET 440

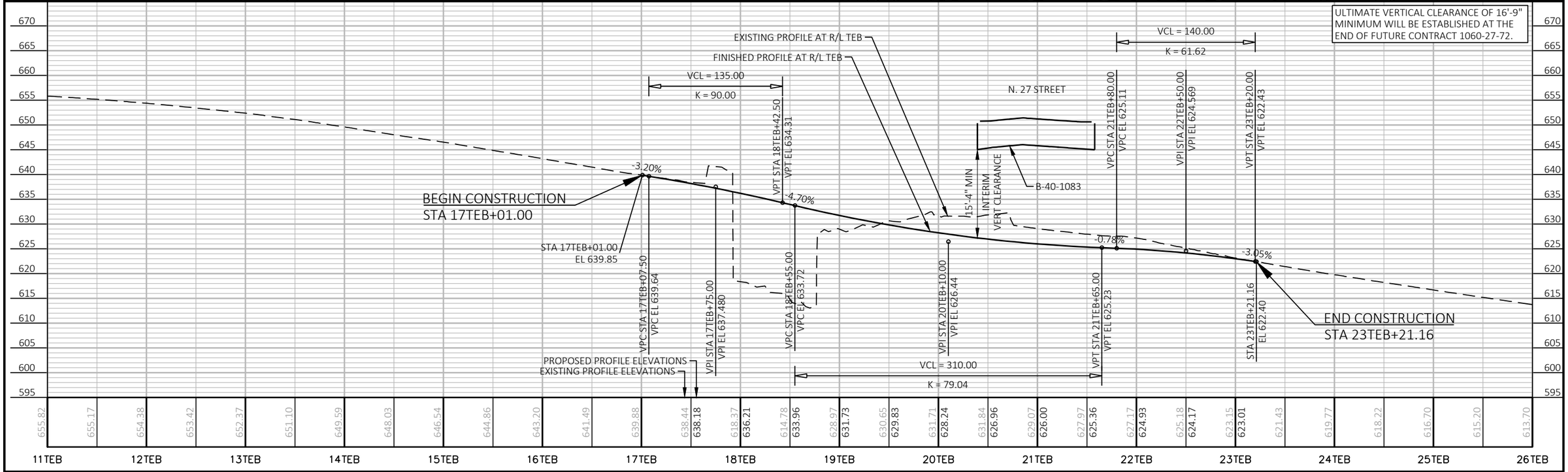
E

FILE NAME : 10602724_EASTADV_DETAILS.DWG
LAYOUT NAME - (4.07) 4.08

PLOT DATE : 7/8/2025 12:43 PM PLOT BY : PLOT NAME : P SCALE :

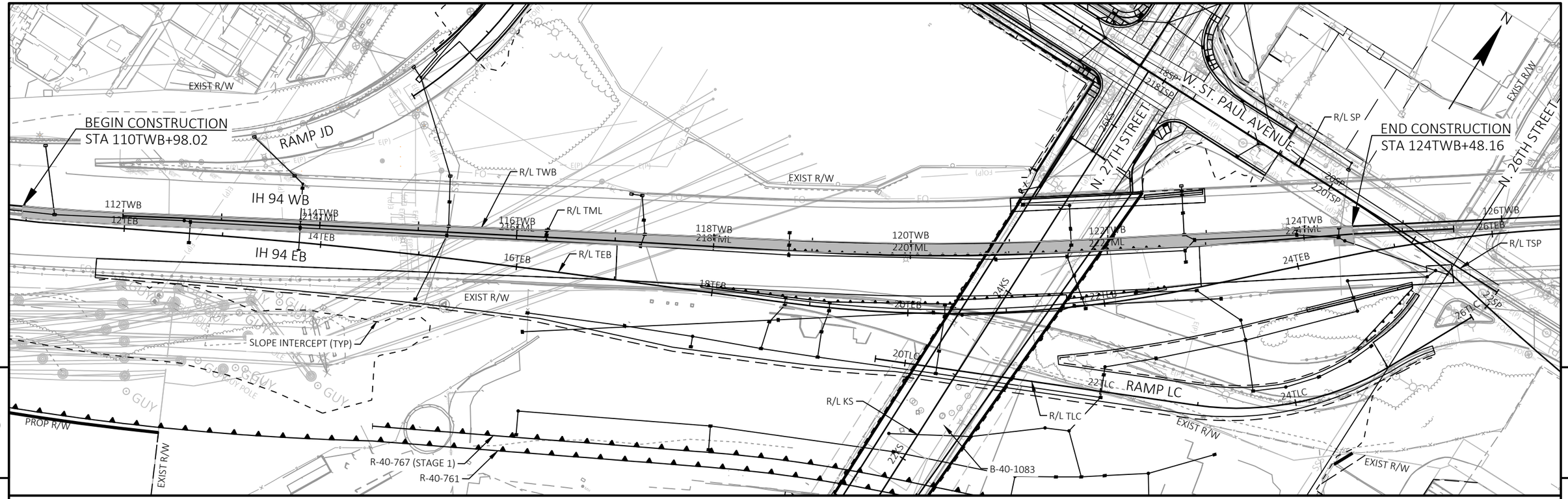
WISDOT/CADDS SHEET 75





PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PLAN AND PROFILE: IH 94 EB - TEB	SHEET 441	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\05 PP\10602709ELA-050101-PP.DWG
LAYOUT NAME - 01 - TEB - 01
PLOT DATE : 7/9/2025 2:50 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



NO PROFILE THIS SHEET

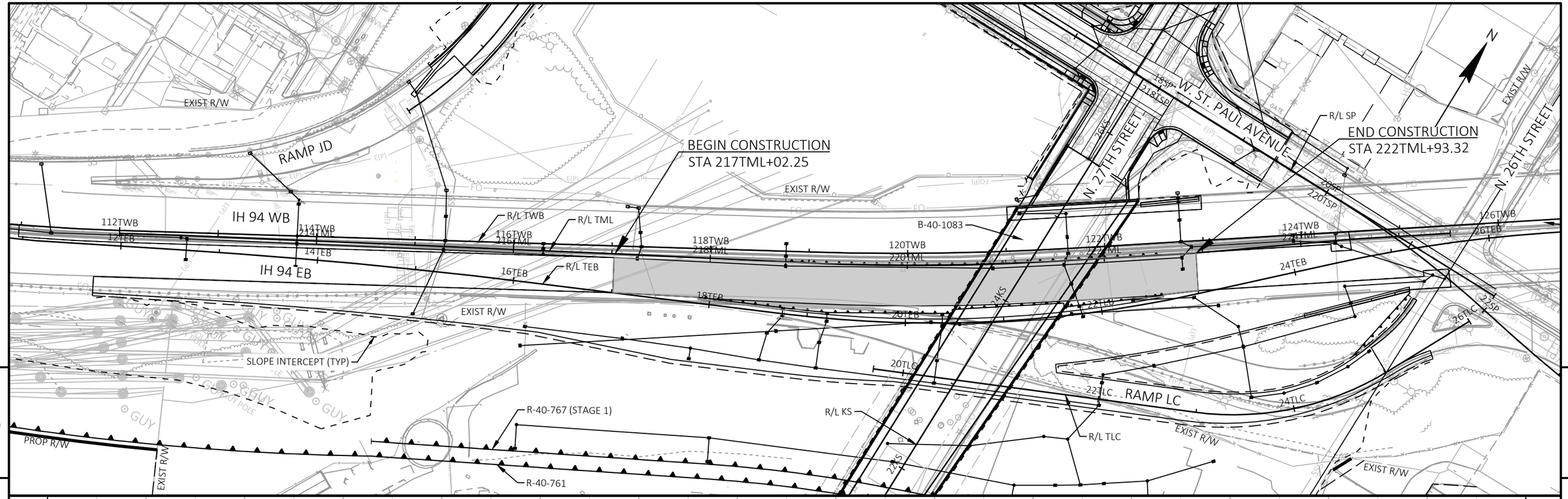
MATCH ELEVATION OF ADJACENT PAVEMENT

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PLAN AND PROFILE: IH 94 EB - TWB	SHEET 442	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\05 PP\10602709ELA-050101-PP.DWG
LAYOUT NAME - 02 - TWB - 01

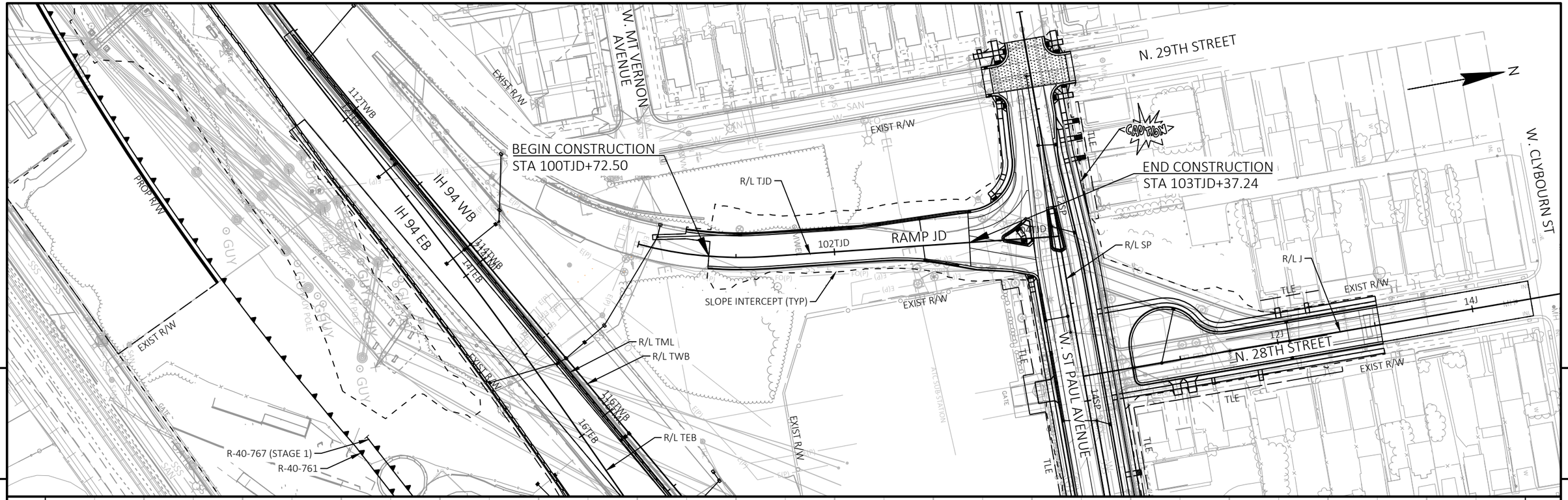
PLOT DATE : 7/9/2025 2:50 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

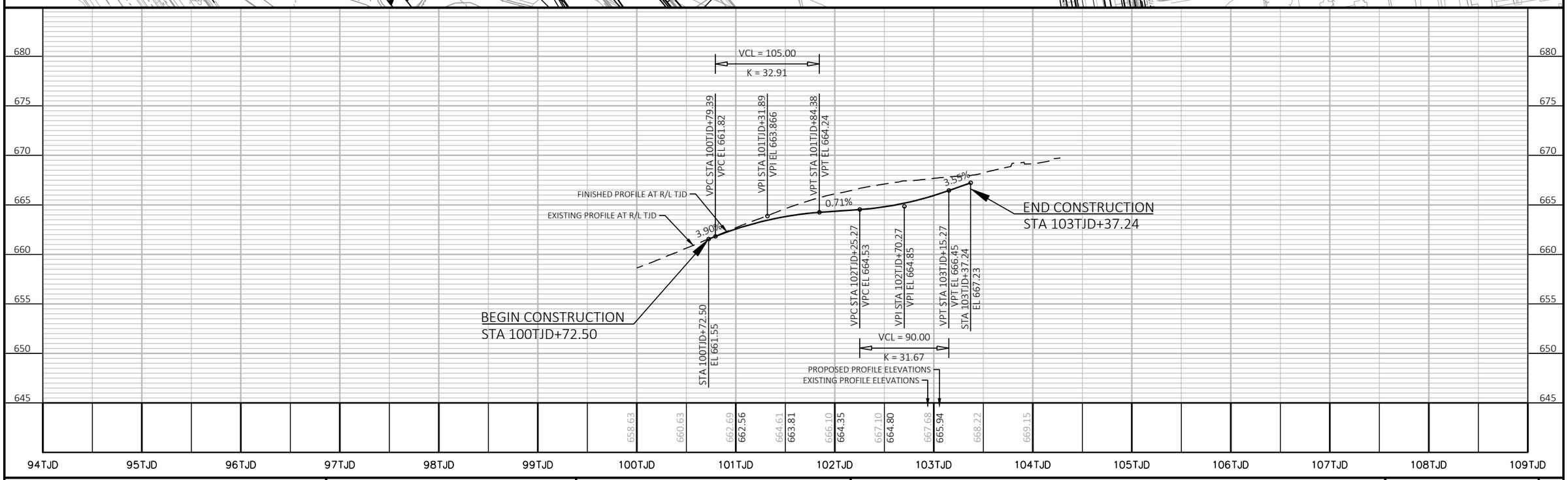
WISDOT/CADDS SHEET 44



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PLAN AND PROFILE: IH 94 EB - TML	SHEET 443	E

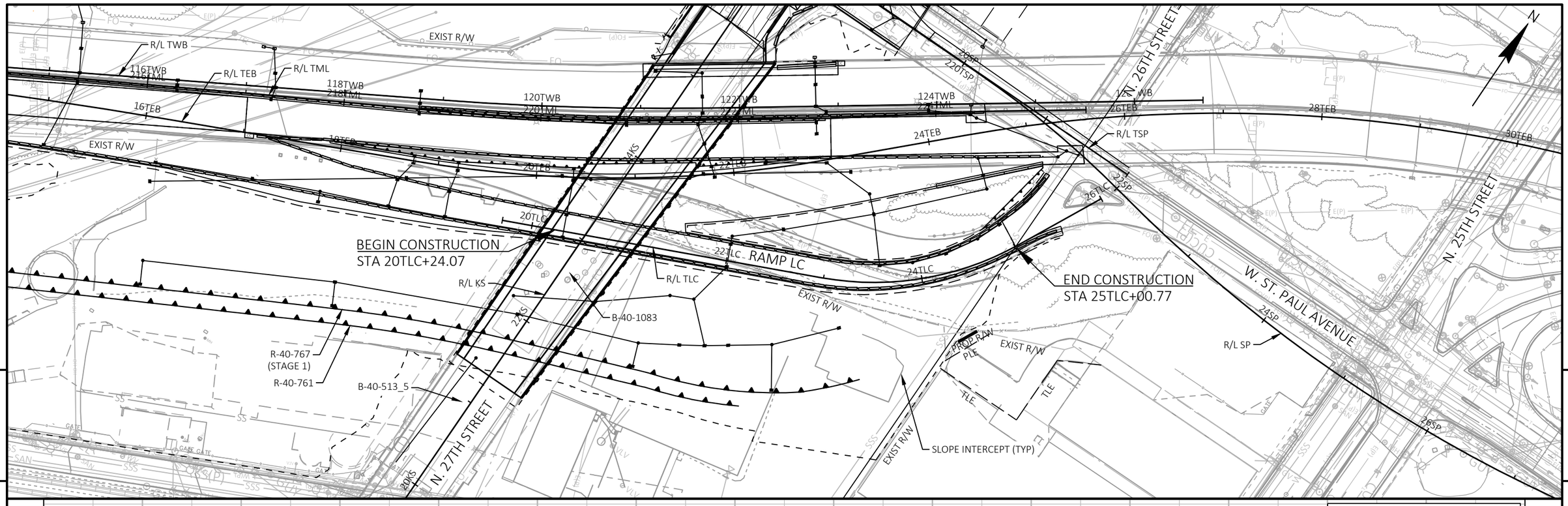
FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\05 PP\10602709ELA-050101-PP.DWG
LAYOUT NAME - 03 - TML - 01
PLOT DATE : 7/9/2025 2:51 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

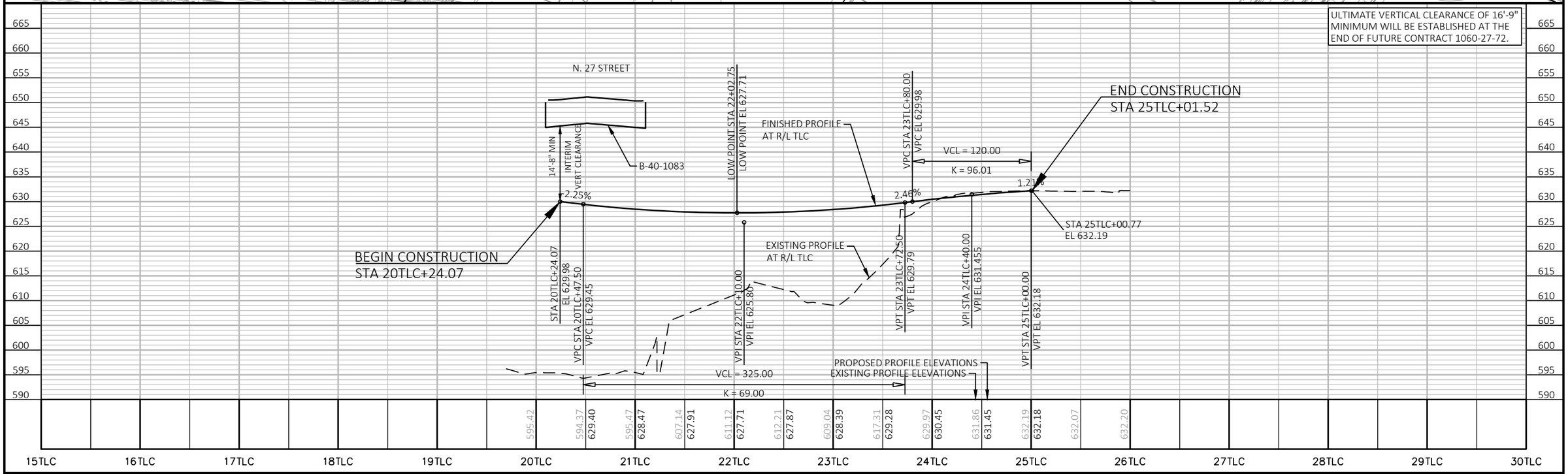




PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PLAN AND PROFILE: RAMP TJD	SHEET 444 E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\05 PP\10602709ELA-050101-PP.DWG
LAYOUT NAME - 04 - TJD - 01
PLOT DATE : 7/9/2025 2:51 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

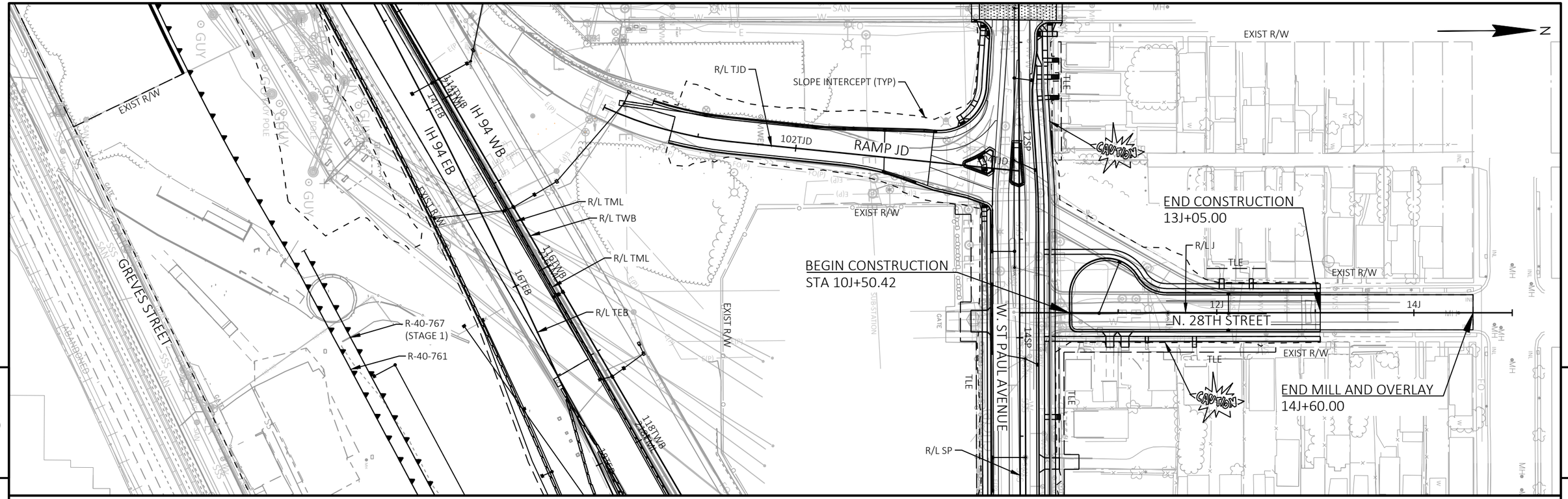


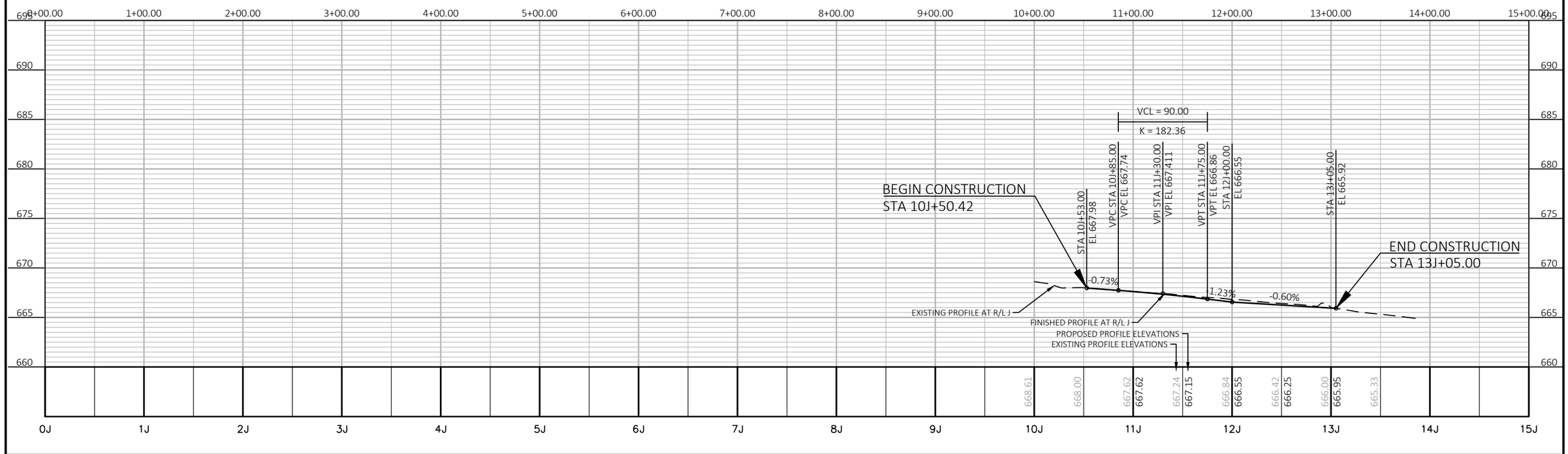


PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PLAN AND PROFILE: RAMP TLC	SHEET 445 E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\05 PP\10602709ELA-050101-PP.DWG
LAYOUT NAME - 05 - TLC - 01

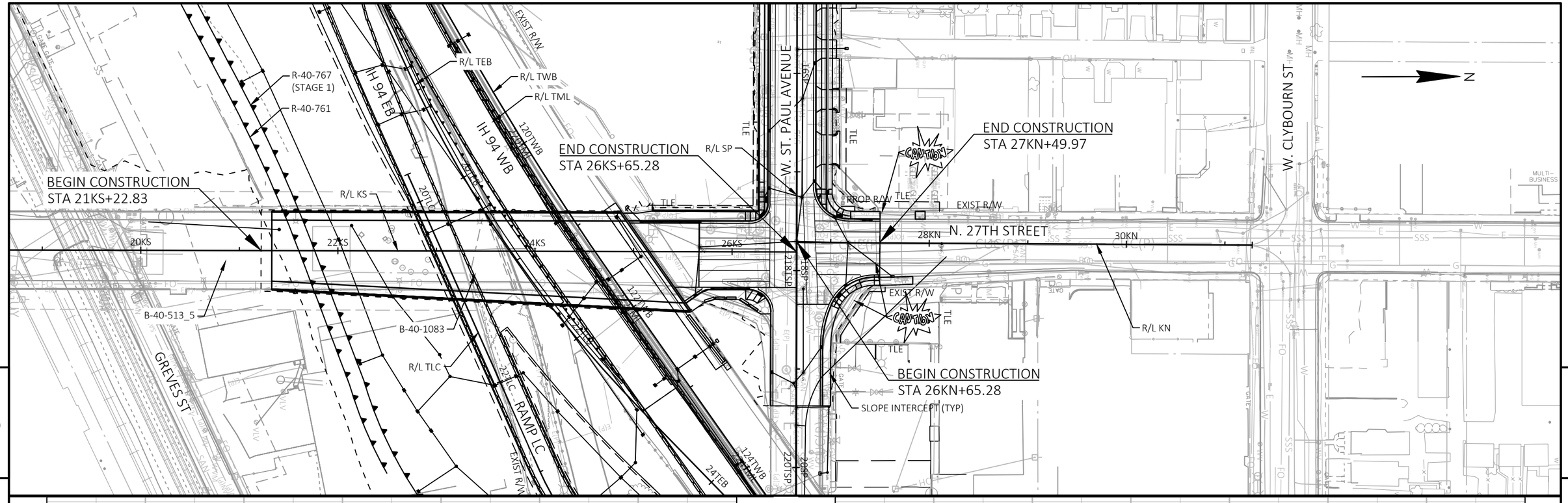
PLOT DATE : 7/9/2025 2:51 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

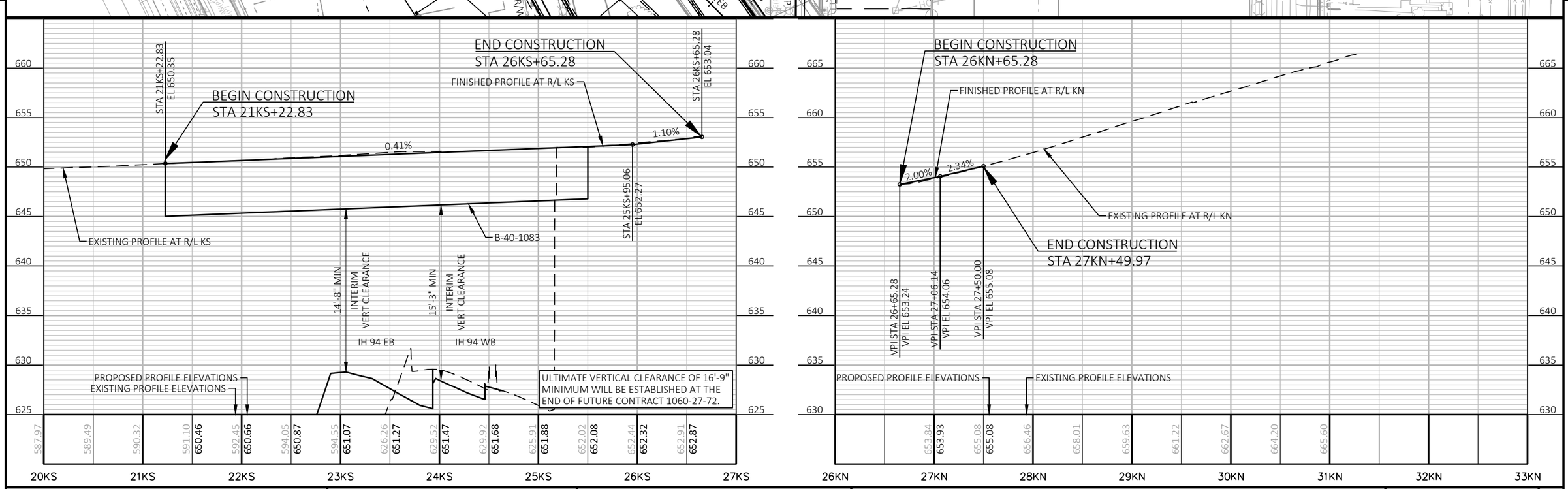




PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PLAN AND PROFILE: N. 28TH STREET	SHEET 446	E

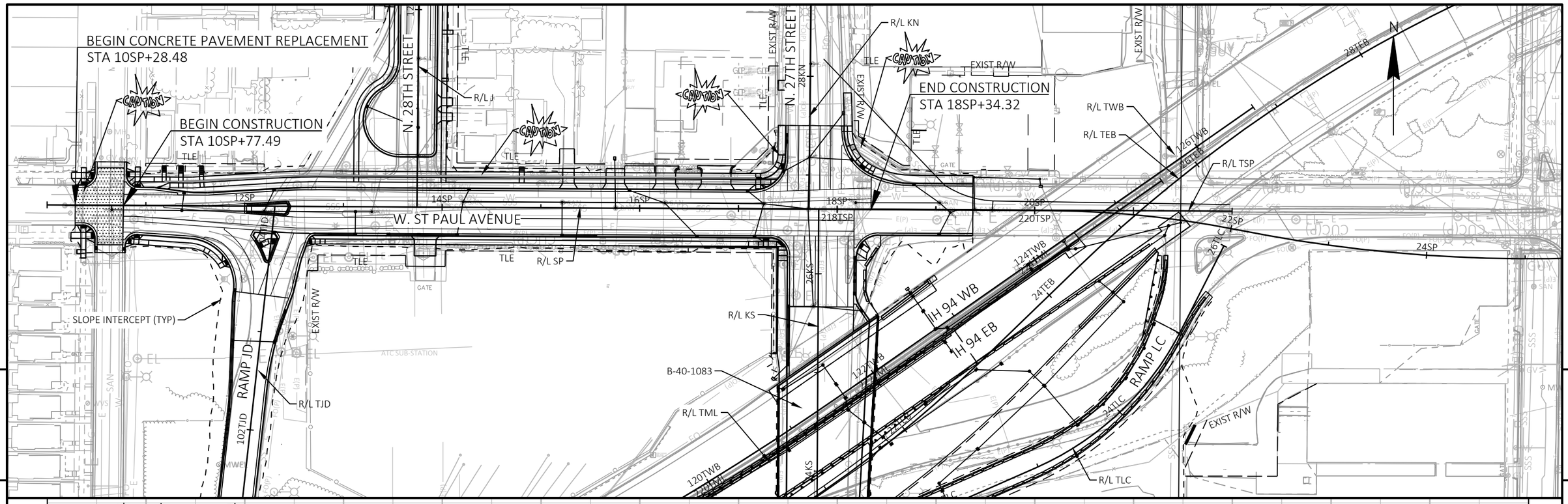
FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\05 PP\10602709ELA-050101-PP.DWG
LAYOUT NAME - 06 - J - 01
PLOT DATE : 7/9/2025 2:51 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

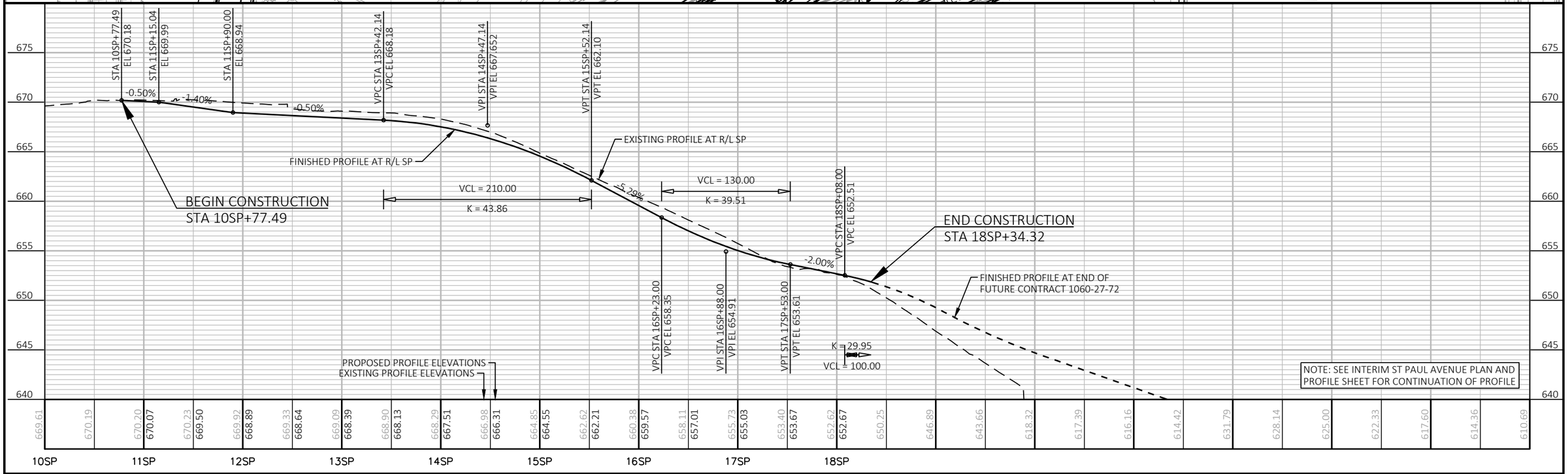




PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PLAN AND PROFILE: N. 27TH STREET	SHEET 447 E

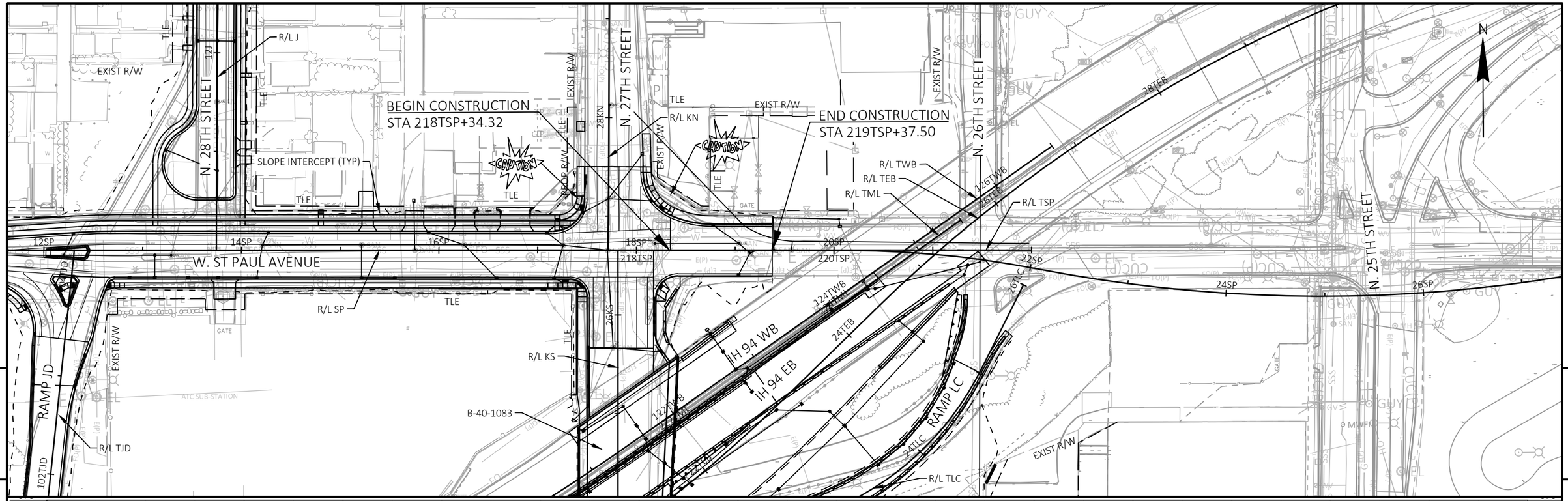
FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\05 PP\10602709ELA-050101-PP.DWG
LAYOUT NAME - 07 - K - 01
PLOT DATE : 7/9/2025 2:51 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

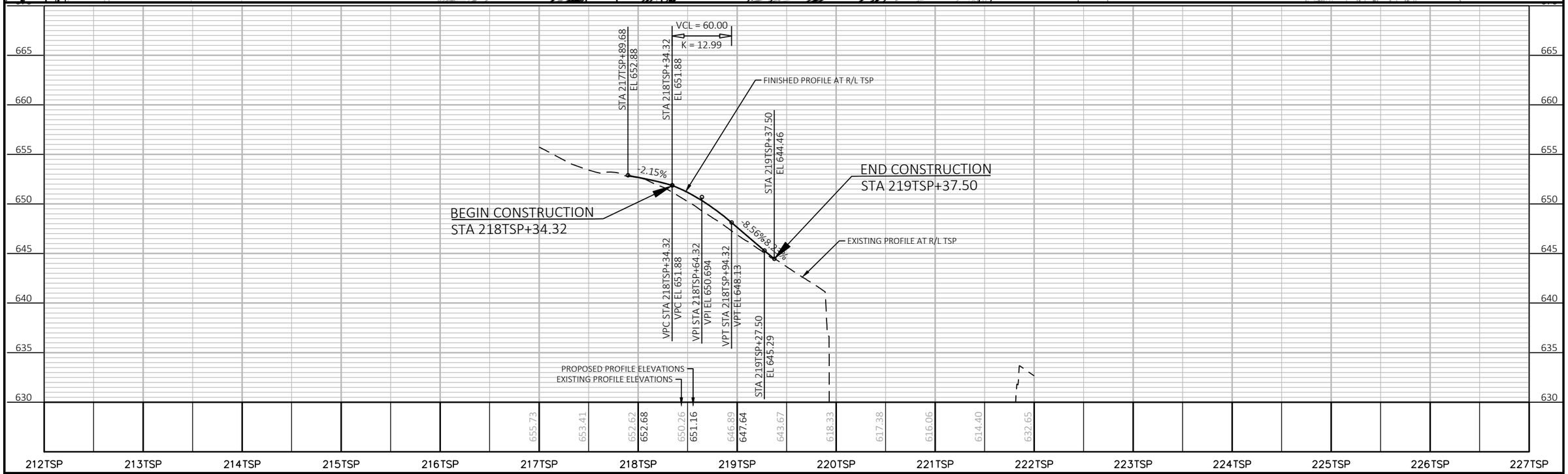




PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PLAN AND PROFILE: W. ST. PAUL AVENUE	SHEET 448 E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\05 PP\10602709ELA-050101-PP.DWG
LAYOUT NAME - 08 - SP - 01
PLOT DATE : 7/9/2025 2:51 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44





PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PLAN AND PROFILE: INTERIM W. ST. PAUL AVENUE	SHEET 449 E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\05 PP\10602709ELA-050101-PP.DWG
LAYOUT NAME - 09 - TSP - 1

PLOT DATE : 7/9/2025 2:51 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

Standard Detail Drawing List

08A05-21A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-21B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-21C	INLET COVERS TYPE F, HM, HM-S, S, T, HM-GJ & HM-GJ-S
08A05-21D	INLET COVERS TYPE V, V-B, & VV-B
08A05-21E	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-03	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08B09-04	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08C06-03	INLETS 3-FT AND 4-FT DIAMETER
08C07-03	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT
08C08-03	INLETS MEDIAN 1 AND 2 GRATE
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-21A	CURB RAMPS TYPES 1 AND 1-A
08D05-21B	CURB RAMPS TYPES 2 AND 3
08D05-21C	CURB RAMPS TYPES 4A AND 4A1
08D05-21D	CURB RAMPS TYPE 4B AND 4B1
08D05-21E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-21F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D15-05A	EDGEDRAIN OUTLET AND OUTFALL MARKERS
08D15-05B	EDGEDRAIN AND BASE AGGREGATE OPEN GRADED
08D15-05C	EDGEDRAIN AND BASE AGGREGATE OPEN GRADED
08D16-11	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08D18-04	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
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
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B04-13	PULL BOX
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C15-02	CONCRETE BASE TYPE 10 SPECIAL
09C16-01	CONCRETE BASE TYPE 10 SPECIAL EXTENSION
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09E02-05	FREEWAY LIGHTING UNIT POLE WIRING
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
10A04-03	IDENTIFICATION PLAQUES UNDERDECK AND HIGH MAST LIGHTING
10A06-03	ELECTRICAL DETAILS GROUND MOUNT LIGHT POLES GROUNDED NEUTRAL SYSTEMS
10A08-03	ELECTRICAL DETAILS STRUCTURE MOUNT LIGHT POLES ISOLATED NEUTRAL SYSTEMS
10A11-03	ELECTRICAL DETAILS MEDIAN MOUNT LIGHT POLES ISOLATED NEUTRAL SYSTEMS
10A12-03	ELECTRICAL DETAILS MEDIAN MOUNT LIGHT POLES GROUNDED NEUTRAL SYSTEMS
10A15-04A	ELECTRICAL DETAILS UNDERDECK LIGHTING
10A15-04B	ELECTRICAL DETAILS UNDERDECK LIGHTING
11B02-02	CONCRETE MEDIAN NOSE
12A03-10	NAME PLATE (STRUCTURES)
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13B02-09B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
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

6

Standard Detail Drawing List

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
14B07-16A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16J	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16K	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16L	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16M	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16N	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-02A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B29-01	SAFETY EDGE
14B32-11A	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11B	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11D	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11E	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B36-02C	32-INCH SINGLE-FACED F SHAPE CONCRETE BARRIER TO 36-INCH SSCB TRANSITION
14B36-02D	32-INCH SINGLE-FACED F SHAPE CONCRETE BARRIER TO 36-INCH SSCB TRANSITION
14B38-02C	32-INCH DOUBLE-FACED F SHAPE CONCRETE BARRIER TO 36-INCH SSCB TRANSITION
14B38-02D	32-INCH DOUBLE-FACED F SHAPE CONCRETE BARRIER TO 36-INCH SSCB TRANSITION
14B39-02A	32-INCH SSCB TO 36-INCH SSCB HEIGHT TRANSITION
14B39-02B	36-INCH SSCB TO 42-INCH SSCB HEIGHT TRANSITION
14B39-02C	42-INCH SSCB TO 56-INCH SSCB HEIGHT TRANSITION
14B40-02G	51-INCH VERTICAL SHAPE CONCRETE BARRIER TO 42-INCH SSCB TRANSITION
14B40-02H	51-INCH VERTICAL SHAPE CONCRETE BARRIER TO 42-INCH SSCB TRANSITION
14B41-03A	SINGLE SLOPE ROADSIDE RETAINING WALL
14B41-03B	SINGLE SLOPE ROADSIDE RETAINING WALL
15A04-08A	FLEXIBLE DELINEATOR POST
15A04-08B	BARRIER WALL DELINEATOR WITH REFLECTIVE SHEETING
15A04-08D	CHANNELIZING DEVICES, PERMANENT FLEXIBLE TUBULAR MARKER POST
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-09D	ON RAMP LANE CLOSURE
15C02-09E	OFF RAMP LANE CLOSURE
15C02-09F	ADVANCED WIDTH RESTRICTION SIGNING
15C02-09G	TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE
15C02-09H	MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-16A	PAVEMENT MARKING SYMBOLS
15C07-16B	PAVEMENT MARKING WORDS
15C07-16C	PAVEMENT MARKING ARROWS
15C07-16E	PAVEMENT MARKING FOR BIKE LANES
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
15C18-09A	MEDIAN ISLAND PAVEMENT MARKINGS
15C18-09B	PAVEMENT MARKINGS, MEDIAN ISLAND NOSE
15C18-09C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT

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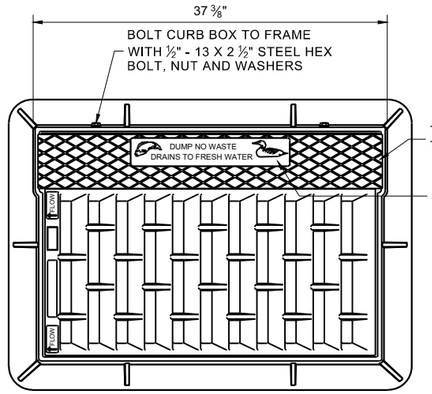
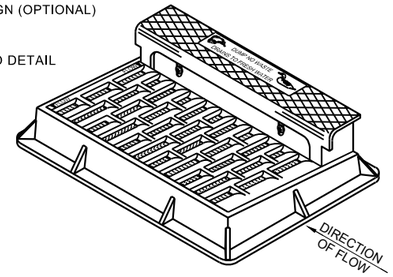
Standard Detail Drawing List

15C19-09C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C26-04	END-OF-ROADWAY SIGNING
15C29-08A	BICYCLE LANE MARKING
15C29-08B	PAVEMENT MARKING FOR SHARED LANE 35 MPH OR LESS
15C31-08A	PAVEMENT MARKING EXIT RAMP AND PARALLEL EXIT RAMP
15C31-08B	PAVEMENT MARKING MAJOR SPLIT FREEWAY TO FREEWAY
15C31-08C	PAVEMENT MARKING ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
15C31-08D	PAVEMENT MARKING LANE DROP AND LANE REDUCTION
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
Error 2023	
15D14-08	TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY
15D15-07A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-07B	TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-07C	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-07D	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-07E	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D16-06	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-09A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D20-09B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D20-09C	TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D29-06	TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD
15D30-10A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D35-03A	RAMP GATE HARD WIRED
15D35-03B	RAMP GATE HARD WIRED
15D35-03C	RAMP GATE HARD WIRED
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D40-05A	TRAFFIC CONTROL, FULL LANE SHIFT NON-FREEWAY OR MULTILANE DIVIDED 45 MPH AND UNDER
15D41-05A	TRAFFIC CONTROL, MULTIPLE LANE SHIFT, MULTILANE DIVIDED ROAD
15D46-01	TRAFFIC CONTROL, ONE - WAY SIGNING
15D47-03A	TRAFFIC CONTROL, INGRESS/EGRESS WITH BARRIER
15D47-03B	TRAFFIC CONTROL, INGRESS/EGRESS WITHOUT BARRIER
15D49-04	TRAFFIC CONTROL, SYSTEM RAMP CLOSURE
15D50-03A	TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT

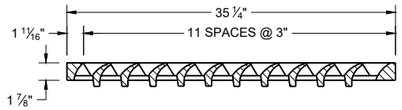
6

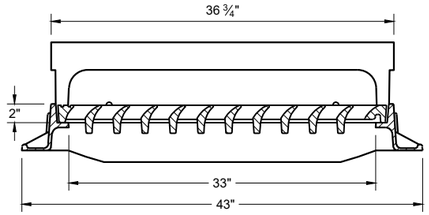


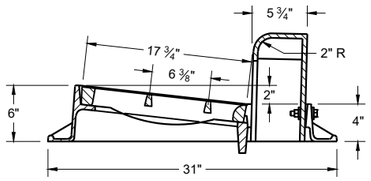
NOTE: EITHER CASTING IS ACCEPTABLE

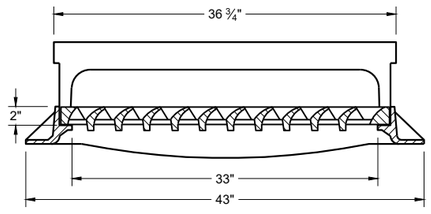


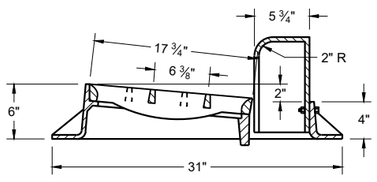
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"







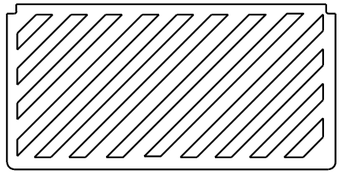




TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

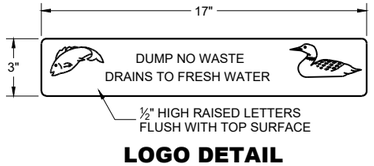
1 1/8" DIAGONAL BARS WITH 1 5/8" OPENINGS



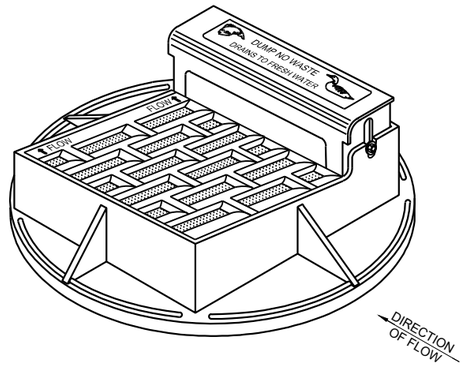
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

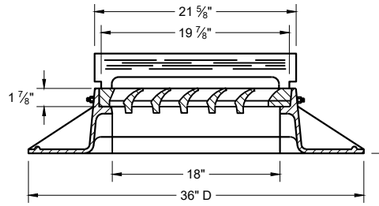


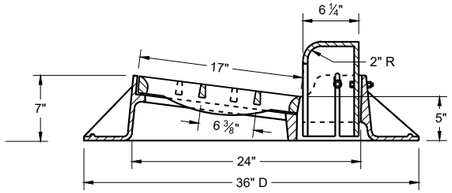
LOGO DETAIL



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

NOTE: EITHER CASTING IS ACCEPTABLE





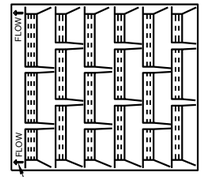
TYPE "A"

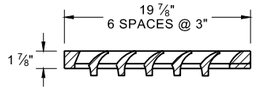
GENERAL NOTES

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

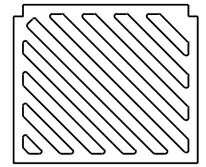
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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





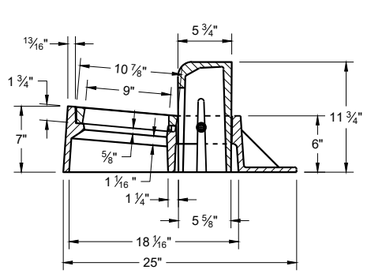
1" DIAGONAL BARS WITH 1 1/2" OPENINGS



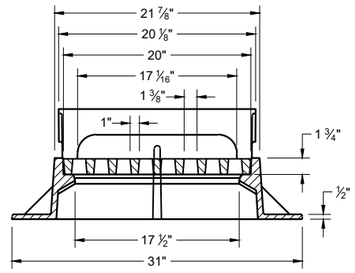
SPECIAL GRATE FOR TYPE "A" COVER

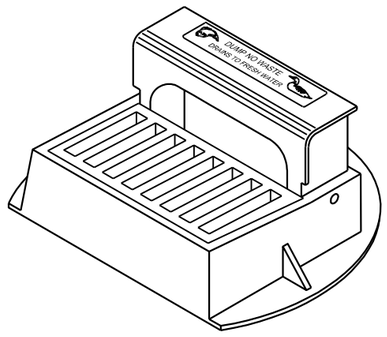
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "Z"





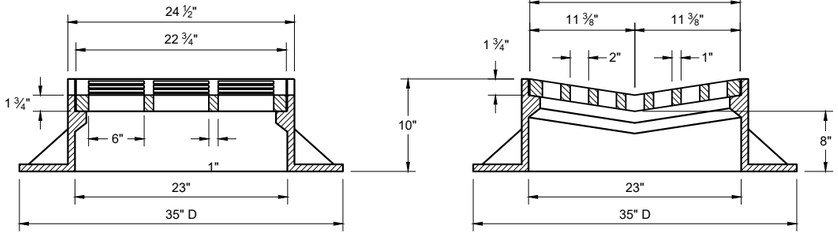
INLET COVERS
TYPES A, H, A-S, H-S AND Z

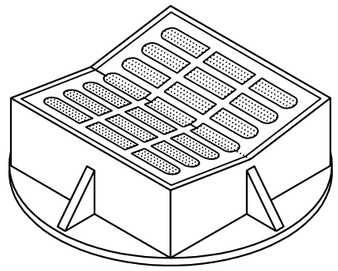
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

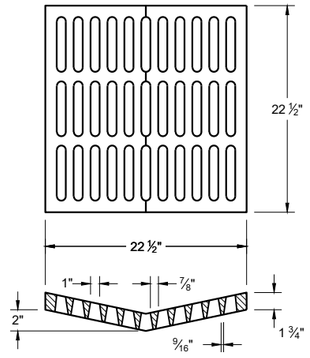
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA





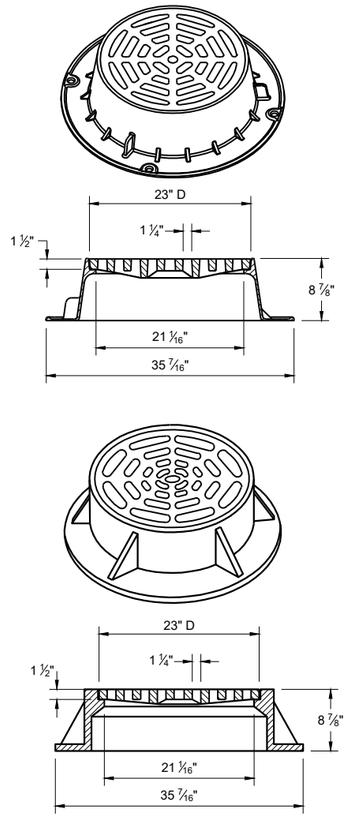
TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS POSSIBLE

NOTED AS TYPE B - A ON THE DRAINAGE TABLE



TYPE "C"

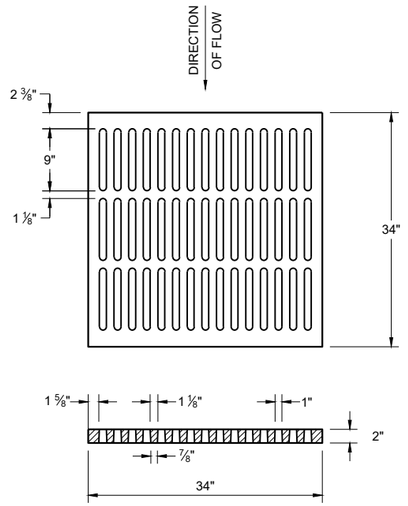
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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.

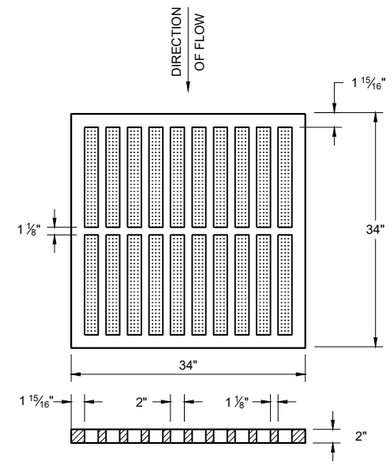
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS PERMITTED

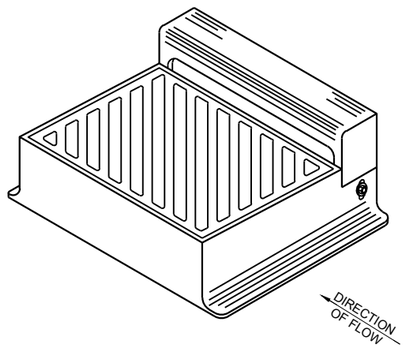
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



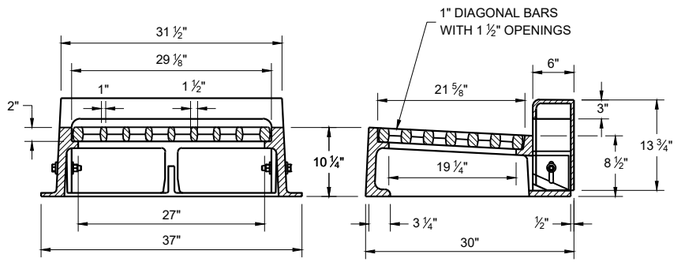
TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON THE DRAINAGE TABLE



DIAGONAL SLOTS SHALL BE ORIENTEDTO THE DIRECTION OF FLOW AS ILLUSTRATED.
GRATES ARE MANUFACTURED TO BE REVERSIBLE.



TYPE "WM"

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

INLET COVERS TYPES B, B-A, C, MS, MS-A AND WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6

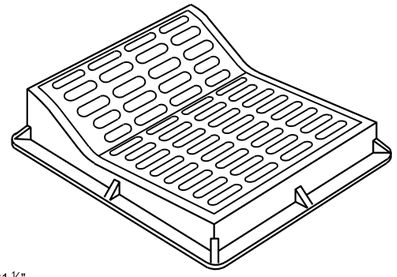
SDD 08A05-21b

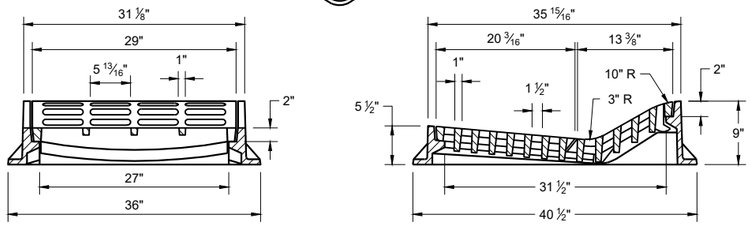
SDD 08A05-21b

GENERAL NOTES

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

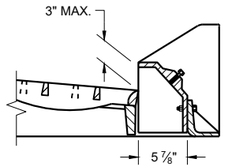
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.





TYPE "F"

USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"

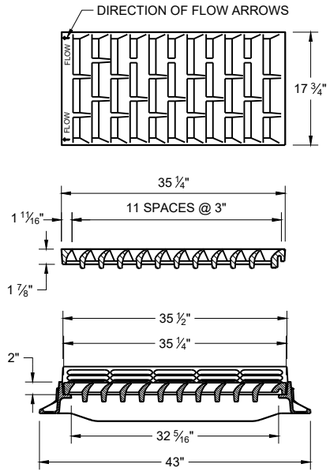


ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

USE WITH TYPES "G" AND "J" CONCRETE CURB AND GUTTER, 30 INCH
NOTED AS TYP "HM-GJ" ON DRAINAGE TABLE

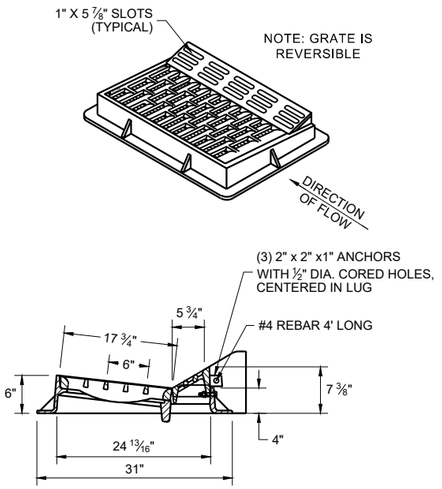
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.



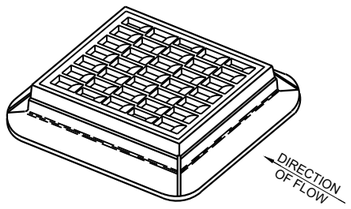
TYPE "HM"

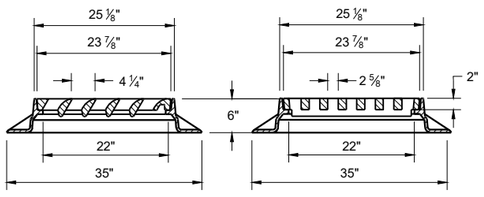
USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"



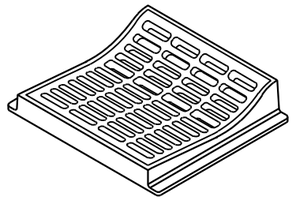
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

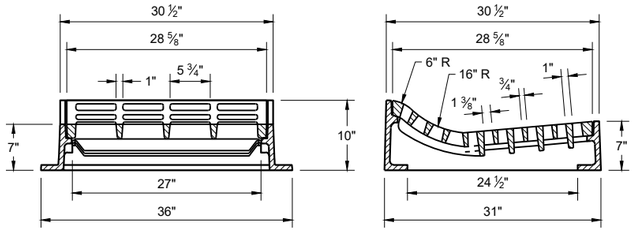
NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.





TYPE "S"





TYPE "T"

USE WITH TYPES "R" AND "T" CONCRETE CURB AND GUTTER, 36"

INLET COVERS
TYPES F, HM, HM-S, S, T, HM-GJ AND HM-GJ-S

STATE OF WISCONSIN
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APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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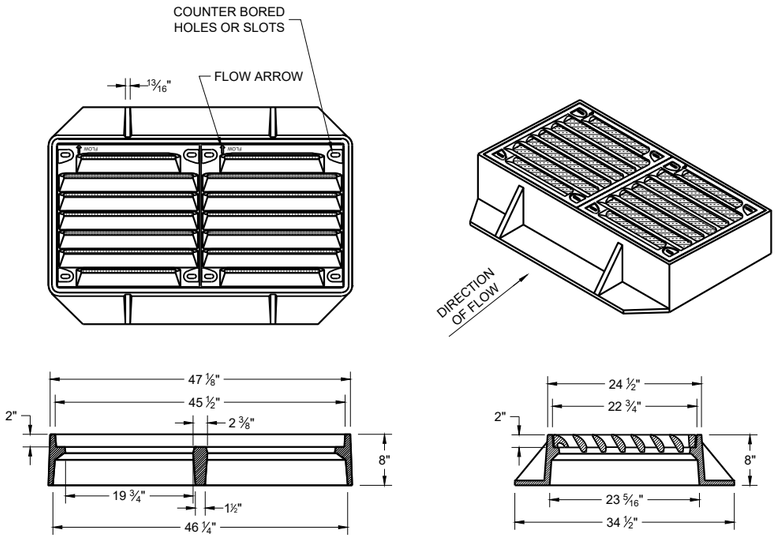
SDD 08A05-21c

GENERAL NOTES

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

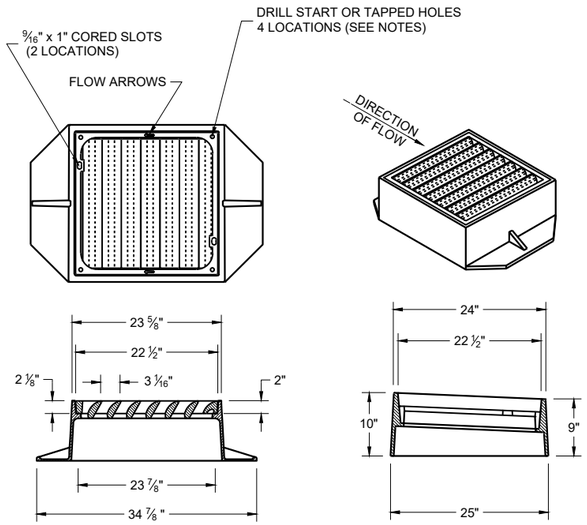
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



TYPE "VV-B"

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER
ALL DRILLING AND TAPPING GRATES AND FRAMES BY CASTING MANUFACTURER

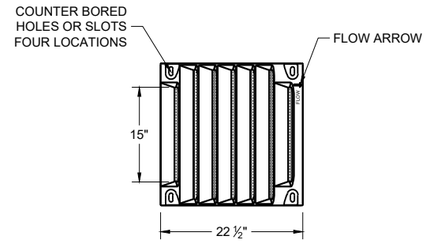
TYPE V
FRAME - CAST GRAY IRON ASTM A48 CLASS 35B
3/8" DIA. X 1/16" DRILL START IN 8 LOCATIONS
GRATE - CAST GRAY IRON ASTM A-48, CLASS 35B



TYPE "V"

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER ALL DRILLING AND TAPPING GRATES AND FRAMES BY CASTING MANUFACTURER

TYPE V
FRAME - CAST GRAY IRON ASTM A48 CLASS 40A
3/8" DIA. X 1/16" DRILL START IN 4 LOCATIONS
GRATE - CAST GRAY IRON ASTM A-48, CLASS 35B



BOLT DOWN GRATE FOR TYPE "V" AND "VV-B" COVER

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER NOTED AS TYPE "V-B" OR "VV-B" (FOR DOUBLE GRATE) ON DRAINAGE TABLE

TAP 1/2" -13 HOLES IN FOUR LOCATIONS PER GRATE IN FRAME TO BOLT GRATE(S).
FRAME - CAST GRAY IRON ASTM A48 CLASS 40A

GRATE - CAST DUCTILE IRON ASTM A536, 55+KSI YIELD
BOLTS - 1/2" -13 STAINLESS STEEL BOLTS WITH WASHERS
TORQUE BOLTS TO MANUFACTURER SPECIFICATION DO NOT OVERTIGHTEN.

INLET COVERS
TYPES V, V-B, AND VV-B

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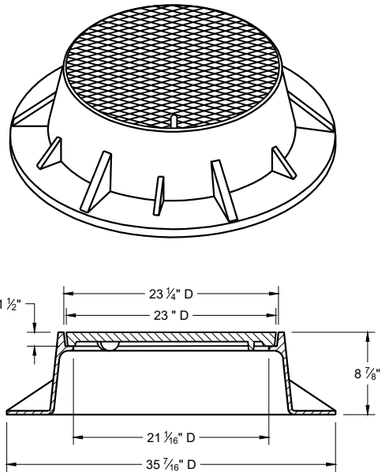
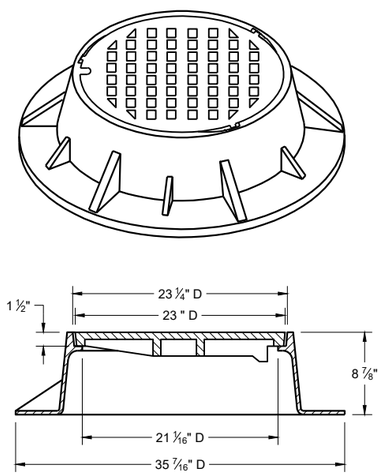
GENERAL NOTES

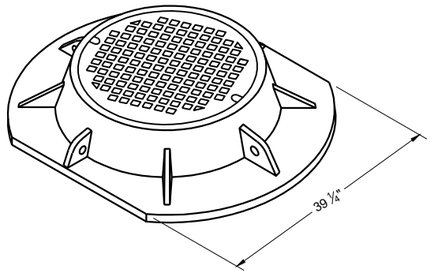
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

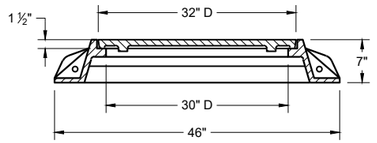
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

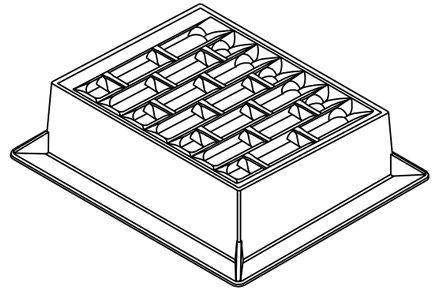


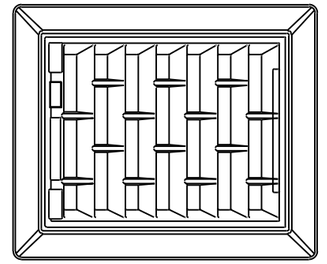


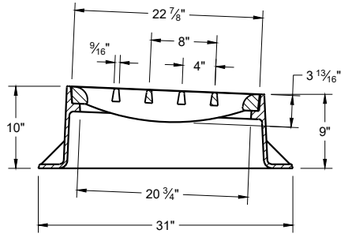


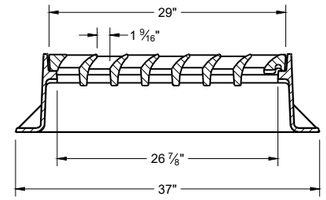


TYPE "K"

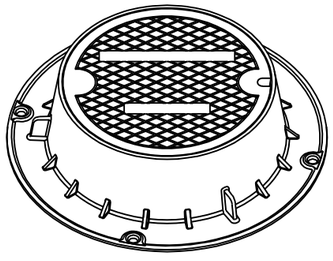


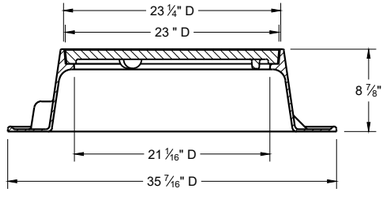






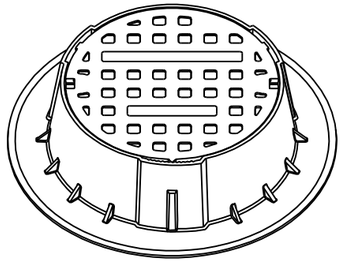
INLET COVER TYPE "BW"

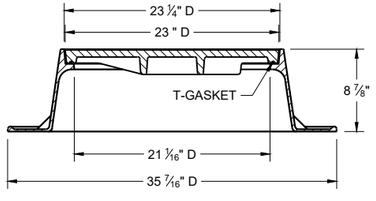




TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

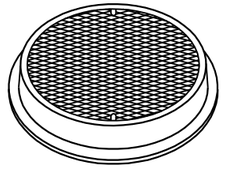


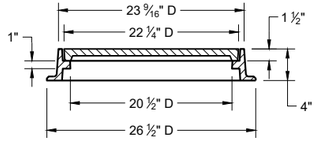


TYPE "J" SPECIAL

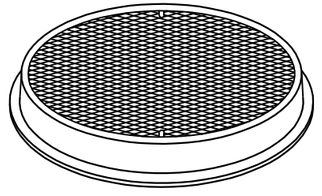
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

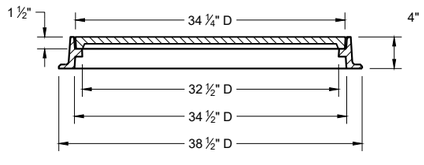
NOTE: EITHER CASTING IS ACCEPTABLE





TYPE "L"





TYPE "M"

INLET COVERS TYPES BW
MANHOLE COVERS TYPES K, J, J-S, L, AND M

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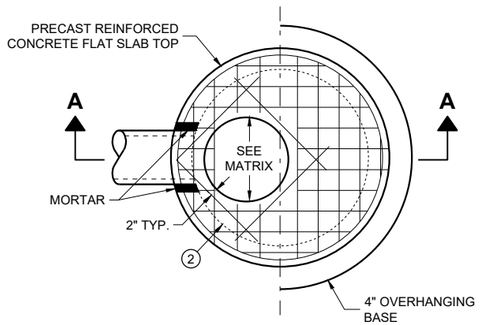
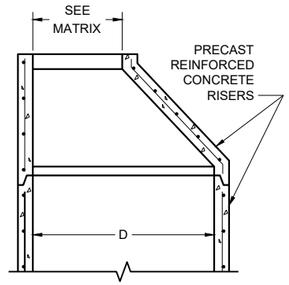
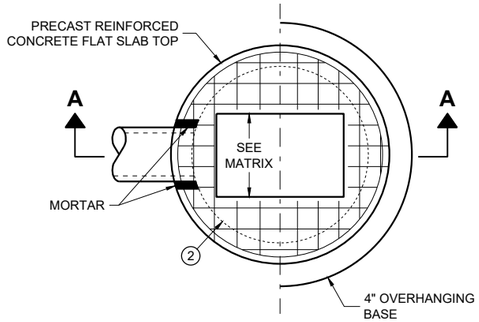


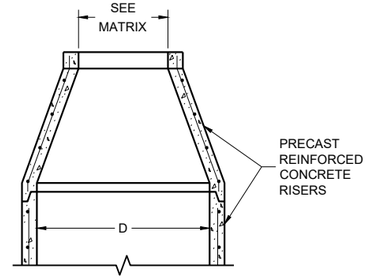
PLAN VIEW CIRCULAR OPENING



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



PLAN VIEW RECTANGULAR OPENING



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

COVER MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V V-B	VV-B	WM	Z
	OPENING SIZE (FT.)												
3-FT	2 X 2	X	X					X		X			
	2 DIA.				X								X
4-FT TO 6-FT	2 X 2	X	X					X		X			
	2 X 2.5			X				X	X	X		X	
	2 DIA.				X								X
	2 X 3						X						
	2.5 X 3					X							
	2 X 3.5*										X*		

* REQUIRES 5-FT DIAMETER OR LARGER STRUCTURE

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

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

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

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

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

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

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

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

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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

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

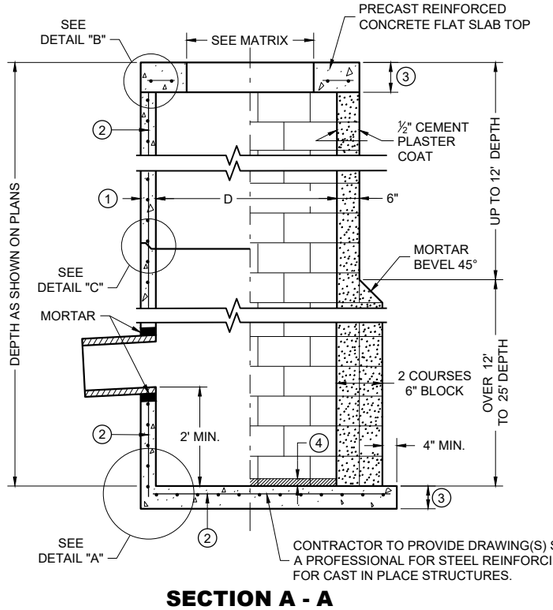
(1) MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

(2) FOR PRECAST CATCH BASINS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(3) PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

(4) 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

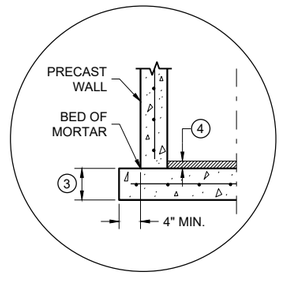
(5) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFROMING TO ASTM C443.



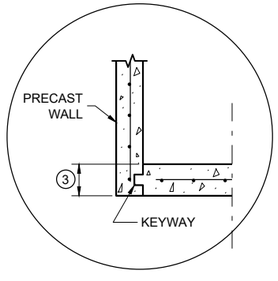
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (2)

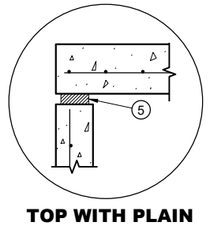


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

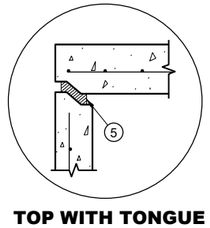


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

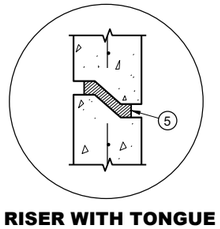
DETAIL "A"



TOP WITH PLAIN END JOINT

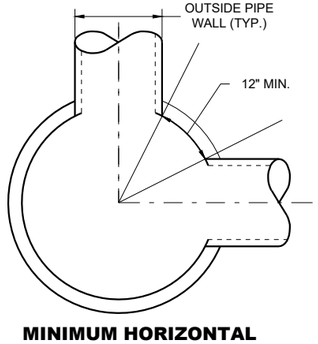


TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B" **DETAIL "C"**



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

CATCH BASINS, 3-FT. 4-FT., 5 FT., AND 6-FT. DIAMETER

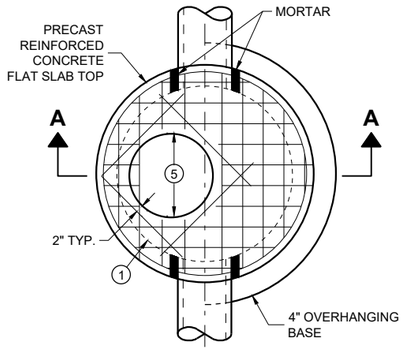
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

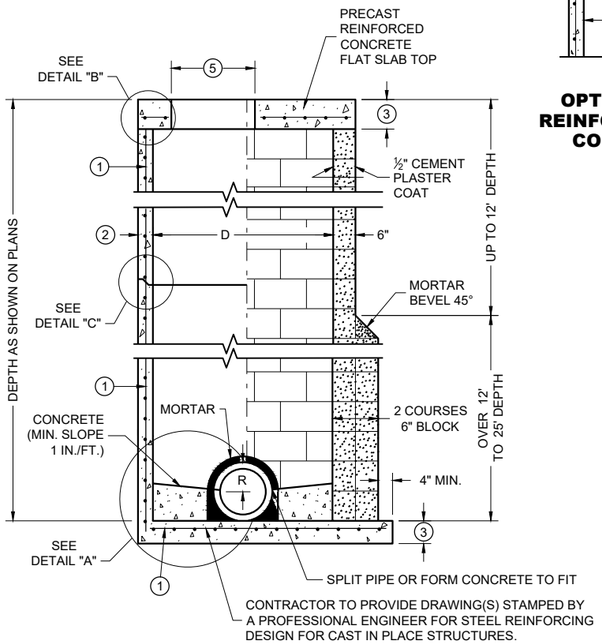
SDD 08A08-03

SDD 08A08-03



PLAN VIEW

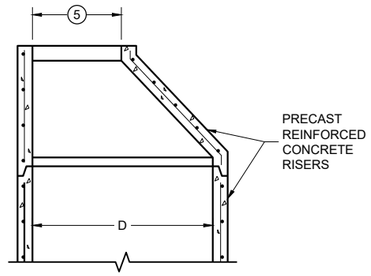
CIRCULAR OPENING



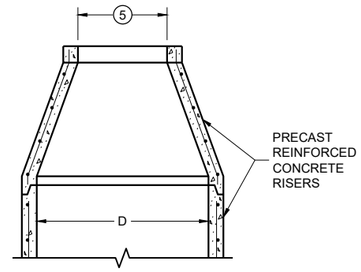
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

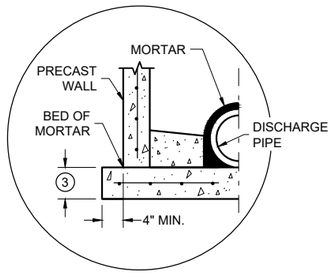
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)



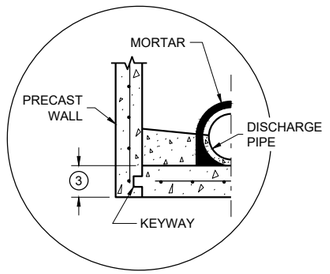
OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

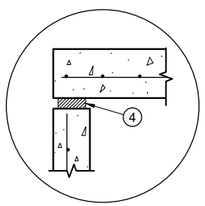


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

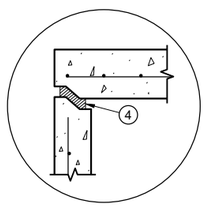


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

DETAIL "A"

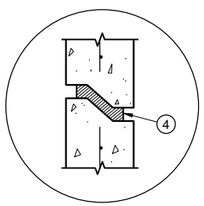


TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT

DETAIL "B"



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "C"

MANHOLE COVER OPENING MATRIX

OPENING SIZE (FT.) (5) \ MANHOLE COVER TYPE	C	ALL J'S	K	L	M
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42 *	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES. SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

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

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

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

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

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

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

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

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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

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

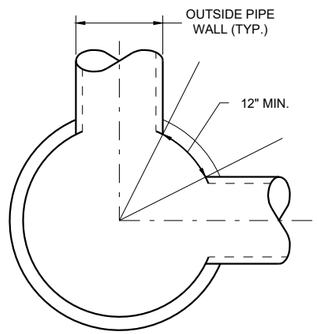
(1) FOR PRECAST MANHOLES AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

(4) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.

(5) SEE MANHOLE COVER OPENING MATRIX.



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

SDD 08B09-04

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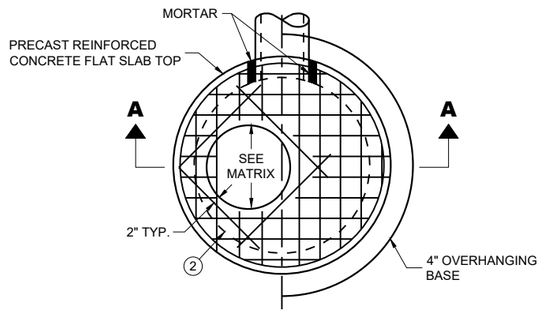
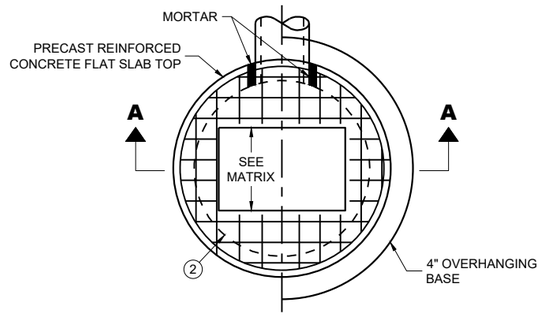
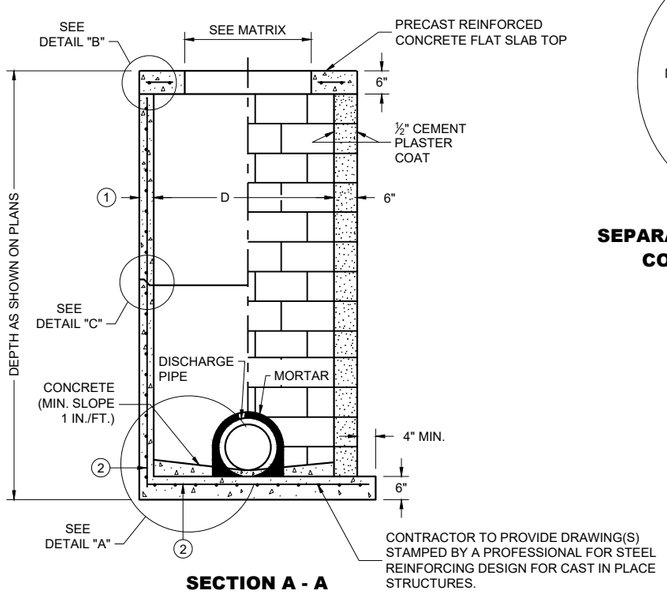


PLAN VIEW CIRCULAR OPENING



PLAN VIEW RECTANGULAR OPENING



SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (2)

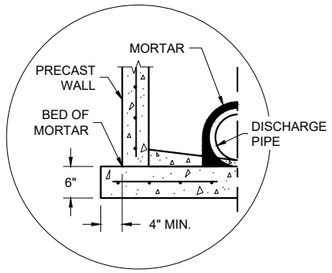
CIRCULAR INLETS WITH FLAT TOP

CATCH BASIN COVER OPENING MATRIX

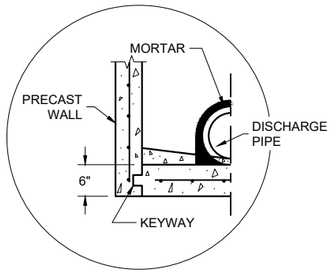
INLET SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT.)											
3-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
4-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
	2 X 2.5			X				X	X	X	X	
	2 X 3						X					
	2.5 X 3					X						

PIPE MATRIX

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

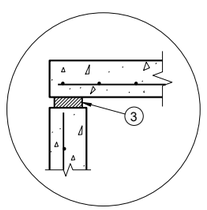


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

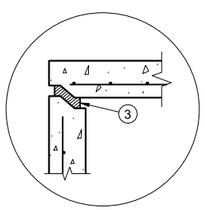


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

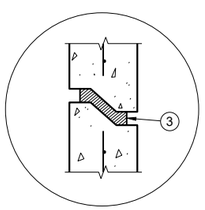
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B" **DETAIL "C"**

INLETS 3-FT AND 4-FT DIAMETER

GENERAL NOTES

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

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

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

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

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

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

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

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

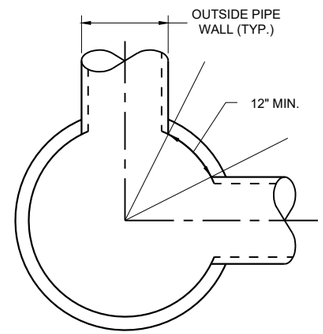
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

(1) MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT DIAMETER AND 5 INCHES FOR 4-FT DIAMTER PRECAST INLETS.

(2) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(3) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

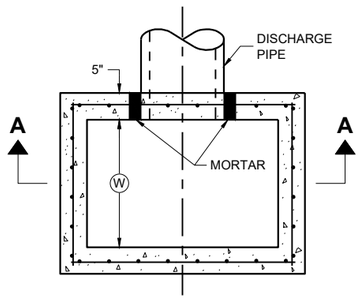
INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

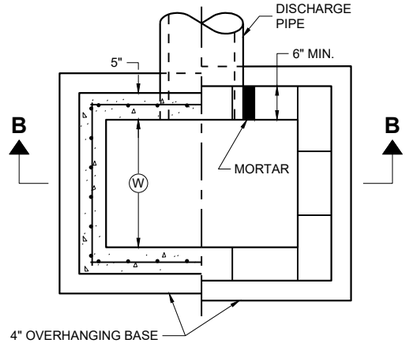
APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

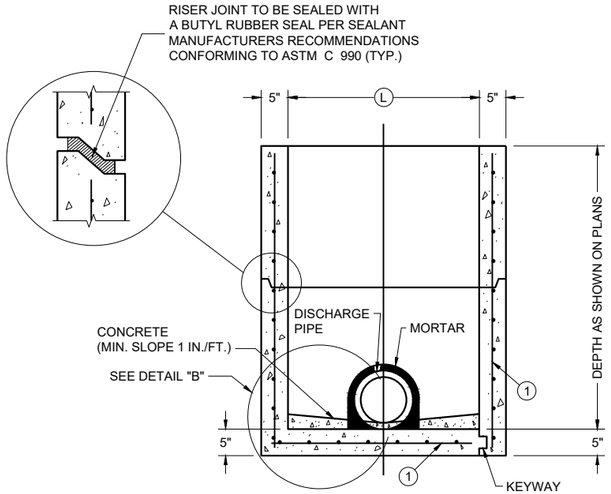
6
SDD 08C06-03



PLAN VIEW



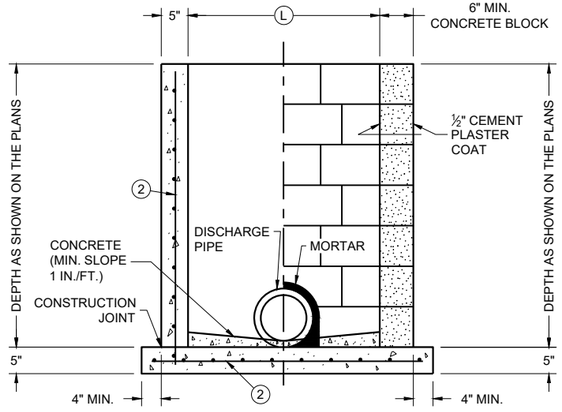
PLAN VIEW



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

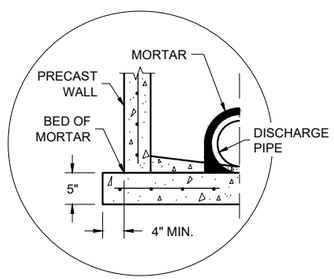
SECTION A - A



CAST IN PLACE REINFORCED CONCRETE

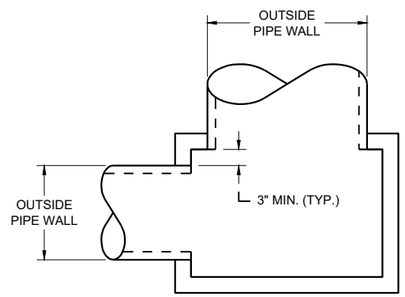
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

SECTION B - B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "B"



DETAIL "A"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP N0T SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

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

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

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

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

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

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

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

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

(1) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913
(2) CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

CATCH BASIN COVER MATRIX

INLET SIZE	WIDTH (W) (FT.)	LENGTH (L) (FT.)	INLET COVER TYPE									
			ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM	V V-B
2 X 2-FT	2	2	X	X				X				
2 X 2.5-FT	2	2.5			X			X	X	X	X	
2 X 3-FT	2	3					X					
2.5 X 3-FT	2.5	3				X						
2 X 3.5-FT	2	3.5										X

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2 X 2-FT	12	12
2 X 2.5-FT	12	18
2 X 3-FT	12	24
2.5 X 3-FT	18	24
2 X 3.5-FT	12	30

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2X3.5-FT

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2 X 3.5-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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SDD 08C07-03

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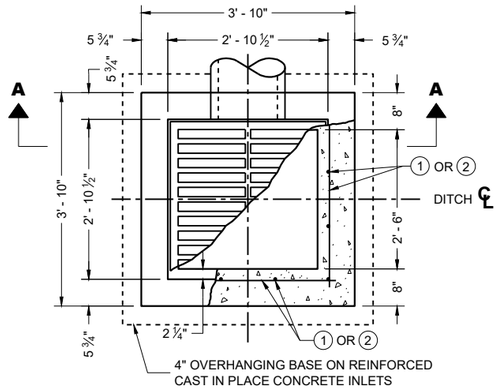
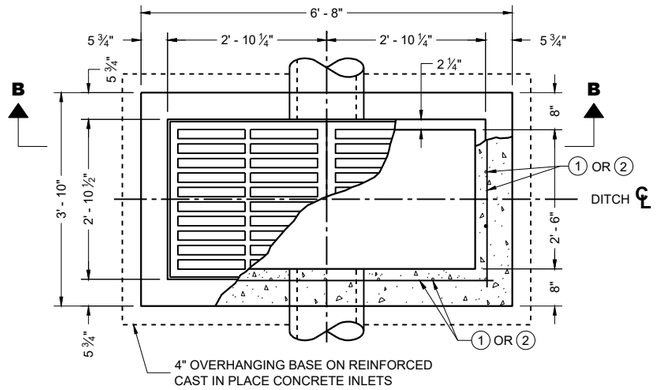
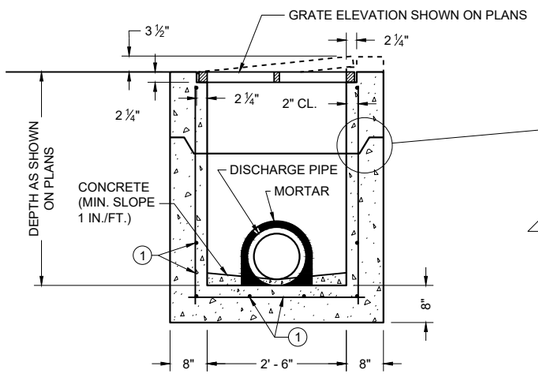
SDD 08C07-03



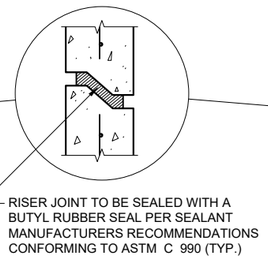
PLAN VIEW

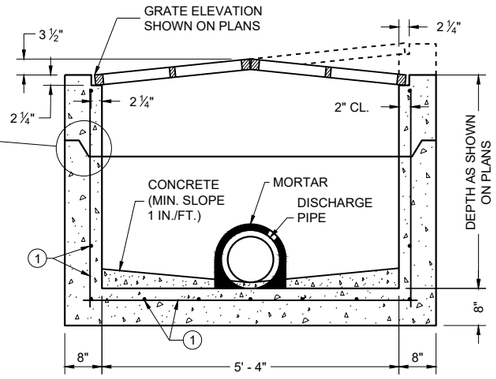


PLAN VIEW



PRECAST REINFORCED CONCRETE SECTION A - A





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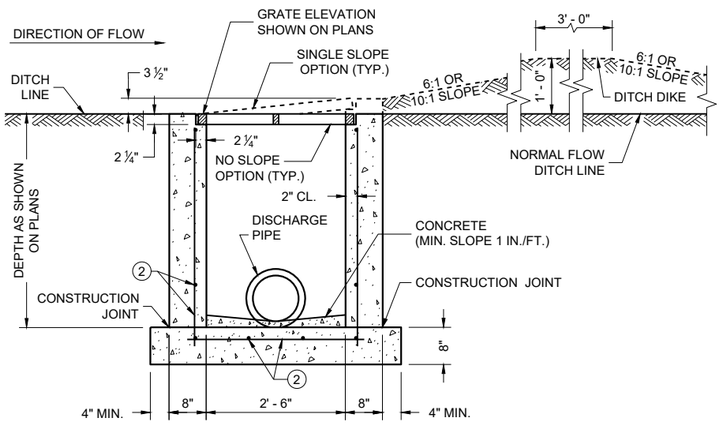
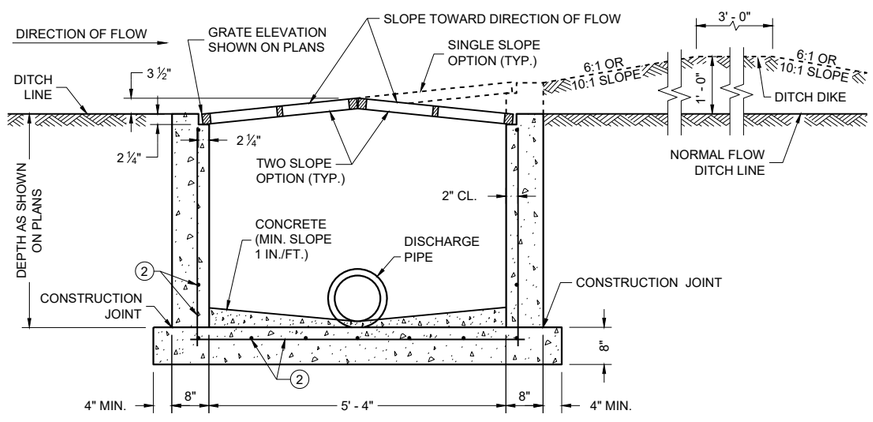


REINFORCED CAST IN PLACE CONCRETE SECTION A - A

INLETS MEDIAN 1 GRATE



REINFORCED CAST IN PLACE CONCRETE SECTION B - B

INLETS MEDIAN 2 GRATE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP N0T SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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

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

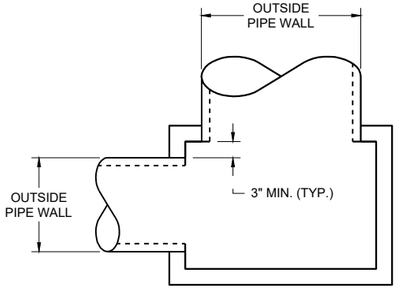
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

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

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

(1) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

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



DETAIL "A"

PIPE MATRIX

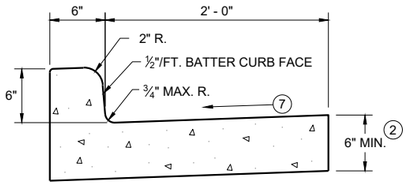
INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42

INLETS
MEDIAN 1 AND 2 GRATE

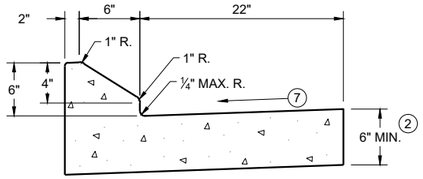
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

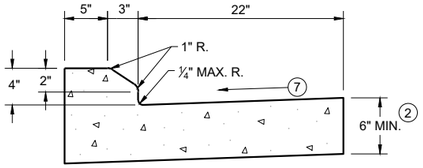
FHWA



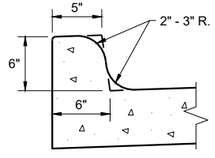
TYPES A (1) & D



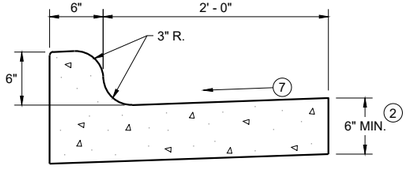
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

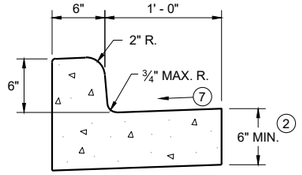


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



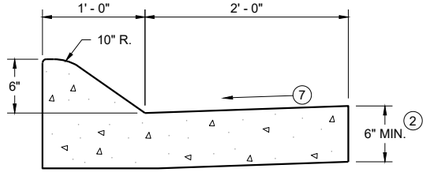
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

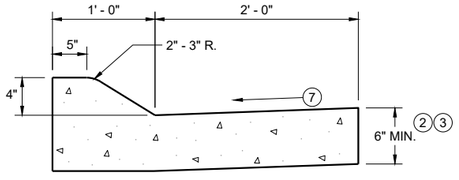


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

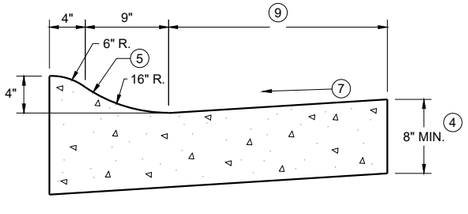


6" SLOPED CURB TYPES A (1) & D



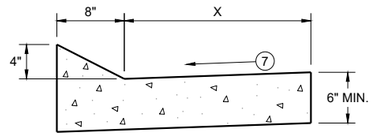
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

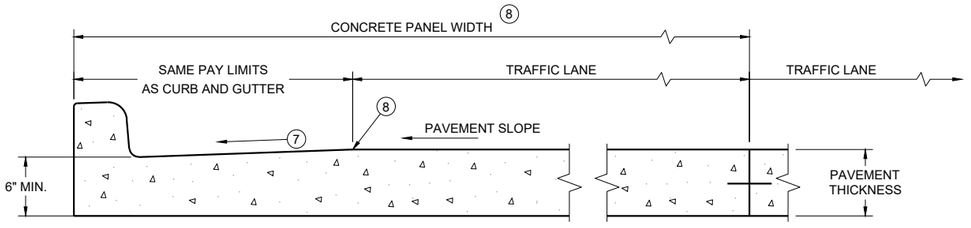


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

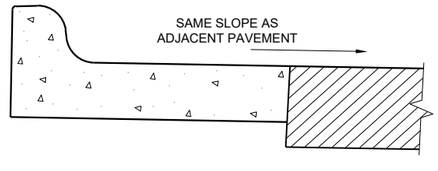
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

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

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

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

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

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

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

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

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

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a

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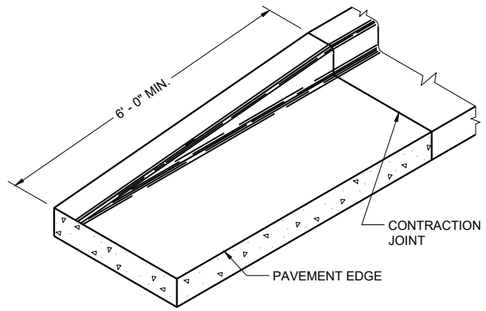
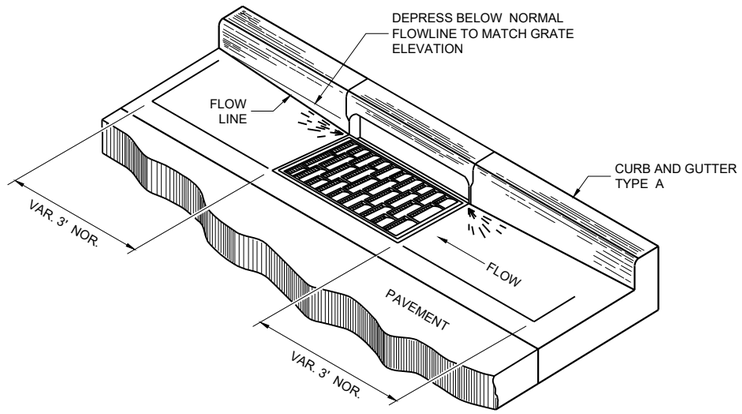


END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

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

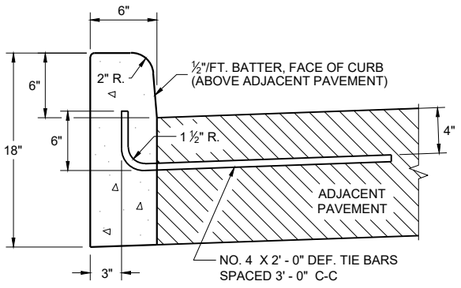
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

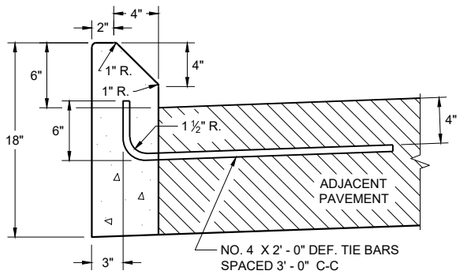
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

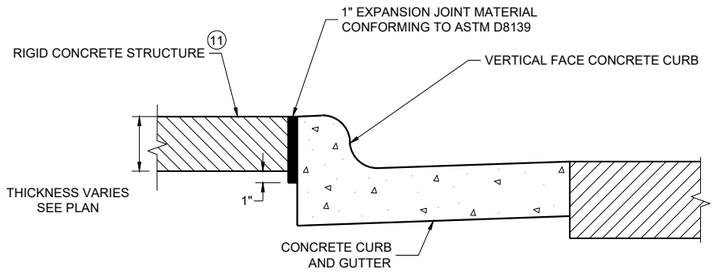


TYPES A (1) & D

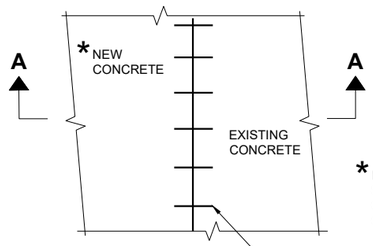


TYPES G (1) & J

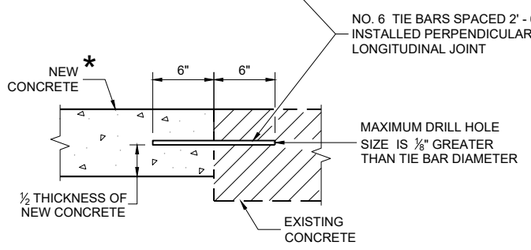
CONCRETE CURB



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)

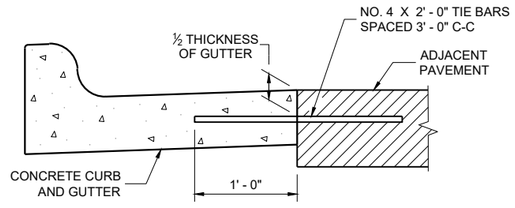


PLAN VIEW

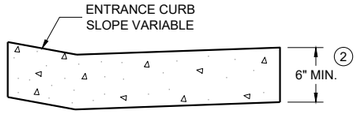


SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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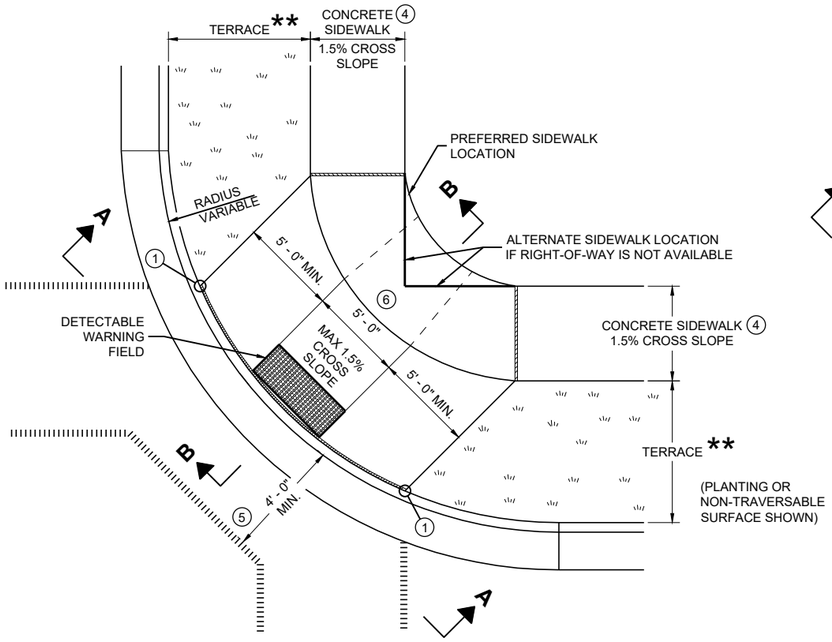
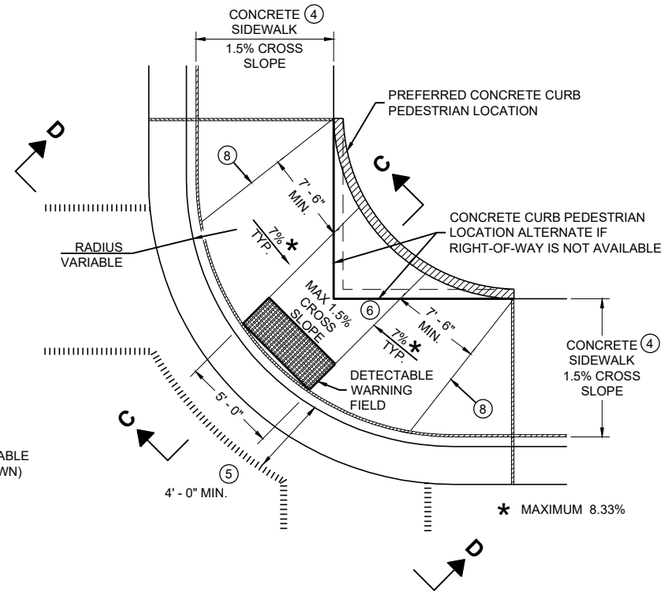
SDD 08D01-23b



PLAN VIEW

CURB RAMP TYPE 1

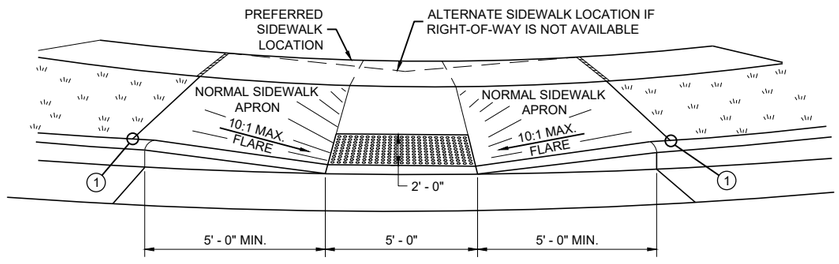
(CENTER OF CORNER RADIUS)



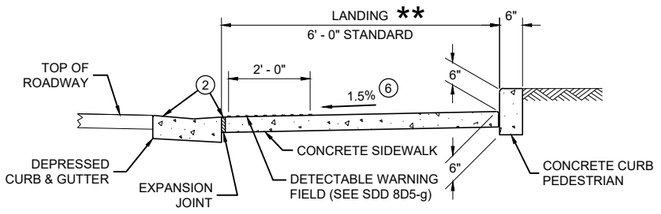
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

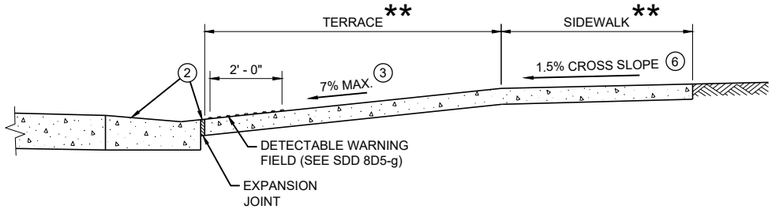


VIEW A - A FOR TYPE 1

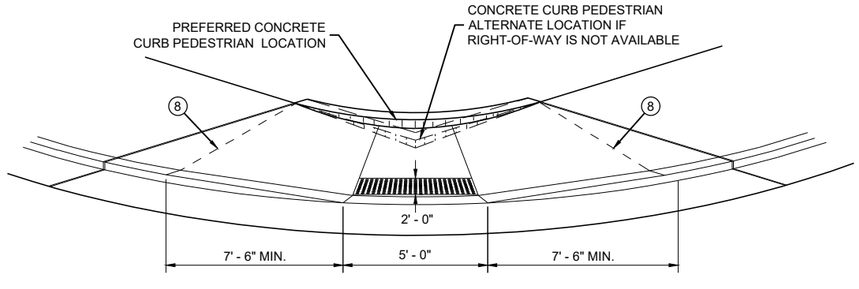


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

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

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

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

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

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

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

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA. 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE

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

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

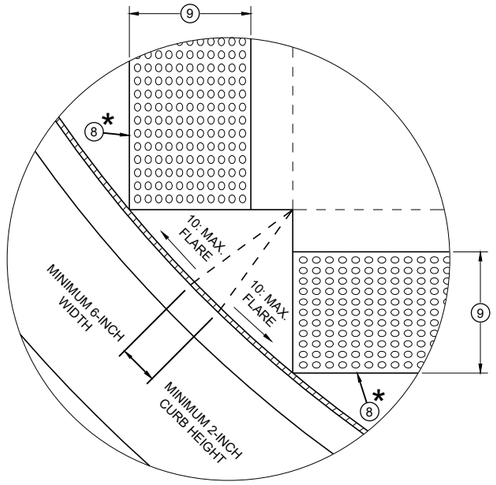
LEGEND

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

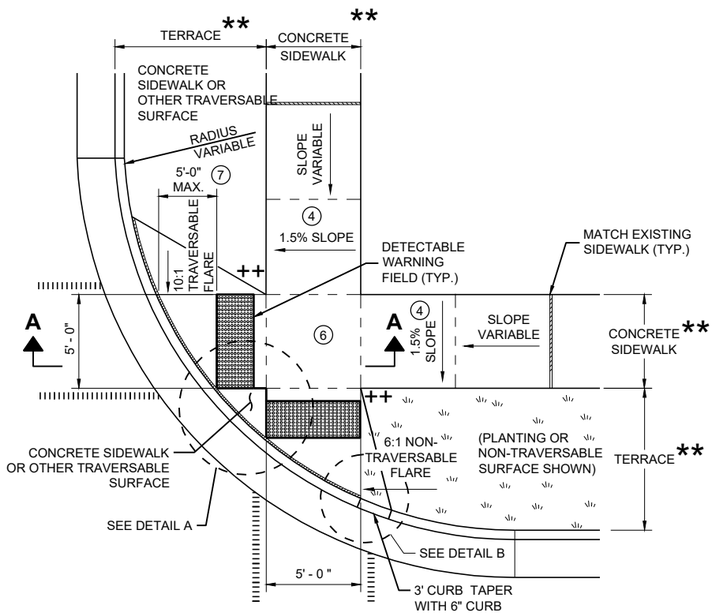
CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

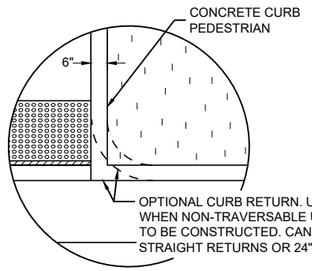
6
SDD 08D05-21a



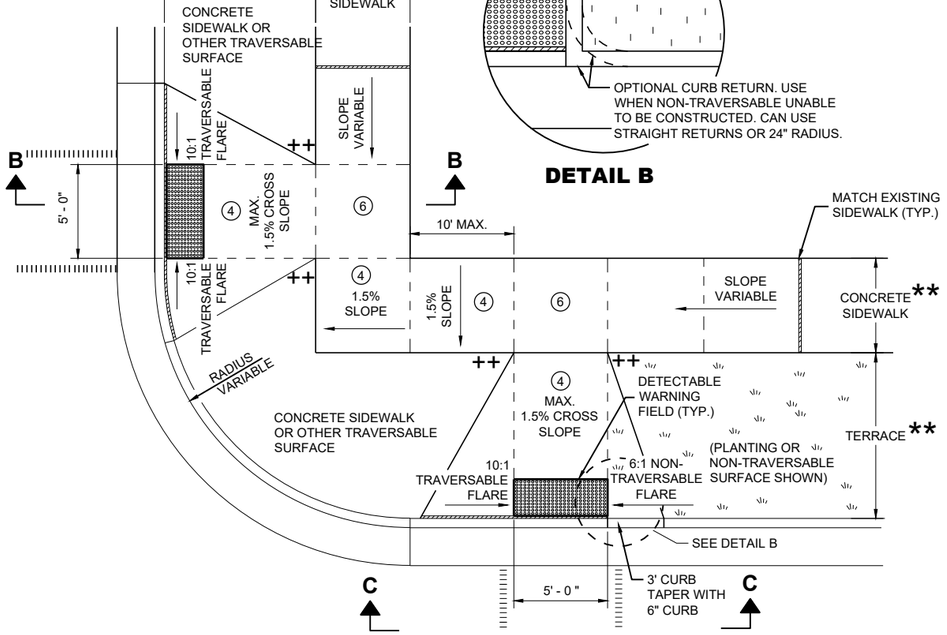
DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)



DETAIL B



PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

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

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

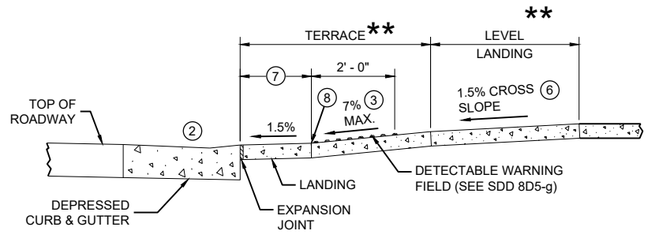
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

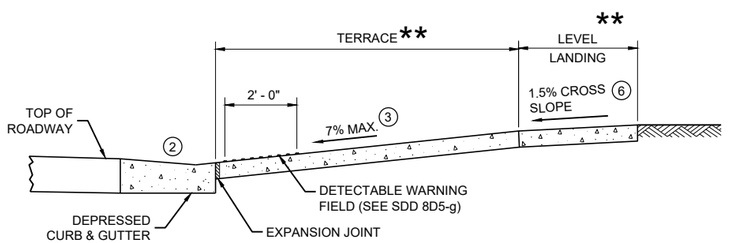


SECTION A - A FOR TYPE 2

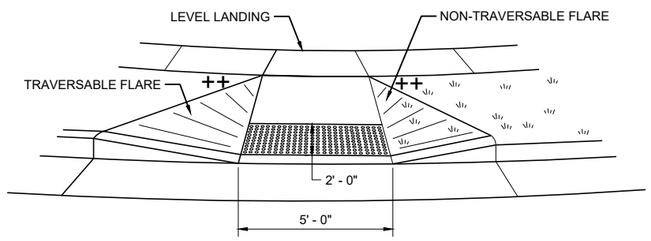
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



SECTION B - B FOR TYPE 3



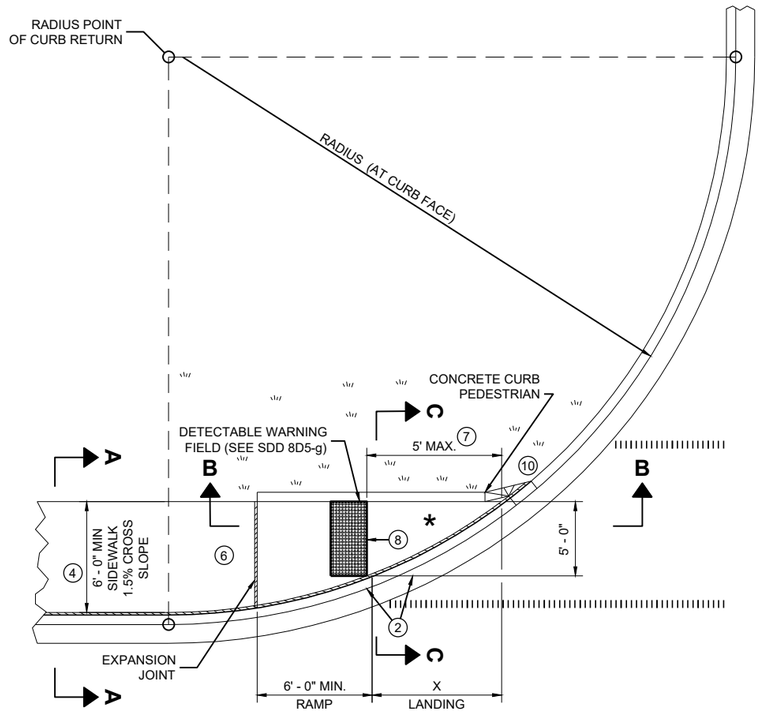
VIEW C - C FOR TYPE 3

LEGEND

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

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

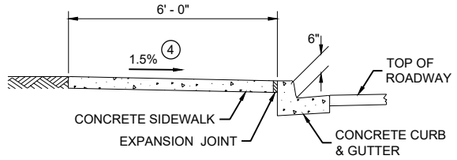


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

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.

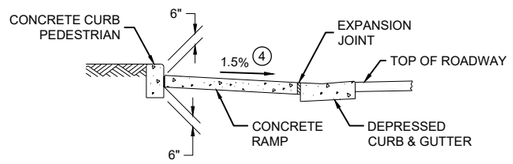
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

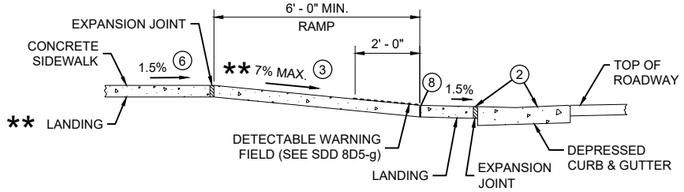
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)

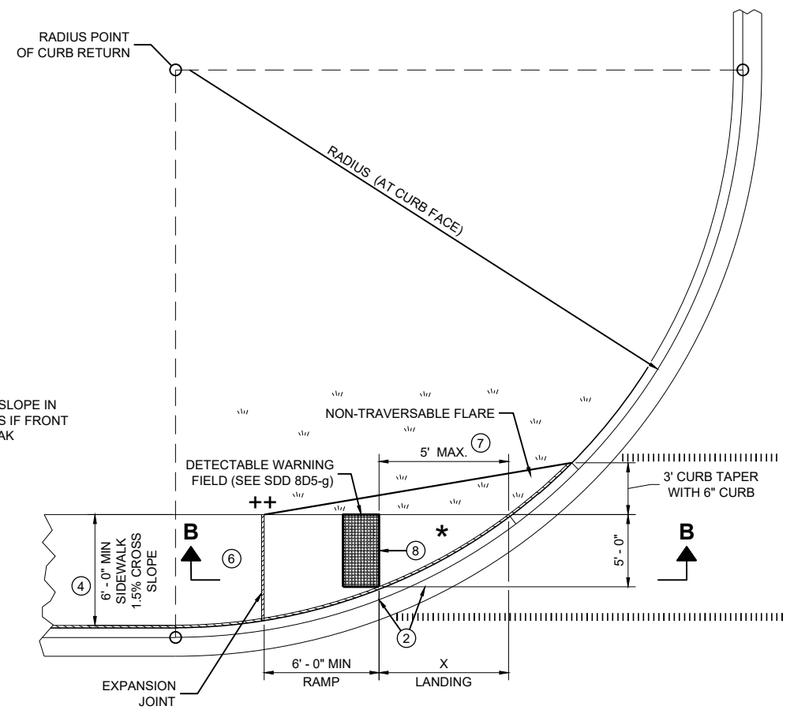


SECTION C - C FOR TYPE 4A



SECTION B - B FOR TYPE 4A AND TYPE 4A1

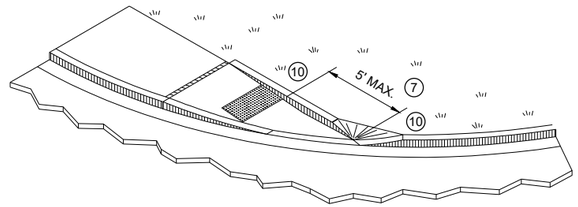
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED



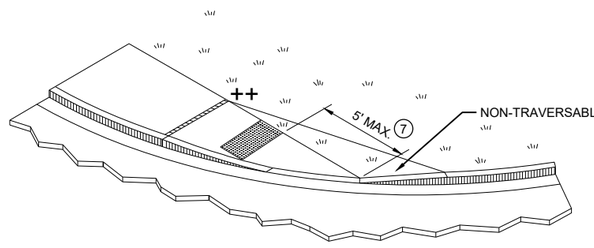
PLAN VIEW

CURB RAMP TYPE 4A1

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



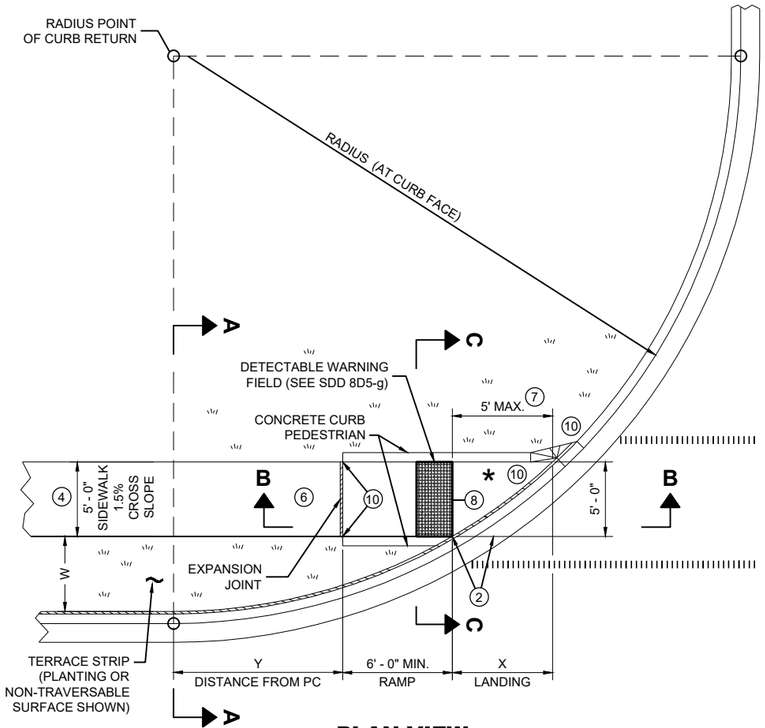
ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



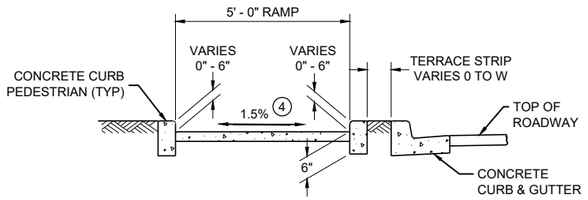
PLAN VIEW
CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 1/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET			4' - 11 1/2"	5' - 1 3/4"	4' - 3 1/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET									4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET															4' - 10 3/4"	19' - 8 1/4"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

LEGEND

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



SECTION C - C FOR TYPE 4B

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.

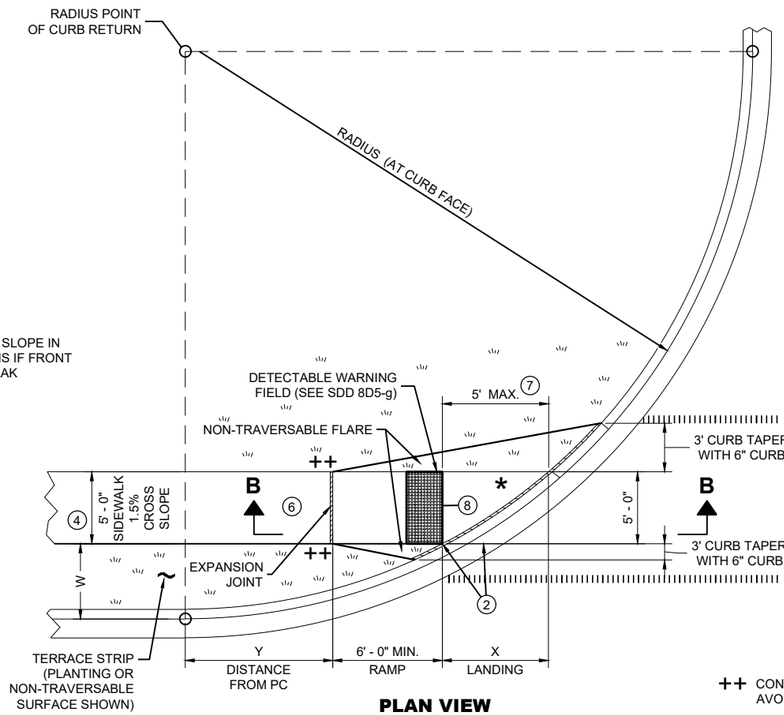
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

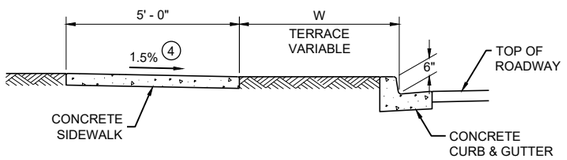
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

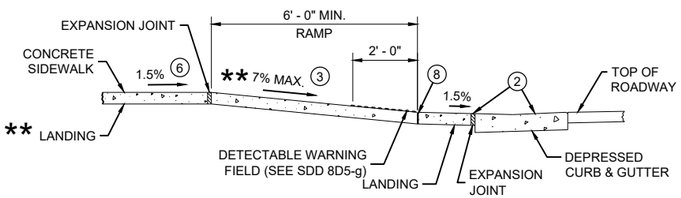
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



PLAN VIEW
CURB RAMP TYPE 4B1



SECTION A - A FOR TYPE 4B

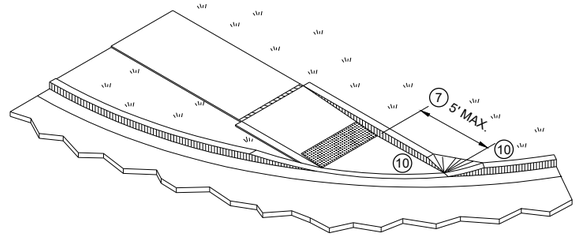


SECTION B - B FOR TYPE 4B AND TYPE 4B1

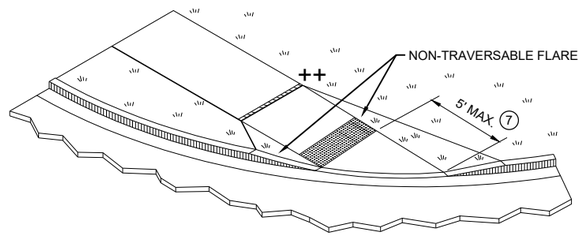
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

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

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



ISOMETRIC VIEW FOR TYPE 4B



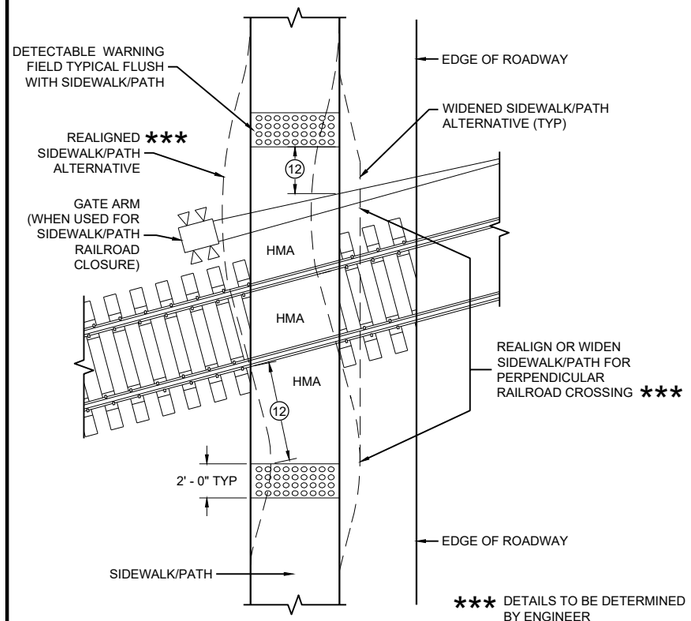
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

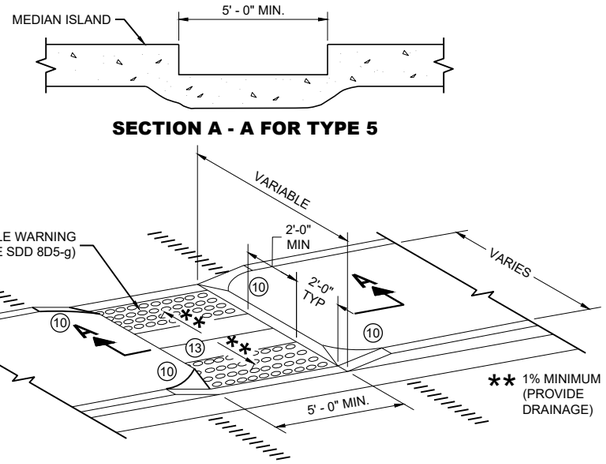
6

SDD 08D05-21d



CURB RAMP TYPE 8

DETECTABLE WARNINGS FOR SIDEWALKS OR SHARED USE PATHS AT RAILROAD CROSSINGS



SECTION A - A FOR TYPE 5

CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

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

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

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

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

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

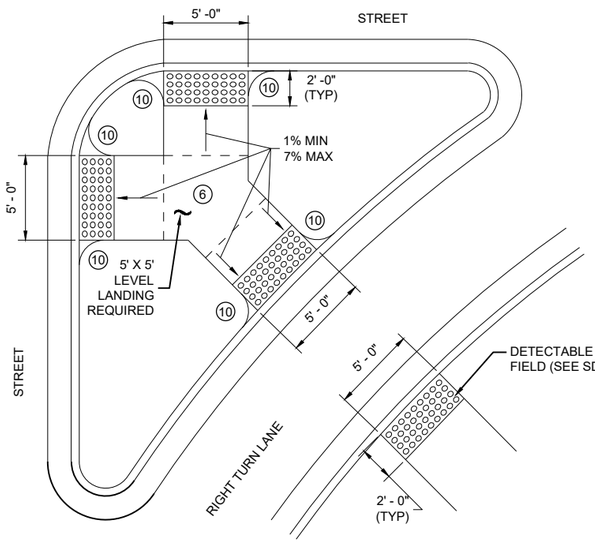
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK/PATH. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

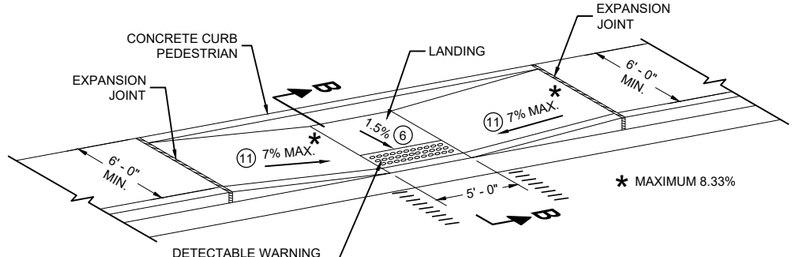
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

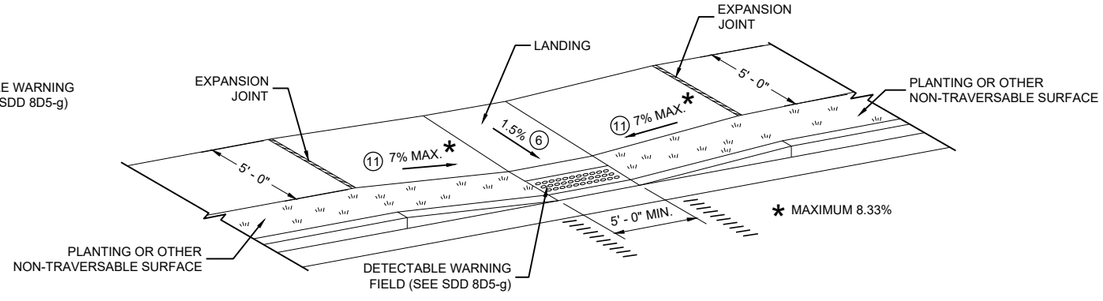
DETECTABLE WARNING AT ISLANDS

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



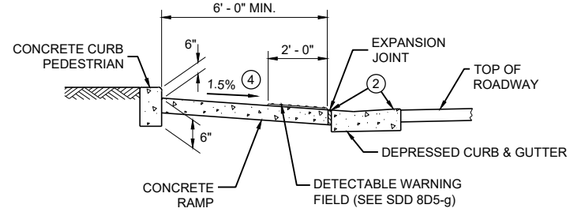
CURB RAMP TYPE 7A

FOR INTERSECTIONS AND MID BLOCK CROSSINGS



CURB RAMP TYPE 7B

FOR INTERSECTIONS AND MID BLOCK CROSSINGS



SECTION B - B FOR TYPE 7A

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

STATE OF WISCONSIN
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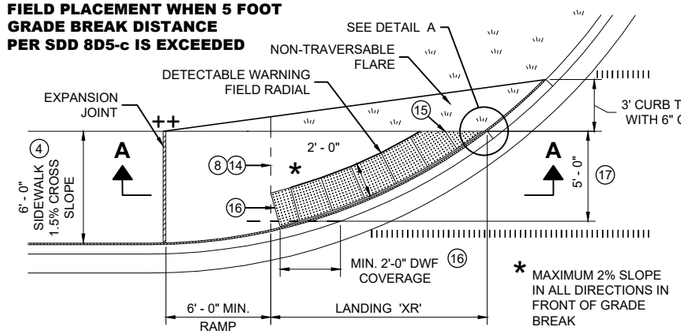
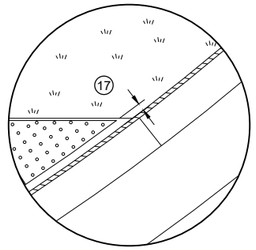
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED

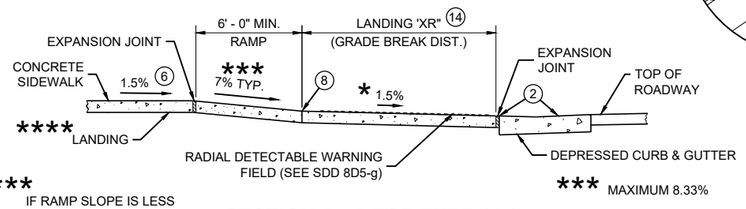


PLAN VIEW

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

LEGEND

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

GENERAL NOTES

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

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

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

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

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

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

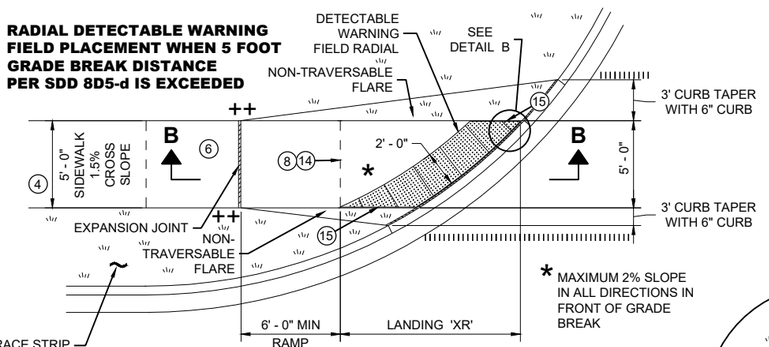
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

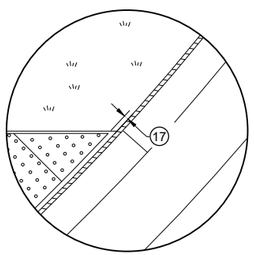
(17) A MAXIMUM 3 INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED

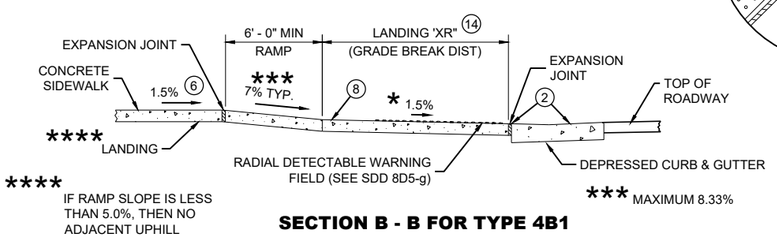


PLAN VIEW

CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B

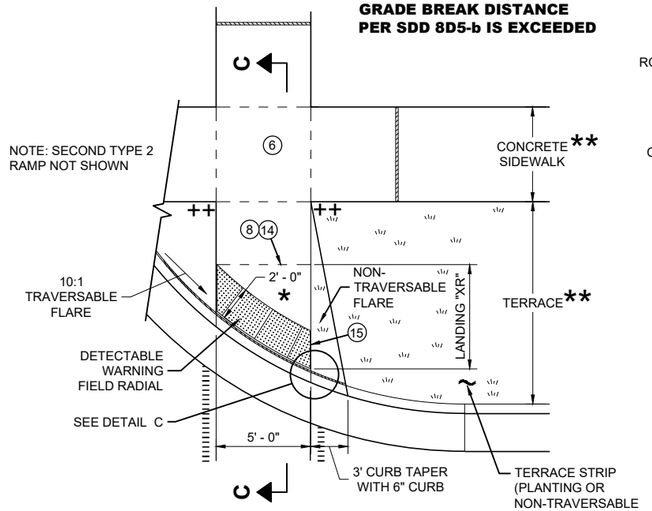


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

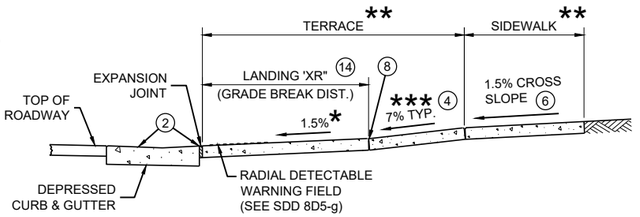
SECTION B - B FOR TYPE 4B1

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

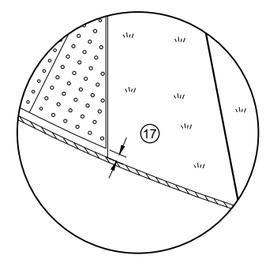


PLAN VIEW

CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)



SECTION C - C FOR TYPE 2



DETAIL C

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

CURB RAMPS
RADIAL DETECTABLE WARNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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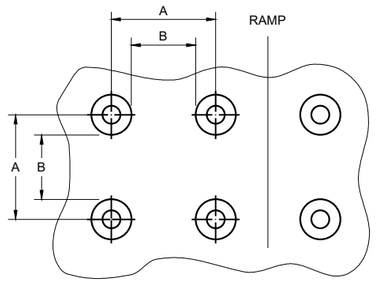
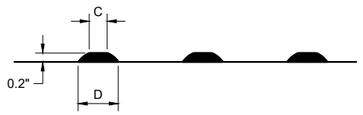
SDD 08D05-21f

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

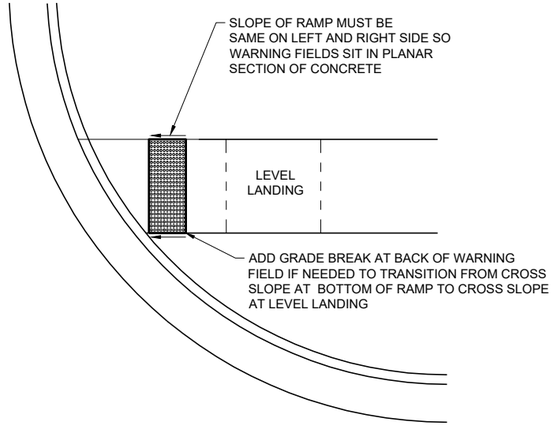
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD
PLANAR INSTALLATION

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

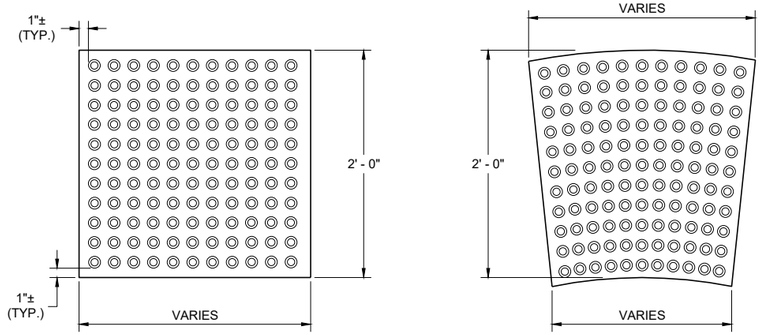
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

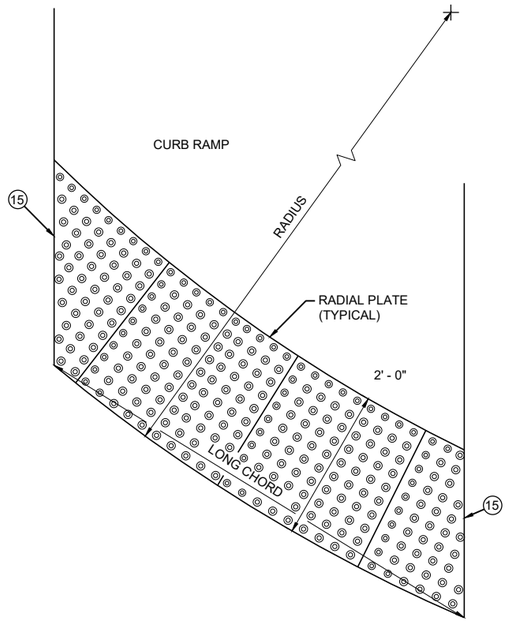
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



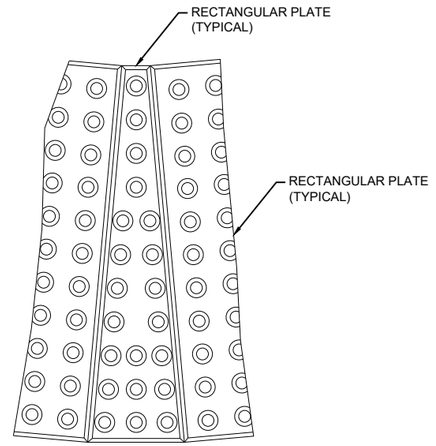
RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

July 2023 — DATE

/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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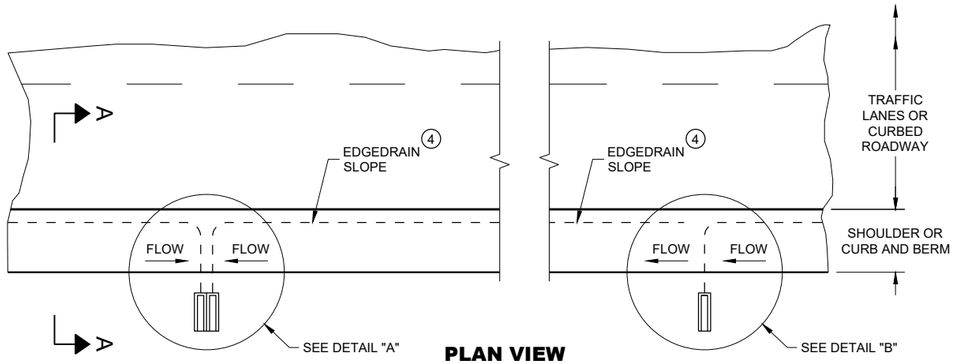
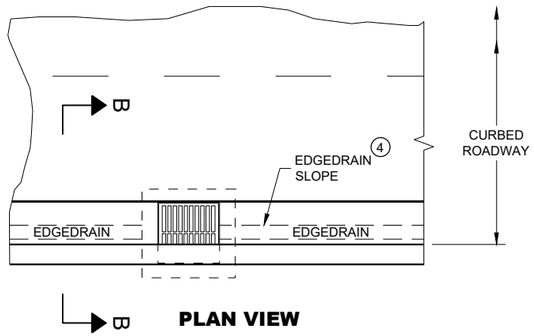
SDD 08D05-21g



PLAN VIEW

ROADWAY WITH SHOULDERS OR CURBS
(EDGEDRAIN CONNECTS TO ROADSIDE) (2)



PLAN VIEW

ROADWAY WITH CURBS
(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)

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) UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

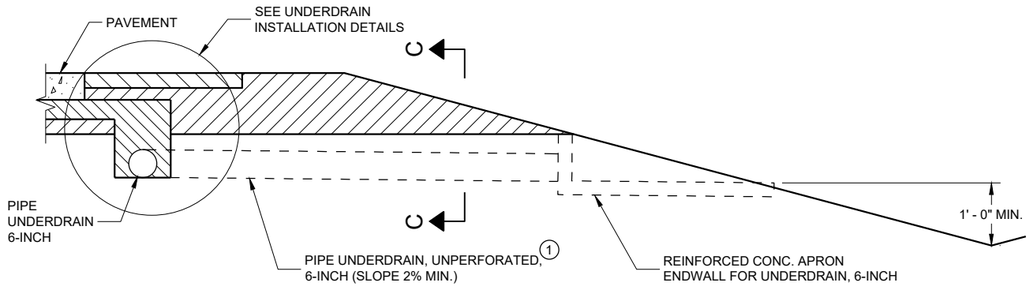
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.

(2) MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

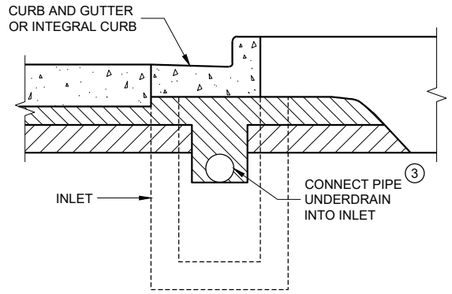
(3) EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.

(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



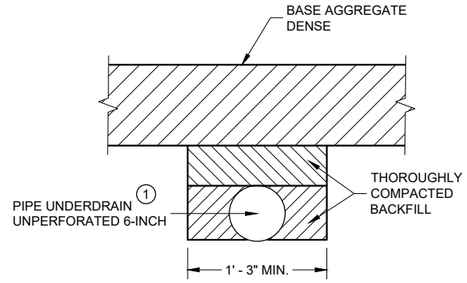
SECTION A - A

RURAL CROSS SECTION



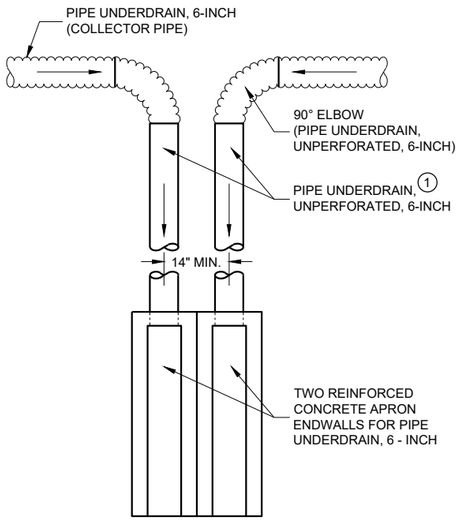
SECTION B - B

URBAN CROSS SECTION

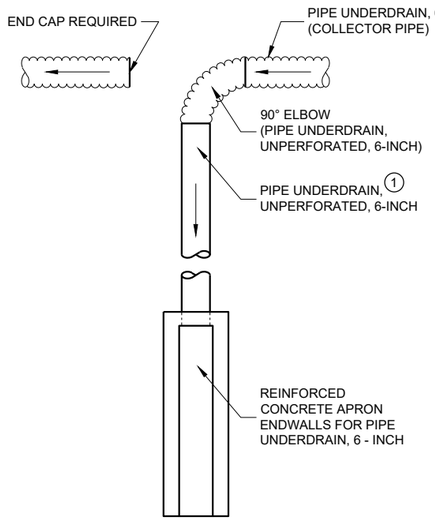


SECTION C - C

TRENCH FOR OUTFALL PIPE

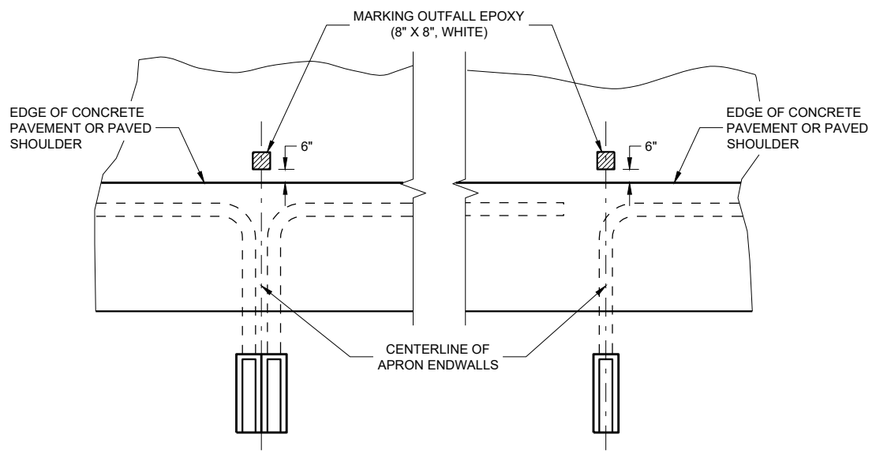


DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS



DETAIL "B"
TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS



LOW POINT LOCATIONS — INTERMEDIATE LOCATIONS

PAVEMENT MARKINGS FOR OUTFALL MARKERS

EDGEDRAIN OUTLET AND OUTFALL MARKERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD08D15 - 05a

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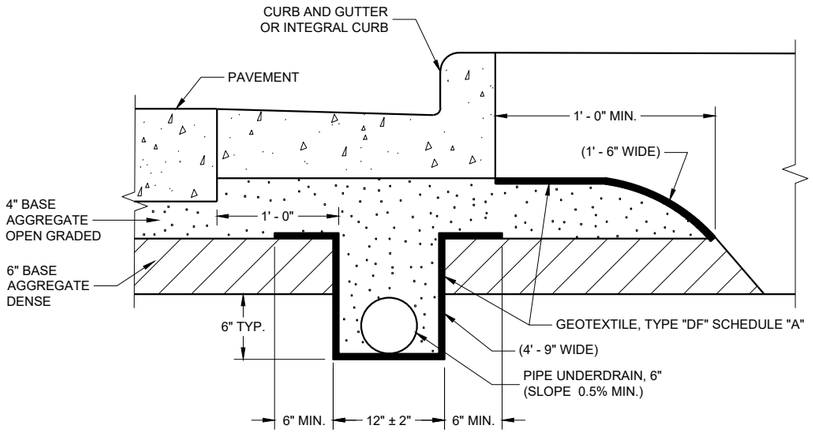
SDD08D15 - 05a



EDGEDRAIN IN URBAN ROADWAY

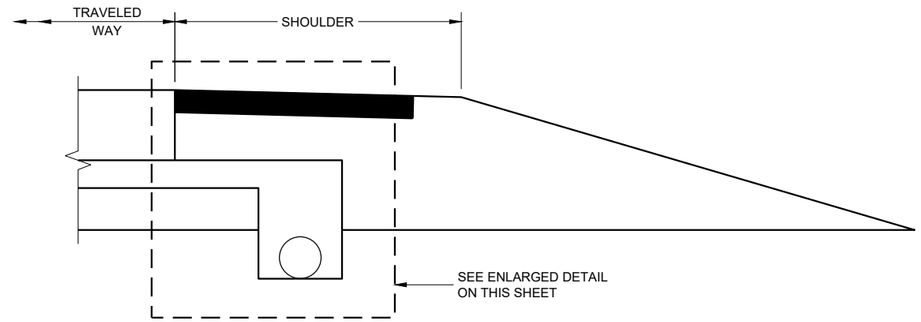
GENERAL NOTES

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

PIPE UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROADWAY.

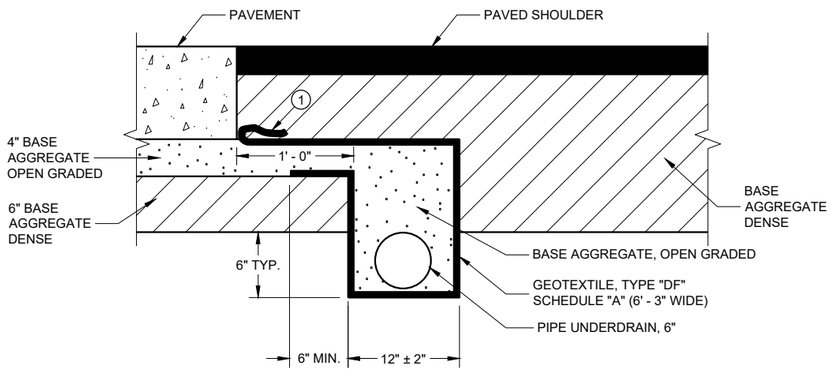
(1) FOLD OVER EXCESS GEOTEXTILE AT THIS LOCATION.

(2) TOTAL GEOTEXTILE WIDTH IS 6'-3" FOR PAYMENT.



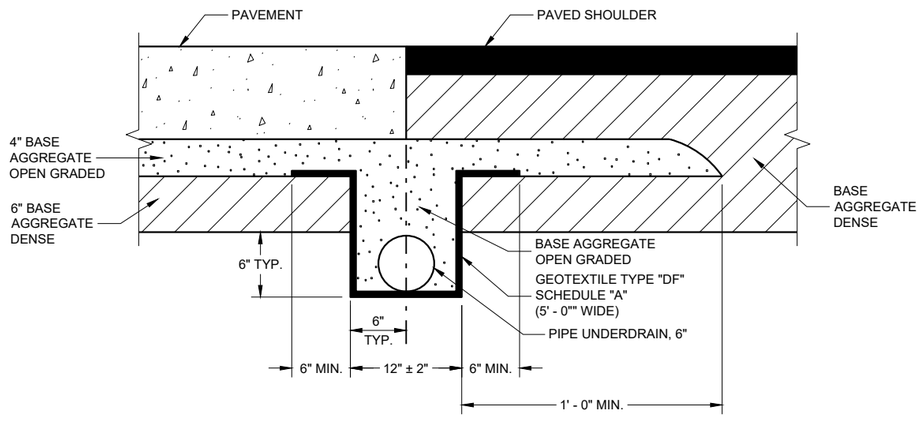
RURAL CROSS SECTION

6



POST PAVING INSTALLATION

(QUANTITIES ARE BASED ON THIS DETAIL)



PRE-PAVING INSTALLATION ALTERNATIVE

EDGEDRAIN IN RURAL ROADWAY

6

SDD 08D15 - 05b

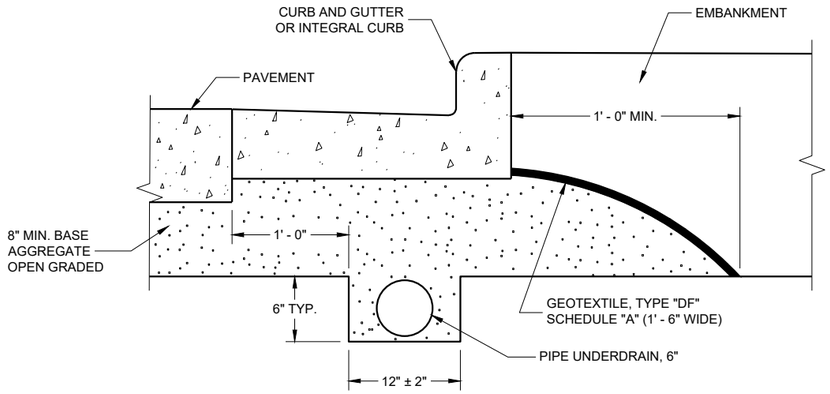
EGEDRAIN AND BASE AGGREGATE OPEN GRADED

SDD 08D15 - 05b

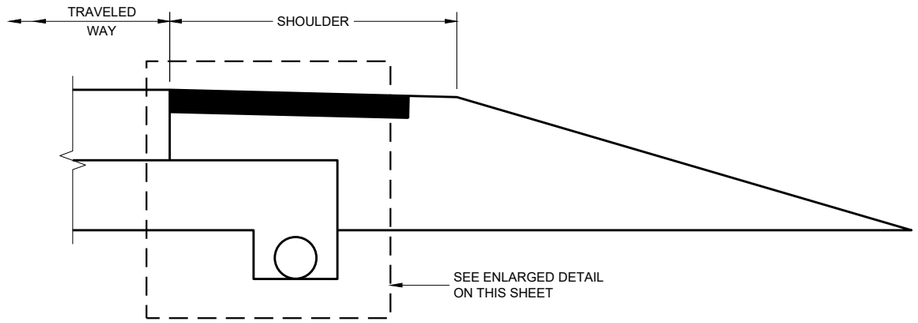
GENERAL NOTES

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

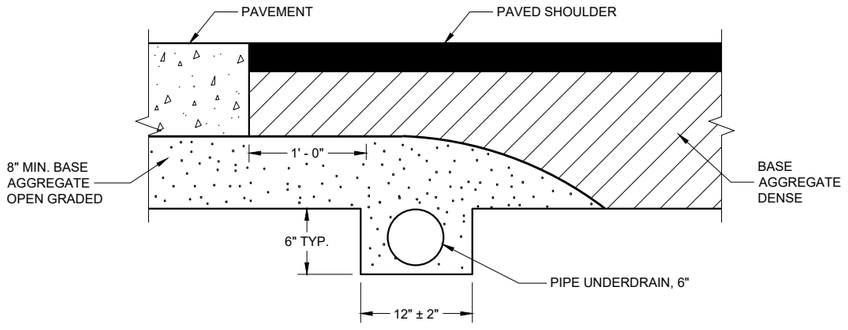
PIPE UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROADWAY.



EDGEDRAIN IN URBAN ROADWAY

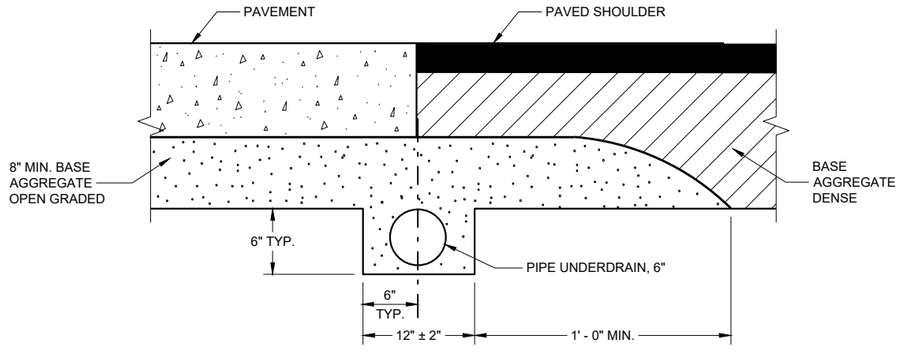


RURAL CROSS SECTION



POST PAVING INSTALLATION

(QUANTITIES ARE BASED ON THIS DETAIL)



PRE-PAVING INSTALLATION ALTERNATIVE

EDGEDRAIN IN RURAL ROADWAY

EDGEDRAIN AND BASE AGGREGATE OPEN GRADED

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2015
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVISOR

FHWA

474

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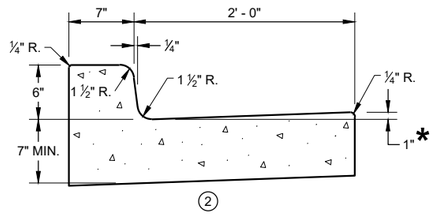
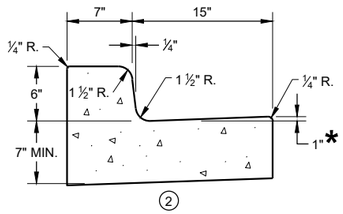
SDD 08D15 - 05c

SDD 08D15 - 05c

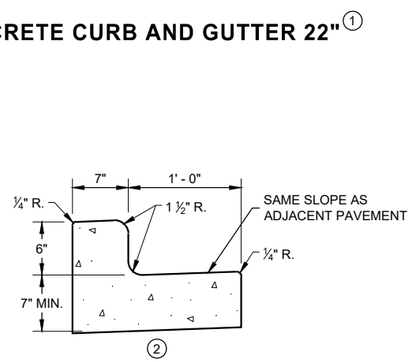


CONCRETE CURB AND GUTTER 31" ①

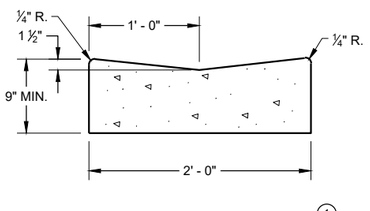
*TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



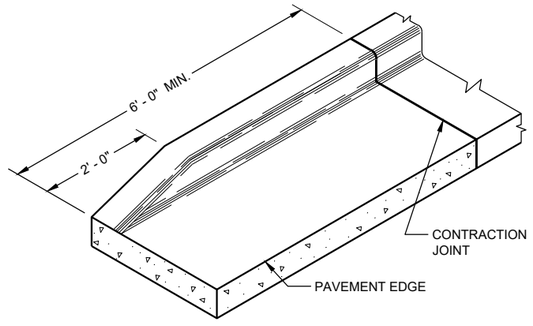
CONCRETE CURB AND GUTTER 22" ①



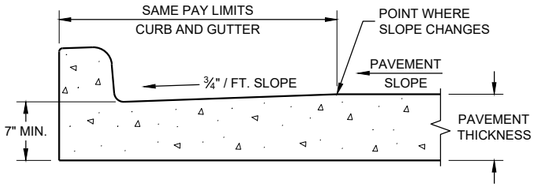
CONCRETE CURB AND GUTTER 19" ①



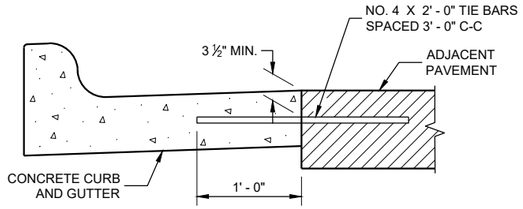
CONCRETE GUTTER 24" ①



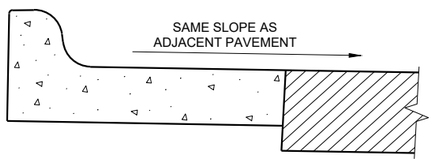
END SECTIONCURB AND GUTTER



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER



TYPICAL TIE BAR LOCATION ①



HIGH SIDE SECTION ③

(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

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

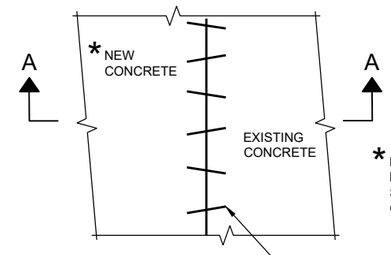
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

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

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUITED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".

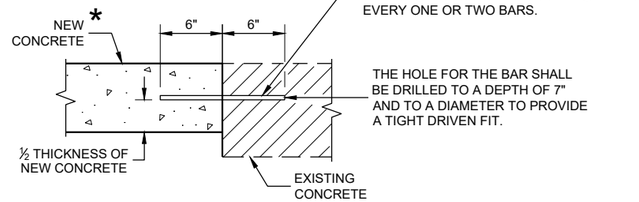
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MINIMUM GUTTER THICKNESS IS MAINTAINED.

③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLANS



PLAN VIEW

*EXISTING AND NEW CONCRETE MAY BE CURB AND GUTTER, SURFACE DRAINS, PAVEMENT OR OTHER CONCRETE STRUCTURE.



SECTION A - A

PAVEMENT TIES

CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES

(For Optional use in Milwaukee Co. Only)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

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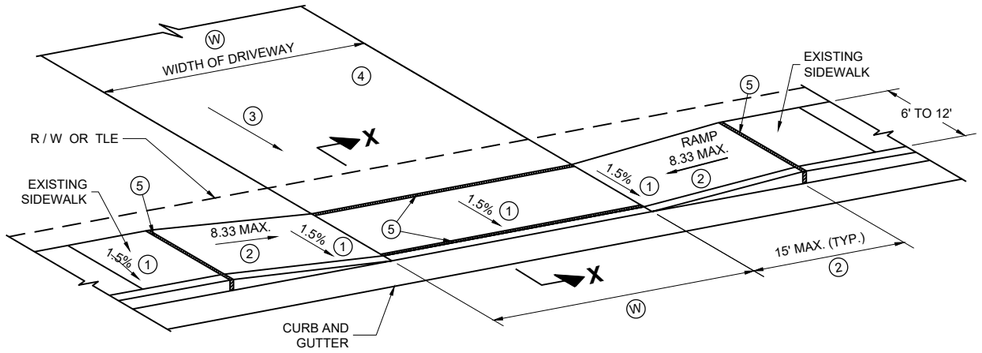
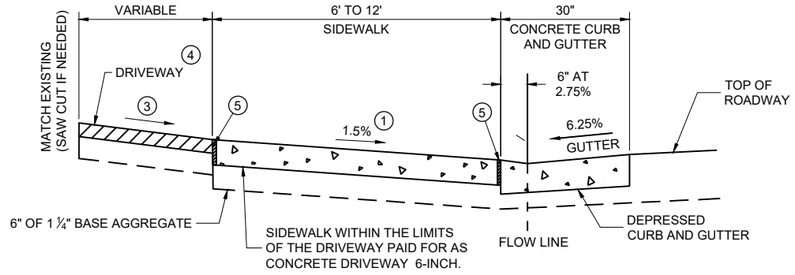
SDD 08D16 - 11

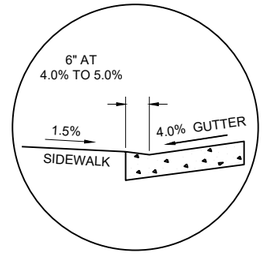
SDD 08D16 - 11



TYPE X
SIDEWALK ABUTS CURB AND GUTTER
TERRACE VARIES 0 TO 3 FEET



SECTION X - X



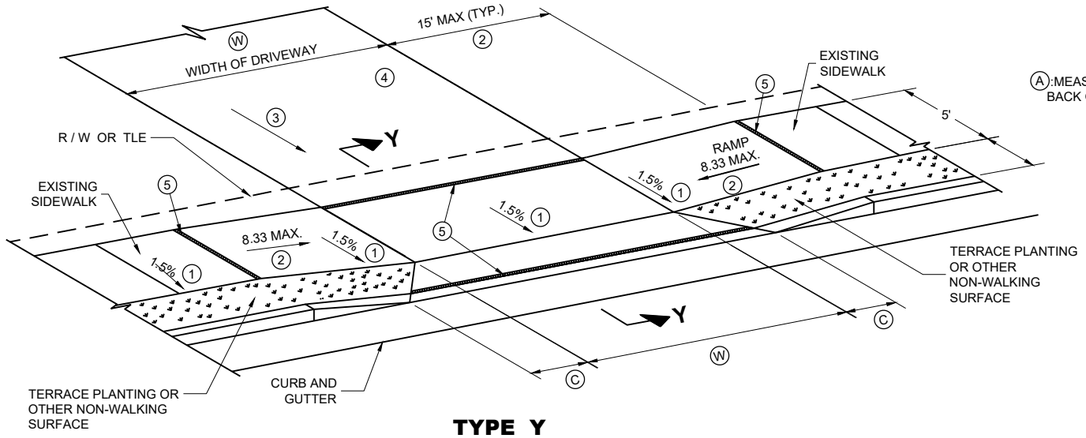
SECTION X - X
4% GUTTER SLOPE

Ⓦ: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)

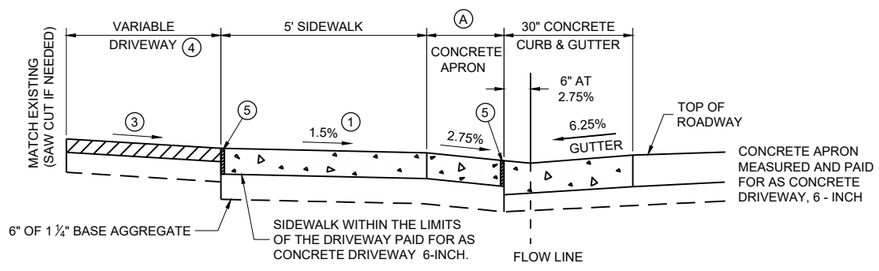
TABLE Y

Ⓐ FEET	Ⓒ FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'

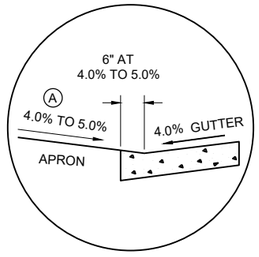


TYPE Y
SIDEWALK WITH NARROWER TERRACE
TERRACE VARIES 4 TO 6 FEET

Ⓐ:MEASURE FROM BACK OF CURB



NOTE: SIDEWALK MY BE DEPRESSED IN DRIVEWAY AREAS



SECTION Y - Y
4% GUTTER SLOPE

SECTION Y - Y

DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER

(URBAN AND SUBURBAN)

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

Ⓦ IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

① CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

② THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

③ DRIVEWAY SLOPES: DESIRABLE MAXIMUM
- 10.5% UP AWAY FROM SIDEWALK (SAG)
- 8.5% DOWN AWAY FROM SIDEWALK (CREST)
- ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

④ DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

⑤ ½" EXPANSION JOINT FILLER

DRIVEWAY AND SIDEWALK RAMPS TYPES X AND Y

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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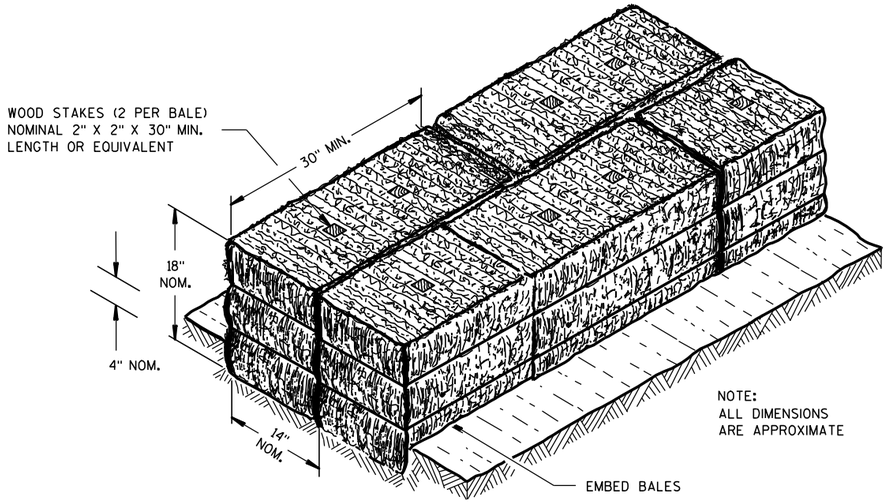
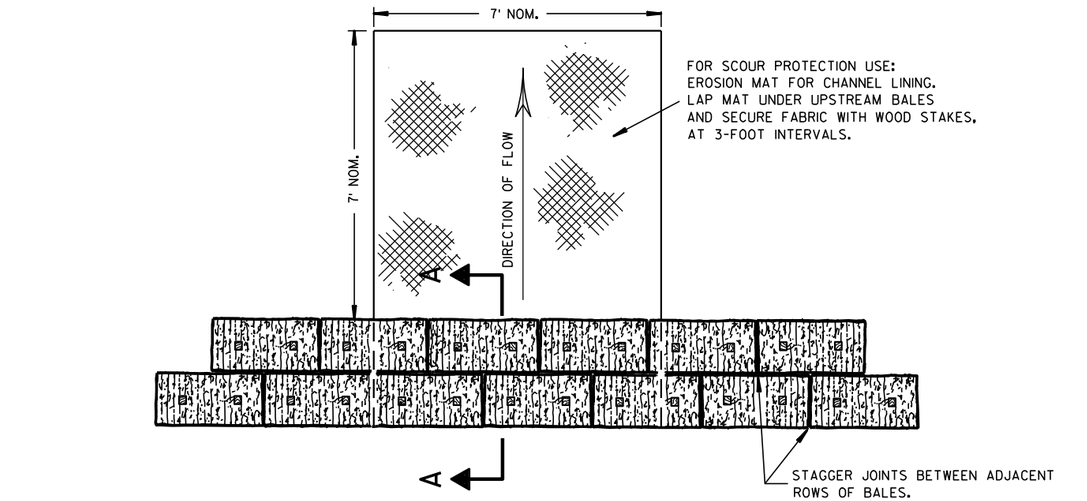
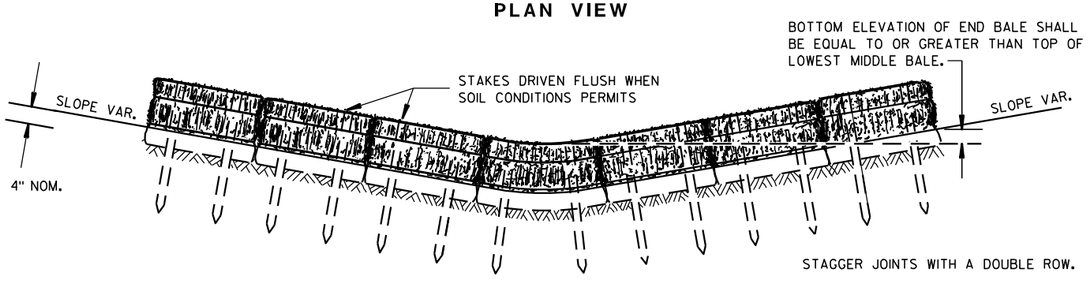
SDD 08D18-04



SECTION A-A



PLAN VIEW



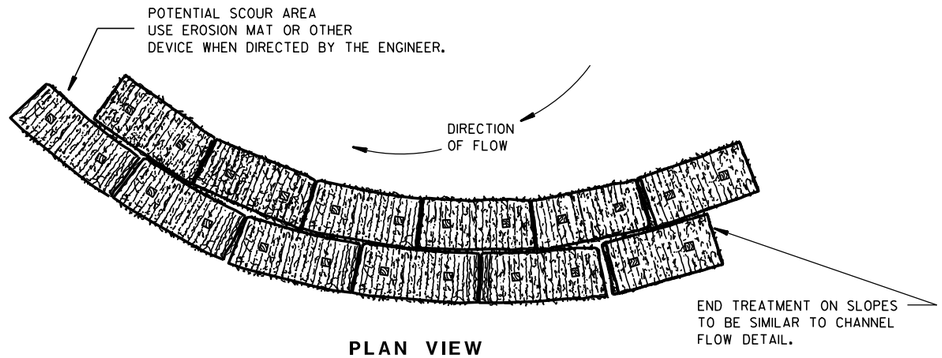
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

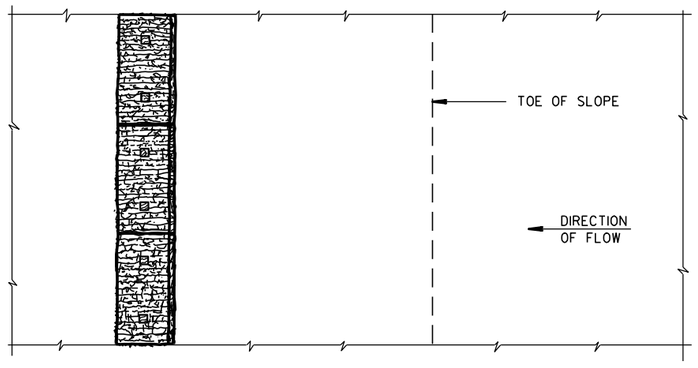
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

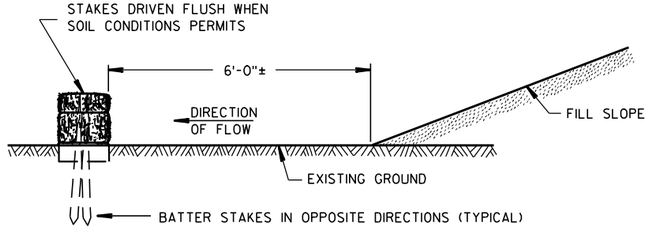


PLAN VIEW

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

477

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S.D.D. 8 E 8-3

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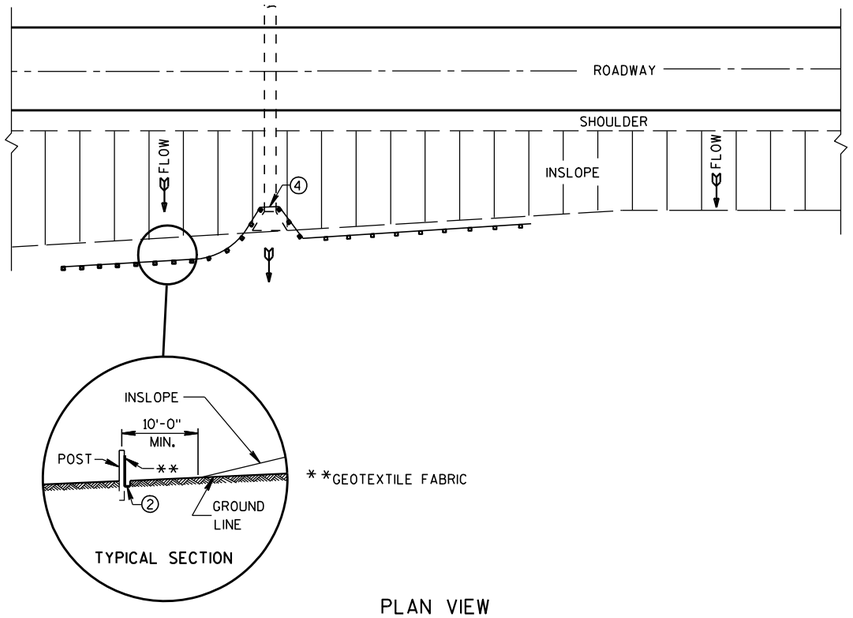
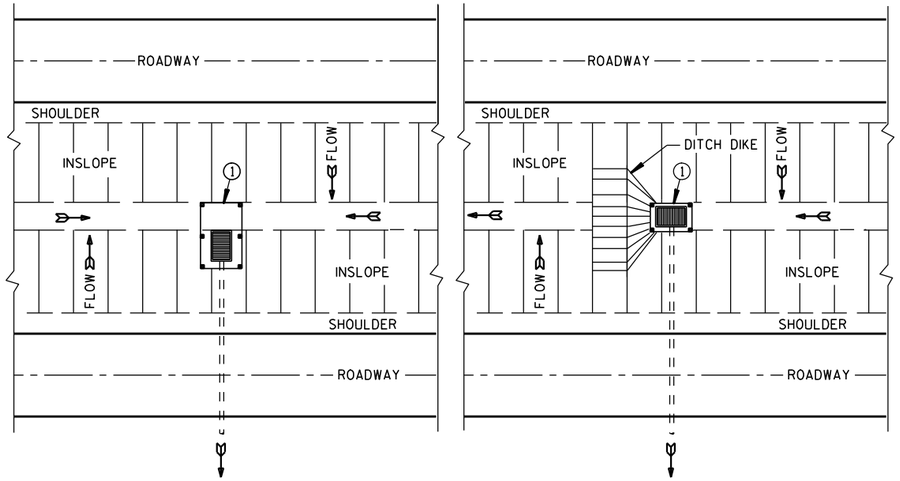
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



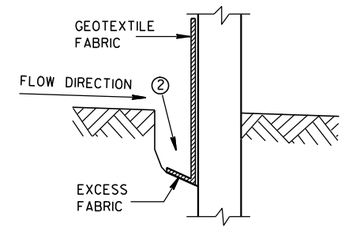
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

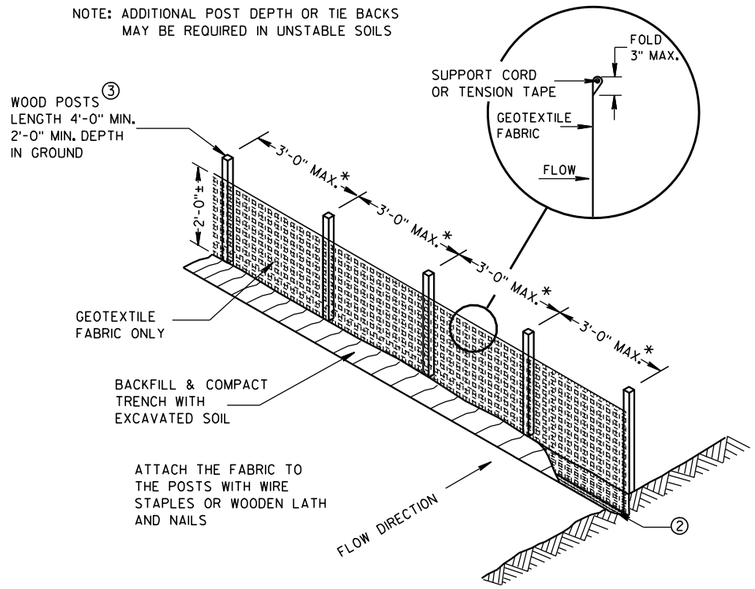
GENERAL NOTES

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

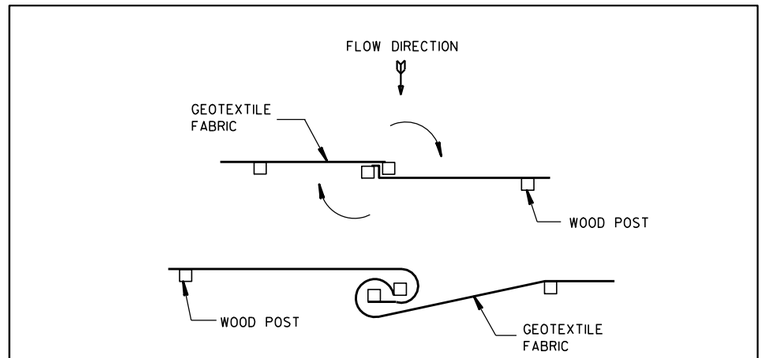
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL 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.



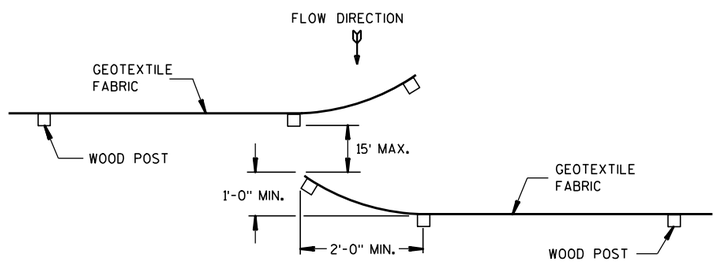
TRENCH DETAIL



SILT FENCE

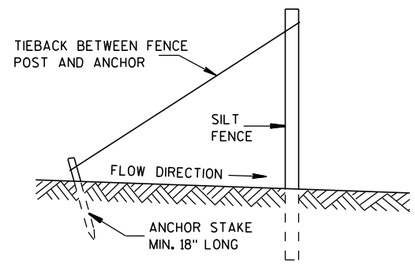


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

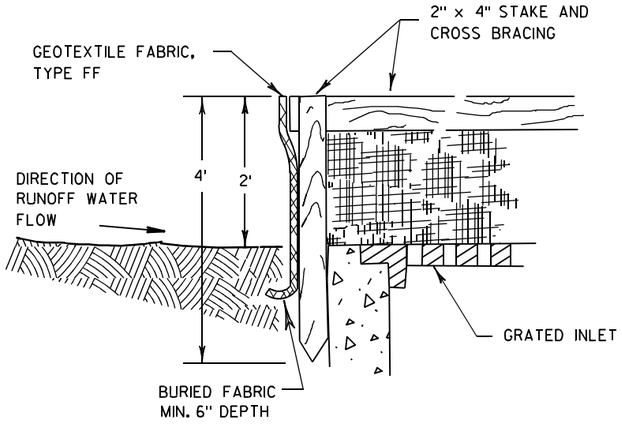
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

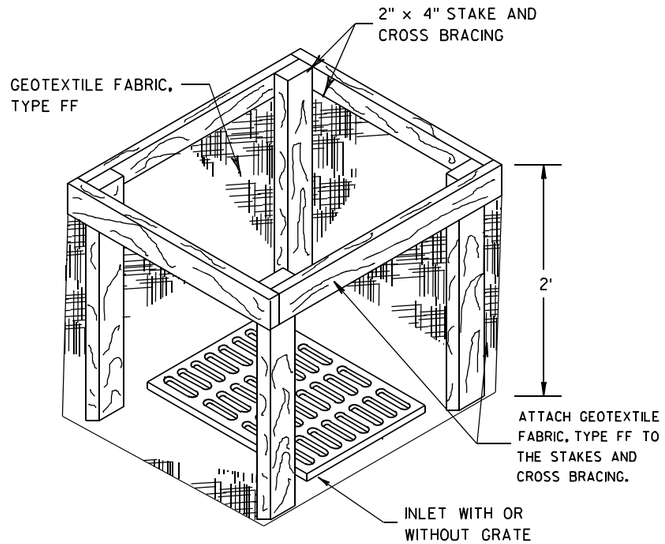
6

S.D.D. 8 E 9-6

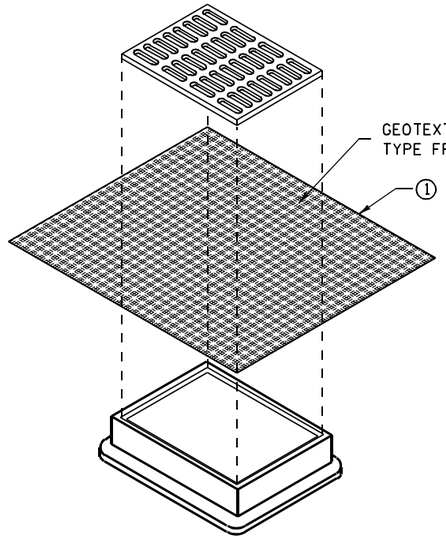
6

S.D.D. 8 E 9-6



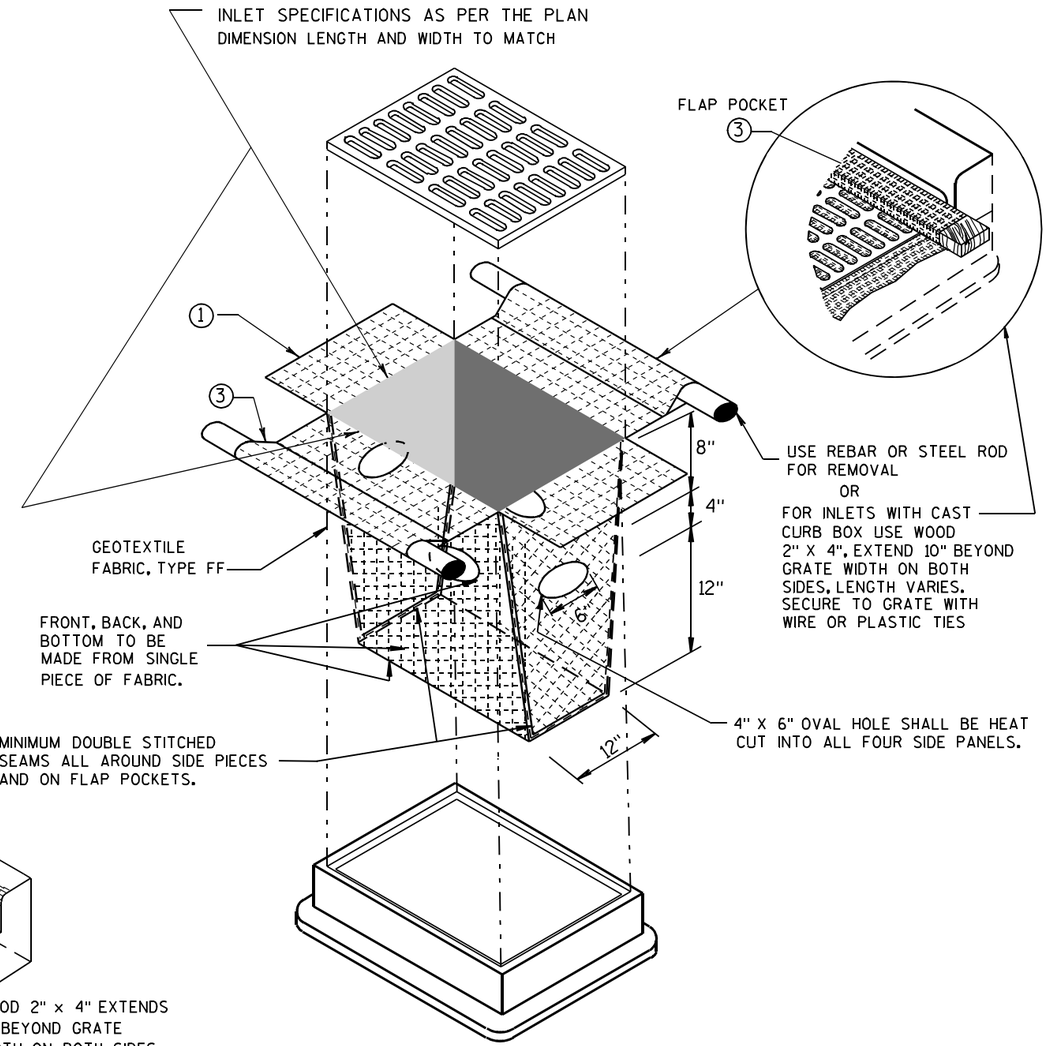


INLET PROTECTION, TYPE A



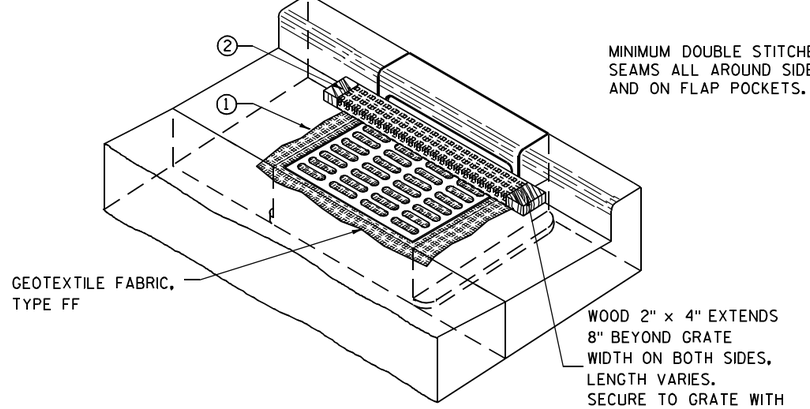
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

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.

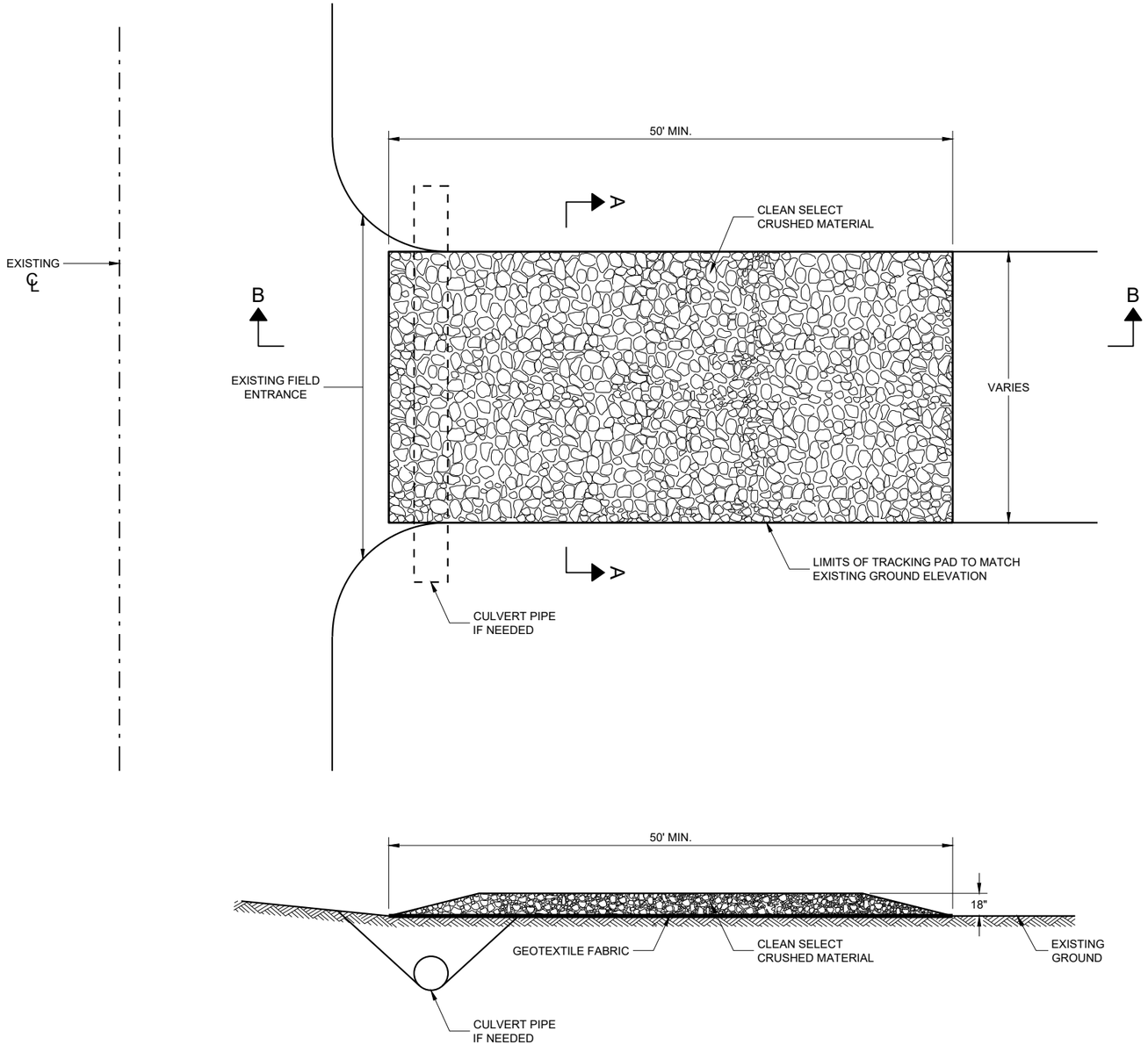
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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



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.

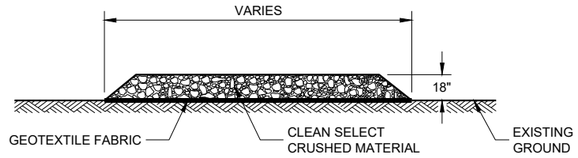
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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

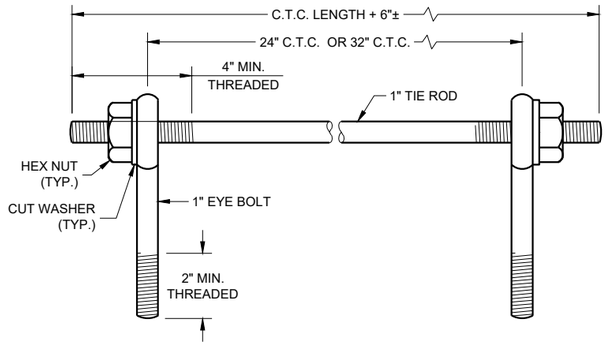
APPROVED
3/24/2011
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVE ENGINEER

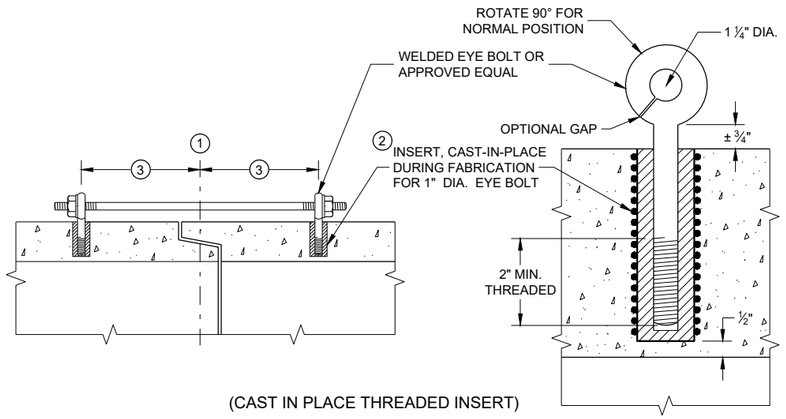
FHWA

6

SDD 08E14 - 01



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

(1) CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

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

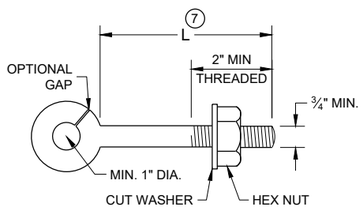
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

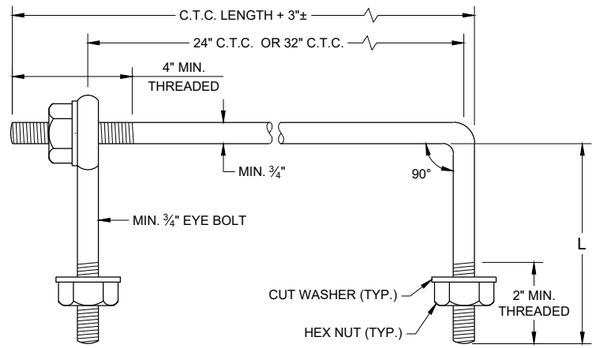
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

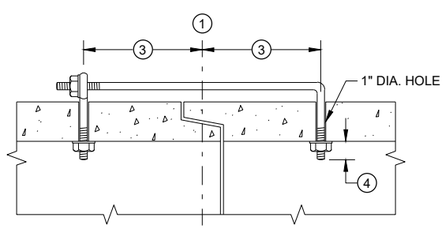


EYE BOLT (7)

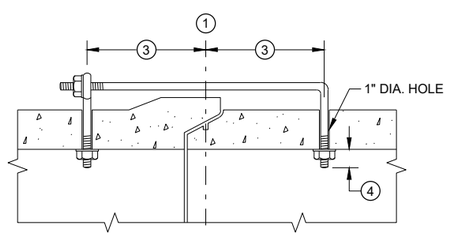
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

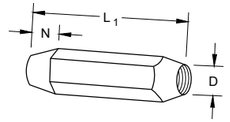
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



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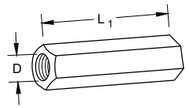
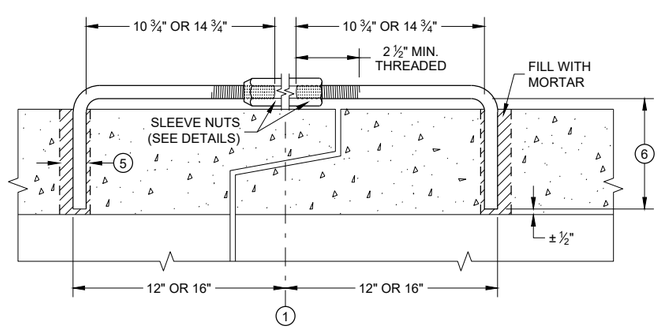


PLAIN

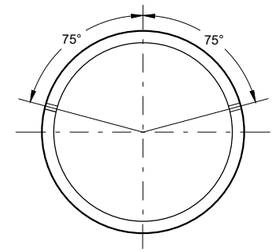
RIGHT AND LEFT THREADS

SLEEVE NUTS



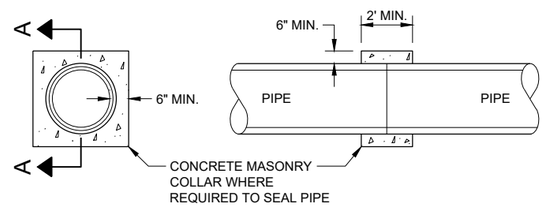
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

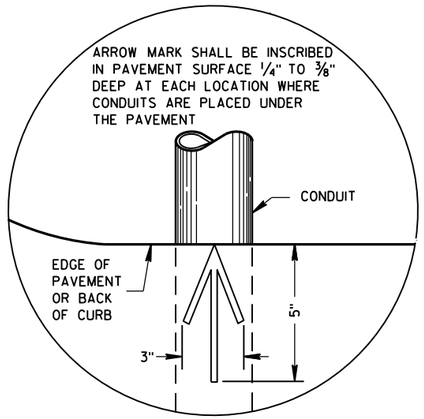
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

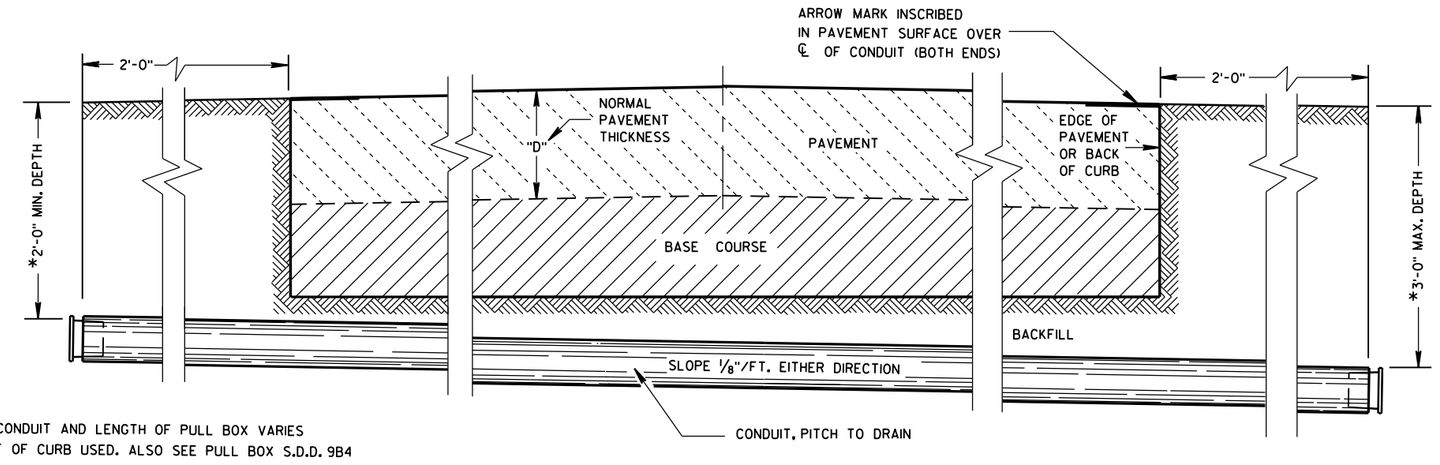
SDD 08F04 - 08

SDD 08F04 - 08



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

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

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

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

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

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

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

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

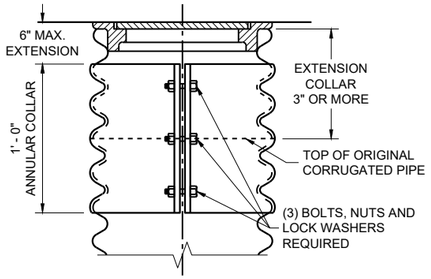
CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

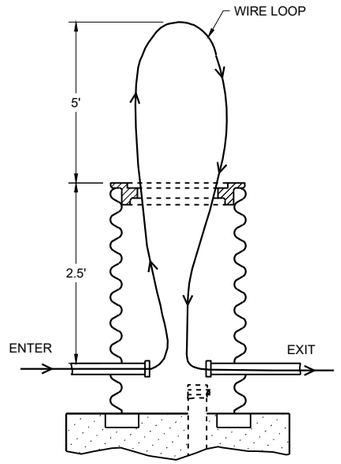
APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

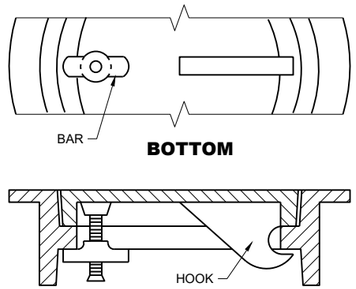
S.D.D. 9 B 2-10



CORRUGATED PIPE EXTENDER



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



BOTTOM

SECTION

ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

GENERAL NOTES

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

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

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

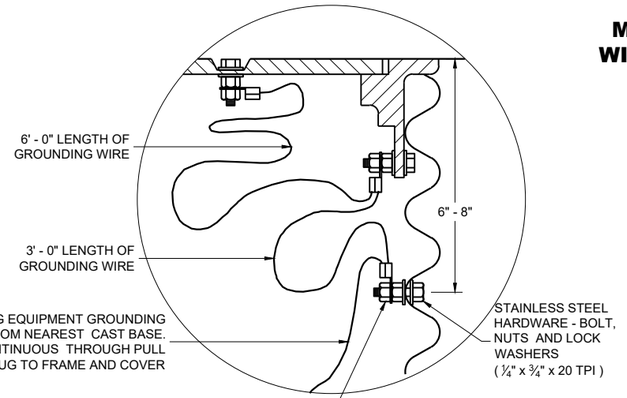
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

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

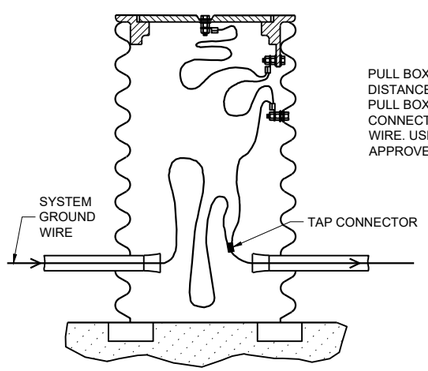
GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

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

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

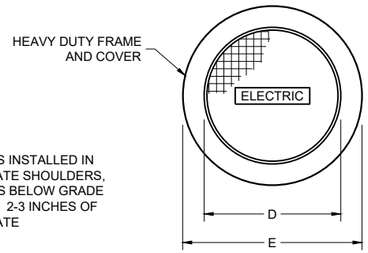


EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

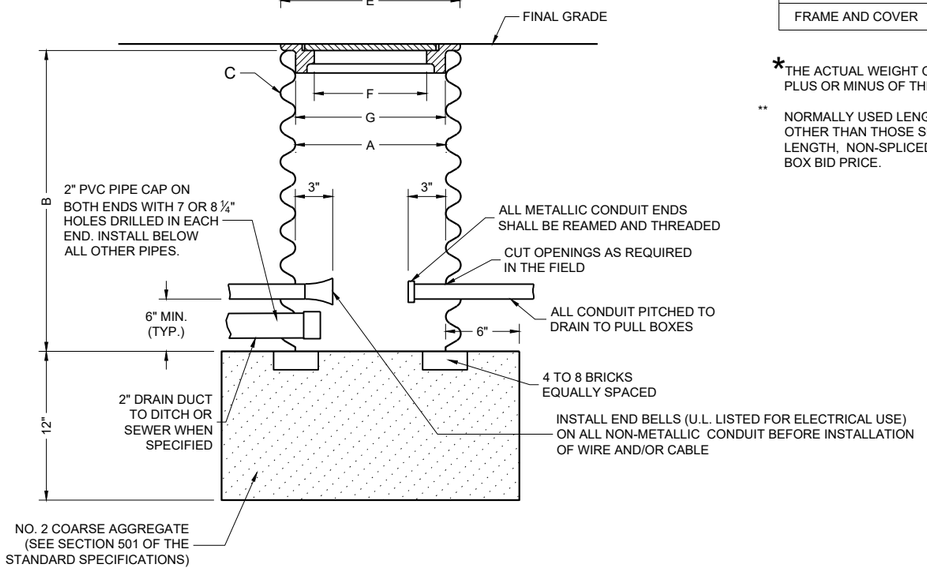


PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE



PULL BOX

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 ¼	10 ¼	10 ¼	16 ¼	16 ¼	16 ¼	22 ¼	22 ¼	22 ¼
FRAME	E	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½	26 ½	26 ½	26 ½
FRAME	F	8 ½	8 ½	8 ½	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½
FRAME	G	11 ½	11 ½	11 ½	17 ½	17 ½	17 ½	23 ½	23 ½	23 ½
WEIGHT IN POUNDS*										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

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

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

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024
DATE

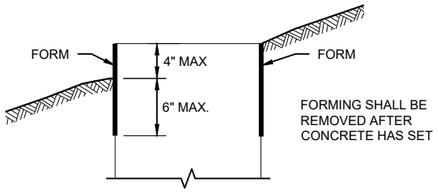
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

FHWA

6

SDD 09B04-13

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



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

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

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

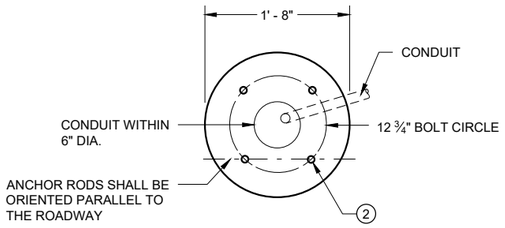
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

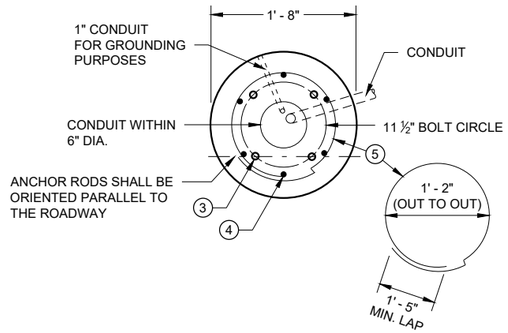
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

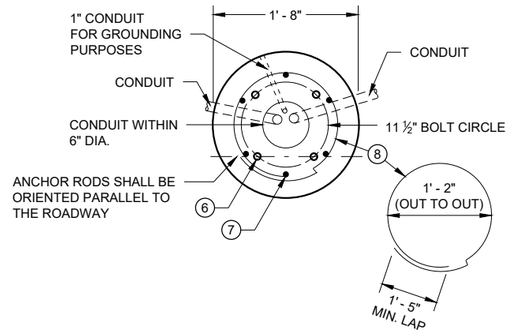
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).







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

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

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

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

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

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

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

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

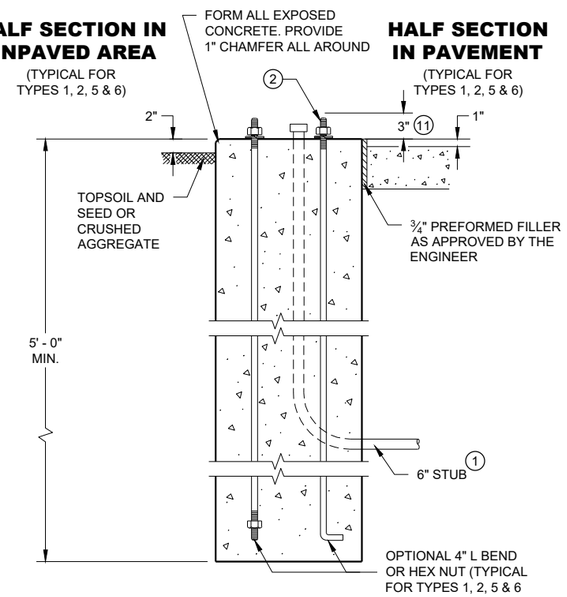
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

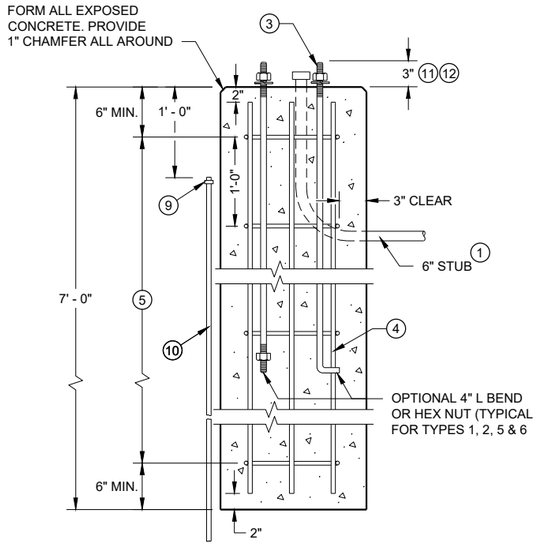
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

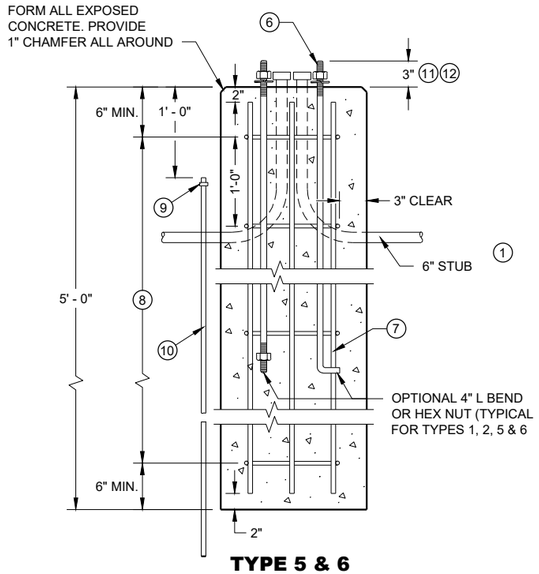
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 484

FHWA

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SDD 09C02 - 09

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

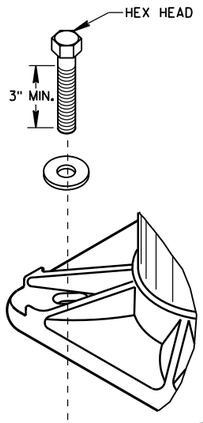
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

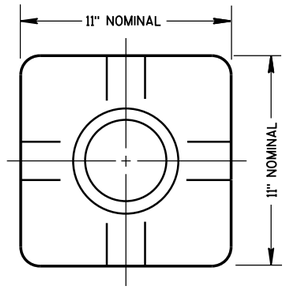
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

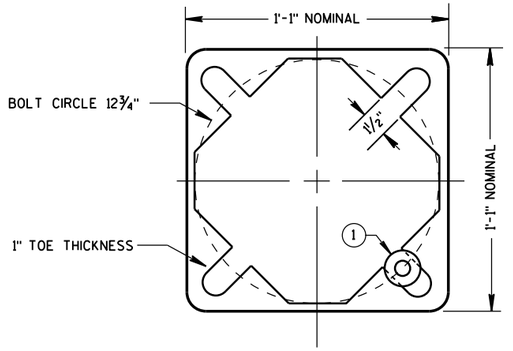
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

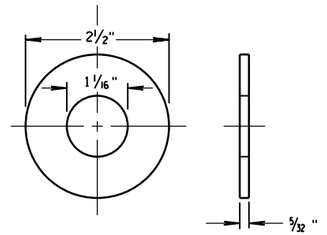




TOP VIEW
(PEDESTAL BASE)

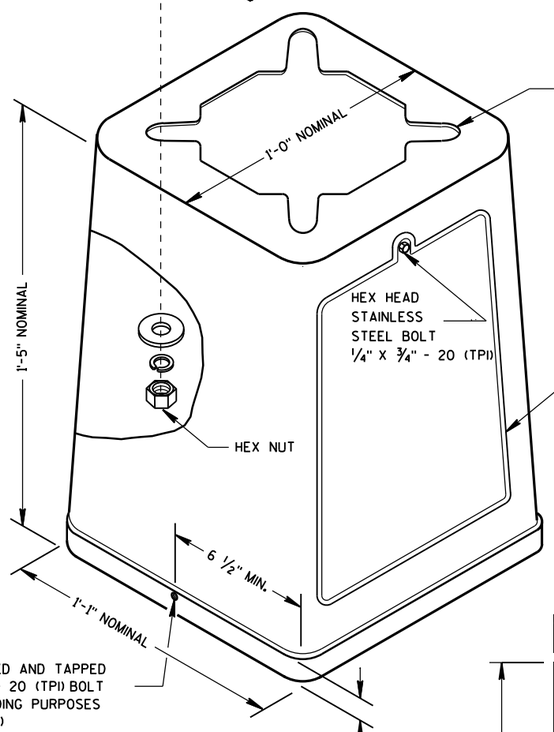


BOTTOM VIEW
(PEDESTAL BASE)

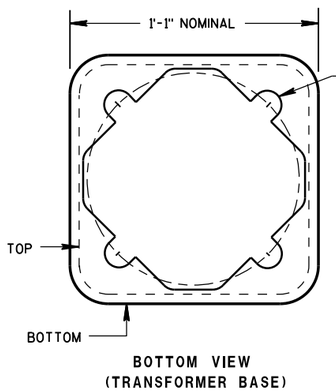


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

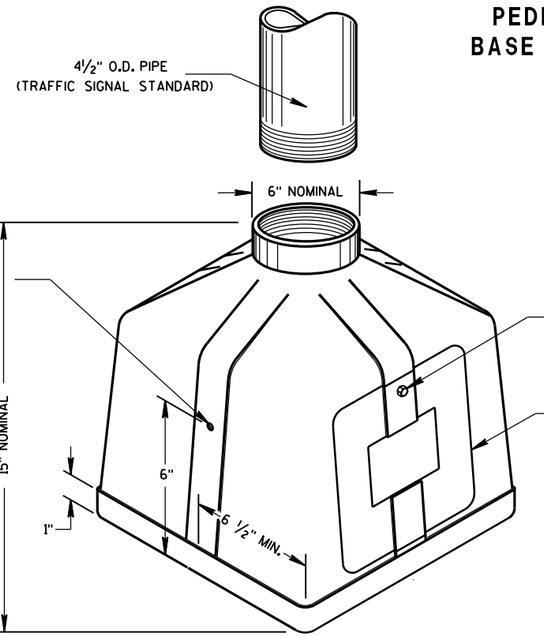
PEDESTAL BASE WASHER (1)



ISOMETRIC VIEW

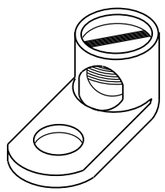


BOTTOM VIEW
(TRANSFORMER BASE)



ISOMETRIC VIEW

PEDESTAL BASE

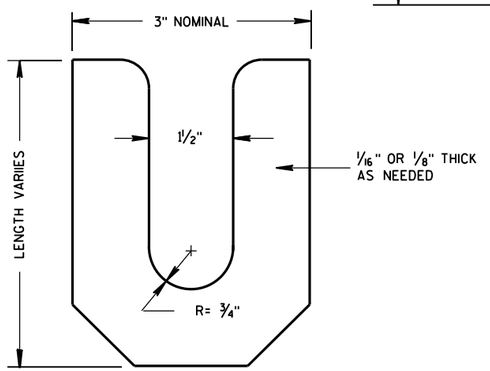


TYPICAL MECHANICAL CONNECTOR LUG

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

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S.D.D. 9 C 3-4

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 FOOTING 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.

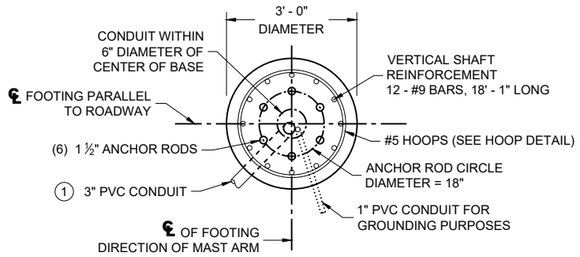
A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

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.

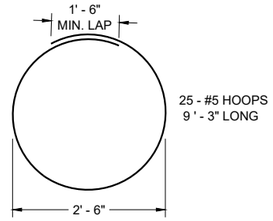
THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

(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.

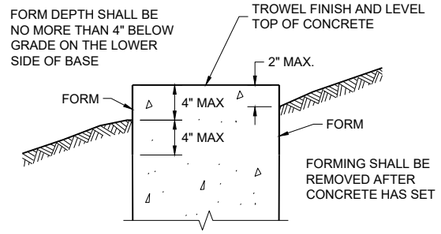
CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55.....fy = 55,000 p.s.i.
(IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.



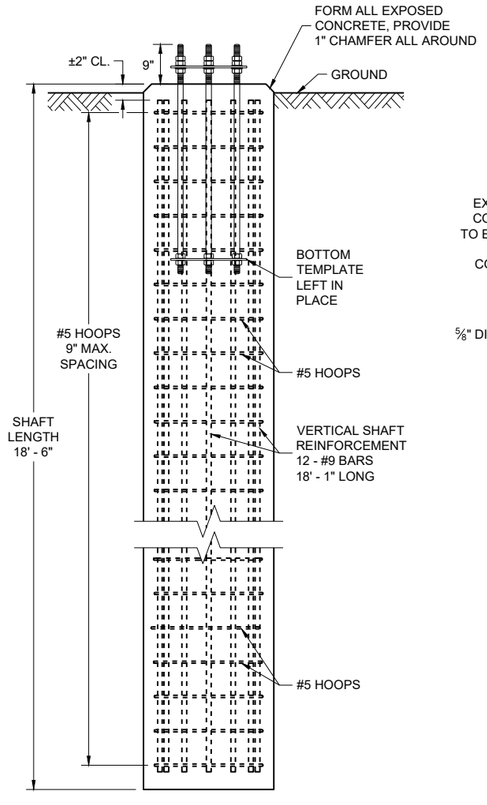
PLAN VIEW



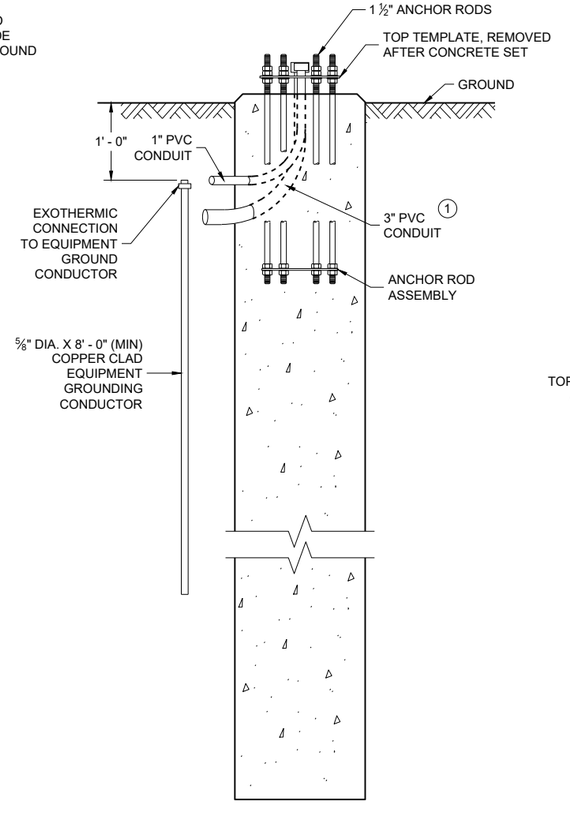
HOOP DETAIL



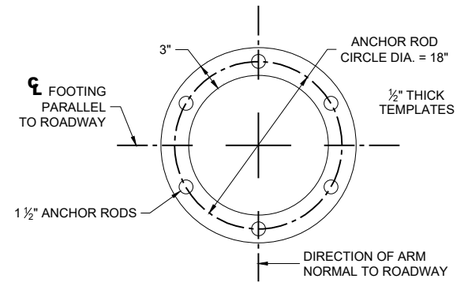
FORMING DETAIL



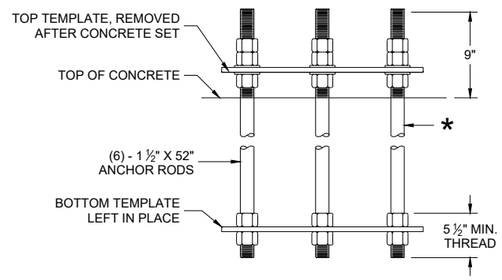
ELEVATION VIEW
(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)



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 AND OVER HEIGHT (OH) POLES)

CONCRETE = 4.8 CUBIC YARD
H.S. REINFORCEMENT = 979 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

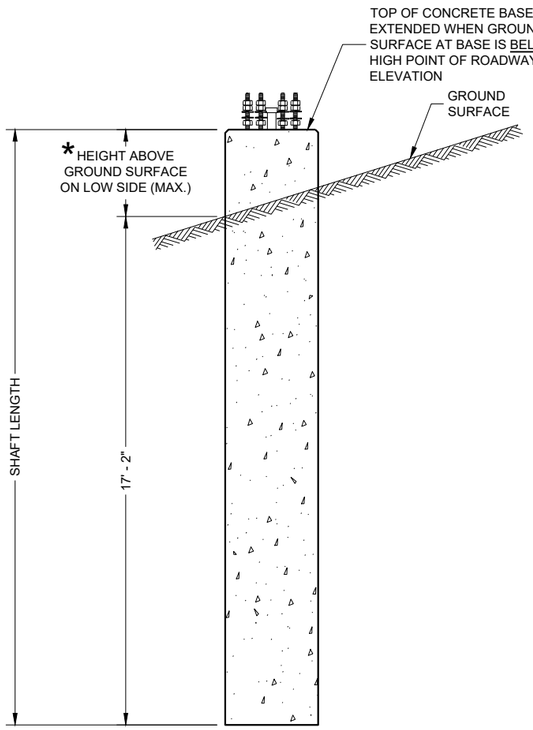
APPROVED
December 2024 — DATE
/S/ Alex Crabtree — WIND LOADED STRUCTURES PROGRAM LEADER

FHWA

6
SDD 09C15-02

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 487

FHWA

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SDD 09C16-01

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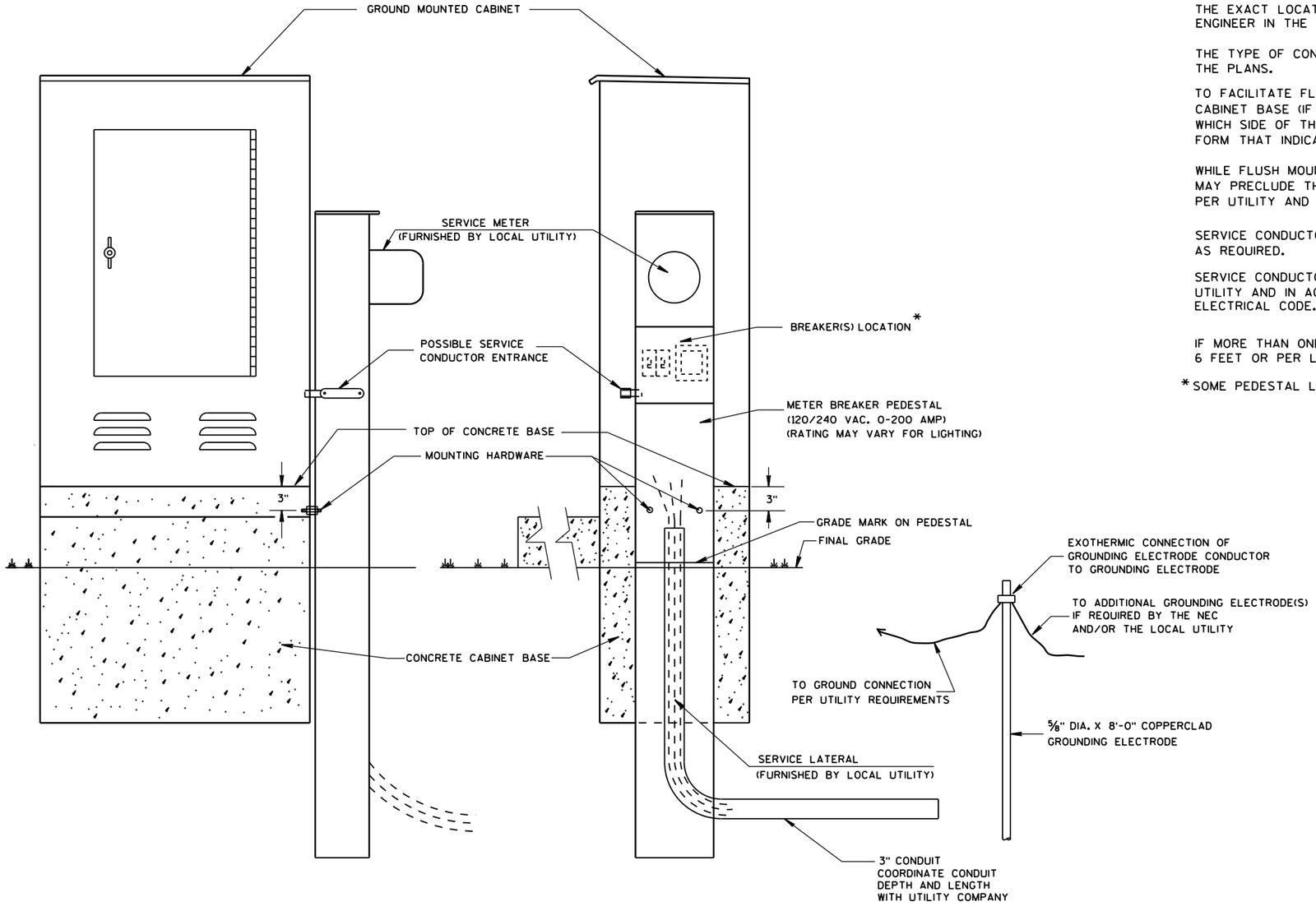
SDD 09C16-01



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

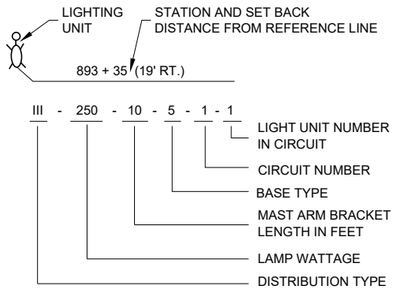
FHWA

GENERAL NOTES

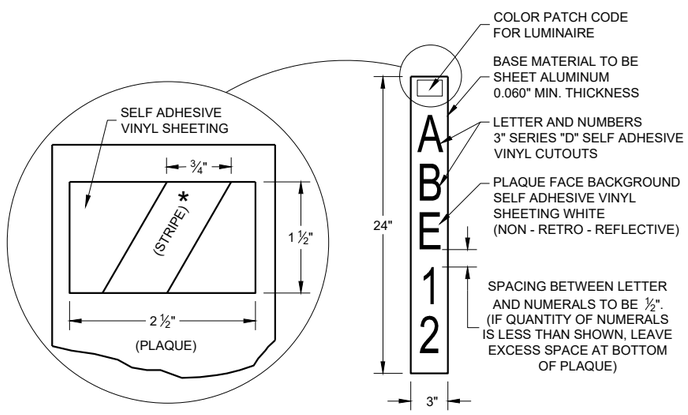
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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.



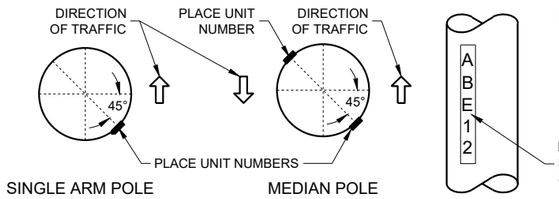
LIGHTING UNIT CODE
(TYPICAL)



COLOR PATCH CODE FOR LUMINAIRES

(HIGH PRESSURE SODIUM)	(MERCURY VAPOR)
1000 WATT - NO PATCH	400 WATT - NO PATCH
400 WATT - ORANGE	250 WATT - YELLOW
310 WATT - BLUE	
250 WATT - ORANGE W / WHITE STRIPE *	
200 WATT - RED	
150 WATT - GREEN	
100 WATT - BROWN	

IDENTIFICATION PLAQUE



NOTES

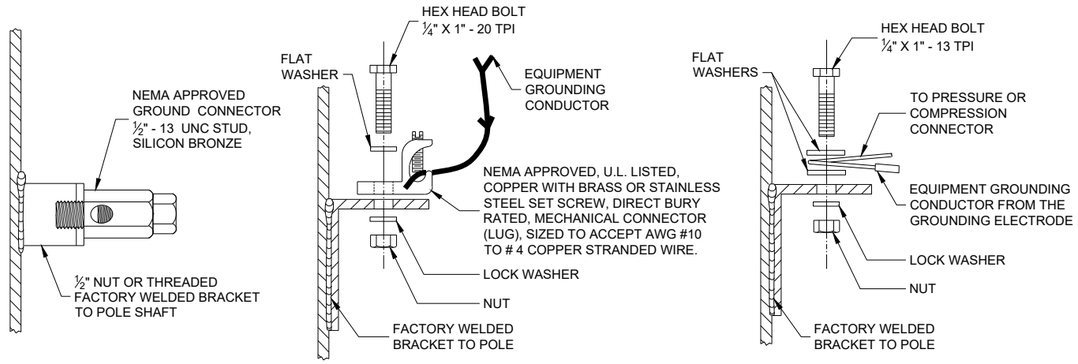
1) PLACE BOTTOM OF UNIT NUMBER PLAQUE 5'-0" ABOVE ELEVATION OF ADJACENT CURB OR SHOULDER.

2) UNIT NUMBER: ONE REQUIRED FOR SINGLE ARM POLES. TWO REQUIRED FOR MEDIAN MOUNT POLES.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE WITH 3 ALUMINUM POP RIVETS (ALUMINUM POLES) OR STAINLESS STEEL POP RIVETS (STEEL POLES).

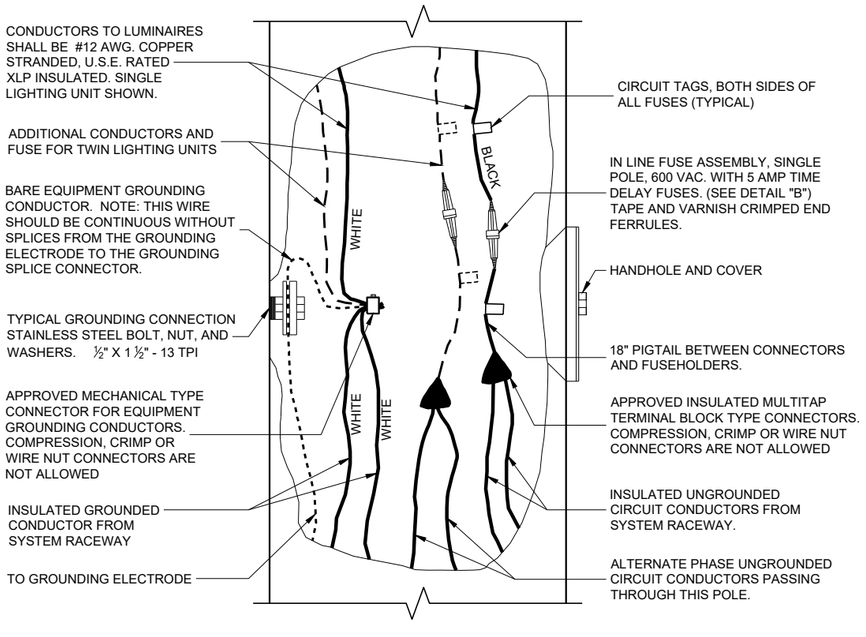
LIGHTING UNIT IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENT
(TYPICAL, ALL LIGHTING UNITS)

FURNISH PLAQUE WHEN CALLED FOR BY SPECIAL PROVISIONS

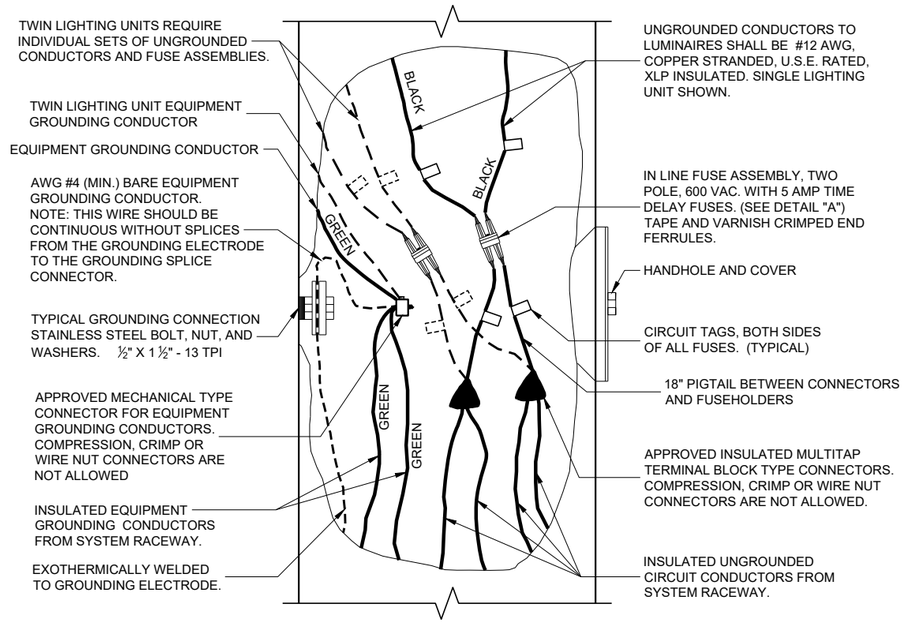


TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

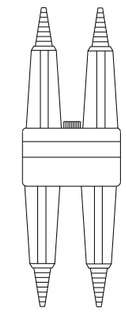
OLD EXISTING FREEWAY WIRING (SOME AREAS)



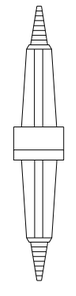
2 WIRE - 120, 240, OR 480 VAC TO GROUND



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



DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT

FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 489

FHWA

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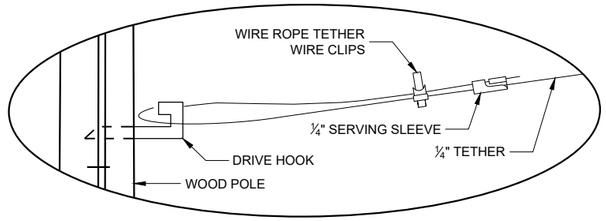
SDD 09E02 - 05

MINIMUM POLE LENGTHS	POLE BURIAL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

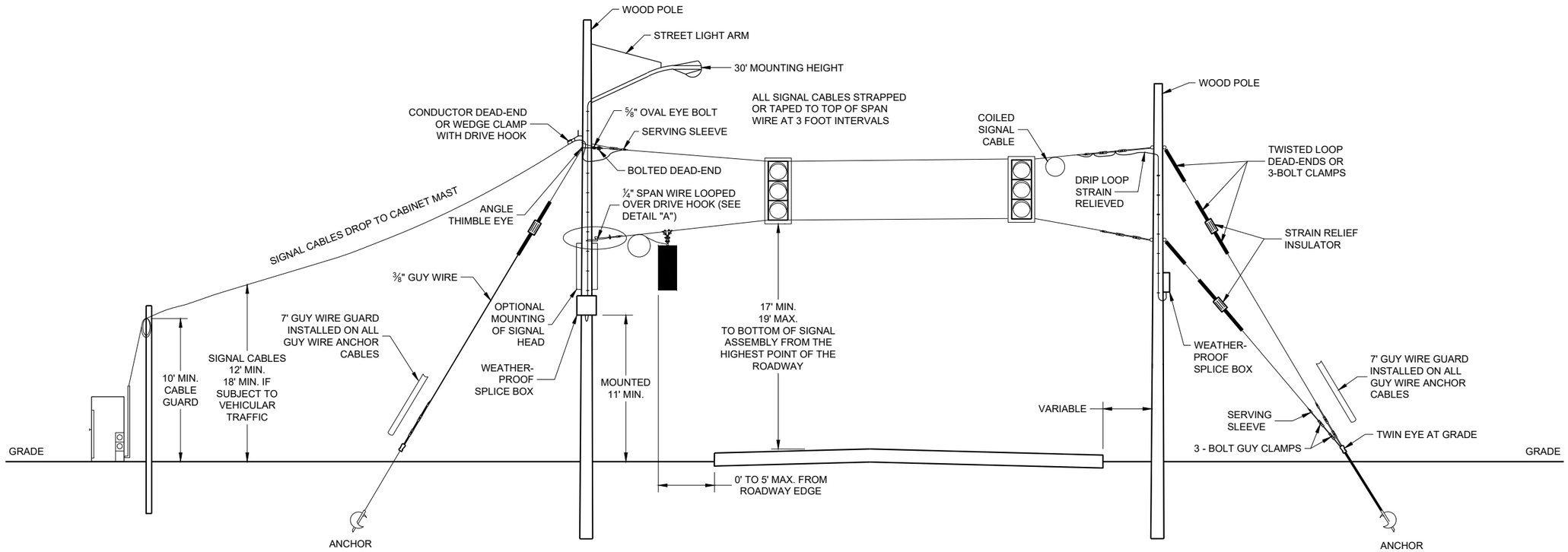


DETAIL "A"

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 490

FHWA

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SDD09G01 - 04a

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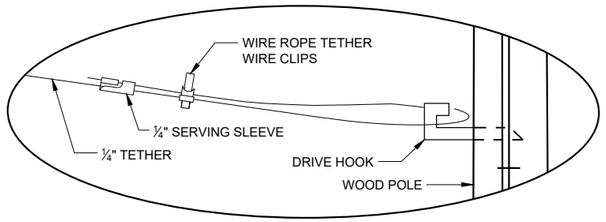
SDD09G01 - 04a

MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'



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   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
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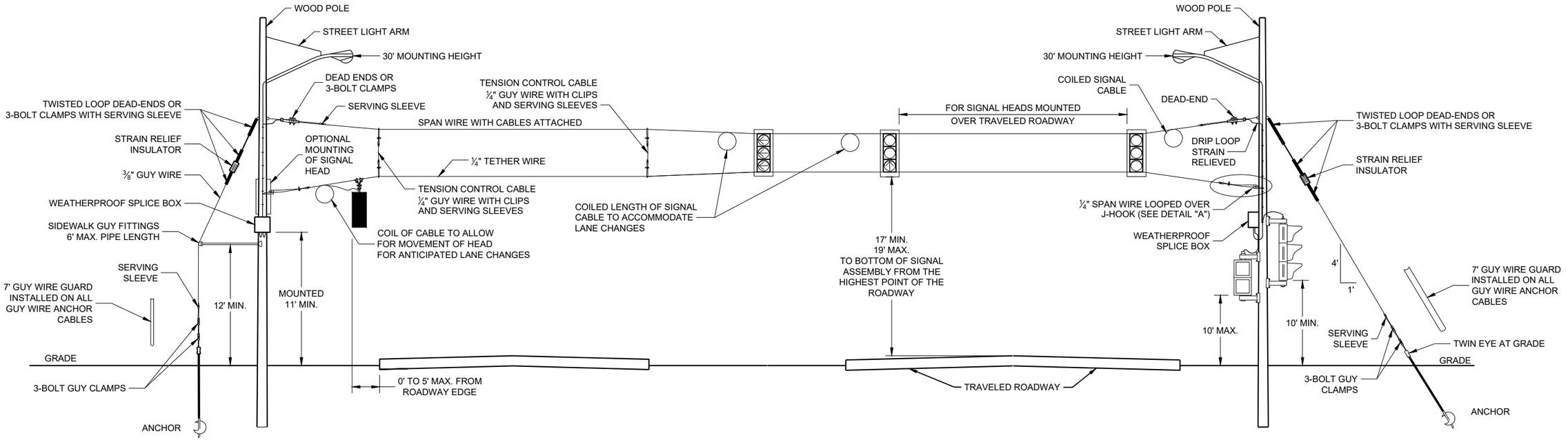

SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE
/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI 491
FHWA

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SDD09G01 - 04b

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SDD09G01 - 04b

MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
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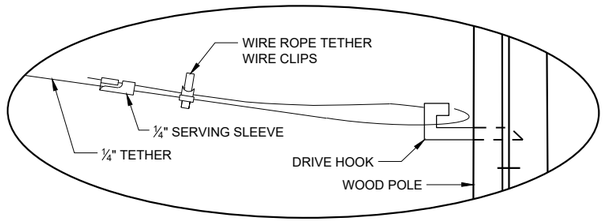
40'	IV	8'
45'	IV	9'



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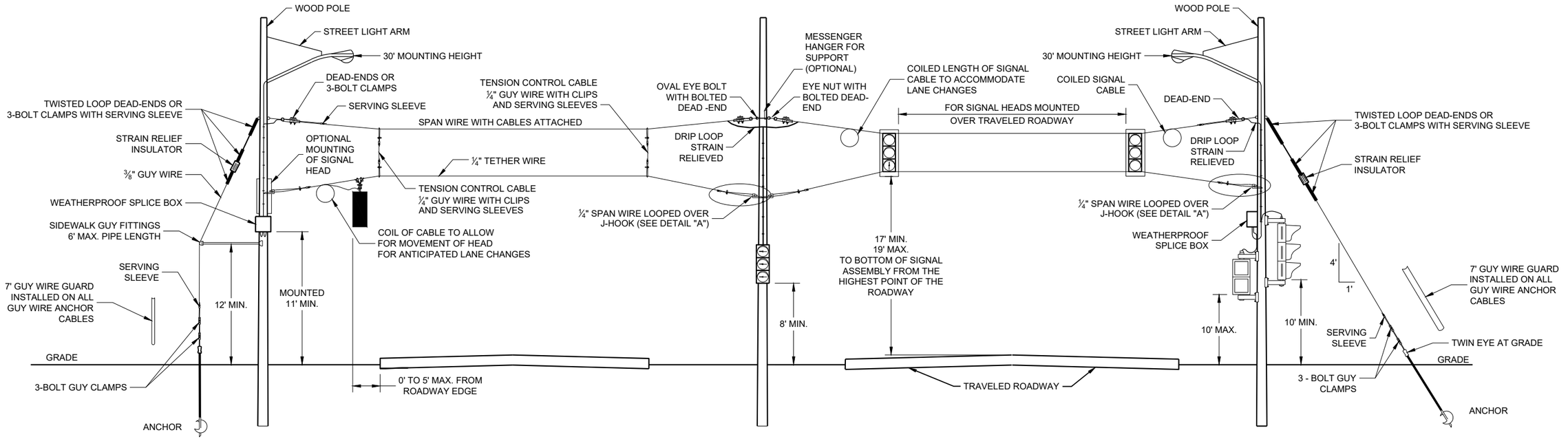

SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE
/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI 492

FHWA

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SDD09G01 - 04c

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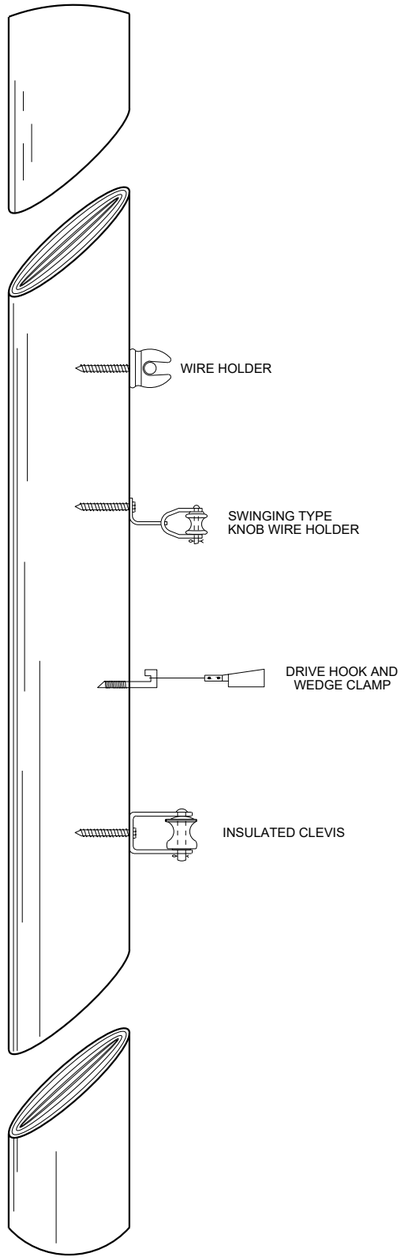

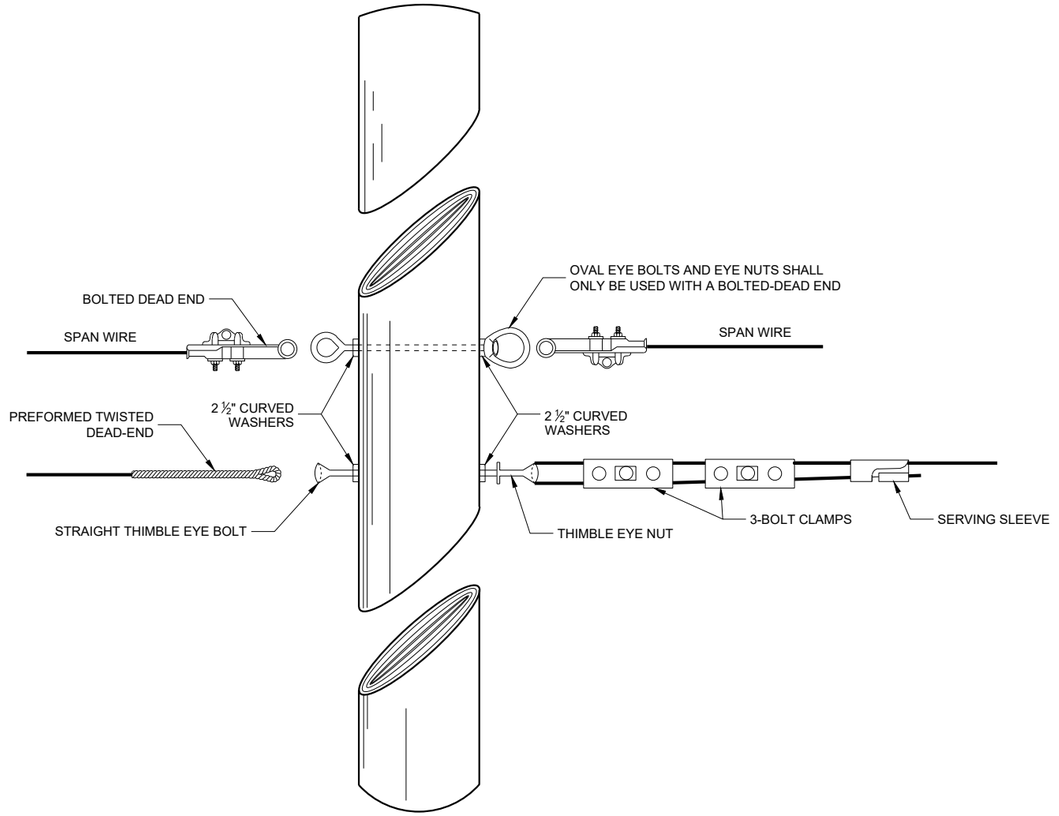

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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SDD 09G01 - 4d

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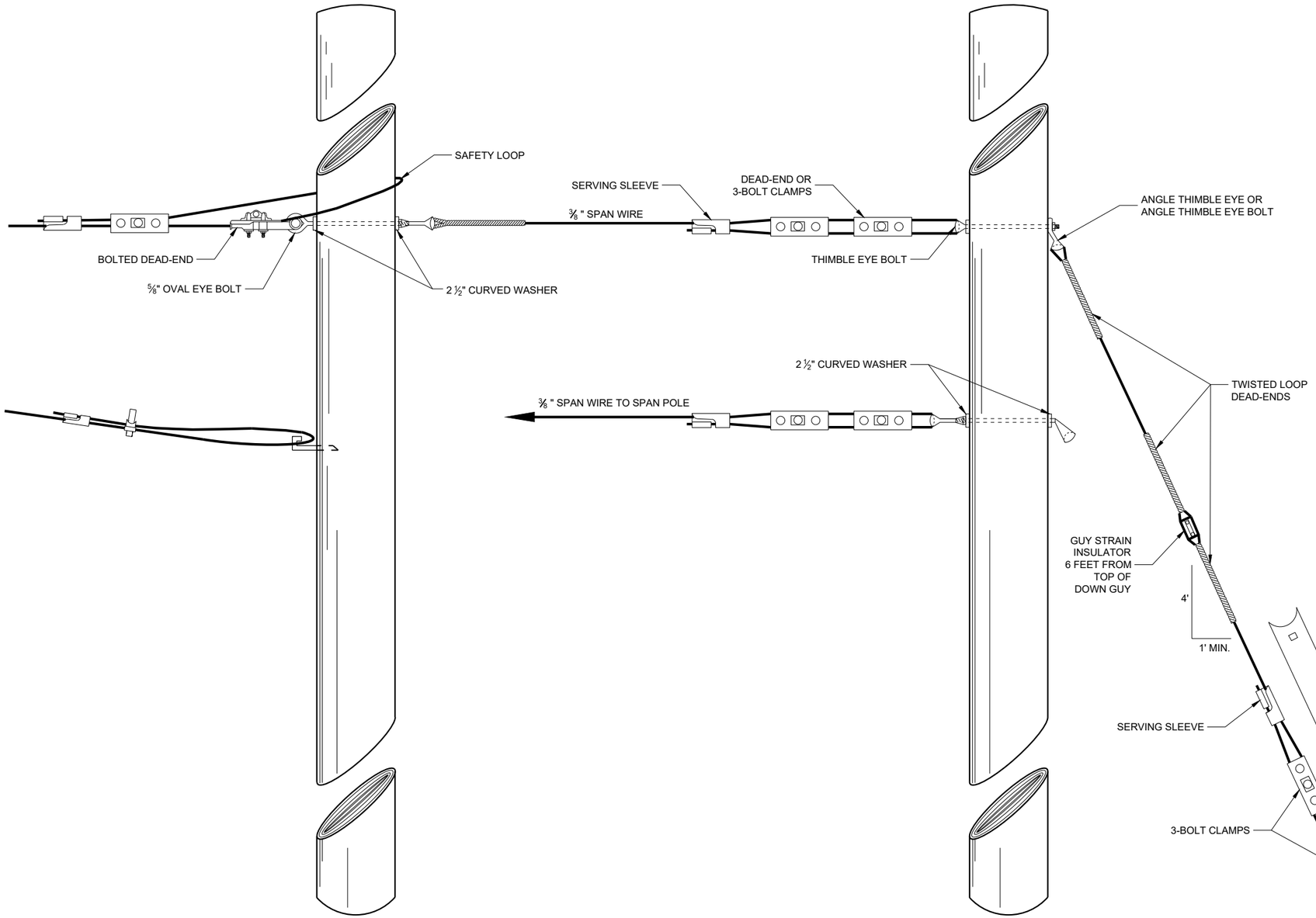
GENERAL NOTES

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

6

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SDD 09G01 - 4e

SDD 09G01 - 4e

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June 2015
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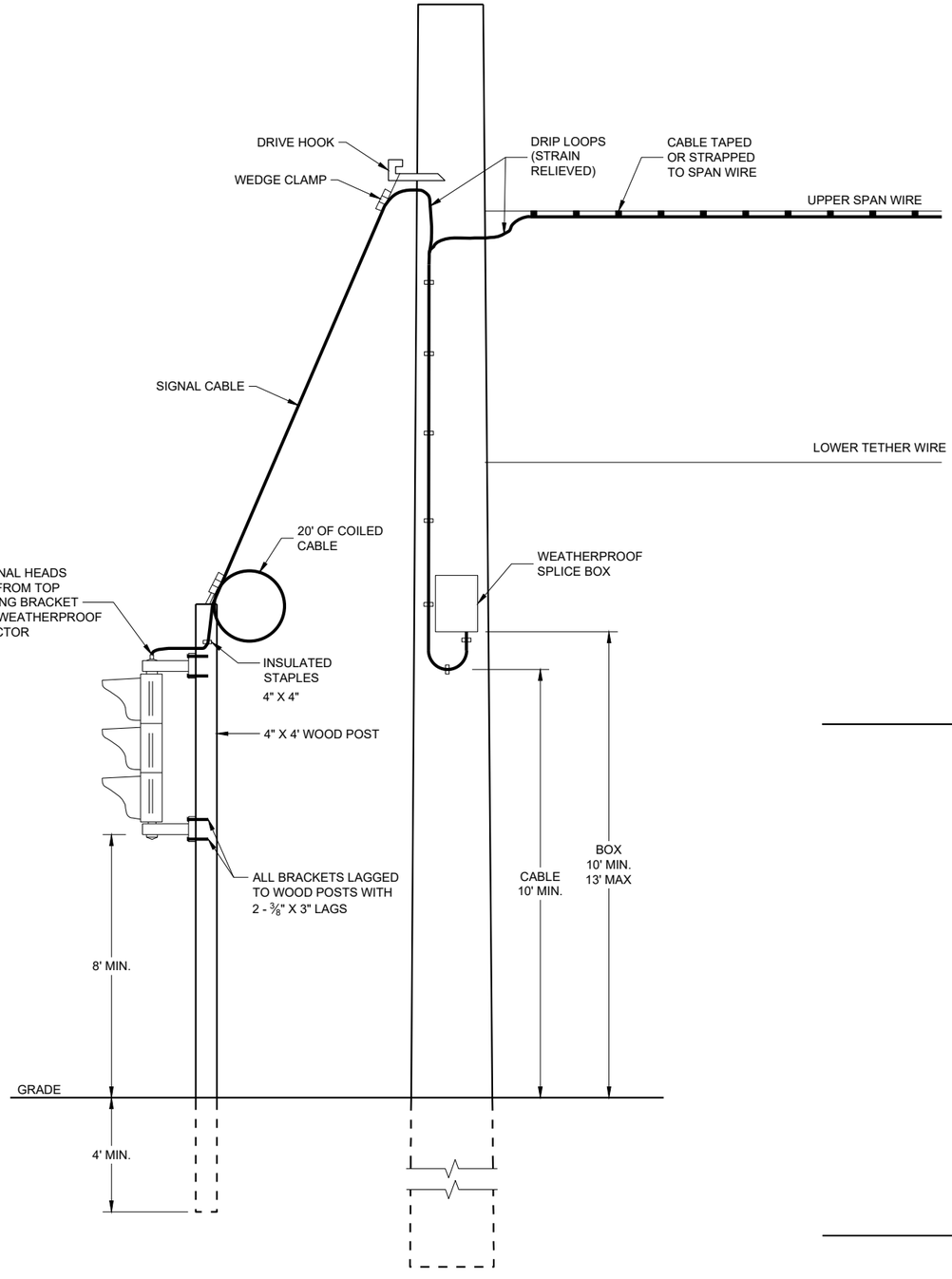
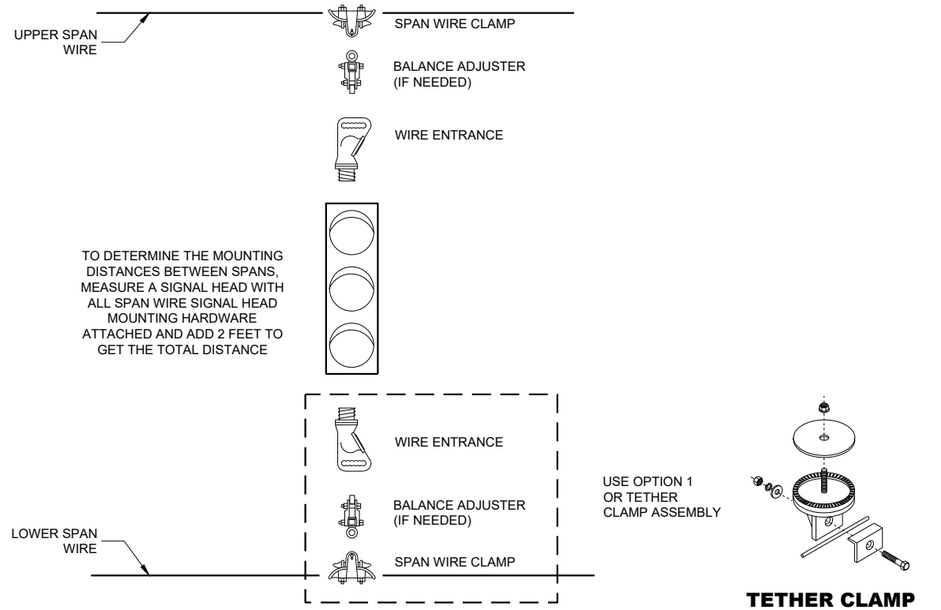
/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

FHWA



TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL

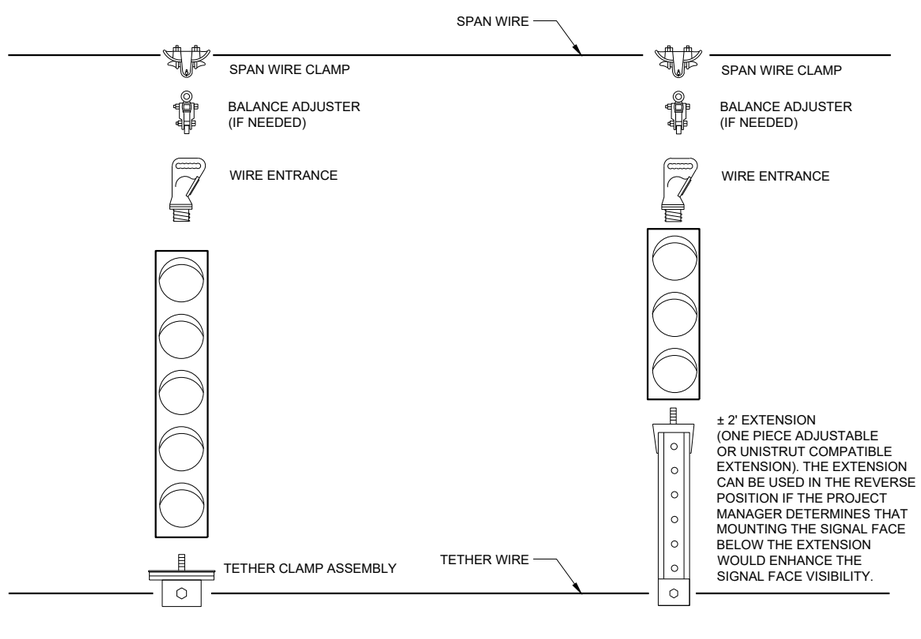


OPTION 1

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

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DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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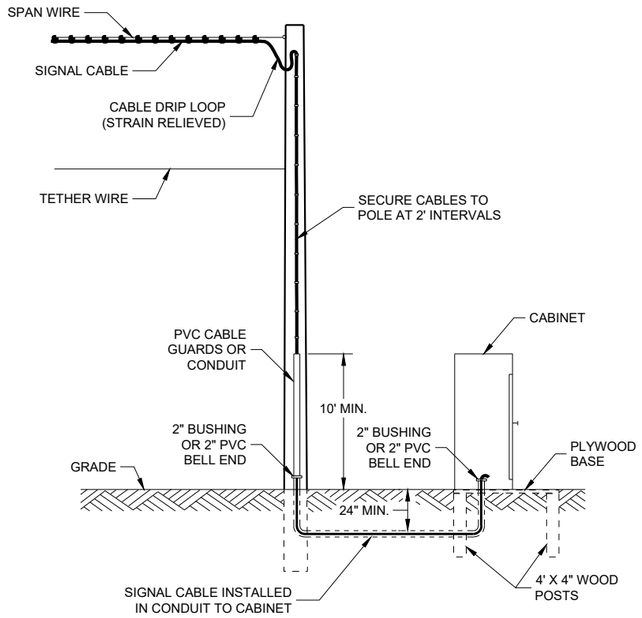
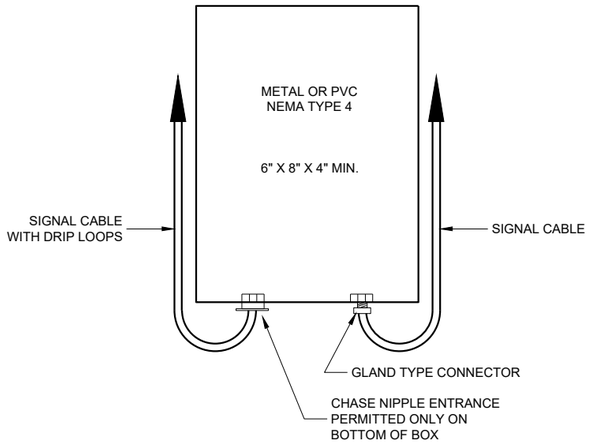
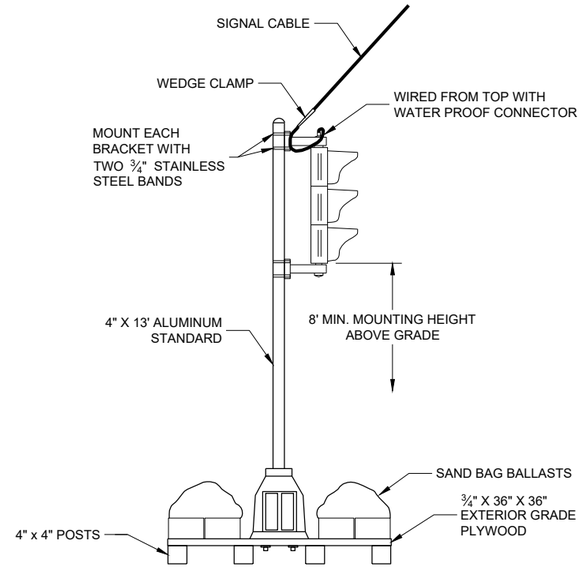
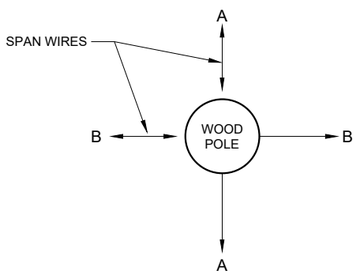




SPLICE BOX

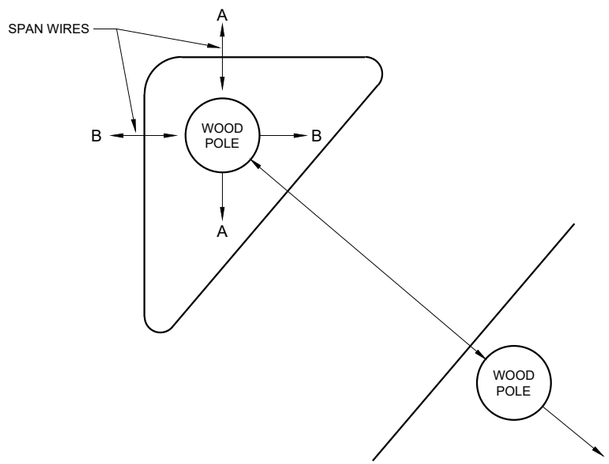


TYPICAL SKID TYPE TEMPORARY

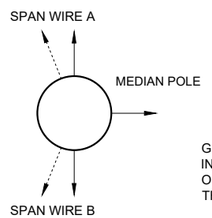


ALL DOWN OR SIDEWALK GUYS
SHALL BE INSTALLED IN THE
OPOSITE DIRECTION OF THE
STRAIN OF THE SPAN WIRE

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

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DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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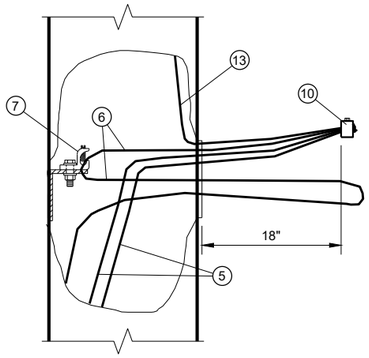
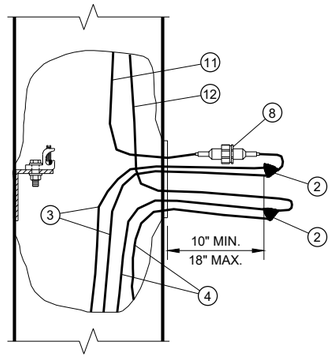
SDD 09G01 - 4g

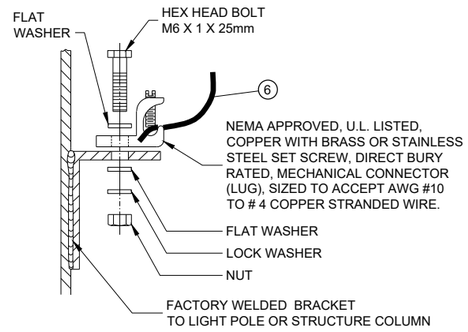


EQUIPMENT GROUNDING CONDUCTOR SLACK



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.

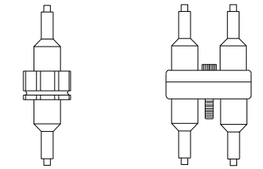
USE THIS DETAIL IN CONJUNCTION WITH THE ELECTRICAL DETAILS FOR THE APPLICATION, WHICH MAY BE A LIGHT POLE, SIGN BRIDGE, ETC.

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.



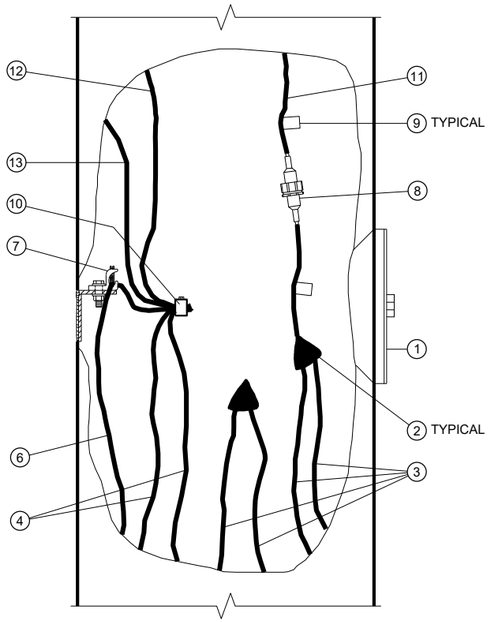
1 POLE (1P) 2 POLE (2P)

FUSE ASSEMBLIES

CONDUCTOR COLOR CODES

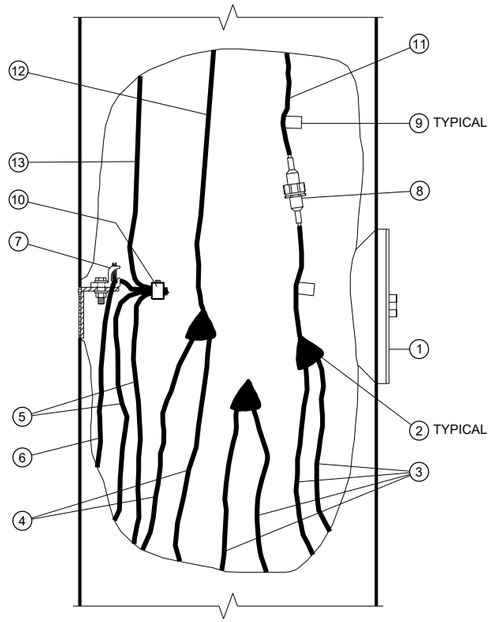
KEY	CONDUCTOR	COLOR
3	UNGROUNDED LINE WIRE	*
4	GROUNDED LINE WIRE	WHITE
5	SYSTEM GROUNDING LINE WIRE	GREEN
6	GROUNDING ELECTRODE CONDUCTOR	BARE
11	UNGROUNDED POLE WIRE	*
12	GROUNDED POLE WIRE	WHITE
13	EQUIPMENT GROUNDING POLE WIRE	GREEN

* 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.



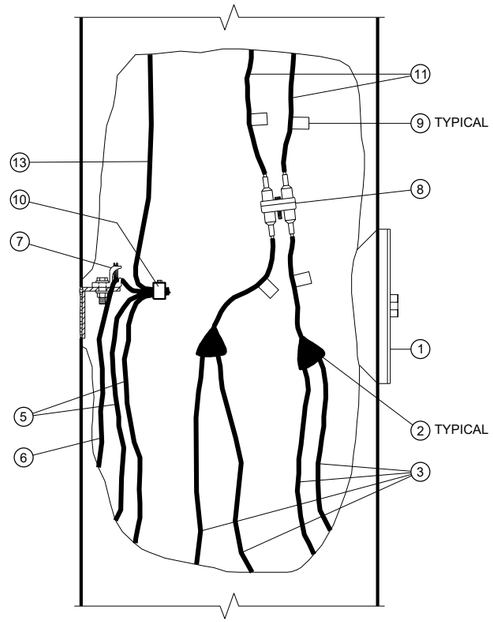
CUTAWAY HANDHOLE DETAIL

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 497

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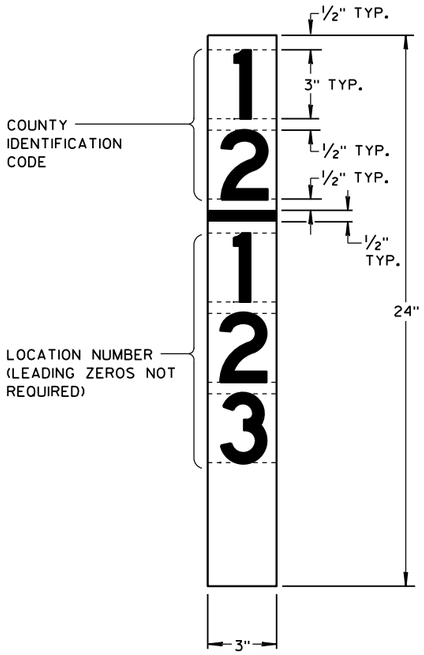
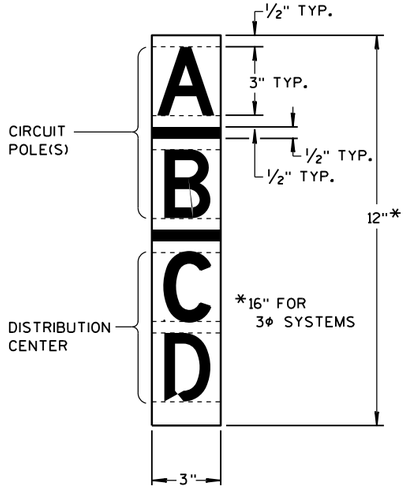
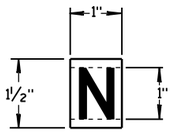
SDD 10A01 - 04



HIGH MAST LIGHT TOWER STRUCTURE PLAQUE

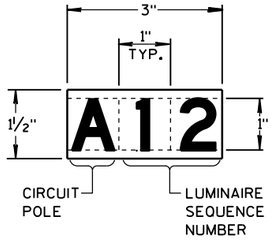


UNDERDECK LIGHTING OR HIGH MAST LIGHT TOWER CIRCUIT PLAQUE



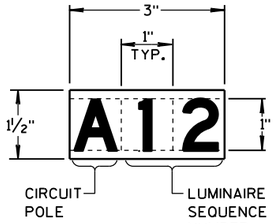
HIGH MAST LIGHT TOWER NORTH PLAQUE

(MOUNT ON LOWERING RING - INDICATING NORTH HEADING ^{2} ± 10^{o3} WHEN RING IS RAISED AND LATCHED)



HIGH MAST LIGHT TOWER LUMINAIRE SEQUENCE PLAQUE

(MOUNT ON LUMINAIRE RING)



UNDER DECK LUMINAIRE SEQUENCE DECAL

(MOUNT ON LUMINAIRE)

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.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

CONCRETE SURFACE - MASONRY ANCHORS

GALVANIZED STEEL SHAFT - STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

PLAQUE MATERIALS:

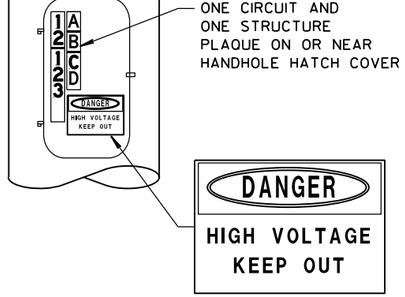
BASE - SHEET ALUMINUM, 0.060" THICK.

FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETRORFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

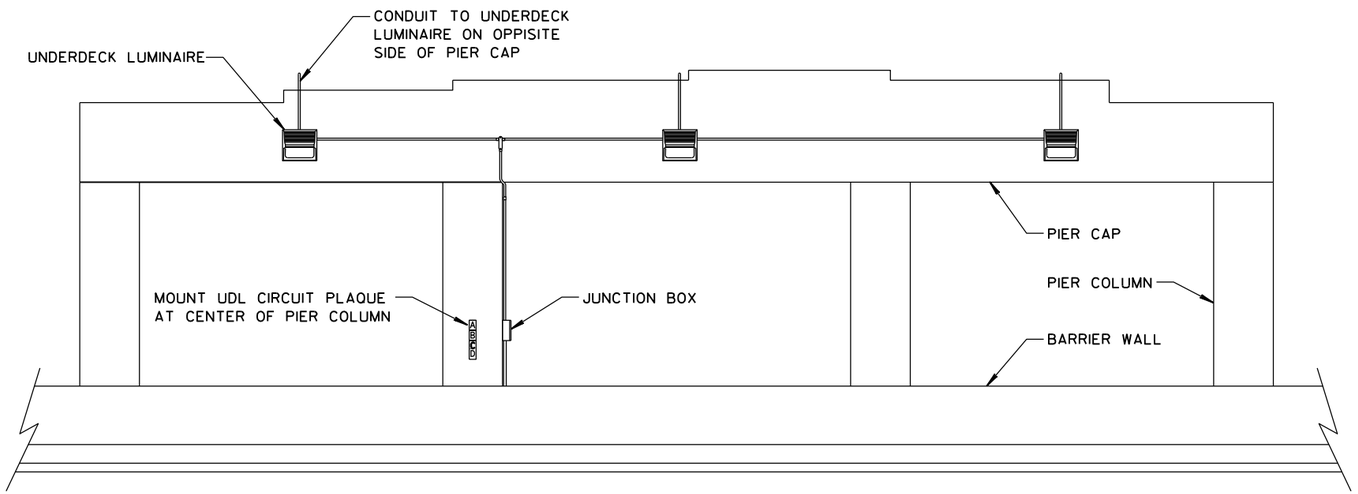
CHARACTERS - BLACK, SELF-ADHESIVE, SERIES "D", SIZE AS SHOWN

ALTERNATIVE COMPUTER-GENERATED SIGN LETTERING MAY BE ACCEPTED IF THE ENGINEER FINDS IT TO BE EQUIVALENT.



NOTE: NEMA PLAQUE SHOWN ABOVE IS REQUIRED ONLY IN PARK AND RIDE LOTS OR IN OTHER PEDESTRIAN ACCESSIBLE AREAS.

LOCATION OF HIGH MAST LIGHT TOWER STRUCTURE PLAQUE AND CIRCUIT PLAQUE



LOCATION OF UNDERDECK LIGHTING CIRCUIT PLAQUE

IDENTIFICATION PLAQUES UNDERDECK AND HIGH MAST LIGHTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 10 A 4-3

GENERAL NOTES

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

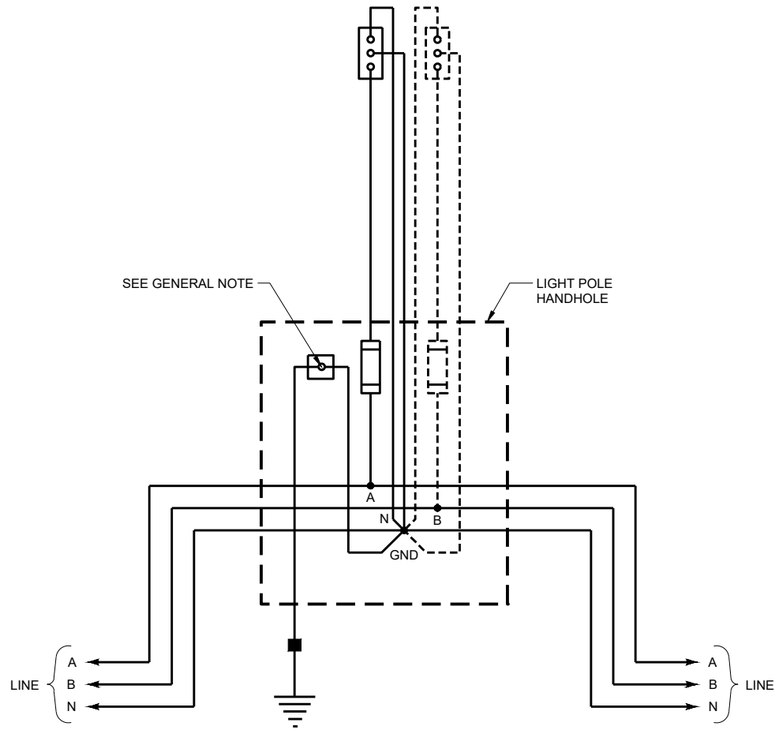
USE THIS DETAIL IN CONJUNCTION WITH THE DETAIL FOR ELECTRICAL HANDHOLE WIRING, SDD10A01.

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.



TYPICAL WIRING DIAGRAM

GROUNDED NEUTRAL SYSTEM
1 - ϕ 240 / 480VAC 3 WIRE OR 480VAC 2 WIRE

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

ELECTRICAL DETAILS
GROUND MOUNT LIGHT POLES
GROUNDED NEUTRAL SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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SDD 10A06 - 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.

WIRING FOR SINGLE LUMINAIRE POLES IS SHOWN WITH SOLID LINES. WIRING FOR THE SECOND LUMINAIRE OF TWIN LUMINAIRE POLES IS SHOWN WITH DOTTED LINES.

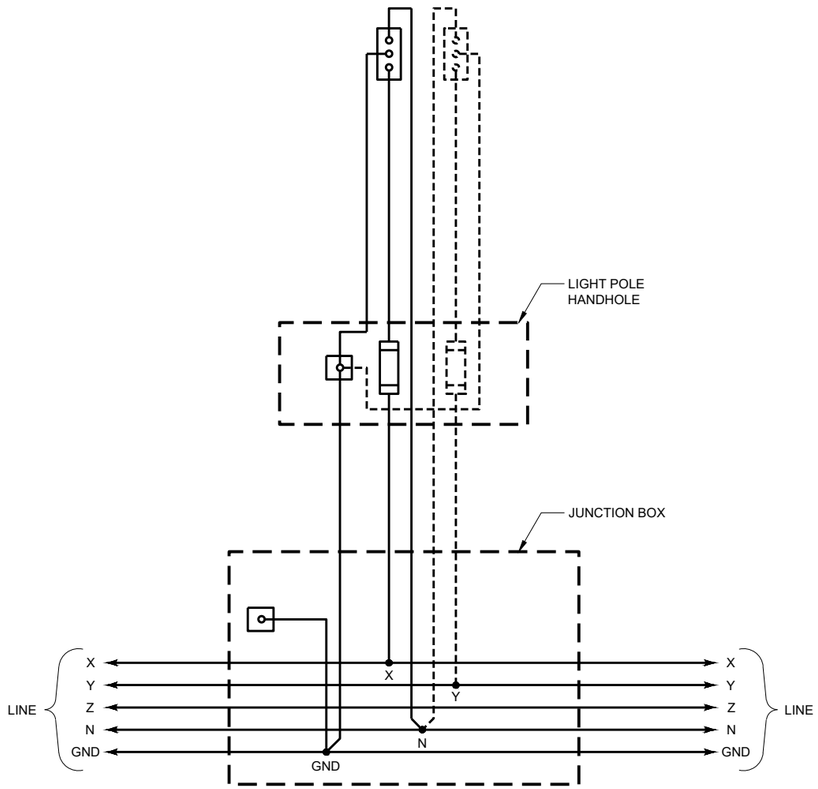
THE PLANS WILL SHOW WHICH CIRCUIT LEG(S) ARE CONNECTED TO EACH INSTALLATION.

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.

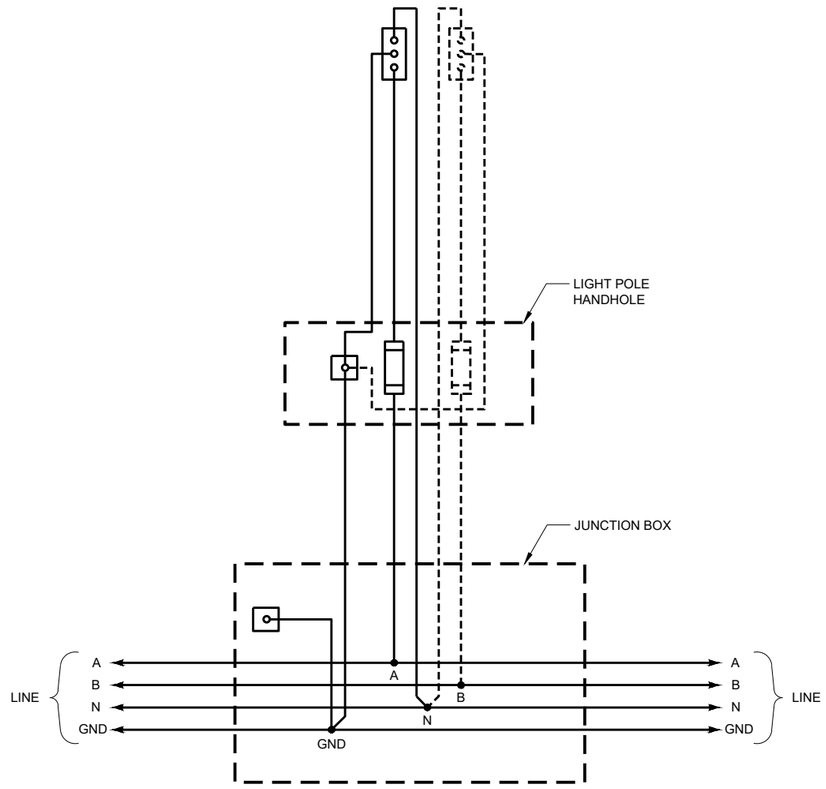
LEGEND

A,B,X,Y,Z	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
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
STRUCTURE MOUNT LIGHT POLES
ISOLATED NEUTRAL SYSTEMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 500

FHWA

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SDD 10A08 - 03

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SDD 10A08 - 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.

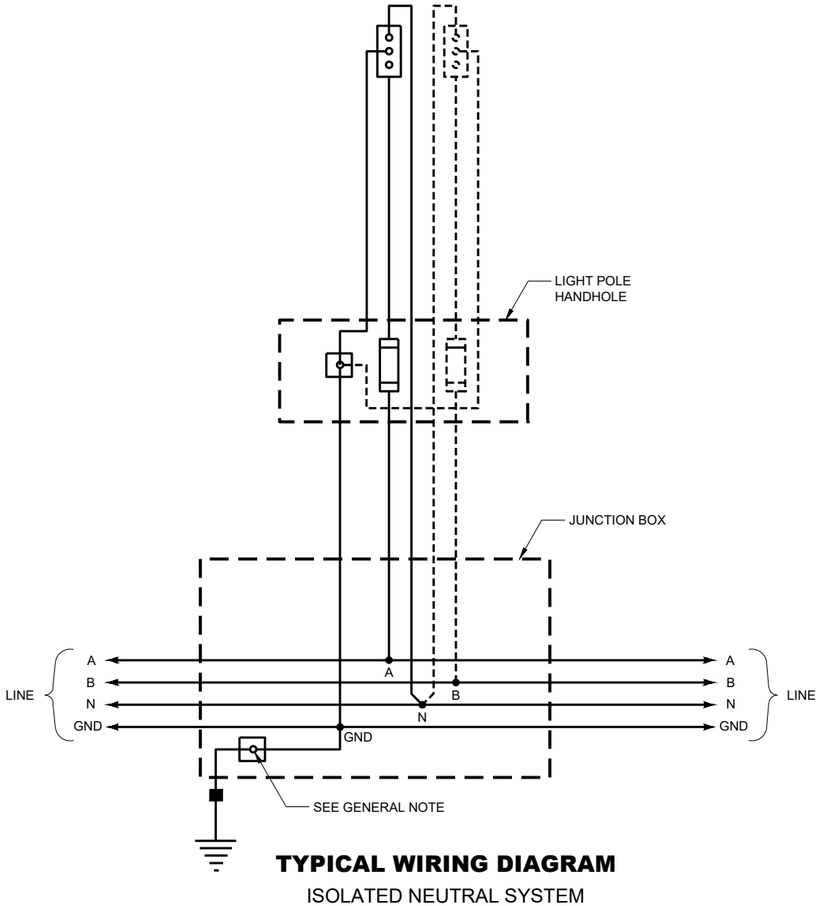
THE PLANS WILL SHOW WHICH CIRCUIT LEG(S) ARE CONNECTED TO EACH INSTALLATION.

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.

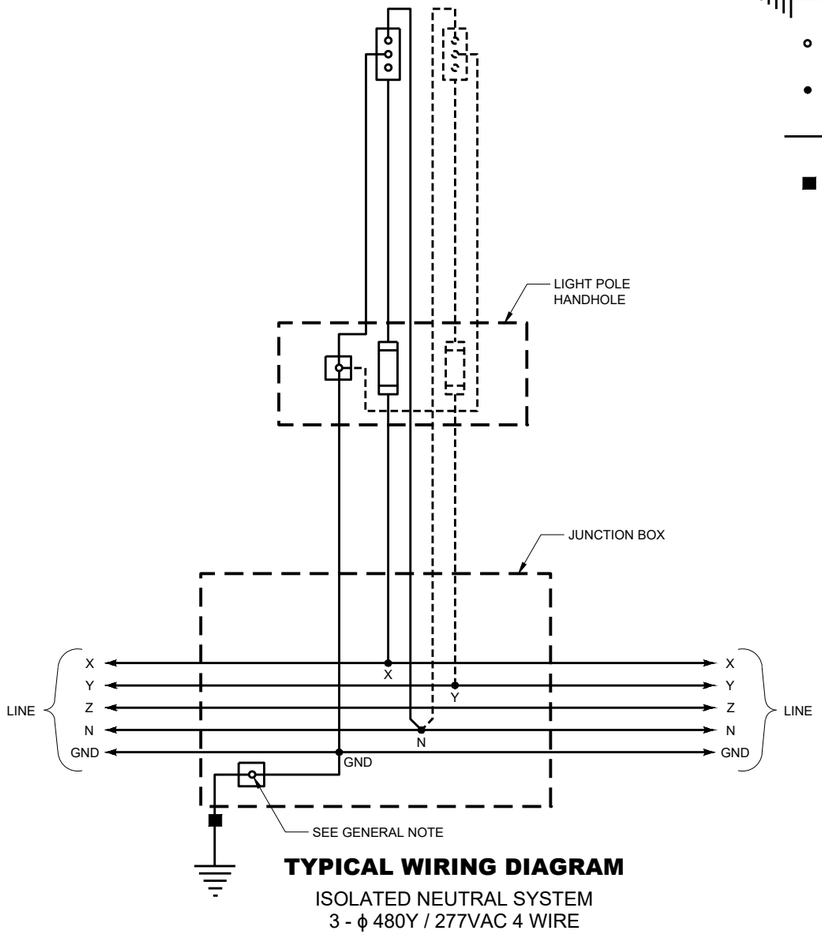
LEGEND

A,B,X,Y,Z	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
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
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 501

FHWA

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SDD 10A11 - 03

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SDD 10A11 - 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.

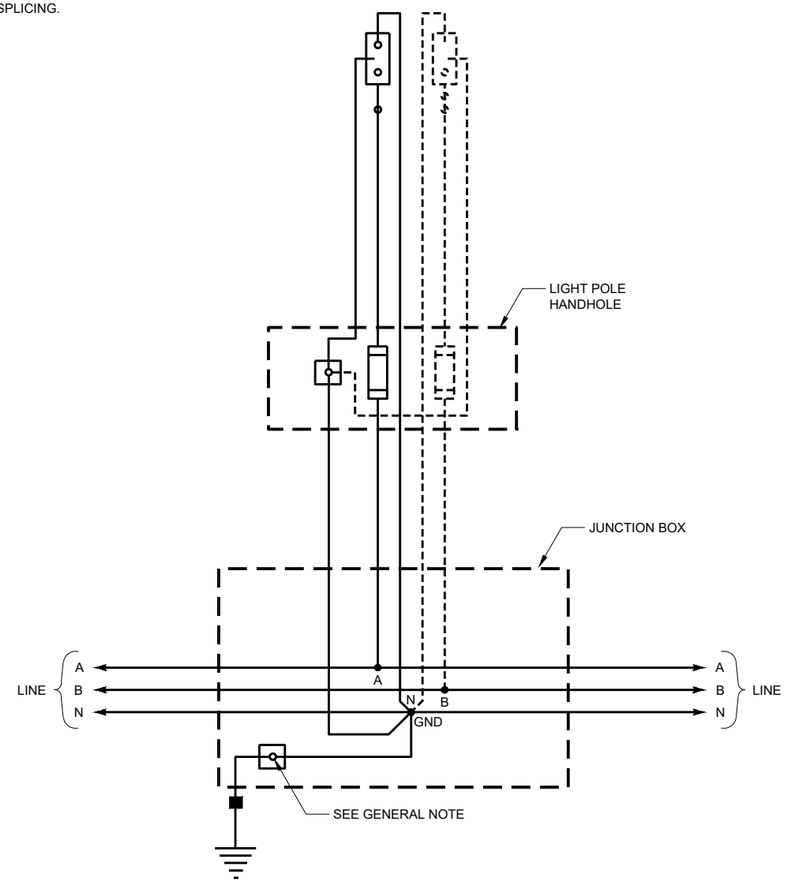
THE GROUNDING ELECTROCDE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLD GROUNDING LUG TO THE CONNECTOR.

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.



TYPICAL WIRING DIAGRAM

GROUNDED NEUTRAL SYSTEM
1 - ϕ 240 / 480VAC 3 WIRE OR 480VAC 2 WIRE

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

ELECTRICAL DETAILS
MEDIAN MOUNT LIGHT POLES
GROUNDED NEUTRAL SYSTEMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 502

FHWA

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SDD 10A12 - 03

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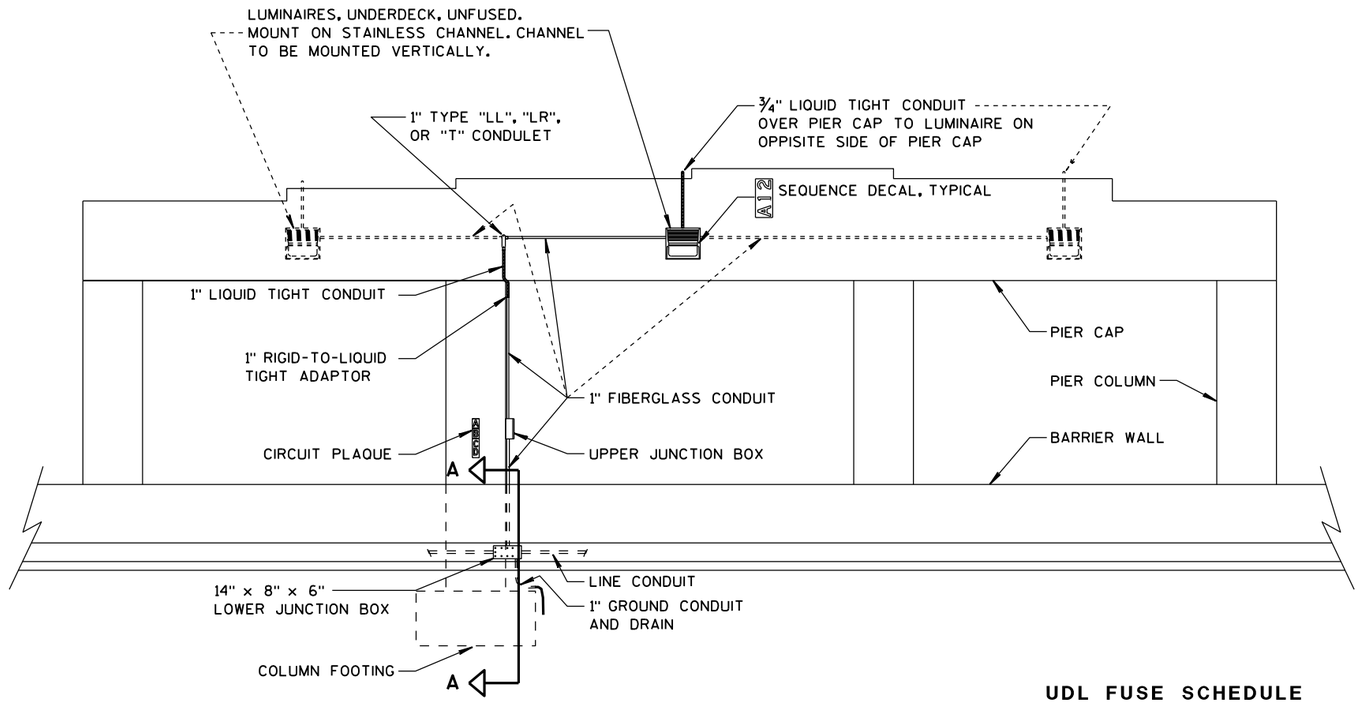
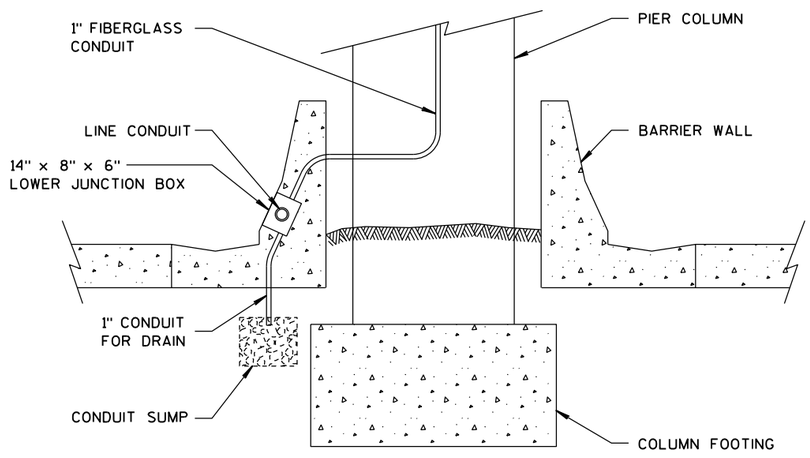
SDD 10A12 - 03



TYPICAL UNDERDECK LIGHTING INSTALLATION



SECTION "A-A"

UDL FUSE SCHEDULE

LINE VOLTAGE φ-GROUND	TOP JUNCTION BOX FUSES
120VAC	5 A
208VAC	5 A
240VAC	5 A
480VAC	3 A

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, SUBSTITUTING THE LOWER JUNCTION BOX FOR THE HANDHOLE SHOWN IN THAT DETAIL.

THE PLANS WILL SHOW WHICH CIRCUIT LEGS(S) ARE CONNECTED TO EACH INSTALLATION AND THE REQUIRED NUMBER OF LUMINAIRES.

THE UPPER JUNCTION BOX (FOR FUSE ASSEMBLIES) SHALL CONFORM TO THE APPLICABLE PROVISIONS OF SECTION 653.2.2 OF THE STANDARD SPECIFICATIONS; SHALL BE SUITABLE FOR SURFACE MOUNTING WITH EXTERNAL MOUNTING LUGS; AND SHALL HAVE A HINGED COVER, WING-NUT FASTENERS, AND PADLOCK HASP. ALL HARDWARE SHALL BE STAINLESS STEEL. FURNISH O-Z/GEDNEY YW-120603, SPRING CITY HC-12-06-04, CROUSE-HINDS WTB-120604, OR APPROVED EQUAL.

MEDIAN CONFIGURATIONS VARY; NOT ALL CASES CAN BE SHOWN IN THIS DETAIL.

WIRING FOR THE FIRST LUMINAIRE PAIR IS SHOWN IN SOLID LINES. WIRING FOR ADDITIONAL LUMINAIRE PAIRS, WHERE REQUIRED, IS SHOWN IN DOTTED LINES.

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
	UNFUSED LUMINAIRE
	SINGLE POLE (1P) FUSE ASSEMBLY
	TERMINAL
	SPLICE
	CONDUCTOR

ELECTRICAL DETAILS
UNDERDECK LIGHTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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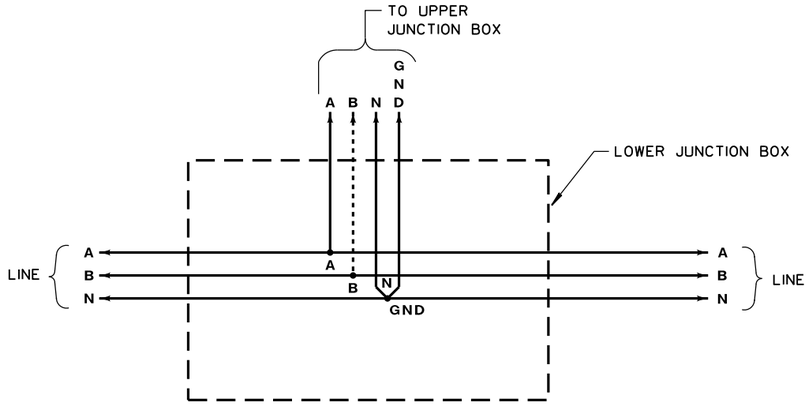
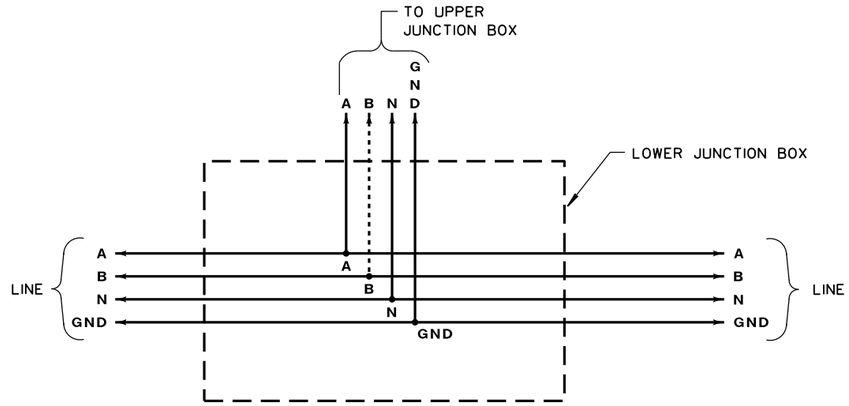
S.D.D. 10 A 15-4a



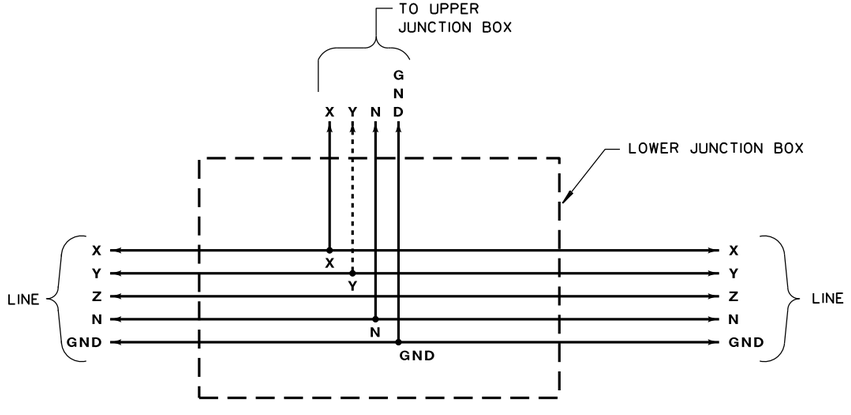
TYPICAL WIRING DIAGRAM, LOWER JUNCTION BOX

GROUNDED NEUTRAL SYSTEM
1-ϕ 240/480VAC OR 3 WIRE OR 480VAC 2 WIRE



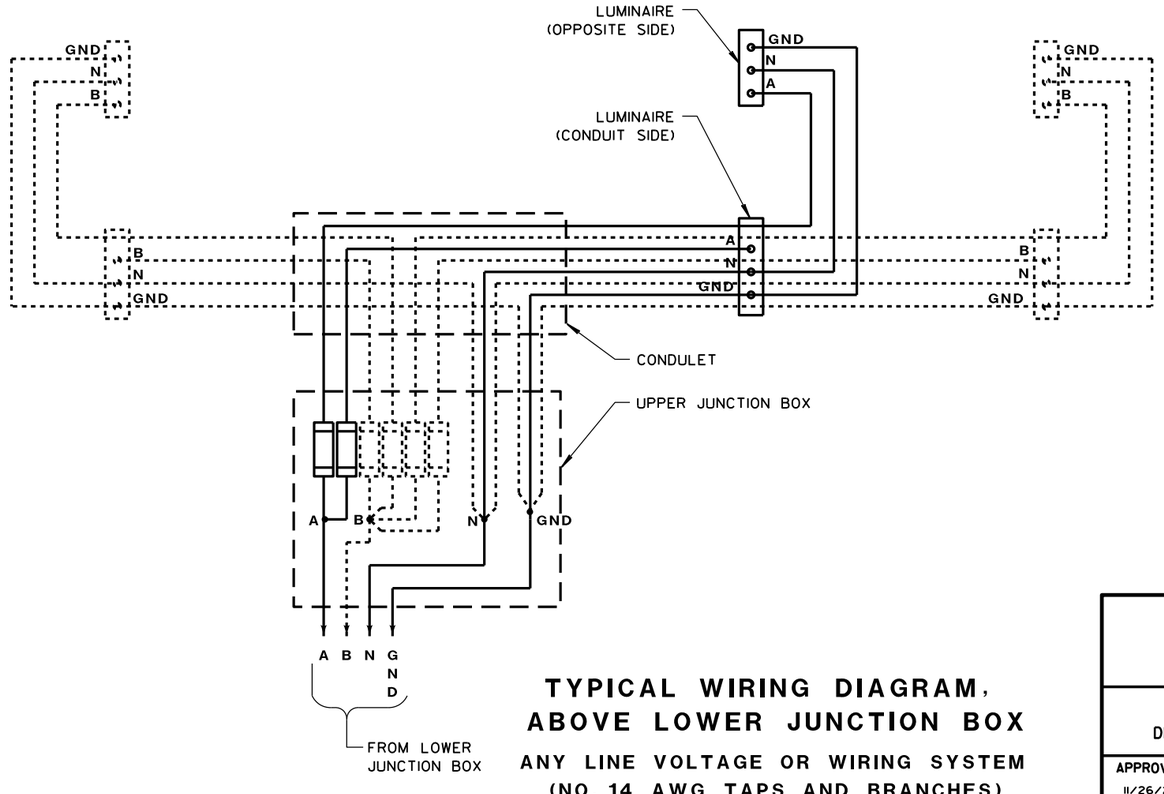
TYPICAL WIRING DIAGRAM, LOWER JUNCTION BOX

ISOLATED NEUTRAL SYSTEM
1-ϕ 120/240VAC OR 240/480VAC 3 WIRE



TYPICAL WIRING DIAGRAM, LOWER JUNCTION BOX

ISOLATED NEUTRAL SYSTEM
3-ϕ 208Y/120VAC OR 480Y/277VAC 4 WIRE



TYPICAL WIRING DIAGRAM, ABOVE LOWER JUNCTION BOX

ANY LINE VOLTAGE OR WIRING SYSTEM
(NO. 14 AWG TAPS AND BRANCHES)

ELECTRICAL DETAILS
UNDERDECK LIGHTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/26/2013
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

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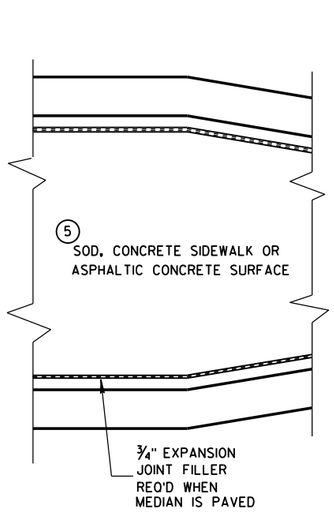
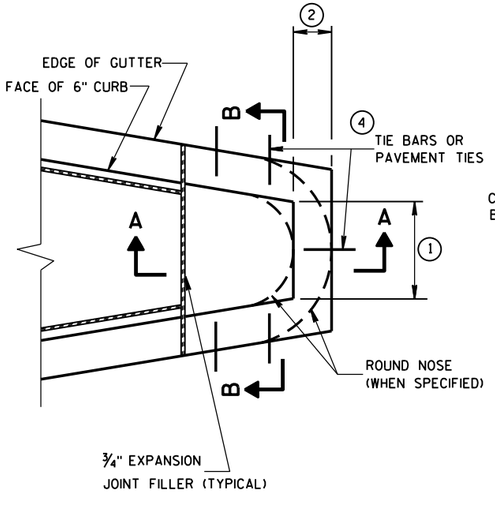
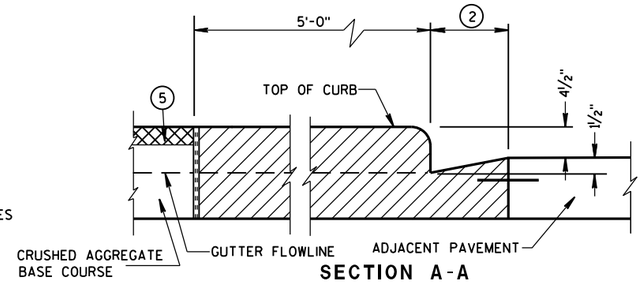
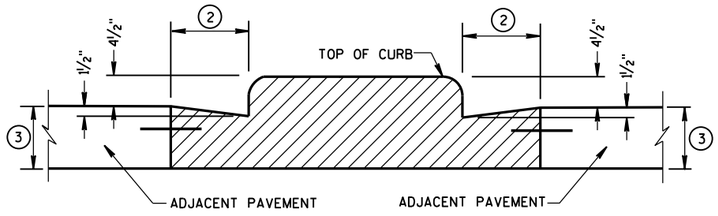
S.D.D. 10 A 15-4b







SECTION A-A



SECTION B-B

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.

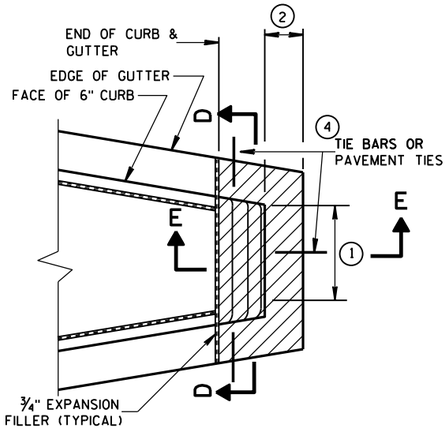
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

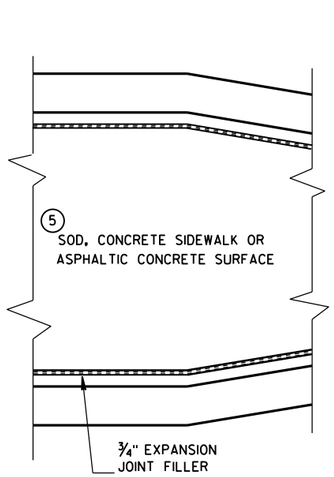
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

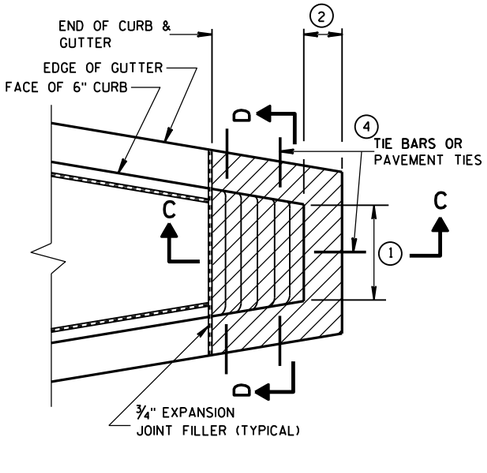
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

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.

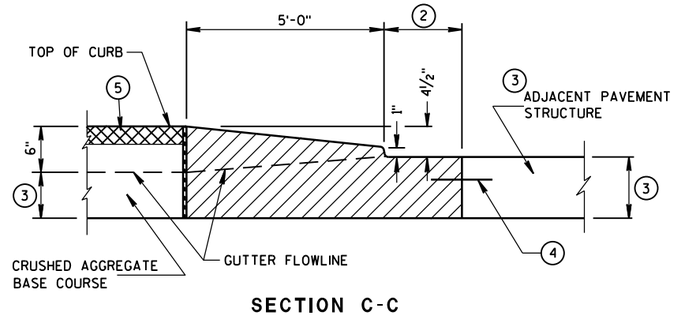
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



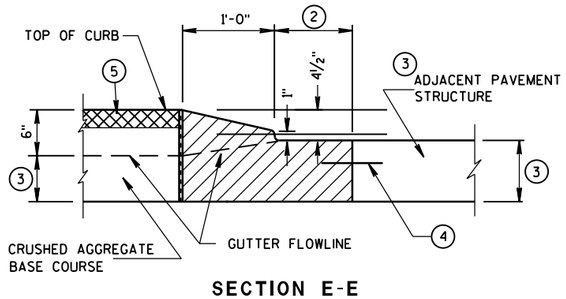




CONCRETE MEDIAN SLOPED NOSE TYPE 1

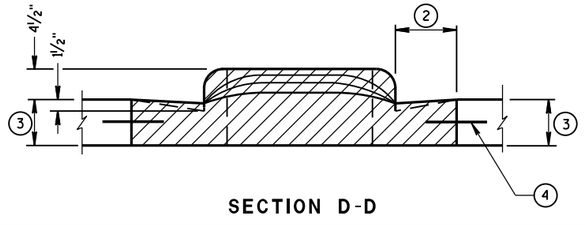


SECTION C-C



SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
505
FHWA

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S.D.D. 11 B 2-2

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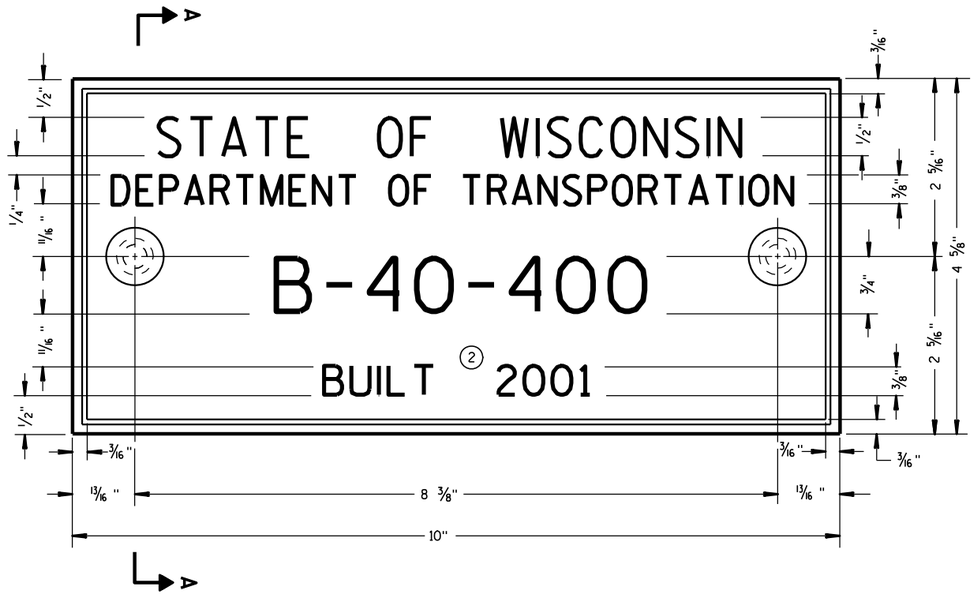
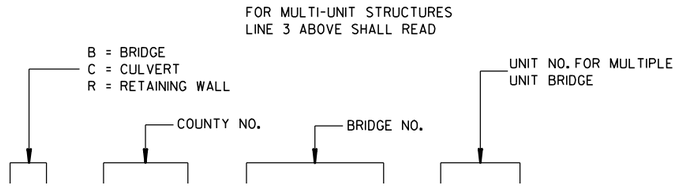
S.D.D. 11 B 2-2



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

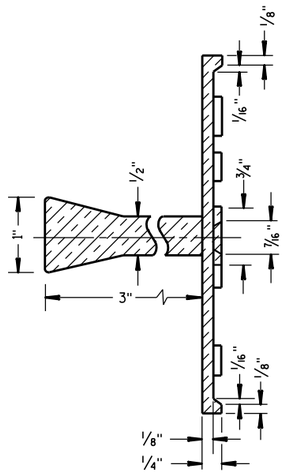
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

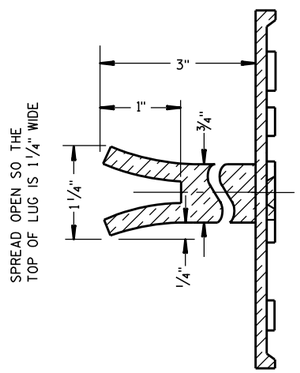
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

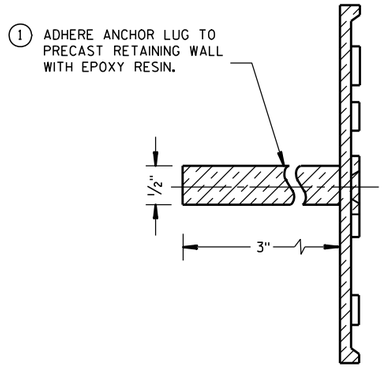
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
3/26/10 DATE	/S/ Scot Beck CHIEF STRUCTURAL DEVELOPMENT ENGINEER
FHWA	

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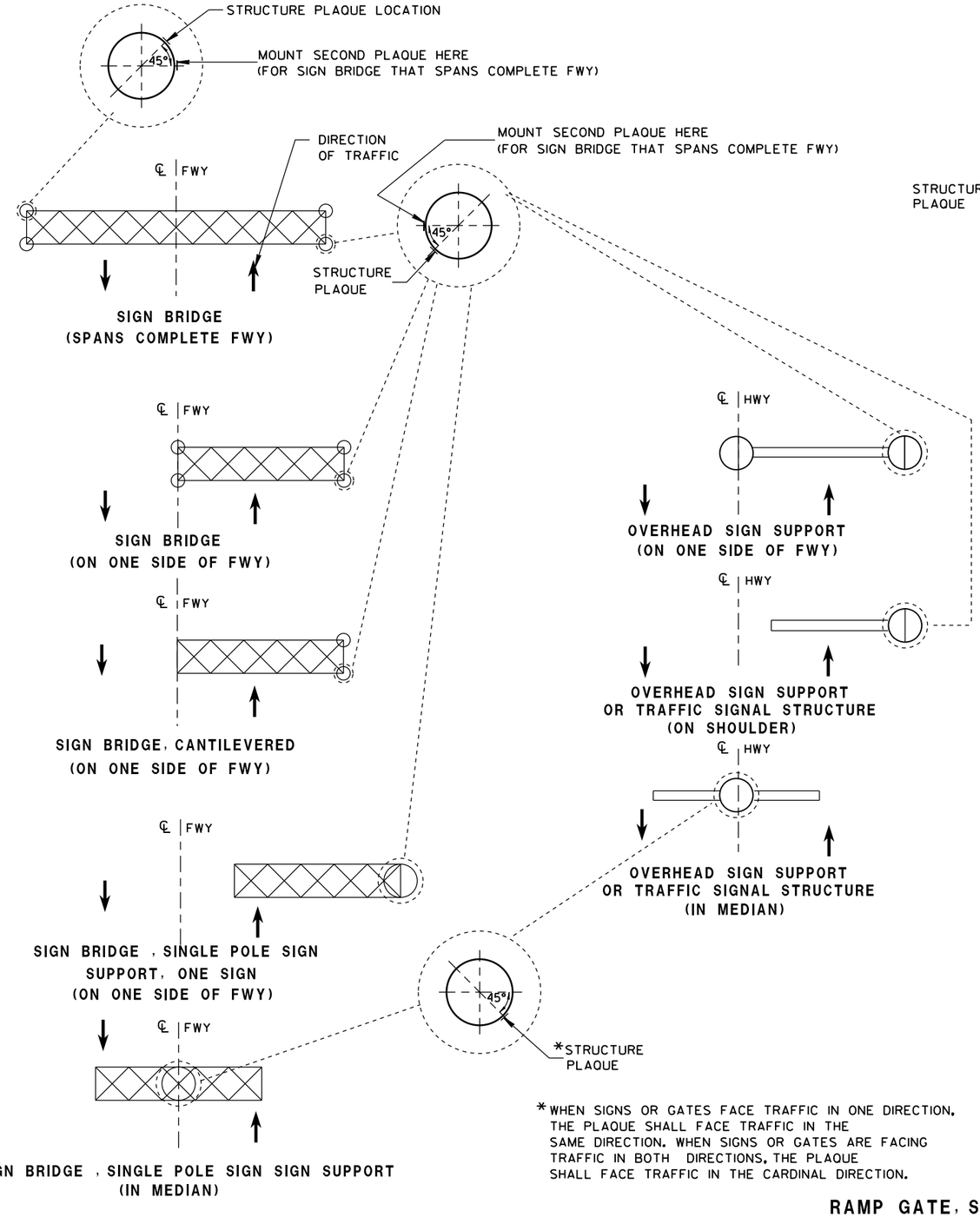
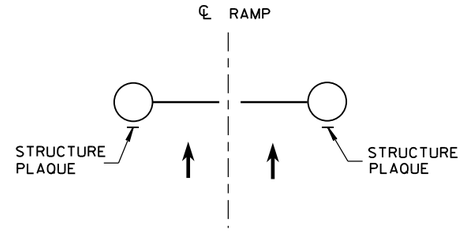
S.D.D. 12 A 3-10

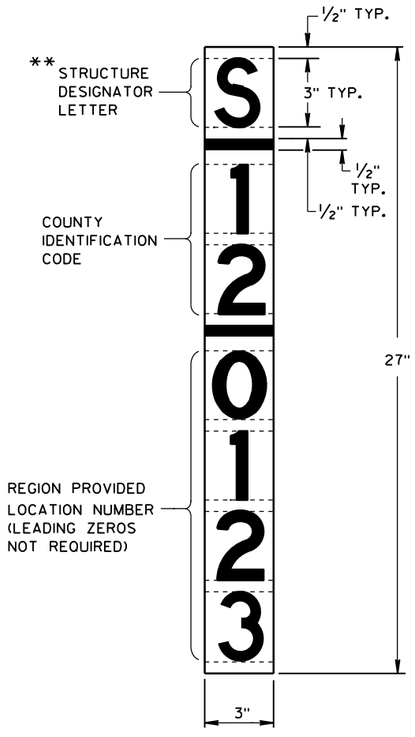


*WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

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.

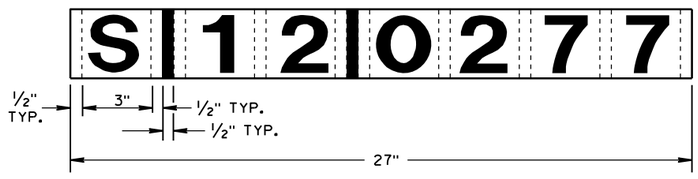
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

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

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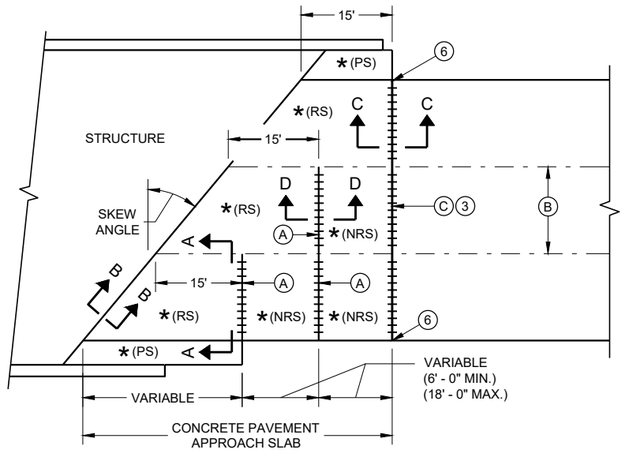
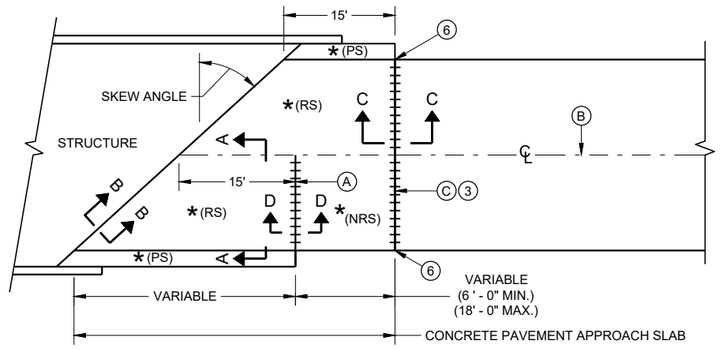
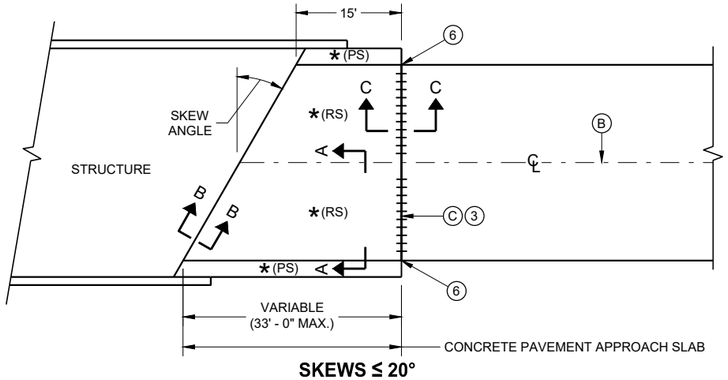
S.D.D. 12 A 4-3



SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

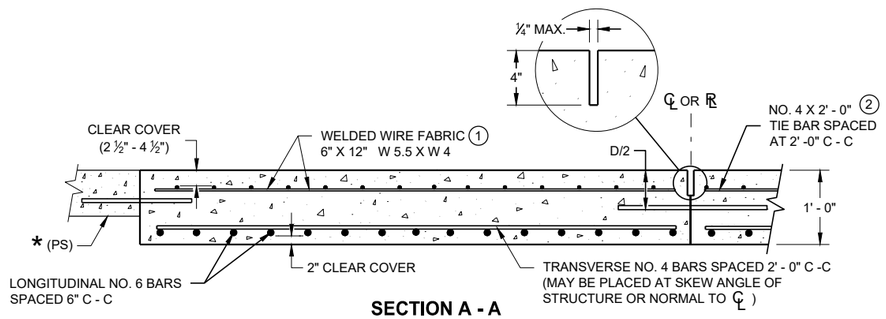
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

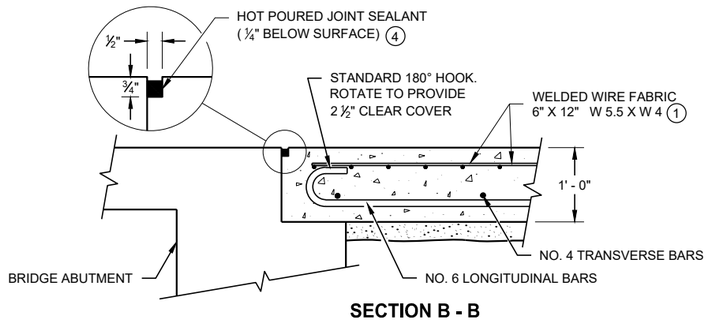
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

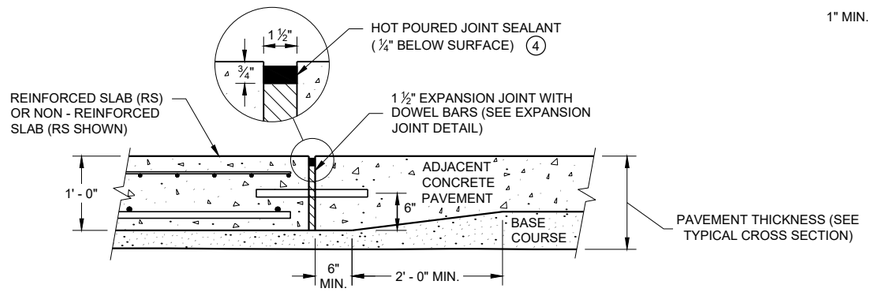
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



SECTION A - A
REINFORCEMENT POSITIONING DETAIL



SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

(1) THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2' - 0 " C - C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

(2) THE CONTRACTOR MAY OMIT THE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

(3) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

(4) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

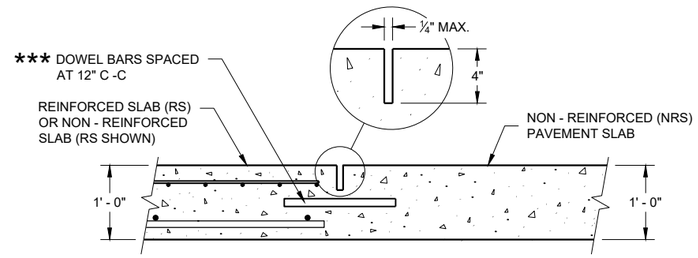
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

(6) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

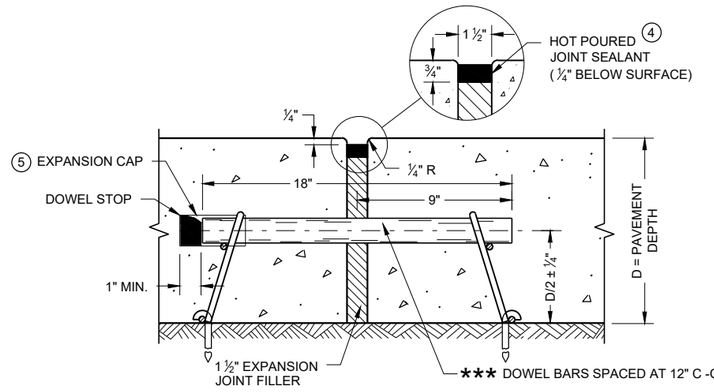
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞ .



SECTION D - D
CONTRACTION JOINT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

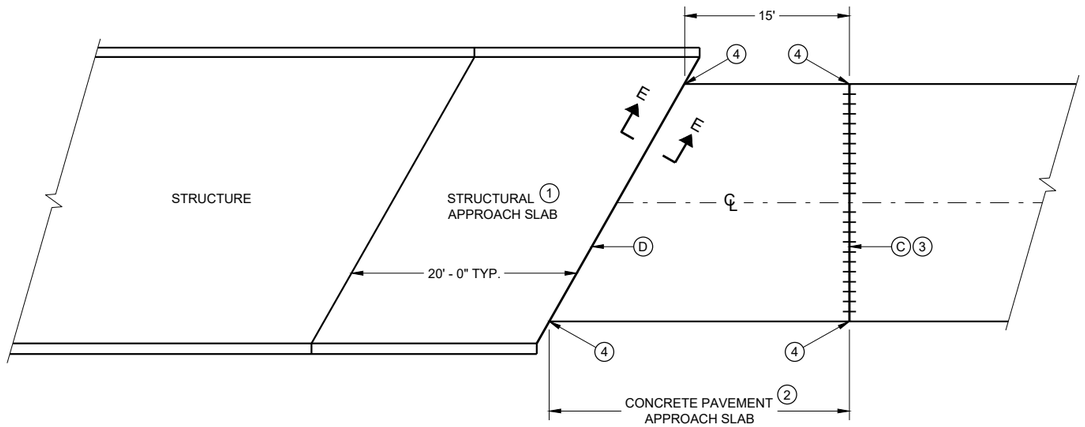
APPROVED
November 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVIS

FHWA

6

SDD 13B02 - 09a



BRIDGE APPROACHES

GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

(1) SEE BRIDGE PLAN.

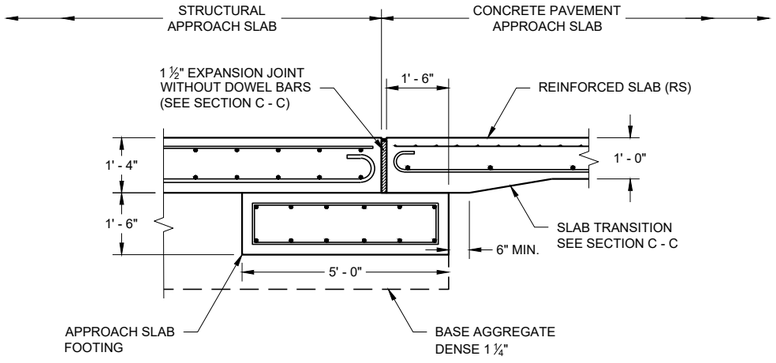
(2) CONFORM TO SDD 13B02 SHEET A FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS

(3) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

(4) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞.

(D) 1 ½" EXPANSION JOINT (NO DOWELS)



SECTION E - E
FOOTING DETAIL
STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

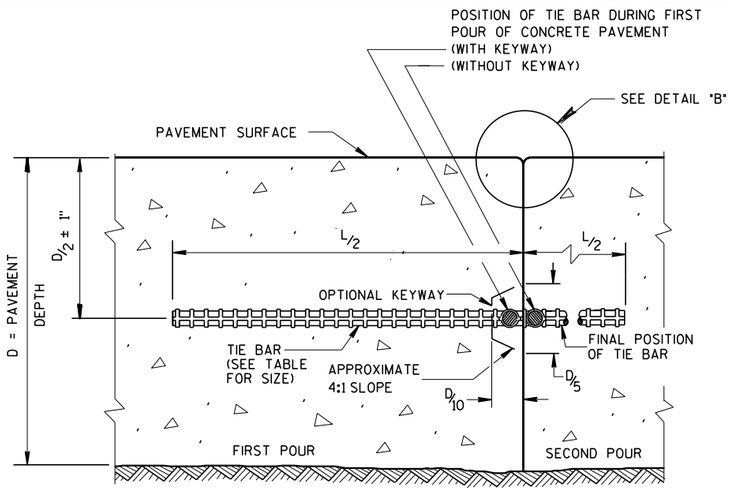
APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

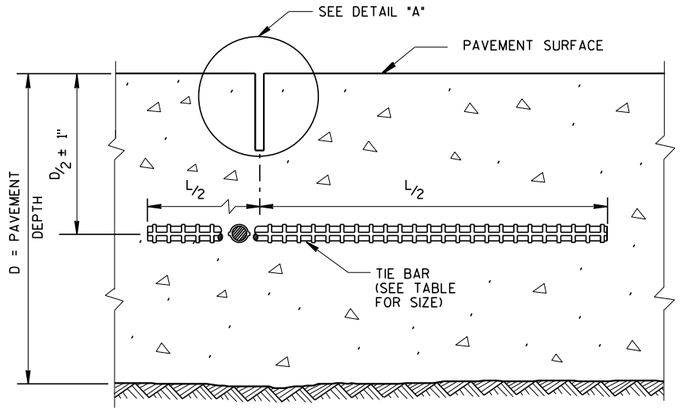
FHWA

6

SDD 13B02 - 09b



CONSTRUCTION JOINT



SAWED JOINT

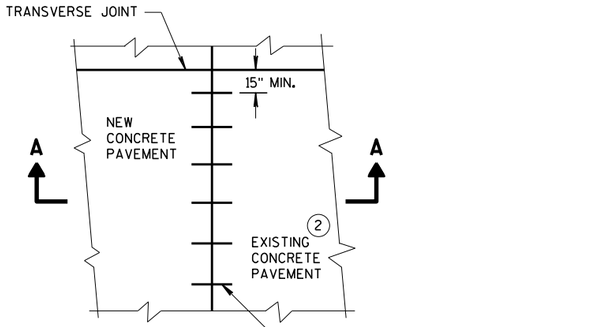
GENERAL NOTES

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

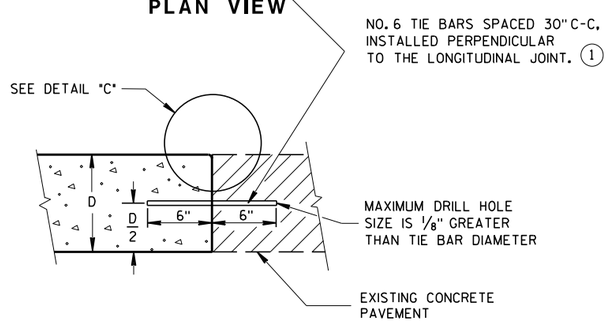
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

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

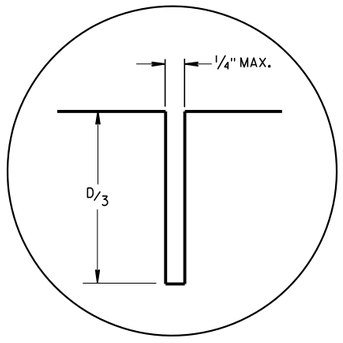


PLAN VIEW

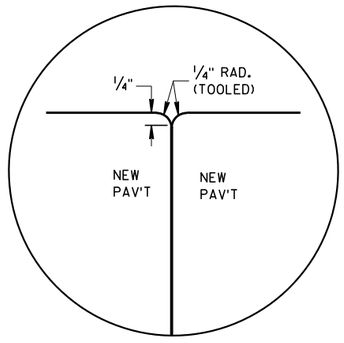


SECTION A-A

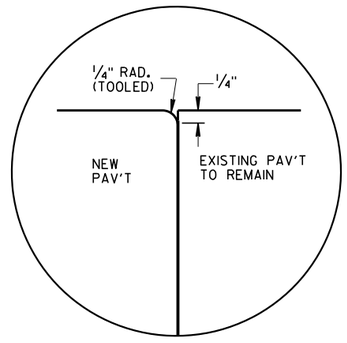
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



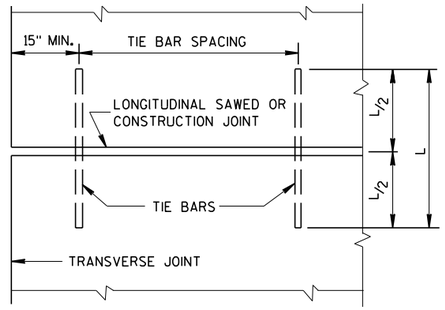
DETAIL "C"

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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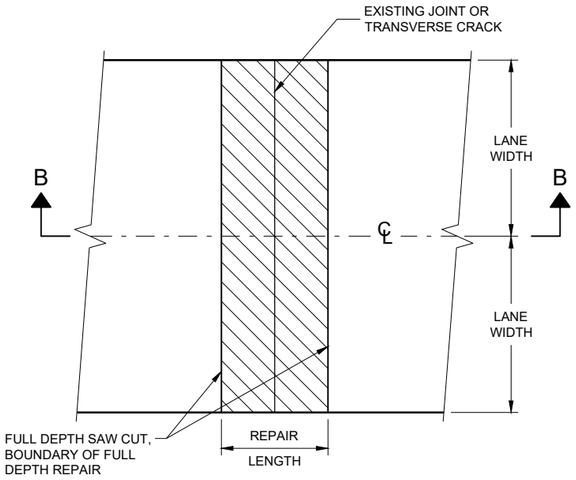
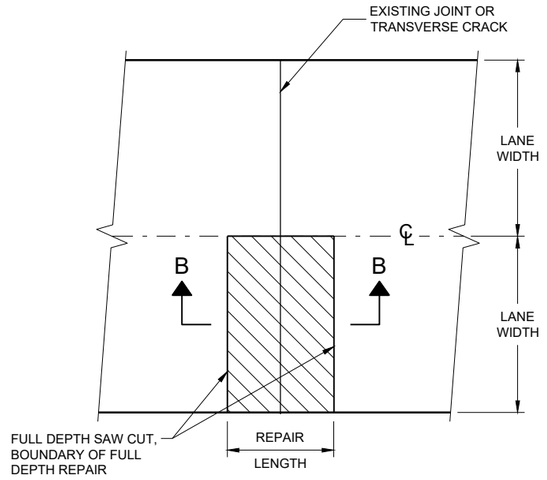


PLAN VIEW
(DOUBLE LANE REPAIR)



PLAN VIEW
(SINGLE LANE REPAIR)

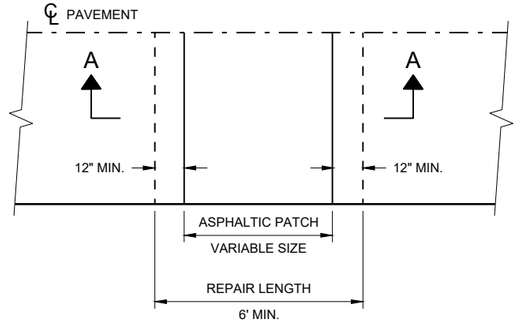
GENERAL NOTES

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.

