WKE

PROJECT ID: 2110-03-71, 2110-03-72

WITH: N/A

COUNTY: MILWAUKEE

FEBRUARY 2025

ORDER OF SHEETS

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

TOTAL SHEETS = 322

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2110-03-71	WISC 2025312	1
2110-03-72		

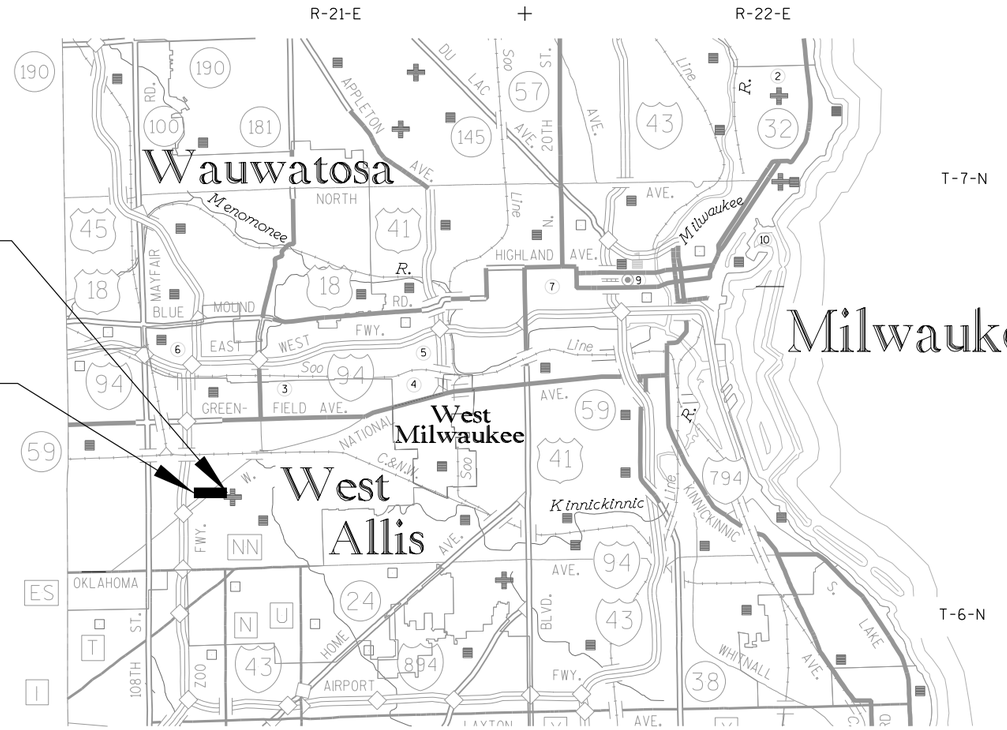
C WEST ALLIS, W LINCOLN AVENUE
S 93RD ST TO S 96TH ST
LOCAL STREET
MILWAUKEE COUNTY

STATE PROJECT NUMBER
2110-03-71

C WEST ALLIS, W LINCOLN AVENUE
S 93RD ST TO S 96TH ST
LOCAL STREET
MILWAUKEE COUNTY

STATE PROJECT NUMBER
2110-03-72
(SANITARY SEWER & WATER MAIN)

N



END PROJECT
STA. 111+81.57

BEGIN PROJECT
STA. 98+42.00
N = 371,644.37
E = 2,526,271.93

DESIGN DESIGNATION

A.A.D.T. 2025	=	18,100
A.A.D.T. 2045	=	20,000
D.H.V.	=	2,000
D.D.	=	55/45
T.	=	5.1%
DESIGN SPEED	=	35 MPH
ESALS	=	2,300,000

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE (PL + 58.1)
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

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

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

LAYOUT
SCALE 0 1.0 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.254 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM (WSPCS), SOUTH' ZONE, NAD27, GROUND, US SURVEY FOOT

VERTICAL DATUM - CITY OF WEST ALLIS. (NGVD29 - 580.56)

ACCEPTED FOR
CITY of WEST ALLIS
10/25/2024 (Date) Traci Ziegler, Principal Engineer (Signature & Title of Official)

ORIGINAL PLANS PREPARED BY
GRAEF

WISCONSIN ROBERT J. STEUCK 41177 NEW BERLIN WI PROFESSIONAL ENGINEER
10/24/2024 (Date) (Signature)

CITY OF WEST ALLIS
(STORM SEWER, SANITARY SEWER & WATER MAIN PLANS)

WISCONSIN ROBERT J. HUTTER 34983 WEST ALLIS, WI PROFESSIONAL ENGINEER
10/24/2024 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	GRAEF
Designer	GRAEF
Project Manager	MICHAEL BAIRD
Regional Examiner	
Regional Supervisor	AMY TAETSCH
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 10/28/2024 Michael J. Baird (Signature)

E

2

GENERAL NOTES

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS INDICATED FOR REMOVAL BY THE ENGINEER.

THE LOCATION OF KNOWN EXISTING UTILITIES IN THE VICINITY OF THE PROJECT ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITIES IN THE AREA THAT ARE NOT SHOWN.

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.

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

2" DEPTH - 2" OF HMA PAVEMENT 4 MT 58-28 S AS THE UPPER LAYER

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

THE EXACT LOCATION OF PRIVATE ENTRANCES IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

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

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

ALL ELEVATIONS ALONG CURB & GUTTER ARE GIVEN TO THE FLANGE.

CONCRETE JOINTS SHALL MATCH ABUTTING PAVEMENT AND CURB AND GUTTER JOINTS UNLESS OTHERWISE DESIGNATED BY THE ENGINEER.

STANDARD ABBREVIATIONS

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

CITY OF WEST ALLIS

TRACI GENGLER
CITY OF WEST ALLIS ENGINEERING DEPARTMENT
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WISDOT FIBER OPTIC COMMUNICATIONS
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MILWAUKEE, WI 53203
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DEAN.BEEKMAN@DOT.WI.GOV

WEST ALLIS-WEST MILWAUKEE SCHOOL DISTRICT
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GREEN BAY, WI 54307
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GSELISSEN@MCEWI.COM

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411 7TH STREET
RACINE, WI 53403
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NG952W@ATT.COM

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KEVIN.WEHRHAHN@CHARTER.COM

TDS METROCOM
JASON KENNY
525 JUNCTION ROAD
MADISON, WI 53717
(608) 345-7939

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WEST ALLIS, WI 53214
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NICHOLAS.SCHAFER@WE-ENERGIES.COM

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STEVE SCHECHER
500 S 116TH STREET
WEST ALLIS, WI 53214
(414) 550-7102
STEVE.SCHECHER@WE-ENERGIES.COM

CITY OF WEST ALLIS - SANITARY
TIM LAST
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WEST ALLIS, WI 53219
(414) 302-8815
TLAST@WESTALLISWI.GOV

CITY OF WEST ALLIS - WATER
KARYN RITTENHOUSE
6300 MCGEOCH AVENUE
WEST ALLIS, WI 53219
(414) 302-8828; MOBILE (414) 975-6480
KRITTENHOUSE@WESTALLISWI.GOV

INDEX OF DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
REMOVAL PLAN
PLAN DETAIL
CURB RAMP DETAIL
PAVEMENT GRADES
EROSION CONTROL
STORM SEWER
SANITARY SEWER
WATER MAIN
PERMANENT SIGNING
LIGHTING PLAN
TRAFFIC SIGNAL
PAVEMENT MARKING
TRAFFIC CONTROL AND CONSTRUCTION STAGING
DETOUR PLAN
ALIGNMENT

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

2

CITY OF WEST ALLIS

2

IH-41

S. 99TH ST

S. 98TH ST

S. 97TH ST

S. 96TH ST

S. 95TH ST

S. 94TH ST

S. 93RD ST

S. 92ND ST

S. 91ST ST

W. GRANT ST

W. NATIONAL AVE

W. LINCOLN AVE

W. HAYES AVE

W. HAYES PLACE

W. AURTHUR PL

N

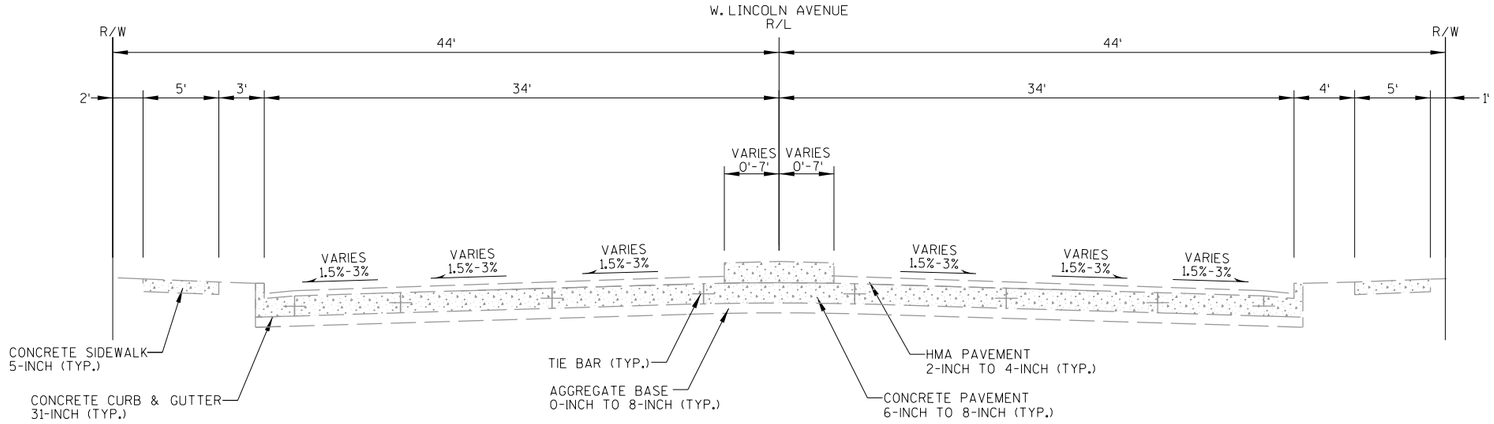
BEGIN PROJECT
STA. 98+42.00
N = 371,644.37
E = 2,526,271.93

END PROJECT
STA. 111+81.57

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SHEET 3	E

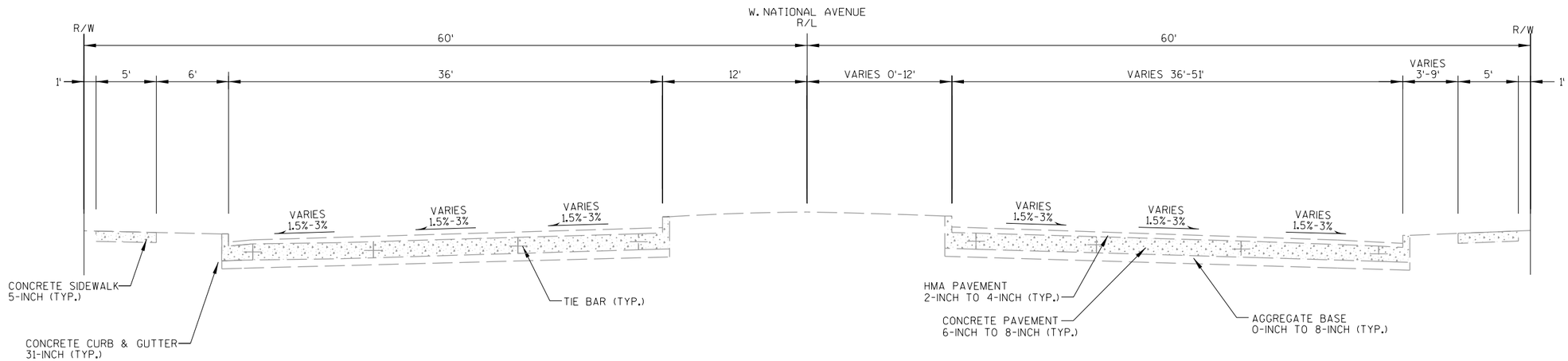
FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\020201_po.dgn PLOT DATE : 10/30/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 240.0000 sf / in.

WISDOT/CADDS SHEET 42



TYPICAL EXISTING SECTION - W. LINCOLN AVENUE

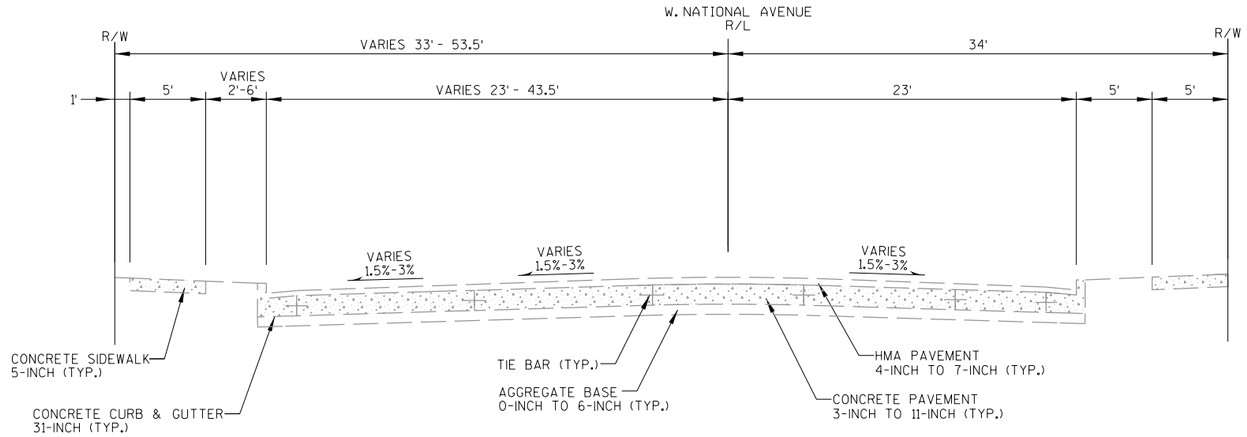
STA 98+42 TO STA 111+81.57



TYPICAL EXISTING SECTION - W. NATIONAL AVENUE

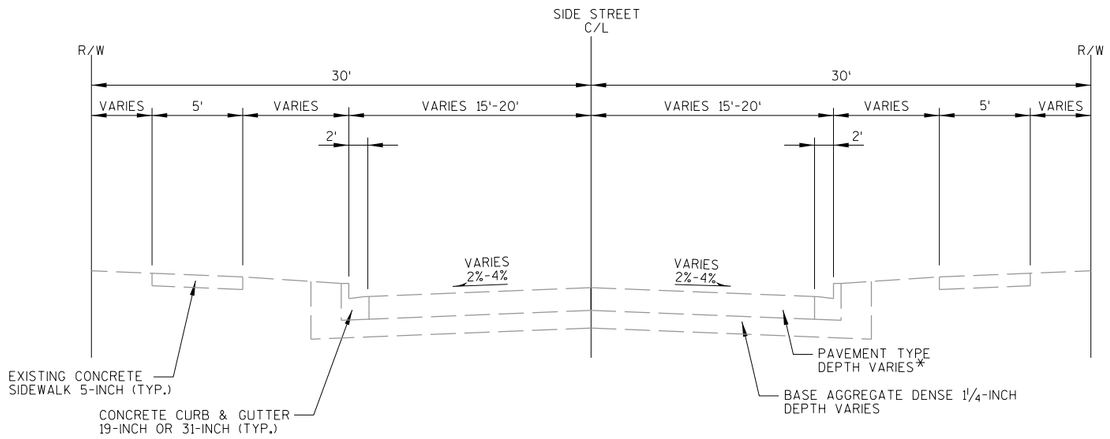
STA 7+35 TO STA 10+50

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 4	E



TYPICAL EXISTING SECTION - W. NATIONAL AVENUE

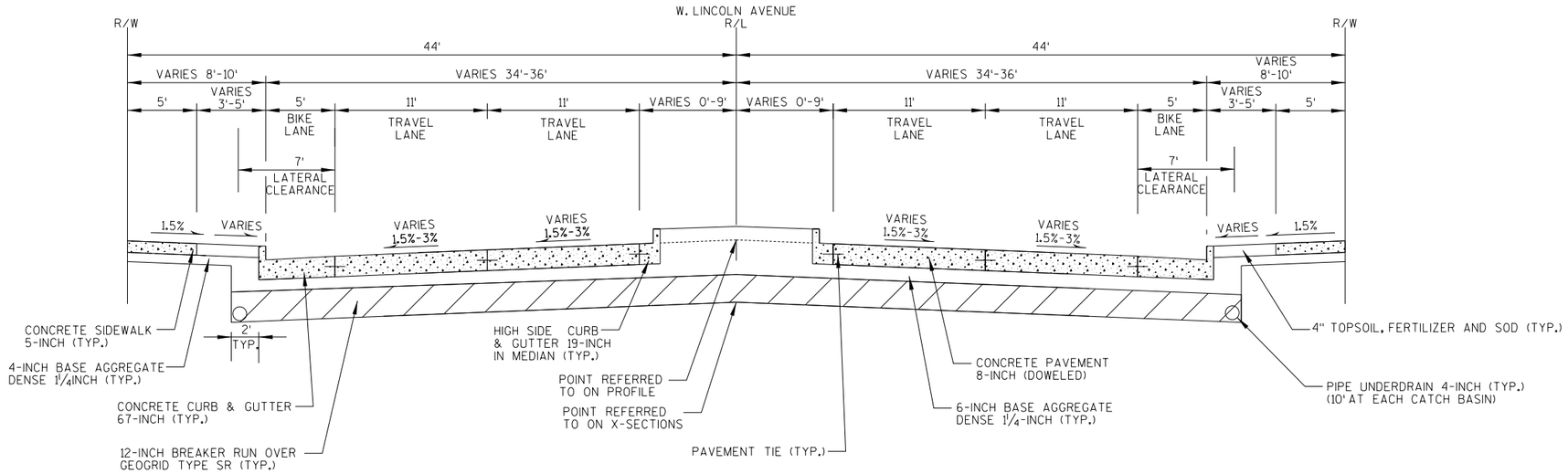
STA 10+50 TO STA 12+87



TYPICAL EXISTING SECTION - SIDE ROADS

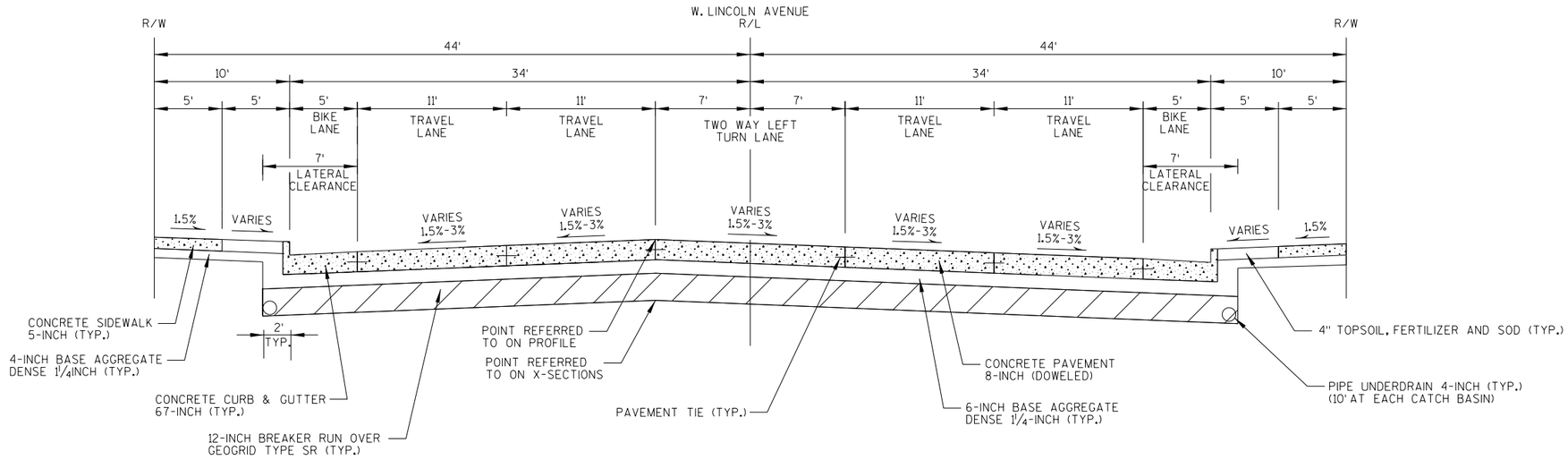
SIDE STREET	PAVEMENT TYPE *
S. 96TH STREET	CONCRETE
S. 95TH STREET (NORTH)	CONCRETE
S. 95TH STREET (SOUTH)	ASPHALT ON CONCRETE
S. 94TH STREET	CONCRETE
S. 93TH STREET	CONCRETE

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 5	E



TYPICAL FINISHED SECTION - W. LINCOLN AVENUE

STA 98+84.95 TO STA 107+25



TYPICAL FINISHED SECTION - W. LINCOLN AVENUE

STA 107+25 TO STA 111+81.57

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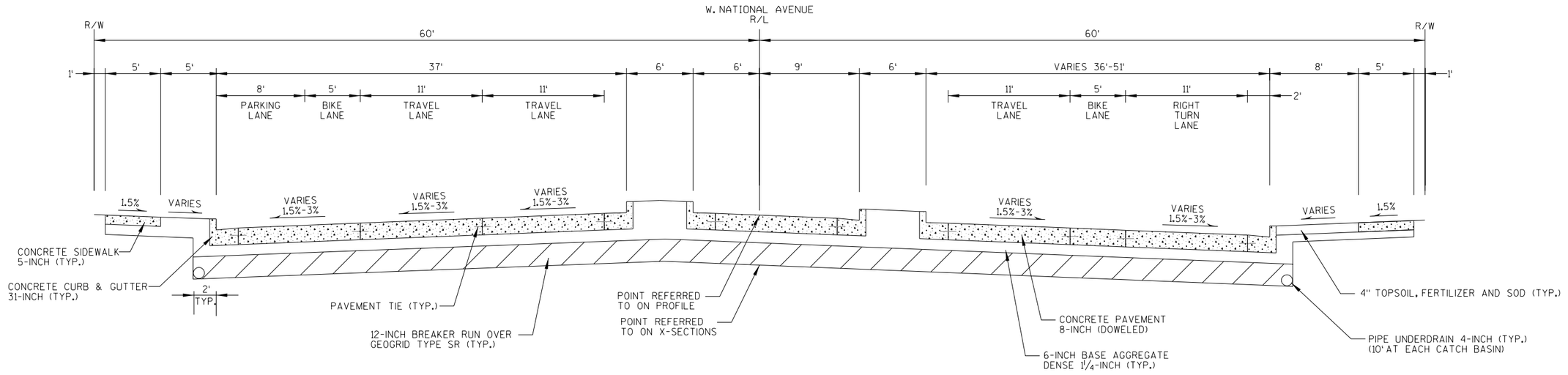
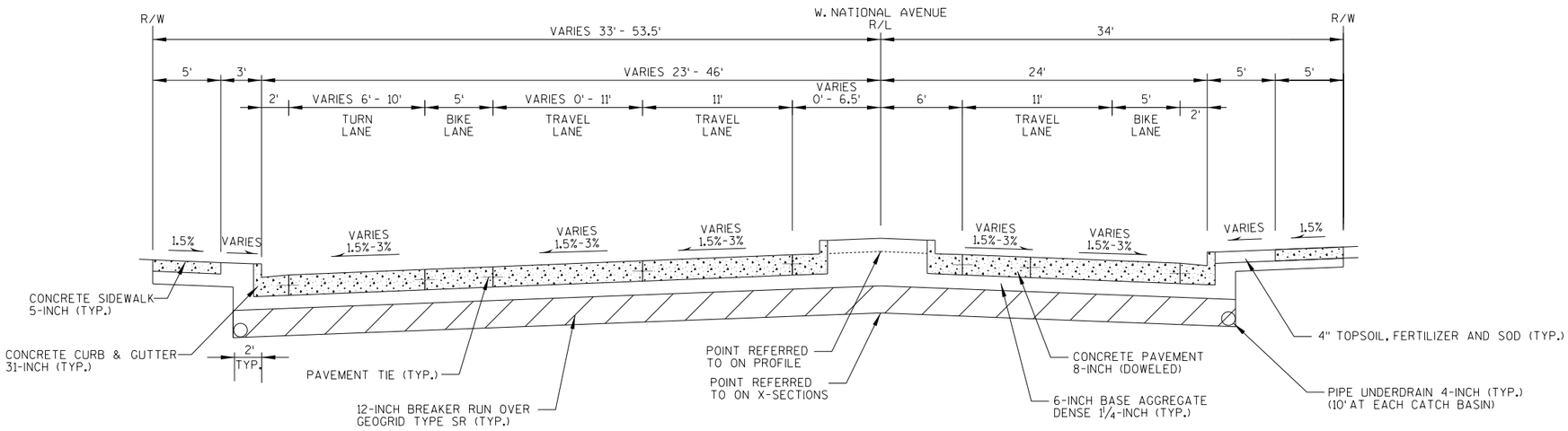


TYPICAL FINISHED SECTION - W. NATIONAL AVENUE

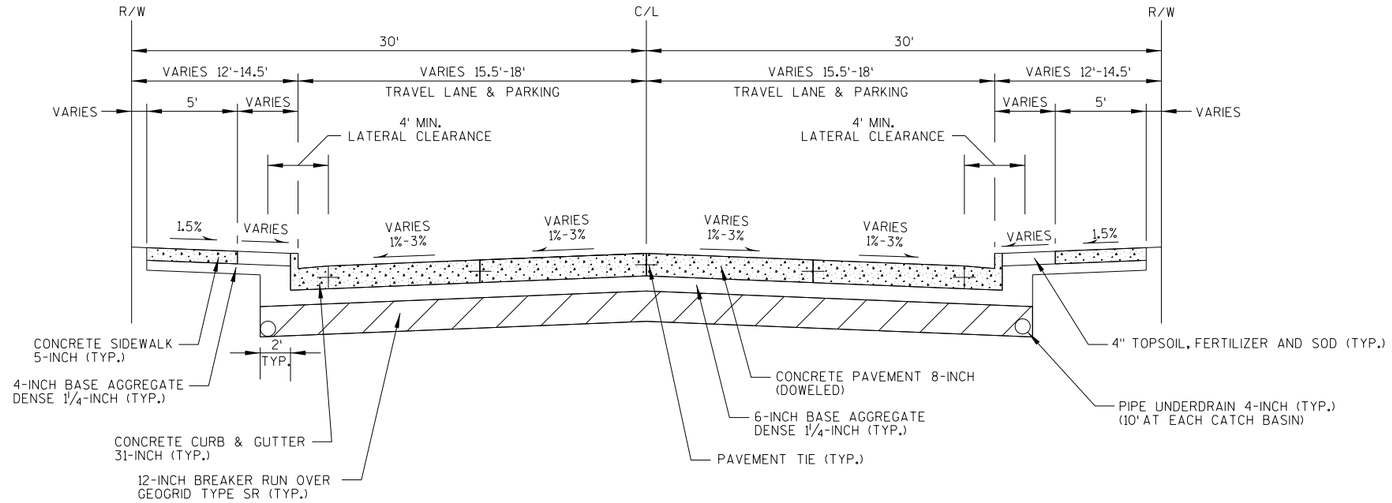
STA 7+66 TO STA 11+00



TYPICAL FINISHED SECTION - W. NATIONAL AVENUE

STA 11+00 TO STA 12+91

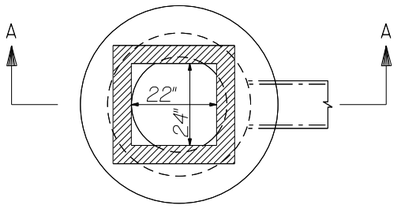
PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 7	E



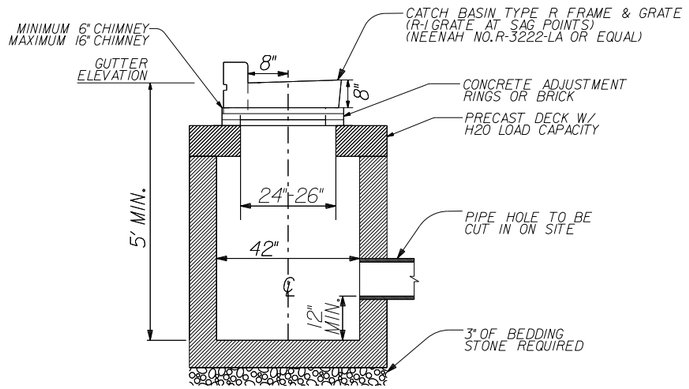
TYPICAL FINISHED SECTION SIDE ROADS

SIDESTREET	LANE WIDTH (LT & RT)
S. 96TH STREET	16'
S. 95TH STREET (NORTH)	16'
S. 95TH STREET (SOUTH)	13.5'
S. 94TH STREET	18'
S. 93RD STREET	16'

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 8	E



PLAN VIEW

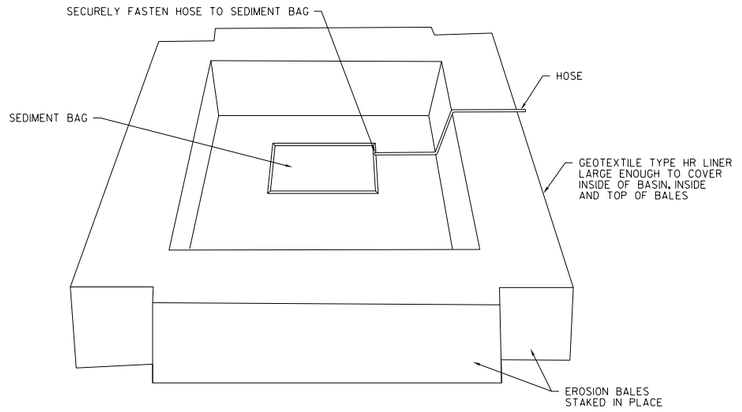


SECTION A-A

REVISED JAN.2016
CITY OF WEST ALLIS

ROAD TYPE CATCH BASIN
FIGURE V-117

CATCH BASIN, SPECIAL



EXAMPLE TEMPORARY SETTLING BASIN DETAIL

(SIZE TO BE DETERMINED IN FIELD AS INDICATED BELOW:)

STORAGE VOLUME (C.F.) = 16 X GPM (PUMP RATE)

EXAMPLE:
CONTRACTOR INDICATES PUMP CAPABLE OF 50 GPM
HEIGHT OF BALES = 1.5 FT.

SOLUTION:
SV (C.F.) = 16 X 50
SV = 800 C.F.

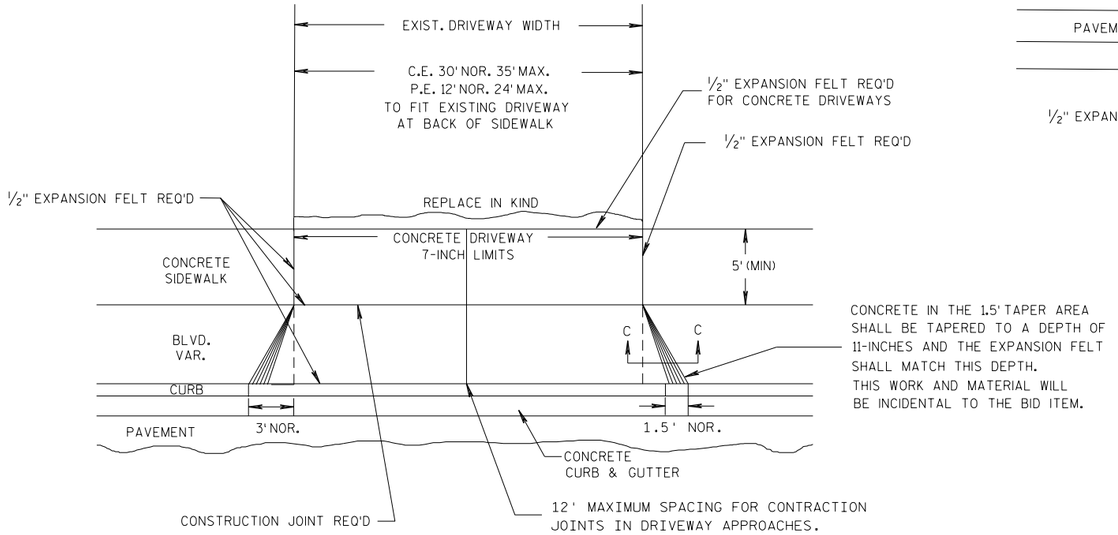
$\frac{800\ C.F.}{1.5\ FT.}$ = 533 S.F.

USE A 20 FT. X 27 FT. BASIN

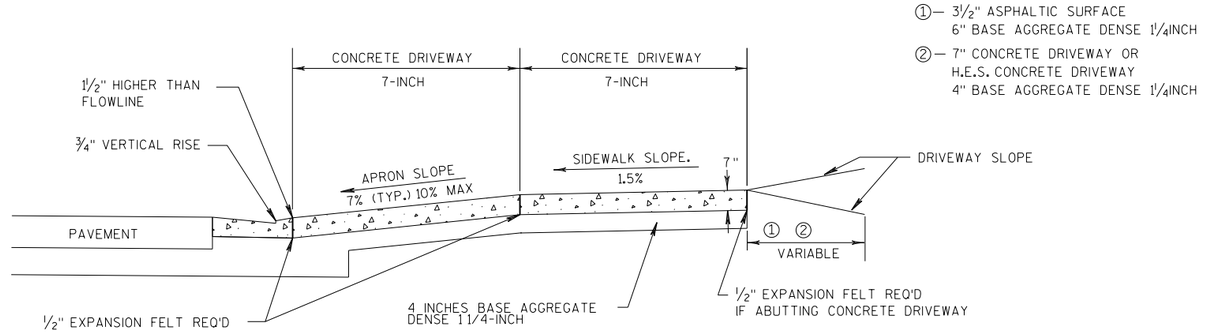
NOTES

1. CONTRACTOR SHALL PUMP TURBID WATER FROM EXCAVATION TO SEDIMENT BAG PLACED INSIDE FABRIC LINED STAKED BALE ENCLOSURE PRIOR TO DISCHARGING TO DITCHES/INLETS/WETLANDS OR WATERWAYS.
2. SEDIMENT BAG TO BE PLACED IN AN UPLAND VEGETATED AREA OR EQUIVALENT LOCATION APPROVED BY THE ENGINEER.
3. BASIN TO BE KEPT LESS THAN 10% FULL OF SEDIMENT. GEOTEXTILE FABRIC AND SEDIMENTS TO BE DISPOSED BY THE CONTRACTOR OFF OF THE PROJECT SITE.
4. TEMPORARY SETTLING BASIN IS PAID FOR AS EROSION BALES AND GEOTEXTILE FABRIC TYPE HR. THE SEDIMENT BAGS ARE INCIDENTAL.
5. SEDIMENT BAG TO BE REPLACED AS NECESSARY AND IS INCIDENTAL TO CONTRACT.
6. SIZE TO BE DETERMINED BY THE CONTRACTOR AS PART OF THE ECIP SUBMITTAL.

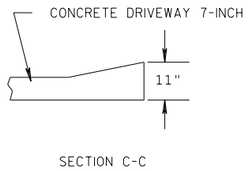
2



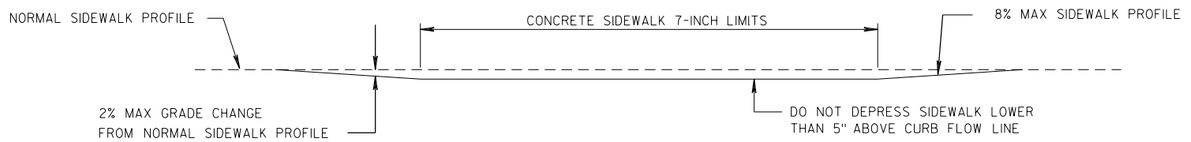
PLAN VIEW



TYPICAL SIDEWALK SECTION



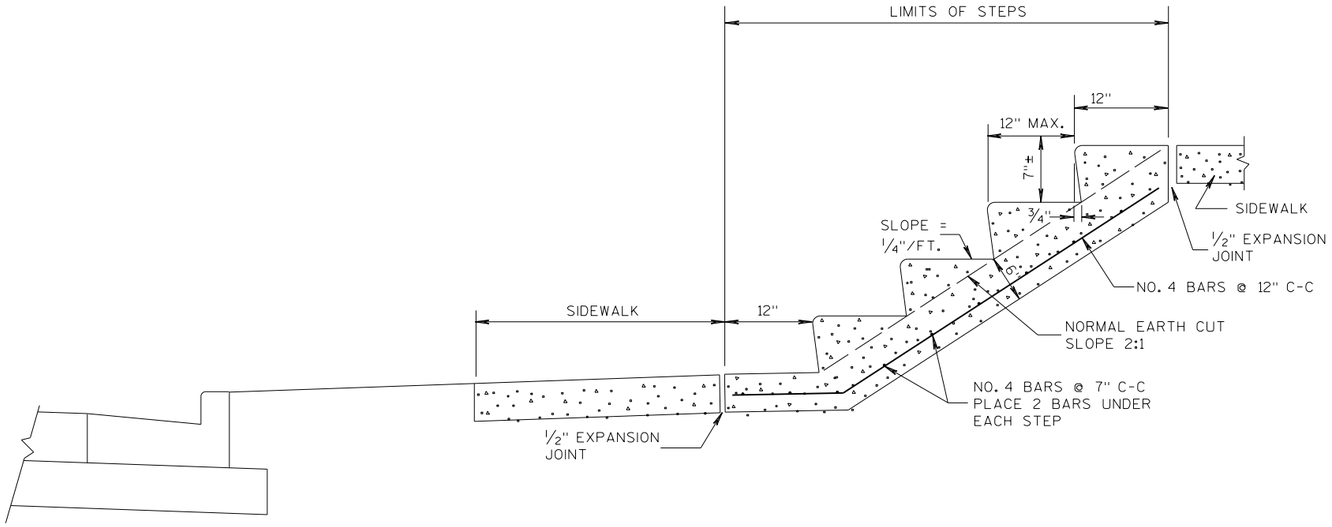
SECTION C-C



DEPRESSED SIDEWALK PROFILE DETAIL

DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER

2

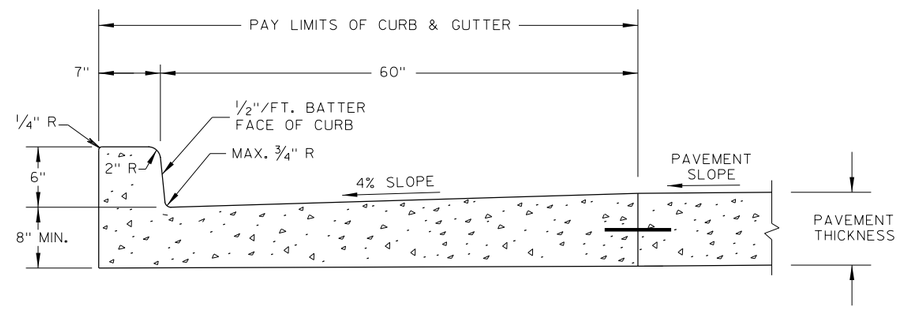


NOTE:

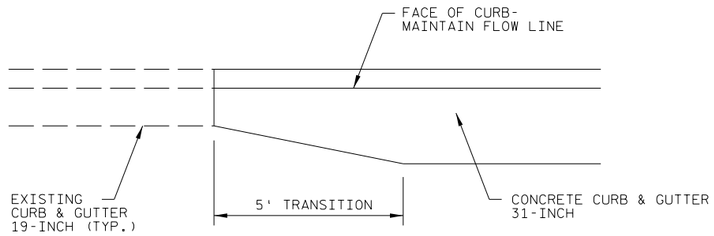
THE EXACT LOCATION, WIDTHS, & NUMBER OF STEPS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

WIDTH OF STEPS TO MATCH EXISTING WALK

CONCRETE STEPS DETAIL

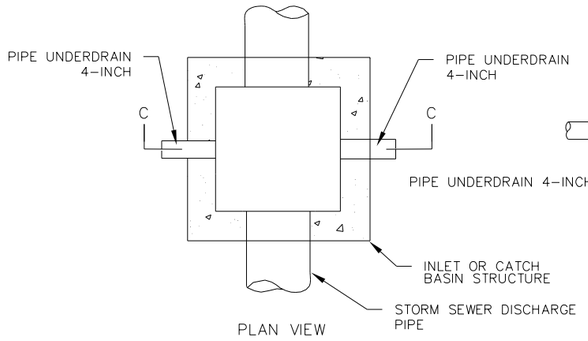


67" CONCRETE CURB AND GUTTER

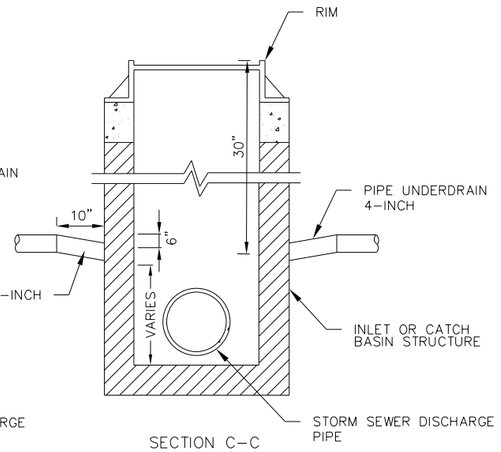


CONCRETE CURB AND GUTTER TRANSITION

(PAYMENT INCIDENTAL TO CURB AND GUTTER)



PLAN VIEW



SECTION C–C

UNDERDRAIN OUTFALL AT INLET

NOTES:

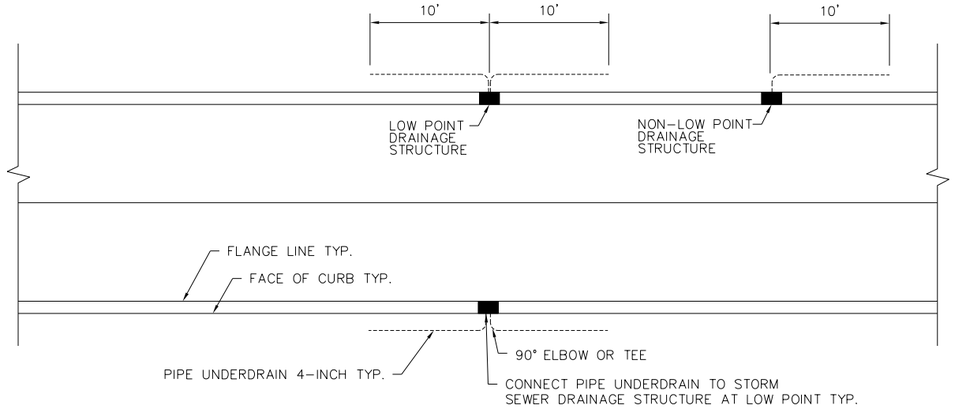
1. CONNECTIONS TO INLETS & CATCH BASINS SHALL USE PIPE UNDERDRAIN, 4–INCH

2. PROVIDE 4" DIA. OPENINGS FOR UNDERDRAIN PIPE A MINIMUM OF 30" BELOW THE RIM ELEVATION. CORE INTO EXISTING STRUCTURES TO REMAIN.

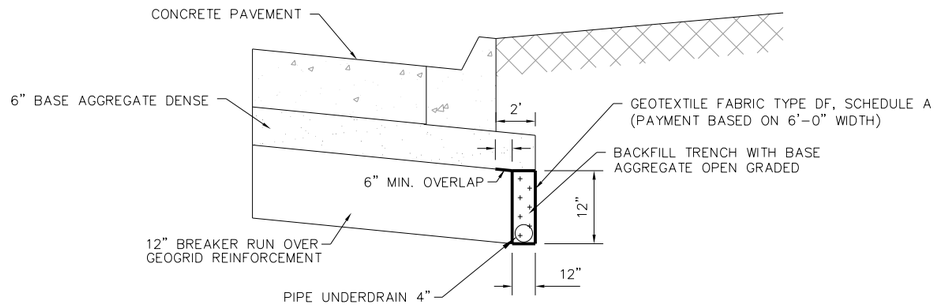
3. SEE MISCELLANEOUS QUANTITIES AND STORM SEWER PLANS FOR PIPE UNDERDRAIN LOCATIONS.

4. PIPE UNDERDRAIN ONLY REQUIRED ON HIGH SIDE OF INLET IN SLOPED CONDITION.

5. PIPE UNDERDRAIN REQUIRED ON BOTH SIDES OF INLET IN SAG CONDITION.

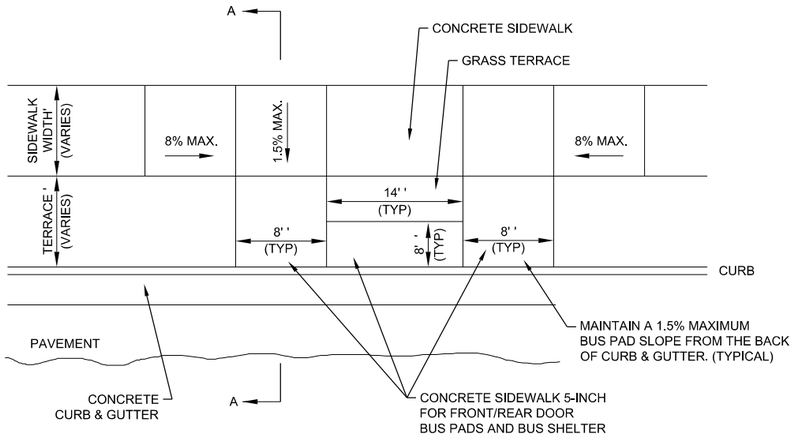


PLAN



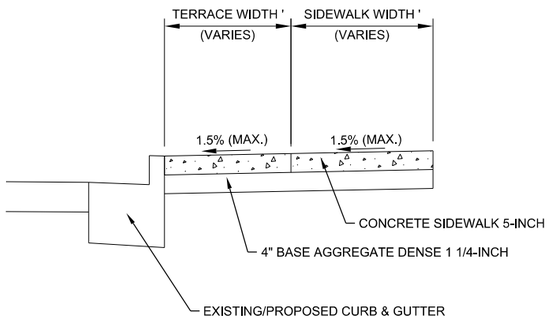
UNDERDRAIN TRENCH DETAIL

10' EACH SIDE OF INLET AT LOW POINTS.
10' ON HIGH SIDE OF INLET AT ALL OTHER INLETS
CONNECT PIPE UNDERDRAIN TO INLETS



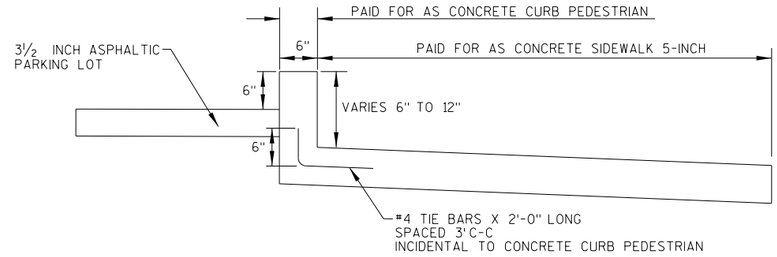
PLAN VIEW - SIDEWALK WITH TERRACE

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



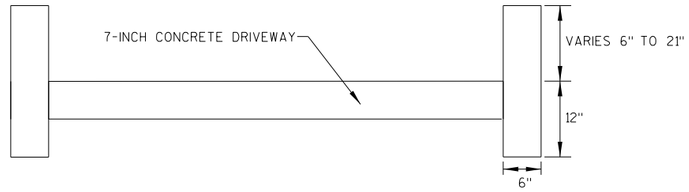
SECTION A-A

CONCRETE BUS PAD DETAIL



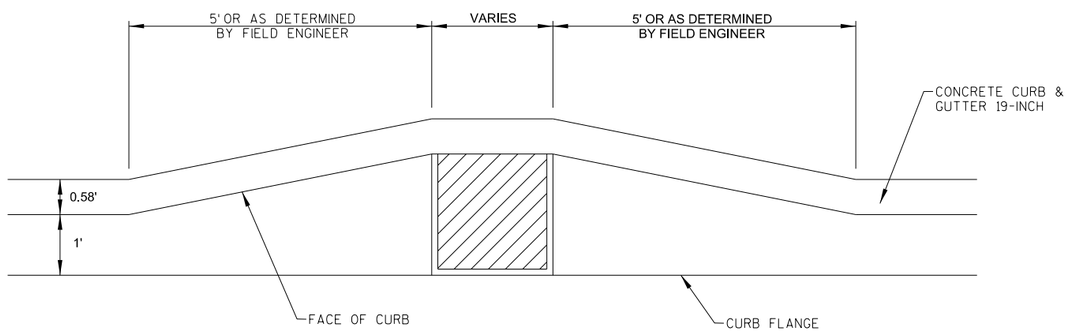
CONCRETE CURB DETAIL

STA. 103+15 - 103+65 LT
(PAID FOR AS CONCRETE CURB PEDESTRIAN)



CONCRETE CURB SPECIAL DETAIL

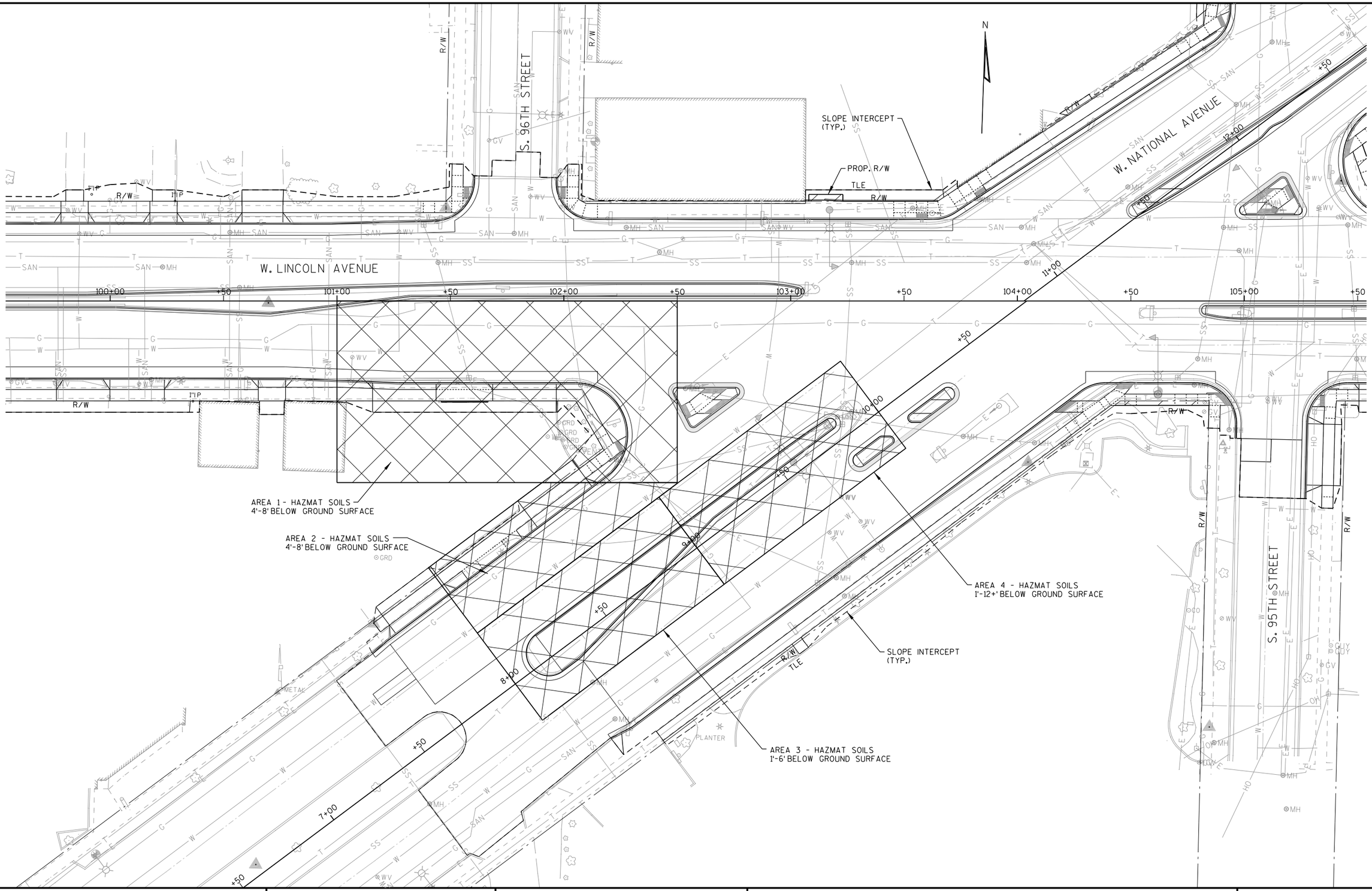
STA. 109+65 LT



CURB TRANSITION AT INLETS WITH CURB & GUTTER 19-INCH

CURB TRANSITION PAID FOR AS CONCRETE CURB & GUTTER 19-INCH

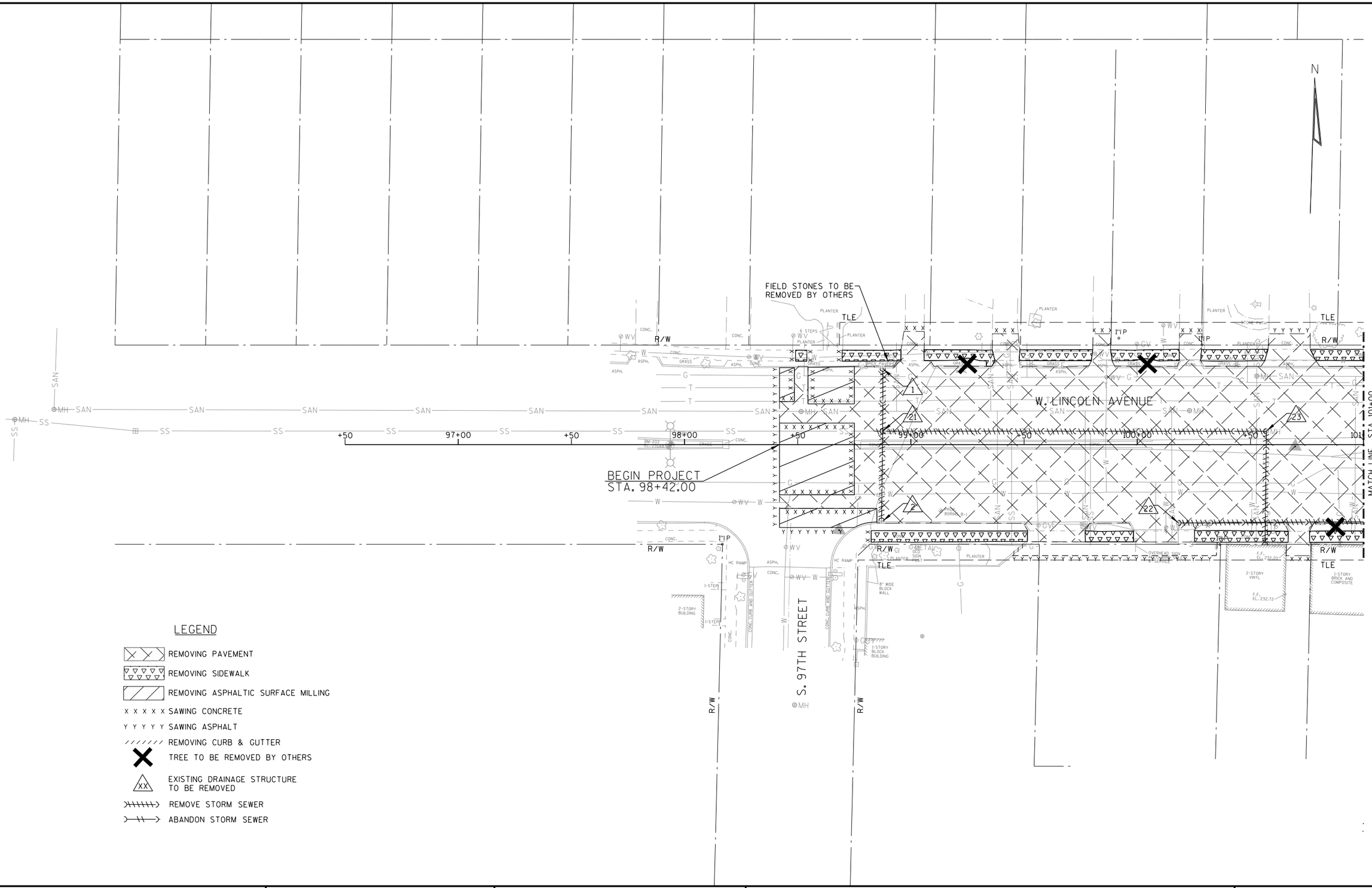
2



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CONSTRUCTON DETAIL - HAZARDDOUS MATERIAL LOCATIONS	SHEET 14	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\021002_cd.dgn PLOT DATE : 10/30/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 40.0000 sf / in.

2



LEGEND

- REMOVING PAVEMENT
- REMOVING SIDEWALK
- REMOVING ASPHALTIC SURFACE MILLING
- X X X X SAWING CONCRETE
- Y Y Y Y SAWING ASPHALT
- REMOVING CURB & GUTTER
- TREE TO BE REMOVED BY OTHERS
- XX EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- REMOVE STORM SEWER
- ABANDON STORM SEWER

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	REMOVAL PLAN	SHEET 15	E

2

S. 96TH STREET

S. 95TH STREET

W. NATIONAL AVENUE

W. LINCOLN AVENUE

SALVAGE WHEEL STOPS.

WHEEL STOPS PARALLEL TO SIDEWALK TO BE REMOVED BY OTHERS.

REMOVE RETAINING WALL BLOCK. INCIDENTAL TO EXCAVATION COMMON.

MATCH LINE STA. 101+00

MATCH LINE STA. 107+00

MATCH LINE STA. 8+90

R/W

TLE

N

LEGEND

- REMOVING PAVEMENT
- REMOVING SIDEWALK
- REMOVING ASPHALTIC SURFACE MILLING
- X X X X X SAWING CONCRETE
- Y Y Y Y Y SAWING ASPHALT
- REMOVING CURB & GUTTER
- TREE TO BE REMOVED BY OTHERS
- XX EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- REMOVE STORM SEWER
- ABANDON STORM SEWER

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	REMOVAL PLAN	SHEET 16	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\021012_rm.dgn PLOT DATE : 10/31/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 40.0000 sf / in.

2

S. 94TH STREET

S. 93RD STREET

W. LINCOLN AVENUE

REMOVING MASONRY

TLE

R/W

MATCH LINE STA. 107+00

108+00 109+00 110+00 111+00 112+00 113+

+50

END PROJECT
STA. 111+81.57

12

33

11

REMOVE BLOCK RETAINING WALL.
INCIDENTAL TO EXCAVATION
COMMON.

N

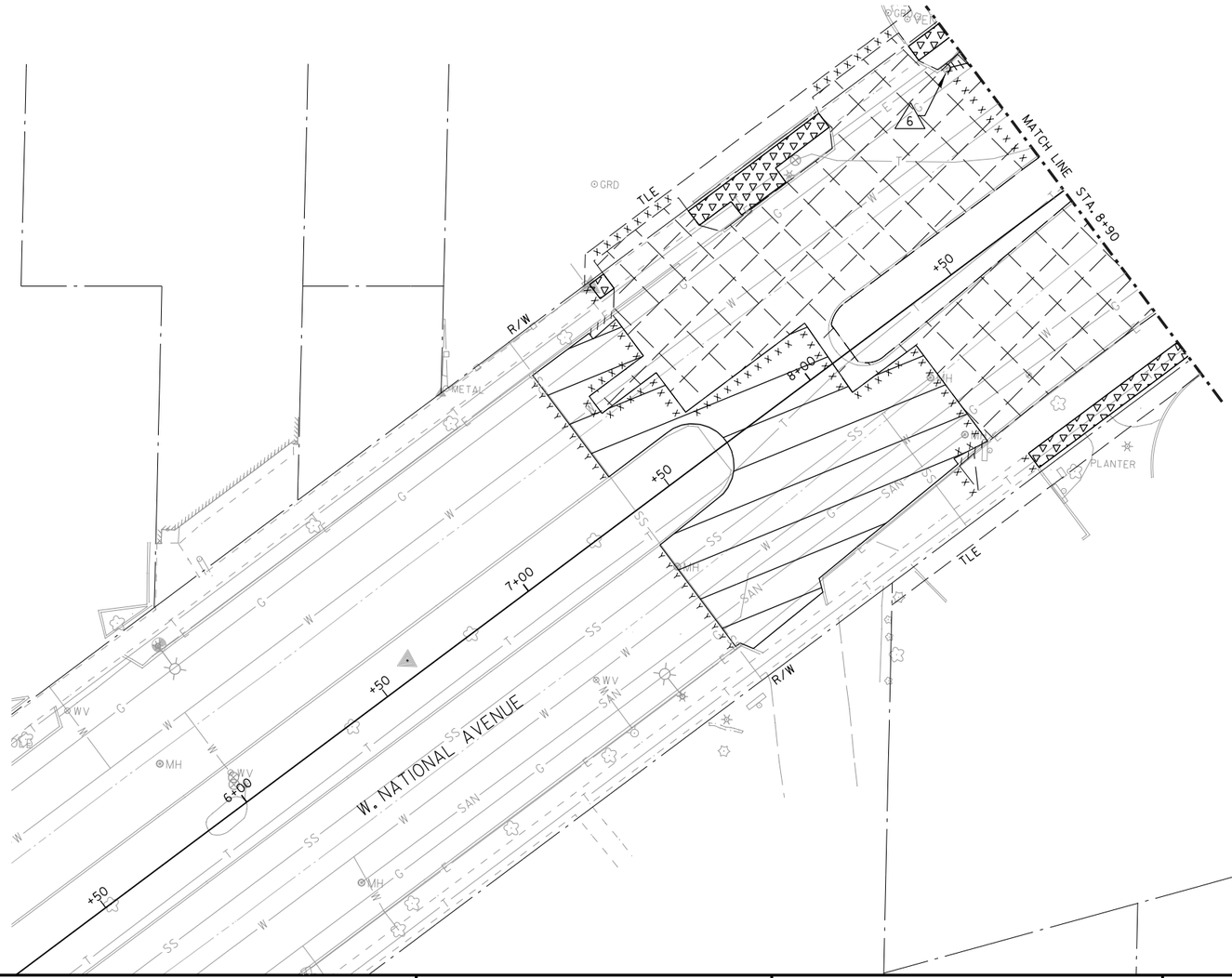
LEGEND

- REMOVING PAVEMENT
- REMOVING SIDEWALK
- REMOVING ASPHALTIC SURFACE MILLING
- X X X X X SAWING CONCRETE
- Y Y Y Y Y SAWING ASPHALT
- REMOVING CURB & GUTTER
- TREE TO BE REMOVED BY OTHERS
- XX EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- REMOVE STORM SEWER
- ABANDON STORM SEWER

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	REMOVAL PLAN	SHEET 17	E

2

N



LEGEND

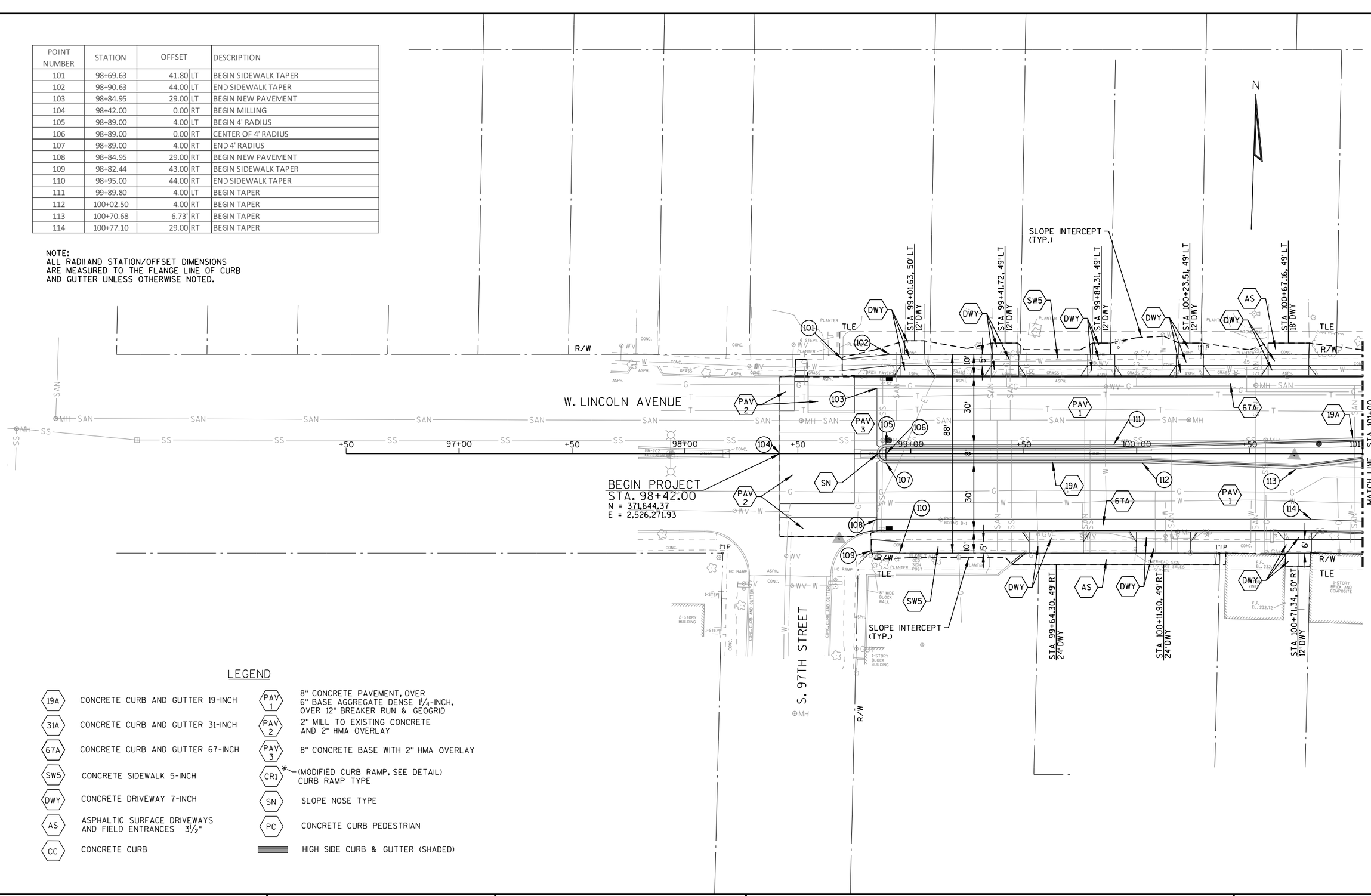
- REMOVING PAVEMENT
- REMOVING SIDEWALK
- REMOVING ASPHALTIC SURFACE MILLING
- X X X X X SAWING CONCRETE
- Y Y Y Y Y SAWING ASPHALT
- REMOVING CURB & GUTTER
- TREE TO BE REMOVED BY OTHERS
- XX EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- REMOVE STORM SEWER
- ABANDON STORM SEWER

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	REMOVAL PLAN	SHEET 18	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\021014_rm.dgn PLOT DATE : 10/30/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 40.0000 sf / in.

POINT NUMBER	STATION	OFFSET		DESCRIPTION
101	98+69.63	41.80	LT	BEGIN SIDEWALK TAPER
102	98+90.63	44.00	LT	END SIDEWALK TAPER
103	98+84.95	29.00	LT	BEGIN NEW PAVEMENT
104	98+42.00	0.00	RT	BEGIN MILLING
105	98+89.00	4.00	LT	BEGIN 4' RADIUS
106	98+89.00	0.00	RT	CENTER OF 4' RADIUS
107	98+89.00	4.00	RT	END 4' RADIUS
108	98+84.95	29.00	RT	BEGIN NEW PAVEMENT
109	98+82.44	43.00	RT	BEGIN SIDEWALK TAPER
110	98+95.00	44.00	RT	END SIDEWALK TAPER
111	99+89.80	4.00	LT	BEGIN TAPER
112	100+02.50	4.00	RT	BEGIN TAPER
113	100+70.68	6.73'	RT	BEGIN TAPER
114	100+77.10	29.00	RT	BEGIN TAPER

NOTE:
ALL RADII AND STATION/OFFSET DIMENSIONS ARE MEASURED TO THE FLANGE LINE OF CURB AND GUTTER UNLESS OTHERWISE NOTED.



LEGEND

19A	CONCRETE CURB AND GUTTER 19-INCH	PAV 1	8" CONCRETE PAVEMENT, OVER 6" BASE AGGREGATE DENSE 1¼-INCH, OVER 12" BREAKER RUN & GEOGRID
31A	CONCRETE CURB AND GUTTER 31-INCH	PAV 2	2" MILL TO EXISTING CONCRETE AND 2" HMA OVERLAY
67A	CONCRETE CURB AND GUTTER 67-INCH	PAV 3	8" CONCRETE BASE WITH 2" HMA OVERLAY
SW5	CONCRETE SIDEWALK 5-INCH	CR1 *	(MODIFIED CURB RAMP, SEE DETAIL) CURB RAMP TYPE
DWY	CONCRETE DRIVEWAY 7-INCH	SN	SLOPE NOSE TYPE
AS	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES 3½"	PC	CONCRETE CURB PEDESTRIAN
CC	CONCRETE CURB		HIGH SIDE CURB & GUTTER (SHADED)

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PLAN DETAIL	SHEET 19	E

2

LEGEND

19A	CONCRETE CURB AND GUTTER 19-INCH	PAV 1	8" CONCRETE PAVEMENT, OVER 6" BASE AGGREGATE DENSE 1¼-INCH, OVER 12" BREAKER RUN & GEOGRID
31A	CONCRETE CURB AND GUTTER 31-INCH	PAV 2	2" MILL TO EXISTING CONCRETE AND 2" HMA OVERLAY
67A	CONCRETE CURB AND GUTTER 67-INCH	PAV 3	8" CONCRETE BASE WITH 2" HMA OVERLAY
SW5	CONCRETE SIDEWALK 5-INCH	CR1*	(MODIFIED CURB RAMP, SEE DETAIL) CURB RAMP TYPE
DWY	CONCRETE DRIVEWAY 7-INCH	SN	SLOPE NOSE TYPE
AS	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES 3½"	PC	CONCRETE CURB PEDESTRIAN
CC	CONCRETE CURB		HIGH SIDE CURB & GUTTER (SHADED)

S. 96TH STREET

S. 95TH STREET

W. NATIONAL AVENUE

W. LINCOLN AVENUE

N

SLOPE INTERCEPT (TYP.)

PROP. R/W

TLE

R/W

MATCH LINE STA. 101+00

MATCH LINE STA. 8+90

MATCH LINE STA. 107+00

STA 12+32.36, 74.03' LT
28' DWY

STA 101+29.68, 49' RT
28' DWY

STA 101+82.68, 49' RT
28' DWY

STA 105+42.64, 67.93' RT
27' DWY

STA 106+64.48, 56' RT
12' DWY

BIKE CUT THROUGH AREA PAID FOR AS CONCRETE SIDEWALK

SLOPE INTERCEPT (TYP.)

CONCRETE STAIRS

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PLAN DETAIL	SHEET 20	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\021202_pd.dgn
PLOT DATE : 11/1/2024
PLOT BY : GRAEF
PLOT NAME :
PLOT SCALE : 40.0000 sf / in.
WISDOT/CADDS SHEET 42

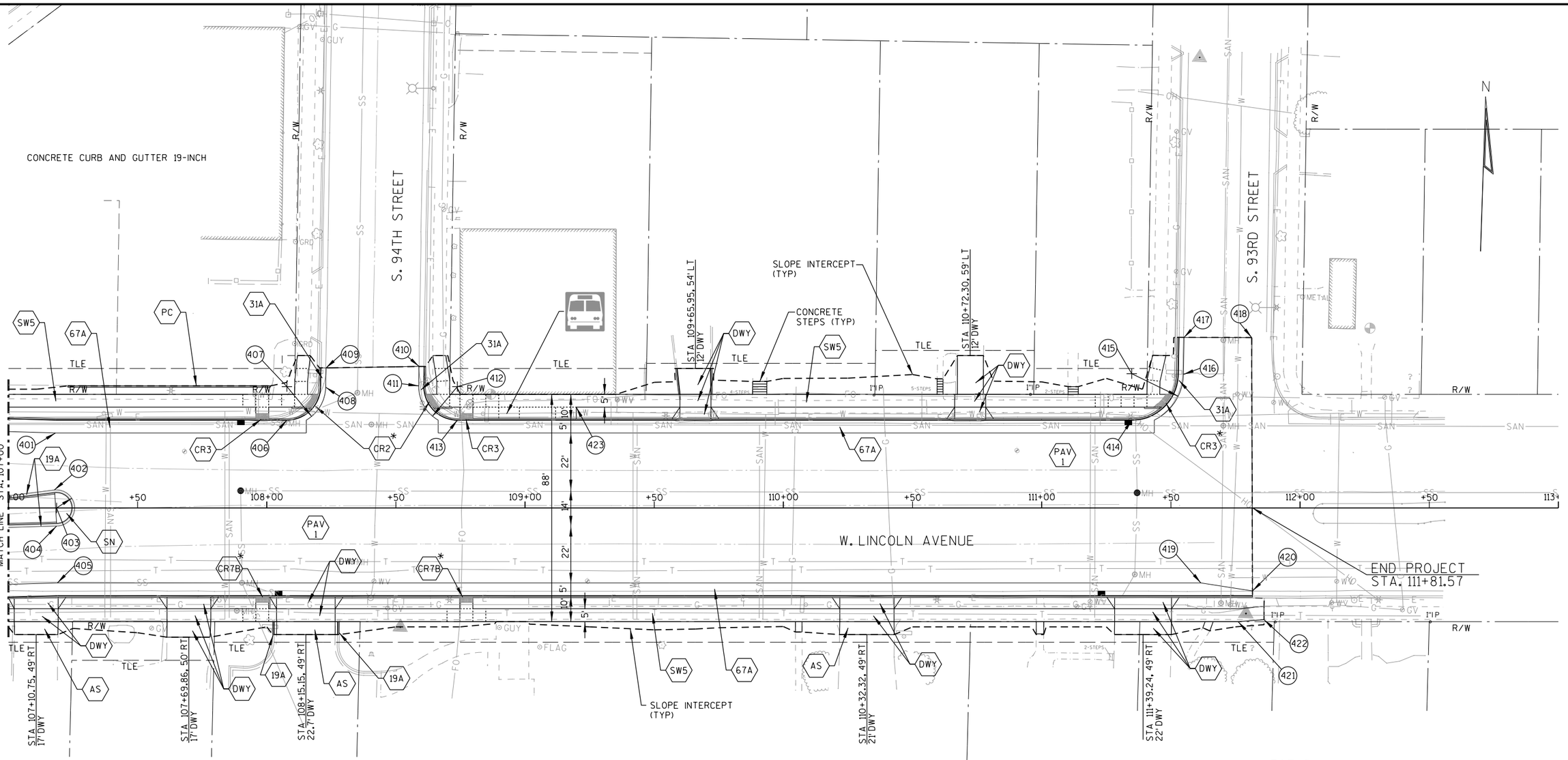
POINT NUMBER	STATION	OFFSET		DESCRIPTION
201	101+27.10	31.00	RT	END TAPER
202	101+32.48	1.00	LT	END TAPER
203	101+69.76	9.00	LT	END TAPER
204	101+43.14	35.27	LT	END TAPER/BEGIN 18' RADIUS (FACE OF CURB)
205	101+42.64	53.26	LT	CENTER OF 20' RADIUS
206	101+62.63	52.98	LT	END 20' RADIUS
207	101+62.67	55.25	LT	END NEW PAVEMENT
208	101+94.66	54.43	LT	END NEW PAVEMENT
209	101+94.63	52.26	LT	BEGIN 18' RADIUS
210	102+12.63	52.00	LT	CENTER OF 18' RADIUS
211	102+12.63	36.00	LT	END 16' RADIUS (FACE OF CURB)
212	102+05.14	36.00	RT	BEGIN 23' RADIUS (FACE OF CURB)
213	102+05.14	59.00	RT	CENTER OF 25' RADIUS
214	102+05.31	44.00	RT	SIDEWALK ANGLE POINT
215	102+50.15	36.00	RT	BEGIN 4' RADIUS
216	102+50.15	40.00	RT	CENTER OF 4' RADIUS
217	102+46.57	41.80	RT	END 4' RADIUS
218	102+53.54	55.62	RT	BEGIN 4' RADIUS
219	102+57.11	53.82	RT	CENTER OF 4' RADIUS
220	102+59.51	57.02	RT	END 4' RADIUS
221	102+77.97	43.20	RT	BEGIN 4' RADIUS
222	102+75.58	40.00	RT	CENTER OF 4' RADIUS
223	102+75.58	36.00	RT	END 4' RADIUS
224	102+67.53	97.24	RT	END TAPER
225	102+94.15	64.82	RT	BEGIN 320' RADIUS
226	104+85.91	321.00	RT	CENTER OF 320' RADIUS
227	103+15.13	50.38	RT	END 320' RADIUS/BEGIN 4.5' RADIUS
228	103+17.54	54.18	RT	CENTER OF 4.5' RADIUS
229	103+20.23	57.79	RT	END 4.5' RADIUS
230	103+27.48	66.10	RT	BEGIN 5' RADIUS
231	103+30.48	70.10	RT	CENTER OF 5' RADIUS
232	103+33.48	74.10	RT	END 5' RADIUS
233	103+44.84	63.10	RT	BEGIN 2' RADIUS (FACE OF CURB)
234	103+43.64	61.50	RT	CENTER OF 2' RADIUS (FACE OF CURB)
235	103+43.64	59.50	RT	END 2' RADIUS (FACE OF CURB
236	103+40.30	59.50	RT	BEGIN 2' RADIUS (FACE OF CURB)
237	103+40.30	61.50	RT	CENTER OF 2' RADIUS (FACE OF CURB)
238	103+39.10	59.90	RT	END 2' RADIUS (FACE OF CURB
239	103+52.46	49.90	RT	BEGIN 2' RADIUS (FACE OF CURB)
240	103+53.66	51.50	RT	CENTER OF 2' RADIUS (FACE OF CURB)
241	103+53.66	53.50	RT	END 2' RADIUS (FACE OF CURB
242	103+57.00	53.50	RT	BEGIN 2' RADIUS (FACE OF CURB)
243	103+57.00	51.50	RT	CENTER OF 2' RADIUS (FACE OF CURB)
244	103+58.20	53.10	RT	END 2' RADIUS (FACE OF CURB
245	103+72.35	45.00	RT	BEGIN 5' RADIUS
246	103+69.36	41.00	RT	CENTER OF 5' RADIUS
247	103+66.36	37.00	RT	END 5' RADIUS
248	102+86.00	9.00	LT	BEGIN 75' RADIUS
249	102+86.08	66.00	RT	CENTER OF 75' RADIUS
250	103+03.61	6.92	LT	END 75' RADIUS/BEGIN 3' RADIUS
251	103+02.91	4.00	LT	CENTER OF 3' RADIUS
252	103+02.91	1.00	LT	END 3' RADIUS
253	103+62.74	36.00	LT	BEGIN 18' RADIUS (FACE OF CURB)
254	103+62.74	54.00	LT	CENTER OF 20' RADIUS
255	103+73.77	37.31	LT	END 20' RADIUS
256	12+16.16	39.48	LT	BEGIN 20' RADIUS
257	12+17.31	59.45	LT	CENTER OF 20' RADIUS
258	12+33.14	47.22	LT	END 20' RADIUS
259	12+17.71	49.91	LT	SIDEWALK ANGLE POINT
260	12+27.85	60.00	LT	SIDEWALK ANGLE POINT
261	12+47.93	86.00	LT	END SIDEWALK
262	12+58.67	80.29	LT	END CURB AND GUTTER
263	12+49.06	67.84	LT	END NEW PAVEMENT
264	12+73.84	47.77	LT	END NEW PAVEMENT
265	12+71.85	45.20	LT	BEGIN 15' RADIUS

NOTE:
ALL RADII AND STATION/OFFSET DIMENSIONS
ARE MEASURED TO THE FLANGE LINE OF CURB
AND GUTTER UNLESS OTHERWISE NOTED.

POINT NUMBER	STATION	OFFSET		DESCRIPTION
266	12+83.70	36.00	LT	CENTER OF 15' RADIUS
267	12+84.07	21.00	LT	END 15' RADIUS
268	12+89.93	21.15	LT	END NEW PAVEMENT
269				NOT USED
270				NOT USED
271				NOT USED
272				NOT USED
273	12+92.08	22.00	RT	END NEW PAVEMENT
274	12+85.00	6.00	RT	BEGIN 3' RADIUS
275	12+85.00	3.00	RT	CENTER OF 3' RADIUS
276	12+85.00	0.00	RT	END 3' RADIUS
277	12+58.07	0.00	RT	ANGLE POINT
278	11+44.99	6.53	LT	BEGIN 3.7' RADIUS
279	11+44.78	2.83	LT	CENTER OF 3.7' RADIUS
280	11+44.19	0.82	RT	END 3.7' RADIUS/BEGIN 314' RADIUS
281	11+93.98	309.21	LT	CENTER OF 314' RADIUS
282	11+75.89	4.27	RT	END 314' RADIUS
283	12+05.83	6.00	RT	ANGLE POINT
284	105+52.74	84.44	LT	BEGIN 28' RADIUS
285	105+69.49	62.00	LT	CENTER OF 28' RADIUS
286	105+69.49	36.00	LT	END 28' RADIUS (FACE OF CURB)
287	105+75.07	39.00	LT	BEGIN 25' RADIUS OF SIDEWALK
288	105+75.07	64.00	LT	CENTER OF 25' RADIUS
289	105+51.53	55.59	LT	END 25' RADIUS OF SIDEWALK
290	105+20.62	54.60	LT	BEGIN 4' RADIUS
291	105+17.05	52.80	LT	CENTER OF 4' RADIUS
292	105+14.66	56.00	LT	END 4' RADIUS
293	104+97.51	43.21	LT	BEGIN 4' RADIUS
294	104+99.90	40.00	LT	CENTER OF 4' RADIUS
295	104+99.90	36.00	LT	END 4' RADIUS
296	105+23.50	36.00	LT	BEGIN 4' RADIUS
297	105+23.50	40.00	LT	CENTER OF 4' RADIUS
298	105+27.07	41.80	LT	END 4' RADIUS
299	104+83.15	1.00	RT	BEGIN 3' RADIUS
300	104+83.15	4.00	RT	CENTER OF 3' RADIUS
301	104+82.45	6.92	RT	END 3' RADIUS/BEGIN 75' RADIUS
302	105+00.00	66.00	LT	CENTER OF 75' RADIUS
303	105+00.00	9.00	RT	END 75' RADIUS
304	106+54.20	31.00	LT	BEGIN TAPER
305	106+54.20	1.00	RT	BEGIN TAPER
306	106+54.63	9.00	RT	BEGIN TAPER
307	106+54.98	31.00	RT	BEGIN TAPER
308	104+26.78	38.00	RT	BEGIN 20' RADIUS
309	104+38.76	54.00	RT	CENTER OF 20' RADIUS
310	104+38.76	36.00	RT	END 18' RADIUS (FACE OF CURB)
311	104+78.56	36.00	RT	BEGIN 18' RADIUS (FACE OF CURB)
312	104+78.56	54.00	RT	CENTER OF 20' RADIUS
313	104+98.56	54.49	RT	END 20' RADIUS
314	104+98.41	60.57	RT	END NEW PAVEMENT
315	104+97.81	86.34	RT	BEGIN MILLING
316				NOT USED
317	105+24.77	87.00	RT	BEGIN CURB AND GUTTER
318	105+39.07	91.35	RT	BEGIN SIDEWALK
319	105+25.40	61.24	RT	END NEW PAVEMENT
320	105+25.59	53.51	RT	BEGIN 20' RADIUS
321	105+45.58	54.00	RT	CENTER OF 20' RADIUS
322	105+45.58	36.00	RT	END 18' RADIUS (FACE OF CURB)
323	103+06.60	43.00	LT	SIDEWALK ANGLE POINT
324	103+06.60	44.50	LT	SIDEWALK ANGLE POINT
325	103+15.00	44.50	LT	SIDEWALK ANGLE POINT
326	103+23.00	44.00	LT	SIDEWALK ANGLE POINT

2

2



POINT NUMBER	STATION	OFFSET		DESCRIPTION
401	107+18.20	29.00	LT	END TAPER
402	107+17.76	6.95	LT	END TAPER/BEGIN 7' RADIUS
403	107+18.63	0.00	RT	CENTER OF 7' RADIUS
404	107+18.63	7.00	RT	END TAPER/END 7' RADIUS
405	107+18.98	29.00	RT	END TAPER
406	108+07.80	34.00	LT	BEGIN 13' RADIUS (FACE OF CURB)
407	108+07.80	47.00	LT	CENTER OF 15' RADIUS
408	108+22.80	46.75	LT	END 15' RADIUS
409	108+22.92	54.22	LT	END NEW PAVEMENT
410	108+58.94	54.80	LT	END NEW PAVEMENT
411	108+58.81	47.25	LT	BEGIN 15' RADIUS
412	108+73.81	47.00	LT	CENTER OF 15' RADIUS
413	108+73.81	34.00	LT	END 13' RADIUS (FACE OF CURB)
414	111+34.83	34.00	LT	BEGIN 18' RADIUS

POINT NUMBER	STATION	OFFSET		DESCRIPTION
415	111+34.83	52.00	LT	CENTER OF 20' RADIUS
416	111+54.83	51.68	LT	END 20' RADIUS
417	111+55.05	66.00	LT	END NEW PAVEMENT
418	111+81.26	66.00	LT	END NEW PAVEMENT
419	111+61.60	29.00	RT	BEGIN FLANGE TAPER
420	111+81.61	32.15	RT	END FLANGE TAPER/END NEW PAVEMENT
421	111+76.06	44.00	RT	BEGIN SIDEWALK TAPER
422	111+86.06	43.25	RT	END SIDEWALK TAPER
423	109+19.80	39.00	LT	END BUS PAD

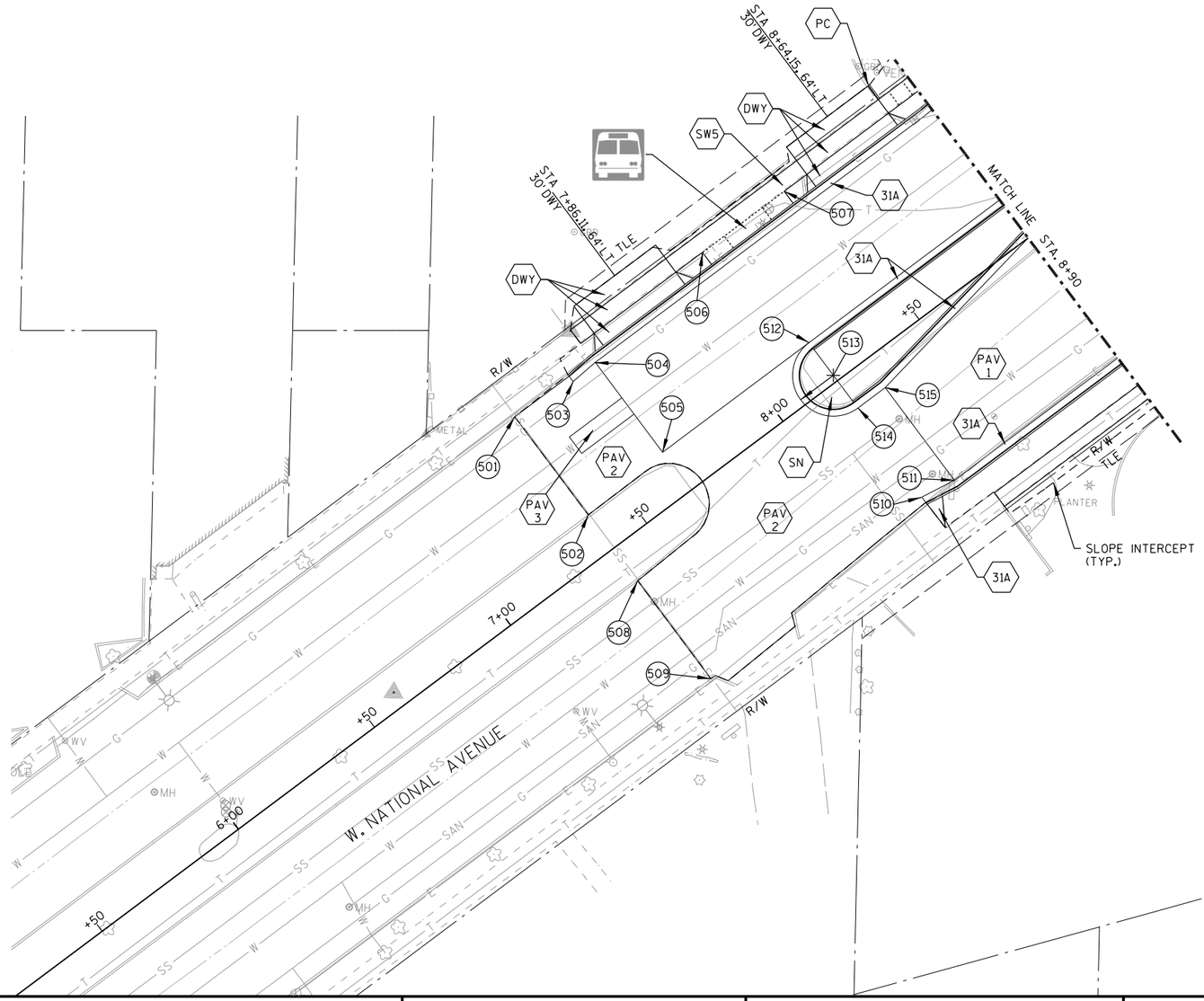
NOTE:
ALL RADII AND STATION/OFFSET DIMENSIONS ARE MEASURED TO THE FLANGE LINE OF CURB AND GUTTER UNLESS OTHERWISE NOTED.

LEGEND

19A	CONCRETE CURB AND GUTTER 19-INCH	PAV 1	8" CONCRETE PAVEMENT, OVER 6" BASE AGGREGATE DENSE 1¼-INCH, OVER 12" BREAKER RUN & GEOGRID
31A	CONCRETE CURB AND GUTTER 31-INCH	PAV 2	2" MILL TO EXISTING CONCRETE AND 2" HMA OVERLAY
67A	CONCRETE CURB AND GUTTER 67-INCH	PAV 3	8" CONCRETE BASE WITH 2" HMA OVERLAY
SW5	CONCRETE SIDEWALK 5-INCH	CR1*	(MODIFIED CURB RAMP, SEE DETAIL) CURB RAMP TYPE
DWY	CONCRETE DRIVEWAY 7-INCH	SN	SLOPE NOSE TYPE
AS	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES 3½"	PC	CONCRETE CURB PEDESTRIAN
CC	CONCRETE CURB		HIGH SIDE CURB & GUTTER (SHADED)

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PLAN DETAIL	SHEET 22	E

2



POINT NUMBER	STATION	OFFSET		DESCRIPTION
501	7+37.72	48.39	LT	BEGIN MILLING
502	7+37.72	12.36	LT	BEGIN MILLING
503	7+57.66	46.35	LT	BEGIN CURB AND GUTTER/TAPER
504	7+66.11	47.00	LT	END TAPER
505	7+66.26	14.00	LT	BEGIN NEW PAVEMENT
506	8+11.00	54.00	LT	BEGIN BUS PAD
507	8+41.00	54.00	LT	END BUS PAD
508	7+37.72	11.85	RT	BEGIN MILLING
509	7+37.72	47.81	RT	BEGIN MILLING
510	8+19.36	42.25	RT	BEGIN CURB AND GUTTER
511	8+30.00	44.00	RT	BEGIN NEW PAVEMENT
512	8+20.00	14.00	LT	BEGIN 12' RADIUS
513	8+20.00	2.00	LT	CENTER OF 12' RADIUS
514	8+20.00	10.00	RT	END 12' RADIUS
515	8+30.00	10.00	RT	BEGIN NEW PAVEMENT/TAPER

NOTE:
ALL RADII AND STATION/OFFSET DIMENSIONS
ARE MEASURED TO THE FLANGE LINE OF CURB
AND GUTTER UNLESS OTHERWISE NOTED.

N

LEGEND

19A	CONCRETE CURB AND GUTTER 19-INCH	PAV 1	8" CONCRETE PAVEMENT, OVER 6" BASE AGGREGATE DENSE 1¼-INCH, OVER 12" BREAKER RUN & GEOGRID
31A	CONCRETE CURB AND GUTTER 31-INCH	PAV 2	2" MILL TO EXISTING CONCRETE AND 2" HMA OVERLAY
67A	CONCRETE CURB AND GUTTER 67-INCH	PAV 3	8" CONCRETE BASE WITH 2" HMA OVERLAY
SW5	CONCRETE SIDEWALK 5-INCH	CR1	(MODIFIED CURB RAMP, SEE DETAIL) CURB RAMP TYPE
DWY	CONCRETE DRIVEWAY 7-INCH	SN	SLOPE NOSE TYPE
AS	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES 3½"	PC	CONCRETE CURB PEDESTRIAN
CC	CONCRETE CURB		HIGH SIDE CURB & GUTTER (SHADED)

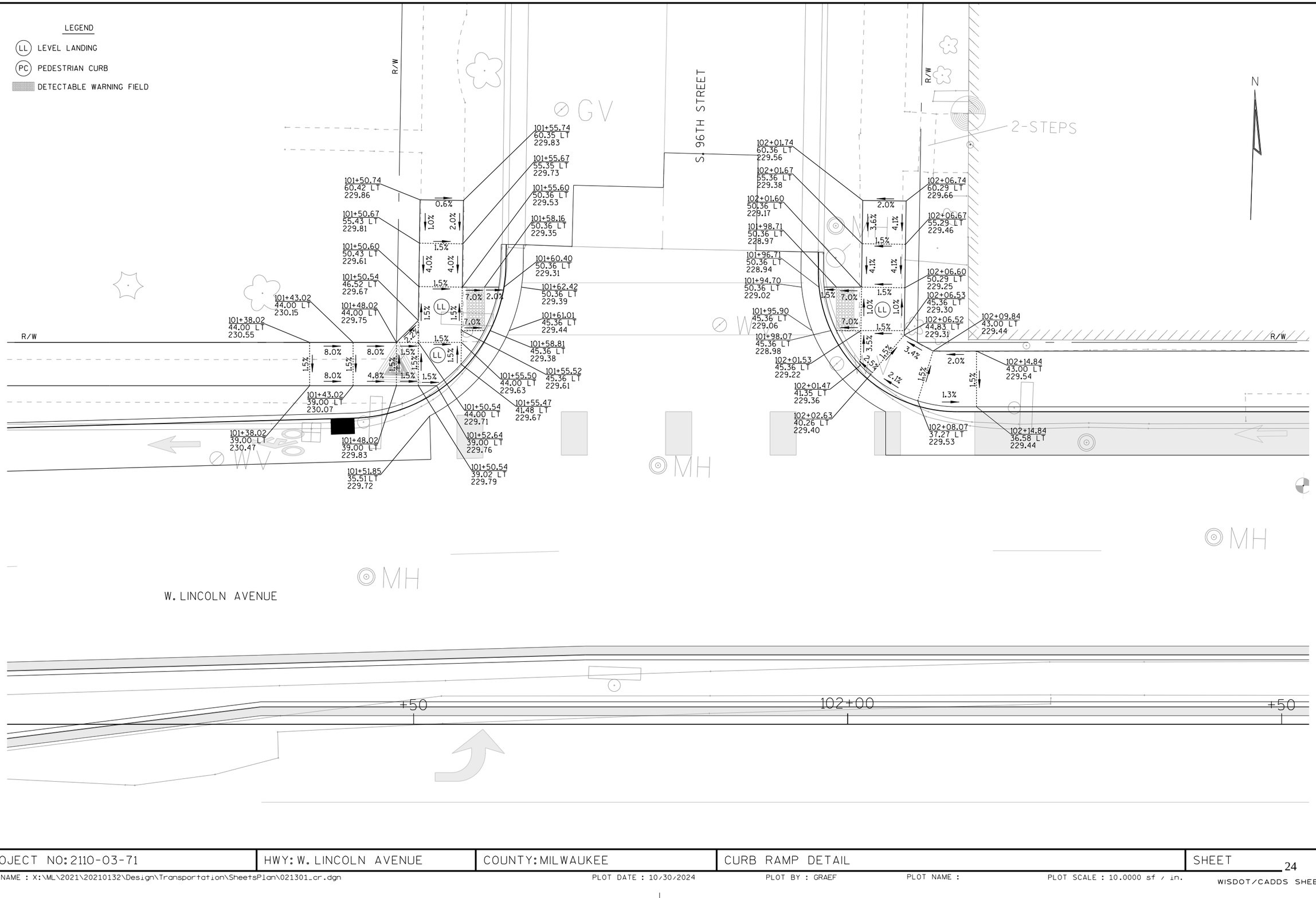
2

LEGEND

(LL) LEVEL LANDING

(PC) PEDESTRIAN CURB

DETECTABLE WARNING FIELD



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CURB RAMP DETAIL	SHEET 24	E

LEGEND

(LL) LEVEL LANDING

(PC) PEDESTRIAN CURB

DETECTABLE WARNING FIELD

R/W

W. NATIONAL AVENUE

W. LINCOLN AVENUE

N

103+45.43
44.00 LT
228.00

103+50.43
44.00 LT
227.74

103+55.43
44.00 LT
227.46

103+60.43
44.00 LT
227.38

103+64.84
44.00 LT
227.55

103+69.42
47.03 LT
227.31

103+45.43
39.00 LT
227.92

103+45.43
36.58 LT
227.88

103+50.43
39.00 LT
227.66

103+55.43
39.00 LT
227.40

103+55.43
36.00 LT
227.19

103+55.43
31.00 LT
227.40

103+60.43
39.00 LT
227.31

103+60.43
36.00 LT
227.10

103+60.43
31.00 LT
227.30

103+65.89
39.00 LT
227.47

103+66.32
36.95 LT
227.44

103+71.46
36.00 LT
226.89

103+71.46
31.00 LT
227.05

103+72.18
42.85 LT
227.23

103+73.60
49.78 LT
227.04

103+73.79
40.42 LT
227.19

103+77.77
52.54 LT
226.76

103+77.96
43.17 LT
226.96

103+80.52
48.36 LT
226.68

103+81.94
55.24 LT
226.68

103+83.56
43.78 LT
226.51

103+84.70
51.12 LT
226.60

103+86.11
58.05 LT
226.93

103+86.63
48.20 LT
226.35

103+87.74
46.54 LT
226.43

103+88.87
53.88 LT
226.85

103+82.45
45.44 LT
226.43

11+47.15
6.40 LT
225.55

11+47.09
5.40 LT
225.57

11+57.96
4.78 LT
225.35

11+58.02
5.77 LT
225.33

11+56.25
2.52 RT
225.36

11+56.37
1.53 RT
225.32

11+67.91
3.71 RT
225.14

11+67.99
2.71 RT
225.10

11+00

104+00

+50

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CURB RAMP DETAIL	SHEET 25	E

2

102+00

+50

103+00

2

N

W. LINCOLN AVENUE

R/W

102+21.73
62.69 RT
228.86

102+19.25
58.35 RT
229.21

102+24.16
61.41 RT
228.67

102+30.12
58.21 RT
228.66

102+28.14
59.32 RT
228.60

102+29.58
64.27 RT
228.75

102+27.19
65.52 RT
228.70

102+24.72
66.76 RT
228.89

102+20.75
69.80 RT
228.97

102+16.74
72.80 RT
229.21

102+12.74
75.79 RT
229.42

102+16.93
81.40 RT
228.91

102+14.91
60.83 RT
229.29

102+17.75
65.80 RT
228.94

102+13.75
68.79 RT
229.29

102+09.74
71.79 RT
229.50

LEGEND

(LL) LEVEL LANDING

(PC) PEDESTRIAN CURB

DETECTABLE WARNING FIELD

102+65.55
36.00 RT
228.82

102+74.95
36.00 RT
228.77

102+63.13
38.00 RT
228.88

102+72.54
38.00 RT
228.82

102+69.42
40.58 RT
228.88

102+60.01
40.58 RT
228.96

102+65.89
43.50 RT
228.99

102+69.93
43.50 RT
228.95

102+55.39
44.40 RT
229.05

102+77.57
43.50 RT
228.80

102+51.23
46.59 RT
228.94

102+74.24
43.50 RT
228.86

102+49.46
47.52 RT
228.90

102+69.56
49.50 RT
228.87

102+66.22
49.50 RT
228.93

102+52.16
52.88 RT
228.91

102+58.57
49.50 RT
229.08

102+53.93
51.95 RT
228.95

W. NATIONAL AVENUE

+50

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CURB RAMP DETAIL	SHEET 26	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\021303_cr.dgn PLOT DATE : 10/30/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 10.0000 sf / in.

WISDOT/CADDS SHEET 42

LEGEND

(LL) LEVEL LANDING

(PC) PEDESTRIAN CURB

DETECTABLE WARNING FIELD

+50 104+00 +50

+50

10+00

N

W. LINCOLN AVENUE

W. NATIONAL AVENUE

R/W

R/W

10+21.04 9.00 RT 227.90

10+18.37 7.00 RT 227.99

10+11.03 9.00 RT 228.07

10+08.36 7.00 RT 228.15

10+29.06 15.00 RT 227.62

10+31.19 16.60 RT 227.64

10+21.72 17.00 RT 227.73

10+19.05 15.00 RT 227.82

2.8% 1.7% 2.0% 2.5%

104+45.02 36.00 RT 225.72

104+49.12 31.00 RT 225.82

104+55.58 31.00 RT 225.70

104+35.86 44.00 RT 226.21

104+42.56 39.00 RT 225.95

104+51.48 36.00 RT 225.57

104+49.37 38.58 RT 225.77

104+26.42 44.00 RT 226.42

104+38.27 42.20 RT 226.03

104+22.09 44.00 RT 226.32

104+47.38 41.00 RT 225.99

104+52.38 41.00 RT 226.23

104+18.75 44.00 RT 226.43

104+28.76 44.00 RT 226.26

104+15.41 49.00 RT 226.44

104+12.07 49.00 RT 226.56

104+19.72 49.00 RT 226.54

104+24.75 52.00 RT 226.74

104+20.75 54.99 RT 227.14

104+26.42 49.00 RT 226.50

104+41.11 46.00 RT 226.11

104+47.38 46.00 RT 226.07

104+52.38 46.00 RT 226.31

104+28.76 49.00 RT 226.34

104+38.71 47.80 RT 226.29

104+31.75 53.00 RT 226.42

104+27.75 56.00 RT 226.82

104+23.75 59.00 RT 227.22

5.9% 7.0% 5.9% 0.8% 1.5% 4.8% 1.5% 0.6% 4.8% 2.3% 6.8% 0.7% 6.0% 2.3% 0.6% 8.0%

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CURB RAMP DETAIL	SHEET 27	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\021304_cr.dgn PLOT DATE : 10/30/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 10.0000 sf / in.

WISDOT/CADDS SHEET 42

2

+50 105+00 +50

GV

W. LINCOLN AVENUE

N

MH MH

BACK OF CURB RADIUS = 17.42'
LONG CHORD = 6.33'
XR = 7.18'

104+84.43
41.00 RT
224.77

104+92.39
39.56 RT
224.75

104+91.01
41.00 RT
224.67

104+96.48
45.11 RT
224.65

104+94.69
46.00 RT
224.57

104+89.43
46.00 RT
224.65

104+89.31
51.12 RT
224.94

104+89.18
56.12 RT
224.90

104+98.66
60.58 RT
224.19

104+69.43
41.00 RT
225.70

104+74.43
41.00 RT
225.35

104+79.43
41.00 RT
225.00

104+64.43
41.00 RT
226.03

R/W

104+64.43
.00 RT
226.13

104+69.43
46.00 RT
225.78

104+74.43
46.00 RT
225.43

104+79.43
46.00 RT
225.08

104+84.43
46.00 RT
224.73

104+84.31
51.00 RT
225.02

104+84.19
55.97 RT
224.99

7.0% 7.0% 7.0% 4.6% 7.0% 7.0% 7.0% 7.0% 7.0%
1.5% 1.5% 1.5% 1.5% 1.5% 1.5% 1.5% 1.5% 1.5% 1.5% 1.5%
0.8% 5.8% 5.8% 1.5% 0.6% 0.8% 1.8%

PC LL

105+40.61
39.00 RT
224.42

105+45.61
39.00 RT
224.69

105+36.72
39.00 RT
224.36

105+35.45
41.50 RT
224.30

105+31.19
40.11 RT
224.19

105+32.63
41.50 RT
224.11

105+27.40
45.67 RT
224.09

105+29.22
46.50 RT
224.01

105+33.45
46.50 RT
224.08

105+35.45
46.50 RT
224.22

105+35.14
51.49 RT
224.36

105+50.54
39.00 RT
224.54

105+50.54
44.00 RT
224.62

105+45.61
44.00 RT
224.69

105+40.61
44.00 RT
224.34

105+40.44
46.81 RT
224.30

105+40.13
51.80 RT
224.44

1.5% 7.0% 1.5% 1.5% 5.4% 0.0% 3.0% 1.5% 1.4% 1.6% 2.8% 2.8%

R/W

S. 95TH STREET

LEGEND

LL LEVEL LANDING

PC PEDESTRIAN CURB

DETECTABLE WARNING FIELD

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CURB RAMP DETAIL	SHEET 28	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\021305_cr.dgn PLOT DATE : 10/31/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 10.0000 sf / in.

2

LEGEND

LL LEVEL LANDING

PC PEDESTRIAN CURB

DETECTABLE WARNING FIELD

N

W. NATIONAL AVENUE

W. LINCOLN AVENUE

BACK OF CURB RADIUS = 25.42'
LONG CHORD = 7.38'
XR = 9.38'

11+00

105+00

+50

106+00

R/W

P-R/W

MH

WV

11+67.91
3.71 RT
225.14

11+96.51
24.00 RT
224.64

11+93.83
22.00 RT
224.66

11+86.48
24.00 RT
224.86

11+83.80
22.00 RT
224.88

11+89.93
26.58 RT
224.95

11+93.13
28.97 RT
224.93

11+89.46
29.87 RT
224.94

11+83.71
31.30 RT
224.92

11+86.22
30.68 RT
224.82

11+89.93
35.94 RT
224.82

11+92.44
35.32 RT
224.72

12+02.53
28.50 RT
224.79

12+08.32
28.50 RT
224.49

12+06.29
28.50 RT
224.53

12+07.26
34.50 RT
224.58

12+05.23
34.50 RT
224.62

12+01.48
34.50 RT
225.88

11+95.74
34.50 RT
224.84

12+52.42
29.00 RT
223.22

12+47.42
29.00 RT
223.43

12+42.42
29.00 RT
223.40

12+35.72
27.38 RT
223.37

12+36.90
29.00 RT
223.29

12+30.16
32.77 RT
223.44

12+31.74
34.00 RT
223.36

12+37.19
34.00 RT
223.47

12+35.72
36.78 RT
223.79

12+34.25
43.56 RT
224.14

12+32.99
49.48 RT
224.49

12+33.22
55.78 RT
224.84

12+35.02
61.82 RT
225.07

12+52.42
34.00 RT
223.30

12+47.42
34.00 RT
223.51

12+42.42
34.00 RT
223.48

12+41.97
35.47 RT
223.55

12+40.50
40.25 RT
223.87

12+39.03
45.03 RT
224.22

12+37.97
49.93 RT
224.57

12+38.16
54.97 RT
224.92

12+39.59
59.80 RT
225.15

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CURB RAMP DETAIL	SHEET 29	E

2

2

LEGEND

(LL) LEVEL LANDING

(PC) PEDESTRIAN CURB

DETECTABLE WARNING FIELD

S. 94TH STREET

R/W

R/W

R/W

GRD

MH

MH

MH

MH

N

108+00.75
44.00 LT
225.29

107+95.75
44.00 LT
225.32

107+90.75
44.00 LT
225.67

108+05.75
44.00 LT
224.97

108+10.75
44.00 LT
224.65

108+11.86
59.00 LT
224.82

108+11.33
54.00 LT
225.02

108+10.84
49.00 LT
224.97

108+16.88
59.00 LT
224.68

108+16.36
54.00 LT
224.94

108+15.84
49.00 LT
224.89

108+15.75
44.00 LT
224.57

108+20.45
44.00 LT
224.50

108+22.40
43.54 LT
224.58

108+18.05
39.00 LT
224.60

108+19.63
37.77 LT
224.68

107+90.75
39.00 LT
225.59

107+95.75
39.00 LT
225.24

108+00.75
39.00 LT
225.21

108+05.75
39.00 LT
224.96

108+10.75
39.00 LT
224.71

BACK OF CURB RADIUS = 12.42'
LONG CHORD = 5.61'
XR = 5.38'

107+95.75
34.00 LT
224.89

108+00.75
34.00 LT
224.86

107+95.75
29.00 LT
225.09

108+00.75
29.00 LT
225.06

108+64.26
59.00 LT
224.73

108+65.05
54.00 LT
224.83

108+65.84
48.97 LT
224.58

108+65.76
43.98 LT
224.23

108+61.16
44.00 LT
224.17

108+59.22
43.54 LT
224.25

108+63.56
39.00 LT
224.22

108+61.99
37.77 LT
224.30

108+69.32
59.00 LT
224.84

108+70.11
54.00 LT
224.91

108+70.85
49.33 LT
224.66

108+70.76
43.98 LT
224.31

108+74.81
44.00 LT
224.55

108+79.81
44.00 LT
224.47

108+84.81
44.00 LT
224.82

108+89.81
44.00 LT
224.77

108+79.81
39.00 LT
224.39

108+84.81
39.00 LT
224.74

108+89.81
39.00 LT
224.69

108+70.76
39.00 LT
224.33

108+74.81
39.00 LT
224.47

108+74.81
34.00 LT
224.24

108+79.81
34.00 LT
224.16

BACK OF CURB RADIUS = 12.42'
LONG CHORD = 5.61'
XR = 5.38'

108+74.81
29.00 LT
224.44

108+79.81
29.00 LT
224.36

W. LINCOLN AVENUE

108+00

+50

109+00

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CURB RAMP DETAIL	SHEET 30	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\021307_cr.dgn PLOT DATE : 10/30/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 10.0000 sf / in.

WISDOT/CADDS SHEET 42

2

2

S. 94TH STREET

N

108+00

+50

109+00

W. LINCOLN AVENUE

MH

MH

MH

WV

GV

GV

GUY

FL

107+95.75
29.00 RT
225.03

108+00.75
29.00 RT
224.99

107+95.75
34.00 RT
224.83

108+00.75
34.00 RT
224.79

PC

107+90.75
39.00 RT
225.50

107+95.75
39.00 RT
225.15

108+00.75
39.00 RT
25.11

108+03.82
39.00 RT
225.14

6.4%

6.4%

0.8%

7.0%

1.5%

1.5%

LL

1.5%

1.0%

1.5%

7.0%

0.8%

1.0%

R/W

107+95.75
44.00 RT
225.23

108+03.82
44.00 RT
225.22

107+90.75
44.00 RT
225.58

108+00.75
44.00 RT
225.19

108+74.81
29.00 RT
224.16

108+79.81
29.00 RT
224.08

108+74.81
34.00 RT
223.96

108+79.81
34.00 RT
223.88

108+74.81
39.00 RT
224.31

108+79.81
39.00 RT
224.23

108+69.81
39.00 RT
224.66

108+84.81
39.00 RT
224.47

7.0%

7.0%

1.5%

1.5%

LL

1.5%

4.8%

1.5%

7.0%

1.5%

4.8%

R/W

108+69.81
44.00 RT
224.74

108+74.81
44.00 RT
224.39

108+79.81
44.00 RT
224.31

108+84.81
44.00 RT
224.55

LEGEND

LL LEVEL LANDING

PC PEDESTRIAN CURB

DETECTABLE WARNING FIELD

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CURB RAMP DETAIL	SHEET 31	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\021308_cr.dgn PLOT DATE : 10/30/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 10.0000 sf / in.

WISDOT/CADDS SHEET 42

2

2

LEGEND

(LL) LEVEL LANDING

(PC) PEDESTRIAN CURB

DETECTABLE WARNING FIELD

S. 93RD STREET

R/W

R/W

R/W

N

METAL

MH

MH

MH

WV

WV

GV

SUMP D

SUMP D

SUMP

2-STEPS

111+20.70
44.00 LT
219.44

111+25.70
44.00 LT
219.12

111+30.70
44.00 LT
218.72

111+35.70
44.00 LT
218.31

111+42.97
59.08 LT
217.85

111+41.88
54.36 LT
218.04

111+40.79
49.64 LT
217.98

111+40.70
44.03 LT
217.91

111+48.09
59.00 LT
217.80

111+54.83
51.77 LT
217.42

111+46.76
53.23 LT
217.96

111+45.78
49.03 LT
217.90

111+45.70
44.03 LT
217.83

111+50.95
44.00 LT
217.75

111+52.75
43.11 LT
217.83

1.5%
6.4%
1.5%
8.1%
0.5%
8.1%
0.5%
8.1%
1.5%
6.4%
1.5%
7.1%
7.1%
7.1%
1.7%

1.0%
4.0%
2.7%
1.5%
1.3%
1.4%
1.5%
1.3%
1.4%
1.5%

LL

PC

BACK OF CURB RADIUS = 17.42'
LONG CHORD = 6.33'
XR = 7.18'

111+20.70
39.00 LT
219.36

111+25.70
39.00 LT
219.04

111+30.70
39.00 LT
218.69

111+35.70
39.00 LT
218.33

111+48.66
37.56 LT
217.95

111+40.70
39.00 LT
217.98

111+43.55
34.00 LT
218.12

111+47.28
39.00 LT
217.87

111+43.55
29.00 LT
218.32

W. LINCOLN AVENUE

111+00

+50

112+00

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CURB RAMP DETAIL	SHEET 32	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\021309_cr.dgn

PLOT DATE : 10/30/2024

PLOT BY : GRAEF

PLOT NAME :

PLOT SCALE : 10.0000 sf / in.

WISDOT/CADDS SHEET 42

2

LEGEND

(LL) LEVEL LANDING

(PC) PEDESTRIAN CURB

DETECTABLE WARNING FIELD

S. 95TH STREET

R/W

R/W

R/W

R/W

W. NATIONAL AVENUE

N

11+00

+50

12+31.72 56.84 LT 223.20
12+27.75 59.91 LT 223.28
12+24.42 56.59 LT 223.42
12+20.88 53.07 LT 223.17
12+17.71 50.00 LT 223.19
12+12.71 50.20 LT 223.59
12+07.72 50.48 LT 223.99
12+02.73 50.77 LT 224.17
12+02.44 45.78 LT 224.18
12+07.43 45.49 LT 223.91
12+12.43 45.23 LT 223.51
12+17.42 44.92 LT 223.27
12+23.64 44.57 LT 223.18
12+27.45 42.21 LT 223.06
12+26.43 43.93 LT 222.98
12+32.72 46.70 LT 222.95
12+31.18 47.98 LT 222.87
12+26.70 49.00 LT 222.93
12+24.40 49.52 LT 223.09
12+27.95 53.05 LT 223.34
12+69.08 39.34 LT 222.04
12+71.03 38.90 LT 221.96
12+72.65 38.53 LT 221.99
12+75.41 37.90 LT 222.16
12+74.51 44.41 LT 222.47
12+73.84 47.77 LT 222.11
12+78.21 41.53 LT 222.32
12+77.57 48.37 LT 222.47
12+82.16 38.47 LT 222.40
12+81.27 45.49 LT 222.56
12+70.89 33.80 LT 221.92
12+68.92 33.46 LT 222.00
12+74.29 33.02 LT 222.13
12+80.01 32.75 LT 222.21
12+74.91 27.23 LT 222.04
12+76.57 28.57 LT 222.07
12+85.22 42.43 LT 222.64
12+85.44 38.83 LT 222.68
12+83.56 40.28 LT 222.51
12+81.33 31.00 LT 222.09
12+81.33 26.03 LT 222.01
12+81.33 23.82 LT 221.84
12+80.67 31.87 LT 222.15
12+80.78 36.67 LT 222.24
12+82.89 35.52 LT 222.36
12+83.68 34.17 LT 222.23
12+89.38 34.16 LT 221.99
12+86.33 34.17 LT 222.02
12+92.73 31.00 LT 221.80
12+89.38 31.00 LT 221.83
12+86.33 31.00 LT 221.86
12+92.73 26.00 LT 221.64
12+92.73 23.95 LT 221.52
12+86.33 26.00 LT 221.78
12+86.33 23.65 LT 221.61
12+86.34 21.07 LT 221.18

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CURB RAMP DETAIL	SHEET 33	E

2

N

W. LINCOLN AVENUE

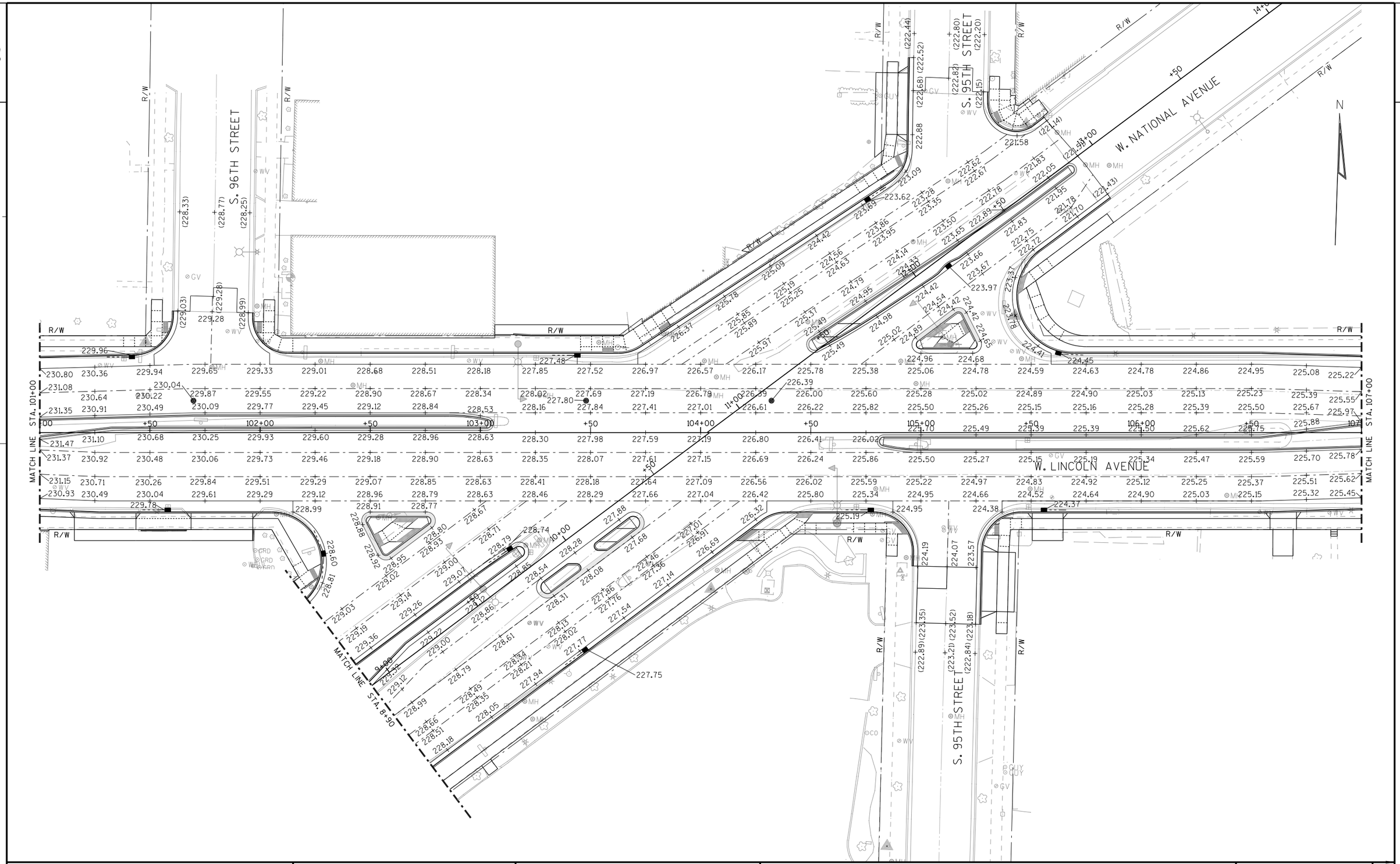
BEGIN PROJECT
STA. 98+42.00

MATCH LINE STA. 101+00

S. 97TH STREET

R/W

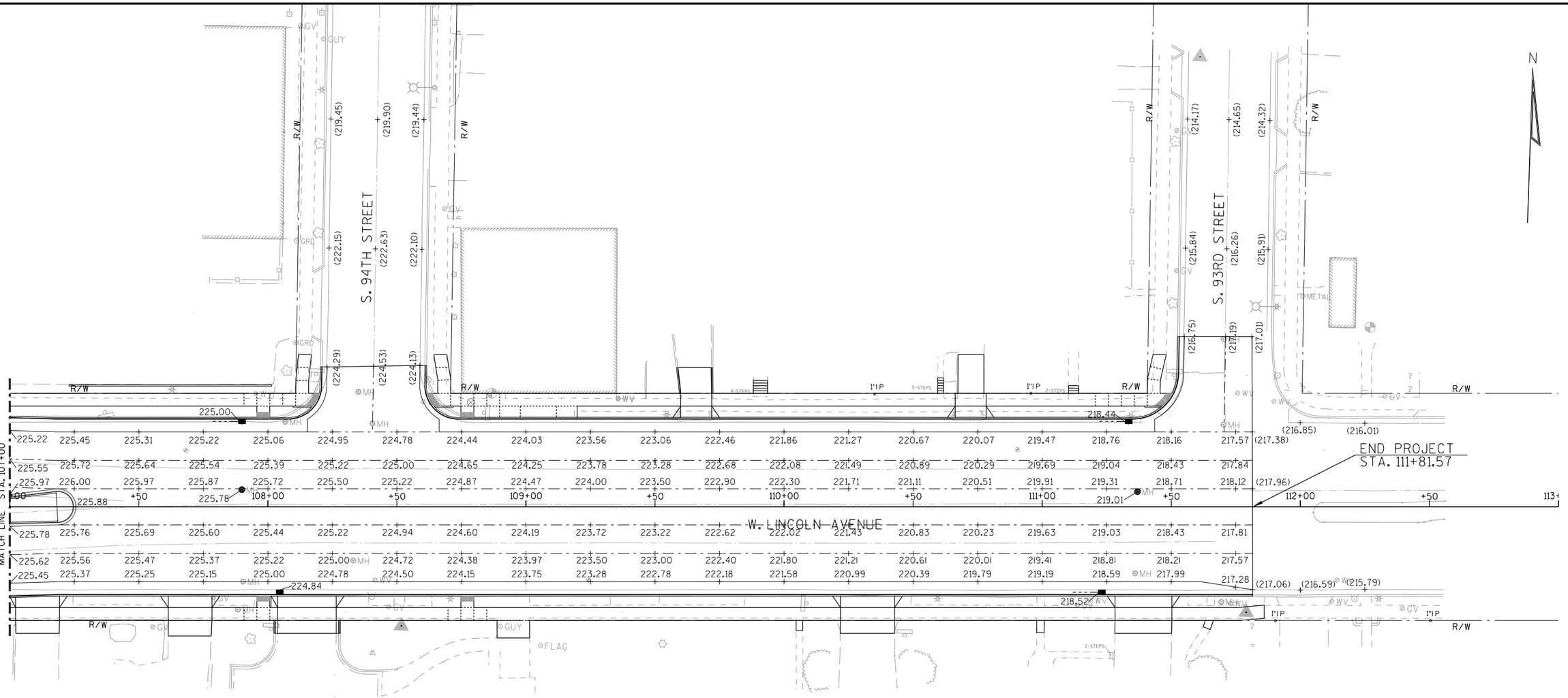
PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PAVEMENT GRADES	SHEET 34 E



2

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PAVEMENT GRADES	SHEET 35	E

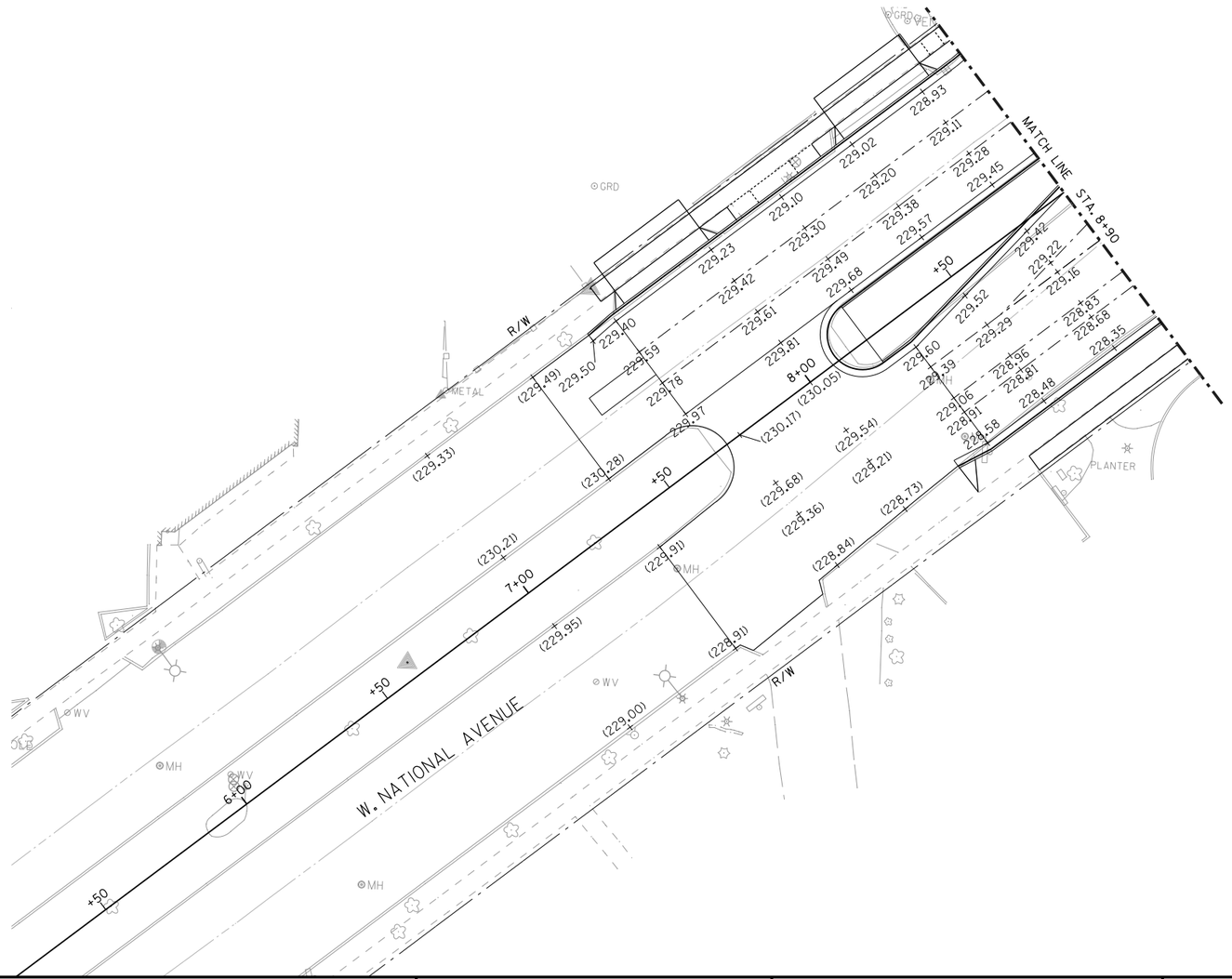
2



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PAVEMENT GRADES	SHEET 36	E

2

N



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PAVEMENT GRADES	SHEET 37	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\021404_jd.dgn PLOT DATE : 10/31/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 40.0000 sf / in.

LEGEND

- INLET PROTECTION
- (A) INLET PROTECTION TYPE
- SLOPE INTERCEPT
- SOD LAWN

N

W. LINCOLN AVENUE

BEGIN PROJECT
STA. 98+42.00

MATCH LINE STA. 101+00

S. 97TH STREET

R/W

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 38	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\022001_ec.dgn | PLOT DATE : 10/30/2024 | PLOT BY : GRAEF | PLOT NAME : | PLOT SCALE : 40.0000 sf / in.

WISDOT/CADDS SHEET 42

2

LEGEND

- INLET PROTECTION
- (A) INLET PROTECTION TYPE
- SLOPE INTERCEPT
- SOD LAWN

S. 96TH STREET

S. 95TH STREET

W. NATIONAL AVENUE

W. LINCOLN AVENUE

SHREDDED HARDWOOD BARK MULCH

REMOVE AND REPLACE DECORATIVE STONE MULCH

REMOVE AND REPLACE DECORATIVE STONE MULCH

MATCH LINE STA. 101+00

MATCH LINE STA. 8+90

MATCH LINE STA. 107+00

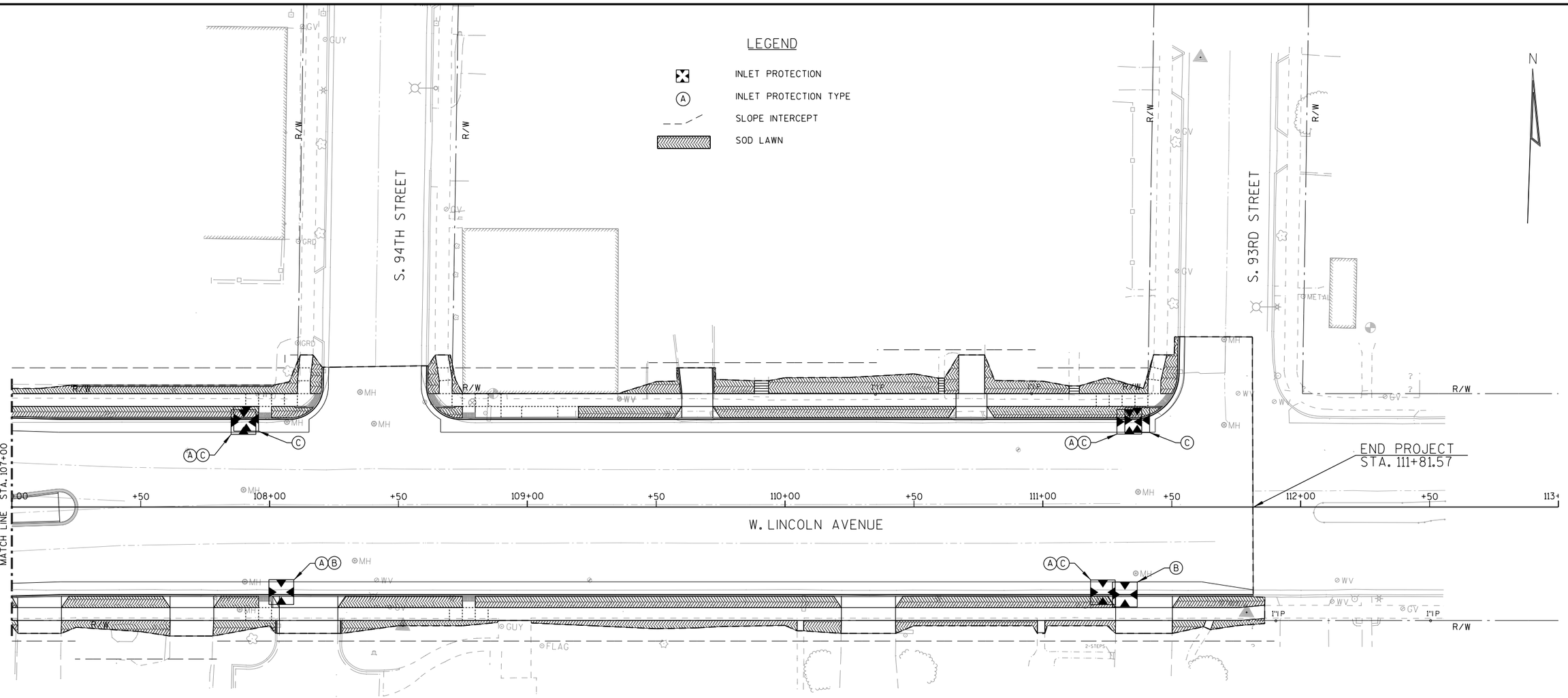
N

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 39	E

2

LEGEND

- INLET PROTECTION
- (A) INLET PROTECTION TYPE
- SLOPE INTERCEPT
- SOD LAWN



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 40	E

2

2

LEGEND

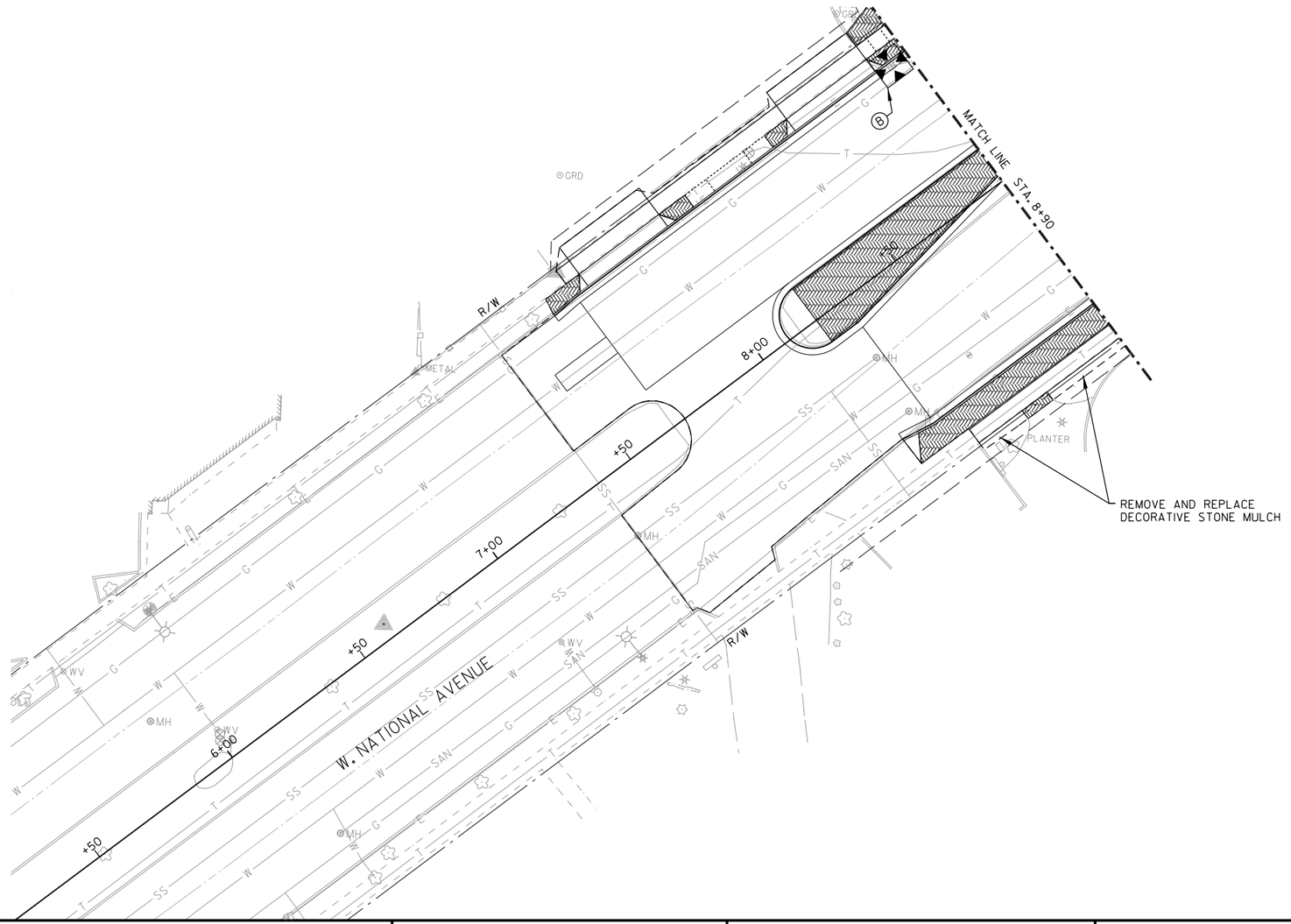
INLET PROTECTION

(A) INLET PROTECTION TYPE

SLOPE INTERCEPT

SOD LAWN

N



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 41	E

LEGEND

P-XX STORM SEWER PIPE NUMBER

(XXX) DRAINAGE STRUCTURE NUMBER

(XXX) EXISTING DRAINAGE STRUCTURE TO BE ADJUSTED

N

W. LINCOLN AVENUE

BEGIN PROJECT
STA. 98+42.00

STA. 98+90.38, 5.90 LT
MANHOLE 5 FT - J

STA. 98+90.38, 34.00 LT
CATCH BASIN SPECIAL, R-1

STA. 98+90.38, 34.00 RT
CATCH BASIN SPECIAL, R-1

STA. 100+80.65, 4.40 LT
MANHOLE 5 FT - J

3' OF 6-INCH PVC
STA 98+90

31' OF 6-INCH PVC
STA 99+11 BLIND
TAP TO TRUNK LINE

31' OF 6-INCH PVC
STA 99+80 BLIND
TAP TO TRUNK LINE

31' OF 6-INCH PVC
STA 99+93 BLIND
TAP TO TRUNK LINE

31' OF 6-INCH PVC
STA 100+57 BLIND
TAP TO TRUNK LINE

44' OF 8-INCH PVC
STA 100+18 BLIND
TAP TO TRUNK LINE

44' OF 6-INCH PVC
STA 100+57 BLIND
TAP TO TRUNK LINE

44' OF 6-INCH PVC
STA 100+81

P-1A

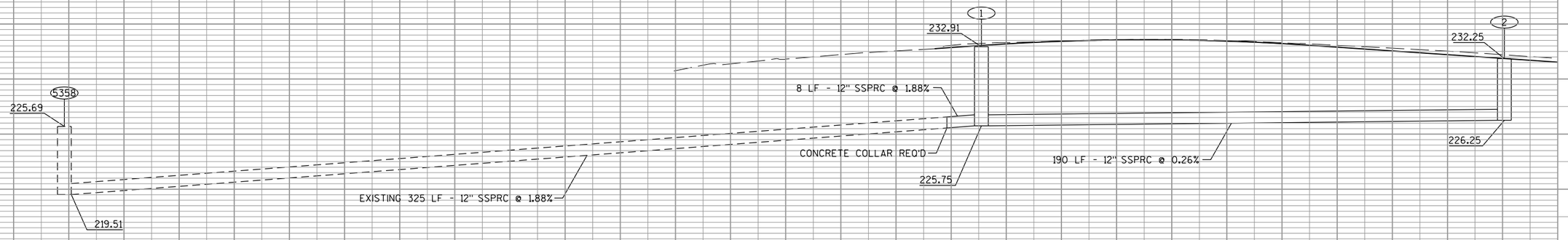
P-1B

P-2

4-INCH PIPE
UNDERDRAIN (TYP)

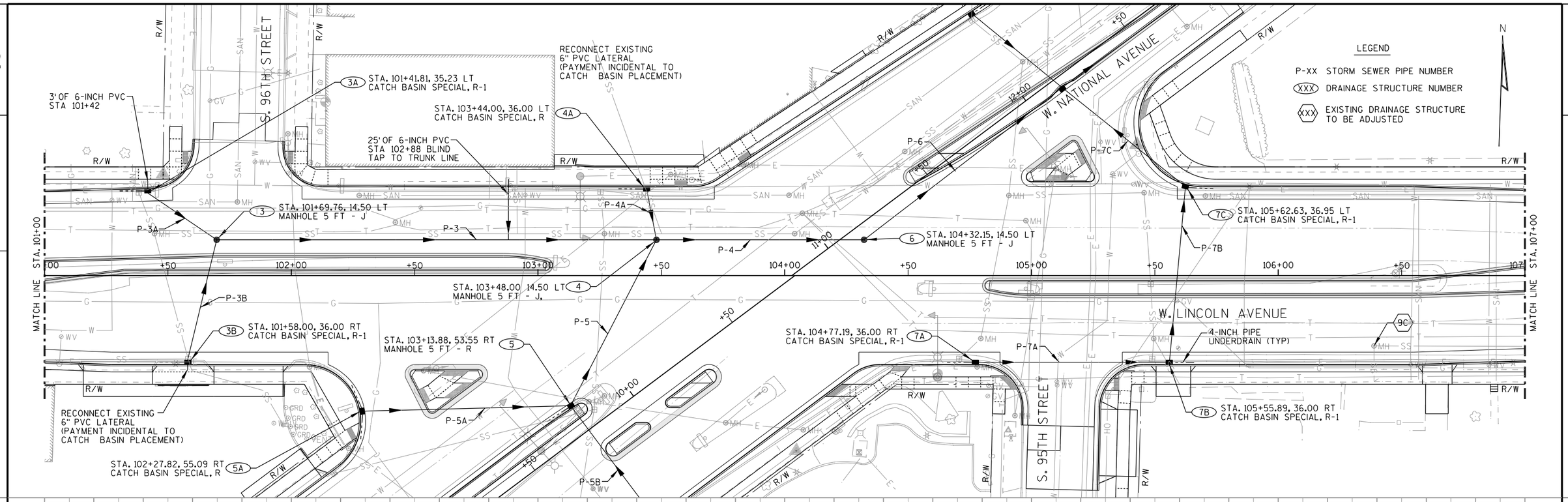
S. 97TH STREET

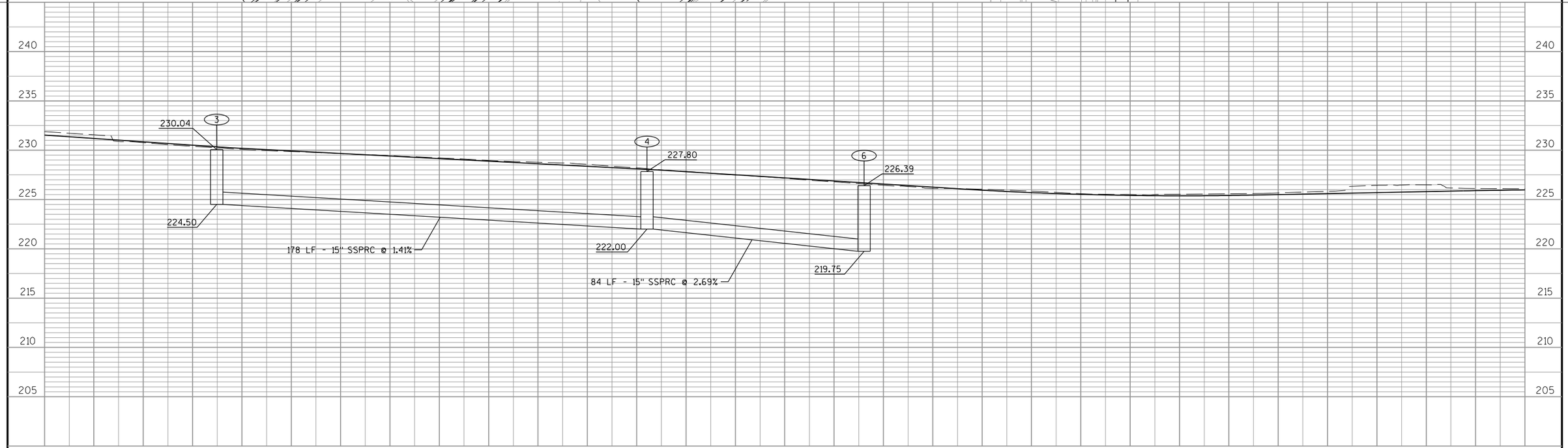
MATCH LINE STA. 101+00



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	STORM SEWER	SHEET 42	E

2





PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	STORM SEWER	SHEET 43	E

LEGEND

P-XX STORM SEWER PIPE NUMBER

(XXX) DRAINAGE STRUCTURE NUMBER

XXX EXISTING DRAINAGE STRUCTURE TO BE ADJUSTED

S. 94TH STREET

S. 93RD STREET

W. LINCOLN AVENUE

MATCH LINE STA. 107+00

31' OF 6-INCH PVC
STA 109+20 BLIND
TAP TO TRUNK LINE

31' OF 6-INCH PVC
STA 110+05 BLIND
TAP TO TRUNK LINE

31' OF 6-INCH PVC
STA 111+00 BLIND
TAP TO TRUNK LINE

111+33.45, 34.00 LT
CATCH BASIN SPECIAL, R-1 (10A)

STA. 107+89.90, 34.00 LT
CATCH BASIN SPECIAL, R-1 (9A)

STA. 111+23.18, 34.00 RT
CATCH BASIN SPECIAL, R-1 (10B)

P-9A

P-10A

P-10B

9

10

11

9B

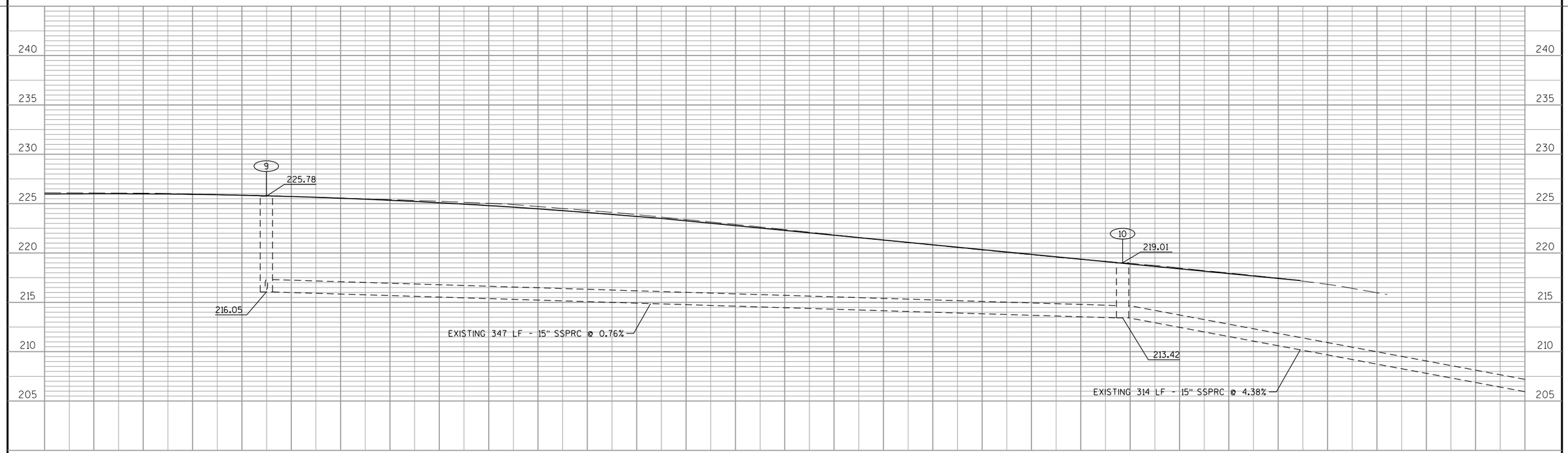
9D

9E

4-INCH PIPE UNDERDRAIN (TYP)

END PROJECT
STA. 111+81.57

N



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	STORM SEWER	SHEET 44	E

LEGEND

P-XX STORM SEWER PIPE NUMBER

(XXX) DRAINAGE STRUCTURE NUMBER

⬡XXX⬡ EXISTING DRAINAGE STRUCTURE TO BE ADJUSTED

W. NATIONAL AVENUE

W. LINCOLN AVENUE

S. 95TH STREET

STA. 102+27.82, 55.09 RT
CATCH BASIN SPECIAL, R (5A)

STA. 103+48.00, 14.50 LT
MANHOLE 5 FT - J (4)

STA. 103+44.00, 36.00 LT
CATCH BASIN SPECIAL, R (4A)

STA. 103+13.88, 53.55 RT
MANHOLE 5 FT - R (5)

STA. 9+77.24, 46.00 RT
CATCH BASIN SPECIAL, R-1 (5B)

STA. 104+32.15, 14.50 LT
MANHOLE 5 FT - J (6)

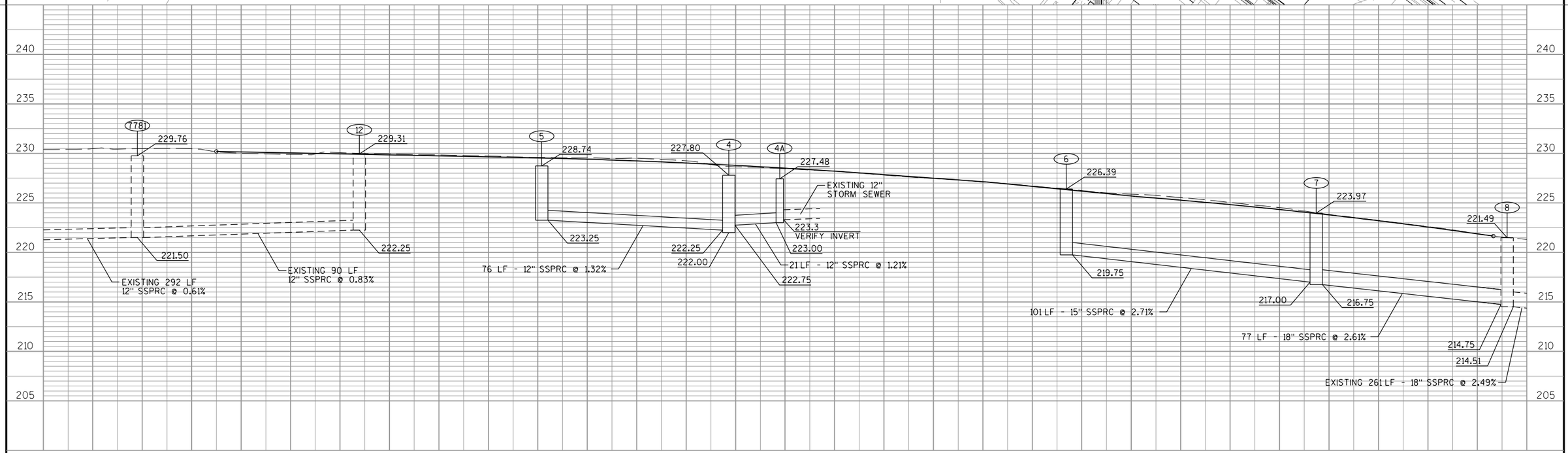
STA. 12+03.37, 42.22 LT
CATCH BASIN SPECIAL, R-1 (7D)

STA. 12+14.85, 4.00 RT
MANHOLE 5 FT - R-1 (7)

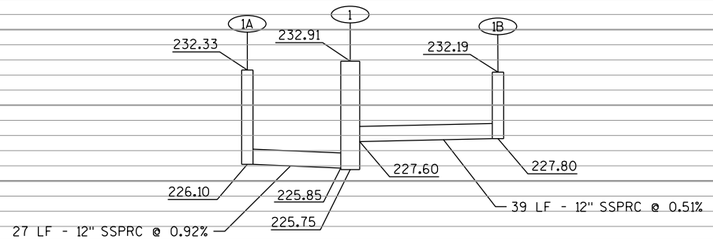
STA. 105+62.63, 36.95 LT
CATCH BASIN SPECIAL, R-1 (7C)

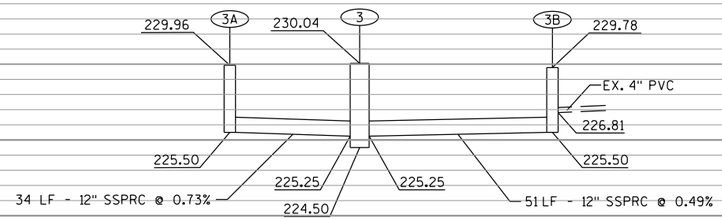
4-INCH PIPE
UNDERDRAIN (TYP)

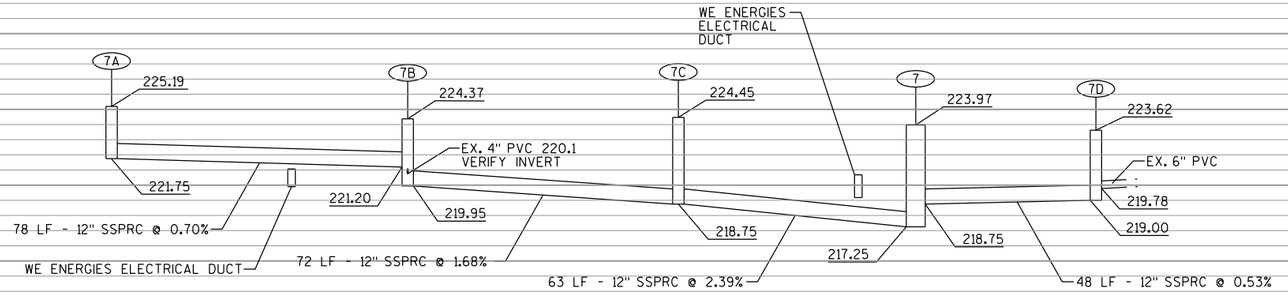
P-3, P-4, P-5, P-5A, P-5B, P-6, P-7, P-7B, P-7C, P-7D



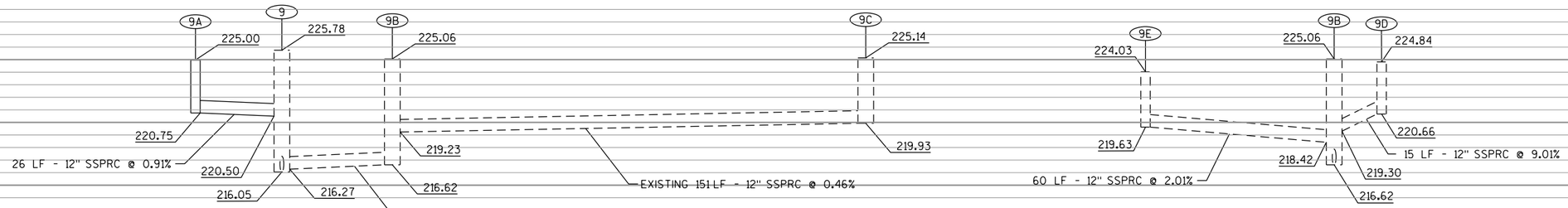
PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	STORM SEWER	SHEET 45	E

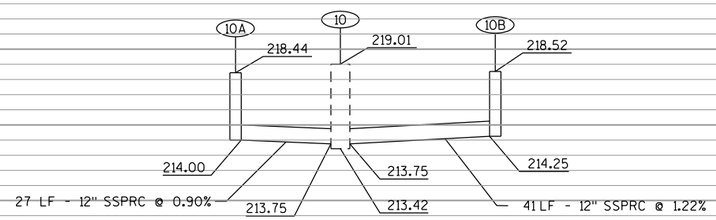






PROJECT NO: 2110-03-71	HWY: W LINCOLN AVENUE	COUNTY: MILWAUKEE	STORM SEWER PROFILES	SHEET 46	E


9A
225.00
9
225.78
9B
225.06
9C
225.14
220.75
26 LF - 12" SSPRC @ 0.91%
220.50
219.23
219.93
216.05
216.27
216.62
EXISTING 151 LF - 12" SSPRC @ 0.46%
EXISTING 35 LF - 02" SSPRC @ 0.99%
9E
224.03
9B
225.06
9D
224.84
219.63
60 LF - 12" SSPRC @ 2.01%
220.66
15 LF - 12" SSPRC @ 9.01%
218.42
219.30
216.62

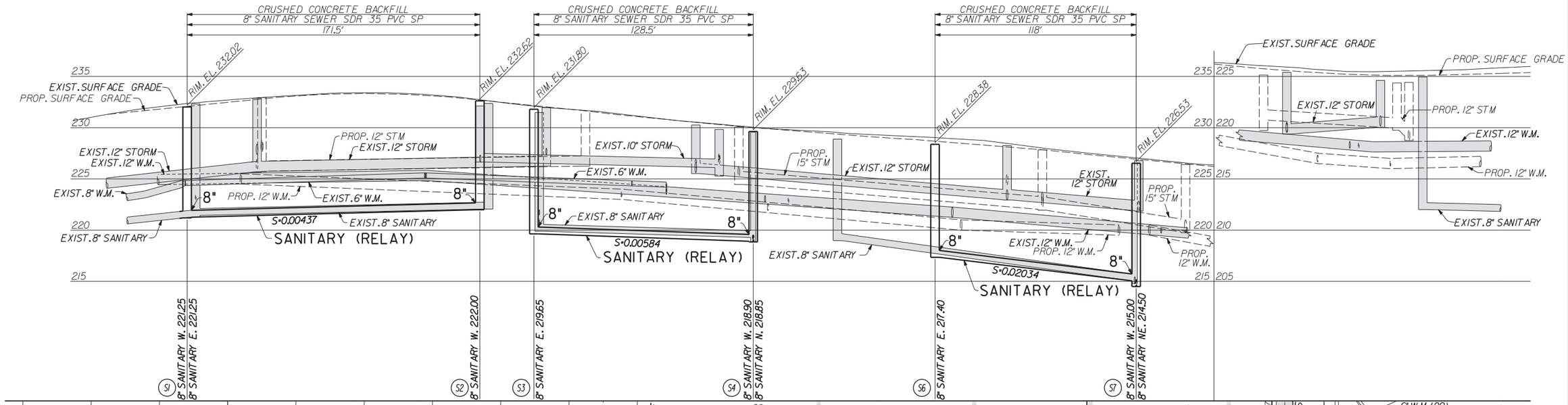

10A
218.44
10
219.01
10B
218.52
214.00
213.75
214.25
27 LF - 12" SSPRC @ 0.90%
213.75
213.42
41 LF - 12" SSPRC @ 1.22%

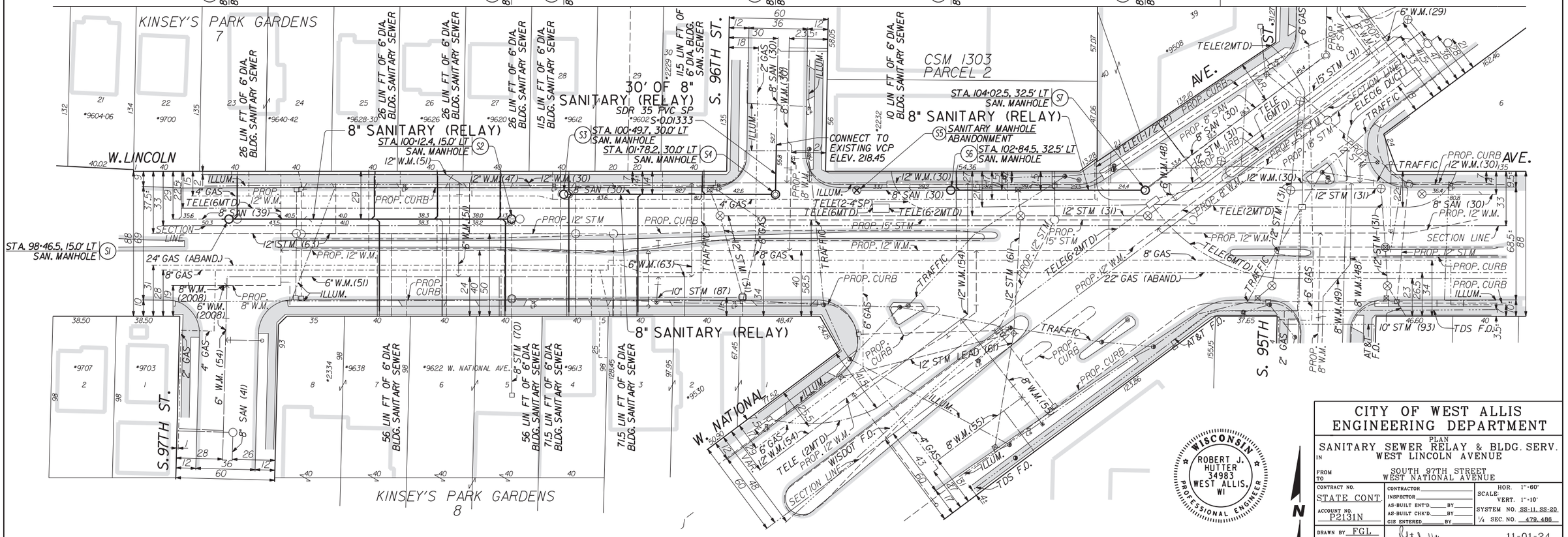
2

STRUCT. NO.	STATION	OFFSET	PIPE NO.	C-C (FT)	TO STRUCT.	CB TYPE & COVER		MH TYPE & COVER		RIM/ GRATE ELEV.	DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	INLET ELEV.	DISCH. ELEV.	LENGTH (FT)	SLOPE (%)	PIPE CLASS	REMARKS
1	98+90.38	5.90' LT	P-1	8	EX. 5358	--	--	5 FT	J	232.91	7.16	12	225.75	225.60	8	1.88	V	CONNECT TO EX. STORM SEWER, 12" W I.E.= 225.60 CONCRETE COLLAR REQUIRED
1A	98+90.38	34.00' LT	P-1A	27	1	SPECIAL	R-1	--	--	232.33	6.23	12	226.10	225.85	27	0.92	V	
1B	98+90.38	34.00' RT	P-1B	39	1	SPECIAL	R-1	--	--	232.19	4.39	12	227.80	227.60	39	0.51	V	
2	100+80.65	4.40' LT	P-2	190	1	--	--	5 FT	J	232.25	6.00	12	226.25	225.75	190	0.26	V	
3	101+69.76	14.50' LT	P-3	178	4	--	--	5 FT	J	230.04	5.54	15	224.50	222.00	178	1.41	V	
3A	101+41.81	35.23' LT	P-3A	34	3	SPECIAL	R-1	--	--	229.96	4.46	12	225.50	225.25	34	0.73	V	
3B	101+58.00	36.00' RT	P-3B	51	3	SPECIAL	R-1	--	--	229.78	4.28	12	225.50	225.25	51	0.49	V	CONNECT TO EX. 6" STORM LATERAL, S I.E.= 226.81
4	103+48.00	14.50' LT	P-4	84	6	--	--	5 FT	J	227.80	5.80	15	222.00	219.75	84	2.69	V	
4A	103+44.00	36.00' LT	P-4A	84	4	SPECIAL	R	--	--	227.48	4.48	12	223.00	222.75	21	1.21	V	CONNECT TO EX. 12" STORM PIPE, N I.E.= 223.3
5	103+13.88	53.55' RT	P-5	76	4	--	R	5 FT	--	228.74	5.49	12	223.25	222.25	76	1.32	V	
5A	102+27.82	55.09' RT	P-5A	85	5	SPECIAL	R	--	--	228.60	4.35	12	224.25	223.75	85	0.59	V	
5B	9+77.24	46.00' RT	P-5B	57	5	SPECIAL	R-1	--	--	227.75	4.05	12	223.70	223.40	57	0.52	V	
6	104+32.15	14.50' LT	P-6	101	7	--	--	5 FT	J	226.39	6.64	15	219.75	217.02	101	2.71	V	
7	12+14.85	4.00' RT	P-7	77	8	--	R-1	5 FT	--	223.97	7.22	18	216.75	214.75	77	2.61	IV	CORE INTO EXISITNG MANHOLE
7A	104+77.19	36.00' RT	P-7A	78	7B	SPECIAL	R-1	--	--	225.19	3.44	12	221.75	221.20	78	0.70	V	
7B	105+55.89	36.00' RT	P-7B	72	7C	SPECIAL	R-1	--	--	224.37	4.42	12	219.95	218.75	72	1.68	V	
7C	105+62.63	36.95' LT	P-7C	63	7	SPECIAL	R-1	--	--	224.45	5.70	12	218.75	217.25	63	2.39	V	
7D	12+03.37	42.22' LT	P-7D	48	7	SPECIAL	R-1	--	--	223.62	4.62	12	219.00	218.75	48	0.53	V	CONNECT TO EX. 6" STORM LATERAL, N I.E.= 219.78
9A	107+89.90	34.00' LT	P-9A	26	9	SPECIAL	R-1	--	--	225.00	4.25	12	220.75	220.51	26	0.91	V	
10A	111+33.45	34.00' LT	P-10A	27	10	SPECIAL	R-1	--	--	218.44	4.44	12	214.00	213.76	27	0.90	V	
10B	111+23.18	34.00' RT	P-10B	41	10	SPECIAL	R-1	--	--	218.52	4.27	12	214.25	213.75	41	1.22	V	

STORM SEWER NOTES:

1. STATION / OFFSETS TO MANHOLES ARE GIVEN TO THE CENTER OF STRUCTURE.
2. STATION / OFFSETS TO CATCH BASINS ARE GIVEN TO THE FACE OF CURB.
3. MANHOLE RIM/GRATE ELEVATIONS ARE GIVEN TO THE CENTER OF THE STRUCTURE.
4. CATCH BASIN RIM/GRATE ELEVATIONS ARE GIVEN TO THE FLANGE OF THE CASTING.
5. DEPTH OF MANHOLES, CATCH BASINS AND INLETS ARE MEASURED FROM THE LOWEST INVERT OF THE STRUCTURE TO THE RIM/GRATE ELEVATION.





NOTES:

1) THE EXISTING ROADWAY SURFACE IN WEST LINCOLN AVENUE FROM SOUTH 97TH STREET TO SOUTH 96TH STREET IS CONCRETE. THE EXISTING ROADWAY SURFACE IN WEST LINCOLN AVENUE FROM SOUTH 96TH STREET TO WEST NATIONAL AVENUE IS ASPHALT OVER CONCRETE.

2) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

CITY OF WEST ALLIS
ENGINEERING DEPARTMENT

PLAN: SANITARY SEWER RELAY & BLDG. SERV.
IN: WEST LINCOLN AVENUE
FROM: SOUTH 97TH STREET
TO: WEST NATIONAL AVENUE

CONTRACT NO. STATE CONT.
ACCOUNT NO. P2131N
DRAWN BY FGL
DATE DRAWN 12-21
DESIGNED BY AJW
CHECKED BY RJH
SURVEY FINAL PLAN DATE

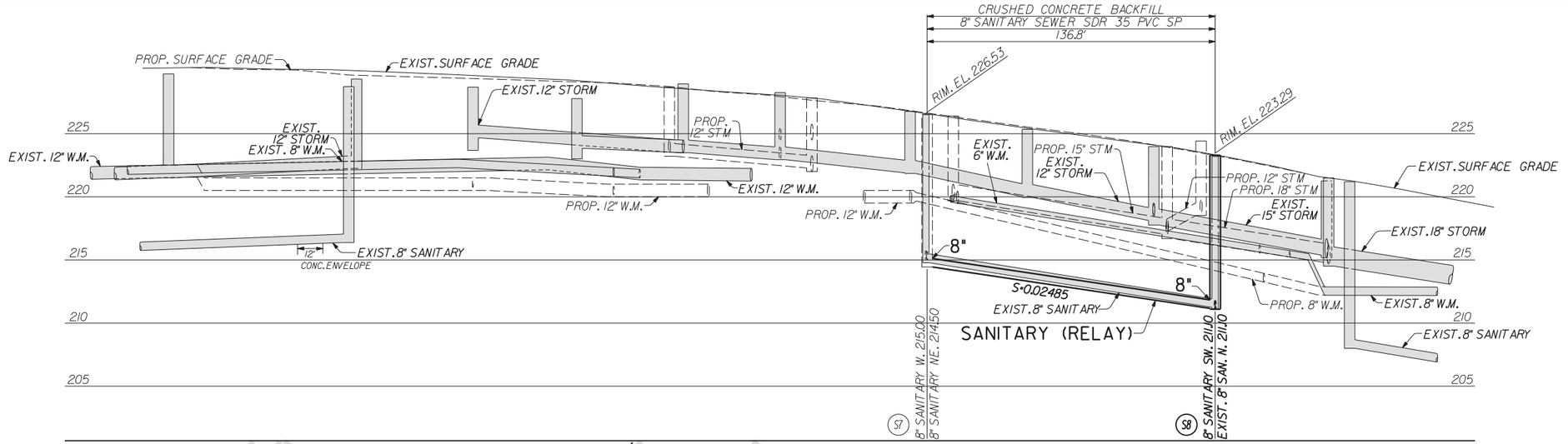
CONTRACTOR
INSPECTOR
AS-BUILT ENT'D BY
AS-BUILT CHK'D BY
GIS ENTERED BY

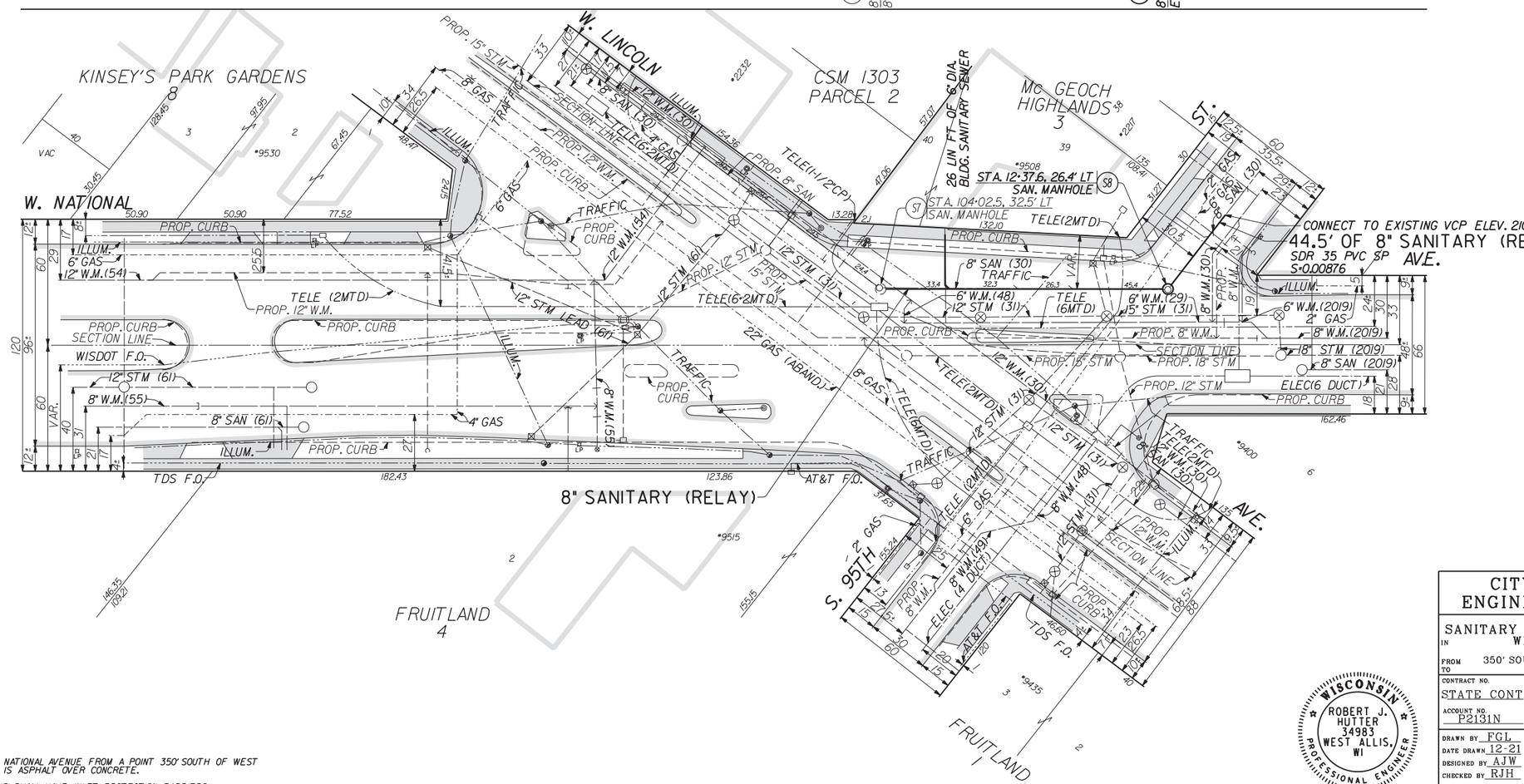
SCALE: HOR. 1"=60' VERT. 1"=10'
SYSTEM NO. SS-11, SS-20
1/4 SEC. NO. 479, 486

APPROVED ASSISTANT CITY ENGINEER 11-01-24 DATE
APPROVED CITY ENGINEER 11-01-24 DATE

PLAN FILE NO. S-1679

PROJECT NO: 2110-03-71	HWY: WEST LINCOLN AVENUE	COUNTY: MILWAUKEE	SANITARY SEWER PLAN	SHEET 49





NOTES:

1) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM A POINT 350' SOUTH OF WEST LINCOLN AVENUE TO SOUTH 95TH STREET IS ASPHALT OVER CONCRETE.

2) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

WISCONSIN
ROBERT J. HUTTER
34983
WEST ALLIS, WI
PROFESSIONAL ENGINEER

SCALE FT.
0 30 60

CITY OF WEST ALLIS
ENGINEERING DEPARTMENT

PLAN
SANITARY SEWER RELAY & BLDG. SERV.
IN WEST NATIONAL AVENUE
FROM 350' SOUTH OF WEST LINCOLN AVENUE
TO SOUTH 95TH STREET

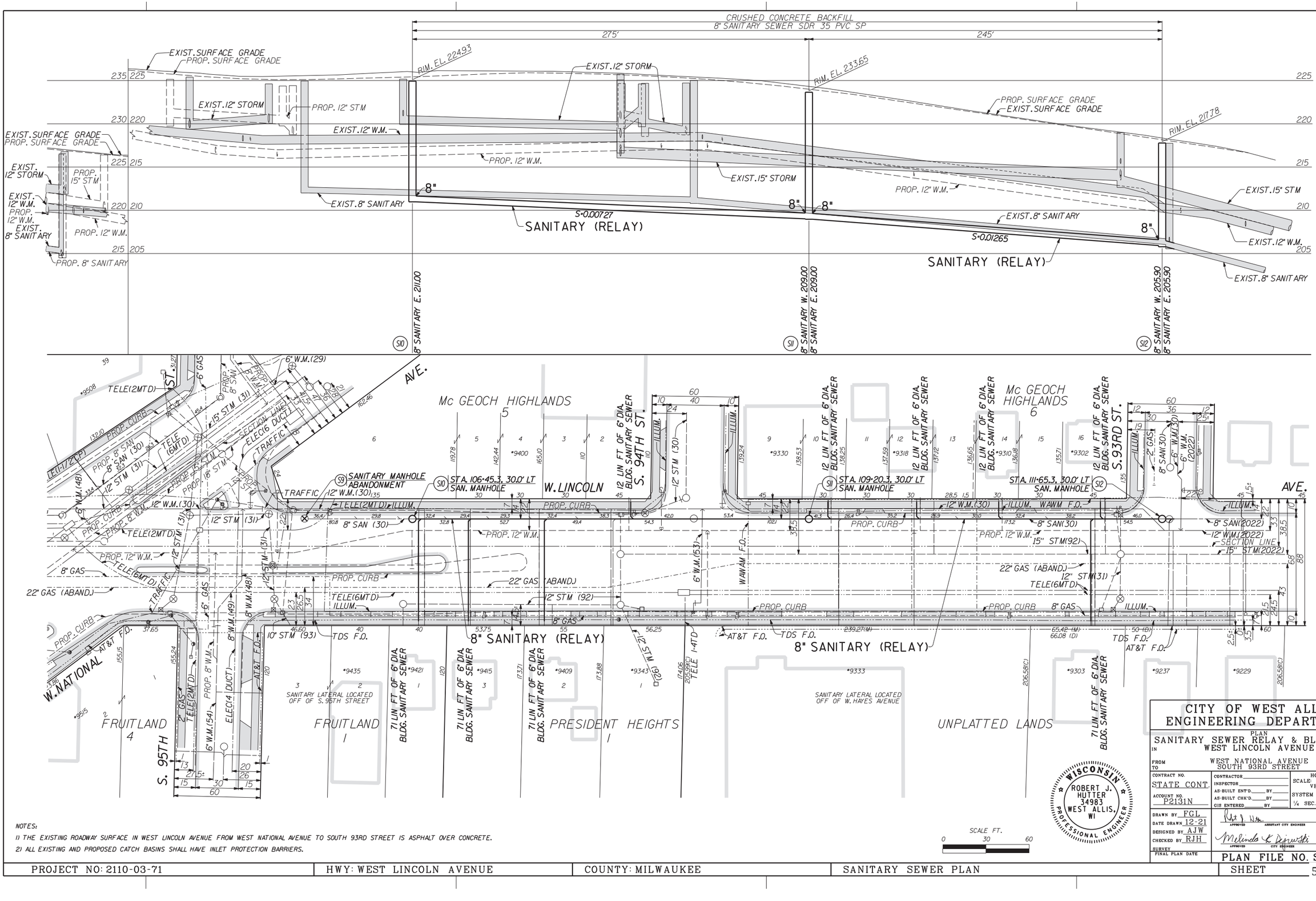
CONTRACT NO. STATE CONT.	CONTRACTOR	HOR. 1"=60'
ACCOUNT NO. P2131N	INSPECTOR	VERT. 1"=10'
	AS-BUILT ENT'D BY	SYSTEM NO. SS-11, SS-20
	AS-BUILT CHK'D BY	1/4 SEC. NO. 479, 486
	GIS ENTERED BY	
DRAWN BY FGL		
DATE DRAWN 12-21		
DESIGNED BY AJW		
CHECKED BY RJH		
SURVEY FINAL PLAN DATE		

APPROVED ASSISTANT CITY ENGINEER DATE 11-01-24

APPROVED CITY ENGINEER DATE 11-01-24

PLAN FILE NO. S-1680

PROJECT NO: 2110-03-71	HWY: WEST LINCOLN AVENUE	COUNTY: MILWAUKEE	SANITARY SEWER PLAN	SHEET 50



NOTES:

1) THE EXISTING ROADWAY SURFACE IN WEST LINCOLN AVENUE FROM WEST NATIONAL AVENUE TO SOUTH 93RD STREET IS ASPHALT OVER CONCRETE.

2) ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION BARRIERS.

WISCONSIN
ROBERT J. HUTTER
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WEST ALLIS, WI
PROFESSIONAL ENGINEER

CITY OF WEST ALLIS
ENGINEERING DEPARTMENT

PLAN: SANITARY SEWER RELAY & BLDG. SERV.
IN: WEST LINCOLN AVENUE
FROM: WEST NATIONAL AVENUE
TO: SOUTH 93RD STREET

CONTRACT NO. STATE CONT.	CONTRACTOR
ACCOUNT NO. P2131N	INSPECTOR
DRAWN BY FGL	AS-BUILT ENT'D BY
DATE DRAWN 12-21	AS-BUILT CHK'D BY
DESIGNED BY AJW	GIS ENTERED BY
CHECKED BY RJH	SCALE HOR. 1"=60' / VERT. 1"=10'
SURVEY FINAL PLAN DATE	SYSTEM NO. SS-11, SS-20
	¼ SEC. NO. 479, 486

Robert J. Hutter — APPROVED ASSISTANT CITY ENGINEER — 11-01-24 DATE
Melinda L. Dejewski — APPROVED CITY ENGINEER — 11-01-24 DATE

PLAN FILE NO. S-1681

PROJECT NO: 2110-03-71	HWY: WEST LINCOLN AVENUE	COUNTY: MILWAUKEE	SANITARY SEWER PLAN	SHEET 51

CRUSHED CONCRETE BACKFILL
SEE NOTE *7
SEE NOTE *8
EXIST. SURFACE GRADE
PROP. SURFACE GRADE
EXIST. 12" STORM
EXIST. 12" W.M.
EXIST. 6" W.M.
EXIST. 8" SANITARY
PROP. 8" SANITARY
S=0.00000
S=0.04368
8" W.M. (RELAY)
12" W.M. (RELAY)
STA. 98+78.0 - 40.0' LT
12" W.M. CONNECTION (BRK)
EL. 224.50
STA. 98+78.0 - 22.5' LT
45° VERTICAL BEND (BRK)
EL. 224.50
STA. 98+78.0 - 21.0' LT
45° VERTICAL BEND (BRK)
EL. 223.00
STA. 98+78.0 - 10.0' LT
45° VERTICAL BEND (BRK)
EL. 223.00
STA. 98+78.0 - 0.5' RT
45° VERTICAL BEND (BRK)
EL. 224.50
STA. 98+78.0 - 4.0' RT
12" ON 12" TEE
EL. 224.50
STA. 98+78.0 - 6.0' RT
12" TO 8" REDUCER (BRK)
12" EL. 224.50
8" EL. 224.67
STA. 98+78.0 - 25.0' RT
90° BEND (BRK)
EL. 225.50

CRUSHED CONCRETE BACKFILL
12" D.I.W.M. CL 53 R.G.J. (IN DOUBLE POLYETHYLENE WRAP) OR C-900 DR-18
EXIST. SURFACE GRADE
PROP. SURFACE GRADE
EXIST. 12" STORM
EXIST. 12" W.M.
PROP. 8" W.M.
PROP. 12" STM
EXIST. 8" W.M.
EXIST. 6" W.M.
EXIST. 8" SANITARY
PROP. 8" SANITARY
EXIST. 10" STORM
PROP. 15" STM
EXIST. 12" STORM
EXIST. 12" W.M.
PROP. 12" W.M.
S=-0.00673
S=-0.01457
S=-0.01546
S=-0.00541
12" W.M. (RELAY)
STA. 98+78.0 - 4.0' RT
12" ON 12" TEE (BRK)
EL. 224.50
STA. 101+01.0 - 4.0' RT
6" ON 12" ANCHOR TEE (BRK)
EL. 223.00
STA. 101+50.0 - 4.0' RT
12" VALVE
STA. 101+86.8 - 4.0' RT
8" ON 12" TEE (BRK)
12" EL. 221.75
8" EL. 221.92
STA. 103+00.0 - 4.0' RT
12" ON 12" TEE (BRK)
EL. 220.00
STA. 103+92.5 - 4.0' RT
45° HORIZONTAL BEND (BRK)
EL. 219.50

DETAIL "A"

CRUSHED CONCRETE BACKFILL
SEE NOTE *8
EXIST. SURFACE GRADE
PROP. SURFACE GRADE
8" W.M. (RELAY)
S=0.03823
EXIST. 12" STORM
EXIST. 12" W.M.
PROP. 12" STM
PROP. 12" W.M.
EXIST. 6" W.M.
EXIST. 8" SANITARY
PROP. 8" SANITARY
EXIST. 8" W.M.
EXIST. 8" SANITARY
STA. 98+43.4 - 25.0' RT
8" SLEEVE
EL. 224.15±
STA. 98+45.3 - 25.0' RT
97TH W.M. CONNECTION (BRK)
6" ON 8" TEE
8" EL. 224.25
6" EL. 224.33
STA. 98+78.0 - 25.0' RT
90° BEND (BRK)
EL. 225.50

DETAIL "B"
BRASS CAP & FITTING
PROP. F.O.C.
PROPOSED FINISHED GRADE
6" MAX.
SERVICE BOX
SERVICE BOX
6' MIN. FROM PROP. CURB GRADE
STOP & DRAIN VALVE
TAP & FITTINGS OUT OF 8" W.M.
1.5" COPPER
1.5" COPPER
PROP. 8" DIA. WATER MAIN
WOOD BLOCKS
1.5" AIR RELEASE ASSEMBLY (TYP.)
(NOT TO SCALE)

KINSEY'S PARK GARDENS 7
12" W.M. (RELAY)
12" WATER MAIN CONNECTION
1 - 12" SLEEVE
1 - 12" 90° BEND
4 LIN. FT. OF 12" W.M.
12" W.M. (RELAY) (SEE DETAIL "A")
W. LINCOLN
8" W.M. (RELAY) (SEE DETAIL "A")
24" GAS (ABAND.)
8" GAS
8" W.M. (2008)
6" W.M. (2008)
SECTION LINE
S. 97TH ST.
6" W.M. (54)
8" SAN (41)
2" GAS
4" GAS
*9703
*9700
*9640-42
*9628-30
*9626
*9620
*9612
*9602
*2229
*2232
*2334
*9638
*9622 W. NATIONAL AVE.
*9613
*9508
49 LIN FT OF 1" DIA WATER SERVICE
50 LIN FT OF 1" DIA WATER SERVICE
6 LIN FT OF 1.5" SPRINKLER SERVICE
34 LIN FT OF 1" DIA WATER SERVICE
34 LIN FT OF 1.5" DIA WATER SERVICE
12" W.M. (51)
12" W.M. (47)
12" W.M. (30)
8" SAN (30)
4" GAS
TELE (6MT D)
8" SAN (39)
PROP. CURB
PROP. 8" SAN
PROP. 12" STM
12" STM (63)
6" W.M. (51)
ILLUM.
6" W.M. (63)
10" STM (87)
8" STM (70)
1.5" AIR RELEASE ASSEMBLY (SEE DETAIL)
8" W.M. (RELAY) (SEE DETAIL "B")
97TH W.M. CONNECTION
1 - 6" ON 8" TEE
1 - 6" SLEEVE
1 - 8" SLEEVE
2 LIN. FT. OF 6" W.M.
2 LIN. FT. OF 8" W.M.
CURB STOPS TO BE LOCATED 1' NORTH OF PROPOSED F.O.W. ON THE SOUTH SIDE OF WEST LINCOLN AVENUE.
CURB STOPS TO BE LOCATED 1' NORTH OF PROPOSED B.O.W. ON THE NORTH SIDE OF WEST LINCOLN AVENUE.
HYDRANT #1
34 LIN. FT. OF 6" W.M.
SET HYDRANT 3' BEHIND PROPOSED F.O.C.
T.O.C. EL. = 231.29
REMOVE EXISTING HYDRANT
KINSEY'S PARK GARDENS 8

S. 96TH ST.
CSM 1303
PARCEL 2
W. NATIONAL AVE.
8" W.M. (55)
12" STM LEAD (61)
12" W.M. (54)
12" STM (61)
12" STM (31)
8" W.M. (5)
22" GAS (ABAND.)
TELE (2MT D)
TELE (6MT D)
TELE (2-4" SP)
TELE (6-2MT D)
TELE (1-1/2" CP)
TRAFFIC
PROP. CURB
PROP. 15" STM
PROP. 12" W.M.
PROP. 8" W.M.
51 LIN FT OF 1.5" DIA. WATER SERVICE (MOVE TAP TO 103+80.5)
CURB STOP TO BE LOCATED 1' SOUTH OF PROPOSED F.O.W. ON THE NORTH SIDE OF WEST NATIONAL AVENUE.
AVE.
AT&T F.O.
WISDOT F.O.
TDS F.O.
SECTION LINE
SCALE FT.
0 30 60
N

NOTES:
1) THE EXISTING ROADWAY SURFACE IN WEST LINCOLN AVENUE FROM SOUTH 97TH STREET TO SOUTH 96TH STREET IS CONCRETE. THE EXISTING ROADWAY SURFACE IN WEST LINCOLN AVENUE FROM SOUTH 96TH STREET TO WEST NATIONAL AVENUE IS ASPHALT OVER CONCRETE.
2) THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT CONNECTION AND CROSSING POINTS TO VERIFY ELEVATIONS PRIOR TO INSTALLATION OF THE WATER MAIN.
3) AT CROSSINGS, ONE FULL LENGTH (SOLID PIECE) OF PIPE SHALL BE CENTERED ABOVE OR BELOW THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE.
4) WET CONNECTS ARE TO BE LIMITED TO ONE PIPE LENGTH.
5) A NO-CONTACT LEAD PAK COMPRESSION FITTING SHALL BE USED TO PREVENT THE DIRECT CONTACT OF LEAD PLUMBING LINES WITH OTHER METALLIC WATER SYSTEM COMPONENTS. AN APPROVED PRODUCT IS MADE BY THE FORD METER COMPANY.
6) ALL RECONNECTS MUST BE LEAK CHECKED PRIOR TO TAPING AND BACK FILL.
7) CONTRACTOR MAY USE 12" D.I.W.M. CL 53 R.G.J. (IN DOUBLE POLYETHYLENE WRAP) OR C-900 DR-18 AS PIPE MATERIAL.
8) CONTRACTOR MAY USE 8" D.I.W.M. CL 53 R.G.J. (IN DOUBLE POLYETHYLENE WRAP) OR C-900 DR-18 AS PIPE MATERIAL

WISCONSIN
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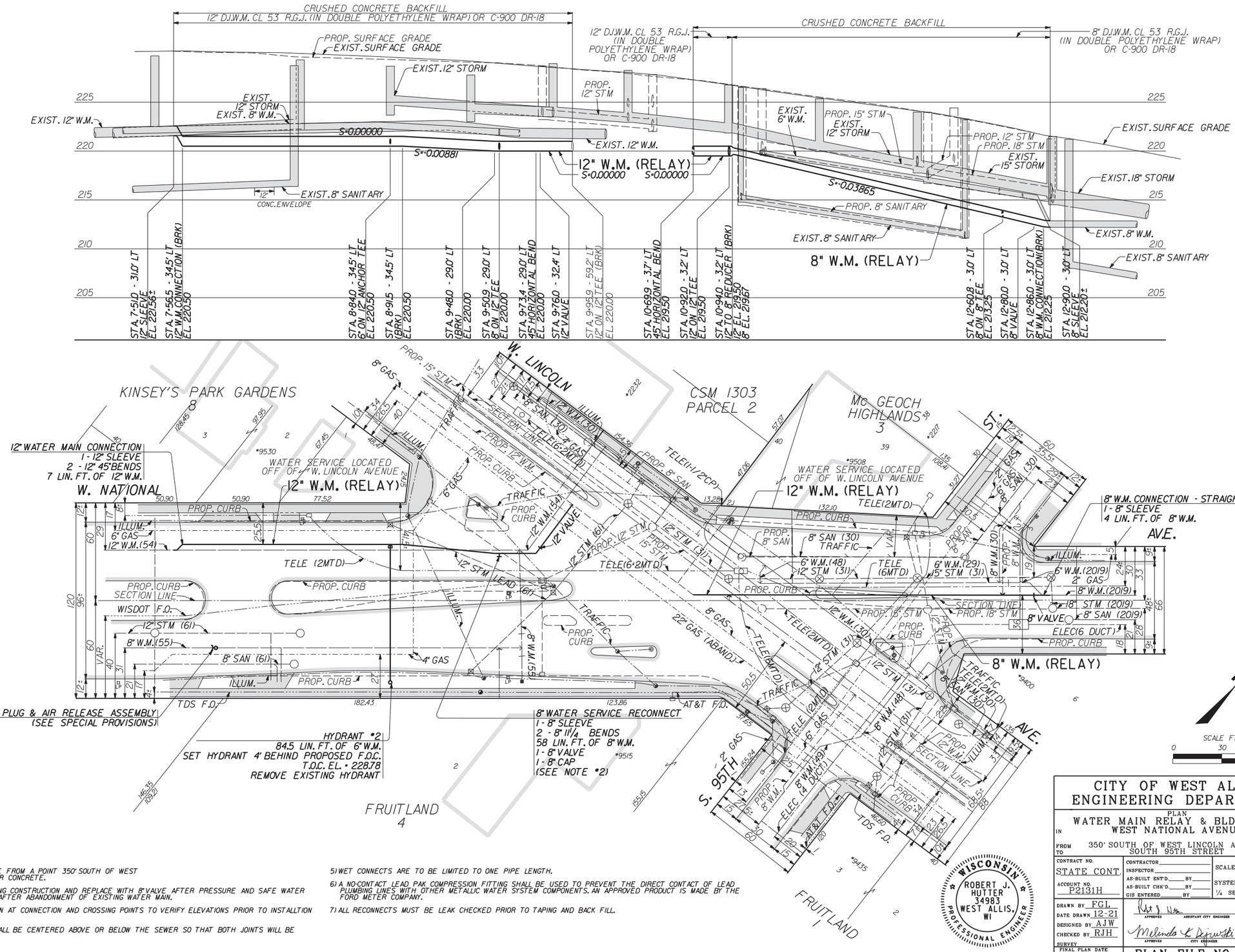
WEST ALLIS, WI
PROFESSIONAL ENGINEER

CITY OF WEST ALLIS
ENGINEERING DEPARTMENT

PLAN
WATER MAIN RELAY & BLDG. SERV.
IN WEST LINCOLN AVENUE
FROM SOUTH 97TH STREET
TO WEST NATIONAL AVENUE

CONTRACT NO. STATE CONT.	CONTRACTOR	HOR. 1"=60'
ACCOUNT NO. P2131H	INSPECTOR	SCALE: VERT. 1"=10'
	AS-BUILT ENT'D BY	SYSTEM NO. SS-11, SS-20
	AS-BUILT CHK'D BY	1/4 SEC. NO. 479, 486
	GIS ENTERED BY	
DRAWN BY FGL	Robert J. Hutter APPROVED ASSISTANT CITY ENGINEER	11-01-24 DATE
DATE DRAWN 12-21		
DESIGNED BY AJW		
CHECKED BY RJH	Melinda K Dejwski APPROVED CITY ENGINEER	11-01-24 DATE
SURVEY FINAL PLAN DATE	PLAN FILE NO. W-1462	

PROJECT NO: 2110-03-71 | HWY: WEST LINCOLN AVENUE | COUNTY: MILWAUKEE | WATER MAIN PLAN | SHEET 52



NOTES:

1) THE EXISTING ROADWAY SURFACE IN WEST NATIONAL AVENUE FROM A POINT 350' SOUTH OF WEST LINCOLN AVENUE TO SOUTH 95TH STREET IS ASPHALT OVER CONCRETE.

2) INSTALL ONE TEMPORARY 8" CAP ON NEW ANCHOR TEE DURING CONSTRUCTION AND REPLACE WITH 8" VALVE AFTER PRESSURE AND SAFE WATER TESTING. 8" WATER SERVICE RECONNECT TO BE INSTALLED AFTER ABANDONMENT OF EXISTING WATER MAIN.

3) THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT CONNECTION AND CROSSING POINTS TO VERIFY ELEVATIONS PRIOR TO INSTALLTION OF THE WATER MAIN.

4) AT CROSSINGS, ONE FULL LENGTH (SOLID PIECE) OF PIPE SHALL BE CENTERED ABOVE OR BELOW THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE.

5) WET CONNECTS ARE TO BE LIMITED TO ONE PIPE LENGTH.

6) A NO-CONTACT LEAD PAK COMPRESSION FITTING SHALL BE USED TO PREVENT THE DIRECT CONTACT OF LEAD PLUMBING LINES WITH OTHER METALLIC WATER SYSTEM COMPONENTS. AN APPROVED PRODUCT IS MADE BY THE FORD METER COMPANY.

7) ALL RECONNECTS MUST BE LEAK CHECKED PRIOR TO TAPING AND BACK FILL.

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34983
WEST ALLIS, WI
PROFESSIONAL ENGINEER

CITY OF WEST ALLIS
ENGINEERING DEPARTMENT

PLAN
WATER MAIN RELAY & BLDG. SERV.
IN WEST NATIONAL AVENUE
FROM 350' SOUTH OF WEST LINCOLN AVENUE
TO SOUTH 95TH STREET

CONTRACT NO. STATE CONT.	CONTRACTOR
ACCOUNT NO. P2131H	INSPECTOR
DRAWN BY FGL	AS-BUILT ENT'D. BY
DATE DRAWN 12-21	AS-BUILT CHK'D. BY
DESIGNED BY AJW	GIS ENTERED BY
CHECKED BY RJH	SCALE HOR. 1"=60' VERT. 1"=10'
SURVEY FINAL PLAN DATE	SYSTEM NO. SS-11, SS-20
	¼ SEC. NO. 479, 486

APPROVED ASSISTANT CITY ENGINEER DATE 11-01-24
APPROVED CITY ENGINEER DATE 11-01-24

PLAN FILE NO. W-1463

PROJECT NO: 2110-03-71	HWY: WEST LINCOLN AVENUE	COUNTY: MILWAUKEE	WATER MAIN PLAN	SHEET 53

CRUSHED CONCRETE BACKFILL
12" DI.W.M. CL 53 R.G.J. (IN DOUBLE POLYETHYLENE WRAP) OR C-900 DR-18

EXIST. SURFACE GRADE
PROP. SURFACE GRADE
EXIST. 12" STORM
PROP. 12" STM
EXIST. 12" W.M.
S=-0.03040
S=-0.01174
S=0.00375
S=0.00000
S=-0.02286
12" W.M. (RELAY)
EXIST. 15" STORM
EXIST. 8" SANITARY
PROP. 8" SANITARY
PROP. 15" STM
EXIST. 15" STM
EXIST. 12" W.M.
EXIST. 8" SANITARY

STA. 104+10.2 - 9.1' LT
12" ON 12" TEE (BRK)
EL 219.50

STA. 104+12.5 - 6.5' LT
45° HORIZONTAL BEND
EL 219.42

STA. 105+08.9 - 6.5' LT
8" ON 12" TEE (BRK)
12" EL 216.50
8" EL 216.67

STA. 105+43.0 - 6.5' LT
12" VALVE

STA. 105+51.5 - 6.5' LT
6" ON 12" ANCHOR TEE (BRK)
EL 216.00

STA. 105+63.0 - 6.5' LT
11.25° HORIZONTAL BEND
EL 216.04

STA. 106+41.0 - 22.0' LT
11.25° HORIZONTAL BEND
EL 216.34

STA. 108+18.0 - 22.0' LT
6" ON 12" ANCHOR TEE (BRK)
EL 217.00

STA. 108+50.0 - 22.0' LT
6" ON 12" ANCHOR TEE (BRK)
EL 217.00

STA. 109+93.2 - 22.0' LT
6" ON 12" TEE
12" EL 213.73

STA. 111+65.0 - 22.0' LT
12" W.M. CONNECTION (BRK)
EL 209.80

STA. 111+67.0 - 22.0' LT
12" SLEEVE
EL 209.75±

HYDRANT #4
29 LIN. FT. OF 6" W.M.
SET HYDRANT 3' BEHIND PROPOSED F.O.C.
T.O.C. EL. = 224.80
REMOVE EXISTING HYDRANT

HYDRANT #3
42.5 LIN. FT. OF 6" W.M.
SET HYDRANT 4' BEHIND PROPOSED F.O.C.
T.O.C. EL. = 224.60
REMOVE EXISTING HYDRANT

HYDRANT #5
60 LIN. FT. OF 6" W.M.
SET HYDRANT 4' BEHIND PROPOSED F.O.C.
T.O.C. EL. = 224.86
REMOVE EXISTING HYDRANT

CURB STOPS TO BE LOCATED 1' NORTH OF PROPOSED F.O.W. ON THE SOUTH SIDE OF WEST LINCOLN AVENUE.

CURB STOPS TO BE LOCATED 1' NORTH OF PROPOSED B.O.W. ON THE NORTH SIDE OF WEST LINCOLN AVENUE.

6" WATER SERVICE RECONNECT
1 - 6" SLEEVE
2 - 6" 11¼ BENDS
60 LIN. FT. OF 6" W.M.
1 - 6" VALVE
1 - 6" CAP
(SEE NOTE #2)

12" WATER MAIN CONNECTION - STRAIGHT
1 - 12" SLEEVE
2 LIN. FT. OF 12" W.M.
(REMOVE 45° BEND INSTALLED IN 2022)

WATER SERVICE LOCATED OFF OF S. 95TH STREET

Mc GEOCH HIGHLANDS 5
Mc GEOCH HIGHLANDS 6
FRUITLAND 4
FRUITLAND 1
PRESIDENT HEIGHTS 1
UNPLATTED LANDS

W. NATIONAL AVE.
W. LINCOLN AVE.
S. 94TH ST.
S. 95TH ST.
S. 93RD ST.

NOTES:

1) THE EXISTING ROADWAY SURFACE IN WEST LINCOLN AVENUE FROM WEST NATIONAL AVENUE TO SOUTH 93RD STREET IS ASPHALT OVER CONCRETE.

2) INSTALL ONE TEMPORARY 6" CAP ON NEW ANCHOR TEE DURING CONSTRUCTION AND REPLACE WITH 6" VALVE AFTER PRESSURE AND SAFE WATER TESTING. 6" WATER SERVICE RECONNECT TO BE INSTALLED AFTER ABANDONMENT OF EXISTING WATER MAIN.

3) THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT CONNECTION AND CROSSING POINTS TO VERIFY ELEVATIONS PRIOR TO INSTALLATION OF THE WATER MAIN.

4) AT CROSSINGS, ONE FULL LENGTH (SOLID PIECE) OF PIPE SHALL BE CENTERED ABOVE OR BELOW THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE.

5) WET CONNECTS ARE TO BE LIMITED TO ONE PIPE LENGTH.

6) A NO-CONTACT LEAD PAK COMPRESSION FITTING SHALL BE USED TO PREVENT THE DIRECT CONTACT OF LEAD PLUMBING LINES WITH OTHER METALLIC WATER SYSTEM COMPONENTS. AN APPROVED PRODUCT IS MADE BY THE FORD METER COMPANY.

7) ALL RECONNECTS MUST BE LEAK CHECKED PRIOR TO TAPING AND BACK FILL.

SCALE FT. 0 30 60

WISCONSIN
ROBERT J. HUTTER
34983
WEST ALLIS, WI
PROFESSIONAL ENGINEER

CITY OF WEST ALLIS
ENGINEERING DEPARTMENT

PLAN
WATER MAIN RELAY & BLDG. SERV.
IN WEST LINCOLN AVENUE
FROM WEST NATIONAL AVENUE
TO SOUTH 93RD STREET

CONTRACT NO. STATE CONT.
ACCOUNT NO. P2131H
DRAWN BY FGL
DATE DRAWN 12-21
DESIGNED BY AJW
CHECKED BY RJH
SURVEY
FINAL PLAN DATE

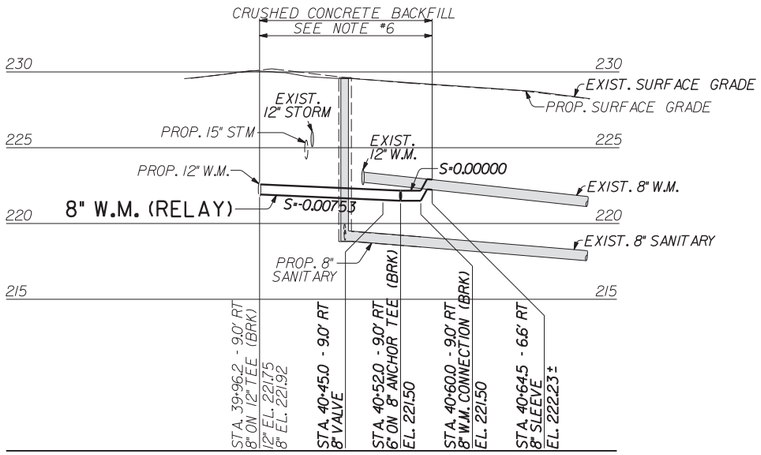
CONTRACTOR
INSPECTOR
AS-BUILT ENT'D BY
AS-BUILT CHK'D BY
GIS ENTERED BY

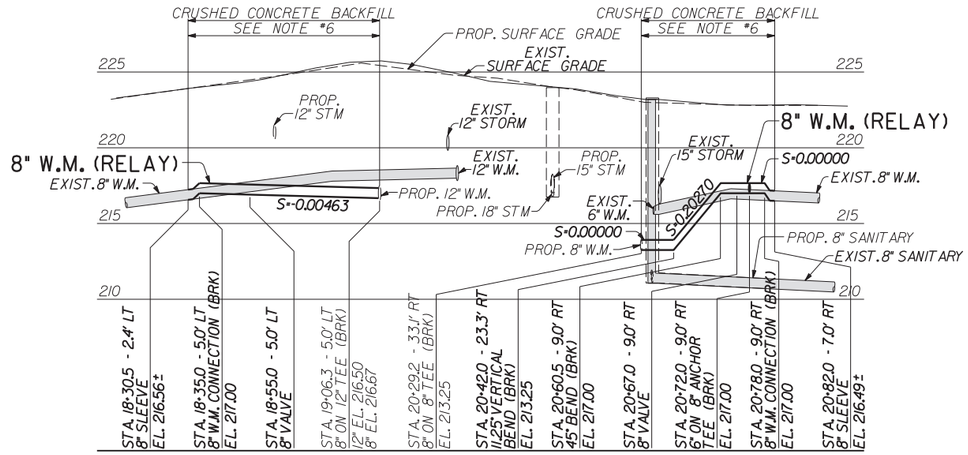
SCALE: HOR. 1"=60'
VERT. 1"=10'
SYSTEM NO. SS-11, SS-20
¼ SEC. NO. 479, 486

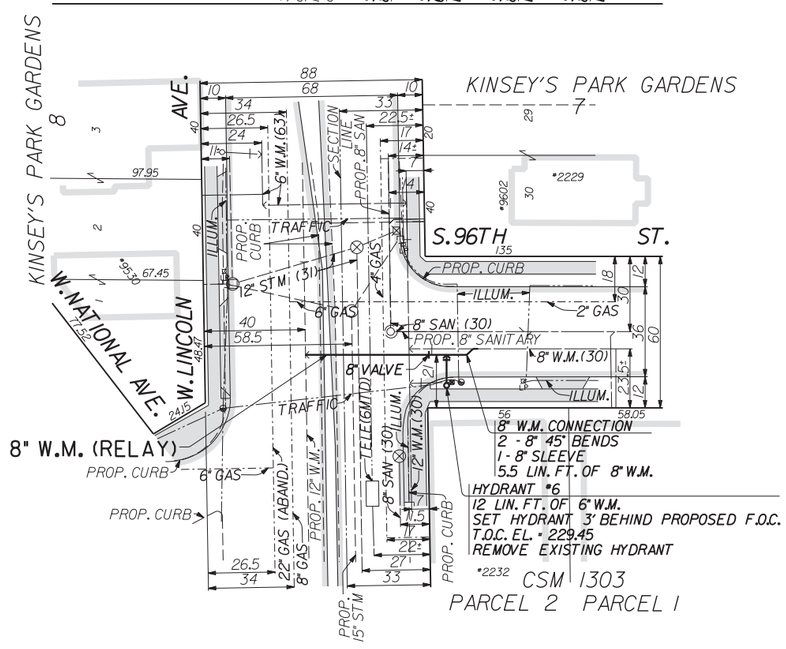
APPROVED ASSISTANT CITY ENGINEER 11-01-24
APPROVED CITY ENGINEER 11-01-24

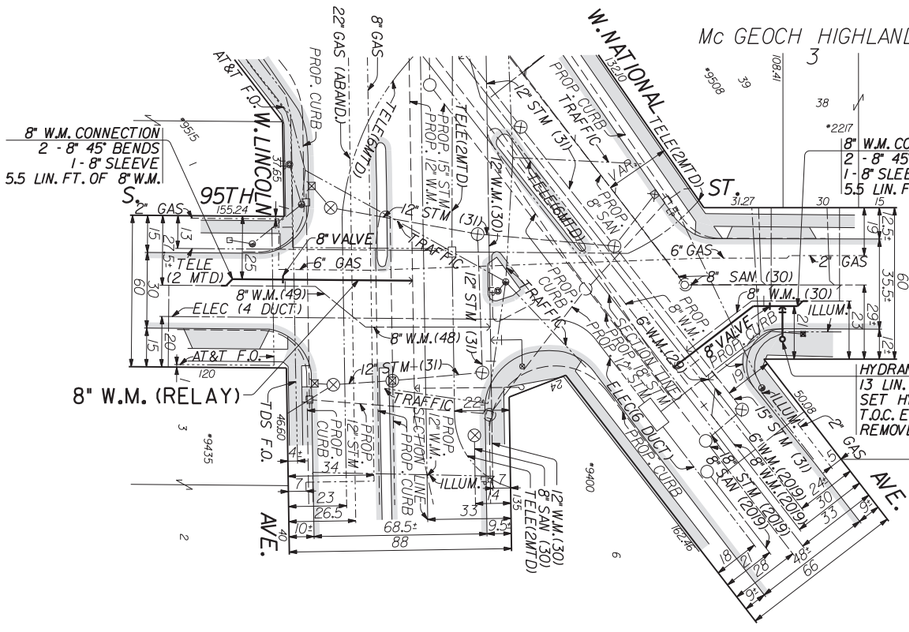
PLAN FILE NO. W-1464

PROJECT NO: 2110-03-71 | HWY: WEST LINCOLN AVENUE | COUNTY: MILWAUKEE | WATER MAIN PLAN | SHEET 54









WISCONSIN
ROBERT J. HUTTER
34983
WEST ALLIS, WI
PROFESSIONAL ENGINEER

NOTES:

1) THE EXISTING ROADWAY SURFACE IN WEST LINCOLN AVENUE AND WEST NATIONAL AVENUE IS ASPHALT OVER CONCRETE.
2) THE EXISTING ROADWAY SURFACE IN SOUTH 95TH STREET AND SOUTH 96TH STREET IS CONCRETE.
3) THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT CONNECTION AND CROSSING POINTS TO VERIFY ELEVATIONS PRIOR TO INSTALLATION OF THE WATER MAIN.
4) AT CROSSINGS, ONE FULL LENGTH (SOLID PIECE) OF PIPE SHALL BE CENTERED ABOVE OR BELOW THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE.
5) WET CONNECTS ARE TO BE LIMITED TO ONE PIPE LENGTH.
6) CONTRACTOR MAY USE 8" DJ W.M. CL 53 R.G.J. (IN DOUBLE POLYETHYLENE WRAP) OR C-900 DR-18 AS PIPE MATERIAL.