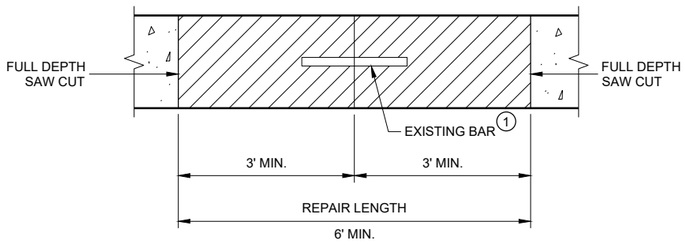
THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NON-DOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

(1) DOWEL BARS MAY NOT BE PRESENT.

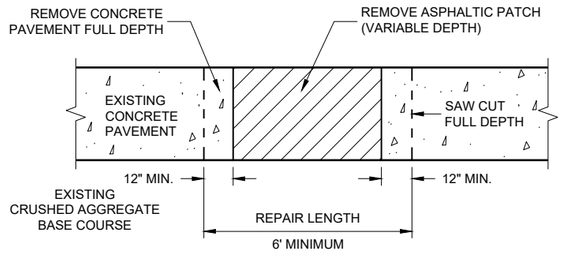


PLAN VIEW

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION B - B
CONCRETE REMOVAL



SECTION A - A

HMA PATCH REMOVAL

CONCRETE PAVEMENT
REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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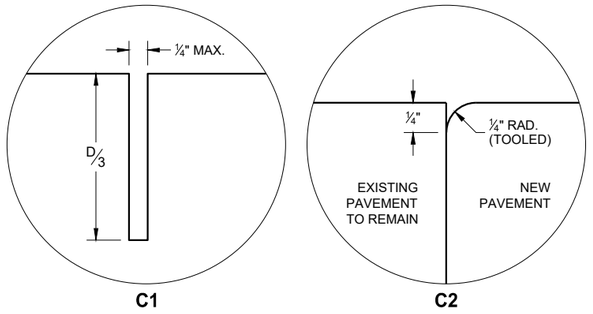
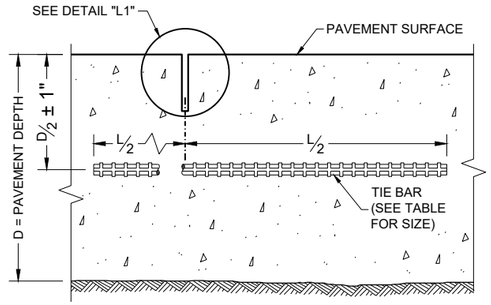
SDD13C09 - 17a

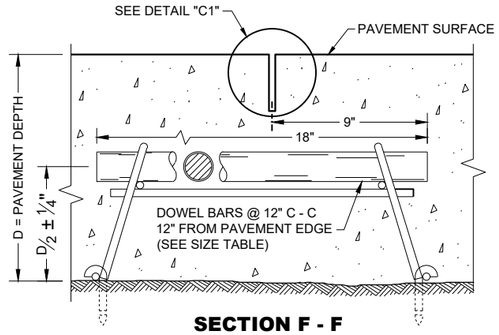


TRANSVERSE JOINTS



SECTION C - C

SAWED LONGITUDINAL JOINT



SECTION F - F

DOWELED CONTRACTION JOINT

GENERAL NOTES

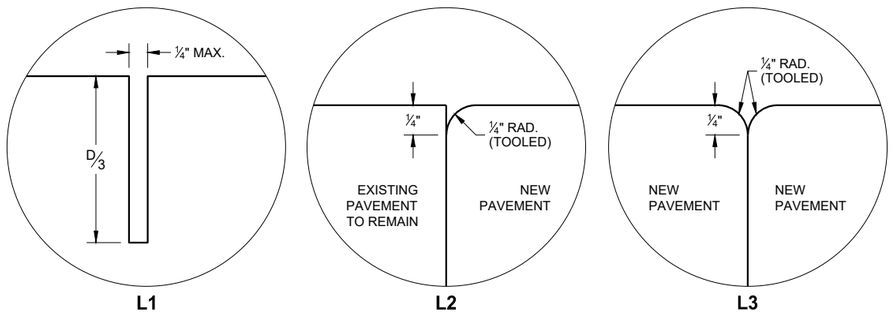
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

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

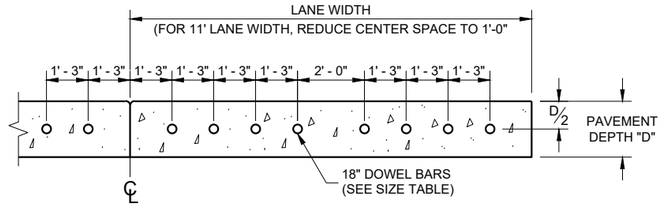
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

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.

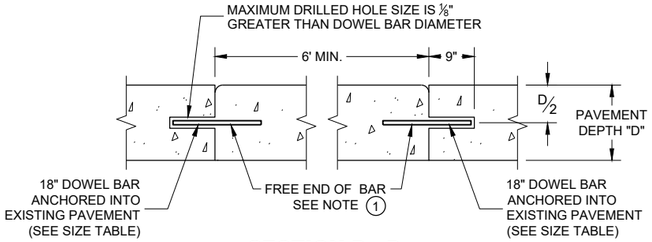


LONGITUDINAL JOINTS



SECTION E - E

DRILLED DOWEL BAR CONSTRUCTION JOINT



SECTION D - D

TIE BAR TABLE

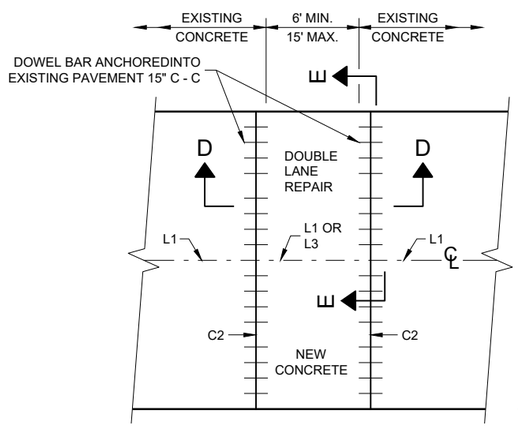
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* 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.

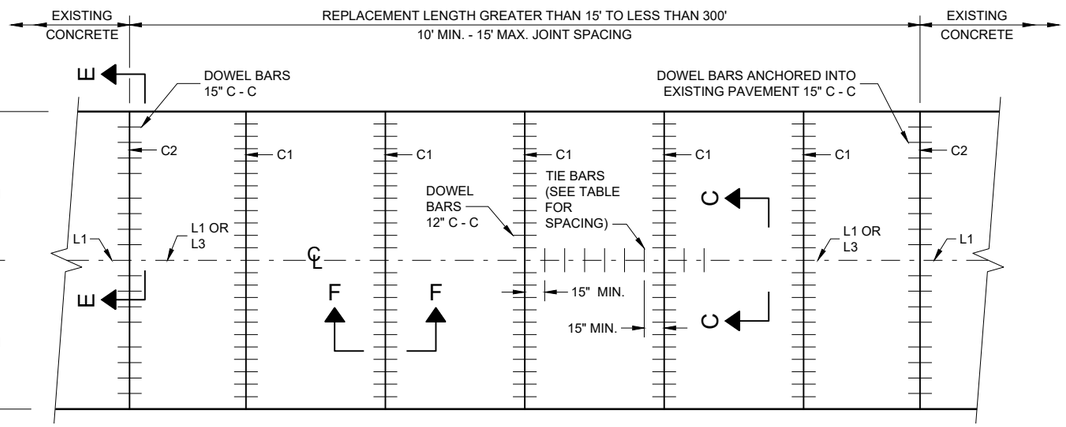
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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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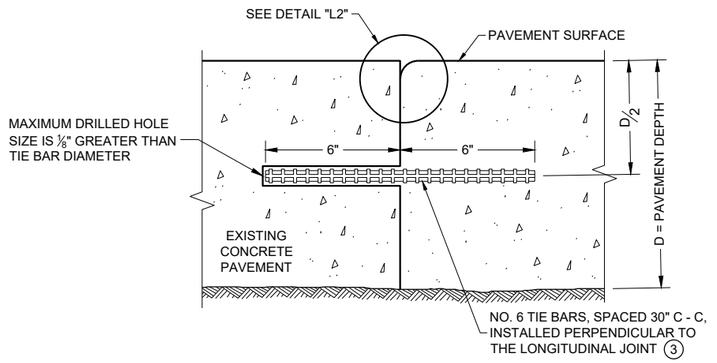
SDD 13C09 - 17b

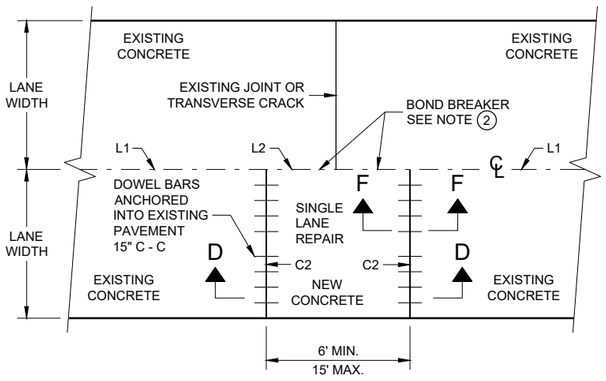


SECTION G - G

TIE BARS ANCHORED INTO EXISTING PAVEMENT

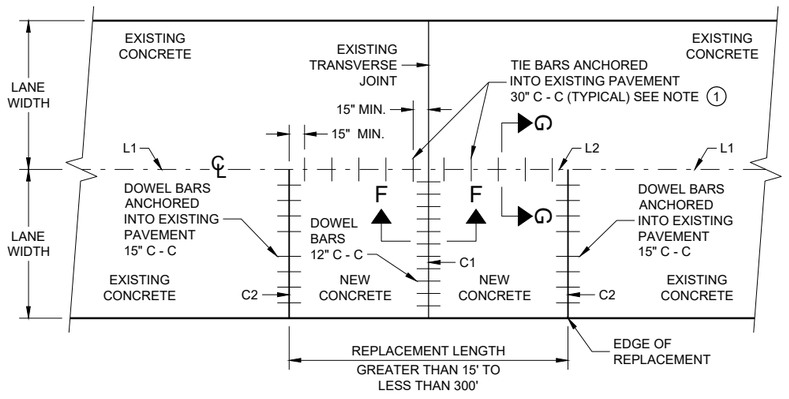
GENERAL NOTES

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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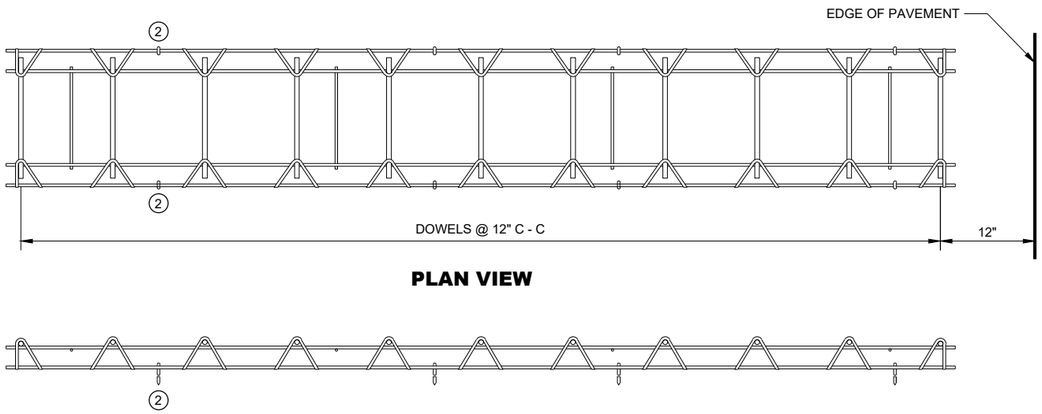
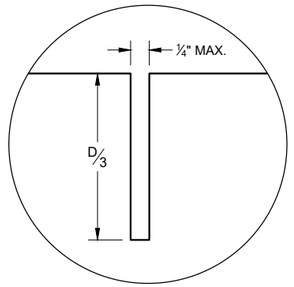
SDD 13C09 - 17c



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.

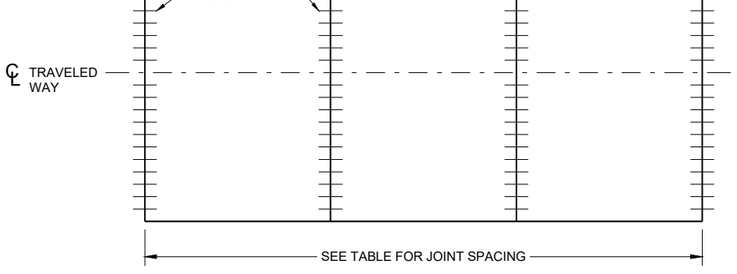
(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

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

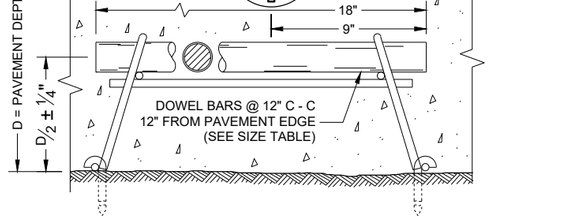
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED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



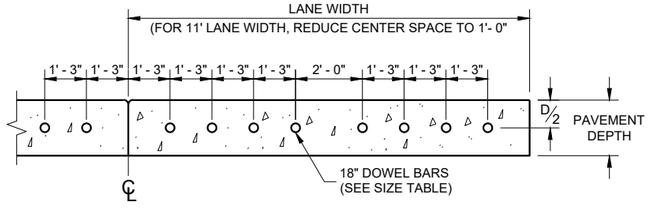
CONTRACTION JOINT LOCATIONS



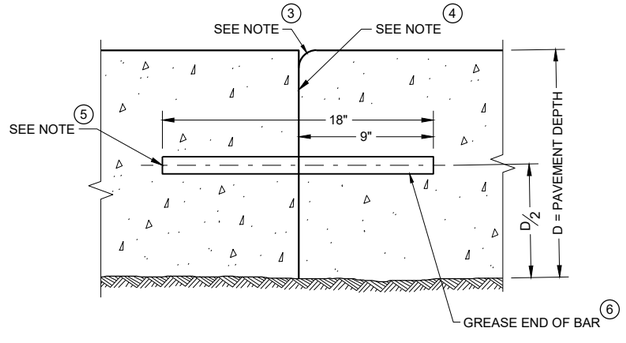
DOWELED CONTRACTION JOINT

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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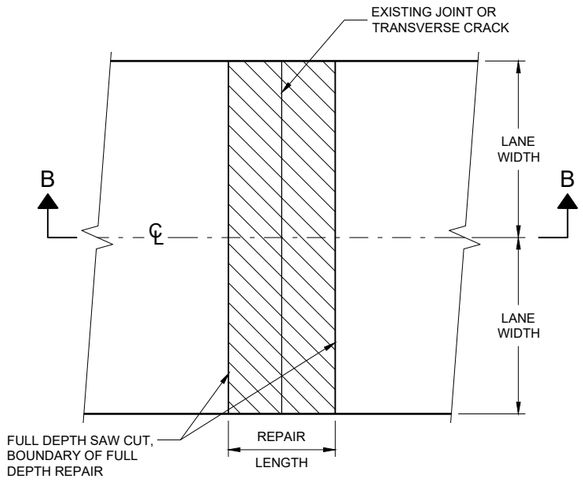
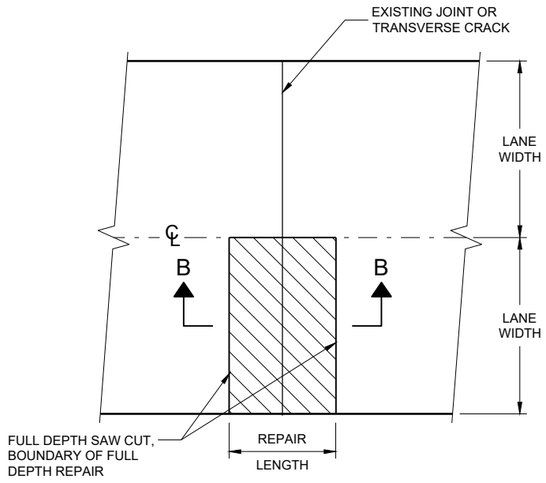


PLAN VIEW
DOUBLE LANE REPAIR



PLAN VIEW
SINGLE LANE REPAIR

GENERAL NOTES

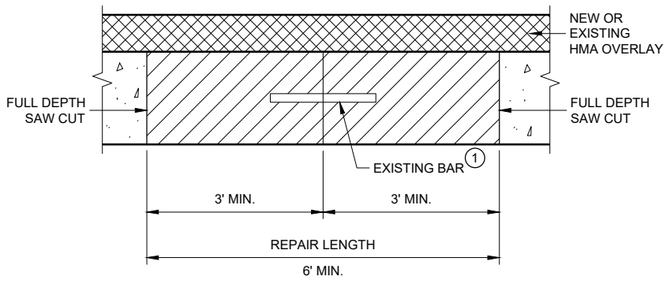
SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

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

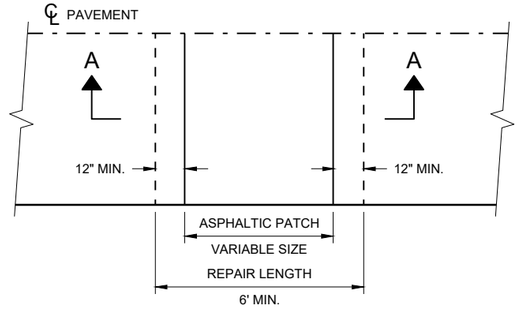
THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NON-DOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

(1) DOWEL BARS MAY NOT BE PRESENT.

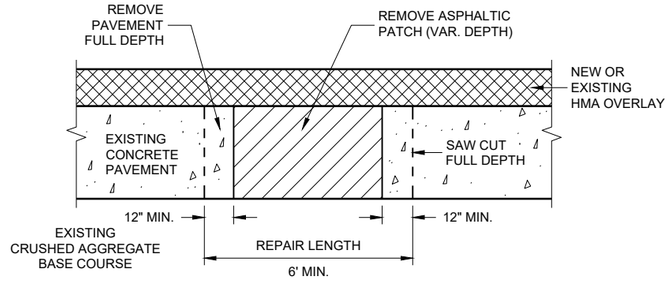
FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION B - B
CONCRETE REMOVAL



PLAN VIEW

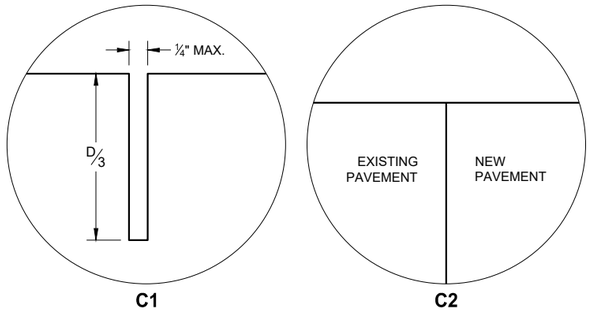


SECTION A - A

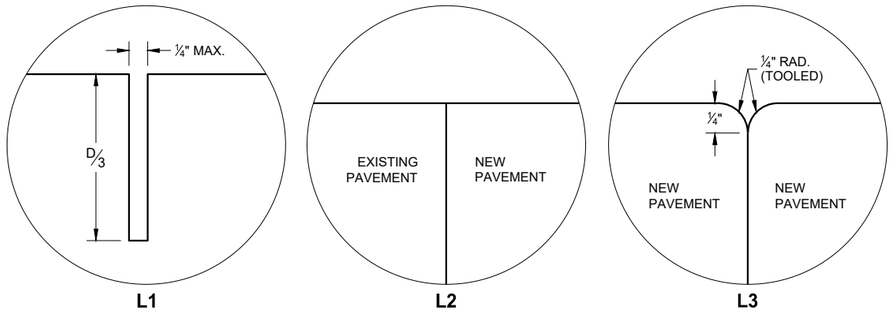
HMA PATCH REMOVAL

BASE PATCHING CONCRETE

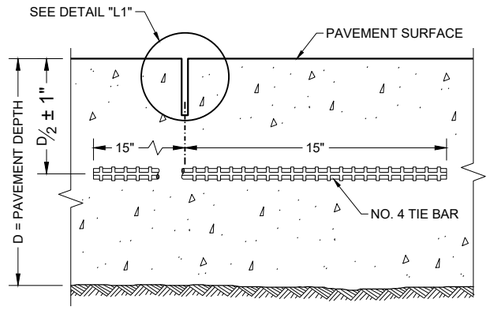
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA 515



TRANSVERSE JOINTS

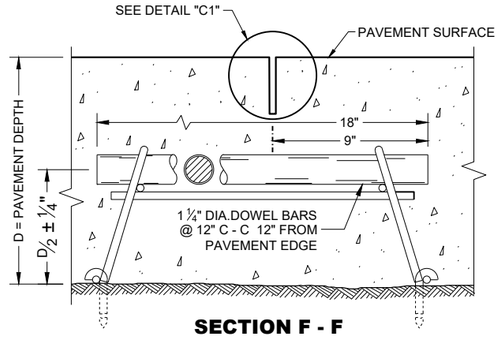


LONGITUDINAL JOINTS



SECTION C - C

SAWED LONGITUDINAL JOINT



SECTION F - F

CONTRACTION JOINT

GENERAL NOTES

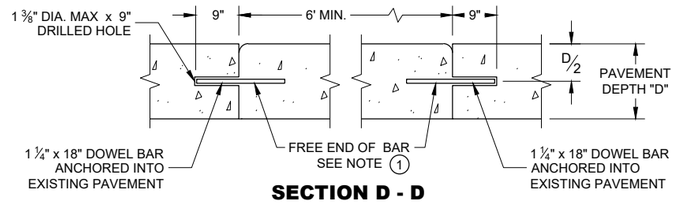
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE BASE PATCHES OF EXISTING NON-DOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

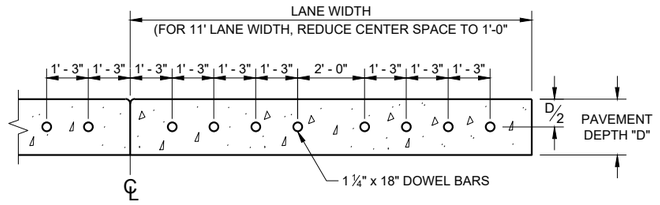
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

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.

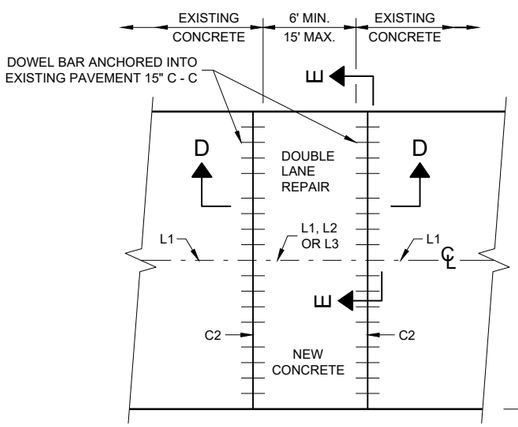


SECTION D - D



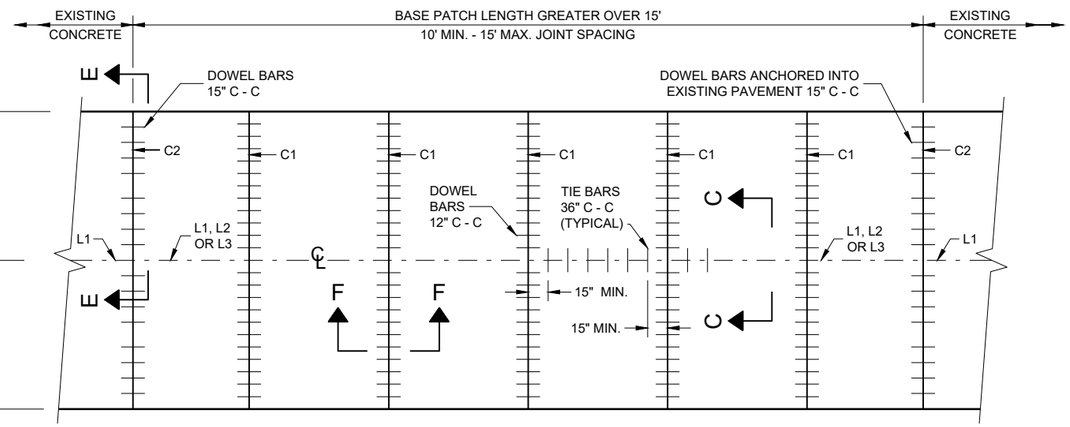
SECTION E - E

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 516

SDD 13C14 - 07b

SDD 13C14 - 07b

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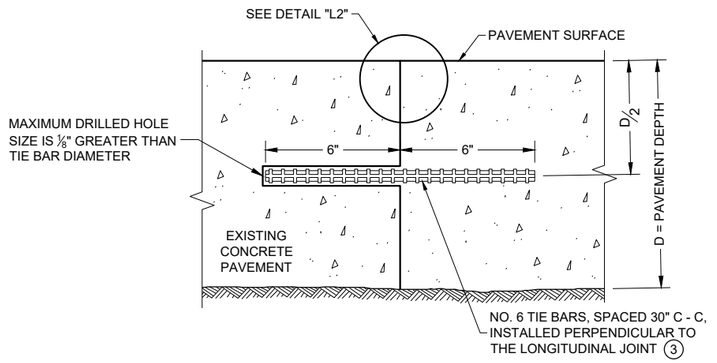
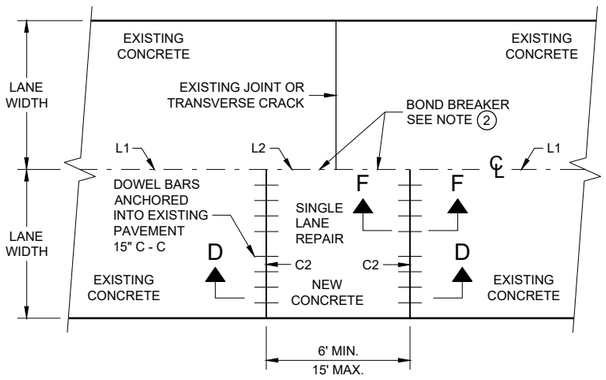


SECTION G - G

TIE BARS ANCHORED INTO EXISTING PAVEMENT

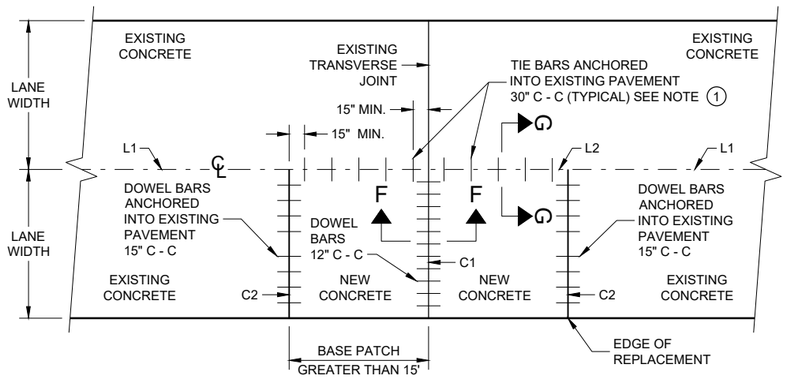
GENERAL NOTES

1. WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.
2. USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.
3. ANCHOR TIE BARS INTO DRILLED HOES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH
15' MAXIMUM LENGTH



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH
GREATER THAN 15' LENGTH

BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVISO

FHWA

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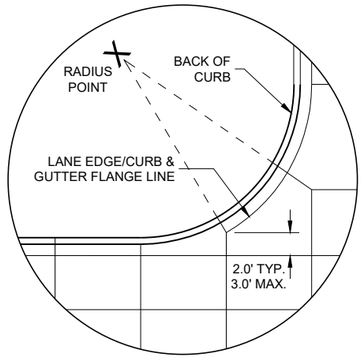
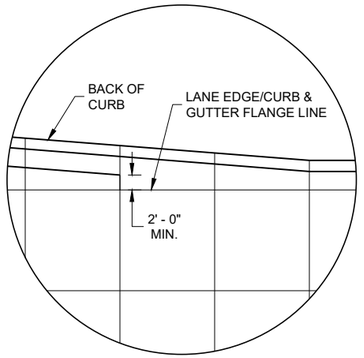
SDD 13C14 - 07c



DETAIL "A"



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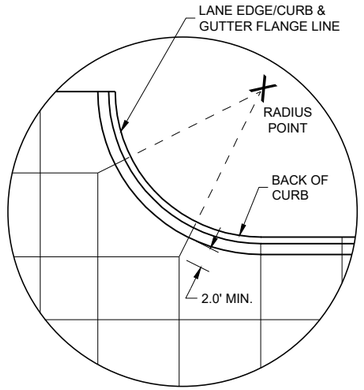
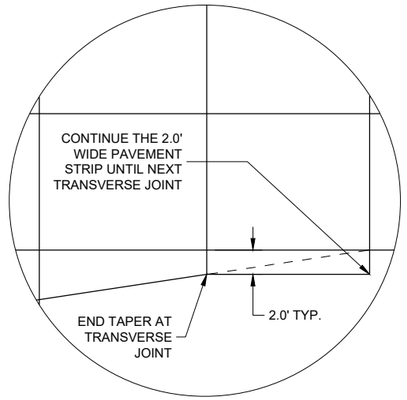


DETAIL "C"



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.

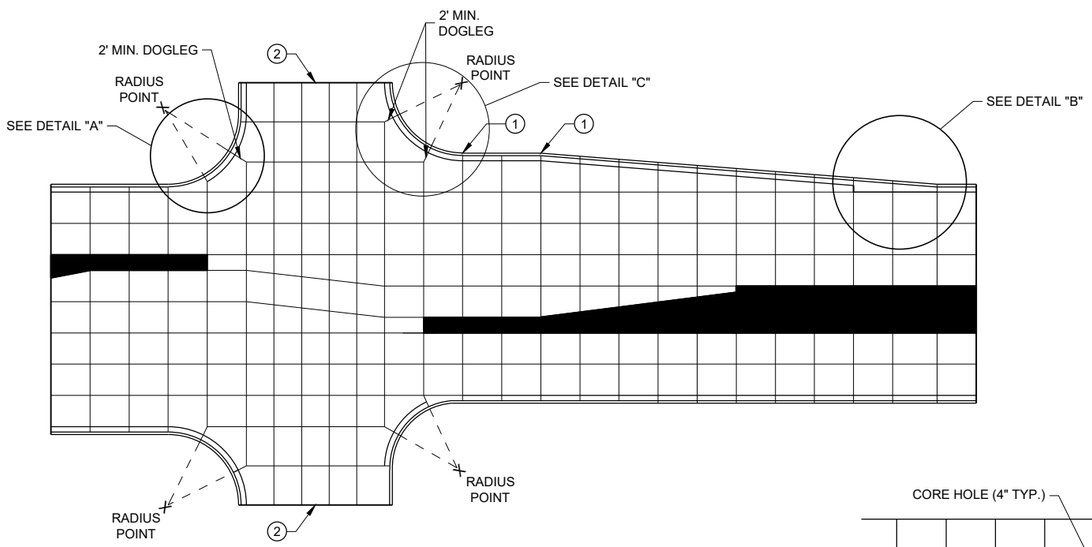
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

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.

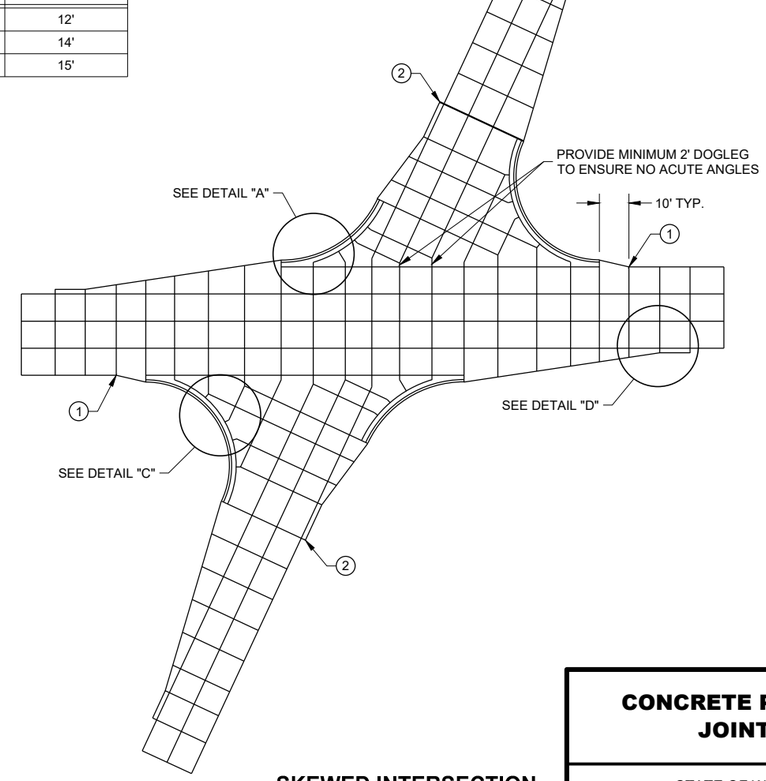
(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



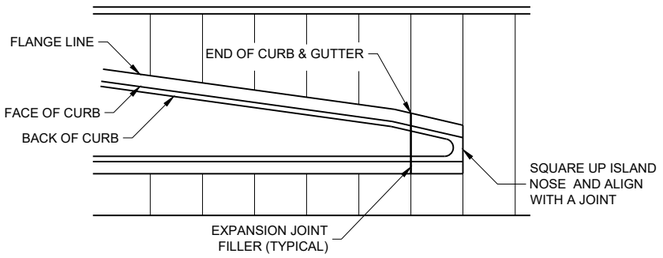
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

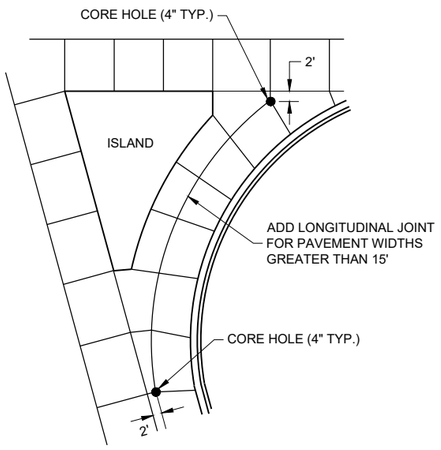
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

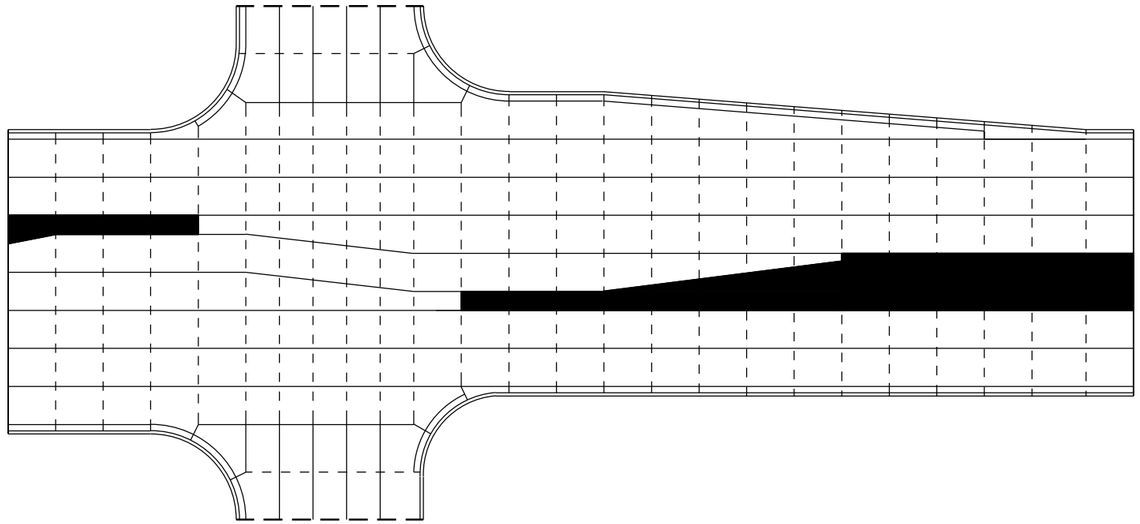
6
SDD 13C18 - 08a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

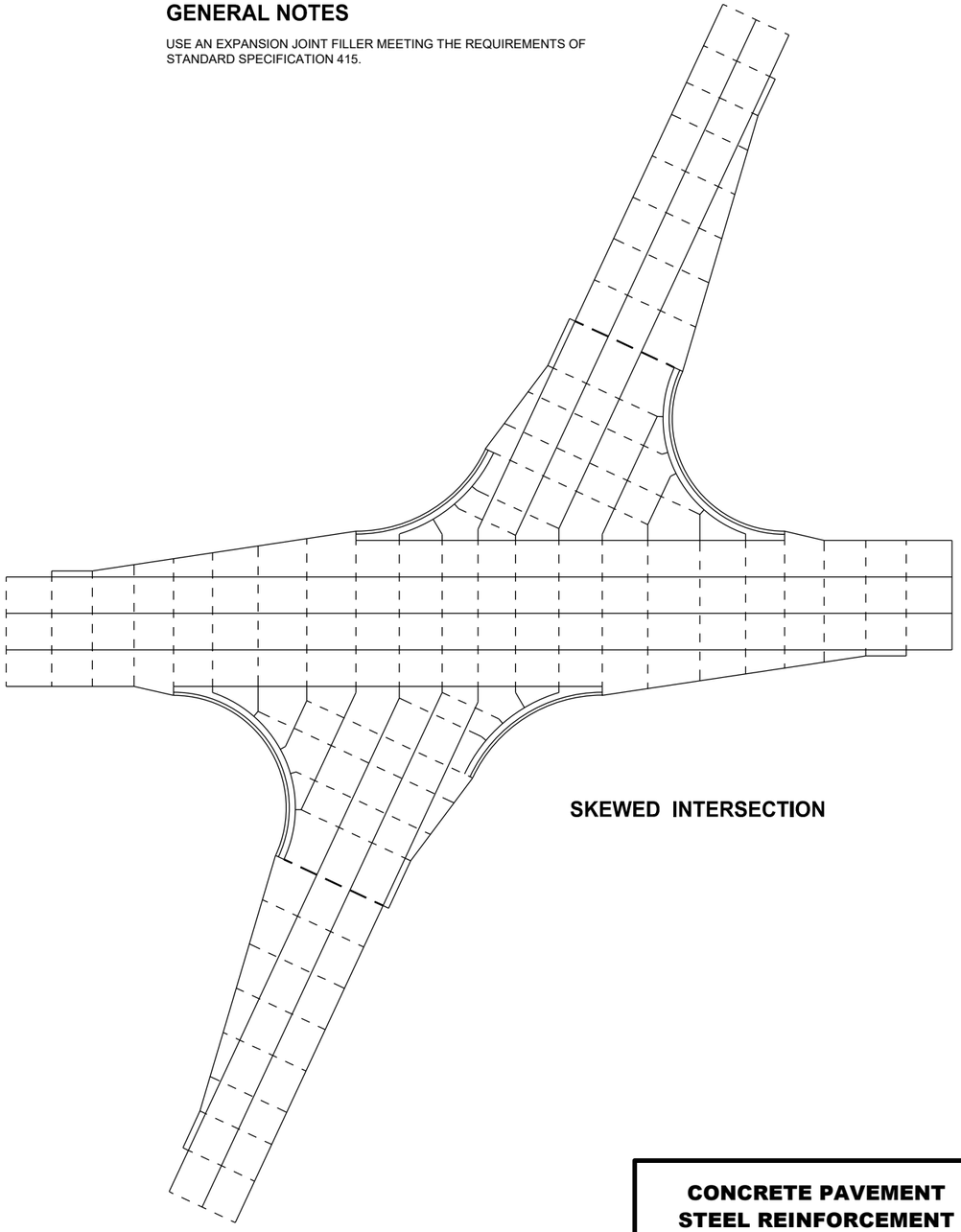
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

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



SKEWED INTERSECTION

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SDD 13C18 - 08b

CONCRETE PAVEMENT STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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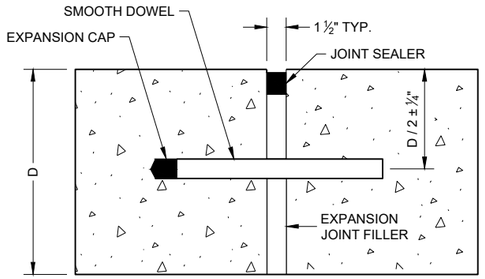
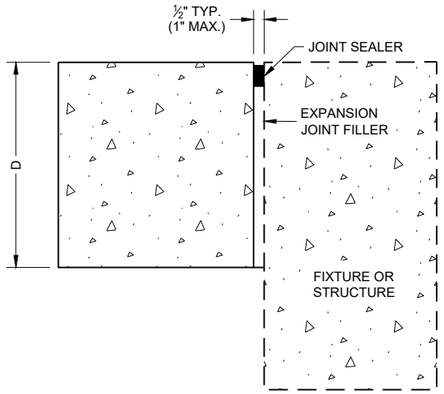
SDD 13C18 - 08b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

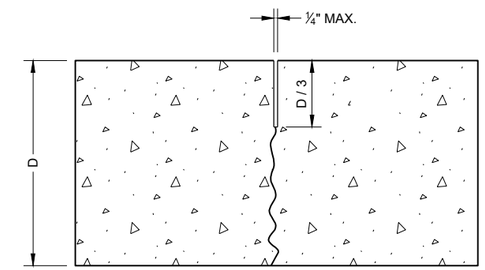
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

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

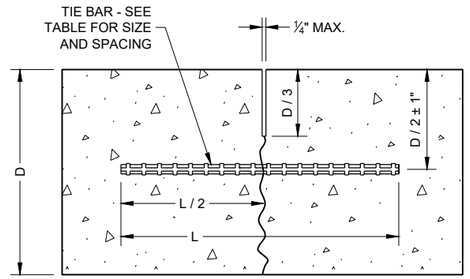
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

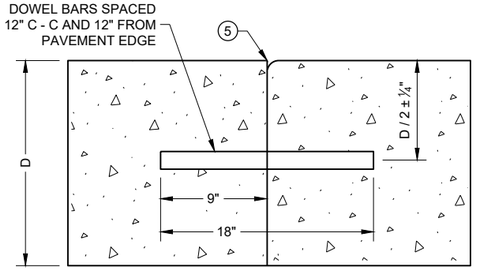
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM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



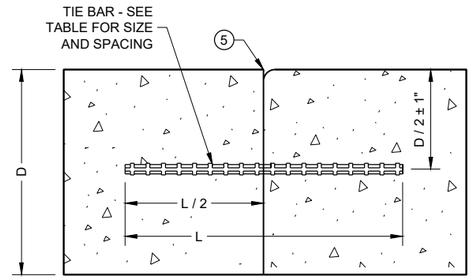
UNDOWELED TRANSVERSE



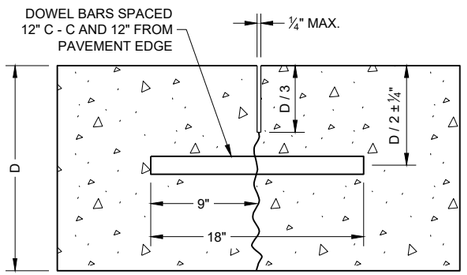
TIED LONGITUDINAL



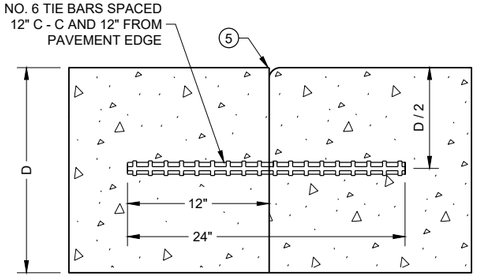
DOWELED TRANSVERSE (3)



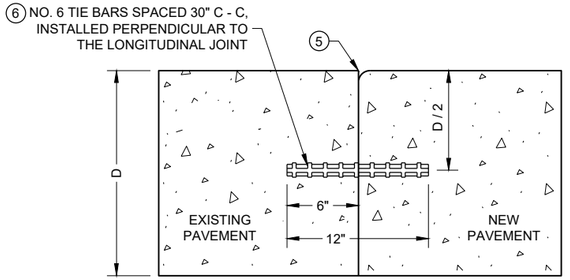
TIED LONGITUDINAL



DOWELED TRANSVERSE



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

CONTRACTION JOINTS (2)

CONSTRUCTION JOINTS (4)

CONCRETE PAVEMENT JOINT TYPES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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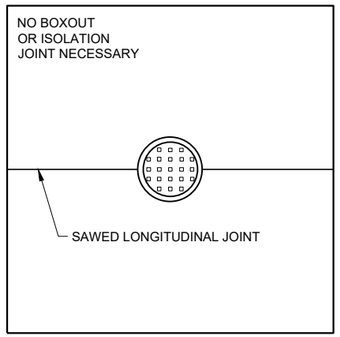
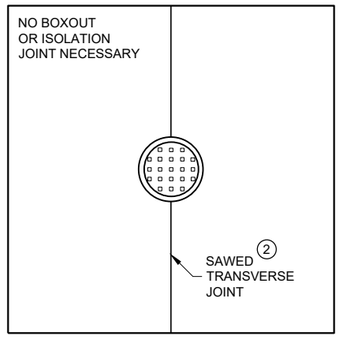
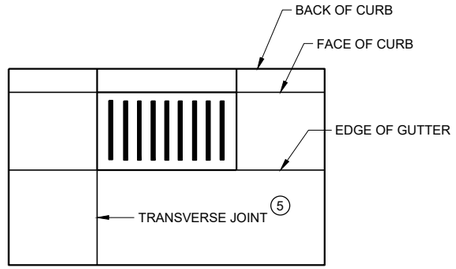
SDD 13C18 - 08c



MANHOLE WITH LONGITUDINAL JOINT



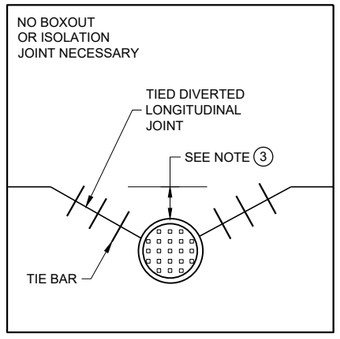
MANHOLE WITH TRANSVERSE JOINT



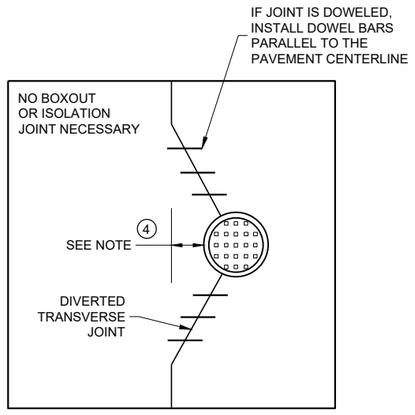
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

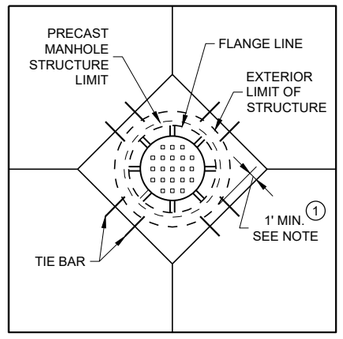
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF 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 SUPERVIS

FHWA

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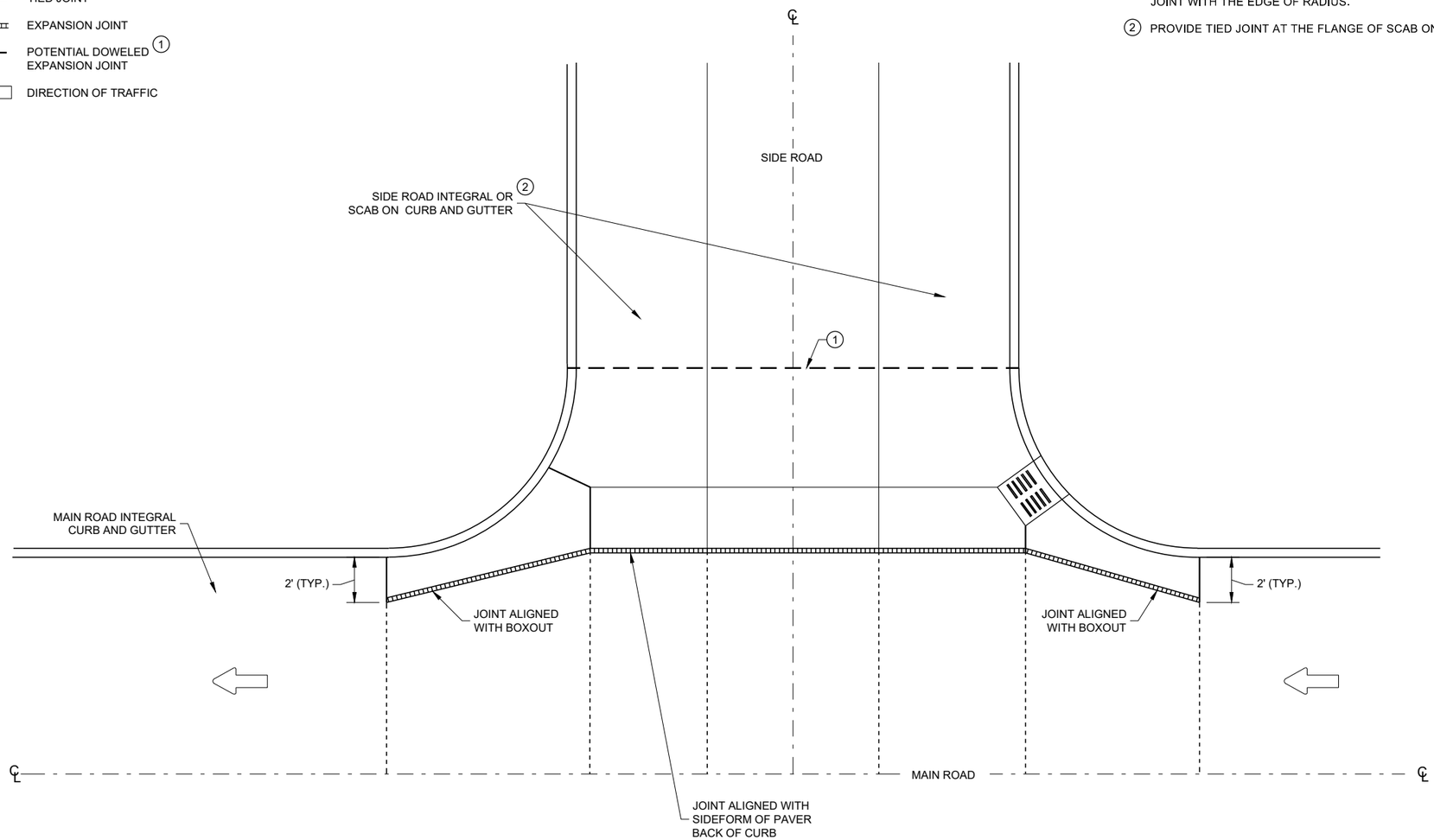
SDD13C18 - 08d

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 522

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SDD 13C18 - 08f

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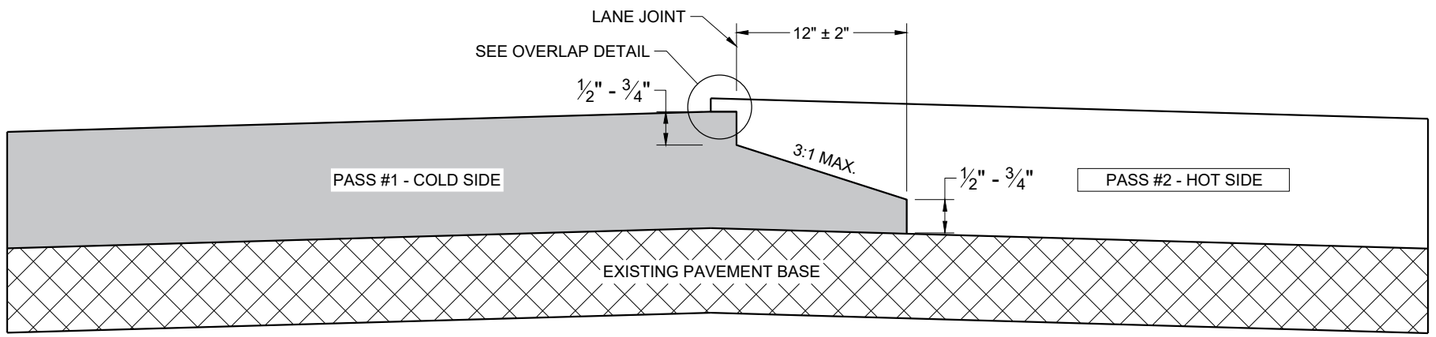
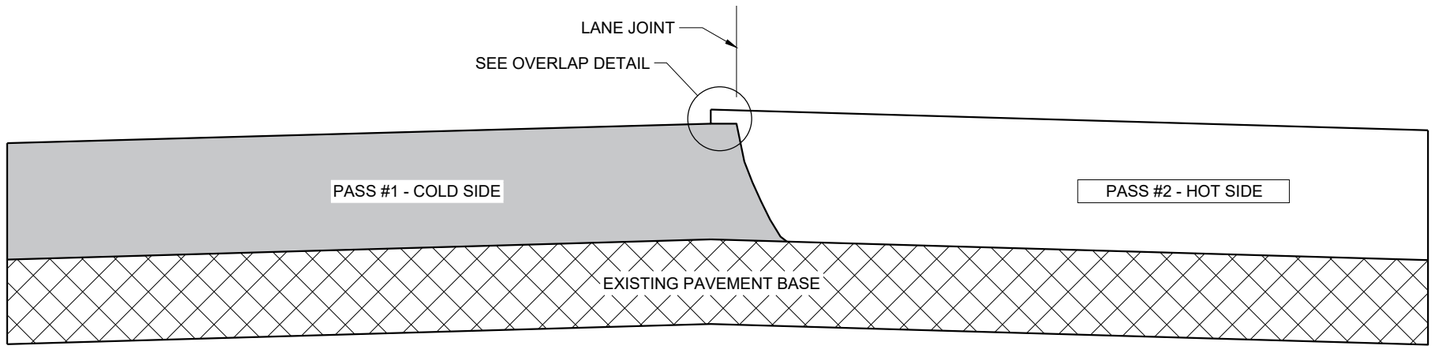
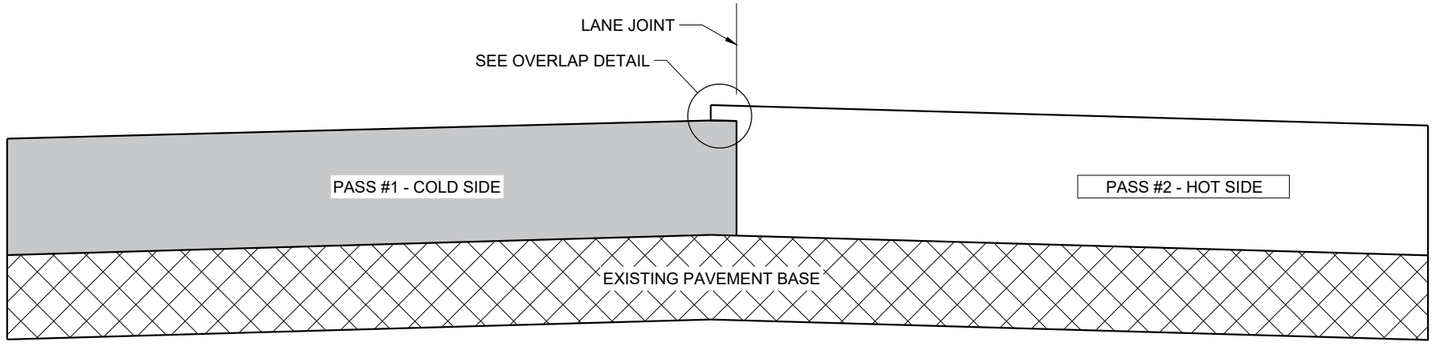
SDD 13C18 - 08f



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

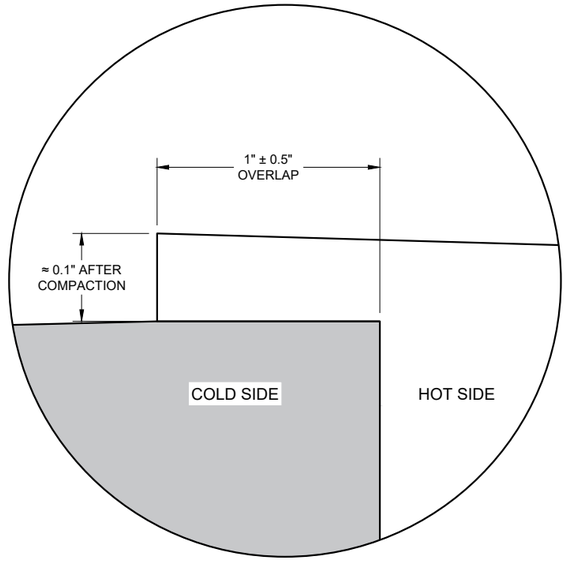
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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)

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SDD 13C19 - 03

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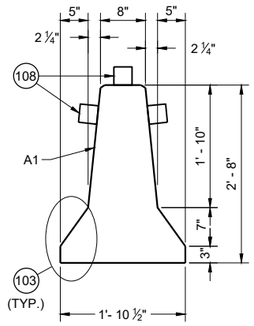
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

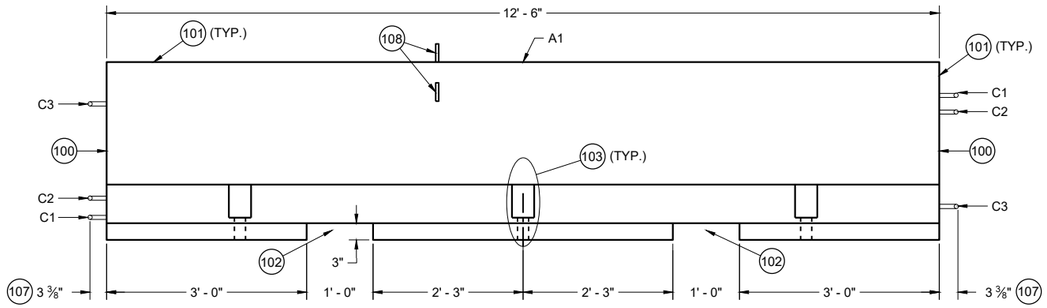
APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



CROSS SECTION



PROFILE VIEW

GENERAL NOTES

PLACE BARRIER ON PAVED SURFACE. BEFORE PLACEMENT OF TEMPORARY BARRIER, REMOVE ALL LOOSE MATERIAL FROM PAVED SURFACE.

LOOP BARS C1, C2 AND C3 ARE NOT FOR PLACEMENT OR MOVEMENT OF BARRIER.

(100) PERMANENTLY FORM INTO ONE END OF BARRIER THE FOLLOWING INFORMATION:
- A. TYPE OF BARRIER: WI-CBTP
- B. MANUFACTURER
- C. DATE OF MANUFACTURE (MONTH AND YEAR)

(101) 1" OPTIONAL CHAMFER

(102) SEE LIFTING SLOT DETAIL

(103) SEE ANCHOR BLOCK DETAIL

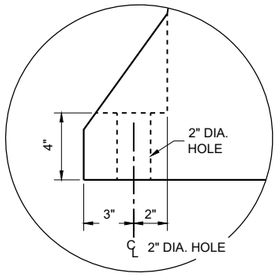
(104) 1 ¾" MIN. CLEAR COVER

(105) 2" MIN. CLEAR COVER

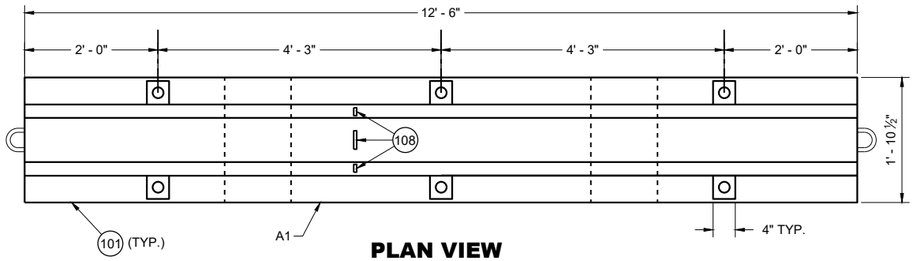
(106) 1" MIN. CLEAR COVER

(107) ± ⅛" MEASURED FROM FACE OF CONCRETE BARRIER TO OUTSIDE OF LOOP BAR (TYP.)

(108) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURERS INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED LEFT OF TRAFFIC AND WHITE WHEN BARRIER IS LOCATED RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART, PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO SIDE MOUNTED DELINEATORS ON BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAT 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

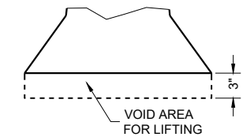


ANCHOR BLOCK DETAIL

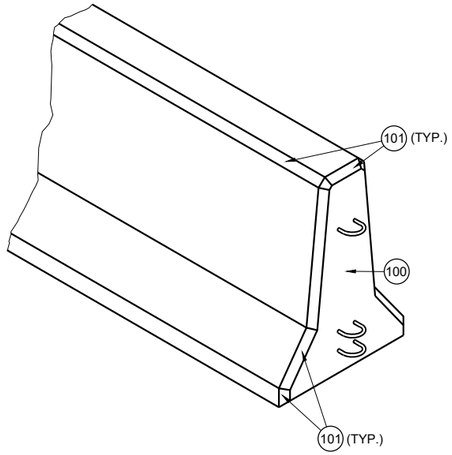


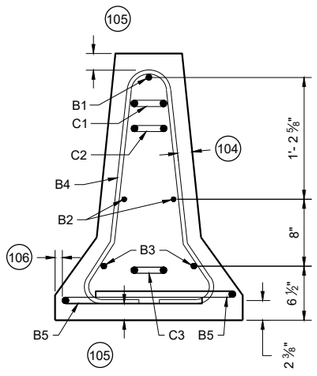
PLAN VIEW

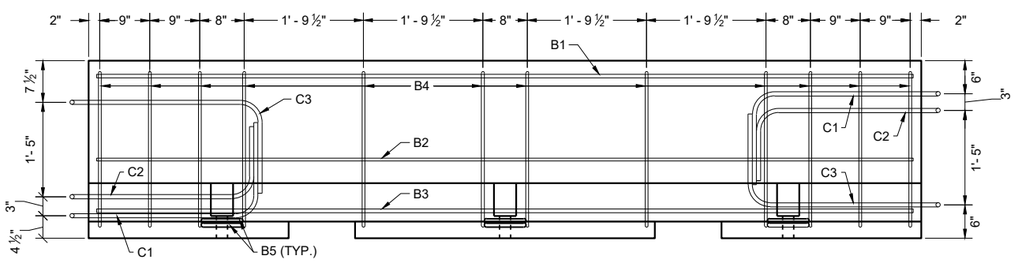
TEMPORARY BARRIER



LIFTING SLOT DETAIL (TYP.)







PROFILE VIEW

TEMPORARY BARRIER REINFORCEMENT

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

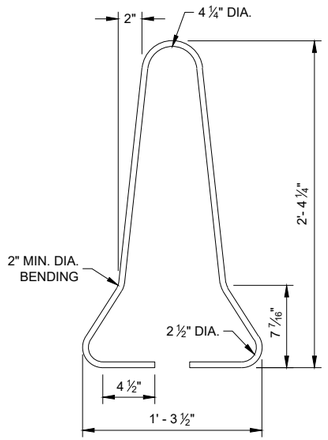
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

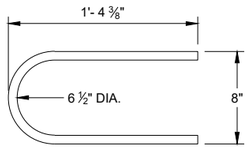
SDD 14B07-16a

6

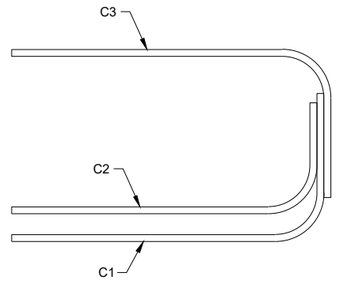
SDD 14B07-16a



B4 BAR DETAIL

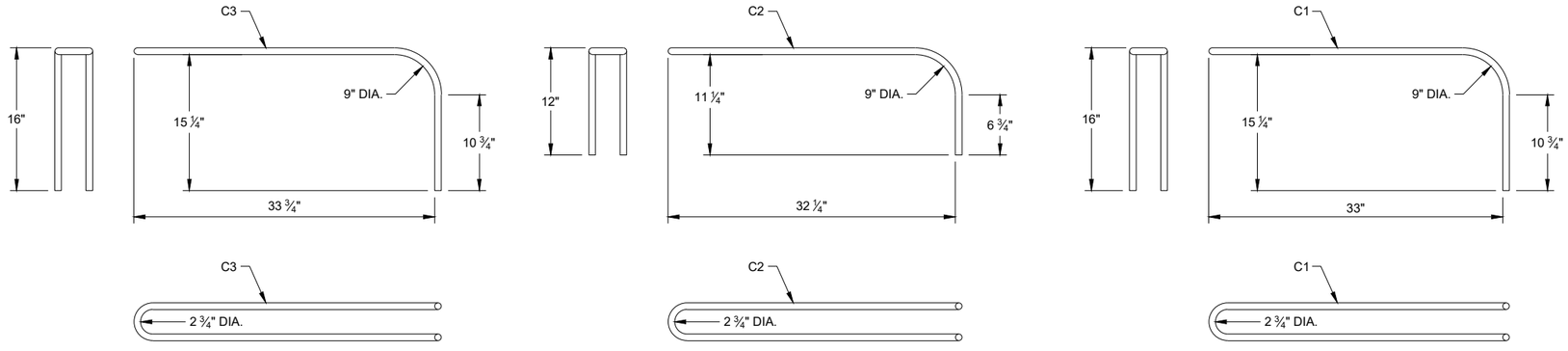


B5 BAR DETAIL



PROFILE VIEW

LOOP BAR ASSEMBLY



C BAR DETAILS

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

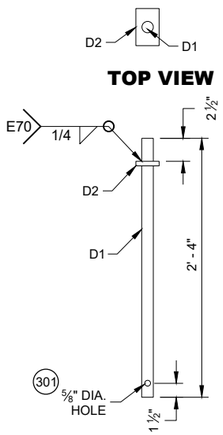
525

6

SDD 14B07-16b

6

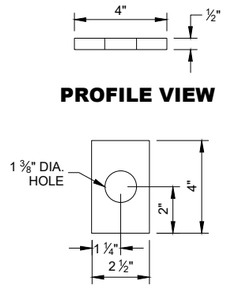
SDD 14B07-16b



TOP VIEW

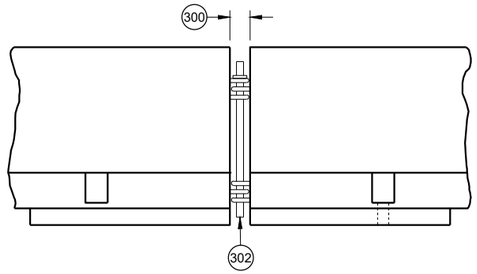
PROFILE VIEW

CONNECTOR PIN ASSEMBLY



PROFILE VIEW

TOP VIEW D2



CONNECTING TEMPORARY BARRIER SECTIONS

GENERAL NOTES

300 SET WITH 3 ⅝" WOOD BLOCK.

301 HOLE IS OPTIONAL.

302 CONNECTOR PIN ASSEMBLY.

303 CONCRETE PAVEMENT, APPROACH SLAB, OR DECK.

304 CONCRETE DECK.

305 DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY OR CONCRETE PAVEMENT WITH ASPHALT OVERLAY.

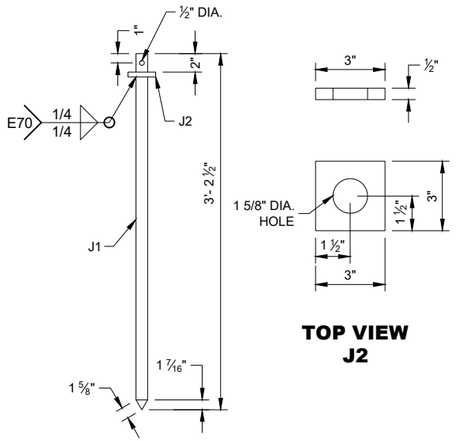
306 MINIMUM OF 2" OF ASPHALT.

307 ASPHALT ANCHOR PIN ASSEMBLY

308 IF DRILLING A PILOT HOLE, THE MAX, DIA. OF THE HOLE IS 3/4"

309 WHEN THERE IS ASPHALT OVERLAYING CONCRETE PAVEMENT, A 1 5/8" DIA. PILOT HOLE CAN BE DRILLED INTO THE OVERLAY AND CONCRETE. IF NEEDED DRILL A 3/4" PILOT HOLE IN BASE COURSE.

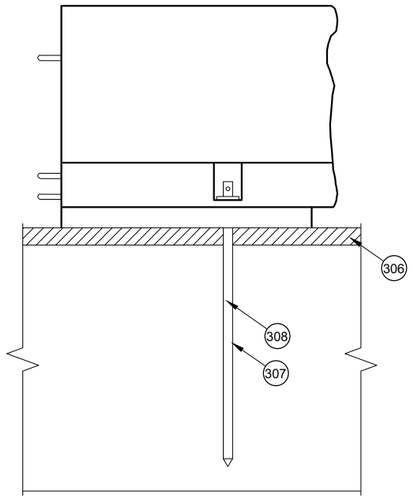
TOP VIEW



TOP VIEW J2

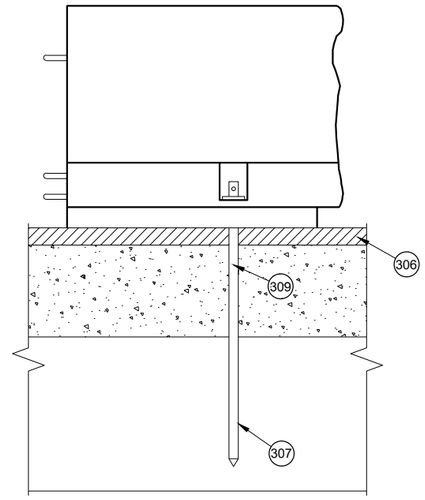
PROFILE VIEW

ASPHALT ANCHOR PIN ASSEMBLY



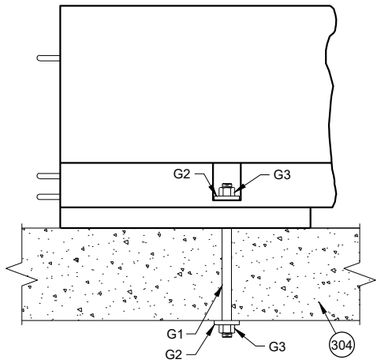
SIDE VIEW

ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT PAVEMENT



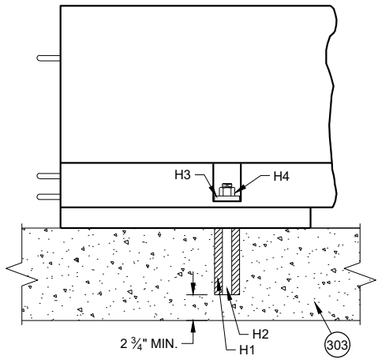
SIDE VIEW

ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT OVERLAY ON TOP OF CONCRETE PAVEMENT



SIDE VIEW

THROUGH BOLT ANCHOR INSTALLATION (305)



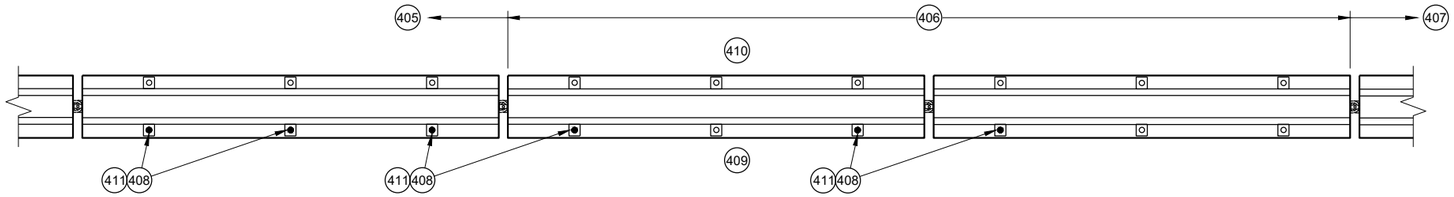
SIDE VIEW

ADHESIVE ANCHOR INSTALLATION (305)

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

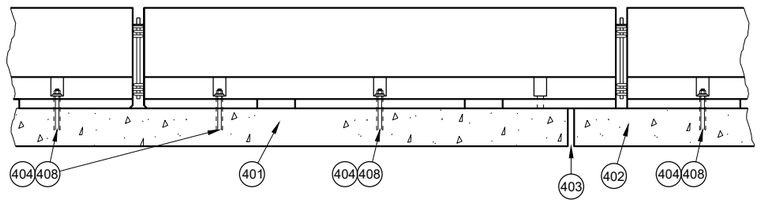
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B07-16c



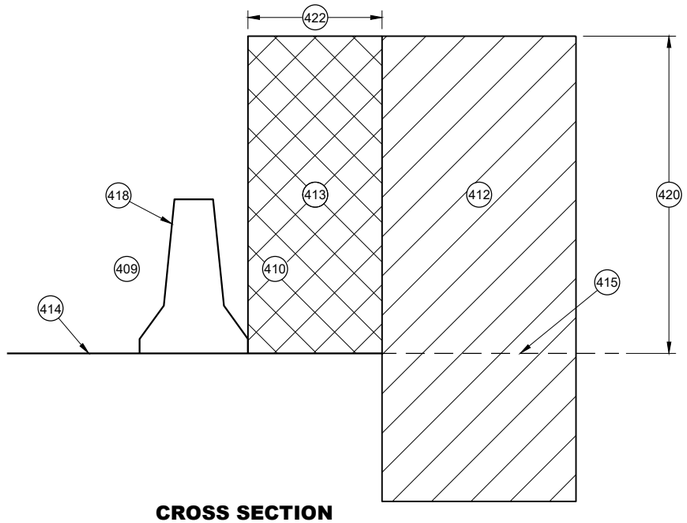
PLAN VIEW

TRANSITION FROM FREE STANDING TO ANCHORED BARRIER



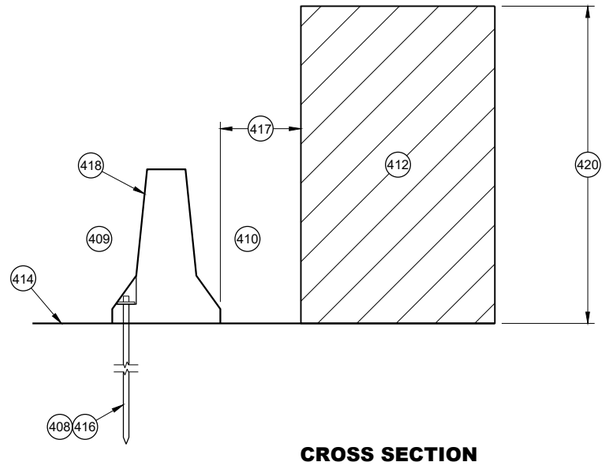
PROFILE VIEW

ANCHORED BARRIER NEAR EXPANSION JOINT (400)



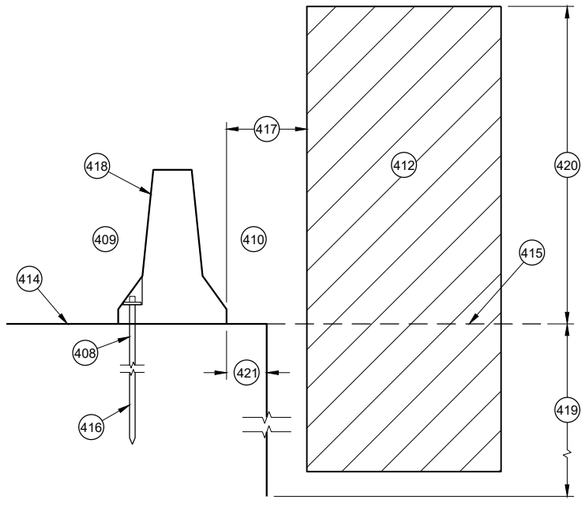
CROSS SECTION

FREE STANDING BARRIER



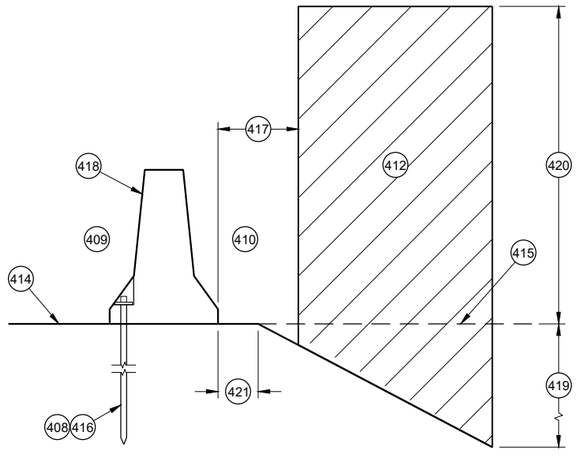
CROSS SECTION

ANCHORED BARRIER FOR OBJECTS ABOVE THE GRADE LINE AND NEAR THE BARRIER



CROSS SECTION

ANCHORED BARRIER NEAR VERTICAL DROP OFF



CROSS SECTION

ANCHORED BARRIER NEAR A SLOPE

GENERAL NOTES

(400) NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.

(401) CONCRETE DECK

(402) CONCRETE DECK OR APPROACH SLAB.

(403) EXPANSION JOINT

(404) ADHESIVE ANCHOR SHOWN. SEE ANCHOR DETAILS.

(405) ANCHORED TEMPORARY BARRIER

(406) TRANSITION FROM ANCHORED TEMPORARY BARRIER TO FREE STANDING

(407) FREE STANDING BARRIER

(408) REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERCIAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

(409) TRAFFIC SIDE

(410) NON-TRAFFIC SIDE

(411) ANCHOR LOCATION. SEE ANCHORING DETAILS.

(412) WORK AREA

(413) AREA FREE OF OBJECTS AND WORKERS

(414) GRADE LINE

(415) EXTENDED GRADE LINE

(416) ANCHORED TEMPORARY BARRIER. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR AN ASPHALT ANCHOR ROD DETAILS FOR MORE INFORMATION. ASPHALT ANCHOR ROD SHOWN.

(417) WHEN OBJECTS EXTEND ABOVE THE GRADE. A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT.

(418) OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR ALLOWED TO LEAN AGAINST THE BARRIER WITHOUT WRITTEN PERMISSION OF THE PROJECT ENGINEER.

(419) DEPTHS OF 3 FEET OR MORE.

(420) Y = 6.5'

(421) OFFSET FROM BACK OF BARRIER EDGE:

CONCRETE PAVEMENT	0.5'
ASPHALT	0.5'

(422) POSTED SPEED (MPH):

45 OR GREATER	4.0'
40 OR LOWER	2.0'

6

SDD 14B07-16d

6

SDD 14B07-16d

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

(500) EXISTING RIGID BARRIERS (VARIES)

(501) TEMPORARY BARRIER

(502) SEE OTHER DETAIL ON HOW TO ANCHOR TEMPORARY BARRIER (BARRIER ASPHALT ANCHOR SHOWN).

(503) ANCHORS ARE REQUIRED ON BOTH SIDE OF THE TEMPORARY BARRIER.

(504) NESTED RAILS ARE REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

(505) TRAFFIC TRAVELS FROM PERMANENT BARRIER TO TEMPORARY BARRIER.

(506) TRAFFIC TRAVELS FROM TEMPORARY BARRIER TO PERMANENT BARRIER.

(507) VERTICAL BARRIER

(508) SAFETY SHAPE BARRIER

(509) SINGLE SLOPE BARRIER

(510) CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF RIGID BARRIER.

(511) BENT THRIE BEAM TO FIT.

(512) THRIE BEAM PIECES ARE OFFSET 15 ¼" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.

(513) TWO (2) P1, P2 AND P3 ARE REQUIRED

(514) FIVE (5) N1, N2 AND N3 ARE REQUIRED

(515) TWO (2) R1, R2 AND R3 ARE REQUIRED

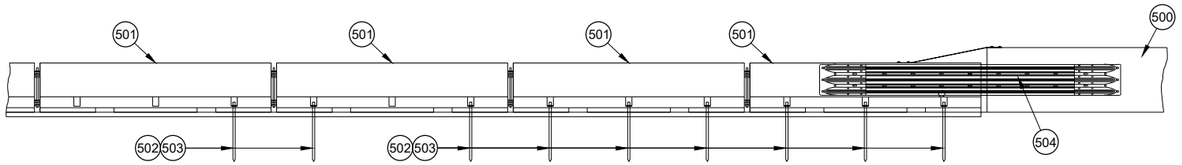
(516) CUT WOOD BLOCK TO FIT.

(517) SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL ASSEMBLY.

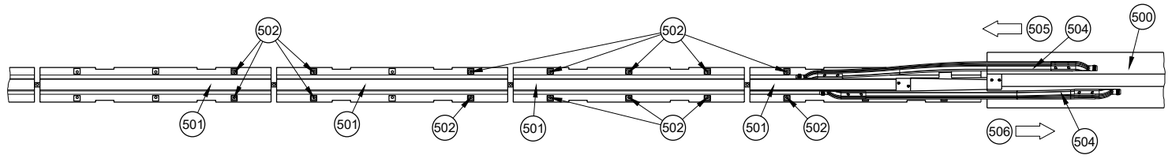
(518) CAP ASSEMBLY

(519) 4" MAX. GAP BETWEEN TEMPORARY BARRIER AND RIGID BARRIER.

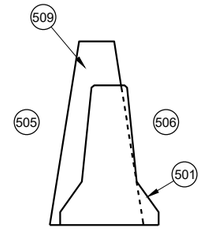
(520) ALL TWELVE SPLICE HOLES REQUIRE M1 AND M2



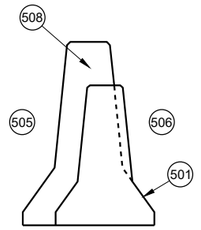
PROFILE VIEW



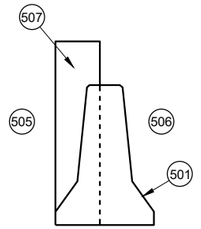
PLAN VIEW
TRANSITION TO RIGID BARRIER



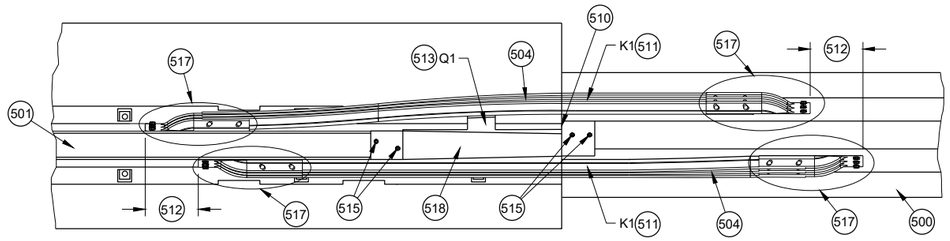
CROSS SECTION TEMPORARY BARRIER PLACEMENT SINGLE SLOPE



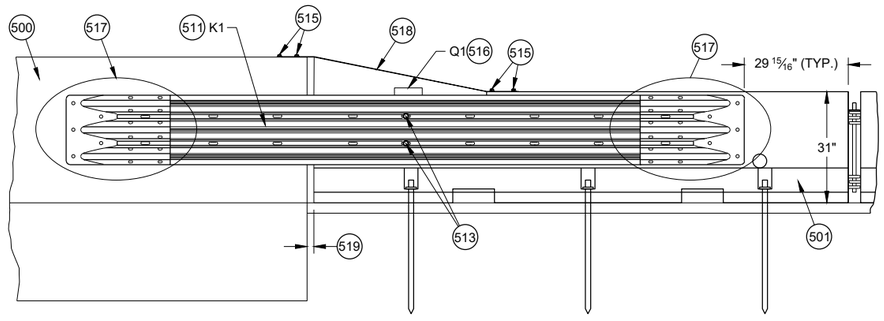
CROSS SECTION TEMPORARY BARRIER PLACEMENT SAFETY SHAPE



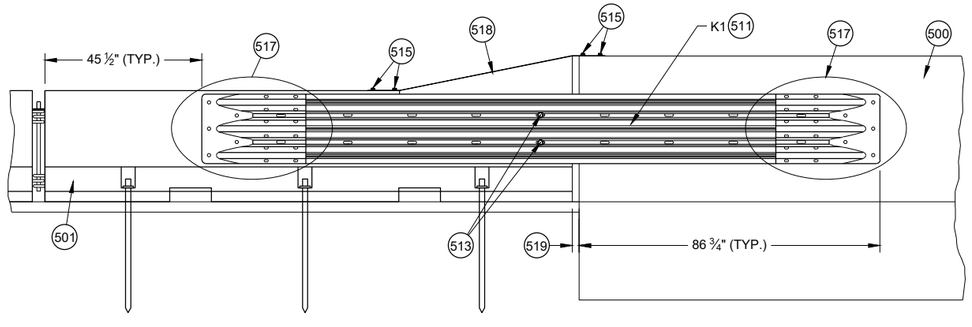
CROSS SECTION TEMPORARY BARRIER PLACEMENT VERTICAL



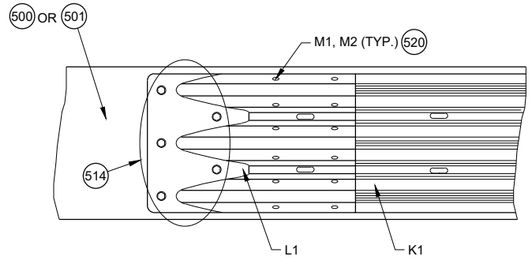
PLAN DETAIL VIEW
TRANSITION TO RIGID BARRIER



BACK DETAIL VIEW
TRANSITION TO RIGID BARRIER



FRONT DETAIL VIEW
TRANSITION TO RIGID BARRIER

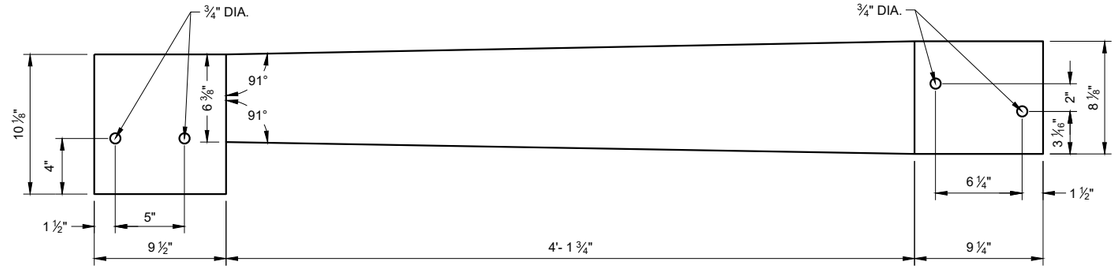


(517) DETAIL PLAN VIEW
THRIE BEAM RAIL TERMINAL CONNECTOR ASSEMBLY

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

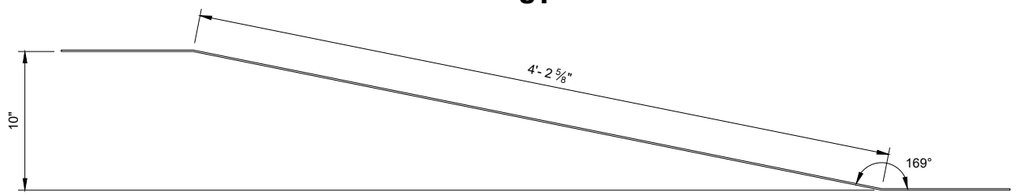
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B07-16e



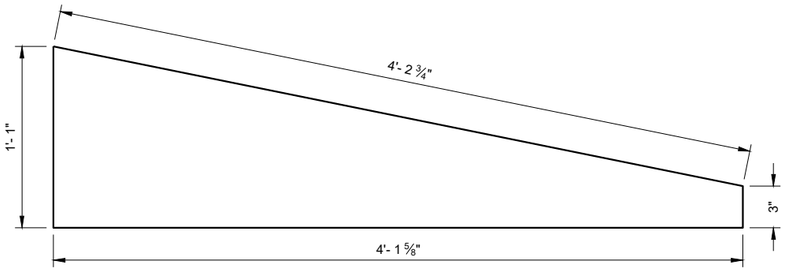
TOP VIEW

S1



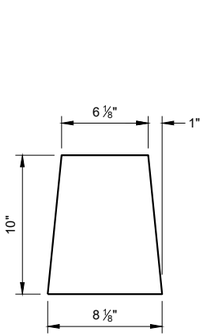
ELEVATION VIEW

S1

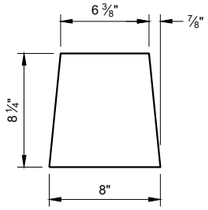


SIDE VIEW

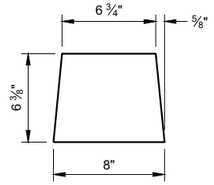
S3



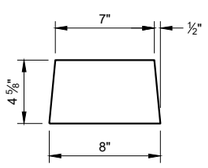
S2



S4



S5



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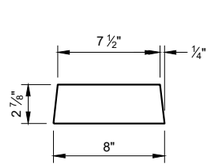

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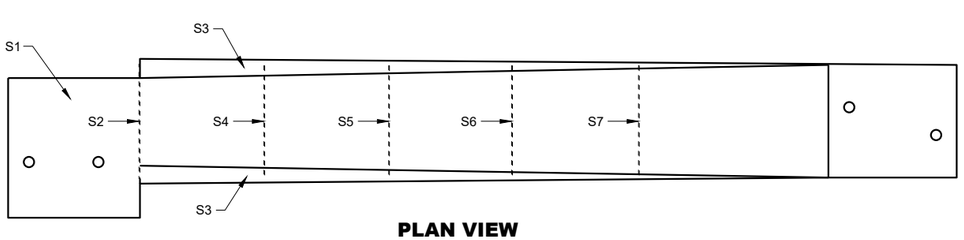
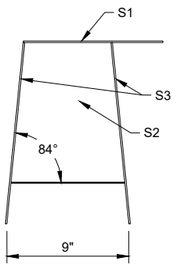
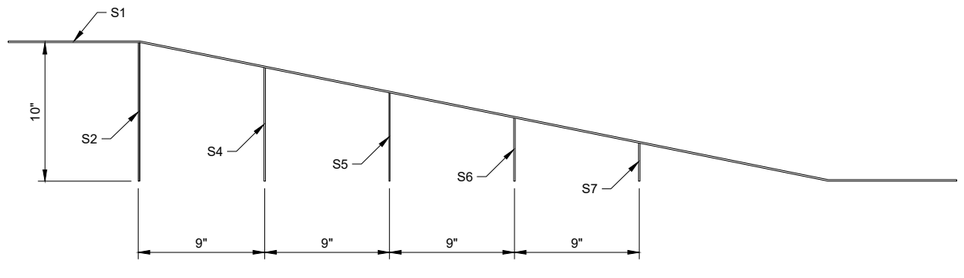


PLAN VIEW



BACK VIEW



SIDE VIEW (600)

42" TOP CAP ASSEMBLY

GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THREE SIDES

STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

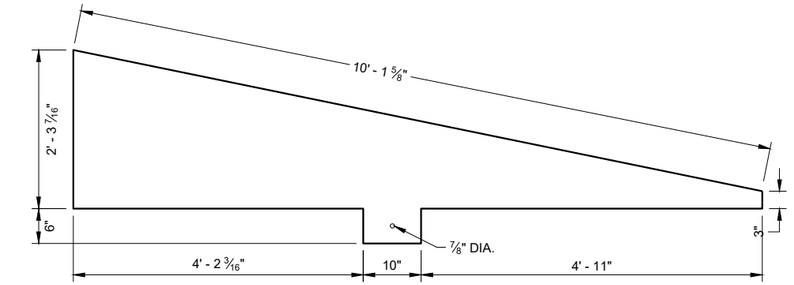
(600) SIDE PLATES (S3) NOT SHOWN FOR CLARITY.

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

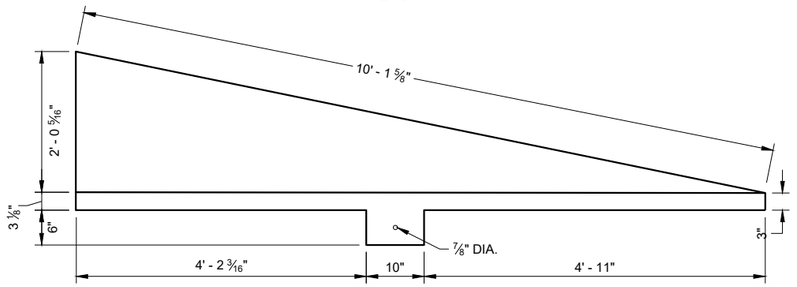
6

SDD 14B07-16f



SIDE VIEW
T4

END VIEW



SIDE VIEW
T3

END VIEW

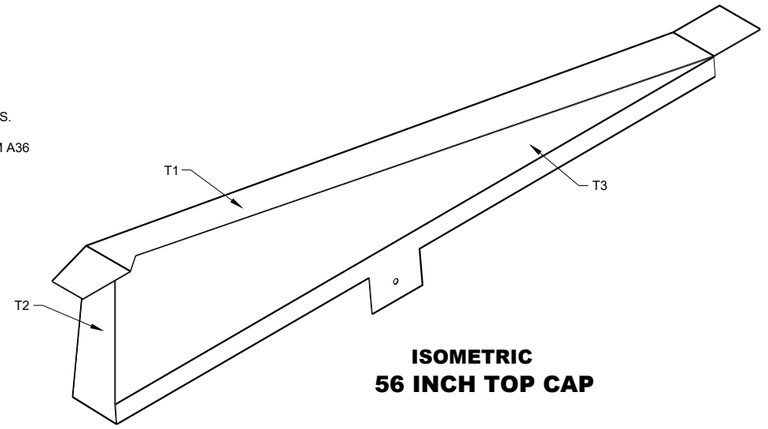
GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THRIE SIDES

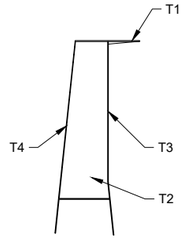
STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.

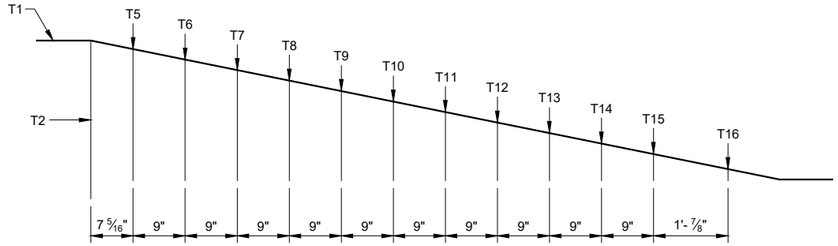
(700) SIDE PLATES (T3 AND T4) NOT SHOWN FOR CLARITY.



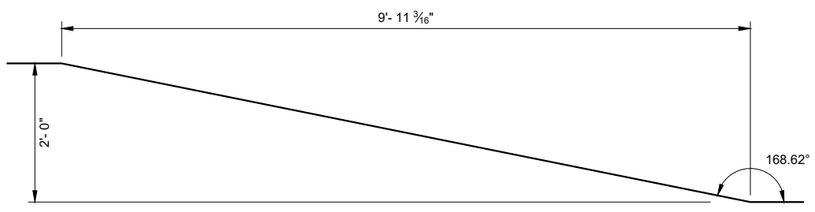
ISOMETRIC
56 INCH TOP CAP



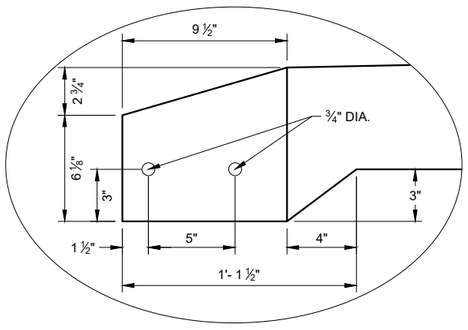
END VIEW
56 INCH TOP CAP



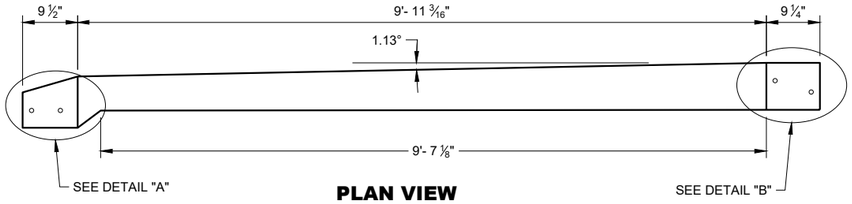
SIDE VIEW (700)
56 INCH TOP CAP



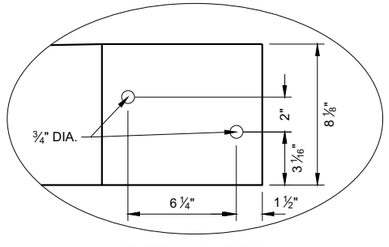
SIDE VIEW
TOP PLATE T1



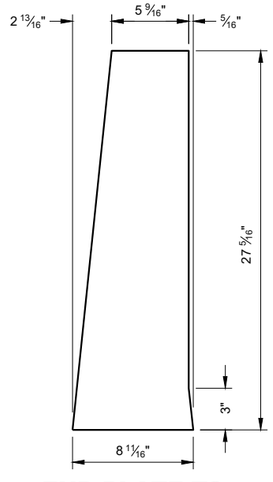
DETAIL "A"



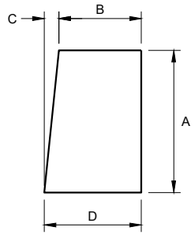
PLAN VIEW
TOP PLATE T1



DETAIL "B"



END PLATE T2



GUSSET PLATES
T5 - T16

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
T5	22 13/16"	5 1/16"	2 5/16"	8 1/16"
T6	21"	5 7/8"	2 3/16"	8 1/16"
T7	19 3/16"	6 1/16"	1 15/16"	8 1/16"
T8	17 3/8"	6 1/4"	1 13/16"	8 1/16"
T9	15 5/16"	6 7/16"	1 9/16"	8 1/16"
T10	13 3/4"	6 5/8"	1 7/16"	8 1/16"
T11	11 15/16"	6 13/16"	1 1/4"	8 1/16"
T12	10 1/8"	7"	1 1/16"	8 1/16"
T13	8 5/16"	7 3/16"	7/8"	8 1/16"
T14	6 1/2"	7 3/8"	1 1/16"	8 1/16"
T15	4 11/16"	7 9/16"	1/2"	8"
T16	2 7/8"	7 3/4"	1/4"	8"

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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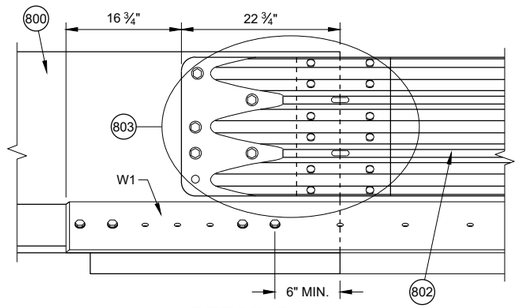
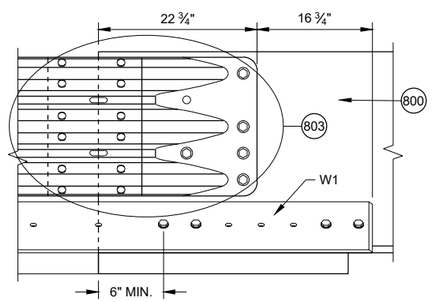
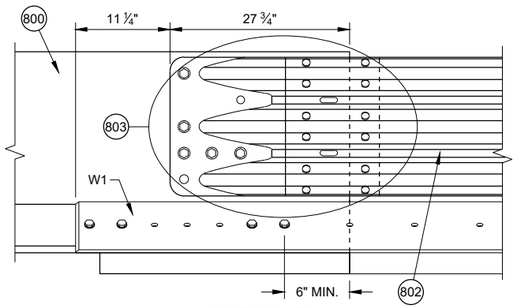
SDD 14B07-16g



DETAIL D



DETAIL E



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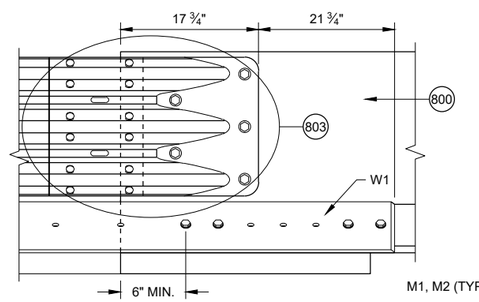
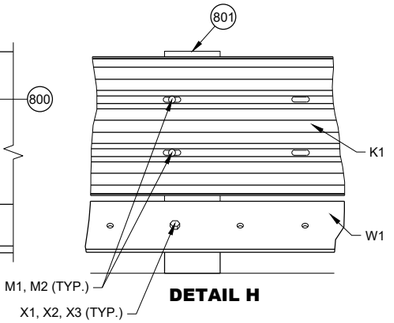
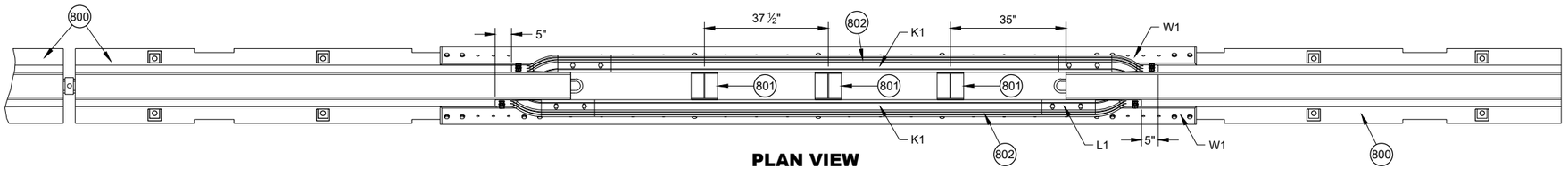


DETAIL G



DETAIL H



PLAN VIEW

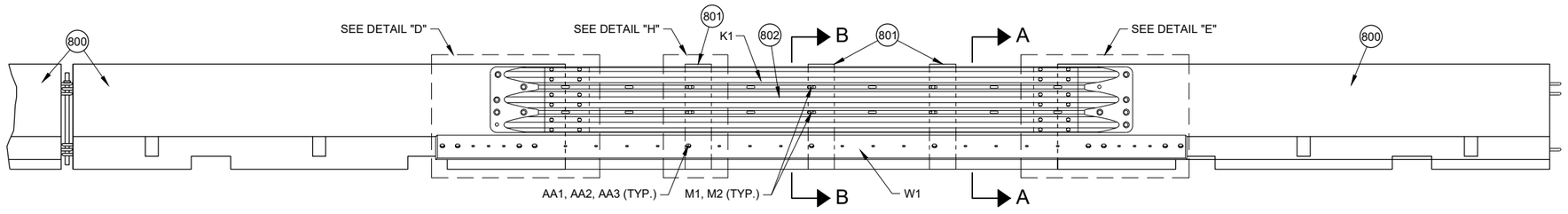
GENERAL NOTES

(800) FREE STANDING TEMPORARY BARRIER

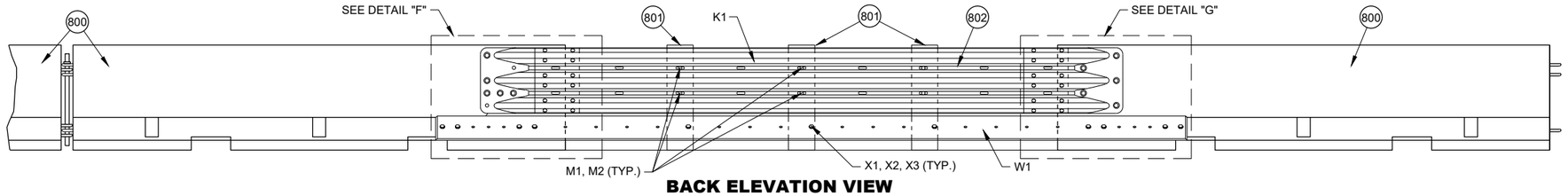
(801) GAP STIFFENER ASSEMBLY

(802) THRIE BEAMS ARE NESTED ON BOTH SIDES OF THE TEMPORARY BARRIER.

(803) SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL



FRONT ELEVATION VIEW



BACK ELEVATION VIEW

PORTABLE CONCRETE BARRIER GAP THRIE BEAM COVER

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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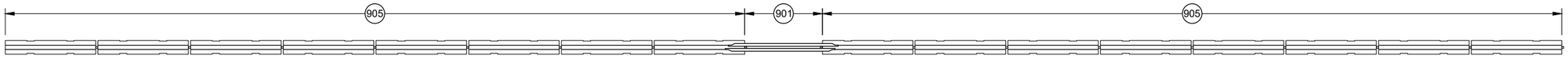
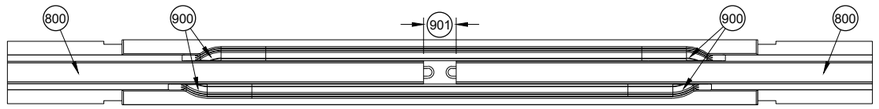
SDD 14B07-16h



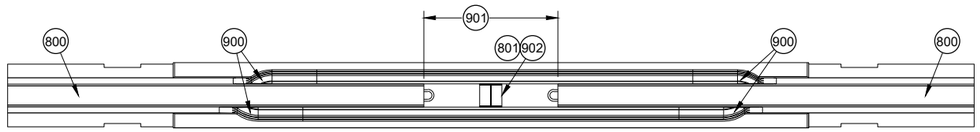
PLAN VIEW
GAP WITHIN SPACING



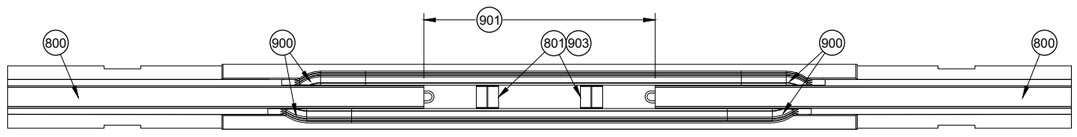
PLAN VIEW
TEMPORARY BARRIER GAP OVER 4" TO 1' MAX. (904)

GENERAL NOTES

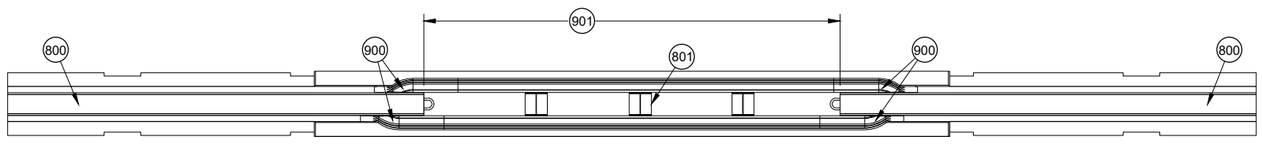
(900) SEE OTHER DETAILS FOR TEMPORARY GAP HARDWARE (TYP.)
(901) TEMPORARY BARRIER GAP
(902) GAP STIFFENER ASSEMBLY CENTERED IN THE GAP.
(903) GAP STIFFENER ASSEMBLY IS OFFSET 18 ¾" FROM CENTER
(904) MINIMUM NUMBER OF GAP STIFFENERS SHOWN FOR THE GAP RANGE SHOWN.
(905) MINIMUM OF 8 CONTINUOUS FREE STANDING TEMPORARY BARRIERS



PLAN VIEW
TEMPORARY BARRIER GAP OVER 1' TO 4' MAX. (904)



PLAN VIEW
TEMPORARY BARRIER GAP OVER 4' TO 7' MAX. (904)

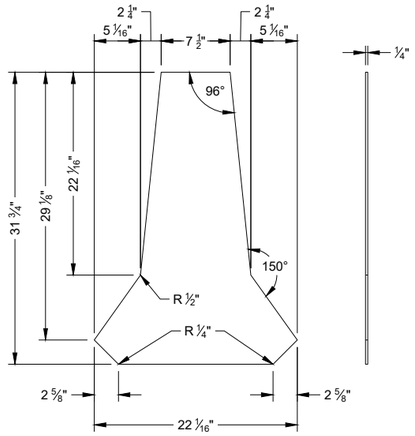


PLAN VIEW
TEMPORARY BARRIER GAP OVER 7' TO 12.5' MAX. (904)

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

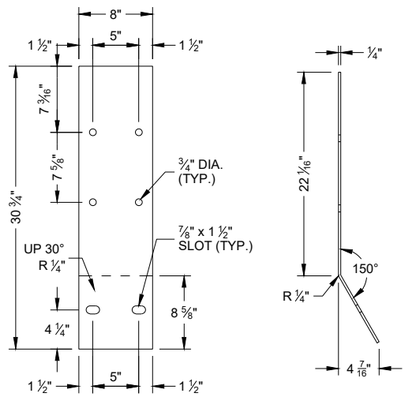
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
6
SDD 14B07-16i



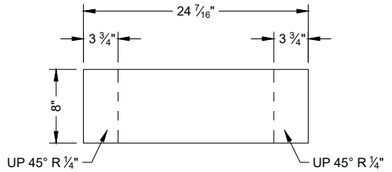
PROFILE VIEW SIDE VIEW

STIFFENER ASSEMBLY CENTER PANEL U1

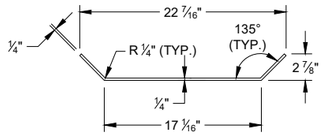


FLAT PATTERN SIDE VIEW

STIFFENER ASSEMBLY SIDE PANEL U2

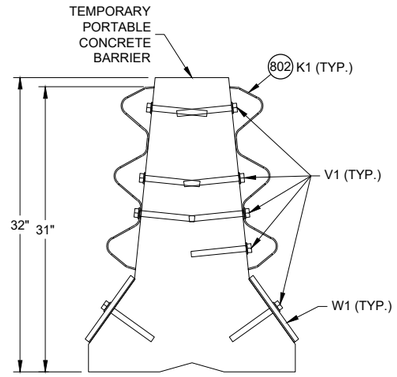


FLAT PATTERN

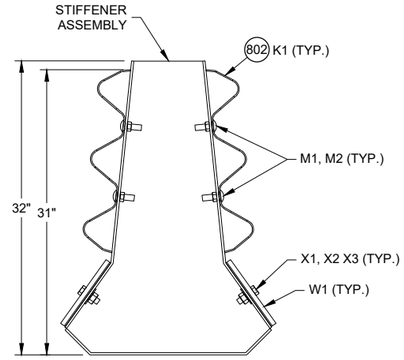


PROFILE VIEW

STIFFENER ASSEMBLY BOTTOM PANEL U3

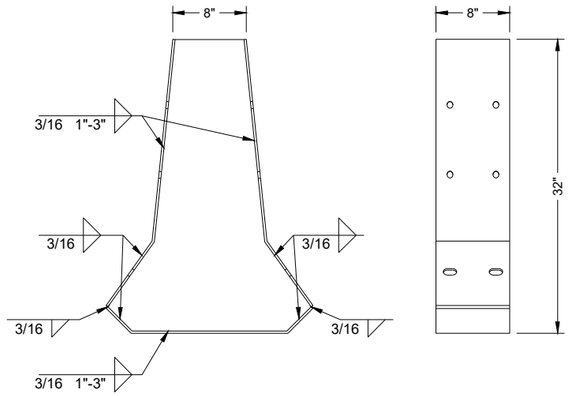


SECTION A - A



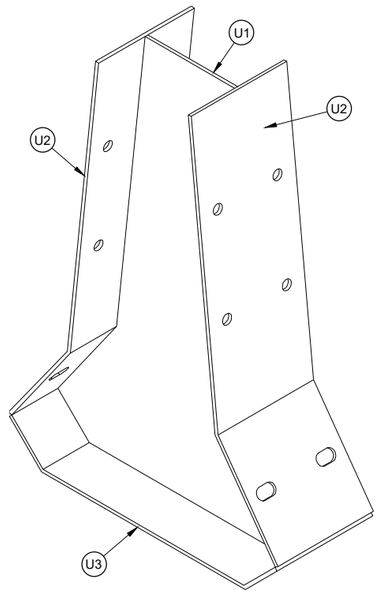
SECTION B - B

PLAN VIEW



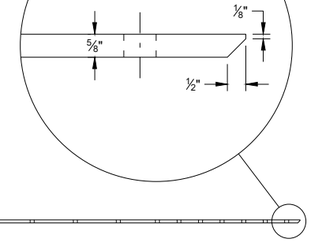
PROFILE VIEW

SIDE VIEW

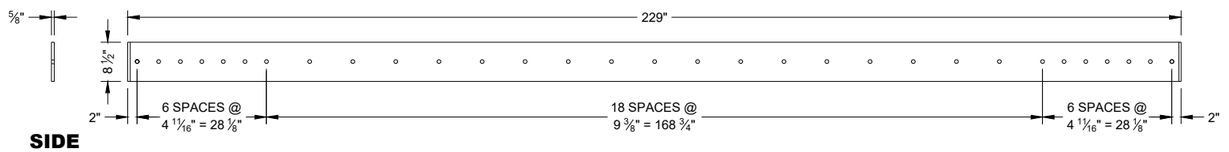


ISOMETRIC

GAP STIFFENER ASSEMBLY



PLAN VIEW



SIDE VIEW

ELEVATION VIEW

W1 TOE PLATE

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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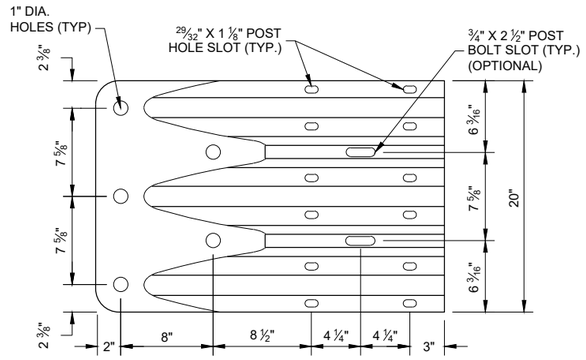
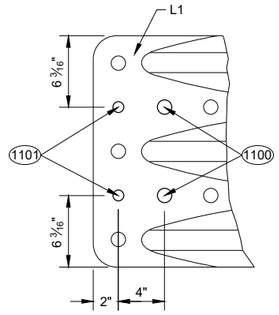
SDD 14B07-16j



ELEVATION VIEW

THRIE BEAM TERMINAL CONNECTOR



ELEVATION VIEW

ADDITIONAL THRIE BEAM (1102) TERMINAL CONNECTOR HOLE DETAIL

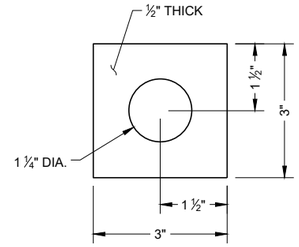


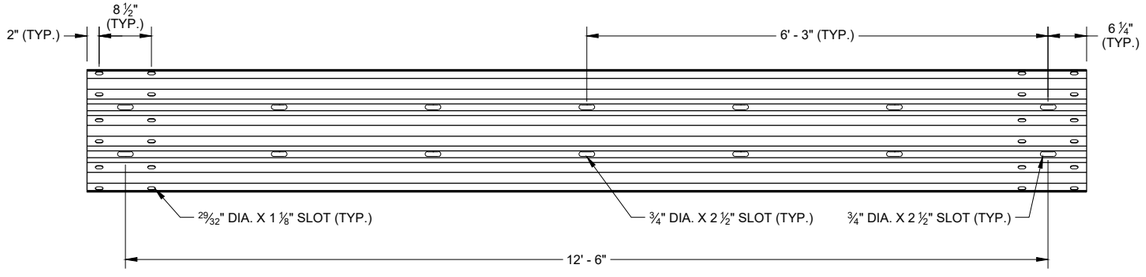
PLATE WASHER DETAIL G2, H3

GENERAL NOTES

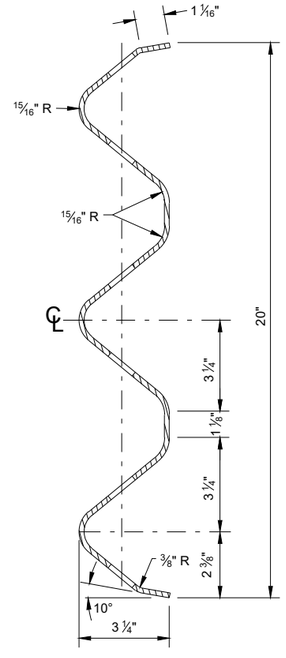
(1100) 1" DIA. HOLE

(1101) 3/4" DIA. HOLE

(1102) PROVIDE HOLES IN THRIE BEAM TERMINAL CONNECTOR TO LIMIT STEEL REINFORCEMENT OR LOOP BAR CONFLICT. CONTRACTOR MAY FIELD DRILL ADDITIONAL HOLE OR PROVIDE THRIE BEAM TERMINAL CONNECTOR WITH ADDITIONAL HOLES FROM SUPPLIER.



SLOTTED THRIE BEAM RAIL K1



SECTION THROUGH BEAM K1

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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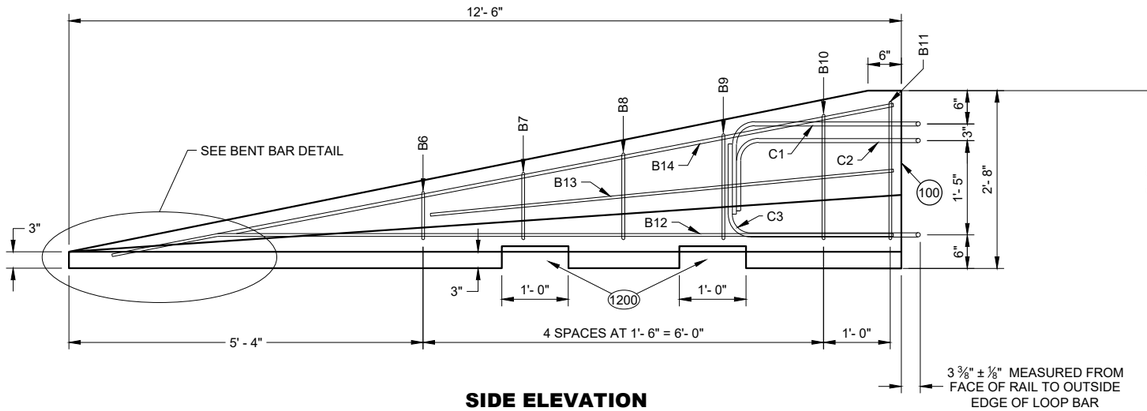
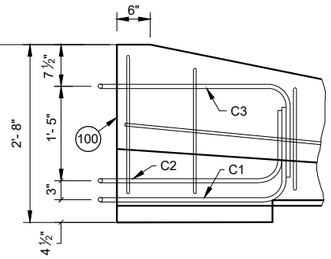
SDD 14B07-16k



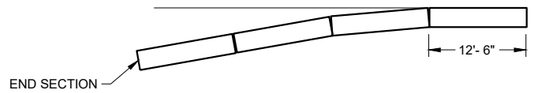
SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED FOR OPPOSITE END
(FOR CONNECTION TO RIGHT END OF BARRIER)

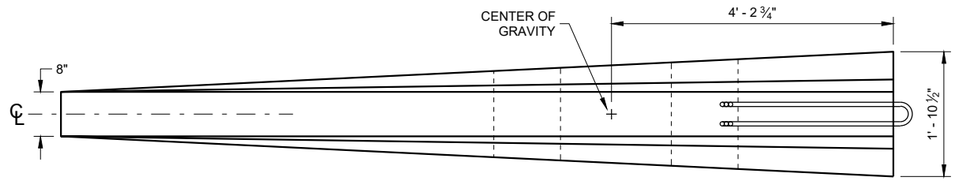
GENERAL NOTES

(1200) SEE LIFTING SLOT DETAIL. LOCATION OF LIFTING SLOTS DETERMINED BY CONTRACTOR.

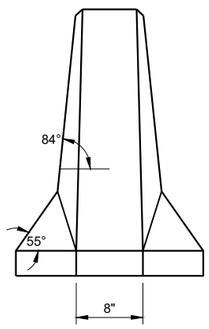


FLARE AT BARRIER END

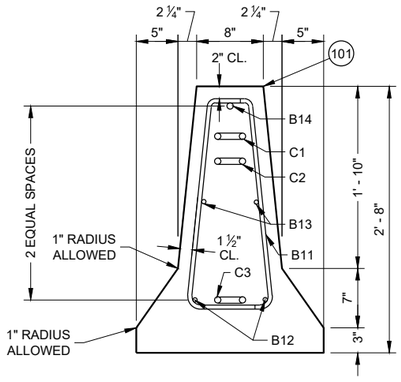
POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1



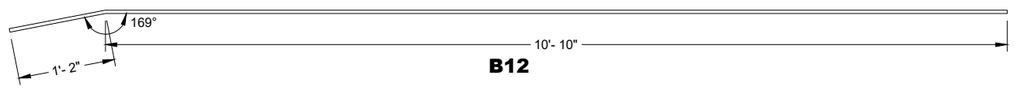
PLAN VIEW



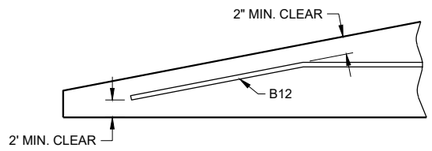
FRONT ELEVATION



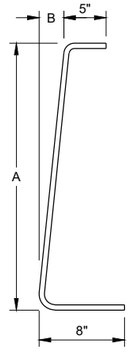
END SECTION



B12



BENT BAR DETAIL



BAR	A	B
B6	10"	1"
B7	1'- 1"	1 ¼"
B8	1'- 5"	1 ⅝"
B9	1'- 8"	1 ⅞"
B10	2'- 0 ½"	2 ⅜"
B11	2'- 3"	2 ¾"

B BARS
2 OF EACH SIZE REQUIRED FOR STIRRUP ASSEMBLY

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B07-16I

BILL OF MATERIALS - CONCRETE BARRIER PRECAST

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	PRECAST TEMPORARY BARRIER - CONCRETE	MIN. = f'c 5000 PSI	
B1	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 12'-2"
B2	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 12'-2"
B3	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 12'-2"
B4	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 6'-0"
B5	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#6 REBAR, LENGTH 2'-11"
B6	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 1'-11"
B7	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-2"
B8	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-6"
B9	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-9"
B10	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 3'-2"
B11	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 3'-4"
B12	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 12'-0"
B13	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 7'-9"
B14	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 11'-9"
C1	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
C2	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
C3	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
D1	CONNECTION PIN - ROD	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	1 ¼" DIA.
D2	CONNECTION PIN - TOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
G1	BOLT THROUGH ANCHOR - THREADED ROD	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A OR SAE J429 GRADE 2 UNC	1 ⅛" DIA.
G2	BOLT THROUGH ANCHOR - WASHER, SQUARE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
G3	BOLT THROUGH ANCHOR - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
H1	ADHESIVE ANCHOR - ADHESIVE	ICC-ES-AC308 5 ¼" EMBEDMENT WITH A MIN. BOND STRENGTH OF 1,650 PSI. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
H2	ADHESIVE ANCHOR - THREADED ROD	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A / SAE J429 GRADE 2 UNC	1 ⅛" DIA.
H3	ADHESIVE ANCHOR - WASHER, SQUARE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
H4	ADHESIVE ANCHOR - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
J1	ASPHALT ANCHOR PIN - ROD	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	1 ½" DIA.
J2	ASPHALT ANCHOR PIN - STOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
K1	THRIE BEAM RAIL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER	12 GAUGE
L1	THRIE BEAM RAIL - TERMINAL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER	12 GAUGE

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
M1	SPLICE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	⅝" DIA.
M2	SPLICE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
N1	THRIE BEAM RAIL TERMINAL - MECHANICAL ANCHOR	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	¾" DIA. LENGTH 6"
N2	THRIE BEAM RAIL TERMINAL - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
N3	THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
P1	THRIE BEAM RAIL CONNECTION 1-BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	¾" DIA.
P2	THRIE BEAM RAIL CONNECTION 1-WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
P3	THRIE BEAM RAIL CONNETION 1- MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
Q1	BLOCK WOOD	SEE STANDARD SPEC. 614	
R1	CAP - BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	⅝" DIA.
R2	CAP- BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
R3	CAP - BOLT - MECHANICAL ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	12 GAUGE
S1	CAP 42-INCH TOP PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S2	CAP 42-INCH END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S3	CAP 42-INCH SIDE PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S4	CAP 42-INCH GUSSET 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S5	CAP 42-INCH GUSSET 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S6	CAP 42-INCH GUSSET 3	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S7	CAP 42-INCH GUSSET 4	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B07-16m

BILL OF MATERIALS - CONCRETE BARRIER PRECAST

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
T1	CAP 56-INCH TOP PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T2	CAP 56-INCH END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T3	CAP 56-INCH SIDE PLATE 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T4	CAP 56-INCH SIDE PLATE 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T5	CAP 56-INCH GUSSET 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T6	CAP 56-INCH GUSSET 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T7	CAP 56-INCH GUSSET 3	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T8	CAP 42-INCH GUSSET 4	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T9	CAP 42-INCH GUSSET 5	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T10	CAP 42-INCH GUSSET 6	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T11	CAP 42-INCH GUSSET 7	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T12	CAP 42-INCH GUSSET 8	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T13	CAP 42-INCH GUSSET 9	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T14	CAP 42-INCH GUSSET 10	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T15	CAP 42-INCH GUSSET 11	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T16	CAP 42-INCH GUSSET 12	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
U1	GAP STIFFENER	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
U2	GAP STIFFENER - CONNECTOR PLATE 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
U3	GAP STIFFENER - CONNECTOR PLATE 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
V1	THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 24.0 KIPS AND ULTIMATE SHEAR LOAD 21.5 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	¾" DIA.
V2	GAP STIFFENER - BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C O R MECHANICAL GALVANIZE TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
W1	TOE PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
X1	TOE PLATE - CONNECTION BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC HEAVY HEX HEAD OR AASTHO M180 HEAD, ASTM F3125 GRADE A325 TYPE 1 HEAVY HEX HEAD OR SAE J429 GRADE 5 HEAVY HEX HEAD / ASTM A449 TYPE 1 HEAVY HEX HEAD. BOLTS MAY BE FULLY THREADED. PROVIDE ENOUGH THREADING FOR PROPER TIGHTENING OF BOLT.	¾" DIA.
X2	TOE PLATE - CONNECTION BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1 (HARDEN WASHER ONLY)	
X3	TOE PLATE - CONNECTION BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	

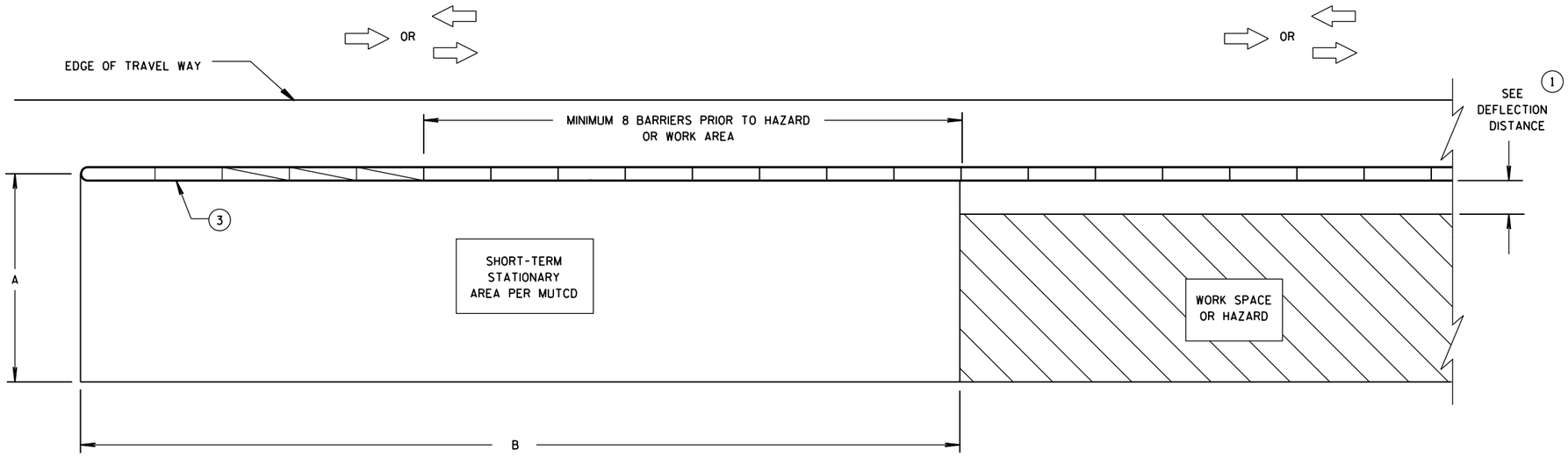
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER
FHWA

6

SDD 14B07-16n



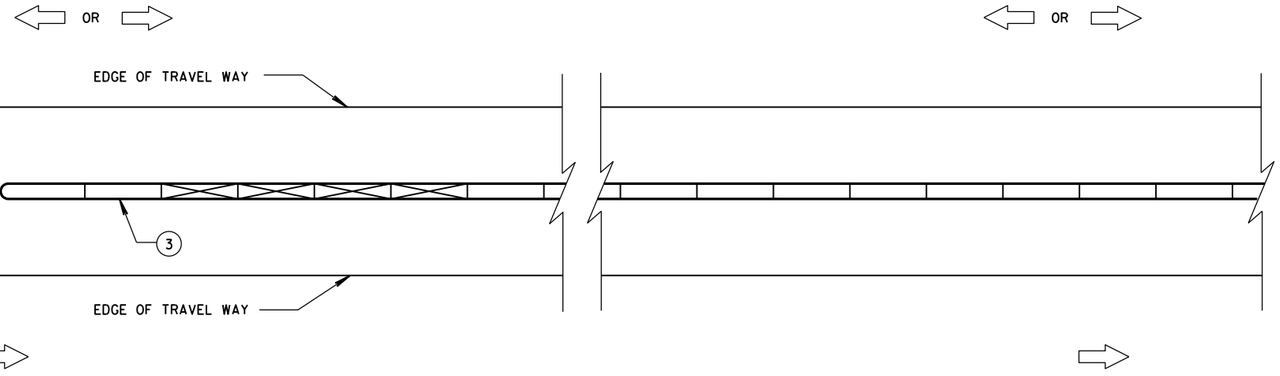
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

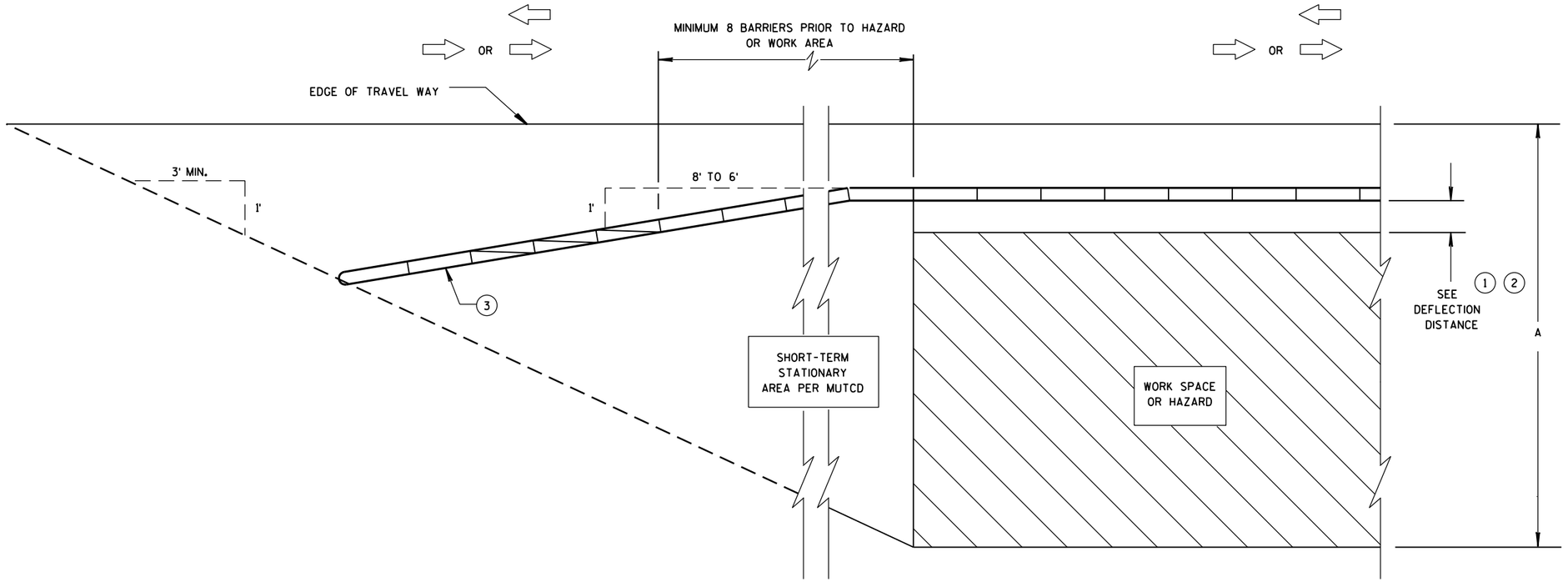
(3) ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

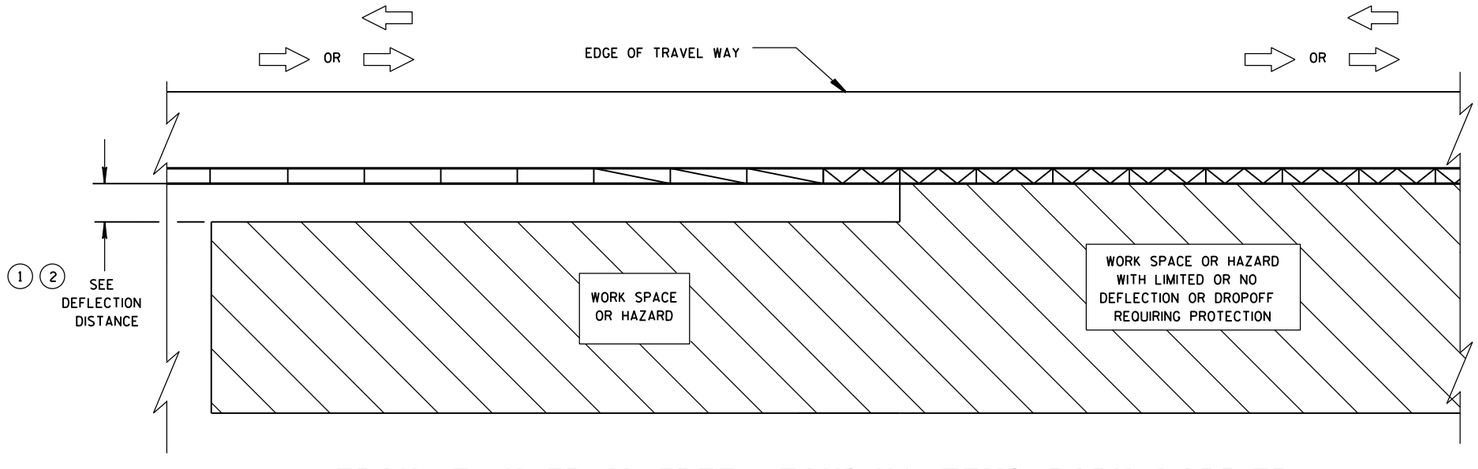
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 8-2a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

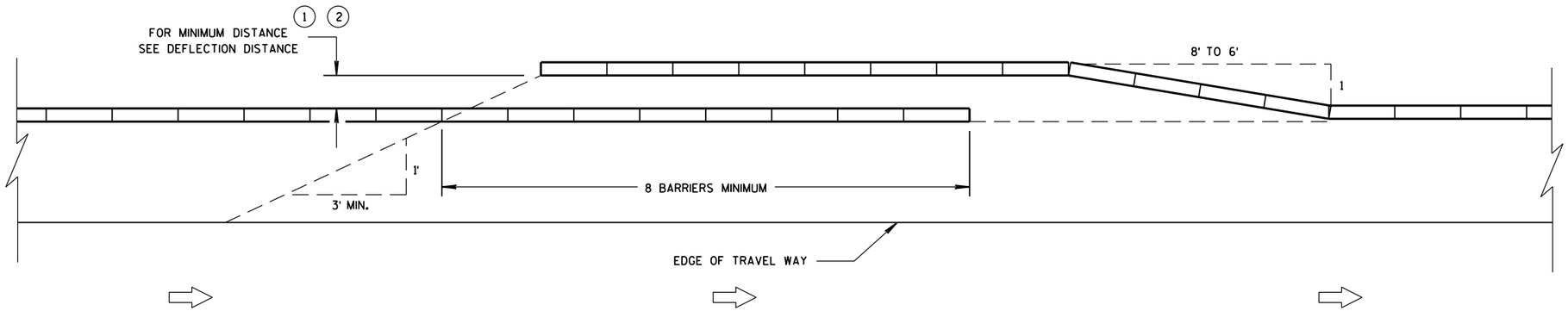
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

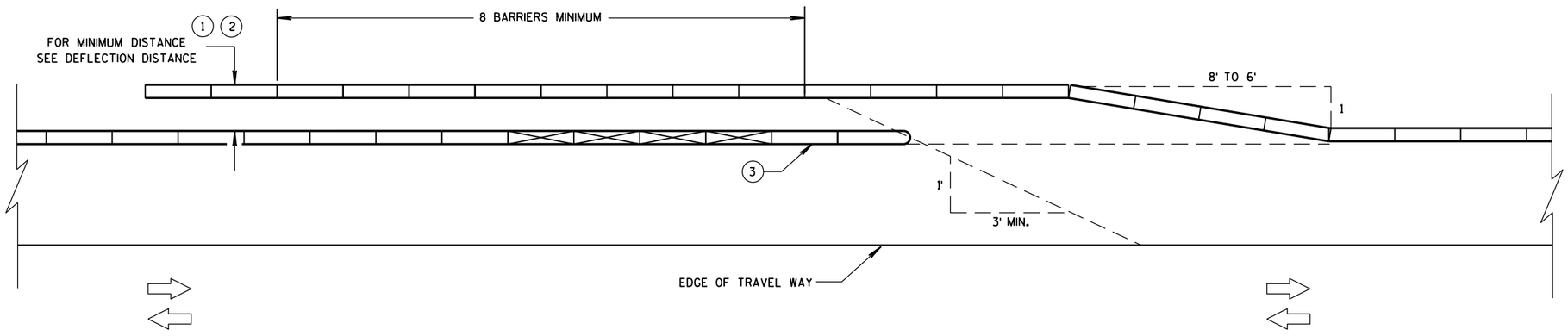
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

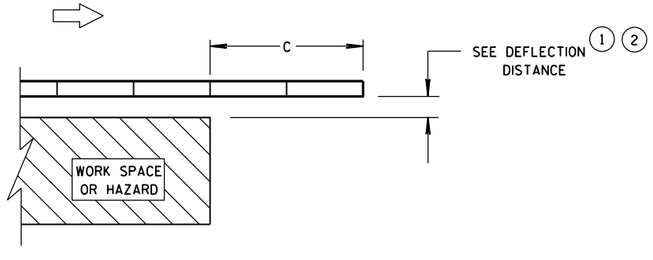
S.D.D. 14 B 8-2b



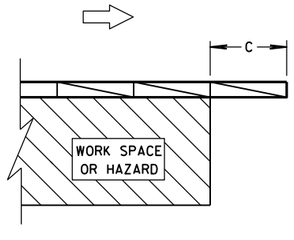
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

LEGEND

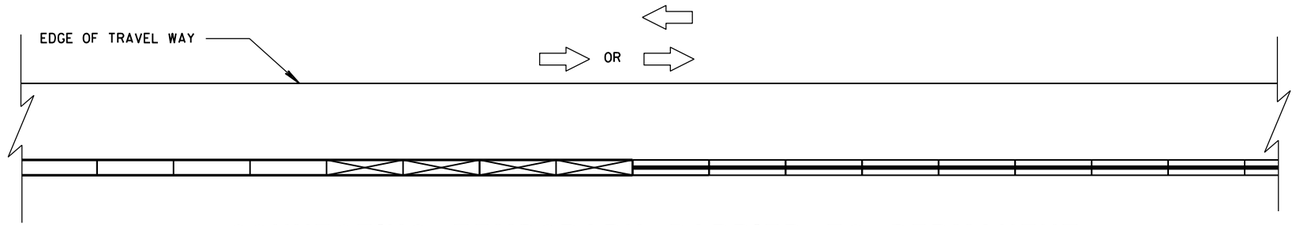
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

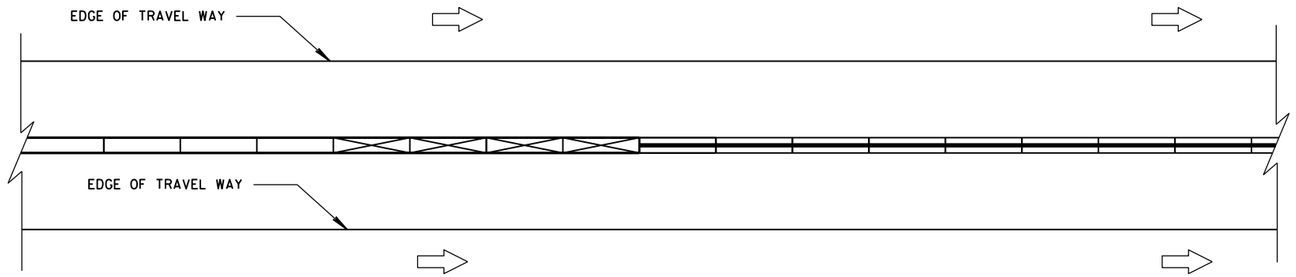
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 8-2c



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR
SAND BARREL ARRAY

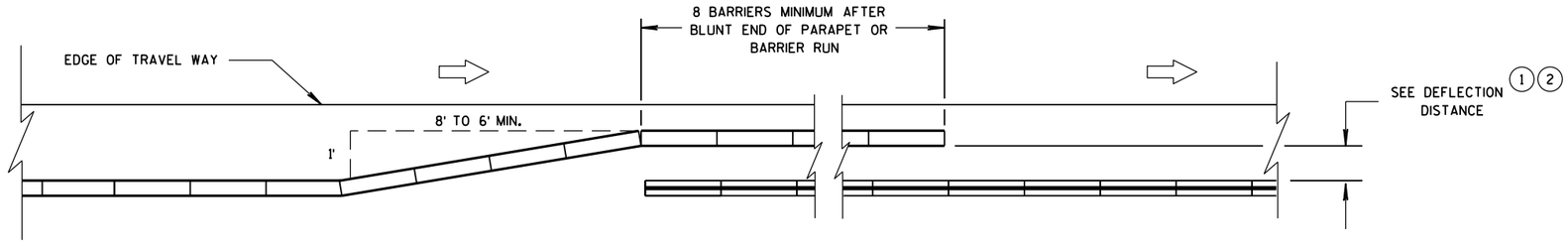
SEE FREE STANDING TRANSITION
TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION
TO TIED-DOWN SYSTEM DETAILS

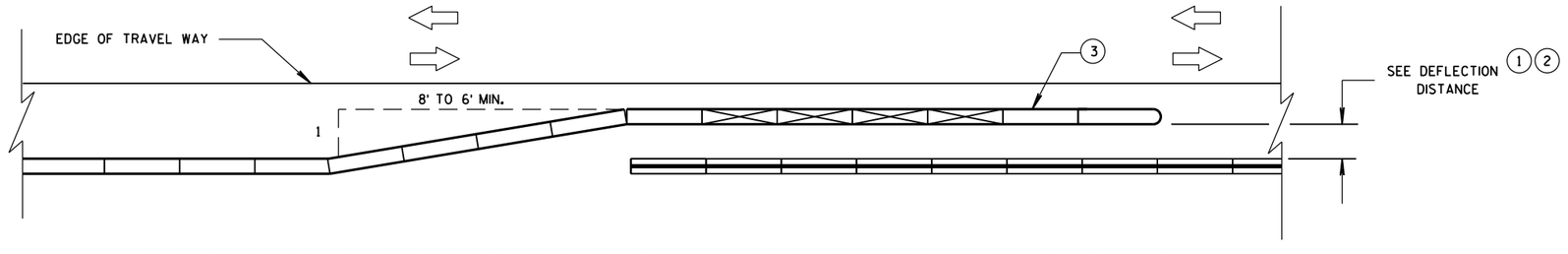
3 PINS PLACED ON
TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER
OR CONCRETE PARAPET

FREE STANDING TEMPORARY
BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 8-2d

6

S.D.D. 14 B 8-2d

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

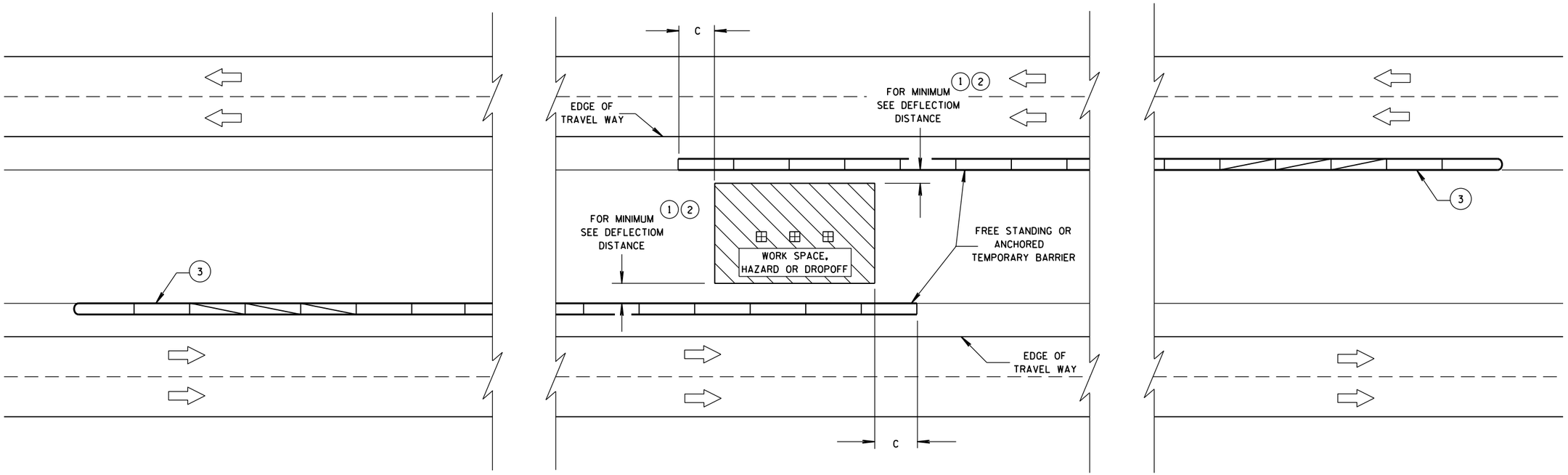
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



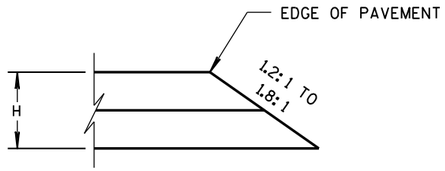
CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINNER
FHWA

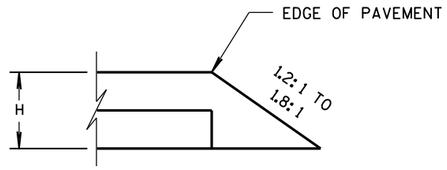
6

S.D.D. 14 B 8-2e



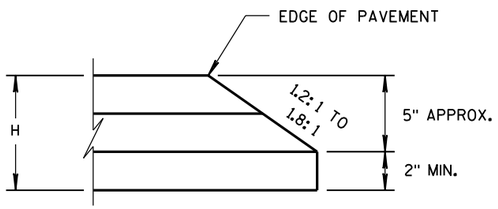
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



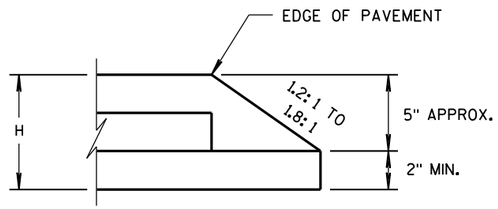
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

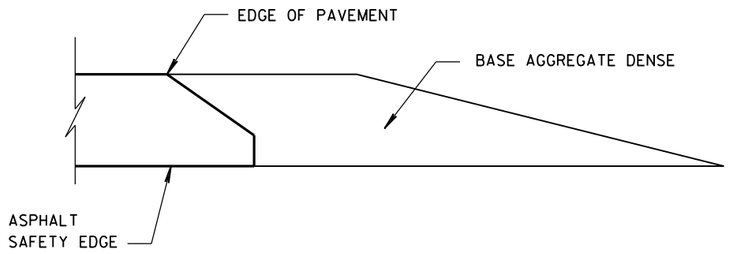
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

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S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

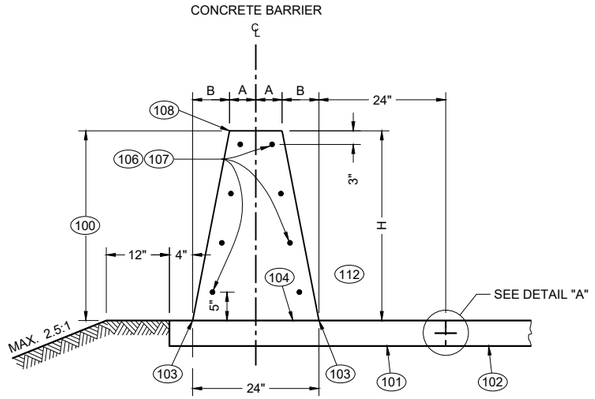
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

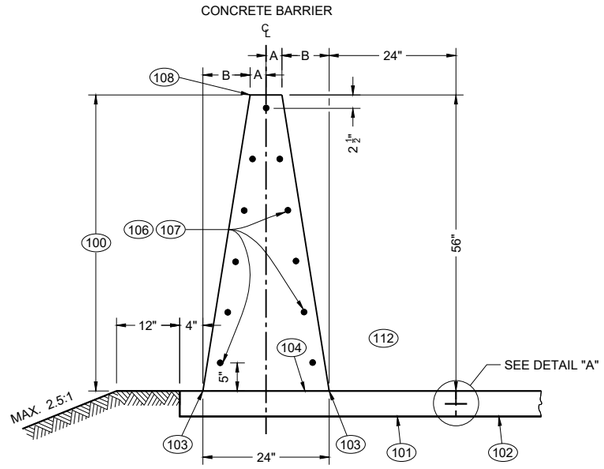
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



32 - INCH, 36 - INCH OR 42 - INCH SINGLE SLOPE CONCRETE BARRIER

(TYPE S32, TYPE S36, TYPE S42)

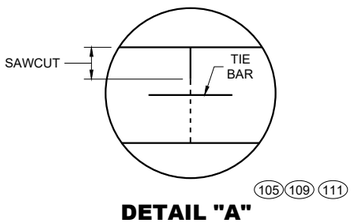


56 - INCH SINGLE SLOPE CONCRETE BARRIER

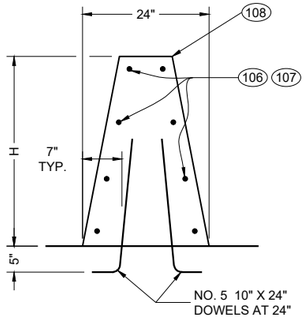
(TYPE S56)

TABLE "A"

BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
32	7	5	8
36	6 ¼	5 ¾	8
42	5 ¼	6 ¾	10
56	3	9	11

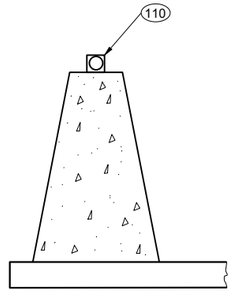


DETAIL "A"



SINGLE SLOPE CONCRETE BARRIER ON BRIDGE

(NON OUTER PARAPET APPLICATION)



DELINEATION

GENERAL NOTES

WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.

LOCATE EXPANSION JOINTS IN CONCRETE BARRIER SHALL AT ALL DECK AND PRINCIPAL WALL JOINTS. FILL EXPANSION JOINT WITH EXPANSION JOINT MATERIAL. SEAL THE EXPANSION JOINT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.

2" CLEAR COVER TYPICAL

ANCHORS ARE REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHOR MAY BE AS SHOWN IN THIS SDD OR DETAIL SHOWN ON SDD 14B33. ANCHORS INCIDENTAL TO CBSS.

PROVIDE A 1" DEEP CONTRACTION JOINT IN BARRIER PAD AND BARRIER. JOINT IS TO MATCH ADJACENT CONCRETE JOINTS. NO DOWEL BARS ARE REQUIRED FOR BARRIER PAD. IF ADJACENT TO ASPHALT, CONTRACTION JOINT IS REQUIRED EVERY 15'.

ALL REBAR SHALL BE EPOXY COATED M31 TYPE S. SEE STANDARD SPECIFICATION 505.

CONCRETE BARRIER, UPPER CONCRETE BARRIER, LOWER CONCRETE BARRIER, CONCRETE BARRIER PAD, AND FOOTINGS ARE TERMS USED TO DESCRIBE PARTS OF SINGLE SLOPE CONCRETE BARRIER BID ITEMS. THESE PARTS ARE INCIDENTAL TO THE SINGLE SLOPE CONCRETE BARRIER BID ITEMS.

(100) CONCRETE BARRIER

(101) CONCRETE BARRIER PAD

(102) PAVEMENT

(103) WHERE VERTICAL ROADWAY OFFSET IS GREATER THAN 1 ½", USE TYPE A SINGLE SLOPE BARRIER.

(104) OPTIONAL CONSTRUCTION JOINT.

(105) CONSTRUCTION JOINTS MAY BE ELIMINATED WHEN CONCRETE SHOULDER IS LESS THAT 10'.

(106) STAGGER LAPPING OF LONGITUDINAL STEEL. MINIMUM OVERLAP OF STEEL IS 2' BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.

(107) NO. 5 CONTINUOUS BARS EVENLY SPACED (SEE TABLE "A").

(108) USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

(109) CONCRETE BARRIER PAD UNDER CBSS MAY BE PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED ⅓ DEPTH. CONCRETE BARRIER PAD AND SAWING OF CONCRETE SHOULDER IS INCIDENTAL TO CONCRETE BARRIER BID ITEM. CONCRETE BARRIER PAD MINIMUM DEPTH IS 6", OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.

(110) SEE SDD 15A04 FOR DELINEATOR DETAILS AND SPACING.

(111) SEE SDD 13C01 FOR DETAILS TYPING CONCRETE BARRIER TO ADJACENT CONCRETE

(112) TRAFFIC SIDE

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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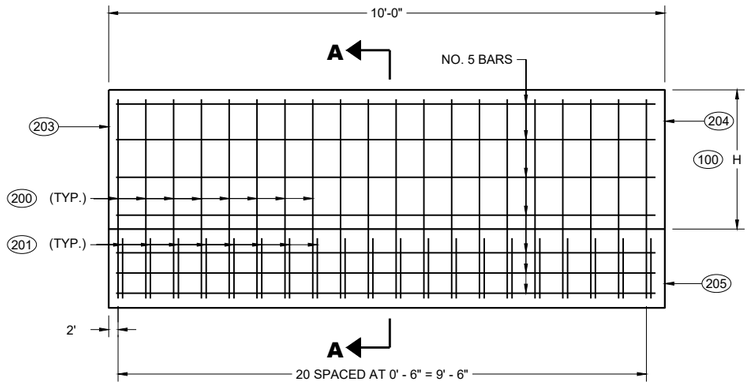
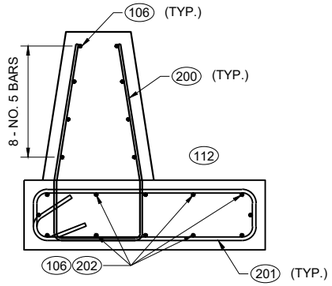
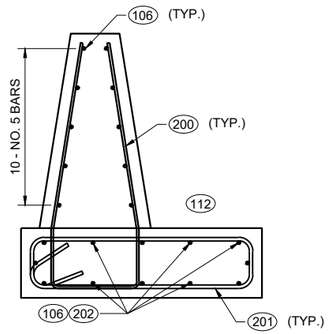
SDD 14B32-11a



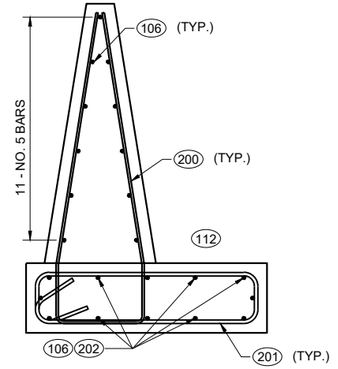
END ANCHOR SINGLE
SLOPE CONCRETE BARRIER



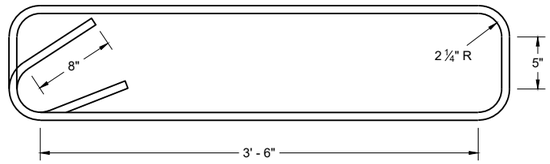
32" AND 36" CBSS



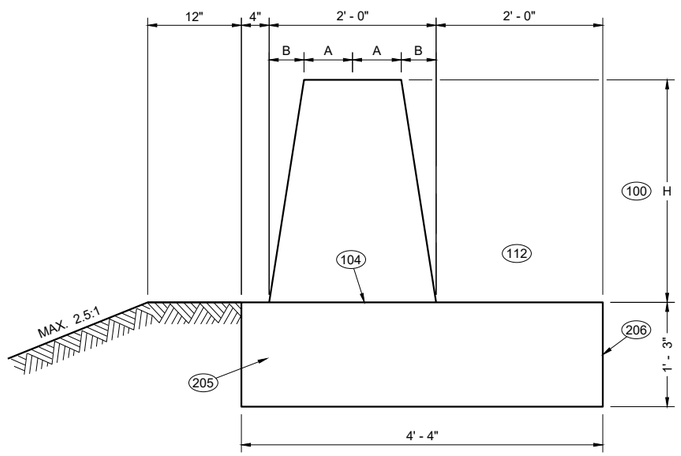
42" CBSS



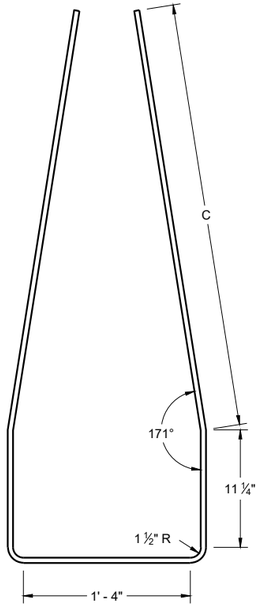
56" CBSS



STIRRUP BAR
BENDING DETAIL



SECTION A - A



V1 BAR
BENDING DETAIL

TABLE "B"

BARRIER HEIGHT H INCHES	C INCHES
32	2' - 6"
36	2' - 11"
42	3' - 4"
56	4' - 6 ½"

GENERAL NOTES

(200) V1 BARS ARE NO. 5 BARS. (SEE BAR BENDING DETAIL)

(201) STIRRUPS ARE NO. 6 BARS. (SEE BAR BENDING DETAIL)

(202) TWELVE (12) NO. 5 BARS EVENLY SPACED

(203) END OF INSTALLATION OR EXPANSION JOINT.

(204) SEE COLD JOINT DETAIL TO CONNECT END ANCHOR SINGLE SLOPE CONCRETE BARRIER TO SINGLE SLOPE CONCRETE BARRIER.

(205) FOOTING

(206) DO NOT TIE TO FOOTING TO ADJACENT PAVEMENT.

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SDD 14B32-11b

CONCRETE BARRIER
SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B32-11b

GENERAL NOTES

(400) END ANCHOR SINGLE SLOPE CONCRETE BARRIER.

(401) PARAPET, SIGN BRIDGE BASE, LIGHT POLE BASE OR OTHER OBJECT SINGLE SLOPE CONCRETE BARRIER CANNOT TIE INTO.

(402) JOINT SEAL CONFORMING TO STANDARD SPECIFICATION 415.2.6

(403) EXPANSION JOINT MATERIAL.

(404) INLET (SEE PLAN)

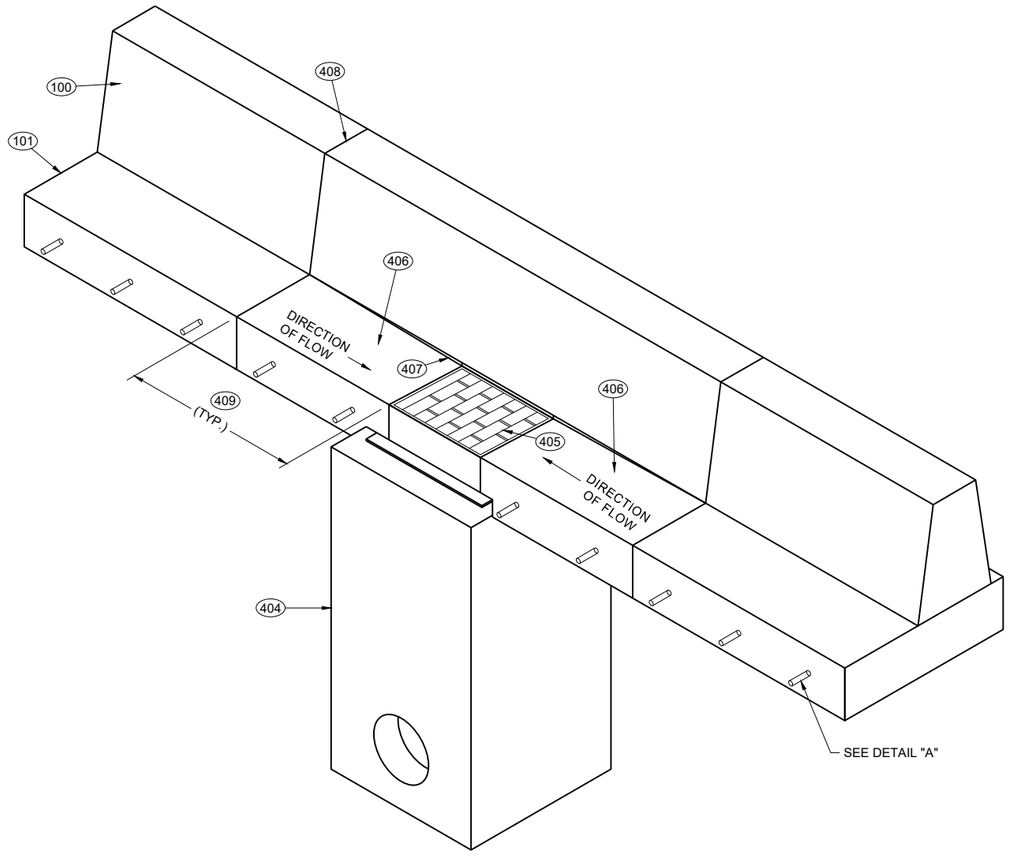
(405) INLET COVER BW (SEE PLAN)

(406) WARP PAN TO MATCH INLET COVER.

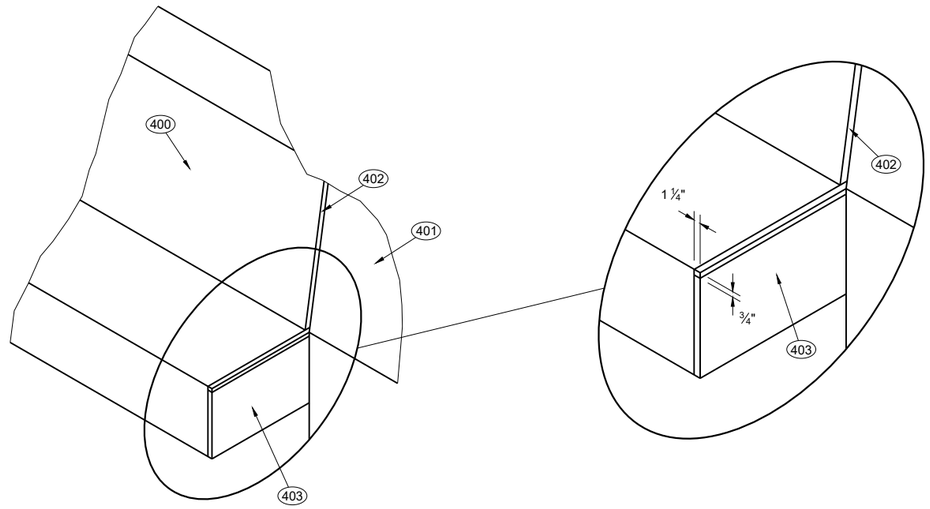
(407) EXTEND BARRIER SLOPE TO INLET. SEE PLAN FOR THE LENGTH OF EXTENSION.

(408) CONTRACTION JOINT.

(409) WHEN ADJACENT TO CONCRETE PAVEMENT OR SHOULDER, JOINT SHOULD MATCH CONCRETE JOINTS. OTHERWISE, 3' (TYP.). SEE SDD 13C18 FOR MORE INFORMATION.



DRAINAGE DETAIL



EXPANSION JOINT DETAIL

6

SDD 14B32-11d

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B32-11d

GENERAL NOTES

USE COLD JOINT TO CONNECT MULTIPLE HEIGHT TRANSITIONS.

(500) SEE TABLE "A" FOR DIMENSIONS

(501) SEE TABLE "D"

(502) MULTIPLE HEIGHT TRANSITION MAY BE USED IN SEQUENCE TO GET APPROPRIATE HEIGHT.

(503) COLD JOINT

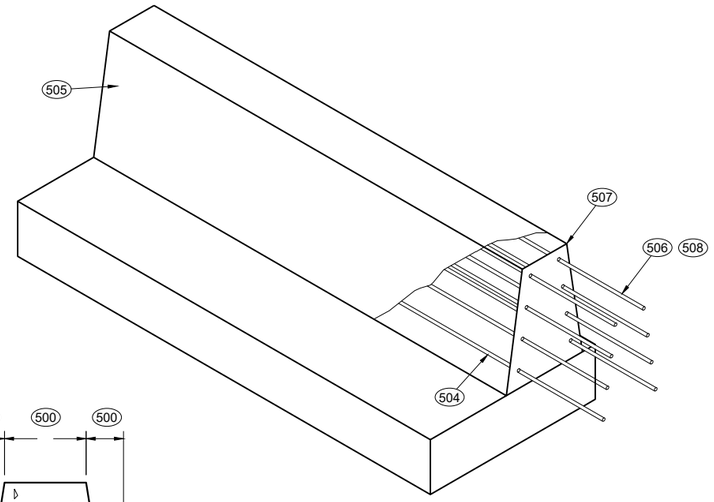
(504) BARRIER REBAR (SEE OTHER DETAILS FOR BAR SIZE, QUANTITY AND LOCATION). SINGLE SLOPE BARRIER SHOWN. SIMILAR DETAIL CAN BE USED FOR COLD JOINT IN

(505) END ANCHORS AND TRANSITIONS.

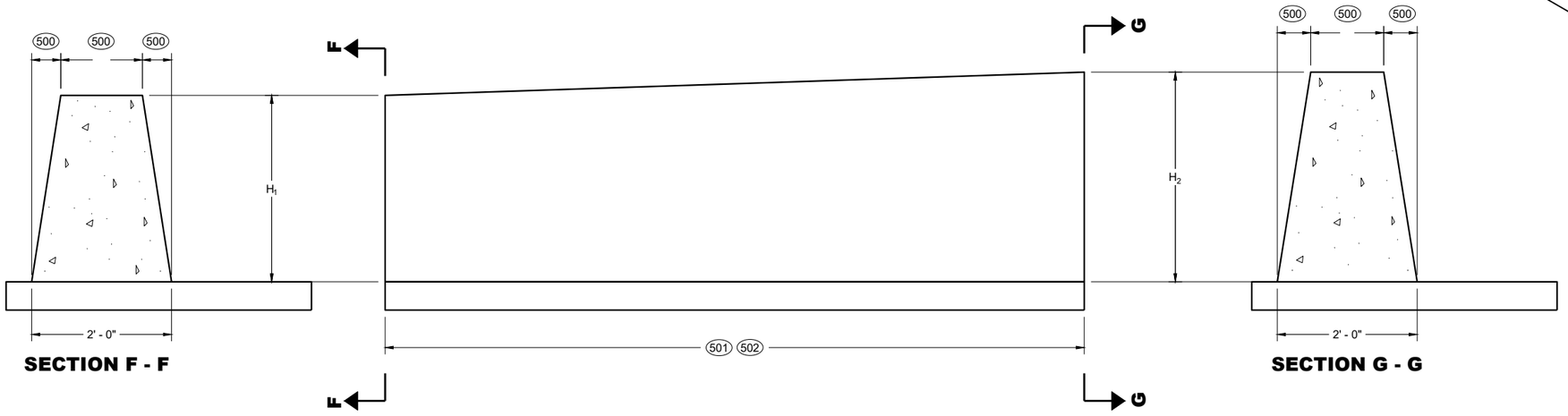
(506) NO. 5 REBAR FOR SPLICE. 3' OF SPLICE REBAR IS LAPPED AND TIED TO BARRIER REBAR. EXTEND 3' OF SPLICE REBAR BEYOND END OF POUR. ALL BARS ARE FIRMLY TIED OR CONNECTED. EVERY REBAR IN THE BARRIER SECTION REQUIRES A SPLICE BAR.

(507) END OF POUR.

(508) LAP AND TIE 3' OF NEXT POUR'S REBAR TO SPLICE REBAR.



COLD JOINT DETAIL



SECTION F - F

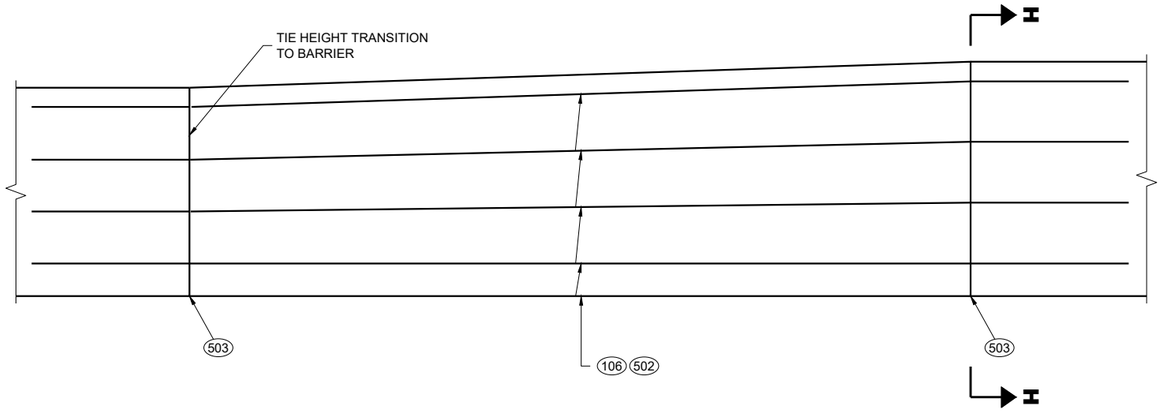
SECTION G - G

DOUBLE COLD JOINT HEIGHT TRANSITION

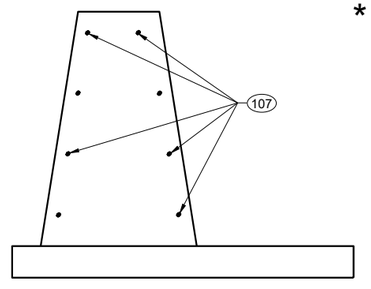
TABLE "D"

H_1	H_2	L *	NUMBER OF NO. 5 BARS
32"	36"	10' - 0"	8
36"	42"	10' - 6"	10
42"	56"	24' - 6"	11

* LENGTH OF DOUBLE COLD JOINT INCLUDED IN THE TOTAL LENGTH OF CBSS.



STEEL REINFORCEMENT DETAIL

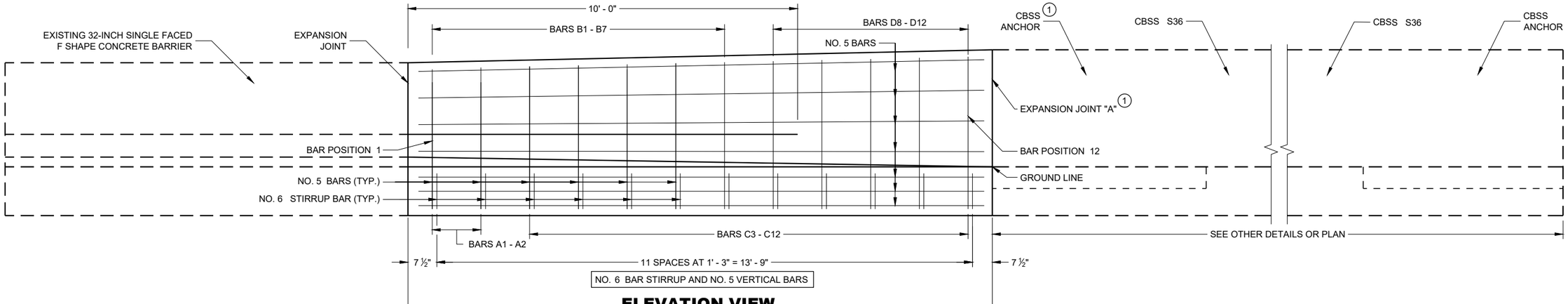


SECTION H - H

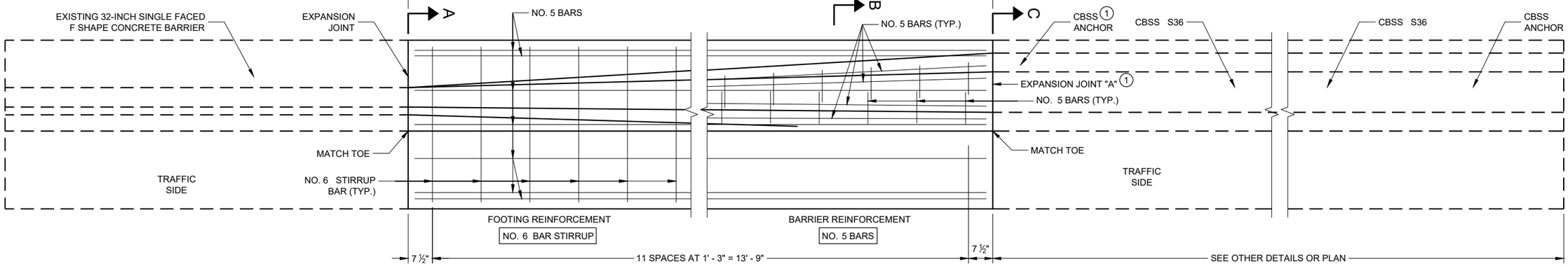
CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

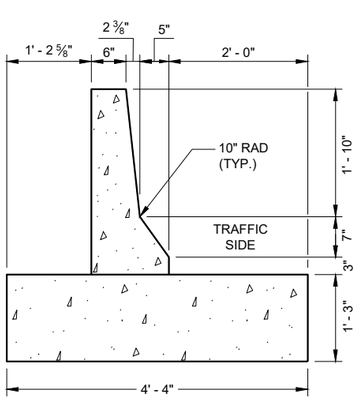
6
SDD 14B32-11e



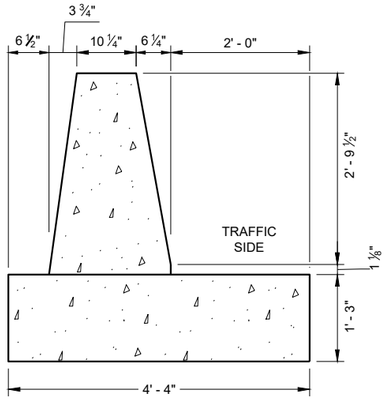
ELEVATION VIEW



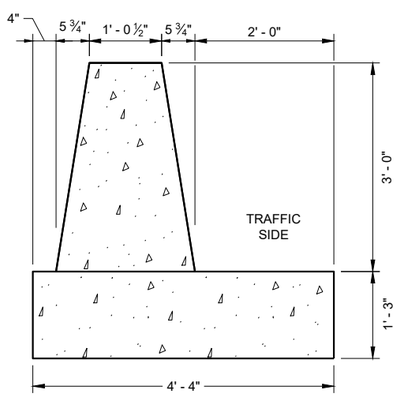
PLAN VIEW



SECTION A - A



SECTION B - B



SECTION C - C

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

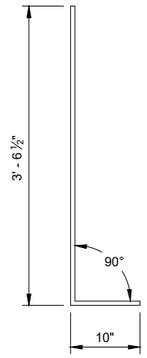
(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD JOINT IS USED, ANCHOR IS NOT REQUIRED.

32 - INCH SINGLE FACED F SHAPE CONCRETE BARRER TO 36 - INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

SDD 14B36 - 02c

6

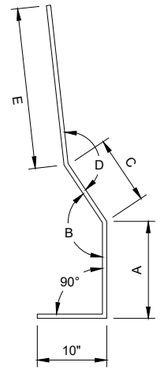
"A" BAR POSITIONS 1 - 2



"A" BAR
BENDING DETAIL

"B" BAR CHART
BAR POSITIONS
1 - 7

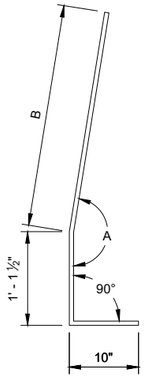
BAR	A	B	C	D	E
B1	1' - 2"	148°	10"	154°	1' - 8 ¼"
B2	1' - 2"	154°	9 ¾"	162°	1' - 8 ½"
B3	1' - 2"	154°	9 ¾"	163°	1' - 8 ¾"
B4	1' - 2"	157°	9 ¾"	165°	1' - 9"
B5	1' -1 ½"	161°	10"	169°	1' - 9 ¼"
B6	1' -1 ½"	163°	10"	172°	1' - 9 ½"
B7	1' -1 ½"	166°	10"	175°	1' - 10"



"B" BAR
BENDING DETAIL

"C" BAR CHART
BAR POSITIONS
3 - 12

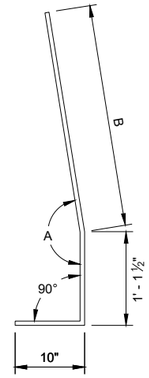
BAR	A	B
C3	177°	2' - 6"
C4	177°	2' - 6 ½"
C5	176°	2' - 6 ¾"
C6	176°	2' - 7"
C7	174°	2' - 7 ½"
C8	174°	2' - 7 ¾"
C9	173°	2' - 8 ½"
C10	173°	2' - 8 ½"
C11	173°	2' - 9"
C12	172°	2' - 9 ½"



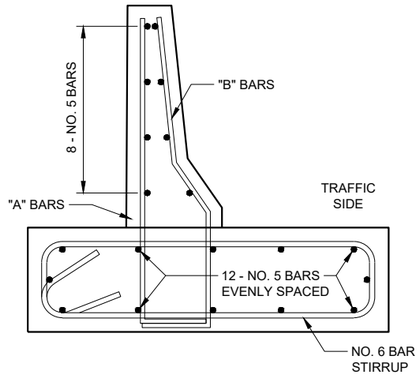
"C" BAR
BENDING DETAIL

"D" BAR CHART
BAR POSITIONS
8 - 12

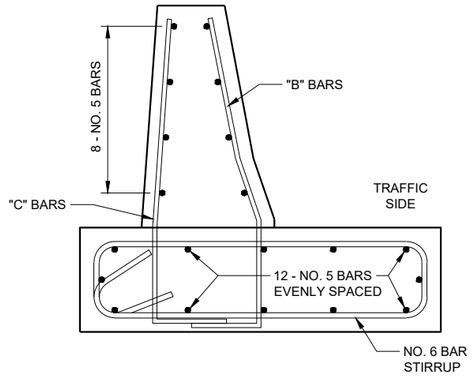
BAR	A	B
D8	170°	2' - 7 ¾"
D9	170°	2' - 8 ½"
D10	170°	2' - 8 ½"
D11	171°	2' - 9"
D12	171°	2' - 9 ½"



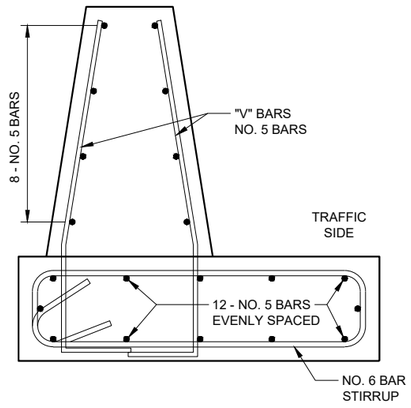
"D" BAR
BENDING DETAIL



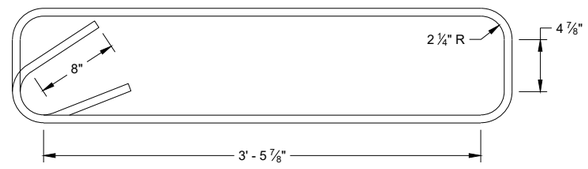
BAR DETAIL
BAR POSITIONS 1 - 2



BAR DETAIL
BAR POSITIONS 3 - 7



BAR DETAIL
BAR POSITIONS 8 - 12



STIRRUP BAR
BENDING DETAIL

32 - INCH SINGLE FACED F SHAPE CONCRETE BARRIER TO 36 - INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

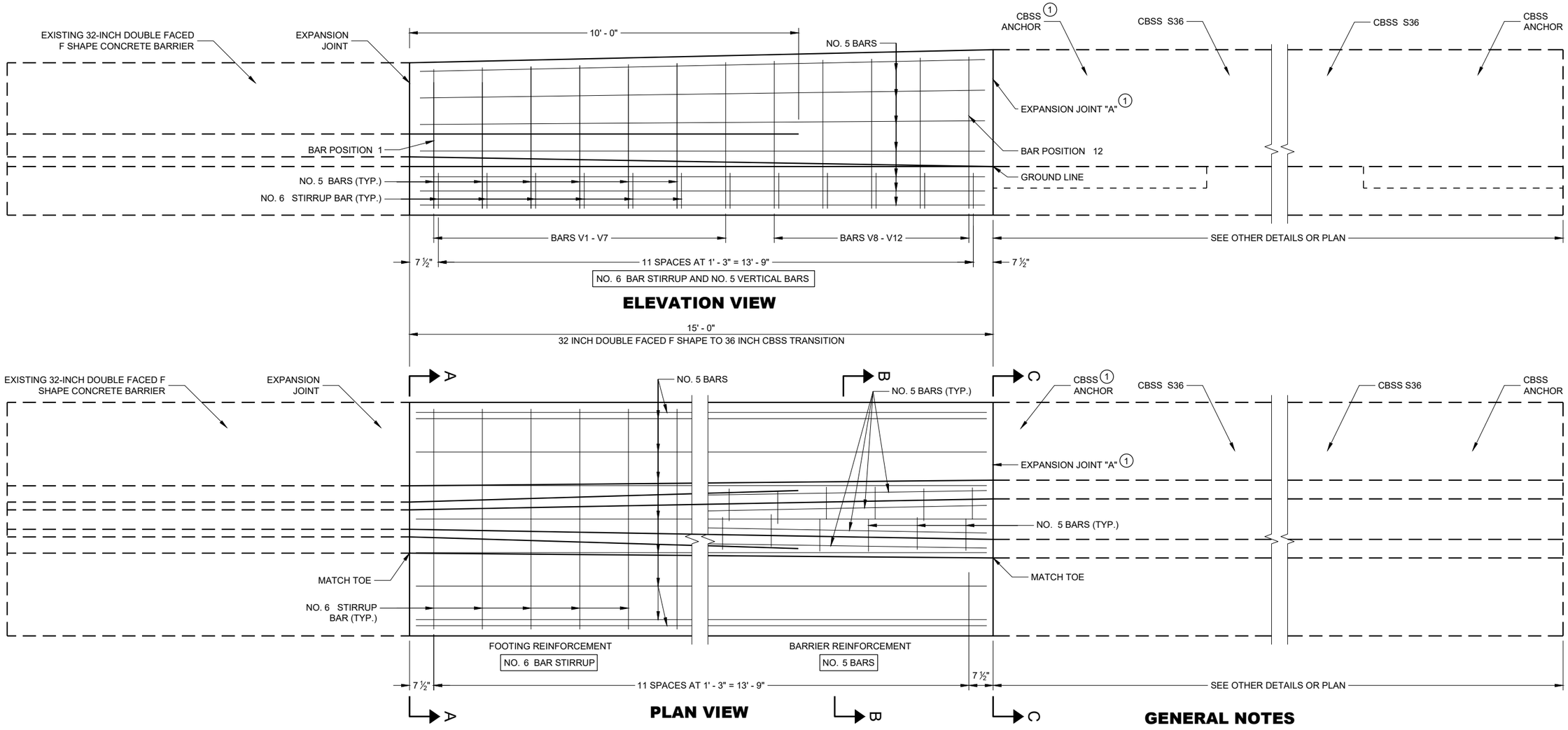
FHWA

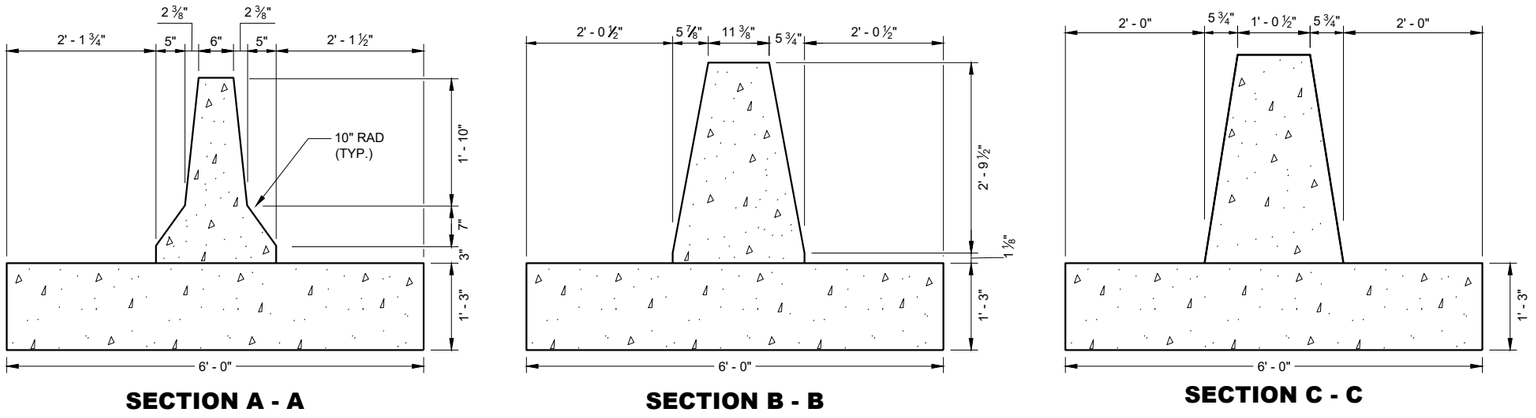
6

SDD 14B36 - 02d

6

SDD 14B36 - 02d





GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

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THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD JOINT IS USED, ANCHOR IS NOT REQUIRED.

32 - INCH DOUBLE FACED F SHAPE CONCRETE BARRER TO 36 - INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

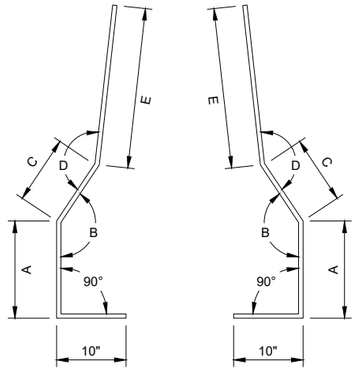
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B38 - 02c
SDD 14B38 - 02c

BAR CHART
BAR POSITIONS
1 - 7

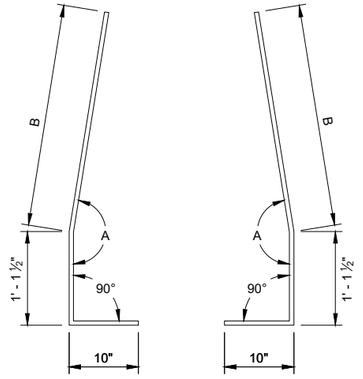
BAR	A	B	C	D	E
B1	1' - 2"	148°	10"	154°	1' - 8 ¼"
B2	1' - 2"	154°	9 ¾"	162°	1' - 8 ½"
B3	1' - 2"	154°	9 ¾"	163°	1' - 8 ¾"
B4	1' - 2"	157°	9 ¾"	165°	1' - 9"
B5	1' -1 ½"	161°	10"	169°	1' - 9 ¼"
B6	1' -1 ½"	163°	10"	172°	1' - 9 ½"
B7	1' -1 ½"	166°	10"	175°	1' - 10"



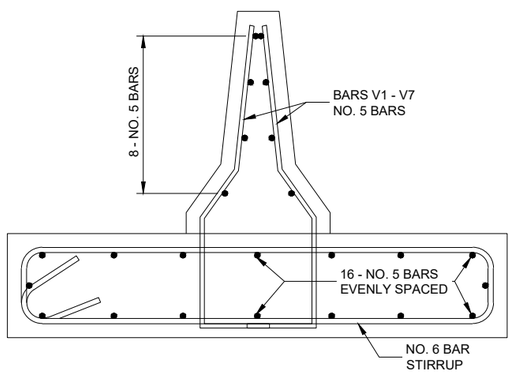
BAR BENDING DETAIL
BARS V1 - V7

BAR CHART
BAR POSITIONS
8 - 12

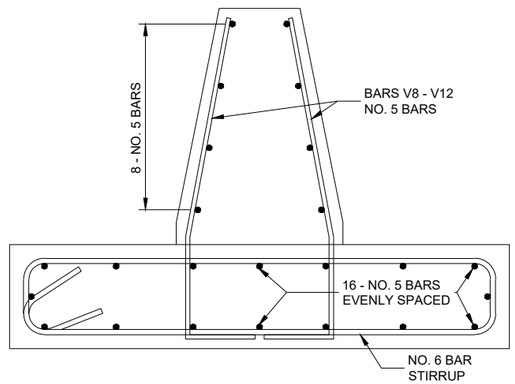
BAR	A	B
D8	170°	2' - 7 ¾"
D9	170°	2' - 8 ½"
D10	170°	2' - 8 ½"
D11	171°	2' - 9"
D12	171°	2' - 9 ½"



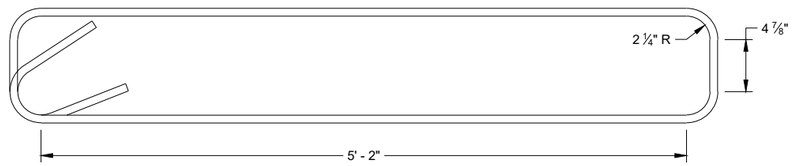
BAR BENDING DETAIL
BARS V8 - V12



BAR DETAIL
BAR POSITIONS V1 - V7



BAR DETAIL
BAR POSITIONS V8 - V12



STIRRUP BAR
BENDING DETAIL

32-INCH DOUBLE FACED F SHAPE CONCRETE BARRIER TO 32-INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

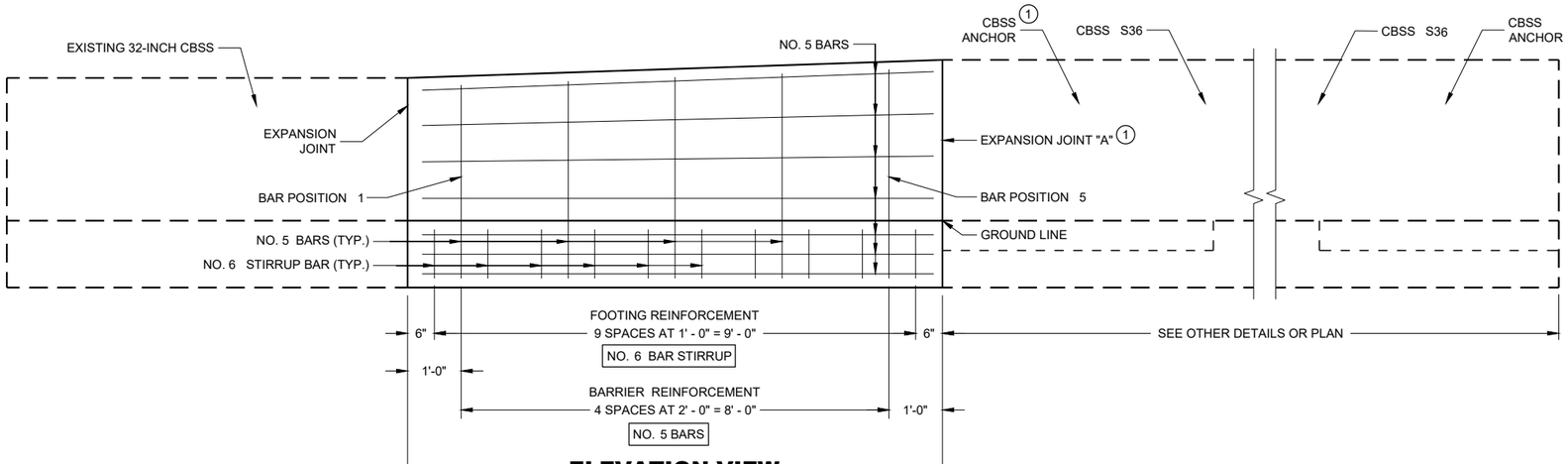
APPROVED
February 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

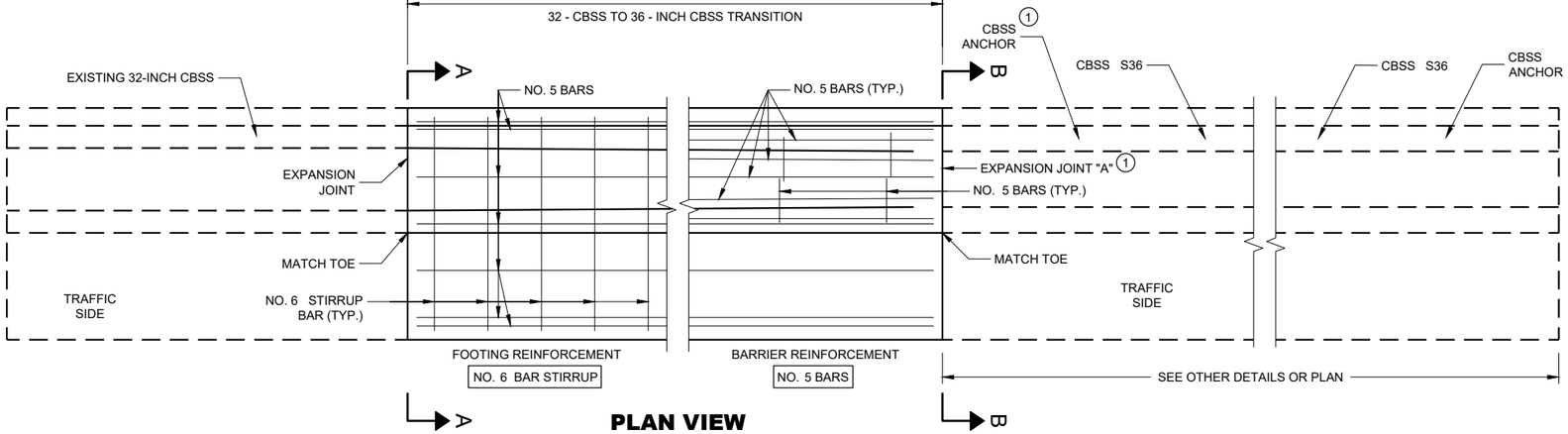
6

SDD 14B38 - 02d



ELEVATION VIEW

10' - 0"
32 - CBSS TO 36 - INCH CBSS TRANSITION



PLAN VIEW

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.

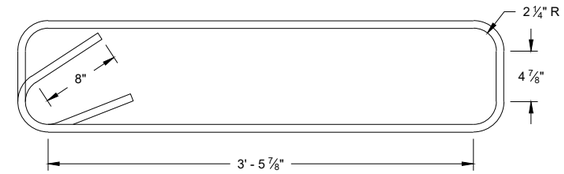
4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

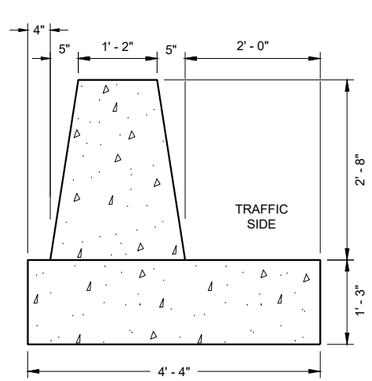
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

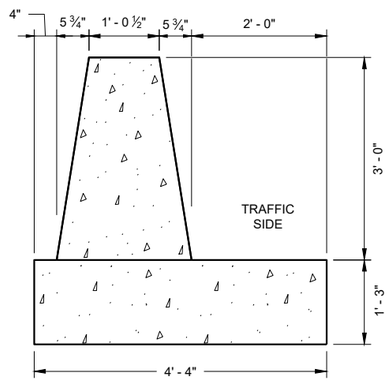
(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD JOINT IS USED, ANCHOR IS NOT REQUIRED.



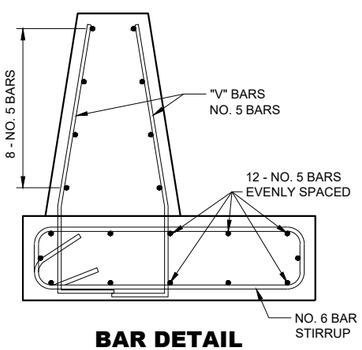
STIRRUP BAR BENDING DETAIL



SECTION A - A



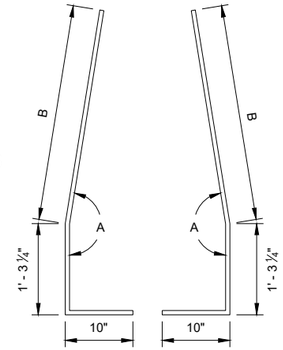
SECTION B - B



BAR DETAIL
BAR POSITIONS V1 - V5

BAR CHART
BAR POSITIONS
V1 - V5

BAR	A	B
V1	170°	2' - 4"
V2	170°	2' - 5 ¼"
V3	170°	2' - 6 ¼"
V4	170°	2' - 7"
V5	170°	2' - 7 ¾"



BENDING DETAIL
FOR BARS V1 - V5

32" SINGLE SLOPE CONCRETE BARRIER TO 36" SINGLE SLOPE CONCRETE BARRIER HEIGHT TRANSITION

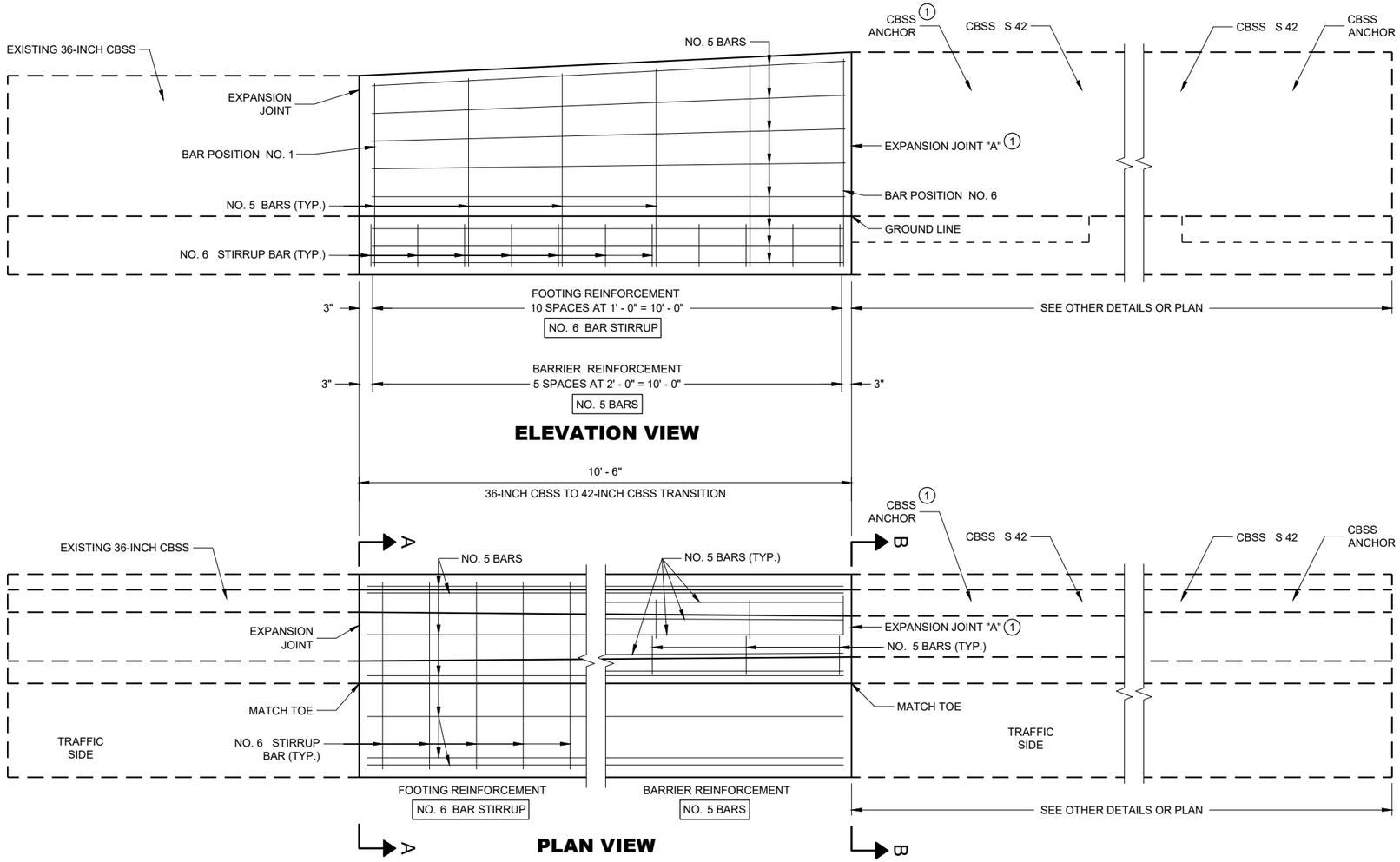
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER
552
FHWA

SDD 14B39 - 02a

6

SDD 14B39 - 02a



ELEVATION VIEW

PLAN VIEW

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

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THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD JOINT IS USED, ANCHOR IS NOT REQUIRED.

STIRRUP BAR BENDING DETAIL

SECTION A - A

SECTION B - B

BAR DETAIL
BAR POSITIONS V1 - V6

BAR CHART
BAR POSITIONS
V1 - V6

BAR	A	B
V1	170°	2' - 7 ½"
V2	170°	2' - 9"
V3	170°	2' - 9 ¾"
V4	170°	2' - 11 ¼"
V5	170°	3' - 0 ½"
V6	170°	3' - 2"

BENDING DETAIL
FOR BARS V1 - V6

36" SINGLE SLOPE CONCRETE BARRIER TO 42" SINGLE SLOPE CONCRETE BARRIER HEIGHT TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 14B39 - 02b

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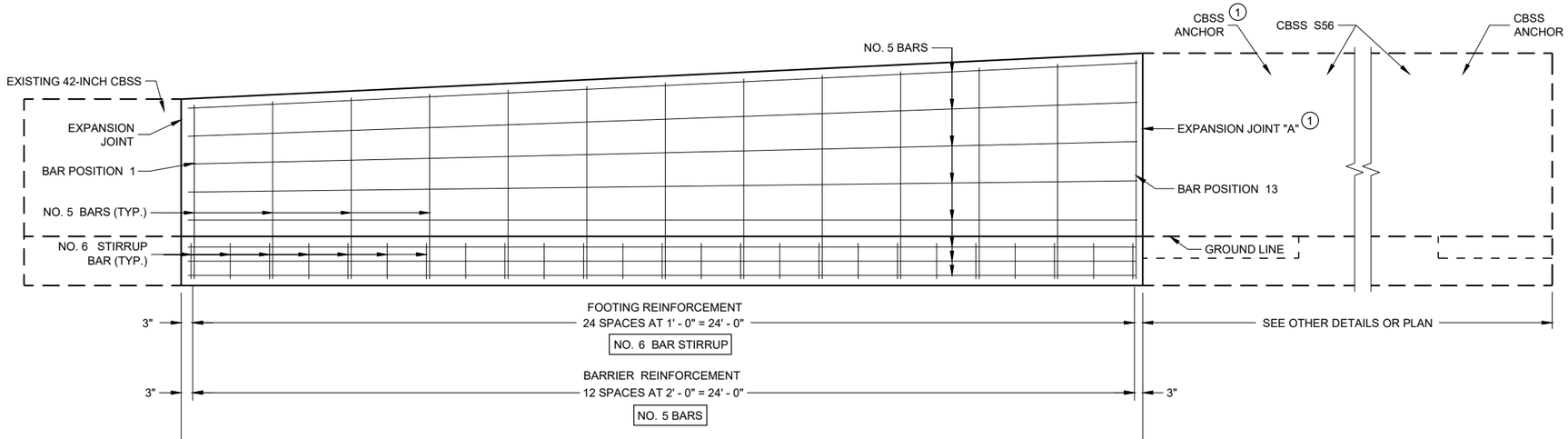
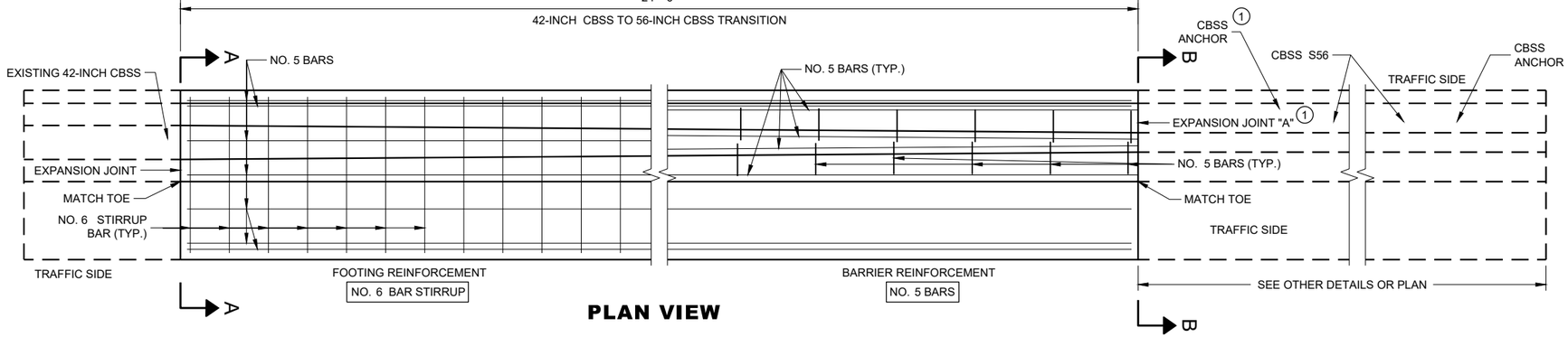
SDD 14B39 - 02b



ELEVATION VIEW



PLAN VIEW

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.

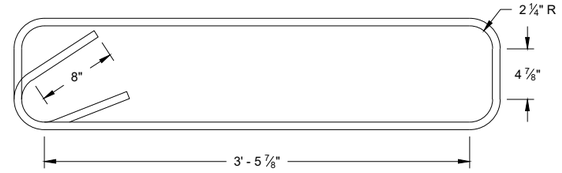
4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

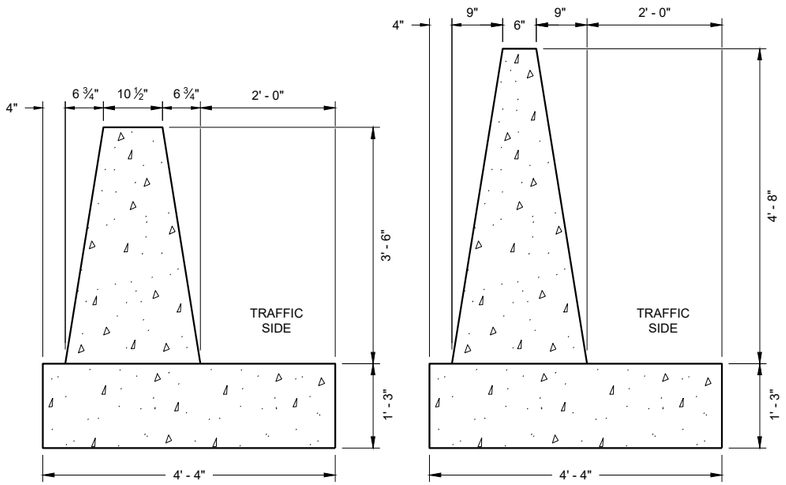
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

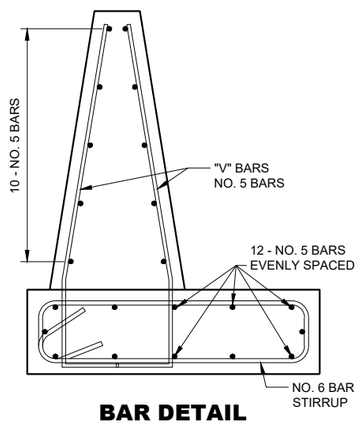
(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD JOINT IS USED, ANCHOR IS NOT REQUIRED.



STIRRUP BAR BENDING DETAIL



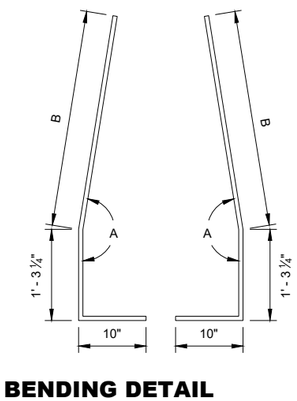
SECTION A - A **SECTION B - B**



BAR DETAIL
BAR POSITIONS V1 - V13

BAR CHART
BAR POSTIONS
V1 - V13

BAR	A	B
V1	170°	3' - 1 ½"
V2	170°	3' - 3"
V3	170°	3' - 4 ¼"
V4	170°	3' - 5 ½"
V5	170°	3' - 6 ½"
V6	170°	3' - 7 ¾"
V7	170°	3' - 9 ¼"
V8	170°	3' - 10"
V9	170°	3' - 11 ¼"
V10	170°	4' - 1 ¼"
V11	170°	4' - 1 ½"
V12	170°	4' - 2 ¼"
V12	170°	4' - 2 ½"



BENDING DETAIL
FOR BARS V1 - V13

42" SINGLE SLOPE CONCRETE BARRIER TO 56" SINGLE SLOPE CONCRETE BARRIER HEIGHT TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER
FHWA

SDD 14B39 - 02c

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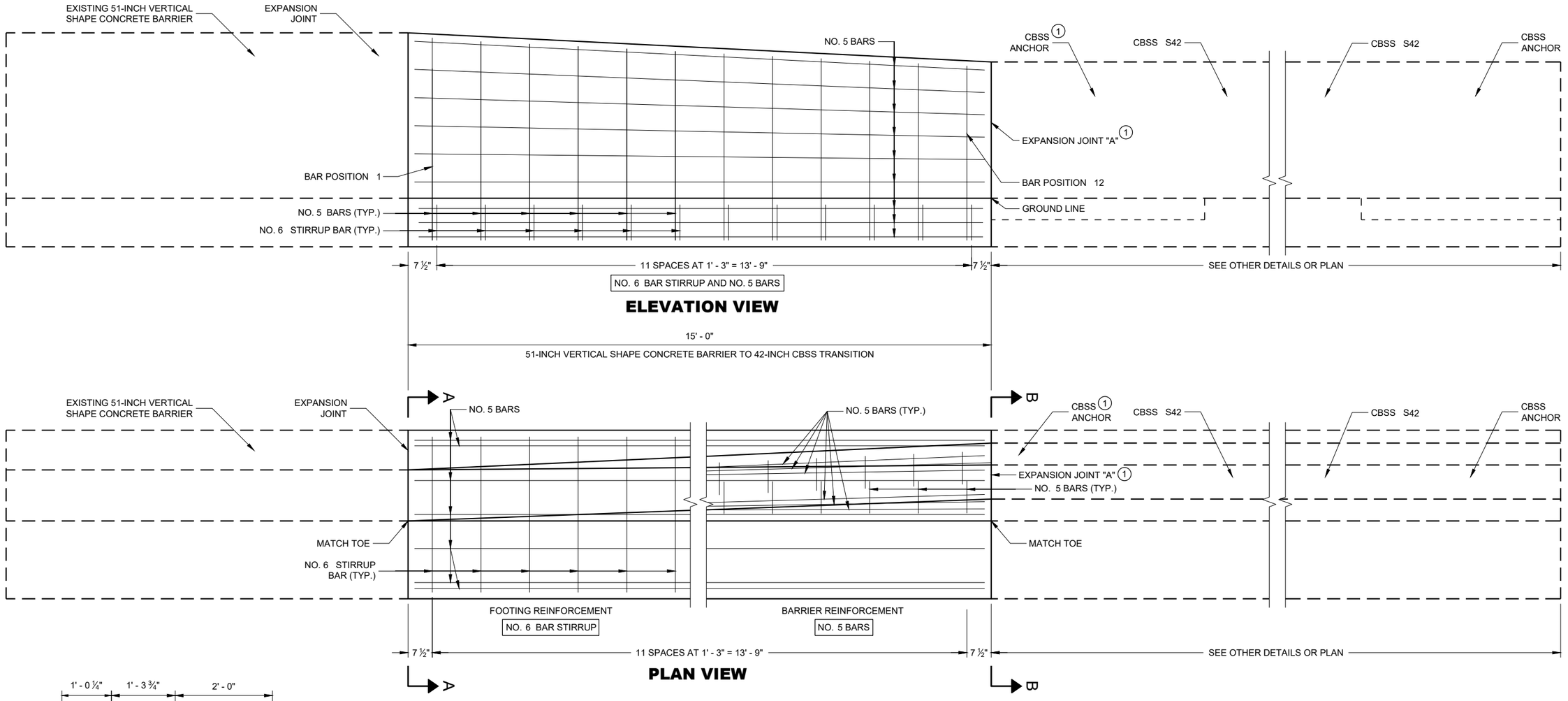
SDD 14B39 - 02c

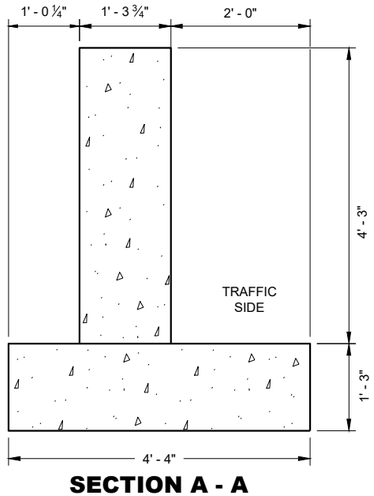


ELEVATION VIEW

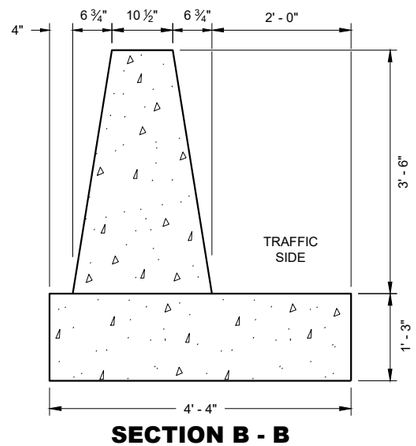
15' - 0"

51-INCH VERTICAL SHAPE CONCRETE BARRIER TO 42-INCH CBSS TRANSITION

PLAN VIEW



SECTION A - A



SECTION B - B

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD JOINT IS USED, ANCHOR IS NOT REQUIRED.

51-INCH VERTICAL SHAPE CONCRETE BARRIER TO 42-INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B40 - 02g

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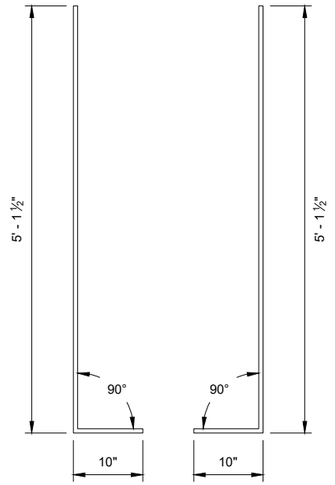
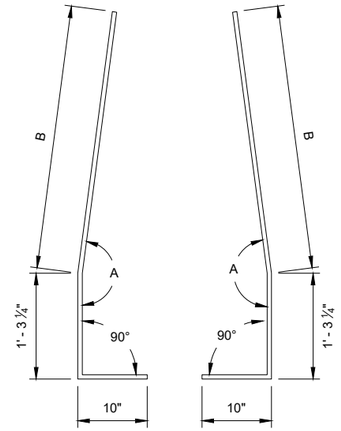
SDD 14B40 - 02g



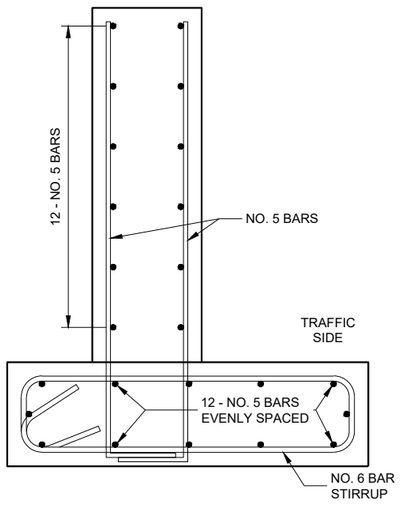
BENDING DETAIL
BAR 1

BAR CHART
BAR POSITIONS
2 - 12

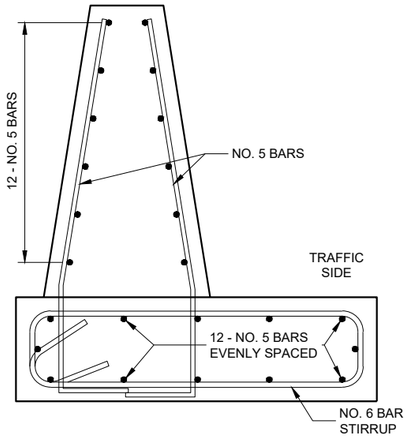
BAR	A	B
2	179°	3' - 9½"
3	178°	3' - 8¾"
4	177°	3' - 8"
5	176°	3' - 7½"
6	176°	3' - 6¾"
7	175°	3' - 6"
8	174°	3' - 5¼"
9	173°	3' - 4½"
10	172°	3' - 3¾"
11	172°	3' - 3¼"
12	171°	3' - 2½"



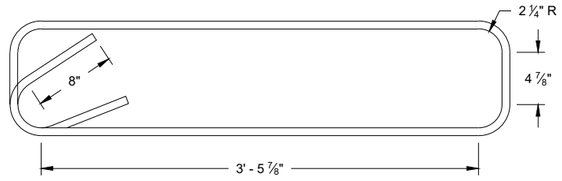
BENDING DETAIL
BARS 2 - 12



BAR DETAIL
BAR POSITION 1



BAR DETAIL
BAR POSITIONS 2 - 12



STIRRUP BAR
BENDING DETAIL

51-INCH VERTICAL SHAPE CONCRETE BARRIER TO 42-INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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SDD 14B40 - 02h

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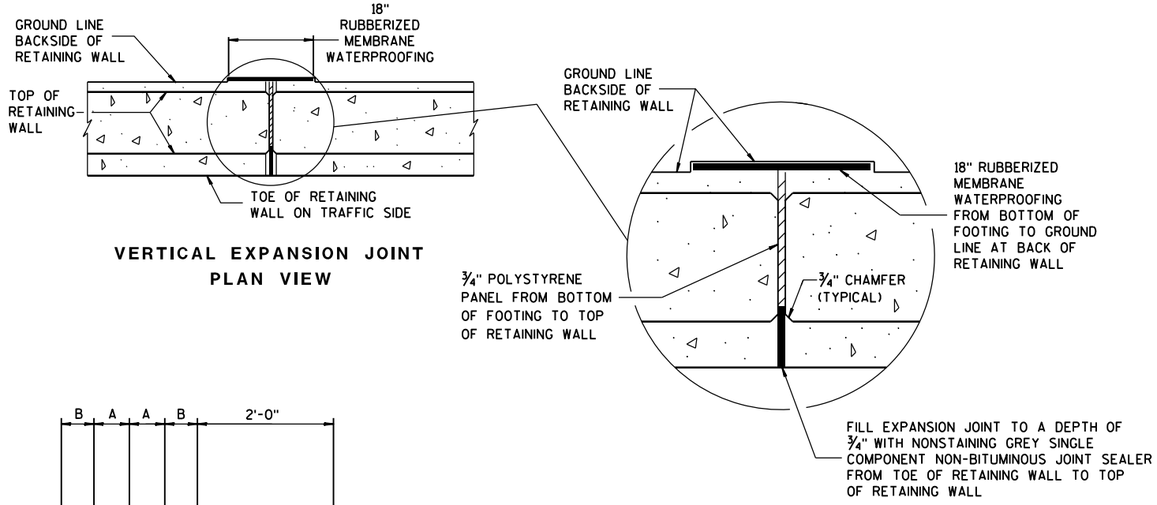
SDD 14B40 - 02h



VERTICAL EXPANSION JOINT
PLAN VIEW

DELINEATION

GENERAL NOTES

PROVIDE EXPANSION JOINTS WHERE THERE ARE EXISTING EXPANSION JOINTS OR AT THE END OF EACH POUR.

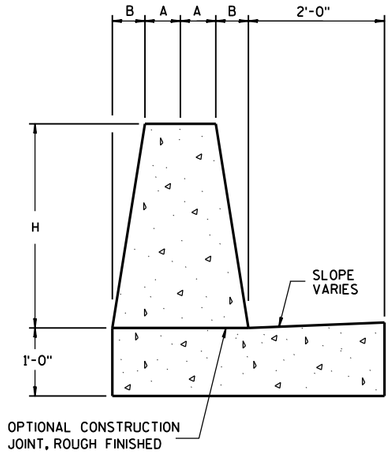
NO HORIZONTAL STEEL CROSSES EXPANSION JOINTS.

CONSTRUCT PER STANDARD SPECIFICATION 603. SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASETENED TOGETHER UNLESS NOTED OTHERWISES.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

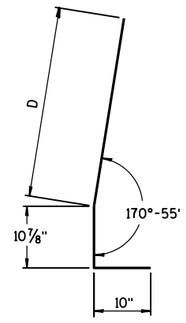
ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR.



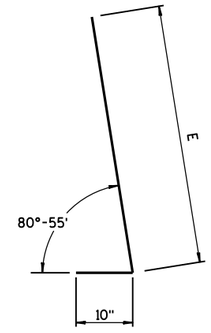
ROADSIDE RETAINING WALL

BARRIER WALL DIMENSIONS

BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
32	7	5	8
36	6¼	5¾	8
42	5¼	6¾	10
56	3	9	11



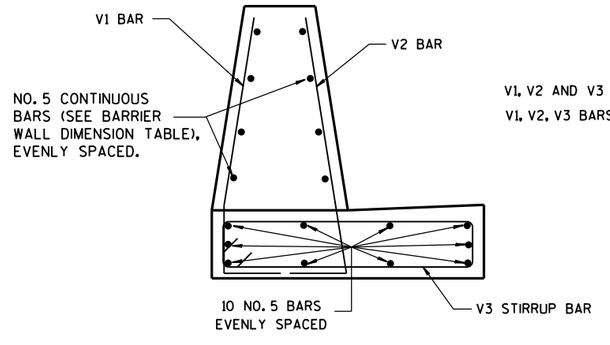
V1 BAR
BENDING DETAIL



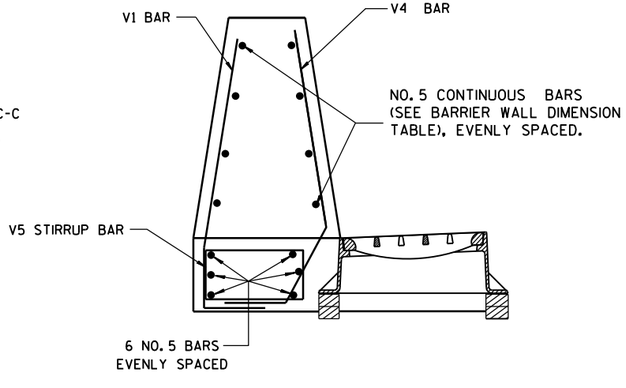
V2 BAR
BENDING DETAIL

BAR CHART
ROADSIDE RETAINING WALL

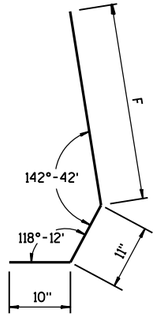
BARRIER HEIGHT	V1 BAR D	V2 BAR E	V4 BAR F
32"	2'-5½"	3'-4½"	2'-6½"
36"	2'-9½"	3'-9¾"	2'-10¾"
42"	3'-3½"	4'-2½"	3'-4¾"
56"	4'-5¾"	5'-4¾"	4'-6¾"



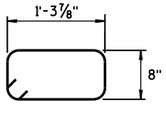
ROADSIDE RETAINING WALL
NORMAL BAR PLACEMENT



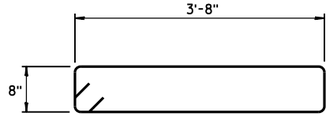
ROADSIDE RETAINING WALL
BAR PLACEMENT NEAR
INLET



V4 BAR
BENDING DETAIL



V5 STIRRUP BAR
BENDING DETAIL



V3 STIRRUP BAR
BENDING DETAIL

SINGLE SLOPE
ROADSIDE RETAINING WALL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 14 B 41-3a

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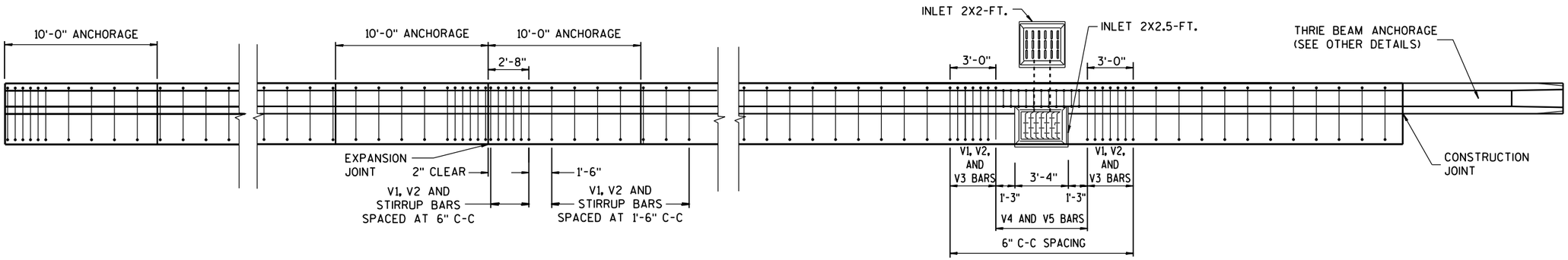
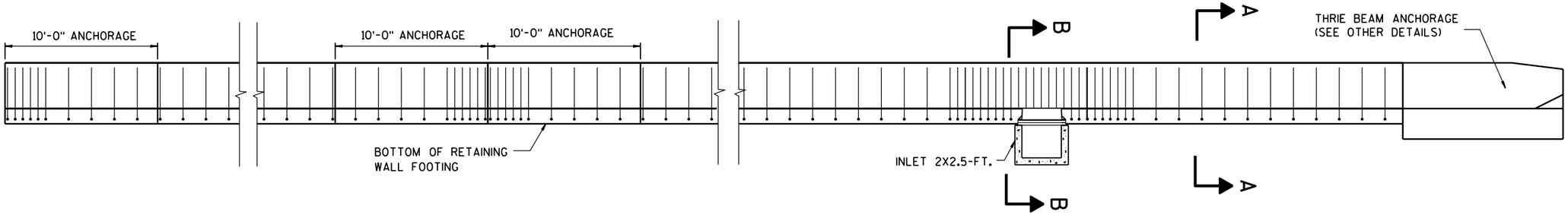
S.D.D. 14 B 41-3a



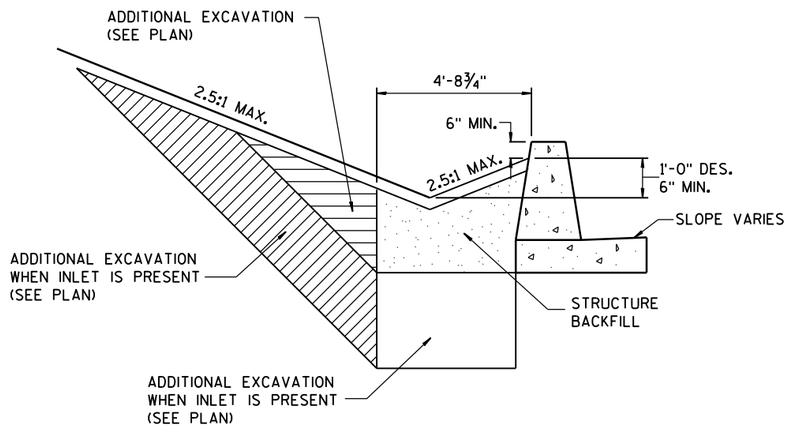
PLAN VIEW

NOTE: HORIZONTAL BARS ARE NOT SHOWN. SEE OTHER DETAILS FOR HORIZONTAL BARS.

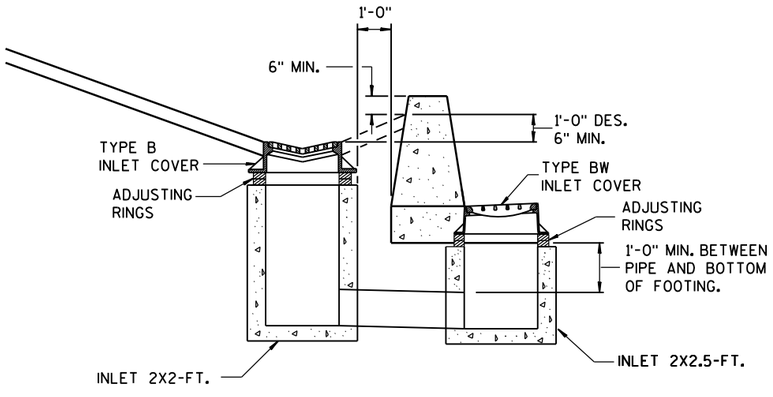


ELEVATION VIEW

NOTE: HORIZONTAL BARS ARE NOT SHOWN. SEE OTHER DETAILS FOR HORIZONTAL BARS.

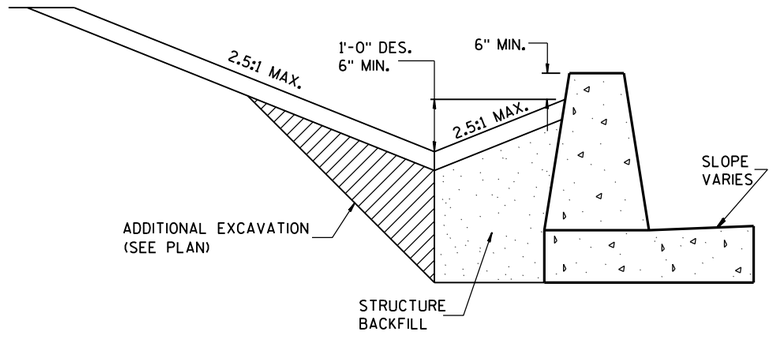


SECTION A-A



SECTION B-B

MINIMUM DESIGN OF EARTH WORK FOR INLET



MINIMUM DESIGN OF EARTH WORK

SINGLE SLOPE ROADSIDE RETAINING WALL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERV...
FHWA

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S.D.D. 14 B 41-3b

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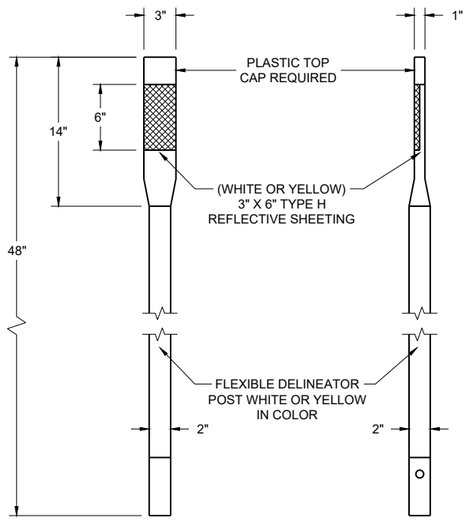
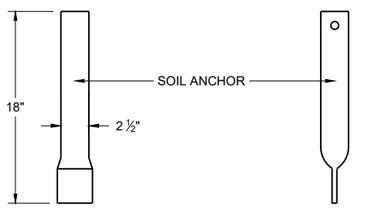
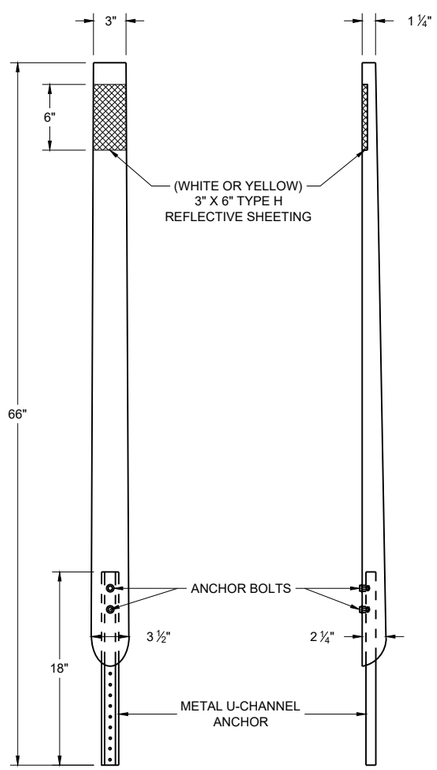
S.D.D. 14 B 41-3b





FRONT VIEW SIDE VIEW

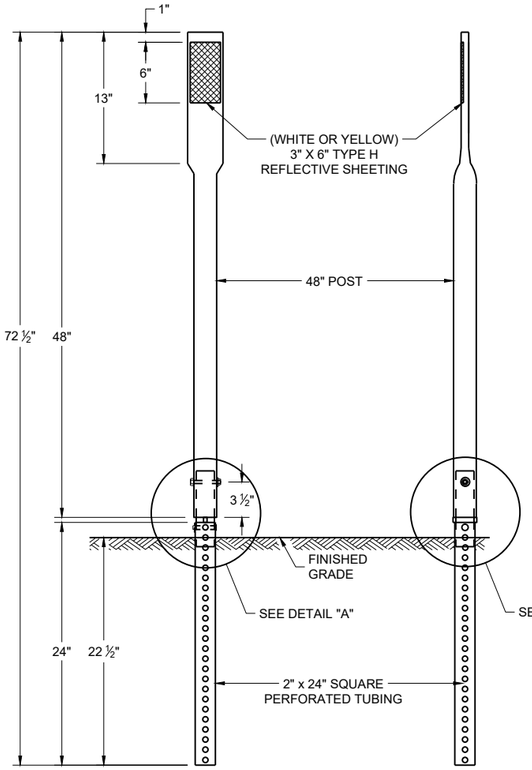
ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2

FLEXIBLE DELINEATOR POSTS

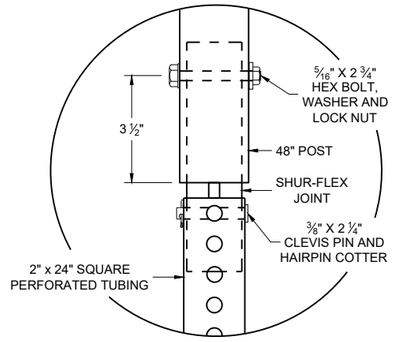


FRONT VIEW SIDE VIEW

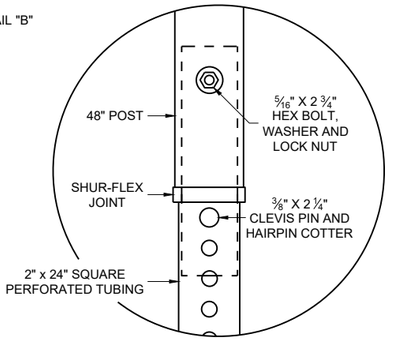
ALTERNATE 3

GENERAL NOTES

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



DETAIL A

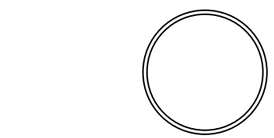


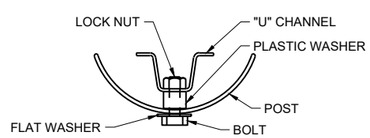
DETAIL B

REFLECTOR SPACING TABLE

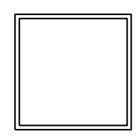
REFLECTOR SPACING	LOCATION
* 100' C-C	RAMPS
400' C-C	MAINLINE

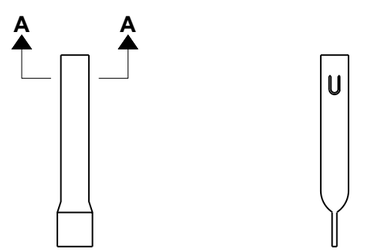
* START AT BEGINNING OF RAMP TAPER AND END AT END OF RAMP TAPER





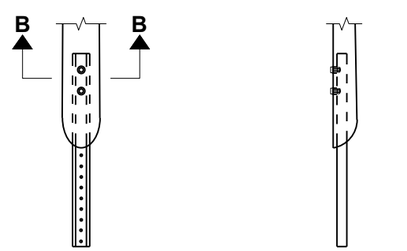
SECTION B - B





FRONT VIEW SIDE VIEW

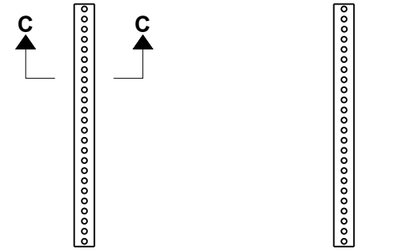
ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2

FLEXIBLE MARKER POST ANCHORS



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE DELINEATOR POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

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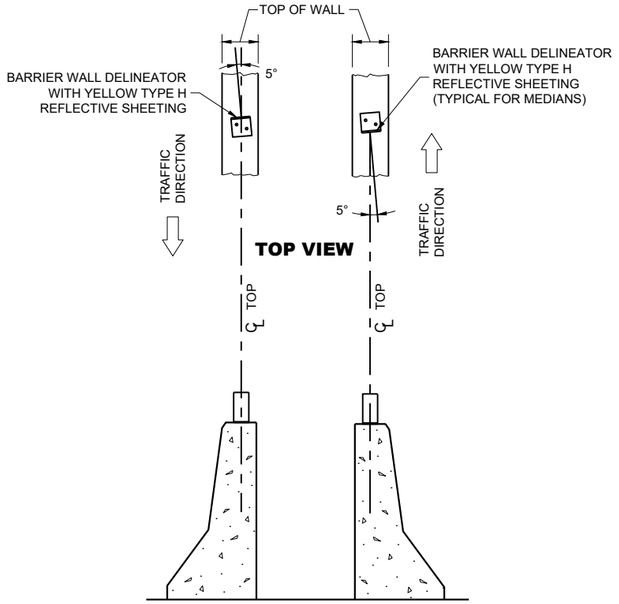
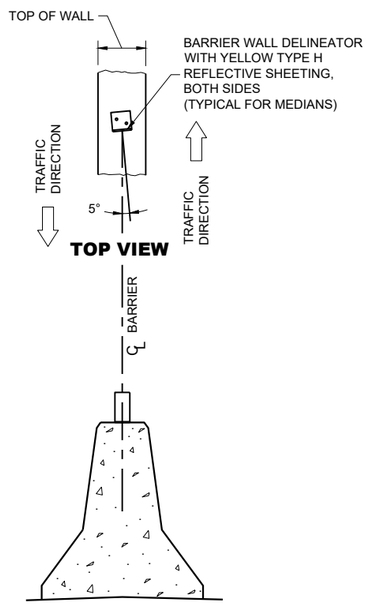
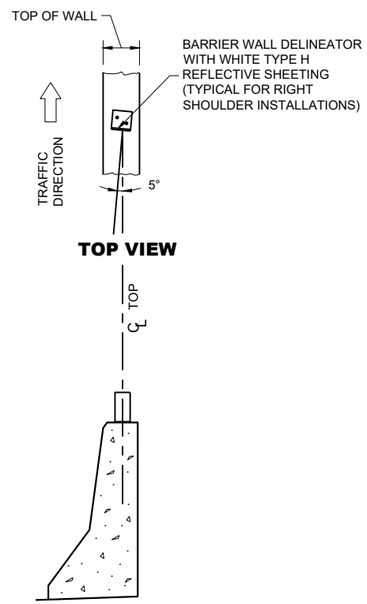
SDD 15A04-08a



SIDE VIEW
DOUBLE BARRIERS IN MEDIAN

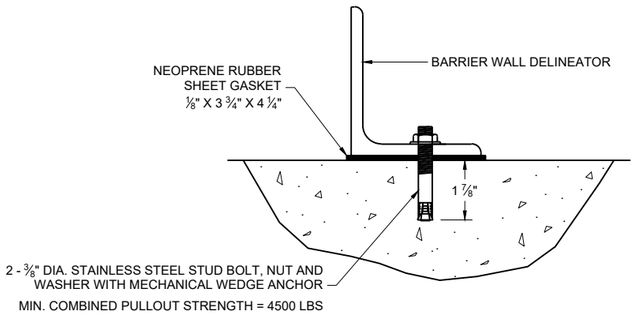


SIDE VIEW
MEDIAN BARRIER

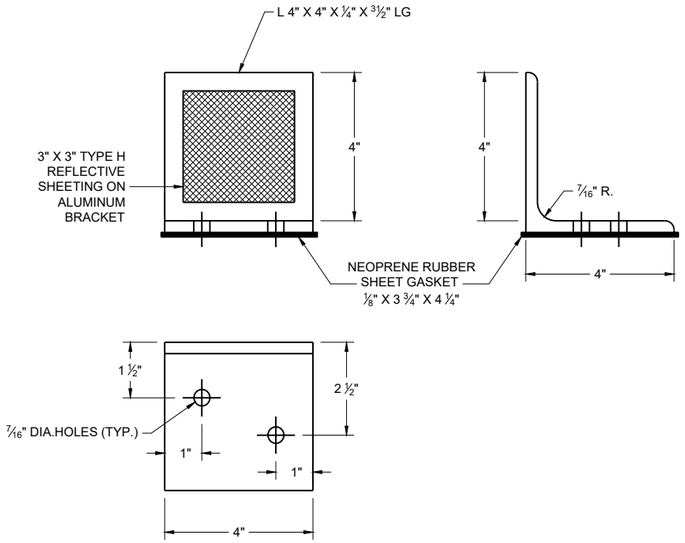


SIDE VIEW
TO RIGHT OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR BARRIER WALL DELINEATOR MOUNTED ON CONCRETE BARRIERS



BARRIER WALL DELINEATOR
MOUNTING DETAIL



BARRIER WALL DELINEATOR

REFLECTOR SPACING TABLE

REFLECTOR SPACING	MINIMUM NUMBER OF REFLECTORS
100' C-C	3

BARRIER WALL DELINEATOR WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024 — DATE
/S/ Jeannie Silver — Statewide Pavement Marking Engineer

FHWA

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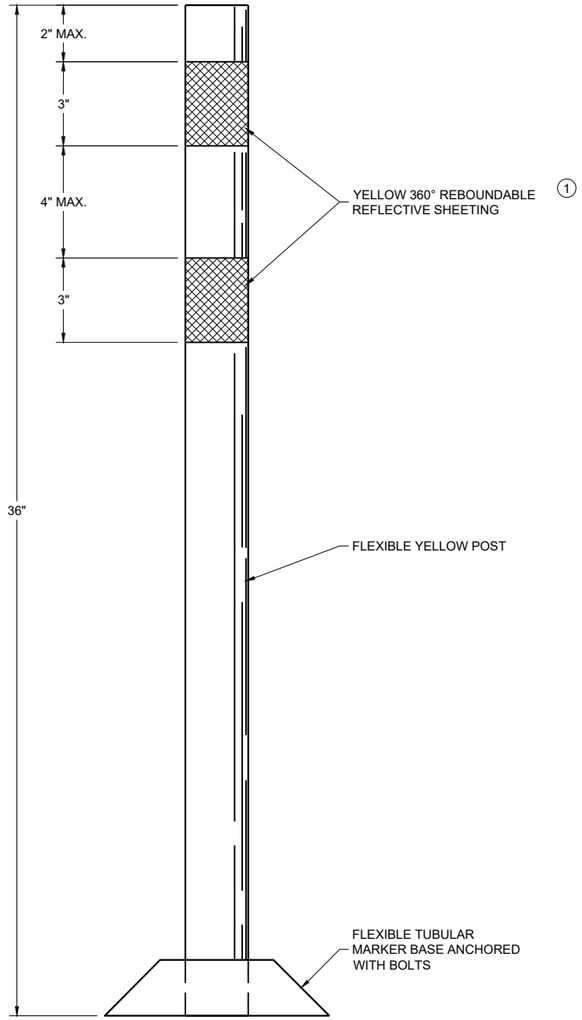
SDD 15A04-08b



PERMANENT FLEXIBLE TUBULAR MARKER POST

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

6

SDD 15A04-08d

CHANNELIZING DEVICES
PERMANENT FLEXIBLE
TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

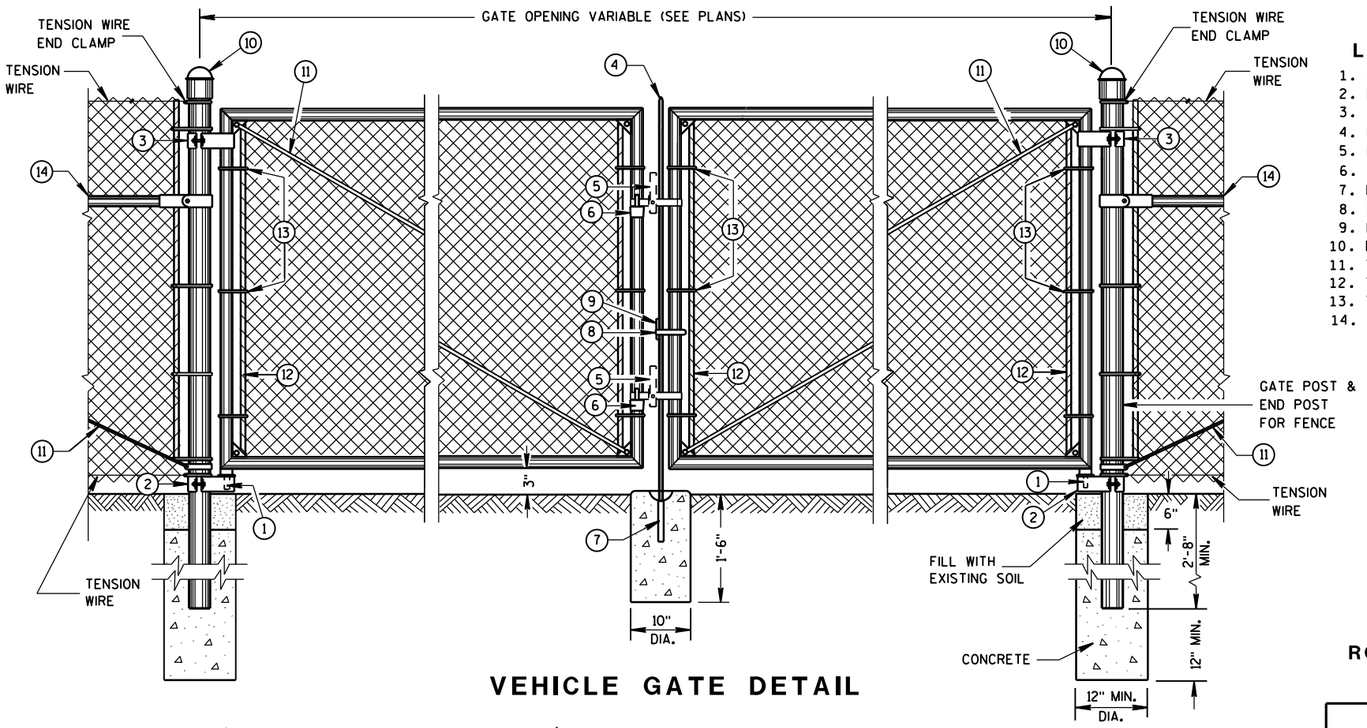
APPROVED
March 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

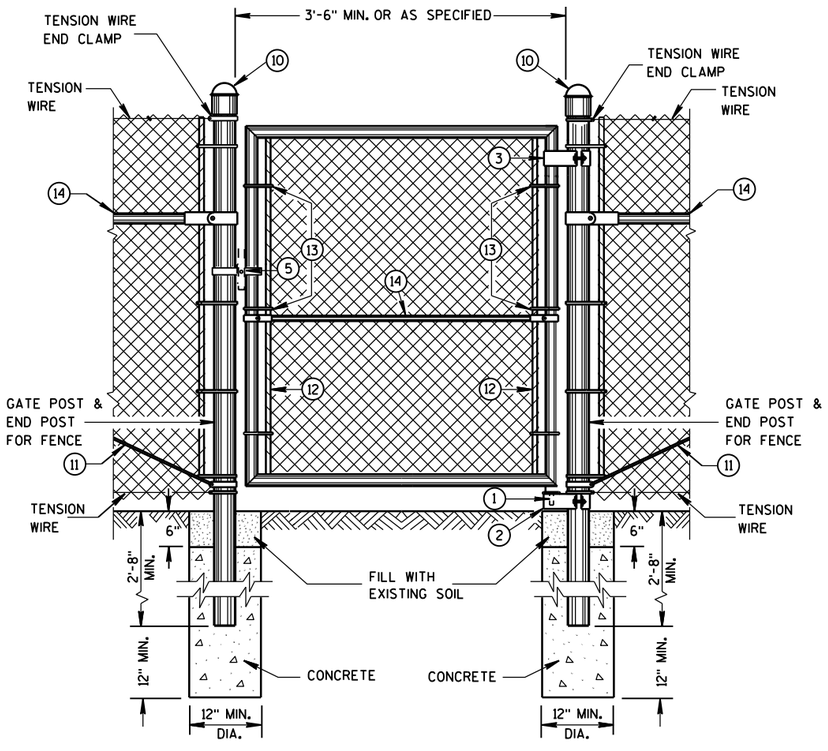
FHWA

6

SDD 15A04-08d



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

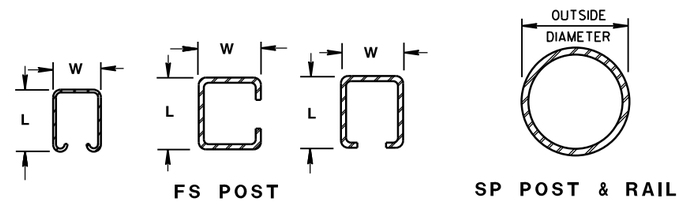
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



FS POST

SP POST & RAIL

CROSS SECTIONS OF POSTS AND RAILS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

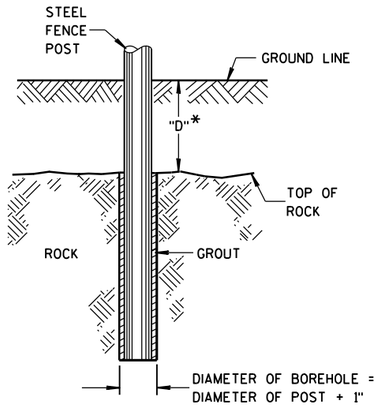
** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

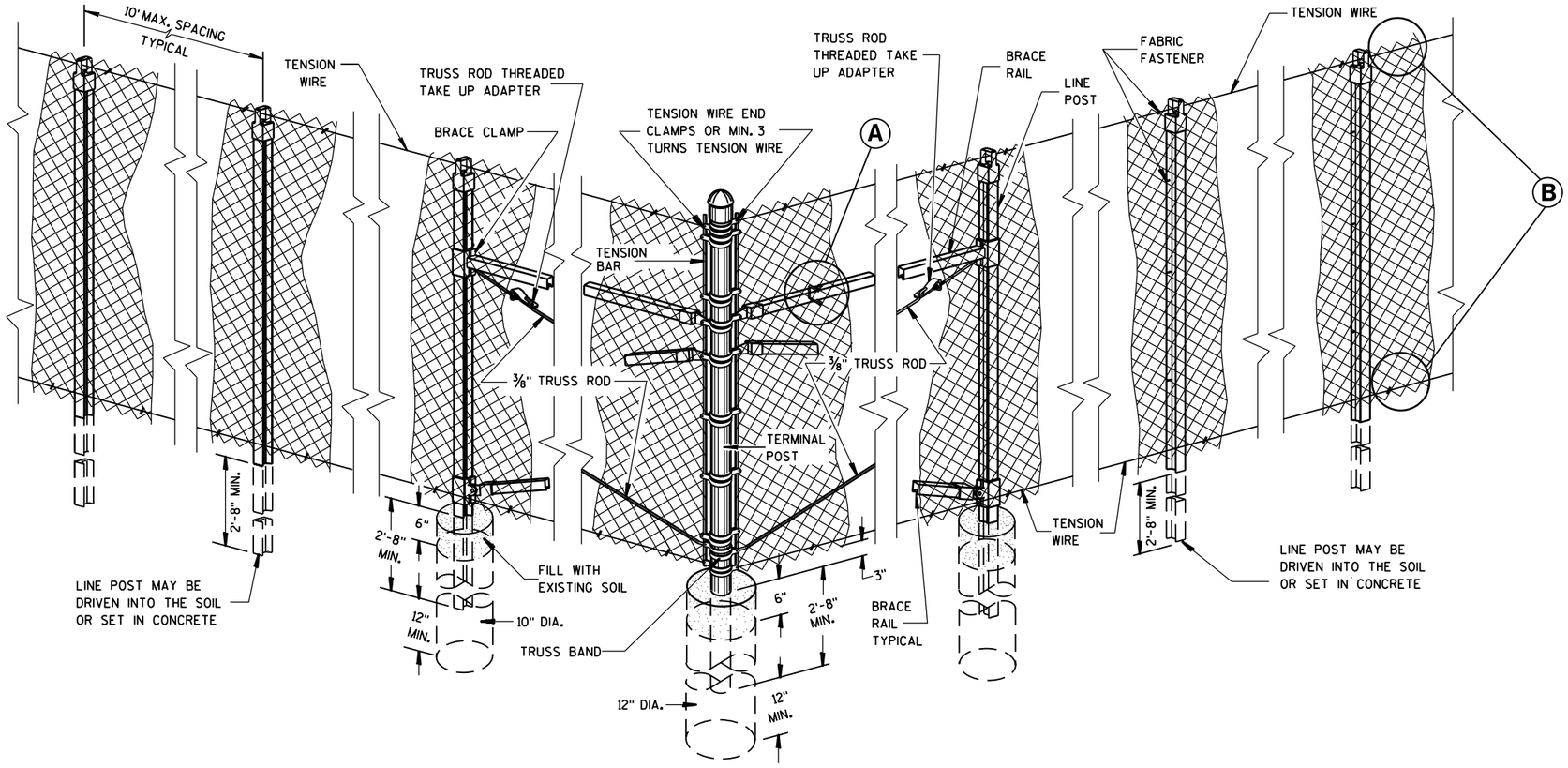
6

S.D.D. 15 B 3-15a

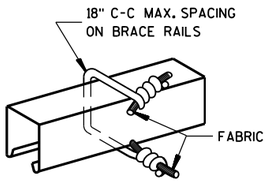


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



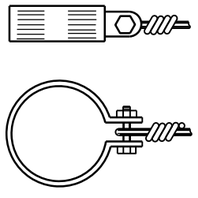
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



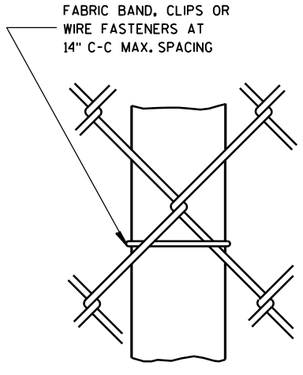
BRACE RAIL

FABRIC FASTENER

Ⓐ



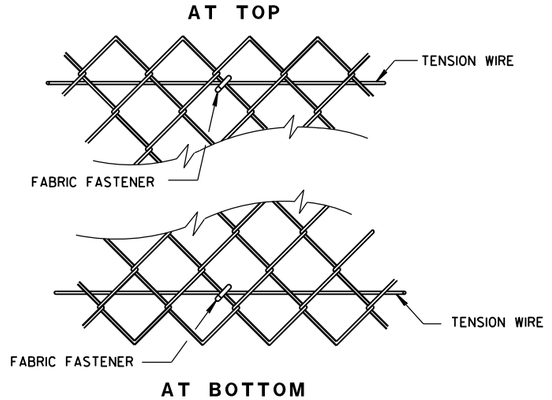
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

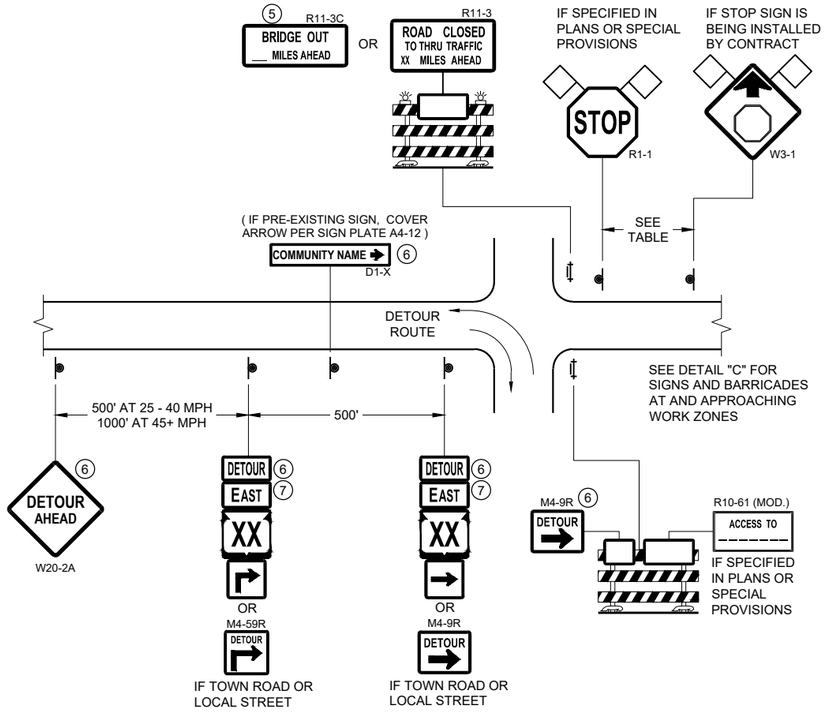
APPROVED
FEB. 2015 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 15 B 3-15b

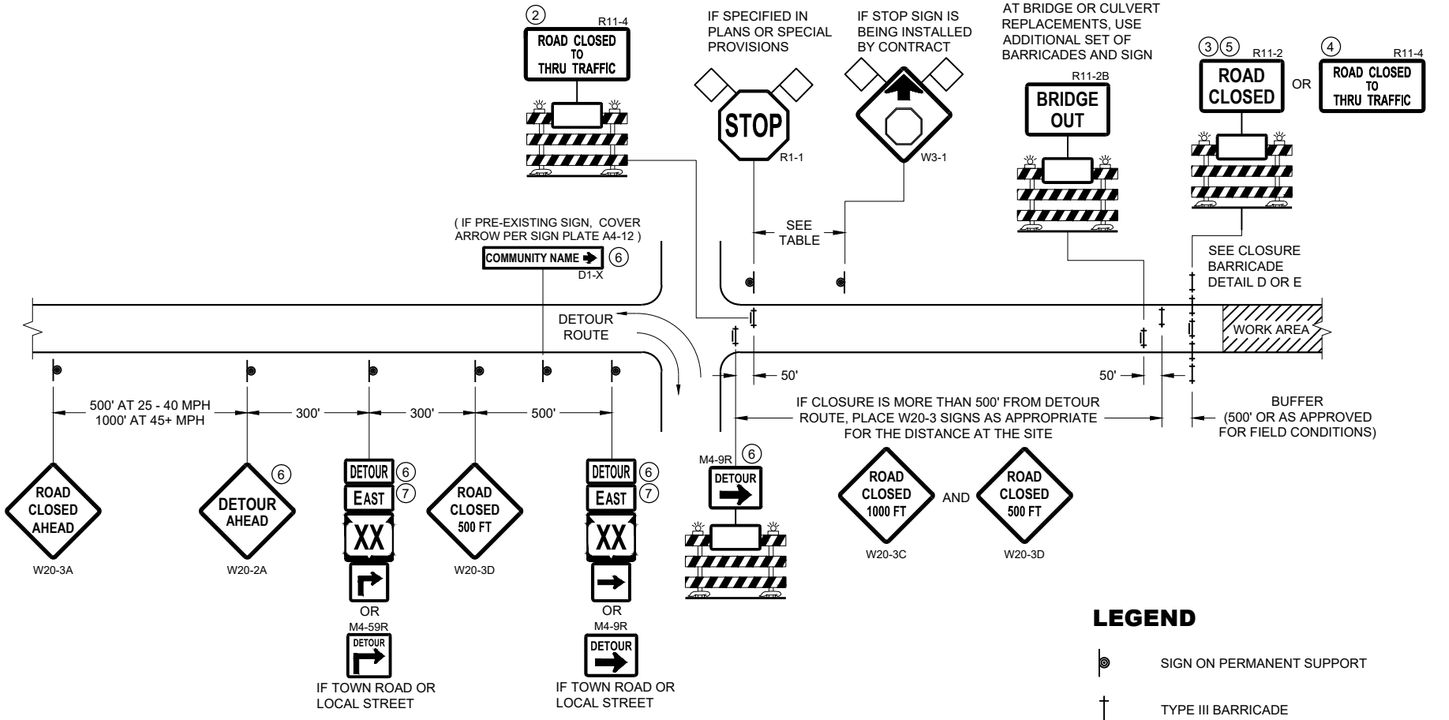
6

S.D.D. 15 B 3-15b



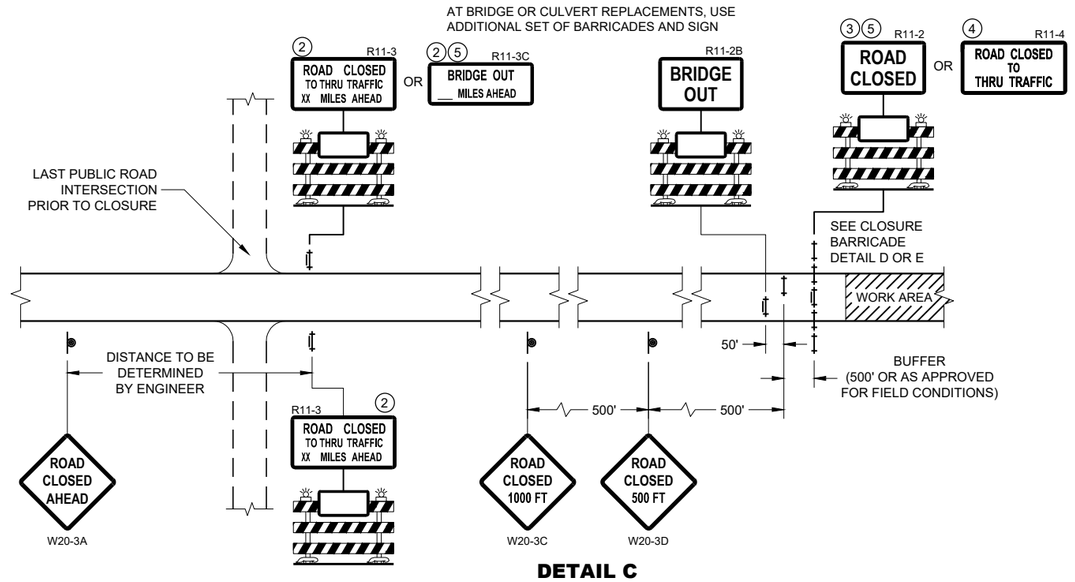
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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)



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

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

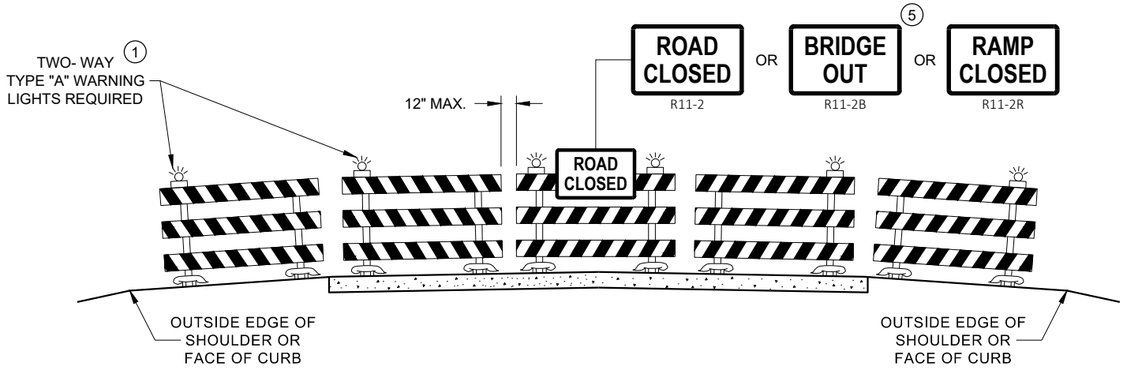
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

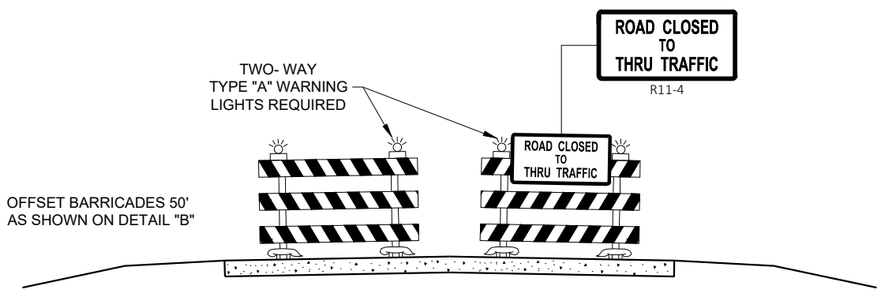
FHWA

6

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE 565
FHWA

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- 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 EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (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)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

500' AT 25-40 MPH
1000' AT 45+ MPH

500'

M4-8a *
END DETOUR WEST XX

DETOUR EAST XX *

D1-X *
COMMUNITY NAME
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

DETOUR EAST XX WEST XX

DETOUR ROUTE

WORK AREA

DETOUR EAST XX

WEST XX OR M4-9L DETOUR ** IF TOWN ROAD OR LOCAL STREET

500'

DETOUR NEXT X MILES *
G20-51

DETOUR WEST XX * OR M4-59L * DETOUR ** IF TOWN ROAD OR LOCAL STREET

MATCH POINT

* M4-59L ** DETOUR OR DETOUR EAST XX *
IF TOWN ROAD OR LOCAL STREET

D1-X *
COMMUNITY NAME
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

500'

M4-9L ** DETOUR OR DETOUR EAST XX
IF TOWN ROAD OR LOCAL STREET

DETOUR WEST XX

DETOUR WEST XX OR M4-9R DETOUR ** IF TOWN ROAD OR LOCAL STREET

DETOUR WEST XX * OR M4-59R * DETOUR ** IF TOWN ROAD OR LOCAL STREET

500'

DETOUR ROUTE

500' AT 25 - 40 MPH
1000' AT 45+ MPH

500'

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

DETOUR EAST XX *

D1-X *
COMMUNITY NAME
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

DETOUR EAST XX

DETOUR EAST XX

500'

DETOUR EAST XX

DETOUR EAST XX

D1-X *
COMMUNITY NAME
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA)

500' AT 25 - 40 MPH
1000' AT 45+ MPH

DETOUR EAST XX *

EAST XX M3-X 24" X 12" M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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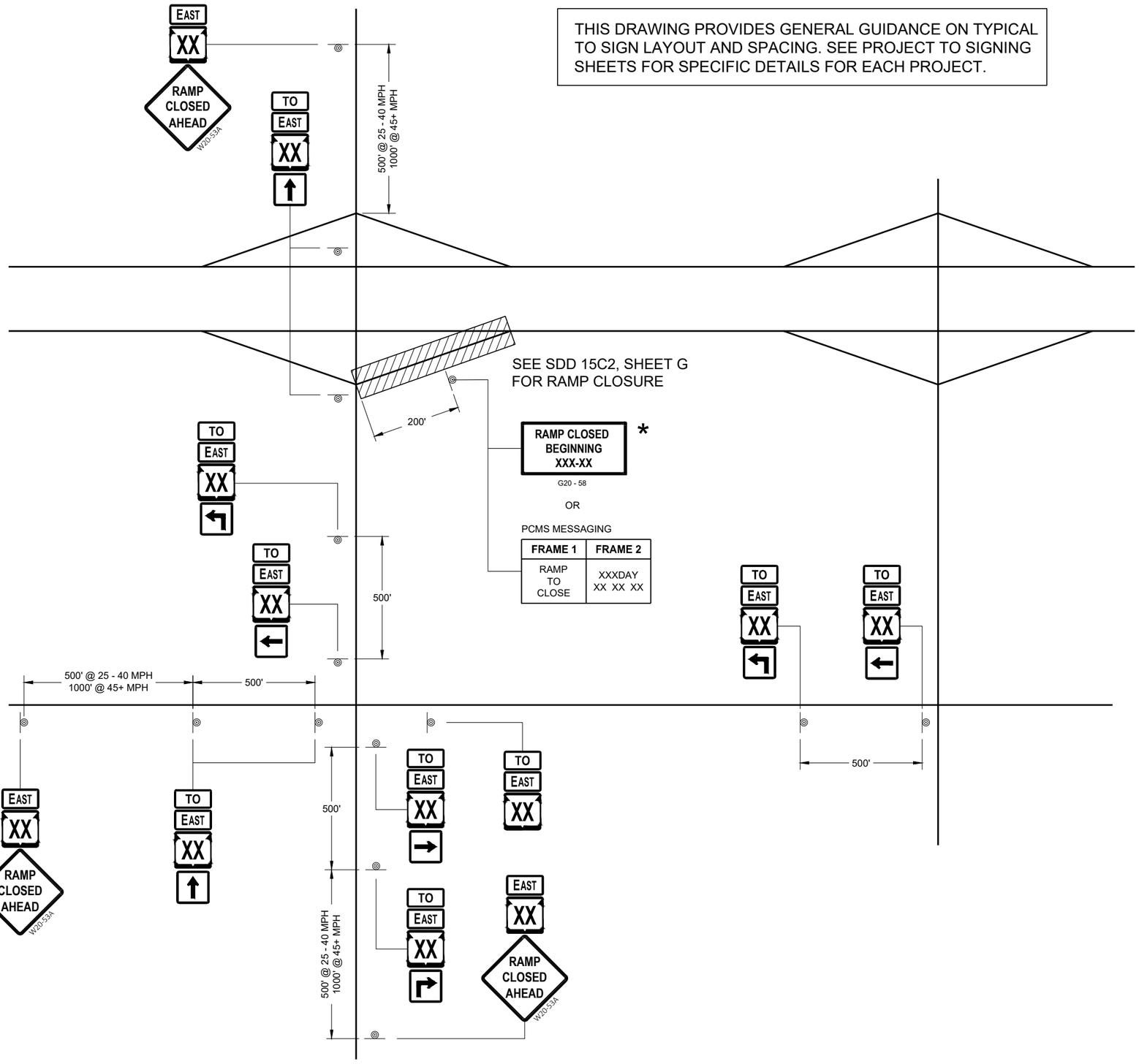
SDD 15C02 - 09c



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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May 2023 — DATE
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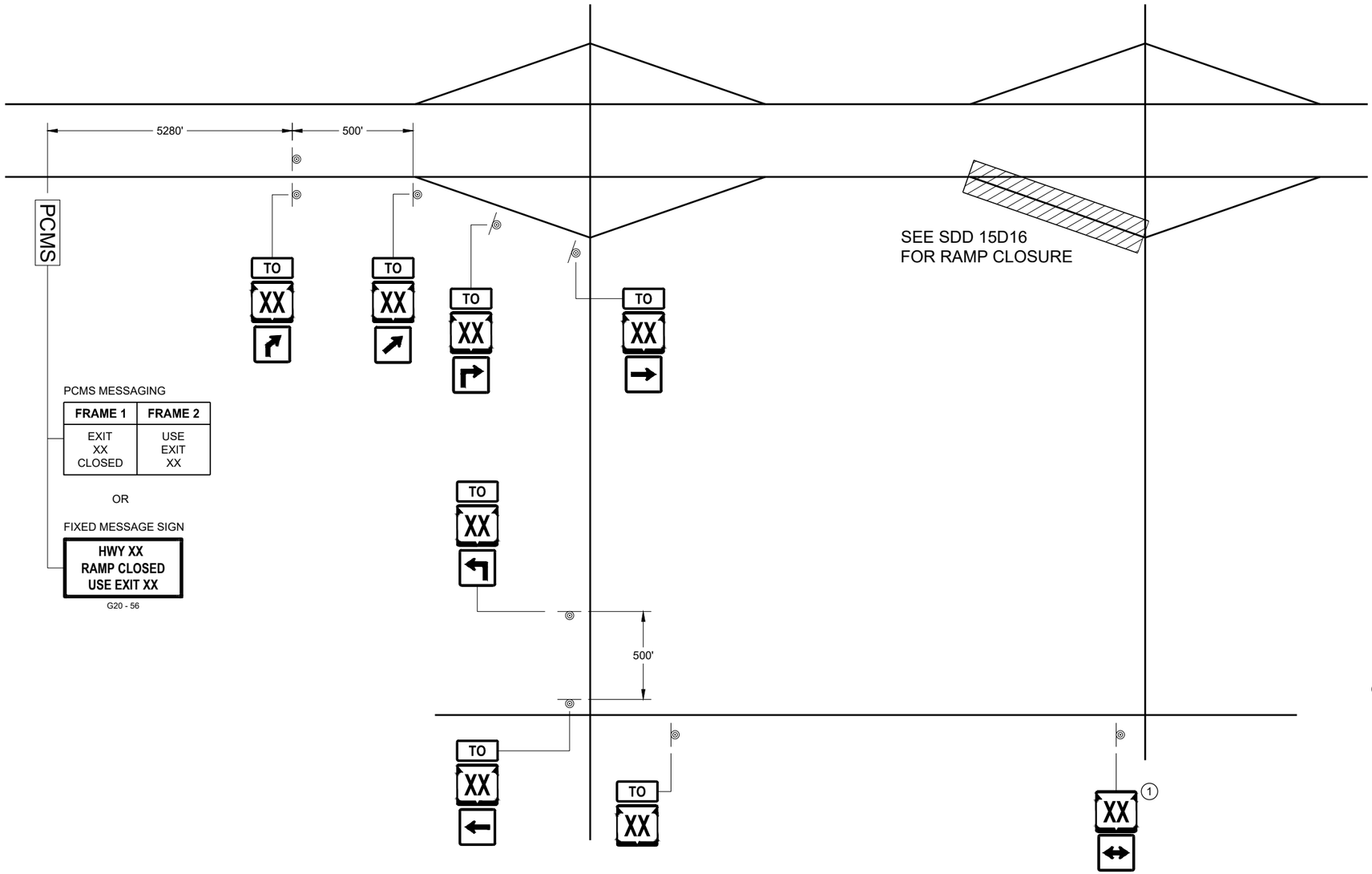
THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL "TO" MO-4 SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.



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 ENGINEER
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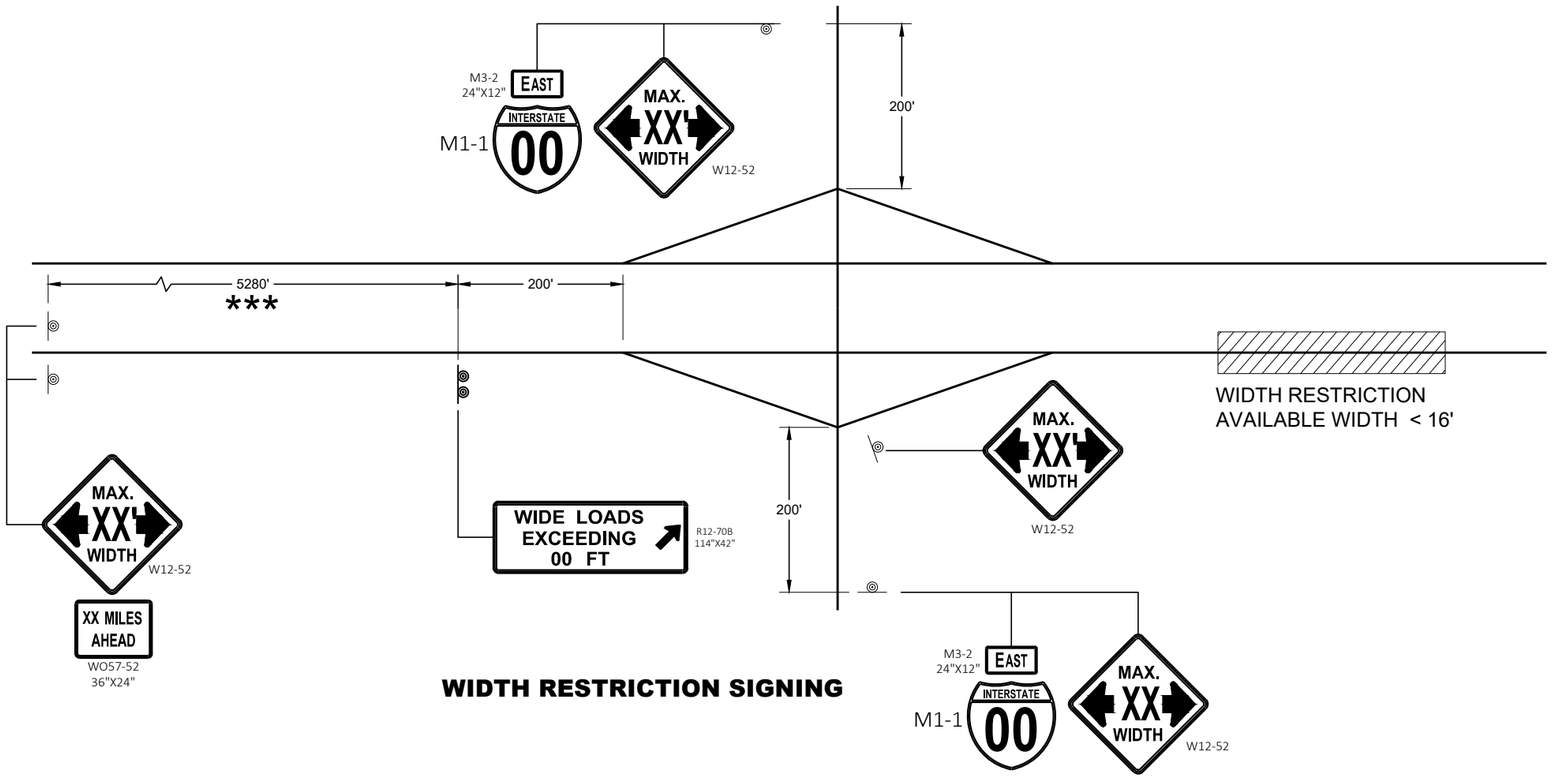
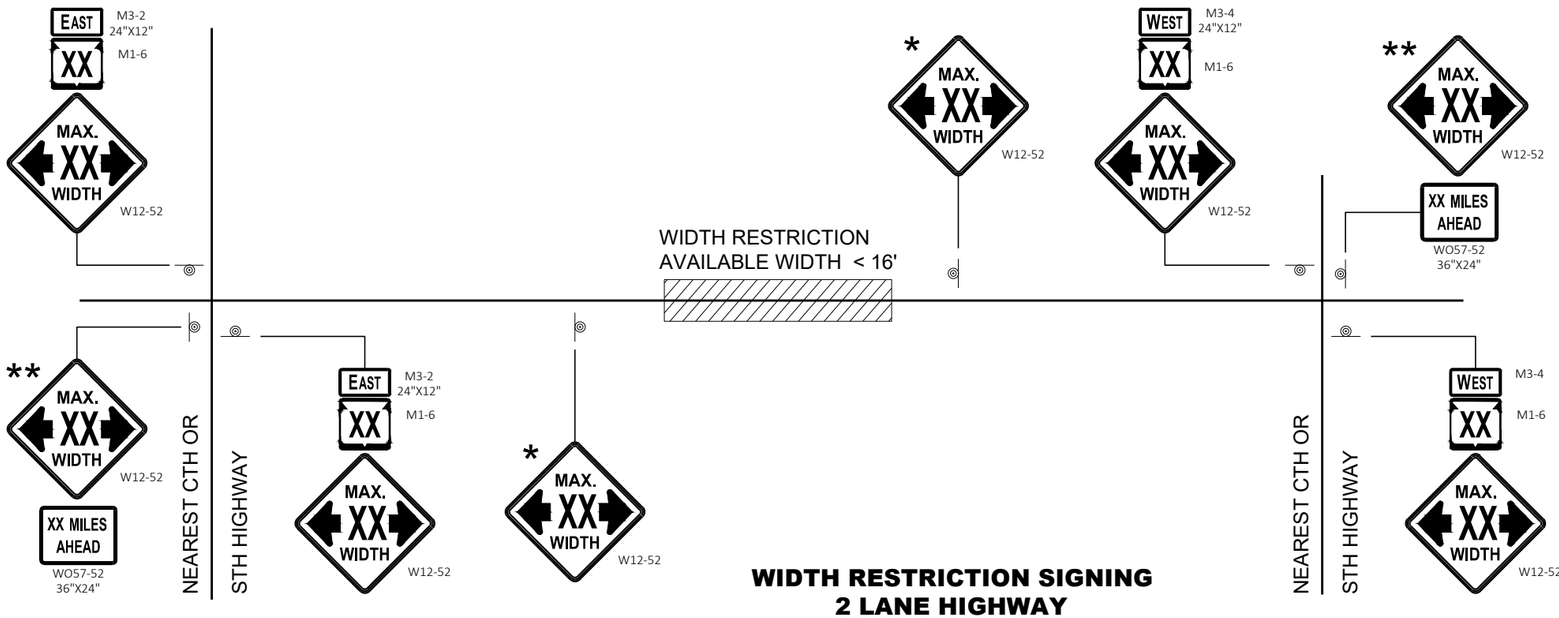


WIDTH RESTRICTION SIGNING



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
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APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

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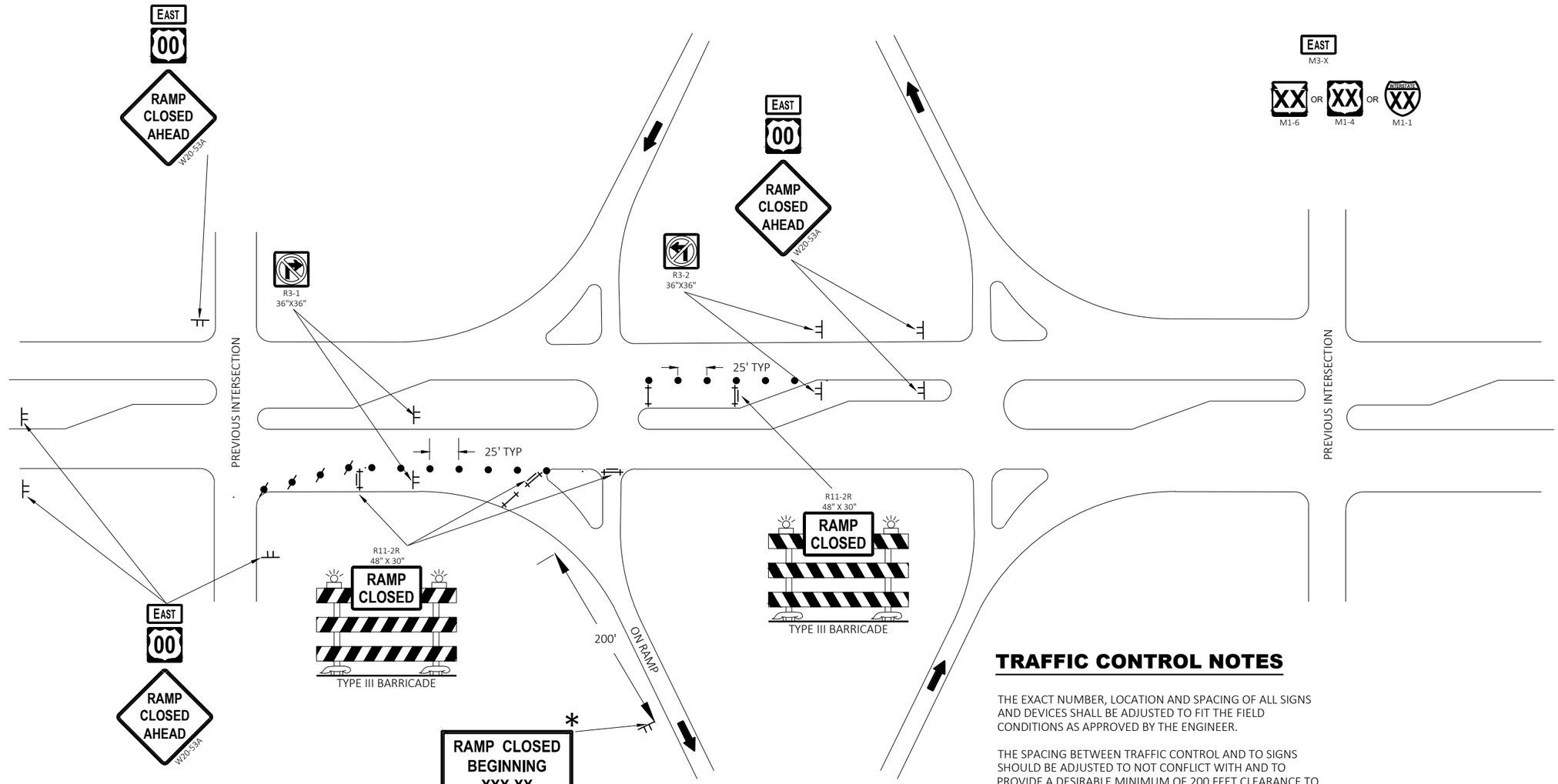

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL NOTES

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

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 THE 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.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24"x24" (36" x18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-1, M1-4, AND M1-6 SHALL BE 24"x24" (36"x36" IF NEEDED TO MATCH EXISTING SIGNS)
- W20-53A SHALL BE 48"X48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEE

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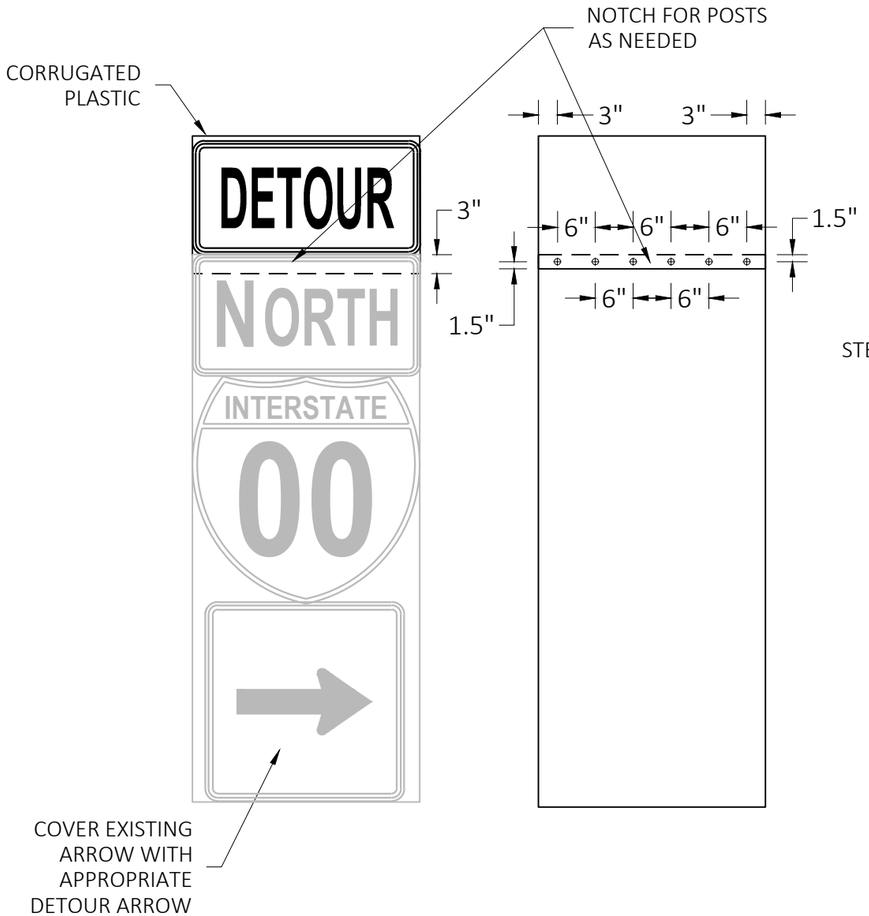
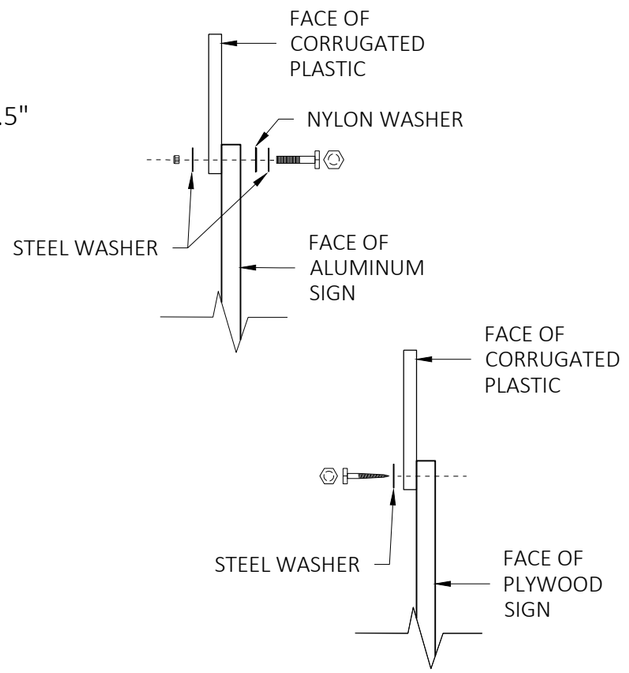
FRONT SIDE

BACK SIDE

SIDE VIEW





GENERAL NOTES

CELLS OF CORRUGATED PLASTIC SHALL BE VERTICALLY ORIENTED.

PROVIDE A 0.4-INCH THICK BASE CORRUGATED PLASTIC WITH A 0.035-INCH WALL THICKNESS AND 0.4-INCH CELL SIZE.

FOR 36" WIDE SIGNS: USE 6 FASTENERS AS SHOWN.

FOR 24" WIDE SIGNS: USE 4 FASTENERS WITH EDGE SPACING AS SHOWN AND 6" SPACING BETWEEN FASTENERS.

METAL WASHERS, NUTS, BOLTS AND LAGS 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, SC3

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.

PLYWOOD SIGNS:
LAG SCREWS - 5/16" x 1"
ALUMINUM SIGNS:
MACHINE BOLTS - 5/16" x 1-1/4" LENGTH W/NUTS
WASHERS:
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

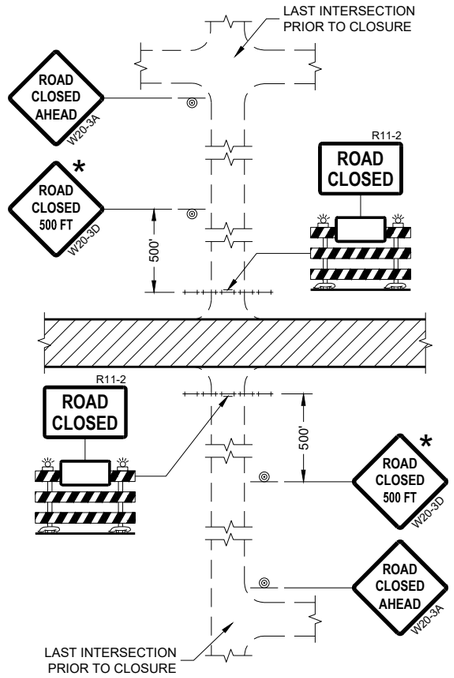
MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

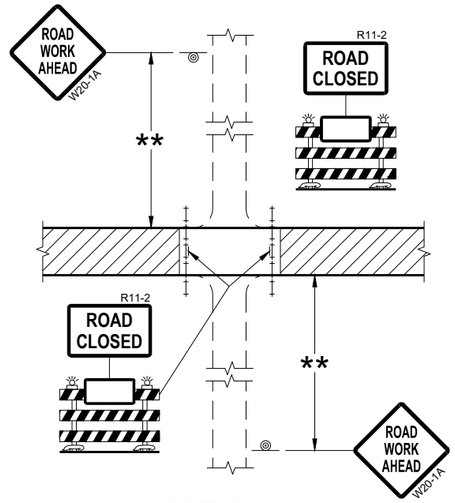
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVEL ENGINEER
FHWA

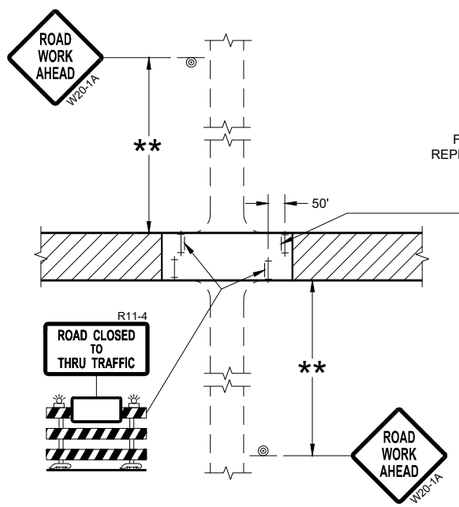
6
SDD 15C02-09h



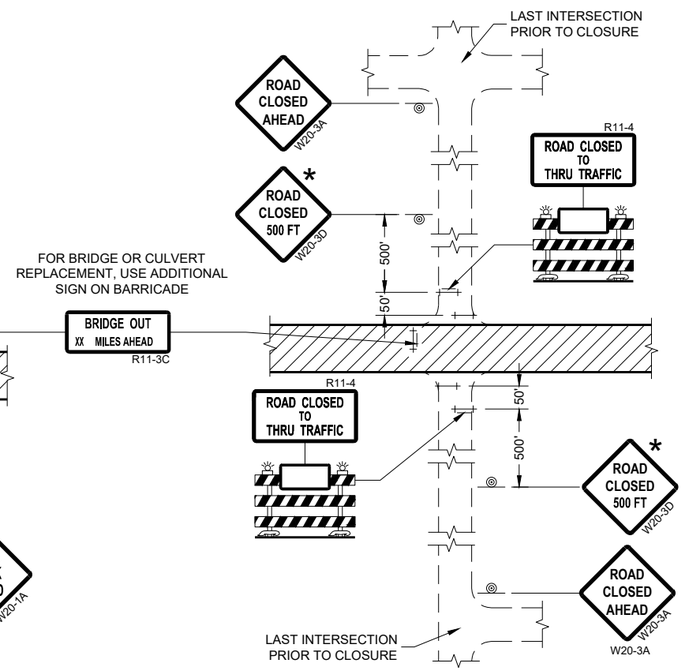
DETAIL 1
(NO ACCESS TO PROJECT)



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



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



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

GENERAL NOTES

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

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

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

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

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

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

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

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C03 - 05

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SDD 15C03 - 05

GENERAL NOTES

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

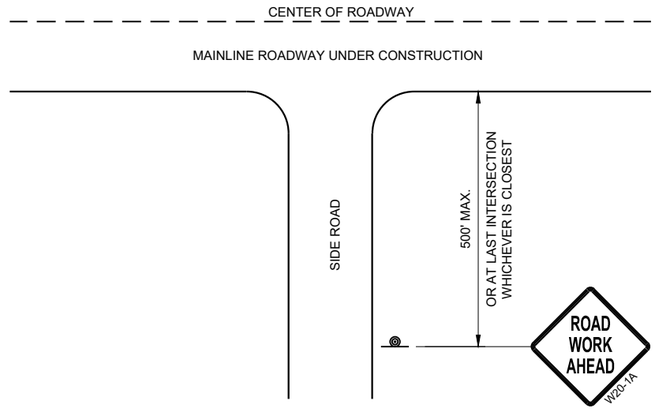
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS

** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



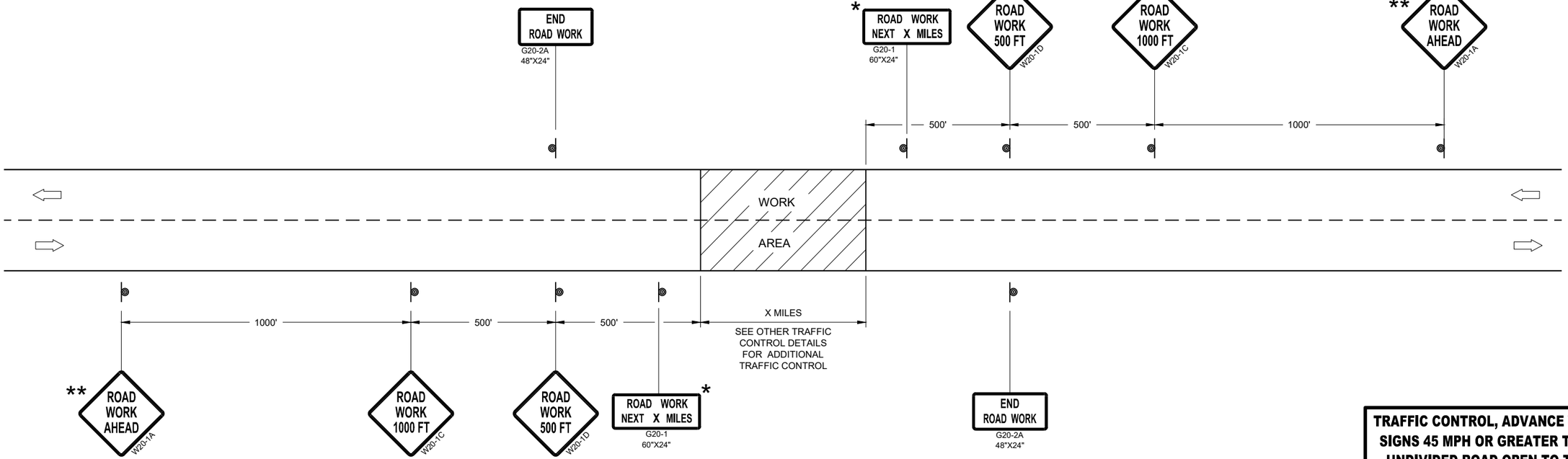
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

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SDD 15C04 - 05

GENERAL NOTES

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

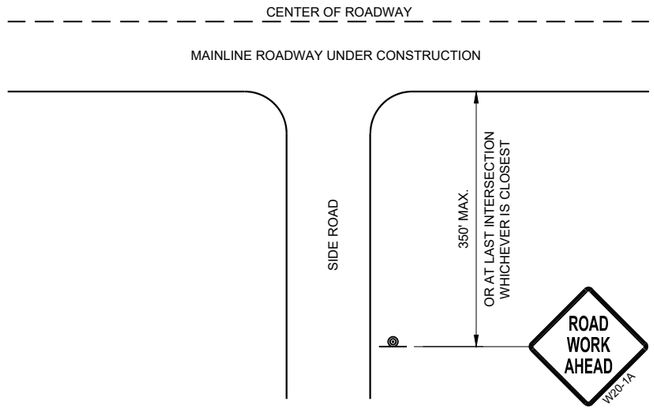
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.

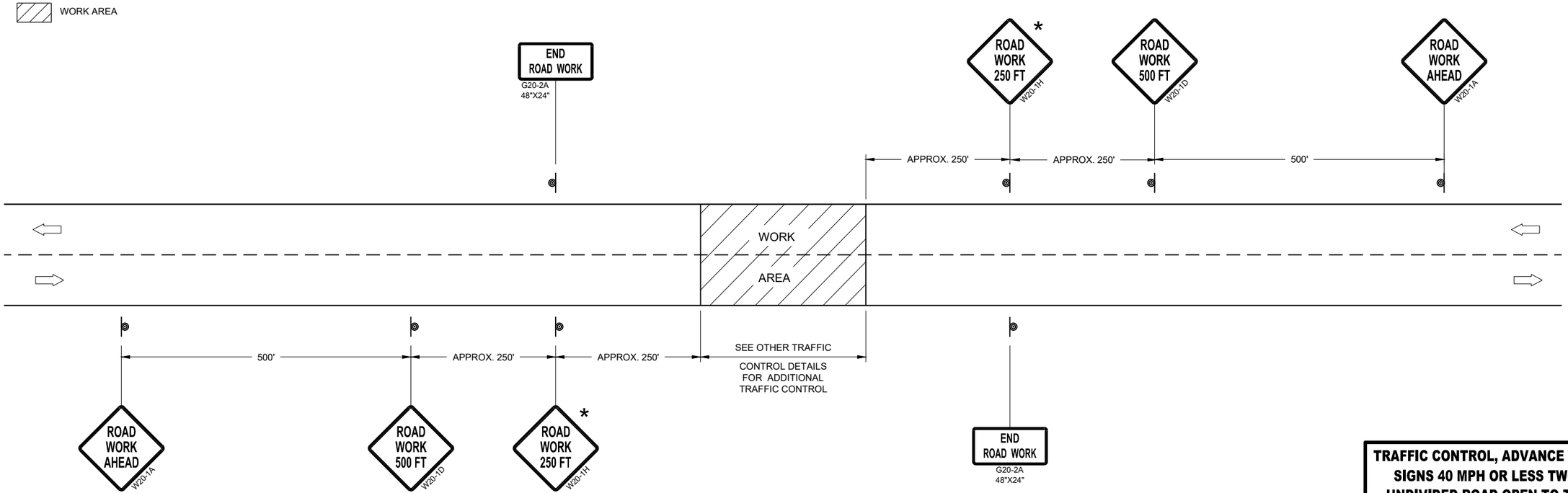
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



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

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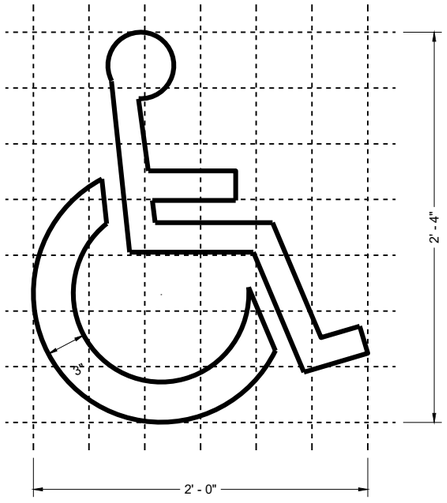
6

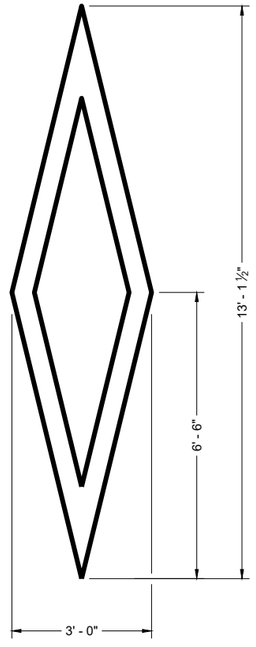
SDD 15C05 - 05

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.



HANDICAP SYMBOL



PREFERENTIAL LANE SYMBOL

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SDD 15C07-16a

SDD 15C07-16a

PAVEMENT MARKING SYMBOLS

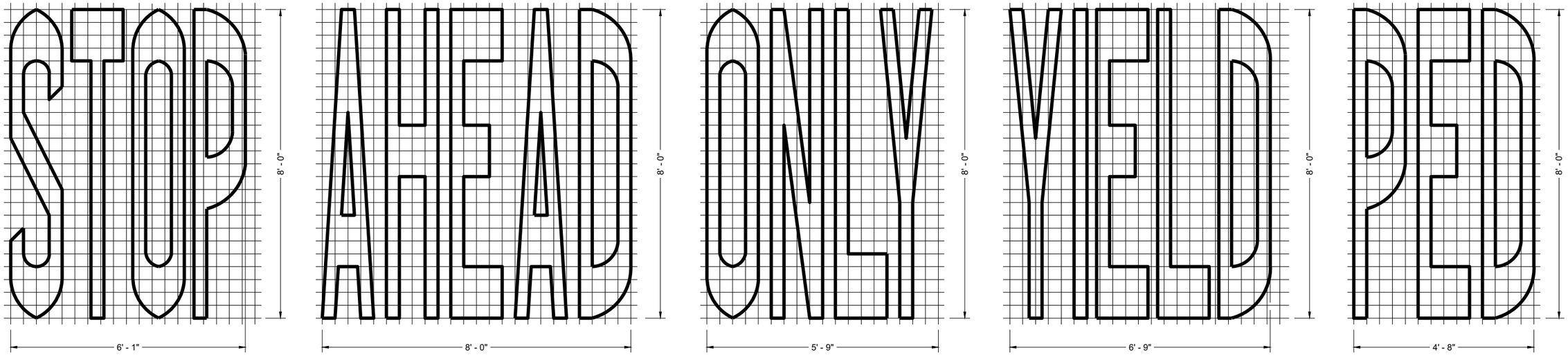
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

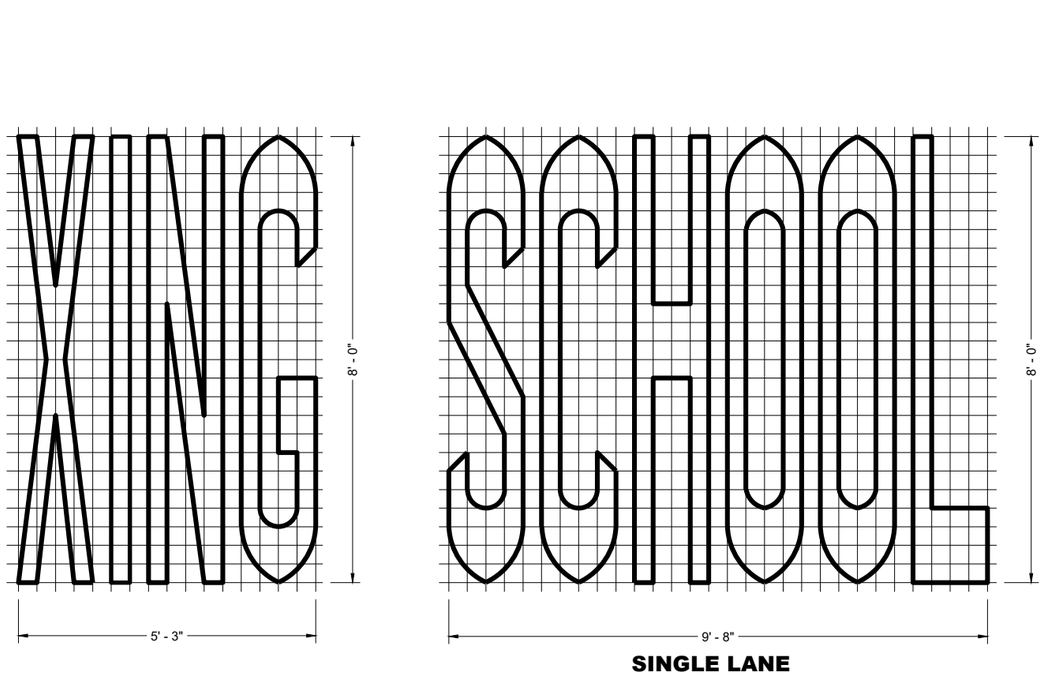
APPROVED

November 2024
DATE

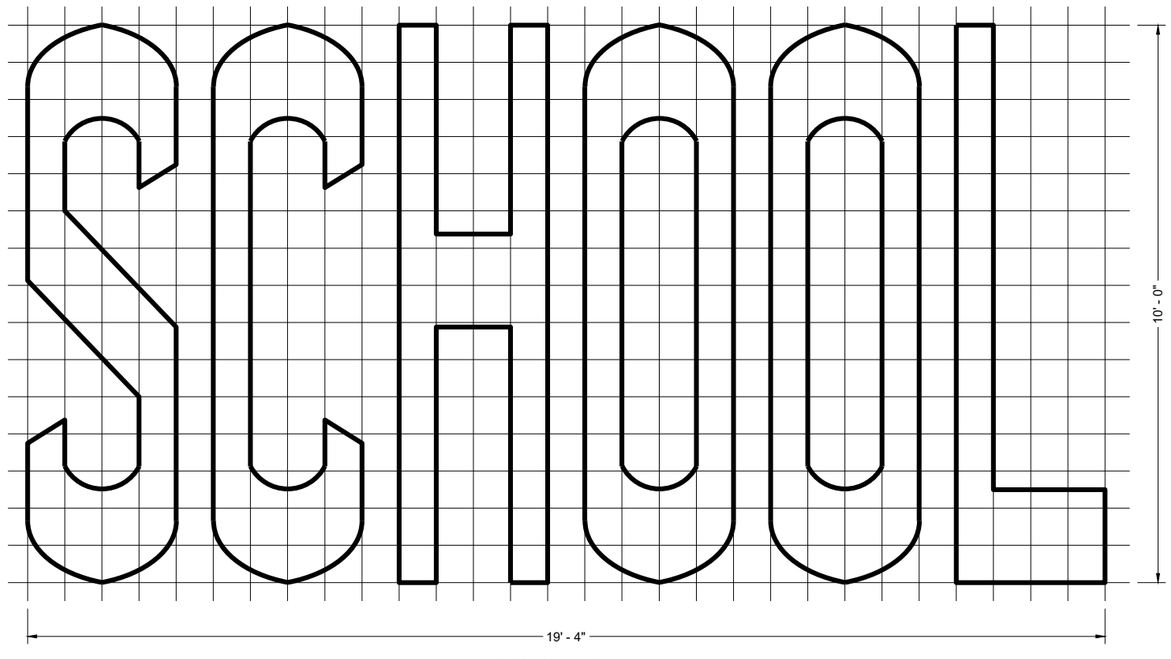
/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA





SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

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SDD 15C07-16b

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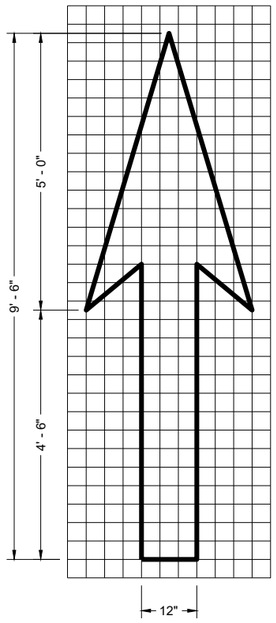
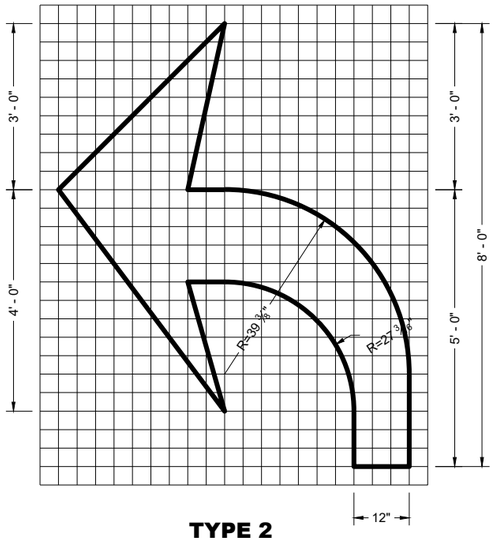
SDD 15C07-16b

GENERAL NOTES

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



TYPE 1



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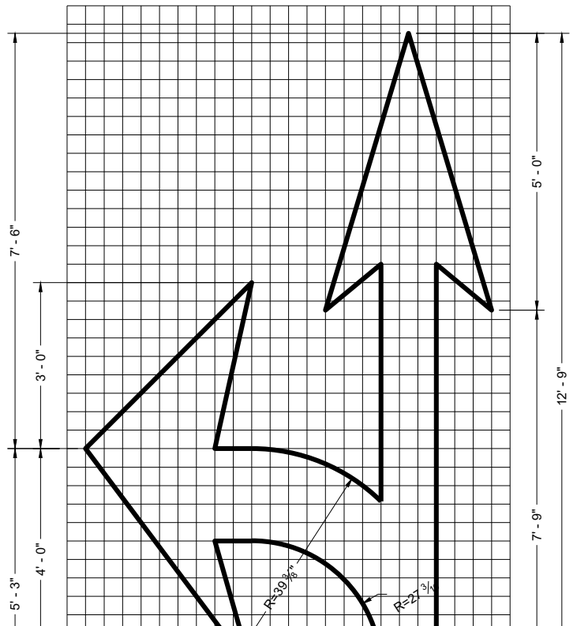

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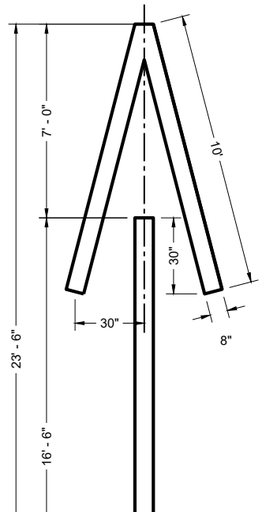

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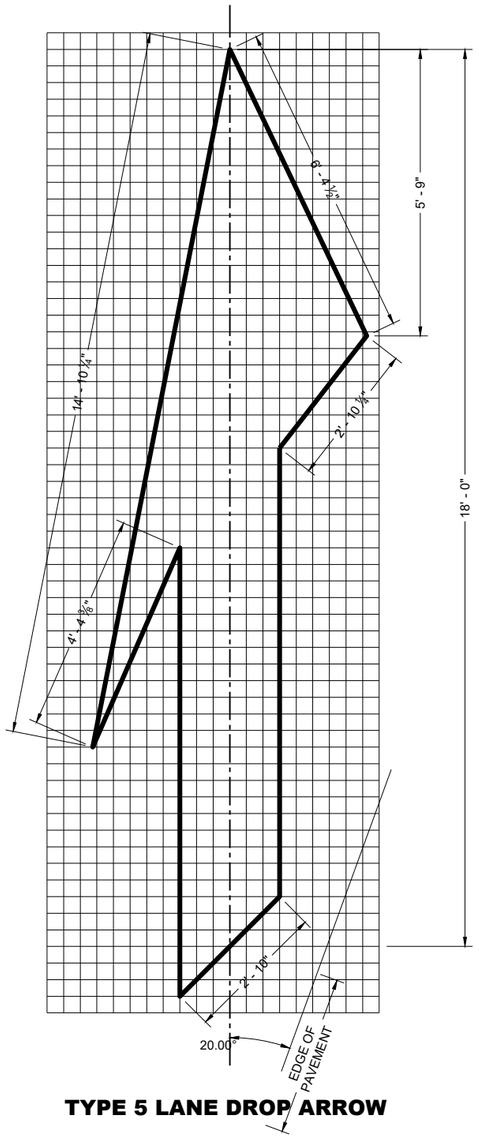
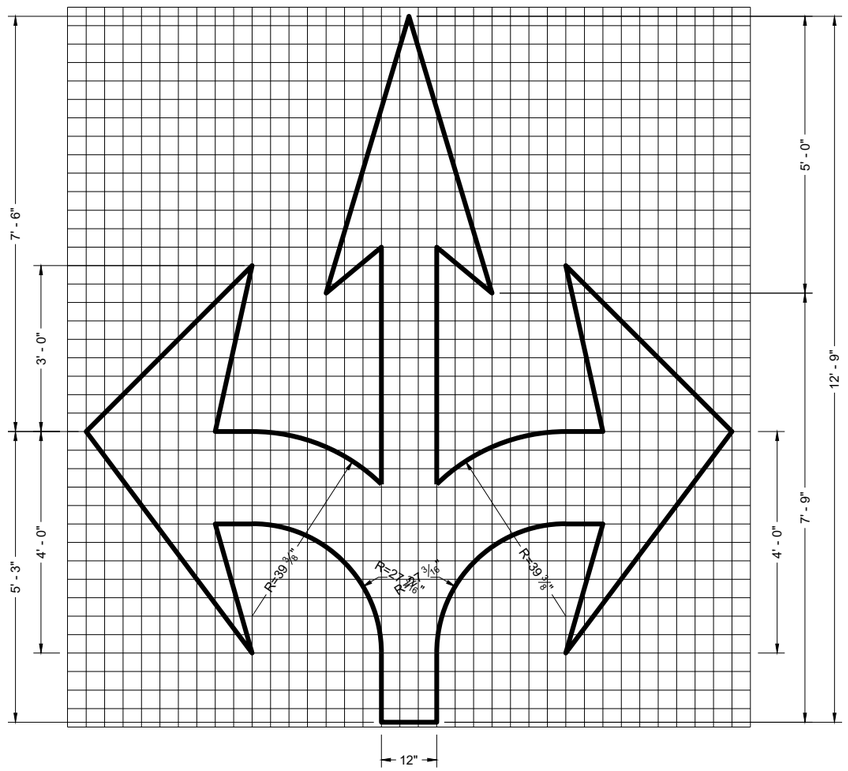
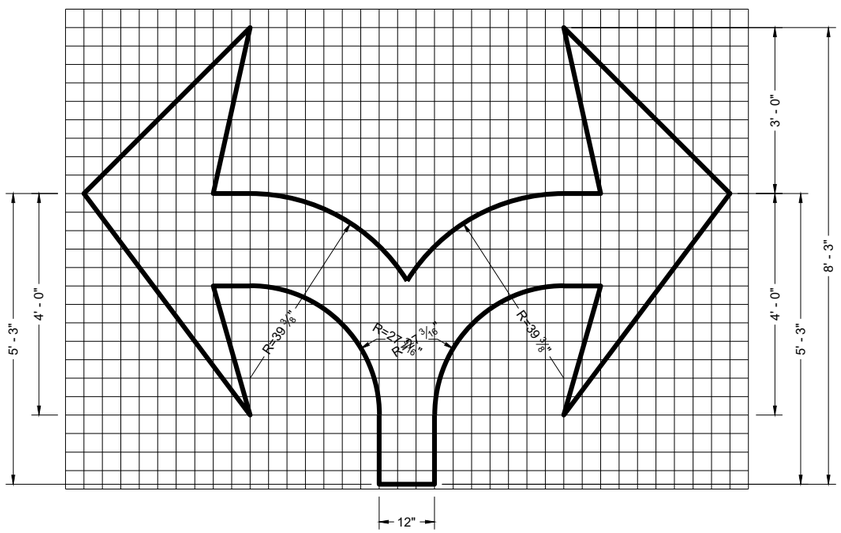


TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

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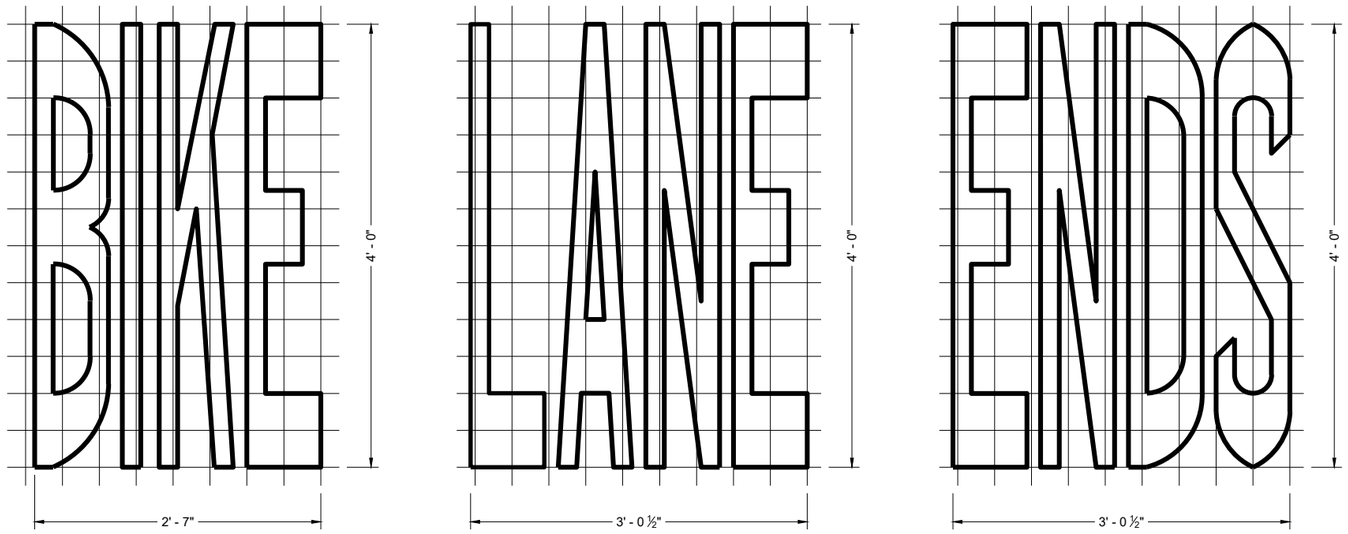
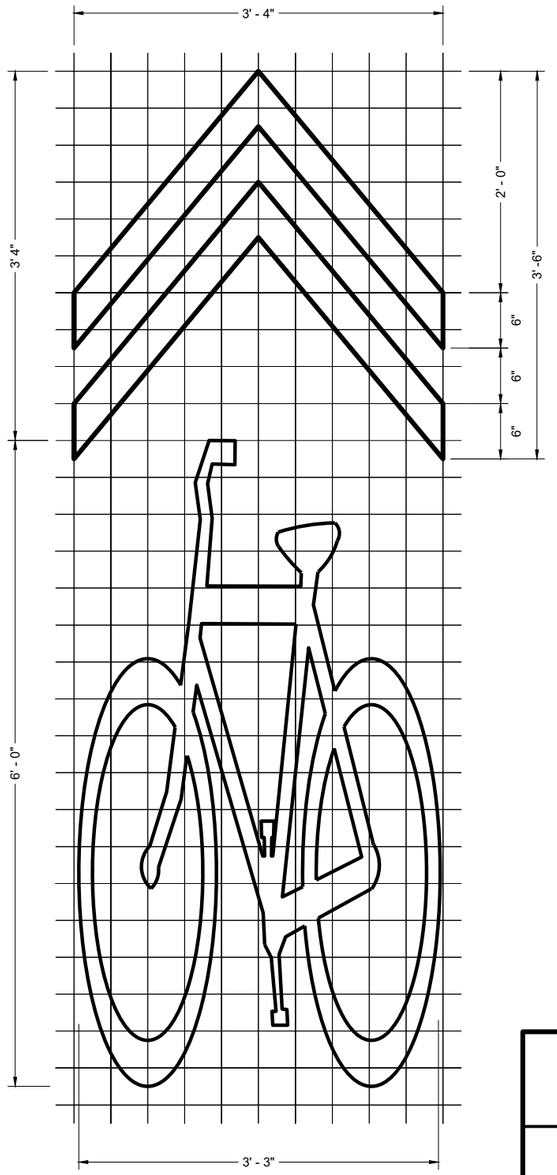


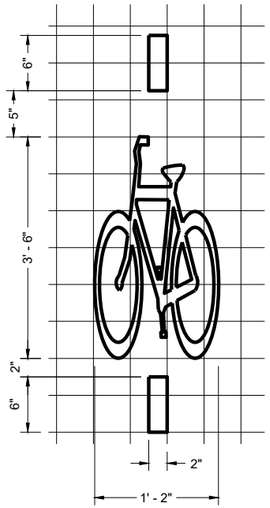
BIKE LANE WORDS

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.



BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING

BIKE LANE SYMBOL

BIKE LANE SYMBOL FOR SHARED LANE

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

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GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

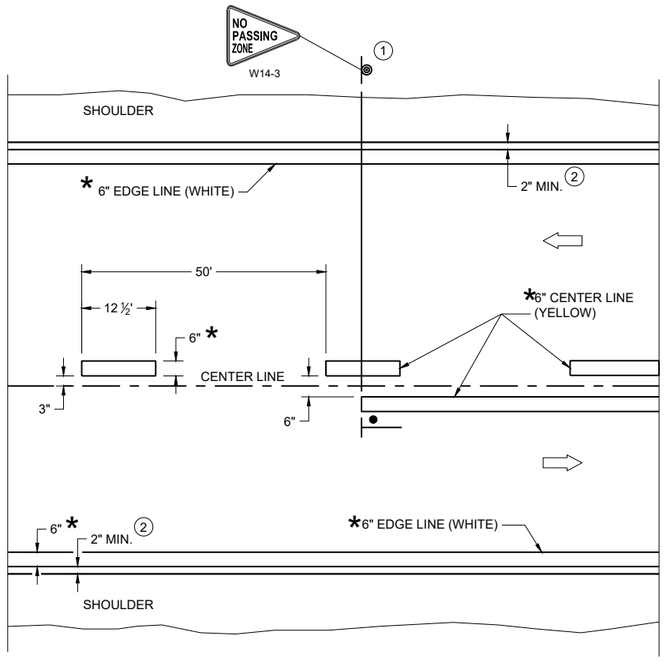
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

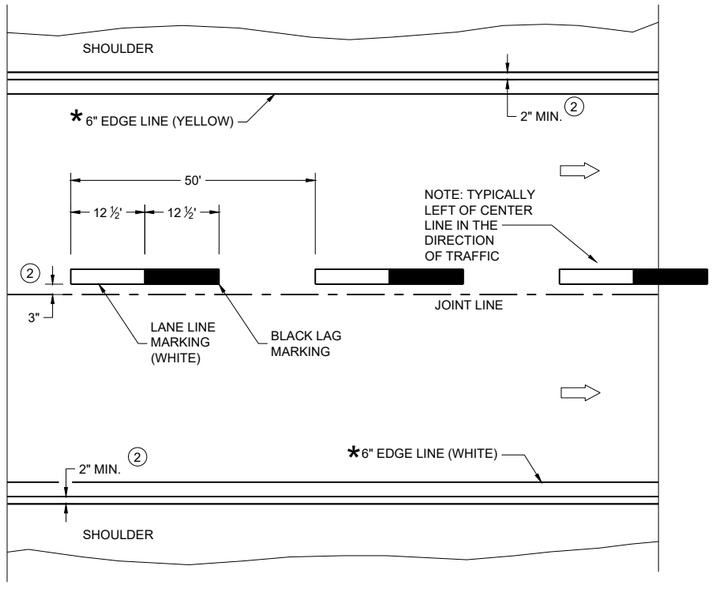
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

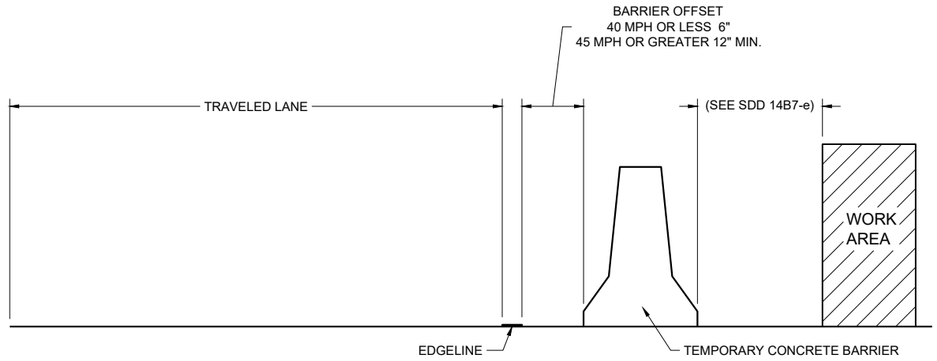
6

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — Statewide Pavement Marking Engineer
FHWA

SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGELINE

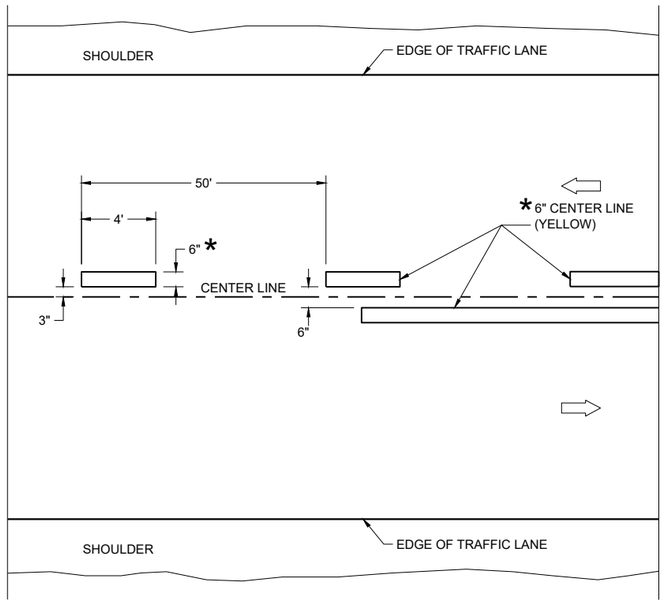
GENERAL NOTES

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

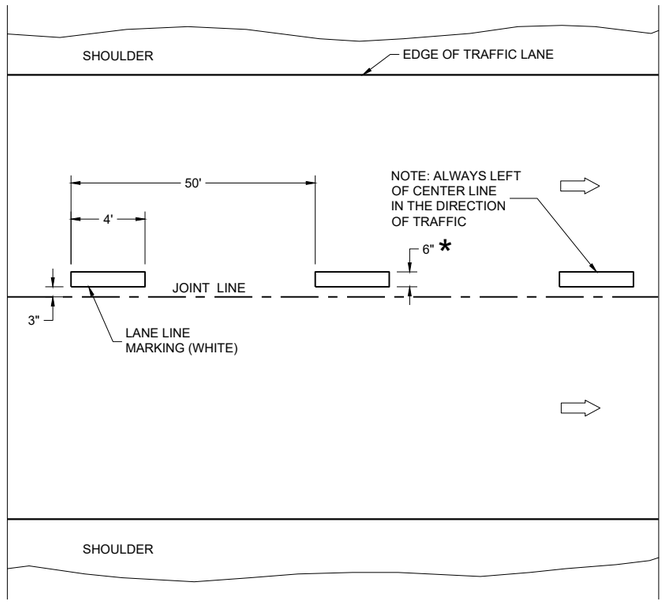
LEGEND

DIRECTION OF TRAFFIC

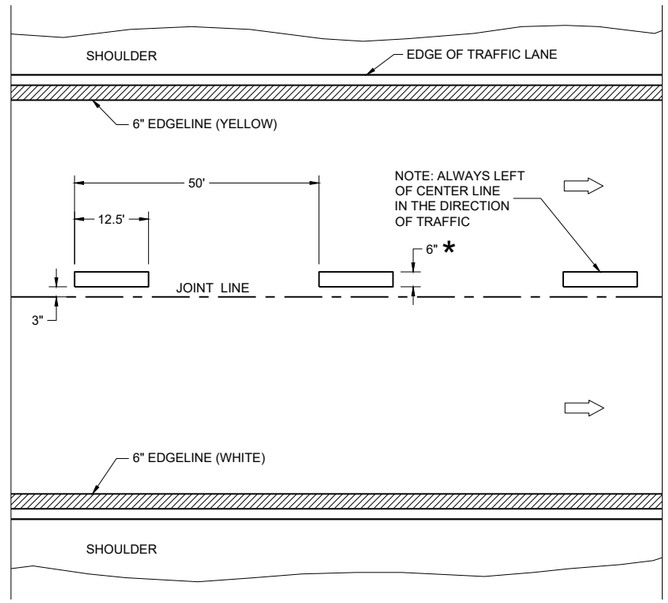
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



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 Pavement Marking Engineer

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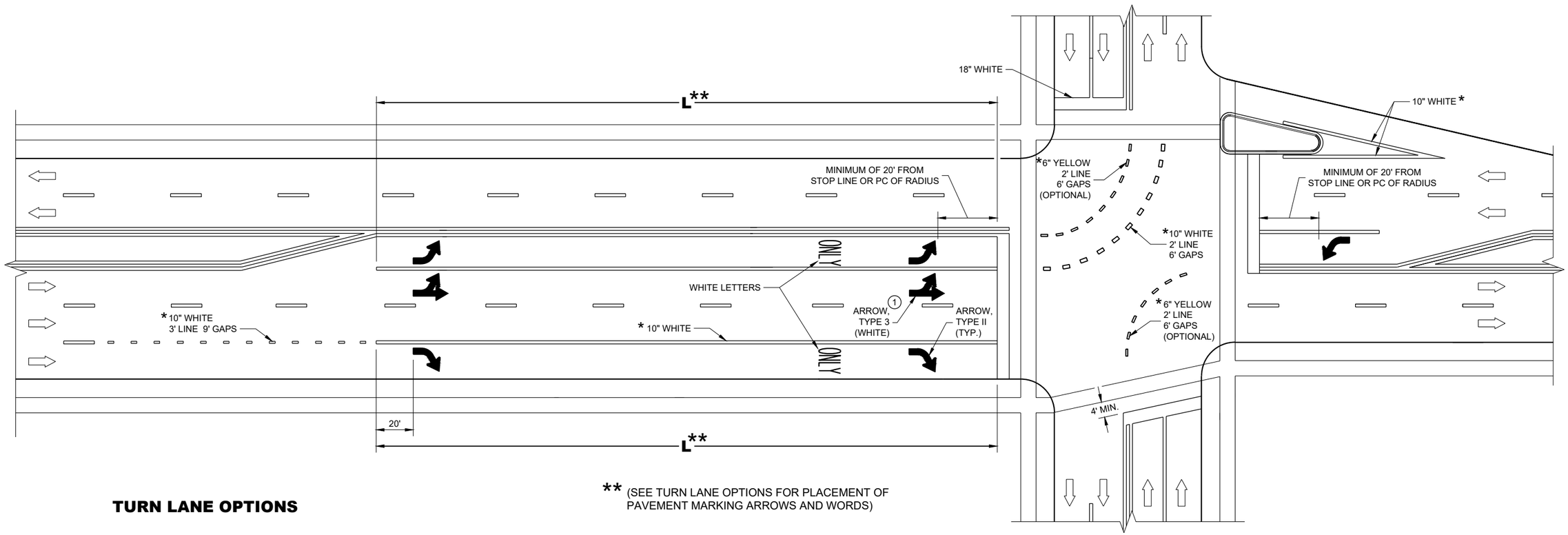
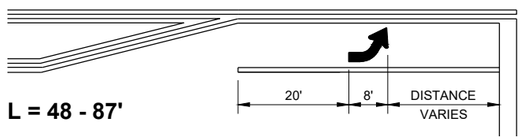


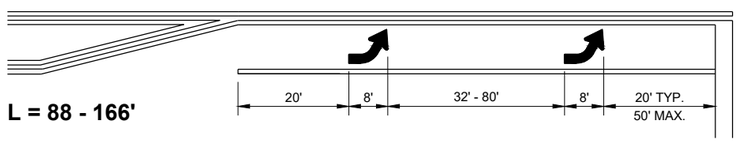
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

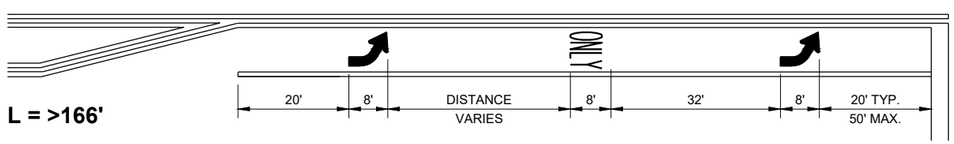
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



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

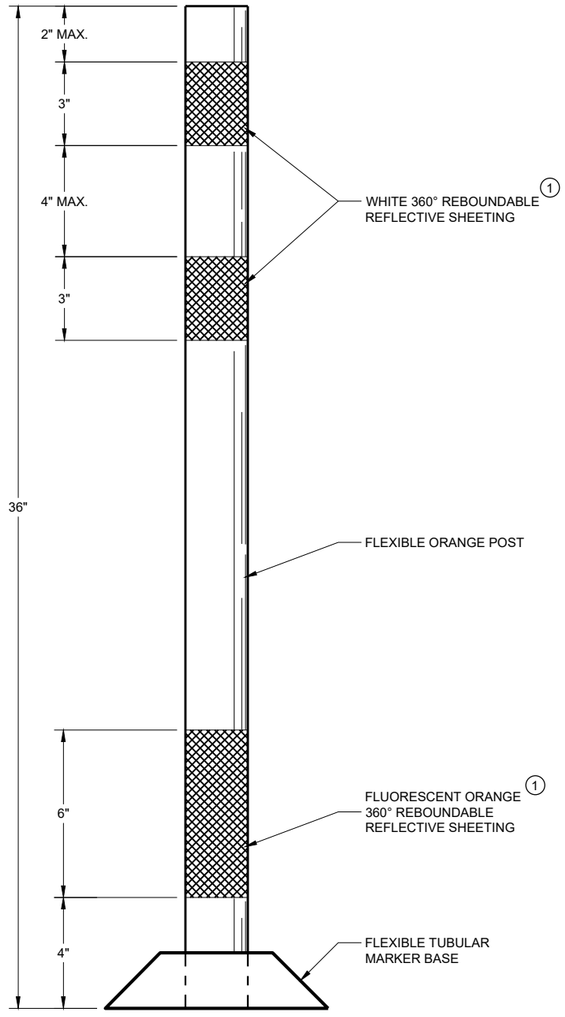
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

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 ENGINEER

FHWA

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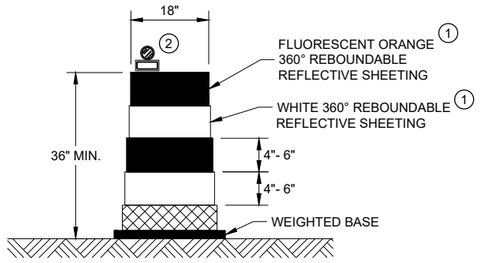
SDD 15C11 - 10a

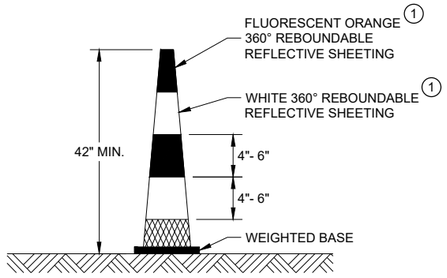
GENERAL NOTES

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

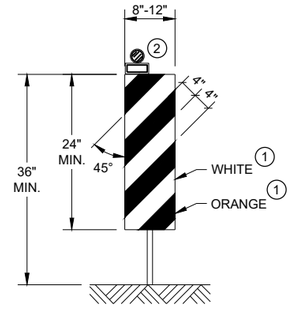
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

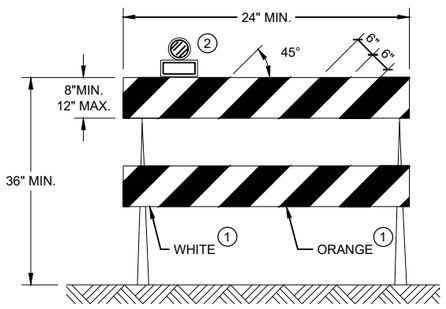
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



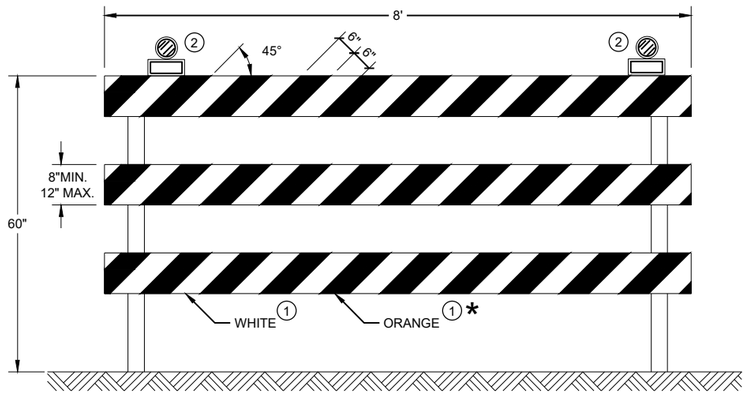
VERTICAL PANEL

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 ENGINEER

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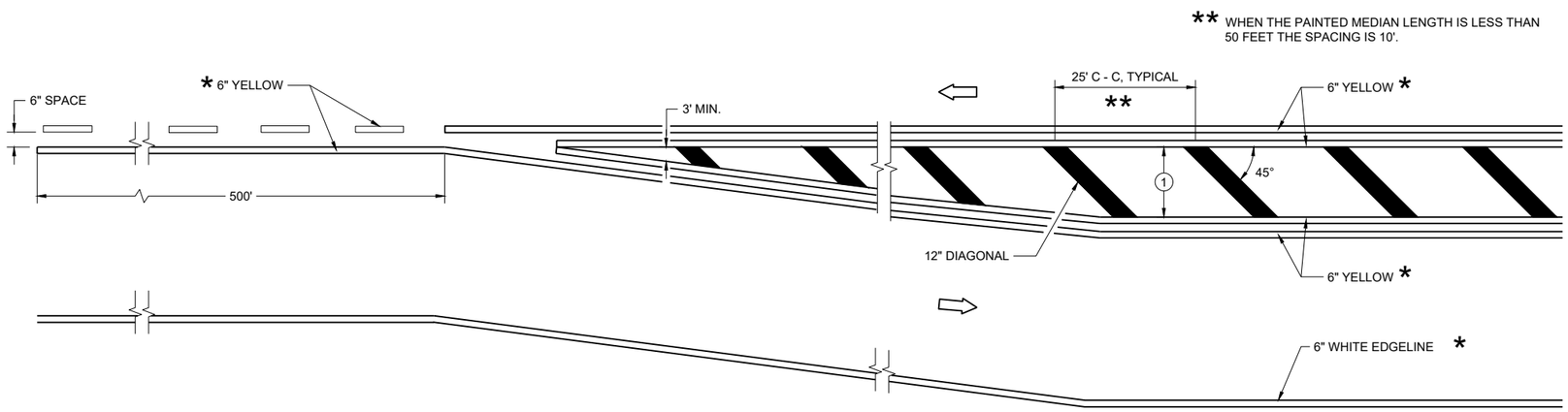


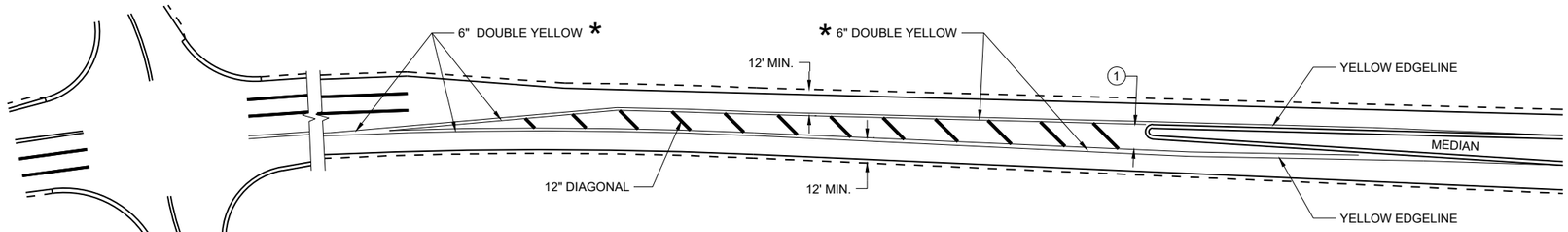
MEDIAN ISLAND DETAIL

GENERAL NOTES

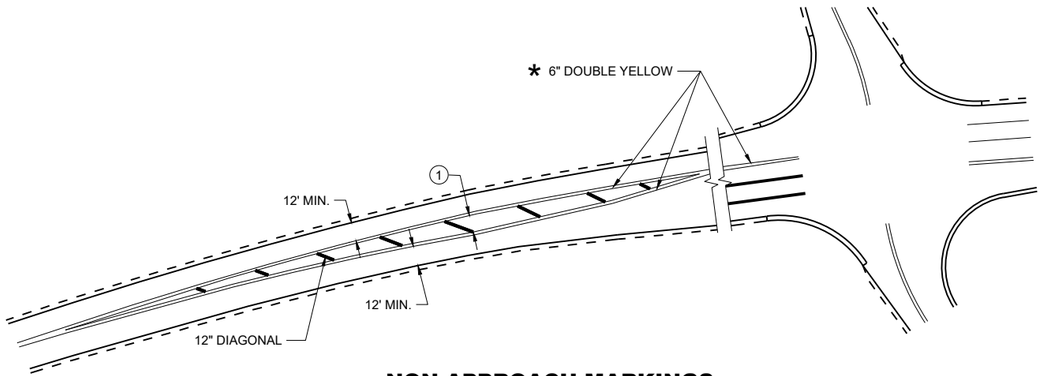
(1) DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

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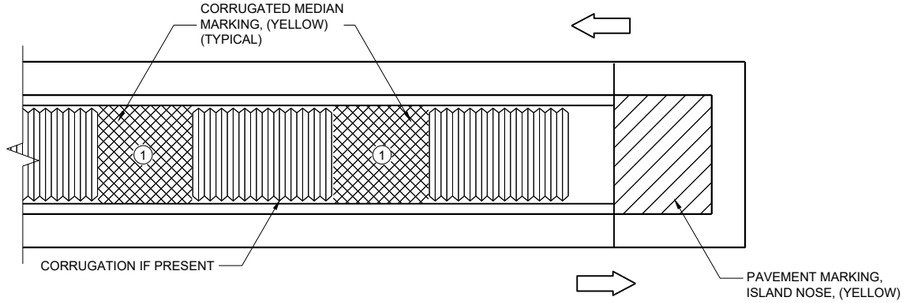
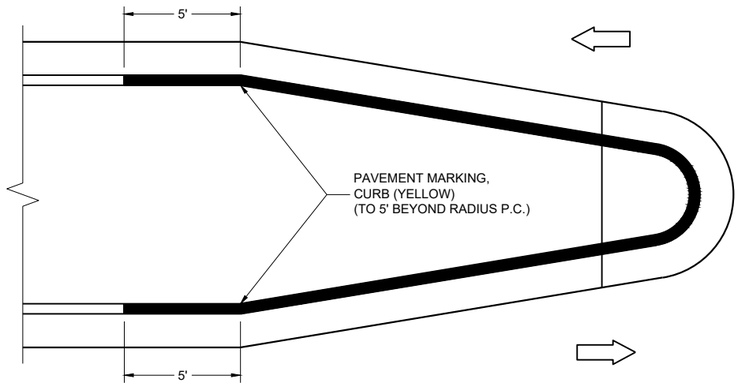
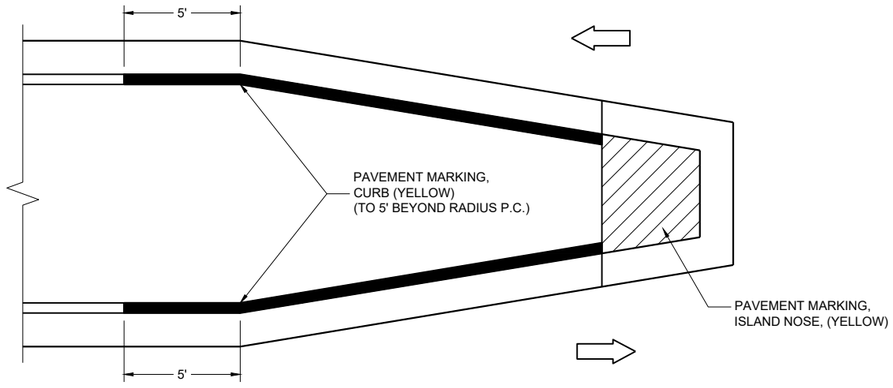
SDD 15C18-09a



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

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

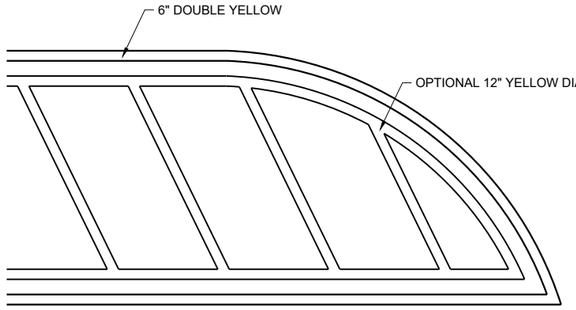
(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL



FLUSH MEDIAN ISLAND NOSE

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

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REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED

GENERAL NOTES

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

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

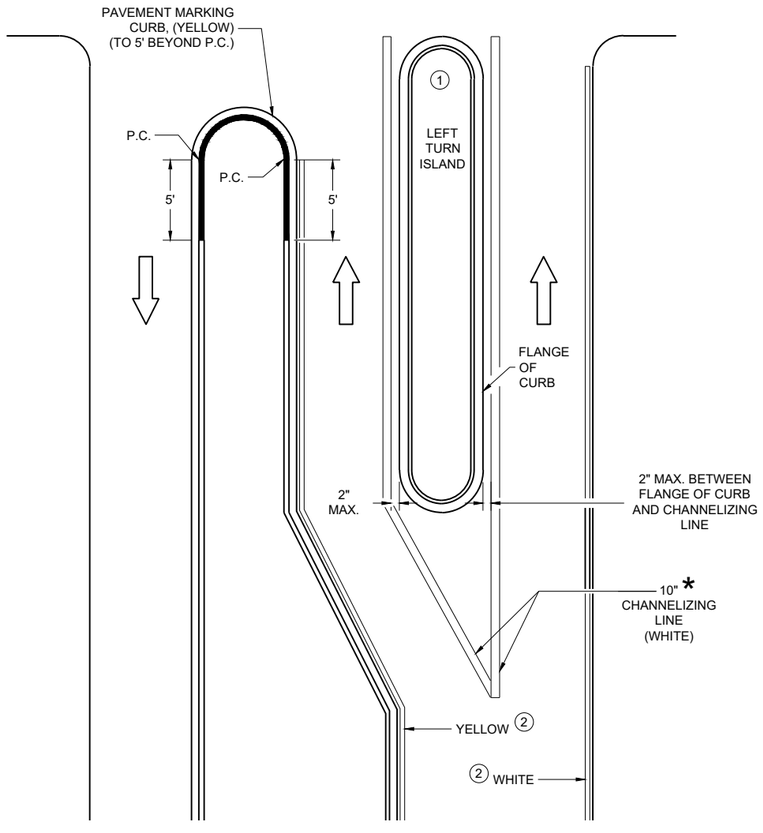
(1) MARK CURB NOSES YELLOW.

(2) MARK ACCORDING TO TABLE.

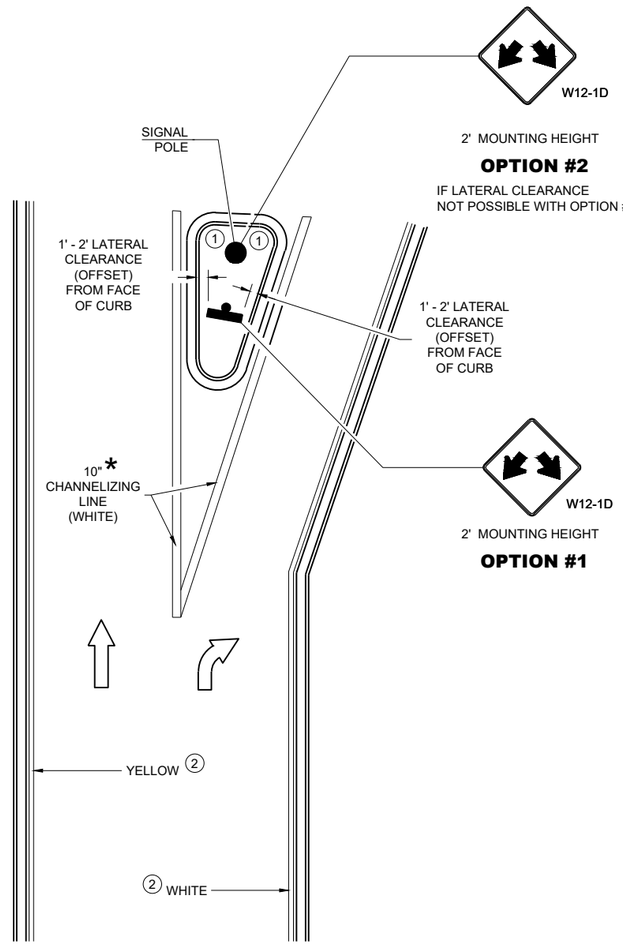
(3) CHEVRON MAY BE OMITTED IF LESS THAN 4" WIDE

DIRECTION OF TRAVEL

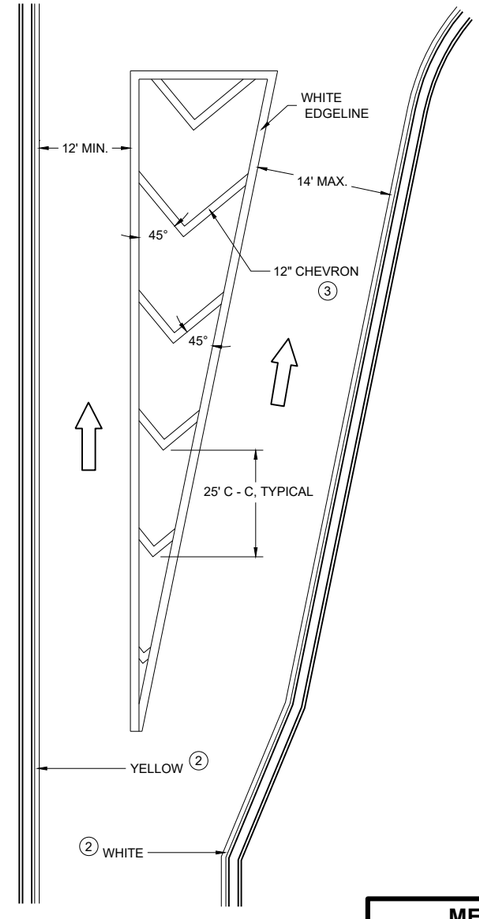
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



LEFT TURN & MEDIAN ISLAND



RIGHT TURN ISLAND



TURN LANE DETAIL

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

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LEGEND

V1 MARKING VEHICLE

V2 SHADOW VEHICLE

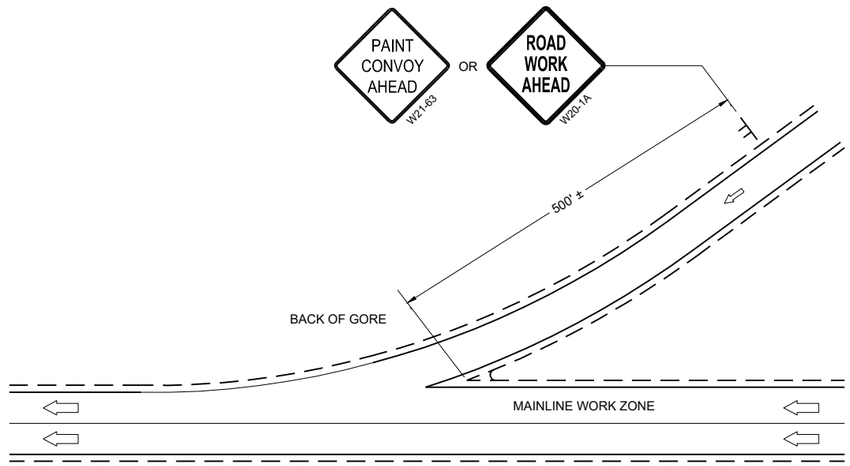
V3 TRAIL VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (MERGE)



GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

IF THE SHOULDER IS TOO NARROW TO ACCOMMODATE THE LAST TRAILING VEHICLE, THE VEHICLE SHOULD STRADDLE THE EDGE LINE.

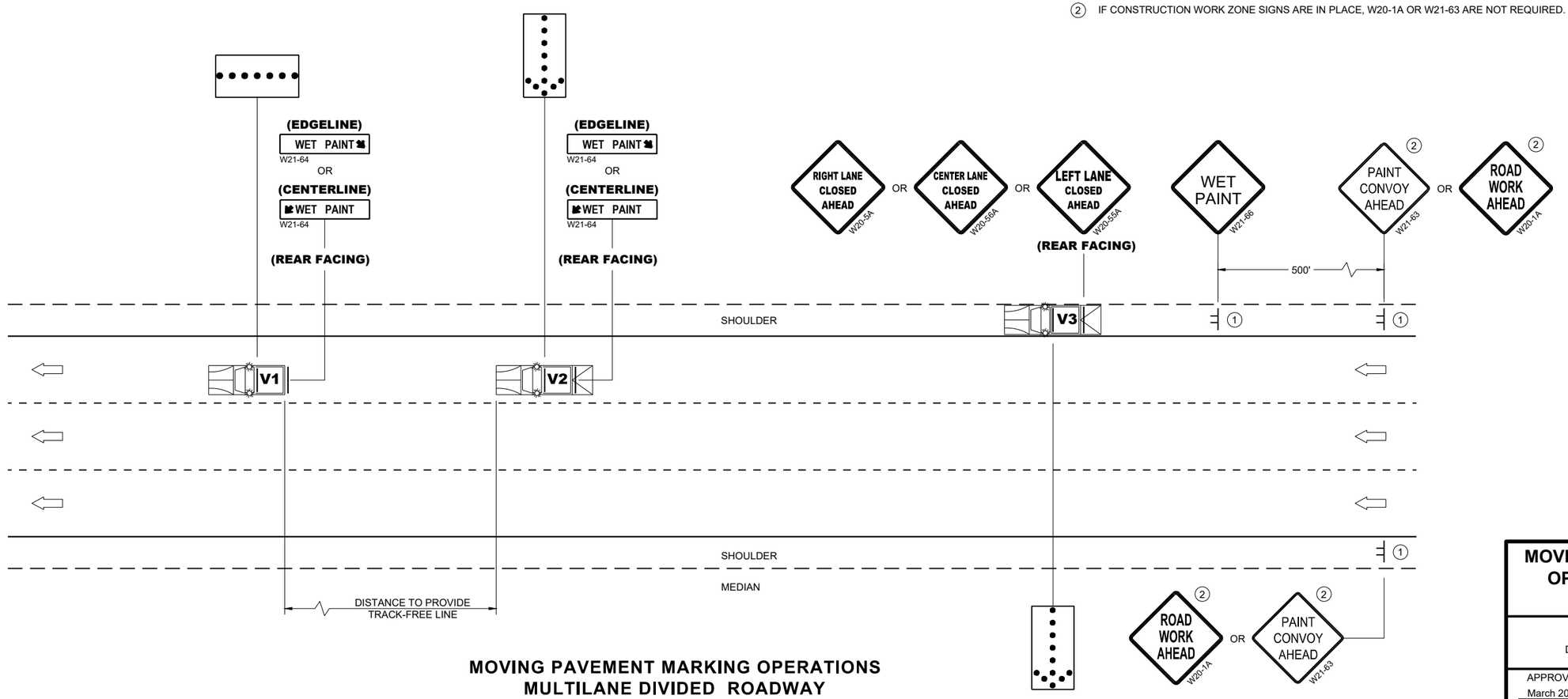
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY ON RAMP.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS MULTILANE DIVIDED ROADWAY

MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C19-9c

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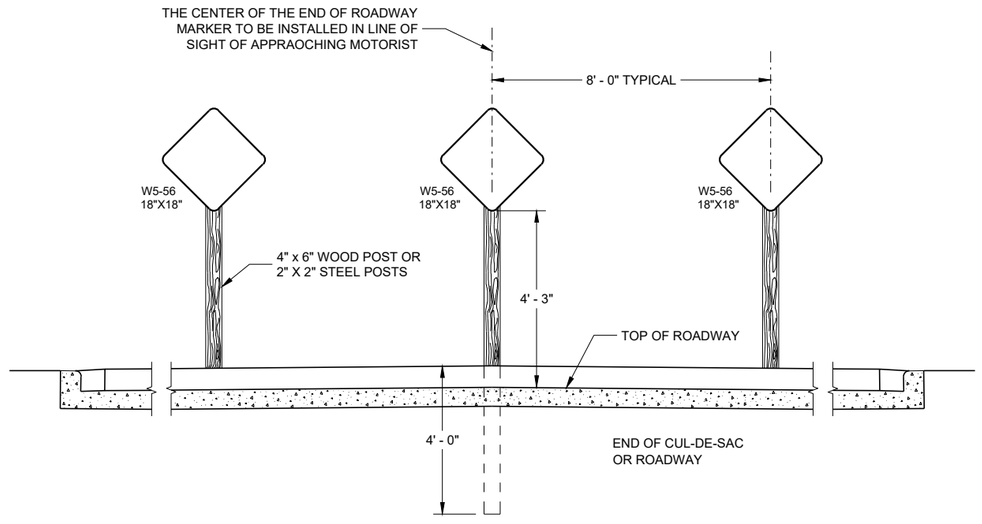
SDD 15C19-9c

GENERAL NOTES

SIGN LOCATIONS SHOWN ARE TYPICAL PLACEMENT AND MAY BE ADJUSTED BY THE ENGINEER AS FIELD CONDITIONS DICTATE.

THE MINIMUM NUMBER OF END-OF-ROADWAY SIGNS ARE THREE (AS SHOWN). ADDITIONAL END-OF-ROADWAY SIGNS MAY BE INSTALLED AS FIELD CONDITIONS DICTATE. (SEE SIGNING PLAN).

WHEN BEAMGUARD IS REQUIRED, PLACE END-OF-ROADWAY SIGNING BEHIND BEAMGUARD.



TYPICAL SIGN INSTALLATION

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SDD 15C26 - 04

SDD 15C26 - 04

END-OF-ROADWAY SIGNING

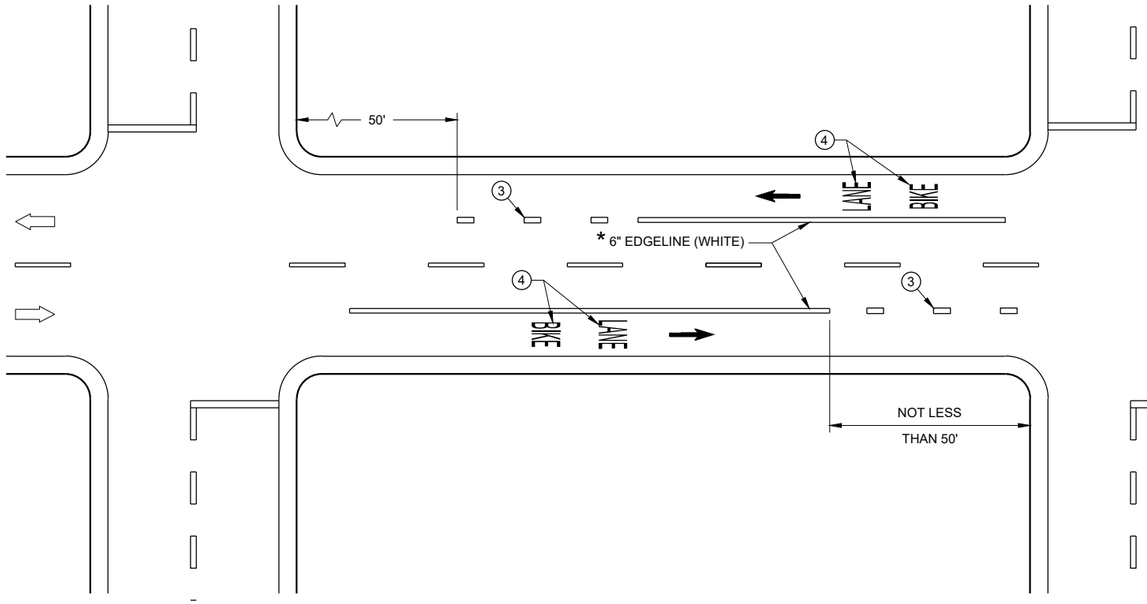
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

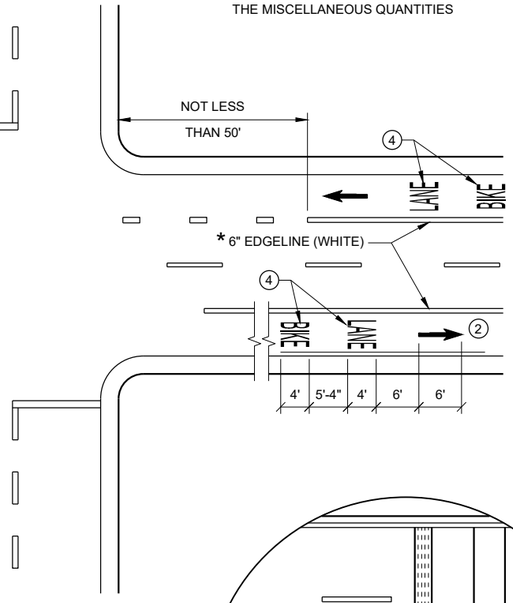
APPROVED

May 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA





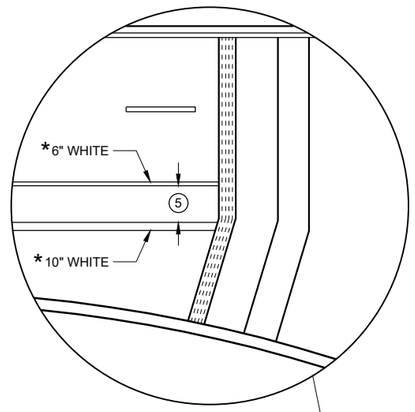
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

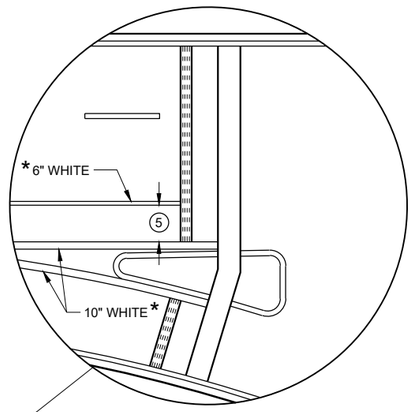
1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. MINIMUM OF ONE PER BLOCK. MAXIMUM OF 250 FEET.
3. DOTTED LINES (3' LINE, 9' GAP) SHOULD BE USED 50 FEET TO 200 FEET IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. BIKE SYMBOLS OR WORDS MAY BE USED.
5. BIKE ACCOMMODATION IS TYPICAL 5 FEET WIDE AND MINIMUM OF 4 FEET FROM A LONGITUDINAL JOINT. USE 5 FEET AT ≥ 45 MPH.
6. OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FOOT WIDE TURN LANE).
7. REFER TO CONTRACT PLANS FOR LANE WIDTH.

DIRECTION OF TRAVEL

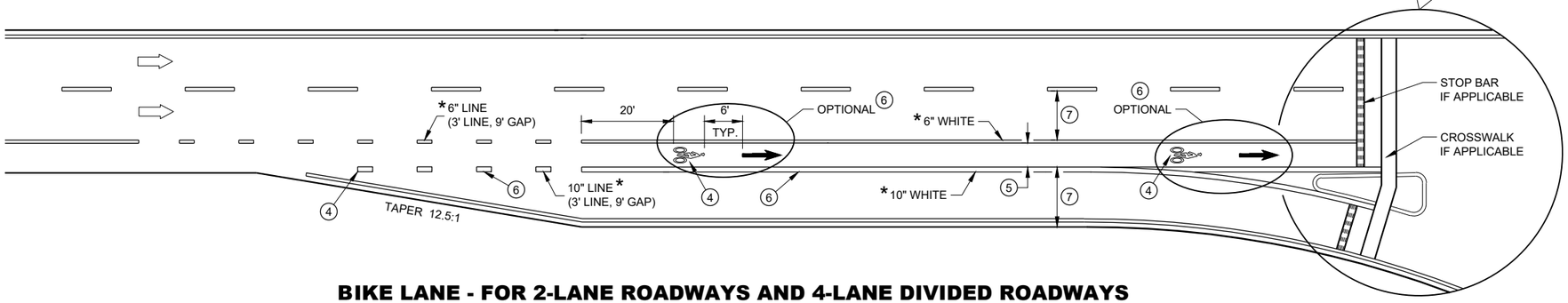
DESIGNATED BIKE LANE - NO PARKING



4 LANE DIVIDED WITHOUT ISLAND



4 LANE DIVIDED WITH ISLAND



BIKE LANE - FOR 2-LANE ROADWAYS AND 4-LANE DIVIDED ROADWAYS
(4-LANE DIVIDED WITH RIGHT TURN LANE SHOWN)

BIKE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER
FHWA

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SDD 15C29-08a

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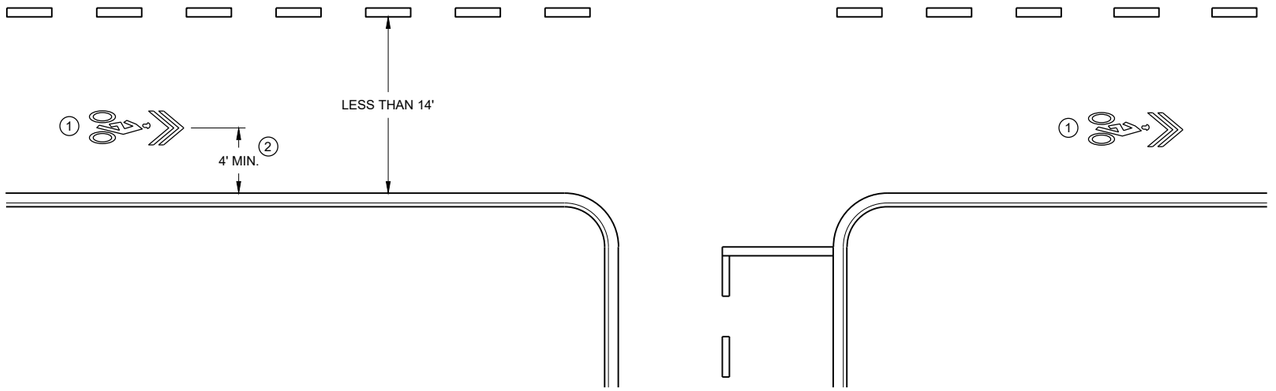
SDD 15C29-08a

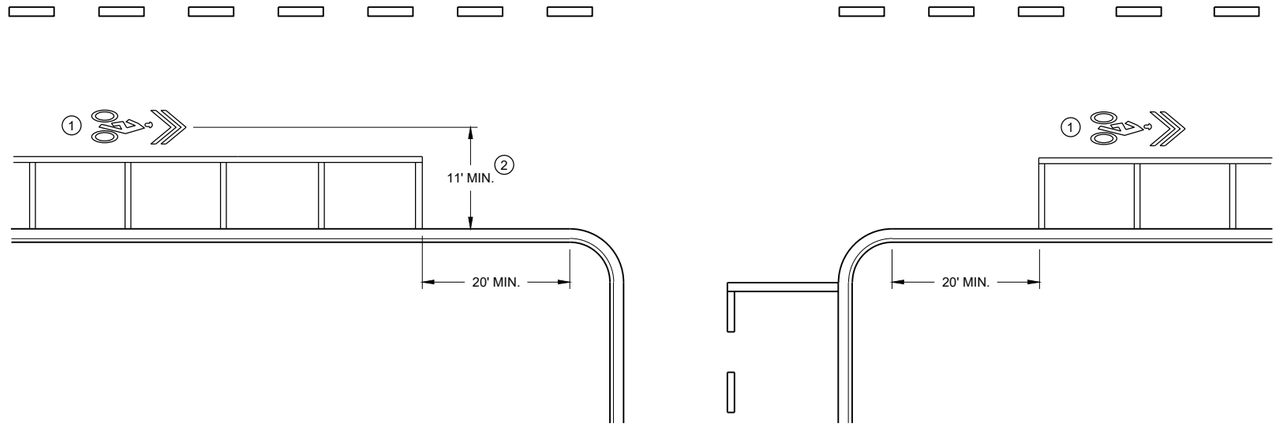
GENERAL NOTES

(1) MINIMUM OF ONE PER BLOCK, MAXIMUM OF 250 FEET.

(2) OR TO EDGE OF PAVEMENT WITHOUT CURB.



WITHOUT PARKING



WITH PARKING

6

SDD 15C29-08b

PAVEMENT MARKING FOR SHARED LANE 35 MPH OR LESS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

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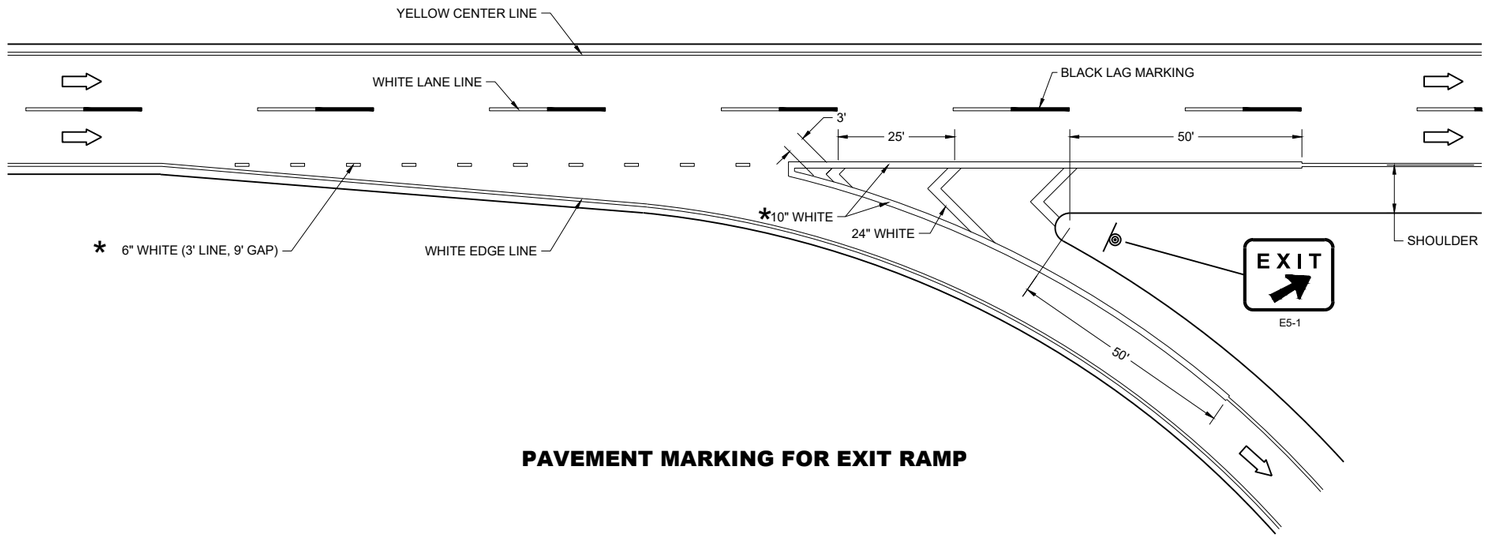
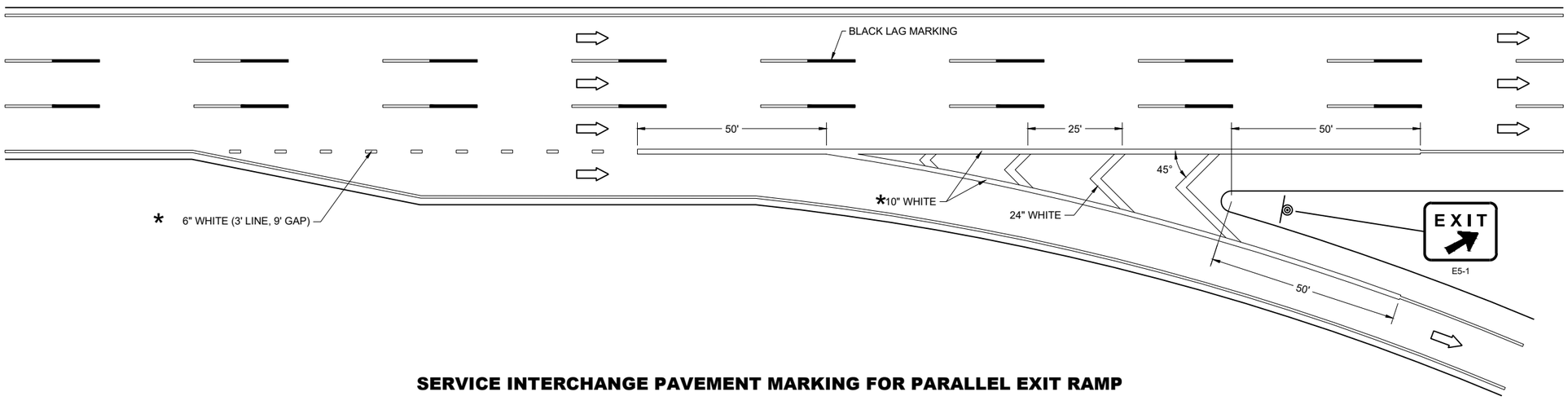
SDD 15C29-08b



PAVEMENT MARKING FOR EXIT RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT RAMP

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 15C31-08a

GENERAL NOTES

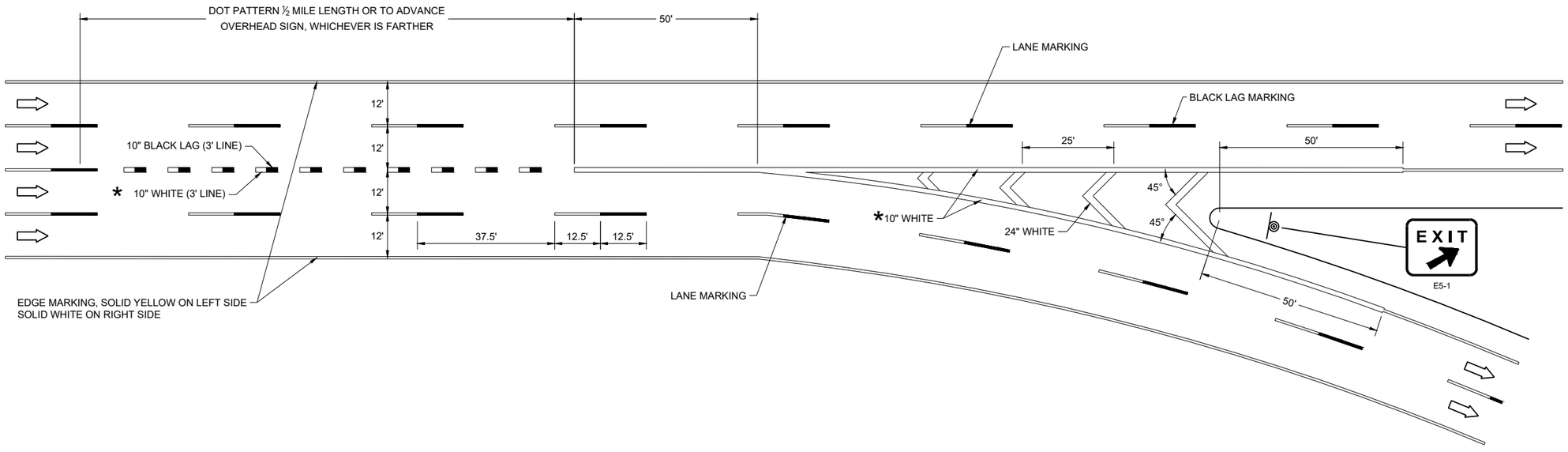
PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



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SDD 15C31-08b

PAVEMENT MARKING, MAJOR SPLIT FREEWAY TO FREEWAY

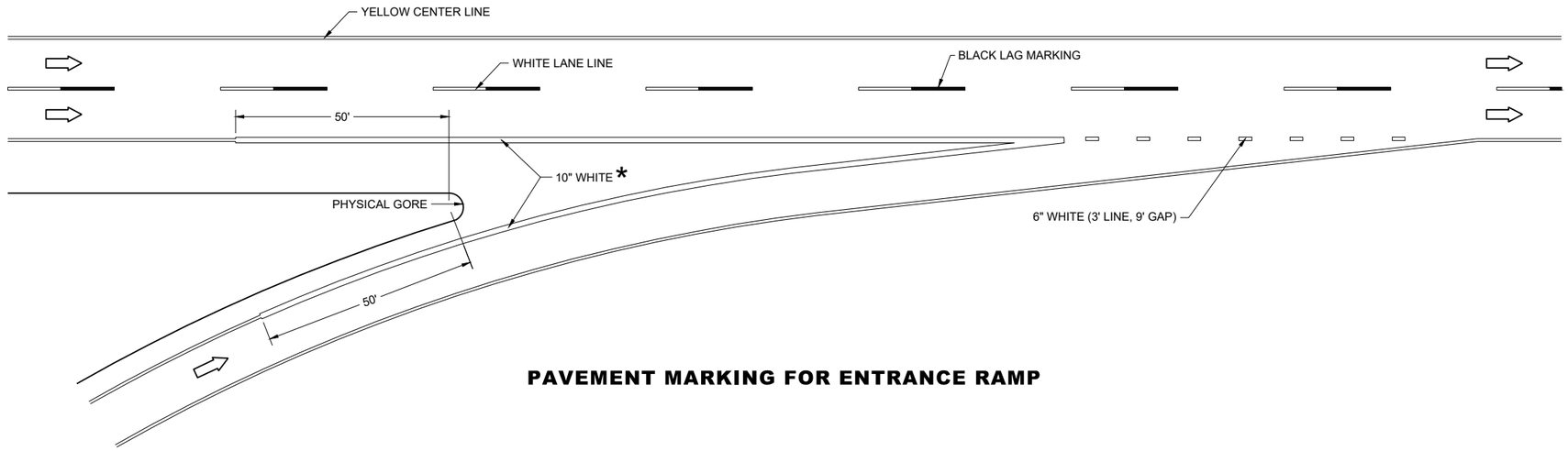
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C31-08b

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

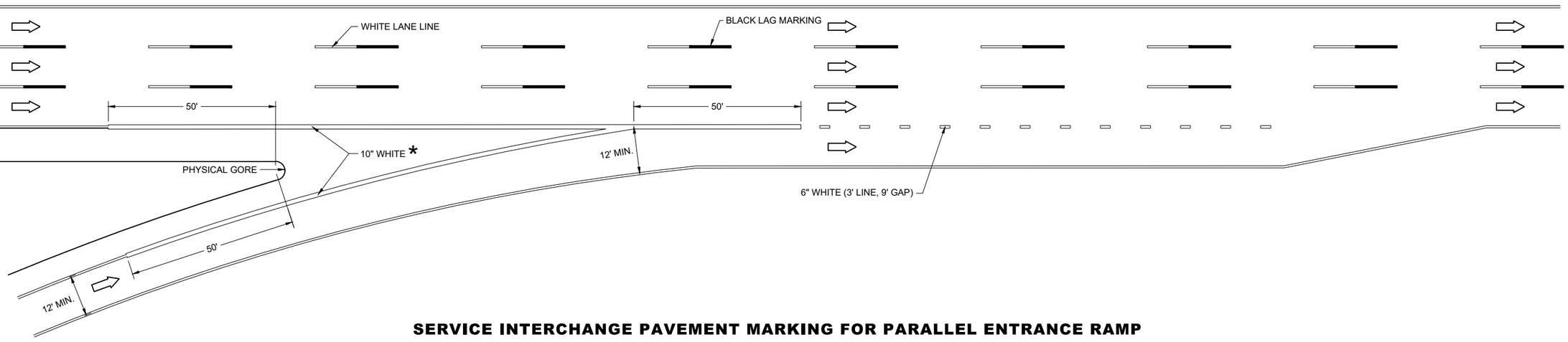


PAVEMENT MARKING FOR ENTRANCE RAMP

LEGEND

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

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SDD 15C31-08c

PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C31-08c

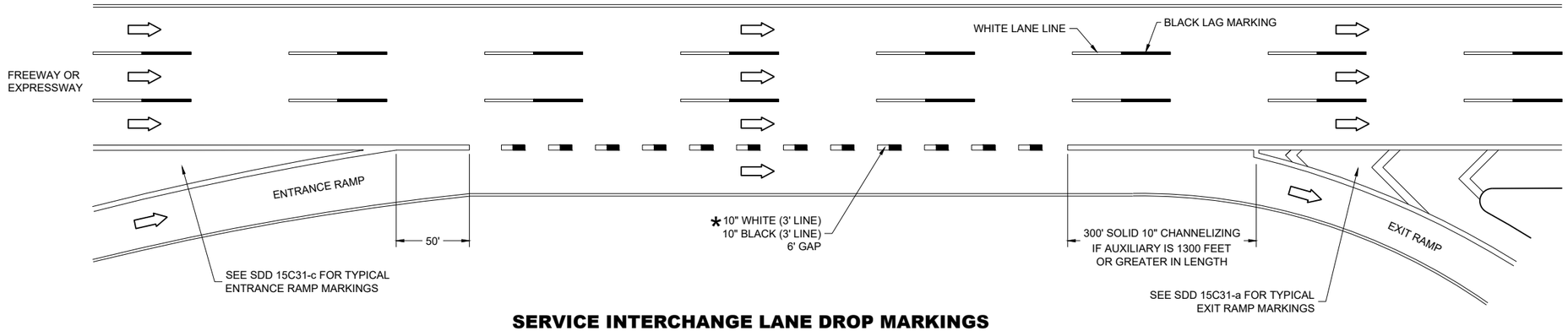
LEGEND

DIRECTION OF TRAVEL

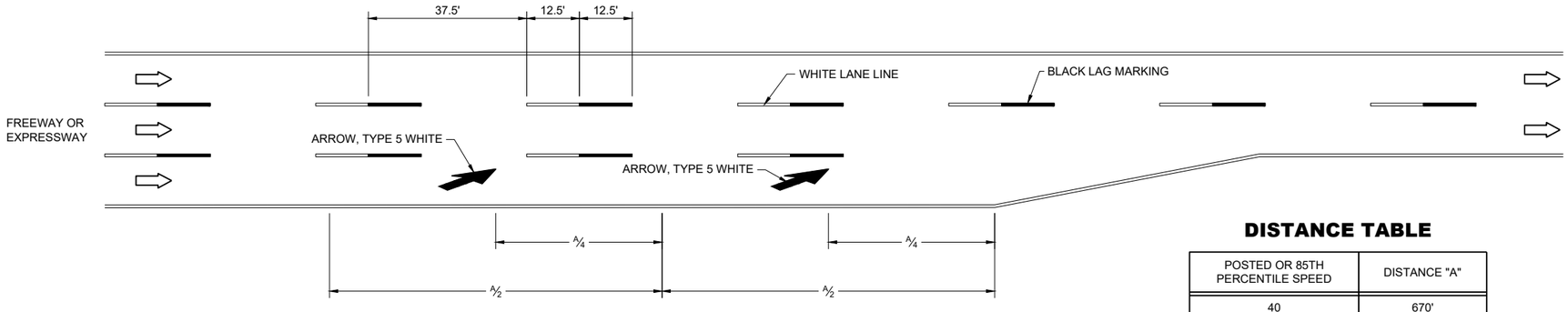
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.



SERVICE INTERCHANGE LANE DROP MARKINGS



LANE REDUCTION MARKINGS

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
40	670'
45	775'
50	885'
55	990'
60	1100'
65	1200'
70	1250'

PAVEMENT MARKING, LANE DROP AND LANE REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Matthew Rauch — WORK ZONE ENGINEER
FHWA

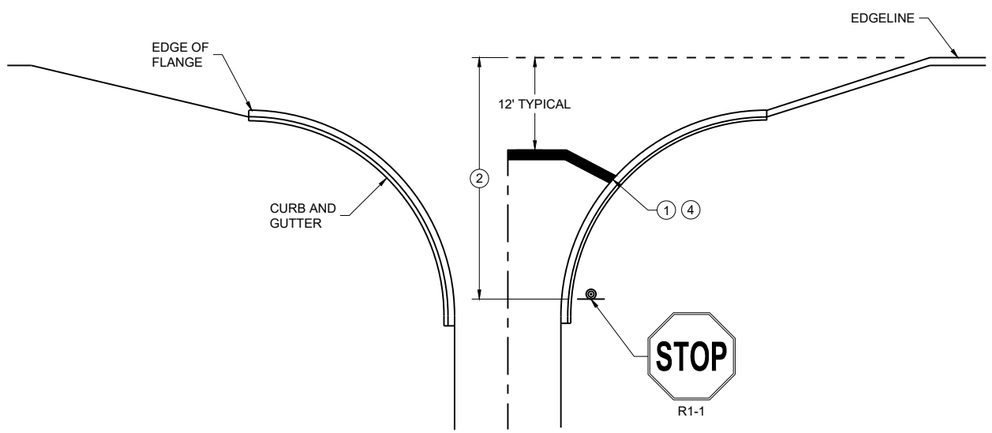
6

SDD 15C31-08d

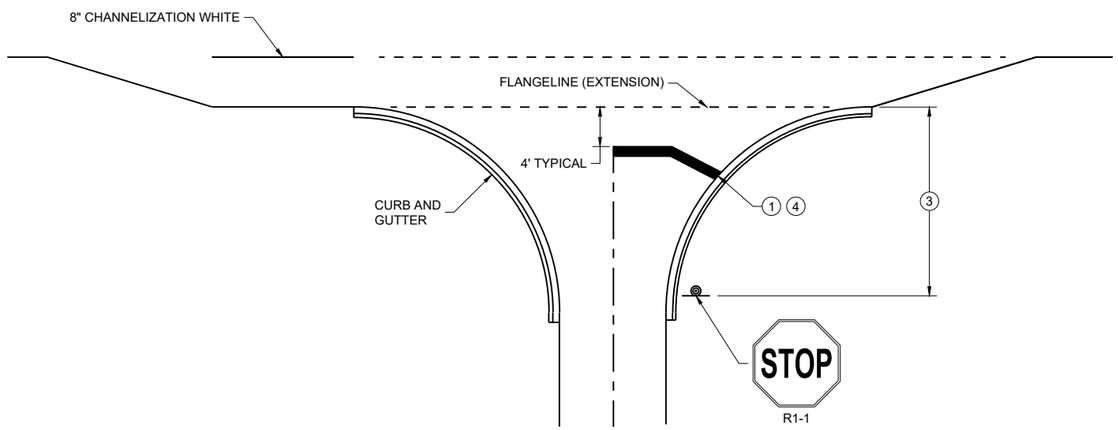
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

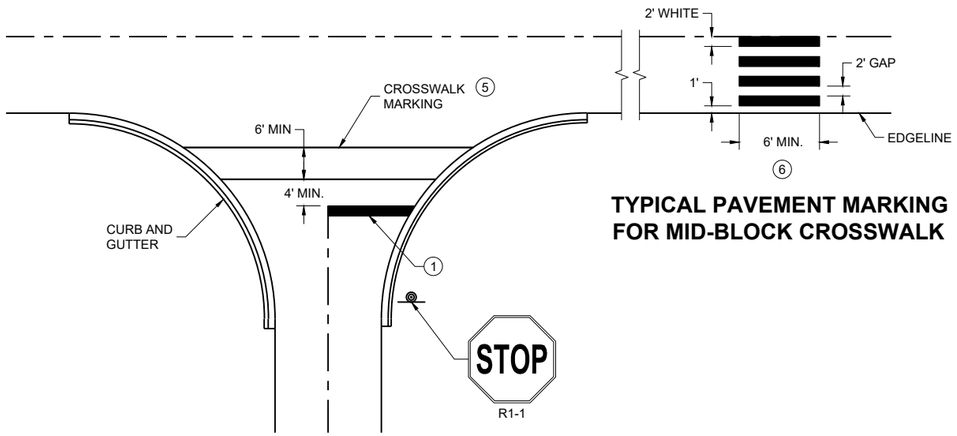
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES.
6. POSTED SPEED LIMITS OF 40 MPH OR GREATER USE A MINIMUM WIDTH OF 8' FOR MIDBLOCK CROSSWALKS



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

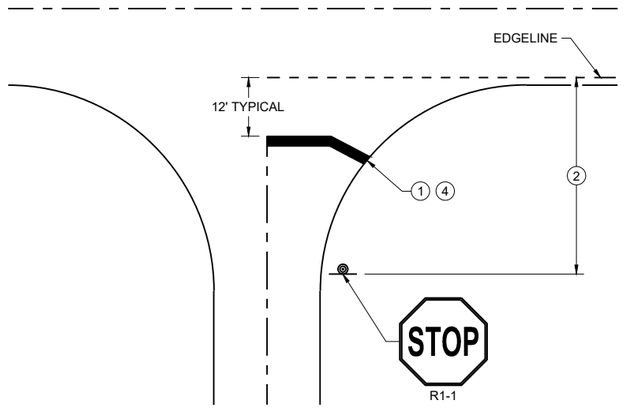


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK (5)

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

6
SDD 15C33-05

GENERAL NOTES

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

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

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

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

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

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

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

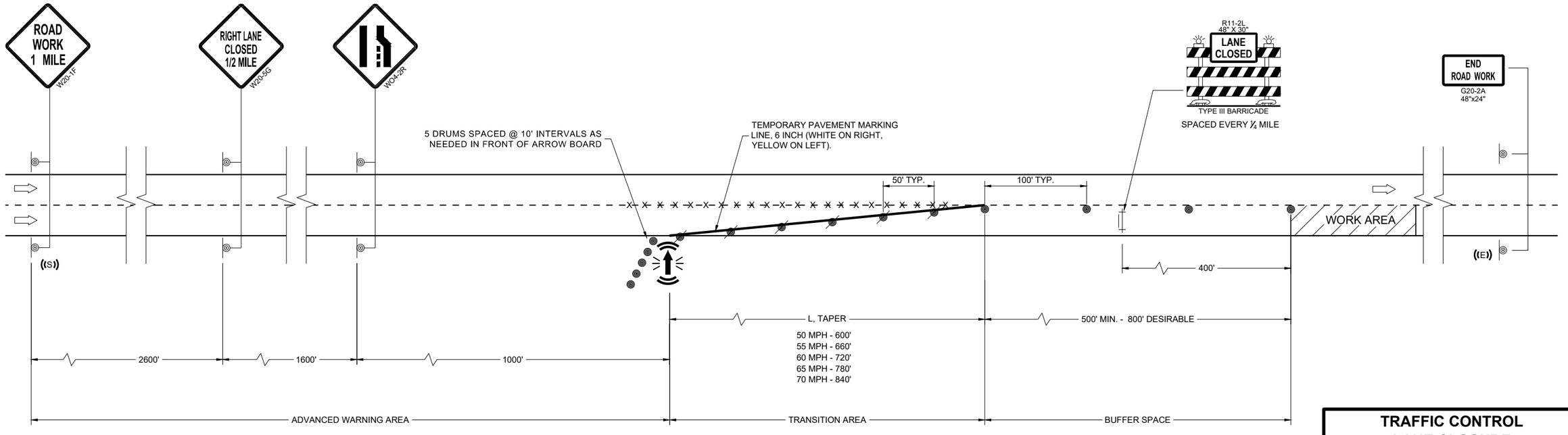
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6

SDD 15D12-14a

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SDD 15D12-14a

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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 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

W20-1E AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS.

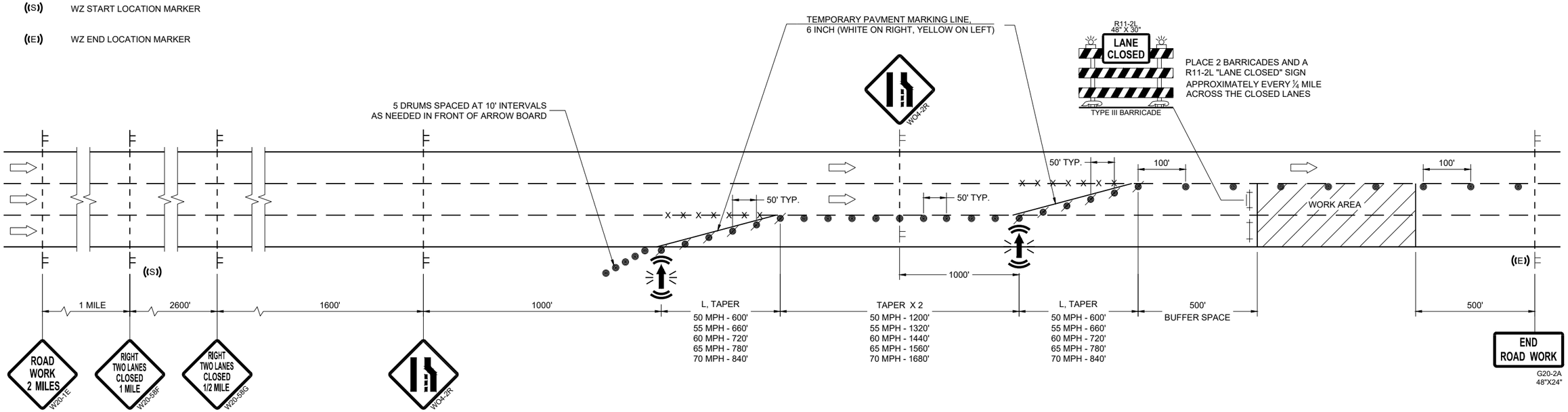
WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.



TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D14-08

6

SDD 15D14-08

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.

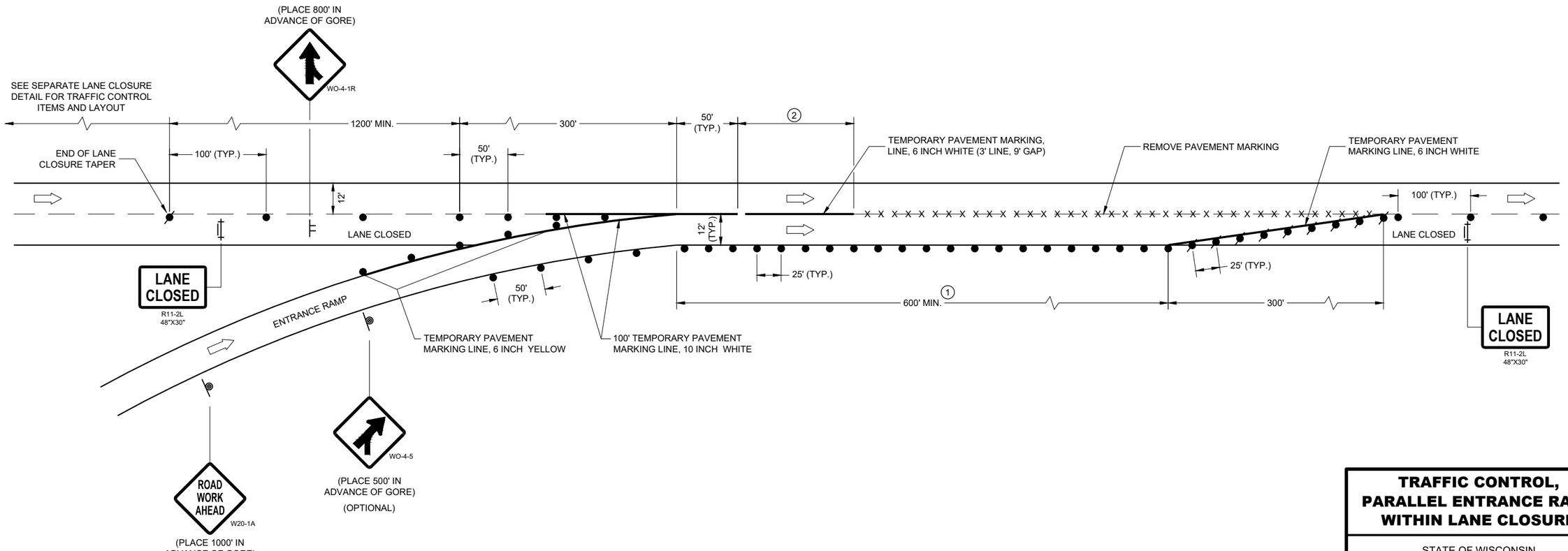
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

598

6

SDD 15D15-07a

6

SDD 15D15-07a

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.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS /OR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

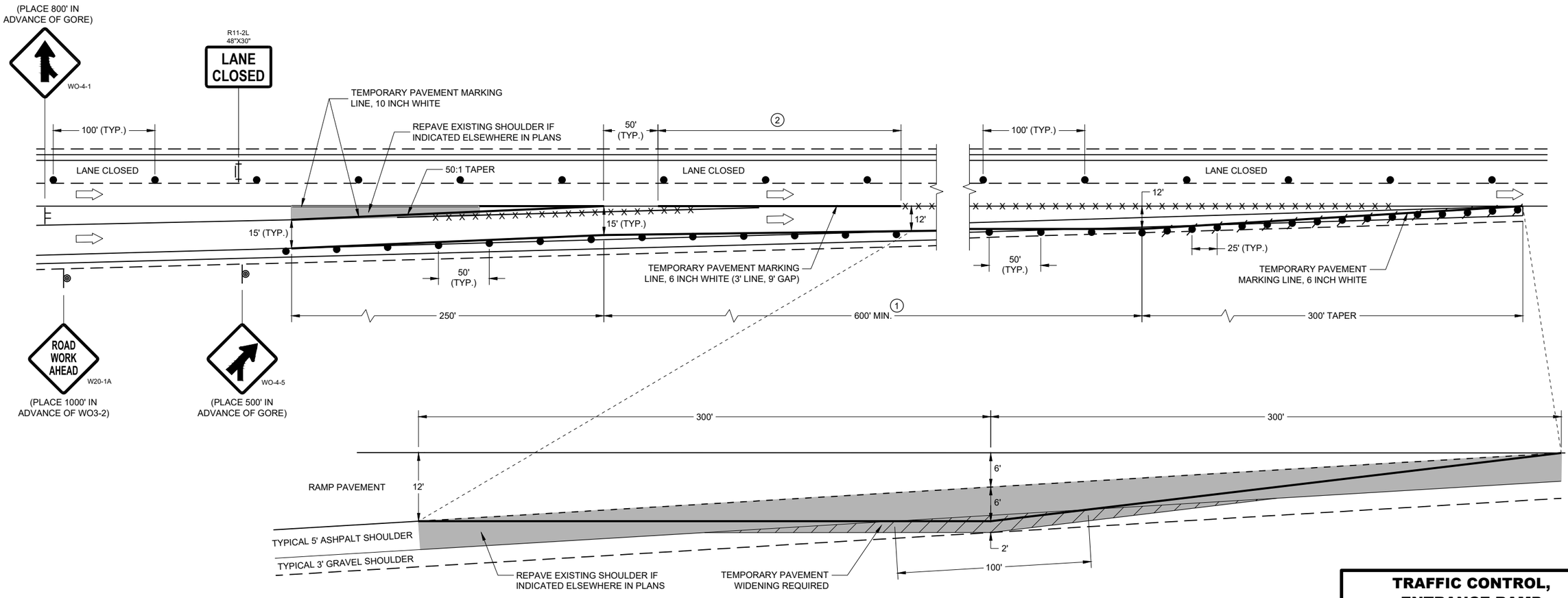
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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 AREA IF THE ENTERING (DESIGN) SPEED OF THE RAMP IS LESS THAN 50 MPH 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.



TEMPORARY PAVEMENT DETAIL

(EXISTING RAMP DIMENSIONS MAY VARY, ADJUST TEMPORARY PAVEMENT ACCORDINGLY)

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

599

6

SDD 15D15-07b

6

SDD 15D15-07b

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
- FLAGS, 16" X 16" MIN., ORANGE
- 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.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

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.

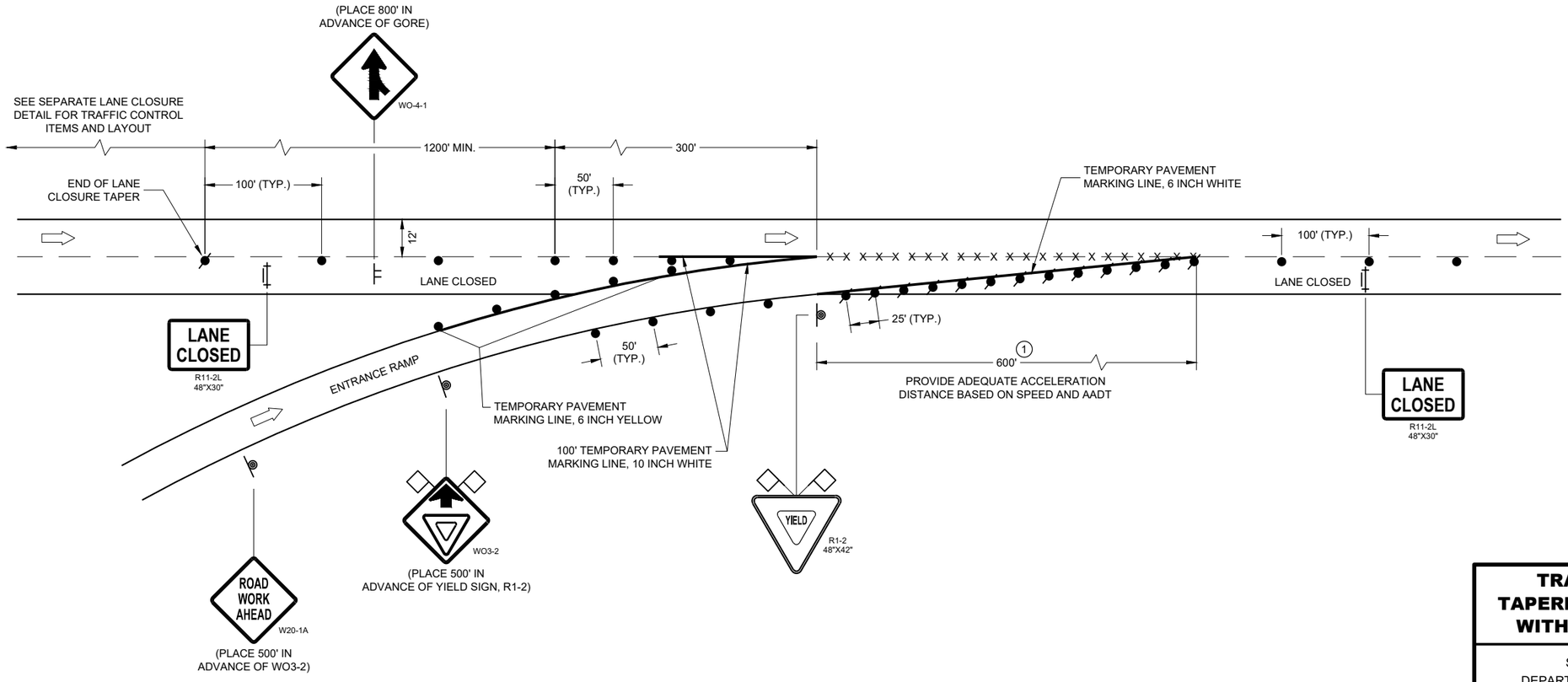
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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) CONSULT WITH REGIONAL WORK ZONE ENGINEER IF NEED TO REDUCE LENGTH EXISTS.



TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

600

6

SDD 15D15-07c

6

SDD 15D15-07c

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

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.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

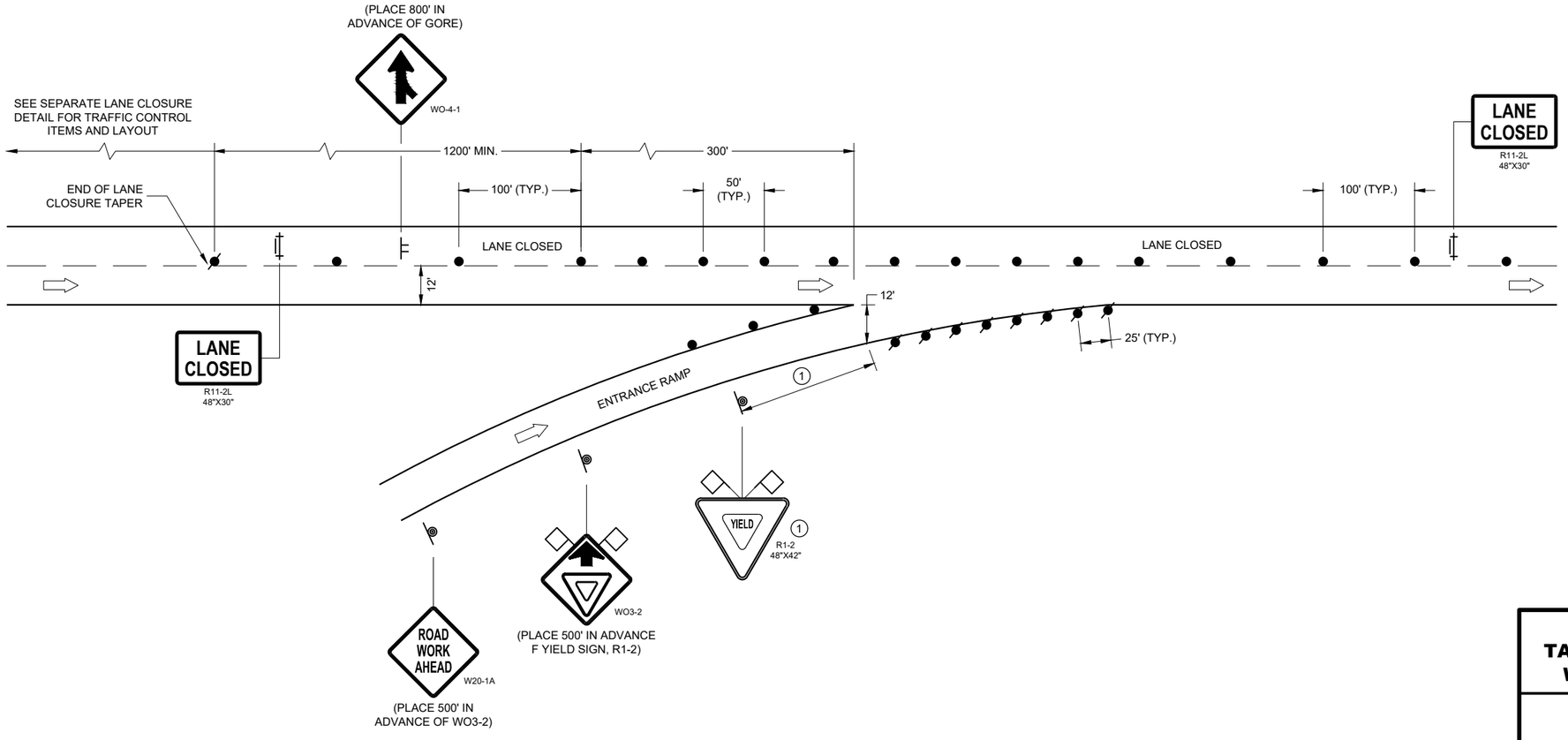
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

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.

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

(1) PLACE YIELD SIGN TO PROVIDE ADEQUATE SIGHT DISTANCE AND ACCELERATION DISTANCE.



TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15-07d

6

SDD 15D15-07d

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.

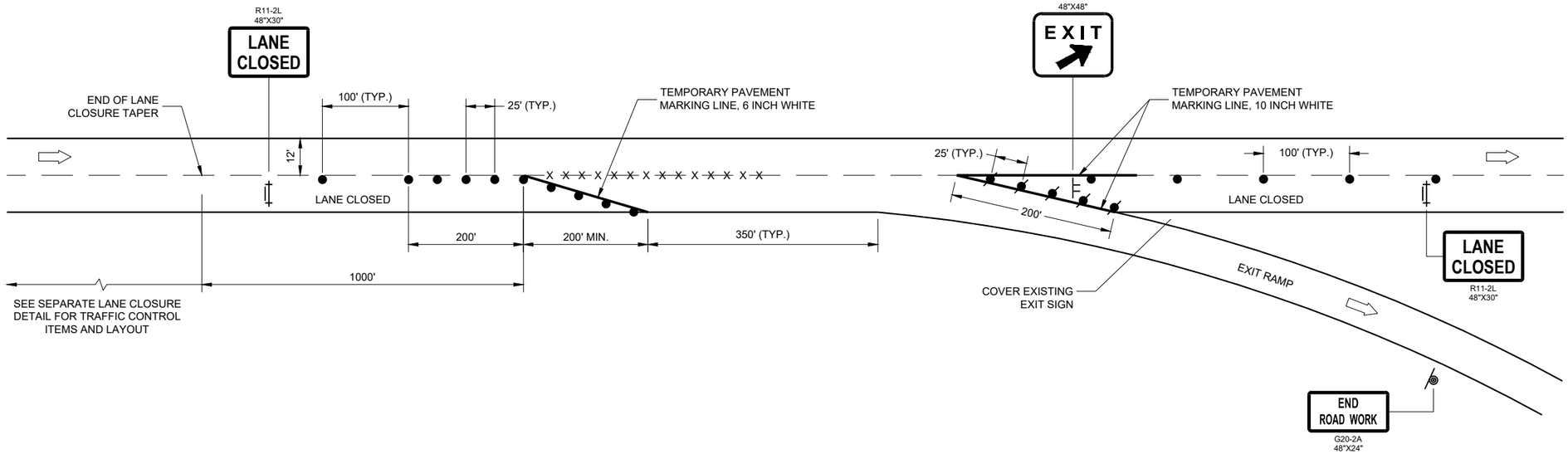
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE EXIT 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.



TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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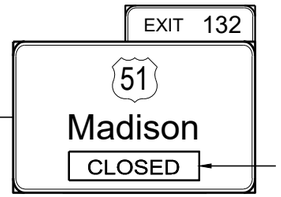
SDD 15D15-07e

G20 - 60
108" X 24"

OR



G20 - 60
108" X 24"

PLACE SIGN G20 - 60 OVER MILEAGE
ON EXISTING E1 - 1A SIGN

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

COVER ARROW ON EXISTING
E4 - 1 SIGN (COVERING SIGNS
TYPE I)

G20 - 61
120 ' X 30"

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.

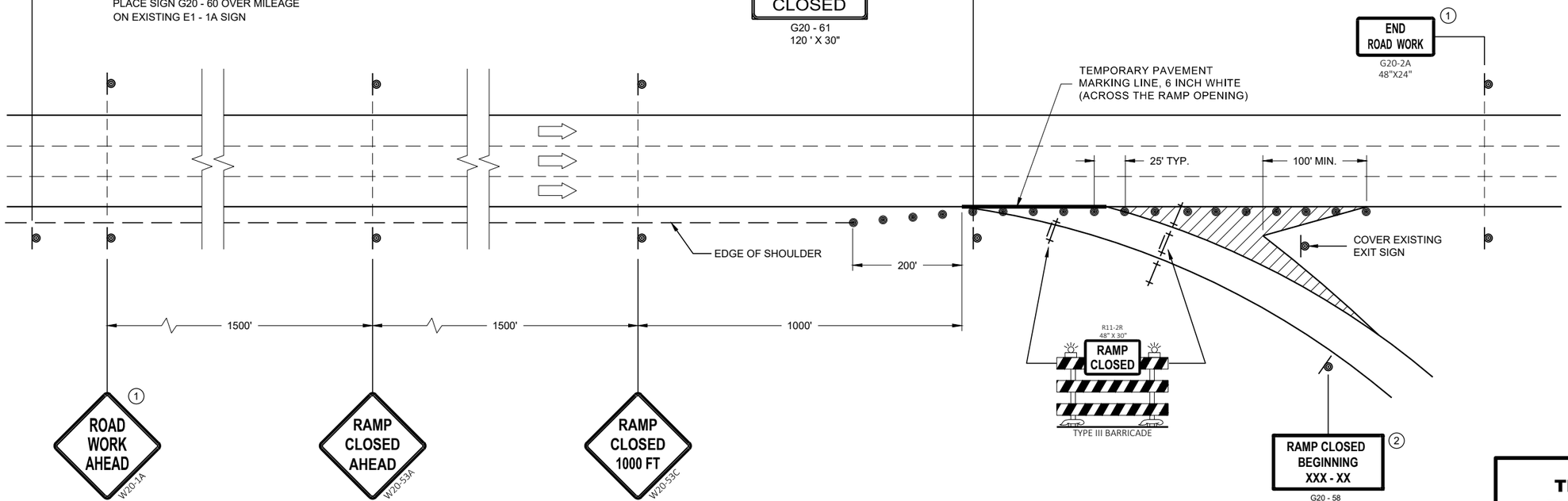
PLACE TEMPORARY PAVEMENT MARKING LINE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

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)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

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

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

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

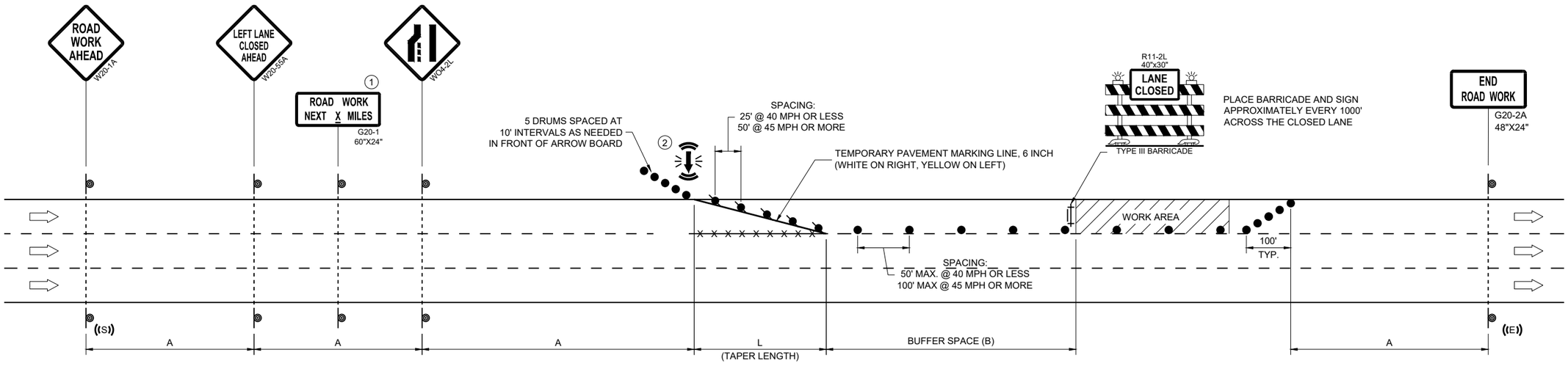
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D20-09a

6

SDD 15D20-09a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

GENERAL NOTES

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.

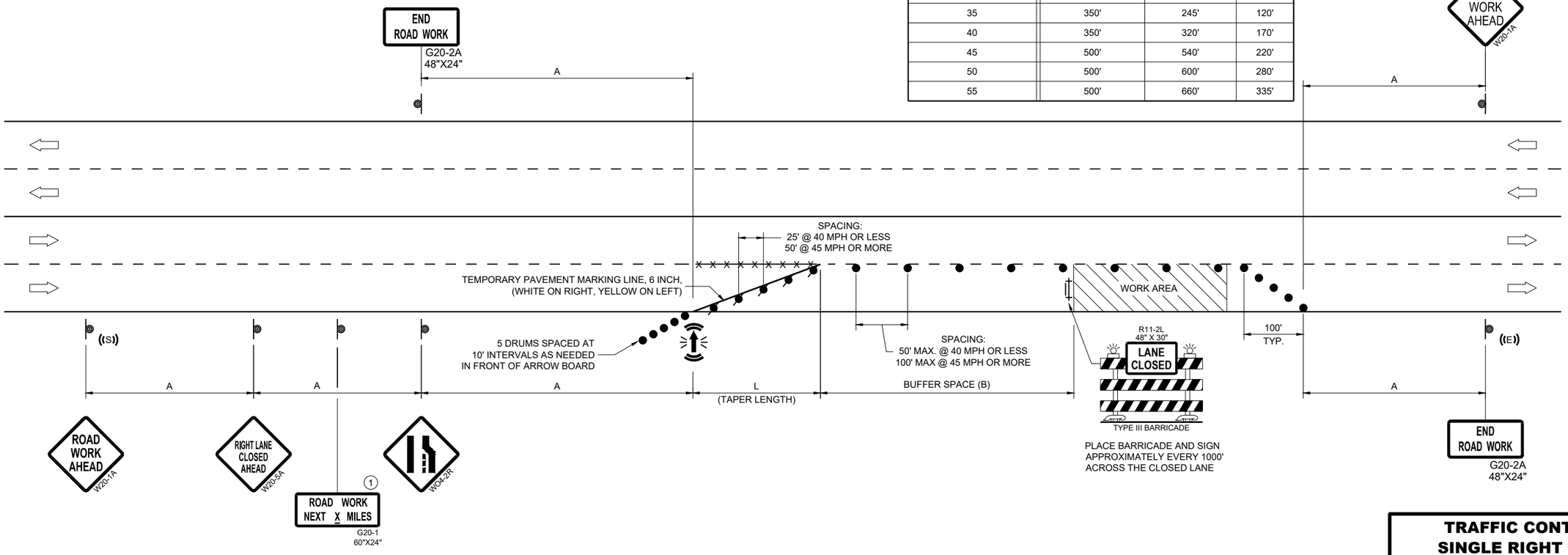
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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.

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'
50	500'	600'	280'
55	500'	660'	335'



TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

November 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D20-09b
SDD 15D20-09b

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

GENERAL NOTES

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.

DUE TO LACK OF SHOULDER/MEDIAN, ARROW BOARD IS PLACED AT THE THE END OF THE TAPER.

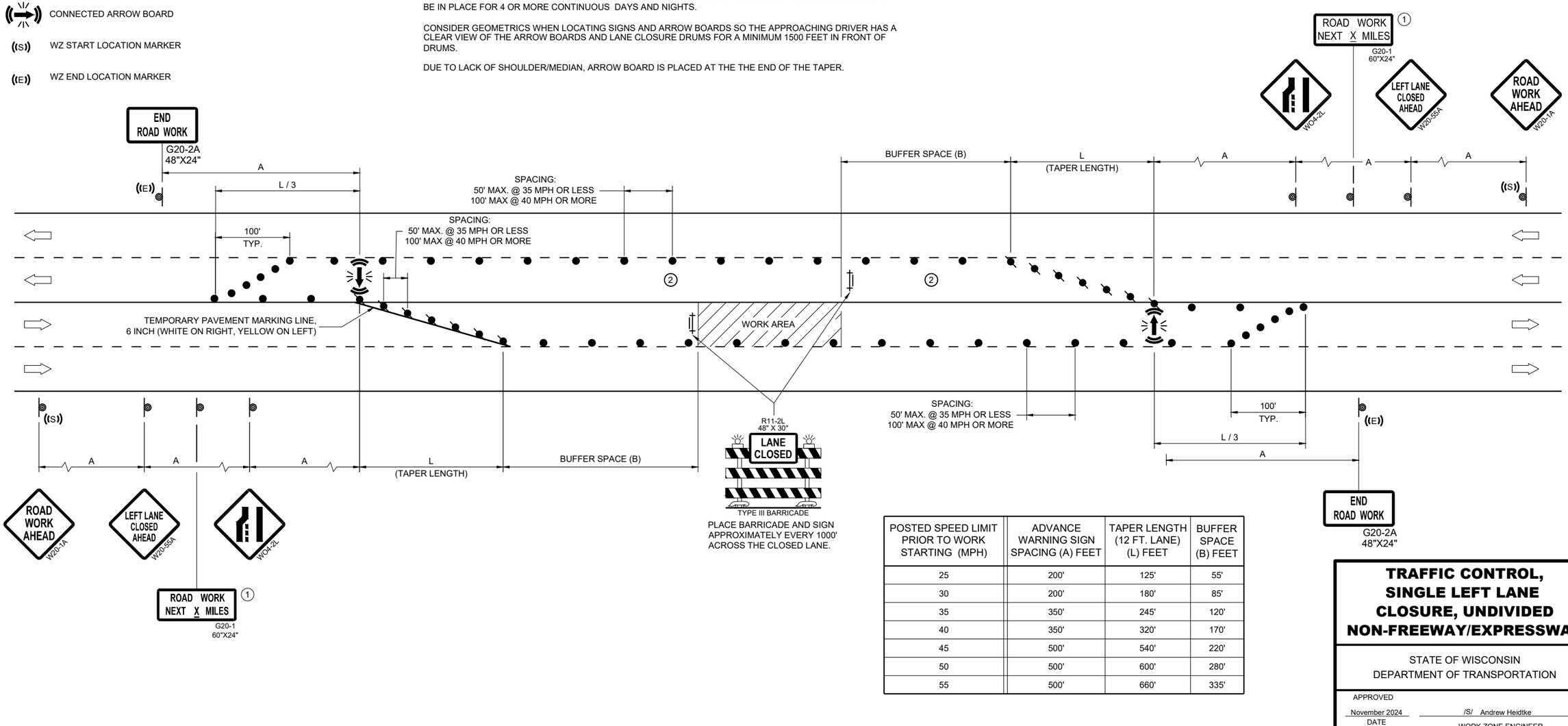
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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) LANE MAY BE OPENED WHEN WORKERS ARE NOT PRESENT IN THE WORK AREA.



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'
50	500'	600'	280'
55	500'	660'	335'

TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

November 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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SDD 15D20-09c

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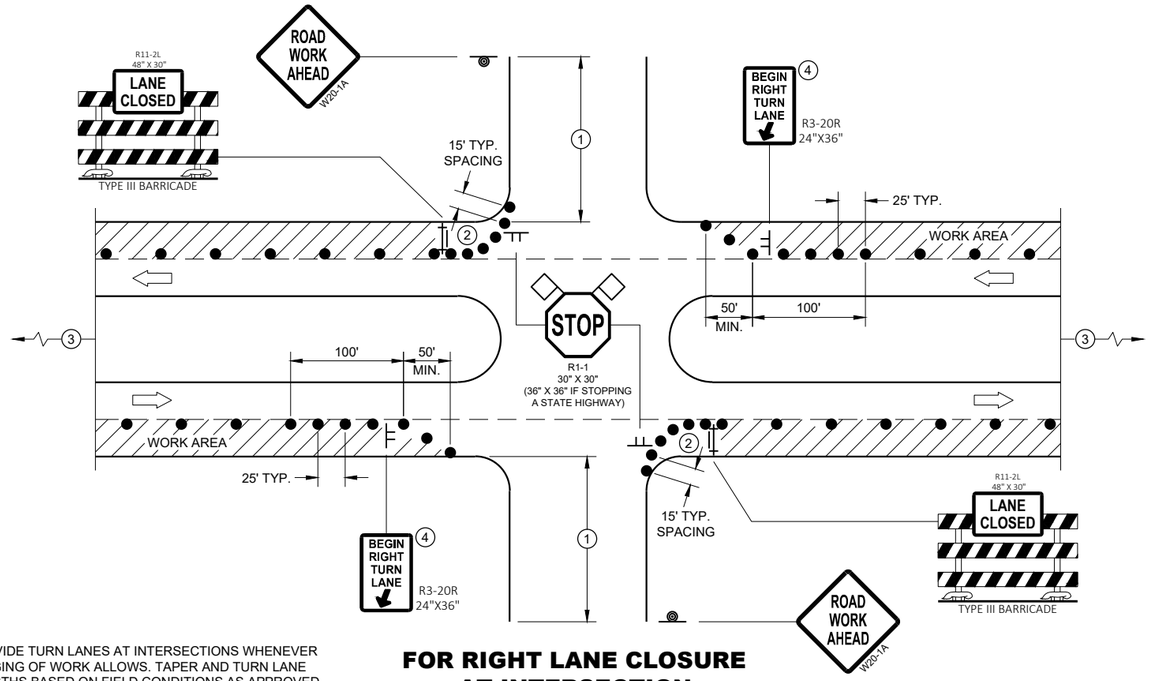
SDD 15D20-09c



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

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

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

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

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

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

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

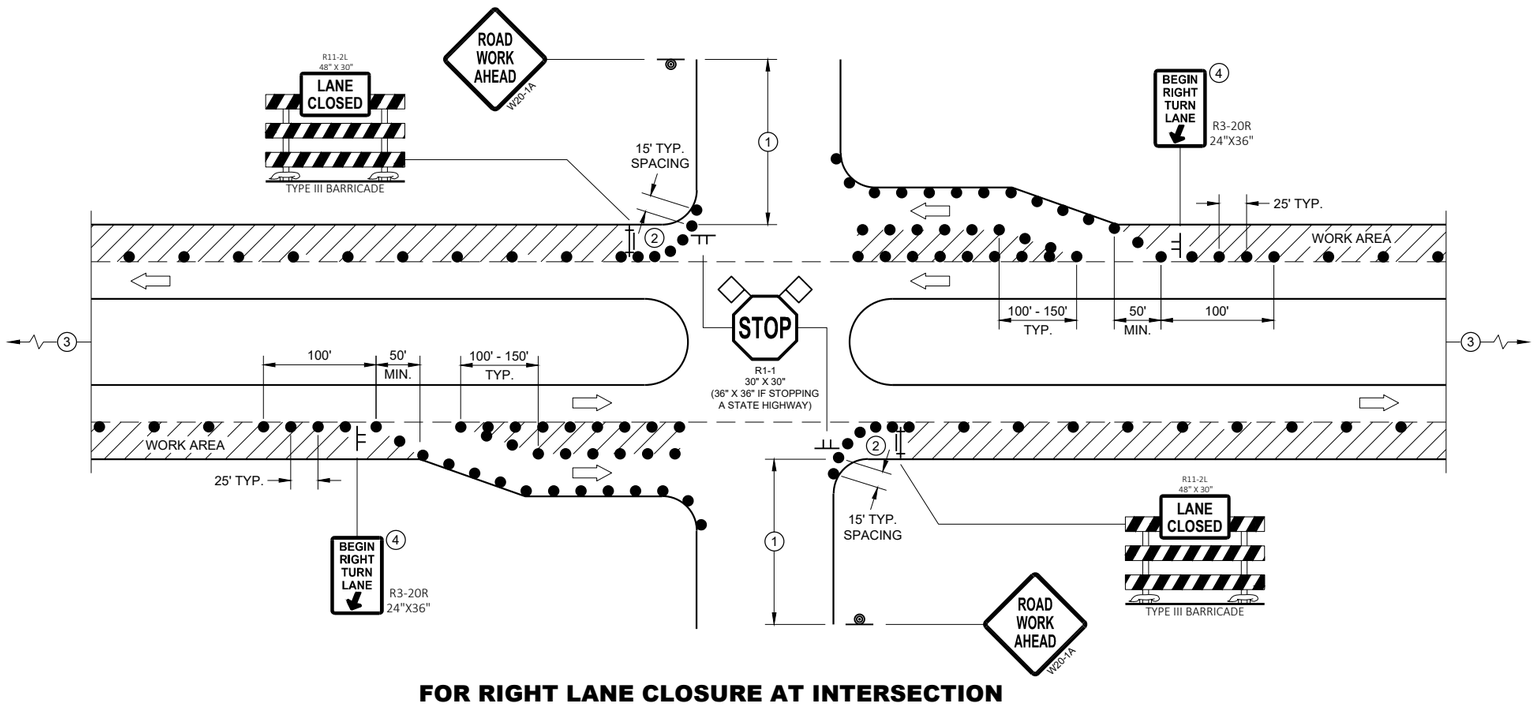
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

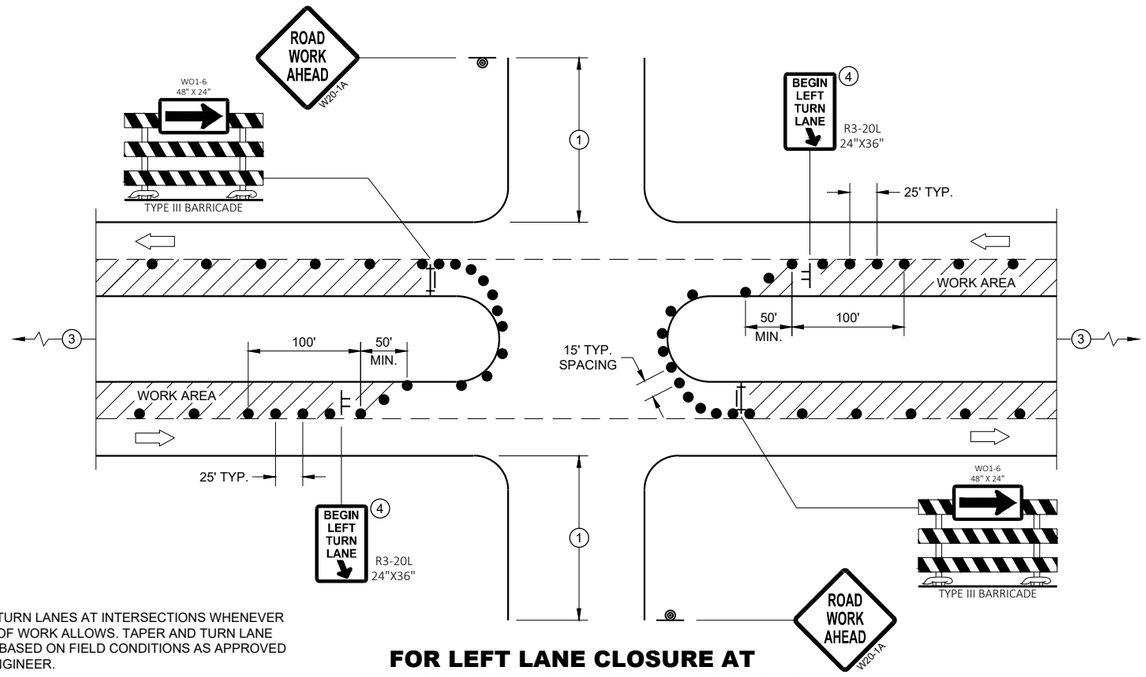
TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D21 - 07a

SDD 15D21 - 07a



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

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

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

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

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

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

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

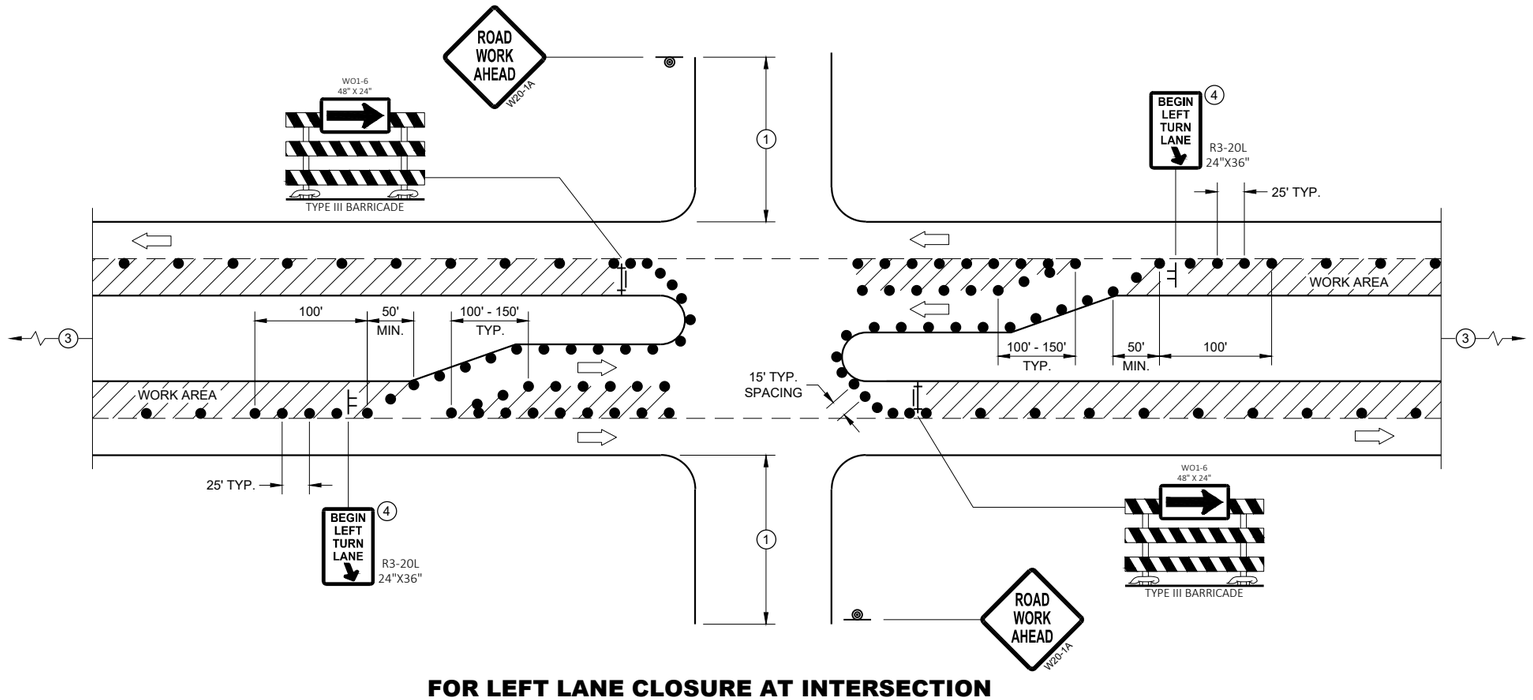
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

608

FHWA

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SDD 15D21 - 07b

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

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

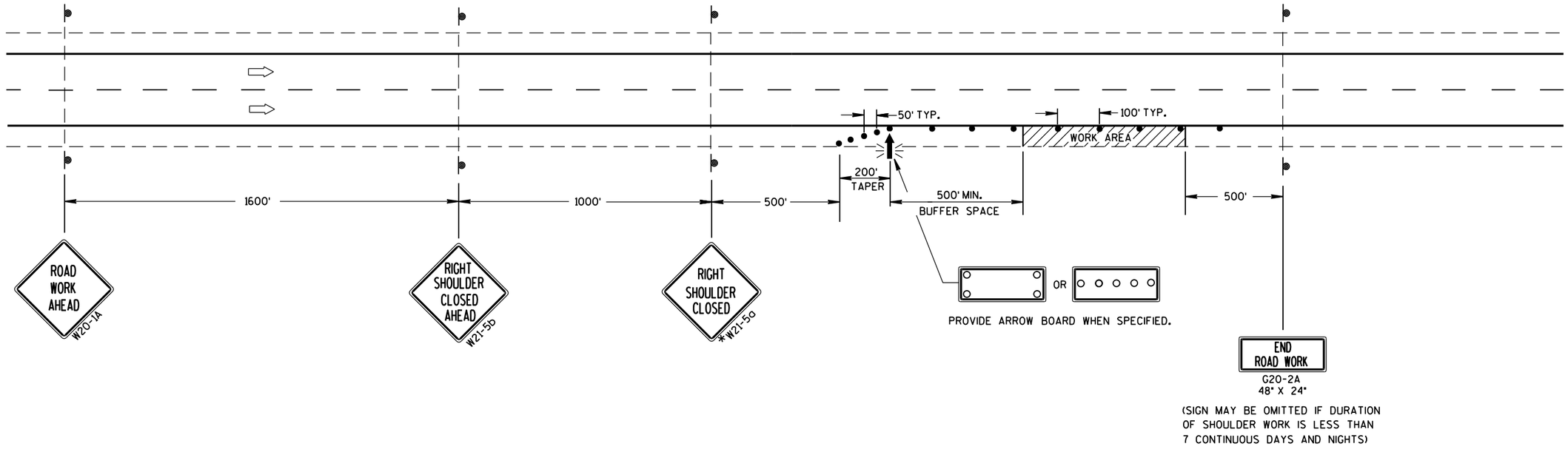
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

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

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI

FHWA

6

S.D.D. 15 D 27-3

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S.D.D. 15 D 27-3

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET
0-30	200'
35-40	350'
45-55	500'

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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

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

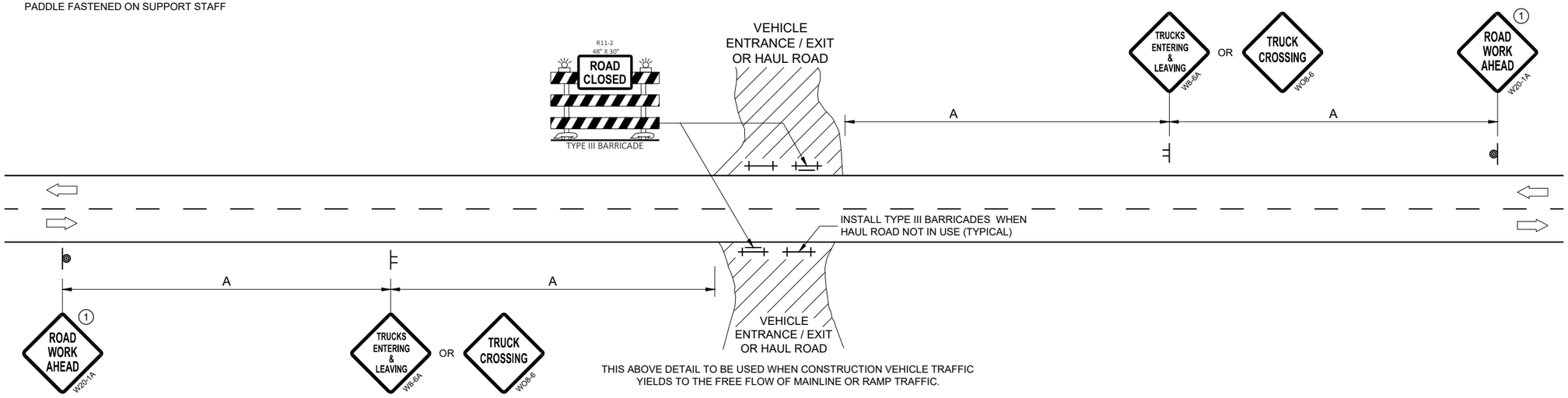
WARNING SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

WHEN ACTIVITY REFLECTED BY THE SIGN IS NOT CURRENTLY TAKING PLACE, THE HIGHWAY SHALL BE RESTORED TO NORMAL CONDITION AND THE SIGNS SHALL BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC.

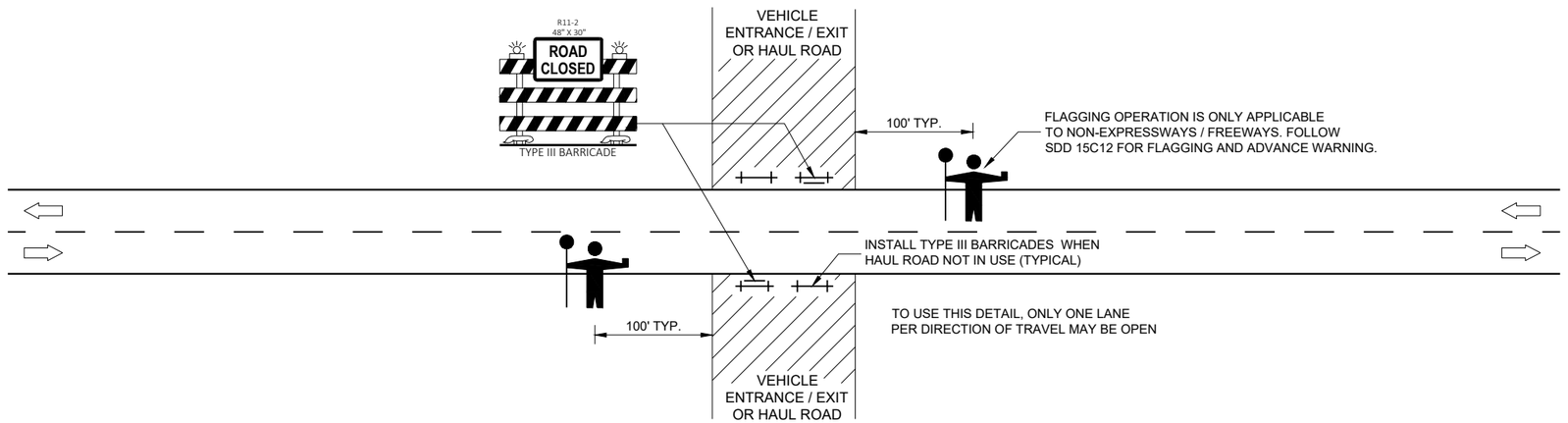
WHEN A SIDE ROAD OR RAMP INTERSECTS WITHIN THE ADVANCE SIGNING AREA, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND / OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

PLACE SIGNS ON BOTH SIDES IF USED ON DIVIDED HIGHWAY.

(1) THESE SIGNS ARE TO BE USED ONLY WHEN VEHICLE ENTRANCE / EXIT CONDITIONS ARE SEPARATED BY MORE THAN TWO MILES FROM PREVIOUS WORK AREA OR SIGNING OR AS DIRECTED BY THE ENGINEER.



THIS ABOVE DETAIL TO BE USED WHEN CONSTRUCTION VEHICLE TRAFFIC YIELDS TO THE FREE FLOW OF MAINLINE OR RAMP TRAFFIC.



TO USE THIS DETAIL, ONLY ONE LANE PER DIRECTION OF TRAVEL MAY BE OPEN

THIS DETAIL TO BE USED WHEN CONSTRUCTION WORK INCLUDING TRUCKING ACTIVITY REQUIRES MAINLINE TRAFFIC TO BE TEMPORARILY STOPPED IN ONE OR BOTH DIRECTIONS. DELAY TO HIGHWAY TRAFFIC SHALL BE MINIMIZED.

TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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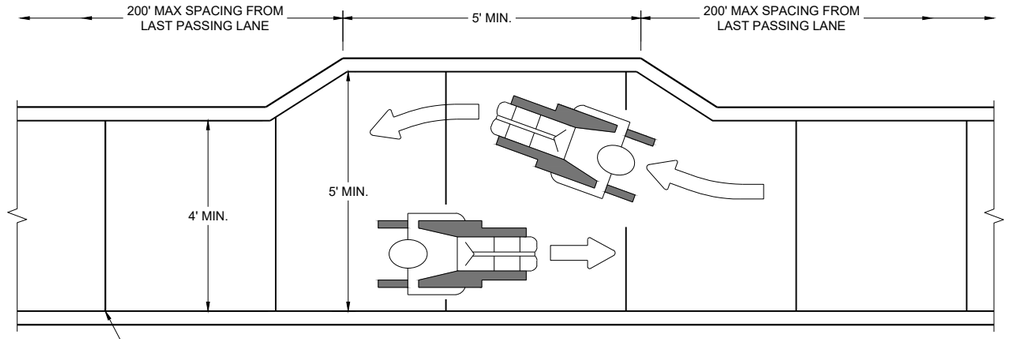
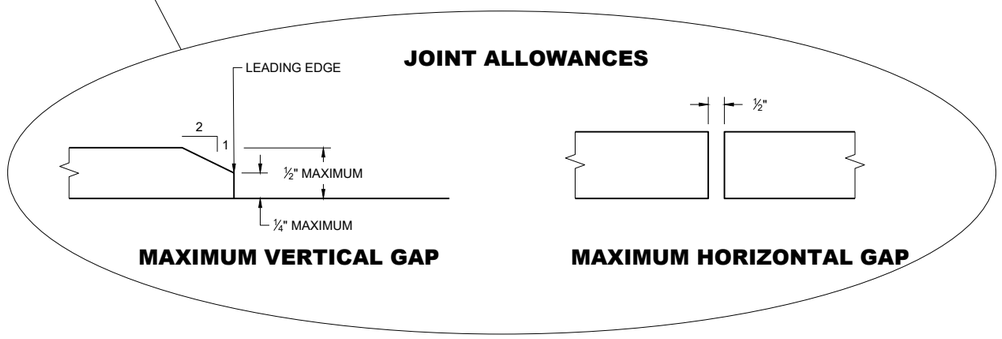
SDD 15D29 - 06



NARROW SIDEWALK PASSING DETAIL



MAXIMUM VERTICAL GAP

MAXIMUM HORIZONTAL GAP

GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

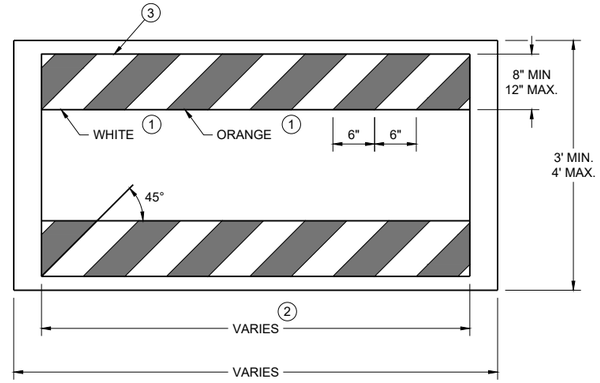
(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

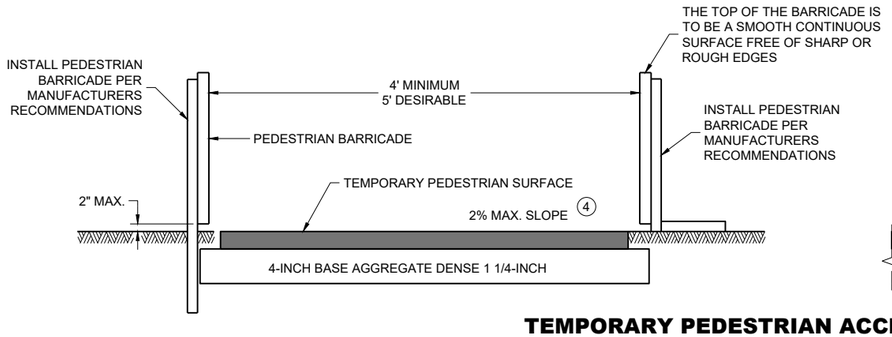
(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

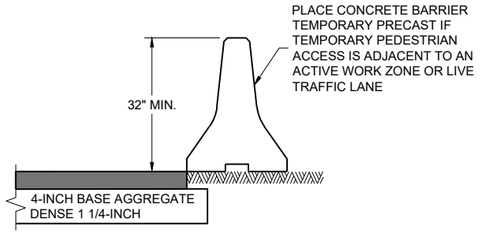
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

(4) WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.



TEMPORARY PEDESTRIAN BARRICADE *





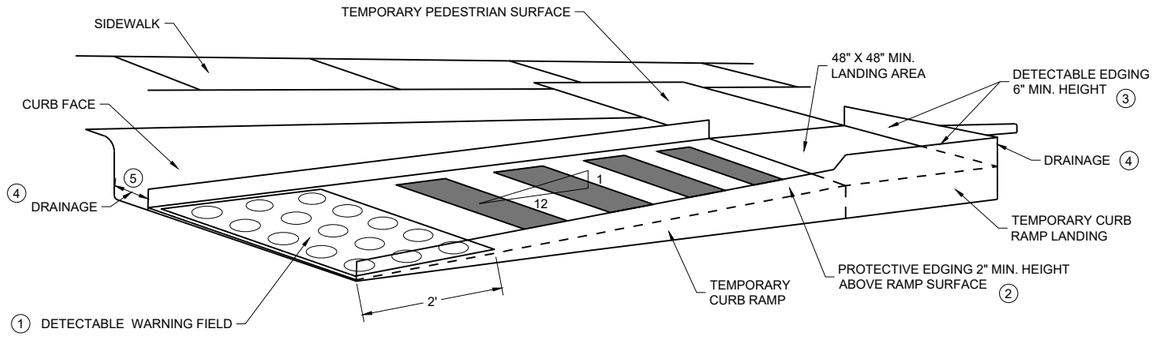
TEMPORARY PEDESTRIAN ACCESS

6

SDD 15D30-10a

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PERSPECTIVE VIEW

GENERAL NOTES

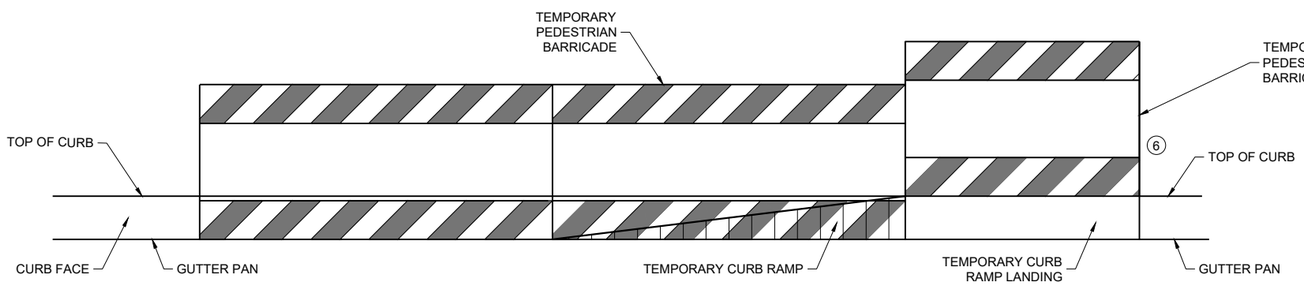
CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

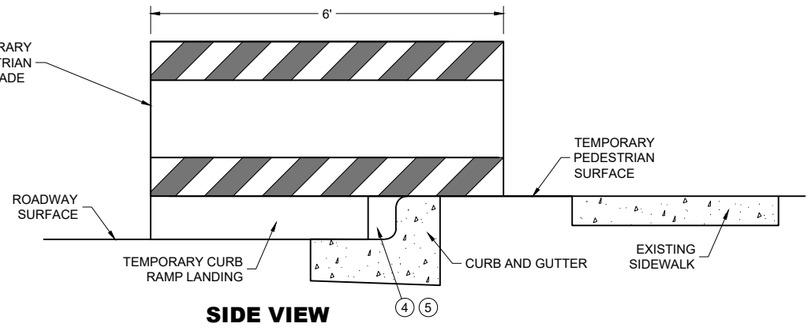
CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

1. INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.
2. PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
3. DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
5. ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.
6. IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



FRONT VIEW



SIDE VIEW

TEMPORARY CURB RAMP PARALLEL TO CURB

6

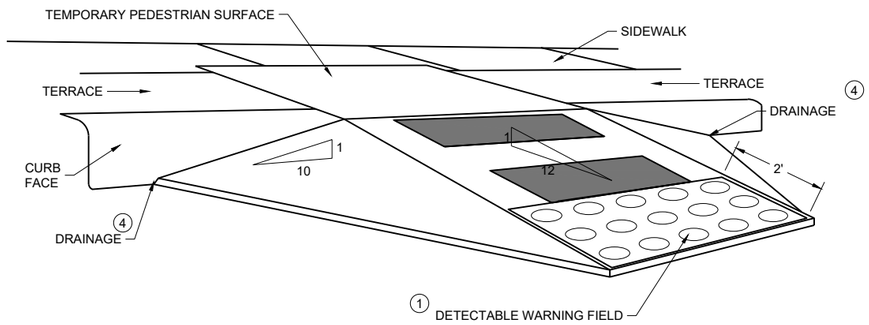
SDD 15D30-10b

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

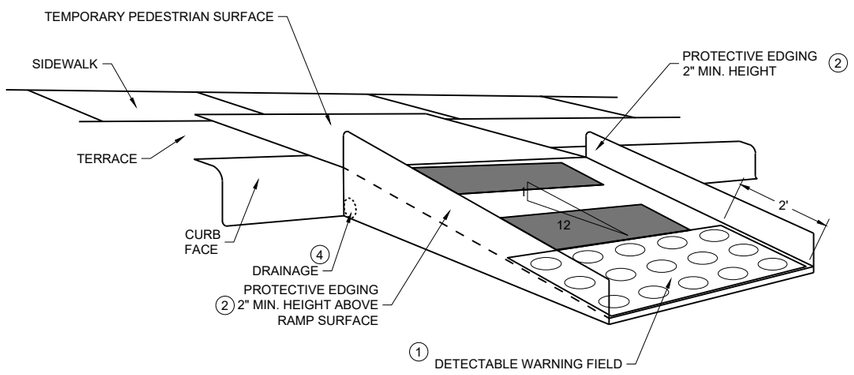
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-10b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

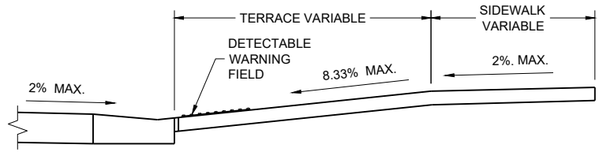
6

SDD 15D30-10c

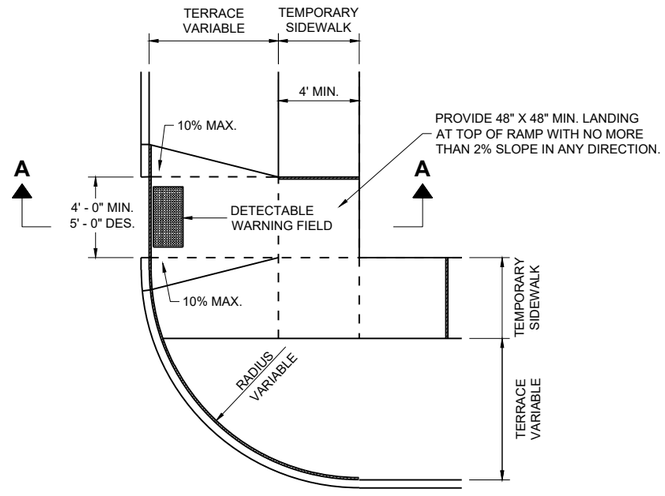
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES



SECTION A - A



PLAN VIEW
TEMPORARY TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

6

SDD 15D30-10d

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

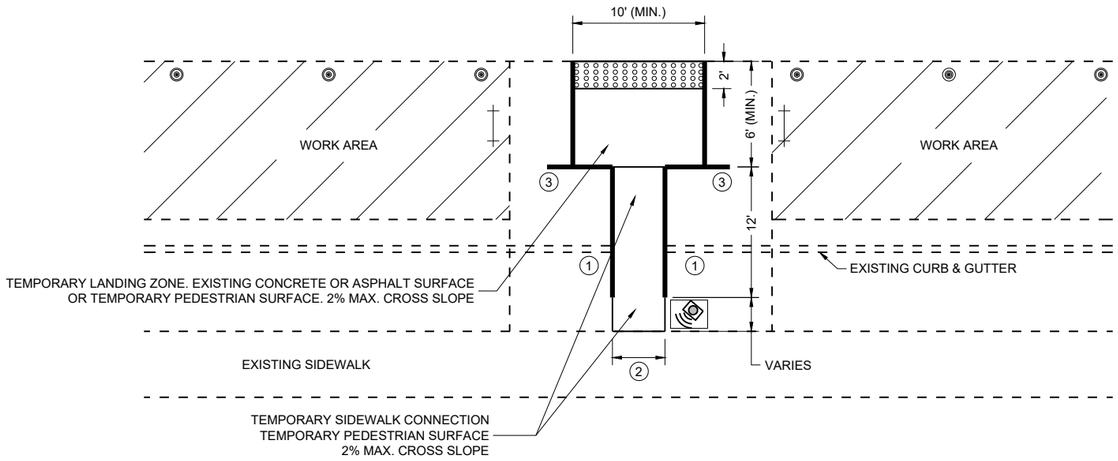
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — <position>

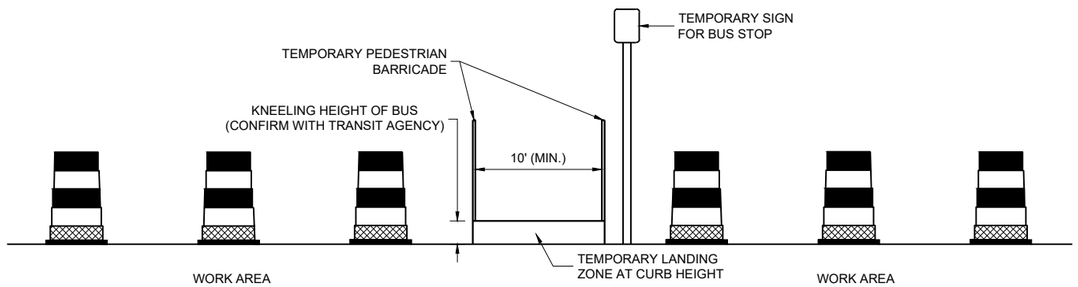
FHWA

6

SDD 15D30-10d



PLAN VIEW



PROFILE VIEW TEMPORARY BUS STOP PAD

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

(1) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(2) 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.

(3) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

6

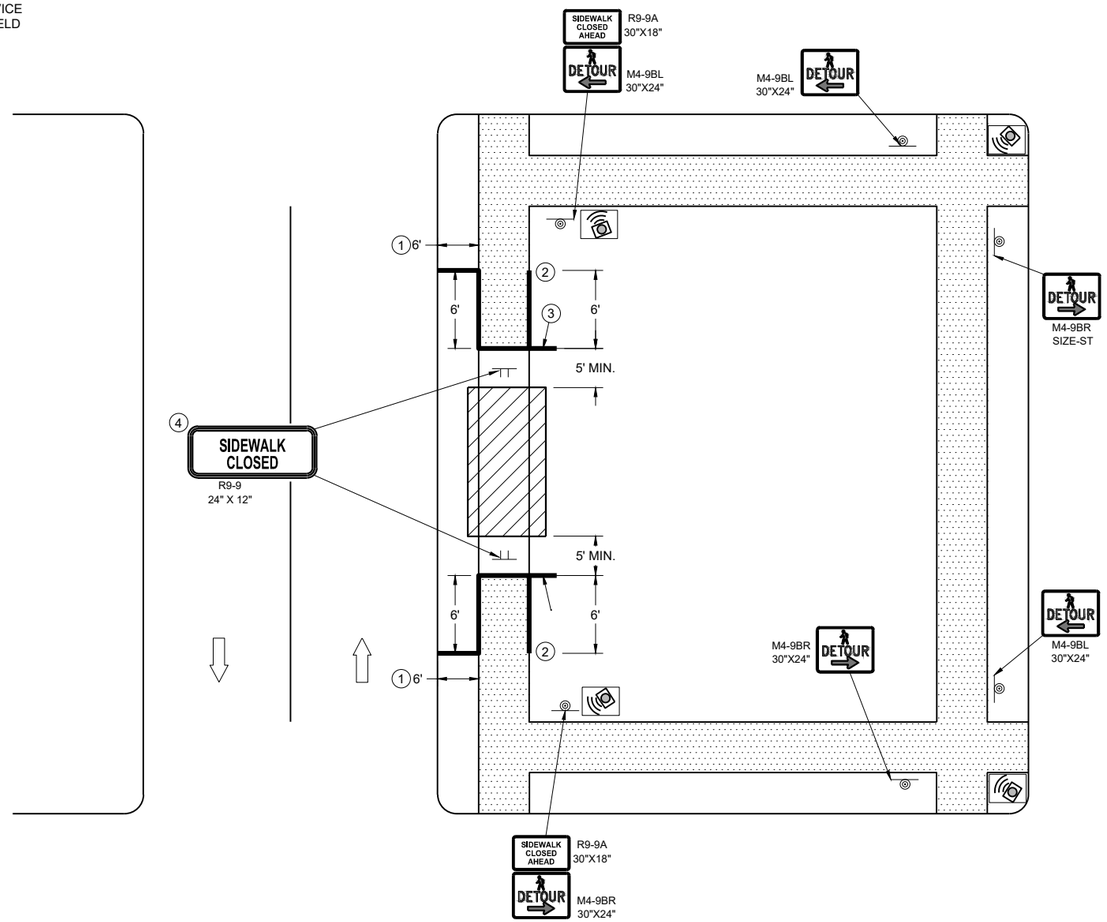
SDD 15D30-10e

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

GENERAL NOTES

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-10f

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

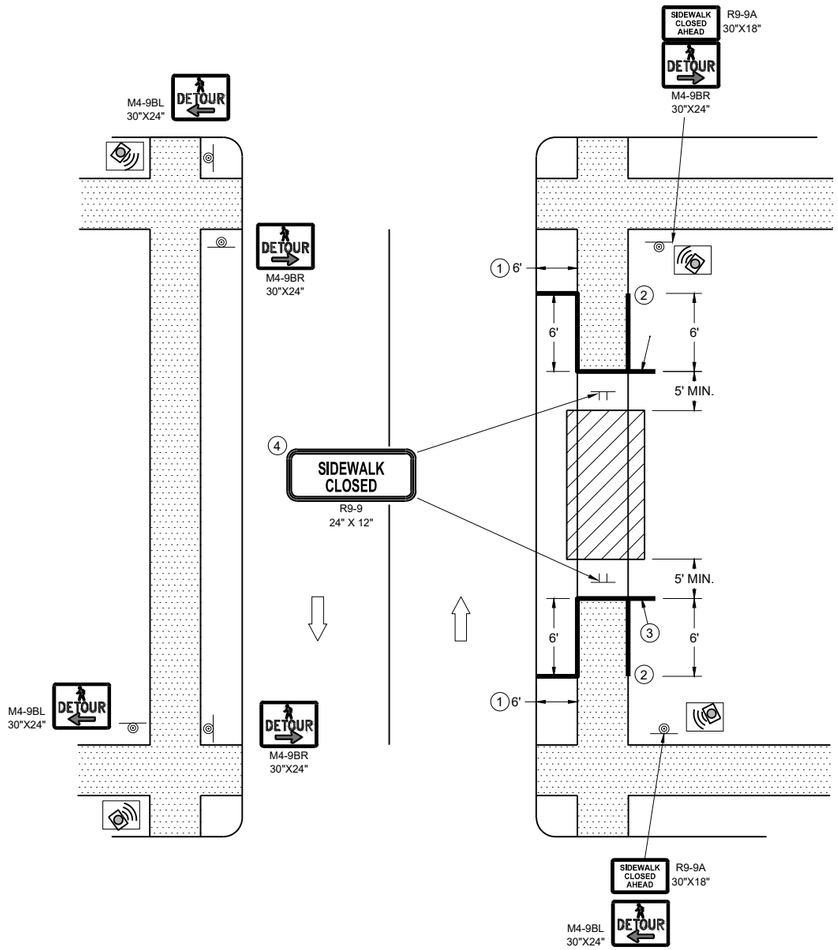
UNDER PEDESTRIAN TRAFFIC

WORK AREA

TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC

TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

GENERAL NOTES

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

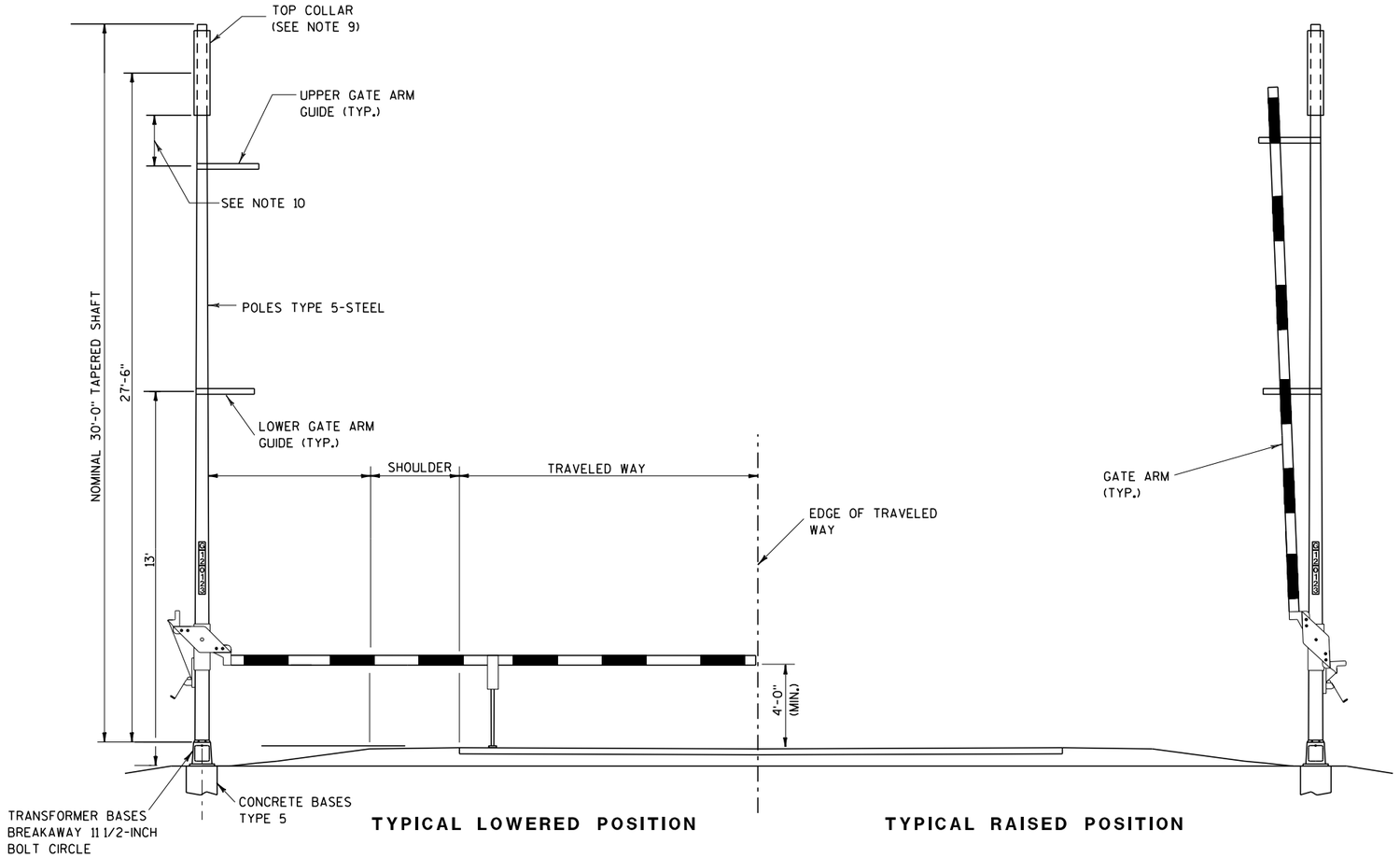
1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

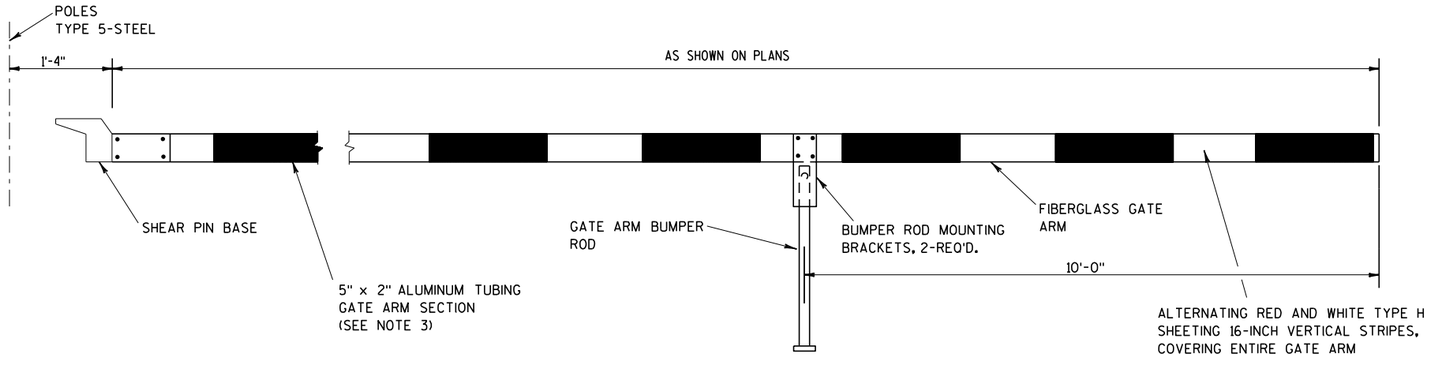
6

SDD 15D30-10k



TYPICAL LOWERED POSITION

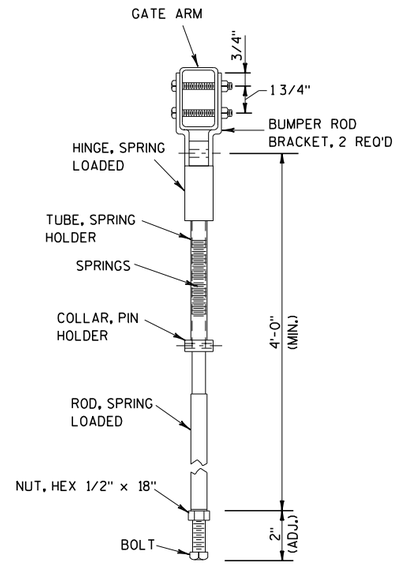
TYPICAL RAISED POSITION



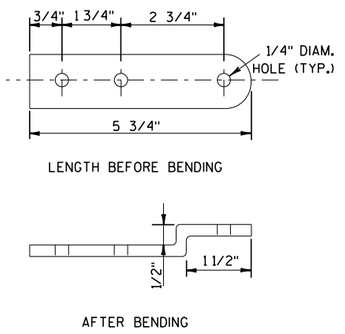
GATE DETAIL

GENERAL NOTES

1. THE LOCATION OF RAMP CLOSURE GATES AND MOUNTING HEIGHT OF GATE ARM PIVOT SHALL BE VERIFIED BY THE ENGINEER.
2. HEIGHT OF GATE ARM GUIDES MAY BE VARIED AS REQUIRED FOR WARNING LIGHT CLEARANCE.
3. FIBERGLASS/ALUMINUM GATE ARM AND SHEAR PIN BASE SHALL BE SUPPLIED BY THE SAME VENDOR.
4. GATE ARM TO BE MOUNTED ON PROPOSED POLE AS INDICATED ON THE PLANS. PROPOSED POLE SHALL BE TYPE 5 POLE.
5. LOCATION OF THE CONCRETE BASE AND LENGTH OF THE GATE ARM WILL BE VERIFIED BY THE ENGINEER TO ENSURE ADEQUATE COVERAGE OF THE TRAVELED LANE.
6. GATE PIVOTS, SUPPORTS AND GUIDES, AND ALL ASSOCIATED HARDWARE SHALL BE GALVANIZED. ALL ROUGH EDGES AND BURRS SHALL BE GROUND SMOOTH PRIOR TO GALVANIZING.
7. ALL EXPOSED BOLT THREADS SHALL BE PAINTED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
8. ANY FIELD DAMAGE TO THE GALVANIZING SHALL BE REPAIRED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
9. A STANDARD LIGHTING LUMINAIRE ARM MAY BE MOUNTED TO THE TYPE 5 POLE IN LIEU OF THE TOP COLLAR.
10. UPPER GATE ARM GUIDE IS TO BE INSTALLED 6 TO 12-INCHES BELOW THE BOTTOM OF THE TOP COLLAR.



GATE ARM BUMPER ROD DETAIL

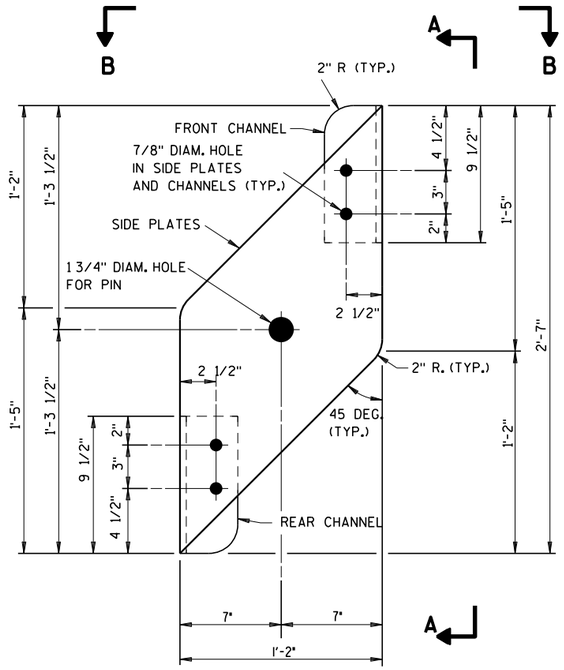


BUMPER ROD MOUNTING
BRACKET DETAIL

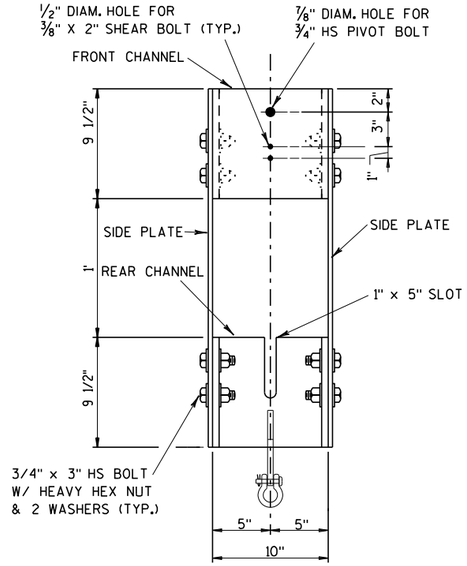
RAMP GATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

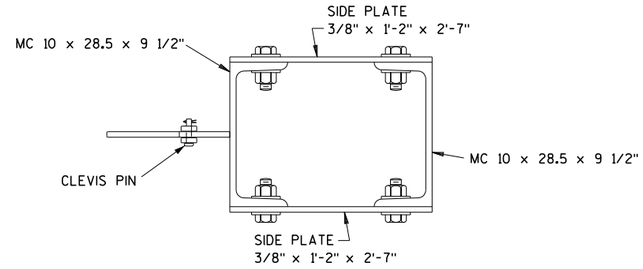
6
S.D.D. 15 D 35-3a



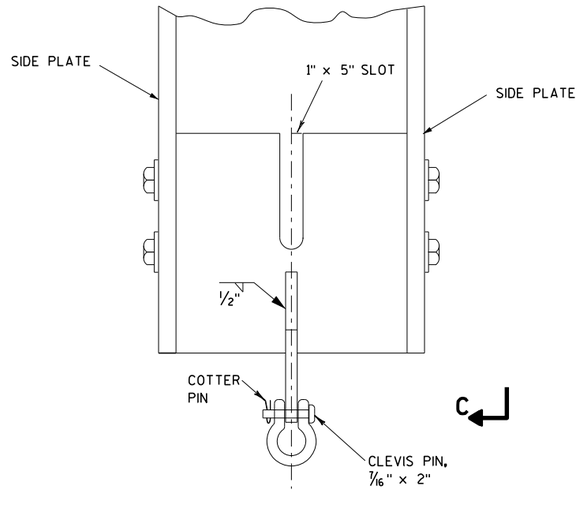
SIDE PLATE DETAIL



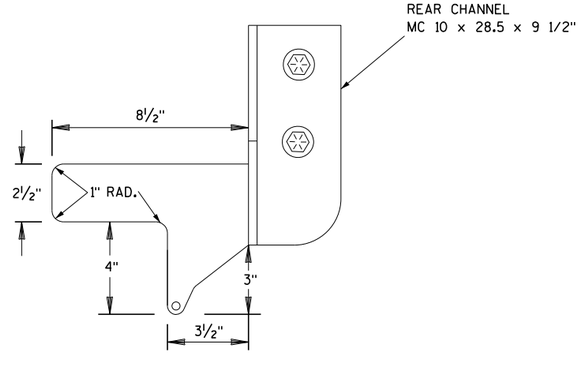
SECTION A-A



SECTION B-B



YOKE ASSEMBLY DETAIL



SECTION C-C

RAMP GATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 D 35-3b

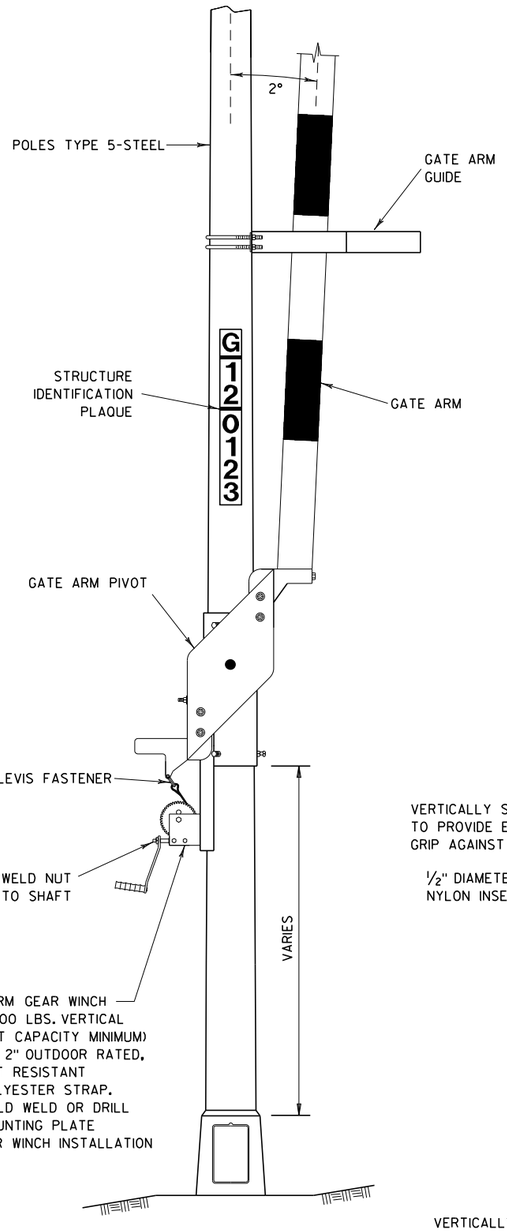
GENERAL NOTES

1. WHEN THE GATE IS FULLY RAISED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE OUTSIDE OF THE REAR CHANNEL.

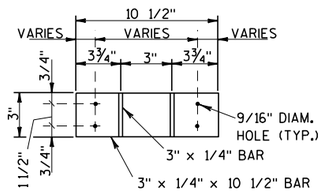
2. WHEN THE GATE IS FULLY LOWERED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE INSIDE OF THE REAR CHANNEL.

3. ANTI-SEIZE LUBRICATING MATERIAL SHALL BE USED ON ALL BOLT THREADS BEFORE INSTALLATION.

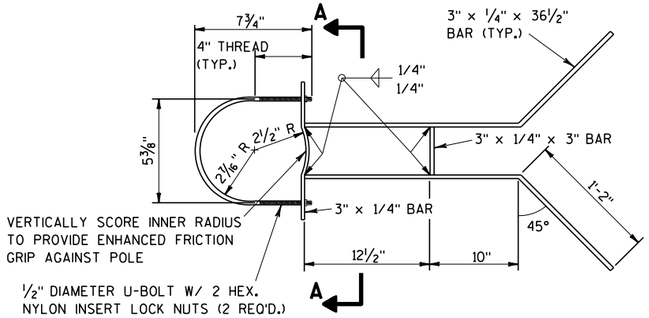
4. ALL BOLTS SHALL BE GALVANIZED AND CONFORM TO ASTM A307, GRADE A, UNLESS DESIGNATED AS HS (HIGH STRENGTH), WHICH SHALL CONFORM TO ASTM A325. BOLTS OF ½" NOMINAL DIAMTER OR LESS MAY BE STAINLESS STEEL.



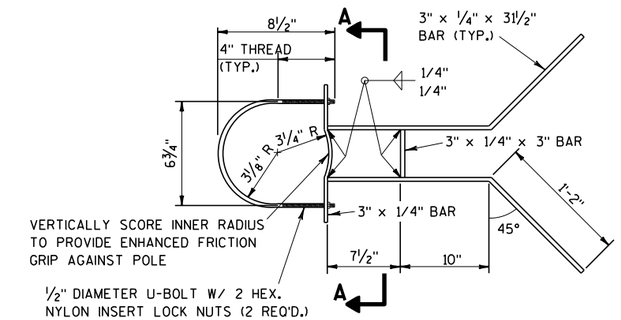
GATE PIVOT ASSEMBLY



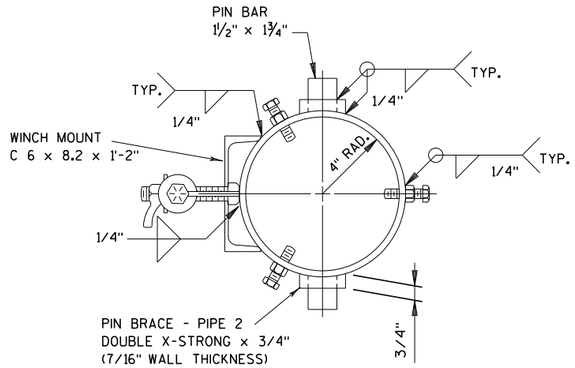
SECTION A-A
U-BOLTS NOT SHOWN



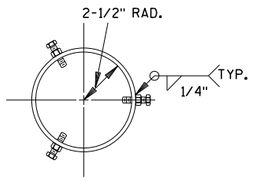
UPPER GATE ARM GUIDE DETAIL



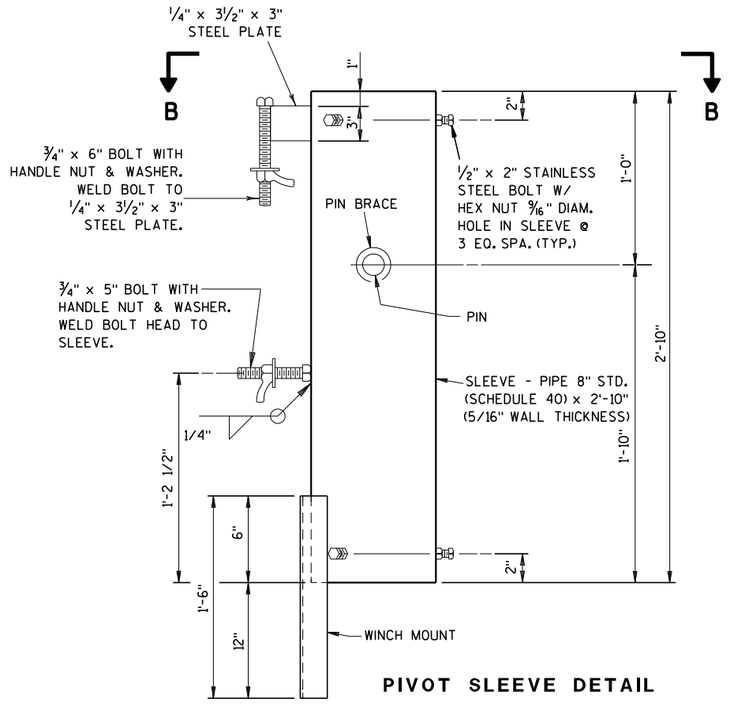
LOWER GATE ARM GUIDE DETAIL



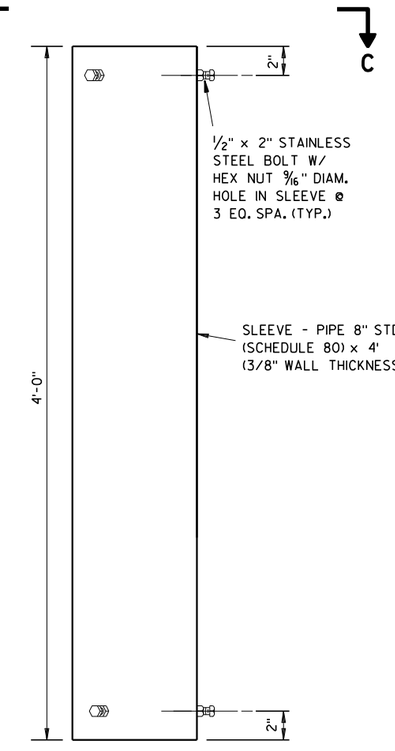
SECTION B-B



SECTION C-C



PIVOT SLEEVE DETAIL



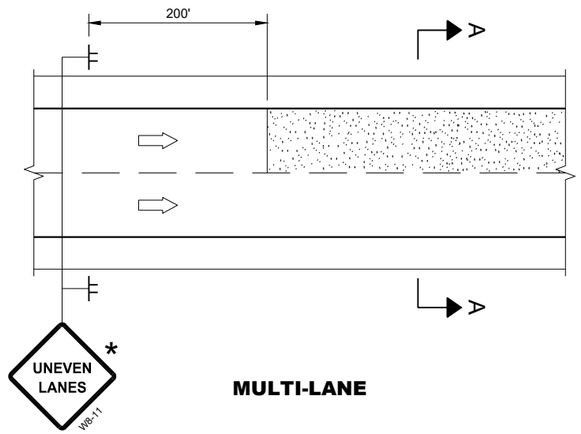
TOP COLLAR

RAMP GATE

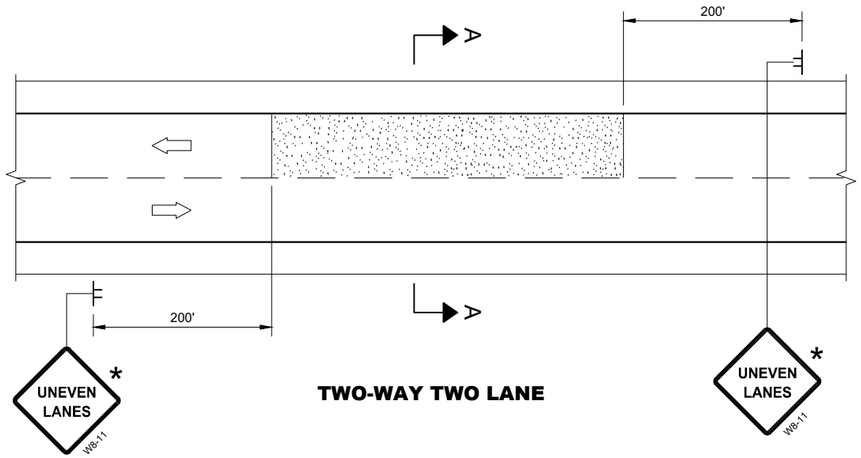
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER
FHWA

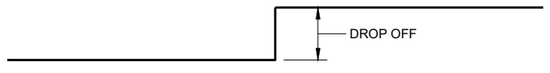
6
S.D.D. 15 D 35-3c



MULTI-LANE

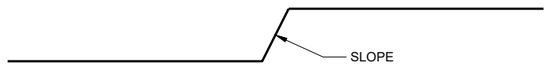


TWO-WAY TWO LANE

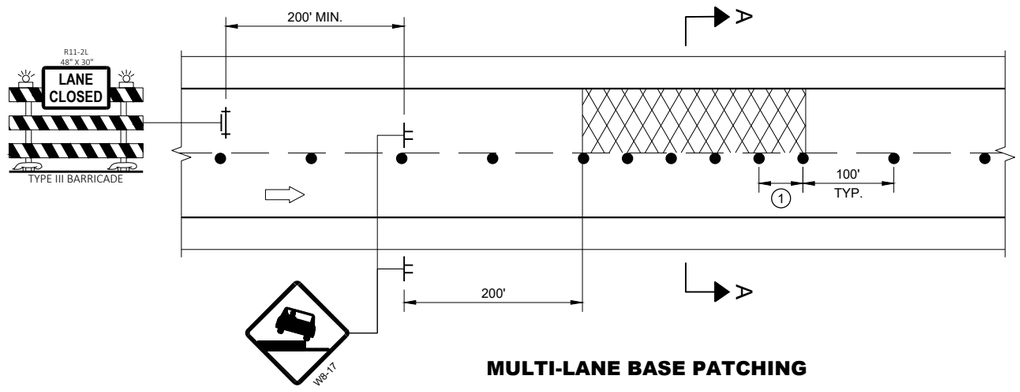


SECTION A - A

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.

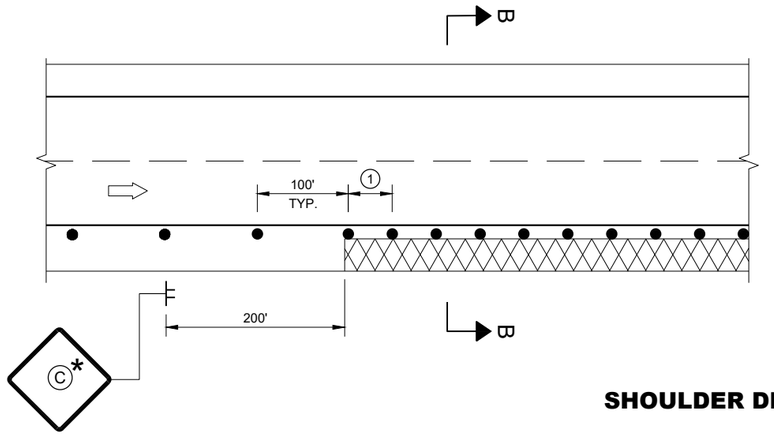
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

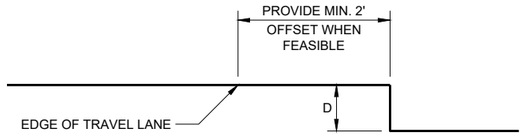
(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

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

6
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.

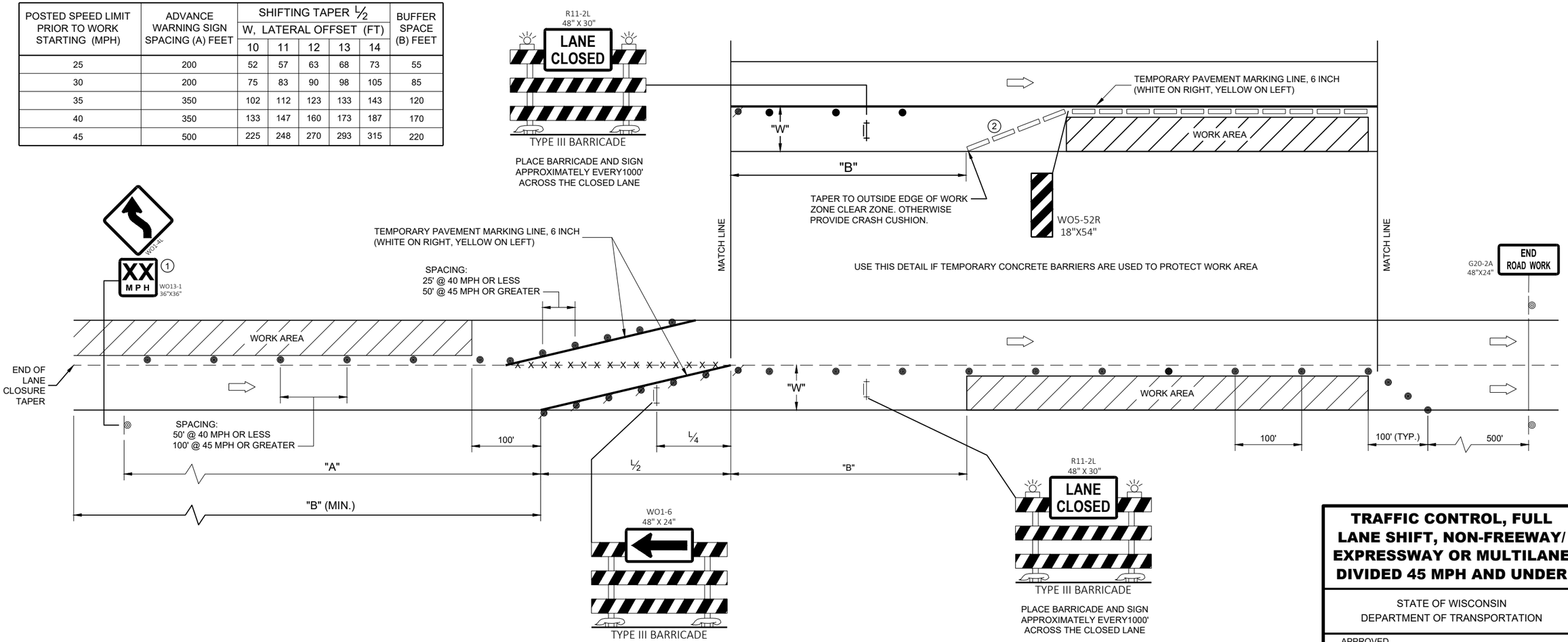
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

6

SDD 15D40-05a

6

SDD 15D40-05a

LEGEND

TYPE III BARRICADE WITH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

CONCRETE BARRIER TEMPORARY PRECAST

TYPE "A" WARNING LIGHT (FLASHING)

WORK AREA

FULL SHIFT							
SHIFTING TAPER L/2							
POSTED SPEED (MPH)	W, LATERAL OFFSET (FT)						
	10	11	12	13	14	15	16
45	225	248	270	293	315	338	360
50	250	275	300	325	350	375	400
55	275	303	330	358	385	413	440
60	300	330	360	390	420	450	480
65	325	358	390	423	455	488	520
70	350	385	420	455	490	525	560

SPEED LIMIT 60 / W03-5

OR

SPEED LIMIT 55 / W03-5

LOCATED 3000 FEET BEYOND THE "ROAD WORK 1 MILE" (W20-1F) SIGN

SPEED LIMIT 60 / R2-1 48"X60"

OR

SPEED LIMIT 55 / R2-1 48"X60"

(BLACK AND WHITE) LOCATED 700 FEET BEYOND THE W03-5 SIGN

IF THE REGULATORY SPEED HAS BEEN REDUCED, A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 3 MILES.

WO1-6 48" X 24"

TYPE III BARRICADE

TAPER TO OUTSIDE EDGE OF WORK ZONE CLEAR ZONE, OTHERWISE PROVIDE CRASH CUSHION.

WO1-4BL 48"x48"

② XX MPH WO13-1 36"X36"

WO1-4C 48"X48"

② XX MPH WO13-1 36"X36"

(FOR 3 LANE DIVIDED HIGHWAYS)

WO5-52L 18"X24"

* INCLUDE RESUME SPEED LIMIT SIGN A MINIMUM OF 200 FEET (500 FEET DESIRABLE) AFTER END ROAD WORK SIGNS.

* END ROAD WORK G20-2A 48"X24"

4200' 1000' L / 2 500' MIN. 800' DESIRABLE

200' L / 4 50' W 100' 8:1 WORK AREA 50'

250' 250' 250' 1000' L / 2 250'

T

TEMPORARY PAVEMENT MARKING LINE, 6 INCH WHITE

ROAD WORK 1 MILE W20-1F

WO1-4BR 48"x48" OR ① W24-14R

② XX MPH WO13-1 36"X36"

WO1-4C 48"X48" OR ① W24-18R

② XX MPH WO13-1 36"X36"

(FOR 3 LANE DIVIDED HIGHWAYS)

PARTIAL SHIFT									
POSTED SPEED PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L/2								
	W, LATERAL OFFSET (FT)								
	1	2	3	4	5	6	7	8	9
45	23	45	68	90	113	135	158	180	203
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 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.

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.

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 WO1-4C.

② IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

TRAFFIC CONTROL MULTIPLE LANE SHIFT MULTILANE DIVIDED ROAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6 SDD 15D41-05a

LEGEND

- EXISTING SIGN ON PERMANENT SUPPORT
- NEW SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK ZONE

GENERAL NOTES

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

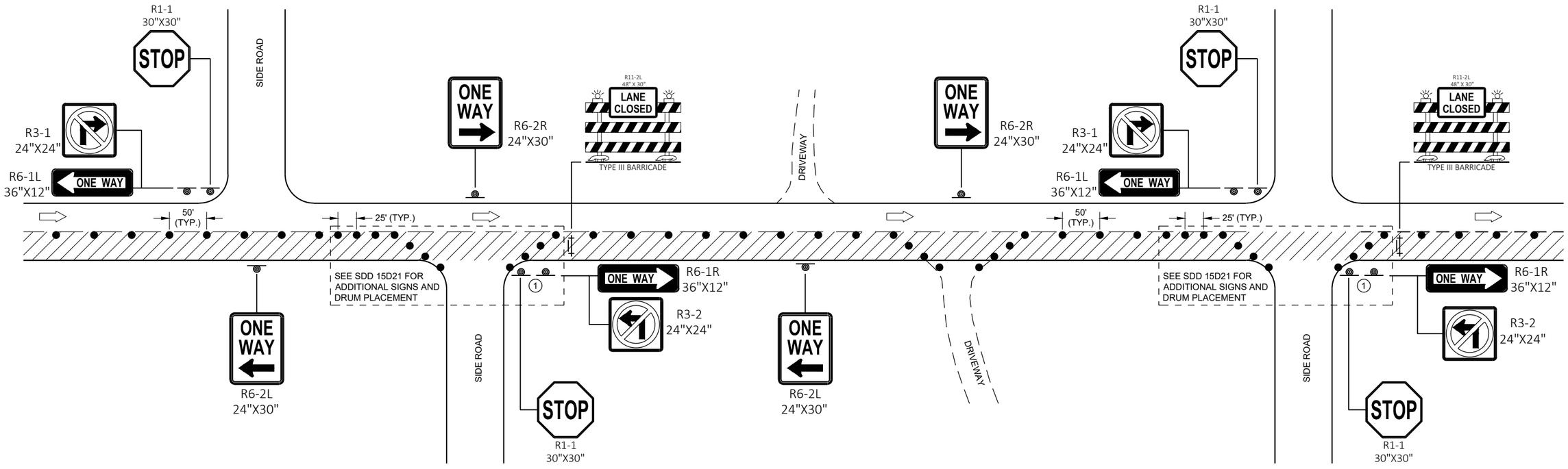
ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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.

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.

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

(1) IF WORK OPERATIONS ALLOWS, MOVE R1-1, R6-1R, AND R3-2 CLOSER TO INTERSECTION.



TRAFFIC CONTROL
ONE - WAY SIGNING

TRAFFIC CONTROL ONE-WAY SIGNING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2020 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEE 624
FHWA	

6
SDD 15D46 - 01

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- DELINEATOR, FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- CONSTRUCTION TRAFFIC
- WORK AREA
- CC — CRASH CUSHION TEMPORARY
- EXISTING CONCRETE BARRIER TEMPORARY PRECAST

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.

WORK ZONE INGRESS/EGRESS LOCATIONS SHALL BE APPROVED BY THE ENGINEER. LOCATIONS FOR WORK ZONE ACCESS TO/FROM THE FREEWAY SHALL NOT BE USED FOR INGRESS AND EGRESS AT THE SAME TIME.

THIS ACCESS DETAIL IS TYPICAL FOR LEFT LANE ACCESS, FOR RIGHT LANE ACCESS, REVERSE THE TRAFFIC CONTROL

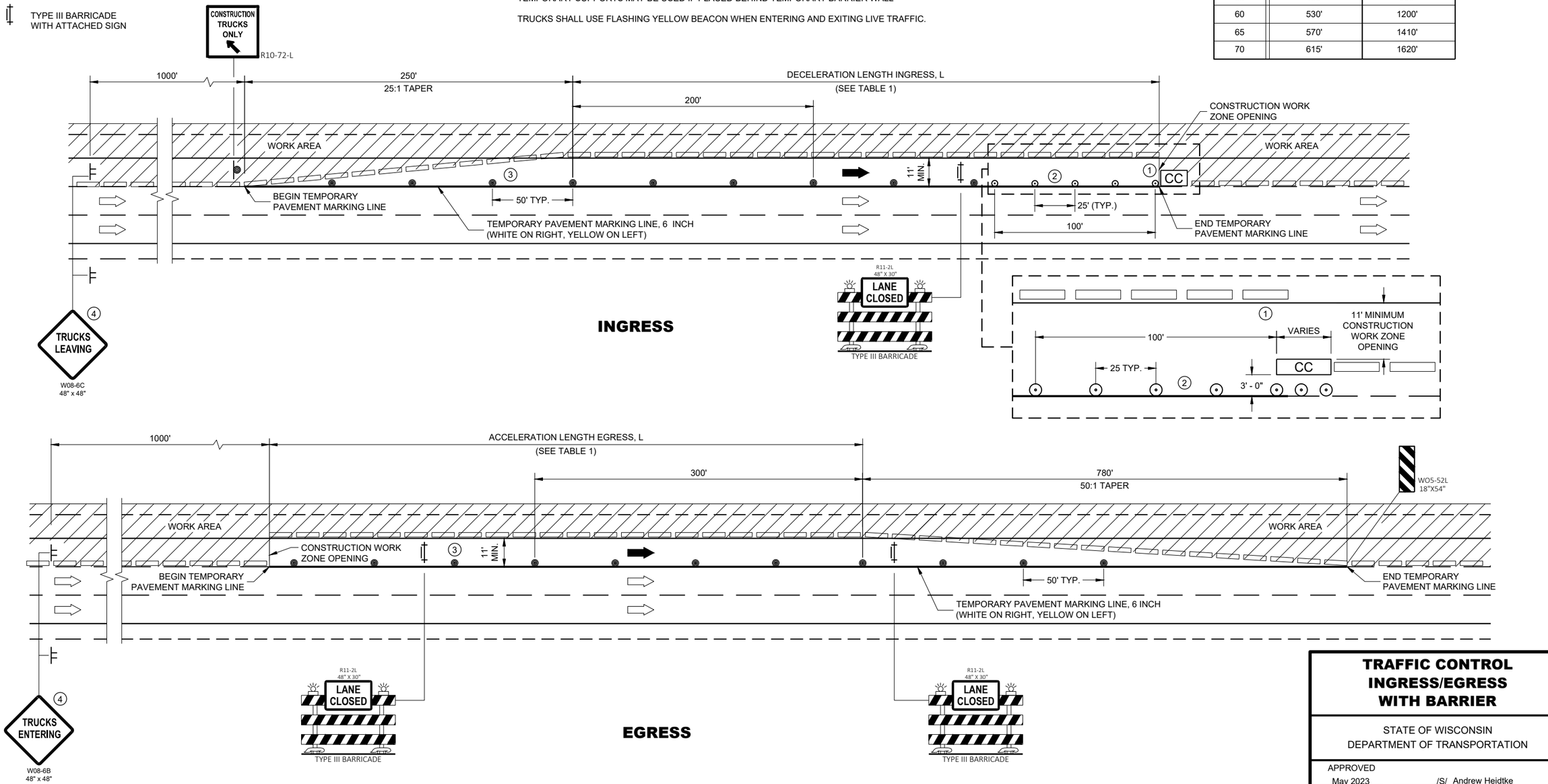
TEMPORARY SUPPORTS MAY BE USED IF PLACED BEHIND TEMPORARY BARRIER WALL

TRUCKS SHALL USE FLASHING YELLOW BEACON WHEN ENTERING AND EXITING LIVE TRAFFIC.

1. WIDEN BARRIER AS NECESSARY TO ACCOMMODATE CRASH CUSHION WIDTH.
2. USE TUBULAR MARKERS TO HELP DELINEATE TEMPORARY CRASH CUSHION.
3. REMOVE DRUMS / BARRICADES WHEN INGRESS / EGRESS ARE IN USE.
4. REMOVE OR COVER WHEN ACCESS IS NOT NEEDED.

TABLE 1

S (MPH)	INGRESS, L	EGRESS, L
50	435'	720'
55	480'	960'
60	530'	1200'
65	570'	1410'
70	615'	1620'



TRAFFIC CONTROL INGRESS/EGRESS WITH BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE 625

FHWA

6

SDD 15D47-03a

6

SDD 15D47-03a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- CONSTRUCTION TRAFFIC
- WORK AREA

TABLE 1

S (MPH)	INGRESS, L	EGRESS, L
50	435'	720'
55	480'	960'
60	530'	1200'
65	570'	1410'
70	615'	1620'

LEGEND

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.

WORK ZONE INGRESS/EGRESS LOCATIONS SHALL BE APPROVED BY THE ENGINEER. LOCATIONS FOR WORK ZONE ACCESS TO/FROM THE FREEWAY SHALL NOT BE USED FOR INGRESS AND EGRESS AT THE SAME TIME.

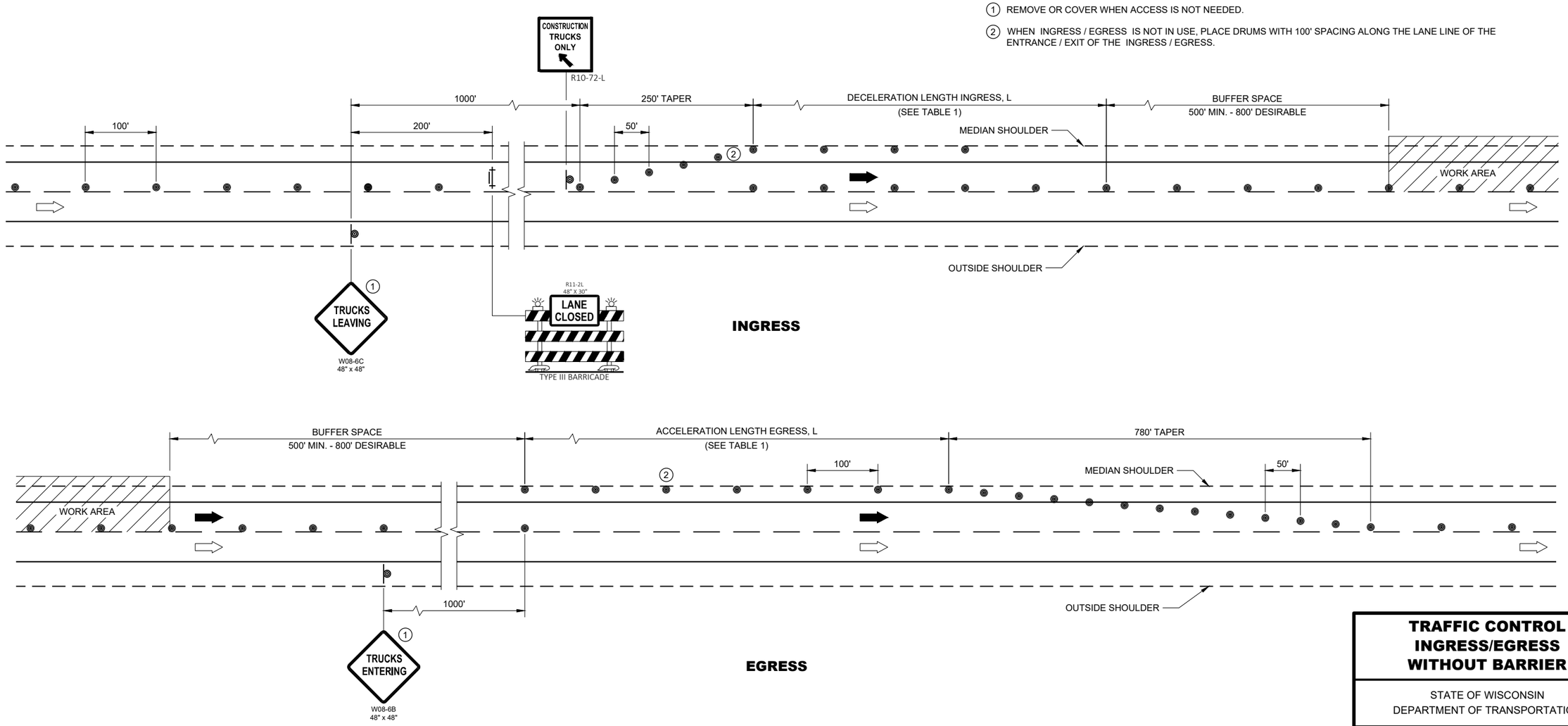
THIS ACCESS DETAIL IS TYPICAL FOR LEFT LANE ACCESS, FOR RIGHT LANE ACCESS, REVERSE THE TRAFFIC CONTROL

TEMPORARY SUPPORTS MAY BE USED IF PLACED BEHIND TEMPORARY BARRIER WALL

TRUCKS SHALL USE FLASHING YELLOW BEACON WHEN ENTERING AND EXITING LIVE TRAFFIC.

(1) REMOVE OR COVER WHEN ACCESS IS NOT NEEDED.

(2) WHEN INGRESS / EGRESS IS NOT IN USE, PLACE DRUMS WITH 100' SPACING ALONG THE LANE LINE OF THE ENTRANCE / EXIT OF THE INGRESS / EGRESS.



TRAFFIC CONTROL INGRESS/EGRESS WITHOUT BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D47-03b

6

SDD 15D47-03b

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS, INCLUDING PCMS 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" SIGNS ARE THE SAME AS "W" SIGNS 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. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED SIGNS.

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

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

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

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

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

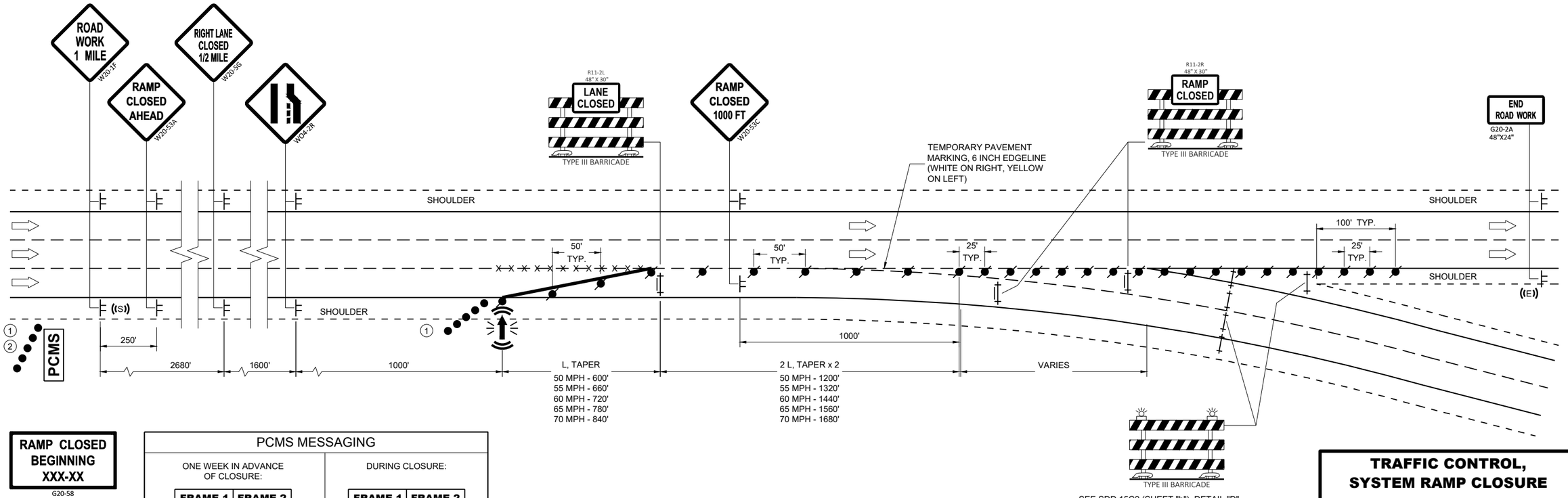
REMOVE ALL ARROW BOARDS AND DEVICES BEYOND THE SHOULDER WHEN THE WORK IS NOT IN PROGRESS.

REFER TO SDD 15C2 FOR SETTING DETOUR SIGNAGE.

ADD FREEWAY SHIELD AND DIRECTION IF APPLICABLE. COVER EXISTING RAMP AND LANE SIGNS IF APPLICABLE.

(1) 5 DRUMS SPACED AT 10 FOOT INTERVALS.

(2) DURING THE PRE-WARNING PERIOD, PLACE THE PCMS AT THE SYSTEM RAMP THAT IS TO BE CLOSED. DURING CLOSURE PERIOD, PLACE PCMS OR FMS AT LAST AVAILABLE EXIT IN ADVANCE OF SYSTEM RAMP CLOSURE. IF DYNAMIC MESSAGE SIGNS (DMS) ARE AVAILABLE, COORDINATE POTENTIAL SIGN MESSAGES WITH THE TRAFFIC MANAGEMENT CENTER (TMC).



SEE SDD 15C2 (SHEET "b"), DETAIL "D" "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" PLACE BARRICADES TO FULLY SEAL OFF ROAD

RAMP CLOSED BEGINNING XXX-XX
G20-58

PCMS MESSAGING

ONE WEEK IN ADVANCE OF CLOSURE:

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

DURING CLOSURE:

FRAME 1	FRAME 2
HWY XX RAMP CLOSED	USE ALT ROUTE

TRAFFIC CONTROL, SYSTEM RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D49-04

6

SDD 15D49-04

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

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)					
		3	4	5	6	7	8
25	200	10	14	17	21	24	28
30	200	15	20	25	30	35	40
35	350	20	27	34	40	47	54
40	350	26	35	44	53	62	70
45	500	45	59	74	89	104	119
50	500	50	66	83	99	116	132
55	500	54	73	91	109	127	145

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.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

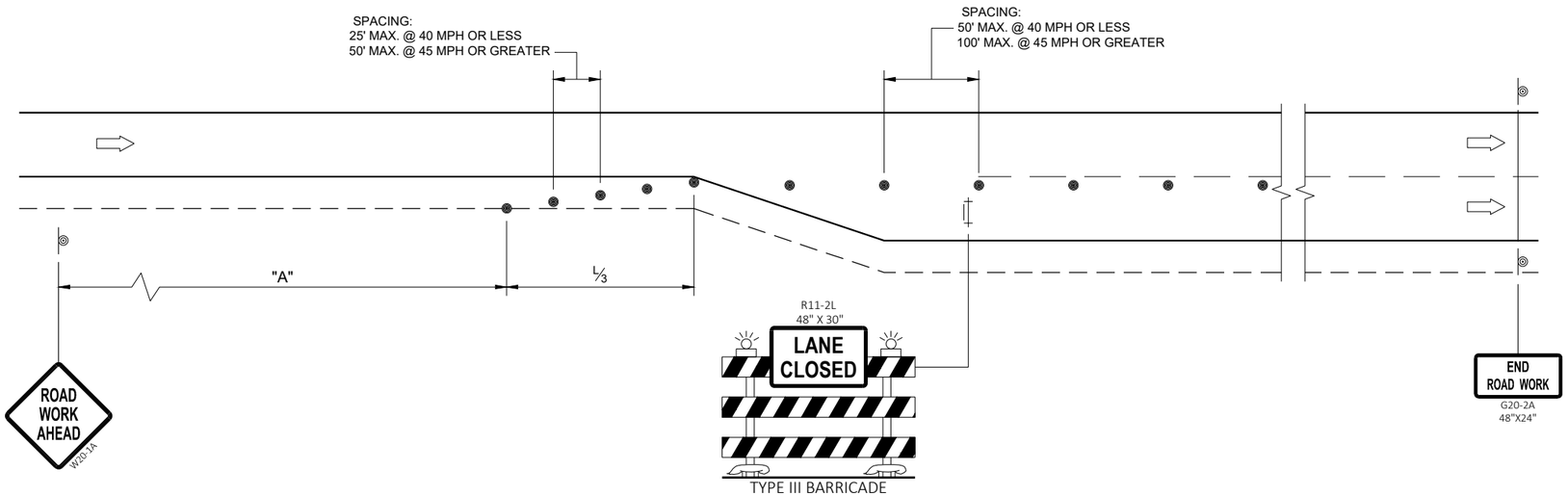
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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.

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

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

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.



PLACE BARRICADE AND SIGN APPROXIMATELY EVERY 1000' ACROSS THE CLOSED LANE

TRAFFIC CONTROL
ADDED LANE CLOSURE
WITHOUT LANE SHIFT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

628

FHWA

6

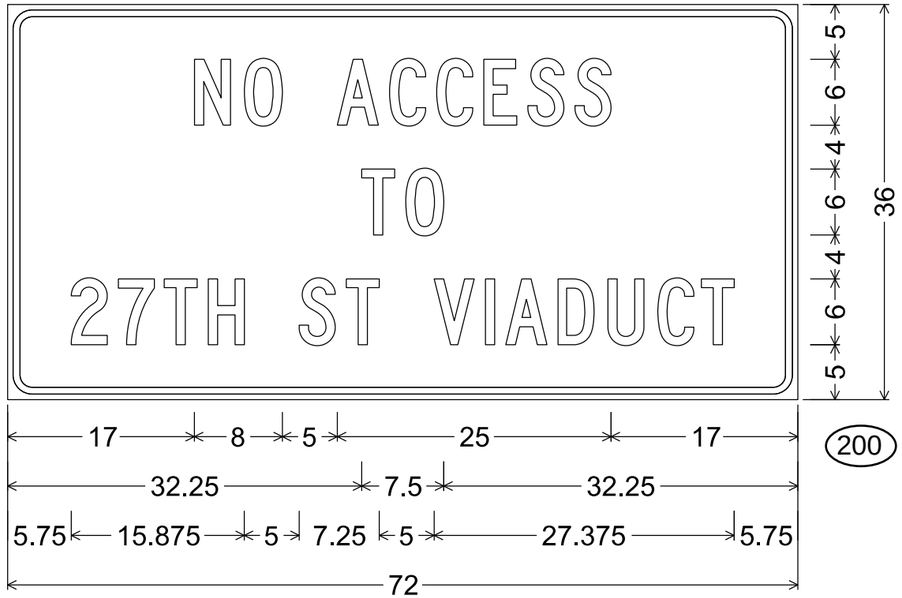
SDD 15D50-03a

6

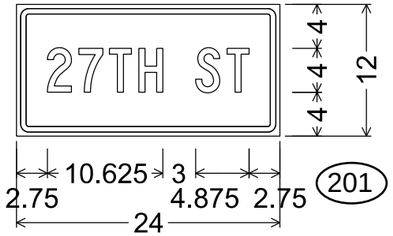
SDD 15D50-03a

NOTES

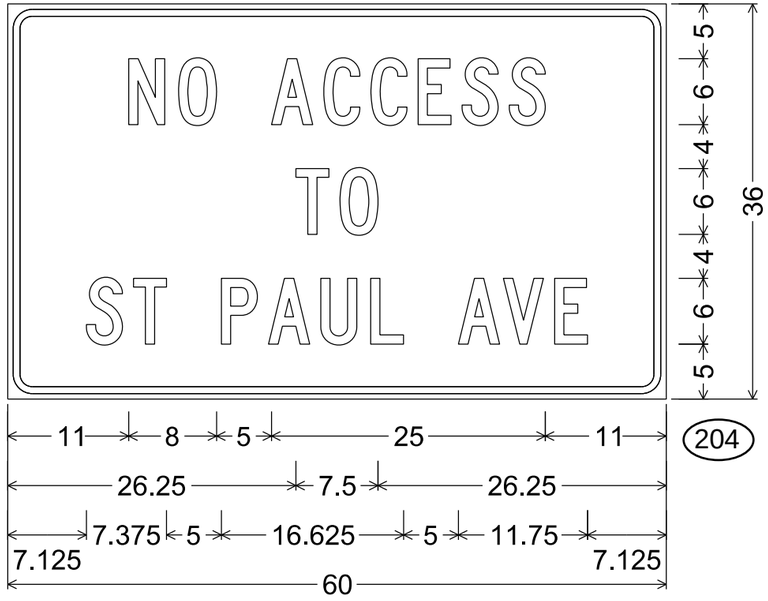
1. Fixed Message Signs Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C



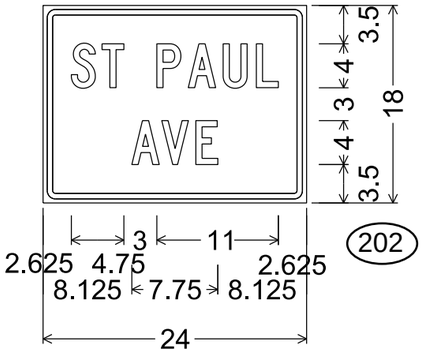
2.250" Radius, 0.625" Border, 0.500" Indent



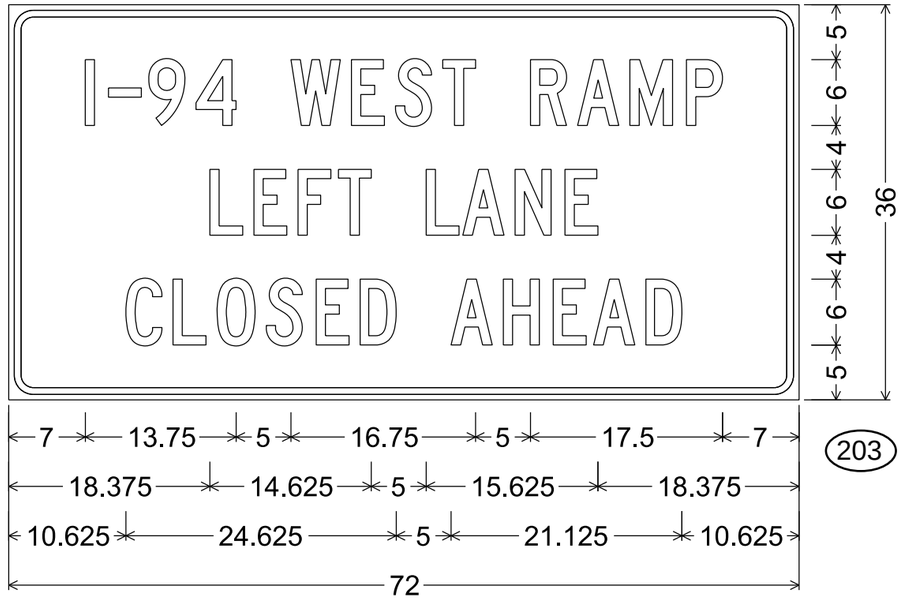
1.125" Radius, 0.500" Border, 0.375" Indent



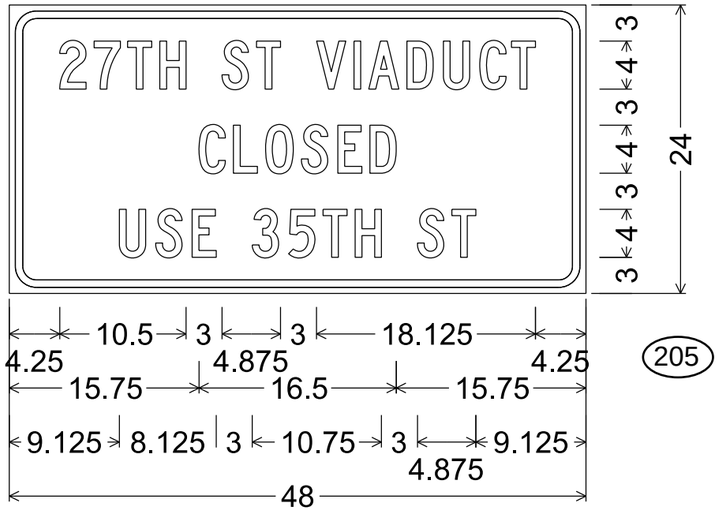
2.250" Radius, 0.625" Border, 0.500" Indent



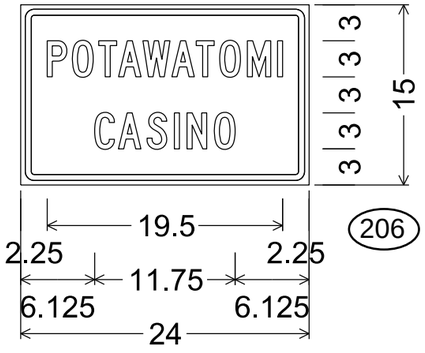
1.125" Radius, 0.500" Border, 0.375" Indent



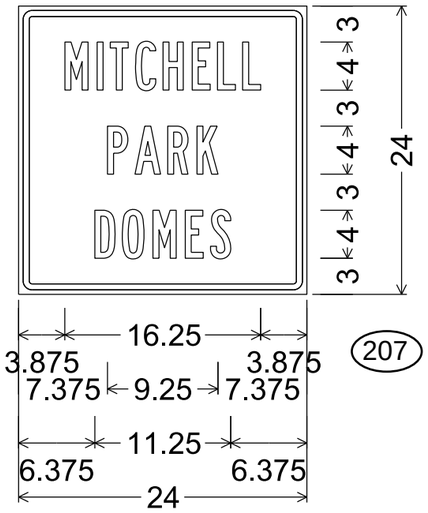
2.250" Radius, 0.625" Border, 0.500" Indent



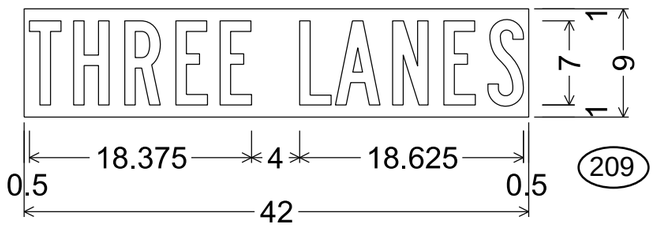
2.250" Radius, 0.625" Border, 0.500" Indent
"27TH", C; "ST", C; "VIADUCT", C;
"CLOSED", C; "USE", C;
"35TH", C; "ST", C



1.125" Radius, 0.500" Border, 0.375" Indent
"POTAWATOMI", C;
"CASINO", C



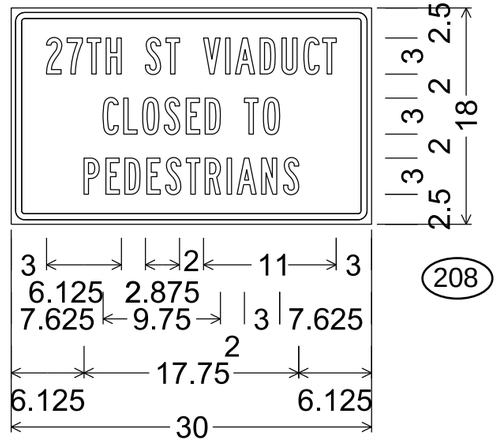
1.125" Radius, 0.500" Border, 0.375" Indent



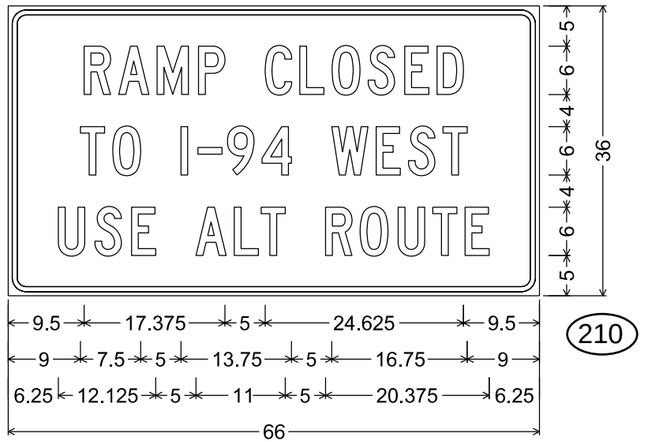
No border, White on Fluorescent orange

NOTES

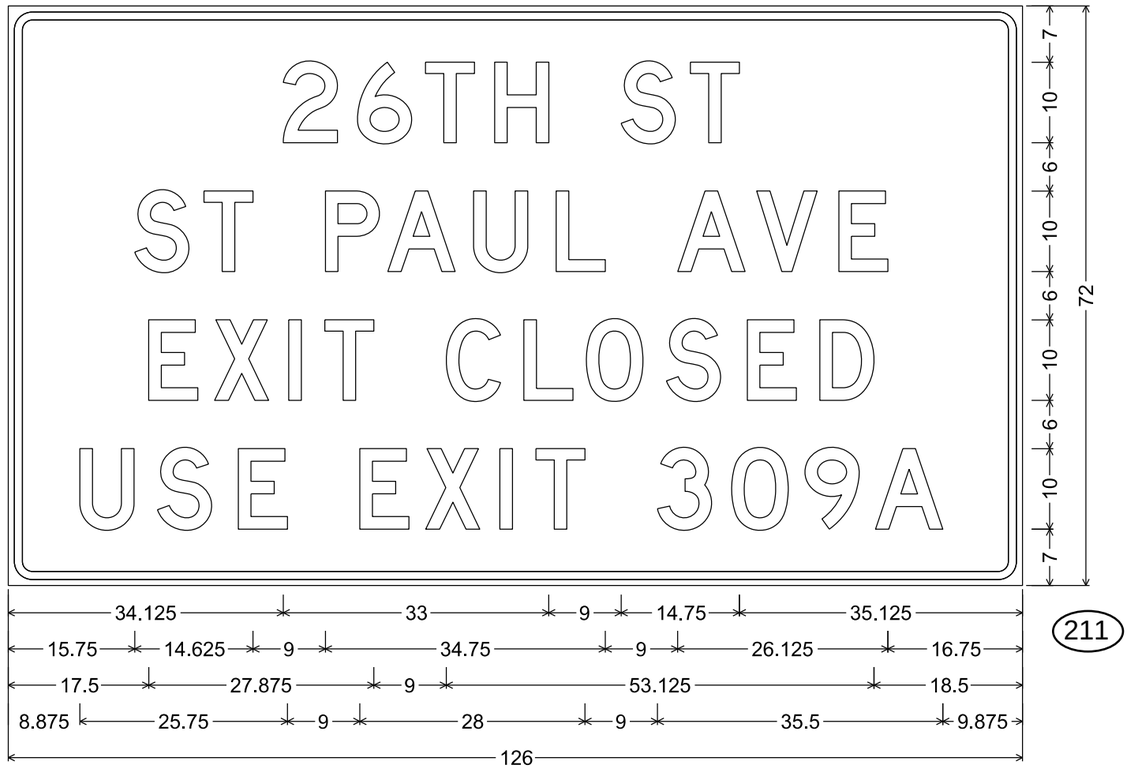
1. Fixed Message Signs Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B or as noted



1.125" Radius, 0.500" Border, 0.375" Indent



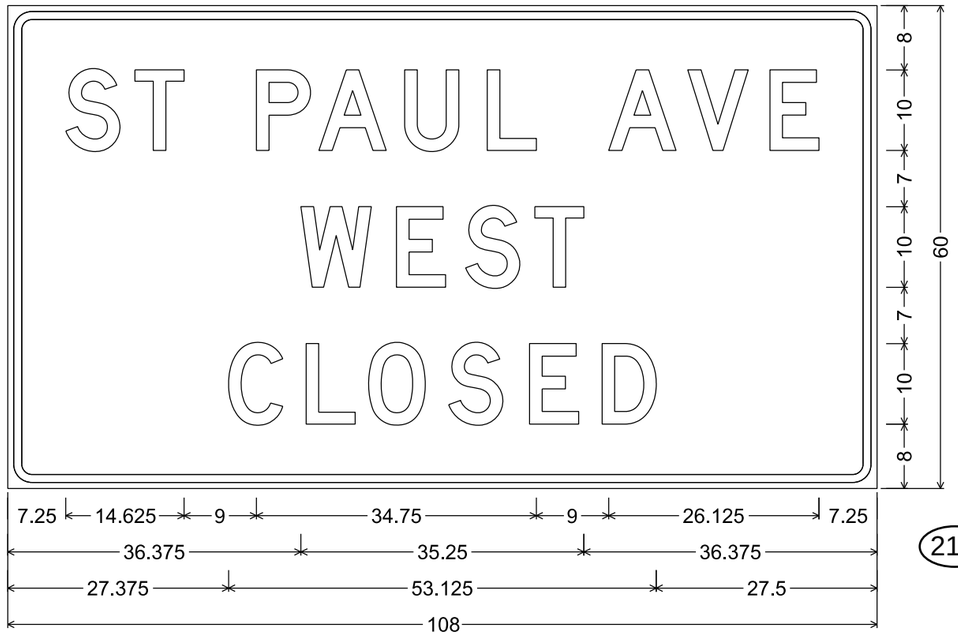
2.250" Radius, 0.625" Border, 0.500" Indent
"RAMP", C; "CLOSED", C; "TO", C; "I-94", C;
"WEST", C; "USE", C; "ALT", C; "ROUTE", C



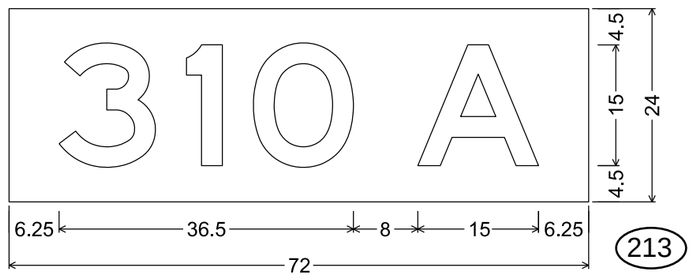
3.000" Radius, 1.000" Border, 0.750" Indent

NOTES

1. Fixed Message Signs Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D or as noted



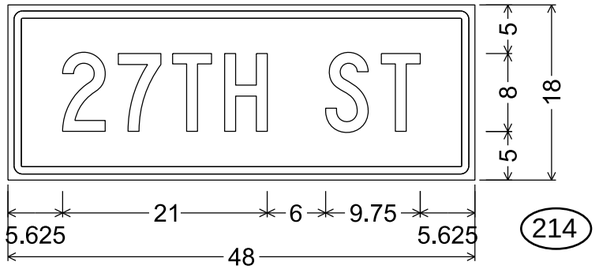
3.000" Radius, 1.000" Border, 0.750" Indent



No border, Black on Fluorescent orange;
"310", E; "A", E

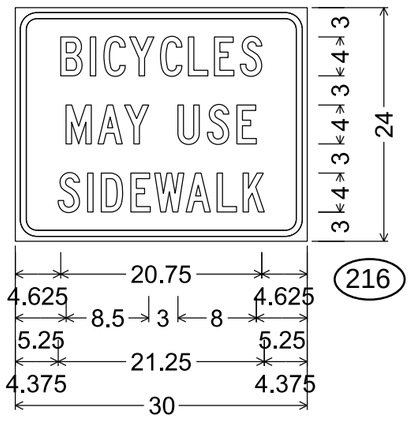
NOTES

1. Fixed Message Signs Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C except as noted

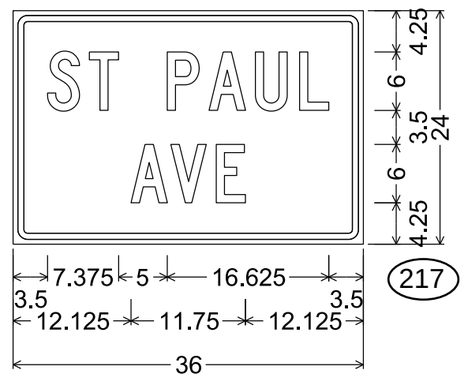


1.500" Radius, 0.750" Border, 0.625" Indent

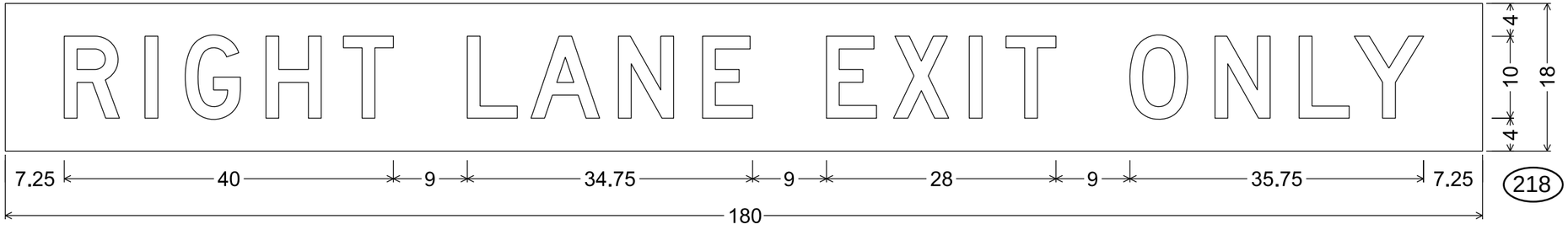
1.500" Radius, 0.750" Border, 0.625" Indent



2.250" Radius, 0.625" Border, 0.500" Indent



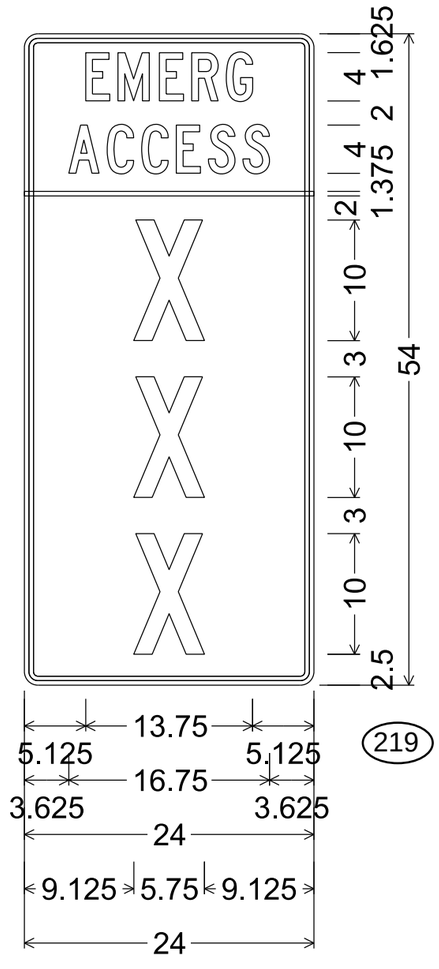
1.500" Radius, 0.625" Border, 0.500" Indent



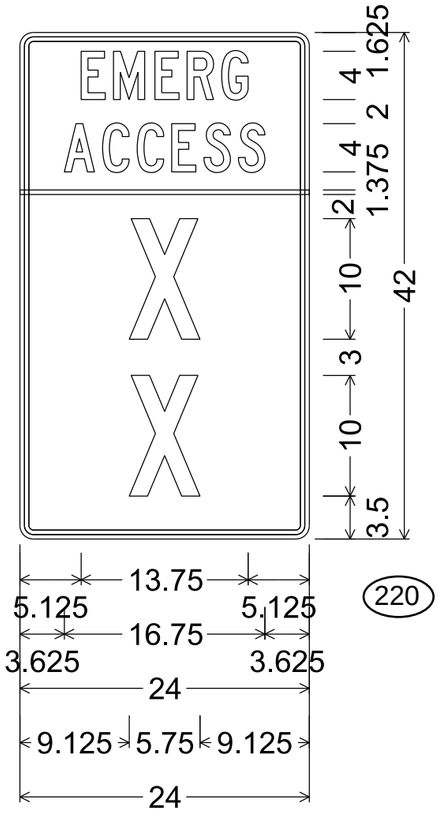
No border,
"RIGHT", D; "LANE", D; "EXIT", D; "ONLY", D

NOTES

1. Fixed Message Signs Type II - Type H Reflective
2. Color:
   Background - White
   Message - Red
3. Message Series - C



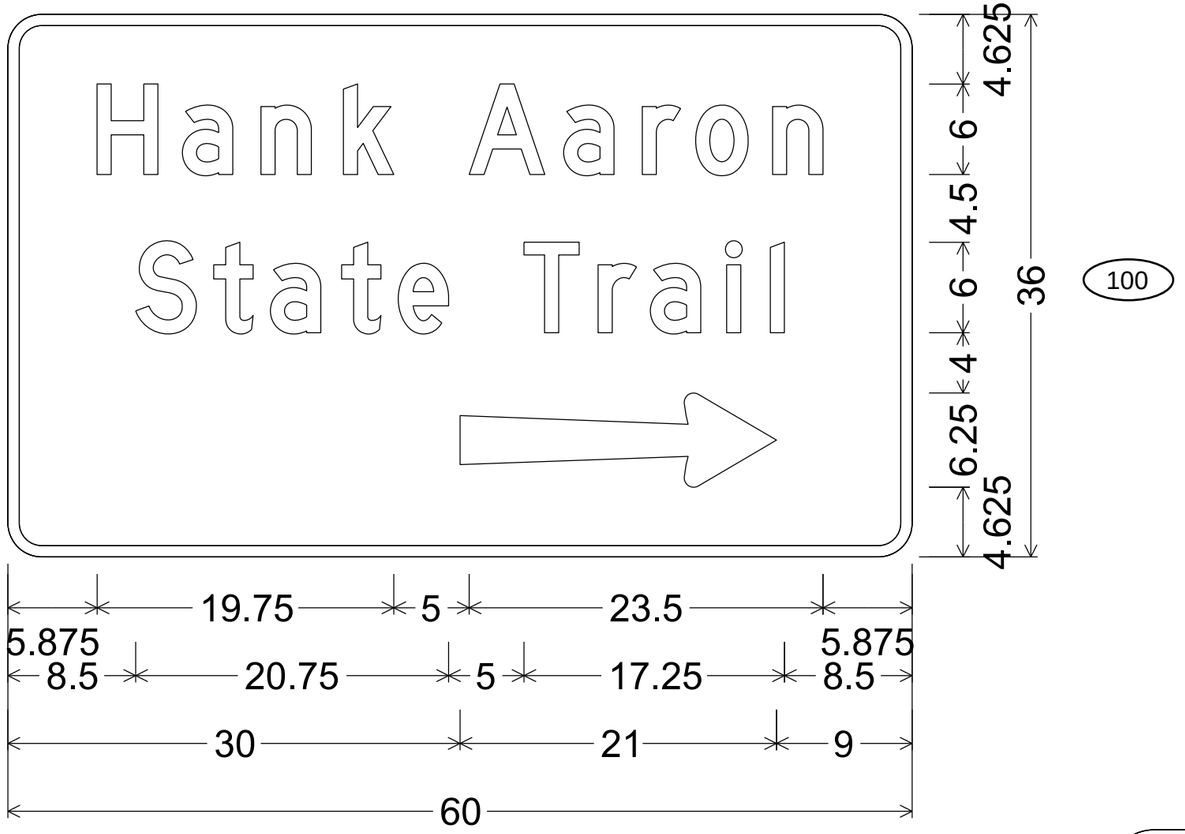
1.125" Radius, 0.375" Border, 0.375" Indent



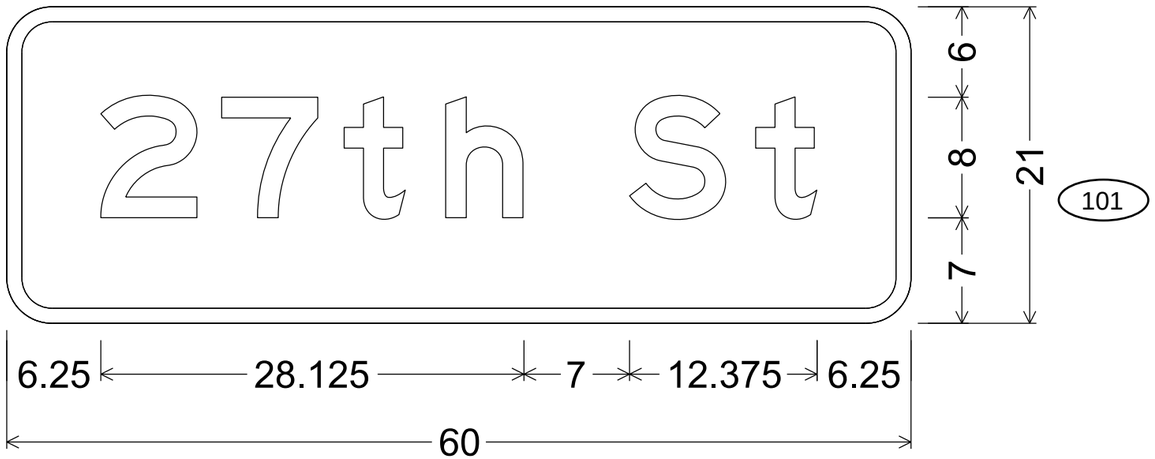
1.125" Radius, 0.375" Border, 0.375" Indent

NOTES

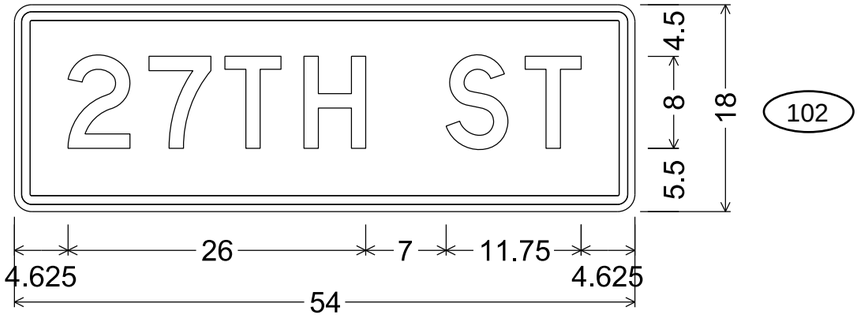
1. Signs are Type II - Type H Reflective
2. Color:
   Background - Green except as noted
   Message - White
3. Message Series - E except as noted



D7-95; 2.250" Radius, 0.750" Border, White on Brown; "Hank", D; "Aaron", D; "State", D; "Trail", D



M1-94; 3.000" Radius, 1.000" Border

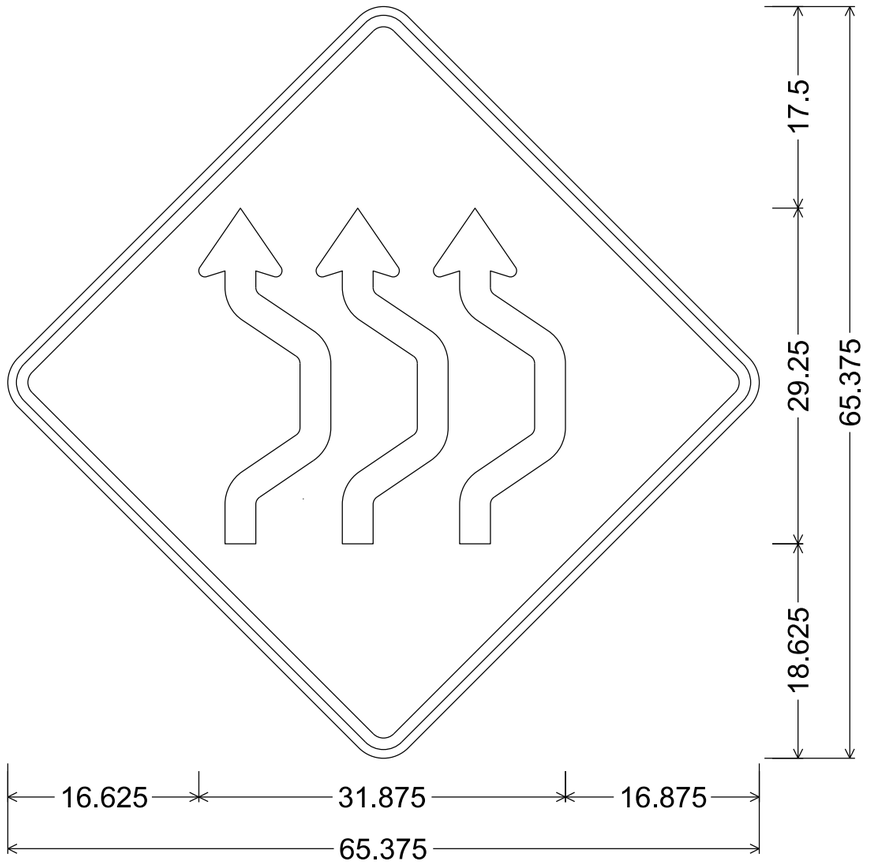


102

1.500" Radius, 0.750" Border, 0.625" Indent

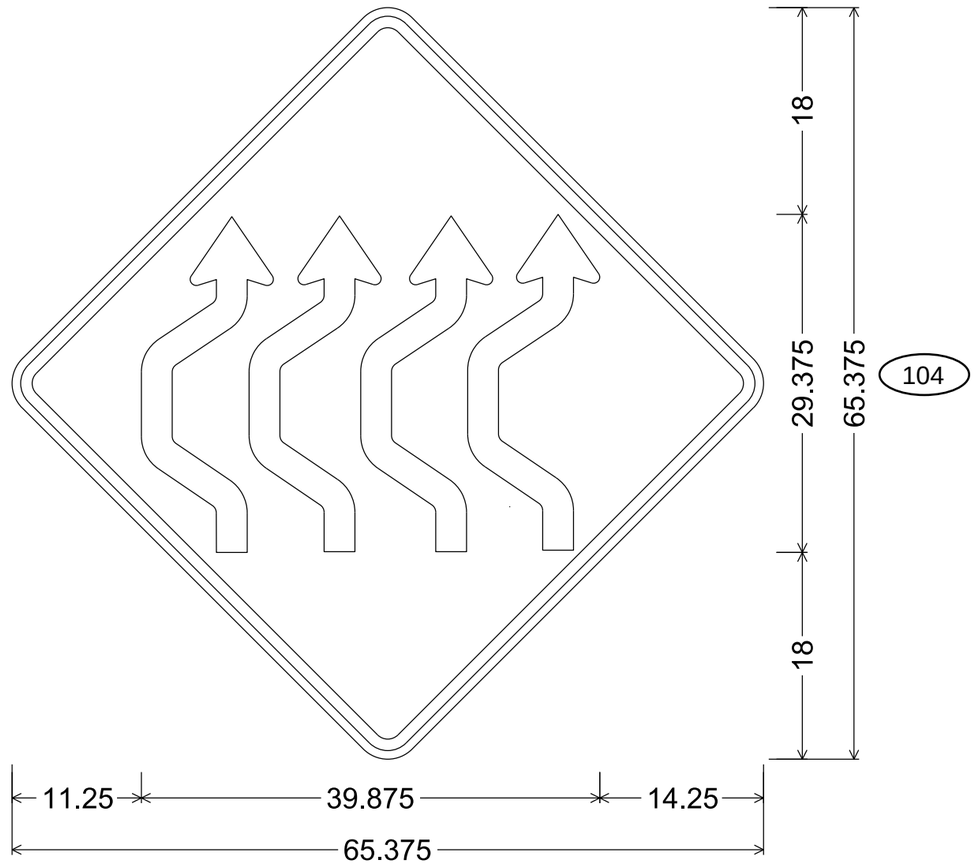
NOTES

1. Signs are Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D



103

W24-1BR_Mod
48.000" across sides 3.000" Radius, 1.000" Border, 0.750" Indent



104

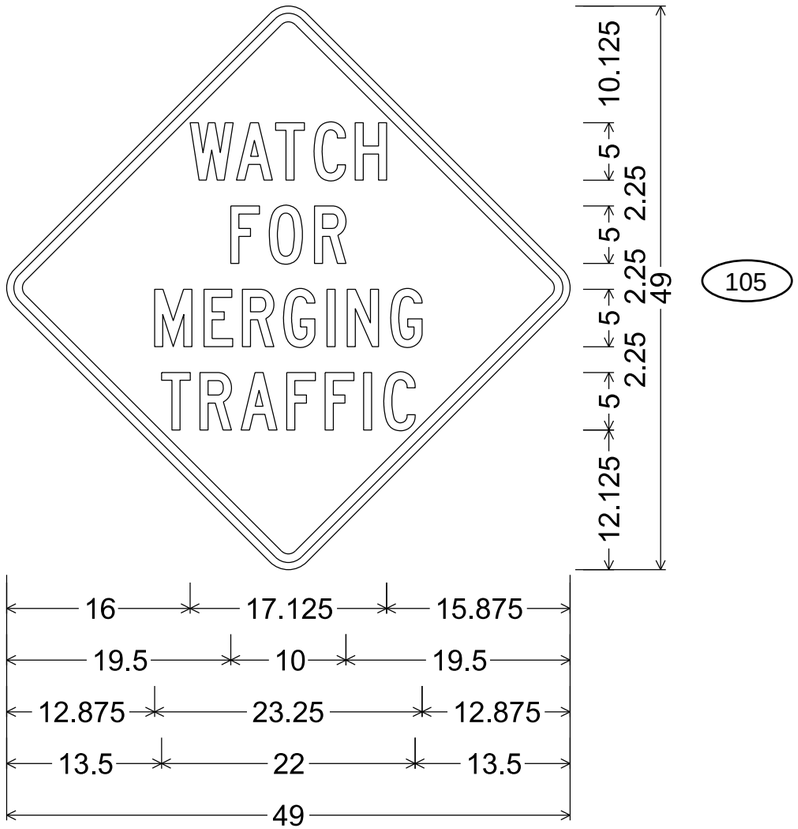
W24-1bL Mod;
48.000" across sides 3.000" Radius, 1.000" Border, 0.750" Indent

7

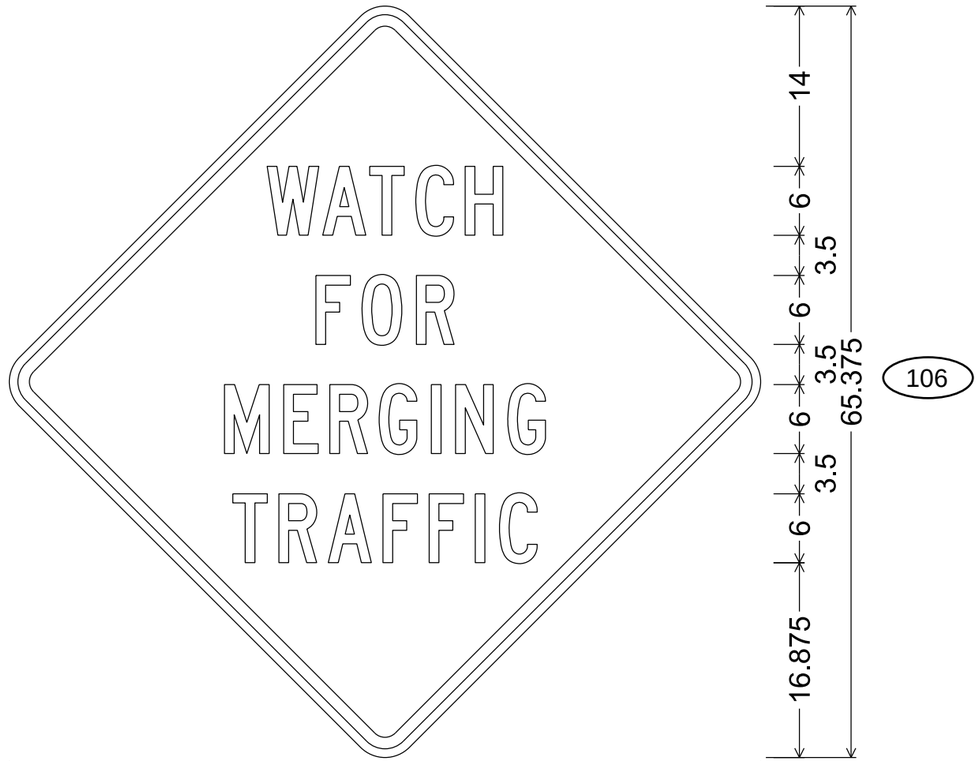
7

NOTES

1. Signs are Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C



36.000" across sides 2.250" Radius, 0.750" Border, 0.625" Indent



48.000" across sides 3.000" Radius, 1.000" Border, 0.750" Indent

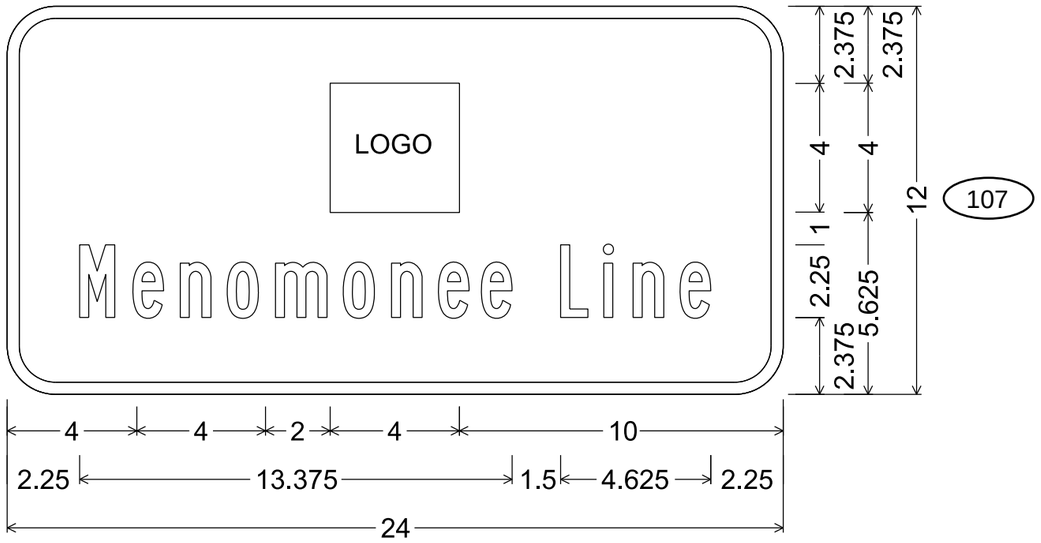
7

7

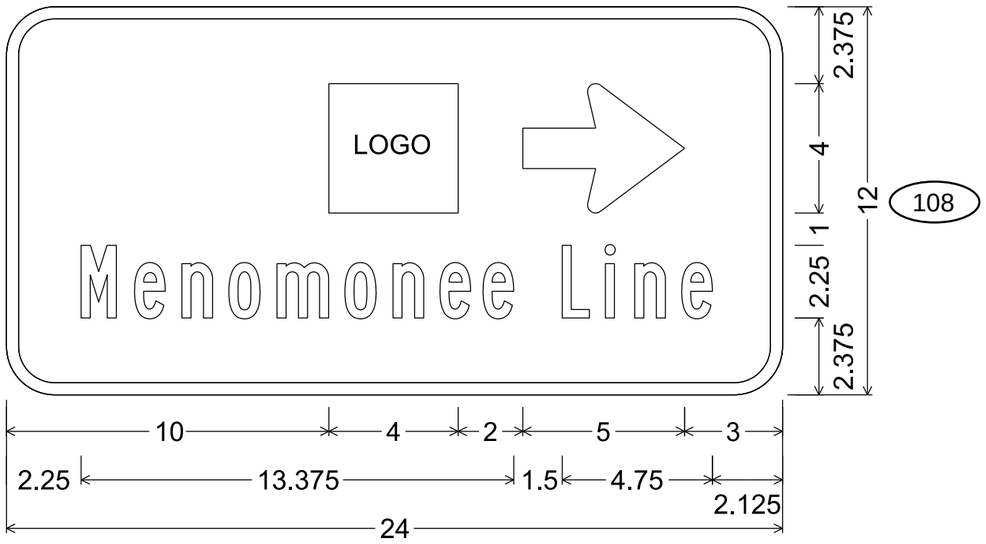
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET NO: 636	E

NOTES

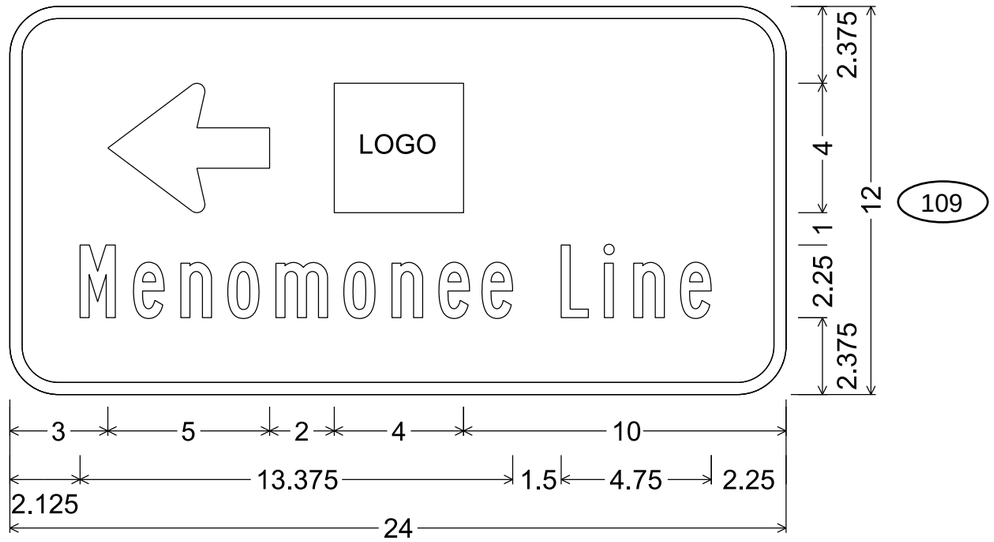
1. Signs are Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - B



1.500" Radius, 0.375" Border



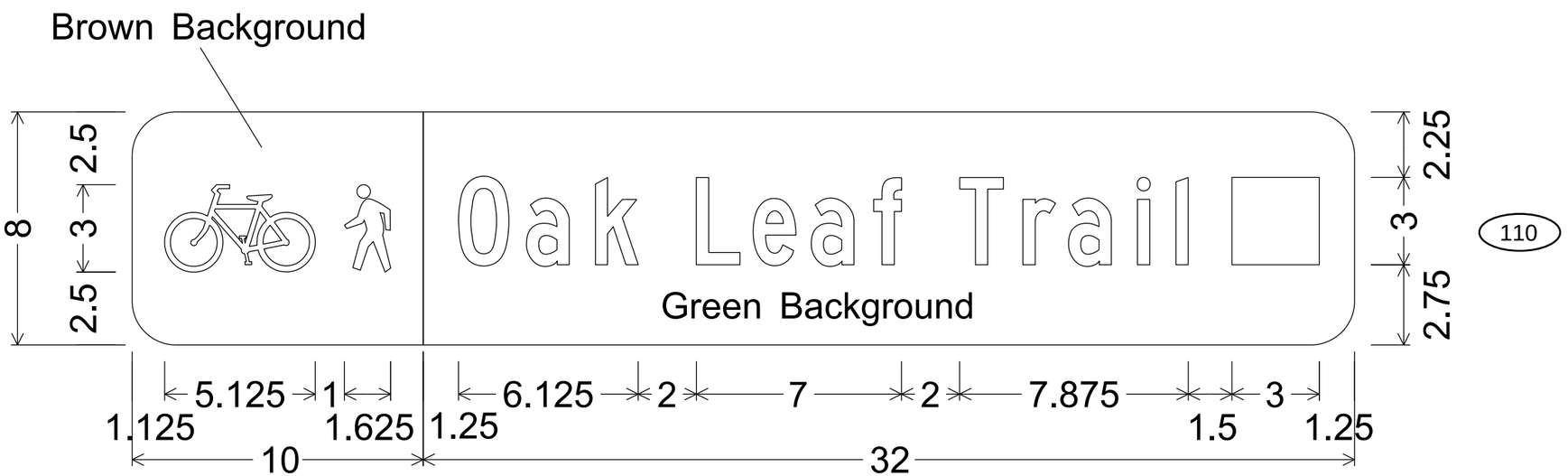
1.500" Radius, 0.375" Border



1.500" Radius, 0.375" Border

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - As noted
   Message - White
3. Message Series - C



1.500" Radius, No border,

110

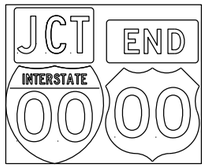
7

7

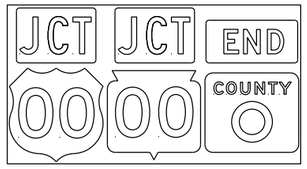
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET NO: 638	E

TYPICAL ASSEMBLIES

J1-1



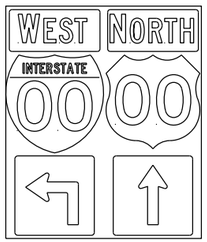
J1-2



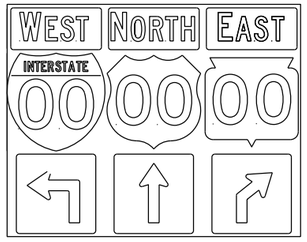
J1-3

JR1-1

J2-1

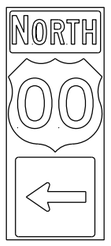


J2-2

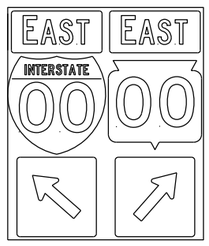


J2-3

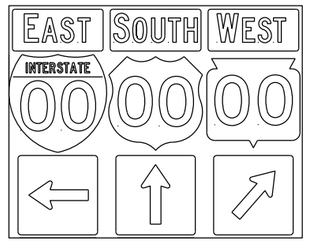
JV
(Typical Vertical J-Assembly
See Note 10 and 11)



J3-1

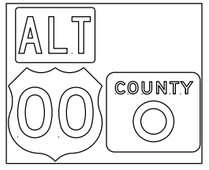


J3-2

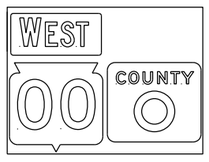


J3-3

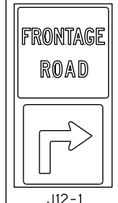
J4-1



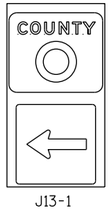
J4-2



J4-2



J12-1

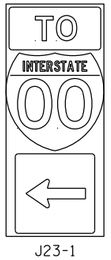


J13-1

J32-1

J33-1

J22-1

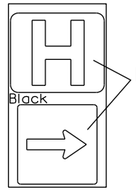


J23-1

JR13-1

JR23-1

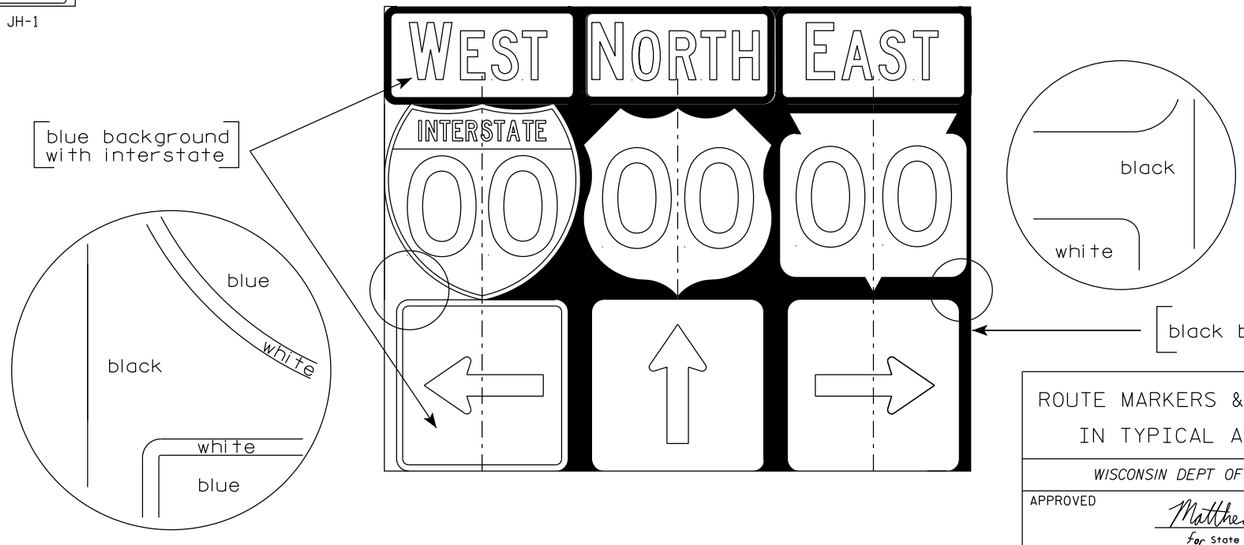
JR99-1



JH-1

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Black Non-reflective
   Message - see Note 4
3. Message Series - See Note 4
4. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
5. 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.
6. 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.
7. 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.
8. 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.
9. All Vertical J Assemblies are given a Sign Code of JV
10. For JV Assemblies that have a mixture of Interstate and Non-Interstate shields, arrows and cardinals shall be white on blue.
11. For JV Assemblies that have a mixture of Non-Interstate and Auto-Tour shields, arrows and cardinals shall be black on white.



ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

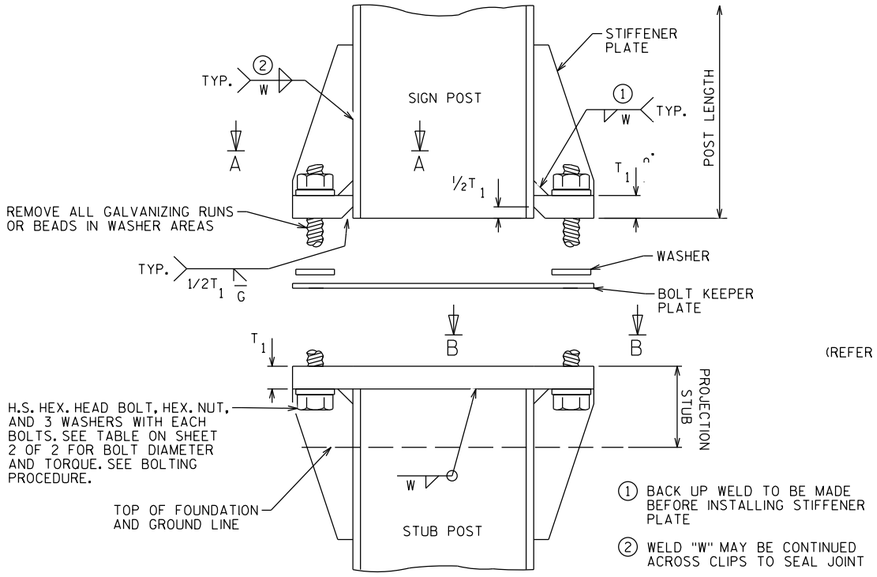
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/23 PLATE NO. A2-1S.10

PROJECT NO:

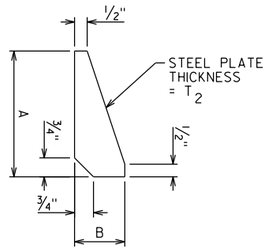
SHEET NO: 639 E



① BACK UP WELD TO BE MADE BEFORE INSTALLING STIFFENER PLATE

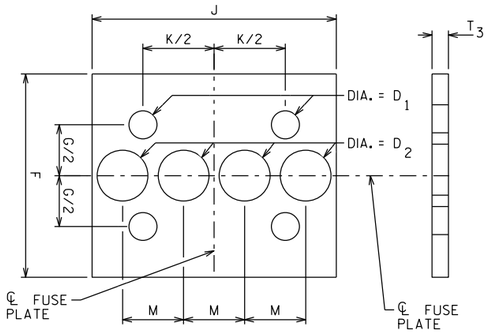
② WELD "W" MAY BE CONTINUED ACROSS CLIPS TO SEAL JOINT

SIGN POST & STUB POST ELEVATION



STIFFENER PLATE DETAIL

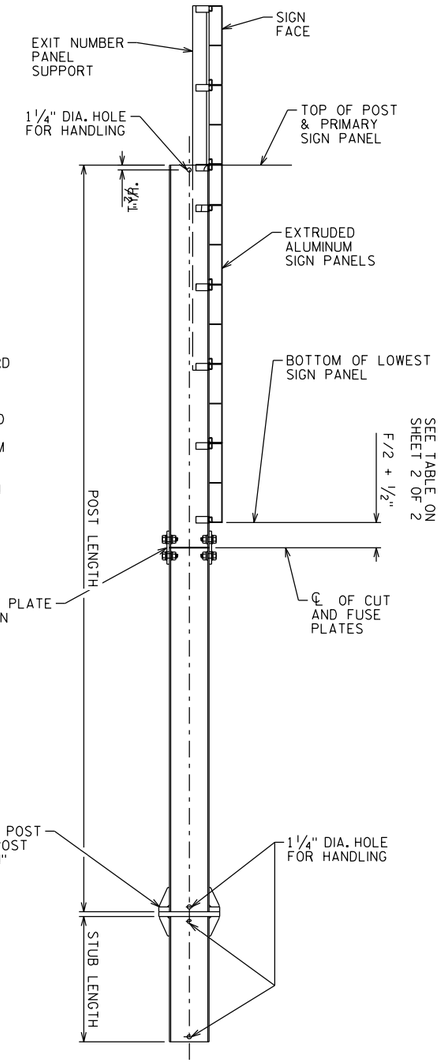
(REFER TO TABLE ON SHEET 2 OF 2 FOR DIMENSIONS)



PERFORATED FUSE PLATE DETAIL

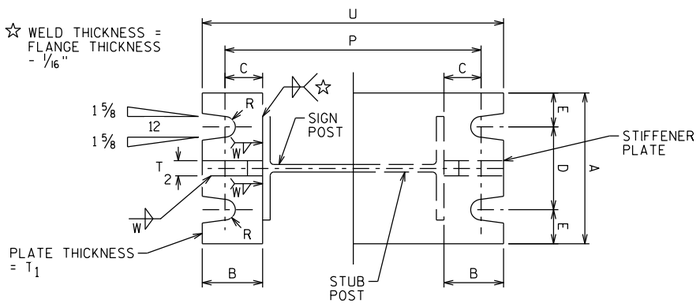
USE H.S. HEX HEAD BOLTS, HEX HEAD NUT AND FLAT WASHER UNDER NUT. INSTALL BOLTS PER THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION SECTION 506.3.12.3.

ALL HOLES SHALL BE DRILLED, SUB-PUNCHED AND REAMED. ALL PLATE CUTS SHALL PREFERABLY BE SAW CUTS. HOWEVER, FLAME CUTTING WILL BE PERMITTED PROVIDED ALL EDGES ARE GROUND. METAL PROJECTING BEYOND THE PLANE OF THE PLATE FACE WILL NOT BE PERMITTED. STEEL FUSE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36. ASTM A572 GRADE 50 OR ASTM A588 MAY BE SUBSTITUTED FOR A36 AT THE OPTION OF THE FABRICATOR. MILL TEST REPORTS SHALL BE SUBMITTED FOR FUSE PLATES. STEEL USED SHALL HAVE AN ULTIMATE TENSILE STRENGTH NOT TO EXCEED 80 KSI.



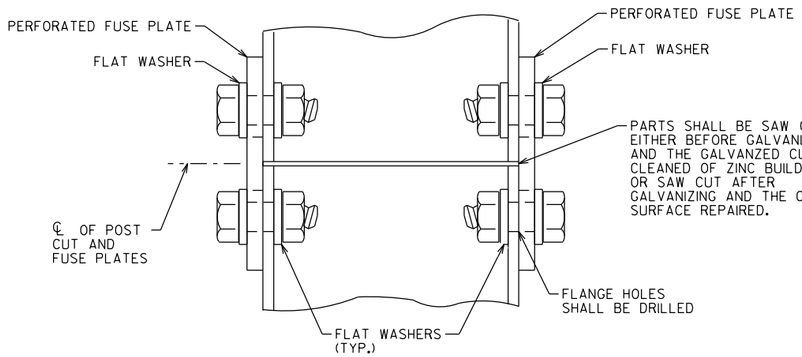
POST DETAIL

☆ WELD THICKNESS = FLANGE THICKNESS - 1/16"

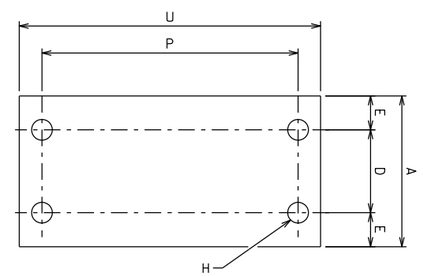


SECTION A-A

SECTION B-B



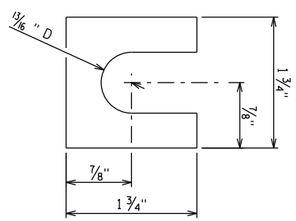
FUSE PLATE CONNECTION DETAIL



H = BOLT DIA. + 1/8"

BOLT KEEPER PLATE DETAIL

30 GA GALVANIZED SHEET STEEL



SHIM DETAIL

FURNISH TWO .012"± THICK AND TWO .032"± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO ASTM B36.

BOLTING PROCEDURE FOR BASE CONNECTION

1. ASSEMBLE SIGN POST, BOLT KEEPER PLATE, AND STUB POST WITH BOLTS AND THREE FLAT WASHERS PER BOLT AS SHOWN.
2. SHIM AS REQUIRED TO PLUMB POST.
3. PRIOR TO BOLT TIGHTENING, LUBRICATE BASE CONNECTION BOLTS WITH BEESWAX OR OTHER HIGH-WAX LUBRICANT.
4. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH A 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS.
5. LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PERSCRIBED TORQUE. (SEE TABLE FOR PERSCRIBED TORQUE). DO NOT OVER-TIGHTEN.
6. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

DRAWN BY	PLANS CK'D.

CONNECTION & FOUNDATION DETAILS 1 OF 2

SHEET A3-1.20

640

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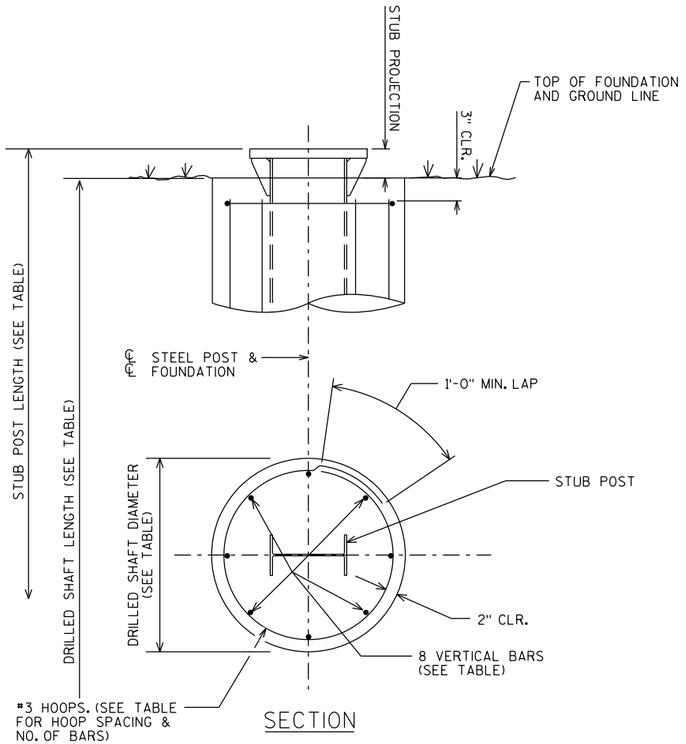
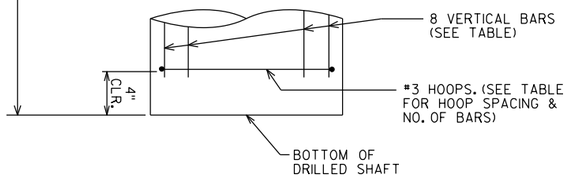
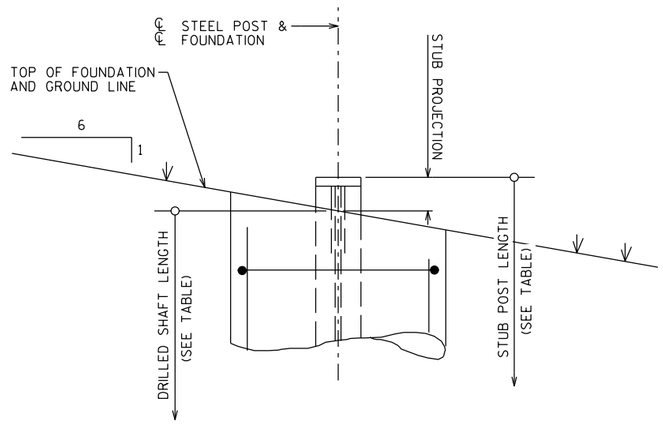


SECTION



FOUNDATION DETAIL



SHAFT PLACEMENT

FOUNDATION DATA TABLE

POST SHAPE	STUB LENGTH	STUB PROJECTION	DRILLED SHAFT DIAMETER	DRILLED SHAFT LENGTH	VERTICAL BARS		HOOPS		CONCRETE VOLUME	TOTAL REINF. WEIGHT
					SIZE	LENGTH	MAX SPA.	NO.		
W6X15	2'-6"	3"	24"	6'-6"	#5	5'-11"	10"	9	0.8 CY	71 LB
W8X18	2'-6"	3"	24"	7'-6"	#6	6'-11"	12"	8	0.9 CY	102 LB
W8X21	3'-0"	2½"	24"	8'-0"	#6	7'-5"	12"	9	1.0 CY	110 LB
W10X22	3'-0"	2½"	24"	8'-6"	#7	7'-11"	12"	9	1.0 CY	151 LB
W12X26	3'-0"	2½"	24"	10'-0"	#7	9'-5"	12"	11	1.2 CY	180 LB

◆ QUANTITIES SHOWN ARE FOR ONE DRILLED SHAFT

BASE CONNECTION & FUSE PLATE DATA TABLE

POST SHAPE	WEIGHT PER FOOT	BASE CONNECTION DATA										BOLT KEEPER PLATE DATA		PERFORATED FUSE PLATE DATA									V ◪
		BOLT SIZE & TORQUE	A	B	C	D	E	T1	T2	W	R	P	U	F	G	J	K	M	D1	D2	T3	BOLT DIA.	WGT. EA. LBS	BOLT LENGTH	
W6X15	15 LB	⅝" DIA. X 4" 36 TO 38 FT-LB	5"	2"	1¼"	2¾"	1⅛"	1¼"	½"	¼"	11/32"	8½"	10"	5"	2½"	6"	3½"	1½"	11/16"	1¼"	⅜"	⅝"	2.4	2	73.0 LB
W8X18	18 LB											10⅝"	12⅛"	5"	2½"	5¼"	2¾"	1¼"	11/16"	1 1/16"	⅜"	⅝"	2.0	2	83.0 LB
W8X21	21 LB	¾" DIA. X 4¾" 62 TO 63 FT-LB	6"	2¼"	1⅜"	3½"	1¼"	1½"	¾"	5/16"	13/32"	11"	12¾"	5½"	2½"	5¼"	2¾"	1¼"	13/16"	1"	½"	¾"	3.1	2¼"	124.0 LB
W10X22	22 LB											12⅞"	14⅝"	6"	3"	5¾"	2¾"	1⅜"	13/16"	1⅛"	½"	¾"	3.9	2¼"	134.0 LB
W12X26	26 LB											15"	16¾"	6"	3"	6½"	3½"	1⅝"	13/16"	1 5/16"	½"	¾"	4.5	2¼"	152.0 LB

◪ TOTAL STRUCTURAL CARBON STEEL WEIGHT FOR ONE POST = V + (POST LENGTH X POST WEIGHT PER FOOT)

"V" INCLUDES STUB POST, BASE PLATES, STIFFENER PLATES, PERFORATED FUSE PLATES, BOLTS, NUTS, AND WASHERS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED

MATERIALS SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 506, UNLESS NOTED OTHERWISE.

FABRICATION SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 506.

ALL POST, POST STUBS & ATTACHMENTS SHALL BE ASTM A709 GRADE 50, GALVANIZED IN ACCORDANCE WITH ASTM A123.

THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST, FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.

H.S. BOLTS, WASHERS, & NUTS SHALL BE A325 GALVANIZED.

FOUNDATION MATERIAL PROPERTIES

CONCRETE MASONRY	F'C = 3,500 P.S.I.
BAR STEEL REINFORCEMENT (UNCOATED), GRADE 60	FY = 60,000 P.S.I.

DESIGN DATA

DESIGN CONFORMS TO AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS 1ST EDITION 2015 (WITH 2017 & 2018 INTERIM REVISIONS).

DEAD LOADS (DL):

- STEEL POST SELF WEIGHT
- SIGN PANEL WEIGHT = 3 PSF

WIND LOADS (WL):

WIND LOADS WERE APPLIED TO THE PROJECTED AREAS OF THE SIGN PANELS AND THE STEEL SIGN POSTS.

- BASIC WIND SPEED = 76 MPH
- MEAN RECURRANCE INTERVAL (MRI) = 10 YEARS
- HEIGHT & EXPOSURE FACTOR = 1.00
- DIRECTIONALITY FACTOR = 0.85
- GUST EFFECT FACTOR = 1.14

WIND LOAD CASES:

- WL CASE 1: 1.0 X NORMAL WIND
- WL CASE 2: 1.0 X TRANSVERSE WIND
- WL CASE 3: 0.75 X NORMAL WIND + 0.75 X TRANSVERSE WIND

LOAD COMBINATIONS:

LOAD COMBINATION	TYPE	DL FACTOR	WL FACTOR
STRENGTH I	GRAVITY	1.25	-
EXTREME I	WIND	1.10	1.0
		0.9	1.0
SERVICE I	DEFLECTION	1.0	1.0

FOUNDATION DESIGN DATA

THE FOUNDATION DESIGN ASSUMED COHESIONLESS SOILS (LOOSE SAND) ABOVE THE WATER TABLE WITH THE FOLLOWING PROPERTIES:

- SOIL UNIT WEIGHT = 115 PCF
- ANGLE OF INTERNAL FRICTION = 24 DEGREES
- SOIL MODULUS PARAMETER = 25 LB/IN3

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

DRAWN BY | PLANS CK'D.

CONNECTION & FOUNDATION DETAILS 2 OF 2

SHEET A3-1.20

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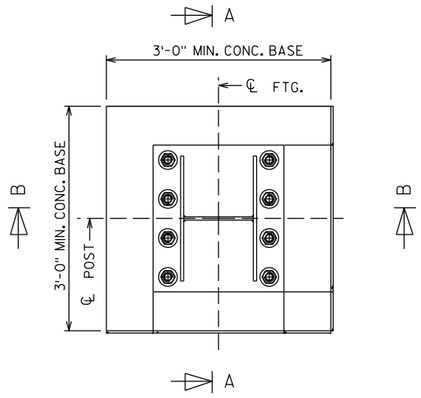
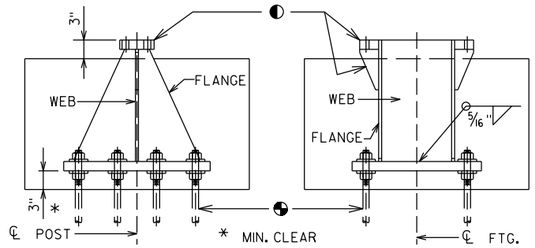
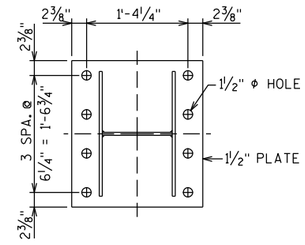
STUB AND ADHESIVE ANCHOR DETAILS



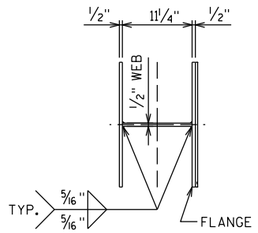
STUB SECTION



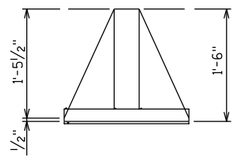
SECTION A-A SECTION B-B



BASE PLATE



STUB



FLANGE

◐ SEE BASE CONNECTION DETAILS ON "CONNECTIONS & FOUNDATION DETAILS" SHEETS.

◔ ADHESIVE ANCHORS 1¼-INCHES. ALLOWABLE PULL OUT CAPACITY = 15 KIPS. EMBED 1'-3" INTO ROCK.

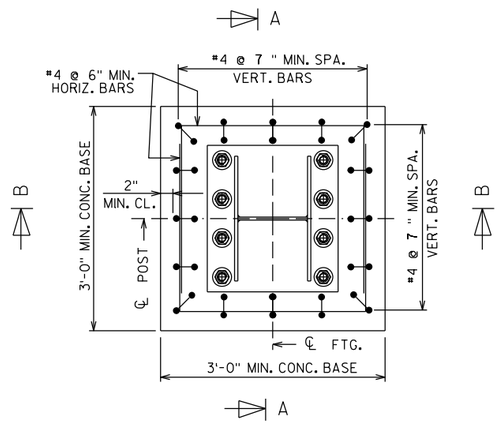
GENERAL NOTES:

QUANTITIES PER BASE:
REINFORCING STEEL = 62 LB
CONCRETE = 0.6 CY
STRUCTURAL STEEL = 335 LB

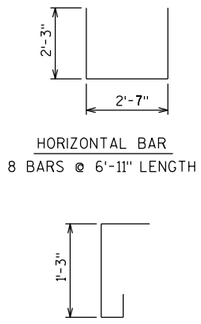
ALL MATERIALS, EXCEPT FOR ANCHOR ROD, NUTS, AND WASHERS, SHALL BE ASTM A709 GRADE 50. ALL MATERIALS TO BE GALVANIZED AFTER FABRICATION.

IF ROCK IS ENCOUNTERED PRIOR TO REACHING THE MINIMUM DRILLED SHAFT EMBEDMENT DEPTH DEFINED ON THE FOUNDATION DATA TABLE OF THE "CONNECTIONS & FOUNDATION DETAILS 2 OF 2" SHEET, THE CONTRACTOR SHALL INSTALL A TEST ADHESIVE ANCHOR AND DETERMINE THE PULL-OUT CAPACITY. IF THE FIELD TEST RESULTS IN A PULL-OUT CAPACITY GREATER THAN OR EQUAL TO 15 KIPS, THE CONTRACTOR MAY INSTALL THE ALTERNATE CONCRETE BASE AND BREAK-WAY STUB PER THE DETAILS ON THIS SHEET.

CONCRETE BASE DETAILS

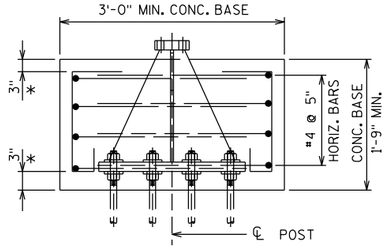


CONCRETE BASE PLAN

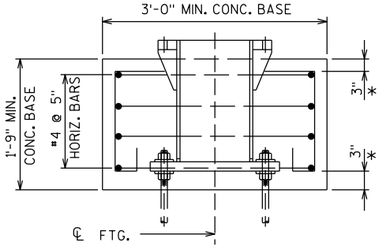


HORIZONTAL BAR
8 BARS @ 6'-11" LENGTH

VERTICAL BARS
16 BARS @ 2'-4" LENGTH
MAY BE PLACED IN SKEW
FOR CLEARANCE NEED



SECTION A-A



SECTION B-B

* MIN. CLEAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

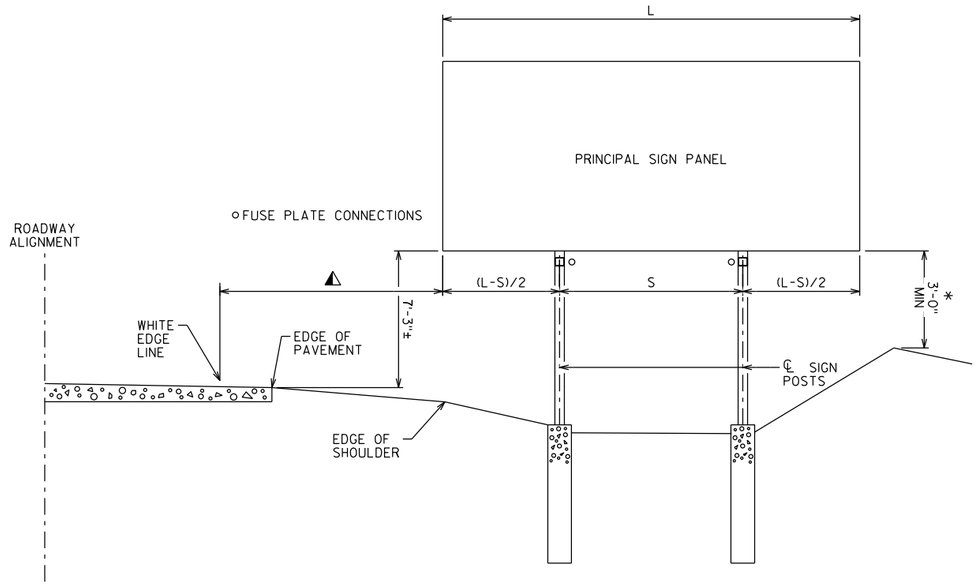
STRUCTURE BTO TYPE I SIGNS

DRAWN BY	PLANS CK'D.

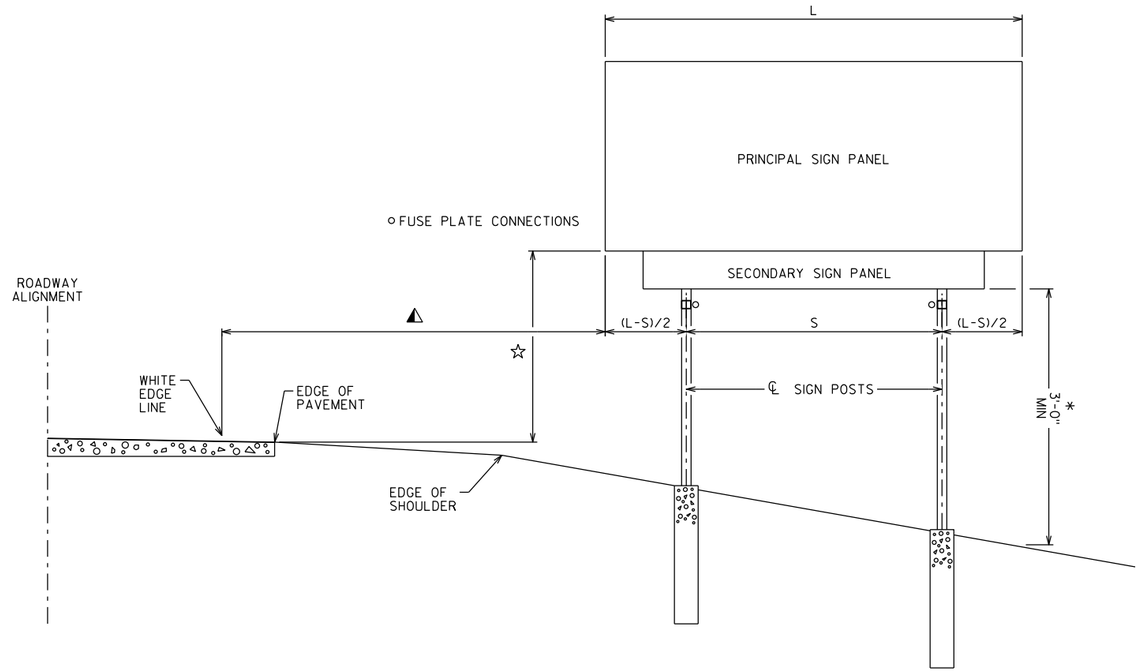
ALTERNATE BREAK-AWAY BASE ON ROCK

SHEET A3-1M.2

642



INSTALLATION WITHOUT SECONDARY SIGN



INSTALLATION WITH SECONDARY SIGN

TYPE 1 SIGN INSTALLATION NOTES:

FOR A 2-POST INSTALLATION, "S" EQUALS 3L/5, BUT SHALL NOT BE LESS THAN 6'-0".

FOR A 3-POST INSTALLATION, "S" EQUALS 5L/7, BUT SHALL NOT BE LESS THAN 12'-0". THE SPACING BETWEEN ANY TWO POSTS SHALL NOT BE LESS THAN 6'-0".

◭ UNLESS NOTED IN THE PLANS, THE SIGN OFFSET DISTANCE SHALL BE A MINIMUM OF 17'-6" FROM THE WHITE EDGE LINE, DESIRABLE 30'-0".

WHERE SIGNS ARE MOUNTED BEHIND CRASH WORTHY PROTECTION SUCH AS GUARDRAIL OR BARRIER WALL, THE LATERAL OFFSET MAY BE 4'-6" BEHIND THE GUARDRAIL OR BARRIER WALL.

THE ± TOLERANCE SHOWN ON THIS SHEETS IS 3".

THE VERTICAL SIGN HEIGHT CLEARANCES SHOWN ON THIS SHEET ARE MEASURED FROM THE BOTTOM OF THE SIGN PANEL TO THE NEAR EDGE OF PAVEMENT.

☆ THE VERTICAL CLEARANCE SHALL BE 8'-3"± WHEN THE SECONDARY SIGN HEIGHT IS 3'-0" OR LESS. FOR SECONDARY SIGN HEIGHTS LARGER THAN 3'-0", THE VERTICAL CLEARANCE TO THE BOTTOM OF THE SECONDARY SIGN PANEL SHALL BE 5'-3"±.

* THE VERTICAL SIGN GROUND CLEARANCE ON RIGHT END OF SIGN SHALL BE A MINIMUM OF 3'-0"±.

○ FOR 2-POST SIGNS, IF THERE IS A SECONDARY SIGN THAT IS NOT AS WIDE AS THE POSTS, INSTALL FUSE PLATES BENEATH PRINCIPAL SIGN.

FOR SECONDARY SIGNS THAT ARE NOT AS WIDE AS THE EXTERIOR POSTS, SECURE SIGN WITH CHANNEL STEEL AS DESCRIBED IN A4-6.

POST LENGTHS SHOWN IN THE MISCELLANEOUS QUANTITIES ARE ESTIMATED LENGTHS. THE CONTRACTOR SHALL VERIFY POST LENGTHS AT THE TIME OF FINAL GRADING.

REFER TO THE TRAFFIC ENGINEERING OPERATIONS AND SAFETY MANUAL FOR FURTHER GUIDANCE ON MINIMUM VERTICAL CLEARANCE REQUIREMENTS.

NO.	DATE	REVISION	BY
	2/29/24		

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

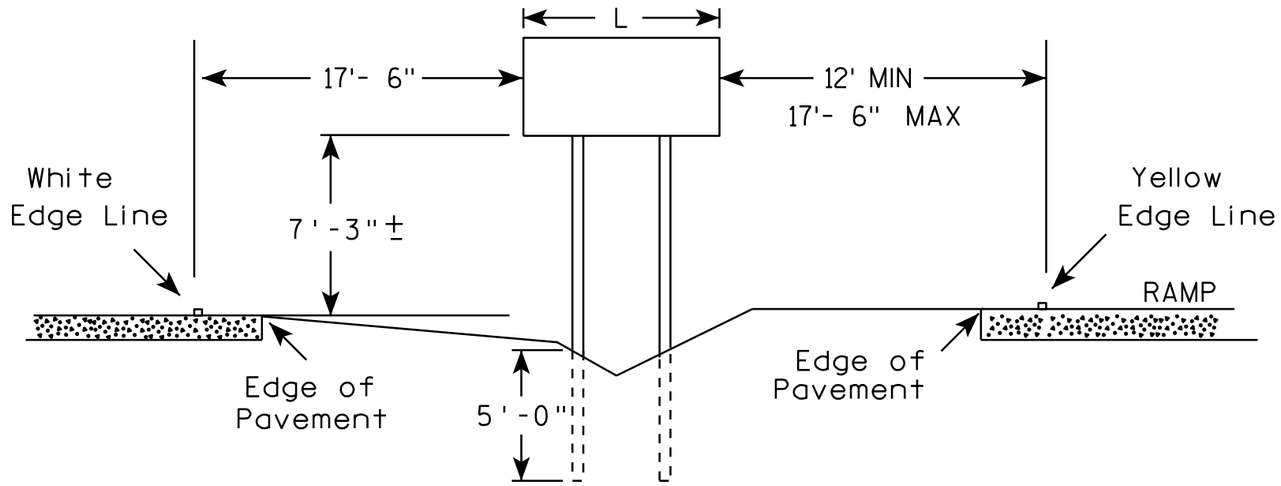
STRUCTURE BTO TYPE I SIGNS

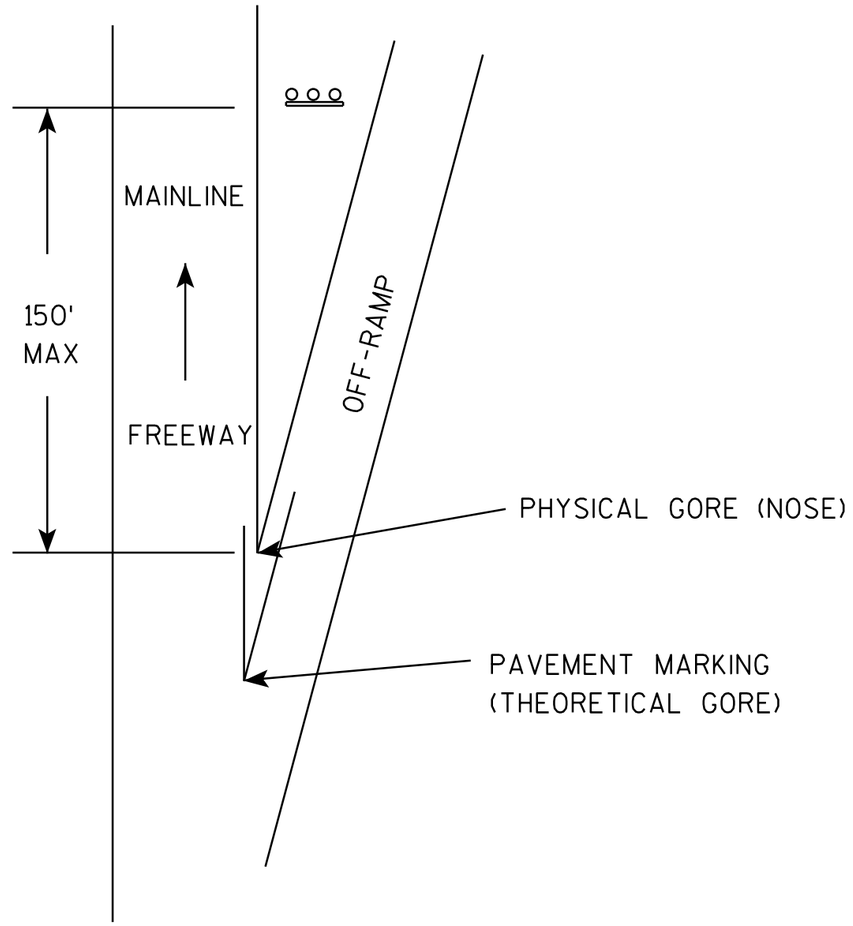
DRAWN BY	PLANS CK'D.

TYPICAL TYPE I SIGN INSTALLATION

SHEET A4-1.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 643	E





GENERAL NOTES

1. The 150 foot distance from the physical gore (where pavement ends) will normally provide the offsets as shown.
2. If roadway geometrics permit, the sign may be closer than the 150 foot distance as long as the offsets are maintained.
3. At no time shall the location be greater than 150 feet. If the normal offsets cannot be maintained, they can be reduced to 6 feet from the edge of the paved shoulder (both freeway and ramp).
4. The offset from edge of sign to the yellow edge line on the ramp is shown as a minimum of 12 feet and a maximum of 17 feet, 6 inches. Preference is adhering to the maximum rather than the minimum dimension.
5. When L is equal to or exceeds 10 feet, use 3 posts as per A4-4.
6. The (∓) tolerance for the mounting height is 3 inches.

7

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TYPICAL INSTALLATION
OF TYPE II SIGNS ON
WOOD POSTS IN GORE

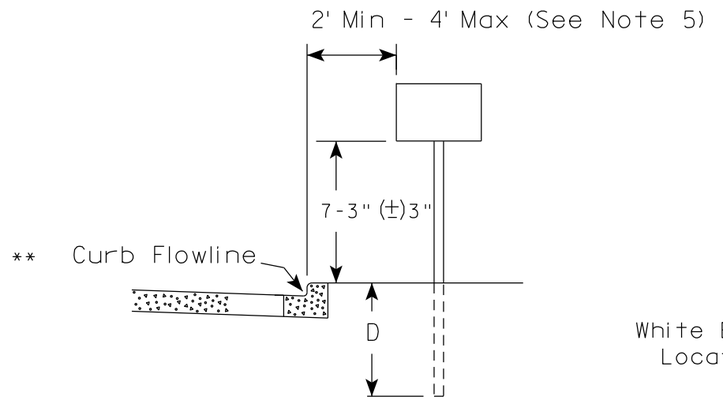
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

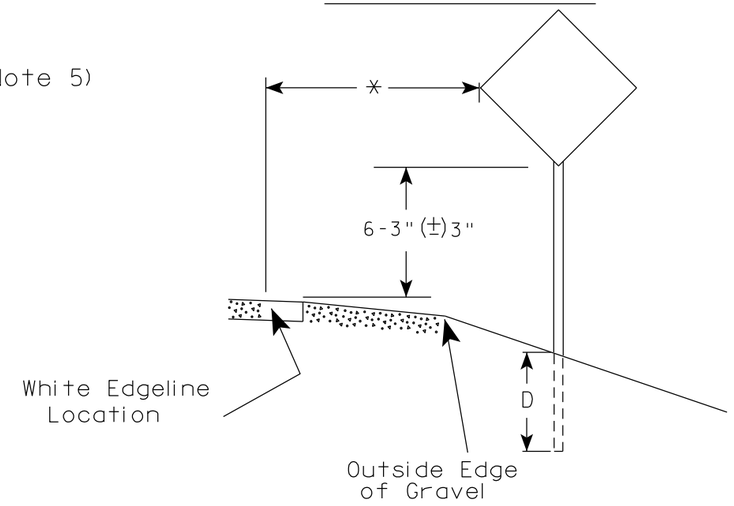
DATE 2/06/14 PLA 644 A4-2.3

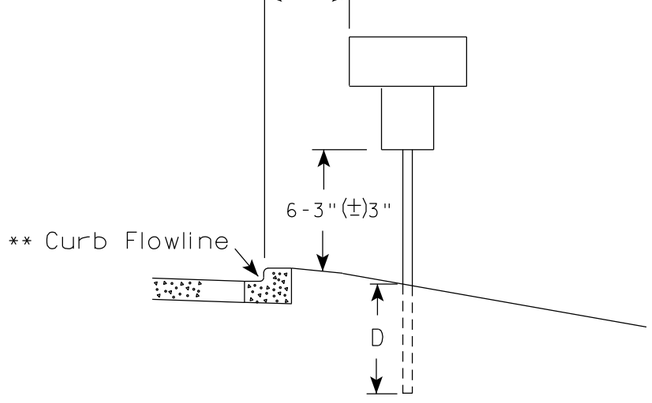
PROJECT NO: | SHEET NO: E

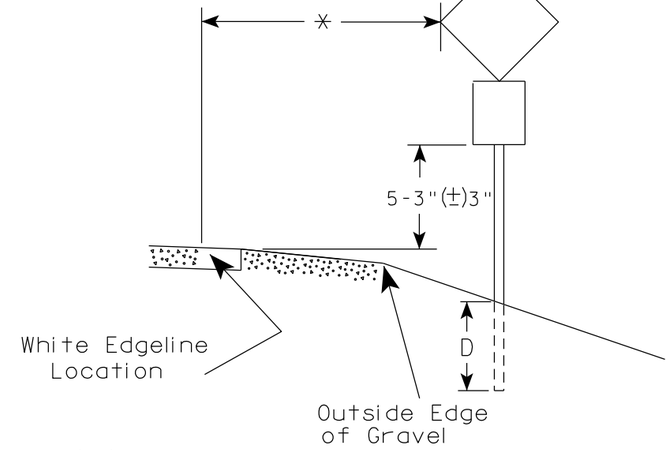
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

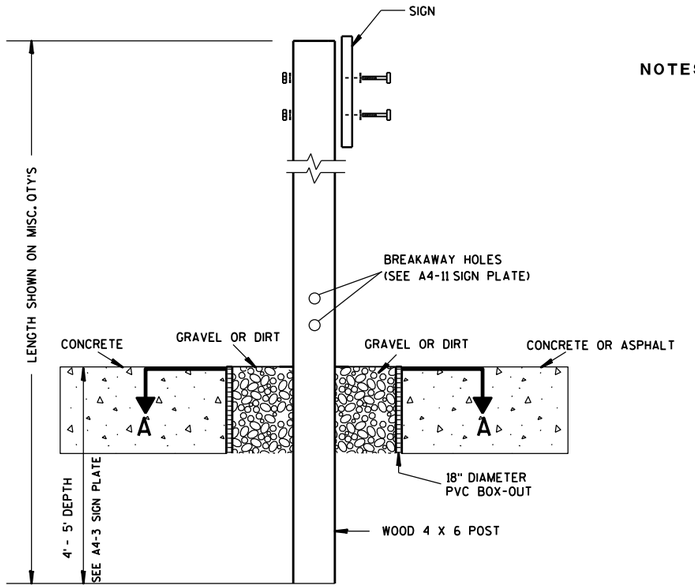
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

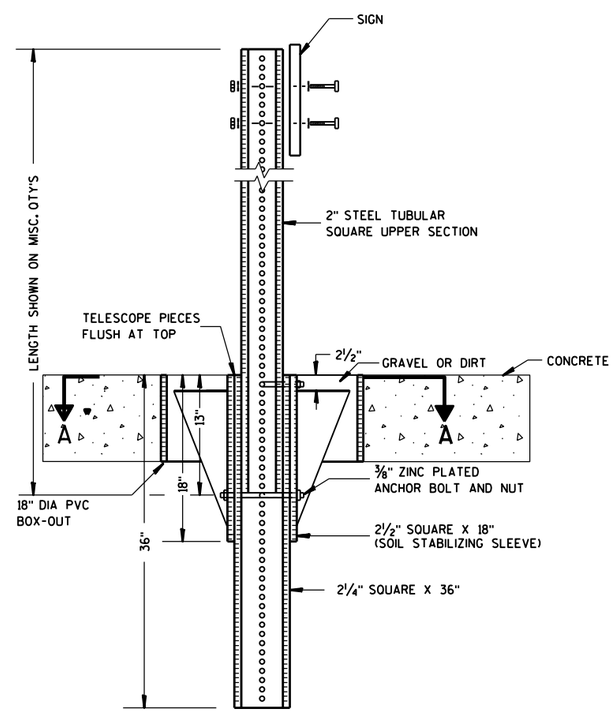
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 645	E



ELEVATION VIEW

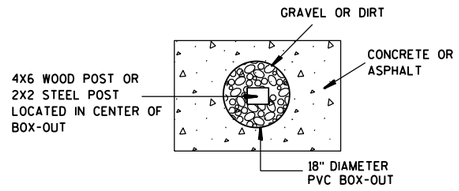
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

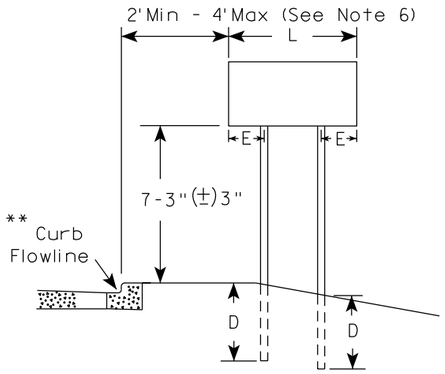
APPROVED Matthew R Rauch
for State Traffic Engineer

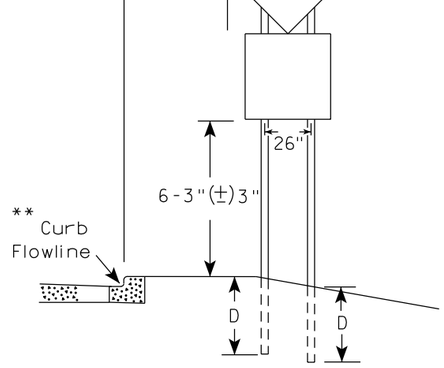
DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

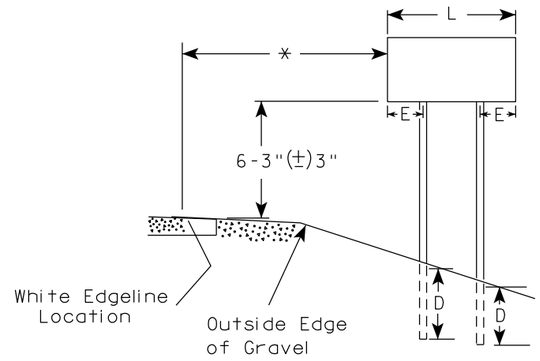
URBAN AREA

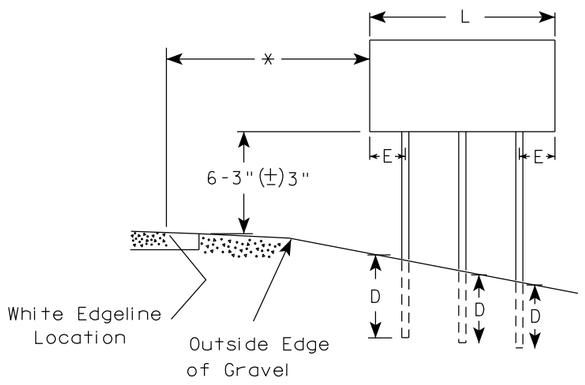


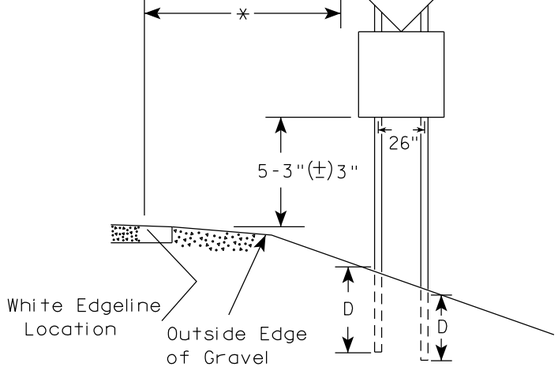


48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±) 3".

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

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"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

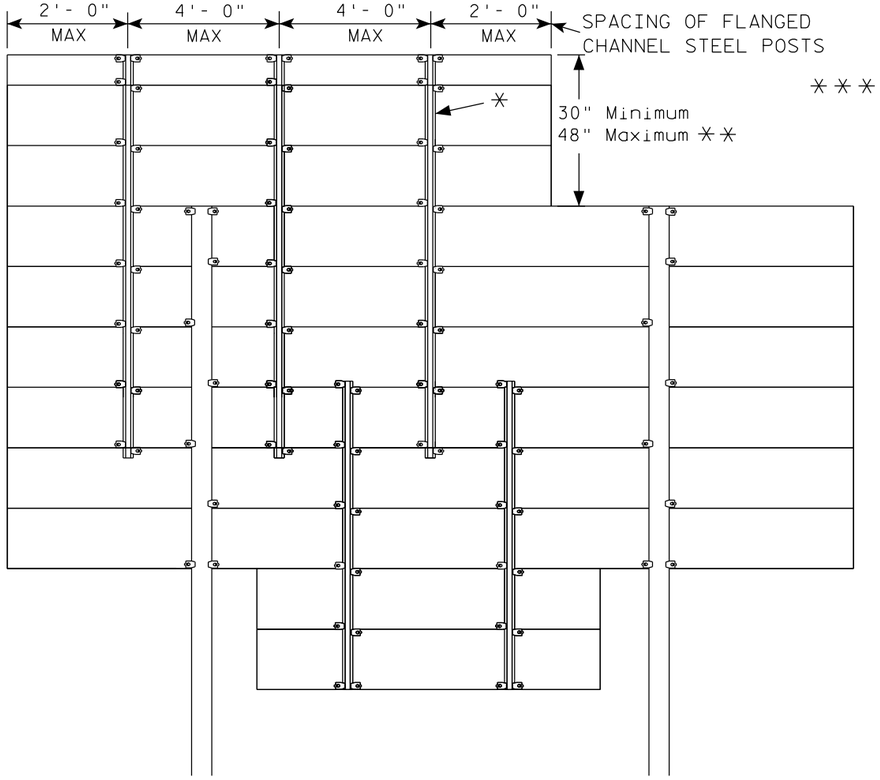
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 647	E

GROUND MOUNTED SIGN



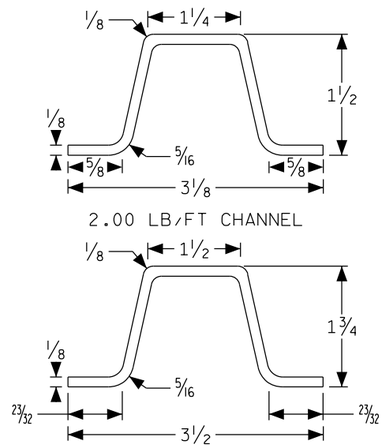
✳=2.00 lb/ft AND 4.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

✳✳=FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

✳✳✳ THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 15 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 15 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAILS

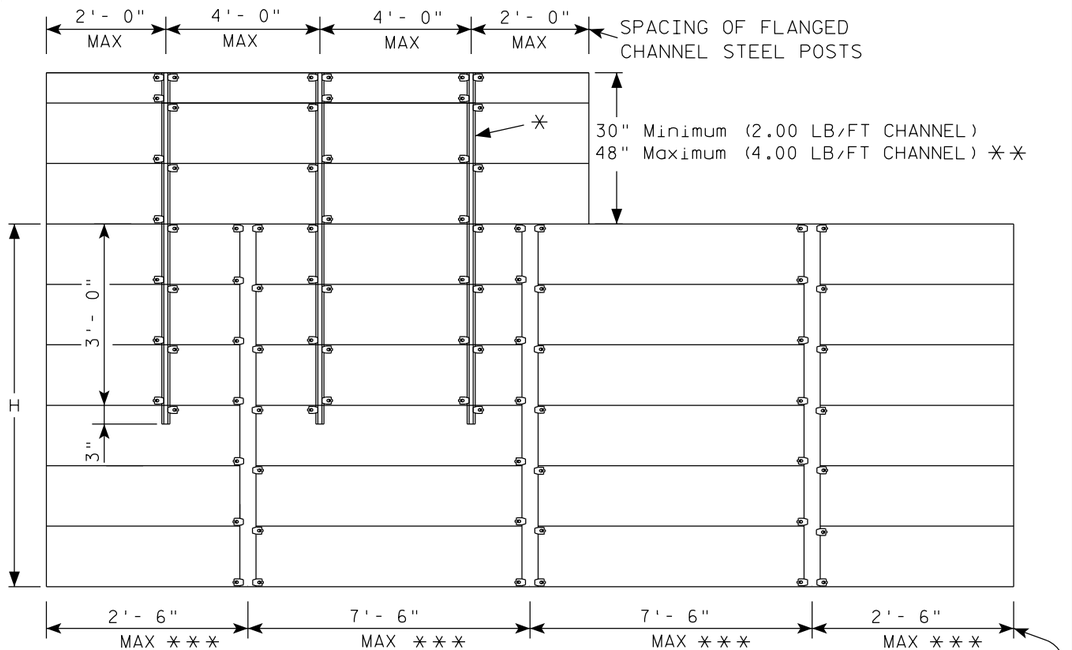
NOT TO SCALE



2.00 LB/FT CHANNEL

4.00 LB/FT CHANNEL

SIGN BRIDGE MOUNTED SIGN



SPACING OF ALUMINUM SIGN SUPPORTS 5" X 3.5" X 3.7 LBS./ft.

GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

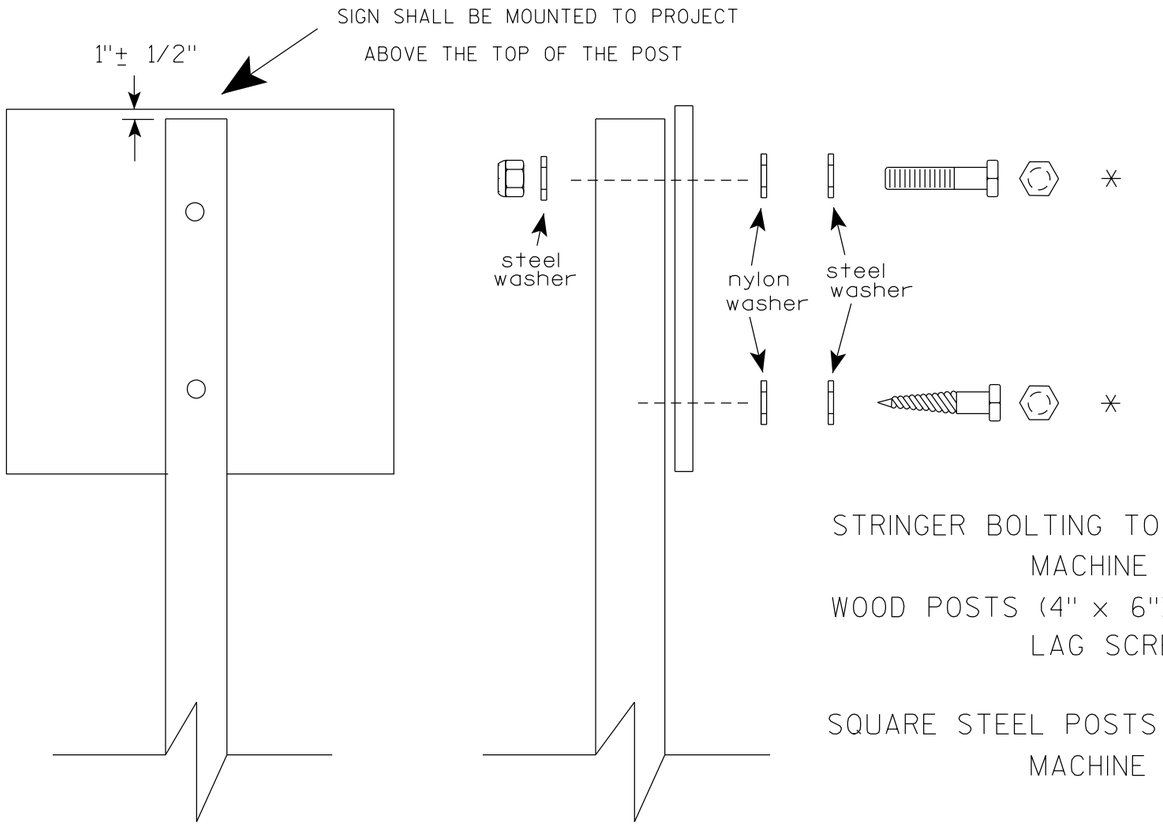
   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/07/20 PLATE NO. A4-6.12



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: 649 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 01-APRIL-2020 PLOT BY : dotc4c

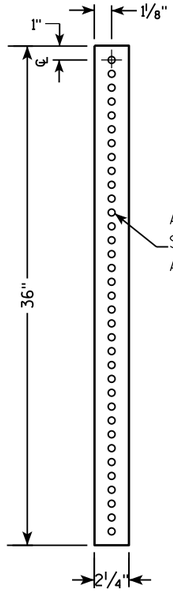
WISDOT/CADDS SHEET 42

7

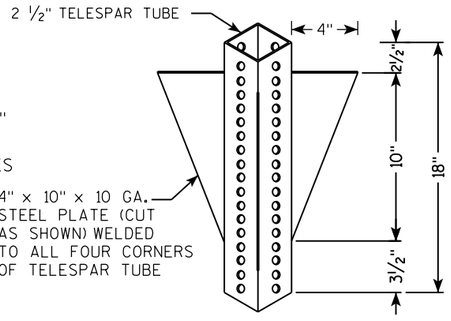
7

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

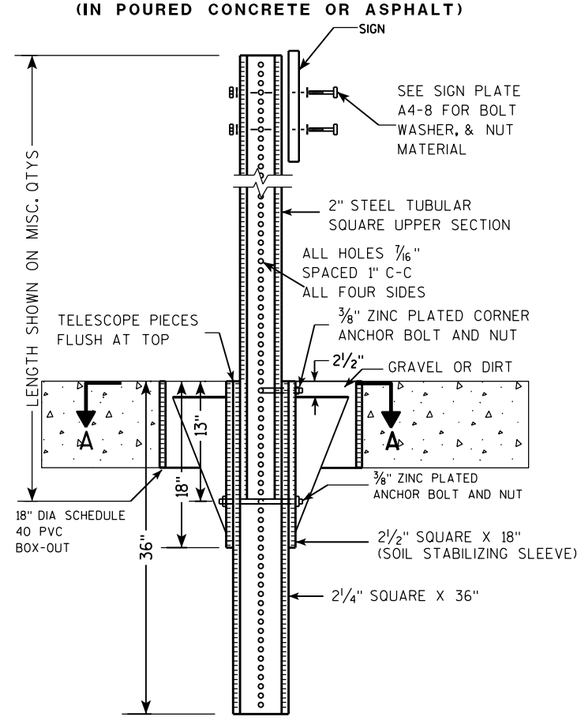
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



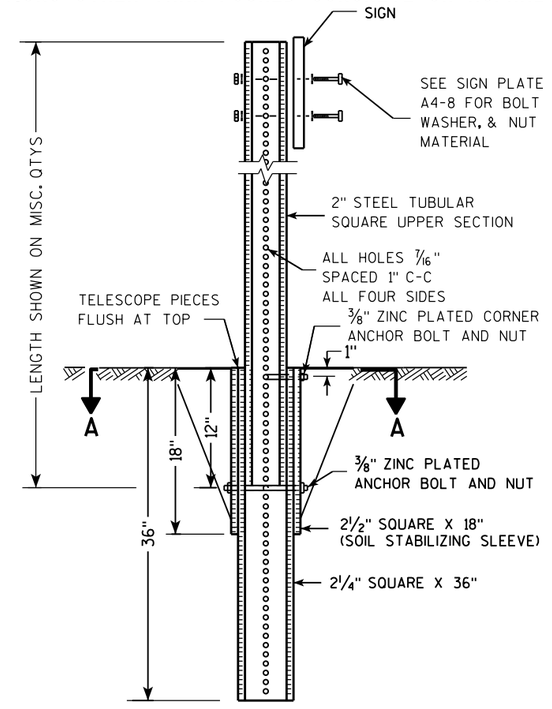
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

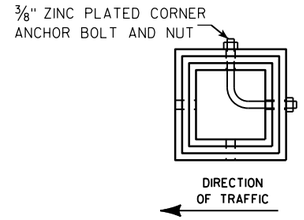


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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 650 A4-9.9

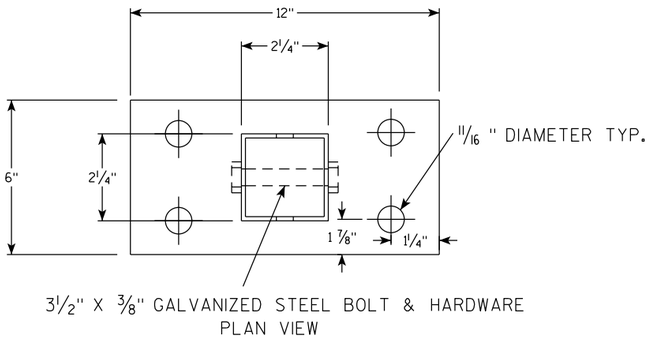
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

TYPICAL BARRIER WALL SIGN PLACEMENT DETAILS

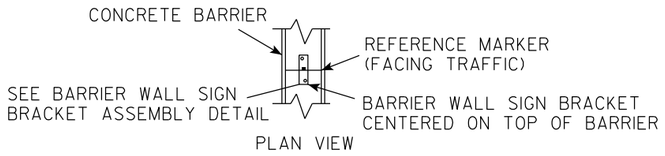
NOTES
1) ALL MATERIAL TO BE APPROVED BY ENGINEER BEFORE INSTALLATION
2) SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS.

TYPICAL REFERENCE MARKER MOUNTING DETAILS

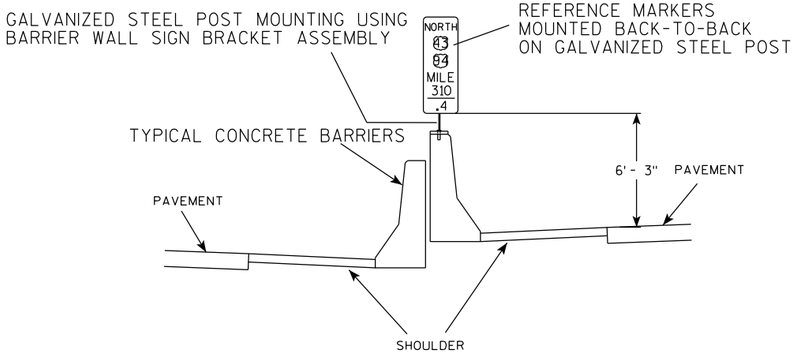
BARRIER WALL SIGN BRACKET ASSEMBLY
NOT TO SCALE



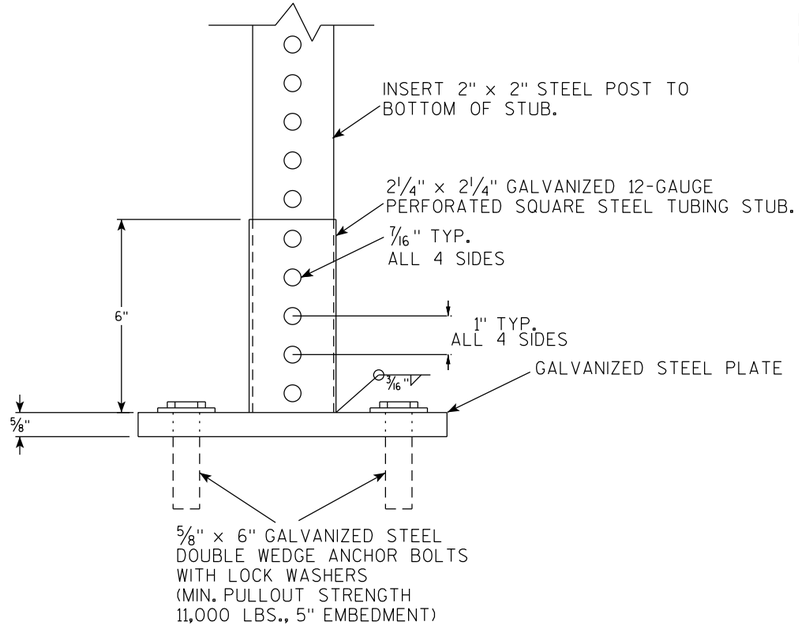
PLAN VIEW



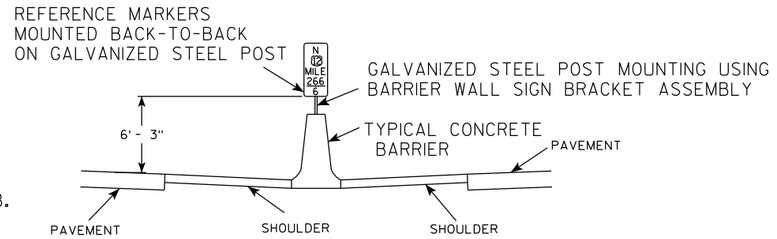
MEDIAN BARRIER MOUNTING DETAIL



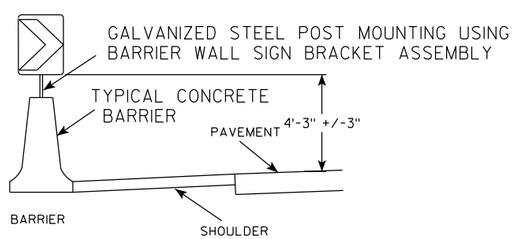
TYPICAL ENHANCED REFERENCE MARKER PLACEMENT ON DOUBLE MEDIAN BARRIER



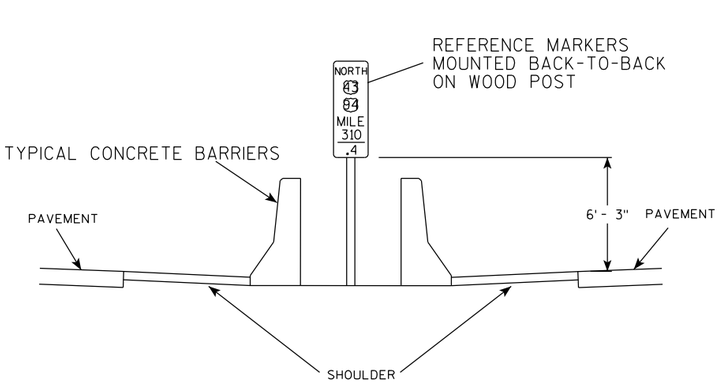
SIDE VIEW



TYPICAL ENHANCED REFERENCE MARKER PLACEMENT ON SINGLE MEDIAN BARRIER



TYPICAL CHEVRON MARKER PLACEMENT



TYPICAL ENHANCED REFERENCE MARKER PLACEMENT BETWEEN MEDIAN BARRIERS

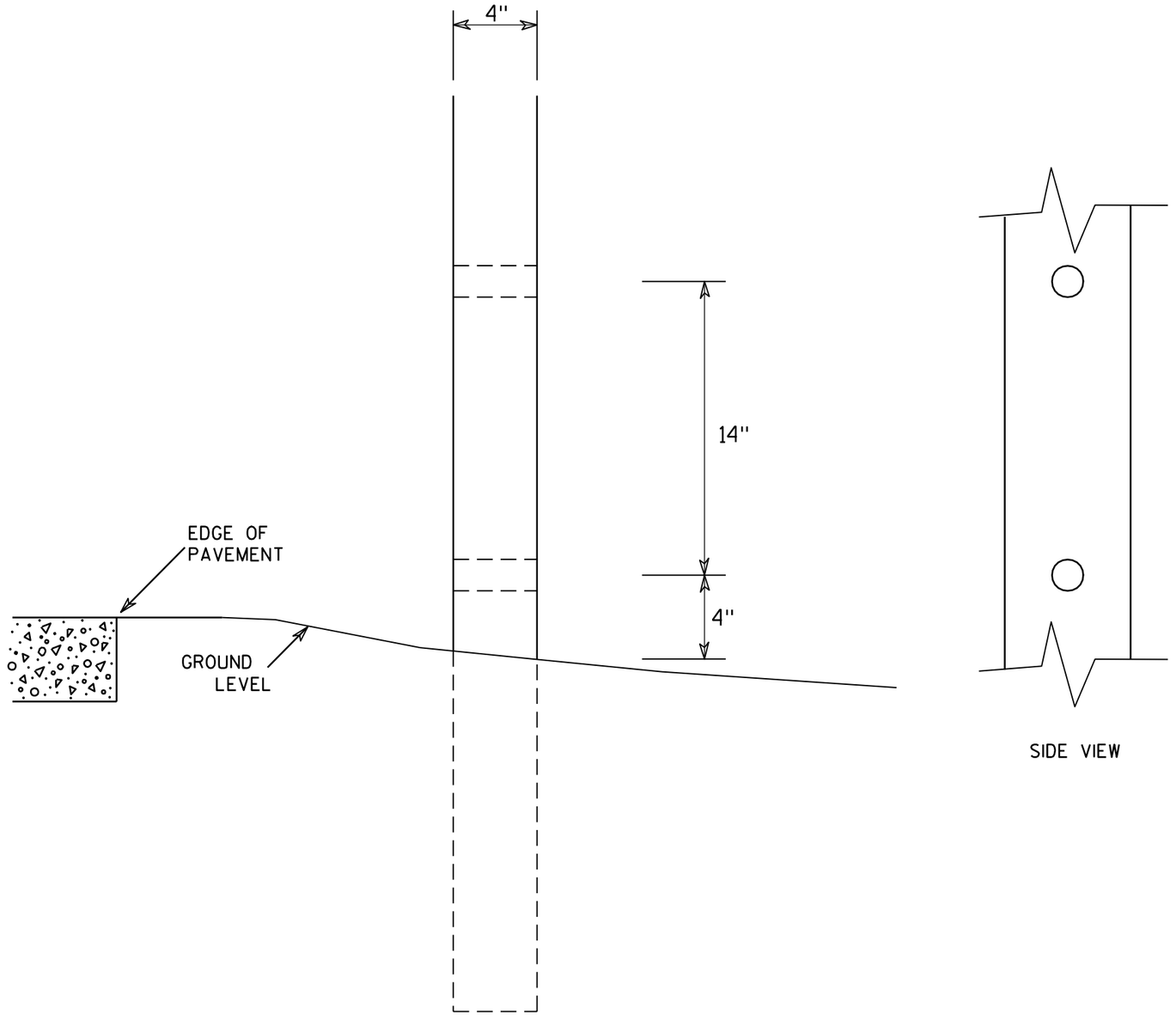
SIGN MOUNTING ON BARRIER WALL

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-10.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 651	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

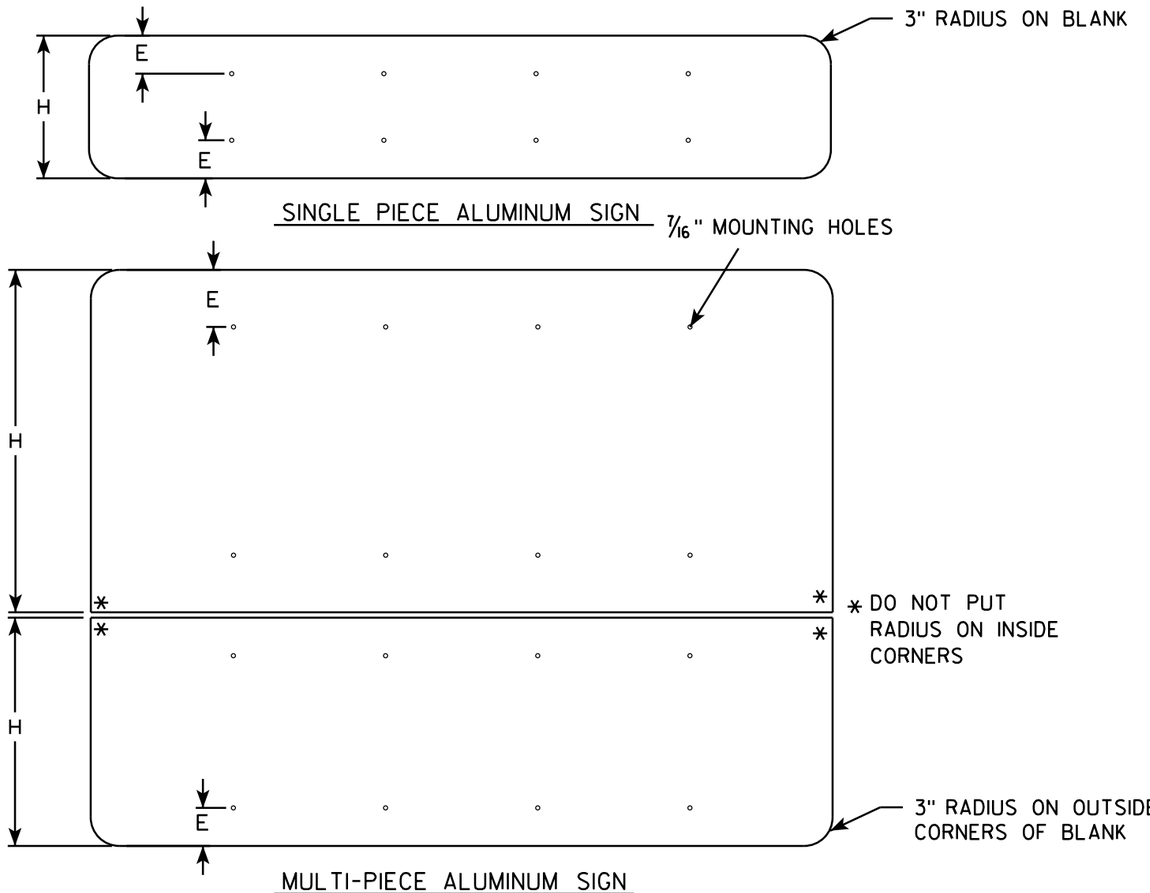
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

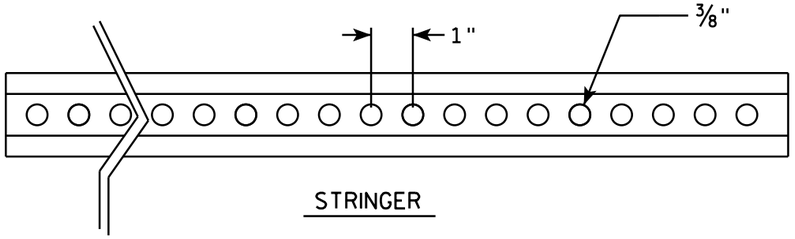
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 652	E



GENERAL NOTES

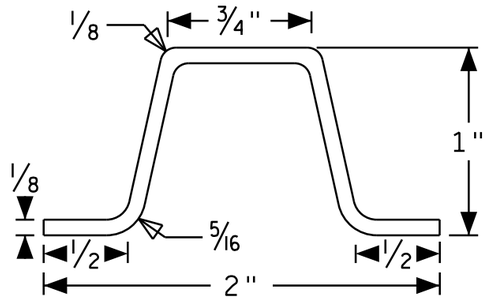
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 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"

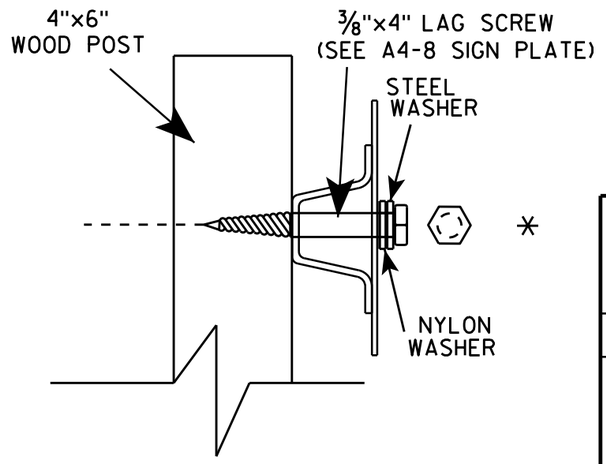


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

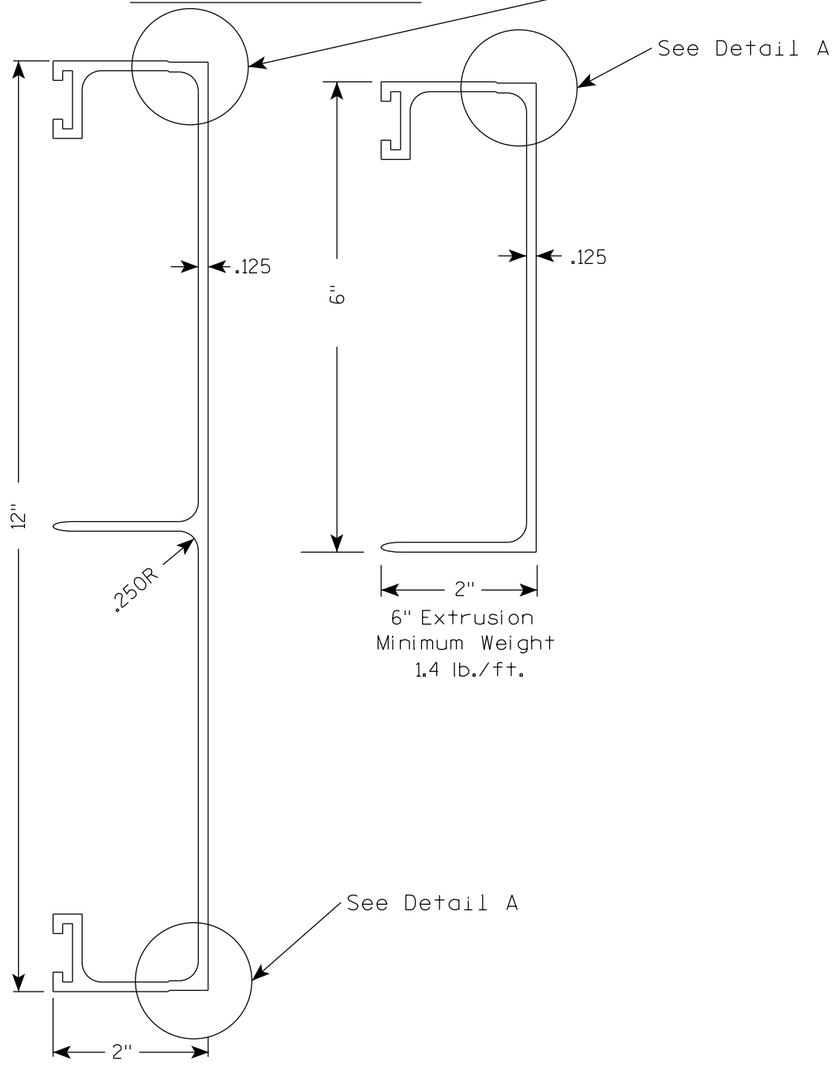
for State Traffic Engineer

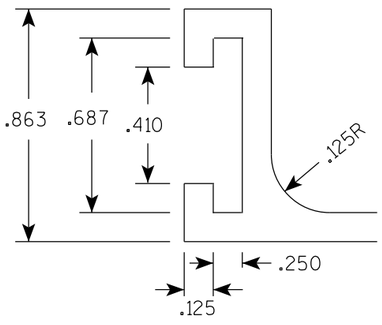
DATE 4/26/16 PLATE NO A4-18.1

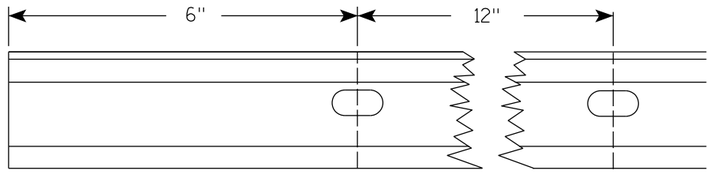
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

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

Extruded Shape







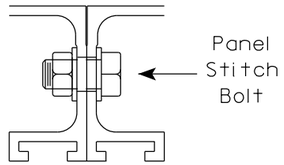
Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

Hardware

STITCH BOLT, WASHER & NUT

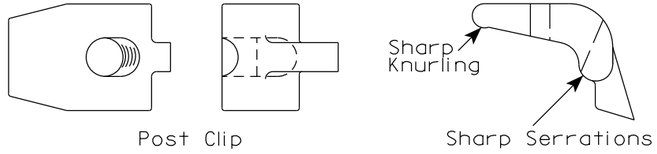
The hardware includes:

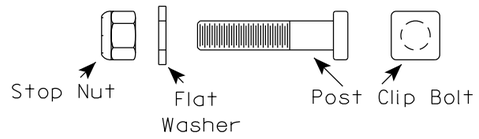
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



POST CLIP, POST CLIP BOLT, WASHER & NUT

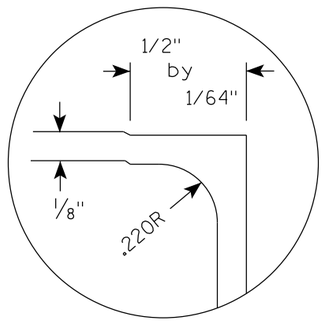
Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.
4. Edge wrapping of sign sheeting required on all extrusions joints shown in Detail A.



DETAIL A (EDGE WRAP JOINT)

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/07/20 PLATE NO. A5-2.10

PROJECT NO:

SHEET NO: 654 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A52.DGN PLOT DATE : 7-Jan-2020 PLOT BY : dotc4c

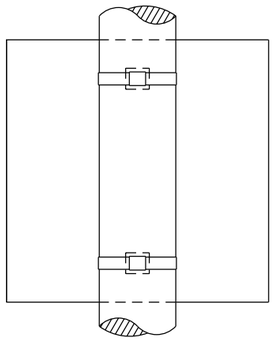
WISDOT/CADDS SHEET 42

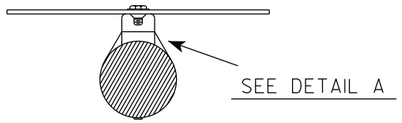
7

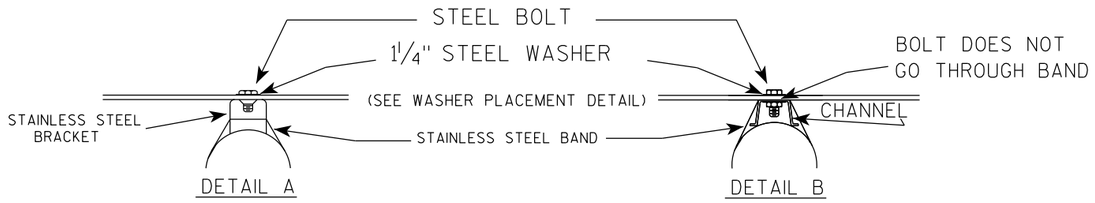
7

BANDING

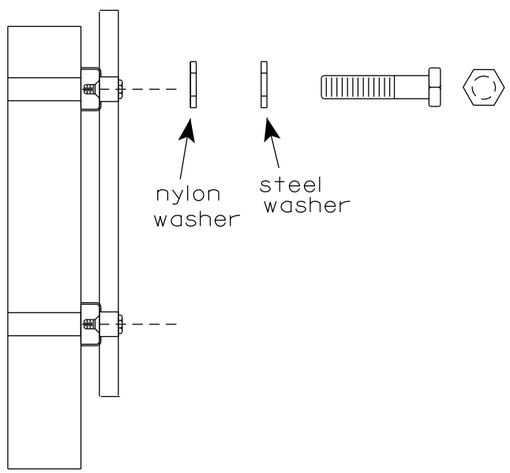
SINGLE SIGN







WASHER PLACEMENT

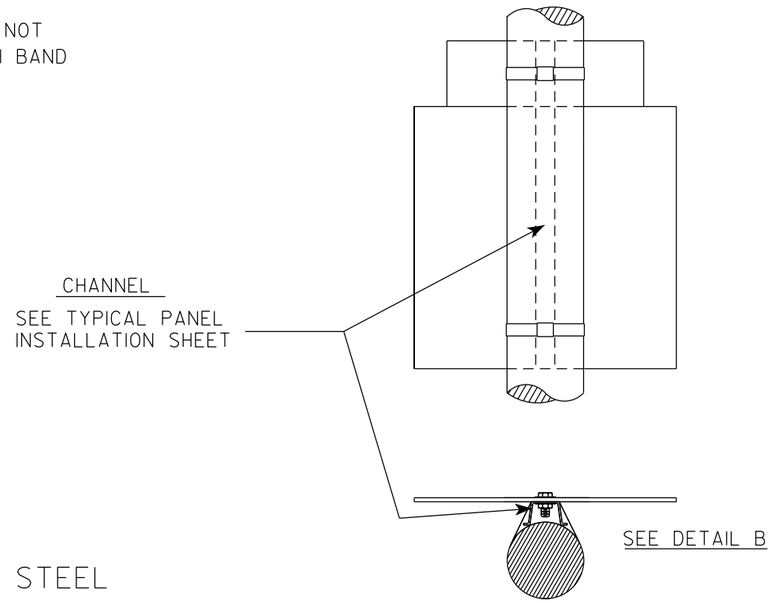


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 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



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

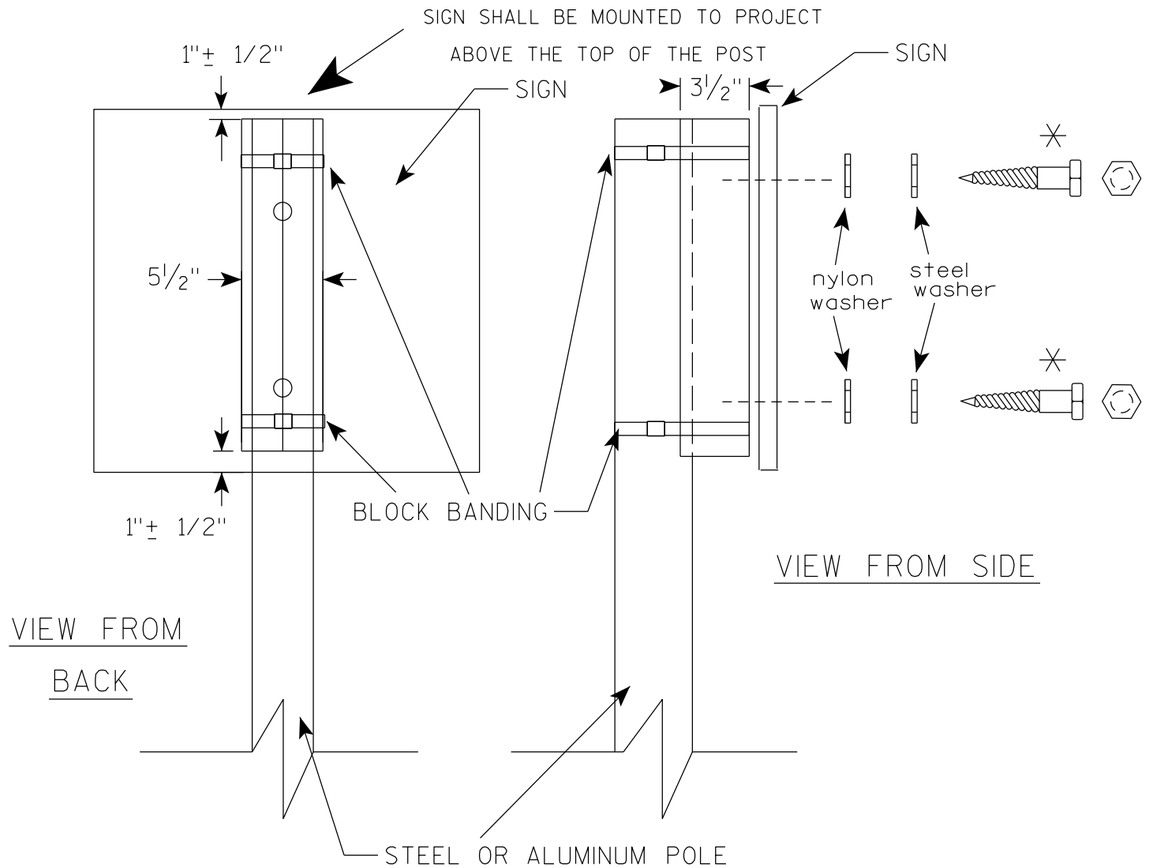
DATE 6/10/19 PLATE NO. A5-9.4

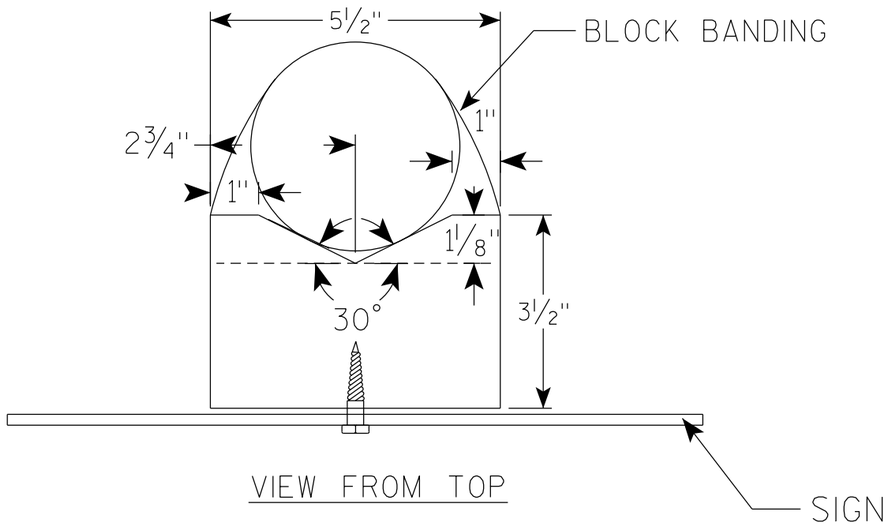
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 655	E

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

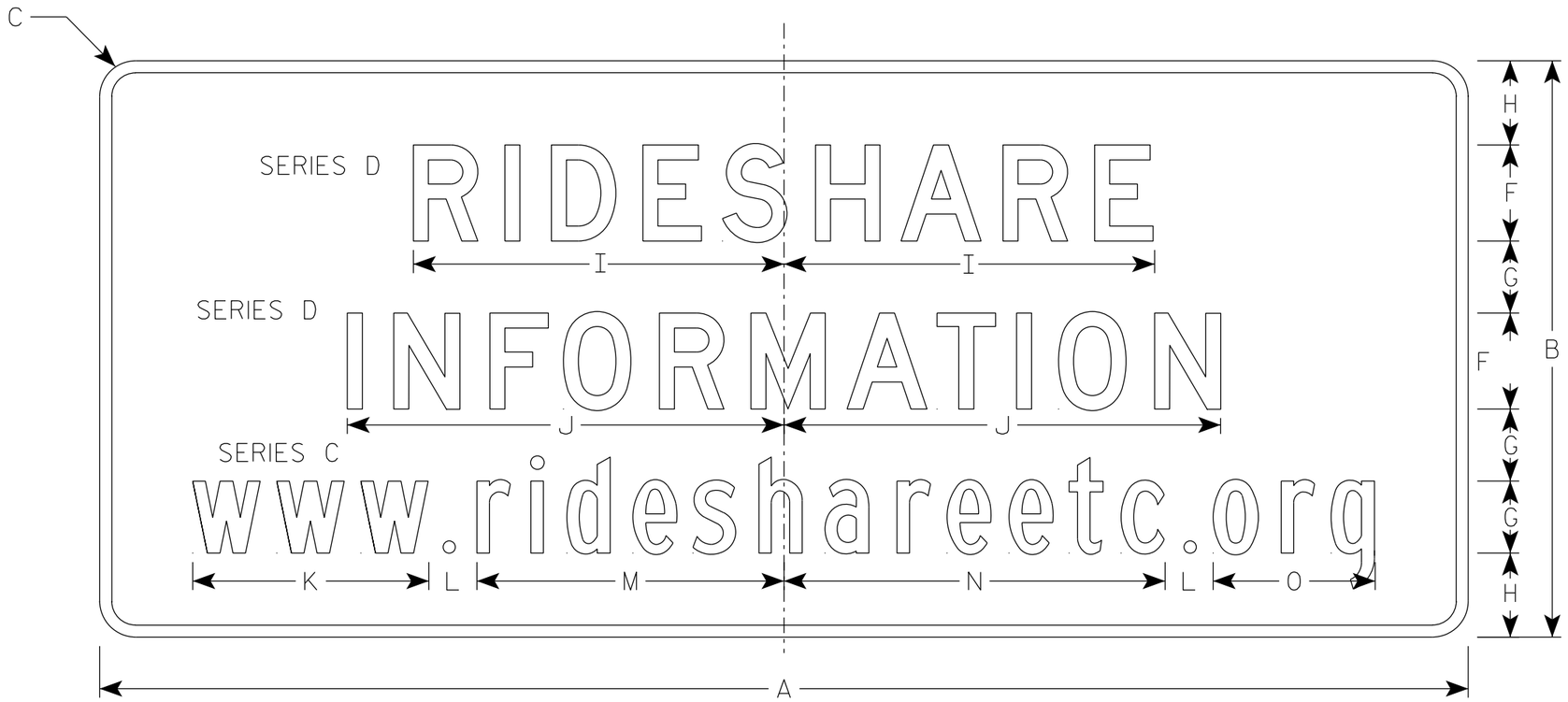
DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 656 E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Blue
   Message - White
3. Message Series - Lines 1 & 2 are Series D and Line 3 is Series C



D12-2B

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	84	36	2 1/4		3/4	6	4 1/2	5 1/4	24 1/4	28 5/8	14 3/4	3	19 1/4	23 7/8	10 1/8												21.0
2M	84	36	2 1/4		3/4	6	4 1/2	5 1/4	24 1/4	28 5/8	14 3/4	3	19 1/4	23 7/8	10 1/8												21.0
3	84	36	2 1/4		3/4	6	4 1/2	5 1/4	24 1/4	28 5/8	14 3/4	3	19 1/4	23 7/8	10 1/8												21.0
4	114	48	3		1	8	6	7	30 7/8	36 3/8	19 3/4	4 1/4	25 5/8	31 3/4	13 1/2												38.0
5	114	48	3		1	8	6	7	30 7/8	36 3/8	19 3/4	4 1/4	25 5/8	31 3/4	13 1/2												38.0

STANDARD SIGN
D12-2B

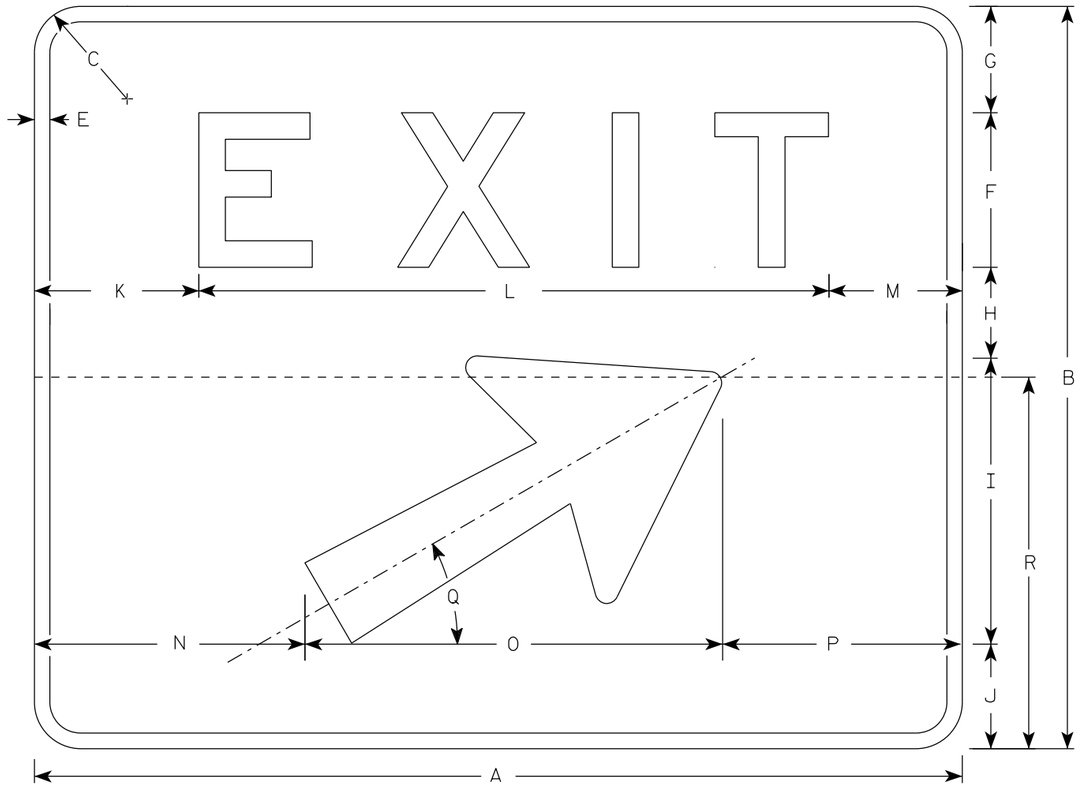
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/6/24 PLATE NO. D12-2B.4

PROJECT NO:

SHEET NO: 657 E



E5-1

NOTES

1. Sign is Type II - Type H reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E
4. Sign shall be split into two seperate pieces as shown on the detail by the dashed line (----------) for sizes 4 & 5.
5. Arrow is Type "A" from sign plate A1-1.
6. As per the Standard Spec's, this sign shall not have a vertical joint.
7. Size 3 E5-1 shall only be used in a Work Zone application with a Temporary Sign Support

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																											
2M																											
3	48	48	3		1	10	6 7/8	5 7/8	18 1/2	6 3/4	8 1/2	31 1/8	8 3/8	11 1/2	27	9 1/2	30°	30									16.0
4	60	48	3		1	10	6 7/8	5 7/8	18 1/2	6 3/4	10 5/8	40 3/4	8 5/8	17 1/2	27	15 1/2	30°	30									20.0
5	72	60	3		1	12	9 3/4	10	18 1/2	9 3/4	13 1/4	48 1/2	10 1/4	23 1/2	27	21 1/2	30°	30									30.0

STANDARD SIGN

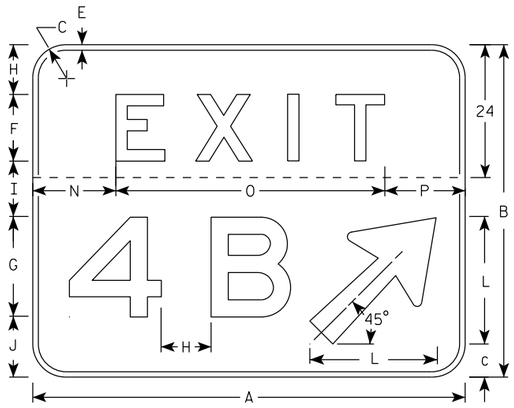
E5-1

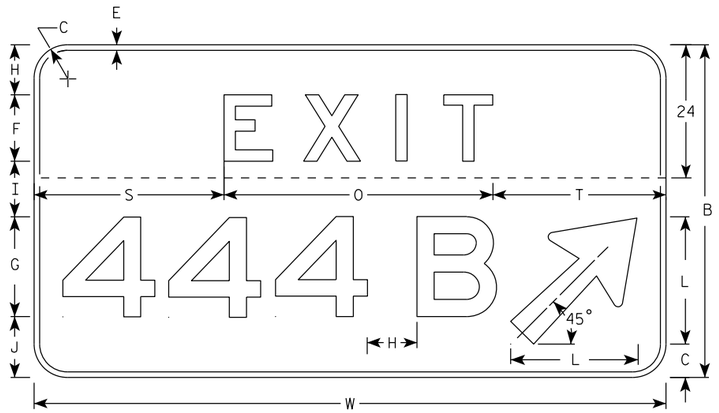
WISCONSIN DEPT OF TRANSPORTATION

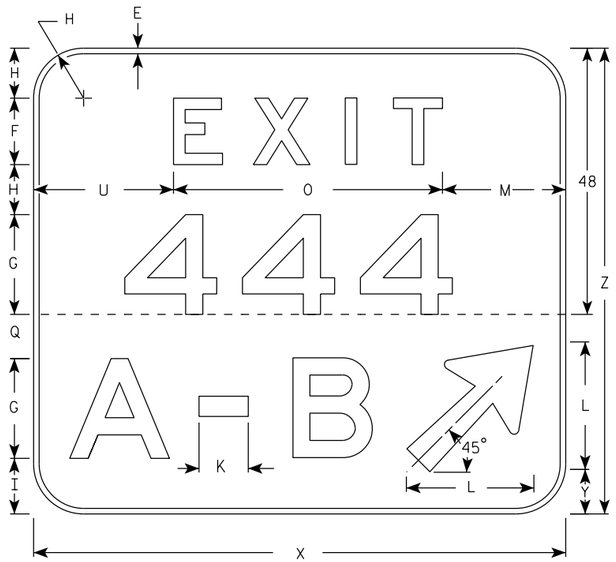
APPROVED Matthew R Rauch
for State Traffic Engineer

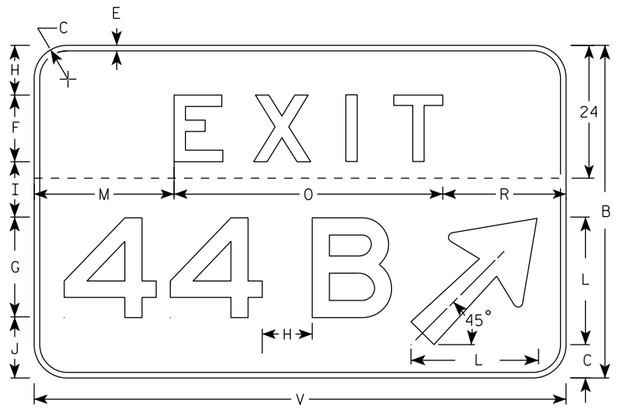
DATE 1/26/2023 PLATE NO. E5-1.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 658 | E

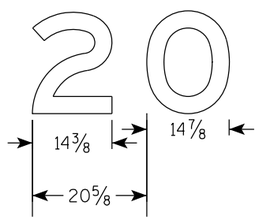








EXAMPLE FOR USING SPACING CHART



NOTES

1. Signs are Type II - Type H reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E
4. Sign shall be split into two seperate pieces as shown on each detail by the dashed line (- - - - - - - - - -).
5. Arrow is Type "A" from sign plate A1-1.
6. Substitute appropriate message, space per the table and adjust placement on sign to achieve proper balance.
7. When two letters are hyphenated, the distance between them should be equal to two letter heights and the hyphen is spaced optically between them.
8. As per the Standard Spec's, these signs shall not have a vertical joint.

SPACING CHART FOR 18" NUMERALS

NUMBERS	WIDTH	0	1	2	3	4	5	6	7	8	9	A	B	C
0	14 7/8	21 5/8	21 5/8	21 1/4	20 3/8	21 1/4	21 1/4	21 5/8	19 7/8	22 1/8	21 5/8	19 7/8	22 1/8	22 1/8
1	5 7/8	14	14	14	13 1/8	12 1/8	14	14	12 1/4	14	14	9 7/8	14	14
2	14 3/8	20 5/8	21 1/8	20 5/8	19 3/4	20 1/4	20 5/8	20 5/8	18 7/8	21 1/8	20 5/8	20 1/4	21 1/8	21 1/8
3	14 3/8	20 3/4	21 1/8	20 3/4	20 1/4	19 3/4	20 3/4	20 3/4	19 3/8	21 1/8	20 3/4	20 1/4	21 1/8	21 1/8
4	16 5/8	22 7/8	22	22 1/2	21 5/8	21 5/8	22 7/8	22 7/8	20 5/8	23 3/8	22 7/8	22 1/2	25 1/2	23 3/8
5	14 1/4	20 5/8	20 5/8	20 1/8	18 3/4	18 3/4	20 5/8	20 5/8	18 3/8	20 5/8	20 5/8	19 1/4	20 5/8	20 5/8
6	14 1/2	21 1/4	20 3/4	20 3/4	19 7/8	19 1/2	20 3/8	20 3/4	19	20 3/4	20 3/8	18	20 3/4	20 3/4
7	14 3/8	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4	20 1/4	20 5/8	20 5/8
8	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8	19 1/4	21 1/2	21 1/2
9	14 1/2	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4	18	21 3/4	21 3/4
A	18	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4	21 5/8	23 7/8	23
B	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8	19 1/2	22 3/8	21 1/2
C	14 1/4	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4	18 3/8	21	19 3/4

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
2																										
3																										
4																										
5	78	60	6		1	12	18	8	10	11	8 7/8	23	25 1/4	15	48 1/2	14 1/2	8	22 1/4	34 1/4	31 1/4	25 1/4	96	114	96	7 1/2	84

2 Digit Bid Area	3 Digit Bid Area	4 Digit Bid Area	5 Digit Bid Area
Sq. Ft.			
32.5	40.0	47.5	56.0

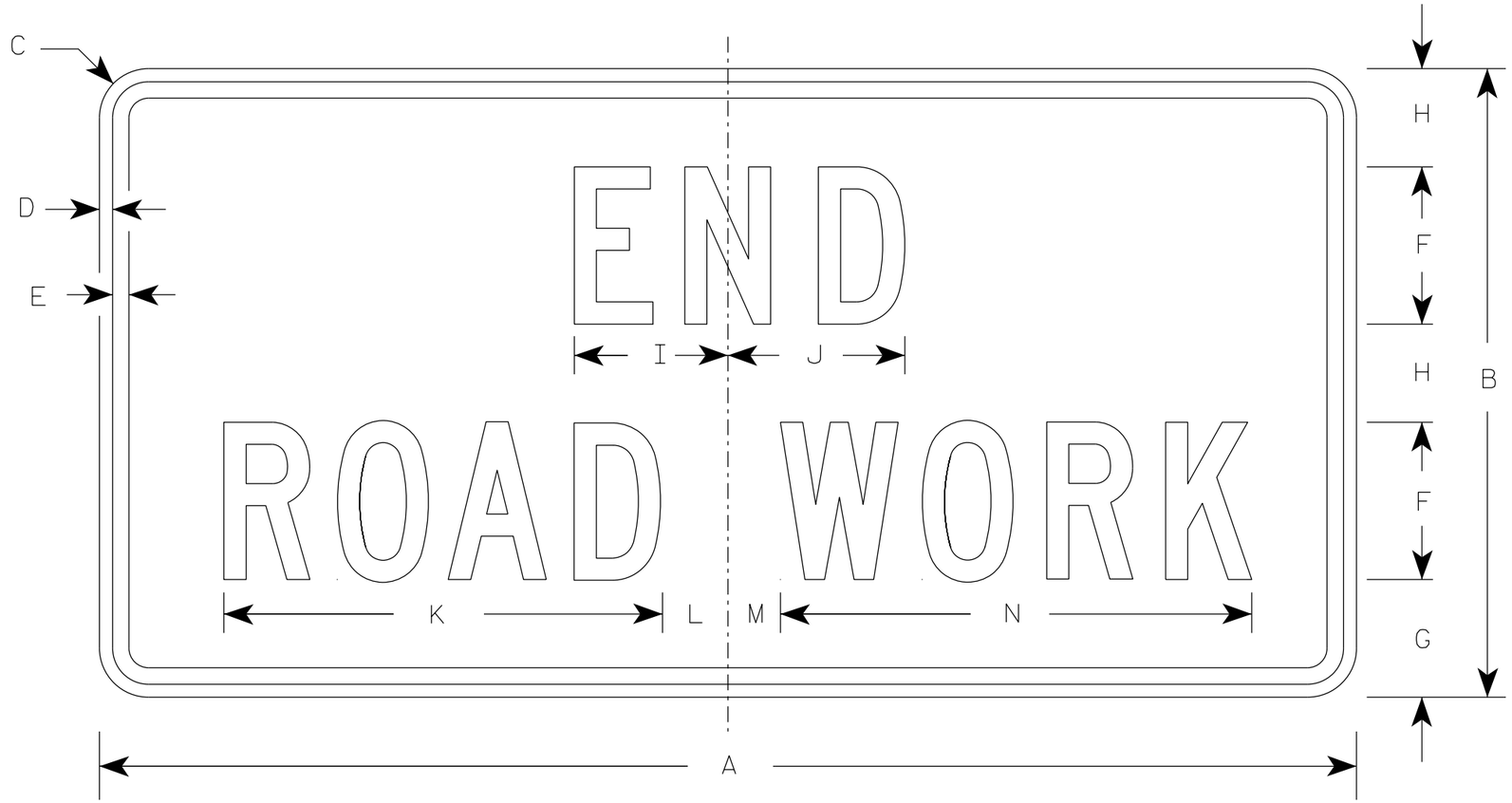
STANDARD SIGN
E5-1B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2022 PLATE NO. E5-1B.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 659 | E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5
2	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
2M	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
3	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
4	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
5	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0

STANDARD SIGN

G20-2A

WISCONSIN DEPT OF TRANSPORTATION

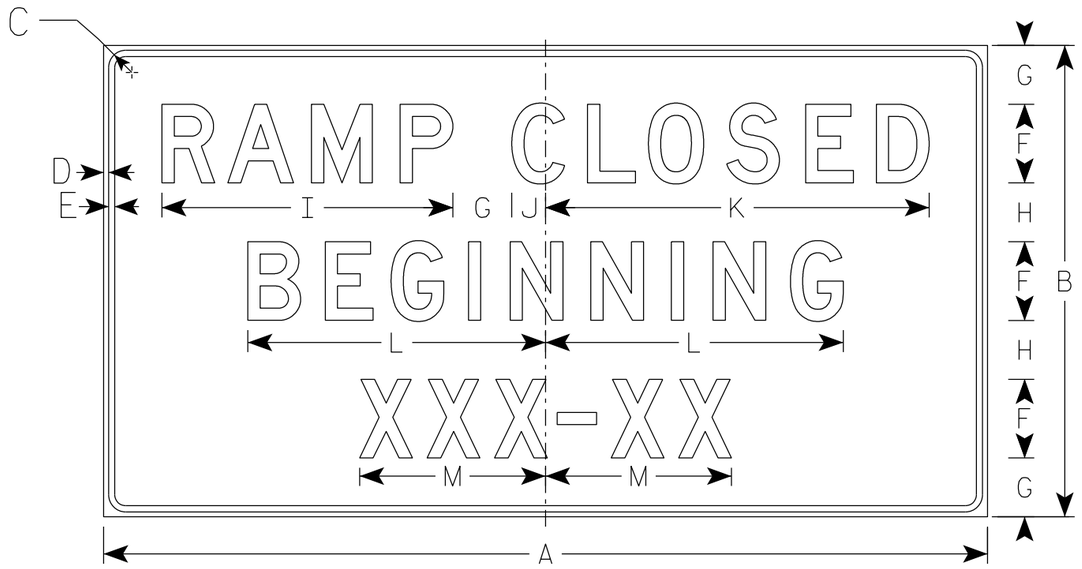
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-2A.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 660 E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D



G20-58

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	72	36	1 5/8	5/8	3/4	6	5	4	22 1/4	2 3/8	29 1/2	22 3/4	14 1/4														18.0
3	90	48	1 5/8	5/8	3/4	8	6	6	29 5/8	3 3/8	39	30 3/8	19														30.0
4																											
5																											

STANDARD SIGN
G20-58

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/19/2020 PLATE NO. G20-58.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 661	E

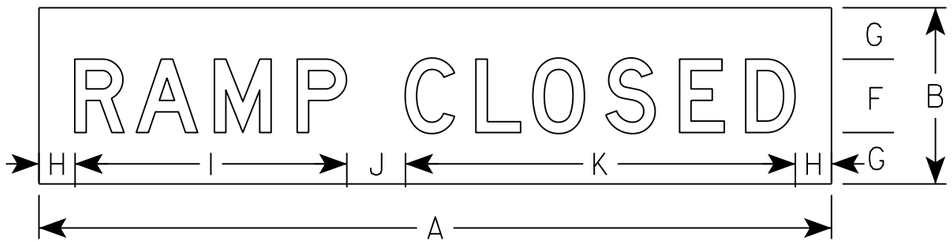
FILE NAME : C:\Users\PROJECTS\tr_stdplate\G2058.dgn PLOT DATE : 19-OCT-2020 7:30 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Material shall be .040 aluminmum



G20-63

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	72	12				6	3	6	22 1/8	6	31 7/8																6.0
4	108	24				10	7	4 7/8	37	8	53 1/8																18.0
5																											

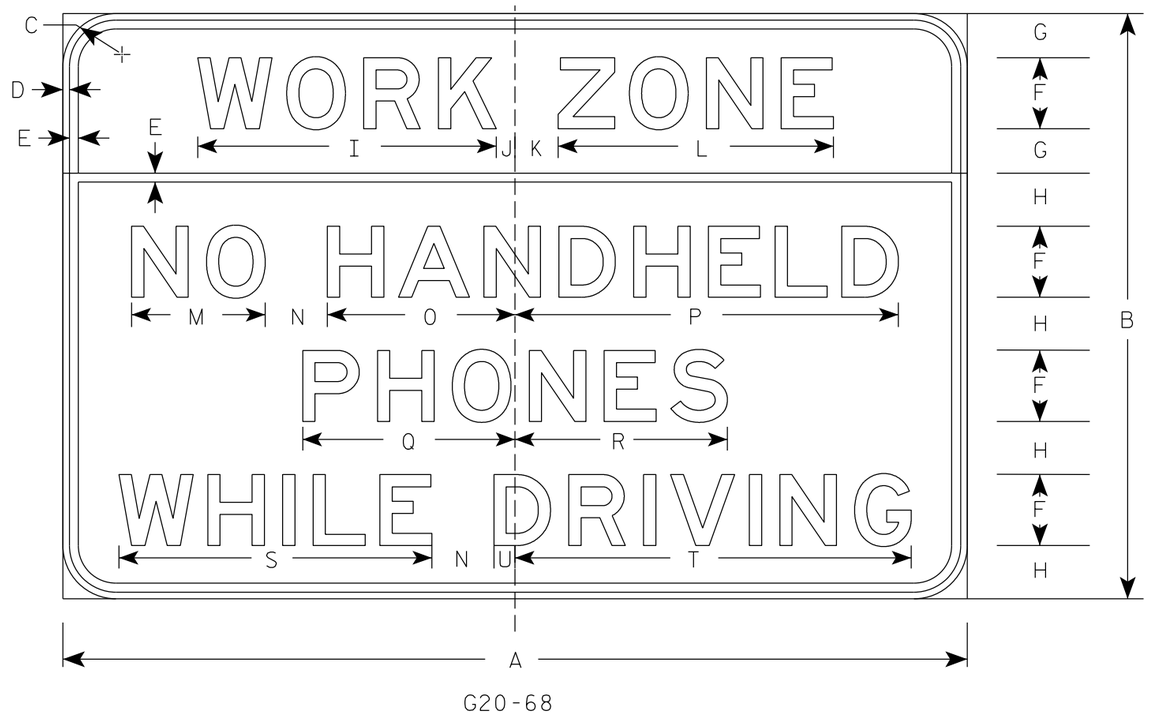
STANDARD SIGN
G20-63

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 11/8/17 PLATE NO. G20-63.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 662 | E



G20-68

NOTES

1. Sign is Type II- Type H Reflective except as noted.
2. Color:
   Background - White except Work Zone panel is Fluorescent Orange Type F Reflective
   Message - Black
3. Message Series - E
4. Traffic mitigation contract required for signs to be included on project.
5. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

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	78	48	3	5/8	3/4	6	3	4 1/2	24 7/8	2 3/8	4 1/4	23	11 1/4	6	15 1/2	32 3/4	18	18	26 1/2	33 7/8	1 3/8						26.0
2M	78	48	3	5/8	3/4	6	3	4 1/2	24 7/8	2 3/8	4 1/4	23	11 1/4	6	15 1/2	32 3/4	18	18	26 1/2	33 7/8	1 3/8						26.0
3	102	66	6	3/4	1	8	5	6	33 5/8	2 1/8	4 7/8	31	15	7	21 1/8	43 1/4	24	24	35 1/4	44 5/8	2 3/8						46.75
4	102	66	6	3/4	1	8	5	6	33 5/8	2 1/8	4 7/8	31	15	7	21 1/8	43 1/4	24	24	35 1/4	44 5/8	2 3/8						46.75
5	102	66	6	3/4	1	8	5	6	33 5/8	2 1/8	4 7/8	31	15	7	21 1/8	43 1/4	24	24	35 1/4	44 5/8	2 3/8						46.75

STANDARD SIGN
G20-68

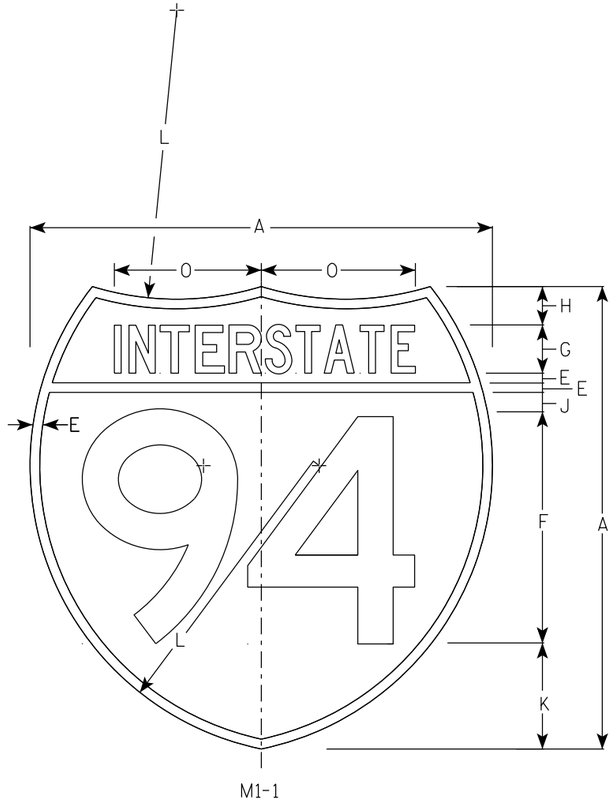
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

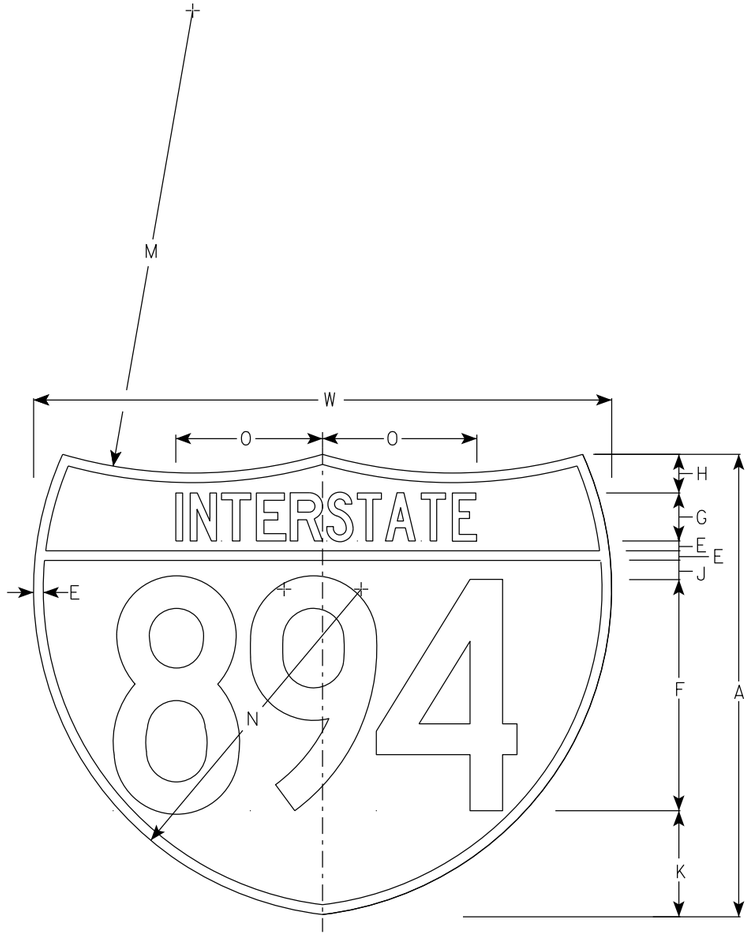
DATE 6/10/19 PLATE NO. G20-68.1

PROJECT NO:

SHEET NO: 663 E



M1-1



M1-1A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Top Red - Bottom Blue
   Message - White
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.
1																											
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91
2M	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79

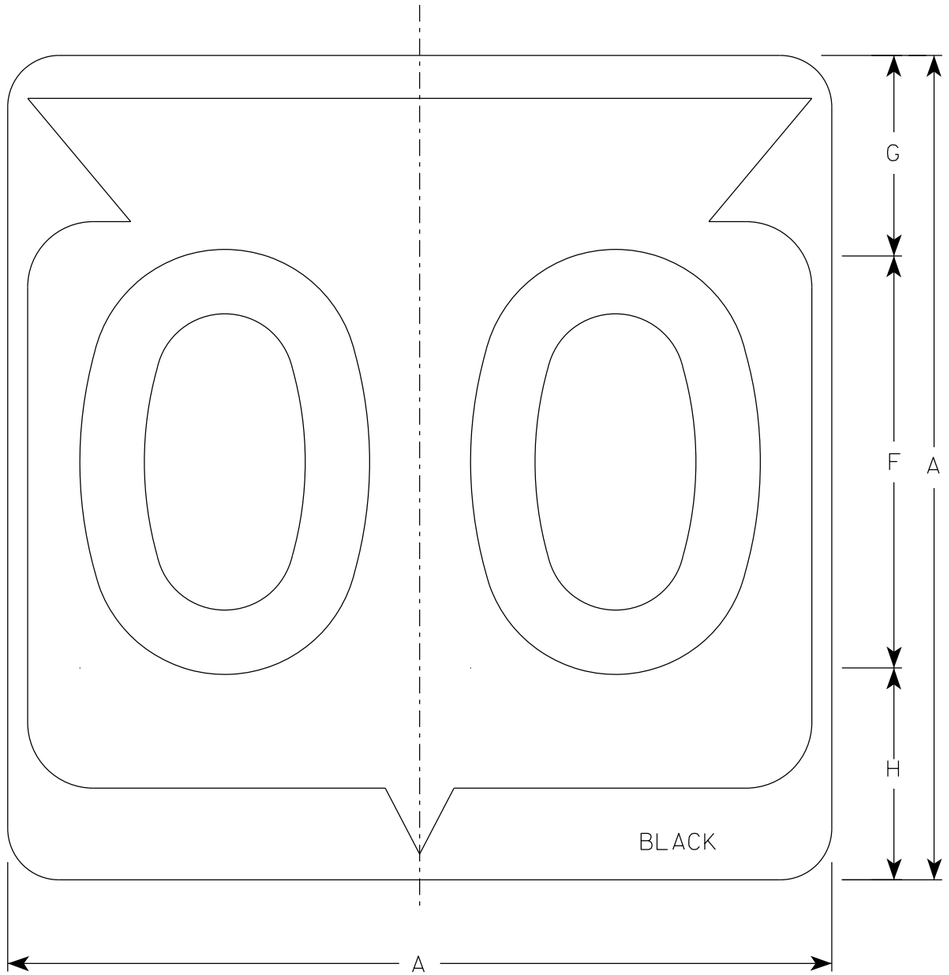
INTERSTATE ROUTE MARKER M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

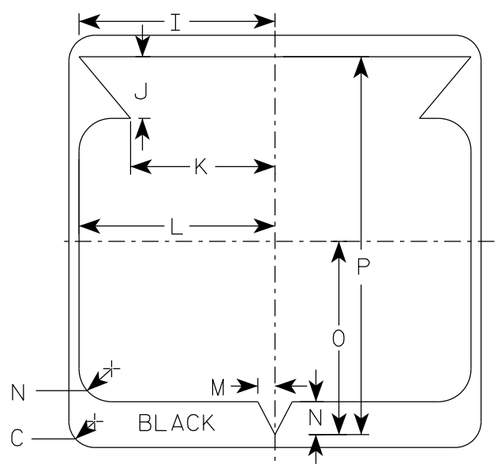
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 11/7/2022 PLATE NO. M1-1.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 664 E



M1-6



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C

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

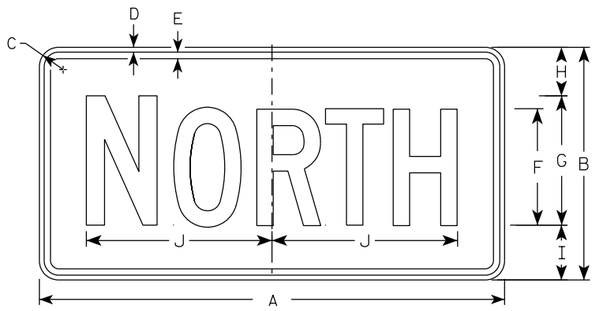
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

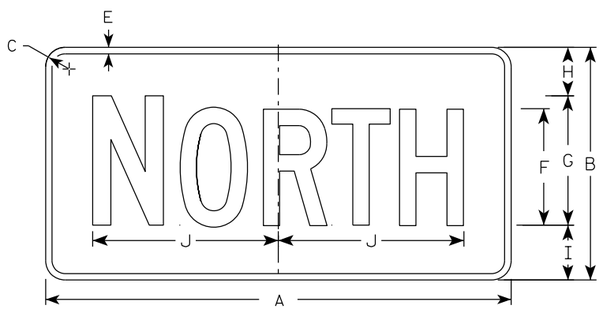
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-6.11

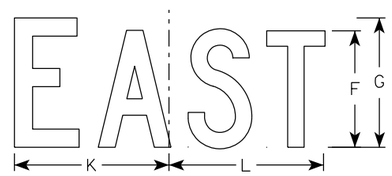
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 665	E



M3-1
MM3-1
MP3-1

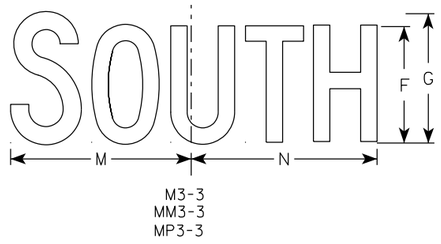


MB3-1
MK3-1
MN3-1

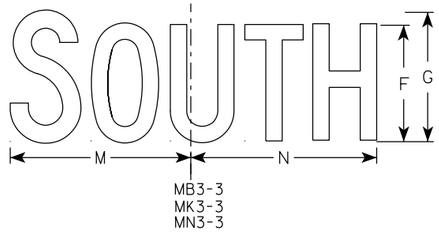


M3-2
MM3-2
MP3-2

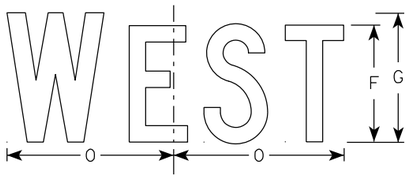
MB3-2
MK3-2
MN3-2



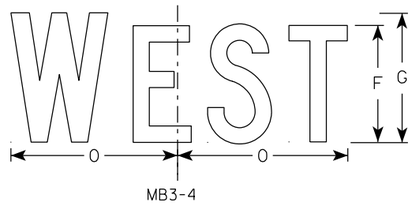
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
2M	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
3	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
4	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
5	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5

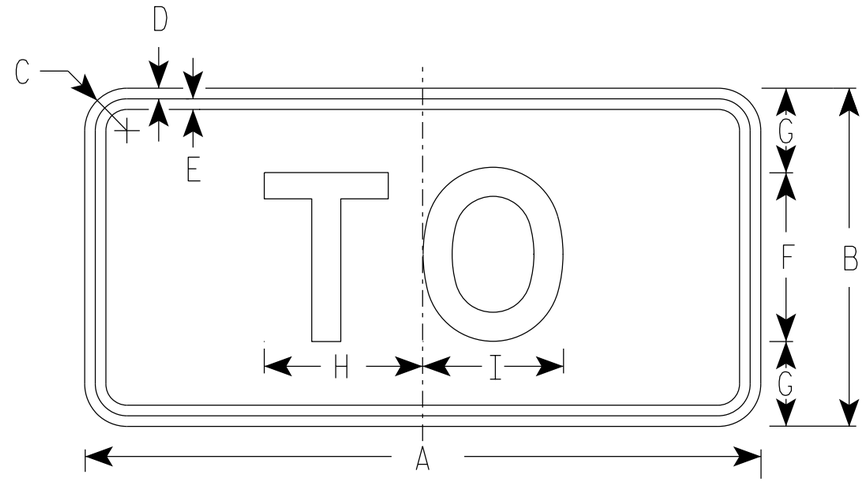
STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

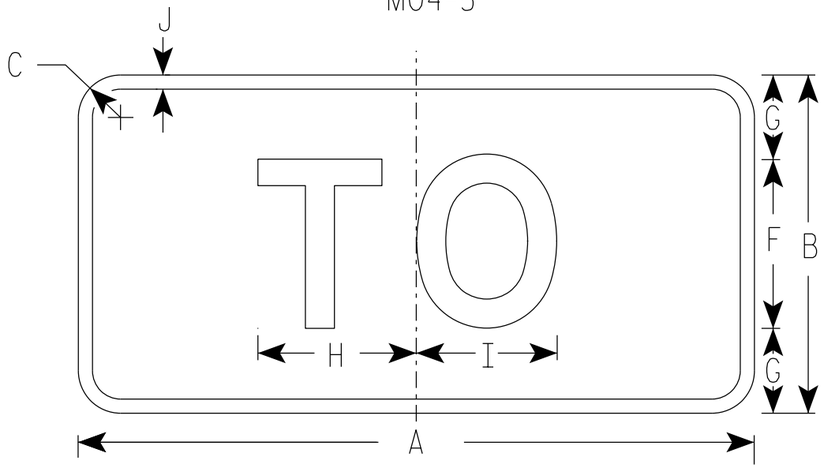
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 666	E



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																											
2S	24	12	1 ½	⅜	⅜	6	3	5 ⅜	5 ¼	½																	2.00
2M	24	12	1 ½	⅜	⅜	6	3	5 ⅜	5 ¼	½																	2.00
3	36	18	1 ½	⅜	½	9	4 ½	8 ¼	8 ⅜	½																	4.5
4	36	18	1 ½	⅜	½	9	4 ½	8 ¼	8 ⅜	½																	4.5
5	36	18	1 ½	⅜	½	9	4 ½	8 ¼	8 ⅜	½																	4.5

STANDARD SIGN
M4-5

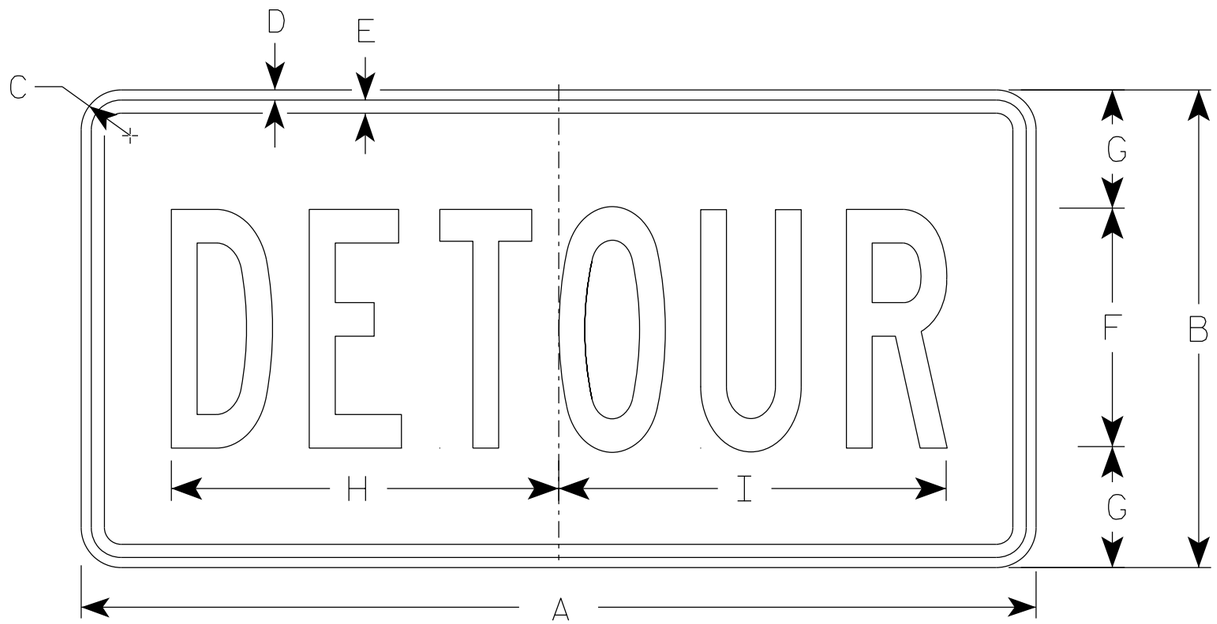
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/8/2023 PLATE NO. M4-5.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 667 E

7



M4-8

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
2M	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5

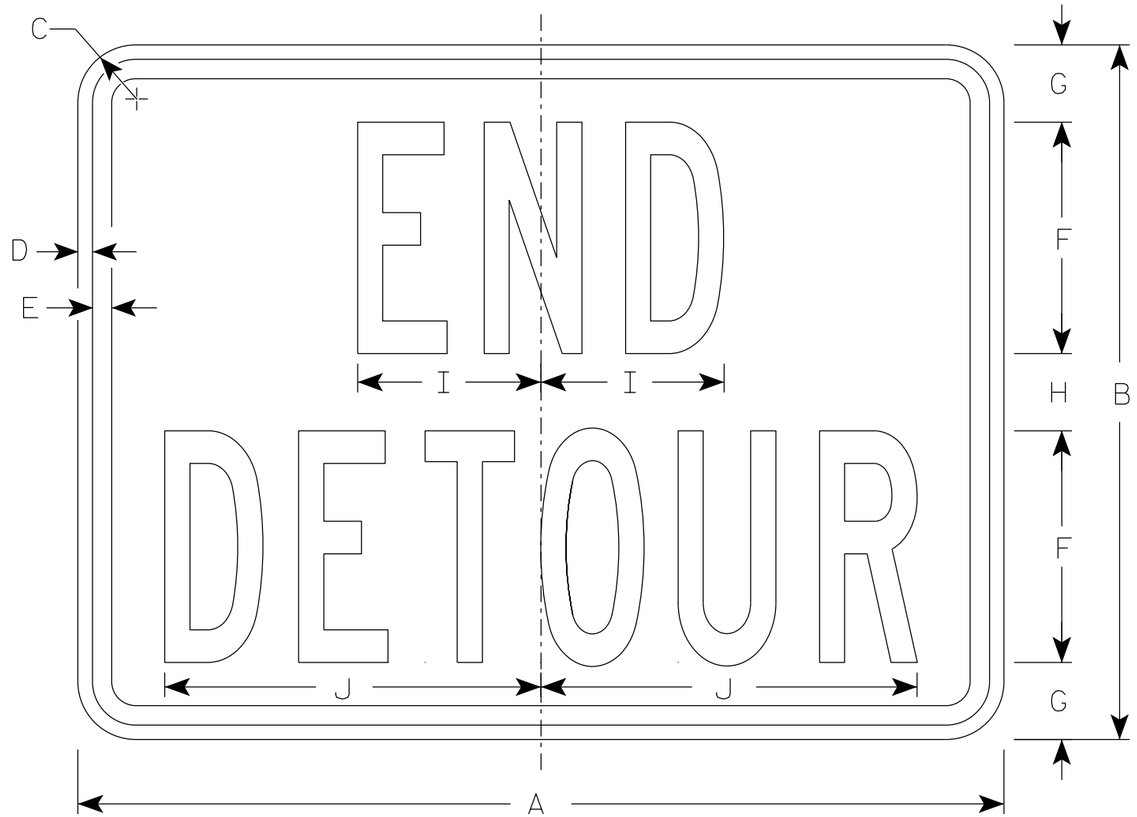
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 668	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
2M	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
3	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
4	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
5	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0

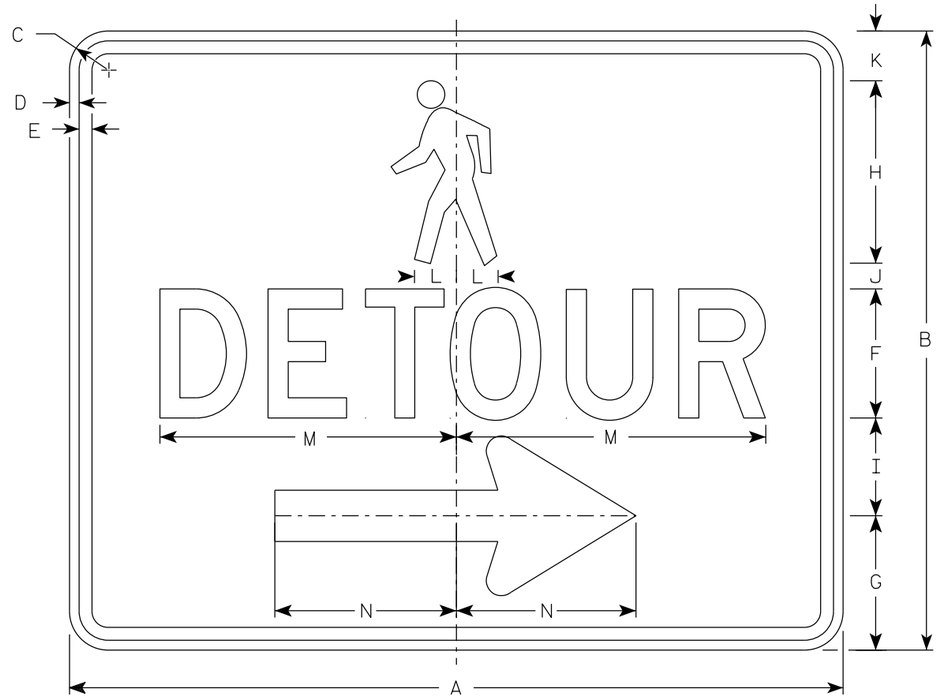
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

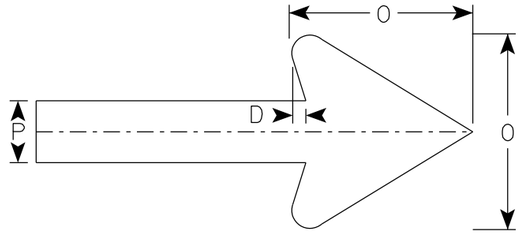
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 669 | E



M4-9BR

NOTES

1. Sign is Type II-Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9BL is the same as M4-9BR except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
2M	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
3																											
4																											
5																											

STANDARD SIGN
M4-9B L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9B.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 670 | E

M4-50

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/2	3/8	3/8	5	3 1/2	2 1/4	5 1/8	3	11 3/8																2.0
2M	24	12	1 1/2	3/8	3/8	5	3 1/2	2 1/4	5 1/8	3	11 3/8																2.0
3	36	18	1 1/2	3/8	1/2	8	5	2 1/4	8 1/4	5	18 1/4																4.5
4																											
5																											

STANDARD SIGN
M4-50

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/2024 PLATE NO. M4-50.1

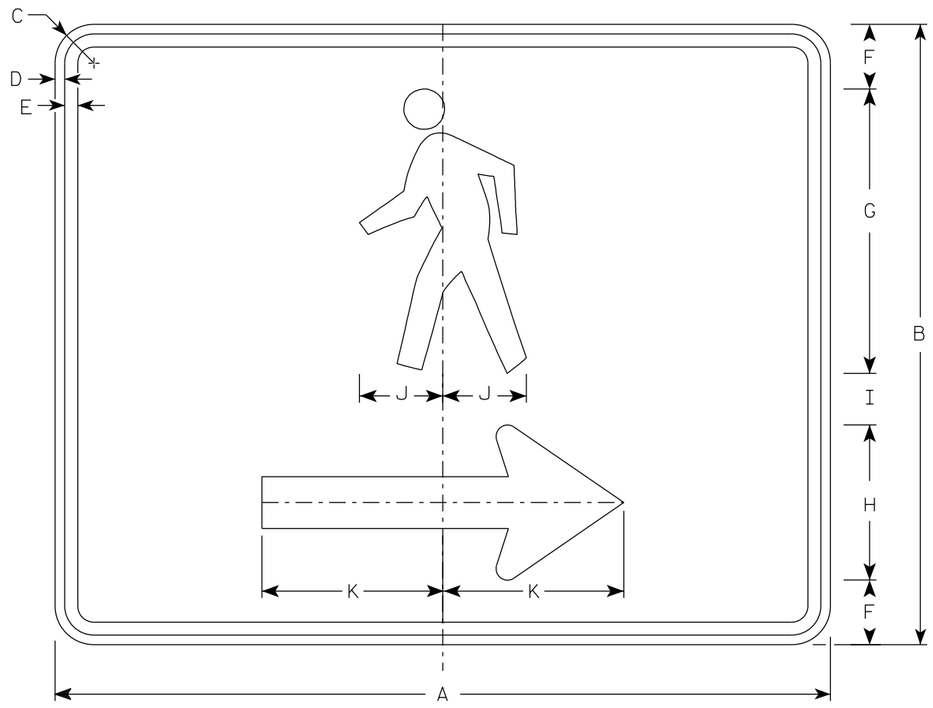
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M450.dgn PLOT DATE : 17-DEC 2024 7:00 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

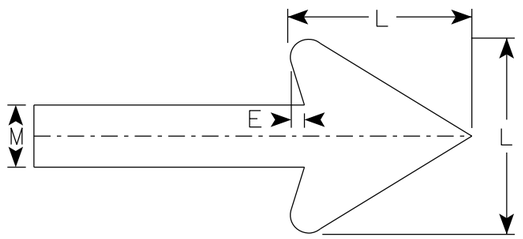
7

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M4-60L is the same as M4-60R except the arrow is reversed.



M4-60R



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 ½	⅜	½	2 ½	11	6	2	3 ¼	7	6	2														5.00
2M	30	24	1 ½	⅜	½	2 ½	11	6	2	3 ¼	7	6	2														5.00
3																											
4																											
5																											

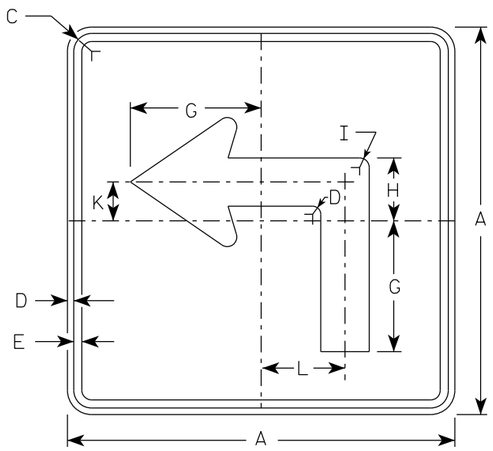
STANDARD SIGN
M4-60 L&R

WISCONSIN DEPT OF TRANSPORTATION

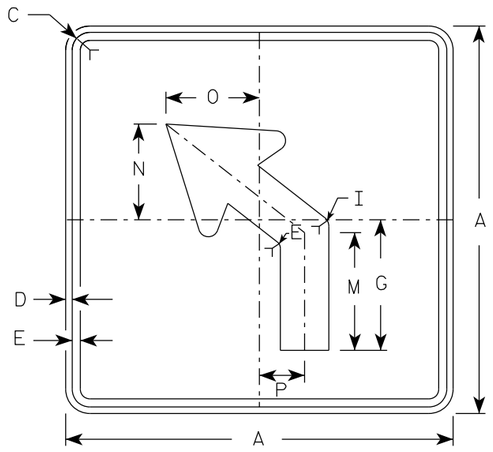
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/2023 PLATE NO. M4-60.2

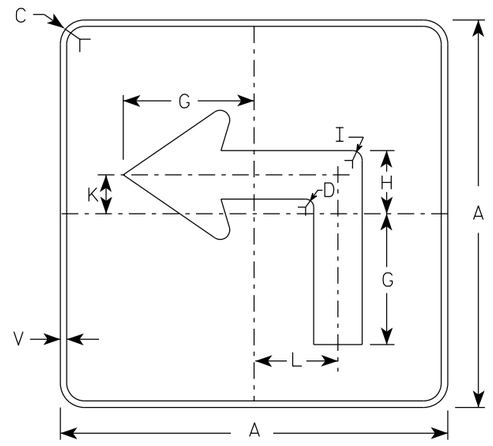
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 672 | E



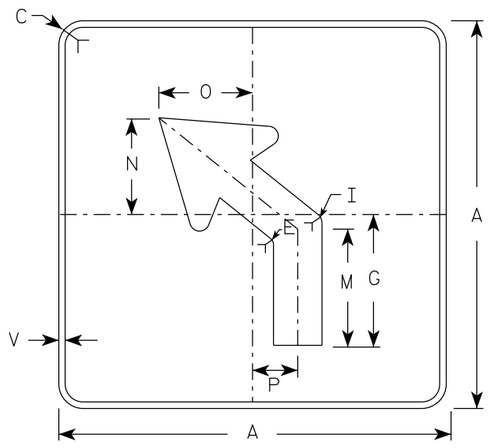
M5-1L
MM5-1L
MO5-1L
MP5-1L



M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L

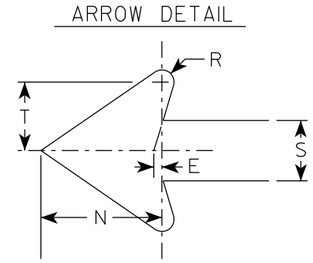


MB5-2L
MK5-2L
MN5-2L
MR5-2L

NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
2M	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
3	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
4	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
5	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25

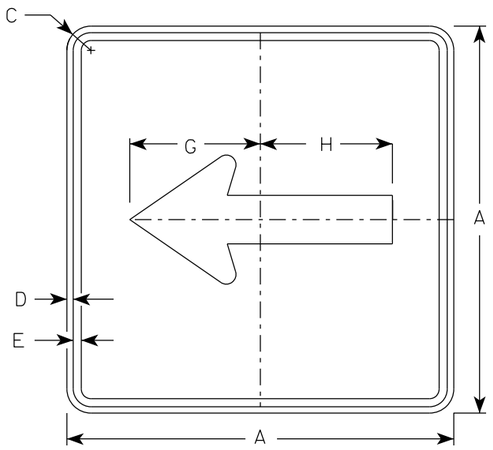
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

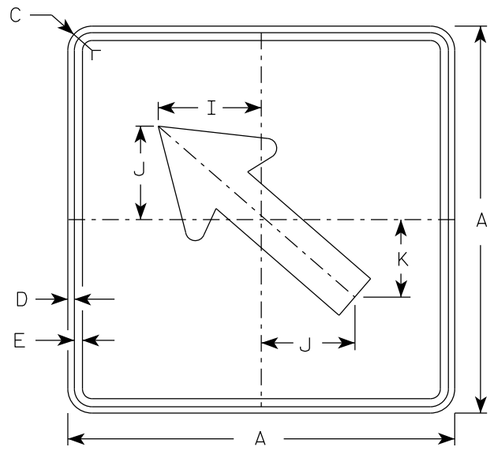
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

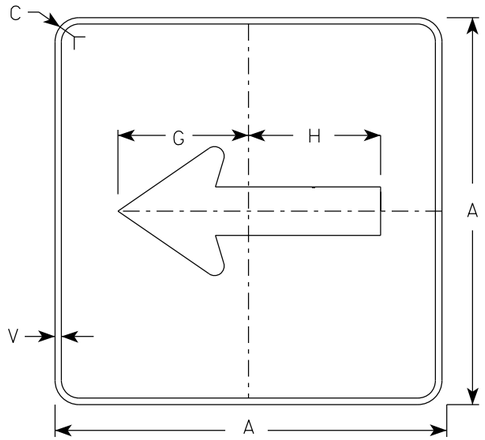
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 673 | E



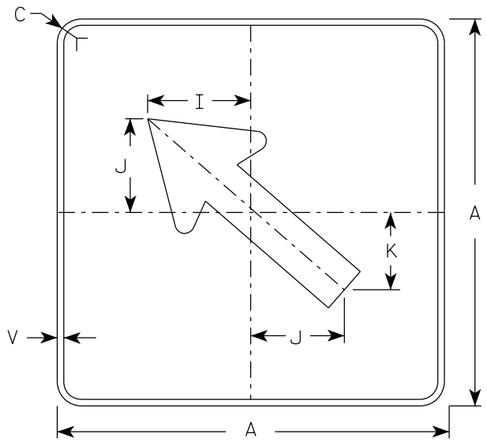
M6-1
MM6-1
MO6-1
MP6-1



M6-2
MM6-2
MO6-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1

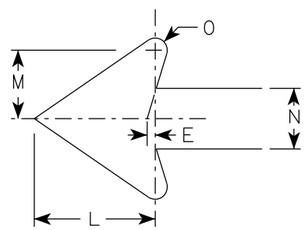


MB6-2
MK6-2
MN6-2
MR6-2

NOTES

1. Signs are Type II - Type H Reflective except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

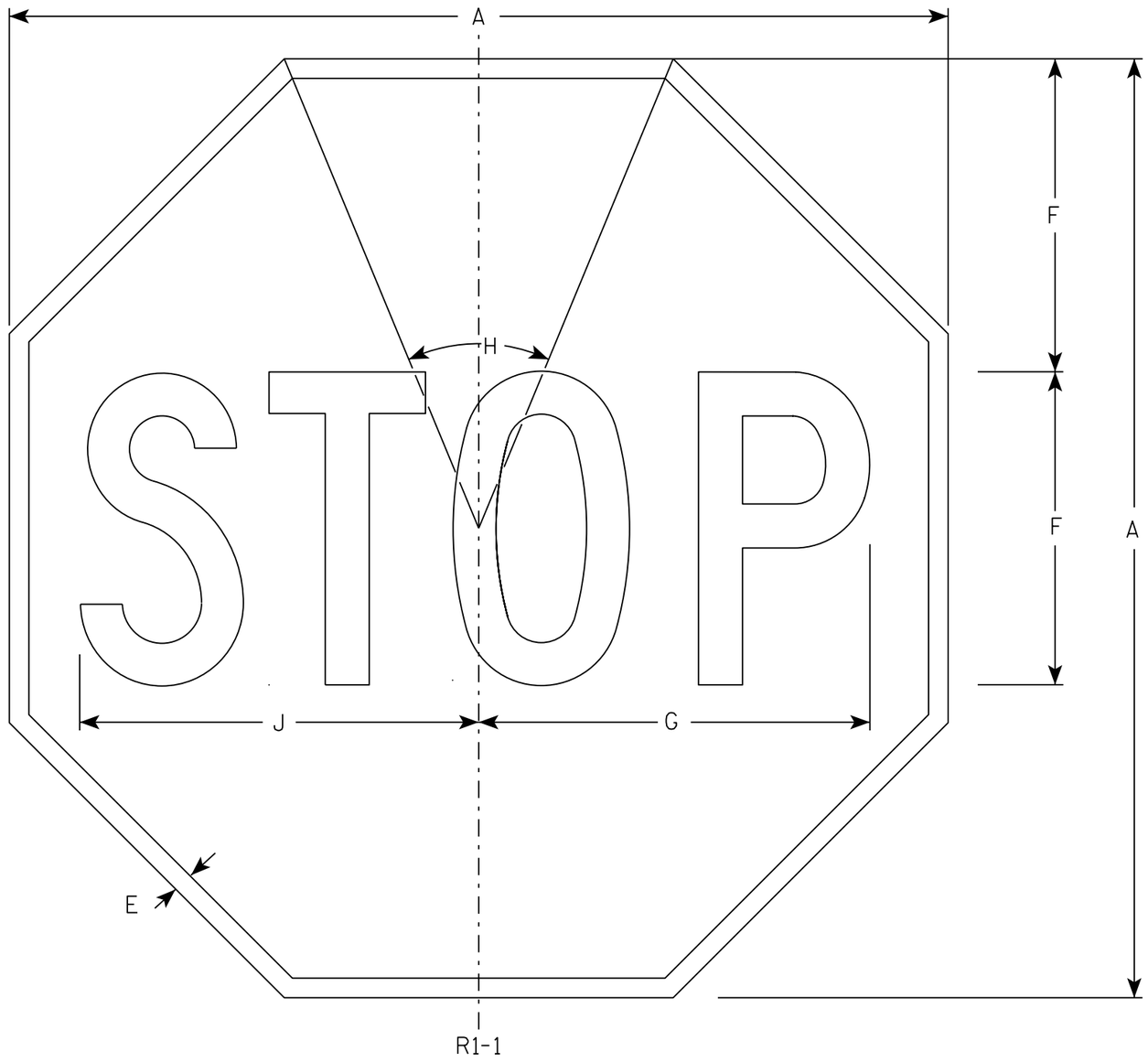
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 674 | E



NOTES

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

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

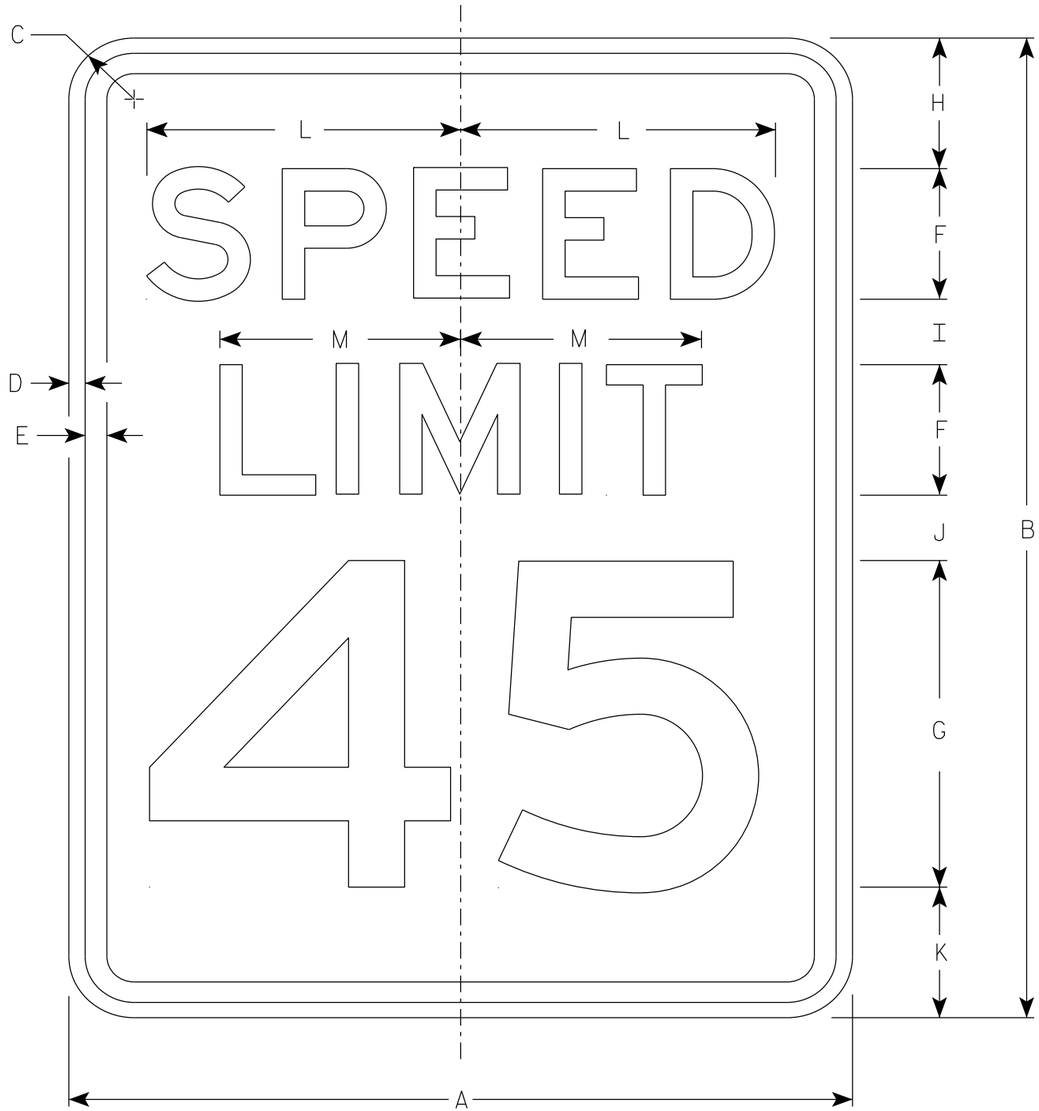
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 675	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. 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 1/2	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/2	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 7/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 7/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 7/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	3	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

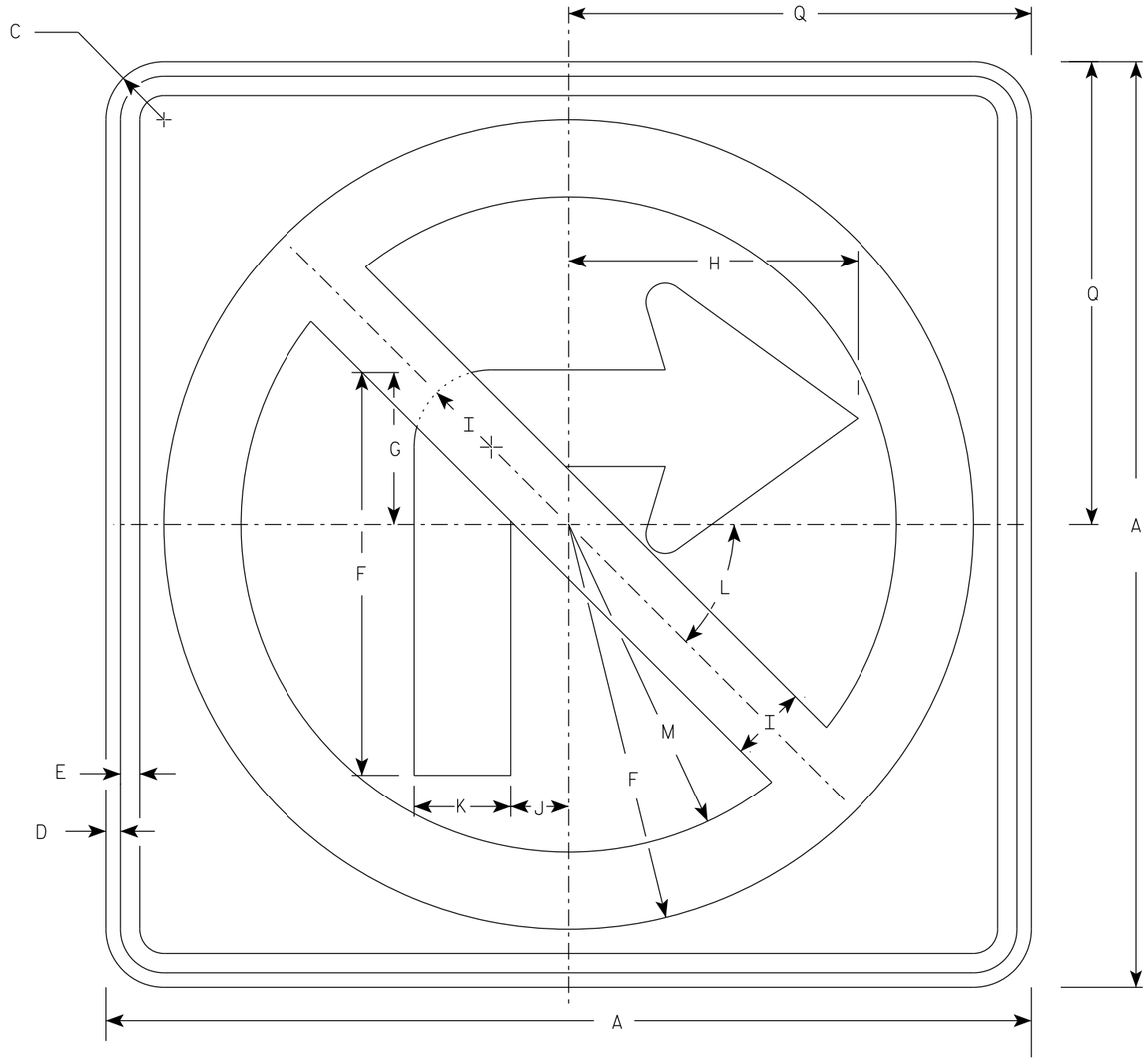
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/23 PLATE NO. R2-1.14

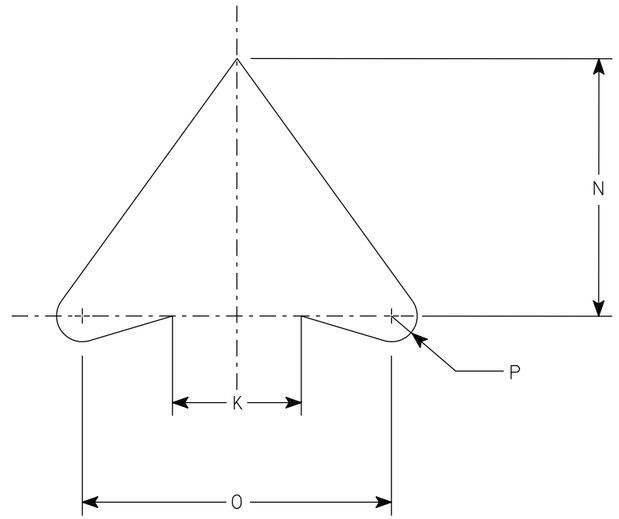
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 676 | E



R3-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45	8 ½	5	6	½	12										4.0
2S	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45°	8 ½	5	6	½	12										4.0
2M	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45	12 ¾	7 ½	9	¾	18										9.0
3	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45	12 ¾	7 ½	9	¾	18										9.0
4	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾	18										9.0
5	48		2 ¼	¾	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

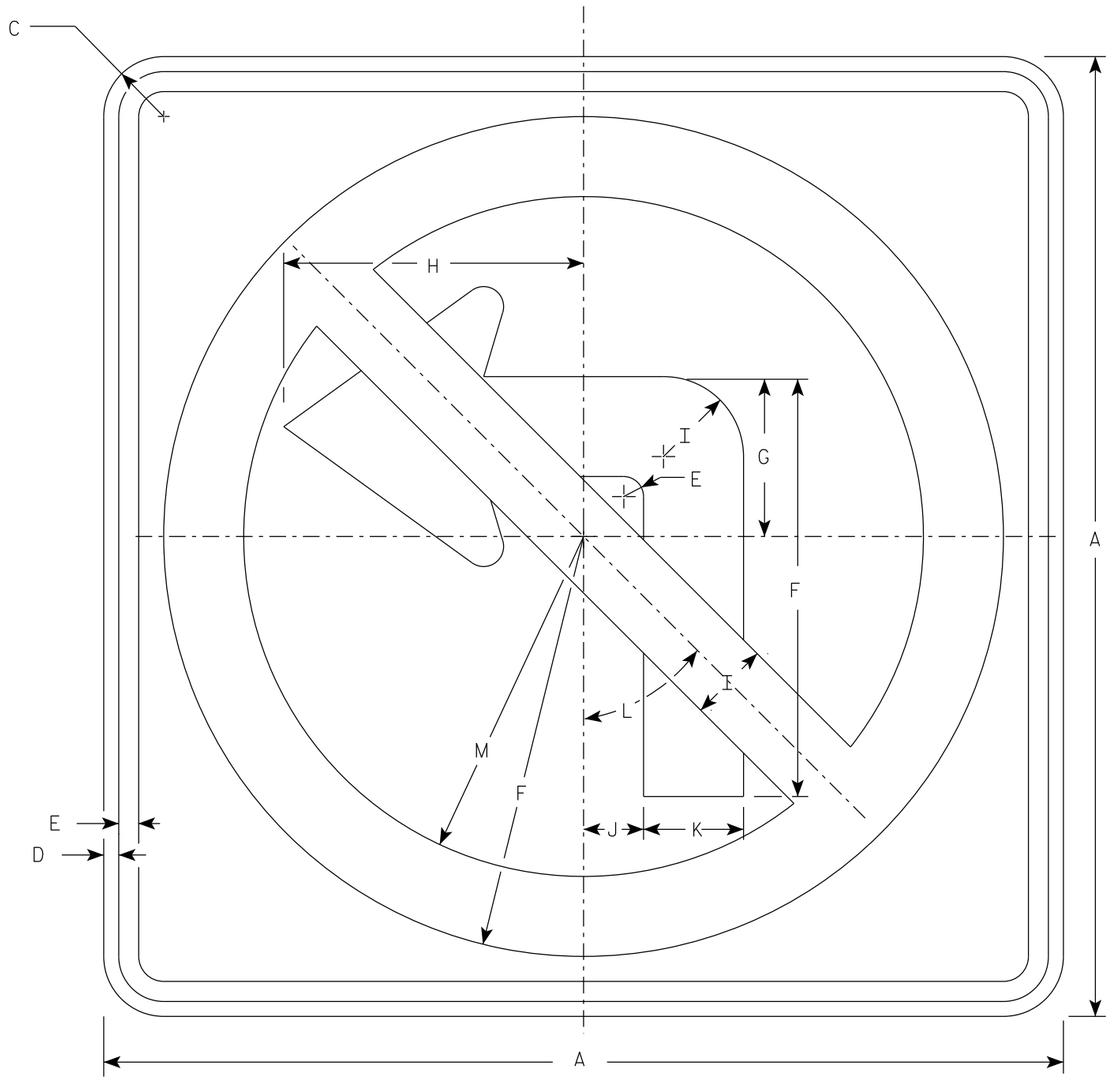
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/2/23 PLATE NO. R3-1.6

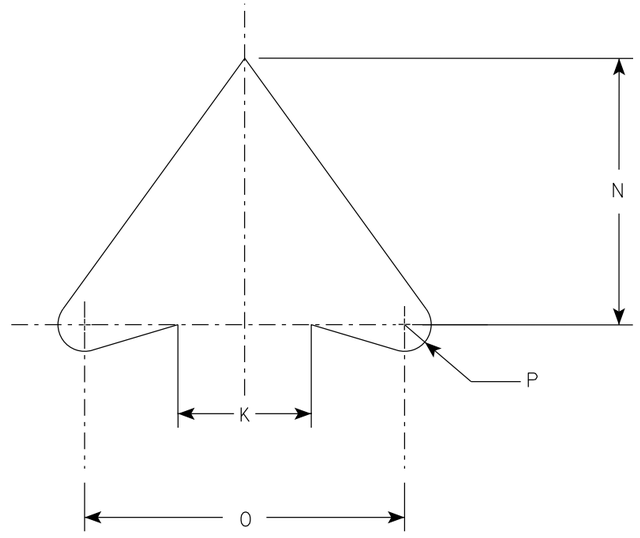
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 677 | E



R3-2

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45°	8 ½	5	6	½											4.0
2S	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45°	8 ½	5	6	½											4.0
2M	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾											9.0
3	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾											9.0
4	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾											9.0
5	48		2 ¼	¾	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

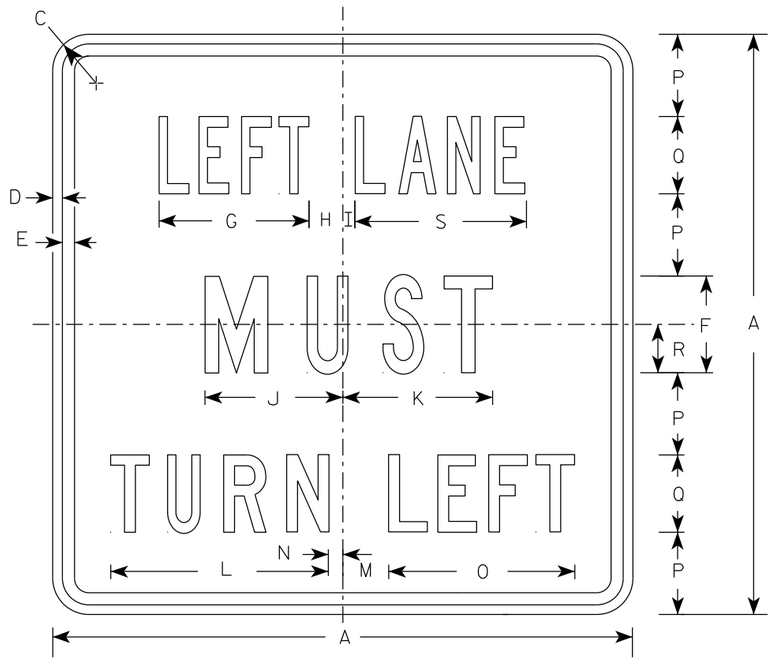
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/2/23 PLATE NO. R3-2.11

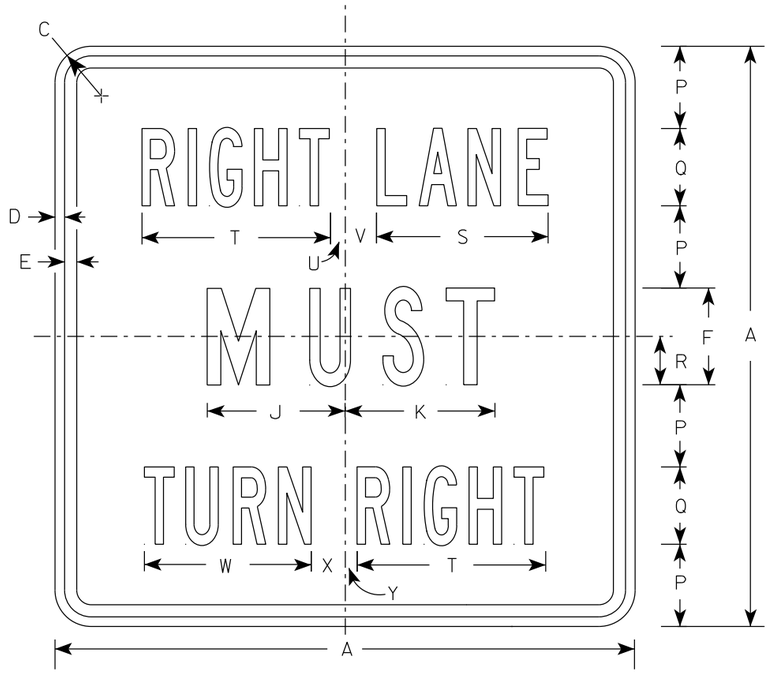
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 678 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.



R3-7L



R3-7R

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 7/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 7/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 7/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		2 1/4	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

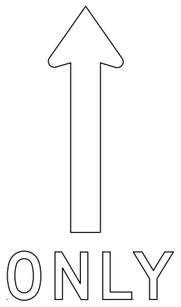
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/23 PLATE NO. R3-7.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 679 | E

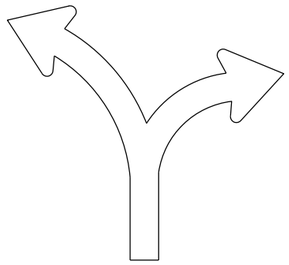
7

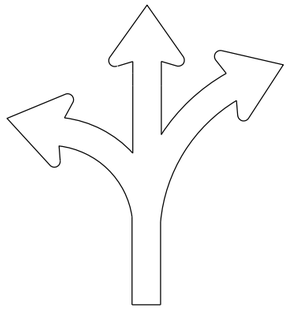
7

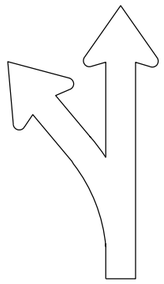


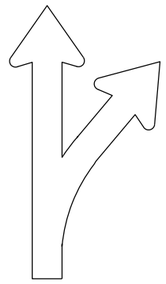
(A)

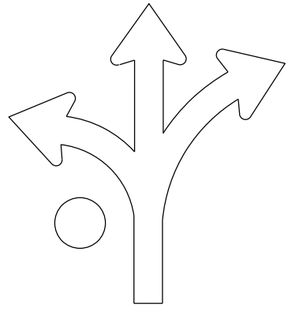
(B)

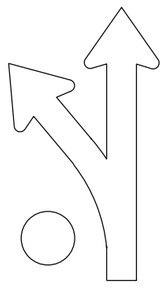

(C)

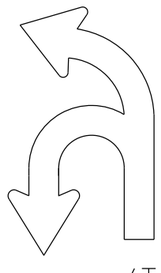

(D)

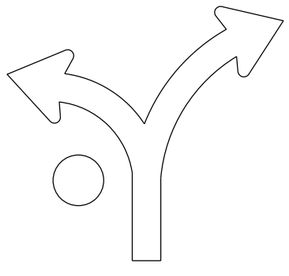

(E)

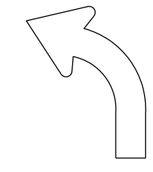

(F)


(G)

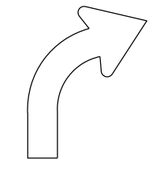

(H)


(I)


(J)



(L)



(R)

NOTES

1. Sigs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Use appropriate Letter for Sign Code
   Each letter added makes sign wider. Example R3-8EAR
5. Square footage of sign varies by letters

1 Letter =	3.75 sq ft	for Size 2
	6.0 sq ft	for Size 3
	10.0 sq ft	for Size 4 or 5
2 Letters =	7.5 sq ft	for Size 2
	12.0 sq ft	for Size 3
	20.0 sq ft	for Size 4 or 5
3 Letters =	11.25 sq ft	for Size 2
	18.0 sq ft	for Size 3
	30.0 sq ft	for Size 4 or 5
4 Letters =	15.0 sq ft	for Size 2
	24.0 sq ft	for Size 3
	40.0 sq ft	for Size 4 or 5
5 Letters =	18.75 sq ft	for Size 2
	30.0 sq ft	for Size 3
	50.0 sq ft	for Size 4 or 5
6 Letters =	22.5 sq ft	for Size 2
	36.0 sq ft	for Size 3
	60.0 sq ft	for Size 4 or 5

6. When letters C,D,G,J are used on the Left or Right end of the sign the Sq. Ft. changes.
   Add the amounts when these letters are used:
   1.25 sq ft for Size 2
   1.5 sq ft for Size 3
   2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

SHEET NO: 680 E

FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn PLOT DATE : 14-FEB 2023 3:01 PLOT BY : mscj9h PLOT NAME :

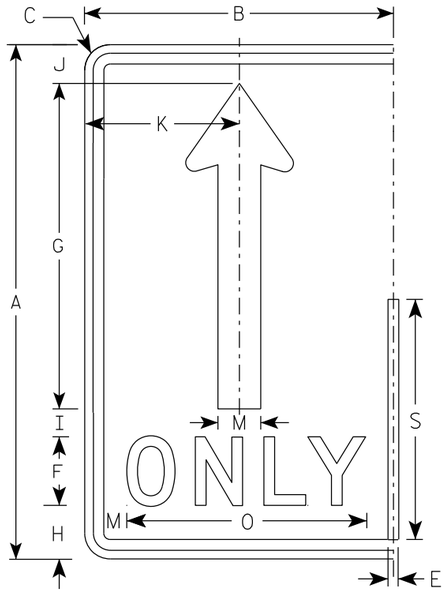
WISDOT/CADDS SHEET 42

7

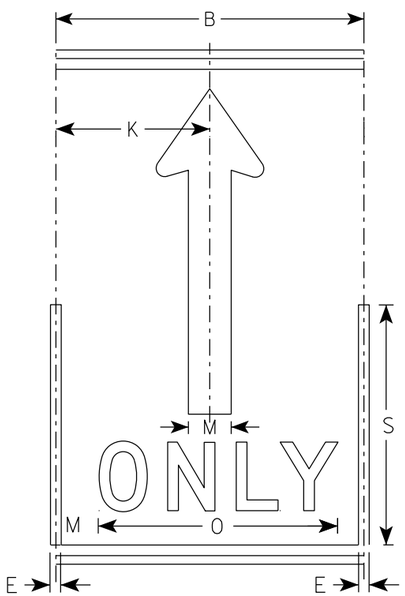
7

NOTES

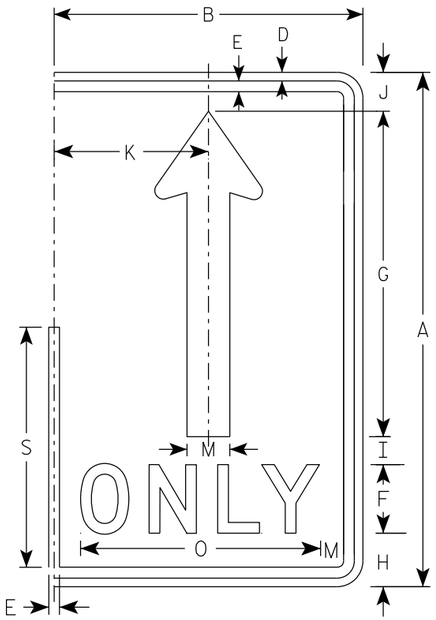
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



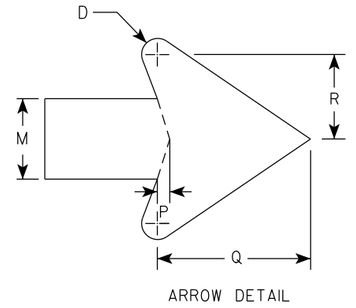
(A)



(A)



(A)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8	5	22 3/4	3 3/4	1 3/4	2 3/4	12		3		17 5/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (A) Arrow

WISCONSIN DEPT OF TRANSPORTATION

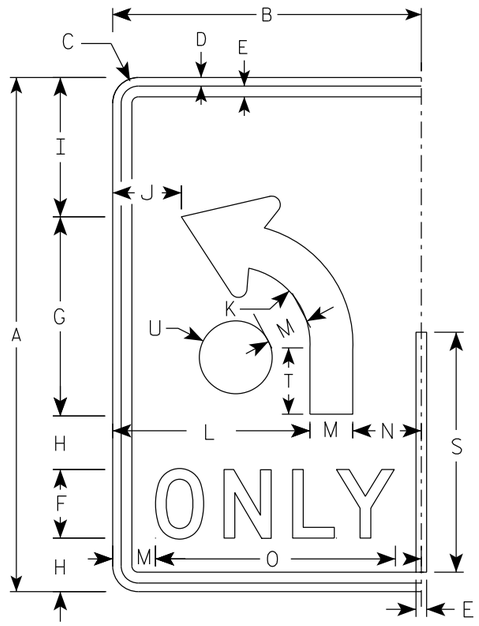
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

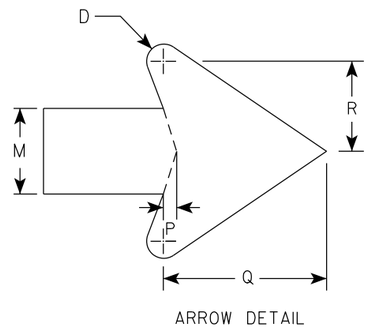
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 681 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
   Message Series - D



(B)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
2M	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
3	36	24	1 1/2	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8	2 1/2						6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0

STANDARD SIGN

R3-8 (B) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

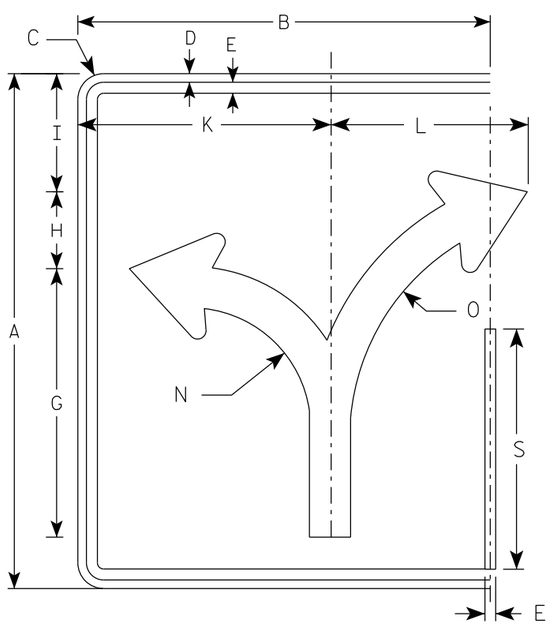
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

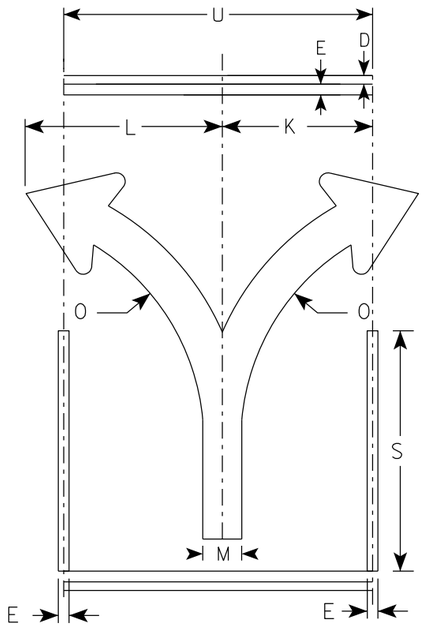
SHEET NO: 682 E

NOTES

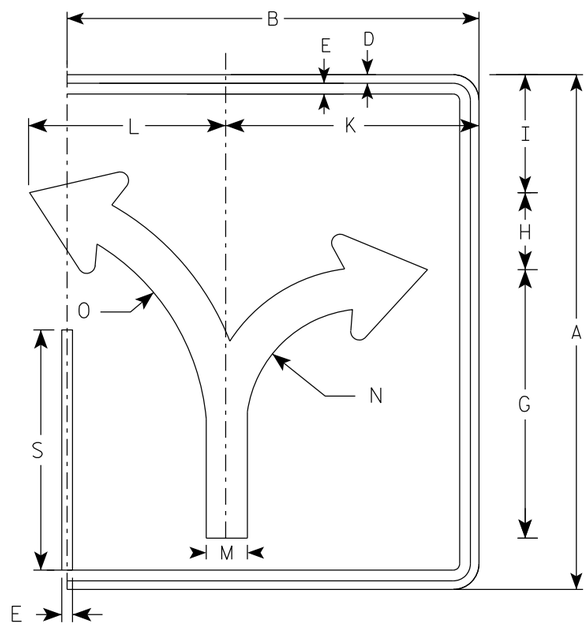
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



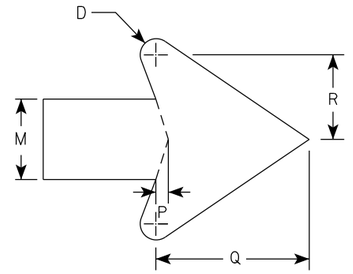
(C)



(C)



(C)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (C) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

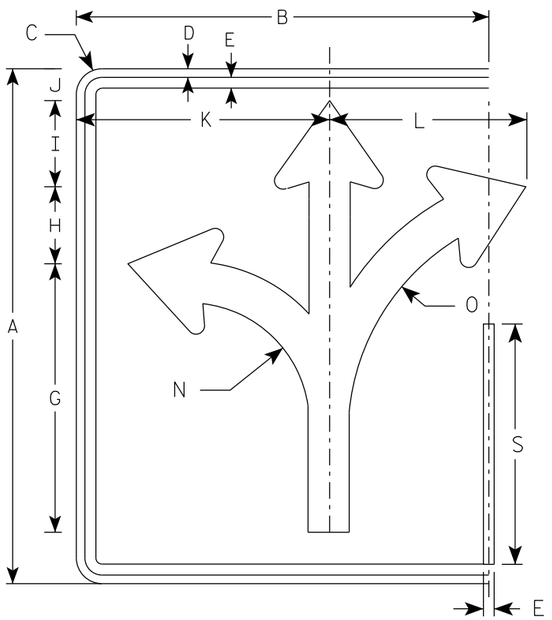
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 683 | E

7

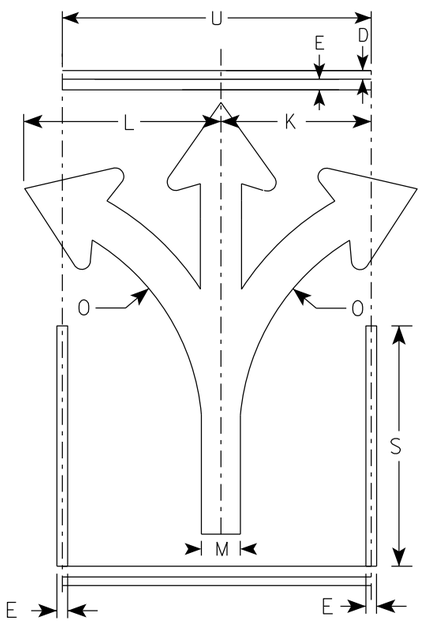
7

NOTES

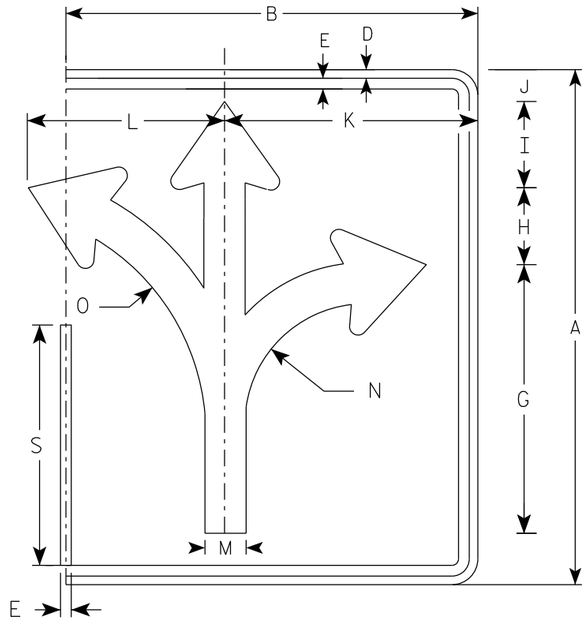
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



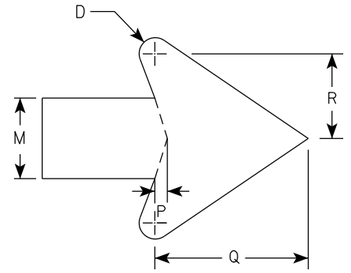
(D)



(D)



(D)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	6	2 1/4	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (D) Arrow

WISCONSIN DEPT OF TRANSPORTATION

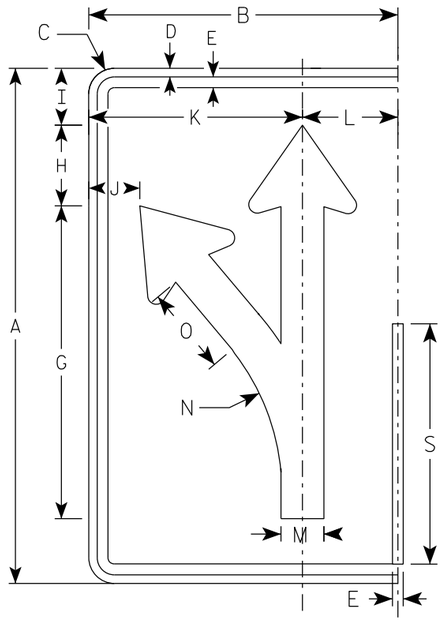
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

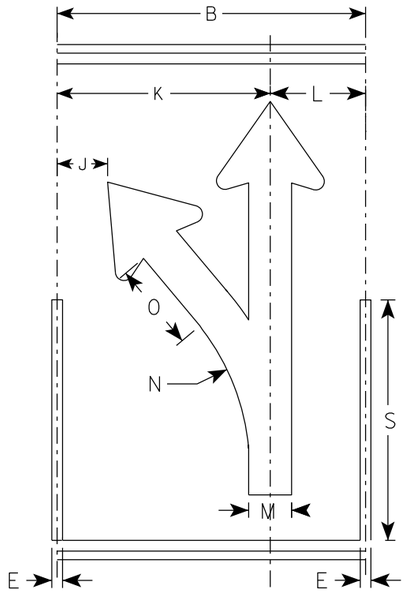
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 684 | E

NOTES

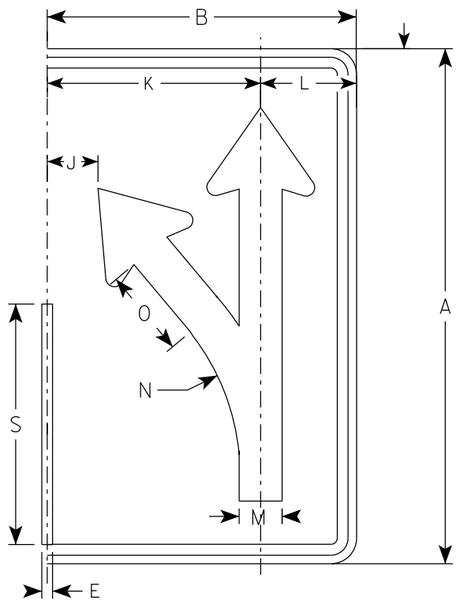
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



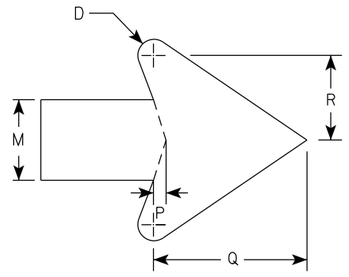
(E)



(E)



(E)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (E) Arrow

WISCONSIN DEPT OF TRANSPORTATION

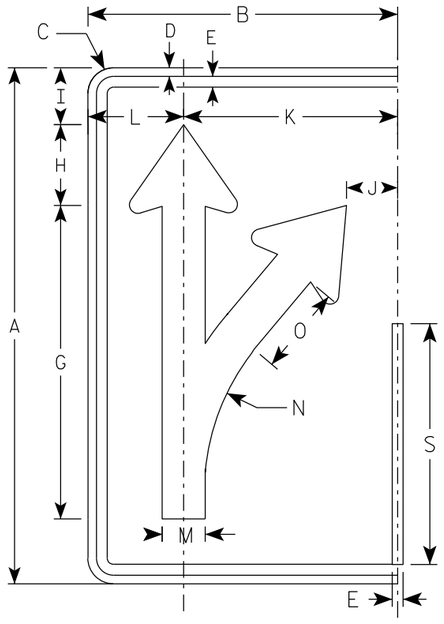
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

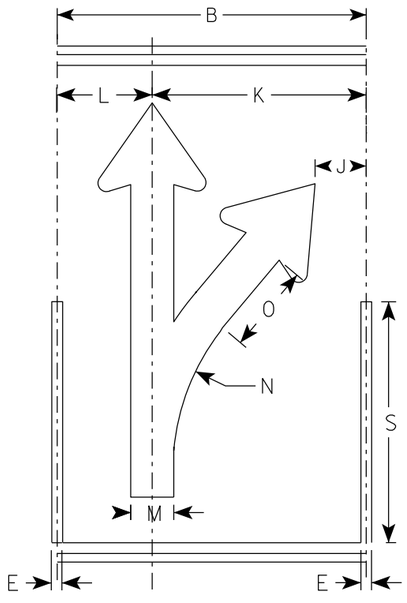
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 685 | E

NOTES

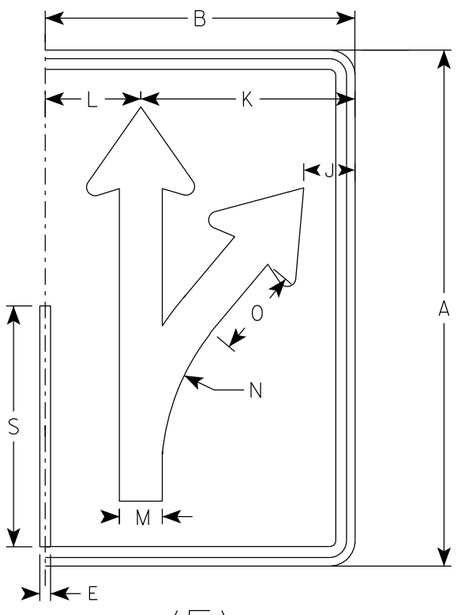
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



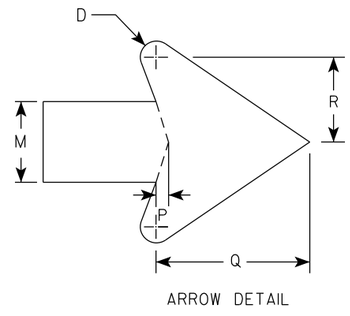
(F)



(F)



(F)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (F) Arrow

WISCONSIN DEPT OF TRANSPORTATION

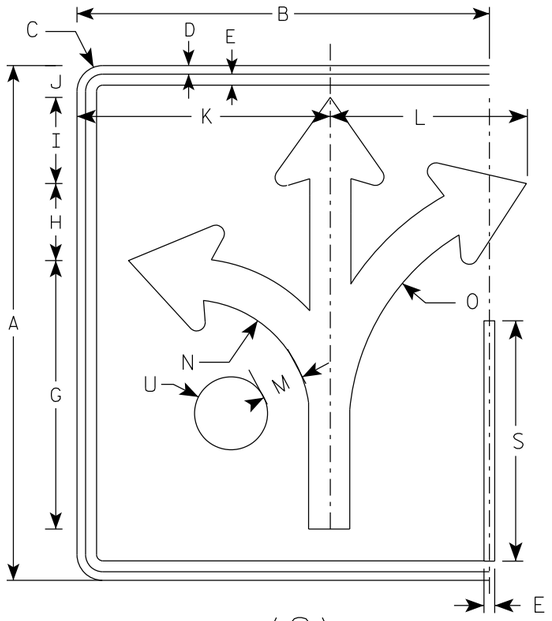
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

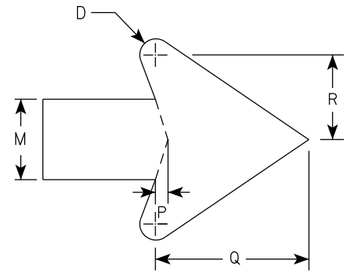
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 686 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(G)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	6	3 1/8	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (G) Arrow

WISCONSIN DEPT OF TRANSPORTATION

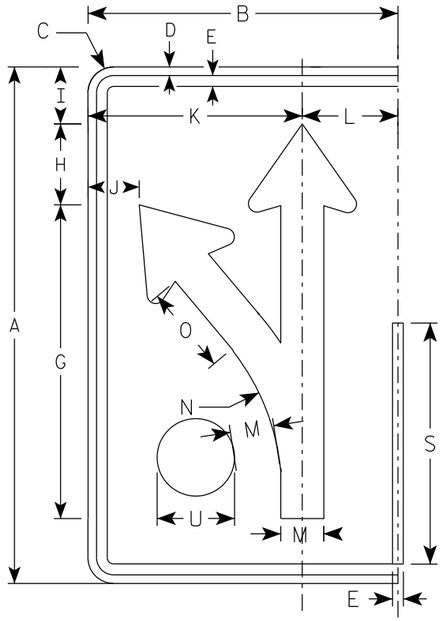
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

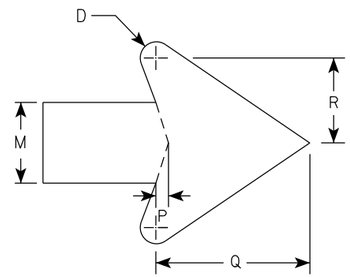
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 687	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(H)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4		2 1/2						6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0

STANDARD SIGN
R3-8 (H) Arrow

WISCONSIN DEPT OF TRANSPORTATION

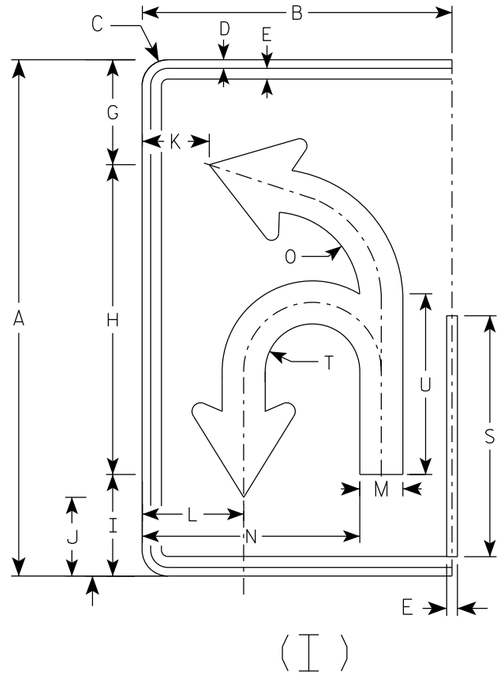
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

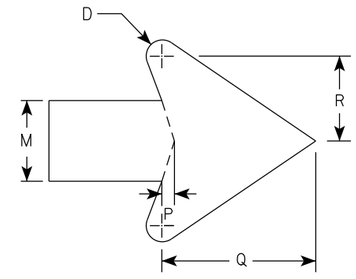
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 688 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(I)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
2M	30	18	1 1/2	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	21 5/8	7 1/8	5 1/2	5 7/8	8 1/4	3	16 3/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4	3 1/4	12 5/8						6.0
4	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0
5	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0

STANDARD SIGN
R3-8 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

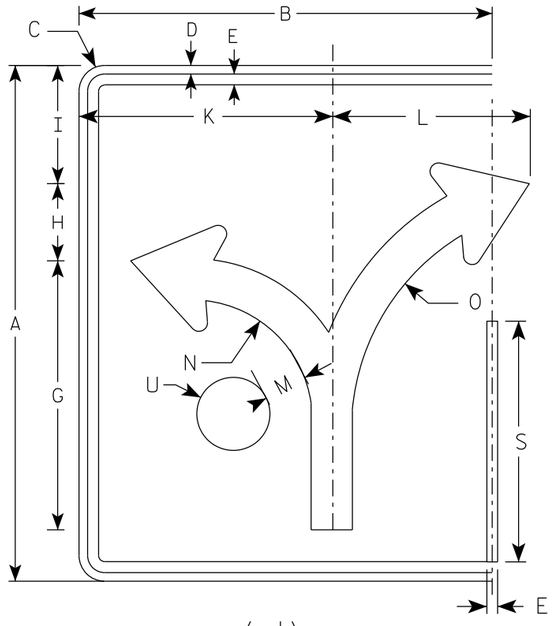
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

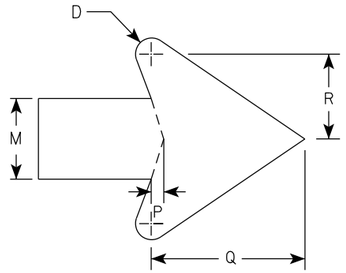
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 689 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(J)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (J) Arrow

WISCONSIN DEPT OF TRANSPORTATION

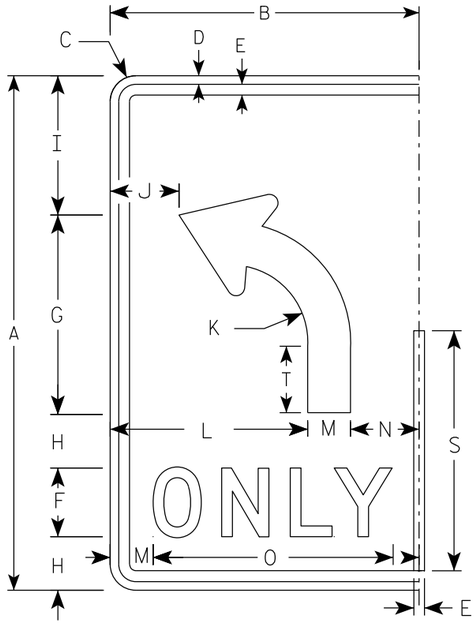
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

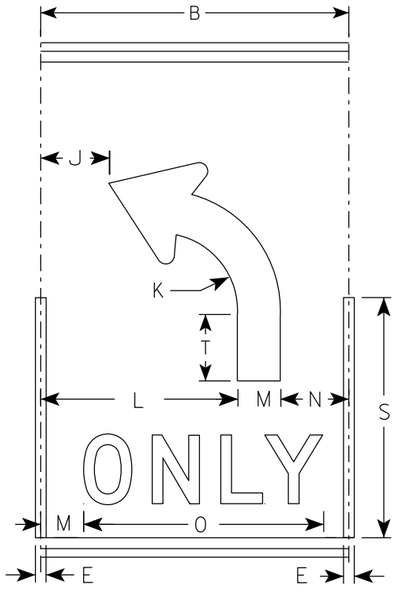
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 690	E

NOTES

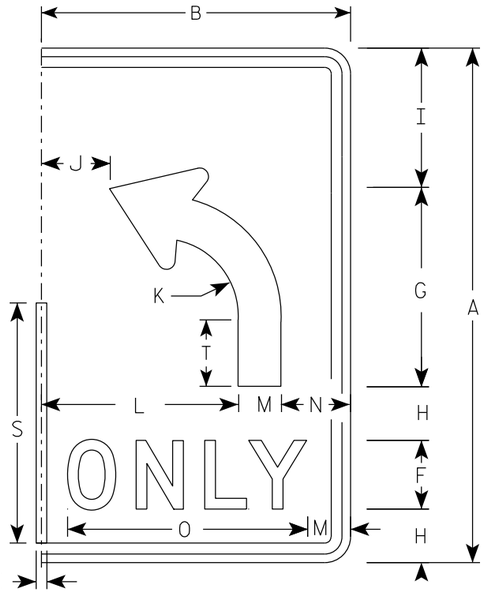
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



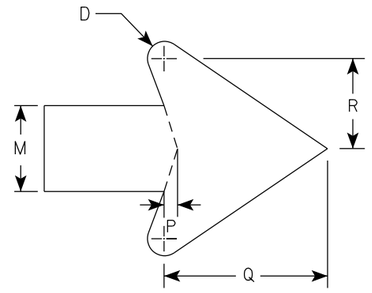
(L)



(L)



(L)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 ½	½	⅝	4	11 ⅝	3 ⅛	8 ⅛	4	4 ½	11 ½	2 ½	4	14	⅜	4 ¾	2 ⅝	14	3 ⅞							3.75
2M	30	18	1 ½	½	⅝	4	11 ⅝	3 ⅛	8 ⅛	4	4 ½	11 ½	2 ½	4	14	⅜	4 ¾	2 ⅝	14	3 ⅞							3.75
3	36	24	1 ½	½	⅝	5	14	3 ½	9 ¾	6	5 ⅜	15	3	6	17 ⅝	½	5 ¾	3 ⅛	16 ¾	4 ⅝							6.0
4	48	30	2 ¼	¾	1	6	18 ⅝	5 ⅛	13 ⅛	6 ⅛	7 ¼	18	4	8	21 ¾	⅝	7 ⅝	4 ¼	22 ⅜	6 ¼							10.0
5	48	30	2 ¼	¾	1	6	18 ⅝	5 ⅛	13 ⅛	6 ⅛	7 ¼	18	4	8	21 ¾	⅝	7 ⅝	4 ¼	22 ⅜	6 ¼							10.0

STANDARD SIGN
R3-8 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

SHEET NO: 691 E

FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn PLOT DATE : 14-FEB 2023 3:02 PLOT BY : mscj9h PLOT NAME :

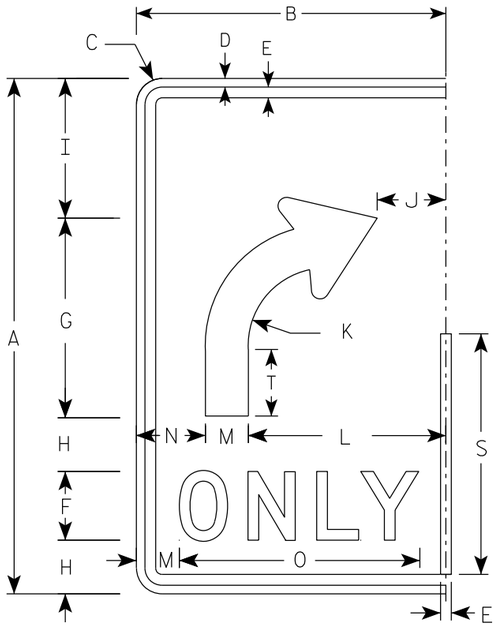
WISDOT/CADDS SHEET 42

7

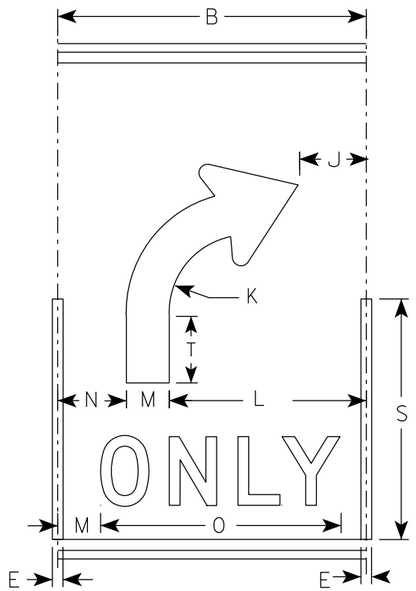
7

NOTES

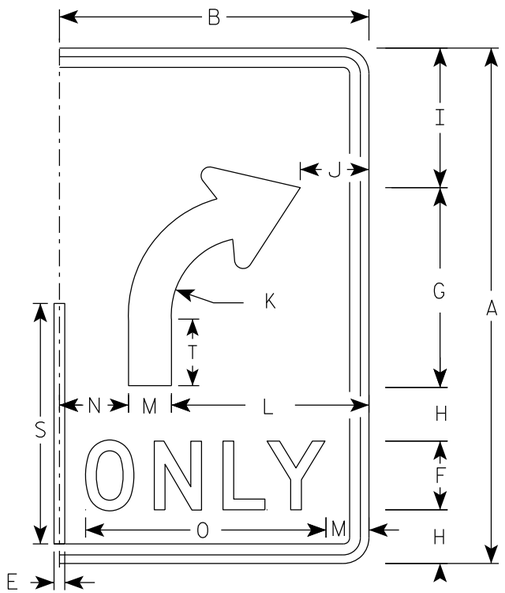
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



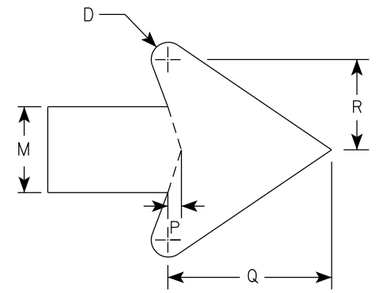
(R)



(R)



(R)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 1/2	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN

R3-8 (R) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

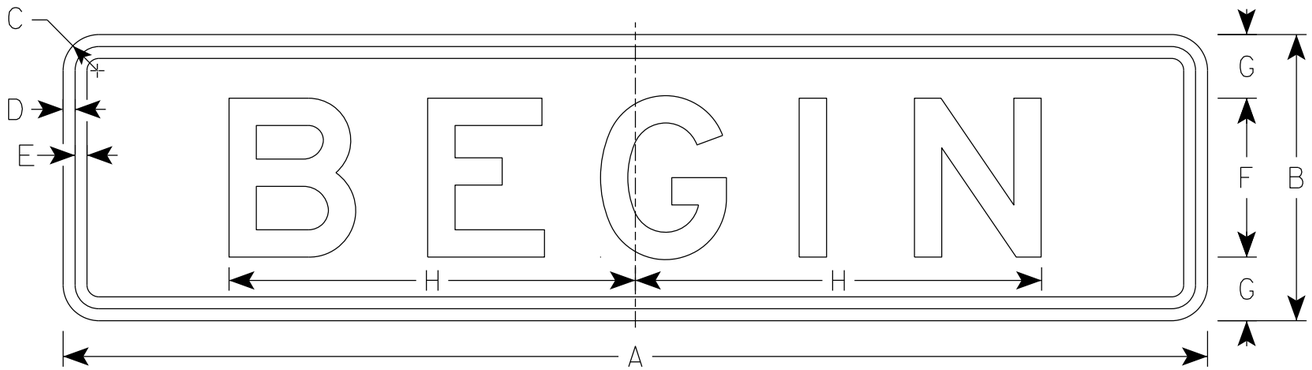
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

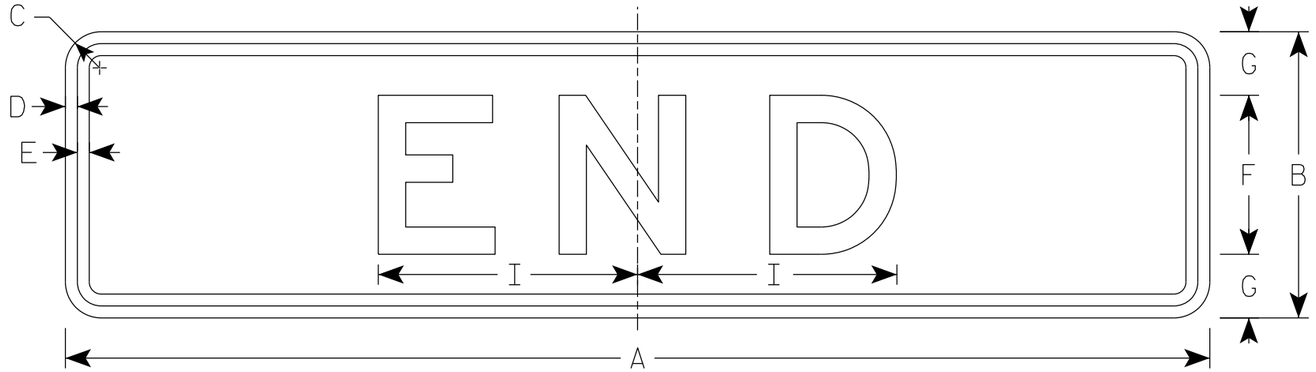
SHEET NO: 692 **E**

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E



R3-9C



R3-9D

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	6	1 1/2	3/8	3/8	3	1 1/2	7 3/4	4 7/8																		1.0
2M	24	6	1 1/2	3/8	3/8	3	1 1/2	7 3/4	4 7/8																		1.0
3	36	9	1 1/2	3/8	3/8	5	2	12 3/4	8 1/8																		2.25
4																											
5																											

STANDARD SIGN
R3-9C & R3-9D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

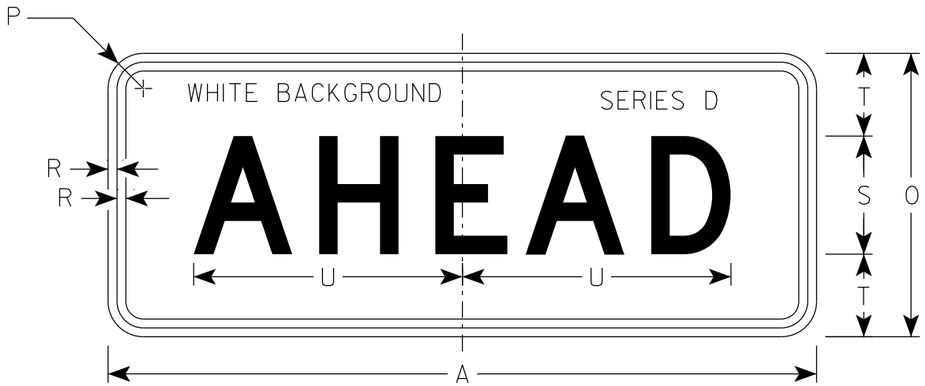
DATE 2/23/23 PLATE NO. R3-9C.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 693 | E

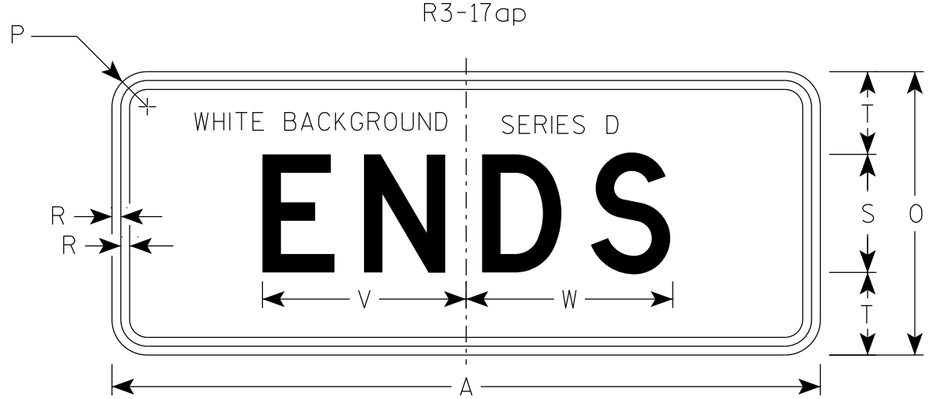
R3-17

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - AS SHOWN
   Message - BLACK
3. Message Series - C or as noted



R3-17ap



R3-17bp

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	R3-17 Area sq. ft.	R3-17ap Area sq. ft.	R3-17bp Area sq. ft.
1																													
2S	30	24	1 1/2	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/2	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
2M	30	24	1 1/2	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/2	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
3																													
4																													
5																													

STANDARD SIGN
R3-17 & R3-17a&bp

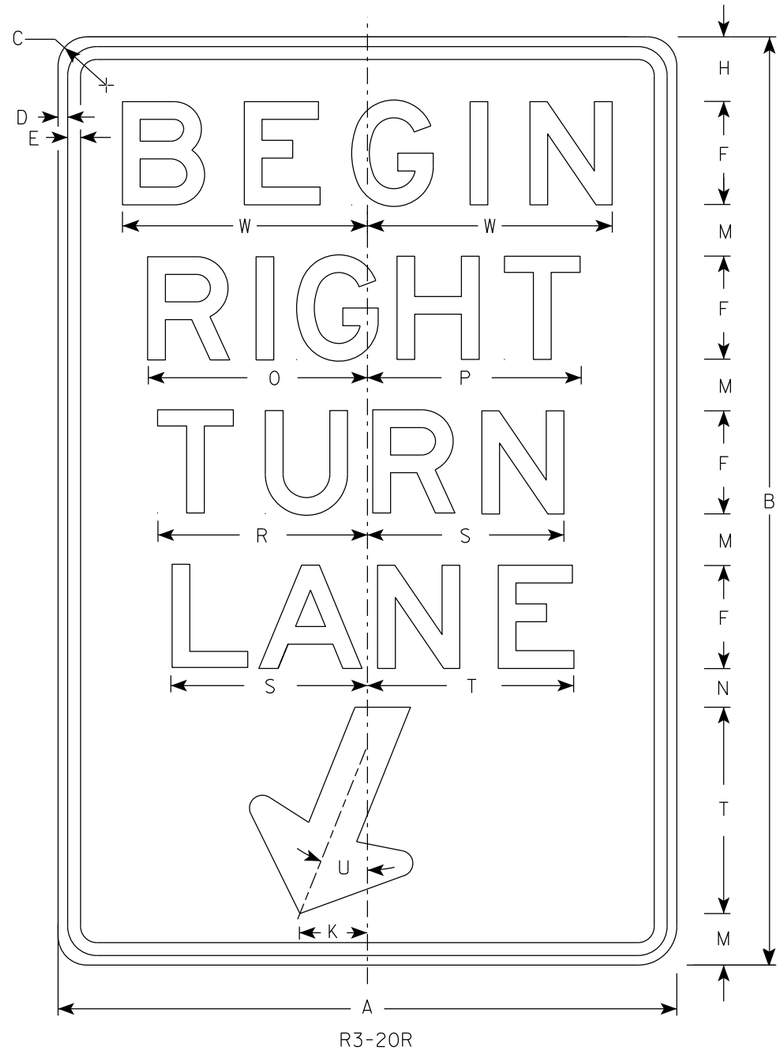
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-17.3

PROJECT NO:

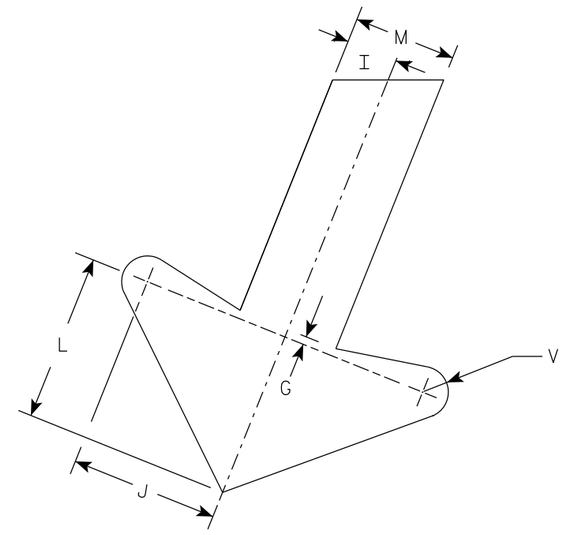
SHEET NO: 694 E



R3-20R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/2	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/2	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 7/8	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

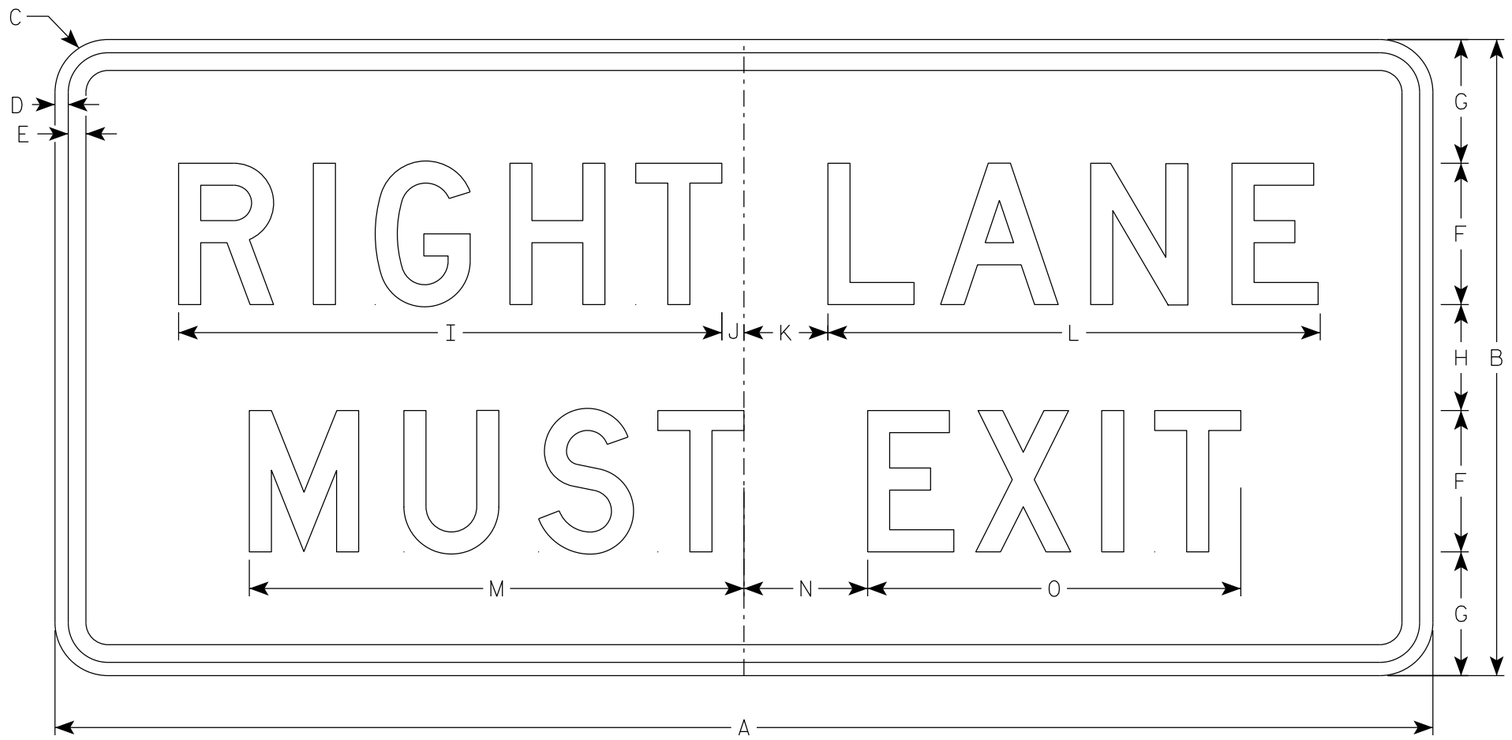
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-20R.7

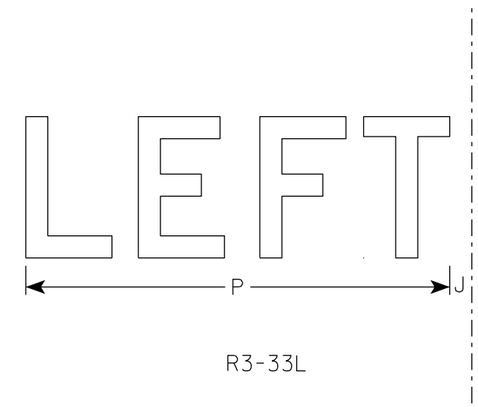
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 695 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



R3-33R



R3-33L

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																											
2M																											
3																											
4	78	36	3	¾	1	8	7	6	30 ¾	1 ¼	4 ¾	27 ⅞	28	7	21 ⅛	24											19.5
5	78	36	3	¾	1	8	7	6	30 ¾	1 ¼	4 ¾	27 ⅞	28	7	21 ⅛	24											19.5

STANDARD SIGN
R3-33

WISCONSIN DEPT OF TRANSPORTATION

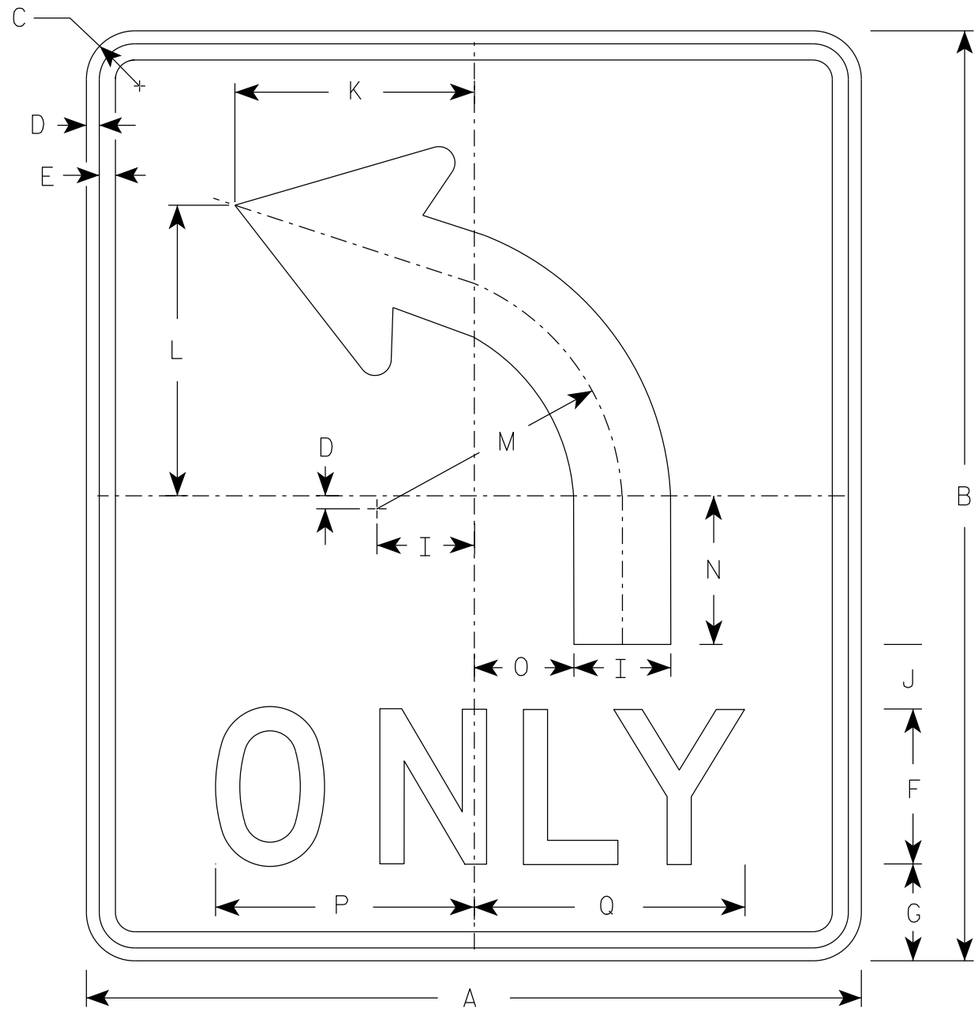
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/27/24 PLATE NO. R3-33.2

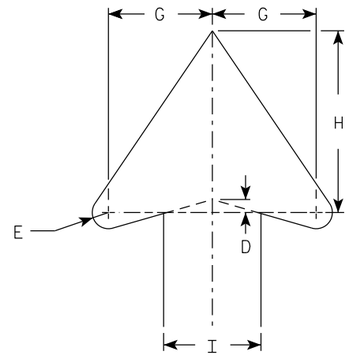
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 696 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. R3-50R is the same as R3-50L except curved portion of arrow points right.



R3-50L



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	36	1 7/8	1/2	5/8	6	4	7	3 3/4	2 1/2	9 1/4	11 1/4	9 1/2	5 3/4	3 7/8	10	10 1/2										7.5
2M	30	36	1 7/8	1/2	5/8	6	4	7	3 3/4	2 1/2	9 1/4	11 1/4	9 1/2	5 3/4	3 7/8	10	10 1/2										7.5
3																											
4																											
5																											

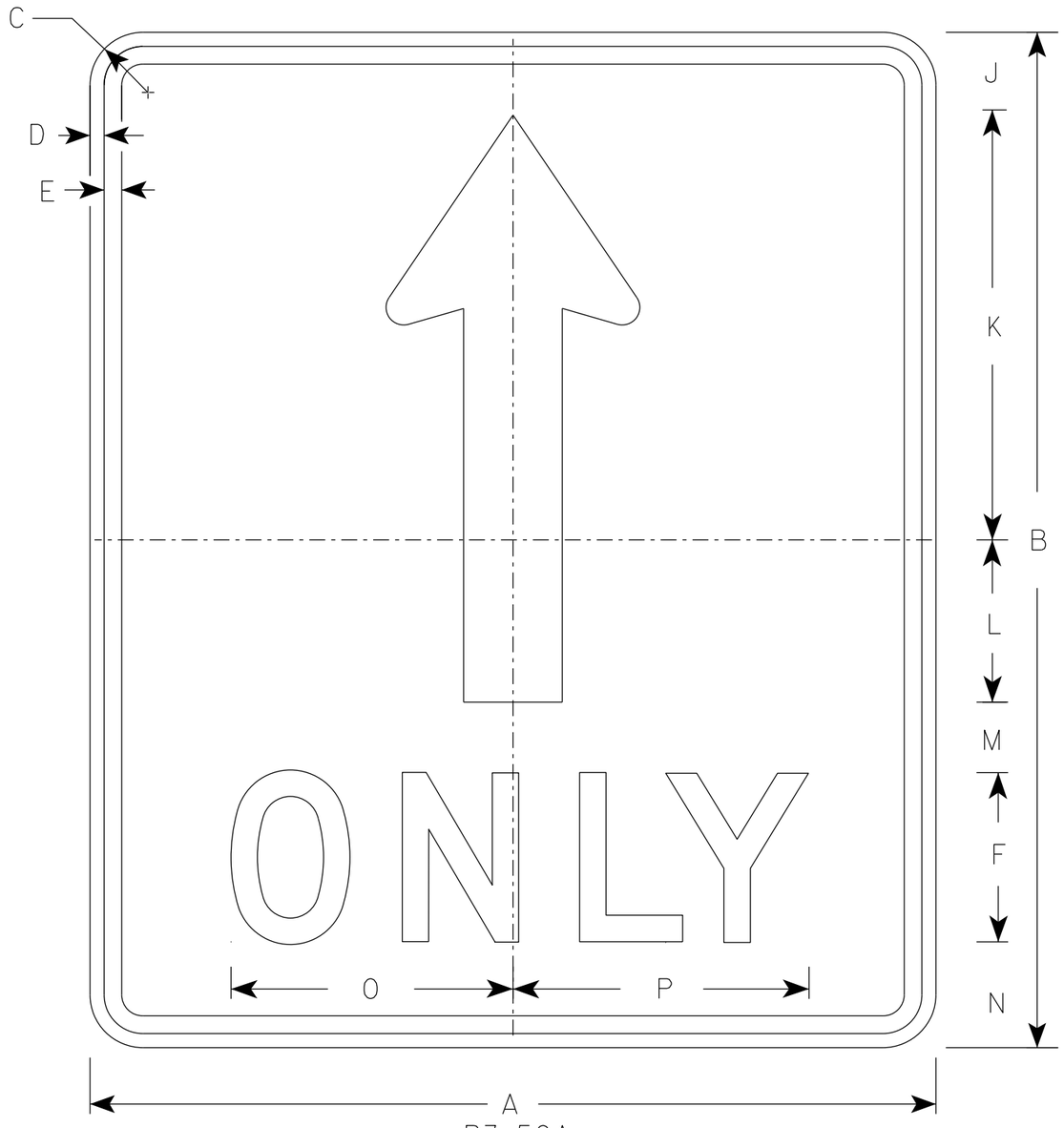
STANDARD SIGN
R3-50

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-50.3

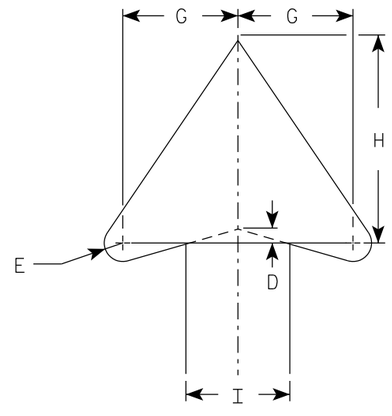
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 697	E



R3-50A

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	36	1 7/8	1/2	5/8	6	4	7	3 1/2	2 3/4	15 1/4	5 3/4	2 1/2	3 3/4	10	10 1/2											7.5
2M	30	36	1 7/8	1/2	5/8	6	4	7	3 1/2	2 3/4	15 1/4	5 3/4	2 1/2	3 3/4	10	10 1/2											7.5
3																											
4																											
5																											

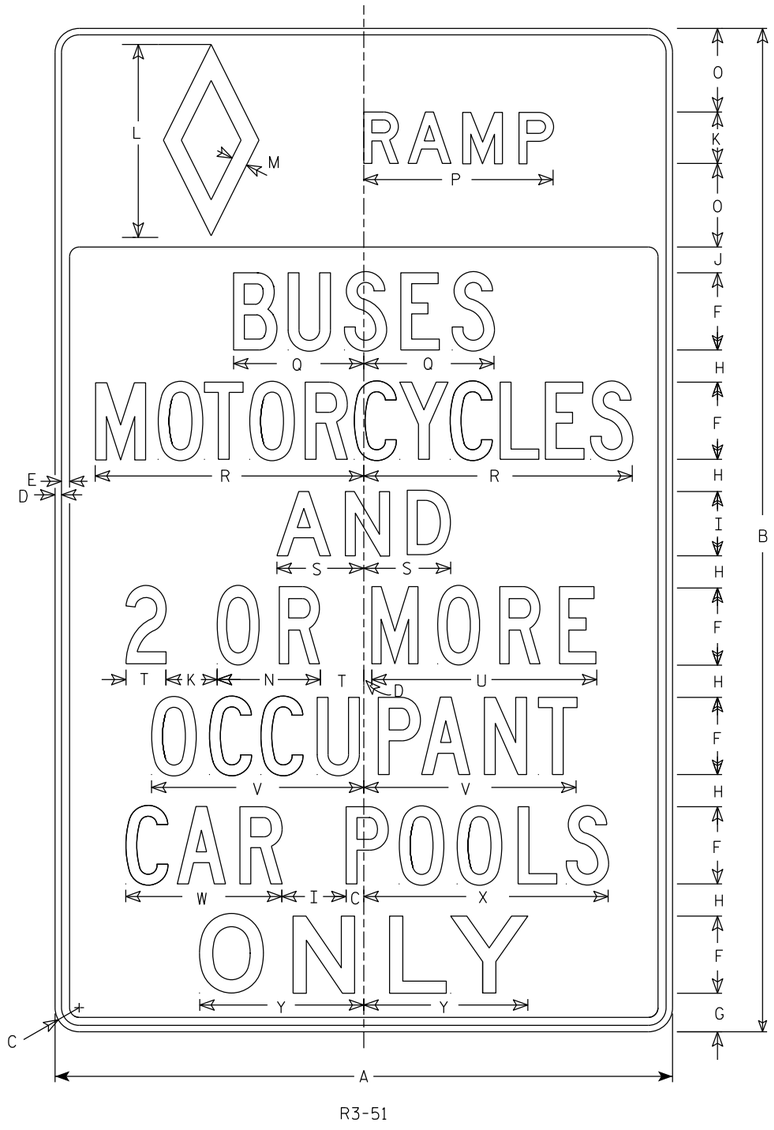
STANDARD SIGN
R3-50A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-50A.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 698 | E



R3-51

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See Note 5
   Message - See Note 5
3. Message Series - See Note 6
4. Top symbol and legend are white Type H Reflective with Black background.
   Bottom legend is Black with White Type H Reflective background.
5. Lines 1 and 4 are Series D.
   Lines 2, 3, 5, 6, and 7 are Series C.
   Bottom Line 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																											
2S	48	78	3	1/2	5/8	6	3	2 1/2	5	2	4	15	1 1/4	8	6 1/2	14 3/4	10 1/8	20 7/8	6 3/4	3 1/8	17 1/2	16 1/2	12 1/8	19	12 3/4		26.0
2M	48	78	3	1/2	5/8	6	3	2 1/2	5	2	4	15	1 1/4	8	6 1/2	14 3/4	10 1/8	20 7/8	6 3/4	3 1/8	17 1/2	16 1/2	12 1/8	19	12 3/4		26.0
3																											
4																											
5																											

STANDARD SIGN
R3-51

WISCONSIN DEPT OF TRANSPORTATION

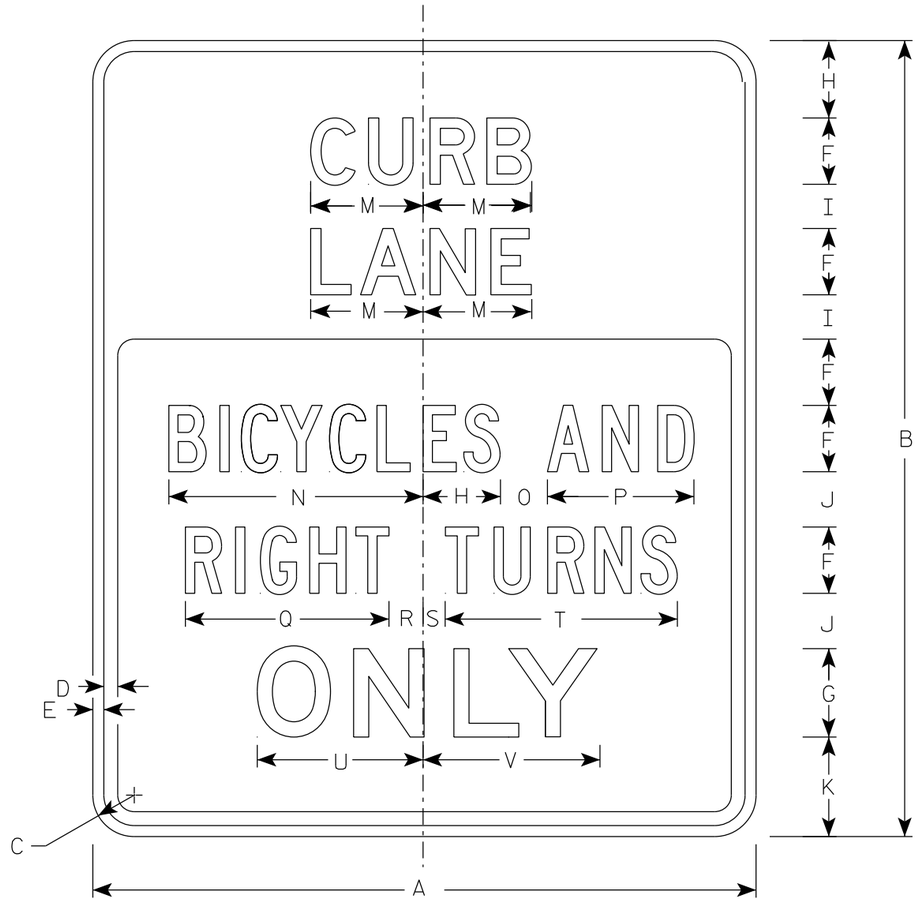
APPROVED Matthew P Rauch
for State Traffic Engineer

DATE 3/27/24 PLATE NO. R3-51.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 699 | E

7

7



R3-52

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Message Series - Lines 1 and 2 are series D
   Lines 3 and 4 are Series C
   Bottom line is series E
4. Top Message is White Type H reflective with a Black background,
   Bottom Message is Black with White Type H reflective background

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 7/8	1/2	5/8	3	4	3 1/2	2	2 1/2	4 1/2		5	11 1/2	2 1/8	6 5/8	9 1/4	1 1/2	1	10 1/2	7 1/2	8					7.5
2M	30	36	1 7/8	1/2	5/8	3	4	3 1/2	2	2 1/2	4 1/2		5	11 1/2	2 1/8	6 5/8	9 1/4	1 1/2	1	10 1/2	7 1/2	8					7.5
3																											
4																											
5																											

STANDARD SIGN
R3-52

WISCONSIN DEPT OF TRANSPORTATION

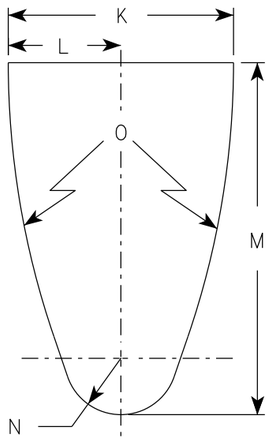
APPROVED Matthew R Rauch
for State Traffic Engineer

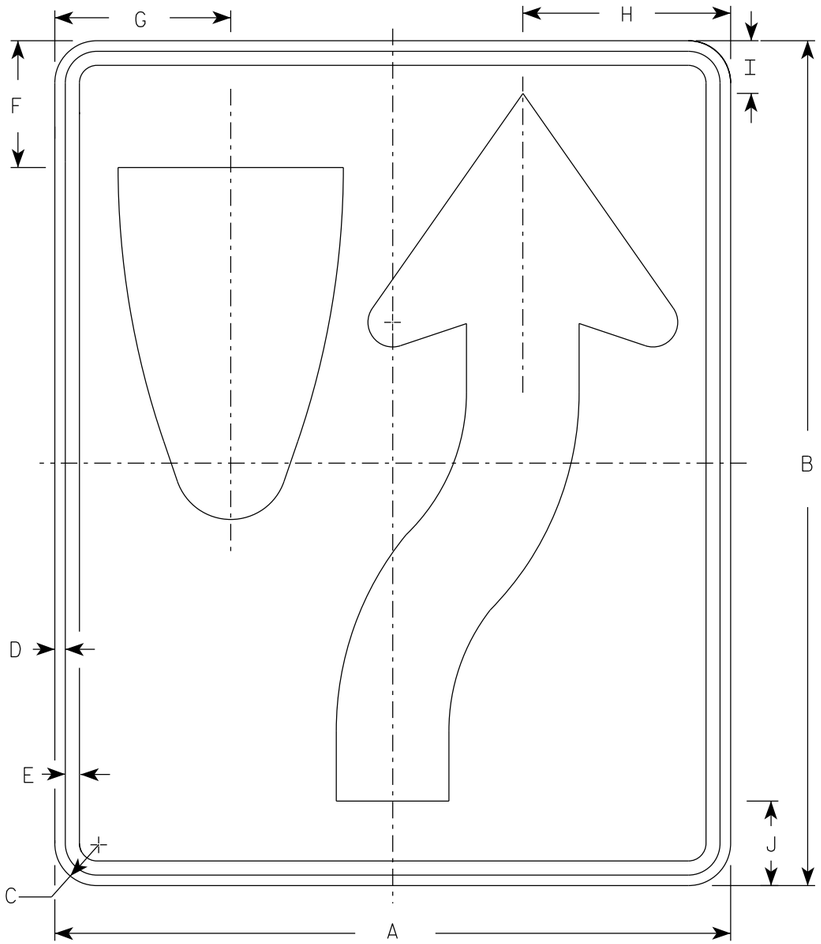
DATE 2/23/23 PLATE NO. R3-52.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 700 | E

7

DIVIDER DETAIL



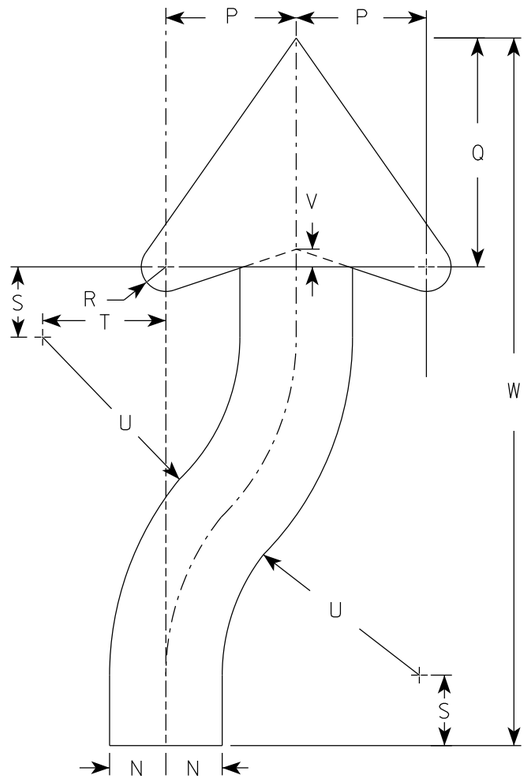


R4-7

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. R4-8 is the same as R4-7 except Legend is reversed.

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/2	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/2	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/2	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 7/8	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 7/8	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	3	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

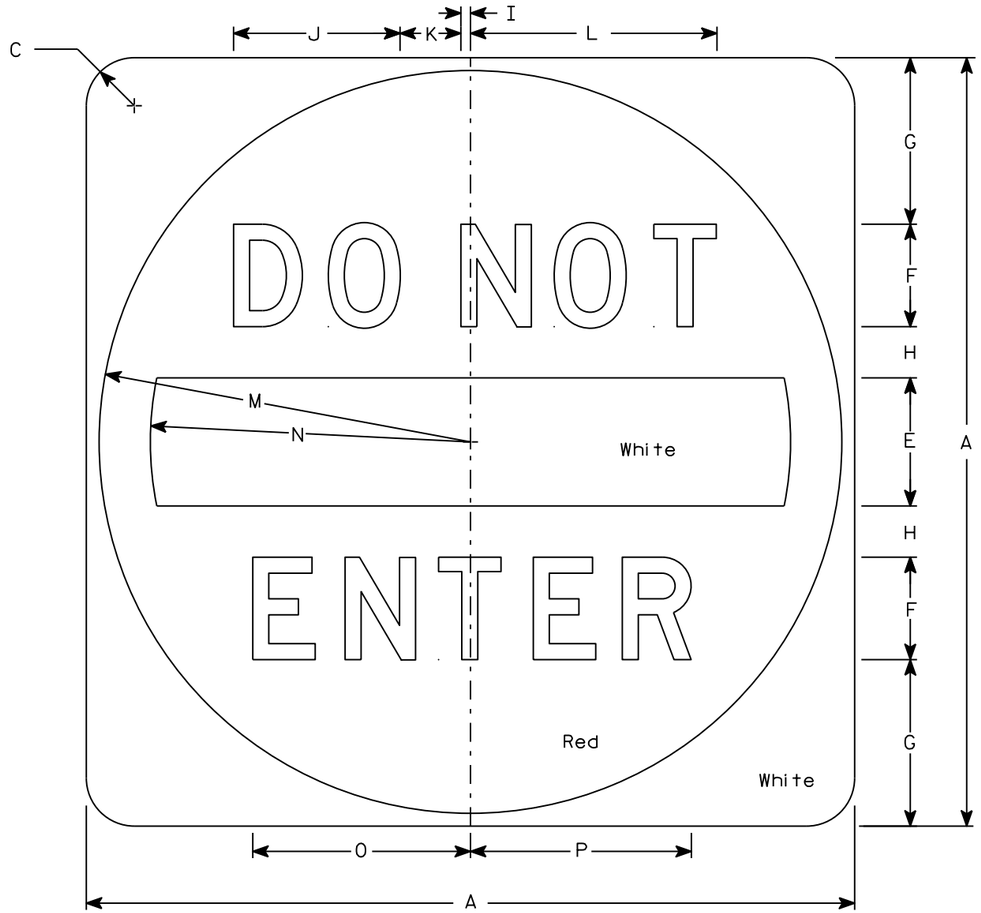
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/17/23 PLATE NO. R4-7.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 701 | 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

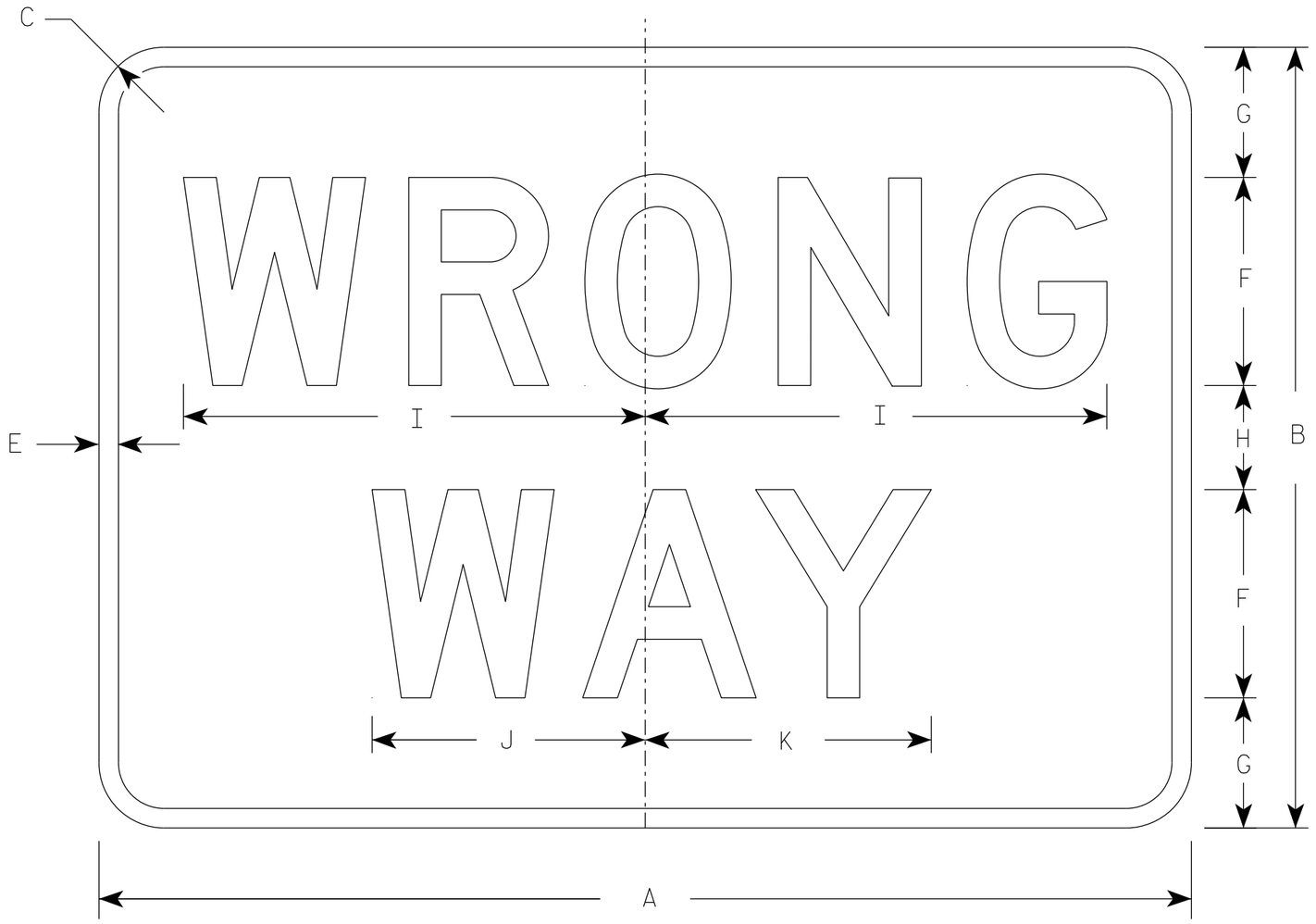
STANDARD SIGN
R5-1

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: 702 | E



R5-1A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Red
   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	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	1 1/2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	1 7/8		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	1 7/8		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	1 7/8		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	1 7/8		3/4	8	5	4	17 3/4	10 1/2	11																8.75

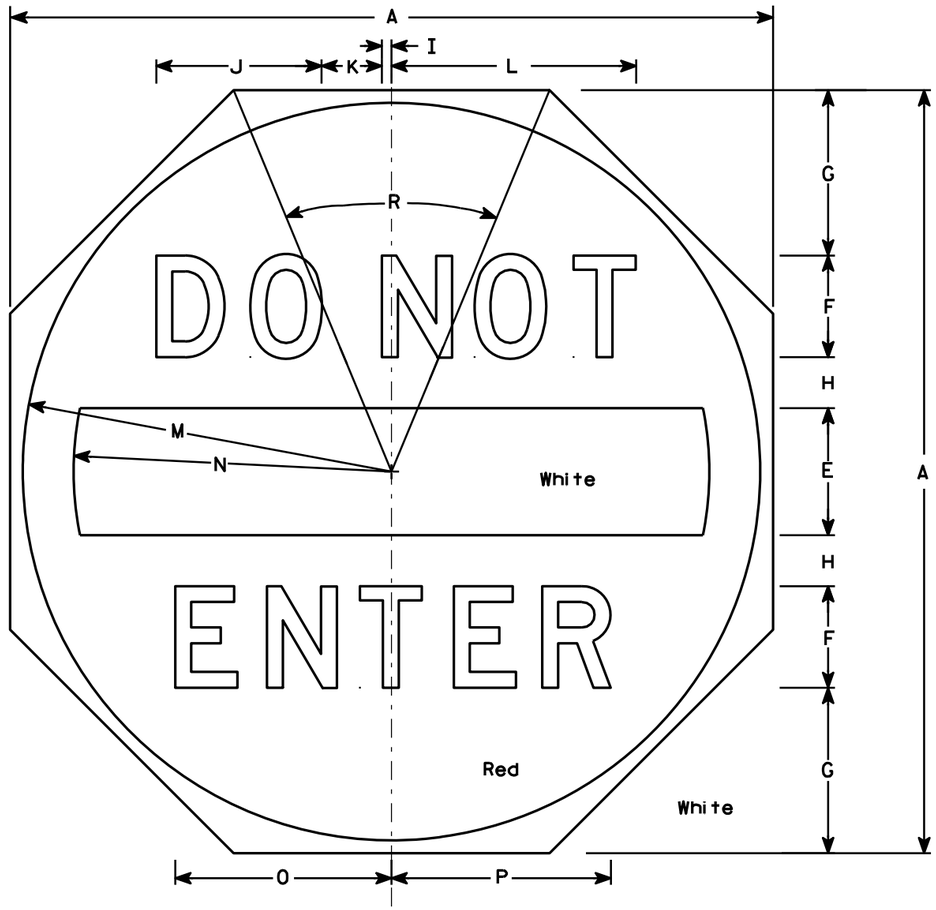
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/17/23 PLATE NO. R5-1A.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 703 | E



R5-1C

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8		45°									5.18
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		45°									7.46
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		45°									7.46
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		45°									13.25
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		45°									13.25

STANDARD SIGN
R5-1C

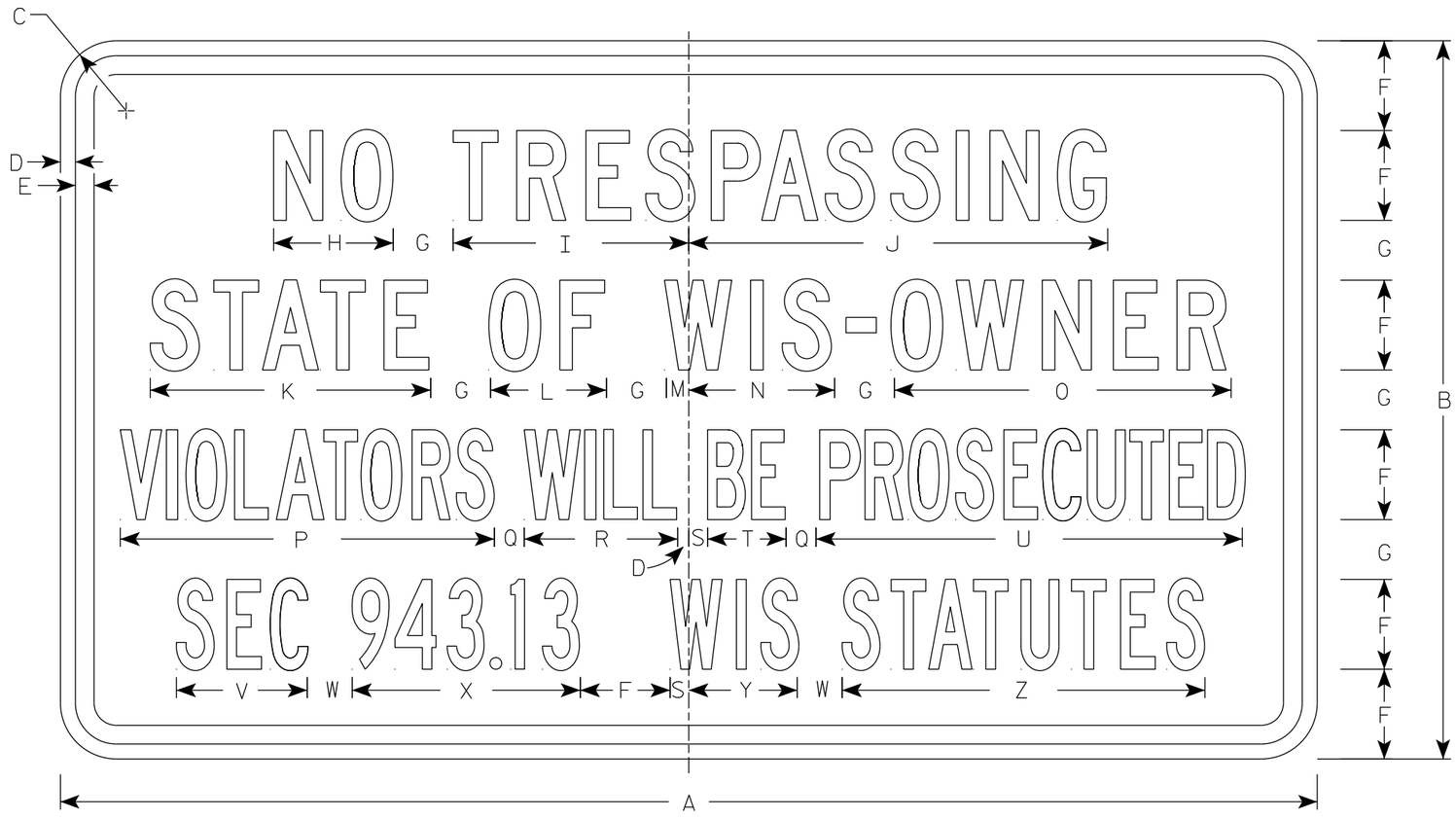
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

State Traffic Engineer

DATE 3/23/11 PLATE NO. R5-1C.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 704 | E



R5-98

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - See note 4
4. Lines 1 and 2 are Series C
   Lines 3 and 4 are Series B

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	42	24	1 7/8	1/2	5/8	3	2	4	7 7/8	14	9 3/8	3 7/8	3/4	4 7/8	11 1/4	12 1/2	1	5 1/8	5/8	2 5/8	14 1/4	4 3/8	1 1/2	7 5/8	3 5/8	12 1/8	7.00
2M	42	24	1 7/8	1/2	5/8	3	2	4	7 7/8	14	9 3/8	3 7/8	3/4	4 7/8	11 1/4	12 1/2	1	5 1/8	5/8	2 5/8	14 1/4	4 3/8	1 1/2	7 5/8	3 5/8	12 1/8	7.00
3																											
4																											
5																											

STANDARD SIGN
R5-98

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/30/23 PLATE NO. R5-98.7

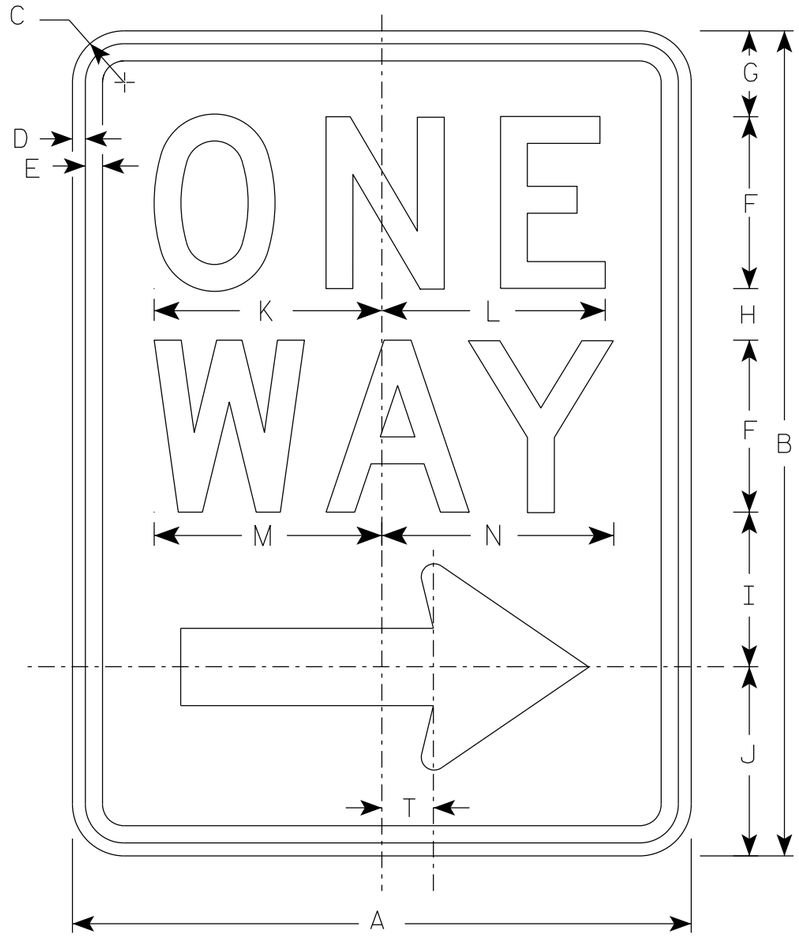
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 705 | E

7

7

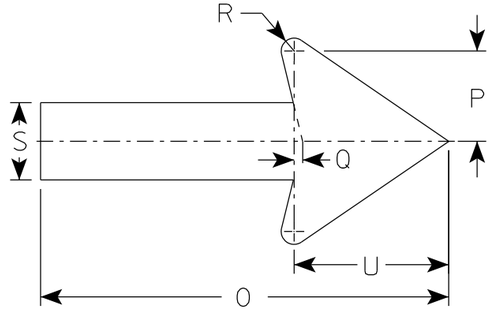
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. R6-2L same as R6-2R except arrow points to the left.



R6-2R

Arrow Detail



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

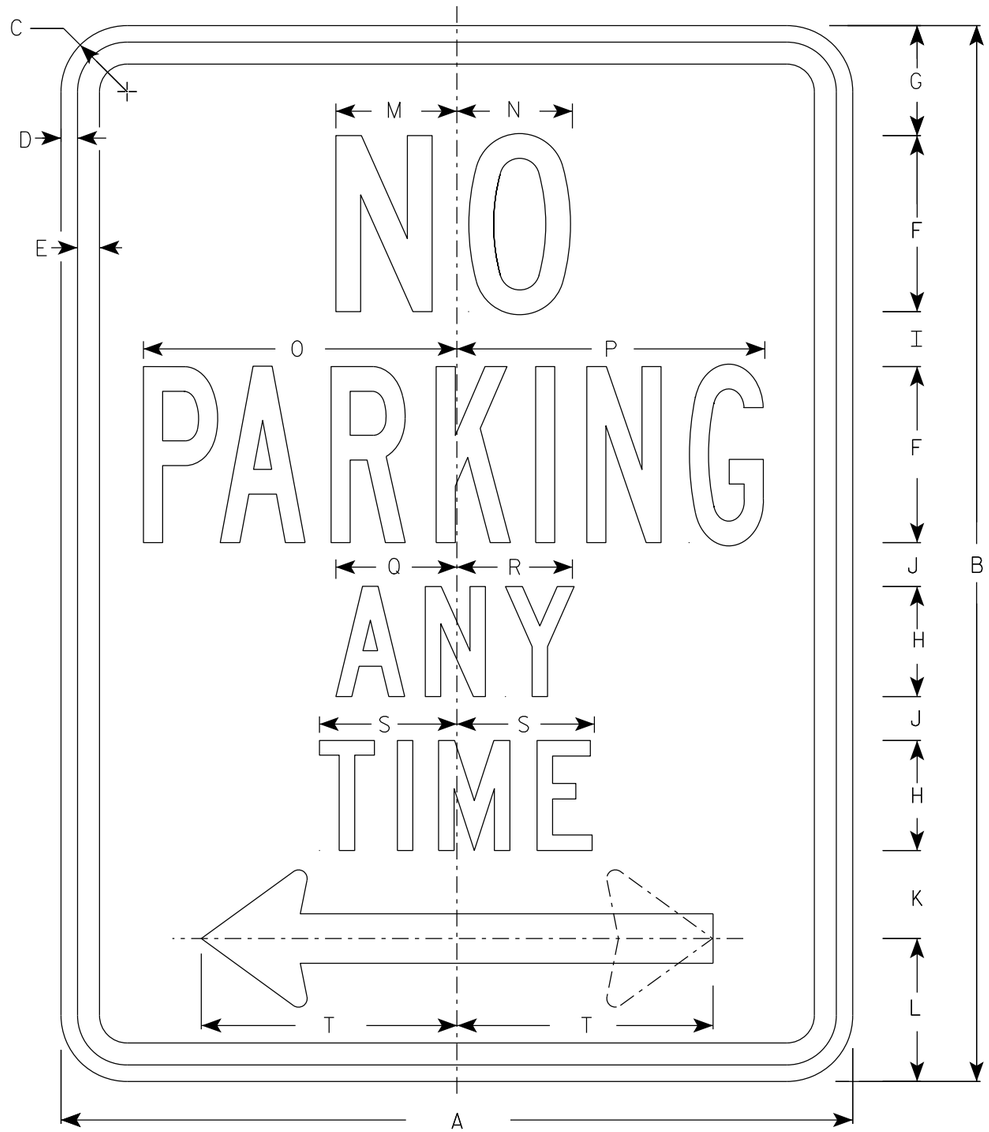
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 706 | E

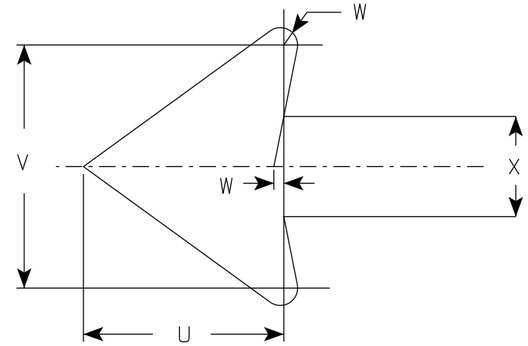


R7-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 4
4. Lines 1, 3 and 4 are series C, line 2 is series B.
5. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)

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	12	18	1 ½	⅜	⅜	3	1 ⅞	2	⅞	⅝	1 ½	2 ½	2	2	4 ⅞	4 ⅞	2 ¼	2 ⅛	2 ½	3 ⅞	1 ½	1 ¾	⅛	¾			1.5
2S	18	24	1 ½	⅜	½	4	2 ½	2 ½	1 ¼	1	2	3 ¼	2 ¾	2 ⅝	7 ⅛	7	2 ¾	2 ⅝	3 ⅛	5 ⅞	2 ¼	2 ⅝	¼	1 ⅛			3.0
2M	24	30	1 ½	⅜	½	5	3	3	2	1 ¼	2 ½	4	3 ¼	3 ⅜	9 ¼	9 ¼	3 ¼	3 ¼	3 ¾	7 ¾	3	3 ½	¼	1 ½			5.0
3	24	30	1 ½	⅜	½	5	3	3	2	1 ¼	2 ½	4	3 ¼	3 ⅜	9 ¼	9 ¼	3 ¼	3 ¼	3 ¾	7 ¾	3	3 ½	¼	1 ½			5.0
4																											
5																											

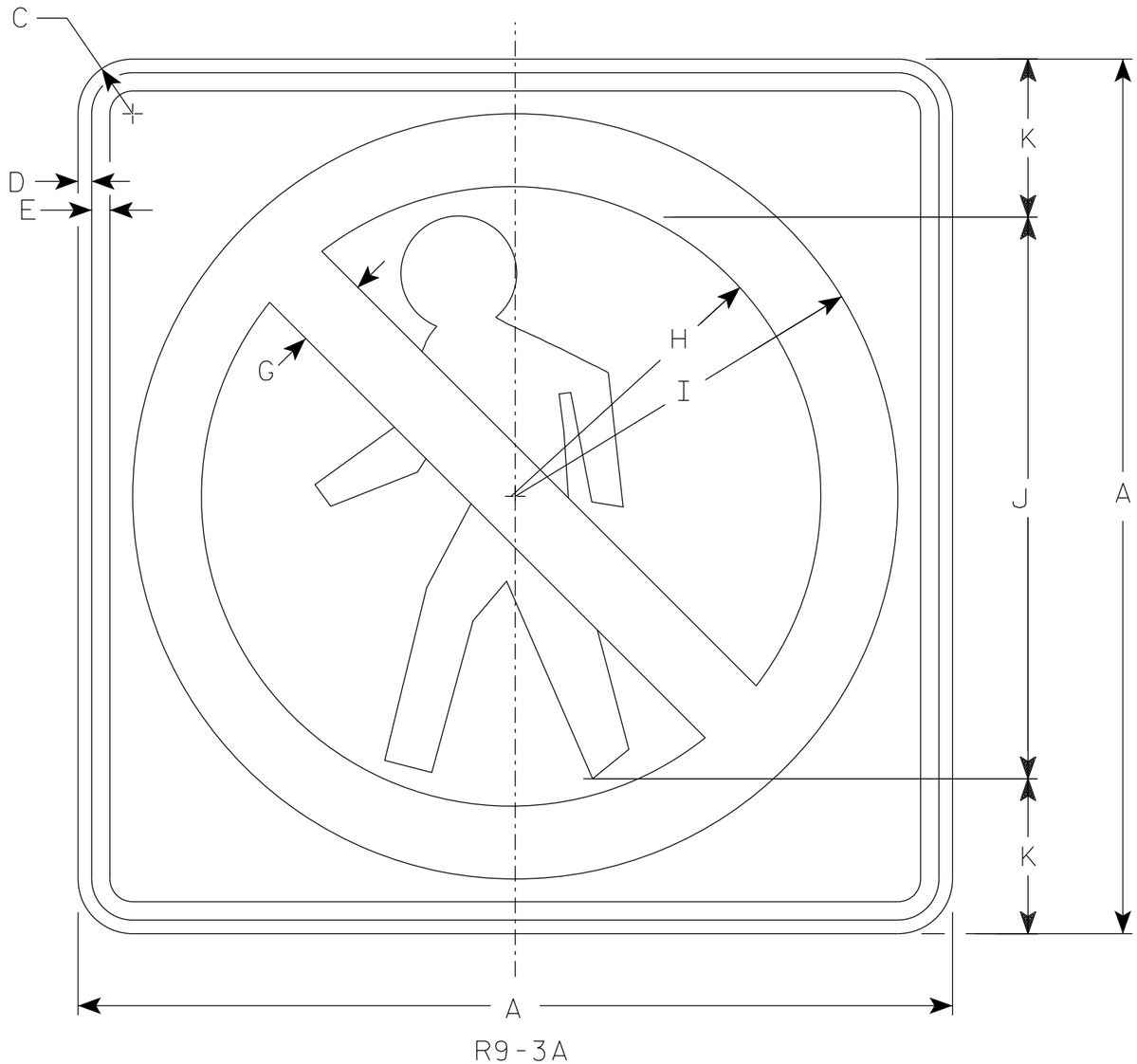
STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/26/23 PLATE NO. R7-1.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 707 E



R9-3A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Pedestrian are non-reflective black. Circle with diagonal bar is reflective red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/2	3/8	3/8		1 1/2	6 1/4	7 7/8	12	3																2.25
2S	24		1 1/2	3/8	1/2		2	8 1/2	10 1/2	15	4																4.00
2M	24		1 1/2	3/8	1/2		2	8 1/2	10 1/2	15	4																4.00
3																											
4																											
5																											

STANDARD SIGN
R9-3A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

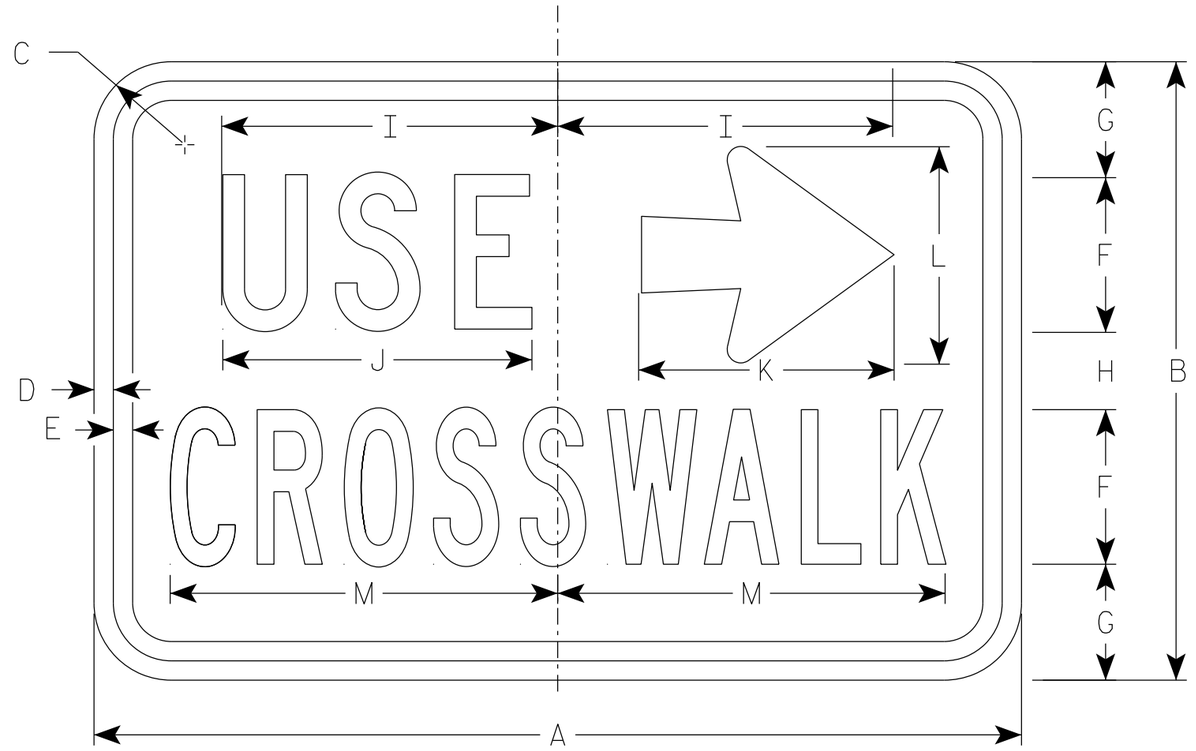
DATE 1/23/24 PLATE NO. R9-3A.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 708 E

7

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C Line 1, Series B Line 2



R9-3B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	18	12	1 1/2	3/8	3/8	3	2 1/4	1 1/2	6 1/2	6	5	4 1/4	7 1/2														1.5
2M	18	12	1 1/2	3/8	3/8	3	2 1/4	1 1/2	6 1/2	6	5	4 1/4	7 1/2														1.5
3																											
4																											
5																											

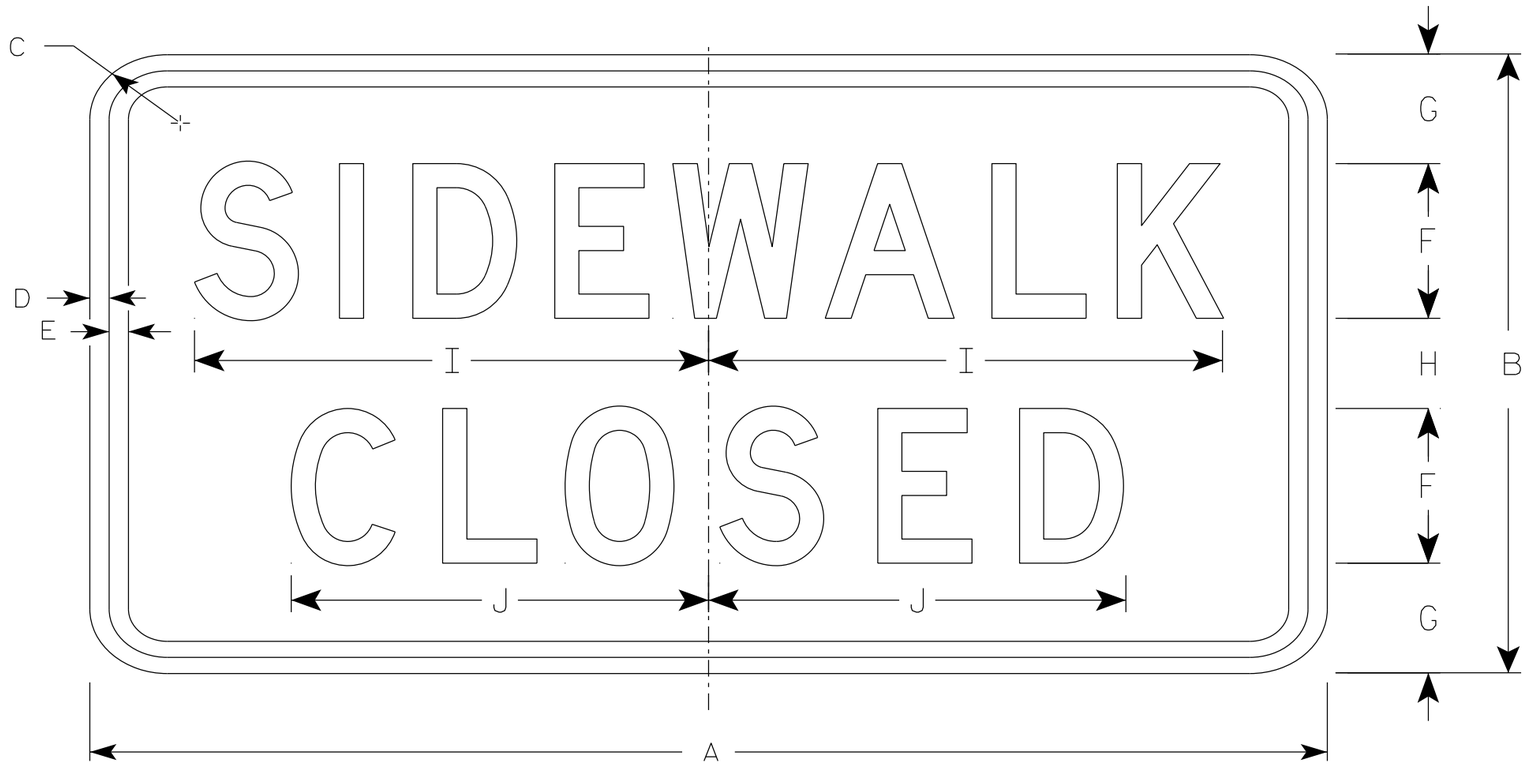
STANDARD SIGN
R9-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/23/24 PLATE NO. R9-3B.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 709	E



R9-9

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
2M	24	12	1 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
3	30	18	1 ½	½	½	4	3 ½	3	12 ½	10 ¼																	3.75
4																											
5																											

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

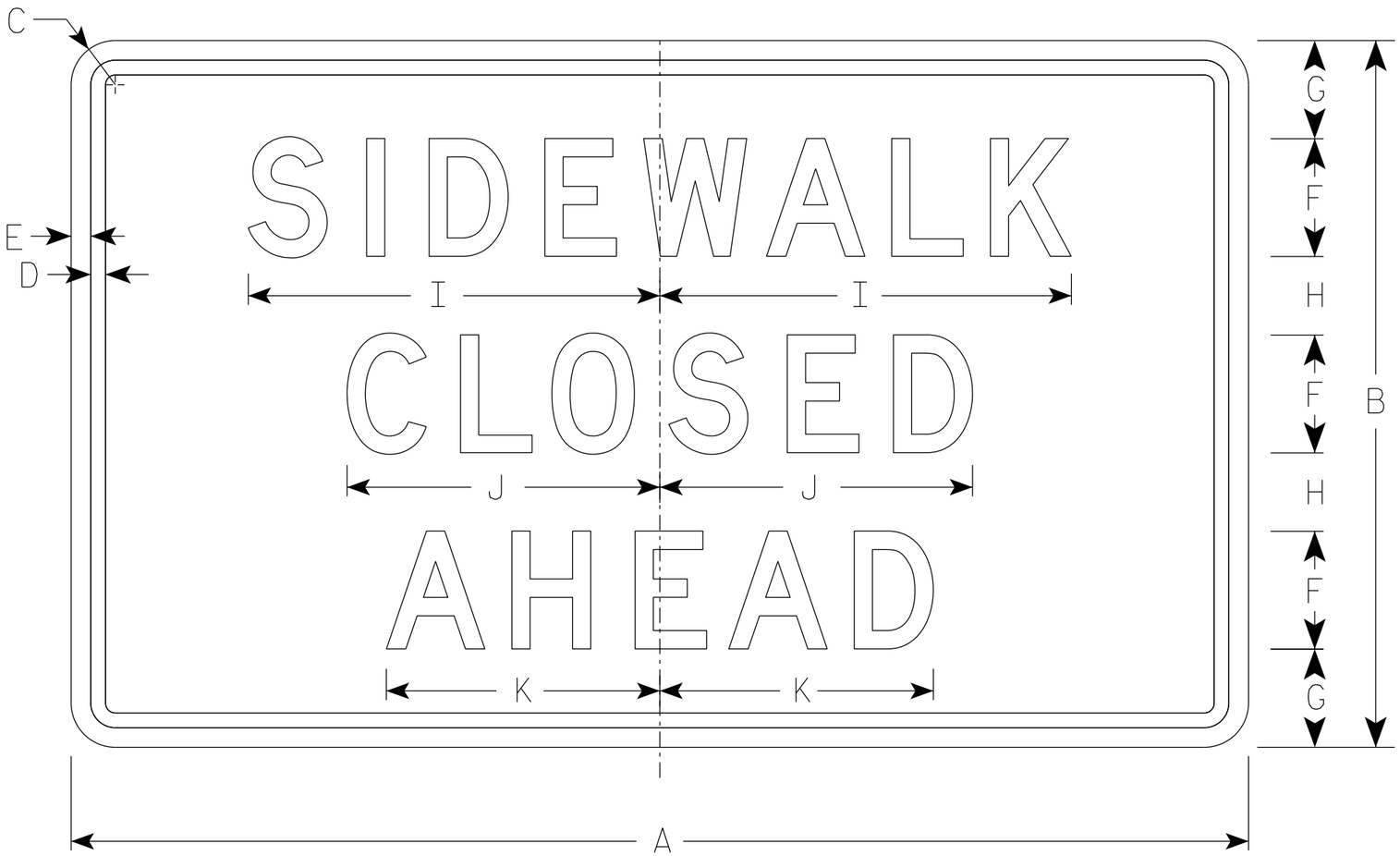
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 710 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



R9-9A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 ½	⅜	½	3	2 ½	2	10 ½	8	7																3.75
2M	30	18	1 ½	⅜	½	3	2 ½	2	10 ½	8	7																3.75
3																											
4																											
5																											

STANDARD SIGN
R9-9A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9A.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 711 | E

R10-71

R10-71L

R10-71R

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	R10-71L&R Area sq. ft.	R10-71 Area sq. ft.
1																												
2S	72	36	3	¾	1	18	5	4	6	20 ⅝	11 ¾	9 ⅛	8 ½	12 ⅞	9 ⅞	16 ⅛	23 ⅞	30	5 ⅝	26 ¾	66	23 ⅝	8 ¾	13	26 ⅞	27	18.0	16.5
2M	72	36	3	¾	1	18	5	4	6	20 ⅝	11 ¾	9 ⅛	8 ½	12 ⅞	9 ⅞	16 ⅛	23 ⅞	30	5 ⅝	26 ¾	66	23 ⅝	8 ¾	13	26 ⅞	27	18.0	16.5
3																												
4																												
5																												

STANDARD SIGN
R10-71

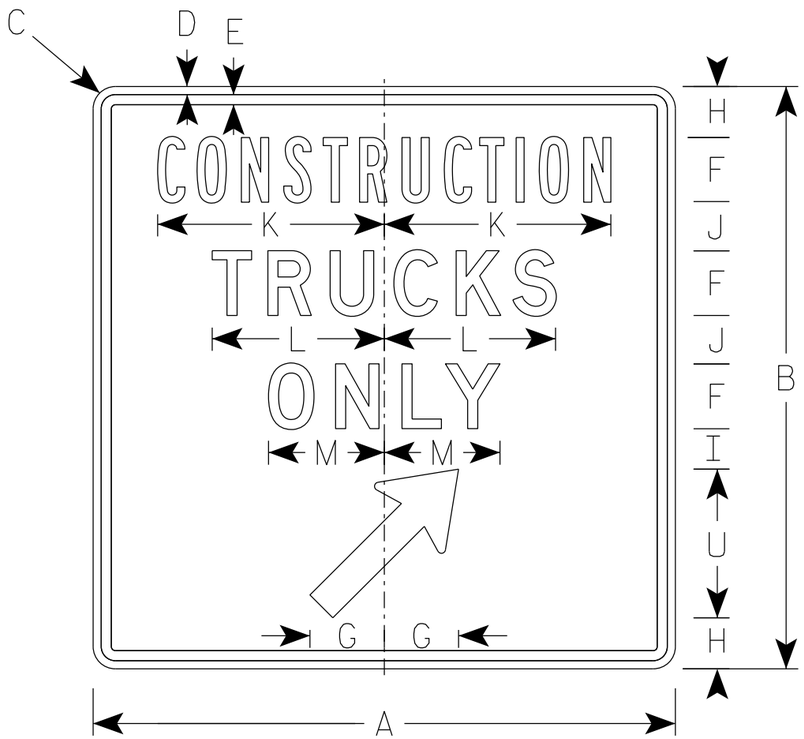
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R10-71.4

PROJECT NO:

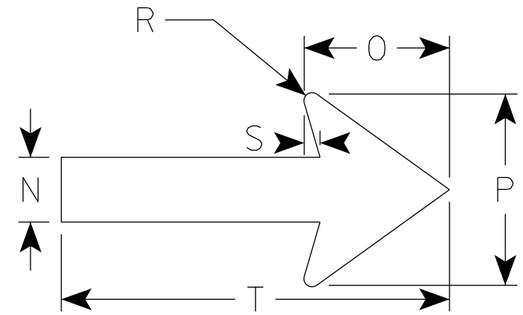
SHEET NO: 712 E



R10-72R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 Series B Line 2-3 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. R10-72L is same as R10-72R except arrow is reversed



ARROW DETAIL

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

STANDARD SIGN
R10-72

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R10-72.2

PROJECT NO:

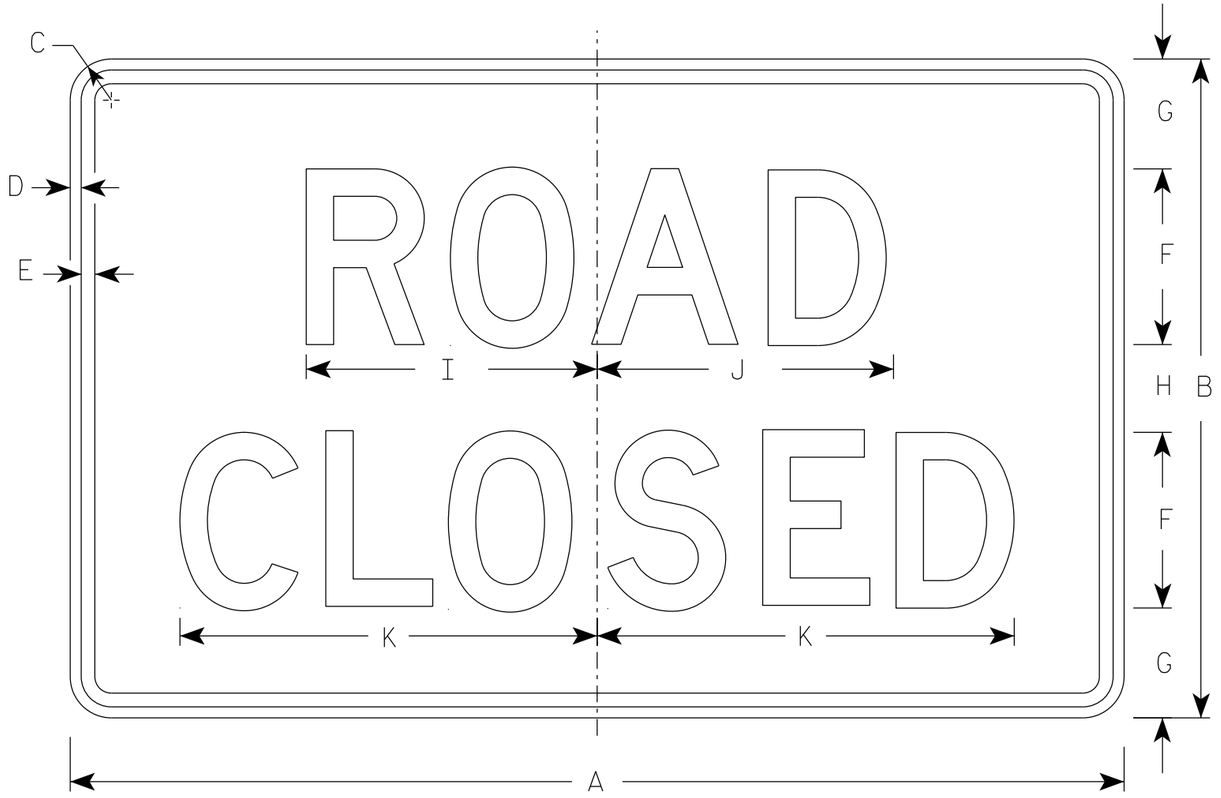
SHEET NO: 713 E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R1072.dgn PLOT DATE : 5-FEB 2024 1:45 PLOT BY : mscj9h PLOT NAME :

WISDOT/CADDS SHEET 42

7

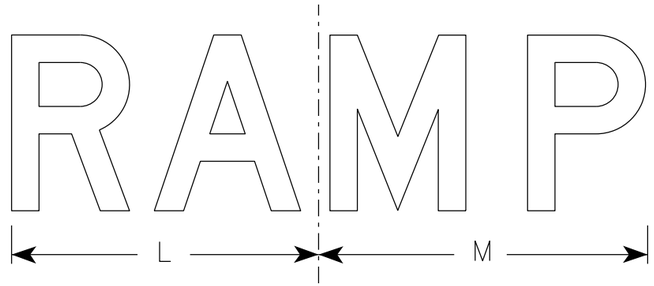
7



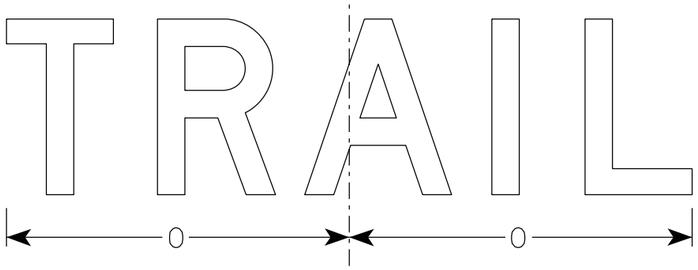
R11-2

NOTES

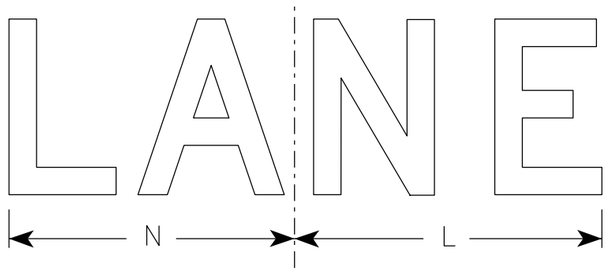
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

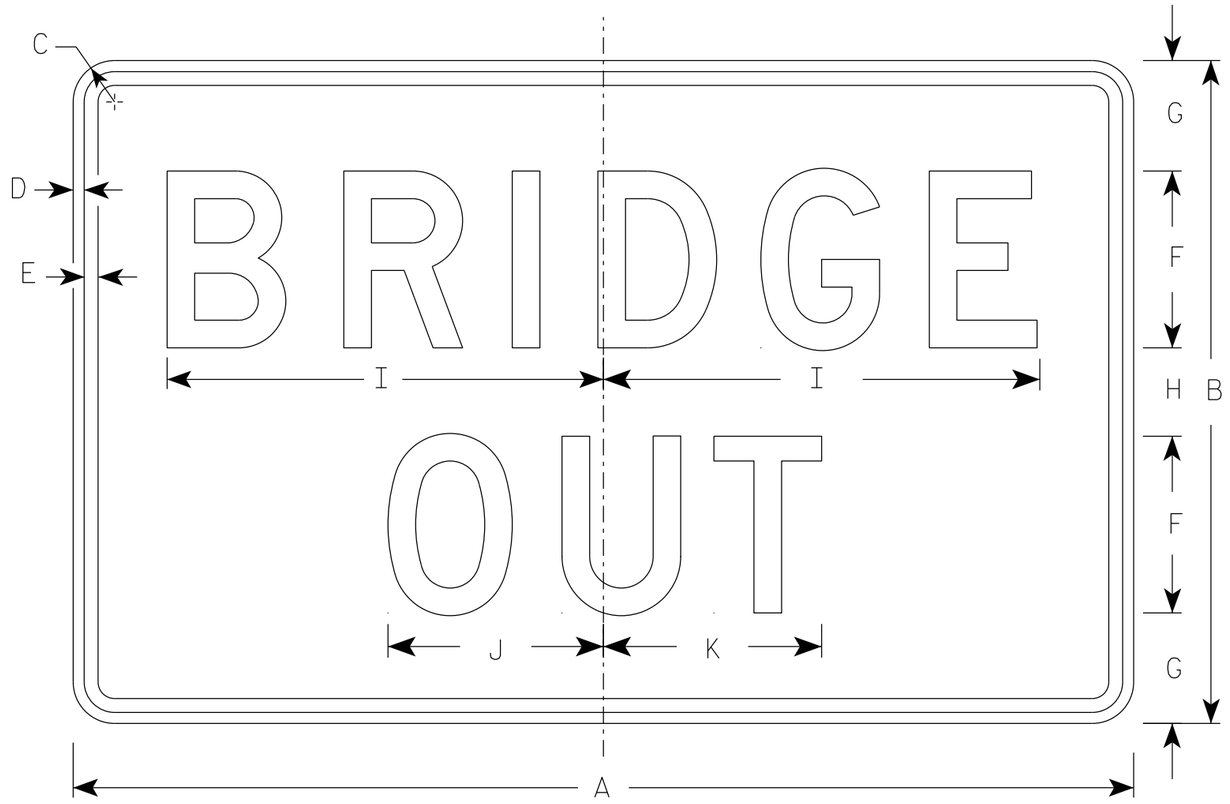
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-2.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 714 E



R11-2B

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	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0

STANDARD SIGN
R11-2B

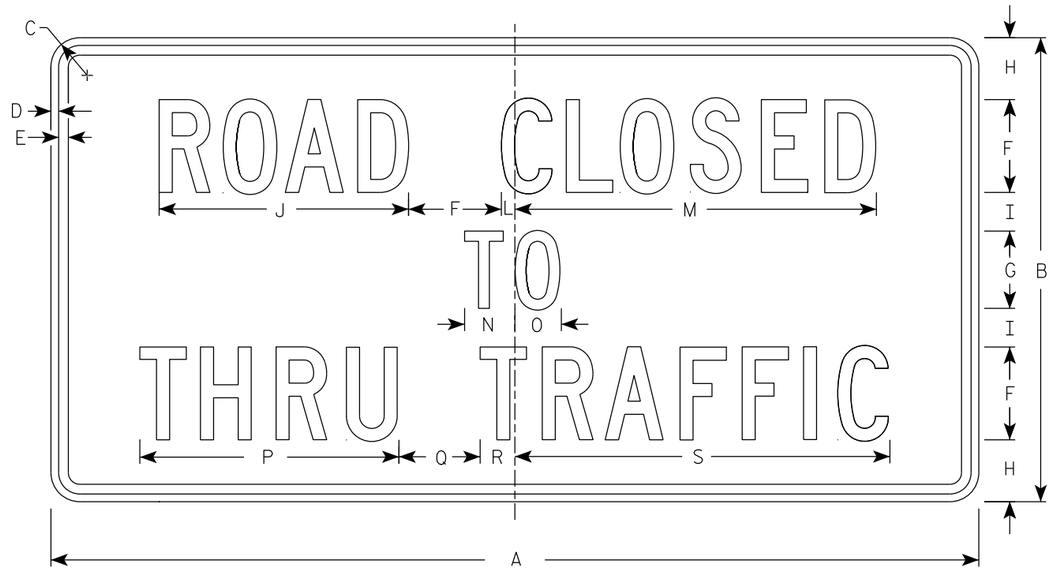
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-2B.3

PROJECT NO:

SHEET NO: 715 E



R11-4

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.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 7/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 7/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

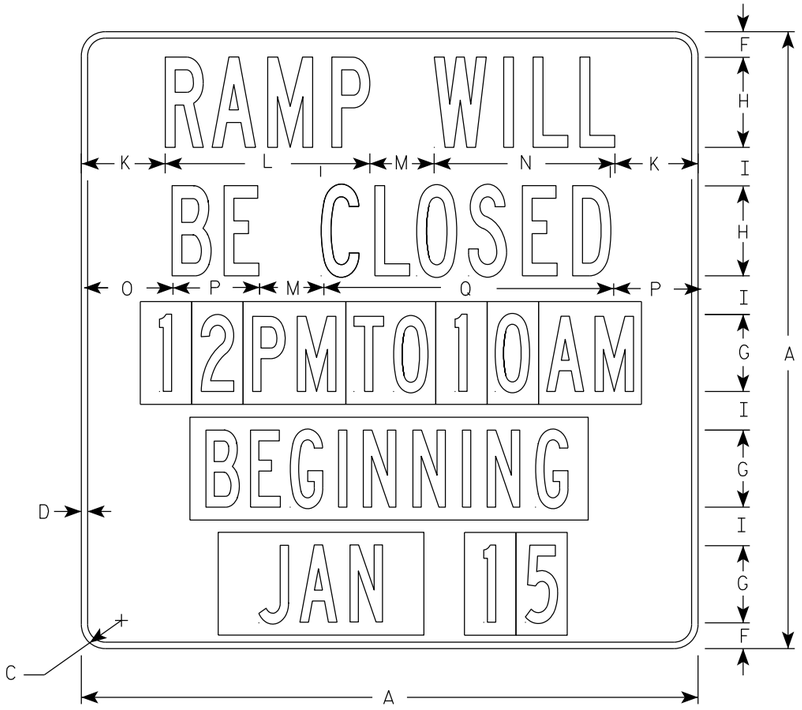
STANDARD SIGN
R11 - 4

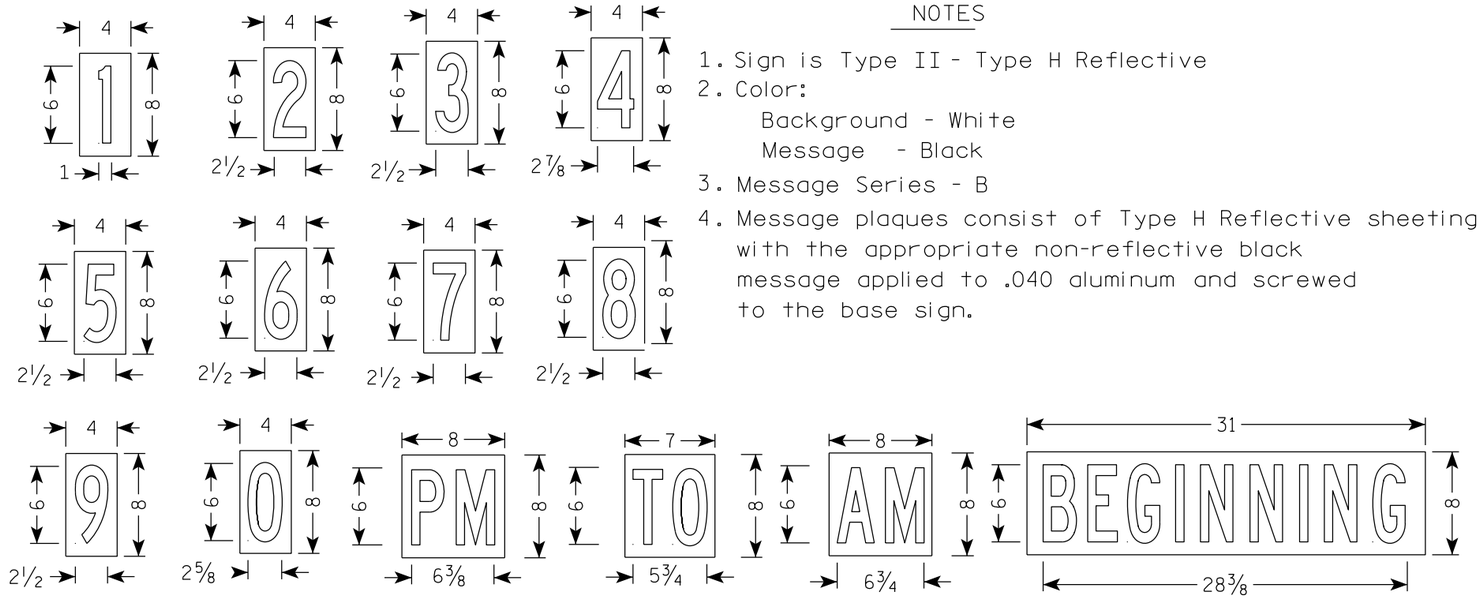
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-4.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 716	E





NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - B
4. Message plaques consist of Type H Reflective sheeting with the appropriate non-reflective black message applied to .040 aluminum and screwed to the base sign.

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		1 7/8	1/2		2	6	7	3		6 1/2	15 7/8	5	14 1/8	6 7/8	6 3/4	22 1/2										16.0
2M	48		1 7/8	1/2		2	6	7	3		6 1/2	15 7/8	5	14 1/8	6 7/8	6 3/4	22 1/2										16.0
3																											
4																											
5																											

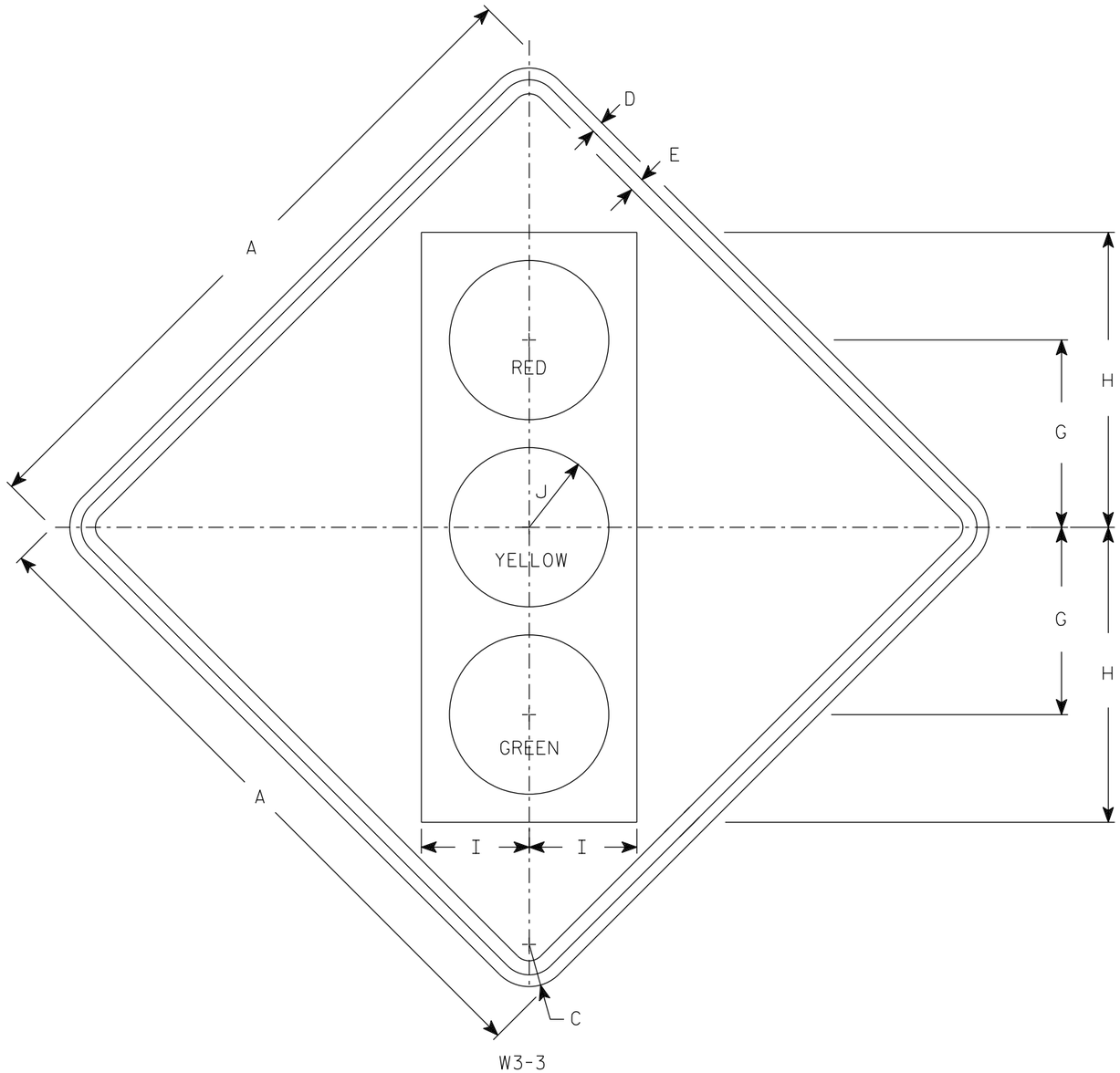
STANDARD SIGN
R11-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/8/24 PLATE NO. R11-51.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 717 | E



W3-3

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - See Note 3
3. 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 7/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		2 1/4	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		2 1/4	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		2 1/4	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		3	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		3	3/4	1		12 1/2	20	7 1/2	5																	16.0

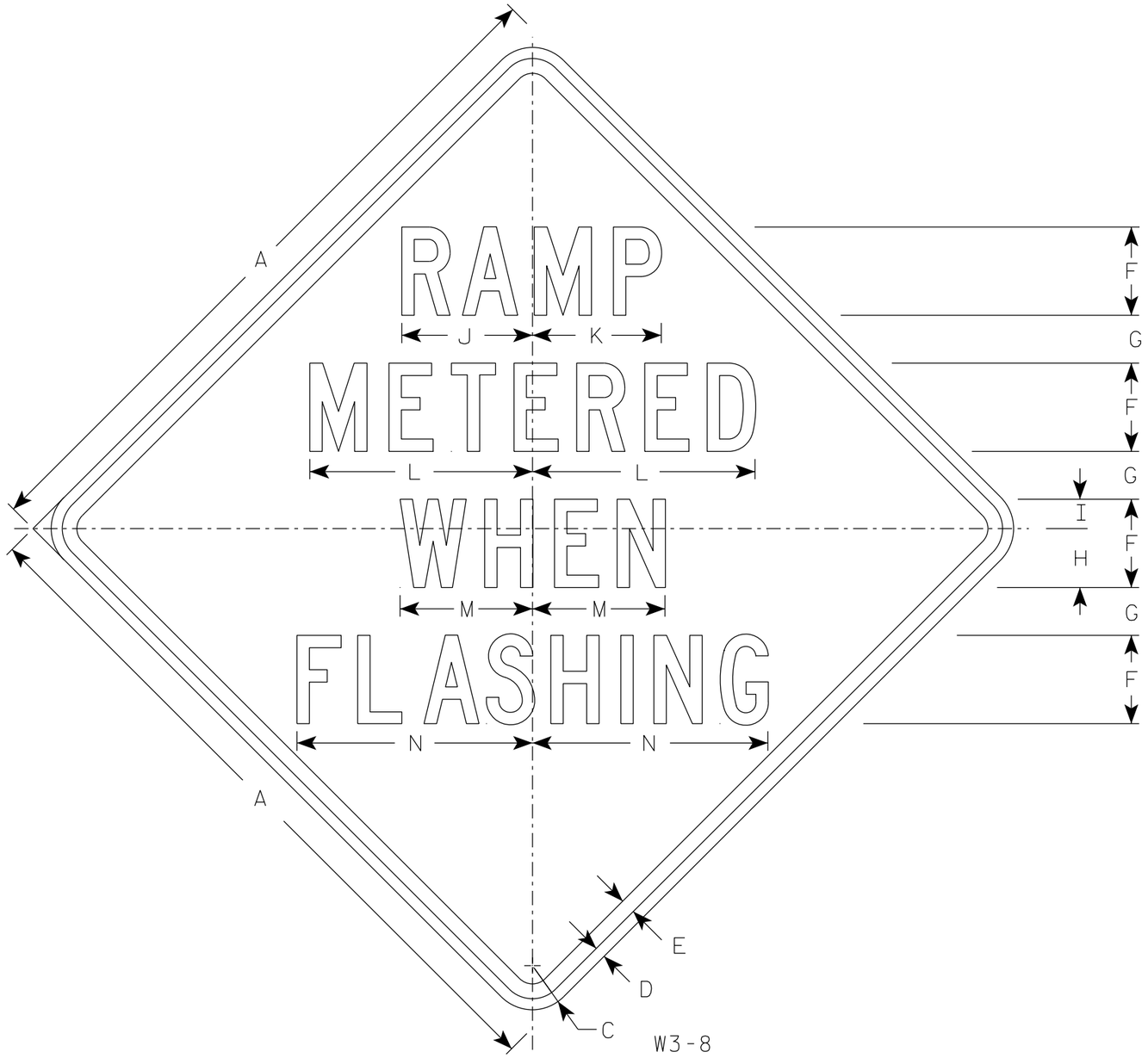
STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/2023 PLATE NO. W3-3.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 718	E



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		3	3/4	1	6	3 3/4	4	2	8 7/8	8 3/4	15 1/8	9	16													16.0
2M	48		3	3/4	1	6	3 3/4	4	2	8 7/8	8 3/4	15 1/8	9	16													16.0
3	48		3	3/4	1	6	3 3/4	4	2	8 7/8	8 3/4	15 1/8	9	16													16.0
4	48		3	3/4	1	6	3 3/4	4	2	8 7/8	8 3/4	15 1/8	9	16													16.0
5	48		3	3/4	1	6	3 3/4	4	2	8 7/8	8 3/4	15 1/8	9	16													16.0

STANDARD SIGN
W3-8

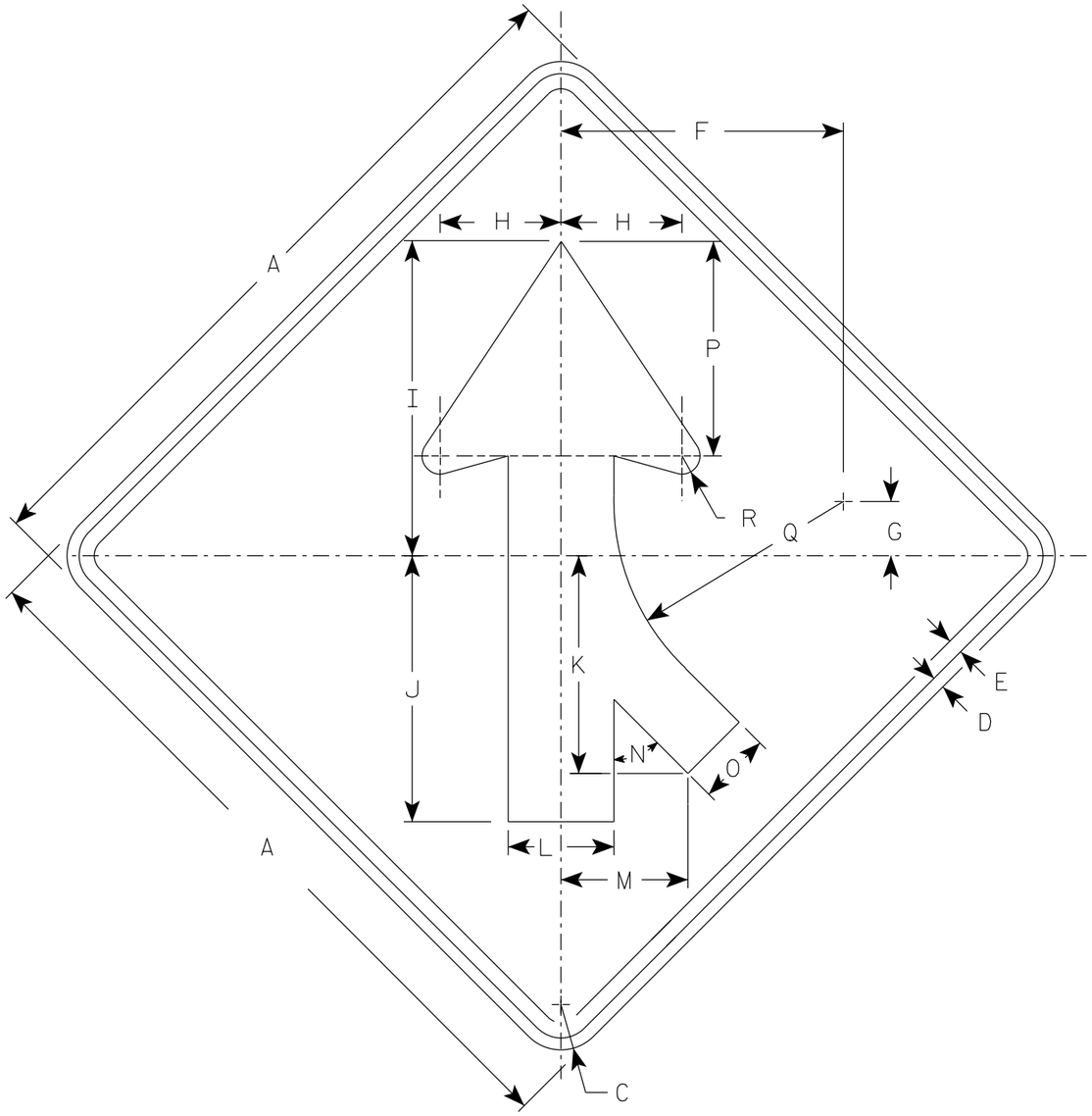
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/30/2023 PLATE NO. W3-8.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W38.DGN PLOT DATE : 30-AUG 2023 4:07 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W4-1R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W4-1L is the same as W4-1R 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	30		1 7/8	1/2	5/8	11 5/8	2 1/2	5	13	11	9	4 3/8	5 1/4	45°	3	8 7/8	9 1/2	3/4									6.25
2S	36		2 1/4	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2M	36		2 1/4	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
3	36		2 1/4	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
4	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

STANDARD SIGN
W4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

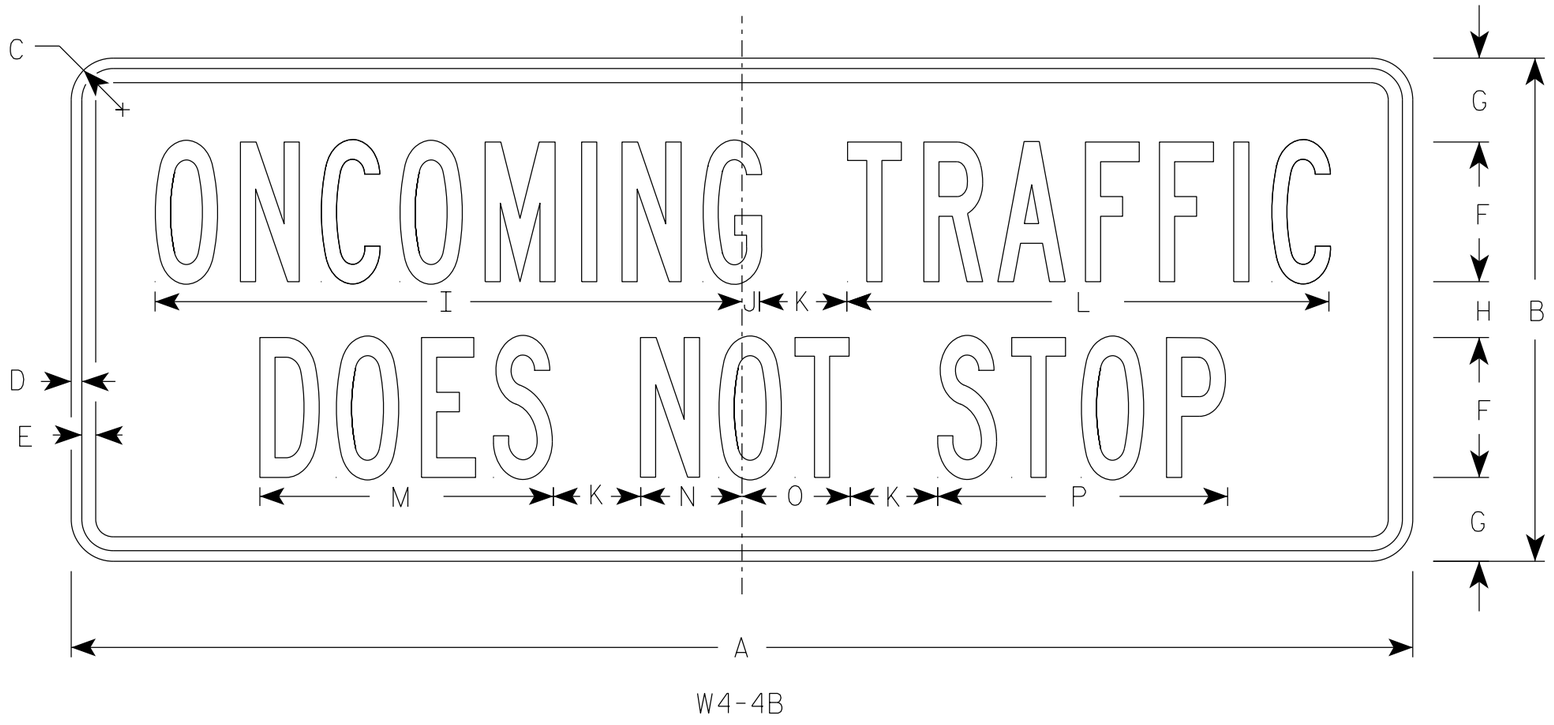
DATE 8/31/2023 PLATE NO. W4-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 720 E

7

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - B



W4-4B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	12	1 1/2	3/8	1/2	3	2 1/4	1 1/2	12 3/8	5/8	1 1/2	10 3/8	6 1/4	2 1/4	2 1/4	6 1/4											2.5
2M	30	12	1 1/2	3/8	1/2	3	2 1/4	1 1/2	12 3/8	5/8	1 1/2	10 3/8	6 1/4	2 1/4	2 1/4	6 1/4											2.5
3	42	15	1 1/2	3/8	1/2	4	2 5/8	1 3/4	16 7/8	5/8	2 3/8	13 7/8	8 3/8	3	3 1/8	8 3/8											4.38
4	48	18	1 1/2	3/8	1/2	5	3	2	21	5/8	3 1/8	17 1/4	10 1/2	3 5/8	3 7/8	10 3/8											6.0
5																											

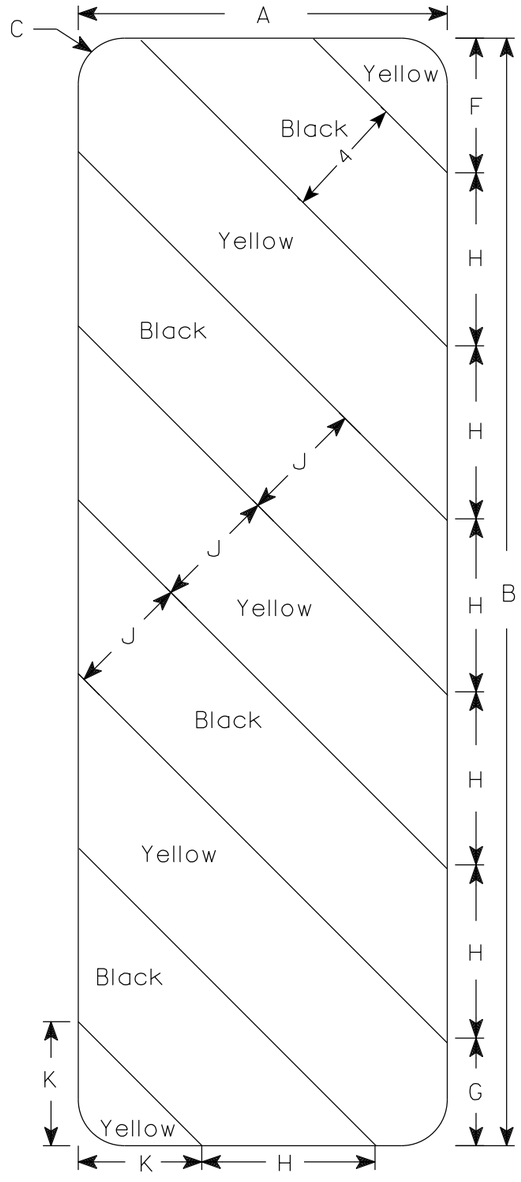
STANDARD SIGN
W4-4B

WISCONSIN DEPT OF TRANSPORTATION

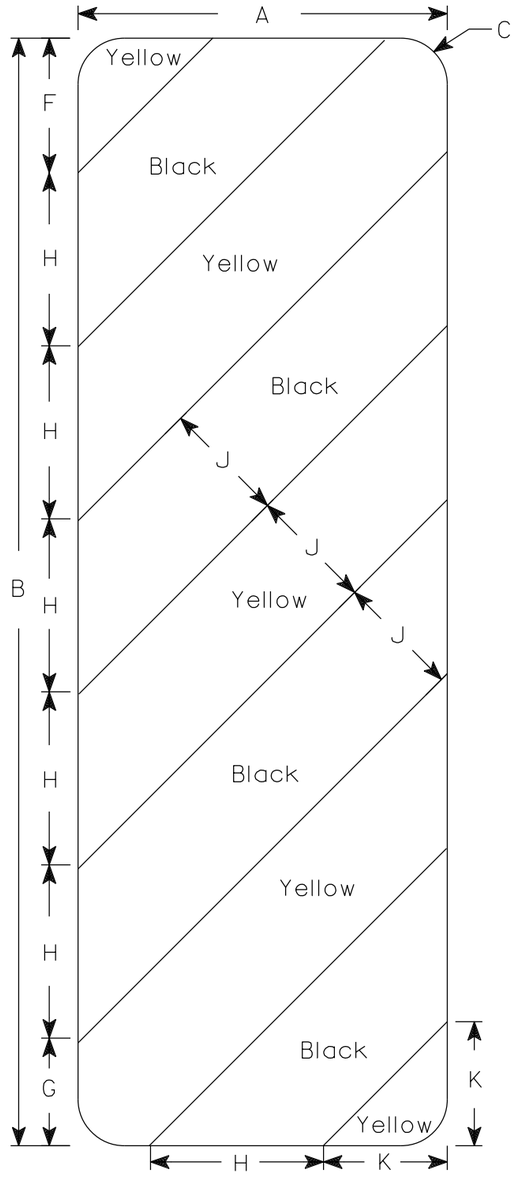
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/5/2023 PLATE NO. W4-4B.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Alternate colors of stripes as shown.

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	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54	1 1/2			6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

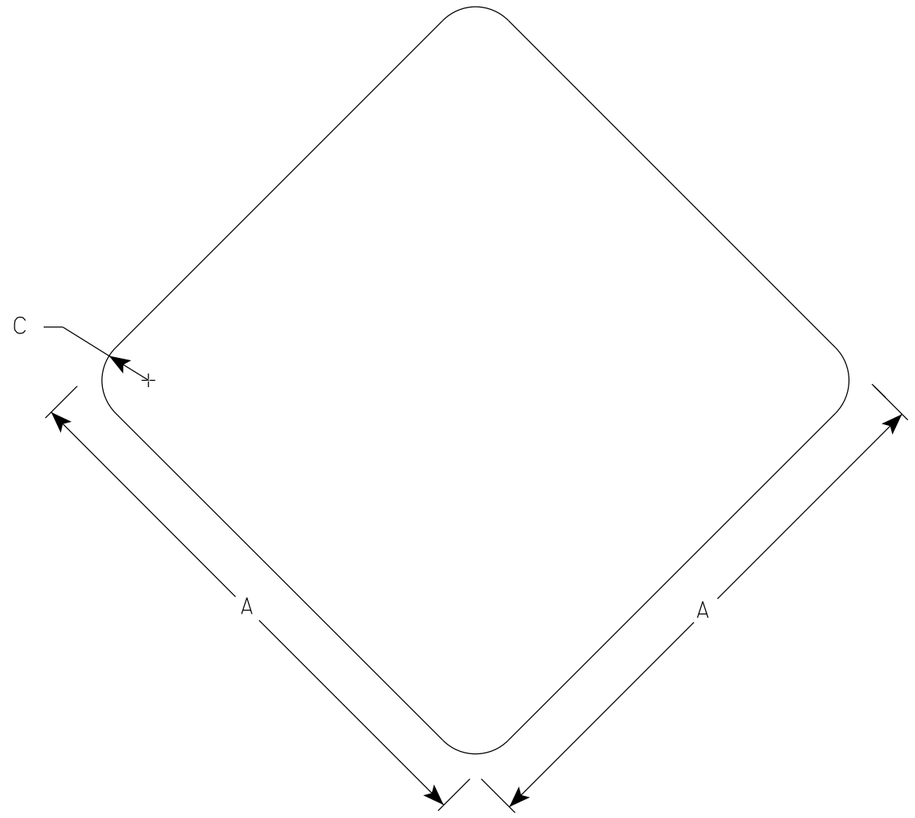
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/4/2024 PLATE NO. W5-52.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 722 E



W5-54

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - 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	12		1 ½																								1.0
2S	18		1 ½																								2.25
2M	18		1 ½																								2.25
3																											
4																											
5																											

STANDARD SIGN
W5-54

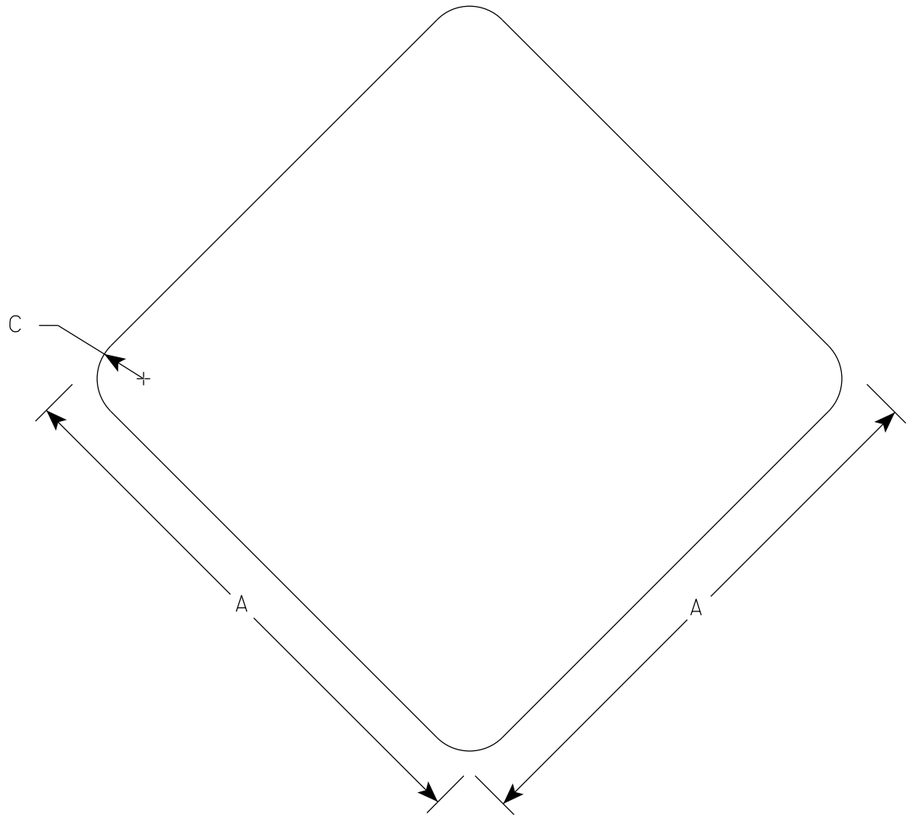
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/5/2024 PLATE NO. W5-54.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate_W554.dgn PLOT DATE : 5-MARCH 2024 11:55 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W5-56

NOTES

1. Sign is Type II - Type SH Reflective
2. Color:
   Background - 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	12		1 ½																								1.0
2S	18		1 ½																								2.25
2M	18		1 ½																								2.25
3																											
4																											
5																											

STANDARD SIGN

W5-56

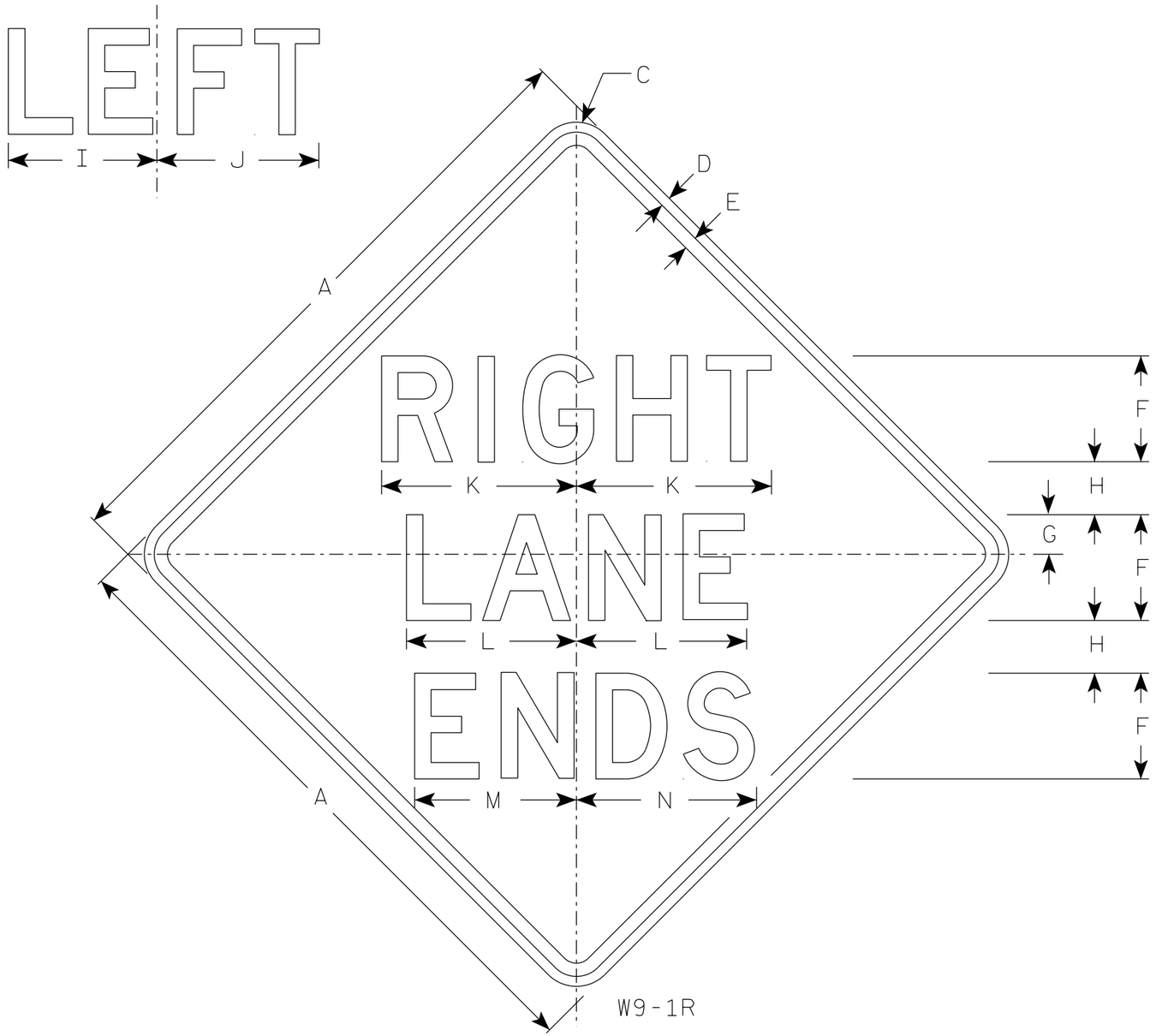
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/5/2024 PLATE NO. W5-56.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate_W556.dgn PLOT DATE : 5-MARCH 2024 1:56 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. W9-1L same as W9-1R except the word Left replaces 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	30		1 7/8	1/2	5/8	5	1 1/2	2 1/2	7 1/8	7 5/8	9 1/4	8 1/8	7 5/8	8 5/8													6.25
2S	36		2 1/4	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
2M	36		2 1/4	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
3	36		2 1/4	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
4	36		2 1/4	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
5	48		3	3/4	1	8	3	4	11 1/4	12 1/4	14 3/4	12 7/8	12 1/4	13 5/8													16.0

STANDARD SIGN
W9-1

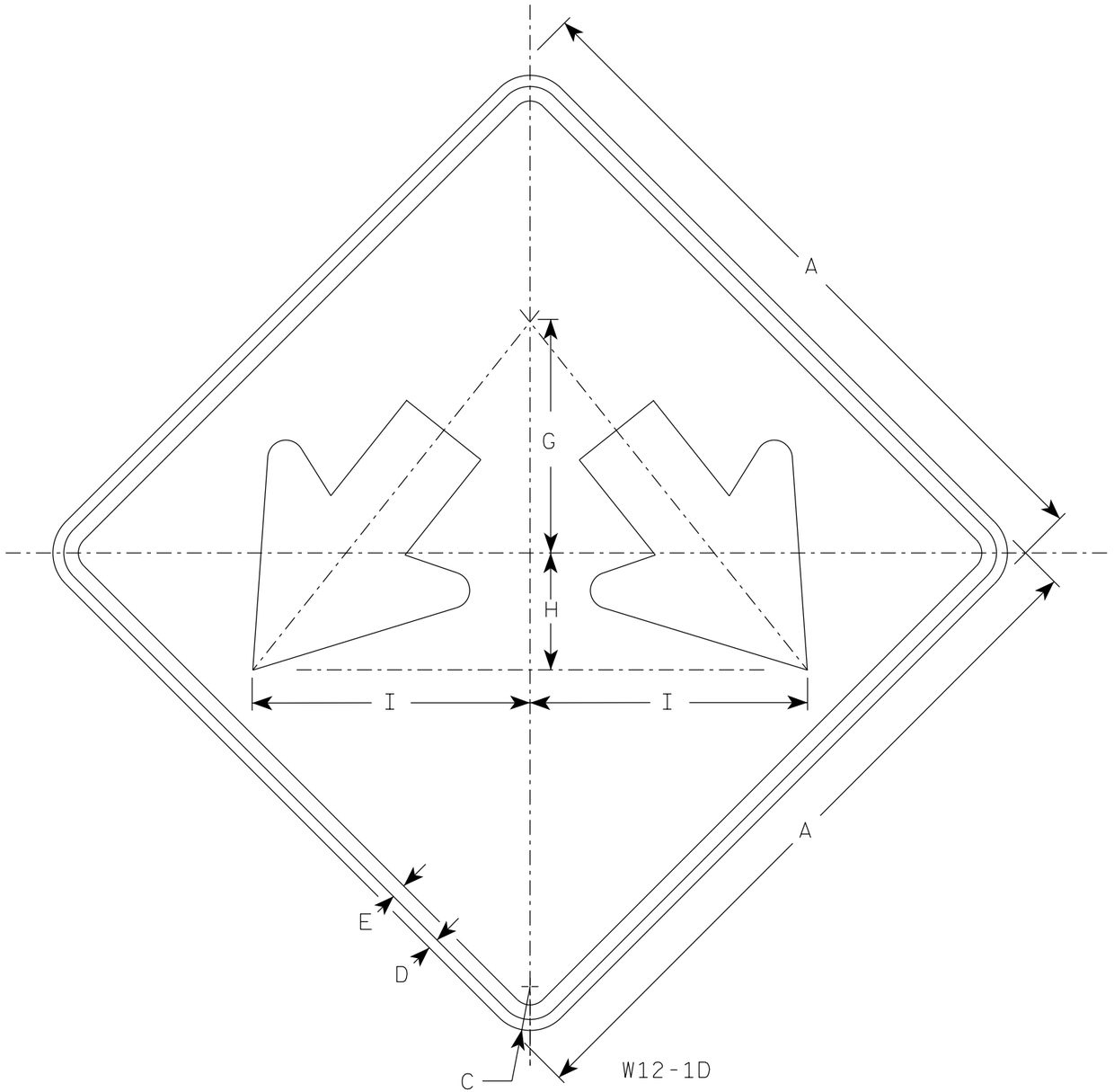
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/9/2023 PLATE NO. W9-1.9

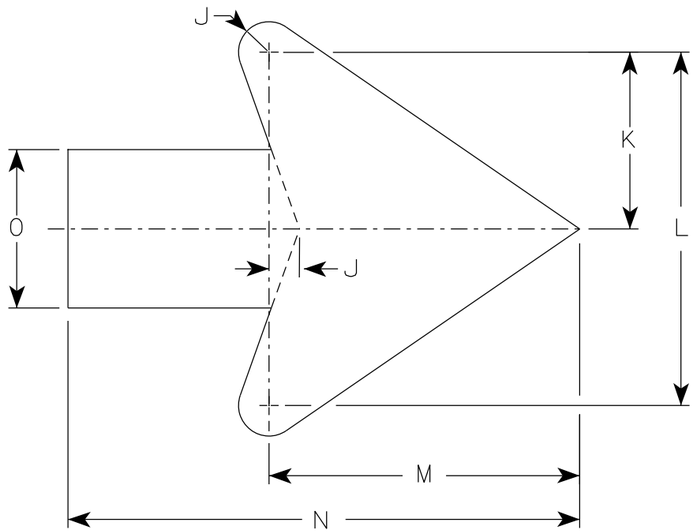
PROJECT NO:

SHEET NO: 725 E



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black



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	Areq sq. ft.
1																											
2S	24		1 ½	½	⅜		8	4	9 ½	⅜	3 ⅜	7 ¼	6 ⅜	10 ⅜	3 ¼												4.0
2M	24		1 ½	½	⅜		8	4	9 ½	⅜	3 ⅜	7 ¼	6 ⅜	10 ⅜	3 ¼												4.0
3	30		1 ⅞	½	⅝		10	5	11 ⅞	¾	4 ½	9	7 ⅞	13	4												6.25
4	36		2 ¼	½	⅝		12	6	14 ¼	1	5 ½	10 ⅞	9 ⅝	15 ¾	4 ¾												9.0
5	48		3	¾	1		16	8	19	1 ¼	7 ¼	14 ½	12 ¾	21	6 ¼												16.0

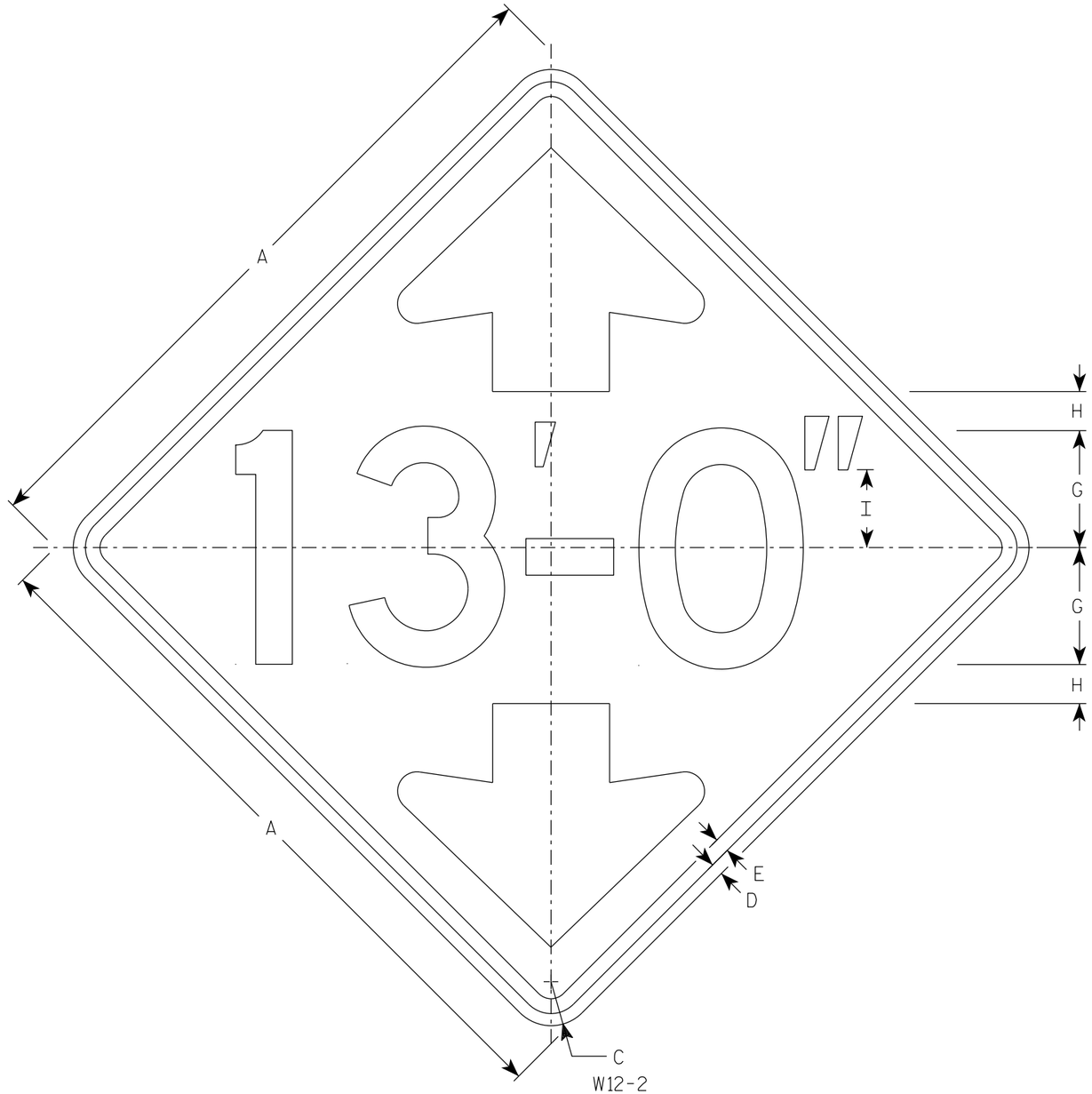
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

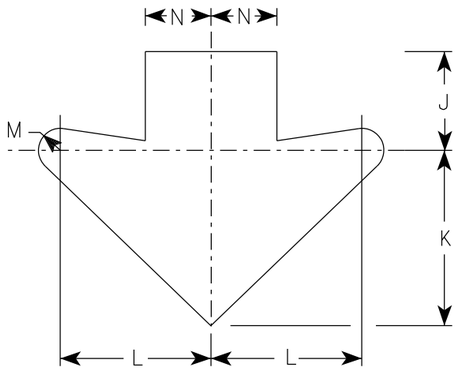
DATE 11/30/2023 PLATE NO. W12-1D.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 726	E

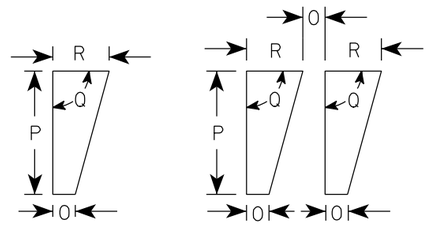


NOTES

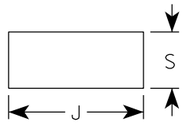
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Substitute appropriate numerals and optically adjust spacing of numerals, hyphen, foot & inch marks to achieve proper balance.



Arrow Detail



Foot Mark & Inch Mark Detail



Hyphen 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 7/8	1/2	5/8		5	1 5/8	3 3/8	3 3/4	6 5/8	5 3/4	3/4	2 1/2	1/2	2 1/4	90°	1	1 5/8								6.25
2S	36		2 1/4	5/8	3/4		6	2	4	4 1/2	8	6 7/8	1	3	1/2	2 3/4	90°	1 1/4	1 7/8								9.0
2M	36		2 1/4	5/8	3/4		6	2	4	4 1/2	8	6 7/8	1	3	1/2	2 3/4	90°	1 1/4	1 7/8								9.0
3	36		2 1/4	5/8	3/4		6	2	4	4 1/2	8	6 7/8	1	3	1/2	2 3/4	90°	1 1/4	1 7/8								9.0
4	36		2 1/4	5/8	3/4		6	2	4	4 1/2	8	6 7/8	1	3	1/2	2 3/4	90°	1 1/4	1 7/8								9.0
5	48		3	3/4	1		8	2 5/8	5 1/2	5 7/8	10 5/8	9 1/4	1 3/8	4	5/8	3 5/8	90°	1 5/8	2 1/2								16.0

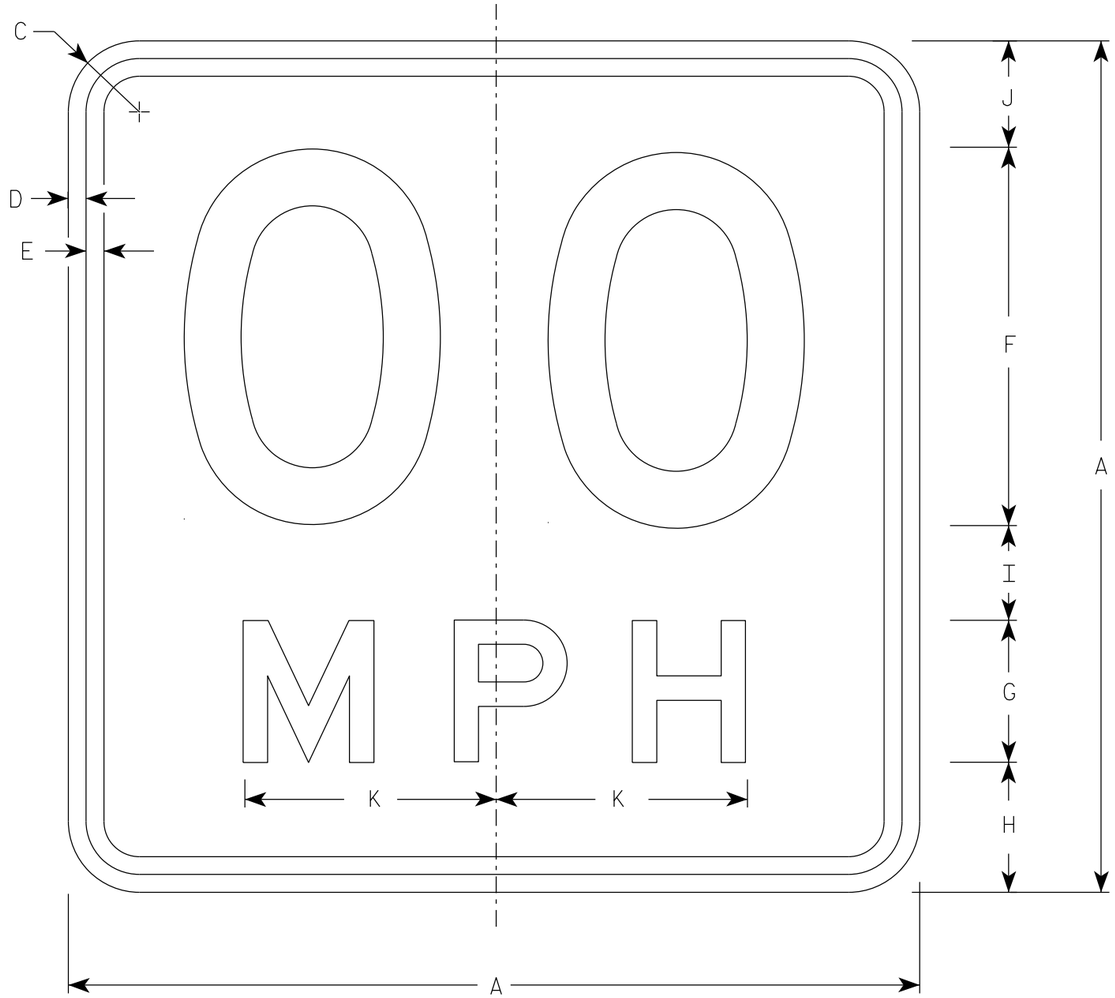
STANDARD SIGN
W12-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/30/2023 PLATE NO. W12-2.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 727 E



W13-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 5
4. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
5. Line 1 is Series D
   Line 2 is Series E

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

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

STANDARD SIGN
W13-1

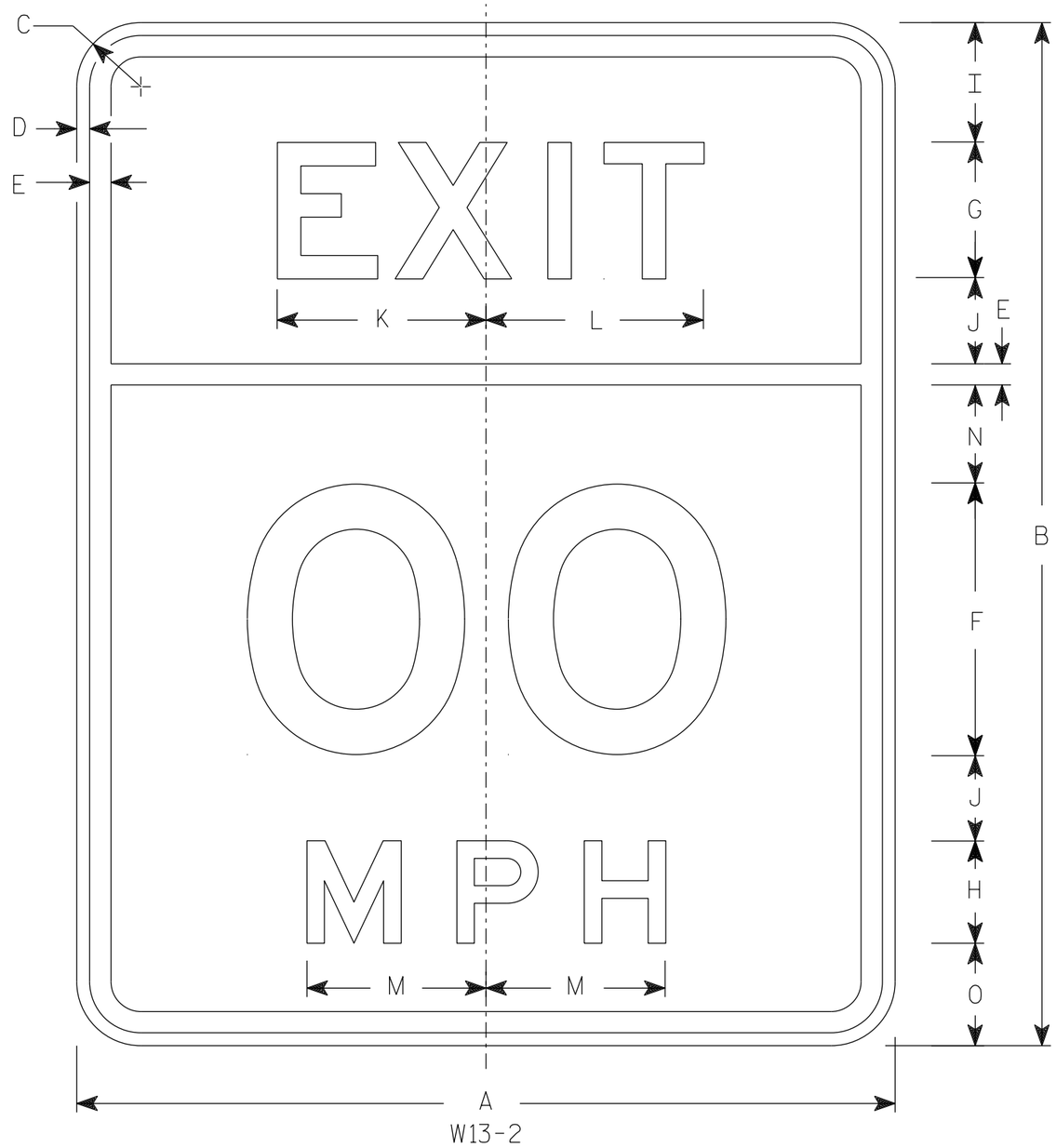
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/8/2024 PLATE NO. W13-1.17

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W131.dgn PLOT DATE : 8-Jan 2024 11:07 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W13-2

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - E
4. Substitute appropriate numerals and optically space about centerline 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																											
2S	24	30	1 1/2	3/8	5/8	8	4	3	3 1/2	2 1/2	6 1/8	6 3/8	5 1/4	2 7/8	3												5.0
2M	24	30	1 1/2	3/8	5/8	8	4	3	3 1/2	2 1/2	6 1/8	6 3/8	5 1/4	2 7/8	3												5.0
3	36	48	1 7/8	5/8	7/8	12	6	4	6	4	9 1/4	9 1/2	7 1/8	5 1/8	6												12.0
4	36	48	1 7/8	5/8	7/8	12	6	4	6	4	9 1/4	9 1/2	7 1/8	5 1/8	6												12.0
5	48	60	3	3/4	1	16	8	6	7	5	12 1/4	12 3/4	10 5/8	5 3/4	6												20.0

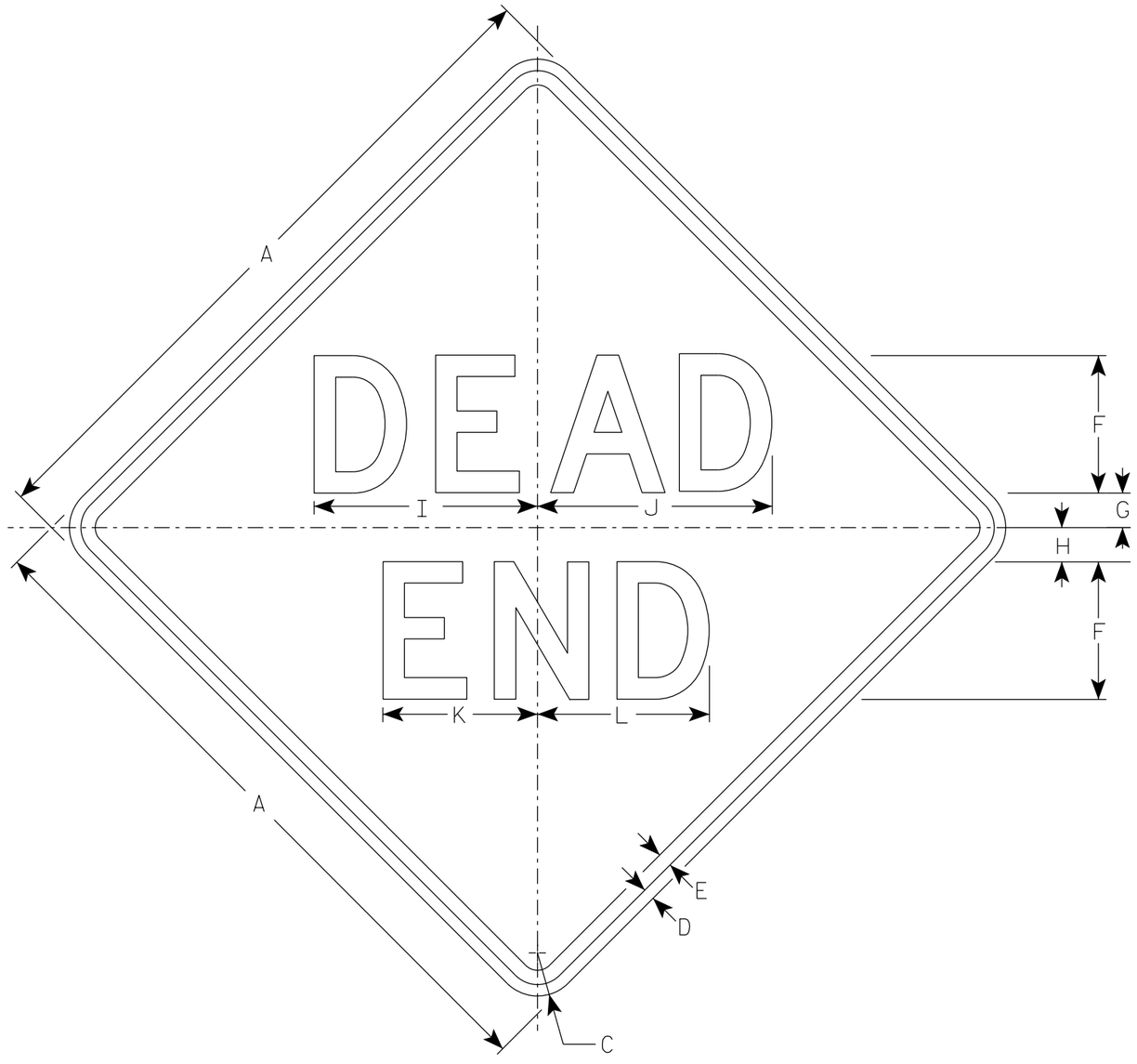
STANDARD SIGN
W13-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/16/2024 PLATE NO. W13-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 729	E



W14-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
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	Areq sq. ft.
1	24		1 1/2	3/8	1/2	5	1	2	8 1/4	8 5/8	5 5/8	6 1/4															4.0
2S	30		1 7/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
2M	30		1 7/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
3	36		2 1/4	5/8	3/4	7	2	3	11 3/8	12	7 7/8	8 3/4															9.0
4																											
5																											

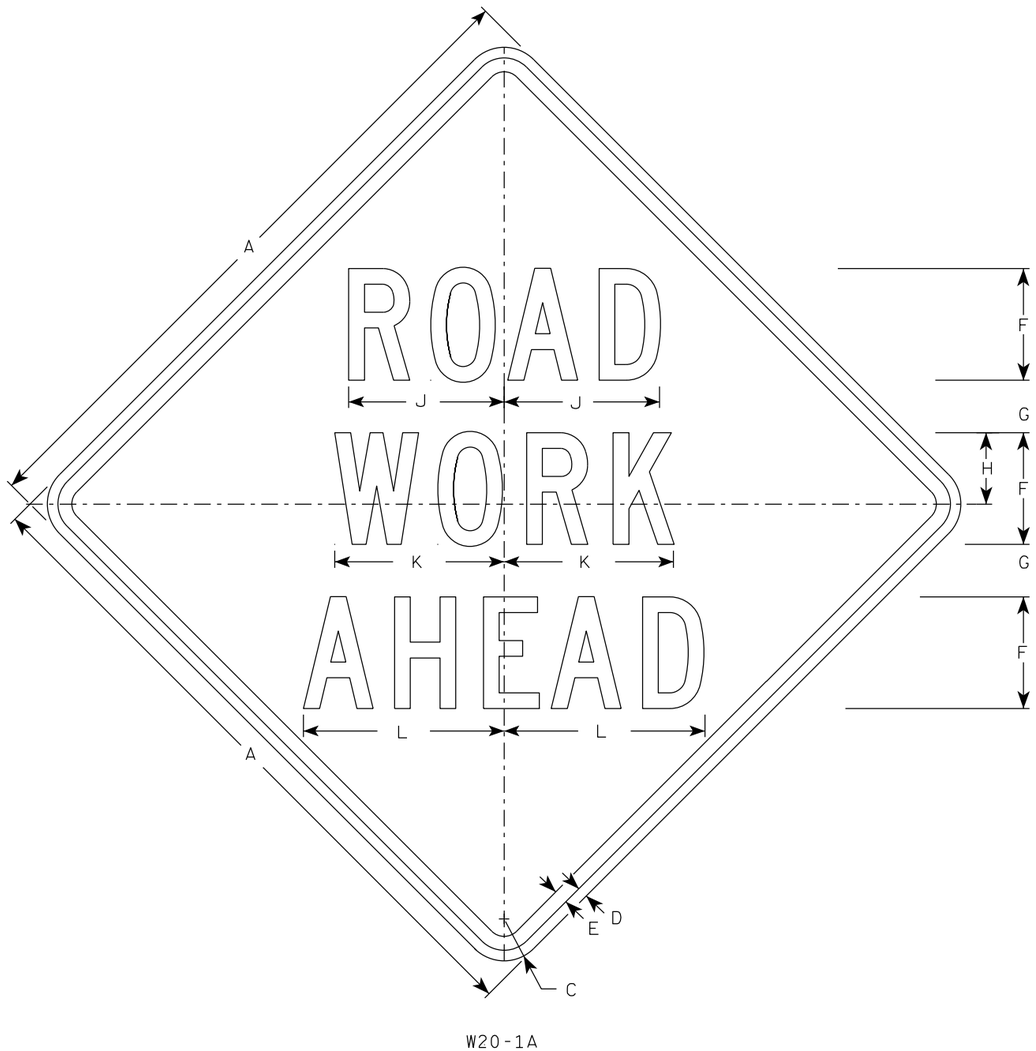
STANDARD SIGN
W14-1

WISCONSIN DEPT OF TRANSPORTATION

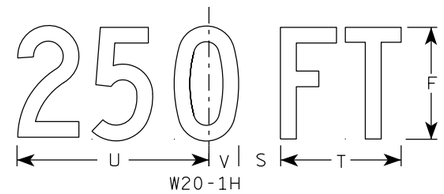
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/8/2024 PLATE NO. W14-1.8

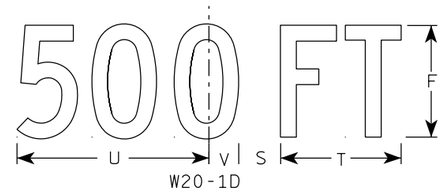
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 730 | E



W20-1A



W20-1H



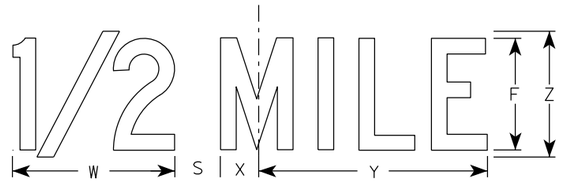
W20-1D

W20-1C

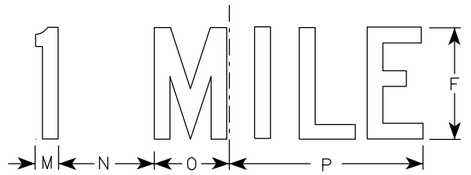
W20-1B

NOTES

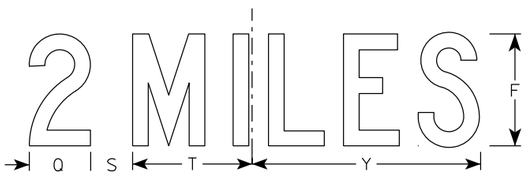
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

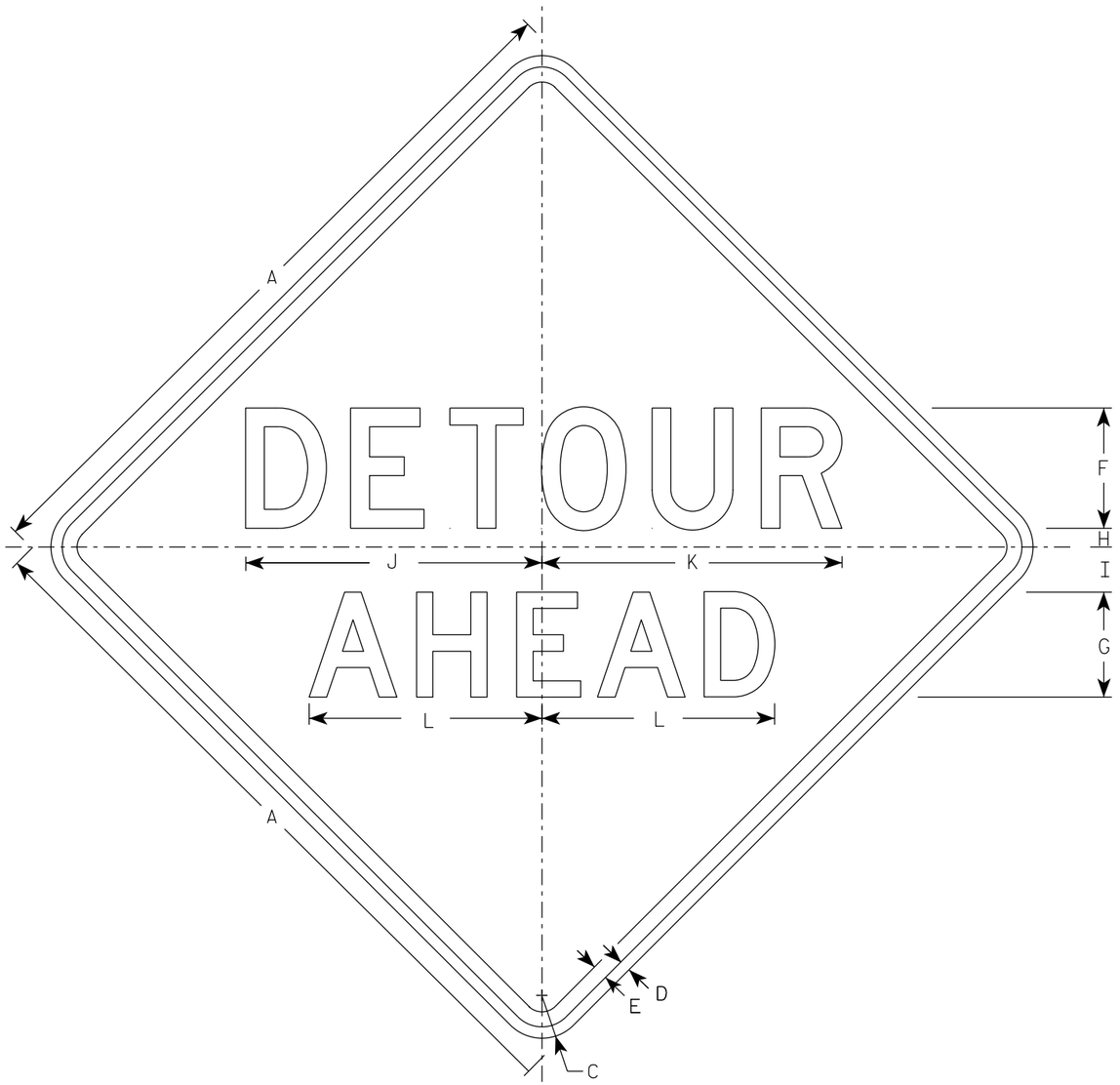
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

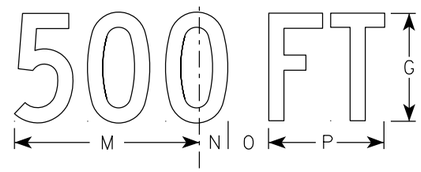
DATE 1/10/2024 PLATE NO. W20-1.12

PROJECT NO:

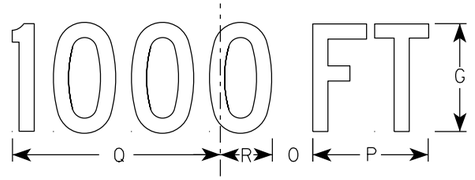
SHEET NO: 731 E



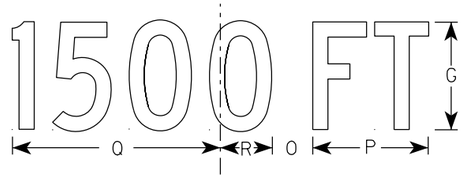
W20-2A



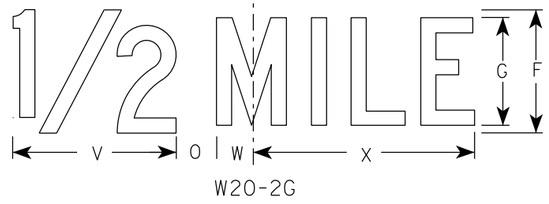
W20-2D



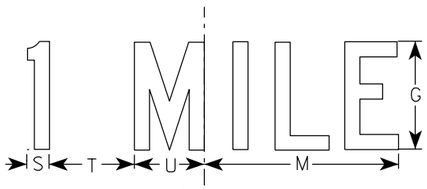
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

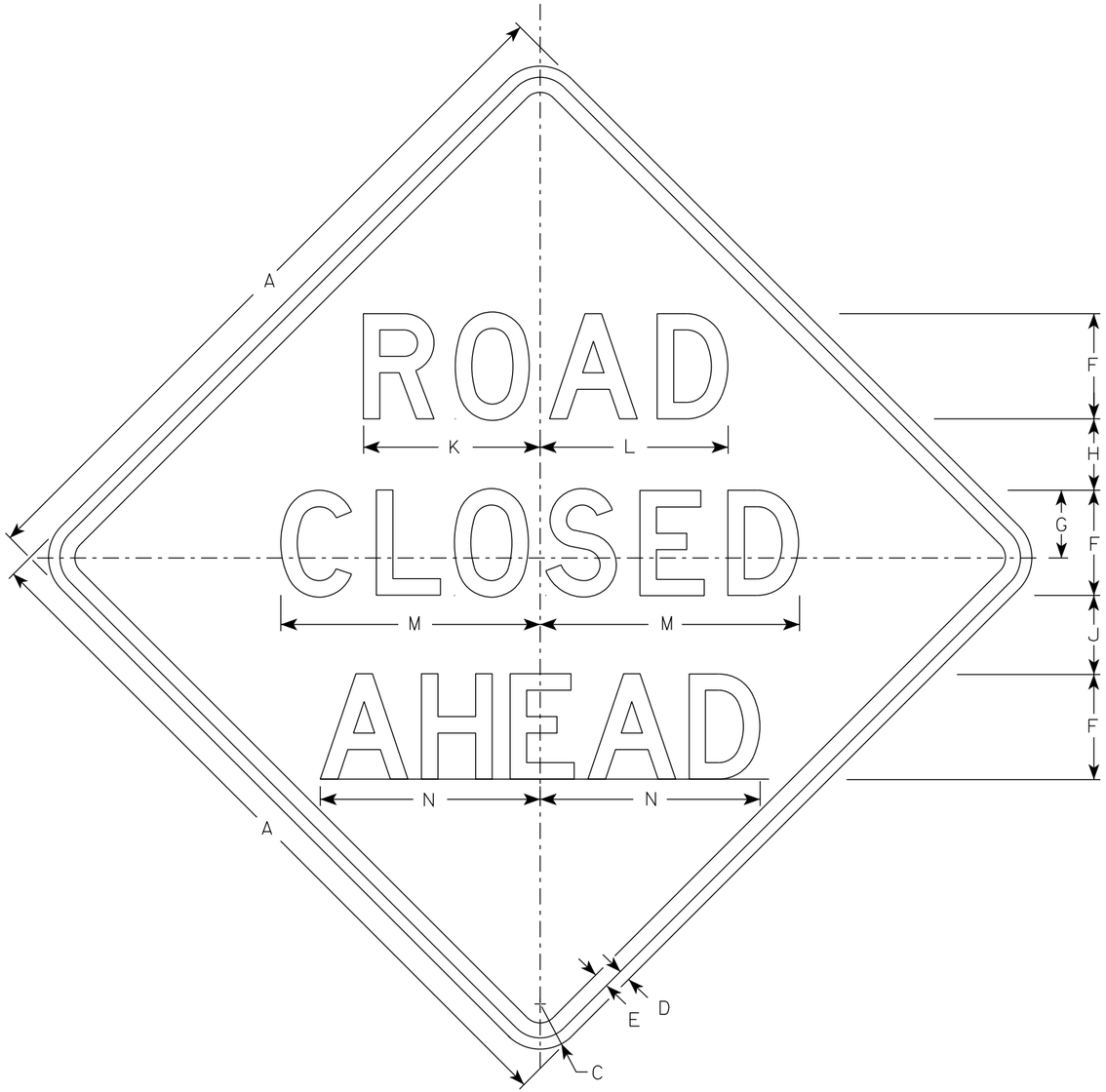
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

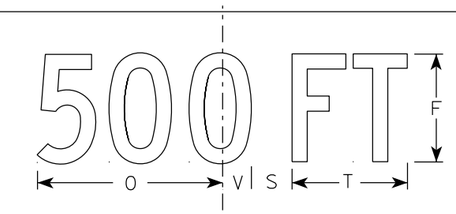
DATE 1/10/2024 PLATE NO. W20-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

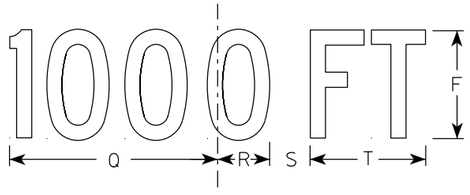
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W202.DGN PLOT DATE : 10-JAN 2024 11:36 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



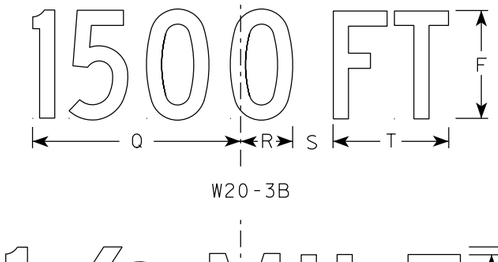
W20-3A



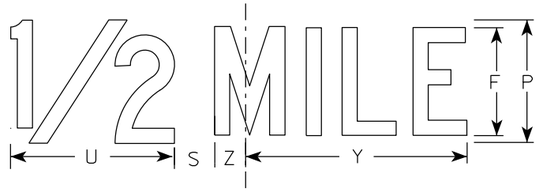
W20-3D



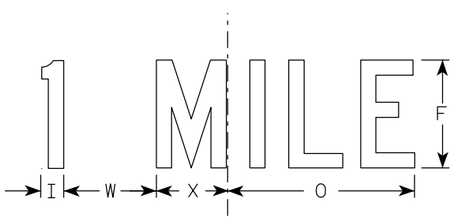
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

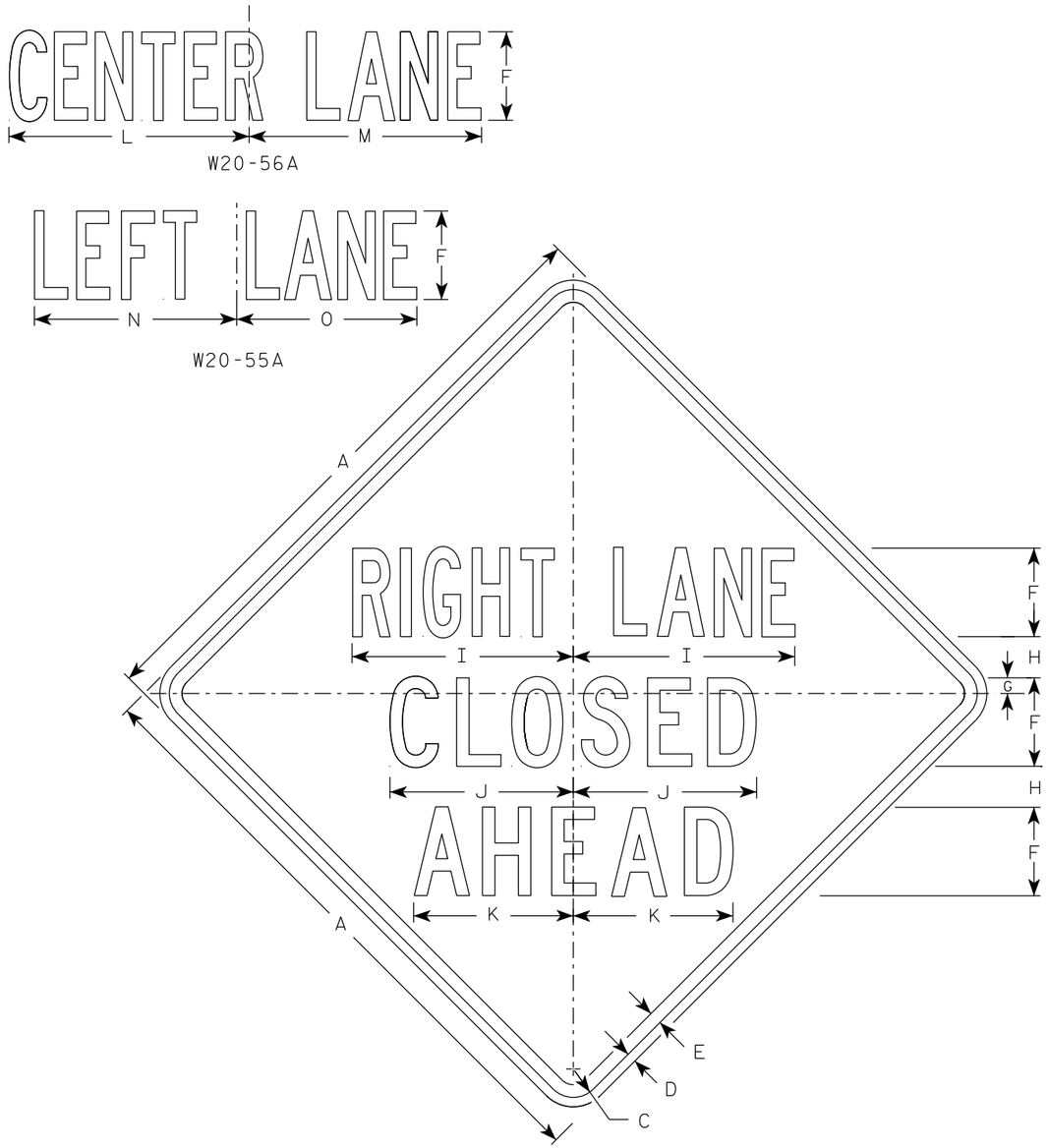
STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

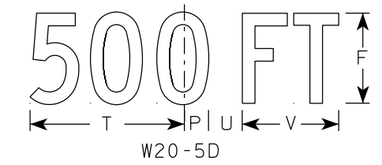
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-3.8

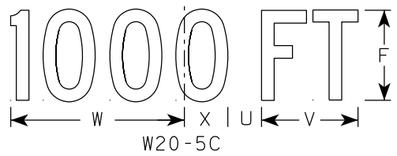
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 733 | E



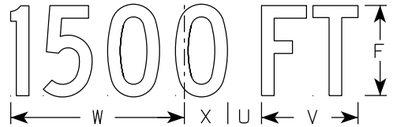
W20-5A



W20-5D



W20-5C



W20-5B

W20-5G

W20-5F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	2 1/4	5/8	3/4	5	7/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

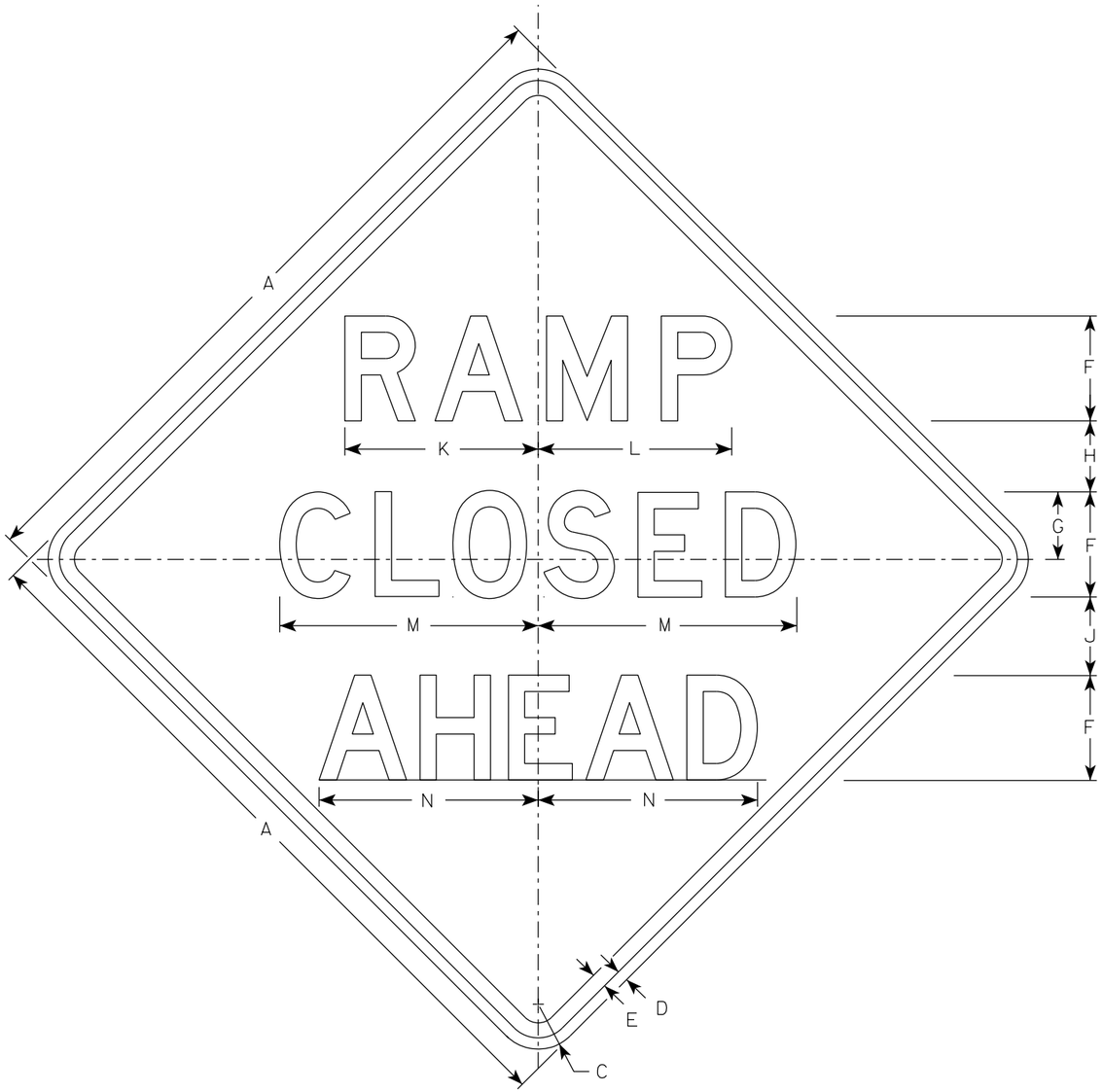
STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

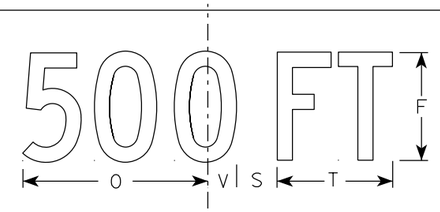
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/27/24 PLATE NO. W20-5.12

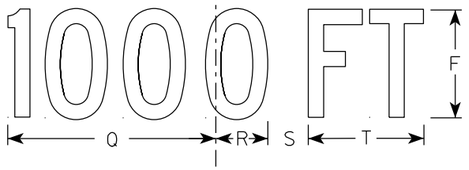
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 734	E



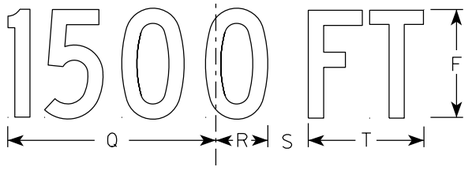
W20-53A



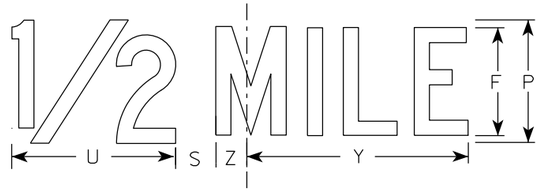
W20-53D



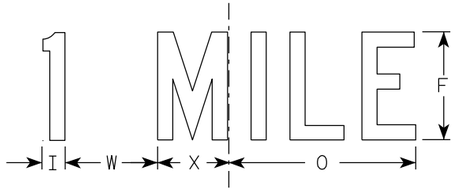
W20-53C



W20-53B



W20-53G



W20-53F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

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

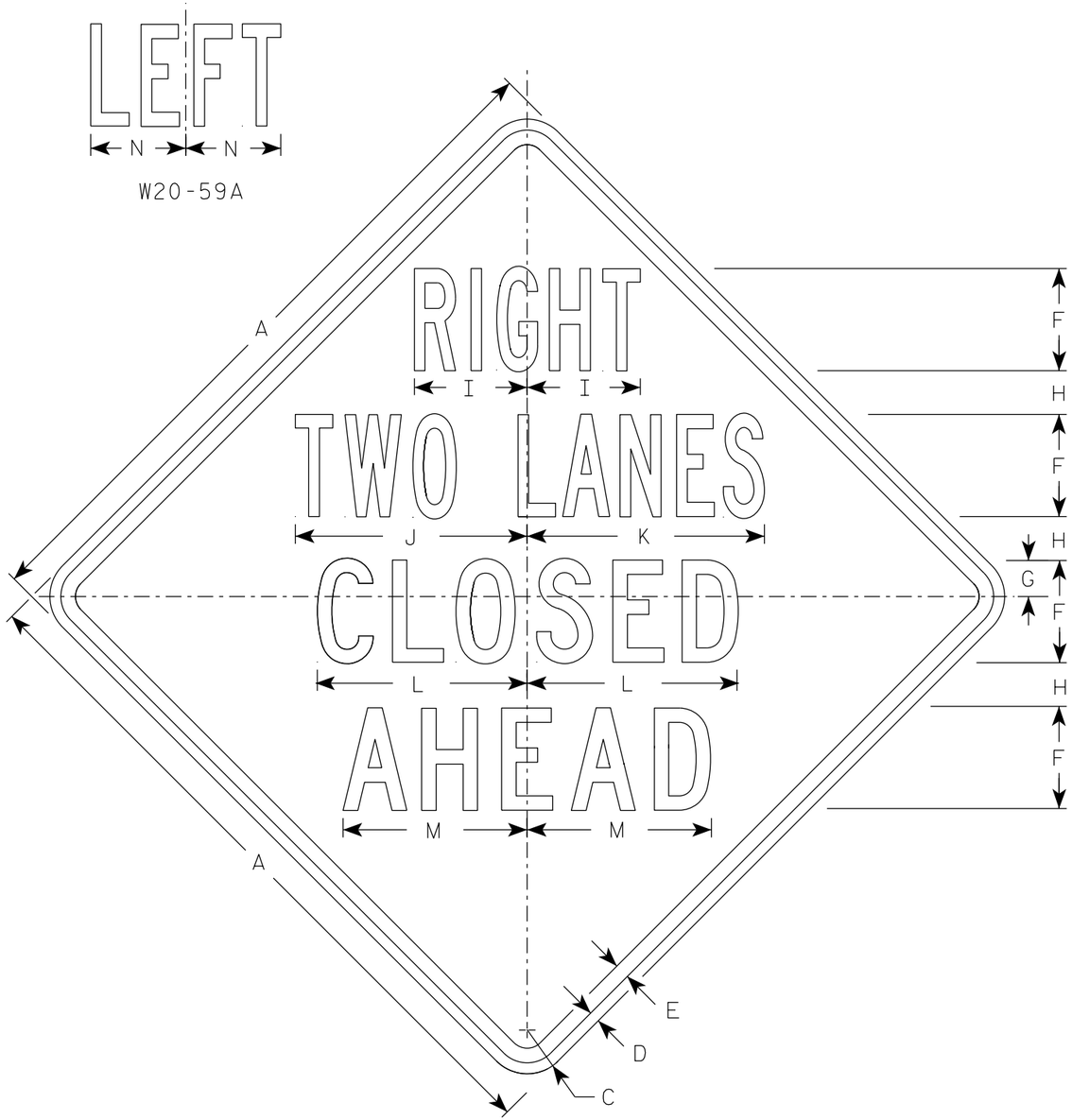
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-53.2

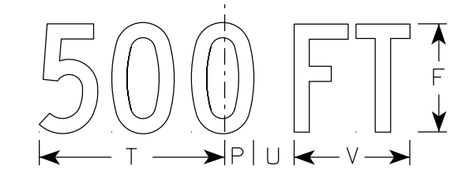
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W2053.DGN PLOT DATE : 10-JAN 2024 2:38 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

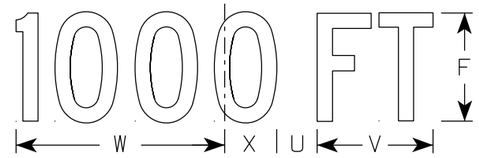
7



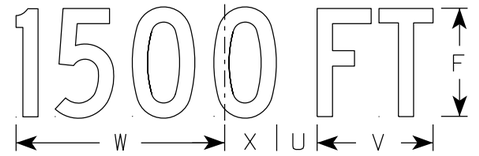
W20-58A



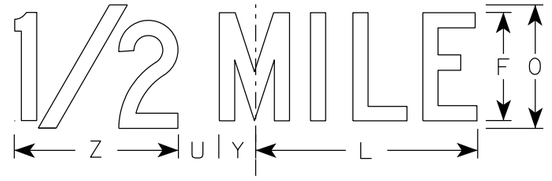
W20-58D



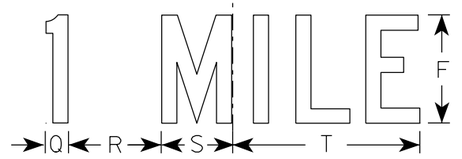
W20-58C



W20-58B



W20-58G



W20-58F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 & 2 Series B.
   Lines 3 & 4 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		2 1/4	5/8	3/4	5	1 7/8	2 1/4	5 7/8	11 7/8	12 1/8	10 3/4	9 1/2	4 7/8	6	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48		3	3/4	1	7	2 1/2	3	7 3/4	15 7/8	16 1/4	14 3/8	12 5/8	6 1/2	8	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		3	3/4	1	7	2 1/2	3	7 3/4	15 7/8	16 1/4	14 3/8	12 5/8	6 1/2	8	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		3	3/4	1	7	2 1/2	3	7 3/4	15 7/8	16 1/4	14 3/8	12 5/8	6 1/2	8	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		3	3/4	1	7	2 1/2	3	7 3/4	15 7/8	16 1/4	14 3/8	12 5/8	6 1/2	8	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		3	3/4	1	7	2 1/2	3	7 3/4	15 7/8	16 1/4	14 3/8	12 5/8	6 1/2	8	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

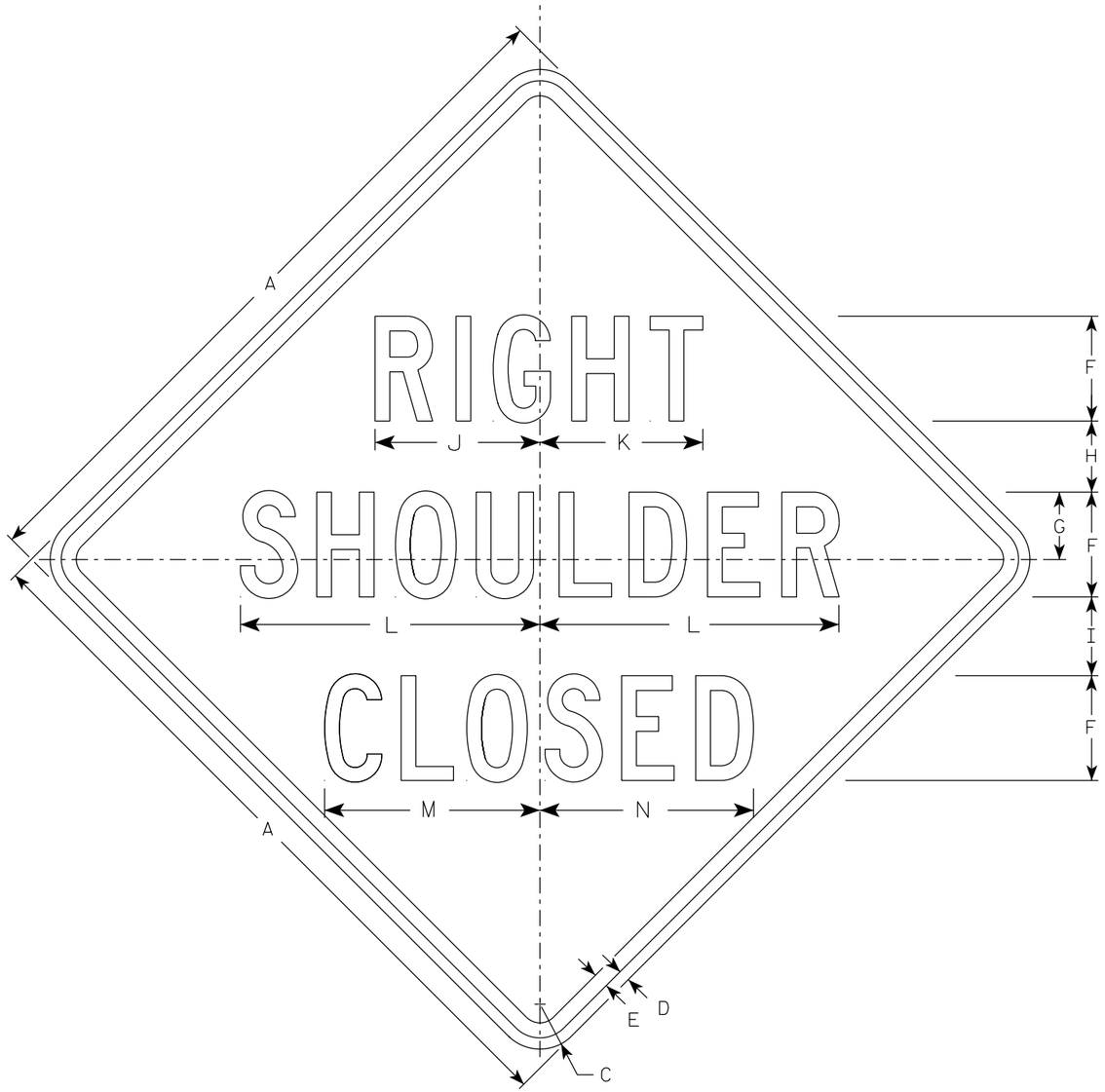
STANDARD SIGN
W20-58A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

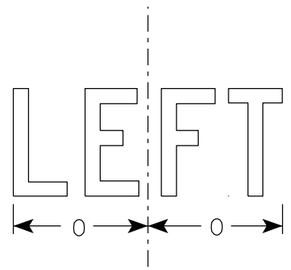
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-58.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 736 E



W21-5A



W21-5AL

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
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	36		2 1/4	5/8	3/4	5	3 3/8	3 1/2	4	7 7/8	7 3/4	14 1/4	10 1/4	10 1/8	6 1/4												9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0

STANDARD SIGN
W21-5A

WISCONSIN DEPT OF TRANSPORTATION

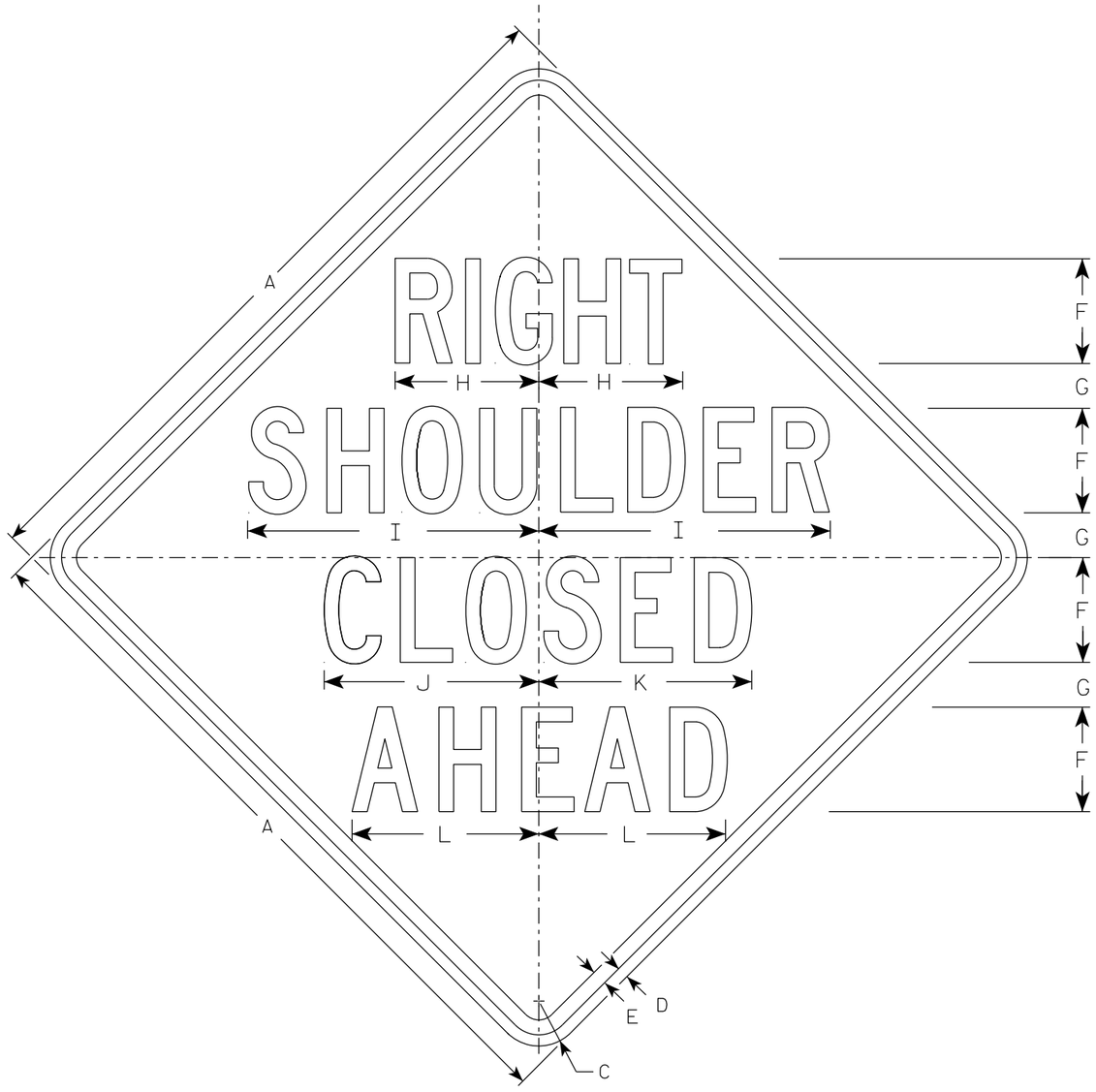
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/11/2024 PLATE NO. W21-5A.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 737 | E

7

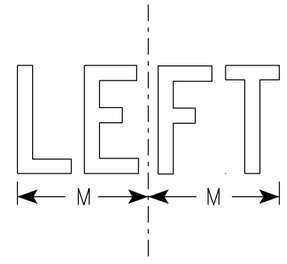
7



W21-5B

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C



W21-5BL

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

STANDARD SIGN
W21-5B

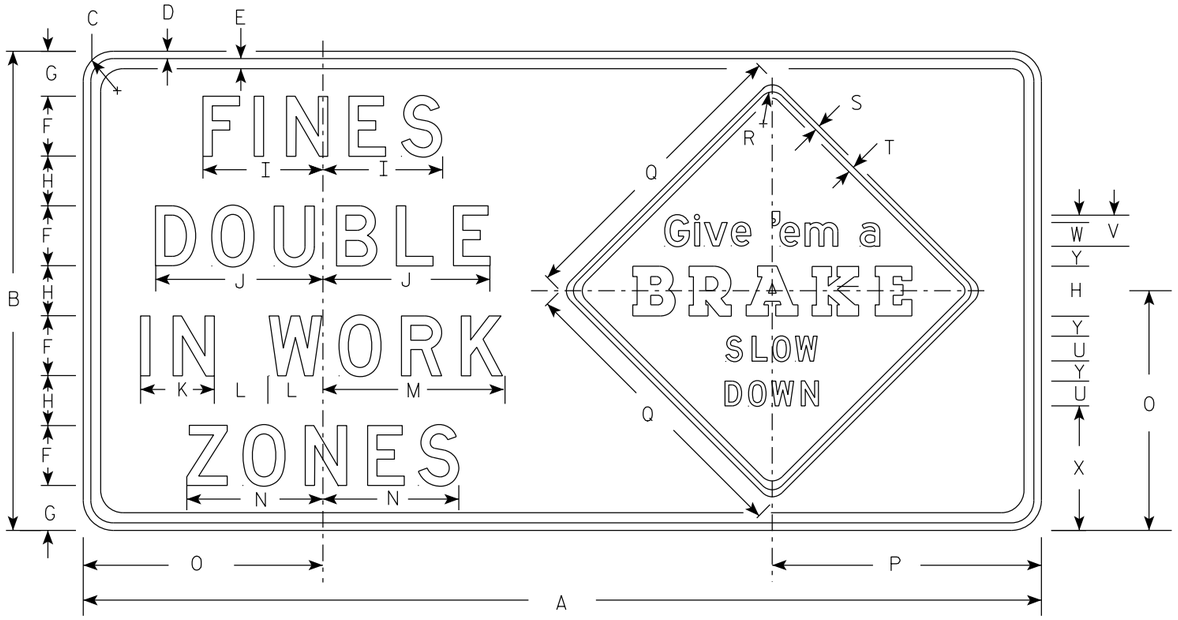
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/16/2024 PLATE NO. W21-5B.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 738 | E

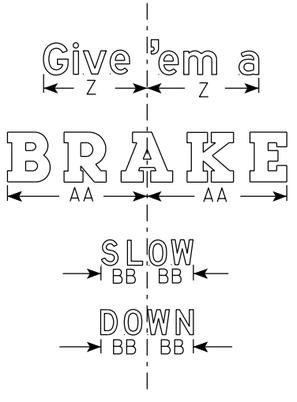
7

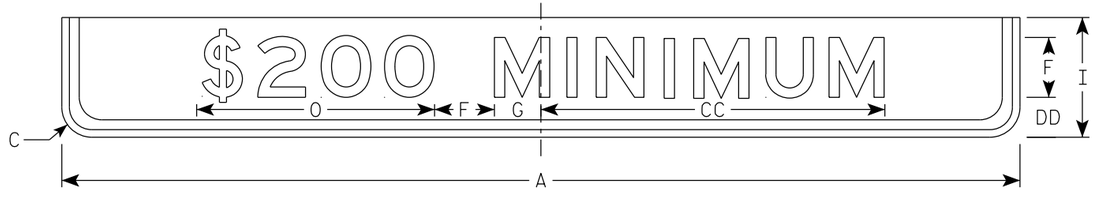


W21-62

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White - (See Note 5)
   Message - Black
3. Message Series -
   Fines Double Message - All lines are Series D
   Give 'em a Brake -
   Line one is Series E, line two is a Special Graphic Series and lines three and four are Series D.
4. The base material shall be plywood. Corners may be square or rounded, but borders shall be rounded as shown. The base material for Give 'em a Brake sign can be a seperate sheet of aluminum with the corners and borders rounded as shown. This seperate panel shall then be attached to the plywood with aluminum or stainless steel sheet metal screws.
5. Background for the Give 'em a Brake sign shall be Type F reflective orange.





W21-62P

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	AA	BB	CC	DD	Area sq. ft.
1																															
2S																															
2M																															
3	96	48	3	¾	1	6	4 ½	5	12	16 ¾	7 ⅜	5 ½	18 ¼	13 ⅝	24	27	30	1 ⅜	½	⅝	2 ½	3 ⅛	2 ⅜	12 ½	2	10 ¾	14	4 ⅝	34 ½	4	32.0
4																															
5																															

STANDARD SIGN
W21-62

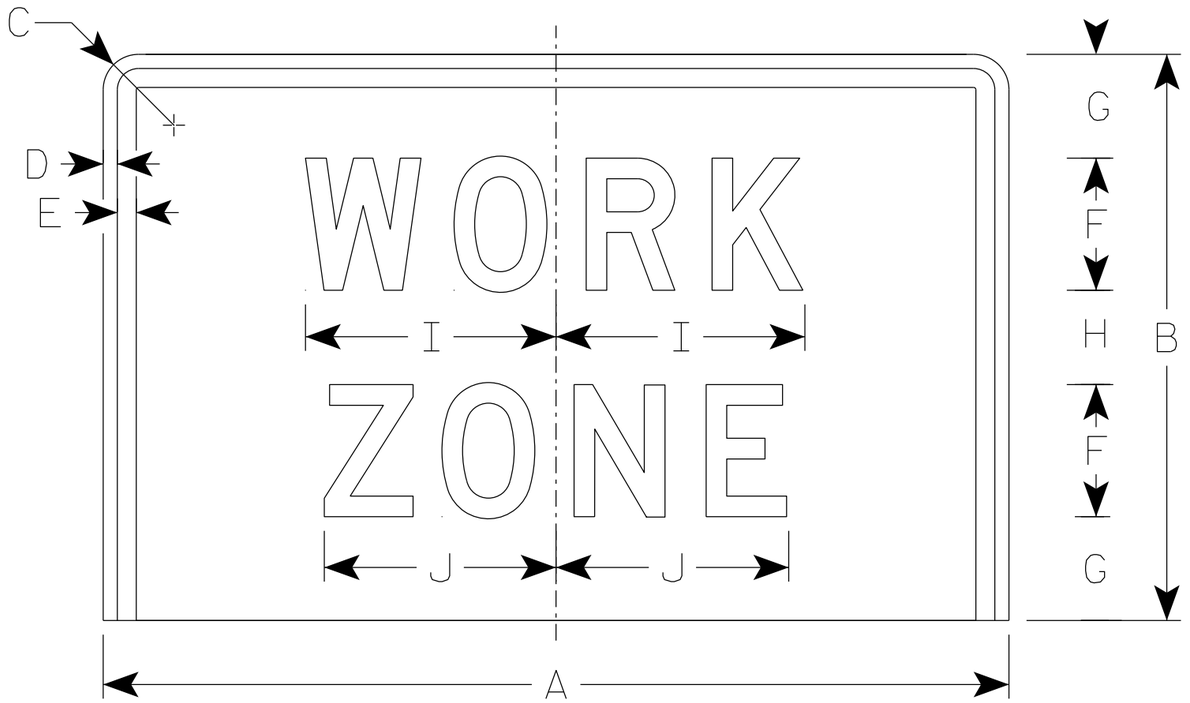
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/12/2024 PLATE NO. W21-62.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate_W2162.dgn PLOT DATE : 12-MARCH 2024 2:57 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W21-62Q

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
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	48	30	1 7/8	3/4	1	7	5 1/2	5	13 1/4	12 1/4																	10.0
2M	48	30	1 7/8	3/4	1	7	5 1/2	5	13 1/4	12 1/4																	10.0
3	48	30	1 7/8	3/4	1	7	5 1/2	5	13 1/4	12 1/4																	10.0
4	48	30	1 7/8	3/4	1	7	5 1/2	5	13 1/4	12 1/4																	10.0
5	48	30	1 7/8	3/4	1	7	5 1/2	5	13 1/4	12 1/4																	10.0

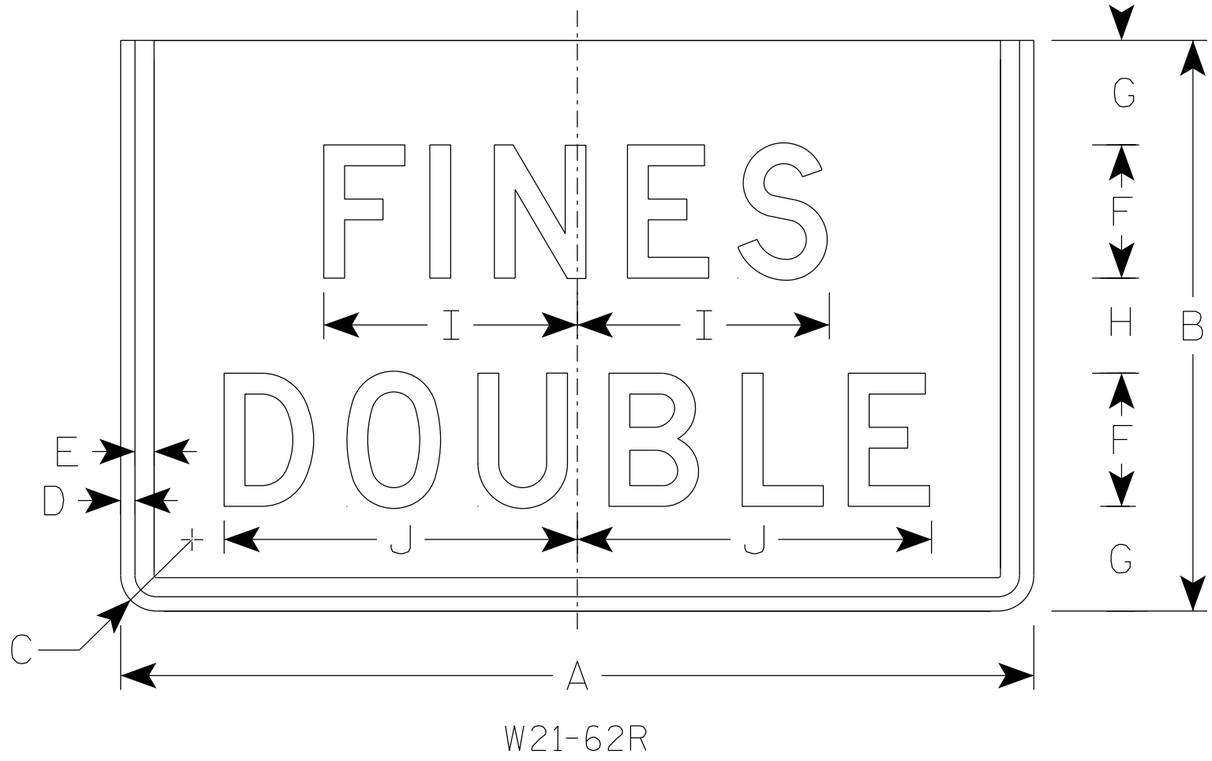
STANDARD SIGN
W21-62Q

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/12/2024 PLATE NO. W21-62Q.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 740	E



W21-62R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
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	48	30	1 7/8	3/4	1	7	5 1/2	5	13 1/4	18 5/8																	10.0
2M	48	30	1 7/8	3/4	1	7	5 1/2	5	13 1/4	18 5/8																	10.0
3	48	30	1 7/8	3/4	1	7	5 1/2	5	13 1/4	18 5/8																	10.0
4	48	30	1 7/8	3/4	1	7	5 1/2	5	13 1/4	18 5/8																	10.0
5	48	30	1 7/8	3/4	1	7	5 1/2	5	13 1/4	18 5/8																	10.0

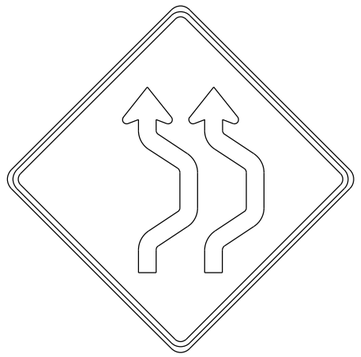
STANDARD SIGN
W21-62R

WISCONSIN DEPT OF TRANSPORTATION

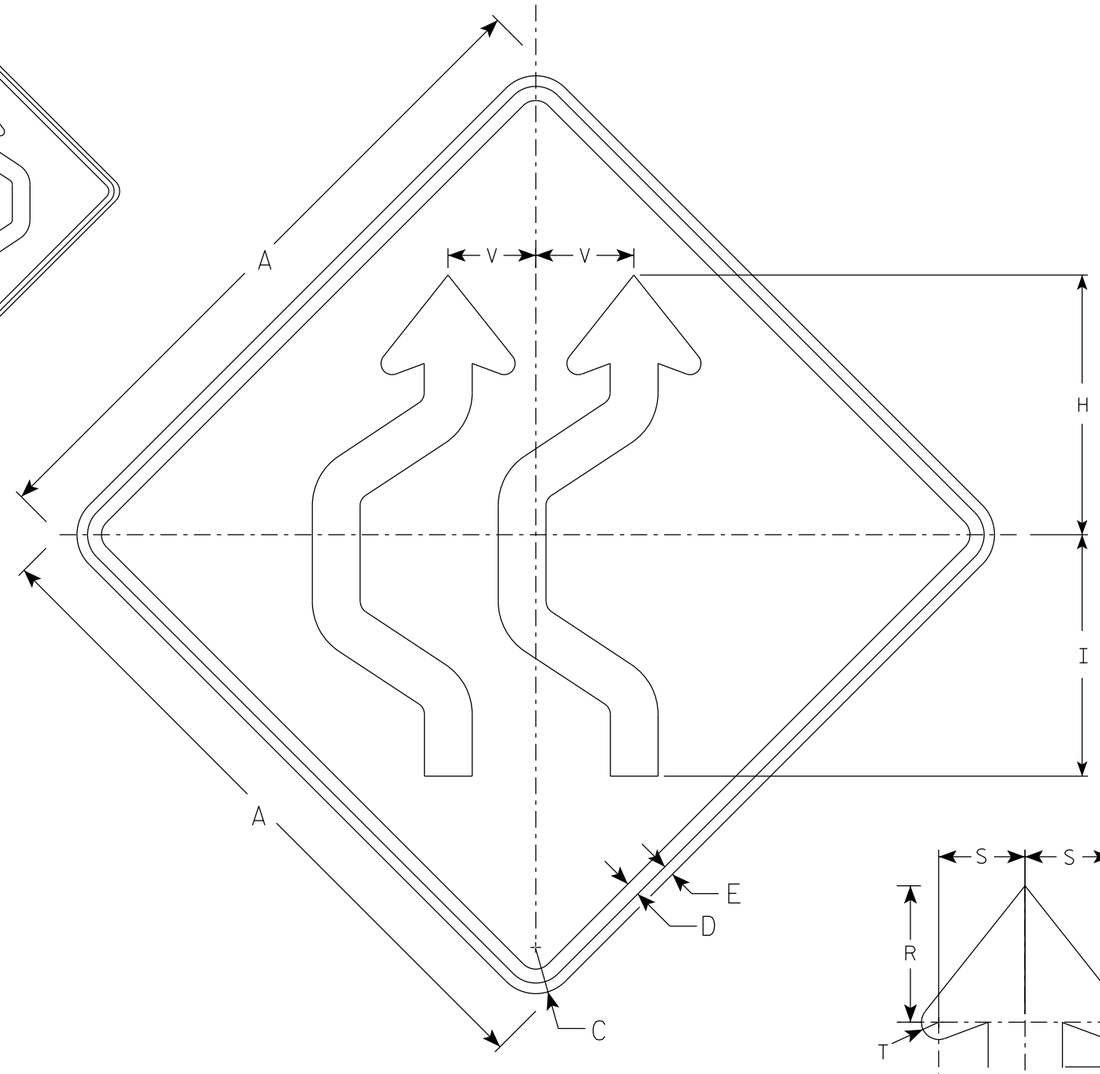
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/13/2024 PLATE NO. W21-62R.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 741 E



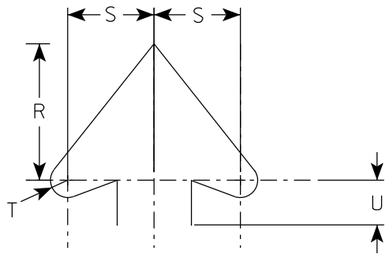
W24-1AR



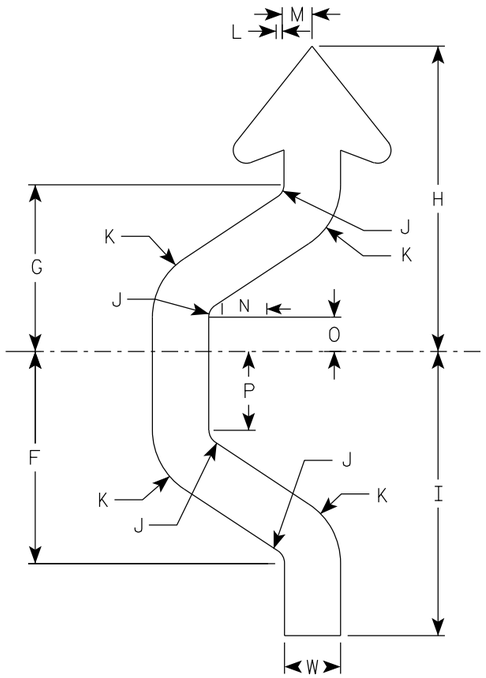
W24-1AL

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. W24-1AR is the same as W24-1AL except reversed along the vertical centerline.



Arrowhead Detail



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	1/2	9 1/2	7 1/2	13 3/4	12 3/4	5/8	3 1/8	3/8	1 5/8	2 3/8	1 1/2	3 1/2		4 5/8	3	5/8	1 1/2	4 3/4	2 1/2				9.0
2S	48		3	1	3/4	12 7/8	10 1/8	18 1/2	17 1/4	7/8	4 1/4	3/8	2 1/8	3 1/4	2	4 3/4		6 1/4	4	3/4	2 1/8	6 1/4	3 3/8				16.0
2M	48		3	1	3/4	12 7/8	10 1/8	18 1/2	17 1/4	7/8	4 1/4	3/8	2 1/8	3 1/4	2	4 3/4		6 1/4	4	3/4	2 1/8	6 1/4	3 3/8				16.0
3	48		3	1	3/4	12 7/8	10 1/8	18 1/2	17 1/4	7/8	4 1/4	3/8	2 1/8	3 1/4	2	4 3/4		6 1/4	4	3/4	2 1/8	6 1/4	3 3/8				16.0
4	48		3	1	3/4	12 7/8	10 1/8	18 1/2	17 1/4	7/8	4 1/4	3/8	2 1/8	3 1/4	2	4 3/4		6 1/4	4	3/4	2 1/8	6 1/4	3 3/8				16.0
5	48		3	1	3/4	12 7/8	10 1/8	18 1/2	17 1/4	7/8	4 1/4	3/8	2 1/8	3 1/4	2	4 3/4		6 1/4	4	3/4	2 1/8	6 1/4	3 3/8				16.0

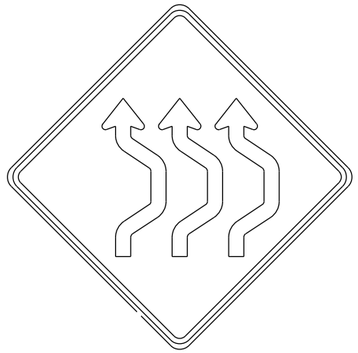
STANDARD SIGN
W24-1AL

WISCONSIN DEPT OF TRANSPORTATION

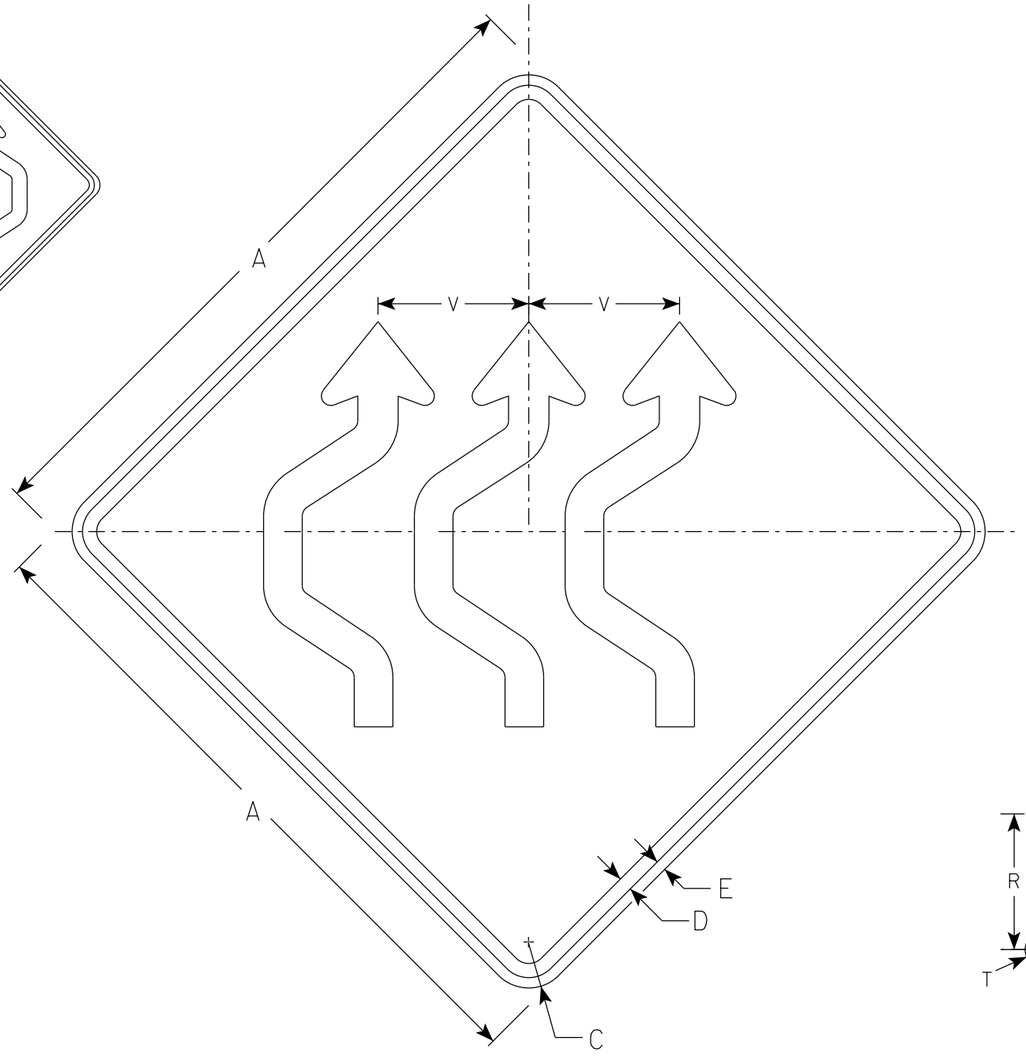
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/22/2024 PLATE NO. W24-1AL.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 742 E



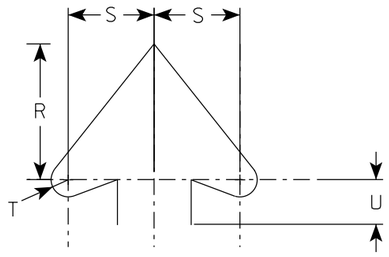
W24-1BR



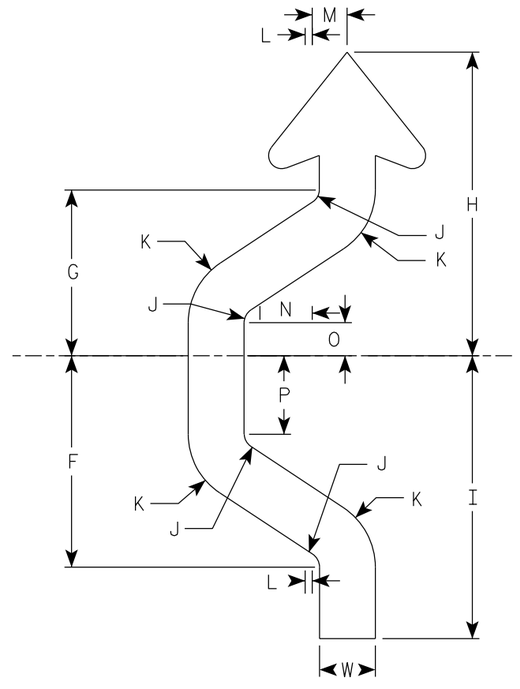
W24-1BL

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. W24-1BR is the same as W24-1BL except reversed along the vertical centerline.



Arrow Detail



Arrow Detail

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

STANDARD SIGN
W24-1BL

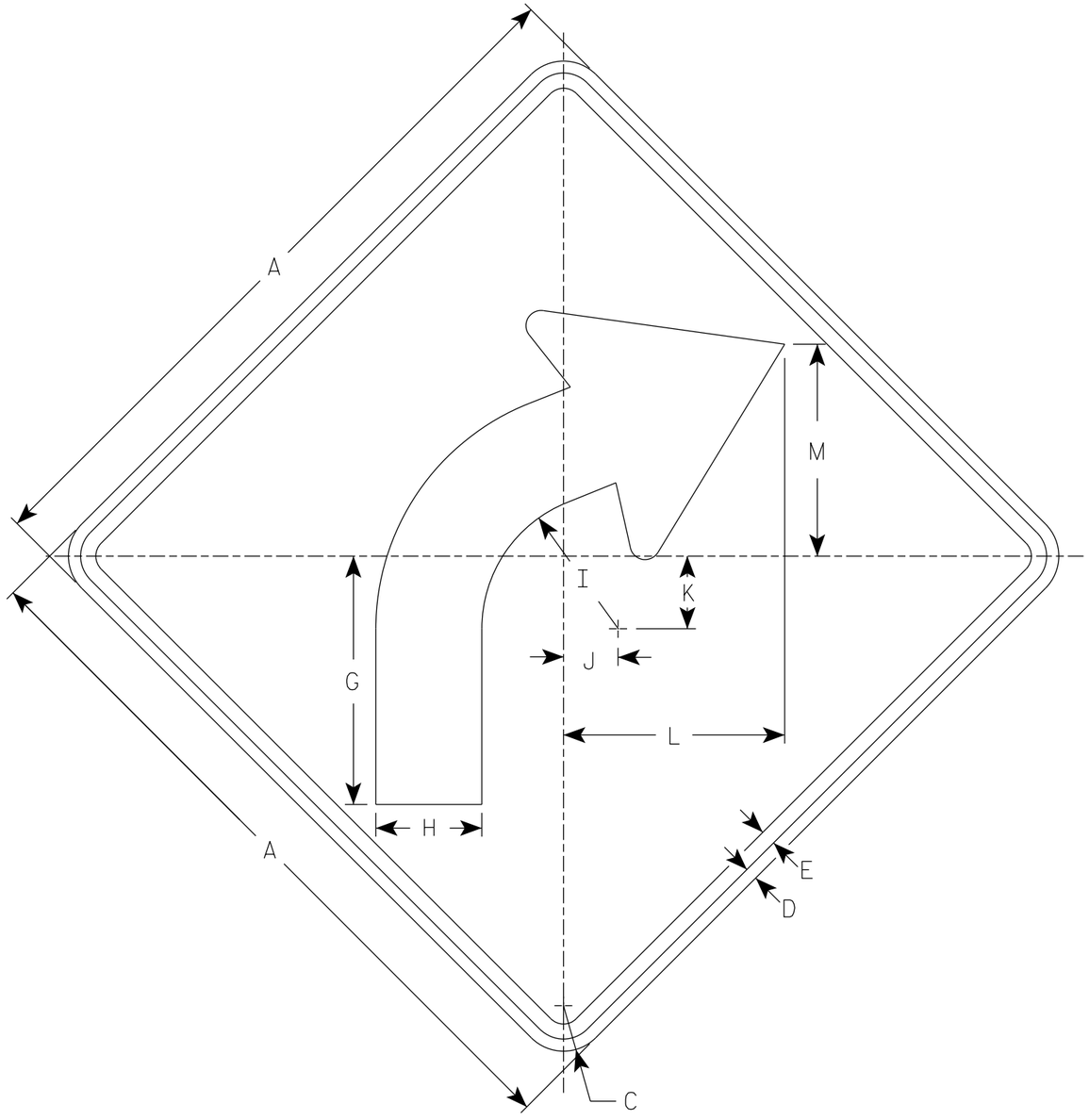
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/22/2024 PLATE NO. W24-1BL.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

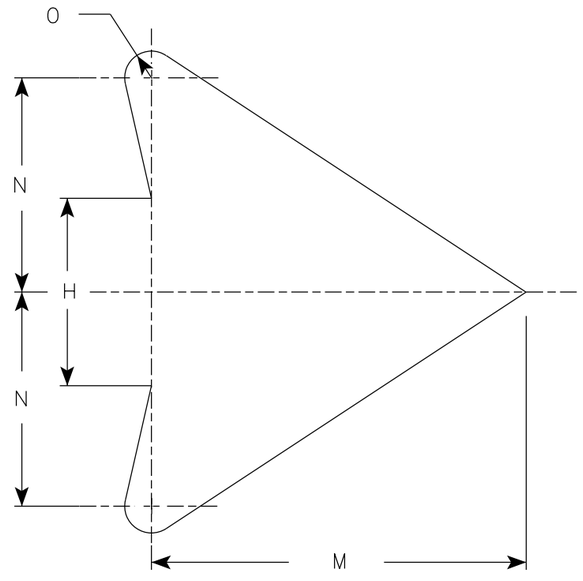
FILE NAME : FILE NAME :C:\CAEfiles\Projects\tr_stdplate\W241BL.DGN PLOT DATE : 23-JAN 2024 7:04 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W01-2R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-2L is the same as W01-2R except the arrow is reversed along the vertical centerline.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												4.0
2S	48		3	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
2M	48		3	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
3	48		3	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
4	48		3	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
5	48		3	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

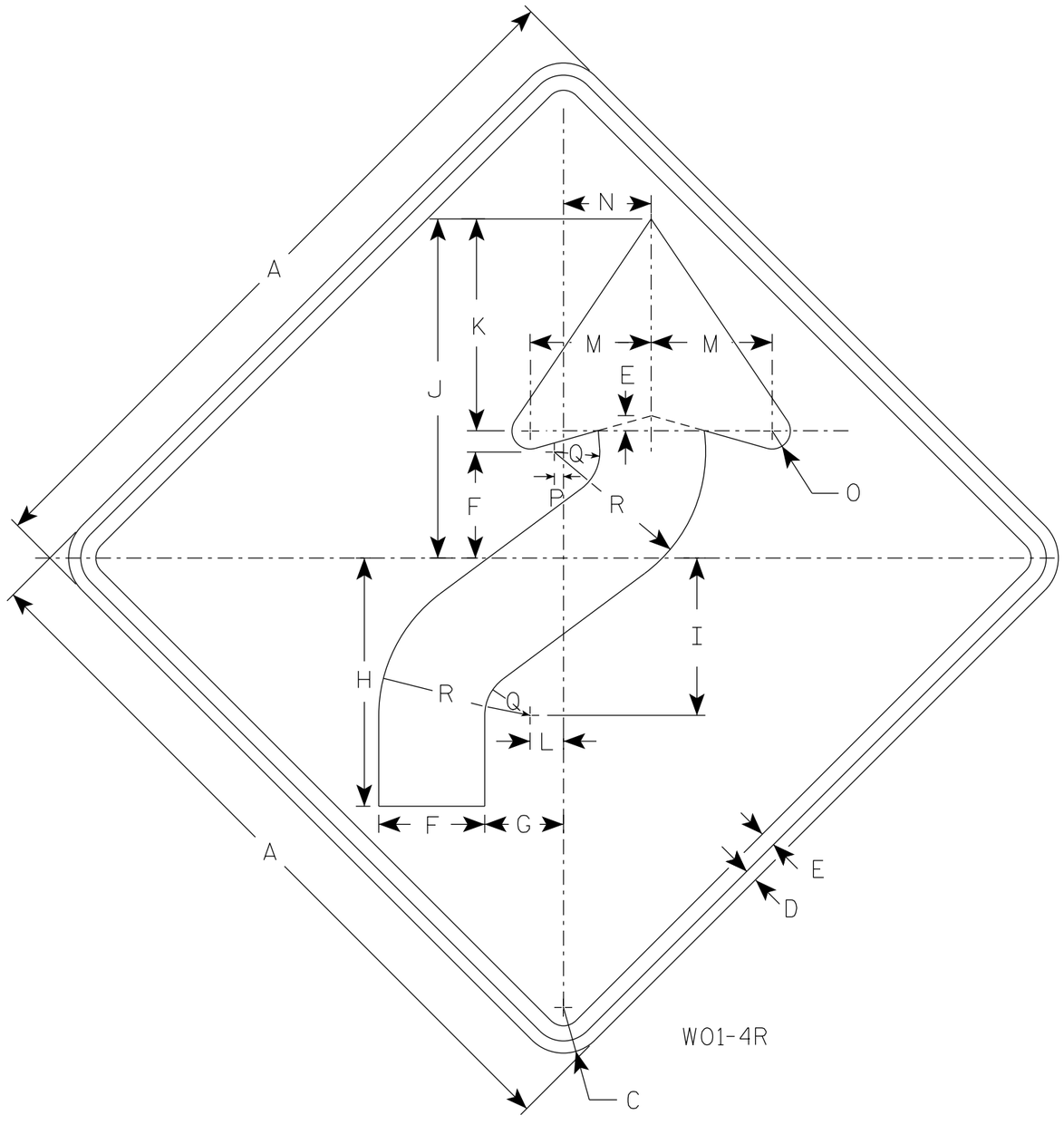
STANDARD SIGN
W01-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-2.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 744	E



W01-4R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

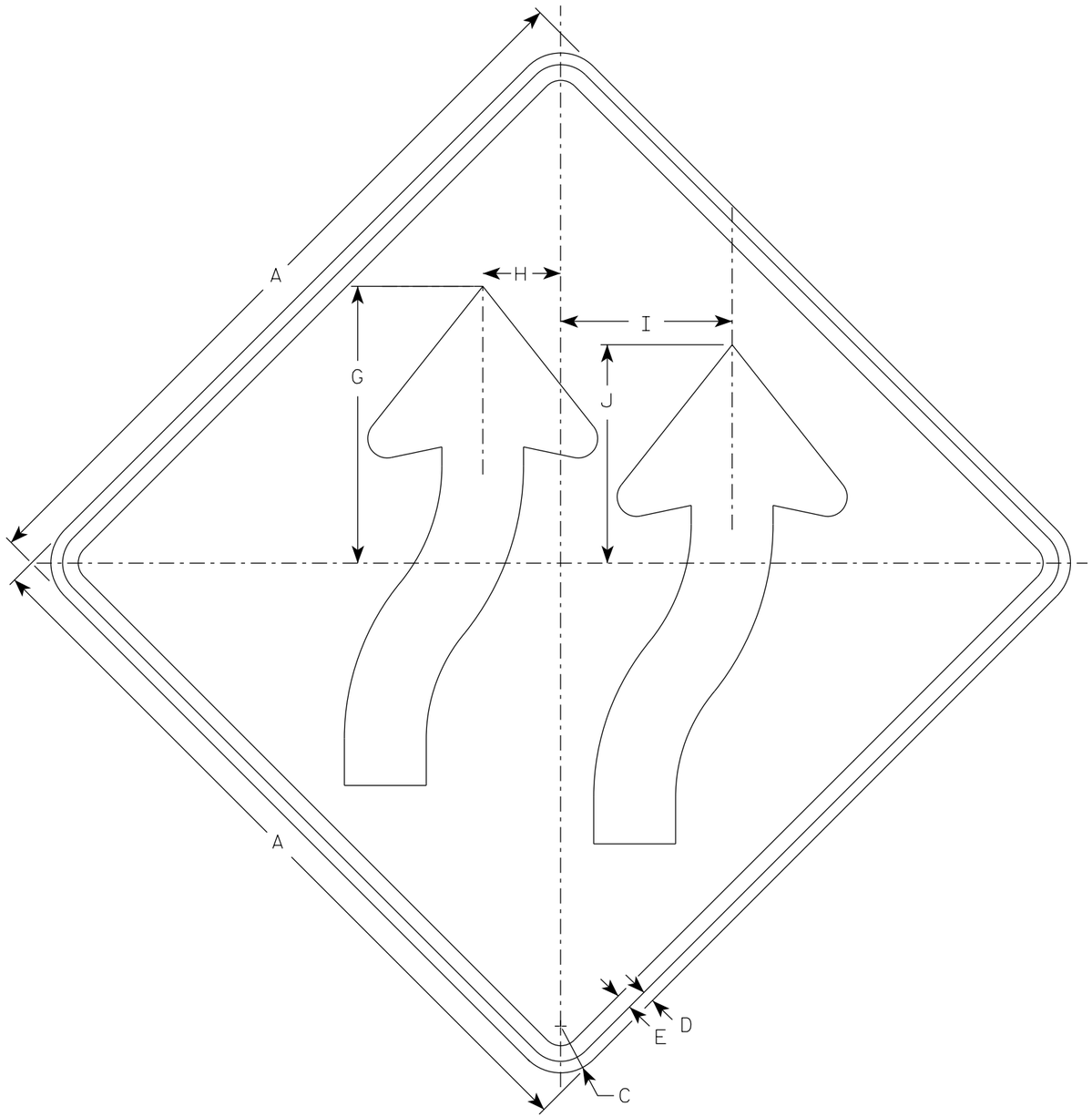
STANDARD SIGN
W01-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-4.2

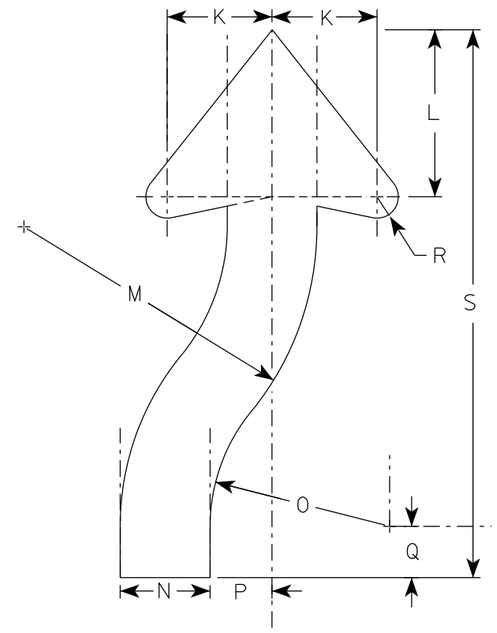
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 745 | E



W01-4BR

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4BL is the same as W014-BR exept arrows are reversed along the vertical centerline



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4		13 3/8	3 3/4	8 1/4	10 1/2	4 5/8	7 3/8	12 7/8	3 7/8	7 7/8	2 3/4	2 1/4	7/8	24								9.0
2S	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
2M	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
3	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
4	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
5	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0

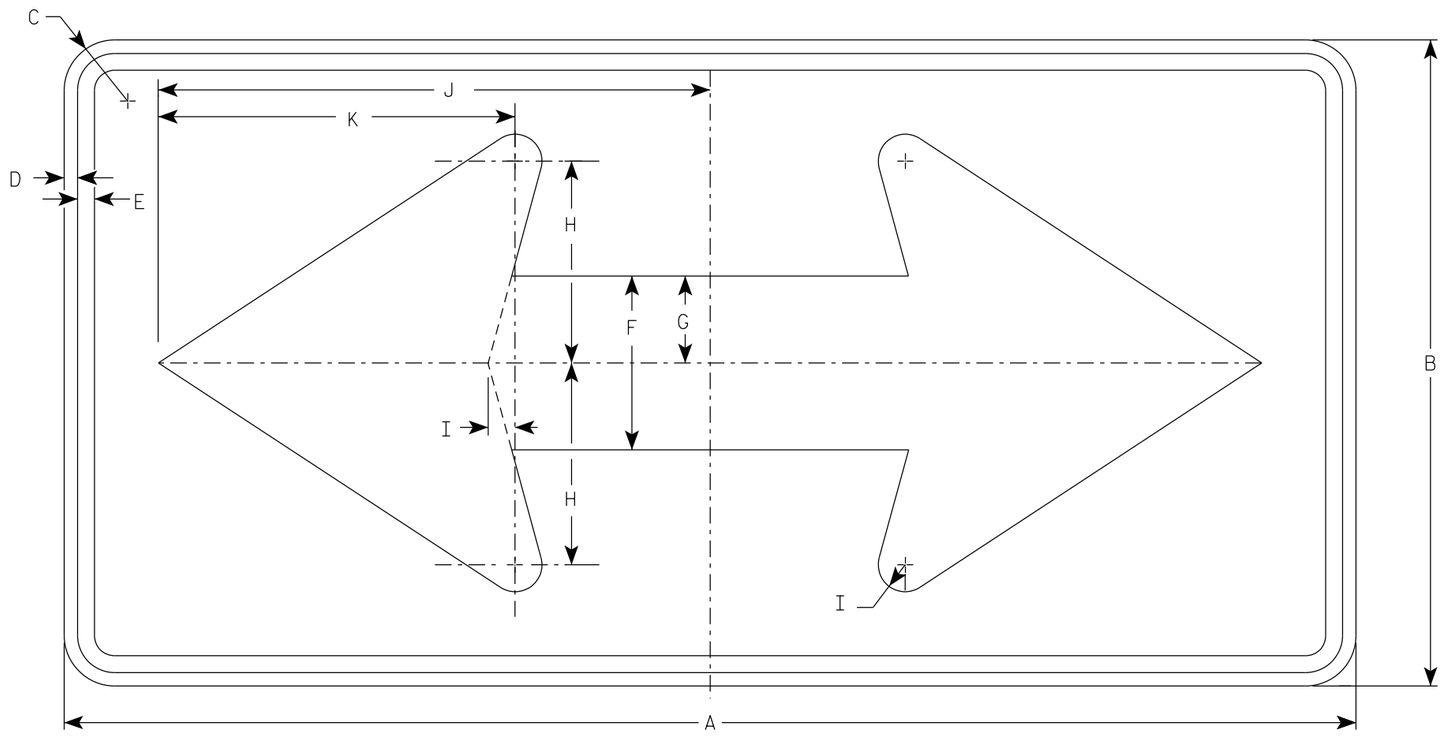
STANDARD SIGN
W01-4B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-4B.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E



W01-7

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 7/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 7/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 7/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 7/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	60	30	1 7/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5

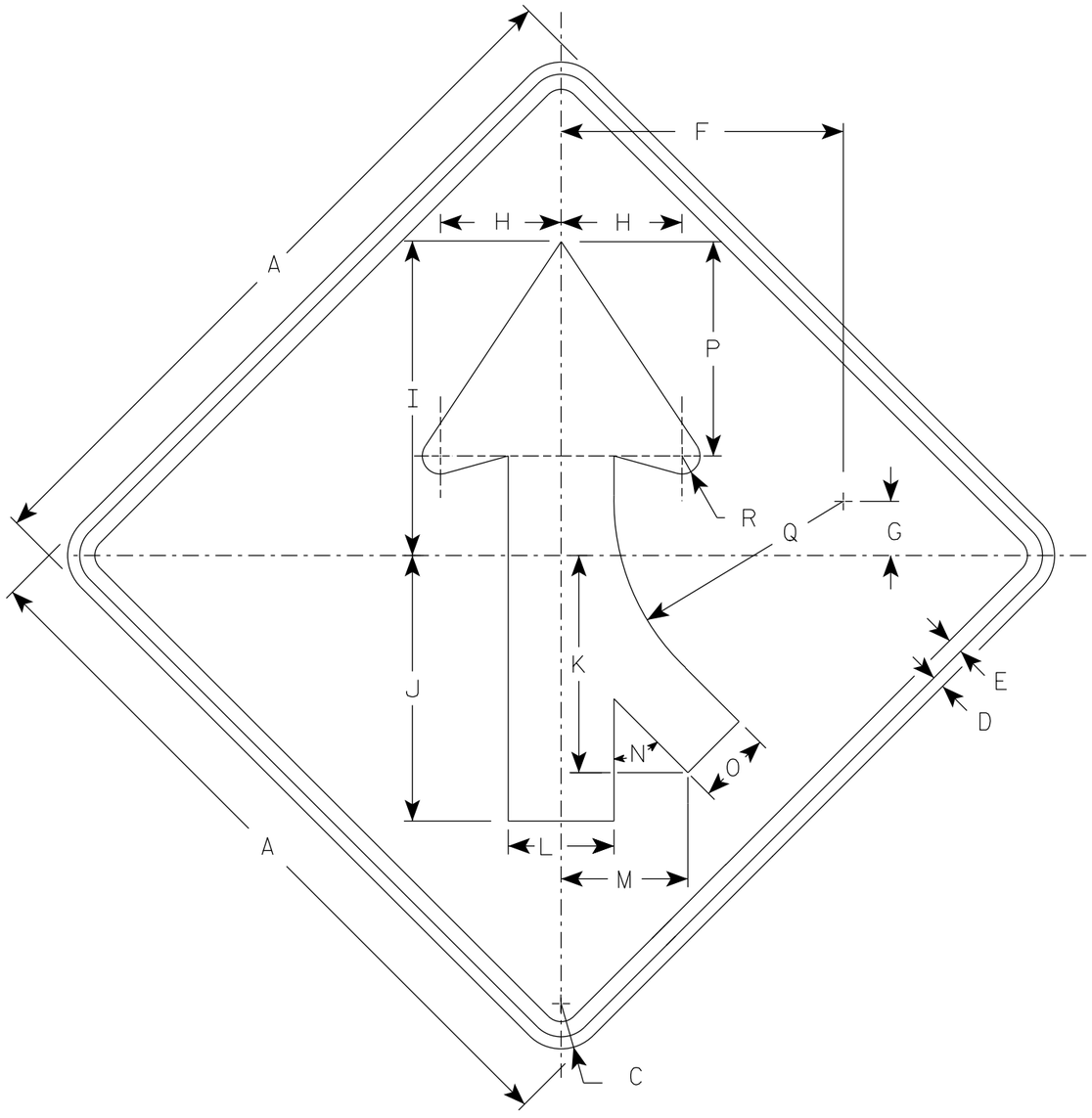
STANDARD SIGN
W01-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-7.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 747 | E



W04-1R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-1L is the same as W04-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2S	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
2M	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
3	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
4	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

STANDARD SIGN
W04-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-1.3

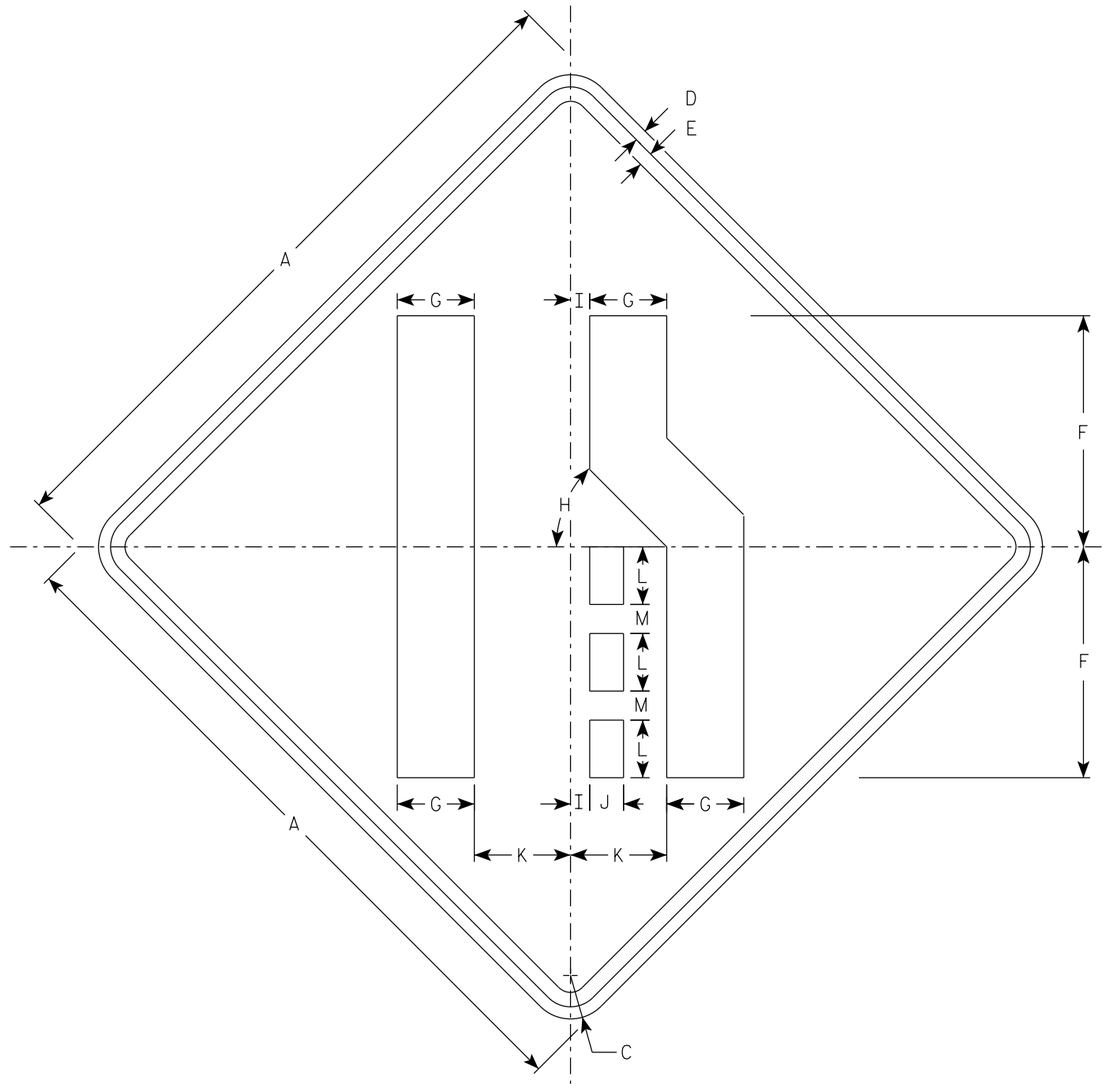
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 748 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W041.dgn PLOT DATE : 25-JAN 2024 8:20 PLOT BY : dotc4c PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

7

7



W04-2R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

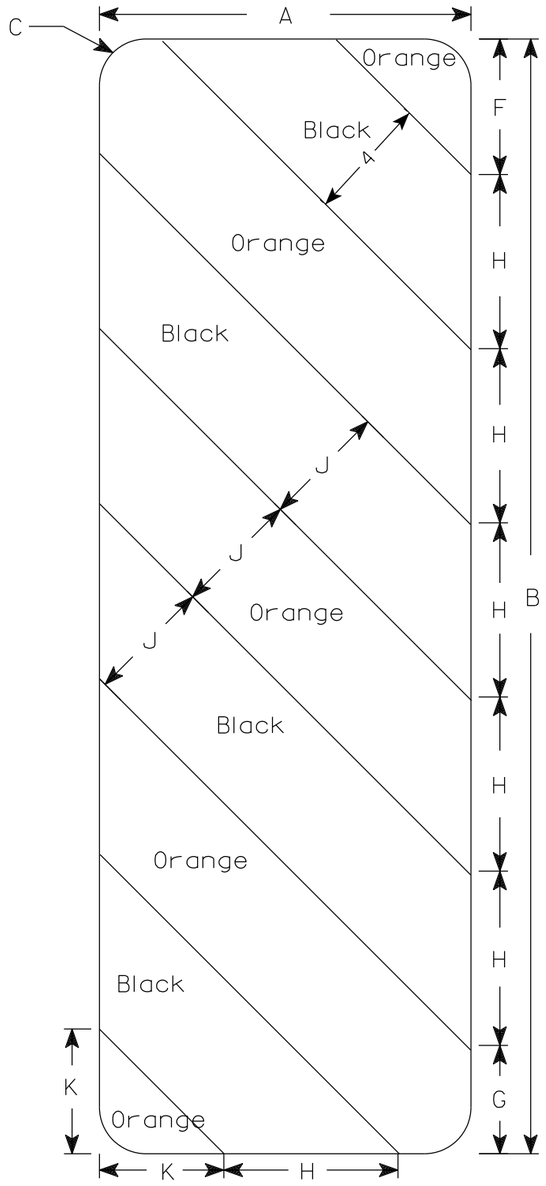
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

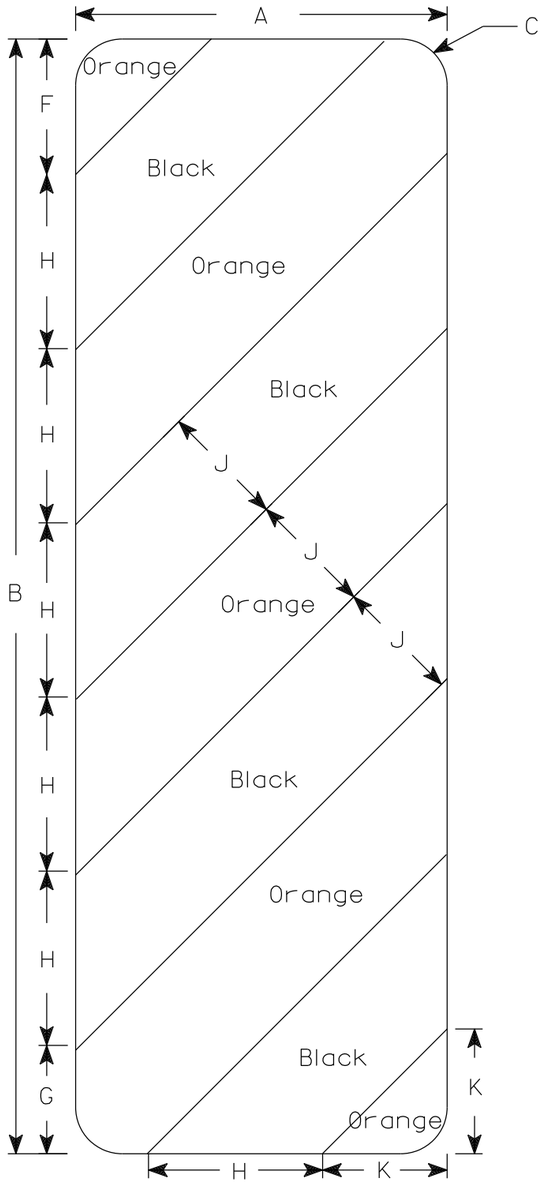
DATE 1/25/2024 PLATE NO. W04-2.2

PROJECT NO:

SHEET NO: 749 E



W05-52L



W05-52R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
4. Alternate colors of stripes as shown.