N

SCALE FT.
0 30 60

CITY OF WEST ALLIS
ENGINEERING DEPARTMENT

PLAN WATER MAIN RELAY & BLDG. SERV.
IN SOUTH 95TH & 96TH STREET

FROM WEST NATIONAL AVENUE
TO SOUTH 93RD STREET

CONTRACT NO. STATE CONT.	CONTRACTOR	HOR. 1"=60'
ACCOUNT NO. P2131H	INSPECTOR	VERT. 1"=10'
	AS-BUILT ENT'D BY	SYSTEM NO. SS-11, SS-20
	AS-BUILT CHK'D BY	¼ SEC. NO. 479, 486
	GIS ENTERED BY	
DRAWN BY FGL	APPROVED ASSISTANT CITY ENGINEER	DATE 11-01-24
DATE DRAWN 12-21		
DESIGNED BY AJW		
CHECKED BY RJH	APPROVED CITY ENGINEER	DATE 11-01-24
SURVEY FINAL PLAN DATE	PLAN FILE NO. W-1465	

PROJECT NO: 2110-03-71	HWY: WEST LINCOLN AVENUE	COUNTY: MILWAUKEE	WATER MAIN PLAN	SHEET 55

2

LEGEND

- (XXX) SIGN NUMBER
- (ESTR) EXISTING SIGN TO REMAIN
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON UTILITY POLE OR MAST ARM
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON UTILITY POLE OR MAST ARM
- (X) INDICATES SIGN SIZE

N

S 97 ST
W LINCOLN AV
ESTR

R3-17(2S)
BIKE LANE
ENDS
1-1
1-2
R3-17B(2S)

SPEED LIMIT 30
REMOVE

1-8
SPEED LIMIT 30
R2-1(2S)

NO PARKING ANY TIME
REMOVE

W. LINCOLN AVENUE

BEGIN PROJECT
STA. 98+42.00

MATCH LINE STA. 101+00

ESTR

STOP
ESTR

1-3
BIKE LANE
R3-17(2S)

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

1-5
H
D9-2(2S)
REMOVE

1-6
MB6-1(2S)

1-7
NO PARKING ANY TIME
REMOVE

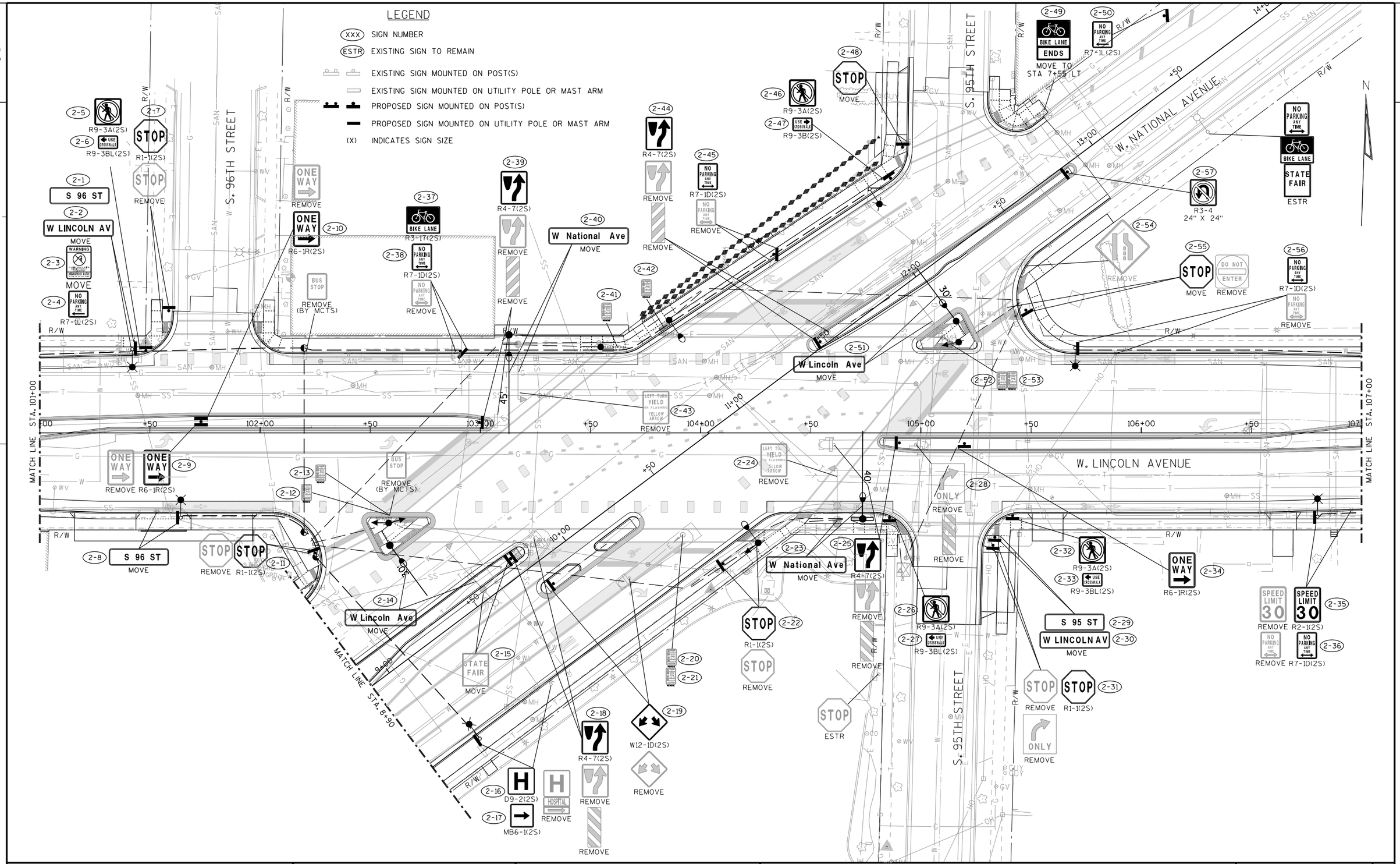
S. 97TH STREET

R/W

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 56	E

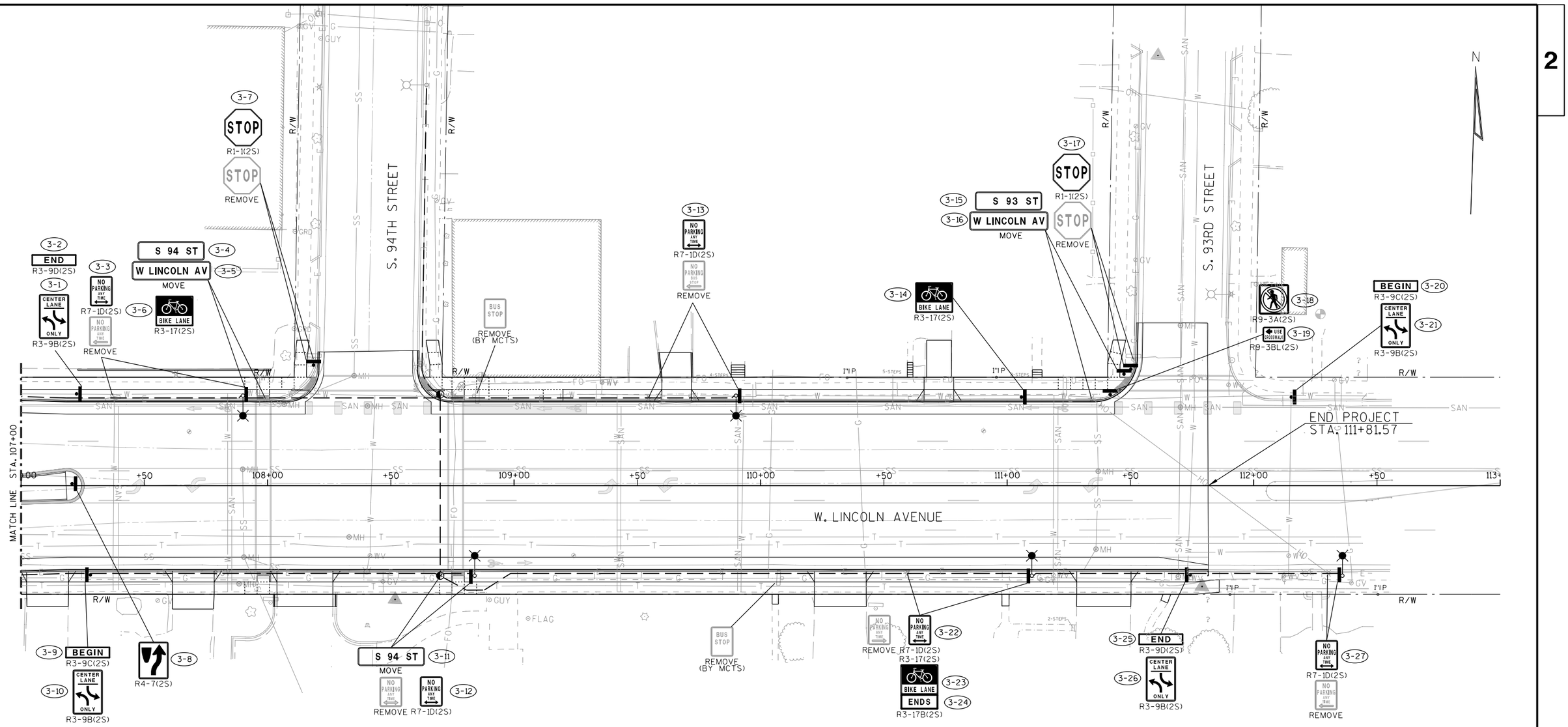
FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\023201_ps.dgn PLOT DATE : 11/1/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 40.0000 sf / in.

WISDOT/CADDS SHEET 42



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 57	E

2



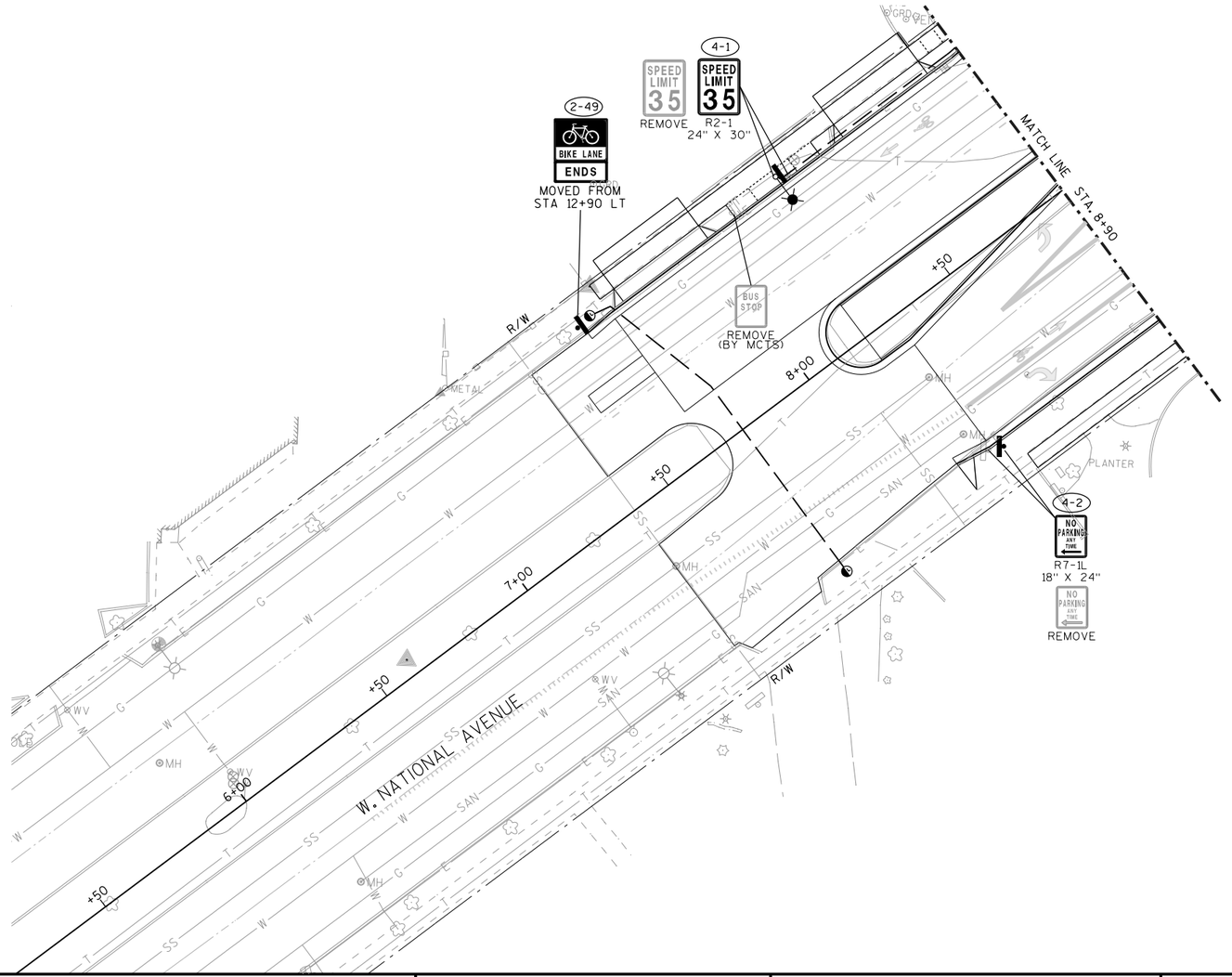
LEGEND

- (XXX) SIGN NUMBER
- (ESTR) EXISTING SIGN TO REMAIN
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON UTILITY POLE OR MAST ARM
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON UTILITY POLE OR MAST ARM
- (X) INDICATES SIGN SIZE

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 58	E

2

N

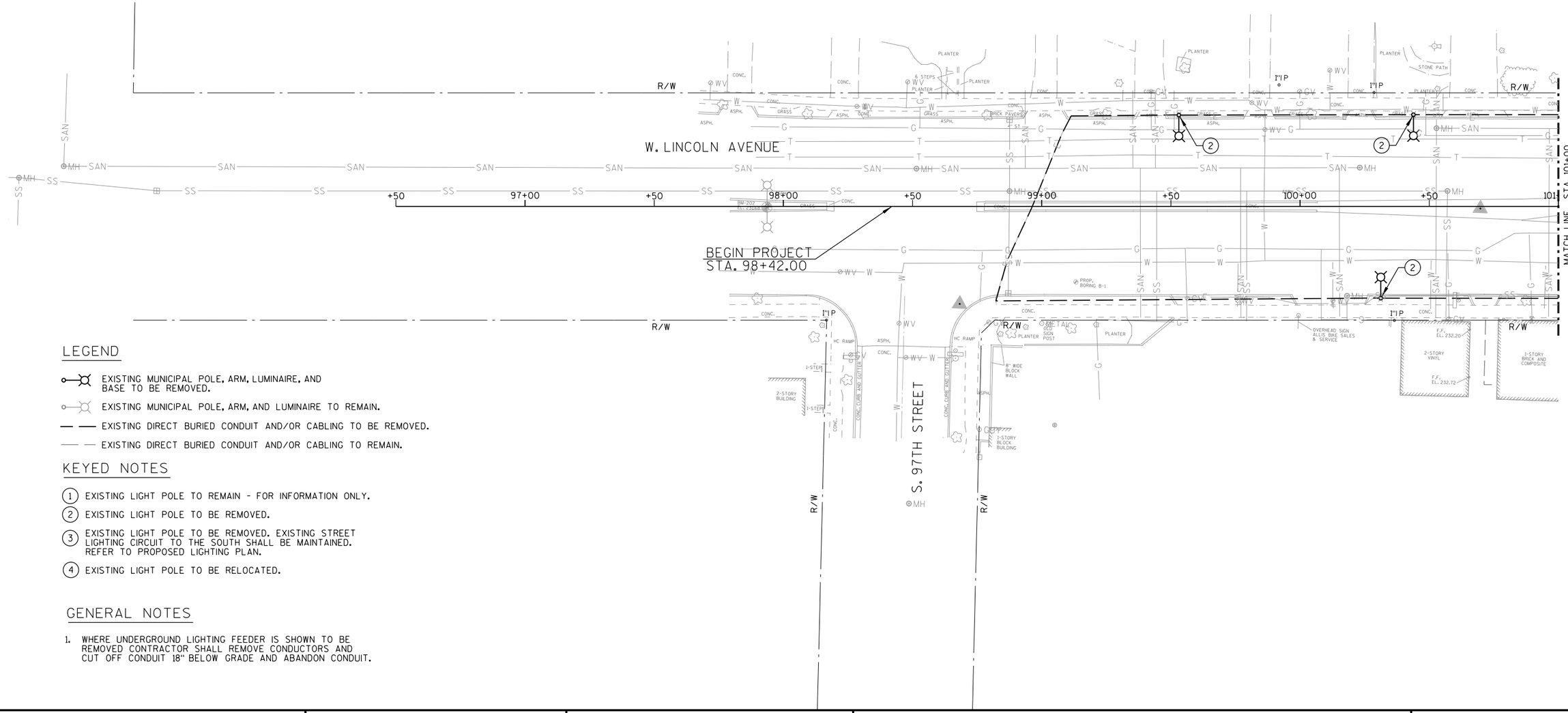


LEGEND

- (XXX) SIGN NUMBER
- (ESTR) EXISTING SIGN TO REMAIN
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON UTILITY POLE OR MAST ARM
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON UTILITY POLE OR MAST ARM
- (X) INDICATES SIGN SIZE

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 59	E

2



LEGEND

- EXISTING MUNICIPAL POLE, ARM, LUMINAIRE, AND BASE TO BE REMOVED.
- EXISTING MUNICIPAL POLE, ARM, AND LUMINAIRE TO REMAIN.
- EXISTING DIRECT BURIED CONDUIT AND/OR CABLING TO BE REMOVED.
- EXISTING DIRECT BURIED CONDUIT AND/OR CABLING TO REMAIN.

KEYED NOTES

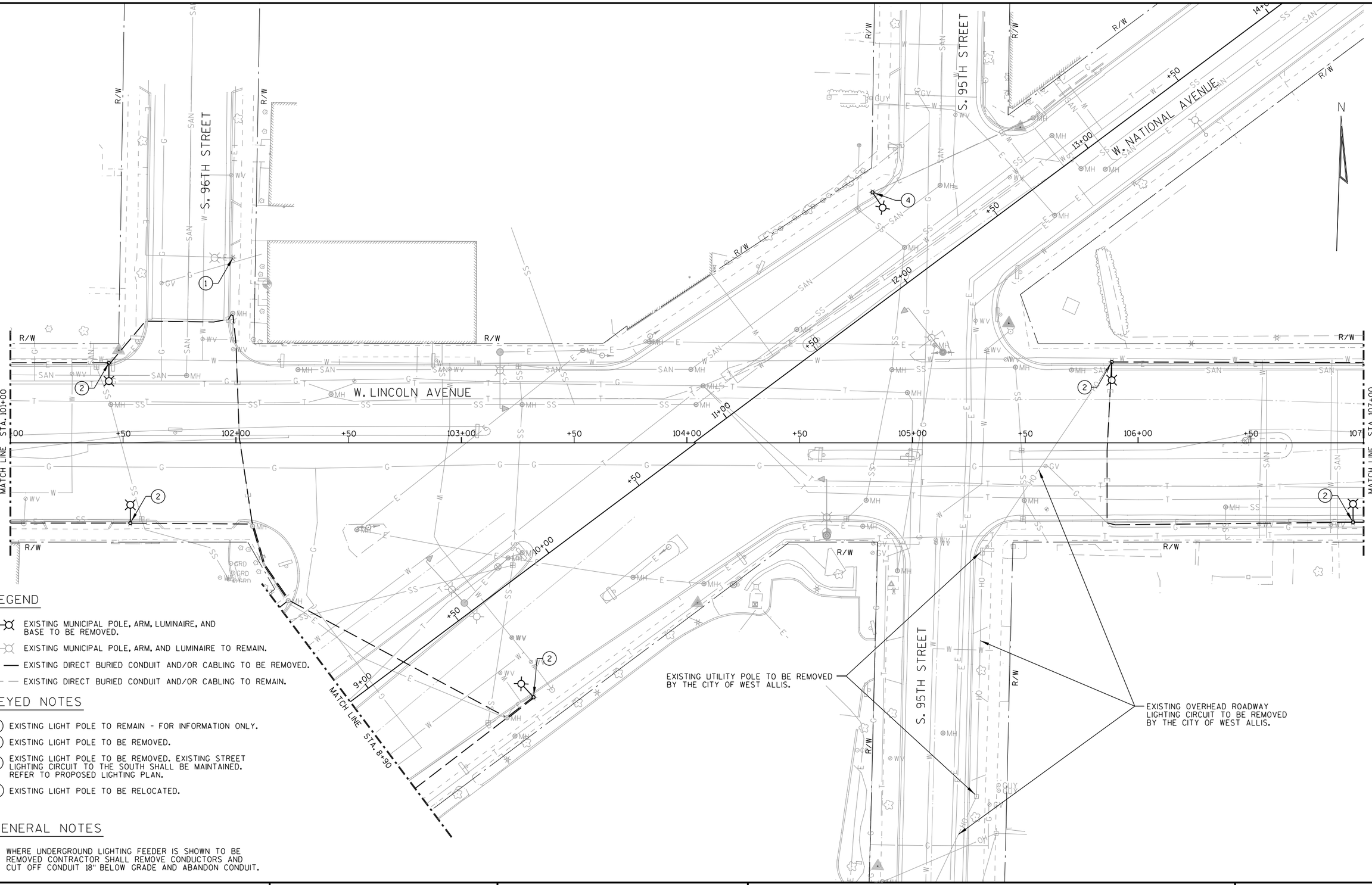
1. EXISTING LIGHT POLE TO REMAIN - FOR INFORMATION ONLY.
2. EXISTING LIGHT POLE TO BE REMOVED.
3. EXISTING LIGHT POLE TO BE REMOVED. EXISTING STREET LIGHTING CIRCUIT TO THE SOUTH SHALL BE MAINTAINED. REFER TO PROPOSED LIGHTING PLAN.
4. EXISTING LIGHT POLE TO BE RELOCATED.

GENERAL NOTES

1. WHERE UNDERGROUND LIGHTING FEEDER IS SHOWN TO BE REMOVED CONTRACTOR SHALL REMOVE CONDUCTORS AND CUT OFF CONDUIT 18" BELOW GRADE AND ABANDON CONDUIT.

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	LIGHTING REMOVAL PLAN	SHEET 60	E

2



LEGEND

- EXISTING MUNICIPAL POLE, ARM, LUMINAIRE, AND BASE TO BE REMOVED.
- EXISTING MUNICIPAL POLE, ARM, AND LUMINAIRE TO REMAIN.
- EXISTING DIRECT BURIED CONDUIT AND/OR CABLING TO BE REMOVED.
- EXISTING DIRECT BURIED CONDUIT AND/OR CABLING TO REMAIN.

KEYED NOTES

(1) EXISTING LIGHT POLE TO REMAIN - FOR INFORMATION ONLY.

(2) EXISTING LIGHT POLE TO BE REMOVED.

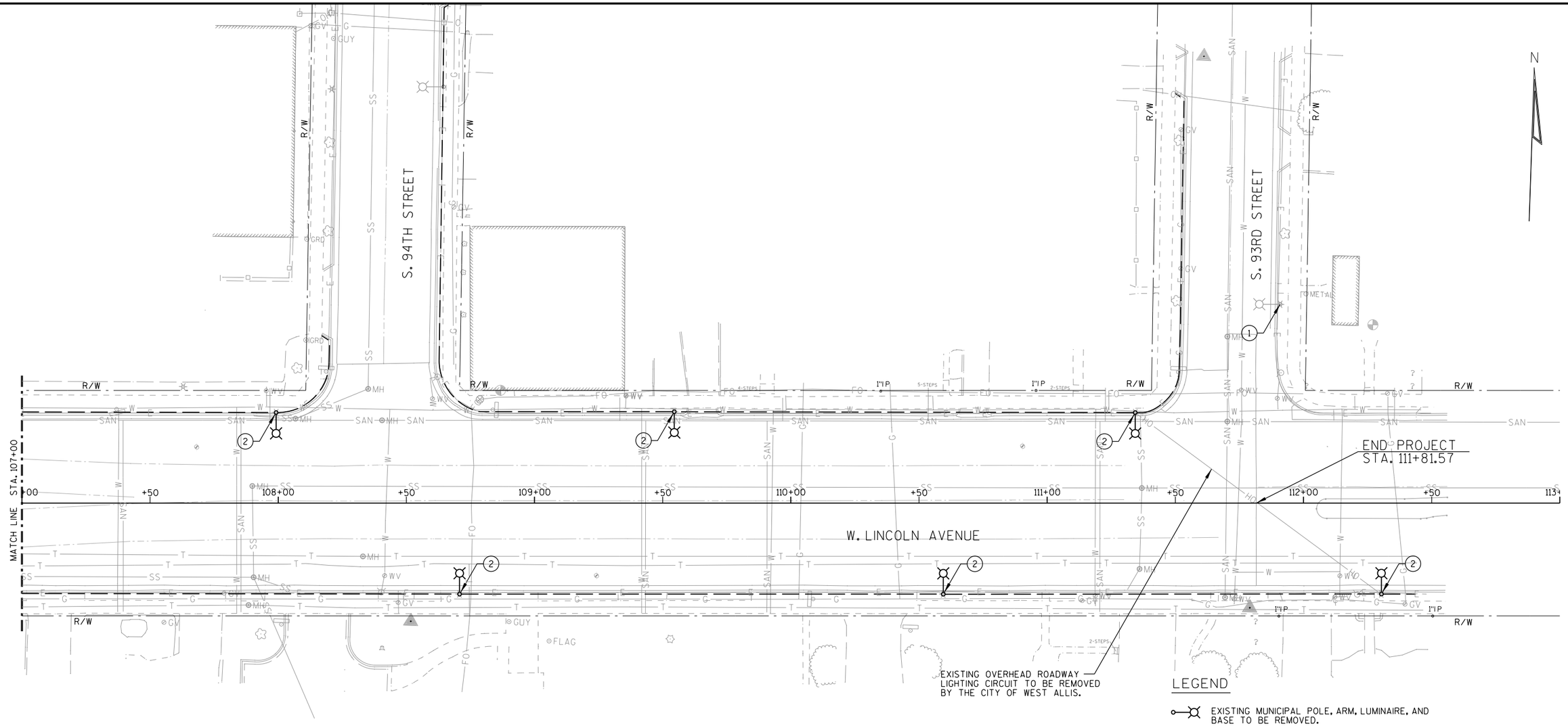
(3) EXISTING LIGHT POLE TO BE REMOVED. EXISTING STREET LIGHTING CIRCUIT TO THE SOUTH SHALL BE MAINTAINED. REFER TO PROPOSED LIGHTING PLAN.

(4) EXISTING LIGHT POLE TO BE RELOCATED.

GENERAL NOTES

1. WHERE UNDERGROUND LIGHTING FEEDER IS SHOWN TO BE REMOVED CONTRACTOR SHALL REMOVE CONDUCTORS AND CUT OFF CONDUIT 18" BELOW GRADE AND ABANDON CONDUIT.

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	LIGHTING REMOVAL PLAN	SHEET 61	E



LEGEND

- EXISTING MUNICIPAL POLE, ARM, LUMINAIRE, AND BASE TO BE REMOVED.
- EXISTING MUNICIPAL POLE, ARM, AND LUMINAIRE TO REMAIN.
- EXISTING DIRECT BURIED CONDUIT AND/OR CABLING TO BE REMOVED.
- EXISTING DIRECT BURIED CONDUIT AND/OR CABLING TO REMAIN.

KEYED NOTES

(1) EXISTING LIGHT POLE TO REMAIN - FOR INFORMATION ONLY.

(2) EXISTING LIGHT POLE TO BE REMOVED.

(3) EXISTING LIGHT POLE TO BE REMOVED. EXISTING STREET LIGHTING CIRCUIT TO THE SOUTH SHALL BE MAINTAINED. REFER TO PROPOSED LIGHTING PLAN.

(4) EXISTING LIGHT POLE TO BE RELOCATED.

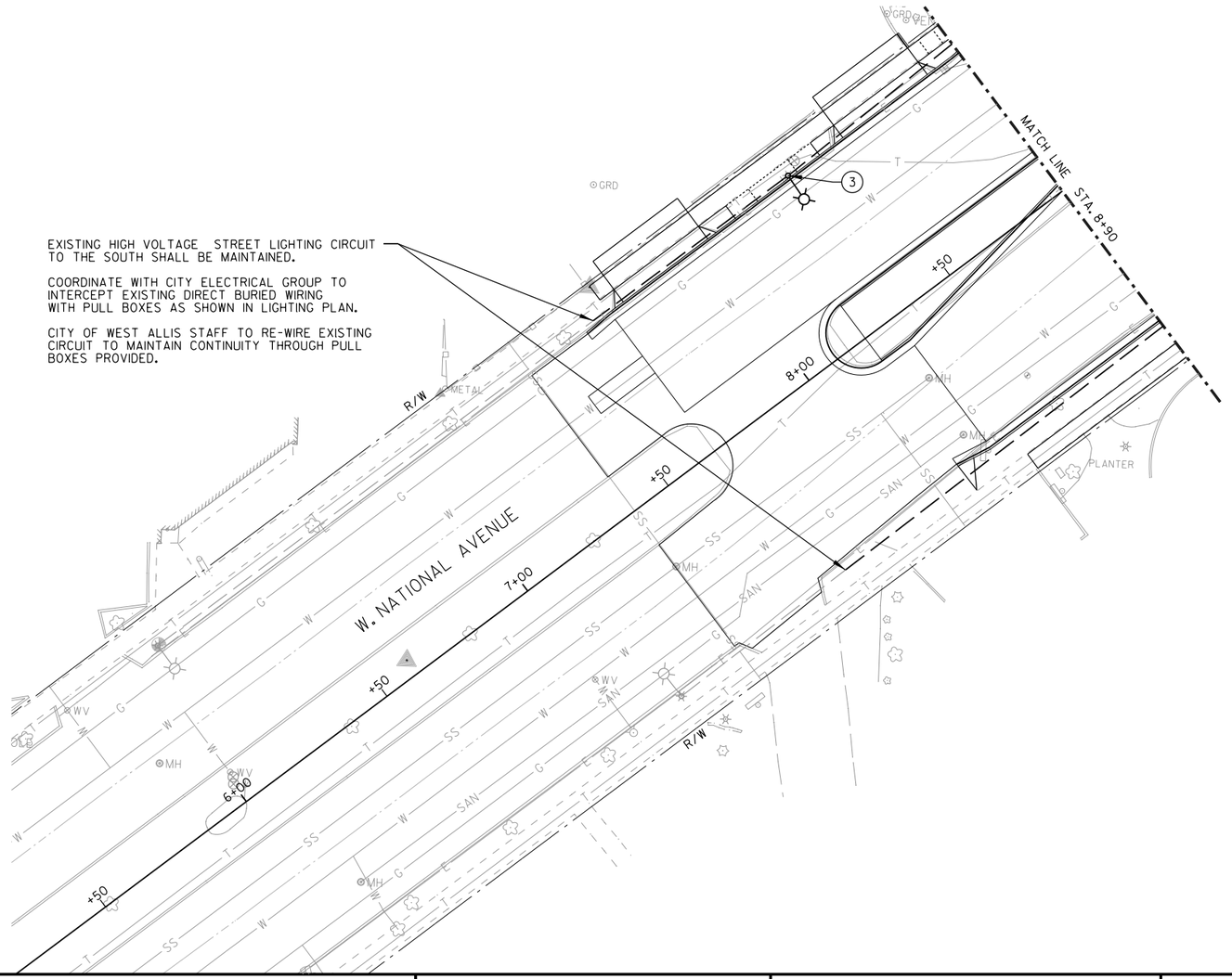
GENERAL NOTES

1. WHERE UNDERGROUND LIGHTING FEEDER IS SHOWN TO BE REMOVED CONTRACTOR SHALL REMOVE CONDUCTORS AND CUT OFF CONDUIT 18" BELOW GRADE AND ABANDON CONDUIT.

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	LIGHTING REMOVAL PLAN	SHEET 62	E

2

N



LEGEND

- EXISTING MUNICIPAL POLE, ARM, LUMINAIRE, AND BASE TO BE REMOVED.
- EXISTING MUNICIPAL POLE, ARM, AND LUMINAIRE TO REMAIN.
- EXISTING DIRECT BURIED CONDUIT AND/OR CABLING TO BE REMOVED.
- EXISTING DIRECT BURIED CONDUIT AND/OR CABLING TO REMAIN.

KEYED NOTES

1. EXISTING LIGHT POLE TO REMAIN - FOR INFORMATION ONLY.
2. EXISTING LIGHT POLE TO BE REMOVED.
3. EXISTING LIGHT POLE TO BE REMOVED. EXISTING STREET LIGHTING CIRCUIT TO THE SOUTH SHALL BE MAINTAINED. REFER TO PROPOSED LIGHTING PLAN.
4. EXISTING LIGHT POLE TO BE RELOCATED.

GENERAL NOTES

1. WHERE UNDERGROUND LIGHTING FEEDER IS SHOWN TO BE REMOVED CONTRACTOR SHALL REMOVE CONDUCTORS AND CUT OFF CONDUIT 18" BELOW GRADE AND ABANDON CONDUIT.

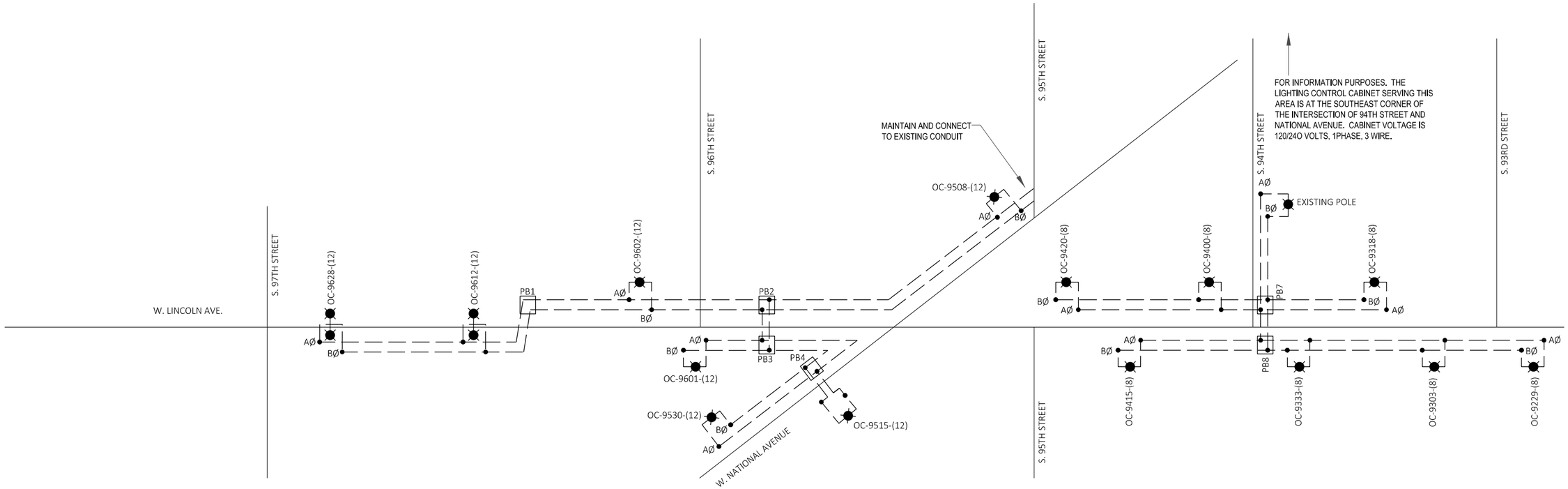
PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	LIGHTING REMOVAL PLAN	SHEET 63	E

GENERAL NOTE

1. GROUNDING CONDUCTOR NOT SHOWN, BUT REQUIRED.

LIGHTING LEGEND

- LED LUMINAIRE
- SPLICE



CIRCUITING DIAGRAM - (120/240V)

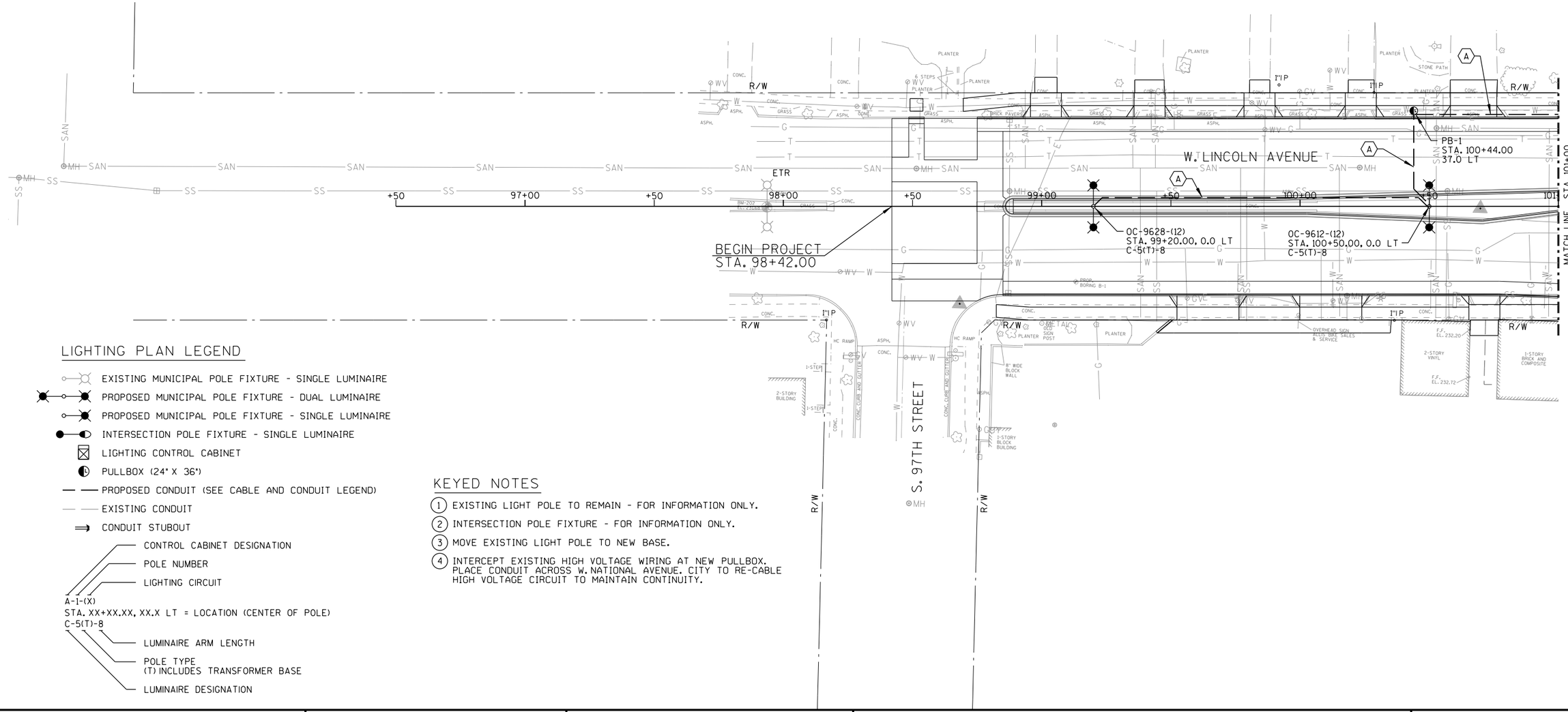
NTS

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	LIGHTING CIRCUIT DIAGRAM	SHEET 64	E

CABLE AND CONDUIT LEGEND

- (A) 2 #6 AWG AND 1 #6 GROUND IN 2" RIGID SCHEDULE 40 NONMETALLIC CONDUIT
- (B) 4 #6 AWG AND 1 #6 GROUND IN 2" RIGID SCHEDULE 40 NONMETALLIC CONDUIT
- (C) 2" EMPTY RIGID SCHEDULE 40 NONMETALLIC CONDUIT
- (D) 2 #6 AWG AND 1 #6 GROUND IN 2" RIGID SCHEDULE 40 NONMETALLIC CONDUIT DIRECTIONAL BORE.
- (E) 2" EMPTY RIGID SCHEDULE 40 NONMETALLIC CONDUIT DIRECTIONAL BORE.

N



LIGHTING PLAN LEGEND

- EXISTING MUNICIPAL POLE FIXTURE - SINGLE LUMINAIRE
- PROPOSED MUNICIPAL POLE FIXTURE - DUAL LUMINAIRE
- PROPOSED MUNICIPAL POLE FIXTURE - SINGLE LUMINAIRE
- INTERSECTION POLE FIXTURE - SINGLE LUMINAIRE
- LIGHTING CONTROL CABINET
- PULLBOX (24" X 36")
- PROPOSED CONDUIT (SEE CABLE AND CONDUIT LEGEND)
- EXISTING CONDUIT
- CONDUIT STUBOUT

A-1-(X)
- CONTROL CABINET DESIGNATION
- POLE NUMBER
- LIGHTING CIRCUIT

STA. XX+XX.XX, XX.X LT = LOCATION (CENTER OF POLE)

C-5(T)-8
- LUMINAIRE ARM LENGTH
- POLE TYPE (T) INCLUDES TRANSFORMER BASE
- LUMINAIRE DESIGNATION

KEYED NOTES

1. EXISTING LIGHT POLE TO REMAIN - FOR INFORMATION ONLY.
2. INTERSECTION POLE FIXTURE - FOR INFORMATION ONLY.
3. MOVE EXISTING LIGHT POLE TO NEW BASE.
4. INTERCEPT EXISTING HIGH VOLTAGE WIRING AT NEW PULLBOX. PLACE CONDUIT ACROSS W. NATIONAL AVENUE. CITY TO RE-CABLE HIGH VOLTAGE CIRCUIT TO MAINTAIN CONTINUITY.

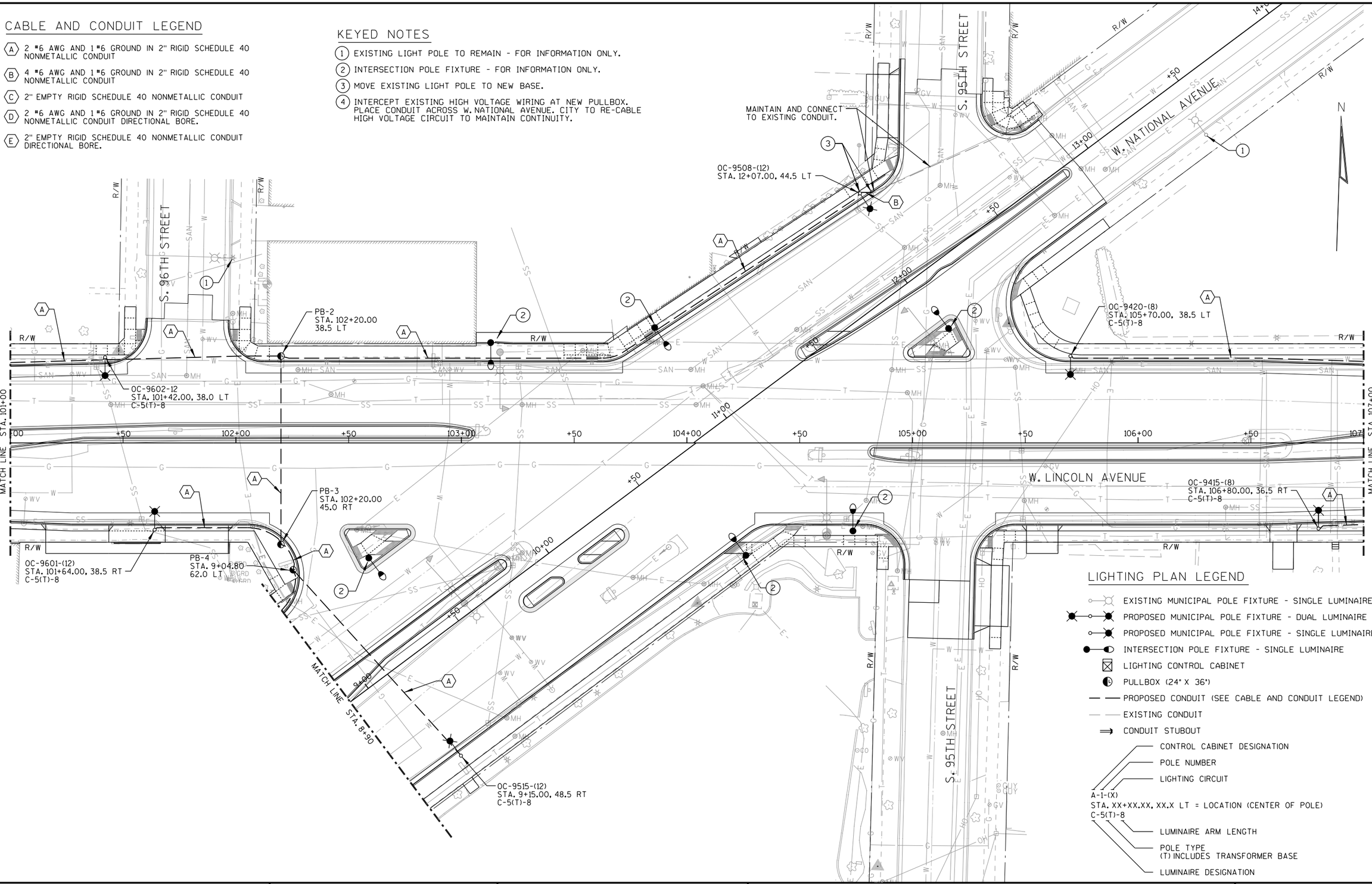
PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	LIGHTING PLAN	SHEET 65	E

CABLE AND CONDUIT LEGEND

- (A) 2 #6 AWG AND 1 #6 GROUND IN 2" RIGID SCHEDULE 40 NONMETALLIC CONDUIT
- (B) 4 #6 AWG AND 1 #6 GROUND IN 2" RIGID SCHEDULE 40 NONMETALLIC CONDUIT
- (C) 2" EMPTY RIGID SCHEDULE 40 NONMETALLIC CONDUIT
- (D) 2 #6 AWG AND 1 #6 GROUND IN 2" RIGID SCHEDULE 40 NONMETALLIC CONDUIT DIRECTIONAL BORE.
- (E) 2" EMPTY RIGID SCHEDULE 40 NONMETALLIC CONDUIT DIRECTIONAL BORE.

KEYED NOTES

1. EXISTING LIGHT POLE TO REMAIN - FOR INFORMATION ONLY.
2. INTERSECTION POLE FIXTURE - FOR INFORMATION ONLY.
3. MOVE EXISTING LIGHT POLE TO NEW BASE.
4. INTERCEPT EXISTING HIGH VOLTAGE WIRING AT NEW PULLBOX. PLACE CONDUIT ACROSS W. NATIONAL AVENUE. CITY TO RE-CABLE HIGH VOLTAGE CIRCUIT TO MAINTAIN CONTINUITY.



LIGHTING PLAN LEGEND

- EXISTING MUNICIPAL POLE FIXTURE - SINGLE LUMINAIRE
- PROPOSED MUNICIPAL POLE FIXTURE - DUAL LUMINAIRE
- PROPOSED MUNICIPAL POLE FIXTURE - SINGLE LUMINAIRE
- INTERSECTION POLE FIXTURE - SINGLE LUMINAIRE
- LIGHTING CONTROL CABINET
- PULLBOX (24" X 36")
- PROPOSED CONDUIT (SEE CABLE AND CONDUIT LEGEND)
- EXISTING CONDUIT
- CONDUIT STUBOUT

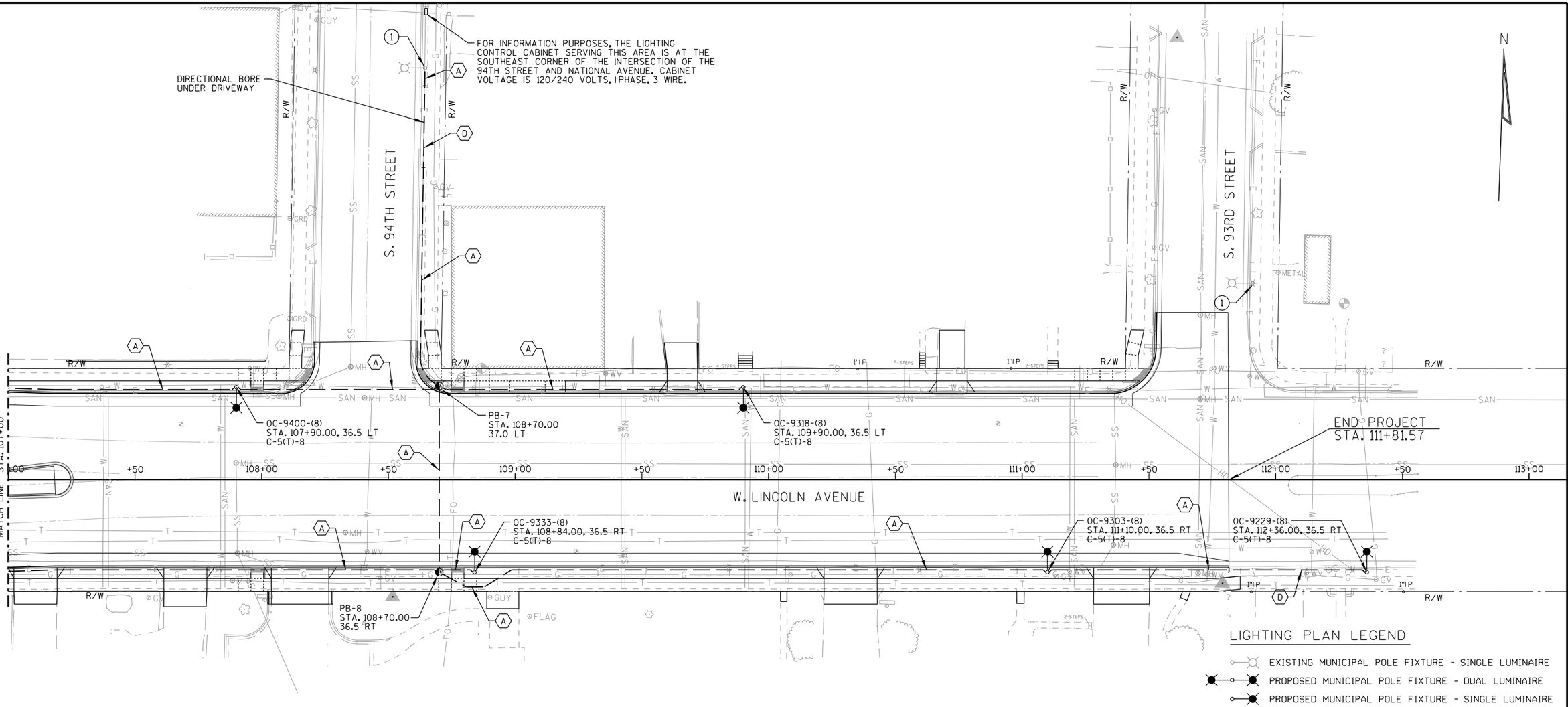
A-1-(X)
- CONTROL CABINET DESIGNATION
- POLE NUMBER
- LIGHTING CIRCUIT

STA. XX+XX.XX, XX.X LT = LOCATION (CENTER OF POLE)

C-5(T)-8
- LUMINAIRE ARM LENGTH
- POLE TYPE (T) INCLUDES TRANSFORMER BASE
- LUMINAIRE DESIGNATION

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	LIGHTING PLAN	SHEET 66	E

2



LIGHTING PLAN LEGEND

- EXISTING MUNICIPAL POLE FIXTURE - SINGLE LUMINAIRE
- PROPOSED MUNICIPAL POLE FIXTURE - DUAL LUMINAIRE
- PROPOSED MUNICIPAL POLE FIXTURE - SINGLE LUMINAIRE
- INTERSECTION POLE FIXTURE - SINGLE LUMINAIRE
- LIGHTING CONTROL CABINET
- PULLBOX (24" X 36")
- PROPOSED CONDUIT (SEE CABLE AND CONDUIT LEGEND)
- EXISTING CONDUIT
- CONDUIT STUBOUT

A-1-(X)
STA. XX+XX.XX, XX.X LT = LOCATION (CENTER OF POLE)
C-5(T)-8

- CONTROL CABINET DESIGNATION
- POLE NUMBER
- LIGHTING CIRCUIT
- LUMINAIRE ARM LENGTH
- POLE TYPE (T) INCLUDES TRANSFORMER BASE
- LUMINAIRE DESIGNATION

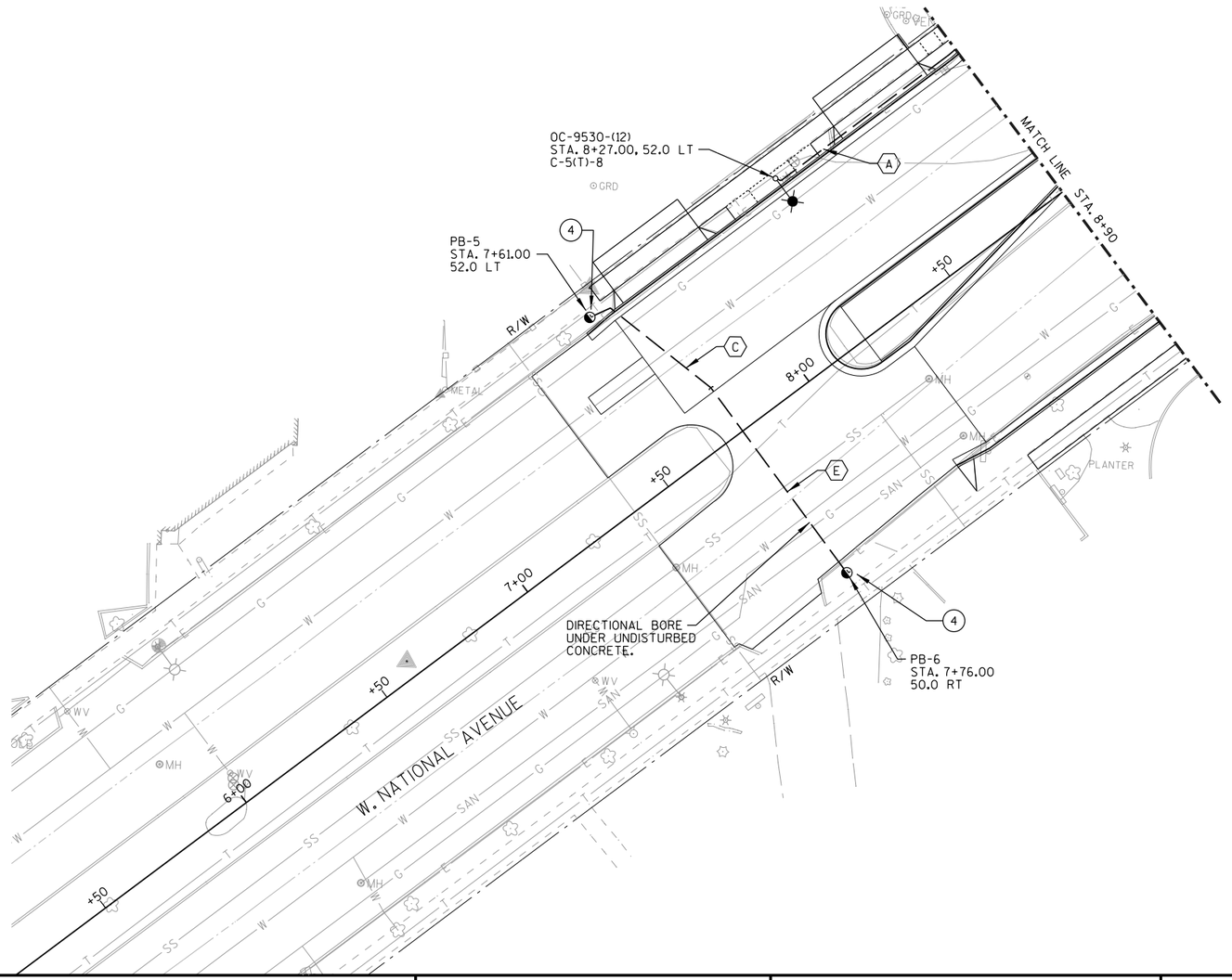
CABLE AND CONDUIT LEGEND

- (A) 2 #6 AWG AND 1 #6 GROUND IN 2" RIGID SCHEDULE 40 NONMETALLIC CONDUIT
- (B) 4 #6 AWG AND 1 #6 GROUND IN 2" RIGID SCHEDULE 40 NONMETALLIC CONDUIT
- (C) 2" EMPTY RIGID SCHEDULE 40 NONMETALLIC CONDUIT
- (D) 2 #6 AWG AND 1 #6 GROUND IN 2" RIGID SCHEDULE 40 NONMETALLIC CONDUIT DIRECTIONAL BORE.
- (E) 2" EMPTY RIGID SCHEDULE 40 NONMETALLIC CONDUIT DIRECTIONAL BORE.

KEYED NOTES

1. EXISTING LIGHT POLE TO REMAIN - FOR INFORMATION ONLY.
2. INTERSECTION POLE FIXTURE - FOR INFORMATION ONLY.
3. MOVE EXISTING LIGHT POLE TO NEW BASE.
4. INTERCEPT EXISTING HIGH VOLTAGE WIRING AT NEW PULLBOX. PLACE CONDUIT ACROSS W. NATIONAL AVENUE. CITY TO RE-CABLE HIGH VOLTAGE CIRCUIT TO MAINTAIN CONTINUITY.

2



N

CABLE AND CONDUIT LEGEND

- (A) 2 #6 AWG AND 1 #6 GROUND IN 2" RIGID SCHEDULE 40 NONMETALLIC CONDUIT
- (B) 4 #6 AWG AND 1 #6 GROUND IN 2" RIGID SCHEDULE 40 NONMETALLIC CONDUIT
- (C) 2" EMPTY RIGID SCHEDULE 40 NONMETALLIC CONDUIT
- (D) 2 #6 AWG AND 1 #6 GROUND IN 2" RIGID SCHEDULE 40 NONMETALLIC CONDUIT DIRECTIONAL BORE.
- (E) 2" EMPTY RIGID SCHEDULE 40 NONMETALLIC CONDUIT DIRECTIONAL BORE.

KEYED NOTES

1. EXISTING LIGHT POLE TO REMAIN - FOR INFORMATION ONLY.
2. INTERSECTION POLE FIXTURE - FOR INFORMATION ONLY.
3. MOVE EXISTING LIGHT POLE TO NEW BASE.
4. INTERCEPT EXISTING HIGH VOLTAGE WIRING AT NEW PULLBOX. PLACE CONDUIT ACROSS W. NATIONAL AVENUE. CITY TO RE-CABLE HIGH VOLTAGE CIRCUIT TO MAINTAIN CONTINUITY.

LIGHTING PLAN LEGEND

- EXISTING MUNICIPAL POLE FIXTURE - SINGLE LUMINAIRE
- PROPOSED MUNICIPAL POLE FIXTURE - DUAL LUMINAIRE
- PROPOSED MUNICIPAL POLE FIXTURE - SINGLE LUMINAIRE
- INTERSECTION POLE FIXTURE - SINGLE LUMINAIRE
- LIGHTING CONTROL CABINET
- PULLBOX (24" X 36")
- PROPOSED CONDUIT (SEE CABLE AND CONDUIT LEGEND)
- EXISTING CONDUIT
- CONDUIT STUBOUT

A-1-(X)
STA. XX+XX.XX, XX.X LT = LOCATION (CENTER OF POLE)
C-5(T)-8

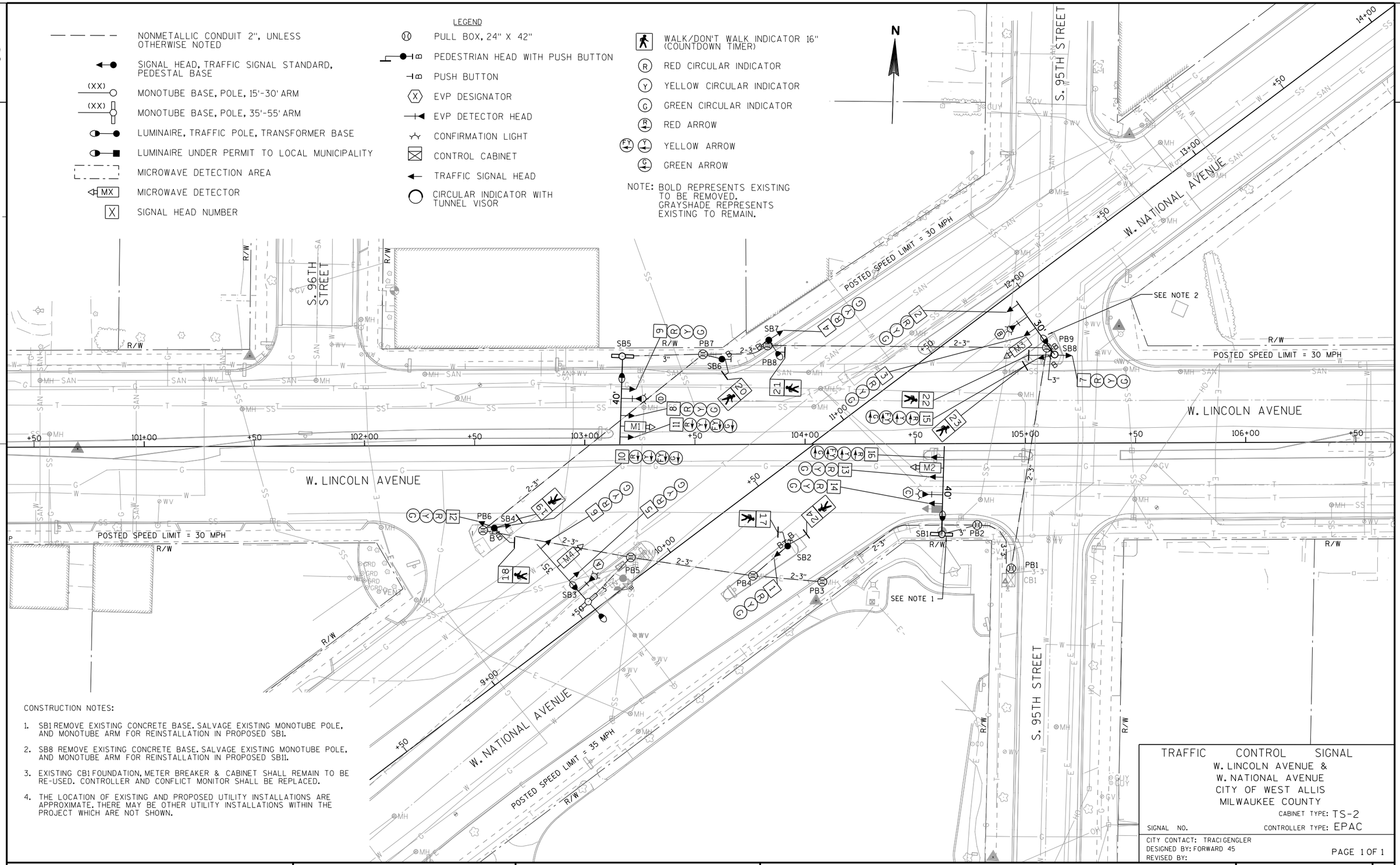
- CONTROL CABINET DESIGNATION
- POLE NUMBER
- LIGHTING CIRCUIT
- LUMINAIRE ARM LENGTH
- POLE TYPE (T) INCLUDES TRANSFORMER BASE
- LUMINAIRE DESIGNATION

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	LIGHTING PLAN	SHEET 68	E

LEGEND

- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- MICROWAVE DETECTION AREA
- MX MICROWAVE DETECTOR
- X SIGNAL HEAD NUMBER
- PULL BOX, 24" X 42"
- B PEDESTRIAN HEAD WITH PUSH BUTTON
- B PUSH BUTTON
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- CONFIRMATION LIGHT
- CONTROL CABINET
- TRAFFIC SIGNAL HEAD
- CIRCULAR INDICATOR WITH TUNNEL VISOR
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY Y YELLOW ARROW
- G GREEN ARROW

NOTE: BOLD REPRESENTS EXISTING TO BE REMOVED. GRAYSHADE REPRESENTS EXISTING TO REMAIN.



CONSTRUCTION NOTES:

1. SB1 REMOVE EXISTING CONCRETE BASE. SALVAGE EXISTING MONOTUBE POLE, AND MONOTUBE ARM FOR REINSTALLATION IN PROPOSED SB1.
2. SB8 REMOVE EXISTING CONCRETE BASE. SALVAGE EXISTING MONOTUBE POLE, AND MONOTUBE ARM FOR REINSTALLATION IN PROPOSED SB11.
3. EXISTING CB1 FOUNDATION, METER BREAKER & CABINET SHALL REMAIN TO BE RE-USED. CONTROLLER AND CONFLICT MONITOR SHALL BE REPLACED.
4. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.

TRAFFIC CONTROL SIGNAL
W. LINCOLN AVENUE &
W. NATIONAL AVENUE
CITY OF WEST ALLIS
MILWAUKEE COUNTY

CABINET TYPE: TS-2
SIGNAL NO. CONTROLLER TYPE: EPAC

CITY CONTACT: TRACI GENGLER
DESIGNED BY: FORWARD 45
REVISED BY:

PAGE 1 OF 1

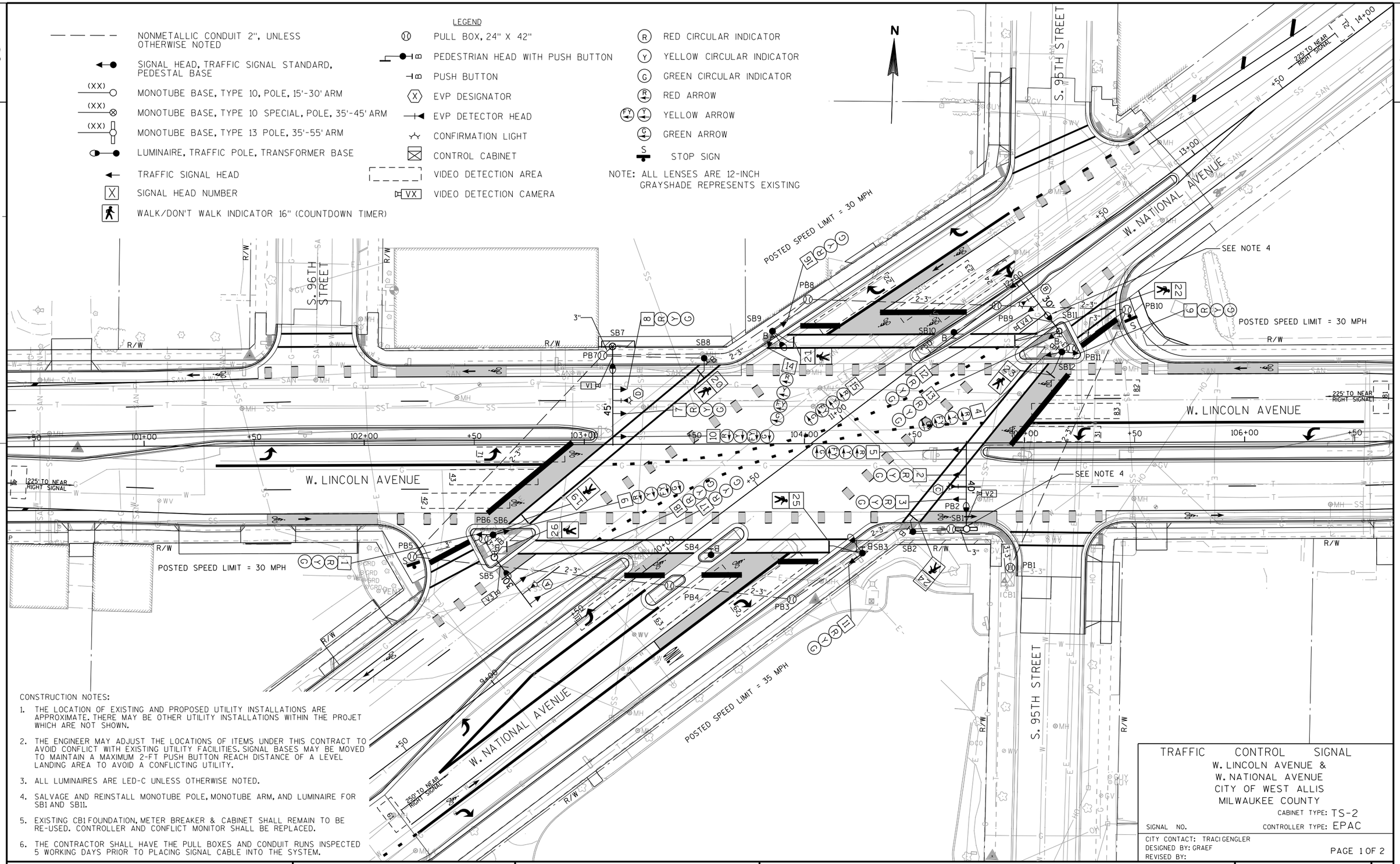
PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 69	E

LEGEND

NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED	PULL BOX, 24" X 42"
SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE	PEDESTRIAN HEAD WITH PUSH BUTTON
(XX) MONOTUBE BASE, TYPE 10, POLE, 15'-30' ARM	PUSH BUTTON
(XX) MONOTUBE BASE, TYPE 10 SPECIAL, POLE, 35'-45' ARM	EVP DESIGNATOR
(XX) MONOTUBE BASE, TYPE 13 POLE, 35'-55' ARM	EVP DETECTOR HEAD
LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE	CONFIRMATION LIGHT
TRAFFIC SIGNAL HEAD	CONTROL CABINET
SIGNAL HEAD NUMBER	VIDEO DETECTION AREA
WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)	VIDEO DETECTION CAMERA

RED CIRCULAR INDICATOR	STOP SIGN
YELLOW CIRCULAR INDICATOR	
GREEN CIRCULAR INDICATOR	
RED ARROW	
YELLOW ARROW	
GREEN ARROW	

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



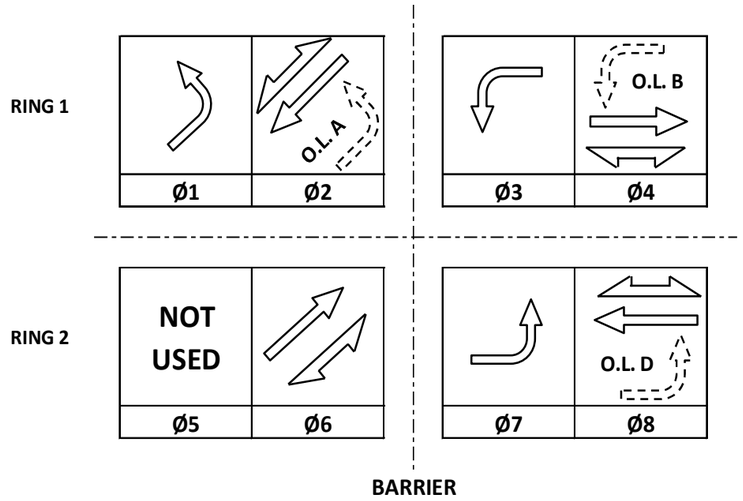
CONSTRUCTION NOTES:

1. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJET WHICH ARE NOT SHOWN.
2. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES. SIGNAL BASES MAY BE MOVED TO MAINTAIN A MAXIMUM 2-FT PUSH BUTTON REACH DISTANCE OF A LEVEL LANDING AREA TO AVOID A CONFLICTING UTILITY.
3. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.
4. SALVAGE AND REINSTALL MONOTUBE POLE, MONOTUBE ARM, AND LUMINAIRE FOR SB1 AND SB11.
5. EXISTING CB1 FOUNDATION, METER BREAKER & CABINET SHALL REMAIN TO BE RE-USED. CONTROLLER AND CONFLICT MONITOR SHALL BE REPLACED.
6. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO THE SYSTEM.

TRAFFIC CONTROL SIGNAL
W. LINCOLN AVENUE &
W. NATIONAL AVENUE
CITY OF WEST ALLIS
MILWAUKEE COUNTY
CABINET TYPE: TS-2
SIGNAL NO. CONTROLLER TYPE: EPAC
CITY CONTACT: TRACI GENGLER
DESIGNED BY: GRAEF
REVISED BY:
PAGE 1 OF 2

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET 70	E

	HEAD NUMBERS	FLASH
Ø1	14,15	-
Ø2	16,17,18	R
Ø3	9,10	-
Ø4	1,2,3	R
Ø5		
Ø6	11,12,13	R
Ø7	4,5	-
Ø8	6,7,8	R
Ø2P	19,20	
Ø4P	25,26	
Ø6P	23,24	
Ø8P	21,22	
OLA	14,15	R ←
OLB	9,10	R ←
OLD	4,5	R ←



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3		7		X
4		8	---	X
5				
6	X	2	MIN	X
7		3		X
8		4	---	X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	↙	↗	↱	↰
PHASE	2	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASE 4+8.

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	X
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO: S-	
SIGNAL SYSTEM NO: SS-	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	11	22	24	41	43	62	71	82									PLAN LOOP DETECTOR*(S)
ASSIGNED PHASE	1	2	2	4	4	5	7	8									ASSIGNED PHASE
OPERATION MODE	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OPERATION MODE
SWITCH	2						8										SWITCH
EXTEND	X			X			X										EXTEND
DELAY		X				X											DELAY

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	21	23	31	42	61	63	81	83									PLAN LOOP DETECTOR*(S)
ASSIGNED PHASE	2	2	3	4	6	6	8	8									ASSIGNED PHASE
OPERATION MODE	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OPERATION MODE
SWITCH			4														SWITCH
EXTEND	X		X		X		X										EXTEND
DELAY																	DELAY

W LINCOLN AVENUE & W NATIONAL AVENUE
WEST ALLIS
MILWAUKEE COUNTY
CABINET TYPE: TS2
CONTROLLER TYPE: EPAC
DATE: 11/2024 PAGE NO. 2 OF 2

PROJECT NO: 2110-03-71 | HWY: W LINCOLN AVENUE | COUNTY: MILWAUKEE | SEQUENCE OF OPERATIONS | SHEET NO: 71 | E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

2

PROJECT ID:	2110-03-71
INTERSECTION:	W LINCOLN AVENUE & W NATIONAL AVENUE

SIGNAL WIRE COLOR CODING	BLK-BLACK	RED-RED	GRN-GREEN
	WHT-WHITE	BLU-BLUE	ORG-ORANGE

			SIGNAL INDICATION WIRE COLOR									PED BUTTON WIRE 1	PED BUTTON WIRE 2
CB1 TO	AWG14 # OF CONDUCTORS	HEAD NO.	RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	FLASHING <YELLOW>	D/WALK	WALK		
SB1	12	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		5				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB2	7	24								BLK	BLU		
		B										RED	GRN
SB3	12	11	RED	ORG	GRN								
		25								BLK	BLU		
		B										WHT/BLK	BLU/BLK
SB4	7	B										RED	GRN
SB5	12	17	RED	ORG	GRN								
		18	RED	ORG	GRN								
		26								BLK	BLU		
		B										WHT/BLK	BLU/BLK
SB6	15	1	RED	ORG	GRN								
		9				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		19								BLK	BLU		
		B										WHT/BLK	BLU/BLK
SB7	12	7	RED	ORG	GRN								
		8	RED	ORG	GRN								
		10				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB8	7	20								BLK	BLU		
		B										RED	GRN
SB9	15	14				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		16	RED	ORG	GRN								
		21								BLK	BLU		
		B										WHT/BLK	BLU/BLK
SB10	7	B										RED	GRN
SB11	15	12	RED	ORG	GRN								
		13	RED	ORG	GRN								
		15				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		22								BLK	BLU		
		B										WHT/BLK	BLU/BLK
SB12	15	4				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		6	RED	ORG	GRN								
		23								BLK	BLU		
		B										WHT/BLK	BLU/BLK

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	CB1

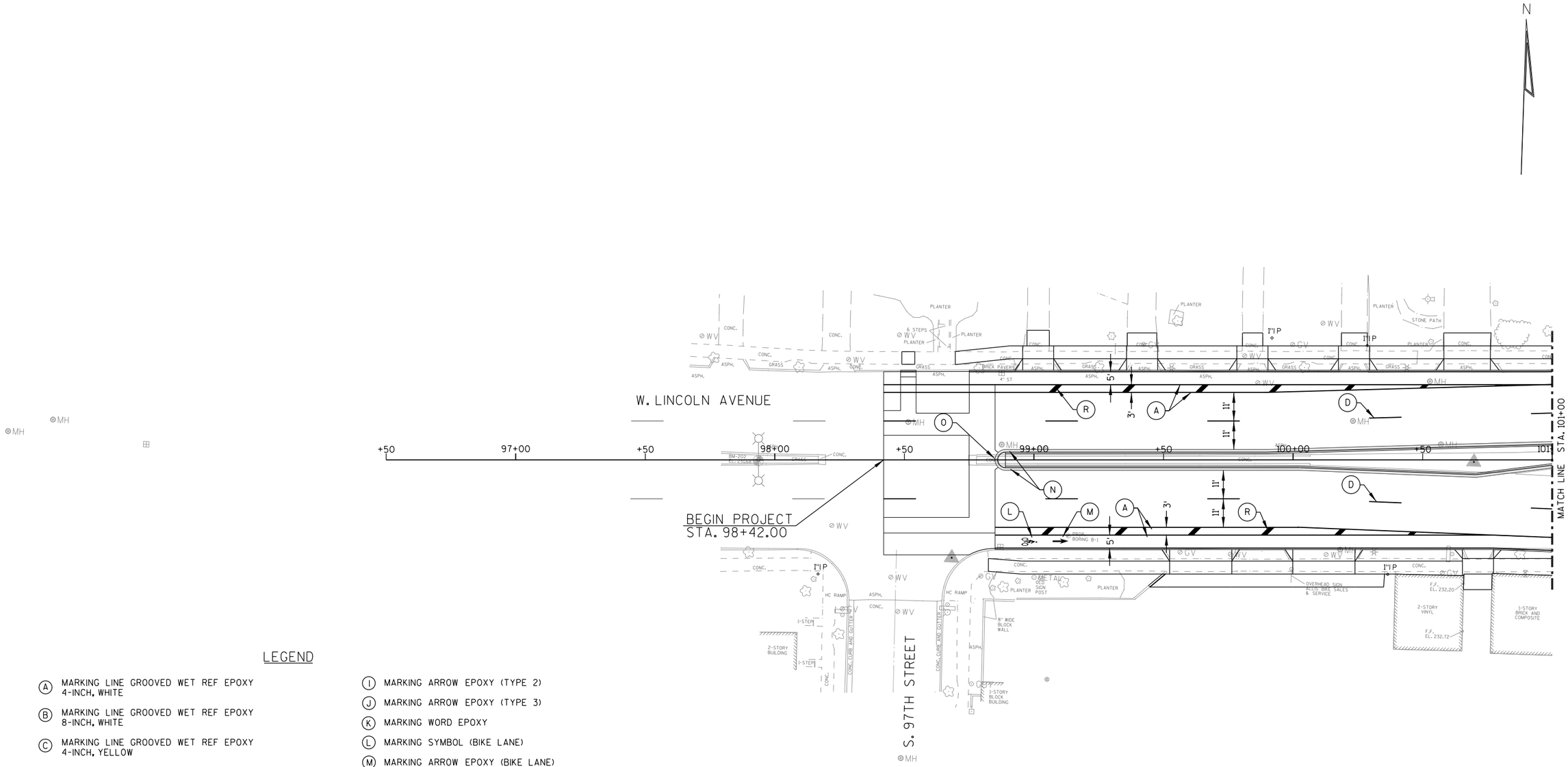
PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	CB1
PB2	SB1
PB3	SB3
PB4	SB4
PB5	SB6
PB6	SB5
PB7	SB7
PB8	SB9
PB9	SB10
PB10	SB12
PB11	SB11

EMERGENCY VEHICLE PREEMPTION	
FROM	TO
CB1	HEAD A (SB7)
CB1	HEAD B (SB1)
CB1	HEAD C (SB5)
CB1	HEAD D (SB11)

LIGHTING UF 10 AWG W/ GROUND	
FROM	TO
CB1	SB1
SB1	SB3
SB3	SB5
CB1	SB11
SB11	SB9
SB9	SB7

NOTES:
*USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
*ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
*RECONNECT THE GROUNDING CONDUCTORS WHENEVER THE CIRCUIT HAS BEEN INTERRUPTED TO ENSURE THE GROUNDING CIRCUIT IS COMPLETE.

2



LEGEND

- (A) MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
- (B) MARKING LINE GROOVED WET REF EPOXY 8-INCH, WHITE
- (C) MARKING LINE GROOVED WET REF EPOXY 4-INCH, YELLOW
- (D) MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE (20' SKIP, 10' LINE)
- (E) MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE (9' SKIP, 3' LINE)
- (F) MARKING LINE GROOVED WET REF EPOXY 8-INCH, WHITE (9' SKIP, 3' LINE)
- (G) MARKING CROSSWALK EPOXY TRAVERSE LINE 6-INCH
- (H) MARKING STOP LINE EPOXY 18-INCH
- (I) MARKING ARROW EPOXY (TYPE 2)
- (J) MARKING ARROW EPOXY (TYPE 3)
- (K) MARKING WORD EPOXY
- (L) MARKING SYMBOL (BIKE LANE)
- (M) MARKING ARROW EPOXY (BIKE LANE)
- (N) MARKING CURB EPOXY
- (O) MARKING LINE ISLAND NOSE EPOXY
- (P) MARKING LINE GROOVED WET REF EPOXY 4-INCH, YELLOW (20' SKIP, 10' LINE)
- (R) MARKING DIAGONAL EPOXY 12-INCH (WHITE @ 20' SPACING)
- HIGH FRICTION GREEN SURFACING

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET 73	E

2

LEGEND

- (A) MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
- (B) MARKING LINE GROOVED WET REF EPOXY 8-INCH, WHITE
- (C) MARKING LINE GROOVED WET REF EPOXY 4-INCH, YELLOW
- (D) MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE (20' SKIP, 10' LINE)
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- (N) MARKING CURB EPOXY
- (O) MARKING LINE ISLAND NOSE EPOXY
- (P) MARKING LINE GROOVED WET REF EPOXY 4-INCH, YELLOW (20' SKIP, 10' LINE)
- (R) MARKING DIAGONAL EPOXY 12-INCH (WHITE @ 20' SPACING)
- HIGH FRICTION GREEN SURFACING

S. 96TH STREET

S. 95TH STREET

W. NATIONAL AVENUE

W. LINCOLN AVENUE

S. 95TH STREET

REMOVE EXISITNG MARKING LINES THAT CONFLICT WITH NEW MARKING LINES

N

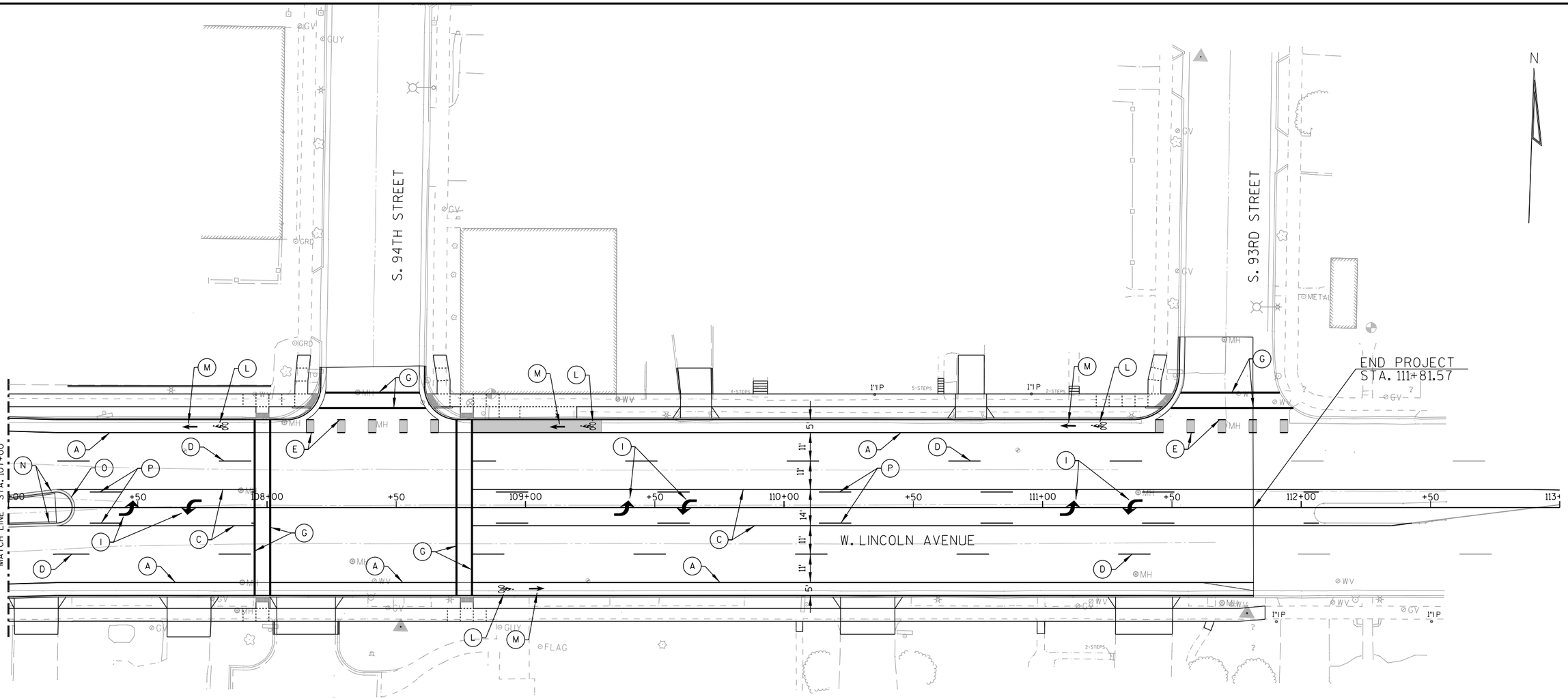
MATCH LINE STA. 101+00

MATCH LINE STA. 107+00

MATCH LINE STA. 8+90

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET 74	E

2



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- (I) MARKING ARROW EPOXY (TYPE 2)
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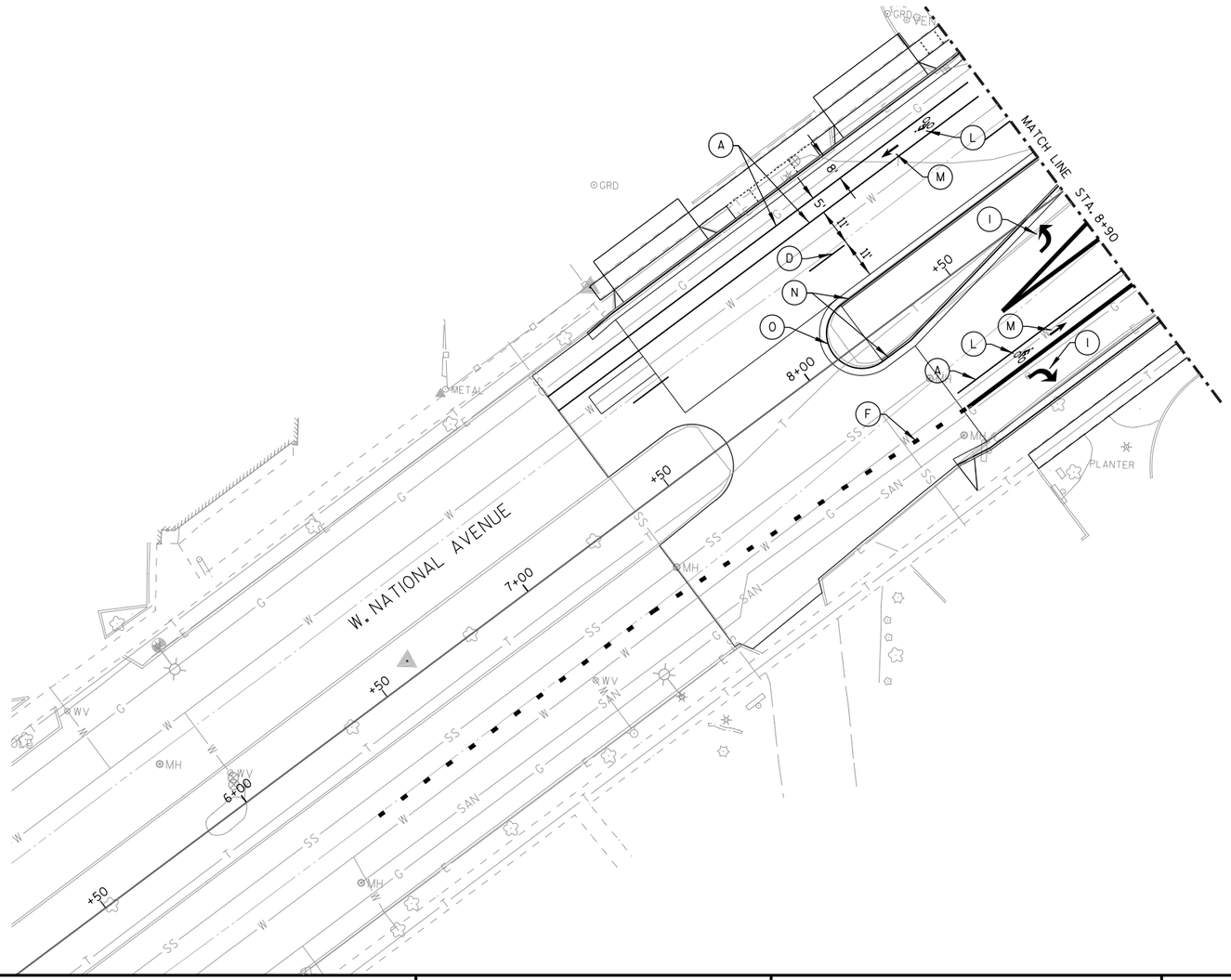
- (L) MARKING SYMBOL (BIKE LANE)
- (M) MARKING ARROW EPOXY (BIKE LANE)
- (N) MARKING CURB EPOXY
- (O) MARKING LINE ISLAND NOSE EPOXY
- (P) MARKING LINE GROOVED WET REF EPOXY 4-INCH, YELLOW (20' SKIP, 10' LINE)
- (R) MARKING DIAGONAL EPOXY 12-INCH (WHITE @ 20' SPACING)
- HIGH FRICTION GREEN SURFACING

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET 75	E

2

N



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- (R) MARKING DIAGONAL EPOXY 12-INCH (WHITE @ 20' SPACING)
- HIGH FRICTION GREEN SURFACING

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET 76	E

2

2

TRAFFIC CONTROL NOTES

1. MAINTAIN ACCESS FOR EMERGENCY VEHICLES AND LOCAL TRAFFIC ON LINCOLN AVENUE AND NATIONAL AVENUE AT ALL TIMES.

2. THE CONTRACTOR SHALL COVER ANY SIGN CONFLICTING WITH THE TRAFFIC CONTROL IN OPERATION AS NEEDED OR AS DIRECTED BY THE ENGINEER. COVERING OF SIGNS IS INCLUDED IN "TRAFFIC CONTROL COVERING SIGNS TYPE II" ITEM.

3. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY BARRICADES, SIGNS, DIRECTIONAL ARROWS, LIGHTS, TEMPORARY MARKINGS, FLAGMEN, AND SAFETY DEVICES AS CALLED FOR ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

4. DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON CONTRACTOR'S METHOD OR SEQUENCES OF OPERATION.

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

6. ALL SIGNS ARE 36" X 36" EXCEPT OTHERWISE NOTED.

7. ANY "STOP" SIGNS THAT ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

8. THE EXACT LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD LOCATIONS AS APPROVED BY THE ENGINEER IN THE FIELD.

9. BOTH STEADY BURN LIGHTS AND FLASHING LIGHTS SHALL BE ONE WAY WITH THE LIGHT SOURCE SHOWING TOWARDS ADJACENT APPROACHING TRAFFIC.

10. CHANNELIZING DEVICES SHALL BE DRUMS WITH ATTACHED TYPE "C" STEADY BURN LIGHT (TAPERS ONLY).

11. MAINTAIN ACCESS TO DRIVEWAYS DURING CONSTRUCTION. FOR PROPERTIES WITH MULTIPLE DRIVEWAYS, ONLY ONE DRIVEWAY CAN BE CLOSED/WORKED ON AT ANY TIME.

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC CONTROL NOTES	SHEET 77	E

2

2

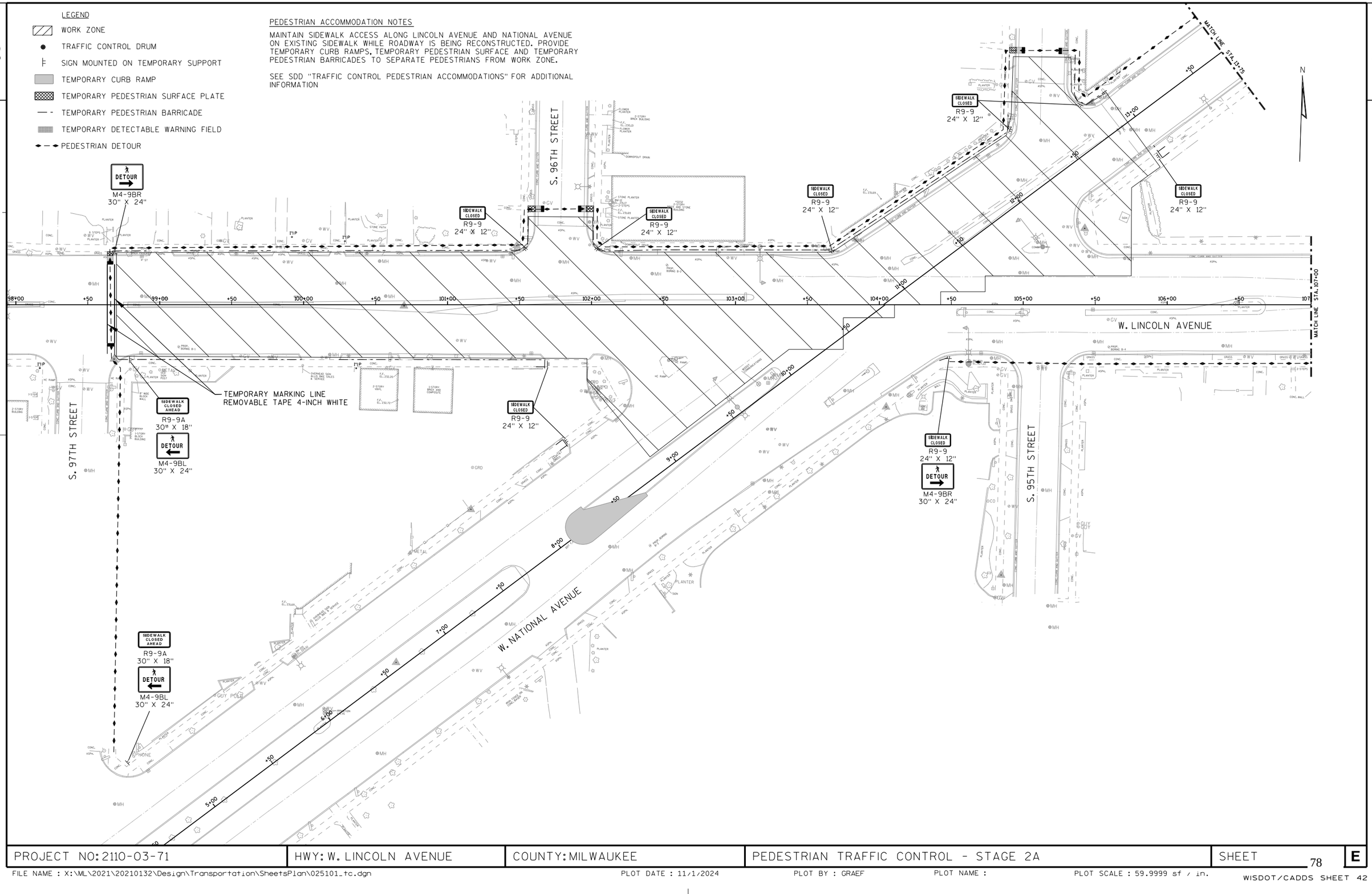
LEGEND

- WORK ZONE
- TRAFFIC CONTROL DRUM
- SIGN MOUNTED ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE PLATE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- PEDESTRIAN DETOUR

PEDESTRIAN ACCOMMODATION NOTES

MAINTAIN SIDEWALK ACCESS ALONG LINCOLN AVENUE AND NATIONAL AVENUE ON EXISTING SIDEWALK WHILE ROADWAY IS BEING RECONSTRUCTED. PROVIDE TEMPORARY CURB RAMPS, TEMPORARY PEDESTRIAN SURFACE AND TEMPORARY PEDESTRIAN BARRICADES TO SEPARATE PEDESTRIANS FROM WORK ZONE.

SEE SDD "TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS" FOR ADDITIONAL INFORMATION



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PEDESTRIAN TRAFFIC CONTROL - STAGE 2A	SHEET 78	E

LEGEND

- WORK ZONE
- TRAFFIC CONTROL DRUM
- SIGN MOUNTED ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE PLATE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- PEDESTRIAN DETOUR

PEDESTRIAN ACCOMMODATION NOTES

MAINTAIN SIDEWALK ACCESS ALONG LINCOLN AVENUE AND NATIONAL AVENUE ON EXISTING SIDEWALK WHILE ROADWAY IS BEING RECONSTRUCTED. PROVIDE TEMPORARY CURB RAMPS, TEMPORARY PEDESTRIAN SURFACE AND TEMPORARY PEDESTRIAN BARRICADES TO SEPARATE PEDESTRIANS FROM WORK ZONE.

SEE SDD "TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS" FOR ADDITIONAL INFORMATION

N

DETOUR
M4-9BL
30" X 24"

DETOUR
M4-9BR
30" X 24"

SIDEWALK CLOSED AHEAD
R9-9A
30" X 18"

DETOUR
M4-9BR
30" X 24"

SIDEWALK CLOSED
R9-9
24" X 12"

DETOUR
M4-9BR
30" X 24"

DETOUR
M4-9BL
30" X 24"

SIDEWALK CLOSED AHEAD
R9-9A
30" X 18"

DETOUR
M4-9BR
30" X 24"

DETOUR
M4-9BL
30" X 24"

W. NATIONAL AVENUE

W. LINCOLN AVENUE

S. 94TH STREET

S. 93RD STREET

S. 92ND STREET

MATCH LINE STA. 13+75

MATCH LINE STA. 107+00

14+00 15+00 +50 16+00

+50 108+00 +50 109+00 +50 110+00 +50 111+00 +50 112+00 +50 113+00 +50 114+00 +50 115+00

2

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PEDESTRIAN TRAFFIC CONTROL - STAGE 2A	SHEET 79	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\025102_tc.dgn PLOT DATE : 11/1/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 59.9999 sf / in.

LEGEND

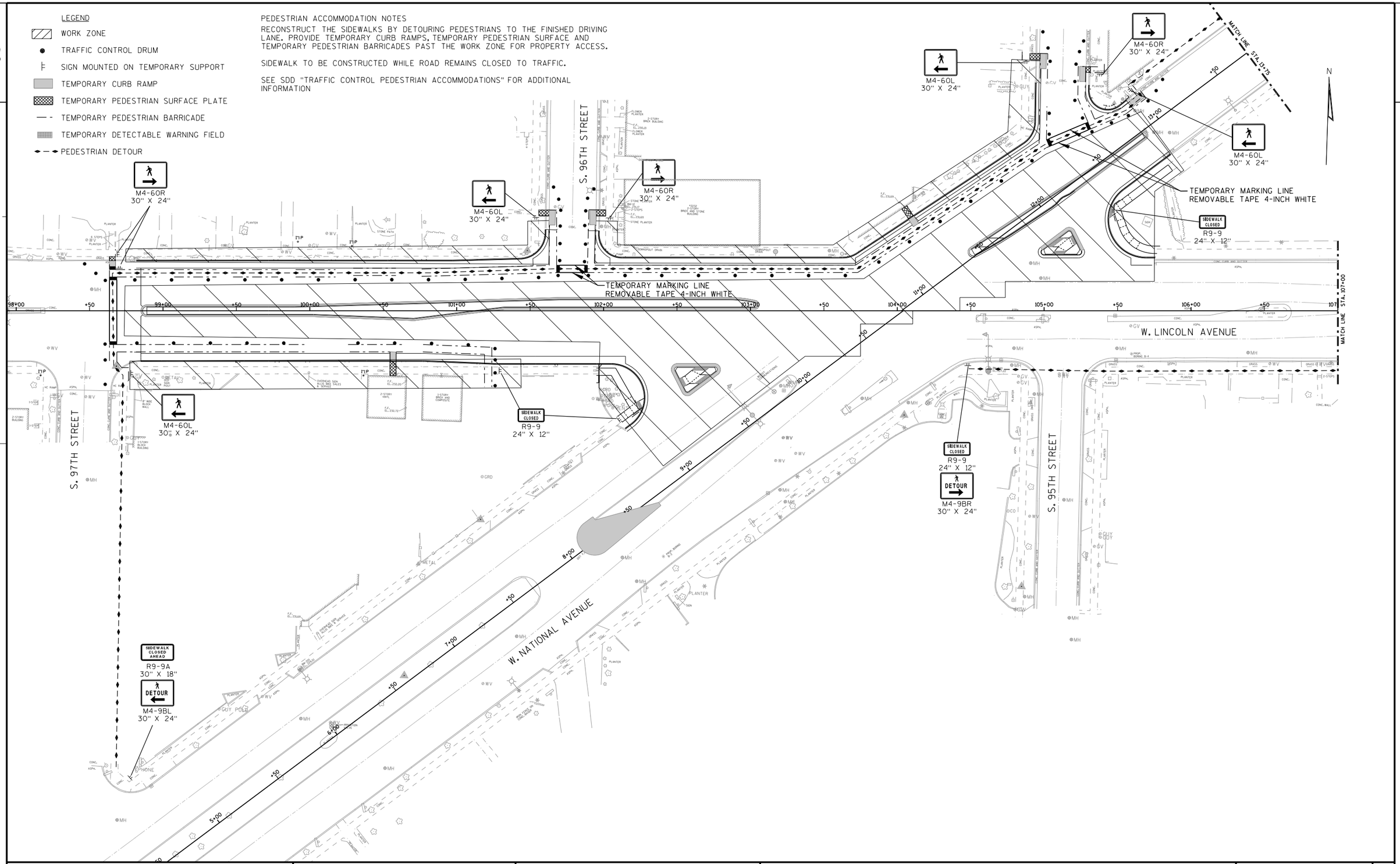
- WORK ZONE
- TRAFFIC CONTROL DRUM
- SIGN MOUNTED ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE PLATE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- PEDESTRIAN DETOUR

PEDESTRIAN ACCOMMODATION NOTES

RECONSTRUCT THE SIDEWALKS BY DETOURING PEDESTRIANS TO THE FINISHED DRIVING LANE. PROVIDE TEMPORARY CURB RAMPS, TEMPORARY PEDESTRIAN SURFACE AND TEMPORARY PEDESTRIAN BARRICADES PAST THE WORK ZONE FOR PROPERTY ACCESS.

SIDEWALK TO BE CONSTRUCTED WHILE ROAD REMAINS CLOSED TO TRAFFIC.

SEE SDD "TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS" FOR ADDITIONAL INFORMATION



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PEDESTRIAN TRAFFIC CONTROL - STAGE 2B	SHEET 80	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\025111_tc.dgn PLOT DATE : 11/1/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 59.9999 sf / in.