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	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54	1 1/2			6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

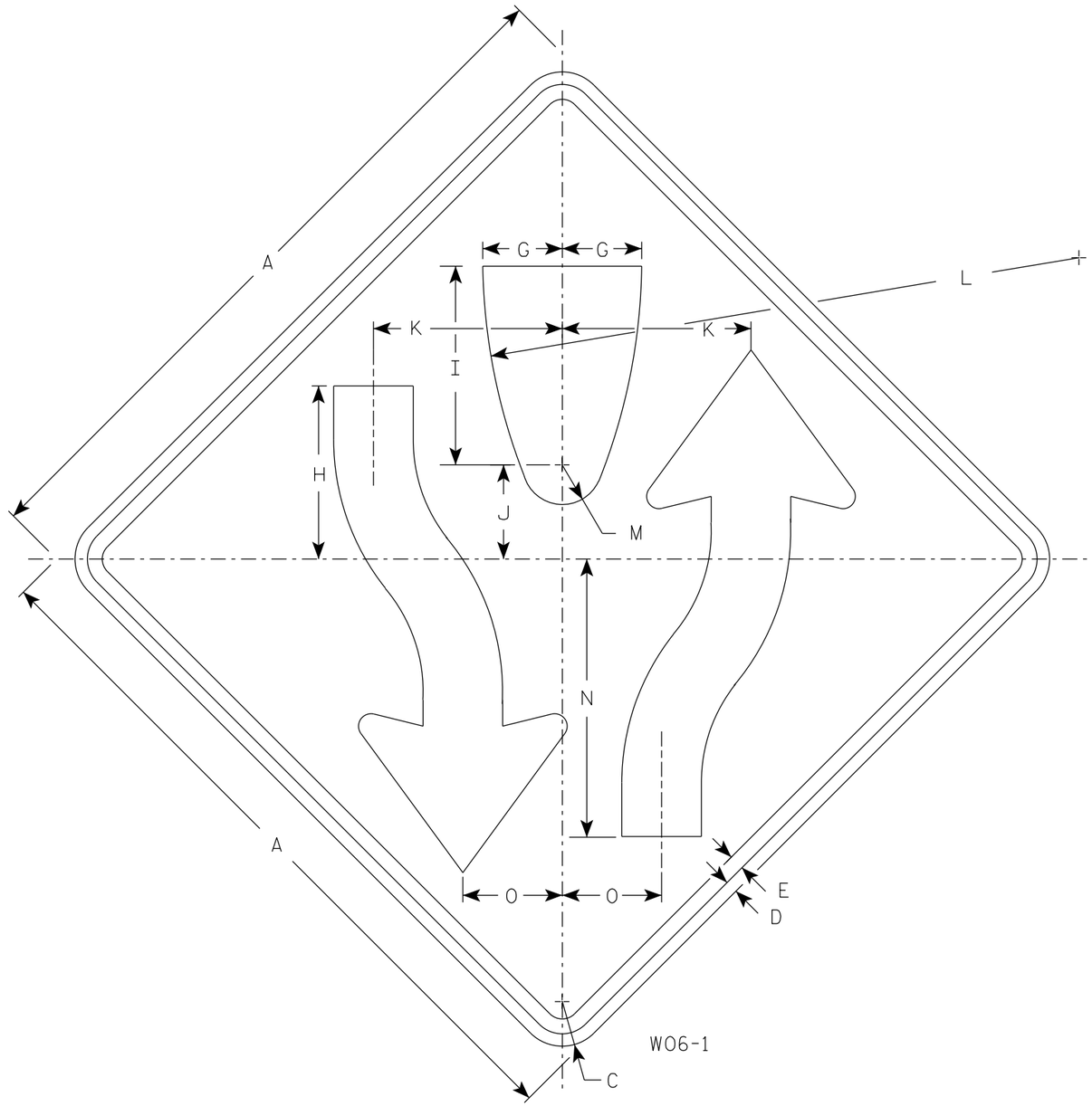
W05-52L & W05-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/2024 PLATE NO. W05-52.2

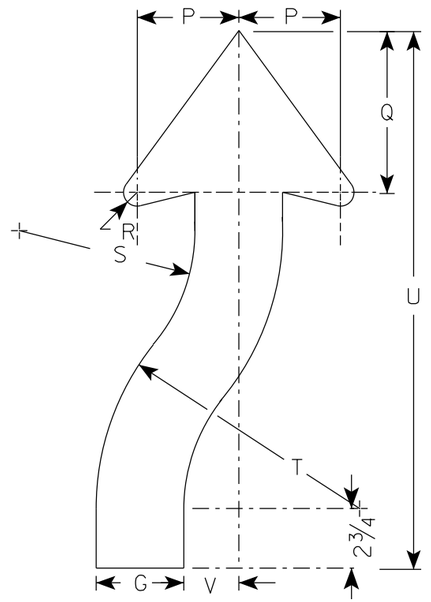
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 750	E



W06-1

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. 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		2 1/4	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		3	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		3	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		3	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		3	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		3	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

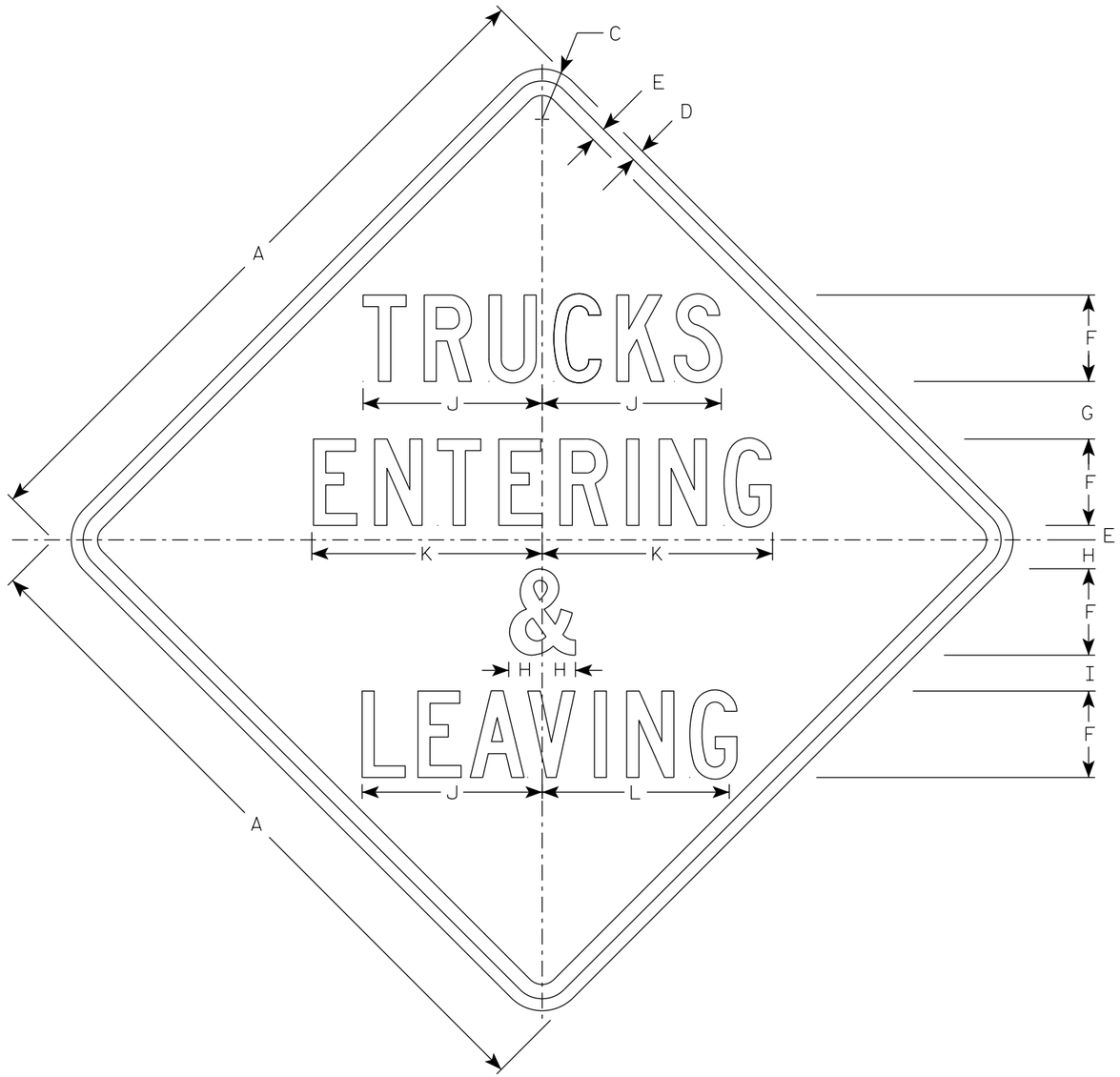
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/30/2024 PLATE NO. W06-1.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W061.dgn PLOT DATE : 30-JAN 2024 10:55 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W08-6A

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	1/2	5/8	4 1/2	3	1 1/2	1 7/8	9 3/8	12	9 3/4															9.0
2S	48		3	3/4	1	6	4	2	2 1/2	12 1/2	16	13															16.0
2M	48		3	3/4	1	6	4	2	2 1/2	12 1/2	16	13															16.0
3	48		3	3/4	1	6	4	2	2 1/2	12 1/2	16	13															16.0
4	48		3	3/4	1	6	4	2	2 1/2	12 1/2	16	13															16.0
5	48		3	3/4	1	6	4	2	2 1/2	12 1/2	16	13															16.0

STANDARD SIGN

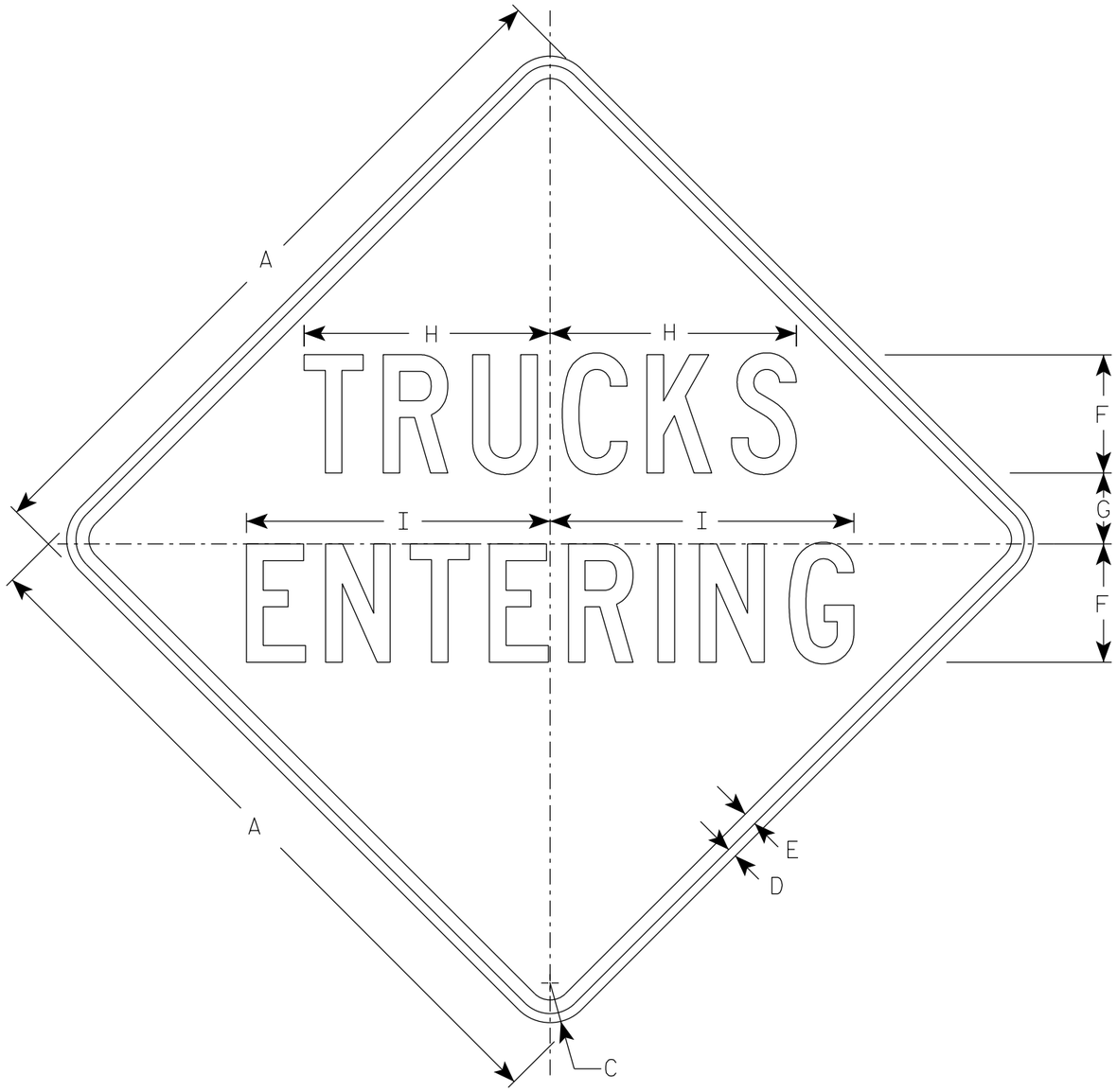
W08-6A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/31/2024 PLATE NO. W08-6A.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 752 | E



W08-6B

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	3 5/8	12 1/2	15 3/8																		9.0
2S	48		3	3/4	1	8	5	16 5/8	20 1/2																		16.0
2M	48		3	3/4	1	8	5	16 5/8	20 1/2																		16.0
3	48		3	3/4	1	8	5	16 5/8	20 1/2																		16.0
4	48		3	3/4	1	8	5	16 5/8	20 1/2																		16.0
5	48		3	3/4	1	8	5	16 5/8	20 1/2																		16.0

STANDARD SIGN

W08-6B

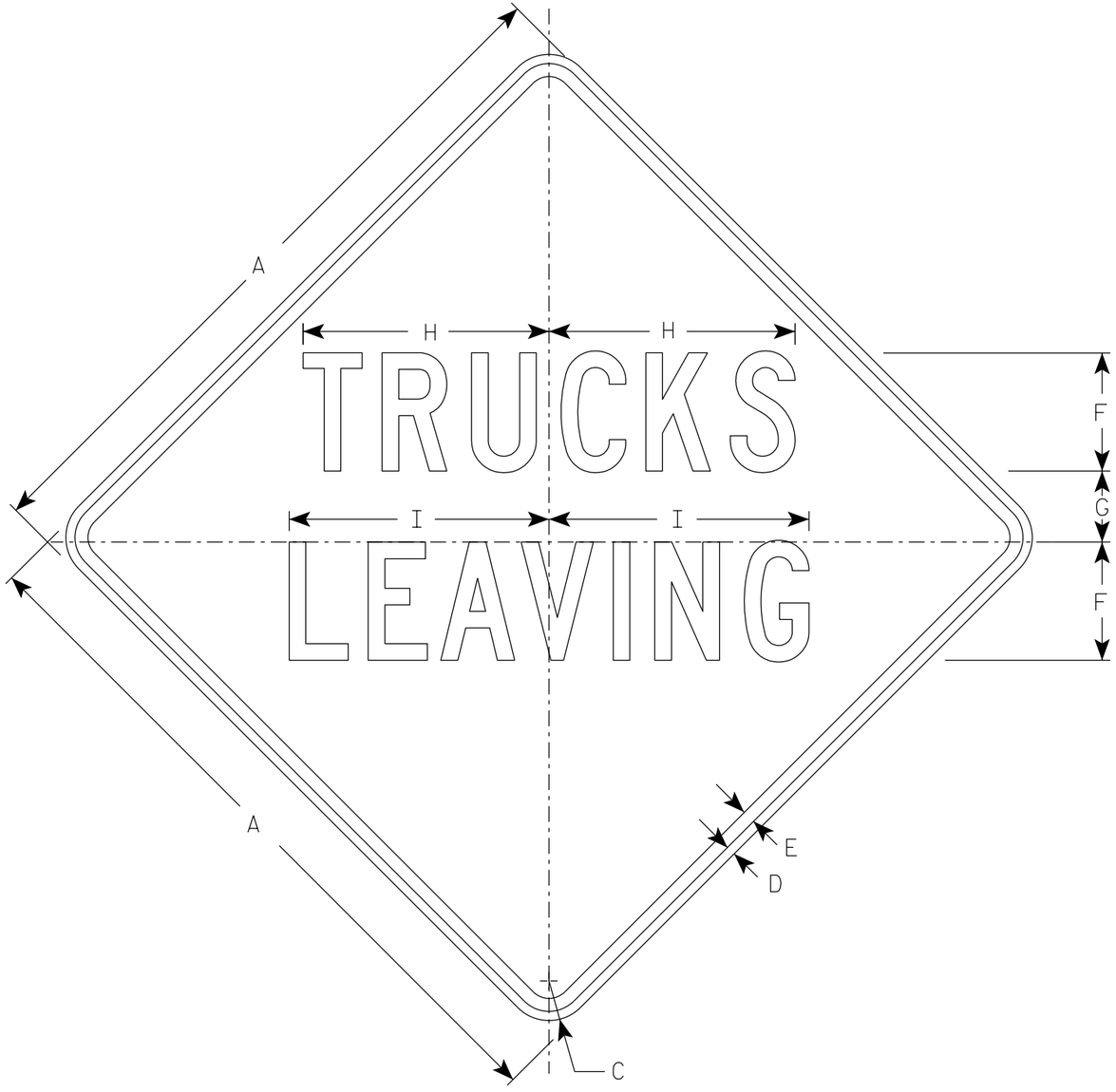
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/31/2024 PLATE NO. W08-6B.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 753 | E

7



W08-6C

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	3 5/8	12 1/2	13 1/4																		9.0
2S	48		3	3/4	1	8	5	16 5/8	17 5/8																		16.0
2M	48		3	3/4	1	8	5	16 5/8	17 5/8																		16.0
3	48		3	3/4	1	8	5	16 5/8	17 5/8																		16.0
4	48		3	3/4	1	8	5	16 5/8	17 5/8																		16.0
5	48		3	3/4	1	8	5	16 5/8	17 5/8																		16.0

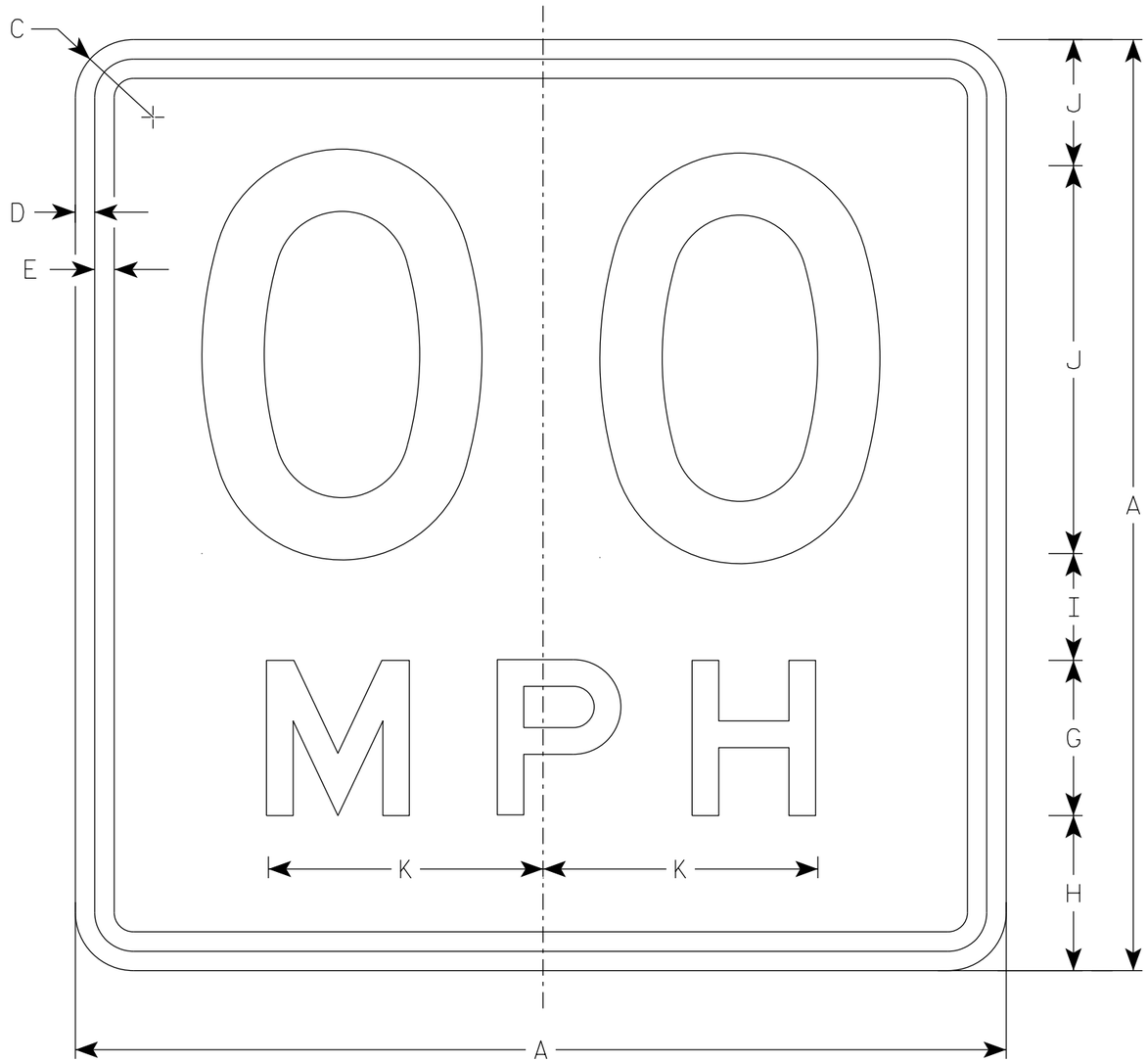
STANDARD SIGN
W08-6C

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/31/2024 PLATE NO. W08-6C.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 754 E



W013-1

NOTES

1. Sign is Type II - Type F Reflective
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 1/2	3/8	1/2	10	4	4	2 3/4	3 1/4	7 1/8																4.0
2S	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.0
2M	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.0
3	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.0
4	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.0
5	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.0

STANDARD SIGN

W013-1

WISCONSIN DEPT OF TRANSPORTATION

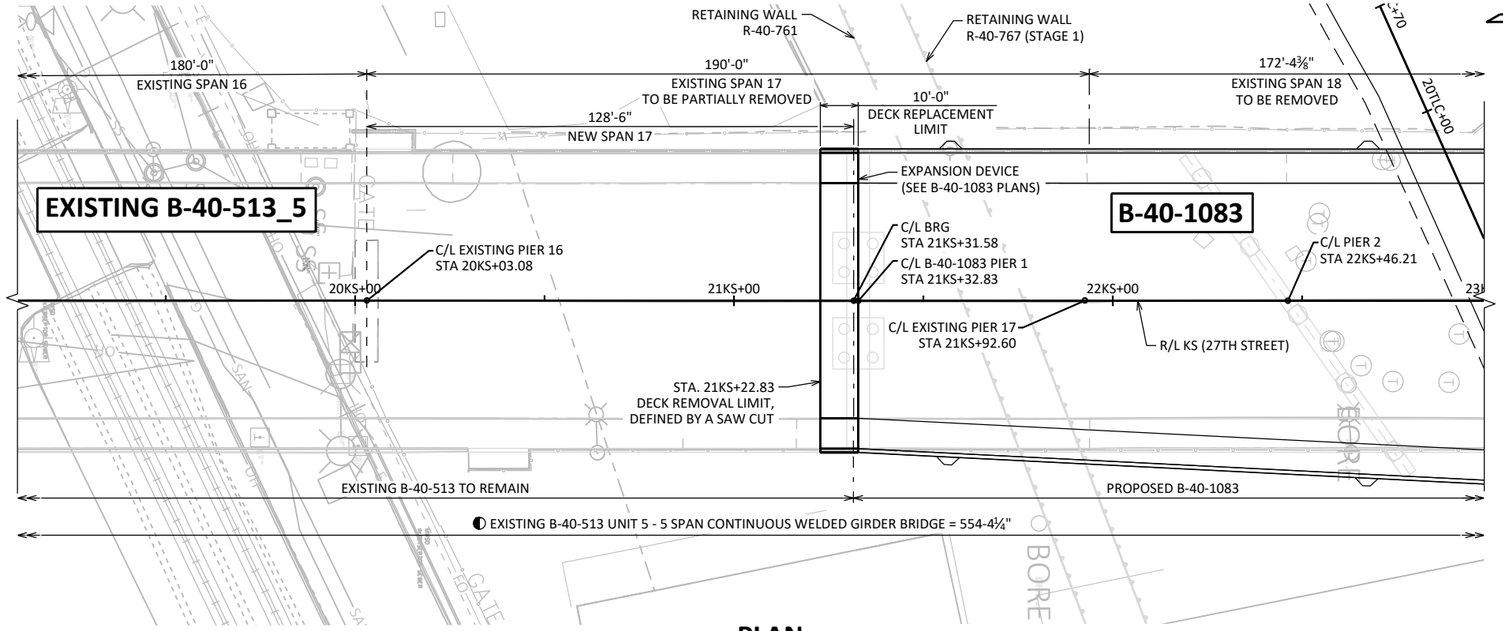
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W013-1.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 755	E

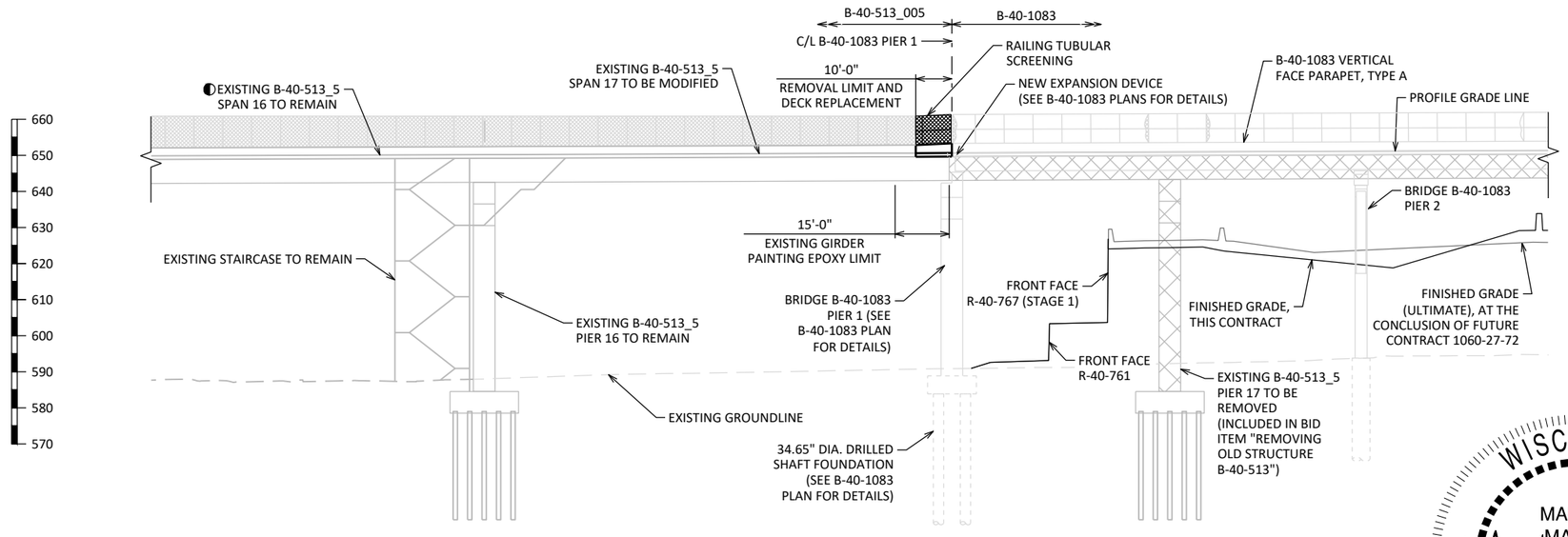
STATE PROJECT NUMBER

1060-27-74



PLAN

(EXISTING 5 SPAN - 78" WEB PLATE GIRDER BRIDGE TO BE MODIFIED)



ELEVATION

(LOOKING WEST)

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. GENERAL NOTES, QUANTITIES & CONSTRUCTION SEQUENCE
3. TYPICAL SECTION
4. REINFORCEMENT DETAILS
5. BEARING DETAILS
6. BEARING STIFFENER & END DIAPHRAGM DETAILS
7. RAILING TUBULAR SCREENING

LEGEND

◐ EXISTING STRUCTURE B-40-513_5 IS A 5-SPAN STEEL GIRDER BRIDGE. PLANS OF THE EXISTING BRIDGE ARE AVAILABLE FOR REVIEW AT WISDOT SE REGION OFFICE, 141 NW BARSTOW STREET, WAUKESHA, WI, OR THROUGH THE WISDOT STRUCTURES WEBSITE.

DESIGN DATA

LIVE LOAD:

DESIGN LOAD: HS20
INVENTORY RATING: HS22
OPERATING RATING: HS45
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE (HPC) ——— f'_c = 4,000 PSI

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

HIGH STRENGTH STRUCTURAL STEEL:
ASTM A709 (AASTHO M270), GRADE 50 ——— f_y = 50,000 PSI
ALLOWABLE DESIGN STRESS ——— f_s = 27,000 PSI

TRAFFIC DATA

27TH STREET:

EXISTING ADT = 22,500 (2019)
FUTURE ADT = 23,900 (2050)
R.D.S. = 35 MPH

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
AARON BONK (608) 261-0261
CONSULTANT:
MARK MADAY (414) 272-2426

NO.	DATE	REVISION	BY

Jacobs

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED EMK 05/09/25
CHIEF STRUCTURES DESIGN ENGINEER DATE

WISCONSIN MARK A. MADAY E-25925 MILWAUKEE WI 5/1/2025 PROFESSIONAL ENGINEER

STRUCTURE B-40-513-005

27TH ST OVER MENOMONEE VALLEY

COUNTY	~~TOWN~~/CITY/~~VILLAGE~~
MILWAUKEE	MILWAUKEE

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
AKK	SGM	AKK	EKM

GENERAL PLAN & ELEVATION

SHEET 1 OF 7
756

SCALE = 1:40

I.D. 1060-27-03 DATE: 04/30/2025

8

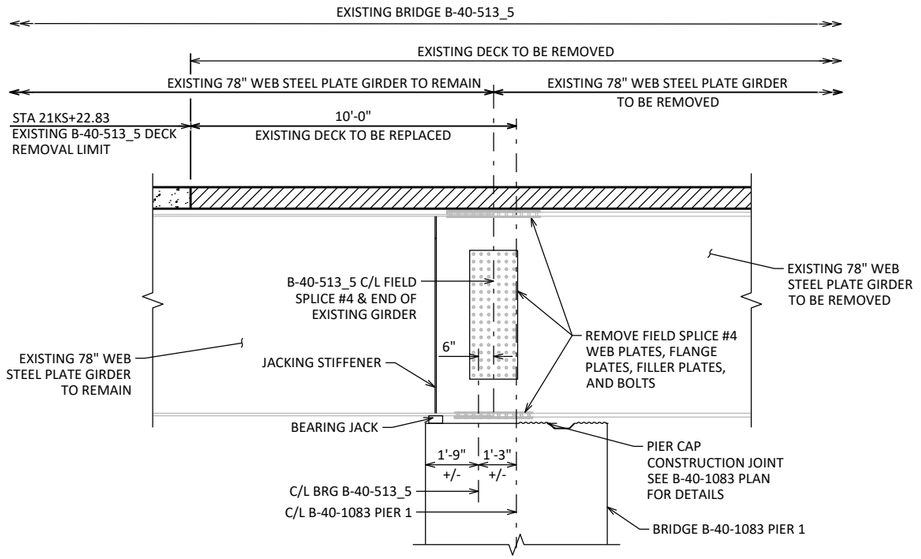
8

STATE PROJECT NUMBER
1060-27-74

ESTIMATE OF QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTAL
203.0220.0513	REMOVING STRUCTURE B-40-513	EACH	1
501.1000.S	ICE HOT WEATHER CONCRETING	LB	230
502.3200	PROTECTIVE SURFACE TREATMENT	SY	109
502.3210	PIGMENTED SURFACE SEALER	SY	8
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	6,950
506.0605	STRUCTURAL STEEL HS	LB	9,400
506.3020	WELDED STUD SHEAR CONNECTORS 7/8 X 7-INCH	EACH	54
506.6000	BEARING ASSEMBLIES EXPANSION (B-40-513_5)	EACH	9
513.4091	RAILING TUBULAR SCREENING	LF	20
517.0901.S	PREPARATION AND COATING OF TOP FLANGES B-40-513_5	EACH	1
517.0601.0513	PAINTING EPOXY SYSTEM B-40-513_5	EACH	1
517.1801.S.0513	STRUCTURE REPAINTING RECYCLED ABRASIVE B-40-513_5	EACH	1
517.4501.S	NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS B-40-513_5	EACH	1
517.6001.S	PORTABLE DECONTAMINATION FACILITY	EACH	1
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	12
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	40
652.0325	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	20
SPV.0035.4000	HPC MASONRY STRUCTURES	CY	31
SPV.0060.4010	BRIDGE JACKING B-40-513_5	EACH	1

ALL ITEMS ARE CATEGORY 2000



GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON EXISTING STRUCTURE PLANS.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), MILWAUKEE COUNTY ZONE, NAD 83 (2007). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2007).

DESIGN OF MODIFICATIONS OF B-40-513 UNIT 5 IN ACCORDANCE WITH THE 1977 AASHTO STANDARD SPECIFICATIONS.

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

ALL REINFORCING BARS ARE ENGLISH. THE FIRST OR FIRST ROW DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE. BAR DIMENSIONS ARE OUT TO OUT OF BAR.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

THE UTILITY 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 THEIR OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE. UTILITIES LABELED AS PROPOSED MAY BE INSTALLED BY OTHERS PRIOR TO THIS CONTRACT.

EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE SHALL BE PAID PER LINEAL FOOT AS "EXPANSION DEVICE" AND IS QUANTIFIED IN THE B-40-1083 PLANS.

CLEAN AND PAINT ALL EXPOSED STEEL SUPERSTRUCTURE SURFACES TO THE LIMITS SHOWN AND AS THE ENGINEER DIRECTS AFTER REMOVAL OF FIELD SPLICE #4 AND INSTALLATION OF THE BEARING STIFFENERS AND END DIAPHRAGMS. THE SURFACES INCLUDE GIRDERS, DIAPHRAGMS, BEARING STIFFENERS, CONNECTIONS, ETC. ALL CLEANING AND PAINTING TO BE PAID FOR AS "PAINTING EPOXY SYSTEM B-40-513_5".

REMOVAL OF EXISTING STRUCTURE B-40-43 IS INCLUDED IN THE B-40-1083 PLANS.

ALL STRUCTURAL STEEL TOP FLANGE AREAS IN CONTACT WITH NEW CONCRETE ARE TO BE CLEANED AND PRIME COATED IN ACCORDANCE WITH THE BID ITEM 517.0901.S "PREPARATION AND COATING OF TOP FLANGES B-40-513". ALL RUSTED AND CORRODED AREAS WITHIN CONCRETE ARE TO BE CLEANED, PRIME PAINT COATED AND TO RECEIVE ONE FINISH PAINT COAT.

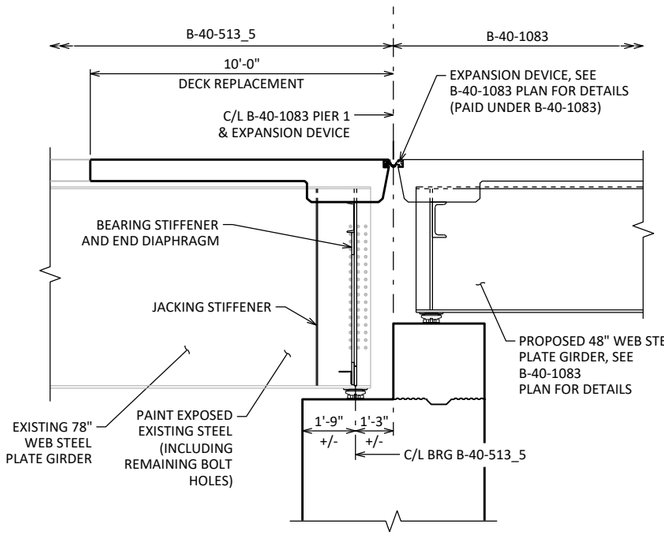
WELDED STUD SHEAR CONNECTOR QUANTITY IS BASED UPON AN ASSUMED NUMBER OF DAMAGED STUDS RESULTING FROM THE DECK REMOVAL PROCESS. THE STUDS ARE TO BE REPLACED IN KIND.

CONTRACTOR TO VERIFY THE JACKING LOAD DURING CONSTRUCTION BASED OF FIELD CONDITION.

PHASE 1 EXISTING B-40-513_005 BRIDGE REMOVAL AT B-40-1083 PIER 1

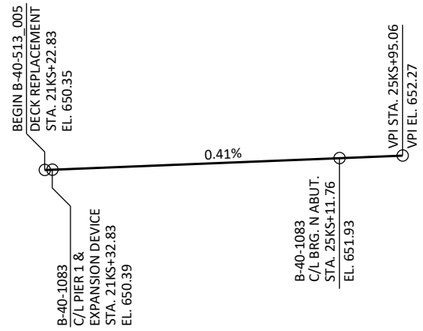
1. INSTALL JACKING STIFFENERS
2. CONSTRUCT B-40-1083 PIER 1 TO LIMIT SHOWN UNDER THE EXISTING B-40-513_005 BRIDGE
3. REMOVE EXISTING B-40-513_5 DECK TO LIMIT SHOWN
4. TEMPORARILY SUPPORT/ JACK EXISTING B-40-513_5 GIRDERS SOUTH OF FIELD SPLICE #4
5. UNBOLT AND REMOVE EXISTING FIELD SPLICE #4
6. REMOVE EXISTING B-40-513_5 SUPERSTRUCTURE, PIER 17 & PIER 18 NORTH OF FIELD SPLICE #4

JACKING LOAD (KIPS)	
COMPOSITE DEAD LOAD	NON-COMPOSITE DEAD LOAD
45.33	12.43



PHASE 2 - NEW BRIDGE CONSTRUCTION AT B-40-1083 PIER 1

1. INSTALL NEW BEARING STIFFENERS, LATERAL BRACING AND END DIAPHRAGMS
2. INSTALL BEARINGS
3. REMOVE TEMPORARY SUPPORT/JACKING EQUIPMENT
4. CONSTRUCT REMAINING PORTION OF B-40-1083 PIER 1 CAP
5. INSTALL B-40-1083 GIRDERS, BEARINGS & DIAPHRAGMS
6. CONSTRUCT B-40-1083 DECK, MODULAR EXPANSION JOINT & B-40-513 DECK REPLACEMENT



PROFILE GRADE LINE - KS

27TH STREET

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-513-005

DRAWN BY AKK | PLANS CK'D EKM

GENERAL NOTES, QUANTITIES & CONST. SEQUENCE

SHEET 2 OF 7
757

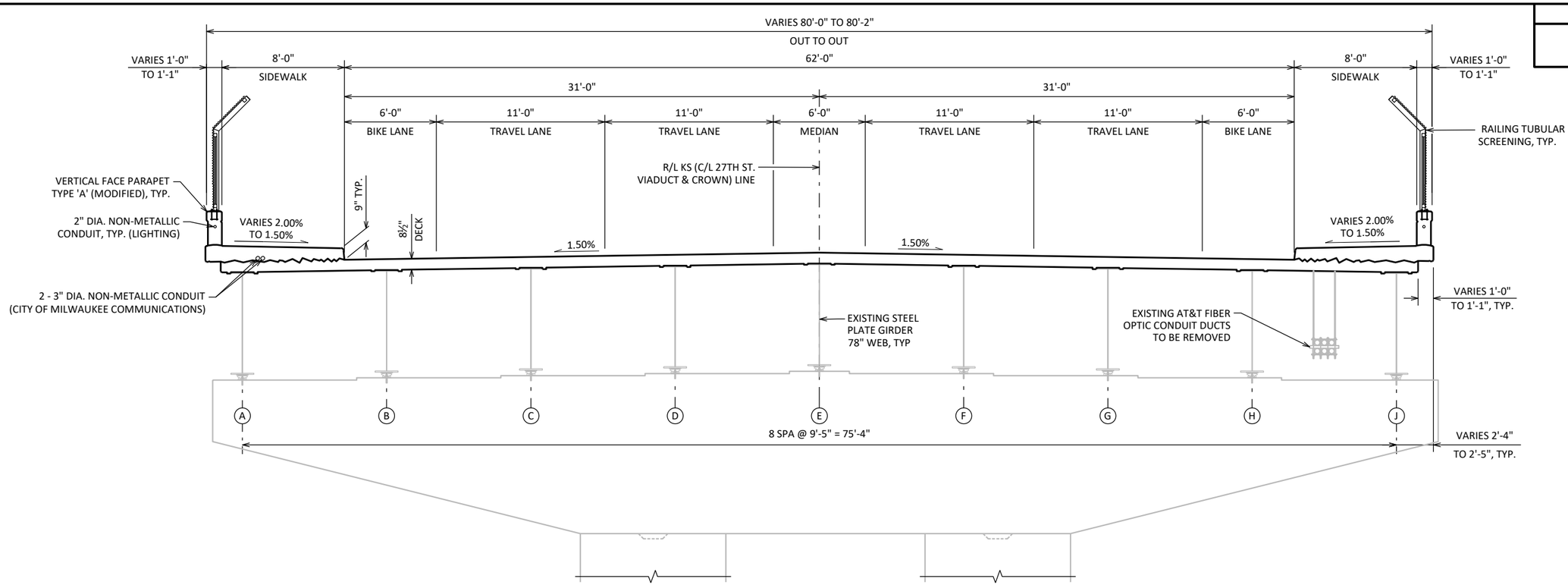
SCALE = N/A

8

8

STATE PROJECT NUMBER

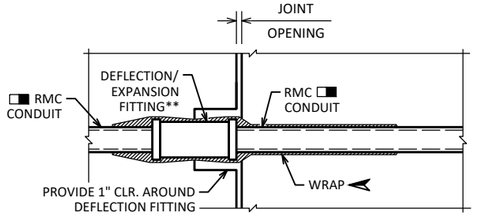
1060-27-74



TYPICAL SECTION

(LOOKING UPSTATION)

STA 21KS+22.83 TO STA 21KS+32.83



DEFLECTION/EXPANSION FITTING

LEGEND

- USE 2" DIA. RIGID METALLIC (RMC) CONDUIT AT FITTINGS. PROVIDE RMC FOR 3'-0" MIN. ON EACH SIDE OF JOINT OPENINGS UNLESS NOTED OTHERWISE.
- ‡ NONMETALLIC CONDUIT TO METALLIC CONDUIT ADAPTER FITTING (UL OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED).
- SPONGE RUBBER WRAP TO BE AASHTO M135, TYPE 1 OR EQUIVALENT - MINIMUM THICKNESS. PROVIDE WRAP FOR THE ENTIRE LENGTH OF THE FITTING OR AS SHOWN. SPONGE RUBBER WRAP INCIDENTAL TO "CONDUIT RIGID METTALIC 2-INCH".
- ● POSITION MOVABLE END OF CONDUIT INSIDE EXPANSION FITTING, SUCH THAT IT WILL HAVE THE SAME ALLOWANCE FOR MOVEMENT (EXPANSION/CONTRACTION) AS THE EXPANSION DEVICE SET IN PLACE IN THE DECK BELOW IT. TAKE CARE TO INSTALL EXPANSION FITTING AND CONDUIT EXACTLY PARALLEL TO BRIDGE MOVEMENT.

NOTES

CONDUIT SHALL BE EMBEDDED 2" CLEAR.

USE 2" DIA. RIGID NONMETALLIC CONDUIT (PVC) UNLESS NOTED OTHERWISE.

CONDUIT FITTINGS, CONDUIT BENDS, AND ADAPTER FITTINGS INCIDENTAL TO CONDUIT WORK.

CONDUIT BENDS SHALL CONFORM TO THE NATIONAL ELECTRIC CODE.

- 2'-0" MIN. CONDUIT COVER UNDER ROADWAYS, 1'-6" OTHERWISE. CONDUIT COVER SHOULD NOT EXCEED 3'-0".

PROVIDE JUNCTION BOXES FROM THE APPROVED PRODUCTS LIST.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-513-005

DRAWN BY AKK | PLANS CK'D EKM

TYPICAL SECTION

SHEET 3 OF 7

758

8

8

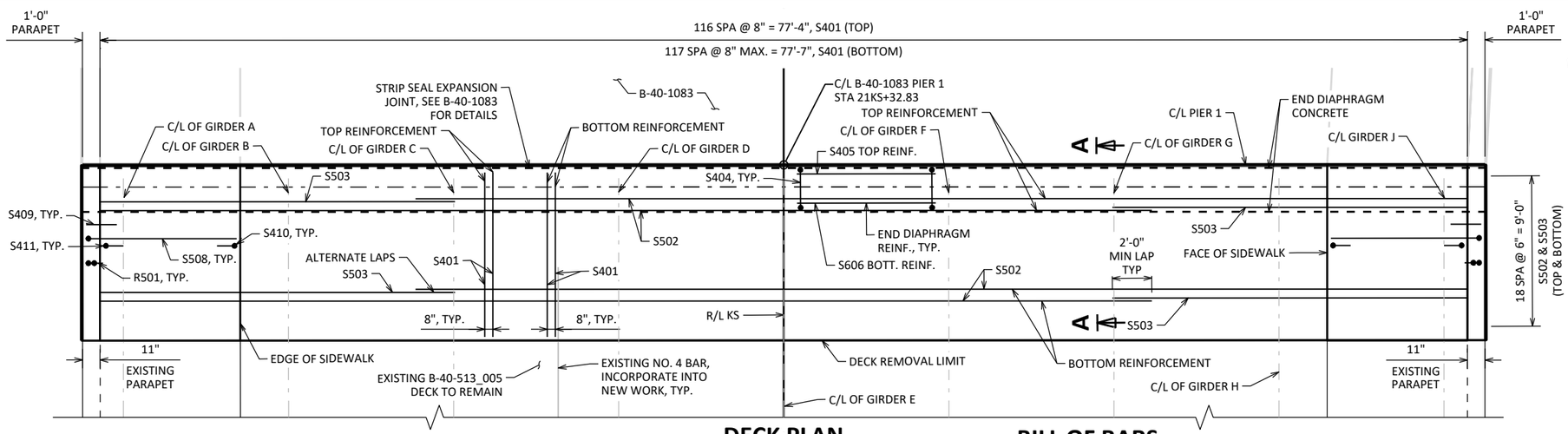
STATE PROJECT NUMBER

1060-27-74

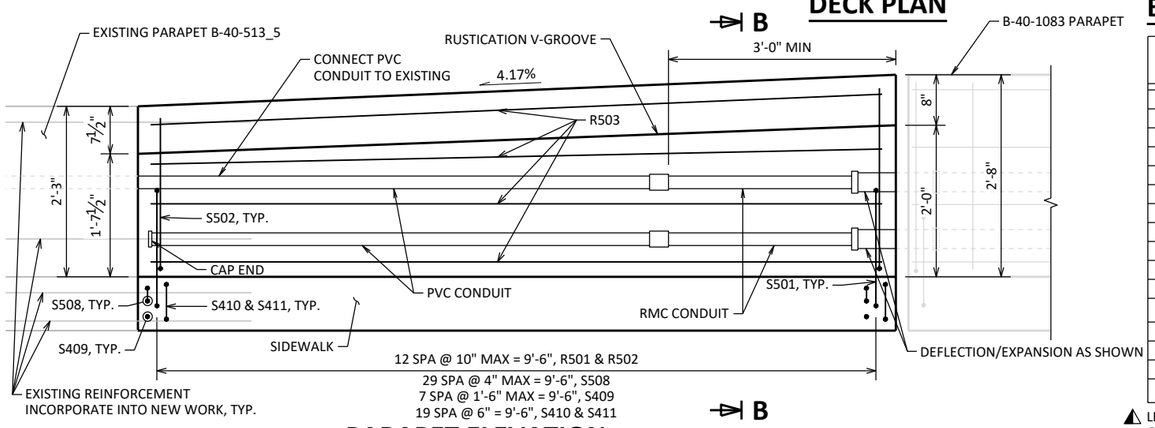
LEGEND

- CONSTRUCTION JOINT, STRIKE OFF AS SHOWN
- NONMETALLIC CONDUIT TO METALLIC CONDUIT ADAPTER FITTING (UL OR NRTL LISTED FOR ELECTRIC USE SHALL BE USED).
- JOINT FOLLOWS THE SLOPE OF THE DECK

PVC = POLYVINYL CHLORIDE (RIGID NONMETALLIC) CONDUIT.
RMC = RIGID METALLIC CONDUIT.

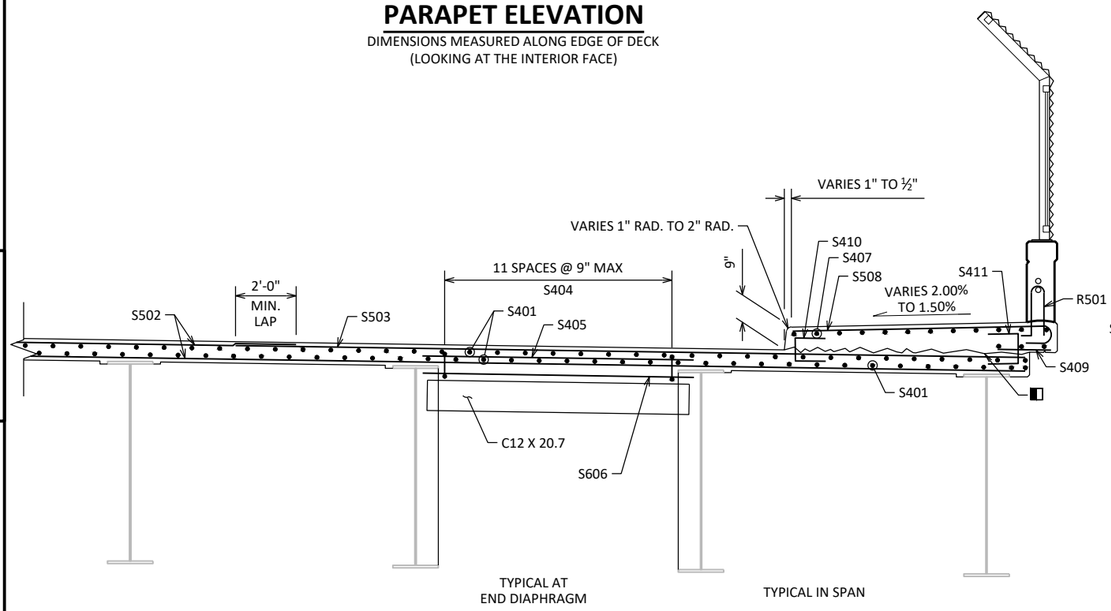


DECK PLAN



PARAPET ELEVATION

DIMENSIONS MEASURED ALONG EDGE OF DECK
(LOOKING AT THE INTERIOR FACE)



CROSS SECTION THROUGH SUPERSTRUCTURE

(LOOKING UPSTATION)

BILL OF BARS

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S401	X	235	9'-7"			DECK LONGITUDINAL - TOP & BOTTOM
S502	X	38	50'-0"			DECK TRANSVERSE - TOP & BOTTOM
S503	X	38	29'-9"			DECK TRANSVERSE - TOP & BOTTOM
S404	X	96	4'-6"	X		END DIAPHRAGM STIRRUP
S405	X	16	7'-11"			END DIAPHRAGM TRANSVERSE - TOP
S606	X	40	7'-11"			END DIAPHRAGM TRANSVERSE - BOTTOM
S407	X	30	9'-8"			SIDEWALK LONGITUDINAL
S508	X	60	9'-1"	X		SIDEWALK TRANSVERSE - TOP
S409	X	16	1'-10"			SIDEWALK TRANSVERSE - BOTTOM
S410	X	40	2'-10"	X		SIDEWALK TIE
S411	X	40	3'-0"	X		SIDEWALK TIE
S412	X	16	8'-11"			EXPANSION DEVICE (BETWEEN GIRDERS A THRU J)
R501	X	26	4'-4"	X	⚠	PARAPET VERTICAL DOWEL
R502	X	26	4'-4"	X		PARAPET VERTICAL TIE
R503	X	16	9'-8"			PARAPET LONGITUDINAL

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

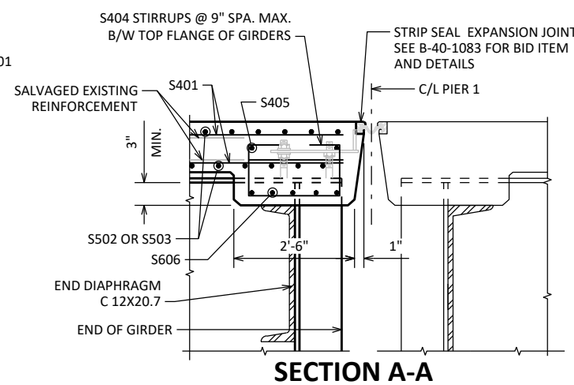
NOTE:
BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

BAR SERIES TABLE

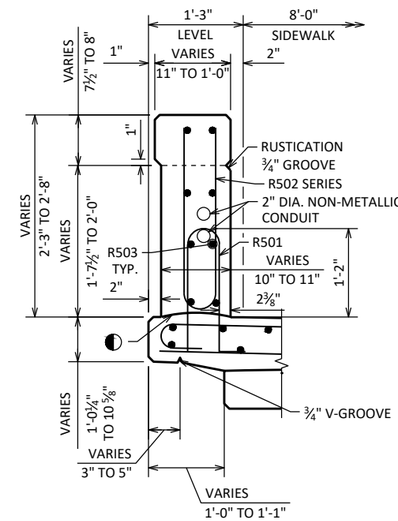
BAR MARK	NO. REQUIRED	LENGTH
R502	2 SERIES OF 13	3'-11" TO 4'-9"

BUNDLE AND TAG EACH SERIES SEPARATELY

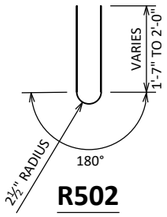
BAR MARK	DIM. 'A'
S410	1'-0"
S411	1'-2"



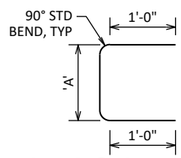
SECTION A-A



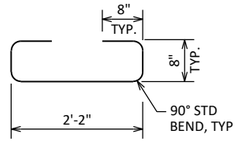
SECTION B- B



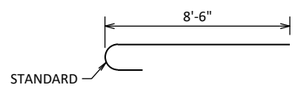
R502



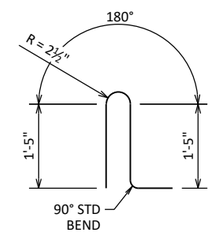
S410 & S411



S404



S508



R501

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-513-005

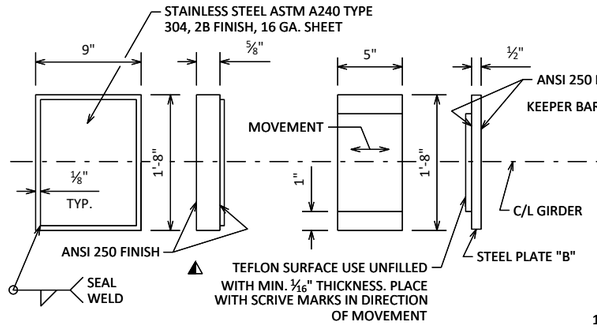
DRAWN BY AKK | PLANS CK'D EKM

REINFORCEMENT DETAILS

SHEET 4 OF 7
759

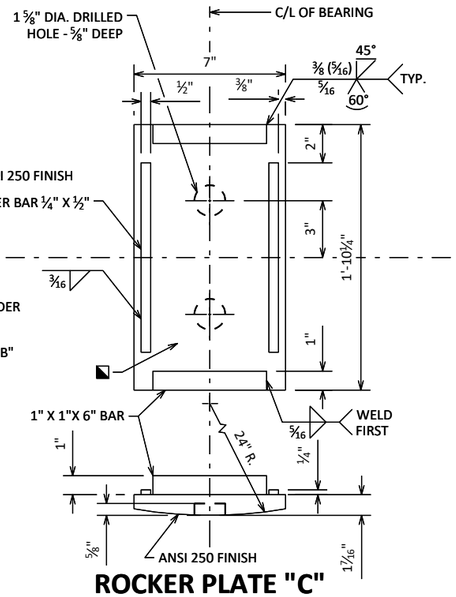
8

8

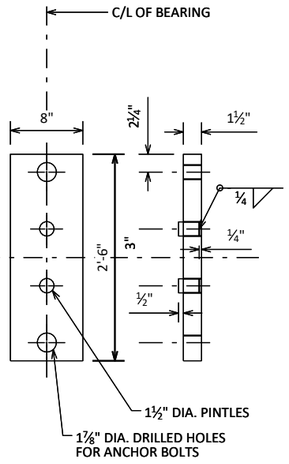


TOP PLATE "A"

TEFLON SURFACE ON PLATE "B"

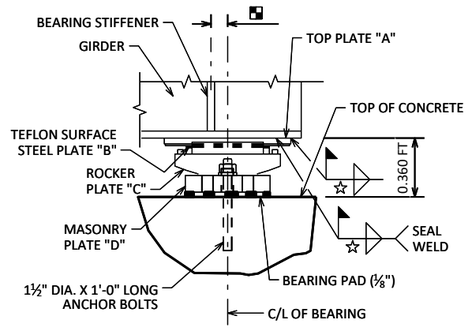


ROCKER PLATE "C"



MASONRY PLATE "D"

EXPANSION BEARING



EXPANSION BEARING ASSEMBLY

BEARING NOTES

ALL BEARINGS ARE SYMMETRICAL ABOUT C/L OF GIRDER AND C/L OF BEARING.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153, CLASS C.

ANCHOR BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM F1554 GRADE 55, OR MATERIAL OF EQUIVALENT YIELD STRENGTH AND ELONGATION.

ALL MATERIAL IN BEARINGS, INCLUDING SHIM PLATES, BUT EXCLUDING STAINLESS STEEL SHEET, TEFLON SURFACE, PINTLES, ANCHOR BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A709 GRADE 50W.

ALL MATERIAL IN BEARINGS, INCLUDING SHIM PLATES AND BEARING PADS, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING ASSEMBLIES EXPANSION B-40-1083" EACH.

CHAMFER ANCHOR BOLTS PRIOR TO THREADING.

ALL FINISHED SURFACES SHALL BE MACHINE FINISHED BY AN AUTOMATIC PROCESS.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL.

PROVIDE ⅛" THICK BEARING PAD THE SAME SIZE AS MASONRY PLATE "D" FOR EACH BEARING.

ANCHOR BOLTS SHALL BE THREADED 3". PROVIDE ONE STANDARD WROUGHT WASHER AND ONE HEX NUT PER BOLT. BOLT LENGTH TO BE 1'-5" FOR 1¼" DIA. AND 1'-10" FOR 1½" DIA. BOLTS. PROJECT ANCHOR BOLTS, MASONRY PLATE "D" THICKNESS + 2¼", ABOVE TOP OF CONCRETE.

CHAMFER TOP OF PINTLES ⅛". DRILL HOLES FOR ALL PINTLES IN MASONRY PLATE "D" FOR A DRIVING FIT.

STEEL PINTLES SHALL CONFORM TO ASTM A449 OR ASTM A572 GRADE 50.

EXPANSION BEARINGS:
ROCKER PLATE "C" AND MASONRY PLATE "D" SHALL BE GALVANIZED. TOP PLATE "A" AND STEEL PLATE "B" SHALL BE SHOP PAINTED. USE A WELDABLE PRIMER ON TOP PLATE "A". DO NOT PAINT STAINLESS STEEL OR TEFLON SURFACES.

◪ PROVIDE A METHOD FOR HANDLING ROCKER PLATE "C" DURING GALVANIZING.

◭ BOND STEEL PLATE "B" AND TEFLON WITH ADHESIVE MATERIAL MEETING REQUIREMENTS FOUND IN THE STANDARD SPECIFICATION.

AT INSTALLATION, ENSURE STAINLESS STEEL SLIDING FACE OF THE UPPER ELEMENT AND THE TFE SLIDING FACE OF THE LOWER ELEMENT HAVE THE SURFACE FINISH SPECIFIED AND ARE CLEAN AND FREE OF ALL DUST, MOISTURE, AND OTHER FOREIGN MATTER.

☆ TABLE OF FILLET WELD SIZES

MATERIAL THICKNESS OF THICKER PART JOINED.	‡ MIN. SIZE OF FILLET WELD
TO ½" INCLUSIVE	3/16"
OVER ½" TO ¾"	¼"
OVER ¾" TO 1½"	△ 5/16"
OVER 1½" TO 2¼"	△ ⅜"
OVER 2¼" TO 6"	△ ½"

‡ EXCEPT THAT THE WELD SIZE SHALL NOT EXCEED THE THICKNESS OF THE THINNER PART JOINED.

△ MIN. PASS SIZE IS 5/16"

°F	PIER 1
30	0.4
45	0
60	-0.4
75	-0.7
90	-1.0

◪ BEARING OFFSET TABLE

ALL DIMENSIONS IN INCHES
AMBIENT TEMPERATURE DURING GIRDER INSTALLATION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

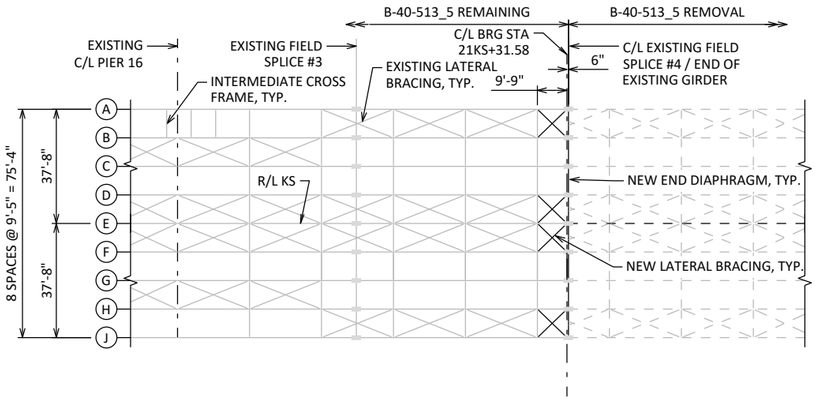
STRUCTURE B-40-513-005

DRAWN BY AKK | PLANS CK'D EKM

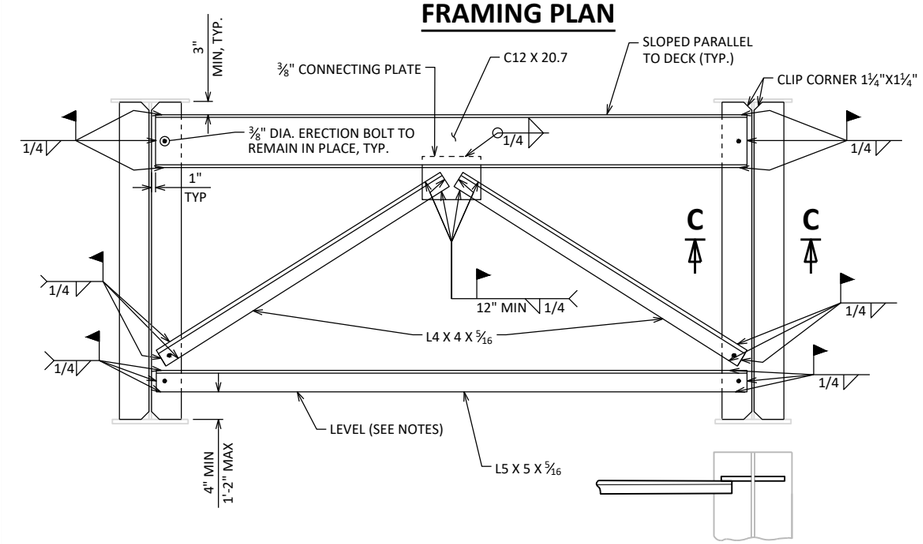
BEARING DETAILS

STATE PROJECT NUMBER

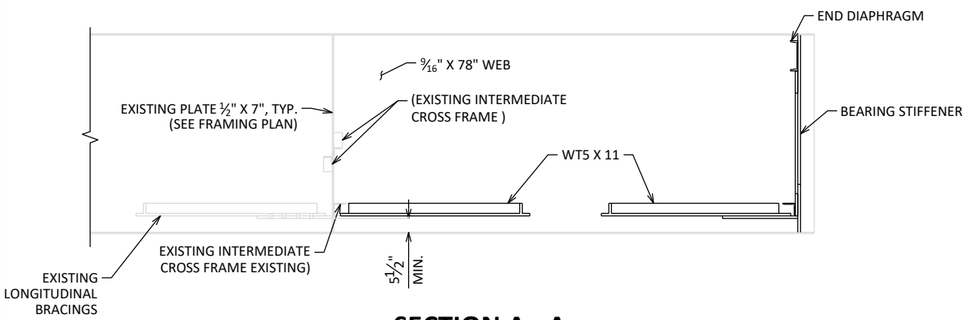
1060-27-74



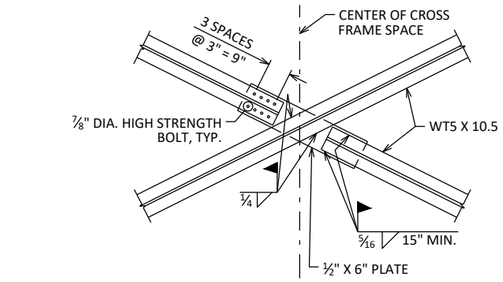
FRAMING PLAN



END DIAPHRAGM CONNECTIONS

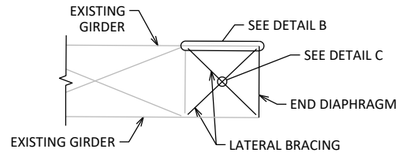


SECTION A - A

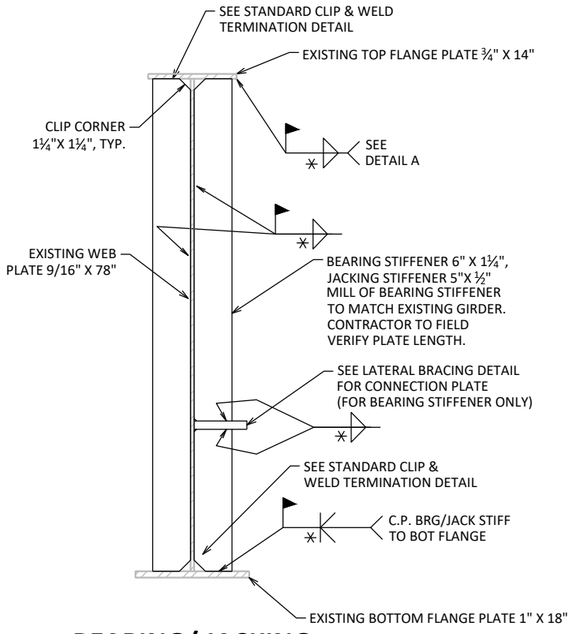


BOLTED ALTERNATE **WELDED ALTERNATE**

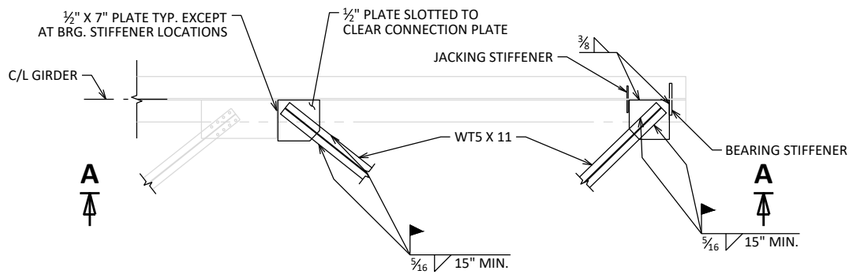
DETAIL C



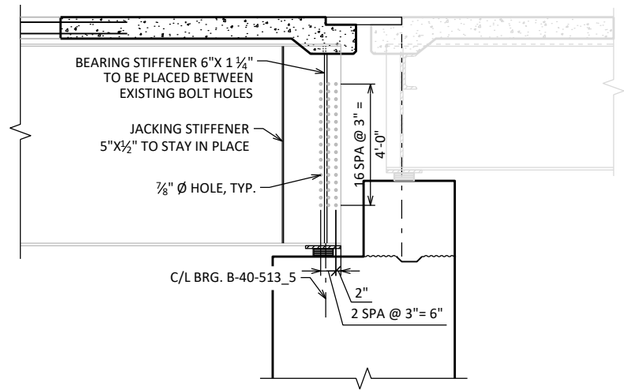
TYPICAL LATERAL BRACING DIAGRAM



BEARING/ JACKING STIFFENER DETAIL



DETAIL B



BEARING STIFFENERS LAYOUT

✳ TABLE OF FILLET WELD SIZES

MATERIAL THICKNESS OF THICKER PART JOINED	◐MIN. SIZE OF FILLET WELD
TO ½" INCLUSIVE	3/16"
OVER ½" TO ¾"	1/4"
OVER ¾" TO 1½"	◭ 5/16"
OVER 1½"	◭ 3/8"

◐ EXCEPT THAT THE WELD SIZE SHALL NOT EXCEED THE THICKNESS OF THE THINNER PART JOINED.

◭ MIN. PASS SIZE IS 5/16"

LEGEND

◹ ⅛" MIN., ¼" MAX. TYP.

NOTES:

CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS.

ALL BOLTED CONNECTIONS SHALL BE FRICTION TYPE USING ⅞" DIA. HIGH STRENGTH ASTM A325 BOLTS WITH DOUBLE WASHERS.

LOWER CROSS FRAME MEMBERS ARE SLOPED WHEN DIFFERENCE IN ADJACENT BOTTOM FLANGE ELEVATIONS EXCEEDS 6". HOLD 8" FROM TOP OF ADJACENT FLANGES TO BOTTOM OF DIAPHRAGMS OR LOWER CROSS FRAME WHEN THESE MEMBERS ARE SLOPED.

LOWER CROSS FRAME MEMBERS THAT ARE LEVEL SHALL BE PLACED 4" ABOVE TOP OF THE HIGHER BOTTOM FLANGE OF ADJACENT GIRDERS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-513-005

DRAWN BY AKK | PLANS CK'D EKM

BEARING STIFFENER & END DIAPHRAGM DETAILS

SHEET 6 OF 7

761

8

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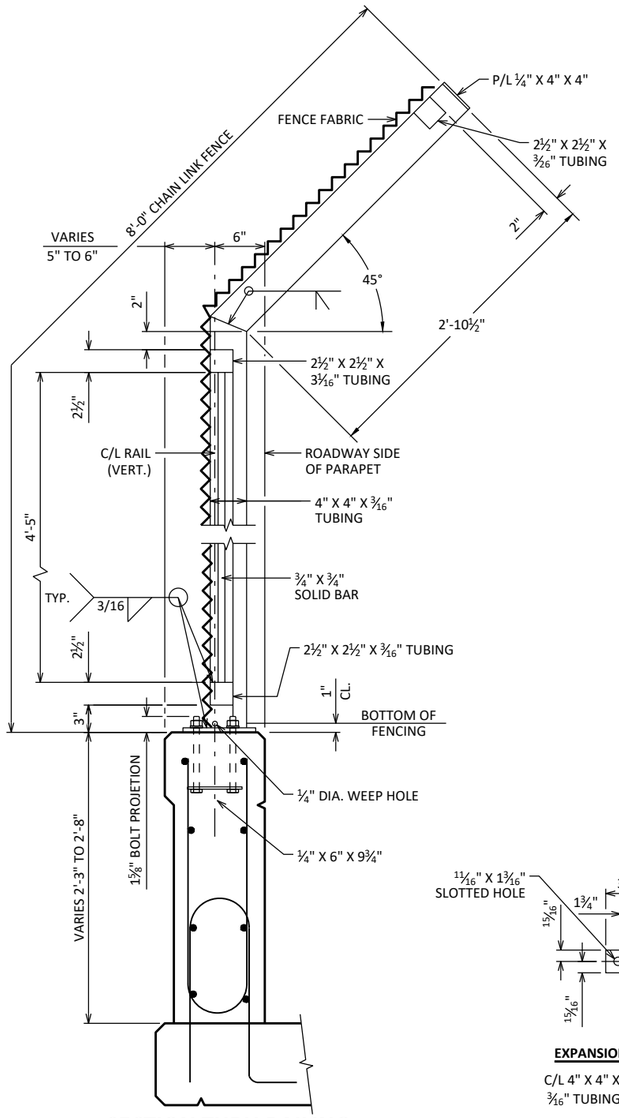
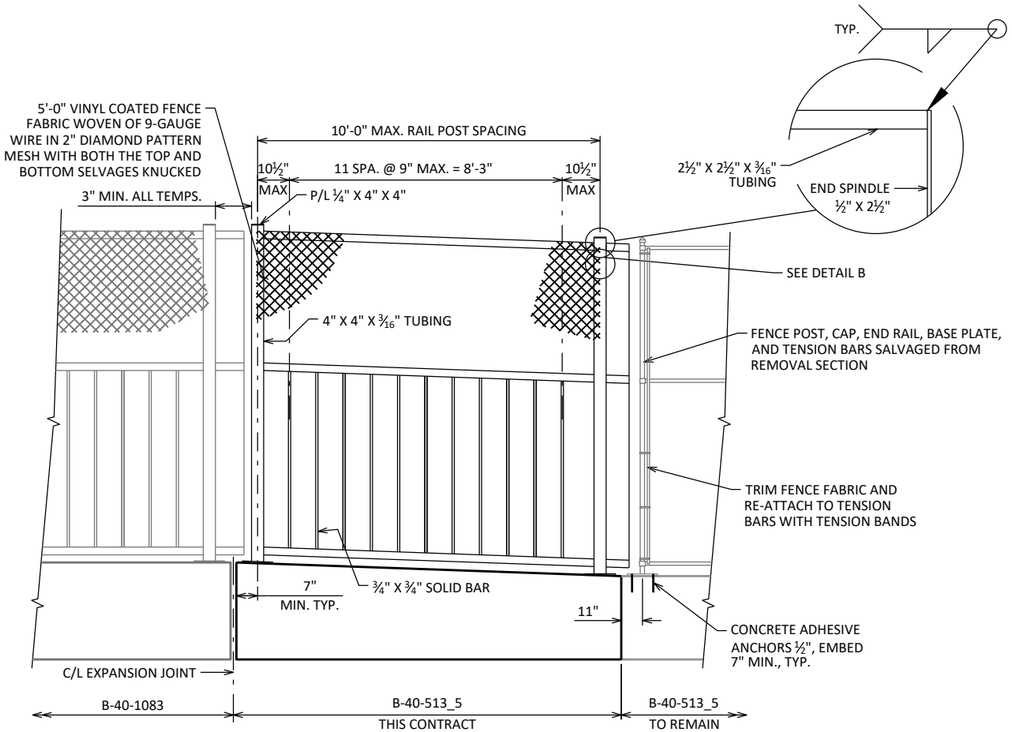
STATE PROJECT NUMBER

1060-27-74



SECTION THRU RAILING



INSIDE ELEVATION OF RAILING

LOOKING EAST

NOTES

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE B. PLATES, ANGLES, BARS AND SHIMS SHALL CONFORM TO ASTM A709, GRADE 36. FENCE FABRIC SHALL CONFORM TO F668, CLASS 2B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET POSTS NORMAL TO GRADE.

ALL POST SPACINGS ARE TAKEN HORIZONTAL ALONG CENTERLINE OF RAILING AT BASE OF POST.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

CUT BOTTOM OF POST TO MAKE VERTICAL IN TRANSVERSE DIRECTION.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

THE BID ITEM SHALL BE "RAILING TUBULAR SCREENING" WHICH SHALL INCLUDE ALL ITEMS SHOWN.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE NOT MORE THAN 3 POSTS.

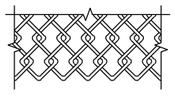
VENT HOLES SHALL BE DRILLED IN MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

ALL RAILING MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE CONTRACT DOCUMENTS. THE RAILING SHALL BE PAINTED AMS STD. COLOR NO. 27038, BLACK. FENCE FABRIC AND TIES TO BE VINYL-COATED. COLOR SHALL BE BLACK IN ACCORDANCE WITH ASTM F934.

THE END OF THE FABRIC SHALL BE ATTACHED TO THE POST BY MEANS OF A TENSION BAR THREADED THROUGH THE END LOOPS OF THE FABRIC AND SECURED TO THE POST WITH CLAMPS & BOLT. THE FABRIC SHALL BE STRETCHED TO REMOVE ALL SLACK.

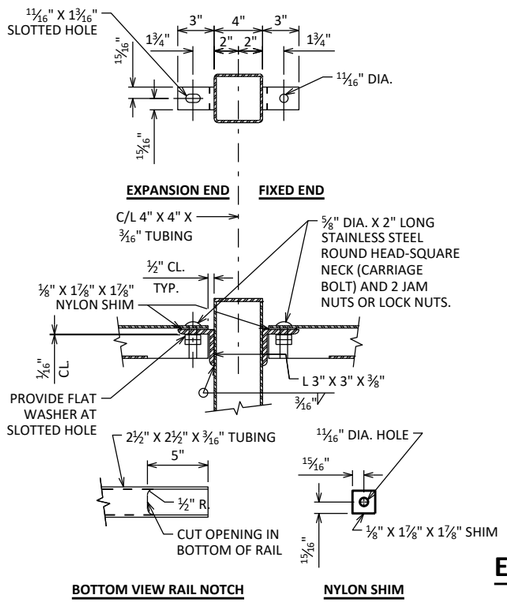
SALVAGE OF EXISTING FENCE HARDWARE, TRIMMING OF FENCE FABRIC, ½" DIA. ADHESIVE ANCHOR BOLTS, AND RE-INSTALLATION OF FENCE POST INCLUDED IN "RAILING TUBULAR SCREENING" BID ITEM.

TOP DETAIL

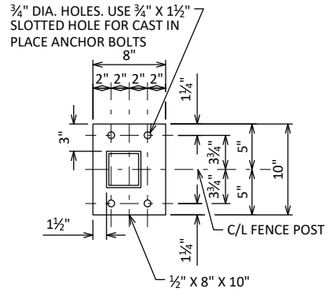


BOTTOM DETAIL

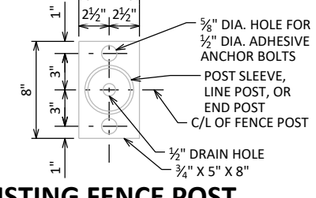
FENCE FABRIC



TOP RAIL CONNECTION FOR FENCE W/ BENT TOP

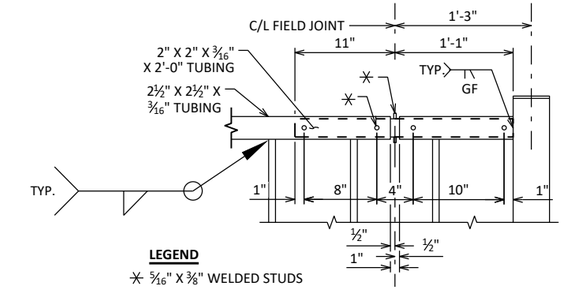


BASE PLATE

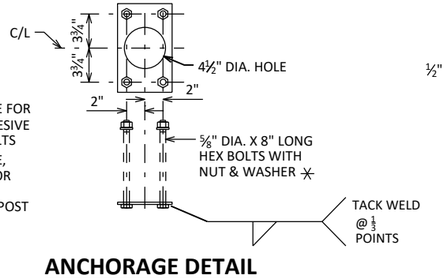


EXISTING FENCE POST BASE PLATE

(FOR INFORMATION ONLY)



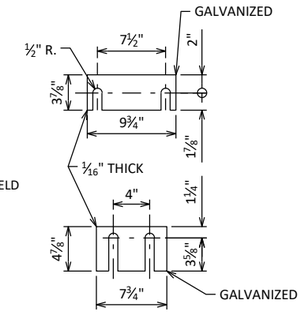
RAILING EXPANSION JOINT DETAIL



ANCHORAGE DETAIL

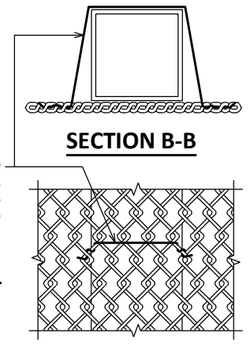
ALTERNATIVE ANCHORAGE: ADHESIVE ANCHORS 5/8-INCH. EMBED 7" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.



SHIM PLATE DETAILS

TWO SHIMS OF EACH SIZE REQUIRED PER POST



SECTION B-B

DETAIL B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-513-005

DRAWN BY AKK | PLANS CK'D MAM

RAILING TUBULAR SCREENING

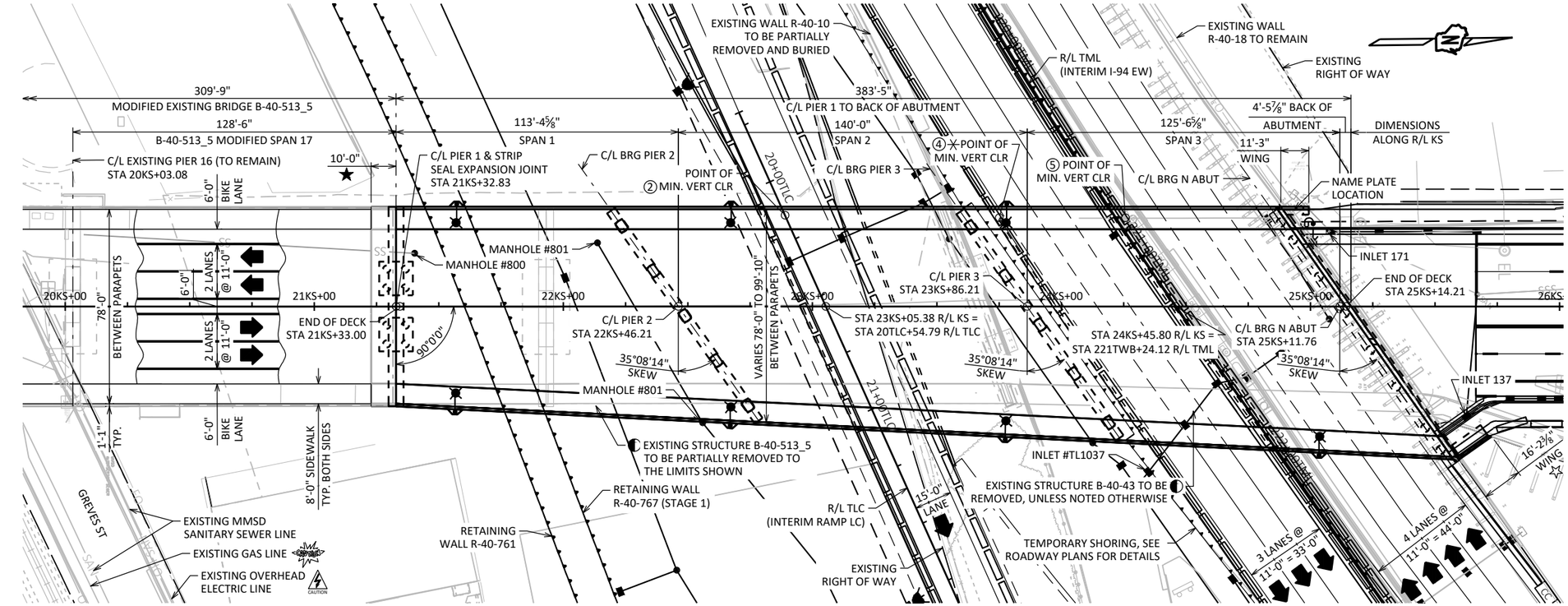
SHEET 7 OF 7

762

SCALE = 1 IN:25 FT

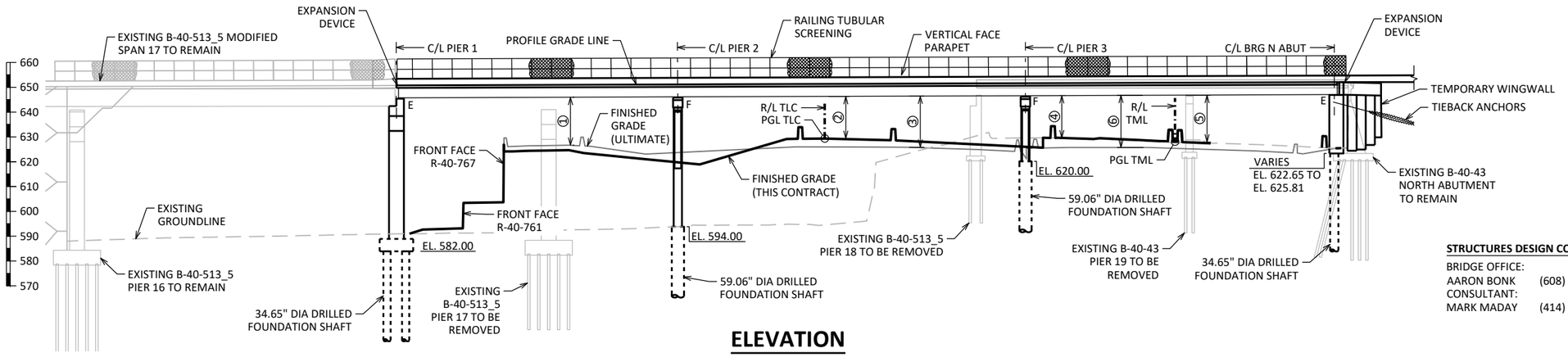
8

8



PLAN

3-SPAN STEEL PLATE GIRDER, 48-INCH WEB DEPTH



ELEVATION

LOOKING WEST

LEGEND

- EXISTING STRUCTURE B-40-43 IS A 2-SPAN STEEL GIRDER BRIDGE AND EXISTING STRUCTURE B-40-513_5 IS A 3-SPAN STEEL GIRDER BRIDGE. PLANS OF THE EXISTING BRIDGES ARE AVAILABLE FOR REVIEW AT WISDOT SE REGION OFFICE, 141 NW BARSTOW STREET, WAUKESHA, WI, OR THROUGH THE WISDOT STRUCTURES WEBSITE.
- INDICATES ROADWAY LANE LOCATIONS AND DIRECTION OF TRAVEL AT THE CONCLUSION OF THIS CONTRACT
- ⚹ INTERIM MINIMUM VERTICAL CLEARANCE AT THE CONCLUSION OF THIS CONTRACT
  ULTIMATE MINIMUM VERTICAL CLEARANCE AT THE CONCLUSION OF FUTURE CONTRACT 1060-27-72
- ☆ TEMPORARY WINGWALL, MOMENT SLAB, AND PARAPET TO BE PARTIALLY REMOVED IN FUTURE CONTRACT 1060-27-72 TO ALLOW FOR CONSTRUCTION OF THE ULTIMATE 27TH STREET PAVEMENT LIMITS
- ★ LIMITS OF NEW DECK, SIDEWALK, PARAPET AND EXPANSION JOINT. SEE B-40-513_5 REHABILITATION PLAN FOR DETAILS

MINIMUM VERTICAL CLEARANCES

POINT	LOCATION	INTERIM/ULTIMATE ⚹	VERT. CLR.
1	RAMP LC	ULTIMATE	16'-9"
2	RAMP LC	INTERIM	14'-8"
3	I-94 EB	ULTIMATE	17'-9"
4	I-94 EB	INTERIM	15'-3"
5	I-94 WB	INTERIM	16'-3"
6	I-94 WB	ULTIMATE	17'-4"

STATE PROJECT NUMBER

1060-27-74

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. GENERAL NOTES & DESIGN DATA
3. QUANTITIES
4. TYPICAL SECTIONS
5. CONSTRUCTION SEQUENCE (1 OF 2)
6. CONSTRUCTION SEQUENCE (2 OF 2)
7. SUBSURFACE EXPLORATION (1 OF 2)
8. SUBSURFACE EXPLORATION (2 OF 2)
9. NORTH ABUTMENT LAYOUT
10. NORTH ABUTMENT REINFORCEMENT DETAILS
11. NORTH ABUTMENT FOUNDATION DETAILS
12. NORTH ABUTMENT REMOVAL & REHABILITATION
13. NORTH ABUTMENT TIEBACK ANCHOR DETAILS
14. NORTH ABUTMENT TEMPORARY WINGWALL DETAILS
15. NORTH ABUTMENT REINFORCEMENT DETAILS
16. PIER 1 LAYOUT
17. PIER 1 FOUNDATION DETAILS
18. PIER 1 COLUMN DETAILS
19. PIER 1 CAP DETAILS
20. PIER 1 REINFORCEMENT SCHEDULE
21. PIER 2 LAYOUT
22. PIER 2 FOUNDATION DETAILS
23. PIER 2 COLUMN DETAILS
24. PIER 2 CAP DETAILS
25. PIER 3 LAYOUT
26. PIER 3 FOUNDATION DETAILS
27. PIER 3 COLUMN DETAILS
28. PIER 3 CAP DETAILS
29. BEARING DETAILS
30. JACKING PROVISIONS
31. GIRDER PLAN & ELEVATION: FIELD SECTIONS 1, 2 & 3
32. GIRDER PLAN & ELEVATION: FIELD SECTIONS 4 & 5
33. GIRDER DIMENSION TABLES
34. MISCELLANEOUS GIRDER DETAILS
35. FIELD SPLICE DETAILS
36. DIAPHRAGM AND UTILITY SUPPORT LAYOUT
37. DIAPHRAGMS
38. TRANSFER GIRDER
39. CAMBER DIAGRAM
40. CAMBER AND DECK ELEVATIONS: FIELD SECTION 1
41. CAMBER AND DECK ELEVATIONS: FIELD SECTION 2
42. CAMBER AND DECK ELEVATIONS: FIELD SECTION 3
43. CAMBER AND DECK ELEVATIONS: FIELD SECTION 4
44. CAMBER AND DECK ELEVATIONS: FIELD SECTION 5
45. DECK ELEVATIONS & DEAD LOAD DEFLECTION DIAGRAM
46. DECK REINFORCEMENT (1 OF 2)
47. DECK REINFORCEMENT (2 OF 2)
48. SUPERSTRUCTURE CROSS SECTIONS
49. DECK REINFORCEMENT SCHEDULE
50. DECK POURING SEQUENCING AND NOTES
51. PARAPET ELEVATIONS (1 OF 2)
52. PARAPET ELEVATIONS (2 OF 2)
53. PARAPET SECTIONS & DETAILS
54. PARAPET REINFORCEMENT SCHEDULE
55. LIGHT SUPPORT
56. RAILING TUBULAR SCREENING
57. COVER PLATE DETAILS (1 OF 2)
58. COVER PLATE DETAILS (2 OF 2)
59. STRIP SEAL EXPANSION JOINT DETAILS
60. UNDERDECK UTILITY DETAILS
61. FLOOR DRAIN PIPING
62. FLOOR DRAIN TYPE WF

NO.	DATE	REVISION	BY

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
AARON BONK (608) 261-0261
CONSULTANT:
MARK MADAY (414) 272-2426

WISCONSIN
MARK A. MADAY
E-25925
MILWAUKEE
WI
6/13/2025
PROFESSIONAL ENGINEER

Jacobs

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED EMK 06/16/25
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-40-1083

27TH ST OVER RAMP LC AND IH 94

COUNTY	~~TOWN/CITY/VILLAGE~~
MILWAUKEE	MILWAUKEE

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
TMH	MAM	TMH	MAM

GENERAL PLAN & ELEVATION

SHEET 1 OF 62
763

SCALE = 1:50

I.D. 1060-27-03 DATE: 05/01/2025

8

8

STATE PROJECT NUMBER

1060-27-74

GENERAL

G.1 DRAWINGS SHALL NOT BE SCALED.

G.2 ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS NOTED OTHERWISE.

G.3 COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), MILWAUKEE COUNTY ZONE, NAD 83 (2007). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2007).

G.4 DIRECTIONS IN THE PLANS REFERRING TO 'LEFT' AND 'RIGHT' ARE WITH RESPECT TO THE REFERENCE LINE WHEN LOOKING UPSTATION.

G.5 THE UTILITY 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 THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE. UTILITIES LABELED AS PROPOSED MAY BE INSTALLED BY OTHERS PRIOR TO THIS CONTRACT.

G.6 THE CONTRACTOR MUST COORDINATE THE REMOVAL OF EXISTING STRUCTURES B-40-43 & B-40-513_5 AND CONSTRUCTION OF THE BRIDGE B-40-1083 PIERS AND ABUTMENT WITH CONSTRUCTION OF RETAINING WALLS R-40-761 AND R-40-767. THE EXISTING BRIDGES B-40-43 & B-40-513_5 ARE TWO-SPAN AND THREE-SPAN STEEL DECK PLATE GIRDER BRIDGES, RESPECTIVELY.

G.7 SEE CONSTRUCTION SEQUENCE SHEETS FOR INFORMATION ON ASSUMED CONSTRUCTION SEQUENCE.

G.8 EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE, SHALL BE PAID PER LINEAL FOOT AS "EXPANSION DEVICE".

EXCAVATION AND BACKFILL

EB.1 THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMIT OF EXCAVATION FOR STRUCTURES.

EB.2 AT THE BACK FACE OF ABUTMENT, ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE OR MSE BACKFILL SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

DESIGN

D.1 DESIGN IS IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 9TH EDITION, 2020, UNLESS NOTED OTHERWISE.

D.2 TEMPERATURE CHANGE USED FOR DETERMINING SUBSTRUCTURE FORCES = 90°F.

D.3 ABSOLUTE TEMPERATURE RANGE FOR DETERMINING BEARING AND EXPANSION JOINT MOVEMENTS = -30°F TO +120°F.

D.4 DESIGN ASSUMED 10 PSF FOR TEMPORARY FORMWORK.

D.5 LIVE LOAD DEFLECTION LIMIT = SPAN/800 (HL93).

REINFORCING STEEL

RS.1 ALL REINFORCING BARS ARE IN ENGLISH. THE FIRST DIGIT OF A THREE DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFY THE BAR SIZE.

RS.2 BAR STEEL REINFORCEMENT SHALL BE PLACED WITH 2" OF CLEAR CONCRETE COVER UNLESS OTHERWISE NOTED.

STRUCTURE STEEL

SS.1 STEEL GRADE FOR ALL PLATES AND ROLLED SHAPES SHALL BE ASTM A709 GRADE 50.

SS.2 STEEL GRADES FOR BEARING COMPONENTS SHALL BE AS NOTED ON THE BEARING SHEETS.

SS.3 CHARPY V-NOTCH TOUGHNESS REQUIREMENTS FOR ALL STEEL SHALL CONFORM TO THE REQUIREMENTS FOR ZONE 2.

SS.4 ALL BOLTS SHALL BE ASTM A325-X TYPE 1. BOLTS SHALL BE 1" DIAMETER UNLESS NOTED OTHERWISE. ALL HOLES SHALL BE STANDARD DIAMETER - NO OVERSIZED HOLES. ALL CONNECTIONS SHALL BE FABRICATED AND ASSEMBLED AS SLIP-CRITICAL CONNECTIONS. DESIGN ASSUMED CLASS B FAYING SURFACE FOR SLIP RESISTANCE.

SS.5 PAINT ALL STRUCTURAL STEEL AND SHEET PILING. FINISH COAT SHALL HAVE A COLOR TO MATCH AMS STANDARD 595A #20059 BROWN.

SS.6 CAMBER DIAGRAMS HAVE BEEN DEVELOPED ASSUMING A CONSTANT 3½" HAUNCH HEIGHT, MEASURED FROM THE UNDERSIDE OF THE TOP FLANGE TO THE UNDERSIDE OF THE DECK. ANY ADDITIONAL QUANTITIES REQUIRED AS A RESULT OF VARIATION IN THE HAUNCH HEIGHT ARE ASSUMED TO BE INCIDENTAL TO OTHER PAY ITEMS AND WILL NOT BE PAID FOR SEPARATELY. THIS INCLUDES ADDITIONAL CONCRETE IN THE HAUNCH, ADDITIONAL OR MORE COMPLICATED FORMWORK, EXTRA SHEAR STUD LENGTH AND ANY REQUIRED REINFORCEMENT IN THE HAUNCH.

SS.7 ALL PLAN DIMENSIONS ARE BASED ON THE FINAL DEFLECTED SHAPE AT 60°F.

CONCRETE

C.1 THE HAUNCH CONCRETE QUANTITY IS BASED ON AN AVERAGE HAUNCH DEPTH OF 3½" MEASURED FROM TOP OF WEB TO UNDERSIDE OF SLAB (EXCLUDING THE VOLUME TAKEN UP BY THE TOP FLANGE) WHICH IS THE MAXIMUM HAUNCH QUANTITY FOR WHICH THE CONTRACTOR WILL BE PAID.

C.2 THE PARAPET QUANTITY FOR PARAPET ON THE DECK AND ABUTMENT BACKWALL SHALL BE PAID FOR UNDER BID ITEM "HPC MASONRY STRUCTURES".

C.3 CONCRETE ABOVE THE ABUTMENT UPPER BACKWALL SHALL BE PAID FOR UNDER BID ITEM "HPC MASONRY STRUCTURES". THE REMAINING CONCRETE QUANTITY FOR THE ABUTMENT SHALL BE PAID FOR UNDER BID ITEM "CONCRETE MASONRY BRIDGES".

C.4 THE CONCRETE QUANTITY FOR THE PIERS SHALL BE PAID FOR UNDER BID ITEM "CONCRETE MASONRY BRIDGES".

C.5 BEVEL ALL EXPOSED EDGES ¾" UNLESS NOTED OTHERWISE.

C.6 ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

C.7 FILLER SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M135 TYPE I, II, OR III OR AASHTO DESIGNATION M213.

C.8 PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED TO THE TOP OF DECK.

C.9 PIGMENTED SURFACE SEALER IS TO BE APPLIED TO THE INSIDE AND TOP FACES OF THE PARAPETS.

C.10 LOCATIONS OF "CONCRETE SURFACE REPAIR" SHALL BE DETERMINED IN THE FIELD BY THE PROJECT ENGINEER. QUANTITIES SHOWN FOR THIS BID ITEM ARE APPROXIMATE. ALL SUBSTRUCTURE CONCRETE SURFACE REPAIRS SHALL INCLUDE "EMBEDDED GALVANIC ANODES", PAID FOR SEPARATELY.

FOUNDATION DATA

FD.1 THE ABUTMENT AND PIERS SHALL BE SUPPORTED ON DRILLED SHAFTS. SHAFT DIAMETERS, FACTORED AXIAL RESISTANCES, TOP OF SHAFT AND BOTTOM OF SHAFT ELEVATIONS, AND CORRESPONDING SHAFT LENGTHS FOR EACH DRILLED SHAFT ARE GIVEN IN THE TABLE BELOW.

FD.2 THE MINIMUM FACTORED AXIAL RESISTANCE OF DRILLED SHAFTS IN COMPRESSION USED FOR DESIGN IS THE REQUIRED AXIAL RESISTANCE MULTIPLIED BY A SHAFT RESISTANCE FACTOR OF 0.60. THE RESISTANCE FACTOR INCLUDES A 20% INCREASE FOR REDUNDANCY.

FD.3 SUCCESSFUL INSTALLATION AND ENGINEER ACCEPTANCE OF THE ITEM "TRIAL DRILLED FOUNDATION SHAFT 34.65-INCH" IS REQUIRED PRIOR TO BEGINNING THE CONSTRUCTION OF THE PERMANENT DRILLED SHAFTS.

DRILLED SHAFT DATA

SHAFT LOCATION	SHAFT NUMBER	SHAFT DIA (IN)	MINIMUM FACTORED AXIAL RESIST (KIP)	TOP OF SHAFT EL	BOTTOM OF SHAFT EL	SHAFT LENGTH (FT)
PIER 1	P101	34.65	3,150	582.00	532.00	50.00
	P102	34.65	3,150	582.00	532.00	50.00
	P103	34.65	3,150	582.00	532.00	50.00
	P104	34.65	3,150	582.00	532.00	50.00
	P105	34.65	3,150	582.00	532.00	50.00
	P106	34.65	3,150	582.00	532.00	50.00
	P107	34.65	3,150	582.00	532.00	50.00
	P108	34.65	3,150	582.00	532.00	50.00
PIER 2	P201	59.06	4,000	594.00	564.00	30.00
	P202	59.06	4,000	594.00	564.00	30.00
	P203	59.06	4,000	594.00	564.00	30.00
	P204	59.06	4,000	594.00	564.00	30.00
	P205	59.06	4,000	594.00	564.00	30.00
PIER 3	P301	59.06	4,500	620.00	567.00	53.00
	P302	59.06	4,500	620.00	567.00	53.00
	P303	59.06	4,500	620.00	567.00	53.00
	P304	59.06	4,500	620.00	567.00	53.00
	P305	59.06	4,500	620.00	567.00	53.00
NORTH ABUTMENT	NA001	34.65	3,200	625.69	580.69	45.00
	NA002	34.65	3,200	625.47	580.47	45.00
	NA003	34.65	3,200	625.02	580.02	45.00
	NA004	34.65	3,200	624.58	579.58	45.00
	NA005	34.65	3,200	624.13	579.13	45.00
	NA006	34.65	3,200	623.67	578.67	45.00
	NA007	34.65	3,200	623.14	578.14	45.00
	NA008	34.65	3,200	622.86	577.86	45.00

DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.07
OPERATING RATING: RF = 1.39
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:
CONCRETE MASONRY:
SUPERSTRUCTURE (HPC) —— f'_c = 4,000 PSI
ALL OTHER —— f'_c = 3,500 PSI

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

HIGH STRENGTH STRUCTURAL STEEL:
ASTM A709, GRADE 50 —— f_y = 50,000 PSI

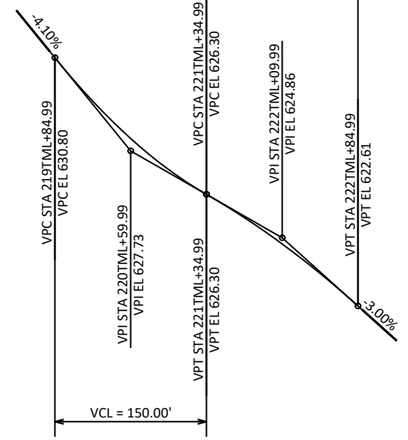
PZ 22 TEMPORARY ABUTMENT WINGWALL:
TOP FLANGE THICKNESS —— t_f = 0.375 IN
AREA —— A = 6.47 IN^2/FT
ELASTIC SECTION MODULUS —— S_x = 18.1 IN^3/FT
PLASTIC SECTION MODULUS —— Z_x = 21.79 IN^3/FT
MOMENT OF INERTIA —— I_x = 84.38 IN^4/FT

TRAFFIC DATA

27TH STREET:
EXISTING ADT = 22,500 (2019)
FUTURE ADT = 23,900 (2050)
R.D.S. = 35 MPH

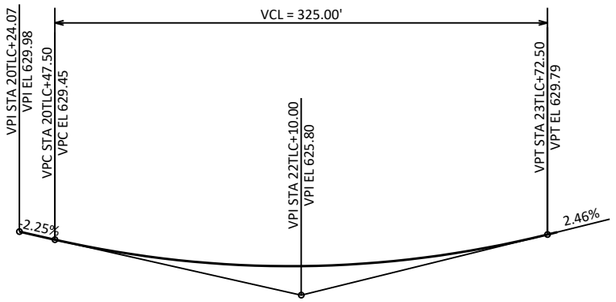
IH 94:
EXISTING ADT = 157,000 (2019)
FUTURE ADT = 188,000 (2050)
R.D.S. = 60 MPH

RAMP LC:
EXISTING ADT = 7,500 (2019)
FUTURE ADT = 8,500 (2050)
R.D.S. = 50 MPH



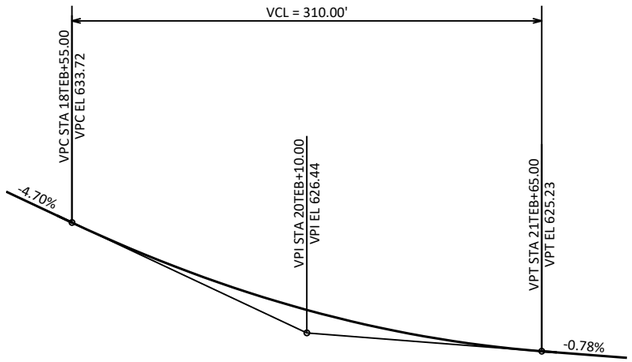
PROFILE GRADE LINE - TML

TEMPORARY MAINLINE AT CONCLUSION OF THIS CONTRACT



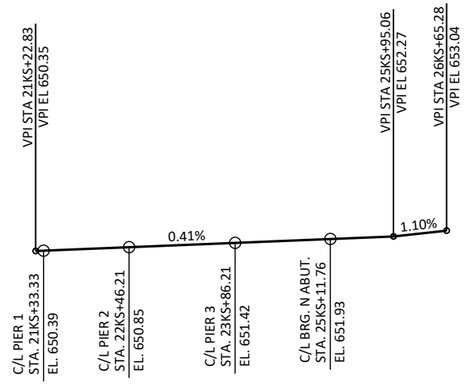
PROFILE GRADE LINE - TLC

I-94 EB INTERIM EXIT RAMP TO 26TH ST



PROFILE GRADE LINE - TEB

INTERIM I-94 EB



PROFILE GRADE LINE - KS

27TH STREET

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D MAM

GENERAL NOTES & DESIGN DATA

SHEET 2 OF 62
764

SCALE = N/A

8

8

STATE PROJECT NUMBER

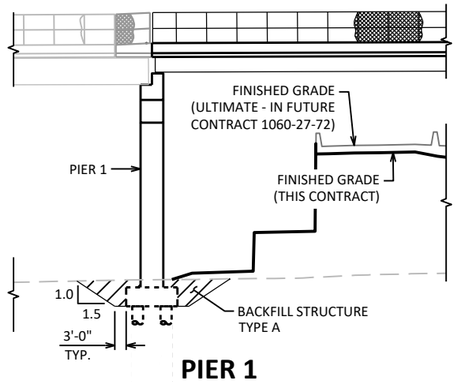
1060-27-74

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	PIER 1	PIER 2	PIER 3	NORTH ABUTMENT	SUPER-STRUCTURE	TOTAL
203.0220.0043	REMOVING STRUCTURE B-40-43	EACH	---	---	---	---	---	1
206.1001.1083	EXCAVATION FOR STRUCTURES BRIDGES B-40-1083	EACH	---	---	---	---	---	1
209.0200.S.1083	BACKFILL CONTROLLED LOW STRENGTH	CY	---	---	---	40	---	40
210.1500	BACKFILL STRUCTURE TYPE A	TON	290	1480	520	500	---	2,790
501.1000.S	ICE HOT WEATHER CONCRETING	LB	3,060	1,495	990	4,825	9,120	19,490
502.0100	CONCRETE MASONRY BRIDGES	CY	408	199	132	643	---	1,382
502.0120.S.1083	NON-SHRINK GROUT	CF	---	---	---	---	6	6
502.3101	EXPANSION DEVICE	LF	---	---	---	---	200	200
502.3200	PROTECTIVE SURFACE TREATMENT	SY	---	---	---	---	3,910	3,910
502.3210	PIGMENTED SURFACE SEALER	SY	---	---	---	11	319	330
502.4206	ADHESIVE ANCHORS NO. 6 BAR	EACH	160	---	---	---	---	160
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	24,350	15,680	25,780	21,350	---	87,160
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	63,290	86,330	51,390	45,190	221,700	467,900
505.0910	BAR COUPLERS NO. 10	EACH	---	168	90	90	---	348
506.0605	STRUCTURAL STEEL HS	LB	---	---	---	---	1,144,280	1,144,280
506.3015	WELDED STUD SHEAR CONNECTORS 7/8 X 6-INCH	EACH	---	---	---	---	16,746	16,746
506.5000.1083	BEARING ASSEMBLIES FIXED B-40-1083	EACH	---	11	11	---	---	22
506.6000.1083	BEARING ASSEMBLIES EXPANSION B-40-1083	EACH	10	---	---	11	--	21
509.1500	CONCRETE SURFACE REPAIR	SF	---	---	---	250	---	250
512.0500	PILING STEEL SHEET PERMANENT DELIVERED	SF	---	---	---	225	---	225
512.0600	PILING STEEL SHEET PERMANENT DRIVEN	SF	---	---	---	225	---	225
513.4091	RAILING TUBULAR SCREENING	LF	---	---	---	27	779	806
514.0450	FLOOR DRAINS TYPE WF	EACH	---	---	---	---	5	5
514.2608	DOWNSPOUT 8-INCH	LF	160	75	35	---	---	270
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	---	---	---	25	---	25
517.0601.1083	PAINTING EPOXY SYSTEM B-40-1083	EACH	---	---	---	---	1	1
612.0208	PIPE UNDERDRAIN UNPERFORATED 8-INCH	LF	45	30	10	---	---	85
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	---	---	---	185	---	185
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	---	---	---	120	---	120
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	---	---	---	---	65	65
652.0210	CONDUIT RIGID NOMETALLIC SCHEDULE 40 1-INCH	LF	---	140	150	130	---	420
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	---	---	---	80	1,565	1,645
652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	---	---	---	---	725	725
653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	---	---	---	---	11	11
SPV.0035.4000	HPC MASONRY STRUCTURES	CY	---	---	---	3	1,213	1,216
SPV.0060.4000	ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES	EACH	---	---	---	---	7	7
SPV.0060.4100	THERMAL INTEGRITY PROFILE (TIP) TESTING DRILLED FOUNDATION SHAFT 34.65-INCH	EACH	9	---	---	8	---	17
SPV.0060.4110	THERMAL INTEGRITY PROFILE (TIP) TESTING DRILLED FOUNDATION SHAFT 59.06-INCH	EACH	---	5	5	---	---	10
SPV.0060.4200	CROSSHOLE SONIC LOG TESTING (CSL) TESTING, DRILLED FOUNDATION SHAFT 34.65-INCH	EACH	9	---	---	8	---	17
SPV.0060.4210	CROSSHOLE SONIC LOG TESTING (CSL) TESTING, DRILLED FOUNDATION SHAFT 59.06-INCH	EACH	---	5	5	---	---	10
SPV.0060.4400	TIEBACK ANCHORS	EACH	---	---	---	6	---	6
SPV.0060.4410	TIEBACK ANCHORS PERFORMANCE TESTS	EACH	---	---	---	6	---	6
SPV.0060.4600	TRIAL DRILLED FOUNDATION SHAFT 34.65-INCH	EACH	1	---	---	---	---	1
SPV.0060.4900	EMBEDDED GALVANIC ANODES	EACH	---	---	---	136	---	136
SPV.0075.4000	OBSTRUCTIONS DRILLED FOUNDATION SHAFT	HRS	12	8	8	12	---	40
SPV.0090.4100	DRILLED FOUNDATION SHAFT 34.65-INCH	LF	440	---		360	---	800
SPV.0090.4110	DRILLED FOUNDATION SHAFT 59.06-INCH	LF	---	150	265	---	---	415
SPV.0090.4300	REMOVE EXISTING STEEL PILING	LF	---	---	---	40	---	40
⚠ SPV.0060.4700	UNDERDECK UTILITY STRUCTURE B-40-1083	EACH	---	---	---	---	1	1
	NON-BID ITEMS							
	PREFORMED JOINT FILLER	SIZE						1/2", 3/4"
	NAME PLATE	EACH						1
	BRIDGE SEAT PROTECTION	EACH						1
	POLYETHYLENE SHEETS	SIZE						3 MIL
	EXPANDED POLYSTYRENE	SIZE						3"

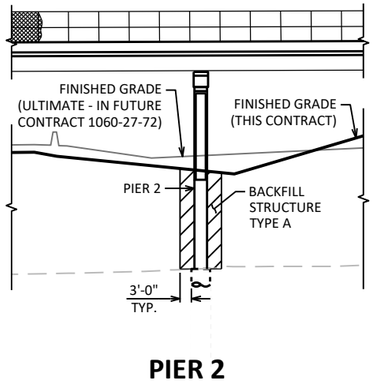
ALL ITEMS ARE CATEGORY 2010

⚠ UNDERDECK UTILITY STRUCTURE B-40-1083 IS CATEGORY 8000



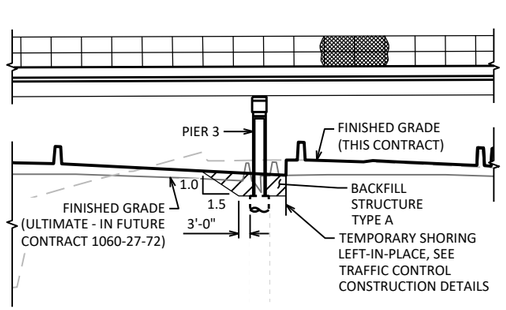
PIER 1

(BACKFILL STRUCTURE LIMITS)
LOOKING WEST



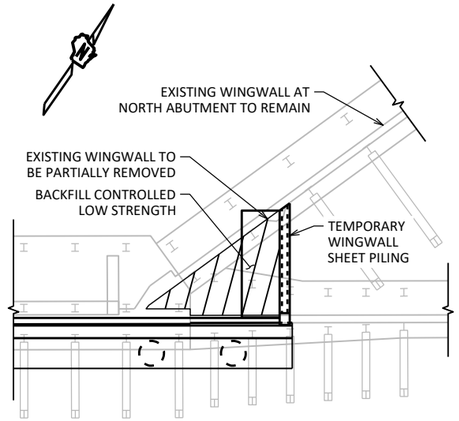
PIER 2

(BACKFILL STRUCTURE LIMITS)
LOOKING WEST



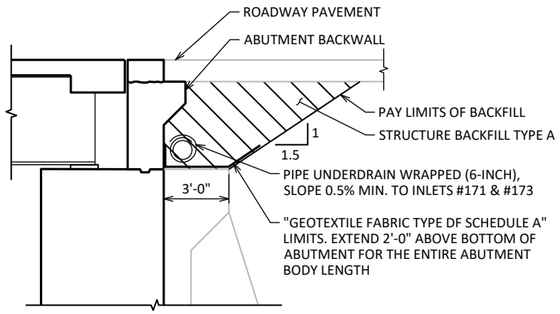
PIER 3

(BACKFILL STRUCTURE LIMITS)
LOOKING WEST



NORTH ABUTMENT

(BACKFILL CONTROLLED LOW STRENGTH LIMITS)



NORTH ABUTMENT

(BACKFILL STRUCTURE LIMITS)
LOOKING WEST

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D MAM

QUANTITIES

SHEET 3 OF 62

765

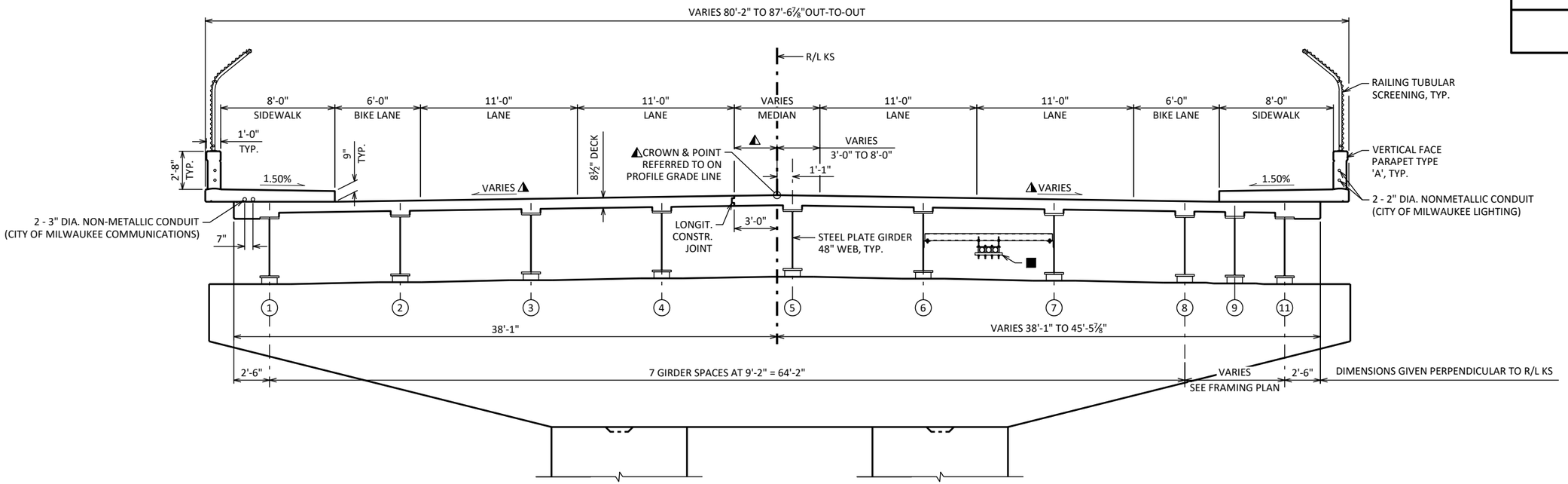
SCALE = N/A

8

8

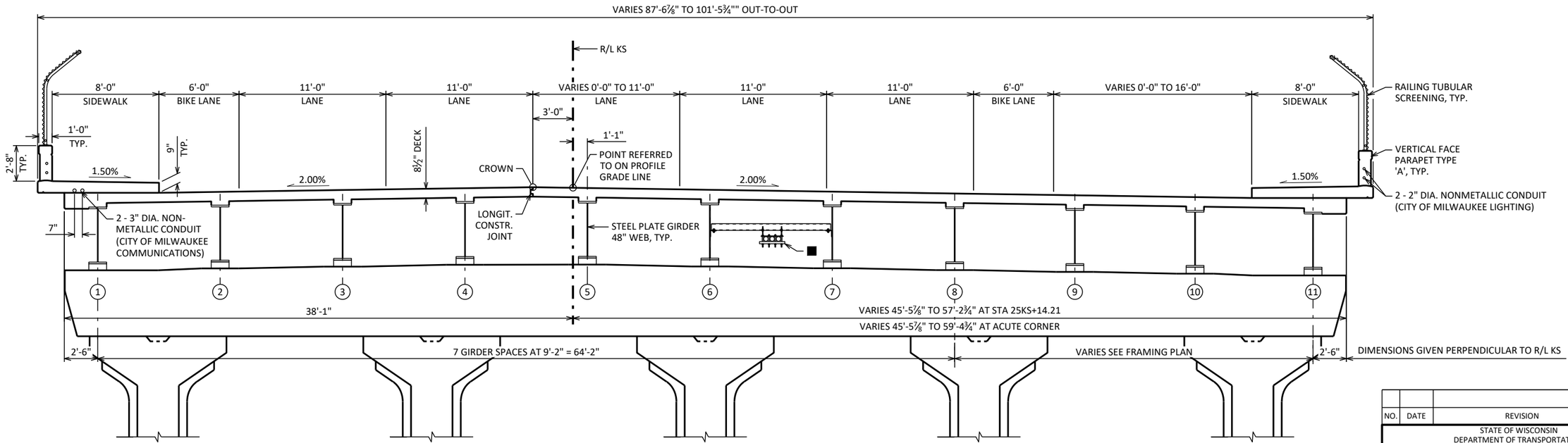
STATE PROJECT NUMBER

1060-27-74



PROPOSED TYPICAL SECTION

(LOOKING UPSTATION)
STA 21KS+32.83 TO STA 22KS+79.38



PROPOSED TYPICAL SECTION

(LOOKING UPSTATION)
STA 22KS+79.38 TO STA 25KS+14.21

LEGEND

⚠ CROWN TRANSITIONS FROM R/L KS AT STA 21KS+32.83 TO 3'-0" LEFT AT STA 21KS+52.83

⚠ SLOPE TRANSITIONS FROM 1.50% AT STA 21KS+32.83 TO 2.00% AT STA 21KS+52.83

■ AT&T FIBER OPTIC CONDUIT DUCTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D MAM

TYPICAL SECTIONS

SHEET 4 OF 62

766

SCALE = VARIES

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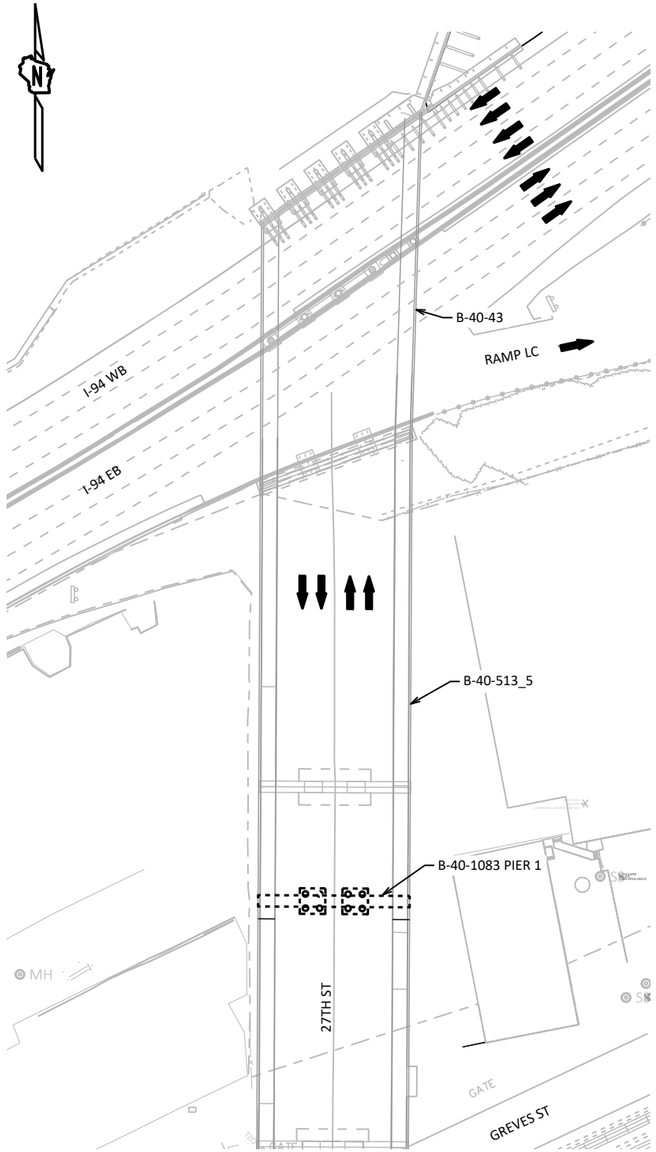
8

STATE PROJECT NUMBER

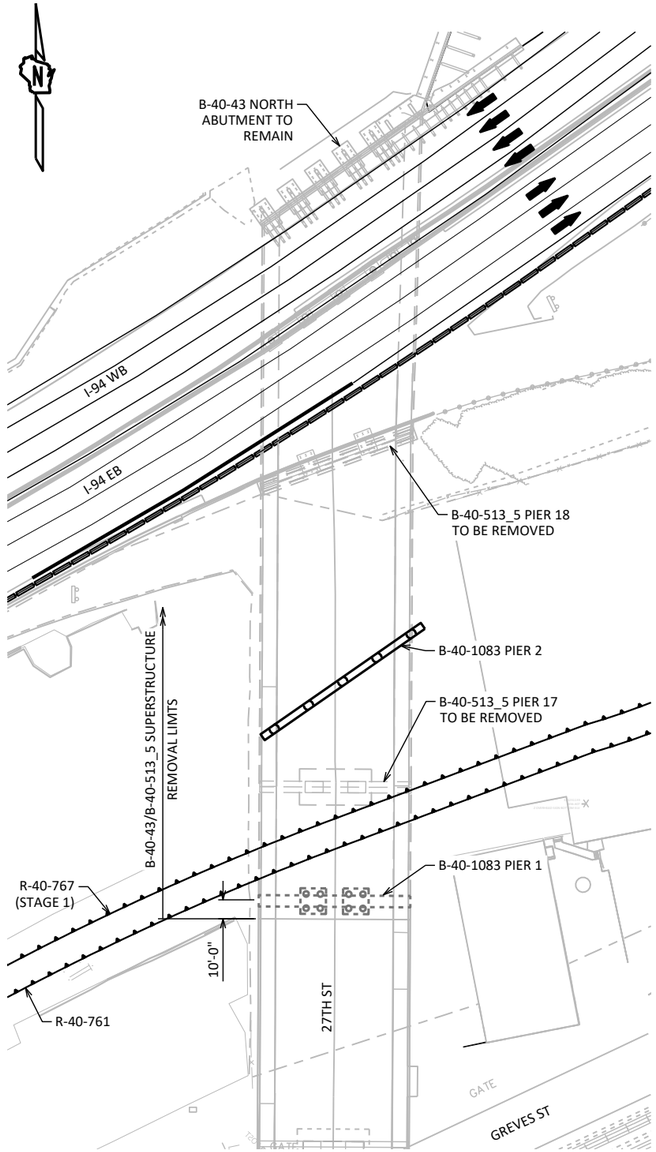
1060-27-74



PHASE 1 CONSTRUCTION

27TH STREET AND I-94 EW ARE IN EXISTING TRAFFIC CONDITIONS.

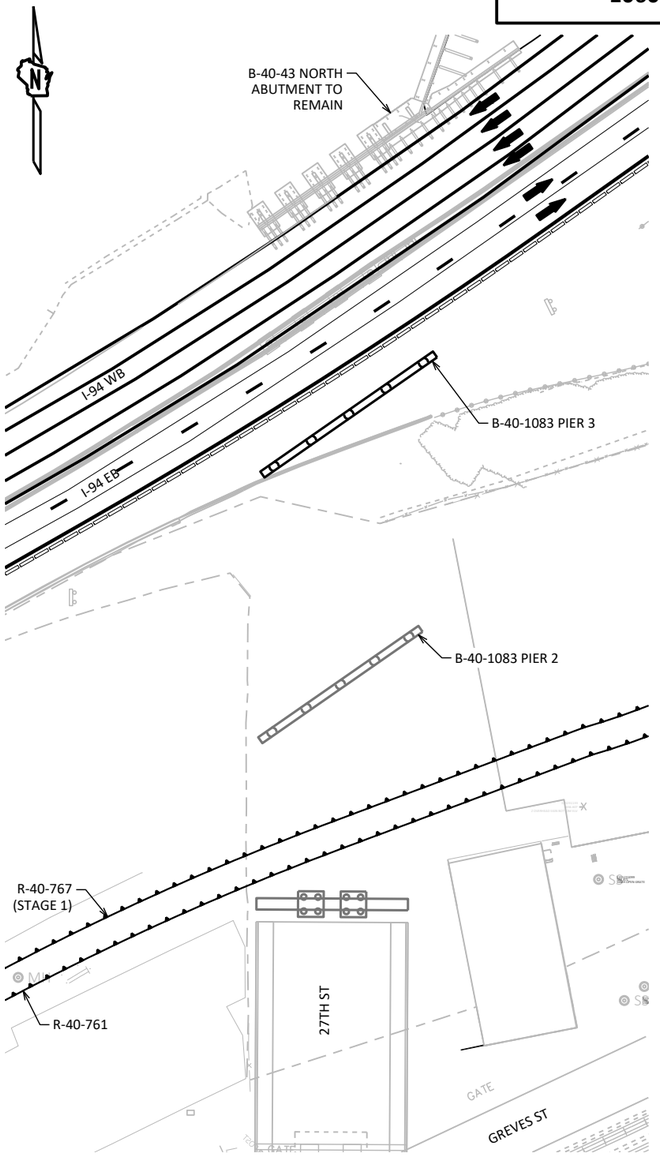
1. CONSTRUCT B-40-1083 PIER 1 UNDER EXISTING STRUCTURE B-40-513_5



PHASE 2 CONSTRUCTION

27TH STREET IS CLOSED TO TRAFFIC AND I-94 EW REMAINS IN EXISTING TRAFFIC CONDITION.

1. SUPPORT EXISTING BRIDGE B-40-513_5 ON B-40-1083 PIER 1.
2. REMOVE EXISTING B-40-43 AND B-40-513_5 SUPERSTRUCTURE TO LIMITS SHOWN IN PLANS.
3. REMOVE B-40-513_5 PIERS 17 AND 18.
4. BEGIN CONSTRUCTION OF B-40-1083 PIER 2.
5. BEGIN CONSTRUCTION OF TIERED RETAINING WALLS R-40-761 AND R-40-767.



PHASE 3 CONSTRUCTION

27TH STREET IS CLOSED TO TRAFFIC, FOUR LANES OF TRAFFIC I-94 WB AND TWO LANES OF TRAFFIC I-94 EB.

1. FINISH CONSTRUCTION OF B-40-1083 PIER 2.
2. CONSTRUCT B-40-1083 PIER 3.
3. CONTINUE CONSTRUCTION OF TIERED RETAINING WALLS R-40-761 AND R-40-767.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D EKM

CONSTRUCTION SEQUENCE (1 OF 2)

SHEET 5 OF 62

767

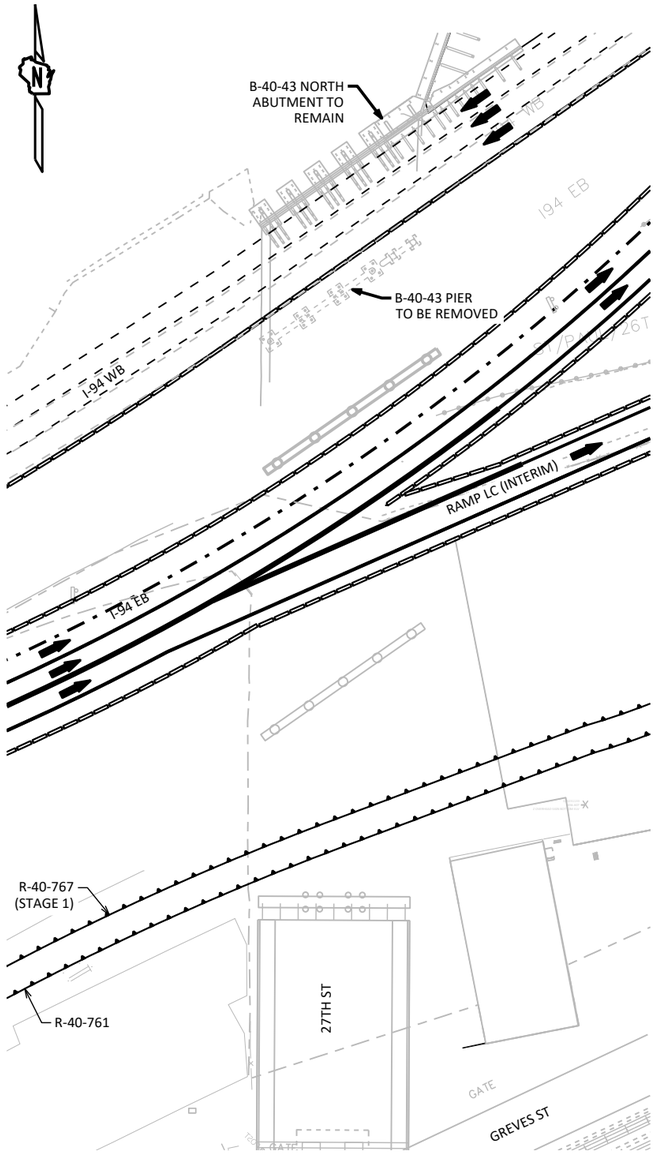
SCALE = 1:80

8

8

STATE PROJECT NUMBER

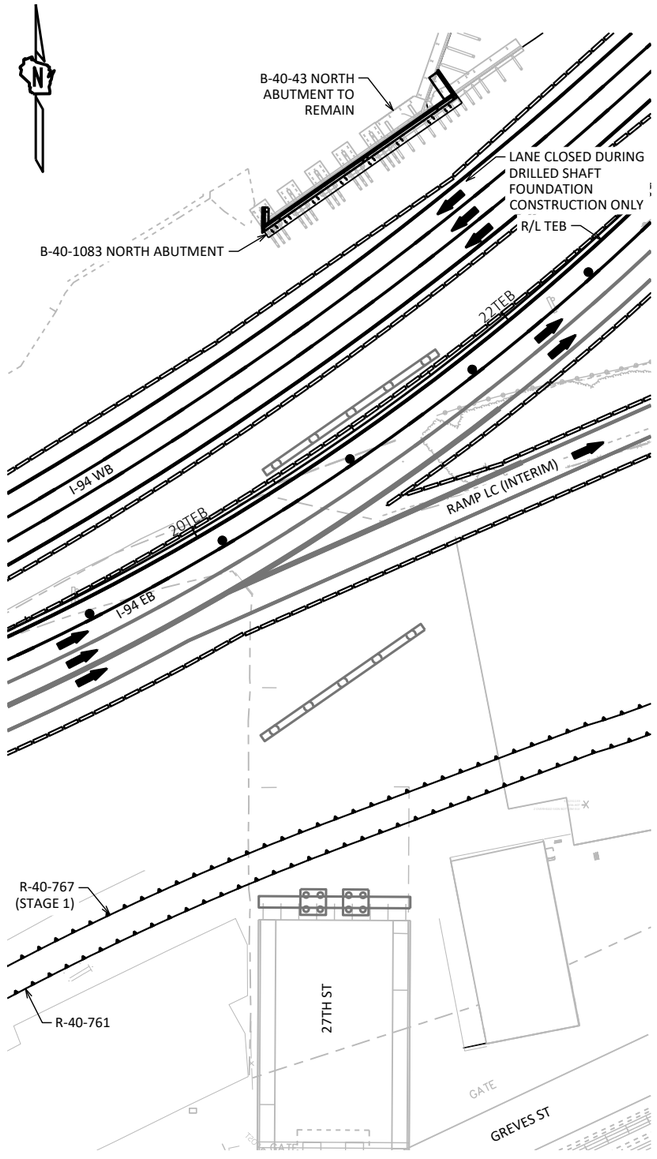
1060-27-74



PHASE 4 CONSTRUCTION

27TH STREET IS CLOSED TO TRAFFIC, THREE LANES OF TRAFFIC I-94 WB AND TWO LANES OF I-94 EB.

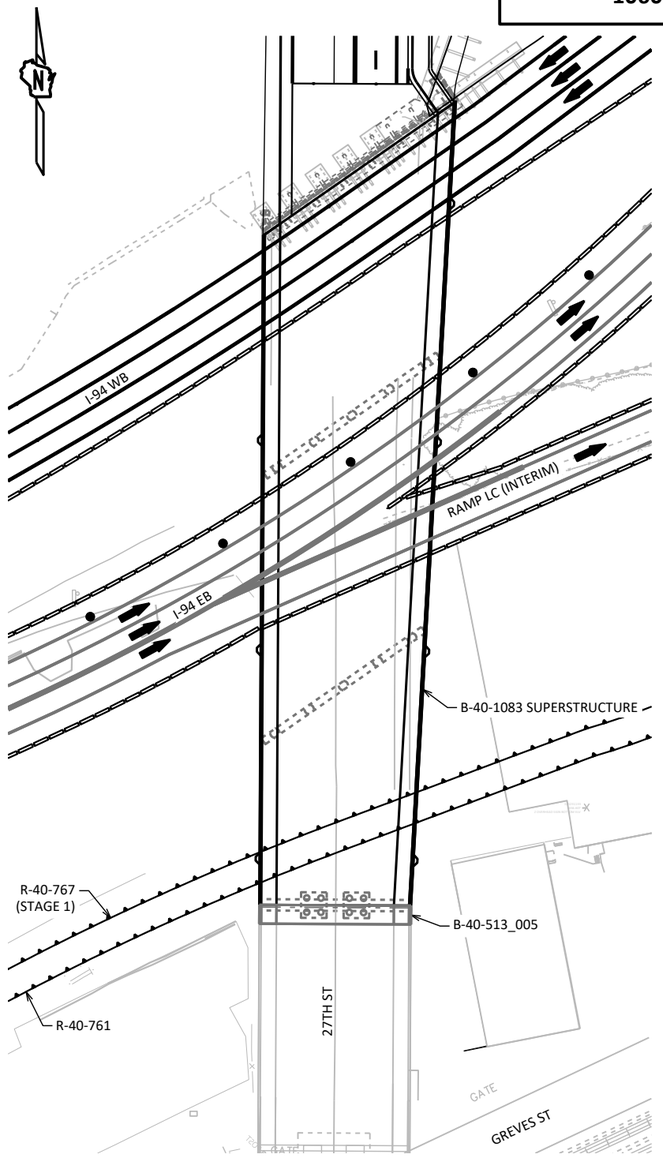
1. REMOVE EXISTING B-40-43 PIER 19.
2. CONTINUE CONSTRUCTION OF TIERED RETAINING WALLS R-40-761 AND R-40-767



PHASE 5 CONSTRUCTION

27TH STREET IS CLOSED TO TRAFFIC, TWO/THREE LANES OF TRAFFIC I-94 WB AND TWO LANES OF I-94 EB.

1. CONSTRUCT B-40-1083 NORTH ABUTMENT DRILLED SHAFT FOUNDATIONS.
2. OPEN I-94 EB TO THREE LANES OF TRAFFIC.
3. CONSTRUCT B-40-1083 NORTH ABUTMENT.
4. CONTINUE CONSTRUCTION OF TIERED RETAINING WALLS R-40-761 AND R-40-767.



PHASE 6 CONSTRUCTION

27TH STREET IS CLOSED TO TRAFFIC, THREE LANES OF TRAFFIC I-94 WB AND TWO LANES OF TRAFFIC I-94 EB.

1. CONSTRUCT B-40-1083 SUPERSTRUCTURE
2. CONSTRUCT B-40-513_5 SUPERSTRUCTURE
3. CONTINUE CONSTRUCTION OF TIERED RETAINING WALLS R-40-761 AND R-40-767

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D EKM

CONSTRUCTION SEQUENCE (2 OF 2)

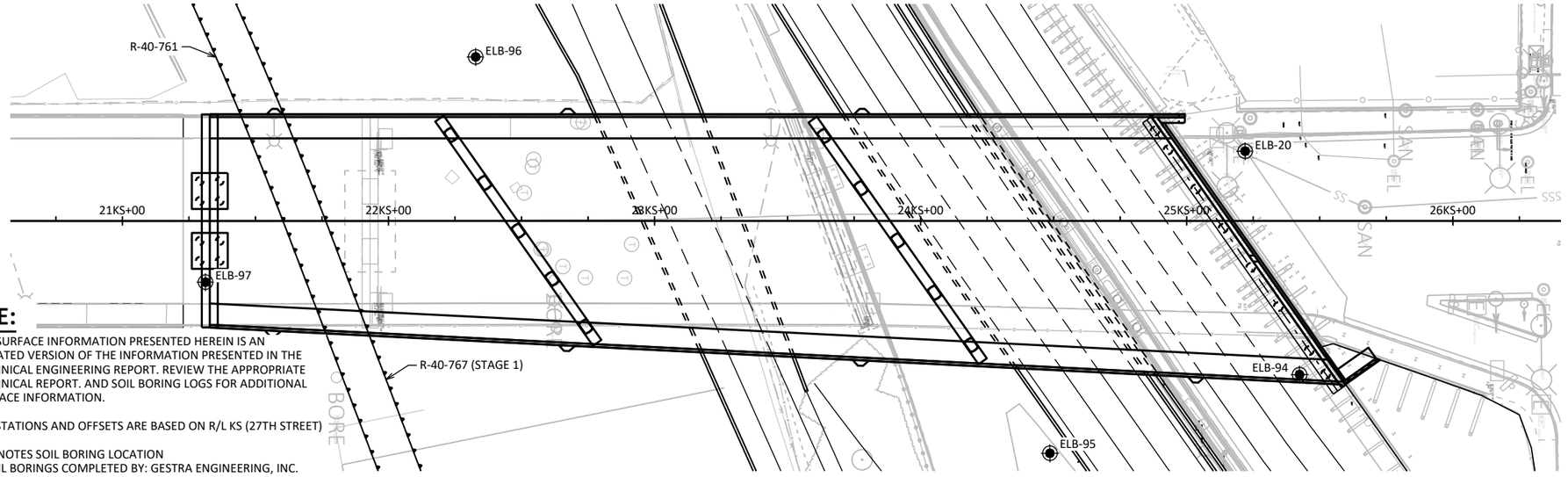
SHEET 6 OF 62

768

SCALE = 1:80

8

8



PLAN

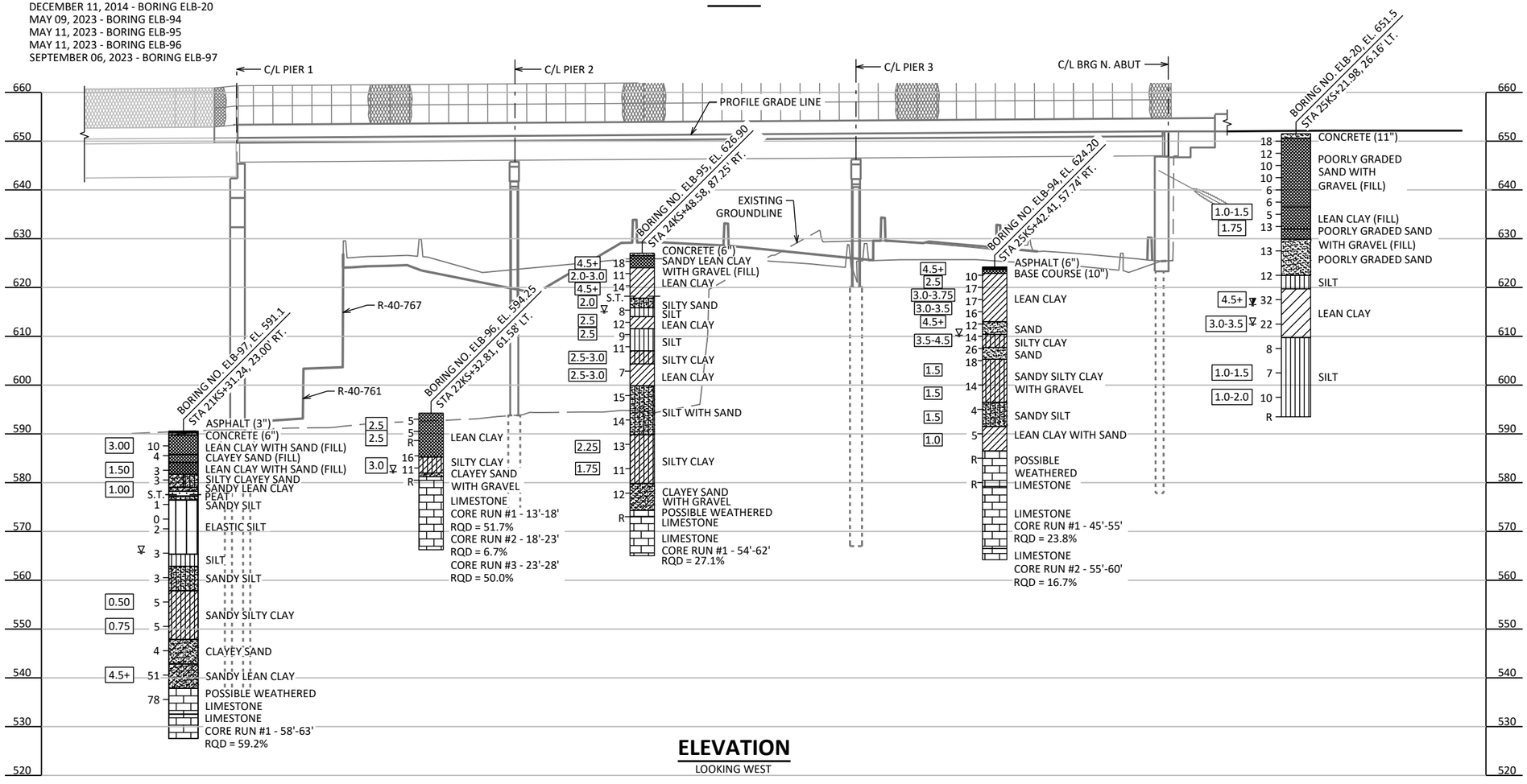
NOTE:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT. AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

BORING STATIONS AND OFFSETS ARE BASED ON R/L KS (27TH STREET)

DENOTES SOIL BORING LOCATION
SOIL BORINGS COMPLETED BY: GESTRA ENGINEERING, INC.

SOIL BORINGS TAKEN:
DECEMBER 11, 2014 - BORING ELB-20
MAY 09, 2023 - BORING ELB-94
MAY 11, 2023 - BORING ELB-95
MAY 11, 2023 - BORING ELB-96
SEPTEMBER 06, 2023 - BORING ELB-97



ELEVATION

LOOKING WEST

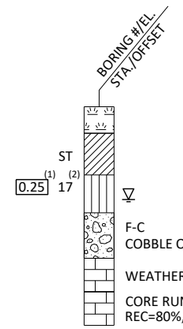
STATE PROJECT NUMBER

1060-27-74

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D EKM

SUBSURFACE EXPLORATION (1 OF 2)

SHEET 7 OF 62
769

SCALE = 1:50

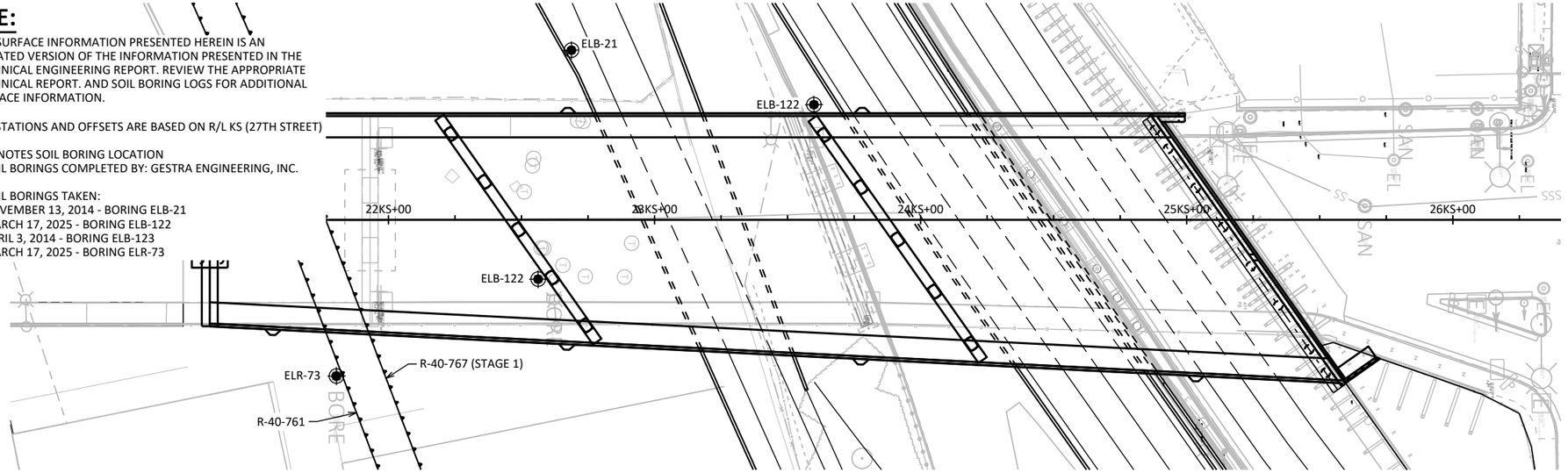
NOTE:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT. AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

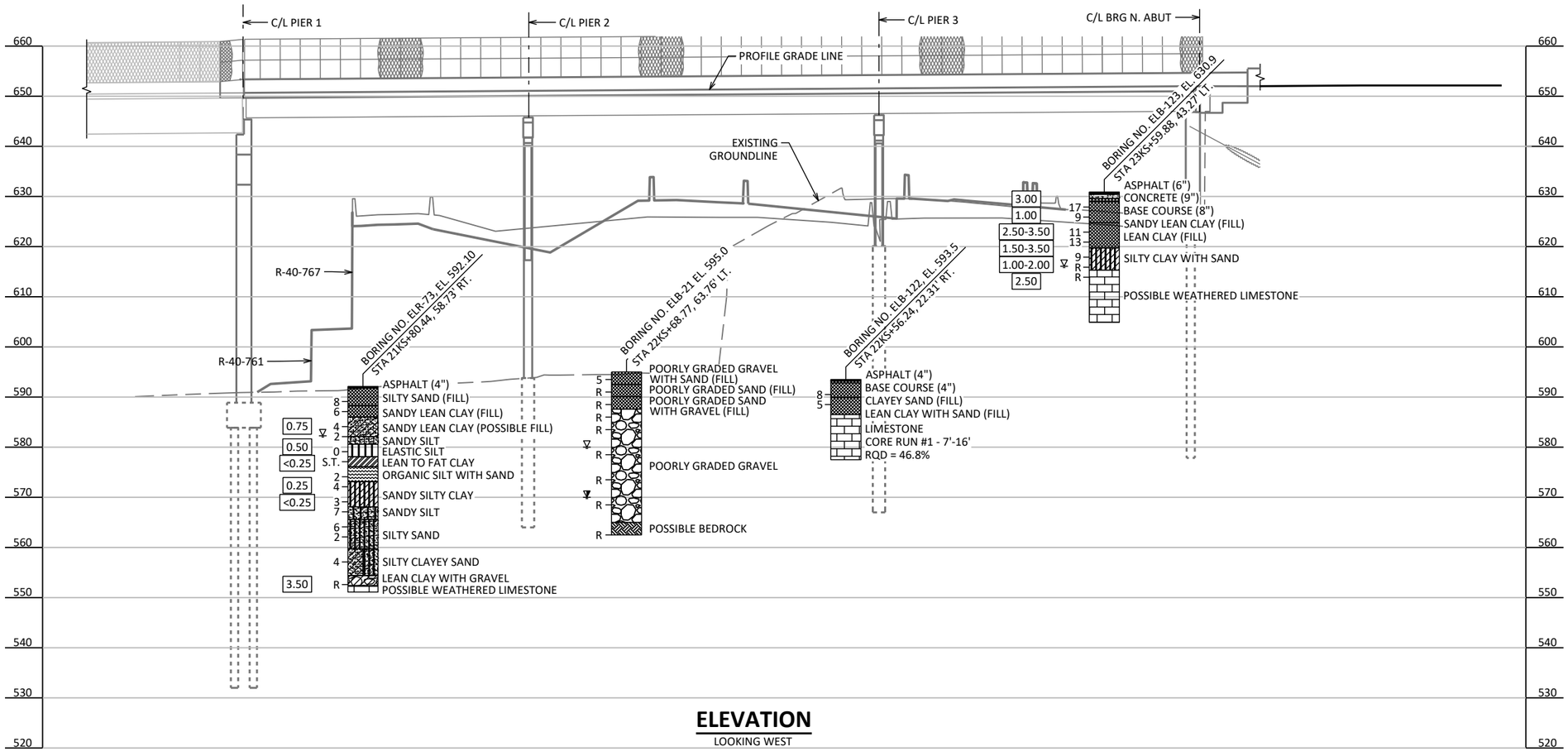
BORING STATIONS AND OFFSETS ARE BASED ON R/L KS (27TH STREET)

DENOTES SOIL BORING LOCATION
SOIL BORINGS COMPLETED BY: GESTRA ENGINEERING, INC.

SOIL BORINGS TAKEN:
NOVEMBER 13, 2014 - BORING ELB-21
MARCH 17, 2025 - BORING ELB-122
APRIL 3, 2014 - BORING ELB-123
MARCH 17, 2025 - BORING ELR-73



PLAN



ELEVATION
LOOKING WEST

8

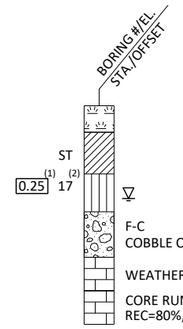
STATE PROJECT NUMBER

1060-27-74

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY	TMH	PLANS CK'D	EKM

SUBSURFACE EXPLORATION (2 OF 2)

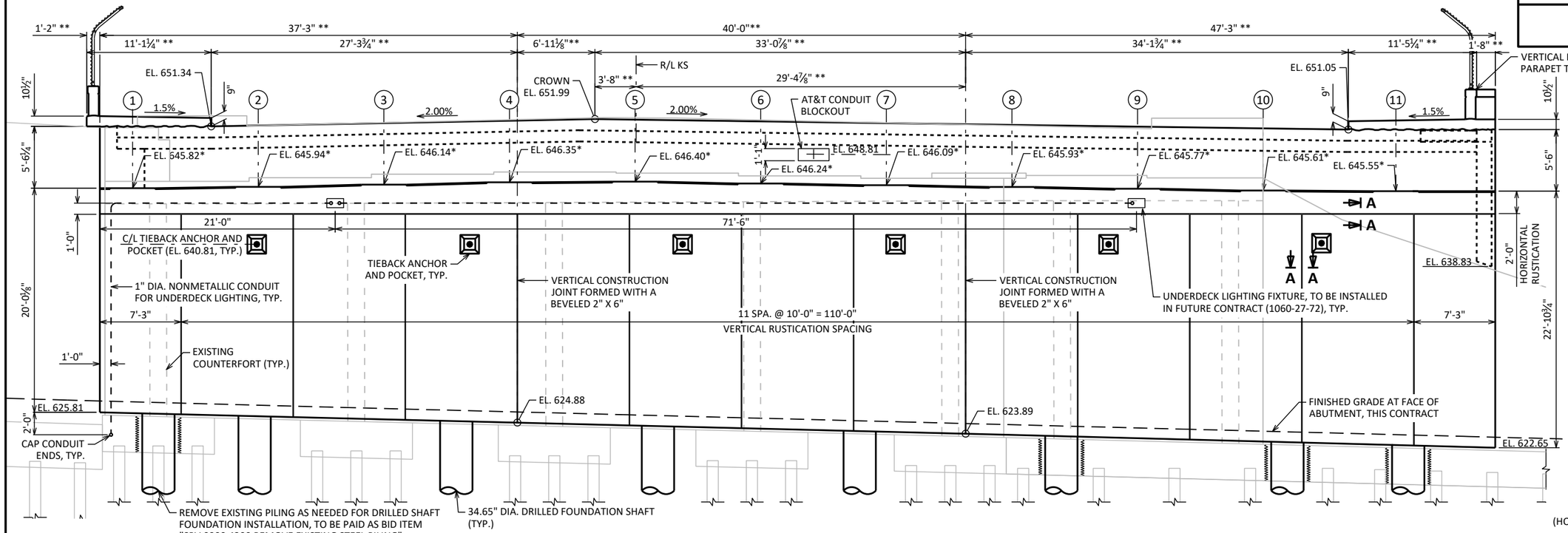
SHEET 8 OF 62
770

SCALE = 1:50

8

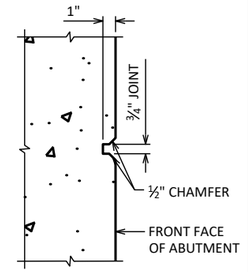
STATE PROJECT NUMBER

1060-27-74



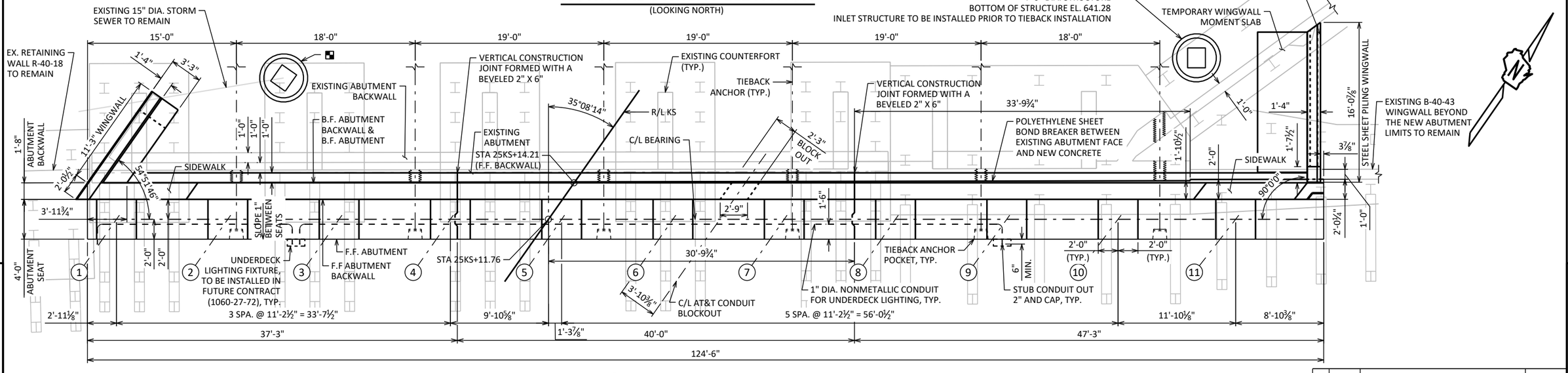
NORTH ABUTMENT ELEVATION

(LOOKING NORTH)

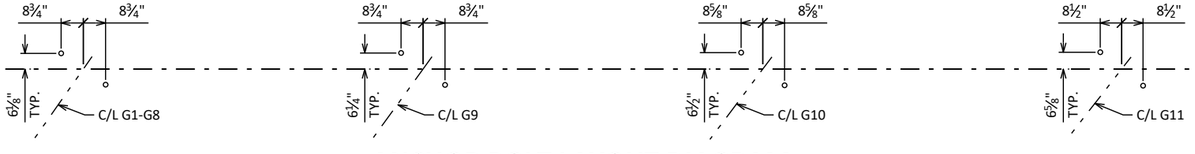


SECTION A-A

(HORIZONTAL & VERTICAL RUSTICATION)



NORTH ABUTMENT PLAN



ANCHOR BOLT LAYOUT DIAGRAM

LEGEND

* ELEVATIONS ARE GIVEN AT THE TOP OF THE ABUTMENT CAP CONCRETE AT THE C/L BEARING

** DIMENSIONS ARE TAKEN FROM THE FRONT FACE OF THE BACKWALL

INLET 171 (SEE STORM SEWER PLAN FOR DETAILS) 4'-0" DIA. STRUCTURE, BOTT. OF STRUCTURE EL. 641.62 INLET STRUCTURE TO BE INSTALLED PRIOR TO TIEBACK INSTALLATION

NOTES

1. FOR ABUTMENT FOUNDATION DETAILS, SEE SHEET 11
2. FOR ABUTMENT REINFORCEMENT DETAILS, SEE SHEET 10
3. FOR ABUTMENT SECTIONS & DETAILS, SEE SHEET 14
4. FOR TIEBACK ANCHOR DETAILS, SEE SHEET 13
5. EXISTING ABUTMENT WALL TO BE REHABILITATED PRIOR TO CONSTRUCTION OF NEW WALL SEE SHEET 12 FOR DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY CMS | PLANS CK'D EKM

NORTH ABUTMENT LAYOUT

SHEET 9 OF 62
771

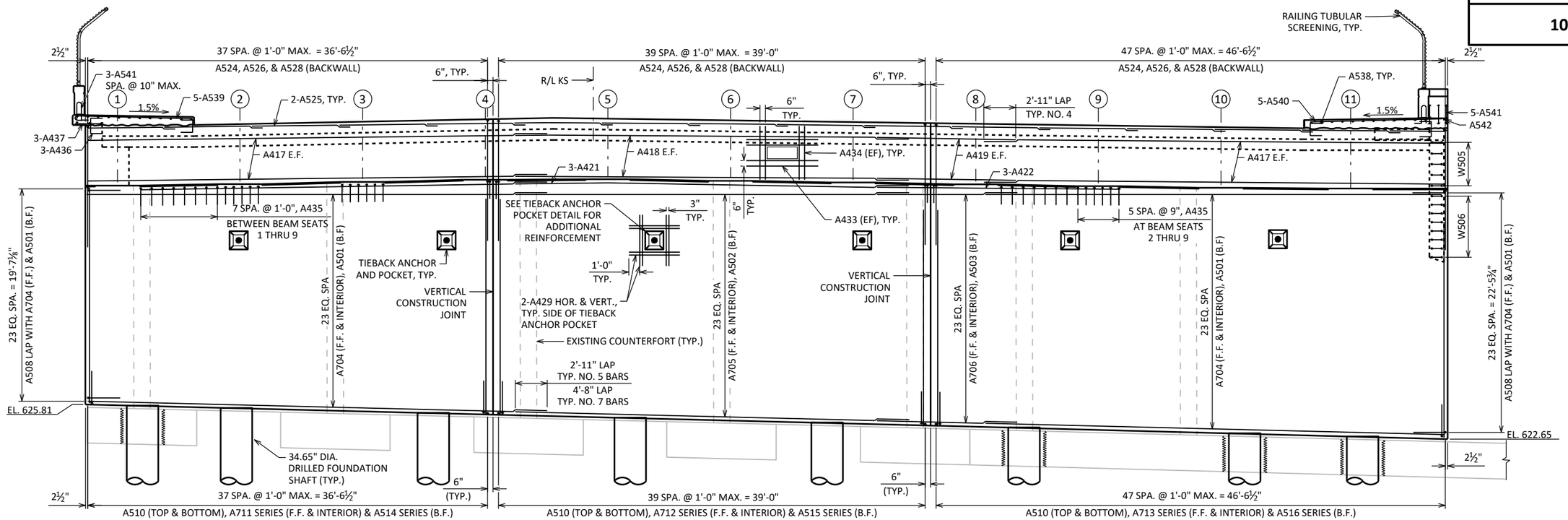
SCALE = 1:30

8

8

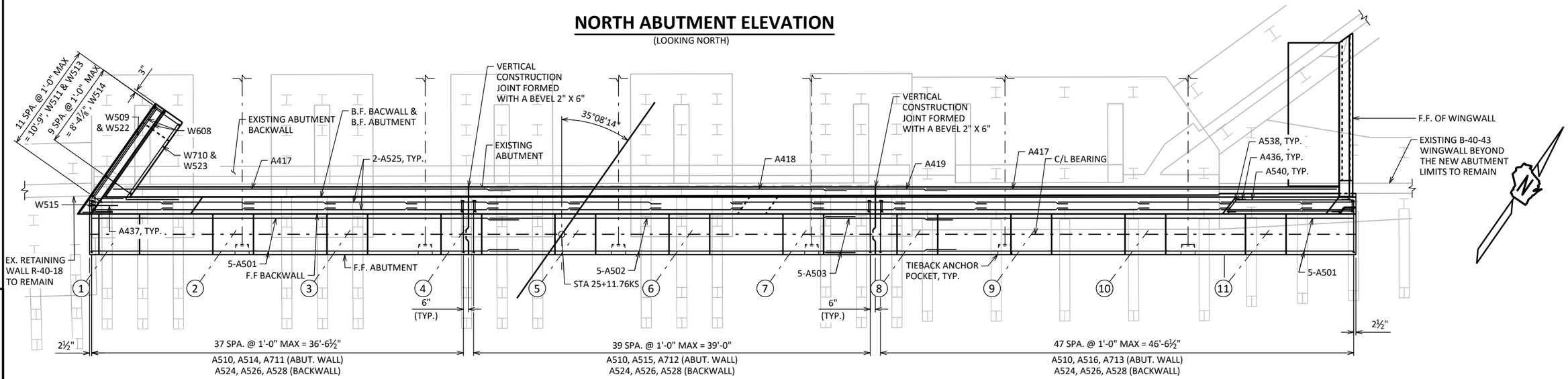
STATE PROJECT NUMBER

1060-27-74



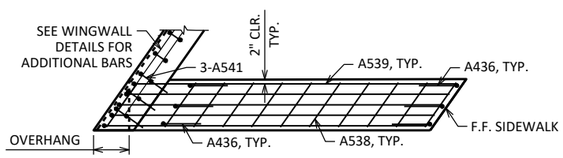
NORTH ABUTMENT ELEVATION

(LOOKING NORTH)

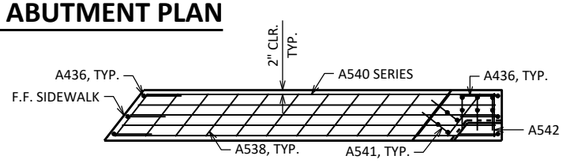


WEST SIDEWALK PLAN

(ONLY SIDEWALK ON PAVING BLOCK SHOWN FOR CLARITY)



NORTH ABUTMENT PLAN



EAST SIDEWALK PLAN

(ONLY SIDEWALK ON PAVING BLOCK SHOWN FOR CLARITY)

NOTES

1. FOR ABUTMENT FOUNDATION DETAILS, SEE SHEET 11
2. FOR ABUTMENT SECTIONS & DETAILS, SEE SHEET 14
3. FOR TIEBACK ANCHOR DETAILS, SEE SHEET 13
4. EX. F.F. OF ABUTMENT WALL TO BE REHABILITATED PRIOR TO CONSTRUCTION OF NEW WALL. SEE SHEET 12 FOR DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY CMS | PLANS CK'D EKM

NORTH ABUTMENT REINFORCEMENT DETAIL

SHEET 10 OF 62

772

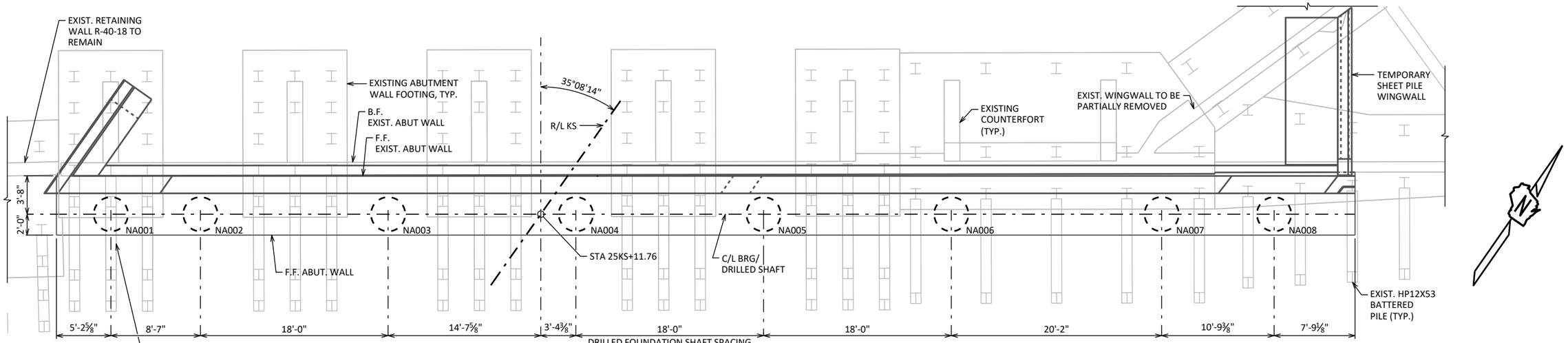
SCALE = 1:30

8

8

STATE PROJECT NUMBER

1060-27-74

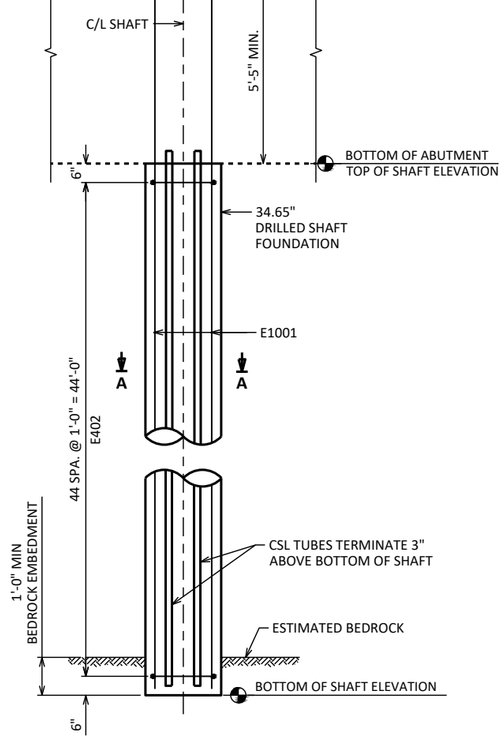


DRILLED FOUNDATION SHAFT LAYOUT

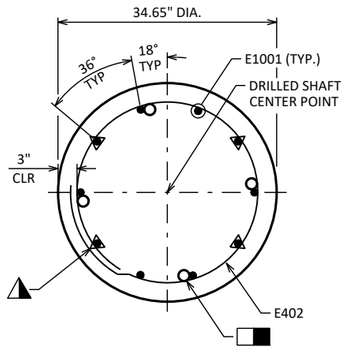
(EXISTING ABUTMENT AND PILE LAYOUT BASED ON AS-BUILT DRAWINGS)

SHAFT DATA

SHAFT NO.	SHAFT C/L "X"	SHAFT C/L "Y"	ASSUMED DRILLING EL.	TOP OF SHAFT EL.	BOTTOM OF SHAFT EL.	SHAFT LENGTH (FT.)	SHAFT VOLUME (CY)	INSTRUMENTATION
NA001	595715.27	297991.11	626.66	625.69	580.69	45'-0"	10.90	CSL TUBES/TIP TESTING
NA002	595722.32	297996.01	626.41	625.47	580.47	45'-0"	10.90	CSL TUBES/TIP TESTING
NA003	595737.09	298006.28	625.88	625.02	581.02	45'-0"	10.90	CSL TUBES/TIP TESTING
NA004	595751.87	298016.56	625.26	624.58	579.58	45'-0"	10.90	CSL TUBES/TIP TESTING
NA005	595766.64	298026.84	624.95	624.13	579.13	45'-0"	10.90	CSL TUBES/TIP TESTING
NA006	595781.42	298037.11	624.52	623.67	578.67	45'-0"	10.90	CSL TUBES/TIP TESTING
NA007	595797.97	298048.63	623.97	623.14	578.14	45'-0"	10.90	CSL TUBES/TIP TESTING
NA008	595806.82	298054.79	623.75	622.86	577.86	45'-0"	10.90	CSL TUBES/TIP TESTING



DRILLED SHAFT ELEVATION



SECTION A-A

(34.65" DIA. DRILLED SHAFT FOUNDATION)

NOTES

1. ABUTMENT SHALL BE SUPPORTED ON 34.65" DIA. DRILLED SHAFT FOUNDATIONS EMBEDDED 1'-0" INTO BEDROCK.
2. ORIENTATION OF DRILLED SHAFT CAGE IS ARBITRARY FOR DESIGN PURPOSES. CONTRACTOR MAY INSTALL CAGE ASSEMBLY IN ANY DESIRED ORIENTATION.
3. IF BEDROCK IS ENCOUNTERED 5' OR MORE ABOVE THE PLANNED BOTTOM OF SHAFT ELEVATION, THE FOUNDATION SHAFT DRILLING MAY STOP AT A HIGHER ELEVATION. ALERT THE ENGINEER AND COORDINATE WITH THE DESIGNER.
4. THE DRILLED FOUNDATION LENGTH ASSUMES DRILLING BEGINS AT THE BOTTOM OF ABUTMENT. THE PLANNED BOTTOM OF SHAFT ELEVATION IS BASED ON AN ESTIMATED BEDROCK SURFACE DETERMINED FROM SOIL BORING INFORMATION.
5. THE DRILLED FOUNDATION LENGTH IS AN ESTIMATED VALUE THAT IS BASED UPON AN ESTIMATED BEDROCK SURFACE.
6. LENGTH OF E1001 BARS AND NUMBER of E402 BARS ARE DETAILED FOR SHAFTS 5'-0" LONGER REQUIRED BASED ON ASSUMED BEDROCK ELEVATIONS. FIELD CUT E1001 BARS AND ADJUST NUMBER OF E402 BARS ACCORDINGLY BASED UPON SHAFT LENGTH AFTER DRILLING IS COMPLETE.

LEGEND

- 4 - 2" DIA. CSL TUBES FULL LENGTH OF SHAFT TIED TO INSIDE AND SPACED AROUND THE PERIMETER OF REINFORCEMENT AS SHOWN.
- 4 - THERMAL WIRES FOR TIP TESTING. DISTRIBUTE 4 THERMAL WIRES EVENLY AROUND THE PERIMETER OF REINFORCEMENT TIED TO VERTICAL BARS.

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

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NORTH ABUTMENT FOUNDATION DETAILS

SHEET 11 OF 62

773

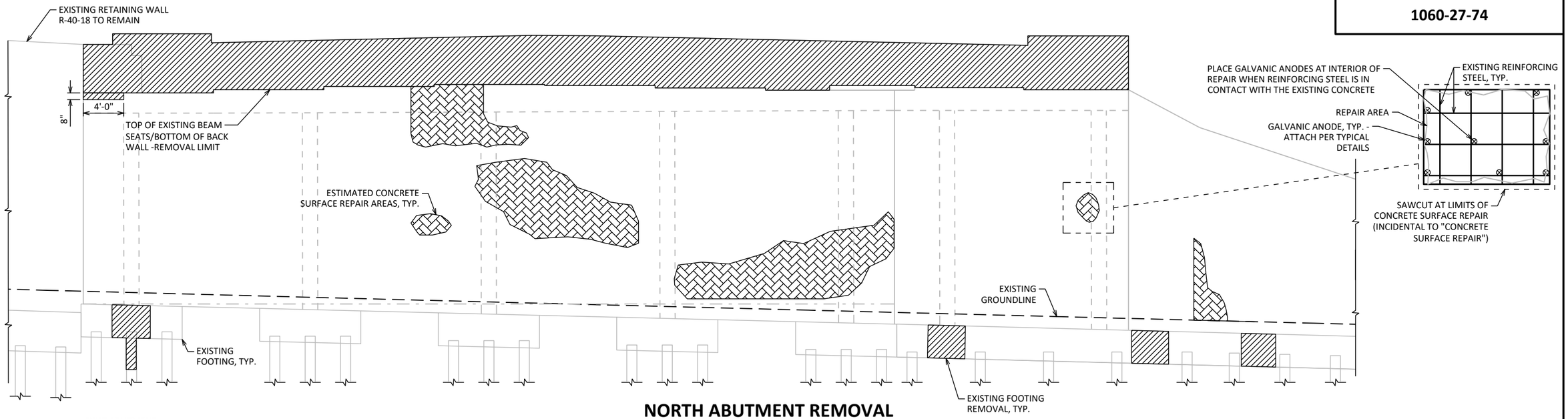
SCALE = 1:30

8

8

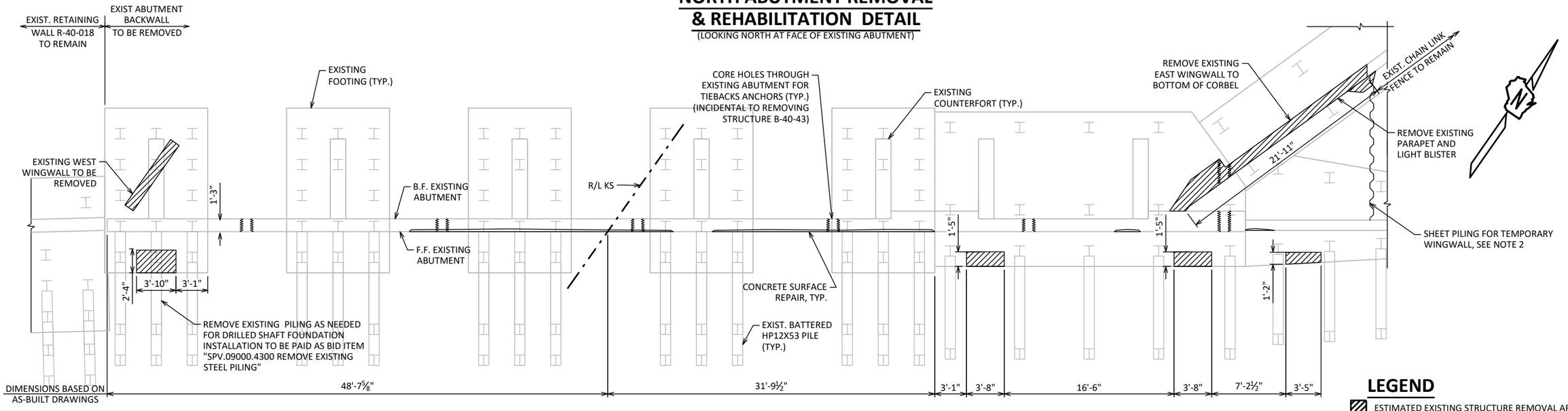
STATE PROJECT NUMBER

1060-27-74



NORTH ABUTMENT REMOVAL & REHABILITATION DETAIL

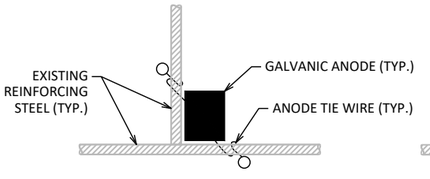
(LOOKING NORTH AT FACE OF EXISTING ABUTMENT)



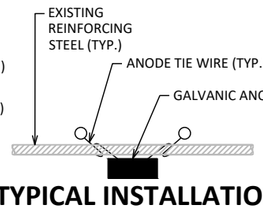
GALVANIC ANODE NOTES

1. SEE SPECIAL PROVISION "EMBEDDED GALVANIC ANODES" FOR DESCRIPTION, MATERIALS, CONSTRUCTION, MEASUREMENT AND PAYMENT INFORMATION.
2. EXISTING REINFORCING STEEL TO BE COMPLETELY CLEANED OF CORRODED MATERIAL PRIOR TO INSTALLATION OF GALVANIC ANODES.
3. LOCATIONS OF GALVANIC ANODES SHOULD BE WITHIN 6" OF THE EDGE OF THE REPAIR AREA.
4. AFTER PLACEMENT, GALVANIC ANODES SHOULD MAINTAIN A MINIMUM TOP COVER OF 1½" AND A MINIMUM BOTTOM COVER OF ¾".
5. PROVIDE GALVANIC ANODES IN CONCRETE SURFACE REPAIR AREAS IN SUBSTRUCTURE ONLY.
6. THE ESTIMATED ANODE QUANTITY ON PLANS IS BASED ON A MAXIMUM SPACING OF 24" AROUND PERIMETER OF THE CONCRETE SURFACE REPAIR AREA. PLACE ADDITIONAL ANODES AT THE INTERIOR OF REPAIRED AREA SO CENTER TO CENTER SPACING OF ANODES IS NOT GREATER THAN 24" IN ANY DIRECTION.

FOUNDATION DEMO PLAN

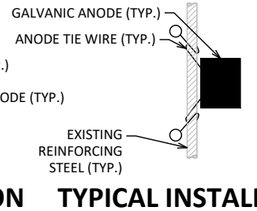


TYPICAL INSTALLATION AT BARS STEEL INTERSECTION



TYPICAL INSTALLATION BELOW BARS STEEL

(HORIZONTAL)



TYPICAL INSTALLATION BESIDE BARS STEEL

(VERTICAL)

LEGEND

ESTIMATED EXISTING STRUCTURE REMOVAL AREA. DEFINE WITH MINIMUM 1" DEEP SAW CUT.

ESTIMATED CONCRETE SURFACE REPAIR AREA.

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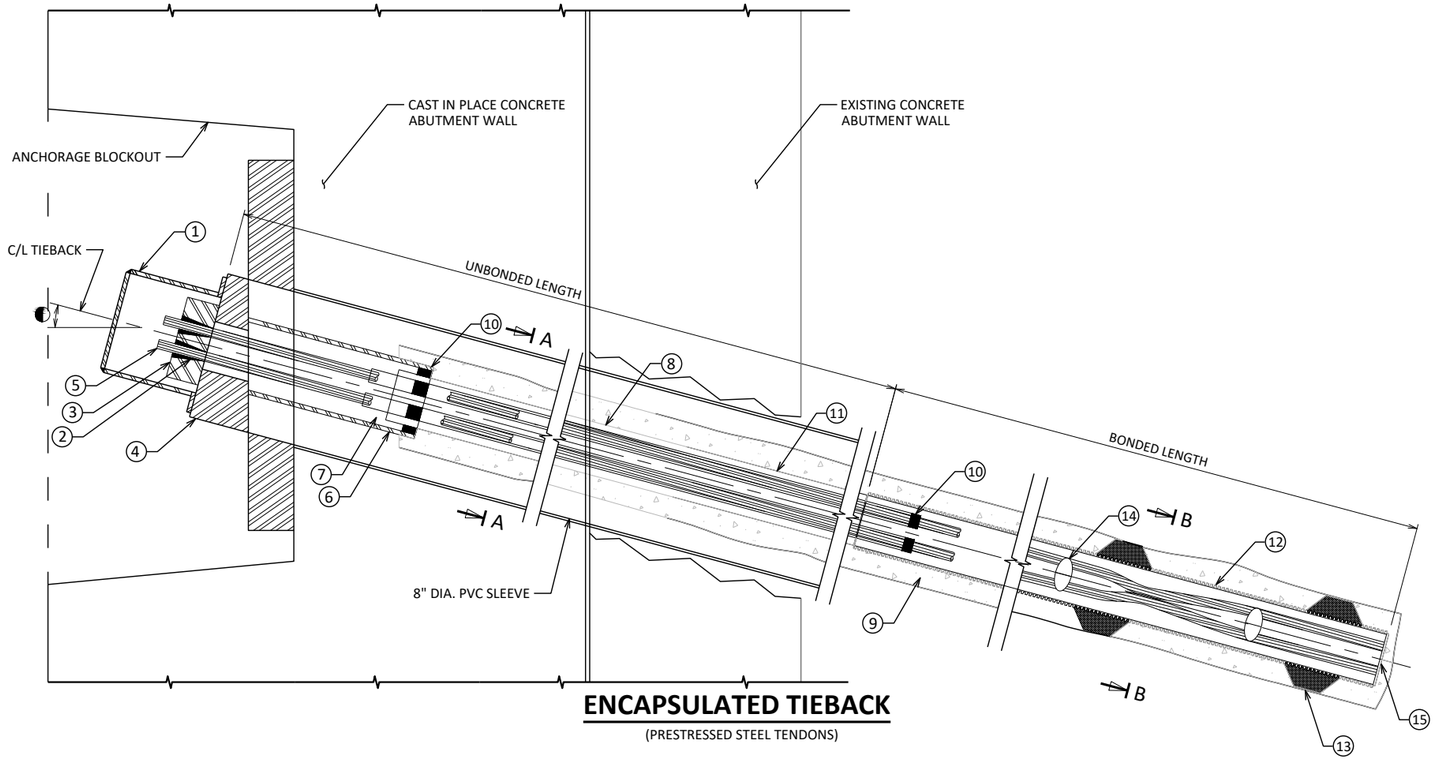


ENCAPSULATED TIEBACK

(PRESTRESSED STEEL TENDONS)

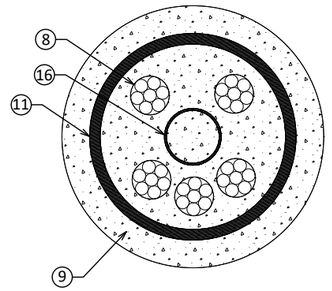
LEGEND

1. ANCHORAGE COVER
2. WEDGE
3. WEDGE PLATE
4. WEDGE PLATE & BEARING PLATE ASSEMBLY *
5. BARE PRESTRESSING STRAND
6. TRUMPET
7. GROUT OR CORROSION INHIBITING COMPOUND
8. GREASE FILLED STRAND SHEATH
9. GROUT
10. SEAL
11. SHEATH (GROUT FILLED FOR NON-EXTRUDED STRAND SHEATHS)
12. CORRUGATED ENCAPSULATION
13. EXTERNAL CENTRALIZER
14. INTERNAL SPACER/CENTRALIZER
15. END CAP
16. GROUT TUBE

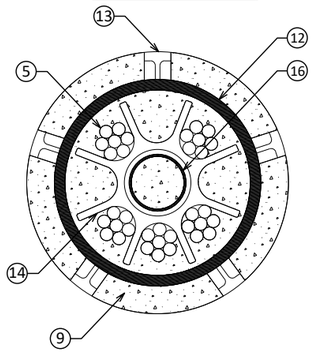
◐ ANGLE FROM HORIZONTAL, SEE TIEBACK ANCHOR DATA TABLES ON THIS SHEET.

☆ HORIZONTAL ORIENTATION IS MEASURED FROM ABUTMENT FACE ~ IN COUNTER-CLOCKWISE DIRECTION. REFER TO TIEBACK ANCHOR DATA TABLE ON THIS SHEET.

* WEDGE PLATE & BEARING PLATE ASSEMBLY SHALL BE DESIGNED IN ACCORDANCE WITH THE "TIEBACK ANCHORS" SPECIAL PROVISION (SPV.0060.4400).



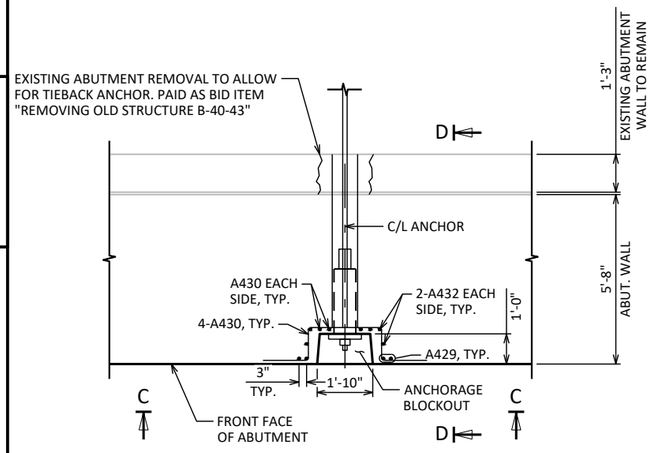
SECTION A-A



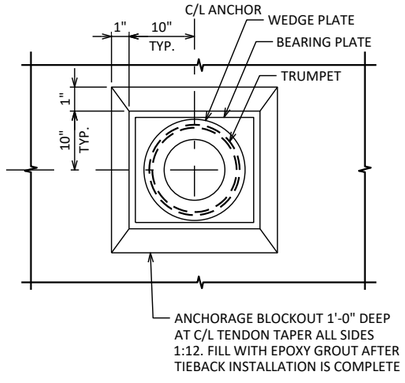
SECTION B-B

ANCHOR TABLE

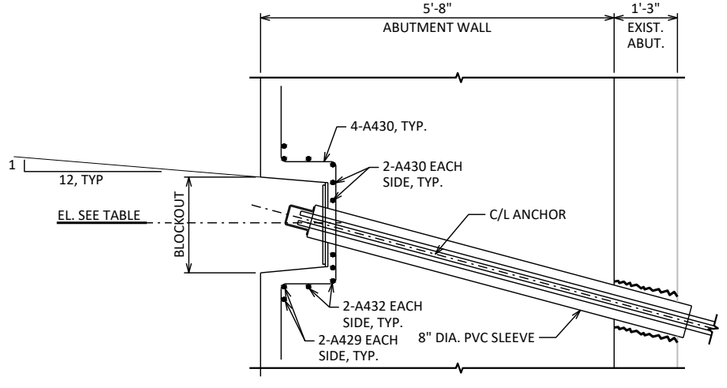
TIEBACK NUMBER	TIEBACK ELEVATION	TIEBACK VERTICAL ORIENTATION (DEG) ◐	TIEBACK HORIZONTAL ORIENTATION (DEG) ☆	ESTIMATED BONDED ANCHOR LENGTH (FT)	MINIMUM UNBONDED ANCHOR LENGTH (FT)	DESIGN LOAD (KIPS)	TIE OFF LOADS (KIPS)
1	640.81	15	90	15	15	50	40
2	640.81	15	90	15	15	50	40
3	640.81	15	90	15	15	50	40
4	640.81	15	90	15	15	50	40
5	640.81	15	90	15	15	50	40
6	640.81	15	90	15	15	50	40



PARTIAL PLAN VIEW OF PROPOSED TIEBACK



SECTION C-C



SECTION D-D

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

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NORTH ABUTMENT TIEBACK ANCHOR DETAILS

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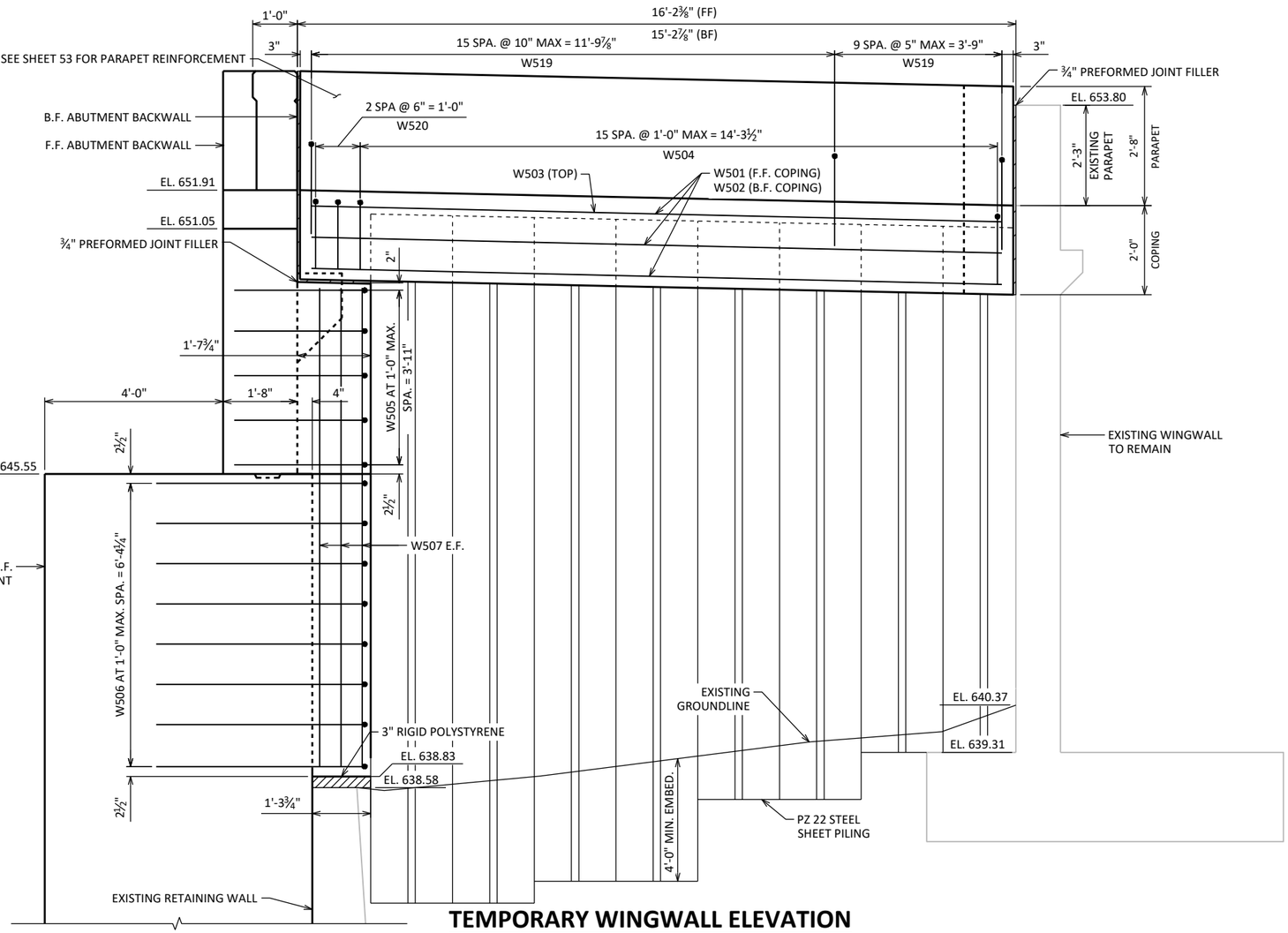
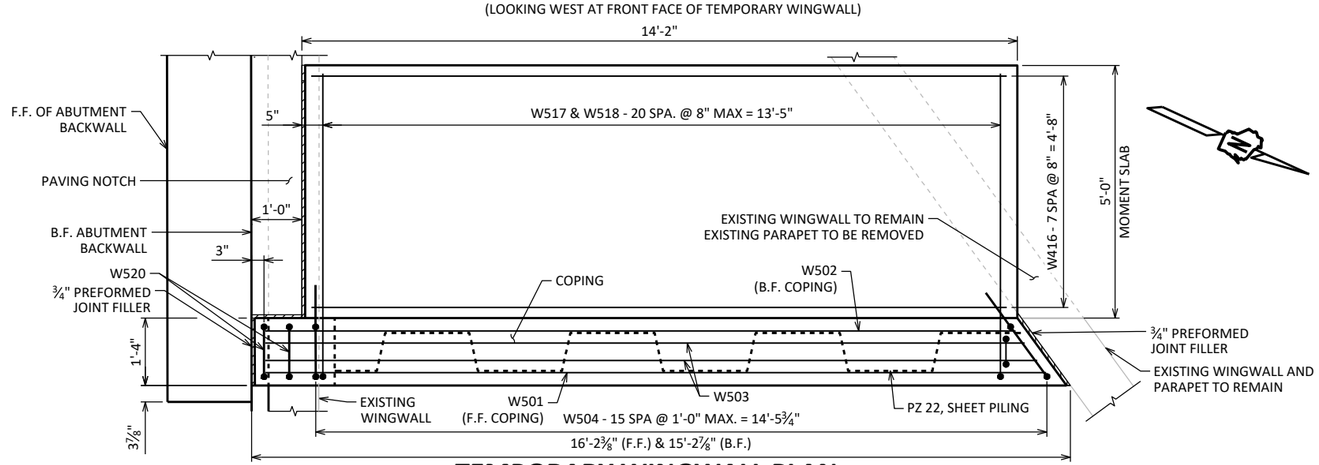


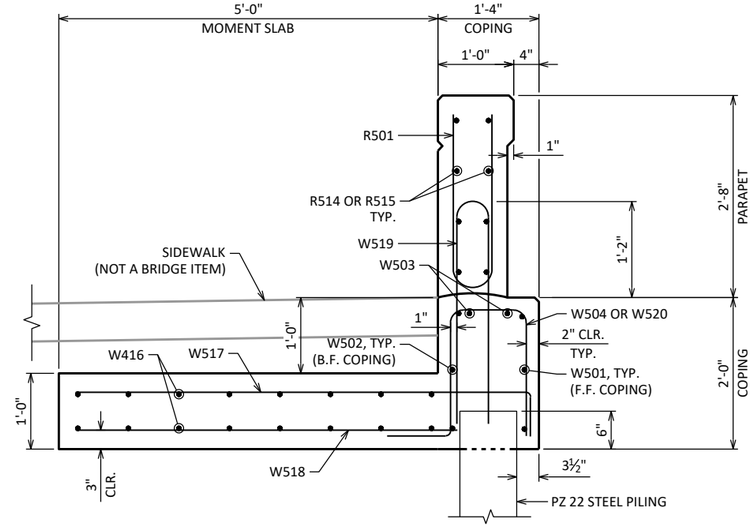
TEMPORARY WINGWALL ELEVATION

(LOOKING WEST AT FRONT FACE OF TEMPORARY WINGWALL)



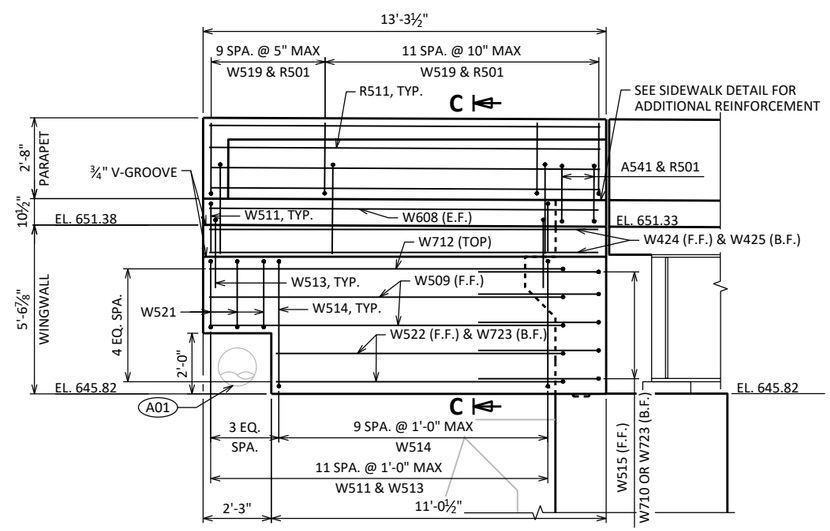
TEMPORARY WINGWALL PLAN

(PARAPET NOT SHOWN FOR CLARITY)



TEMPORARY WINGWALL SECTION

(LOOKING NORTH)



NW WINGWALL ELEVATION

(LOOKING EAST)

LEGEND

(A01) EXISTING 15" DIA. STORM SEWER PIPE TO REMAIN
APPROXIMATE INVERT EL. 646.08

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NORTH ABUTMENT TEMPORARY WINGWALL DETAILS

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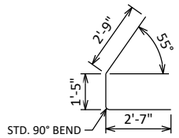
BILL OF BARS

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
E1001		80	55'-5"			DRILLED SHAFT - VERTICAL
E402		400	8'-6"	X		DRILLED SHAFT - STIRRUP
A501	X	64	42'-0"			ABUT. BODY - B.F., TOP & BOTTOM
A502	X	32	36'-0"			ABUT. BODY - B.F., TOP & BOTTOM
A503	X	32	12'-10"			ABUT. BODY - B.F., TOP & BOTTOM
A704	X	100	42'-0"			ABUT. BODY - F.F. INTERIOR & BOTTOM
A705	X	50	36'-0"			ABUT. BODY - F.F. INTERIOR & BOTTOM
A706	X	50	18'-1"			ABUT. BODY - F.F. INTERIOR & BOTTOM
A508	X	48	10'-8"	X		ABUT. BODY - EACH END
A510	X	252	10'-10"	X		ABUT. BODY - TOP & BOTTOM U-BARS
A711	X	76	20'-0"		△	ABUT. BODY - F.F. & INTERIOR
A712	X	80	20'-11"		△	ABUT. BODY - F.F. & INTERIOR
A713	X	96	22'-0"		△	ABUT. BODY - F.F. & INTERIOR
A514	X	38	20'-0"		△	ABUT. BODY - B.F.
A515	X	40	20'-11"		△	ABUT. BODY - B.F.
A516	X	48	22'-0"		△	ABUT. BODY - B.F.
A417	X	28	42'-0"			ABUT. BACKWALL - EACH FACE & CORBEL
A418	X	14	36'-0"			ABUT. BACKWALL - EACH FACE & CORBEL
A419	X	14	12'-10"			ABUT. BACKWALL - EACH FACE & CORBEL
A420	X	3	37'-2"			ABUT. BODY - TOP
A421	X	3	36'-0"			ABUT. BODY - TOP
A422	X	3	22'-3"			ABUT. BODY - TOP
A423	X	295	5'-11"	X		ABUT. BODY - BAR TIES
A524	X	126	13'-4"	X		ABUT. BACKWALL - TOP U-BARS
A525	X	54	8'-0"			ABUT. BACKWALL - POUR BLOCK
A526	X	126	5'-8"	X		ABUT. BACKWALL - POUR BLOCK U-BARS
A528	X	126	6'-10"	X		ABUT. BACKWALL - TOP
A429	X	48	4'-9"			ABUT. BODY - TIEBACK ANCHOR POCKET
A430	X	48	6'-7"	X		ABUT. BODY - TIEBACK ANCHOR POCKET
A432	X	48	4'-9"			ABUT. BODY - TIEBACK ANCHOR POCKET
A433	X	8	6'-8"			ABUT. BACKWALL - CONDUIT BARS
A434	X	8	5'-0"			ABUT. BACKWALL - CONDUIT BARS
A435	X	112	7'-6"	X		ABUT. BODY - TOP L-BARS
A436	X	12	5'-7"	X		SIDEWALK BAR
A437	X	3	3'-0"			SIDEWALK BAR
A538	X	24	1'-8"			SIDEWALK BAR
A539	X	5	11'-3"	X		SIDEWALK BAR
A540	X	5	12'-8"	X	△	SIDEWALK BAR
A541	X	8	4'-4"	X		SIDEWALK BAR
A542	X	1	1'-3"			SIDEWALK BAR
A543	X	9	38'-8"			EXPANSION JOINT
W501	X	3	15'-6"			ABUT. NE WINGWALL - F.F. COPING BLOCK
W502	X	3	14'-7"			ABUT. NE WINGWALL - B.F. COPING BLOCK
W503	X	2	15'-2"			ABUT. NE WINGWALL - TOP COPING BLOCK
W504	X	16	4'-6"	X		ABUT. NE WINGWALL - COPING BLOCK U-BARS
W505	X	5	6'-8"	X		ABUT. NE WINGWALL - U-BARS
W506	X	8	10'-2"	X		ABUT. NE WINGWALL - U-BARS
W507	X	6	10'-8"			ABUT. NE WINGWALL
W608	X	2	10'-9"			ABUT. NW WINGWALL - SIDEWALK BLOCK
W509	X	2	10'-9"			ABUT. NW WINGWALL - F.F.
W710	X	3	12'-11"	X		ABUT. NW WINGWALL - B.F.
W511	X	12	3'-6"	X		ABUT. NW WINGWALL - TOP U-BARS
W712	X	3	10'-9"			ABUT. NW WINGWALL -TOP
W513	X	12	7'-7"	X		ABUT. NW WINGWALL - TOP U-BARS
W514	X	10	14'-4"	X		ABUT. NW WINGWALL - STIRRUPS
W515	X	5	6'-8"	X		ABUT. NE WINGWALL - F.F. L-BARS
W416	X	16	13'-9"			ABUT. NE WINGWALL - MOMENT SLAB BARS
W517	X	21	6'-8"	X		ABUT. NE WINGWALL - MOMENT SLAB BARS
W518	X	21	5'-0"			ABUT. NE WINGWALL - MOMENT SLAB BARS
W519	X	46	5'-9"	X		ABUT. NE WINGWALL - TOP U-BARS
W520	X	3	3'-11"	X		ABUT. NE WINGWALL - COPING BLOCK U-BARS
W521	X	3	10'-6"	X		ABUT. NW WINGWALL - STIRRUPS
W522	X	4	8'-6"			ABUT. NW WINGWALL - F.F. & BOTTOM
W723	X	2	10'-8"	X		ABUT. NW WINGWALL - B.F.
W424	X	3	12'-10"			ABUT. NW WINGWALL - F.F. SIDEWALK BLOCK
W425	X	3	12'-0"			ABUT. NW WINGWALL - B.F. SIDEWALK BLOCK

△ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT. SEE BAR SERIES TABLE FOR CALCULATIONS FOR ACTUAL LENGTH.

NOTE:
BAR DIMENSIONS ARE OUT TO OUT OF BAR, EXCEPT FOR RADIUS DIMENSIONS WHICH ARE TO INSIDE OF BENDS. THE FIRST ONE OR TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE.



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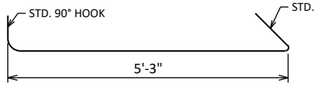

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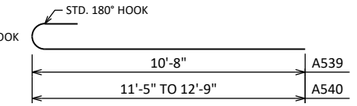
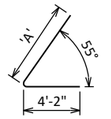
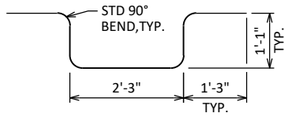


A539 & A540



BAR MARK	DIM 'A'
W710	8'-9"
W723	6'-6"

W710 & W723



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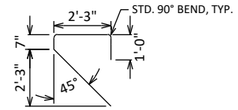

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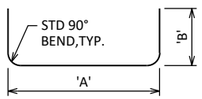
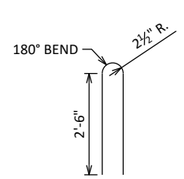


BAR MARK	DIM 'A'	DIM 'B'
A508	5'-1"	2'-11"
A510	5'-3"	2'-11"
A524	1'-3"	6'-2"
A526	1'-3"	2'-4"
A436	3'-3"	1'-3"
W505	1'-1"	2'-11"
W506	1'-1"	4'-8"
W511	0'-7"	1'-7"
W513	0'-10"	3'-6"
W520	1'-0"	1'-7"

A508, A510, A524, A526, A436
W505, W506, W511, W513 & W520



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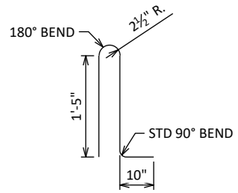

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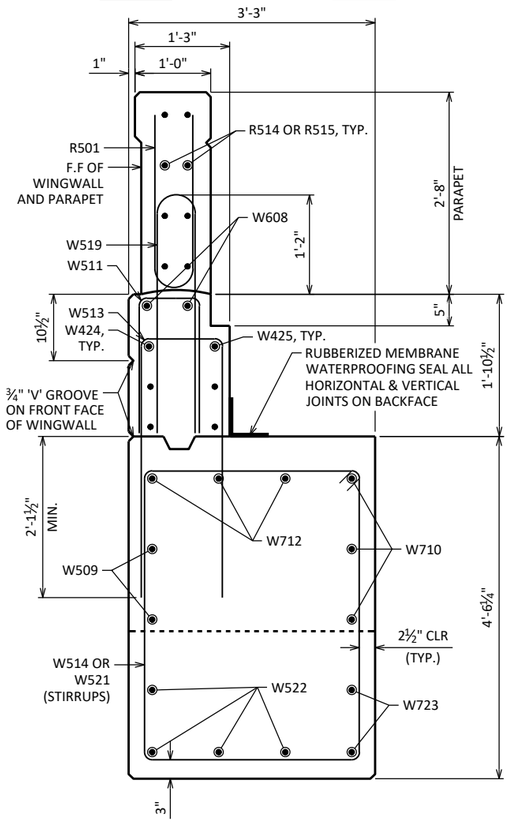
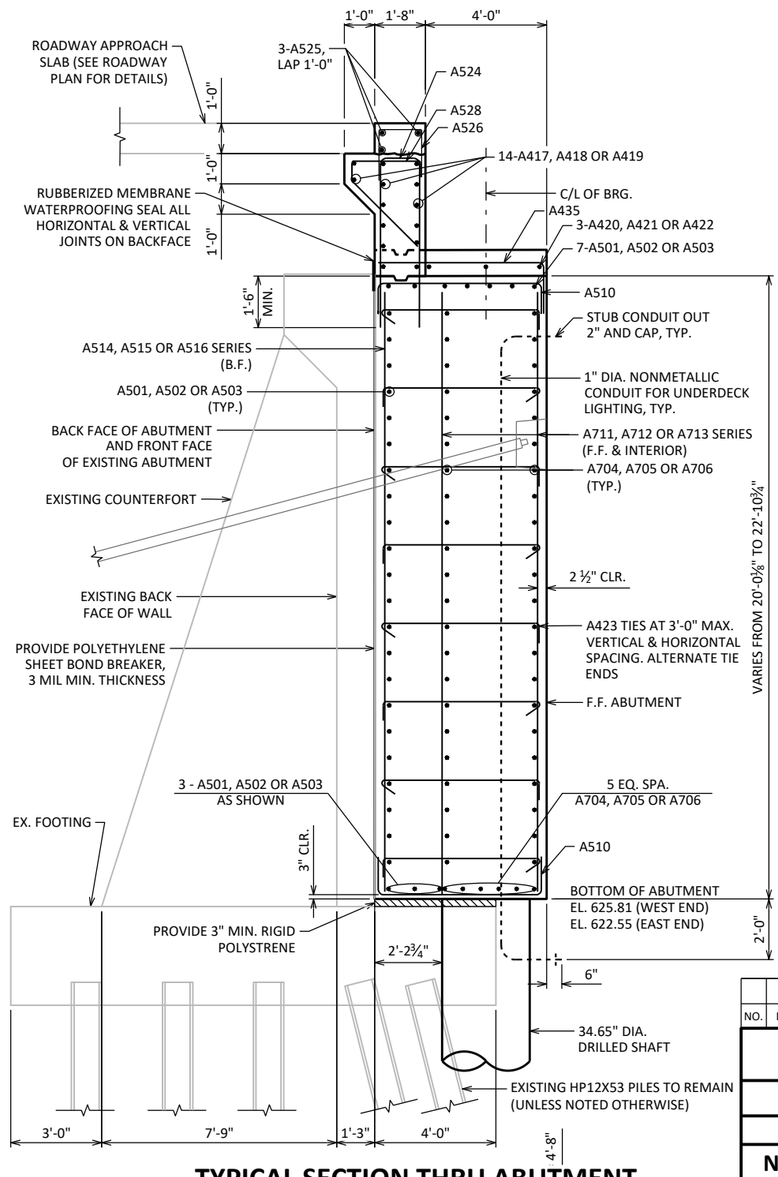


SECTION C-C

(LOOKING NORTH)



TYPICAL SECTION THRU ABUTMENT

(LOOKING EAST)

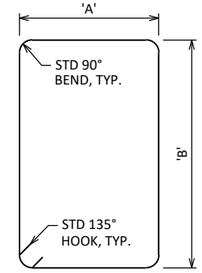
STATE PROJECT NUMBER

1060-27-74

BAR SERIES TABLE

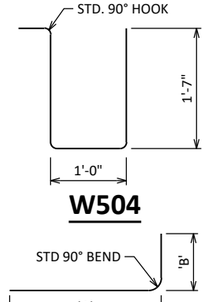
BAR MARK	NO. REQ'D	LENGTH
A711	2 SERIES OF 38	19'-7" TO 20'-4"
A712	2 SERIES OF 40	20'-4" TO 21'-5"
A713	2 SERIES OF 48	21'-5" TO 22'-6"
A514	2 SERIES OF 38	19'-7" TO 20'-4"
A515	2 SERIES OF 40	20'-4" TO 21'-5"
A516	2 SERIES OF 48	21'-5" TO 22'-6"
A540	1 SERIES OF 5	12'-0" TO 13'-4"

BUNDLE AND TAG EACH SEPARATELY

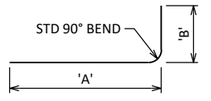


BAR MARK	DIM 'A'	DIM 'B'
W514	2'-10"	4'-0"
W521	2'-7"	2'-1"

W514 & W521

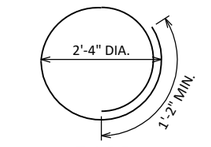


W504



BAR MARK	DIM 'A'	DIM 'B'
A435	5'-3"	2'-4"
W517	5'-11"	0'-10"

A435 & W517



E402

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY CMS | PLANS CK'D EKM

NORTH ABUTMENT REINFORCEMENT DETAILS

SHEET 15 OF 62
777

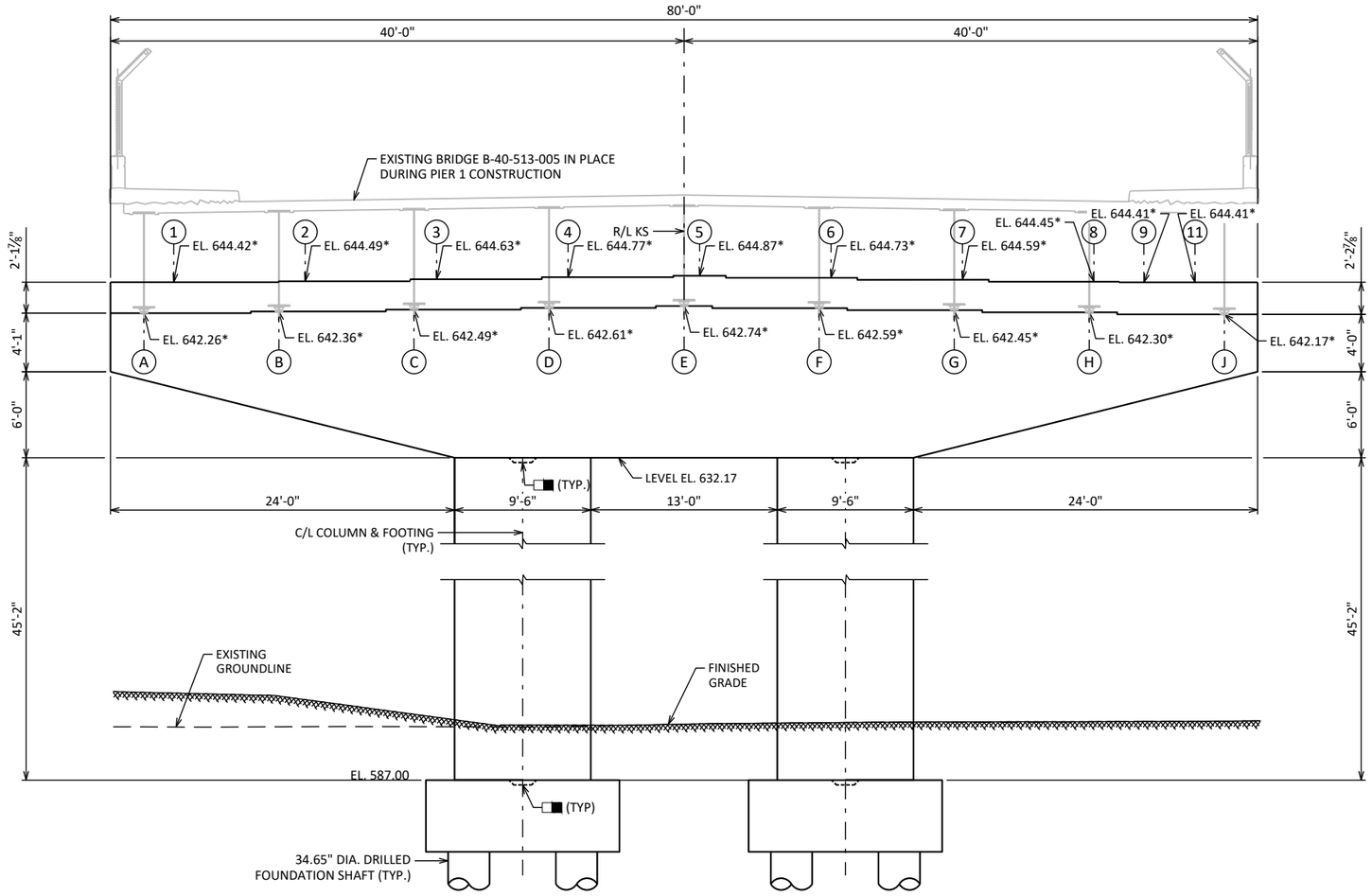
SCALE = 1:30

8

8

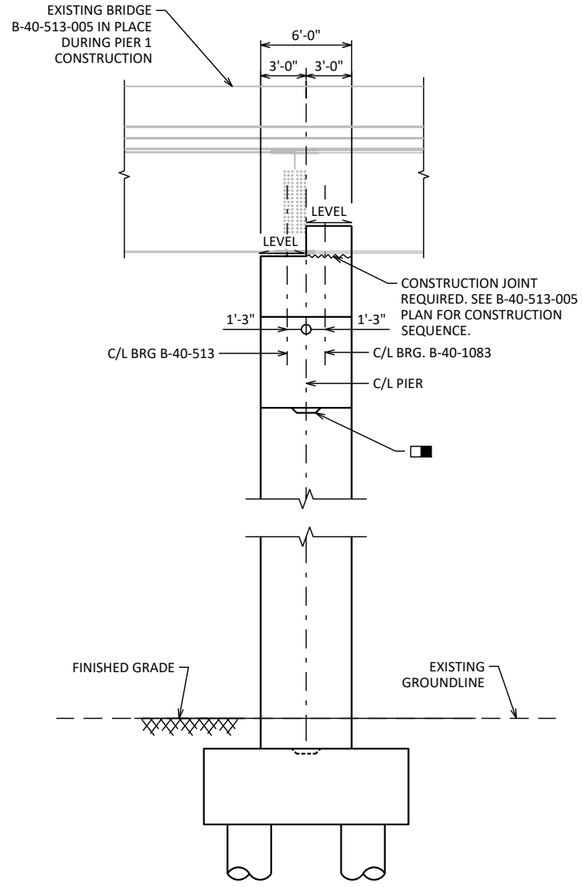
STATE PROJECT NUMBER

1060-27-74



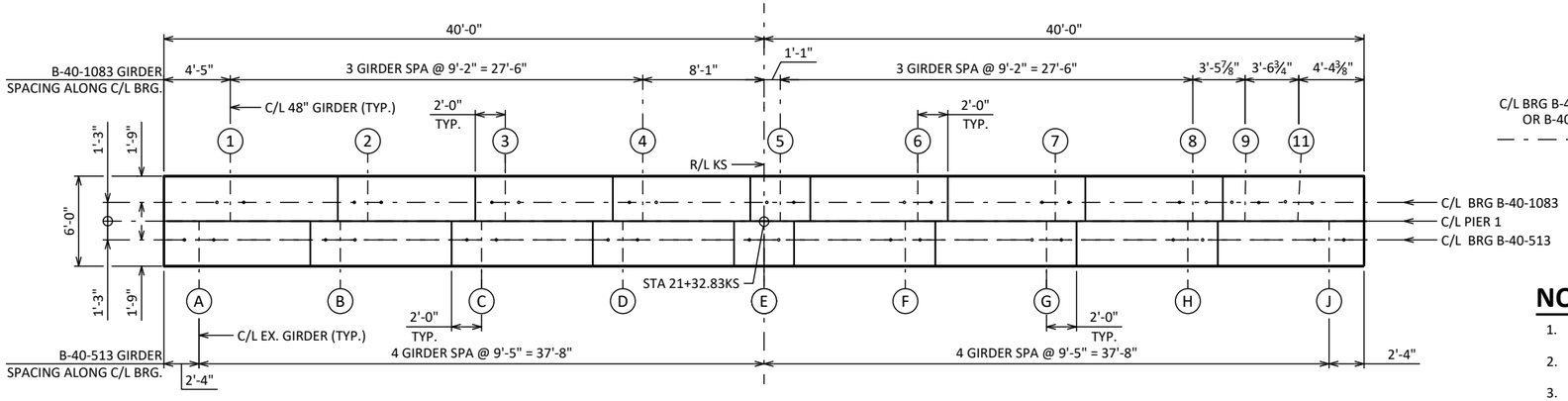
ELEVATION

(LOOKING NORTH)

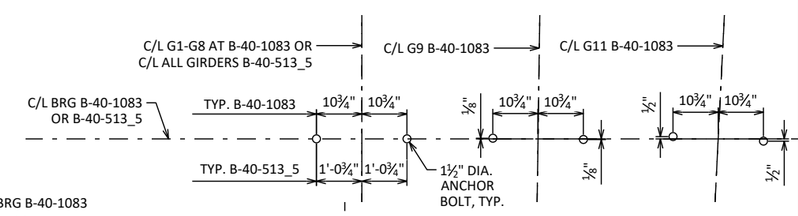


END VIEW

(LOOKING WEST)



PLAN



ANCHOR BOLT LAYOUT DIAGRAM

NOTES

1. FOR PIER 1 FOUNDATION DETAILS, SEE SHEET 17.
2. FOR PIER 1 COLUMN DETAILS, SEE SHEET 18.
3. FOR PIER CAP DETAILS, SEE SHEET 19.

LEGEND

- KEYED CONSTRUCTION JOINT FORMED BY BEVELED 4" X 1'-3" X 2'-0".
- * ELEVATIONS ARE GIVEN AT THE TOP OF THE PIER CAP CONCRETE AT THE C/L BEARING

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY CMS | PLANS CK'D EKM

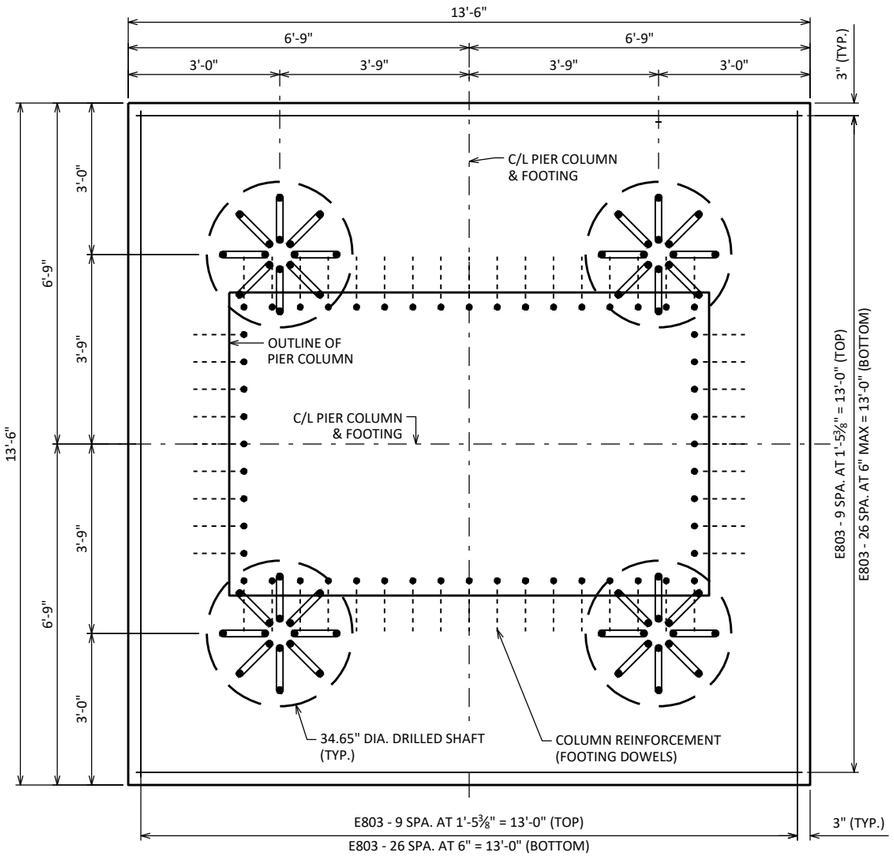
PIER 1 LAYOUT

SHEET 16 OF 62
778

SCALE = 1:30

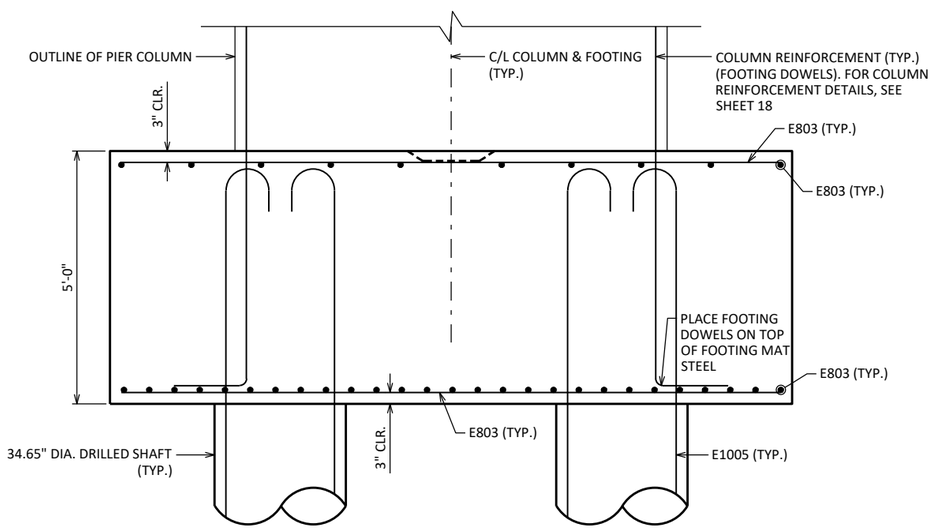
STATE PROJECT NUMBER

1060-27-74

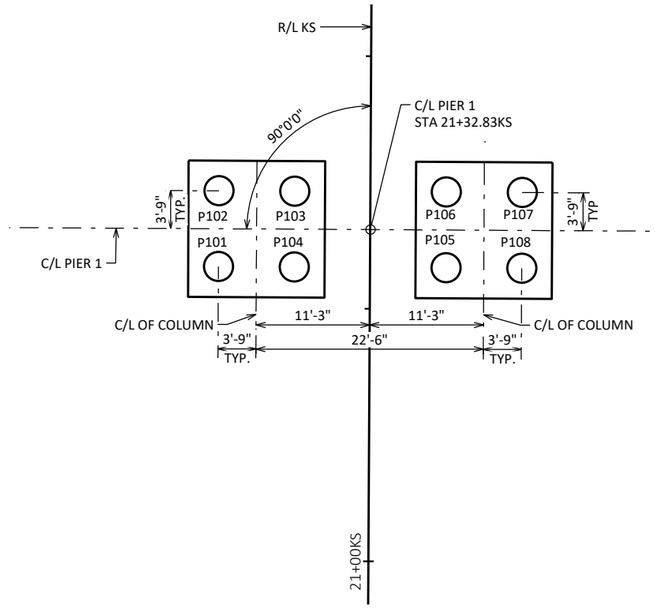


TYPICAL FOOTING PLAN

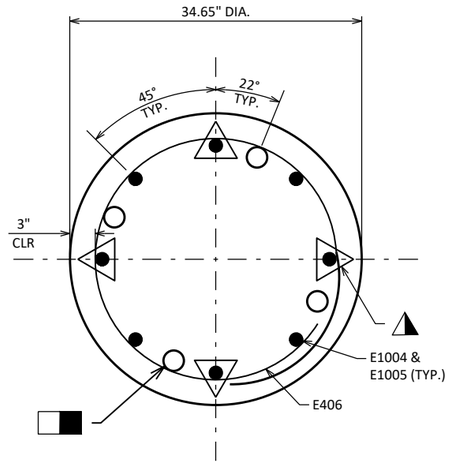
(2 TOTAL)



TYPICAL FOOTING ELEVATION

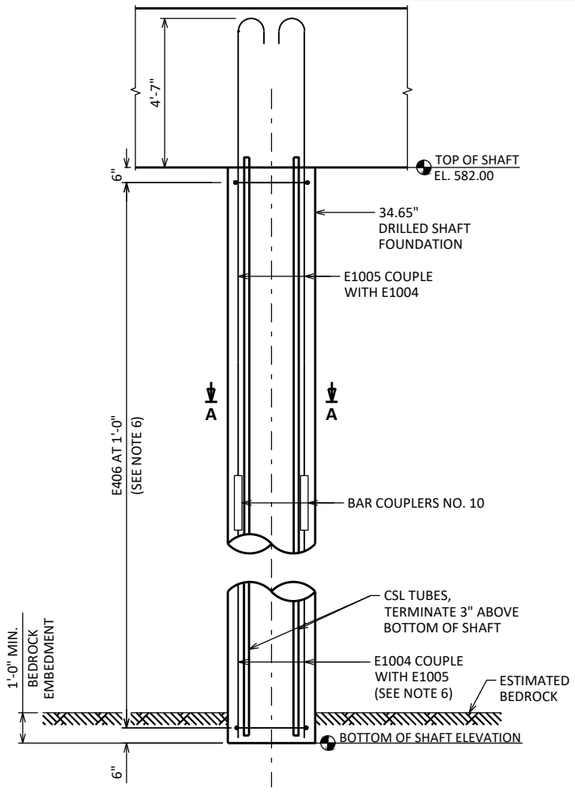


FOUNDATION LAYOUT



SECTION A-A

(34.63 DIA. DRILLED SHAFT FOUNDATION)



DRILLED SHAFT ELEVATION

NOTES

1. PIER SHALL BE SUPPORTED ON 34.65" DIA. DRILLED SHAFTS.
2. ORIENTATION OF DRILLED SHAFT CAGE IS ARBITRARY FOR DESIGN PURPOSES. CONTRACTOR MAY INSTALL CAGE ASSEMBLY IN ANY DESIRED ORIENTATION.
3. IF BEDROCK IS ENCOUNTERED 5' OR MORE ABOVE THE PLANNED BOTTOM OF SHAFT ELEVATION, THE FOUNDATION SHAFT DRILLING MAY STOP AT A HIGHER ELEVATION. ALERT THE ENGINEER AND COORDINATE WITH THE DESIGNER
4. THE DRILLED FOUNDATION LENGTH ASSUMES DRILLING BEGINS AT THE BOTTOM OF COLUMN. THE PLANNED BOTTOM OF SHAFT ELEVATION IS BASED ON AN ESTIMATED MAXIMUM VALUE DETERMINED FROM SOIL BORING INFORMATION.
5. THE DRILLED FOUNDATION LENGTH IS AN ESTIMATED VALUE BASED UPON AN ASSUMED BEDROCK SURFACE.
6. LENGTH OF E1004 BARS AND NUMBER OF E406 BARS ARE DETAILED FOR SHAFTS 5'-0" LONGER THAN WOULD BE REQUIRED BASED ON ASSUMED BEDROCK ELEVATION.

   FILED CUT E1004 BARS AND ADJUST THE NUMBER OF E406 BARS ACCORDINGLY BASED UPON THE SHAFT LENGTH AFTER DRILLING IS COMPLETE.

LEGEND

- 4 - 2" DIA CSL TUBES FULL LENGTH OF SHAFT TIED TO INSIDE AND SPACED AROUND THE PERIMETER OF REINFORCEMENT AS SHOWN.
- 4 - THERMAL WIRES FOR TIP TESTING. DISTRIBUTE 4 THERMAL WIRES EVENLY AROUND THE PERIMETER OF REINFORCEMENT TIED TO VERTICAL BARS.

SHAFT DATA

SHAFT NO.	SHAFT C/L "X"	SHAFT C/L "Y"	ASSUMED DRILLING EL.	TOP OF SHAFT EL.	BOTTOM OF SHAFT EL.	SHAFT LENGTH (FT.)	SHAFT VOLUME (CY)	INSTRUMENTATION
P101	595731.99	297632.05	590.73	582.00	532.00	50'-0"	12.05	CSL TUBES/TIP TESTING
P102	595732.03	297639.55	590.73	582.00	532.00	50'-0"	12.05	CSL TUBES/TIP TESTING
P103	595739.53	297639.51	590.78	582.00	532.00	50'-0"	12.05	CSL TUBES/TIP TESTING
P104	595739.49	297632.01	590.73	582.00	532.00	50'-0"	12.05	CSL TUBES/TIP TESTING
P105	595754.49	297631.92	590.73	582.00	532.00	50'-0"	12.05	CSL TUBES/TIP TESTING
P106	595754.53	297639.42	591.05	582.00	532.00	50'-0"	12.05	CSL TUBES/TIP TESTING
P107	595762.03	297639.38	591.11	582.00	532.00	50'-0"	12.05	CSL TUBES/TIP TESTING
P108	595761.99	297631.88	591.00	582.00	532.00	50'-0"	12.05	CSL TUBES/TIP TESTING

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY CMS | PLANS CK'D EKM

PIER 1 FOUNDATION DETAILS

SHEET 17 OF 62

779

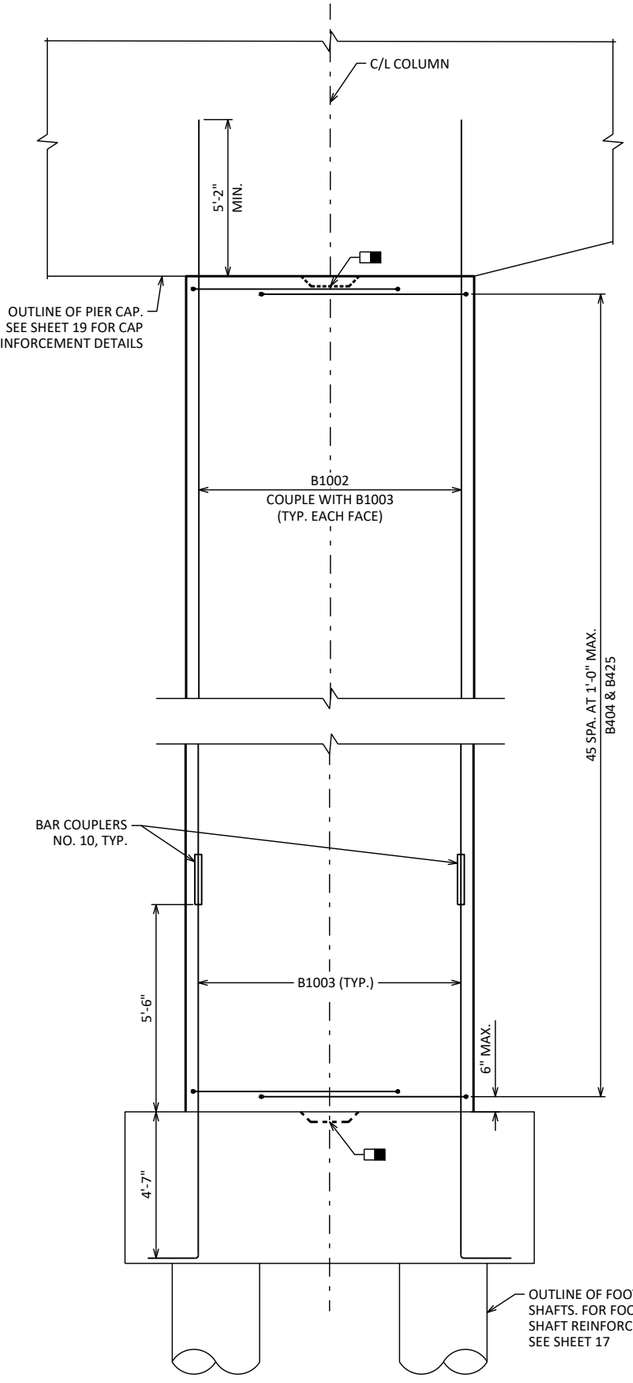
SCALE = 1:30

8

8

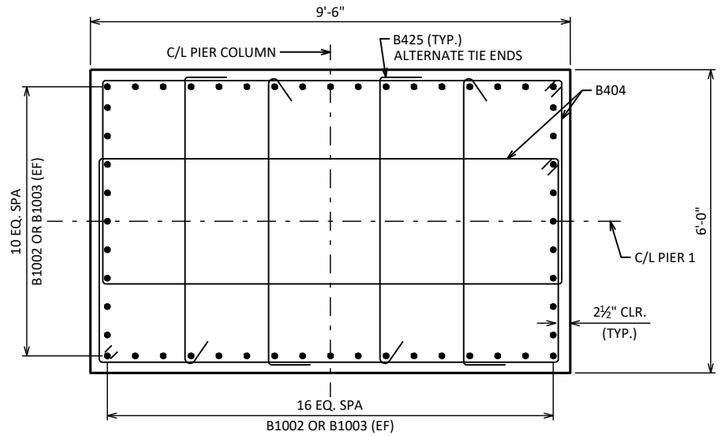
STATE PROJECT NUMBER

1060-27-74



TYPICAL COLUMN ELEVATION

(LOOKING NORTH)



TYPICAL COLUMN SECTION

LEGEND

KEYED CONSTRUCTION JOINT FORMED BY BEVELED 4" X 1'-3" X 2'-0".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY CMS | PLANS CK'D EKM

PIER 1 COLUMN DETAILS

SHEET 18 OF 62

780

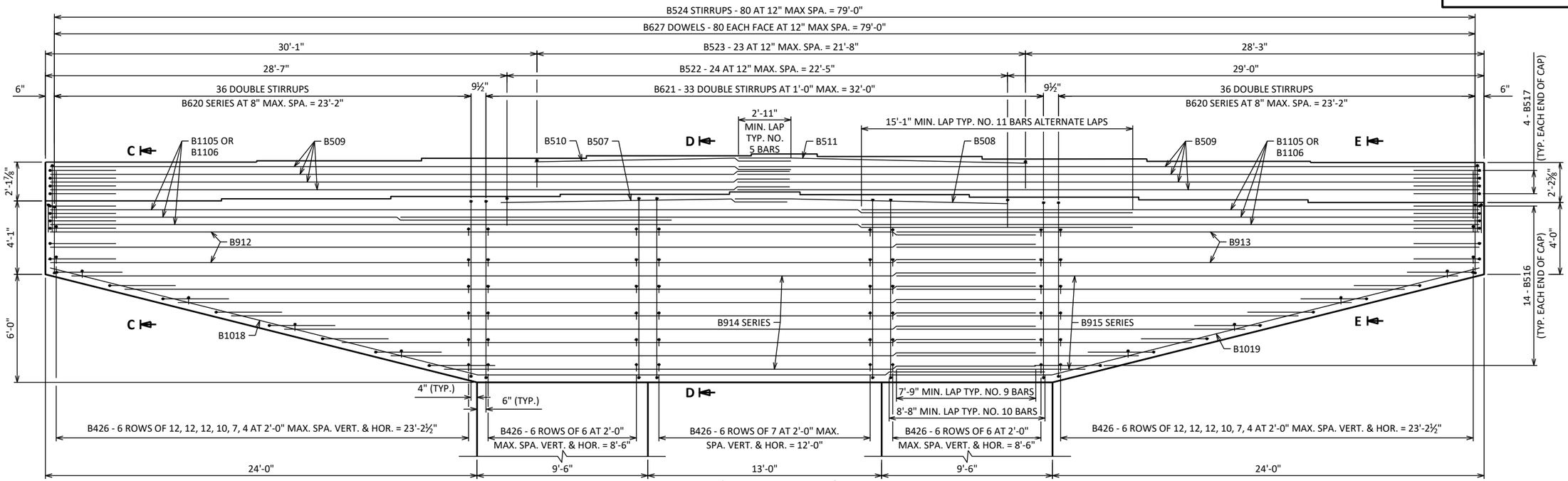
SCALE = 1:30

8

8

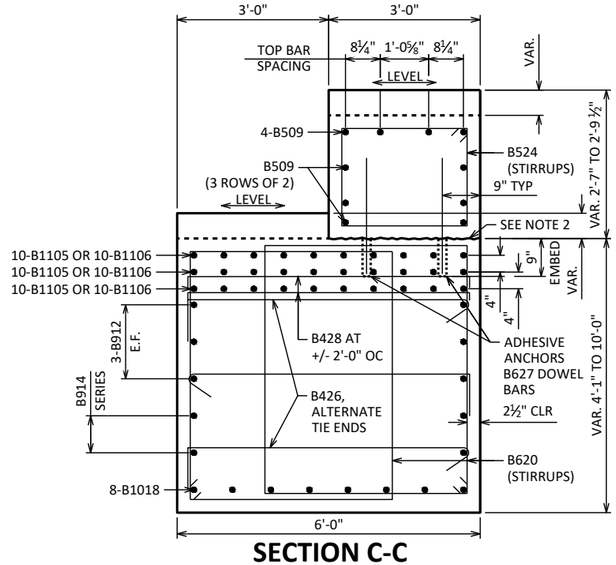
STATE PROJECT NUMBER

1060-27-74

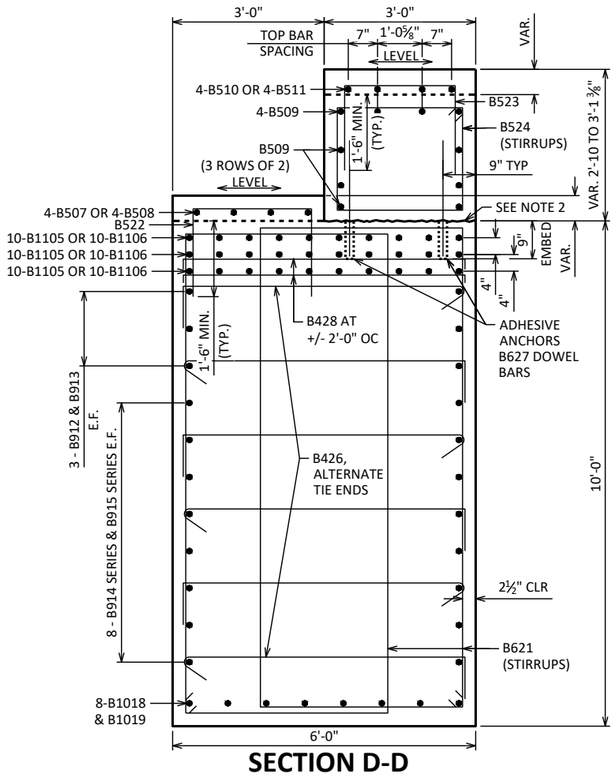


PIER CAP ELEVATION

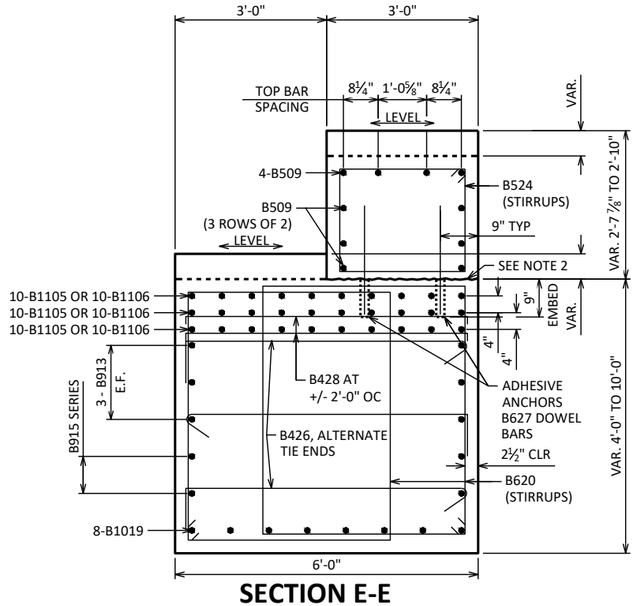
(LOOKING NORTH)



SECTION C-C



SECTION D-D



SECTION E-E

NOTES

1. FOR BAR LIST AND BAR BENDING DIAGRAMS, SEE SHEET 20.
2. CONSTRUCTION JOINT, ROUGHEN TO ¼" AMPLITUDE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY: CMS | PLANS CK'D: EKM

PIER 1 CAP DETAIL

SHEET 19 OF 62

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SCALE = 1:30

8

8

BILL OF BARS

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	SERIES	LOCATION
E803		148	13'-0"			PIER FOOTING - TOP & BOTTOM MAT
E1004		64	32'-4"			DRILLED SHAFT
E1005		64	28'-8"	X		DRILLED SHAFT
E406		425	8'-6"	X		DRILLED SHAFT - BAR TIES
B1002	X	104	44'-10"			COLUMN
B1003	X	104	11'-7"	X		COLUMN
B404	X	92	27'-0"	X		COLUMN - BAR TIES
B1105	X	30	58'-7"			PIER CAP - TOP
B1106	X	30	36'-1"			PIER CAP - TOP
B507	X	4	12'-11"			PIER CAP - TOP
B508	X	4	12'-5"			PIER CAP - TOP
B509	X	20	41'-3"			PIER CAP - TOP & SIDES
B510	X	4	11'-5"			PIER CAP - TOP
B511	X	4	13'-3"			PIER CAP - TOP
B912	X	6	54'-11"			PIER CAP - SIDES
B913	X	6	32'-5"			PIER CAP - SIDES
B914	X	16	43'-11"		△	PIER CAP - SIDES
B915	X	16	21'-5"		△	PIER CAP - SIDES
B516	X	28	11'-8"			PIER CAP - ENDS
B517	X	8	9'-6"			PIER CAP - ENDS
B1018	X	8	56'-2"	X		PIER CAP - BOTTOM
B1019	X	8	33'-8"	X		PIER CAP - BOTTOM
B620	X	144	22'-2"	X	△	PIER CAP - STIRRUPS
B621	X	66	28'-2"	X		PIER CAP - STIRRUPS
B522	X	24	6'-4"	X		PIER CAP - TOP
B523	X	23	6'-0"	X		PIER CAP - TOP
B524	X	80	9'-4"	X		PIER CAP - STIRRUPS
B425	X	184	6'-3"	X		COLUMN - BAR TIES
B426	X	228	6'-3"	X		PIER CAP - BAR TIES
B627	X	160	2'-7"			PIER CAP - DOWELS
B428	X	82	6'-9"	X		PIER CAP - SUPPORT BARS

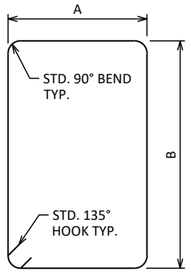
△ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT. SEE BAR SERIES TABLE FOR CALCULATIONS FOR ACTUAL LENGTH.

NOTE:
BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST ONE OR TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE

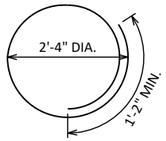
BAR SERIES TABLE

BAR MARK	NO. REQ'D	LENGTH
B914	2 SERIES OF 8	32'-11" TO 54'-11"
B915	2 SERIES OF 8	10'-5" TO 32'-5"
B620	4 SERIES OF 36	15'-8" TO 27'-8"

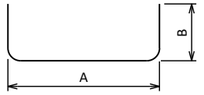
BUNDLE AND TAG EACH SEPARATELY



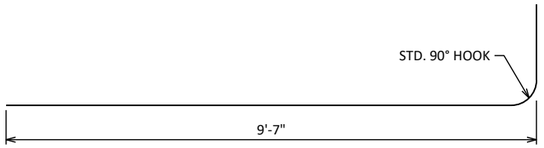
B404, B620, B621 & B524



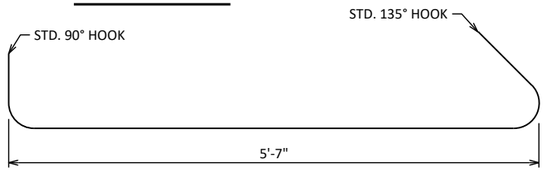
E406



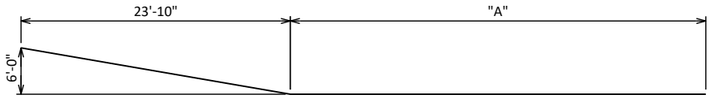
B516, B517, B522 B523 & E428



B1003

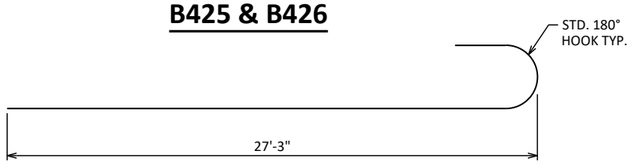


B425 & B426



B1018 & B1019

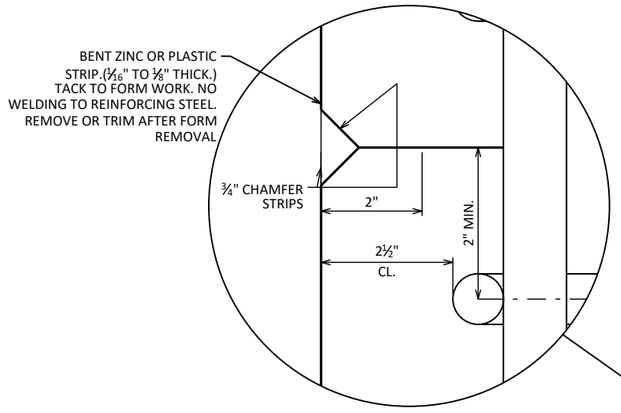
BAR MARK	DIM 'A'
B1018	31'-7"
B1019	9'-1"

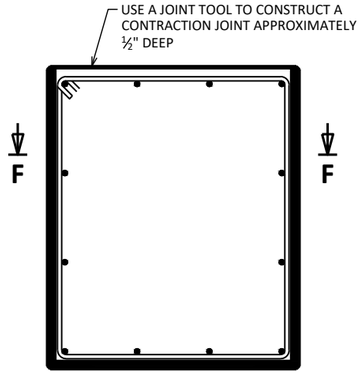


E1005

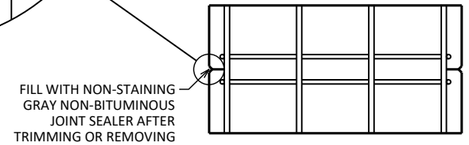
TABLE OF DIMENSIONS

BAR MARK	DIM 'A'	DIM 'B'
B404	9'-1"	4'-2"
B516	5'-5"	3'-8"
B517	2'-5"	3'-8"
B620	4'-1"	3'-7" TO 9'-7"
B621	4'-1"	9'-7"
B522	2'-5"	2'-1"
B523	2'-4"	2'-0"
B524	2'-7"	1'-9"
B428	5'-7"	7"





SECTION THRU PIER CAP



SECTION F-F

CONSTRUCTION JOINT DETAIL AT PIER CAP AND ABUTMENT

STATE PROJECT NUMBER

1060-27-74

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY CMS | PLANS CK'D EKM

PIER 1 REINFORCEMENT SCHEDULE

SHEET 20 OF 62
782

SCALE = 1:30

8

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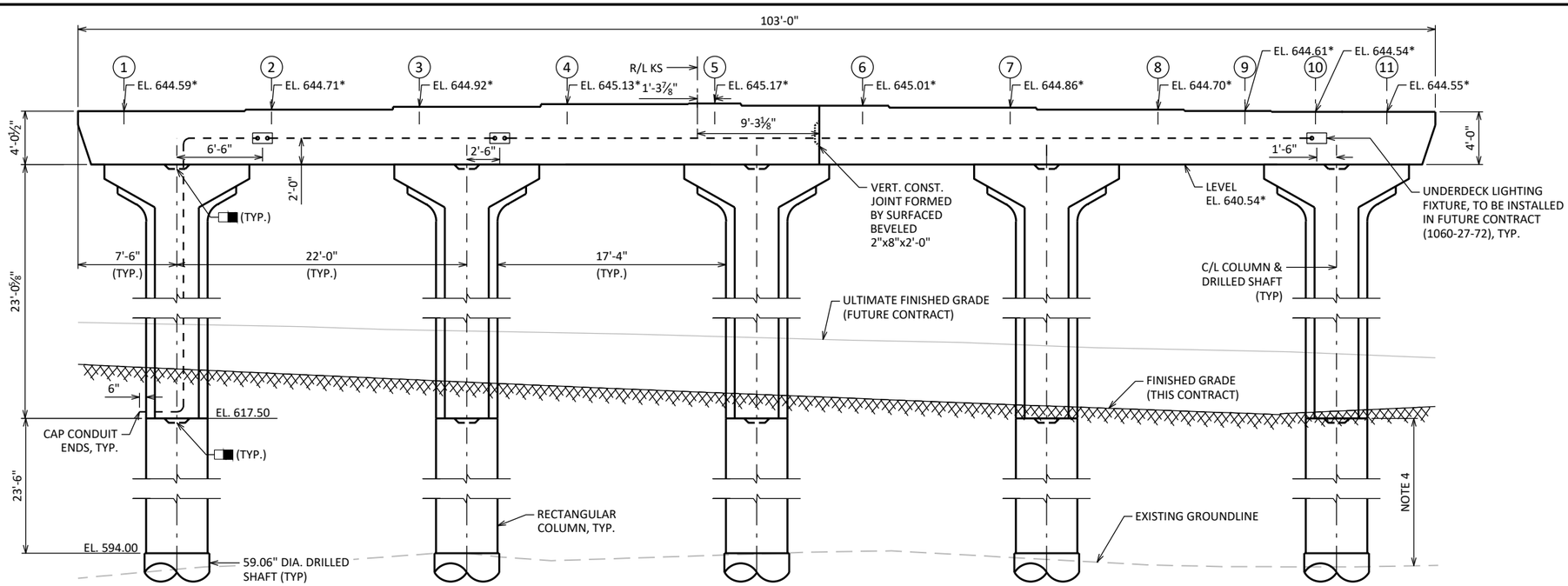
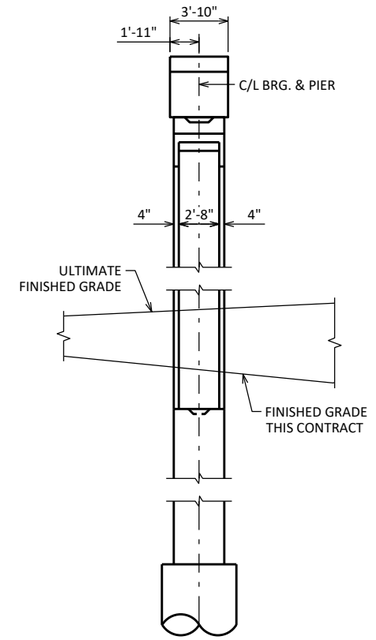
STATE PROJECT NUMBER

1060-27-74



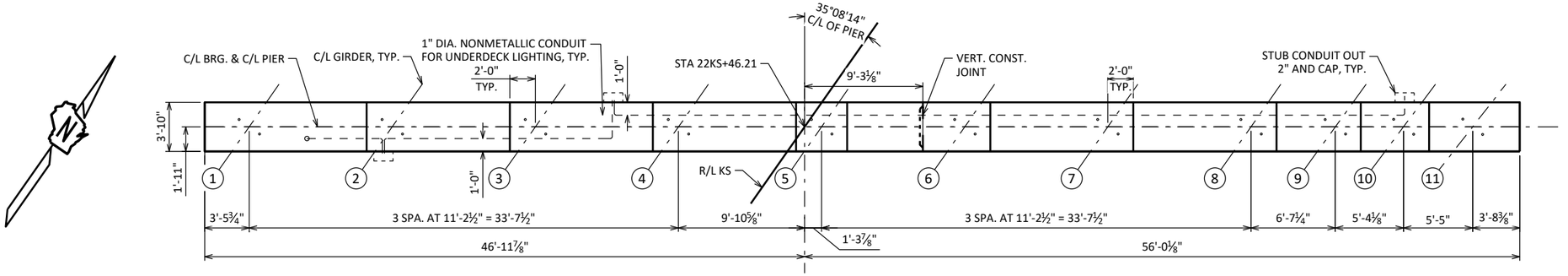
ELEVATION

(LOOKING NORTH)



END VIEW

(LOOKING WEST)



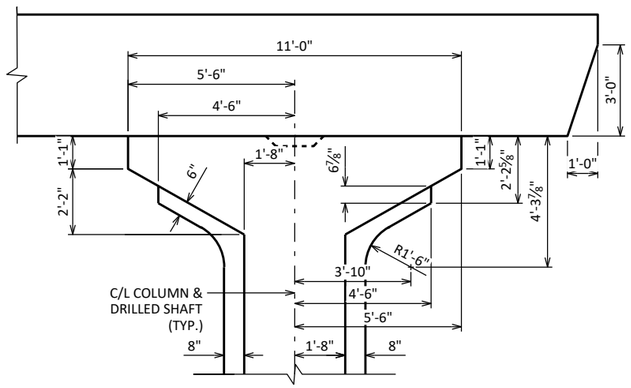
PLAN

NOTES

1. FOR PIER 2 FOUNDATION DETAILS, SEE SHEET 22.
2. FOR PIER 2 COLUMN DETAILS, SEE SHEET 23.
3. FOR PIER CAP DETAILS, SEE SHEET 24.
4. CONSTRUCTION OF THIS PORTION OF THE PIER COLUMNS TO TAKE PLACE PRIOR TO EMBANKMENT FILL PLACEMENT AROUND AND ADJACENT TO COLUMNS. SUBSEQUENT PLACEMENT AND COMPACTION OF FILL AROUND COLUMNS TO BE DONE UNIFORMLY AROUND ALL SIDES OF COLUMNS AND IN SUCH A MANNER NOT TO DEFLECT COLUMNS LATERALLY IN ANY DIRECTION.
5. SEE SHEET 3 FOR BACKFILL STRUCTURE LIMITS. BACKFILL STRUCTURE TO BE IN PLACE PRIOR TO POURING THE PIER CAP.

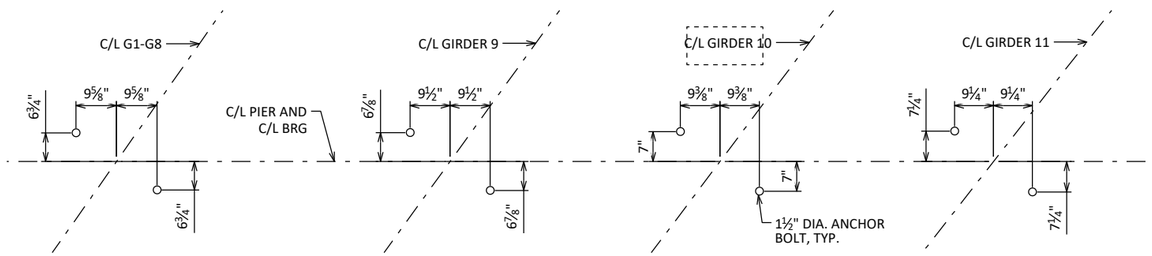
LEGEND

- KEYED CONSTRUCTION JOINT FORMED BY BEVELED 4" X 1'-3" X 2'-0".
- * ELEVATIONS ARE GIVEN AT THE TOP OF THE PIER CAP CONCRETE AT THE C/L PIER



COLUMN CAPITAL DETAIL

(TYPICAL PIERS 2 & 3)



ANCHOR BOLT LAYOUT DIAGRAM

(TYPICAL PIERS 2 & 3)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY CMS | PLANS CK'D EKM

PIER 2 LAYOUT

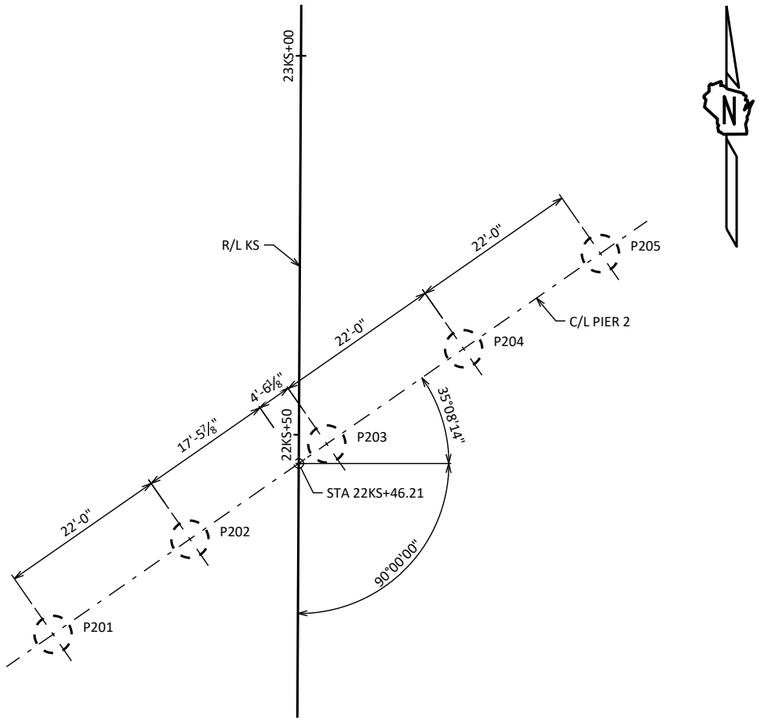
SHEET 21 OF 62

783

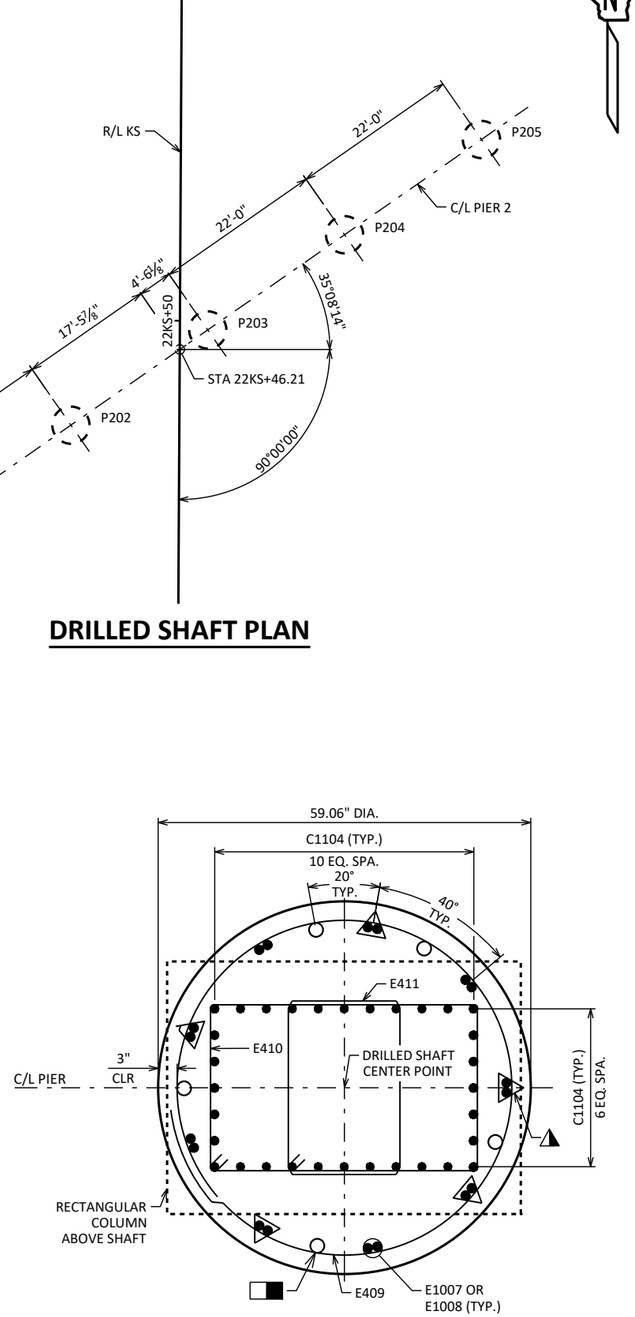
SCALE = 1:30

STATE PROJECT NUMBER

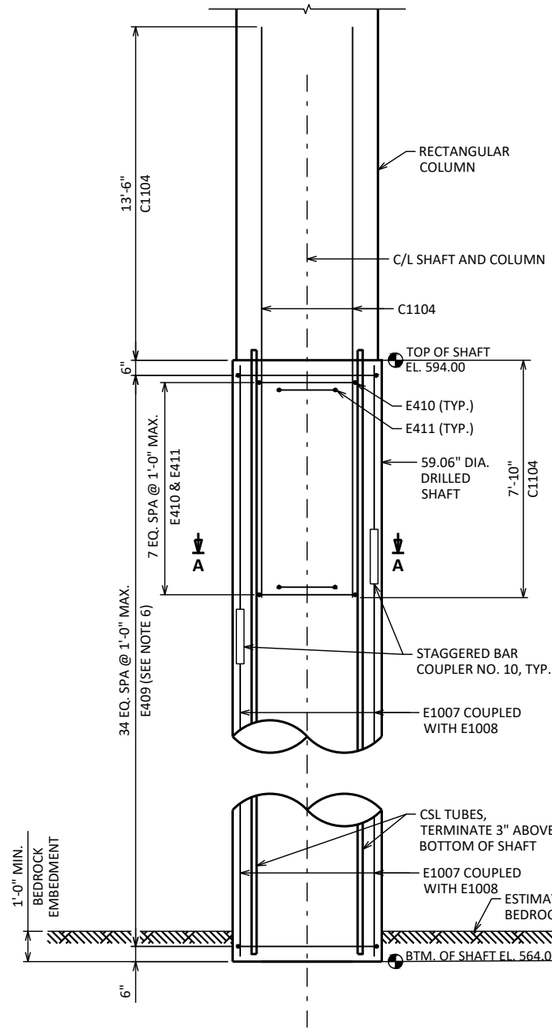
1060-27-74



DRILLED SHAFT PLAN



SECTION A-A



DRILLED SHAFT ELEVATION

SHAFT DATA

SHAFT NO.	SHAFT C/L "X"	SHAFT C/L "Y"	ASSUMED DRILLING EL.	TOP OF SHAFT EL.	BOTTOM OF SHAFT EL.	SHAFT LENGTH (FT.)	SHAFT VOLUME (CY)	INSTRUMENTATION
P201	595715.22	297726.55	594.00	594.00	564.00	30'-0"	21.14	CSL TUBES/TIP TESTING
P202	595733.28	297739.11	594.00	594.00	564.00	30'-0"	21.14	CSL TUBES/TIP TESTING
P203	595751.34	297751.67	594.00	594.00	564.00	30'-0"	21.14	CSL TUBES/TIP TESTING
P204	595769.40	297764.23	594.00	594.00	564.00	30'-0"	21.14	CSL TUBES/TIP TESTING
P205	595787.46	297776.80	594.00	594.00	564.00	30'-0"	21.14	CSL TUBES/TIP TESTING

NOTES

1. PIER SHALL BE SUPPORTED ON 59.06" DIA. DRILLED SHAFTS.
2. THE ROTATED ORIENTATION OF THE CIRCULAR DRILLED SHAFT CAGE IS ARBITRARY. CONTRACTOR MAY INSTALL THE CIRCULAR CAGE ASSEMBLY IN ANY ROTATED ORIENTATION. THE RECTANGULAR REINFORCEMENT CAGE AT THE TOP OF THE DRILLED SHAFT THAT EXTENDS INTO THE COLUMNS MUST ALIGN WITH THE COLUMN ORIENTATION AS SHOWN IN SECTION A-A.
3. IF BEDROCK IS ENCOUNTERED 5' OR MORE ABOVE THE PLANNED BOTTOM OF SHAFT ELEVATION, THE FOUNDATION SHAFT DRILLING MAY STOP AT A HIGHER ELEVATION. ALERT THE ENGINEER AND COORDINATE WITH THE DESIGNER
4. THE SHAFT FOUNDATION LENGTH ASSUMES DRILLING BEGINS AT THE EXISTING GROUND ELEVATION OF 594.00. THE PLANNED BOTTOM OF SHAFT ELEVATION IS BASED ON AN ESTIMATED LOWEST ROCK ELEVATION OF 565.00 DETERMINED FROM SOIL BORING INFORMATION.
5. THE DRILLED SHAFT FOUNDATION LENGTH IS ESTIMATED BASED ON AN ASSUMED ROCK SURFACE ELEVATION OF 565.00 DETERMINED FROM BORINGS.
6. LENGTH OF E1007 BARS AND NUMBER OF E409 BARS ARE DETAILED FOR SHAFTS THAT ARE 5'-0" LONGER THAN REQUIRED FOR THE ASSUMED ROCK ELEVATION. FIELD CUT E1007 BARS AND ADJUST THE NUMBER OF E409 BARS BASED ON THE SHAFT LENGTH DETERMINED AFTER DRILLING IS COMPLETE.

LEGEND

- 5 - 2" DIA CSL TUBES FULL LENGTH OF SHAFT TIED TO INSIDE AND SPACED AROUND THE PERIMETER OF REINFORCEMENT AS SHOWN.
- ⚠ 5 - THERMAL WIRES FOR TIP TESTING. DISTRIBUTE 5 THERMAL WIRES EVENLY AROUND THE PERIMETER OF REINFORCEMENT TIED TO VERTICAL BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY CMS | PLANS CK'D EKM

PIER 2 FOUNDATION DETAILS

SHEET 22 OF 62

784

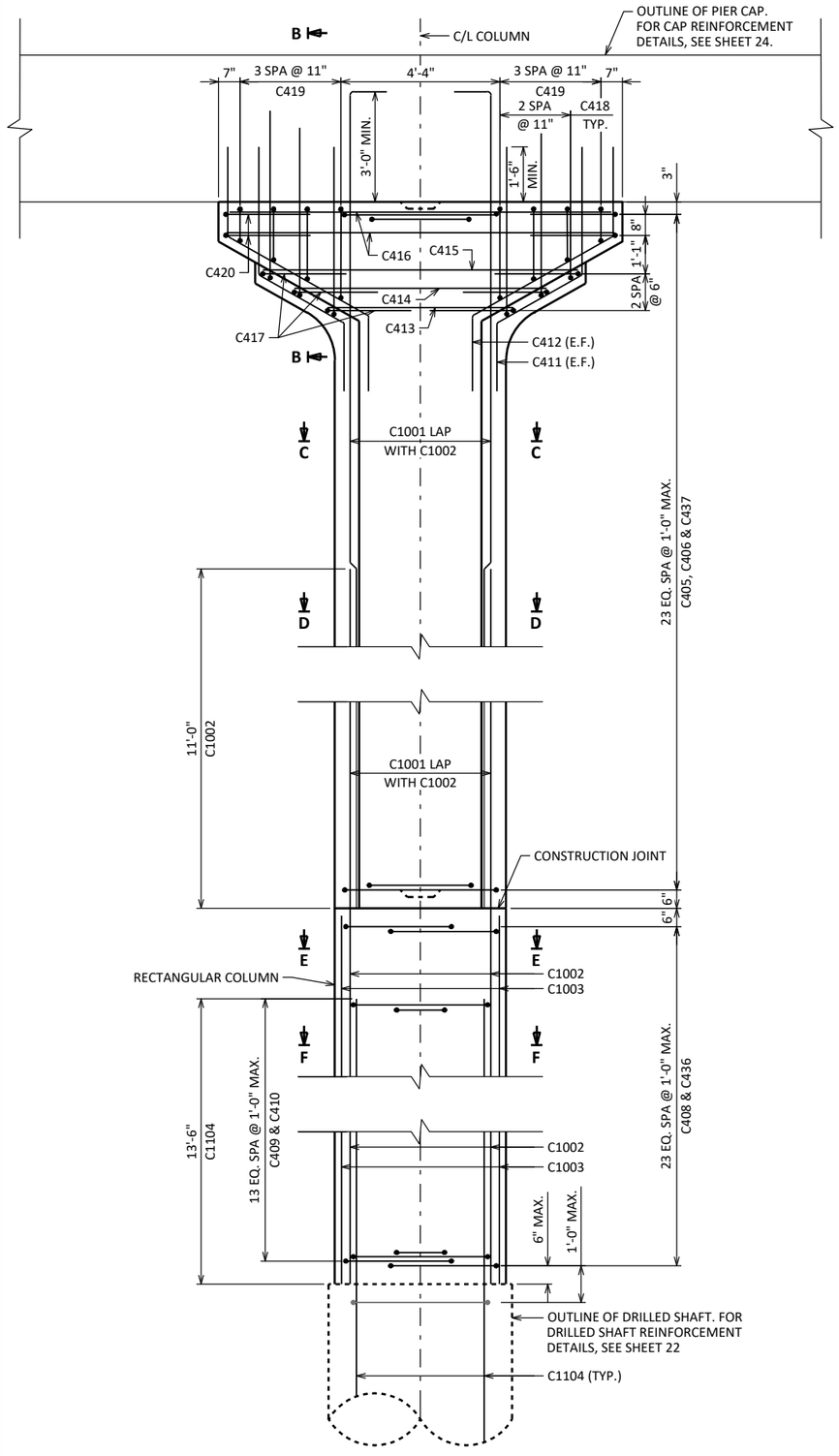
SCALE = 1:30

8

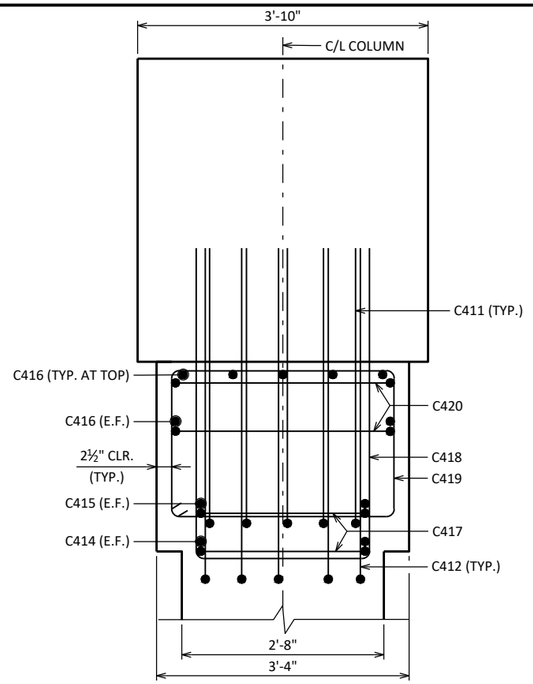
8

STATE PROJECT NUMBER

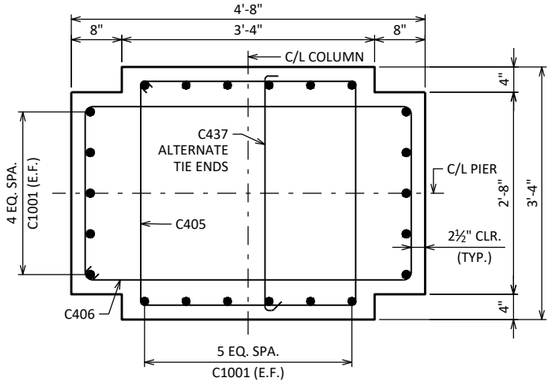
1060-27-74



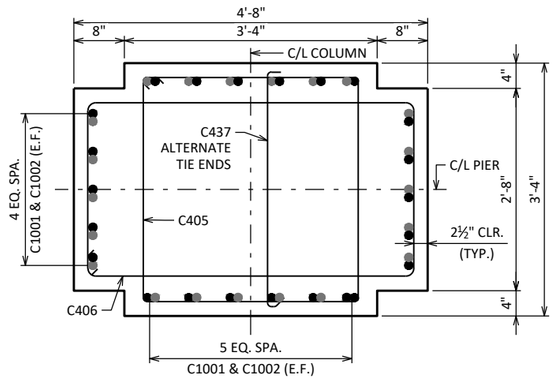
TYPICAL COLUMN ELEVATION



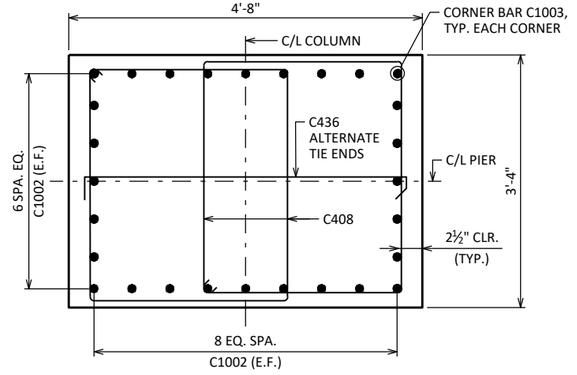
SECTION B-B



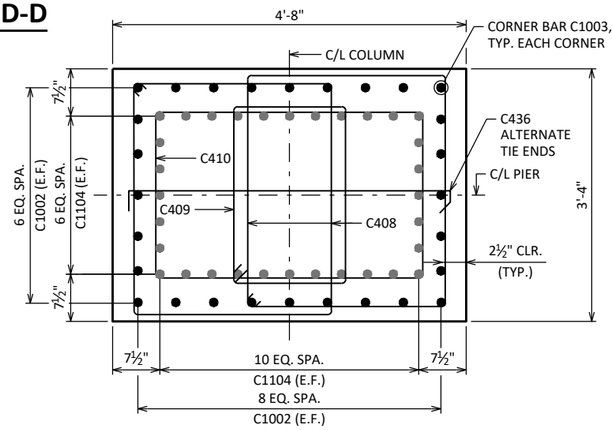
SECTION C-C



SECTION D-D



SECTION E-E



SECTION F-F

LEGEND

KEYED CONSTRUCTION JOINT FORMED BY BEVELED 4" X 1'-3" X 2'-0".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY CMS | PLANS CK'D EKM

PIER 2 COLUMN DETAILS

SHEET 23 OF 62

785

SCALE = 1:30

8

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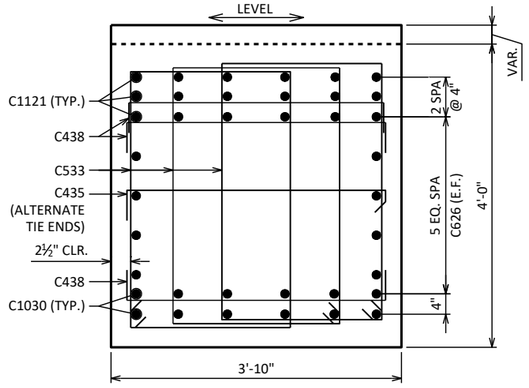
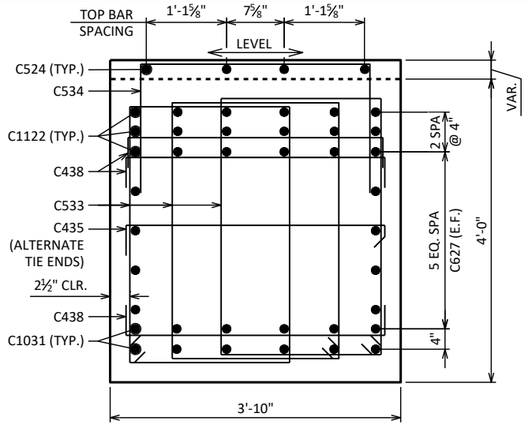
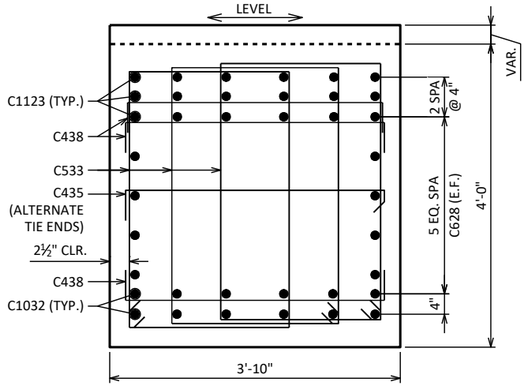


SECTION G-G



SECTION H-H



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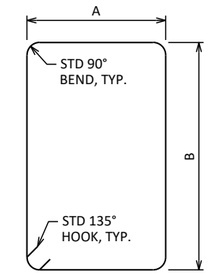
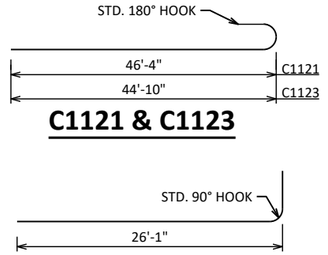


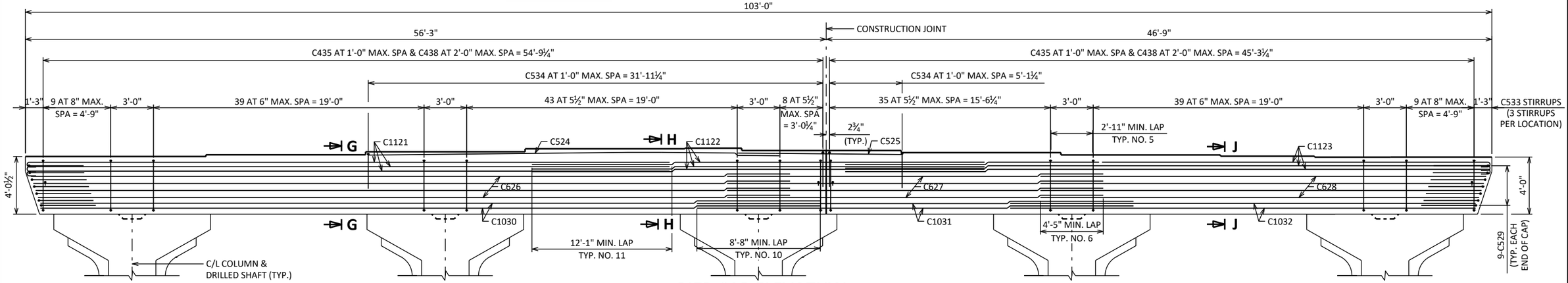
C405, C406, C408, C409, C410, C419, C533, E410 & E411



C1121 & C1123

C1001

STATE PROJECT NUMBER
1060-27-74



PIER CAP ELEVATION

(LOOKING NORTH)

BILL OF BARS

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
E1007		90	19'-0"			DRILLED SHAFT
E1008		90	15'-9"			DRILLED SHAFT
E409		175	15'-1"	X		DRILLED SHAFT - BAR TIES
E410		40	12'-6"	X		DRILLED SHAFT DOWELS - STIRRUPS
E411		40	8'-4"	X		DRILLED SHAFT DOWELS - STIRRUPS
C1001	X	110	26'-7"	X		COLUMN
C1002	X	120	34'-6"			COLUMN
C1003	X	20	23'-2"			COLUMN
C1104	X	160	21'-4"			COLUMN
C405	X	120	12'-2"	X		COLUMN - STIRRUPS
C406	X	120	13'-6"	X		COLUMN - STIRRUPS
C408	X	240	11'-10"	X		COLUMN - STIRRUPS
C409	X	70	8'-4"	X		COLUMN DOWELS - STIRRUP
C410	X	70	12'-6"	X		COLUMN DOWELS - STIRRUP
C411	X	50	7'-7"	X		COLUMN CAP
C412	X	50	8'-6"	X		COLUMN CAP
C413	X	10	4'-8"			COLUMN CAP
C414	X	10	6'-8"			COLUMN CAP
C415	X	10	8'-7"			COLUMN CAP
C416	X	35	10'-7"			COLUMN CAP
C417	X	30	6'-8"	X		COLUMN CAP - ENDS

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
C418	X	30	11'-1"	X		COLUMN CAP
C419	X	40	9'-5"	X	△	COLUMN CAP - STIRRUPS
C420	X	20	7'-4"	X		COLUMN CAP - ENDS
C1121	X	18	47'-11"	X		PIER CAP - TOP
C1122	X	18	35'-7"			PIER CAP - TOP
C1123	X	18	46'-5"	X		PIER CAP - TOP
C524	X	4	28'-11"			PIER CAP - TOP
C525	X	4	11'-7"			PIER CAP - TOP
C626	X	8	53'-6"			PIER CAP - SIDES
C627	X	8	26'-5"			PIER CAP - SIDES
C628	X	8	31'-6"			PIER CAP - SIDES
C529	X	18	10'-6"	X		PIER CAP - ENDS
C1030	X	12	54'-8"			PIER CAP - BOTTOM
C1031	X	12	30'-8"			PIER CAP - BOTTOM
C1032	X	12	32'-8"			PIER CAP - BOTTOM
C533	X	546	12'-0"	X		PIER CAP - STIRRUPS
C534	X	40	6'-8"	X		PIER CAP - TOP
C435	X	103	4'-1'	X		PIER CAP - BAR TIES
C436	X	120	4'-11"	X		COLUMN - BAR TIES
C437	X	120	3'-7"	X		PIER CAP - TIES
C438	X	159	4'-7"	X		PIER CAP - SUPPORT BARS

NOTE:
BAR DIMENSIONS ARE OUT TO OUT OF BARS. THE FIRST ONE OR TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE.

△ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT. SEE BAR SERIES TABLE FOR CALCULATIONS FOR ACTUAL LENGTH.

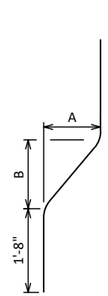
TABLE OF DIMENSIONS

MARK	DIM "A"	DIM "B"
C405	2'-11"	2'-11"
C406	4'-3"	2'-3"
C408	2'-9"	2'-11"
C409	1'-7"	2'-4"
C410	3'-8"	2'-4"
C411	2'-2"	2'-4"
C412	3'-10"	3'-6"
C417	2'-2"	2'-4"
C418	2'-3"	4'-6"
C419	2'-11"	10" TO 2'-5"
C420	2'-10"	2'-4"
C529	3'-5"	3'-8"
C533	2'-2"	3'-7"
C534	3'-1"	1'-11"
C438	3'-5"	0'-8"
E410	3'-8"	2'-4"
E411	1'-7"	2'-4"

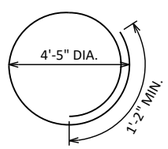
BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
C419	10 SERIES OF 4	8' - 0" TO 11' - 2"

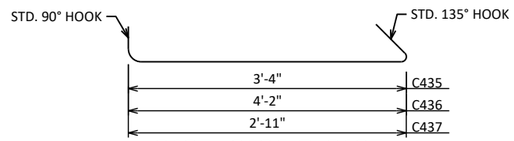
BUNDLE AND TAG EACH SERIES SEPARATELY



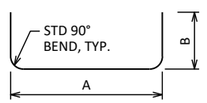
C411 & C412



E409



C435, C436 & C437



C417, C418, C420, C529, C534 & C438

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY	CMS	PLANS CK'D	EKM

PIER 2 CAP DETAILS

SHEET 24 OF 62
786

SCALE = 1:30

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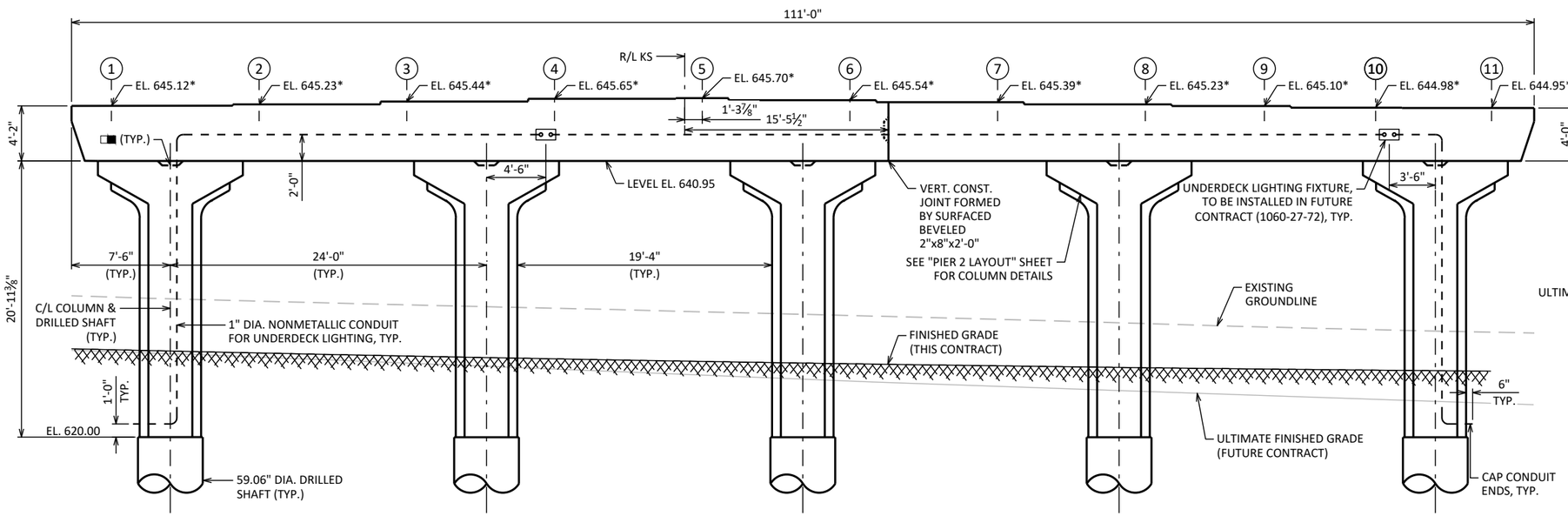
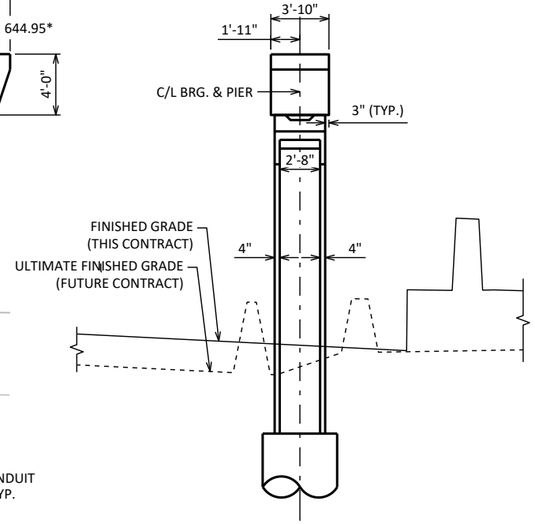
STATE PROJECT NUMBER

1060-27-74



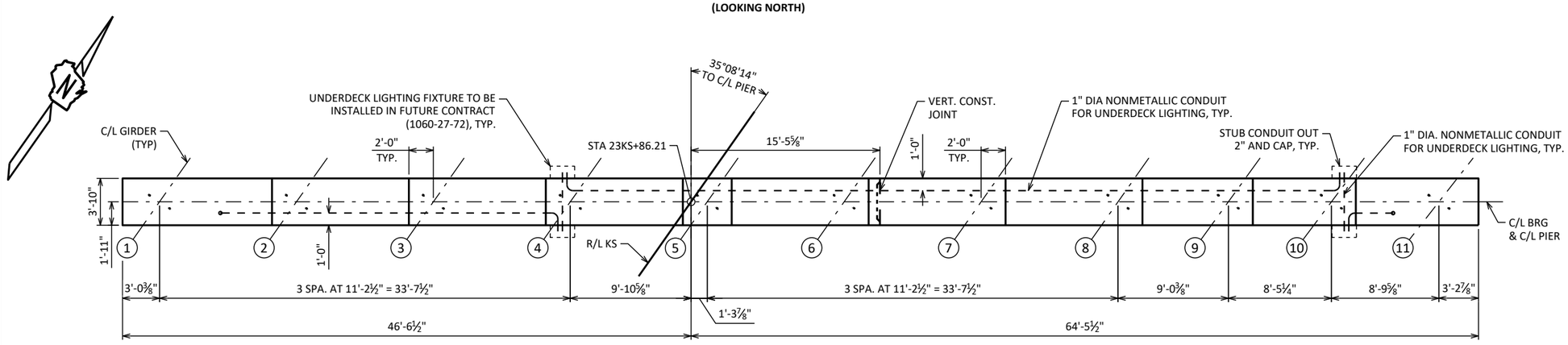
ELEVATION

(LOOKING NORTH)

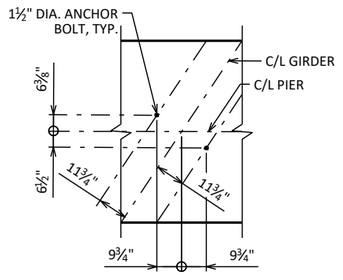


END VIEW

(LOOKING WEST)



PLAN



ANCHOR BOLT LAYOUT

NOTES

1. FOR PIER 3 FOUNDATION DETAILS, SEE SHEET 26.
2. FOR PIER 3 COLUMN DETAILS, SEE SHEET 27.
3. FOR PIER 3 CAP DETAILS, SEE SHEET 28.
4. FOR COLUMN CAPITAL DETAIL AND ANCHOR BOLT LAYOUT DIAGRAM, SEE SHEET 21.

LEGEND

KEYED CONSTRUCTION JOINT FORMED BY BEVELED 4" X 1'-3" X 2'-0".

* ELEVATIONS ARE GIVEN AT THE TOP OF THE PIER CAP CONCRETE AT THE C/L PIER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY CMS | PLANS CK'D EKM

PIER 3 LAYOUT

SHEET 25 OF 62

787

SCALE = 1:30

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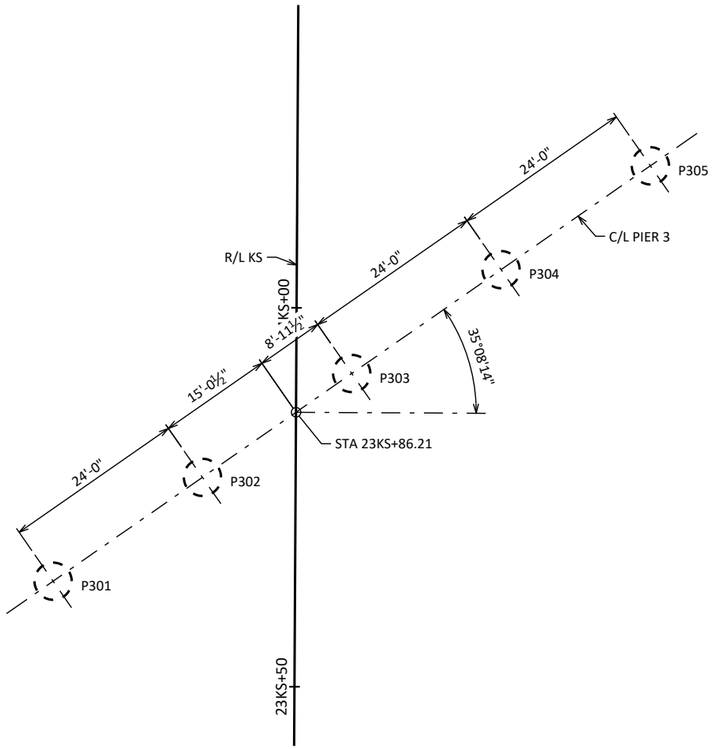
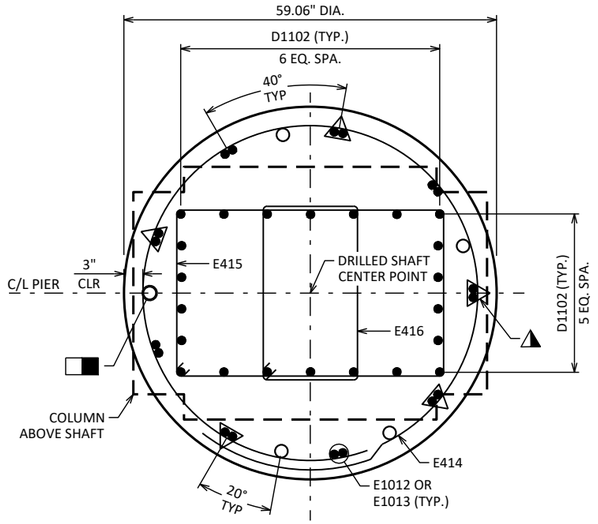
STATE PROJECT NUMBER

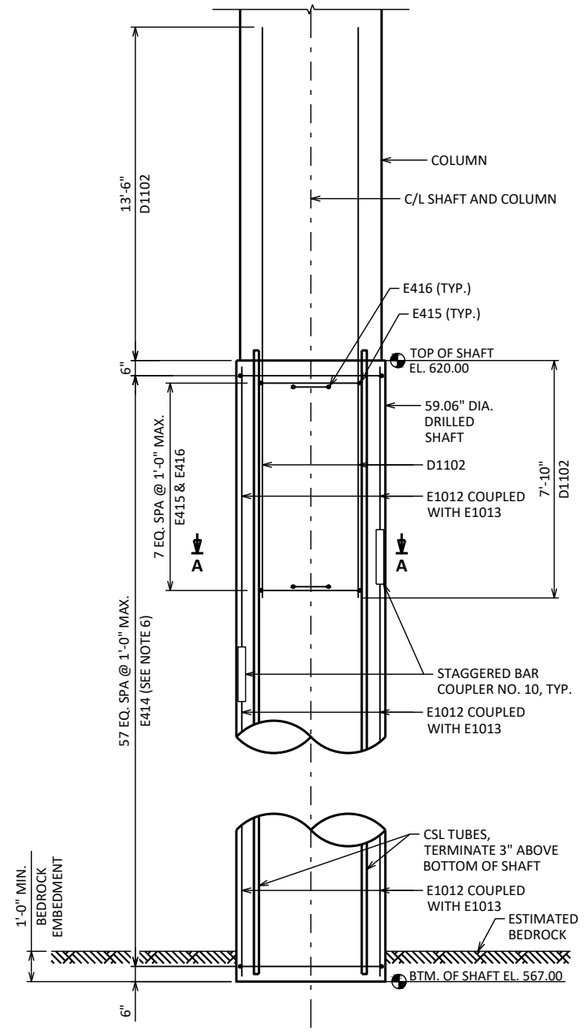
1060-27-74



DRILLED SHAFT PLAN



SECTION A-A



DRILLED SHAFT ELEVATION

SHAFT DATA

SHAFT NO.	SHAFT C/L "X"	SHAFT C/L "Y"	ASSUMED DRILLING EL.	TOP OF SHAFT EL.	BOTTOM OF SHAFT EL.	SHAFT LENGTH (FT.)	SHAFT VOLUME (CY)	INSTRUMENTATION
P301	595716.36	297866.80	620.00	620.00	567.00	53'-0"	22.41	CSL TUBES/TIP TESTING
P302	595736.07	297880.51	620.00	620.00	567.00	53'-0"	22.41	CSL TUBES/TIP TESTING
P303	595755.77	297894.21	620.00	620.00	567.00	53'-0"	22.41	CSL TUBES/TIP TESTING
P304	595775.47	297907.92	620.00	620.00	567.00	53'-0"	22.41	CSL TUBES/TIP TESTING
P305	595795.17	297921.62	620.00	620.00	567.00	53'-0"	22.41	CSL TUBES/TIP TESTING

NOTES

1. PIER SHALL BE SUPPORTED ON 59.06" DIA. DRILLED SHAFTS.
2. THE ROTATED ORIENTATION OF THE CIRCULAR DRILLED SHAFT CAGE IS ARBITRARY. CONTRACTOR MAY INSTALL THE CIRCULAR CAGE ASSEMBLY IN ANY ROTATED ORIENTATION. THE RECTANGULAR REINFORCEMENT CAGE AT THE TOP OF THE DRILLED SHAFT THAT EXTENDS INTO THE COLUMNS MUST ALIGN WITH THE COLUMN ORIENTATION AS SHOWN IN SECTION A-A.
3. IF BEDROCK IS ENCOUNTERED 5' OR MORE ABOVE THE PLANNED BOTTOM OF SHAFT ELEVATION, THE FOUNDATION SHAFT DRILLING MAY STOP AT A HIGHER ELEVATION. ALERT THE ENGINEER AND COORDINATE WITH THE DESIGNER
4. THE SHAFT FOUNDATION LENGTH ASSUMES DRILLING BEGINS AT THE EXISTING GROUND ELEVATION OF 620.00. THE PLANNED BOTTOM OF SHAFT ELEVATION IS BASED ON AN ESTIMATED LOWEST ROCK ELEVATION OF 566.00 DETERMINED FROM SOIL BORING INFORMATION.
5. THE DRILLED SHAFT FOUNDATION LENGTH IS ESTIMATED BASED ON AN ASSUMED ROCK SURFACE ELEVATION OF 568.00 DETERMINED FROM BORINGS.
6. LENGTH OF E1012 AND E1013 BARS AND NUMBER OF E414 BARS ARE DETAILED FOR SHAFTS THAT ARE 5'-0" LONGER THAN REQUIRED FOR THE ASSUMED ROCK ELEVATION. FIELD CUT E1012 AND E1013 BARS AND ADJUST THE NUMBER OF E414 BARS BASED ON THE SHAFT LENGTH DETERMINED AFTER DRILLING IS COMPLETE.

LEGEND

- 5 - 2" DIA CSL TUBES FULL LENGTH OF SHAFT TIED TO INSIDE AND SPACED AROUND THE PERIMETER OF REINFORCEMENT AS SHOWN.
- ⚠ 5 - THERMAL WIRES FOR TIP TESTING. DISTRIBUTE 5 THERMAL WIRES EVENLY AROUND THE PERIMETER OF REINFORCEMENT TIED TO VERTICAL BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY CMS | PLANS CK'D EKM

PIER 3 FOUNDATION DETAILS

SHEET 26 OF 62

788

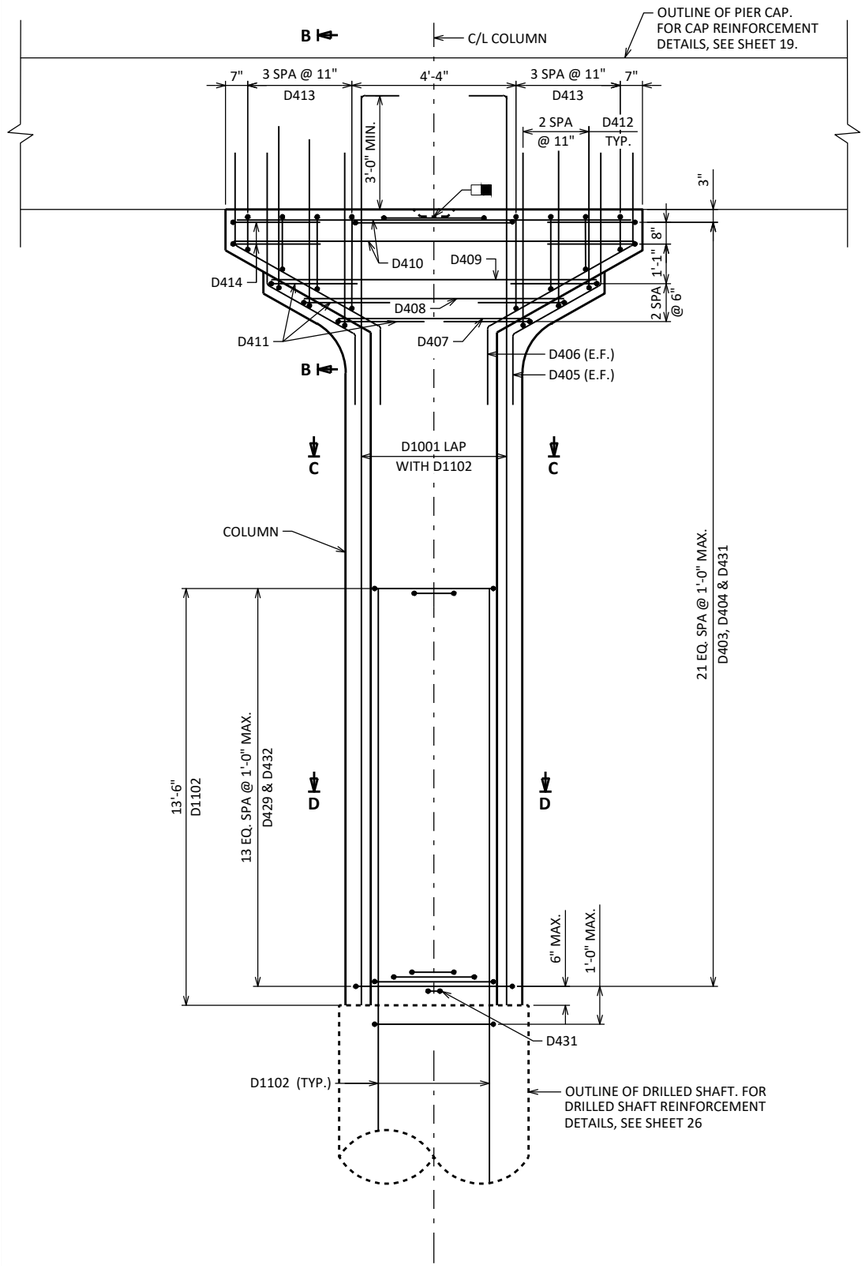
SCALE = 1:30

8

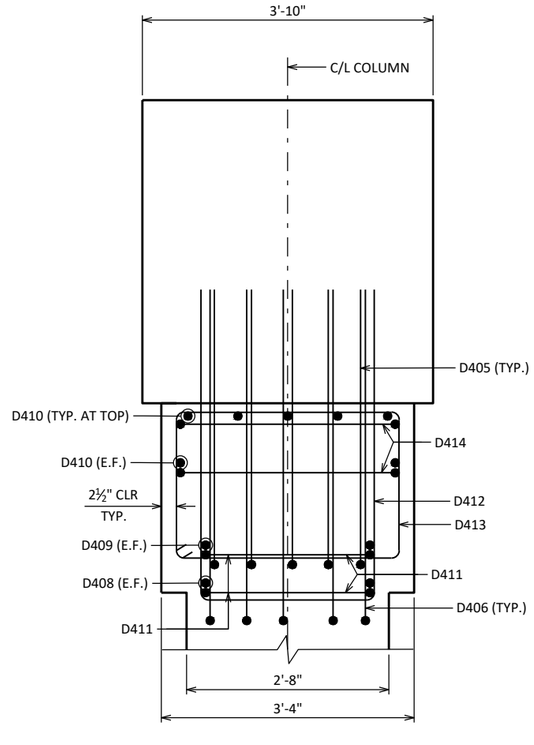
8

STATE PROJECT NUMBER

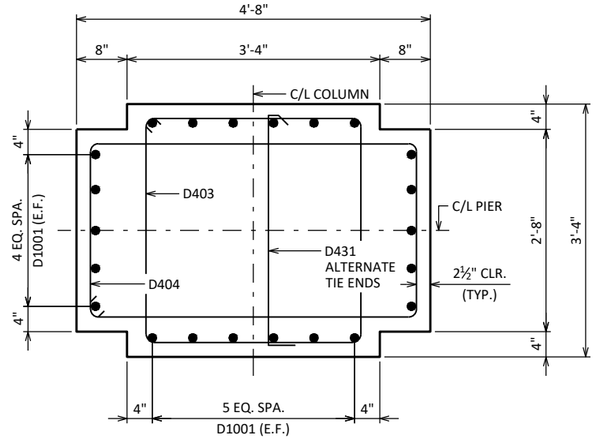
1060-27-74



TYPICAL COLUMN ELEVATION



SECTION B-B



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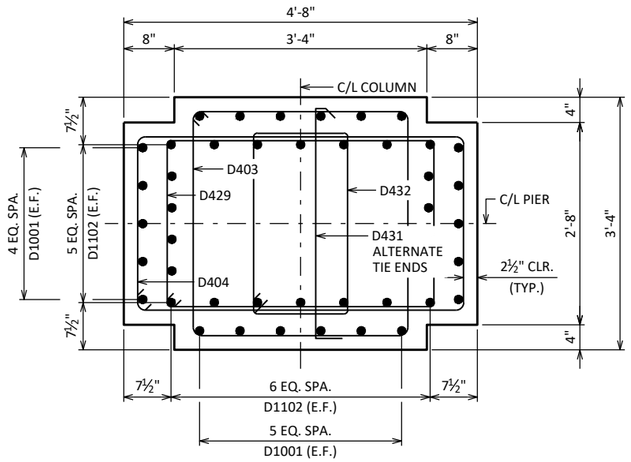

SECTION D-D

LEGEND

KEYED CONSTRUCTION JOINT FORMED BY BEVELED 4" X 1'-3" X 2'-0".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY CMS | PLANS CK'D EKM

PIER 3 COLUMN DETAILS

SHEET 27 OF 62

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SCALE = 1:30

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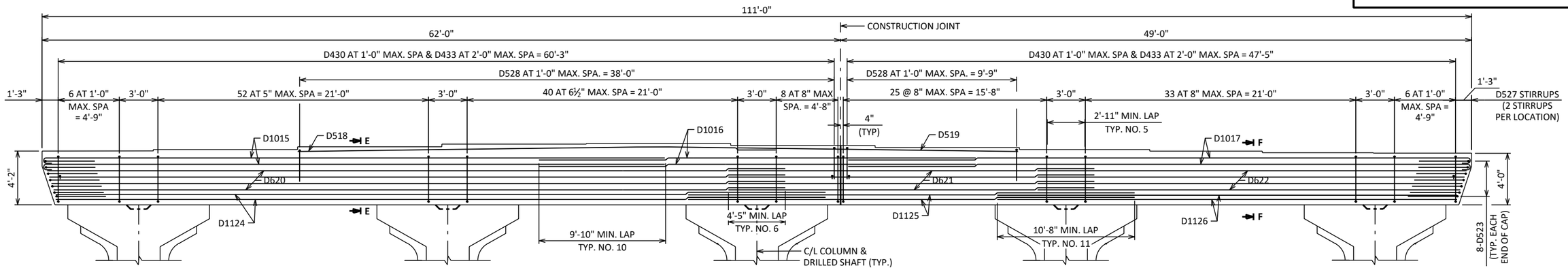
1060-27-74



BILL OF BARS

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
E1012		90	30'-6"			DRILLED SHAFT
E1013		90	27'-3"			DRILLED SHAFT
E414		290	15'-1"	X		DRILLED SHAFT - BAR TIES
E415		40	12'-6"	X		DRILLED SHAFT DOWELS - STIRRUPS
E416		40	7'-10"	X		DRILLED SHAFT DOWELS - STIRRUPS
D1001	X	110	25'-6"	X		COLUMN
D1102	X	110	21'-4"			COLUMN
D403	X	110	12'-2"	X		COLUMN - STIRRUPS
D404	X	110	13'-6"	X		COLUMN - STIRRUPS
D405	X	50	7'-7"	X		COLUMN CAP
D406	X	50	8'-6"	X		COLUMN CAP
D407	X	10	4'-8"			COLUMN CAP
D408	X	10	6'-8"			COLUMN CAP
D409	X	10	8'-7"			COLUMN CAP
D410	X	35	10'-7"			COLUMN CAP
D411	X	30	6'-8"	X		COLUMN CAP
D412	X	30	11'-1"	X	△	COLUMN CAP
D413	X	40	9'-5"	X	X	COLUMN CAP - STIRRUPS
D414	X	20	7'-4"	X		COLUMN CAP - ENDS
D1015	X	12	49'-8"	X		PIER CAP - TOP
D1016	X	12	33'-9"			PIER CAP - TOP
D1017	X	12	49'-8"	X		PIER CAP - TOP
D518	X	4	33'-4"			PIER CAP - TOP
D519	X	4	18'-1"			PIER CAP - TOP
D620	X	8	57'-6"			PIER CAP - SIDES
D621	X	8	28'-5"			PIER CAP - SIDES
D622	X	8	33'-6"			PIER CAP - SIDES
D523	X	16	10'-6"	X		PIER CAP - ENDS
D1124	X	12	59'-8"			PIER CAP - BOTTOM
D1125	X	12	34'-8"			PIER CAP - BOTTOM
D1126	X	12	35'-8"			PIER CAP - BOTTOM
D527	X	370	12'-0"	X		PIER CAP - STIRRUPS
D528	X	50	7'-0"	X		PIER CAP - TOP
D429	X	70	12'-6"	X		COLUMN DOWELS - STIRRUPS
D430	X	111	4'-1"	X		PIER CAP - BAR TIES
D431	X	110	3'-7"	X		COLUMN - BAR TIES
D432	X	70	7'-10"	X		COLUMN DOWELS - BAR TIES
D433	X	114	4'-7"	X		PIER CAP - SUPPORT BARS

△ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

NOTE:
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BARS. THE FIRST ONE OR TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE.

TABLE OF DIMENSIONS

MARK	DIM "A"	DIM "B"
D403	2'-11"	2'-11"
D404	2'-3"	4'-3"
D405	2'-2"	1'-1"
D406	3'-10"	2'-2"
D411	2'-2"	2'-4"
D412	2'-3"	4'-6"
D413	2'-11"	9" TO 2'-4"
D414	2'-10"	2'-4"
D523	3'-5"	3'-8"
D527	2'-2"	3'-7"
D528	3'-1"	2'-1"
D429	3'-8"	2'-4"
D432	1'-4"	2'-4"
D433	3'-5"	0'-8"
E415	3'-8"	2'-4"
E416	1'-4"	2'-4"

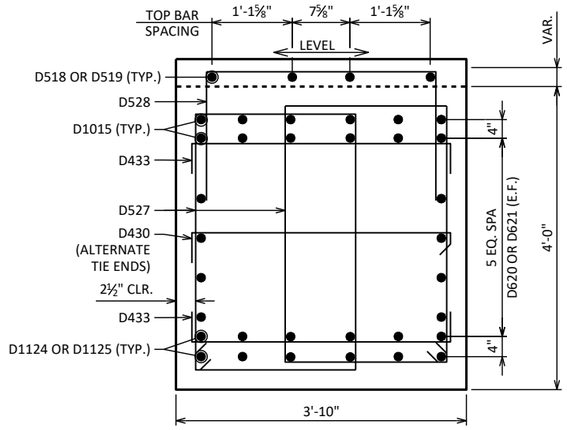
BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
D413	10 SERIES OF 4	8' - 2" TO 11' - 4"

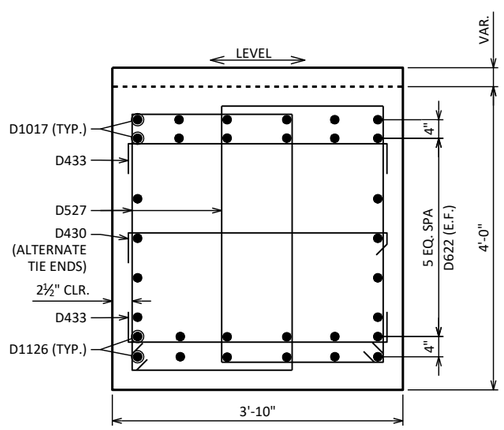
BUNDLE AND TAG EACH SERIES SEPARATELY

PIER CAP ELEVATION

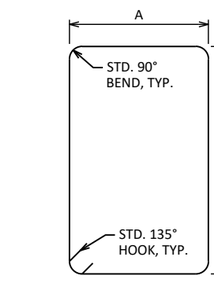
(LOOKING NORTH)



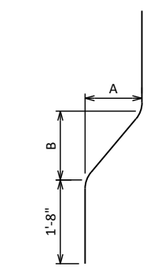
SECTION E-E



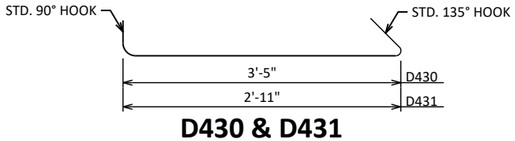
SECTION F-F



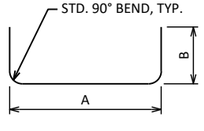
D403, D404, D413, D527, D429, D432, E415 & E416



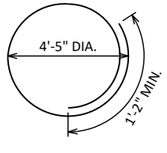
D405 & D406



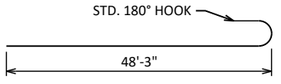
D430 & D431



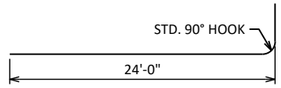
D411, D412, D414, D523, D528 & D433



E414



D1015 & D1017



D1001

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STATE OF WISCONSIN
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STRUCTURE B-40-1083

DRAWN BY CMS | PLANS CK'D EKM

PIER 3 CAP DETAILS

SHEET 28 OF 62
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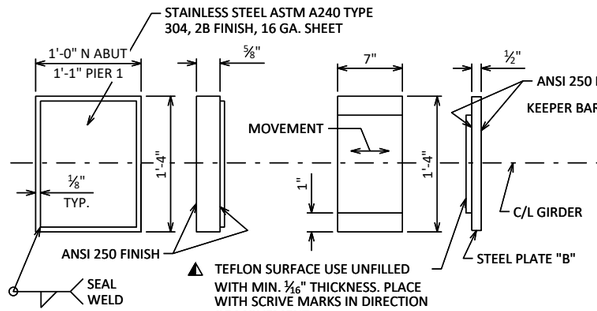
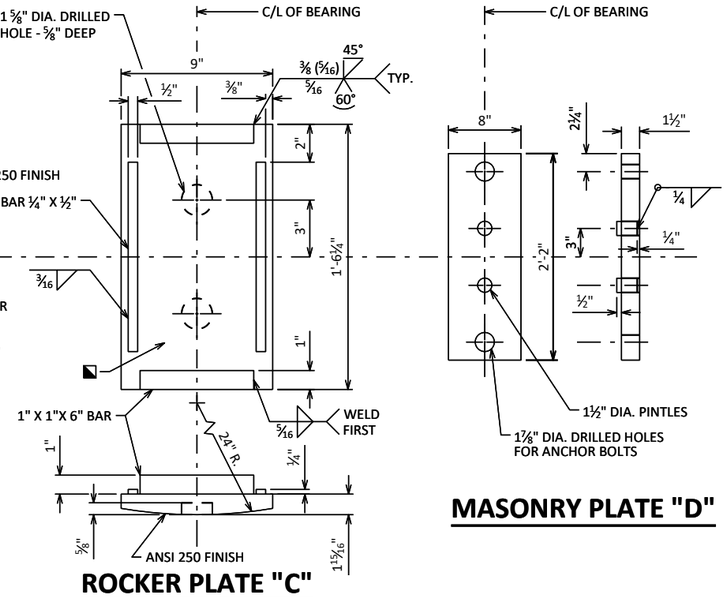


TOP PLATE "A"

TEFLON SURFACE ON PLATE "B"

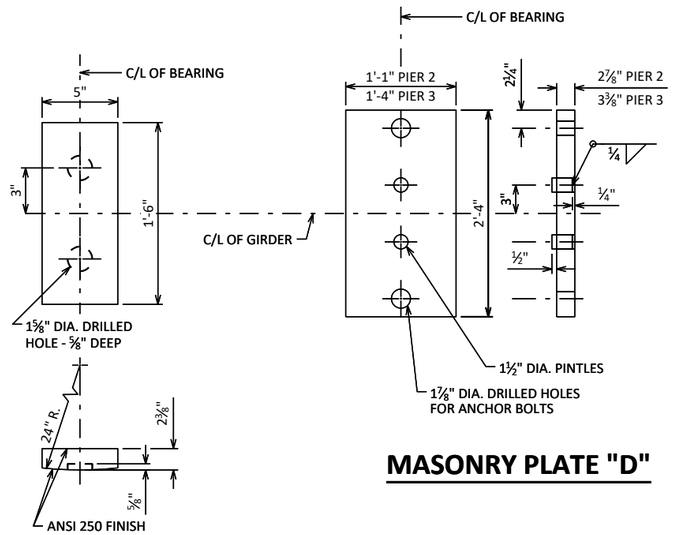


ROCKER PLATE "C"

MASONRY PLATE "D"

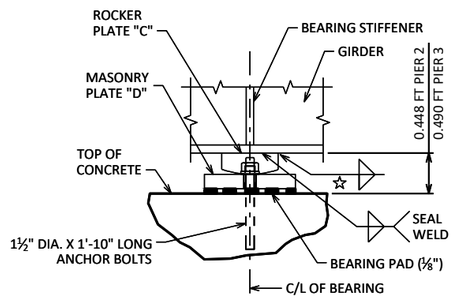
EXPANSION BEARING

AT PIER 1 AND NORTH ABUTMENT



MASONRY PLATE "D"

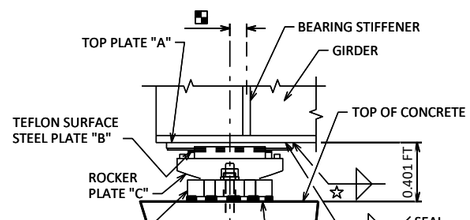
ROCKER PLATE "C"



FIXED BEARING ASSEMBLY

FIXED BEARING

AT PIER 2 AND PIER 3



EXPANSION BEARING ASSEMBLY

☆ TABLE OF FILLET WELD SIZES

MATERIAL THICKNESS OF THICKER PART JOINED.	‡ MIN. SIZE OF FILLET WELD
TO ½" INCLUSIVE	3/16"
OVER ½" TO ¾"	¼"
OVER ¾" TO 1½"	△ 5/16"
OVER 1½" TO 2¼"	△ ⅜"
OVER 2¼" TO 6"	△ ½"

‡ EXCEPT THAT THE WELD SIZE SHALL NOT EXCEED THE THICKNESS OF THE THINNER PART JOINED.

△ MIN. PASS SIZE IS 5/16"

°F	PIER 1	N ABUT
30	0.3	-0.3
45	0	0
60	-0.3	0.3
75	-0.6	0.6
90	-0.8	0.8

◪ BEARING OFFSET TABLE

ALL DIMENSIONS IN INCHES
AMBIENT TEMPERATURE DURING GIRDER INSTALLATION

BEARING NOTES

ALL BEARINGS ARE SYMMETRICAL ABOUT C/L OF GIRDER AND C/L OF BEARING.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153, CLASS C.

ANCHOR BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM F1554 GRADE 55, OR MATERIAL OF EQUIVALENT YIELD STRENGTH AND ELONGATION.

ALL MATERIAL IN BEARINGS, INCLUDING SHIM PLATES, BUT EXCLUDING STAINLESS STEEL SHEET, TEFLON SURFACE, PINTLES, ANCHOR BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A709 GRADE 50W.

ALL MATERIAL IN BEARINGS, INCLUDING SHIM PLATES AND BEARING PADS, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING ASSEMBLIES EXPANSION B-40-1083" OR "BEARING ASSEMBLIES FIXED B-40-1083", EACH.

CHAMFER ANCHOR BOLTS PRIOR TO THREADING.

ALL FINISHED SURFACES SHALL BE MACHINE FINISHED BY AN AUTOMATIC PROCESS.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL.

PROVIDE ⅛" THICK BEARING PAD THE SAME SIZE AS MASONRY PLATE "D" FOR EACH BEARING.

ANCHOR BOLTS SHALL BE THREADED 3". PROVIDE ONE STANDARD WROUGHT WASHER AND ONE HEX NUT PER BOLT. BOLT LENGTH TO BE 1'-5" FOR 1¼" DIA. AND 1'-10" FOR 1½" DIA. BOLTS. PROJECT ANCHOR BOLTS, MASONRY PLATE "D" THICKNESS + 2¼", ABOVE TOP OF CONCRETE.

CHAMFER TOP OF PINTLES ⅛". DRILL HOLES FOR ALL PINTLES IN MASONRY PLATE "D" FOR A DRIVING FIT.

STEEL PINTLES SHALL CONFORM TO ASTM A449 OR ASTM A572 GRADE 50.

FIXED BEARINGS:
ROCKER PLATE "C" SHALL BE SHOP PAINTED WITH A WELDABLE PRIMER.
MASONRY PLATE "D" SHALL BE GALVANIZED.

EXPANSION BEARINGS:
ROCKER PLATE "C" AND MASONRY PLATE "D" SHALL BE GALVANIZED. TOP PLATE "A" AND STEEL PLATE "B" SHALL BE SHOP PAINTED. USE A WELDABLE PRIMER ON TOP PLATE "A". DO NOT PAINT STAINLESS STEEL OR TEFLON SURFACES.

◪ PROVIDE A METHOD FOR HANDLING ROCKER PLATE "C" DURING GALVANIZING.

◭ BOND STEEL PLATE "B" AND TEFLON WITH ADHESIVE MATERIAL MEETING REQUIREMENTS FOUND IN THE STANDARD SPECIFICATION.

AT INSTALLATION, ENSURE STAINLESS STEEL SLIDING FACE OF THE UPPER ELEMENT AND THE TFE SLIDING FACE OF THE LOWER ELEMENT HAVE THE SURFACE FINISH SPECIFIED AND ARE CLEAN AND FREE OF ALL DUST, MOISTURE, AND OTHER FOREIGN MATTER.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D MAM

BEARING DETAILS

SHEET 29 OF 62

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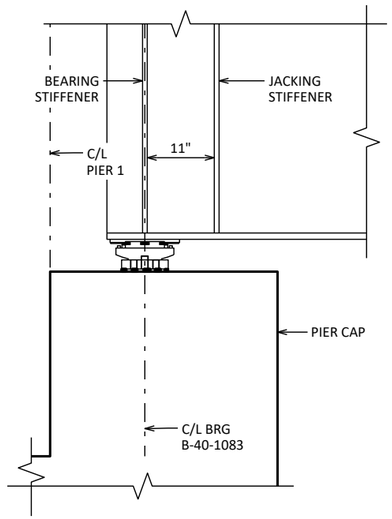
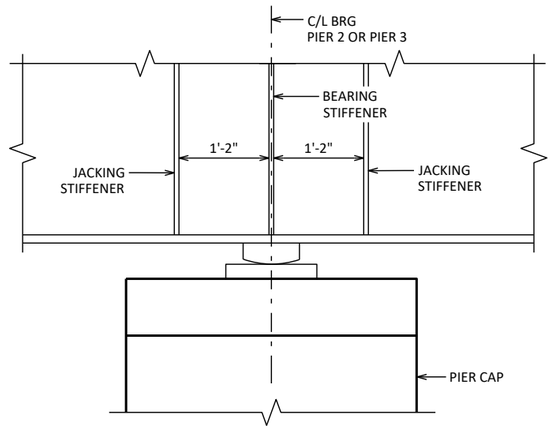


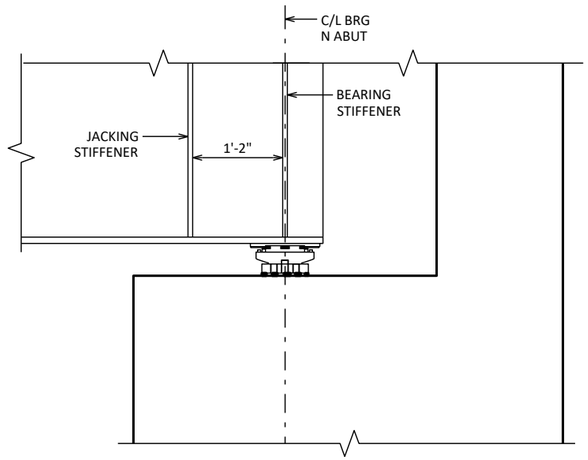
SECTION AT PIER 1

LOOKING WEST ALONG GIRDER



SECTION AT PIER 2 & PIER 3

LOOKING WEST ALONG GIRDER



SECTION AT NORTH ABUTMENT

LOOKING WEST ALONG GIRDER

NOTES

1. THIS DRAWING SHOWS LOCATION OF JACKING STIFFENER FOR FUTURE BEARING REPLACEMENT.
2. ESTIMATED JACKING FORCE IS BASED ON UNFACTORED DEAD LOAD REACTIONS ONLY - NO LIVE LOAD IS INCLUDED AND NO ADDITIONAL ALLOWANCES HAVE BEEN MADE.

   THESE FORCES MUST BE INCREASED TO ALLOW FOR JACK FRICTION AND OTHER FACTORS.
3. FORCES AND RECOMMENDATIONS ARE PROVIDED FOR INFORMATION ONLY AND MUST BE VERIFIED BY THE ENGINEER RESPONSIBLE FOR JACKING OPERATIONS.
4. JACKING PROVISIONS HAVE BEEN DESIGNED ASSUMING THAT THE STRUCTURE IS CLOSED TO TRAFFIC AT ALL TIMES THAT THE STRUCTURE IS NOT RESTING ON THE PERMANENT BEARINGS.
5. CONTROL JACKS TO ENSURE THAT FORCES APPLIED TO ALL JACKING PADS AT A SINGLE BEARING LOCATION ARE APPROXIMATELY EQUAL.

   IF THIS REQUIREMENT IS NOT MET, A COMPLETE ANALYSIS OF THE ABUTMENT AND PIER DIAPHRAGM SYSTEM WILL BE REQUIRED IN ORDER TO ACCOUNT FOR THE REDISTRIBUTION OF FORCES WITHIN THE SYSTEM.
6. JACKING STIFFENERS HAVE BEEN DESIGNED FOR A FACTORED LOAD OF 1.5 TIMES DEAD LOAD.

LOCATION	JACK FORCE PER GIRDER (KIPS)	NUMBER OF JACKS PER GIRDER	JACK FORCE PER JACK (KIPS)
PIER 1	120	1	120
PIER 2	410	2	205
PIER 3	520	2	260
NORTH ABUTMENT	190	1	190

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STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D MAM

JACKING PROVISIONS

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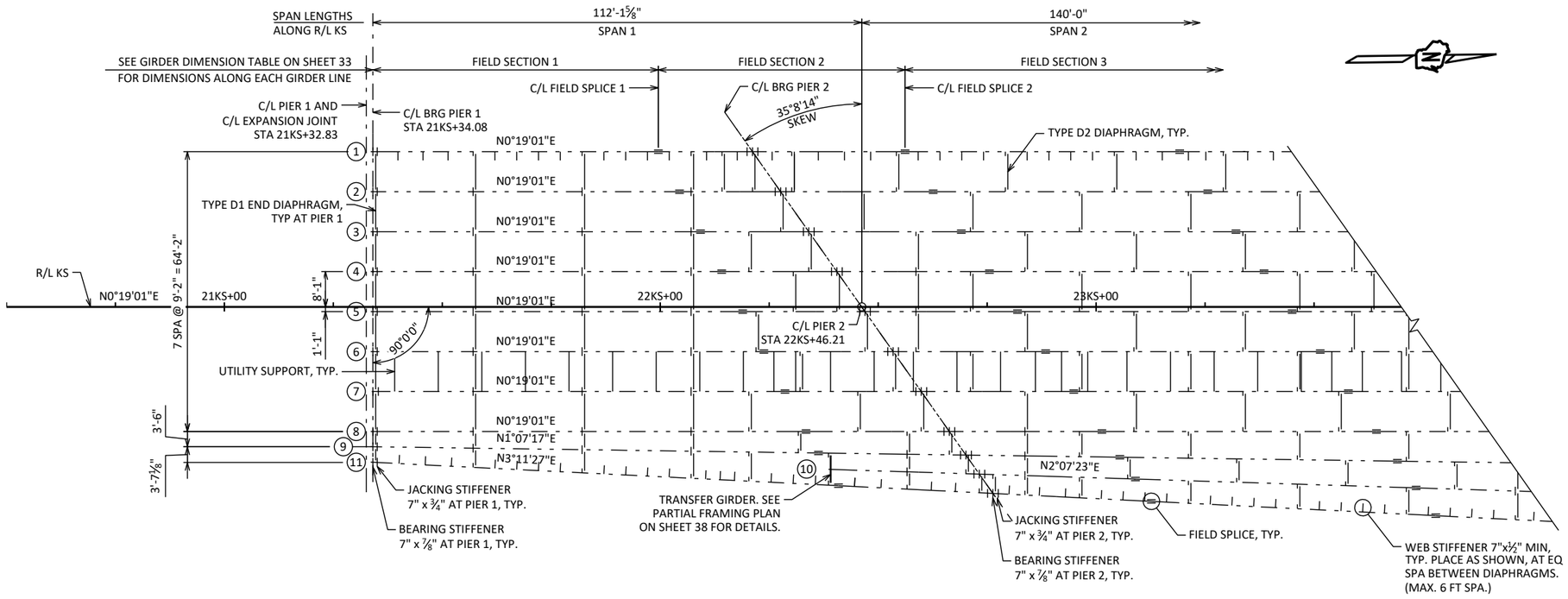
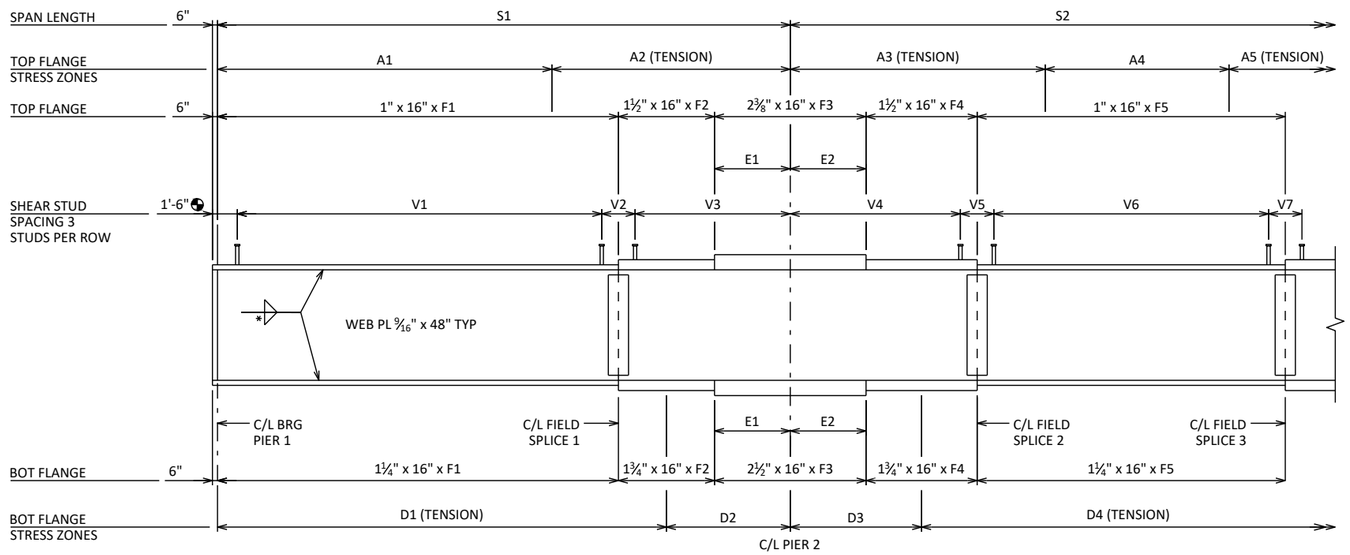


GIRDER FRAMING PLAN - FIELD SECTIONS 1, 2 & 3



GIRDER ELEVATION - FIELD SECTIONS 1, 2 & 3

NOTES

SEE SHEET 36 FOR DIAPHRAGM AND UTILITY SUPPORT LAYOUT.