2

LEGEND

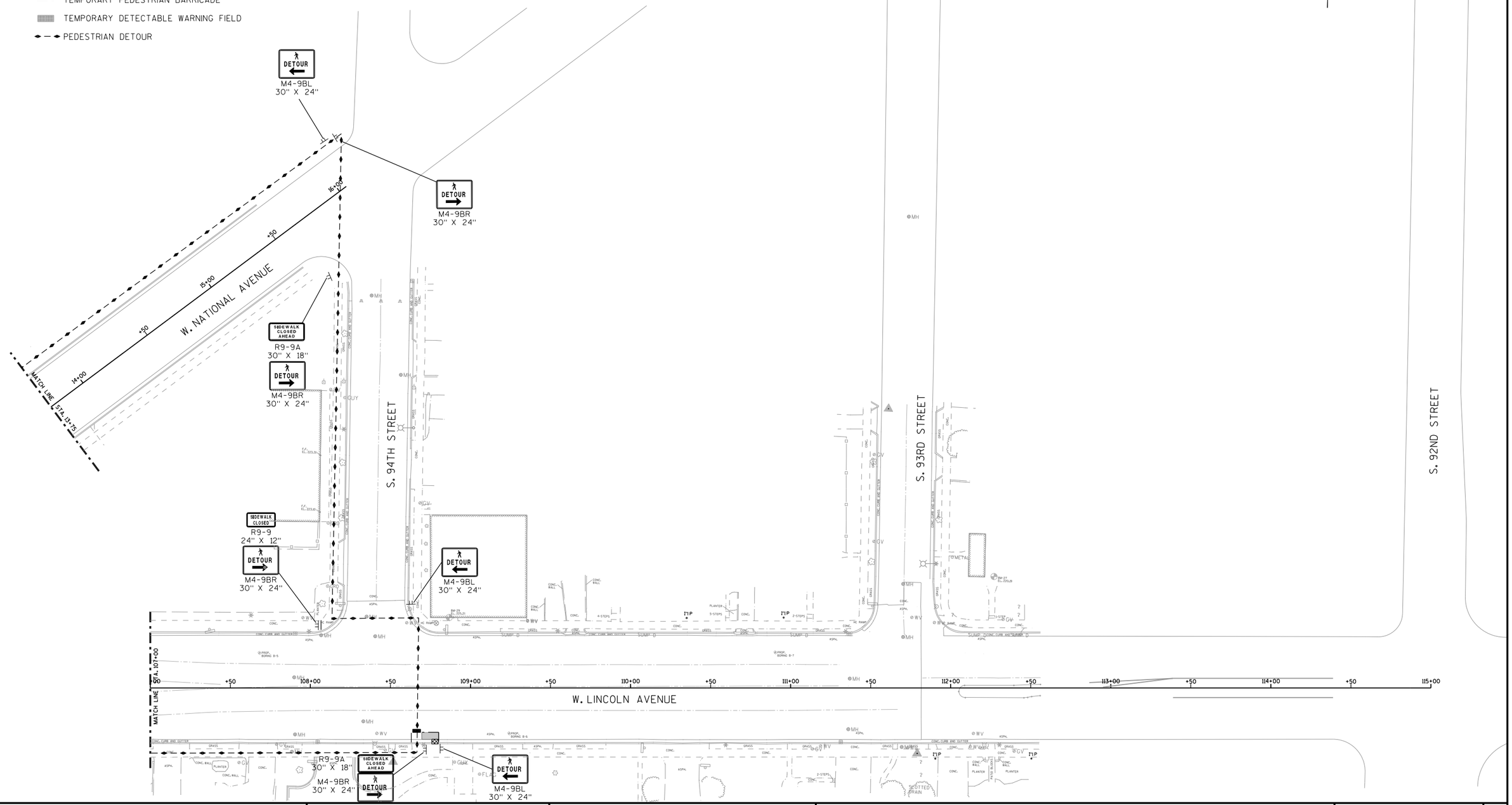
- WORK ZONE
- TRAFFIC CONTROL DRUM
- SIGN MOUNTED ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE PLATE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- PEDESTRIAN DETOUR

PEDESTRIAN ACCOMMODATION NOTES

RECONSTRUCT THE SIDEWALKS BY DETOURING PEDESTRIANS TO THE FINISHED DRIVING LANE. PROVIDE TEMPORARY CURB RAMPS, TEMPORARY PEDESTRIAN SURFACE AND TEMPORARY PEDESTRIAN BARRICADES PAST THE WORK ZONE FOR PROPERTY ACCESS.

SIDEWALK TO BE CONSTRUCTED WHILE ROAD REMAINS CLOSED TO TRAFFIC.

SEE SDD "TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS" FOR ADDITIONAL INFORMATION



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PEDESTRIAN TRAFFIC CONTROL - STAGE 2B	SHEET 81 E

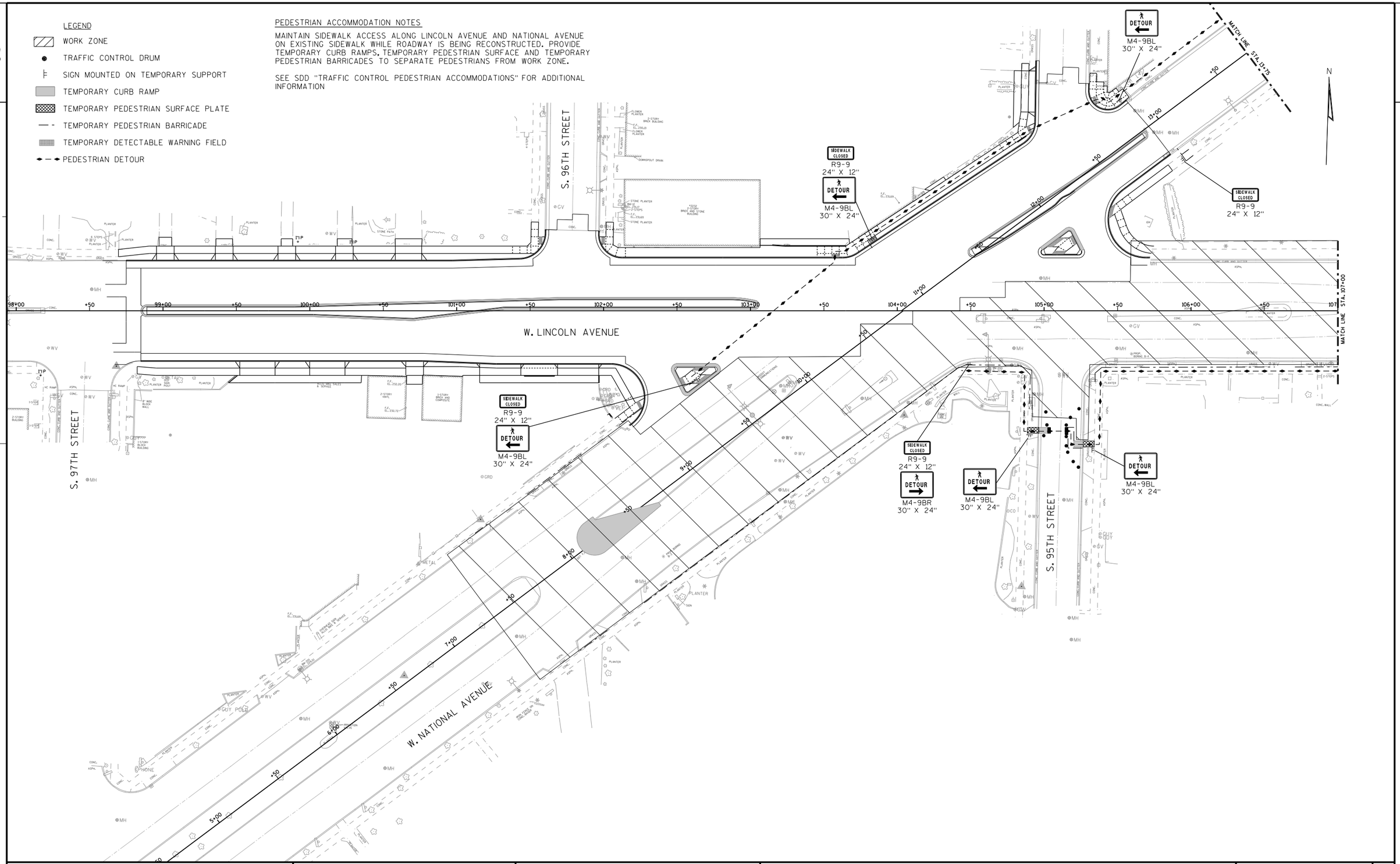
LEGEND

- WORK ZONE
- TRAFFIC CONTROL DRUM
- SIGN MOUNTED ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE PLATE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- PEDESTRIAN DETOUR

PEDESTRIAN ACCOMMODATION NOTES

MAINTAIN SIDEWALK ACCESS ALONG LINCOLN AVENUE AND NATIONAL AVENUE ON EXISTING SIDEWALK WHILE ROADWAY IS BEING RECONSTRUCTED. PROVIDE TEMPORARY CURB RAMPS, TEMPORARY PEDESTRIAN SURFACE AND TEMPORARY PEDESTRIAN BARRICADES TO SEPARATE PEDESTRIANS FROM WORK ZONE.

SEE SDD "TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS" FOR ADDITIONAL INFORMATION



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PEDESTRIAN TRAFFIC CONTROL - STAGE 3A	SHEET 82	E

2

LEGEND

- WORK ZONE
- TRAFFIC CONTROL DRUM
- SIGN MOUNTED ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE PLATE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- PEDESTRIAN DETOUR

PEDESTRIAN ACCOMMODATION NOTES

MAINTAIN SIDEWALK ACCESS ALONG LINCOLN AVENUE AND NATIONAL AVENUE ON EXISTING SIDEWALK WHILE ROADWAY IS BEING RECONSTRUCTED. PROVIDE TEMPORARY CURB RAMPS, TEMPORARY PEDESTRIAN SURFACE AND TEMPORARY PEDESTRIAN BARRICADES TO SEPARATE PEDESTRIANS FROM WORK ZONE.

SEE SDD "TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS" FOR ADDITIONAL INFORMATION

N

DETOUR M4-9BL 30" X 24"

DETOUR M4-9BR 30" X 24"

SIDEWALK CLOSED AHEAD R9-9A 30" X 18"

DETOUR M4-9BR 30" X 24"

SIDEWALK CLOSED R9-9 24" X 12"

DETOUR M4-9BR 30" X 24"

DETOUR M4-9BL 30" X 24"

DETOUR M4-9BL 30" X 24"

DETOUR M4-9BL 30" X 24"

DETOUR M4-9BL 30" X 24"

SIDEWALK CLOSED AHEAD R9-9A 30" X 18"

DETOUR M4-9BL 30" X 24"

DETOUR M4-9BR 30" X 24"

W. NATIONAL AVENUE

W. LINCOLN AVENUE

S. 94TH STREET

S. 93RD STREET

S. 92ND STREET

MATCH LINE STA. 13+75

MATCH LINE STA. 107+00

14+00 15+00 +50 108+00 109+00 110+00 111+00 112+00 113+00 114+00 115+00

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PEDESTRIAN TRAFFIC CONTROL - STAGE 3A	SHEET 83	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\025202_tc.dgn PLOT DATE : 10/30/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 59.9999 sf / in.

WISDOT/CADDS SHEET 42

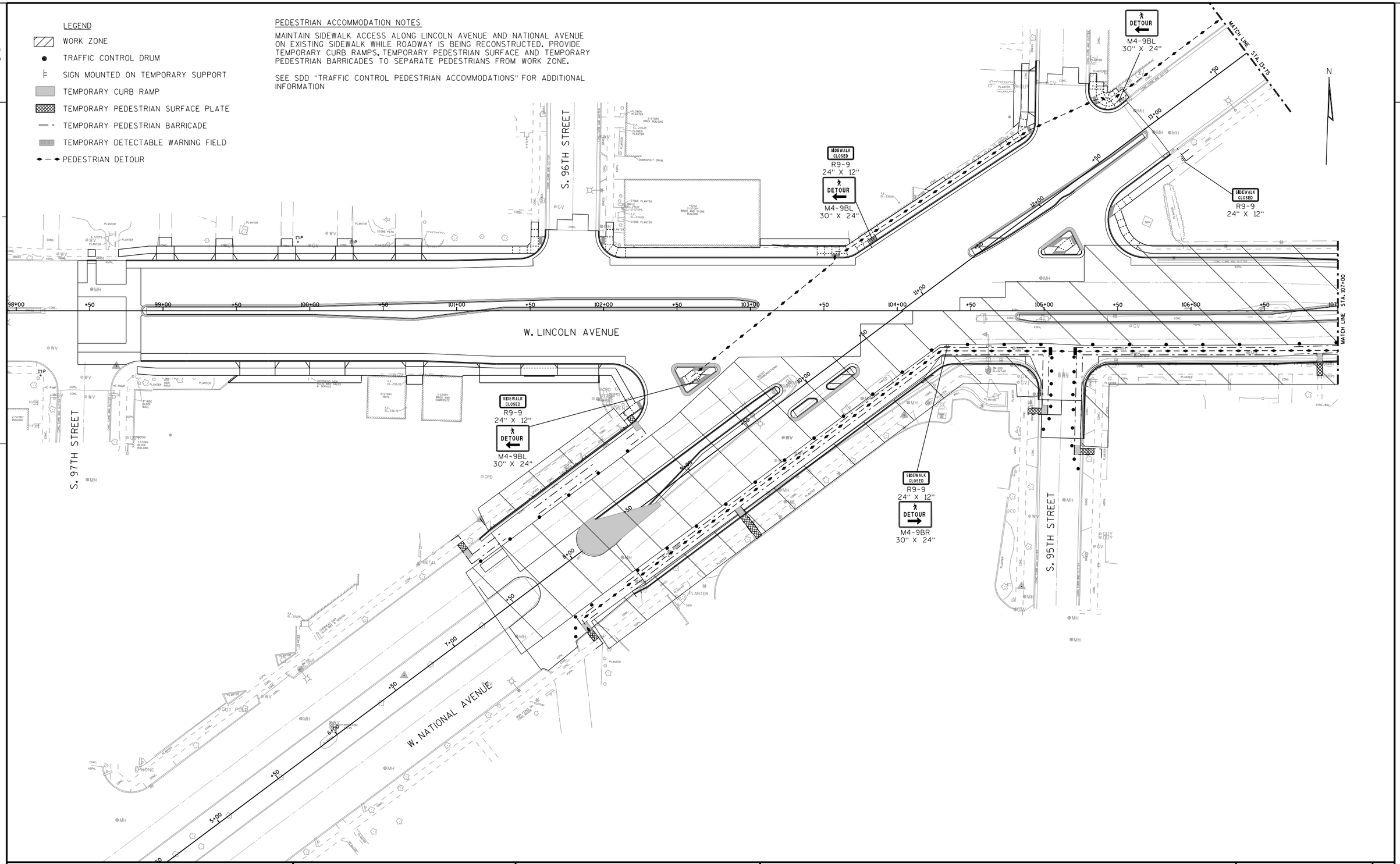
LEGEND

- WORK ZONE
- TRAFFIC CONTROL DRUM
- SIGN MOUNTED ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE PLATE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- PEDESTRIAN DETOUR

PEDESTRIAN ACCOMMODATION NOTES

MAINTAIN SIDEWALK ACCESS ALONG LINCOLN AVENUE AND NATIONAL AVENUE ON EXISTING SIDEWALK WHILE ROADWAY IS BEING RECONSTRUCTED. PROVIDE TEMPORARY CURB RAMPS, TEMPORARY PEDESTRIAN SURFACE AND TEMPORARY PEDESTRIAN BARRICADES TO SEPARATE PEDESTRIANS FROM WORK ZONE.

SEE SDD "TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS" FOR ADDITIONAL INFORMATION



2

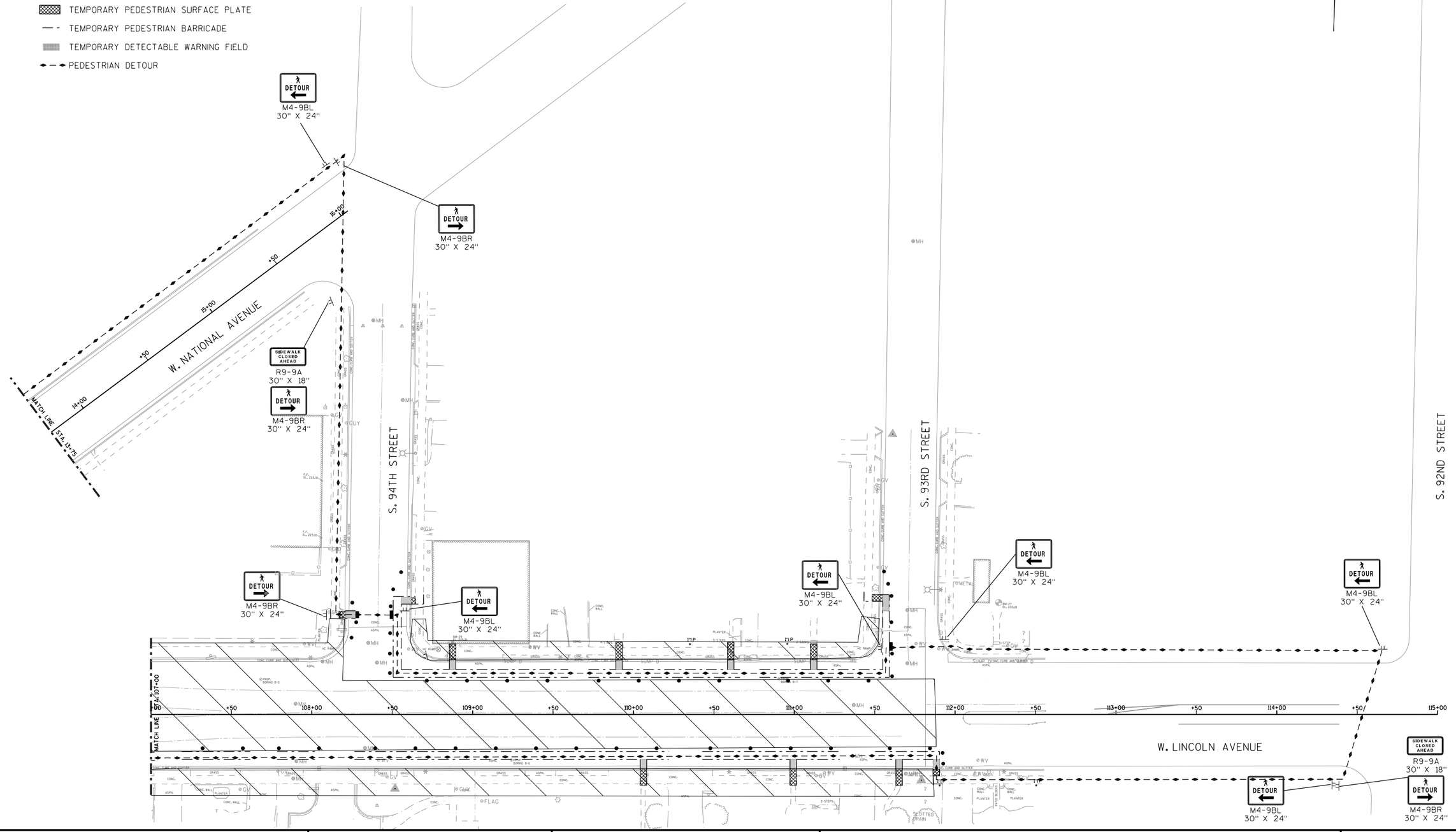
LEGEND

- WORK ZONE
- TRAFFIC CONTROL DRUM
- SIGN MOUNTED ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE PLATE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- PEDESTRIAN DETOUR

PEDESTRIAN ACCOMMODATION NOTES

MAINTAIN SIDEWALK ACCESS ALONG LINCOLN AVENUE AND NATIONAL AVENUE ON EXISTING SIDEWALK WHILE ROADWAY IS BEING RECONSTRUCTED. PROVIDE TEMPORARY CURB RAMPS, TEMPORARY PEDESTRIAN SURFACE AND TEMPORARY PEDESTRIAN BARRICADES TO SEPARATE PEDESTRIANS FROM WORK ZONE.

SEE SDD "TRAFFIC CONTROL PEDESTRIAN ACCOMMODATIONS" FOR ADDITIONAL INFORMATION



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PEDESTRIAN TRAFFIC CONTROL - STAGE 3B	SHEET 85 E

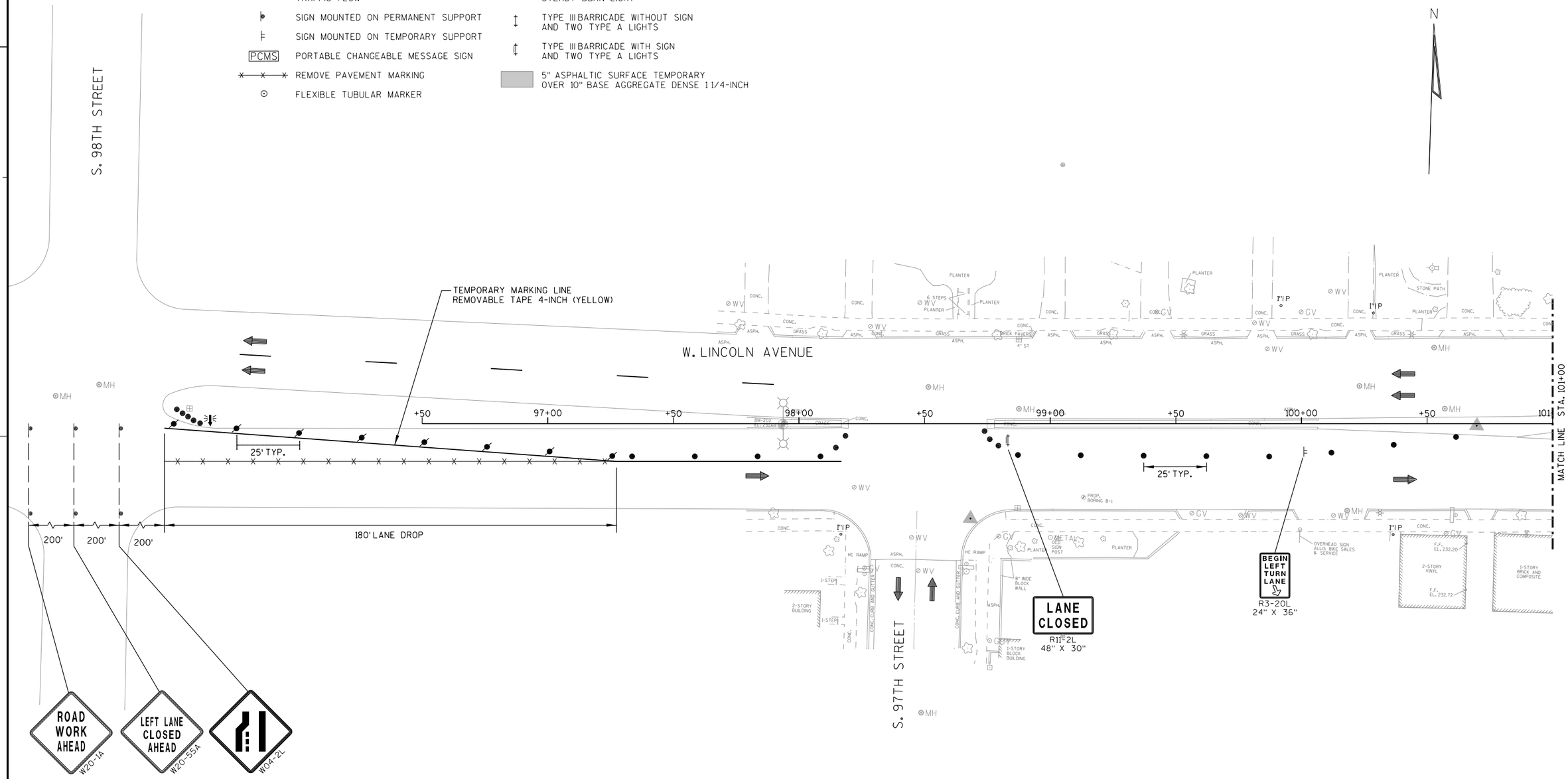
FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\025212_tc.dgn PLOT DATE : 10/30/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 59.9999 sf / in.

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK ZONE
- TRAFFIC FLOW
- SIGN MOUNTED ON PERMANENT SUPPORT
- SIGN MOUNTED ON TEMPORARY SUPPORT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- REMOVE PAVEMENT MARKING
- FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TYPE III BARRICADE WITHOUT SIGN AND TWO TYPE A LIGHTS
- TYPE III BARRICADE WITH SIGN AND TWO TYPE A LIGHTS
- 5" ASPHALTIC SURFACE TEMPORARY OVER 10" BASE AGGREGATE DENSE 1 1/4-INCH



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 1	SHEET 86	E

2

N

S. 96TH STREET

S. 95TH STREET

W. LINCOLN AVENUE

W. NATIONAL AVENUE

STA. 101+00

MATCH LINE

STA. 9+00

MATCH LINE

ROAD WORK AHEAD
W20-1A

500'

END ROAD WORK
G20-2A
48" X 24"

W01-6
48" X 24"

R3-8
36" X 30"

ONLY

LANE CLOSED
R11-2L
48" X 30"

90' LANE SHIFT

200'

+50

13+00

12+00

11+00

10+00

W01-4R

REMOVE BARRICADES AND PULL BACK DRUMS WHEN NO WORK IS TAKING PLACE IN TURN LANE

REMOVE SIGN WHEN NO WORK IS TAKING PLACE IN TURN LANE

R3-2
24" X 24"

25' TYP.

100'

STOP

ONLY

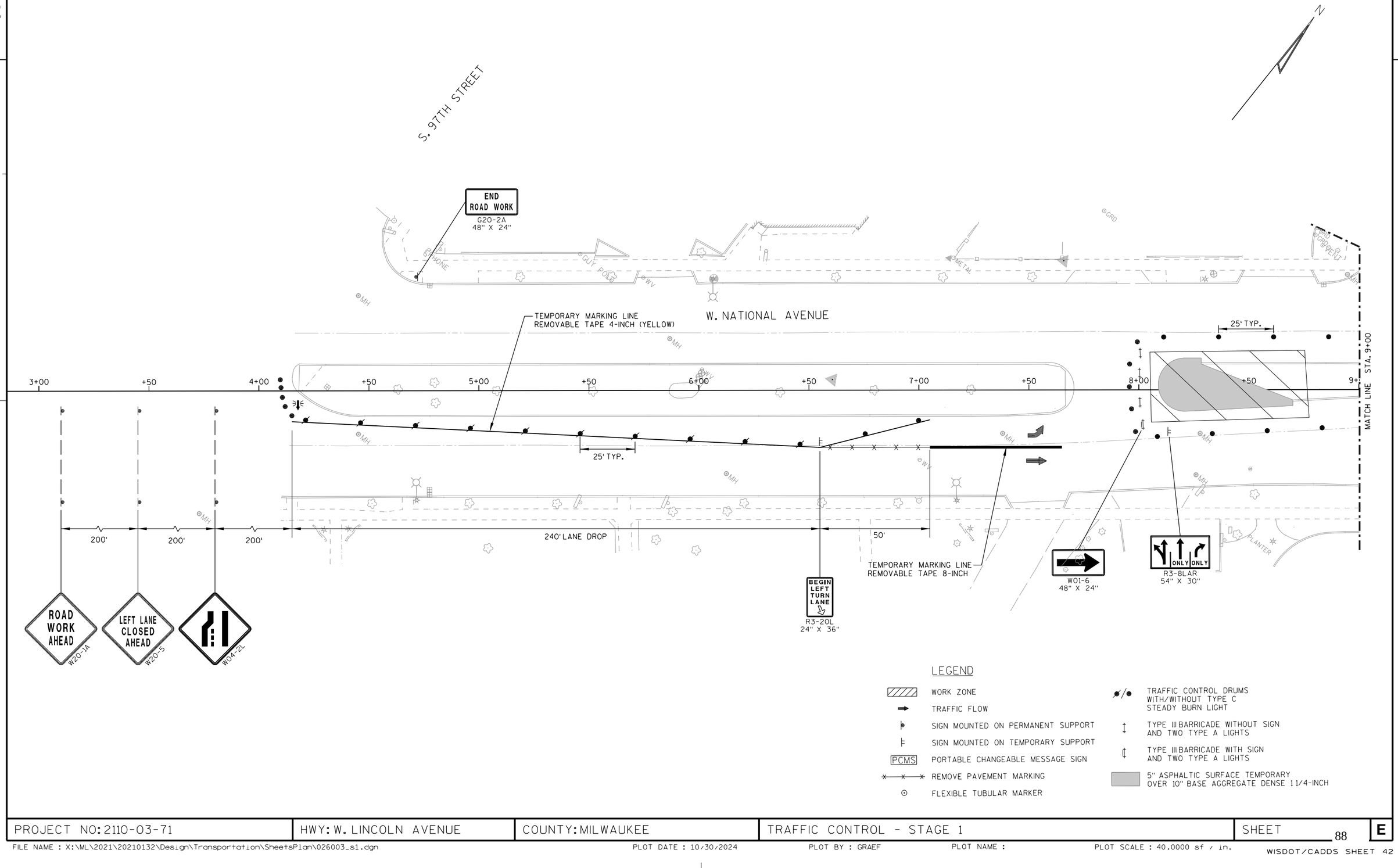
PLACE SIGN AT HAYES AVENUE INTERSECTION

LEGEND

- WORK ZONE
- TRAFFIC FLOW
- SIGN MOUNTED ON PERMANENT SUPPORT
- SIGN MOUNTED ON TEMPORARY SUPPORT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- REMOVE PAVEMENT MARKING
- FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TYPE III BARRICADE WITHOUT SIGN AND TWO TYPE A LIGHTS
- TYPE III BARRICADE WITH SIGN AND TWO TYPE A LIGHTS
- 5" ASPHALTIC SURFACE TEMPORARY OVER 10" BASE AGGREGATE DENSE 1 1/4-INCH

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 1	SHEET 87	E

2



LEGEND

- WORK ZONE
- TRAFFIC FLOW
- SIGN MOUNTED ON PERMANENT SUPPORT
- SIGN MOUNTED ON TEMPORARY SUPPORT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- REMOVE PAVEMENT MARKING
- FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TYPE III BARRICADE WITHOUT SIGN AND TWO TYPE A LIGHTS
- TYPE III BARRICADE WITH SIGN AND TWO TYPE A LIGHTS
- 5" ASPHALTIC SURFACE TEMPORARY OVER 10" BASE AGGREGATE DENSE 1 1/4-INCH

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 1	SHEET 88	E

2

LEGEND

- WORK ZONE
- TRAFFIC FLOW
- SIGN MOUNTED ON PERMANENT SUPPORT
- SIGN MOUNTED ON TEMPORARY SUPPORT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- REMOVE PAVEMENT MARKING
- FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TYPE III BARRICADE WITHOUT SIGN AND TWO TYPE A LIGHTS
- TYPE III BARRICADE WITH SIGN AND TWO TYPE A LIGHTS
- 5" ASPHALTIC SURFACE TEMPORARY OVER 10" BASE AGGREGATE DENSE 1 1/4-INCH

N

S. 98TH STREET

W. LINCOLN AVENUE

END ROAD WORK
G20-2A
48" X 24"

+50 97+00 +50 98+00 +50 99+00 +50 100+00 +50 101

25' TYP.

200' 300' 200' 200'

180' LANE DROP

ROAD CLOSED 1000 FT
W20-3C

W04-2L

ROAD CLOSED AHEAD
W20-3A

LEFT LANE CLOSED AHEAD
W20-55A

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

END ROAD WORK
G20-2A
48" X 24"

S. 97TH STREET

PCMS

FRAME 1	FRAME 2
ROAD TO CLOSE	BEGINS XXXDAY

PLACE SIGN 7 CALENDAR DAYS PRIOR TO SWITCH TO STAGE 2

STOP
R3-1
24" X 24"

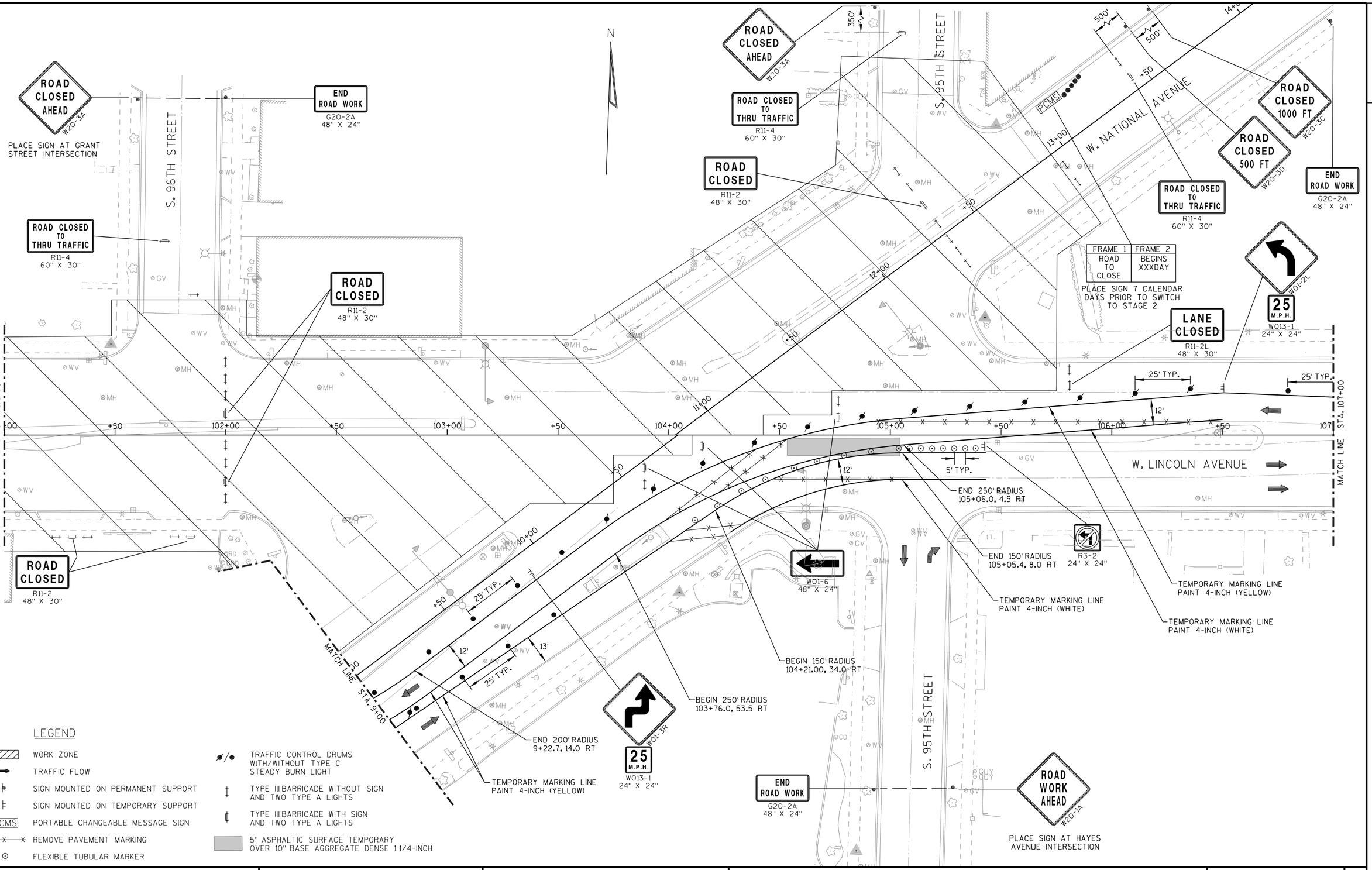
MAINTAIN ACCESS TO DRIVEWAY

ROAD CLOSED
R11-2
48" X 30"

MATCH LINE STA. 101+00

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 2	SHEET 89	E

2



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 2	SHEET 90	E

2

ROAD WORK AHEAD W20-1A

PLACE SIGN AT NATIONAL AVENUE INTERSECTION

END ROAD WORK G20-2A 48" X 24"

ROAD WORK AHEAD W20-1A

N

S. 94TH STREET

S. 93RD STREET

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

TEMPORARY BUS STOP. COORDINATE WITH MCTS.

LANE CLOSED R11-2L 48" X 30"

W11-2 30" X 30"

W16-7L 30" X 18"

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

180' LANE DROP

350'

W04-2R

RIGHT LANE CLOSED AHEAD W20-5A

ROAD CLOSED AHEAD W20-3A

200'

200'

200'

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE) 3' LINE 9' GAP

MATCH LINE STA. 107+00

108+00 +50 109+00 +50 110+00 +50 111+00 +50 112+00 +50 113+00

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

W. LINCOLN AVENUE

BEGIN RIGHT TURN LANE R3-20R 24" X 36"

ROAD CLOSED 500 FT W20-3D

END ROAD WORK G20-2A 48" X 24"

W11-2 30" X 30"

W16-7L 30" X 18"

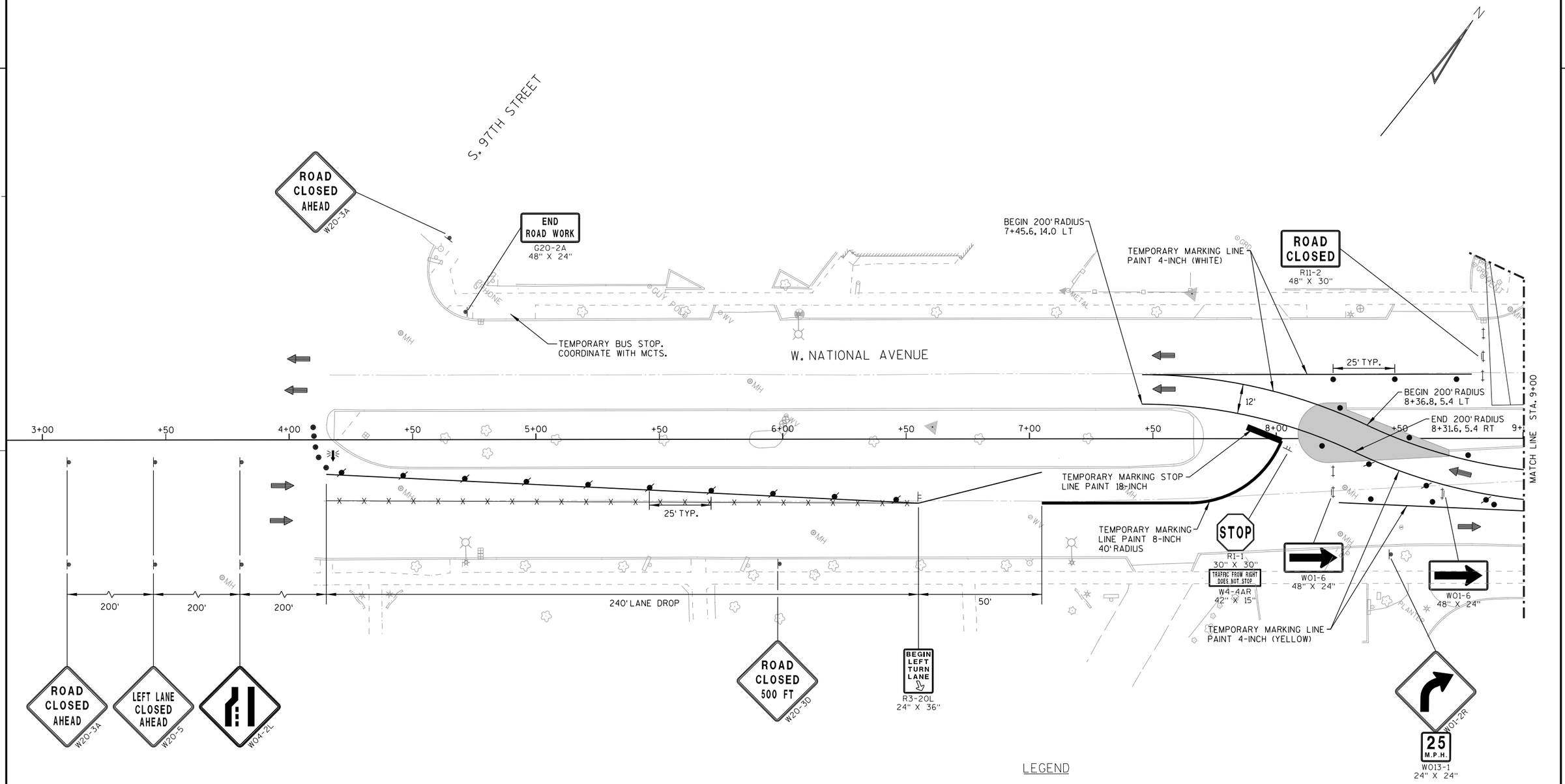
LEGEND

- WORK ZONE
- TRAFFIC FLOW
- SIGN MOUNTED ON PERMANENT SUPPORT
- SIGN MOUNTED ON TEMPORARY SUPPORT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- REMOVE PAVEMENT MARKING
- FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TYPE III BARRICADE WITHOUT SIGN AND TWO TYPE A LIGHTS
- TYPE III BARRICADE WITH SIGN AND TWO TYPE A LIGHTS
- 5" ASPHALTIC SURFACE TEMPORARY OVER 10" BASE AGGREGATE DENSE 1 1/4-INCH

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 2	SHEET 91	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\026103_s2.dgn PLOT DATE : 12/17/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 40.0000 sf / in.

2



LEGEND

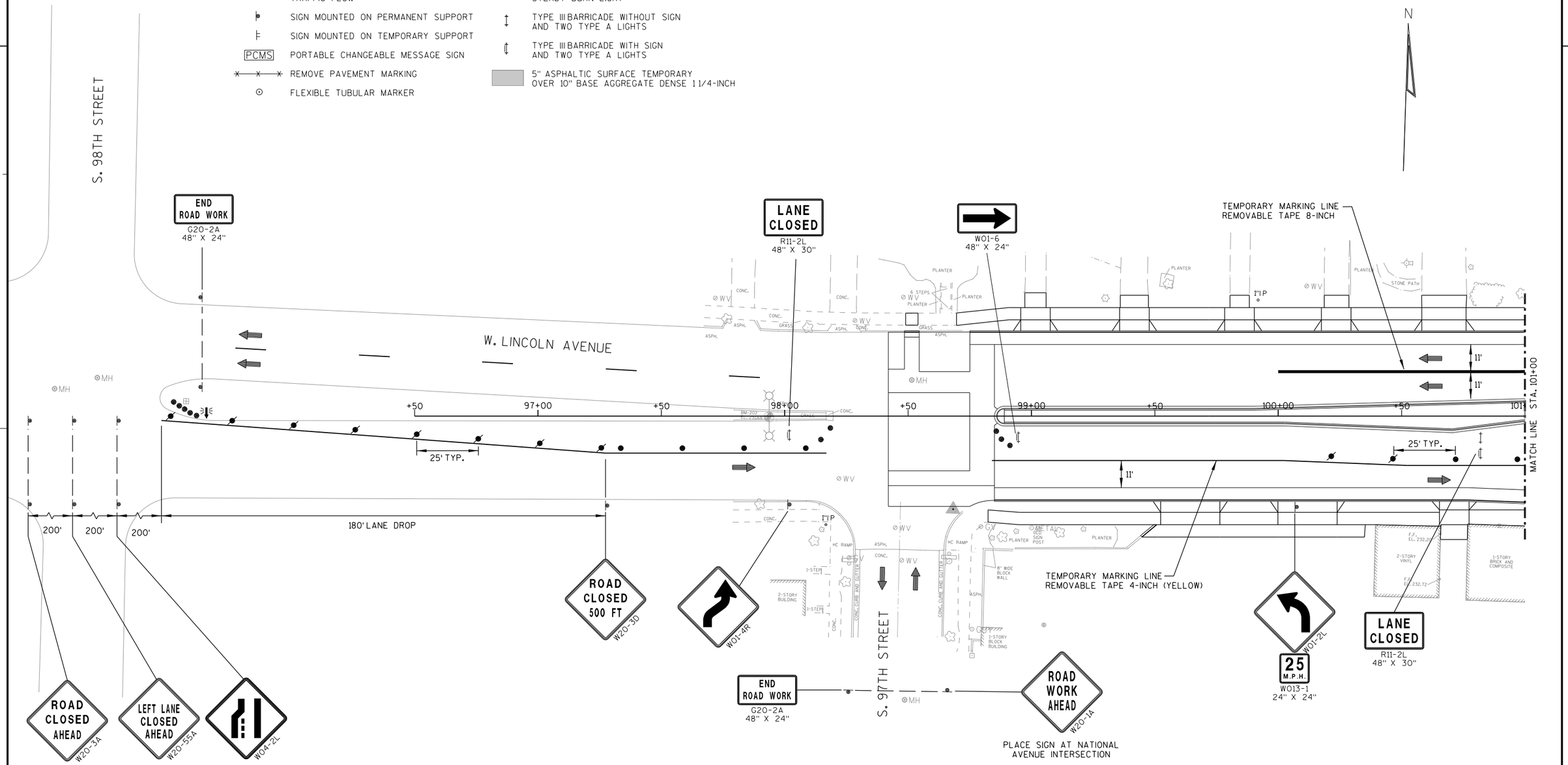
- WORK ZONE
- TRAFFIC FLOW
- SIGN MOUNTED ON PERMANENT SUPPORT
- SIGN MOUNTED ON TEMPORARY SUPPORT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- REMOVE PAVEMENT MARKING
- FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TYPE III BARRICADE WITHOUT SIGN AND TWO TYPE A LIGHTS
- TYPE III BARRICADE WITH SIGN AND TWO TYPE A LIGHTS
- 5" ASPHALTIC SURFACE TEMPORARY OVER 10" BASE AGGREGATE DENSE 1 1/4-INCH

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 2	SHEET 92 E

2

LEGEND

- WORK ZONE
- TRAFFIC FLOW
- SIGN MOUNTED ON PERMANENT SUPPORT
- SIGN MOUNTED ON TEMPORARY SUPPORT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- REMOVE PAVEMENT MARKING
- FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TYPE III BARRICADE WITHOUT SIGN AND TWO TYPE A LIGHTS
- TYPE III BARRICADE WITH SIGN AND TWO TYPE A LIGHTS
- 5" ASPHALTIC SURFACE TEMPORARY OVER 10" BASE AGGREGATE DENSE 1 1/4-INCH



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 3	SHEET 93	E

2

N

ROAD WORK AHEAD
W20-1A

PLACE SIGN AT GRANT STREET INTERSECTION

END ROAD WORK
G20-2A
48" X 24"

S. 96TH STREET

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

W11-2
30" X 30"

W16-7R
30" X 18"

W01-6
48" X 24"

TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH

W. LINCOLN AVENUE

11'

11'

50'

STA. 101+00

MATCH LINE

+00

+50

102+00

+50

103+00

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

11'

BEGIN TAPER
101+75.0, 31.0 RT

W01-6
48" X 24"

DO NOT ENTER
R5-1
36" X 36"

ROAD CLOSED
R11-2
48" X 30"

BEGIN 200' RADIUS
103+56.0, 31.0 LT

W01-6
48" X 24"

BEGIN 261' RADIUS
103+43.4, 8.5 RT

+50

10+00

MATCH LINE STA. 9+00

ROAD CLOSED
R11-2
48" X 30"

W11-2
30" X 30"

W16-7L
30" X 18"

ROAD WORK AHEAD
W20-1A

500'

LANE CLOSED
R11-2L
48" X 30"

END 361' RADIUS
105+11.7, 60.0 LT

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

END 200' RADIUS
104+61.5, 64.1 LT

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

+50

11+00

+50

104+00

+50

105+00

+50

106+00

+50

107

MATCH LINE STA. 107+00

S. 95TH STREET

END ROAD WORK
G20-2A
48" X 24"

500'

+50

1100'

W. NATIONAL AVENUE

13+00

ROAD CLOSED AHEAD
W20-3A

ROAD CLOSED 500 FT
W20-3D

END ROAD WORK
G20-2A
48" X 24"

12+00

W01-2R

ROAD CLOSED
R11-2
48" X 30"

25 M.P.H.
W013-1
24" X 24"

ROAD CLOSED
R11-2
48" X 30"

W01-6
48" X 24"

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

S. 95TH STREET

END ROAD WORK
G20-2A
48" X 24"

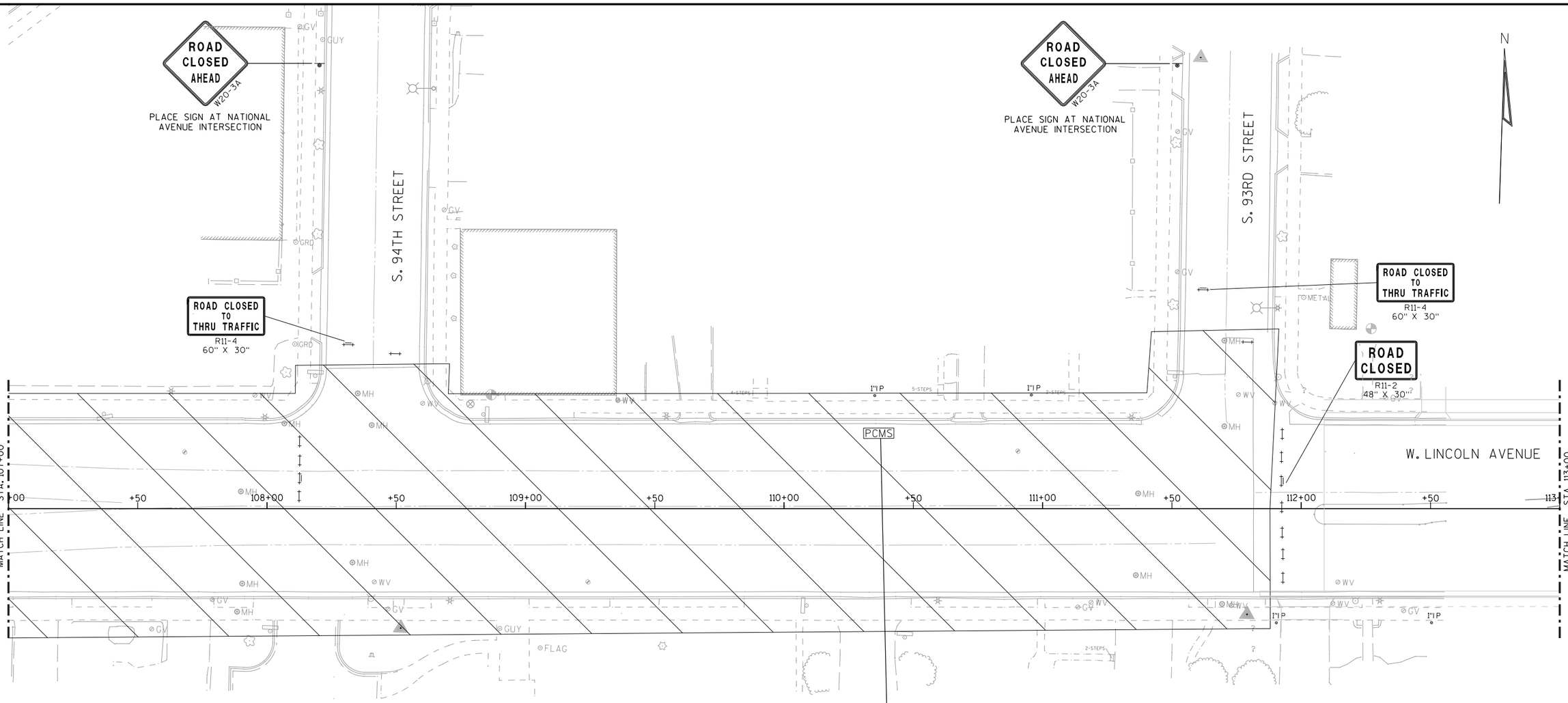
ROAD CLOSED AHEAD
W20-3A

PLACE SIGN AT HAYES AVENUE INTERSECTION

LEGEND

- WORK ZONE
- TRAFFIC FLOW
- SIGN MOUNTED ON PERMANENT SUPPORT
- SIGN MOUNTED ON TEMPORARY SUPPORT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- REMOVE PAVEMENT MARKING
- FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TYPE III BARRICADE WITHOUT SIGN AND TWO TYPE A LIGHTS
- TYPE III BARRICADE WITH SIGN AND TWO TYPE A LIGHTS
- 5" ASPHALTIC SURFACE TEMPORARY OVER 10" BASE AGGREGATE DENSE 1 1/4-INCH

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 3	SHEET 94	E



FRAME 1	FRAME 2
ROAD TO CLOSE	BEGINS XXXDAY

PLACE SIGN 7 CALENDAR DAYS PRIOR TO SWITCH TO STAGE 3

LEGEND

- WORK ZONE
- TRAFFIC FLOW
- SIGN MOUNTED ON PERMANENT SUPPORT
- SIGN MOUNTED ON TEMPORARY SUPPORT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- REMOVE PAVEMENT MARKING
- FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE C STEADY BURN LIGHT
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- TYPE III BARRICADE WITH SIGN AND TWO TYPE A LIGHTS
- 5" ASPHALTIC SURFACE TEMPORARY OVER 10" BASE AGGREGATE DENSE 1 1/4-INCH

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 3	SHEET 95	E

2

N

S. 92ND STREET

S. 91ST STREET

W. LINCOLN AVENUE

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

R3-1
24" X 24"

ROAD CLOSED 500 FT
W20-3D

ROAD CLOSED AHEAD
W20-3A

500'

1100'

25' TYP.

MATCH LINE

STA. 113+00

+50

114+00

+50

115+00

R3-2
24" X 24"

LANE CLOSED
R11-2L
48" X 30"

ONLY ONLY
R3-8LR
36" X 30"

25' TYP.

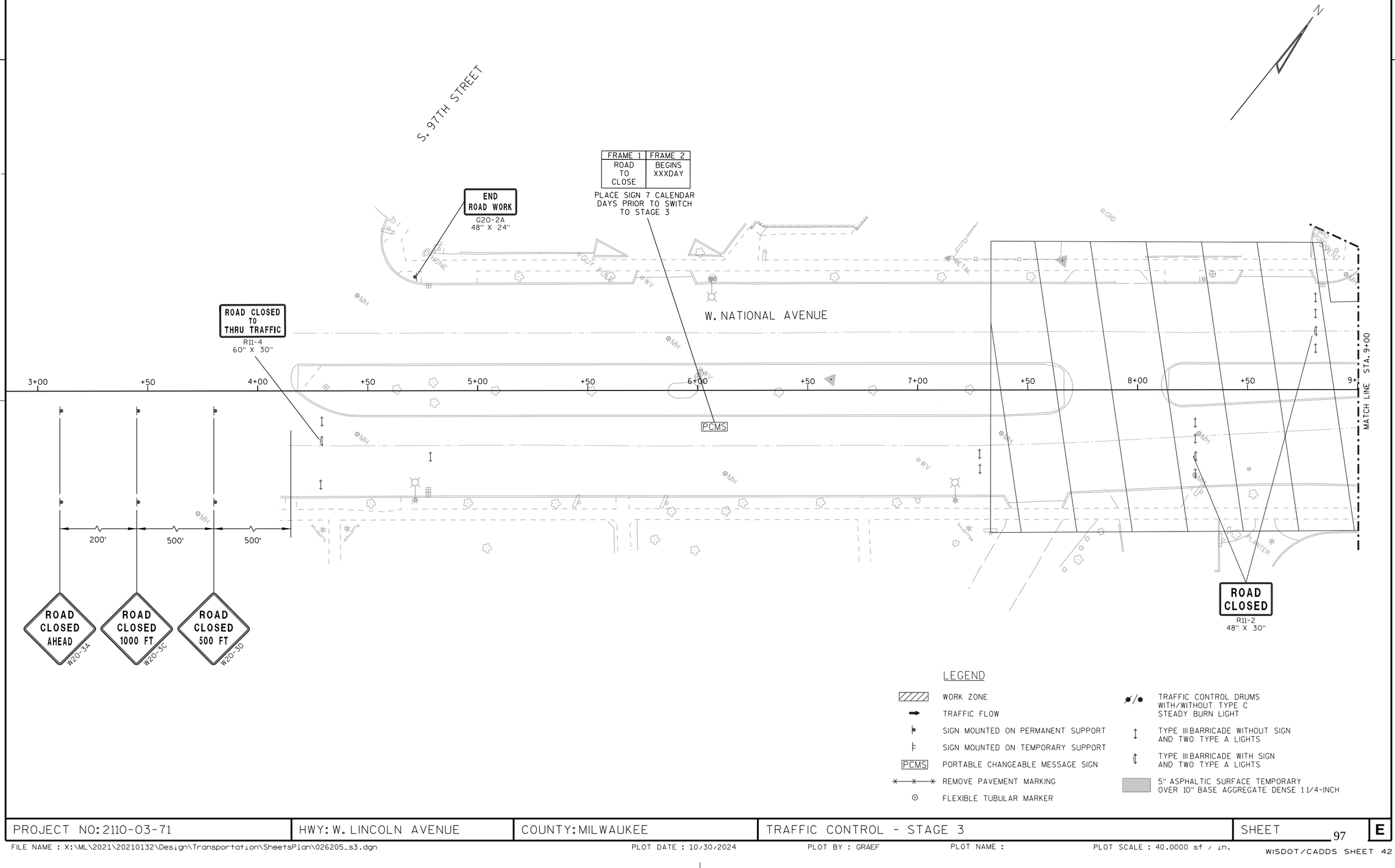
EXTEND DRUMS TO CLOSE TURN LANE

LEGEND

- WORK ZONE
- TRAFFIC FLOW
- SIGN MOUNTED ON PERMANENT SUPPORT
- SIGN MOUNTED ON TEMPORARY SUPPORT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- REMOVE PAVEMENT MARKING
- FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TYPE III BARRICADE WITHOUT SIGN AND TWO TYPE A LIGHTS
- TYPE III BARRICADE WITH SIGN AND TWO TYPE A LIGHTS
- 5" ASPHALTIC SURFACE TEMPORARY OVER 10" BASE AGGREGATE DENSE 1 1/4-INCH

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 3	SHEET 96	E

2



LEGEND

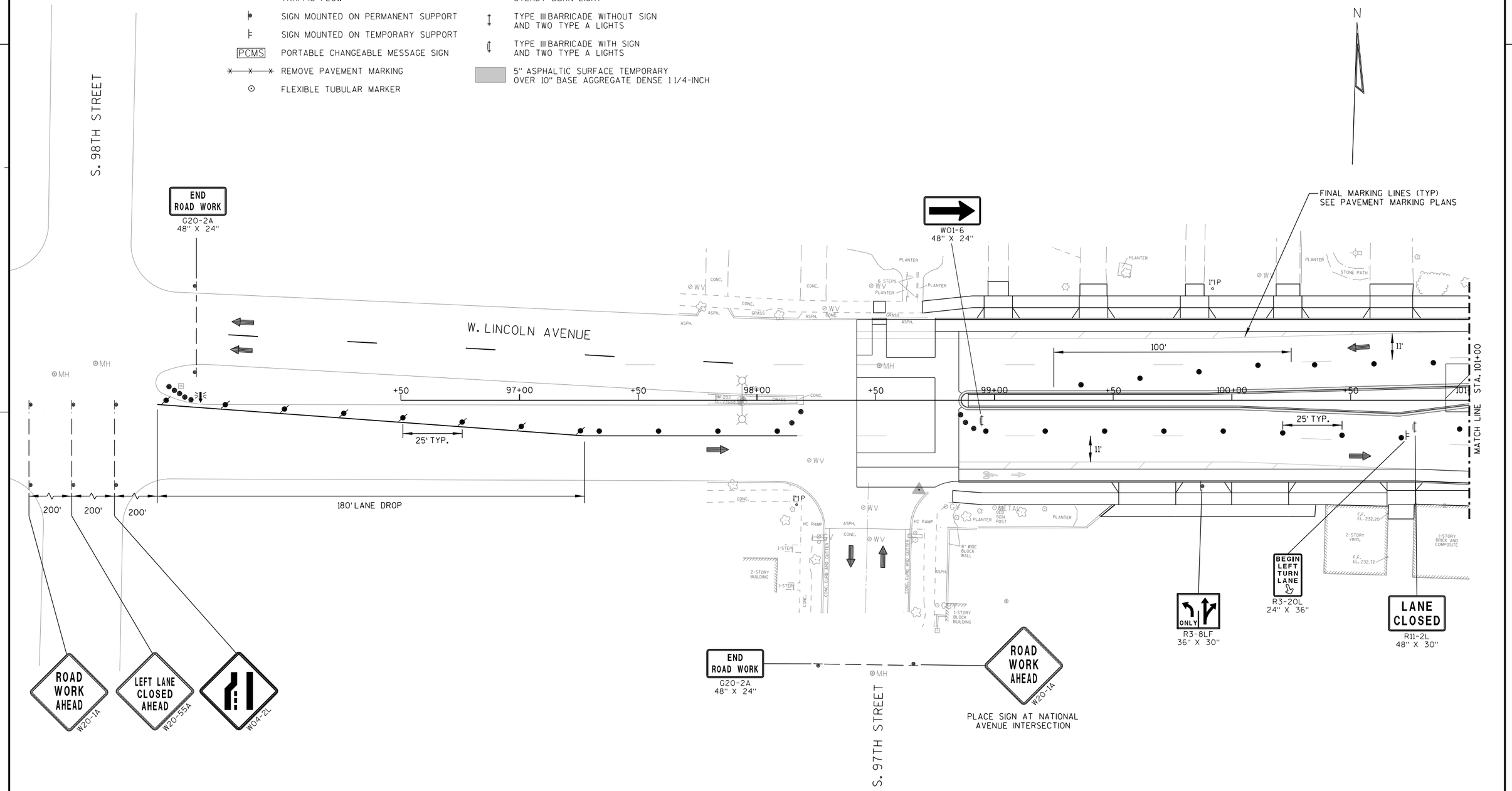
- WORK ZONE
- TRAFFIC FLOW
- SIGN MOUNTED ON PERMANENT SUPPORT
- SIGN MOUNTED ON TEMPORARY SUPPORT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- REMOVE PAVEMENT MARKING
- FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TYPE III BARRICADE WITHOUT SIGN AND TWO TYPE A LIGHTS
- TYPE III BARRICADE WITH SIGN AND TWO TYPE A LIGHTS
- 5" ASPHALTIC SURFACE TEMPORARY OVER 10" BASE AGGREGATE DENSE 1 1/4-INCH

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 3	SHEET 97	E

2

LEGEND

- WORK ZONE
- TRAFFIC FLOW
- SIGN MOUNTED ON PERMANENT SUPPORT
- SIGN MOUNTED ON TEMPORARY SUPPORT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- REMOVE PAVEMENT MARKING
- FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TYPE III BARRICADE WITHOUT SIGN AND TWO TYPE A LIGHTS
- TYPE III BARRICADE WITH SIGN AND TWO TYPE A LIGHTS
- 5" ASPHALTIC SURFACE TEMPORARY OVER 10" BASE AGGREGATE DENSE 1 1/4-INCH



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 4	SHEET 98	E

2

ROAD WORK AHEAD
W20-1A

PLACE SIGN AT GRANT STREET INTERSECTION

S. 96TH STREET

W01-6
48" X 24"

LANE CLOSED
R11-2L
48" X 30"

W01-6
48" X 24"

W. LINCOLN AVENUE

11'

MATCH LINE STA. 101+00

101+00 +50 102+00 +50 103+00 +50 104+00 +50 105+00 +50 106+00 +50 107+00

MATCH LINE STA. 107+00

N

ROAD WORK AHEAD
W20-1A

S. 95TH STREET

14+00 +50 13+00

W. NATIONAL AVENUE

END ROAD WORK
G20-2A
48" X 24"

FINAL MARKING LINES (TYP)
SEE PAVEMENT MARKING PLANS

12+00 +50 11+00 +50 10+00 +50 9+00 +50 8+00

500'

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1A

PLANTER

LANE CLOSED
R11-2L
48" X 30"

END ROAD WORK
G20-2A
48" X 24"

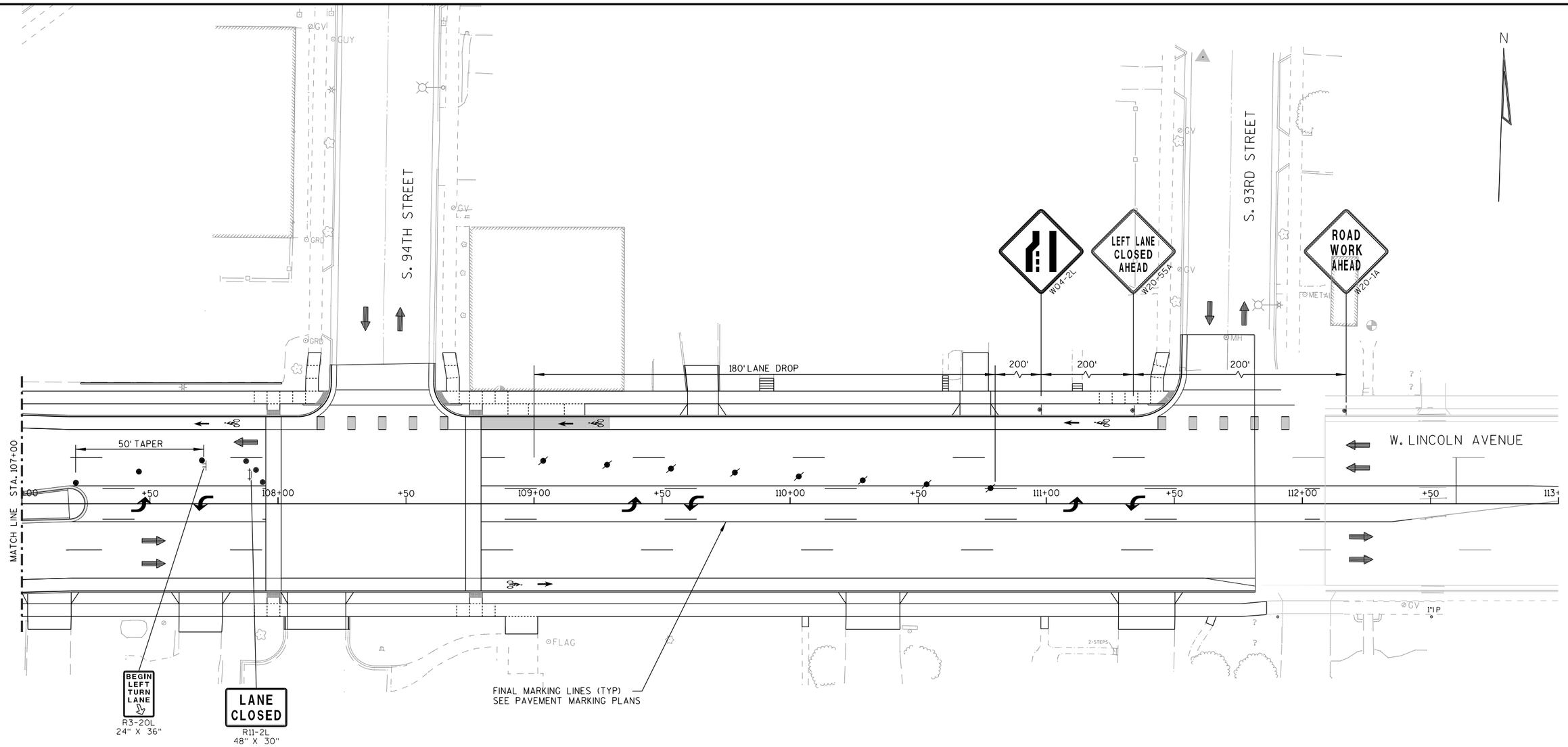
S. 95TH STREET

LEGEND

- WORK ZONE
- TRAFFIC FLOW
- SIGN MOUNTED ON PERMANENT SUPPORT
- SIGN MOUNTED ON TEMPORARY SUPPORT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- REMOVE PAVEMENT MARKING
- FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TYPE III BARRICADE WITHOUT SIGN AND TWO TYPE A LIGHTS
- TYPE III BARRICADE WITH SIGN AND TWO TYPE A LIGHTS
- 5" ASPHALTIC SURFACE TEMPORARY OVER 10" BASE AGGREGATE DENSE 1 1/4-INCH

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 4	SHEET 99	E

2



LEGEND

- WORK ZONE
- TRAFFIC FLOW
- SIGN MOUNTED ON PERMANENT SUPPORT
- SIGN MOUNTED ON TEMPORARY SUPPORT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- REMOVE PAVEMENT MARKING
- FLEXIBLE TUBULAR MARKER
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- TYPE III BARRICADE WITHOUT SIGN AND TWO TYPE A LIGHTS
- TYPE III BARRICADE WITH SIGN AND TWO TYPE A LIGHTS
- 5" ASPHALTIC SURFACE TEMPORARY OVER 10" BASE AGGREGATE DENSE 1 1/4-INCH

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 4	SHEET 100	E

2

2

LEGEND

- DETOUR ROUTE - LINCOLN AVENUE
- DETOUR ROUTE - NATIONAL AVENUE
- WORK ZONE
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN AND TWO TYPE A LIGHTS

NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES.

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

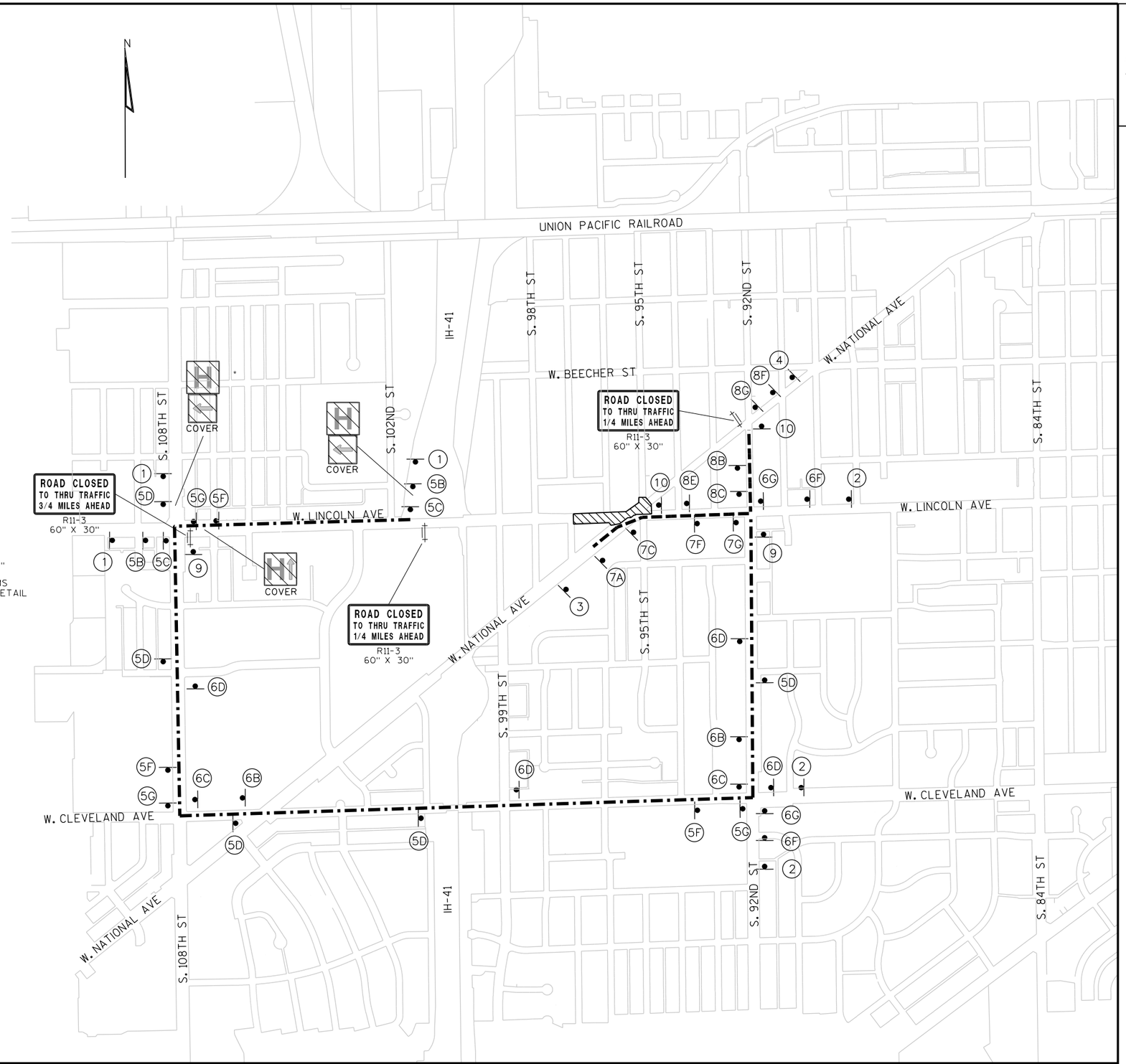
ANY SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER AND PAID FOR UNDER THE ITEM TRAFFIC CONTROL COVERING SIGNS.

FMS SIGNS WILL BE PAID FOR UNDER THE BID ITEM "TRAFFIC CONTROL SIGNS FIXED MESSAGE".

SEE TRAFFIC CONTROL SHEETS FOR ADDITIONAL SIGNING.

1. EAST / LINCOLN AVE / DETOUR AHEAD — M3-2, 24" X 12" — FMS SEE DETAIL — W20-2
2. WEST / LINCOLN AVE / DETOUR AHEAD — M3-4, 24" X 12" — FMS SEE DETAIL — W20-2
3. EAST / NATIONAL AVE / DETOUR AHEAD — M3-2, 24" X 12" — FMS SEE DETAIL — W20-2
4. WEST / NATIONAL AVE / DETOUR AHEAD — M3-4, 24" X 12" — FMS SEE DETAIL — W20-2
5. DETOUR / EAST / LINCOLN AVE / H — M4-8, 24" X 12"; M3-2, 24" X 12"; FMS SEE DETAIL; D9-2, 24" X 24"
6. DETOUR / WEST / LINCOLN AVE — M4-8, 24" X 12"; M3-4, 24" X 12"; FMS SEE DETAIL
7. DETOUR / EAST / NATIONAL AVE — M4-8, 24" X 12"; M3-2, 24" X 12"; FMS SEE DETAIL
8. DETOUR / WEST / NATIONAL AVE — M4-8, 24" X 12"; M3-4, 24" X 12"; FMS SEE DETAIL
9. END DETOUR / LINCOLN AVE — M4-8A, 24" X 18"; FMS SEE DETAIL
10. END DETOUR / NATIONAL AVE — M4-8A, 24" X 18"; FMS SEE DETAIL

- A — M5-2R, 21" X 21"
- B — M5-01R, 21" X 21"
- C — M06-1, 21" X 21"
- D — M06-1, 21" X 21"
- E — M5-2L, 21" X 21"
- F — M5-01R, 21" X 21"
- G — M06-1, 21" X 21"



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	DETOUR PLAN - STAGE 2	SHEET 101	E

2

LEGEND

- DETOUR ROUTE - LINCOLN AVENUE
- DETOUR ROUTE - NATIONAL AVENUE
- WORK ZONE
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN AND TWO TYPE A LIGHTS

NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES.

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

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FMS SIGNS WILL BE PAID FOR UNDER THE BID ITEM "TRAFFIC CONTROL SIGNS FIXED MESSAGE".

SEE TRAFFIC CONTROL SHEETS FOR ADDITIONAL SIGNING.

(1) EAST M3-2 24" X 12" / LINCOLN AVE / DETOUR AHEAD W20-2 — FMS SEE DETAIL

(2) WEST M3-4 24" X 12" / LINCOLN AVE / DETOUR AHEAD W20-2 — FMS SEE DETAIL

(3) EAST M3-2 24" X 12" / NATIONAL AVE / DETOUR AHEAD W20-2 — FMS SEE DETAIL

(4) WEST M3-4 24" X 12" / NATIONAL AVE / DETOUR AHEAD W20-2 — FMS SEE DETAIL

(5) DETOUR M4-8 24" X 12" / EAST M3-2 24" X 12" / LINCOLN AVE — FMS SEE DETAIL

(6) DETOUR M4-8 24" X 12" / WEST M3-4 24" X 12" / LINCOLN AVE — FMS SEE DETAIL

(7) DETOUR M4-8 24" X 12" / EAST M3-2 24" X 12" / NATIONAL AVE / H D9-2 24" X 24" — FMS SEE DETAIL

(8) DETOUR M4-8 24" X 12" / WEST M3-4 24" X 12" / NATIONAL AVE — FMS SEE DETAIL

(9) END DETOUR M4-8A 24" X 18" / LINCOLN AVE — FMS SEE DETAIL

(10) END DETOUR M4-8A 24" X 18" / NATIONAL AVE — FMS SEE DETAIL

(A) M5-2R 21" X 21"

(B) M5-01R 21" X 21"

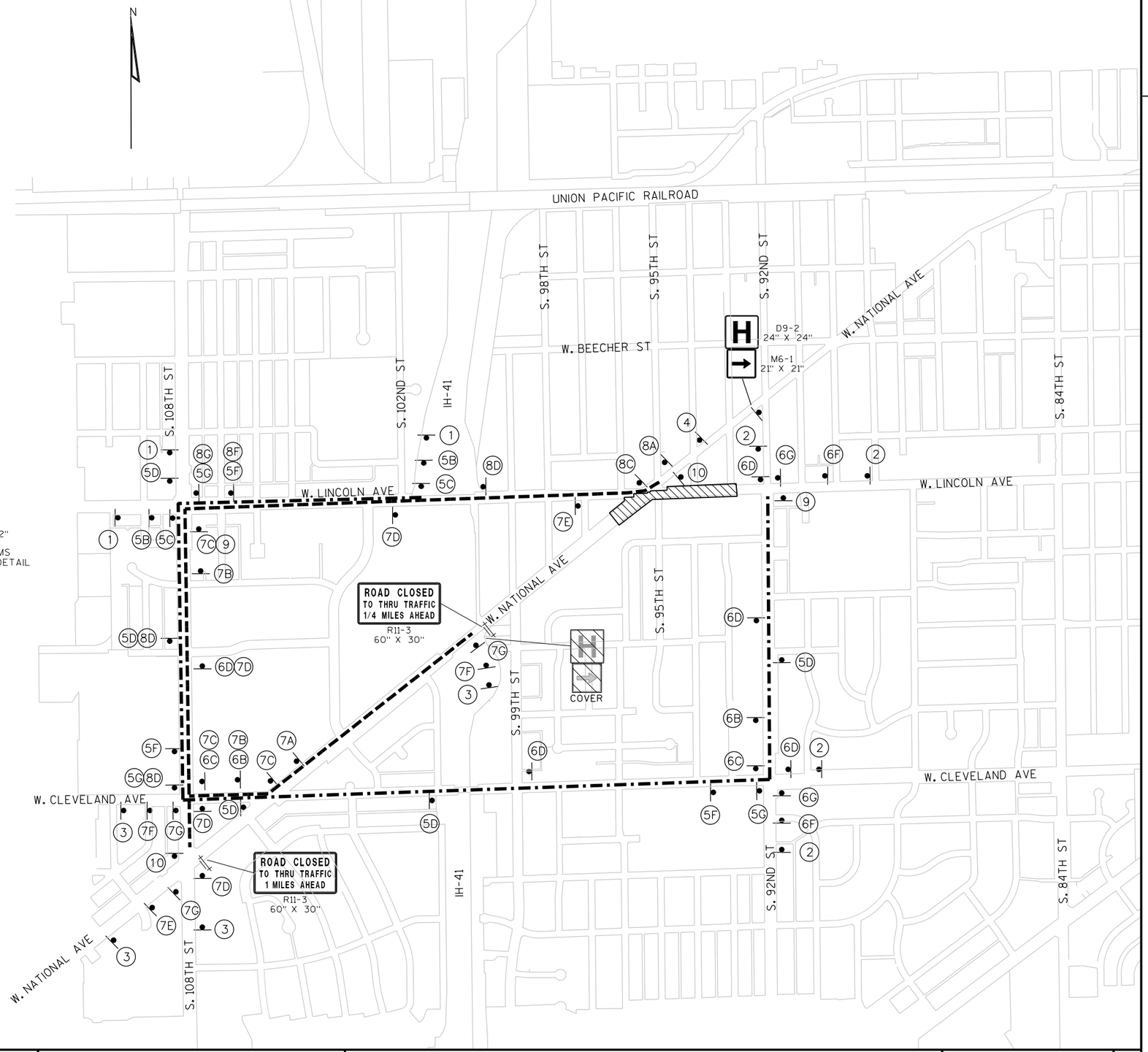
(C) M06-1 21" X 21"

(D) M06-1 21" X 21"

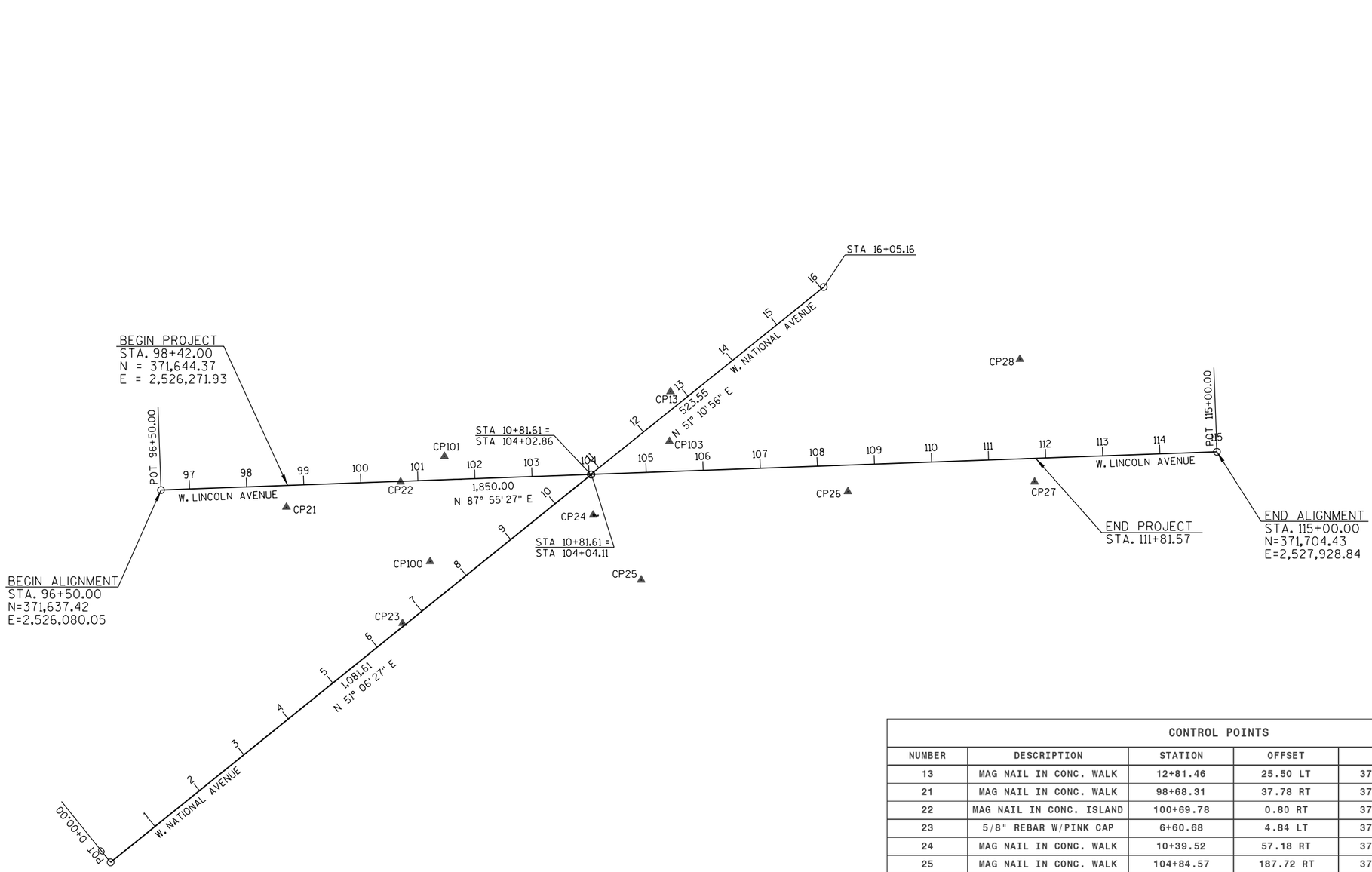
(E) M5-2L 21" X 21"

(F) M5-01R 21" X 21"

(G) M06-1 21" X 21"



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	DETOUR PLAN - STAGE 3	SHEET 102 E



CONTROL POINTS					
NUMBER	DESCRIPTION	STATION	OFFSET	N	E
13	MAG NAIL IN CONC. WALK	12+81.46	25.50 LT	371,809.83	2,526,972.14
21	MAG NAIL IN CONC. WALK	98+68.31	37.78 RT	371,607.57	2,526,299.59
22	MAG NAIL IN CONC. ISLAND	100+69.78	0.80 RT	371,651.83	2,526,499.59
23	5/8" REBAR W/PINK CAP	6+60.68	4.84 LT	371,404.21	2,526,503.01
24	MAG NAIL IN CONC. WALK	10+39.52	57.18 RT	371,593.81	2,526,836.80
25	MAG NAIL IN CONC. WALK	104+84.57	187.72 RT	371,480.05	2,526,920.88
26	5/8" REBAR W/PINK CAP	108+51.72	46.14 RT	371,634.84	2,527,282.66
27	MAG NAIL IN CONC. WALK	111+79.09	40.86 RT	371,651.97	2,527,609.61
28	MAG NAIL IN CONC. ROAD	111+61.16	174.39 LT	371,866.43	2,527,583.90
100	MAG NAIL IN CONC. WALK	7+65.97	58.73 LT	371,512.26	2,526,551.12
101	MAG NAIL IN CONC. WALK	101+48.10	41.05 LT	371,696.48	2,526,576.34
103	MAG NAIL IN CONC. WALK	105+42.70	53.05 LT	371,722.77	2,526,970.24

					2110-03-71	2110-03-72
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0002	201.0220	Grubbing	ID	46.000	46.000	
0004	204.0100	Removing Concrete Pavement	SY	14,769.000	14,769.000	
0006	204.0120	Removing Asphaltic Surface Milling	SY	839.000	839.000	
0008	204.0130	Removing Curb	LF	14.000	14.000	
0010	204.0150	Removing Curb & Gutter	LF	80.000	80.000	
0012	204.0155	Removing Concrete Sidewalk	SY	1,558.000	1,558.000	
0014	204.0185	Removing Masonry	CY	0.600	0.600	
0016	204.0195	Removing Concrete Bases	EACH	20.000	20.000	
0018	204.0210	Removing Manholes	EACH	13.000	13.000	
0020	204.0215	Removing Catch Basins	EACH	12.000	12.000	
0022	204.0245	Removing Storm Sewer (size) 01. 10-Inch	LF	140.000	140.000	
0024	204.0245	Removing Storm Sewer (size) 02. 12-Inch	LF	1,396.000	1,396.000	
0026	204.0245	Removing Storm Sewer (size) 03. 15-Inch	LF	82.000	82.000	
0028	204.9060.S	Removing (item description) 01. Traffic Signals - W Lincoln Ave & W National Ave	EACH	1.000	1.000	
0030	204.9060.S	Removing (item description) 02. Lighting Units	EACH	15.000	15.000	
0032	204.9060.S	Removing (item description) 03. Monotube Bases	EACH	4.000	4.000	
0034	204.9165.S	Removing (item description) 01. Concrete Steps	SF	62.000	62.000	
0036	205.0100	Excavation Common	CY	11,874.000	11,874.000	
0038	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	1,275.000	1,275.000	
0040	213.0100	Finishing Roadway (project) 01. 2110-03-71	EACH	1.000	1.000	
0042	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	5,874.000	5,874.000	
0044	310.0110	Base Aggregate Open-Graded	TON	15.000	15.000	
0046	311.0110	Breaker Run	TON	9,070.000	9,070.000	
0048	320.0145	Concrete Base 8-Inch	SY	155.000	155.000	
0050	415.0080	Concrete Pavement 8-Inch	SY	11,764.000	11,764.000	
0052	415.4100	Concrete Pavement Joint Filling	SY	13,798.000	13,798.000	
0054	416.0610	Drilled Tie Bars	EACH	366.000	366.000	
0056	416.0620	Drilled Dowel Bars	EACH	240.000	240.000	
0058	455.0605	Tack Coat	GAL	51.000	51.000	
0060	460.2000	Incentive Density HMA Pavement	DOL	70.000	70.000	
0062	460.6224	HMA Pavement 4 MT 58-28 S	TON	99.000	99.000	
0064	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	26.000	26.000	
0066	465.0125	Asphaltic Surface Temporary	TON	67.000	67.000	
0068	520.8000	Concrete Collars for Pipe	EACH	1.000	1.000	
0070	601.0105	Concrete Curb Type A	LF	10.000	10.000	
0072	601.0110	Concrete Curb Type D	LF	8.000	8.000	
0074	601.0319	Concrete Curb & Gutter 19-Inch	LF	1,569.000	1,569.000	
0076	601.0331	Concrete Curb & Gutter 31-Inch	LF	1,513.000	1,513.000	
0078	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	10.000	10.000	
0080	601.0600	Concrete Curb Pedestrian	LF	202.000	202.000	
0082	602.0410	Concrete Sidewalk 5-Inch	SF	18,449.000	18,449.000	
0084	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	249.000	249.000	
0086	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	53.000	53.000	
0088	602.0815	Concrete Driveway 7-Inch	SY	439.000	439.000	
0090	602.0865	Concrete Driveway HES 7-Inch	SY	241.000	241.000	
0092	602.1500	Concrete Steps	SF	62.000	62.000	
0094	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	77.000	77.000	
0096	608.0512	Storm Sewer Pipe Reinforced Concrete Class V 12-Inch	LF	943.000	943.000	
0098	608.0515	Storm Sewer Pipe Reinforced Concrete Class V 15-Inch	LF	363.000	363.000	

					2110-03-71	2110-03-72
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0100	611.0530	Manhole Covers Type J	EACH	5.000	5.000	
0102	611.0648	Inlet Covers Type R	EACH	16.000	16.000	
0104	611.2005	Manholes 5-FT Diameter	EACH	7.000	7.000	
0106	611.8105	Adjusting Catch Basin Covers	EACH	1.000	1.000	
0108	611.8110	Adjusting Manhole Covers	EACH	6.000	6.000	
0110	611.8120.S	Cover Plates Temporary	EACH	20.000	20.000	
0112	612.0104	Pipe Underdrain 4-Inch	LF	160.000	160.000	
0114	618.0100	Maintenance and Repair of Haul Roads (project) 01. 2110-03-71	EACH	1.000	1.000	
0116	619.1000	Mobilization	EACH	1.000	1.000	
0118	620.0300	Concrete Median Sloped Nose	SF	510.000	510.000	
0120	624.0100	Water	MGAL	58.000	58.000	
0122	625.0100	Topsoil	SY	1,724.000	1,724.000	
0124	627.0200	Mulching	SY	100.000	100.000	
0126	628.1104	Erosion Bales	EACH	25.000	25.000	
0128	628.1504	Silt Fence	LF	100.000	100.000	
0130	628.1520	Silt Fence Maintenance	LF	100.000	100.000	
0132	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000	
0134	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000	
0136	628.7005	Inlet Protection Type A	EACH	18.000	18.000	
0138	628.7010	Inlet Protection Type B	EACH	3.000	3.000	
0140	628.7015	Inlet Protection Type C	EACH	27.000	27.000	
0142	628.7560	Tracking Pads	EACH	4.000	4.000	
0144	629.0210	Fertilizer Type B	CWT	1.400	1.400	
0146	630.0200	Seeding Temporary	LB	5.000	5.000	
0148	630.0500	Seed Water	MGAL	5.000	5.000	
0150	631.0300	Sod Water	MGAL	20.000	20.000	
0152	631.1000	Sod Lawn	SY	1,767.000	1,767.000	
0154	637.2210	Signs Type II Reflective H	SF	227.710	227.710	
0156	637.2230	Signs Type II Reflective F	SF	4.000	4.000	
0158	638.2102	Moving Signs Type II	EACH	19.000	19.000	
0160	638.2602	Removing Signs Type II	EACH	51.000	51.000	
0162	638.3000	Removing Small Sign Supports	EACH	22.000	22.000	
0164	642.5201	Field Office Type C	EACH	1.000	1.000	
0166	643.0300	Traffic Control Drums	DAY	30,292.000	30,292.000	
0168	643.0420	Traffic Control Barricades Type III	DAY	10,261.000	10,261.000	
0170	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	17.000	17.000	
0172	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	17.000	17.000	
0174	643.0705	Traffic Control Warning Lights Type A	DAY	20,522.000	20,522.000	
0176	643.0715	Traffic Control Warning Lights Type C	DAY	5,216.000	5,216.000	
0178	643.0800	Traffic Control Arrow Boards	DAY	307.000	307.000	
0180	643.0900	Traffic Control Signs	DAY	45,307.000	45,307.000	
0182	643.0920	Traffic Control Covering Signs Type II	EACH	12.000	12.000	
0184	643.1000	Traffic Control Signs Fixed Message	SF	227.250	227.250	
0186	643.1050	Traffic Control Signs PCMS	DAY	28.000	28.000	
0188	643.3105	Temporary Marking Line Paint 4-Inch	LF	1,622.000	1,622.000	
0190	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	2,845.000	2,845.000	
0192	643.3205	Temporary Marking Line Paint 8-Inch	LF	168.000	168.000	
0194	643.3250	Temporary Marking Line Removable Tape 8-Inch	LF	310.000	310.000	
0196	643.3805	Temporary Marking Stop Line Paint 18-Inch	LF	15.000	15.000	

					2110-03-71	2110-03-72
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0198	643.5000	Traffic Control	EACH	1.000	1.000	
0200	644.1430	Temporary Pedestrian Surface Plate	SF	1,026.000	1,026.000	
0202	644.1601	Temporary Pedestrian Curb Ramp	DAY	1,048.000	1,048.000	
0204	644.1605	Temporary Pedestrian Detectable Warning Field	SF	216.000	216.000	
0206	644.1810	Temporary Pedestrian Barricade	LF	8,237.000	8,237.000	
0208	645.0111	Geotextile Type DF Schedule A	SY	89.000	89.000	
0210	645.0120	Geotextile Type HR	SY	50.000	50.000	
0212	645.0220	Geogrid Type SR	SY	15,116.000	15,116.000	
0214	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	5,275.000	5,275.000	
0216	646.3040	Marking Line Grooved Wet Ref Epoxy 8-Inch	LF	1,026.000	1,026.000	
0218	646.5020	Marking Arrow Epoxy	EACH	31.000	31.000	
0220	646.5120	Marking Word Epoxy	EACH	1.000	1.000	
0222	646.5220	Marking Symbol Epoxy	EACH	22.000	22.000	
0224	646.6120	Marking Stop Line Epoxy 18-Inch	LF	245.000	245.000	
0226	646.7120	Marking Diagonal Epoxy 12-Inch	LF	61.000	61.000	
0228	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	1,603.000	1,603.000	
0230	646.8120	Marking Curb Epoxy	LF	70.000	70.000	
0232	646.8220	Marking Island Nose Epoxy	EACH	14.000	14.000	
0234	646.9000	Marking Removal Line 4-Inch	LF	495.000	495.000	
0236	646.9002	Marking Removal Line 6-Inch	LF	120.000	120.000	
0238	646.9100	Marking Removal Line 8-Inch	LF	92.000	92.000	
0240	650.4000	Construction Staking Storm Sewer	EACH	24.000	24.000	
0242	650.4500	Construction Staking Subgrade	LF	3,724.000	3,724.000	
0244	650.7000	Construction Staking Concrete Pavement	LF	3,724.000	3,724.000	
0246	650.8501	Construction Staking Electrical Installations (project) 01. 2110-03-71	EACH	1.000	1.000	
0248	650.9000	Construction Staking Curb Ramps	EACH	19.000	19.000	
0250	650.9500	Construction Staking Sidewalk (project) 01. 2110-03-71	EACH	1.000	1.000	
0252	650.9911	Construction Staking Supplemental Control (project) 01. 2110-03-71	EACH	1.000	1.000	
0254	650.9920	Construction Staking Slope Stakes	LF	3,724.000	3,724.000	
0256	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	2,478.000	2,478.000	
0258	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	1,732.000	1,732.000	
0260	652.0605	Conduit Special 2-Inch	LF	160.000	160.000	
0262	653.0135	Pull Boxes Steel 24x36-Inch	EACH	8.000	8.000	
0264	653.0140	Pull Boxes Steel 24x42-Inch	EACH	11.000	11.000	
0266	653.0905	Removing Pull Boxes	EACH	9.000	9.000	
0268	654.0101	Concrete Bases Type 1	EACH	6.000	6.000	
0270	654.0102	Concrete Bases Type 2	EACH	2.000	2.000	
0272	654.0105	Concrete Bases Type 5	EACH	14.000	14.000	
0274	654.0110	Concrete Bases Type 10	EACH	1.000	1.000	
0276	654.0113	Concrete Bases Type 13	EACH	1.000	1.000	
0278	654.0120	Concrete Bases Type 10-Special	EACH	2.000	2.000	
0280	655.0230	Cable Traffic Signal 5-14 AWG	LF	573.000	573.000	
0282	655.0240	Cable Traffic Signal 7-14 AWG	LF	879.000	879.000	
0284	655.0260	Cable Traffic Signal 12-14 AWG	LF	1,194.000	1,194.000	
0286	655.0270	Cable Traffic Signal 15-14 AWG	LF	1,271.000	1,271.000	
0288	655.0320	Cable Type UF 2-10 AWG Grounded	LF	1,322.000	1,322.000	
0290	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	2,351.000	2,351.000	
0292	655.0610	Electrical Wire Lighting 12 AWG	LF	2,292.000	2,292.000	
0294	655.0625	Electrical Wire Lighting 6 AWG	LF	7,272.000	7,272.000	

Line	Item	Item Description	Unit	Total	2110-03-71 Qty	2110-03-72 Qty
0296	655.0900	Traffic Signal EVP Detector Cable	LF	1,439.000	1,439.000	
0298	657.0100	Pedestal Bases	EACH	6.000	6.000	
0300	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	15.000	15.000	
0302	657.0310	Poles Type 3	EACH	2.000	2.000	
0304	657.0322	Poles Type 5-Aluminum	EACH	13.000	13.000	
0306	657.0350	Poles Type 10	EACH	1.000	1.000	
0308	657.0352	Poles Type 10-Special	EACH	1.000	1.000	
0310	657.0405	Traffic Signal Standards Aluminum 3.5-FT	EACH	2.000	2.000	
0312	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	2.000	2.000	
0314	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	2.000	2.000	
0316	657.0530	Monotube Arms 30-FT	EACH	1.000	1.000	
0318	657.0546	Monotube Arms 45-FT-Special	EACH	1.000	1.000	
0320	657.0614	Luminaire Arms Single Member 4-Inch Clamp 8-FT	EACH	2.000	2.000	
0322	657.0615	Luminaire Arms Single Member 4 1/2-Inch Clamp 8-FT	EACH	15.000	15.000	
0324	657.0810	Luminaire Arms Steel 10-FT	EACH	1.000	1.000	
0326	657.0815	Luminaire Arms Steel 15-FT	EACH	1.000	1.000	
0328	658.0173	Traffic Signal Face 3S 12-Inch	EACH	12.000	12.000	
0330	658.0174	Traffic Signal Face 4S 12-Inch	EACH	6.000	6.000	
0332	658.0416	Pedestrian Signal Face 16-Inch	EACH	8.000	8.000	
0334	658.5070	Signal Mounting Hardware (location) 01. W Lincoln Ave & W National Ave	EACH	1.000	1.000	
0336	659.1125	Luminaires Utility LED C	EACH	21.000	21.000	
0338	659.5000.S	Lamp, Ballast, LED, Switch Disposal by Contractor	EACH	45.000	45.000	
0340	690.0150	Sawing Asphalt	LF	625.000	625.000	
0342	690.0250	Sawing Concrete	LF	1,507.000	1,507.000	
0344	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	3,529.000	3,529.000	
0346	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,200.000	1,200.000	
0348	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	4,200.000	4,200.000	
0350	SPV.0060	Special 01. Catch Basin Special	EACH	14.000	14.000	
0352	SPV.0060	Special 02. Storm Sewer Reconnect	EACH	13.000	13.000	
0354	SPV.0060	Special 03. Round Steel Sign Post System	EACH	36.000	36.000	
0356	SPV.0060	Special 06. Water Service Reconnect, 6-Inch	EACH	1.000		1.000
0358	SPV.0060	Special 07. Water Service Reconnect, 8-Inch	EACH	1.000		1.000
0360	SPV.0060	Special 08. Hydrant	EACH	7.000		7.000
0362	SPV.0060	Special 09. Water Main Valve, 8-Inch	EACH	4.000		4.000
0364	SPV.0060	Special 10. Water Main Valve, 12-Inch	EACH	3.000		3.000
0366	SPV.0060	Special 11. Water Main Connection, 8-Inch	EACH	3.000		3.000
0368	SPV.0060	Special 12. Water Main Connection, 8-Inch Straight	EACH	1.000		1.000
0370	SPV.0060	Special 13. Water Main Connection, 12-Inch	EACH	2.000		2.000
0372	SPV.0060	Special 14. Water Main Connection, 12-Inch Straight	EACH	1.000		1.000
0374	SPV.0060	Special 15. Water Main Connection, 97th	EACH	1.000		1.000
0376	SPV.0060	Special 16. Air Release Assembly, 1.5-Inch	EACH	1.000		1.000
0378	SPV.0060	Special 17. Adjust Water Valve Box	EACH	17.000		17.000
0380	SPV.0060	Special 18. Sanitary Manhole Abandonment	EACH	2.000		2.000
0382	SPV.0060	Special 19. Internal Sanitary Manhole Seal	EACH	10.000		10.000
0384	SPV.0060	Special 20. Sanitary Manhole Frame with Solid Gasketed Lid	EACH	10.000		10.000
0386	SPV.0060	Special 21. Adjust Sanitary Manhole Frame	EACH	10.000		10.000
0388	SPV.0060	Special 22. APS Push Button System, 10 Buttons, W Lincoln Ave & W National Ave	EACH	1.000	1.000	
0390	SPV.0060	Special 23. Salvage and Reinstall EVP System, W Lincoln Ave & W National Ave	EACH	1.000	1.000	
0392	SPV.0060	Special 24. Vehicle Video Detection System, W Lincoln Ave & W National Ave (4	EACH	1.000	1.000	

Line	Item	Item Description	Unit	Total	2110-03-71 Qty	2110-03-72 Qty
		Camera)				
0394	SPV.0060	Special 25. Reinstalling Monotube Assembly	EACH	2.000	2.000	
0396	SPV.0060	Special 26. Communications Vault Adjustment	EACH	1.000	1.000	
0398	SPV.0060	Special 27. Utility Line Opening (ULO)	EACH	10.000	10.000	
0400	SPV.0060	Special 28. Plug & Air Vent Assembly	EACH	1.000		1.000
0402	SPV.0060	Special 29. Existing Traffic Signal Cabinet with New Controller and MMU	EACH	1.000	1.000	
0404	SPV.0060	Special 30. Salvage Wheel Stops	EACH	2.000	2.000	
0406	SPV.0090	Special 01. Water Main Relay, 8-Inch	LF	485.000		485.000
0408	SPV.0090	Special 02. Water Main Relay, 12-Inch	LF	1,551.000		1,551.000
0410	SPV.0090	Special 03. Water Service, 1-Inch	LF	780.000		780.000
0412	SPV.0090	Special 04. Water Service, 1.5-Inch	LF	67.000		67.000
0414	SPV.0090	Special 05. Water Service, 2-Inch	LF	23.000		23.000
0416	SPV.0090	Special 06. Sanitary Sewer Relay, SDR 35 PVC SP, 8-Inch	LF	1,150.000		1,150.000
0418	SPV.0090	Special 07. Building Sanitary Sewer, 6-Inch	LF	762.000		762.000
0420	SPV.0090	Special 08. 6-Inch PVC Storm Sewer Lateral	LF	336.000	336.000	
0422	SPV.0090	Special 09. 8-Inch PVC Storm Sewer Lateral	LF	44.000	44.000	
0424	SPV.0090	Special 10. Concrete Curb and Gutter 67-Inch	LF	1,995.000	1,995.000	
0426	SPV.0090	Special 11. Concrete Curb Special	LF	20.000	20.000	
0428	SPV.0165	Special 01. High Friction Green Surfacing	SF	4,902.000	4,902.000	
0430	SPV.0180	Special 01. Shredded Hardwood Bark Mulch	SY	15.000	15.000	
0432	SPV.0180	Special 02. Remove and Replace Decorative Stone Mulch	SY	68.000	68.000	
0434	SPV.0200	Special 01. Sanitary Manhole, 48-Inch Diameter	VF	121.000		121.000

3

GRUBBING

STATION TO STATION	201.0220 GRUBBING ID
W LINCOLN AVE	
98+71 - 105+75	46
105+75 - 111+82	-
TOTALS	46

REMOVING CONCRETE PAVEMENT

STATION TO STATION	204.0100 REMOVING CONCRETE PAVEMENT SY
W LINCOLN AVE	
98+71 - 105+75	9,878
105+75 - 111+82	4,891
TOTALS	14,769

REMOVING ASPHALTIC SURFACE MILLING

STATION TO STATION	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
W LINCOLN AVE	
98+71 - 105+75	839
105+75 - 111+82	-
TOTALS	839

3

REMOVING CURB

STATION TO STATION	204.0130 REMOVING CURB LF
W LINCOLN AVE	
98+71 - 105+75	8
105+75 - 111+82	6
TOTALS	14

REMOVING CURB & GUTTER

STATION TO STATION	204.0150 REMOVING CURB & GUTTER LF
W LINCOLN AVE	
98+71 - 105+75	21
105+75 - 111+82	59
TOTALS	80

REMOVING CONCRETE SIDEWALK

STATION TO STATION	204.0155 REMOVING CONCRETE SIDEWALK SY
W LINCOLN AVE	
98+71 - 105+75	916
105+75 - 111+82	642
TOTALS	1,558

ALL ITEMS ARE CATEGORY 0010
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3

REMOVING MASONRY

STATION TO STATION	204.0185 REMOVING MASONRY CY
W LINCOLN AVE	
98+71 - 105+75	-
105+75 - 111+82	0.6
TOTALS	0.6

REMOVING MANHOLES

STATION	204.0210 REMOVING MANHOLES EACH
W LINCOLN AVE	
98+88, 6' LT	1
100+18, 35' RT	1
100+57, 6' LT	1
101+45, 17' LT	1
101+58, 34' RT	1
103+27, 17' LT	1
104+79, 25' RT	1
104+91, 32' LT	1
105+46, 34' LT	1
105+50, 26' RT	1
111+36, 26' RT	1
W NATIONAL AVE	
10+93, 13' LT	1
12+08, 13' LT	1
TOTALS	13

REMOVING CATCH BASINS

STATION	204.0215 REMOVING CATCH BASINS EACH
W LINCOLN AVE	
98+87, 34' RT	1
98+88, 34' LT	1
101+38, 34' LT	1
103+25, 34' LT	1
104+71, 34' RT	1
105+49, 34' RT	1
111+31, 34' RT	1
111+36, 34' LT	1
W NATIONAL AVE	
8+84, 48' LT	1
9+33, 44' RT	1
9+84, 5' LT	1
12+02, 39' LT	1
TOTALS	12

3

REMOVING STORM SEWER

STATION TO STATION	204.0245.01 10-INCH LF	204.0245.02 12-INCH LF	204.0245.03 15-INCH LF
W LINCOLN AVE			
98+71 - 105+75	140	1,280	82
105+75 - 111+82	-	116	-
TOTALS	140	1,396	82

REMOVING CONCRETE STEPS

STATION TO STATION	204.9165.S 01. REMOVING CONCRETE STEPS SF
W LINCOLN AVE	
98+71 - 105+75	62
105+75 - 111+82	-
TOTALS	62

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LINCOLN AVENUE	FROM/TO STATION	LOCATION	205.0100 EXCAVATION COMMON (1) CUT (2) CY	205.0100 EXCAVATION COMMON (1) EBS EXCAVATION (3) CY	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4) CY	AVAILABLE MATERIAL (5) CY	UNEXPANDED FILL CY	EXPANDED FILL (6) CY FACTOR 1.15	MASS ORDINATE +/- (7) CY	WASTE CY	COMMENT
	98+72 to 11+81.5	LINCOLN AVENUE	8,734	0	2,516	6,218	37	42	6,176	6,176	
	7+66 to 12+91	NATIONAL AVENUE	3,139	0	896	2,243	10	12	2,231	2,231	
GRAND TOTAL			11,874	0	3,412	8,461	47	54	8,407		
TOTAL COMMON EXC			11,874								

NOTES:
(1) EXCAVATION COMMON IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(6) EXPANDED FILL FACTOR = 1.15
(7) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL

STATION TO STATION	LOCATION	205.0501.S TON
LINCOLN AVENUE		
101+00 - 102+50	REF LINE TO 80'RT (4' TO 8' BELOW GROUND SURFACE)	179
NATIONAL AVENUE		
8+00 - 9+00	28'LT TO EXCAVAION LIMIT LT (4' TO 8' BELOW GROUND SURFACE)	67
8+00 - 9+00	28'LT TO 20'RT (1' TO 6' BELOW GROUND SURFACE)	388
9+00 - 10+00	28'LT TO 20'RT (1' TO 12' BELOW GROUND SURFACE)	641
	TOTALS	1,275

ALL ITEMS ARE CATEGORY 0010
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3

FINISHING ROADWAY

STATION TO STATION	213.0100 01. FINISHING ROADWAY EACH
W LINCOLN AVE	
2110-03-71	1
TOTALS	1

BASE AGGREGATE DENSE 1 1/4-INCH

STATION TO STATION	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON
W LINCOLN AVE	
98+71 - 105+75	3,926
105+75 - 111+82	1,948
TOTALS	5,874

3

BREAKER RUN

STATION TO STATION	311.0110 BREAKER RUN TON	645.0220 GEOGRID TYPE SR SY
W LINCOLN AVE		
98+71 - 105+75	5,961	9,934
105+75 - 111+82	3,109	5,182
TOTALS	9,070	15,116

CONCRETE BASE

STATION TO STATION	320.0145 8-INCH SY
W LINCOLN AVE	
98+71 - 105+75	155
105+75 - 111+82	-
TOTALS	155

CONCRETE PAVEMENT

STATION TO STATION	415.0080 8-INCH SY
W LINCOLN AVE	
98+71 - 105+75	7,722
105+75 - 111+82	4,042
TOTALS	11,764

CONCRETE PAVEMENT JOINT FILLING

STATION TO STATION	415.4100 CONCRETE PAVEMENT JOINT FILLING SY
W LINCOLN AVE	
98+71 - 105+75	8,979
105+75 - 111+82	4,819
TOTALS	13,798

DRILLED TIE BARS

STATION TO STATION	416.0610 DRILLED TIE BARS EACH
W LINCOLN AVE	
98+71 - 105+75	265
105+75 - 111+82	101
TOTALS	366

DRILLED DOWEL BARS

STATION TO STATION	416.0620 DRILLED DOWEL BARS EACH
W LINCOLN AVE	
98+71 - 105+75	168
105+75 - 111+82	72
TOTALS	240

ALL ITEMS ARE CATEGORY 0010
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HMA PAVEMENT

STATION TO STATION	460.6224 4 MT 58-28 S TON	465.0120 DRIVEWAYS AND FIELD ENTRANCES TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	455.0605 TACK COAT GAL
W LINCOLN AVE				
98+71 - 105+75	99	20	67	51
105+75 - 111+82	-	6	-	-
TOTALS	99	26	67	51

CONCRETE CURB

STATION TO STATION	601.0105 TYPE A LF	601.0110 TYPE D LF	601.0600 PEDESTRIAN LF	SPV.0090.11 CONCRETE CURB SPECIAL LF
W LINCOLN AVE				
98+71 - 105+75	10	8	97	-
105+75 - 111+82	-	-	105	20
TOTALS	10	8	202	20

3

CONCRETE CURB & GUTTER

STATION TO STATION	601.0319 19-INCH LF	601.0331 31-INCH LF	601.0407 18-INCH TYPE D LF	SPV.0090.10 CONCRETE CURB AND GUTTER 67-INCH LF
W LINCOLN AVE				
98+71 - 105+75	1,282	1,438	-	872
105+75 - 111+82	287	75	10	1,123
TOTALS	1,569	1,513	10	1,995

CURB RAMP DETECTABLE WARNING FIELD YELLOW

STATION TO STATION	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF
W LINCOLN AVE		
98+71 - 105+75	209	16
105+75 - 111+82	40	37
TOTALS	249	53

CONCRETE DRIVEWAY

STATION TO STATION	602.0815 7-INCH SY	602.0865 HES 7-INCH SY
W LINCOLN AVE		
98+71 - 105+75	223	241
105+75 - 111+82	216	-
TOTALS	439	241

CONCRETE SIDEWALK

STATION TO STATION	602.0410 5-INCH SF
W LINCOLN AVE	
98+71 - 105+75	11,922
105+75 - 111+82	6,527
TOTALS	18,449

CONCRETE STEPS

STATION TO STATION	602.1500 CONCRETE STEPS SF
W LINCOLN AVE	
98+71 - 105+75	62
105+75 - 111+82	-
TOTALS	62

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STORM SEWER SUMMARY

ITEM NUMBER	ITEM	UNIT	PROJECT TOTAL
520.8000	CONCRETE COLLARS FOR PIPE	EACH	1
608.0418	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH	LF	77
608.0512	STORM SEWER PIPE REINFORCED CONCRETE CLASS V 12-INCH	LF	943
608.0515	STORM SEWER PIPE REINFORCED CONCRETE CLASS V 15-INCH	LF	363
611.0530	MANHOLE COVERS TYPE J	EACH	5
611.0648	INLET COVERS TYPE R	EACH	16
611.2005	MANHOLES 5-FT DIAMETER	EACH	7
611.8105	ADJUSTING CATCH BASIN COVERS	EACH	1
611.8110	ADJUSTING MANHOLE COVERS	EACH	6
SPV.0060.01	CATCH BASIN SPECIAL	EACH	14

(REFER TO STORM SEWER PLAN DRAINAGE TABLE FOR ADDITIONAL INFORMATION)

COVER PLATES TEMPORARY

STATION	611.8120.S COVER PLATES TEMPORARY EACH
W NATIONAL AVE	
12+38, 26' LT	1
W LINCOLN AVE	
98+47, 15' LT	1
98+90, 6' LT	1
100+12, 15' LT	1
100+50, 30' LT	1
100+81, 4' LT	1
101+70, 15' LT	1
101+78, 30' LT	1
102+85, 33' LT	1
103+48, 15' LT	1
104+03, 33' LT	1
104+32, 15' LT	1
106+39, 28' RT	1
106+45, 30' LT	1
107+90, 29' RT	1
107+90, 7' LT	1
108+35, 45' LT	1
109+20, 30' LT	1
111+37, 6' LT	1
111+65, 30' LT	1
TOTALS	20

MAINTENANCE AND REPAIR OF HAUL ROADS

STATION TO STATION	618.0100 01. MAINTENANCE AND REPAIR OF HAUL ROADS EACH
W LINCOLN AVE	
2110-03-71	1
TOTALS	1

PIPE UNDERDRAIN

STATION TO STATION	310.0110 BASE AGGREGATE OPEN GRADED TON	612.0104 PIPE UNDERDRAIN 4-INCH LF	645.0111 GEOTEXTILE TYPE DF SCHEDULE A SY
W LINCOLN AVE			
98+71 - 105+75	12	130	72
105+75 - 111+82	3	30	17
TOTALS	15	160	89

CONCRETE MEDIAN NOSE

STATION TO STATION	620.0300 SLOPED NOSE SF
W LINCOLN AVE	
98+71 - 105+75	510
105+75 - 111+82	-
TOTALS	510

WATER

STATION TO STATION	624.0100 WATER MGAL
W LINCOLN AVE	
98+71 - 105+75	39
105+75 - 111+82	19
TOTALS	58

TOPSOIL

STATION TO STATION	625.0100 TOPSOIL SY
W LINCOLN AVE	
98+71 - 105+75	963
105+75 - 111+82	761
TOTALS	1,724

MULCHING & SEEDING

STATION TO STATION	627.0200 MULCHING SY	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
W LINCOLN AVE			
98+71 - 105+75	-	-	-
105+75 - 111+82	-	-	-
UNDISTRIBUTED	100	5	5
TOTALS	100	5	5

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

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TEMPORARY SETTLING BASINS

STATION TO STATION	628.1104 EROSION BALES EACH	645.0120 GEOTEXTILE TYPE HR SY
W LINCOLN AVE		
UNDISTRIBUTED	25	50
TOTALS	25	50

SILT FENCE

STATION TO STATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF
UNDISTRIBUTED	100	100
TOTALS	100	100

EROSION CONTROL MOBILIZATIONS

STREET	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
W LINCOLN AVE	2	4
TOTALS	2	4

3

INLET PROTECTION

STATION TO STATION	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH
W LINCOLN AVE			
98+71 - 105+75	14	1	22
105+75 - 111+82	4	2	5
TOTALS	18	3	27

TRACKING PADS

STAGE	628.7560 TRACKING PADS EACH
W LINCOLN AVE	
STAGE 2	2
STAGE 3	2
TOTALS	4

SOD

STATION TO STATION	629.0210 FERTILIZER TYPE B CWT	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY
W LINCOLN AVE			
98+71 - 105+75	0.6	11	963
105+75 - 111+82	0.5	8.5	761
UNDISTRIBUTED	0.3	0.5	43
TOTALS	1.4	20	1,767

ALL ITEMS ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

TYPE II PERMANENT SIGNING

2110-03-71 W. LINCOLN AVENUE

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2102 MOVING SIGNS TYPE II [EA]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	SPV.0060.03 ROUND STEEL SIGN POST SYSTEM [EA]	POLE HEIGHT FOR INFORMATION ONLY CONTRACTOR TO VERIFY POLE HEIGHT WITH MUTCD REQUIREMENTS PRIOR TO ORDERING [10 FT]	[12 FT]	[14 FT]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
1-1	R3-17 (2S)	II	--	30	x	24	5.00	--	--	--	--	1	--	1	--	--	--
1-2	R3-17B (2S)	II	--	30	x	12	2.50	--	--	--	--	--	--	--	--	1-1	--
1-3	R3-17 (2S)	II	--	30	x	24	5.00	--	--	--	--	1	--	1	--	--	--
1-4	R7-1L (2S)	II	--	18	x	24	3.00	--	--	--	--	--	--	--	--	1-3	--
1-5	D9-2 (2S)	II	--	24	x	24	4.00	--	--	1	--	--	--	--	--	--	ON LIGHT POLE
1-6	MB6-1 (2S)	II	--	21	x	21	3.06	--	--	--	--	--	--	--	--	--	ON LIGHT POLE
1-7	-- --	--	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--
1-8	R2-1 (2S)	II	30	24	x	30	5.00	--	--	2	--	--	--	--	--	--	ON LIGHT POLE
2-1	-- --	--	--	--	x	--	--	--	1	--	--	--	--	--	--	--	ON LIGHT POLE
2-2	-- --	--	--	--	x	--	--	--	1	--	--	--	--	--	--	--	ON LIGHT POLE
2-3	-- --	--	--	--	x	--	--	--	1	--	--	--	--	--	--	--	ON LIGHT POLE
2-4	R7-1L (2S)	II	--	18	x	24	3.00	--	--	--	--	--	--	--	--	--	ON LIGHT POLE
2-5	R9-3A (2S)	II	--	24	x	24	4.00	--	--	--	--	1	--	1	--	--	--
2-6	R9-3BL (2S)	II	--	12	x	18	1.50	--	--	--	--	--	--	--	--	2-6	--
2-7	R1-1 (2S)	II	--	30	x	30	5.18	--	--	1	1	1	--	1	--	--	--
2-8	-- --	--	--	--	x	--	--	--	1	--	--	--	--	--	--	--	ON LIGHT POLE
2-9	R6-1R (2S)	II	--	36	x	12	3.00	--	--	1	1	1	1	--	--	--	--
2-10	R6-1R (2S)	II	--	36	x	12	3.00	--	--	1	--	--	--	--	--	2-9	--
2-11	R1-1 (2S)	II	--	30	x	30	5.18	--	--	1	1	1	--	1	--	--	--
2-12	-- --	--	--	--	x	--	--	--	--	1	--	--	--	--	--	--	--
2-13	-- --	--	--	--	x	--	--	--	--	1	--	--	--	--	--	--	--
2-14	-- --	--	--	--	x	--	--	--	1	--	--	--	--	--	--	--	ON SIGNAL ARM
2-15	-- --	--	--	--	x	--	--	--	1	--	--	1	--	1	--	--	--
2-16	D9-2 (2S)	II	--	24	x	24	4.00	--	--	2	--	--	--	--	--	--	ON LIGHT POLE
2-17	MB6-1 (2S)	II	--	21	x	21	3.06	--	--	1	--	--	--	--	--	--	ON LIGHT POLE
2-18	R4-7 (2S)	II	--	24	x	30	5.00	--	--	2	1	--	--	--	--	2-15	--
2-19	W12-1D (2S)	II	--	24	x	24	--	4.00	--	1	1	1	1	--	--	--	--
2-20	-- --	--	--	--	x	--	--	--	--	1	--	--	--	--	--	--	--
2-21	-- --	--	--	--	x	--	--	--	--	1	--	--	--	--	--	--	--
2-22	R1-1 (2S)	II	--	30	x	30	5.18	--	--	1	1	1	--	1	--	--	--
2-23	-- --	--	--	--	x	--	--	--	1	--	--	--	--	--	--	--	ON SIGNAL ARM
2-24	-- --	--	--	--	x	--	--	--	--	1	--	--	--	--	--	--	--
2-25	R4-7 (2S)	II	--	24	x	30	5.00	--	--	2	1	1	--	1	--	--	--
2-26	R9-3A (2S)	II	--	24	x	24	4.00	--	--	--	--	1	--	1	--	--	--
2-27	R9-3BL (2S)	II	--	12	x	18	1.50	--	--	--	--	--	--	--	--	2-26	--

ALL ITEMS ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

SIGN NO.	SIGN CODE & SIZE		SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	**637.2210** SIGNS TYPE II REFLC H [SF]	SIGNS TYPE II REFLC F [SF]	**638.2102** MOVING SIGNS TYPE II [EA]	**638.2602** REMOVING SIGNS TYPE II [EA]	**638.3000** REMOVING SMALL SIGN SUPPORTS [EA]	**SPV.0060.03** ROUND STEEL SIGN POST SYSTEM [EA]	**POLE HEIGHT** FOR INFORMATION ONLY CONTRACTOR TO VERIFY POLE HEIGHT WITH MUTCD REQUIREMENTS PRIOR TO ORDERING [10 FT]	[12 FT]	[14 FT]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
2-28	--	--	--	--	--	x	--	--	--	--	2	1	--	--	--	--	--	--
2-29	--	--	--	--	--	x	--	--	--	1	--	1	1	1	--	--	--	--
2-30	--	--	--	--	--	x	--	--	--	1	--	--	--	--	--	--	2-29	--
2-31	R1-1	(2S)	II	--	30	x	30	5.18	--	--	2	--	1	--	1	--	--	--
2-32	R9-3A	(2S)	II	--	24	x	24	4.00	--	--	--	--	1	--	1	--	--	--
2-33	R9-3BL	(2S)	II	--	12	x	18	1.50	--	--	--	--	--	--	--	--	2-32	--
2-34	R6-1R	(2S)	II	--	36	x	12	3.00	--	--	--	--	1	1	--	--	--	--
2-35	R2-1	(2S)	II	30	24	x	30	5.00	--	--	1	--	--	--	--	--	--	ON LIGHT POLE
2-36	R7-1D	(2S)	II	--	18	x	24	3.00	--	--	1	--	--	--	--	--	--	ON LIGHT POLE
2-37	R3-17	(2S)	II	--	30	x	24	5.00	--	--	--	1	1	--	1	--	--	--
2-38	R7-1D	(2S)	II	--	18	x	24	3.00	--	--	1	--	--	--	--	--	2-37	--
2-39	R4-7	(2S)	II	--	24	x	30	5.00	--	--	2	1	1	--	1	--	--	--
2-40	--	--	--	--	--	x	--	--	--	1	--	--	--	--	--	--	--	ON SIGNAL ARM
2-41	--	--	--	--	--	x	--	--	--	--	1	--	--	--	--	--	--	--
2-42	--	--	--	--	--	x	--	--	--	--	1	--	--	--	--	--	--	--
2-43	--	--	--	--	--	x	--	--	--	--	1	--	--	--	--	--	--	--
2-44	R4-7	(2S)	II	--	24	x	30	5.00	--	--	2	1	1	--	1	--	--	--
2-45	R7-1D	(2S)	II	--	18	x	24	3.00	--	--	1	1	1	--	1	--	--	--
2-46	R9-3A	(2S)	II	--	24	x	24	4.00	--	--	--	--	1	--	1	--	--	--
2-47	R9-3B	(2S)	II	--	12	x	18	1.50	--	--	--	--	--	--	--	--	2-46	--
2-48	--	--	--	--	--	x	--	--	--	1	--	1	1	1	--	--	--	--
2-49	--	--	--	--	--	x	--	--	--	1	--	1	1	--	1	--	--	MOVE TO STA 7+55 LT
2-50	R7-1L	(2S)	II	--	18	x	24	3.00	--	--	--	--	1	--	1	--	--	--
2-51	--	--	--	--	--	x	--	--	--	1	--	--	--	--	--	--	--	ON SIGNAL ARM
2-52	--	--	--	--	--	x	--	--	--	--	1	--	--	--	--	--	--	--
2-53	--	--	--	--	--	x	--	--	--	--	1	--	--	--	--	--	--	--
2-54	--	--	--	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--
2-55	--	--	--	--	--	x	--	--	--	1	1	1	1	1	--	--	--	--
2-56	R7-1D	(2S)	II	--	18	x	24	3.00	--	--	1	--	--	--	--	--	--	ON LIGHT POLE
2-57	R3-4	(2S)	II	--	24	x	24	4.00	--	--	--	--	1	--	1	--	--	--
3-1	R3-9B	(2S)	II	--	24	x	36	6.00	--	--	--	--	1	--	1	--	--	--
3-2	R3-9D	(2S)	II	--	24	x	6	1.00	--	--	--	--	--	--	--	--	3-1	--
3-3	R7-1D	(2S)	II	--	18	x	24	3.00	--	--	1	1	--	--	--	--	--	ON LIGHT POLE

ALL ITEMS ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

TYPE II PERMANENT SIGNING

2110-03-71 W. LINCOLN AVENUE

SIGN NO.	SIGN CODE & SIZE		SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2102 MOVING SIGNS TYPE II [EA]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	SPV.0060.03 ROUND STEEL SIGN POST SYSTEM [EA]	POLE HEIGHT FOR INFORMATION ONLY CONTRACTOR TO VERIFY POLE HEIGHT WITH MUTCD REQUIREMENTS PRIOR TO ORDERING [10 FT]	[12 FT]	[14 FT]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
3-4	--	--	--	--	--	x	--	--	--	1	--	--	--	--	--	--	--	ON LIGHT POLE
3-5	--	--	--	--	--	x	--	--	--	1	--	--	--	--	--	--	--	ON LIGHT POLE
3-6	R3-17	(2S)	II	--	30	x	24	5.00	--	--	--	--	--	--	--	--	--	ON LIGHT POLE
3-7	R1-1	(2S)	II	--	30	x	30	5.18	--	--	1	1	1	--	1	--	--	--
3-8	R4-7	(2S)	II	--	24	x	30	5.00	--	--	--	--	1	--	1	--	--	--
3-9	R3-9C	(2S)	II	--	24	x	6	1.00	--	--	--	--	1	--	1	--	--	--
3-10	R3-9B	(2S)	II	--	24	x	36	6.00	--	--	--	--	--	--	--	--	3-9	--
3-11	--	--	--	--	--	x	--	--	--	1	--	--	--	--	--	--	--	ON LIGHT POLE
3-12	R7-1D	(2S)	II	--	18	x	24	3.00	--	--	1	--	--	--	--	--	--	ON LIGHT POLE
3-13	R7-1D	(2S)	II	--	18	x	24	3.00	--	--	1	--	--	--	--	--	--	ON LIGHT POLE
3-14	R3-17	(2S)	II	--	30	x	24	5.00	--	--	--	--	1	--	1	--	--	--
3-15	--	--	--	--	--	x	--	--	--	1	--	--	1	1	--	--	--	--
3-16	--	--	--	--	--	x	--	--	--	1	--	--	--	--	--	--	3-15	--
3-17	R1-1	(2S)	II	--	30	x	30	5.18	--	--	1	1	1	--	1	--	--	--
3-18	R9-3A	(2S)	II	--	24	x	24	4.00	--	--	--	--	1	--	1	--	--	--
3-19	R9-3BL	(2S)	II	--	12	x	18	1.50	--	--	--	--	--	--	--	--	3-18	--
3-20	R3-9C	(2S)	II	--	24	x	6	1.00	--	--	--	--	1	--	1	--	--	--
3-21	R3-9B	(2S)	II	--	24	x	36	6.00	--	--	--	--	--	--	--	--	3-20	--
3-22	R7-1D	(2S)	II	--	18	x	24	3.00	--	--	1	--	--	--	--	--	--	ON LIGHT POLE
3-23	R3-17	(2S)	II	--	30	x	24	5.00	--	--	--	--	--	--	--	--	--	ON LIGHT POLE
3-24	R3-17B	(2S)	II	--	30	x	12	2.50	--	--	--	--	--	--	--	--	--	ON LIGHT POLE
3-25	R3-9D	(2S)	II	--	24	x	6	1.00	--	--	--	--	1	--	1	--	--	--
3-26	R3-9B	(2S)	II	--	24	x	36	6.00	--	--	--	--	--	--	--	--	3-25	--
3-27	R7-1D	(2S)	II	--	18	x	24	3.00	--	--	1	--	--	--	--	--	--	ON LIGHT POLE
4-1	R2-1	(2S)	II	35	24	x	30	5.00	--	--	1	--	--	--	--	--	--	ON LIGHT POLE
4-2	R7-1L	(2S)	II	--	18	x	24	3.00	--	--	1	1	1	--	1	--	--	--
TOTALS								227.71	4.00	19	51	22	36	7	29	0		

ALL ITEMS ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

3

FIELD OFFICE TYPE C

STATION TO STATION	642.5201 FIELD OFFICE TYPE C EACH
W LINCOLN AVE	
2110-03-71	1
TOTALS	1

TEMPORARY MARKING LINE

STAGE	643.3105 PAINT 4-INCH (WHITE) LF	643.3105 PAINT 4-INCH (YELLOW) LF	643.3150 REMOVABLE TAPE 4-INCH LF	643.3205 PAINT 8-INCH (WHITE) LF	643.3250 REMOVABLE TAPE 8-INCH LF
W LINCOLN AVE					
STAGE 1	-	-	562	-	60
STAGE 2	710	912	539	168	-
STAGE 3	-	-	1,744	-	250
STAGE 4	-	-	-	-	-
SUBTOTALS	710	912	2,845	168	310
TOTALS	1,622		2,845	168	310

TEMPORARY MARKING OTHER

STAGE	643.3805 MARKING STOP LINE PAINT 18-INCH LF
W LINCOLN AVE	
STAGE 1	-
STAGE 2	15
TOTALS	15

3

TRAFFIC CONTROL

STAGE	DURATION DAYS	643.0300 TRAFFIC CONTROL DRUMS EACH	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS EACH	643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	643.0900 TRAFFIC CONTROL SIGNS EACH	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1050 TRAFFIC CONTROL SIGNS PCMS EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY
W LINCOLN AVE															
STAGE 1	5	113	565	15	75	30	150	22	110	2	10	36	180	-	-
STAGE 2	68	172	11,696	55	3,740	110	7,480	41	2,788	3	204	124	8,432	2	14
STAGE 3	83	207	17,181	72	5,976	144	11,952	26	2,158	1	83	114	9,462	2	14
STAGE 4	10	85	850	10	100	20	200	16	160	1	10	29	290	-	-
DETOUR STAGE 2	68	-	-	3	204	6	408	-	-	-	-	146	9,928	-	-
DETOUR STAGE 3	83	-	-	2	166	4	332	-	-	-	-	205	17,015	-	-
TOTALS	317	577	30,292	157	10,261	314	20,522	105	5,216	7	307	654	45,307	4	28

TRAFFIC CONTROL

STAGE	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF
W LINCOLN AVE	
LINCOLN AVE SIGNS	111.00
NATIONAL AVE SIGNS	116.25
TOTALS	227.25

TRAFFIC CONTROL

STAGE	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II CYCLES	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II SIGNS	643.5000 TRAFFIC CONTROL EACH
W LINCOLN AVE						1
STAGE 1	-	-	-	-	-	-
STAGE 2	17	17	5	1	5	-
STAGE 3	-	-	2	1	2	-
STAGE 4	-	-	-	-	-	-
UNDISTRIBUTED	-	-	5	1	5	-
TOTALS	17	17			12	1

TEMPORARY PEDESTRIAN FACILITIES

STAGE	644.1430 SURFACE PLATE SF	644.1601 CURB RAMP DAY	644.1605 DETECTABLE WARNING FIELD SF	644.1810 BARRICADE LF
W LINCOLN AVE				
STAGE 2A	71	290	60	1,030
STAGE 2B	186	80	58	2,265
STAGE 3A	131	408	50	1,399
STAGE 3B	638	270	48	3,543
TOTALS	1,026	1,048	216	8,237

ALL ITEMS ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

3

MARKING REMOVAL

STATION TO STATION	646.9000 LINE 4-INCH LF	646.9002 LINE 6-INCH LF	646.9100 LINE 8-INCH LF
LINCOLN AVE			
98+71 - 105+75	222	120	92
105+75 - 111+82	273	-	-
TOTALS	495	120	92

MARKING LINE

STATION TO STATION	646.1040 GROOVED WET REF EPOXY 4-INCH (WHITE) LF	646.1040 GROOVED WET REF EPOXY 4-INCH (YELLOW) LF	646.3040 GROOVED WET REF EPOXY 8-INCH (WHITE) LF
W LINCOLN AVE			
98+71 - 105+75	2,603	100	947
105+75 - 111+82	1,396	1,176	79
SUBTOTALS	3,999	1,276	1,026
TOTALS	5,275		1,026

3

MARKING OTHER

STATION TO STATION	646.5020 ARROW EPOXY EACH	646.5120 WORD EPOXY EACH	646.5220 MARKING SYMBOL EPOXY EACH	646.6120 STOP LINE EPOXY 18-INCH LF	646.7120 DIAGONAL EPOXY 12-INCH LF	646.7420 CROSSWALK EPOXY TRAVERSE LINE 6-INCH LF	646.8120 CURB EPOXY LF	646.8220 ISLAND NOSE EPOXY EACH	SPV.0165.01 HIGH FRICTION GREEN SURFACING SF
W LINCOLN AVE									
98+71 - 105+75	18	1	16	245	61	1,168	60	13	4,300
105+75 - 111+82	13	-	6	-	-	435	10	1	602
TOTALS	31	1	22	245	61	1,603	70	14	4,902

CONSTRUCTION STAKING

ITEM	QUANTITY	UNIT	DESCRIPTION
650.4000	24	EACH	CONSTRUCTION STAKING STORM SEWER
650.4500	3,724	LF	CONSTRUCTION STAKING SUBGRADE
650.7000	3,724	LF	CONSTRUCTION STAKING CONCRETE PAVEMENT
650.8501	1	EACH	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (01. 2110-03-71)
650.9000	19	EACH	CONSTRUCTION STAKING CURB RAMPS
650.9500	1	EACH	CONSTRUCTION STAKING SIDEWALK (01. 2110-03-71)
650.9911	1	EACH	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (01. 2110-03-71)
650.9920	3,724	LF	CONSTRUCTION STAKING SLOPE STAKES

SAWING

STATION TO STATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF
W LINCOLN AVE		
98+71 - 105+75	466	1,303
105+75 - 111+82	159	204
TOTALS	625	1,507

ALL ITEMS ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

3

RECONNECT STORM SEWER LATERALS

STATION	SPV.0060.02 STORM SEWER RECONNECT EACH	SPV.0090.08 6-INCH PVC STORM SEWER LATERAL LF	SPV.0090.09 8-INCH PVC STORM SEWER LATERAL LF
W LINCOLN AVE			
98+90, RT	1	3	-
99+11, LT	1	31	-
99+80, LT	1	31	-
99+93, LT	1	31	-
100+18, RT	1	-	44
100+57, LT	1	31	-
100+57, RT	1	44	-
100+81, RT	1	44	-
101+42, LT	1	3	-
102+88, LT	1	25	-
109+20, LT	1	31	-
110+05, LT	1	31	-
111+00, LT	1	31	-
TOTALS	13	336	44

UTILITY LINE OPENING (ULO)

STATION	SPV.0060.27 UTILITY LINE OPENING (ULO) EACH
S 43RD STREET	
UNDISTRIBUTED	10
TOTALS	10

SPECIAL LANDSCAPING

STATION TO STATION	SPV.0180.01 SHREDDED HARDWOOD BARK MULCH SY	SPV.0180.02 REMOVE AND REPLACE DECORATIVE STONE SY
W LINCOLN AVE		
98+71 - 105+75	15	68
105+75 - 111+82	-	-
TOTALS	15	68

COMMUNICATIONS VAULT ADJUSTMENT

STATION	SPV.0060.26 COMMUNICATIONS VAULT ADJUSTMENT EACH
W LINCOLN AVE	
9+78, 9' LT	1
TOTALS	1

SALVAGE WHEEL STOPS

STATION TO STATION	SPV.0060.30 SALVAGE WHEEL STOPS EACH
W LINCOLN AVE	
98+71 - 105+75	2
105+75 - 111+82	-
TOTALS	2

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3

3

LUMINAIRE AND POLE MOUNTINGS

DESCRIPTION	STATION	OFFSET	DIRECTION	654.0105 CONCRETE BASES TYPE 5 EACH	657.0255* TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0322 POLES TYPE 5-ALUMINUM (30-FOOT) EACH	657.0615 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 8-FT EACH	659.1125* LUMINAIRES UTILITY LED C EACH
OC-9628-(12)	99+20	0.0	LT	1	1	1	2	2
OC-9612-(12)	100+50	0.0	LT	1	1	1	2	2
OC-9602-(12)	101+42	38.0	LT	1	1	1	1	1
OC-9601-(12)	101+64	38.5	RT	1	1	1	1	1
OC-9515-(12)	9+15	48.5	RT	1	1	1	1	1
OC-9508-(8)	12+07	44.5	LT	1	0	0	0	0
OC-9420-(8)	105+70	38.5	LT	1	1	1	1	1
OC-9415-(8)	106+80	36.5	RT	1	1	1	1	1
OC-9400-(8)	107+90	36.5	LT	1	1	1	1	1
OC-9333-(8)	108+84	36.5	RT	1	1	1	1	1
OC-9318-(8)	109+90	36.5	LT	1	1	1	1	1
OC-9303-(8)	111+10	36.5	RT	1	1	1	1	1
OC-9229-(8)	112+36	36.5	RT	1	1	1	1	1
OC-9530-(12)	8+27	52.0	LT	1	1	1	1	1
			TOTALS	14	13	13	15	15

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LIGHTING REMOVAL

STATION	OFFSET	DIRECTION	659.5000.S * LAMP, BALLAST, LED, SWITCH DISPOSAL BY EACH	204.9060.S.02 REMOVING LIGHTING UNITS EACH	204.0195* REMOVING CONCRETE BASES EACH
99+50	36	LT	1	1	1
100+30	36	RT	1	1	1
100+40	36	LT	1	1	1
101+42	36	LT	1	1	1
101+55	36	RT	1	1	1
9+55	46	RT	1	1	1
105+88	36	LT	1	1	1
12+12	36	LT	0	0	1
106+95	36	RT	1	1	1
107+98	36	LT	1	1	1
108+65	36	RT	1	1	1
109+55	36	LT	1	1	1
110+58	36	RT	1	1	1
111+37	36	LT	1	1	1
112+28	36	RT	1	1	1
8+25	50	LT	1	1	1
		TOTALS	15	15	16

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

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STREET LIGHTING WIRING AND CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0605 CONDUIT SPECIAL 2-INCH LF	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG (UNDERGROUND PHASE AND NEUTRAL WIRES) LF	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG (UNDERGROUND GROUND WIRES) LF
OC-96-28-(12)	OC-9612-(12)	141	0	290	145
OC-9612-(12)	PB1	56	0	120	60
PB1	OC-9602-(12)	111	0	230	115
OC-9602-(12)	PB2	89	0	186	93
PB2	OC-9508-(12)	291	0	590	295
PB2	PB3	101	0	210	105
PB3	OC-9601-(12)	76	0	160	80
PB3	PB4	26	0	60	30
PB4	OC-9515-(12)	121	0	250	125
PB4	OC-9530-(12)	86	0	180	90
PB5	PB6	50	70	0	0
OC-9420-(8)	OC-9400(8)	226	0	460	230
OC-9400-(8)	PB7	86	0	180	90
PB7	EXISTING POLE	95	35	280	140
PB7	PB8	91	0	190	95
OC-9414-(8)	PB8	196	0	400	200
PB7	OC-9318-(8)	126	0	260	130
PB8	OC-9333-(8)	21	0	50	25
PB8	OC-9303-(8)	236	0	480	240
OC-9303-(8)	OC-9229-(8)	72	55	272	136
	TOTALS	2,297	160	4,848	2,424

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

POLE MOUNTED LUMINAIRE WIRING

DESCRIPTION	Pole Height LF	Length of Extension Arm LF	Number of Phase and Neutral Wires in Run QUANTITY	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG (POLE PHASE AND NEUTRAL WIRES) LF	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG (POLE GROUND WIRES) LF
OC-9628-(12)	30	16	2	92	46
OC-9612-(12)	30	16	2	92	46
OC-9602-(12)	30	8	2	76	38
OC-9601-(12)	30	8	2	76	38
OC-9515-(12)	30	8	2	76	38
OC-9420-(8)	30	8	2	76	38
OC-9415-(8)	30	8	2	76	38
OC-9400-(8)	30	8	2	76	38
OC-9333-(8)	30	8	2	76	38
OC-9318-(8)	30	8	2	76	38
OC-9303-(8)	30	8	2	76	38
OC-9229-(8)	30	8	2	76	38
OC-9530-(12)	30	8	2	76	38
			TOTALS	1,020	510

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PULL BOXES

DESCRIPTION	STATION	OFFSET	DIRECTION	653.0135 STEEL 24X36-INCH EACH
PB-1	100+44	37	LT	1
PB-2	102+20	38.5	LT	1
PB-3	102+20	45	RT	1
PB-4	9+04.80	62	LT	1
PB-5	7+61	52	LT	1
PB-6	7+76	50	RT	1
PB-7	108+70	37	LT	1
PB-8	108+70	36.5	RT	1
			TOTALS	8

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

INTERSECTION OF
W LINCOLN AVE & W NATIONAL AVE
ALL ITEMS CATEGORY 0010

3

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TRAFFIC SIGNAL REMOVALS

LOCATION	204.9060.S.01 REMOVING TRAFFIC SIGNALS EACH
W LINCOLN AVE & W NATIONAL AVE	1
TOTALS	1

REMOVING MONOTUBE BASES

SIGNAL BASE NO.	204.9060.S.03 REMOVING MONOTUBE BASES EACH
SB1	1
SB3	1
SB5	1
SB8	1
	4

REMOVING PULL BOXES

PULL BOX NO.	653.0905 REMOVING PULL BOXES EACH
PB1	1
PB2	1
PB3	1
PB4	1
PB5	1
PB6	1
PB7	1
PB8	1
PB9	1
TOTALS	9

REMOVING CONCRETE BASES

EXISTING BASE NO.	204.0195* REMOVING CONCRETE BASES EACH
SB2	1
SB4	1
SB6	1
SB7	1
TOTALS	4

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PULL BOXES

PULL BOX NO.	STATION	OFFSET	653.0140 PULL BOXES STEEL 24X42-INCH EACH
PB1	104+93.3	56.7' RT	1
PB2	104+66.6	39.0' RT	1
PB3	103+94.0	70.7' RT	1
PB4	103+38.4	64.2' RT	1
PB5	102+21.6	50.6' RT	1
PB6	102+54.1	42.6' RT	1
PB7	103+08.4	40.5' LT	1
PB8	104+01.9	65.5' LT	1
PB9	104+87.6	62.4' LT	1
PB10	105+46.7	60.3' LT	1
PB11	105+21.3	42.8' LT	1
		TOTALS	11

CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF
CB1	PB2	-	126
PB2	PB3	-	166
PB3	PB4	-	112
PB4	PB5	-	236
PB5	PB6	-	34
PB5	PB7	-	250
PB7	PB8	-	202
PB8	PB9	-	166
PB9	PB10	-	118
PB10	PB11	-	31
PB10	PB1	-	258
PB2	SB1	-	7
PB2	SB2	18	-
PB3	SB3	38	-
PB4	SB4	24	-
PB6	SB5	-	10
PB6	SB6	5	-
PB7	SB7	-	6
PB7	SB8	46	-
PB8	SB9	22	-
PB9	SB10	23	-
PB11	SB11	-	10
PB11	SB12	5	-
	TOTALS	181	1,732

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 1 OF 4

INTERSECTION OF
W LINCOLN AVE & W NATIONAL AVE
ALL ITEMS CATEGORY 0010

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CONCRETE BASES

BASE NO.	STATION	OFFSET	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	654.0113 CONCRETE BASES TYPE 13 EACH	654.0120 CONCRETE BASES TYPE 10-SPECIAL EACH
SB1	104+73.6	39.0' RT	-	-	-	1	-
SB2	104+49.1	40.2' RT	1	-	-	-	-
SB3	104+26.1	49.8' RT	-	1	-	-	-
SB4	103+57.4	50.3' RT	1	-	-	-	-
SB5	102+58.9	51.0' RT	-	-	-	-	1
SB6	102+58.4	40.9' RT	1	-	-	-	-
SB7	103+13.0	44.5' LT	-	-	-	-	1
SB8	103+54.6	39.0' LT	1	-	-	-	-
SB9	103+85.7	51.2' LT	-	1	-	-	-
SB10	104+68.1	50.3' LT	1	-	-	-	-
SB11	105+16.0	50.8' LT	-	-	1	-	-
SB12	105+17.1	41.2' LT	1	-	-	-	-
		TOTALS	6	2	1	1	2

ELECTRICAL WIRE LIGHTING

FROM	TO	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED LF	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF
CB1	SB1	76	-
SB1	LUMIN	-	129
SB1	SB3	168	-
SB3	LUMIN	-	123
SB3	SB5	331	-
SB5	LUMIN	-	129
CB1	SB11	294	-
SB11	LUMIN	-	129
SB11	SB9	280	-
SB9	LUMIN	-	123
SB9	SB7	173	-
SB7	LUMIN	-	129
	TOTALS	1,322	762

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL CABLE

FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG LF	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF	655.0270 CABLE TRAFFIC SIGNAL 15-14 AWG LF
CB1	SB1	-	-	76	-
SB1	HEAD 2	50	-	-	-
SB1	HEAD 3	39	-	-	-
SB1	HEAD 5	-	64	-	-
CB1	SB2	-	87	-	-
SB2	HEAD 24	18	-	-	-
CB1	SB3	-	-	206	-
SB3	HEAD 11	21	-	-	-
SB3	HEAD 25	18	-	-	-
CB1	SB4	-	264	-	-
CB1	SB5	-	-	434	-
SB5	HEAD 17	52	-	-	-
SB5	HEAD 18	41	-	-	-
SB5	HEAD 26	18	-	-	-
CB1	SB6	-	-	-	429
SB6	HEAD 1	21	-	-	-
SB6	HEAD 9	-	22	-	-
SB6	HEAD 19	18	-	-	-
CB1	SB7	-	-	478	-
SB7	HEAD 7	45	-	-	-
SB7	HEAD 8	56	-	-	-
SB7	HEAD 10	-	67	-	-
CB1	SB8	-	-	-	-
SB8	HEAD 20	18	-	-	-
CB1	SB9	-	-	-	377
SB9	HEAD 14	-	22	-	-
SB9	HEAD 16	21	-	-	-
SB9	HEAD 21	18	-	-	-
CB1	SB10	-	276	-	-
CB1	SB11	-	-	-	235
SB11	HEAD 12	41	-	-	-
SB11	HEAD 13	21	-	-	-
SB11	HEAD 15	-	55	-	-
SB11	HEAD 22	18	-	-	-
CB1	SB12	-	-	-	230
SB12	HEAD 4	-	22	-	-
SB12	HEAD 6	21	-	-	-
SB12	HEAD 23	18	-	-	-
	TOTALS	573	879	1,194	1,271

SHEET 2 OF 4

INTERSECTION OF
W LINCOLN AVE & W NATIONAL AVE
ALL ITEMS CATEGORY 0010

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ELECTRICAL WIRE TRAFFIC SIGNALS

		655.0515
		ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG
FROM	TO	LF
CB1	SB1	76
SB1	SB2	49
SB2	SB3	179
SB3	SB4	158
SB4	SB5	242
SB5	SB6	39
SB6	SB7	226
SB7	SB8	76
SB8	SB9	209
SB9	SB10	171
SB10	SB11	179
SB11	SB12	39
SB12	CB1	227
PB1	CB1	29
PB2	SB1	27
PB3	SB3	58
PB4	SB4	44
PB5	SB6	80
PB6	SB5	30
PB7	SB7	26
PB8	SB9	42
PB9	SB10	43
PB10	SB12	72
PB11	SB11	30
	TOTALS	2,351

TRAFFIC SIGNAL FACES

		658.0173	658.0174	658.0416
		TRAFFIC SIGNAL FACE 3S 12-INCH	TRAFFIC SIGNAL FACE 4S 12-INCH	PEDESTRIAN SIGNAL FACE 16-INCH
SIGNAL HEAD NO.	SIGNAL BASE NO.	EACH	EACH	EACH
1	SB6	1	-	-
2	SB1	1	-	-
3	SB1	1	-	-
4	SB12	-	1	-
5	SB1	-	1	-
6	SB12	1	-	-
7	SB7	1	-	-
8	SB7	1	-	-
9	SB6	-	1	-
10	SB7	-	1	-
11	SB3	1	-	-
12	SB11	1	-	-
13	SB11	1	-	-
14	SB9	-	1	-
15	SB15	-	1	-
16	SB9	1	-	-
17	SB5	1	-	-
18	SB5	1	-	-
19	SB6	-	-	1
20	SB8	-	-	1
21	SB9	-	-	1
22	SB11	-	-	1
23	SB12	-	-	1
24	SB2	-	-	1
25	SB3	-	-	1
26	SB5	-	-	1
	TOTALS	12	6	8

TRAFFIC SIGNAL EVP DETECTOR CABLE

		655.0900	-
		TRAFFIC SIGNAL EVP DETECTOR CABLE	EVP CONFIRMATION LIGHT CABLE
FROM	TO	LF	LF
CB1	SB7 (HEAD A)	532	532
CB1	SB1 (HEAD B)	130	130
CB1	SB5 (HEAD C)	488	488
CB1	SB11 (HEAD D)	289	289
	TOTALS	1,439	1,439

POLES AND ARMS

	657.0100	657.0255*	657.0310	657.0350	657.0352	SPV.0060.25	657.0405	657.0425	657.0430	657.0530	657.0546	657.0614	657.0810	657.0815	659.1125*
	PEDESTAL BASES	TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	POLES TYPE 3	POLES TYPE 10	POLES TYPE 10-SPECIAL	REINSTALLING MONOTUBE ASSEMBLY	TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FOOT	TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FOOT	TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FOOT	MONOTUBE ARMS 30-FT	MONOTUBE ARMS 45-FT-SPECIAL	LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 8-FOOT	LUMINAIRE ARMS STEEL 10-FT	LUMINAIRE ARMS STEEL 15-FT	LUMINAIRES UTILITY LED C
SIGNAL BASE NO.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
SB1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
SB2	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
SB3	-	1	1	-	-	-	-	-	-	-	-	1	-	-	1
SB4	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-
SB5	-	-	-	1	-	-	-	-	-	1	-	-	1	-	1
SB6	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
SB7	-	-	-	-	1	-	-	-	-	-	1	-	-	1	1
SB8	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
SB9	-	1	1	-	-	-	-	-	-	-	-	1	-	-	1
SB10	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-
SB11	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
SB12	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
TOTALS	6	2	2	1	1	2	2	2	2	1	1	2	1	1	6

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	MISCELLANEOUS QUANTITIES	SHEET: 126	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

INTERSECTION OF
W LINCOLN AVE & W NATIONAL AVE
ALL ITEMS CATEGORY 0010

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SIGNAL MOUNTING HARDWARE, W LINCOLN AVE & W NATIONAL AVE
APS PUSH BUTTON SYSTEM, 10 BUTTONS, W LINCOLN AVE & W NATIONAL AVE

LOCATION	658.5070 SIGNAL MOUNTING HARDWARE EACH	SPV.0060.22 APS PUSH BUTTON SYSTEM 10 BUTTONS EACH
W LINCOLN AVE & W NATIONAL AVE	1	1
TOTALS	1	1

SEE PLANS FOR PUSH BUTTON LOCATIONS

VEHICLE VIDEO DETECTION SYSTEM, W LINCOLN AVE & W NATIONAL AVE (4 CAMERA)

LOCATION	SPV.0060.24 VEHICLE VIDEO DETECTION SYSTEM EACH
W LINCOLN AVE & W NATIONAL AVE	1
TOTAL	1

CAMERA	INSTALLATION METHOD
V1 (SB7)	ON LUMINAIRE ARM
V2 (SB1)	ON LUMINAIRE ARM
V3 (SB5)	ON LUMINAIRE ARM
V4 (SB11)	ON LUMINAIRE ARM

SALVAGE AND REINSTALL EVP SYSTEM

LOCATION	SPV.0060.23 SALVAGE AND REINSTALL EVP SYSTEM EACH
W LINCOLN AVE & W NATIONAL AVE	1
TOTALS	1

LAMP, BALLAST, LED, SWITCH DISPOSAL BY DEPARTMENT

FIXTURE TYPE	659.5000.S* LAMP, BALLAST, LED, SWITCH DISPOSAL BY CONTRACTOR EACH
PEDESTRIAN SIGNAL - 16 INCH	8
TRAFFIC SIGNAL, THREE SECTION	12
TRAFFIC SIGNAL, FOUR SECTION	4
LUMINAIRES, UTILITY, LED	6
	30

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LAMP, BALLAST, LED, SWITCH DISPOSAL BY DEPARTMENT
(FOR INFORMATION ONLY)

SIGNAL BASE NO.	PEDESTRIAN SIGNAL, 16 INCH EACH	TRAFFIC SIGNAL, THREE SECTION EACH	TRAFFIC SIGNAL, FOUR SECTION EACH	LUMINAIRES, UTILITY LED EACH
SB1	-	2	1	1
SB2	2	1	-	-
SB3	-	2	-	2
SB4	2	1	1	-
SB5	-	2	1	1
SB6	1	-	-	-
SB7	1	1	-	1
SB8	2	3	1	1
TOTAL	8	12	4	6

EXISTING TRAFFIC SIGNAL CABINET WITH NEW CONTROLLER AND MMU

LOCATION	SPV.0060.29 EXISTING TRAFFIC SIGNAL CABINET WITH NEW CONTROLLER AND MMU EACH
W LINCOLN AVE & W NATIONAL AVE	1
TOTALS	1

SHEET 4 OF 4

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	MISCELLANEOUS QUANTITIES	SHEET: 127	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

WATER MAIN RELAY

CATEGORY	FROM STATION	FROM OFFSET	TO STATION	TO OFFSET	SPV.0060.08* HYDRANT [EACH]	SPV.0060.09 WATER MAIN VALVE, 8-INCH [EACH]	SPV.0060.10 WATER MAIN VALVE, 12-INCH [EACH]	SPV.0060.11* WATER MAIN CONNECTION, 8-INCH [EACH]	SPV.0060.12* WATER MAIN CONNECTION, 8-INCH STRAIGHT [EACH]	SPV.0060.13 WATER MAIN CONNECTION, 12-INCH [EACH]	LOCATION
0010	98 + 45.3	25.0 RT	98+78.0	25.0 RT	--	--	--	--	--	--	Lincoln @ 97th
	98+78.0	4.0 RT	98+78.0	25.0 RT	--	--	--	--	--	--	Lincoln @ 97th
	98 + 78.0	40.0 LT	98 + 78.0	4.0 RT	--	--	--	--	--	1	Lincoln @ 97th
	98+78.0	4.0 RT	103+92.5	4.0 RT	1	--	1	--	--	--	Lincoln - 97th to National
	104+12.5	6.5 LT	111+65.0	22.0 LT	3	--	1	--	--	--	Lincoln - National to 93rd
	7+56.5	34.5 LT	9+95.9	59.2 LT	1	--	1	--	--	1	National - S/O Lincoln to Lincoln
	7+75.0	29.0 RT	7+75.0	29.0 RT	--	--	--	--	--	--	National - S/O Lincoln
	10+69.9	3.7 LT	10+94.0	3.2 LT	--	--	--	--	--	--	National - Lincoln to N/O Lincoln
	10+94.0	3.2 LT	12+86.0	3.0 LT	--	1	--	--	1	--	National - N/O Lincoln to 95th
	18+35.0	5.0 LT	19+06.3	5.0 LT	--	1	--	1	--	--	95th - S/O Lincoln to Lincoln
	20+29.2	33.1 RT	20+78.0	9.0 RT	1	1	--	1	--	--	95th - National to N/O National
	39+96.2	9.0 RT	40+60.0	9.0 RT	1	1	--	1		--	96th - Lincoln to N/O Lincoln
			PROJECT TOTALS		7	4	3	3	1	2	

*Various water main/lead lengths, see plans

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WATER MAIN RELAY

CATEGORY	FROM STATION	FROM OFFSET	TO STATION	TO OFFSET	SPV.0060.14 WATER MAIN CONNECTION, 12-INCH STRAIGHT [EACH]	SPV.0060.15 WATER MAIN CONNECTION, 97TH [EACH]	SPV.0060.16 AIR RELEASE ASSEMBLY 1.5-INCH [EACH]	SPV.0060.17 ADJUST WATER VALVE BOX [EACH]	SPV.0060.28 PLUG & AIR VENT ASSEMBLY [EACH]	SPV.0090.01 WATER MAIN RELAY, 8-INCH [LIN. FT.]	SPV.0090.02 WATER MAIN RELAY, 12-INCH [LIN. FT.]	LOCATION
0010	98 + 45.3	25.0 RT	98+78.0	25.0 RT	--	1	--	--	--	33.4	--	Lincoln @ 97th
	98+78.0	4.0 RT	98+78.0	25.0 RT	--	--	1	--	--	19.0	--	Lincoln @ 97th
	98 + 78.0	40.0 LT	98 + 78.0	4.0 RT	--	--	--	--	--	44.0	--	Lincoln @ 97th
	98+78.0	4.0 RT	103+92.5	4.0 RT	--	--	--	1	--	--	514.5	Lincoln - 97th to National
	104+12.5	6.5 LT	111+65.0	22.0 LT	1	--	--	5	--	--	757.6	Lincoln - National to 93rd
	7+56.5	34.5 LT	9+95.9	59.2 LT	--	--	--	3	--	--	254.6	National - S/O Lincoln to Lincoln
	7+75.0	29.0 RT	7+75.0	29.0 RT	--	--	--	2	1	--	--	National - S/O Lincoln
	10+69.9	3.7 LT	10+94.0	3.2 LT	--	--	--	--	--	--	24.0	National - Lincoln to N/O Lincoln
	10+94.0	3.2 LT	12+86.0	3.0 LT	--	--	--	1	--	190.6	--	National - N/O Lincoln to 95th
	18+35.0	5.0 LT	19+06.3	5.0 LT	--	--	--	1	--	71.3	--	95th - S/O Lincoln to Lincoln
	20+29.2	33.1 RT	20+78.0	9.0 RT	--	--	--	2	--	57.0	--	95th - National to N/O National
	39+96.2	9.0 RT	40+60.0	9.0 RT	--	--	--	2	--	68.8	--	96th - Lincoln to N/O Lincoln
			PROJECT TOTALS		1	1	1	17	1	485	1551	

*Various water main/lead lengths, see plans

3

WATER SERVICES

CATEGORY	STATION	LOCATION	**SPV.0060.06** WATER SERVICE RECONNECT, 6-INCH [EACH]	**SPV.0060.07** WATER SERVICE RECONNECT, 8-INCH [EACH]	**SPV.0090.03** WATER SERVICE, 1-INCH [LIN. FT.]	**SPV.0090.04** WATER SERVICE, 1.5-INCH [LIN. FT.]	**SPV.0090.05** WATER SERVICE, 2-INCH [LIN. FT.]	ADDRESS
0010	99 + 31.4	LT	--	--	49	--	--	#9628-30 Lincoln
	99 + 36.5	RT	--	--	--	34	--	#9638 Lincoln
	99+72.8	LT	--	--	49	--	--	#9626 Lincoln
	100+11.5	LT	--	--	49	--	--	#9620 Lincoln
	100+13.7	RT	--	--	34	--	--	#9622 National
	100+47.8	LT	--	--	50	--	--	#9612 Lincoln
	100+51.5	RT	--	--	34	--	--	#9613 Lincoln
	100+94.0	RT	--	--	34	--	--	#9530 National
	100+07.0	LT	--	--	--	6	--	Sprinkler @ #9530 Lincoln
	100+34.8	LT	--	--	49	--	--	#9602 Lincoln
	102+87.9	LT	--	--	49	--	--	#2232 95th
	103+80.5	LT	--	--	51	--	--	#9508 National
	106+45.0	RT	--	--	--	27	--	Sprinkler @ #9421 Lincoln
	106+53.7	RT	--	--	60	--	--	#9421 Lincoln
	106+85.5	RT	--	--	60	--	--	#9415 Lincoln
	107+33.2	RT	--	--	60	--	--	#9409 Lincoln
	107+95.5	LT	--	--	--	--	23	#9400 Lincoln
	109+35.7	LT	--	--	23	--	--	#9330 Lincoln
	109+93.2	RT	1	--	--	--	--	#9333 Lincoln
	109+97.5	LT	--	--	23	--	--	#9318 Lincoln
	110+54.3	LT	--	--	23	--	--	#9310 Lincoln
	111+18.7	RT	--	--	60	--	--	#9303 Lincoln
	111+25.5	LT	--	--	23	--	--	#9302 Lincoln
	9 + 50.9	RT	--	1	--	--	--	#9515 National
	PROJECT TOTALS		1	1	780	67	23	

3

SANITARY SEWER PIPES

CATEGORY	UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	SPV.0090.06 SANITARY SEWER RELAY, SDR 35 PVC SP, 8-INCH [LIN. FT.]
0020	S2	S1	171.5
	S3	S4	128.5
	S4	STUB N/O S4	30
	S6	S7	118
	S7	S8	136.8
	S8	STUB N/O S8	44.5
	S10	S11	275
	S11	S12	245
		PROJECT TOTAL	1150

BUILDING SANITARY SEWER

CATEGORY	STATION	LOCATION	SPV.0090.07 BUILDING SANITARY SEWER, 6-INCH [LIN. FT.]	ADDRESS
0020	98+49.7	LT	26	#9640-42 Lincoln
	99+33.0	LT	26	#9628-30 Lincoln
	99+36.0	RT	56	#9638 Lincoln
	99+71.3	LT	26	#9626 Lincoln
	100+09.3	LT	26	#9620 Lincoln
	100+12.5	RT	56	#9622 National
	100+54.6	LT	11.5	#9612 Lincoln
	100+54.6	RT	71.5	#9613 Lincoln
	100+96.5	RT	71.5	#9530 National
	101+35.6	LT	11.5	#9602 Lincoln
	102+89.8	LT	10	#2232 96th
	106+51.3	RT	71	#9421 Lincoln
	106+85.9	RT	71	#9415 Lincoln
	107+38.6	RT	71	#9409 Lincoln
	107+98.5	LT	12	#9400 Lincoln
	109+35.2	LT	12	#9330 Lincoln
	109+96.8	LT	12	#9318 Lincoln
	110+53.7	LT	12	#9310 Lincoln
	111+17.6	RT	71	#9303 Lincoln
	111+24.3	LT	12	#9302 Lincoln
	11+33.2	LT	26	#9508 National
		PROJECT TOTALS	762	

3

SANITARY SEWER STRUCTURES

CATEGORY	STRUCTURE STRUCTURE NUMBER	STATION	LOCATION		SPV.0060.18 SANITARY MANHOLE ABANDONMENT [EACH]	SPV.0060.19 INTERNAL SANITARY MANHOLE SEAL [EACH]	SPV.0060.20 SANITARY MANHOLE FRAME WITH SOLID GASKETED LID [EACH]	SPV.0060.21 ADJUST SANITARY MANHOLE FRAME [EACH]	SPV.0200.01 SANITARY MANHOLE, 48-INCH DIAMETER [VERT. FT.]	RIM ELEVATION	LOWEST INVERT	ADDRESS
0020	S1	98+46.5	15.0	LT	-	1	1	1	10.77	232.02	221.25	Lincoln & 97th
	S2	100+12.4	15.0	LT	-	1	1	1	10.62	232.62	222.00	#9620 Lincoln
	S3	100+49.7	30.0	LT	-	1	1	1	12.15	231.80	219.65	#9612 Lincoln
	S4	101+78.2	30.0	LT	-	1	1	1	10.78	229.63	218.85	Lincoln & 96th
	S5	102+27.5	32.5	LT	1	-	-	-	0.00			
	S6	102+84.5	32.5	LT	-	1	1	1	10.98	228.38	217.40	#2232 96th
	S7	104+02.5	32.5	LT	-	1	1	1	12.03	226.53	214.50	Lincoln & National
	S8	12+37.6	26.4	LT	-	1	1	1	12.29	223.29	211.00	National & 95th
	S9	105+70.5	30.0	LT	1	-	-	-	0.00			
	S10	106+45.3	30.0	LT	-	1	1	1	13.93	224.93	211.00	#9421 Lincoln
	S11	109+20.3	30.0	LT	-	1	1	1	14.65	223.65	209.00	#9330 Lincoln
	S12	111+65.3	30.0	LT	-	1	1	1	11.88	217.78	205.90	Lincoln & 93rd
				PROJECT TOTALS	2	10	10	10	121			

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

C WEST ALLIS W LINCOLN AVENUE

S 93RD STREET TO S 96TH STREET

LOCAL STREET

MILWAUKEE COUNTY

R/W PROJECT NUMBER
2110-03-01

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
2110-03-01	4.01	7
FEDERAL PROJECT NUMBER		

PLAT OF RIGHT OF WAY REQUIRED FOR
C WEST ALLIS W LINCOLN AVENUE
S 93RD STREET TO S 96TH STREET
W LINCOLN AVENUE — MILWAUKEE CO.

CONSTRUCTION PROJECT NUMBER
2110-03-71

CAUTION
THIS PLAT IS FOR ILLUSTRATIVE PURPOSES ONLY.
DEEDS MUST BE CHECKED TO DETERMINE
PROPERTY BOUNDARIES.

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

- SECTION CORNER SYMBOL
- 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
- OFF-PREMISE 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

CURVE DATA

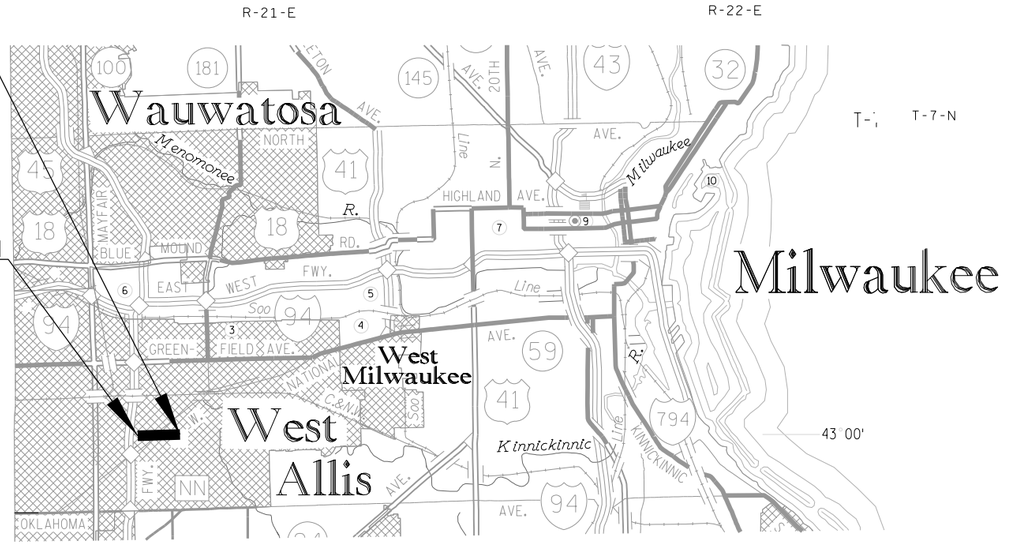
LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF BEGINNING	POB
ACRES	AC	POINT OF CURVATURE	PC
AHEAD	AH	POINT OF COMPOUND CURVE	PCC
ALUMINUM	ALUM	POINT OF INTERSECTION	PI
AND OTHERS	ET AL	POINT OF TANGENCY	PT
BACK	BK	PROPERTY LINE	PL
BLOCK	BLK	RECORDED AS	(100')
CENTERLINE	C	REEL / IMAGE	R/I
CERTIFIED SURVEY MAP	CSM	REFERENCE LINE	R
CONCRETE	CONC	REMAINING	REM
COUNTY	CO	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
COUNTY TRUNK HIGHWAY	CTH	RIGHT	RT
DISTANCE	DIST	RIGHT OF WAY	R/W
CORNER	COR	SECTION	SEC
DOCUMENT NUMBER	DOC	SEPTIC VENT	SEPV
EASEMENT	EASE	SQUARE FEET	SF
EXISTING	EX	STATE TRUNK HIGHWAY	STH
GAS VALVE	GV	STATION	STA
GRID NORTH	GN	TELEPHONE PEDESTAL	TP
HIGHWAY EASEMENT	HE	TEMPORARY LIMITED EASEMENT	TLE
IDENTIFICATION	ID	TRANSPORTATION PROJECT PLAT	TPP
LAND CONTRACT	LC	UNITED STATES HIGHWAY	USH
LEFT	LT	VOLUME	V
MONUMENT	MON	GRID COORDINATES	Y,X
NATIONAL GEODETIC SURVEY	NGS	GROUND COORDINATES	N,E
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
PERMANENT LIMITED EASEMENT	PLE		

END RELOCATION ORDER
STA. 112+46.87
20.16' SOUTH OF AND 252.56' WEST OF THE SE. CORNER OF THE SE. 1/4, SECTION 5, T.6N., R.21E.
N=371,695.26
E=2,527,675.88

BEGIN RELOCATION ORDER
STA. 98+67.84
25.70' NORTH OF AND 1,012.64' EAST OF THE SW. CORNER OF THE SE. 1/4, SECTION 5, T.6N., R.21E.
N=371,645.31
E=2,526,297.75



N

LAYOUT
SCALE 0 1.0 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.261 MI.

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

NOTES:

COORDINATES SHOWN ON THIS PLAT ARE ORIENTED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NAD27. ALL PLAT DISTANCES ARE GROUND LENGTH AND MAY BE CONVERTED TO GRID LENGTH BY MULTIPLYING THE DISTANCE BY THE GRID FACTOR PROVIDED ON THE DETAIL SHEETS.

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

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE THE 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 HIGHWAY AUTHORITIES DEEM NECESSARY OR DESIRABLE. ALL TLE'S EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

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

ORIGINAL PLAT PREPARED BY
GRÄEF

06/24/2022 (Date)
CARLA J. ROLLINS S-2207 ELEVENTY-ONE WI LAND SURVEYOR (Signature)

REVISION DATE
04/27/2023 (1)

CITY OF WEST ALLIS

APPROVED FOR THE CITY
DATE: 06/24/2022 Traci Stengler (Signature)

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\040101_rt.dgn PLOT DATE : 6/24/2022 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 50

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.

PARCEL NUMBER	SHEET NUMBER	OWNER(S)	INTEREST REQUIRED	TOTAL ACRES	R/W REQUIRED (ACRES OR S.F.)			REMAINING ACRES		
					NEW ACRES	EXISTING ACRES	TOTAL ACRES		P.L.E. ACRES	T.L.E. ACRES
1	4.04	ROGER D. EINEICHNER AND DIANNE M. EINEICHNER, AS HUSBAND AND WIFE	TLE	0.247	0.000	0.000	0.000	0.247	0.000	0.0092
2	4.04	THEODORE E. RADER AND BONNIE K. RADER, FORMERLY KNOWN AS BONNIE K. MOSCICKI	TLE	0.124	0.000	0.000	0.000	0.124	0.000	0.0092
3	4.04	KARI ELIZABETH BETHKE	TLE	0.124	0.000	0.000	0.000	0.124	0.000	0.0092
4	4.04	PAUL C. MORRIS AND JESSICA F. MORRIS, AS HUSBAND AND WIFE	TLE	0.124	0.000	0.000	0.000	0.124	0.000	0.0092
5	4.04	ANDREW J. MEDVED AND VALARIE D. JAEGER-MEDVED, HUSBAND AND WIFE	TLE	0.185	0.000	0.000	0.000	0.185	0.000	0.0138
6	4.04	MICHAEL L. IBARRA AND RICHARD RAUL IBARRA, AS JOINT TENANTS WITH RIGHTS OF SURVIVORSHIP	TLE	0.185	0.000	0.000	0.000	0.185	0.000	0.0137
7	4.04	RONALD MELLANTINE	TLE	0.556	0.000	0.000	0.000	0.556	0.000	0.0126
8	4.04	THE JAMES S. MORATECK AND KAREN M. MORATECK REVOCABLE TRUST DATED APRIL 28, 2020	TLE	0.348	0.000	0.000	0.000	0.348	0.000	0.0129
9	4.04	PAUL A. GRANT	TLE	0.090	0.000	0.000	0.000	0.090	0.000	0.0064
10	4.04	NATIONAL PETRO OF WISCONSIN, LLC, A WISCONSIN LIMITED LIABILITY COMPANY	TLE	0.238	0.000	0.000	0.000	0.238	0.000	0.0434
11	4.05	96TH ST APARTMENTS, LLC, A WISCONSIN LIMITED LIABILITY COMPANY	FEE & TLE	0.207	0.001	0.000	0.001	0.206	0.000	0.0256
12	4.05	EMIL J. BELICH AND STEVEN E. BELICH	TLE	0.169	0.000	0.000	0.000	0.169	0.000	0.0125
13	4.05	EMIL J. BELICH AND STEVEN E. BELICH, AS TENANTS IN COMMON	TLE	0.138	0.000	0.000	0.000	0.138	0.000	0.0023
14	4.05	LANDMARK CREDIT UNION	FEE & TLE	1.047	0.002	0.000	0.002	1.045	0.000	0.0414
15	4.06	SOURCE ONE ENTERPRISE LLC, A WISCONSIN LIMITED LIABILITY COMPANY	TLE	0.323	0.000	0.000	0.000	0.323	0.000	0.0007
16	4.06	KONSTANTINE S. GEORGE, SAM P. NESEMANN, THOMAS C. PAGEDAS AND PHILIP SHOVERS, D/B/A ORTHOPEDIC MEDICAL BUILDING COMPANY, A CO-PARTNERSHIP	FEE & TLE	0.728	0.004	0.000	0.004	0.724	0.000	0.0708
17	4.06	EBRAHIM A. JABER	TLE	0.256	0.000	0.000	0.000	0.256	0.000	0.0159
18	4.06	DIANE L. SACK, IN HER OWN RIGHT	TLE	0.110	0.000	0.000	0.000	0.110	0.000	0.0138
19	4.06	LORI A. KLEBAR, A SINGLE PERSON	TLE	0.214	0.000	0.000	0.000	0.214	0.000	0.0099
20	4.06	JENNIFER R. WACHHOLTZ AND THOMAS W. WACHHOLTZ, WIFE AND HUSBAND	TLE	0.219	0.000	0.000	0.000	0.219	0.000	0.0189
21	4.06	SCHOOL DISTRICT OF WEST ALLIS, WEST MILWAUKEE, ETAL, A UNIFIED SCHOOL DSITRICT ORGANIZED AND EXISTING UNDER CHAPTER 120, SUBCHAPTER III, WISCONSIN STATUTES	TLE	0.224	0.000	0.000	0.000	0.224	0.000	0.0103
22	4.07	9330 W LINCOLN S2 LLC, A WISCONSIN LIMITED LIABILITY COMPANY	TLE	0.238	0.000	0.000	0.000	0.238	0.000	0.0175
23	4.07	DOUGLAS O. BLANK AND SUSAN M. THAYER, AS TENANTS IN COMMON, AN UNDIVIDED ONE-HALF INTEREST TO EACH	TLE	0.279	0.000	0.000	0.000	0.279	0.000	0.0244
24	4.07	SUSAN K. PALOMO, FORMERLY KNOWN AS SUSAN K. HINTZ	TLE	0.192	0.000	0.000	0.000	0.192	0.000	0.0240
25	4.07	EDWARD REPINSKI, MARRIED	TLE	0.139	0.000	0.000	0.000	0.139	0.000	0.0101
26	4.07	INTENTIONALLY OMITTED [1]	TLE	0.106	0.000	0.000	0.000	0.000	0.000	0.0000
27	4.07	SCHOOL DISTRICT OF WEST ALLIS, WEST MILWAUKEE, ET AL., A UNIFIED SCHOOL DSITRICT ORGANIZED AND EXISTING UNDER CHAPTER 120, SUBCHAPTER III, WISCONSIN STATUTES	TLE	1.998	0.000	0.000	0.000	1.998	0.000	0.0434
28	4.07	ANGEL L. VILLARREAL AND ANNA L. VILLARREAL, AS HUSBAND AND WIFE	TLE	0.312	0.000	0.000	0.000	0.312	0.000	0.0120
29	4.07	CARL A. HUTCHINSON AND CYNTHIA HUTCHINSON	TLE	0.238	0.000	0.000	0.000	0.238	0.000	0.0096
100	4.04, 4.05 & 4.06	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS	0.000	0.000	0.000	0.000	0.000	0.000	0.0000
101	4.04, 4.05 & 4.06	AT&T WISCONSIN	RELEASE OF RIGHTS	0.000	0.000	0.000	0.000	0.000	0.000	0.0000

4

REVISION DATE
04/27/2023 (1)

DATE 06/24/2022

SCALE: FEET
0 N/A

HWY: W. LINCOLN AVENUE
COUNTY: MILWAUKEE

R/W PROJECT NUMBER 2110-03-01
CONSTRUCTION PROJECT NUMBER 2110-03-71

PLAT SHEET 4.02
PS&E SHEET 132

E

FOUND RAILROAD SPIKE WITH CROSS
N=374,275.62
E=2,525,236.75

SW-SE
SEC 5-6-21

FOUND CONCRETE MONUMENT WITH SEWRPC BRASS CAP
N=371,619.61
E=2,525,285.11

1/4 SECTION LINE

1/16 LINE

SE-SE
SEC 5-6-21

CITY

S. 96TH STREET

S. 95TH STREET

W. NATIONAL AVENUE

S. 94TH STREET

GN

FOUND SEWRPC BRASS CAP IN CONCRETE BRIDGE DECK
N=374,357.31
E=2,527,874.26

S. 93RD STREET

SECTION LINE

4

SECTION LINE

8+00 99+00 100+00 101+00 102+00 103+00 104+00 105+00 106+00 107+00 108+00 109+00 110+00 111+00 112+00

OF

W. LINCOLN AVENUE

S. 97TH STREET

S. 95TH STREET

WEST ALLIS

FOUND CONCRETE MONUMENT WITH WISDOT BRASS CAP IN CAST IRON HANDHOLE
N=371,715.42
E=2,527,928.44

FOUND CONCRETE MONUMENT WITH SEWRPC BRASS CAP
N=369,074.44
E=2,527,947.17

NW-NE
SEC 8-6-21

NE-NE
SEC 8-6-21

1/16 LINE

FOUND CONCRETE MONUMENT WITH SEWRPC BRASS CAP
N=368,985.09
E=2,525,315.64

REVISION DATE	DATE 06/24/2022	SCALE, FEET 0 50 100	HWY: W. LINCOLN AVENUE	R/W PROJECT NUMBER: 2110-03-01	PLAT SHEET 4.03
	GRID FACTOR 0.99991868		COUNTY: MILWAUKEE	CONSTRUCTION PROJECT NUMBER: 2110-03-71	PS&E SHEET 133 E

GN

FOUND RAILROAD SPIKE WITH CROSS
N=374,275.62
E=2,525,236.75

T 6 N
5 5
5 5
R 21 E

LINE
2656.46'
N 01° 2'35" W

SW-SE

CITY

PL

LOT 21 | LOT 22 | LOT 23 | LOT 24 | LOT 25 | LOT 26 | LOT 27 | LOT 28 | LOT 29 | LOT 30

KINSEY'S PARK GARDENS
BLOCK 7

1 2 3 4 5 6

THEODORE E. RADER & BONNIE K. RADER, FORMERLY KNOWN AS BONNIE K. MOSCICKI
TAX KEY: 479-0419-000

KARI ELIZABETH BETHKE
TAX KEY: 479-0420-000

PAUL C. MORRIS & JESSICA F. MORRIS, AS HUSBAND AND WIFE
TAX KEY: 479-0421-000

ANDREW J. MEDVED AND VALARIE D. JAEGER-MEDVED, HUSBAND AND WIFE
TAX KEY: 479-0422-000

MICHAEL L. IBARRA AND RICHARD RAUL IBARRA, AS JOINT TENANTS WITH RIGHTS OF SURVIVORSHIP
TAX KEY: 479-0423-000

S. 96TH STREET (FIELD)
89TH AVENUE (PLATTED)

98+68.56 54.00'
98+68.39 44.00'
99+08.57 54.00'
99+48.57 54.00'
99+88.58 54.00'
100+28.58 54.00'
100+88.59 54.00'
101+48.19 54.00'
99+08.40 44.00'
99+48.40 44.00'
99+88.41 44.00'
100+28.42 44.00'
100+88.42 44.00'
101+48.02 44.00'
10'
33'
55'
60'

SEE SHEET 4.05

W. LINCOLN AVENUE

SECTION LINE

1013.46' N 87°55'27" E
1026.84'
98+00
+50
99+00
+50
100+00
+50
1631.61' N 87°55'27" E
101+00
+50
102+00
N 87°55'27" E

11.00' N 02°04'33" W
11.00' N 02°04'33" W
S 02°04'33" E 44.00'

BEGIN RELOCATION ORDER
STA. 98+67.84
N=371,645.31
E=2,526,297.75

OF

SLOPE INTERCEPT (TYP)

98+81.78 44.00'
98+76.66 49.00'
98+76.61 51.00'
99+16.79 44.00'
99+56.80 44.00'
100+36.82 44.00'
100+76.83 44.00'
99+16.62 51.00'
99+56.63 51.00'
100+36.66 51.00'
100+76.63 51.00'
102+00.09 51.00'
102+05.31 44.00'
102+17.25 64.92'
102+07.30 63.63'

1"IP
7'
5'
8'
60'

TLE SLOPES (TYP)

THE JAMES S. MORATECK AND KAREN M. MORATECK REVOCABLE TRUST DATED APRIL 28, 2020

NATIONAL PETRO OF WISCONSIN, LLC, A WISCONSIN LIMITED LIABILITY COMPANY
TAX KEY: 479-0424-002

5' WIDE INGRESS/EGRESS EASEMENT - DOC. 7725847

RONALD MELLANTINE
TAX KEY: 479-0430-001

BLANKET EASEMENT FOR VEHICULAR AND PEDESTRIAN INGRESS & EGRESS OVER LOT 6, BLOCK 8, KINSEY'S PARK GARDENS DOCS. 4458093 & 102671

PAUL A. GRANT
TAX KEY: 479-0425-000

TAX KEY: 479-0434-001

7 8 9 10

LOT 8 | LOT 7 | LOT 6 | LOT 5 | LOT 4 | LOT 3 | LOT 2 | LOT 1

100 101

KINSEY'S PARK GARDENS
BLOCK 8

WEST ALLIS

101+14.72 132.92'
101+14.52 141.62'

Z Z Z Z Z Z Z

LOT 9 | LOT 10 | LOT 11 | LOT 12 | LOT 13

S. 97TH STREET (FIELD)
90TH AVENUE (PLATTED)

SIXTEENTH

W. NATIONAL AVENUE

MATCH LINE

NW-NE

NE-NE

SE-SE

McGEOCH HIGHLANDS EAST

T 6 N
5 4
5 4
R 21 E

FOUND SEWRPC BRASS CAP IN CONCRETE BRIDGE DECK
N=374,357.31
E=2,527,874.26

2642.45'
N 01°10'29" W

2634.71'
S 0°39'50" E

T 6 N
5 5
8 8
R 21 E

FOUND CONCRETE MONUMENT WITH SEWRPC BRASS CAP
N=371,619.61
E=2,525,285.11

1/4 SECTION

FOUND CONCRETE MONUMENT WITH SEWRPC BRASS CAP
N=368,985.09
E=2,525,315.64

T 6 N
8 8
8 8
R 21 E

2641.05'
S 0°24'23" E

T 6 N
5 4
8 9
R 21 E

FOUND CONCRETE MONUMENT WITH WISDOT BRASS CAP IN CAST IRON HANDHOLE
N=371,715.42
E=2,527,928.44

SECTION

FOUND CONCRETE MONUMENT WITH SEWRPC BRASS CAP
N=369,074.44
E=2,527,947.17

T 6 N
8 9
8 9
R 21 E

UTILITY NO.	OWNER	WIDTH	DOCUMENT NO.	PARCEL
100	WE ENERGIES-ELECTRIC	BLANKET EASEMENT BLANKET EASEMENT	4521773 4521772	7 7
101	AT&T WISCONSIN	BLANKET EASEMENT BLANKET EASEMENT	4521773 4521772	7 7

NOTE: THE TLE'S DO NOT INCLUDE ANY PART OF BUILDINGS

HIGHWAY	BASIS OF EXISTING R/W	WIDTH
W. LINCOLN AVENUE	KINSEY'S PARK GARDENS DOCUMENT NO. 3943482 (SOUTH OF C.L.)	66' 55'
S. 97TH STREET	KINSEY'S PARK GARDENS	60'
S. 96TH STREET	KINSEY'S PARK GARDENS	60'

REVISION DATE

DATE: 06/24/2022
GRID FACTOR 0.99991868

SCALE. FEET
0 20 40

HWY: W. LINCOLN AVENUE
COUNTY: MILWAUKEE

R/W PROJECT NUMBER: 2110-03-01
CONSTRUCTION PROJECT NUMBER: 2110-03-71

PLAT SHEET 4.04
PS&E SHEET 134 E

HIGHWAY	BASIS OF EXISTING R/W	WIDTH
W. LINCOLN AVENUE	McGEOCH HIGHLANDS (NORTH OF C.L.) CSM 1303 FRUITLAND (SOUTH OF C.L.)	33' VARIES 55'
W. NATIONAL AVENUE	KINSEY'S PARK GARDENS DOCUMENT NO. 3874226 (WEST OF C.L.) FRUITLAND (EAST OF C.L.) CSM 5792	66' VARIES 60' 120'
S. 95TH STREET	McGEOCH HIGHLANDS FRUITLAND	60' 60'

COURSE TABLE PARCEL 11		
101-102	S87°55'27"W	15.00'
102-102	N2°3'53"W	3.00'
103-104	N87°55'27"E	15.00'
104-101	S2°3'53"E	3.00'

COURSE TABLE PARCEL 14		
105-106	N87°55'27"E	39.03'
106-107	S00°41'33"E	2.00'
107-108	S87°55'27"W	41.65'
109-110	N51°06'27"E	3.34'

UTILITY NO.	OWNER	WIDTH	DOCUMENT NO.	PARCEL
100	WE ENERGIES-ELECTRIC	VARIABLE WIDTH VARIABLE WIDTH VARIABLE WIDTH VARIABLE WIDTH	3912347 3912347 4871195 9074174	11 12 13 14
101	AT&T WISCONSIN	VARIABLE WIDTH 5' WIDE ROW GRANT VARIABLE WIDTH	3912347 5901680 3912347	11 12 12

FOUND RAILROAD SPIKE WITH CROSS N=374,275.62 E=2,525,236.75

LINE 2656.46' N 01°2'35" W

1,353.10

2634.71' S 0°39'50" E

FOUND CONCRETE MONUMENT WITH SEWRPC BRASS CAP N=371,619.61 E=2,525,285.11

CITY

FOUND CONCRETE MONUMENT WITH SEWRPC BRASS CAP N=369,985.09 E=2,525,315.64

MATCH LINE

W. LINCOLN AVENUE

W. NATIONAL AVENUE

1/4 SECTION

SECTION

OF

102+08.15 51.00 SEE SHEET 4.04

102+08.03 44.00 33.00' N 02°04'33" W

96TH ST APARTMENTS, LLC. A WISCONSIN LIMITED LIABILITY COMPANY TAX KEY: 479-0729-004

11

103+08.03 47.00 (103)

103+23.03 47.00 (104)

103+08.03 44.00 (102)

103+73.03 44.00 (101)

103+62.79 44.00

103+61.83 51.00

103+73.44 56.66

103+73.44 53.87

231.42' N 87°55'27" E

13' WIDE INGRESS/EGRESS EASEMENT - DOC. 4527006

10' WIDE RECIPROCAL DRIVEWAY EASEMENT - DOC. 4527006

VARIABLE WIDTH PARKING RESERVATION - DOCS. 3891717 AND 4527006

PARCEL 1 CSM #1303

PARCEL 2 CSM #1303

LOCATION OF NW LINE OF EASEMENT APPROXIMATE BASED ON AERIAL PHOTOGRAPH

McGEOCH HIGHLANDS BLOCK 4

LOT 37 LOT 38 LOT 39 LOT 40

13 EMIL J. BELICH AND STEVEN E. BELICH, AS TENANTS IN COMMON TAX KEY: 479-0723-000

12 EMIL J. BELICH AND STEVEN E. BELICH TAX KEY: 479-0724-000

RESTRICTED ACCESS DOC. 4052258

RESTRICTED ACCESS DOC. 6205296

12+46.23 95.26

12+50.20 92.22

12+14.08 53.62

12+17.90 50.40

S. 95TH ST (FIELD) 88TH AVE (PLATTED)

SEE SHEET 4.06

STA 10+81.61 (N) = STA 104+02.86

STA 10+81.61 (S) = STA 104+04.11

N 87°55'27" E 1054.55' 105+00

N 51°06'27" E

N 51°10'56" E

11.00' N 02°04'33" W

44.00' S 02°04'33" E

SLOPE INTERCEPT (TYP)

TLE SLOPES (TYP)

105 104+45.45 44.00

108 104+42.78 46.00

104+84.48 44.00 (106)

104+84.43 46.00 (107)

104+44.44 51.00

104+79.31 51.00

104+78.87 69.00

104+83.87 69.00

14 LANDMARK CREDIT UNION TAX KEY: 486-0099-001

LOT 2 NE-NE BLOCK 4 FRUITLAND

LOT 1

RIGHT OF INGRESS/EGRESS ALONG NORTH LINES OF LOTS 1 AND 2, BLOCK 4, FRUITLAND GRANTED TO STATE OF WISCONSIN - DOC 4419172

PARCEL 3 CSM #5792

7+84.19 60.00

7+80.27 65.00

2642.45' N 01°10'29" W

2641.05' S 0°24'23" E

FOUND SEWRPC BRASS CAP IN CONCRETE BRIDGE DECK N:374,351.31 E:2,527,874.26

FOUND CONCRETE MONUMENT WITH WISDOT BRASS CAP IN CAST IRON HANDHOLE N:371,715.42 E:2,527,928.44

FOUND CONCRETE MONUMENT WITH SEWRPC BRASS CAP N:369,074.44 E:2,527,947.17

WEST ALLIS

NOTE: THE TLE'S DO NOT INCLUDE ANY PART OF BUILDINGS

4

4

REVISION DATE	DATE: 06/24/2022	SCALE: FEET 0 20 40	HWY: W. LINCOLN AVENUE	R/W PROJECT NUMBER: 2110-03-01	PLAT SHEET 4.05	
	GRID FACTOR 0.99991868		COUNTY: MILWAUKEE	CONSTRUCTION PROJECT NUMBER: 2110-03-71	PS&E SHEET 135	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\040105_rp.dgn PLOT DATE : 4/27/2023 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 75

HIGHWAY	BASIS OF EXISTING R/W	WIDTH
W. LINCOLN AVENUE	McGEOCH HIGHLANDS (NORTH OF C.L.) FRUITAND (SOUTH OF C.L.) PRESIDENTS HEIGHTS	33' 55' 88'
W. NATIONAL AVENUE	ROW PLAT 2410-00-06 REV 05/10/2018	VARIES
S. 94TH STREET	McGEOCH HIGHLANDS	60'

COURSE TABLE PARCEL 16		
109-110	N21°44'13"W	23.18'
110-111	N51°10'56"E	5.23'
111-112	S21°44'13"E	12.41'
112-113	S41°36'32"E	11.94'
113-114	S72°12'14"E	11.94'
114-109	S87°55'27"W	19.40'

NOTE: THE TLE'S DO NOT INCLUDE ANY PART OF BUILDINGS

CSM #8049

LOT 1

SOURCE ONE ENTERPRISE LLC, A WISCONSIN LIMITED LIABILITY COMPANY

TAX KEY: 479-0676-004

15

VARIABLE WIDTH UTILITY EASEMENT TO WE ENERGIES ELECTRIC AND AT&T WISCONSIN DOC. 5127565

SEE SHEET 4.05

W. NATIONAL AVENUE

N 51°10'56" E

12+87.97 39.69

12+86.39 40.91

12+84.35 35.00

12+90.27 35.00

12+90.27 33.00

12+80.27 33.00

N 38°49'04" W 33.00'

13+00

14+00

+50

43.09' N 51°10'56" E

12+97.19 34.00

12+97.19 44.00

LOT 6

LOT 5

LOT 4

SE-SE

LOT 3

LOT 2

LOT 1

TAX KEY: 479-0756-002

16

KONSTANTINE S. GEORGE, SAM P. NESEMANN, THOMAS C. PAGEDAS AND PHILIP SHOVERS, D/B/A ORTHOPEDIC MEDICAL BUILDING COMPANY, A CO-PARTNERSHIP

McGEOCH HIGHLANDS

BLOCK 5

S. 94TH STREET (FIELD)
87TH AVENUE (PLATTED)

60'

SEE SHEET 4.07

111 12+42.42 34.00

110 12+37.12 34.06

12+44.58 44.00

105+62.71 54.00

TLE SLOPES (TYP)

100 101

108+06.00 59.00

108+05.92 54.00

108+11.00 59.00

108+10.75 44.00

6'

15'

82.07' N 02°04'33" W

105+56.24 57.27

105+55.67 44.00

105+75.07 44.00 114

105+63.84 48.06 113

112 109

33.00'

10'

SLOPE INTERCEPT (TYP)

OF

33'

254.54' N 87°55'27" E

LINE

33.00' N 01°08'14" W

689.79' N 87°55'27" E

662.54' N 87°55'27" E

11.00' S00°41'41"E

44.01' S00°41'41"E

55'

W. LINCOLN AVENUE

+50 106+00 +50 107+00 +50 108+00

N 87°55'27" E

105+44.49 44.00

105+44.30 52.00

106+30.93 52.00

106+30.76 59.00

106+70.94 52.00

106+70.77 59.00

107+24.69 52.00

107+24.52 59.00

107+79.69 52.00

107+79.52 59.00

108+36.13 44.00

108+35.94 52.00

7' 15' 7' 15' 7'

MATCH LINE

17 EBRAHIM A. JABER
TAX KEY: 486-0053-000

18 DIANE L. SACK, IN HER OWN RIGHT
TAX KEY: 486-0052-001

19 LORI A. KLEBAR, A SINGLE PERSON
TAX KEY: 486-0032-000

20 JENNIFER R. WACHHOLTZ AND THOMAS W. WACHHOLTZ, WIFE AND HUSBAND
TAX KEY: 486-0031-000

21
TAX KEY: 486-0030-000

BLOCK 1

NE-NE

BLOCK 1

FRUITLAND

PRESIDENT HEIGHTS

SCHOOL DISTRICT OF WEST ALLIS, WEST MILWAUKEE, ETAL, A UNIFIED SCHOOL DISTRICT ORGANIZED AND EXISTING UNDER CHAPTER 120, SUBCHAPTER III, WISCONSIN STATUTES

WEST ALLIS

CITY OF WEST ALLIS

SECTION LINE

T 6 N R 21 E
5 5 5 5

FOUND RAILROAD SPIKE WITH CROSS
N=374,275.62
E=2,525,236.75

2656.46' N 01°27'35" W

T 6 N R 21 E
5 5 8 8

FOUND CONCRETE MONUMENT WITH SEWRPC BRASS CAP
N=371,619.61
E=2,525,285.11

1672.60' N 87°55'27" E

SECTION 28.14'

1982.53'

1/4 SECTION LINE

2634.71' S 0°39'50" E

T 6 N R 21 E
8 8 8 8

FOUND CONCRETE MONUMENT WITH SEWRPC BRASS CAP
N=368,985.09
E=2,525,315.64

SECTION LINE

T 6 N R 21 E
5 4 5 4

FOUND SEWRPC BRASS CAP IN CONCRETE BRIDGE DECK
N=374,357.31
E=2,527,874.26

2642.45' N 0°10'29" W

T 6 N R 21 E
5 4 8 9

FOUND CONCRETE MONUMENT WITH WISDOT BRASS CAP IN CAST IRON HANDHOLE
N=371,715.42
E=2,527,928.44

2641.05' S 0°24'23" E

1/4 SECTION LINE

T 6 N R 21 E
8 9 8 9

FOUND CONCRETE MONUMENT WITH SEWRPC BRASS CAP
N=369,074.44
E=2,527,947.17

UTILITY NO.	OWNER	WIDTH	DOCUMENT NO.	PARCEL
100	WE ENERGIES-ELECTRIC	6' BLANKET EASEMENT	3634698 4111761	16 16
101	AT&T WISCONSIN	6' BLANKET EASEMENT	3634698 4111761	16 16

REVISION DATE	DATE: 06/24/2022	SCALE, FEET 0 20 40	HWY: W. LINCOLN AVENUE	R/W PROJECT NUMBER: 2110-03-01	PLAT SHEET 4.06
	GRID FACTOR 0.99991868		COUNTY: MILWAUKEE	CONSTRUCTION PROJECT NUMBER: 2110-03-71	PS&E SHEET 136 E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\040106_rp.dgn PLOT DATE : 4/27/2023 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 75

6' WIDE UTILITY EASEMENT TO WE ENERGIES - ELECTRIC AND AT&T WISCONSIN DOC. 3994374

CITY

SE-SE

FOUND RAILROAD SPIKE WITH CROSS
N=374,275.62
E=2,525,236.75

S. 94TH STREET (FIELD)
87TH AVENUE (PLATTED)

LINE

SEE SHEET 4.06

9330 W LINCOLN S2 LLC, A WISCONSIN LIMITED LIABILITY COMPANY

22

TAX KEY: 479-0767-001

DOUGLAS O. BLANK AND SUSAN M. THAYER, AS TENANTS IN COMMON, AN UNDIVIDED ONE-HALF INTEREST TO EACH

23

McGEOCH HIGHLANDS

BLOCK 6

TAX KEY: 479-0770-001

SUSAN K. PALOMO, FORMERLY KNOWN AS SUSAN K. HINTZ

24

TAX KEY: 479-0772-001

EDWARD REPINSKI, MARRIED

25

TAX KEY: 479-0774-000

LOT 9 | LOT 10 | LOT 11 | LOT 12 | LOT 13 | LOT 14 | LOT 15 | LOT 16

S. 93RD STREET (FIELD)
86TH AVENUE (PLATTED)

ASSESSOR'S PLAT NO. 252

BLOCK 1

26

INTENTIONALLY (1) OMITTED

LOT 7

60'

108+70.93 54.00
109+47.04 54.00
109+47.07 56.00
110+35.58 56.00
110+35.66 61.00
110+97.16 61.00
110+97.05 54.00
111+40.86 54.00

108+70.76 44.00
109+46.88 44.00
110+35.39 44.00
110+96.90 44.00
111+40.70 44.00

10' | 12' | 17' | 10'

1"P | 1"P

33'

S 33.00' 01°10'03" W

N 33.00' 02°04'33" W

FOUND SEWRPC BRASS CAP IN CONCRETE BRIDGE DECK
N=374,357.31
E=2,527,874.26

GN

FOUND CONCRETE MONUMENT WITH WISDOT BRASS CAP IN CAST IRON HANDHOLE
N=371,715.42
E=2,527,928.44

2642.45' N 01°10'29" W

FOUND CONCRETE MONUMENT WITH SEWRPC BRASS CAP
N=371,619.61
E=2,525,285.11

2656.46' N 01°2'35" W

1/4 SECTION

SECTION

2285.25' N 87°55'27" E

106.69' N 87°55'27" E

253.13' N 87°55'27" E

308.48' N 87°55'27" E

2336.59'

N 87°55'27" E

+50 | 109+00 | +50 | 110+00 | +50 | 111+00 | +50 | 112+00 | +50

11.00' N 02°04'33" W

55.02' S 00°30'12" E

W. LINCOLN AVENUE

55'

END RELOCATION ORDER
STA. 112+46.87
N=371,695.26
E=2,527,675.88

108+36.13 44.00
110+72.48 44.00
111+37.99 44.00

SLOPE INTERCEPT (TYP)

7'

GUY

FLAG

TLE SLOPES (TYP)

1"P | 1"P

111+90.01 44.00
111+89.79 52.00

108+35.94 52.00
110+72.26 52.00
111+37.77 52.00

MATCH LINE

2634.71' S 0°39'50" E

2641.05' S 0°24'23" E

FOUND CONCRETE MONUMENT WITH SEWRPC BRASS CAP
N=369,074.44
E=2,527,947.17

SCHOOL DISTRICT OF WEST ALLIS WEST MILWAUKEE, ET AL., A UNIFIED SCHOOL DISTRICT ORGANIZED AND EXISTING UNDER CHAPTER 120, SUBCHAPTER III, WISCONSIN STATUTES

27

UNPLATTED LANDS

TAX KEY: 486-0012-001

NE-NE

ANGEL L. VILLARREAL AND ANNA L. VILLARREAL, AS HUSBAND AND WIFE

28

UNPLATTED LANDS

TAX KEY: 486-9995-001

CARL A. HUTCHINSON AND CYNTHIA HUTCHINSON

29

TAX KEY: 486-9995-002

WEST ALLIS

FOUND CONCRETE MONUMENT WITH SEWRPC BRASS CAP
N=368,985.09
E=2,525,315.64

HIGHWAY	BASIS OF EXISTING R/W	WIDTH
W. LINCOLN AVENUE	McGEOCH HIGHLANDS (NORTH OF C.L.) ASSESSOR'S PLAT NO. 252 (NORTH OF C.L.) TPP 2995-04-04	33' 33' 88'
S. 93RD STREET	McGEOCH HIGHLANDS (WEST OF C.L.) ASSESSOR'S PLAT NO. 252 (EAST OF C.L.)	30' 30'

REVISION DATE
04/27/2023 (1)

DATE: 06/24/2022

GRID FACTOR 0.99991868

SCALE, FEET
0 20 40

HWY: W. LINCOLN AVENUE

COUNTY: MILWAUKEE

R/W PROJECT NUMBER: 2110-03-01

CONSTRUCTION PROJECT NUMBER: 2110-03-71

PLAT SHEET 4.07

PS&E SHEET 137

E

N

W. LINCOLN AVENUE

SLOPE INTERCEPT (TYP)

TLE

R/W

CITY OF WEST ALLIS SANITARY

CITY OF WEST ALLIS WATER

AT&T WISCONSIN

WE ENERGIES GAS

1"IP

BM202

98+00

97+00

99+00

100+00

101+00

+50

MATCH LINE STA. 101+00

BEGIN PROJECT
STA. 98+42.00
N = 371,644.37
E = 2,526,271.93

S. 97TH STREET

CITY OF WEST ALLIS LIGHTING

88'

22'

14'

10'

5'

BENCH MARKS

NO.	DESCRIPTION	ELEV.
202	TOP SE. BOLT OF LIGHT POLE UA3 9703 IN CENTER MEDIAN OF W. LINCOLN AVENUE WEST OF S. 97TH ST.	231.68

EXISTING PROFILE ON R/L

FINISHED PROFILE ON R/L

232.23

PI 99+50.00
El 234.08

+1.75%

-1.70%

98+90.00
EL 233.03

100+10.00
EL 233.06

K = 35
L = 120'

EXISTING PROFILE ELEVATION ON R/L

FINISHED PROFILE ELEVATION ON R/L

233.3 233.19

233.6 233.56

233.3 233.22

232.7 232.38

231.9 231.53

240 235 230 225 220 215 210 205

99+00 99+50 100+00 100+50 101+00

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PLAN & PROFILE	SHEET 138	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\050101_pp.dgn PLOT DATE : 10/30/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 40.0000 sf / in.

WISDOT/CADDS SHEET 30

AT&T WISCONSIN
CITY OF WEST ALLIS SANITARY
CITY OF WEST ALLIS WATER
CITY OF WEST ALLIS LIGHTING
S. 96TH STREET
W. NATIONAL AVENUE
W. LINCOLN AVENUE
S. 95TH STREET
BM12
BM200
MATCH LINE STA. 101+00
MATCH LINE STA. 107+00
EXPOSE AND ADJUST EXISTING INTERCONNECT CONDUIT AS NEEDED TO ACCOMMODATE VAULT ADJUSTMENT.
ADJUST EXISTNG TRAFFIC SIGNAL COMMUNICATIONS VAULT TO FINISHED GRADE.
WE ENERGIES GAS
WE ENERGIES ELECTRIC
TDS METROCOM
SLOPE INTERCEPT (TYP)
TLE
R/W

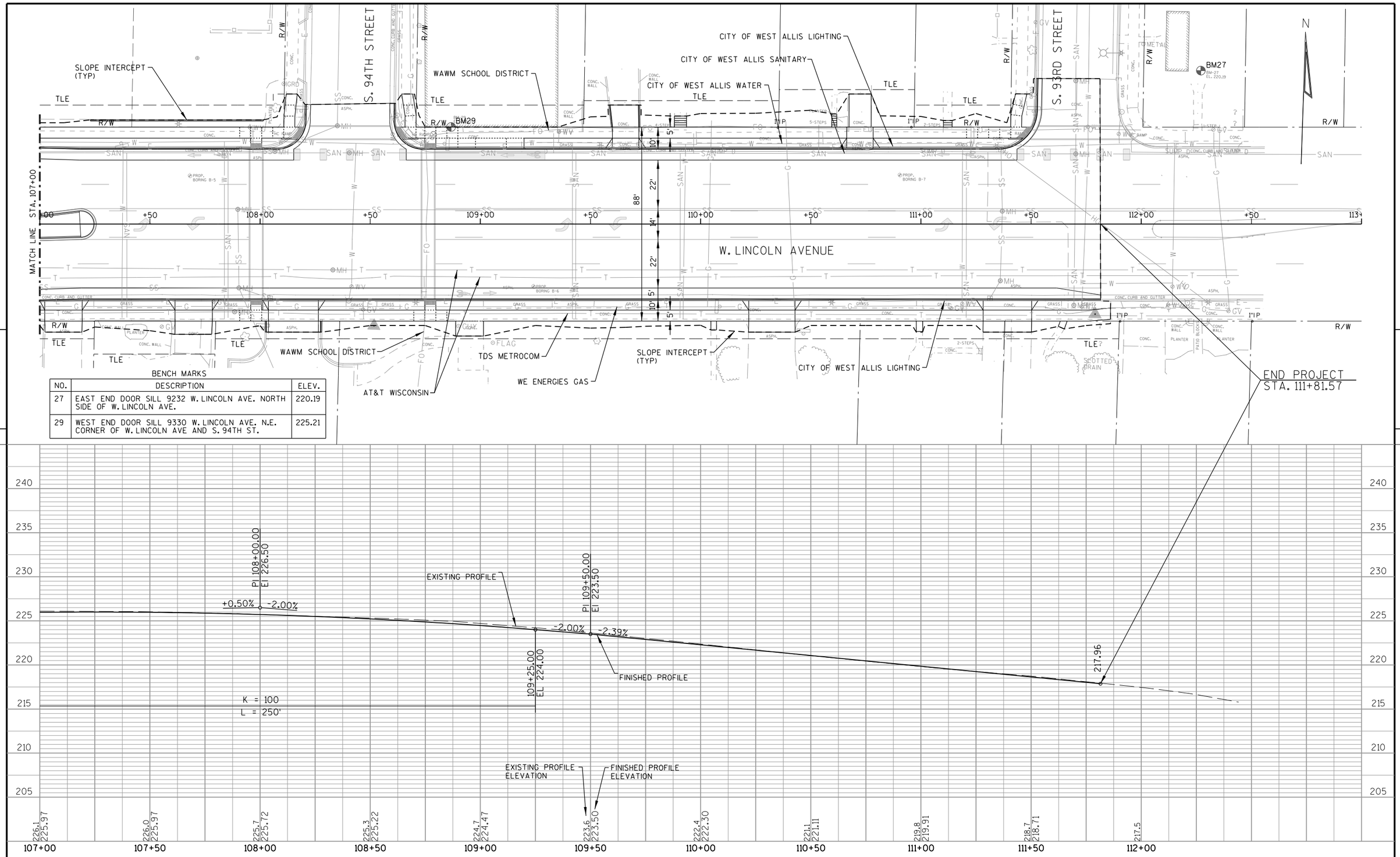
BENCH MARKS

NO.	DESCRIPTION	ELEV.
12	NORTH END DOOR SILL 2232 S. 96TH ST AT N.E. CORNER OF W. LINCOLN AVE AND S. 96TH ST.	231.71
200	TOP NORTH BOLT OF TRAFFIC SIGNAL MONOTUBE POLE UT 9513 AT N.W. CORNER OF W. LINCOLN AVE AND S. 95TH ST.	227.22

PI 101+75.00 EL 230.26
PI 103+50.00 EL 227.98
104+70.00 EL 226.09
105+90.00 EL 225.45
PI 105+30.00 EL 225.15
106+75.00 EL 225.88
K = 58
L = 120'
-1.70%
-1.30%
-1.57%
+0.50%
EXISTING PROFILE ON R/L
FINISHED PROFILE ON R/L
EXISTING PROFILE ELEVATION ON R/L
FINISHED PROFILE ELEVATION ON R/L

231.9 / 231.53	230.6 / 230.68	229.9 / 229.93	229.3 / 229.28	228.8 / 228.63	228.0 / 227.98	227.2 / 227.19	226.3 / 226.41	225.9 / 225.70	225.5 / 225.39	225.7 / 225.50	226.5 / 225.75	226.1 / 225.97
101+00	101+50	102+00	102+50	103+00	103+50	104+00	104+50	105+00	105+50	106+00	106+50	107+00

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PLAN & PROFILE	SHEET 139	E



BENCH MARKS

NO.	DESCRIPTION	ELEV.
27	EAST END DOOR SILL 9232 W. LINCOLN AVE. NORTH SIDE OF W. LINCOLN AVE.	220.19
29	WEST END DOOR SILL 9330 W. LINCOLN AVE. N.E. CORNER OF W. LINCOLN AVE AND S. 94TH ST.	225.21

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PLAN & PROFILE	SHEET 140	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\050103_pp.dgn PLOT DATE : 10/30/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 40.0000 sf / in.