LEGEND

* SEE SHEET 34 FOR GIRDER WELD SIZES

2'-0" AT GIRDER 10

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

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GIRDER PLAN AND ELEVATION: FIELD SECTIONS 1, 2 & 3

SHEET 31 OF 62
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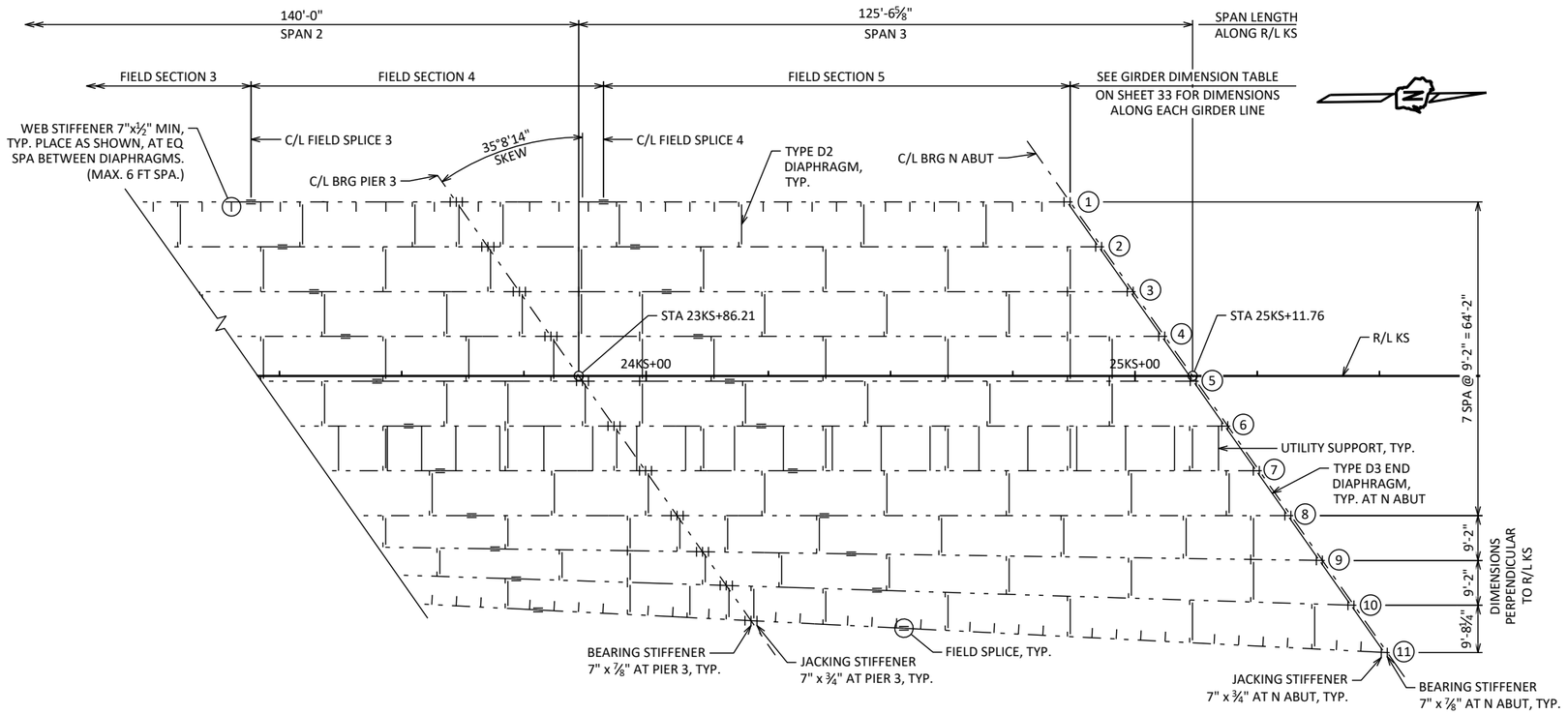
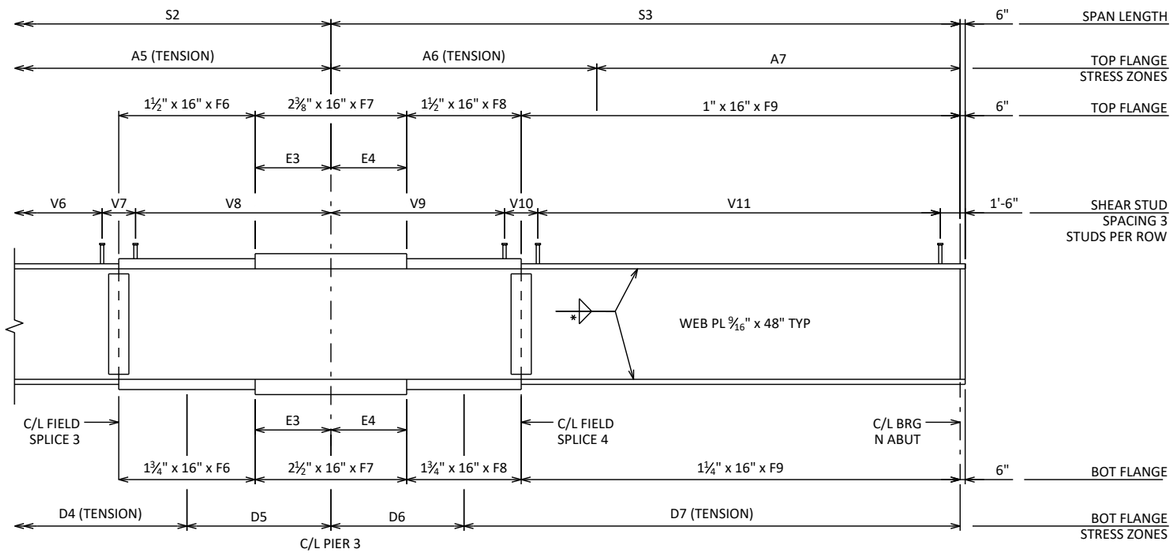


GIRDER FRAMING PLAN - FIELD SECTIONS 4 & 5



GIRDER ELEVATION - FIELD SECTIONS 4 & 5

NOTES

SEE SHEET 36 FOR DIAPHRAGM AND UTILITY SUPPORT LAYOUT.

LEGEND

* SEE SHEET 34 FOR GIRDER WELD SIZES

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GIRDER PLAN AND ELEVATION: FIELD SECTIONS 4 & 5

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GIRDER DIMENSION TABLE

	S1	S2	S3	A1	A2	A3	A4	A5	A6	A7	F1	F2	F3	F4	F5	F6	F7	F8	F9	E1	E2	E3	E4	D1	D2	D3	D4	D5	D6	D7
GIRDER 1	87'-1⅛"	140'-0"	125'-6⅝"	26'-1⅛"	61'-0"	40'-0"	44'-0"	56'-0"	51'-0"	74'-6⅞"	65'-6"	12'-10½"	22'-8½"	21'-0"	63'-0"	28'-0"	26'-6⅞"	17'-6⅞"	95'-5⅛"	8'-8½"	14'-0"	14'-0"	12'-6⅞"	68'-0"	19'-1⅛"	21'-0"	92'-0"	27'-0"	26'-6⅝"	99'-0"
GIRDER 2	93'-6½"	140'-0"	125'-6⅝"	32'-6½"	61'-0"	43'-0"	38'-0"	59'-0"	51'-0"	74'-6⅝"	70'-3⅞"	13'-10⅜"	23'-4¼"	21'-0"	63'-0"	28'-0"	26'-6⅝"	17'-6⅞"	95'-5⅛"	9'-4¼"	14'-0"	14'-0"	12'-6⅝"	76'-0"	17'-6½"	19'-0"	95'-0"	26'-0"	23'-6⅞"	102'-0"
GIRDER 3	99'-11⅞"	140'-0"	125'-6⅝"	41'-11⅞"	58'-0"	52'-0"	20'-0"	68'-0"	51'-0"	74'-6⅝"	75'-2⅛"	14'-9¾"	24'-0"	21'-0"	63'-0"	28'-0"	26'-6⅝"	17'-6⅞"	95'-5⅛"	10'-0"	14'-0"	14'-0"	12'-6⅝"	82'-0"	17'-11⅞"	19'-0"	96'-0"	25'-0"	22'-6⅝"	103'-0"
GIRDER 4	106'-5⅜"	140'-0"	125'-6⅝"	53'-5⅜"	53'-0"	65'-0"	5'-0"	70'-0"	50'-0"	75'-6⅝"	80'-0¼"	15'-9⅜"	24'-7¾"	21'-0"	63'-0"	28'-0"	26'-6⅝"	17'-6⅞"	95'-5⅛"	10'-7¾"	14'-0"	14'-0"	12'-6⅝"	88'-0"	18'-5⅜"	20'-0"	96'-0"	24'-0"	21'-6⅝"	104'-0"
GIRDER 5	112'-10¾"	140'-0"	125'-6⅝"	72'-10¾"	50'-0"	70'-0"	0'-0"	70'-0"	50'-0"	75'-6⅝"	84'-10¼"	16'-9"	25'-3½"	21'-0"	63'-0"	28'-0"	26'-6⅝"	17'-6⅞"	95'-5⅛"	11'-3½"	14'-0"	14'-0"	12'-6⅝"	94'-0"	18'-10¾"	20'-0"	95'-0"	25'-0"	21'-6⅝"	104'-0"
GIRDER 6	119'-4⅛"	140'-0"	125'-6⅝"	70'-4⅛"	49'-0"	70'-0"	0'-0"	70'-0"	50'-0"	75'-6⅝"	89'-8⅜"	17'-8½"	25'-11¼"	21'-0"	63'-0"	28'-0"	26'-6⅝"	17'-6⅞"	95'-5⅛"	11'-11¼"	14'-0"	14'-0"	12'-6⅝"	99'-0"	20'-4⅛"	23'-0"	93'-0"	24'-0"	21'-6⅝"	104'-0"
GIRDER 7	125'-9⅝"	140'-0"	125'-6⅝"	77'-9⅝"	48'-0"	70'-0"	0'-0"	70'-0"	49'-0"	76'-6⅝"	94'-6⅜"	18'-8½"	26'-6⅝"	21'-0"	63'-0"	28'-0"	26'-6⅝"	17'-6⅞"	95'-5⅛"	12'-6⅝"	14'-0"	14'-0"	12'-6⅝"	105'-0"	20'-9⅝"	24'-0"	92'-0"	24'-0"	21'-6⅝"	104'-0"
GIRDER 8	132'-3"	140'-0"	125'-6⅝"	81'-3"	51'-0"	70'-0"	0'-0"	70'-0"	48'-0"	77'-6⅝"	99'-4½"	19'-7¾"	27'-2¾"	21'-0"	63'-0"	28'-0"	26'-6⅝"	17'-6⅞"	95'-5⅛"	13'-2¾"	14'-0"	14'-0"	12'-6⅝"	109'-0"	23'-3"	25'-0"	90'-0"	25'-0"	21'-6⅝"	104'-0"
GIRDER 9	136'-0¾"	141'-4⅞"	126'-9¾"	83'-0¾"	53'-0"	70'-0"	0'-0"	70'-0"	46'-0"	79'-6⅝"	102'-2⅞"	20'-2¾"	27'-9"	21'-2⅜"	63'-7⅞"	28'-3⅜"	26'-9⅞"	17'-8⅞"	96'-4⅝"	13'-7¼"	14'-1⅝"	14'-1⅝"	12'-8⅜"	109'-0"	27'-0¾"	26'-6⅞"	87'-0"	27'-10"	22'-9¾"	104'-0"
GIRDER 10	35'-9⅞"	143'-3"	128'-5½"	---	35'-9⅞"	71'-7½"	0'-0"	71'-7½"	44'-0"	84'-5½"	---	21'-11"	28'-2⅞"	21'-5⅞"	64'-5⅜"	28'-7¼"	27'-2⅛"	18'-0"	97'-7⅜"	13'-10⅞"	14'-4"	14'-4"	12'-10⅛"	3'-0"	32'-9⅞"	26'-11⅝"	85'-7½"	30'-7"	24'-5½"	104'-0"
GIRDER 11	142'-5⅛"	145'-3¾"	130'-3¾"	86'-5⅛"	56'-0"	58'-0"	18'-3¾"	69'-0"	42'-0"	88'-3¾"	106'-11⅜"	21'-2¾"	28'-9¼"	21'-10⅜"	65'-3⅞"	29'-0¾"	27'-6¾"	18'-3⅜"	99'-0"	14'-2⅞"	14'-6⅜"	14'-6⅜"	13'-0⅜"	112'-0"	30'-5⅛"	26'-9⅛"	84'-8⅝"	33'-7¾"	25'-3¾"	105'-0"

SHEAR CONNECTOR SPACING TABLE

	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11
GIRDER 1	69 SPA @ 11" = 63'-0"	3'-0"	22 SPA @ 11" = 20'-1"	37 SPA @ 11" = 33'-6"	3'-0"	60 SPA @ 12" = 60'-0"	3'-0"	45 SPA @ 11" = 40'-6"	32 SPA @ 11" = 28'-7½"	3'-0"	112 SPA @ 10" = 92'-11⅛"
GIRDER 2	102 SPA @ 8" = 67'-10⅛"	3'-0"	29 SPA @ 9" = 21'-8⅜"	45 SPA @ 9" = 33'-6"	3'-0"	72 SPA @ 10" = 60'-0"	3'-0"	49 SPA @ 10" = 40'-6"	35 SPA @ 10" = 28'-7½"	3'-0"	186 SPA @ 6" = 92'-11⅛"
GIRDER 3	146 SPA @ 6" = 72'-8⅜"	3'-0"	35 SPA @ 8" = 23'-3¾"	51 SPA @ 8" = 33'-6"	3'-0"	80 SPA @ 9" = 60'-0"	3'-0"	70 SPA @ 7" = 40'-6"	50 SPA @ 7" = 28'-7½"	3'-0"	160 SPA @ 7" = 92'-11⅛"
GIRDER 4	133 SPA @ 7" = 77'-6¼"	3'-0"	43 SPA @ 7" = 24'-11⅛"	58 SPA @ 7" = 33'-6"	3'-0"	103 SPA @ 7" = 60'-0"	3'-0"	61 SPA @ 8" = 40'-6"	43 SPA @ 8" = 28'-7½"	3'-0"	140 SPA @ 8" = 92'-11⅛"
GIRDER 5	165 SPA @ 6" = 82'-4¼"	3'-0"	40 SPA @ 8" = 26'-6½"	51 SPA @ 8" = 33'-6"	3'-0"	103 SPA @ 7" = 60'-0"	3'-0"	61 SPA @ 8" = 40'-6"	43 SPA @ 8" = 28'-7½"	3'-0"	140 SPA @ 8" = 92'-11⅛"
GIRDER 6	175 SPA @ 6" = 87'-2⅜"	3'-0"	49 SPA @ 7" = 28'-1¾"	58 SPA @ 7" = 33'-6"	3'-0"	90 SPA @ 8" = 60'-0"	3'-0"	70 SPA @ 7" = 40'-6"	50 SPA @ 7" = 28'-7½"	3'-0"	140 SPA @ 8" = 92'-11⅛"
GIRDER 7	158 SPA @ 7" = 92'-0⅜"	3'-0"	45 SPA @ 8" = 29'-9⅛"	51 SPA @ 8" = 33'-6"	3'-0"	80 SPA @ 9" = 60'-0"	3'-0"	54 SPA @ 9" = 40'-6"	39 SPA @ 9" = 28'-7½"	3'-0"	140 SPA @ 8" = 92'-11⅛"
GIRDER 8	106 SPA @ 11" = 96'-10½"	3'-0"	38 SPA @ 10" = 31'-4½"	41 SPA @ 10" = 33'-6"	3'-0"	66 SPA @ 11" = 60'-0"	3'-0"	61 SPA @ 8" = 40'-6"	43 SPA @ 8" = 28'-7½"	3'-0"	140 SPA @ 8" = 92'-11⅛"
GIRDER 9	93 SPA @ 13" = 99'-8⅞"	3'-0"	30 SPA @ 13" = 32'-4"	32 SPA @ 13" = 33'-10"	3'-0"	61 SPA @ 12" = 60'-7⅞"	3'-0"	55 SPA @ 9" = 40'-11⅛"	39 SPA @ 9" = 28'-11⅛"	3'-0"	126 SPA @ 9" = 93'-10⅝"
GIRDER 10	---	---	49 SPA @ 8" = 32'-1½"	52 SPA @ 8" = 34'-3⅞"	3'-0"	53 SPA @ 14" = 61'-5⅜"	3'-0"	50 SPA @ 10" = 41'-5¾"	36 SPA @ 10" = 29'-4⅛"	3'-0"	104 SPA @ 11" = 95'-1⅜"
GIRDER 11	79 SPA @ 16" = 104'-5⅜"	3'-0"	41 SPA @ 10" = 33'-11⅝"	42 SPA @ 10" = 34'-10⅝"	3'-0"	44 SPA @ 17" = 62'-3⅞"	3'-0"	46 SPA @ 11" = 42'-1⅛"	33 SPA @ 11" = 29'-9¾"	3'-0"	73 SPA @ 16" = 96'-6"

NOTE: SHEAR CONNECTOR SPACING PROVIDED IN TABLE IS MAXIMUM SPACING

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D MAM

GIRDER DIMENSION TABLES

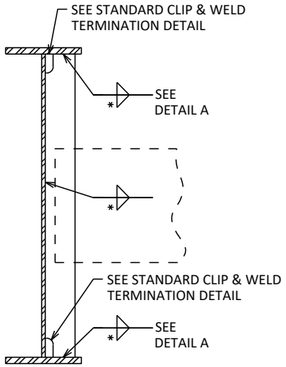
SHEET 33 OF 62

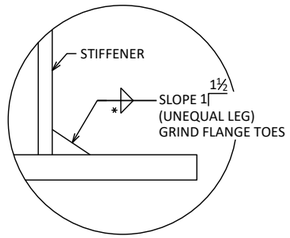
795

SCALE = 1:30

STATE PROJECT NUMBER

1060-27-74

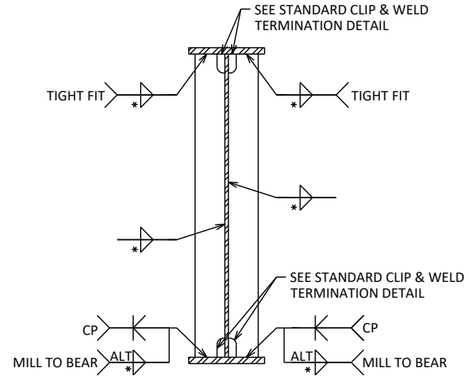




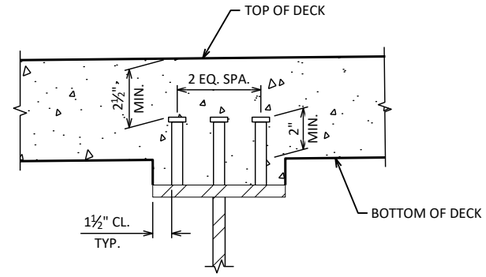
DETAIL A

CONNECTION STIFFENER DETAIL AT TENSION FLANGE

CONNECTION STIFFENER DETAILS



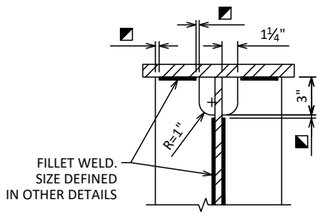
BEARING STIFFENER DETAILS



SHEAR CONNECTOR DETAILS

NOTE: USE THREE FIELD WELDED 7/8" DIA. X 6" LONG ◐ STUDS EQUALLY SPACED WITH A MIN. OF 1½" CL. FROM THE FLANGE EDGE. STUDS SHALL NOT BE PLACED OVER FIELD SPLICE PLATES.

◐ USE DIFFERENT LENGTH STUDS IF 2½" MIN. CLEARANCE OR 2" EXTENSION CRITERIA IS VIOLATED.



STANDARD CLIP & WELD TERMINATION DETAIL

◩ ¼" MIN TO ½" MAX, TYP.

* MINIMUM FILLET WELD SIZES

THICKNESS OF THICKER PART JOINED, "T"	MINIMUM FILLET WELD SIZE
T <= ½"	3/16"
½" < T <= ¾"	¼"
¾" < T <= 1½"	5/16"
T > 1½"	⅜"

MINIMUM WELD SIZES SHOWN IN TABLE ABOVE SHALL BE USED WHEN A SIZE IS NOT OTHERWISE SPECIFIED OR SHOWN.

WELD SIZE SHALL NOT EXCEED THE THICKNESS OF THE THINNER PART BEING JOINED.

FOR ALL WELDS 5/16" OR LARGER, THE MINIMUM PASS SIZE SHALL BE 5/16".

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STRUCTURE B-40-1083

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MISCELLANEOUS GIRDER DETAILS

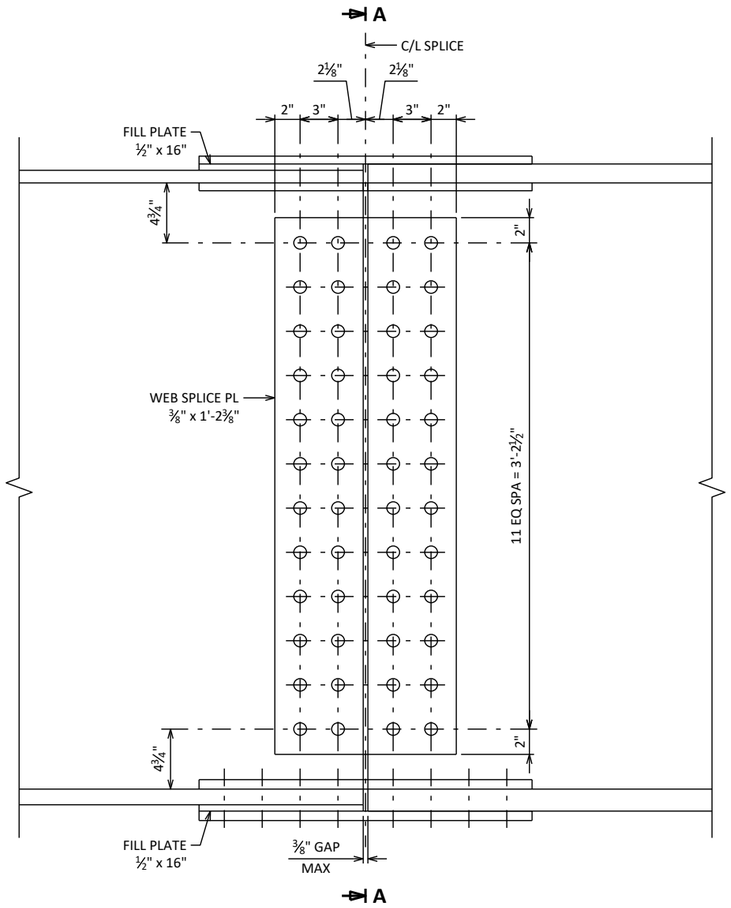
SHEET 34 OF 62

796

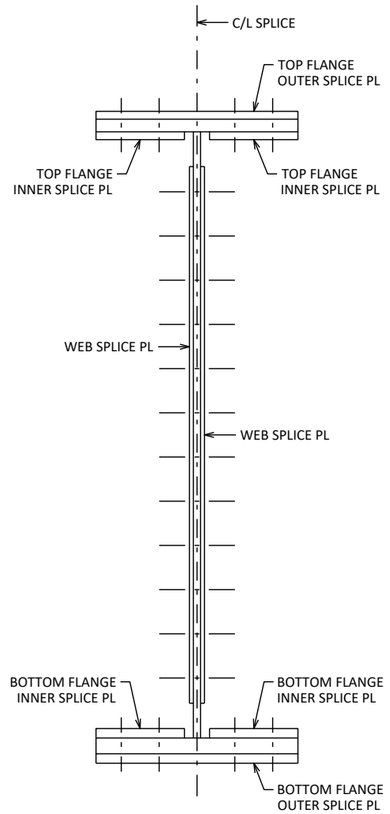
SCALE = 1:30

STATE PROJECT NUMBER

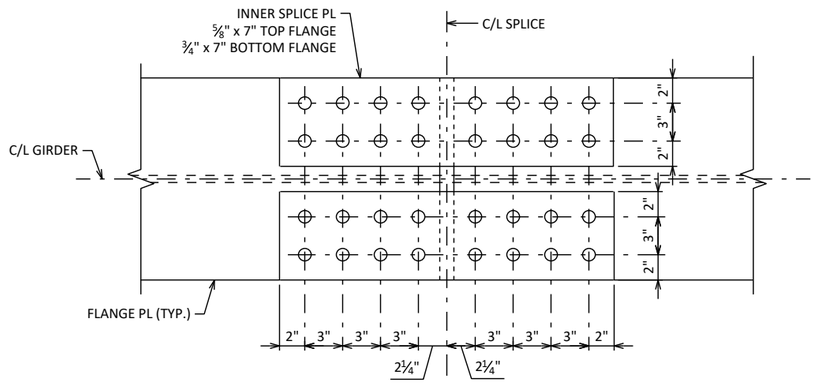
1060-27-74



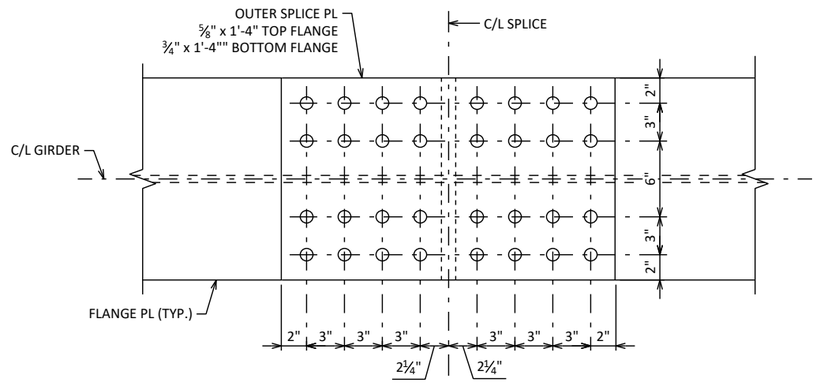
ELEVATION



SECTION A-A



PLAN OF INNER PLATES



PLAN OF OUTER PLATES

FLANGE SPLICE

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

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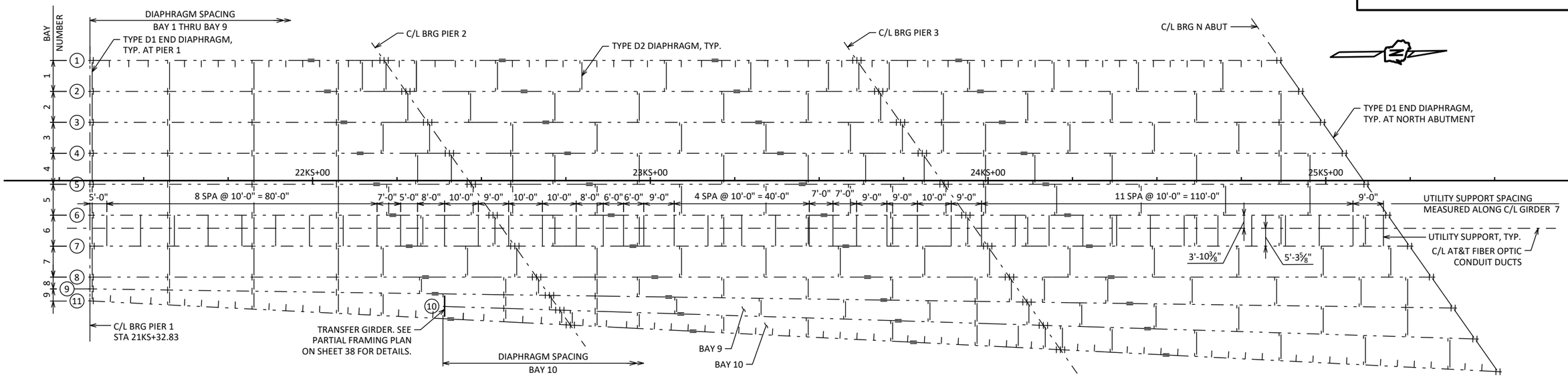
FIELD SPLICE DETAILS

SHEET 35 OF 62

797

SCALE = 1 IN:1 FT

STATE PROJECT NUMBER
1060-27-74



DIAPHRAGM LAYOUT

DIAPHRAGM SPACING TABLE

	SPACE 1	SPACE 2	SPACE 3	SPACE 4	SPACE 5	SPACE 6	SPACE 7	SPACE 8	SPACE 9	SPACE 10	SPACE 11	SPACE 12	SPACE 13	SPACE 14	SPACE 15	SPACE 16	SPACE 17	SPACE 18	SPACE 19
BAY 1	23'-0"	25'-0"	25'-0"	7'-1⅛"	7'-0"	9'-0"	24'-0"	25'-0"	25'-0"	25'-0"	23'-0"	9'-0"	9'-0"	23'-9 ⅜"	25'-0"	25'-0"	25'-0"		
BAY 2	23'-0"	25'-0"	25'-0"	20'-6½"	18'-8⅞"	24'-11½"	25'-0"	25'-0"	25'-0"	21'-5⅜"	18'-8⅞"	24'-11½"	25'-0"	25'-0"	25'-0"				
BAY 3	23'-0"	25'-0"	25'-0"	13'-3"	13'-8⅞"	24'-7⅞"	25'-0"	25'-0"	25'-0"	25'-0"	15'-4⅞"	12'-1⅝"	12'-5½"	25'-0"	25'-0"	25'-0"	12'-6"		
BAY 4	23'-0"	25'-0"	25'-0"	23'-5⅜"	10'-0"	18'-1¾"	12'-6"	25'-0"	25'-0"	25'-0"	17'-0"	17'-4¼"	18'-1¾"	14'-7⅝"	22'-10⅜"	25'-0"	25'-0"	8'-7"	
BAY 5	23'-0"	25'-0"	25'-0"	14'-10¾"	25'-0"	11'-8⅜"	25'-0"	25'-0"	25'-0"	25'-0"	12'-6"	15'-9⅝"	11'-8⅜"	21'-1"	25'-0"	25'-0"	25'-0"		
BAY 6	23'-0"	25'-0"	25'-0"	25'-0"	21'-4⅛"	17'-8⅛"	25'-0"	25'-0"	25'-0"	25'-0"	22'-3⅛"	17'-8⅛"	25'-0"	25'-0"	25'-0"	25'-0"			
BAY 7	23'-0"	25'-0"	25'-0"	13'-3"	25'-0"	14'-6⅝"	23'-9½"	25'-0"	25'-0"	22'-0"	25'-0"	19'-2½"	23'-9½"	25'-0"	25'-0"	25'-0"	20'-0"		
BAY 8	23'-0"	25'-0"	25'-0"	24'-7⅛"	24'-11½"	9'-8⅜"	17'-4⅛"	12'-6"	25'-0"	25'-0"	25'-0"	25'-0"	10'-1⅞"	9'-9⅜"	18'-9"	25'-0"	25'-0"	25'-0"	13'-9⅝"
BAY 9	23'-0"	25'-0"	25'-0"	13'-3"	18'-3¼" *	18'-0⅜"	13'-6"	13'-6½"	23'-6¾"	25'-0"	25'-0"	25'-0"	13'-11¼"	15'-4¼"	15'-7¾"	22'-0"	24'-6"	25'-0"	25'-0"
BAY 10	18'-0⅜"	16'-6⅞"	3'-1⅜"	7'-4⅛"	12'-6"	25'-0"	25'-0"	25'-0"	25'-0"	12'-2⅝"	8'-0"	5'-0¾"	14'-8⅝"	25'-0"	25'-0"	25'-0"	25'-0"		

*TRANSFER GIRDER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D MAM

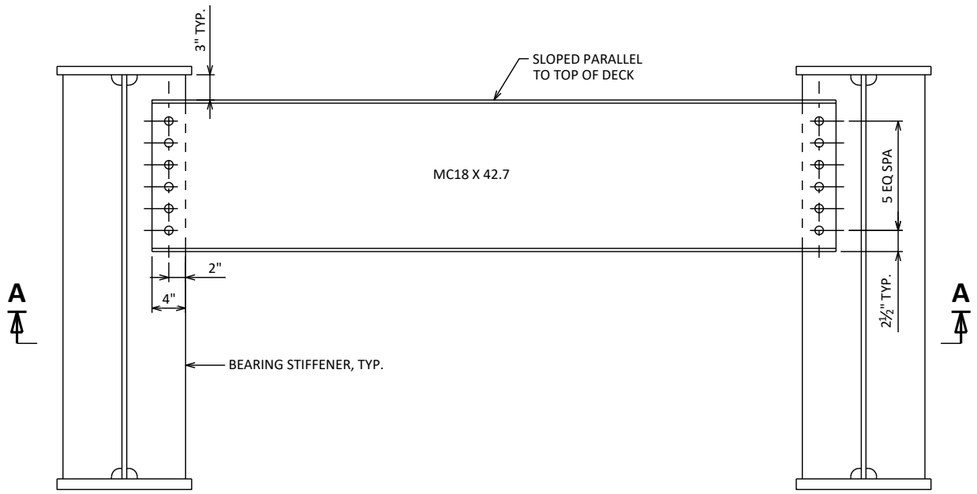
DIAPHRAGM AND UTILITY SUPPORT LAYOUT

SHEET 36 OF 62
798

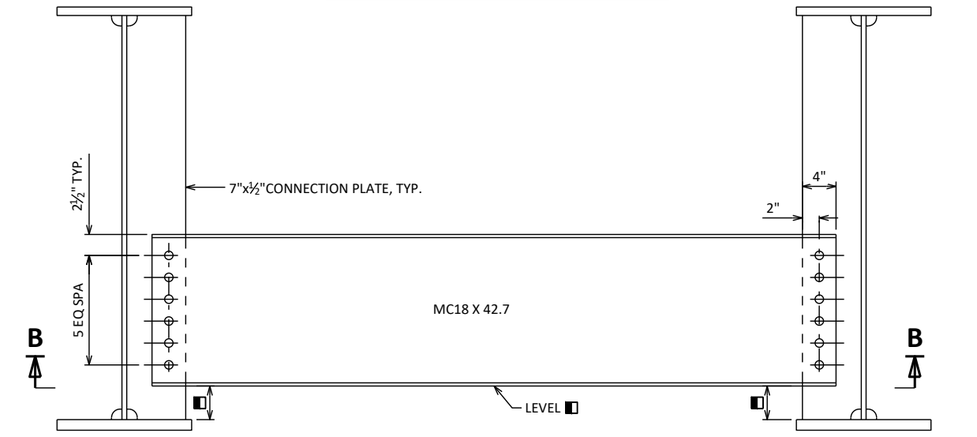
SCALE = 1:30

STATE PROJECT NUMBER

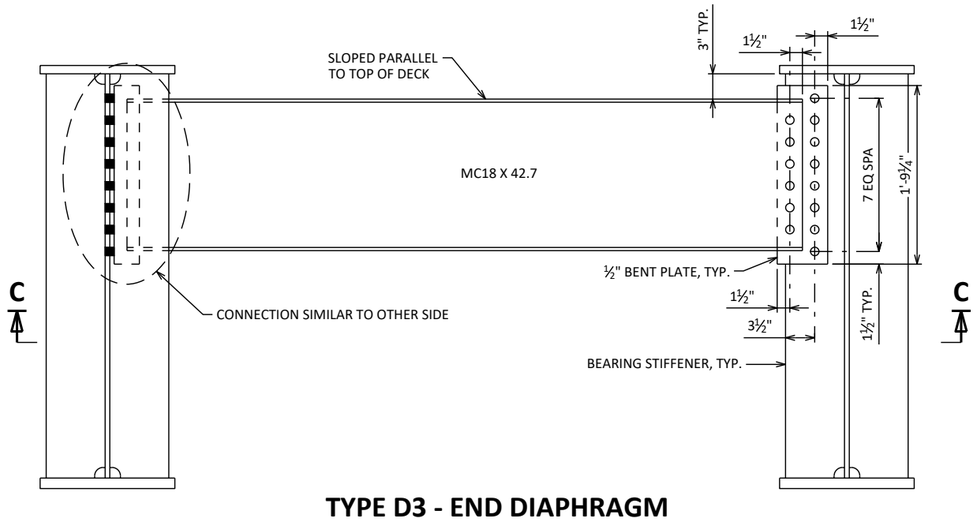
1060-27-74



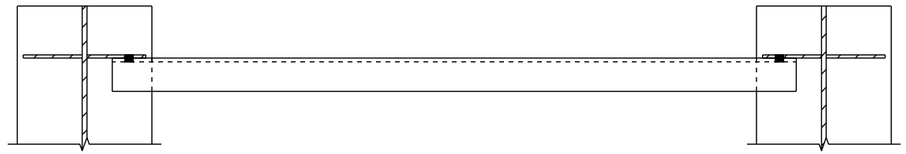
TYPE D1 - END DIAPHRAGM



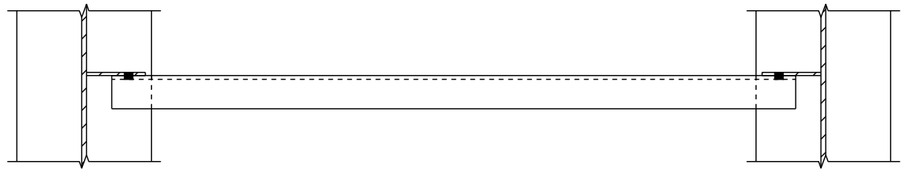
TYPE D2 - TYPICAL DIAPHRAGM



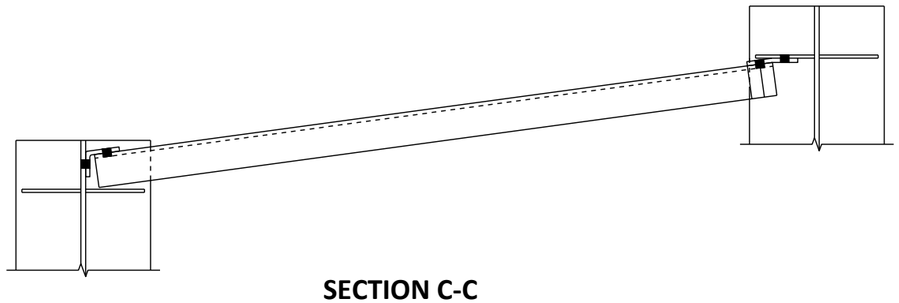
TYPE D3 - END DIAPHRAGM



SECTION A-A



SECTION B-B



SECTION C-C

NOTES

ALL BOLTS SHALL BE ASTM A325-X TYPE 1. BOLTS SHALL BE ¾" DIAMETER. ALL HOLES SHALL BE STANDARD DIAMETER - NO OVERSIZED HOLES. ALL CONNECTIONS SHALL BE FABRICATED AND ASSEMBLED AS SLIP-CRITICAL CONNECTIONS. DESIGN ASSUMED CLASS B FAYING SURFACE FOR SLIP RESISTANCE.

LEGEND

◧ DIAPHRAGMS SHALL BE PLACED 4" ABOVE THE TOP OF THE HIGHER BOTTOM FLANGE OF ADJACENT GIRDERS. DIAPHRAGMS ARE 4" MIN. TO 1'-2" MAX. ABOVE BOTTOM FLANGE.

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STATE OF WISCONSIN
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STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D MAM

DIAPHRAGMS

SHEET 37 OF 62

799

SCALE = 1 IN:1.5 FT

8

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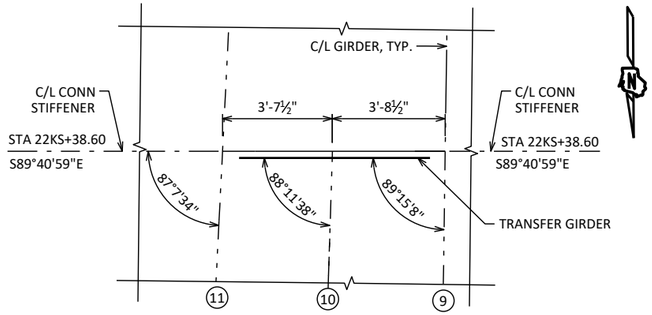
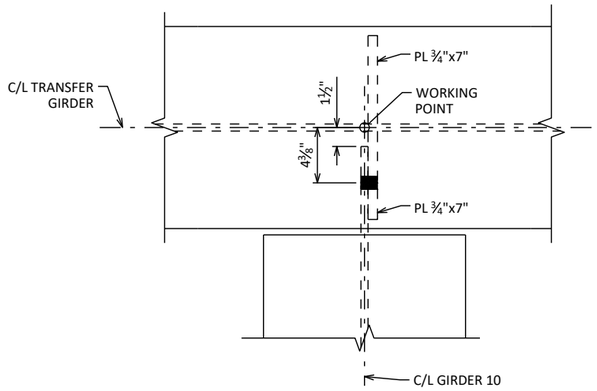
STATE PROJECT NUMBER

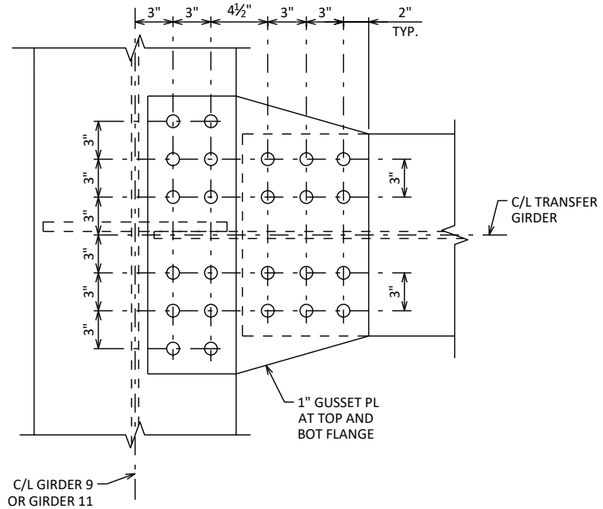
1060-27-74



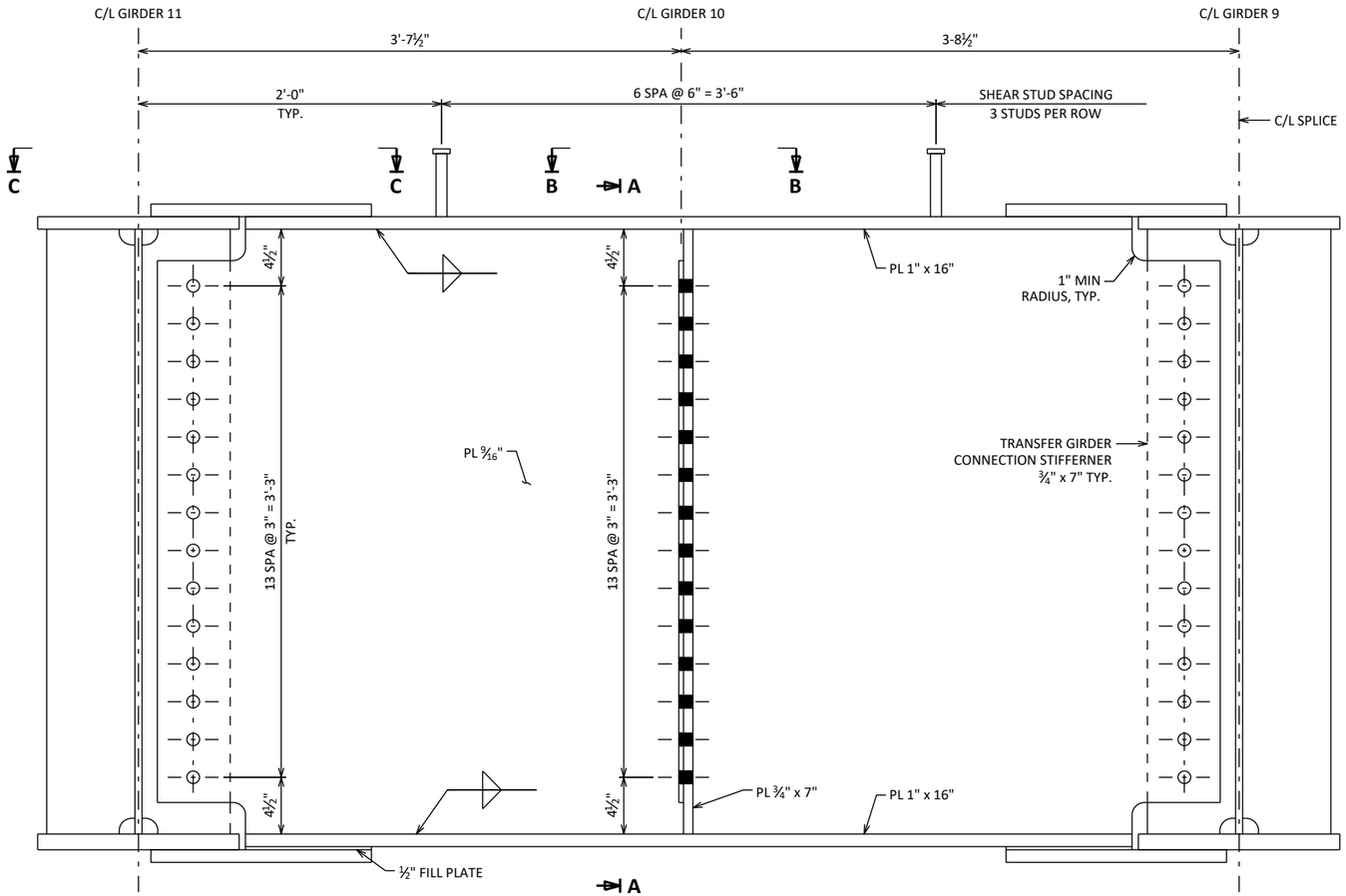
PART FRAMING PLAN - GIRDER 10



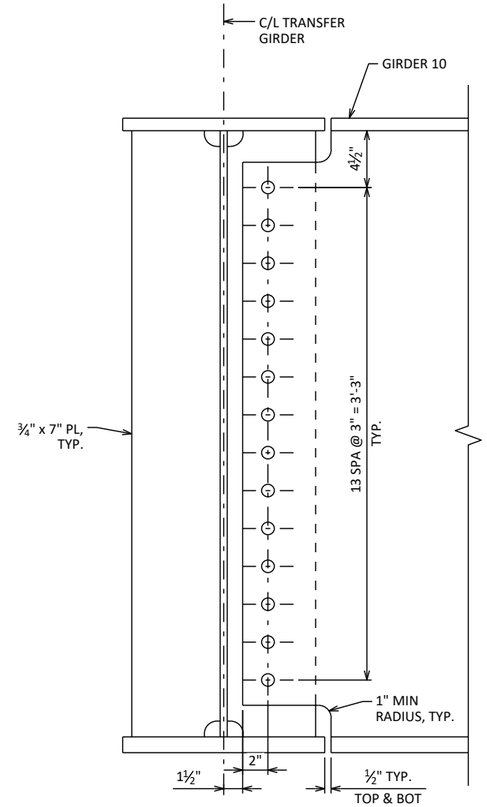
VIEW B-B



VIEW C-C



TRANSFER GIRDER ELEVATION



SECTION A-A

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D MAM

TRANSFER GIRDER

SHEET 38 OF 62

800

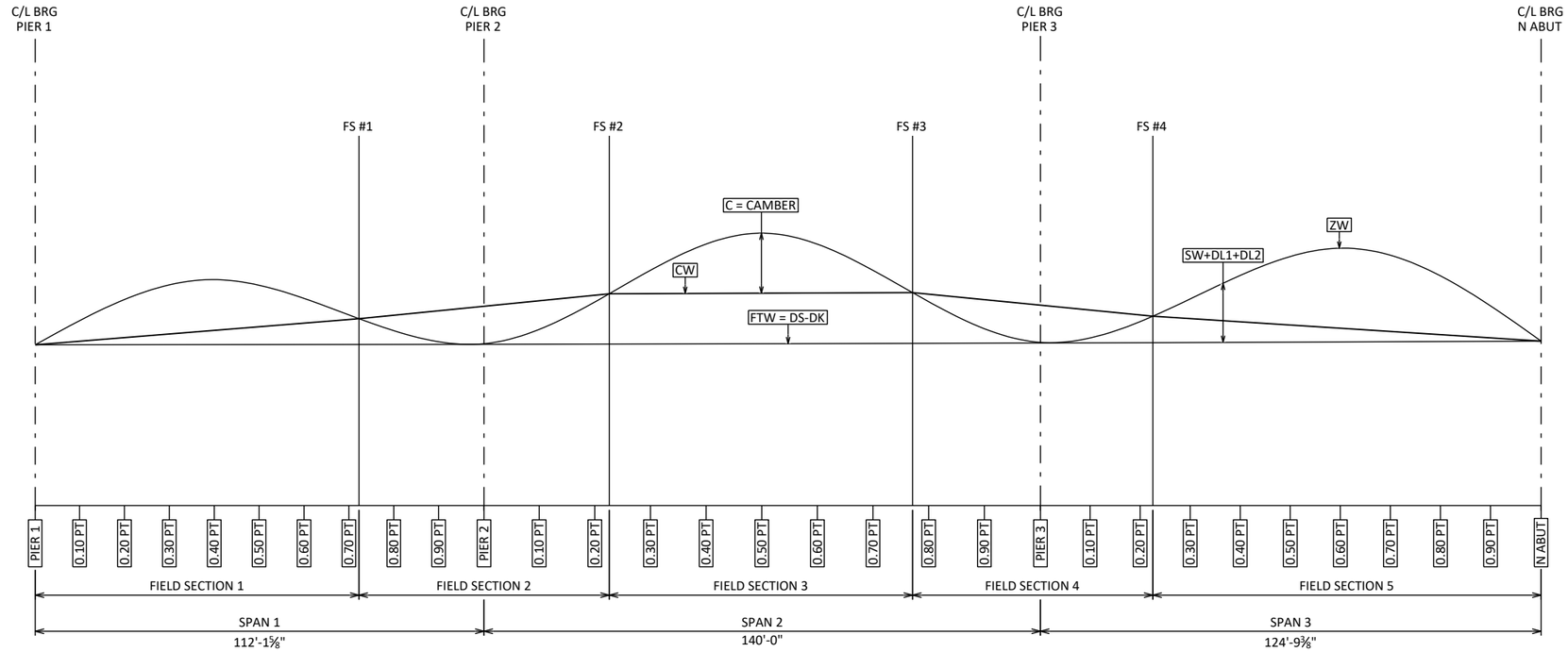
SCALE = 1 IN:1 FT

8

8

STATE PROJECT NUMBER

1060-27-74



LEGEND

0.10 PT — INTERMEDIATE ELEVATION POINT CORRESPONDING TO TENTH POINT WITHIN SPAN.

CAMBER DIAGRAM

VERTICAL PROFILE AND DEFLECTIONS ARE EXAGGERATED TO DIFFERENT DEGREES. THE CAMBERS SHOWN ON THIS DIAGRAM ARE SCHEMATIC ONLY. DIMENSIONS SHOWN ARE ALONG R/L KS.

TABULATED ELEVATIONS

FTW FINISHED ELEVATION AT TOP OF WEB.

DS FINISHED ELEVATION AT TOP OF DECK SLAB.

TES TOP OF ERECTED STEEL ELEVATION, INCLUDING SPLICE PLATE THICKNESS WHERE APPLICABLE.
= ZW + PL - SW

ZW TOP OF WEB ELEVATION NEGLECTING ALL DEFLECTIONS.
= DS +SW + DL1+ DL2 - DK

CW ELEVATION OF CHORD LINES JOINING TOP OF WEB ELEVATION AT 'ZW' AT FIELD SPLICES AND END SUPPORTS.

BLK BLOCKING HEIGHT TO UNDEFLECTED SHAPE. BLOCKING HEIGHT IS MEASURED TO BOTTOM OF WEB AND DOES NOT TAKE INTO ACCOUNT BOTTOM FLANGE THICKNESS, SPLICE PLATES, ETC.

TABULATED DEFLECTIONS

SW SELF-WEIGHT OF STEEL GIRDERS, INCLUDING ALL DIAPHRAGMS, STIFFENERS AND BRACING.

DL1 CONCRETE DECK SLAB AND HAUNCHES APPLIED TO BARE STEEL SECTION.

DL2 PARAPETS AND SIDEWALK APPLIED TO COMPOSITE SECTION.

CALCULATED VALUES

PL = THICKNESS OF TOP FLANGE PLUS ANY FILLER AND SPLICE PLATES

DK = DECK ASSEMBLY THICKNESS FROM TOP OF WEB TO FINISHED GADE

= 3½" HAUNCH + 8½" SLAB = 12" = 1.00 FT

C = CAMBER = ZW - CW

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D MAM

CAMBER DIAGRAM

SHEET 39 OF 62

801

SCALE = N/A

FIELD SECTION #1

LOC	VALUE (SEE NOTE 1)	POSITION ALONG GIRDER AND STATION								
		PIER 1 C/L BRG	0.10 PT SPAN 1	0.20 PT SPAN 1	0.30 PT SPAN 1	0.40 PT SPAN 1	0.50 PT SPAN 1	0.60 PT SPAN 1	0.70 PT SPAN 1	FS #1 SPAN 1
GIRDER 1	DS	649.93	649.94	649.97	650.00	650.04	650.07	650.11	650.14	650.16
	TES	649.01	649.04	649.08	649.12	649.16	649.18	649.21	649.23	649.34
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	648.93	648.96	649.00	649.04	649.08	649.10	649.13	649.14	649.16
	CW	648.93	648.96	648.99	649.02	649.05	649.08	649.11	649.14	649.16
	SW	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
	DL1	0.00	0.01	0.02	0.02	0.02	0.02	0.01	0.00	0.00
	DL2	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
	C	0.00	0.00	0.01	0.02	0.03	0.02	0.02	0.00	0.00
	BLK	0.01								0.24
GIRDER 2	DS	650.00	650.02	650.06	650.10	650.14	650.18	650.21	650.25	650.27
	TES	649.08	649.13	649.18	649.23	649.28	649.31	649.33	649.35	649.46
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.00	649.05	649.11	649.16	649.20	649.23	649.25	649.27	649.28
	CW	649.00	649.04	649.07	649.11	649.15	649.19	649.22	649.26	649.28
	SW	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00
	DL1	0.00	0.02	0.04	0.05	0.05	0.05	0.03	0.02	0.01
	DL2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.01	0.03	0.05	0.05	0.05	0.02	0.01	0.00
	BLK	0.08								0.36
GIRDER 3	DS	650.14	650.19	650.25	650.29	650.33	650.37	650.41	650.45	650.47
	TES	649.22	649.31	649.39	649.45	649.49	649.53	649.55	649.57	649.67
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.14	649.23	649.32	649.38	649.43	649.46	649.48	649.49	649.50
	CW	649.14	649.19	649.24	649.28	649.33	649.38	649.43	649.48	649.50
	SW	0.00	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.01
	DL1	0.00	0.03	0.06	0.07	0.08	0.07	0.06	0.04	0.03
	DL2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.04	0.08	0.10	0.09	0.08	0.05	0.02	0.00
	BLK	0.22								0.58
GIRDER 4	DS	650.28	650.36	650.44	650.48	650.53	650.57	650.61	650.66	650.68
	TES	649.36	649.49	649.61	649.67	649.73	649.76	649.78	649.79	649.89
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.28	649.42	649.55	649.61	649.67	649.70	649.71	649.72	649.72
	CW	649.28	649.34	649.40	649.46	649.52	649.58	649.63	649.69	649.72
	SW	0.00	0.01	0.02	0.02	0.02	0.02	0.02	0.01	0.01
	DL1	0.00	0.05	0.09	0.11	0.12	0.11	0.08	0.05	0.04
	DL2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.08	0.15	0.16	0.16	0.12	0.07	0.03	0.00
	BLK	0.36								0.80
GIRDER 5	DS	650.38	650.42	650.47	650.51	650.56	650.60	650.65	650.69	650.72
	TES	649.46	649.57	649.67	649.74	649.81	649.84	649.87	649.87	649.97
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.38	649.50	649.61	649.69	649.76	649.79	649.81	649.81	649.81
	CW	649.38	649.44	649.49	649.55	649.61	649.66	649.72	649.78	649.81
	SW	0.00	0.01	0.02	0.03	0.03	0.03	0.03	0.02	0.02
	DL1	0.00	0.06	0.11	0.15	0.16	0.15	0.13	0.09	0.07
	DL2	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00
	C	0.00	0.06	0.12	0.14	0.15	0.13	0.09	0.03	0.00
	BLK	0.46								0.89
GIRDER 6	DS	650.24	650.25	650.29	650.34	650.38	650.43	650.48	650.53	650.56
	TES	649.32	649.42	649.53	649.63	649.69	649.72	649.73	649.73	649.82
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.24	649.36	649.48	649.59	649.65	649.68	649.69	649.67	649.66
	CW	649.24	649.30	649.35	649.41	649.46	649.52	649.58	649.63	649.66
	SW	0.00	0.02	0.03	0.04	0.05	0.04	0.03	0.02	0.02
	DL1	0.00	0.08	0.15	0.19	0.21	0.19	0.16	0.11	0.08
	DL2	0.00	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01
	C	0.00	0.06	0.13	0.18	0.19	0.16	0.11	0.04	0.00
	BLK	0.32								0.74

FIELD SECTION #1

LOC	VALUE (SEE NOTE 1)	POSITION ALONG GIRDER AND STATION								
		PIER 1 C/L BRG	0.10 PT SPAN 1	0.20 PT SPAN 1	0.30 PT SPAN 1	0.40 PT SPAN 1	0.50 PT SPAN 1	0.60 PT SPAN 1	0.70 PT SPAN 1	FS #1 SPAN 1
GIRDER 7	DS	650.1	650.09	650.11	650.16	650.21	650.26	650.31	650.36	650.39
	TES	649.18	649.27	649.38	649.49	649.56	649.60	649.62	649.61	649.70
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.10	649.21	649.33	649.46	649.54	649.58	649.58	649.56	649.55
	CW	649.10	649.16	649.22	649.28	649.34	649.40	649.46	649.52	649.55
	SW	0.00	0.02	0.04	0.05	0.06	0.06	0.05	0.04	0.03
	DL1	0.00	0.09	0.16	0.22	0.24	0.23	0.20	0.15	0.12
	DL2	0.00	0.01	0.02	0.03	0.03	0.03	0.03	0.02	0.02
	C	0.00	0.05	0.11	0.17	0.20	0.18	0.12	0.04	0.00
	BLK	0.18								0.63
GIRDER 8	DS	649.96	649.91	649.93	649.98	650.04	650.09	650.15	650.2	650.225
	TES	649.04	649.10	649.21	649.32	649.41	649.46	649.48	649.46	649.55
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	648.96	649.04	649.18	649.30	649.40	649.44	649.45	649.42	649.40
	CW	648.96	649.02	649.08	649.14	649.20	649.26	649.31	649.37	649.40
	SW	0.00	0.03	0.05	0.06	0.07	0.07	0.06	0.04	0.04
	DL1	0.00	0.09	0.16	0.21	0.23	0.23	0.20	0.15	0.12
	DL2	0.00	0.02	0.04	0.05	0.05	0.05	0.05	0.03	0.03
	C	0.00	0.02	0.10	0.17	0.20	0.18	0.14	0.05	0.00
	BLK	0.04								0.48
GIRDER 9	DS	649.92	649.85	649.86	649.91	649.96	650.01	650.06	650.11	650.135
	TES	649.00	649.05	649.15	649.27	649.34	649.38	649.39	649.37	649.46
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	648.92	648.99	649.12	649.25	649.34	649.37	649.37	649.34	649.32
	CW	648.92	648.97	649.03	649.08	649.13	649.18	649.24	649.29	649.32
	SW	0.00	0.03	0.05	0.07	0.08	0.07	0.06	0.04	0.04
	DL1	0.00	0.09	0.16	0.21	0.23	0.23	0.19	0.14	0.11
	DL2	0.00	0.03	0.05	0.06	0.07	0.07	0.06	0.04	0.03
	C	0.00	0.02	0.10	0.17	0.21	0.19	0.13	0.05	0.00
	BLK	0.00								0.40
GIRDER 10	DS	---	---	---	---	---	---	---	---	---
	TES	---	---	---	---	---	---	---	---	---
	DK	---	---	---	---	---	---	---	---	---
	ZW	---	---	---	---	---	---	---	---	---
	CW	---	---	---	---	---	---	---	---	---
	SW	---	---	---	---	---	---	---	---	---
	DL1	---	---	---	---	---	---	---	---	---
	DL2	---	---	---	---	---	---	---	---	---
	C	---	---	---	---	---	---	---	---	---
	BLK	---	---	---	---	---	---	---	---	---
GIRDER 11	DS	649.92	649.85	649.86	649.9	649.95	649.99	650.03	650.08	650.1
	TES	649.00	649.06	649.17	649.28	649.36	649.39	649.38	649.36	649.43
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	648.92	649.01	649.15	649.27	649.36	649.39	649.36	649.32	649.29
	CW	648.92	648.97	649.02	649.07	649.12	649.17	649.22	649.26	649.29
	SW	0.00	0.03	0.06	0.08	0.08	0.08	0.07	0.05	0.04
	DL1	0.00	0.09	0.16	0.22	0.24	0.23	0.19	0.14	0.11
	DL2	0.00	0.04	0.06	0.08	0.09	0.09	0.07	0.05	0.04
	C	0.00	0.04	0.13	0.21	0.24	0.22	0.15	0.06	0.00
	BLK	0.00								0.37

STATE PROJECT NUMBER

1060-27-74

LEGEND

0.10 PT — INTERMEDIATE ELEVATION POINT CORRESPONDING TO TENTH POINT WITHIN SPAN.

NOTES

1. SEE CAMBER DIAGRAM FOR DESCRIPTION OF VALUES SHOWN IN TABLE.
2. ALL TABULATED VALUES ARE IN DECIMALS OF A FOOT.
3. POSITIVE DEFLECTIONS ARE DOWNWARD.
4. POSITIVE CAMBER IS UPWARD RELATIVE TO A CHORD LINE JOINING THE FIELD SECTION ENDPOINTS.
5. CAMBER DIAGRAMS HAVE BEEN DEVELOPED ASSUMING THE DECK WEST OF THE LONGITUDINAL JOINT IS POURED FIRST AND IS ALLOWED TO CURE PRIOR TO POURING THE NORTH SIDE. VERIFY THE VALIDITY OF THIS ASSUMPTION BASED ON THE SELECTED POUR SEQUENCE. ADJUST CAMBER TABLES AS NECESSARY FOR ANY EXPECTED VARIATIONS EXCEEDING 0.04 FT (½").
6. CAMBER GIRDERS TO THE VALUES SHOWN, AFTER INCORPORATING ANY REQUIRED ADJUSTMENTS FOR THE SELECTED POUR SEQUENCE.
7. TOP OF ERECTED STEEL ELEVATIONS AT SUPPORTS AND FIELD SPLICES SHALL BE CHECKED AFTER ERECTION IS COMPLETE AND BEFORE BOLTED CONNECTIONS ARE FINALLY TORQUED.

   IF SURVEYED ELEVATIONS DIFFER FROM THOSE EXPECTED BY MORE THAN 0.02 FT (¼") AT SUPPORTS OR 0.083 FT (1") AT FIELD SPLICES, CORRECTIVE MEASURES SHALL BE TAKEN BEFORE FURTHER CONSTRUCTION OPERATIONS MAY PROCEED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D MAM

CAMBER AND DECK ELEVATIONS: FIELD SECTION 1

SHEET 40 OF 62

802

SCALE = N/A

8

8

FIELD SECTION #2

LOC	VALUE (SEE NOTE 1)	POSITION ALONG GIRDER AND STATION						
		FS #1 SPAN 1	0.80 PT SPAN 1	0.90 PT SPAN 1	PIER 2 C/L BRG	0.10 PT SPAN 2	0.20 PT SPAN 2	FS #2 SPAN 2
GIRDER 1	DS	650.16	650.18	650.21	650.25	650.31	650.36	650.39
	TES	649.34	649.30	649.40	649.45	649.55	649.59	649.71
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.16	649.17	649.20	649.25	649.37	649.49	649.55
	CW	649.16	649.19	649.25	649.31	649.41	649.51	649.55
	SW	0.00	0.00	0.00	0.00	0.01	0.02	0.02
	DL1	0.00	0.00	0.00	0.00	0.03	0.06	0.08
	DL2	0.00	0.00	0.00	0.00	0.02	0.04	0.06
	C	0.00	-0.02	-0.05	-0.06	-0.04	-0.02	0.00
	BLK	0.24						0.63
GIRDER 2	DS	650.27	650.29	650.33	650.37	650.42	650.48	650.51
	TES	649.46	649.42	649.52	649.57	649.65	649.69	649.80
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.28	649.29	649.33	649.37	649.46	649.58	649.64
	CW	649.28	649.31	649.37	649.43	649.51	649.60	649.64
	SW	0.00	0.00	0.00	0.00	0.01	0.02	0.02
	DL1	0.01	0.01	0.00	0.00	0.03	0.07	0.09
	DL2	0.00	0.00	0.00	0.00	0.01	0.02	0.03
	C	0.00	-0.02	-0.04	-0.06	-0.05	-0.02	0.00
	BLK	0.36						0.72
GIRDER 3	DS	650.47	650.49	650.54	650.58	650.63	650.69	650.72
	TES	649.67	649.63	649.74	649.78	649.85	649.88	649.98
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.50	649.51	649.54	649.58	649.66	649.77	649.82
	CW	649.50	649.53	649.58	649.63	649.71	649.78	649.82
	SW	0.01	0.00	0.00	0.00	0.01	0.02	0.02
	DL1	0.03	0.02	0.00	0.00	0.02	0.06	0.07
	DL2	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	C	0.00	-0.02	-0.04	-0.05	-0.05	-0.02	0.00
	BLK	0.58						0.90
GIRDER 4	DS	650.68	650.70	650.74	650.79	650.84	650.90	650.93
	TES	649.89	649.85	649.94	649.99	650.06	650.08	650.18
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.72	649.73	649.74	649.80	649.87	649.97	650.02
	CW	649.72	649.75	649.80	649.85	649.92	649.99	650.02
	SW	0.01	0.00	0.00	0.00	0.01	0.02	0.02
	DL1	0.04	0.02	0.00	0.00	0.03	0.06	0.08
	DL2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C	0.00	-0.02	-0.06	-0.06	-0.05	-0.02	0.00
	BLK	0.80						1.10
GIRDER 5	DS	650.72	650.74	650.79	650.83	650.89	650.95	650.98
	TES	649.97	649.92	650.01	650.03	650.09	650.10	650.19
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.81	649.81	649.82	649.83	649.90	649.99	650.03
	CW	649.81	649.83	649.87	649.91	649.96	650.00	650.03
	SW	0.02	0.01	0.00	0.00	0.00	0.01	0.01
	DL1	0.07	0.05	0.02	0.00	0.01	0.03	0.05
	DL2	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01
	C	0.00	-0.02	-0.05	-0.08	-0.06	-0.02	0.00
	BLK	0.89						1.11
GIRDER 6	DS	650.56	650.58	650.63	650.67	650.73	650.79	650.82
	TES	649.82	649.76	649.84	649.86	649.93	649.94	650.03
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.66	649.65	649.65	649.66	649.73	649.82	649.86
	CW	649.66	649.68	649.72	649.75	649.80	649.84	649.86
	SW	0.02	0.01	0.00	0.00	0.00	0.01	0.01
	DL1	0.08	0.05	0.01	0.00	0.01	0.03	0.05
	DL2	0.01	0.01	0.00	0.00	-0.01	-0.01	-0.01
	C	0.00	-0.03	-0.07	-0.09	-0.07	-0.02	0.00
	BLK	0.74						0.94

FIELD SECTION #2

LOC	VALUE (SEE NOTE 1)	POSITION ALONG GIRDER AND STATION						
		FS #1 * SPAN 1	0.80 PT SPAN 1	0.90 PT SPAN 1	PIER 2 C/L BRG	0.10 PT SPAN 2	0.20 PT SPAN 2	FS #2 SPAN 2
GIRDER 7	DS	650.39	650.42	650.47	650.52	650.57	650.63	650.66
	TES	649.70	651.02	649.71	649.72	649.76	649.76	649.85
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.55	649.54	649.52	649.52	649.56	649.64	649.68
	CW	649.55	649.57	649.59	649.61	649.64	649.67	649.68
	SW	0.03	0.02	0.01	0.00	0.00	0.00	0.01
	DL1	0.12	0.09	0.03	0.00	0.00	0.01	0.03
	DL2	0.02	0.01	0.01	0.00	-0.01	-0.01	-0.01
	C	0.00	-0.02	-0.07	-0.09	-0.08	-0.03	0.00
	BLK	0.63						0.76
GIRDER 8	DS	650.23	650.25	650.31	650.36	650.42	650.47	650.50
	TES	649.55	650.86	649.55	649.56	649.60	650.97	649.68
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.40	649.39	649.37	649.36	649.40	649.47	649.51
	CW	649.40	649.41	649.44	649.46	649.48	649.50	649.51
	SW	0.04	0.03	0.01	0.00	0.00	0.00	0.00
	DL1	0.12	0.09	0.04	0.00	-0.01	0.00	0.01
	DL2	0.03	0.02	0.01	0.00	0.00	0.00	0.00
	C	0.00	-0.03	-0.07	-0.10	-0.07	-0.03	0.00
	BLK	0.48						0.59
GIRDER 9	DS	650.14	650.16	650.22	650.27	650.32	650.37	650.40
	TES	649.46	650.77	649.46	649.47	649.50	650.86	649.58
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.32	649.29	649.28	649.27	649.30	649.37	649.41
	CW	649.32	649.32	649.34	649.36	649.38	649.40	649.41
	SW	0.04	0.03	0.01	0.00	0.00	0.00	0.00
	DL1	0.11	0.08	0.03	0.00	-0.01	-0.01	-0.01
	DL2	0.03	0.02	0.01	0.00	0.00	0.01	0.01
	C	0.00	-0.03	-0.07	-0.09	-0.08	-0.03	0.00
	BLK	0.40						0.49
GIRDER 10	DS	650.11	650.11	650.16	650.20	650.24	650.29	650.32
	TES	650.76	650.70	649.39	649.40	649.43	650.80	649.51
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.30	649.22	649.20	649.20	649.23	649.30	649.34
	CW	649.30	649.22	649.25	649.28	649.31	649.33	649.34
	SW	0.04	0.02	0.01	0.00	0.00	0.00	0.01
	DL1	0.11	0.07	0.03	0.00	-0.01	-0.01	-0.01
	DL2	0.04	0.02	0.01	0.00	0.01	0.02	0.03
	C	0.00	0.00	-0.05	-0.08	-0.07	-0.03	0.00
	BLK	---						0.50
GIRDER 11	DS	650.10	650.12	650.16	650.21	650.25	650.30	650.32
	TES	649.43	650.73	649.40	649.41	649.45	650.84	649.55
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.29	649.26	649.21	649.21	649.25	649.34	649.38
	CW	649.29	649.30	649.32	649.34	649.35	649.37	649.38
	SW	0.04	0.03	0.01	0.00	0.00	0.00	0.01
	DL1	0.11	0.08	0.03	0.00	-0.01	0.00	0.00
	DL2	0.04	0.03	0.01	0.00	0.01	0.04	0.05
	C	0.00	-0.04	-0.10	-0.13	-0.10	-0.03	0.00
	BLK	0.37						0.46

STATE PROJECT NUMBER

1060-27-74

LEGEND

0.10 PT — INTERMEDIATE ELEVATION POINT CORRESPONDING TO TENTH POINT WITHIN SPAN.

* — BEGINNING OF GIRDER LINE 10

NOTES

1. SEE CAMBER DIAGRAM FOR DESCRIPTION OF VALUES SHOWN IN TABLE.
2. ALL TABULATED VALUES ARE IN DECIMALS OF A FOOT.
3. POSITIVE DEFLECTIONS ARE DOWNWARD.
4. POSITIVE CAMBER IS UPWARD RELATIVE TO A CHORD LINE JOINING THE FIELD SECTION ENDPOINTS.
5. CAMBER DIAGRAMS HAVE BEEN DEVELOPED ASSUMING THE DECK WEST OF THE LONGITUDINAL JOINT IS POURED FIRST AND IS ALLOWED TO CURE PRIOR TO POURING THE NORTH SIDE. VERIFY THE VALIDITY OF THIS ASSUMPTION BASED ON THE SELECTED POUR SEQUENCE. ADJUST CAMBER TABLES AS NECESSARY FOR ANY EXPECTED VARIATIONS EXCEEDING 0.04 FT (½").
6. CAMBER GIRDERS TO THE VALUES SHOWN, AFTER INCORPORATING ANY REQUIRED ADJUSTMENTS FOR THE SELECTED POUR SEQUENCE.
7. TOP OF ERECTED STEEL ELEVATIONS AT SUPPORTS AND FIELD SPLICES SHALL BE CHECKED AFTER ERECTION IS COMPLETE AND BEFORE BOLTED CONNECTIONS ARE FINALLY TORQUED.

   IF SURVEYED ELEVATIONS DIFFER FROM THOSE EXPECTED BY MORE THAN 0.02 FT (¼") AT SUPPORTS OR 0.083 FT (1") AT FIELD SPLICES, CORRECTIVE MEASURES SHALL BE TAKEN BEFORE FURTHER CONSTRUCTION OPERATIONS MAY PROCEED.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D MAM

CAMBER AND DECK ELEVATIONS: FIELD SECTION 2

SHEET 41 OF 62

803

SCALE = N/A

FIELD SECTION #3

LOC	VALUE (SEE NOTE 1)	POSITION ALONG GIRDER AND STATION						
		FS #2 SPAN 2	0.30 PT SPAN 2	0.40 PT SPAN 2	0.50 PT SPAN 2	0.60 PT SPAN 2	0.70 PT SPAN 2	FS #3 SPAN 2
GIRDER 1	DS	650.39	650.42	650.48	650.53	650.59	650.65	650.65
	TES	649.71	649.67	649.77	649.82	649.85	649.86	649.95
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.55	649.62	649.72	649.78	649.80	649.80	649.80
	CW	649.55	649.58	649.64	649.69	649.75	649.80	649.80
	SW	0.02	0.03	0.04	0.04	0.03	0.02	0.02
	DL1	0.08	0.10	0.12	0.13	0.11	0.07	0.07
	DL2	0.06	0.07	0.08	0.08	0.07	0.05	0.05
	C	0.00	0.04	0.09	0.09	0.06	0.00	0.00
	BLK	1.07						1.32
GIRDER 2	DS	650.51	650.54	650.59	650.65	650.71	650.76	650.76
	TES	649.80	649.76	649.84	649.90	649.93	649.94	650.03
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.64	649.70	649.79	649.85	649.88	649.88	649.88
	CW	649.64	649.67	649.72	649.77	649.82	649.88	649.88
	SW	0.02	0.03	0.03	0.04	0.03	0.02	0.02
	DL1	0.09	0.11	0.13	0.13	0.12	0.08	0.08
	DL2	0.03	0.03	0.03	0.03	0.03	0.02	0.02
	C	0.00	0.03	0.07	0.08	0.06	0.00	0.00
	BLK	1.02						1.26
GIRDER 3	DS	650.72	650.75	650.80	650.86	650.92	650.97	650.97
	TES	649.98	649.93	650.01	650.07	650.11	650.12	650.22
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.82	649.87	649.96	650.02	650.05	650.06	650.06
	CW	649.82	649.85	649.90	649.95	650.01	650.06	650.06
	SW	0.02	0.02	0.03	0.03	0.03	0.02	0.02
	DL1	0.07	0.09	0.12	0.12	0.10	0.07	0.07
	DL2	0.01	0.01	0.01	0.00	0.00	0.00	0.00
	C	0.00	0.03	0.06	0.07	0.05	0.00	0.00
	BLK	0.92						1.16
GIRDER 4	DS	650.93	650.96	651.01	651.07	651.13	651.18	651.18
	TES	650.18	650.13	650.20	650.25	650.29	650.30	650.39
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	650.02	650.07	650.14	650.19	650.22	650.23	650.23
	CW	650.02	650.05	650.09	650.14	650.18	650.23	650.23
	SW	0.02	0.02	0.03	0.03	0.02	0.01	0.01
	DL1	0.08	0.09	0.11	0.10	0.08	0.04	0.04
	DL2	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.01
	C	0.00	0.03	0.05	0.06	0.04	0.00	0.00
	BLK	0.84						1.05
GIRDER 5	DS	650.98	651.00	651.06	651.12	651.17	651.23	651.23
	TES	650.19	650.14	650.22	650.29	650.32	650.36	650.45
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	650.03	650.07	650.16	650.23	650.26	650.29	650.29
	CW	650.03	650.06	650.12	650.17	650.23	650.29	650.29
	SW	0.01	0.02	0.02	0.03	0.02	0.02	0.02
	DL1	0.05	0.06	0.09	0.09	0.08	0.05	0.05
	DL2	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
	C	0.00	0.01	0.05	0.05	0.03	0.00	0.00
	BLK	0.65						0.91
GIRDER 6	DS	650.82	650.84	650.90	650.96	651.02	651.07	651.07
	TES	650.03	649.97	650.05	650.11	650.15	650.18	650.27
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.86	649.91	649.99	650.05	650.08	650.10	650.10
	CW	649.86	649.89	649.94	650.00	650.05	650.10	650.10
	SW	0.01	0.02	0.02	0.02	0.02	0.01	0.01
	DL1	0.05	0.06	0.08	0.08	0.06	0.03	0.03
	DL2	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
	C	0.00	0.02	0.04	0.05	0.04	0.00	0.00
	BLK	0.76						1.00

FIELD SECTION #3

LOC	VALUE (SEE NOTE 1)	POSITION ALONG GIRDER AND STATION						
		FS #2 SPAN 2	0.30 PT SPAN 2	0.40 PT SPAN 2	0.50 PT SPAN 2	0.60 PT SPAN 2	0.70 PT SPAN 2	FS #3 SPAN 2
GIRDER 7	DS	650.66	650.69	650.74	650.80	650.86	650.92	650.92
	TES	649.85	649.80	649.87	649.94	650.00	650.03	650.13
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.68	649.73	649.81	649.88	649.93	649.96	649.96
	CW	649.68	649.71	649.78	649.84	649.90	649.96	649.96
	SW	0.01	0.01	0.02	0.02	0.02	0.01	0.01
	DL1	0.03	0.04	0.06	0.07	0.06	0.03	0.03
	DL2	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00
	C	0.00	0.02	0.03	0.04	0.03	0.00	0.00
	BLK	0.76						1.04
GIRDER 8	DS	650.50	650.53	650.59	650.64	650.70	650.76	650.76
	TES	649.68	649.63	649.71	649.77	649.82	649.86	649.95
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.51	649.55	649.64	649.70	649.75	649.79	649.79
	CW	649.51	649.54	649.60	649.66	649.72	649.79	649.79
	SW	0.00	0.01	0.01	0.02	0.01	0.01	0.01
	DL1	0.01	0.02	0.03	0.04	0.03	0.01	0.01
	DL2	0.00	0.00	0.00	0.01	0.01	0.01	0.01
	C	0.00	0.01	0.04	0.04	0.03	0.00	0.00
	BLK	0.59						0.87
GIRDER 9	DS	650.40	650.43	650.48	650.53	650.59	650.64	650.64
	TES	649.58	649.53	649.59	649.65	649.70	649.73	649.82
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.41	649.45	649.52	649.58	649.63	649.66	649.66
	CW	649.41	649.44	649.49	649.55	649.60	649.66	649.66
	SW	0.00	0.01	0.01	0.02	0.01	0.01	0.01
	DL1	-0.01	0.00	0.01	0.01	0.00	-0.01	-0.01
	DL2	0.01	0.01	0.02	0.03	0.02	0.02	0.02
	C	0.00	0.01	0.03	0.03	0.03	0.00	0.00
	BLK	0.49						0.74
GIRDER 10	DS	650.32	650.34	650.39	650.44	650.49	650.54	650.54
	TES	649.51	649.46	649.53	649.58	649.62	649.64	649.74
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.34	649.38	649.46	649.52	649.55	649.57	649.57
	CW	649.34	649.37	649.42	649.47	649.52	649.57	649.57
	SW	0.01	0.01	0.01	0.02	0.02	0.01	0.01
	DL1	-0.01	0.00	0.00	0.01	0.00	-0.01	-0.01
	DL2	0.03	0.04	0.05	0.05	0.05	0.03	0.03
	C	0.00	0.01	0.04	0.05	0.03	-0.01	0.00
	BLK	0.50						0.73
GIRDER 11	DS	650.32	650.34	650.39	650.43	650.47	650.52	650.52
	TES	649.55	649.50	649.58	649.62	649.64	649.65	649.74
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.38	649.43	649.51	649.56	649.57	649.58	649.58
	CW	649.38	649.41	649.45	649.49	649.54	649.58	649.58
	SW	0.01	0.01	0.02	0.02	0.02	0.01	0.01
	DL1	0.00	0.01	0.02	0.02	0.02	0.00	0.00
	DL2	0.05	0.06	0.08	0.08	0.07	0.05	0.05
	C	0.00	0.02	0.06	0.06	0.03	-0.01	0.00
	BLK	0.46						0.66

STATE PROJECT NUMBER

1060-27-74

LEGEND

0.10 PT — INTERMEDIATE ELEVATION POINT CORRESPONDING TO TENTH POINT WITHIN SPAN.

NOTES

1. SEE CAMBER DIAGRAM FOR DESCRIPTION OF VALUES SHOWN IN TABLE.
2. ALL TABULATED VALUES ARE IN DECIMALS OF A FOOT.
3. POSITIVE DEFLECTIONS ARE DOWNWARD.
4. POSITIVE CAMBER IS UPWARD RELATIVE TO A CHORD LINE JOINING THE FIELD SECTION ENDPOINTS.
5. CAMBER DIAGRAMS HAVE BEEN DEVELOPED ASSUMING THE DECK WEST OF THE LONGITUDINAL JOINT IS POURED FIRST AND IS ALLOWED TO CURE PRIOR TO POURING THE NORTH SIDE. VERIFY THE VALIDITY OF THIS ASSUMPTION BASED ON THE SELECTED POUR SEQUENCE. ADJUST CAMBER TABLES AS NECESSARY FOR ANY EXPECTED VARIATIONS EXCEEDING 0.04 FT (½").
6. CAMBER GIRDERS TO THE VALUES SHOWN, AFTER INCORPORATING ANY REQUIRED ADJUSTMENTS FOR THE SELECTED POUR SEQUENCE.
7. TOP OF ERECTED STEEL ELEVATIONS AT SUPPORTS AND FIELD SPLICES SHALL BE CHECKED AFTER ERECTION IS COMPLETE AND BEFORE BOLTED CONNECTIONS ARE FINALLY TORQUED.

   IF SURVEYED ELEVATIONS DIFFER FROM THOSE EXPECTED BY MORE THAN 0.02 FT (¼") AT SUPPORTS OR 0.083 FT (1") AT FIELD SPLICES, CORRECTIVE MEASURES SHALL BE TAKEN BEFORE FURTHER CONSTRUCTION OPERATIONS MAY PROCEED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D MAM

CAMBER AND DECK ELEVATIONS: FIELD SECTION 3

SHEET 42 OF 62

804

SCALE = N/A

8

8

FIELD SECTION #4

LOC	VALUE (SEE NOTE 1)	POSITION ALONG GIRDER AND STATION						
		FS #3 SPAN 2	0.80 PT SPAN 2	0.90 PT SPAN 2	PIER 3 C/L BRG	0.10 PT SPAN 3	0.20 PT SPAN 3	FS #4 SPAN 3
GIRDER 1	DS	650.65	650.70	650.76	650.82	650.87	650.92	650.94
	TES	649.95	649.89	649.97	650.02	650.11	650.15	650.25
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.80	649.78	649.78	649.82	649.91	650.04	650.09
	CW	649.80	649.86	649.91	649.97	650.02	650.07	650.09
	SW	0.02	0.01	0.00	0.00	0.01	0.02	0.02
	DL1	0.07	0.04	0.01	0.00	0.02	0.07	0.09
	DL2	0.05	0.03	0.01	0.00	0.01	0.03	0.04
	C	0.00	-0.08	-0.13	-0.15	-0.11	-0.04	0.00
	BLK	1.32						1.61
GIRDER 2	DS	650.76	650.82	650.88	650.93	650.99	651.04	651.06
	TES	650.03	649.99	650.08	650.13	650.23	650.26	650.36
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.88	649.87	649.89	649.93	650.03	650.16	650.21
	CW	649.88	649.94	650.01	650.07	650.13	650.19	650.21
	SW	0.02	0.01	0.00	0.00	0.01	0.02	0.02
	DL1	0.08	0.04	0.01	0.00	0.03	0.08	0.10
	DL2	0.02	0.01	0.00	0.00	0.01	0.02	0.03
	C	0.00	-0.07	-0.12	-0.14	-0.09	-0.03	0.00
	BLK	1.26						1.59
GIRDER 3	DS	650.97	651.03	651.09	651.14	651.20	651.25	651.27
	TES	650.22	650.18	650.29	650.34	650.43	650.47	650.57
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	650.06	650.07	650.09	650.14	650.24	650.36	650.41
	CW	650.06	650.13	650.20	650.26	650.33	650.39	650.41
	SW	0.02	0.01	0.00	0.00	0.01	0.02	0.02
	DL1	0.07	0.03	0.00	0.00	0.03	0.08	0.11
	DL2	0.00	0.00	0.00	0.00	0.00	0.01	0.01
	C	0.00	-0.06	-0.10	-0.12	-0.08	-0.03	0.00
	BLK	1.16						1.51
GIRDER 4	DS	651.18	651.24	651.30	651.35	651.41	651.46	651.48
	TES	650.39	650.37	650.49	650.56	650.67	650.71	650.80
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	650.23	650.25	650.30	650.37	650.48	650.61	650.66
	CW	650.23	650.31	650.40	650.48	650.55	650.63	650.66
	SW	0.01	0.00	0.00	0.00	0.01	0.03	0.03
	DL1	0.04	0.01	0.00	0.01	0.06	0.12	0.14
	DL2	-0.01	0.00	0.00	0.00	0.00	0.00	0.00
	C	0.00	-0.06	-0.10	-0.11	-0.07	-0.02	0.00
	BLK	1.05						1.48
GIRDER 5	DS	651.23	651.29	651.34	651.40	651.45	651.50	651.52
	TES	650.45	650.43	650.53	650.60	650.68	650.72	650.81
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	650.29	650.31	650.34	650.40	650.49	650.61	650.66
	CW	650.29	650.36	650.43	650.51	650.57	650.64	650.66
	SW	0.02	0.01	0.00	0.00	0.01	0.02	0.03
	DL1	0.05	0.02	0.00	0.00	0.04	0.09	0.12
	DL2	-0.01	0.00	0.00	0.00	0.00	0.00	0.00
	C	0.00	-0.05	-0.10	-0.11	-0.08	-0.02	0.00
	BLK	0.91						1.28
GIRDER 6	DS	651.07	651.13	651.19	651.24	651.29	651.35	651.37
	TES	650.27	650.25	650.38	650.46	650.55	650.60	650.70
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	650.10	650.13	650.18	650.26	650.37	650.50	650.55
	CW	650.10	650.19	650.28	650.37	650.44	650.52	650.55
	SW	0.01	0.00	0.00	0.00	0.01	0.03	0.03
	DL1	0.03	0.00	-0.01	0.02	0.06	0.13	0.15
	DL2	-0.01	0.00	0.00	0.00	0.00	0.00	0.00
	C	0.00	-0.06	-0.10	-0.10	-0.08	-0.02	0.00
	BLK	1.00						1.45

FIELD SECTION #4

LOC	VALUE (SEE NOTE 1)	POSITION ALONG GIRDER AND STATION						
		FS #3 SPAN 2	0.80 PT SPAN 2	0.90 PT SPAN 2	PIER 3 C/L BRG	0.10 PT SPAN 3	0.20 PT SPAN 3	FS #4 SPAN 3
GIRDER 7	DS	650.92	650.97	651.03	651.09	651.14	651.19	651.21
	TES	650.13	650.10	650.22	650.29	650.38	650.41	650.51
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.96	649.98	650.02	650.09	650.19	650.31	650.36
	CW	649.96	650.04	650.12	650.19	650.26	650.33	650.36
	SW	0.01	0.00	0.00	0.00	0.01	0.02	0.03
	DL1	0.03	0.01	-0.01	0.00	0.04	0.10	0.12
	DL2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C	0.00	-0.06	-0.10	-0.10	-0.08	-0.02	0.00
	BLK	1.04						1.44
GIRDER 8	DS	650.76	650.82	650.87	650.93	650.98	651.03	651.05
	TES	649.95	649.94	650.05	650.13	650.22	650.26	650.36
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.79	649.82	649.85	649.93	650.03	650.16	650.21
	CW	649.79	649.87	649.95	650.03	650.11	650.18	650.21
	SW	0.01	0.00	0.00	0.00	0.01	0.02	0.03
	DL1	0.01	-0.01	-0.01	0.00	0.04	0.10	0.13
	DL2	0.01	0.00	0.00	0.00	0.00	0.01	0.01
	C	0.00	-0.05	-0.10	-0.10	-0.08	-0.02	0.00
	BLK	0.87						1.29
GIRDER 9	DS	650.64	650.70	650.75	650.80	650.85	650.90	650.92
	TES	649.82	649.81	649.93	650.00	650.10	650.15	650.25
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.66	649.69	649.73	649.80	649.91	650.05	650.11
	CW	649.66	649.74	649.83	649.92	650.00	650.08	650.11
	SW	0.01	0.00	0.00	0.00	0.01	0.02	0.03
	DL1	-0.01	-0.02	-0.02	0.00	0.05	0.11	0.13
	DL2	0.02	0.01	0.00	0.00	0.01	0.02	0.02
	C	0.00	-0.05	-0.10	-0.12	-0.09	-0.03	0.00
	BLK	0.74						1.19
GIRDER 10	DS	650.54	650.59	650.63	650.68	650.73	650.77	650.79
	TES	649.74	649.71	649.81	649.88	649.99	650.05	650.16
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.57	649.59	649.61	649.68	649.80	649.94	650.01
	CW	649.57	649.66	649.74	649.83	649.91	649.99	650.01
	SW	0.01	0.00	0.00	0.00	0.01	0.02	0.03
	DL1	-0.01	-0.03	-0.02	0.00	0.05	0.11	0.14
	DL2	0.03	0.02	0.00	0.00	0.01	0.04	0.05
	C	0.00	-0.07	-0.13	-0.15	-0.11	-0.04	0.00
	BLK	0.73						1.17
GIRDER 11	DS	650.52	650.56	650.61	650.65	650.69	650.73	650.75
	TES	649.74	649.69	649.79	649.85	649.96	650.03	650.15
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	649.58	649.57	649.59	649.65	649.77	649.93	650.00
	CW	649.58	649.66	649.75	649.83	649.91	649.99	650.00
	SW	0.01	0.00	0.00	0.00	0.01	0.02	0.03
	DL1	0.00	-0.02	-0.02	0.00	0.05	0.11	0.13
	DL2	0.05	0.02	0.00	0.00	0.03	0.07	0.09
	C	0.00	-0.09	-0.16	-0.18	-0.13	-0.05	0.00
	BLK	0.66						1.08

STATE PROJECT NUMBER

1060-27-74

LEGEND

0.10 PT — INTERMEDIATE ELEVATION POINT CORRESPONDING TO TENTH POINT WITHIN SPAN.

NOTES

1. SEE CAMBER DIAGRAM FOR DESCRIPTION OF VALUES SHOWN IN TABLE.
2. ALL TABULATED VALUES ARE IN DECIMALS OF A FOOT.
3. POSITIVE DEFLECTIONS ARE DOWNWARD.
4. POSITIVE CAMBER IS UPWARD RELATIVE TO A CHORD LINE JOINING THE FIELD SECTION ENDPOINTS.
5. CAMBER DIAGRAMS HAVE BEEN DEVELOPED ASSUMING THE DECK WEST OF THE LONGITUDINAL JOINT IS POURED FIRST AND IS ALLOWED TO CURE PRIOR TO POURING THE NORTH SIDE. VERIFY THE VALIDITY OF THIS ASSUMPTION BASED ON THE SELECTED POUR SEQUENCE. ADJUST CAMBER TABLES AS NECESSARY FOR ANY EXPECTED VARIATIONS EXCEEDING 0.04 FT (½").
6. CAMBER GIRDERS TO THE VALUES SHOWN, AFTER INCORPORATING ANY REQUIRED ADJUSTMENTS FOR THE SELECTED POUR SEQUENCE.
7. TOP OF ERECTED STEEL ELEVATIONS AT SUPPORTS AND FIELD SPLICES SHALL BE CHECKED AFTER ERECTION IS COMPLETE AND BEFORE BOLTED CONNECTIONS ARE FINALLY TORQUED.

   IF SURVEYED ELEVATIONS DIFFER FROM THOSE EXPECTED BY MORE THAN 0.02 FT (¼") AT SUPPORTS OR 0.083 FT (1") AT FIELD SPLICES, CORRECTIVE MEASURES SHALL BE TAKEN BEFORE FURTHER CONSTRUCTION OPERATIONS MAY PROCEED.

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D MAM

CAMBER AND DECK ELEVATIONS: FIELD SECTION 4

SHEET 43 OF 62

805

SCALE = N/A

FIELD SECTION #5

LOC	VALUE (SEE NOTE 1)	POSITION ALONG GIRDER AND STATION								
		FS #4 SPAN 3	0.30 PT SPAN 3	0.40 PT SPAN 3	0.50 PT SPAN 3	0.60 PT SPAN 3	0.70 PT SPAN 3	0.80 PT SPAN 3	0.90 PT SPAN 3	N ABUT C/L BRG
GIRDER 1	DS	650.94	650.97	651.02	651.07	651.12	651.17	651.23	651.28	651.33
	TES	650.25	650.23	650.35	650.45	650.51	650.53	650.53	650.48	650.41
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	650.09	650.18	650.31	650.41	650.48	650.50	650.48	650.42	650.33
	CW	650.09	650.11	650.14	650.17	650.21	650.24	650.27	650.30	650.33
	SW	0.02	0.03	0.04	0.05	0.05	0.05	0.04	0.02	0.00
	DL1	0.09	0.12	0.16	0.20	0.21	0.19	0.14	0.08	0.00
	DL2	0.04	0.06	0.08	0.10	0.10	0.09	0.07	0.04	0.00
	C	0.00	0.06	0.16	0.24	0.27	0.26	0.21	0.12	0.00
	BLK	1.61								1.85
GIRDER 2	DS	651.06	651.09	651.14	651.19	651.24	651.29	651.34	651.39	651.45
	TES	650.36	650.34	650.46	650.55	650.61	650.63	650.62	650.58	650.53
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	650.21	650.29	650.42	650.52	650.58	650.60	650.57	650.52	650.45
	CW	650.21	650.23	650.26	650.29	650.32	650.36	650.39	650.42	650.45
	SW	0.02	0.03	0.04	0.05	0.05	0.05	0.04	0.02	0.00
	DL1	0.10	0.14	0.19	0.23	0.24	0.22	0.17	0.09	0.00
	DL2	0.03	0.03	0.04	0.05	0.05	0.04	0.03	0.02	0.00
	C	0.00	0.06	0.16	0.23	0.26	0.24	0.19	0.10	0.00
	BLK	1.59								1.83
GIRDER 3	DS	651.27	651.30	651.35	651.40	651.45	651.50	651.55	651.60	651.65
	TES	650.57	650.54	650.65	650.74	650.80	650.82	650.81	650.78	650.73
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	650.41	650.49	650.61	650.71	650.77	650.79	650.77	650.72	650.65
	CW	650.41	650.43	650.46	650.49	650.52	650.56	650.59	650.62	650.65
	SW	0.02	0.03	0.04	0.05	0.05	0.05	0.04	0.02	0.00
	DL1	0.11	0.14	0.20	0.24	0.24	0.22	0.17	0.09	0.00
	DL2	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.00
	C	0.00	0.06	0.15	0.21	0.24	0.23	0.18	0.10	0.00
	BLK	1.51								1.75
GIRDER 4	DS	651.48	651.51	651.56	651.61	651.66	651.71	651.76	651.81	651.86
	TES	650.80	650.78	650.87	650.95	650.99	651.00	650.98	650.94	650.94
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	650.66	650.73	650.84	650.92	650.96	650.96	650.93	650.87	650.86
	CW	650.66	650.67	650.70	650.73	650.75	650.78	650.81	650.83	650.86
	SW	0.03	0.04	0.05	0.06	0.05	0.05	0.03	0.01	0.00
	DL1	0.14	0.18	0.23	0.25	0.24	0.20	0.13	0.05	0.00
	DL2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.06	0.14	0.19	0.20	0.18	0.12	0.03	0.00
	BLK	1.48								1.68
GIRDER 5	DS	651.52	651.55	651.60	651.66	651.71	651.76	651.81	651.86	651.91
	TES	650.81	650.79	650.89	650.99	651.05	651.07	651.07	651.04	650.99
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	650.66	650.74	650.86	650.96	651.02	651.04	651.02	650.98	650.91
	CW	650.66	650.68	650.71	650.75	650.78	650.81	650.84	650.88	650.91
	SW	0.03	0.03	0.05	0.05	0.06	0.05	0.04	0.02	0.00
	DL1	0.12	0.15	0.21	0.25	0.25	0.23	0.18	0.10	0.00
	DL2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.06	0.14	0.21	0.24	0.23	0.18	0.10	0.00
	BLK	1.28								1.53
GIRDER 6	DS	651.37	651.40	651.45	651.50	651.55	651.60	651.65	651.70	651.75
	TES	650.70	650.67	650.77	650.84	650.88	650.89	650.87	650.83	650.83
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	650.55	650.63	650.74	650.81	650.85	650.85	650.82	650.76	650.75
	CW	650.55	650.57	650.60	650.62	650.65	650.67	650.70	650.72	650.75
	SW	0.03	0.04	0.05	0.06	0.06	0.05	0.03	0.01	0.00
	DL1	0.15	0.19	0.24	0.26	0.25	0.21	0.14	0.05	0.00
	DL2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.06	0.14	0.19	0.21	0.18	0.12	0.04	0.00
	BLK	1.45								1.65

FIELD SECTION #5

LOC	VALUE (SEE NOTE 1)	POSITION ALONG GIRDER AND STATION								
		FS #4 SPAN 3	0.30 PT SPAN 3	0.40 PT SPAN 3	0.50 PT SPAN 3	0.60 PT SPAN 3	0.70 PT SPAN 3	0.80 PT SPAN 3	0.90 PT SPAN 3	N ABUT C/L BRG
GIRDER 7	DS	651.21	651.24	651.29	651.34	651.39	651.44	651.49	651.55	651.60
	TES	650.51	650.49	650.59	650.68	650.74	650.76	650.75	650.73	650.68
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	650.36	650.44	650.56	650.65	650.71	650.73	650.71	650.67	650.60
	CW	650.36	650.38	650.41	650.44	650.47	650.51	650.54	650.57	650.60
	SW	0.03	0.04	0.05	0.06	0.06	0.05	0.04	0.02	0.00
	DL1	0.12	0.16	0.22	0.25	0.26	0.24	0.18	0.10	0.00
	DL2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.06	0.15	0.21	0.24	0.23	0.17	0.10	0.00
	BLK	1.44								1.68
GIRDER 8	DS	651.05	651.08	651.13	651.18	651.23	651.29	651.34	651.39	651.44
	TES	650.36	650.34	650.45	650.54	650.60	650.63	650.62	650.58	650.52
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	650.21	650.29	650.42	650.51	650.57	650.60	650.58	650.52	650.44
	CW	650.21	650.23	650.26	650.29	650.32	650.35	650.38	650.41	650.44
	SW	0.03	0.04	0.05	0.06	0.06	0.05	0.04	0.02	0.00
	DL1	0.13	0.17	0.22	0.26	0.26	0.24	0.18	0.10	0.00
	DL2	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.00
	C	0.00	0.06	0.16	0.22	0.25	0.25	0.20	0.11	0.00
	BLK	1.29								1.52
GIRDER 9	DS	650.92	650.95	650.99	651.04	651.09	651.14	651.19	651.23	651.28
	TES	650.25	650.24	650.35	650.44	650.50	650.52	650.50	650.44	650.36
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	650.11	650.19	650.32	650.42	650.48	650.49	650.46	650.38	650.28
	CW	650.11	650.12	650.14	650.17	650.19	650.21	650.24	650.26	650.28
	SW	0.03	0.04	0.05	0.06	0.06	0.06	0.04	0.02	0.00
	DL1	0.13	0.17	0.23	0.26	0.27	0.24	0.18	0.10	0.00
	DL2	0.02	0.03	0.04	0.05	0.06	0.05	0.04	0.02	0.00
	C	0.00	0.07	0.17	0.25	0.29	0.28	0.22	0.12	0.00
	BLK	1.19								1.36
GIRDER 10	DS	650.79	650.82	650.86	650.90	650.95	650.99	651.04	651.08	651.12
	TES	650.16	650.15	650.28	650.37	650.43	650.44	650.40	650.31	650.20
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	650.01	650.11	650.25	650.35	650.41	650.41	650.36	650.26	650.12
	CW	650.01	650.02	650.03	650.05	650.06	650.08	650.09	650.11	650.12
	SW	0.03	0.04	0.05	0.06	0.06	0.06	0.04	0.02	0.00
	DL1	0.14	0.18	0.24	0.28	0.28	0.25	0.19	0.10	0.00
	DL2	0.05	0.07	0.09	0.11	0.12	0.11	0.09	0.05	0.00
	C	0.00	0.09	0.21	0.30	0.35	0.33	0.27	0.15	0.00
	BLK	1.17								1.28
GIRDER 11	DS	650.75	650.77	650.81	650.85	650.89	650.93	650.97	651.01	651.06
	TES	650.15	650.14	650.28	650.38	650.43	650.43	650.37	650.27	650.14
	DK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ZW	650.00	650.10	650.25	650.36	650.42	650.41	650.33	650.21	650.06
	CW	650.00	650.00	650.01	650.02	650.03	650.04	650.05	650.05	650.06
	SW	0.03	0.04	0.06	0.06	0.07	0.06	0.05	0.02	0.00
	DL1	0.13	0.17	0.23	0.26	0.27	0.24	0.18	0.10	0.00
	DL2	0.09	0.12	0.16	0.19	0.19	0.18	0.13	0.07	0.00
	C	0.00	0.10	0.24	0.34	0.39	0.37	0.29	0.15	0.00
	BLK	1.08								1.14

STATE PROJECT NUMBER

1060-27-74

LEGEND

0.10 PT	INTERMEDIATE ELEVATION POINT CORRESPONDING TO TENTH POINT WITHIN SPAN.

NOTES

1. SEE CAMBER DIAGRAM FOR DESCRIPTION OF VALUES SHOWN IN TABLE.
2. ALL TABULATED VALUES ARE IN DECIMALS OF A FOOT.
3. POSITIVE DEFLECTIONS ARE DOWNWARD.
4. POSITIVE CAMBER IS UPWARD RELATIVE TO A CHORD LINE JOINING THE FIELD SECTION ENDPOINTS.
5. CAMBER DIAGRAMS HAVE BEEN DEVELOPED ASSUMING THE DECK WEST OF THE LONGITUDINAL JOINT IS POURED FIRST AND IS ALLOWED TO CURE PRIOR TO POURING THE NORTH SIDE. VERIFY THE VALIDITY OF THIS ASSUMPTION BASED ON THE SELECTED POUR SEQUENCE. ADJUST CAMBER TABLES AS NECESSARY FOR ANY EXPECTED VARIATIONS EXCEEDING 0.04 FT (½").
6. CAMBER GIRDERS TO THE VALUES SHOWN, AFTER INCORPORATING ANY REQUIRED ADJUSTMENTS FOR THE SELECTED POUR SEQUENCE.
7. TOP OF ERECTED STEEL ELEVATIONS AT SUPPORTS AND FIELD SPLICES SHALL BE CHECKED AFTER ERECTION IS COMPLETE AND BEFORE BOLTED CONNECTIONS ARE FINALLY TORQUED.

   IF SURVEYED ELEVATIONS DIFFER FROM THOSE EXPECTED BY MORE THAN 0.02 FT (¼") AT SUPPORTS OR 0.083 FT (1") AT FIELD SPLICES, CORRECTIVE MEASURES SHALL BE TAKEN BEFORE FURTHER CONSTRUCTION OPERATIONS MAY PROCEED.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D MAM

CAMBER AND DECK ELEVATIONS: FIELD SECTION 5

SHEET 44 OF 62

806

SCALE = N/A

STATE PROJECT NUMBER

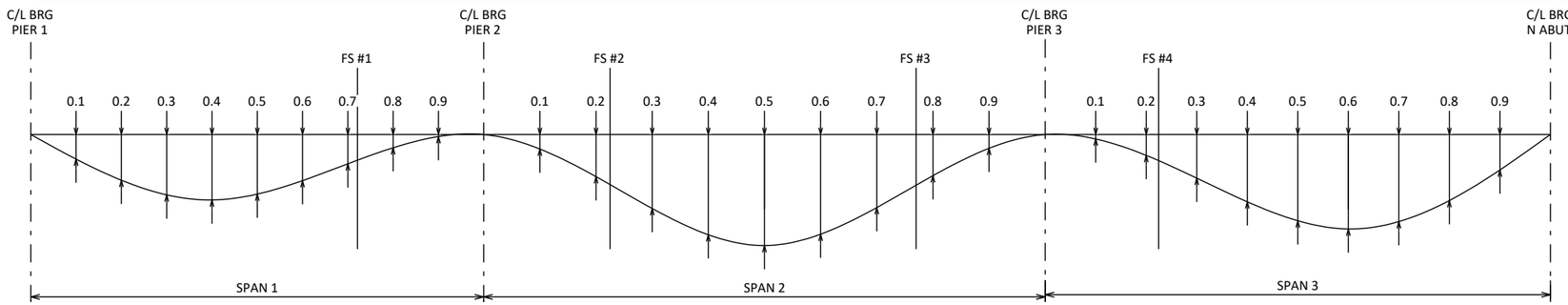
1060-27-74

TOP OF DECK ELEVATIONS (FEET)

CONTROL POINT	C/L BRG PIER 1	SPAN 1									C/L BRG PIER 2	SPAN 2									C/L BRG PIER 3	SPAN 3									C/L BRG N ABUT
		0.1	0.2	0.3	0.4	0.5	0.6	0.7 *	0.8	0.9		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	
LEFT EDGE OF DECK	649.93	649.94	649.96	650.00	650.03	650.07	650.10	650.14	650.17	650.20	650.24	650.30	650.35	650.41	650.47	650.52	650.58	650.64	650.69	650.75	650.81	650.86	650.91	650.96	651.01	651.06	651.11	651.16	651.22	651.27	651.32
GIRDER 1	649.93	649.94	649.97	650.00	650.04	650.07	650.11	650.14	650.18	650.21	650.25	650.31	650.36	650.42	650.48	650.53	650.59	650.65	650.70	650.76	650.82	650.87	650.92	650.97	651.02	651.07	651.12	651.17	651.23	651.28	651.33
LEFT SIDEWALK TOE	649.93	649.94	649.97	650.01	650.04	650.08	650.11	650.15	650.19	650.22	650.26	650.32	650.38	650.43	650.49	650.55	650.60	650.66	650.72	650.77	650.83	650.88	650.93	650.98	651.03	651.09	651.14	651.19	651.24	651.29	651.34
GIRDER 2	650.00	650.02	650.06	650.10	650.14	650.18	650.21	650.25	650.29	650.33	650.37	650.42	650.48	650.54	650.59	650.65	650.71	650.76	650.82	650.88	650.93	650.99	651.04	651.09	651.14	651.19	651.24	651.29	651.34	651.39	651.45
GIRDER 3	650.14	650.19	650.25	650.29	650.33	650.37	650.41	650.45	650.49	650.54	650.58	650.63	650.69	650.75	650.80	650.86	650.92	650.97	651.03	651.09	651.14	651.20	651.25	651.30	651.35	651.40	651.45	651.50	651.55	651.60	651.65
GIRDER 4	650.28	650.36	650.44	650.48	650.53	650.57	650.61	650.66	650.70	650.74	650.79	650.84	650.90	650.96	651.01	651.07	651.13	651.18	651.24	651.30	651.35	651.41	651.46	651.51	651.56	651.61	651.66	651.71	651.76	651.81	651.86
CROWN	650.40	650.47	650.54	650.59	650.63	650.68	650.72	650.77	650.81	650.86	650.90	650.96	651.02	651.07	651.13	651.19	651.24	651.30	651.36	651.41	651.47	651.52	651.57	651.62	651.67	651.73	651.78	651.83	651.88	651.93	651.98
R/L KS	650.40	650.44	650.49	650.53	650.58	650.62	650.67	650.71	650.76	650.80	650.85	650.91	650.96	651.02	651.08	651.13	651.19	651.25	651.31	651.36	651.42	651.47	651.52	651.57	651.62	651.67	651.72	651.78	651.83	651.88	651.93
GIRDER 5	650.38	650.42	650.47	650.51	650.56	650.60	650.65	650.69	650.74	650.79	650.83	650.89	650.95	651.00	651.06	651.12	651.17	651.23	651.29	651.34	651.40	651.45	651.50	651.55	651.60	651.66	651.71	651.76	651.81	651.86	651.91
GIRDER 6	650.24	650.25	650.29	650.34	650.38	650.43	650.48	650.53	650.58	650.63	650.67	650.73	650.79	650.84	650.90	650.96	651.02	651.07	651.13	651.19	651.24	651.29	651.35	651.40	651.45	651.50	651.55	651.60	651.65	651.70	651.75
GIRDER 7	650.10	650.09	650.11	650.16	650.21	650.26	650.31	650.36	650.42	650.47	650.52	650.57	650.63	650.69	650.74	650.80	650.86	650.92	650.97	651.03	651.09	651.14	651.19	651.24	651.29	651.34	651.39	651.44	651.49	651.55	651.60
GIRDER 8	649.96	649.91	649.93	649.98	650.04	650.09	650.15	650.20	650.25	650.31	650.36	650.42	650.47	650.53	650.59	650.64	650.70	650.76	650.82	650.87	650.93	650.98	651.03	651.08	651.13	651.18	651.23	651.29	651.34	651.39	651.44
GIRDER 9	649.92	649.85	649.86	649.91	649.96	650.01	650.06	650.11	650.16	650.22	650.27	650.32	650.37	650.43	650.48	650.53	650.59	650.64	650.70	650.75	650.80	650.85	650.90	650.95	650.99	651.04	651.09	651.14	651.19	651.23	651.28
GIRDER 10	-	-	-	-	-	-	-	650.09	650.11	650.16	650.20	650.24	650.29	650.34	650.39	650.44	650.49	650.54	650.59	650.63	650.68	650.73	650.77	650.82	650.86	650.90	650.95	650.99	651.04	651.08	651.12
RIGHT SIDEWALK TOE	649.92	649.85	649.86	649.90	649.94	649.99	650.03	650.07	650.11	650.16	650.20	650.24	650.29	650.33	650.38	650.42	650.46	650.51	650.55	650.60	650.64	650.68	650.72	650.76	650.80	650.84	650.88	650.92	650.96	651.00	651.04
GIRDER 11	649.92	649.85	649.86	649.90	649.95	649.99	650.03	650.08	650.12	650.16	650.21	650.25	650.30	650.34	650.39	650.43	650.47	650.52	650.56	650.61	650.65	650.69	650.73	650.77	650.81	650.85	650.89	650.93	650.97	651.01	651.06
RIGHT EDGE OF DECK	649.92	649.85	649.86	649.91	649.95	649.99	650.04	650.08	650.13	650.17	650.22	650.26	650.30	650.35	650.39	650.44	650.48	650.53	650.57	650.62	650.66	650.70	650.74	650.78	650.82	650.86	650.90	650.94	650.98	651.02	651.07

DEAD LOAD DEFLECTIONS (FEET)

LOCATION		PIER 1	0.1	0.2	0.3	0.4	0.5	0.6	0.7 *	0.8	0.9	PIER 2	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	PIER 3	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	N ABUT
GIRDER 1	CONC DEFL	0.00	0.02	0.03	0.04	0.04	0.03	0.02	0.01	0.00	-0.01	0.00	0.05	0.11	0.17	0.21	0.21	0.18	0.13	0.06	0.02	0.00	0.04	0.10	0.18	0.25	0.29	0.31	0.28	0.21	0.12	0.00
	TOTAL DEFL	0.00	0.02	0.03	0.04	0.04	0.03	0.02	0.00	-0.01	-0.01	0.00	0.06	0.13	0.20	0.24	0.25	0.21	0.15	0.08	0.02	0.00	0.04	0.12	0.21	0.29	0.34	0.36	0.33	0.25	0.14	0.00
GIRDER 2	CONC DEFL	0.00	0.02	0.04	0.05	0.05	0.05	0.03	0.02	0.00	0.00	0.00	0.04	0.09	0.14	0.17	0.17	0.14	0.09	0.04	0.01	0.00	0.04	0.10	0.17	0.24	0.28	0.29	0.26	0.20	0.11	0.00
	TOTAL DEFL	0.00	0.03	0.05	0.06	0.06	0.05	0.04	0.02	0.00	0.00	0.00	0.04	0.10	0.16	0.20	0.20	0.17	0.12	0.05	0.01	0.00	0.04	0.12	0.20	0.28	0.33	0.34	0.31	0.23	0.13	0.00
GIRDER 3	CONC DEFL	0.00	0.03	0.06	0.07	0.08	0.07	0.06	0.04	0.02	0.00	0.00	0.02	0.06	0.10	0.12	0.13	0.11	0.07	0.03	0.00	0.00	0.04	0.09	0.16	0.22	0.25	0.26	0.24	0.18	0.10	0.00
	TOTAL DEFL	0.00	0.04	0.07	0.09	0.10	0.09	0.07	0.04	0.02	0.00	0.00	0.03	0.08	0.12	0.16	0.16	0.13	0.09	0.04	0.00	0.00	0.04	0.11	0.19	0.26	0.31	0.32	0.29	0.22	0.12	0.00
GIRDER 4	CONC DEFL	0.00	0.05	0.09	0.11	0.12	0.11	0.08	0.05	0.02	0.00	0.00	0.02	0.06	0.09	0.10	0.10	0.07	0.04	0.01	0.00	0.02	0.06	0.12	0.18	0.23	0.25	0.24	0.20	0.14	0.05	0.00
	TOTAL DEFL	0.00	0.06	0.11	0.13	0.14	0.13	0.10	0.06	0.03	0.00	0.01	0.03	0.07	0.11	0.13	0.12	0.09	0.05	0.01	0.00	0.02	0.07	0.15	0.22	0.28	0.31	0.30	0.25	0.17	0.06	0.00
GIRDER 5	CONC DEFL	0.00	0.06	0.12	0.15	0.17	0.16	0.14	0.10	0.06	0.02	0.00	0.00	0.03	0.05	0.08	0.08	0.07	0.04	0.01	-0.01	0.00	0.04	0.09	0.15	0.21	0.24	0.25	0.23	0.17	0.09	0.00
	TOTAL DEFL	0.00	0.08	0.14	0.18	0.20	0.19	0.16	0.12	0.07	0.03	0.00	0.01	0.04	0.07	0.10	0.11	0.09	0.06	0.02	0.00	0.00	0.04	0.11	0.19	0.26	0.30	0.31	0.28	0.21	0.12	0.00
GIRDER 6	CONC DEFL	0.00	0.09	0.16	0.21	0.22	0.21	0.17	0.12	0.06	0.01	-0.01	0.00	0.02	0.05	0.06	0.06	0.05	0.02	0.00	-0.01	0.02	0.07	0.13	0.19	0.23	0.26	0.25	0.21	0.14	0.05	0.00
	TOTAL DEFL	0.00	0.11	0.19	0.25	0.27	0.25	0.21	0.14	0.07	0.02	-0.01	0.00	0.03	0.07	0.09	0.09	0.06	0.03	0.00	-0.01	0.02	0.08	0.15	0.23	0.29	0.31	0.30	0.25	0.17	0.06	0.00
GIRDER 7	CONC DEFL	0.00	0.10	0.18	0.24	0.27	0.26	0.22	0.17	0.10	0.04	0.00	-0.01	0.00	0.03	0.05	0.06	0.05	0.03	0.01	-0.01	0.00	0.04	0.10	0.16	0.22	0.26	0.26	0.24	0.18	0.10	0.00
	TOTAL DEFL	0.00	0.12	0.22	0.30	0.33	0.32	0.27	0.20	0.12	0.05	0.00	-0.01	0.01	0.04	0.07	0.08	0.07	0.04	0.01	-0.01	0.00	0.05	0.12	0.20	0.27	0.31	0.32	0.29	0.22	0.12	0.00
GIRDER 8	CONC DEFL	0.00	0.11	0.20	0.26	0.29	0.28	0.24	0.18	0.11	0.04	0.00	-0.01	0.00	0.02	0.04	0.04	0.04	0.02	0.00	-0.01	0.00	0.04	0.11	0.18	0.24	0.28	0.28	0.26	0.19	0.11	0.00
	TOTAL DEFL	0.00	0.13	0.25	0.32	0.36	0.35	0.30	0.22	0.14	0.06	0.00	-0.02	0.00	0.02	0.05	0.06	0.05	0.03	0.00	-0.02	0.00	0.05	0.13	0.21	0.29	0.33	0.34	0.31	0.24	0.13	0.00
GIRDER 9	CONC DEFL	0.00	0.11	0.21	0.27	0.30	0.29	0.25	0.18	0.11	0.04	0.00	-0.01	-0.01	0.01	0.03	0.03	0.03	0.01	-0.01	-0.02	0.00	0.05	0.12	0.20	0.27	0.32	0.33	0.30	0.23	0.12	0.00
	TOTAL DEFL	0.00	0.14	0.26	0.34	0.38	0.36	0.31	0.23	0.13	0.06	0.00	-0.02	0.00	0.02	0.04	0.05	0.04	0.02	-0.01	-0.02	0.00	0.06	0.15	0.24	0.33	0.38	0.39	0.35	0.27	0.15	0.00
GIRDER 10	CONC DEFL	---	---	---	---	---	---	---	0.15	0.09	0.03	0.00	-0.01	0.01	0.03	0.05	0.06	0.05	0.02	-0.01	-0.02	0.00	0.06	0.15	0.25	0.33	0.39	0.40	0.36	0.28	0.15	0.00
	TOTAL DEFL	---	---	---	---	---	---	---	0.19	0.11	0.04	0.00	-0.01	0.01	0.04	0.07	0.08	0.06	0.03	0.00	-0.02	0.00	0.07	0.17	0.29	0.39	0.45	0.46	0.42	0.32	0.18	0.00
GIRDER 11	CONC DEFL	0.00	0.12	0.23	0.30	0.33	0.32	0.27	0.19	0.11	0.04	0.00	0.01	0.04	0.08	0.10	0.11	0.09	0.05	0.00	-0.02	0.00	0.07	0.18	0.29	0.39	0.45	0.46	0.42	0.32	0.17	0.00
	TOTAL DEFL	0.00	0.16	0.29	0.37	0.41	0.40	0.33	0.24	0.14	0.05	0.00	0.00	0.04	0.09	0.12	0.13	0.10	0.06	0.01	-0.02	0.00	0.08	0.20	0.33	0.44	0.51	0.53	0.48	0.36	0.20	0.00



DEAD LOAD DEFLECTIONS

LEGEND

* BEGINNING OF GIRDER LINE 10

DEFLECTION NOTES

DEFLECTIONS ARE GIVEN IN DECIMALS OF A FOOT.

NEGATIVE VALUE INDICATES UPWARD DEFLECTION.

CONCRETE DEFLECTION INCLUDES CONCRETE SLAB, HAUNCHES, SIDEWALKS AND PARAPETS.

TOTAL DEFLECTION INCLUDES ALL OF ABOVE PLUS DEFLECTIONS TO SELF WEIGHT OF STEEL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D MAM

DECK ELEVATIONS & DEAD LOAD DEFLECTION DIAGRAM

SHEET 45 OF 62

807

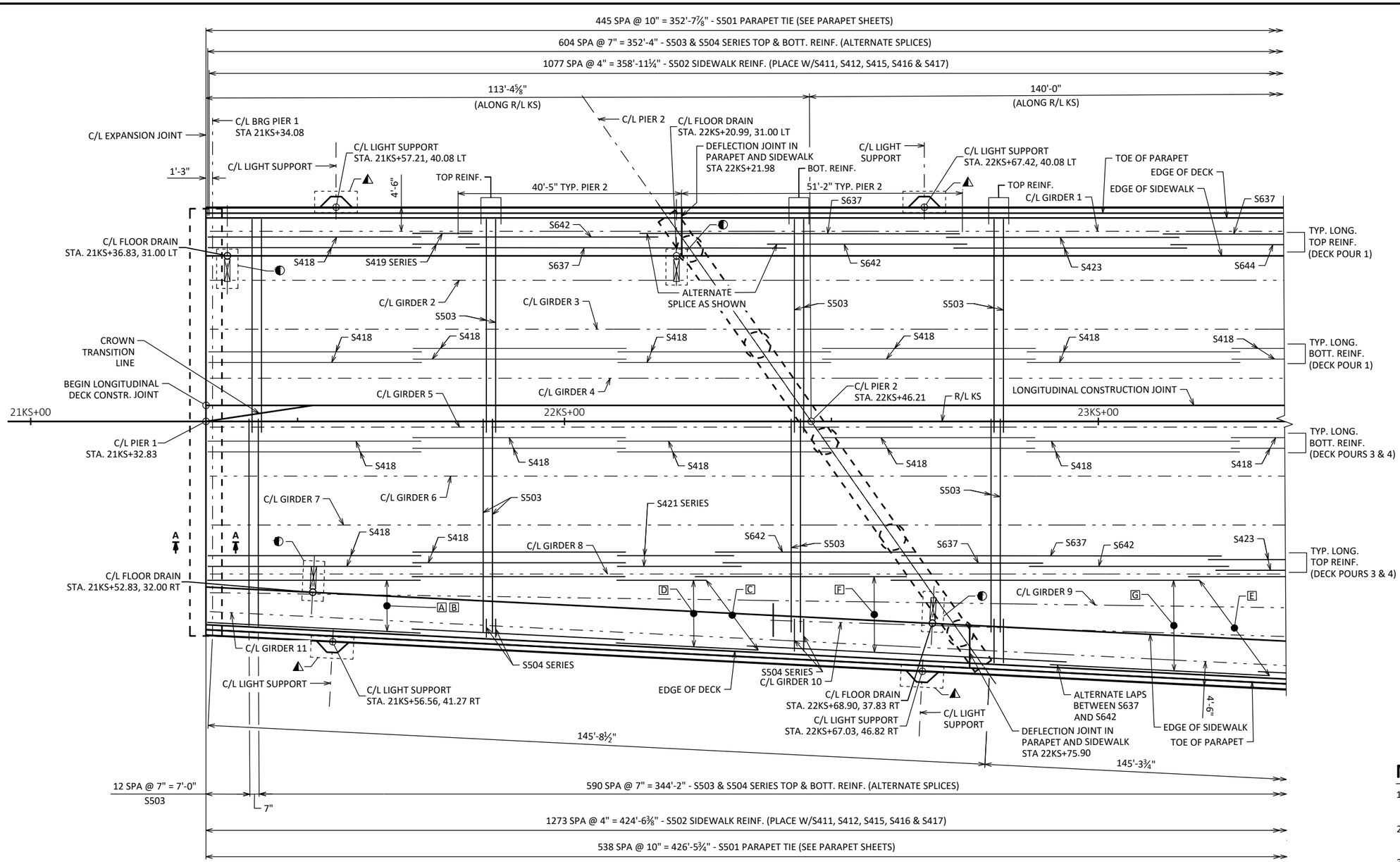
SCALE = N/A

8

8

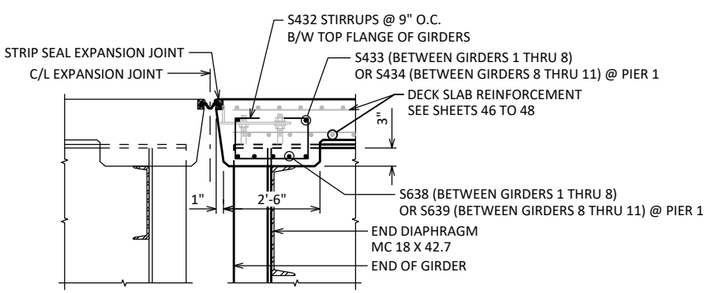
STATE PROJECT NUMBER

1060-27-74



DECK PLAN

ALL DIMENSIONS NORMAL TO R/L KS, EXCEPT AS NOTED



SECTION A - A

(HORIZONTAL DIMENSIONS GIVEN PERPENDICULAR TO C/L BRG.)

SPLAYED BARS

SPLAY BARS IN LOCATIONS SHOWN. HOLD 8" MAX SPA

- A 19 - S418, TOP REINF.
- B 18 - S418, BOTT. REINF.
- C 24 - S422 SERIES, TOP REINF.
- D 21 - S418, BOTT. REINF.
- E 31 - S637, 31 - S642 SERIES TOP REINF. (ALTERNATE SPLICE)
- F 27 - S418, BOTT. REINF.
- G 30 - S418 BOTT. REINF.

DECK BAR LAP LENGTH

BAR SIZE	MIN. LAP LENGTH
#4	1'-8"
#5	2'-7"
#6	3'-1"
SMALLER BAR SIZE DETERMINES LAP LENGTH	

LEGEND

- ◭ FOR DIMENSIONS AND REINFORCEMENT DETAILS AT LIGHT SUPPORT, SEE LIGHT SUPPORT DETAILS SHEET.
- ◐ FOR LOCATION, DETAILS AND REINFORCEMENT AT FLOOR DRAIN, SEE DECK DETAILS SHEET.

NOTES

1. TRANSVERSE TOP AND BOTTOM REINFORCEMENT BARS IN THE DECK ARE PLACED NORMAL TO R/L KS.
2. TYPICAL LONGITUDINAL REINFORCEMENT SHALL BE PLACED PARALLEL TO THE EDGE OF DECK.
3. PLACE ADDITIONAL LONGITUDINAL REINFORCEMENT TO HOLD A MAX 8" BAR SPACING. SPLAY THE ADDITIONAL LONGITUDINAL REINFORCEMENT BETWEEN I-GIRDER FLANGES.
4. SEE ROADWAY GEOMETRY SHEET FOR CROSS SLOPES AND SUPERELEVATION TRANSITIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY MTZ | PLANS CK'D MAM

DECK REINFORCEMENT (1 OF 2)

SHEET 46 OF 62

808

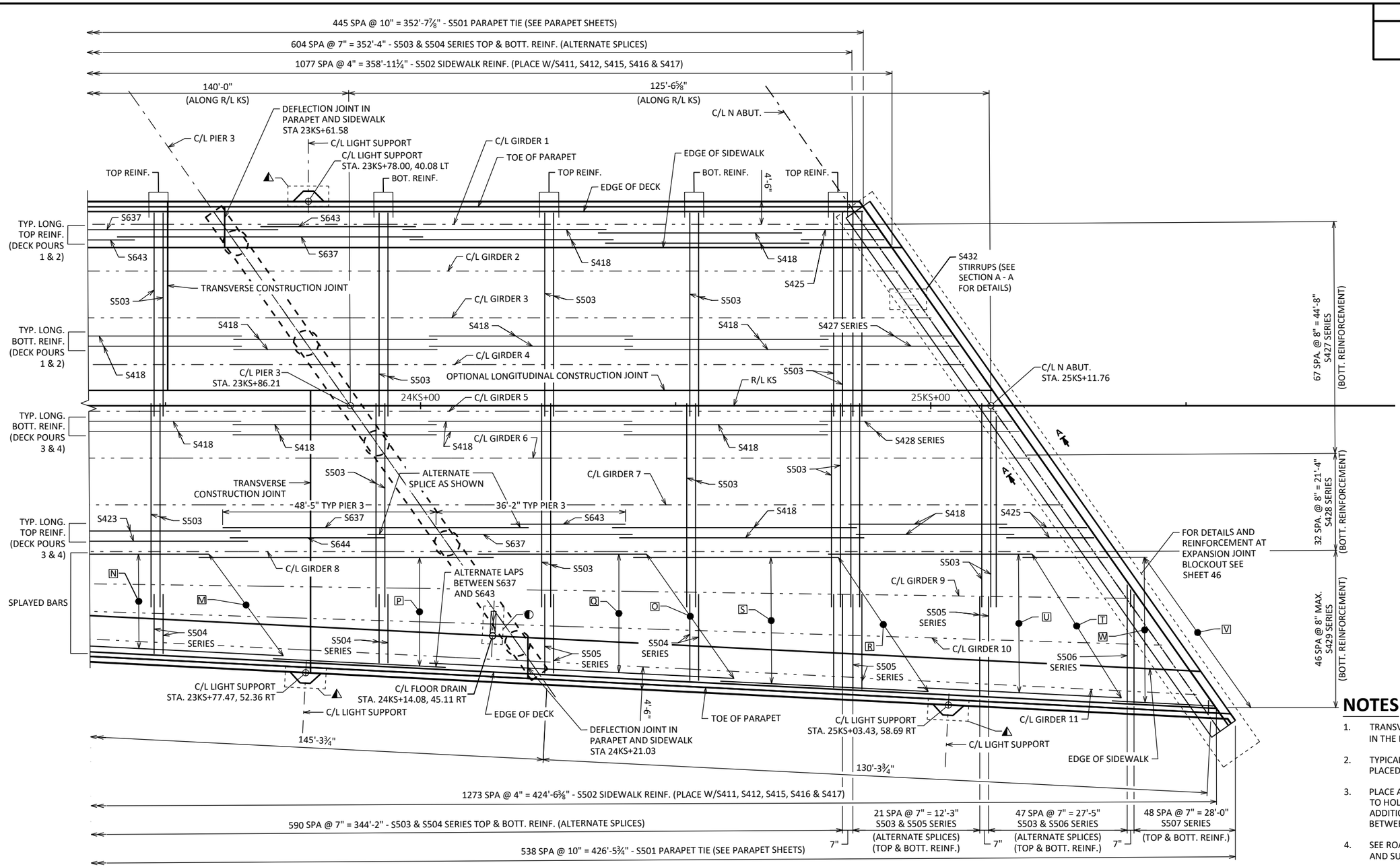
SCALE = 1 IN:20 FT

8

8

STATE PROJECT NUMBER

1060-27-74



NOTES

1. TRANSVERSE TOP AND BOTTOM REINFORCEMENT BARS IN THE DECK ARE PLACED NORMAL TO R/L KS.
2. TYPICAL LONGITUDINAL REINFORCEMENT SHALL BE PLACED PARALLEL TO THE EDGE OF DECK.
3. PLACE ADDITIONAL LONGITUDINAL REINFORCEMENT TO HOLD A MAX 8" BAR SPACING. SPLAY THE ADDITIONAL LONGITUDINAL REINFORCEMENT BETWEEN I-GIRDER FLANGES.
4. SEE ROADWAY GEOMETRY SHEET FOR CROSS SLOPES AND SUPERELEVATION TRANSITIONS.
5. ROTATE S502 BARS AT NORTH END OF BOTH SIDEWALKS AS NEEDED.

SPLAYED BARS

SPLAY BARS IN LOCATIONS SHOWN. HOLD 8" MAX SPA

- M 35 - S418 & S421, TOP REINF.
- N 32 - S418, BOTT. REINF.
- O 41 - S637, 41 - S643 SERIES TOP REINF. (ALTERNATE SPLICE)
- P 35 - S418, BOTT. REINF.
- Q 38 - S418, BOTT. REINF.
- R 44 - S418, TOP REINF.
- S 41 - S418, BOTT. REINF.
- T 47 - S418, TOP REINF.
- U 44 - S418, BOTT. REINF.
- V 48 - S424 SERIES, TOP REINF.
- W 47 - S429 SERIES, BOTT. REINF.

DECK BAR LAP LENGTH

BAR SIZE	MIN. LAP LENGTH
#4	1'-8"
#5	2'-7"
#6	3'-1"
SMALLER BAR SIZE DETERMINES LAP LENGTH	

DECK PLAN

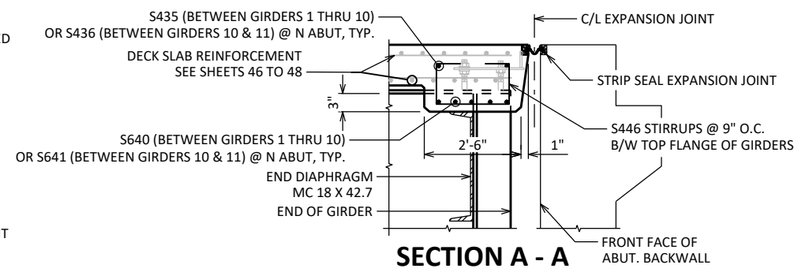
ALL DIMENSIONS NORMAL TO R/L KS, EXCEPT AS NOTED

LEGEND

- ◭ FOR DIMENSIONS AND REINFORCEMENT DETAILS AT LIGHT SUPPORT, SEE LIGHT SUPPORT DETAILS SHEET.
- ◐ FOR LOCATION, DETAILS AND REINFORCEMENT AT FLOOR DRAIN, SEE DECK DETAILS SHEET.

SECTION A - A

(HORIZONTAL DIMENSIONS GIVEN PERPENDICULAR TO C/L BRG.)



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY MTZ | PLANS CK'D MAM

DECK REINFORCEMENT (2 OF 2)

SHEET 47 OF 62

809

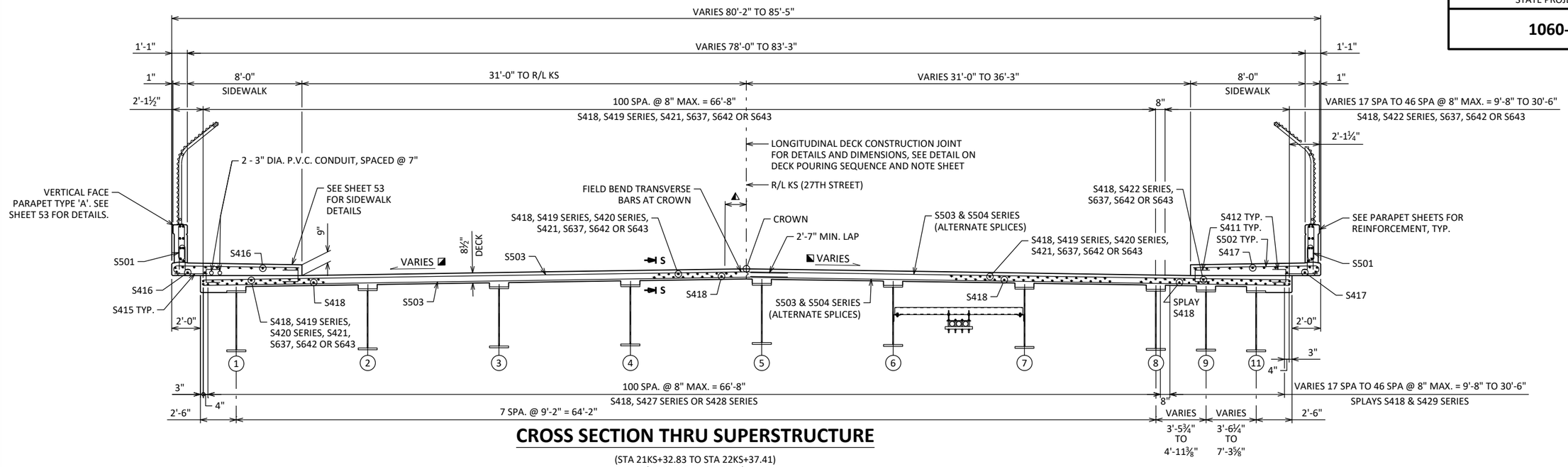
SCALE = 1 IN:20 FT

8

8

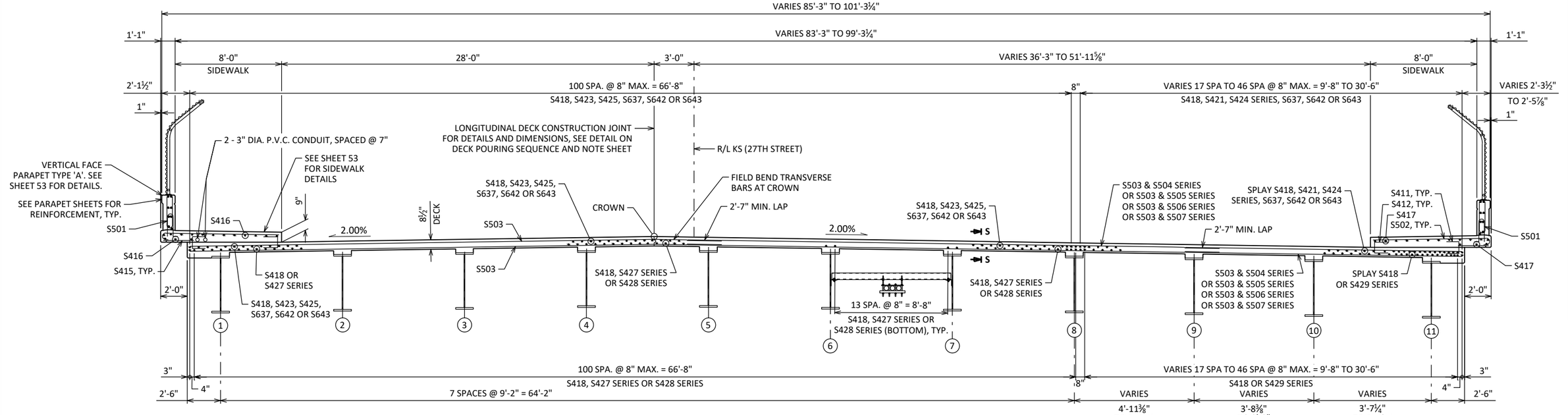
STATE PROJECT NUMBER

1060-27-74



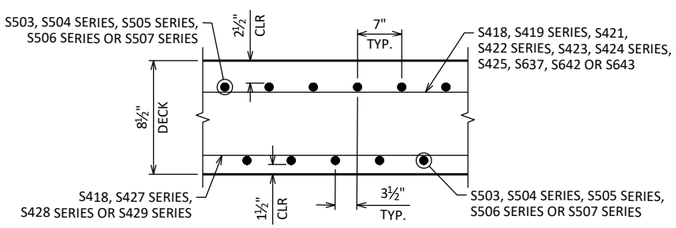
CROSS SECTION THRU SUPERSTRUCTURE

(STA 21KS+32.83 TO STA 22KS+37.41)
(LOOKING UPSTATION)



CROSS SECTION THRU SUPERSTRUCTURE

(STA 22KS+37.41 TO STA 25KS+14.21)
(LOOKING UPSTATION)



SECTION S-S

LEGEND

- CROWN TRANSITIONS FROM R/L KS AT STA. 21KS+32.83 TO 3'-0" LEFT AT STA. 21KS+52.83
- SLOPE TRANSITIONS FROM 1.50% AT STA. 21KS+32.83 TO 2.00% AT STA. 21+52.83

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY MTZ | PLANS CK'D MAM

SUPERSTRUCTURE CROSS SECTION

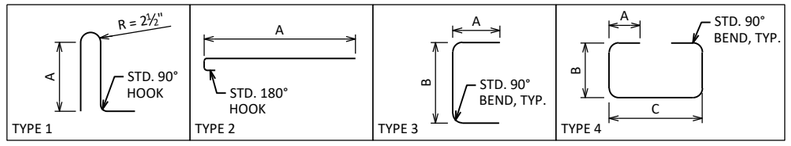
SHEET 48 OF 62
810

SCALE = 1 IN:10 FT

8

8

BAR INFORMATION							BAR DIMENSIONS			LOCATION	BAR SERIES INFORMATION			
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	BEND TYPE	A	B	C		MIN	MAX	NO REQ'D	LENGTH
S501	E	975	4'-4"	X		1	1'-5"			PARAPET - TIE TO SIDEWALK				
S502	E	2,352	9'-3"	X		2	8'-8"			SIDEWALK TRANSVERSE - TOP				
S503	E	1,300	40'-0"							DECK TRANSVERSE - TOP & BOTTOM				
S504	E	1,182	11'-5"		△					DECK TRANSVERSE - TOP & BOTTOM	2'-9"	20'-1"	2 SERIES OF 591	2'-9" TO 20'-1"
S505	E	44	11'-8"		△					DECK TRANSVERSE - TOP & BOTTOM	3'-3"	20'-1"	2 SERIES OF 22	3'-3" TO 20'-1"
S506	E	96	21'-4"		△					DECK TRANSVERSE - TOP & BOTTOM	2'-9"	39'-11"	2 SERIES OF 48	2'-9" TO 39'-11"
S507	E	98	19'-9"		△					DECK TRANSVERSE - TOP & BOTTOM	6"	38'-11"	2 SERIES OF 49	6" TO 38'-11"
S509	E	35	5'-0"							DRAIN - LONGITUDINAL				
S411	E	1,563	3'-1"	X		3	1'-3"	1'-0"		SIDEWALK - TIE				
S412	E	1,563	2'-10"	X		3	1'-0"	1'-0"		SIDEWALK - TIE				
S415	E	523	2'-10"							SIDEWALK TRANSVERSE - BOTTOM				
S416	E	150	37'-6"							SIDEWALK LONGITUDINAL - TOP AND BOTTOM				
S417	E	180	37'-0"							SIDEWALK LONGITUDINAL - TOP AND BOTTOM				
S418	E	1,719	40'-0"							DECK LONGITUDINAL - TOP AND BOTTOM				
S419	E	68	24'-3"		△					DECK LONGITUDINAL - TOP	8'-6"	40'-0"	1 SERIES OF 68	8'-6" TO 40'-0"
S421	E	35	10'-8"							DECK LONGITUDINAL - TOP				
S422	E	24	23'-3"		△					DECK LONGITUDINAL - TOP	16'-11"	29'-6"	1 SERIES OF 24	16'-11" TO 29'-6"
S423	E	101	43'-8"							DECK LONGITUDINAL - TOP				
S424	E	48	19'-1"		△					DECK LONGITUDINAL - TOP	16'-8"	21'-6"	1 SERIES OF 48	16'-8" TO 21'-6"
S425	E	101	16'-8"							DECK LONGITUDINAL - TOP				
S427	E	69	24'-2"		△					DECK LONGITUDINAL - BOTTOM	8'-3"	40'-0"	1 SERIES OF 69	8'-3" TO 40'-0"
S429	E	48	28'-5"		△					DECK LONGITUDINAL - BOTTOM	17'-5"	39'-5"	1 SERIES OF 48	17'-5" TO 39'-5"
S430	E	12	8'-8"							EXPANSION JOINT - PIER 1 TRANSVERSE (BETWEEN GIRDERS 1 THRU 8)				
S431	E	18	10'-9"							EXPANSION JOINT - N ABUTMENT TRANSVERSE (BETWEEN GIRDERS 1 THRU 10)				
S432	E	85	4'-6"	X		4	8"	8"	2'-2"	END DIAPHRAGM - STIRRUP (PIER 1)				
S433	E	35	7'-6"							END DIAPHRAGM TRANSVERSE - TOP (PIER 1)				
S434	E	10	1'-10"							END DIAPHRAGM TRANSVERSE - TOP (PIER 1)				
S435	E	45	9'-2"							END DIAPHRAGM TRANSVERSE - TOP (NORTH ABUTMENT)				
S436	E	5	9'-10"							END DIAPHRAGM TRANSVERSE - TOP (NORTH ABUTMENT)				
S637	E	274	60'-0"							DECK LONGITUDINAL - TOP - ALTERNATE OVER PIERS 2 & 3				
S638	E	35	7'-6"							END DIAPHRAGM TRANSVERSE - BOTTOM (PIER 1 - BETWEEN GIRDERS 1 THRU 8)				
S639	E	10	1'-10"							END DIAPHRAGM TRANSVERSE - BOTTOM (PIER 1 - BETWEEN GIRDERS 8 THRU 11)				
S640	E	45	9'-2"							END DIAPHRAGM TRANSVERSE - BOTTOM (NORTH ABUTMENT - BETWEEN GIRDERS 1 THRU 10)				
S641	E	5	9'-10"							END DIAPHRAGM TRANSVERSE - BOTTOM (NORTH ABUTMENT - BETWEEN GIRDERS 10 & 11)				
S642	E	132	34'-8"							DECK LONGITUDINAL - TOP - ALTERNATE OVER PIERS 2 & 3				
S643	E	142	27'-8"							DECK LONGITUDINAL - TOP - ALTERNATE OVER PIERS 2 & 3				
S444	E	4	3'-1"							EXPANSION JOINT - PIER 1 TRANSVERSE (BETWEEN GIRDERS 8 THRU 11)				
S445	E	2	11'-4"							EXPANSION JOINT - N ABUTMENT TRANSVERSE (BETWEEN GIRDERS 10 & 11)				
S446	E	111	5'-0"	X		4	8"	8"	2'-8"	END DIAPHRAGM - STIRRUP (NORTH ABUTMENT)				



STATE PROJECT NUMBER

1060-27-74

NOTES

THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFY THE BAR SIZE.

DIMENSIONS ARE TO OUTSIDE OF BARS, EXCEPT FOR RADIUS DIMENSIONS WHICH ARE TO INSIDE OF BENDS.

△ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT. SEE BAR SERIES INFORMATION FOR CALCULATIONS FOR ACTUAL LENGTH.

BAR MATERIAL CODES USED IN SECOND COLUMN OF TABLE
E - STEEL, HIGH STRENGTH, EPOXY COATED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY MTZ | PLANS CK'D MAM

DECK REINFORCEMENT SCHEDULE

SHEET 49 OF 62

811

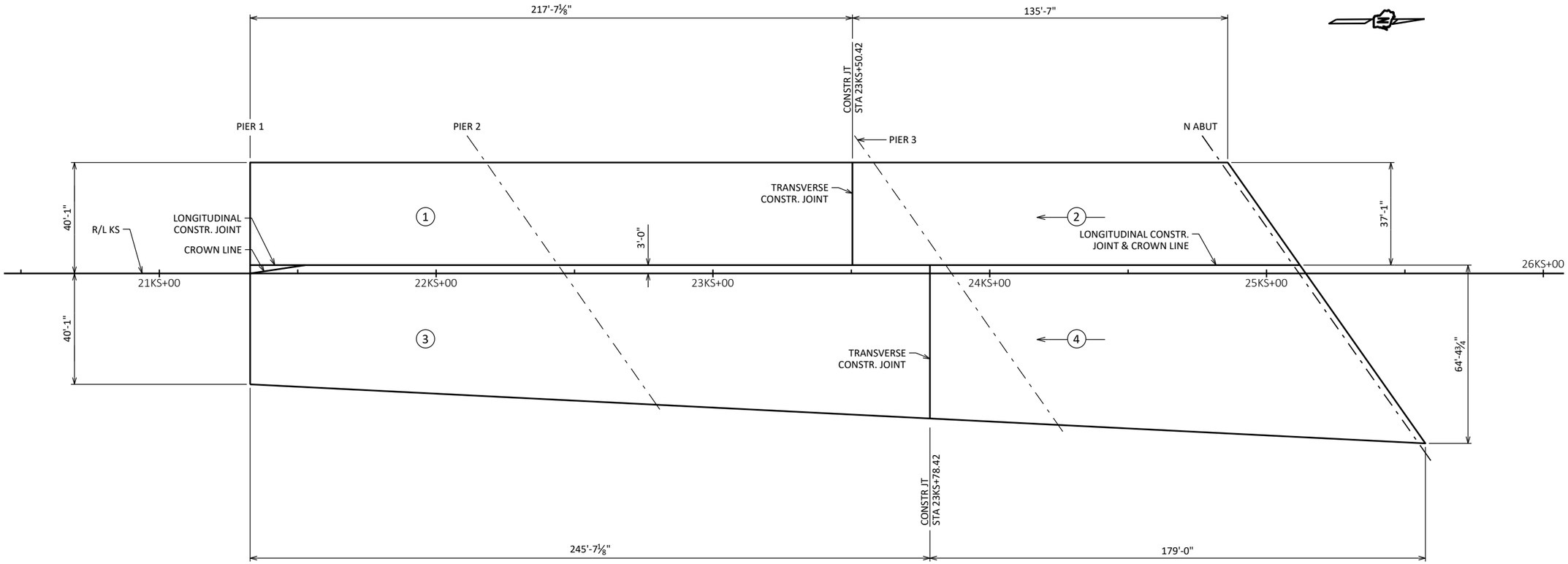
SCALE = N/A

8

8

STATE PROJECT NUMBER

1060-27-74



DECK POURING SEQUENCE

(X) INDICATES POUR NUMBER AND DIRECTION OF POUR

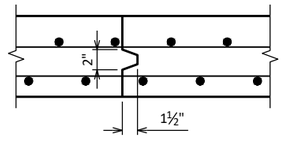
DECK POURING SEQUENCE NOTES

FOLLOW PROCEDURES OUTLINED IN THE STANDARD SPECIFICATIONS.

THE RATE OF PLACING CONCRETE SHALL EQUAL OR EXCEED ½ SPAN LENGTH PER HOUR BUT NEED NOT EXCEED 100 CU. YDS. PER HOUR.

TWO OR MORE ALTERNATE POURS MAY BE PLACED ON THE SAME DAY.

THE CONTRACTOR MAY SUBMIT AN ALTERNATE POURING SEQUENCE SUBJECTS TO THE APPROVAL OF THE STRUCTURES DESIGN SECTION. AN ALTERNATE DECK POURING SEQUENCE DEVIATING FROM THIS PLAN MAY REQUIRE CAMBERS TO BE RECALCULATED AND DECK REINFORCEMENT DETAILS TO BE REVISED.



SECTION THRU TRANSVERSE OR LONGITUDINAL CONSTRUCTION JOINT

TRANVERSE. JOINT SHOWN, LONGITITUDINAL JOINT SIMILAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY TMH | PLANS CK'D MAM

DECK POURING SEQUENCING AND NOTES

SHEET 50 OF 62

812

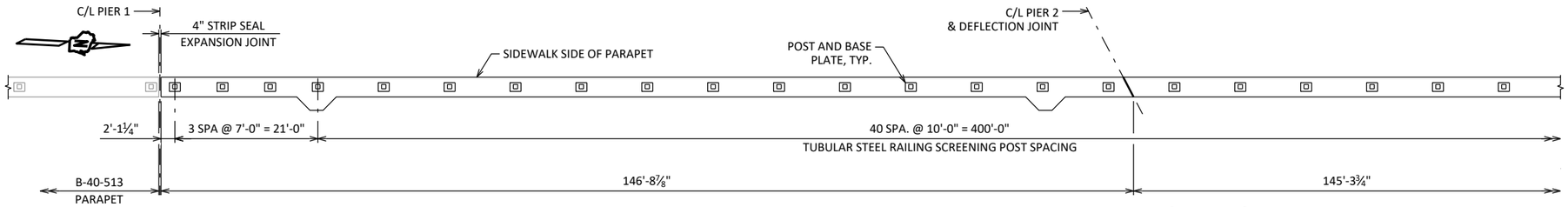
SCALE = N/A

8

8

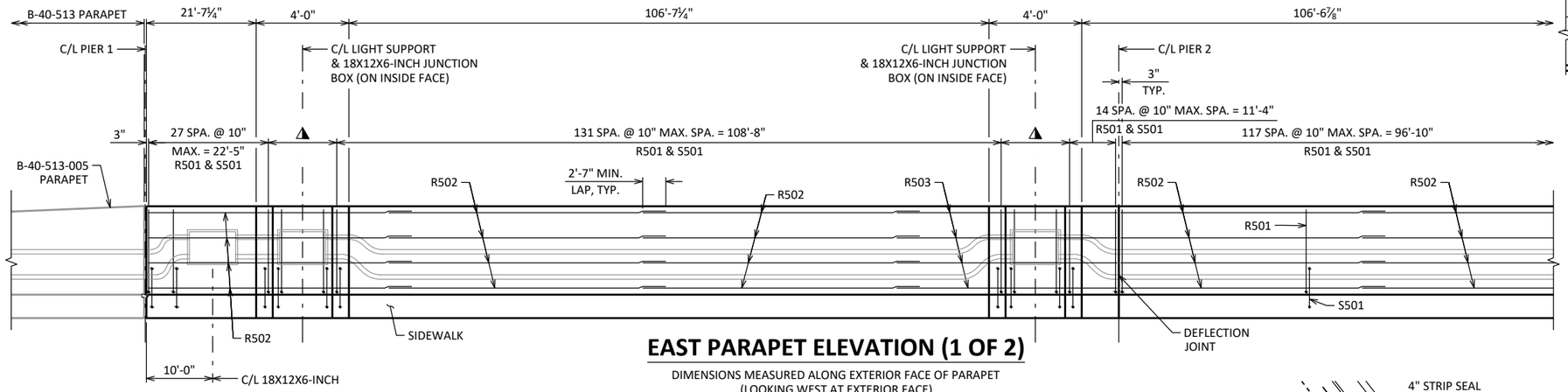
STATE PROJECT NUMBER

1060-27-74



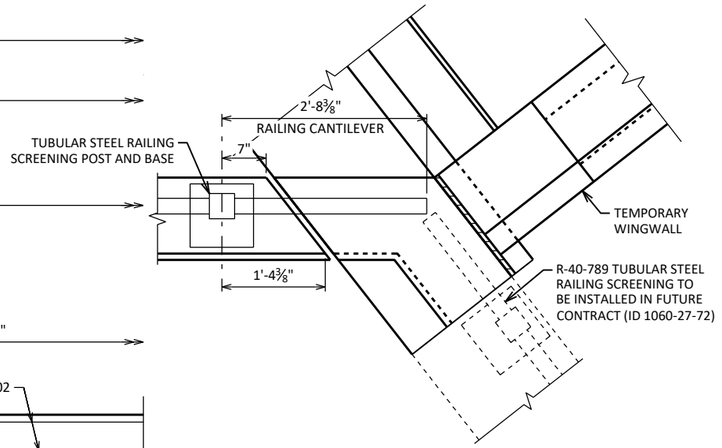
PLAN VIEW - TUBULAR STEEL RAILING SCREENING POST LAYOUT (1 OF 2)

WORK WITH "TUBULAR STEEL RAILING SCREENING" SHEET AND PARAPET DETAILS



EAST PARAPET ELEVATION (1 OF 2)

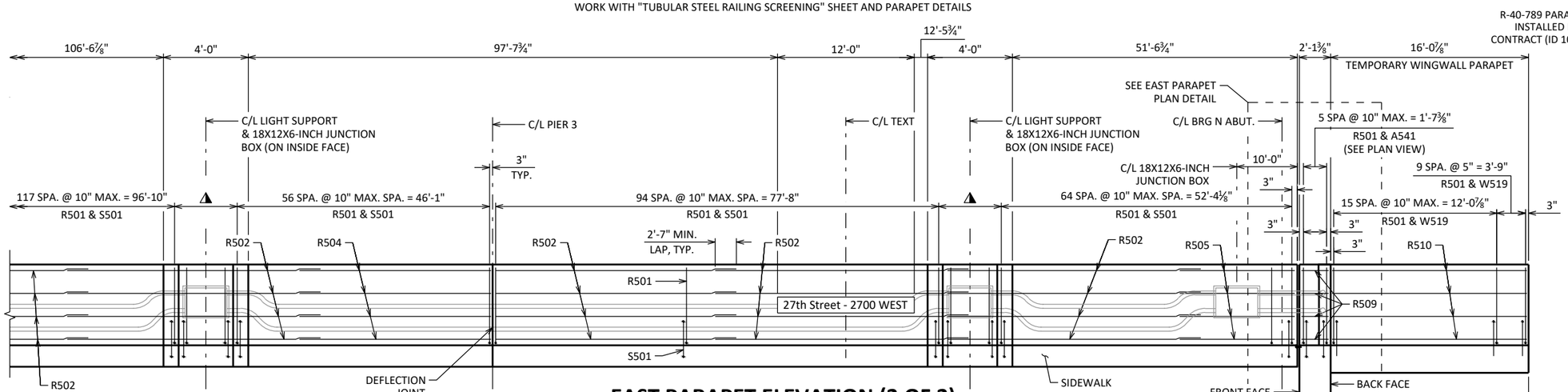
DIMENSIONS MEASURED ALONG EXTERIOR FACE OF PARAPET
(LOOKING WEST AT EXTERIOR FACE)



EAST PARAPET RAILING DETAIL

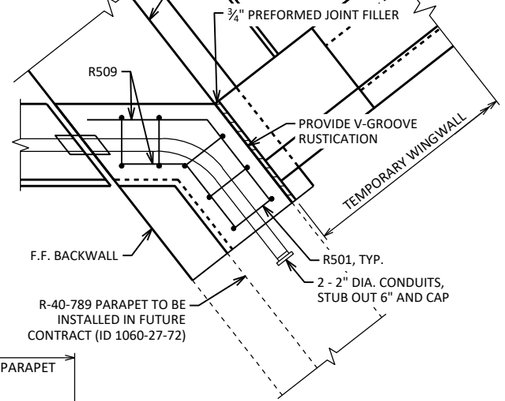
PLAN VIEW - TUBULAR STEEL RAILING SCREENING POST LAYOUT (2 OF 2)

WORK WITH "TUBULAR STEEL RAILING SCREENING" SHEET AND PARAPET DETAILS



EAST PARAPET ELEVATION (2 OF 2)

DIMENSIONS MEASURED ALONG EXTERIOR FACE OF PARAPET
(LOOKING WEST AT EXTERIOR FACE)



EAST PARAPET PLAN DETAIL

LEGEND

◭ SEE LIGHT SUPPORT SHEETS FOR DIMENSIONS AND REINFORCEMENT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY MTZ | PLANS CK'D MAM

PARAPET ELEVATIONS (1 OF 2)

SHEET 51 OF 62

813

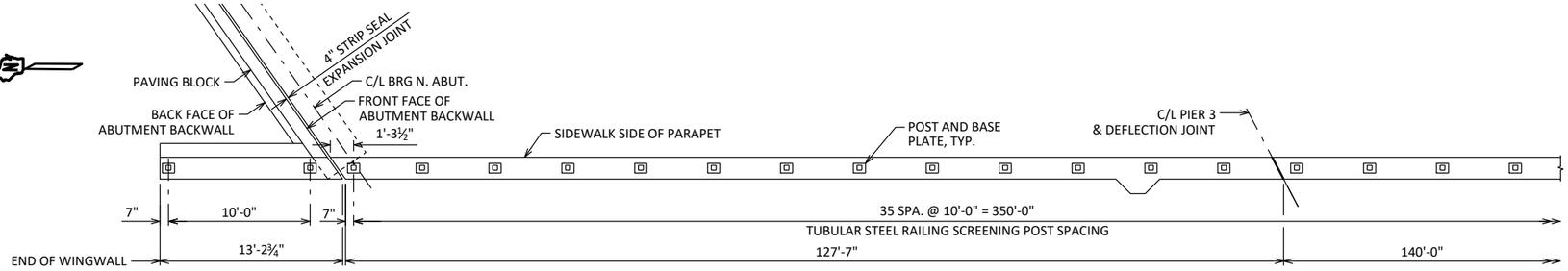
SCALE = 1 IN:20 FT

8

8

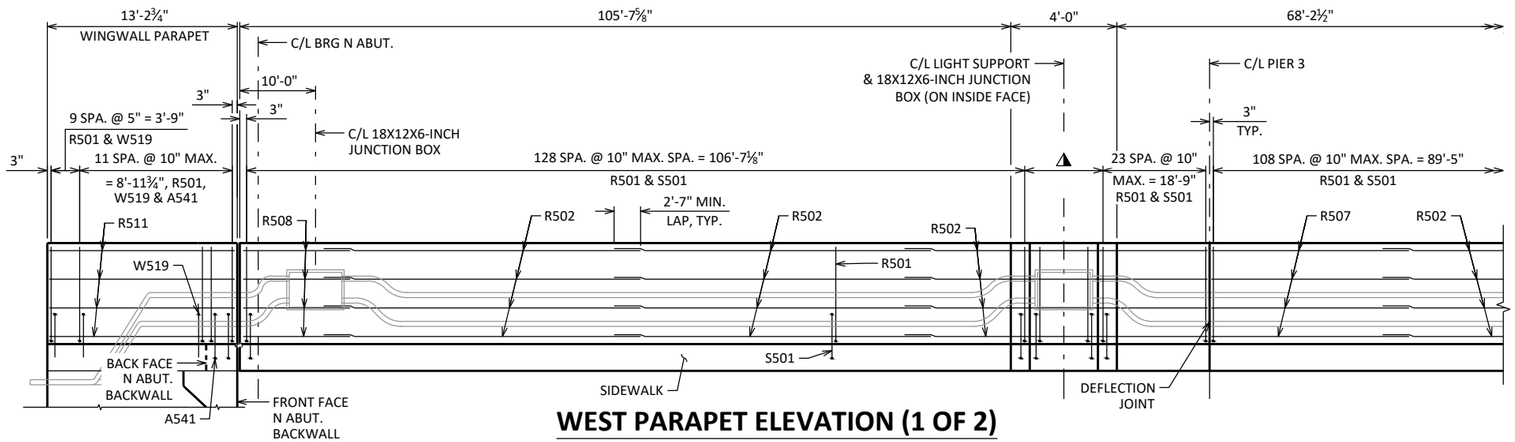
STATE PROJECT NUMBER

1060-27-74



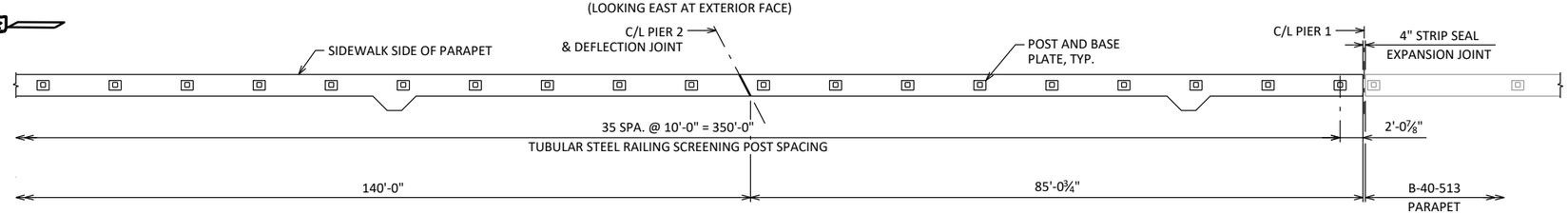
PLAN VIEW - TUBULAR STEEL RAILING SCREENING POST LAYOUT (1 OF 2)

WORK WITH "TUBULAR STEEL RAILING SCREENING" SHEET AND PARAPET DETAILS



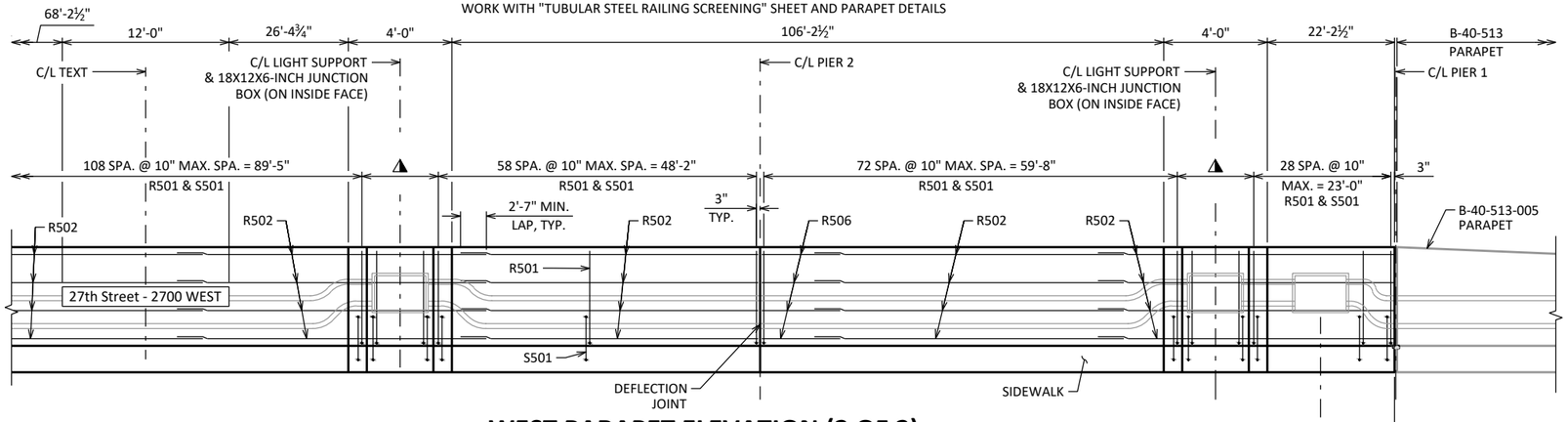
WEST PARAPET ELEVATION (1 OF 2)

DIMENSIONS MEASURED ALONG EXTERIOR FACE OF PARAPET
(LOOKING EAST AT EXTERIOR FACE)



PLAN VIEW - TUBULAR STEEL RAILING SCREENING POST LAYOUT (2 OF 2)

WORK WITH "TUBULAR STEEL RAILING SCREENING" SHEET AND PARAPET DETAILS



WEST PARAPET ELEVATION (2 OF 2)

DIMENSIONS MEASURED ALONG EXTERIOR FACE OF PARAPET
(LOOKING EAST AT EXTERIOR FACE)

LEGEND

⚠ SEE LIGHT SUPPORT SHEETS FOR DIMENSIONS AND REINFORCEMENT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY MTZ | PLANS CK'D MAM

PARAPET ELEVATIONS (2 OF 2)

SHEET 52 OF 62
814

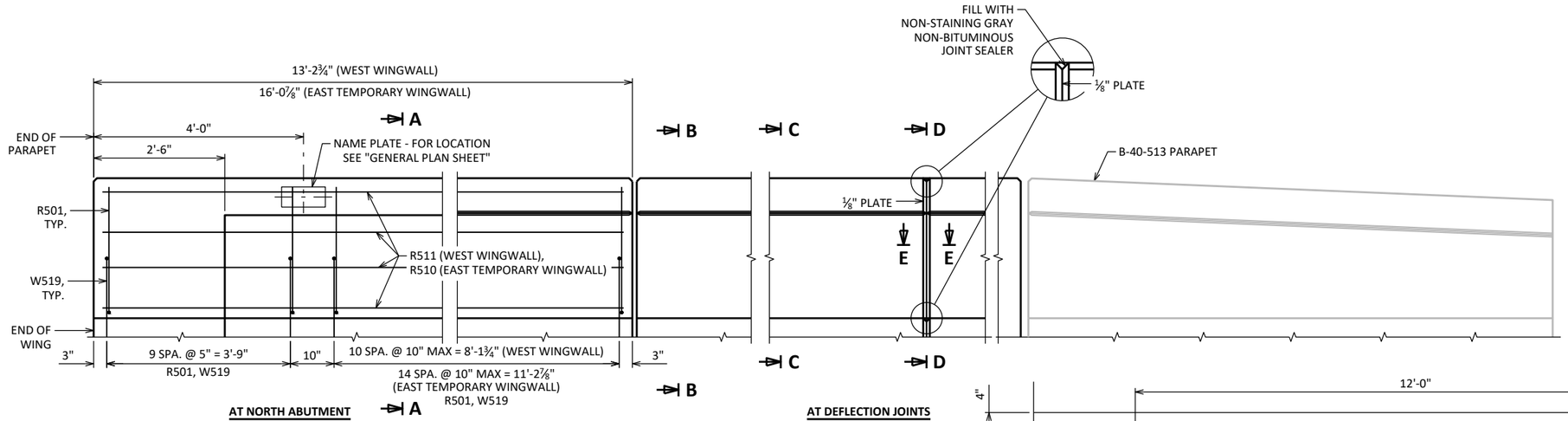
SCALE = 1 IN:20 FT

8

8

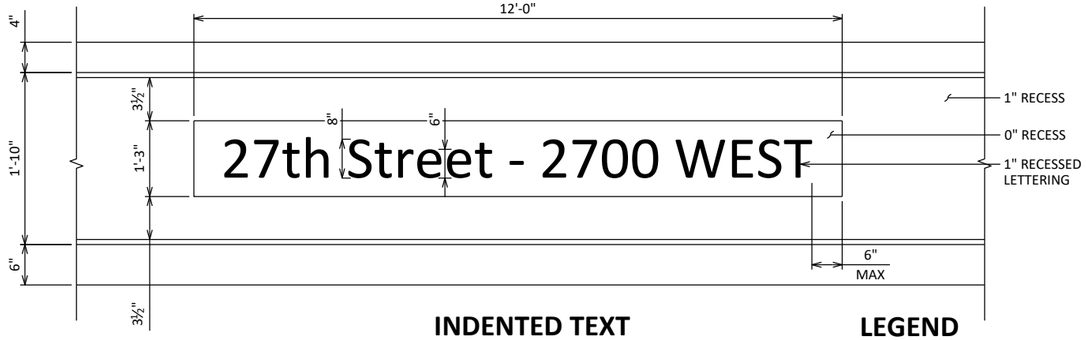
STATE PROJECT NUMBER

1060-27-74



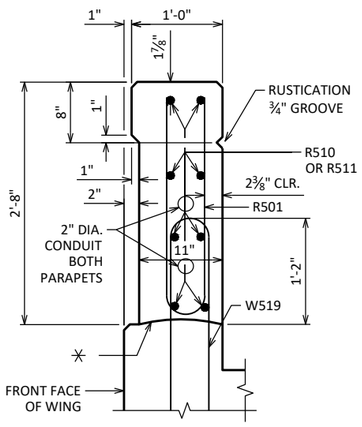
OUTSIDE ELEVATION OF PARAPET

(WEST PARAPET SHOWN, EAST PARAPET SIMILAR)

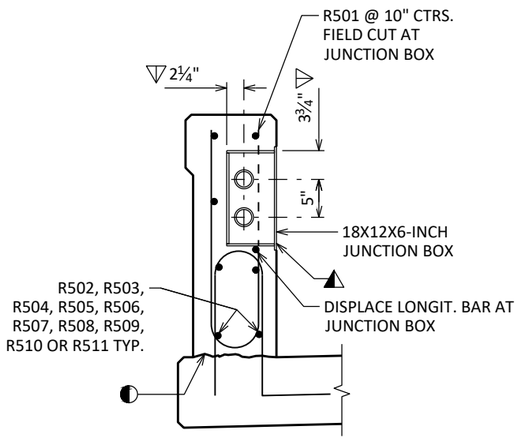


INDENTED TEXT

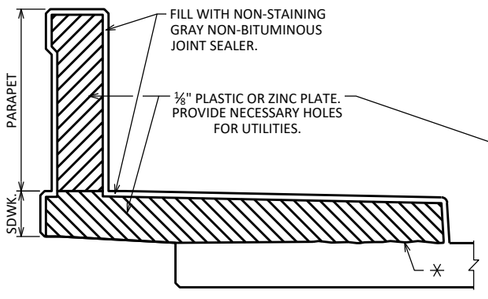
EXTERIOR FACE OF PARAPET ONLY



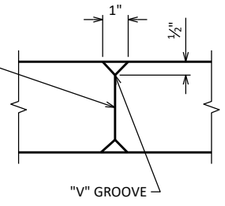
SECTION A - A



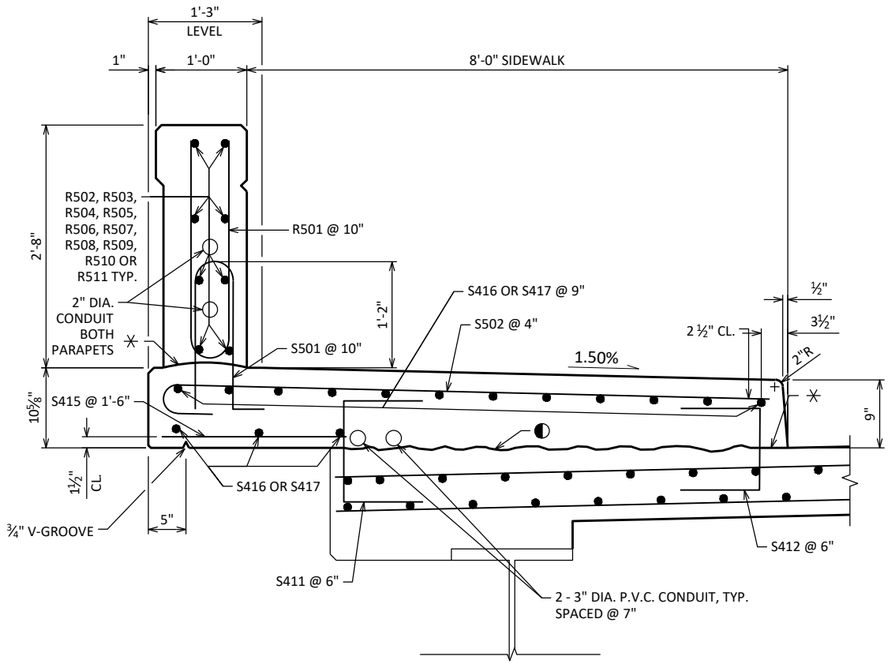
SECTION B - B



SECTION D - D



SECTION E - E



SECTION C - C

LEGEND

- ▽ HORIZ. CONST. JOINT-STRIKE OFF AS SHOWN AND LEAVE ROUGH.
- ✳ CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.
- ◐ JOINT IS LEVEL. DOES NOT FOLLOW THE 2.00% SLOPE OF THE DECK. STRIKE OFF AS SHOWN.
- ▽ LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.
- ◭ CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.

NOTES

WHEN PARAPETS ARE POURED CONTINUOUSLY FROM END TO END, THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF ⅛" ZINC OR PLASTIC PLATE CUT AS SHOWN IN SECTION D-D BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS ARE USED AT THE DEFLECTION JOINTS, ONE SIDE OF JOINT SHALL BE COATED WITH AN APPROVED LIQUID BOND BREAKER AND PLATE SEPARATORS MAY BE OMITTED.

PROVIDE JUNCTION BOXES FROM THE APPROVED PRODUCTS LIST.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY MTZ | PLANS CK'D MAM

PARAPET SECTIONS & DETAILS

SHEET 53 OF 62

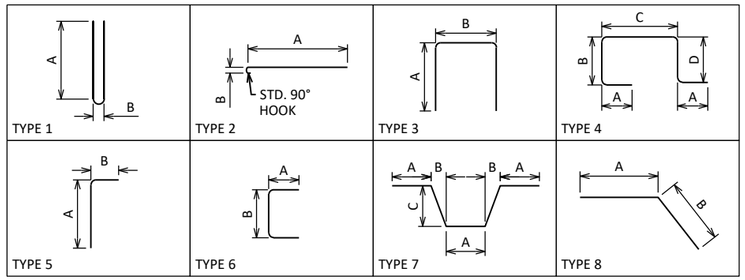
815

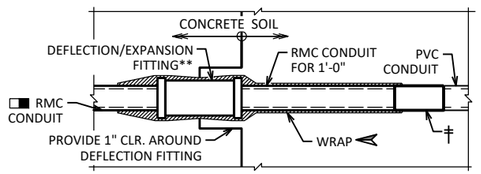
SCALE = 1 IN:20 FT

8

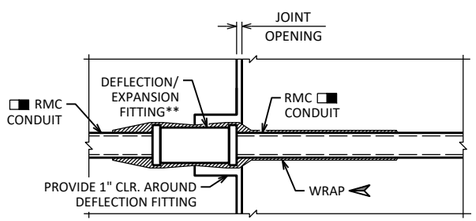
8

BAR INFORMATION						BAR DIMENSIONS				LOCATION
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BEND TYPE	A	B	C	D	
R501	E	999	5'-0"	X	1	2'-2"	7"			PARAPET - VERTICAL FACE TYPE 'A'
R502	E	68	40'-0"							PARAPET - VERTICAL FACE TYPE 'A'
R503	E	4	31'-6"							PARAPET - VERTICAL FACE TYPE 'A'
R504	E	4	29'-10"							PARAPET - VERTICAL FACE TYPE 'A'
R505	E	4	17'-5"							PARAPET - VERTICAL FACE TYPE 'A'
R506	E	4	8'-10"							PARAPET - VERTICAL FACE TYPE 'A'
R507	E	4	24'-3"							PARAPET - VERTICAL FACE TYPE 'A'
R508	E	4	12'-6"							PARAPET - VERTICAL FACE TYPE 'A'
R509	E	4	3'-0"	X	8	1'-7"	1'-5"			PARAPET - VERTICAL FACE TYPE 'A'
R510	E	4	15'-8"							PARAPET - VERTICAL FACE TYPE 'A'
R511	E	4	12'-6"							PARAPET - VERTICAL FACE TYPE 'A'
R512	E	84	9'-6"	X	2	8'-6"	6"			LIGHT SUPPORT - DECK OVERHANG
R513	E	28	6'-6"	X	3	2'-3"	2'-0"			LIGHT SUPPORT - TIE
R514	E	28	7'-9"	X	4	1'-0"	1'-7"	2'-6"	1'-6"	LIGHT SUPPORT - TIE
R515	E	84	9'-6"							LIGHT SUPPORT - DECK OVERHANG
R516	E	14	3'-3"	X	5	2'-3"	1'-0"			LIGHT SUPPORT - TIE
R517	E	14	3'-9"	X	6	1'-0"	1'-7"			LIGHT SUPPORT - TIE
R618	E	49	10'-6"	X	7	2'-0"	9"	2'-1"		LIGHT SUPPORT - TIE

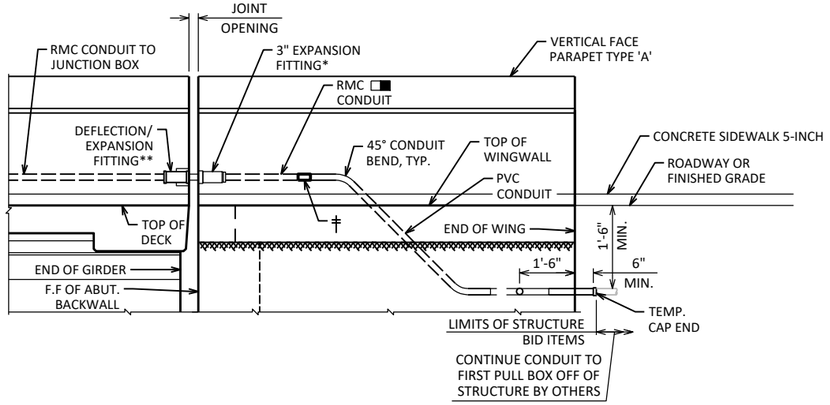




DEFLECTION/EXPANSION FITTING

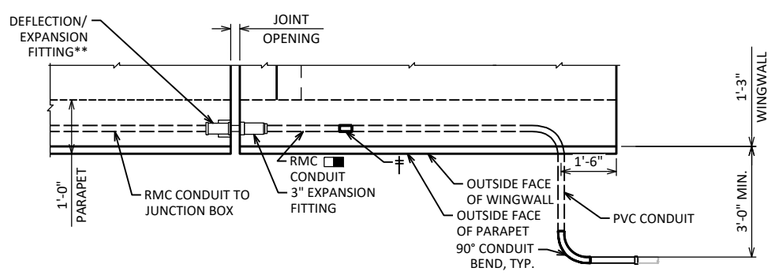


DEFLECTION/EXPANSION FITTING



INSIDE ELEVATION OF PARAPET AT EXP. JOINT

(FENCE NOT SHOWN FOR CLARITY)



PLAN OF PARAPET AT EXP. JOINT

(FENCE NOT SHOWN FOR CLARITY)

STATE PROJECT NUMBER

1060-27-74

NOTES

THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFY THE BAR SIZE.

DIMENSIONS ARE TO OUTSIDE OF BARS, EXCEPT FOR RADIUS DIMENSIONS WHICH ARE TO INSIDE OF BENDS.

FOR A BAR SERIES, LENGTH SHOWN IN THE FOURTH COLUMN OF TABLE IS THE AVERAGE BAR LENGTH USED TO COMPUTE BAR WEIGHT.

BAR MATERIAL CODES USED IN SECOND COLUMN OF TABLE
E - STEEL, HIGH STRENGTH, EPOXY COATED.
S - STAINLESS STEEL.

CONDUIT SHALL BE EMBEDDED 2" CLEAR.

USE 2" DIA. RIGID NONMETALLIC CONDUIT (PVC) UNLESS NOTED OTHERWISE.

CONDUIT FITTINGS, CONDUIT BENDS, AND ADAPTER FITTINGS INCIDENTAL TO CONDUIT WORK.

CONDUIT BENDS SHALL CONFORM TO THE NATIONAL ELECTRIC CODE.

LEGEND

USE 2" DIA. RIGID METALLIC (RMC) CONDUIT AT FITTINGS. PROVIDE RMC FOR 3'-0" MIN. ON EACH SIDE OF JOINT OPENINGS UNLESS NOTED OTHERWISE.

† NONMETALLIC CONDUIT TO METALLIC CONDUIT ADAPTER FITTING (UL OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED).

SPONGE RUBBER WRAP TO BE AASHTO M135, TYPE 1 OR EQUIVALENT - MINIMUM THICKNESS. PROVIDE WRAP FOR THE ENTIRE LENGTH OF THE FITTING OR AS SHOWN. SPONGE RUBBER WRAP INCIDENTAL TO "CONDUIT RIGID METTALIC 2-INCH".

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY MTZ | PLANS CK'D MAM

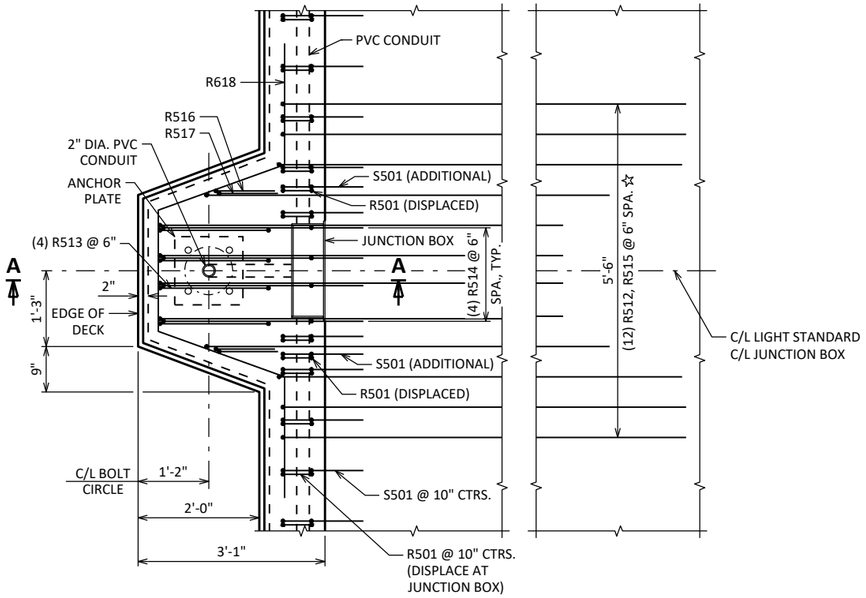
PARAPET REINFORCEMENT SCHEDULE

SHEET 54 OF 62
816

SCALE = N/A

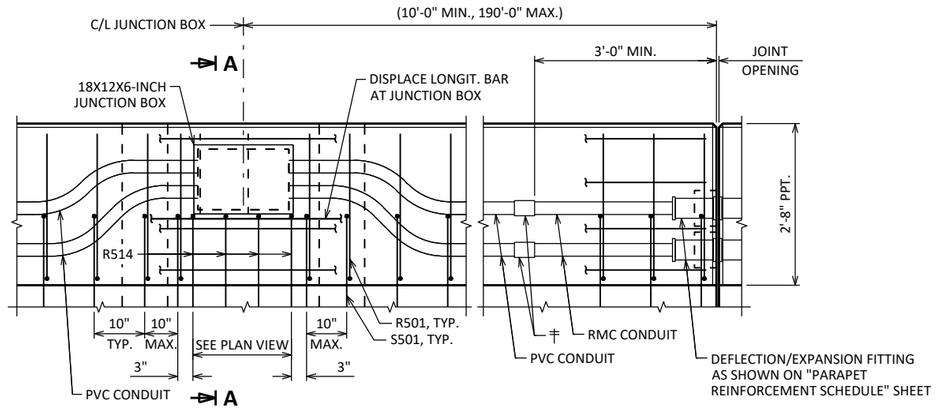
STATE PROJECT NUMBER

1060-27-74



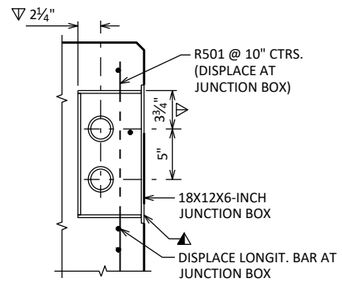
PLAN AT LIGHT STANDARD

(DECK STEEL NOT SHOWN FOR CLARITY)



INSIDE ELEVATION AT JUNCTION BOX

(DECK STEEL NOT SHOWN FOR CLARITY)



JUNCTION BOX DETAIL

NOTES

BID ITEM SHALL BE "ANCHOR ASSEMBLIES POLES ON STRUCTURES", EACH

CONDUIT SHALL BE EMBEDDED 2" CLEAR.

USE 2" DIA. RIGID NONMETALLIC CONDUIT (PVC) UNLESS NOTED OTHERWISE.

CONDUIT FITTINGS, CONDUIT BENDS, AND ADAPTER FITTINGS INCIDENTAL TO CONDUIT WORK.

PROVIDE JUNCTION BOXES FROM THE APPROVED PRODUCTS LIST.

SEE "CONDUIT DETAILS" SHEET FOR ADDITIONAL INFORMATION.

LEGEND

◐ CONSTRUCTION JOINT, STRIKE OFF AS SHOWN.

◭ CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.

▽ LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.

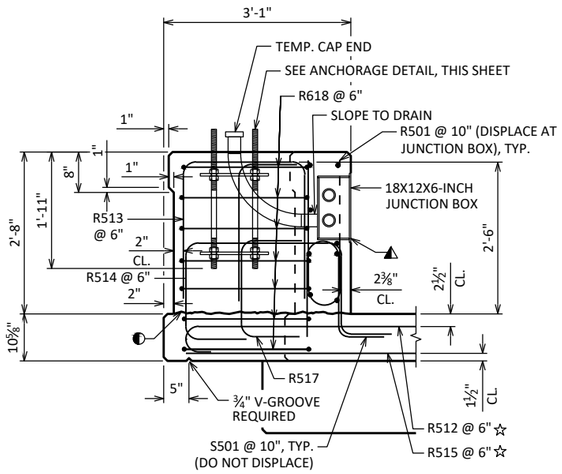
‡ NONMETALLIC CONDUIT TO METALLIC CONDUIT ADAPTER FITTING (UL OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED).

PVC = POLYVINYL CHLORIDE (RIGID NONMETALLIC) CONDUIT.

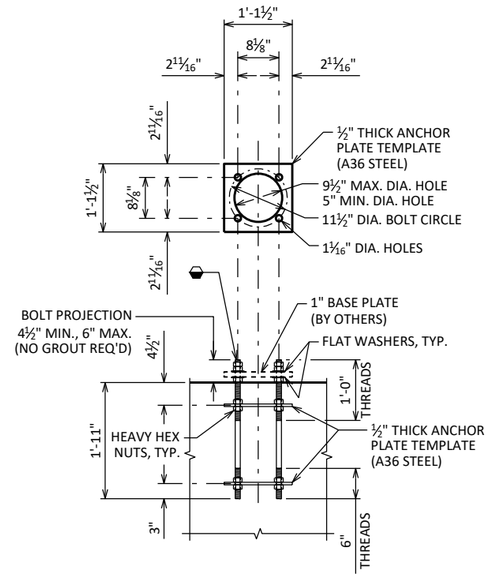
RMC = RIGID METALLIC CONDUIT.

◒ 1" DIA. ANCHOR RODS ASTM F1554 GR 55, HEAVY HEX NUTS ASTM A563, AND WASHERS ASTM F436. ANCHOR ASSEMBLIES SHALL BE GALVANIZED PER SECTION 531 OF THE STANDARD SPECIFICATION. PROVIDE (2) WASHERS AND (7) NUTS PER ANCHOR ROD.

☆ THESE BARS ARE IN ADDITION TO STANDARD TRANSVERSE BARS IN SIDEWALK.



SECTION A - A



ANCHOR ROD ASSEMBLY DETAIL

(ANCHOR ROD TYPE REQ'D)
(4) - ANCHOR RODS REQUIRED PER ASSEMBLY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY MTZ | PLANS CK'D MAM

LIGHT SUPPORT

SHEET 55 OF 62

817

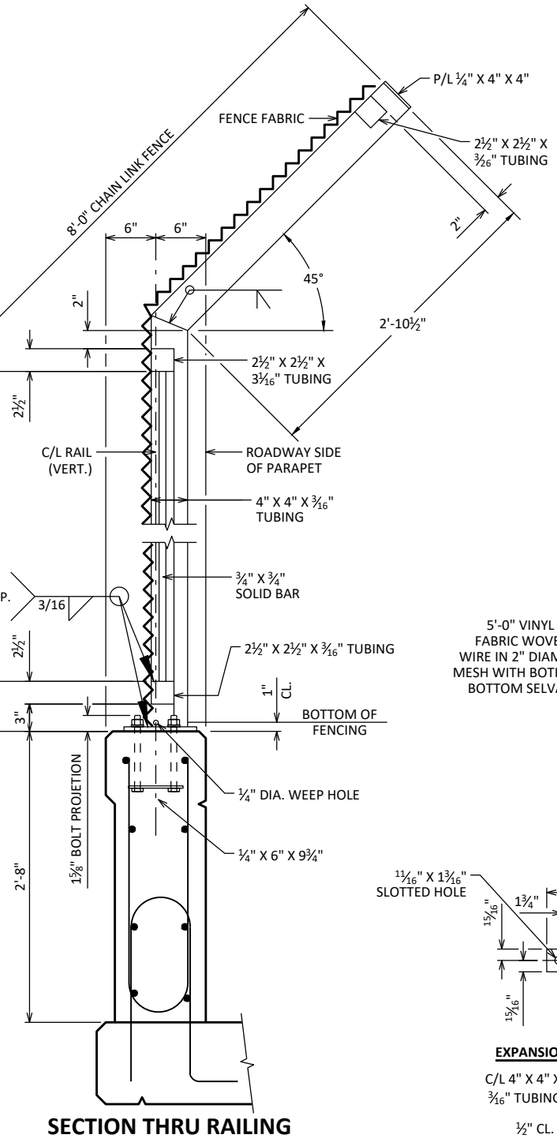
SCALE = VARIES

8

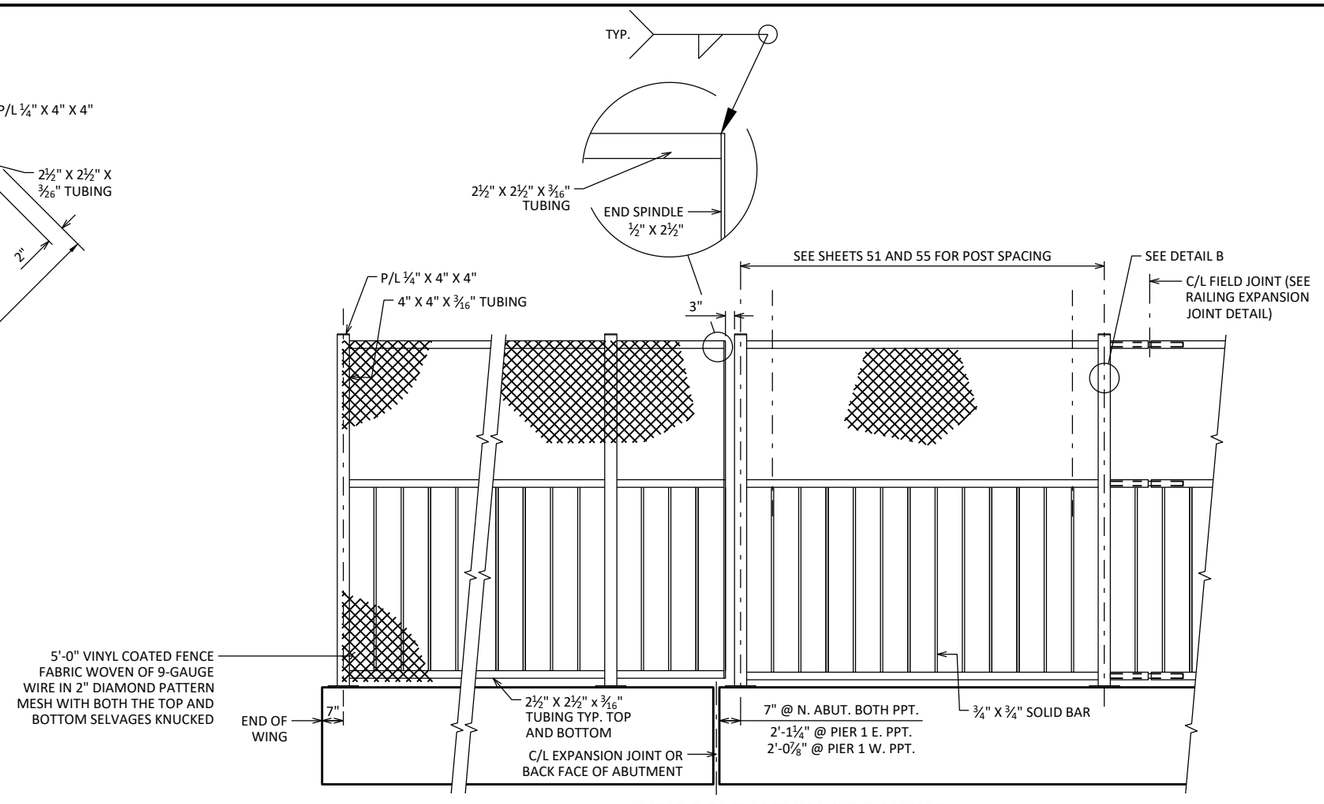
8

STATE PROJECT NUMBER

1060-27-74



SECTION THRU RAILING



INSIDE ELEVATION OF RAILING

STRAIGHT RAIL SHOWN (BENT RAIL SIMILAR)

NOTES

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE B. PLATES, ANGLES, BARS AND SHIMS SHALL CONFORM TO ASTM A709, GRADE 36. FENCE FABRIC SHALL CONFORM TO F668, CLASS 2B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET POSTS NORMAL TO GRADE.

ALL POST SPACINGS ARE TAKEN HORIZONTAL ALONG CENTERLINE OF RAILING AT BASE OF POST.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

CUT BOTTOM OF POST TO MAKE VERTICAL IN TRANSVERSE DIRECTION.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED. ✳

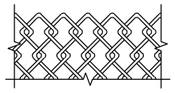
THE BID ITEM SHALL BE "RAILING TUBULAR SCREENING" WHICH SHALL INCLUDE ALL ITEMS SHOWN.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE NOT MORE THAN 3 POSTS.

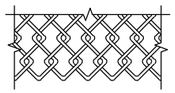
VENT HOLES SHALL BE DRILLED IN MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

ALL RAILING MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE CONTRACT DOCUMENTS. THE RAILING SHALL BE PAINTED AMS STD. COLOR NO. 27308, BLACK. FENCE FABRIC AND TIES TO BE VINYL-COATED. COLOR SHALL BE BLACK IN ACCORDANCE WITH ASTM F934.

THE END OF THE FABRIC SHALL BE ATTACHED TO THE POST BY MEANS OF A TENSION BAR THREADED THROUGH THE END LOOPS OF THE FABRIC AND SECURED TO THE POST WITH CLAMPS & BOLT. THE FABRIC SHALL BE STRETCHED TO REMOVE ALL SLACK.

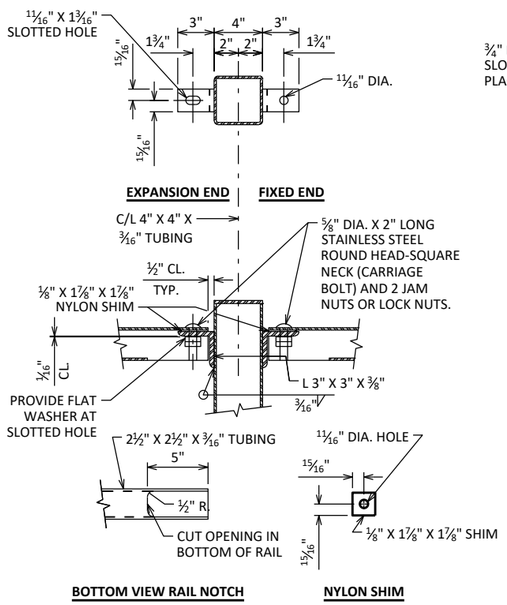


TOP DETAIL



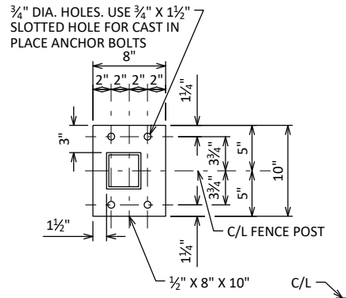
BOTTOM DETAIL

FENCE FABRIC

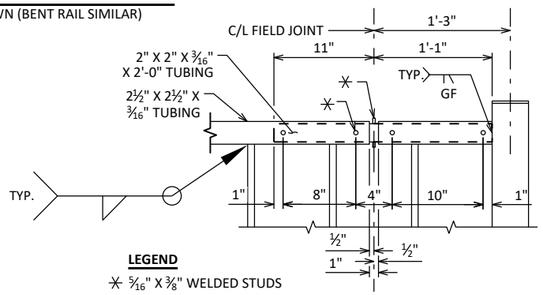


BOTTOM VIEW RAIL NOTCH — NYLON SHIM

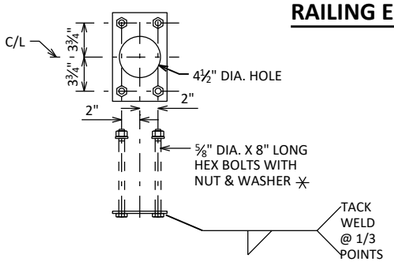
TOP RAIL CONNECTION FOR FENCE W/ BENT TOP



BASE PLATE



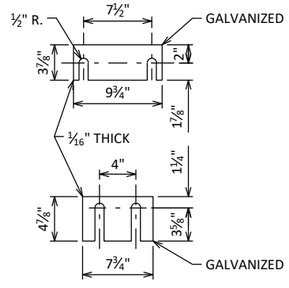
RAILING EXPANSION JOINT DETAIL



ANCHORAGE DETAIL

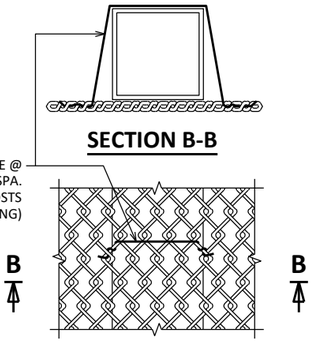
✳ ALTERNATIVE ANCHORAGE: ADHESIVE ANCHORS 5/8-INCH. EMBED 7" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.



SHIM PLATE DETAILS

TWO SHIMS OF EACH SIZE REQUIRED PER POST



DETAIL B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY MTZ | PLANS CK'D MAM

RAILING TUBULAR SCREENING

SHEET 56 OF 62

818

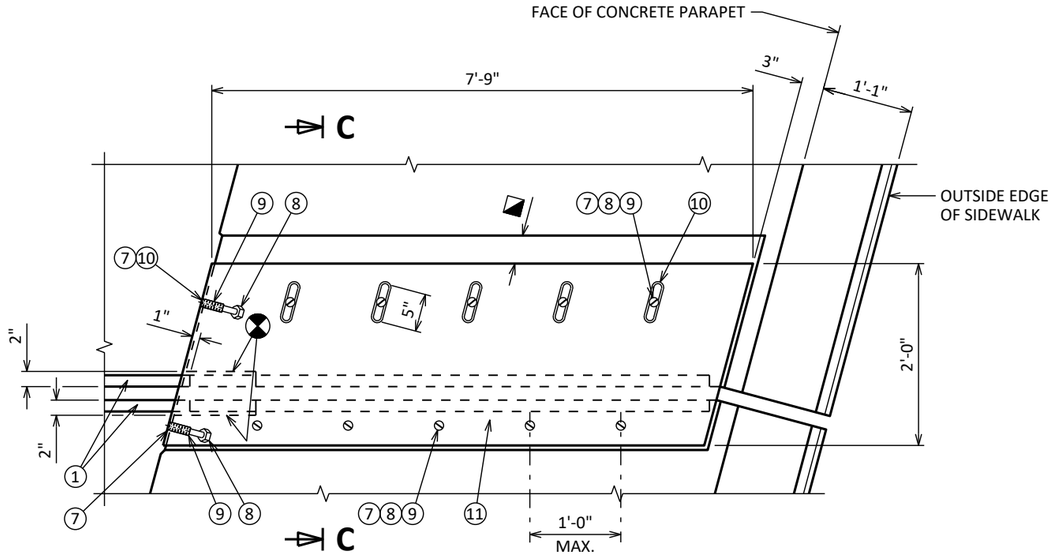
SCALE = 1 IN:25 FT

8

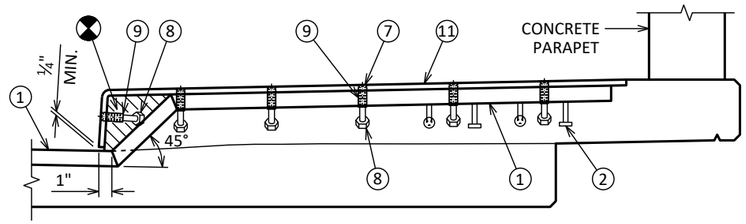
8

STATE PROJECT NUMBER

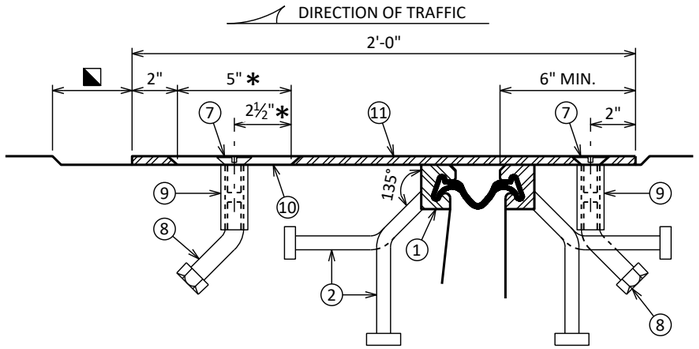
1060-27-74



PLAN AT SIDEWALK

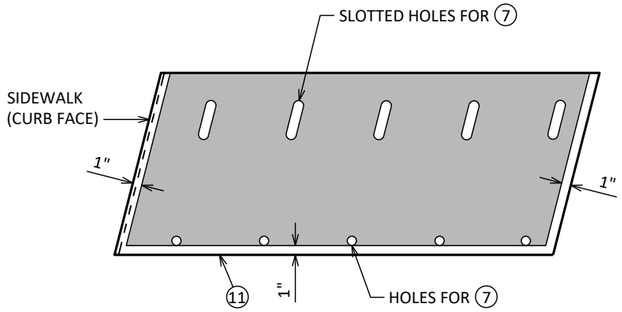


SECTION AT SIDEWALK



SECTION C - C

* DIMENSION ALONG DIRECTION OF MOVEMENT



PLAN OF SIDEWALK COVER PLATE WITH SLIP-RESISTANT SURFACE

PLACE SLIP-RESISTANT SURFACE ON TOP WALKING SURFACE IN SHADED AREA ONLY.

APPROVED SLIP-RESISTANT APPLIED SURFACES FOR STEEL PLATES		
PRODUCT	MANUFACTURER	CONTACT AT
SLIPNOT GRADE 2, STEEL	W. S. MOLNAR COMPANY	1-800-SLIPNOT
ALGRIP, STEEL	ROSS TECHNOLOGY CORP.	1-800-345-8170

LEGEND

1. NEOPRENE STRIP SEAL (4 - INCH) AND STEEL EXTRUSIONS.
2. STUDS ⅝" DIA. X 6⅜" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS AND BEND AS SHOWN AFTER WELDING.
7. ¾" DIA. X 1½" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. PLACE IN COUNTERSUNK HOLE. RECESS 1/16" BELOW PLATE SURFACE.
8. ¾" DIA. X 4" GALVANIZED HEX HEAD BOLT. BEND 45°.
9. ¾" DIA. X 2¼" GALVANIZED THREADED COUPLING.
10. 1" X 5" SLOTTED COUNTERSUNK HOLE FOR NO. 7. PLACE SLOT PARALLEL TO DIRECTION OF MOVEMENT.
11. SIDEWALK COVER PLATE ⅜" X 2'-0" X LIMITS SHOWN. BEND DOWN FACE OF SIDEWALK WITH HOLES FOR NO. 7. GALVANIZE PLATE AFTER SLIP-RESISTANT SURFACE IS APPLIED.

BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.

JOINT OPENING DIMENSION ALONG SKEW PLUS ½".

NOTES

ANCHOR SYSTEM NO. 8 AND NO. 9 SHALL CONFORM TO ASTM A307 AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C AND D.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY MTZ | PLANS CK'D MAM

COVER PLATE DETAILS (1 OF 2)

SHEET 57 OF 62

819

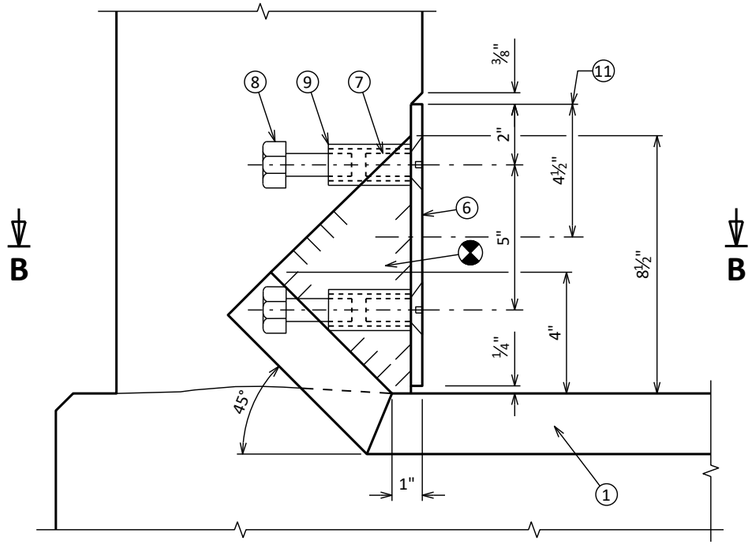
SCALE = VARIES

8

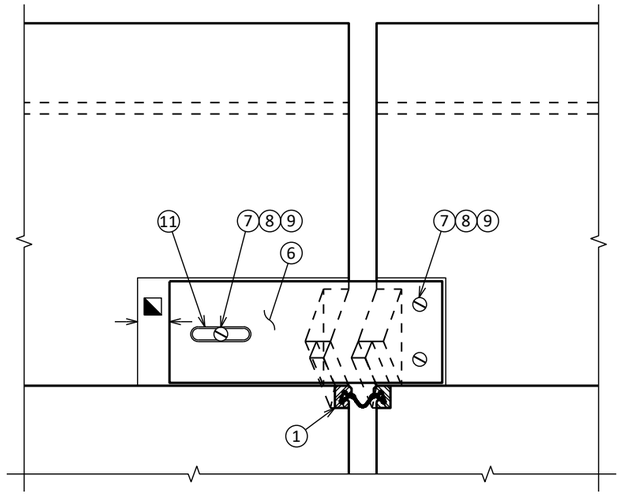
8

STATE PROJECT NUMBER

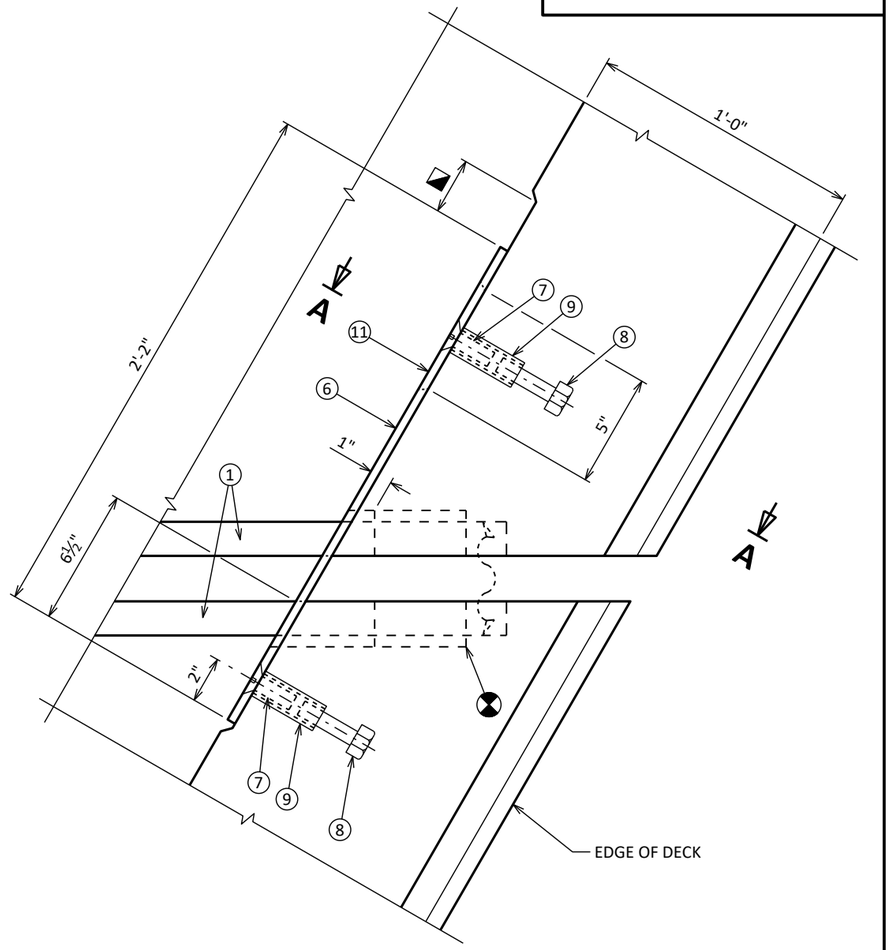
1060-27-74



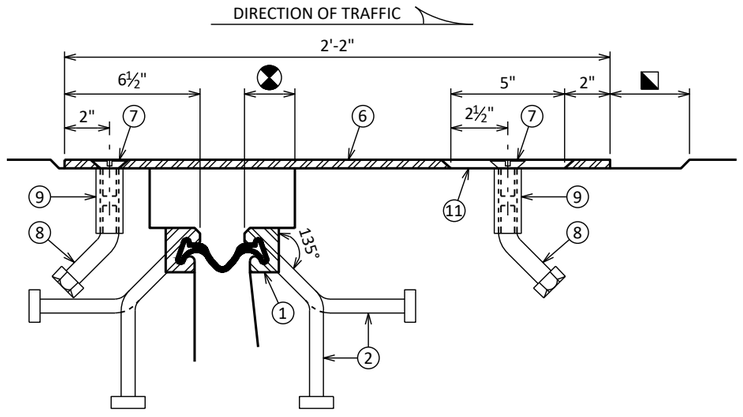
SECTION A - A



VIEW OF PARAPET PLATE FROM ROADWAY



PLAN



SECTION B - B

LEGEND

1. NEOPRENE STRIP SEAL (4 - INCH) AND STEEL EXTRUSIONS.
2. STUDS ⅜" DIA. X 6⅜" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS AND BEND AS SHOWN AFTER WELDING.
6. GALVANIZED PLATE ⅜" X 10" X 2'-2" LONG WITH HOLES FOR NO.7.
7. ¾" DIA. X 1½" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. PLACE IN COUNTERSUNK HOLE. RECESS 1/16" BELOW PLATE SURFACE.
8. ¾" DIA. X 4" GALVANIZED HEX HEAD BOLT. BEND 45°.
9. ¾" DIA. X 2¼" GALVANIZED THREADED COUPLING.
10. 1" X 5" SLOTTED COUNTERSUNK HOLE FOR NO. 7. PLACE SLOT PARALLEL TO DIRECTION OF MOVEMENT.
11. SIDEWALK COVER PLATE ⅜" X 2'-0" X LIMITS SHOWN. BEND DOWN FACE OF SIDEWALK WITH HOLES FOR NO. 7. GALVANIZE PLATE AFTER SLIP-RESISTANT SURFACE IS APPLIED.

BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.

JOINT OPENING DIMENSION ALONG SKEW PLUS ½".

NOTES

ANCHOR SYSTEM NO. 8 AND NO. 9 SHALL CONFORM TO ASTM A307 AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C AND D.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY MTZ | PLANS CK'D MAM

COVER PLATE DETAILS (2 OF 2)

SHEET 58 OF 62

820

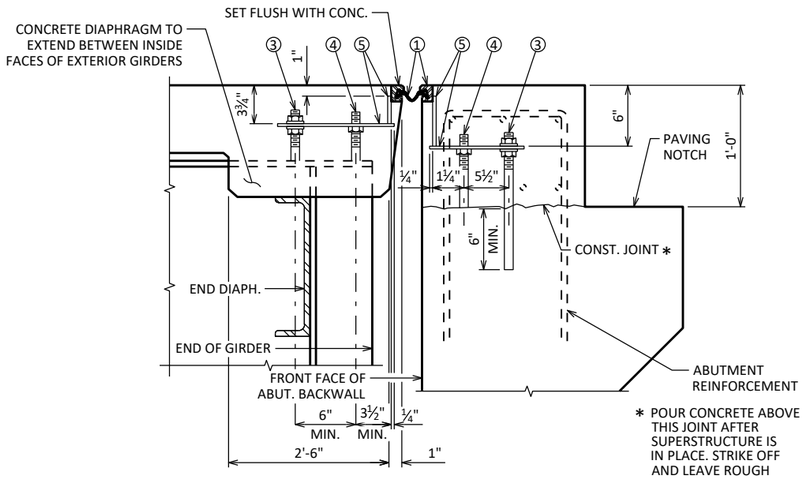
SCALE = VARIES

8

8

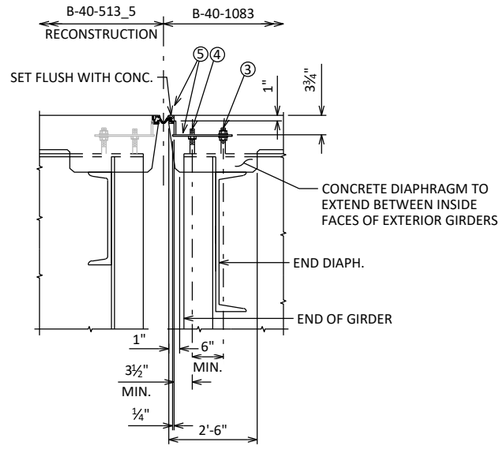
STATE PROJECT NUMBER

1060-27-74



SECTION THRU JOINT AT ABUTMENT

NORMAL TO C/L SUBSTRUCTURE



SECTION THRU JOINT AT PIER 1

NORMAL TO C/L SUBSTRUCTURE

LEGEND

1. NEOPRENE STRIP SEAL (4 - INCH) AND STEEL EXTRUSIONS.
2. STUDS ⅝" DIA. X 6⅜" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS AND BEND AS SHOWN AFTER WELDING.
2A. ½" THICK ANCHOR PLATE WITH ⅝" DIA. ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE, WELD ANCHOR PLATE TO NO. 1 AT 1'-6" CENTERS BETWEEN GIRDERS.
3. ¾" DIA. THREADED ROD WITH 2 NUTS AND PLATE WASHERS. WELD THREADED ROD TO TOP FLANGE OR ATTACH BY BOLTING THRU FLANGE. ON ABUTMENT SIDE GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT BACKWALL AS SHOWN.
4. ¾" DIA. THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
5. FABRICATE SUPPORT FROM 3" X ½" BAR AS SHOWN OR EQUIVALENT, ONE PER GIRDER PER SIDE. SHOP OR FIELD WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE 1½" DIA. HOLE FOR NO. 3 AND 1" DIA. HOLE FOR NO. 4.

NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS, UNLESS MORE ARE REQUIRED FOR STAGED CONSTRUCTION, HANDLING OR GALVANIZING REQUIREMENTS. IF USED, ANCHOR PLATES SHALL BE PROVIDED 3" FROM EACH SIDE OF THE FIELD SPLICE. DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST AND SWEEP.

FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN AND SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES, SUPPORTS AND EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PLATES, SUPPORTS AND EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED. SLIP-RESISTANT SURFACE IS APPLIED TO SIDEWALK COVER PLATES BY THE MANUFACTURER AND THEN HOT DIPPED GALVANIZED TO THEIR RECOMMENDATIONS TO MAINTAIN THE INTEGRITY OF THIS SURFACE.

ALL MATERIAL IN THE EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE SHALL BE PAID AT THE UNIT PRICE BID FOR "EXPANSION DEVICE".

SECTION THRU JOINT

EXTERIOR GIRDER TO EDGE OF DECK AND AT PARAPETS, MEDIANS AND SIDEWALKS

ALTERNATE STRIP SEAL ANCHOR

SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN EXTERIOR GIRDERS

PART PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY MTZ | PLANS CK'D MAM

STRIP SEAL EXPANSION JOINT DETAILS

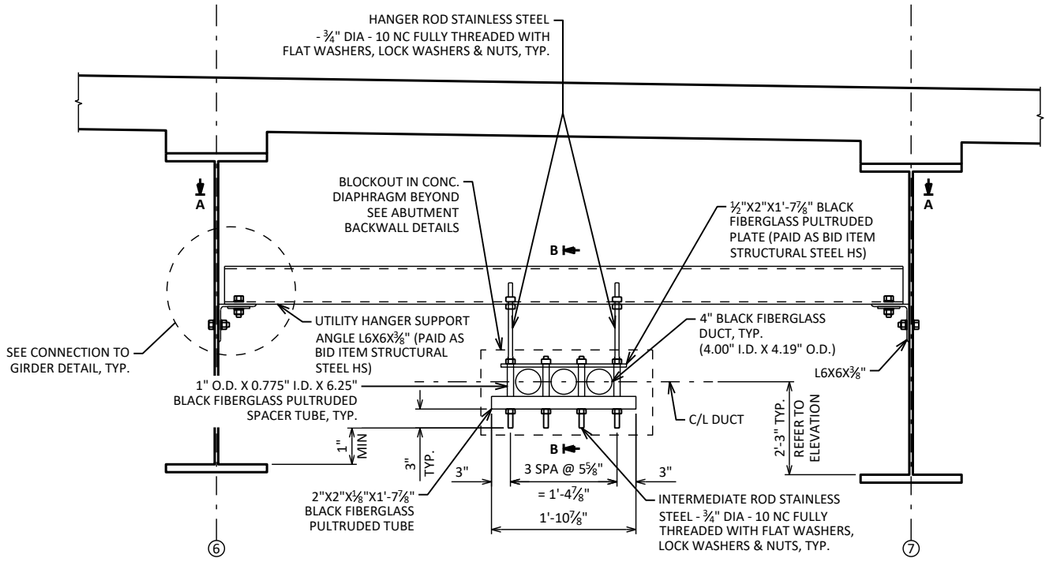
SHEET 59 OF 62

821

SCALE = VARIES

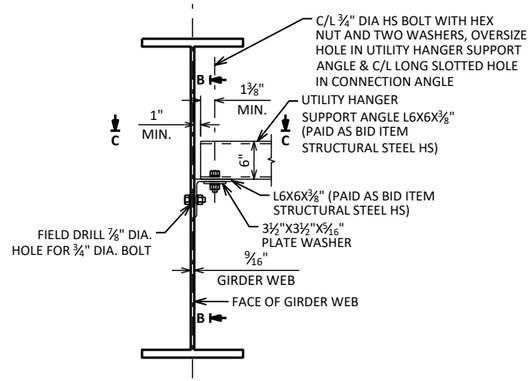
8

8

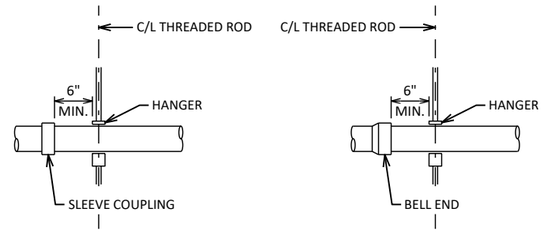


SECTION THRU 3 DUCT AT&T PACKAGE

LOOKING UPSTATION

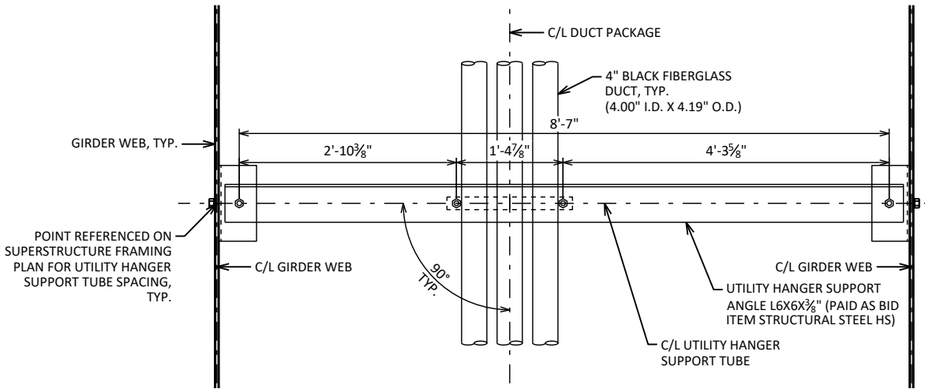


CONNECTION TO GIRDER DETAIL



CLEARANCE FOR SLEEVE COUPLINGS AND BELL ENDS

A BELLED END OR COUPLING SHOULD BE NO CLOSER THAN 6" ON EITHER SIDE OF A SUPPORT AS SHOWN ABOVE. A TAPE MEASURE CAN BE USED TO PREDETERMINE THESE LOCATIONS AND THE CONDUIT CAN BE SAW CUT TO THE PROPER LENGTH BEFORE IT IS THREADED THROUGH THE HANGERS.



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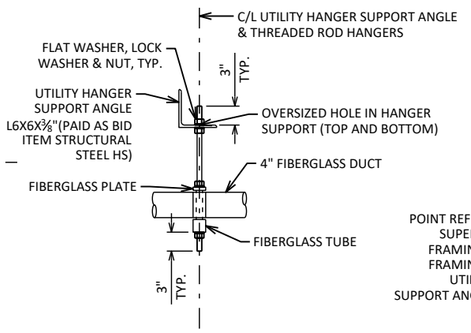

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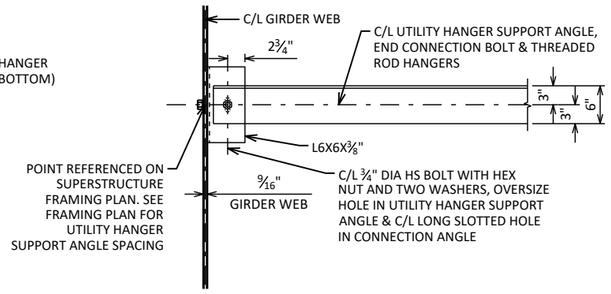

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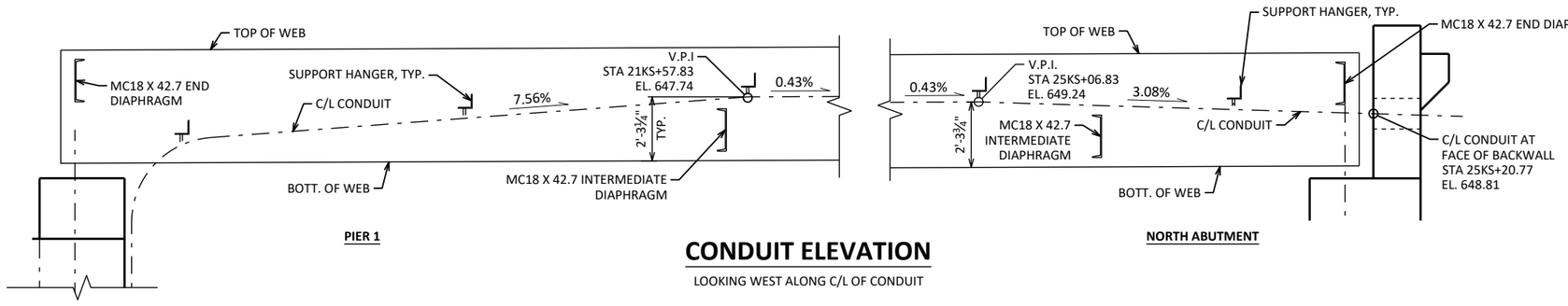


CONDUIT ELEVATION

LOOKING WEST ALONG C/L OF CONDUIT

NOTES

ALL UNDERDECK UTILITY MATERIALS SHOWN ON THIS SHEET AND OUTLINED IN THE SPECIAL PROVISIONS, SHALL BE PAID FOR UNDER BID ITEM "UNDERDECK UTILITY STRUCTURE B-40-1083".

ALL COMPONENTS SHALL HAVE A MINIMUM 75 YEAR DESIGN LIFE.

DEAD LOAD OF EACH 4" CONDUIT AND WIRE IS 9 PLF.

THE CONDUIT SUPPORT HANGER MEMBERS SHALL BE MADE OF BLACK FIBERGLASS PULTRUDED MATERIAL. FIBERGLASS MEMBERS SHALL COMPLY WITH THE REQUIREMENTS OF ASTM E84, CLASS I FLAME RATING AND SELF-EXTINGUISHING REQUIREMENTS OF ASTM D635. A SURFACE VEIL SHALL BE APPLIED DURING PULTRUSION TO INSURE A RESIN-RICH SURFACE AND ULTRAVIOLET RESISTANCE.

PROVIDE AN EXPANSION COUPLING IN THE CONDUITS AT THE LOCATIONS SHOWN ON THE SUPERSTRUCTURE FRAMING PLAN.

ALL FIBERGLASS JOINTS SHALL BE EPOXIED PER MANUFACTURER'S SPECIFICATIONS.

ALL CUTS AND HOLES IN EACH FIBERGLASS PIECE SHALL BE PROPERLY SEALED PER MANUFACTURER'S RECOMMENDATIONS TO PREVENT DETERIORATION.

THE CONDUIT SUPPORT HANGER RODS AND HARDWARE SHALL BE STAINLESS STEEL.

THE STRUCTURAL TUBING FOR THE UTILITY HANGER SUPPORT TUBE SHALL BE ASTM A500 GRADE B.

THE STRUCTURAL STEEL FOR THE CONNECTION ANGLES AND PLATE WASHERS SHALL BE ASTM A709 GRADE 36.

ALL BOTS, NUTS, AND WASHERS SHALL BE ASTM A325 TYPE 1.

THE STRUCTURAL UTILITY HANGER SUPPORT TUBE, CONNECTION ANGLES, AND PLATE WASHERS SHALL BE HOT-DIPPED GALVANIZED. THE BOLTS, NUTS, AND WASHERS USED TO CONNECT THE UTILITY HANGER SUPPORT TUBE TO THE GIRDERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

EXTEND CONDUIT 5'-0" FROM BACK FACE OF ABUTMENT. PROVIDE FIBERGLASS TO PVC ADAPTER ON THE END OF EACH DUCT AND CAP TEMPORARILY.

CONTRACTOR SHALL FIELD VERIFY THE ELEVATION OF THE CONCRETE DIAPHRAGM BLOCKOUTS. AT THE NORTH ABUTMENT BACKWALL, FILL ANNULAR SPACE BETWEEN UTILITY DUCT PACKAGE AND DIAPHRAGM BLOCKOUT WITH A NON-SHRINK CEMENT GROUT WITH A MINIMUM STRENGTH OF 4000 PSI. ALL PENETRATIONS AT THE ABUTMENT FOR AT&T SHALL BE SEALED AND WATERPROOFED. APPLY RUBBERIZED WATERPROOFING TO THE FILL FACE OF THE ABUTMENT DIAPHRAGM. COST OF CEMENT GROUT AND RUBBERIZED WATERPROOFING IS CONSIDERED INCIDENTAL TO "UNDERDECK UTILITY STRUCTURE B-40-1083".

STATE PROJECT NUMBER
1060-27-74

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY MTZ | PLANS CK'D MAM

UNDERDECK UTILITY DETAILS

SHEET 60 OF 62
822

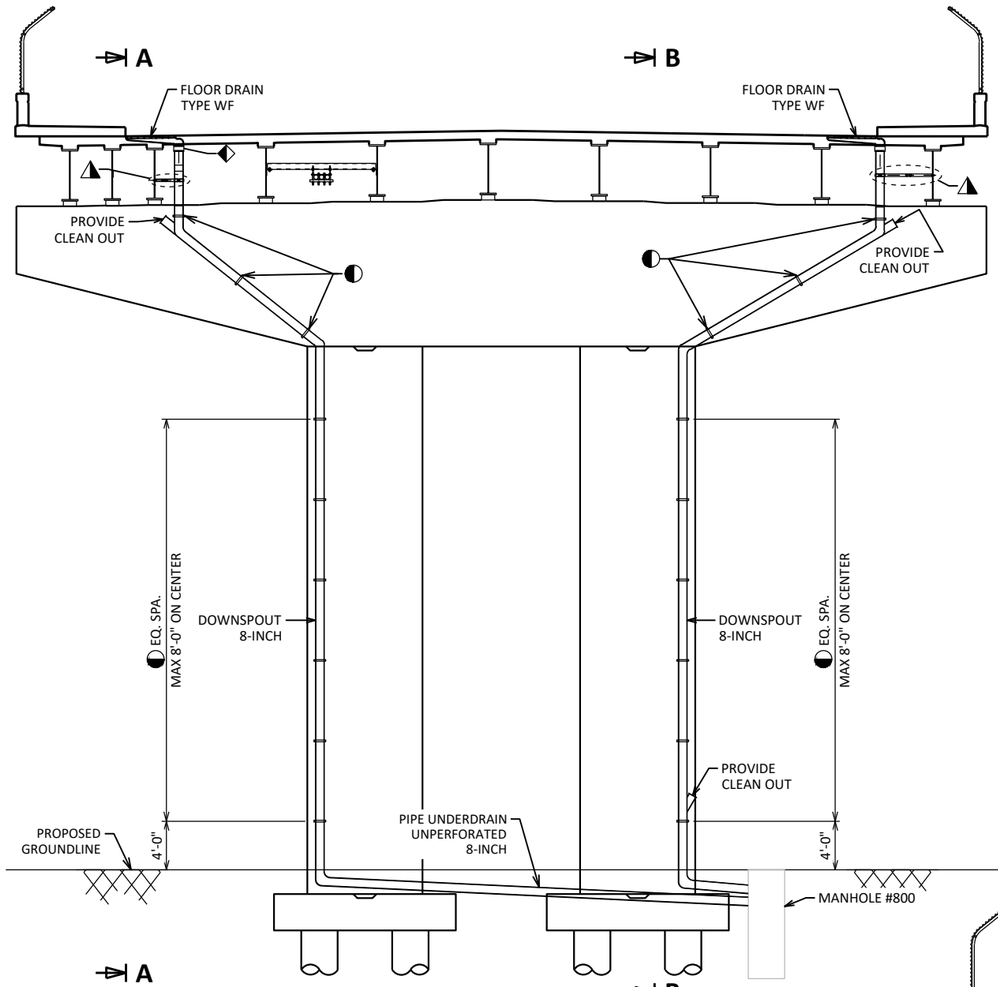
SCALE = VARIES

8

8

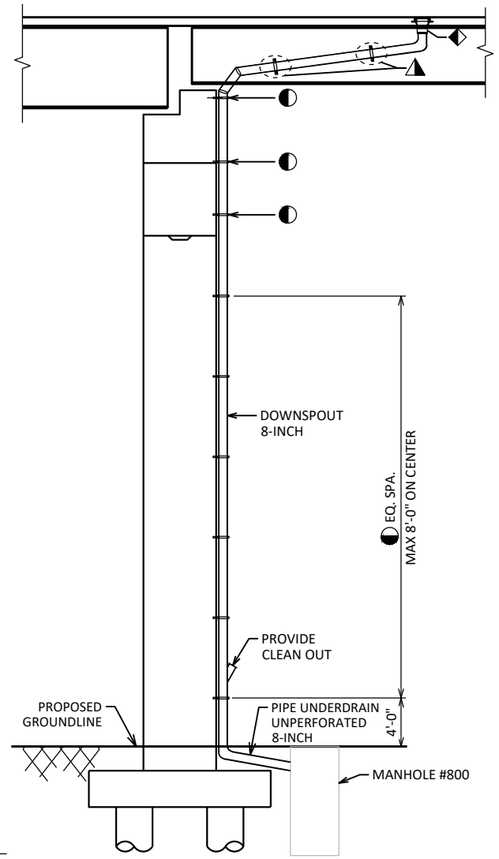
STATE PROJECT NUMBER

1060-27-74



PIER 1 ELEVATION

LOOKING SOUTH - DOWNSTATION



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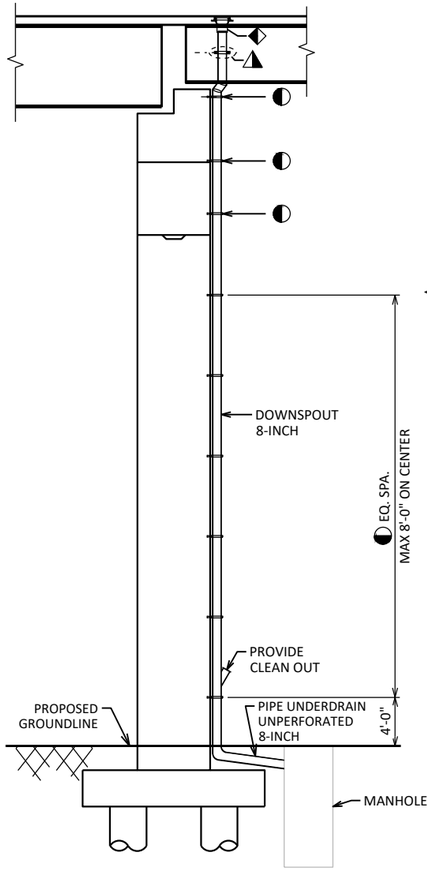
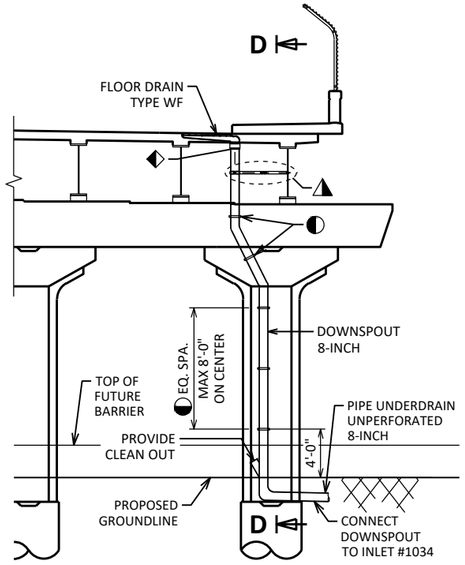


SECTION B - B

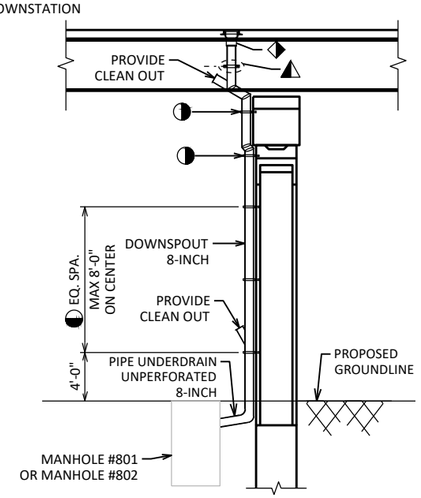


PARTIAL PIER 3 ELEVATION

LOOKING UPSTATION

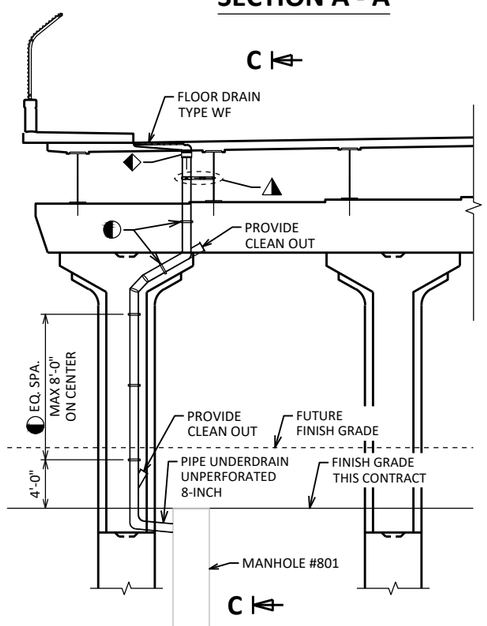
LEGEND

- 1'-6" FLEXIBLE CONNECTOR. FLEXIBLE CONNECTOR SHALL BE CAPABLE OF HANDLING A TWO-WAY MOVEMENT OF 3".
- GIRDER BRACKET DETAIL.
- ANCHOR DETAIL. PLACE AS SHOWN OR 8'-0" MAX. SPA.
- 8" DIA FLEXIBLE HUBLESS COUPLING.



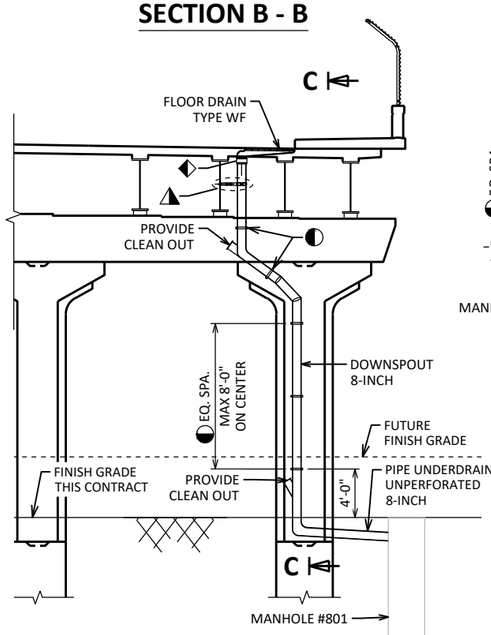
SECTION C - C

(LOOKING WEST)



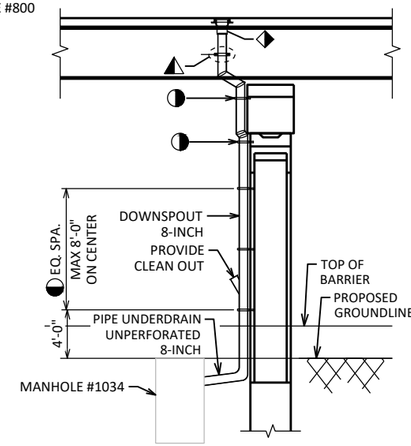
PARTIAL PIER 2 ELEVATION

LOOKING NORTH - UPSTATION



PARTIAL PIER 2 ELEVATION

LOOKING NORTH - UPSTATION



SECTION D - D

(LOOKING WEST)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY MTZ | PLANS CK'D MAM

FLOOR DRAIN PIPING

SHEET 61 OF 62

823

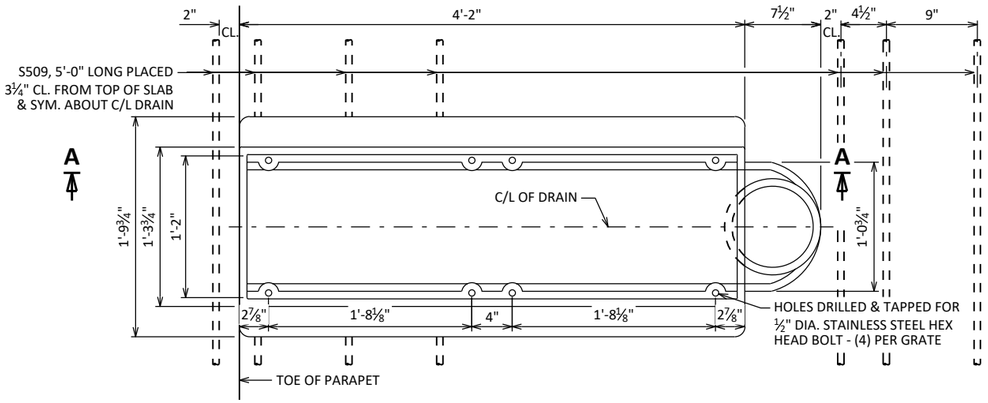
SCALE = VARIES

8

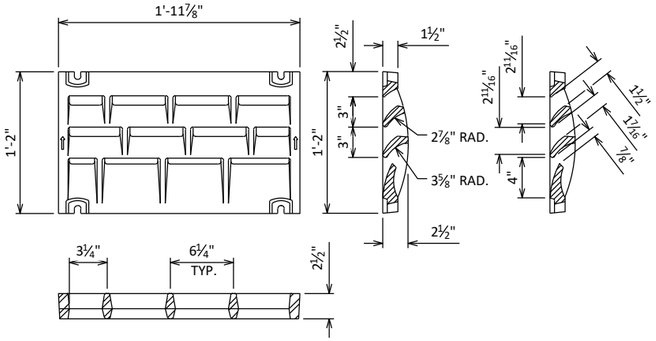
8

STATE PROJECT NUMBER

1060-27-74



PLAN



GRATE CASTING DETAIL

ATTACH GRATE TO FRAME FOR SHIPMENT

NOTES

ALL MATERIAL FOR TYPE "WF" CASTING AND 8" DIA. CONNECTION PIPE, EXCLUDING GRATE HOLD DOWN SCREWS, SHALL BE GRAY IRON CONFORMING TO ASTM A48, CLASS 30.

MATERIAL FOR BRACKETS SHALL CONFORM TO ASTM A36.

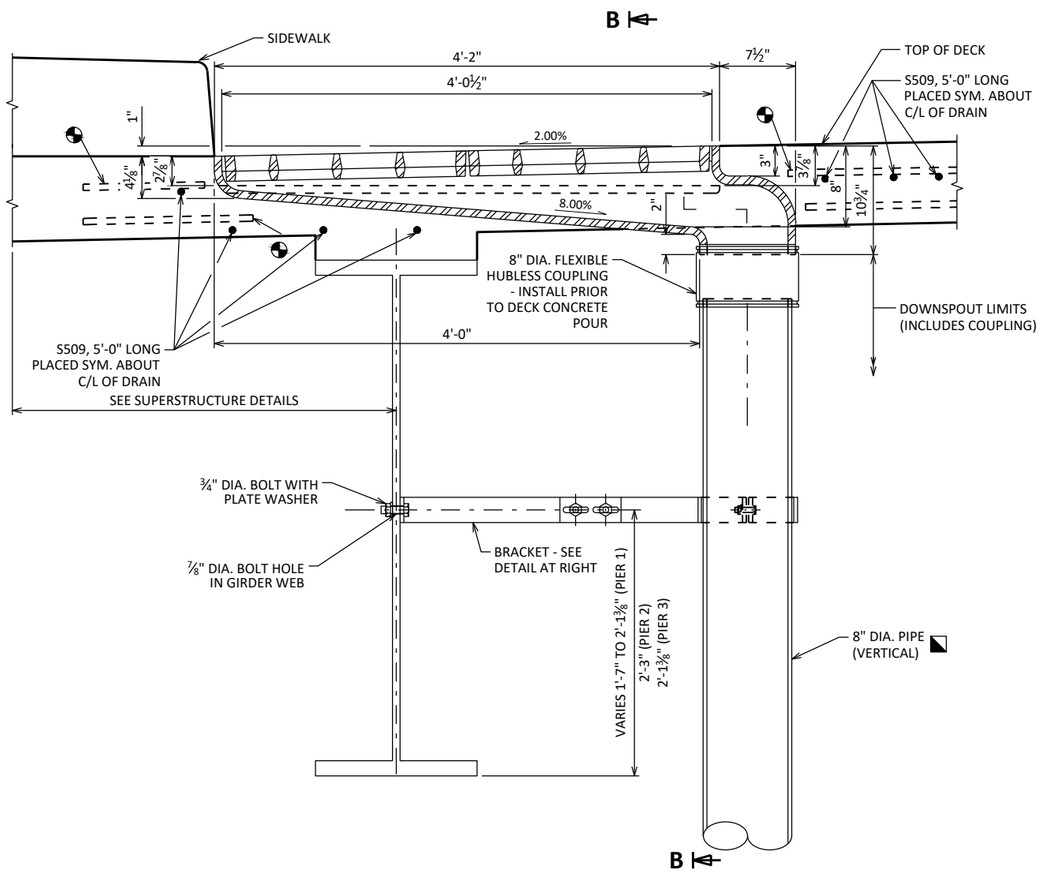
ALTERNATE BRACKETS ARE NOT ALLOWED.

ALL MATERIAL FOR FLOOR DRAINS TO BE INCLUDED IN THE BID ITEM "FLOOR DRAINS TYPE WF".

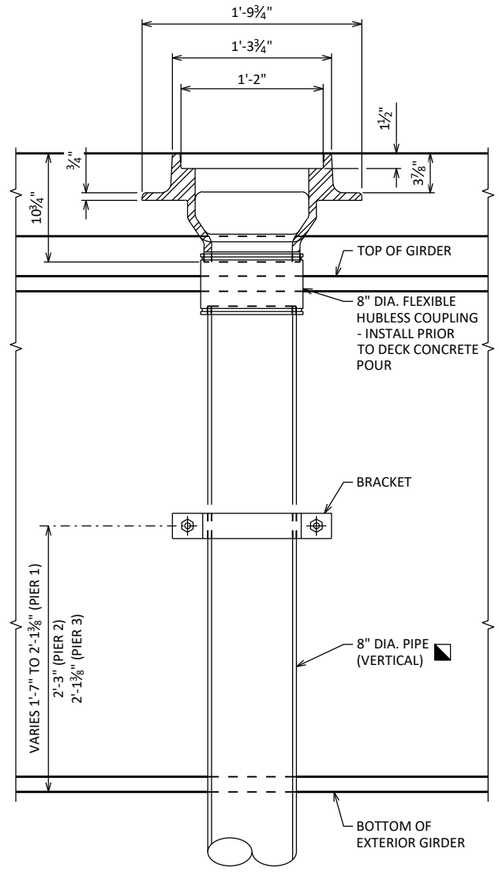
ALL MATERIAL FOR DOWNSPOUTS, DOWNSPOUT CONNECTIONS, AND BRACKETS TO BE INCLUDED IN THE BID ITEM "DOWNSPOUT 8-INCH".

◪ 8" DIA. DOWNSPOUTS SHALL BE REINFORCED THERMOSETTING RESIN PIPE (RTRP).

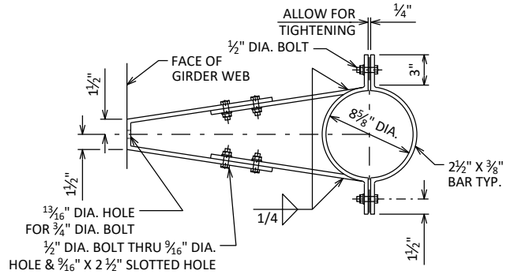
◓ TRANSVERSE & LONGITUDINAL SLAB BAR REINFORCEMENT TO BE CUT A MAXIMUM OF 1" CLEAR FROM DRAIN FRAME. DISPLACE BARS WHERE POSSIBLE.



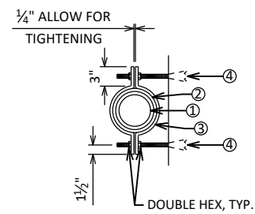
SECTION A - A



SECTION B - B



BRACKET DETAIL



ANCHOR DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-1083

DRAWN BY MTZ | PLANS CK'D MAM

FLOOR DRAIN TYPE WF

SHEET 62 OF 62

824

SCALE = VARIES

8

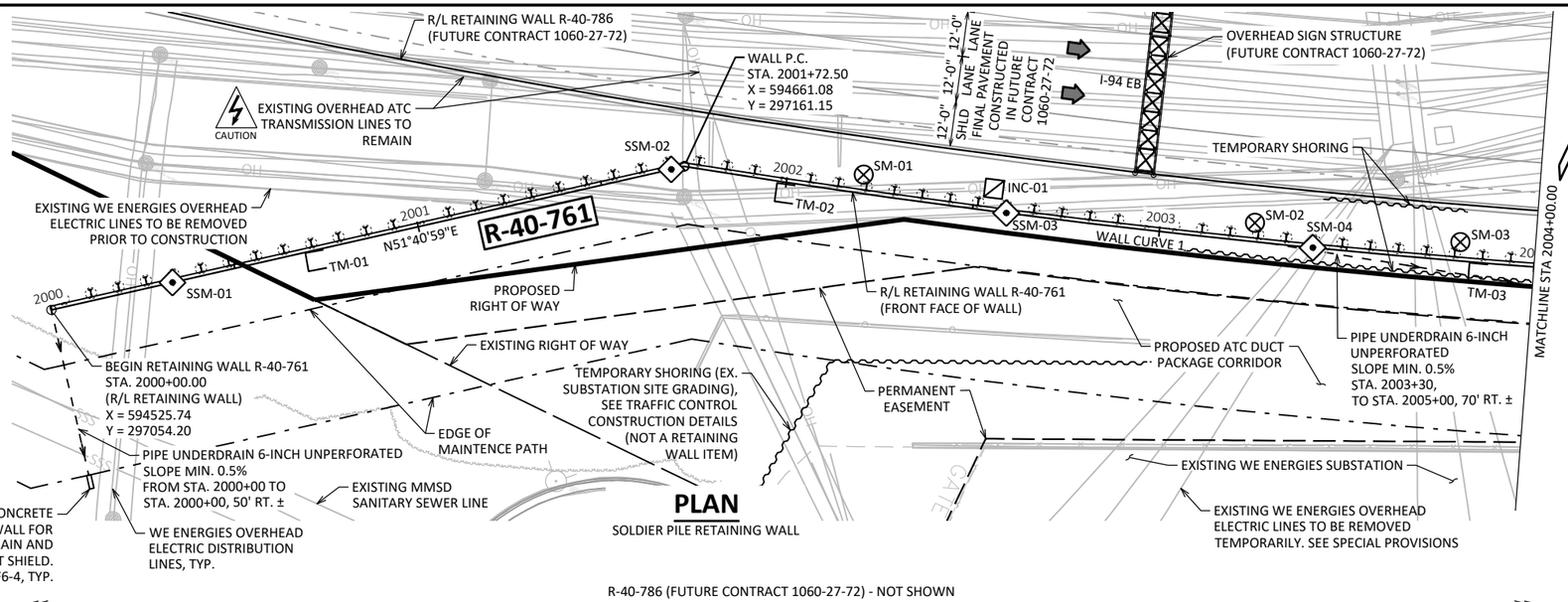
8

NOTES

1. CONSTRUCTION OF RETAINING WALL R-40-761 WILL NEED TO BE ACCOMPLISHED ADJACENT TO ENERGIZED OVERHEAD 138KV ELECTRIC TRANSMISSION LINES OWNED AND OPERATED BY THE AMERICAN TRANSMISSION COMPANY (ATC). THE HORIZONTAL AND VERTICAL LOCATION OF THESE LINES CAN VARY WITH WIND, AMBIENT TEMPERATURE AND POWER LOADING. THE CONTRACTOR IS ADVISED THAT LOW OVERHEAD EQUIPMENT AND INSTALLATION TECHNIQUES MAY BE REQUIRED TO MAINTAIN SAFE CLEARANCES FROM THESE LINES.

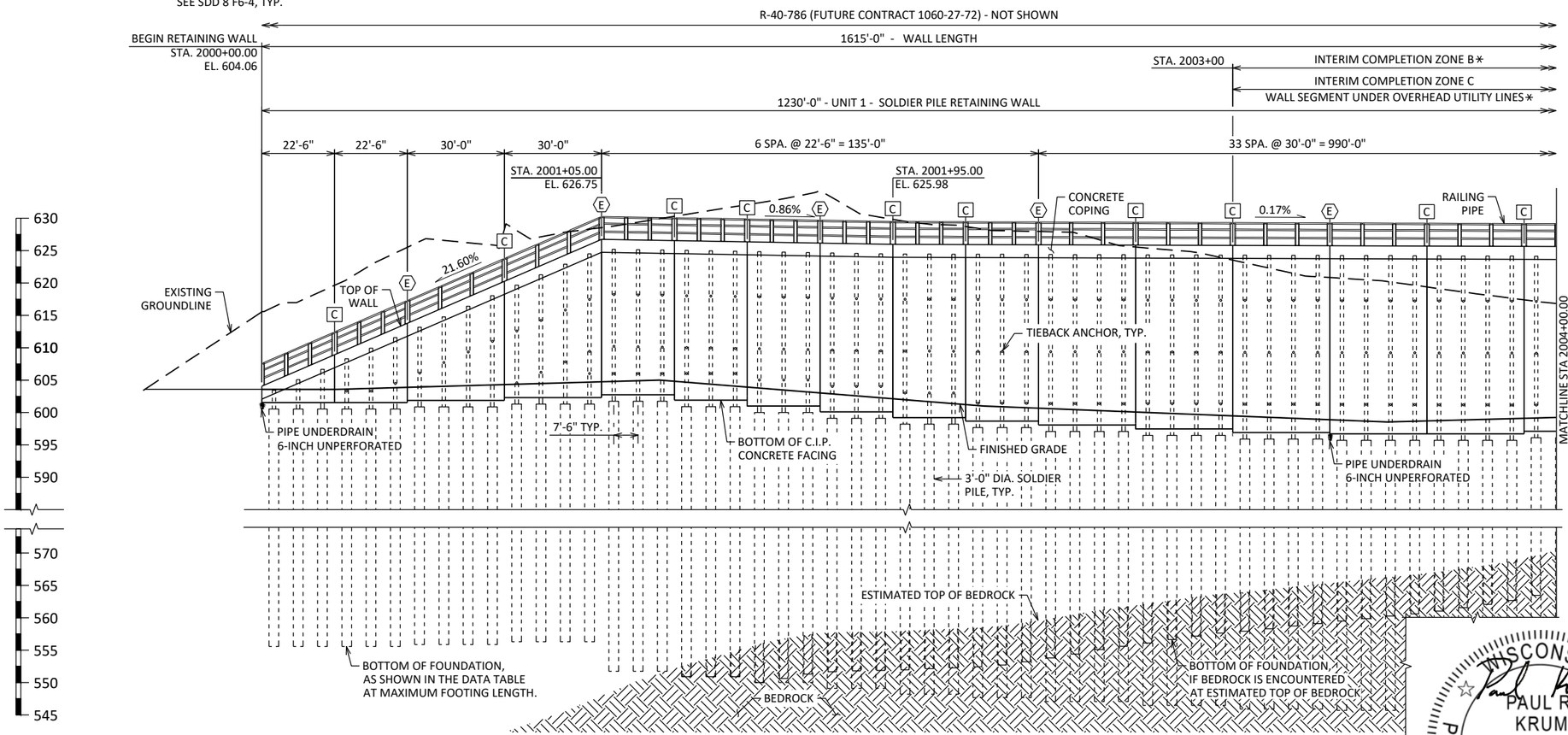
2. CONSTRUCTION OF RETAINING WALL R-40-761 WILL REQUIRE AN OUTAGE OF THE OVERHEAD ELECTRIC LINES OWNED AND OPERATED BY THE AMERICAN TRANSMISSION COMPANY (ATC) THAT EXTEND INTO THE EXISTING WE ENERGIES SUBSTATION. SEE THE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION. (INTERIM COMPLETION ZONE C).

3. SEE SHEETS 31 AND 32 FOR GEOTECHNICAL INSTRUMENTATION DETAILS.



PLAN

SOLDIER PILE RETAINING WALL



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG THE FRONT FACE OF WALL)

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
AARON BONK (608) 261-0261
CONSULTANT:
MARK MADAY (414) 272-2426

STATE PROJECT NUMBER

1060-27-74

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION (1 OF 4)
2. GENERAL PLAN & ELEVATION (2 OF 4)
3. GENERAL PLAN & ELEVATION (3 OF 4)
4. GENERAL PLAN & ELEVATION (4 OF 4)
5. GENERAL NOTES, QUANTITIES & PROFILE GRADE LINES
6. EXCAVATION DETAILS
7. HISTORICAL SITE PLAN
8. GRADING AT UTILITY POLES
9. TEMPORARY SHORING
10. UNIT 1 TYPICAL WALL SECTIONS (1 OF 2)
11. UNIT 1 TYPICAL WALL SECTIONS (2 OF 2)
12. UNIT 1 CONSTRUCTION SEQUENCE
13. SOLDIER PILE DATA TABLE (1 OF 3)
14. SOLDIER PILE DATA TABLE (2 OF 3)
15. SOLDIER PILE DATA TABLE (3 OF 3)
16. SOLDIER PILE TIEBACK ANCHOR DETAILS
17. TIEBACK ANCHOR DATA TABLE (1 OF 5)
18. TIEBACK ANCHOR DATA TABLE (2 OF 5)
19. TIEBACK ANCHOR DATA TABLE (3 OF 5)
20. TIEBACK ANCHOR DATA TABLE (4 OF 5)
21. TIEBACK ANCHOR DATA TABLE (5 OF 5)
22. WALL COPING, FACING & SOLDIER PILE DETAILS (1 OF 2)
23. WALL COPING, FACING & SOLDIER PILE DETAILS (2 OF 2)
24. WALL FACING ELEVATION (1 OF 3)
25. WALL FACING ELEVATION (2 OF 3)
26. WALL FACING ELEVATION (3 OF 3)
27. WALL COPING AND FACING REINFORCING SCHEDULE
28. UNIT 2 TYPICAL WALL SECTIONS, DETAILS & ELEVATION TABLE
29. UNIT 1 AESTHETIC WALL TREATMENT
30. RAILING PIPE DETAILS
31. GEOTECHNICAL INSTRUMENTATION NOTES
32. GEOTECHNICAL INSTRUMENTATION DETAILS
33. SUBSURFACE EXPLORATION (1 OF 6)
34. SUBSURFACE EXPLORATION (2 OF 6)
35. SUBSURFACE EXPLORATION (3 OF 6)
36. SUBSURFACE EXPLORATION (4 OF 6)
37. SUBSURFACE EXPLORATION (5 OF 6)
38. SUBSURFACE EXPLORATION (6 OF 6)

LEGEND

- INDICATES FINAL ROADWAY LANE LOCATION AND DIRECTION OF TRAVEL AT CONCLUSION OF FUTURE CONTRACT 1060-27-72
- (E) EXPANSION JOINT
- [C] CONTRACTION JOINT
- SEE SPECIAL PROVISIONS FOR INTERIM COMPLETION DATES AND DETAILS.

GEOTECHNICAL INSTRUMENTATION LEGEND

- INC INCLINOMETER
- TM 3-AXIS TILTMETER
- SM SURFACE SETTLEMENT MARKERS (IN PAVEMENT, LFCF, OR SOIL)
- SSM STRUCTURE SETTLEMENT MARKERS (ATTACHED TO STRUCTURES)

NO.	DATE	REVISION	BY

Jacobs

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED EMK 06/16/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE R-40-761

LOWER TIERED RETAINING WALL ALONG I-94 EB

COUNTY	~~TOWN~~/CITY/~~VILLAGE~~
MILWAUKEE	MILWAUKEE

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
PRK	EKM	GLM	PRK

GENERAL PLAN & ELEVATION (1 OF 4)

SHEET 1 OF 38
825

SCALE = 1:40

WISCONSIN PAUL R. KRUM E-43964-6 PROFESSIONAL ENGINEER
6/13/2025

8

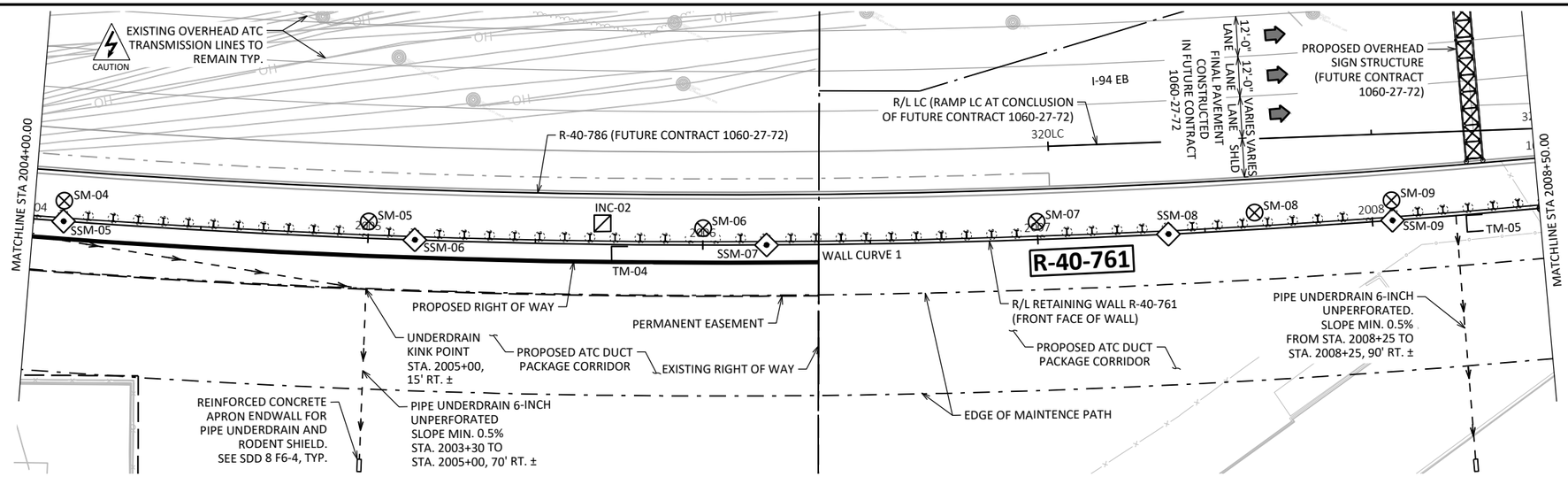
8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080101-104_GP.DWG
LAYOUT NAME - SHT_01

I.D. 1060-27-74 DATE: 05/01/2025

STATE PROJECT NUMBER

1060-27-74



PLAN

SOLDIER PILE RETAINING WALL

R-40-786 (FUTURE CONTRACT 1060-27-72) - NOT SHOWN

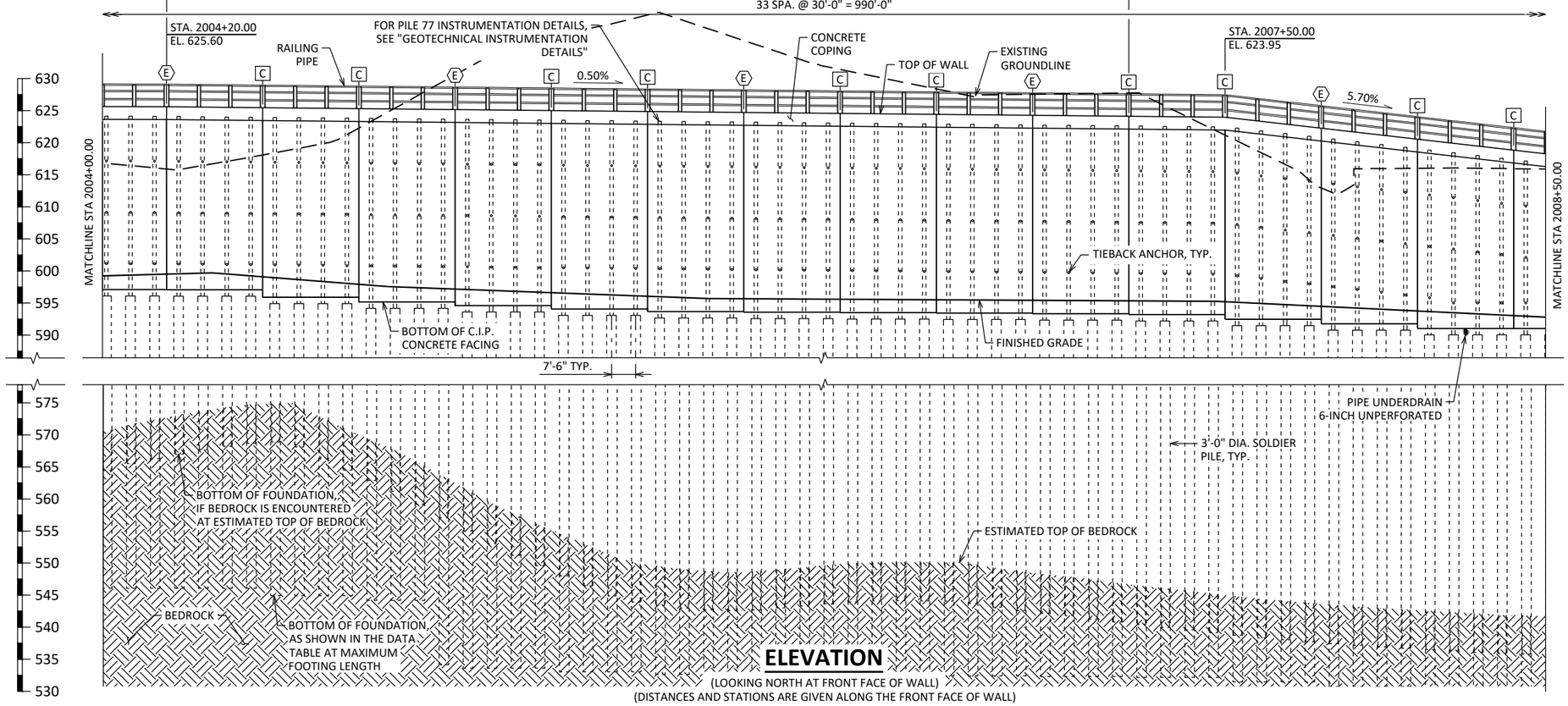
1615'-0" - WALL LENGTH

INTERIM COMPLETION ZONE B ✳ | STA. 2007+20.00 | INTERIM COMPLETION ZONE A ✳

INTERIM COMPLETION ZONE C
WALL SEGMENT UNDER UTILITY LINES ✳

1230'-0" - UNIT 1 - SOLDIER PILE RETAINING WALL

33 SPA. @ 30'-0" = 990'-0"



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)

(DISTANCES AND STATIONS ARE GIVEN ALONG THE FRONT FACE OF WALL)

LEGEND

- INDICATES FINAL ROADWAY LANE LOCATION AND DIRECTION OF TRAVEL AT CONCLUSION OF FUTURE CONTRACT 1060-27-72
- (E) EXPANSION JOINT
- [C] CONTRACTION JOINT
- ✳ SEE SPECIAL PROVISIONS FOR INTERIM COMPLETION DATES AND DETAILS.

GEOTECHNICAL INSTRUMENTATION LEGEND

- INC — INCLINOMETER
- TM — 3-AXIS TILTMETER
- LC — VIBRATING WIRE LOAD CELLS (ATTACHED TO TIEBACKS)
- EP — JACKOUT EARTH PRESSURE CELLS
- SM — SURFACE SETTLEMENT MARKERS (IN PAVEMENT, LFCF, OR SOIL)
- SSM — STRUCTURE SETTLEMENT MARKERS (ATTACHED TO STRUCTURES)
- SG — STRAIN GAUGES PAIR (SISTER BAR)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761

DRAWN BY GLM | PLANS CK'D PRK

GENERAL PLAN & ELEVATION (2 OF 4)

SHEET 2 OF 38

826

SCALE = 1:40

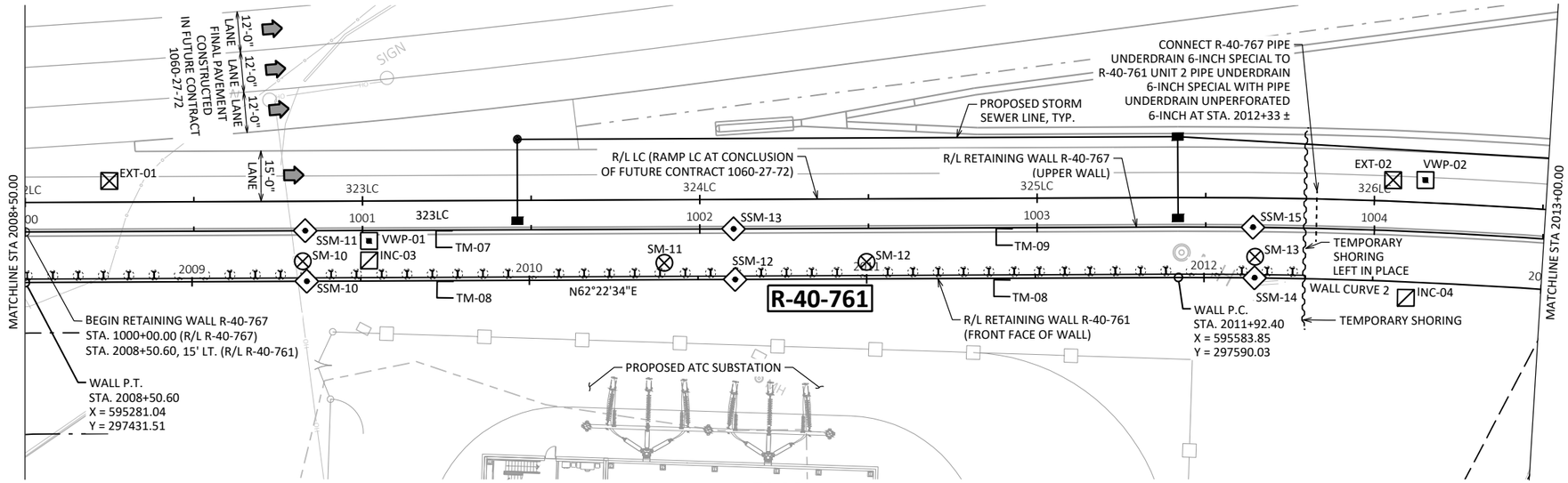
8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080101-104_GP.DWG
LAYOUT NAME - SHT_02

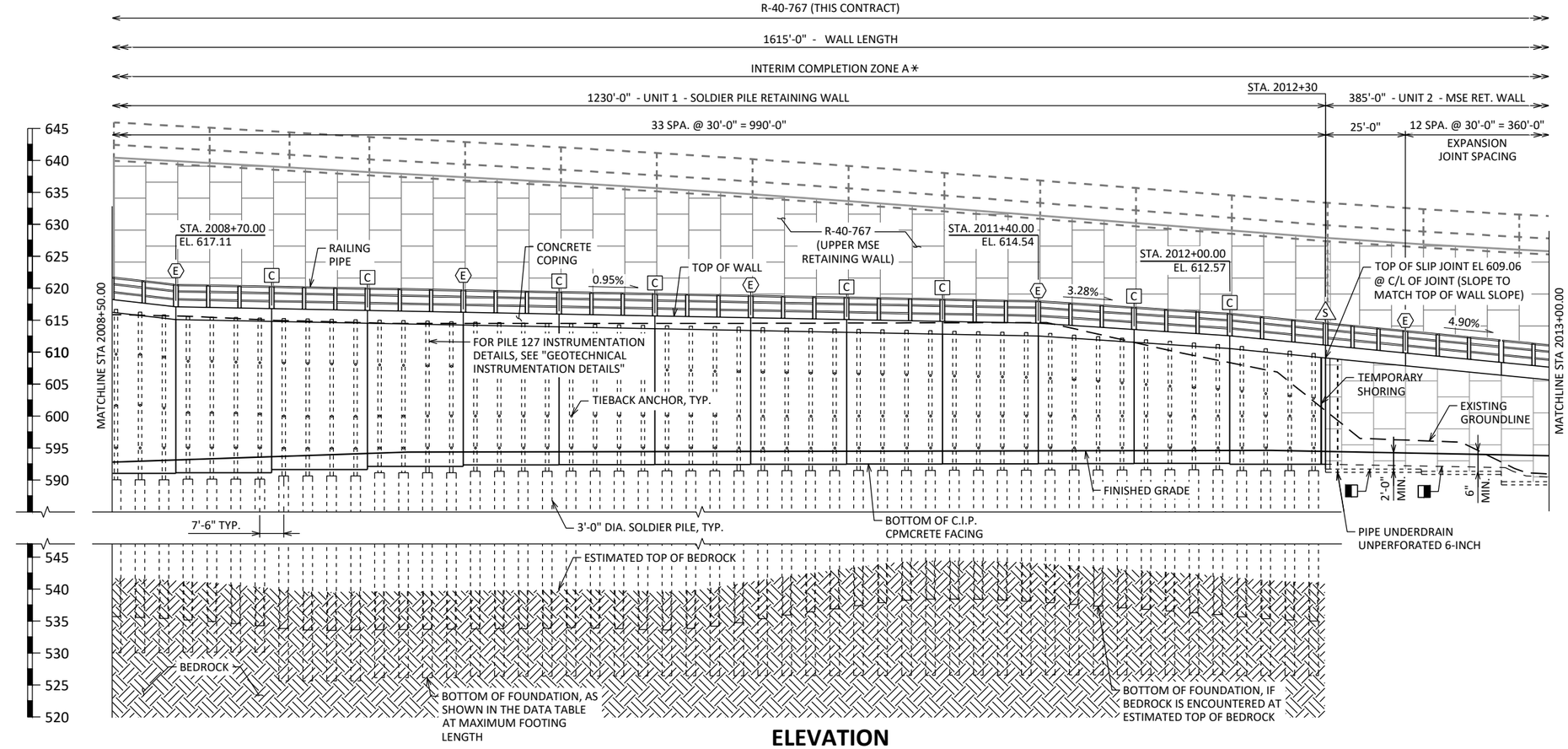
STATE PROJECT NUMBER

1060-27-74



PLAN

SOLDIER PILE AND LFCF MSE RETAINING WALL



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG THE FRONT FACE OF WALL)

LEGEND

- INDICATES FINAL ROADWAY LANE LOCATION AND DIRECTION OF TRAVEL AT CONCLUSION OF FUTURE CONTRACT 1060-27-72
- (E) EXPANSION JOINT
- [C] CONTRACTION JOINT
- ⟨S⟩ SLIP JOINT
- BOTTOM OF WALL/TOP OF UNREINFORCED CONCRETE LEVELING PAD (2'-0" MIN. BELOW FINISHED GRADE AND 6" MIN. BELOW EXISTING GRADE)
- BOTTOM PAY LIMIT OF "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (R-40-761)"
- ✳ SEE SPECIAL PROVISIONS FOR INTERIM COMPLETION DATES AND DETAILS.

GEOTECHNICAL INSTRUMENTATION LEGEND

- VWP VIBRATING WIRE PIEZOMETER
- INC INCLINOMETER
- EXT MULTIPLE POSITION BOREHOLE EXTENSOMETER
- TM 3-AXIS TILTMETER
- LC VIBRATING WIRE LOAD CELLS (ATTACHED TO TIEBACKS)
- EP JACKOUT EARTH PRESSURE CELLS
- SM SURFACE SETTLEMENT MARKERS (IN PAVEMENT, LFCF, OR SOIL)
- SSM STRUCTURE SETTLEMENT MARKERS (ATTACHED TO STRUCTURES)
- SG STRAIN GAUGES PAIR (SISTER BAR)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761

DRAWN BY GLM | PLANS CK'D PRK

GENERAL PLAN & ELEVATION (3 OF 4)

SHEET 3 OF 38

827

SCALE = 1:40

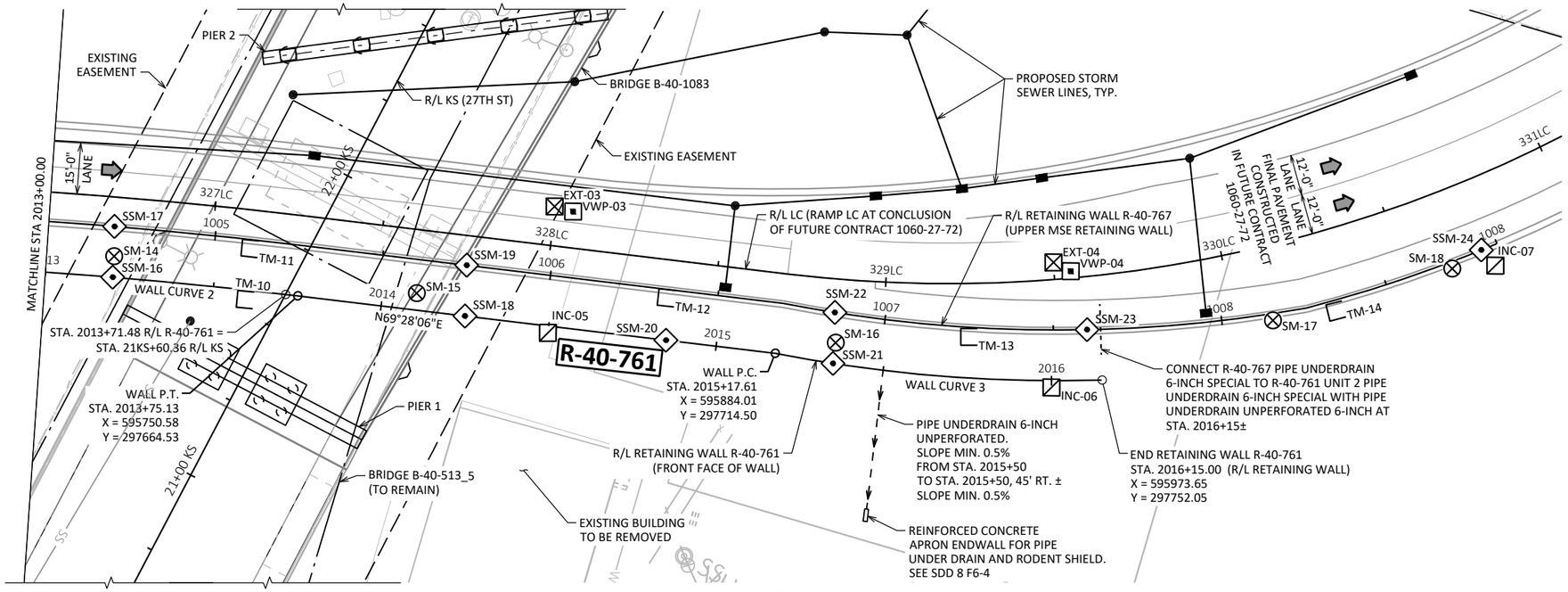
8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080101-104_GP.DWG
LAYOUT NAME - SHT_03

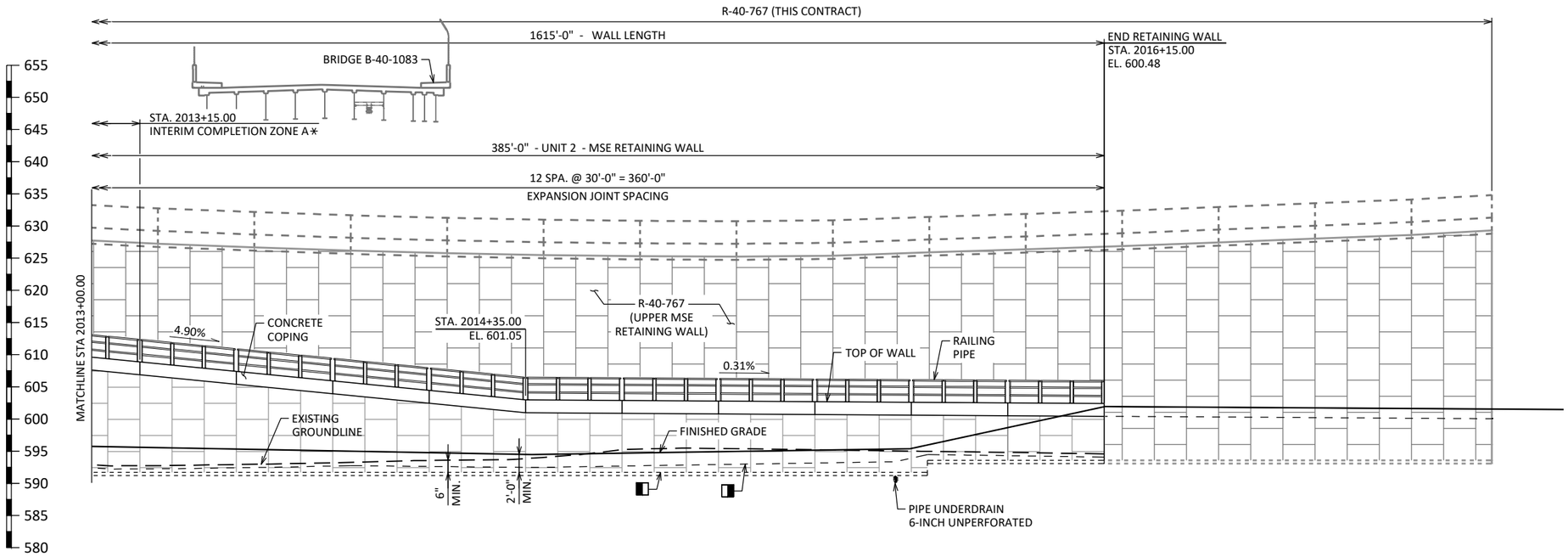
STATE PROJECT NUMBER

1060-27-74



PLAN

LFCF MSE RETAINING WALL



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG THE FRONT FACE OF WALL)

LEGEND

- INDICATES FINAL ROADWAY LANE LOCATION AND DIRECTION OF TRAVEL AT CONCLUSION OF FUTURE CONTRACT 1060-27-72
- (E) EXPANSION JOINT
- BOTTOM OF WALL/TOP OF UNREINFORCED CONCRETE LEVELING PAD (2'-0" MIN. BELOW FINISHED GRADE AND 6" MIN. BELOW EXISTING GRADE)
- BOTTOM PAY LIMIT OF "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (R-40-761)"
- ✳ SEE SPECIAL PROVISIONS FOR INTERIM COMPLETION DATES AND DETAILS.

GEOTECHNICAL INSTRUMENTATION LEGEND

- VWP — VIBRATING WIRE PIEZOMETER
- INC — INCLINOMETER
- EXT — MULTIPLE POSITION BOREHOLE EXTENSOMETER
- TM — 3-AXIS TILTMETER
- SM — SURFACE SETTLEMENT MARKERS (IN PAVEMENT, LFCF, OR SOIL)
- SSM — STRUCTURE SETTLEMENT MARKERS (ATTACHED TO STRUCTURES)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761

DRAWN BY GLM | PLANS CK'D PRK

GENERAL PLAN & ELEVATION (4 OF 4)

SHEET 4 OF 38
828

SCALE = 1:40

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080101-104_GP.DWG
LAYOUT NAME - SHT_04

STATE PROJECT NUMBER

1060-27-74

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BEVEL EXPOSED EDGES OF CONCRETE ¾", UNLESS NOTED OTHERWISE.

REFER TO SPECIAL PROVISIONS FOR INTERIM COMPLETION DATES.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), MILWAUKEE COUNTY ZONE, NAD 83 (2007). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2007).

ALL DIMENSIONS ARE ALONG THE FRONT FACE OF WALL, UNLESS SHOWN OTHERWISE.

ALL BAR STEEL REINFORCEMENT IS TO BE EPOXY COATED. BAR STEEL REINFORCEMENT SHALL HAVE 2" CLEAR COVER, UNLESS SHOWN OTHERWISE.

THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES RETAINING WALLS (R-40-761)".

THE CONTRACTOR MUST COORDINATE THE REMOVAL OF EXISTING STRUCTURE B-40-513_5 AND CONSTRUCTION OF THE BRIDGE B-40-1083 WITH CONSTRUCTION OF RETAINING WALLS R-40-761 AND R-40-767. THE EXISTING BRIDGE B-40-513_5 IS A FOUR-SPAN STEEL PLATE GIRDER BRIDGE.

THE UTILITY 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 THEIR OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE. UTILITIES LABELED AS PROPOSED MAY BE INSTALLED BY OTHERS PRIOR TO THIS CONTRACT.

NAME PLATE SHALL BE CONSIDERED INCIDENTAL TO ITEM 504.0500 "CONCRETE MASONRY RETAINING WALLS". FABRICATE IN ACCORDANCE TO SDD.12 A 3-10.

HAZMAT CONTAMINATED SOIL EXISTS FROM APPROXIMATELY STA 2008+70 TO STA 2013+25. HAULING AND DISPOSAL OF THE TOP 25' (OR TO A DEPTH DIRECTED BY THE WISDOT BTS ENVIRONMENTAL CONSULTANT) OF CONTAMINATED MATERIAL REMOVED DURING "FOUNDATION DRILLING", "TIEBACK ANCHORS", "EXCAVATION FOR STRUCTURES RETAINING WALLS (R-40-761)" AND "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (R-40-761)" ARE INCLUDED IN "EXCAVATION, HAULING AND REUSE OF LOW-LEVEL PETROLEUM CONTAMINATED SOIL". HAULING AND DISPOSAL OF THE REMAINING CONTAMINATED EARTHWORK/SPOILS ARE INCLUDED IN "EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL", "MANAGEMENT OF SOLID WASTE - GREVES ST, WEST OF 27TH ST" OR "MANAGEMENT OF SOLID WASTE - GREVES ST, EAST OF 27TH ST". SEE ROADWAY PLANS FOR THE LIMITS OF HAZMAT CONTAMINATED SOIL.

SOLDIER PILE WALL NOTES

FLOWABLE BACKFILL AND CLSM ARE INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS (R-40-761)". SEE SPECIAL PROVISIONS FOR DESCRIPTION OF FLOWABLE BACKFILL AND CLSM.

TIMBER LAGGING DESIGN ASSUMES NO R-40-767 CONSTRUCTION AND NO LIVE LOAD PRESENT ON TOP OF WALL PRIOR TO CAST IN PLACE CONCRETE FACING BEING INSTALLED AND REACHING DESIGN STRENGTH. IF THESE ASSUMPTIONS ARE NOT MET THE CONTRACTOR WILL BE RESPONSIBLE FOR THE DESIGN AND THE COST OF MODIFICATIONS TO THE TIMBER LAGGING.

SURFACE PREP AND PAINT SOLDIER PILES FROM TOP OF PILE TO 1'-0" BELOW TOP OF FOOTING WITH ONE COAT OF ZINC-RICH PRIMER AS SPECIFIED IN SECTION 517 OF THE STANDARD SPECIFICATIONS. WELDED STUD SHEAR CONNECTORS ARE NOT REQUIRED TO BE PAINTED. PAINTING OF PILES IS MEASURED AND PAID FOR AS BID ITEM NUMBER 517.0600, PAINTING EPOXY SYSTEM R-40-761.

THE EARTHWORK REQUIRED TO INSTALL THE SOLDIER PILES, FOOTINGS, TIEBACK ANCHORS, AND WALL FACING IS INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS (R-40-761)". ALL EARTHWORK IN FRONT OF THE RETAINING WALL IS INCLUDED IN THE ROADWAY BID ITEM "COMMON EXCAVATION". SEE EXCAVATION DETAILS ON SHEET 6 AND ROADWAY PLANS FOR EXCAVATION LIMITS.

"STRUCTURAL STEEL HS SOLDIER PILES DELIVERED" ESTIMATED QUANTITY IS BASED ON MAXIMUM PILE LENGTH REQUIRED IF BEDROCK IS NOT ENCOUNTERED.

"STRUCTURAL STEEL HS SOLDIER PILES INSTALLED", "FOUNDATION DRILLING" AND "CONCRETE MASONRY SOLDIER PILE FOOTINGS" QUANTITY ESTIMATES ARE BASED ON THE ASSUMPTION BEDROCK IS ENCOUNTERED AT ESTIMATED ELEVATIONS AND ARE TO BE PAID BASED UPON QUANTITY INSTALLED.

MSE WALL NOTES

MSE RETAINING WALL SOIL REINFORCEMENT MAY BE PLACED UP TO A MAXIMUM OF 15° FROM PERPENDICULAR IF NECESSARY TO AVOID INTERFERENCE WITH ITEMS BEHIND THE WALL. ANGLES GREATER THAN 15° REQUIRE APPROVAL FROM THE BUREAU OF STRUCTURES DESIGN SECTION.

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE MSE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE MSE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS IS INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (R-40-761)".

THE COST OF FURNISHING AND PLACING THE UNREINFORCED CONCRETE LEVELING PAD UNDER THE MSE PRECAST WALL PANELS IS INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (R-40-761)".

THE VOLUME OF EARTHWORK REQUIRED TO INSTALL THE UNREINFORCED CONCRETE LEVELING PAD, BACKFILL, ANCHORS AND REINFORCING STRIPS IS INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS (R-40-761)". SEE WALL EXCAVATION LIMITS DIAGRAM ON SHEET 6 FOR DETAILS.

THE PLAN QUANTITY FOR THE ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (R-40-761)" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF THE LEVELING PAD TO THE TOP OF WALL AS SHOWN IN THE PLANS. THE TOP OF LEVELING PAD IS ASSUMED TO BE A MINIMUM OF 2'-0" BELOW FINISHED GRADE AND 6" BELOW EXISTING GRADE. WALL AREAS CONSTRUCTED OUTSIDE THESE LIMITS WILL NOT BE MEASURED FOR PAYMENT.

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE MSE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE MSE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

PLAN DIMENSIONS, QUANTITIES AND REINFORCEMENT DETAILS FOR THE MSE RETAINING WALL ARE BASED ON AN ASSUMED MAXIMUM CONCRETE WALL PANEL THICKNESS OF 6 INCHES. FOR PANEL THICKNESSES DIFFERENT THAN 6 INCHES, THE CONTRACTOR SHALL VERIFY REINFORCEMENT BAR DETAILS AND QUANTITIES AND WILL BE RESPONSIBLE FOR ANY QUANTITY VARIATIONS.

ONLY WALL CONCRETE PANEL MSE WALL SYSTEMS THAT USE STRIP TYPE SOIL REINFORCEMENT THAT ARE HINGED AT THE PANEL CONNECTION CAN BE USED FOR THIS PROJECT.

THE STANDARD PANEL SIZE SHALL BE 5' HIGH x 10' WIDE. 5' HIGH x 5' WIDE PANELS WILL NOT BE ALLOWED.

THE QUANTITIES OF CONCRETE MASONRY AND BAR STEEL REINFORCEMENT FOR THE UNIT 2 CAST-IN-PLACE COPING ARE INCIDENTAL TO BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABALIZED EARTH, LFCF".

THE COST OF FURNISHING AND PLACING LIGHTWEIGHT FOAMED CONCRETE FILL (LFCF) WITHIN THE REINFORCED SOIL ZONE IS TO BE INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF". SEE ROADWAY PLANS FOR THE QUANTITY OF LIGHTWEIGHT FOAMED CONCRETE FILL OUTSIDE OF THE REINFORCED SOIL ZONE.

LIGHTWEIGHT FOAMED CONCRETE FILL (LFCF) SHALL BE PLACED IN LIFTS NOT EXCEEDING 4 FEET IN DEPTH. EACH SUCCESSIVE LIFT WILL BE PLACED AFTER A MINIMUM OF 24 HOURS.

THE CONTRACTOR SHALL PROVIDE SUITABLE SUPPORTS FOR THE MSE REINFORCING STRIPS AND FACING PANELS DURING PLACEMENT OF LIGHTWEIGHT FOAMED CONCRETE FILL.

DESIGN DATA

DESIGN SPECIFICATION:

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, 2020

LIVE LOAD:

LIVE LOAD SURCHARGE (ROADWAY) _____ 240 PSF
LIVE LOAD SURCHARGE (NON-ROADWAY) _____ 100 PSF
LIVE LOAD SURCHARGE (CONSTRUCTION) _____ 100 PSF

MATERIAL PROPERTIES:

CONCRETE MASONRY:
CONCRETE MASONRY RETAINING WALL _____ f'c = 4,000 PSI
PRECAST CONCRETE WALL PANELS _____ f'c = 4,000 PSI
CONCRETE MASONRY SOLDIER PILE FOOTINGS _____ f'c = 3,500 PSI
BAR STEEL REINFORCEMENT:
GRADE 60 _____ fy = 60,000 PSI
HIGH STRENGTH STRUCTURAL STEEL:
ASTM A709, GRADE 50 _____ fy = 50,000 PSI

* TIMBER LAGGING fbo = 1,200 PSI
E = 1,700,000 PSI

* MATERIAL VALUES BASED ON DOUGLAS FIR-LARCH NO.1, >2" WIDE, REFERENCE AASHTO LRFD SPECIFICATION TABLE 8.4.1.1.4-1

DESIGN UNIT 2 MSE WALL FOR A HORIZONTAL BACKSLOPE BEHIND THE WALL AND A LIVE LOAD VERTICAL SURCHARGE OF 240 PSF.

HORIZONTAL CURVE DATA

WALL CURVE 1	WALL CURVE 2	WALL CURVE 3
P.I. = STA 2005+13.76	P.I. = STA 2012+83.88	P.I. = STA 2015+99.32
X = 594988.45	X = 595664.90	X = 595962.42
Y = 297257.55	Y = 297632.44	Y = 297737.46
Δ = 14°19'34"	Δ = 7°05'32"	Δ = 21°14'22"
D = 2°06'36"	D = 3°52'52"	D = 13°08'56"
L = 678.97'	L = 182.73'	L = 161.53'
T = 341.26'	T = 91.48'	T = 81.70'
R = 2715.49'	R = 1476.25'	R = 435.75'
P.C. = STA 2001+72.50	P.C. = STA 2011+92.40	P.C. = STA 2015+17.61
X = 594661.08	X = 595583.85	X = 595884.01
Y = 297161.15	Y = 297590.03	Y = 297714.50
P.T. = STA 2008+51.47	P.T. = STA 2013+75.13	P.T. = STA 2016+79.14
X = 595281.79	X = 595750.58	X = 596027.18
Y = 297431.95	Y = 297664.53	Y = 297787.27

ESTIMATE OF QUANTITIES

ITEM NO.	BID ITEMS	UNIT	UNIT 1	UNIT 2	TOTAL
206.3001.0761	EXCAVATION FOR STRUCTURES RETAINING WALLS (R-40-761)	LS	---	---	1
501.1000.S	ICE HOT WEATHER CONCRETING	LB	27,490	---	27,490
502.0110.S.0761	CONCRETE MASONRY SOLDIER PILE FOOTINGS	CY	2,050	---	2,050
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	1,615	---	1,615
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	175,250	---	175,250
506.3035	WELDED STUD SHEAR CONNECTORS 7/8 X 10-INCH	EACH	7,952	---	7,952
511.1200.0761	TEMPORARY SHORING R-40-761	SF	500	68	568
511.2200.0761	TEMPORARY SHORING LEFT IN PLACE R-40-761	SF	---	223	223
513.2001.0761	RAILING PIPE R-40-761	LF	1,230	385	1,615
516.0100	DAMPPROOFING	SY	---	642	642
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	---	5	5
517.0601	PAINTING EPOXY SYSTEM	EACH	1	---	1
612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	380	75	455
612.0806	APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH	EACH	3	1	4
SPV.0060.4400	TIE BACK ANCHORS	EACH	466	---	466
SPV.0060.4410	TIEBACK ANCHORS PERFORMANCE TESTS	EACH	25	---	25
SPV.0060.4800	RETAINING WALL INSTRUMENTATION R-40-761	EACH	1	---	1
SPV.0075.4010	OBSTRUCTIONS FOUNDATION DRILLING	HRS	120	---	120
SPV.0085.4000	STRUCTURAL STEEL HS SOLDIER PILES DELIVERED	LB	1,616,194	---	1,616,194
SPV.0085.4010	STRUCTURAL STEEL HS SOLDIER PILES INSTALLED	LB	1,460,116	---	1,460,116
SPV.0090.0260	PIPE UNDERDRAIN 6-INCH SPECIAL	LF	1,230	385	1,615
SPV.0090.4200	FOUNDATION DRILLING	LF	12,350	---	12,350
SPV.0110.4000	TIMBER LAGGING	MBM	10	---	10
SPV.0165.4000	GEOCOMPOSITE DRAIN BOARD	SF	30,533	---	30,533
SPV.0165.4761	WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (R-40-761)	SF	---	4,726	4,726
	NON-BID ITEMS				
	NON-BITUMINOUS JOINT FILLER	SIZE			1"
	CORK FILLER	SIZE			1"
	NAME PLATE	EACH			1
	EXPANDED POLYSTYRENE	SIZE			1"
	PREFORMED JOINT FILLER	SIZE			3/4"

ALL ITEMS ARE CATEGORY 3000

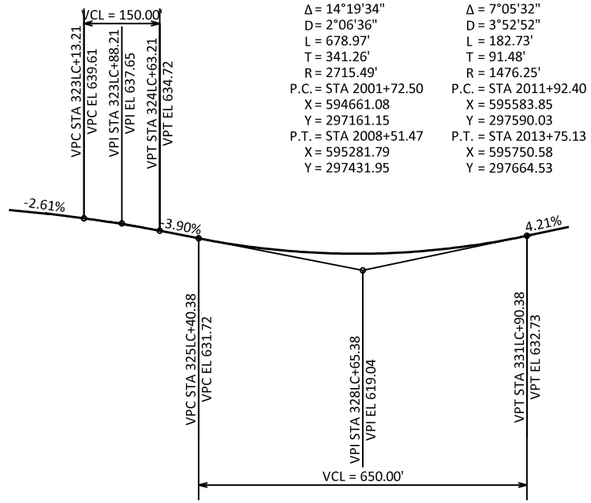
WALL EXTERNAL STABILITY EVALUATION

WALL DIMENSIONS [1]		
R/L RETAINING WALL STATION	STA 2012+50	STA 2016+00
DESIGN WALL HEIGHT (FT) [2]	37.0	34.0
DESIGN EXPOSED WALL HEIGHT (FT)	35.0	32.0
REINFORCEMENT RATIO	0.60H [2]	0.60H [2]
WALL STATION	2012+30 TO 2015+00	2015+00 TO 2016+15
BORING USED	REFER TO GEOTECHNICAL REPORT	
CAPACITY TO DEMAND RATIO (CDR)		
SLIDING [3]	1.00	1.41
ECCENTRICITY [3]	>3.00	>3.00
BEARING [3]	1.08	1.18
GLOBAL STABILITY [3]	1.00	NP [4]

NOTES:
[1] THIS WALL IS PART OF A SUPERIMPOSED (TIERED) MSE WALL AND SHOULD BE DESIGNED AS ONE TIERED WALL.
[2] THE DESIGN WALL HEIGHT (H) FOR THE LOWER WALL EQUALS THE UPPER + LOWER WALL HEIGHT.
[3] THE CDR VALUES SHOWN ARE THE MINIMUM BETWEEN THE UNDRAINED AND DRAINED ANALYSIS.
[4] NP: NOT PERFORMED. GLOBAL STABILITY WAS NOT PERFORMED AT THIS SECTION. PREVIOUS SECTION IS MORE CRITICAL.

SOIL PARAMETERS

SOIL DESCRIPTION	UNIT WEIGHT (PCF)	UNDRAINED		DRAINED	
		FRICTION ANGLE (DEGREES)	COHESION (PSF)	FRICTION ANGLE (DEGREES)	COHESION (PSF)
NEW GRANULAR FILL	125	---	---	32	---
EXISTING BACKFILL	125	---	1250 - 2000	30	50
SOFT-MEDIUM STIFF CLAY	125	---	750 - 1000	28	0
PEAT AND ORGANIC	90	---	500	20	0
LOOSE TO MEDIUM DENSE SAND	120	---	---	29	0
GLACIAL TILL	135	---	3500	35	0



PROFILE GRADE LINE - LC

IH-94 EB EXIT RAMP TO 26TH ST AND ST PAUL AVE AT CONCLUSION OF FUTURE CONTRACT 1060-27-72

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761

DRAWN BY MTZ | PLANS CK'D PRK

GENERAL NOTES, QUANTITIES & PROFILE GRADE LINES

SHEET 5 OF 38
829

SCALE = N/A

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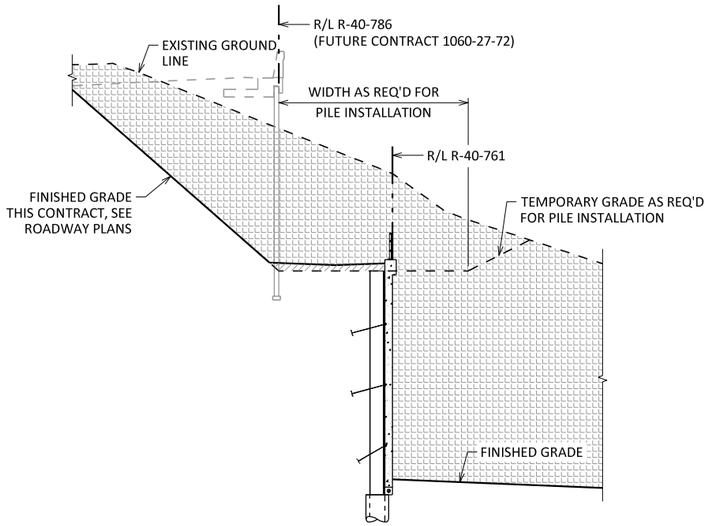
FILE NAME : C:\USERS\PKRUM\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080105_GN.DWG
LAYOUT NAME - SHT_05

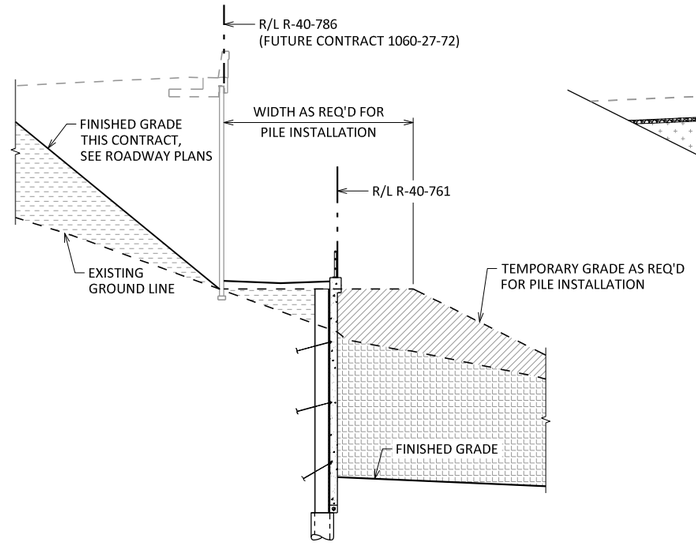
STATE PROJECT NUMBER

1060-27-74



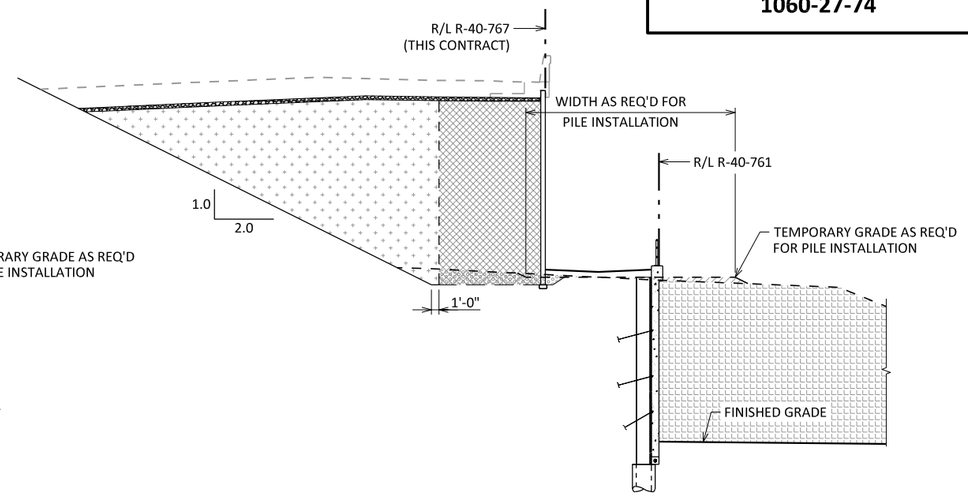
UNIT 1 EXCAVATION DIAGRAM - CUT SECTION

(STA. 2000+00.00 - STA. 2003+00.00 AND STA. 2004+50.00 TO STA. 2007+50.00)



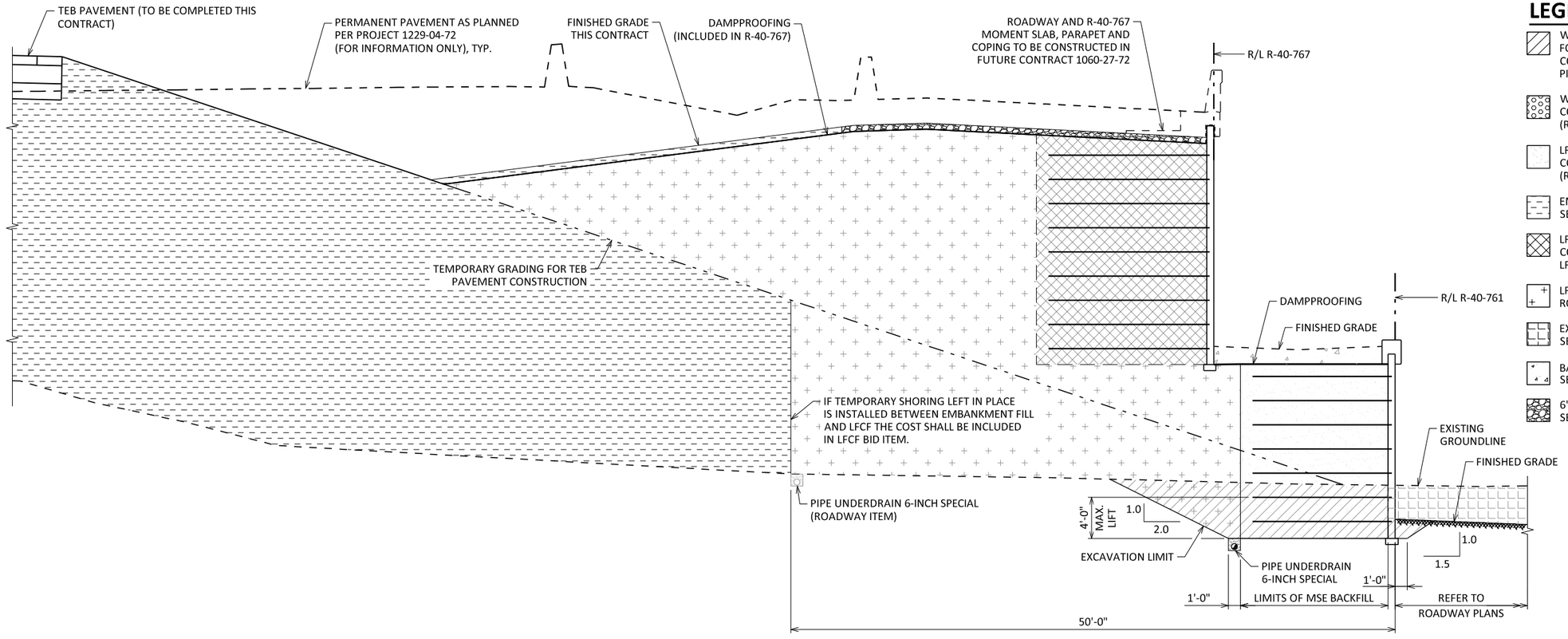
UNIT 1 EXCAVATION DIAGRAM - FILL SECTION

(STA. 2003+00.00 - STA. 2004+50.00 AND STA. 2007+50.00 TO STA. 2008+50.60)



UNIT 1 EXCAVATION DIAGRAM SECTION AT R-40-767

(STA 2008+50.60 - STA 2012+30)



UNIT 2 WALL EXCAVATION LIMITS DIAGRAM

(LOOKING EAST)

LEGEND

- WALL EXCAVATION - INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS (R-40-761)". INCLUDES COST OF TEMPORARY FILL INSTALLED TO FACILITATE SOLDIER PILE DRILLING.
- WALL EXCAVATION - INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (R-40-767)".
- LFCF MSE BACKFILL - INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (R-40-761)".
- EMBANKMENT FILL MATERIAL - NOT A RETAINING WALL ITEM. SEE ROADWAY PLANS.
- LFCF MSE BACKFILL - INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (R-40-767)".
- LFCF FILL MATERIAL - NOT A RETAINING WALL ITEM. SEE ROADWAY PLANS.
- EXCAVATION COMMON - NOT A RETAINING WALL ITEM SEE ROADWAY PLANS.
- BASE AGGREGATE DENSE 1¼" - NOT A RETAINING WALL ITEM. SEE ROADWAY PLANS.
- 6" THICK SELECT CRUSHED - NOT A RETAINING WALL ITEM. SEE ROADWAY PLANS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761

DRAWN BY GLM | PLANS CK'D PRK

EXCAVATION DETAILS

SHEET 6 OF 38

830

SCALE = 1:10

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FILE NAME : C:\USERS\PKRUM\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080206_EX.DWG
LAYOUT NAME - SHT_06

STATE PROJECT NUMBER

1060-27-74

EXISTING BRIDGE B-40-43 TO BE REMOVED / REPLACED WITH B-40-1083

EXISTING ATC TRANSMISSION TOWER TO REMAIN

BEGIN RETAINING WALL R-40-767 (STAGE 1) STA 1000+00.00

R/L RETAINING WALL R-40-767 (FRONT FACE OF WALL)

R/L RETAINING WALL R-40-761 (FRONT FACE OF WALL)

RED STAR YEAST FACILITY, DEMOLISHED IN 2011

END RETAINING WALL R-40-761 UNIT 1 STA. 2012+30.00

END RETAINING WALL R-40-767 (STAGE 1) STA. 1008+85.00

END RETAINING WALL R-40-761 STA. 2016+15.00

EXISTING BUILDINGS TO BE REMOVED PRIOR TO WALL CONSTRUCTION

EXISTING BRIDGE B-40-513 (27TH STREET)

1000+00 1002+00 1004+00 1006+00 1008+00 1008+85 2008+00 2010+00 2012+00 2014+00 2016+00 2017+41

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NOTE:

R-40-761 CONSTRUCTION TO OCCUR ON THE FORMER "RED STAR YEAST" FACILITY SITE. THIS FACILITY WAS DEMOLISHED AND REMOVED IN 2011. THE EXTENT OF REMAINING UNDERGROUND FOUNDATIONS OF THIS FACILITY IS UNKNOWN. THE CONTRACTOR IS ADVISED THAT FOUNDATION DRILLING OBSTRUCTIONS MAY REMAIN. ANY OBSTRUCTIONS TO FOUNDATION DRILLING WILL BE PAID AS "OBSTRUCTIONS FOUNDATION DRILLING"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761

DRAWN BY GLM | PLANS CK'D PRK

HISTORICAL SITE PLAN

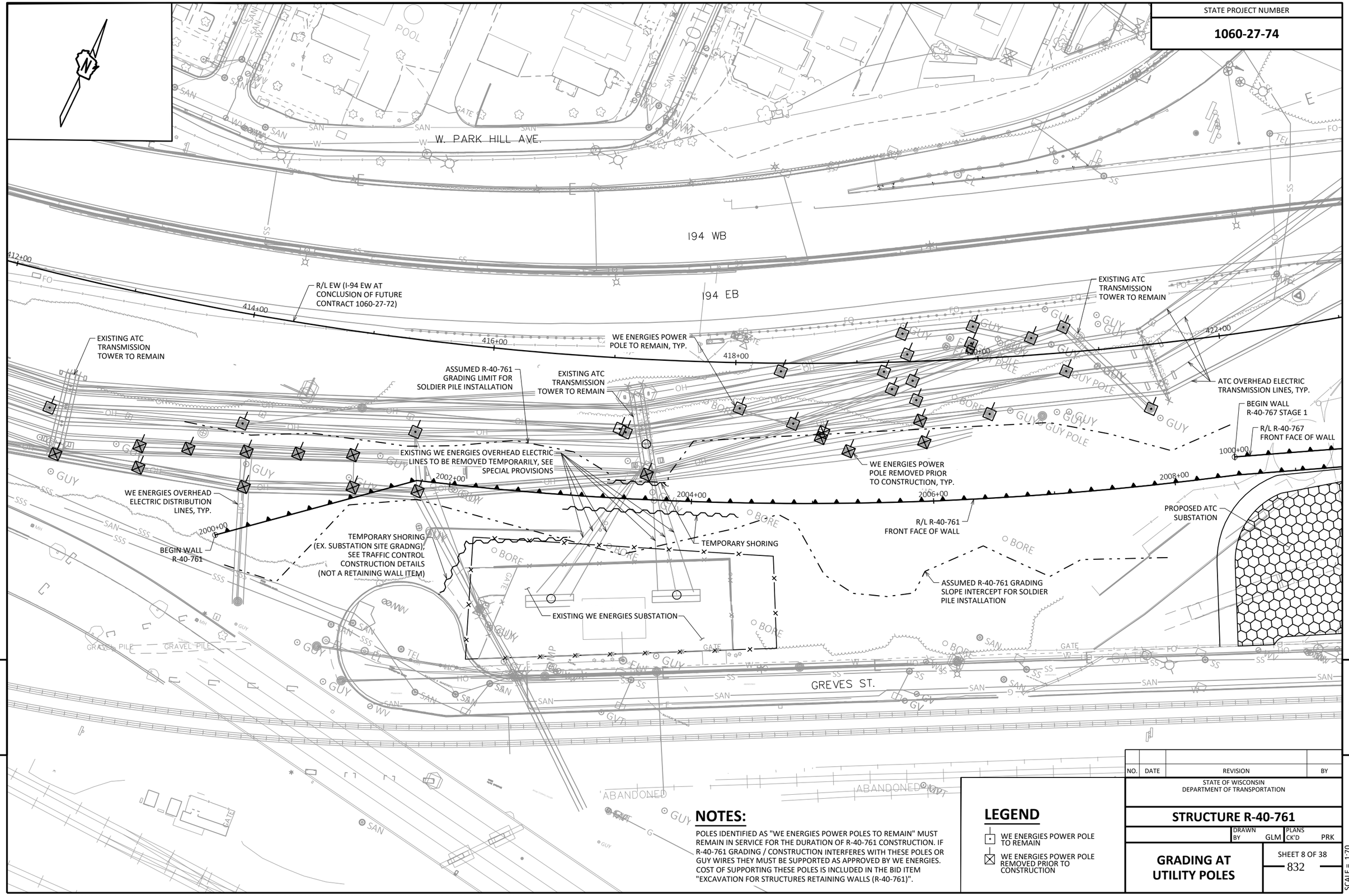
SHEET 7 OF 38
831

SCALE = 1:70

FILE NAME : C:\USERS\HORBINT\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080207_DT.DWG
LAYOUT NAME - SHT_07

STATE PROJECT NUMBER

1060-27-74



8

8

NOTES:

POLES IDENTIFIED AS "WE ENERGIES POWER POLES TO REMAIN" MUST REMAIN IN SERVICE FOR THE DURATION OF R-40-761 CONSTRUCTION. IF R-40-761 GRADING / CONSTRUCTION INTERFERES WITH THESE POLES OR GUY WIRES THEY MUST BE SUPPORTED AS APPROVED BY WE ENERGIES. COST OF SUPPORTING THESE POLES IS INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS (R-40-761)".

LEGEND

- WE ENERGIES POWER POLE TO REMAIN
- WE ENERGIES POWER POLE REMOVED PRIOR TO CONSTRUCTION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761

DRAWN BY GLM | PLANS CK'D PRK

GRADING AT UTILITY POLES

SHEET 8 OF 38

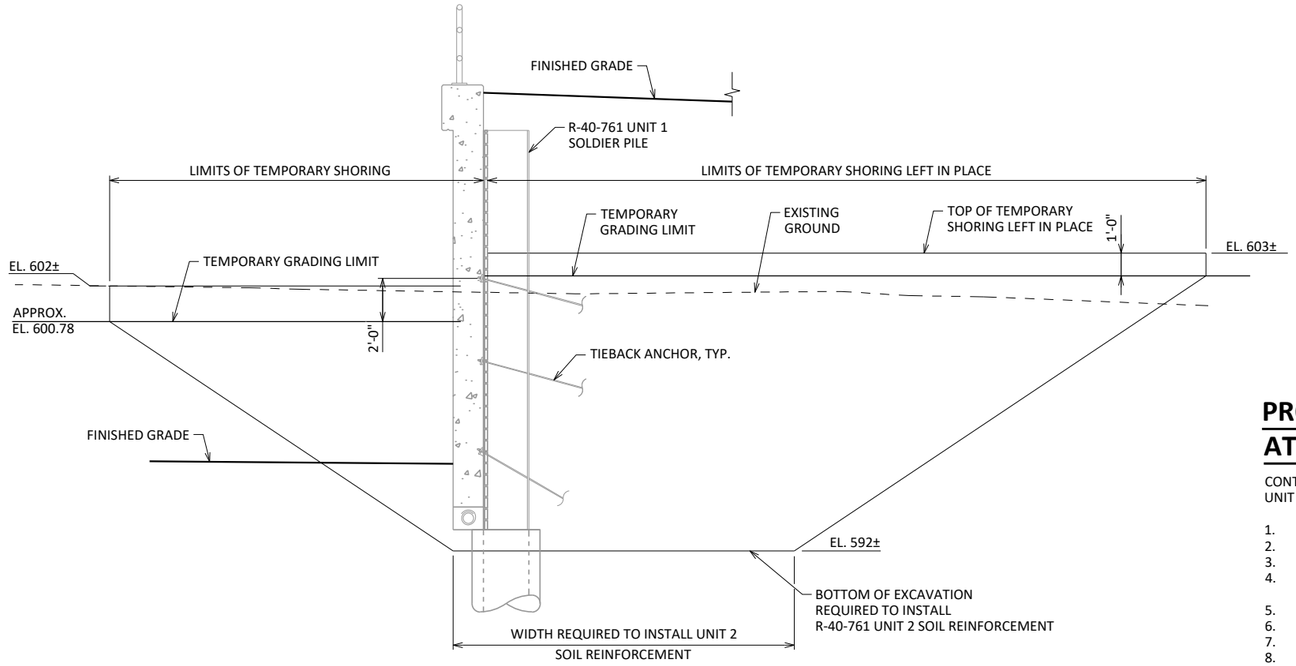
832

SCALE = 1:70

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080208_DT.DWG
LAYOUT NAME - SHT_08

STATE PROJECT NUMBER

1060-27-74



TEMPORARY SHORING DETAIL AT END UNIT 1 - UNIT 2 INTERFACE

(LOOKING WEST AT STA. 2012+30)

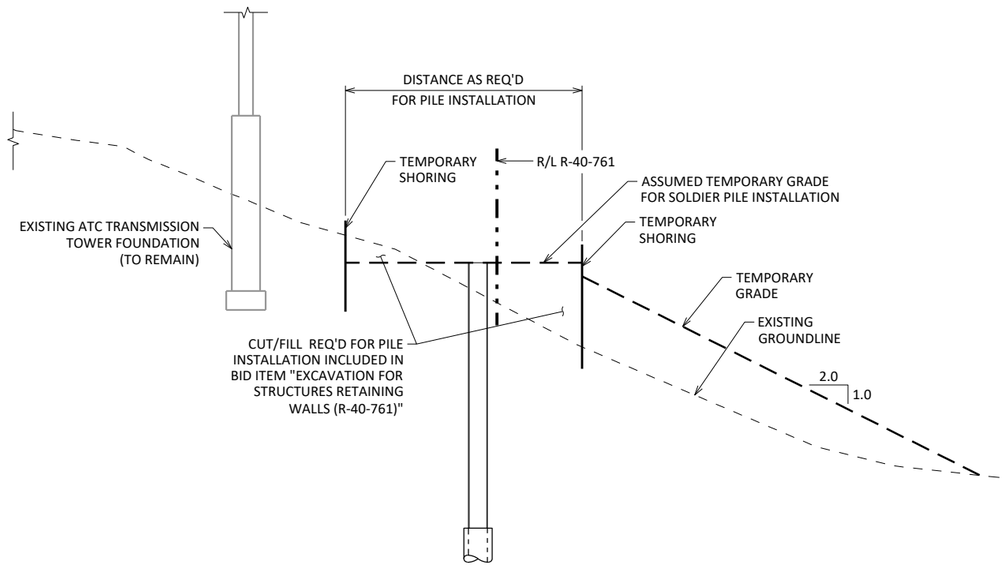
PROPOSED CONSTRUCTION SEQUENCE AT UNIT 1 - UNIT 2 INTERFACE

CONTRACTOR SHALL SUBMIT SHORING DESIGN AND CONSTRUCTION SEQUENCE AT UNIT 1 - UNIT 2 INTERFACE TO THE ENGINEER FOR REVIEW. ASSUMED SEQUENCE PROVIDE BELOW:

1. INSTALL TEMPORARY SHORING AND TEMPORARY SHORING LEFT IN PLACE.
2. FILL/GRADE AS NECESSARY TO INSTALL SOLDIER PILE FOUNDATIONS.
3. INSTALL SOLDIER PILES.
4. EXCAVATE AT FRONT FACE OF SOLDIER PILE WALL TO 2'-0" BELOW TOP ROW OF TIEBACKS AND INSTALL TIMBER LAGGING.
5. EXCAVATE FOR UNIT 2 MSE REINFORCED ZONE.
6. INSTALL MSE PANELS, AND LFCF BACKFILL.
7. BACKFILL BEHIND SOLDIER PILE WALL.
8. REMOVE TEMPORARY SHORING IN FRONT OF R-40-761. SHORING BEHIND FACE OF WALL TO BE LEFT IN PLACE.
9. INSTALL SOLDIER PILE TOP ROW OF TIEBACKS.
10. CONTINUE WITH EXCAVATION, TIEBACKS, TIMBER LAGGING AND FACING.

NOTE

DESIGN OF TEMPORARY SHORING AND TEMPORARY SHORING LEFT IN PLACE AT UNIT 1 - UNIT 2 INTERFACE MUST LIMIT DEFLECTION TO 1".



TEMPORARY SHORING AT ATC TRANSMISSION TOWER

(LOOKING EAST AT STA. 2003+65)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761

DRAWN BY GLM | PLANS CK'D PRK

TEMPORARY SHORING

SHEET 9 OF 38

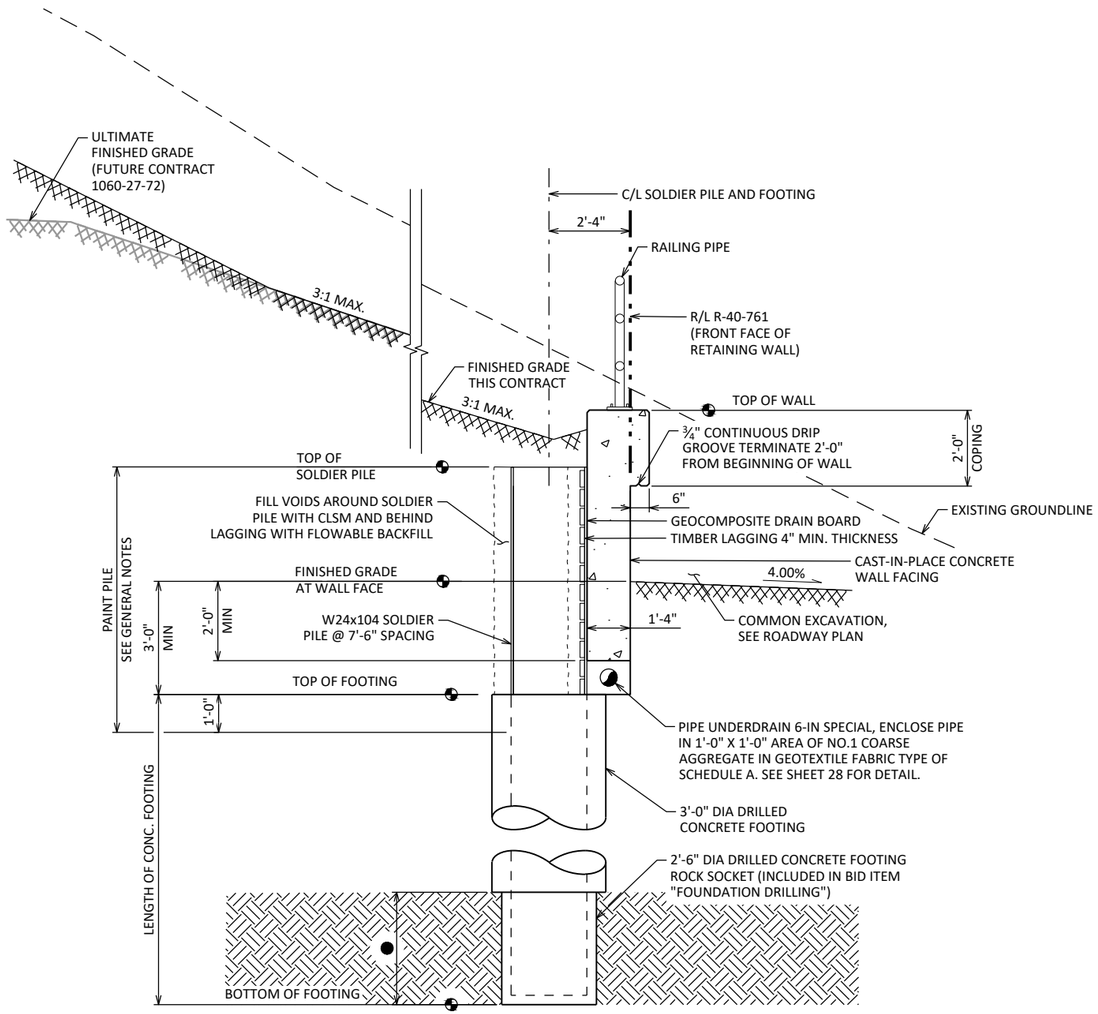
833

SCALE = VARIES

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080209_EX.DWG
LAYOUT NAME - SHT_09

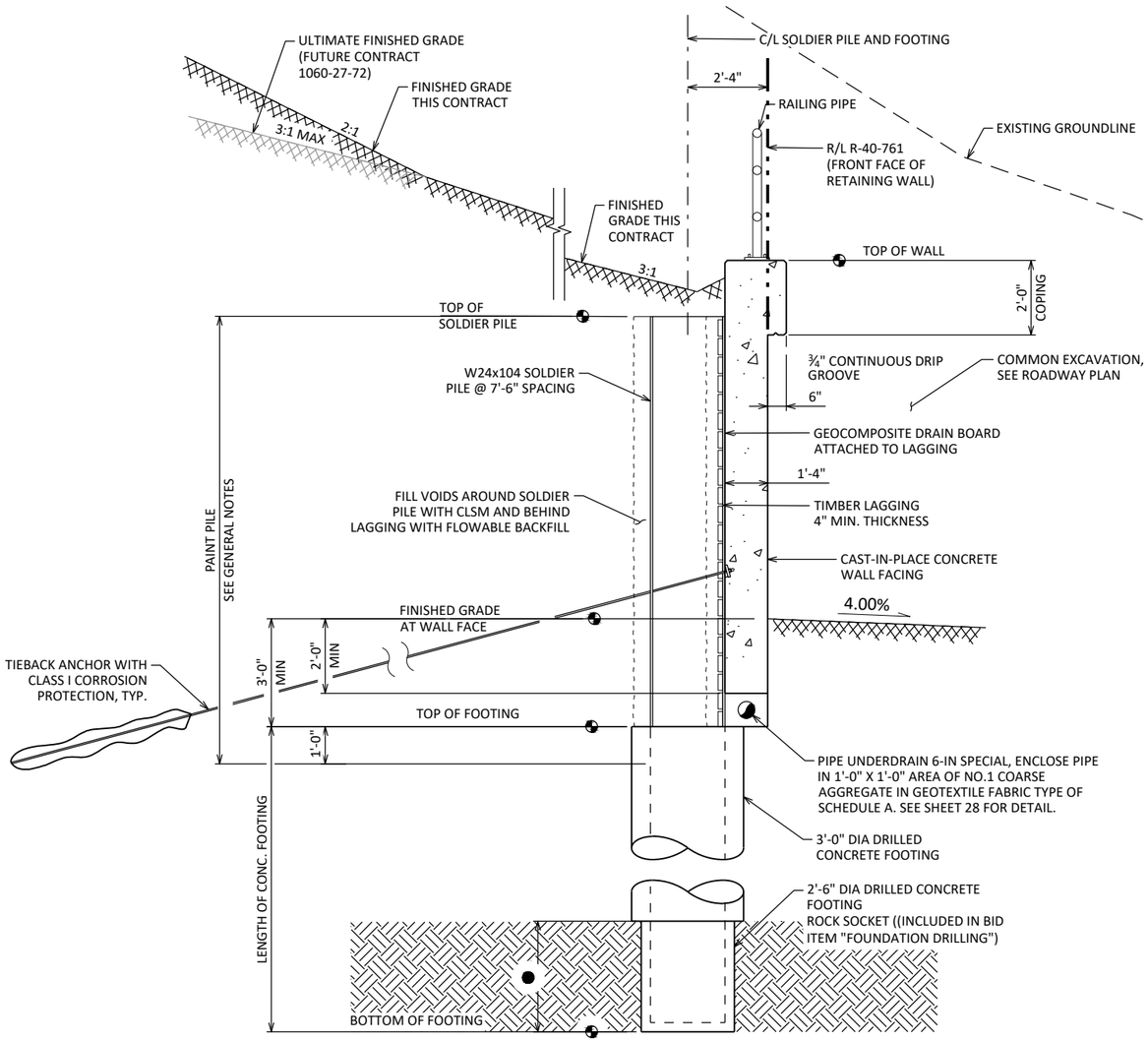
STATE PROJECT NUMBER

1060-27-74



TYPICAL SECTION - UNIT 1

(LOOKING EAST)
(STA 2000+00.00 TO 2000+26.00)



TYPICAL SECTION - UNIT 1

(LOOKING EAST)
(STA 2000+26.00 TO STA 2000+76.00)

LEGEND

● SEE "SOLDIER PILE DATA TABLE" FOR ROCK SOCKET LENGTH

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY GLM | PLANS CK'D PRK

UNIT 1 TYPICAL WALL SECTIONS (1 OF 2)

SHEET 10 OF 38
834

SCALE = 1:4

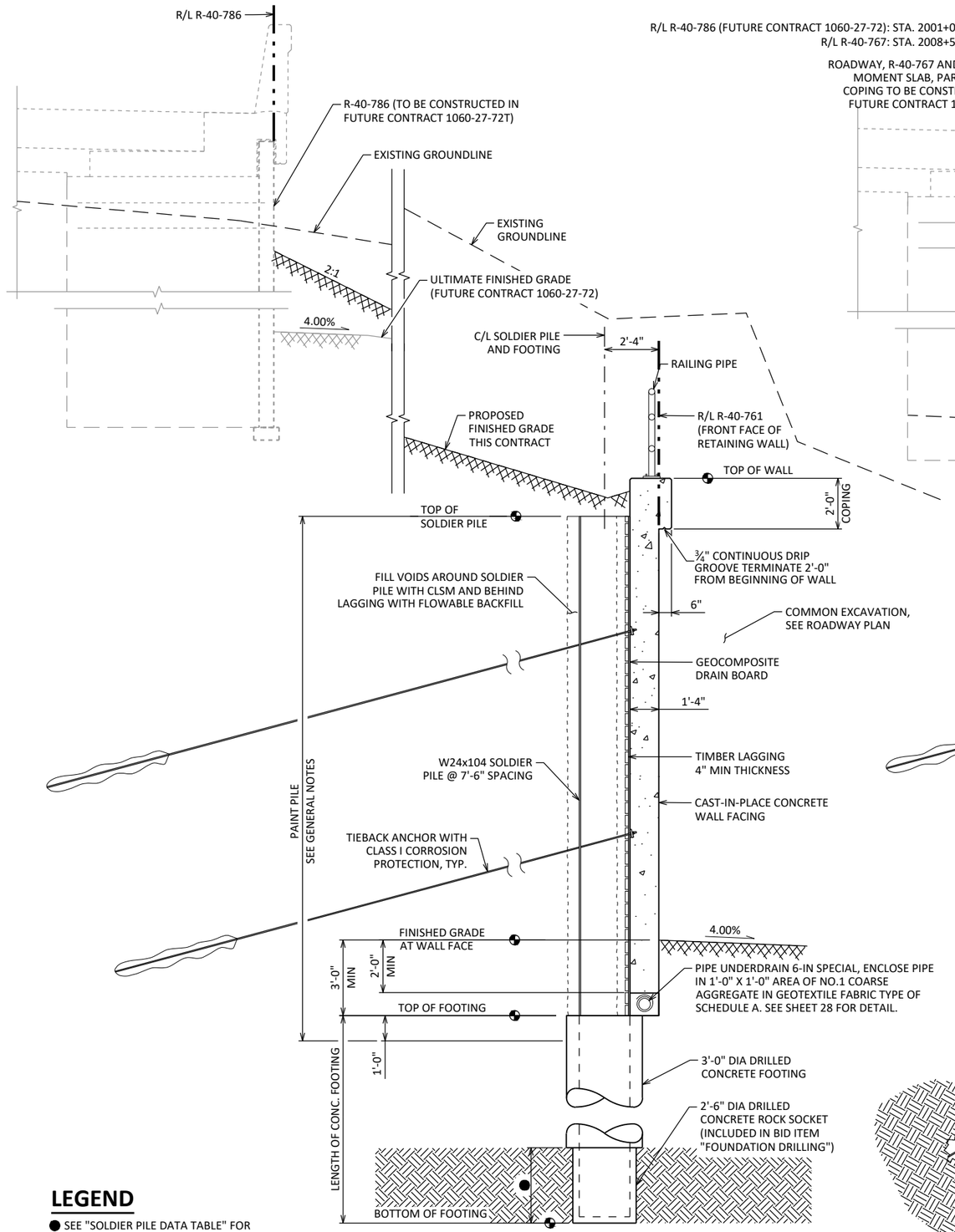
8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080210_TS.DWG
LAYOUT NAME - SHT_10

STATE PROJECT NUMBER

1060-27-74

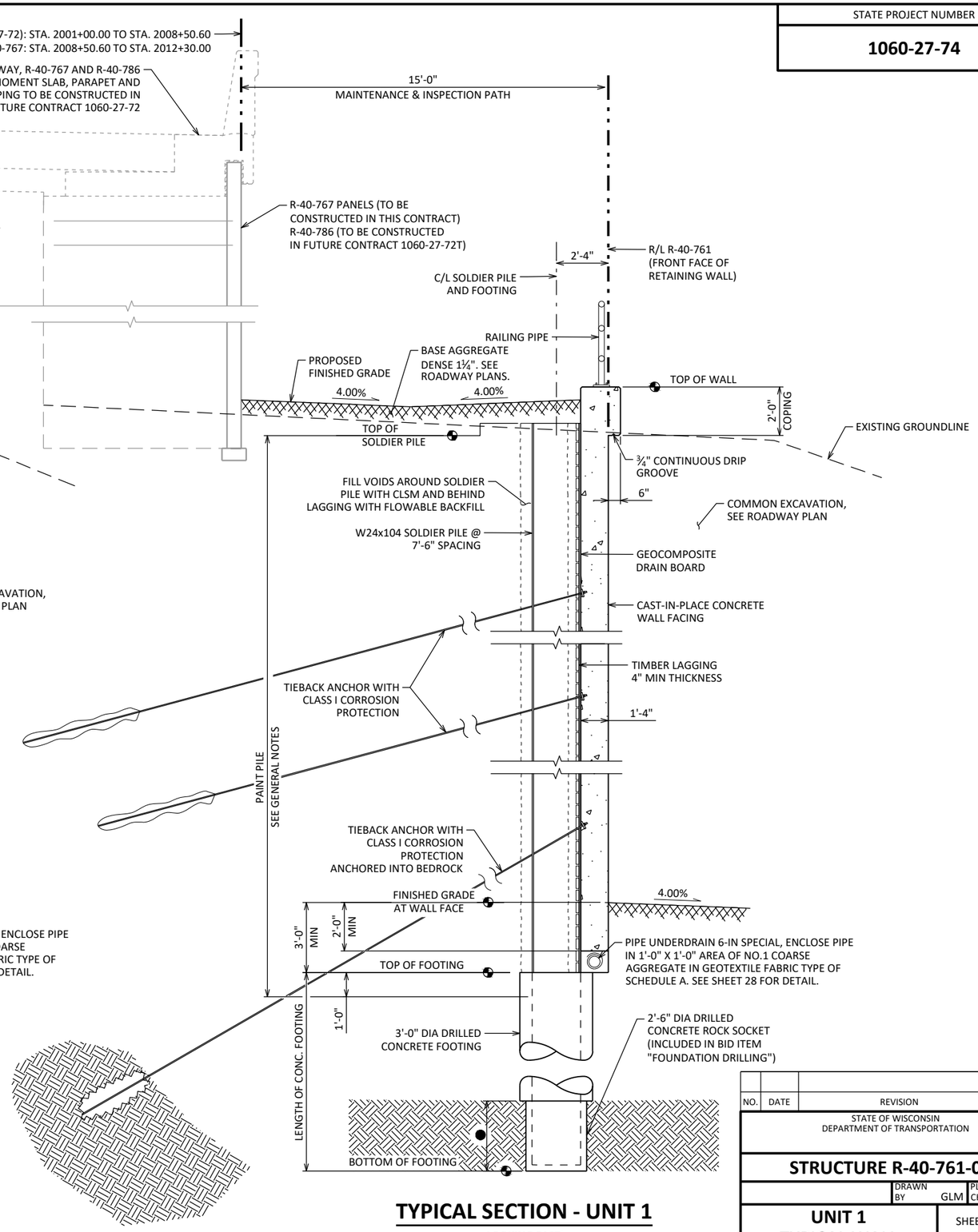


LEGEND

● SEE "SOLDIER PILE DATA TABLE" FOR ROCK SOCKET LENGTH

TYPICAL SECTION - UNIT 1

(LOOKING EAST)
(STA 2000+75.00 TO 2001+00.00)



TYPICAL SECTION - UNIT 1

(LOOKING EAST)
(STA 2001+00.00 TO STA 2012+30.00)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY GLM | PLANS CK'D PRK

UNIT 1 TYPICAL WALL SECTIONS (2 OF 2)

SHEET 11 OF 38
835

SCALE = 1:5

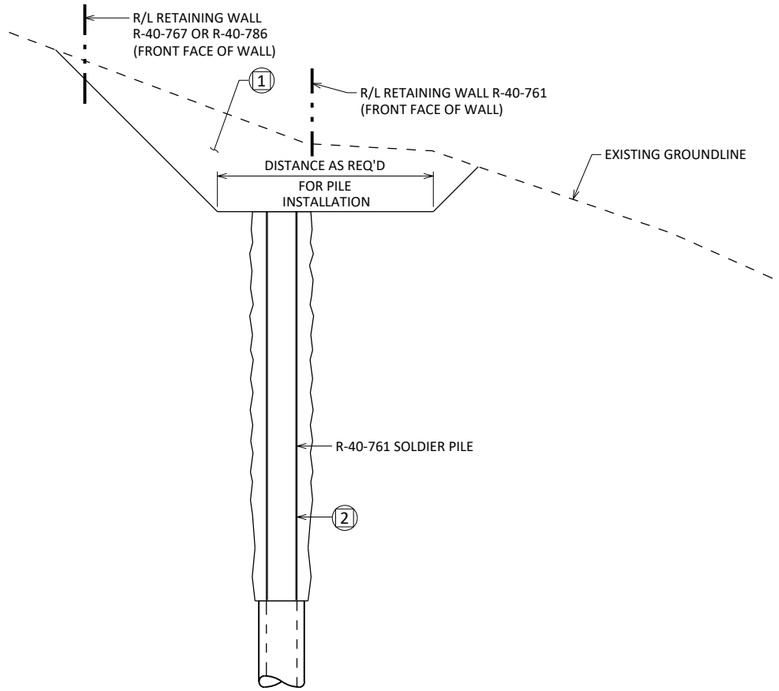
8

8

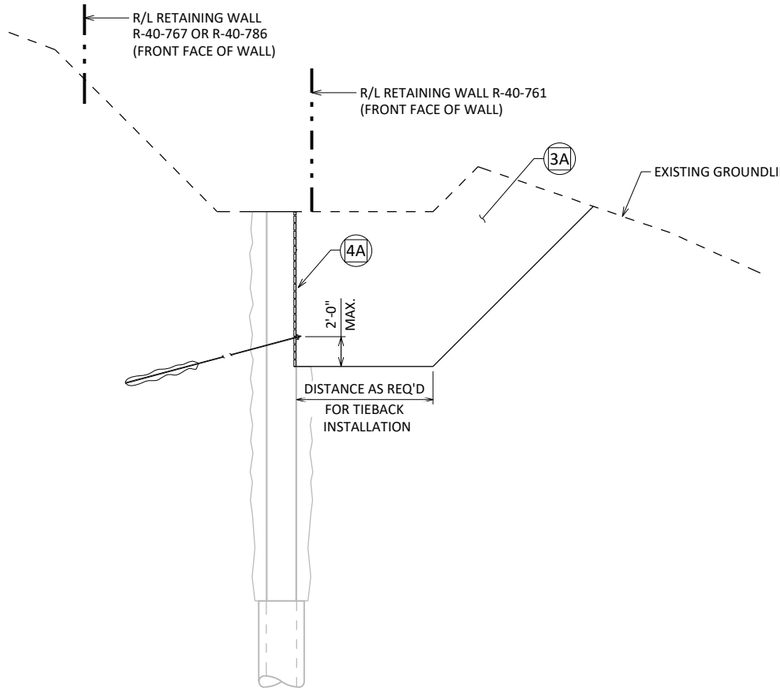
FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080211_TS.DWG
LAYOUT NAME - SHT_11

STATE PROJECT NUMBER

1060-27-74



TYPICAL SECTION - CONSTRUCTION SEQUENCE 1



TYPICAL SECTION - CONSTRUCTION SEQUENCE 2

CONSTRUCTION SEQUENCE

THE CONSTRUCTION SEQUENCE SHOWN IS A PROPOSED SEQUENCE AND THE CONTRACTOR MAY PROPOSE AN ALTERNATE SEQUENCE TO SUIT THEIR PROPOSED CONSTRUCTION METHODOLOGY. ALTERNATE CONSTRUCTION SEQUENCE MUST BE APPROVED BY THE ENGINEER.

PROPOSED CONSTRUCTION SEQUENCE 1:

1. EXCAVATE / FILL AT TOP OF WALL AS REQUIRED TO DRILL SOLDIER PILE FOUNDATIONS.
2. DRILL FOUNDATION AND INSTALL R-40-761 SOLDIER PILES. PLACE "CONCRETE MASONRY SOLDIER PILE FOOTINGS" AND FILL REMAINDER OF HOLE WITH CLSM.

PROPOSED CONSTRUCTION SEQUENCE 2:

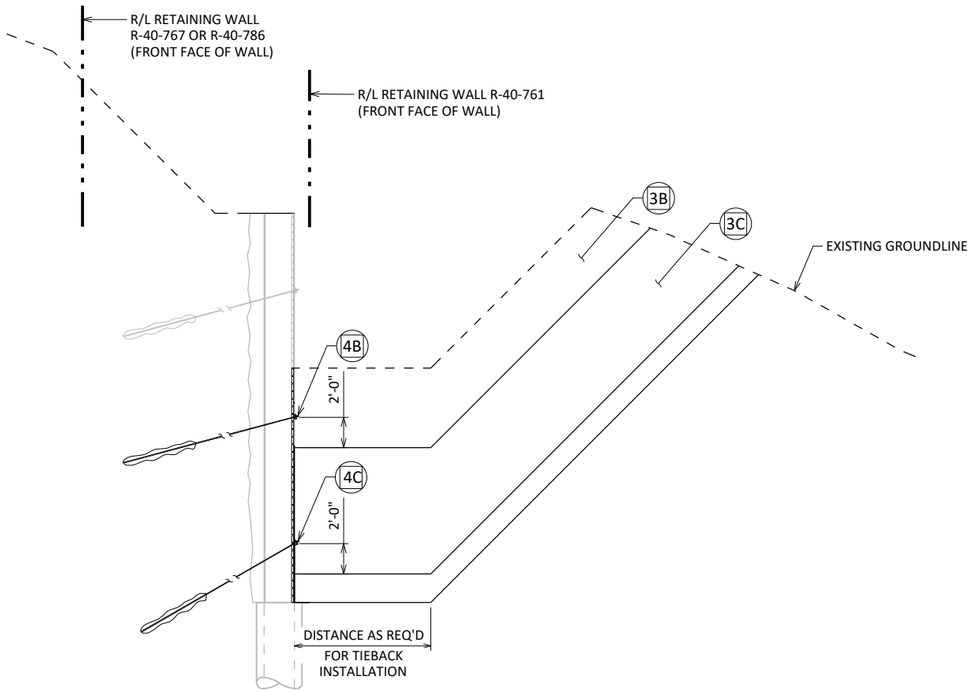
3. EXCAVATE IN FRONT OF WALL IN A TOP DOWN MANNER TO MAXIMUM OF 2'-0" BELOW TIEBACK ELEVATION, INSTALL TIMBER LAGGING.
4. INSTALL AND TEST TIE BACK ANCHOR.

PROPOSED CONSTRUCTION SEQUENCE 3:

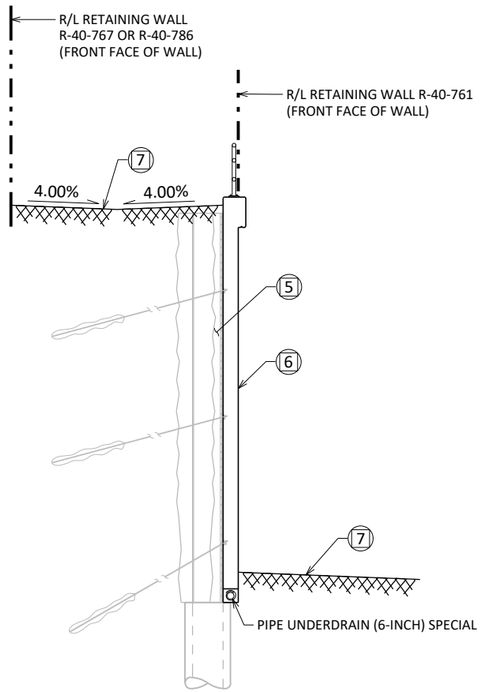
REPEAT STEPS 3 AND 4 UNTIL ALL ROWS OF TIEBACKS ARE INSTALLED.

PROPOSED CONSTRUCTION SEQUENCE 4:

5. FILL VOIDS BEHIND LAGGING WITH FLOWABLE BACKFILL.
6. INSTALL R-40-761 GEOCOMPOSITE DRAIN BOARD, CONCRETE FACING AND PIPE UNDERDRAIN (6-INCH) SPECIAL.
7. COMPLETE FINISHED GRADING AT FRONT FACE AND TOP OF WALL.



TYPICAL SECTION - CONSTRUCTION SEQUENCE 3



TYPICAL SECTION - CONSTRUCTION SEQUENCE 4

LEGEND

(X) ACTIVITY NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY GLM | PLANS CK'D PRK

UNIT 1 CONSTRUCTION SEQUENCE

SHEET 12 OF 38

836

SCALE = 1:10

8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080212_CS.DWG
LAYOUT NAME - SHT_12

SOLDIER PILE DATA TABLE

PILE NO.	WALL R/L STA	APPROXIMATE EXISTING GRADE	FINISHED GRADE AT FACE OF WALL	TOP OF WALL ELEVATION	TOP OF SOLDIER PILE ELEVATION	TOP OF FOOTING ELEVATION	MINIMUM BOTTOM OF FOOTING ELEVATION	MAXIMUM FOUNDATION DRILLING LENGTH ◐	MAXIMUM FOOTING LENGTH	MAXIMUM SOLDIER PILE LENGTH	ESTIMATED BEDROCK ELEVATION	ESTIMATED BOTTOM OF FOOTING IN BEDROCK ELEVATION	ESTIMATED ROCK SOCKET LENGTH	ESTIMATED FOUNDATION DRILLING LENGTH IN BEDROCK ◐	ESTIMATED FOOTING LENGTH IN BEDROCK	ESTIMATED SOLDIER PILE LENGTH IN BEDROCK	TIE BACK ELEVATION 1	TIE BACK ELEVATION 2	TIE BACK ELEVATION 3
1	2000+03.75	616.30	603.56	604.87	603.37	600.56	555.56	60'-9"	45'-0"	47'-10"	535.38	N/A	N/A	60'-9"	45'-0"	47'-10"	-	-	-
2	2000+11.25	617.10	603.56	606.49	604.99	600.56	555.56	61'-7"	45'-0"	49'-6"	535.65	N/A	N/A	61'-8"	45'-0"	49'-6"	-	-	-
3	2000+18.75	618.79	603.56	608.11	606.61	600.56	555.56	63'-3"	45'-0"	51'-1"	535.96	N/A	N/A	63'-3"	45'-0"	51'-1"	-	-	-
4	2000+26.25	620.52	603.61	609.73	608.23	600.56	555.56	65'-0"	45'-0"	52'-9"	536.33	N/A	N/A	65'-0"	45'-0"	52'-9"	603.30	-	-
5	2000+33.75	622.82	603.72	611.35	609.85	600.56	555.56	67'-4"	45'-0"	54'-4"	536.76	N/A	N/A	67'-4"	45'-0"	54'-4"	603.30	-	-
6	2000+41.25	624.63	603.82	612.97	611.47	600.56	555.56	69'-1"	45'-0"	55'-11"	537.41	N/A	N/A	69'-1"	45'-0"	55'-11"	604.47	-	-
7	2000+48.75	626.40	603.93	614.59	613.09	600.88	555.88	70'-7"	45'-0"	57'-3"	538.27	N/A	N/A	70'-7"	45'-0"	57'-3"	606.09	-	-
8	2000+56.25	626.57	604.04	616.21	614.71	600.88	555.88	70'-9"	45'-0"	58'-11"	539.29	N/A	N/A	70'-9"	45'-0"	58'-11"	607.71	-	-
9	2000+63.75	626.22	604.15	617.84	616.34	600.88	555.88	70'-5"	45'-0"	60'-6"	540.42	N/A	N/A	70'-6"	45'-0"	60'-6"	609.34	-	-
10	2000+71.25	625.87	604.26	619.46	617.96	600.88	555.88	70'-0"	45'-0"	62'-1"	541.65	N/A	N/A	70'-0"	45'-0"	62'-1"	610.96	-	-
11	2000+78.75	628.11	604.36	621.08	619.58	601.31	556.31	71'-10"	45'-0"	63'-4"	542.93	N/A	N/A	71'-10"	45'-0"	63'-4"	612.58	604.58	-
12	2000+86.25	627.12	604.47	622.70	621.20	601.31	556.31	70'-10"	45'-0"	64'-11"	544.21	N/A	N/A	70'-10"	45'-0"	64'-11"	614.20	606.20	-
13	2000+93.75	627.84	604.58	624.32	622.82	601.31	556.31	71'-7"	45'-0"	66'-7"	545.54	N/A	N/A	71'-7"	45'-0"	66'-7"	615.82	607.82	-
14	2001+01.25	628.34	604.69	625.94	624.44	601.31	551.31	77'-1"	50'-0"	73'-2"	547.10	N/A	N/A	77'-1"	50'-0"	73'-2"	617.44	609.44	606.00
15	2001+08.75	628.78	604.80	626.71	625.21	601.74	551.74	77'-1"	50'-0"	73'-6"	548.71	N/A	N/A	77'-1"	50'-0"	73'-6"	618.21	610.21	606.00
16	2001+16.25	629.39	604.90	626.65	625.15	601.74	551.74	77'-8"	50'-0"	73'-5"	550.21	N/A	N/A	77'-9"	50'-0"	73'-5"	618.15	610.15	606.00
17	2001+23.75	629.99	604.97	626.59	625.09	601.74	551.74	78'-3"	50'-0"	73'-5"	551.52	N/A	N/A	78'-3"	50'-0"	73'-5"	618.09	610.09	606.00
18	2001+31.25	630.59	604.67	626.52	625.02	600.92	550.92	79'-9"	50'-0"	74'-2"	552.69	550.92	1'-10"	79'-9"	50'-0"	74'-2"	618.02	610.02	606.00
19	2001+38.75	631.19	604.37	626.46	624.96	600.92	550.92	80'-4"	50'-0"	74'-1"	553.76	550.92	2'-11"	80'-4"	50'-0"	74'-1"	617.96	609.96	606.00
20	2001+46.25	631.79	604.07	626.39	624.89	600.92	550.92	80'-11"	50'-0"	74'-0"	554.82	550.92	3'-11"	80'-11"	50'-0"	74'-0"	617.89	609.89	606.00
21	2001+53.75	632.40	603.77	626.33	624.83	600.02	550.02	82'-5"	50'-0"	74'-10"	555.88	550.02	5'-11"	82'-5"	50'-0"	74'-10"	617.83	609.83	605.00
22	2001+61.25	633.00	603.47	626.26	624.76	600.02	550.02	83'-0"	50'-0"	74'-9"	556.73	550.73	6'-0"	82'-4"	49'-4"	74'-1"	617.76	609.76	605.00
23	2001+68.75	633.75	603.17	626.20	624.70	600.02	550.02	83'-9"	50'-0"	74'-9"	557.36	551.36	6'-0"	82'-5"	48'-8"	73'-5"	617.70	609.70	605.00
24	2001+76.25	633.18	602.87	626.14	624.64	599.12	549.12	84'-1"	50'-0"	75'-7"	557.69	551.69	6'-0"	81'-6"	47'-6"	73'-0"	617.64	609.64	604.00
25	2001+83.75	630.98	602.57	626.07	624.57	599.12	549.12	81'-11"	50'-0"	75'-6"	557.81	551.81	6'-0"	79'-3"	47'-4"	72'-10"	617.57	609.57	604.00
26	2001+91.25	630.15	602.27	626.01	624.51	599.12	549.12	81'-1"	50'-0"	75'-5"	557.85	551.85	6'-0"	78'-4"	47'-4"	72'-8"	617.51	609.51	604.00
27	2001+98.75	629.53	601.97	625.97	624.47	598.22	548.22	81'-4"	50'-0"	76'-3"	557.97	551.97	6'-0"	77'-7"	46'-3"	72'-6"	617.47	609.47	603.00
28	2002+06.25	629.05	601.67	625.96	624.46	598.22	548.22	80'-10"	50'-0"	76'-3"	558.12	552.12	6'-0"	77'-0"	46'-2"	72'-5"	617.46	609.46	603.00
29	2002+13.75	628.94	601.37	625.94	624.44	598.22	548.22	80'-9"	50'-0"	76'-3"	558.24	552.24	6'-0"	76'-9"	46'-0"	72'-3"	617.44	609.44	603.00
30	2002+21.25	628.45	601.07	625.93	624.43	597.67	547.67	80'-10"	50'-0"	76'-10"	558.42	552.42	6'-0"	76'-1"	45'-3"	72'-1"	617.43	609.43	601.43
31	2002+28.75	628.05	600.89	625.92	624.42	597.67	547.67	80'-5"	50'-0"	76'-10"	558.74	552.74	6'-0"	75'-4"	45'-0"	71'-9"	617.42	609.42	601.42
32	2002+36.25	627.97	600.74	625.91	624.41	597.67	547.67	80'-4"	50'-0"	76'-9"	559.27	553.27	6'-0"	74'-9"	44'-5"	71'-2"	617.41	609.41	601.41
33	2002+43.75	627.90	600.59	625.89	624.39	597.08	547.08	80'-10"	50'-0"	77'-4"	559.86	553.86	6'-0"	74'-1"	43'-3"	70'-7"	617.39	609.39	601.39
34	2002+51.25	627.76	600.45	625.88	624.38	597.08	547.08	80'-9"	50'-0"	77'-4"	560.50	554.50	6'-0"	73'-4"	42'-7"	69'-11"	617.38	609.38	601.38
35	2002+58.75	626.66	600.30	625.87	624.37	597.08	547.08	79'-7"	50'-0"	77'-4"	561.16	555.16	6'-0"	71'-6"	42'-0"	69'-3"	617.37	609.37	601.37
36	2002+66.25	625.70	600.15	625.86	624.36	597.08	547.08	78'-8"	50'-0"	77'-4"	561.66	555.66	6'-0"	70'-1"	41'-6"	68'-9"	617.36	609.36	601.36
37	2002+73.75	625.38	600.00	625.84	624.34	596.49	546.49	78'-11"	50'-0"	77'-11"	562.14	556.14	6'-0"	69'-3"	40'-5"	68'-3"	617.34	609.34	601.34
38	2002+81.25	625.07	599.86	625.83	624.33	596.49	546.49	78'-8"	50'-0"	77'-11"	562.65	556.65	6'-0"	68'-6"	39'-11"	67'-9"	617.33	609.33	601.33
39	2002+88.75	624.70	599.71	625.82	624.32	596.49	546.49	78'-3"	50'-0"	77'-10"	563.18	557.18	6'-0"	67'-7"	39'-4"	67'-2"	617.32	609.32	601.32
40	2002+96.25	623.93	599.56	625.81	624.31	596.49	546.49	77'-6"	50'-0"	77'-10"	563.61	557.61	6'-0"	66'-4"	38'-11"	66'-9"	617.31	609.31	601.31
41	2003+03.75	623.09	599.41	625.79	624.29	595.90	545.90	77'-3"	50'-0"	78'-5"	563.96	557.96	6'-0"	65'-2"	38'-0"	66'-4"	617.29	609.29	601.29
42	2003+11.25	622.28	599.27	625.78	624.28	595.90	545.90	76'-5"	50'-0"	78'-5"	564.33	558.33	6'-0"	64'-0"	37'-7"	66'-0"	617.28	609.28	601.28
43	2003+18.75	621.47	599.12	625.77	624.27	595.90	545.90	75'-7"	50'-0"	78'-5"	564.75	558.75	6'-0"	62'-9"	37'-2"	65'-7"	617.27	609.27	601.27
44	2003+26.25	620.96	598.97	625.76	624.26	595.90	545.90	75'-1"	50'-0"	78'-5"	565.16	559.16	6'-0"	61'-10"	36'-9"	65'-2"	617.26	609.26	601.26
45	2003+33.75	620.73	598.83	625.74	624.24	595.71	545.71	75'-1"	50'-0"	78'-7"	565.54	559.54	6'-0"	61'-3"	36'-3"	64'-9"	617.24	609.24	601.24
46	2003+41.25	620.52	598.68	625.73	624.23	595.71	545.71	74'-10"	50'-0"	78'-7"	565.90	559.90	6'-0"	60'-8"	35'-10"	64'-4"	617.23	609.23	601.23
47	2003+48.75	620.22	598.56	625.72	624.22	595.71	545.71	74'-7"	50'-0"	78'-7"	566.27	560.27	6'-0"	60'-0"	35'-6"	64'-0"	617.22	609.22	601.22
48	2003+56.25	619.67	598.66	625.71	624.21	595.71	545.71	74'-0"	50'-0"	78'-6"	566.63	560.63	6'-0"	59'-1"	35'-2"	63'-7"	617.21	609.21	601.21
49	2003+63.75	619.13	598.76	625.69	624.19	595.71	545.71	73'-5"	50'-0"	78'-6"	567.08	561.08	6'-0"	58'-1"	34'-8"	63'-2"	617.19	609.19	601.19
50	2003+71.25	618.60	598.86	625.68	624.18	595.71	545.71	72'-11"	50'-0"	78'-6"	567.58	561.58	6'-0"	57'-1"	34'-2"	62'-8"	617.18	609.18	601.18
51	2003+78.75	618.12	598.96	625.67	624.17	595.71	545.71	72'-5"	50'-0"	78'-6"	568.09	562.09	6'-0"	56'-1"	33'-8"	62'-1"	617.17	609.17	601.17
52	2003+86.25	617.63	599.06	625.66	624.16	595.71	545.71	72'-0"	50'-0"	78'-6"	568.74	562.74	6'-0"	54'-11"	33'-0"	61'-6"	617.16	609.16	601.16
53	2003+93.75	617.16	599.16	625.64	624.14	596.11	546.11	71'-1"	50'-0"	78'-1"	569.55	563.55	6'-0"	53'-8"	32'-7"	60'-8"	617.14	609.14	601.14
54	2004+01.25	616.76	599.26	625.63	624.13	596.11	546.11	70'-8"	50'-0"	78'-1"	570.56	564.56	6'-0"	52'-3"	31'-7"	59'-7"	617.13	609.13	601.13
55	2004+08.75	616.41	599.35	625.62	624.12	596.11	546.11	70'-4"	50'-0"	78'-1"	571.56	565.56	6'-0"	50'-11"	30'-7"	58'-7"	617.12	609.12	601.12
56	2004+16.25	616.06	599.45	625.61	624.11	596.11	546.11	70'-0"	50'-0"	78'-0"	572.32	566.32	6'-0"	49'-9"	29'-10"	57'-10"	617.11	609.11	601.11
57	2004+23.75	615.77	599.55	625.58	624.08	596.08	546.08	69'-9"	50'-0"	78'-0"	573.02	567.02	6'-0"	48'-10"	29'-1"	57'-1"	617.08	609.08	601.08
58	2004+31.25	616.41	599.65	625.54	624.04	596.08	546.08	70'-4"	50'-0"	78'-0"	573.73	567.73	6'-0"	48'-9"	28'-5"	56'-4"	617.04	609.04	601.04
59	2004+38.75	617.06	599.52	625.51	624.01	596.08	546.08	71'-0"	50'-0"	78'-0"	574.29	568.29	6'-0"	48'-10"	27'-10"	55'-9"	617.01	609.01	601.01

STATE PROJECT NUMBER

1060-27-74

LEGEND

◥ TABLE VALUES ARE BASED ON MAXIMUM FOOTING LENGTH REQUIRED IF BEDROCK IS NOT ENCOUNTERED.

SEE GENERAL NOTES FOR DETERMINATION OF "STRUCTURAL STEEL HS SOLDIER PILES DELIVERED" QUANTITY.

◥ WHEN BEDROCK IS ENCOUNTERED, THE FOUNDATION DRILLING MAY STOP AT A HIGHER ELEVATION BY CONTINUING THE FOUNDATION INTO BEDROCK (AS DETERMINED BY THE GEOTECHNICAL ENGINEER IN THE FIELD) WITH A 6' (MIN.) DEEP 2'-6" DIA. ROCK SOCKET.

IF BEDROCK IS ENCOUNTERED ABOVE EL. 575.00, THE FOUNDATION DRILLING MAY STOP AT A HIGHER ELEVATION BY CONTINUING THE FOUNDATION INTO BEDROCK (AS DETERMINED BY THE GEOTECHNICAL ENGINEER IN THE FIELD) WITH A 10' (MIN.) DEEP 2'-6" DIA. ROCK SOCKET.

"BEDROCK ELEVATION" IS AN ESTIMATED VALUE BASED ON SOIL BORING INFORMATION. TABLE VALUES ARE BASED UPON THE ASSUMPTION THAT BEDROCK IS ENCOUNTERED AT THE "BEDROCK ELEVATION". "ROCK SOCKET LENGTH" IS ESTIMATED BASED ON THE "MINIMUM BOTTOM OF FOOTING ELEVATION" OR THE 6' DEEP ROCK SOCKET.

SEE GENERAL NOTES FOR DETERMINATION OF "STRUCTURAL STEEL HS SOLDIER PILES INSTALLED", "FOUNDATION DRILLING" AND "CONCRETE MASONRY SOLDIER PILE FOOTINGS" QUANTITY.

◐ FOUNDATION DRILLING LENGTH ASSUMES DRILLING BEGINS AT EXISTING GROUND ELEVATION. IF GRADING OF EXISTING GROUND OCCURS PRIOR TO FOUNDATION DRILLING, THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMIT FOR THE FOUNDATION DRILLING PAY ITEM.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY MTZ | PLANS CK'D PRK

SOLDIER PILE DATA TABLE (1 OF 3)

SHEET 13 OF 38
837

SCALE = N/A

8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080213_DA.DWG
LAYOUT NAME - SHT_13

SOLDIER PILE DATA TABLE

PILE NO.	WALL R/L STA	APPROXIMATE EXISTING GRADE	FINISHED GRADE AT FACE OF WALL	TOP OF WALL ELEVATION	TOP OF SOLDIER PILE ELEVATION	TOP OF FOOTING ELEVATION	MINIMUM BOTTOM OF FOOTING ELEVATION	MAXIMUM FOUNDATION DRILLING LENGTH ◐	MAXIMUM FOOTING LENGTH	MAXIMUM SOLDIER PILE LENGTH	ESTIMATED BEDROCK ELEVATION	ESTIMATED BOTTOM OF FOOTING IN BEDROCK ELEVATION	ESTIMATED ROCK SOCKET LENGTH	ESTIMATED FOUNDATION DRILLING LENGTH IN BEDROCK ◐	ESTIMATED FOOTING LENGTH IN BEDROCK	ESTIMATED SOLDIER PILE LENGTH IN BEDROCK	TIE BACK ELEVATION 1	TIE BACK ELEVATION 2	TIE BACK ELEVATION 3
60	2004+46.25	617.73	599.23	625.47	623.97	596.08	546.08	71'-8"	50'-0"	77'-11"	574.68	568.68	6'-0"	49'-1"	27'-5"	55'-4"	616.97	608.97	600.97
61	2004+53.75	618.42	598.94	625.43	623.93	594.92	544.92	73'-7"	50'-0"	79'-1"	574.89	568.89	6'-0"	49'-7"	26'-1"	55'-1"	616.93	608.93	600.93
62	2004+61.25	619.12	598.65	625.39	623.89	594.92	544.92	74'-3"	50'-0"	79'-0"	574.53	568.53	6'-0"	50'-8"	26'-5"	55'-5"	616.89	608.89	600.89
63	2004+68.75	619.84	598.35	625.36	623.86	594.92	544.92	75'-0"	50'-0"	79'-0"	572.63	566.63	6'-0"	53'-3"	28'-4"	57'-3"	616.86	608.86	600.86
64	2004+76.25	621.24	598.06	625.32	623.82	594.92	544.92	76'-4"	50'-0"	78'-11"	570.85	564.85	6'-0"	56'-5"	30'-1"	59'-0"	616.82	608.82	600.82
65	2004+83.75	623.31	597.77	625.28	623.78	594.18	544.18	79'-2"	50'-0"	79'-8"	569.19	563.19	6'-0"	60'-2"	31'-0"	60'-8"	616.78	608.78	600.78
66	2004+91.25	625.38	597.53	625.24	623.74	594.18	544.18	81'-3"	50'-0"	79'-7"	567.51	561.51	6'-0"	63'-11"	32'-9"	62'-3"	616.74	608.74	600.74
67	2004+98.75	627.45	597.39	625.21	623.71	594.18	544.18	83'-4"	50'-0"	79'-7"	565.60	559.60	6'-0"	67'-11"	34'-7"	64'-2"	616.71	608.71	600.71
68	2005+06.25	629.53	597.25	625.17	623.67	594.18	534.18	95'-5"	60'-0"	89'-6"	563.51	557.51	6'-0"	72'-1"	36'-9"	66'-2"	616.67	608.67	600.67
69	2005+13.75	631.62	597.11	625.13	623.63	593.62	533.62	98'-1"	60'-0"	90'-1"	561.46	555.46	6'-0"	76'-2"	38'-2"	68'-3"	616.63	608.63	600.63
70	2005+21.25	633.71	596.97	625.09	623.59	593.62	533.62	100'-2"	60'-0"	90'-0"	559.45	553.45	6'-0"	80'-4"	40'-2"	70'-2"	616.59	608.59	600.59
71	2005+28.75	635.40	596.83	625.06	623.56	593.62	533.62	101'-10"	60'-0"	90'-0"	557.57	551.57	6'-0"	83'-10"	42'-1"	72'-0"	616.56	608.56	600.56
72	2005+36.25	636.21	596.69	625.02	623.52	593.62	533.62	102'-8"	60'-0"	89'-11"	555.90	549.90	6'-0"	86'-4"	43'-9"	73'-8"	616.52	608.52	600.52
73	2005+43.75	636.99	596.55	624.98	623.48	593.06	533.06	104'-0"	60'-0"	90'-6"	554.32	548.32	6'-0"	88'-9"	44'-9"	75'-2"	616.48	608.48	600.48
74	2005+51.25	637.76	596.41	624.95	623.45	593.06	533.06	104'-9"	60'-0"	90'-5"	552.75	546.75	6'-0"	91'-1"	46'-4"	76'-9"	616.45	608.45	600.45
75	2005+58.75	638.51	596.27	624.91	623.41	593.06	533.06	105'-6"	60'-0"	90'-5"	551.20	545.20	6'-0"	93'-4"	47'-11"	78'-3"	616.41	608.41	600.41
76	2005+66.25	639.44	596.13	624.87	623.37	593.06	533.06	106'-5"	60'-0"	90'-4"	550.08	544.08	6'-0"	95'-5"	49'-0"	79'-4"	616.37	608.37	600.37
77	2005+73.75	640.27	595.99	624.83	623.33	592.68	532.68	107'-8"	60'-0"	90'-8"	549.48	543.48	6'-0"	96'-10"	49'-3"	79'-11"	616.33	608.33	600.33
78	2005+81.25	639.02	595.85	624.80	623.30	592.68	532.68	106'-5"	60'-0"	90'-8"	549.05	543.05	6'-0"	96'-0"	49'-8"	80'-3"	616.30	608.30	600.30
79	2005+88.75	637.78	595.71	624.76	623.26	592.68	532.68	105'-2"	60'-0"	90'-7"	548.74	542.74	6'-0"	95'-1"	50'-0"	80'-7"	616.26	608.26	600.26
80	2005+96.25	636.51	595.69	624.72	623.22	592.68	532.68	103'-10"	60'-0"	90'-7"	548.56	542.56	6'-0"	94'-0"	50'-2"	80'-8"	616.22	608.22	600.22
81	2006+03.75	635.25	595.67	624.68	623.18	592.59	532.59	102'-8"	60'-0"	90'-8"	548.72	542.72	6'-0"	92'-7"	49'-11"	80'-6"	616.18	608.18	600.18
82	2006+11.25	634.01	595.64	624.65	623.15	592.59	532.59	101'-5"	60'-0"	90'-7"	549.02	543.02	6'-0"	91'-0"	49'-7"	80'-2"	616.15	608.15	600.15
83	2006+18.75	632.77	595.62	624.61	623.11	592.59	532.59	100'-3"	60'-0"	90'-7"	549.34	543.34	6'-0"	89'-6"	49'-4"	79'-10"	616.11	608.11	600.11
84	2006+26.25	631.79	595.60	624.57	623.07	592.59	532.59	99'-3"	60'-0"	90'-6"	549.69	543.69	6'-0"	88'-2"	48'-11"	79'-5"	616.07	608.07	600.07
85	2006+33.75	631.01	595.58	624.53	623.03	592.51	532.51	98'-6"	60'-0"	90'-7"	550.01	544.01	6'-0"	87'-1"	48'-7"	79'-1"	616.03	608.03	600.03
86	2006+41.25	630.26	595.56	624.50	623.00	592.51	532.51	97'-9"	60'-0"	90'-6"	550.07	544.07	6'-0"	86'-3"	48'-6"	79'-0"	616.00	608.00	600.00
87	2006+48.75	629.51	595.54	624.46	622.96	592.51	532.51	97'-0"	60'-0"	90'-6"	550.10	544.10	6'-0"	85'-5"	48'-5"	78'-11"	615.96	607.96	599.96
88	2006+56.25	628.77	595.52	624.42	622.92	592.51	532.51	96'-4"	60'-0"	90'-5"	550.11	544.11	6'-0"	84'-8"	48'-5"	78'-10"	615.92	607.92	599.92
89	2006+63.75	628.04	595.50	624.38	622.88	592.43	532.43	95'-8"	60'-0"	90'-6"	550.08	544.08	6'-0"	84'-0"	48'-5"	78'-10"	615.88	607.88	599.88
90	2006+71.25	627.34	595.48	624.35	622.85	592.43	532.43	94'-11"	60'-0"	90'-5"	549.83	543.83	6'-0"	83'-7"	48'-8"	79'-1"	615.85	607.85	599.85
91	2006+78.75	627.46	595.46	624.31	622.81	592.43	532.43	95'-1"	60'-0"	90'-5"	549.24	543.24	6'-0"	84'-3"	49'-3"	79'-7"	615.81	607.81	599.81
92	2006+86.25	627.51	595.44	624.27	622.77	592.43	532.43	95'-1"	60'-0"	90'-5"	548.72	542.72	6'-0"	84'-10"	49'-9"	80'-1"	615.77	607.77	599.77
93	2006+93.75	627.56	595.42	624.23	622.73	592.35	532.35	95'-3"	60'-0"	90'-5"	548.26	542.26	6'-0"	85'-4"	50'-2"	80'-6"	615.73	607.73	599.73
94	2007+01.25	627.61	595.40	624.20	622.70	592.35	532.35	95'-4"	60'-0"	90'-5"	547.87	541.87	6'-0"	85'-9"	50'-6"	80'-10"	615.70	607.70	599.70
95	2007+08.75	627.66	595.38	624.16	622.66	592.35	532.35	95'-4"	60'-0"	90'-4"	547.45	541.45	6'-0"	86'-3"	50'-11"	81'-3"	615.66	607.66	599.66
96	2007+16.25	627.71	595.36	624.12	622.62	592.35	532.35	95'-5"	60'-0"	90'-4"	546.94	540.94	6'-0"	86'-10"	51'-5"	81'-9"	615.62	607.62	599.62
97	2007+23.75	627.61	595.34	624.08	622.58	592.21	532.21	95'-5"	60'-0"	90'-5"	546.48	540.48	6'-0"	87'-2"	51'-9"	82'-2"	615.58	607.58	599.58
98	2007+31.25	625.75	595.32	624.05	622.55	592.21	532.21	93'-7"	60'-0"	90'-4"	546.07	540.07	6'-0"	85'-9"	52'-2"	82'-6"	615.55	607.55	599.55
99	2007+38.75	623.90	595.30	624.01	622.51	592.21	532.21	91'-9"	60'-0"	90'-4"	545.67	539.67	6'-0"	84'-3"	52'-7"	82'-11"	615.51	607.51	599.51
100	2007+46.25	622.07	595.28	623.97	622.47	592.21	532.21	89'-11"	60'-0"	90'-4"	545.24	539.24	6'-0"	82'-10"	53'-0"	83'-3"	615.47	607.47	599.47
101	2007+53.75	620.24	595.12	623.74	622.24	591.49	531.49	88'-9"	60'-0"	90'-9"	544.80	538.80	6'-0"	81'-6"	52'-9"	83'-6"	615.24	607.24	599.24
102	2007+61.25	618.42	594.94	623.31	621.81	591.49	531.49	87'-0"	60'-0"	90'-4"	544.42	538.42	6'-0"	80'-1"	53'-1"	83'-5"	614.81	606.81	598.81
103	2007+68.75	616.61	594.76	622.88	621.38	591.49	531.49	85'-2"	60'-0"	89'-11"	544.09	538.09	6'-0"	78'-7"	53'-5"	83'-4"	614.38	606.38	598.38
104	2007+76.25	614.19	594.58	622.46	620.96	591.49	531.49	82'-9"	60'-0"	89'-6"	543.81	537.81	6'-0"	76'-5"	53'-9"	83'-2"	613.96	605.96	597.96
105	2007+83.75	612.17	594.40	622.03	620.53	590.77	530.77	81'-5"	60'-0"	89'-10"	543.53	537.53	6'-0"	74'-8"	53'-3"	83'-0"	613.53	605.53	597.53
106	2007+91.25	615.94	594.22	621.60	620.10	590.77	530.77	85'-2"	60'-0"	89'-4"	543.26	537.26	6'-0"	78'-9"	53'-7"	82'-11"	613.10	605.10	597.10
107	2007+98.75	615.93	594.04	621.17	619.67	590.77	530.77	85'-2"	60'-0"	88'-11"	543.00	537.00	6'-0"	79'-0"	53'-10"	82'-9"	612.67	604.67	596.67
108	2008+06.25	615.99	593.86	620.74	619.24	590.77	530.77	85'-3"	60'-0"	88'-6"	542.76	536.76	6'-0"	79'-3"	54'-1"	82'-6"	612.24	604.24	596.24
109	2008+13.75	616.04	593.68	620.32	618.82	590.05	530.05	86'-0"	60'-0"	88'-10"	542.57	536.57	6'-0"	79'-6"	53'-6"	82'-3"	611.82	603.82	595.00
110	2008+21.25	616.06	593.50	619.89	618.39	590.05	530.05	86'-1"	60'-0"	88'-5"	542.40	536.40	6'-0"	79'-8"	53'-8"	82'-0"	611.39	603.39	595.00
111	2008+28.75	616.02	593.32	619.46	617.96	590.05	530.05	86'-0"	60'-0"	87'-11"	542.22	536.22	6'-0"	79'-10"	53'-10"	81'-9"	610.96	602.96	595.00
112	2008+36.25	615.97	593.14	619.03	617.53	590.05	530.05	86'-0"	60'-0"	87'-6"	542.03	536.03	6'-0"	80'-0"	54'-1"	81'-7"	610.53	602.53	595.00
113	2008+43.75	615.93	592.96	618.60	617.10	590.05	530.05	85'-11"	60'-0"	87'-1"	541.86	535.86	6'-0"	80'-1"	54'-3"	81'-3"	610.10	602.10	595.00
114	2008+51.25	615.88	592.82	618.18	616.68	590.05	530.05	85'-10"	60'-0"	86'-8"	541.73	535.73	6'-0"	80'-2"	54'-4"	81'-0"	609.68	601.68	595.00
115	2008+58.75	615.79	592.94	617.75	616.25	590.05	530.05	85'-9"	60'-0"	86'-3"	541.59	535.59	6'-0"	80'-3"	54'-6"	80'-8"	609.25	601.25	595.00
116	2008+66.25	615.71	593.07	617.32	615.82	590.05	530.05	85'-8"	60'-0"	85'-10"	541.41	535.41	6'-0"	80'-4"	54'-8"	80'-5"	608.82	600.82	595.00
117	2008+73.75	615.62	593.20	617.07	615.57	590.14	530.14	85'-6"	60'-0"	85'-6"	541.21	535.21	6'-0"	80'-5"	55'-0"	80'-5"	608.57	600.57	595.00
118	2008+81.25	615.46	593.33	617.00	615.50	590.14	530.14	85'-4"	60'-0"	85'-5"	540.97	534.97	6'-0"	80'-6"	55'-3"	80'-7"	608.50	600.50	595.00

STATE PROJECT NUMBER

1060-27-74

LEGEND

◥ TABLE VALUES ARE BASED ON MAXIMUM FOOTING LENGTH REQUIRED IF BEDROCK IS NOT ENCOUNTERED.

SEE GENERAL NOTES FOR DETERMINATION OF "STRUCTURAL STEEL HS SOLDIER PILES DELIVERED" QUANTITY.

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IF BEDROCK IS ENCOUNTERED ABOVE EL. 575.00, THE FOUNDATION DRILLING MAY STOP AT A HIGHER ELEVATION BY CONTINUING THE FOUNDATION INTO BEDROCK (AS DETERMINED BY THE GEOTECHNICAL ENGINEER IN THE FIELD) WITH A 10' (MIN.) DEEP 2'-6" DIA. ROCK SOCKET.

"BEDROCK ELEVATION" IS AN ESTIMATED VALUE BASED ON SOIL BORING INFORMATION. TABLE VALUES ARE BASED UPON THE ASSUMPTION THAT BEDROCK IS ENCOUNTERED AT THE "BEDROCK ELEVATION". "ROCK SOCKET LENGTH" IS ESTIMATED BASED ON THE "MINIMUM BOTTOM OF FOOTING ELEVATION" OR THE 6' DEEP ROCK SOCKET.

SEE GENERAL NOTES FOR DETERMINATION OF "STRUCTURAL STEEL HS SOLDIER PILES INSTALLED", "FOUNDATION DRILLING" AND "CONCRETE MASONRY SOLDIER PILE FOOTINGS" QUANTITY.

◐ FOUNDATION DRILLING LENGTH ASSUMES DRILLING BEGINS AT EXISTING GROUND ELEVATION. IF GRADING OF EXISTING GROUND OCCURS PRIOR TO FOUNDATION DRILLING, THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMIT FOR THE FOUNDATION DRILLING PAY ITEM.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY MTZ | PLANS CK'D PRK

SOLDIER PILE DATA TABLE (2 OF 3)

SHEET 14 OF 38
838

SCALE = N/A

8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080214_DA.DWG
LAYOUT NAME - SHT_14

SOLDIER PILE DATA TABLE

PILE NO.	WALL R/L STA	APPROXIMATE EXISTING GRADE	FINISHED GRADE AT FACE OF WALL	TOP OF WALL ELEVATION	TOP OF SOLDIER PILE ELEVATION	TOP OF FOOTING ELEVATION	◥ MINIMUM BOTTOM OF FOOTING ELEVATION	◥ MAXIMUM FOUNDATION DRILLING LENGTH ◐	◥ MAXIMUM FOOTING LENGTH	◥ MAXIMUM SOLDIER PILE LENGTH	◥ ESTIMATED BEDROCK ELEVATION	◥ ESTIMATED BOTTOM OF FOOTING IN BEDROCK ELEVATION	◥ ESTIMATED ROCK SOCKET LENGTH	◥ ESTIMATED FOUNDATION DRILLING LENGTH IN BEDROCK ◐	◥ ESTIMATED FOOTING LENGTH IN BEDROCK	◥ ESTIMATED SOLDIER PILE LENGTH IN BEDROCK	TIE BACK ELEVATION 1	TIE BACK ELEVATION 2	TIE BACK ELEVATION 3
119	2008+88.75	615.28	593.46	616.93	615.43	590.14	530.14	85'-2"	60'-0"	85'-4"	540.66	534.66	6'-0"	80'-8"	55'-6"	80'-10"	608.43	600.43	595.00
120	2008+96.25	615.10	593.58	616.86	615.36	590.14	530.14	85'-0"	60'-0"	85'-3"	540.30	534.30	6'-0"	80'-10"	55'-11"	81'-1"	608.36	600.36	595.00
121	2009+03.75	614.95	593.71	616.79	615.29	590.65	525.65	89'-4"	65'-0"	89'-8"	539.91	533.91	6'-0"	81'-1"	56'-9"	81'-5"	608.29	600.00	595.00
122	2009+11.25	614.86	593.84	616.71	615.21	590.65	525.65	89'-3"	65'-0"	89'-7"	539.61	533.61	6'-0"	81'-3"	57'-1"	81'-8"	608.21	600.00	595.00
123	2009+18.75	614.76	593.97	616.64	615.14	590.65	525.65	89'-2"	65'-0"	89'-6"	539.55	533.55	6'-0"	81'-3"	57'-2"	81'-8"	608.14	600.00	595.00
124	2009+26.25	614.67	594.10	616.57	615.07	590.65	525.65	89'-1"	65'-0"	89'-6"	539.61	533.61	6'-0"	81'-1"	57'-1"	81'-6"	608.07	600.00	595.00
125	2009+33.75	614.57	594.23	616.50	615.00	591.16	526.16	88'-5"	65'-0"	88'-11"	539.65	533.65	6'-0"	81'-0"	57'-7"	81'-5"	608.00	600.00	595.00
126	2009+41.25	614.49	594.35	616.43	614.93	591.16	526.16	88'-4"	65'-0"	88'-10"	539.67	533.67	6'-0"	80'-10"	57'-6"	81'-4"	607.93	600.00	595.00
127	2009+48.75	614.50	594.38	616.36	614.86	591.16	526.16	88'-5"	65'-0"	88'-9"	539.67	533.67	6'-0"	80'-10"	57'-6"	81'-3"	607.86	600.00	595.00
128	2009+56.25	614.50	594.39	616.29	614.79	591.16	526.16	88'-5"	65'-0"	88'-8"	539.74	533.74	6'-0"	80'-10"	57'-6"	81'-1"	607.79	600.00	595.00
129	2009+63.75	614.50	594.40	616.22	614.72	591.39	526.39	88'-2"	65'-0"	88'-4"	539.78	533.78	6'-0"	80'-9"	57'-8"	81'-0"	607.72	600.00	595.00
130	2009+71.25	614.51	594.40	616.14	614.64	591.39	526.39	88'-2"	65'-0"	88'-4"	539.78	533.78	6'-0"	80'-9"	57'-8"	80'-11"	607.64	600.00	595.00
131	2009+78.75	614.51	594.41	616.07	614.57	591.39	526.39	88'-2"	65'-0"	88'-3"	539.80	533.80	6'-0"	80'-9"	57'-8"	80'-10"	607.57	600.00	595.00
132	2009+86.25	614.51	594.42	616.00	614.50	591.39	526.39	88'-2"	65'-0"	88'-2"	539.90	533.90	6'-0"	80'-8"	57'-6"	80'-8"	607.50	600.00	595.00
133	2009+93.75	614.51	594.43	615.93	614.43	591.42	526.42	88'-2"	65'-0"	88'-1"	539.95	533.95	6'-0"	80'-7"	57'-6"	80'-6"	607.43	600.00	595.00
134	2010+01.25	614.51	594.43	615.86	614.36	591.42	526.42	88'-2"	65'-0"	88'-0"	539.93	533.93	6'-0"	80'-7"	57'-6"	80'-6"	607.36	600.00	595.00
135	2010+08.75	614.51	594.44	615.79	614.29	591.42	526.42	88'-2"	65'-0"	87'-11"	539.84	533.84	6'-0"	80'-9"	57'-8"	80'-6"	607.29	600.00	595.00
136	2010+16.25	614.51	594.45	615.72	614.22	591.42	526.42	88'-2"	65'-0"	87'-10"	539.68	533.68	6'-0"	80'-11"	57'-9"	80'-7"	607.22	600.00	595.00
137	2010+23.75	614.52	594.46	615.65	614.15	591.45	526.45	88'-1"	65'-0"	87'-9"	539.63	533.63	6'-0"	80'-11"	57'-10"	80'-7"	607.15	600.00	595.00
138	2010+31.25	614.52	594.46	615.57	614.07	591.45	526.45	88'-1"	65'-0"	87'-8"	539.83	533.83	6'-0"	80'-9"	57'-8"	80'-3"	607.07	600.00	595.00
139	2010+38.75	614.52	594.47	615.50	614.00	591.45	526.45	88'-1"	65'-0"	87'-7"	540.20	534.20	6'-0"	80'-4"	57'-3"	79'-10"	607.00	600.00	595.00
140	2010+46.25	614.52	594.48	615.43	613.93	591.45	526.45	88'-1"	65'-0"	87'-6"	540.85	534.85	6'-0"	79'-9"	56'-8"	79'-2"	606.93	600.00	595.00
141	2010+53.75	614.53	594.49	615.36	613.86	591.48	526.48	88'-1"	65'-0"	87'-5"	541.45	535.45	6'-0"	79'-1"	56'-1"	78'-5"	606.86	600.00	595.00
142	2010+61.25	614.54	594.49	615.29	613.79	591.48	526.48	88'-1"	65'-0"	87'-4"	541.98	535.98	6'-0"	78'-7"	55'-7"	77'-10"	606.79	600.00	595.00
143	2010+68.75	614.57	594.50	615.22	613.72	591.48	526.48	88'-2"	65'-0"	87'-3"	542.47	536.47	6'-0"	78'-2"	55'-1"	77'-4"	606.72	600.00	595.00
144	2010+76.25	614.58	594.51	615.15	613.65	591.48	526.48	88'-2"	65'-0"	87'-2"	542.95	536.95	6'-0"	77'-8"	54'-7"	76'-9"	606.65	600.00	595.00
145	2010+83.75	614.59	594.52	615.08	613.58	591.51	526.51	88'-1"	65'-0"	87'-1"	543.44	537.44	6'-0"	77'-2"	54'-1"	76'-2"	606.58	600.00	595.00
146	2010+91.25	614.60	594.52	615.00	613.50	591.51	526.51	88'-2"	65'-0"	87'-0"	543.90	537.90	6'-0"	76'-9"	53'-8"	75'-8"	606.50	600.00	595.00
147	2010+98.75	614.61	594.53	614.93	613.43	591.51	526.51	88'-2"	65'-0"	87'-0"	544.26	538.26	6'-0"	76'-5"	53'-4"	75'-3"	606.43	600.00	595.00
148	2011+06.25	614.63	594.54	614.86	613.36	591.51	526.51	88'-2"	65'-0"	86'-11"	544.43	538.43	6'-0"	76'-3"	53'-2"	75'-0"	606.36	600.00	595.00
149	2011+13.75	614.64	594.55	614.79	613.29	591.54	526.54	88'-2"	65'-0"	86'-9"	544.42	538.42	6'-0"	76'-3"	53'-2"	74'-11"	606.29	600.00	595.00
150	2011+21.25	614.65	594.55	614.72	613.22	591.54	526.54	88'-2"	65'-0"	86'-9"	544.38	538.38	6'-0"	76'-4"	53'-2"	74'-11"	606.22	600.00	595.00
151	2011+28.75	614.66	594.56	614.65	613.15	591.54	526.54	88'-2"	65'-0"	86'-8"	544.30	538.30	6'-0"	76'-5"	53'-3"	74'-11"	606.15	600.00	595.00
152	2011+36.25	614.66	594.57	614.58	613.08	591.54	526.54	88'-2"	65'-0"	86'-7"	544.14	538.14	6'-0"	76'-7"	53'-5"	75'-0"	606.08	600.00	595.00
153	2011+43.75	614.53	594.58	614.42	612.92	591.57	526.57	88'-0"	65'-0"	86'-5"	543.92	537.92	6'-0"	76'-8"	53'-8"	75'-0"	605.92	600.00	595.00
154	2011+51.25	613.68	594.58	614.17	612.67	591.57	526.57	87'-2"	65'-0"	86'-2"	543.67	537.67	6'-0"	76'-1"	53'-11"	75'-1"	605.67	600.00	595.00
155	2011+58.75	612.83	594.59	613.93	612.43	591.57	526.57	86'-4"	65'-0"	85'-11"	543.39	537.39	6'-0"	75'-6"	54'-3"	75'-1"	605.43	600.00	595.00
156	2011+66.25	611.97	594.60	613.68	612.18	591.57	526.57	85'-5"	65'-0"	85'-8"	543.13	537.13	6'-0"	74'-11"	54'-6"	75'-1"	605.18	600.00	595.00
157	2011+73.75	611.12	594.60	613.43	611.93	591.60	526.60	84'-7"	65'-0"	85'-4"	542.89	536.89	6'-0"	74'-3"	54'-9"	75'-1"	604.93	600.00	595.00
158	2011+81.25	610.27	594.61	613.19	611.69	591.60	526.60	83'-8"	65'-0"	85'-2"	542.63	536.63	6'-0"	73'-8"	55'-0"	75'-1"	604.69	600.00	595.00
159	2011+88.75	609.49	594.62	612.94	611.44	591.60	526.60	82'-11"	65'-0"	84'-11"	542.36	536.36	6'-0"	73'-2"	55'-3"	75'-1"	604.44	600.00	595.00
160	2011+96.25	608.75	594.63	612.69	611.19	591.60	526.60	82'-2"	65'-0"	84'-8"	542.07	536.07	6'-0"	72'-9"	55'-7"	75'-2"	604.19	600.00	595.00
161	2012+03.75	608.00	594.63	612.39	610.89	591.48	526.48	81'-7"	65'-0"	84'-5"	541.73	535.73	6'-0"	72'-4"	55'-10"	75'-2"	603.89	600.00	595.00
162	2012+11.25	607.26	594.64	612.02	610.52	591.48	526.48	80'-10"	65'-0"	84'-1"	541.41	535.41	6'-0"	71'-11"	56'-1"	75'-2"	603.52	600.00	595.00
163	2012+18.75	605.37	594.59	611.65	610.15	591.48	526.48	78'-11"	65'-0"	83'-9"	541.17	535.17	6'-0"	70'-3"	56'-4"	75'-0"	603.15	600.00	595.00
164	2012+26.25	602.37	594.52	611.28	609.78	591.48	526.48	75'-11"	65'-0"	83'-4"	541.00	535.00	6'-0"	67'-5"	56'-6"	74'-10"	602.78	600.00	595.00

STATE PROJECT NUMBER

1060-27-74

LEGEND

◥ TABLE VALUES ARE BASED ON MAXIMUM FOOTING LENGTH REQUIRED IF BEDROCK IS NOT ENCOUNTERED.

SEE GENERAL NOTES FOR DETERMINATION OF "STRUCTURAL STEEL HS SOLDIER PILES DELIVERED" QUANTITY.

◥ WHEN BEDROCK IS ENCOUNTERED, THE FOUNDATION DRILLING MAY STOP AT A HIGHER ELEVATION BY CONTINUING THE FOUNDATION INTO BEDROCK (AS DETERMINED BY THE GEOTECHNICAL ENGINEER IN THE FIELD) WITH A 6' (MIN.) DEEP 2'-6" DIA. ROCK SOCKET.

IF BEDROCK IS ENCOUNTERED ABOVE EL. 575.00, THE FOUNDATION DRILLING MAY STOP AT A HIGHER ELEVATION BY CONTINUING THE FOUNDATION INTO BEDROCK (AS DETERMINED BY THE GEOTECHNICAL ENGINEER IN THE FIELD) WITH A 10' (MIN.) DEEP 2'-6" DIA. ROCK SOCKET.

"BEDROCK ELEVATION" IS AN ESTIMATED VALUE BASED ON SOIL BORING INFORMATION. TABLE VALUES ARE BASED UPON THE ASSUMPTION THAT BEDROCK IS ENCOUNTERED AT THE "BEDROCK ELEVATION". "ROCK SOCKET LENGTH" IS ESTIMATED BASED ON THE "MINIMUM BOTTOM OF FOOTING ELEVATION" OR THE 6' DEEP ROCK SOCKET.

SEE GENERAL NOTES FOR DETERMINATION OF "STRUCTURAL STEEL HS SOLDIER PILES INSTALLED", "FOUNDATION DRILLING" AND "CONCRETE MASONRY SOLDIER PILE FOOTINGS" QUANTITY.

◐ FOUNDATION DRILLING LENGTH ASSUMES DRILLING BEGINS AT EXISTING GROUND ELEVATION. IF GRADING OF EXISTING GROUND OCCURS PRIOR TO FOUNDATION DRILLING, THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMIT FOR THE FOUNDATION DRILLING PAY ITEM.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY MTZ | PLANS CK'D PRK

SOLDIER PILE DATA TABLE (3 OF 3)

SHEET 15 OF 38

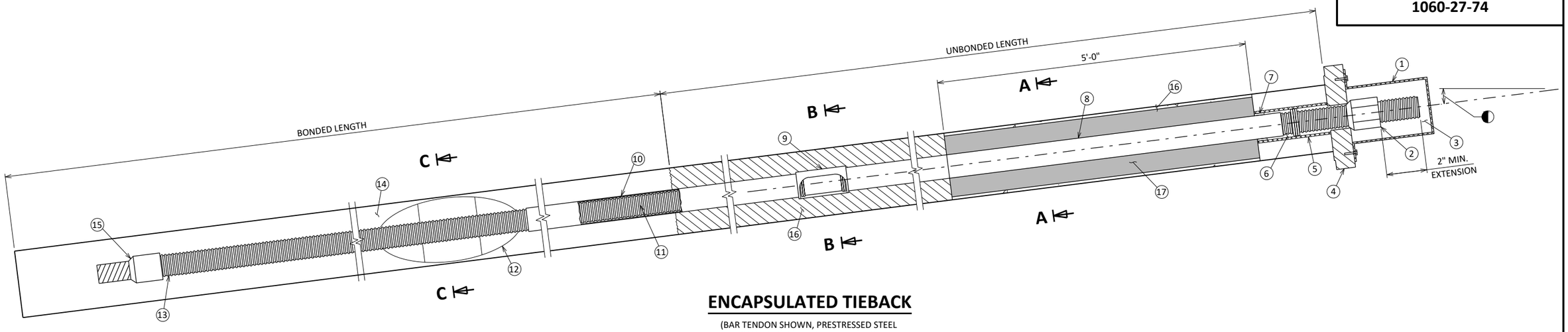
839

SCALE = N/A

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080215_DA.DWG
LAYOUT NAME - SHT_15

STATE PROJECT NUMBER

1060-27-74



ENCAPSULATED TIEBACK

(BAR TENDON SHOWN, PRESTRESSED STEEL TENDONS MAY BE USED AS AN ALTERNATE)

NOTES

W24x104 SHALL BE PRE-FABRICATED WITH ANCHORAGE DETAIL SHOWN BEFORE INSTALLATION INTO DRILLED CONCRETE FOOTING.

BEARING PLATES AND ALL TIEBACK COMPONENTS ARE INCLUDED IN THE BID ITEM "TIEBACK ANCHORS".

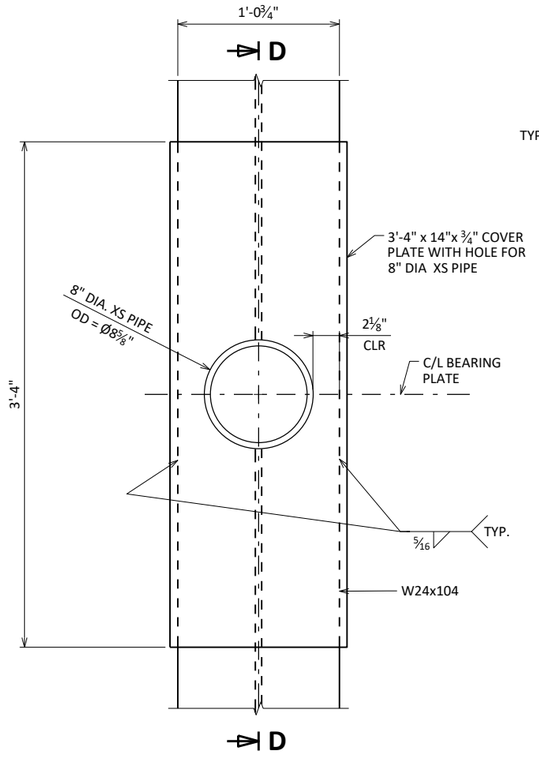
COVER PLATES, 8" XS PIPE AND ANCHOR MODIFICATIONS TO THE W24x104 ARE INCLUDED IN THE BID ITEM "STRUCTURAL STEEL HS SOLDIER PILES DELIVERED".

LEGEND

1. ANCHORAGE COVER
2. NUT
3. ANTICORROSION GREASE
4. BEARING PLATE
5. TRUMPET
6. ANTICORROSION GREASE
7. SEAL
8. SMOOTH PVC BOND BREAKER
9. PROTECTED BAR COUPLER
10. BAR TENDON
11. ENCAPSULATION GROUT
12. CENTRALIZERS
13. CORRUGATED PVC
14. ANCHOR GROUT
15. END CAP
16. GROUT
17. 1" THICK COMPRESSIBLE FOAM (AT 3rd ROW TIEBACKS ONLY. TO EXTEND INTO 8" XS PIPE BY AT LEAST 6")

⨯ BEARING PLATE SHALL BE DESIGNED BY THE CONTRACTOR IN ACCORDANCE WITH THE "TIEBACK ANCHORS" SPECIAL PROVISION (SPV.0060.4400)

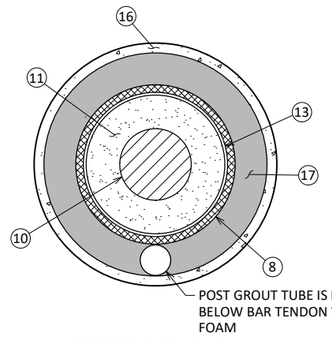
◐ ANGLE FROM HORIZONTAL, SEE "TIEBACK VERTICAL ORIENTATION" IN TIEBACK ANCHOR DATA TABLES.



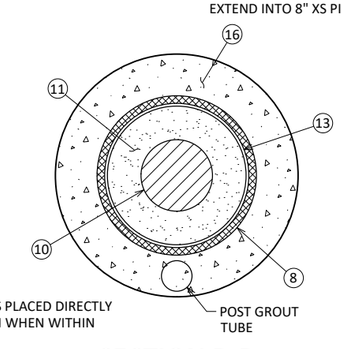
W24x104 ANCHOR DETAIL

(BEARING PLATE, TENDON & ANCHOR HEAD NOT SHOWN FOR CLARITY)

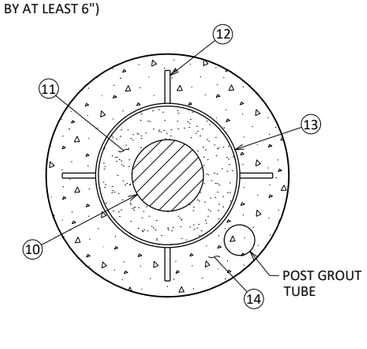
SECTION D-D



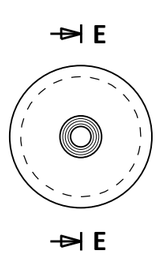
SECTION A-A



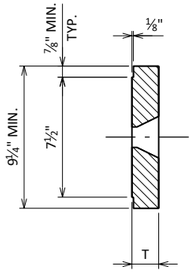
SECTION B-B



SECTION C-C



PLAN



SECTION E-E

BEARING PLATE DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY GLM | PLANS CK'D PRK

SOLDIER PILE TIEBACK ANCHOR DETAILS

SHEET 16 OF 38

840

SCALE = 1:8

8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080216_DE.DWG
LAYOUT NAME - SHT_16

STATE PROJECT NUMBER

1060-27-74

TIEBACK ANCHOR SCHEDULE

TIEBACK NO.	PILE NO.	TIEBACK ELEVATION	TIEBACK VERTICAL ORIENTATION (DEGREES)	TIEBACK HORIZONTAL ORIENTATION (DEGREES)	ESTIMATED BONDED ANCHOR LENGTH (FT)●	MINIMUM UNBONDED ANCHOR LENGTH (FT)	DESIGN LOAD (KIPS)	60% LOCK OFF LOAD	PROOF TEST LOAD (KIPS)
1	4	603.30	15	90	30	15	160	96	160
2	5	603.30	15	90	30	15	160	96	160
3	6	604.47	15	90	30	15	160	96	160
4	7	606.09	15	90	30	15	160	96	160
5	8	607.71	15	90	30	15	160	96	160
6	9	609.34	15	90	30	15	160	96	160
7	10	610.96	15	90	30	15	160	96	160
8	11	612.58	15	90	30	15	150	90	150
9	11	604.58	15	90	30	15	170	102	170
10	12	614.20	15	90	30	15	150	90	150
11	12	606.20	15	90	30	15	170	102	170
12	13	615.82	15	90	30	15	150	90	150
13	13	607.82	15	90	30	15	170	102	170
14	14	617.44	15	90	35	20	210	126	210
15	14	609.44	15	90	35	15	220	132	220
16	14	606.00	30	90	40	30	250	150	250
17	15	618.21	15	90	35	20	210	126	210
18	15	610.21	15	90	35	15	220	132	220
19	15	606.00	30	90	40	30	250	150	250
20	16	618.15	15	90	35	20	210	126	210
21	16	610.15	15	90	35	15	220	132	220
22	16	606.00	30	90	40	30	250	150	250
23	17	618.09	15	90	35	20	210	126	210
24	17	610.09	15	90	35	15	220	132	220
25	17	606.00	30	90	40	30	250	150	250
26	18	618.02	15	90	35	20	210	126	210
27	18	610.02	15	90	35	15	220	132	220
28	18	606.00	30	90	40	30	250	150	250
29	19	617.96	15	90	35	20	210	126	210
30	19	609.96	15	90	35	15	220	132	220
31	19	606.00	30	90	40	30	250	150	250
32	20	617.89	15	90	35	20	210	126	210
33	20	609.89	15	90	35	15	220	132	220
34	20	606.00	30	90	40	30	250	150	250
35	21	617.83	15	90	35	20	210	126	210
36	21	609.83	15	90	35	15	220	132	220
37	21	605.00	30	90	40	30	250	150	250
38	22	617.76	15	90	35	20	210	126	210
39	22	609.76	15	90	35	15	220	132	220
40	22	605.00	30	90	40	30	250	150	250
41	23	617.70	15	90	35	20	210	126	210
42	23	609.70	15	90	35	15	220	132	220
43	23	605.00	30	90	40	30	250	150	250
44	24	617.64	15	90	35	20	210	126	210
45	24	609.64	15	90	35	15	220	132	220
46	24	604.00	30	90	40	30	250	150	250
47	25	617.57	15	90	35	20	210	126	210
48	25	609.57	15	90	35	15	220	132	220
49	25	604.00	30	90	40	30	250	150	250
50	26	617.51	15	90	35	20	210	126	210

TIEBACK ANCHOR SCHEDULE

TIEBACK NO.	PILE NO.	TIEBACK ELEVATION	TIEBACK VERTICAL ORIENTATION (DEGREES)	TIEBACK HORIZONTAL ORIENTATION (DEGREES)	ESTIMATED BONDED ANCHOR LENGTH (FT)●	MINIMUM UNBONDED ANCHOR LENGTH (FT)	DESIGN LOAD (KIPS)	60% LOCK OFF LOAD	PROOF TEST LOAD (KIPS)
51	26	609.51	15	90	35	15	220	132	220
52	26	604.00	30	90	40	30	250	150	250
53	27	617.47	15	90	35	20	210	126	210
54	27	609.47	15	90	35	15	220	132	220
55	27	603.00	30	90	40	30	250	150	250
56	28	617.46	15	90	35	20	210	126	210
57	28	609.46	15	90	35	15	220	132	220
58	28	603.00	30	90	40	30	250	150	250
59	29	617.44	15	90	35	20	210	126	210
60	29	609.44	15	90	35	15	220	132	220
61	29	603.00	30	90	40	30	250	150	250
62	30	617.43	15	90	35	20	210	126	210
63	30	609.43	15	90	35	15	220	132	220
64	30	601.43	30	90	40	30	250	150	250
65	31	617.42	15	90	35	20	210	126	210
66	31	609.42	15	90	35	15	220	132	220
67	31	601.42	30	90	40	30	250	150	250
68	32	617.41	15	90	35	20	210	126	210
69	32	609.41	15	90	35	15	220	132	220
70	32	601.41	30	90	40	30	250	150	250
71	33	617.39	15	90	35	20	210	126	210
72	33	609.39	15	90	35	15	220	132	220
73	33	601.39	30	90	40	30	250	150	250
74	34	617.38	15	90	35	20	210	126	210
75	34	609.38	15	90	35	15	220	132	220
76	34	601.38	30	90	40	30	250	150	250
77	35	617.37	15	90	35	20	210	126	210
78	35	609.37	15	90	35	15	220	132	220
79	35	601.37	30	90	40	30	250	150	250
80	36	617.36	15	90	35	20	210	126	210
81	36	609.36	15	90	35	15	220	132	220
82	36	601.36	30	90	40	30	250	150	250
83	37	617.34	15	90	35	20	210	126	210
84	37	609.34	15	90	35	15	220	132	220
85	37	601.34	30	90	40	30	250	150	250
86	38	617.33	15	90	35	20	210	126	210
87	38	609.33	15	90	35	15	220	132	220
88	38	601.33	30	90	40	30	250	150	250
89	39	617.32	15	90	35	20	210	126	210
90	39	609.32	15	90	35	15	220	132	220
91	39	601.32	30	90	40	30	250	150	250
92	40	617.31	15	90	35	20	210	126	210
93	40	609.31	15	90	35	15	220	132	220
94	40	601.31	30	90	40	30	250	150	250
95	41	617.29	15	90	35	20	210	126	210
96	41	609.29	15	90	35	15	220	132	220
97	41	601.29	30	90	40	30	250	150	250
98	42	617.28	15	90	35	20	210	126	210
99	42	609.28	15	90	35	15	220	132	220
100	42	601.28	30	90	40	30	250	150	250

LEGEND

● ESTIMATED BONDED ANCHOR LENGTH BASED ON 6" DIA. ANCHOR.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY ALR | PLANS CK'D PRK

TIEBACK ANCHOR DATA TABLE (1 OF 5)

SHEET 17 OF 38

841

SCALE = N/A

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080217_DA.DWG
LAYOUT NAME - SHT_17

STATE PROJECT NUMBER

1060-27-74

TIEBACK ANCHOR SCHEDULE

TIEBACK NO.	PILE NO.	TIEBACK ELEVATION	TIEBACK VERTICAL ORIENTATION (DEGREES)	TIEBACK HORIZONTAL ORIENTATION (DEGREES)	ESTIMATED BONDED ANCHOR LENGTH (FT)●	MINIMUM UNBONDED ANCHOR LENGTH (FT)	DESIGN LOAD (KIPS)	60% LOCK OFF LOAD	PROOF TEST LOAD (KIPS)
101	43	617.27	15	90	35	20	210	126	210
102	43	609.27	15	90	35	15	220	132	220
103	43	601.27	30	90	40	30	250	150	250
104	44	617.26	15	90	35	20	210	126	210
105	44	609.26	15	90	35	15	220	132	220
106	44	601.26	30	90	40	30	250	150	250
107	45	617.24	15	90	35	20	210	126	210
108	45	609.24	15	90	35	15	220	132	220
109	45	601.24	30	90	40	30	250	150	250
110	46	617.23	15	90	35	20	210	126	210
111	46	609.23	15	90	35	15	220	132	220
112	46	601.23	30	90	40	30	250	150	250
113	47	617.22	15	90	35	20	210	126	210
114	47	609.22	15	90	35	15	220	132	220
115	47	601.22	30	90	40	30	250	150	250
116	48	617.21	15	90	35	20	210	126	210
117	48	609.21	15	90	35	15	220	132	220
118	48	601.21	30	90	40	30	250	150	250
119	49	617.19	15	90	35	20	210	126	210
120	49	609.19	15	90	35	15	220	132	220
121	49	601.19	30	90	40	30	250	150	250
122	50	617.18	15	90	35	20	210	126	210
123	50	609.18	15	90	35	15	220	132	220
124	50	601.18	30	90	40	30	250	150	250
125	51	617.17	15	90	35	20	210	126	210
126	51	609.17	15	90	35	15	220	132	220
127	51	601.17	30	90	40	30	250	150	250
128	52	617.16	15	90	35	20	210	126	210
129	52	609.16	15	90	35	15	220	132	220
130	52	601.16	30	90	40	30	250	150	250
131	53	617.14	15	90	35	20	210	126	210
132	53	609.14	15	90	35	15	220	132	220
133	53	601.14	30	90	40	30	250	150	250
134	54	617.13	15	90	35	20	210	126	210
135	54	609.13	15	90	35	15	220	132	220
136	54	601.13	30	90	40	30	250	150	250
137	55	617.12	15	90	35	20	210	126	210
138	55	609.12	15	90	35	15	220	132	220
139	55	601.12	30	90	40	30	250	150	250
140	56	617.11	15	90	35	20	210	126	210
141	56	609.11	15	90	35	15	220	132	220
142	56	601.11	30	90	40	30	250	150	250
143	57	617.08	15	90	35	20	210	126	210
144	57	609.08	15	90	35	15	220	132	220
145	57	601.08	30	90	40	30	250	150	250
146	58	617.04	15	90	35	20	210	126	210
147	58	609.04	15	90	35	15	220	132	220
148	58	601.04	30	90	40	30	250	150	250
149	59	617.01	15	90	35	20	210	126	210
150	59	609.01	15	90	35	15	220	132	220

TIEBACK ANCHOR SCHEDULE

TIEBACK NO.	PILE NO.	TIEBACK ELEVATION	TIEBACK VERTICAL ORIENTATION (DEGREES)	TIEBACK HORIZONTAL ORIENTATION (DEGREES)	ESTIMATED BONDED ANCHOR LENGTH (FT)●	MINIMUM UNBONDED ANCHOR LENGTH (FT)	DESIGN LOAD (KIPS)	60% LOCK OFF LOAD	PROOF TEST LOAD (KIPS)
151	59	601.01	30	90	40	30	250	150	250
152	60	616.97	15	90	35	20	210	126	210
153	60	608.97	15	90	35	15	220	132	220
154	60	600.97	30	90	40	30	250	150	250
155	61	616.93	15	90	35	20	210	126	210
156	61	608.93	15	90	35	15	220	132	220
157	61	600.93	30	90	40	30	250	150	250
158	62	616.89	15	90	35	20	210	126	210
159	62	608.89	15	90	35	15	220	132	220
160	62	600.89	30	90	40	30	250	150	250
161	63	616.86	15	90	35	20	210	126	210
162	63	608.86	15	90	35	15	220	132	220
163	63	600.86	30	90	40	30	250	150	250
164	64	616.82	15	90	35	20	210	126	210
165	64	608.82	15	90	35	15	220	132	220
166	64	600.82	30	90	40	30	250	150	250
167	65	616.78	15	90	35	20	210	126	210
168	65	608.78	15	90	35	15	220	132	220
169	65	600.78	30	90	40	30	250	150	250
170	66	616.74	15	90	35	20	210	126	210
171	66	608.74	15	90	35	15	220	132	220
172	66	600.74	30	90	40	30	250	150	250
173	67	616.71	15	90	35	20	210	126	210
174	67	608.71	15	90	35	15	220	132	220
175	67	600.71	30	90	40	30	250	150	250
176	68	616.67	15	90	35	20	220	132	220
177	68	608.67	15	90	40	15	230	138	230
178	68	600.67	30	90	50	35	260	156	260
179	69	616.63	15	90	35	20	220	132	220
180	69	608.63	15	90	40	15	230	138	230
181	69	600.63	30	90	50	35	260	156	260
182	70	616.59	15	90	35	20	220	132	220
183	70	608.59	15	90	40	15	230	138	230
184	70	600.59	30	90	50	35	260	156	260
185	71	616.56	15	90	35	20	220	132	220
186	71	608.56	15	90	40	15	230	138	230
187	71	600.56	30	90	50	35	260	156	260
188	72	616.52	15	90	35	20	220	132	220
189	72	608.52	15	90	40	15	230	138	230
190	72	600.52	30	90	50	35	260	156	260
191	73	616.48	15	90	35	20	220	132	220
192	73	608.48	15	90	40	15	230	138	230
193	73	600.48	30	90	50	35	260	156	260
194	74	616.45	15	90	35	20	220	132	220
195	74	608.45	15	90	40	15	230	138	230
196	74	600.45	30	90	50	35	260	156	260
197	75	616.41	15	90	35	20	220	132	220
198	75	608.41	15	90	40	15	230	138	230
199	75	600.41	30	90	50	35	260	156	260
200	76	616.37	15	90	35	20	220	132	220

LEGEND

● ESTIMATED BONDED ANCHOR LENGTH BASED ON 6" DIA. ANCHOR.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY ALR | PLANS CK'D PRK

TIEBACK ANCHOR DATA TABLE (2 OF 5)

SHEET 18 OF 38

842

SCALE = N/A

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080218_DA.DWG
LAYOUT NAME - SHT_18

STATE PROJECT NUMBER

1060-27-74

TIEBACK ANCHOR SCHEDULE

TIEBACK NO.	PILE NO.	TIEBACK ELEVATION	TIEBACK VERTICAL ORIENTATION (DEGREES)	TIEBACK HORIZONTAL ORIENTATION (DEGREES)	ESTIMATED BONDED ANCHOR LENGTH (FT)●	MINIMUM UNBONDED ANCHOR LENGTH (FT)	DESIGN LOAD (KIPS)	60% LOCK OFF LOAD	PROOF TEST LOAD (KIPS)
201	76	608.37	15	90	40	15	230	138	230
202	76	600.37	30	90	50	35	260	156	260
203	77	616.33	15	90	35	20	220	132	220
204	77	608.33	15	90	40	15	230	138	230
205	77	600.33	30	90	50	35	260	156	260
206	78	616.30	15	90	35	20	220	132	220
207	78	608.30	15	90	40	15	230	138	230
208	78	600.30	30	90	50	35	260	156	260
209	79	616.26	15	90	35	20	220	132	220
210	79	608.26	15	90	40	15	230	138	230
211	79	600.26	30	90	50	35	260	156	260
212	80	616.22	15	90	35	20	220	132	220
213	80	608.22	15	90	40	15	230	138	230
214	80	600.22	30	90	50	35	260	156	260
215	81	616.18	15	90	35	20	220	132	220
216	81	608.18	15	90	40	15	230	138	230
217	81	600.18	30	90	50	35	260	156	260
218	82	616.15	15	90	35	20	220	132	220
219	82	608.15	15	90	40	15	230	138	230
220	82	600.15	30	90	50	35	260	156	260
221	83	616.11	15	90	35	20	220	132	220
222	83	608.11	15	90	40	15	230	138	230
223	83	600.11	30	90	50	35	260	156	260
224	84	616.07	15	90	35	20	220	132	220
225	84	608.07	15	90	40	15	230	138	230
226	84	600.07	30	90	50	35	260	156	260
227	85	616.03	15	90	35	20	220	132	220
228	85	608.03	15	90	40	15	230	138	230
229	85	600.03	30	90	50	35	260	156	260
230	86	616.00	15	90	35	20	220	132	220
231	86	608.00	15	90	40	15	230	138	230
232	86	600.00	30	90	50	35	260	156	260
233	87	615.96	15	90	35	20	220	132	220
234	87	607.96	15	90	40	15	230	138	230
235	87	599.96	30	90	50	35	260	156	260
236	88	615.92	15	90	35	20	220	132	220
237	88	607.92	15	90	40	15	230	138	230
238	88	599.92	30	90	50	35	260	156	260
239	89	615.88	15	90	35	20	220	132	220
240	89	607.88	15	90	40	15	230	138	230
241	89	599.88	30	90	50	35	260	156	260
242	90	615.85	15	90	35	20	220	132	220
243	90	607.85	15	90	40	15	230	138	230
244	90	599.85	30	90	50	35	260	156	260
245	91	615.81	15	90	35	20	220	132	220
246	91	607.81	15	90	40	15	230	138	230
247	91	599.81	30	90	50	35	260	156	260
248	92	615.77	15	90	35	20	220	132	220
249	92	607.77	15	90	40	15	230	138	230
250	92	599.77	30	90	50	35	260	156	260

TIEBACK ANCHOR SCHEDULE

TIEBACK NO.	PILE NO.	TIEBACK ELEVATION	TIEBACK VERTICAL ORIENTATION (DEGREES)	TIEBACK HORIZONTAL ORIENTATION (DEGREES)	ESTIMATED BONDED ANCHOR LENGTH (FT)●	MINIMUM UNBONDED ANCHOR LENGTH (FT)	DESIGN LOAD (KIPS)	60% LOCK OFF LOAD	PROOF TEST LOAD (KIPS)
251	93	615.73	15	90	35	20	220	132	220
252	93	607.73	15	90	40	15	230	138	230
253	93	599.73	30	90	50	35	260	156	260
254	94	615.70	15	90	35	20	210	126	210
255	94	607.70	15	90	35	15	220	132	220
256	94	599.70	30	90	50	30	250	150	250
257	95	615.66	15	90	35	20	210	126	210
258	95	607.66	15	90	35	15	220	132	220
259	95	599.66	30	90	50	30	250	150	250
260	96	615.62	15	90	35	20	210	126	210
261	96	607.62	15	90	35	15	220	132	220
262	96	599.62	30	90	50	30	250	150	250
263	97	615.58	15	90	35	20	210	126	210
264	97	607.58	15	90	35	15	220	132	220
265	97	599.58	30	90	50	30	250	150	250
266	98	615.55	15	90	35	20	210	126	210
267	98	607.55	15	90	35	15	220	132	220
268	98	599.55	30	90	50	30	250	150	250
269	99	615.51	15	90	35	20	210	126	210
270	99	607.51	15	90	35	15	220	132	220
271	99	599.51	30	90	50	30	250	150	250
272	100	615.47	15	90	35	20	210	126	210
273	100	607.47	15	90	35	15	220	132	220
274	100	599.47	30	90	50	30	250	150	250
275	101	615.24	15	90	35	20	210	126	210
276	101	607.24	15	90	35	15	220	132	220
277	101	599.24	30	90	50	30	250	150	250
278	102	614.81	15	90	35	20	210	126	210
279	102	606.81	15	90	35	15	220	132	220
280	102	598.81	30	90	50	30	250	150	250
281	103	614.38	15	90	35	20	210	126	210
282	103	606.38	15	90	35	15	220	132	220
283	103	598.38	30	90	50	30	250	150	250
284	104	613.96	15	90	35	20	210	126	210
285	104	605.96	15	90	35	15	220	132	220
286	104	597.96	30	90	50	30	250	150	250
287	105	613.53	15	90	35	20	210	126	210
288	105	605.53	15	90	35	15	220	132	220
289	105	597.53	30	90	50	30	250	150	250
290	106	613.10	15	90	35	20	210	126	210
291	106	605.10	15	90	35	15	220	132	220
292	106	597.10	30	90	50	30	250	150	250
293	107	612.67	15	90	35	20	210	126	210
294	107	604.67	15	90	35	15	220	132	220
295	107	596.67	30	90	50	30	250	150	250
296	108	612.24	15	90	35	20	210	126	210
297	108	604.24	15	90	35	15	220	132	220
298	108	596.24	30	90	50	30	250	150	250
299	109	611.82	15	90	35	20	210	126	210
300	109	603.82	15	90	35	15	220	132	220

LEGEND

● ESTIMATED BONDED ANCHOR LENGTH BASED ON 6" DIA. ANCHOR.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY ALR | PLANS CK'D PRK

TIEBACK ANCHOR DATA TABLE (3 OF 5)

SHEET 19 OF 38

843

SCALE = N/A

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080219_DA.DWG
LAYOUT NAME - SHT_19

STATE PROJECT NUMBER

1060-27-74

TIEBACK ANCHOR SCHEDULE

TIEBACK NO.	PILE NO.	TIEBACK ELEVATION	TIEBACK VERTICAL ORIENTATION (DEGREES)	TIEBACK HORIZONTAL ORIENTATION (DEGREES)	ESTIMATED BONDED ANCHOR LENGTH (FT)●	MINIMUM UNBONDED ANCHOR LENGTH (FT)	DESIGN LOAD (KIPS)	60% LOCK OFF LOAD	PROOF TEST LOAD (KIPS)
301	109	595.00	30	90	50	30	250	150	250
302	110	611.39	15	90	35	20	210	126	210
303	110	603.39	15	90	35	15	220	132	220
304	110	595.00	30	90	50	30	250	150	250
305	111	610.96	15	90	35	20	210	126	210
306	111	602.96	15	90	35	15	220	132	220
307	111	595.00	30	90	50	30	250	150	250
308	112	610.53	15	90	35	20	210	126	210
309	112	602.53	15	87	35	15	220	132	220
310	112	595.00	30	87	50	30	250	150	250
311	113	610.10	15	93	35	20	210	126	210
312	113	602.10	15	93	35	15	220	132	220
313	113	595.00	30	90	50	30	250	150	250
314	114	609.68	15	90	35	20	210	126	210
315	114	601.68	15	90	35	15	220	132	220
316	114	595.00	30	90	50	30	250	150	250
317	115	609.25	15	90	35	20	210	126	210
318	115	601.25	15	90	35	15	220	132	220
319	115	595.00	30	90	50	30	250	150	250
320	116	608.82	15	90	35	20	210	126	210
321	116	600.82	15	90	35	15	220	132	220
322	116	595.00	30	90	50	30	250	150	250
323	117	608.57	15	90	35	20	210	126	210
324	117	600.57	15	90	35	15	220	132	220
325	117	595.00	30	90	50	30	250	150	250
326	118	608.50	15	90	35	20	210	126	210
327	118	600.50	15	90	35	15	220	132	220
328	118	595.00	30	90	50	30	250	150	250
329	119	608.43	15	90	35	20	210	126	210
330	119	600.43	15	90	35	15	220	132	220
331	119	595.00	30	90	50	30	250	150	250
332	120	608.36	15	90	35	20	210	126	210
333	120	600.36	15	88	35	15	220	132	220
334	120	595.00	30	88	50	30	250	150	250
335	121	608.29	15	92	30	20	170	102	170
336	121	600.00	15	90	30	15	170	102	170
337	121	595.00	30	90	50	30	220	132	220
338	122	608.21	15	90	30	20	170	102	170
339	122	600.00	15	90	30	15	170	102	170
340	122	595.00	30	90	50	30	220	132	220
341	123	608.14	15	90	30	20	170	102	170
342	123	600.00	15	90	30	15	170	102	170
343	123	595.00	30	90	50	30	220	132	220
344	124	608.07	15	90	30	20	170	102	170
345	124	600.00	15	90	30	15	170	102	170
346	124	595.00	30	90	50	30	220	132	220
347	125	608.00	15	90	30	20	170	102	170
348	125	600.00	15	90	30	15	170	102	170
349	125	595.00	30	90	50	30	220	132	220
350	126	607.93	15	90	30	20	170	102	170

TIEBACK ANCHOR SCHEDULE

TIEBACK NO.	PILE NO.	TIEBACK ELEVATION	TIEBACK VERTICAL ORIENTATION (DEGREES)	TIEBACK HORIZONTAL ORIENTATION (DEGREES)	ESTIMATED BONDED ANCHOR LENGTH (FT)●	MINIMUM UNBONDED ANCHOR LENGTH (FT)	DESIGN LOAD (KIPS)	60% LOCK OFF LOAD	PROOF TEST LOAD (KIPS)
351	126	600.00	15	90	30	15	170	102	170
352	126	595.00	30	90	50	30	220	132	220
353	127	607.86	15	90	30	20	170	102	170
354	127	600.00	15	90	30	15	170	102	170
355	127	595.00	30	90	50	30	220	132	220
356	128	607.79	15	90	30	20	170	102	170
357	128	600.00	15	90	30	15	170	102	170
358	128	595.00	30	90	50	30	220	132	220
359	129	607.72	15	90	30	20	170	102	170
360	129	600.00	15	90	30	15	170	102	170
361	129	595.00	30	90	50	30	220	132	220
362	130	607.64	15	90	30	20	170	102	170
363	130	600.00	15	90	30	15	170	102	170
364	130	595.00	30	90	50	30	220	132	220
365	131	607.57	15	90	30	20	170	102	170
366	131	600.00	15	90	30	15	170	102	170
367	131	595.00	30	90	50	30	220	132	220
368	132	607.50	15	90	30	20	170	102	170
369	132	600.00	15	90	30	15	170	102	170
370	132	595.00	30	90	50	30	220	132	220
371	133	607.43	15	90	30	20	170	102	170
372	133	600.00	15	90	30	15	170	102	170
373	133	595.00	30	90	50	30	220	132	220
374	134	607.36	15	90	30	20	170	102	170
375	134	600.00	15	90	30	15	170	102	170
376	134	595.00	30	90	50	30	220	132	220
377	135	607.29	15	90	30	20	170	102	170
378	135	600.00	15	90	30	15	170	102	170
379	135	595.00	30	90	50	30	220	132	220
380	136	607.22	15	90	30	20	170	102	170
381	136	600.00	15	90	30	15	170	102	170
382	136	595.00	30	90	50	30	220	132	220
383	137	607.15	15	90	30	20	170	102	170
384	137	600.00	15	90	30	15	170	102	170
385	137	595.00	30	90	50	30	220	132	220
386	138	607.07	15	90	30	20	170	102	170
387	138	600.00	15	90	30	15	170	102	170
388	138	595.00	30	90	50	30	220	132	220
389	139	607.00	15	90	30	20	170	102	170
390	139	600.00	15	90	30	15	170	102	170
391	139	595.00	30	90	50	30	220	132	220
392	140	606.93	15	90	30	20	170	102	170
393	140	600.00	15	90	30	15	170	102	170
394	140	595.00	30	90	50	30	220	132	220
395	141	606.86	15	90	30	20	170	102	170
396	141	600.00	15	90	30	15	170	102	170
397	141	595.00	30	90	50	30	220	132	220
398	142	606.79	15	90	30	20	170	102	170
399	142	600.00	15	90	30	15	170	102	170
400	142	595.00	30	90	50	30	220	132	220

LEGEND

● ESTIMATED BONDED ANCHOR LENGTH BASED ON 6" DIA. ANCHOR.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY ALR | PLANS CK'D PRK

TIEBACK ANCHOR DATA TABLE (4 OF 5)

SHEET 20 OF 38

844

SCALE = N/A

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080220_DA.DWG
LAYOUT NAME - SHT_20

STATE PROJECT NUMBER

1060-27-74

TIEBACK ANCHOR SCHEDULE

TIEBACK NO.	PILE NO.	TIEBACK ELEVATION	TIEBACK VERTICAL ORIENTATION (DEGREES)	TIEBACK HORIZONTAL ORIENTATION (DEGREES)	ESTIMATED BONDED ANCHOR LENGTH (FT)●	MINIMUM UNBONDED ANCHOR LENGTH (FT)	DESIGN LOAD (KIPS)	60% LOCK OFF LOAD	PROOF TEST LOAD (KIPS)
401	143	606.72	15	90	30	20	170	102	170
402	143	600.00	15	90	30	15	170	102	170
403	143	595.00	30	90	50	30	220	132	220
404	144	606.65	15	90	30	20	170	102	170
405	144	600.00	15	90	30	15	170	102	170
406	144	595.00	30	90	50	30	220	132	220
407	145	606.58	15	90	30	20	170	102	170
408	145	600.00	15	90	30	15	170	102	170
409	145	595.00	30	90	50	30	220	132	220
410	146	606.50	15	90	30	20	170	102	170
411	146	600.00	15	90	30	15	170	102	170
412	146	595.00	30	90	50	30	220	132	220
413	147	606.43	15	90	30	20	170	102	170
414	147	600.00	15	90	30	15	170	102	170
415	147	595.00	30	90	50	30	220	132	220
416	148	606.36	15	90	30	20	170	102	170
417	148	600.00	15	90	30	15	170	102	170
418	148	595.00	30	90	50	30	220	132	220
419	149	606.29	15	90	30	20	170	102	170
420	149	600.00	15	90	30	15	170	102	170
421	149	595.00	30	90	50	30	220	132	220
422	150	606.22	15	90	30	20	170	102	170
423	150	600.00	15	90	30	15	170	102	170
424	150	595.00	30	90	50	30	220	132	220
425	151	606.15	15	90	30	20	170	102	170
426	151	600.00	15	90	30	15	170	102	170
427	151	595.00	30	90	50	30	220	132	220
428	152	606.08	15	90	30	20	170	102	170
429	152	600.00	15	90	30	15	170	102	170
430	152	595.00	30	90	50	30	220	132	220
431	153	605.92	15	90	30	20	170	102	170
432	153	600.00	15	90	30	15	170	102	170
433	153	595.00	30	90	50	30	220	132	220
434	154	605.67	15	90	30	20	170	102	170
435	154	600.00	15	90	30	15	170	102	170
436	154	595.00	30	90	50	30	220	132	220
437	155	605.43	15	90	30	20	170	102	170
438	155	600.00	15	90	30	15	170	102	170
439	155	595.00	30	90	50	30	220	132	220
440	156	605.18	15	90	30	20	170	102	170
441	156	600.00	15	90	30	15	170	102	170
442	156	595.00	30	90	50	30	220	132	220
443	157	604.93	15	90	30	20	170	102	170
444	157	600.00	15	90	30	15	170	102	170
445	157	595.00	30	90	50	30	220	132	220
446	158	604.69	15	90	30	20	170	102	170
447	158	600.00	15	90	30	15	170	102	170
448	158	595.00	30	90	50	30	220	132	220
449	159	604.44	15	90	30	20	170	102	170
450	159	600.00	15	90	30	15	170	102	170

TIEBACK ANCHOR SCHEDULE

TIEBACK NO.	PILE NO.	TIEBACK ELEVATION	TIEBACK VERTICAL ORIENTATION (DEGREES)	TIEBACK HORIZONTAL ORIENTATION (DEGREES)	ESTIMATED BONDED ANCHOR LENGTH (FT)●	MINIMUM UNBONDED ANCHOR LENGTH (FT)	DESIGN LOAD (KIPS)	60% LOCK OFF LOAD	PROOF TEST LOAD (KIPS)
451	159	595.00	30	90	50	30	220	132	220
452	160	604.19	15	90	30	20	170	102	170
453	160	600.00	15	90	30	15	170	102	170
454	160	595.00	30	90	50	30	220	132	220
455	161	603.89	15	90	30	20	170	102	170
456	161	600.00	15	90	30	15	170	102	170
457	161	595.00	30	90	50	30	220	132	220
458	162	603.52	15	90	30	20	170	102	170
459	162	600.00	15	90	30	15	170	102	170
460	162	595.00	30	90	50	30	220	132	220
461	163	603.15	15	90	30	20	170	102	170
462	163	600.00	15	90	30	15	170	102	170
463	163	595.00	30	90	50	30	220	132	220
464	164	602.78	15	90	30	20	170	102	170
465	164	600.00	15	90	30	15	170	102	170
466	164	595.00	30	90	50	30	220	132	220

LEGEND

● ESTIMATED BONDED ANCHOR LENGTH BASED ON 6" DIA. ANCHOR.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY ALR | PLANS CK'D PRK

TIEBACK ANCHOR DATA TABLE (5 OF 5)

SHEET 21 OF 38

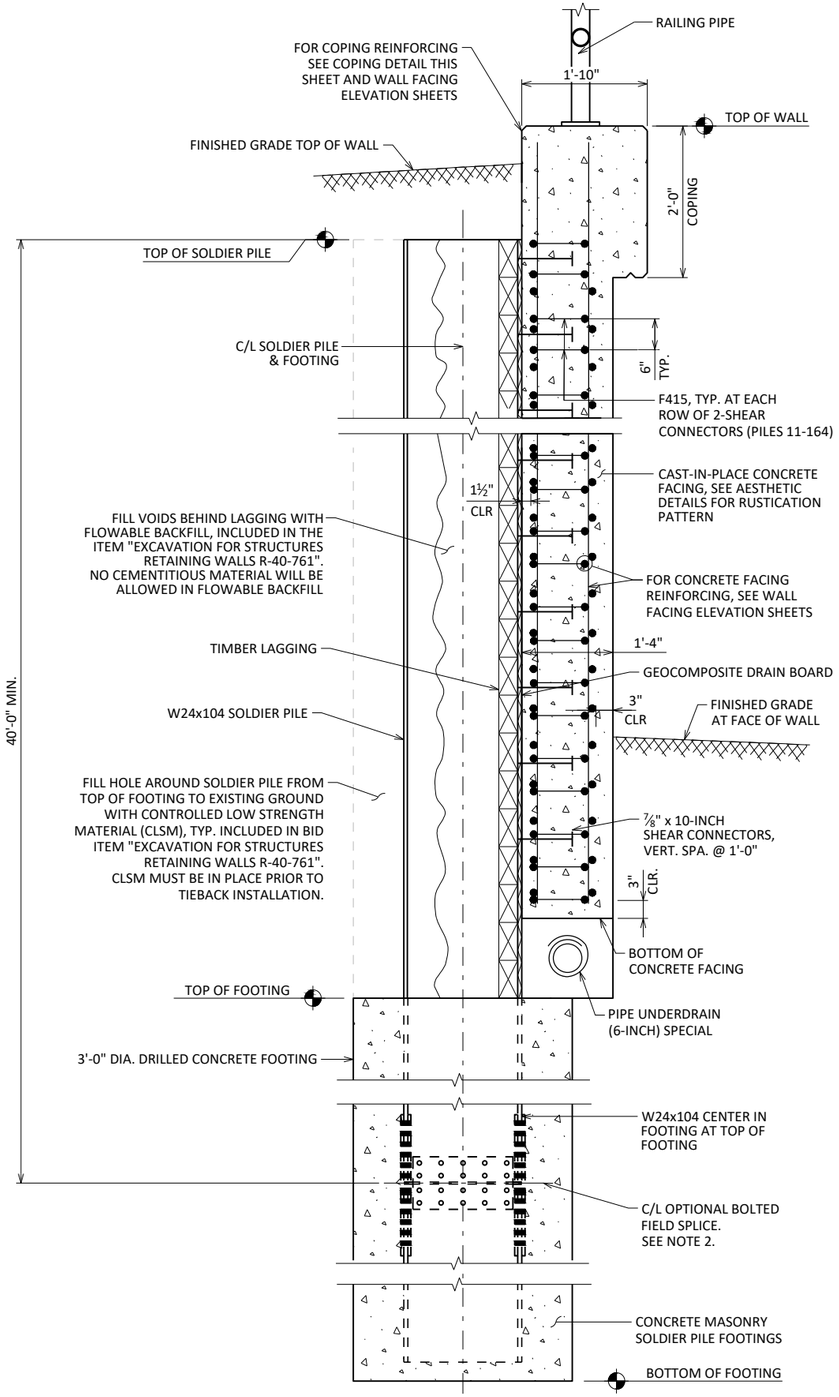
845

SCALE = N/A

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080221_DA.DWG
LAYOUT NAME - SHT_21

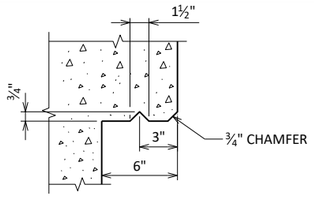
STATE PROJECT NUMBER

1060-27-74



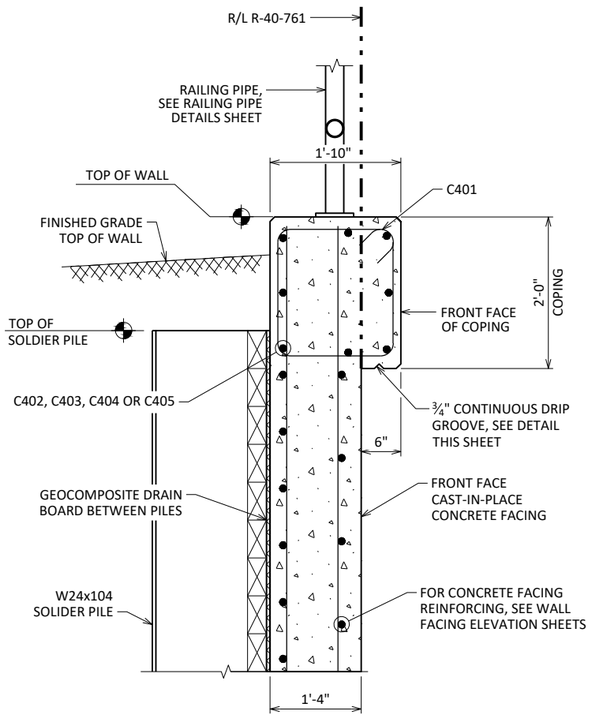
SOLDIER PILE AND WALL SECTION - UNIT 1

(COPING REINFORCEMENT NOT SHOWN)
(LOOKING EAST)



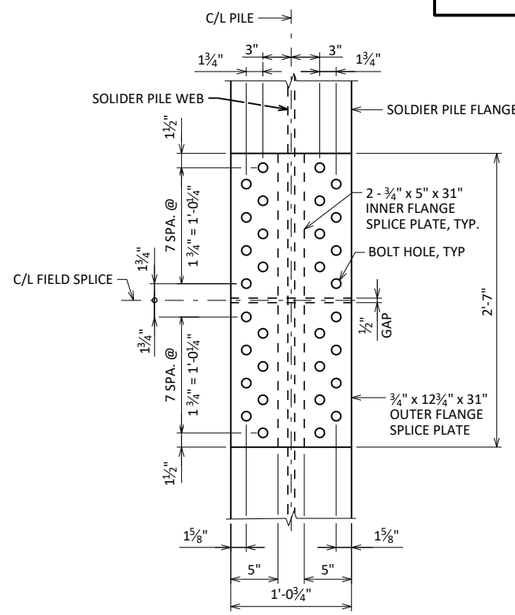
¾" CONTINUOUS DRIP GROOVE DETAIL

TERMINATE 2'-0" FROM BEGINNING OF WALL

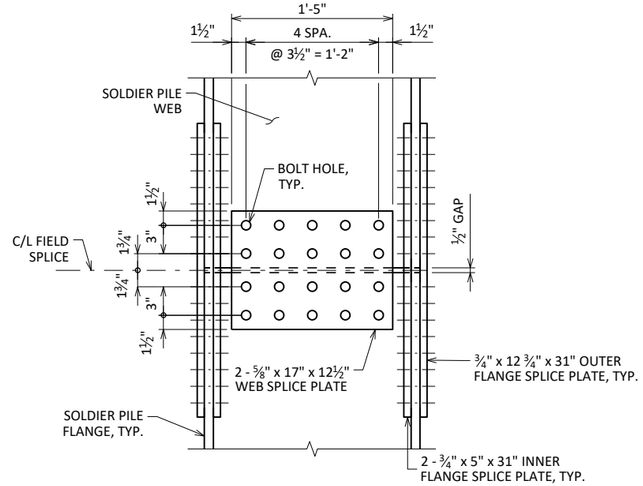


COPING DETAIL

UNIT 1



FIELD SPLICE FLANGE ELEVATION



FIELD SPLICE WEB ELEVATION

FIELD SPLICE NOTES

1. ALL BOLTS SHALL BE ¾" DIAMETER A325 IN STANDARD SIZED HOLES.
2. OPTIONAL BOLTED FIELD SPLICE MAY BE INSTALLED AT ANY LOCATION A MINIMUM OF 40'-0" FROM TOP OF PILE. A MAXIMUM OF ONE BOLTED FIELD SPLICE WILL BE PAID PER PILE. SEE SPLICE DETAILS THIS SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

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WALL COPING, FACING & SOLDIER PILE DETAILS (1 OF 2)

SHEET 22 OF 38
846

SCALE = 1:8

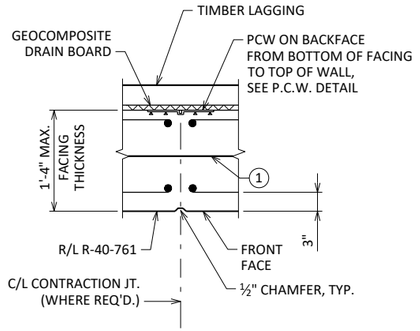
8

8

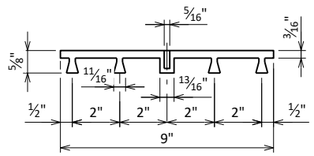
FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080322_DE.DWG
LAYOUT NAME - SHT_22

STATE PROJECT NUMBER

1060-27-74

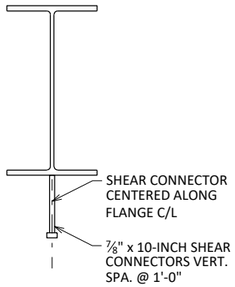


CONTRACTION JOINT DETAIL



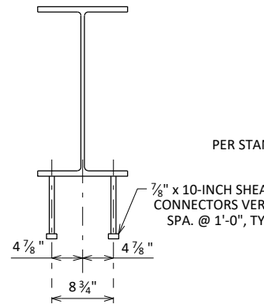
P.C.W. "TYPE B" DETAIL

(POLYVINYL CHLORIDE WATERSTOP)
(INCLUDED IN BID ITEM "CONCRETE MASONRY RETAINING WALLS")
P.C.W. SHALL BE BUTT SPLICED AT ANY INTERSECTIONS BY USING A HEATED SPLICING IRON. HOLD P.C.W. FLUSH WITH CONCRETE. SEAL ALL VERTICAL ENDS OF P.C.W. WITH NON-STAINING BITUMINOUS JOINT SEALER.



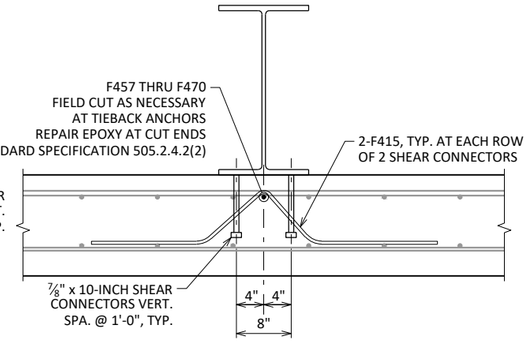
SHEAR CONNECTOR LAYOUT

(PILES 1 - 3)



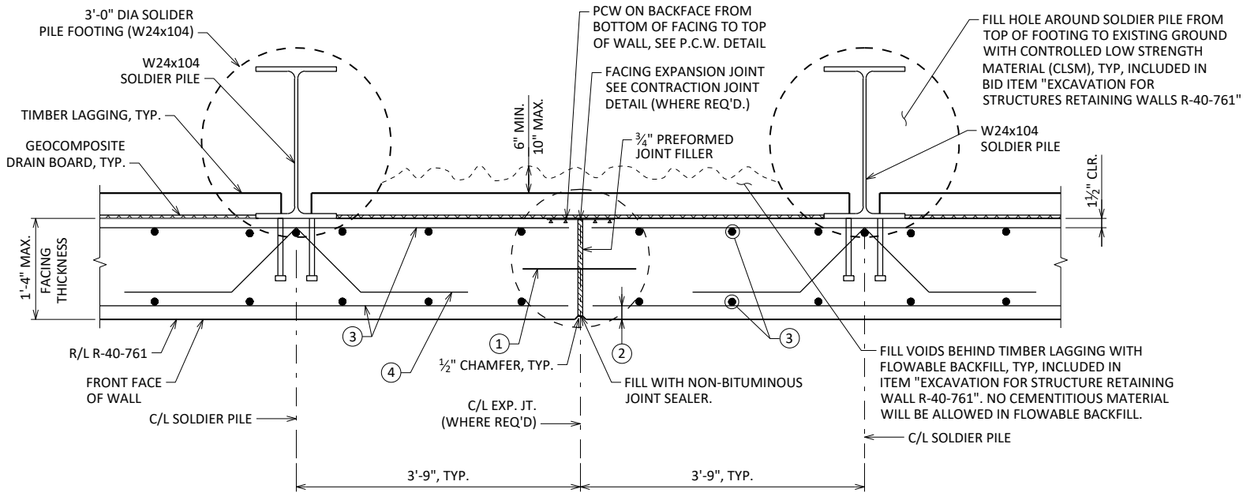
SHEAR CONNECTOR LAYOUT

(PILES 4 - 10)



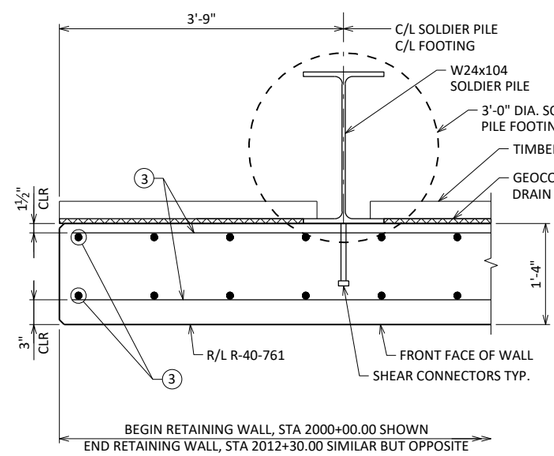
SHEAR CONNECTOR LAYOUT

(PILES 11 - 164)

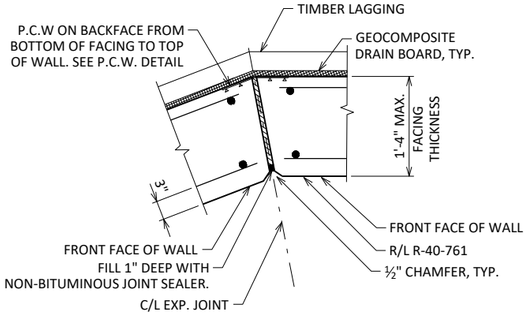


SOLDIER PILE & WALL SECTION PLAN

(SEE GENERAL PLAN & ELEVATION SHEETS FOR LOCATION OF CONTRACTION & EXPANSION JOINTS)

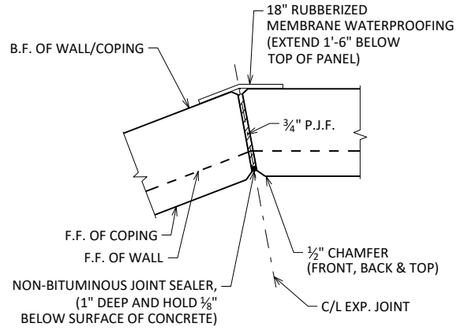


SECTION AT BEGINNING/ END OF UNIT 1



P.C.W. "TYPE B" DETAIL AT WALL KINK

2001+72.50



COPING - EXPANSION JOINT AT WALL KINK

2001+72.50

NOTES

1. ¾" DIA. x 1'-6" SMOOTH EPOXY COATED DOWELS PLACED AT 2'-0" CENTERS MID-DEPTH IN THE WALL. DOWELS SHALL BE LIGHTLY COATED WITH A DEBONDING SURFACE TREATMENT OVER THE DOWEL LENGTH. EMBED 9" INTO ADJACENT PANEL. DOWELS INCLUDED IN THE BID ITEM "CONCRETE MASONRY RETAINING WALLS".
2. 3" CLEAR FROM MAX. WALL THICKNESS.
3. SEE COPING AND WALL ELEVATION SHEETS FOR REINFORCEMENT BAR MARKS.
4. SEE SHEAR CONNECTOR LAYOUT AND SOLDIER PILE AND WALL SECTION UNIT 1 FOR REINFORCEMENT BAR MARKS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY GLM | PLANS CK'D PRK

WALL COPING, FACING, & SOLDIER PILE DETAILS (2 OF 2)

SHEET 23 OF 38

847

SCALE = VARIES

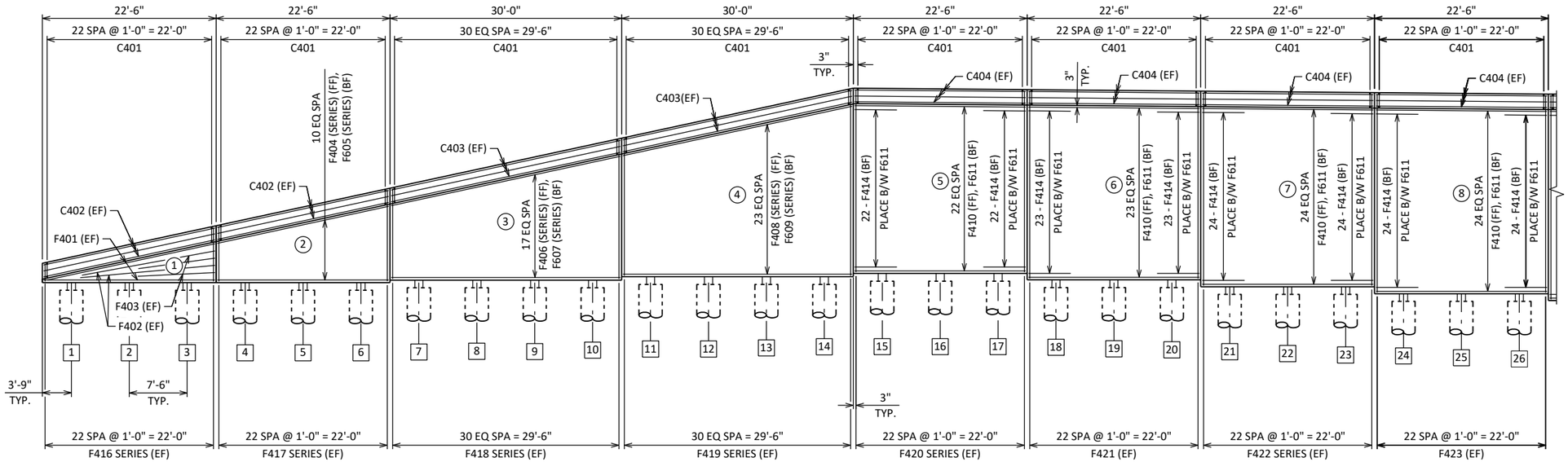
8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080323_DE.DWG
LAYOUT NAME - SHT_23

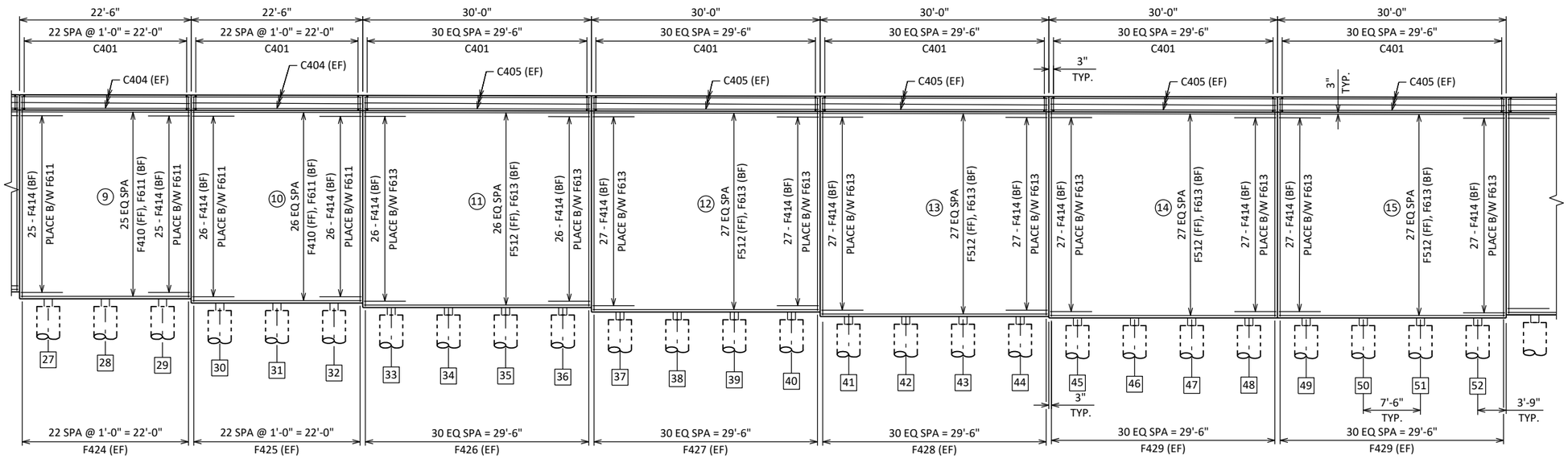
STATE PROJECT NUMBER

1060-27-74



PARTIAL WALL FACING ELEVATION

(PANELS 1 THRU 8)



PARTIAL WALL FACING ELEVATION

(PANELS 9 THRU 15)

WALL FACING ELEVATIONS

PANEL NO.	PANEL STATION		WALL FACING BOTTOM ELEVATION		WALL FACING TOP ELEVATION	
	START	END	START	END	START	END
1	2000+00.00	2000+22.50	601.56	601.56	604.06	608.92
2	2000+22.50	2000+45.00	601.56	601.56	608.92	613.78
3	2000+45.00	2000+75.00	601.88	601.88	613.78	620.27
4	2000+75.00	2001+05.00	602.31	602.31	620.27	626.75
5	2001+05.00	2001+27.50	602.74	602.74	626.75	626.55
6	2001+27.50	2001+50.00	601.92	601.92	626.55	626.36
7	2001+50.00	2001+72.50	601.02	601.02	626.36	626.17
8	2001+72.50	2001+95.00	600.12	600.12	626.17	625.98

WALL FACING ELEVATIONS

PANEL NO.	PANEL STATION		WALL FACING BOTTOM ELEVATION		WALL FACING TOP ELEVATION	
	START	END	START	END	START	END
9	2001+95.00	2002+17.50	599.22	599.22	625.98	625.94
10	2002+17.50	2002+40.00	598.67	598.67	625.94	625.90
11	2002+40.00	2002+70.00	598.08	598.08	625.90	625.85
12	2002+70.00	2003+00.00	597.49	597.49	625.85	625.80
13	2003+00.00	2003+30.00	596.90	596.90	625.80	625.75
14	2003+30.00	2003+60.00	596.71	596.71	625.75	625.70
15	2003+60.00	2003+90.00	596.71	596.71	625.70	625.65

NOTES

SOLDIER PILES BEHIND FACING NOT SHOWN FOR CLARITY.

FOR EXPANSION AND CONTRACTION JOINT LOCATIONS, SEE GENERAL PLAN AND ELEVATION SHEETS.

WALL FACING TOP ELEVATION INCLUDES COPING.

SHEAR CONNECTOR REINFORCING NOT SHOWN FOR CLARITY. SEE WALL COPING, FACING AND SOLDIER PILE DETAILS (2 OF 2) FOR SHEAR CONNECTOR REINFORCING DETAILS.

LEGEND

(X) CAST-IN-PLACE CONCRETE FACING PANEL NUMBER

[X] SOLDIER PILE NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY GLM | PLANS CK'D PRK

WALL FACING ELEVATION (1 OF 3)

SHEET 24 OF 38

848

SCALE = 1:16

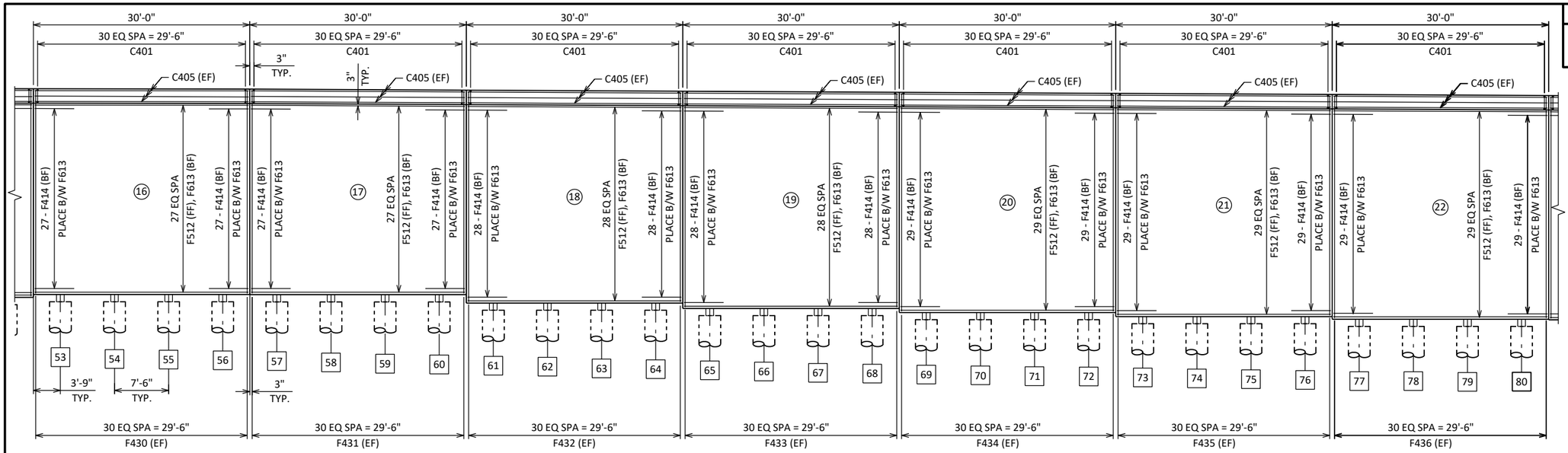
8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080424_EL.DWG
LAYOUT NAME - SHT_24

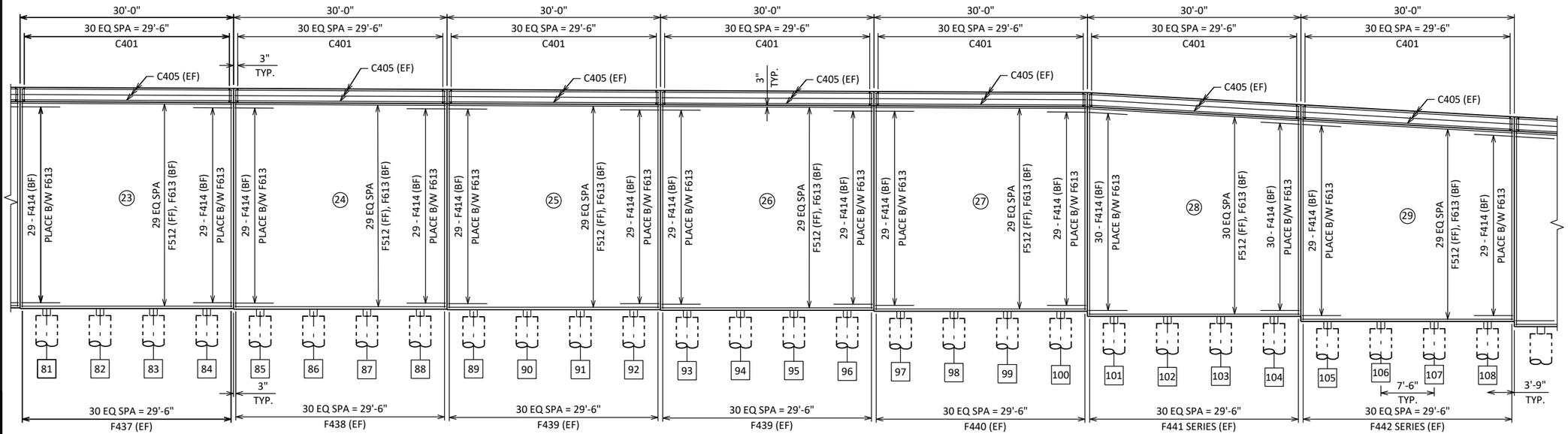
STATE PROJECT NUMBER

1060-27-74



PARTIAL WALL FACING ELEVATION

(PANELS 16 THRU 22)



PARTIAL WALL FACING ELEVATION

(PANELS 23 THRU 29)

WALL FACING ELEVATIONS

PANEL NO.	PANEL STATION		WALL FACING BOTTOM ELEVATION		WALL FACING TOP ELEVATION	
	START	END	START	END	START	END
16	2003+90.00	2004+20.00	597.11	597.11	625.65	625.60
17	2004+20.00	2004+50.00	597.08	597.08	625.60	625.45
18	2004+50.00	2004+80.00	595.92	595.92	625.45	625.30
19	2004+80.00	2005+10.00	595.18	595.18	625.30	625.15
20	2005+10.00	2005+40.00	594.62	594.62	625.15	625.00
21	2005+40.00	2005+70.00	594.06	594.06	625.00	624.85
22	2005+70.00	2006+00.00	593.68	593.68	624.85	624.70

WALL FACING ELEVATIONS

PANEL NO.	PANEL STATION		WALL FACING BOTTOM ELEVATION		WALL FACING TOP ELEVATION	
	START	END	START	END	START	END
23	2006+00.00	2006+30.00	593.59	593.59	624.70	624.55
24	2006+30.00	2006+60.00	593.51	593.51	624.55	624.40
25	2006+60.00	2006+90.00	593.43	593.43	624.40	624.25
26	2006+90.00	2007+20.00	593.35	593.35	624.25	624.10
27	2007+20.00	2007+50.00	593.21	593.21	624.10	623.95
28	2007+50.00	2007+80.00	592.49	592.49	623.95	622.24
29	2007+80.00	2008+10.00	591.77	591.77	622.24	620.53

NOTES

SOLDIER PILES BEHIND FACING NOT SHOWN FOR CLARITY.

FOR EXPANSION AND CONTRACTION JOINT LOCATIONS, SEE GENERAL PLAN AND ELEVATION SHEETS.

WALL FACING TOP ELEVATION INCLUDES COPING.

SHEAR CONNECTOR REINFORCING NOT SHOWN FOR CLARITY. SEE WALL COPING, FACING AND SOLDIER PILE DETAILS (2 OF 2) FOR SHEAR CONNECTOR REINFORCING DETAILS.

LEGEND

(X) CAST-IN-PLACE CONCRETE FACING PANEL NUMBER

[X] SOLDIER PILE NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY GLM | PLANS CK'D PRK

WALL FACING ELEVATION (2 OF 3)

SHEET 25 OF 38

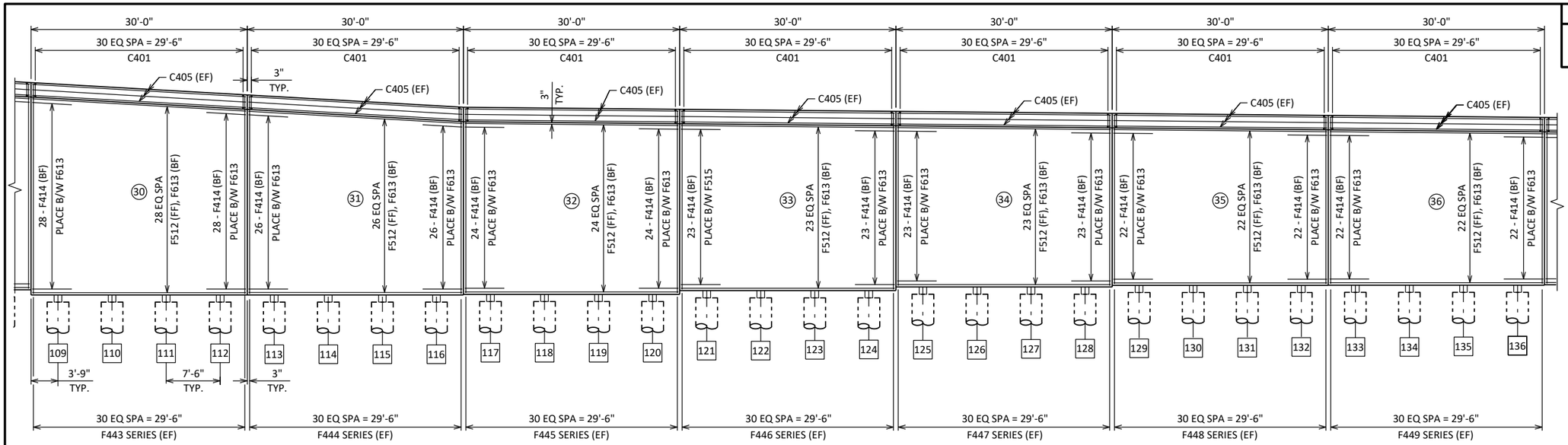
849

SCALE = 1:16

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080425_EL.DWG
LAYOUT NAME - SHT_25

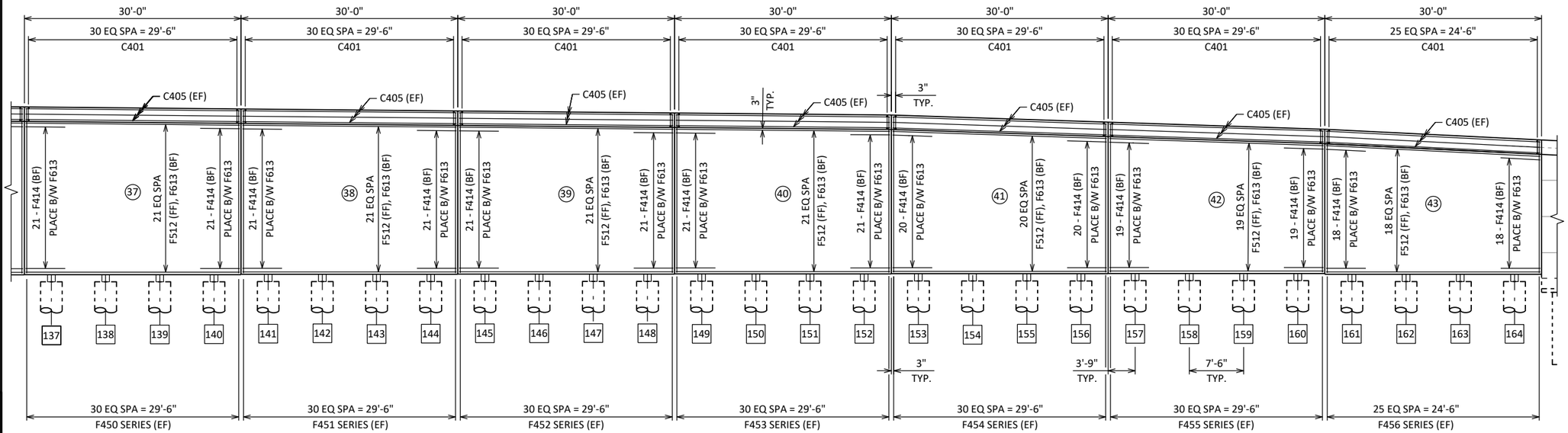
STATE PROJECT NUMBER

1060-27-74



PARTIAL WALL FACING ELEVATION

(PANELS 16 THRU 22)



PARTIAL WALL FACING ELEVATION

(PANELS 16 THRU 22)

WALL FACING ELEVATIONS

PANEL NO.	PANEL STATION		WALL FACING BOTTOM ELEVATION		WALL FACING TOP ELEVATION	
	START	END	START	END	START	END
30	2008+10.00	2008+40.00	591.05	591.05	620.53	618.82
31	2008+40.00	2008+70.00	591.05	591.05	618.82	617.11
32	2008+70.00	2009+00.00	591.14	591.14	617.11	616.82
33	2009+00.00	2009+30.00	591.65	591.65	616.82	616.54
34	2009+30.00	2009+60.00	592.16	592.16	616.54	616.25
35	2009+60.00	2009+90.00	592.39	592.39	616.25	615.97
36	2009+90.00	2010+20.00	592.42	592.42	615.97	615.68

WALL FACING ELEVATIONS

PANEL NO.	PANEL STATION		WALL FACING BOTTOM ELEVATION		WALL FACING TOP ELEVATION	
	START	END	START	END	START	END
37	2010+20.00	2010+50.00	592.45	592.45	615.68	615.40
38	2010+50.00	2010+80.00	592.48	592.48	615.40	615.11
39	2010+80.00	2011+10.00	592.51	592.51	615.11	614.83
40	2011+10.00	2011+40.00	592.54	592.54	614.83	614.54
41	2011+40.00	2011+70.00	592.57	592.57	614.54	613.56
42	2011+70.00	2012+00.00	592.60	592.60	613.56	612.57
43	2012+00.00	2012+30.00	592.48	592.48	612.57	611.10

NOTES

SOLDIER PILES BEHIND FACING NOT SHOWN FOR CLARITY.

FOR EXPANSION AND CONTRACTION JOINT LOCATIONS, SEE GENERAL PLAN AND ELEVATION SHEETS.

WALL FACING TOP ELEVATION INCLUDES COPING.

SHEAR CONNECTOR REINFORCING NOT SHOWN FOR CLARITY. SEE WALL COPING, FACING AND SOLDIER PILE DETAILS (2 OF 2) FOR SHEAR CONNECTOR REINFORCING DETAILS.

LEGEND

(X) CAST-IN-PLACE CONCRETE FACING PANEL NUMBER

[X] SOLDIER PILE NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY GLM | PLANS CK'D PRK

WALL FACING ELEVATION (3 OF 3)

SHEET 26 OF 38

850

SCALE = 1:16

8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080426_EL.DWG
LAYOUT NAME - SHT_26

STATE PROJECT NUMBER

1060-27-74

BILL OF BARS - FACING

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	SERIES	LOCATION
F401	X	4	22'-1"			FACING HORIZONTAL - PANEL 1
F402	X	4	17'-6"			FACING HORIZONTAL - PANEL 1
F403	X	4	10'-0"			FACING HORIZONTAL - PANEL 1
F404	X	11	22'-4"		⚠	FACING HORIZONTAL - PANEL 2
F605	X	11	22'-4"		⚠	FACING HORIZONTAL - PANEL 2
F406	X	18	29'-11"		⚠	FACING HORIZONTAL - PANEL 3
F607	X	18	29'-11"		⚠	FACING HORIZONTAL - PANEL 3
F408	X	24	29'-11"		⚠	FACING HORIZONTAL - PANEL 4
F609	X	24	29'-11"		⚠	FACING HORIZONTAL - PANEL 4
F410	X	150	22'-1"			FACING HORIZONTAL - PANELS 5 THRU 10
F611	X	150	22'-1"			FACING HORIZONTAL - PANELS 5 THRU 10
F512	X	885	29'-7"			FACING HORIZONTAL - PANELS 11 THRU 43
F613	X	885	29'-7"			FACING HORIZONTAL - PANELS 11 THRU 43
F414	X	1976	6'-5"			FACING CANTILEVER REINFORCING
F415	X	7816	5'-5"	X		TRANSVERSE SHEAR STUD REINFORCING - PILES 11 THRU 164
F416	X	46	4'-5"		⚠	FACING VERTICAL - PANEL 1
F417	X	46	9'-4"		⚠	FACING VERTICAL - PANEL 2
F418	X	62	14'-8"		⚠	FACING VERTICAL - PANEL 3
F419	X	62	20'-9"		⚠	FACING VERTICAL - PANEL 4
F420	X	46	23'-5"		⚠	FACING VERTICAL - PANEL 5
F421	X	46	24'-1"		⚠	FACING VERTICAL - PANEL 6
F422	X	46	24'-9"		⚠	FACING VERTICAL - PANEL 7
F423	X	44	25'-5"			FACING VERTICAL - PANEL 8
F424	X	44	26'-3"			FACING VERTICAL - PANEL 9
F425	X	44	26'-9"			FACING VERTICAL - PANEL 10
F426	X	62	27'-4"			FACING VERTICAL - PANEL 11
F427	X	62	27'-10"			FACING VERTICAL - PANEL 12
F428	X	62	28'-5"			FACING VERTICAL - PANEL 13
F429	X	124	28'-6"			FACING VERTICAL - PANEL 14 & 15
F430	X	62	28'-0"			FACING VERTICAL - PANEL 16
F431	X	62	27'-11"			FACING VERTICAL - PANEL 17
F432	X	62	28'-11"			FACING VERTICAL - PANEL 18
F433	X	62	29'-6"			FACING VERTICAL - PANEL 19
F434	X	62	29'-11"			FACING VERTICAL - PANEL 20
F435	X	62	30'-4"			FACING VERTICAL - PANEL 21
F436	X	62	30'-7"			FACING VERTICAL - PANEL 22
F437	X	62	30'-6"			FACING VERTICAL - PANEL 23
F438	X	62	30'-5"			FACING VERTICAL - PANEL 24
F439	X	124	30'-4"			FACING VERTICAL - PANEL 25 & 26
F440	X	62	30'-3"			FACING VERTICAL - PANEL 27
F441	X	62	30'-1"		⚠	FACING VERTICAL - PANEL 28
F442	X	62	29'-2"		⚠	FACING VERTICAL - PANEL 29
F443	X	62	28'-1"		⚠	FACING VERTICAL - PANEL 30
F444	X	62	26'-5"		⚠	FACING VERTICAL - PANEL 31
F445	X	62	25'-4"		⚠	FACING VERTICAL - PANEL 32
F446	X	62	24'-7"		⚠	FACING VERTICAL - PANEL 33
F447	X	62	23'-9"		⚠	FACING VERTICAL - PANEL 34
F448	X	62	23'-3"		⚠	FACING VERTICAL - PANEL 35
F449	X	62	22'-11"		⚠	FACING VERTICAL - PANEL 36
F450	X	62	22'-7"		⚠	FACING VERTICAL - PANEL 37
F451	X	62	22'-3"		⚠	FACING VERTICAL - PANEL 38
F452	X	62	22'-0"		⚠	FACING VERTICAL - PANEL 39
F453	X	62	21'-8"		⚠	FACING VERTICAL - PANEL 40
F454	X	62	21'-0"		⚠	FACING VERTICAL - PANEL 41
F455	X	62	20'-0"		⚠	FACING VERTICAL - PANEL 42
F456	X	62	18'-11"		⚠	FACING VERTICAL - PANEL 43
F457	X	4	19'-9"		⚠	VERTICAL SHEAR STUD REINFORCING (PILES 11-14)

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

NOTE:
BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST OR FIRST TWO DIGITS OF A BAR MAKE SIGNIFIES THE BAR SIZE.

BILL OF BARS - FACING

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	SERIES	LOCATION
F458	X	4	20'-0"			VERTICAL SHEAR STUD REINFORCING (PILES 155-158)
F459	X	9	21'-0"			VERTICAL SHEAR STUD REINFORCING (PILES 146-154)
F460	X	12	22'-0"			VERTICAL SHEAR STUD REINFORCING (PILES134-145)
F461	X	12	23'-0"			VERTICAL SHEAR STUD REINFORCING (PILES 15-17 & 125-133)
F462	X	10	24'-0"			VERTICAL SHEAR STUD REINFORCING (PILES 18-23 & 121-124)
F463	X	8	25'-0"			VERTICAL SHEAR STUD REINFORCING (PILES 24-26 & 116-120)
F464	X	8	26'-0"			VERTICAL SHEAR STUD REINFORCING (PILES 27-32 & 114-115)
F465	X	16	27'-0"			VERTICAL SHEAR STUD REINFORCING (PILES 33-40, 56-60 & 111-113)
F466	X	19	28'-0"			VERTICAL SHEAR STUD REINFORCING (PILES 41-55 & 107-110)
F467	X	16	29'-0"			VERTICAL SHEAR STUD REINFORCING (PILES 61-72 & 103-106)
F468	X	30	30'-0"			VERTICAL SHEAR STUD REINFORCING (PILES 73-102)
F469	X	4	19'-0"			VERTICAL SHEAR STUD REINFORCING (PILES 159-162)
F470	X	2	18'-0"			VERTICAL SHEAR STUD REINFORCING (PILES 163-164)

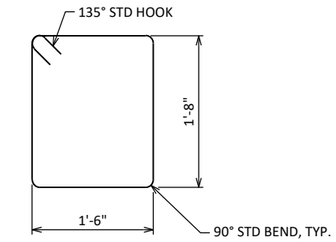
BILL OF BARS - COPING

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	SERIES	LOCATION
C401	X	1264	6'-10"	X		COPING TIE
C402	X	16	22'-7"			COPING HORIZONTAL - PANELS 1 & 2
C403	X	16	30'-3"			COPING HORIZONTAL - PANELS 3 & 4
C404	X	48	22'-1"			COPING HORIZONTAL - PANELS 5 THRU 10
C405	X	264	29'-7"			COPING HORIZONTAL - PANELS 11 THRU 43

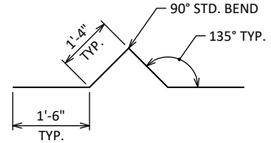
BAR SERIES TABLE

BAR MARK	NO REQ'D	LENGTH
F404	1 SERIES OF 11	22'-1" TO 22'-7"
F605	1 SERIES OF 11	22'-1" TO 22'-7"
F406	1 SERIES OF 18	29'-7" TO 30'-3"
F607	1 SERIES OF 18	29'-7" TO 30'-3"
F408	1 SERIES OF 24	29'-7" TO 30'-3"
F609	1 SERIES OF 24	29'-7" TO 30'-3"
F416	2 SERIES OF 23	2'-0" TO 6'-11"
F417	2 SERIES OF 23	6'-11" TO 11'-9"
F418	2 SERIES OF 31	11'-5" TO 17'-11"
F419	2 SERIES OF 31	17'-6" TO 24'-0"
F420	2 SERIES OF 23	23'-4" TO 23'-7"
F421	2 SERIES OF 23	24'-0" TO 24'-2"
F422	2 SERIES OF 23	24'-8" TO 24'-11"
F441	2 SERIES OF 31	29'-3" TO 31'-0"
F442	2 SERIES OF 31	28'-4" TO 30'-0"
F443	2 SERIES OF 31	27'-3" TO 29'-0"
F444	2 SERIES OF 31	25'-7" TO 27'-4"
F445	2 SERIES OF 31	25'-3" TO 25'-6"
F446	2 SERIES OF 31	24'-5" TO 24'-9"
F447	2 SERIES OF 31	23'-8" TO 23'-11"
F448	2 SERIES OF 31	23'-1" TO 23'-5"
F449	2 SERIES OF 31	22'-10" TO 23'-1"
F450	2 SERIES OF 31	22'-6" TO 22'-9"
F451	2 SERIES OF 31	22'-2" TO 22'-5"
F452	2 SERIES OF 31	21'-10" TO 22'-2"
F453	2 SERIES OF 31	21'-6" TO 21'-10"
F454	2 SERIES OF 31	20'-6" TO 21'-6"
F455	2 SERIES OF 31	19'-6" TO 20'-6"
F456	2 SERIES OF 31	18'-4" TO 19'-7"
F457	1 SERIES OF 4	16'-6" TO 23'-0"

BAR BENDS



C401



F415

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY ALR | PLANS CK'D PRK

WALL COPING & FACING REINFORCING SCHEDULE

SHEET 27 OF 38

851

SCALE = N/A

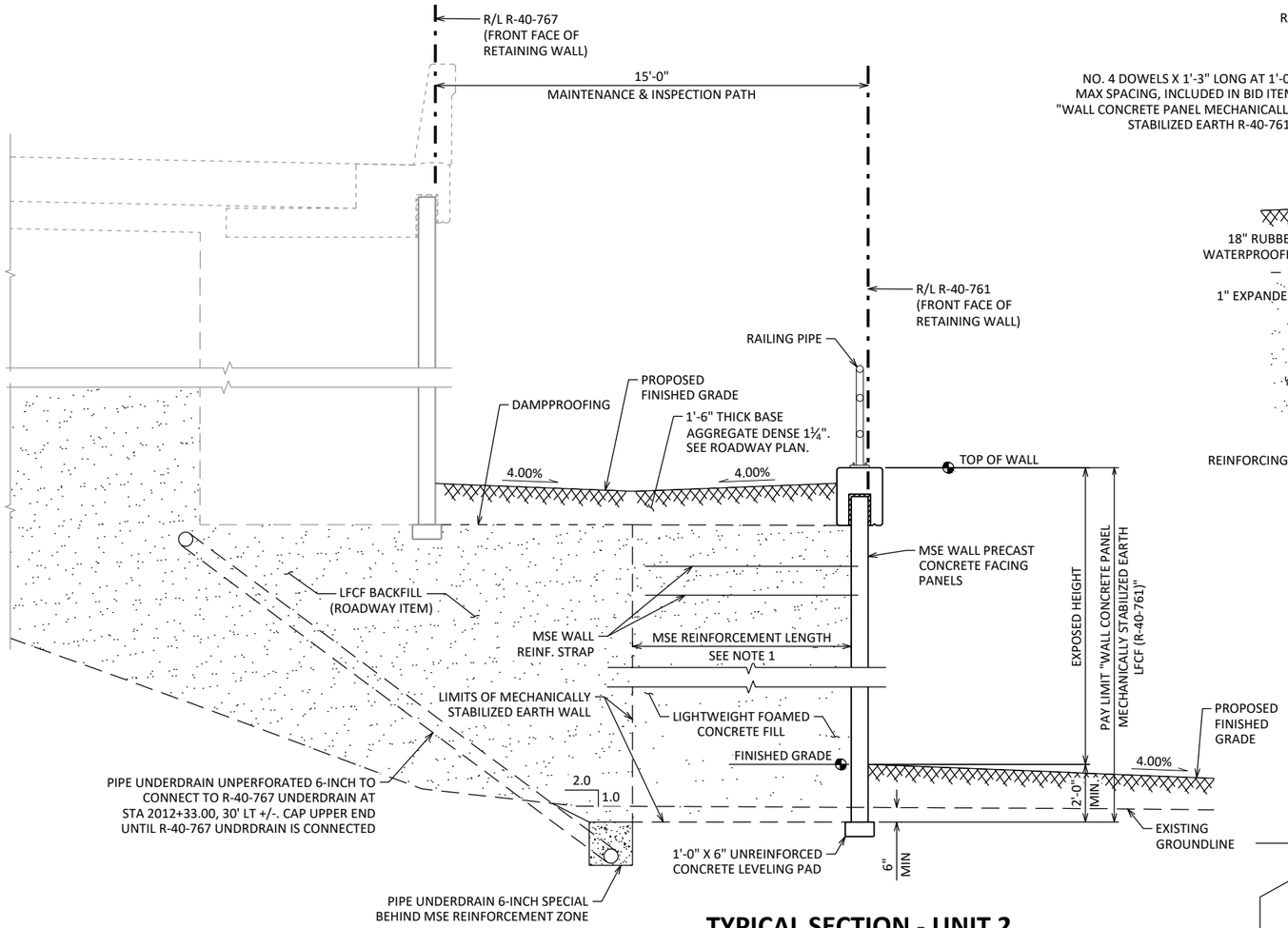
8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080427_DA.DWG
LAYOUT NAME - SHT_27

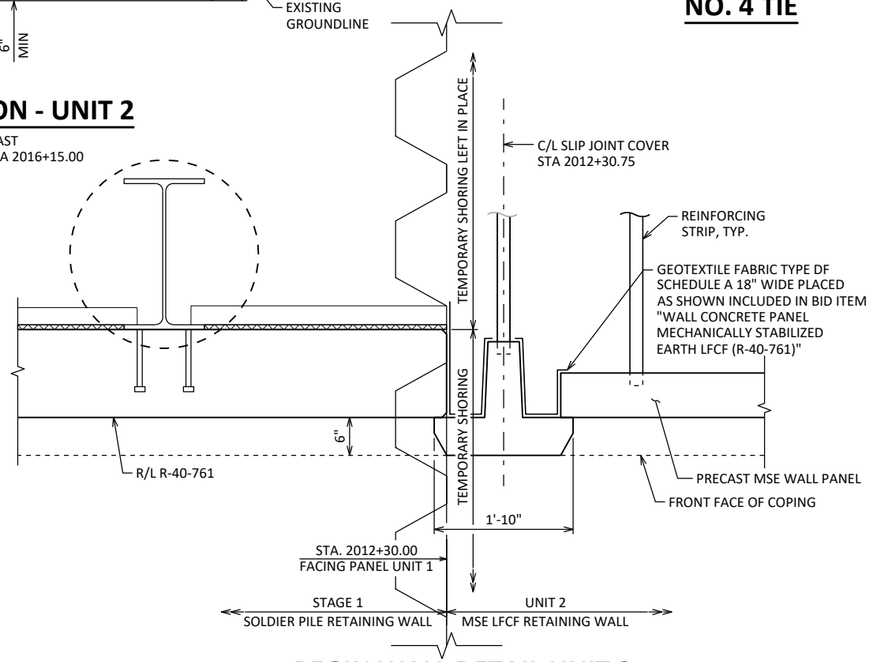
STATE PROJECT NUMBER

1060-27-74



TYPICAL SECTION - UNIT 2

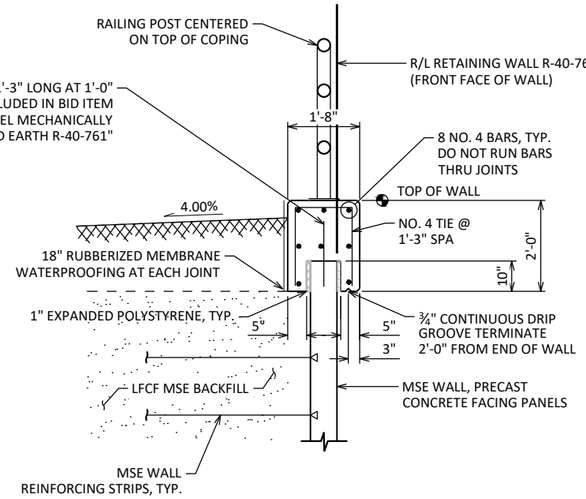
LOOKING EAST
STA 2012+30.00 TO STA 2016+15.00



BEGIN WALL DETAIL UNIT 2

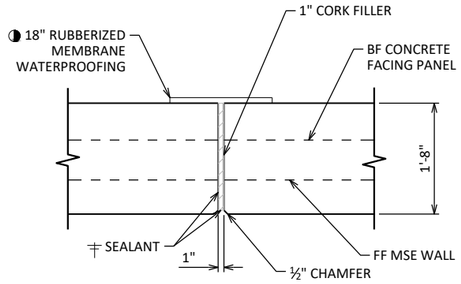
WALL ELEVATIONS

PANEL LENGTH (FT)	STATION	TOP OF WALL	APPROXIMATE EXISTING GROUND	FINISHED GRADE AT WALL FACE
	2012+30.00	611.10	600.83	594.48
25	2012+55.00	609.87	596.21	594.25
30	2012+85.00	608.40	592.84	593.97
30	2013+15.00	606.93	590.81	593.68
30	2013+45.00	605.46	590.98	593.40
30	2013+75.00	603.99	591.26	593.12
30	2014+05.00	602.52	591.59	592.84
30	2014+35.00	601.05	591.89	592.56
30	2014+65.00	600.95	593.32	592.76
30	2014+95.00	600.86	593.48	592.99
30	2015+25.00	600.76	593.29	593.23
30	2015+55.00	600.67	593.08	594.48
30	2015+85.00	600.58	592.87	597.48
30	2016+15.00	600.48	592.65	600.48



COPING SECTION DETAIL

(LOOKING EAST)

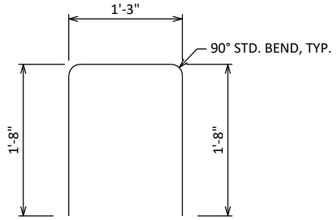


COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.
SEE GENERAL PLAN & ELEVATION SHEET FOR JOINT LOCATIONS.

LEGEND

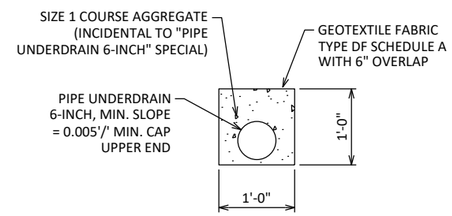
- MEMBRANE WATERPROOFING TO EXTEND FROM TOP TO BOTTOM OF COPING.
- SEAL ALL EXPOSED HORIZONTAL & VERTICAL SURFACES OF FILLER WITH NON-STAINING, NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).



NO. 4 TIE

NOTES:

1. SEE WALL EXTERNAL STABILITY EVALUATION TABLE ON SHEET 5 FOR MINIMUM LENGTH OF MSE WALL REINFORCEMENT STRIPS.
2. SOIL REINFORCEMENT MUST EXTEND A MINIMUM OF 3.0 FEET BEYOND THE FAILURE PLANE FOR INTERNAL STABILITY AS DEFINED BY AASHTO SPECIFICATIONS.
3. LINEARLY INTERPOLATE WALL ELEVATIONS BETWEEN STATIONS.



PIPE UNDERDRAIN 6-INCH SPECIAL DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-002

DRAWN BY GLM | PLANS CK'D PRK

UNIT 2 TYP. WALL SECTIONS, DETAILS & ELEVATION TABLE

SHEET 28 OF 38
852

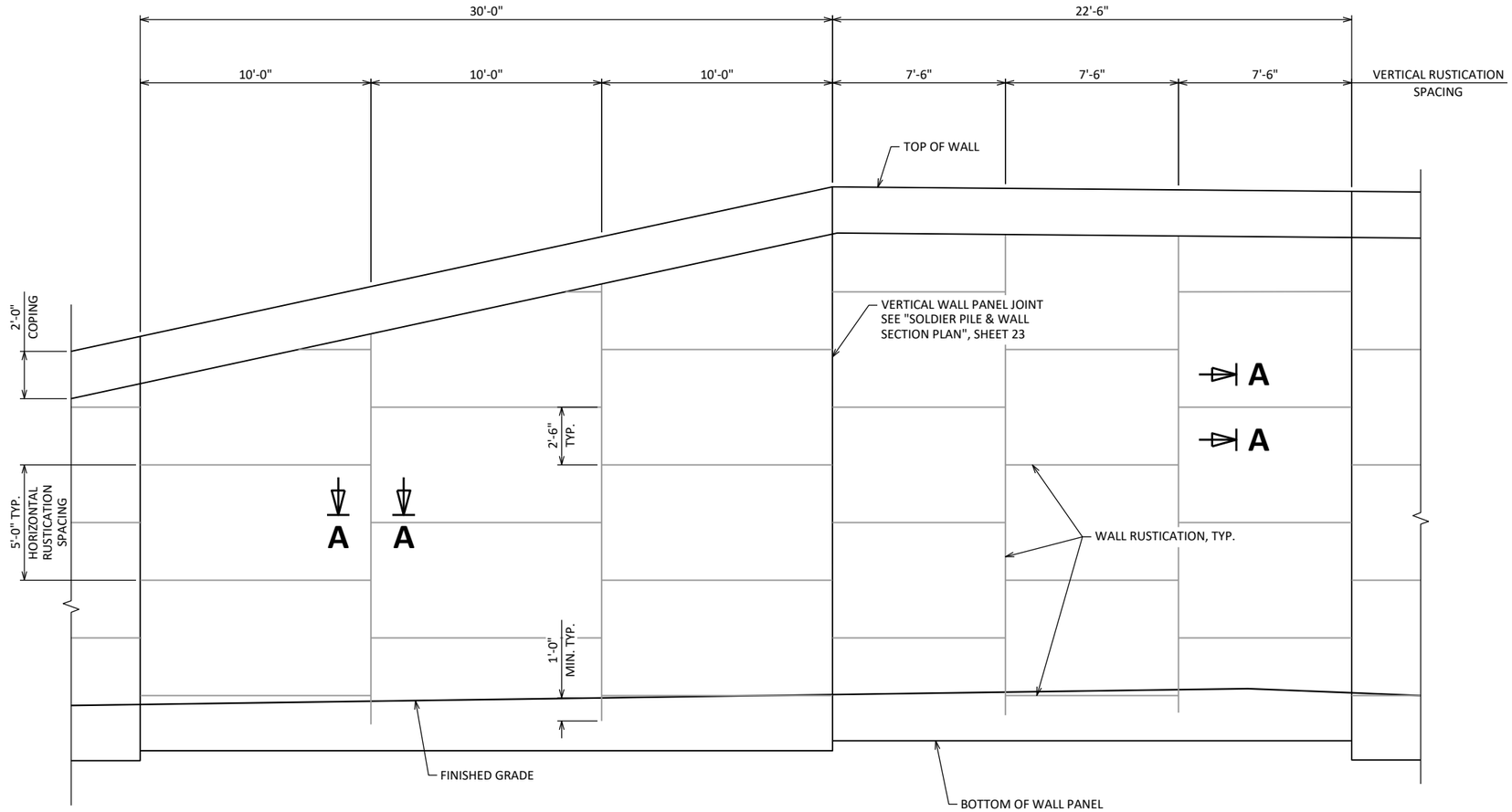
SCALE = VARIES

8

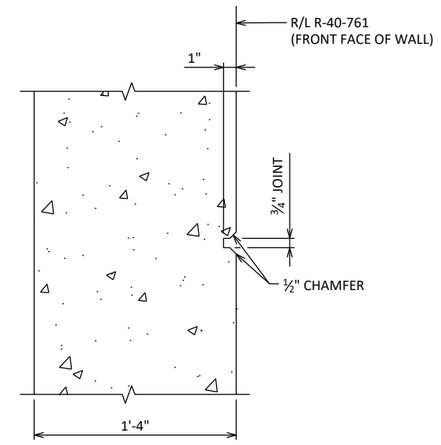
8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080528_TS.DWG
LAYOUT NAME - SHT_28

STATE PROJECT NUMBER
1060-27-74



UNIT 1 AESTHETIC ELEVATION



SECTION A-A

(HORIZONTAL & VERTICAL RUSTICATION)

NOTES:

CAST IN PLACE CONCRETE WALL FACING RUSTICATION PATTERN TO MATCH R-40-761 UNIT 2 AND R-40-767 (STAGE 1) MSE PRECAST CONCRETE WALL PANEL PATTERN.

5'-0" X 5'-0" PRECAST CONCRETE PANELS ARE NOT PERMITTED FOR RETAINING WALLS R-40-761 UNIT 2 AND R-40-767 (STAGE 1).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY	ALR	PLANS CK'D	PRK

UNIT 1 AESTHETIC WALL TREATMENT

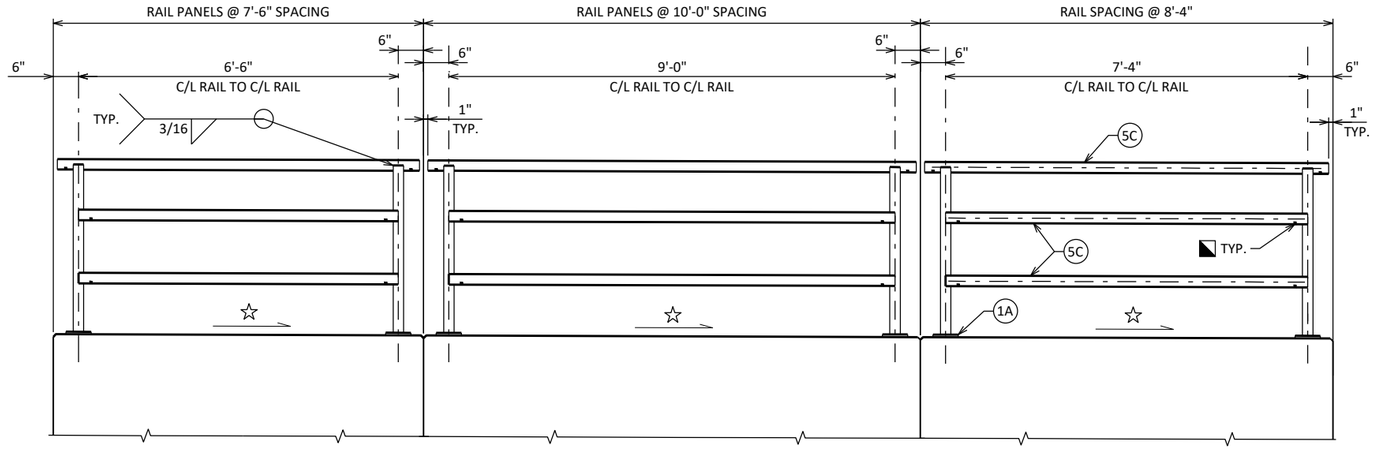
SHEET 29 OF 38
853

SCALE = VARIES

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080529_EL.DWG
LAYOUT NAME - SHT_29

STATE PROJECT NUMBER

1060-27-74



WALL RAILING PIPE ELEVATION

(LOOKING AT FRONT FACE OF COPING)
SEE AESTHETIC GENERAL PLAN AND ELEVATION
FOR RAILING PIPE LAYOUT

NOTES

BID ITEM SHALL BE "RAILING PIPE R-40-761", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN, CONCRETE MASONRY ANCHORS, AND PAINTING.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

1A SHALL CONFORM TO A.S.T.M. A709 GRADE 36. STANDARD PIPE RAIL SHALL CONFORM TO A.S.T.M. A500 GRADE B (NO. 5C).

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

FILL BOLT SLOT OPENINGS IN SHIMS AND PLATE NO. 1A AND CAULK AROUND PERIMETER OF PLATE NO. 1A WITH NON-STAINING BLACK NON-BITUMINOUS JOINT SEALER.

VENT HOLES SHALL BE DRILLED IN MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

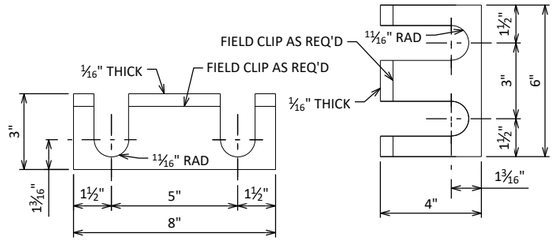
GALVANIZE AFTER FABRICATION AND THEN PAINT GALVANIZED RAILING ASSEMBLIES WITH A TWO COAT SYSTEM SPECIFICALLY INTENDED FOR PAINTING OF GALVANIZED SURFACES PER THE SPECIAL PROVISIONS. SHIMS SHALL BE GALVANIZED PER ASTM 123. THE FINISH COLOR SHALL BE FEDERAL COLOR NO. 27038 BLACK.

RAILING SHALL BE FABRICATED IN PANEL LENGTHS OF 2 POSTS.

PAINT TOUCH-UP TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

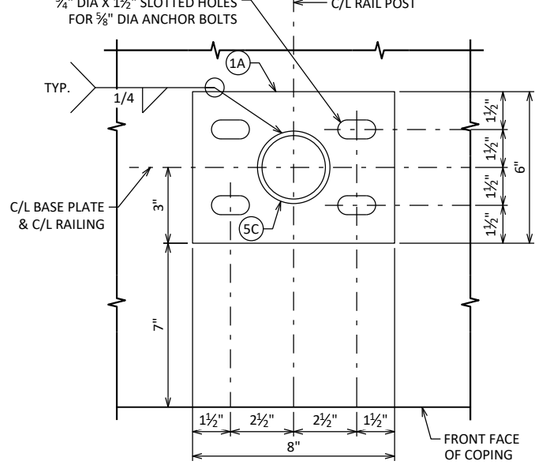
LEGEND

- (1A) PLATE ⅝" x 6" x 8" WITH ¾" x 1½" SLOTTED HOLES.
- (3) STAINLESS STEEL CONCRETE MASONRY ANCHORS, TYPE S (EPOXY), ⅝" DIA, EMBED A MINIMUM OF 5".
- (5C) ½" DIA STANDARD PIPE RAIL (2.875" O.D.). PLACE POSTS VERTICAL. WELD TO 1A. PLACE RAILS PARALLEL TO TOP OF COPING. WELD TO 5C.
- ½" DIA DRAIN HOLE @ BOTTOM OF EACH RAIL END.
- ☆ SEE RAILING DIMENSION TABLE FOR SLOPE.

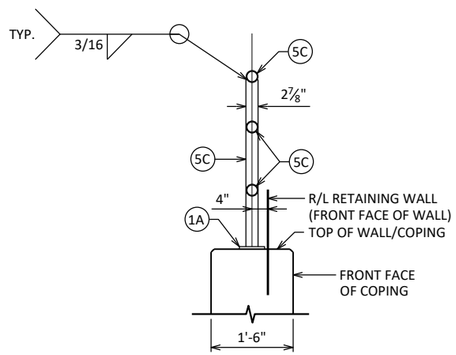


RAIL POST SHIM DETAIL

(2 SETS PER POST)



RAIL POST BASE PLATE

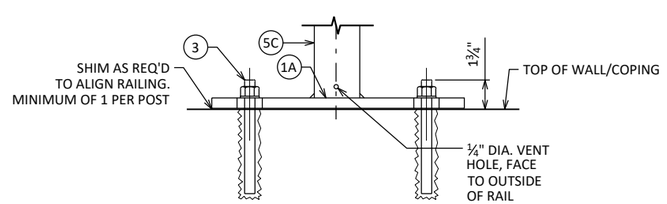


WALL RAILING SECTION

(LOOKING SOUTH)

RAILING DIMENSION TABLE

STATION		RAIL PANEL SPACING	SLOPE
BEGIN	END		
2000+00.00	2000+45.00	6 PANELS @ 7'-6"	21.60%
2000+45.00	2001+05.00	6 PANELS @ 10'-0"	21.60%
2001+05.00	2001+95.00	12 PANELS @ 7'-6"	-0.86%
2001+95.00	2002+40.00	6 PANELS @ 7'-6"	-0.17%
2002+40.00	2004+20.00	18 PANELS @ 10'-0"	-0.17%
2004+20.00	2007+50.00	33 PANELS @ 10'-0"	-0.50%
2007+50.00	2008+70.00	12 PANELS @ 10'-0"	-5.71%
2008+70.00	2011+40.00	27 PANELS @ 10'-0"	-0.95%
2011+40.00	2012+00.00	6 PANELS @ 10'-0"	-3.28%
2012+00.00	2012+30.00	3 PANELS @ 10'-0"	-4.90%
2012+30.00	2012+55.00	3 PANELS @ 8'-4"	-4.90%
2012+55.00	2014+35.00	18 PANELS @ 10'-0"	-4.90%
2014+35.00	2016+15.00	18 PANELS @ 10'-0"	-0.31%



ANCHOR BOLTS FOR RAIL POST

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761

DRAWN BY MTZ | PLANS CK'D PRK

RAILING PIPE DETAILS

SHEET 30 OF 38
854

SCALE = VARIES

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080530_RD.DWG
LAYOUT NAME - SHT_30

STATE PROJECT NUMBER

1060-27-74

SOIL INSTRUMENTATION LOCATION

INSTRUMENT ID	TYPE	STATION	LOCATION
INC-01	INCLINOMETER	R-40-761 - 2002+56	3’ BEHIND WALL R-40-761
TM-01	TILTMETER	R-40-761 - 2000+70	FACE OF WALL R-40-761
TM-02	TILTMETER	R-40-761 - 2002+00	FACE OF WALL R-40-761
TM-03	TILTMETER	R-40-761 - 2003+85	FACE OF WALL R-40-761
SSM-01	STRUCTURE SETTLEMENT MARKERS	R-40-761 - 2000+33	TOP OF WALL R-40-761
SSM-02	STRUCTURE SETTLEMENT MARKERS	R-40-761 - 2001+69	TOP OF WALL R-40-761
SSM-03	STRUCTURE SETTLEMENT MARKERS	R-40-761 - 2002+59	TOP OF WALL R-40-761
SSM-04	STRUCTURE SETTLEMENT MARKERS	R-40-761 - 2003+41	TOP OF WALL R-40-761
SM-01	SURFACE SETTLEMENT MARKERS	R-40-761 - 2002+20	5’ BEHIND WALL R-40-761
SM-02	SURFACE SETTLEMENT MARKERS	R-40-761 - 2003+25	5’ BEHIND WALL R-40-761
SM-03	SURFACE SETTLEMENT MARKERS	R-40-761 - 2003+80	5’ BEHIND WALL R-40-761
INC-02	INCLINOMETER	R-40-761 - 2005+75	3’ BEHIND WALL R-40-761
TM-04	TILTMETER	R-40-761 - 2005+75	FACE OF WALL R-40-761
TM-05	TILTMETER	R-40-761 - 2008+30	FACE OF WALL R-40-761
LC-01	VIBRATING WIRE LOAD CELLS	R-40-761 - 2005+73.75	PILE 77, ATTACHED TO THE UPPER ANCHOR
LC-02	VIBRATING WIRE LOAD CELLS	R-40-761 - 2005+73.75	PILE 77, ATTACHED TO THE MIDDLE ANCHOR
LC-03	VIBRATING WIRE LOAD CELLS	R-40-761 - 2005+73.75	PILE 77, ATTACHED TO THE LOWER ANCHOR
EP-01	JACKOUT EARTH PRESSURE CELLS	R-40-761 - 2005+77.25	BETWEEN PILES 77 AND 78 AT ELEVATION 612 FEET
EP-02	JACKOUT EARTH PRESSURE CELLS	R-40-761 - 2005+73.75	PILE 77, ELEVATION 605 FEET
EP-03	JACKOUT EARTH PRESSURE CELLS	R-40-761 - 2005+73.75	PILE 77, ELEVATION 580 FEET
EP-04	JACKOUT EARTH PRESSURE CELLS	R-40-761 - 2005+73.75	PILE 77, ELEVATION 560 FEET
SG-01	SISTER BAR STRAIN GAUGES	R-40-761 - 2005+73.75	PILE 77, ELEVATION 590 FEET
SG-02	SISTER BAR STRAIN GAUGES	R-40-761 - 2005+73.75	PILE 77, ELEVATION 580 FEET
SG-03	SISTER BAR STRAIN GAUGES	R-40-761 - 2005+73.75	PILE 77, ELEVATION 560 FEET
SSM-05	STRUCTURE SETTLEMENT MARKERS	R-40-761 - 2004+09	TOP OF WALL R-40-761
SSM-06	STRUCTURE SETTLEMENT MARKERS	R-40-761 - 2005+14	TOP OF WALL R-40-761
SSM-07	STRUCTURE SETTLEMENT MARKERS	R-40-761 - 2006+19	TOP OF WALL R-40-761
SSM-08	STRUCTURE SETTLEMENT MARKERS	R-40-761 - 2007+39	TOP OF WALL R-40-761
SSM-09	STRUCTURE SETTLEMENT MARKERS	R-40-761 - 2008+06	TOP OF WALL R-40-761
SM-04	SURFACE SETTLEMENT MARKERS	R-40-761 - 2004+09	5’ BEHIND WALL R-40-761
SM-05	SURFACE SETTLEMENT MARKERS	R-40-761 - 2005+00	5’ BEHIND WALL R-40-761
SM-06	SURFACE SETTLEMENT MARKERS	R-40-761 - 2006+00	5’ BEHIND WALL R-40-761
SM-07	SURFACE SETTLEMENT MARKERS	R-40-761 - 2007+00	5’ BEHIND WALL R-40-761
SM-08	SURFACE SETTLEMENT MARKERS	R-40-761 - 2007+65	5’ BEHIND WALL R-40-761
SM-09	SURFACE SETTLEMENT MARKERS	R-40-761 - 2008+06	5’ BEHIND WALL R-40-761
EXT-01	EXTENSOMETER	R-40-767 - 1000+25	15’ BEHIND WALL R-40-767
EXT-02	EXTENSOMETER	R-40-767 - 1004+05	15’ BEHIND WALL R-40-767
INC-03	INCLINOMETER	R-40-761 - 2009+52.5	2’ BEHIND WALL R-40-761
INC-04	INCLINOMETER	R-40-761 - 2012+60	2’ IN FRONT OF WALL R-40-761
VWP-01	VIBRATING WIRE PIEZOMETER	R-40-761 - 2009+52.5	4’ BEHIND WALL R-40-761
VWP-02	VIBRATING WIRE PIEZOMETER	R-40-767 - 1004+08	13’ BEHIND WALL R-40-767
TM-06	TILTMETER	R-40-761 - 2009+75	FACE OF WALL R-40-761
TM-07	TILTMETER	R-40-767 - 1001+24	FACE OF WALL R-40-767
TM-08	TILTMETER	R-40-761 - 2011+40	FACE OF WALL R-40-761
TM-09	TILTMETER	R-40-767 - 1002+90	FACE OF WALL R-40-767
LC-04	VIBRATING WIRE LOAD CELLS	R-40-761 - 2009+48.75	PILE 127, ATTACHED TO THE UPPER ANCHOR
LC-05	VIBRATING WIRE LOAD CELLS	R-40-761 - 2009+48.75	PILE 127, ATTACHED TO THE MIDDLE ANCHOR
LC-06	VIBRATING WIRE LOAD CELLS	R-40-761 - 2009+48.75	PILE 127, ATTACHED TO THE LOWER ANCHOR
EP-05	JACKOUT EARTH PRESSURE CELLS	R-40-767 – 1000+98.50	ALIGNED WITH PILE 127, ELEVATION 630 FEET
EP-06	JACKOUT EARTH PRESSURE CELLS	R-40-767 – 1000+98.50	ALIGNED WITH PILE 127, ELEVATION 620 FEET
EP-07	JACKOUT EARTH PRESSURE CELLS	R-40-761 - 2009+48.75	PILE 127, ELEVATION 604 FEET
EP-08	JACKOUT EARTH PRESSURE CELLS	R-40-761 - 2009+48.75	PILE 127, ELEVATION 598 FEET
EP-09	JACKOUT EARTH PRESSURE CELLS	R-40-761 - 2009+48.75	PILE 127, ELEVATION 570 FEET
EP-10	JACKOUT EARTH PRESSURE CELLS	R-40-761 - 2009+48.75	PILE 127, ELEVATION 555 FEET
EP-11	JACKOUT EARTH PRESSURE CELLS	R-40-761 - 2009+52.50	BETWEEN PILES 127 AND 128 AT ELEVATION 604 FEET
EP-12	JACKOUT EARTH PRESSURE CELLS	R-40-761 - 2009+52.50	BETWEEN PILES 127 AND 128 AT ELEVATION 598 FEET
SG-04	SISTER BAR STRAIN GAUGES	R-40-761 - 2009+48.75	PILE 127, ELEVATION 585 FEET

SOIL INSTRUMENTATION LOCATION CONT.

INSTRUMENT ID	TYPE	STATION	LOCATION
SG-05	SISTER BAR STRAIN GAUGES	R-40-761 - 2009+48.75	PILE 127, ELEVATION 558 FEET
SG-06	SISTER BAR STRAIN GAUGES	R-40-761 - 2009+48.76	PILE 127, ELEVATION 545 FEET
SSM-10	STRUCTURE SETTLEMENT MARKERS	R-40-761 - 2009+34	TOP OF WALL R-40-761
SSM-11	STRUCTURE SETTLEMENT MARKERS	R-40-767 - 1000+83	TOP OF WALL R-40-767
SSM-12	STRUCTURE SETTLEMENT MARKERS	R-40-761 - 2010+61	TOP OF WALL R-40-761
SSM-13	STRUCTURE SETTLEMENT MARKERS	R-40-767 - 1002+10	TOP OF WALL R-40-767
SSM-14	STRUCTURE SETTLEMENT MARKERS	R-40-761 - 2012+15	TOP OF WALL R-40-761
SSM-15	STRUCTURE SETTLEMENT MARKERS	R-40-767 - 1003+64	TOP OF WALL R-40-767
SM-10	SURFACE SETTLEMENT MARKERS	R-40-761 - 2009+33	5’ BEHIND WALL R-40-761
SM-11	SURFACE SETTLEMENT MARKERS	R-40-761 - 2010+40	5’ BEHIND WALL R-40-761
SM-12	SURFACE SETTLEMENT MARKERS	R-40-761 - 2011+00	5’ BEHIND WALL R-40-761
SM-13	SURFACE SETTLEMENT MARKERS	R-40-761 - 2012+15	5’ BEHIND WALL R-40-761
EXT-03	EXTENSOMETER	R-40-767 – 1006+00	20’ BEHIND WALL R-40-767
EXT-04	EXTENSOMETER	R-40-767 – 1007+50	20’ BEHIND WALL R-40-767
INC-05	INCLINOMETER	R-40-761 - 2014+50	2’ IN FRONT OF WALL R-40-761
INC-06	INCLINOMETER	R-40-761 - 2016+00	2’ INFRONT OF WALL R-40-761
INC-07	INCLINOMETER	R-40-767 - 1008+80	2’ INFRONT OF WALL R-40-767
VWP-03	VIBRATING WIRE PIEZOMETER	R-40-767 - 1006+03	20’ BEHIND WALL R-40-761
VWP-04	VIBRATING WIRE PIEZOMETER	R-40-767 – 1007+53	17’ BEHIND WALL R-40-767
TM-10	TILTMETER	R-40-761 - 2013+60	FACE OF WALL R-40-761
TM-11	TILTMETER	R-40-767 - 1005+10	FACE OF WALL R-40-767
TM-12	TILTMETER	R-40-767 - 1006+35	FACE OF WALL R-40-767
TM-13	TILTMETER	R-40-767 – 1007+25	FACE OF WALL R-40-767
TM-14	TILTMETER	R-40-767 - 1008+33	FACE OF WALL R-40-767
SSM-16	STRUCTURE SETTLEMENT MARKERS	R-40-761 - 2013+20	TOP OF WALL R-40-761
SSM-17	STRUCTURE SETTLEMENT MARKERS	R-40-767 - 1004+70	TOP OF WALL R-40-767
SSM-18	STRUCTURE SETTLEMENT MARKERS	R-40-761 - 2014+25	TOP OF WALL R-40-761
SSM-19	STRUCTURE SETTLEMENT MARKERS	R-40-767 - 1005+75	TOP OF WALL R-40-767
SSM-20	STRUCTURE SETTLEMENT MARKERS	R-40-761 - 2014+85	TOP OF WALL R-40-761
SSM-21	STRUCTURE SETTLEMENT MARKERS	R-40-761 - 2015+35	TOP OF WALL R-40-761
SSM-22	STRUCTURE SETTLEMENT MARKERS	R-40-767 - 1006+85	TOP OF WALL R-40-767
SSM-23	STRUCTURE SETTLEMENT MARKERS	R-40-767 - 1007+60	TOP OF WALL R-40-767
SSM-24	STRUCTURE SETTLEMENT MARKERS	R-40-767 - 1008+80	TOP OF WALL R-40-767
SM-14	SURFACE SETTLEMENT MARKERS	R-40-761 - 2013+20	5’ BEHIND WALL R-40-761
SM-15	SURFACE SETTLEMENT MARKERS	R-40-761 - 2014+10	5’ BEHIND WALL R-40-761
SM-16	SURFACE SETTLEMENT MARKERS	R-40-761 - 2015+35	5’ BEHIND WALL R-40-761
SM-17	SURFACE SETTLEMENT MARKERS	R-40-767 - 1008+15	2’ IN FRONT OF WALL R-40-767
SM-18	SURFACE SETTLEMENT MARKERS	R-40-767 - 1008+70	2’ IN FRONT OF WALL R-40-767

INSTRUMENTATION MOVEMENT CRITERIA

INSTRUMENT	THRESHOLD CRITERIA	LIMITING CRITERIA
INCLINOMETERS	1 INCH	2 INCHES
STRUCTURE SETTLEMENT MARKERS AND 3-AXIS TILTMETER	1 INCH	2 INCHES
SURFACE SETTLEMENT MARKERS	0.75 INCH FOR EVERY 5 FEET OF FILL	1.5 INCH FOR EVERY 5 FEET OF FILL
EXTENSOMETER	0.75 INCH FOR EVERY 5 FEET OF FILL	1.5 INCH FOR EVERY 5 FEET OF FILL

NOTES

FOR ADDITIONAL INSTRUMENTATION AND MONITORING REQUIREMENTS, REFER TO PROJECT SPECIAL PROVISIONS ITEMS SPV.0060.4800 AND SPV.0060.4810.

THE GEOTECHNICAL INSTRUMENTATION SHOWN ON THESE PLANS REPRESENTS THE MINIMUM REQUIRED. INSTRUMENT LOCATIONS ARE APPROXIMATE AND SHOULD BE ADJUSTED BASED ON FIELD CONDITIONS AND PRE-CONSTRUCTION SURVEYS. ADJUSTMENTS GREATER THAN 5 FEET MUST BE APPROVED BY THE ENGINEER.

INSTALLATION REQUIREMENTS ARE PROVIDED IN PROJECT SPECIAL PROVISIONS ITEMS SPV.0060.4800 AND SPV.0060.4810.

ALL INSTRUMENTATION SHALL BE INSTALLED AND BASELINE READINGS TAKEN BEFORE ANY EXCAVATION OR FILL OCCURS. TILTMETERS LOCATED ON SOLDIER PILES SHALL BE INSTALLED BEFORE ANY EXCAVATION OCCURS. TILTMETERS ON MSE WALLS SHALL BE INSTALLED AS SOON AS THE MSE WALL PANEL FACING WHERE THE TILTMETER IS LOCATED ARE COMPLETED.

THE CONTRACTOR IS RESPONSIBLE FOR ADDING CRACK MONITORING GAUGES AND ADDITIONAL SURFACE MONITORING POINTS AS NECESSARY TO MONITOR THE EXISTING STRUCTURES.

THE CONTRACTOR MUST MONITOR THE EXISTING WALL AT STATION 2001+00 BY INSTALLING AT LEAST TWO 3-AXIS TILTMETERS ON THE WALL TO TRACK WALL MOVEMENTS DURING CONSTRUCTION.

AS-BUILT DRAWINGS SHOWING INSTRUMENTATION LOCATIONS, INSTALLATION PHOTOS, CONTROL POINTS, AND BENCHMARKS SHALL BE SUBMITTED TO THE ENGINEER BEFORE ANY CONSTRUCTION ACTIVITIES.

ALL INSTRUMENTATION MUST BE CAPABLE OF PROVIDING REAL-TIME MONITORING DATA AND SHOULD BE EQUIPPED WITH THE NECESSARY DEVICES FOR AUTOMATED, WIRELESS MONITORING.

THE CONTRACTOR SHALL SET UP AN INSTRUMENTATION WEBSITE FOR THE PROJECT, POSTING ALL DATA IN THE FORM OF CHARTS, GRAPHS, AND/OR TABLES.THE WEBSITE SHOULD PROVIDE REAL-TIME DATA POSTING. WEBSITE ACCESS MUST BE PROVIDED TO THE OWNER, ENGINEER, AND OTHER APPROVED PARTIES.

UNLESS OTHERWISE SPECIFIED, INSTRUMENTATION SHALL NOT BE ABANDONED OR REMOVED AFTER PROJECT COMPLETION AND SHOULD BE LEFT FOR FUTURE USE BY OTHERS. THE VIBRATING WIRE PIEZOMETER, INCLINOMETER, MULTIPLE POSITION BOREHOLE EXTENSOMETER, AND 3-AXIS TILTMETER, ALONG WITH THE NECESSARY DATA LOGGERS AND ANY NECESSARY DATA ACQUISITION SYSTEM, SHALL BE PURCHASED (NOT RENTED) TO ENABLE LONG-TERM MONITORING AFTER CONSTRUCTION IS COMPLETED (BY OTHERS). THE CONTRACTOR SHOULD HAND OVER THESE INSTRUMENTS AND AN ACTIVE WEBSITE, THAT CONTAINS THE PREVIOUS INSTRUMENTATION MEASUREMENTS DURING CONSTRUCTION, TO THE OWNER AT THE END OF CONSTRUCTION.

THRESHOLD AND LIMITING CRITERIA:

- IF ANY INSTRUMENT REACHES OR EXCEEDS THE THRESHOLD CRITERIA SHOWN ON THE TABLE INSTRUMENT MOVEMENT CRITERIA, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE OWNER AND ENGINEER AND EVALUATE CONSTRUCTION MEANS AND METHODS TO PREVENT FUTURE EXCEEDANCES.
- IF ANY INSTRUMENT REACHES OR EXCEEDS THE LIMITING CRITERIA SHOWN ON THE TABLE INSTRUMENT MOVEMENT CRITERIA, THE CONTRACTOR SHALL STOP WORK IMMEDIATELY, INFORM THE OWNER AND ENGINEER, EVALUATE CONSTRUCTION MEANS AND METHODS, AND PROPOSE ALTERNATIVES TO PREVENT FUTURE EXCEEDANCES. WORK SHALL RESUME ONLY UPON DIRECTION FROM THE ENGINEER AND OWNER.

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY AKK | PLANS CK'D PRK

GEOTECHNICAL INSTRUMENTATION NOTES

SHEET 31 OF 38

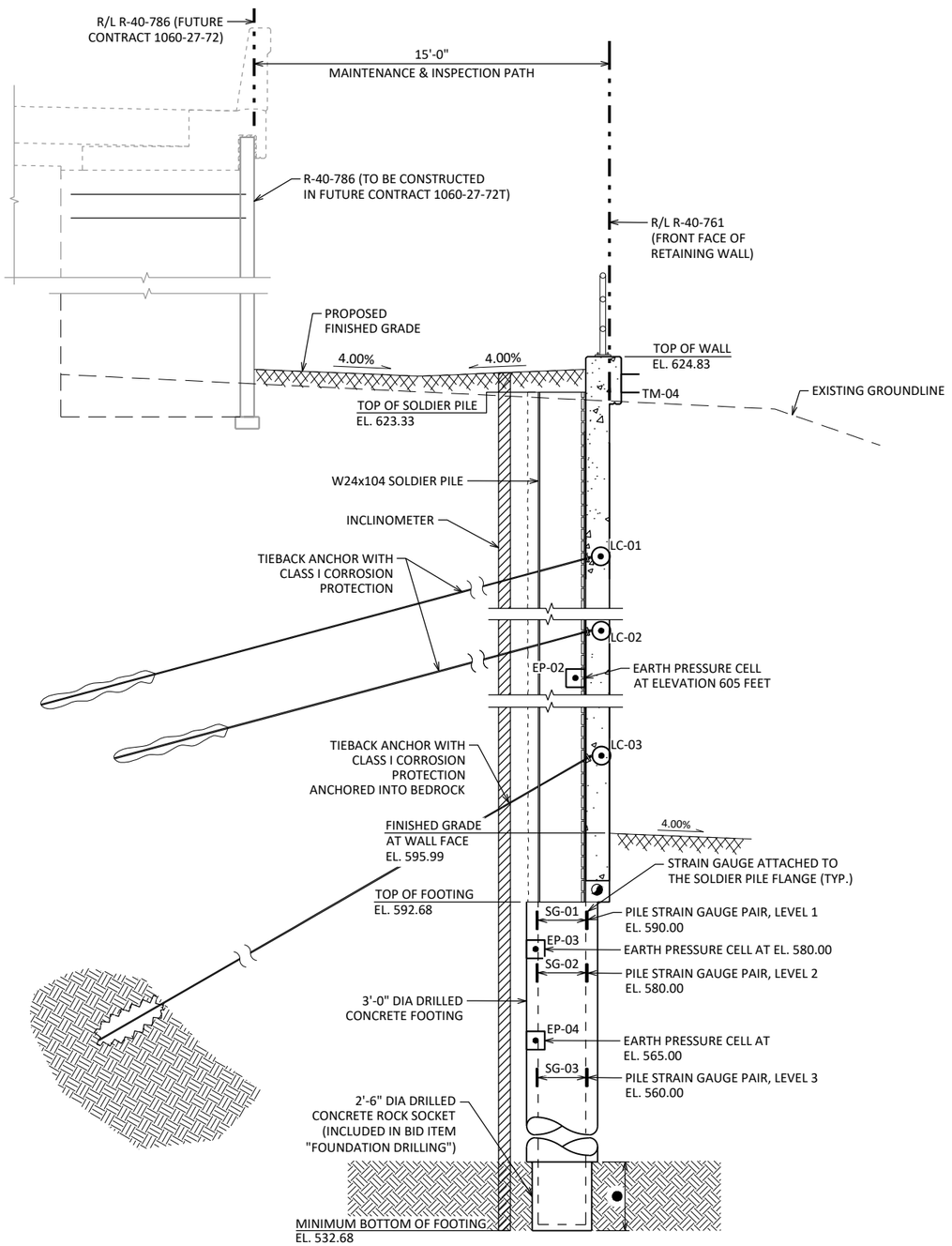
855

SCALE = N/A

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080531_GI.DWG
LAYOUT NAME - SHT_31

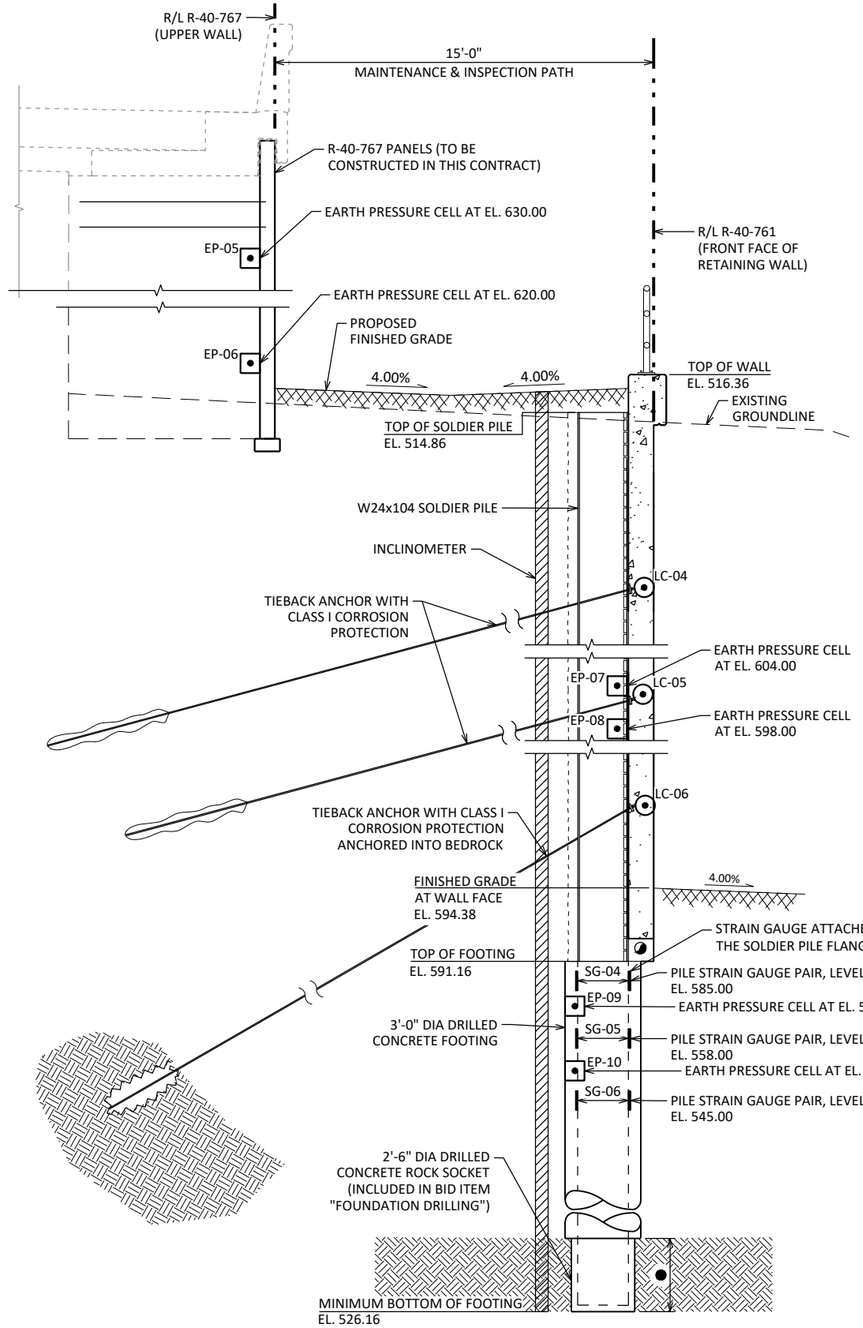
STATE PROJECT NUMBER

1060-27-74



INSTRUMENTATION DETAIL

PILE 77 AT STA 2005+73.75



INSTRUMENTATION DETAIL

PILE 127 AT STA 2009+48.75

GEOTECHNICAL INSTRUMENTATION LEGEND

- TM — 3-AXIS TILTMETER
- LC — VIBRATING WIRE LOAD CELLS (ATTACHED TO TIEBACKS)
- EP — JACKOUT EARTH PRESSURE CELLS - (INSIDE SHAFT)
- SM — SURFACE SETTLEMENT MARKERS (IN PAVEMENT, LFCF, OR SOIL)
- SG — STRAIN GAUGES PAIR (SISTER BAR)

LEGEND

- ● SEE "SOLDIER PILE DATA TABLE" FOR ROCK SOCKET LENGTH.

NOTES

PVC TUBES SHALL BE PROVIDED THROUGH THE WALL FACING TO ALLOW INSTRUMENTATION WIRING TO REACH THE DATA LOGGERS/GATEWAY. THE NUMBER AND LOCATIONS OF THESE ACCESS TUBES SHALL BE COORDINATED WITH THE INSTRUMENTATION ENGINEER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761-001

DRAWN BY AKK | PLANS CK'D PRK

GEOTECHNICAL INSTRUMENTATION DETAILS

SHEET 32 OF 38

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SCALE = 1:6

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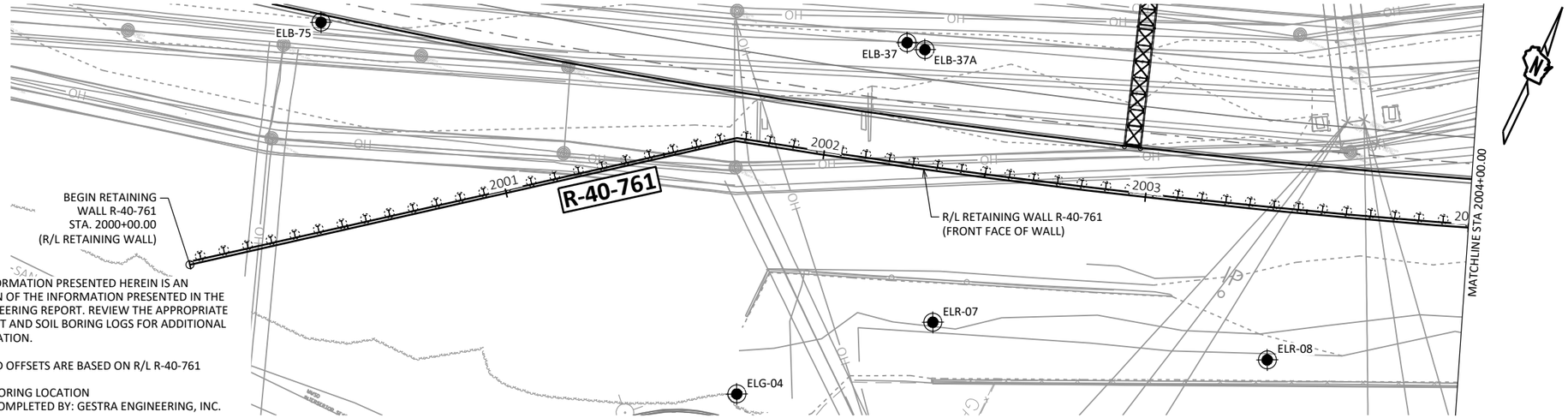
FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080532_GI.DWG
LAYOUT NAME - SHT_32



PLAN

SOLDIER PILE RETAINING WALL

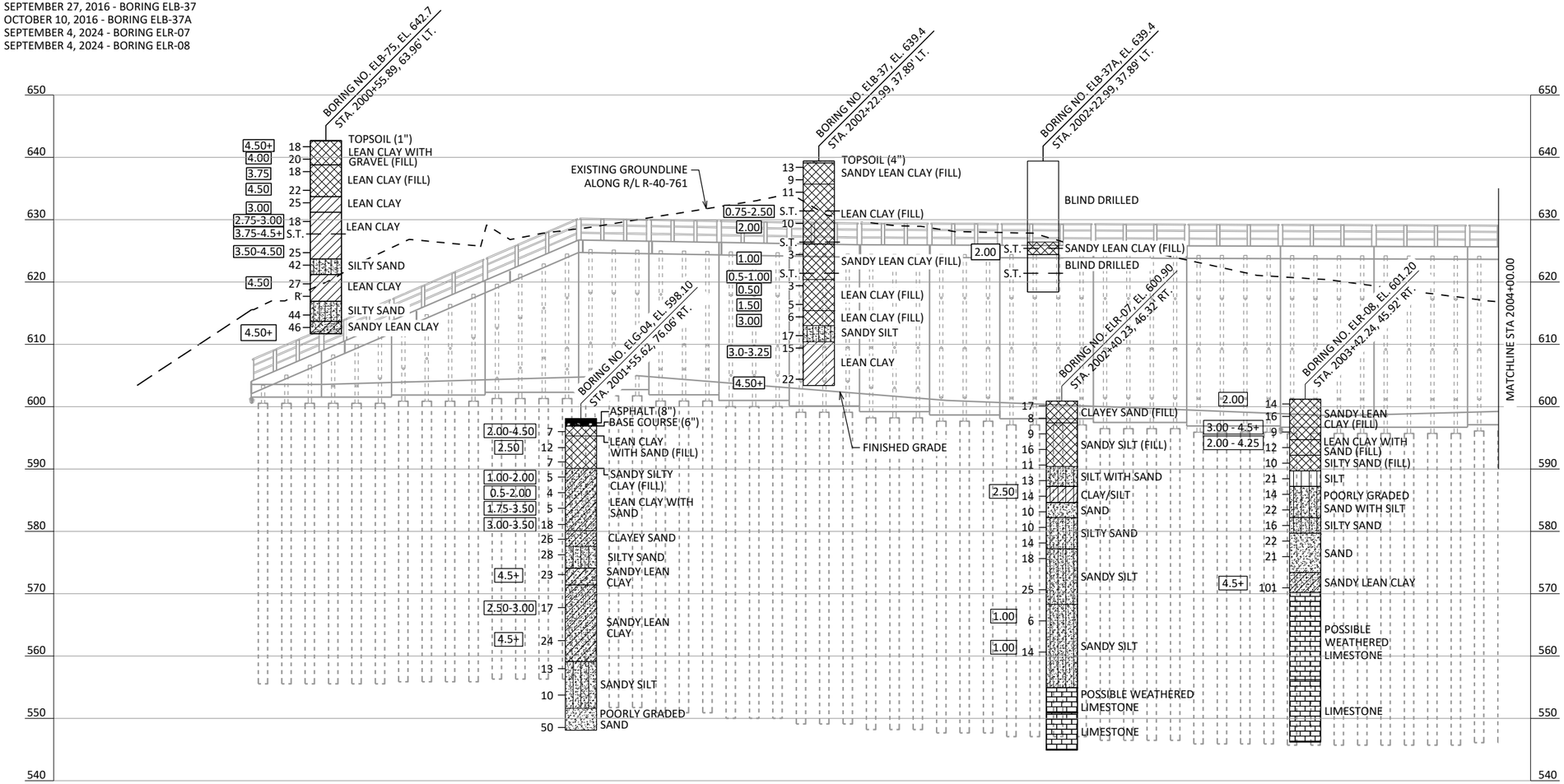
NOTE:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

BORING STATIONS AND OFFSETS ARE BASED ON R/L R-40-761

DENOTES SOIL BORING LOCATION
SOIL BORINGS COMPLETED BY: GESTRA ENGINEERING, INC.

SOIL BORINGS TAKEN:
SEPTEMBER 26, 2016 - BORING ELB-75
JUNE 26, 2014 - BORING ELG-04
SEPTEMBER 27, 2016 - BORING ELB-37
OCTOBER 10, 2016 - BORING ELB-37A
SEPTEMBER 4, 2024 - BORING ELR-07
SEPTEMBER 4, 2024 - BORING ELR-08



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)

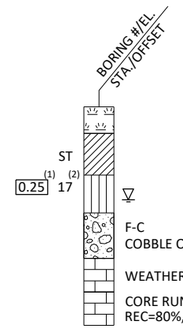
STATE PROJECT NUMBER

1060-27-74

MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

AT TIME OF DRILLING
END OF DRILLING
AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761

DRAWN BY GLM | PLANS CK'D PRK

SUBSURFACE EXPLORATION (1 OF 6)

SHEET 33 OF 38
857

SCALE = 1:40

8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080533-538_SE.DWG
LAYOUT NAME - SHT_33

STATE PROJECT NUMBER

1060-27-74

NOTE:

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BORING STATIONS AND OFFSETS ARE BASED ON R/L R-40-761

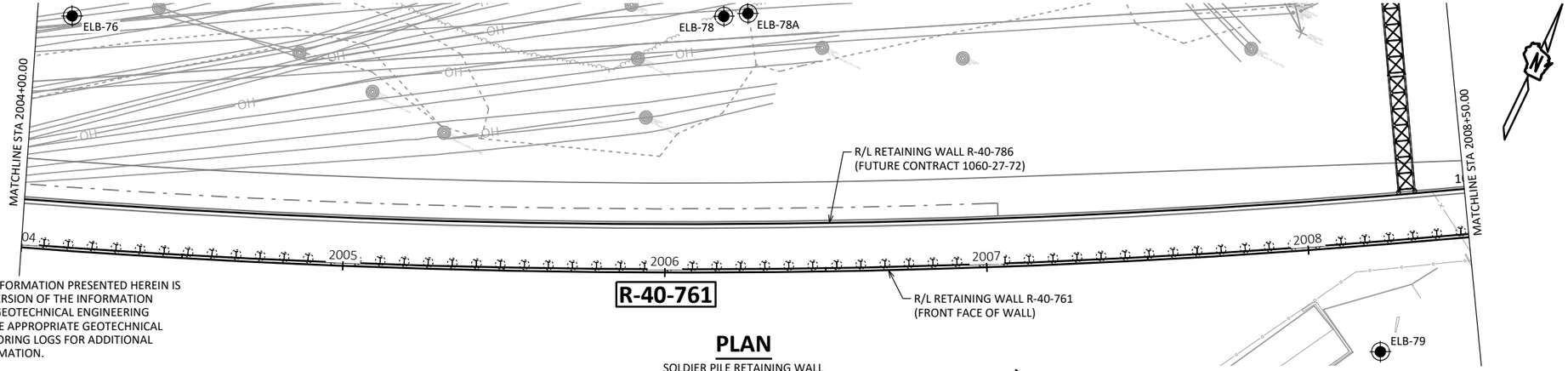
DENOTES SOIL BORING LOCATION
SOIL BORINGS COMPLETED BY:
GESTRA ENGINEERING, INC.

DENOTES SOIL BORINGS SHOWN ON SHEET 35 OF 38.

SOIL BORINGS TAKEN:
SEPTEMBER 23, 2016 - BORING ELB-76
SEPTEMBER 23, 2016 - BORING ELB-78
OCTOBER 10, 2016 - BORING ELB-78A
JULY 26, 2016 - BORING ELB-79

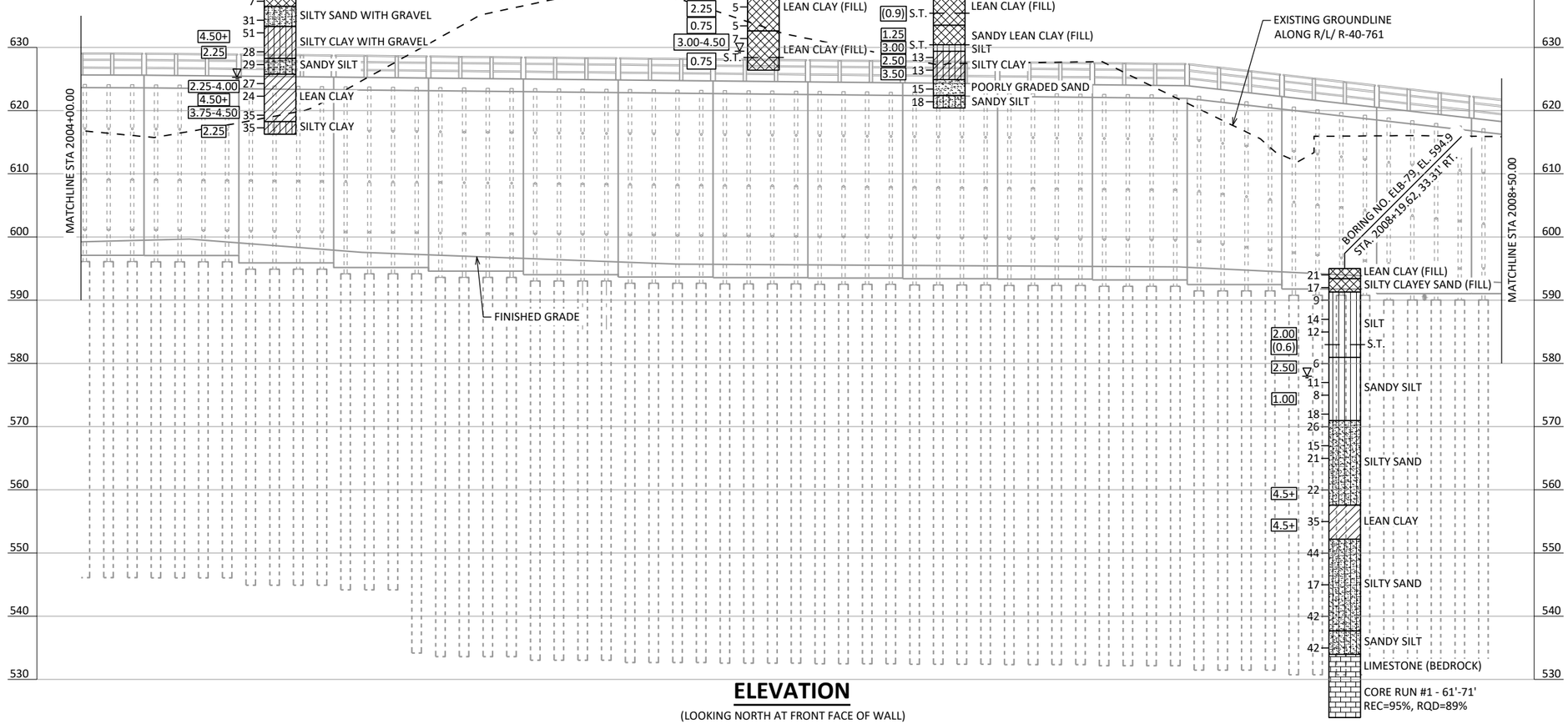
PLAN

SOLDIER PILE RETAINING WALL



ELEVATION

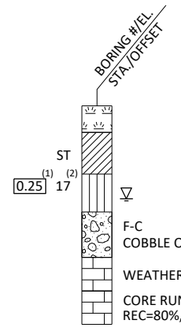
(LOOKING NORTH AT FRONT FACE OF WALL)



MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

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GROUND WATER ELEVATION

AT TIME OF DRILLING
END OF DRILLING
AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761

DRAWN BY GLM | PLANS CK'D PRK

SUBSURFACE EXPLORATION (2 OF 6)

SHEET 34 OF 38
858

SCALE = 1:40

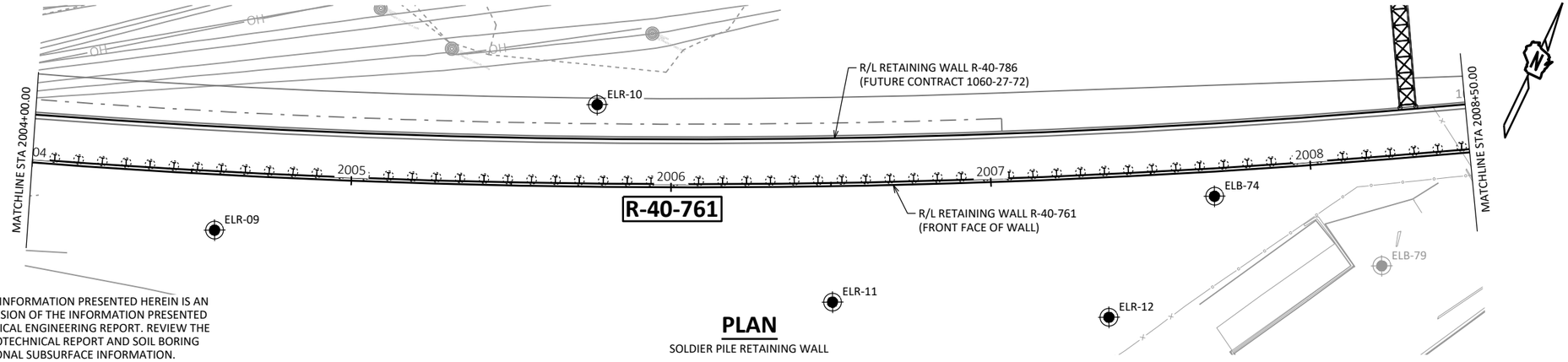
8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080533-538_SE.DWG
LAYOUT NAME - SHT_34

STATE PROJECT NUMBER

1060-27-74



NOTE:

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BORING STATIONS AND OFFSETS ARE BASED ON R/L R-40-761

DENOTES SOIL BORING LOCATION
SOIL BORINGS COMPLETED BY:
GESTRA ENGINEERING, INC.

DENOTES SOIL BORINGS SHOWN ON SHEET 34 OF 38.

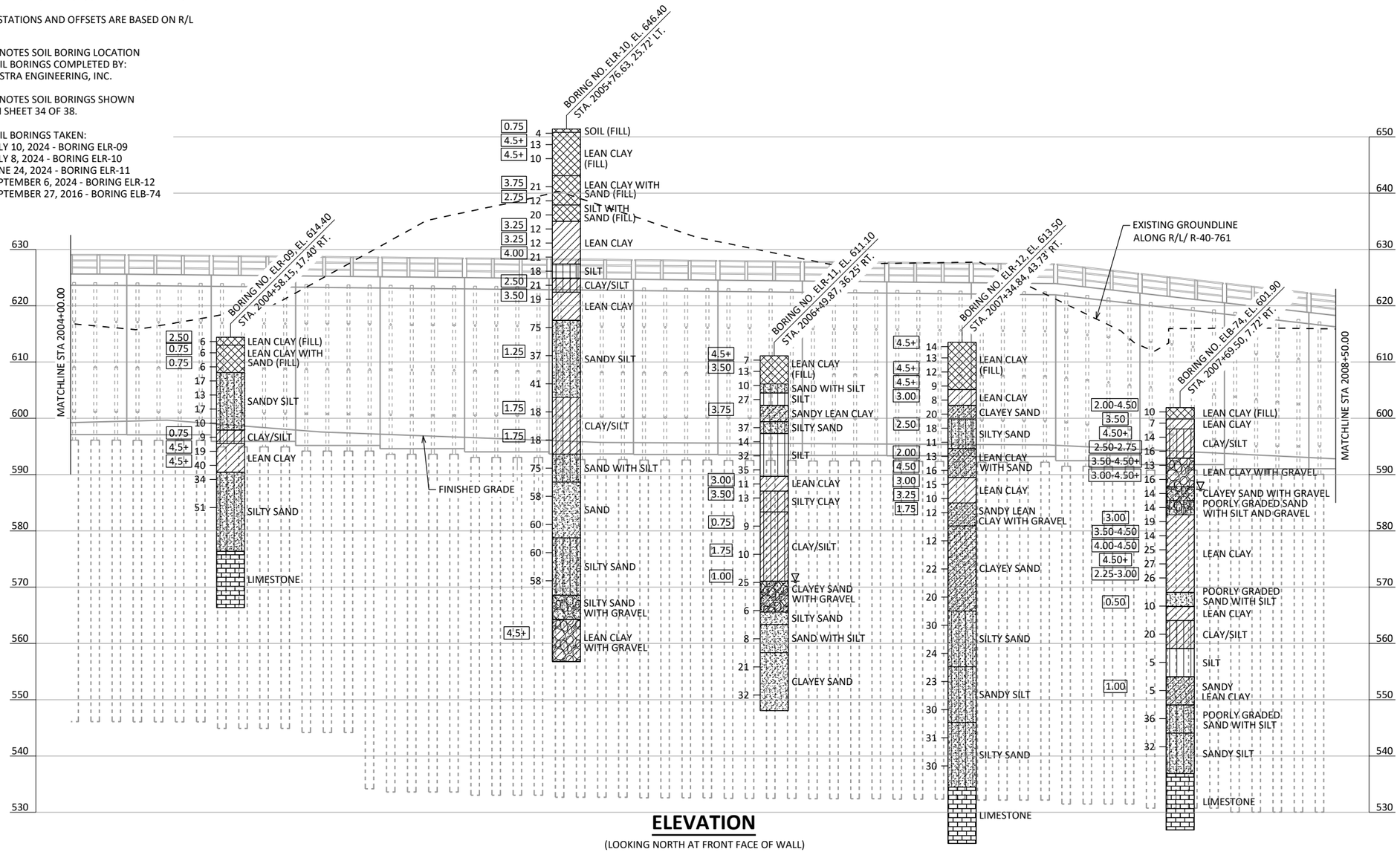
SOIL BORINGS TAKEN:
JULY 10, 2024 - BORING ELR-09
JULY 8, 2024 - BORING ELR-10
JUNE 24, 2024 - BORING ELR-11
SEPTEMBER 6, 2024 - BORING ELR-12
SEPTEMBER 27, 2016 - BORING ELB-74

PLAN

SOLDIER PILE RETAINING WALL

ELEVATION

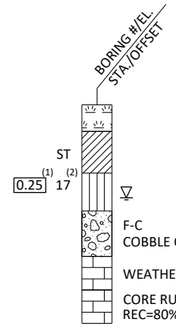
(LOOKING NORTH AT FRONT FACE OF WALL)



MATERIAL SYMBOLS

ASPHALT · TOPSOIL · PEAT
CONCRETE · FILL · GRAVEL
SAND · CLAY · SILT
BOULDERS OR COBBLES · LIMESTONE · BEDROCK (UNKNOWN)
SHALE · SANDSTONE · IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

AT TIME OF DRILLING
END OF DRILLING
AFTER DRILLING

ABBREVIATIONS

F-FINE · M-MEDIUM · C-COARSE · ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-40-761

DRAWN BY GLM · PLANS CK'D PRK

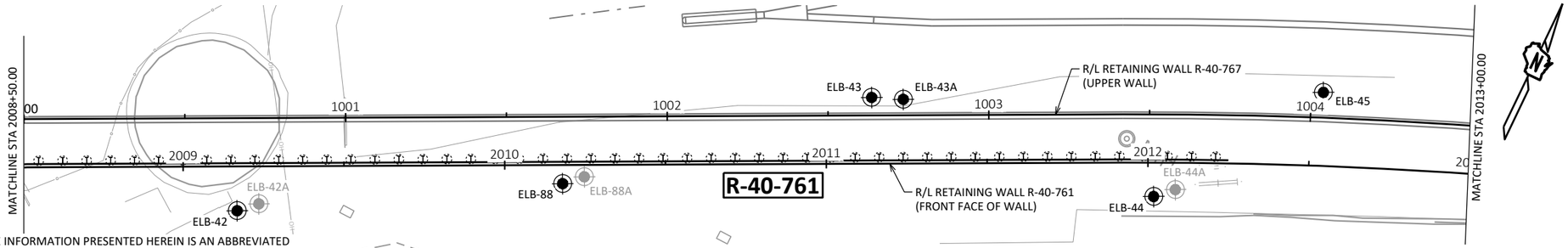
SUBSURFACE EXPLORATION (3 OF 6)

SHEET 35 OF 38
859

8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080533-538_SE.DWG
LAYOUT NAME - SHT_35



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BORING STATIONS AND OFFSETS ARE BASED ON R/L R-40-761

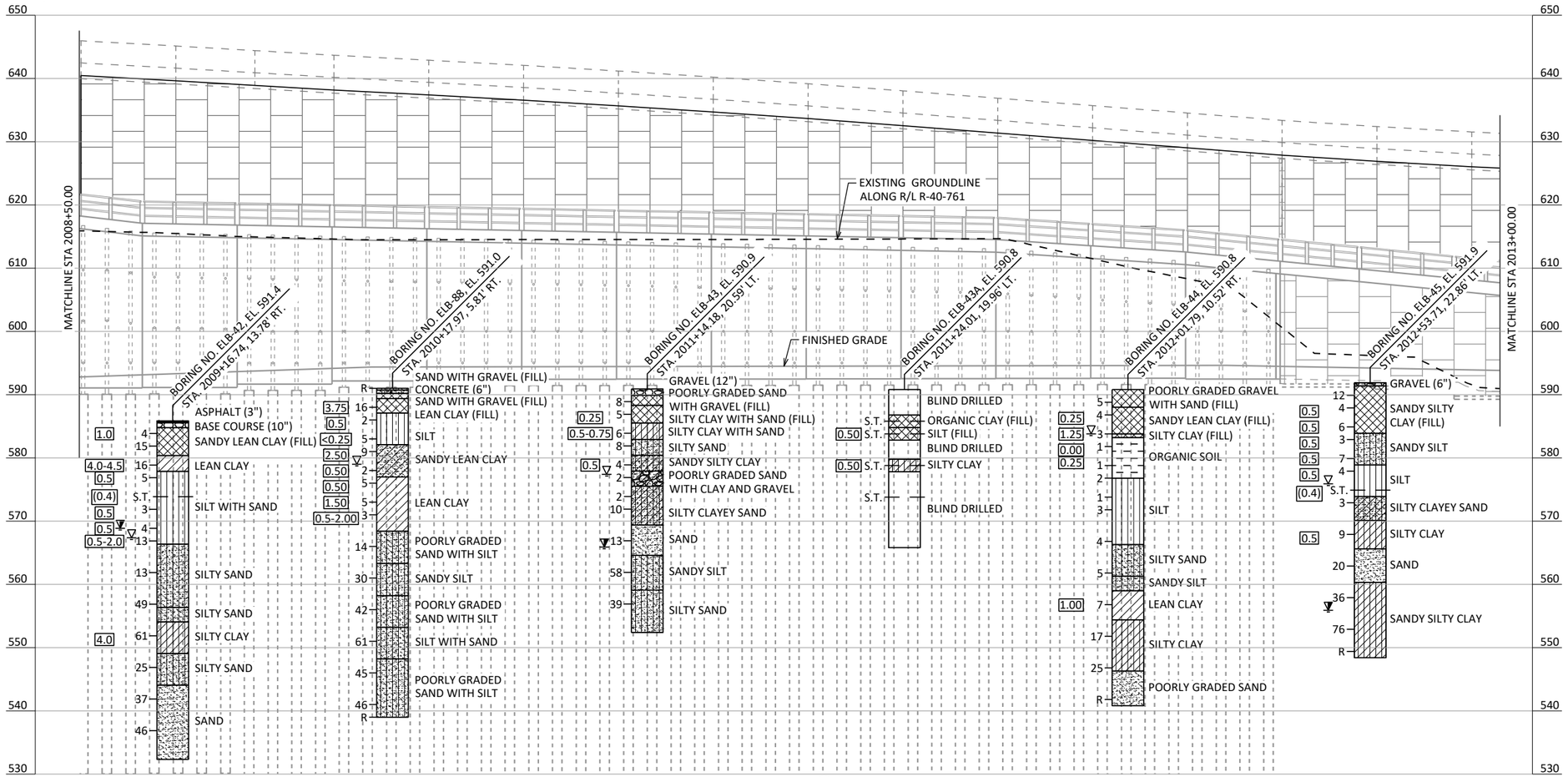
DENOTES SOIL BORING LOCATION
SOIL BORINGS COMPLETED BY: GESTRA ENGINEERING, INC.

DENOTES SOIL BORINGS SHOWN ON SHEET 37 OF 38.

SOIL BORINGS TAKEN:
APRIL 07, 2015 - BORING ELB-42
NOVEMBER 11, 2016 - BORING ELB-88
APRIL 07, 2015 - BORING ELB-43
JULY 26, 2016 - BORING ELB-43A
NOVEMBER 16, 2015 - BORING ELB-44
APRIL 07, 2015 - BORING ELB-45

PLAN

SOLDIER PILE AND MSE RETAINING WALL



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)

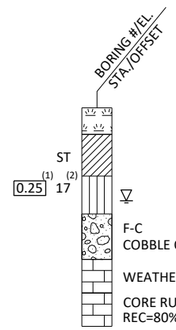
STATE PROJECT NUMBER

1060-27-74

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



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GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761

DRAWN BY GLM | PLANS CK'D PRK

SUBSURFACE EXPLORATION (4 OF 6)

SHEET 36 OF 38

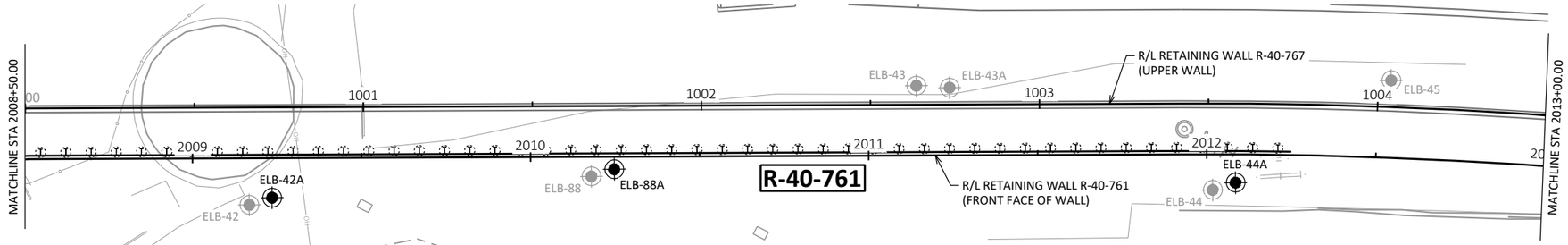
860

SCALE = 1:40

8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080533-538_SE.DWG
LAYOUT NAME - SHT_36



NOTE:

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BORING STATIONS AND OFFSETS ARE BASED ON R/L R-40-761

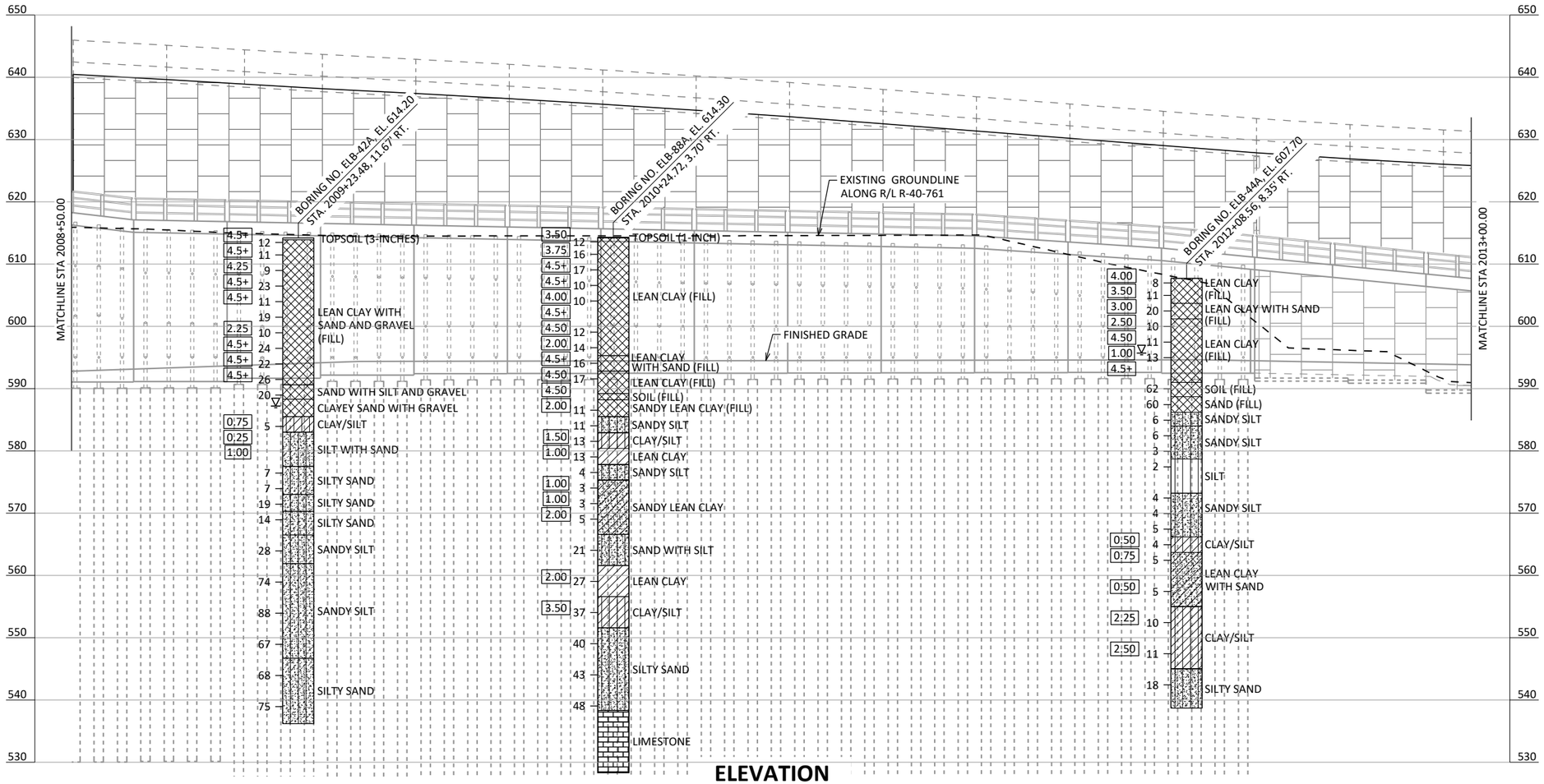
DENOTES SOIL BORING LOCATION
SOIL BORINGS COMPLETED BY: GESTRA ENGINEERING, INC.

DENOTES SOIL BORINGS SHOWN ON SHEET 36 OF 38.

SOIL BORINGS TAKEN:
APRIL 15, 2024 - BORING ELB-42A
JANUARY 3, 2024 - BORING ELB-88A
JANUARY 4, 2024 - BORING ELB-44A

PLAN

SOLDIER PILE AND MSE RETAINING WALL



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)

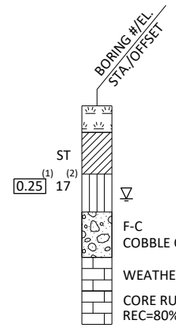
STATE PROJECT NUMBER

1060-27-74

MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

LEGEND OF BORING



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GROUND WATER ELEVATION

AT TIME OF DRILLING
END OF DRILLING
AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-40-761

DRAWN BY GLM | PLANS CK'D PRK

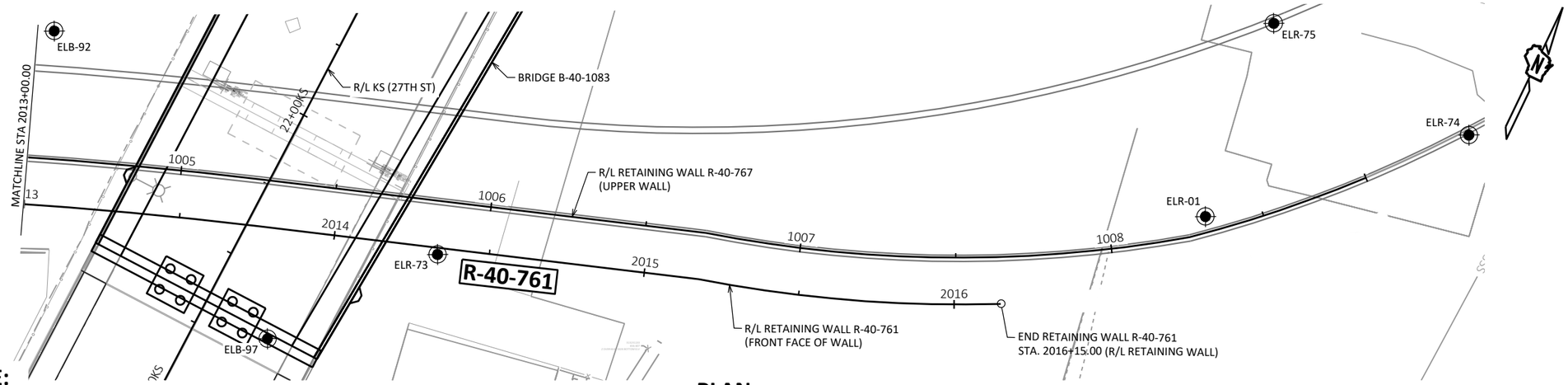
SUBSURFACE EXPLORATION (5 OF 6)

SHEET 37 OF 38
861

8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080533-538_SE.DWG
LAYOUT NAME - SHT_37



PLAN

MSE RETAINING WALL

NOTE:

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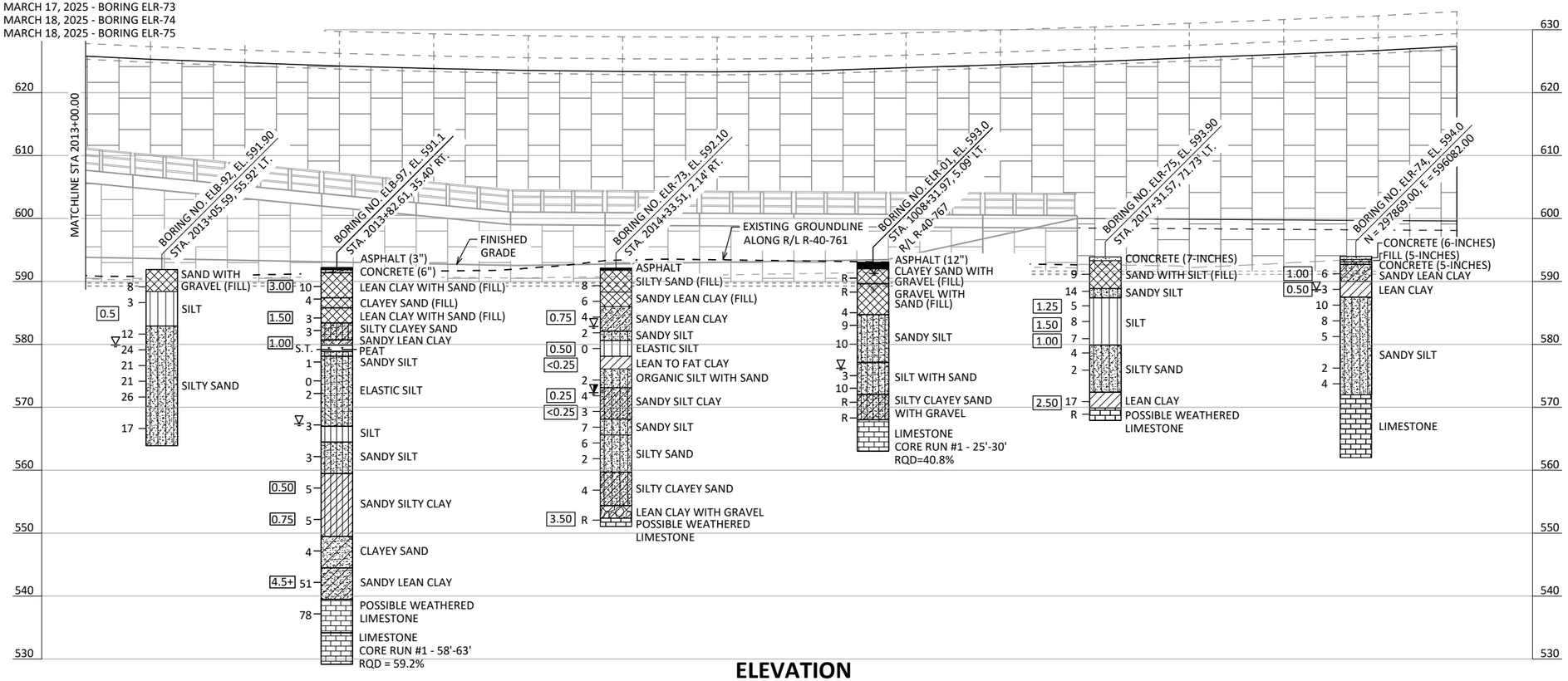
BORING STATION AND OFFSET IS BASED ON R/L R-40-761 UNLESS OTHERWISE NOTED

DENOTES SOIL BORING LOCATION
SOIL BORINGS COMPLETED BY: GESTRA ENGINEERING, INC.

SOIL BORINGS TAKEN:
SEPTEMBER 15, 2016 - BORING ELB-92
SEPTEMBER 06, 2023 - BORING ELB-97
SEPTEMBER 06, 2023 - BORING ELR-01
MARCH 17, 2025 - BORING ELR-73
MARCH 18, 2025 - BORING ELR-74
MARCH 18, 2025 - BORING ELR-75



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)

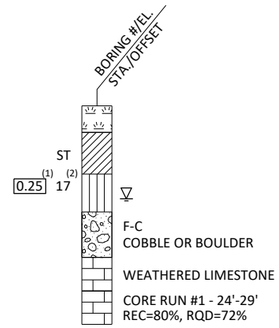
STATE PROJECT NUMBER

1060-27-74

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



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GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-761

DRAWN BY GLM | PLANS CK'D PRK

SUBSURFACE EXPLORATION (6 OF 6)

SHEET 38 OF 38
862

SCALE = 1:40

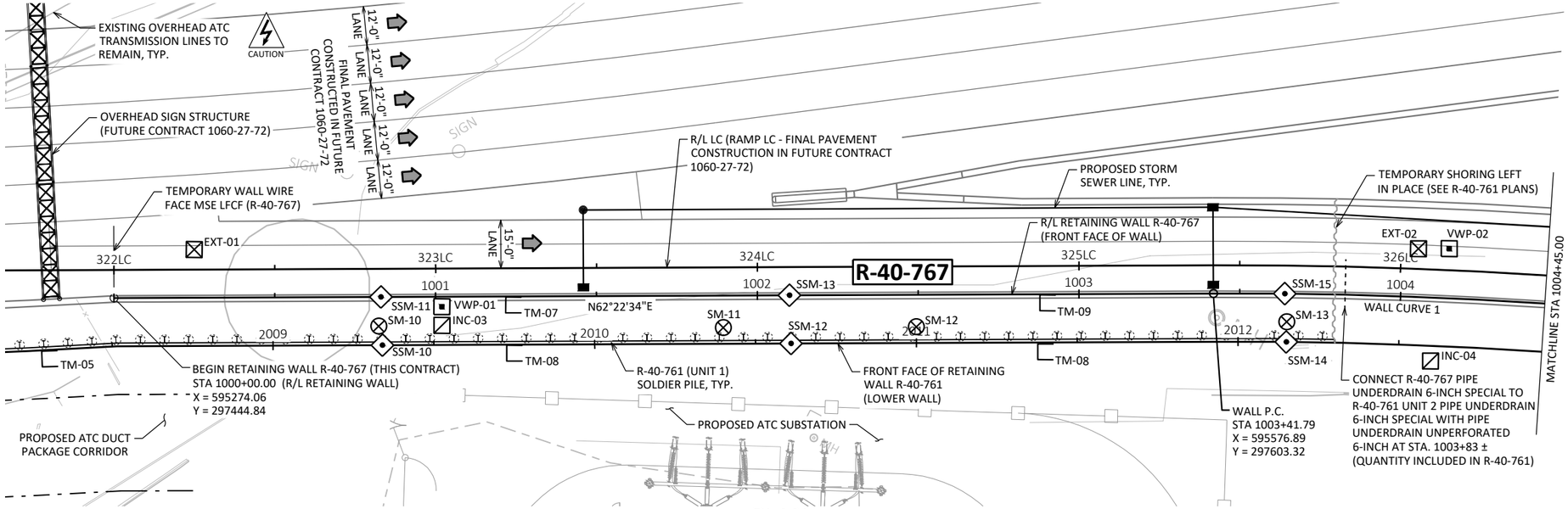
8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-761\CDS\R0761_080533-538_SE.DWG
LAYOUT NAME - SHT_38

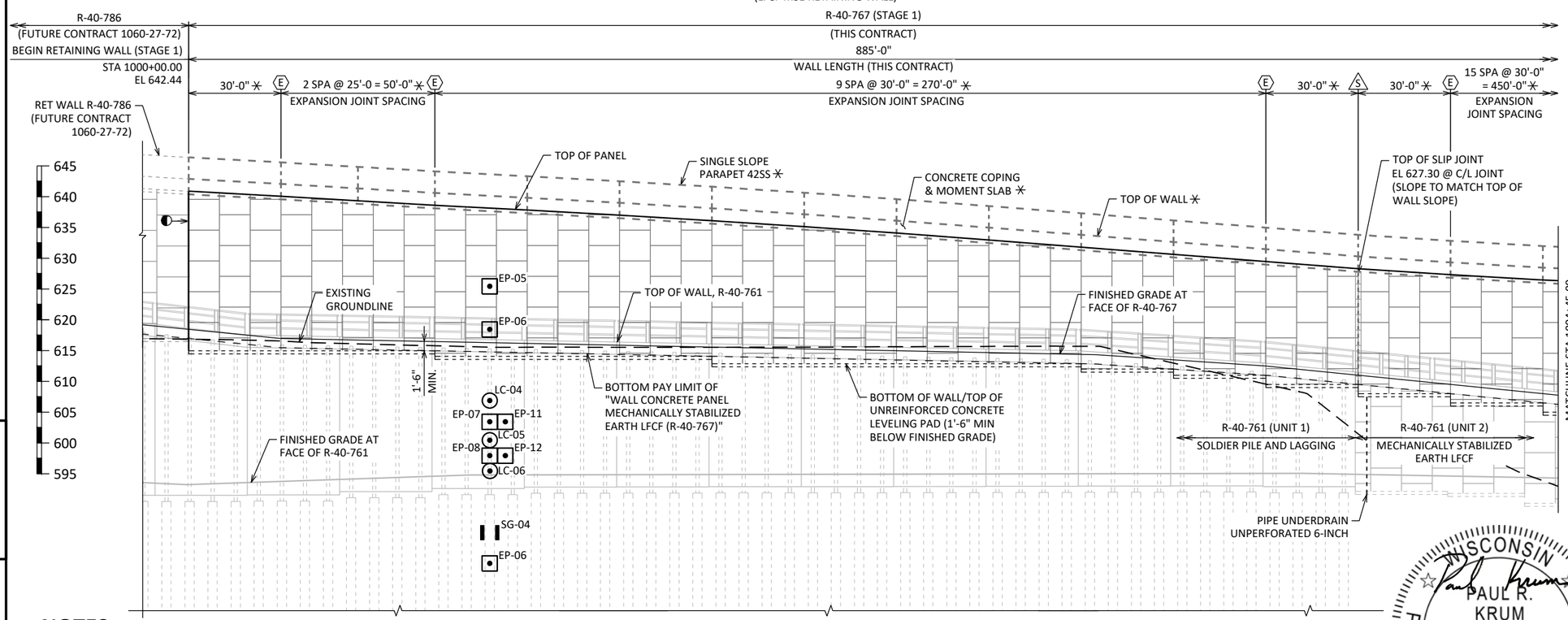
STATE PROJECT NUMBER

1060-27-74



PLAN

(LFCF MSE RETAINING WALL)



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG THE FRONT FACE OF WALL)

NOTES

1. PVC TUBES SHALL BE PROVIDED THROUGH THE WALL PANEL TO ALLOW INSTRUMENTATION WIRING TO REACH THE DATA LOGGERS/GATEWAY. THE NUMBER AND LOCATIONS OF THESE ACCESS TUBES SHALL BE COORDINATED WITH THE INSTRUMENTATION ENGINEER.
2. SEE SHEETS 31 AND 32 OF R-40-761 PLANS FOR INSTRUMENTATION DETAILS.

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION (1 OF 2)
2. GENERAL PLAN & ELEVATION (2 OF 2)
3. GENERAL NOTES, QUANTITIES & PROFILE GRADE LINE
4. TYPICAL WALL SECTIONS (1 OF 2)
5. TYPICAL WALL SECTIONS (2 OF 2)
6. TEMPORARY WALL WIRE FACE (1 OF 2)
7. TEMPORARY WALL WIRE FACE (2 OF 2)
8. EXCAVATION DETAILS
9. SUBSURFACE EXPLORATION (1 OF 3)
10. SUBSURFACE EXPLORATION (2 OF 3)
11. SUBSURFACE EXPLORATION (3 OF 3)

LEGEND

- INDICATES FINAL ROADWAY LANE LOCATION AND DIRECTION OF TRAVEL AT CONCLUSION OF FUTURE CONTRACT 1060-27-72
- S — VERTICAL SLIP JOINT
- TEMPORARY WALL WIRE FACED MECHANICALLY STABILIZED EARTH LFCF, SEE TEMPORARY WALL WIRE FACE SHEET FOR DETAILS
- AT THE CONCLUSION OF FUTURE CONTRACT 1060-27-72
- E — EXPANSION JOINT

GEOTECHNICAL INSTRUMENTATION LEGEND

- VWP — VIBRATING WIRE PIEZOMETER
- INC — INCLINOMETER
- EXT — MULTIPLE POSITION BOREHOLE EXTENSOMETER
- TM — 3-AXIS TILTMETER
- LC — VIBRATING WIRE LOAD CELLS (ATTACHED TO TIEBACKS)
- EP — JACKOUT EARTH PRESSURE CELLS - (INSIDE SHAFT)
- SM — SURFACE SETTLEMENT MARKERS (IN PAVEMENT, LFCF, OR SOIL)
- SSM — STRUCTURE SETTLEMENT MARKERS (ATTACHED TO STRUCTURES)
- SG — STRAIN GAUGES PAIR (SISTER BAR)

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
AARON BONK (608) 261-0261
CONSULTANT:
MARK MADAY (414) 272-2426

WISCONSIN PAUL R. KRUM E-43964-6 WAUKESHA WI PROFESSIONAL ENGINEER 5/1/2025

NO.	DATE	REVISION	BY

Jacobs

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED EMK 06/04/25
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-40-767 (STAGE 1)

UPPER TIER LFCF MSE RETAINING WALL ALONG I-94 EB

COUNTY	~~TOWN~~/CITY/~~VILLAGE~~
MILWAUKEE	MILWAUKEE

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
ALR	PRK	ALR	PRK

GENERAL PLAN & ELEVATION (1 OF 2)

SHEET 1 OF 11
863

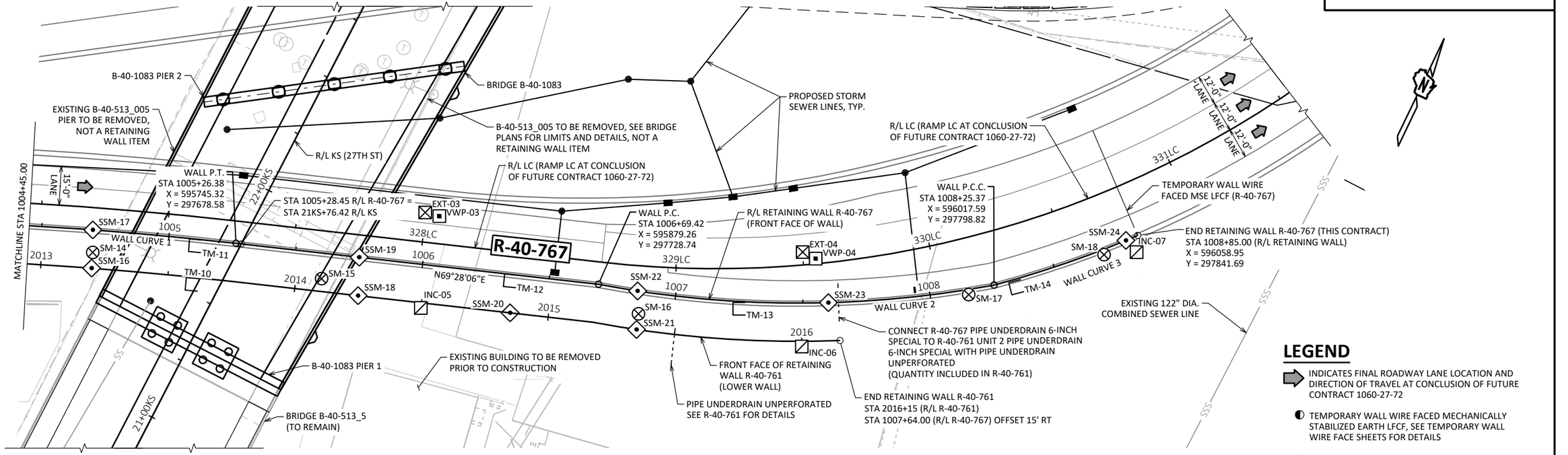
SCALE = 1:40

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-767\CDS\R0767_080101-102_GP.DWG
LAYOUT NAME - SHT_01

I.D. 1060-27-03 DATE: 5/1/2025

STATE PROJECT NUMBER

1060-27-74

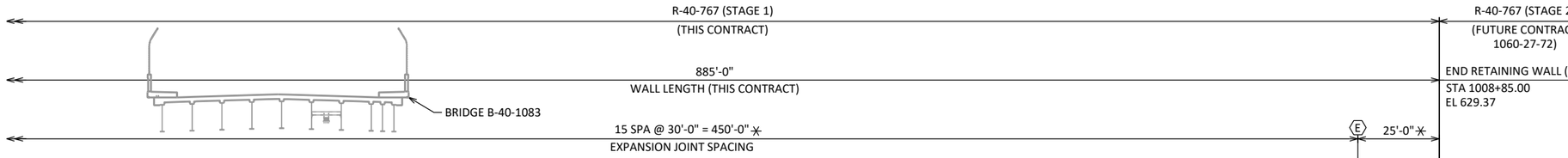


PLAN

(LFCF MSE RETAINING WALL)

LEGEND

- INDICATES FINAL ROADWAY LANE LOCATION AND DIRECTION OF TRAVEL AT CONCLUSION OF FUTURE CONTRACT 1060-27-72
- TEMPORARY WALL WIRE FACED MECHANICALLY STABILIZED EARTH LFCF, SEE TEMPORARY WALL WIRE FACE SHEETS FOR DETAILS
- AT CONCLUSION OF FUTURE CONTRACT 1060-27-72
- (E) EXPANSION JOINT



GEOTECHNICAL INSTRUMENTATION LEGEND

- VWP — VIBRATING WIRE PIEZOMETER
- INC — INCLINOMETER
- EXT — MULTIPLE POSITION BOREHOLE EXTENSOMETER
- TM — 3-AXIS TILTMETER
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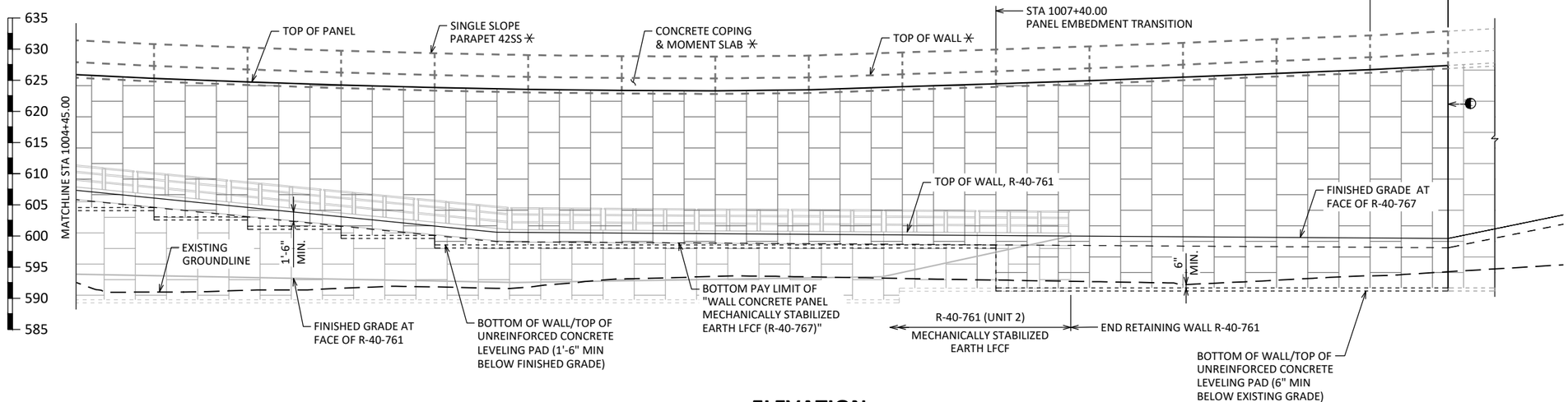


ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG THE FRONT FACE OF WALL)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-767 (STAGE 1)

DRAWN BY ALR | PLANS CK'D EKM

GENERAL PLAN & ELEVATION (2 OF 2)

SHEET 2 OF 11
864

SCALE = 1:40

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-767\CDS\R0767_080101-102_GP.DWG
LAYOUT NAME - SHT_02

8

8

STATE PROJECT NUMBER

1060-27-74

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BEVEL EXPOSED EDGES OF CONCRETE ¾", UNLESS NOTED OTHERWISE.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), MILWAUKEE COUNTY ZONE, NAD 83 (2007). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2007).

ALL DIMENSIONS ARE ALONG THE FRONT FACE OF WALL, UNLESS SHOWN OTHERWISE.

NAME PLATE TO BE INSTALLED IN STAGE 2 (FUTURE CONTRACT 1060-27-72).

BAR STEEL REINFORCEMENT SHALL HAVE 2" CLEAR COVER, UNLESS SHOWN OTHERWISE.

SOIL REINFORCEMENT MAY BE PLACED UP TO A MAXIMUM OF 15° FROM PERPENDICULAR IF NECESSARY TO AVOID INTERFERENCE WITH ITEMS BEHIND THE WALL. ANGLES GREATER THAN 15° REQUIRE APPROVAL FROM THE BUREAU OF STRUCTURES DESIGN SECTION.

ONLY WALL CONCRETE PANEL MSE WALL SYSTEMS THAT USE STRIP TYPE SOIL REINFORCEMENT THAT ARE HINGED AT THE PANEL CONNECTION CAN BE USED FOR THIS PROJECT.

THESE PLANS ARE FOR A PRECAST CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (MSE) RETAINING WALL.

THE QUANTITIES AND REINFORCEMENT DETAILS ARE BASED ON AN ASSUMED CONCRETE WALL PANEL THICKNESS OF 7 INCHES. FOR PANEL THICKNESS DIFFERENT THAN 7 INCHES, THE CONTRACTOR SHALL VERIFY REINFORCEMENT BAR DETAILS AND QUANTITIES AND WILL BE RESPONSIBLE FOR ANY QUANTITY VARIATIONS.

THE CONTRACTOR MUST COORDINATE THE CONSTRUCTION OF THE STORM SEWER COMPONENTS, INCLUDING INLETS, LATERALS AND STRUCTURES WITH THE CONSTRUCTION OF THE MSE WALL.

THE UTILITY 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 THEIR OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE. UTILITIES LABELED AS PROPOSED MAY BE INSTALLED BY OTHERS PRIOR TO THIS CONTRACT.

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALLS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS IS INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (R-40-767)".

THE COST OF FURNISHING AND PLACING THE UNREINFORCED CONCRETE LEVELING PAD UNDER THE MSE PRECAST WALL PANELS IS INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (R-40-767)".

THE VOLUME OF EARTHWORK REQUIRED TO INSTALL THE UNREINFORCED CONCRETE LEVELING PAD, MSE PRECAST WALL PANELS, MSE BACKFILL AND REINFORCING STRIPS IS INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (R-40-767)". SEE WALL EXCAVATION LIMITS DIAGRAM ON SHEET 8 FOR DETAILS.

THE PLAN QUANTITY FOR THE ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (R-40-767)" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF THE LEVELING PAD TO THE TOP OF PANEL AS SHOWN IN THE PLANS. THE TOP OF LEVELING PAD IS ASSUMED TO BE 1'-6" BELOW FINISHED GRADE FROM STA 1000+00.00 TO STA 1007+40.00 AND 6" BELOW EXISTING GROUND FROM STA 1007+40.00 TO STA 1008+85.00. WALL AREAS CONSTRUCTED OUTSIDE THESE LIMITS WILL NOT BE MEASURED FOR PAYMENT.

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE CONTRACTOR MUST COORDINATE THE REMOVAL OF EXISTING STRUCTURE B-40-513_5 AND CONSTRUCTION OF THE BRIDGE B-40-1083 WITH CONSTRUCTION OF RETAINING WALLS R-40-761 AND R-40-767. THE EXISTING BRIDGE B-40-513_5 IS A FOUR-SPAN STEEL DECK PLATE GIRDER BRIDGE.

THE COST OF FURNISHING AND PLACING LIGHTWEIGHT FOAMED CONCRETE FILL (LFCF) WITHIN THE REINFORCED SOIL ZONE IS TO BE INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF". SEE ROADWAY PLANS FOR THE QUANTITY OF LIGHTWEIGHT FOAMED CONCRETE FILL OUTSIDE OF THE REINFORCED SOIL ZONE.

LIGHTWEIGHT FOAMED CONCRETE FILL (LFCF) SHALL BE PLACED IN LIFTS NOT EXCEEDING 4 FEET IN DEPTH. EACH SUCCESSIVE LIFT WILL BE PLACED AFTER A MINIMUM OF 24 HOURS.

THE CONTRACTOR SHALL PROVIDE SUITABLE SUPPORTS FOR THE MSE REINFORCEING STRIPS AND FACING PANELS DURING PLACEMENT OF LIGHTWEIGHT FOAMED CONRETE FILL.

THE STANDARD PANEL SIZE SHALL BE 5' HIGH X 10' WIDE. 5' HIGH BY 5' WIDE STANDARD PANELS WILL NOT BE ALLOWED.

THIS CONTRACT COVERS STAGE 1 CONSTRUCTION OF R-40-767. STAGE 2 WILL BE CONSTRUCTED IN FUTURE PROJECT ID 1060-27-72.

SEE R-40-761 PLANS FOR WALL INSTRUMENTATION DETAILS AND NOTES.

R-40-767 CONSTRUCTION SHALL NOT COMMENCE UNTIL THE R-40-761 (UNIT1) CAST IN PLACE CONCRETE FACING HAS BEEN PLACED AND HAS REACHED DESIGN STRENGTH.

WALL EXTERNAL STABILITY EVALUATION

WALL DIMENSIONS				
R/L RETAINING WALL STATION	1000+49	1004+00 [1]	1007+50 [1]	1008+85
DESIGN WALL HEIGHT (FT)	26.5	21.0	29.0	36.0
DESIGN EXPOSED WALL HEIGHT (FT)	24.5	19.0	27.0	29.0
REINFORCEMENT RATIO	0.70H	0.70H	0.9H	0.9H
WALL STATION	1000+00 TO 1003+80	1003+80 TO 1006+40	1006+40 TO 1007+64	1007+64 TO 1008+85
BORING USED	REFER TO GEOTECHNICAL REPORT			
CAPACITY TO DEMAND RATIO (CDR)				
SLIDING [3]	1.32	1.12	1.24	1.26
ECCENTRICITY [3]	1.09	1.29	1.47	2.65
BEARING [3]	1.47	3.25	3.78	1.08
GLOBAL STABILITY [3]	1.01	1.00	NP [2]	1.06
FACTORED BEARING RESISTANCE (KSF)	5,400	2,800	3,000	3,600

NOTES:
[1] THIS WALL IS PART OF A SUPERIMPOSED (TIERED) MSE WALL AND SHOULD BE DESIGNED AS ONE TIERED WALL.
[2] NP: NOT PERFORMED. GLOBAL STABILITY WAS NOT PERFORMED AT THIS SECTION AS THE PREVIOUS SECTION IS MORE CRITICAL.
[3] THE CDR VALUES SHOWN ARE THE MINIMUM BETWEEN THE UNDRAINED AND DRAINED ANALYSIS.

ESTIMATE OF QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTAL
516.0100	DAMPPROOFING	SY	6,800
SPV.0060.4810	RETAINING WALL INSTRUMENTATION	EACH	1
SPV.0090.0260	PIPE UNDERDRAIN 6-INCH SPECIAL	LF	885
SPV.0165.4100	TEMPORARY WALL WIRE FACED MECHANICALLY STABILIZED EARTH LFCF (R-40-767)	SF	1,895
SPV.0165.4767	WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (R-40-767)	SF	21,190

ALL ITEMS ARE CATEGORY 3010

SOIL PARAMETERS

SOIL DESCRIPTION	UNIT WEIGHT (PCF)	UNDRAINED		DRAINED	
		FRICTION ANGLE (DEGREES)	COHESION (PSF)	FRICTION ANGLE (DEGREES)	COHESION (PSF)
NEW GRANULAR FILL	125	---	---	32	---
EXISTING BACKFILL	125	---	1250 TO 2000	30	50
SOFT-MEDIUM STIFF CLAY	125	---	750 TO 1000	28	0
PEAT AND ORGANIC SOILS	90	---	500	20	0
LOOSE TO MEDIUM DENSE SAND	120	---	---	29	0
GLACIAL TILL	135	---	3500	35	0

MSE WALL SOIL PARAMETERS

TYPE	DRY UNIT WEIGHT (PCF)	MINIMUM UNCONFINED COMPRESSIVE STRENGTH AT 28 DAYS (PSI)
LFCF GRADE 1	30 - 34	70
LFCF GRADE 2 (TOP 3 FEET)	40 - 46	120

DESIGN DATA

DESIGN SPECIFICATIONS:
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS,
9TH EDITION, 2020

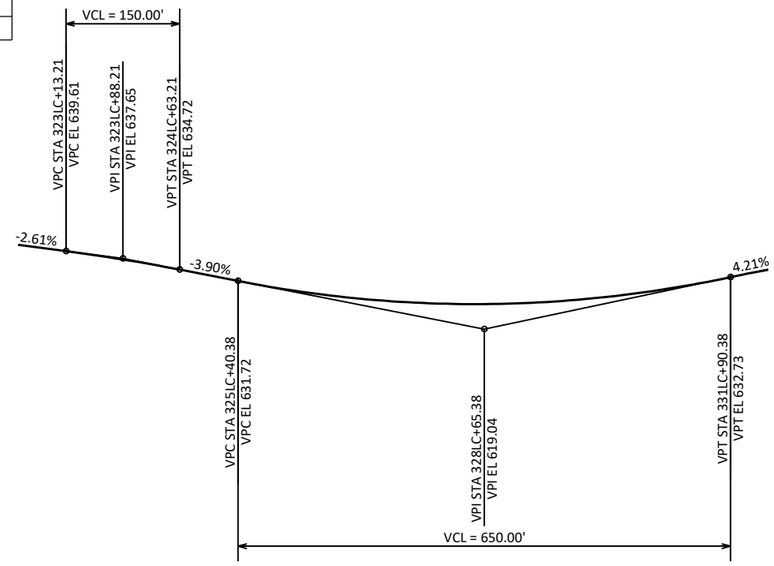
LIVE LOAD:
LIVE LOAD SURCHARGE (ROADWAY) _____ 240 PSF

MATERIAL PROPERTIES:
CONCRETE MASONRY RETAINING WALL ___ f'c = 4,000 PSI
PRECAST CONCRETE WALL PANELS _____ f'c = 4,000 PSI
BAR STEEL REINFORCEMENT _____ Fy = 60,000 PSI

DESIGN THE MSE WALL FOR A HORIZONTAL BACKSLOPE BEHIND THE WALL AND A LIVE LOAD VERTICAL SURCHARGE OF 240 PSF.

HORIZONTAL CURVE DATA

WALL CURVE 1	WALL CURVE 2	WALL CURVE 3
P.I. = STA 1004+34.21	P.I. = STA 1007+48.30	P.I. = STA 1008+55.24
X = 595658.77	X = 595955.00	X = 596039.79
Y = 297646.16	Y = 297750.81	Y = 297818.79
Δ = 7°05'32"	Δ = 21°14'12"	Δ = 8°07'10"
D = 3°50'32"	D = 13°37'03"	D = 13°37'03"
L = 184.59'	L = 155.95'	L = 59.63'
T = 92.41'	T = 78.88'	T = 29.86'
R = 1491.25'	R = 420.75'	R = 420.75'
P.C. = STA 1003+41.79	P.C. = STA 1006+69.42	P.C.C. = STA 1008+25.37
X = 595576.89	X = 595879.27	X = 596017.59
Y = 297603.32	Y = 297728.74	Y = 297798.82
P.T. = STA 1005+26.38	P.C.C. = STA 1008+25.37	P.T. = STA 1008+85.00
X = 595745.32	X = 596017.59	X = 596058.95
Y = 297678.58	Y = 297798.82	Y = 297841.69



PROFILE GRADE LINE - LC

IH-94 EXIT RAMP TO 26TH ST AND ST PAUL AVE
(AT CONCLUSION OF FUTURE CONTRACT 1060-27-72)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-767 (STAGE 1)

DRAWN BY MTZ | PLANS CK'D EKM

GENERAL NOTES, QUANTITIES & PROFILE GRADE LINE

SHEET 3 OF 11
865

SCALE = N/A

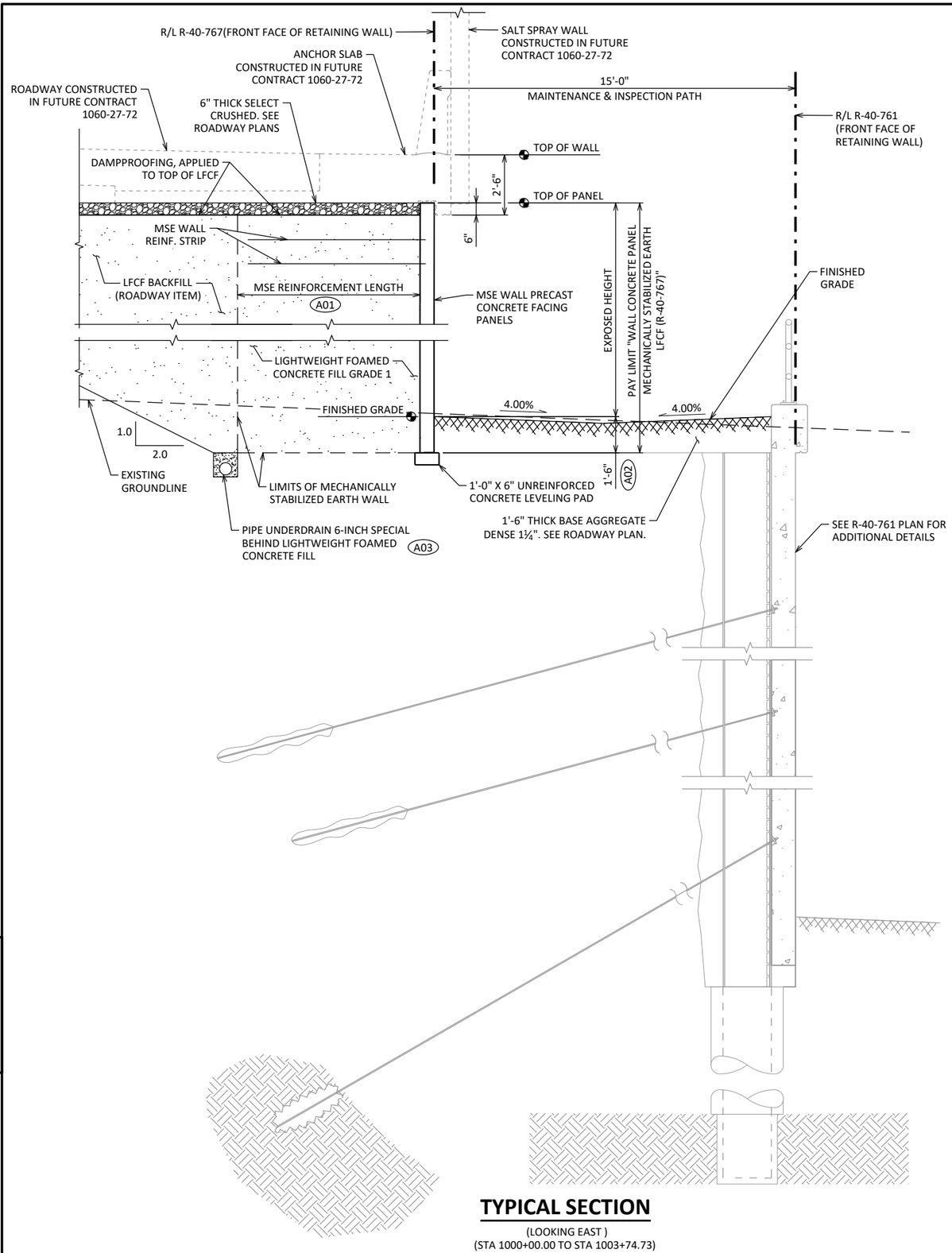
8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-767\CDS\R0767_080103_GN.DWG
LAYOUT NAME - SHT_03

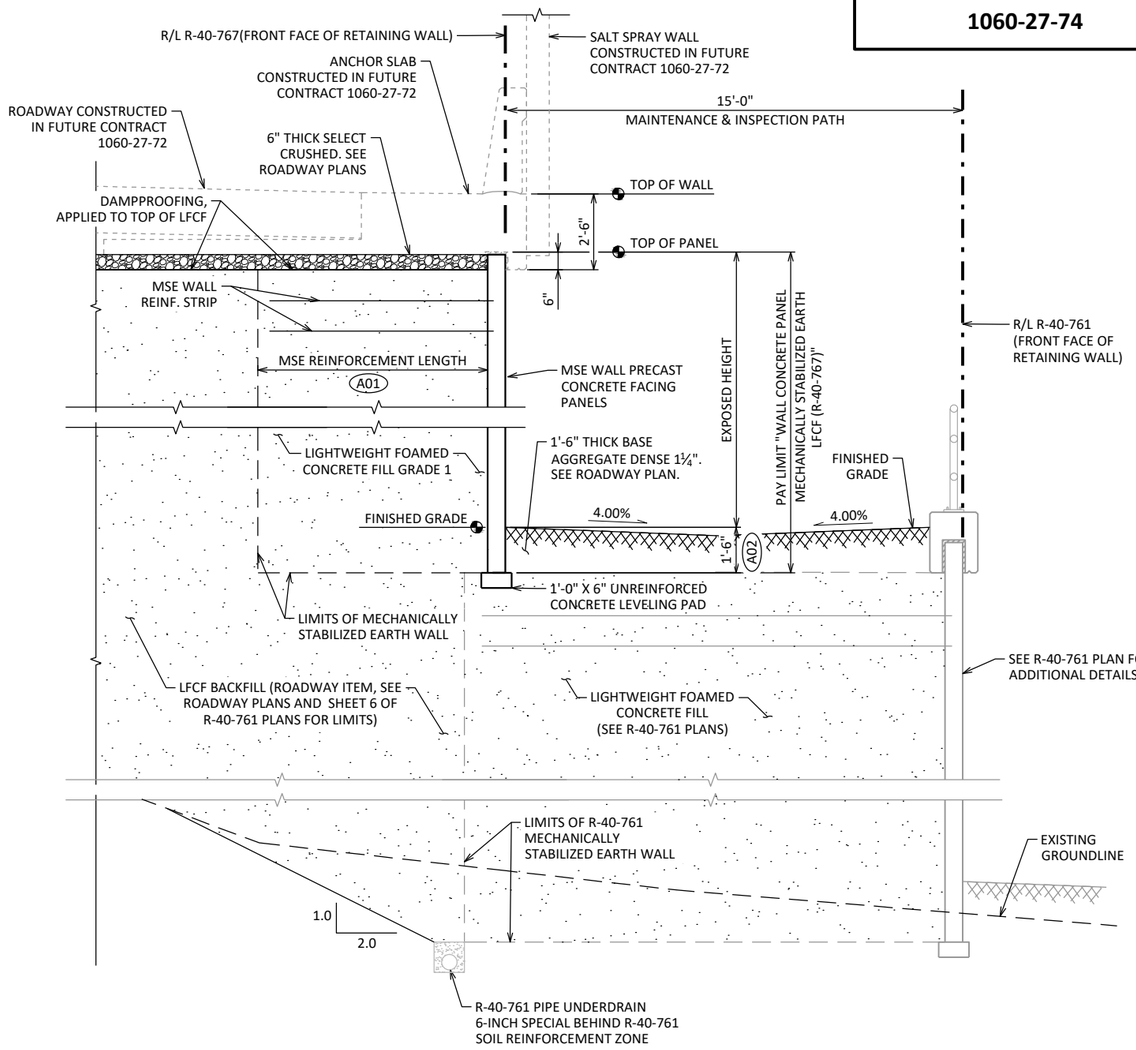
STATE PROJECT NUMBER

1060-27-74



TYPICAL SECTION

(LOOKING EAST)
(STA 1000+00.00 TO STA 1003+74.73)



TYPICAL SECTION

(LOOKING EAST)
(STA 1003+74.73 TO STA 1007+65.00)

LEGEND

(A01) SEE WALL EXTERNAL STABILITY EVALUATION ON SHEET 3 FOR MINIMUM LENGTH OF MSE WALL REINFORCING STRIPS. SOIL REINFORCEMENT MUST EXTEND A MINIMUM OF 3.0 FEET BEYOND THE FAILURE PLANE FOR INTERNAL STABILITY AS DEFINED BY AASHTO SPECIFICATIONS.

(A02) MINIMUM DIMENSION FROM FUTURE FINISHED GRADE AT FRONT FACE OF WALL TO TOP OF LEVELING PAD AS SHOWN. COORDINATE CONSTRUCTION OF THE LEVELING PAD WITH THE WALL PANEL FABRICATOR, PAY LIMITS BASED ON MINIMUM DIMENSION.

(A03) PIPE UNDERDRAIN TO BE CAPPED AT WEST END OF R-40-767. SLOPE UNDERDRAIN TO THE EAST. AT THE END OF R-40-761 UNIT 1, DROP R-40-767 UNDERDRAIN TO CONNECT TO R-40-761 UNIT 2 UNDERDRAIN AND DISCHARGE AT R-40-761 STA 2015+50, 45' RT. NO R-40-767 UNDERDRAIN NECESSARY ABOVE R-40-761 UNIT 2.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-767 (STAGE 1)

DRAWN BY GLM | PLANS CK'D EKM

TYPICAL WALL SECTIONS (1 OF 2)

SHEET 4 OF 11
866

SCALE = 1 IN:5FT

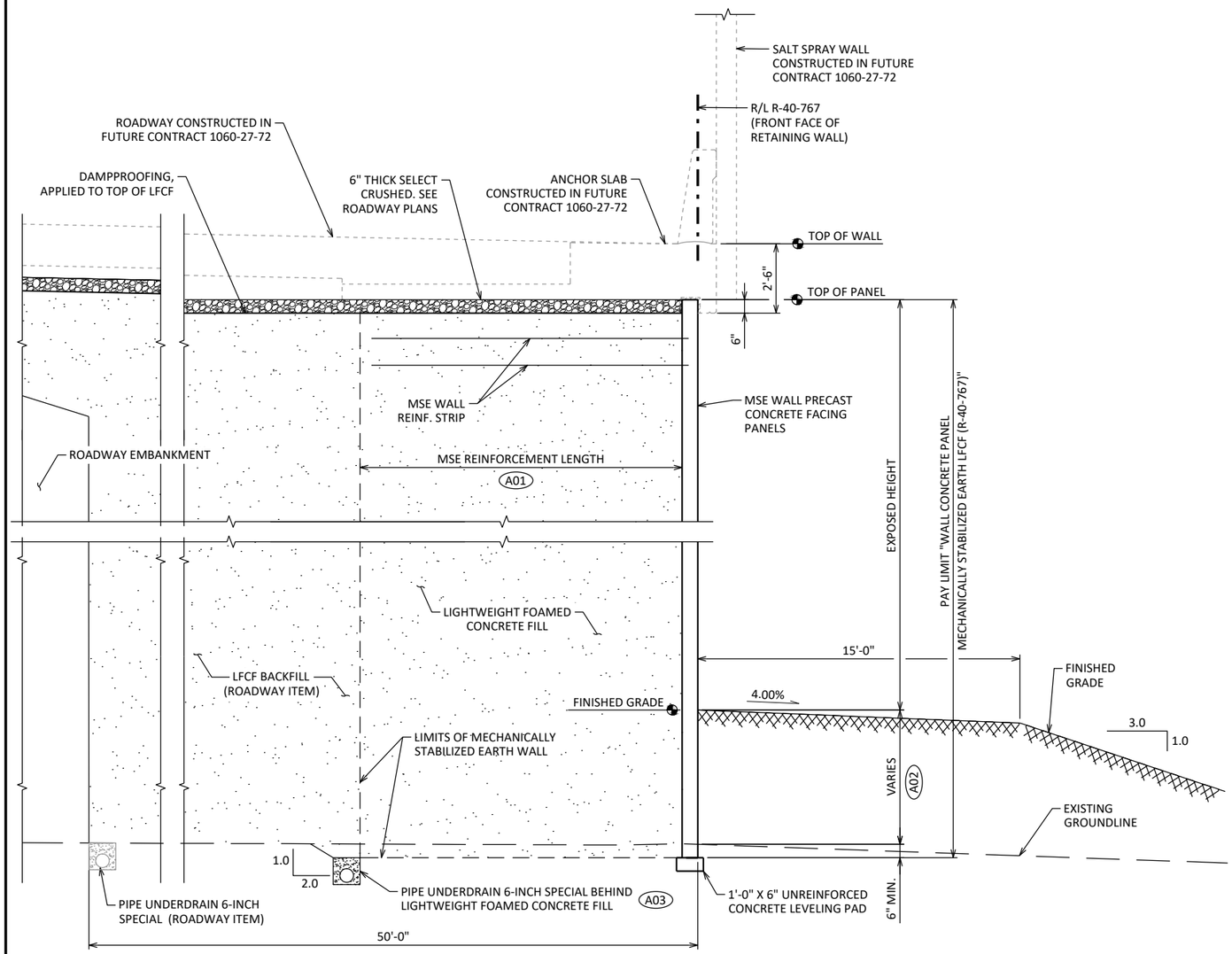
8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-767\CDS\R0767_080204_TS.DWG
LAYOUT NAME - SHT_04

STATE PROJECT NUMBER

1060-27-74



TYPICAL SECTION

(LOOKING EAST)
(STA 1007+65.00 TO STA 1008+85.00)

WALL ELEVATIONS

STATION	PANEL LENGTH (FT)	TOP OF WALL ✳	TOP OF PANEL ◐	EXISTING GROUND	FINISHED GRADE AT R-40-767 WALL FACE
1000+00.00	---	642.44	640.44	616.42	618.02
1000+30.00	30	641.62	639.62	616.10	616.53
1000+55.00	25	640.90	638.90	615.66	616.28
1000+80.00	25	640.17	638.17	615.34	616.03
1001+10.00	30	639.37	637.37	615.11	615.73
1001+40.00	30	638.56	636.56	615.11	615.43
1001+70.00	30	637.67	635.67	615.11	615.13
1002+00.00	30	636.70	634.70	615.12	614.83
1002+30.00	30	635.65	633.65	615.20	614.53
1002+60.00	30	634.53	632.53	615.24	614.23
1002+90.00	30	633.36	631.36	615.26	613.93
1003+20.00	30	632.19	630.19	612.53	613.05
1003+50.00	30	631.03	629.03	609.12	612.07
1003+80.00	30	629.86	627.86	601.03	610.57
1004+10.00	30	628.89	626.89	596.96	609.07
1004+40.00	30	628.03	626.03	593.43	607.57
1004+70.00	30	627.30	625.30	590.99	606.07
1005+00.00	30	626.75	624.75	591.29	604.58
1005+30.00	30	626.23	624.23	591.60	603.08
1005+60.00	30	625.83	623.83	591.83	601.58
1005+90.00	30	625.54	623.54	591.79	600.55
1006+20.00	30	625.37	623.37	593.10	600.46
1006+50.00	30	625.30	623.30	593.50	600.36
1006+80.00	30	625.45	623.45	593.44	600.26
1007+10.00	30	625.96	623.96	593.18	600.17
1007+40.00	30	626.44	624.44	592.92	600.07
1007+70.00	30	626.93	624.93	592.68	599.98
1008+00.00	30	627.51	625.51	592.17	599.88
1008+30.00	30	628.10	626.10	592.91	599.78
1008+60.00	30	628.69	626.69	593.60	599.69
1008+85.00	25	629.37	627.37	594.26	599.61

LEGEND

✳ AT CONCLUSION OF FUTURE CONTRACT 1060-27-72

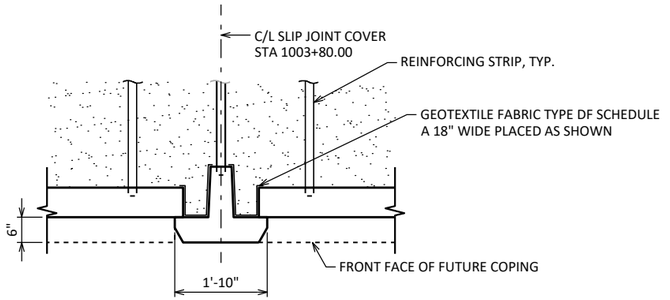
◥ LINEARLY INTERPOLATE WALL ELEVATIONS BETWEEN STATIONS.

◐ TOP OF PANEL ELEVATION TOLERANCE IS 1"±. THIS IS TO ACCOMMODATE TO THE EXTENTS POSSIBLE THE OPTION OF FABRICATING PANELS THAT ARE LEVEL ON TOP.

(A01) SEE WALL EXTERNAL STABILITY EVALUATION ON SHEET 3 FOR MINIMUM LENGTH OF MSE WALL REINFORCING STRIPS. SOIL REINFORCEMENT MUST EXTEND A MINIMUM OF 3.0 FEET BEYOND THE FAILURE PLANE FOR INTERNAL STABILITY AS DEFINED BY AASHTO SPECIFICATIONS.

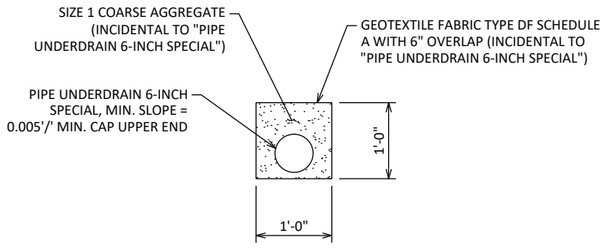
(A02) MINIMUM DIMENSION FROM FUTURE FINISHED GRADE AT FRONT FACE OF WALL TO TOP OF LEVELING PAD AS SHOWN. COORDINATE CONSTRUCTION OF THE LEVELING PAD WITH THE WALL PANEL FABRICATOR, PAY LIMITS BASED ON MINIMUM DIMENSION.

(A03) PIPE UNDERDRAIN TO BE CAPPED AT THE EAST END OF R-40-767 STAGE 1. SLOPE UNDERDRAIN TO WEST. AT STA 1008+85.00 CONNECT R-40-767 UNDERDRAIN TO R-40-761 UNIT 2 UNDERDRAIN AND DAYLIGHT TO SUITABLE DRAINAGE AT R-40-761 STA 2015+50±.



SLIP JOINT DETAIL

(STA 1003+80.00)



PIPE UNDERDRAIN 6-INCH SPECIAL DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-767 (STAGE 1)

DRAWN BY ALR | PLANS CK'D EKM

TYPICAL WALL SECTIONS (2 OF 2)

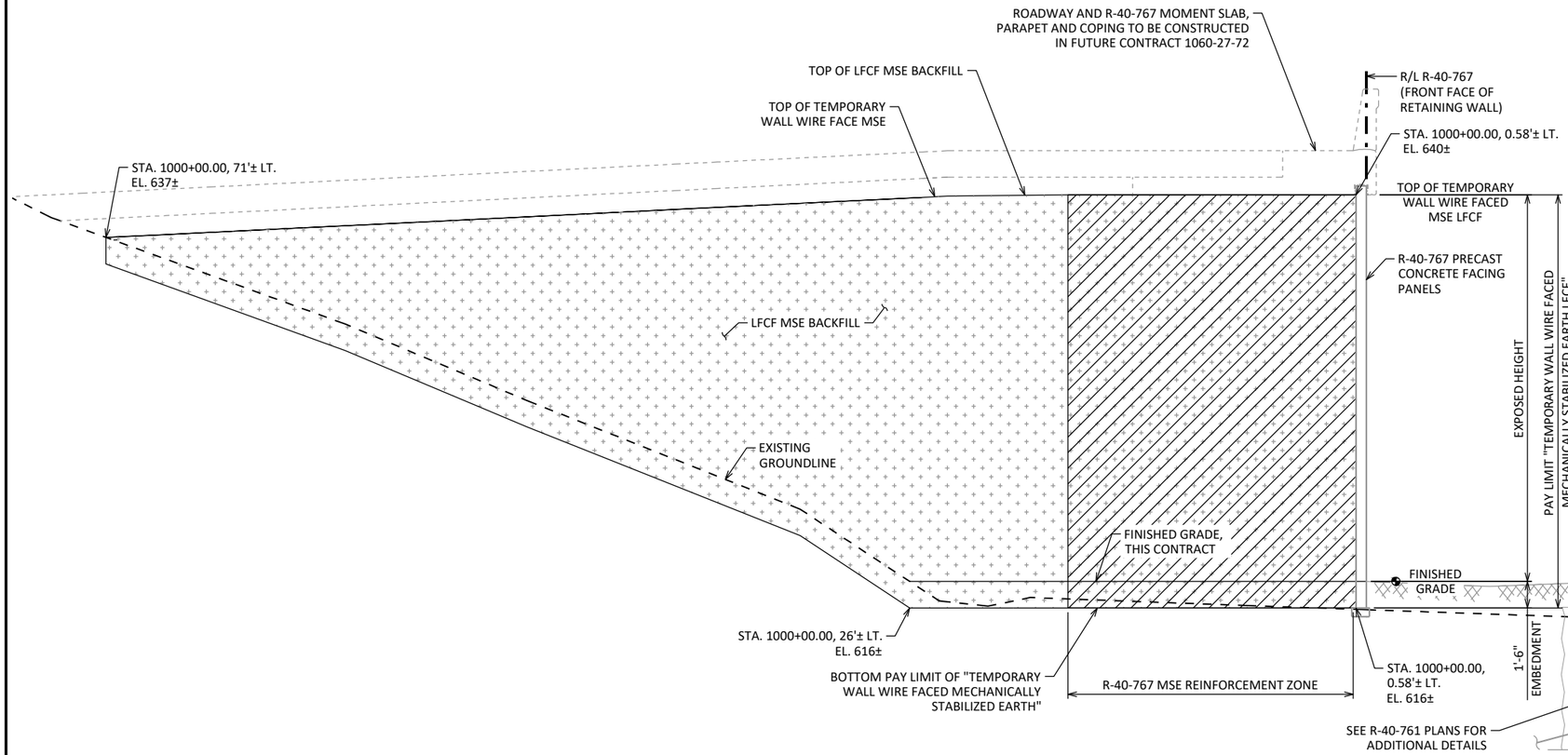
SHEET 5 OF 11
867

SCALE = 1 IN:5FT

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-767\CDS\R0767_080205_TS.DWG
LAYOUT NAME - SHT_05

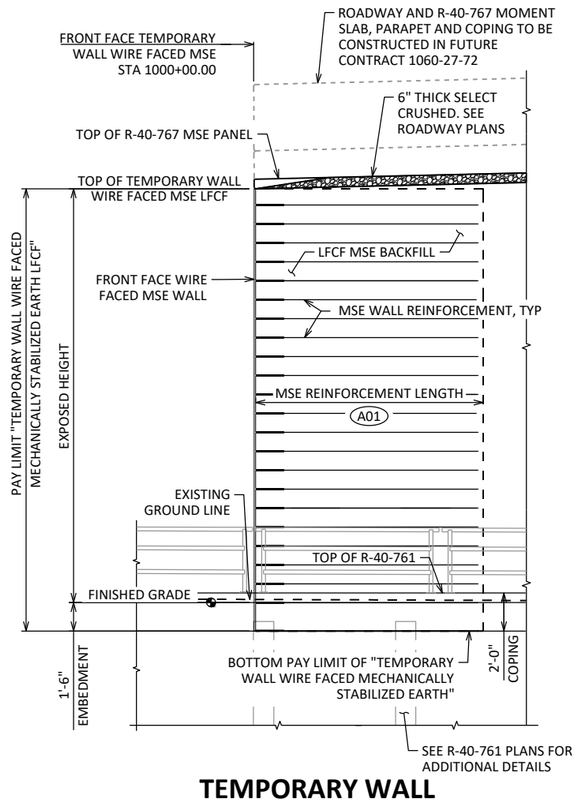
STATE PROJECT NUMBER

1060-27-74



ELEVATION AT FRONT FACE OF TEMPORARY WALL WIRE FACE

(LOOKING EAST AT FRONT FACE OF TEMPORARY WALL WIRE FACED LFCF, STA. 1000+00.00)



TEMPORARY WALL WIRE FACE - TYPICAL SECTION

(LOOKING NORTH AT FRONT FACE OF RETAINING WALL R-40-767)

8

LEGEND

- LFCF MSE BACKFILL - INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (R-40-467)"
- TEMPORARY WALL WIRE FACED
- 6" THICK SELECT CRUSHED - NOT A RETAINING WALL ITEM. SEE ROADWAY PLANS.
- (A01) SEE WALL EXTERNAL STABILITY EVALUATION ON SHEET 3 FOR MINIMUM LENGTH OF MSE WALL REINFORCING STRIPS. SOIL REINFORCEMENT MUST EXTEND A MINIMUM OF 3.0 FEET BEYOND THE FAILURE PLANE FOR INTERNAL STABILITY AS DEFINED BY AASHTO SPECIFICATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-767 (STAGE 1)

DRAWN BY ALR | PLANS CK'D EKM

TEMPORARY WALL WIRE FACE (1 OF 2)

SHEET 6 OF 11

868

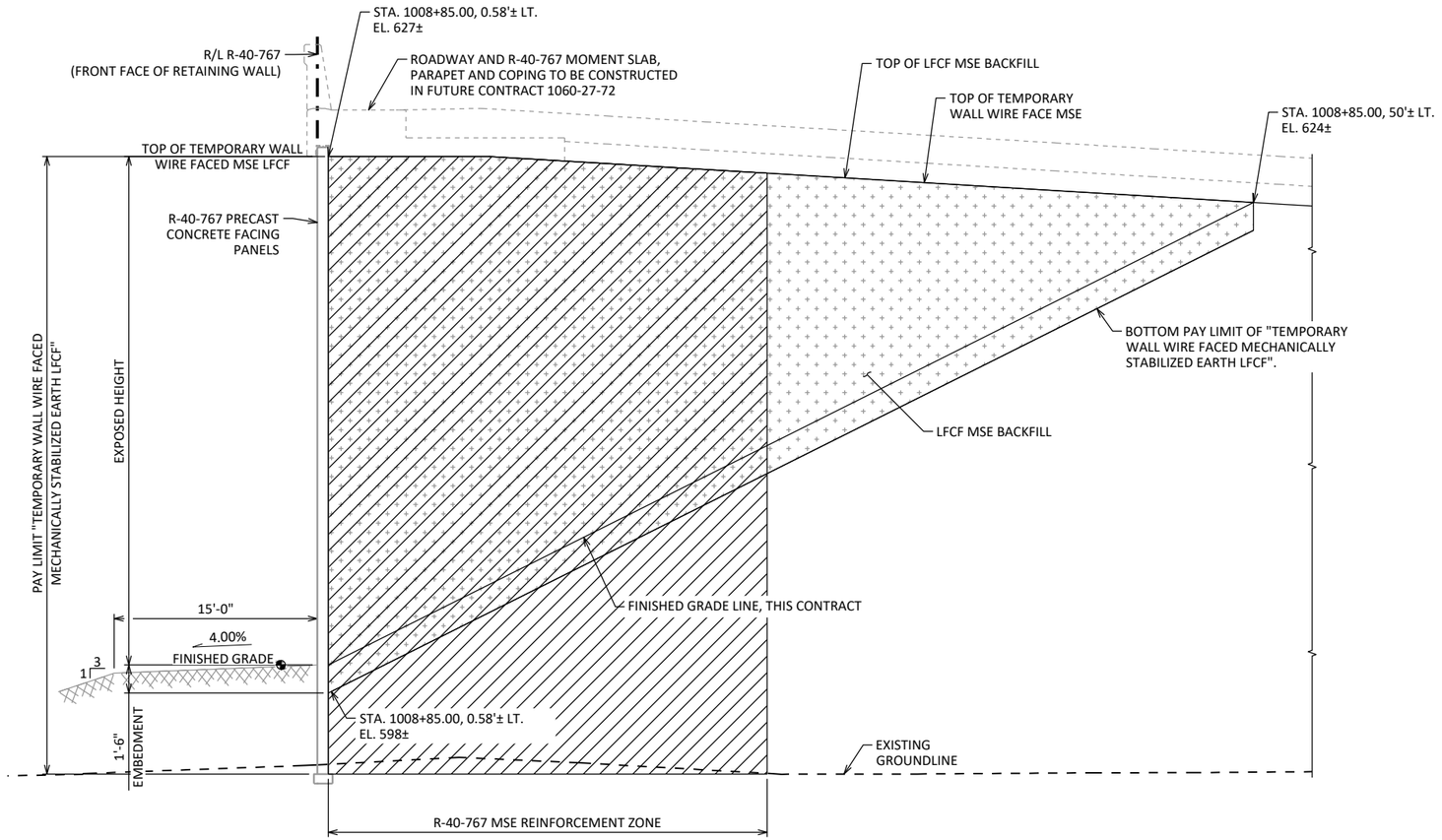
SCALE = 1IN:8FT

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-767\CDS\R0767_080206_DE.DWG
LAYOUT NAME - SHT_06

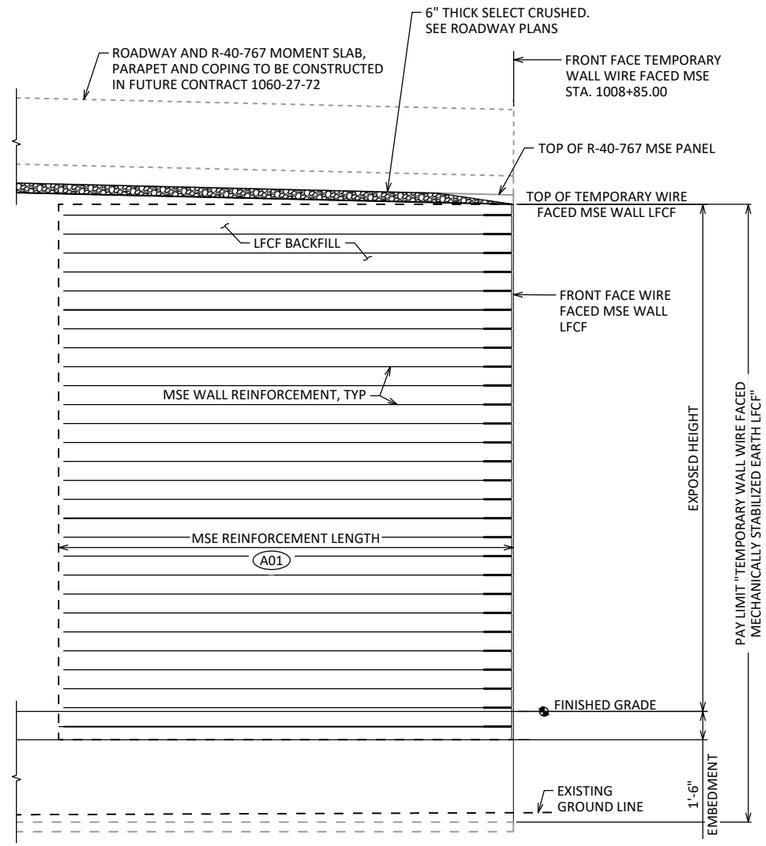
STATE PROJECT NUMBER

1060-27-74



ELEVATION AT FRONT FACE OF TEMPORARY WALL WIRE FACE

(LOOKING WEST AT FRONT FACE OF TEMPORARY WALL WIRE FACE MSE LFCF, STA 1008+85.00)



TEMPORARY WALL WIRE FACED WALL - TYPICAL SECTION

(LOOKING NORTH AT FRONT FACE OF RETAINING WALL R-40-767)

8

8

LEGEND

- LFCF MSE BACKFILL - INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF (R-40-467)"
- TEMPORARY WALL WIRE FACED
- 6" THICK SELECT CRUSHED - NOT A RETAINING WALL ITEM. SEE ROADWAY PLANS.
- (A01) SEE WALL EXTERNAL STABILITY EVALUATION ON SHEET 3 FOR MINIMUM LENGTH OF MSE WALL REINFORCING STRIPS. SOIL REINFORCEMENT MUST EXTEND A MINIMUM OF 3.0 FEET BEYOND THE FAILURE PLANE FOR INTERNAL STABILITY AS DEFINED BY AASHTO SPECIFICATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-767 (STAGE 1)

DRAWN BY	ALR	PLANS CK'D	EKM

TEMPORARY WALL WIRE FACE (2 OF 2)

SHEET 7 OF 11

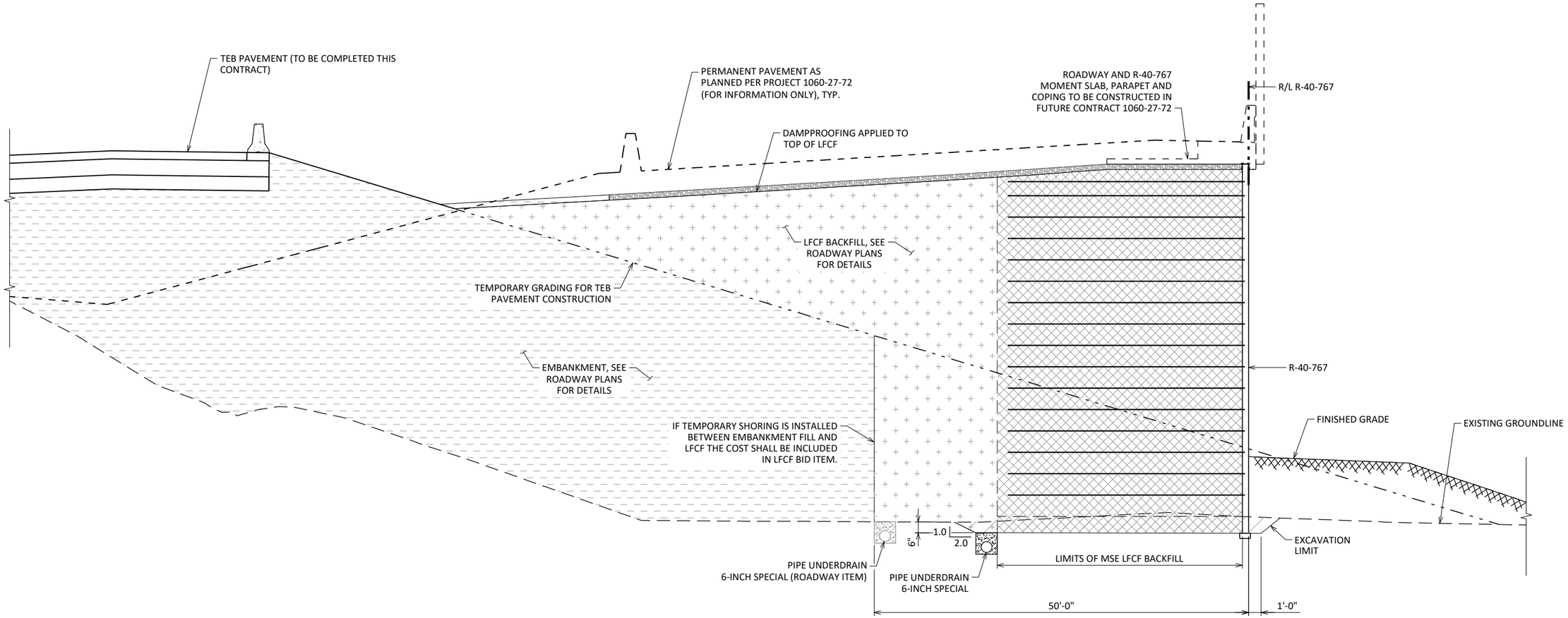
869

SCALE = 1IN:8FT

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-767\CDS\R0767_080207_DE.DWG
LAYOUT NAME - SHT_07

STATE PROJECT NUMBER

1060-27-74



WALL EXCAVATION LIMITS DIAGRAM

(LOOKING EAST)

LEGEND

- WALL EXCAVATION - INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF R-40-767"
- EMBANKMENT FILL MATERIAL - NOT A RETAINING WALL ITEM. SEE ROADWAY PLANS.
- LFCF MSE BACKFILL - INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LFCF R-40-767".
- LFCF FILL MATERIAL - NOT A RETAINING WALL ITEM. SEE ROADWAY PLANS.
- 6" THICK SELECT CRUSHED - NOT A RETAINING WALL ITEM. SEE ROADWAY PLANS.

NOTE

SEE R-40-761 PLANS (SHEET 6 OF 38) FOR EXCAVATION/BACKFILL LIMITS OF R-40-767 AT R-40-761

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-767 (STAGE 1)

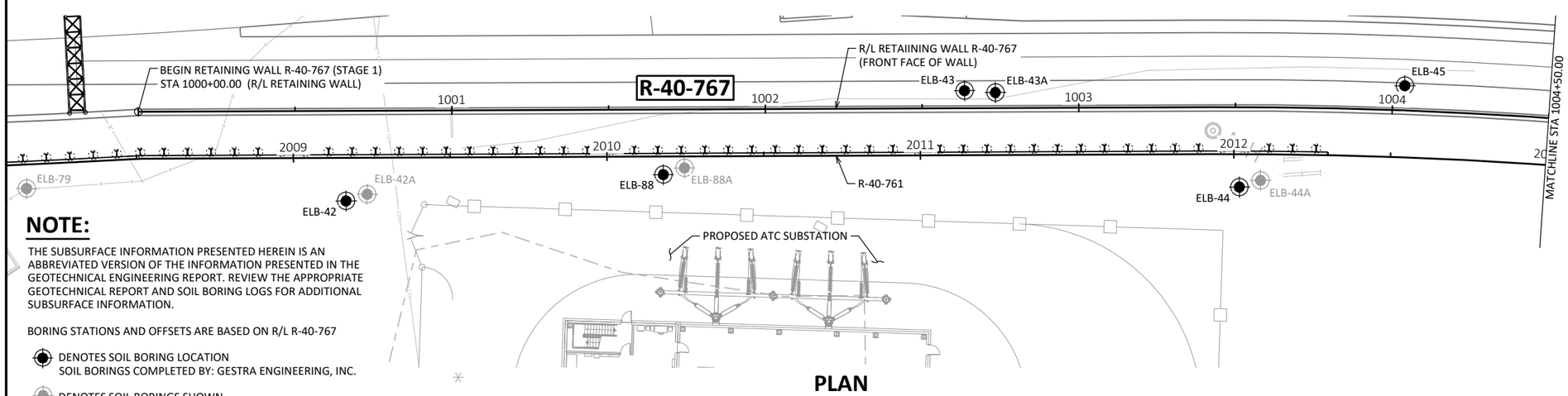
DRAWN BY ALR | PLANS CK'D PRK

EXCAVATION DETAILS

SHEET 8 OF 11
870

SCALE = 1:10

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-767\CDS\R0767_080508_EX.DWG
LAYOUT NAME - SHT_08



PLAN

(MSE LFCF RETAINING WALL)

NOTE:

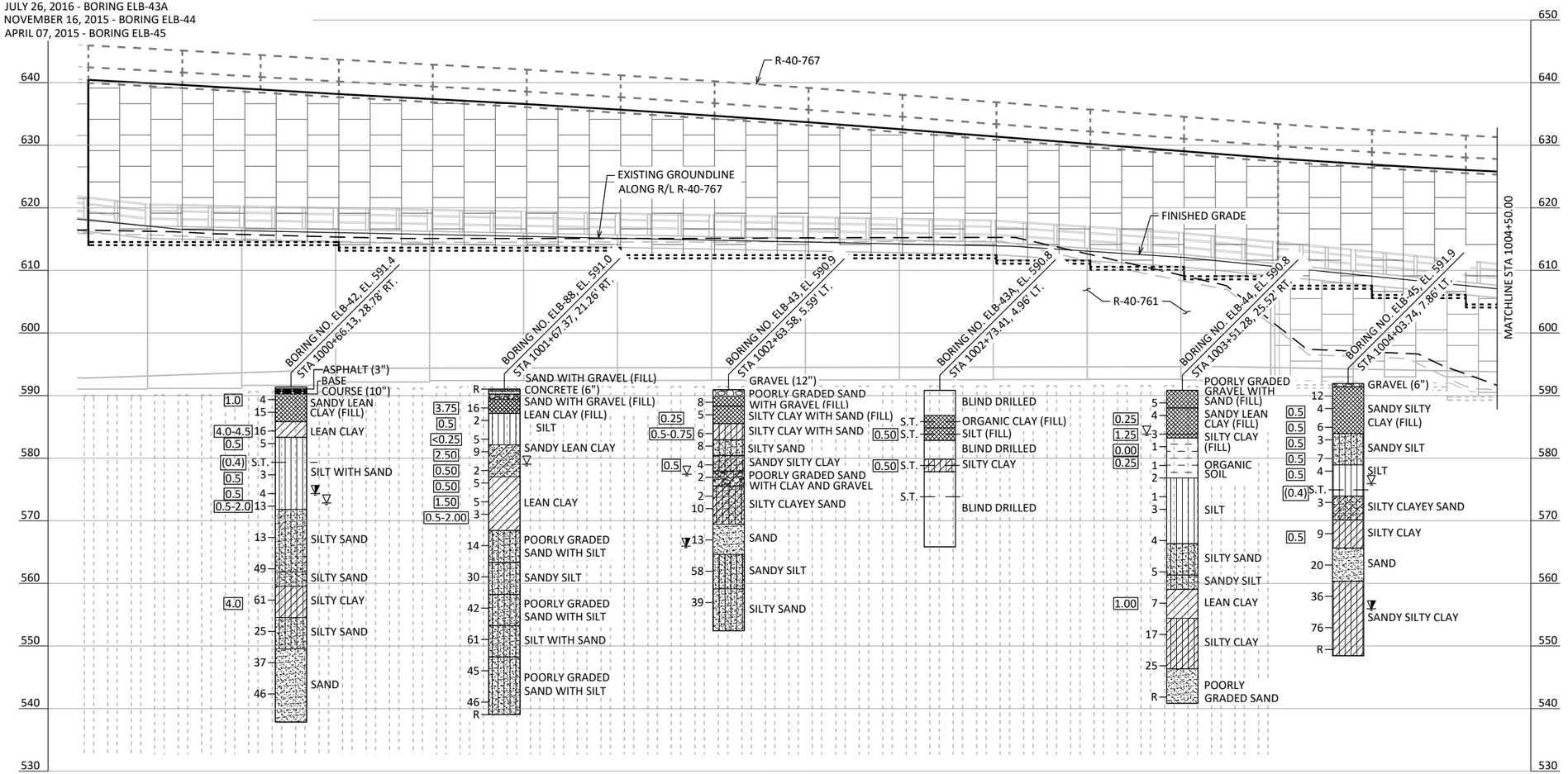
THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

BORING STATIONS AND OFFSETS ARE BASED ON R/L R-40-767

DENOTES SOIL BORING LOCATION
SOIL BORINGS COMPLETED BY: GESTRA ENGINEERING, INC.

DENOTES SOIL BORINGS SHOWN ON SHEET 10 OF 11.

SOIL BORINGS TAKEN:
APRIL 07, 2015 - BORING ELB-42
NOVEMBER 11, 2016 - BORING ELB-88
APRIL 07, 2015 - BORING ELB-43
JULY 26, 2016 - BORING ELB-43A
NOVEMBER 16, 2015 - BORING ELB-44
APRIL 07, 2015 - BORING ELB-45



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)

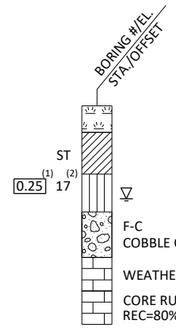
STATE PROJECT NUMBER

1060-27-74

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

AT TIME OF DRILLING
END OF DRILLING
AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-767 (STAGE 1)

DRAWN BY TMH | PLANS CK'D EKM

SUBSURFACE EXPLORATION (1 OF 3)

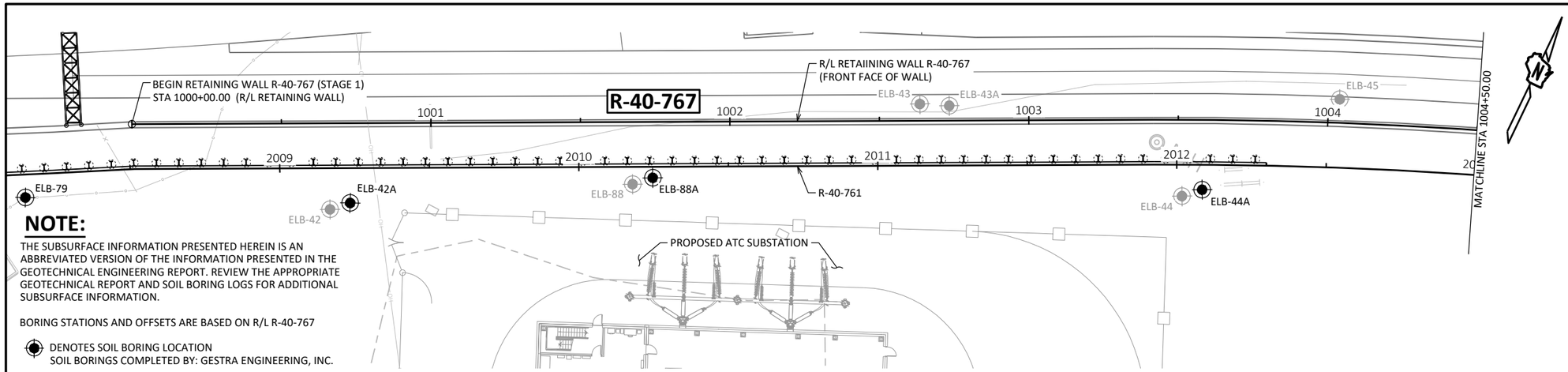
SHEET 9 OF 11
871

SCALE = 1:40

8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-767\CDS\R0767_080509-11_SE.DWG
LAYOUT NAME - SHT_09



NOTE:

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BORING STATIONS AND OFFSETS ARE BASED ON R/L R-40-767

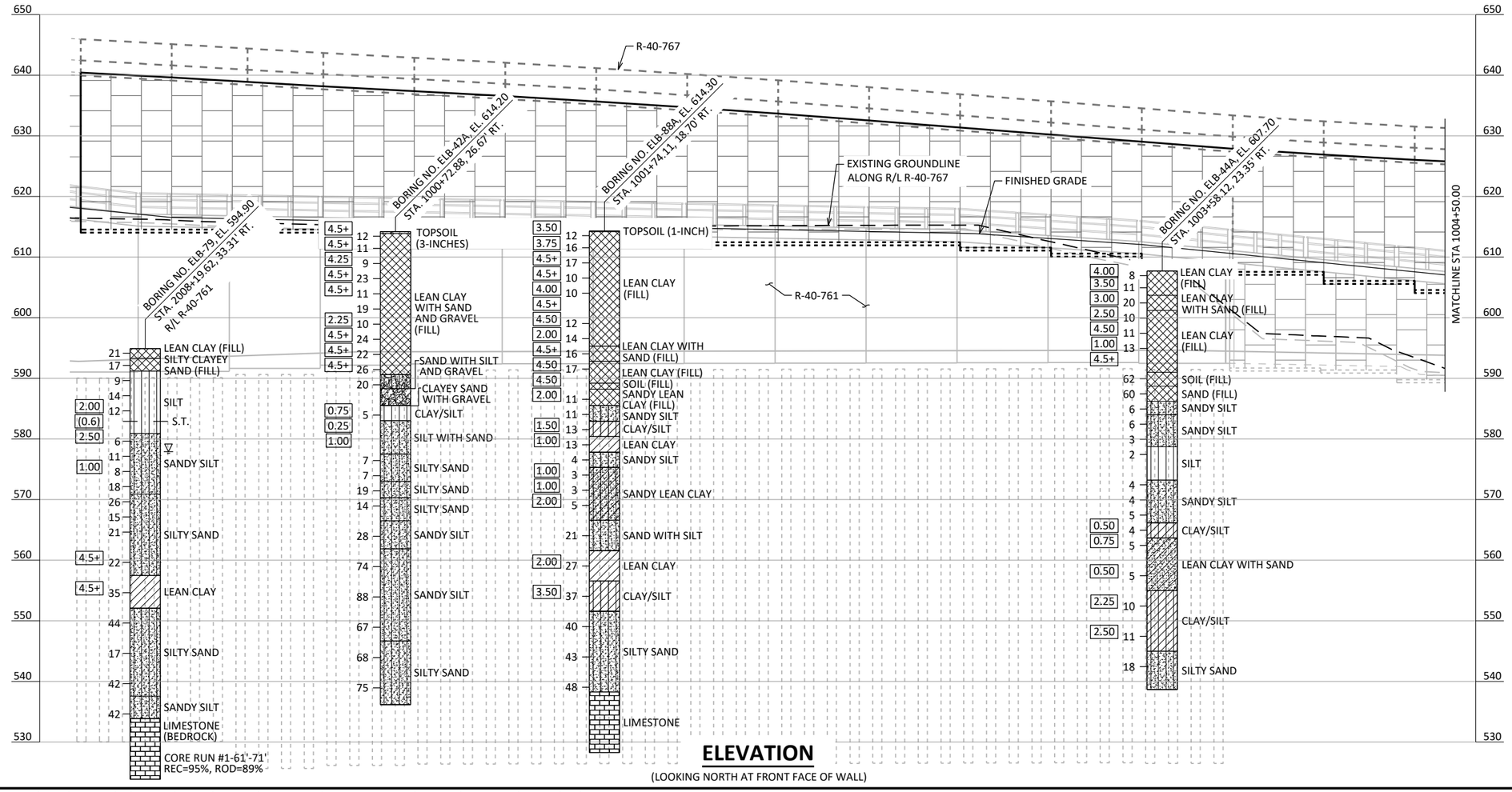
DENOTES SOIL BORING LOCATION
SOIL BORINGS COMPLETED BY: GESTRA ENGINEERING, INC.

DENOTES SOIL BORINGS SHOWN ON SHEET 9 OF 11.

SOIL BORINGS TAKEN:
JULY 26, 2016 - BORING ELB-79
APRIL 15, 2024 - BORING ELB-42A
JANUARY 4, 2024 - BORING ELB-88A
JANUARY 4, 2024 - BORING ELB-44A

PLAN

(MSE LFCF RETAINING WALL)



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)

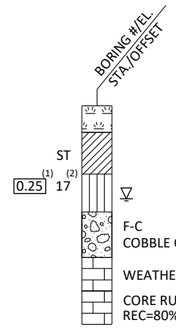
STATE PROJECT NUMBER

1060-27-74

MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

AT TIME OF DRILLING
END OF DRILLING
AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-767 (STAGE 1)

DRAWN BY TMH | PLANS CK'D EKM

SUBSURFACE EXPLORATION (2 OF 3)

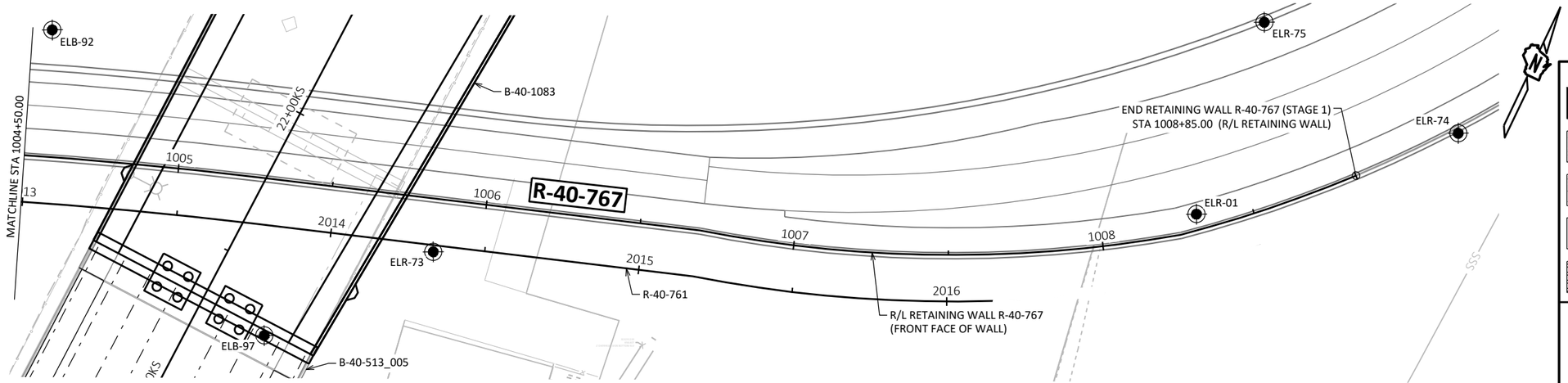
SHEET 10 OF 11
872

SCALE = 1:40

8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-767\CDS\R0767_080509-11_SE.DWG
LAYOUT NAME - SHT_10



PLAN

(MSE LFCF RETAINING WALL)

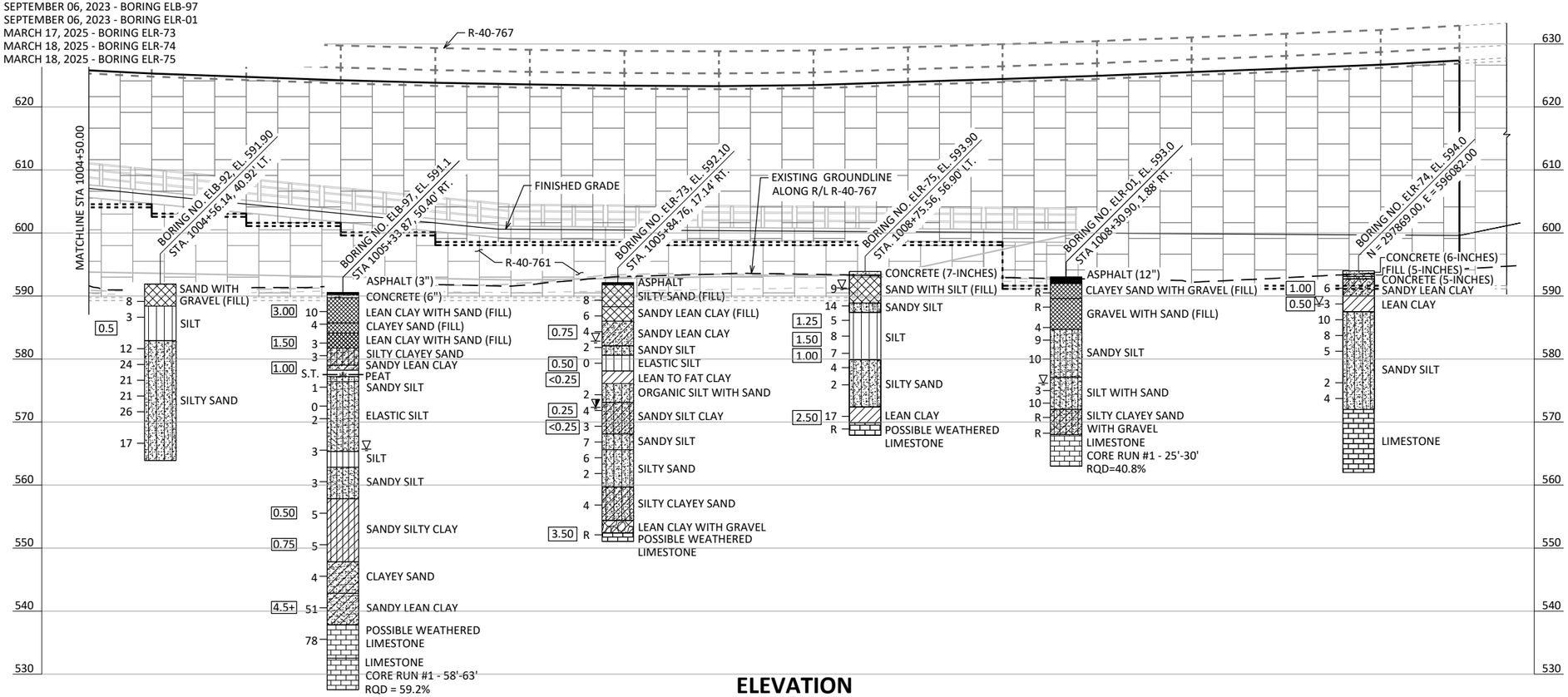
NOTE:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

BORING STATION AND OFFSET IS BASED ON R/L R-40-767 UNLESS OTHERWISE NOTED

DENOTES SOIL BORING LOCATION
SOIL BORINGS COMPLETED BY: GESTRA ENGINEERING, INC.

SOIL BORINGS TAKEN:
SEPTEMBER 15, 2016 - BORING ELB-92
SEPTEMBER 06, 2023 - BORING ELB-97
SEPTEMBER 06, 2023 - BORING ELR-01
MARCH 17, 2025 - BORING ELR-73
MARCH 18, 2025 - BORING ELR-74
MARCH 18, 2025 - BORING ELR-75



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)

STATE PROJECT NUMBER

1060-27-74

MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

LEGEND OF BORING

BORING #/EL
STA/OFFSET
ST
0.25 (1) 17 (2)
F-C
COBBLE OR BOULDER
WEATHERED LIMESTONE
CORE RUN #1 - 24'-29'
REC=80%, RQD=72%

(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

AT TIME OF DRILLING
END OF DRILLING
AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-40-767 (STAGE 1)

DRAWN BY TMH | PLANS CK'D EKM

SUBSURFACE EXPLORATION (3 OF 3)

SHEET 11 OF 11
873

SCALE = 1:40

8

8

FILE NAME : C:\USERS\GMCGINN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\STRUCTURES\R-40-767\CDS\R0767_080509-11_SE.DWG
LAYOUT NAME - SHT_11

STAGE 1 - R-40-761

STATION	REAL STATION	DISTANCE	AREA (SF)					INCREMENTAL VOL (CY)					CUMULATIVE VOL (CY)				
			CUT	FILL	LFCF GRADE 2	LFCF GRADE 1	EBS	CUT	FILL	LFCF GRADE 2	LFCF GRADE 1	EBS	CUT 1.00	EXPANDED FILL 1.00	LFCF GRADE 1 1.00	LFCF GRADE 2 1.00	EXPANDED EBS BACKFILL 1.00
2008+50.00AH	200850.00	0	20.35	0.00	124.93	413.98	0.00	0	0	0	0	0	0	0	0	0	0
2009+00.00	200900.00	50	70.34	0.00	128.91	443.03	0.00	84	0	0	0	0	84	0	0	0	0
2009+50.00	200950.00	50	954.02	0.00	125.99	417.72	0.00	948	0	0	0	0	1032	0	0	0	0
2010+00.00	201000.00	50	1236.11	0.00	123.08	390.21	0.00	2028	0	0	0	0	3060	0	0	0	0
2010+50.00	201050.00	50	1239.43	0.00	119.49	358.56	0.00	2292	0	0	0	0	5352	0	0	0	0
2011+00.00	201100.00	50	2326.42	0.00	111.18	313.76	0.00	3302	0	0	0	0	8654	0	0	0	0
2011+50.00	201150.00	50	2330.12	0.00	99.13	264.27	0.00	4312	0	0	0	0	12966	0	0	0	0
2012+00.00	201200.00	50	1356.86	0.00	95.04	257.32	0.00	3414	0	0	0	0	16380	0	0	0	0
2012+50.00	201250.00	50	80.44	0.00	136.13	748.89	0.00	1331	0	0	0	0	17711	0	0	0	0
2013+00.00	201300.00	50	22.68	0.00	137.90	697.14	0.00	95	0	0	0	0	17806	0	0	0	0
2013+50.00	201350.00	50	0.46	0.00	146.02	821.26	0.00	21	0	0	0	0	17827	0	0	0	0
2014+00.00	201400.00	50	0.85	0.00	154.74	788.87	0.00	1	0	0	0	0	17828	0	0	0	0
2014+50.00	201450.00	50	7.07	0.00	162.07	779.22	0.00	7	0	0	0	0	17835	0	0	0	0
2015+00.00	201500.00	50	5.15	0.00	171.96	801.93	0.00	11	0	0	0	0	17846	0	0	0	0
2015+50.00	201550.00	50	2.75	0.00	186.07	866.23	0.00	7	0	0	0	0	17853	0	0	0	0
2016+00.00	201600.00	50	1.01	0.00	174.49	922.63	0.00	3	0	0	0	0	17856	0	0	0	0
2016+15.00	201615.00	15.00	2.11	0.00	157.84	684.11	0.00	1	0	0	0	0	17857	0	0	0	0
2016+50.00	201650.00	35.00	0.00	0.00	152.31	663.18	0.00	1	0	0	0	0	17858	0	0	0	0
2017+00.00	201700.00	50.00	0.06	0.00	138.04	607.43	0.00	1	0	0	0	0	17859	0	0	0	0
2017+41.00BK	201741.00	41.00	0.00	0.00	114.08	551.81	0.00	1	0	0	0	0	17860	0	0	0	0
							COLUMN TOTALS:	17,860	0	0	0	0					

NOTE:

CUT VOLUMES ARE A COMBINATION OF EXCAVATION COMMON AND SPV.0035.0004, EXCAVATION, HAULING, AND REUSE OF LOW-LEVEL PETROLEUM CONTAMINATED SOIL. SEE EARTHWORK MQ TABLES AND CROSS SECTIONS FOR ADDITIONAL INFORMATION.

STAGE 1 - TEB

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	FILL	EBS	CUT	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL
									1.00	1.00	1.00
11+74.25AH	1174.25	0.00	58.12	0.71	0.00	0	0	0	0	0	0
12+00.00	1200.00	25.75	64.06	0.00	0.00	58	0	0	58	0	0
12+50.00	1250.00	50	67.08	0.01	0.00	121	0	0	179	0	0
13+00.00	1300.00	50	70.91	3.40	0.00	128	3	0	307	3	0
13+50.00	1350.00	50	73.93	16.47	0.00	134	18	0	441	21	0
14+00.00	1400.00	50	78.11	16.80	0.00	141	31	0	582	52	0
14+50.00	1450.00	50	69.94	30.46	0.00	137	44	0	719	96	0
15+00.00	1500.00	50	56.84	41.26	0.00	117	66	0	836	162	0
15+50.00	1550.00	50	47.00	569.71	0.00	96	566	0	932	728	0
16+00.00	1600.00	50	33.16	1376.90	0.00	74	1802	0	1006	2530	0
16+50.00	1650.00	50	33.64	1445.92	0.00	62	2614	0	1068	5144	0
17+00.00	1700.00	50	33.65	1443.42	0.00	62	2675	0	1130	7819	0
17+50.00	1750.00	50	36.81	1404.82	0.00	65	2637	0	1195	10456	0
18+00.00	1800.00	50	26.33	1719.38	0.00	58	2893	0	1253	13349	0
18+50.00	1850.00	50	2.99	2932.95	0.00	27	4308	0	1280	17657	0
19+00.00	1900.00	50	13.00	2810.55	0.00	15	5318	0	1295	22975	0
19+50.00	1950.00	50	51.66	3040.96	0.00	60	5418	0	1355	28393	0
20+00.00	2000.00	50	116.96	2982.02	0.00	156	5577	0	1511	33970	0
20+50.00	2050.00	50	166.96	159.58	0.00	263	2909	0	1774	36879	0
21+00.00	2100.00	50	205.40	87.15	0.00	345	228	0	2119	37107	0
21+50.00	2150.00	50	193.01	61.56	0.00	369	138	0	2488	37245	0
22+00.00	2200.00	50	224.75	74.46	0.00	387	126	0	2875	37371	0
22+50.00	2250.00	50	344.17	12.70	0.00	527	81	0	3402	37452	0
23+00.00	2300.00	50	485.67	0.00	0.00	768	12	0	4170	37464	0
23+50.00	2350.00	50	538.26	0.00	0.00	948	0	0	5118	37464	0
24+00.00	2400.00	50	548.82	0.00	0.00	1007	0	0	6125	37464	0
24+50.00	2450.00	50	325.79	0.00	0.00	810	0	0	6935	37464	0
24+74.99	2474.99	24.99	251.85	0.00	0.00	267	0	0	7202	37464	0
25+00.00	2500.00	25.01	215.58	0.00	0.00	216	0	0	7418	37464	0
25+11.28BK	2511.28	11.28	126.01	0.00	0.00	71	0	0	7489	37464	0
					COLUMN TOTALS:	7,489	37,464	0			

STAGE 1 - TLC

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY)			CUMULATIVE VOL (CY)		
			CUT	FILL	EBS	CUT	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL
									1.00	1.00	1.00
20+24.49AH	2024.49	0.00	0.00	2608.32	0.00	0	0	0	0	0	0
20+50.00	2050.00	25.51	0.00	2582.09	0.00	0	2452	0	0	2452	0
21+00.00	2100.00	50.00	0.00	2451.94	0.00	0	4661	0	0	7113	0
21+50.00	2150.00	50.00	0.00	2189.27	0.00	0	4297	0	0	11410	0
22+00.00	2200.00	50.00	0.00	2017.83	0.00	0	3895	0	0	15305	0
22+50.00	2250.00	50.00	0.00	1787.68	0.00	0	3524	0	0	18829	0
23+00.00	2300.00	50.00	10.46	1556.37	0.00	10	3096	0	10	21925	0
23+50.00	2350.00	50.00	59.29	1622.91	0.00	65	2944	0	75	24869	0
24+00.00	2400.00	50.00	122.19	524.60	0.00	168	1988	0	243	26857	0
24+50.00	2450.00	50.00	135.37	37.15	0.00	238	520	0	481	27377	0
25+00.00BK	2500.00	50.00	144.85	0.06	0.00	259	34	0	740	27411	0
					COLUMN TOTALS:	740	27,411	0			

STAGE 2-4 - R-40-761

STATION	REAL STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY)					CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	LFCF GRADE 2	LFCF GRADE 1	EBS	CUT	FILL	LFCF GRADE 2	LFCF GRADE 1	EBS	CUT 1.00	EXPANDED FILL 1.00	LFCF GRADE 1 1.00	LFCF GRADE 2 1.00	EXPANDED EBS BACKFILL 1.00
2000+00.00AH	200000.00	0.00	1674.35	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0
2000+50.00	200050.00	50	1662.87	0.00	0.00	0.00	0.00	0.00	3090	0	0	0	0	3090	0	0	0	0
2001+00.00	200100.00	50	1181.59	0.00	0.00	0.00	0.00	0.00	2634	0	0	0	0	5724	0	0	0	0
2001+50.00	200150.00	50	1413.55	0.00	0.00	0.00	0.00	0.00	2403	0	0	0	0	8127	0	0	0	0
2002+00.00	200200.00	50	1064.54	0.00	0.06	0.00	0.00	0.00	2295	0	0	0	0	10422	0	0	0	0
2002+50.00	200250.00	50	936.35	0.00	0.00	0.00	0.00	0.00	1853	0	0	0	0	12275	0	0	0	0
2003+00.00	200300.00	50	739.30	0.00	3.84	0.00	0.00	0.00	1552	4	0	0	0	13827	4	0	0	0
2003+50.00	200350.00	50	566.84	0.00	25.88	0.00	0.00	0.00	1209	28	0	0	0	15036	32	0	0	0
2004+00.00	200400.00	50	561.84	0.00	79.85	0.00	0.00	0.00	1045	98	0	0	0	16081	130	0	0	0
2004+50.00	200450.00	50	977.11	0.00	64.64	0.00	0.00	0.00	1425	134	0	0	0	17506	264	0	0	0
2005+00.00	200500.00	50	2100.63	0.00	0.00	0.00	0.00	0.00	2850	60	0	0	0	20356	324	0	0	0
2005+50.00	200550.00	50	2956.59	0.00	0.00	0.00	0.00	0.00	4683	0	0	0	0	25039	324	0	0	0
2006+00.00	200600.00	50	2818.25	0.00	0.00	0.00	0.00	0.00	5347	0	0	0	0	30386	324	0	0	0
2006+50.00	200650.00	50	1923.10	0.00	0.00	0.00	0.00	0.00	4390	0	0	0	0	34776	324	0	0	0
2007+00.00	200700.00	50	2223.01	0.00	0.00	0.00	0.00	0.00	3839	0	0	0	0	38615	324	0	0	0
2007+50.00	200750.00	50	1956.62	0.00	5.66	0.00	0.00	0.00	3870	5	0	0	0	42485	329	0	0	0
2008+00.00	200800.00	50	1390.60	0.00	115.61	0.00	0.00	0.00	3099	112	0	0	0	45584	441	0	0	0
2008+50.00	200850.00	50	1047.77	0.00	77.12	124.93	413.98	0.00	2258	178	0	0	0	47842	619	0	0	0
2009+00.00	200900.00	50	1055.94	0.00	628.80	128.91	443.03	0.00	1948	654	235	794	0	49790	1273	235	794	0
2009+50.00	200950.00	50	1068.68	0.00	540.74	125.99	417.72	0.00	1967	1083	236	797	0	51757	2356	471	1591	0
2010+00.00	201000.00	50	1066.36	0.00	530.10	123.08	390.21	0.00	1977	992	231	748	0	53734	3348	702	2339	0
2010+50.00	201050.00	50	1064.66	0.00	461.78	119.49	358.56	0.00	1973	918	225	693	0	55707	4266	927	3032	0
2011+00.00	201100.00	50	0.00	0.00	356.93	111.18	313.76	0.00	986	758	214	623	0	56693	5024	1141	3655	0
2011+50.00	201150.00	50	0.00	0.00	231.00	99.13	264.27	0.00	0	544	195	535	0	56693	5568	1336	4190	0
2012+00.00	201200.00	50	0.00	0.00	248.62	95.04	257.32	0.00	0	444	180	483	0	56693	6012	1516	4673	0
2012+50.00	201250.00	50	19.53	0.00	1.01	136.13	748.89	0.00	18	231	214	932	0	56711	6243	1730	5605	0
2013+00.00	201300.00	50	39.30	0.00	47.66	137.90	697.14	0.00	54	45	254	1339	0	56765	6288	1984	6944	0
2013+50.00	201350.00	50	1.34	0.00	39.27	146.02	821.26	0.00	38	80	263	1406	0	56803	6368	2247	8350	0
2014+00.00	201400.00	50	1.64	0.00	68.28	154.74	788.87	0.00	3	100	278	1491	0	56806	6468	2525	9841	0
2014+50.00	201450.00	50	1.26	0.00	0.32	162.07	779.22	0.00	3	64	293	1452	0	56809	6532	2818	11293	0
2015+00.00	201500.00	50	13.63	0.00	0.00	171.96	801.93	0.00	14	0	309	1464	0	56823	6532	3127	12757	0
2015+50.00	201550.00	50	0.27	0.00	9.24	186.07	866.23	0.00	13	9	332	1545	0	56836	6541	3459	14302	0
2016+00.00	201600.00	50	0.00	0.00	137.52	174.49	922.63	0.00	0	136	334	1656	0	56836	6677	3793	15958	0
2016+15.00	201615.00	15.00	0.00	0.00	275.39	157.84	684.11	0.00	0	115	92	446	0	56836	6792	3885	16404	0
2016+50.00	201650.00	35.00	1.99	0.00	228.30	152.31	663.18	0.00	1	326	201	873	0	56837	7118	4086	17277	0
2017+00.00	201700.00	50.00	1.31	0.00	160.51	138.04	607.43	0.00	1	360	269	1176	0	56838	7478	4355	18453	0
2017+41.00BK	201741.00	41.00	0.00	0.00	133.45	114.08	551.81	0.00	0	223	191	880	0	56838	7701	4546	19333	0
							COLUMN TOTALS:		56,838	7,701	4,546	19,333	0					

NOTE:

CUT VOLUMES ARE A COMBINATION OF EXCAVATION COMMON AND SPV.0035.0004, EXCAVATION, HAULING, AND REUSE OF LOW-LEVEL PETROLEUM CONTAMINATED SOIL. SEE EARTHWORK MQ TABLES AND CROSS SECTIONS FOR ADDITIONAL INFORMATION.