WISDOT/CADDS SHEET 30

WISDOT COMMUNICATIONS
WE ENERGIES GAS
AT&T WISCONSIN
BM201
BEGIN CONSTRUCTION
STA. 7+70.13
W. NATIONAL AVENUE
W. LINCOLN AVENUE
95TH STREET
WE ENERGIES ELECTRIC
CITY OF WEST ALLIS SANITARY
CITY OF WEST ALLIS WATER
CITY OF WEST ALLIS LIGHTING
SLOPE INTERCEPT (TYP)
TDS METROCOM
BM200
END CONSTRUCTION
STA. 12+86.46

EXISTING PROFILE ON R/L
FINISHED PROFILE ON R/L
PI 9+50.00 EL 229.30
PI 10+21.43 EL 228.18
PI 10+81.60 EL 227.12
PI 12+20.00 EL 224.00
PI 11+41.79 EL 225.66
8+90.00 EL 229.60
10+10.00 EL 228.36
11+60.00 EL 225.27
12+80.00 EL 221.88
230.20
221.65
-0.50%
-1.57%
-1.57%
-1.76%
-1.76%
-2.43%
-2.43%
-2.12%
-2.12%
-3.54%
K = 112
L = 120'
K = 85
L = 120'

EXISTING PROFILE ELEVATION ON R/L
FINISHED PROFILE ELEVATION ON R/L

230.5	229.9 230.05	229.9 229.80	229.6 229.55	229.4 229.14	228.4 228.51	227.6 227.68	226.7 226.67	225.8 225.49	224.5 224.33	222.9 222.89	221.3
7+00	7+50	8+00	8+50	9+00	9+50	10+00	10+50	11+00	11+50	12+00	12+50	13+00

240 235 230 225 220 215 210 205

BENCH MARKS

NO.	DESCRIPTION	ELEV.
200	TOP NORTH BOLT OF TRAFFIC SIGNAL MONOTUBE POLE UT 9513 AT N.W. CORNER OF W. LINCOLN AVE AND S. 95TH ST.	227.22
201	TOP EAST BOLT OF LIGHT POLE U3 9622 AT S.W CORNER OF BUILDING #9622	229.51

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	PLAN & PROFILE - W. NATIONAL AVENUE	SHEET 141 E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\050104_pp.dgn
PLOT DATE : 10/30/2024
PLOT BY : GRAEF
PLOT NAME :
PLOT SCALE : 40.0000 sf / in.

Standard Detail Drawing List

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
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
08D16-11	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08D17-06	MANHOLES, MANHOLE & INLET COVERS
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
09B02-10	CONDUIT
09B04-12	PULL BOX
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C11-10	CONCRETE BASE TYPE 10
09C12-09A	CONCRETE BASE TYPE 13
09C12-09B	CONCRETE BASE TYPE 13
09C15-01	CONCRETE BASE TYPE 10 SPECIAL
09E01-15B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-06	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-09E	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-09H	TYPE 10 SPECIAL POLE 45' MONOTUBE ARM
09E08-09K	GENERAL NOTES,HARDWARE DETAILS FOR TYPE 9/10,9/10 SPECIAL,12 & 13 POLES W/MONOTUBE ARMS
09H09-02	COMMUNICATION VAULT TYPE 1
11B02-02	CONCRETE MEDIAN NOSE
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-11	URBAN DOWELED CONCRETE PAVEMENT
13C15-08A	CONCRETE BASE
13C15-08B	CONCRETE BASE
13C18-08A	CONCRETE PAVEMENT JOINTING
13C18-08B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-08C	CONCRETE PAVEMENT JOINT TYPES
13C18-08D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
13C19-03	HMA LONGITUDINAL JOINTS
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-15A	PAVEMENT MARKING SYMBOLS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C07-15E	PAVEMENT MARKING FOR BIKE LANES
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23C	PAVEMENT MARKING (TURN LANES)
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 MARKINGS
15C18-09B	PAVEMENT MARKINGS, MEDIAN ISLAND NOSE
15C18-09C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
15C29-08A	BICYCLE LANE MARKING
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D20-08A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D20-08B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

6

Standard Detail Drawing List

15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D30-09A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09L	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

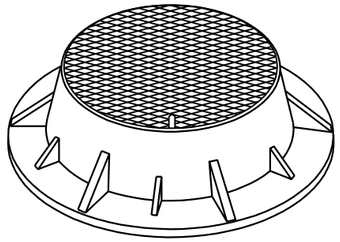
6

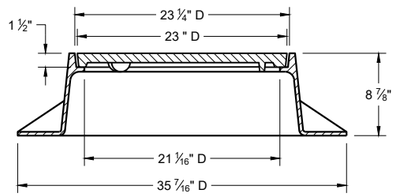
GENERAL NOTES

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.

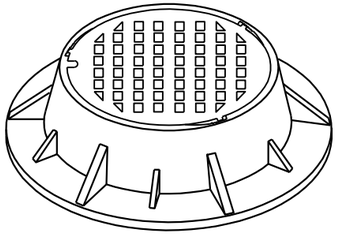
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

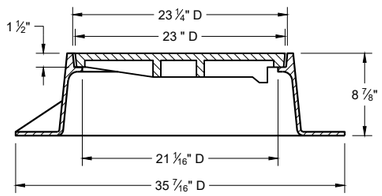




TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

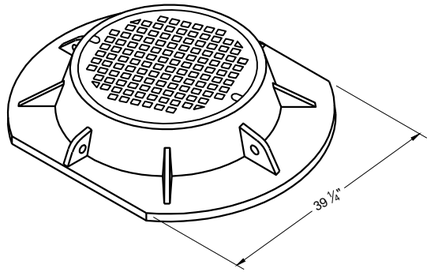


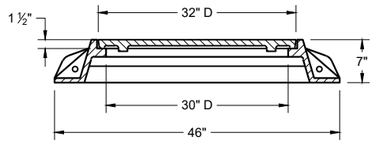


TYPE "J" SPECIAL

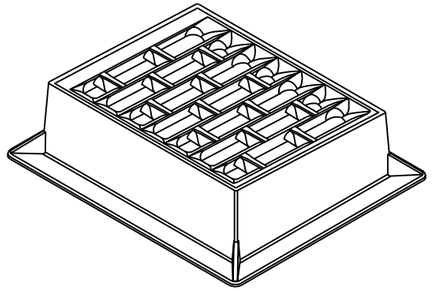
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

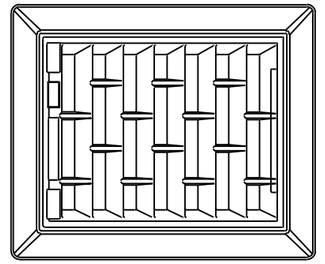
NOTE: EITHER CASTING IS ACCEPTABLE

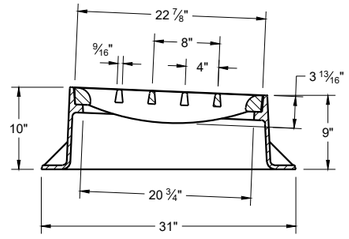


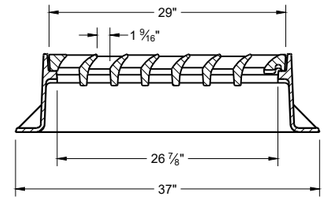


TYPE "K"

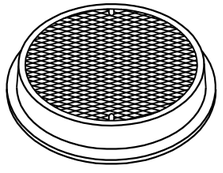


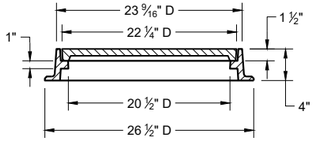




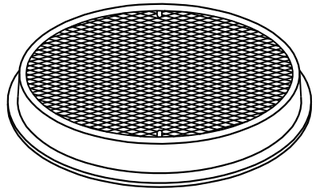


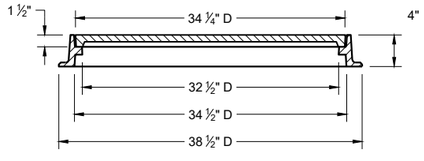
INLET COVER TYPE "BW"





TYPE "L"





TYPE "M"

INLET COVERS TYPES BW
MANHOLE COVERS TYPES K, J, J-S, L, AND M

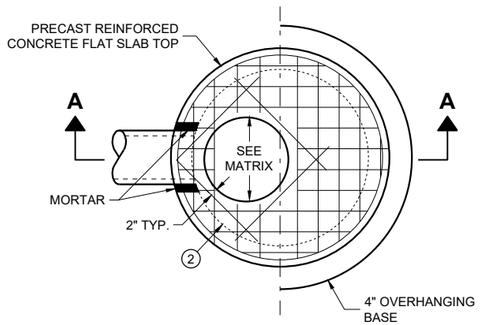
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

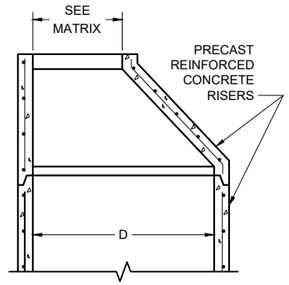
FHWA

6

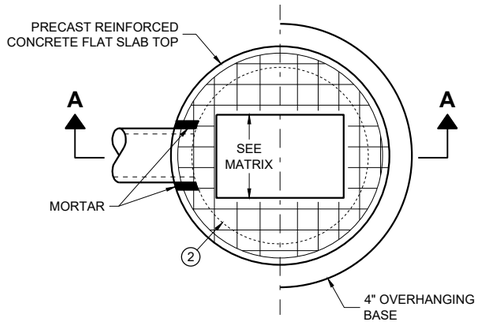
SDD 08A05-21e



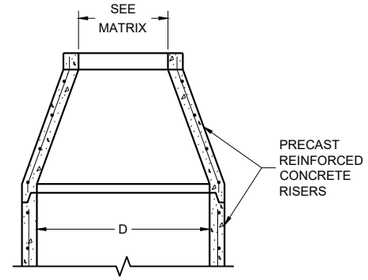
PLAN VIEW CIRCULAR OPENING



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".

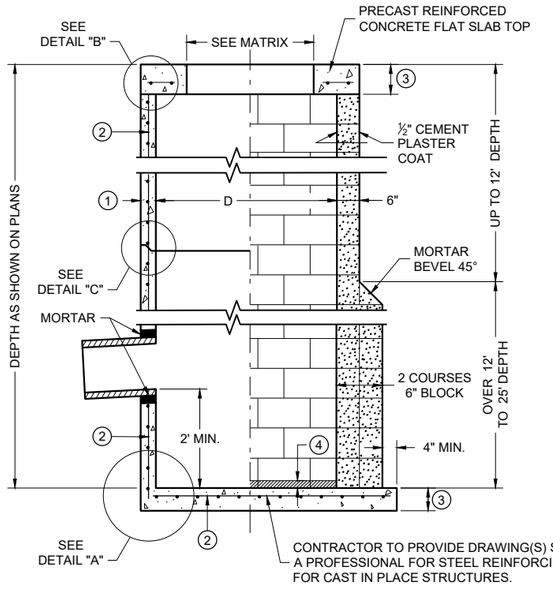
(1) MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

(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.

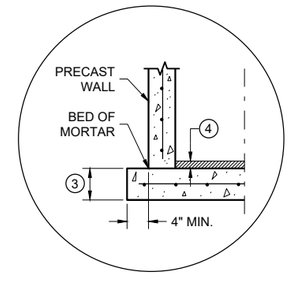
(5) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFROMING TO ASTM C443.



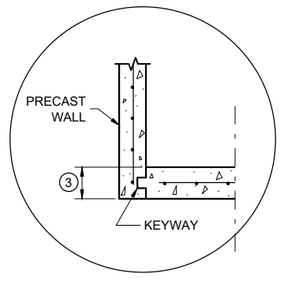
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (2)

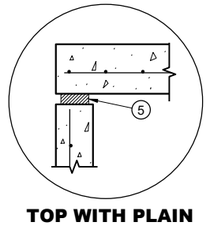


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

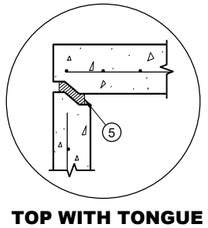


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

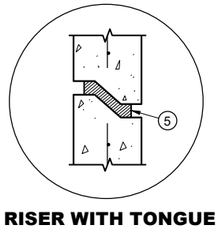
DETAIL "A"



TOP WITH PLAIN END JOINT

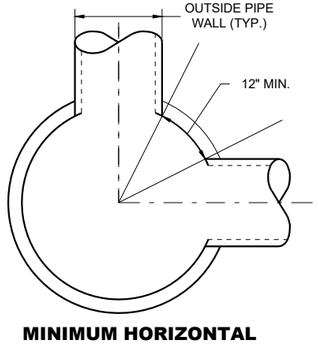


TOP WITH TONGUE AND GROOVE JOINT



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

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December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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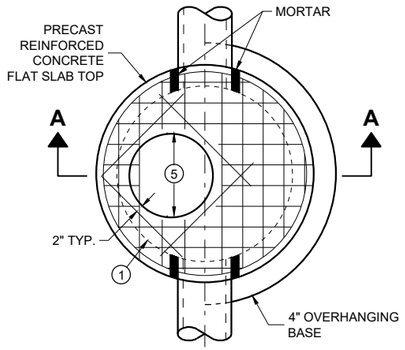
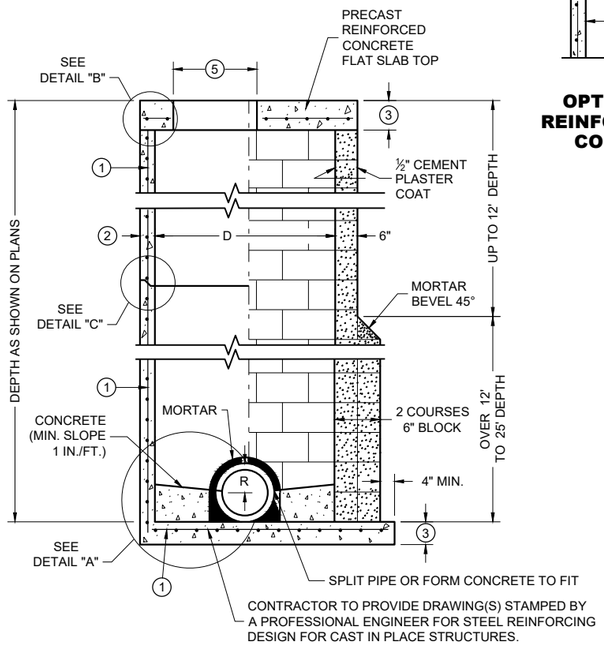
6



PLAN VIEW

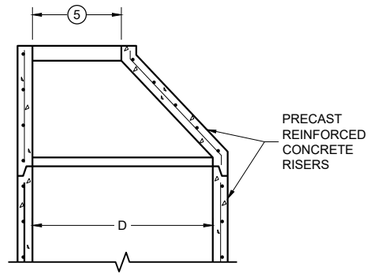
CIRCULAR OPENING



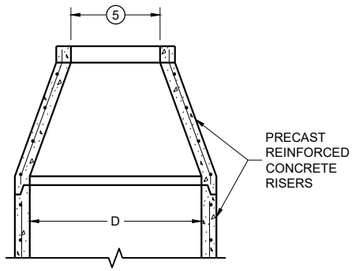
SECTION A - A

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

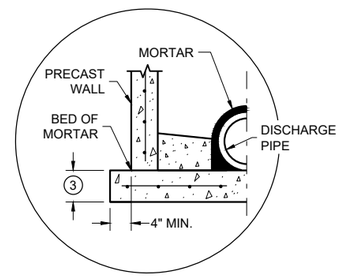
MANHOLE COVER OPENING MATRIX

OPENING SIZE (FT.) (5) \ MANHOLE COVER TYPE	C	ALL J'S	K	L	M
2 DIA.	X	X		X	
3 DIA.			X		X

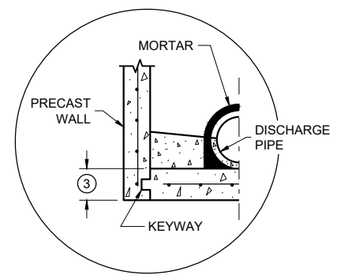
PIPE MATRIX

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.

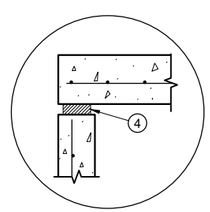


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

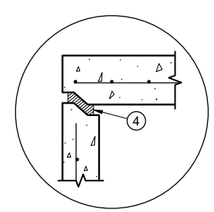


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

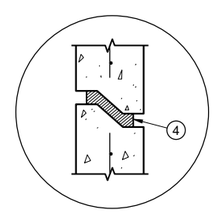
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

DETAIL "C"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST 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".

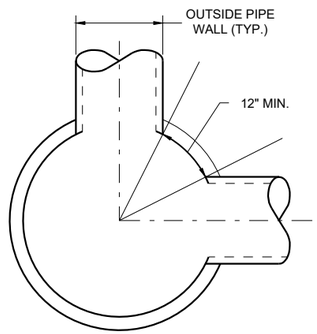
(1) FOR PRECAST MANHOLES AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(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"

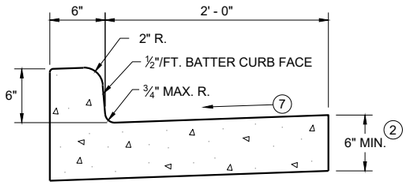
MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

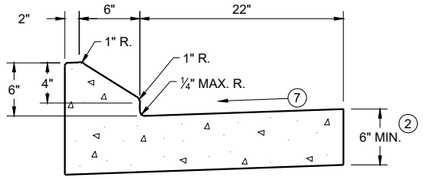
APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

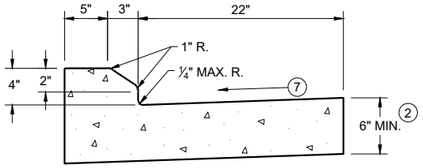
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER



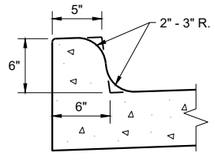
TYPES A (1) & D



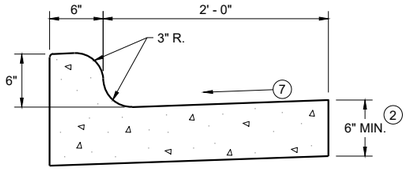
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

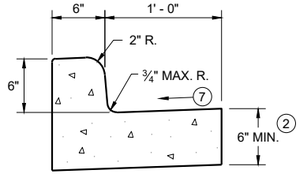


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



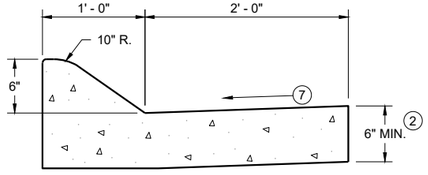
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

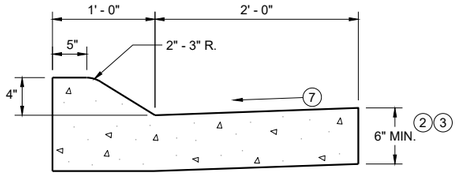


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

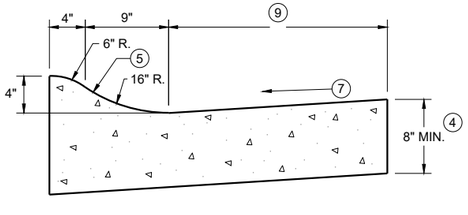


6" SLOPED CURB TYPES A (1) & D



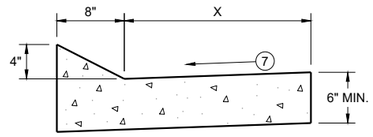
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

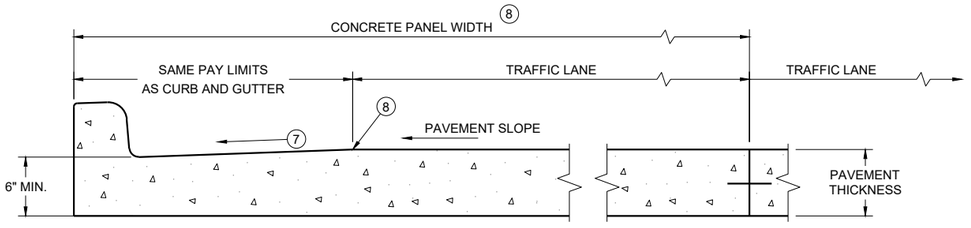


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

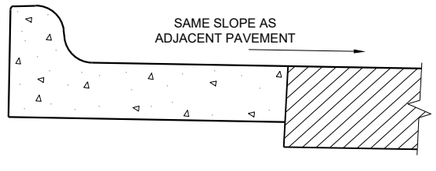
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

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

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

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

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

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

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

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

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

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

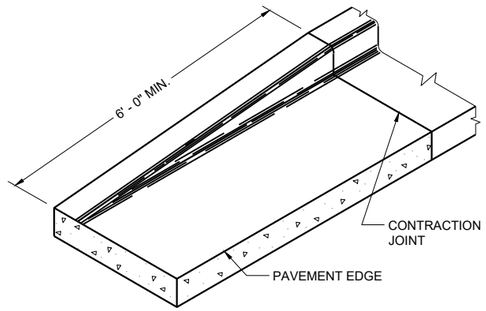
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

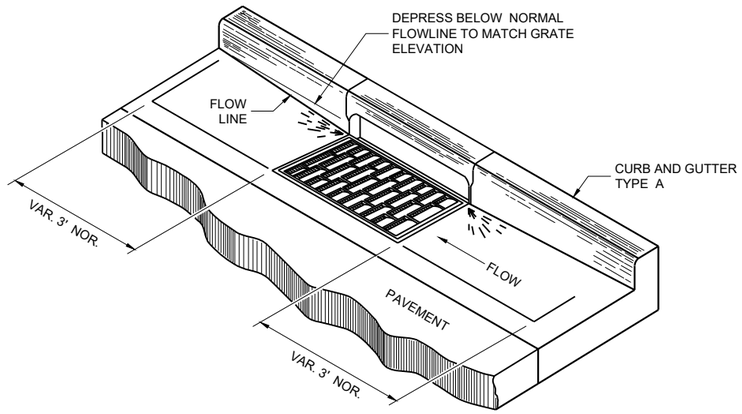
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

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

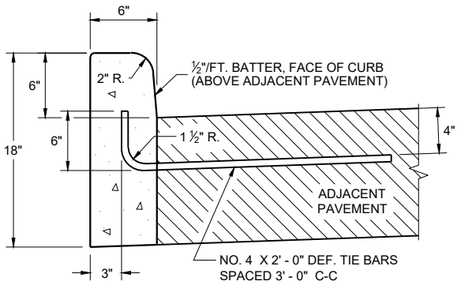
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

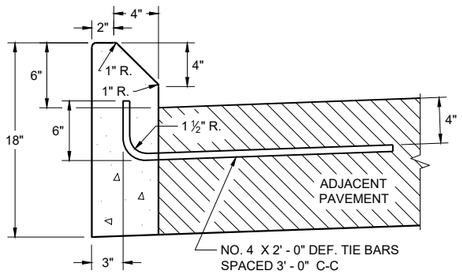
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

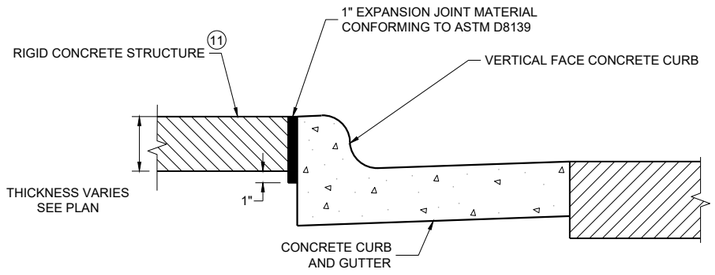


TYPES A (1) & D

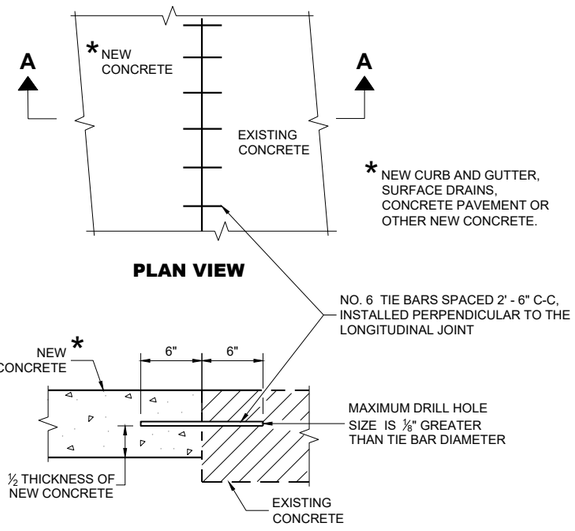


TYPES G (1) & J

CONCRETE CURB



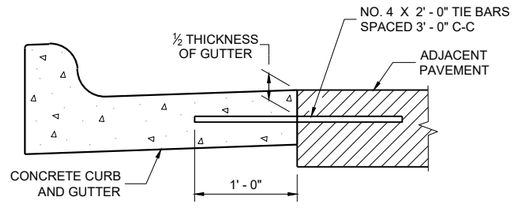
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



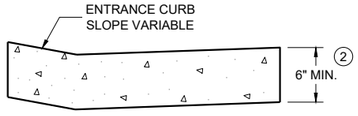
PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

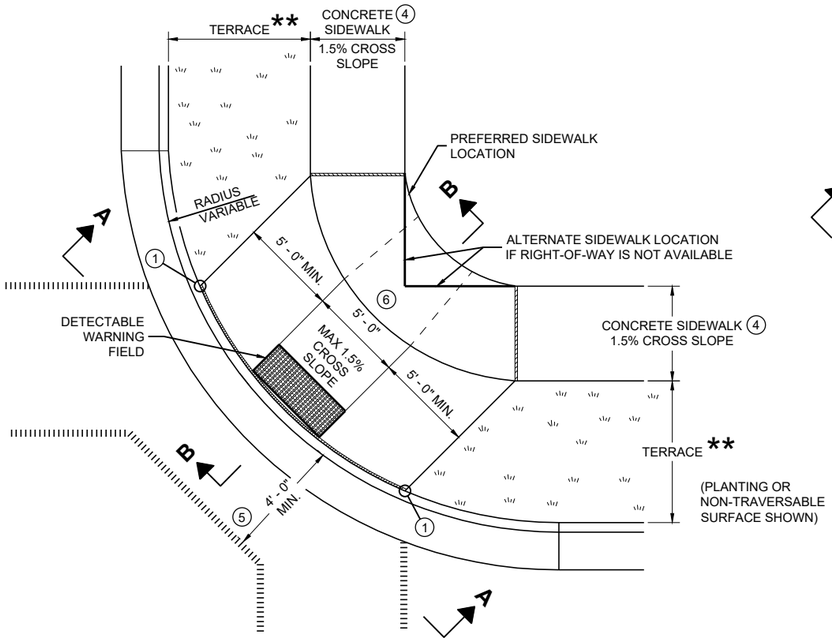
FHWA

6

SDD 08D01-23b

6

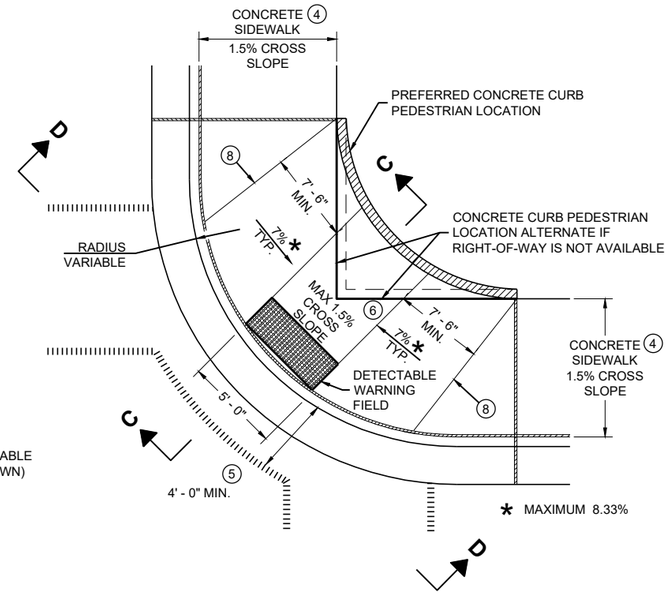
SDD 08D01-23b



PLAN VIEW

CURB RAMP TYPE 1

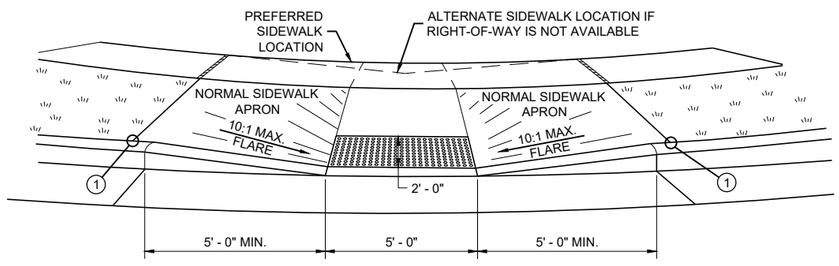
(CENTER OF CORNER RADIUS)



PLAN VIEW

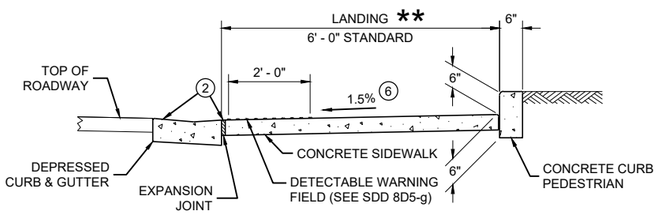
CURB RAMP TYPE 1 - A

(NO TERRACE)

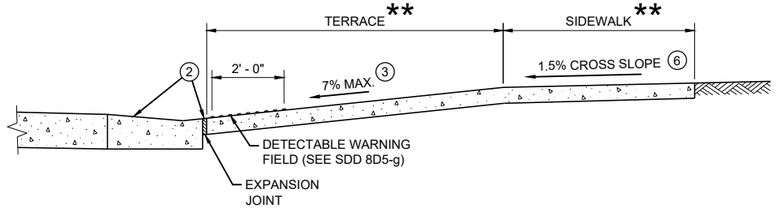


VIEW A - A FOR TYPE 1

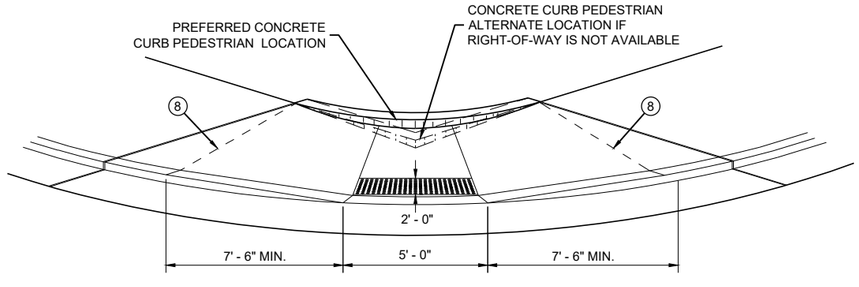
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION C - C FOR TYPE 1 - A



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

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

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

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

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

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

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

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ½ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) 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.

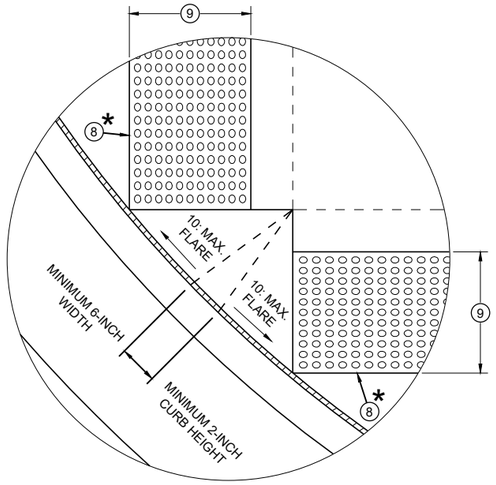
LEGEND

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

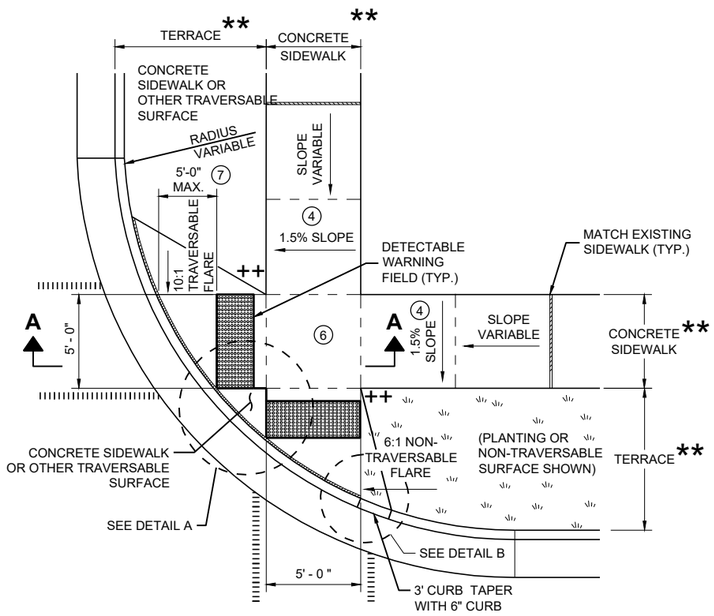
CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

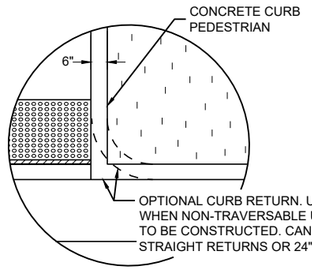
6
SDD 08D05-21a



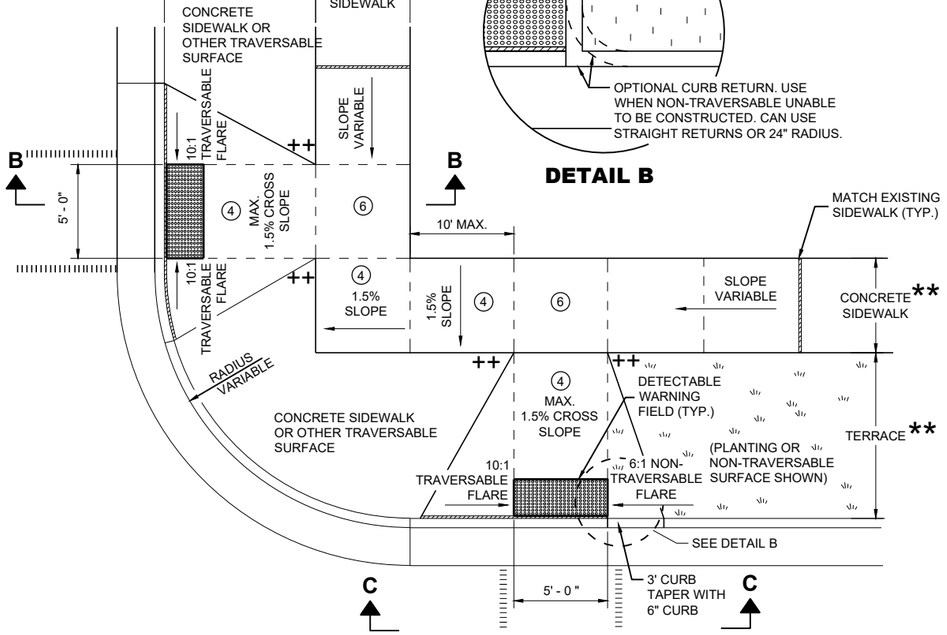
DETAIL A



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.

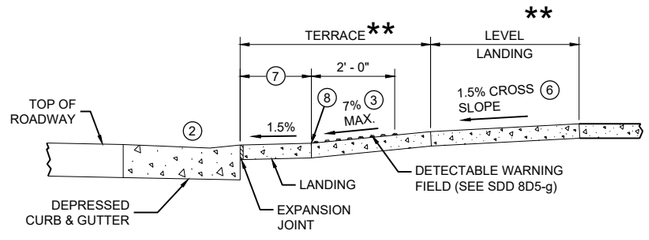
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(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.

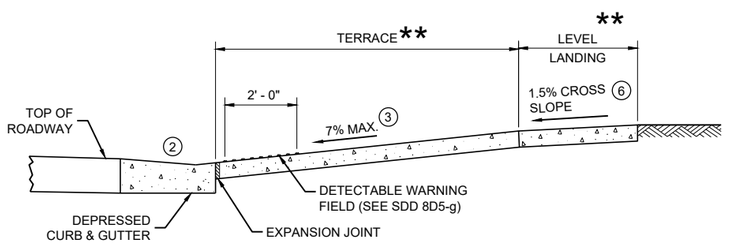


SECTION A - A FOR TYPE 2

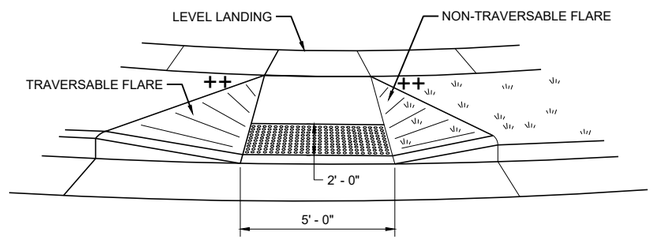
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



SECTION B - B FOR TYPE 3



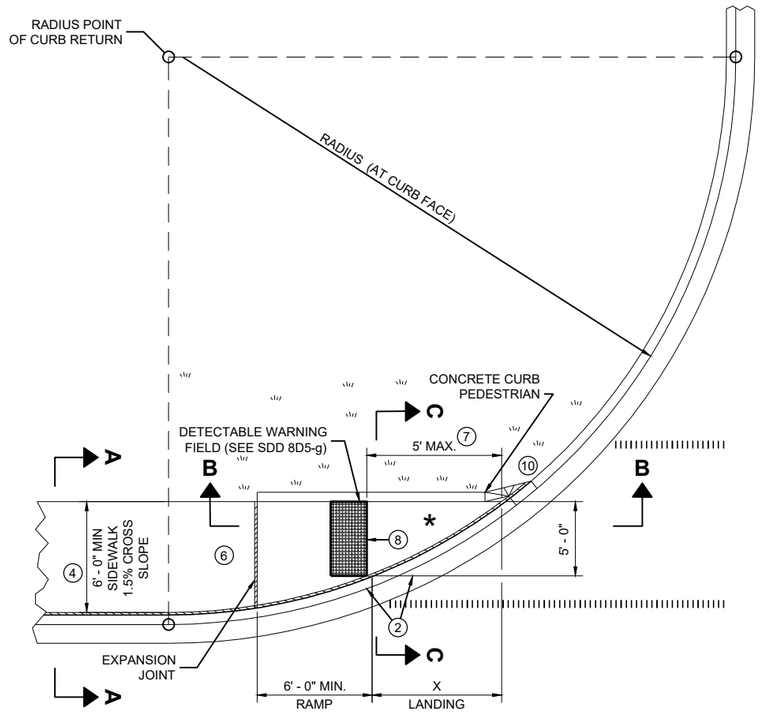
VIEW C - C FOR TYPE 3

LEGEND

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

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

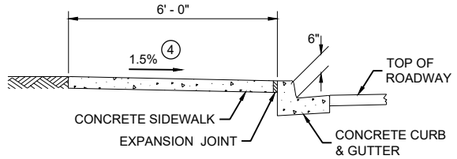


PLAN VIEW

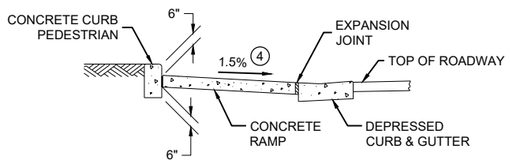
CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"

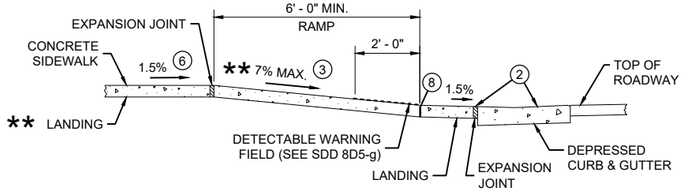
INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

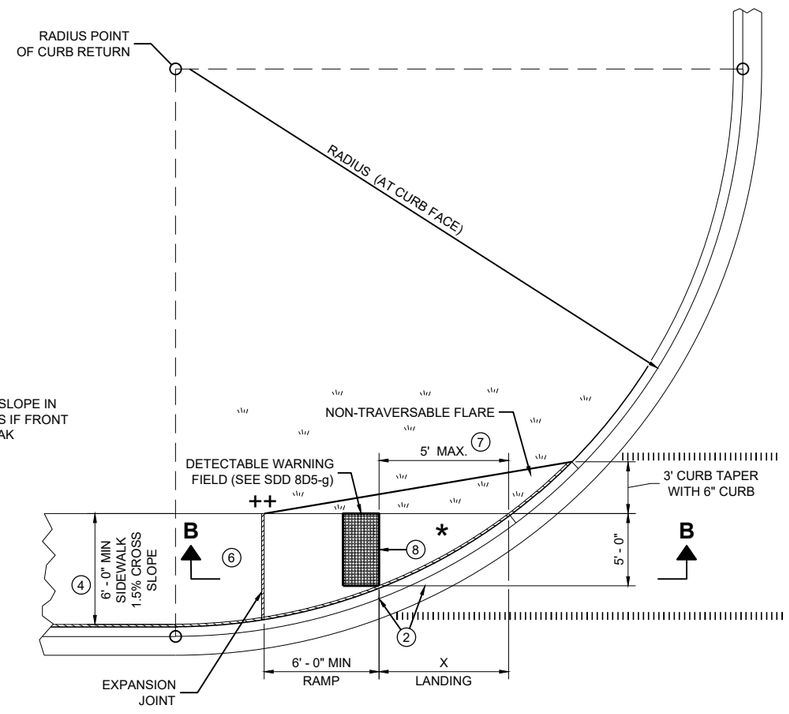


SECTION C - C FOR TYPE 4A



SECTION B - B FOR TYPE 4A AND TYPE 4A1

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

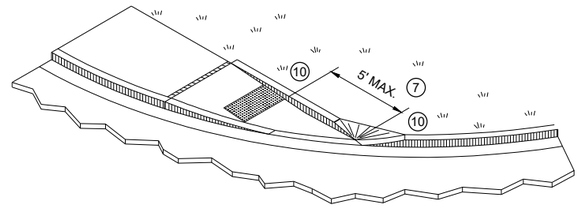


* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

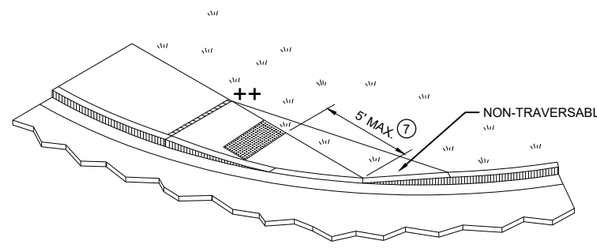
PLAN VIEW

CURB RAMP TYPE 4A1

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

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

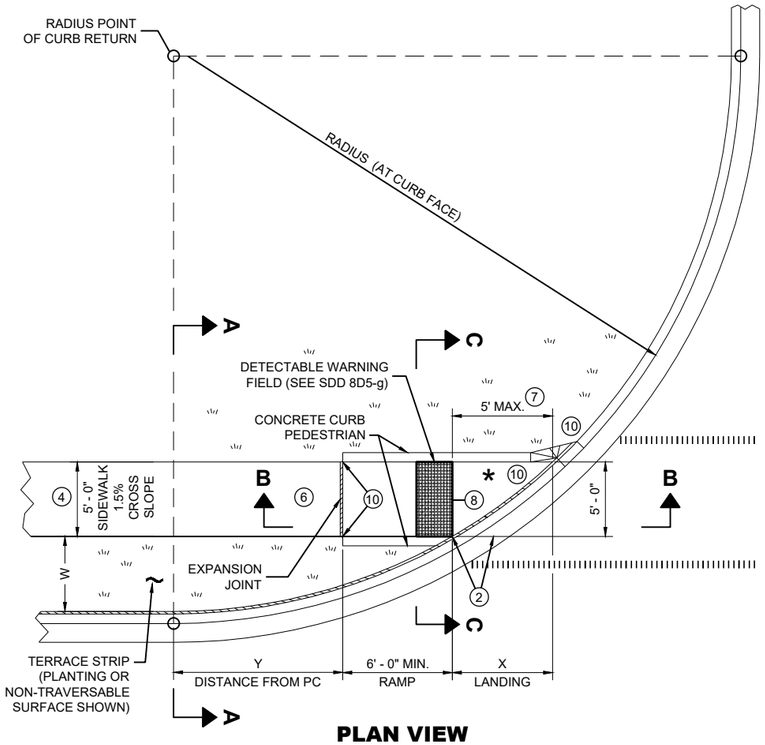
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4A AND 4A1

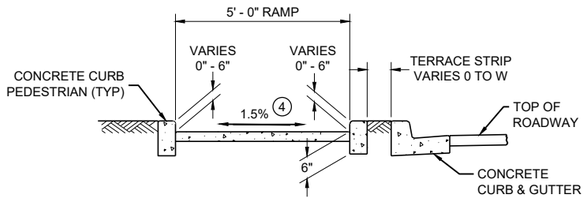
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW
CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 1/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET			4' - 11 1/2"	5' - 1 3/4"	4' - 3 1/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET									4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET															4' - 10 3/4"	19' - 8 1/4"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C - C FOR TYPE 4B

LEGEND

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

GENERAL NOTES

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

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

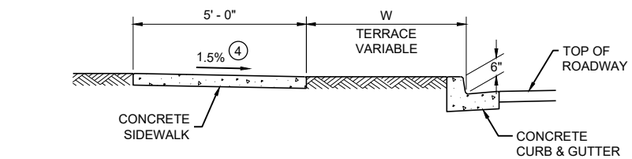
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

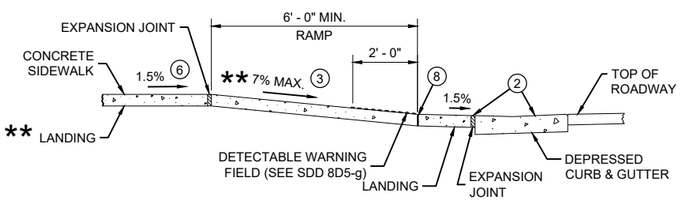
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

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

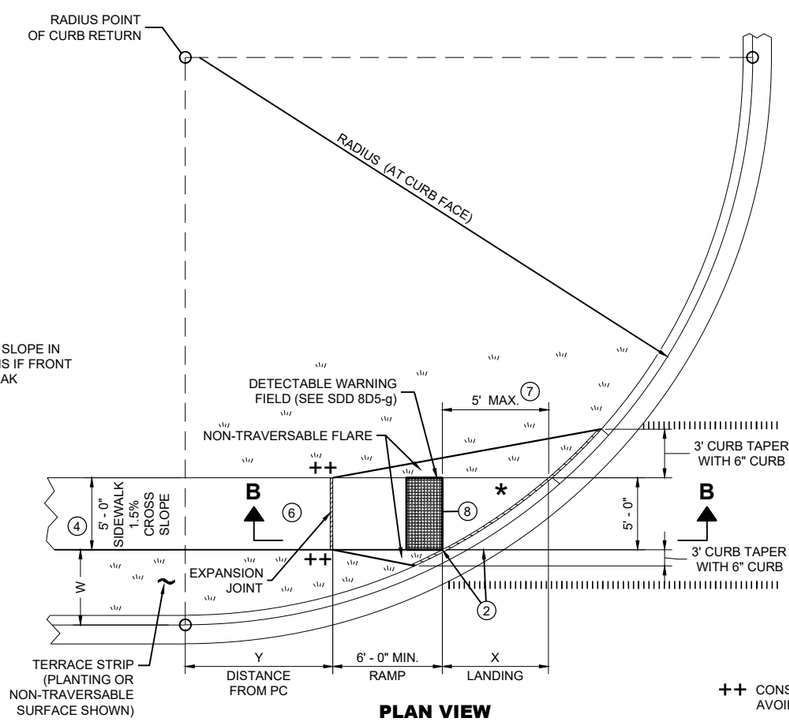


SECTION A - A FOR TYPE 4B



** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

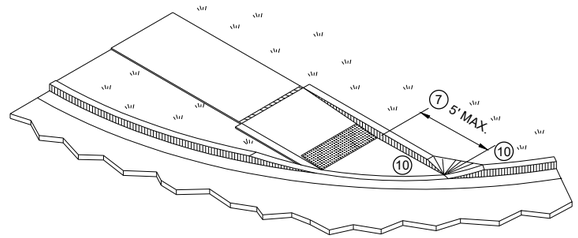
SECTION B - B FOR TYPE 4B AND TYPE 4B1



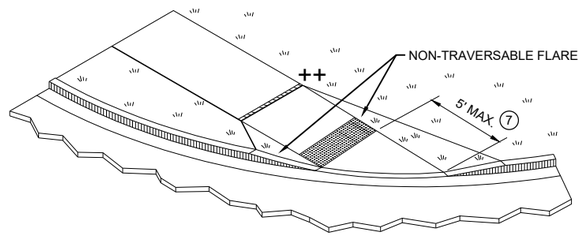
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

PLAN VIEW
CURB RAMP TYPE 4B1



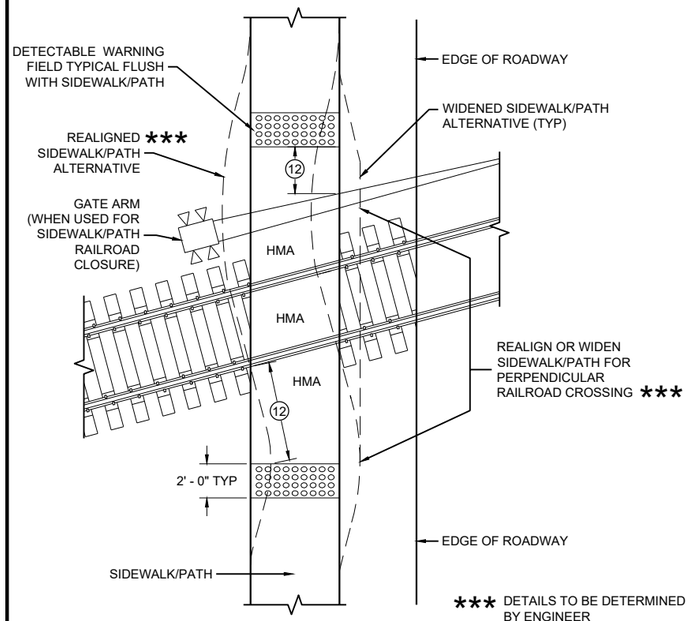
ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

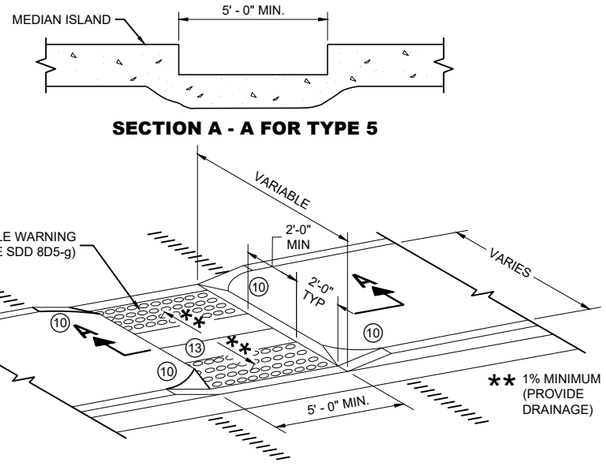
CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 8

DETECTABLE WARNINGS FOR SIDEWALKS OR SHARED USE PATHS AT RAILROAD CROSSINGS



SECTION A - A FOR TYPE 5

CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

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

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

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

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

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

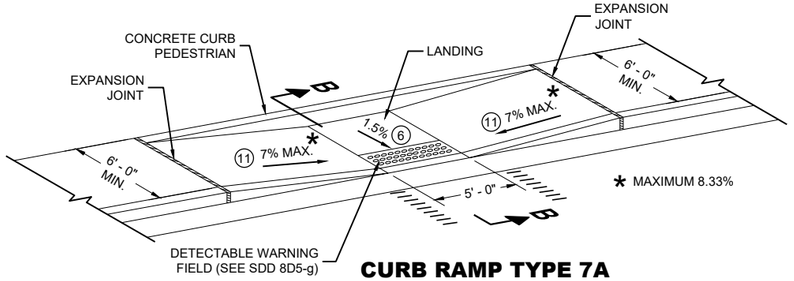
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK/PATH. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

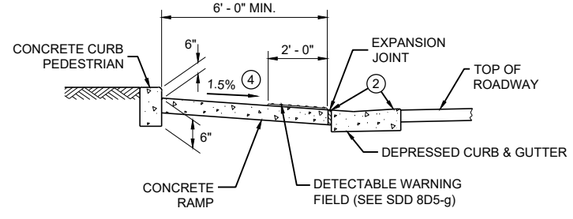
LEGEND

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

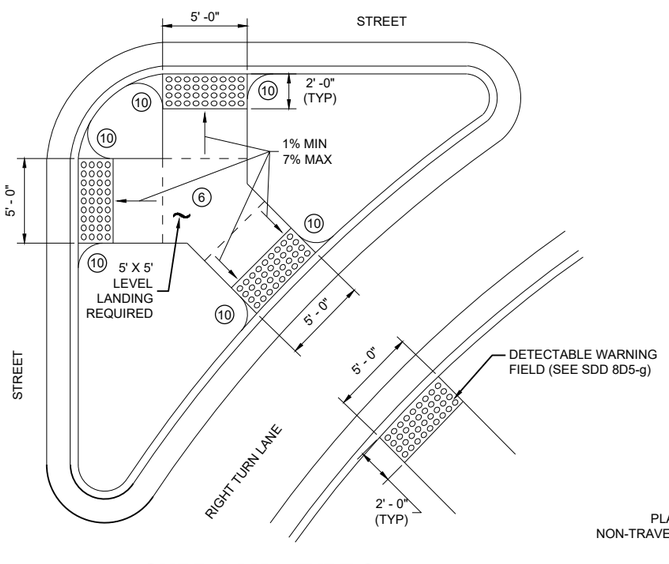


CURB RAMP TYPE 7A

FOR INTERSECTIONS AND MID BLOCK CROSSINGS



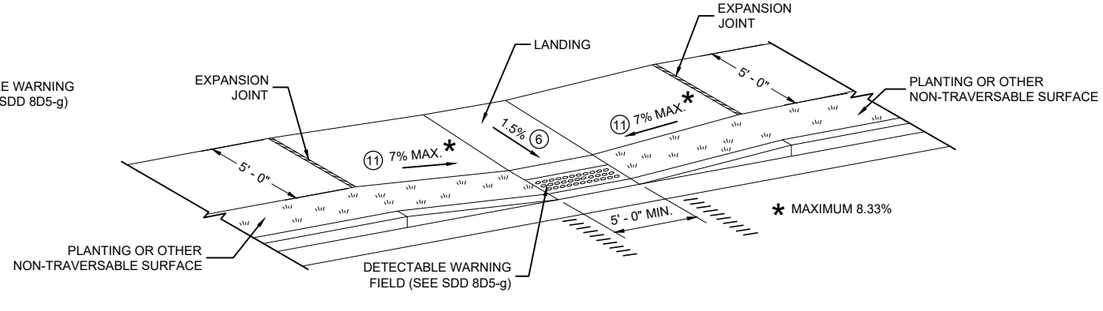
SECTION B - B FOR TYPE 7A



CURB RAMP TYPE 6

DETECTABLE WARNING AT ISLANDS

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



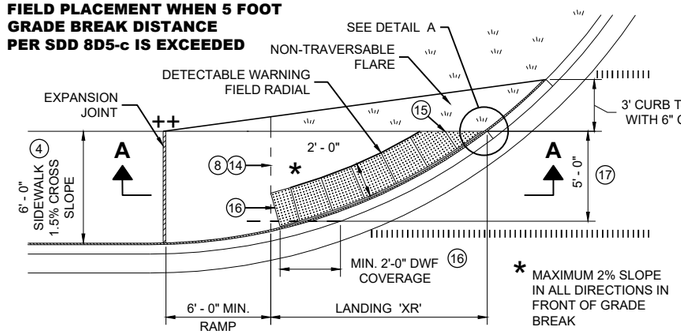
CURB RAMP TYPE 7B

FOR INTERSECTIONS AND MID BLOCK CROSSINGS

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

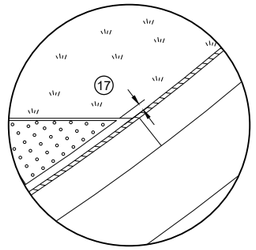
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED

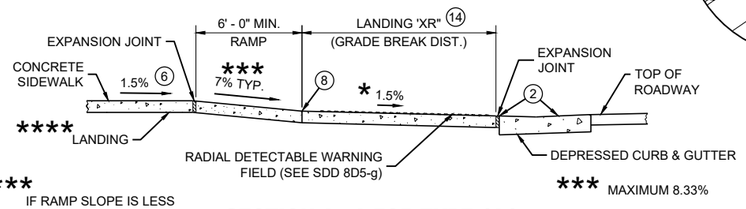


PLAN VIEW

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.

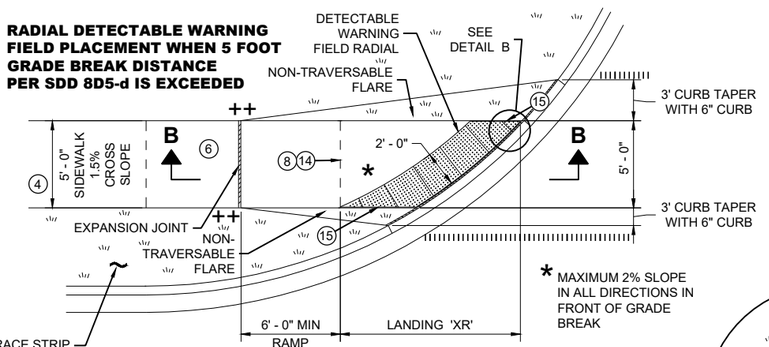
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(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.

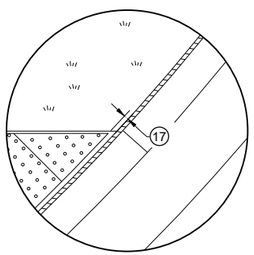
(17) A MAXIMUM 3 INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED

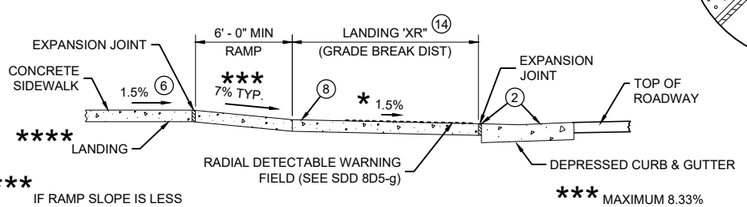


PLAN VIEW

CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B

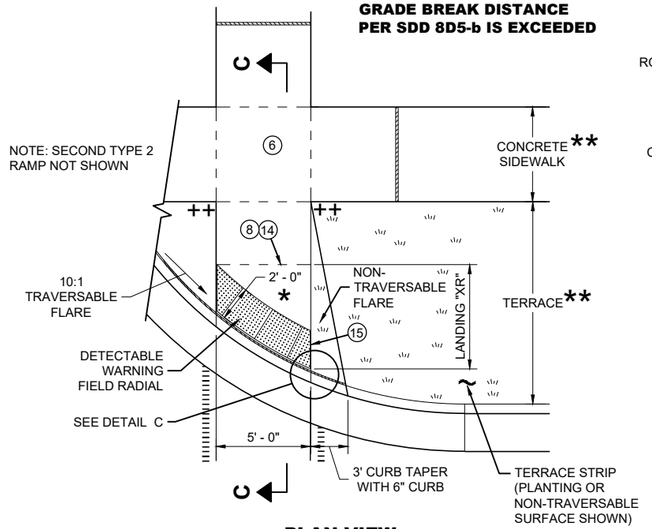


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

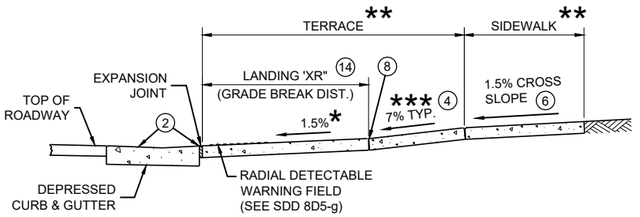
SECTION B - B FOR TYPE 4B1

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

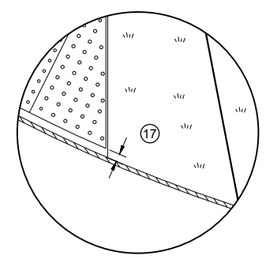


PLAN VIEW

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

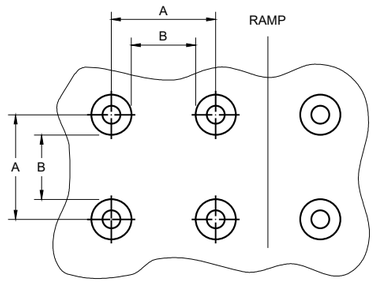
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

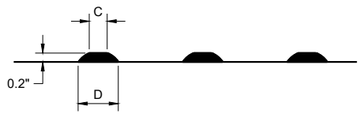
SDD 08D05-21f

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

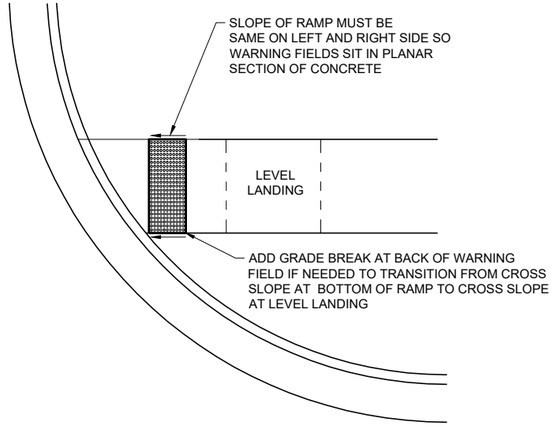
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD
PLANAR INSTALLATION

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

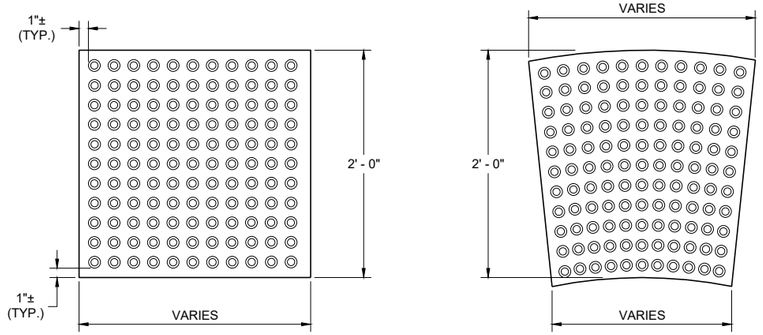
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

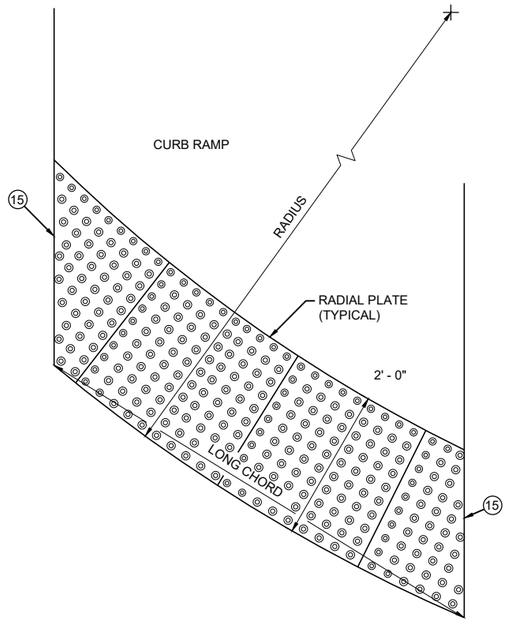
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



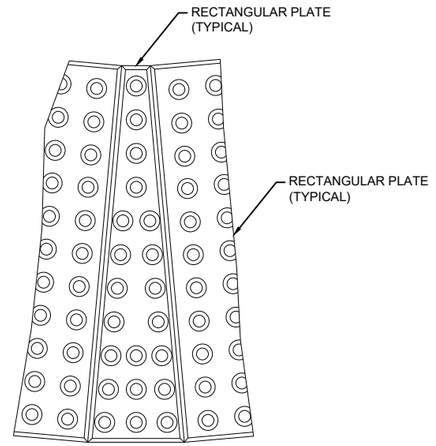
RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

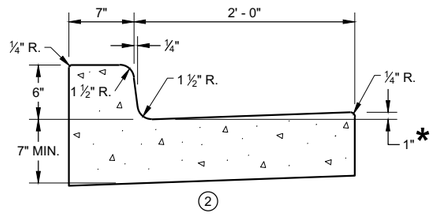
CURB RAMPS
RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

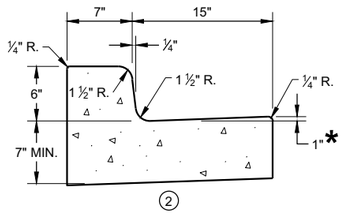
FHWA

6
SDD 08D05-21g

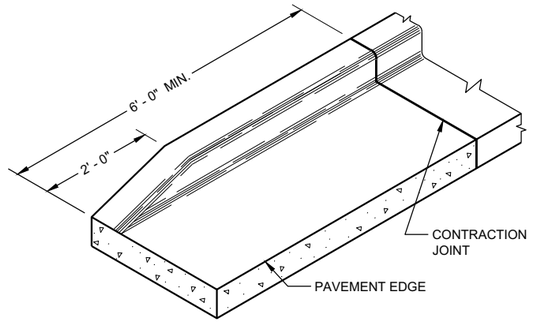


CONCRETE CURB AND GUTTER 31" ①

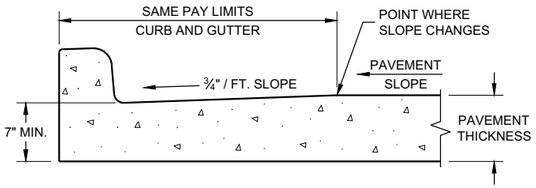
*TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



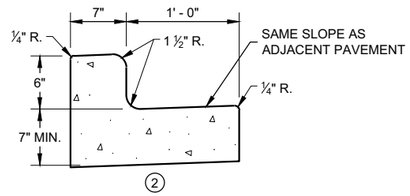
CONCRETE CURB AND GUTTER 22" ①



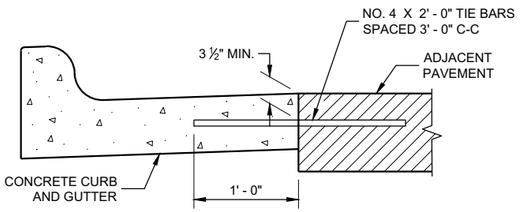
END SECTIONCURB AND GUTTER



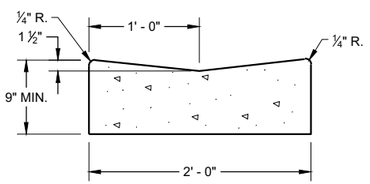
PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER



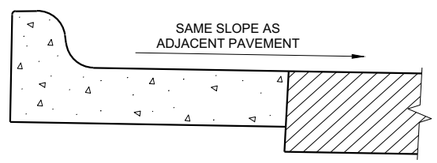
CONCRETE CURB AND GUTTER 19" ①



TYPICAL TIE BAR LOCATION ①



CONCRETE GUTTER 24" ①



HIGH SIDE SECTION ③

(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

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

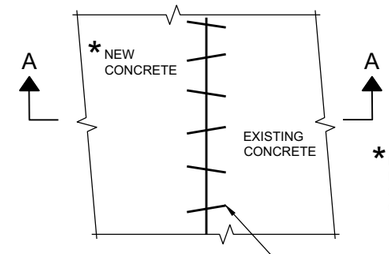
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

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

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUITED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".

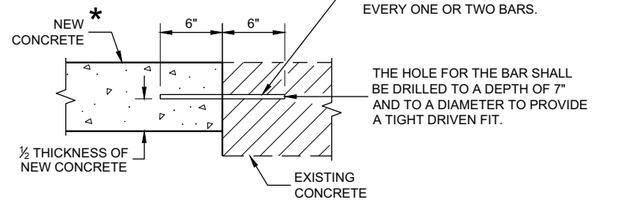
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MINIMUM GUTTER THICKNESS IS MAINTAINED.

③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLANS



*EXISTING AND NEW CONCRETE MAY BE CURB AND GUTTER, SURFACE DRAINS, PAVEMENT OR OTHER CONCRETE STRUCTURE.

PLAN VIEW



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

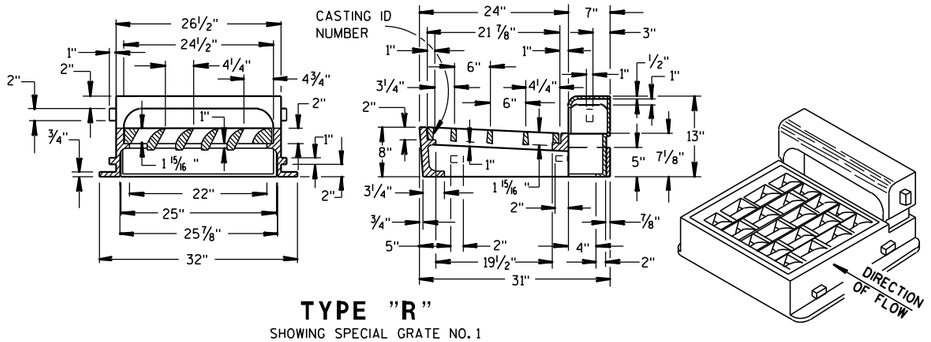
FHWA

SDD 08D16 - 11

6

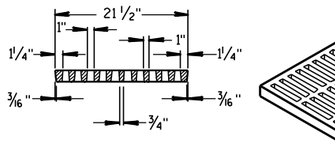
SDD 08D16 - 11

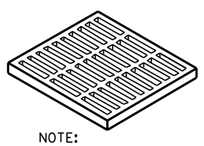
INLET COVERS



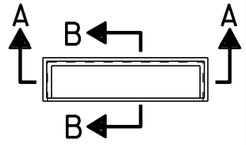
TYPE "R"

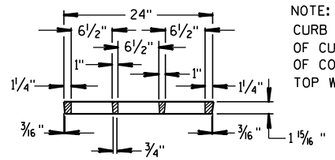
SHOWING SPECIAL GRATE NO. 1
(TO BE NOTED AS R-1 IN DRAINAGE TABLE)



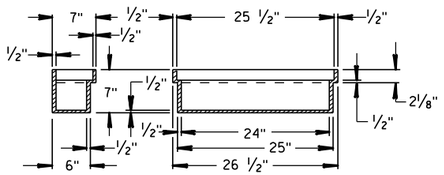


(APPROX. WEIGHT - 510 LBS.)
FRAME..... 245 LBS.
CURB..... 120 LBS.
GRATE..... 145 LBS.





NOTE:
CURB PLUG USED IN PLACE OF CURB BOX IN ABSENCE OF CONC. CURB. FILL TO TOP WITH CONCRETE.



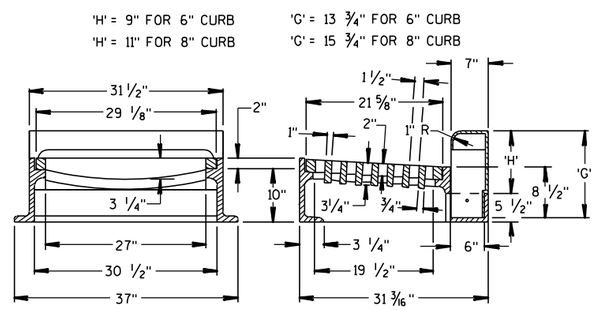
GRATE FOR TYPE "R" INLET COVER

(GRATE..... 150 LBS.)
(TO BE USED UNLESS OTHERWISE NOTED IN DRAINAGE TABLE)

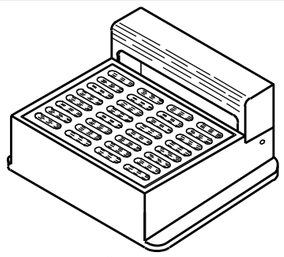
SECTION B-B SECTION A-A

SPECIAL CURB PLUG "P"

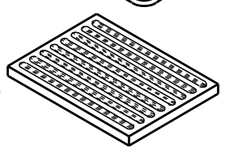
(CURB PLUG..... 85 LBS.)
(TO BE NOTED AS R-P IN DRAINAGE TABLE)



TYPE "W"



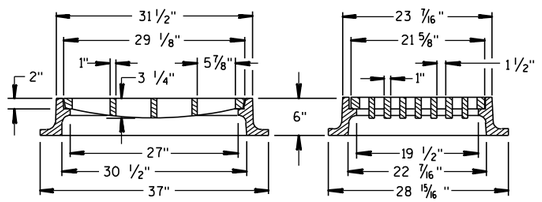
(APPROX. WEIGHT - 670 LBS.)
FRAME..... 350 LBS.
CURB BOX..... 135 LBS.
GRATE..... 185 LBS.



ALTERNATE GRATE

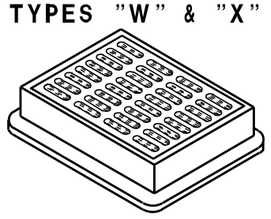
(FOR EXPRESSWAY RAMPS)

TYPES "W" & "X"

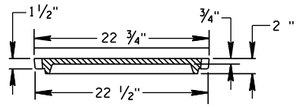


TYPE "X"

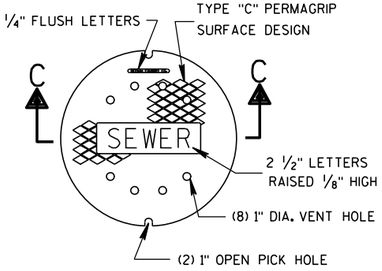
(APPROX. WEIGHT - 470 LBS.)

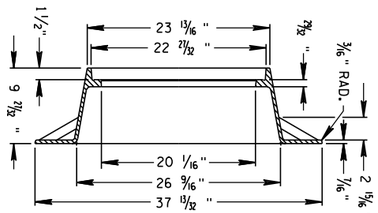


MANHOLE COVER



SECTION C-C





TYPE "Q"

(APPROX. WEIGHT - 290 LBS.)

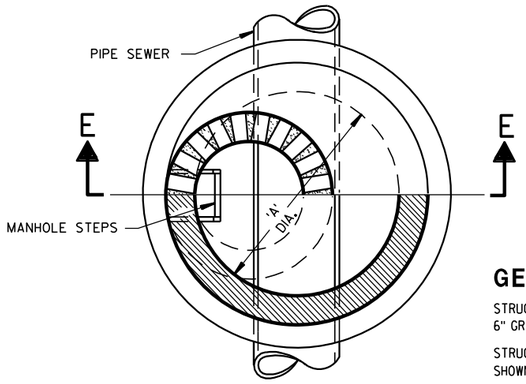
TABLE OF DIMENSIONS

TYPE	'A'	'B'	'C'
11	3'-6"	2'-8"	12" - 36"*
12	4'-0"	3'-8"	12" - 42"**
13	5'-0"	5'-8"	42" - 48"
14	6'-0"	7'-8"	54" - 60"

* 12" - 21" FOR PRECAST MANHOLES
** 12" - 24" FOR PRECAST MANHOLES

THE FIRST STEP SHALL BE PLACED 16" ABOVE THE BENCH.

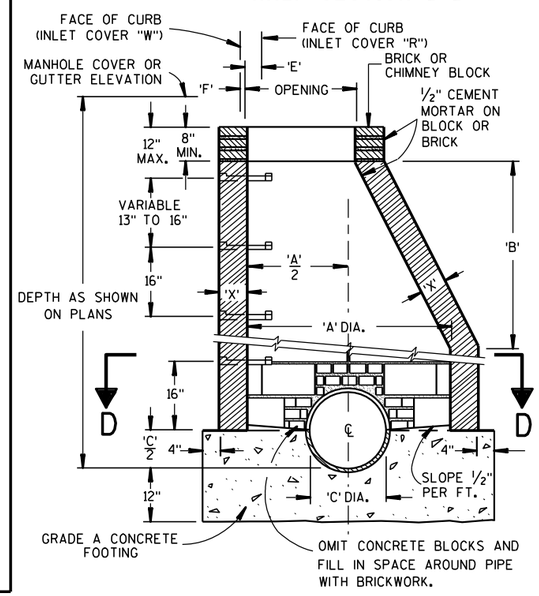
MANHOLE



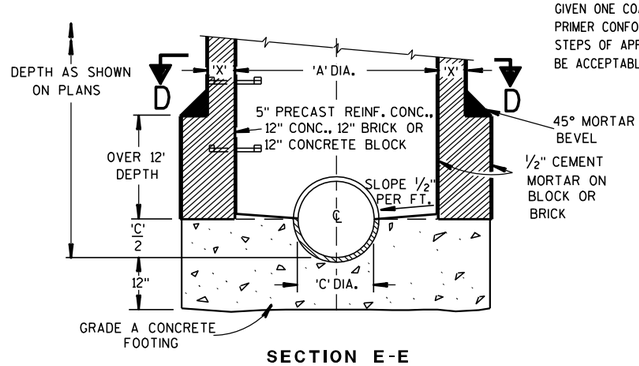
HALF SECTION D-D

TABLE OF OPENING DIMENSIONS

TYPE	COVER DESCRIPTION	OPENING	'E'	'F'
"O"	ROUND	2'-2" DIA.	—	—
"W"	CURB BOX	1'-8" X 2'-6"	—	1"
"X"	INLET	1'-10" X 2'-6"	—	—
"R"	CURB BOX	2'-0" X 2'-1"	4"	—



SECTION E-E



SECTION E-E

TYPES 11, 12, 13 & 14

GENERAL NOTES

STRUCTURE WALL THICKNESS 'X' TO BE 8" BRICK, 6" CONCRETE BLOCK, 6" GRADE A CONCRETE OR 5" PRECAST REINFORCED CONCRETE.

STRUCTURE FOOTINGS ARE TO BE GRADE A CONCRETE OF THE THICKNESS SHOWN IN THE DETAIL OR 5" PRECAST REINFORCED CONCRETE.

REINFORCEMENT FOR 5" PRECAST REINFORCED CONCRETE SHALL BE 6" X 6" W16 X W16 WELDED SREEL WIRE FABRIC AND SHALL BE EMBEDDED 2" CLEAR.

PRECAST INLET UNITS AND BASES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

PRECAST CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

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

SET FRAME ELEVATION 0.03 FT. LOWER THAN ELEVATION INDICATED ON THE PLANS.

THE CONTRACTOR MAY FORM AND POUR MONOLITHIC CONCRETE INVERT PROVIDED THE PIPE ENDS ARE EXTENDED INTO THE M.H. AND NOT TERMINATED WITHIN THE M.H. WALLS.

MANHOLE STEPS

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH; 16 INCH C-C MAX. SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM WALL EMBEDMENT OF 3 INCHES IN PRECAST MANHOLE AND 6 INCHES IN 8 INCH BRICK OR 6 INCH BLOCK MANHOLE; TREAD OF STEP SHALL HAVE A NON-SKID SURFACE AND BE FLANKED BY CLEATS, WITH A MINIMUM OF 10 INCHES CLEAR BETWEEN CLEATS, TO PREVENT FOOT SLIPPING OFF THE EDGE CLEATS SHALL BE A MINIMUM OF 3/4 INCH HIGH BY 3/4 INCH WIDE HAVING A MINIMUM THICKNESS OF 3/8 INCH. STEPS SHALL BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 300 LBS. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

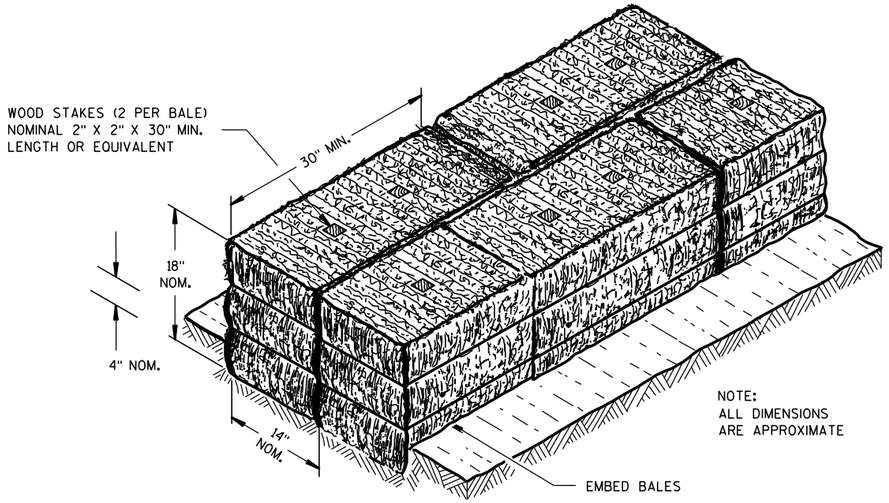
SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 0.75 INCH. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT. STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCING BAR WILL BE ACCEPTABLE.

MANHOLES, MANHOLE & INLET COVERS

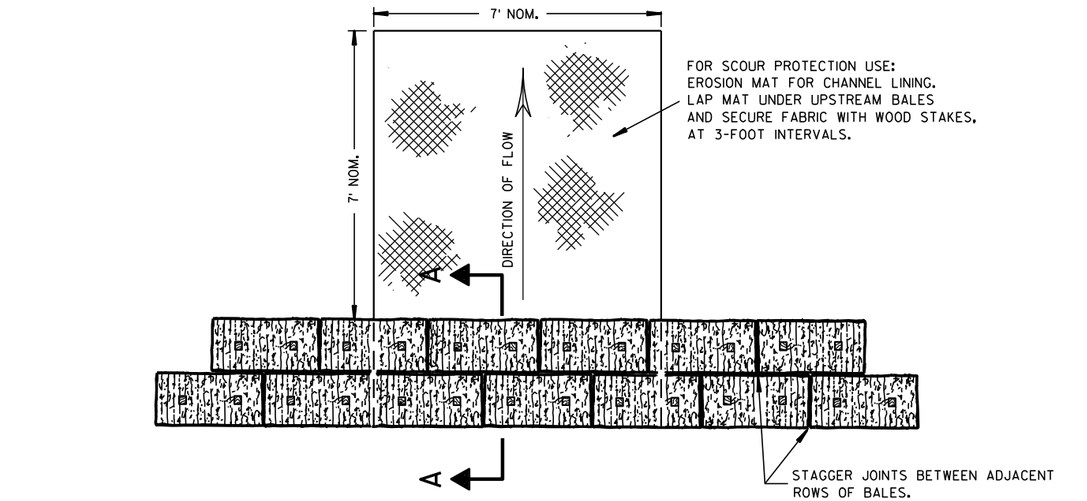
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/12/2011 — DATE
/S/ Jerry H. Zogg — ROADSIDE STANDARDS ENGINEER
FHWA

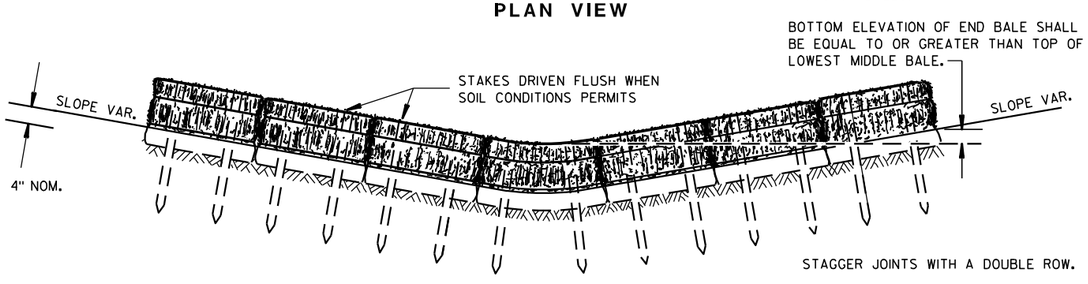
6
S.D.D. 8 D 17-6



SECTION A-A



PLAN VIEW



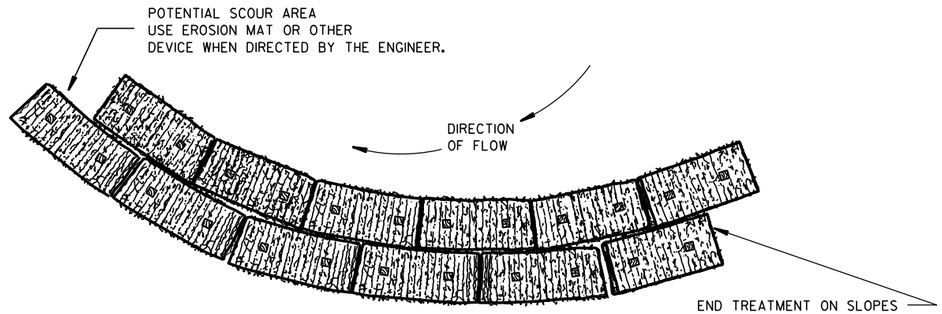
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

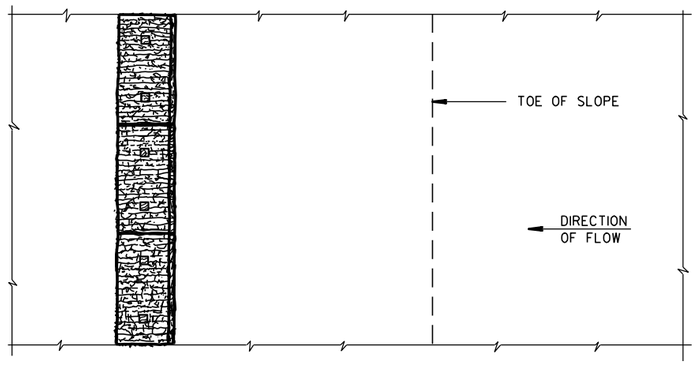
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

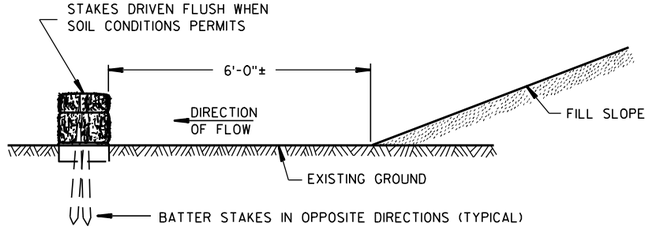


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

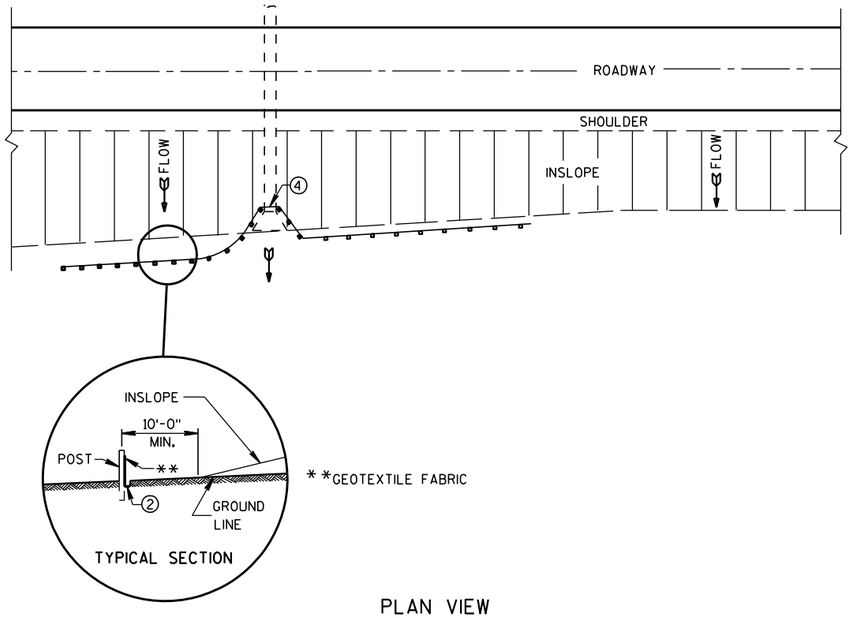
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

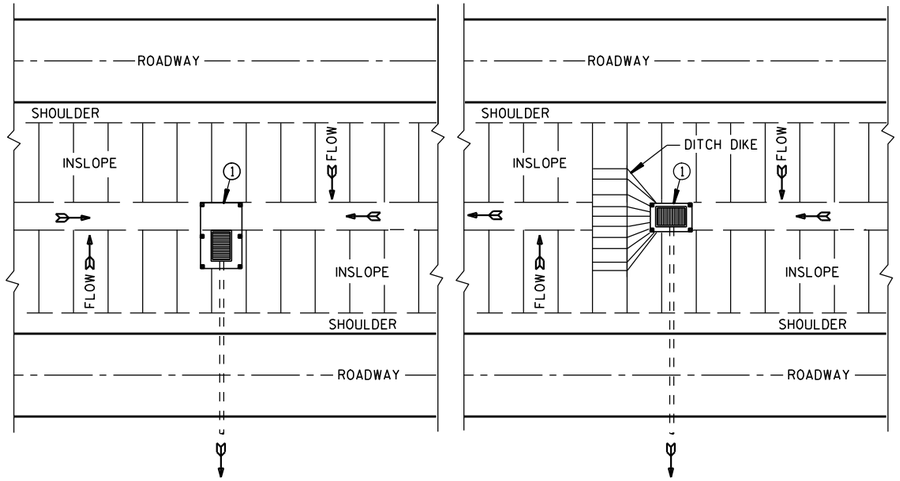
6

S.D.D. 8 E 8-3



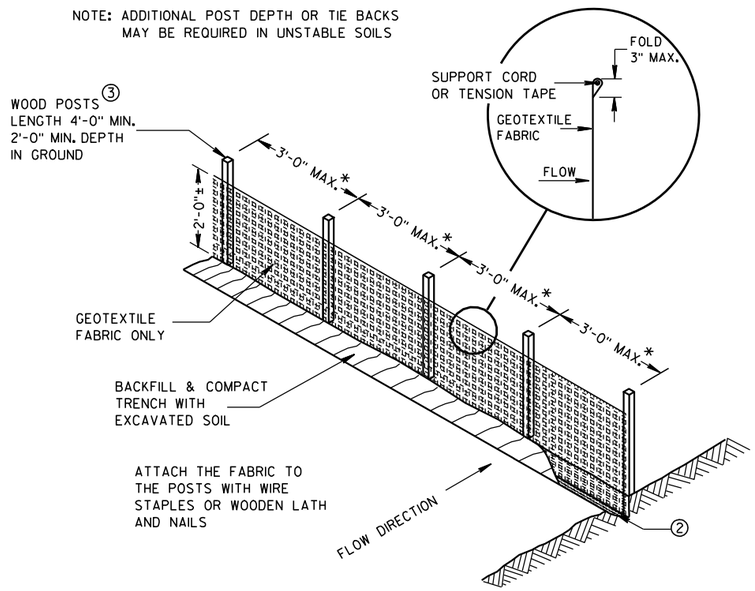
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE

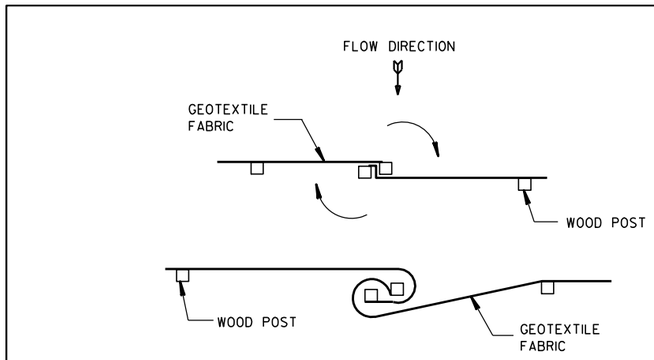


PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS



SILT FENCE

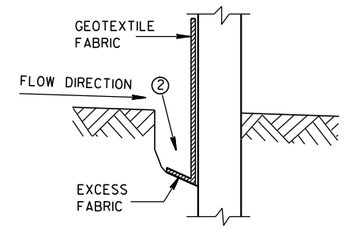


JOINING TWO LENGTHS OF SILT FENCE 5

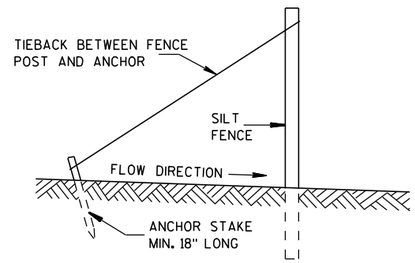
GENERAL NOTES

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 TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

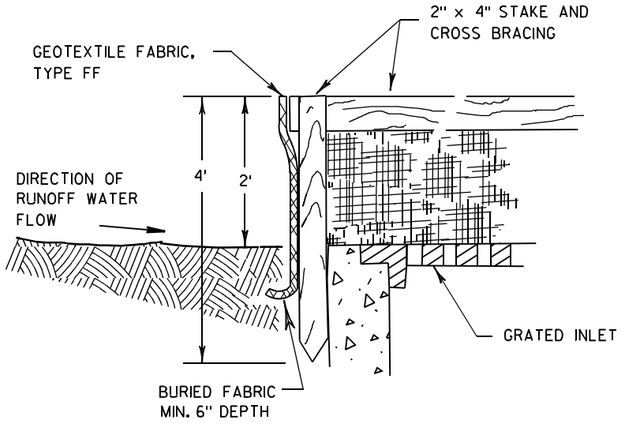
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

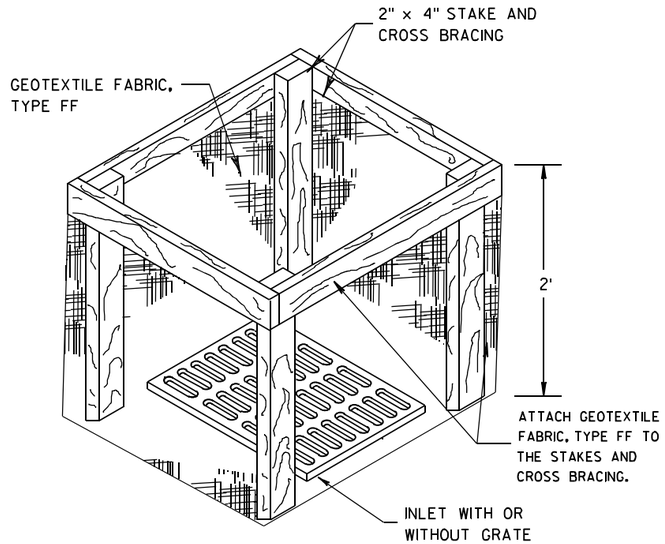
6

S.D.D. 8 E 9-6

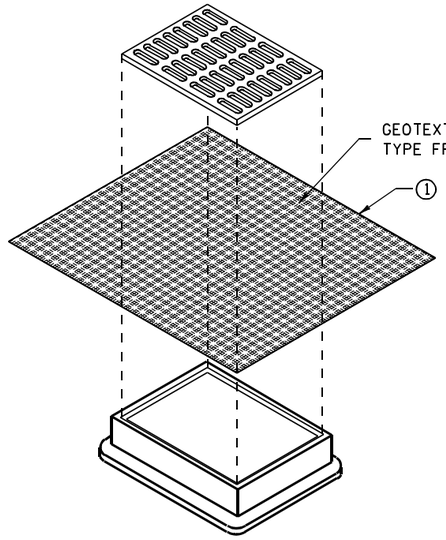
6

S.D.D. 8 E 9-6



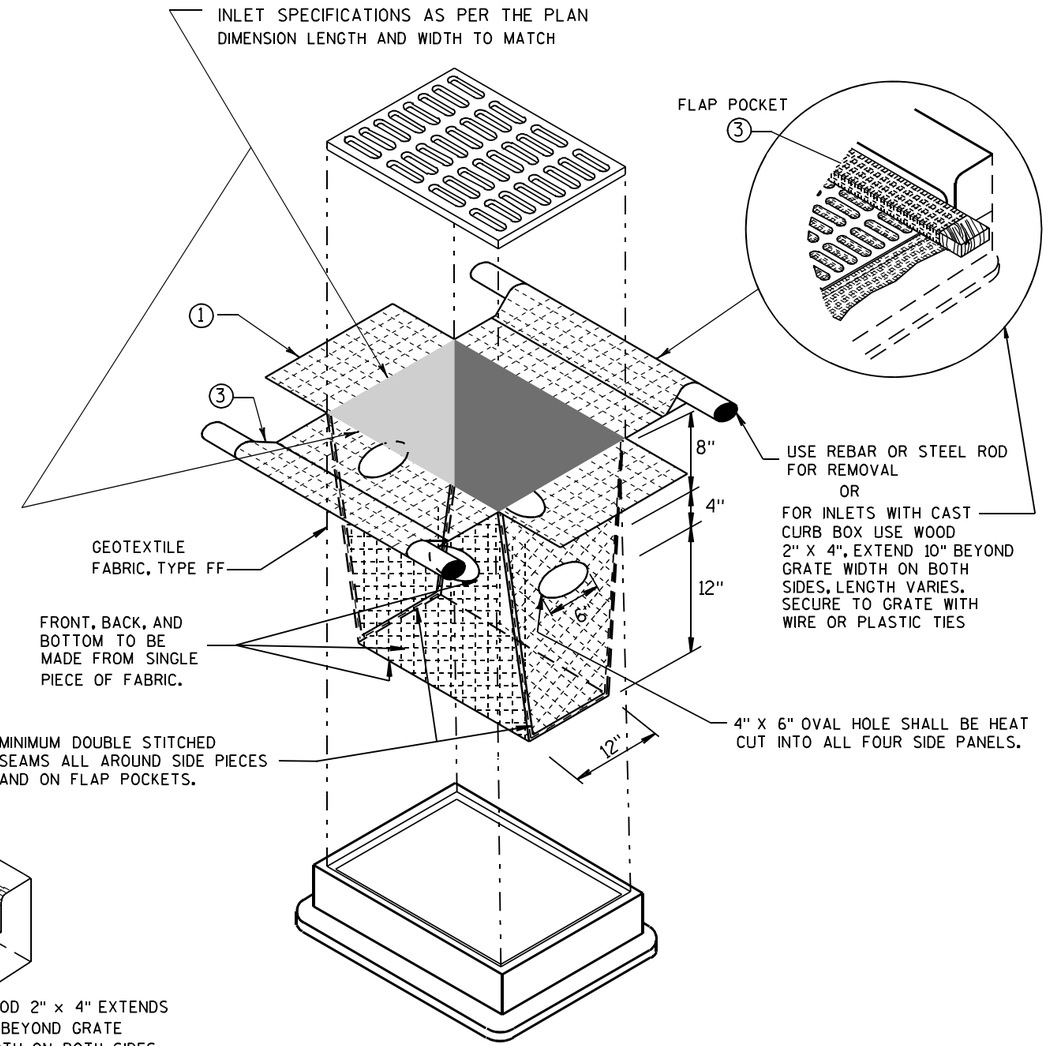


INLET PROTECTION, TYPE A



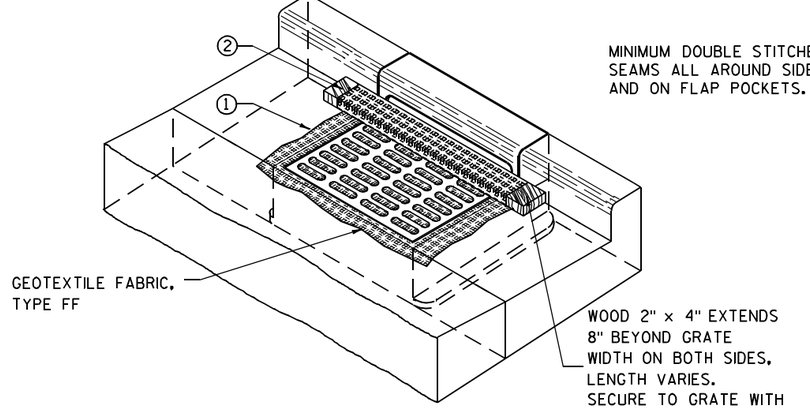
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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.

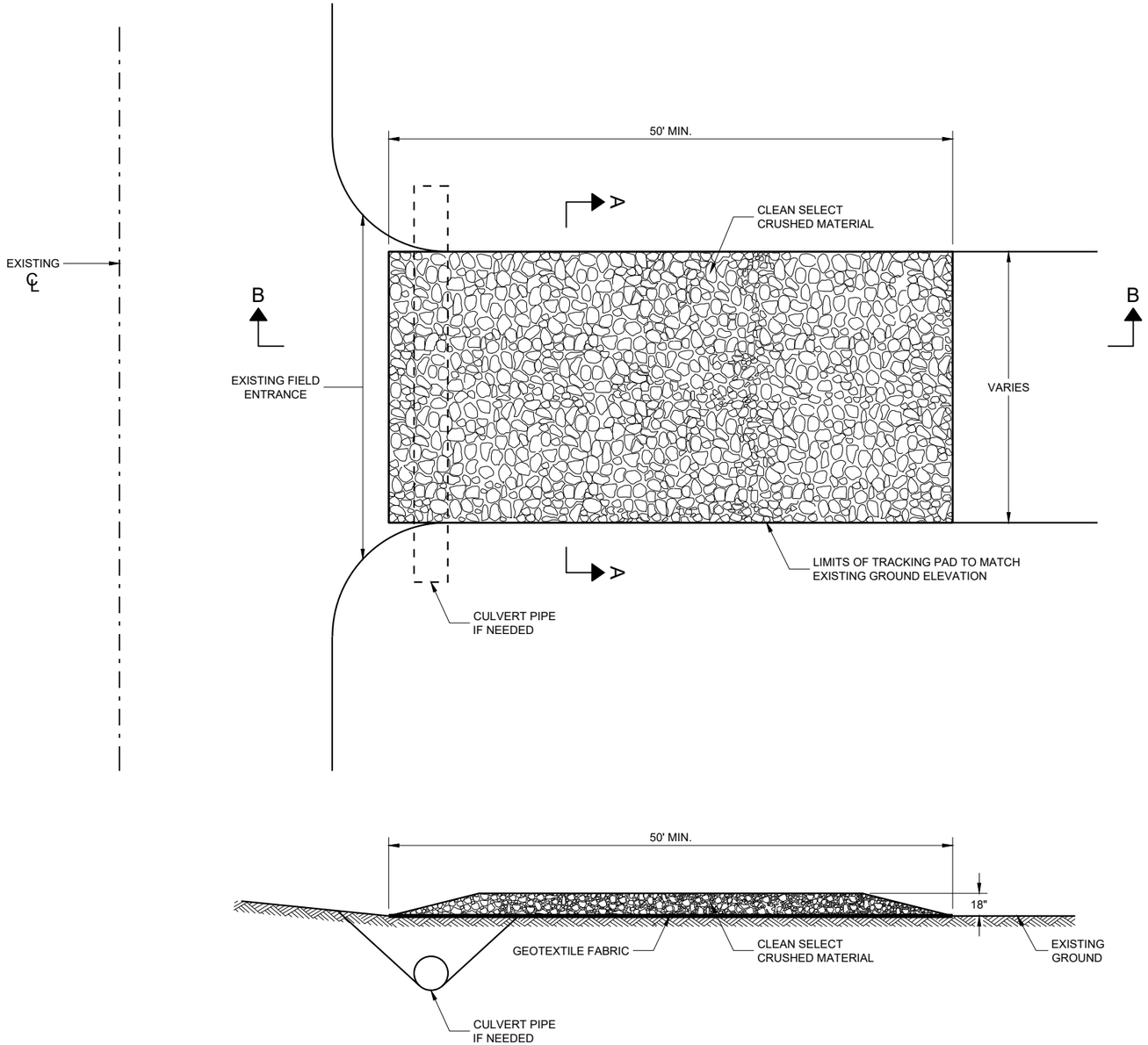
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

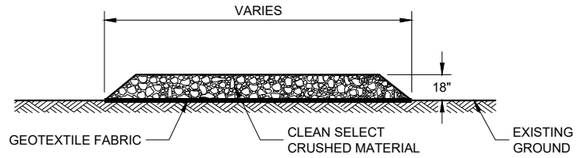
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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

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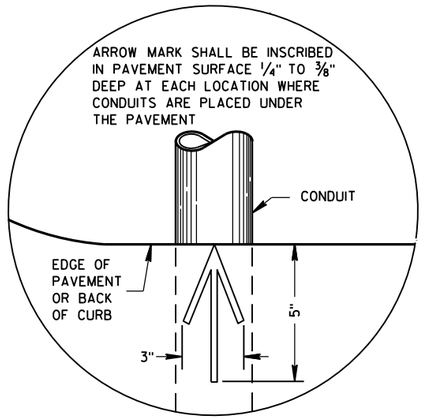
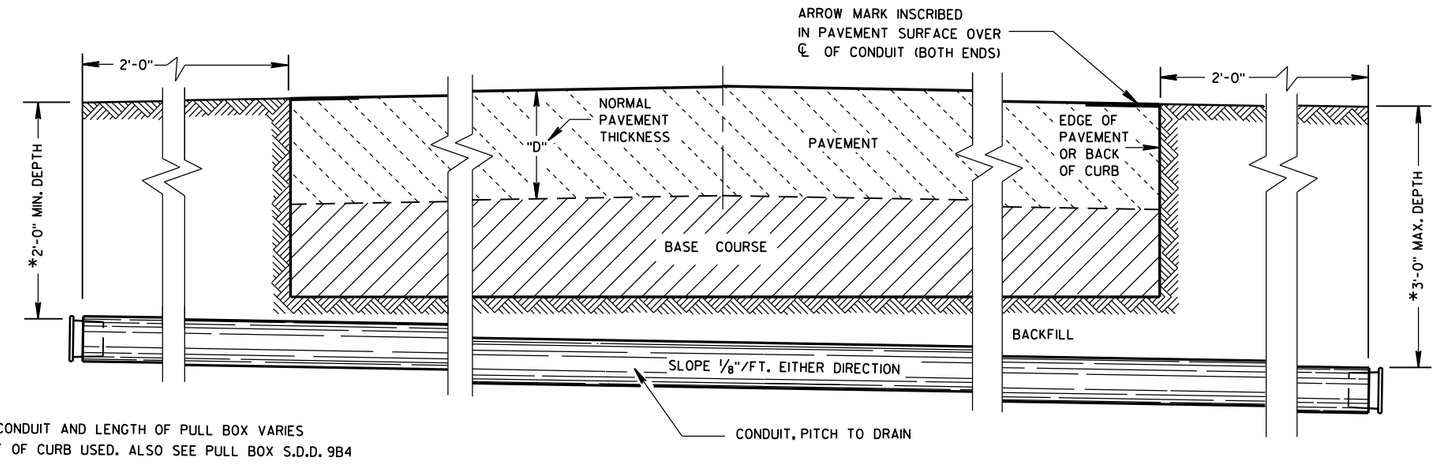
SDD 08E14 - 01



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.

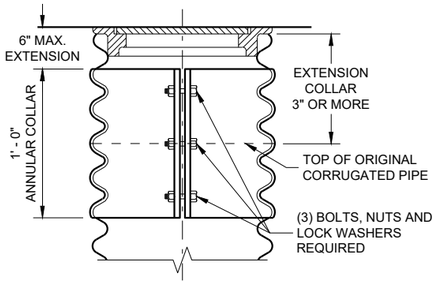
CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

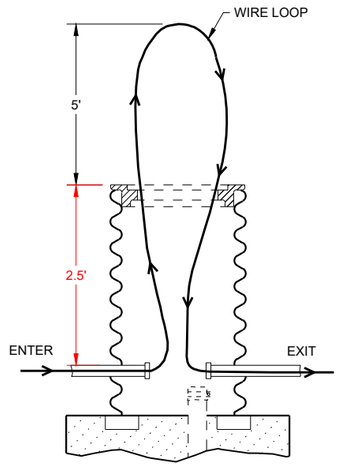
APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

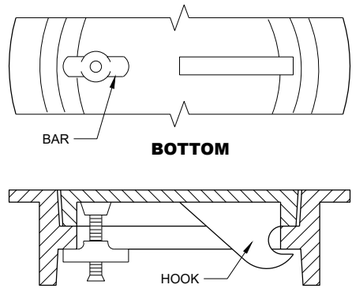
S.D.D. 9 B 2-10



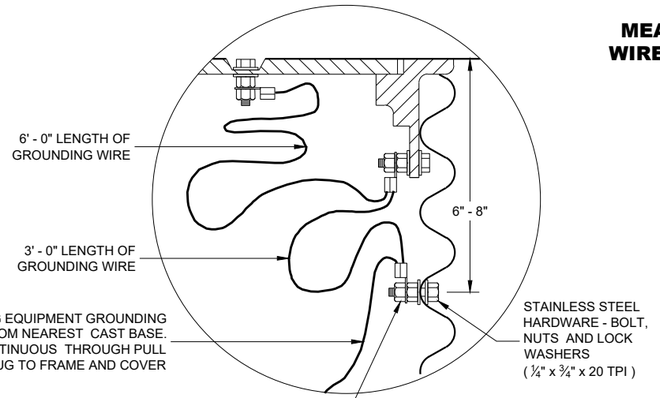
CORRUGATED PIPE EXTENDER



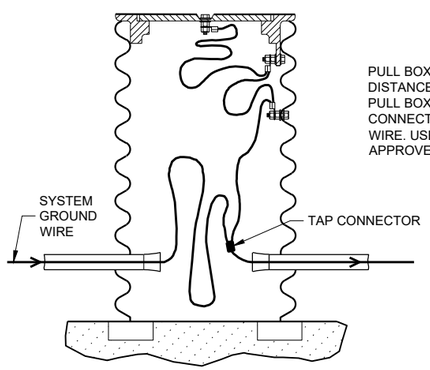
MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



ALTERNATE COVER (LOCKING)
TIGHTENING BAR TYPE

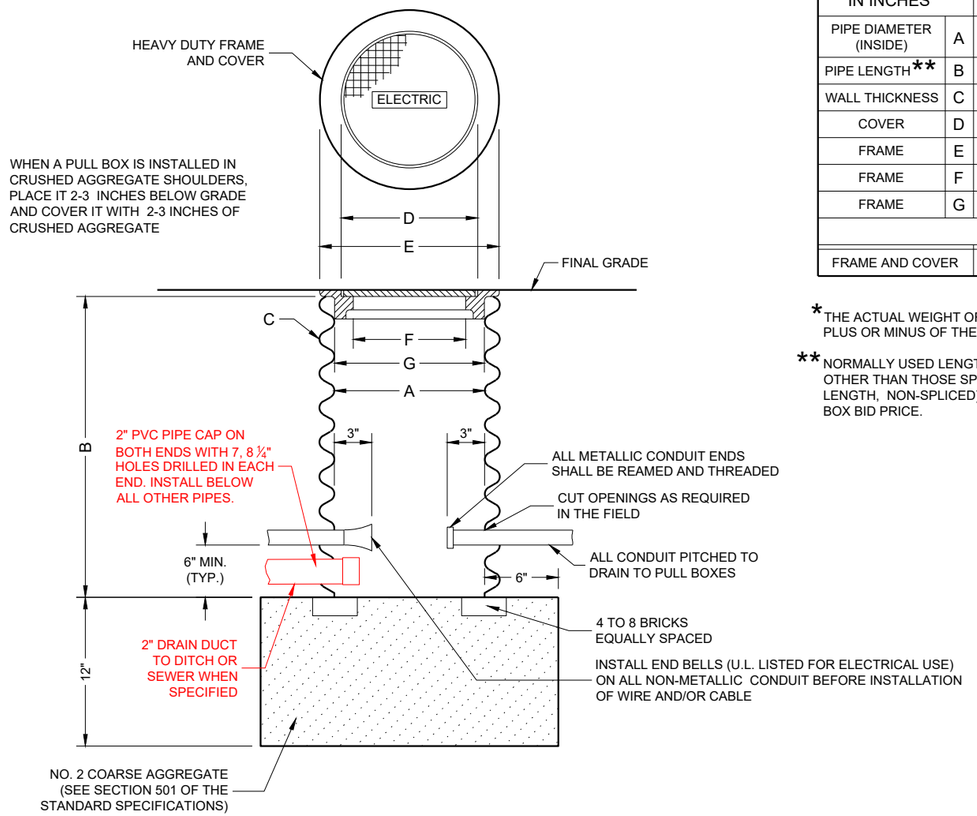


EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

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

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

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

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

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

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

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

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH**	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 ¼	10 ¼	10 ¼	16 ¼	16 ¼	16 ¼	22 ¼	22 ¼	22 ¼
FRAME	E	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½	26 ½	26 ½	26 ½
FRAME	F	8 ½	8 ½	8 ½	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½
FRAME	G	11 ½	11 ½	11 ½	17 ½	17 ½	17 ½	23 ½	23 ½	23 ½
WEIGHT IN POUNDS*										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

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

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

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

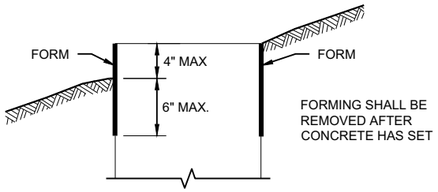
APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

6
SDD 09B04 -12

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.

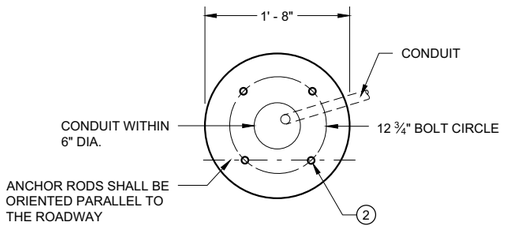
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

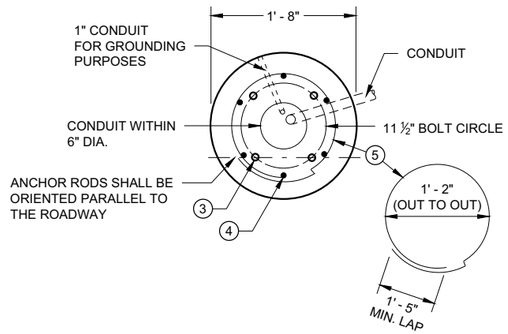
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

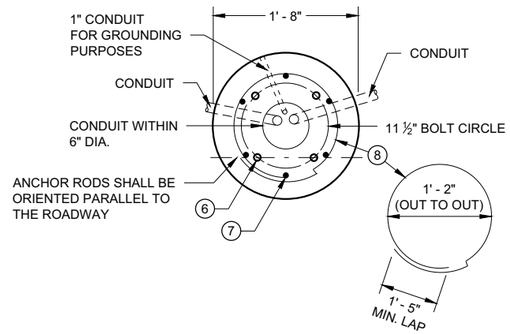
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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

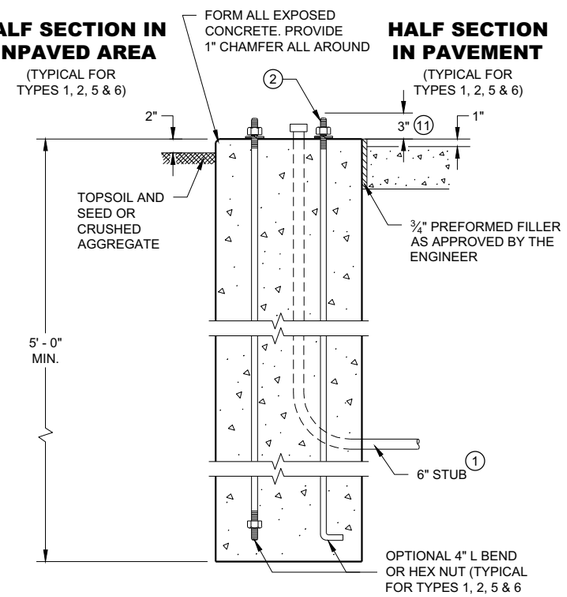
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

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.

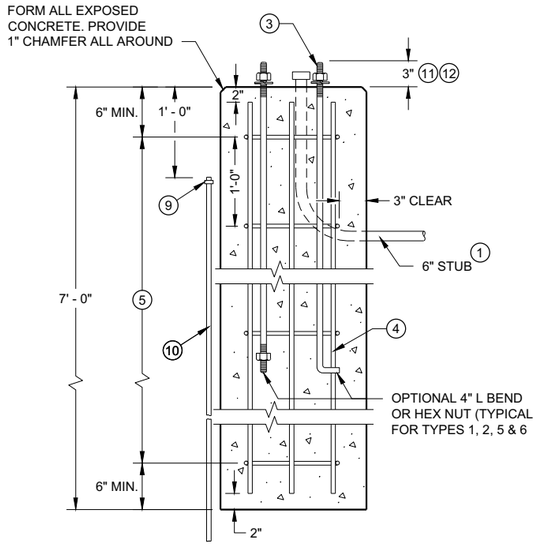
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

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



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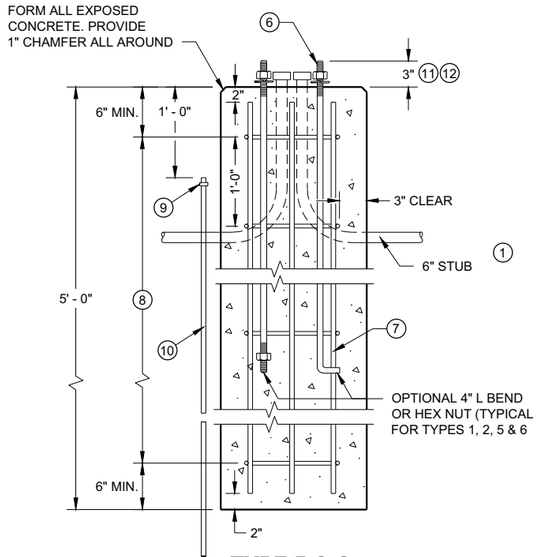


TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

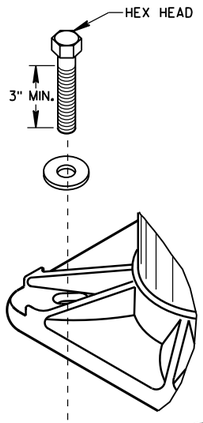
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

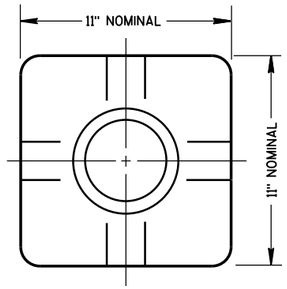
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

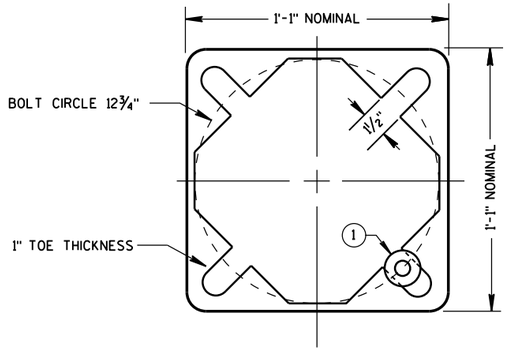
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

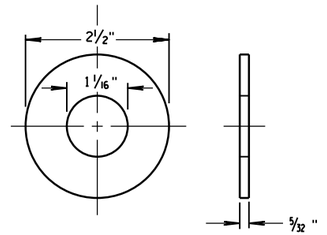




TOP VIEW
(PEDESTAL BASE)

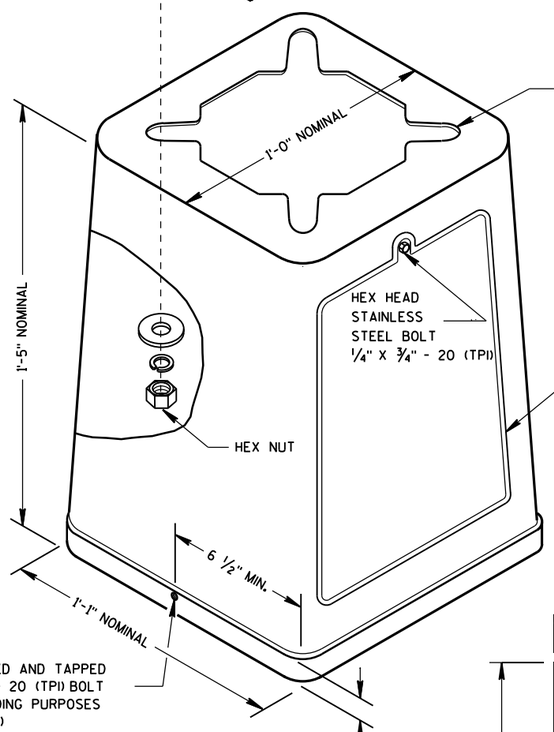


BOTTOM VIEW
(PEDESTAL BASE)

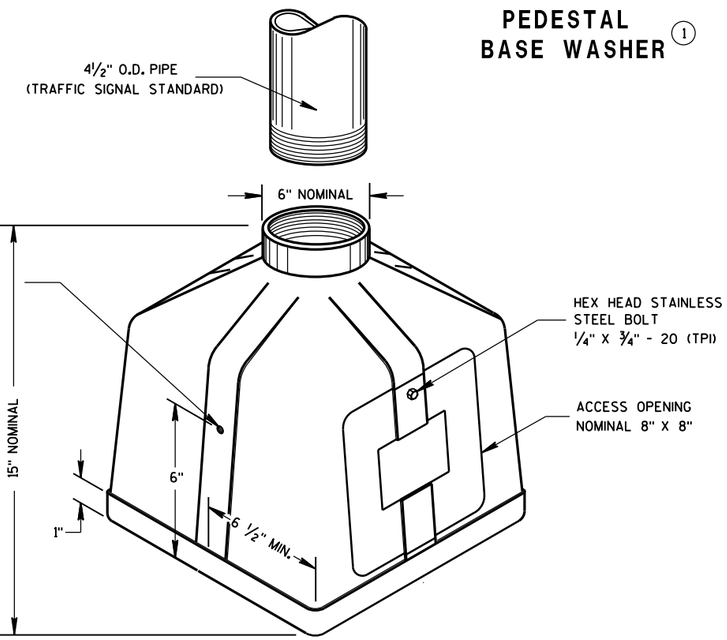


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

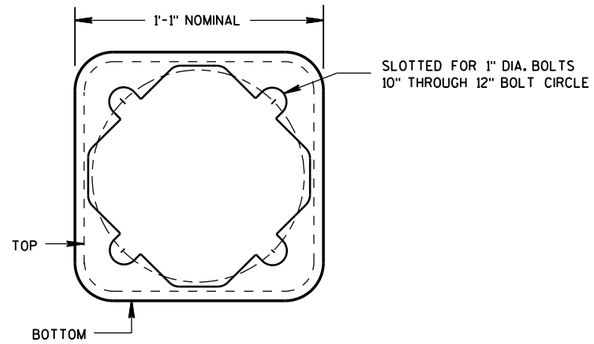
PEDESTAL BASE WASHER (1)



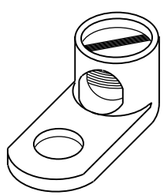
ISOMETRIC VIEW



ISOMETRIC VIEW
PEDESTAL BASE

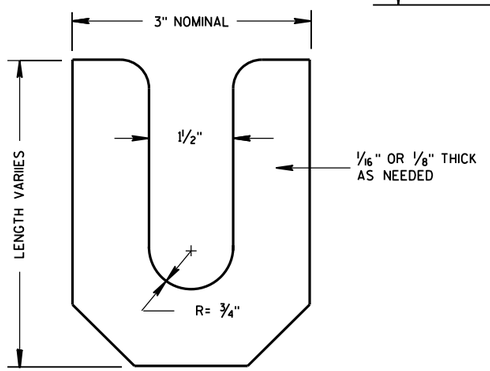


BOTTOM VIEW
(TRANSFORMER BASE)



TYPICAL MECHANICAL CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE
INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

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.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

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

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 TIMES THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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

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

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

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER RUN) EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

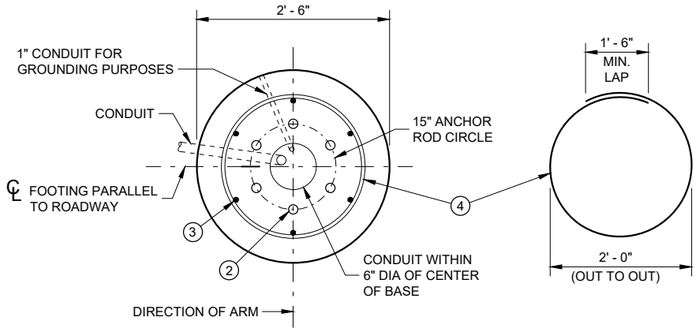
(2) (6) 1 ½ DIA. X 4' - 4" ANCHOR RODS

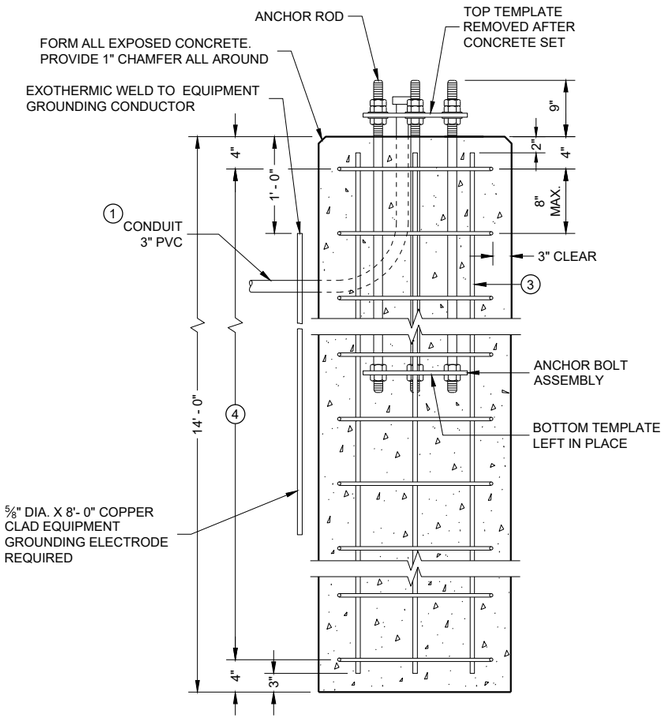
(3) (6) NO. 6 X 13' - 7" BAR STEEL REINFORCEMENT.

(4) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE .....fy = 55,000 p.s.i.
WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.

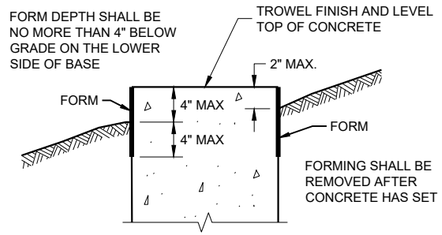
QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122



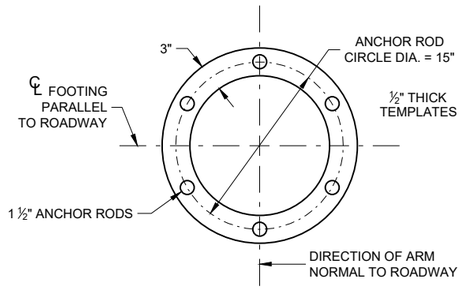


CONCRETE BASE, TYPE 10
(FOR TYPE 9, TYPE 10 AND OVER HEIGHT (OH) POLES)

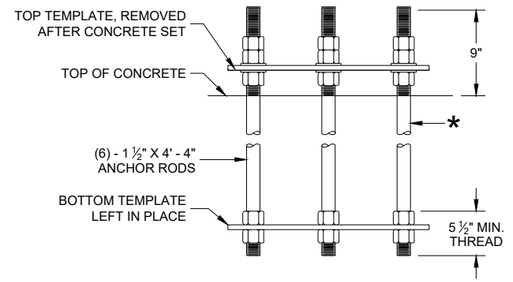
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE SDD 9C13 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demerbilek — WIND LOADED STRUCTU PROGRAM LEADER
FHWA

6

SDD 09C11 - 10

6

SDD 09C11 - 10

GENERAL NOTES

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

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS.

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

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

CONDUIT SIZE AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4 ½ INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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

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

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

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1-INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4-FOOT COIL OF WIRE ABOVE THE CONCRETE BASE, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL WAY SHALL BE 24-INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18-INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36-INCHES, (GREATER THAN 36-INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.

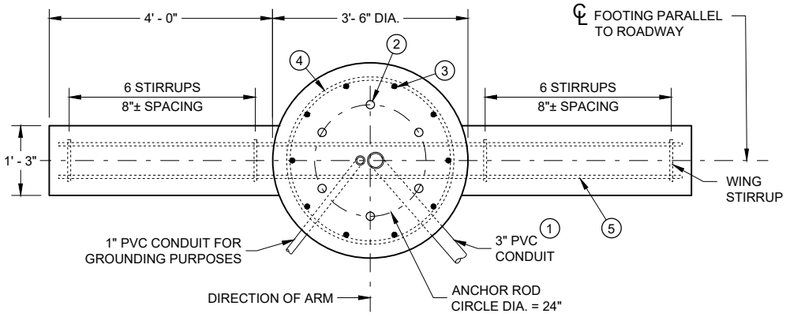
(2) (6) 1 ¾" DIA. X 7' - 2" ANCHOR RODS

(3) (10) NO. 6 X 14' - 1" BAR STEEL VERTICAL REINFORCEMENT.

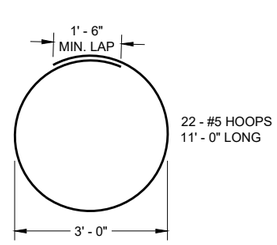
(4) (22) NO. 5 X 11'- 0" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

(5) (10) NO. 5 X 11' - 0" BAR STEEL HORIZONTAL REINFORCEMENT

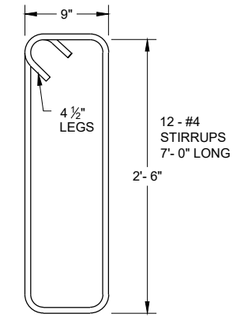
CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE .....fy = 55,000 p.s.i.
WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.



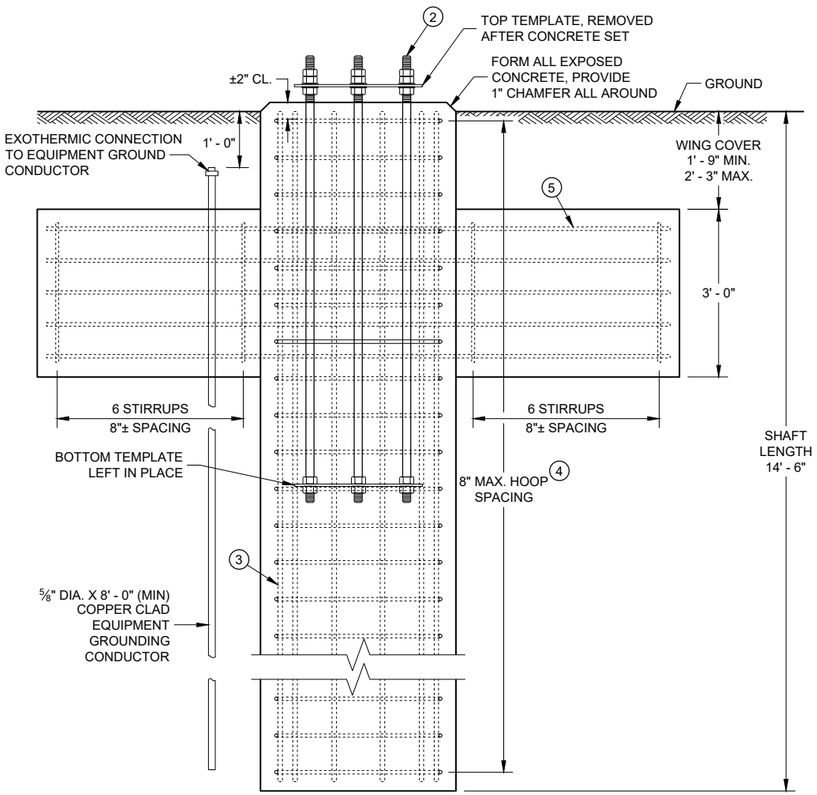
PLAN VIEW



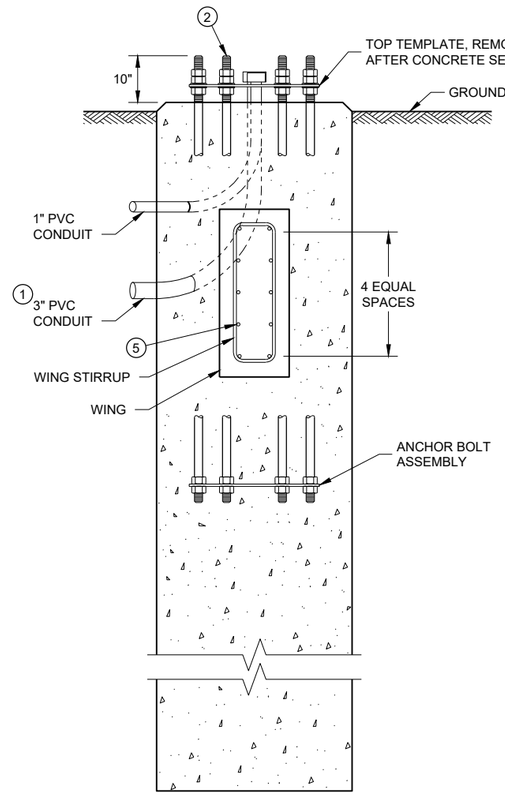
HOOP DETAIL



WING STIRRUP DETAIL



ELEVATION VIEW
(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)



(HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY)

CONCRETE BASE, TYPE 13
(FOR TYPE 12, TYPE 13 AND OVER HEIGHT (OH) POLES)

CONCRETE = 6.3 CUBIC YARD
H.S. REINFORCEMENT = 635 LBS.

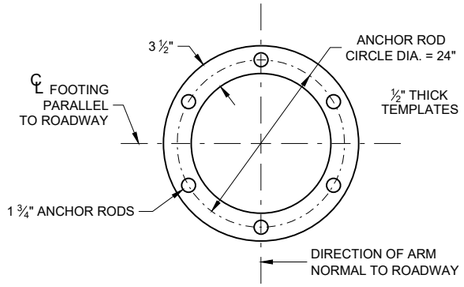
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE 9C13 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION

CONCRETE BASE TYPE 13

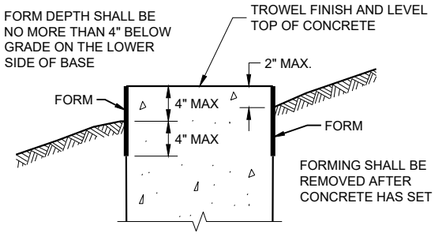
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

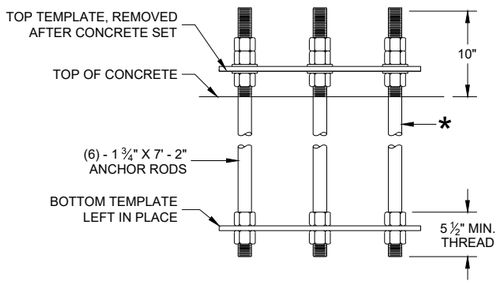
SDD 09C12 - 09a



TOP AND BOTTOM TEMPLATE



FORMING DETAIL



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 11" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2017
DATE

/S/ Ahmet Demirbilek
WIND LOADED STRUCTU
PROGRAM LEADER

FHWA

6

SDD 09C12 - 09b

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.

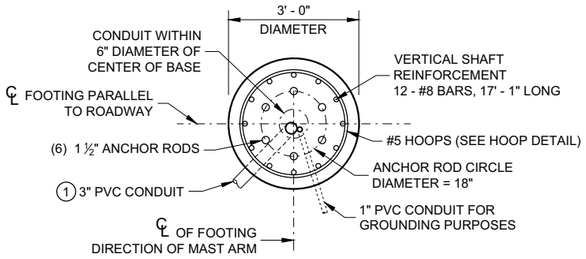
A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

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.

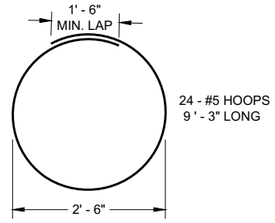
THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

(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.

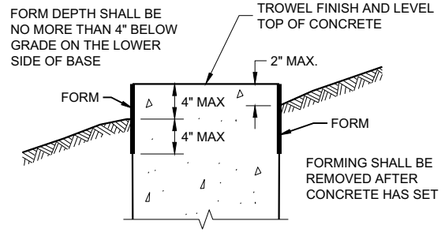
CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION).....fy = 55,000 p.s.i.
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.



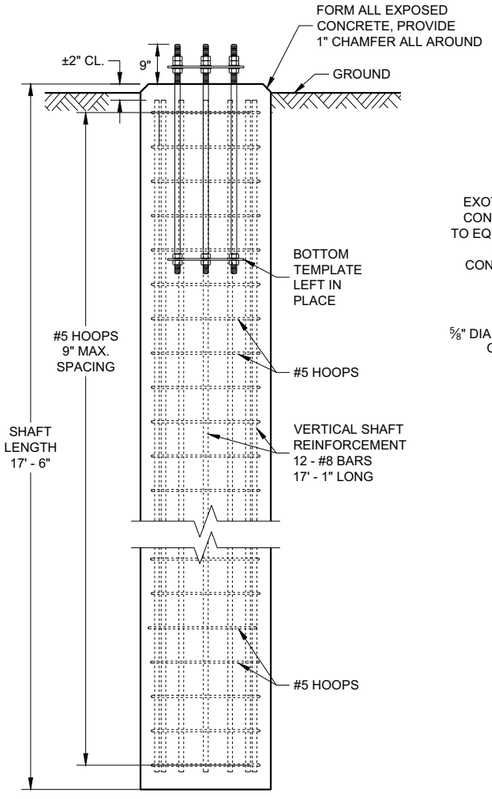
PLAN VIEW



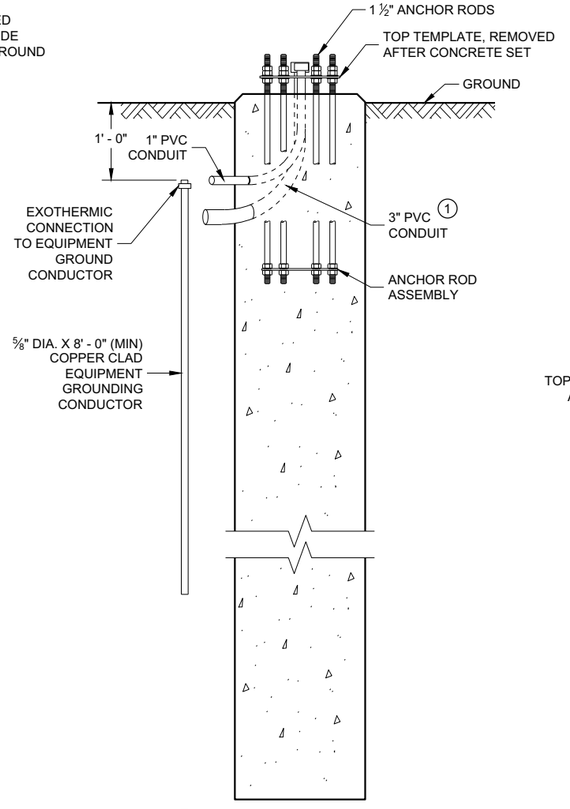
HOOP DETAIL



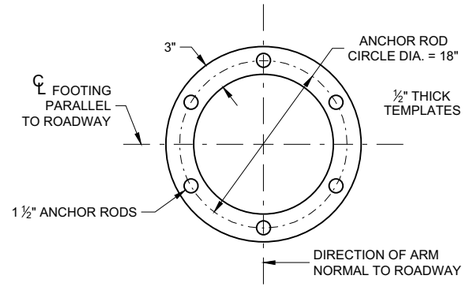
FORMING DETAIL



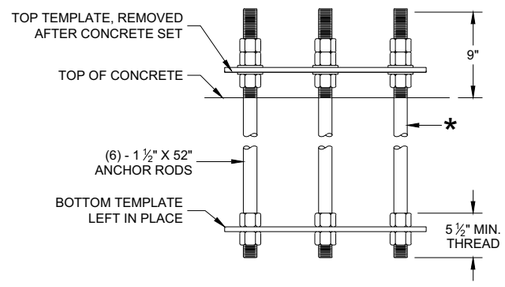
ELEVATION VIEW
(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)



SIDE VIEW
(HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY)



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE, TYPE 10 SPECIAL
(FOR TYPE 9 SPECIAL AND TYPE 10 SPECIAL POLES)

CONCRETE = 4.6 CUBIC YARD
H.S. REINFORCEMENT = 779 LBS.

FOR USE WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 10 SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 — DATE
/S/ Alex Crabtree — WIND LOADED STRUCTU PROGRAM LEADER
FHWA

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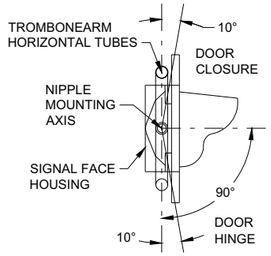
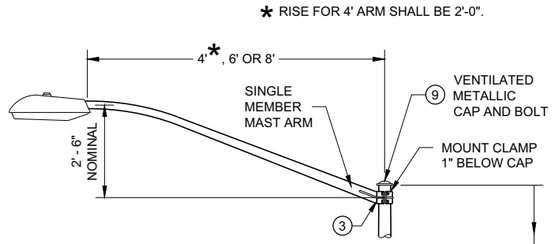
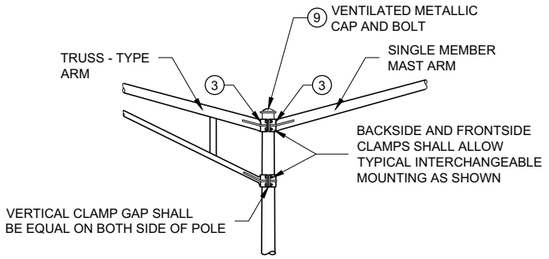
SDD 09C15 - 01

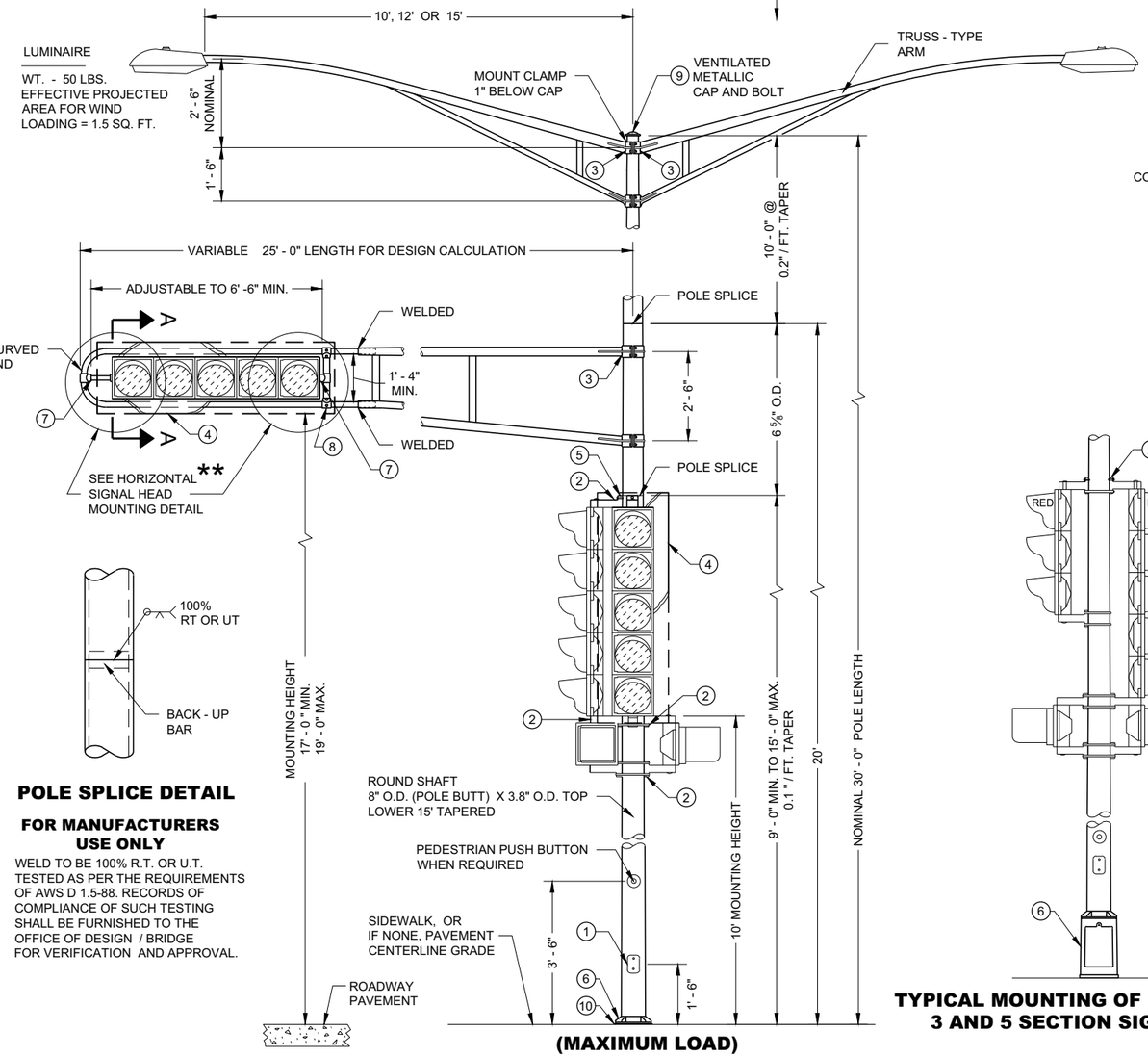


SECTION A-A





INTERCHANGEABLE MOUNTING DETAIL

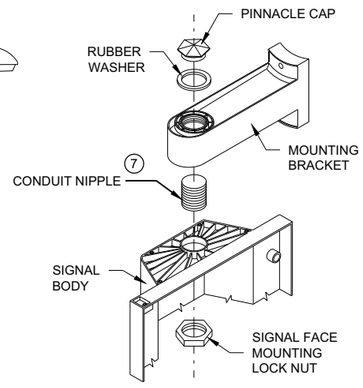


POLE SPLICE DETAIL

FOR MANUFACTURERS USE ONLY

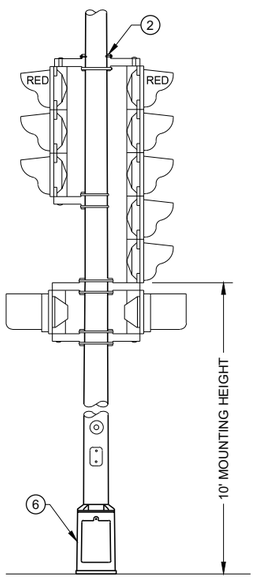
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN / BRIDGE FOR VERIFICATION AND APPROVAL.

(MAXIMUM LOAD)

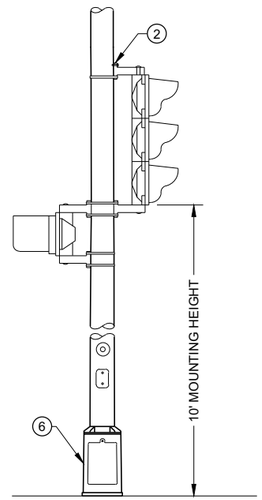


SIGNAL FACE MOUNTING DETAIL

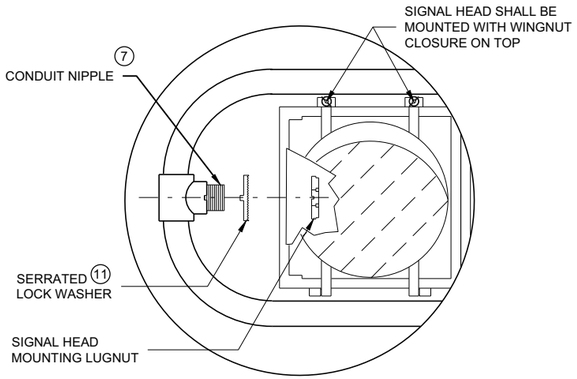
(BANDED)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



HORIZONTAL SIGNAL HEAD ** MOUNTING DETAIL

** SIGNAL HEAD ATTACHMENT ALSO APPLIES TO MOUNTING AT CROSS BAR

GENERAL NOTES

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

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 3/8 INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 3/8" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED. UNDER MAX LOADING, TYPE 3 POLE SHALL BE MOUNTED DIRECTLY TO ITS CONCRETE BASE.

(7) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

TYPE 3 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS TYPE 3 (HEAVY DUTY)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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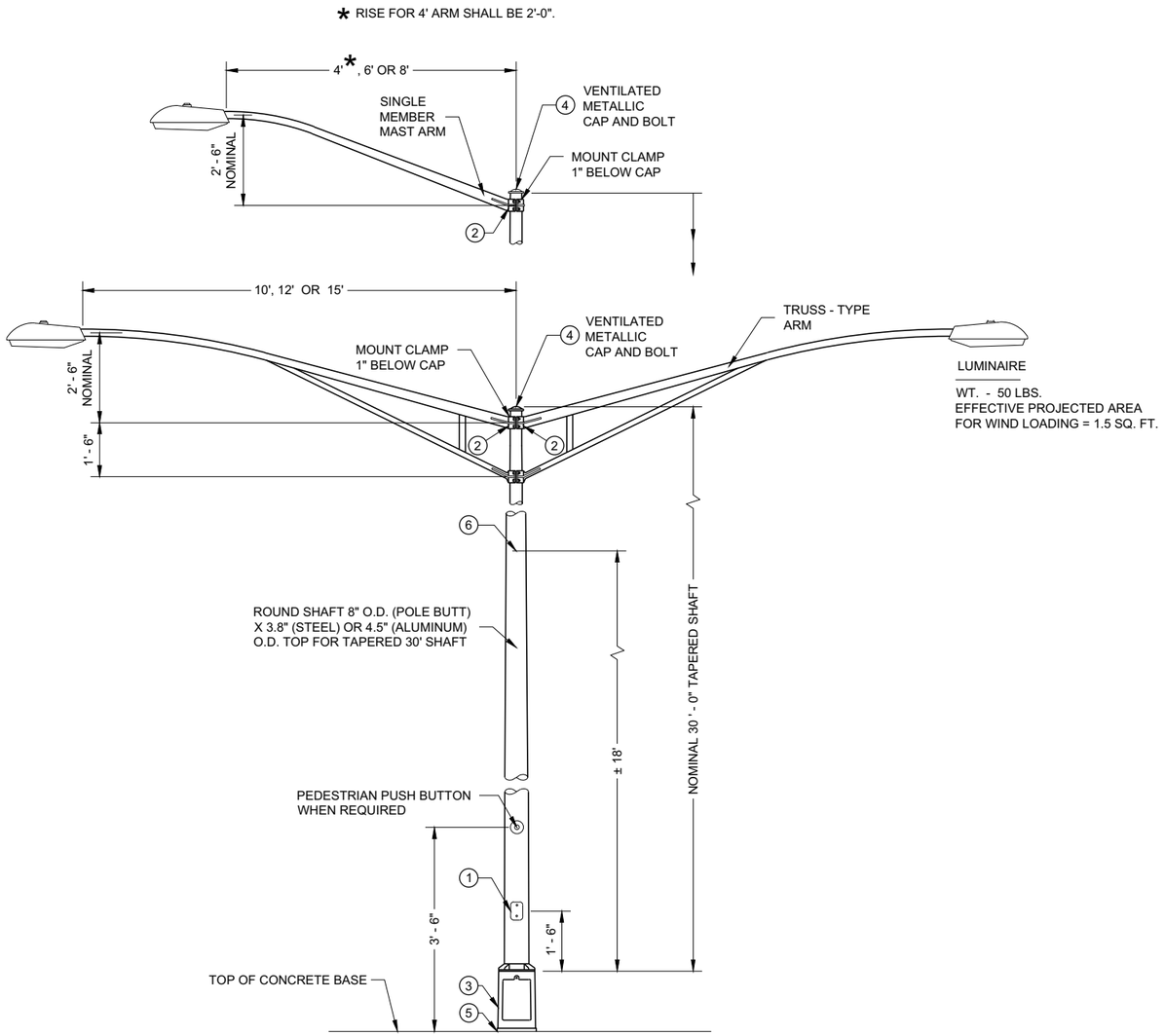


TYPE 5 POLE MOUNTING CONFIGURATION

(MAXIMUM LOAD)

LIGHTING ONLY

GENERAL NOTES

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

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

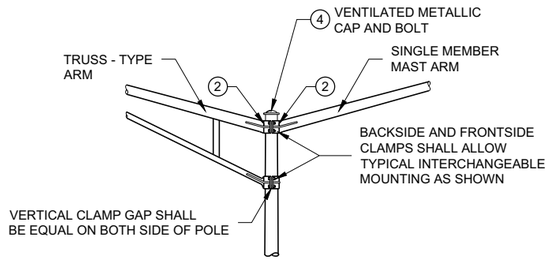
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



INTERCHANGEABLE MOUNTING DETAIL

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

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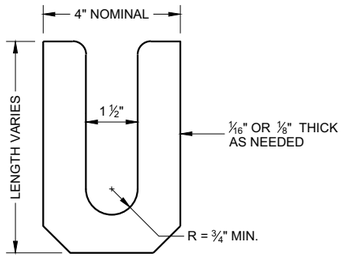
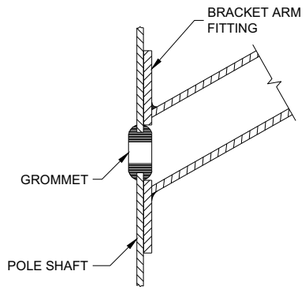
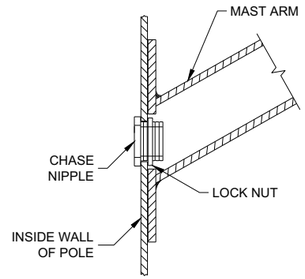


LEVELING SHIM (1)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

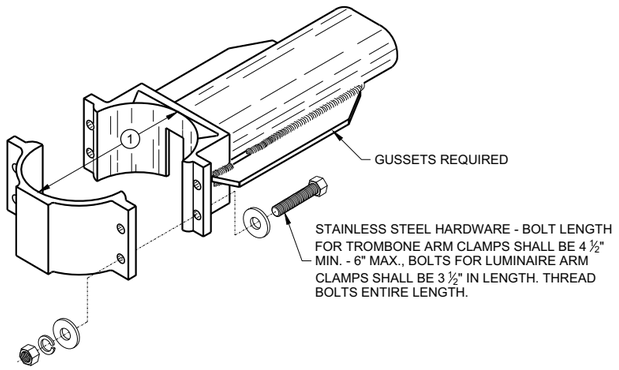
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

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

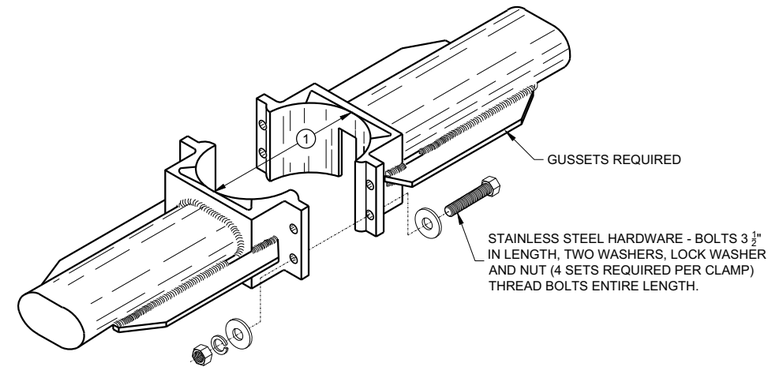
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(4) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

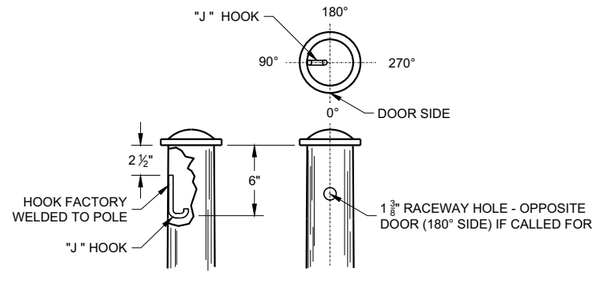
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



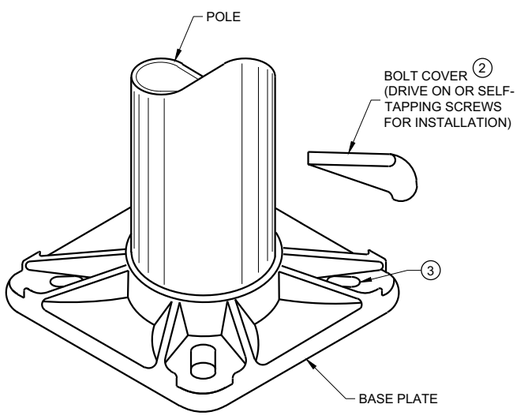
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



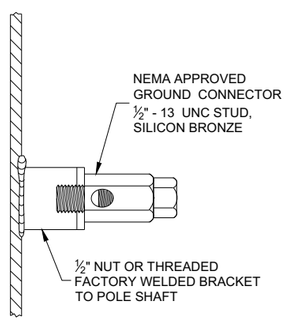
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

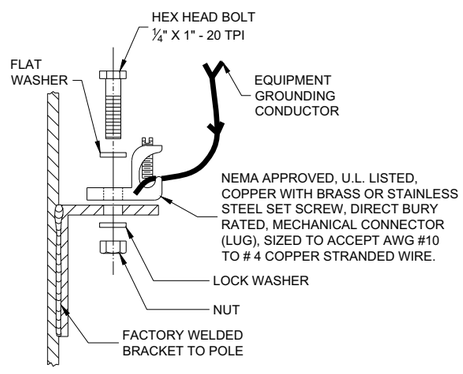


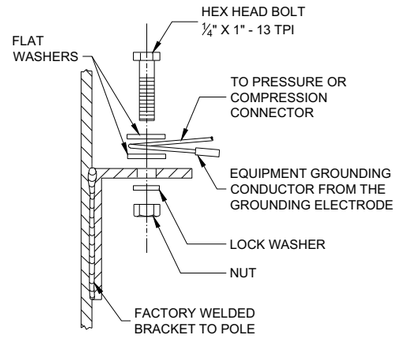
TYPICAL "J" HOOK LOCATION



BASE PLATE







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

HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

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FHWA

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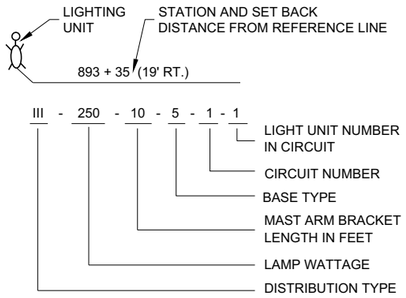
SDD 09E01 - 15g

GENERAL NOTES

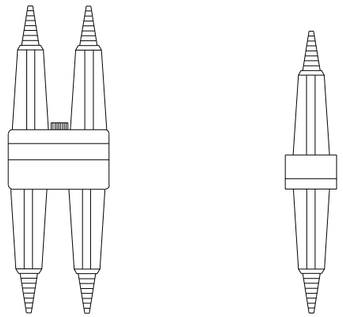
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

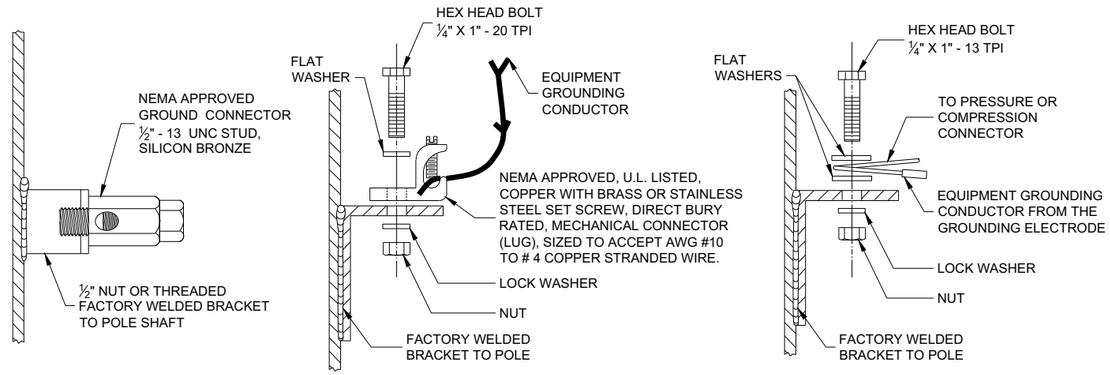


LIGHTING UNIT CODE
(TYPICAL)

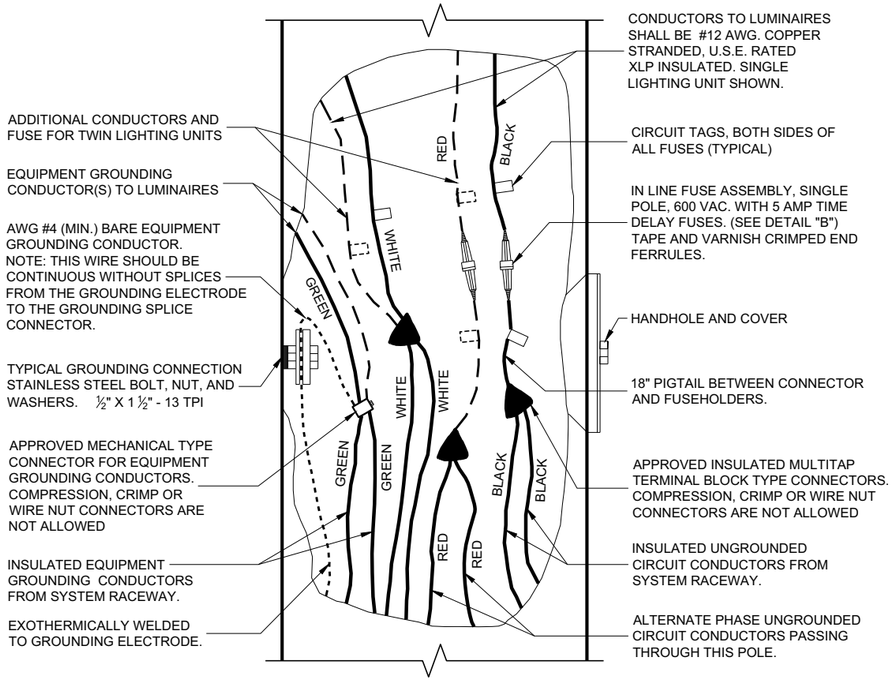


DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT

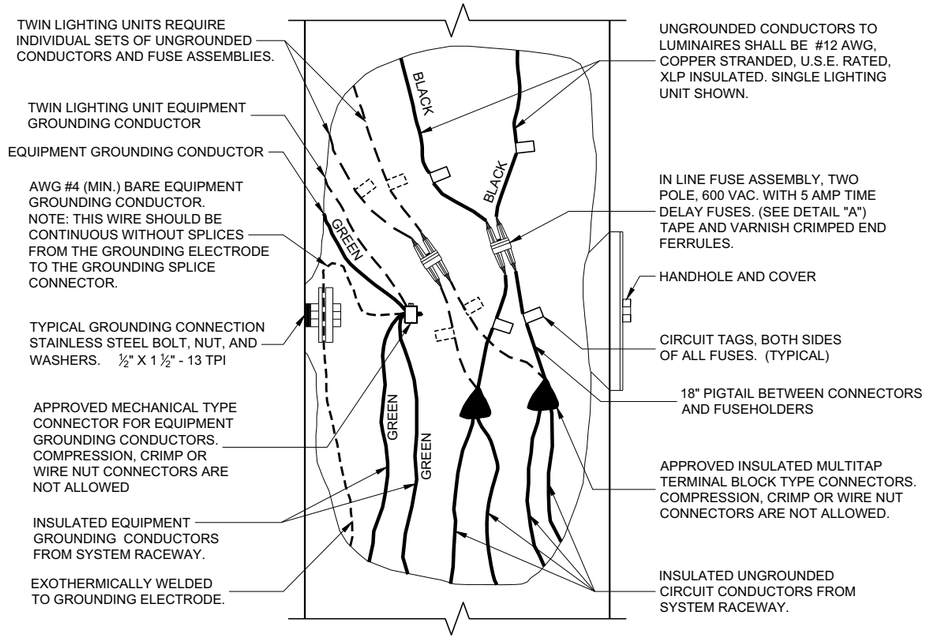
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



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



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR



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

NON - FREEWAY LIGHTING UNIT POLE WIRING

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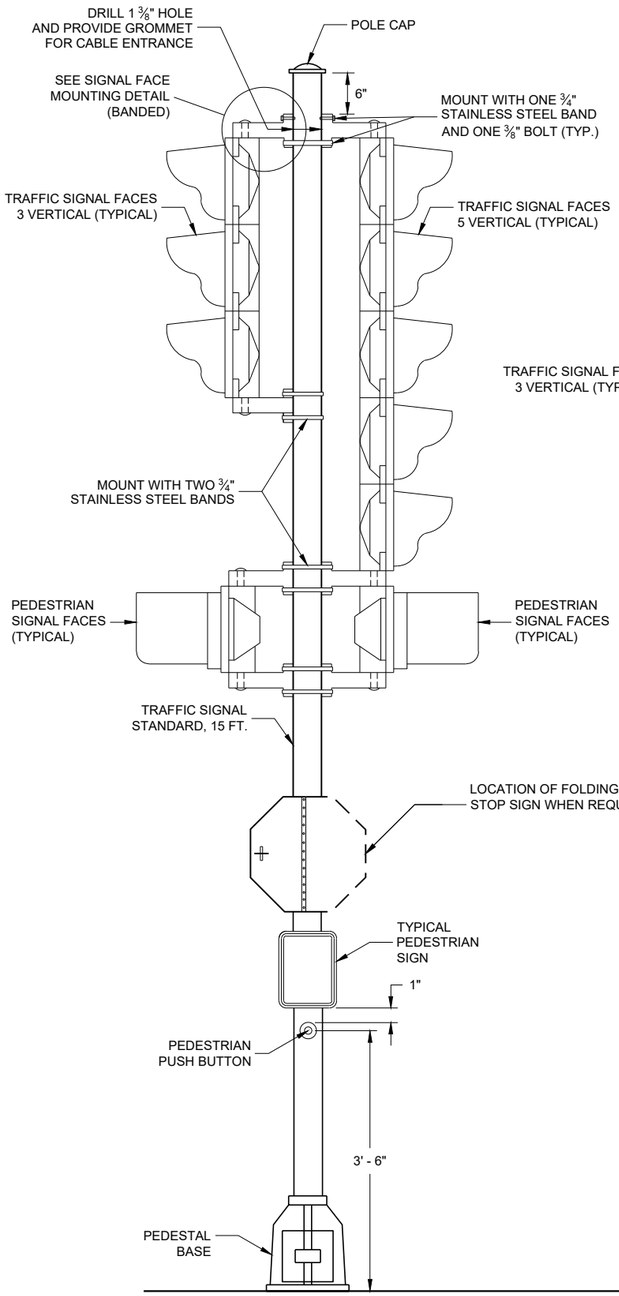
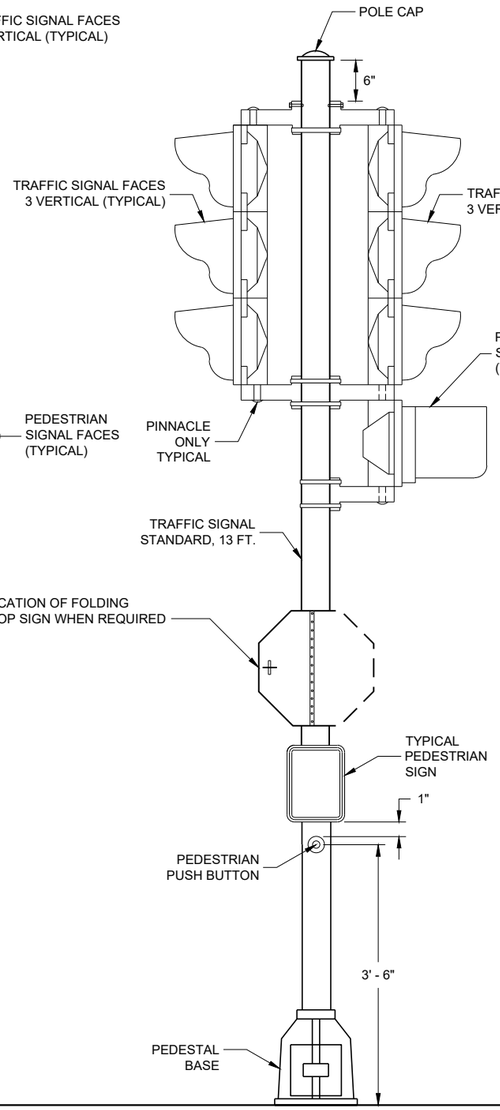
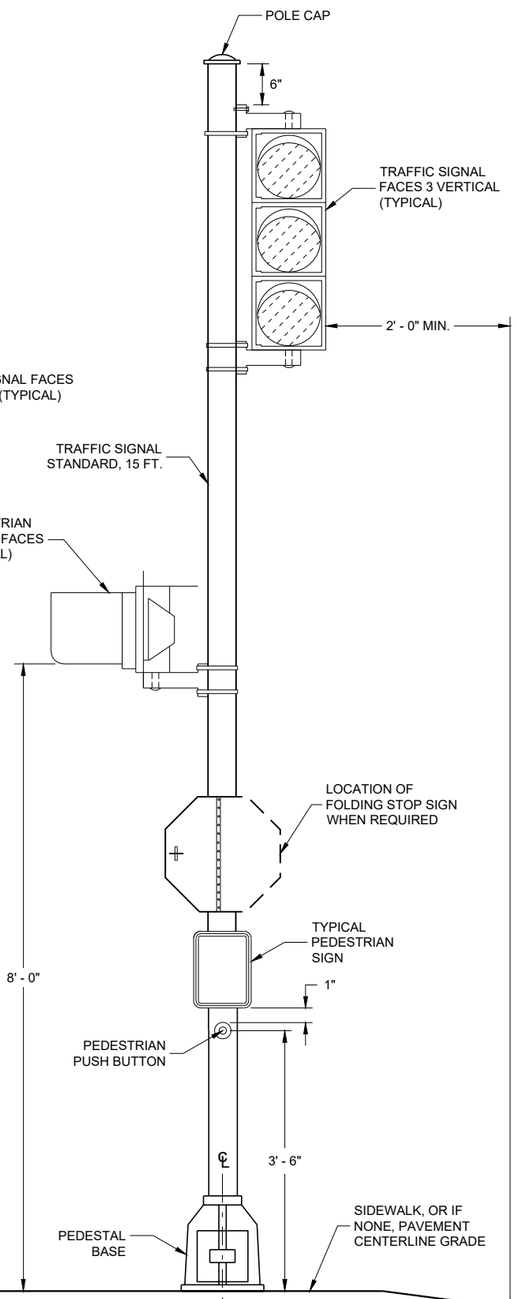


TRAFFIC SIGNAL STANDARD - 15 FT.



TRAFFIC SIGNAL STANDARD - 13 FT.



TRAFFIC SIGNAL TANDARD - 15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

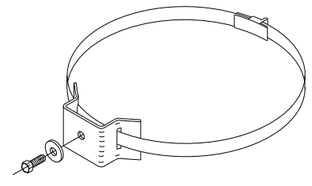
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

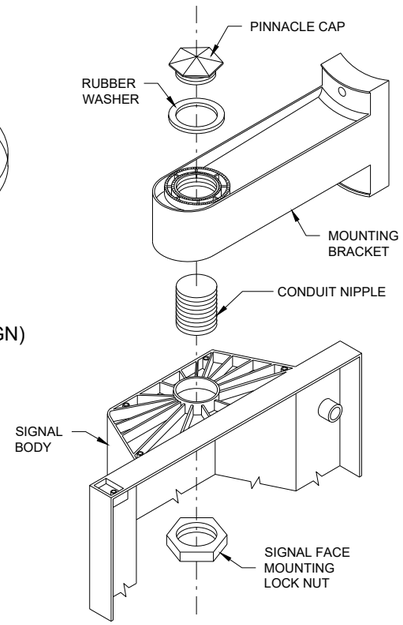
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



SIGNAL FACE MOUNTING DETAIL (BANDED)

TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

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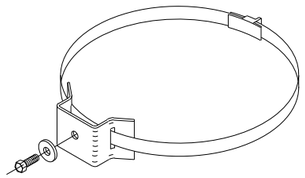
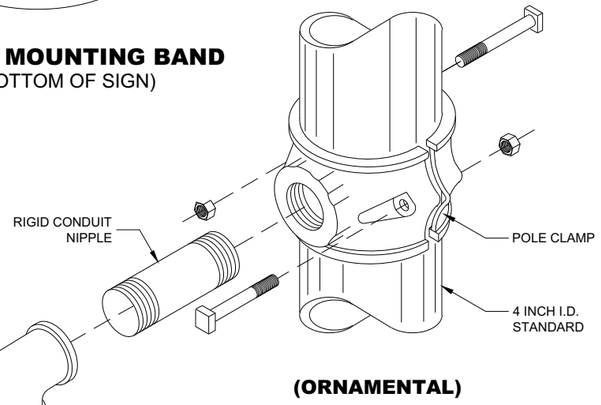
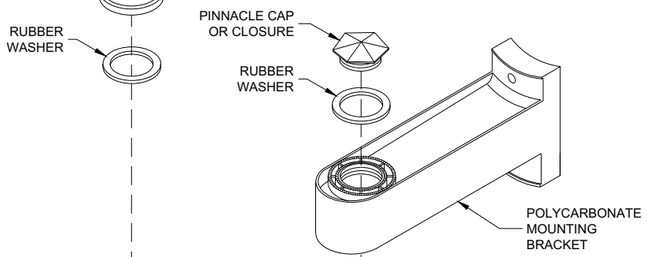


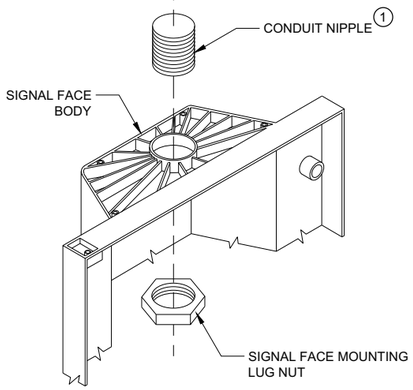
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



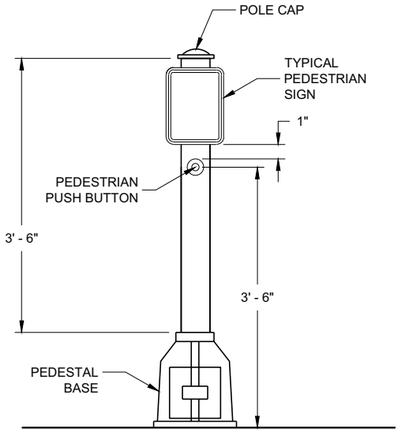
(ORNAMENTAL)



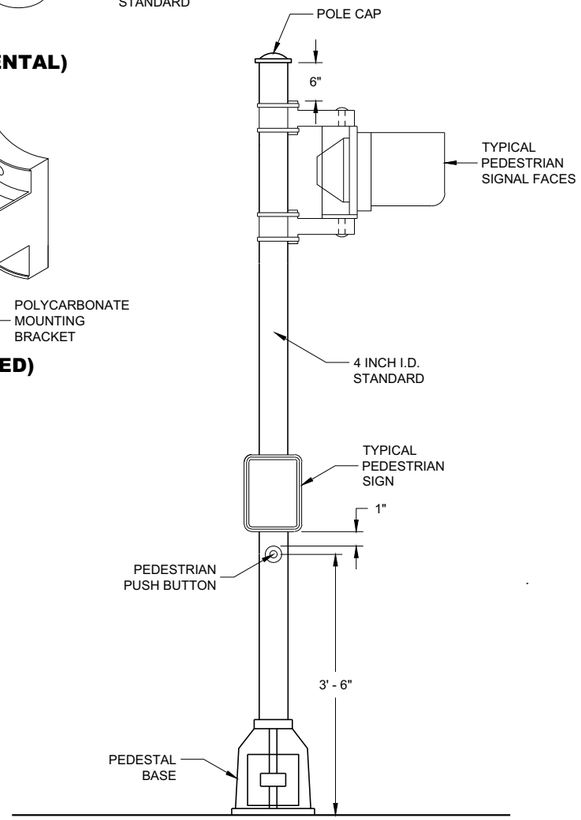
(BANDED)



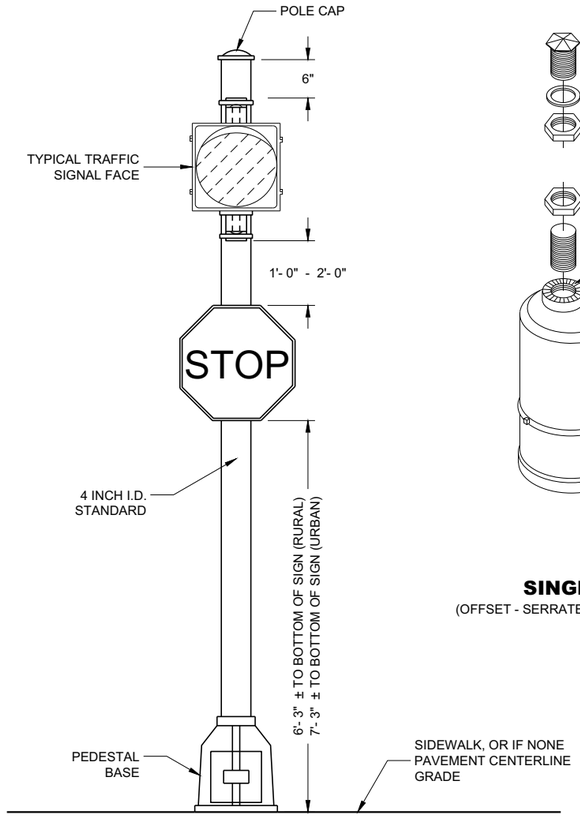
SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING



PEDESTRIAN FACE STANDARD - 10 FT.
(WALK - DON'T WALK)



STANDARD FLASHER
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS, UNLESS APPROVED BY THE ENGINEER IN THE FIELD.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

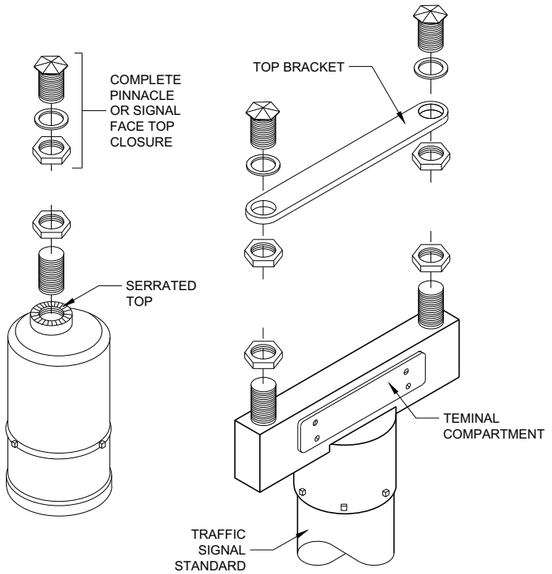
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE REGION TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(1) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACESAND BRACKET ENDS.



SINGLE
(OFFSET - SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
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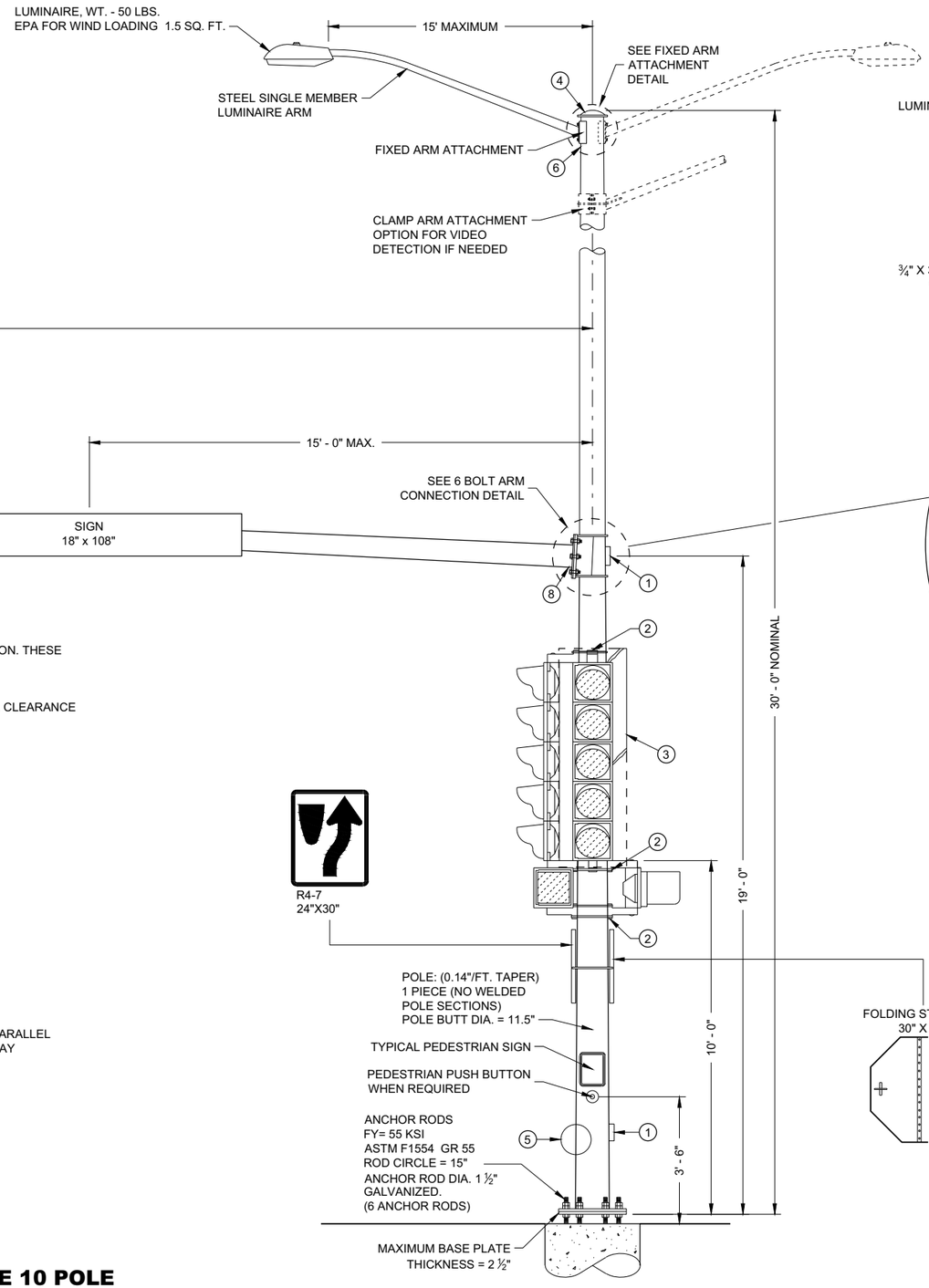
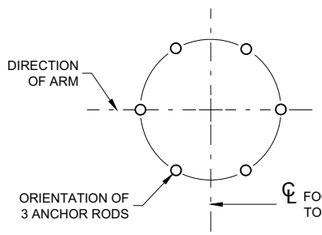
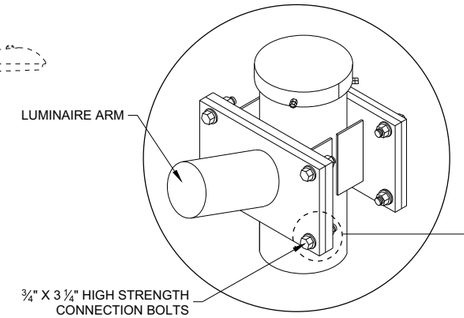


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

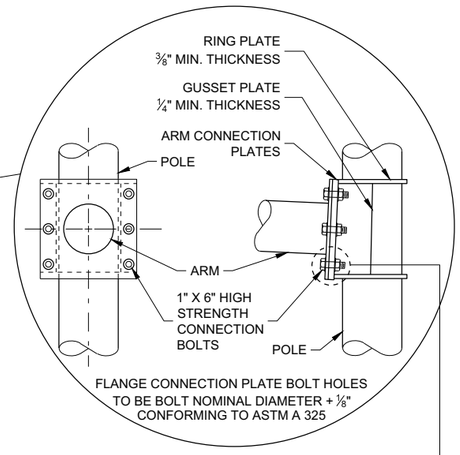
** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE



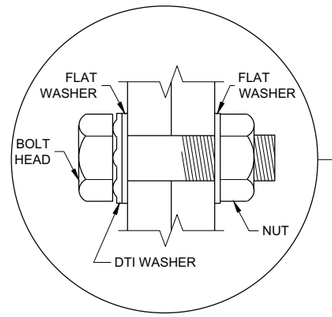
ANCHOR ROD LOCATION



FIXED ARM ATTACHMENT DETAIL



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 POLE
15' - 30' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 POLE
15' - 30' MONOTUBE ARM

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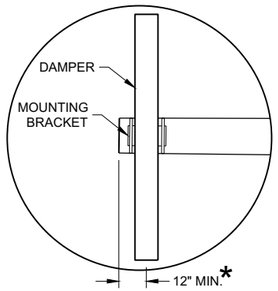
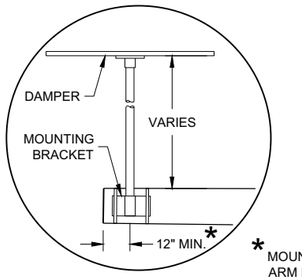
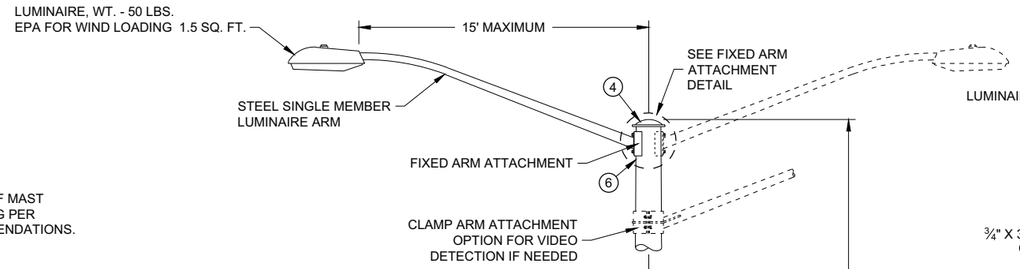


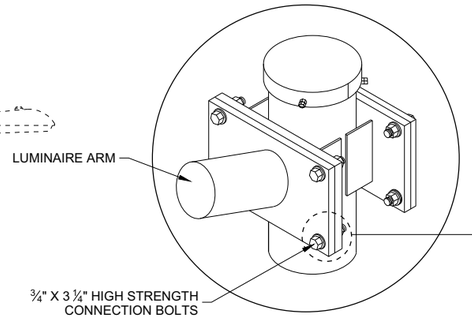
DUMBBELL VIBRATION DAMPER



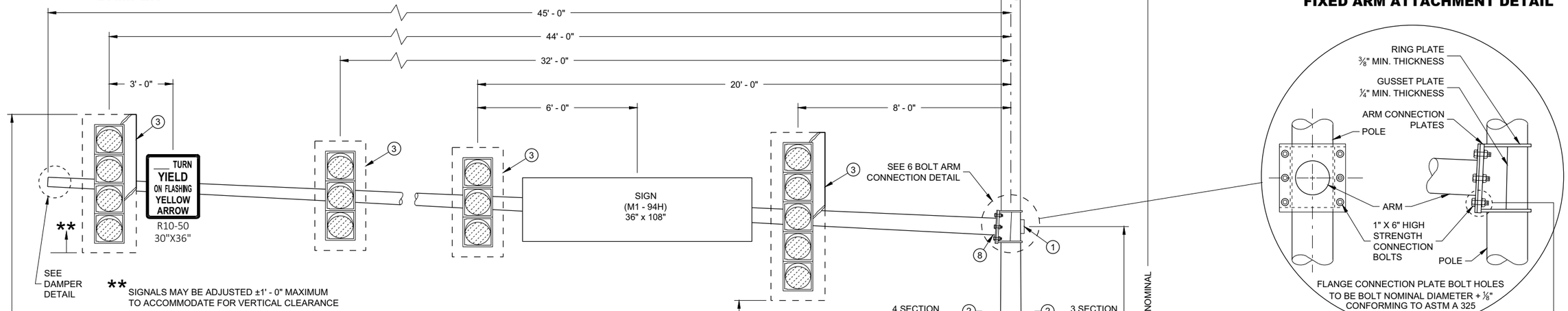
FLAT VIBRATION DAMPER

* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.

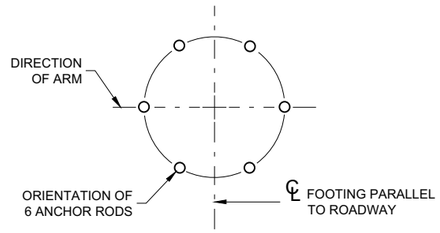




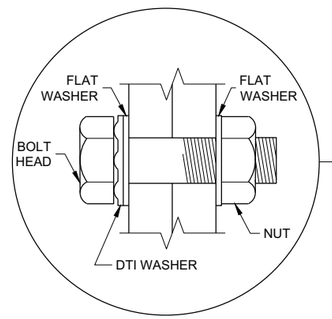
FIXED ARM ATTACHMENT DETAIL



6 BOLT ARM CONNECTION DETAIL



ANCHOR ROD LOCATION



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 SPECIAL POLE
45' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 SPECIAL POLE
45' MONTUBE ARM

STATE OF WISCONSIN
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GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15 FOOT TO 30 FOOT.

POLE TYPES 9 SPECIAL AND 10 SPECIAL ARE FOR ARM LENGTHS 35 FOOT, 40 FOOT, AND 45 FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35 FOOT TO 55 FOOT.

MONOTUBE POLES AND ARMS SHALL BE GALVANIZED STEEL.

RING STIFFENED BUILT UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3% ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATION SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING INTERIM REVISIONS)" AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR THE LIGHTING STRUCTURES AS FOLLOWS:

CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.

CATEGORY II FATIGUE LOADS OF TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 SPECIAL AND TYPE 10 SPECIAL STRUCTURES. IN LIEU OF DESIGNING FOR GALLOPING, A VIBRATION DAMPER MITIGATION DEVICE IS REQUIRED TO BE SUPPLIED AND INSTALLED AT THE END OF THE MAST ARM.

CATEGORY II FATIGUE FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE12 AND TYPE 13 STRUCTURES.

115 MPH (700 YEAR MRI BASIC WIND SPEED).

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" STAINLESS STEEL BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR A S DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEAD AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HAND HOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING (SEE SPECIFICATION SECTION 658).

(3) SECURELY MOUNT BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HAND HOLD, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

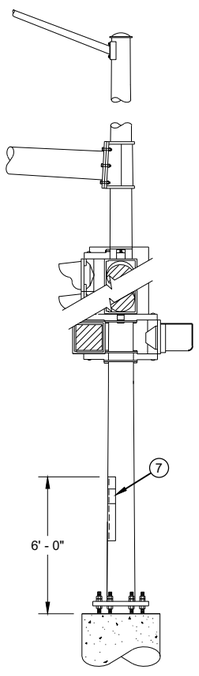
(6) FACTORY WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

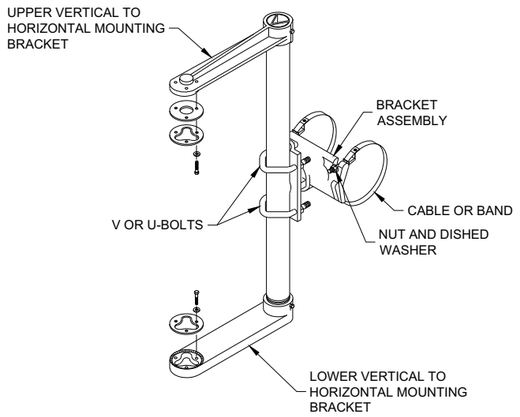
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 6' - 0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

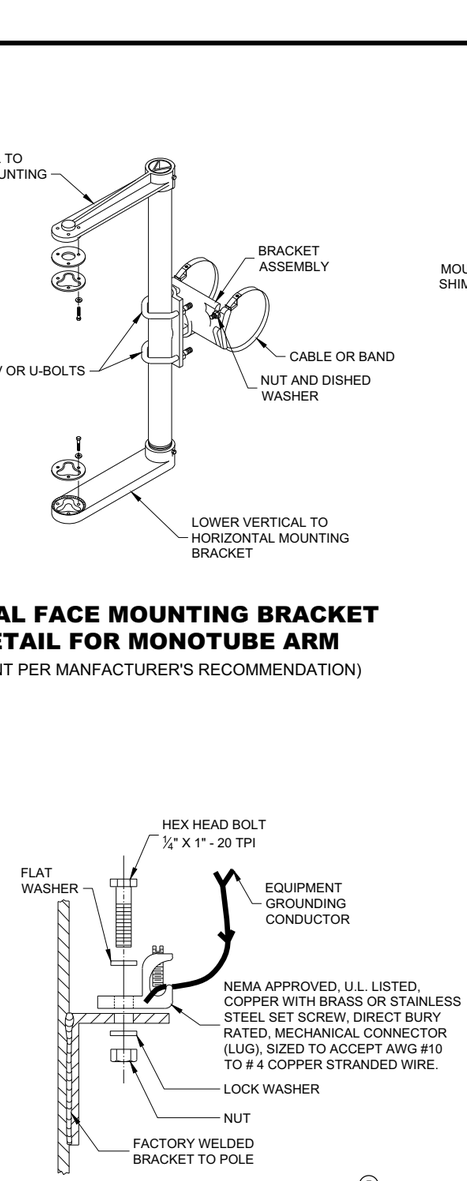


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



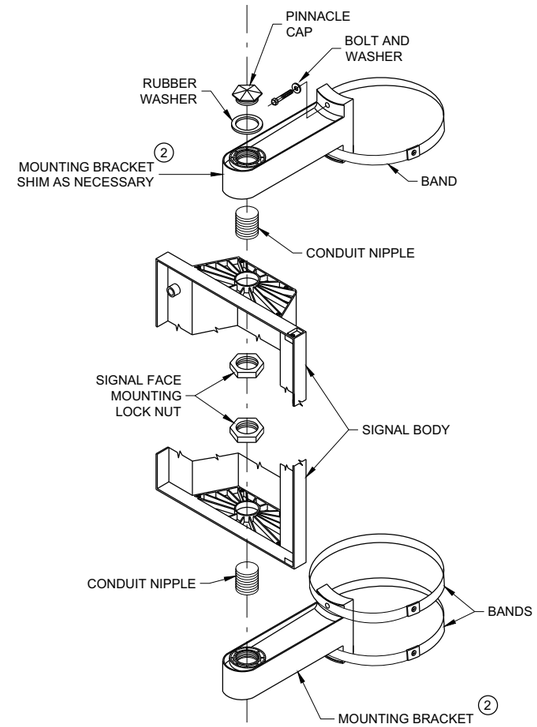
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANFACTURER'S RECOMMENDATION)

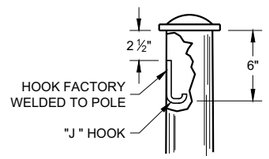


TYPICAL GROUNDING (5) CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



TYPICAL "J" HOOK (6) WIRE SUPPORT

GENERAL NOTES AND HARDWARE FOR TYPES 9,10, 9/10 SPECIAL, 12 AND 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

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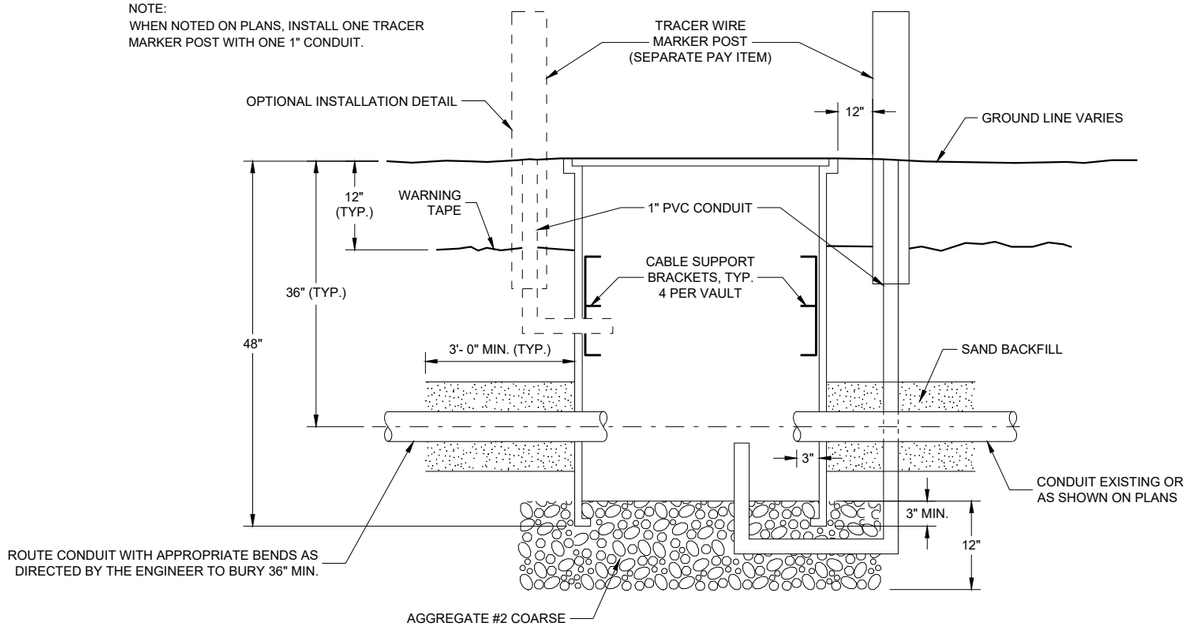
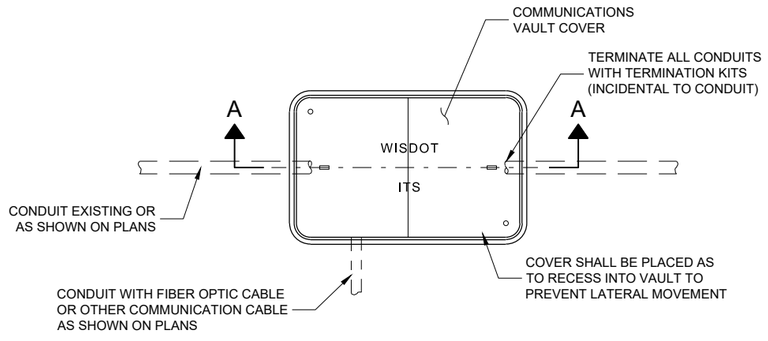
NOTE:
WHEN NOTED ON PLANS, INSTALL ONE TRACER MARKER POST WITH ONE 1" CONDUIT.



SECTION A - A



PLAN VIEW

COMMUNICATIONS VAULT TYPE 1

GENERAL NOTES

PROVIDE VAULT WITH OPEN BASE.

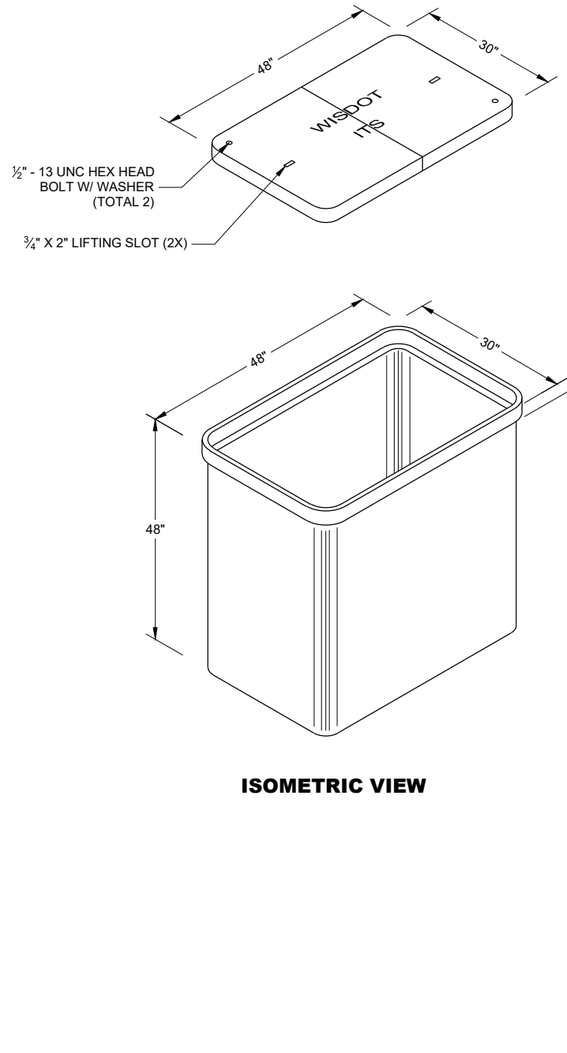
COVER SHALL HAVE A MINIMUM DESIGN LOAD OF 15,000 LBS AND SHALL LOCK.

ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION, OR PUNCH DRIVEN AT TIME OF PLACEMENT.

VAULTS SHALL BE OF ONE-PIECE CONSTRUCTION. TWO-PIECE/STACKABLE VAULTS WILL NOT BE PERMITTED.

FIELD PLACEMENT OF COMMUNICATIONS VAULTS SHALL BE AS DIRECTED BY THE ENGINEER.

FIBER TRACER MARKER POSTS SHALL BE CONSTRUCTED WITH HIGH-IMPACT PLASTIC MATERIAL WHICH IS FADE RESISTANT AND UV STABLE. ALL HARDWARE SHALL BE STAINLESS STEEL AND CONTAIN A MINIMUM OF FIVE STANDARD TERMINALS.



ISOMETRIC VIEW

COMMUNICATION VAULT TYPE 1	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
May 2017 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL ENGI

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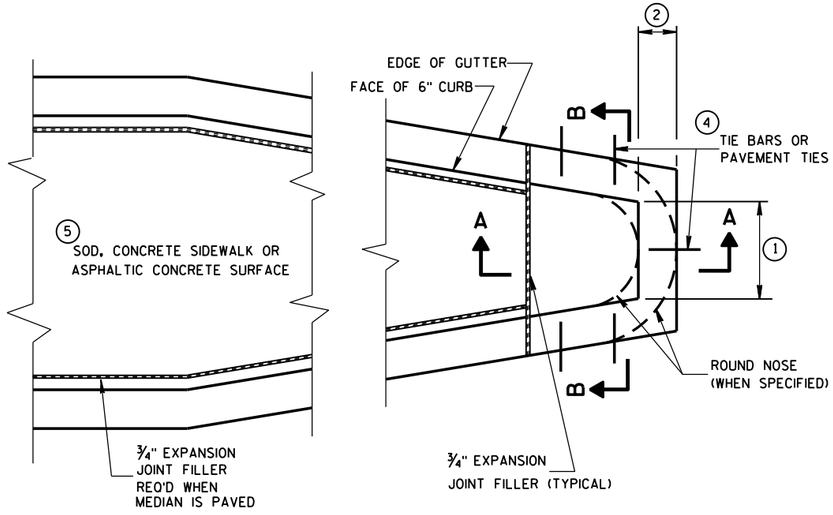
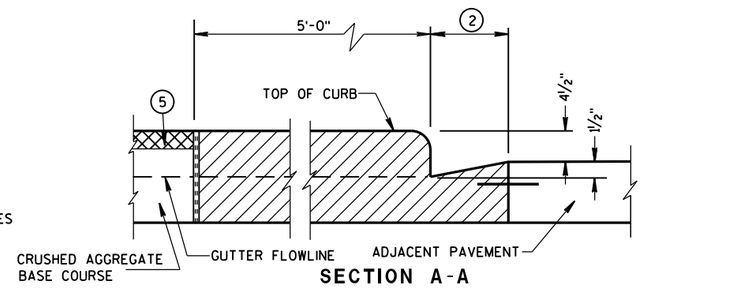




CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

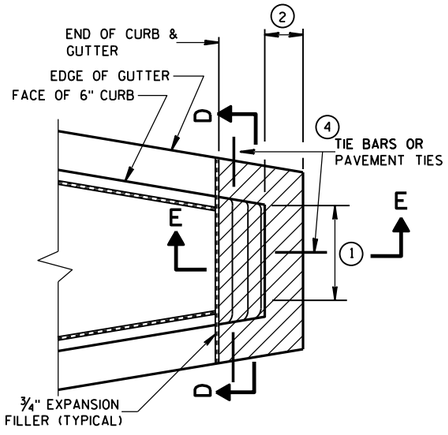
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

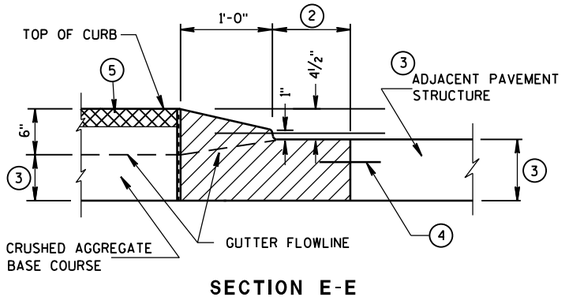
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

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

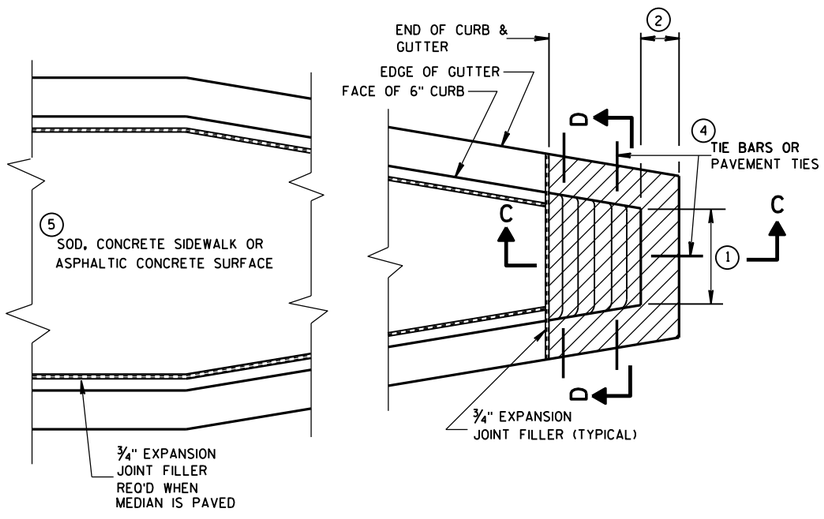
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

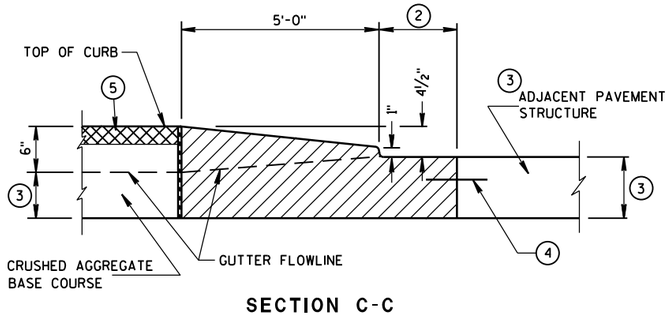
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



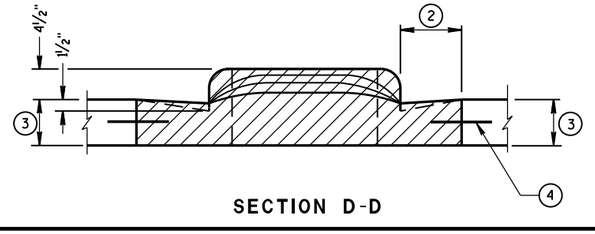


CONCRETE MEDIAN SLOPED NOSE TYPE 2





CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN NOSE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 6/8/2006 DATE FHWA	/S/ Jerry H. Zogg ROADWAY STANDARDS D ENGINEER

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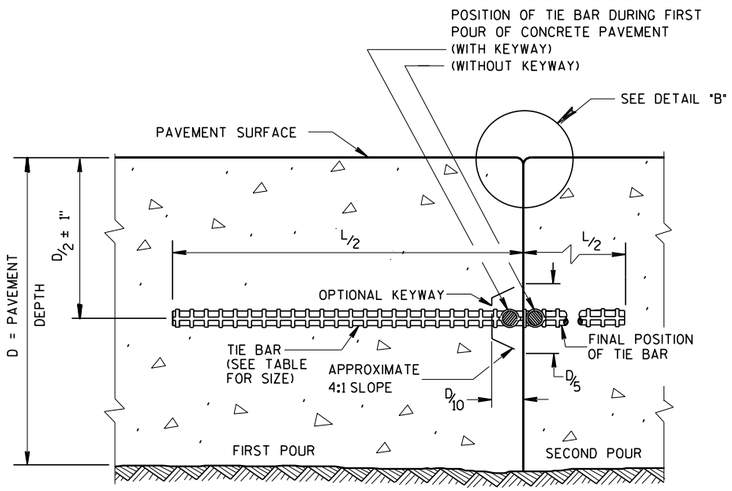
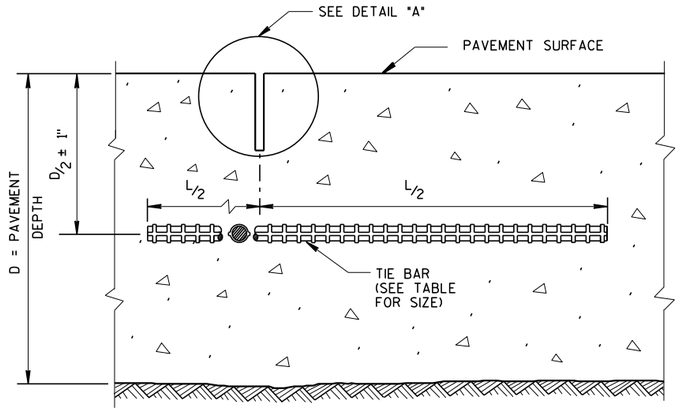
S.D.D. 11 B 2-2



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 — PAVEMENT SUPE
FHWA

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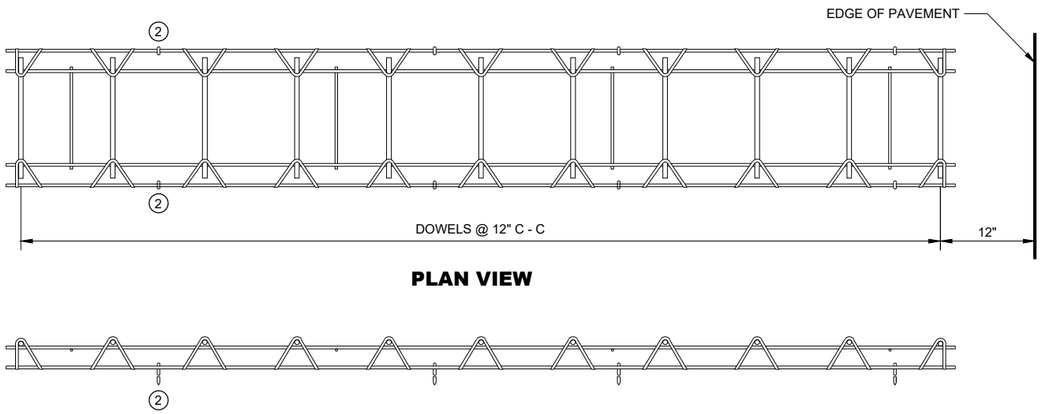
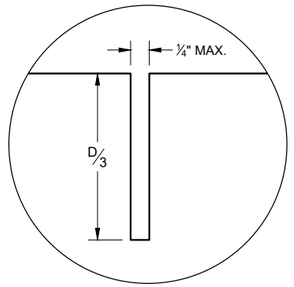


PLAN VIEW

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.

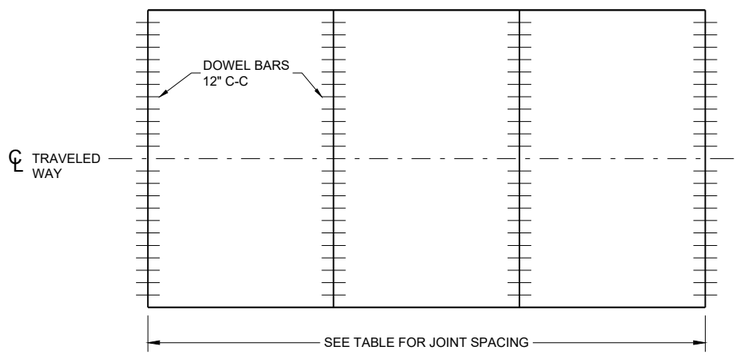
(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

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

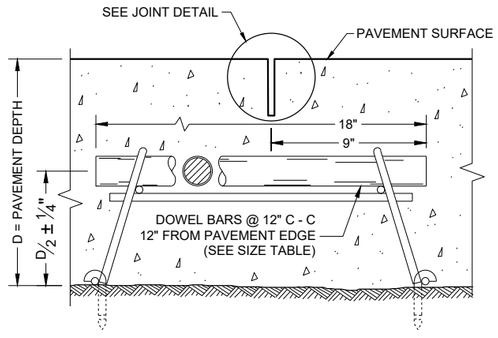
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED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



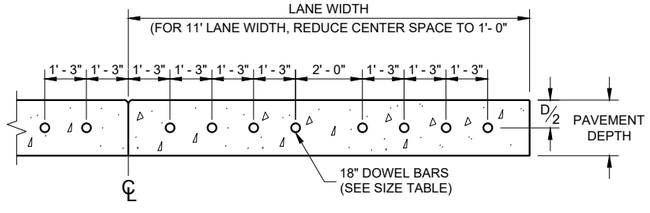
CONTRACTION JOINT LOCATIONS



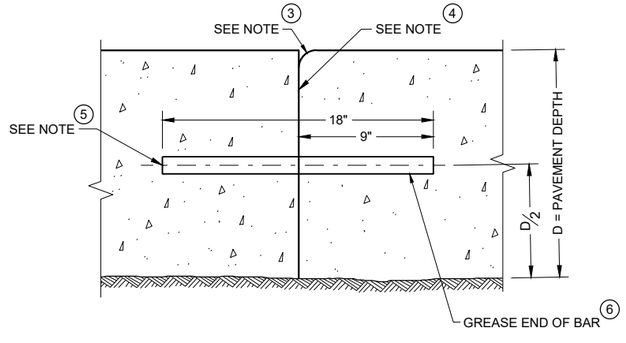
DOWELED CONTRACTION JOINT

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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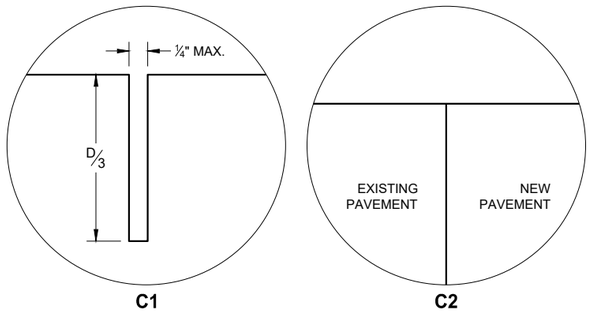
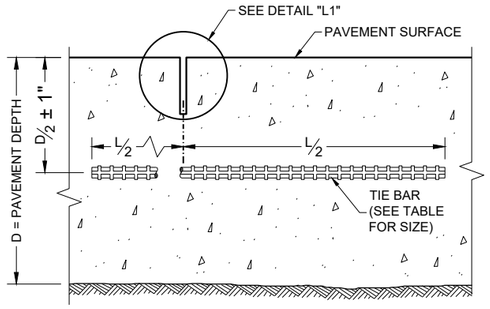
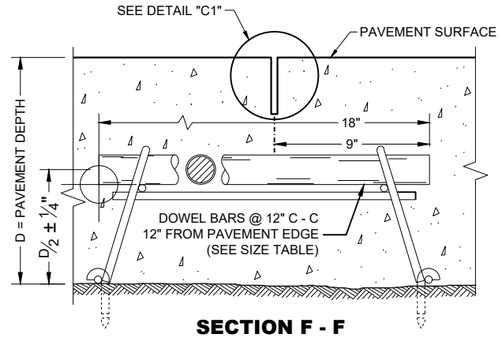


TRANSVERSE JOINTS



SECTION C - C
SAWED JOINT



SECTION F - F
CONTRACTION JOINT

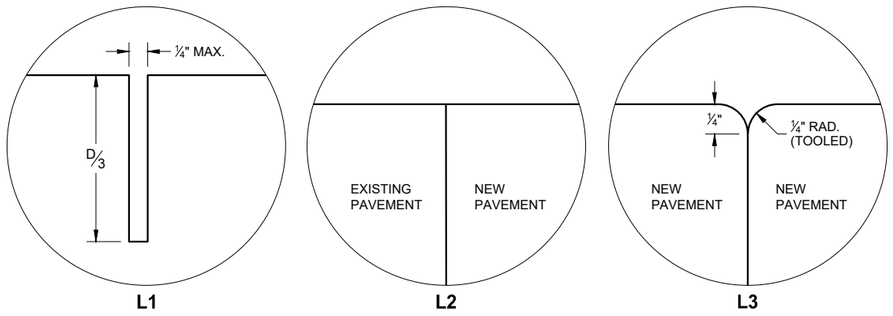
GENERAL NOTES

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

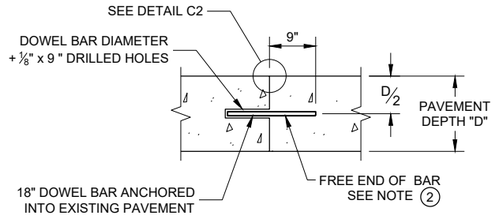
PROVIDE A MIMIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

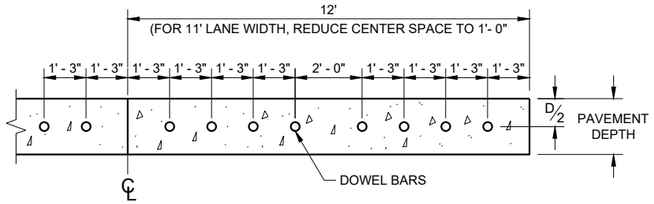
(2) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.



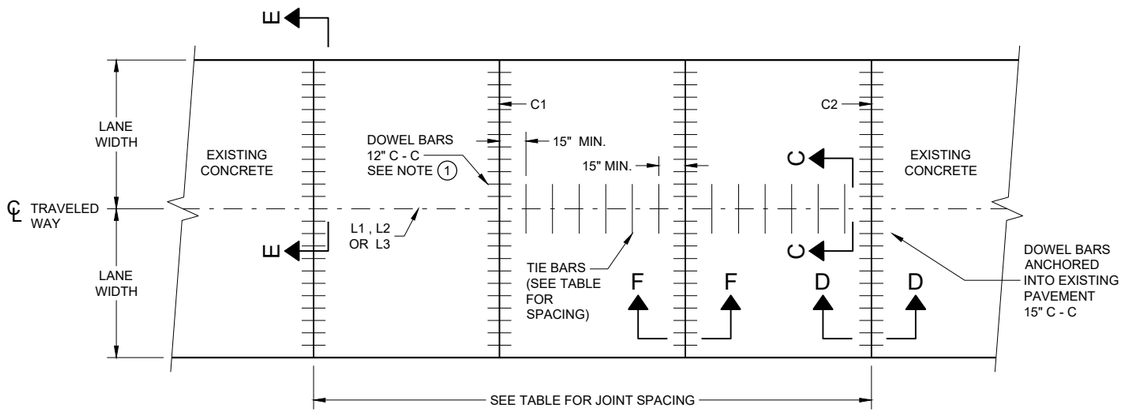
LONGITUDINAL JOINTS



SECTION D - D



SECTION E - E
SPACING OF DOWEL BARS
ANCHORED INTO EXISTING PAVEMENT



PLAN VIEW
CONCRETE BASE
CONTRACTION JOINT LOCATIONS

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	CONTRACTION JOINT SPACING
6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8" & ABOVE	1 ¼"	15'

CONCRETE BASE

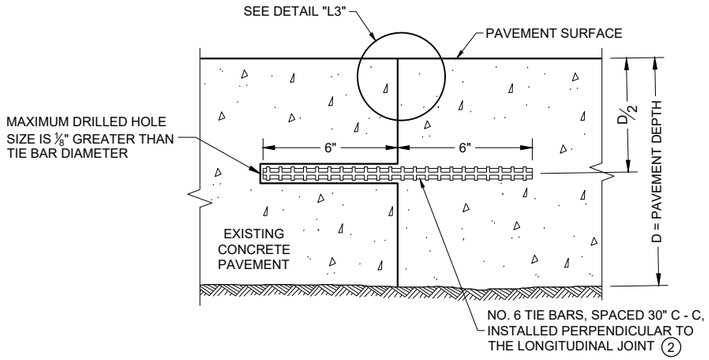
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C15 - 08a

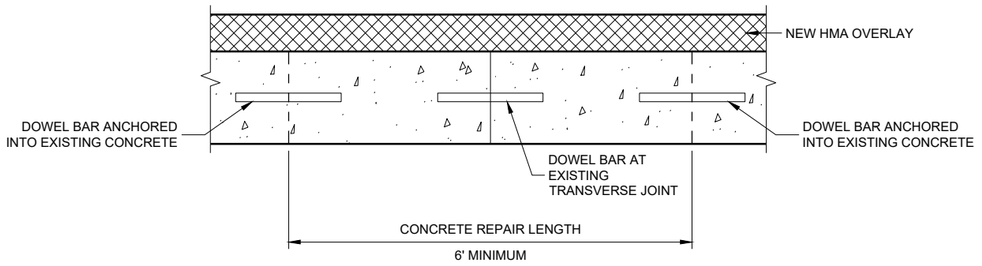
GENERAL NOTES

1. USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) AT THE LONGITUDINAL JOINT IN LIEU OF TIE BARS FOR SINGLE LANE CONCRETE BASE REPAIRS UP TO 15 FEET IN LENGTH.
2. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.
3. PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

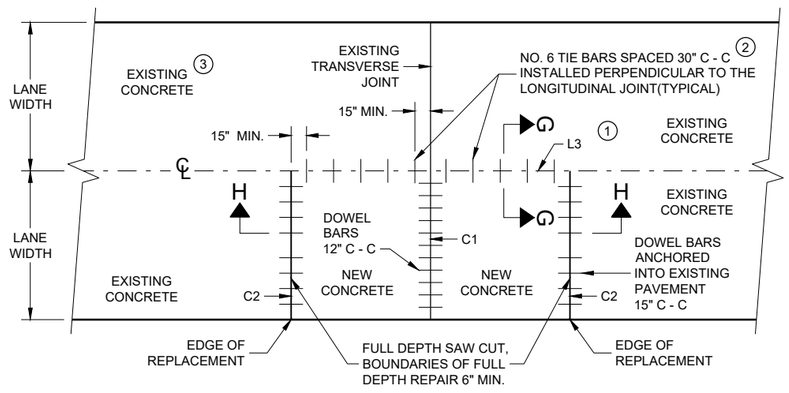


SECTION G - G

TIE BARS ANCHORED INTO EXISTING PAVEMENT



SECTION H - H



PLAN VIEW

SINGLE LANE CONCRETE BASE REPAIR

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SDD 13C15 - 08b

CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

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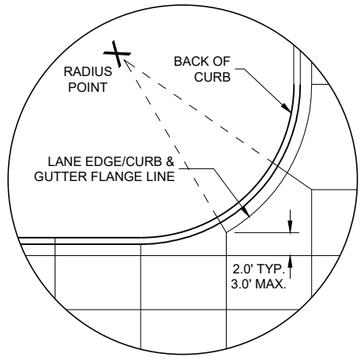
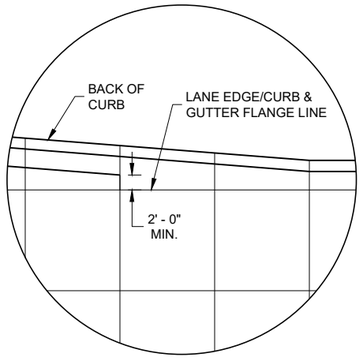
SDD 13C15 - 08b



DETAIL "A"



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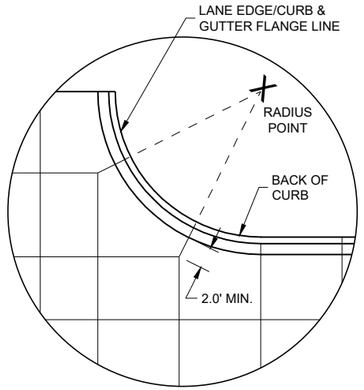

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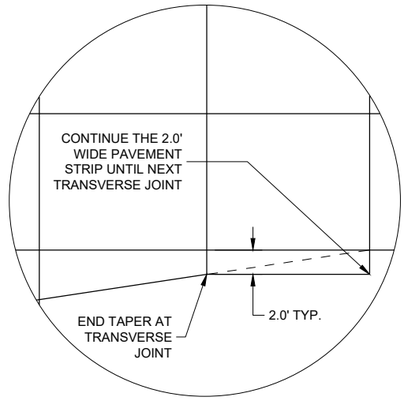


DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

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

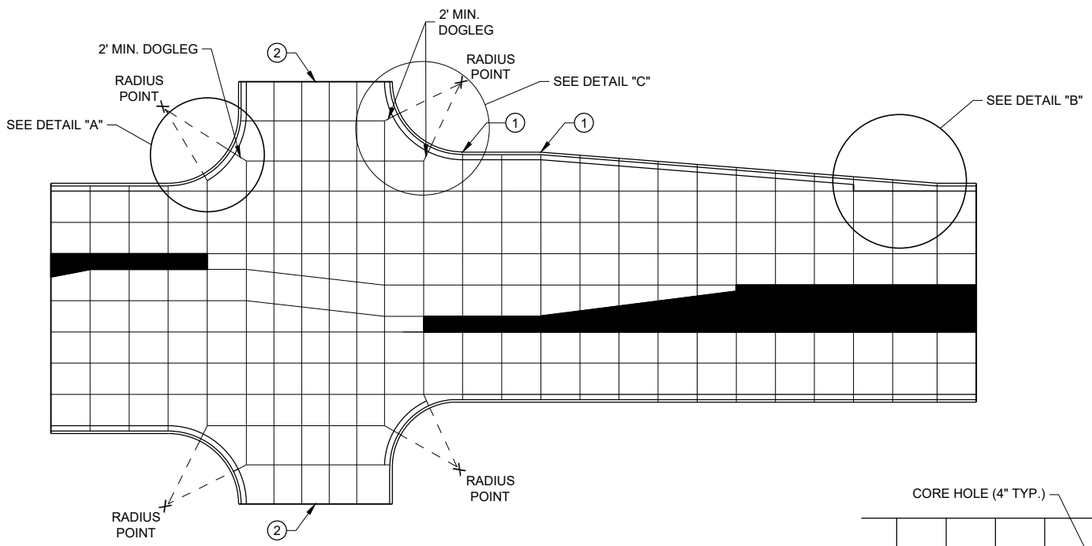
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

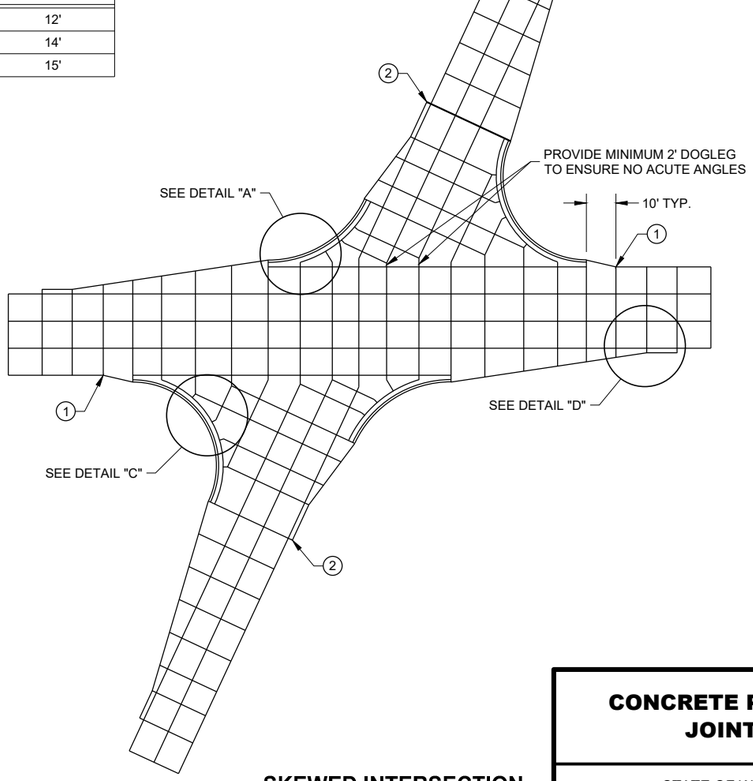
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM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



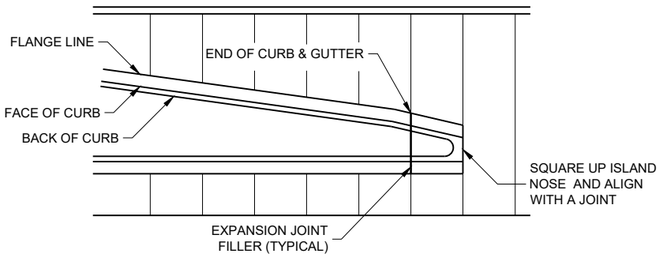
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

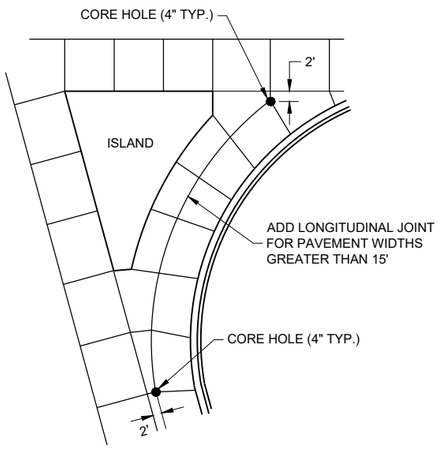
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 08a

6

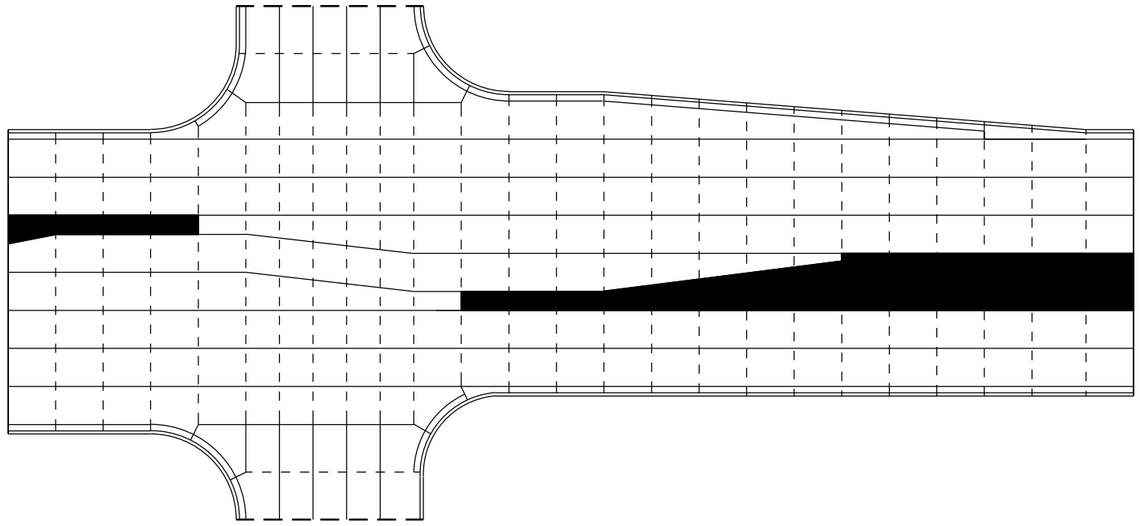
SDD 13C18 - 08a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

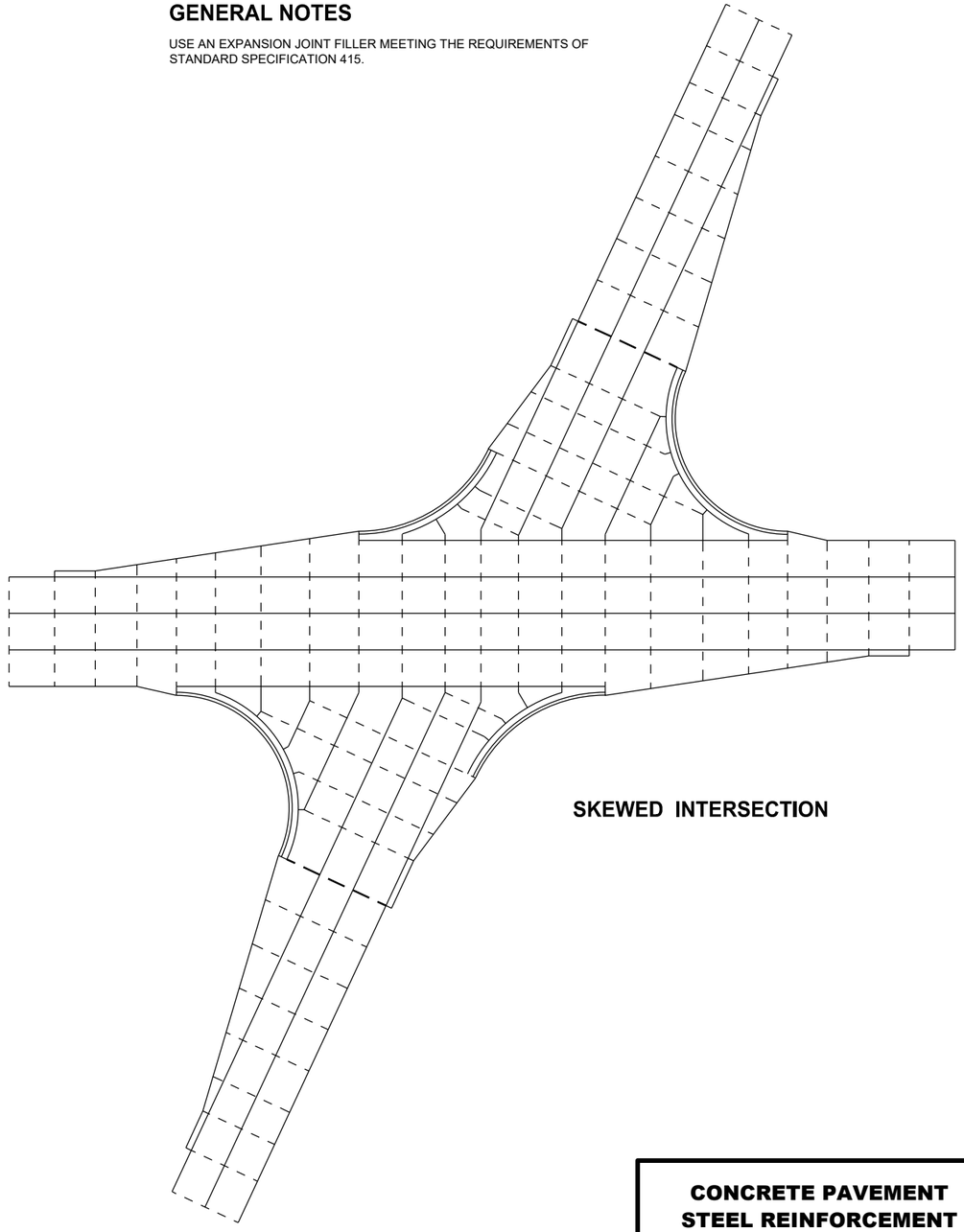
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

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



SKEWED INTERSECTION

6

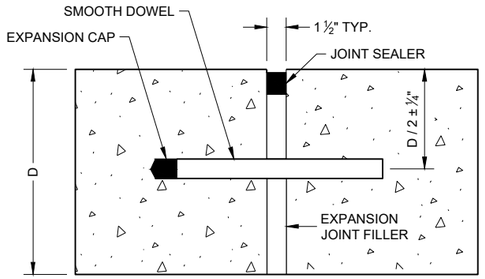
SDD 13C18 - 08b

CONCRETE PAVEMENT STEEL REINFORCEMENT

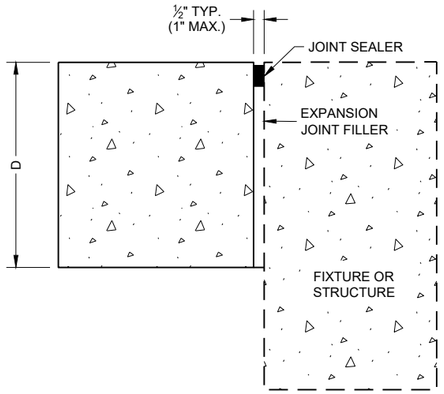
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

SDD 13C18 - 08b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

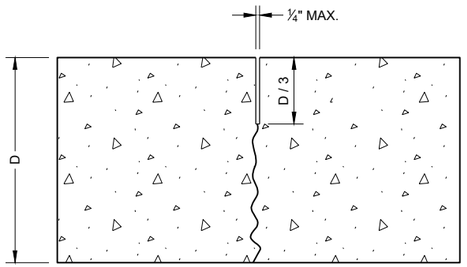
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

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

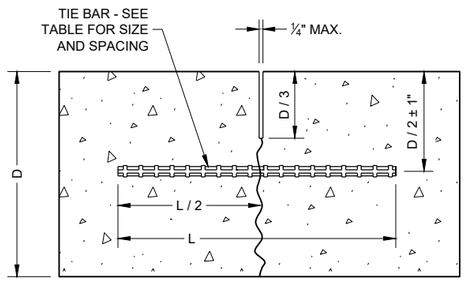
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

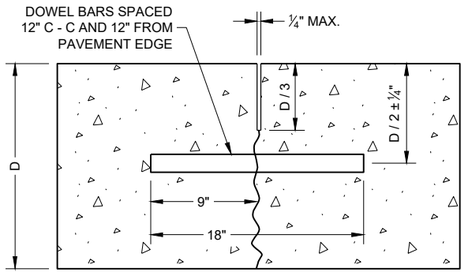
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



UNDOWELED TRANSVERSE

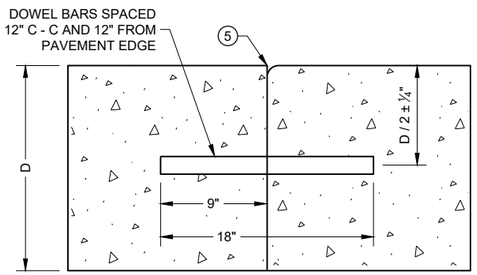


TIED LONGITUDINAL

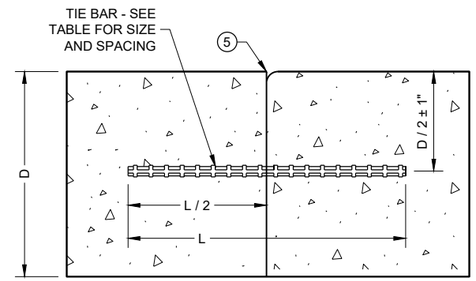


DOWELED TRANSVERSE

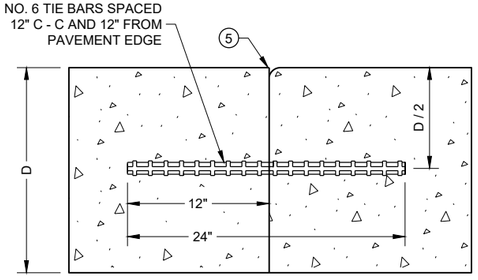
CONTRACTION JOINTS (2)



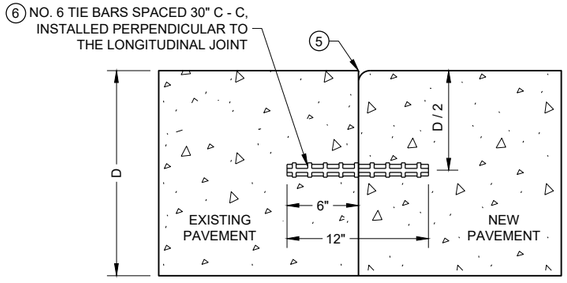
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



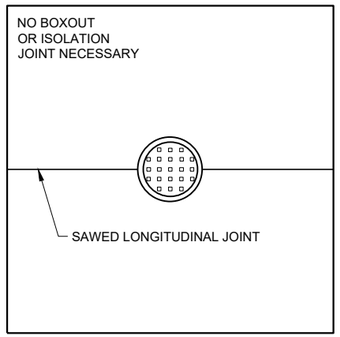
TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



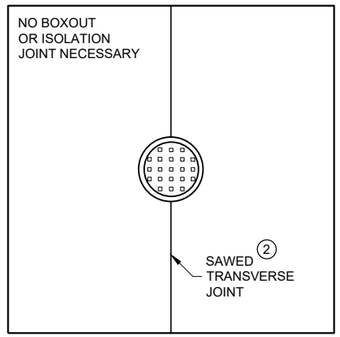
TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS (4)

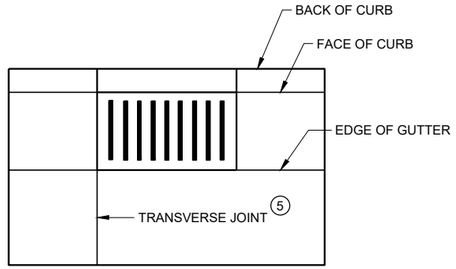
CONCRETE PAVEMENT JOINT TYPES



MANHOLE WITH LONGITUDINAL JOINT



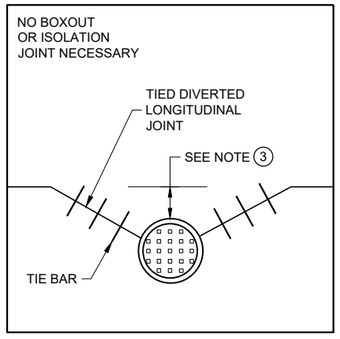
MANHOLE WITH TRANSVERSE JOINT



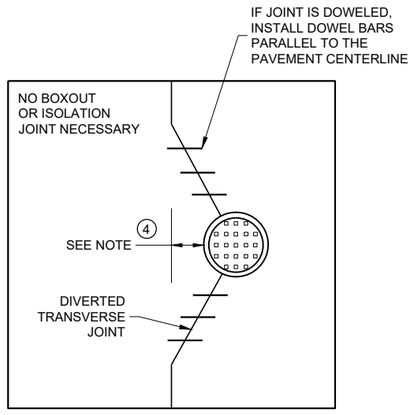
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

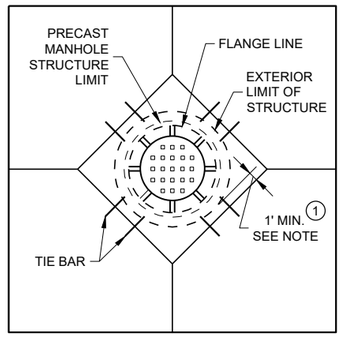
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

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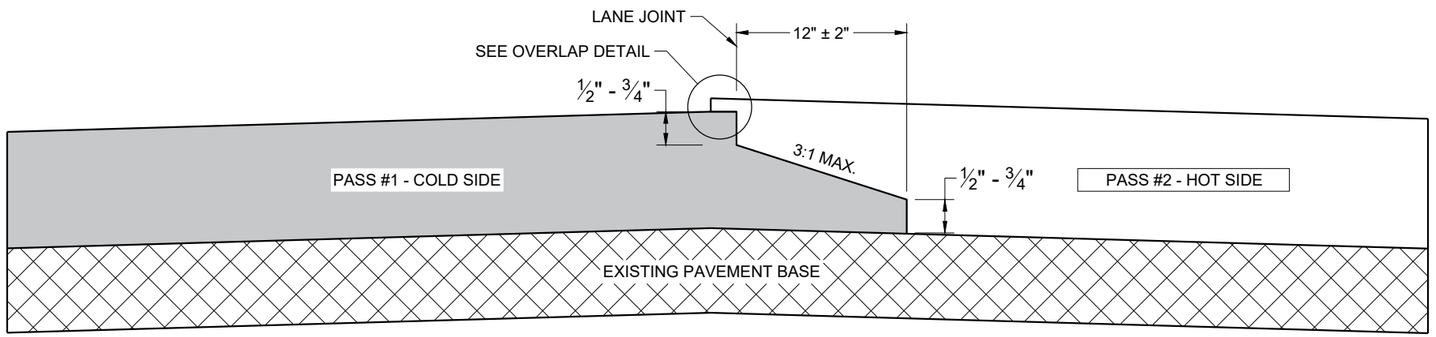
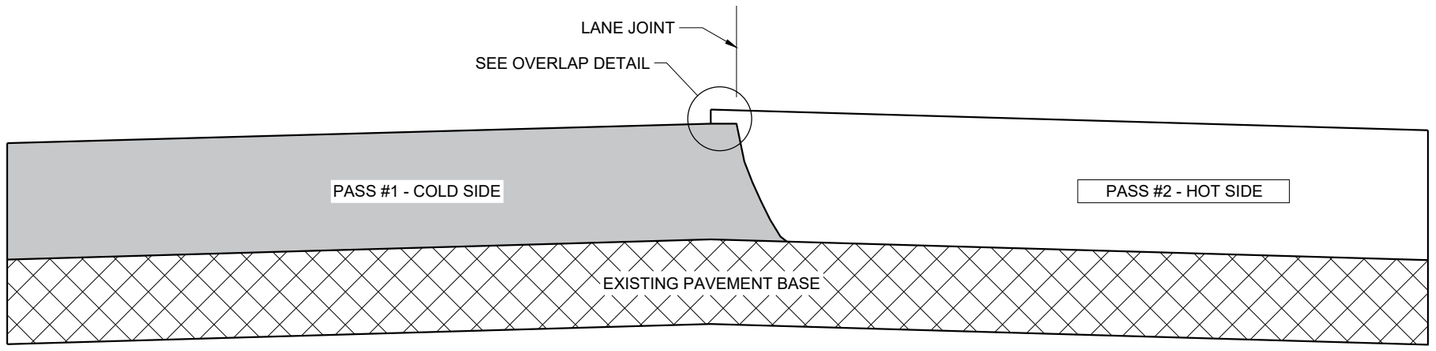
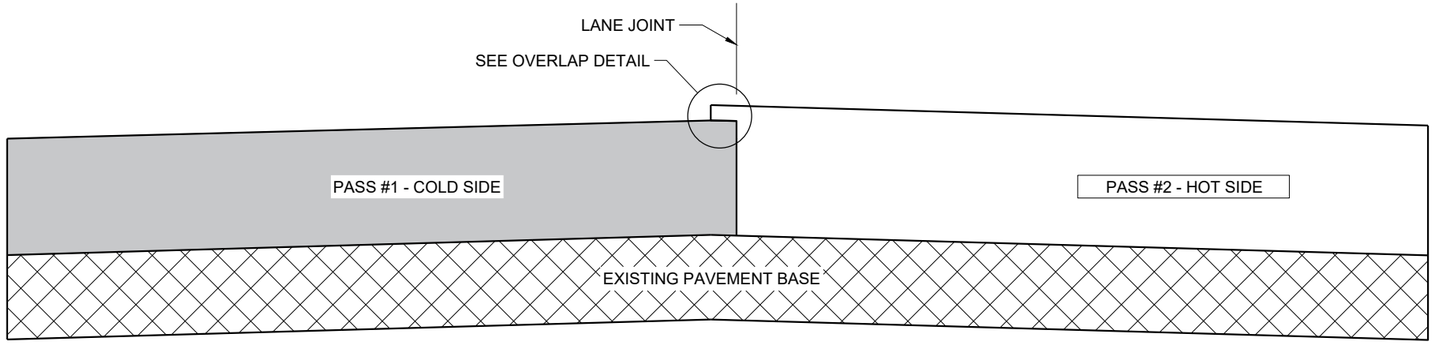
SDD 13C18 - 08d



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

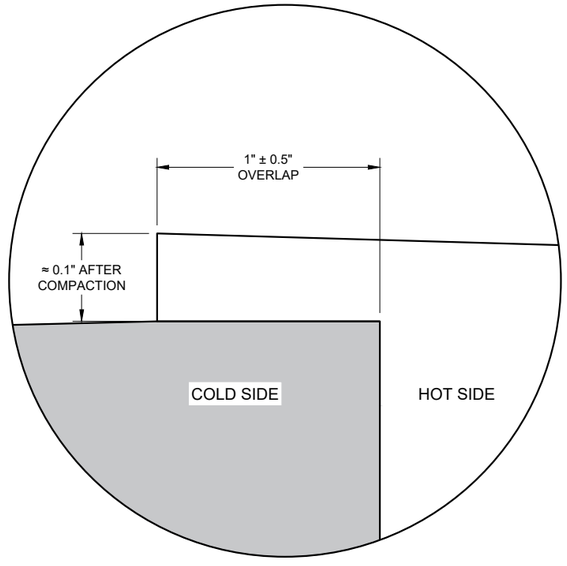
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

SDD 13C19 - 03

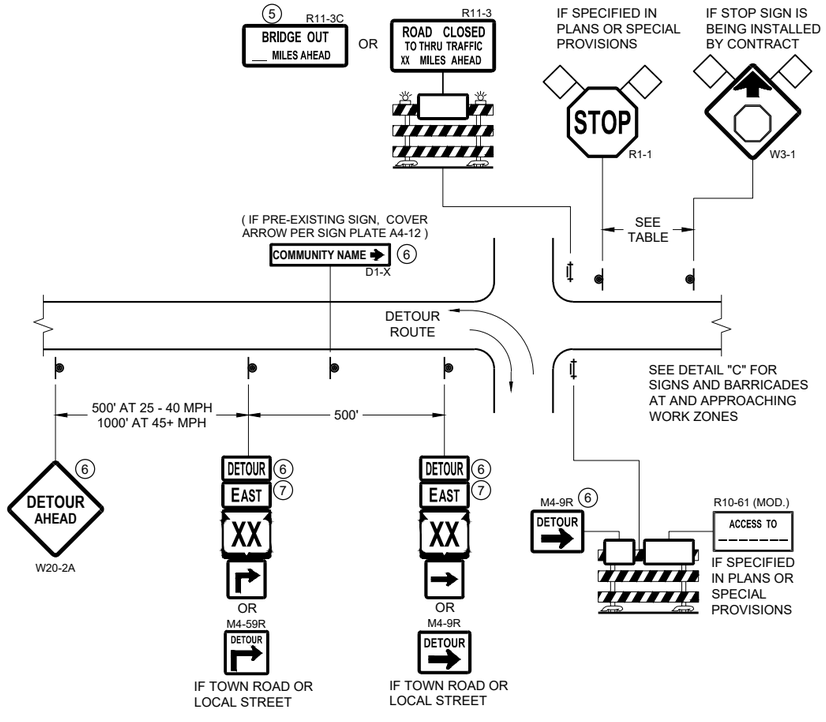
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

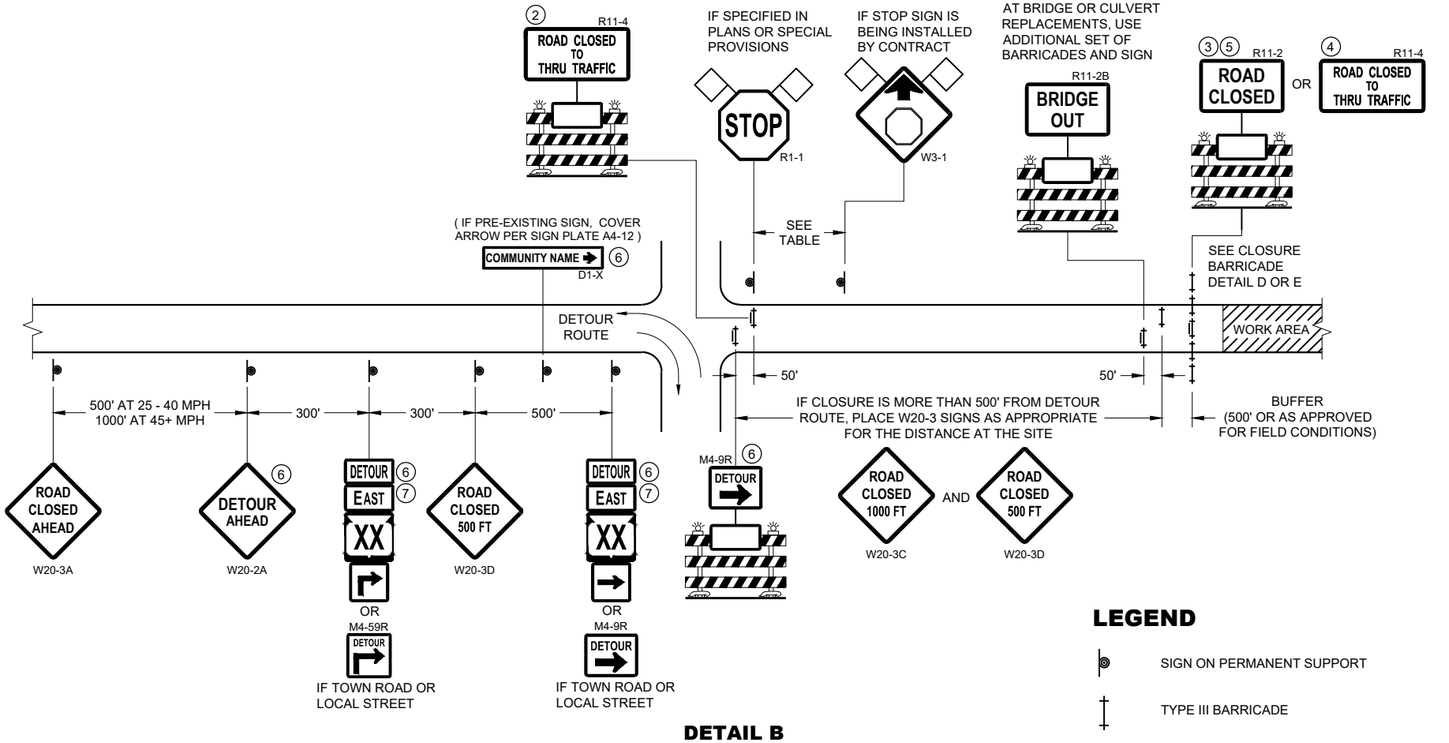
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



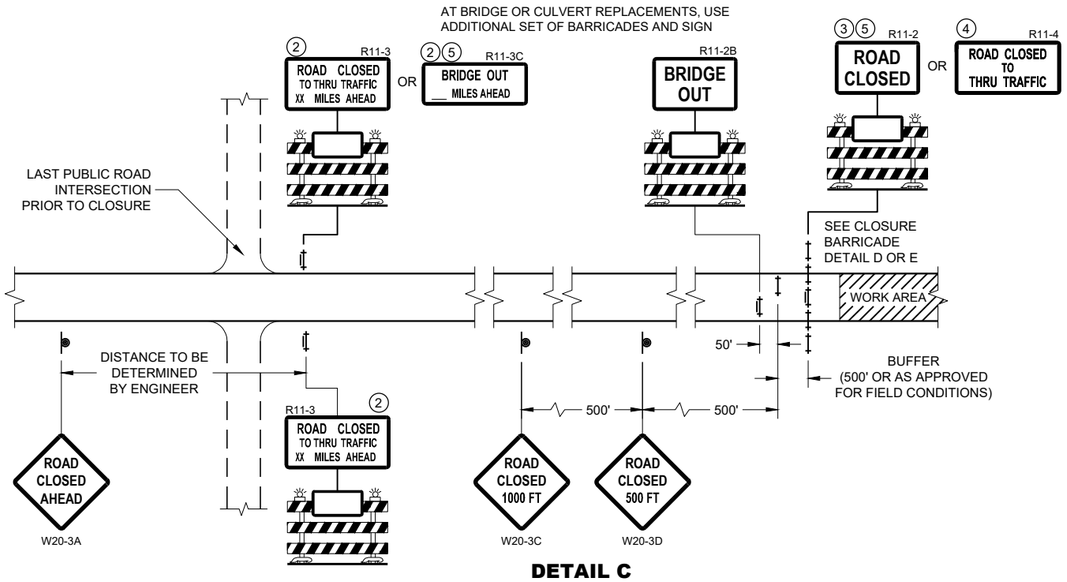
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

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SDD 15C02 - 09a

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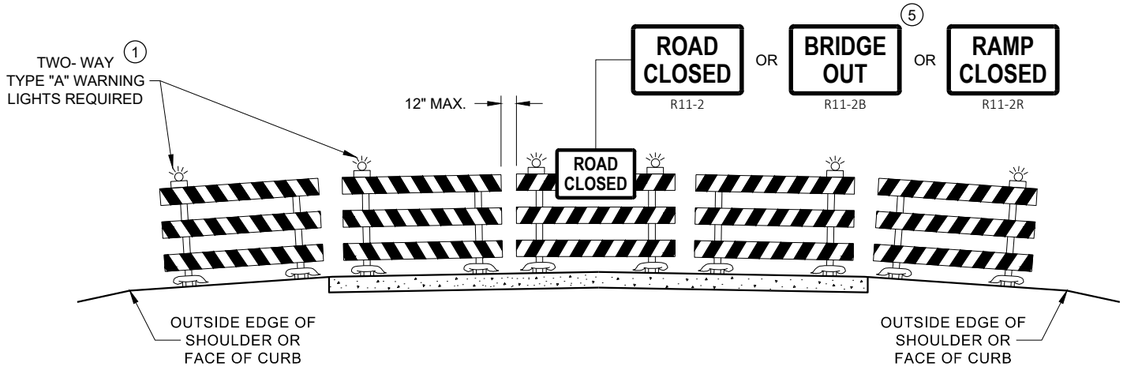
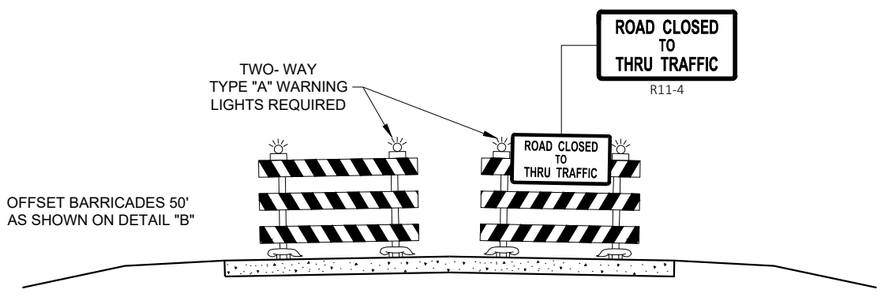
SDD 15C02 - 09a



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
FHWA

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SDD 15C02 - 09b

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SDD 15C02 - 09b

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 / EAST — M4 - 8, 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.

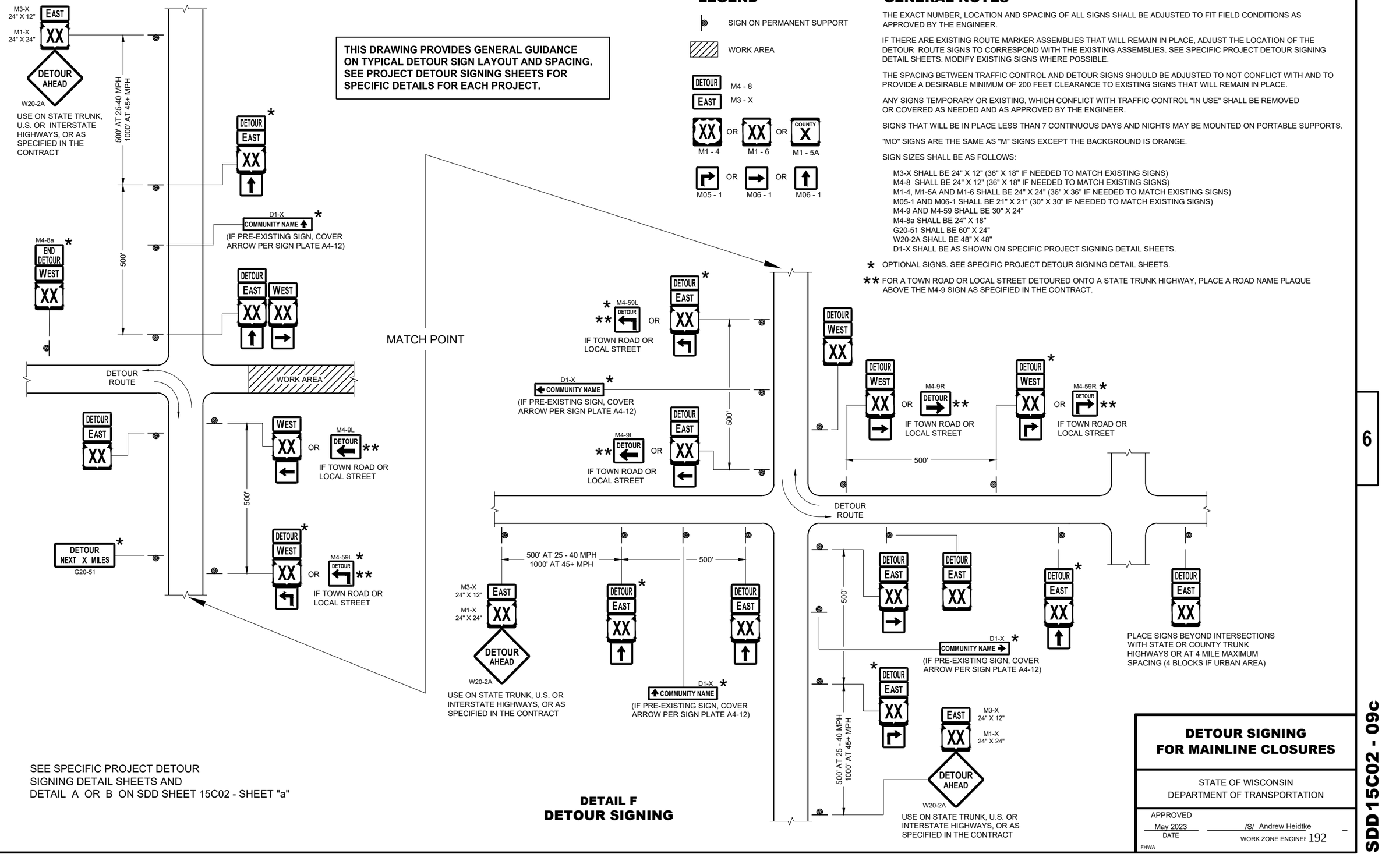
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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



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

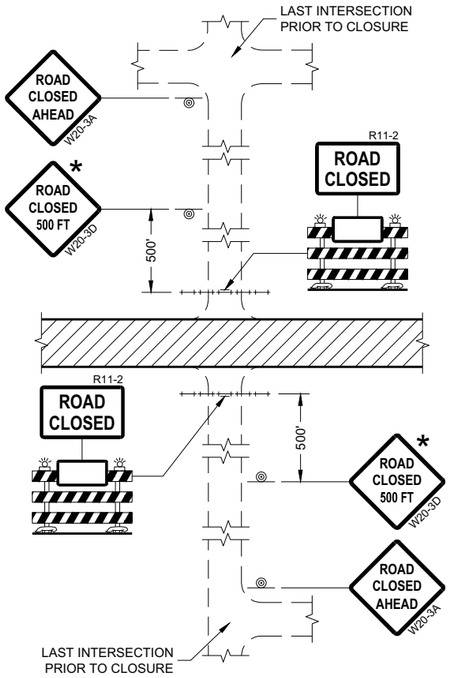
APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

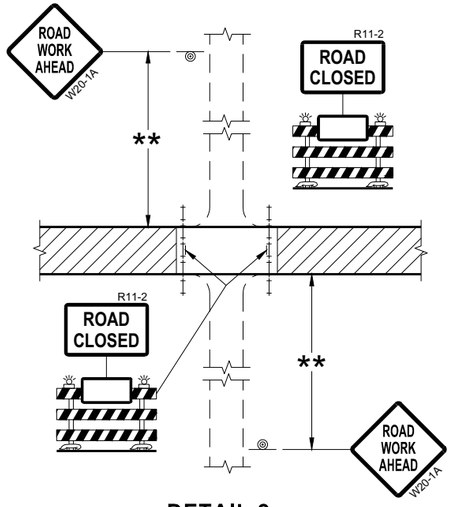
FHWA

6

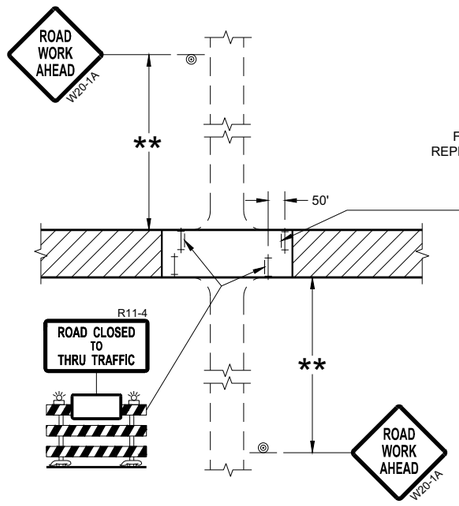
SDD 15C02 - 09c



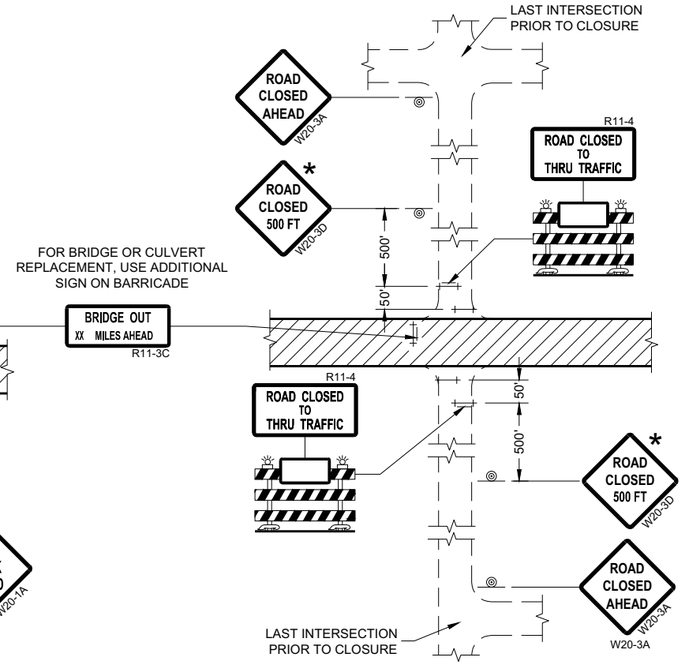
DETAIL 1
(NO ACCESS TO PROJECT)



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 ENGINEER

FHWA

6

SDD 15C03 - 05

6

SDD 15C03 - 05

GENERAL NOTES

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

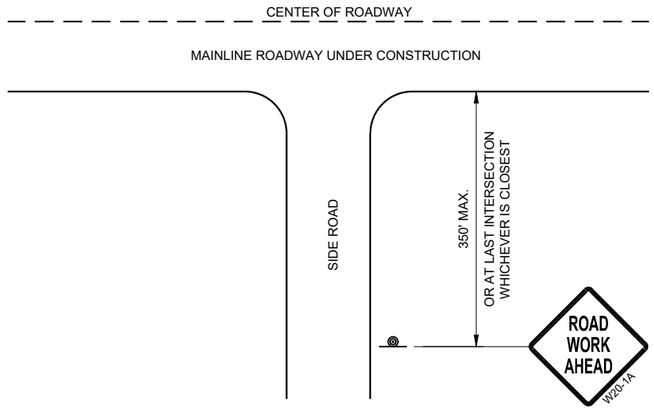
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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



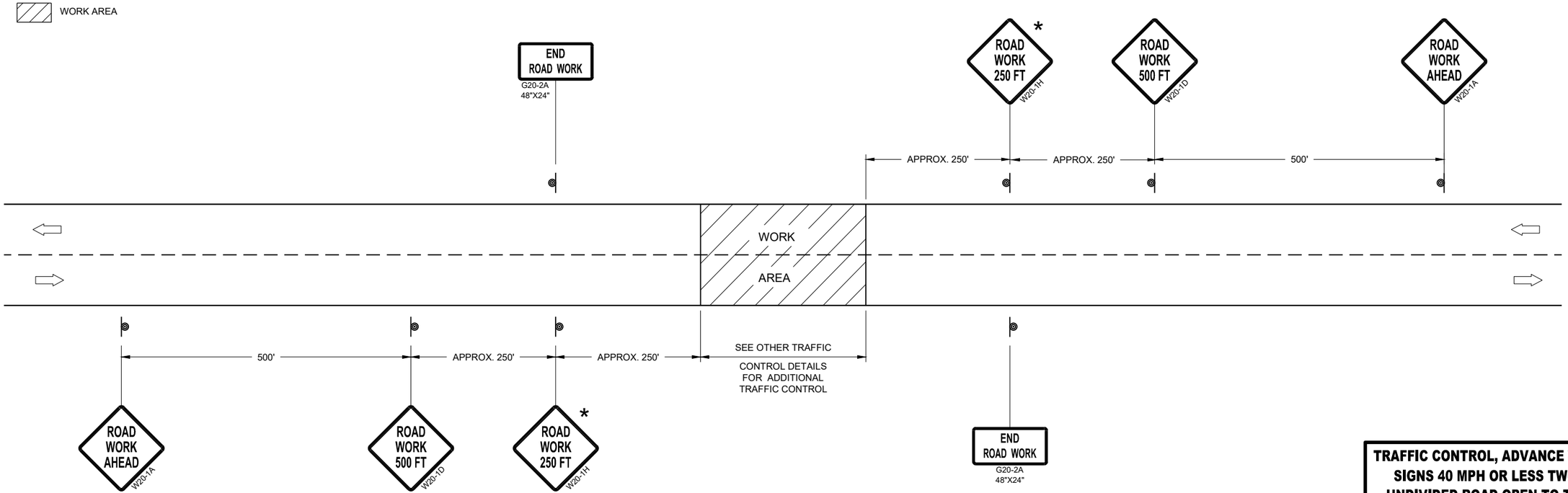
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

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

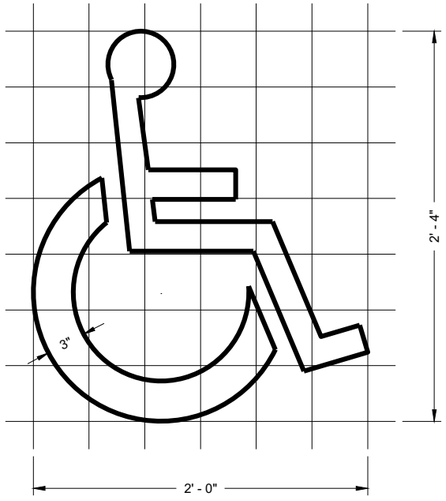
FHWA

6

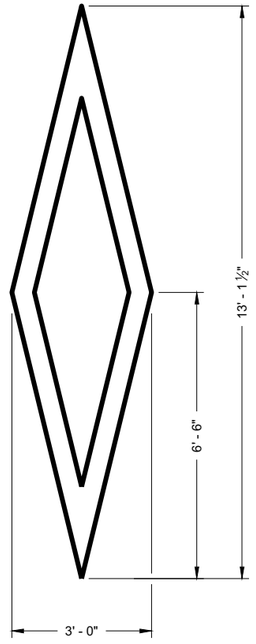
SDD 15C05 - 05

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

6

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SDD 15C07 - 15a

SDD 15C07 - 15a

PAVEMENT MARKING SYMBOLS

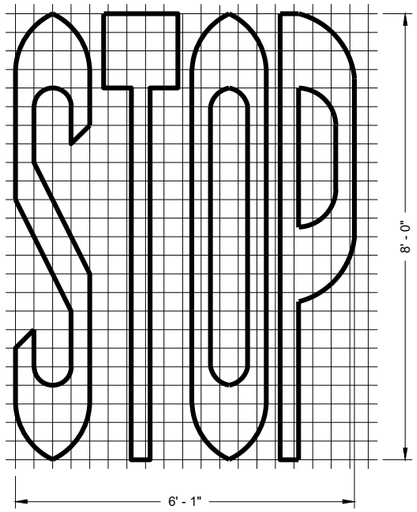
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

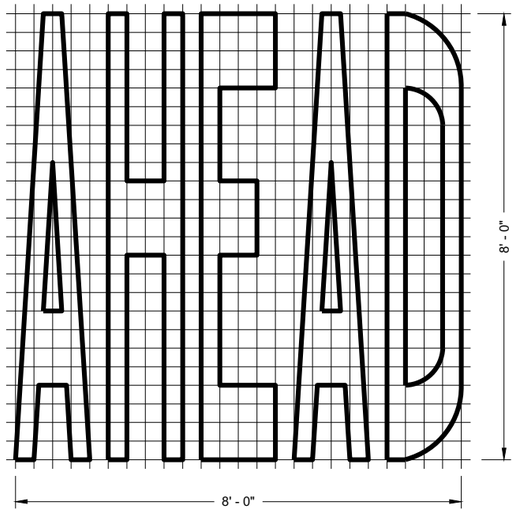
APPROVED

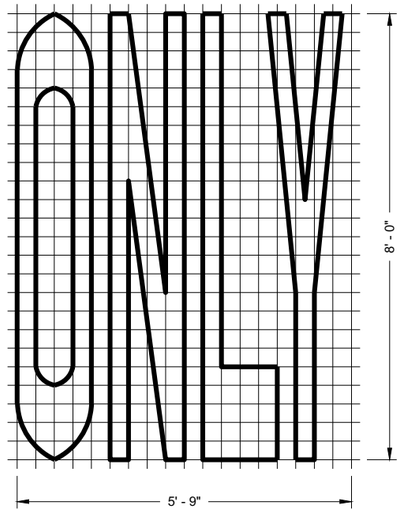
November 2019
DATE

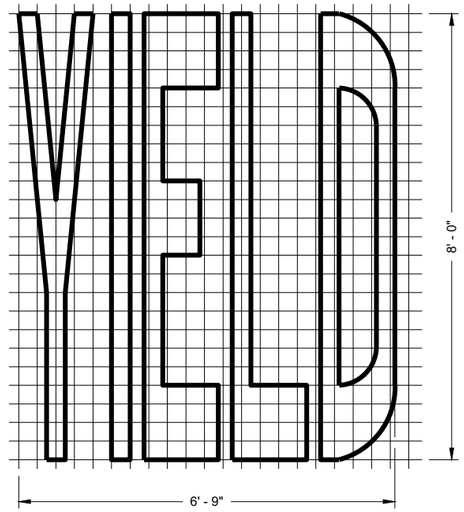
/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

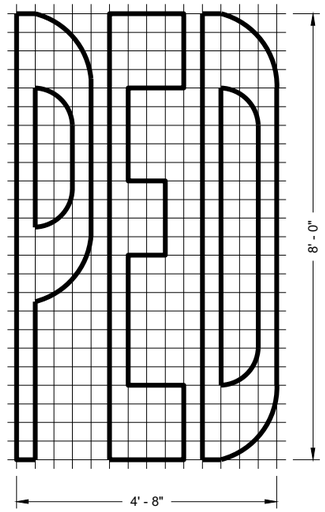
FHWA

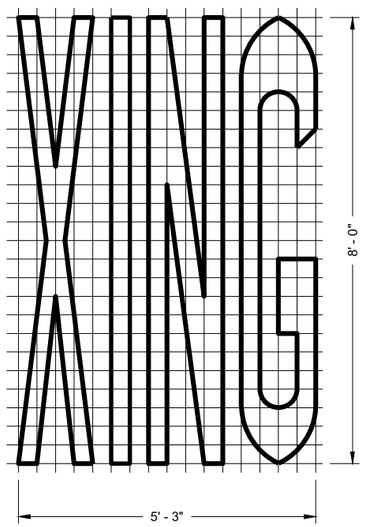


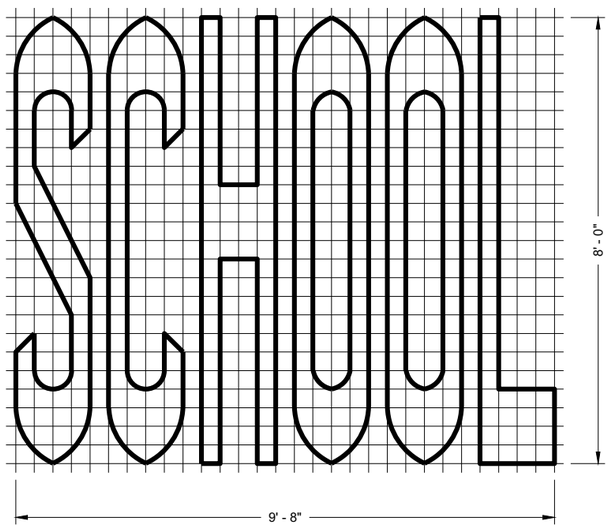




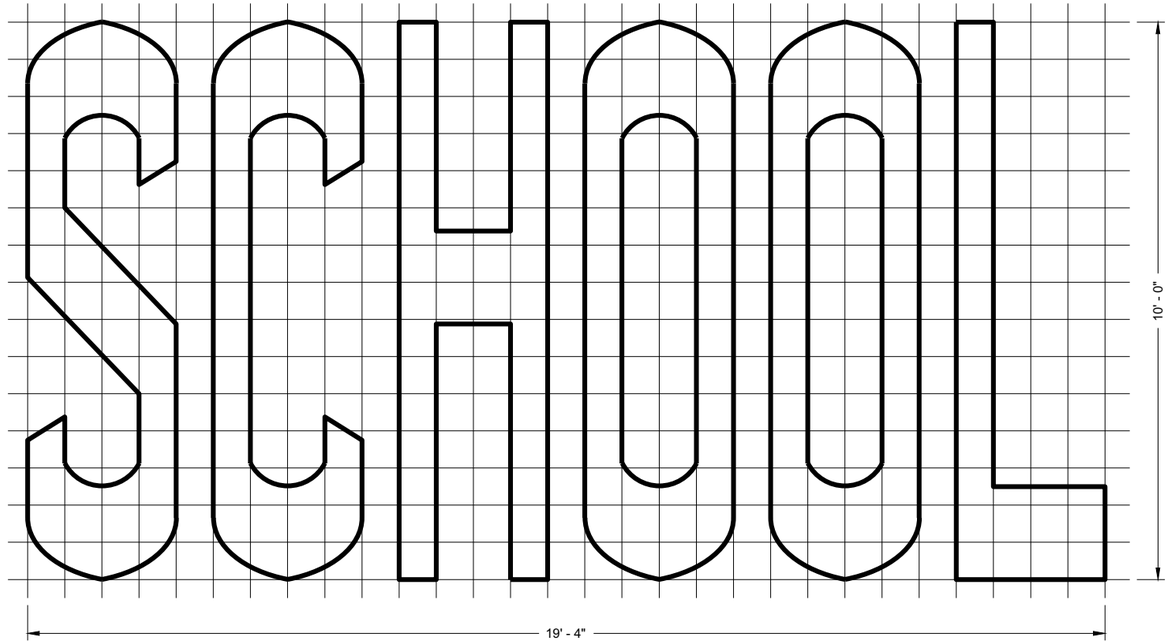








SINGLE LANE



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 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

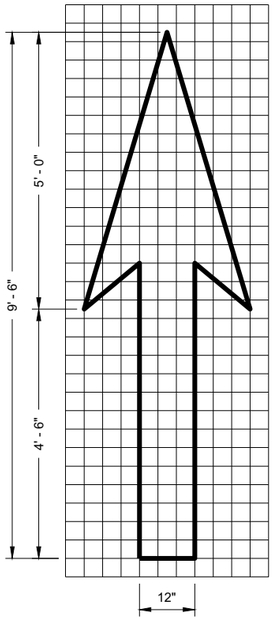
SDD 15C07 - 15b

6

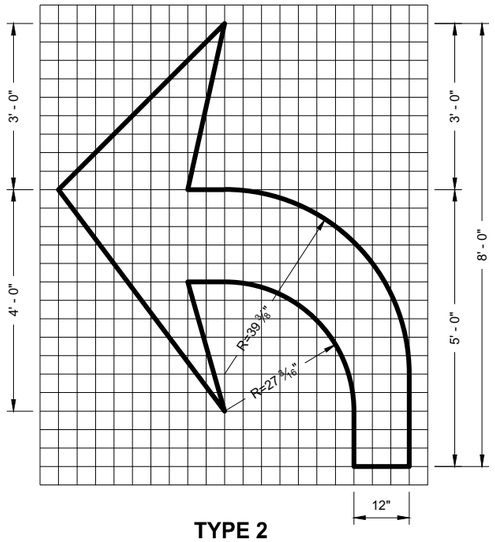
SDD 15C07 - 15b

GENERAL NOTES

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



TYPE 1



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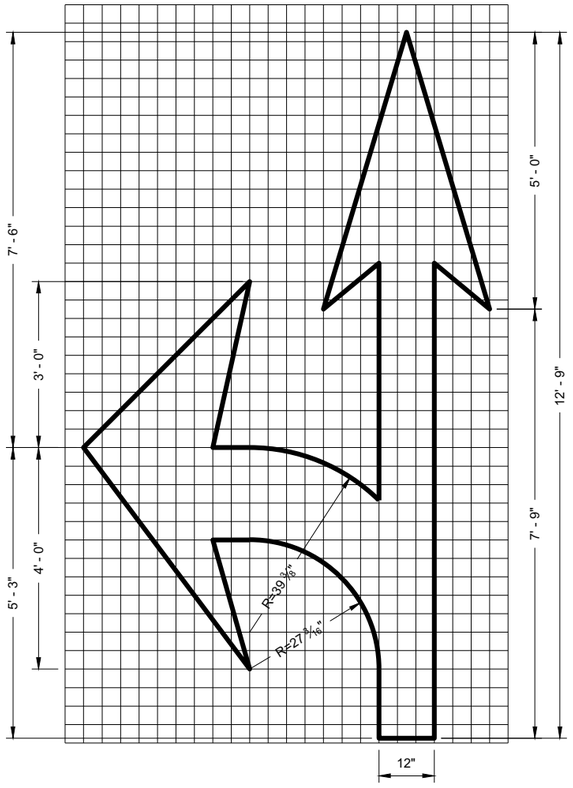
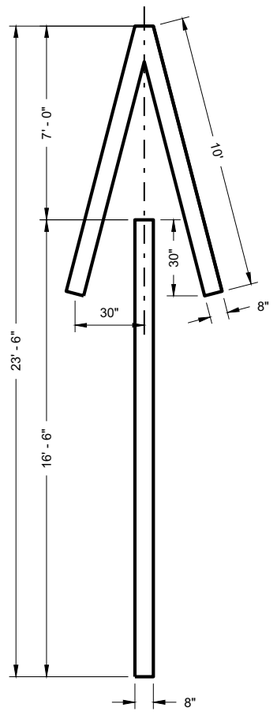
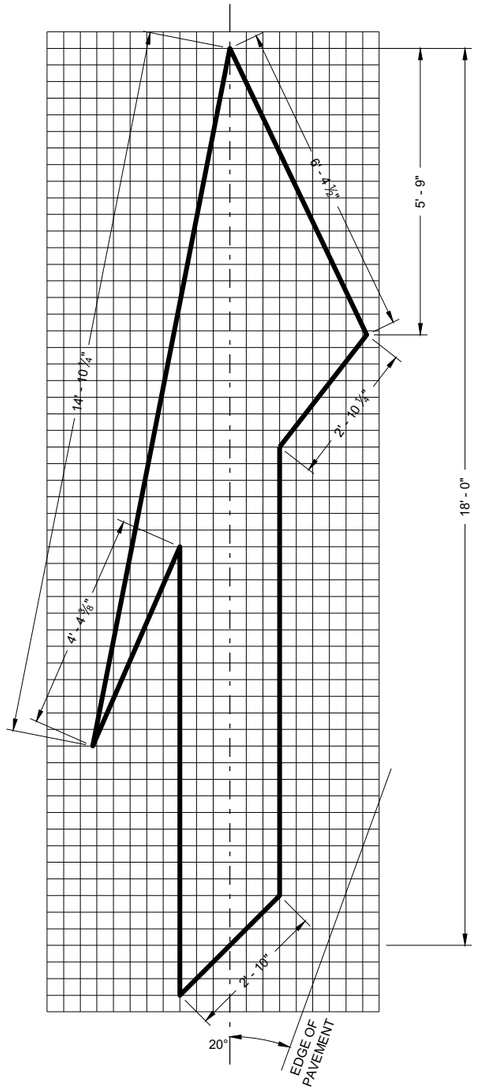


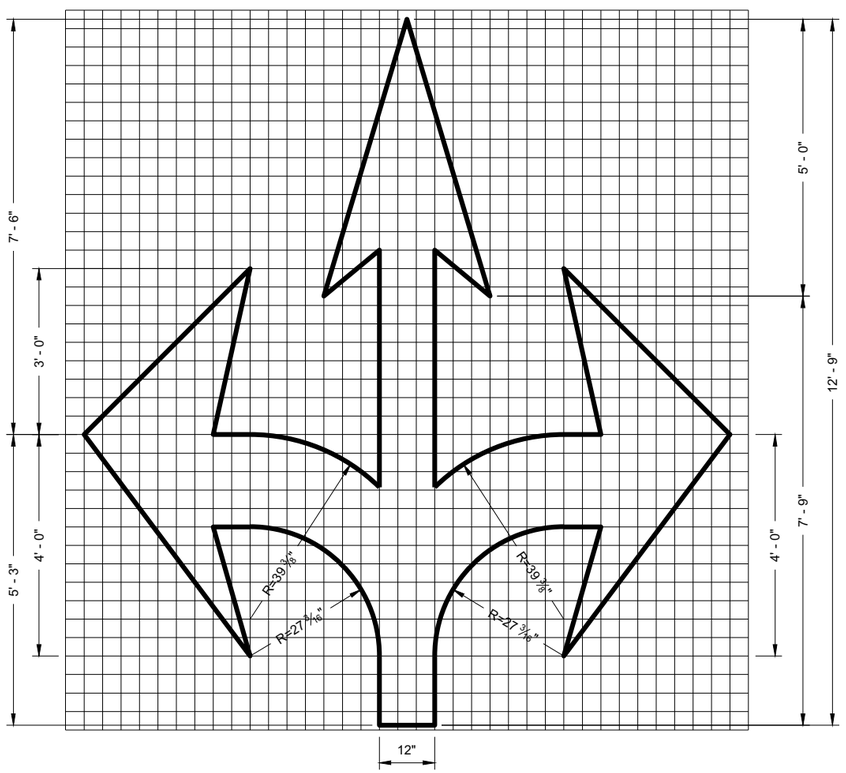
TYPE 3



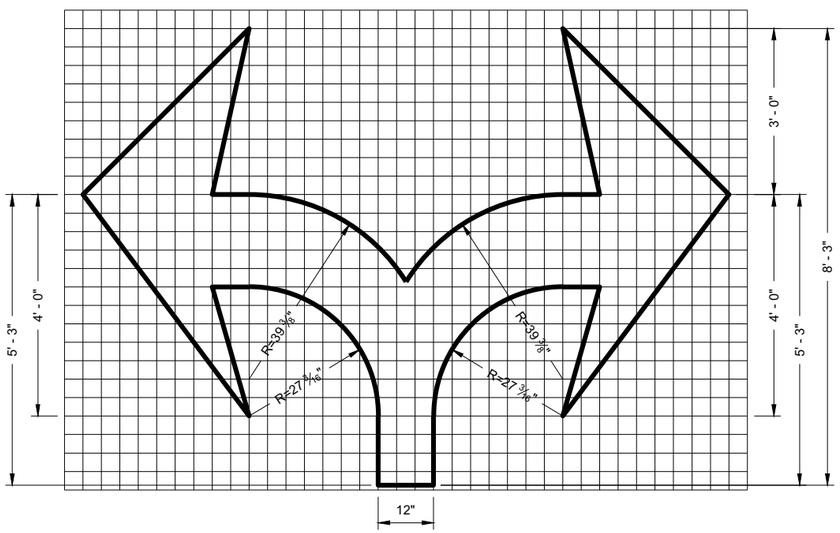
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

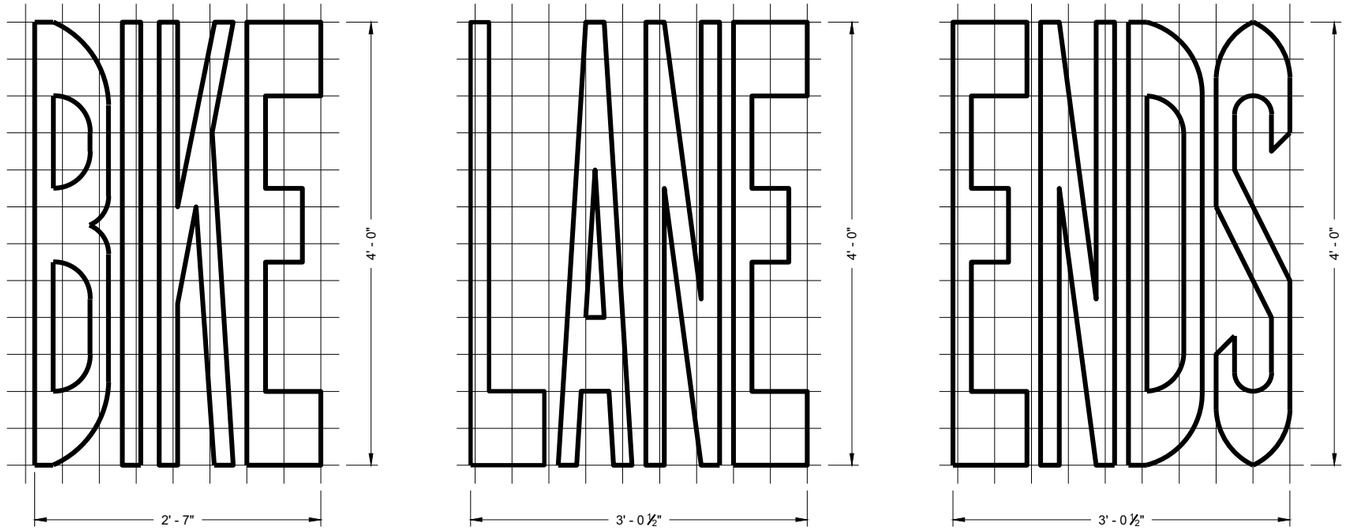
APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

SDD 15C07 - 15c

SDD 15C07 - 15c

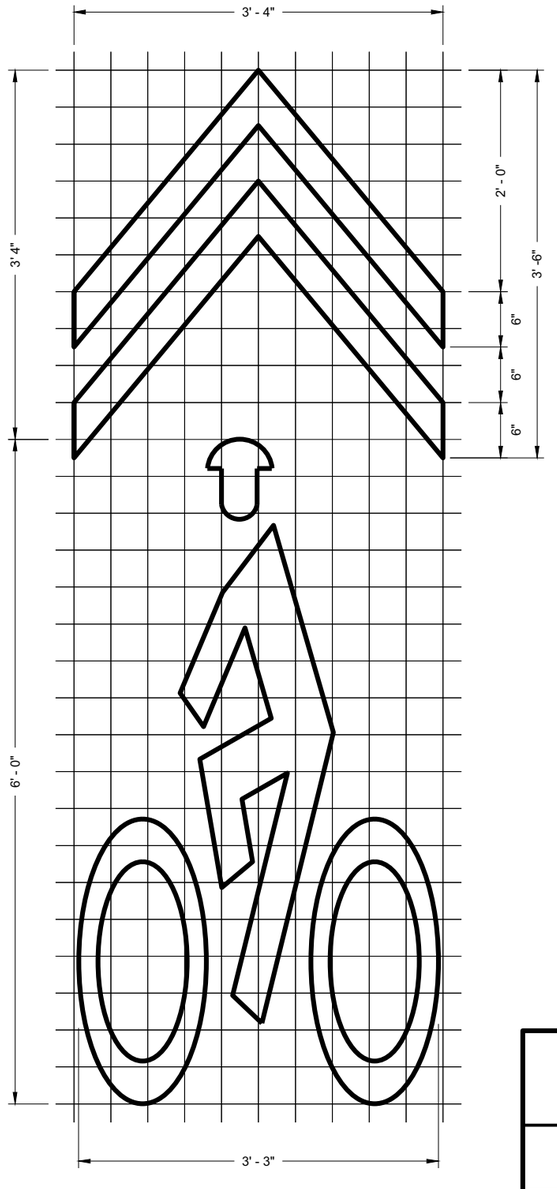
SDD 15C7-e Pavement Marking For Bike Lanes

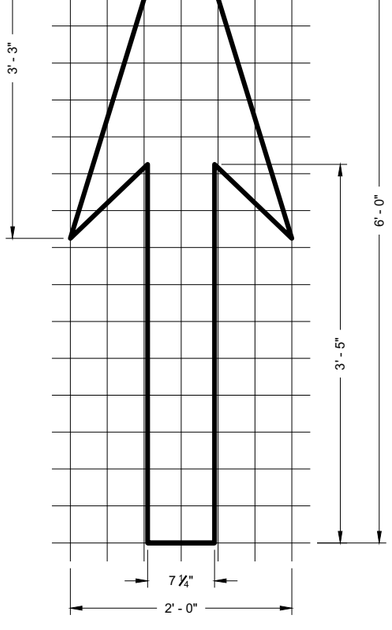


BIKE LANE WORDS

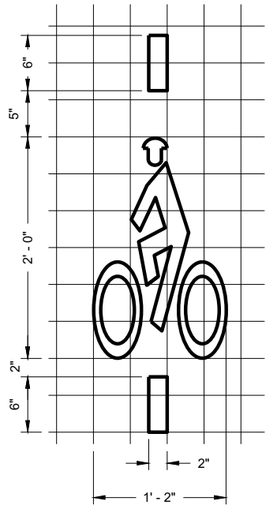
GENERAL NOTES

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.

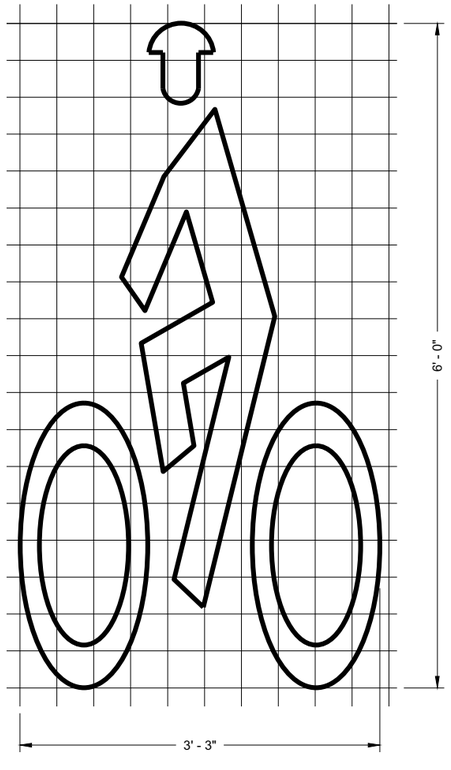




BIKE LANE ARROW



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 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15C07 - 15e

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

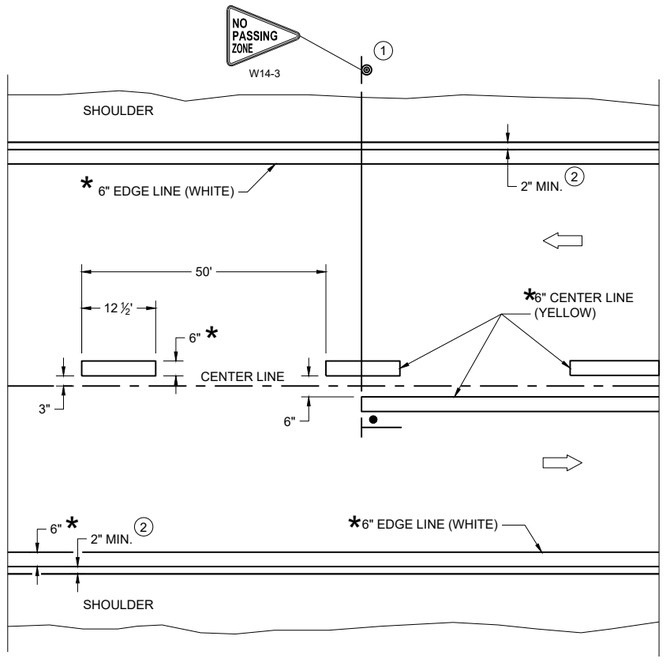
LEGEND

"T" MARKING

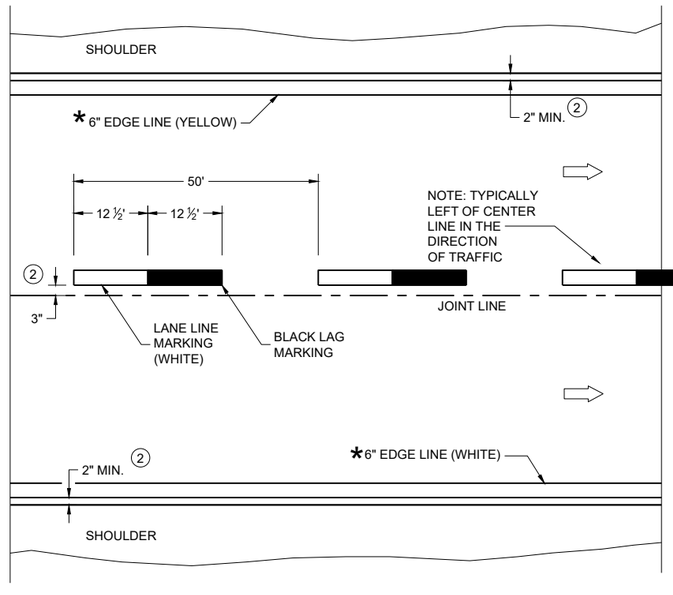
SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

SDD 15C08-23a

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6

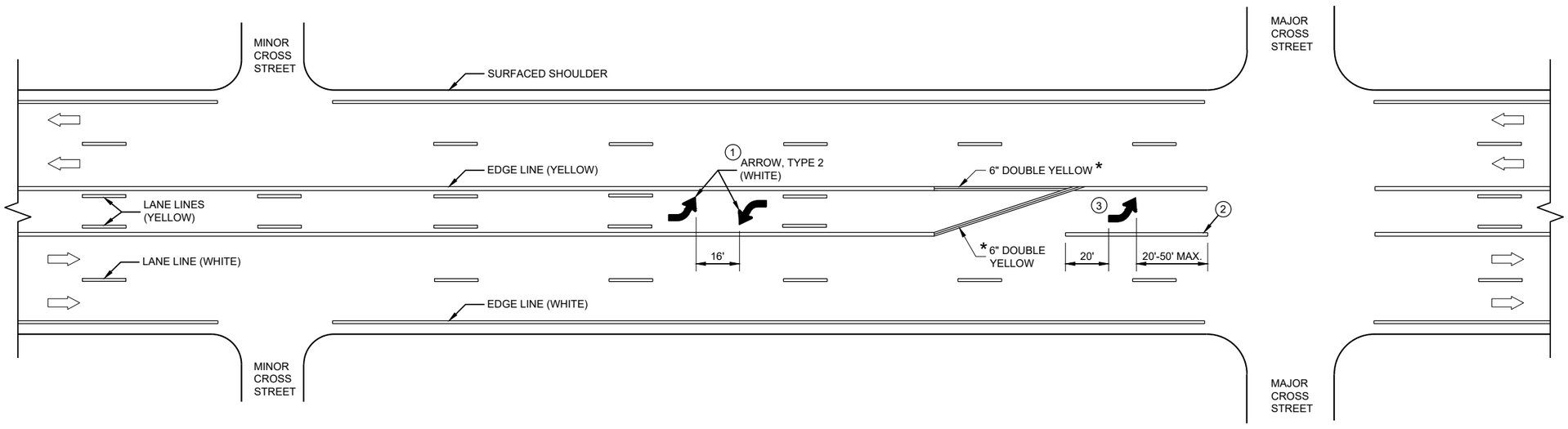
SDD 15C08-23a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 10" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY LEFT TURN LANE

6

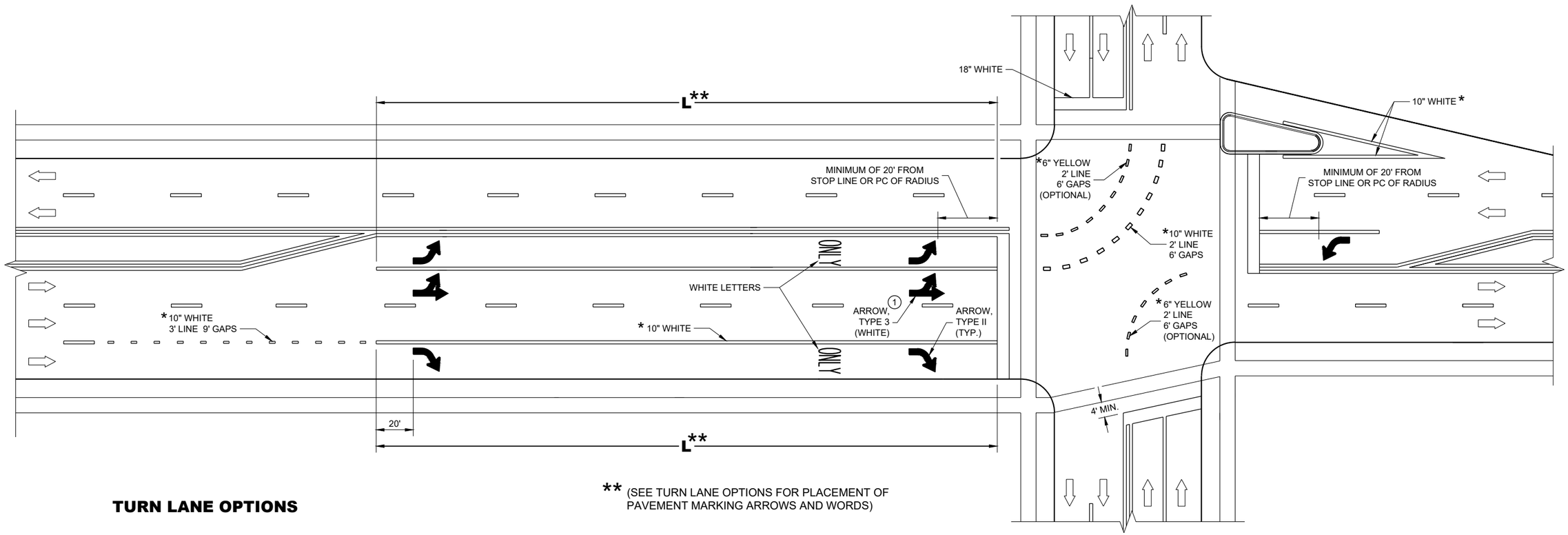
SDD 15C08-23c

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA· 200

6

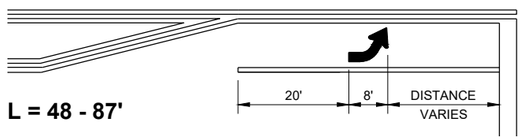
SDD 15C08-23c



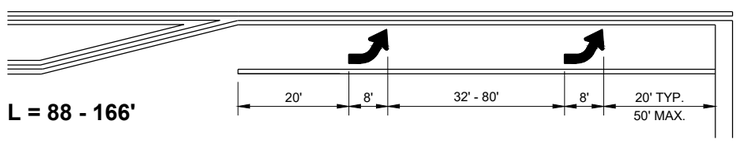
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

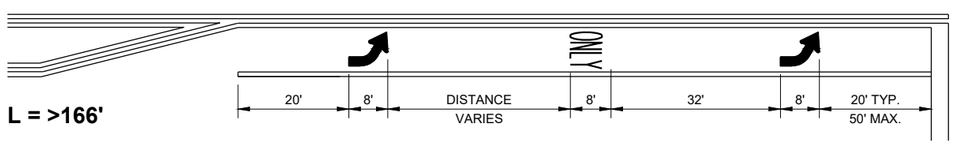
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 15C08-23d

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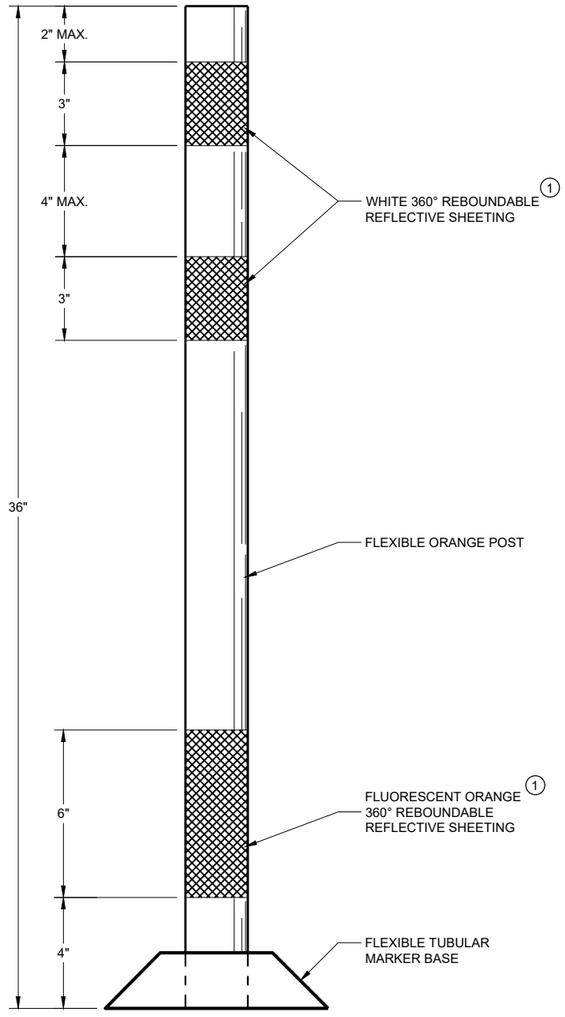

FLEXIBLE TUBULAR MARKER POST WORK ZONE

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

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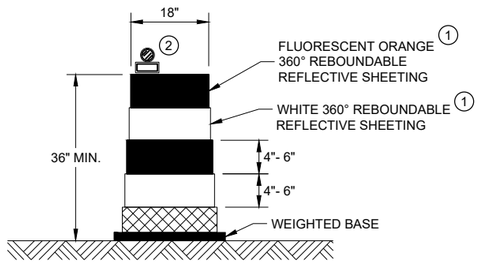
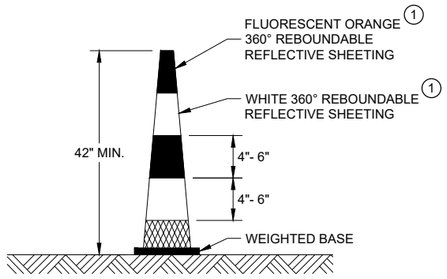
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

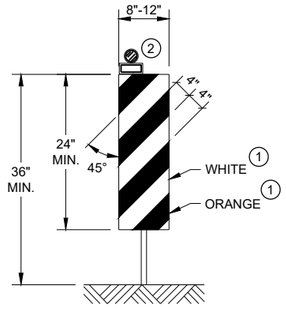
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

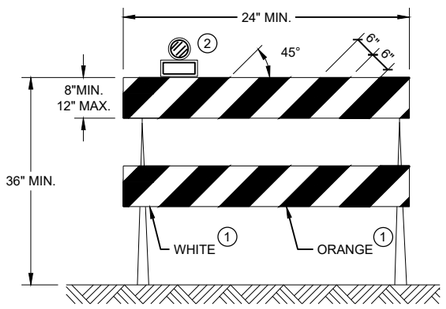
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



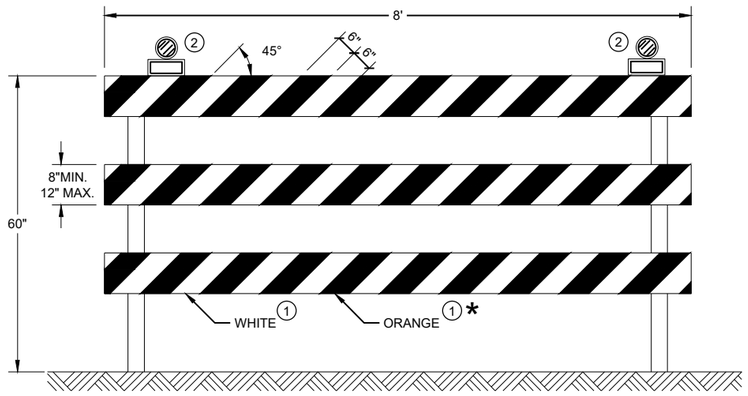
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

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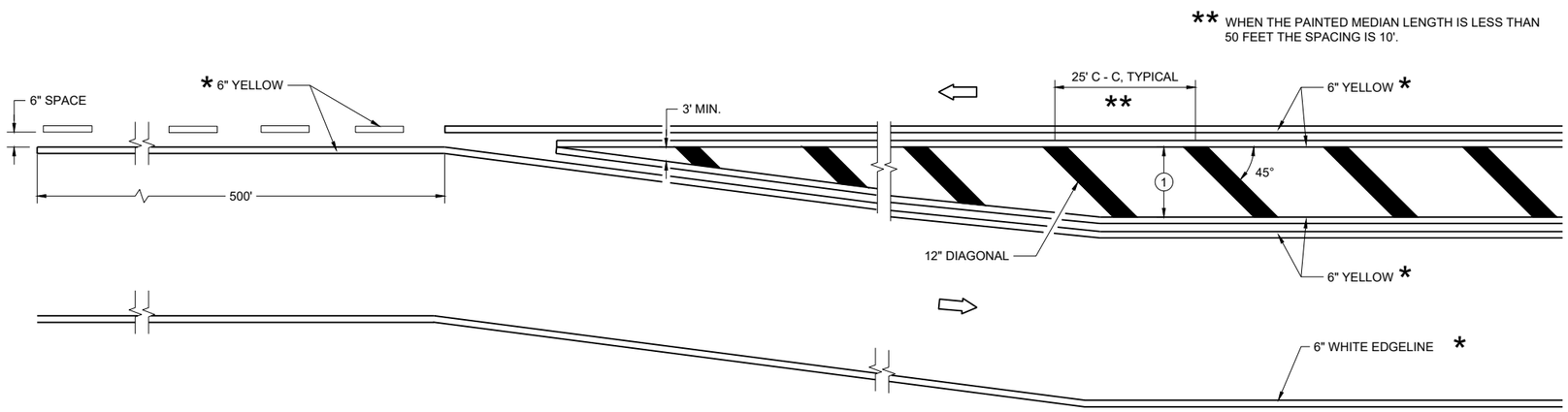


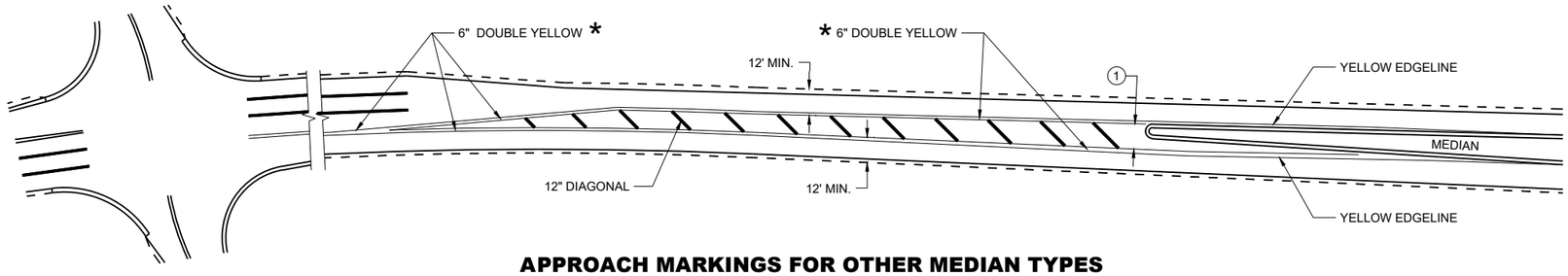
MEDIAN ISLAND DETAIL

GENERAL NOTES

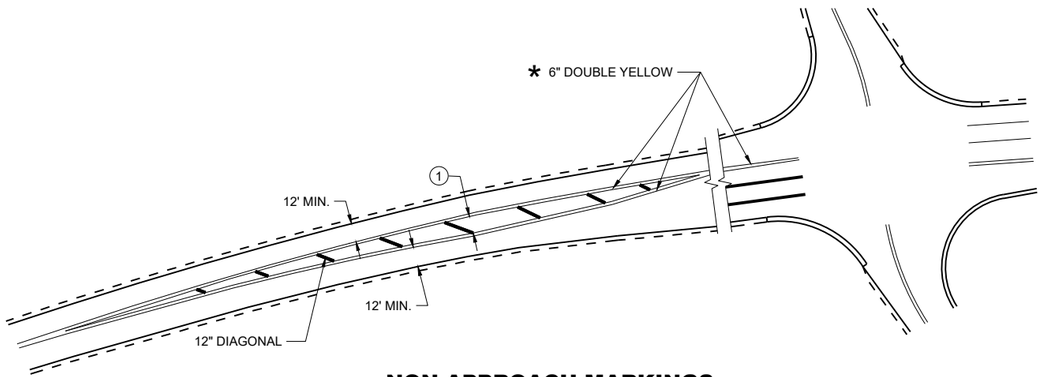
(1) DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

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SDD 15C18-09a

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