STAGE 2 - TWB

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY)			CUMULATIVE VOL (CY)		
			CUT	FILL	EBS	CUT	FILL	EBS	CUT 1.00	EXPANDED FILL 1.00	EXPANDED EBS BACKFILL 1.00
110+98.05AH	11098.05	0.00	46.05	0.00	0.00	0	0	0	0	0	0
111+00.00	11100.00	1.95	46.05	0.00	0.00	3	0	0	3	0	0
111+50.03	11150.03	50.03	45.89	0.00	0.00	85	0	0	88	0	0
112+00.00	11200.00	49.97	45.97	0.00	0.00	85	0	0	173	0	0
112+50.00	11250.00	50.00	45.71	0.00	0.00	85	0	0	258	0	0
113+00.00	11300.00	50.00	45.68	0.00	0.00	85	0	0	343	0	0
113+50.00	11350.00	50.00	46.31	0.00	0.00	85	0	0	428	0	0
114+00.00	11400.00	50.00	45.75	0.00	0.00	85	0	0	513	0	0
114+50.00	11450.00	50.00	46.60	0.00	0.00	86	0	0	599	0	0
115+00.00	11500.00	50.00	46.32	0.00	0.00	86	0	0	685	0	0
115+50.00	11550.00	50.00	45.44	0.00	0.00	85	0	0	770	0	0
116+00.00	11600.00	50.00	45.85	0.00	0.00	85	0	0	855	0	0
116+50.00	11650.00	50.00	46.17	0.00	0.00	85	0	0	940	0	0
117+00.00	11700.00	50.00	46.79	0.00	0.00	86	0	0	1026	0	0
117+50.00	11750.00	50.00	61.48	0.00	0.00	100	0	0	1126	0	0
118+00.00	11800.00	50.00	57.38	0.00	0.00	110	0	0	1236	0	0
118+50.00	11850.00	50.00	51.47	0.03	0.00	101	0	0	1337	0	0
119+00.00	11900.00	50.00	49.42	0.00	0.00	93	0	0	1430	0	0
119+50.00	11950.00	50.00	48.85	0.00	0.00	91	0	0	1521	0	0
120+00.00	12000.00	50.00	51.57	0.00	0.00	93	0	0	1614	0	0
120+50.00	12050.00	50.00	49.23	0.00	0.00	93	0	0	1707	0	0
121+00.00	12100.00	50.00	50.48	0.00	0.00	92	0	0	1799	0	0
121+02.39	12102.39	2.39	51.28	0.00	0.00	5	0	0	1804	0	0
121+50.00	12150.00	47.61	53.63	0.00	0.00	92	0	0	1896	0	0
122+00.00	12200.00	50.00	48.88	0.00	0.00	95	0	0	1991	0	0
122+50.00	12250.00	50.00	53.76	0.00	0.00	95	0	0	2086	0	0
123+00.00	12300.00	50.00	44.95	0.00	0.00	91	0	0	2177	0	0
123+50.00	12350.00	50.00	45.99	0.00	0.00	84	0	0	2261	0	0
124+00.00	12400.00	50.00	47.06	0.00	0.00	86	0	0	2347	0	0
124+49.55BK	12449.55	49.55	54.02	0.00	0.00	93	0	0	2440	0	0
					COLUMN TOTALS:	2,440	0	0			

STAGE 3A - TWB

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY)			CUMULATIVE VOL (CY)		
			CUT	FILL	EBS	CUT	FILL	EBS	CUT 1.00	EXPANDED FILL 1.00	EXPANDED EBS BACKFILL 1.00
121+02.39AH	12102.39	0.00	44.53	0.00	0.00	0	0	0	0	0	0
121+50.00	12150.00	47.61	25.54	0.00	0.00	62	0	0	62	0	0
122+00.00	12200.00	50.00	25.64	0.00	0.00	47	0	0	109	0	0
122+50.00	12250.00	50.00	32.91	0.00	0.00	54	0	0	163	0	0
123+00.00BK	12300.00	50.00	45.89	0.00	0.00	73	0	0	236	0	0
					COLUMN TOTALS:	236	0	0			

PROJECT NO: 1060-27-74 | HWY: IH 94 | COUNTY: MILWAUKEE | EARTHWORK | SHEET: 877 E

FILE NAME : PLOT DATE : June 9, 2025 PLOT BY : JACOBS PLOT NAME : PLOT SCALE : 1:1

STAGE 3A - SP

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY)			CUMULATIVE VOL (CY)		
			CUT	FILL	EBS	CUT	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL
10+78.00AH	1078.00	0.00	216.47	0.00	0.00	0	0	0	0	0	0
11+00.00	1100.00	22	152.17	2.29	0.00	150	1	0	150	1	0
11+50.00	1150.00	50	112.50	1.96	0.00	245	4	0	395	5	0
12+00.00	1200.00	50	153.75	0.02	0.00	247	2	0	642	7	0
12+50.00	1250.00	50	170.59	0.20	0.00	300	0	0	942	7	0
13+00.00	1300.00	50	189.66	0.26	0.00	334	0	0	1276	7	0
13+50.00	1350.00	50	187.56	0.64	0.00	349	1	0	1625	8	0
14+00.00	1400.00	50	196.28	0.25	0.00	355	1	0	1980	9	0
14+50.00	1450.00	50	183.72	0.74	0.00	352	1	0	2332	10	0
15+00.00	1500.00	50	155.58	2.20	0.00	314	3	0	2646	13	0
15+50.00	1550.00	50	167.01	0.90	0.00	299	3	0	2945	16	0
16+00.00	1600.00	50	203.64	0.00	0.00	343	1	0	3288	17	0
16+13.33BK	1613.33	13.33	208.34	0.50	0.00	102	0	0	3390	17	0
16+13.33AH	1613.33	0	120.85	0.48	0.00	0	0	0	3390	17	0
16+50.00	1650.00	36.67	126.09	0.50	0.00	168	1	0	3558	18	0
17+00.00	1700.00	50	113.79	0.05	0.00	222	1	0	3780	19	0
17+50.00	1750.00	50	101.84	0.00	0.00	200	0	0	3980	19	0
18+00.00	1800.00	50	68.17	0.00	0.00	157	0	0	4137	19	0
18+34.00BK	1834.00	34	50.55	10.60	0.00	75	7	0	4212	26	0
					COLUMN TOTALS:	4,212	26	0			

STAGE 3A - TSP

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY)			CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL
								1.00	1.00	1.00
218+36.00AH	21834.37	0.00	50.60	10.53	0	0	0	0	0	0
218+50.00	21850.00	15.63	44.88	1.64	28	4	0	28	4	0
219+23.31	21900.00	50.00	54.14	0.00	92	2	0	120	6	0
219+49.32BK	21937.50	37.50	71.36	0.00	87	0	0	207	6	0
				COLUMN TOTALS:	207	6	0			

STAGE 3A - J

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY)			CUMULATIVE VOL (CY)		
			CUT	FILL	EBS	CUT	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL
									1.00	1.00	1.00
10+60.00AH	1060.00	0.00	128.75	7.24	0.00	0	0	0	0	0	0
11+00.00	1100.00	40.00	135.32	3.52	0.00	196	8	0	196	8	0
11+50.00	1150.00	50	64.35	27.48	0.00	185	29	0	381	37	0
12+00.00	1200.00	50	78.63	0.86	0.00	132	26	0	513	63	0
12+50.00	1250.00	50	71.16	0.49	0.00	139	1	0	652	64	0
13+00.00	1300.00	50	67.65	0.41	0.00	129	1	0	781	65	0
13+05.00BK	1305.00	5.00	66.95	0.30	0.00	12	0	0	793	65	0
					COLUMN TOTALS:	793	65	0			

STAGE 3A - TJD

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY)			CUMULATIVE VOL (CY)		
			CUT	FILL	EBS	CUT	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL
									1.00	1.00	1.00
100+72.54AH	10072.54	0.00	134.26	1.48	0.00	0	0	0	0	0	0
101+00.00	10100.00	27.46	156.59	3.54	0.00	148	3	0	148	3	0
101+50.00	10150.00	50	182.41	0.00	0.00	314	3	0	462	6	0
102+00.00	10200.00	50	231.90	0.00	0.00	384	0	0	846	6	0
102+50.00	10250.00	50	285.79	0.00	0.00	479	0	0	1325	6	0
103+00.00	10300.00	50	311.82	0.00	0.00	553	0	0	1878	6	0
103+33.17	10333.17	33.17	321.09	0.00	0.00	389	0	0	2267	6	0
103+37.80	10337.80	4.63	284.72	0.00	0.00	52	0	0	2319	6	0
103+50.00	10350.00	12.2	266.90	0.00	0.00	125	0	0	2444	6	0
103+99.99BK	10399.99	49.99	246.69	0.00	0.00	475	0	0	2919	6	0
					COLUMN TOTALS:	2,919	6	0			

STAGE 3A - KS

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY)			CUMULATIVE VOL (CY)		
			CUT	FILL	EBS	CUT	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL
									1.00	1.00	1.00
25+58.00AH	2558.00	0.00	208.18	157.73	0.00	0	0	0	0	0	0
26+00.00	2600.00	42	193.51	4.30	0.00	312	126	0	312	126	0
26+35.00BK	2635.00	35	160.18	0.00	0.00	229	3	0	541	129	0
				COLUMN TOTALS:		541	129	0			

STAGE 3C - KN

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY)			CUMULATIVE VOL (CY)		
			CUT	FILL	EBS	CUT	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL
									1.00	1.00	1.00
26+87.00AH	2687.00	0.00	133.18	0.00	0.00	0	0	0	0	0	0
27+00.00	2700.00	13	133.42	0.00	0.00	64	0	0	64	0	0
27+49.50BK	2749.50	49.5	174.45	0.00	0.00	282	0	0	346	0	0
				COLUMN TOTALS:		346	0	0			

STAGE 3C - SP

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY)			CUMULATIVE VOL (CY)		
			CUT	FILL	EBS	CUT	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL
									1.00	1.00	1.00
16+13.33AH	1613.33	0.00	87.75	0.00	0.00	0	0	0	0	0	0
16+50.00	1650.00	36.67	84.21	0.01	0.00	117	0	0	117	0	0
17+00.00	1700.00	50	69.77	1.46	0.00	143	1	0	260	1	0
17+50.00	1750.00	50	38.14	0.00	0.00	100	1	0	360	2	0
18+00.00	1800.00	50	41.85	0.00	0.00	74	0	0	434	2	0
18+34.00BK	1834.00	34	51.67	0.00	0.00	59	0	0	493	2	0
				COLUMN TOTALS:		493	2	0			

STAGE 3C - TSP

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY)			CUMULATIVE VOL (CY)		
			CUT	FILL	EBS	CUT	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL
									1.00	1.00	1.00
218+34.37AH	21834.37	0.00	49.62	0.00	0.00	0	0	0	0	0	0
218+50.00	21850.00	15.63	38.00	9.94	0.00	25	3	0	25	3	0
219+00.00	21900.00	50.00	53.36	3.43	0.00	85	12	0	110	15	0
219+37.50BK	21937.50	37.50	80.54	0.00	0.00	93	2	0	203	17	0
				COLUMN TOTALS:		203	17	0			

STAGE 4 - TML

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY)			CUMULATIVE VOL (CY)		
			CUT	FILL	EBS	CUT	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL
									1.00	1.00	1.00
217+02.26AH	21702.26	0.00	141.42	0.00	0.00	0	0	0	0	0	0
217+50.00	21750.00	47.74	152.05	0.04	0.00	259	0	0	259	0	0
218+00.00	21800.00	50.00	156.09	0.00	0.00	285	0	0	544	0	0
218+50.00	21850.00	50.00	172.12	0.00	0.00	304	0	0	848	0	0
219+00.00	21900.00	50.00	197.50	0.00	0.00	342	0	0	1190	0	0
219+50.00	21950.00	50.00	184.91	0.00	0.00	354	0	0	1544	0	0
220+00.00	22000.00	50.00	211.13	0.00	0.00	367	0	0	1911	0	0
220+50.00	22050.00	50.00	212.01	0.00	0.00	392	0	0	2303	0	0
221+00.00	22100.00	50.00	212.33	0.00	0.00	393	0	0	2696	0	0
221+50.00	22150.00	50.00	194.99	0.00	0.00	377	0	0	3073	0	0
222+00.00	22200.00	50.00	181.26	0.00	0.00	348	0	0	3421	0	0
222+50.00	22250.00	50.00	158.52	0.00	0.00	315	0	0	3736	0	0
222+90.90	22290.90	40.90	147.22	0.16	0.00	232	0	0	3968	0	0
222+93.32BK	22293.32	2.42	145.62	0.19	0.00	13	0	0	3981	0	0
				COLUMN TOTALS:		3,981	0	0			

CROSS SECTION LEGEND

LFCF BACKFILL

MSE BACKFILL

APPROXIMATE EXTENTS OF HAZMAT SOILS - SOLID MATERIALS FROM 1' TO 12' BELOW GROUND SURFACE.

APPROXIMATE EXTENTS OF EXCAVATION OF HAUULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL FROM 0' TO 3'+ BELOW GROUND SURFACE.

APPROXIMATE EXTENTS OF LOW-LEVEL PETROLEUM CONTAMINATED SOIL FROM 0' TO 25'+ BELOW GROUND SURFACE. COULD BE REUSED WITH WDNR CONCURRENCE. IF REUSE IS NOT POSSIBLE, THE SOLID WILL REQUIRE LANDFILL DISPOSAL.

APPROXIMATE EXTENTS OF HAZMAT SOILS - SOLID WASTE FROM 0' TO 3'+ BELOW GROUND SURFACE.

APPROXIMATE EXTENT OF HAZMAT SOILS - SOLID MATERIALS FROM 0.5' TO 5'+ BELOW GROUND SURFACE.

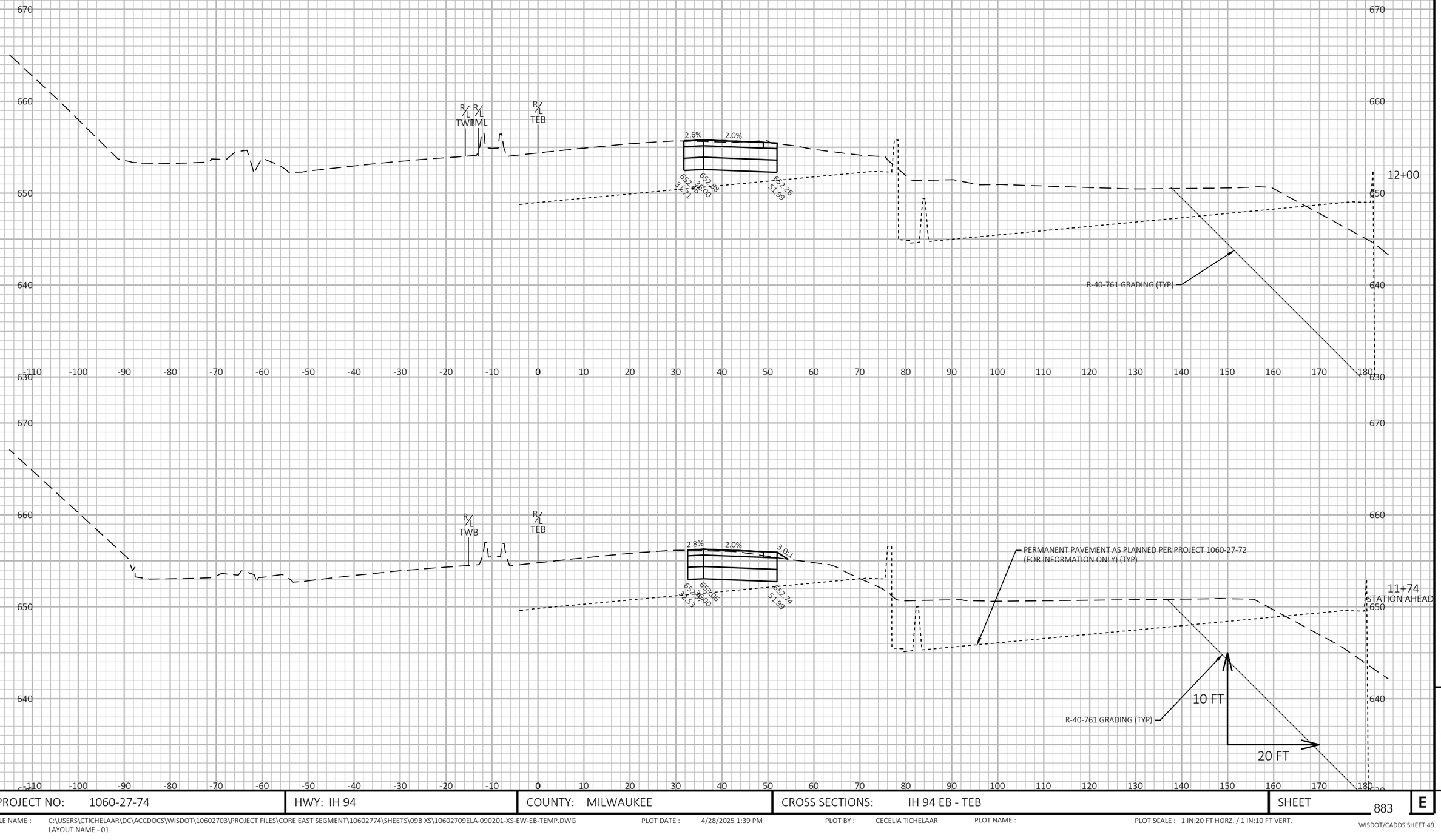
9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: HAZMAT LEGEND	SHEET 882	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 00
PLOT DATE : 5/30/2025 12:00 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 1



9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 883	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 01

PLOT DATE : 4/28/2025 1:39 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 1

13+00

R/L TWB

R/L BML

R/L TEB

2.0%

2.0%

3.0:1

649.94
26.38

650.09
36.00

649.77
21.99

R-40-761 GRADING (TYP)

12+50

2.3%

2.0%

3.0:1

651.38
30.11

651.52
36.00

651.19
21.99

PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72
(FOR INFORMATION ONLY) (TYP)

R-40-761 GRADING (TYP)

10 FT

20 FT

9

9

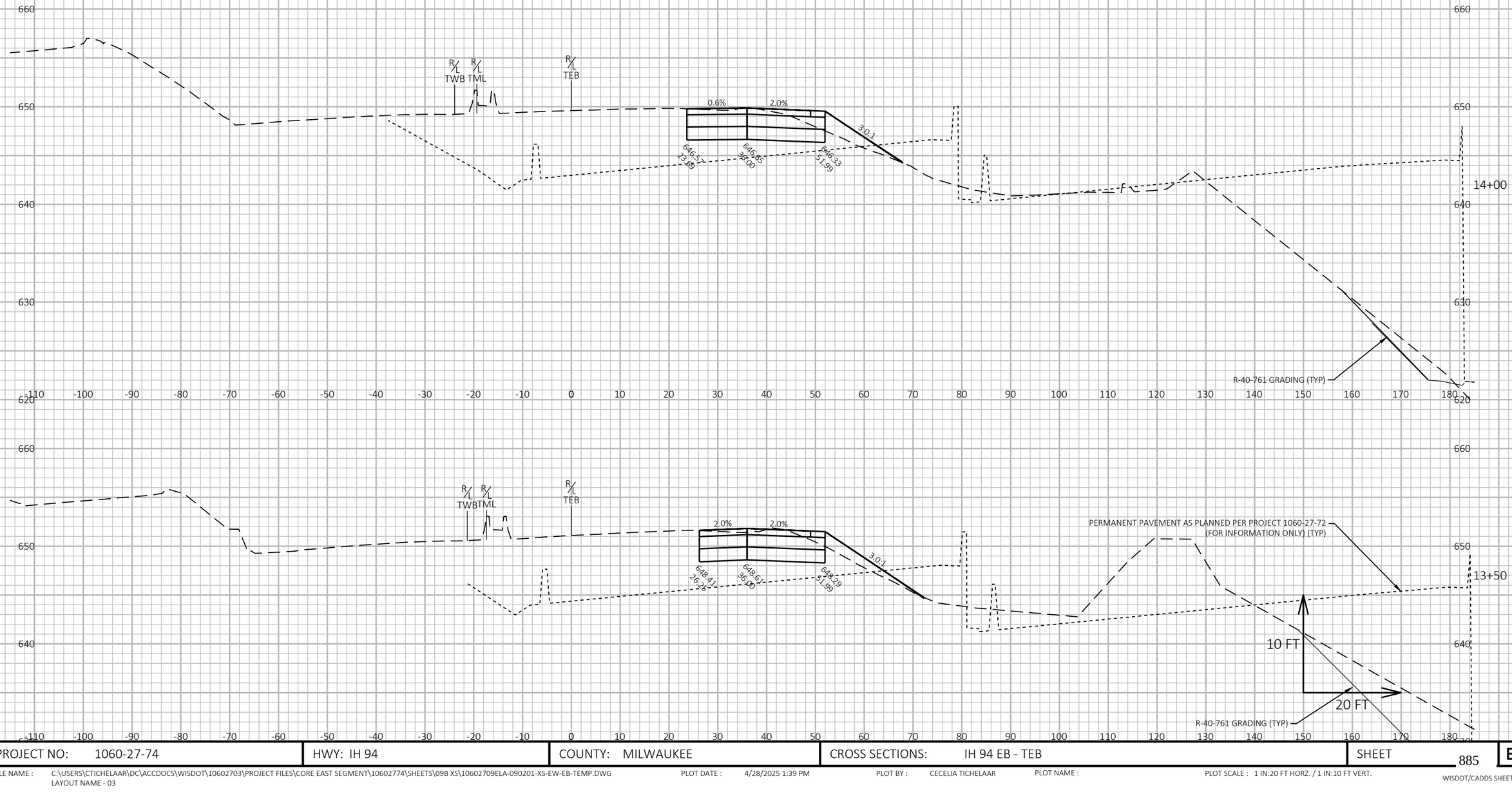
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 884	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 02

PLOT DATE : 4/28/2025 1:39 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 1



9

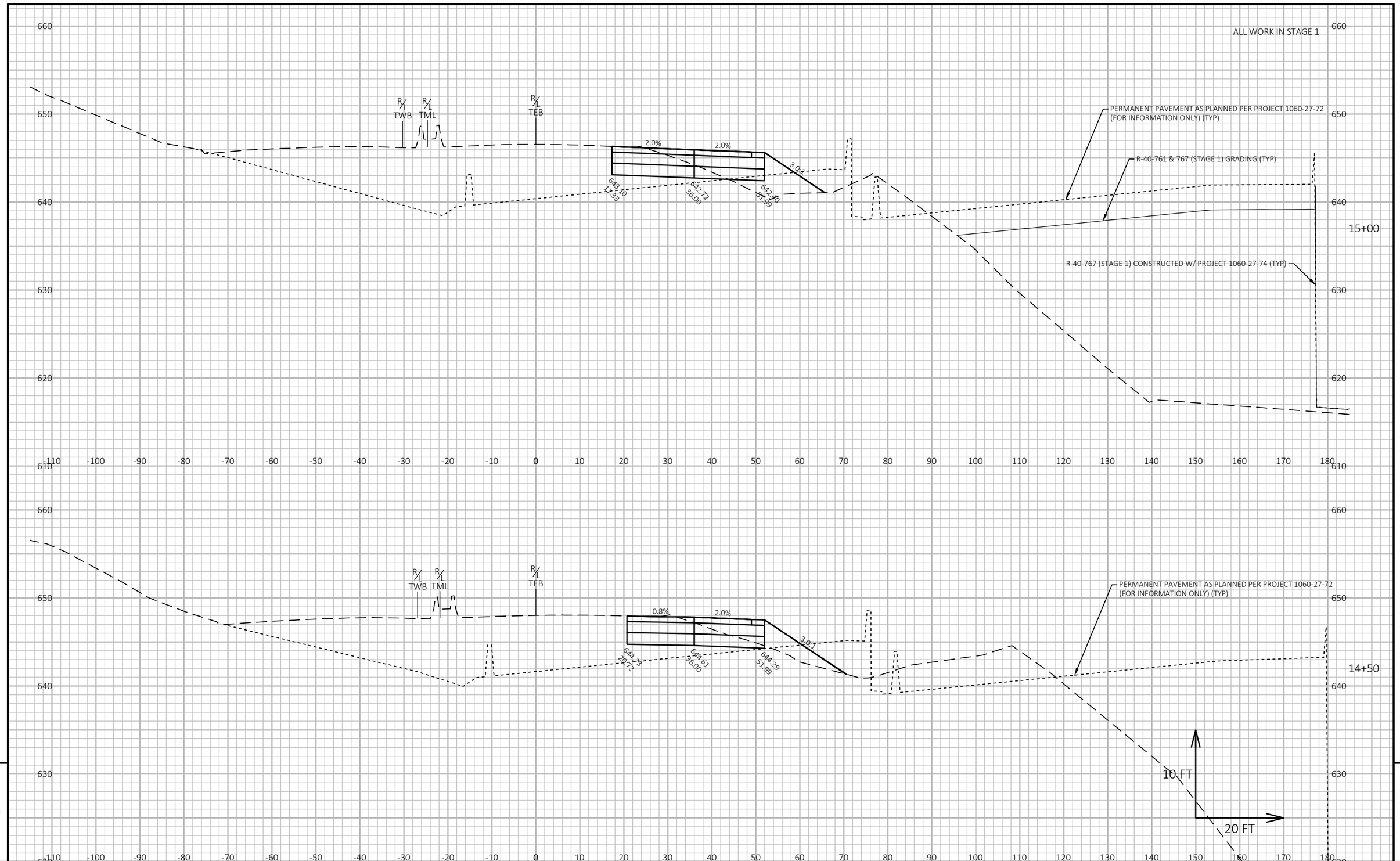
9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 885	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 03

PLOT DATE : 4/28/2025 1:39 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

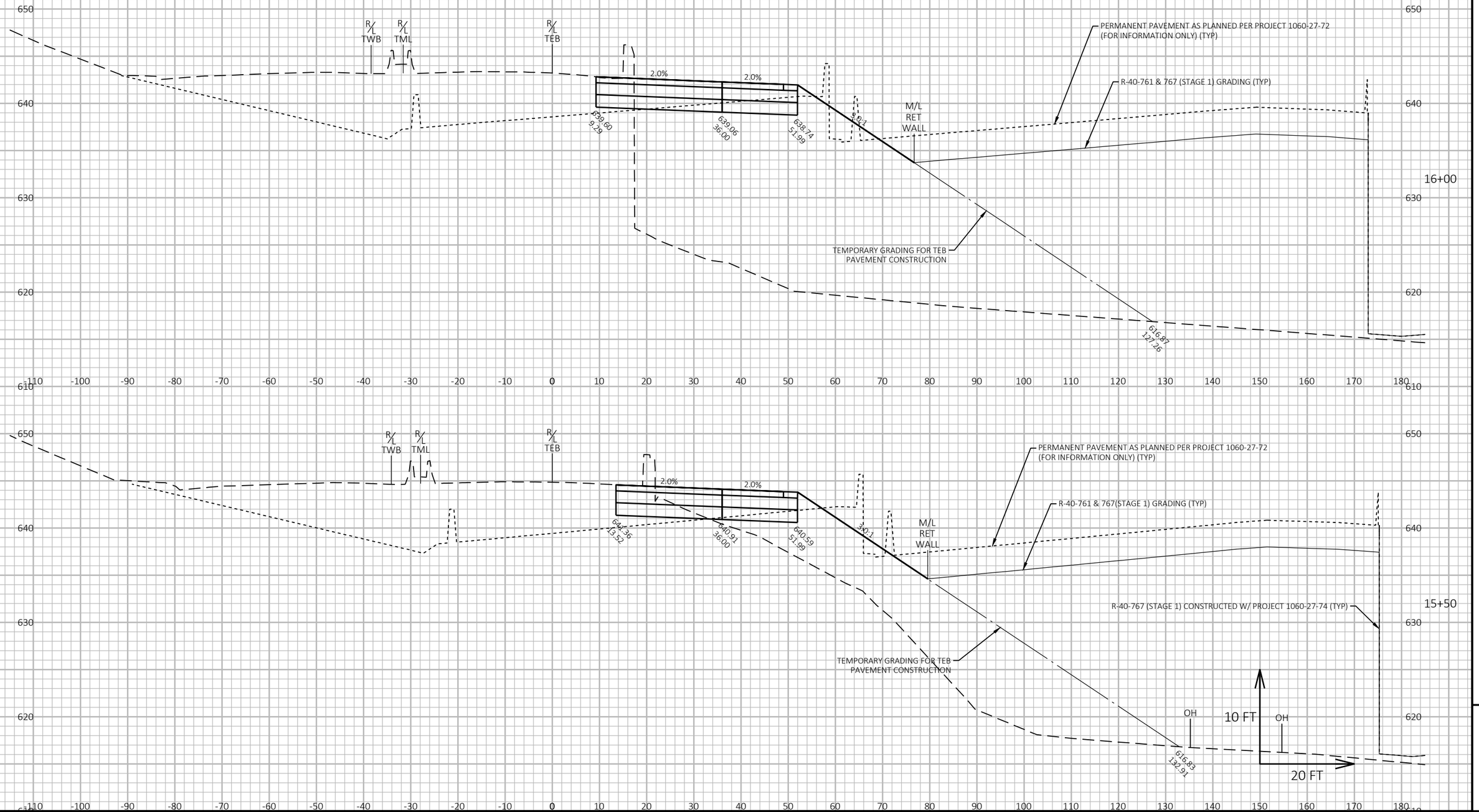
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 886	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 04

PLOT DATE : 4/28/2025 1:40 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 1



9

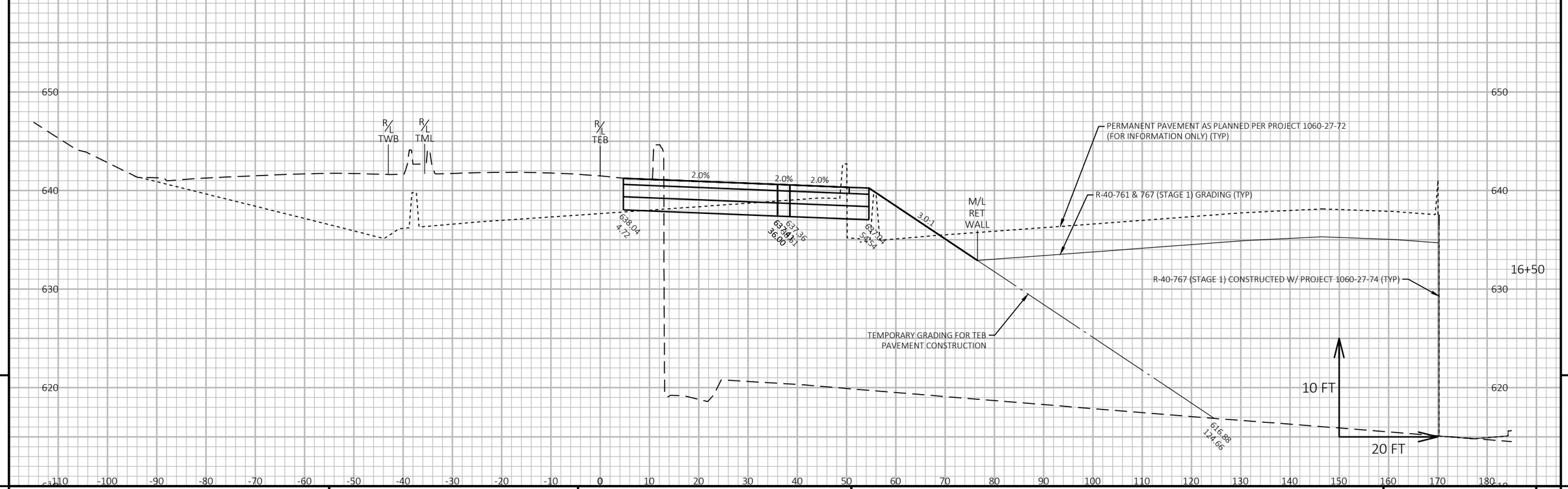
9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 887	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 05

PLOT DATE : 4/28/2025 1:40 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

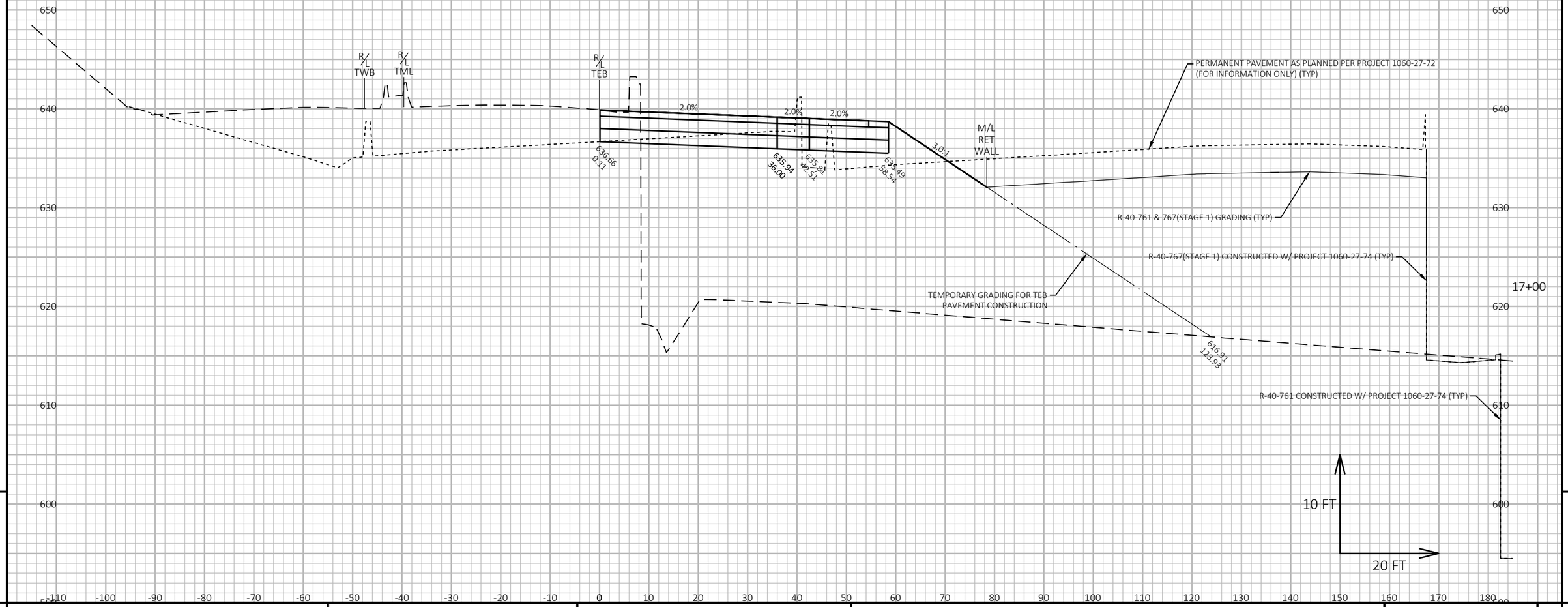
9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 888	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 06

PLOT DATE : 4/28/2025 1:40 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK IN STAGE 1



9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 889	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 07

PLOT DATE : 4/28/2025 1:40 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 1

660
650
640
630
620
610
600

R/L TWB
R/L TML
R/L TEB

2.0% 0.8% 0.8% 0.8% 2.0%

635.01 -4.49
634.97 0.00
634.70 39.00
634.62 46.51
634.29 62.54

3.0:1

M/L RET WALL

628.79 88.71

616.91 124.35

PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72 (FOR INFORMATION ONLY) (TYP)

R-40-761 & 767(STAGE 1) GRADING (TYP)

EXISTING R-40-18 TO REMAIN

R-40-767 (STAGE 1) CONSTRUCTED W/ PROJECT 1060-27-74 (TYP)

TEMPORARY GRADING FOR TEB PAVEMENT CONSTRUCTION

R-40-761 CONSTRUCTED W/ PROJECT 1060-27-74 (TYP)

17+50

10 FT
20 FT

-110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180

9

9

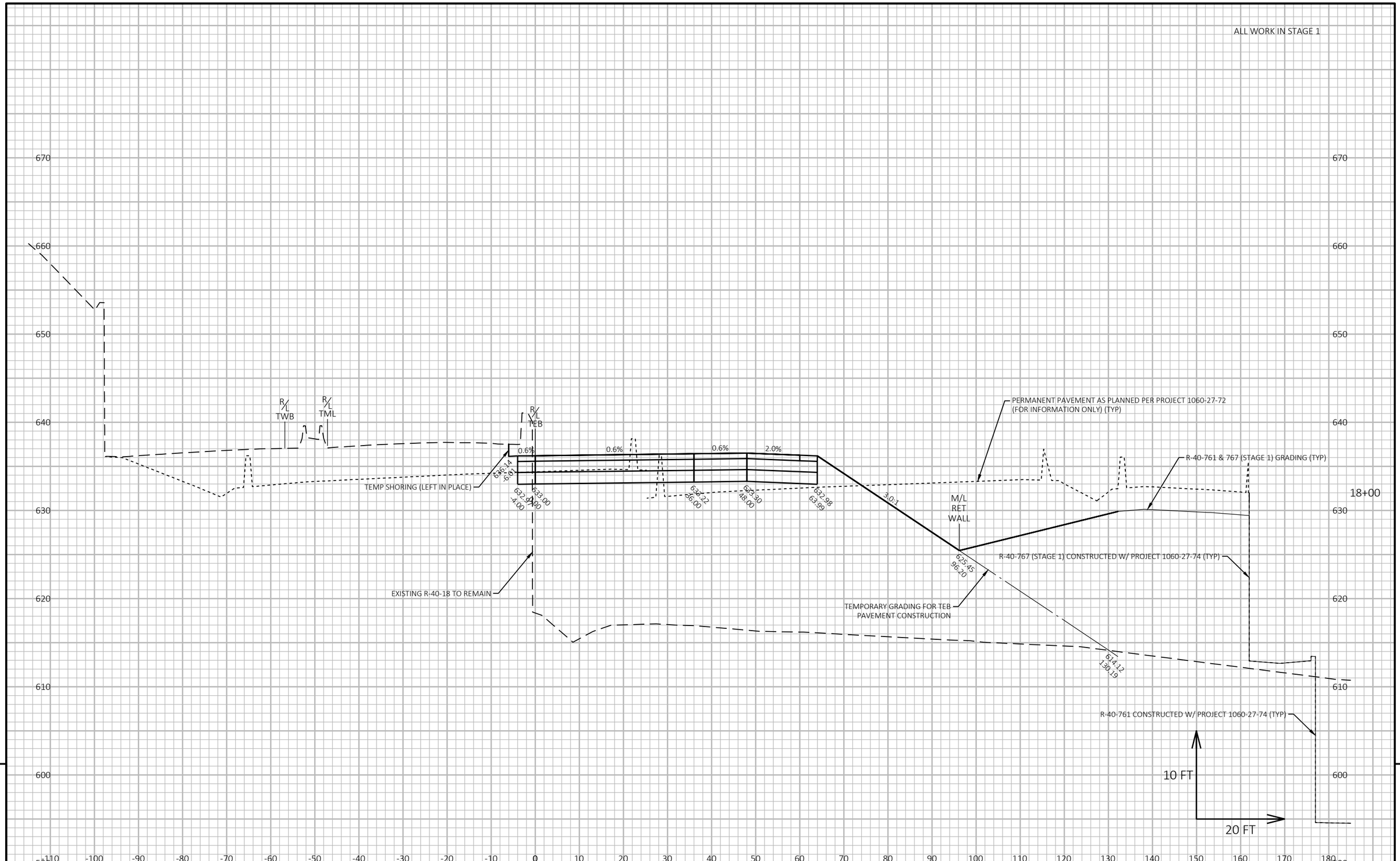
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 890	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 08

PLOT DATE : 4/28/2025 1:40 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 1



9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 891	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 09
PLOT DATE : 4/28/2025 1:40 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 1

670
660
650
640
630
620
610
600

R/L TWB
R/L TML
R/L TEB

TEMP SHORING (LEFT IN PLACE)
633.38 0.00
630.75 0.00
630.60 4.00

2.0%
2.0%
2.0%
2.0%

631.47 36.00
631.71 48.00
631.39 63.99

EXISTING R-40-18 TO REMAIN

PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72 (FOR INFORMATION ONLY) (TYP)

3.0:1

M/L RET WALL

623.98 95.87

R-40-761 & 767 (STAGE 1) GRADING (TYP)

18+50

R-40-767 (STAGE 1) CONSTRUCTED W/ PROJECT 1060-27-74 (TYP)

TEMPORARY GRADING FOR TEB PAVEMENT CONSTRUCTION

603.49 157.33

10 FT

R-40-761 CONSTRUCTED W/ PROJECT 1060-27-74 (TYP)

20 FT

-110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180

9

9

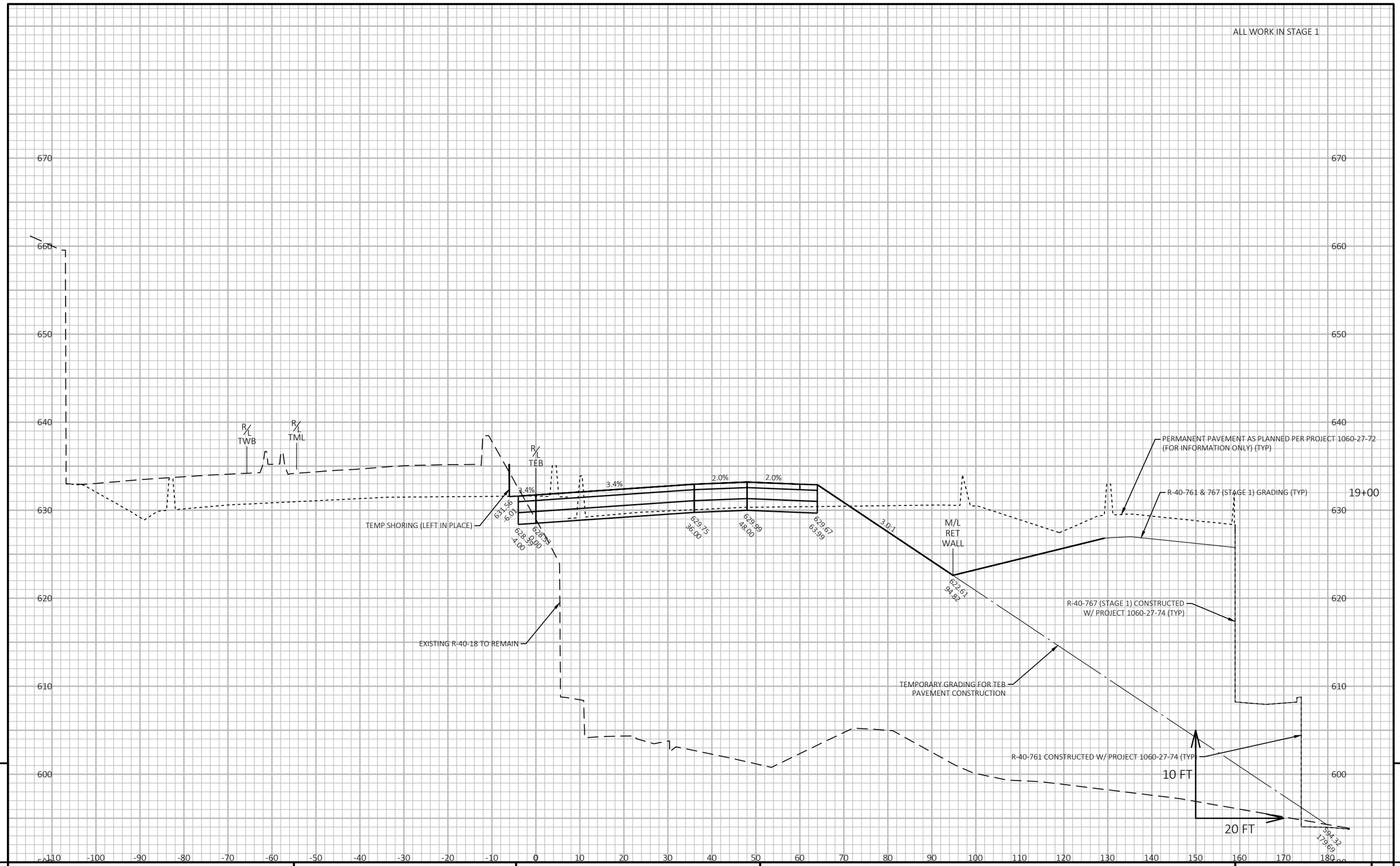
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 892	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 10

PLOT DATE : 4/28/2025 1:41 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 1



9

9

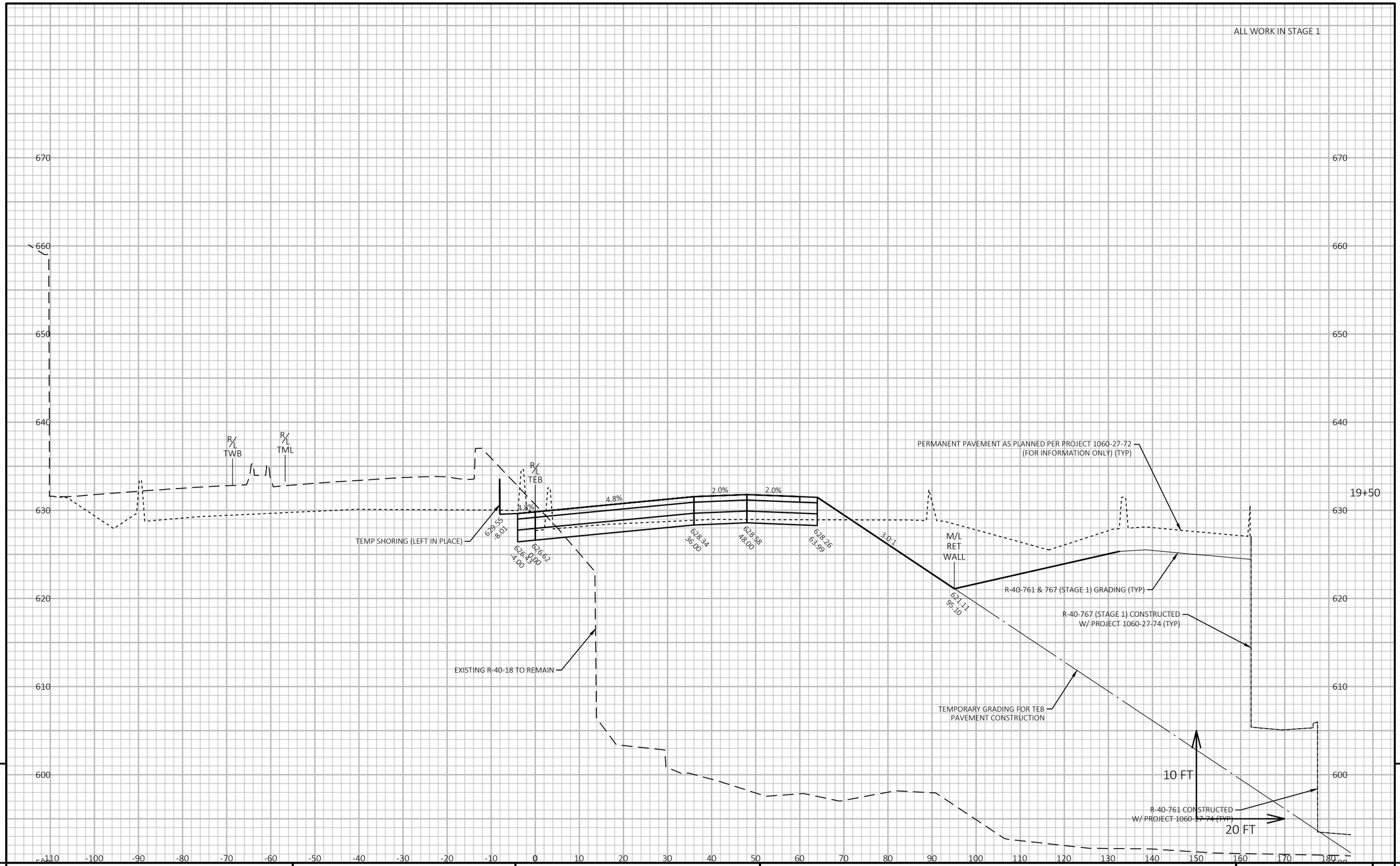
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 893	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 11

PLOT DATE : 4/28/2025 1:41 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 1



9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 894	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 12

PLOT DATE : 4/28/2025 1:41 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 1

660
650
640
630
620
610
600

R/L TWB
R/L TML
R/L TEB
5.5%
5.5%
2.0%
2.0%
3.0:1
TEMP SHORING (LEFT IN PLACE)
627.90 5.74
624.50 -4.00
625.03 0.00
627.01 36.00
627.31 51.13
627.03 65.18
M/L RET WALL
619.47 97.50
20+00
PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72 (FOR INFORMATION ONLY) (TYP)
R-40-761 & 767 (STAGE 1) GRADING (TYP)
R-40-767 (STAGE 1) CONSTRUCTED W/ PROJECT 1060-27-74 (TYP)
EXISTING R-40-18 TO REMAIN
10 FT
20 FT

-110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180

9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 895	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 13
PLOT DATE : 4/28/2025 1:41 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK IN STAGE 1

660
650
640
630
620
610
600

R/L TWB
R/L TML
R/L TEB
M/L TLC
R/L TLC

5.5%
5.5%
1.8%

616.55
-13.69
623.53
-4.00
623.75
0.00
625.73
36.00
625.86
42.87

TEMP SHORING (LEFT IN PLACE)

PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72
(FOR INFORMATION ONLY) (TYP)

R-40-761 & 767 (STAGE 1) GRADING (TYP)

EXISTING R-40-18 TO REMAIN

20+50

10 FT
20 FT

-110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180

9 9

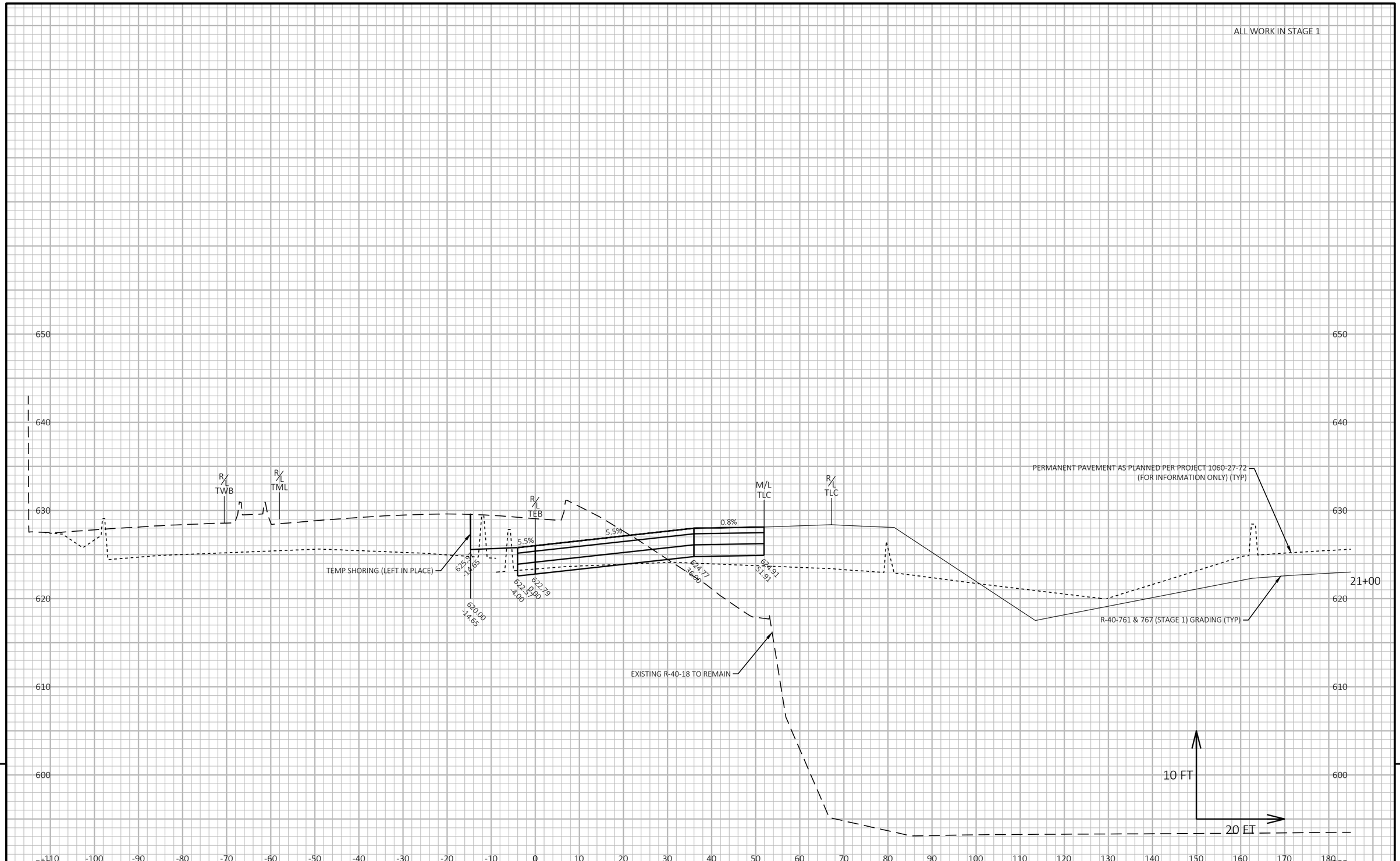
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 896	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 14

PLOT DATE : 4/28/2025 1:41 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 1



9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 897	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 15

PLOT DATE : 4/28/2025 1:41 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 1

650
640
630
620
610
600

R/L TWB
R/L TML
R/L TEB
M/L TLC
R/L TLC

TEMP SHORING (LEFT IN PLACE)

624.95 -13.00
622.15 0.00
621.90 -4.00
624.25 36.00
623.85 46.39

5.5%
5.5%
2.0%
25.9:1

PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72 (FOR INFORMATION ONLY) (TYP)

21+50

10 FT
20 FT

-110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180

9

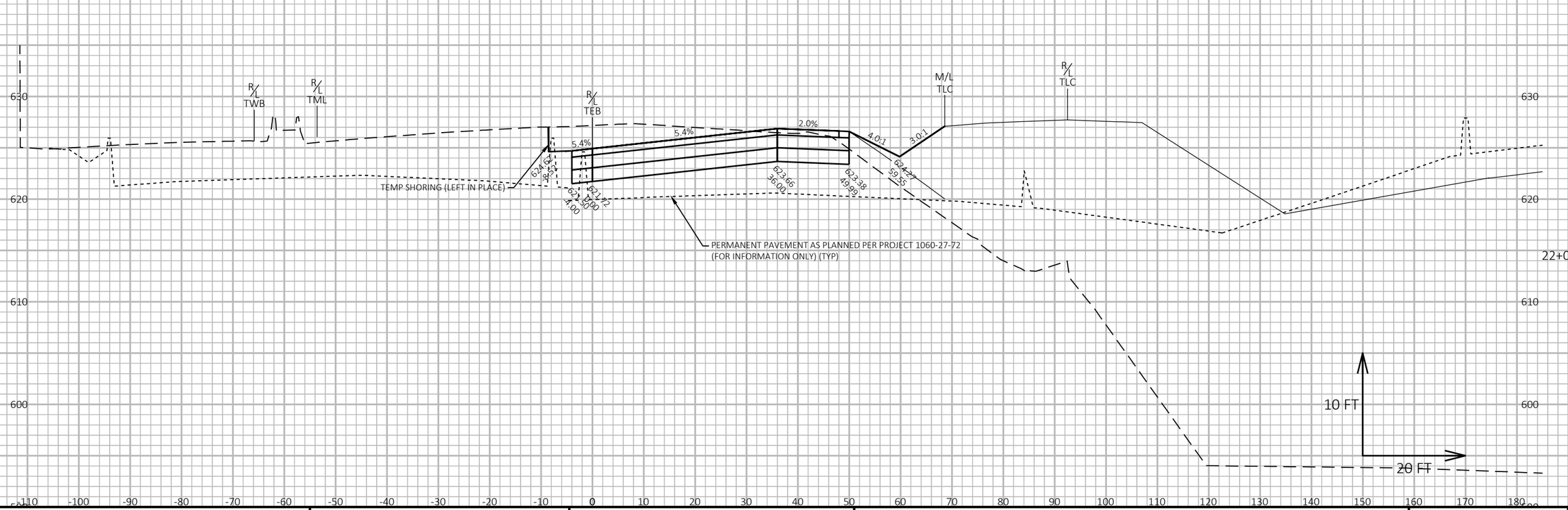
9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 898	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 16

PLOT DATE : 4/28/2025 1:41 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK IN STAGE 1

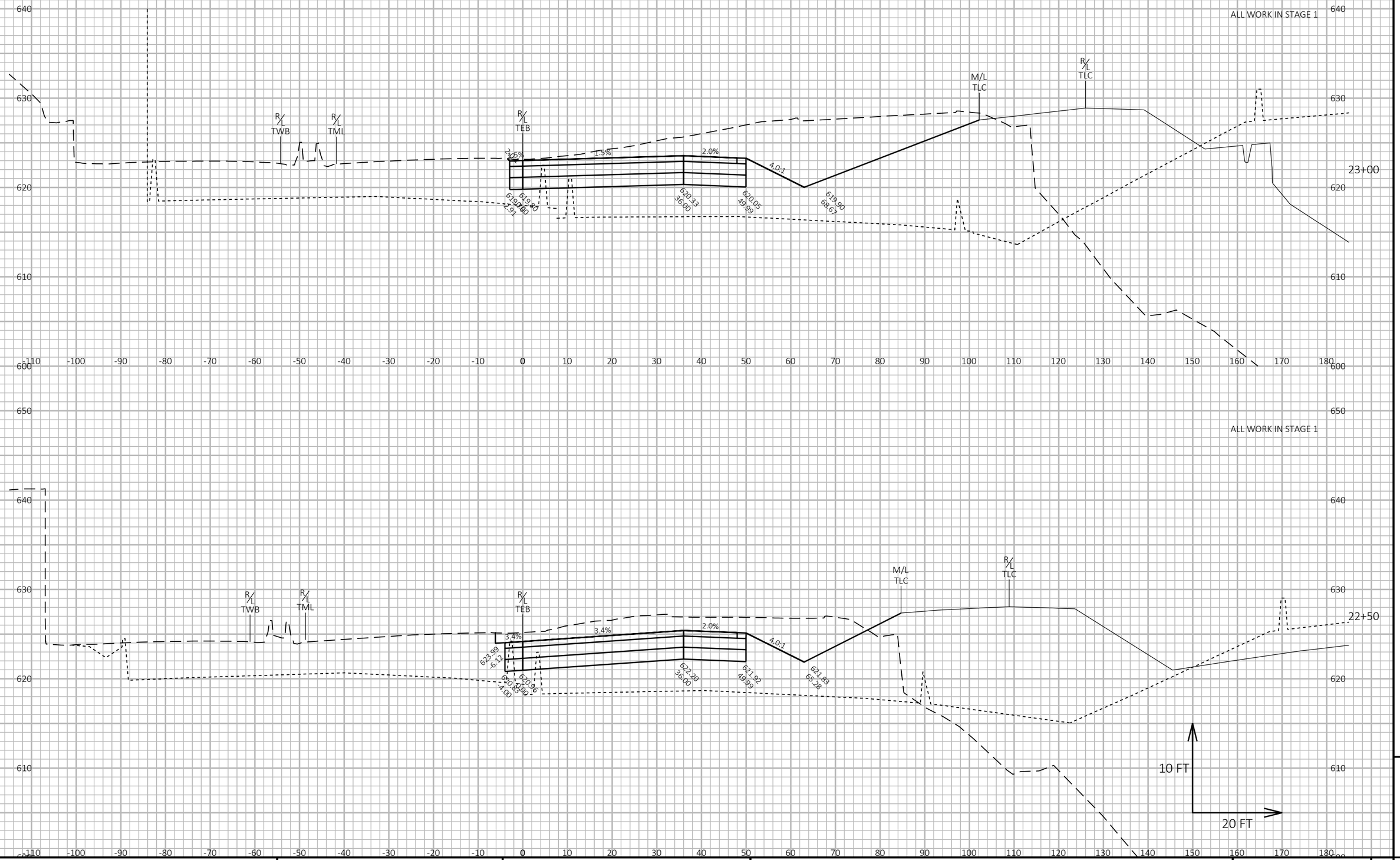


9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 899	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 17

PLOT DATE : 4/28/2025 1:41 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



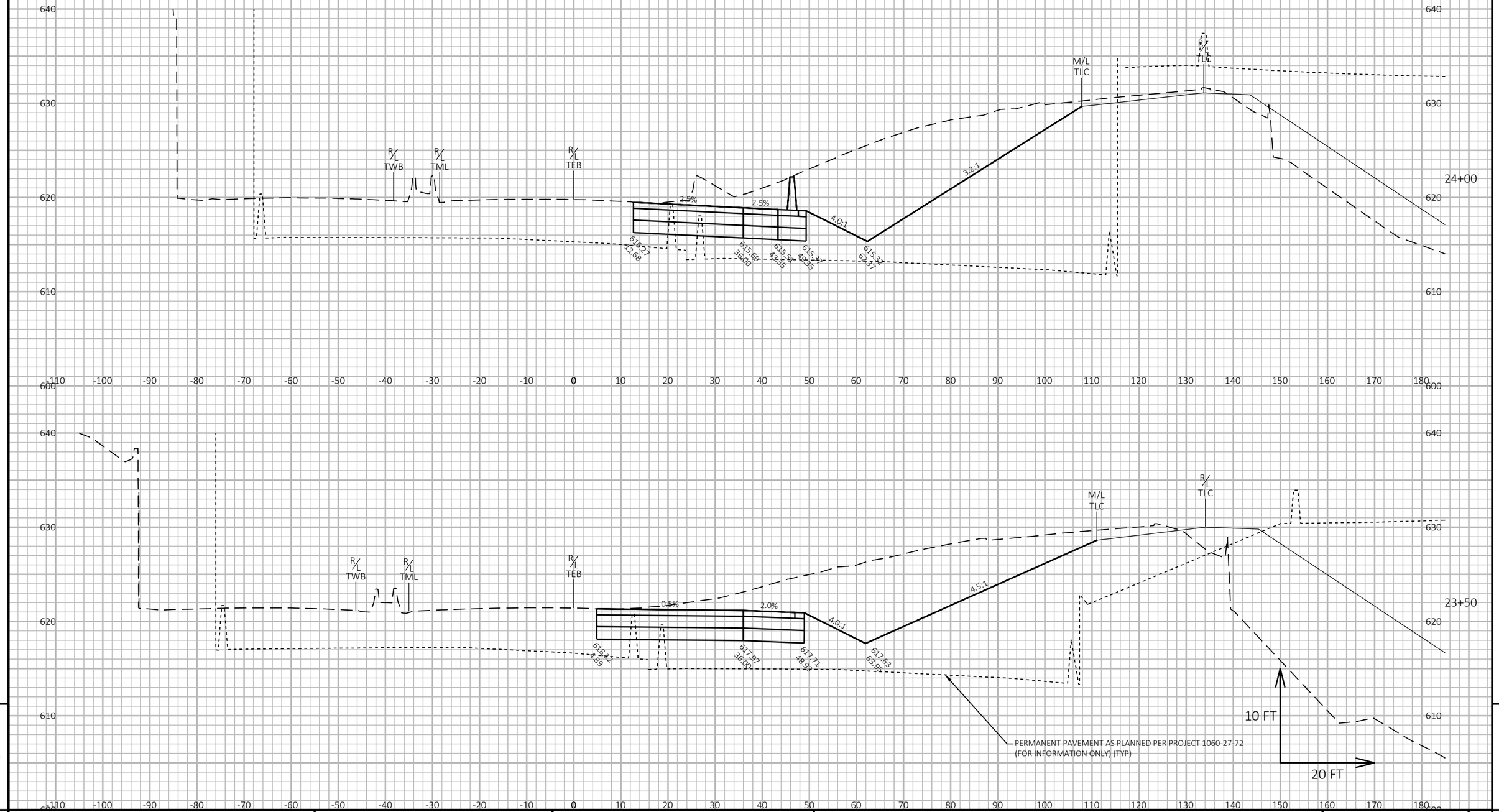
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 900	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 18

PLOT DATE : 4/28/2025 1:41 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 1



9

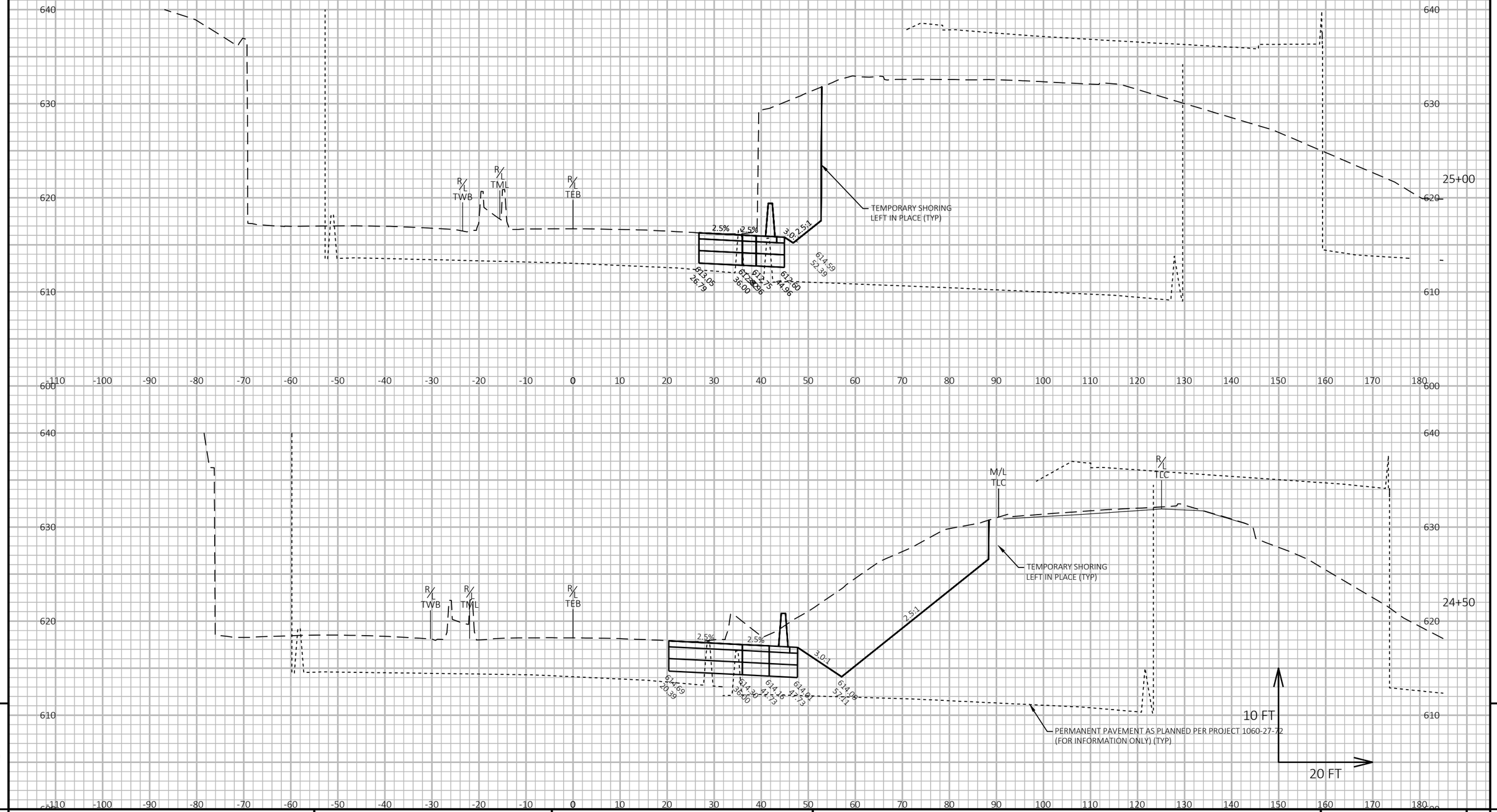
9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 901	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 19

PLOT DATE : 4/28/2025 1:41 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK IN STAGE 1



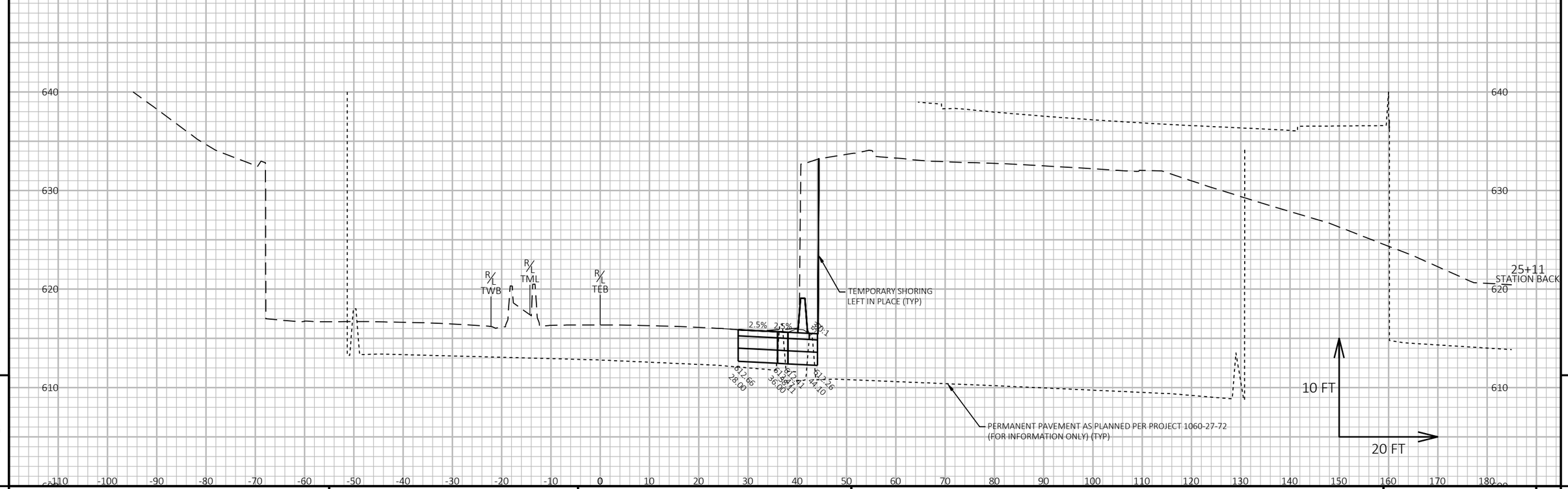
9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 902	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 20

PLOT DATE : 4/28/2025 1:42 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

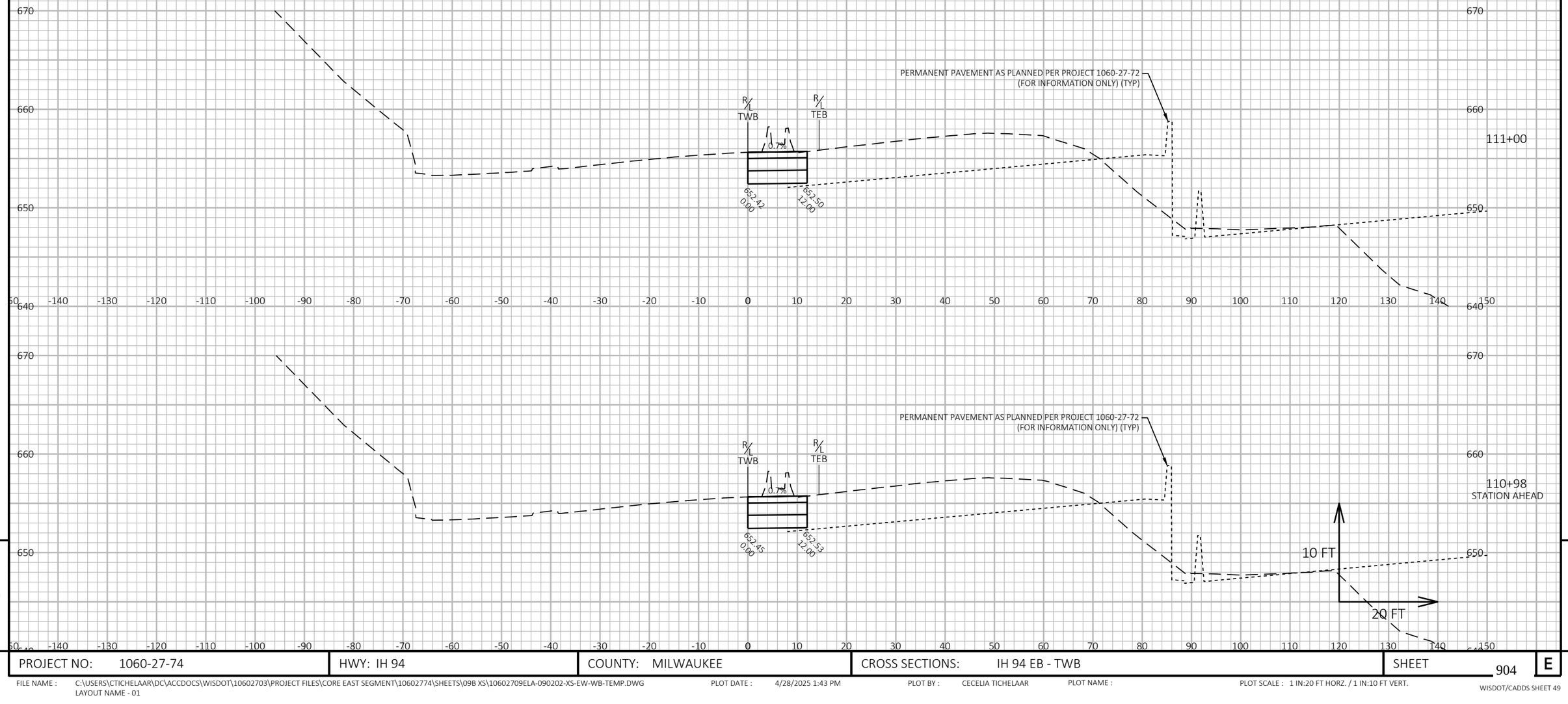
9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TEB	SHEET 903	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090201-XS-EW-EB-TEMP.DWG
LAYOUT NAME - 21

PLOT DATE : 4/28/2025 1:42 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK IN STAGE 2



9

9

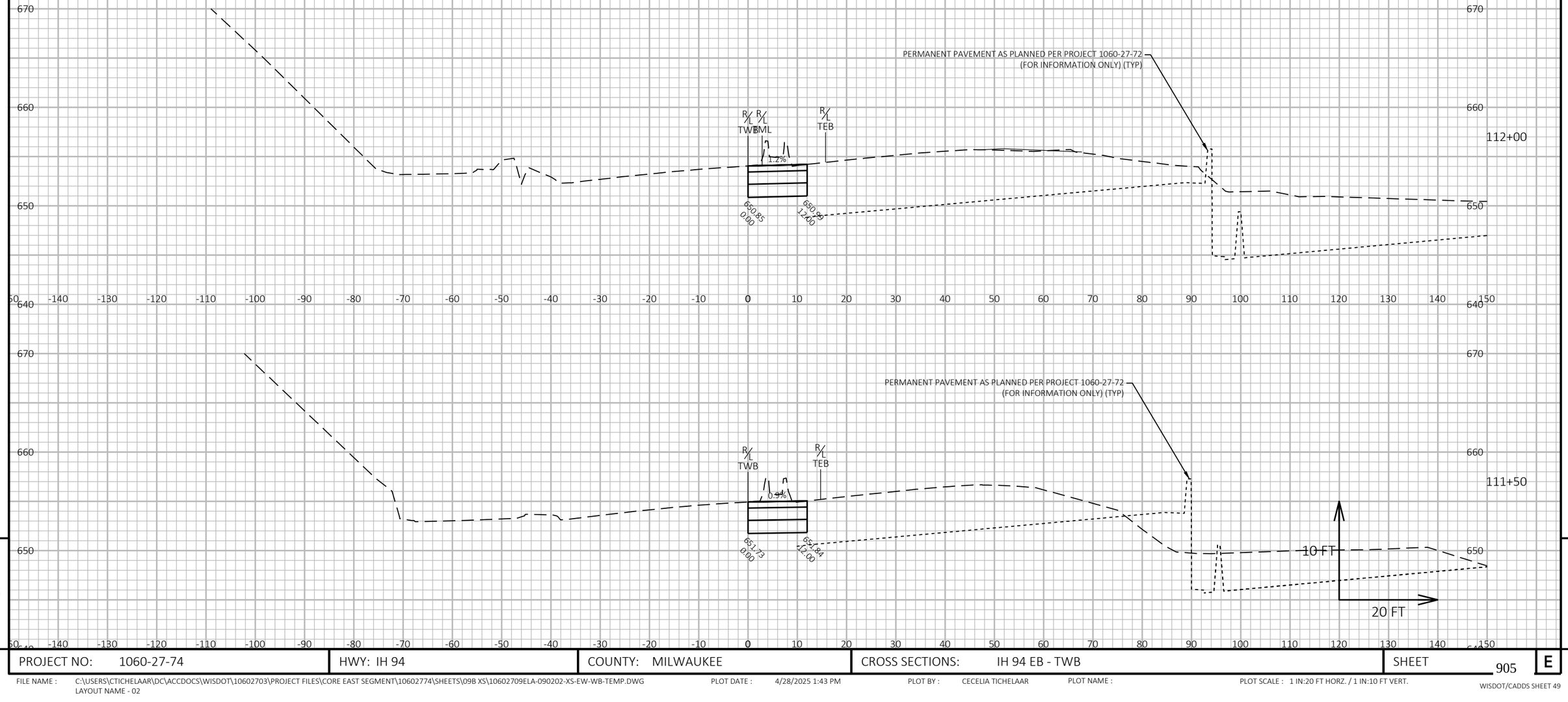
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TWB	SHEET 904	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090202-XS-EW-WB-TEMP.DWG
LAYOUT NAME - 01

PLOT DATE : 4/28/2025 1:43 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 2



9

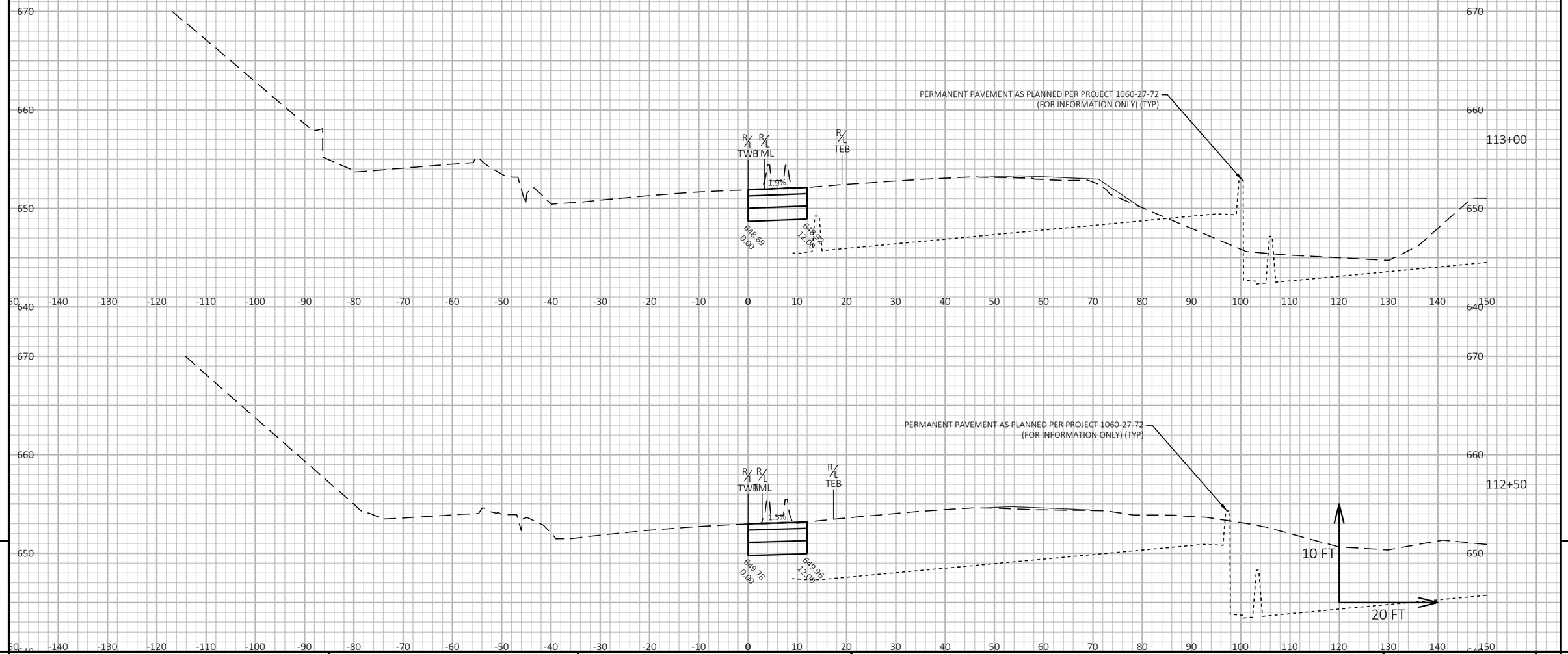
9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TWB	SHEET 905	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090202-XS-EW-WB-TEMP.DWG
LAYOUT NAME - 02

PLOT DATE : 4/28/2025 1:43 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK IN STAGE 2



9

9

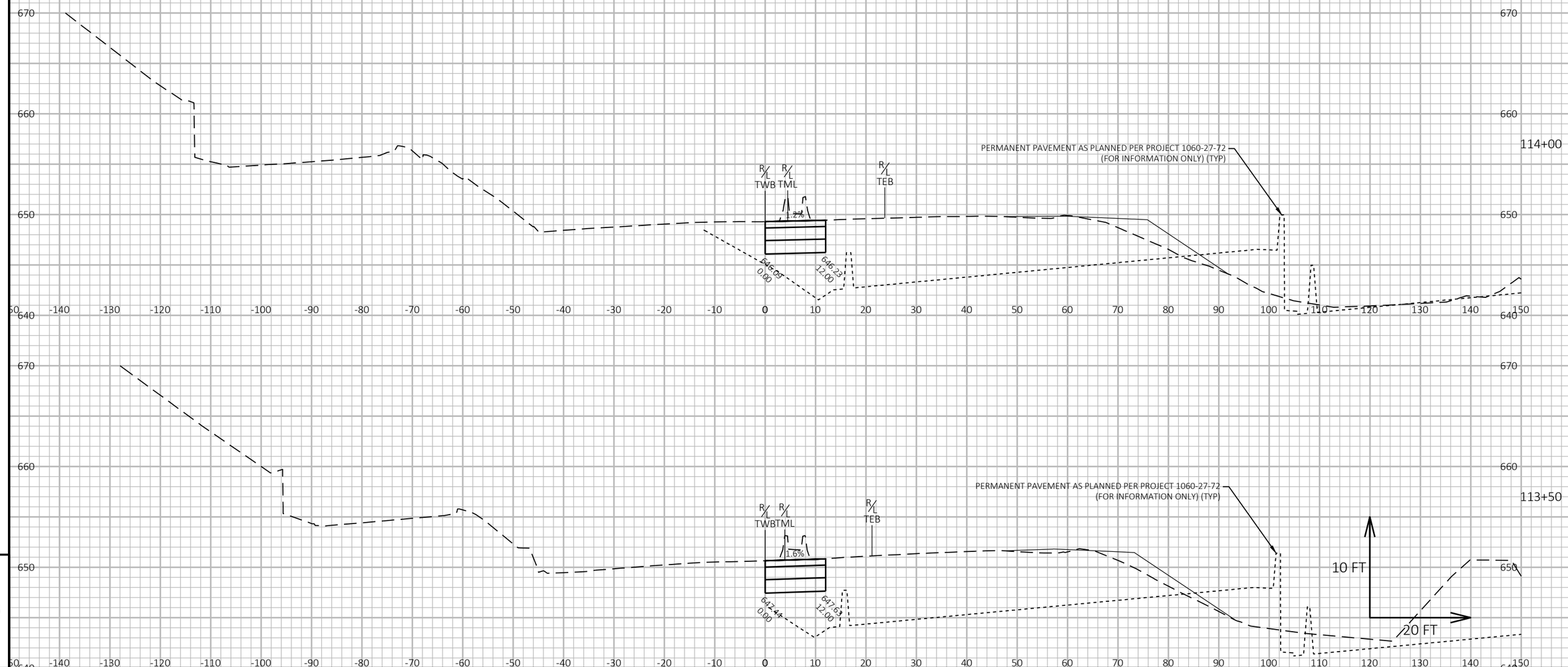
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TWB	SHEET 906	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090202-XS-EW-WB-TEMP.DWG
LAYOUT NAME - 03

PLOT DATE : 4/28/2025 1:43 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 2



9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TWB	SHEET 907	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090202-XS-EW-WB-TEMP.DWG
LAYOUT NAME - 04
PLOT DATE : 4/28/2025 1:43 PM
PLOT BY : CECELIA TICHELAAR
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 2

115+00

PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72
(FOR INFORMATION ONLY) (TYP)

R/L TWB

R/L TML

R/L TEB

0.8%

644.08
0.00

644.36
12.00

114+50

PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72
(FOR INFORMATION ONLY) (TYP)

10%

644.55
0.00

644.67
12.00

10 FT

20 FT

9

9

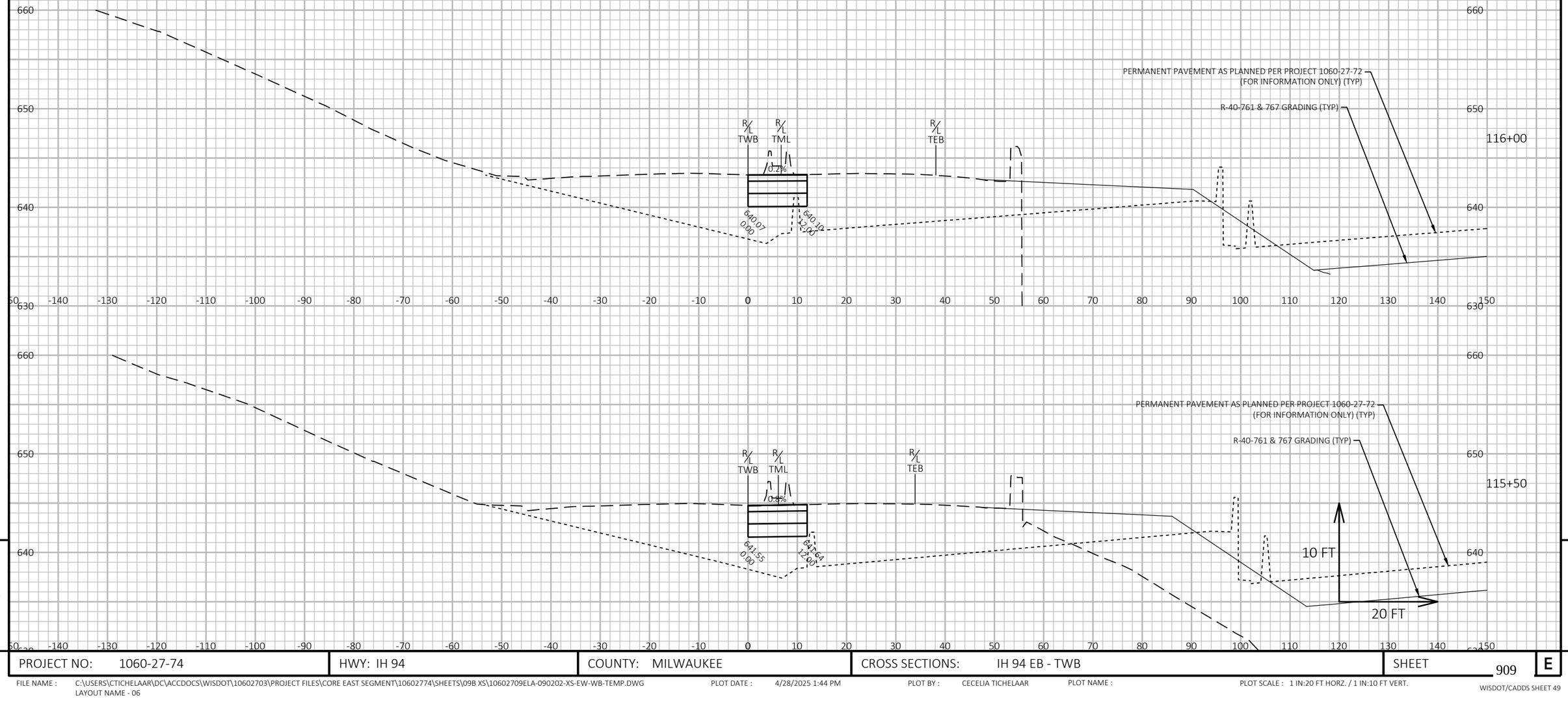
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TWB	SHEET 908	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090202-XS-EW-WB-TEMP.DWG
LAYOUT NAME - 05

PLOT DATE : 4/28/2025 1:44 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 2



9

9

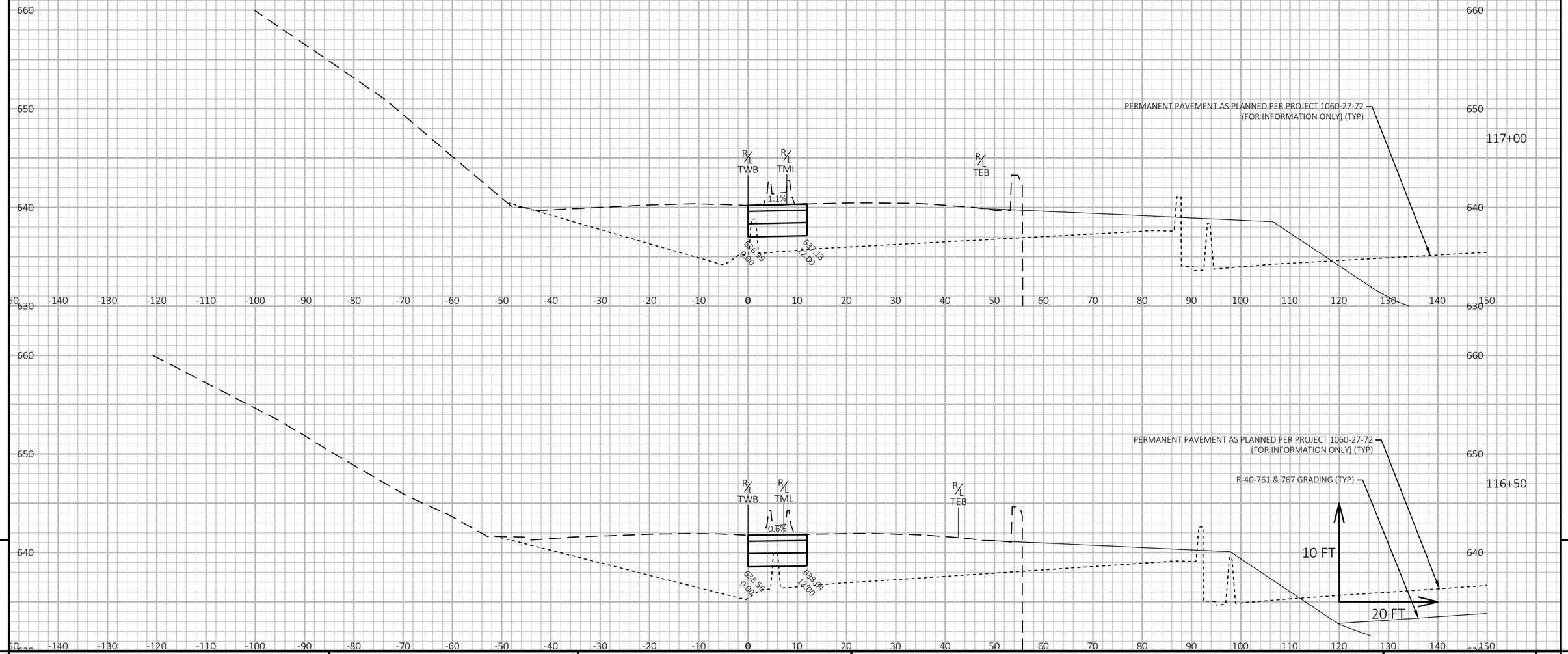
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TWB	SHEET 909	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090202-XS-EW-WB-TEMP.DWG
LAYOUT NAME - 06

PLOT DATE : 4/28/2025 1:44 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 2



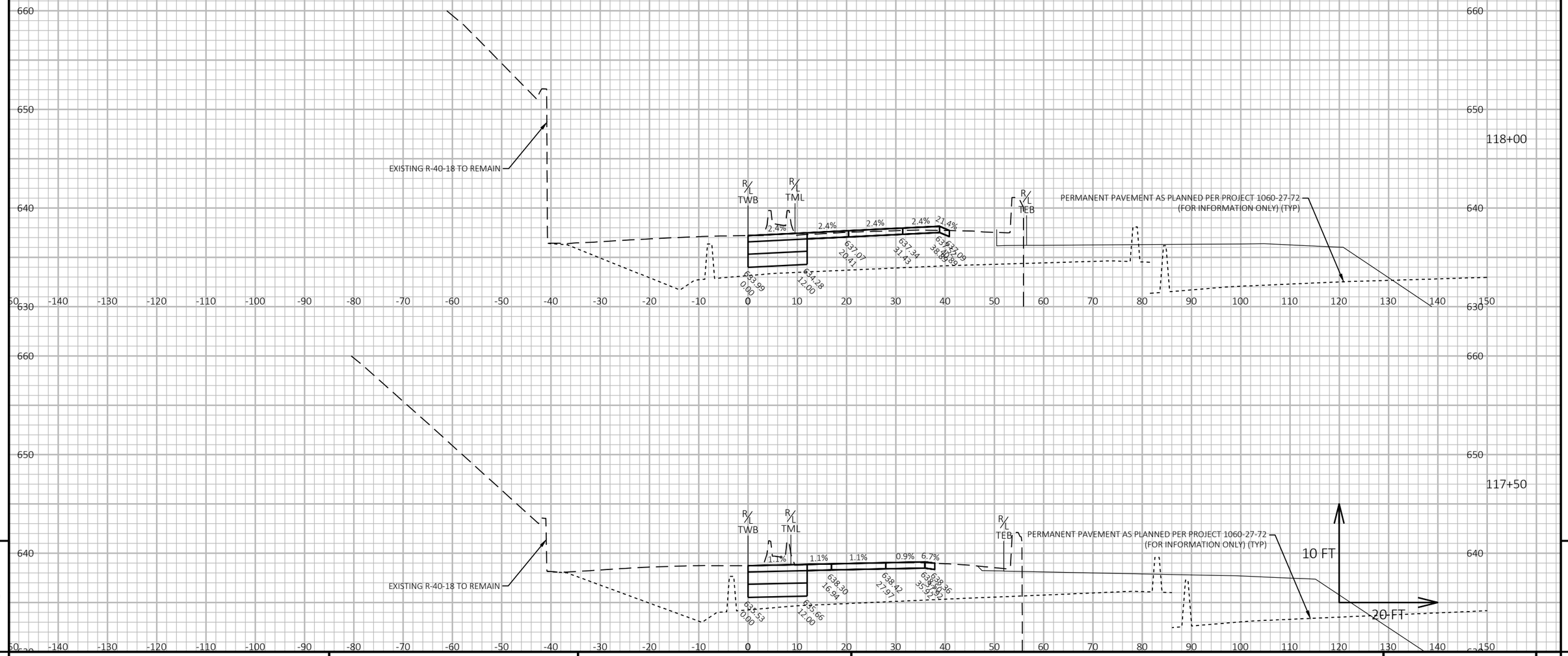
9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TWB	SHEET 910	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090202-XS-EW-WB-TEMP.DWG
LAYOUT NAME - 07
PLOT DATE : 4/28/2025 1:44 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 2



9

9

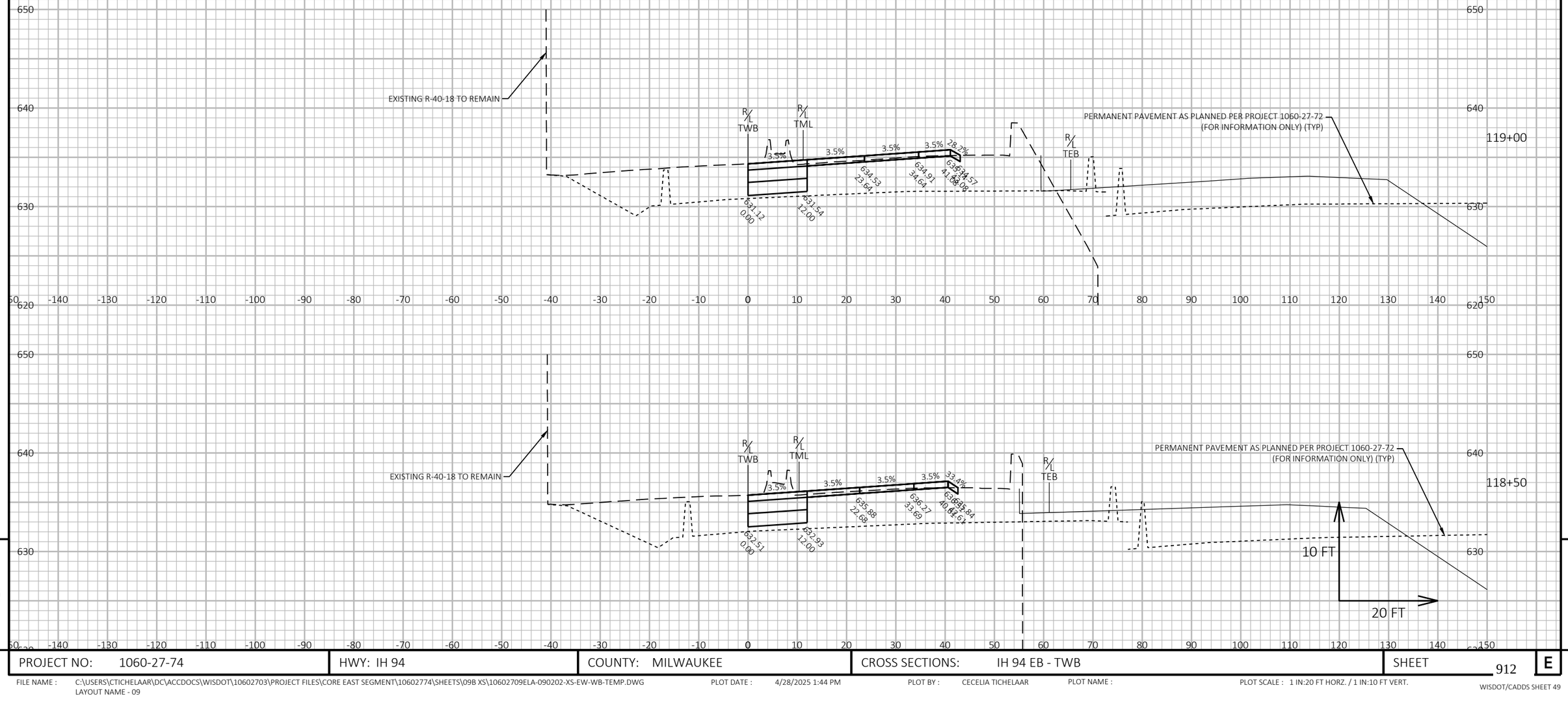
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TWB	SHEET 911	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090202-XS-EW-WB-TEMP.DWG
LAYOUT NAME - 08

PLOT DATE : 4/28/2025 1:44 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 2



9 9

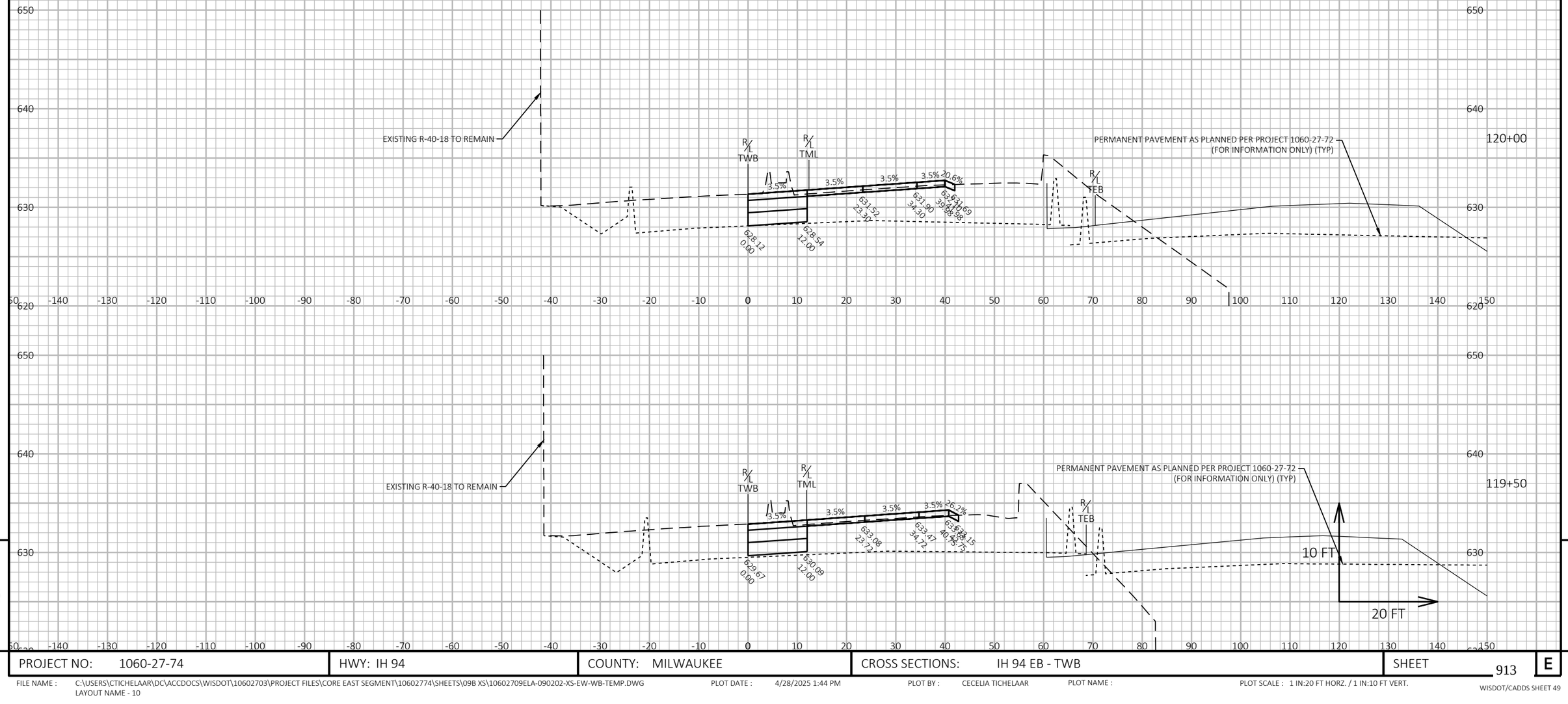
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TWB	SHEET 912	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090202-XS-EW-WB-TEMP.DWG
LAYOUT NAME - 09

PLOT DATE : 4/28/2025 1:44 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 2



9

9

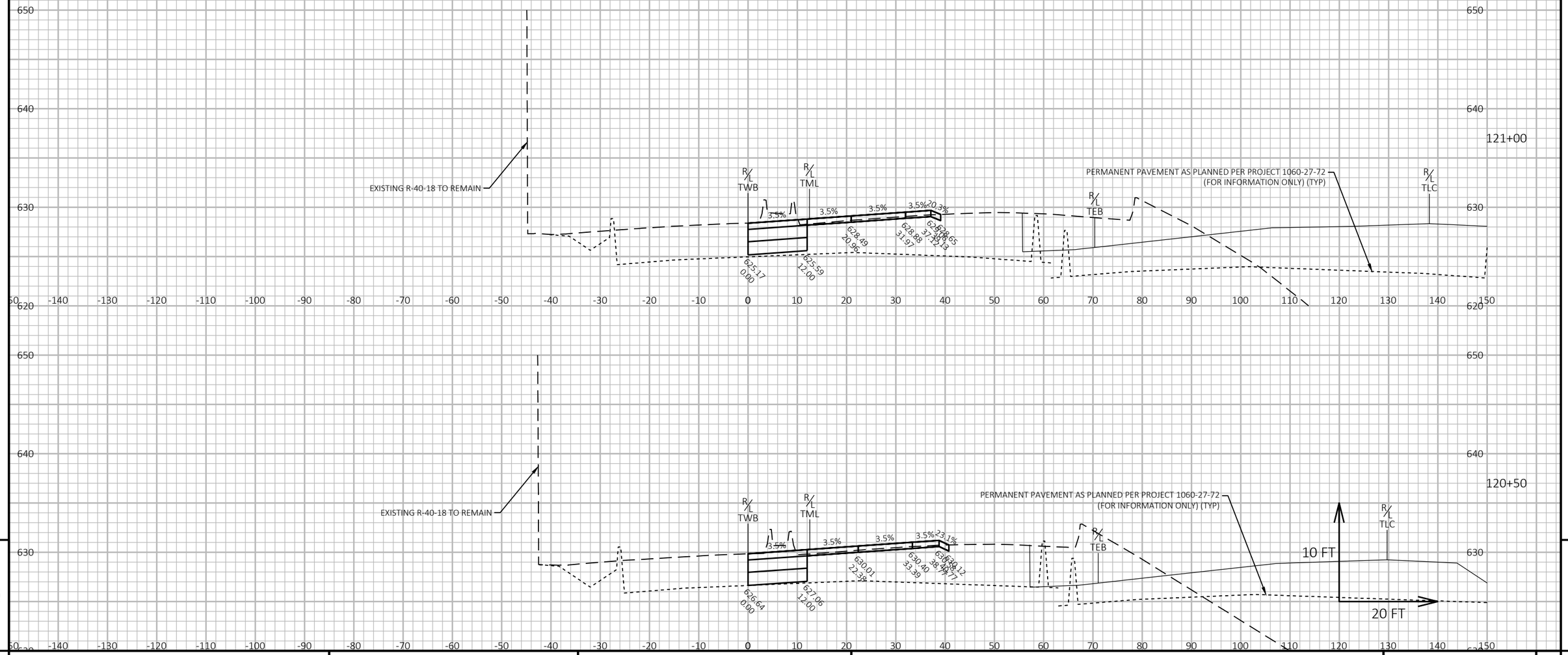
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TWB	SHEET 913	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090202-XS-EW-WB-TEMP.DWG
LAYOUT NAME - 10

PLOT DATE : 4/28/2025 1:44 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

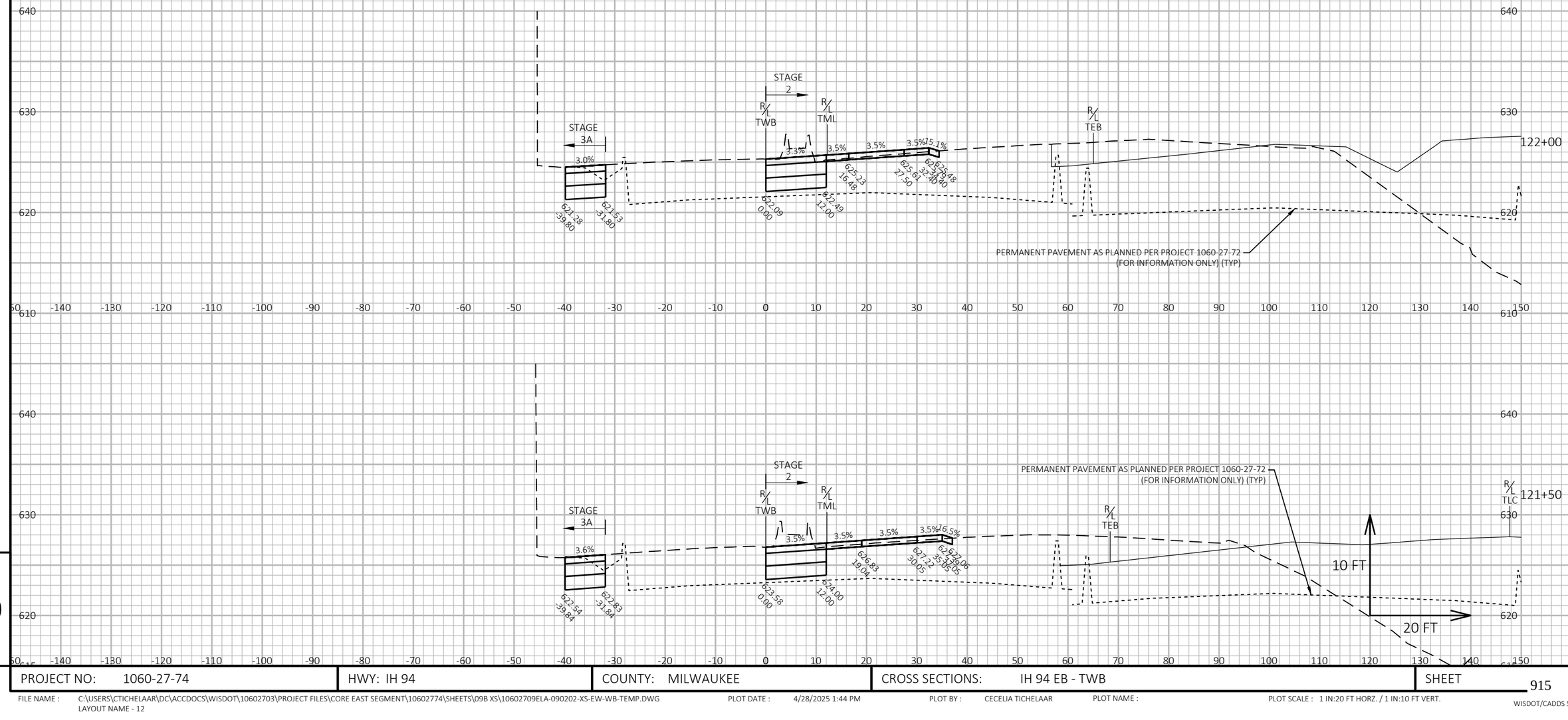
ALL WORK IN STAGE 2



9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TWB	SHEET 914	E

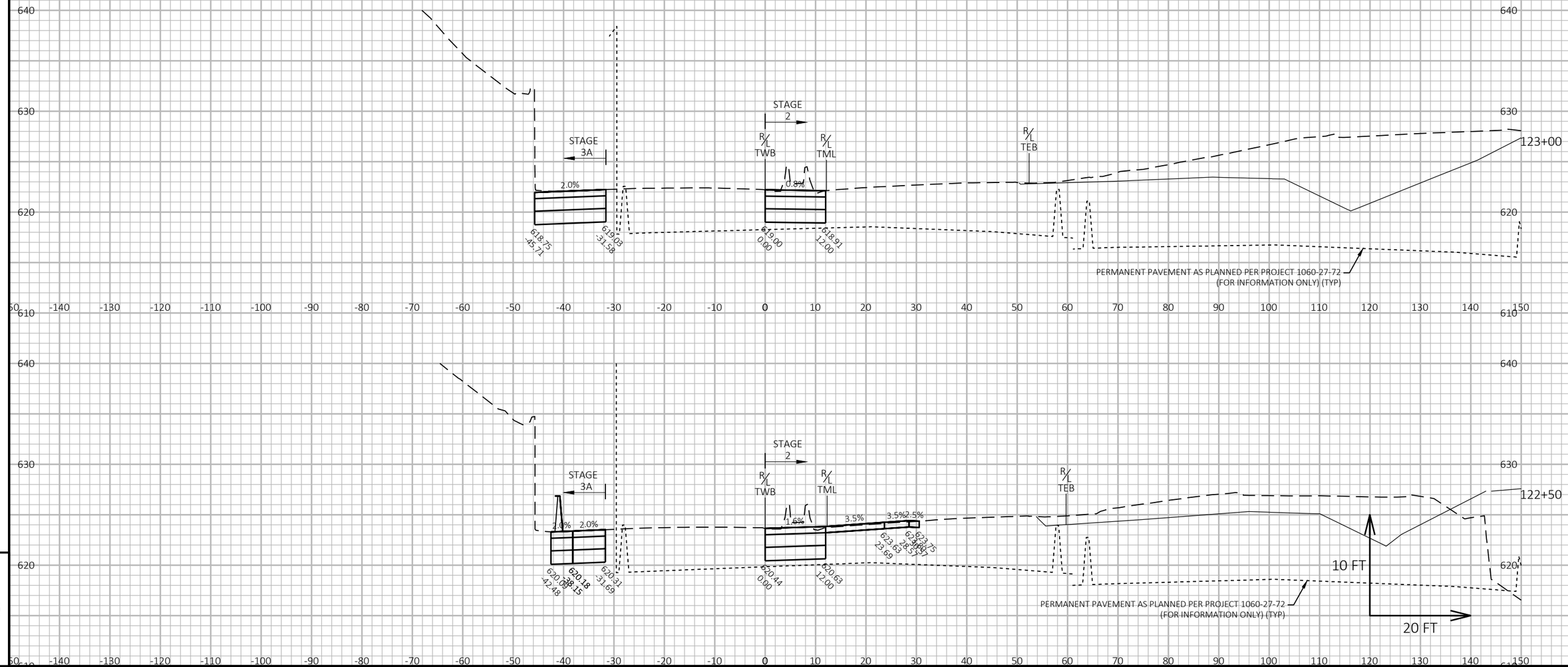
FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090202-XS-EW-WB-TEMP.DWG
LAYOUT NAME - 11
PLOT DATE : 4/28/2025 1:44 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TWB	SHEET 915	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090202-XS-EW-WB-TEMP.DWG
LAYOUT NAME - 12
PLOT DATE : 4/28/2025 1:44 PM
PLOT BY : CECELIA TICHELAAR
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



9

9

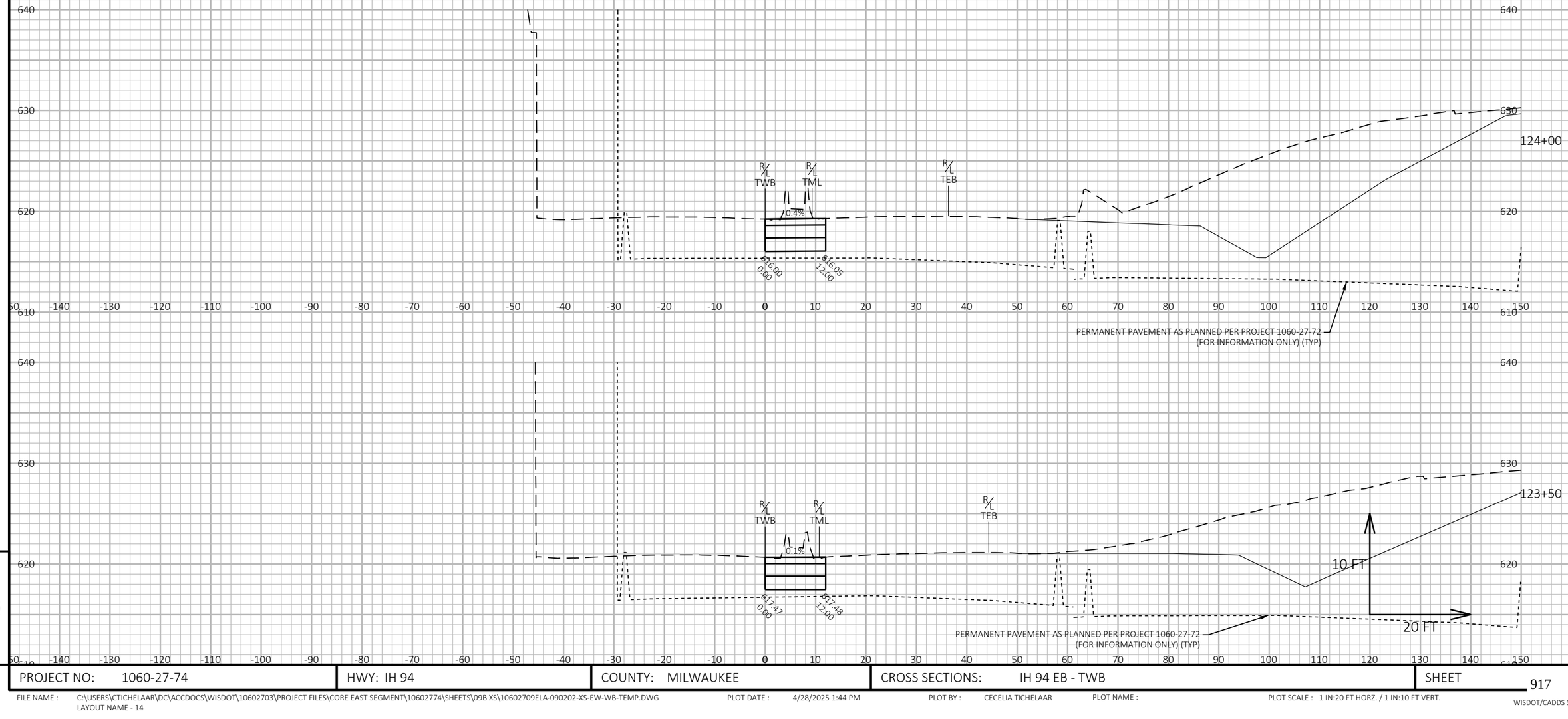
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TWB	SHEET 916	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090202-XS-EW-WB-TEMP.DWG
LAYOUT NAME - 13

PLOT DATE : 4/28/2025 1:44 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 2



9

9

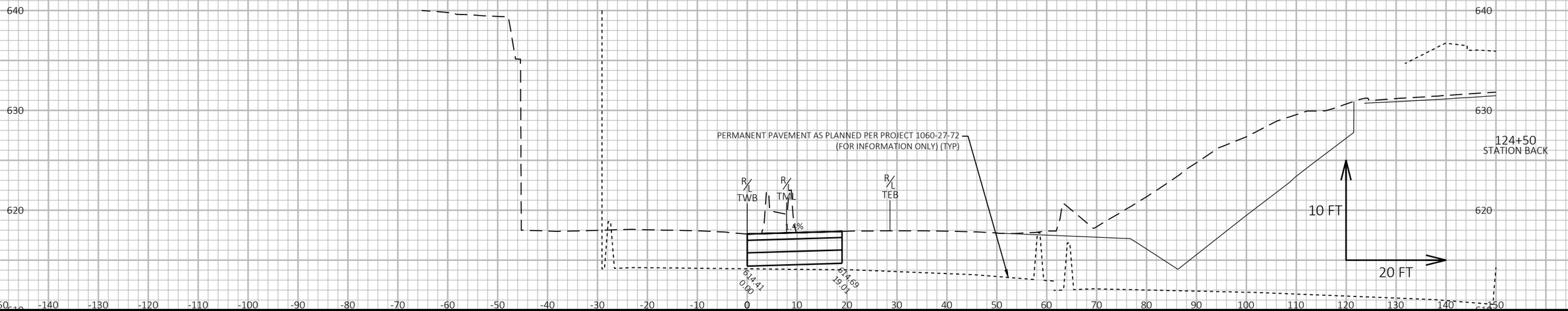
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TWB	SHEET 917	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090202-XS-EW-WB-TEMP.DWG
LAYOUT NAME - 14

PLOT DATE : 4/28/2025 1:44 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 2



9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TWB	SHEET 918	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090202-XS-EW-WB-TEMP.DWG
LAYOUT NAME - 15

PLOT DATE : 4/28/2025 1:44 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 4

680 680

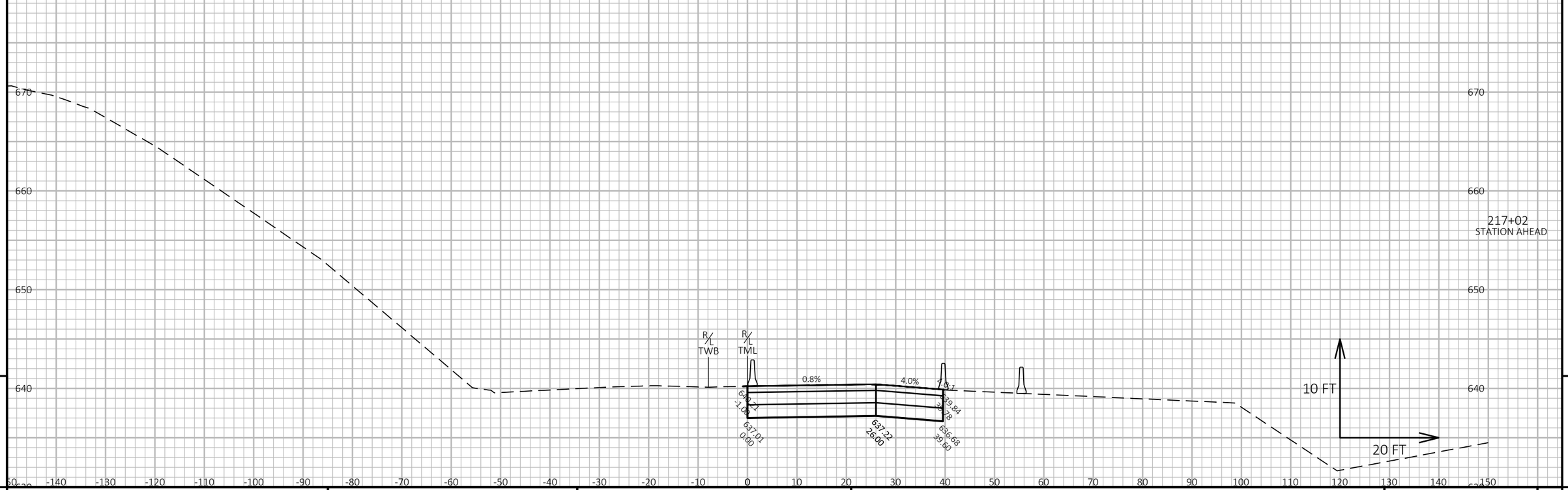
670 670

660 660

650 650

640 640

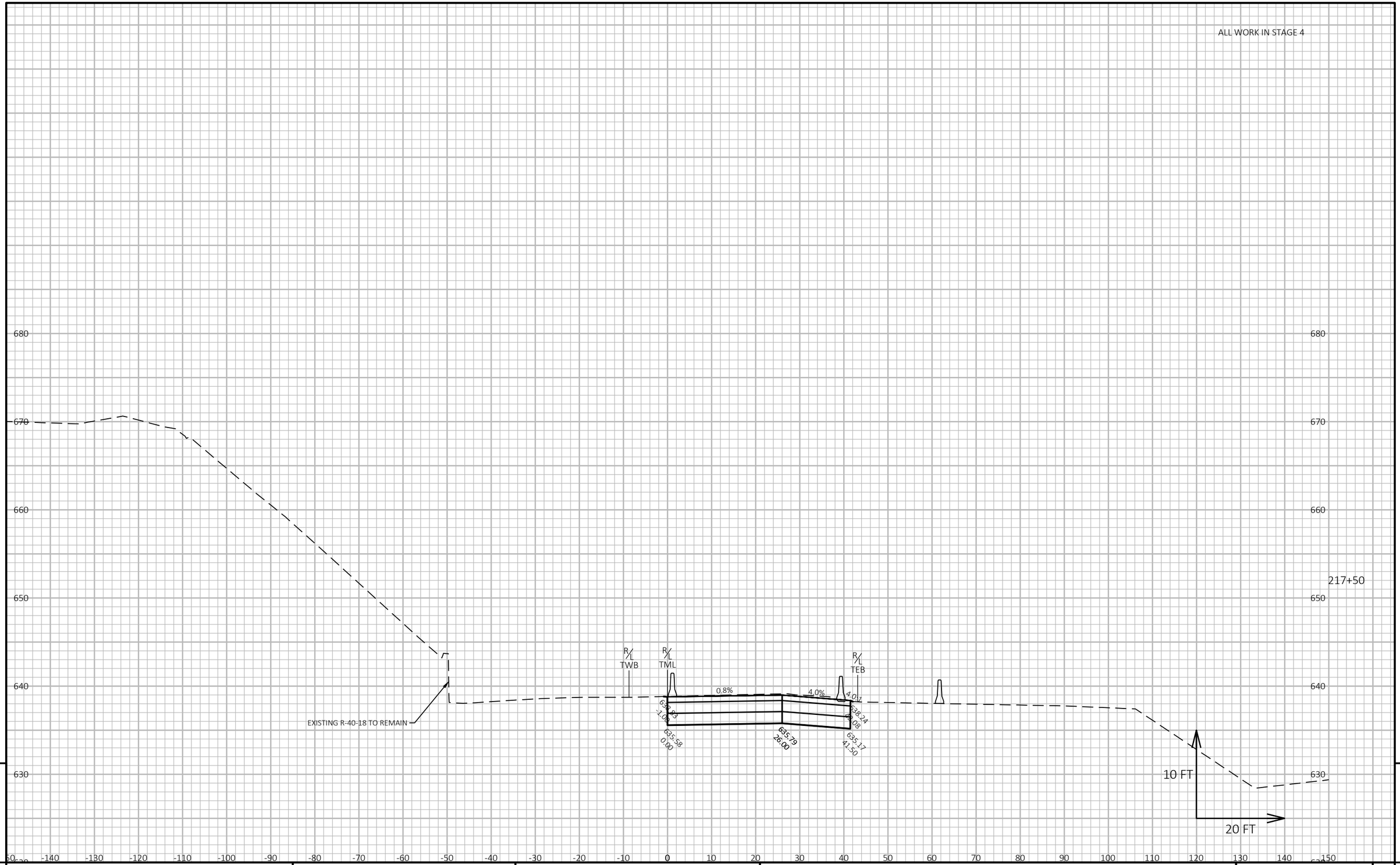
9 9



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TML	SHEET 919	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090203-XS-EW-TML-TEMP.DWG
LAYOUT NAME - 01
PLOT DATE : 4/28/2025 1:46 PM
PLOT BY : CECELIA TICHELAAR
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 4



9

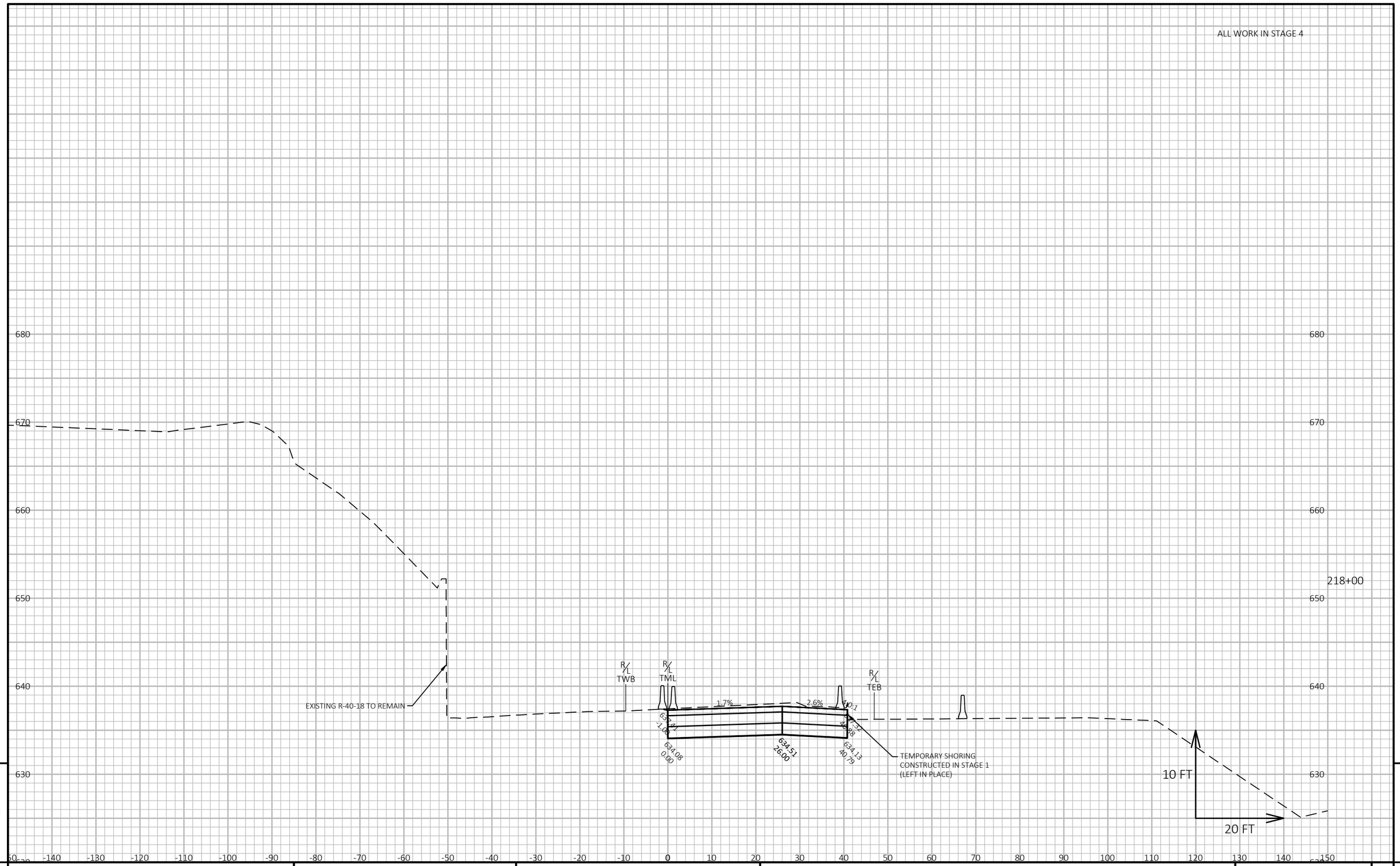
9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TML	SHEET 920	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090203-XS-EW-TML-TEMP.DWG
LAYOUT NAME - 02

PLOT DATE : 4/28/2025 1:46 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK IN STAGE 4



9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TML	SHEET 921	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090203-XS-EW-TML-TEMP.DWG
LAYOUT NAME - 03

PLOT DATE : 4/28/2025 1:46 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 4

680

670

660

650

640

630

218+50

EXISTING R-40-18 TO REMAIN

℄ TWB

℄ TML

℄ TEB

2.0%

-0.2%

-0.2%

632.94
-1.00

632.56
0.00

633.08
26.00

633.05
41.00

632.50
44.64

TEMPORARY SHORING
CONSTRUCTED IN STAGE 1
(LEFT IN PLACE)

10 FT

20 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TML	SHEET 922	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090203-XS-EW-TML-TEMP.DWG
LAYOUT NAME - 04

PLOT DATE : 4/28/2025 1:46 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 4

680

670

660

650

640

630

219+00

EXISTING R-40-18 TO REMAIN

R/L TWB

R/L TML

2.1%

2.1%

4.0:1

R/L TEB

631.72 0.00

630.87 0.00

631.42 26.00

631.74 41.00

632.75 48.19

TEMPORARY SHORING (LEFT IN PLACE)

TEMPORARY SHORING CONSTRUCTED IN STAGE 1 (LEFT IN PLACE)

10 FT

20 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TML	SHEET 923	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090203-XS-EW-TML-TEMP.DWG
LAYOUT NAME - 05

PLOT DATE : 4/28/2025 1:46 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 4

680
670
660
650
640
630

219+50

EXISTING R-40-18 TO REMAIN

R/L TWB

R/L TML

3.1%

3.1%

4.0:1

4.0:1

629.30 0.00

629.01 0.00

629.83 26.00

630.30 41.00

33.48

44.23

TEMPORARY SHORING (LEFT IN PLACE)

R/L TEB

TEMPORARY SHORING CONSTRUCTED IN STAGE 1 (LEFT IN PLACE)

10 FT

20 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TML	SHEET 924	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090203-XS-EW-TML-TEMP.DWG
LAYOUT NAME - 06

PLOT DATE : 4/28/2025 1:46 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 4

220+50

EXISTING R-40-18 TO REMAIN

R/L TWB

R/L TML

4.1%

4.1%

4.0:1

627.27
0.00

626.31
26.00

626.92
41.00

628.27
49.43

TEMPORARY SHORING (LEFT IN PLACE)

625.24
0.00

TEMPORARY SHORING CONSTRUCTED IN STAGE 1 (LEFT IN PLACE)

R/L TEB

R/L TLC

660 650 640 630 680 620 670

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

220+00

EXISTING R-40-18 TO REMAIN

R/L TWB

R/L TML

4.1%

4.1%

4.0:1

627.27
0.00

628.06
26.00

628.68
41.00

628.00
49.43

TEMPORARY SHORING (LEFT IN PLACE)

627.00
0.00

TEMPORARY SHORING CONSTRUCTED IN STAGE 1 (LEFT IN PLACE)

R/L TEB

10 FT

20 FT

660 650 640 630 670

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TML	SHEET 925	E

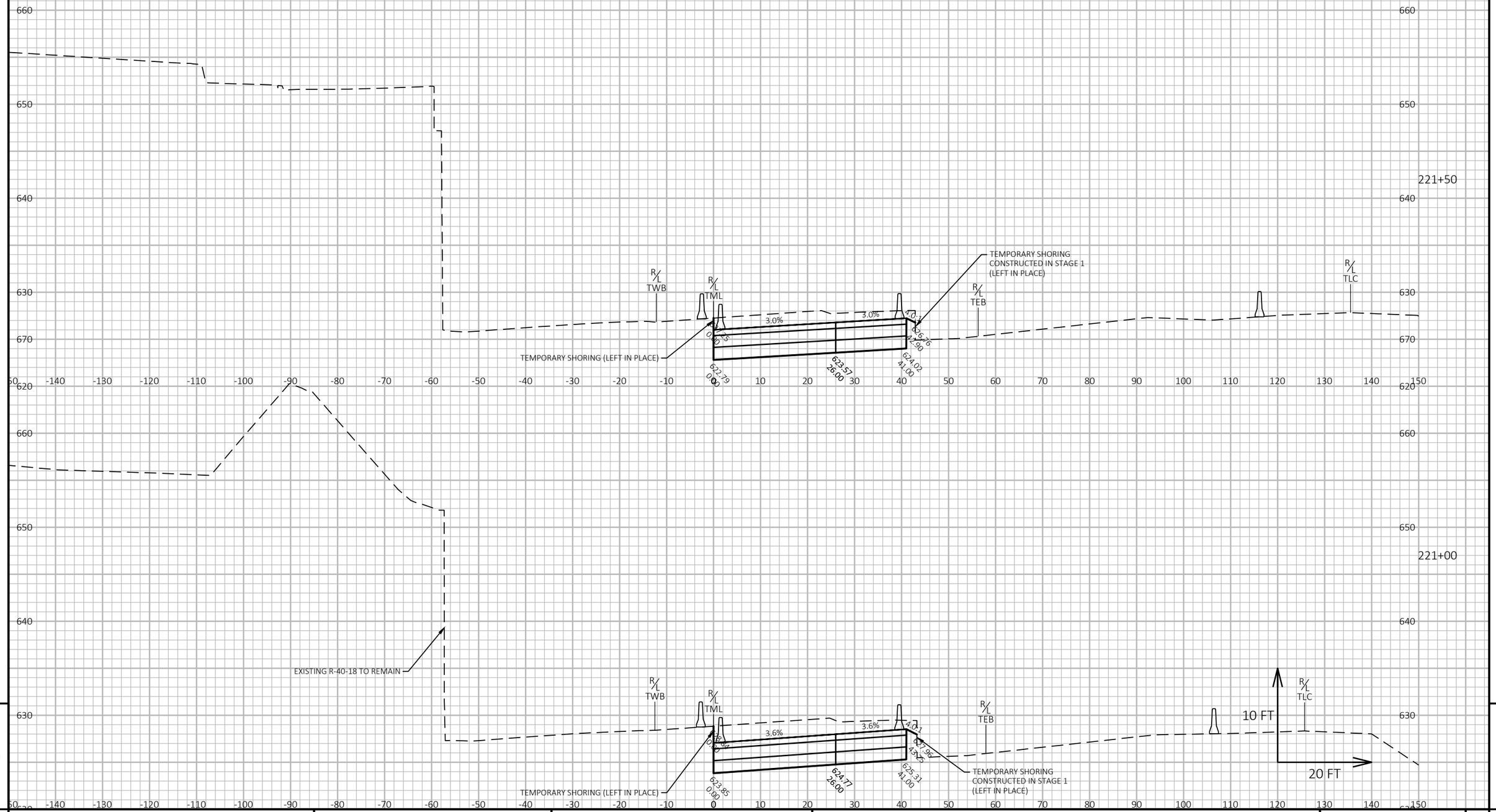
FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090203-XS-EW-TML-TEMP.DWG
LAYOUT NAME - 07

PLOT DATE : 4/28/2025 1:46 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 4

221+50



221+00

9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TML	SHEET 926	E

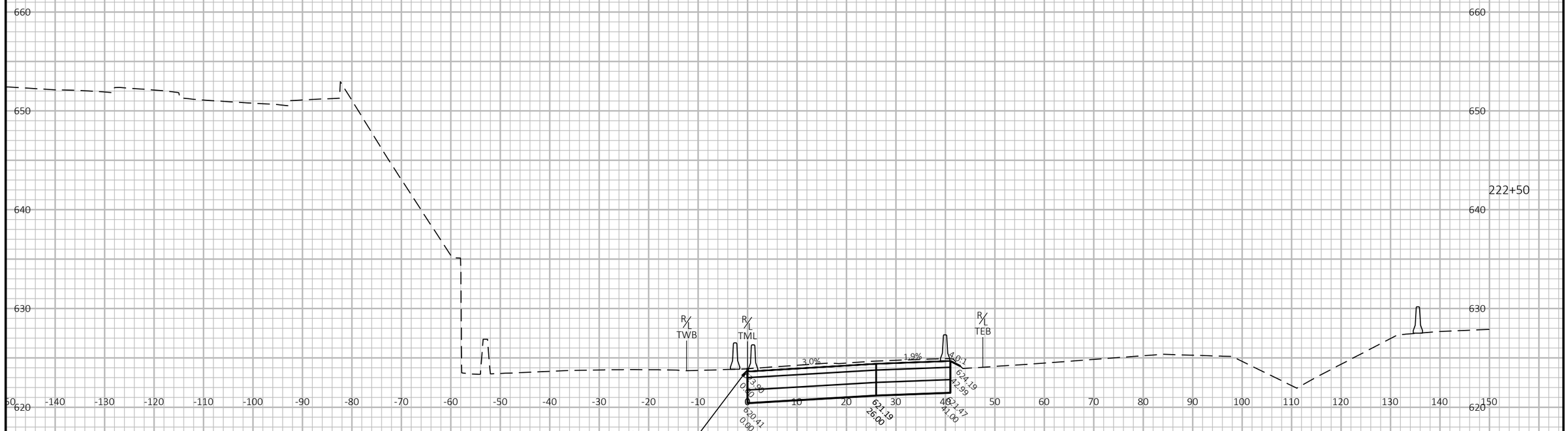
FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090203-XS-EW-TML-TEMP.DWG
LAYOUT NAME - 08

PLOT DATE : 4/28/2025 1:46 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

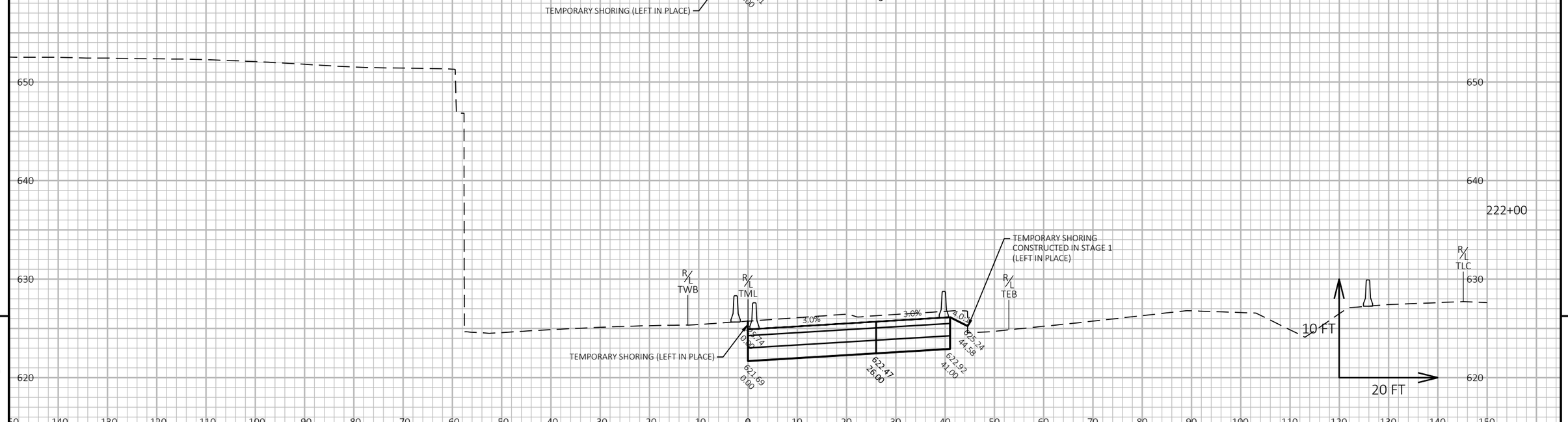
WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 4

222+50



222+00



9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TML	SHEET 927	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090203-XS-EW-TML-TEMP.DWG
LAYOUT NAME - 09

PLOT DATE : 4/28/2025 1:46 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 4

660

660

650

640

630

620

222+93
STATION BACK

R/L TWB

R/L TML

R/L TEB

3.0%

1.0%

4.0:1

623.00
0.00

622.23
1.00

620.20
0.00

619.16
0.00

619.94
26.00

620.09
41.02

TEMPORARY SHORING (LEFT IN PLACE)

10 FT

20 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

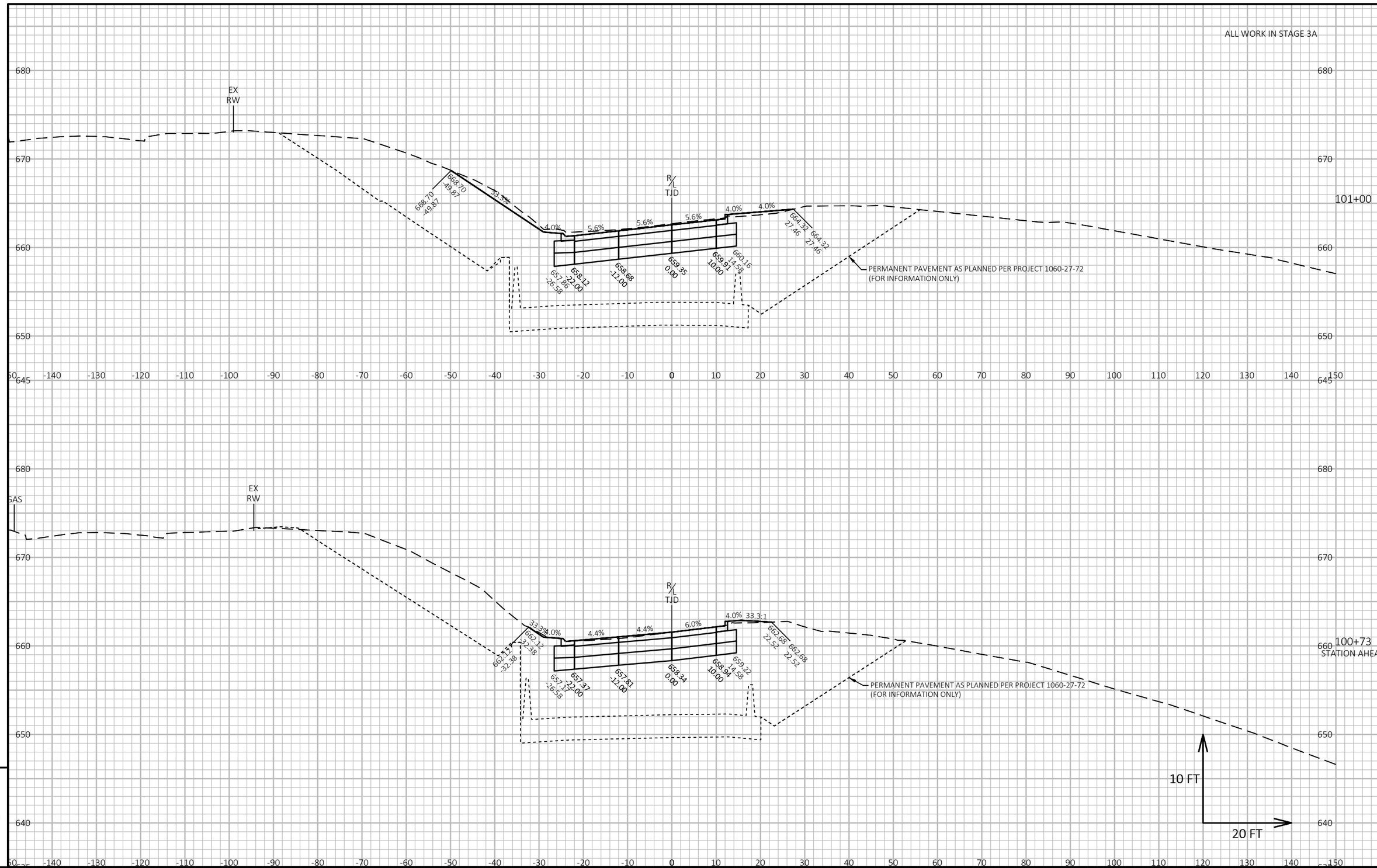
9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 94 EB - TML	SHEET 928	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090203-XS-EW-TML-TEMP.DWG
LAYOUT NAME - 10

PLOT DATE : 4/28/2025 1:46 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK IN STAGE 3A



9

9

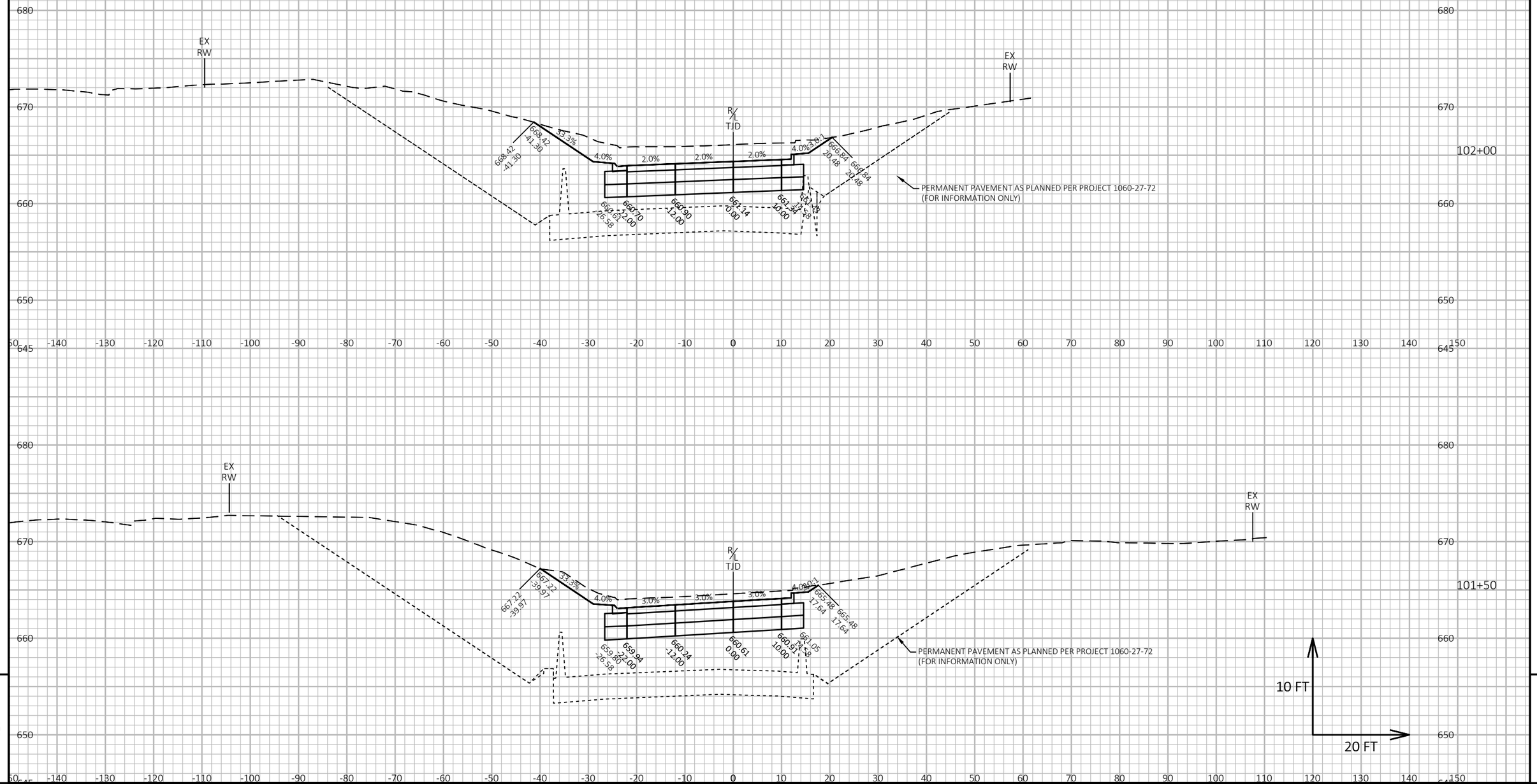
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: RAMP TJD	SHEET 929	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090402-XS-TJD.DWG
LAYOUT NAME - 01

PLOT DATE : 7/25/2025 1:53 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 3A



9 9

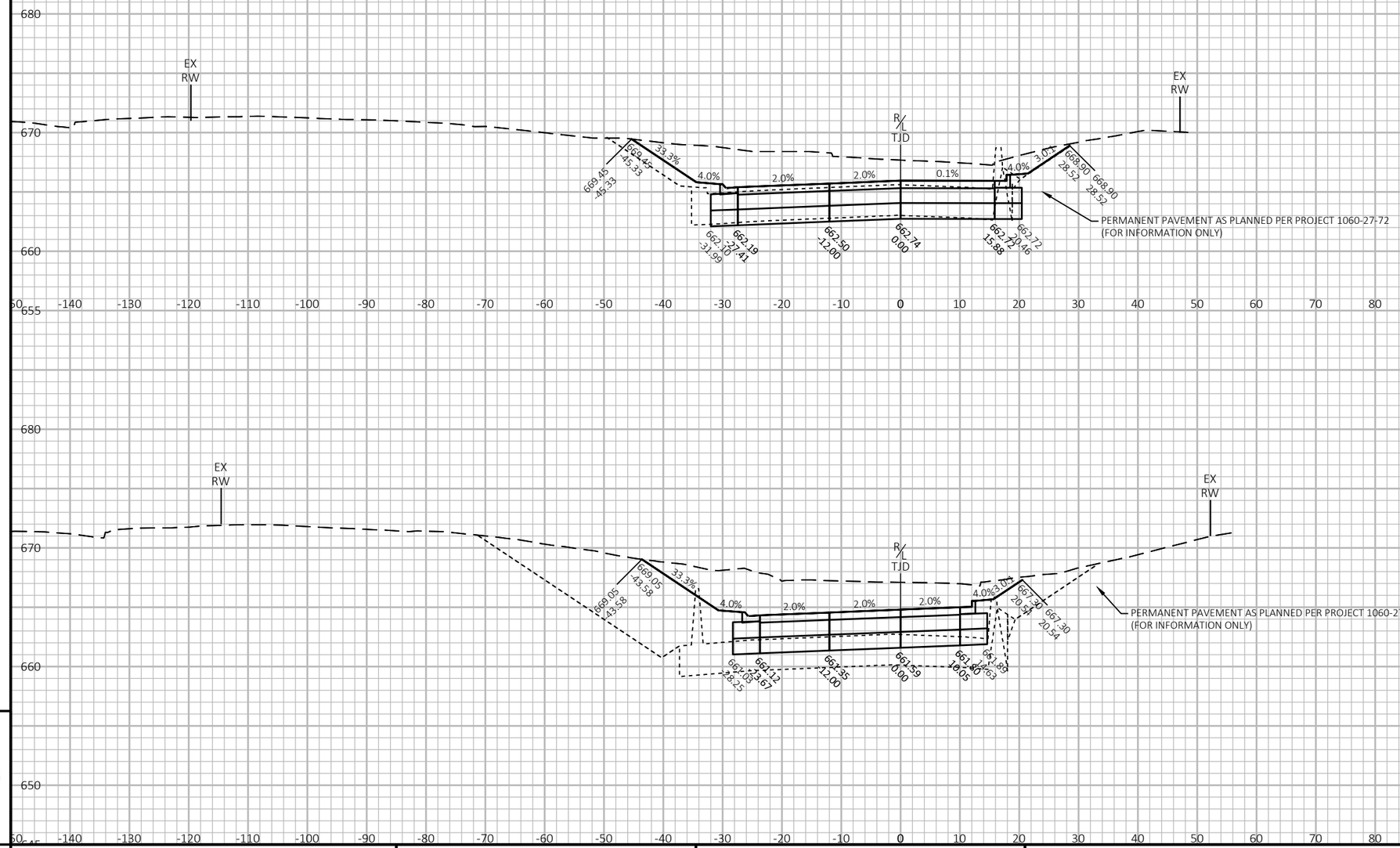
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: RAMP TJD	SHEET 930	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090402-XS-TJD.DWG
LAYOUT NAME - 02

PLOT DATE : 7/25/2025 1:53 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 3A



9

9

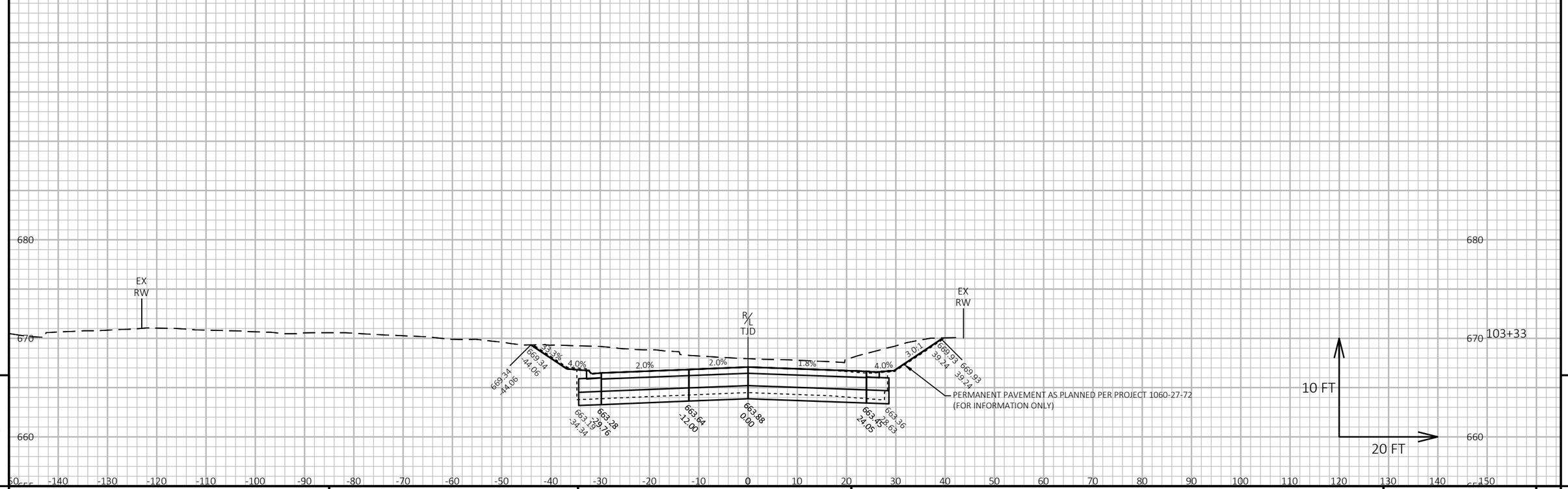
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: RAMP TJD	SHEET 931	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090402-XS-TJD.DWG
LAYOUT NAME - 03

PLOT DATE : 7/25/2025 1:52 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 3A



9

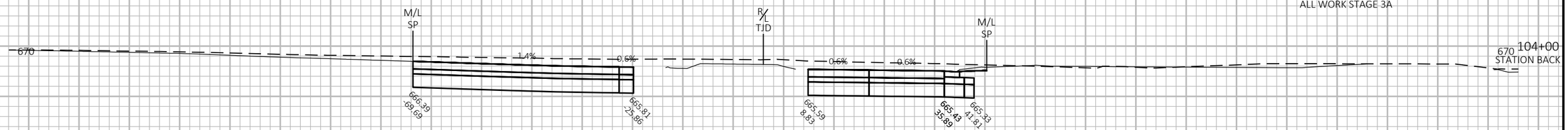
9

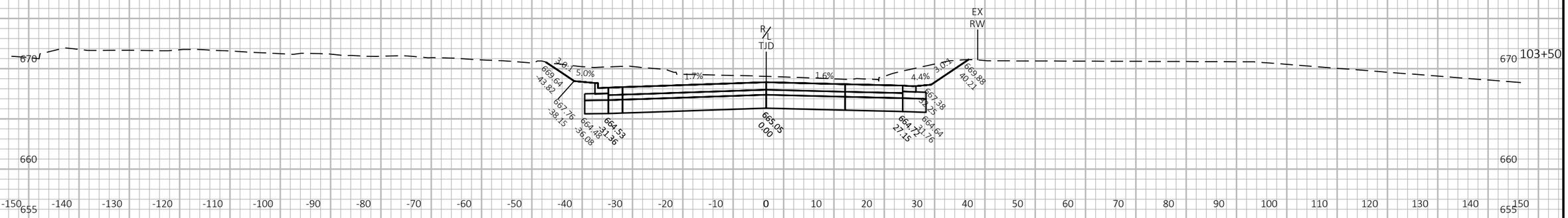
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: RAMP TJD	SHEET 932	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090402-XS-TJD.DWG
LAYOUT NAME - 04

PLOT DATE : 7/25/2025 1:52 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK STAGE 3A





9

9

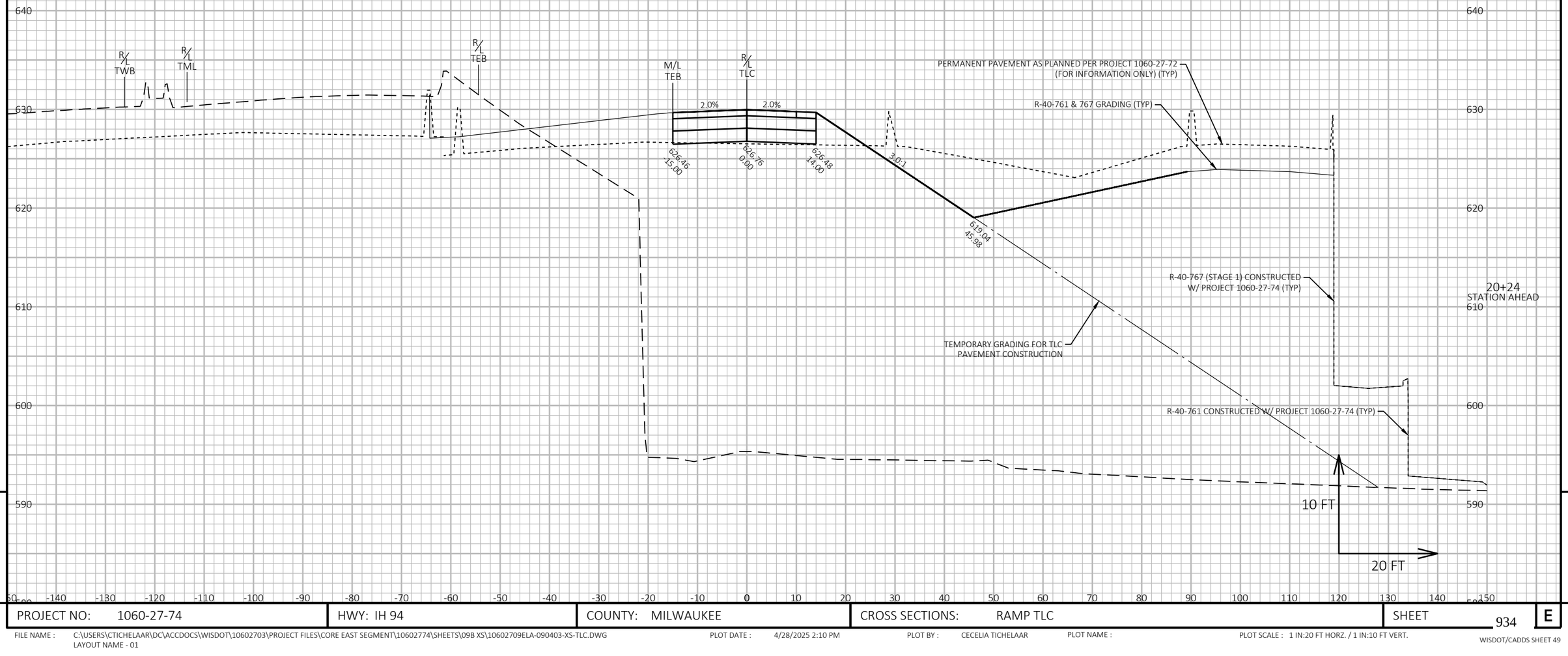
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: RAMP TJD	SHEET 933	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090401-XS-JD.DWG
LAYOUT NAME - 01

PLOT DATE : 7/25/2025 1:55 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 1



9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: RAMP TLC	SHEET 934	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090403-XS-TLC.DWG
LAYOUT NAME - 01

PLOT DATE : 4/28/2025 2:10 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK IN STAGE 1

640
630
620
610
600
590

R/L TWB
R/L TML
R/L TEB
M/L TEB
R/L TLC
2.0%
2.0%
635.89
-15.00
636.19
0.00
635.91
14.00
3:0:1
M/L RET WALL
618.50
45.87
PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72 (FOR INFORMATION ONLY) (TYP)
R-40-761 & 767 (STAGE 1) GRADING (TYP)
R-40-767 (STAGE 1) CONSTRUCTED W/ PROJECT 1060-27-74 (TYP)
20+50
TEMPORARY GRADING FOR TLC PAVEMENT CONSTRUCTION
10 FT
20 FT
R-40-761 CONSTRUCTED W/ PROJECT 1060-27-74 (TYP)

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: RAMP TLC	SHEET 935	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090403-XS-TLC.DWG
LAYOUT NAME - 02
PLOT DATE : 4/28/2025 2:10 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK IN STAGE 1

R/L TWB
R/L TML
R/L TEB
M/L TEB
R/L TLC
M/L RET WALL

4.0%
2.0%
2.0%
3.0:1

624.08 -22.99
624.40 -15.00
624.70 0.00
624.42 14.00
617.33 44.91

21+50

630
620
610
600
590

-140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

R/L TWB
R/L TML
R/L TEB
M/L TEB
R/L TLC
M/L RET WALL

2.0%
2.0%
3.0:1

624.96 -15.00
625.46 0.00
624.98 14.00
617.68 45.96

PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72 (FOR INFORMATION ONLY) (TYP)
R-40-761 & 767 (STAGE 1) GRADING (TYP)
R-40-767 (STAGE 1) CONSTRUCTED W/ PROJECT 1060-27-74 (TYP)
TEMPORARY GRADING FOR TLC PAVEMENT CONSTRUCTION
10 ET
R-40-761 CONSTRUCTED W/ PROJECT 1060-27-74 (TYP)
20 ET

21+00

630
620
610
600
590

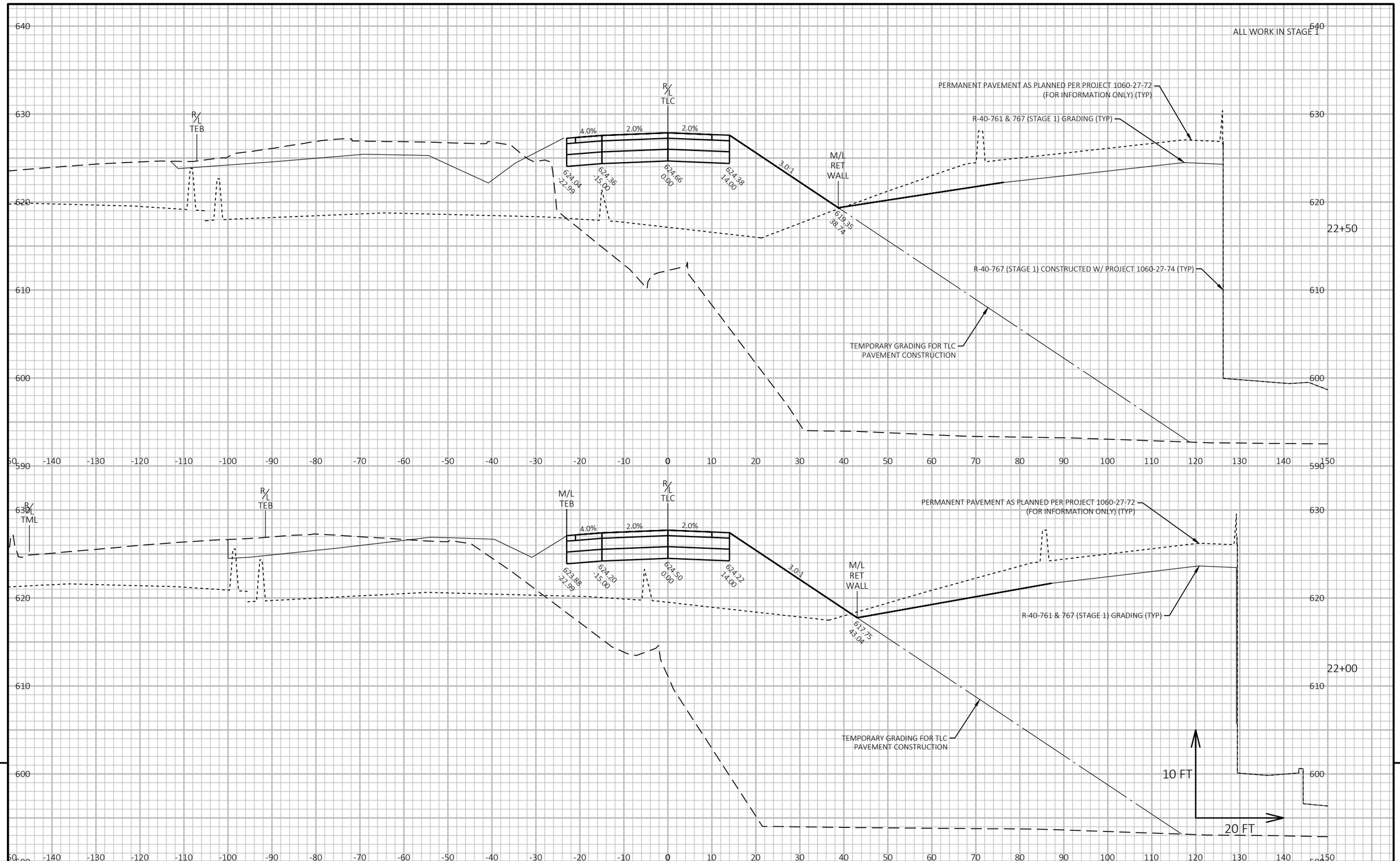
-140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: RAMP TLC	SHEET 936	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090403-XS-TLC.DWG
LAYOUT NAME - 03

PLOT DATE : 4/28/2025 2:10 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

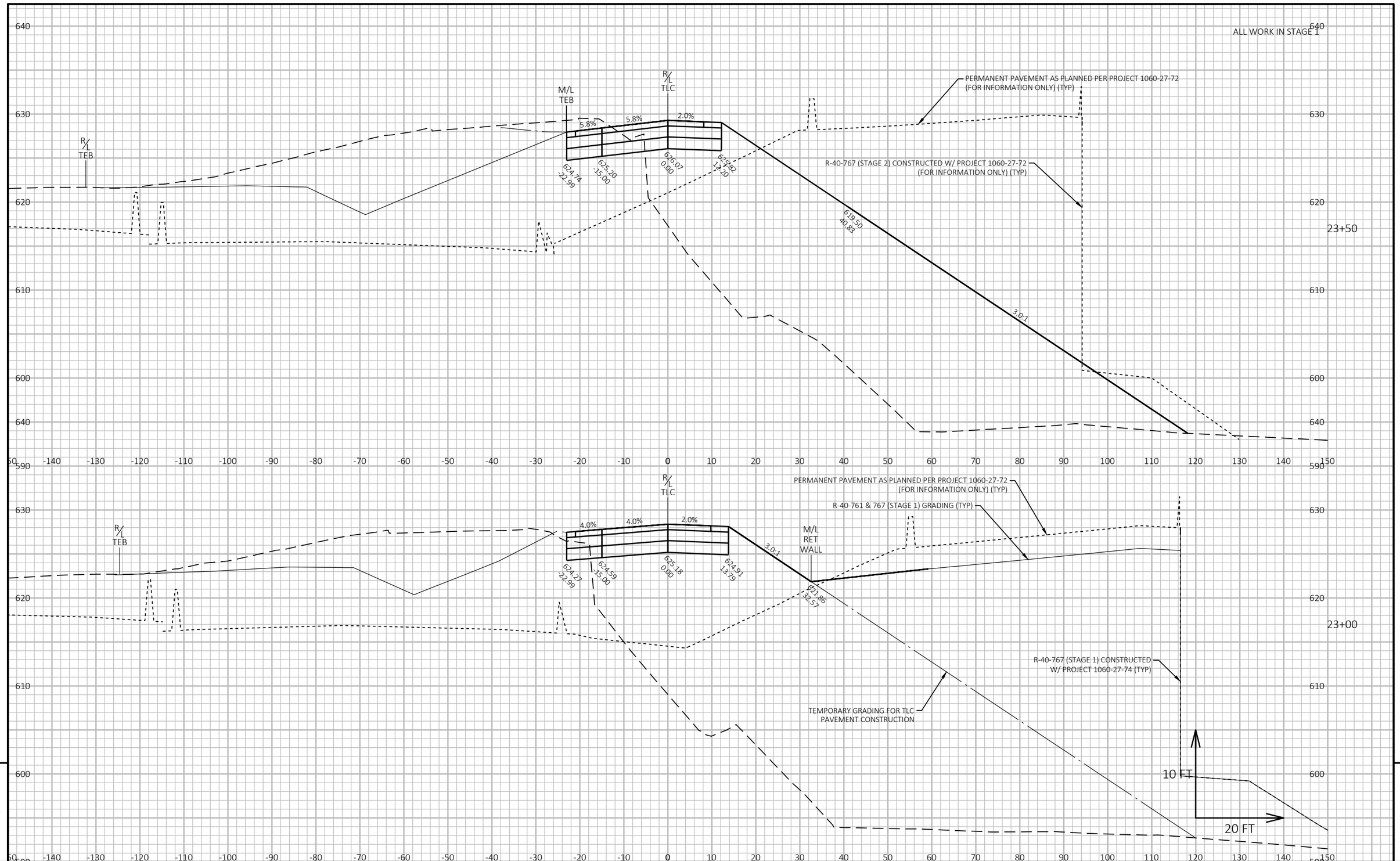


PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: RAMP TLC	SHEET 937	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090403-XS-TLC.DWG
LAYOUT NAME - 04

PLOT DATE : 4/28/2025 2:10 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: RAMP TLC	SHEET 938	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090403-XS-TLC.DWG
LAYOUT NAME - 05

PLOT DATE : 4/28/2025 2:10 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK IN STAGE 1

PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72
(FOR INFORMATION ONLY) (TYP)

R-40-767 (STAGE 2) CONSTRUCTED W/ PROJECT 1060-27-72
(FOR INFORMATION ONLY) (TYP)

R/L TEB

M/L TEB

R/L TLC

5.8%

5.8%

2.0%

3.0:1

625.65
-27.30

627.12
-19.31

628.24
0.00

628.05
9.24

627.26
9.26

24+50

PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72
(FOR INFORMATION ONLY) (TYP)

R-40-767 (STAGE 2) CONSTRUCTED
W/ PROJECT 1060-27-72
(FOR INFORMATION ONLY) (TYP)

625.88
-23.54

626.34
-15.55

627.24
0.00

627.03
10.67

618.96
44.51

24+00

10 FT

20 FT

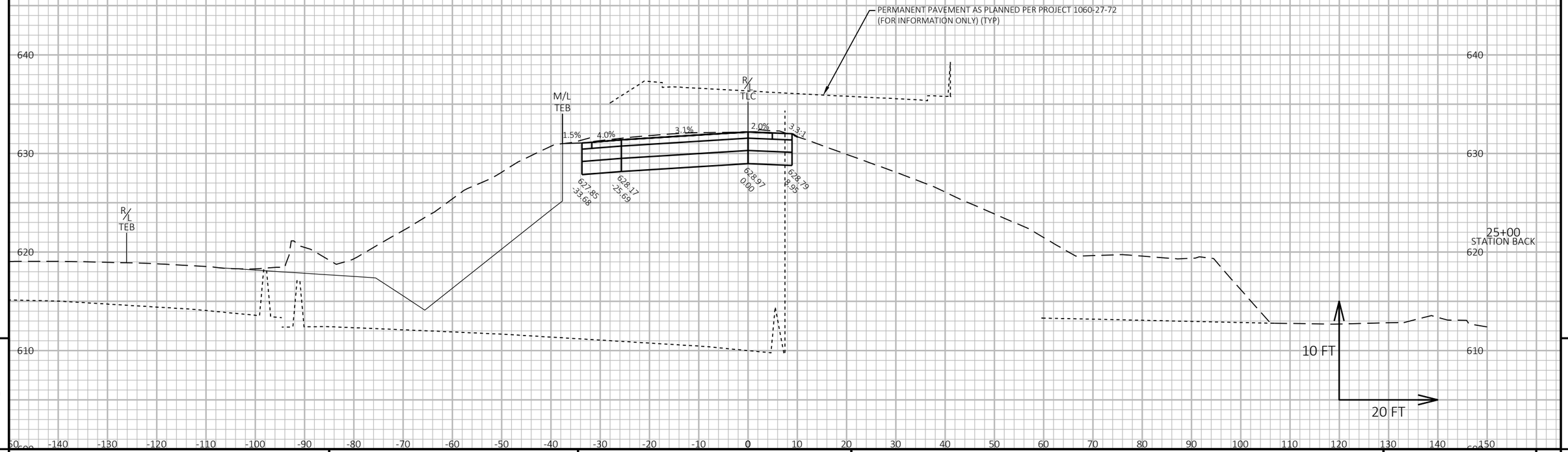
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: RAMP TLC	SHEET 939	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090403-XS-TLC.DWG
LAYOUT NAME - 06

PLOT DATE : 4/28/2025 2:10 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK IN STAGE 1



9

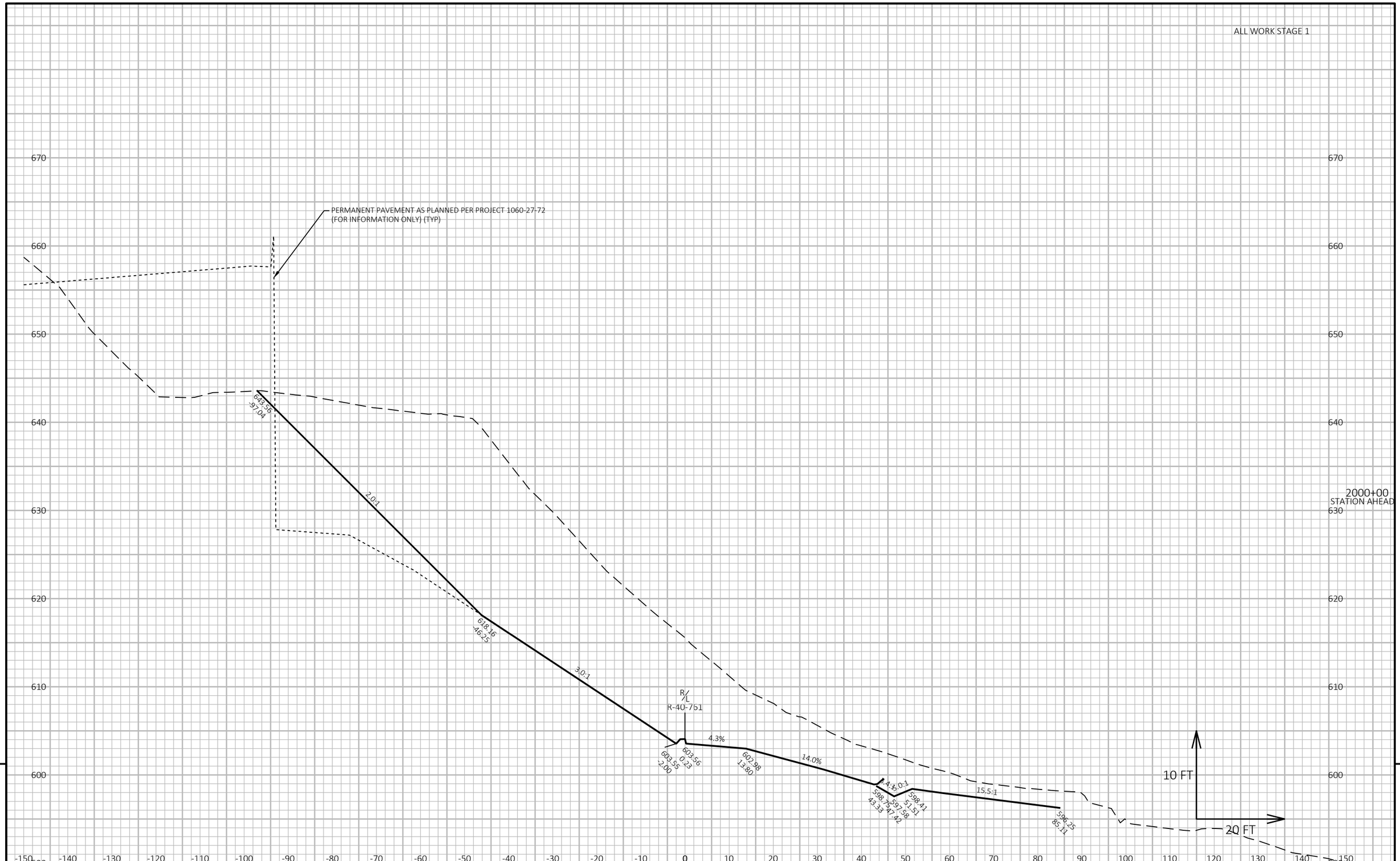
9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: RAMP TLC	SHEET 940	E

FILE NAME : C:\USERS\CTICHELAAR\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090403-XS-TLC.DWG
LAYOUT NAME - 07

PLOT DATE : 4/28/2025 2:10 PM PLOT BY : CECELIA TICHELAAR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK STAGE 1

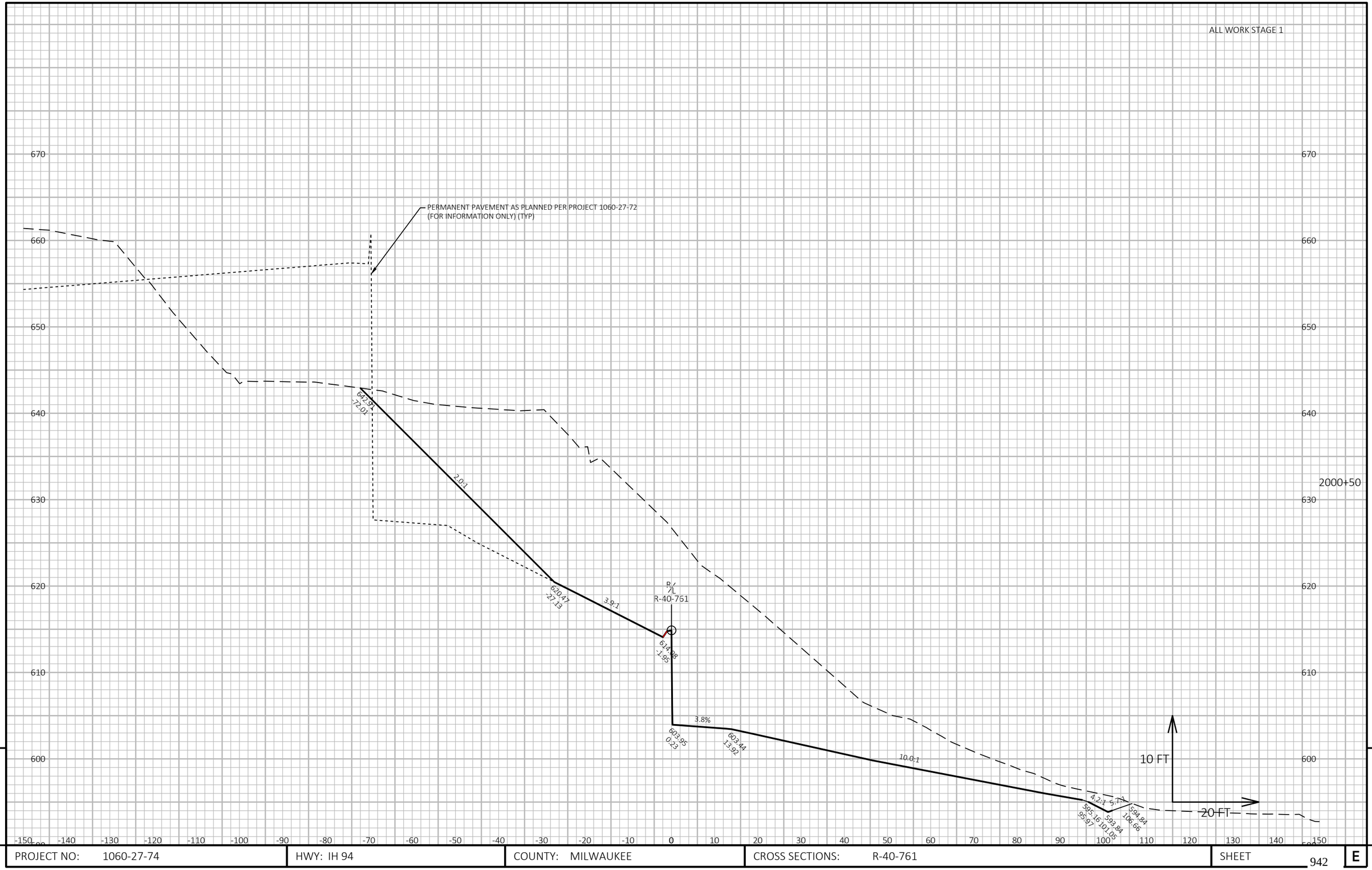


9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 941	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 01
PLOT DATE : 5/28/2025 5:38 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



9

9

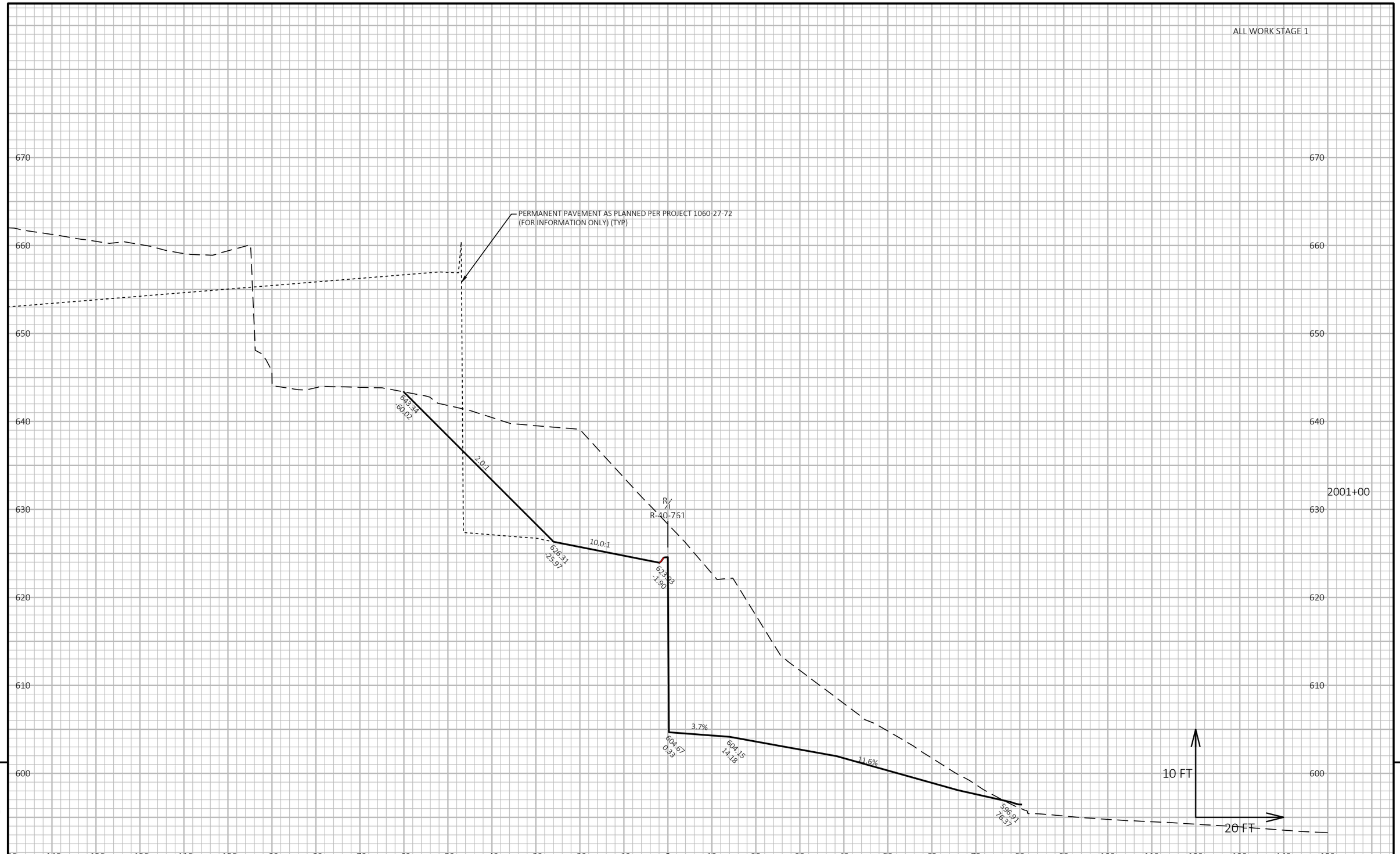
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 942	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 02

PLOT DATE : 5/28/2025 5:38 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 943	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 03

PLOT DATE : 5/28/2025 5:38 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1

PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72
(FOR INFORMATION ONLY) (TYP)

640.73
-35.74

-2.0:1

RT
R-40-751

1.4%

626.37
-10.01

626.19
-1.52

5.9%

603.91
0.39

603.09
14.51

8.7%

597.69
76.45

2001+50

10 FT

20 FT

9

9

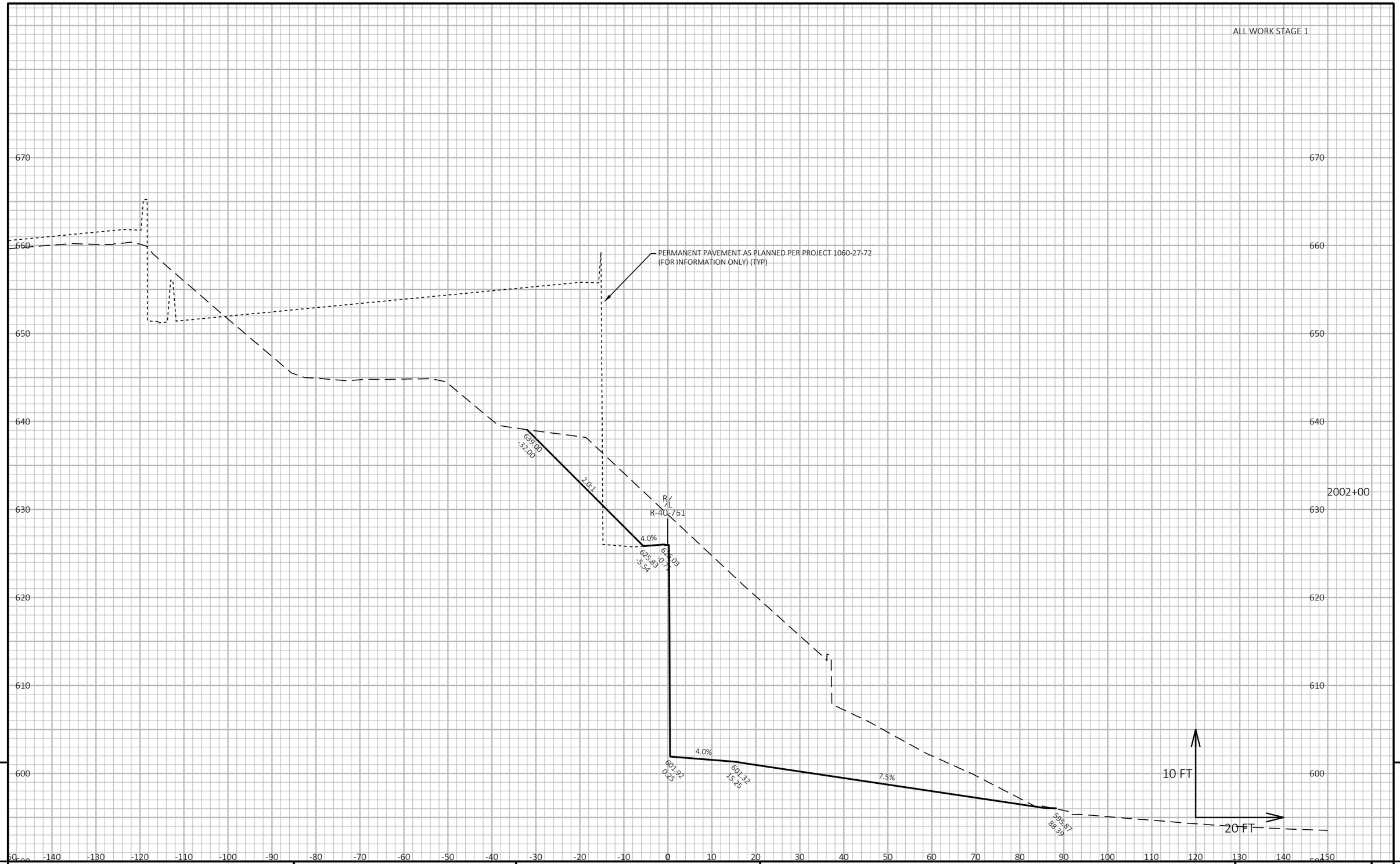
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 944	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 04

PLOT DATE : 5/28/2025 5:38 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 945	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 05

PLOT DATE : 5/28/2025 5:38 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK STAGE 1

PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72
(FOR INFORMATION ONLY) (TYP)

638.96
-41.31

2.0:1

R/L
R-40-761

4.0%
4.0%

625.64
-14.71

625.36
-7.71

625.64
0.71

4.0%

600.47
0.24

599.87
15.24

7.0%

598.43
64.14

2002+50

10 FT

20 FT

670
660
650
640
630
620
610
600

-140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

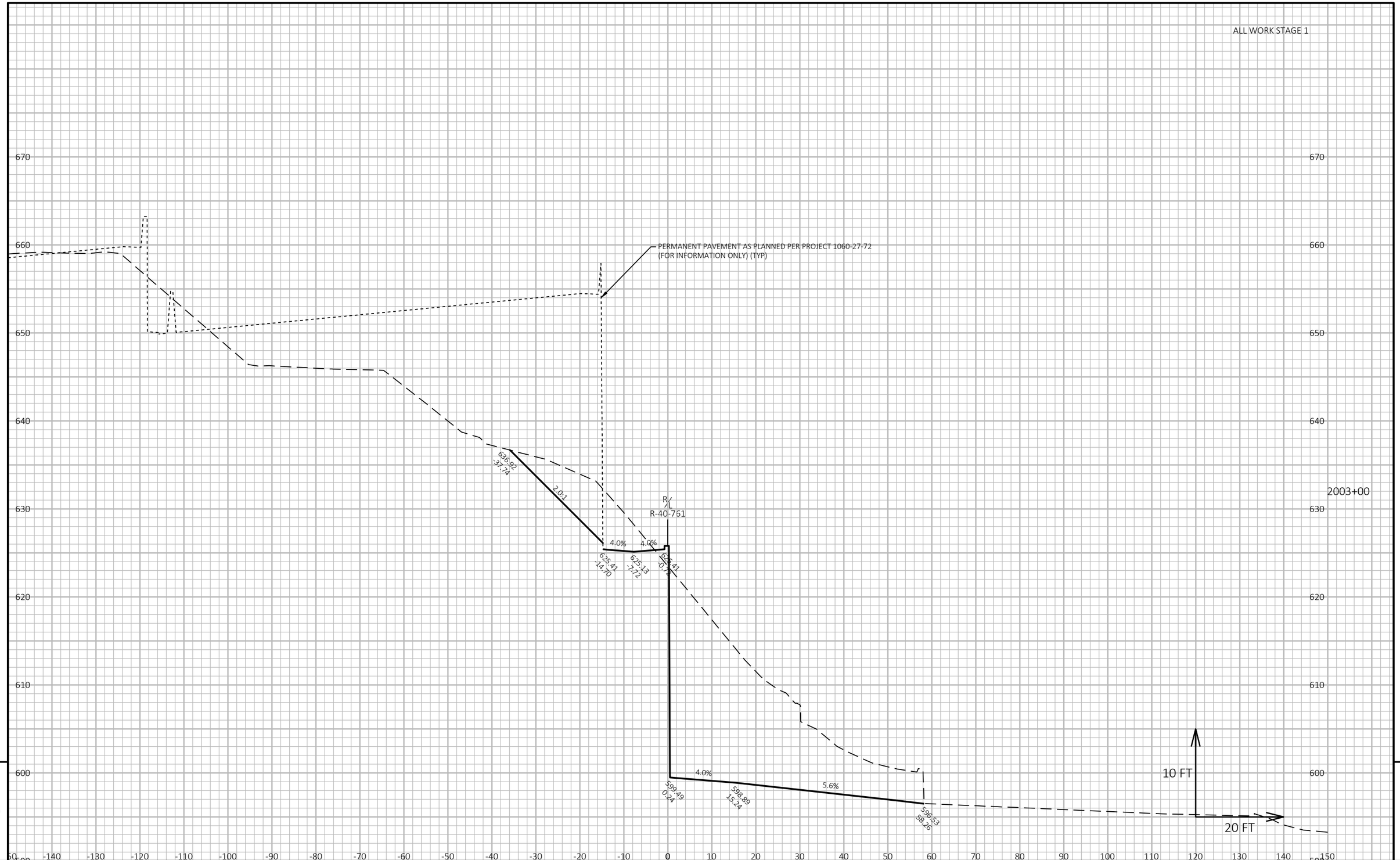
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 946	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 06

PLOT DATE : 5/28/2025 5:38 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



9

9

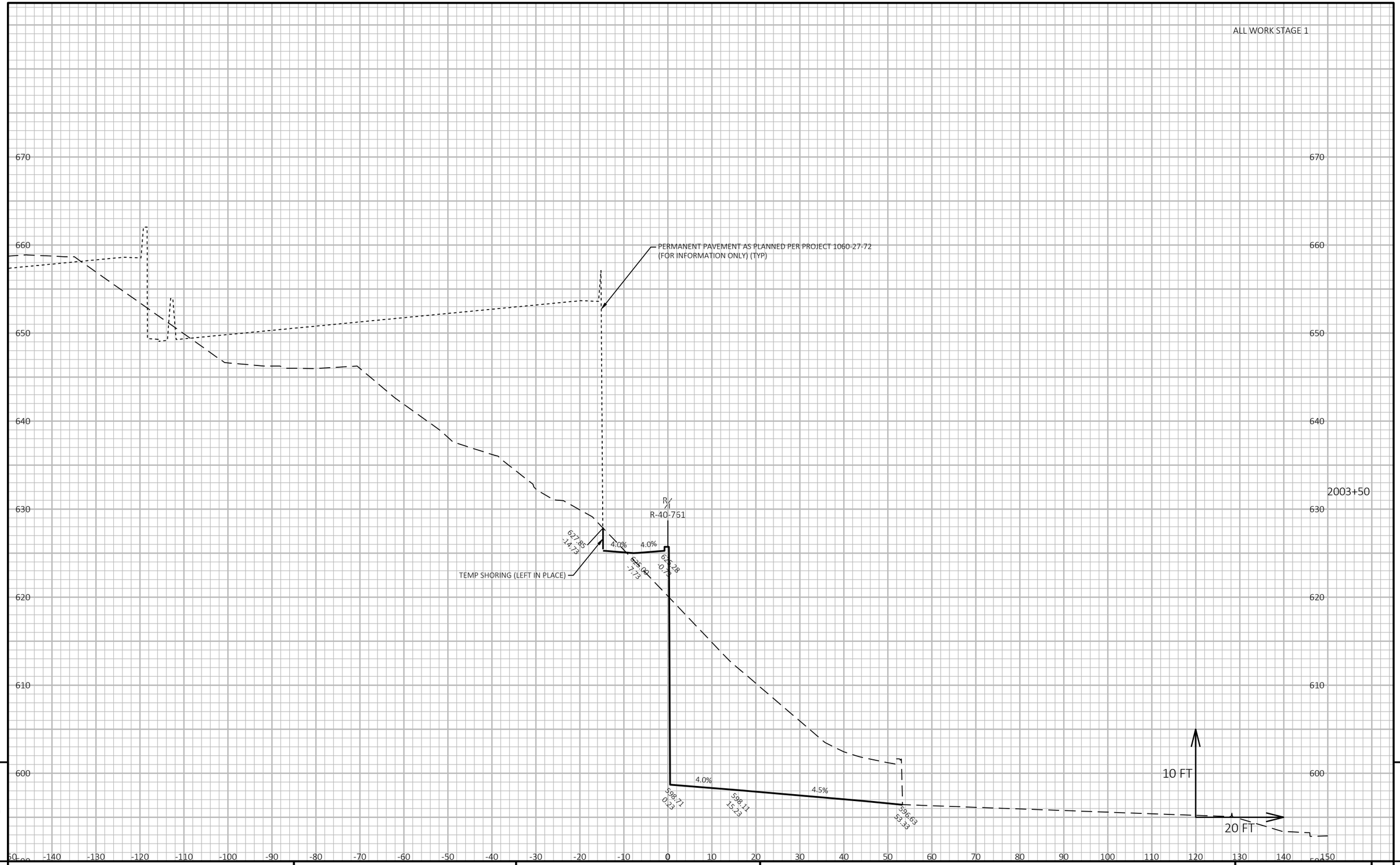
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 947	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 07

PLOT DATE : 5/28/2025 5:38 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



9

9

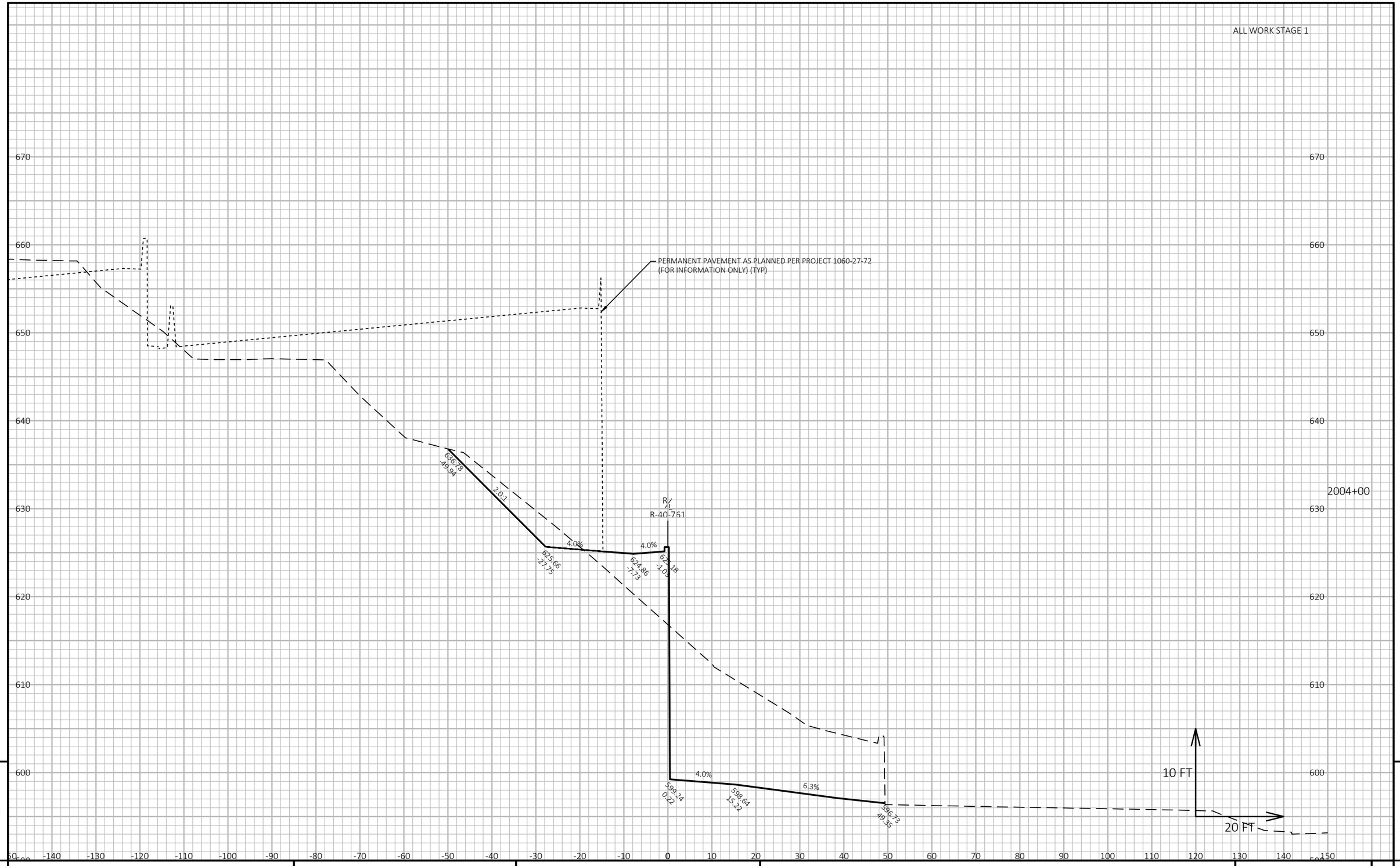
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 948	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 08

PLOT DATE : 5/28/2025 5:38 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



9

9

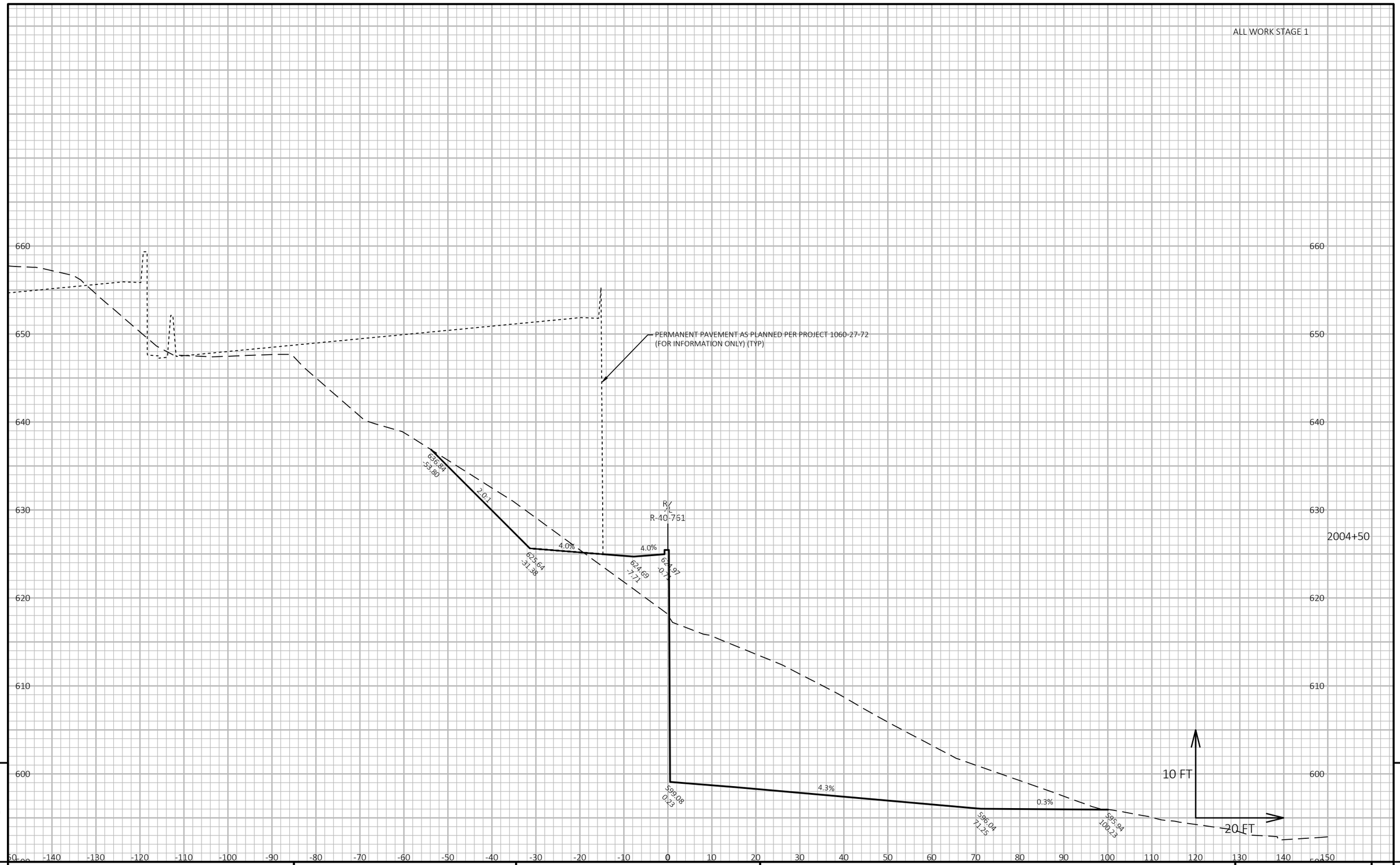
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 949	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 09

PLOT DATE : 5/28/2025 5:38 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 950	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 10

PLOT DATE : 5/28/2025 5:38 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1

660
650
640
630
620
610
600
590

PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72
(FOR INFORMATION ONLY) (TYP)

641.03
-56.63

2.0:1

R/
L
R-40-761

4.0%
4.0%

625.16
-24.88

624.44
7.75

624.72
-0.77

597.39
0.51

4.1%

592.09
129.65

10 FT

20 FT

2005+00

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

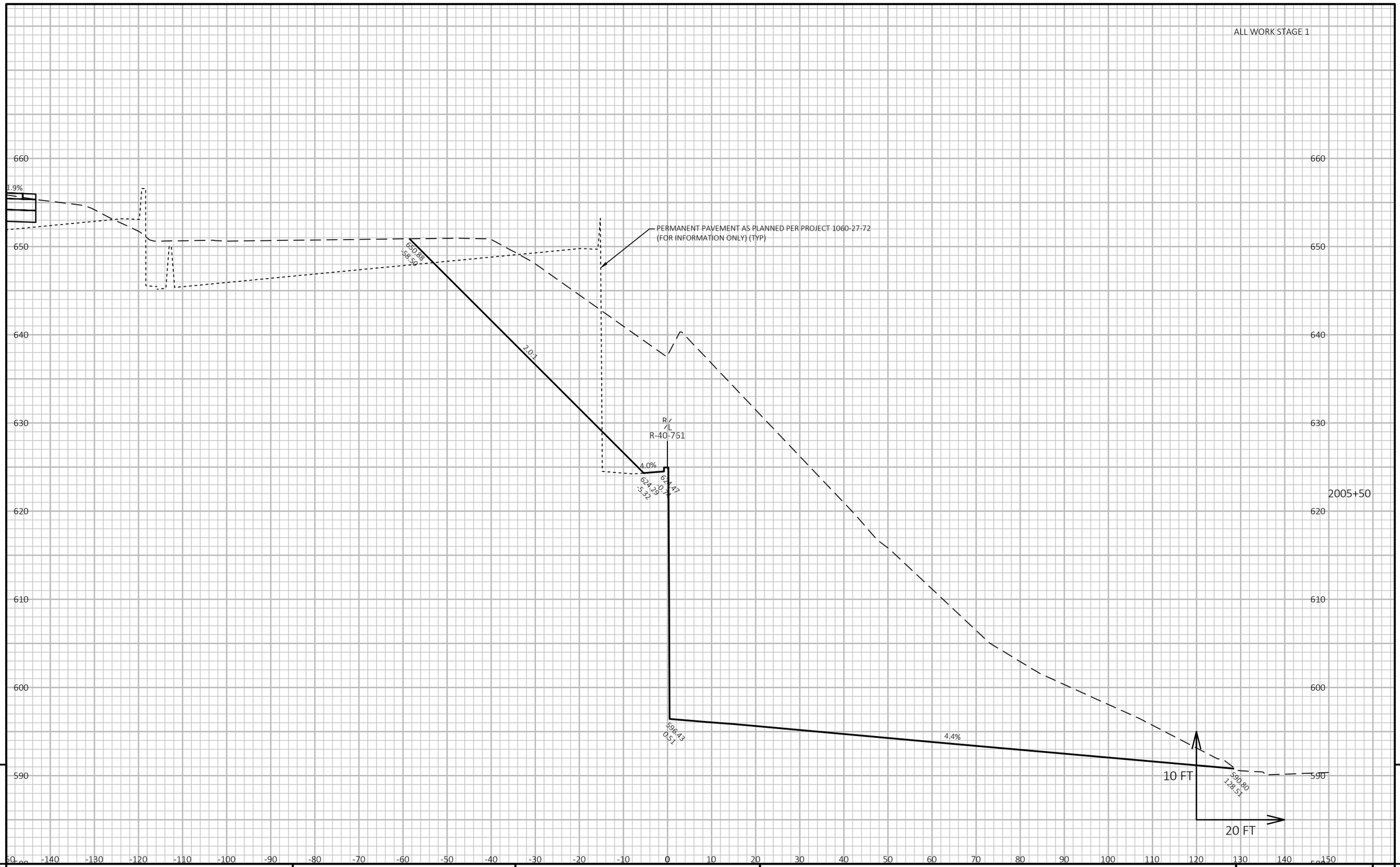
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 951	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 11

PLOT DATE : 5/28/2025 5:38 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



9 9

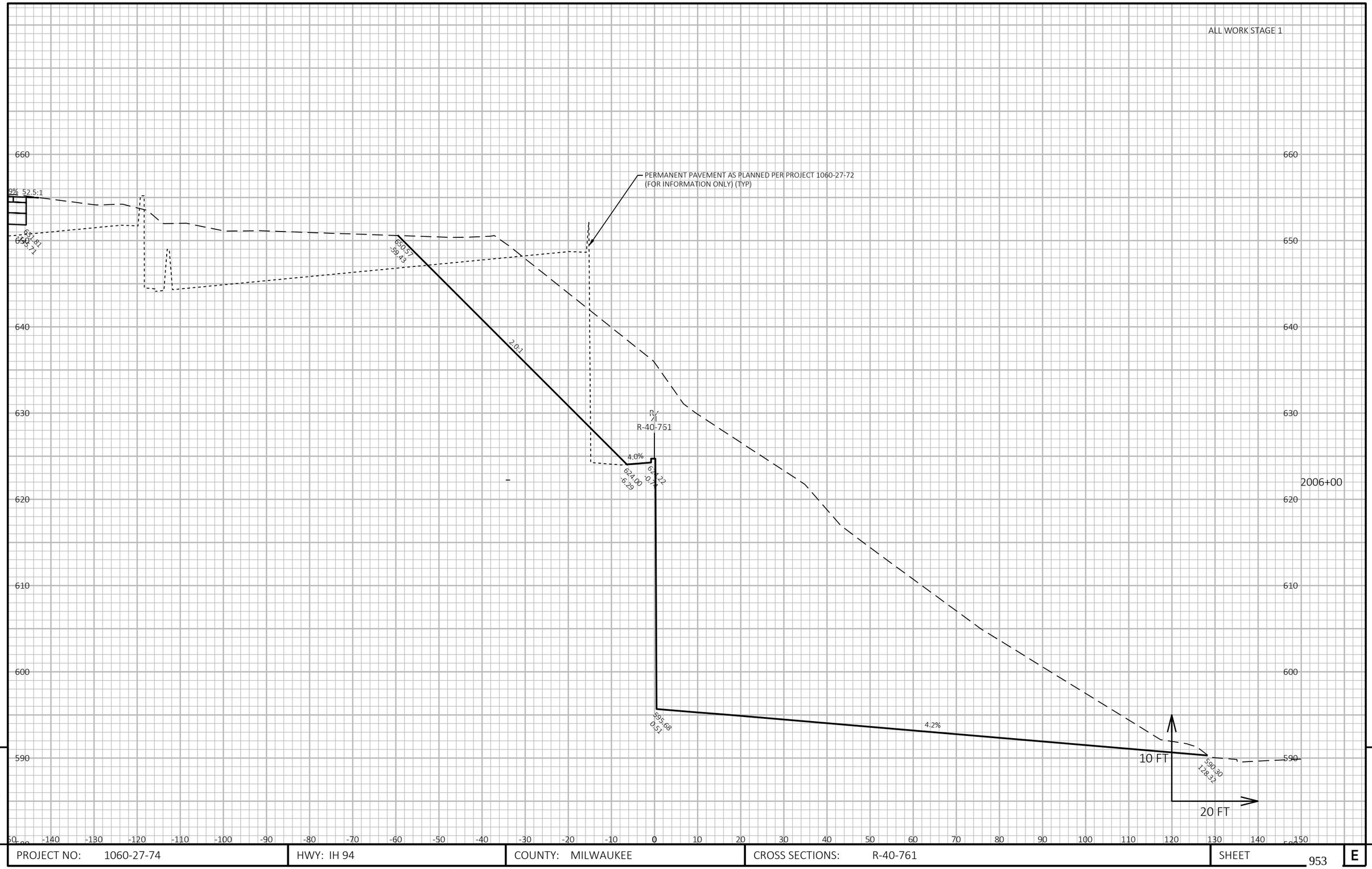
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 952	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 12

PLOT DATE : 5/28/2025 5:39 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 953	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 13

PLOT DATE : 5/28/2025 5:39 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK STAGE 1

660
650
640
630
620
610
600
590

3.0:1
649.67
647.31
649.59
649.50
2.0:1
PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72
(FOR INFORMATION ONLY) (TYP)
R-40-761
4.0%
623.69
7.70
623.97
0.72
2006+50
595.54
0.52
4.4%
10 FT
589.90
128.73
20 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 954	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 14
PLOT DATE : 5/28/2025 5:39 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK STAGE 1

660
650
640
630
620
610
600
590

3.0:1
649.33
-14.77
646.04
-59.19
2.0:1
PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72
(FOR INFORMATION ONLY) (TYP)
R/
/L
R-40-761
4.0%
4.0%
623.79
-14.73
623.44
-7.73
623.72
-0.72
2007+00
595.41
0.52
4.2%
10 FT
590.00
128.74
20 FT
HAZARDOUS MATERIAL REMOVAL -
LOW-LEVEL PETROLEUM
CONTAMINATED SOIL (REUSE)
STA 2006+75 BEGIN
EXCAVATION, HAULING, AND REUSE
OF LOW-LEVEL PETROLEUM
CONTAMINATED SOIL

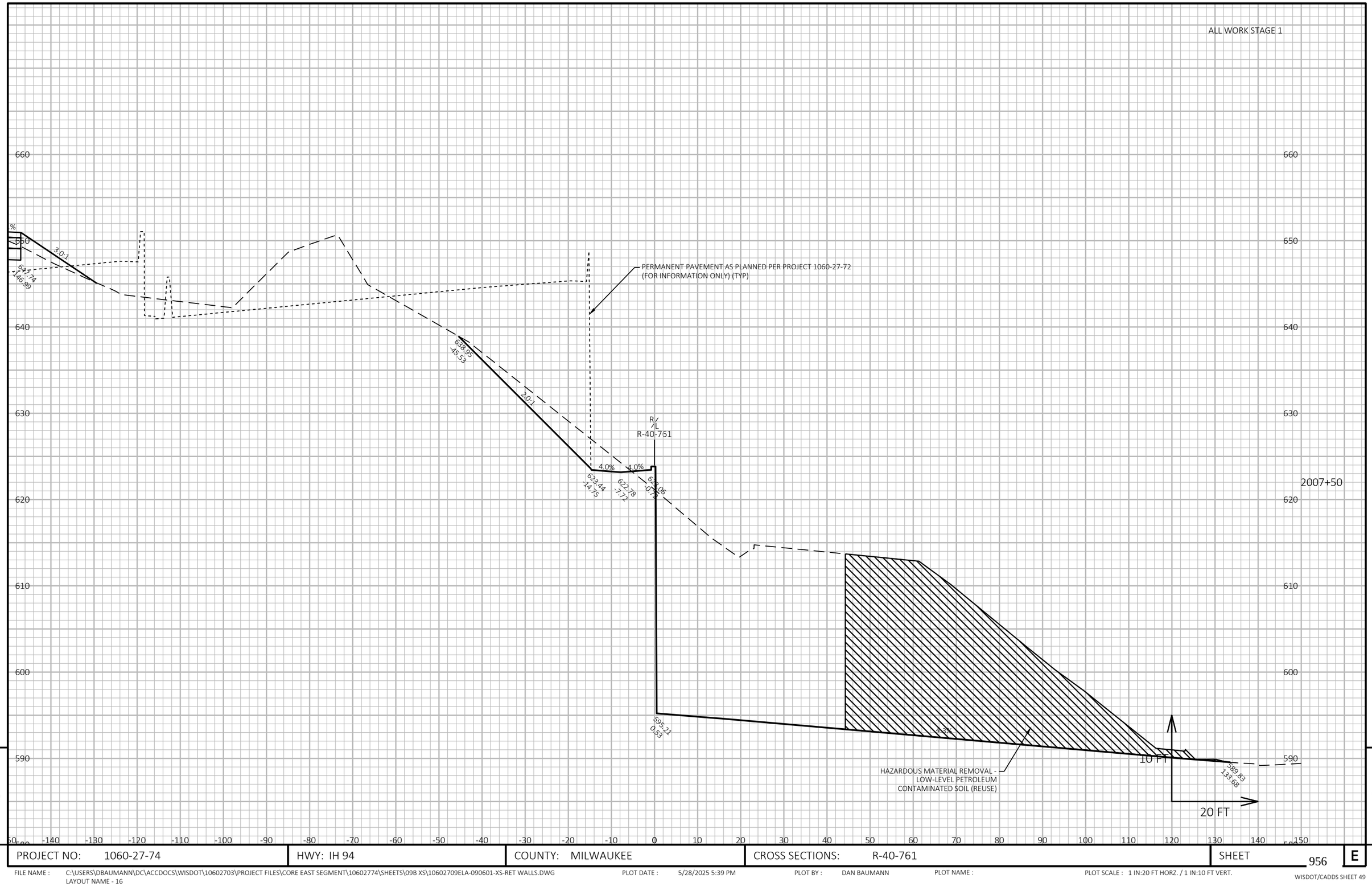
-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 955	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 15
PLOT DATE : 5/28/2025 5:39 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



9 9

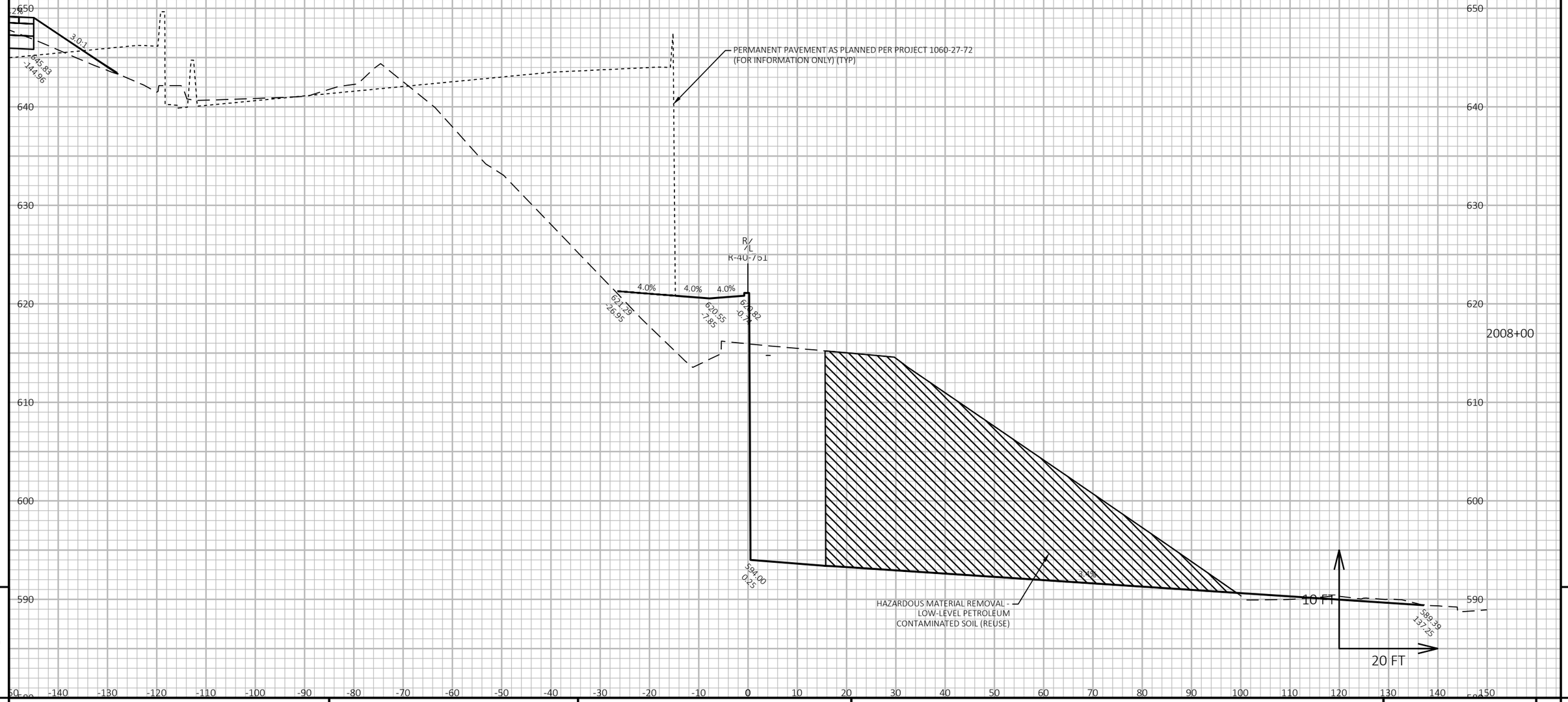
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 956	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 16

PLOT DATE : 5/28/2025 5:39 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



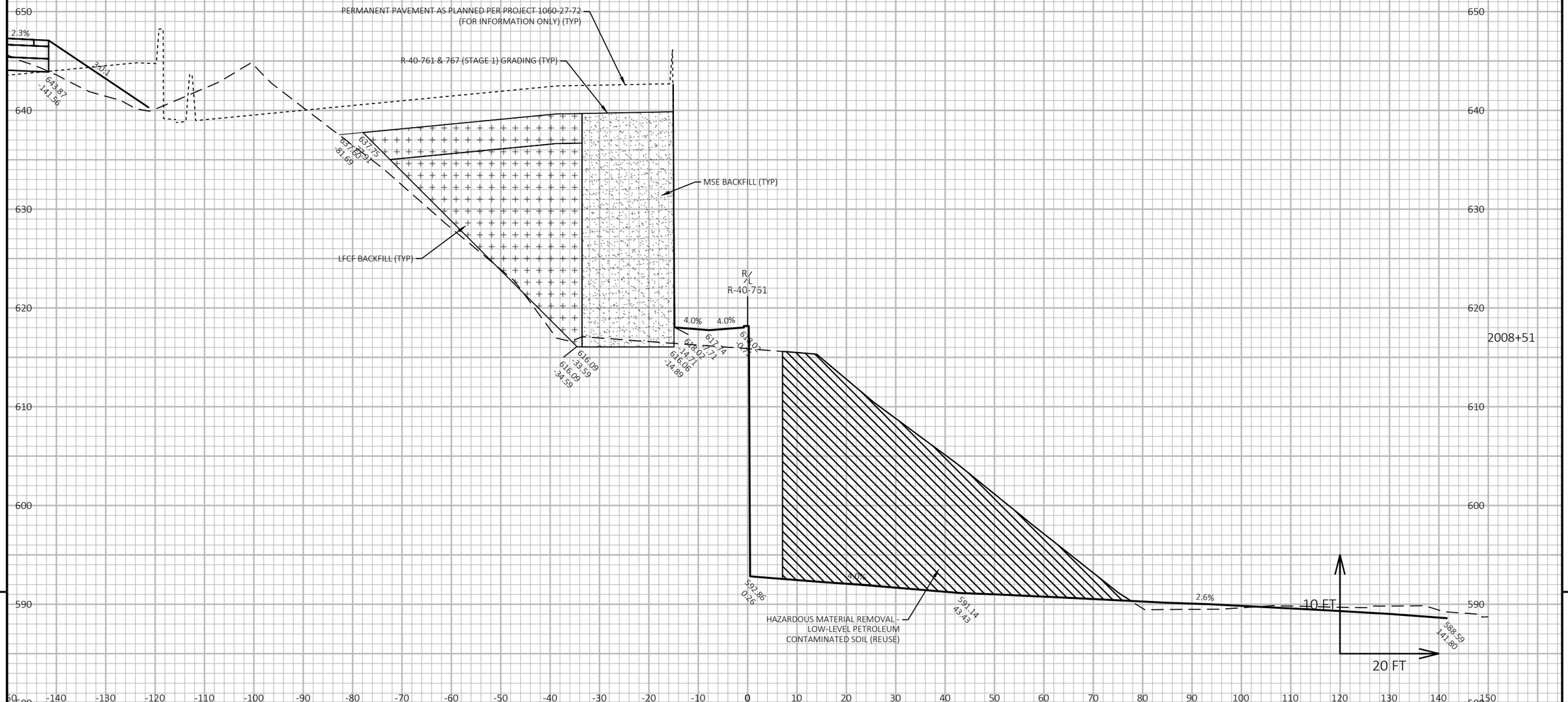
9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 957	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 17

PLOT DATE : 5/28/2025 5:39 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK STAGE 1



9

9

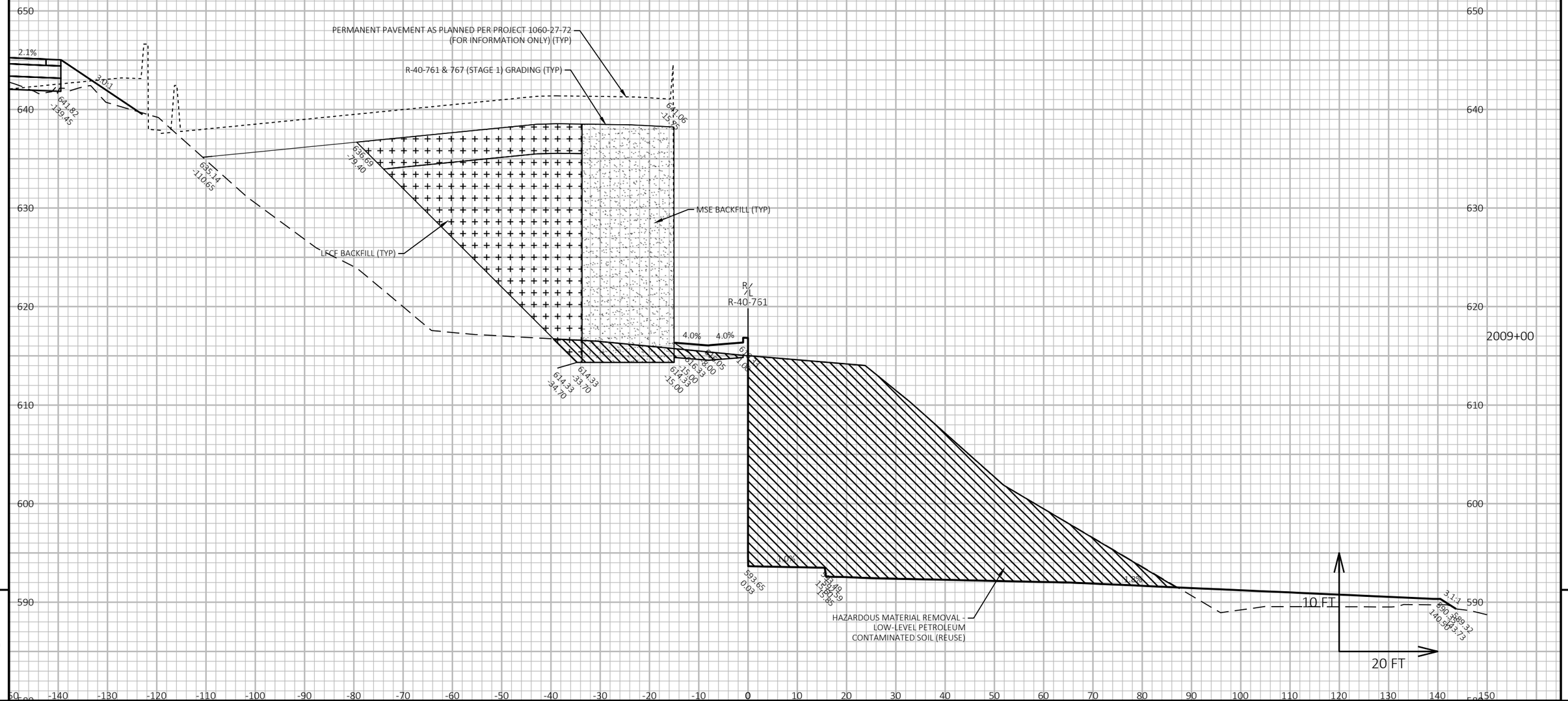
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 958	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 18

PLOT DATE : 5/28/2025 5:39 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1

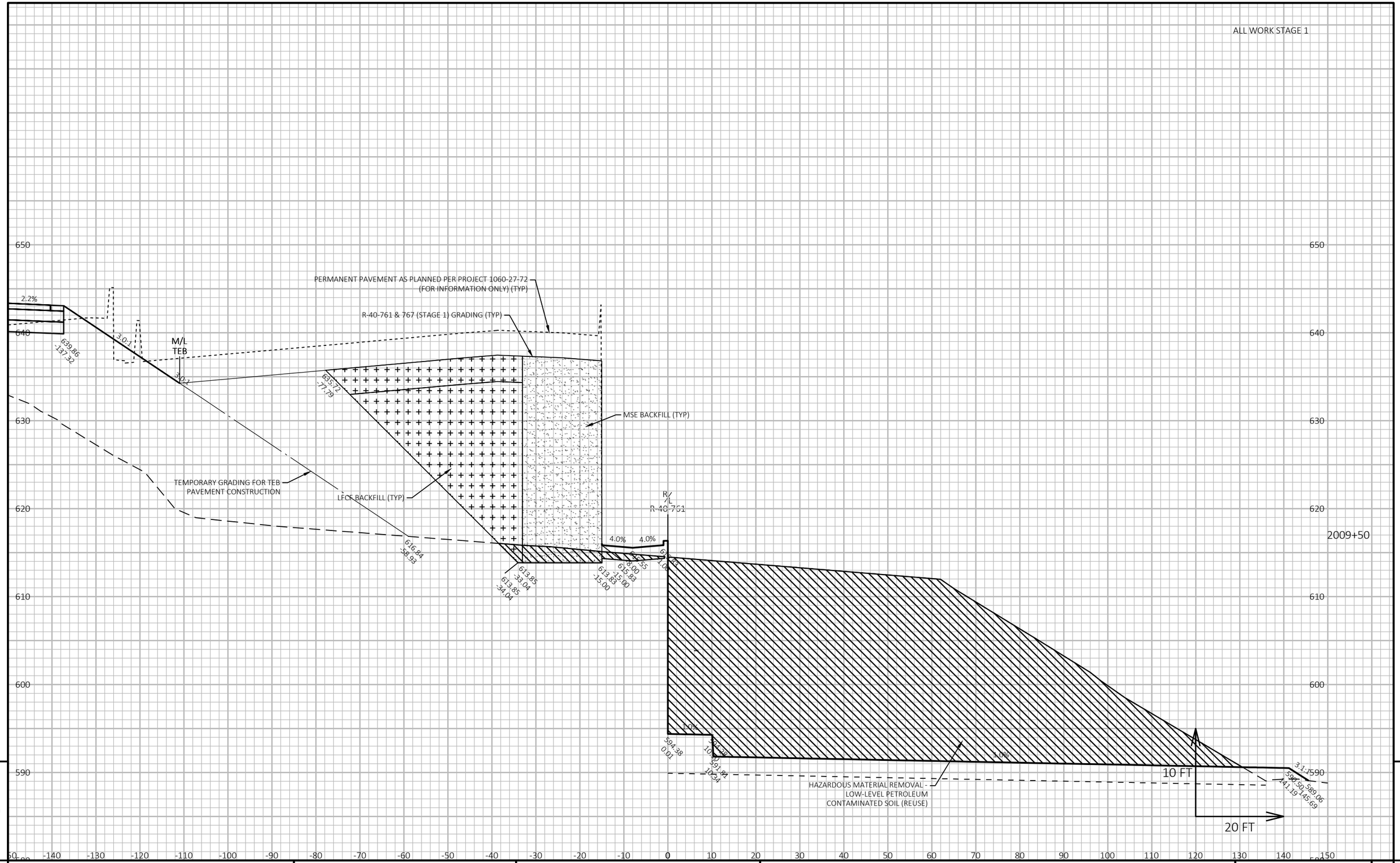


9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 959	E

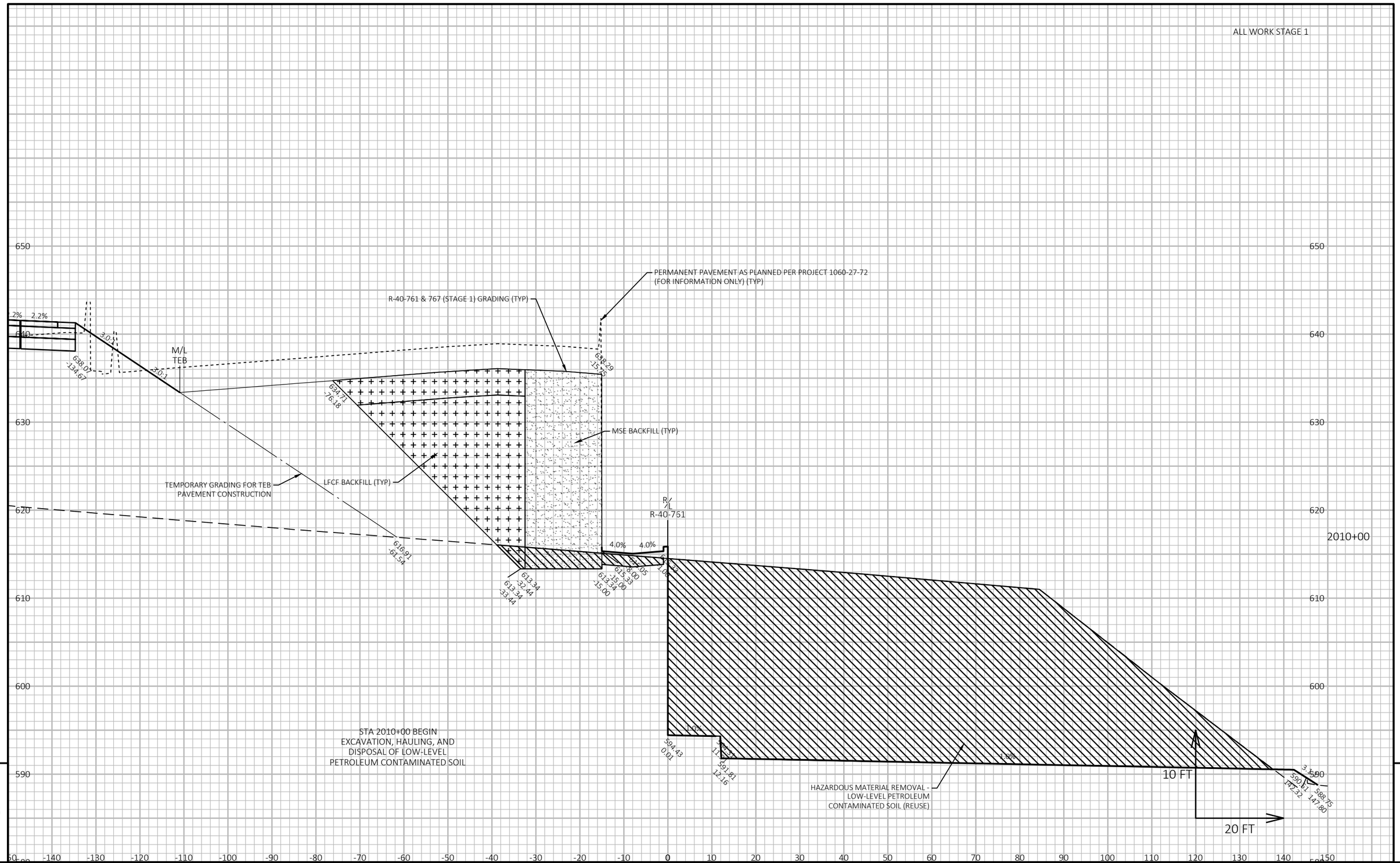
ALL WORK STAGE 1



9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 960	E

ALL WORK STAGE 1



9

9

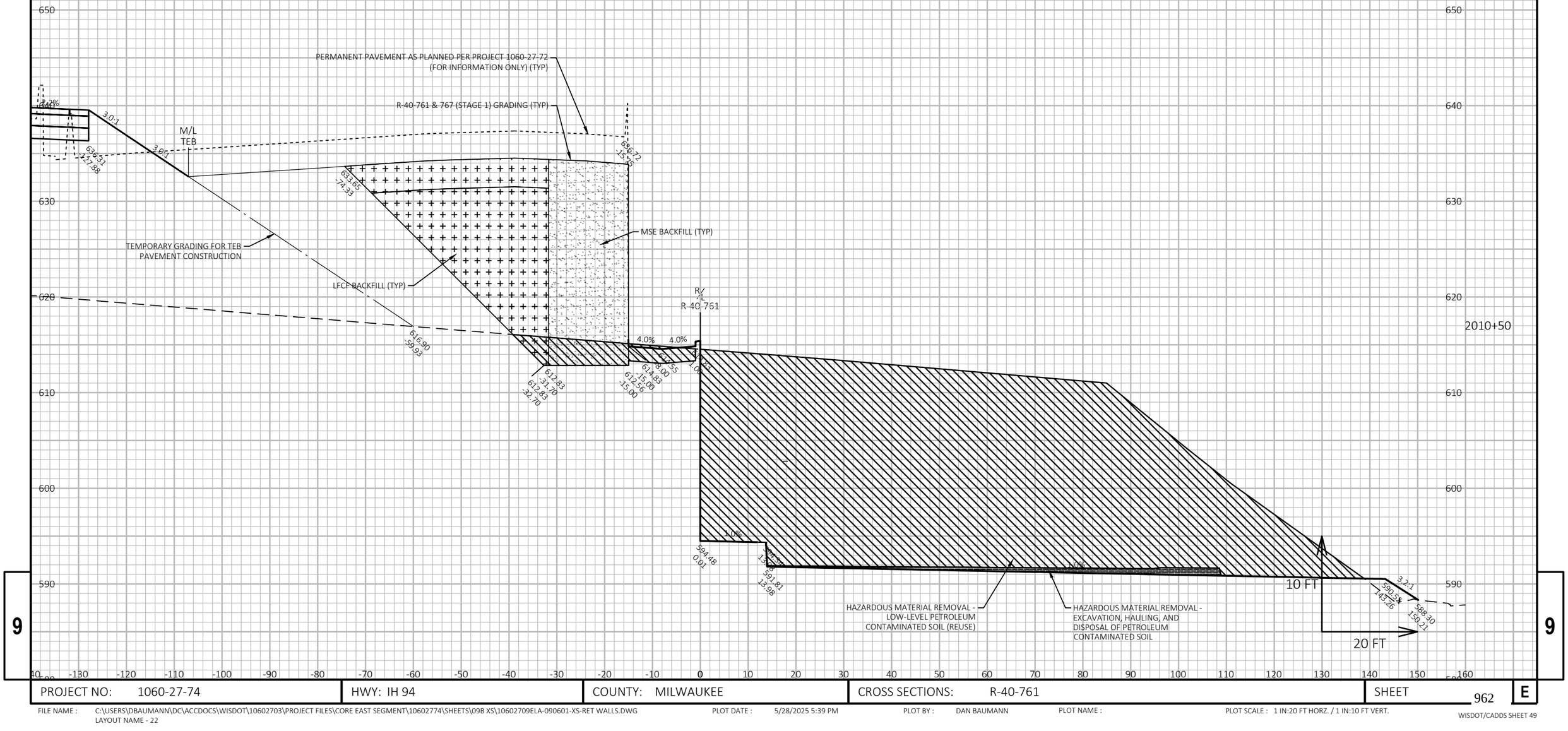
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 961	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 21

PLOT DATE : 5/28/2025 5:39 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



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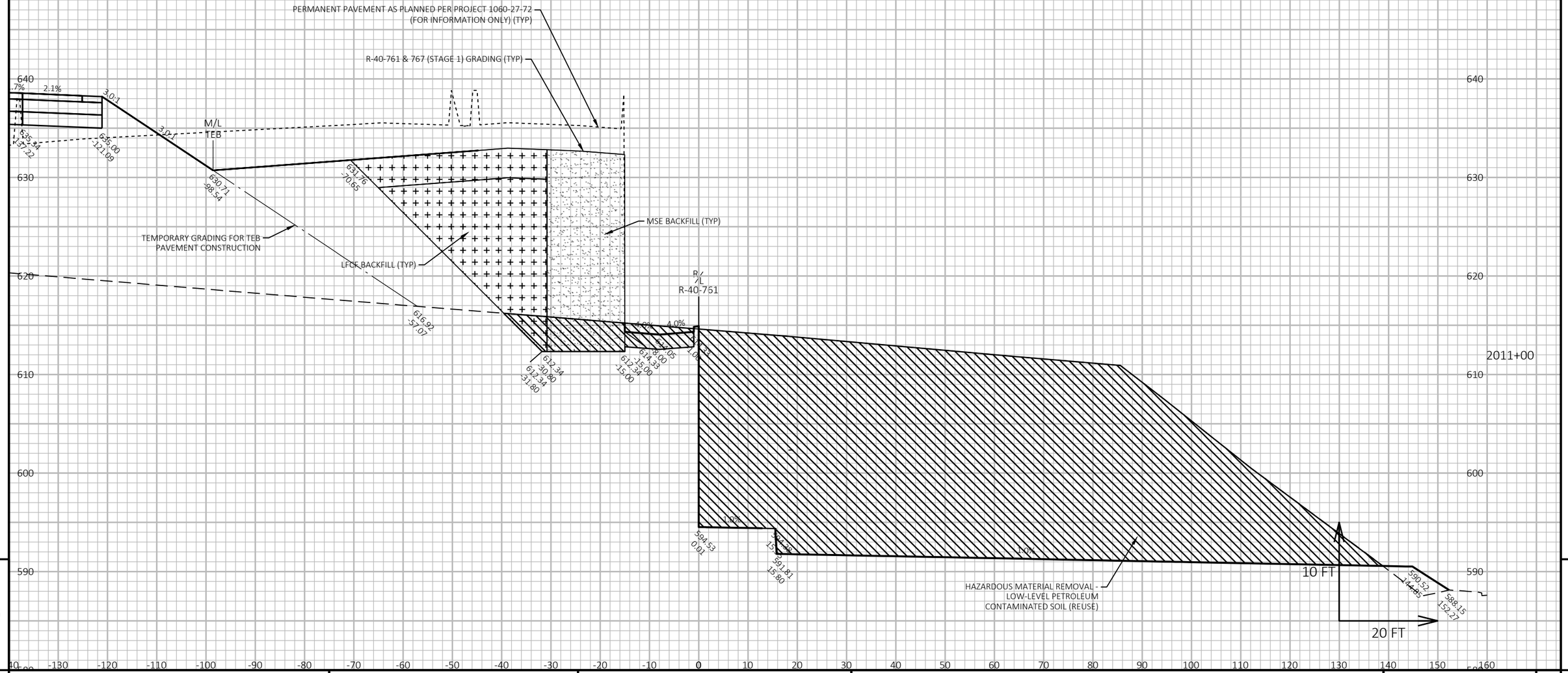
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 962	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 22
PLOT DATE : 5/28/2025 5:39 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



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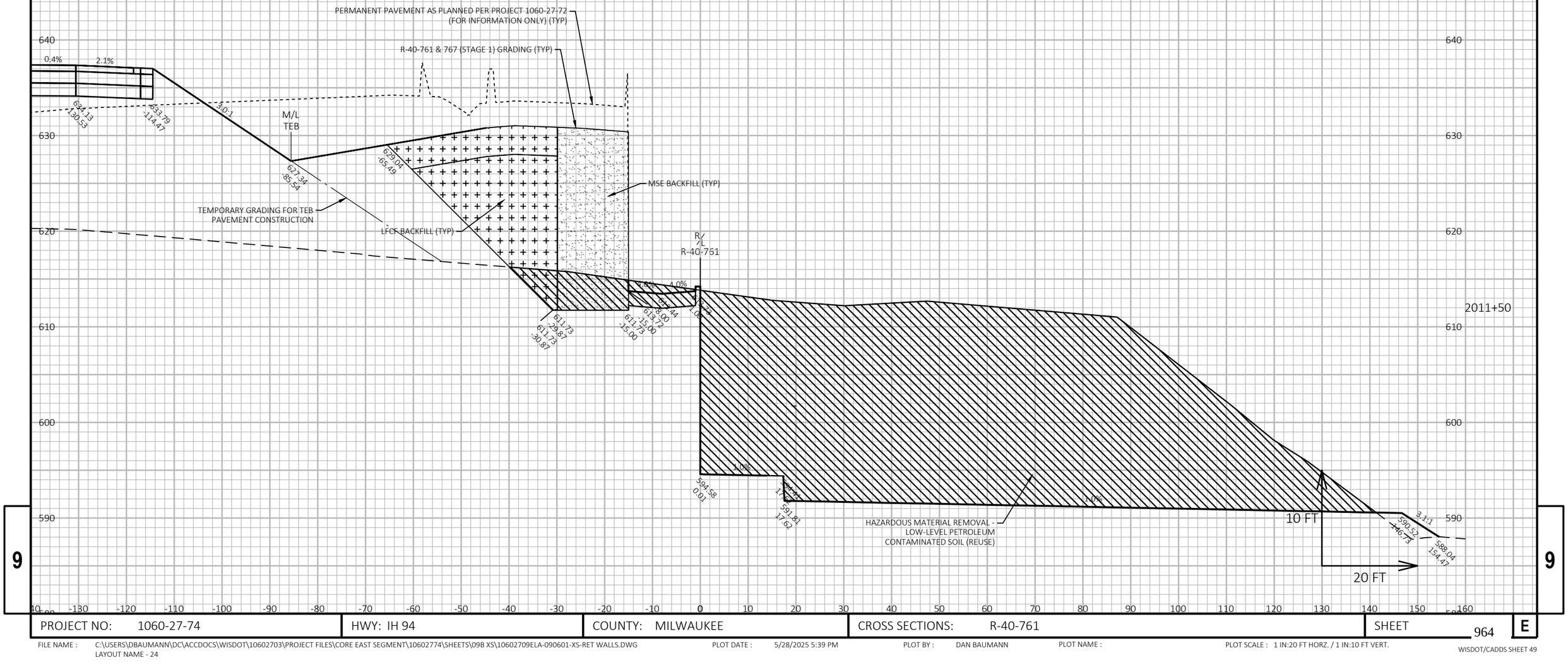
9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 963	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 23

PLOT DATE : 5/28/2025 5:39 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK STAGE 1



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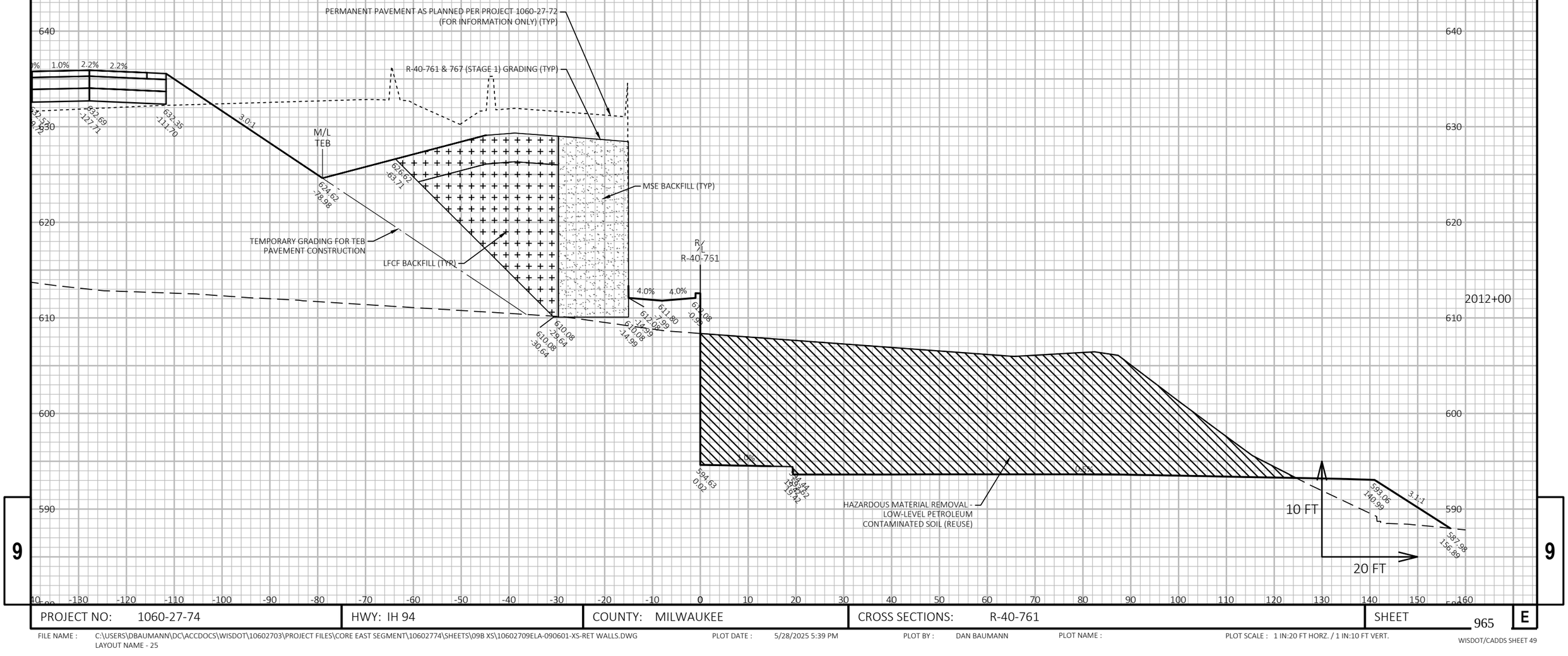
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 964	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 24
PLOT DATE : 5/28/2025 5:39 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



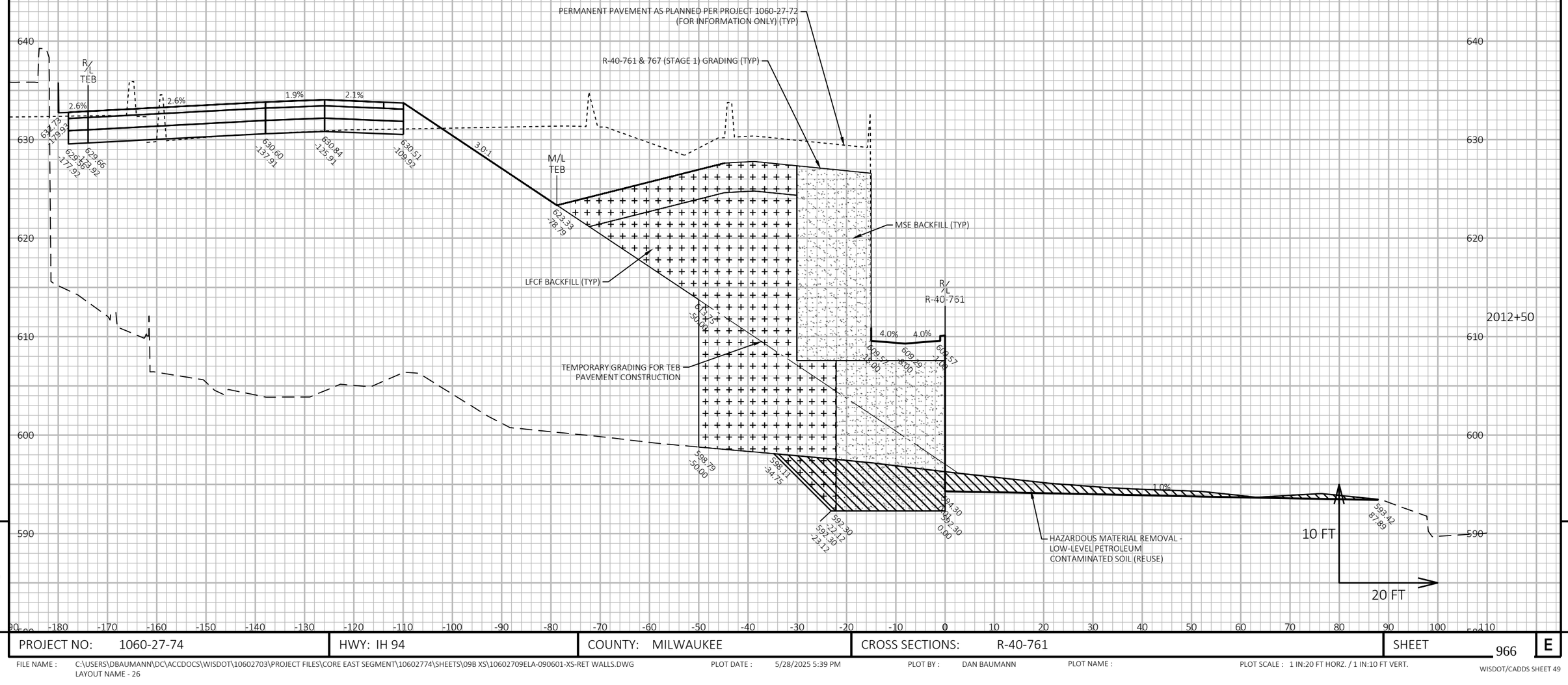
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 965	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 25

PLOT DATE : 5/28/2025 5:39 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



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PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 966	E

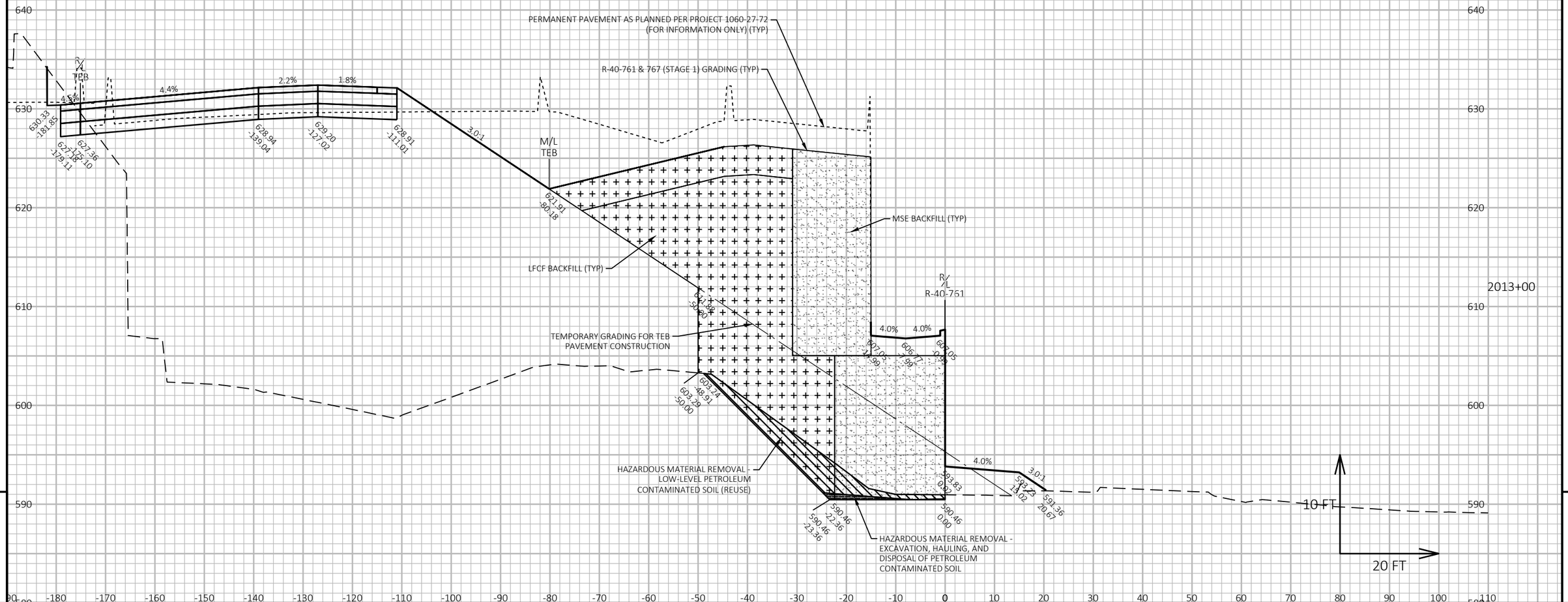
FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 26

PLOT DATE : 5/28/2025 5:39 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK STAGE 1

STA 2013+25 END
EXCAVATION, HAULING, AND
DISPOSAL OF LOW-LEVEL
PETROLEUM CONTAMINATED SOIL

STA 2013+00 END
EXCAVATION, HAULING, AND REUSE
OF LOW-LEVEL PETROLEUM
CONTAMINATED SOIL



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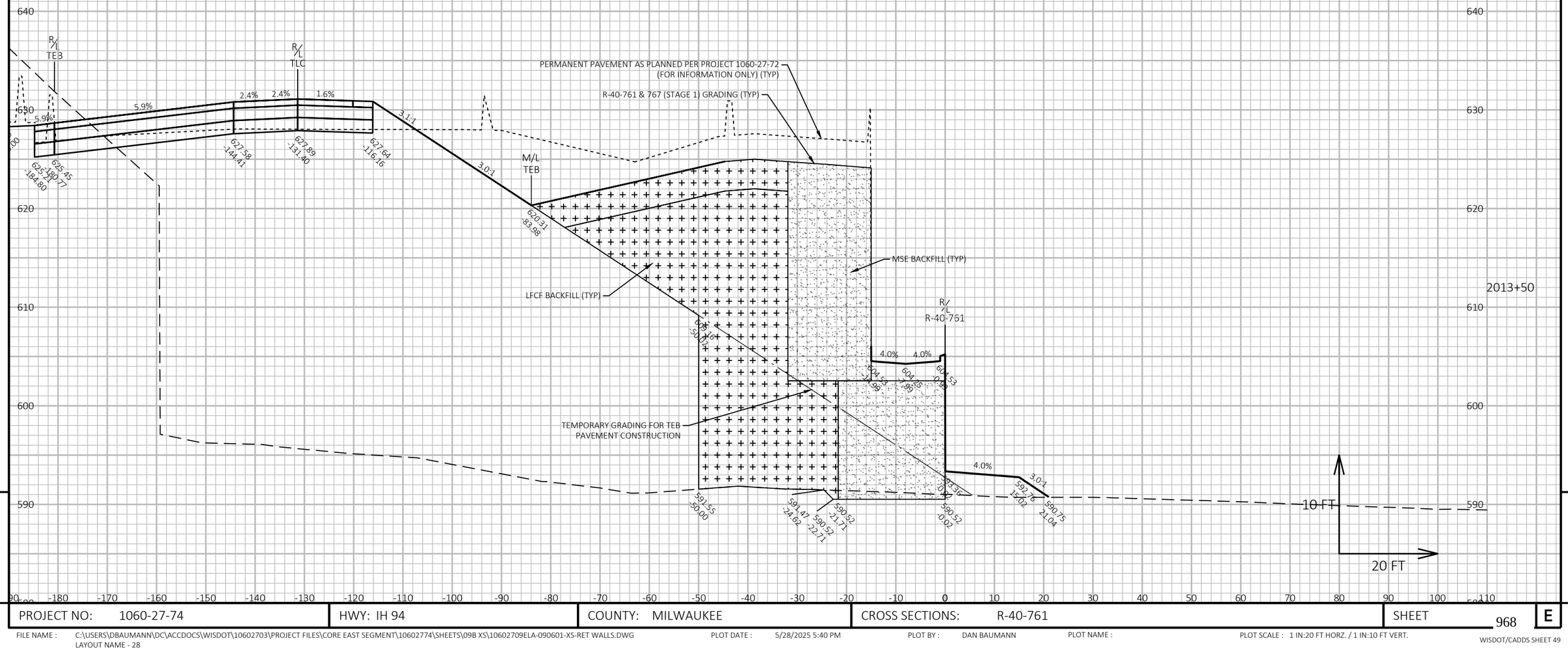
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 967	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 27
PLOT DATE : 5/28/2025 5:39 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



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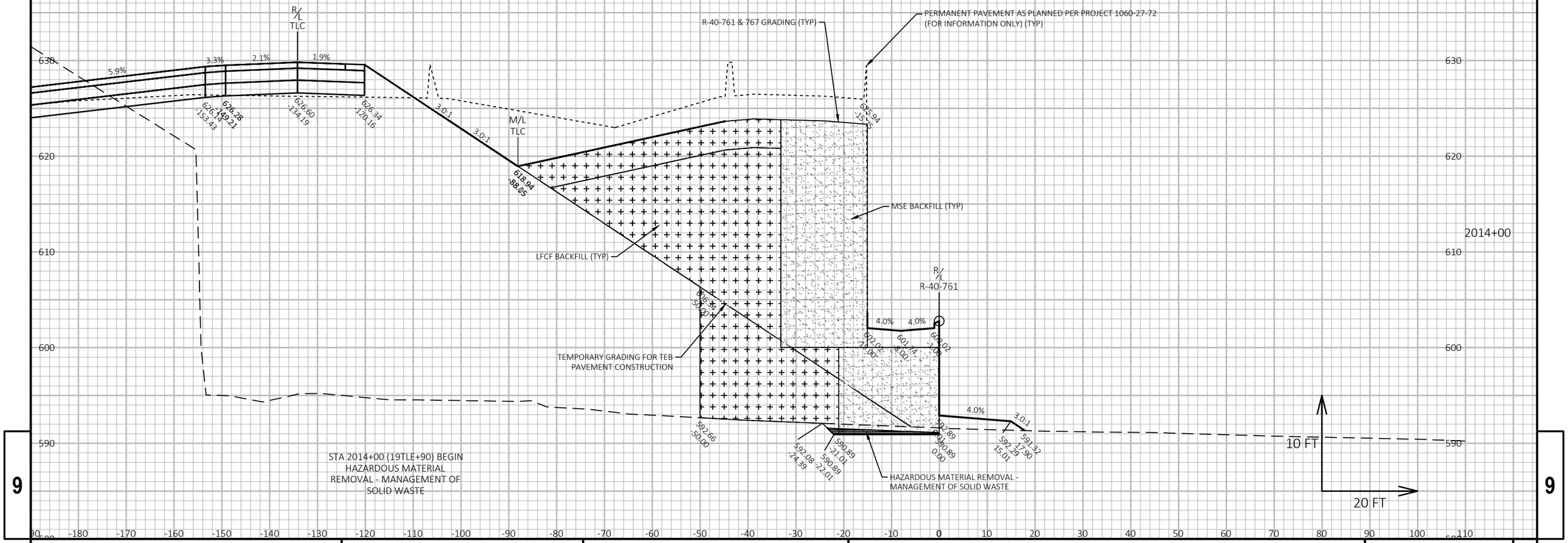
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 968	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 28
PLOT DATE : 5/28/2025 5:40 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



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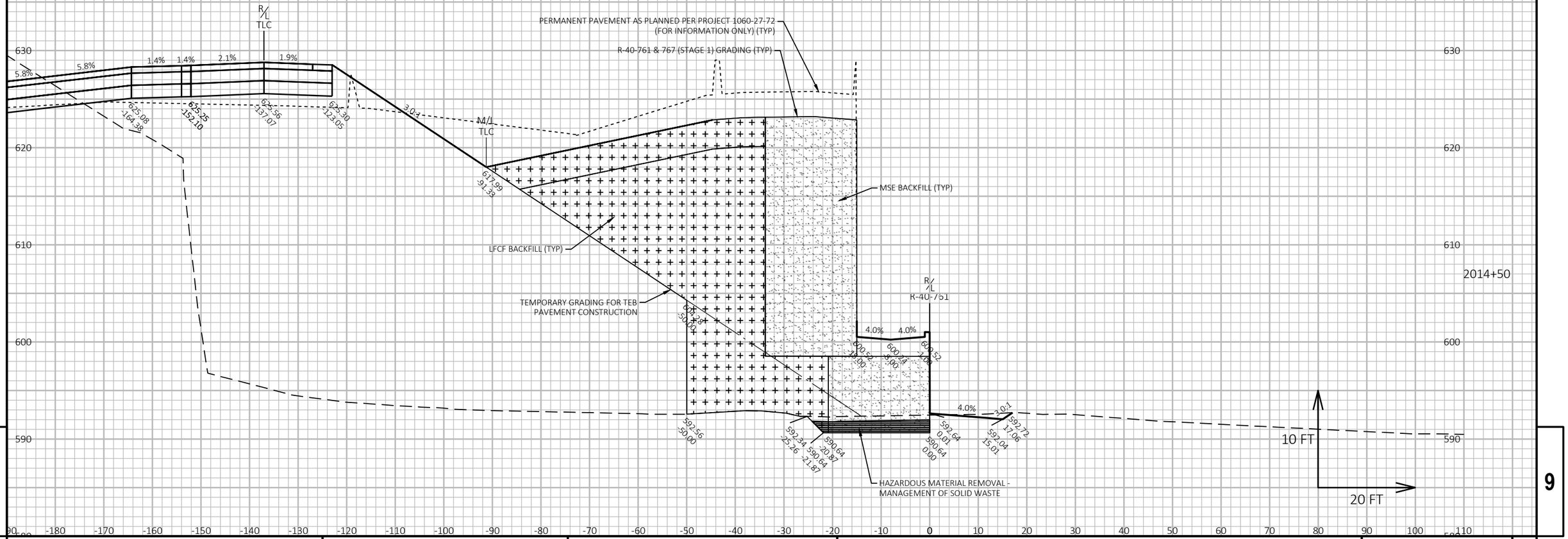
9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 969	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 29
PLOT DATE : 5/28/2025 5:40 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



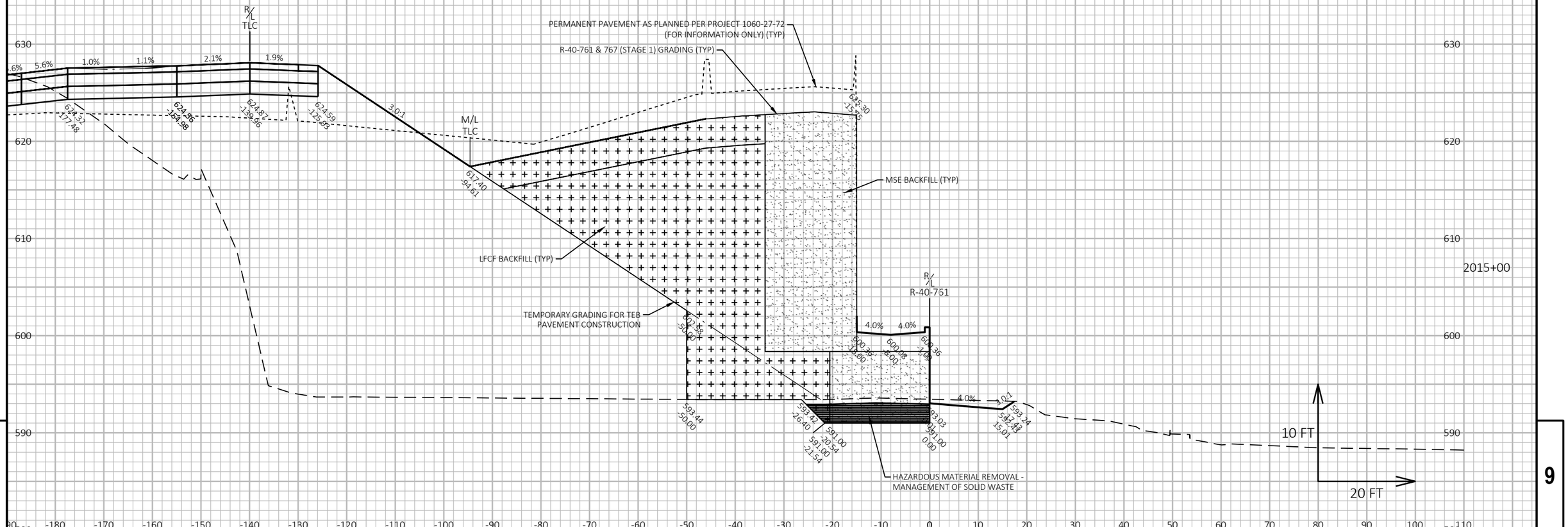
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 970 E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 30

PLOT DATE : 5/28/2025 5:40 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



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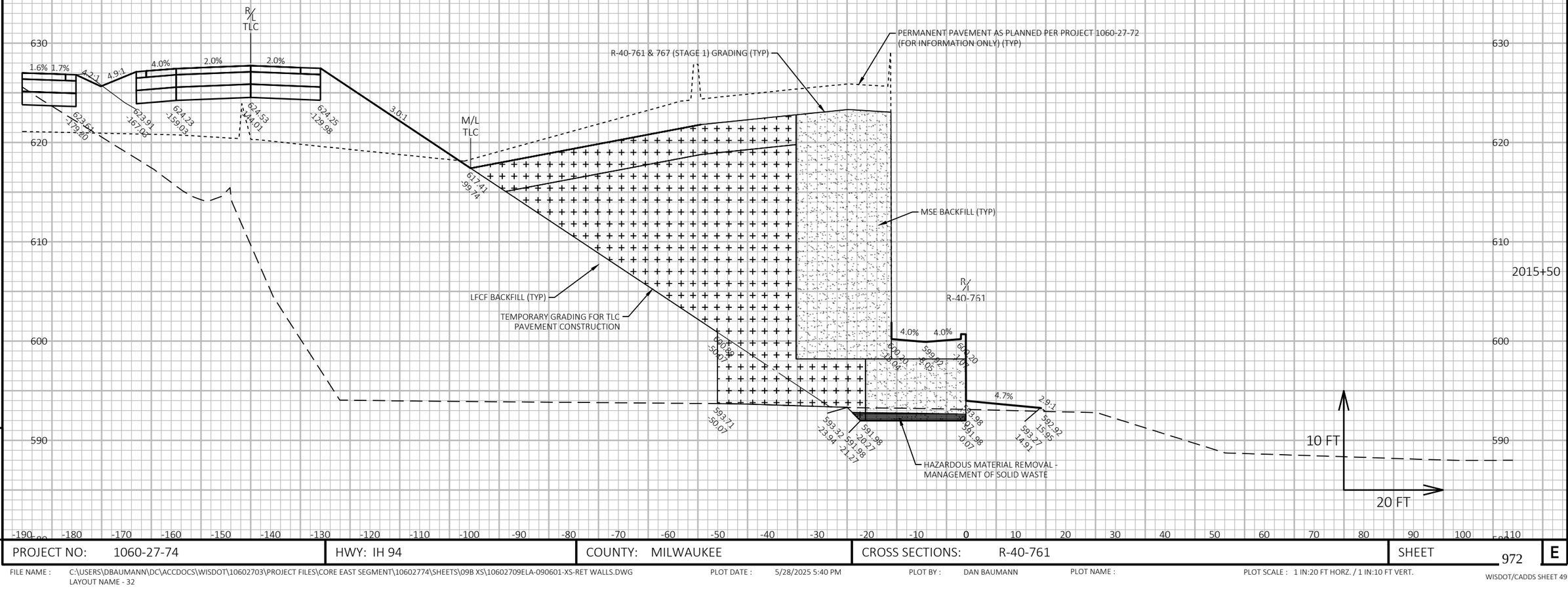
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 971	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 31

PLOT DATE : 5/28/2025 5:40 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



9

9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 972	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 32
PLOT DATE : 5/28/2025 5:40 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

ALL WORK STAGE 1

PERMANENT PAVEMENT AS PLANNED PER PROJECT 1060-27-72 (FOR INFORMATION ONLY) (TYP)

R-40-761 & 767 (STAGE 1) GRADING (TYP)

R/L TLC

M/L TLC

R/L R-40-761

MSE BACKFILL (TYP)

LFCF BACKFILL (TYP)

TEMPORARY GRADING FOR TLC PAVEMENT CONSTRUCTION

HAZARDOUS MATERIAL REMOVAL - MANAGEMENT OF SOLID WASTE

1.4% 4.2:1 2.8:1 4.0% 2.0% 2.0% 3.0:1 4.0% 4.0% 4.7% 2.9:1

623.18 -187.40 623.89 -167.01 624.21 -159.01 624.51 -149.99 624.24 -129.96 618.24 -102.29 607.85 -69.00 593.67 -65.04 592.91 -22.81 592.27 -21.53 592.27 -20.53 592.27 -0.06 600.04 10.00 599.76 24.09 600.08 40.06 598.27 14.90 592.42 32.09

630 620 610 600 590

2016+00

10 FT 20 FT

-190 -180 -170 -160 -150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110

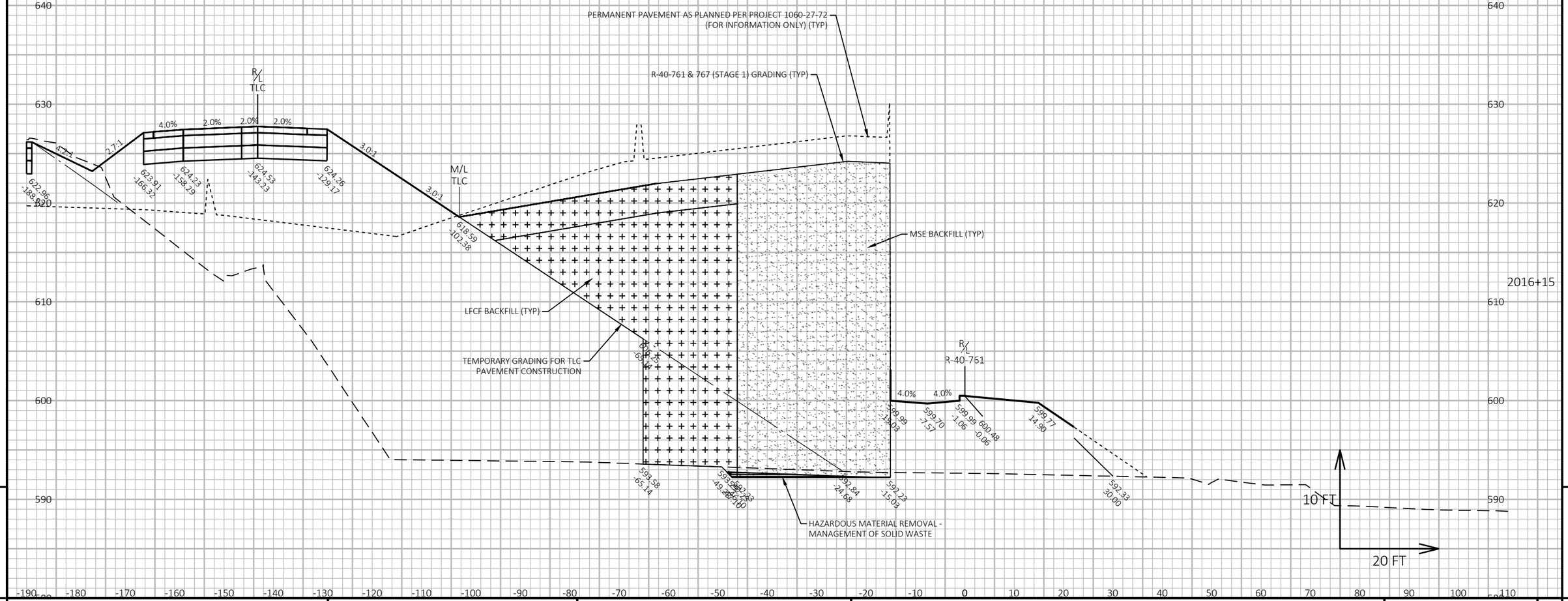
9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 973	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 33

PLOT DATE : 5/28/2025 5:40 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK STAGE 1



9

9

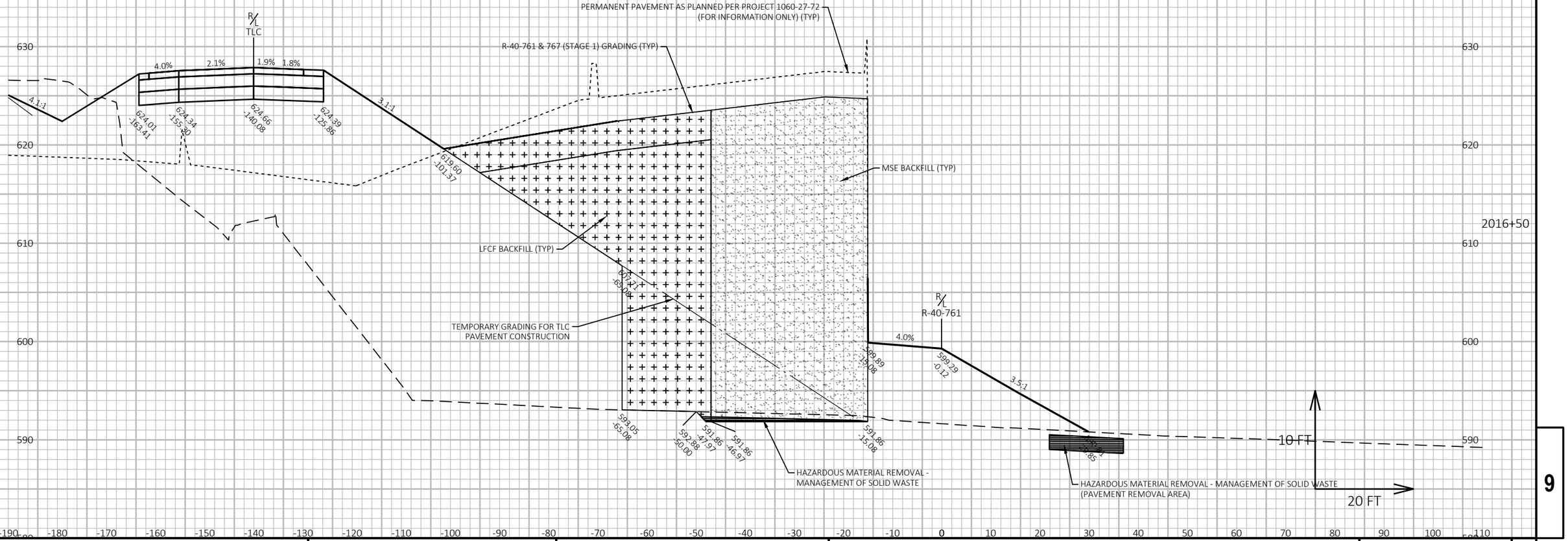
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 974	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 34

PLOT DATE : 5/28/2025 5:40 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



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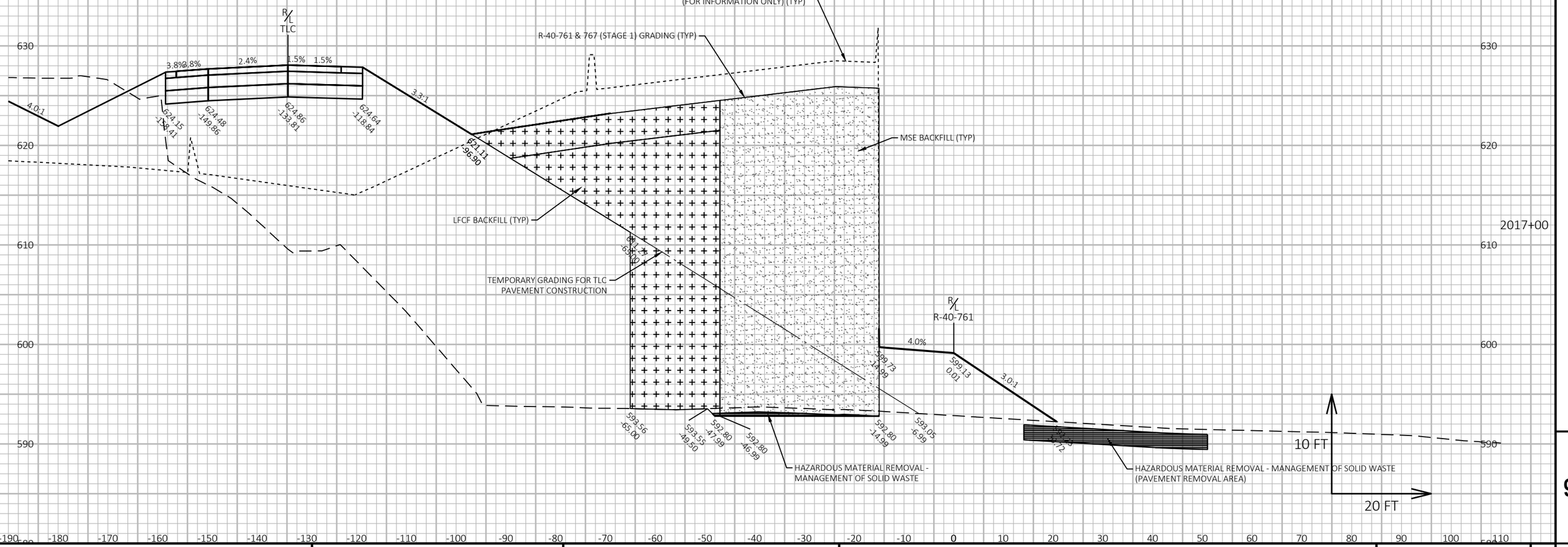
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 975	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 35

PLOT DATE : 5/28/2025 5:40 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



9

9

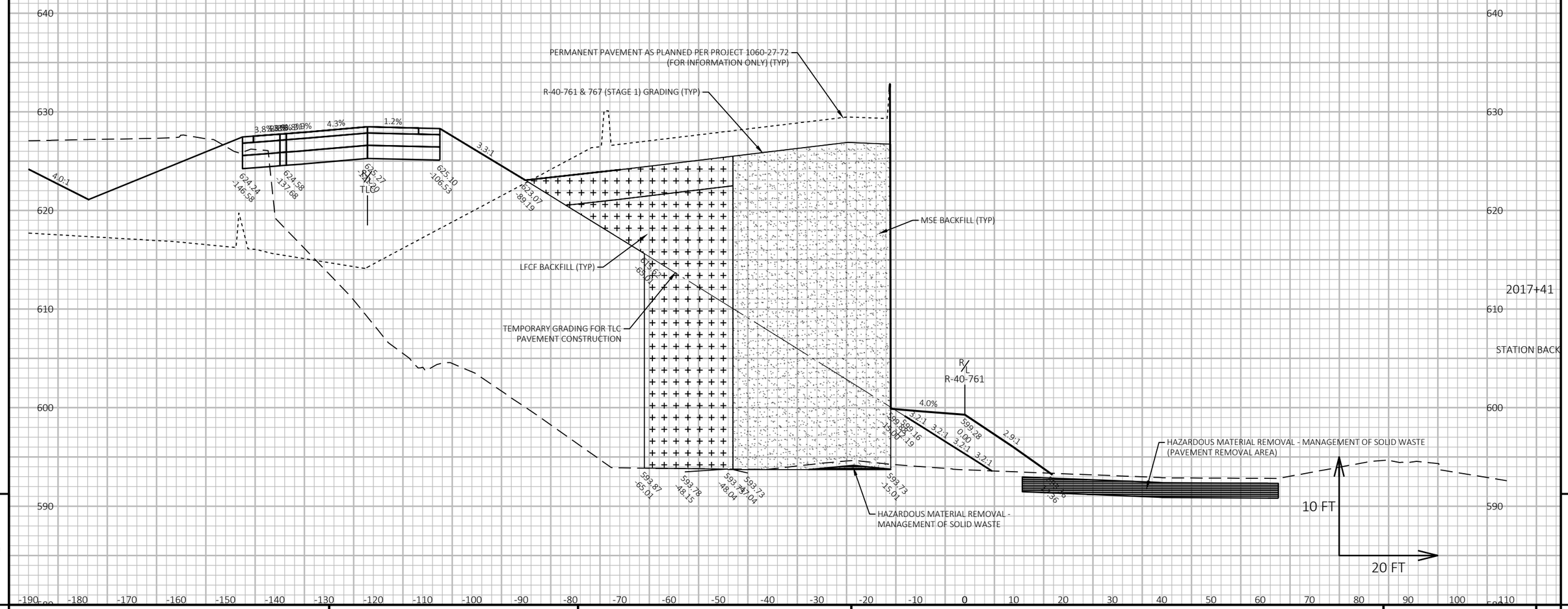
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 976	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 36

PLOT DATE : 5/28/2025 5:40 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 1



9

9

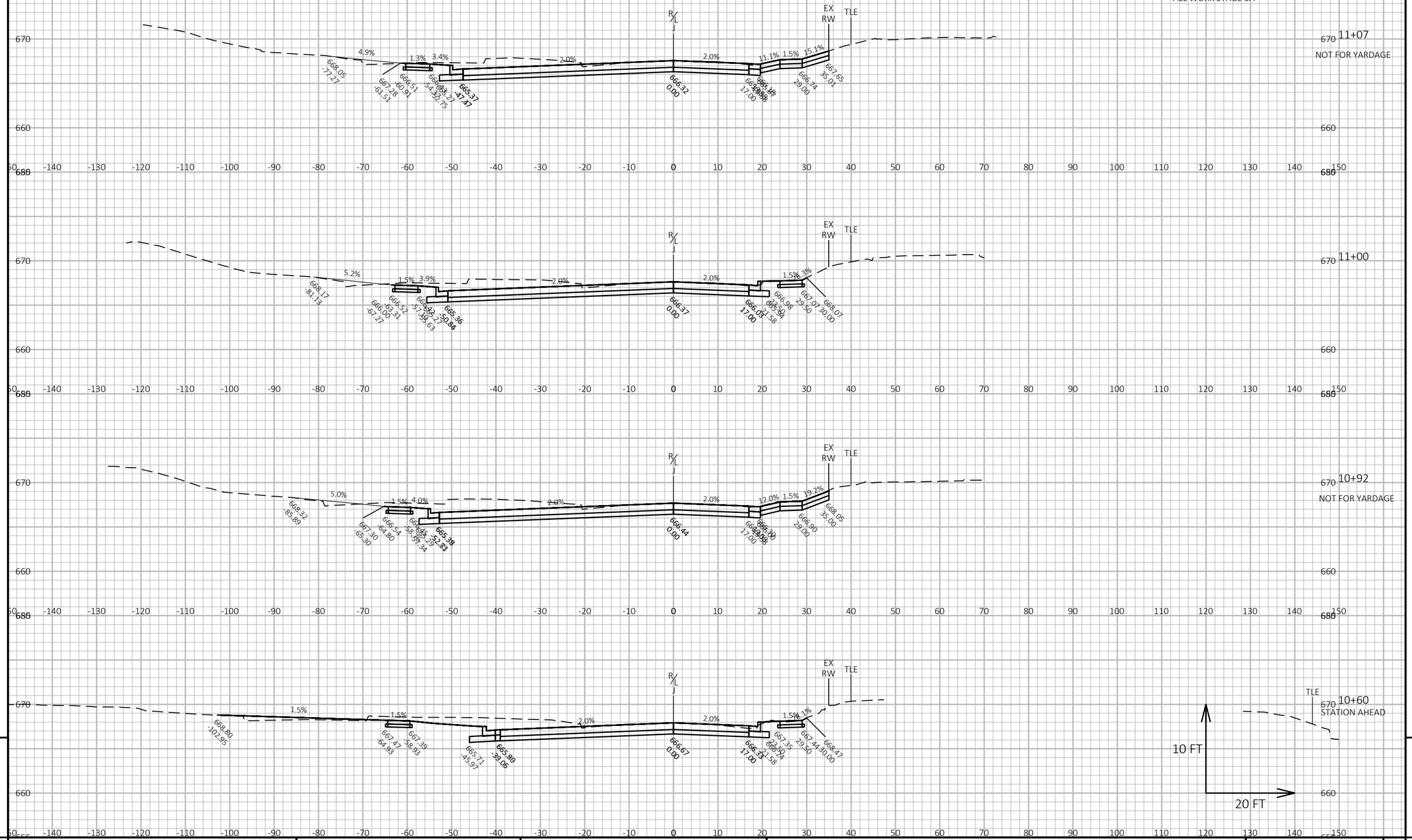
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: R-40-761	SHEET 977	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090601-XS-RET WALLS.DWG
LAYOUT NAME - 37

PLOT DATE : 5/28/2025 5:40 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

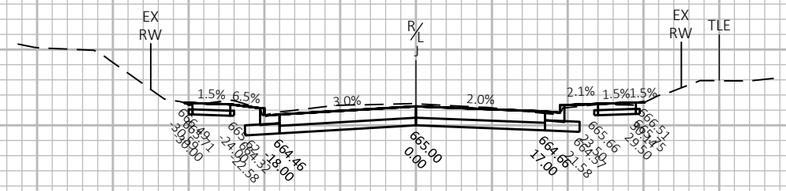
ALL WORK STAGE 3A

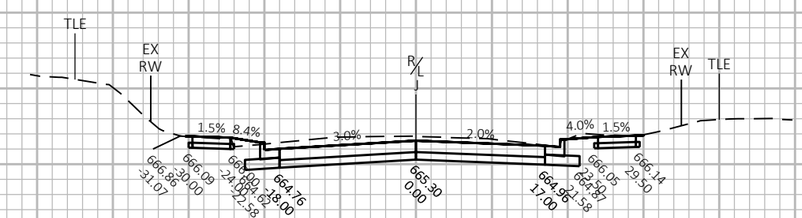


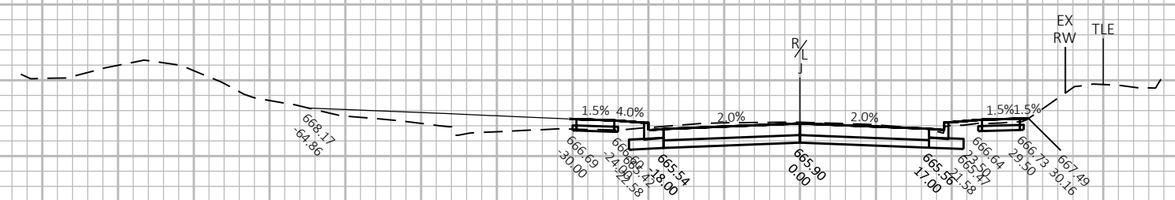
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: N. 28TH STREET	SHEET 978	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090501-XS-J.DWG
LAYOUT NAME - 01
PLOT DATE : 7/23/2025 11:51 AM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

ALL WORK STAGE 3A





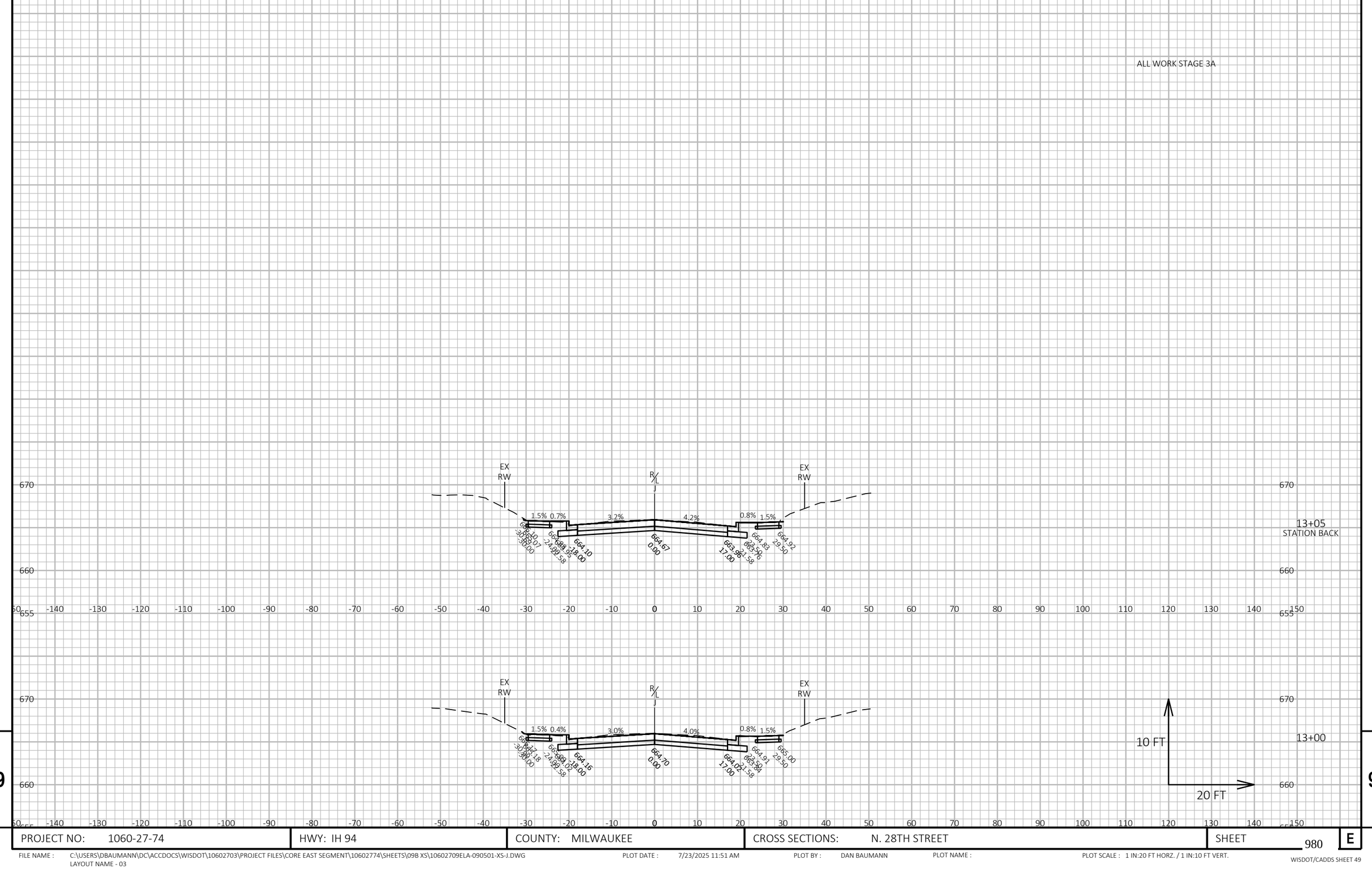


PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: N. 28TH STREET	SHEET 979	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090501-XS-J.DWG
LAYOUT NAME - 02

PLOT DATE : 7/23/2025 11:51 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

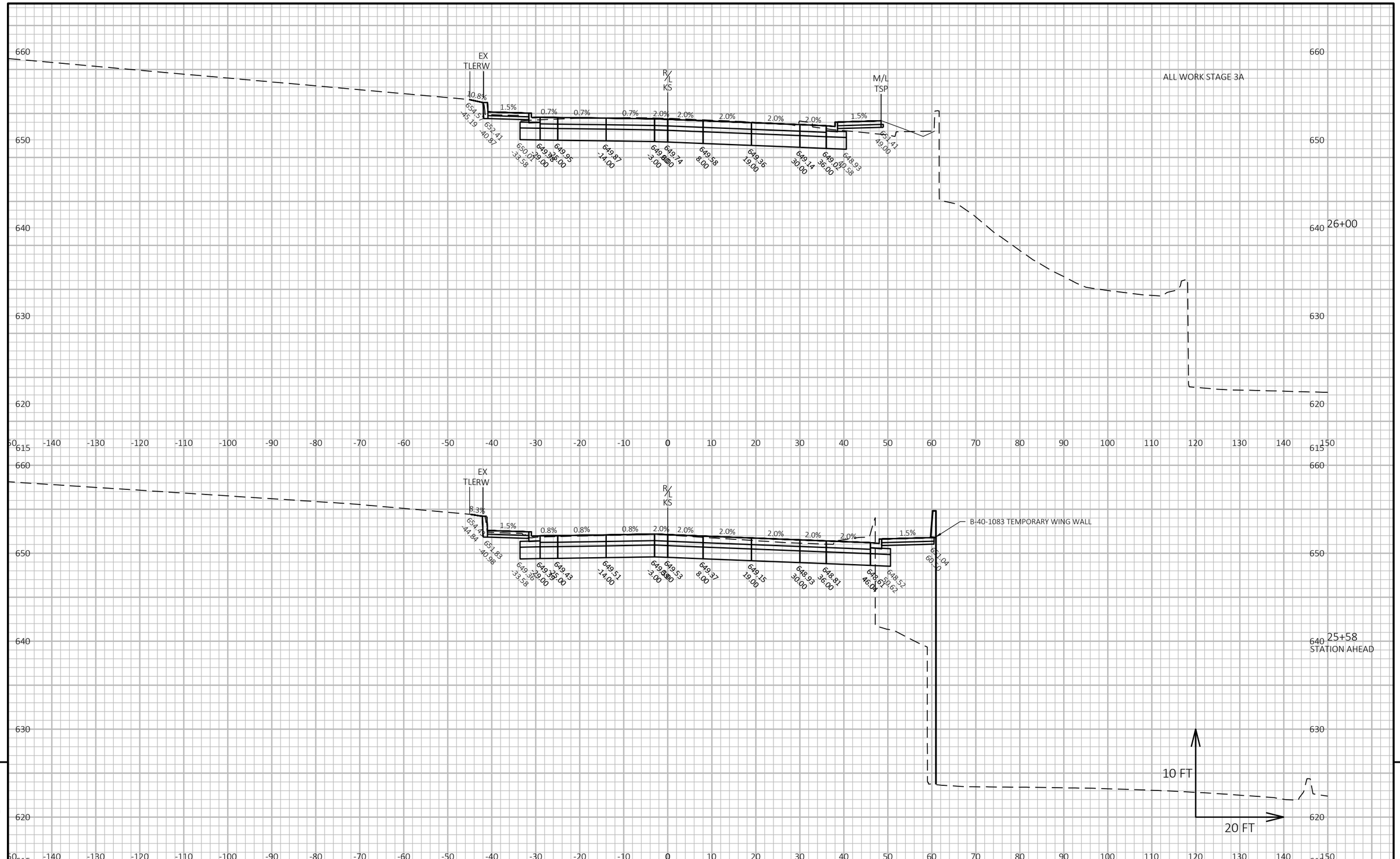
ALL WORK STAGE 3A



9 9

PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: N. 28TH STREET	SHEET 980	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090501-XS-J.DWG
LAYOUT NAME - 03
PLOT DATE : 7/23/2025 11:51 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



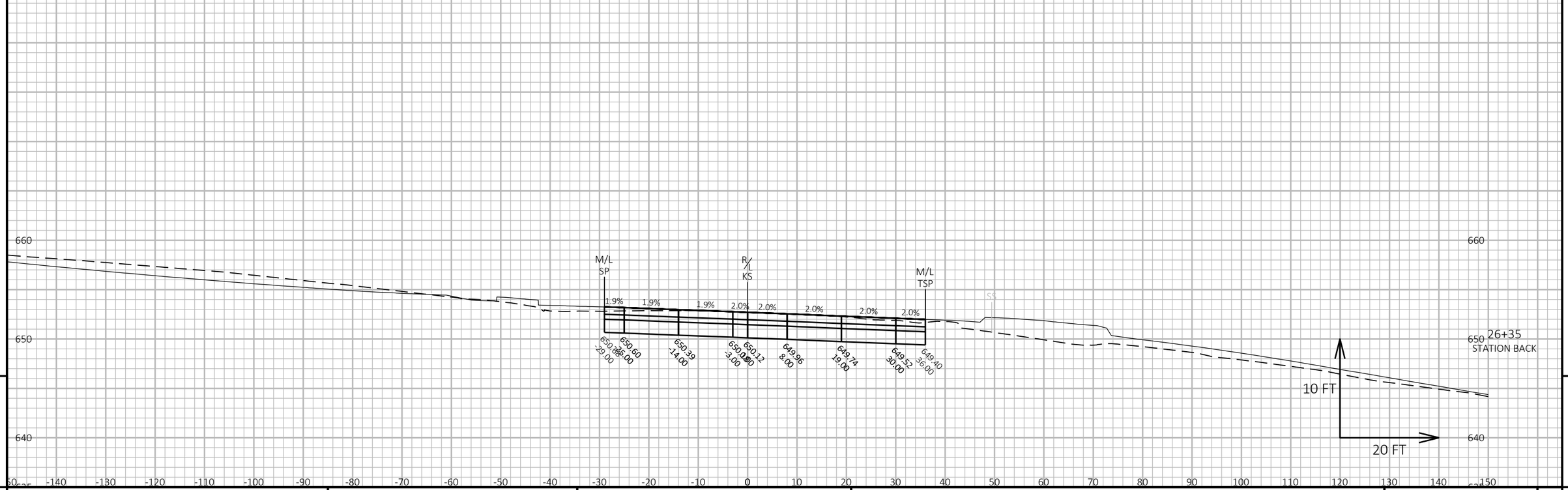
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: N. 27TH STREET - SOUTH	SHEET 981 E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090502-XS-KS.DWG
LAYOUT NAME - 01

PLOT DATE : 7/23/2025 11:51 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 3A



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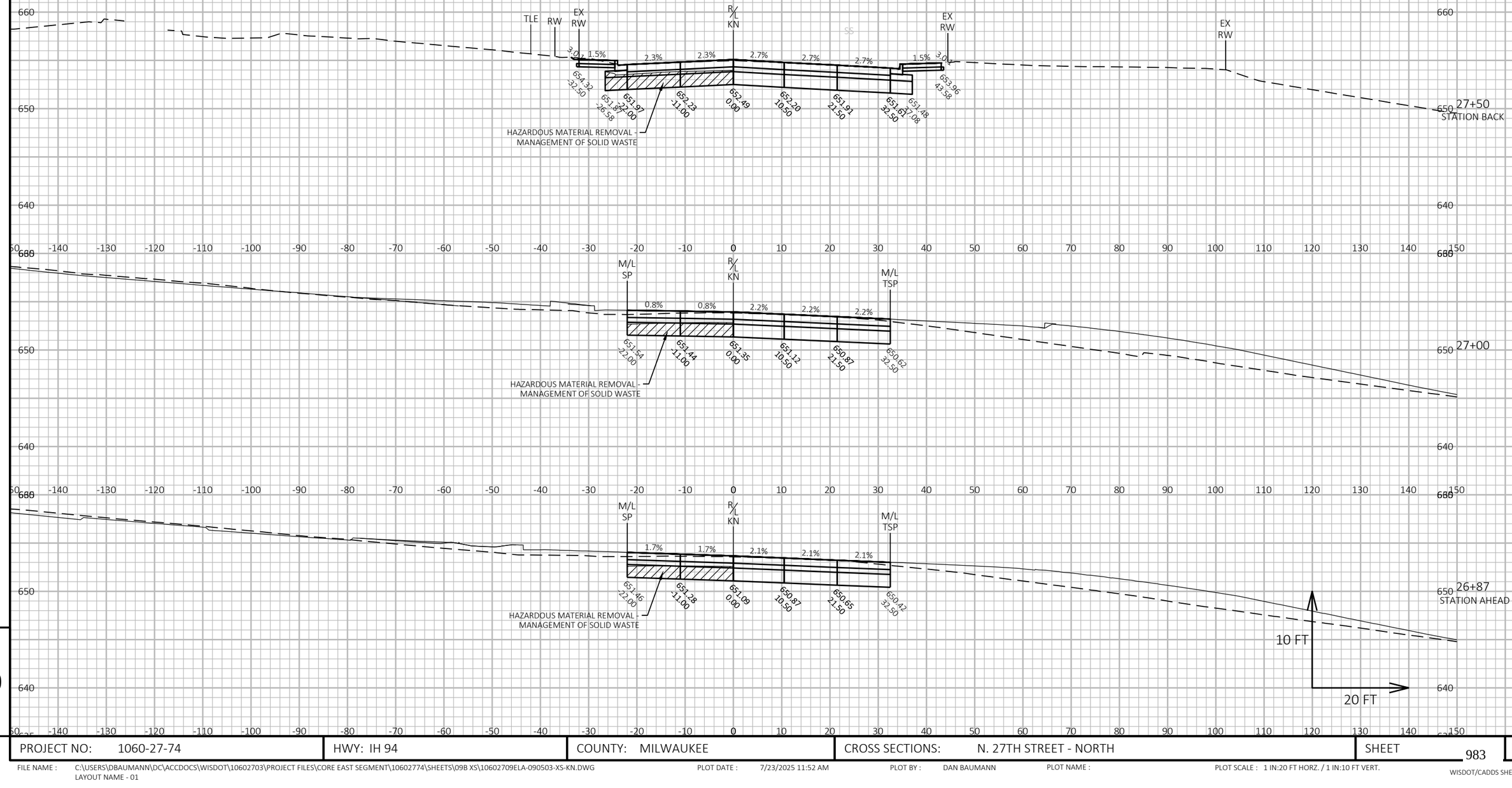
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: N. 27TH STREET - SOUTH	SHEET 982	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090502-XS-KS.DWG
LAYOUT NAME - 02

PLOT DATE : 7/23/2025 11:51 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK STAGE 3C



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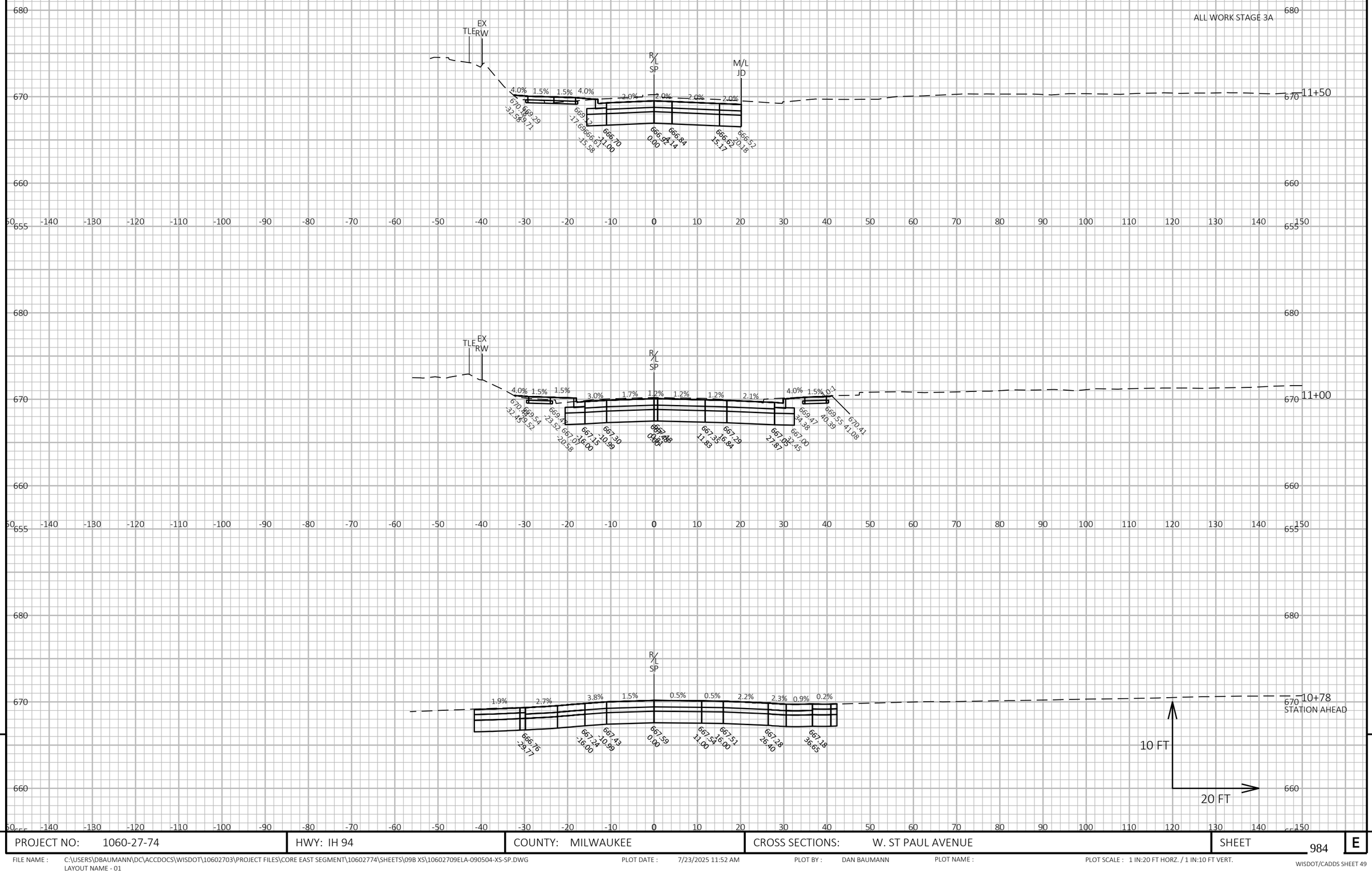
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: N. 27TH STREET - NORTH	SHEET 983	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090503-XS-KN.DWG
LAYOUT NAME - 01

PLOT DATE : 7/23/2025 11:52 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

ALL WORK STAGE 3A

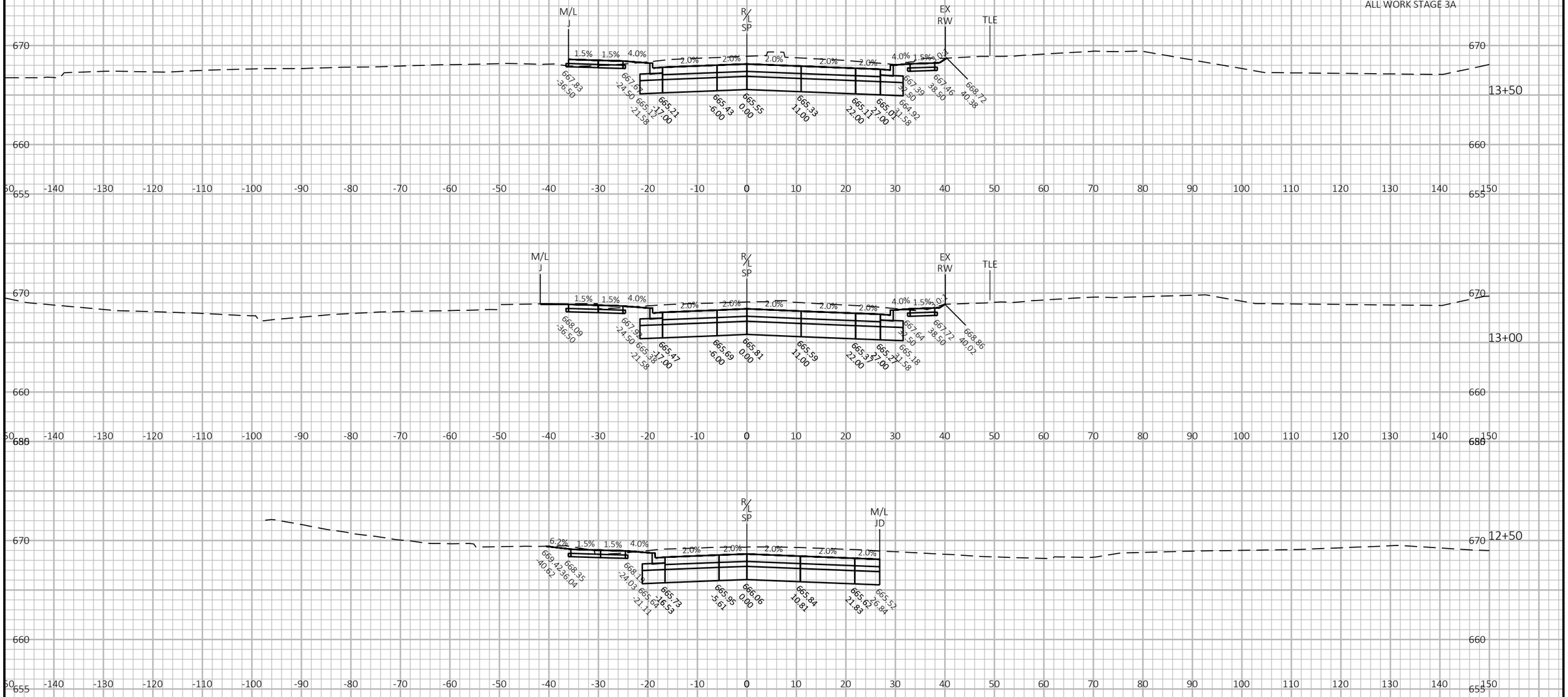


PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 984	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090504-XS-SP.DWG
LAYOUT NAME - 01

PLOT DATE : 7/23/2025 11:52 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK STAGE 3A



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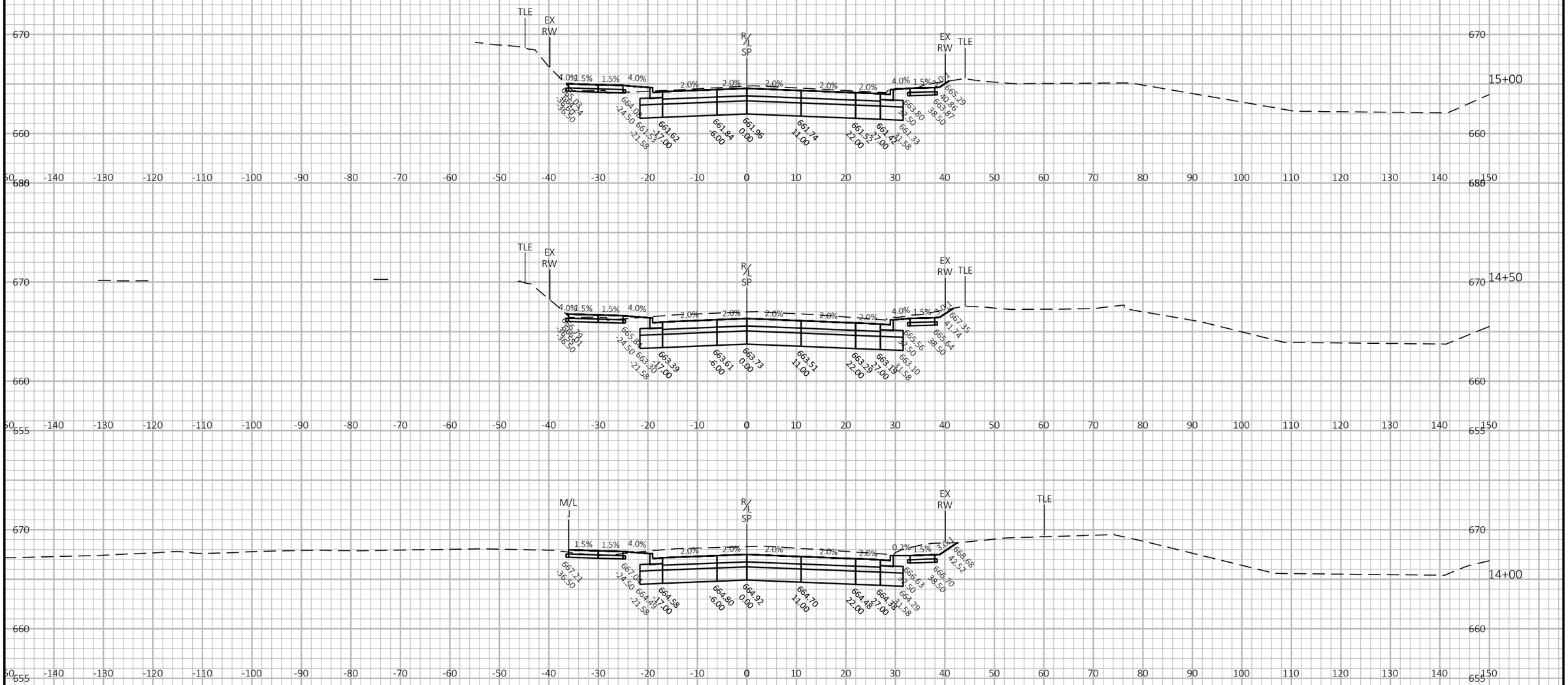
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 985	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090504-XS-SP.DWG
LAYOUT NAME - 02

PLOT DATE : 7/23/2025 11:52 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

ALL WORK STAGE 3A



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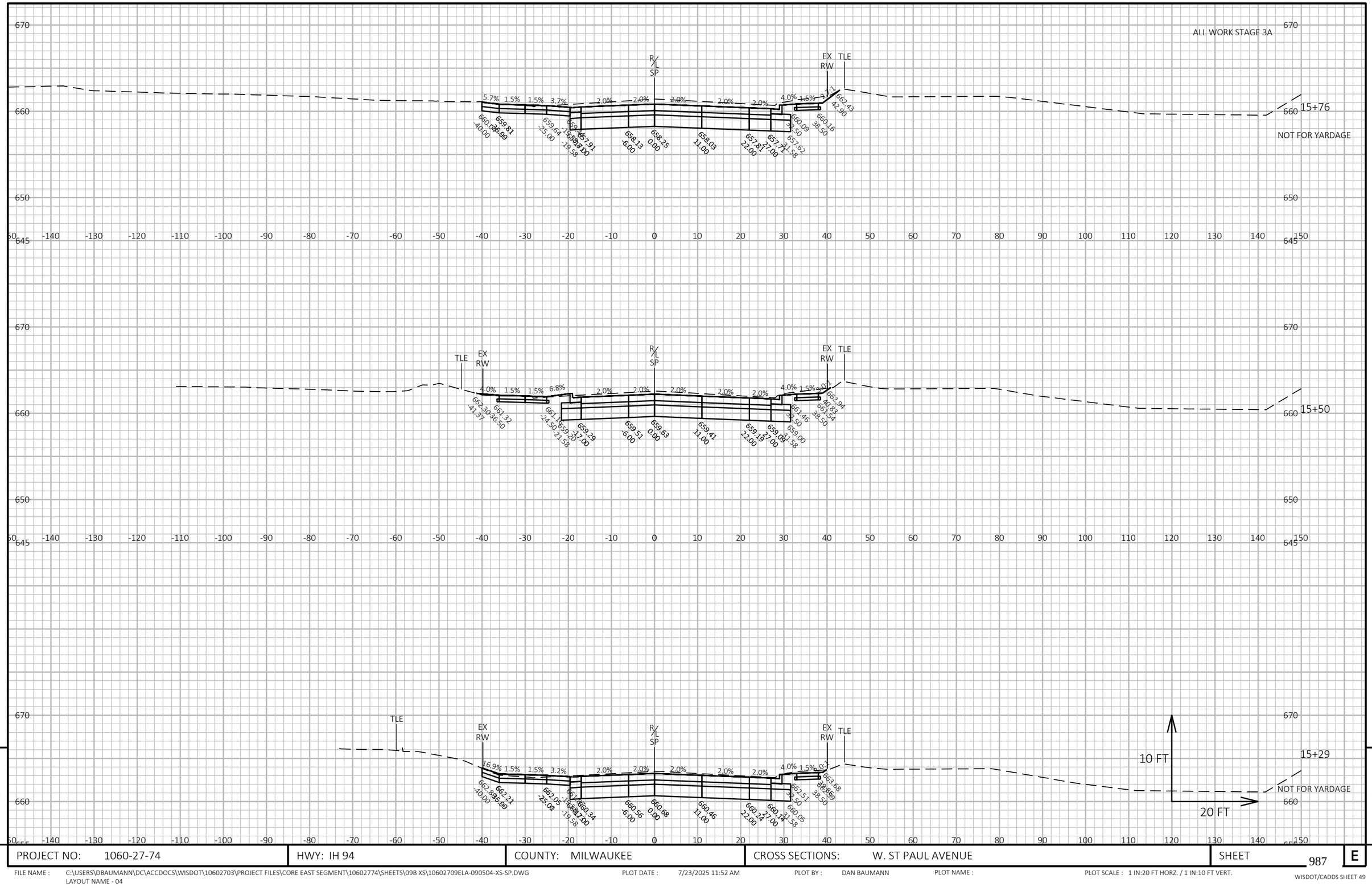
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 986	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090504-XS-SP.DWG
LAYOUT NAME - 03

PLOT DATE : 7/23/2025 11:52 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

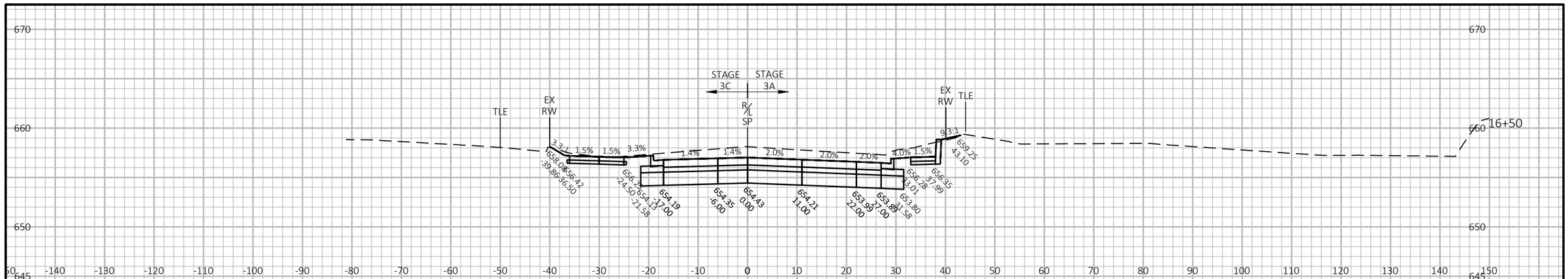


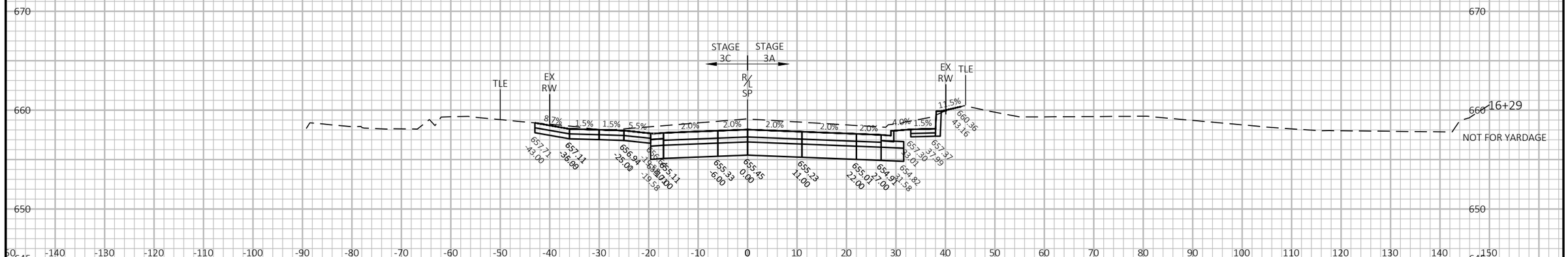
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 987	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090504-XS-SP.DWG
LAYOUT NAME - 04

PLOT DATE : 7/23/2025 11:52 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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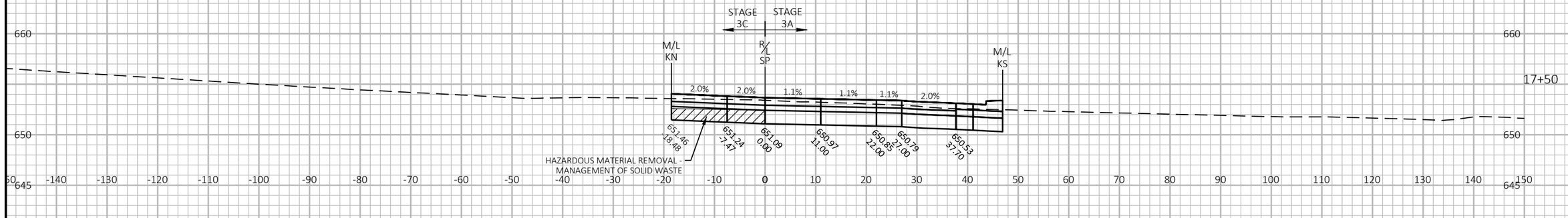
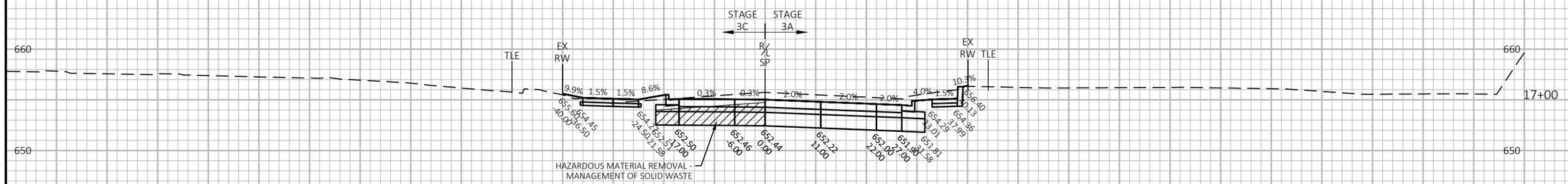
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 988	E

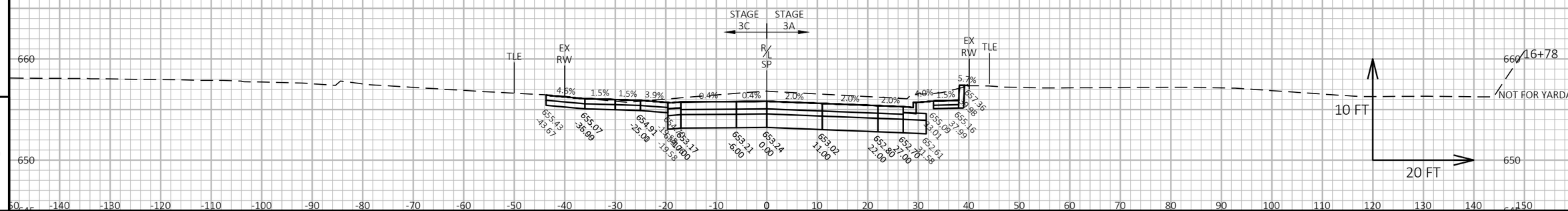
FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090504-XS-SP.DWG
LAYOUT NAME - 05
PLOT DATE : 7/23/2025 11:52 AM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

STA 17SP+70 END
HAZARDOUS MATERIAL REMOVAL -
MANAGEMENT OF SOLID WASTE





STA 16SP+60 BEGIN
HAZARDOUS MATERIAL REMOVAL -
MANAGEMENT OF SOLID WASTE



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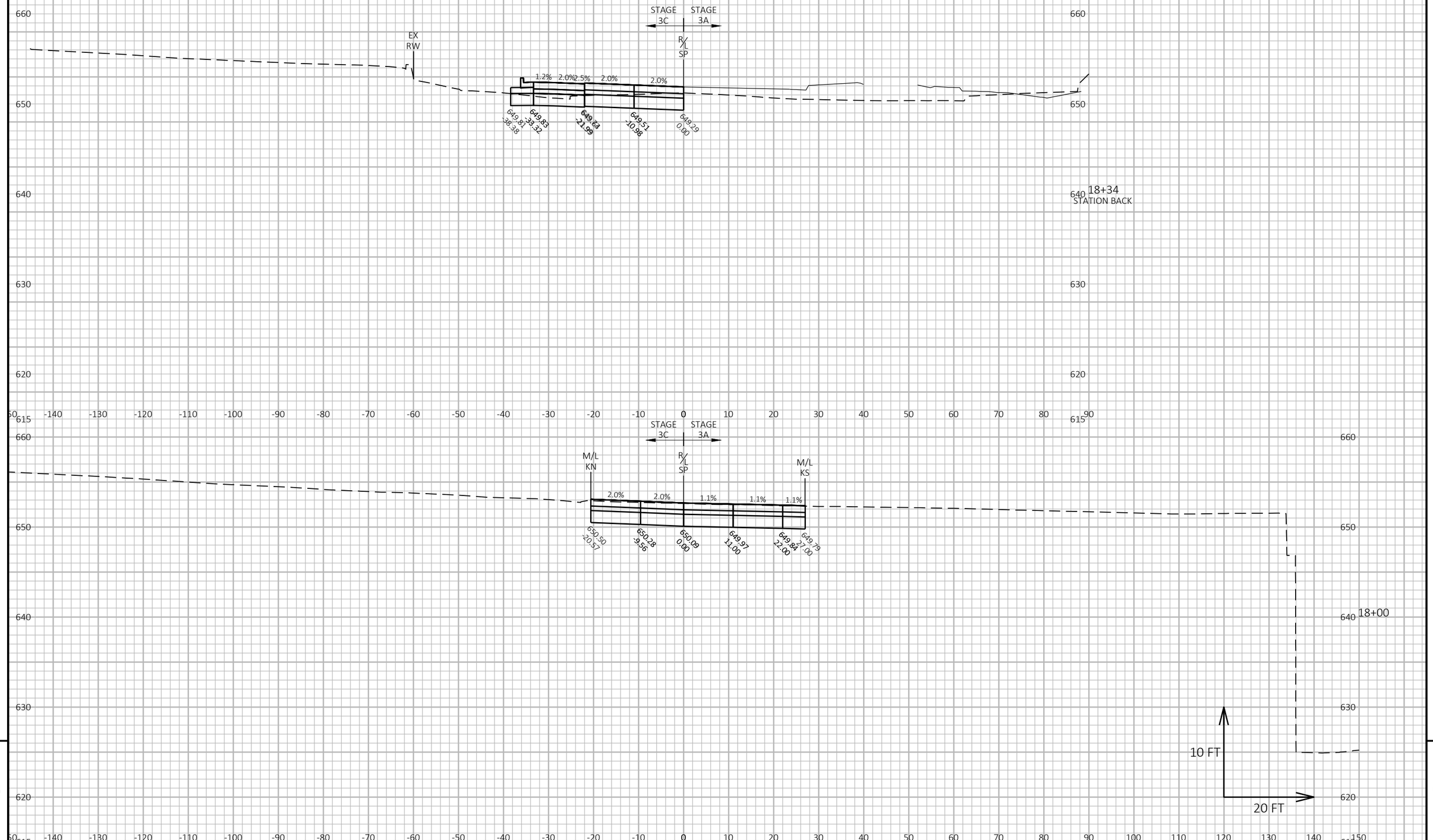
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 989	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090504-XS-SP.DWG
LAYOUT NAME - 06
PLOT DATE : 7/23/2025 11:52 AM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

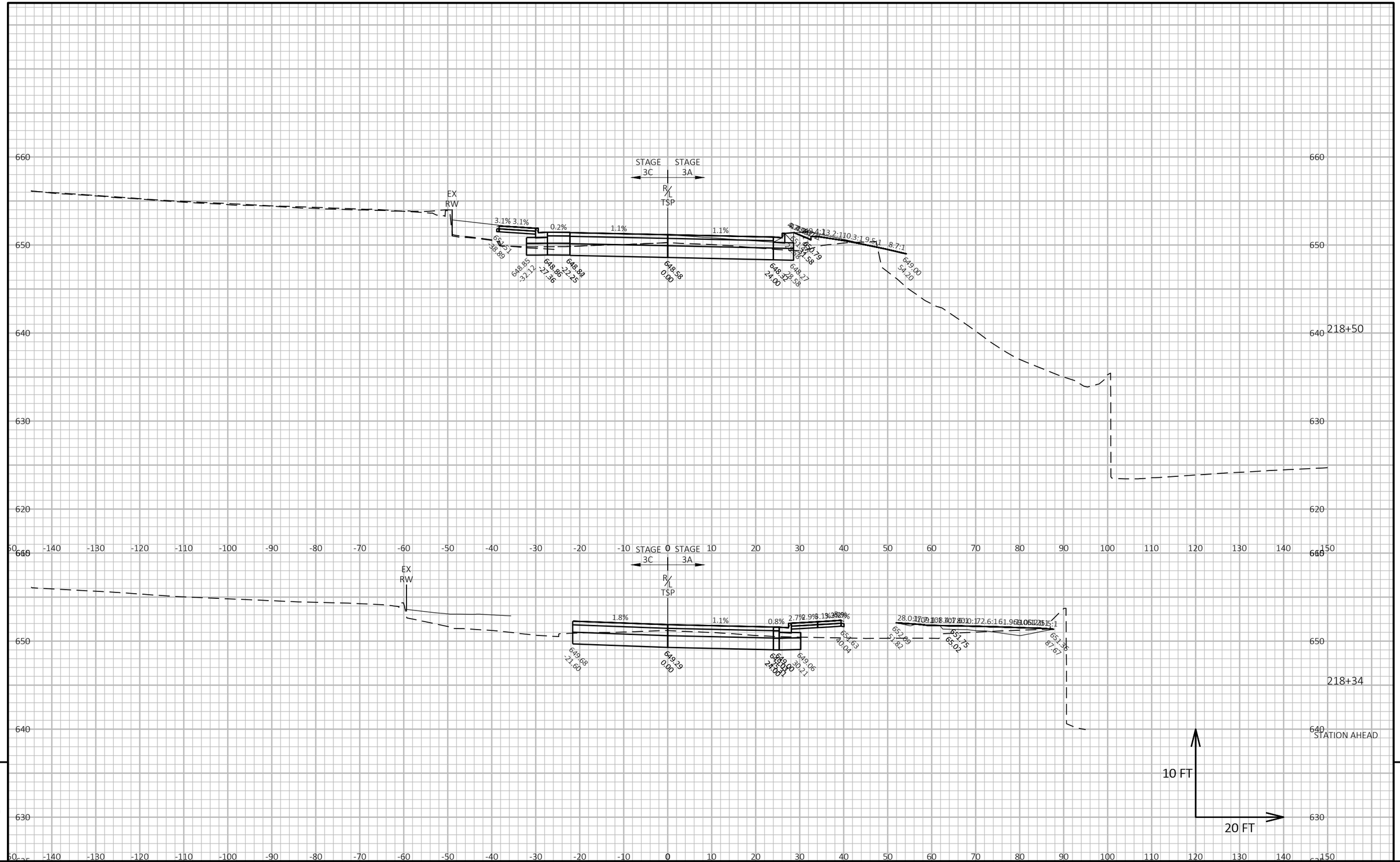


PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 990 E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090504-XS-SP.DWG
LAYOUT NAME - 07

PLOT DATE : 7/23/2025 11:52 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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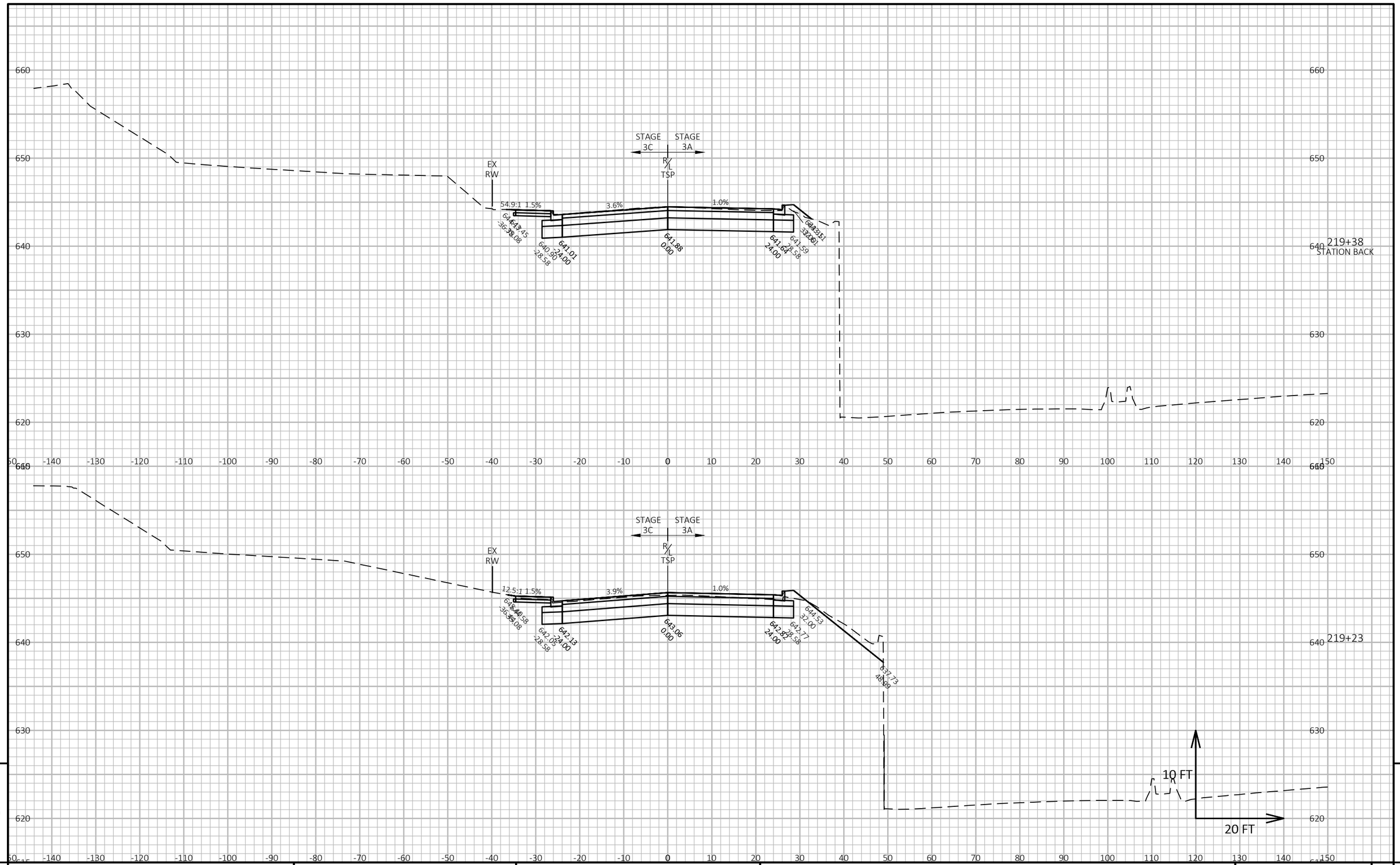
PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: INTERIM W. ST PAUL AVENUE	SHEET 991	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090505-XS-TSP.DWG
LAYOUT NAME - 01

PLOT DATE : 7/23/2025 11:52 AM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1060-27-74	HWY: IH 94	COUNTY: MILWAUKEE	CROSS SECTIONS: INTERIM W. ST PAUL AVENUE	SHEET 992	E

FILE NAME : C:\USERS\DBAUMANN\DC\ACCDOCS\WISDOT\10602703\PROJECT FILES\CORE EAST SEGMENT\10602774\SHEETS\09B XS\10602709ELA-090505-XS-TSP.DWG
LAYOUT NAME - 02
PLOT DATE : 7/23/2025 11:52 AM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov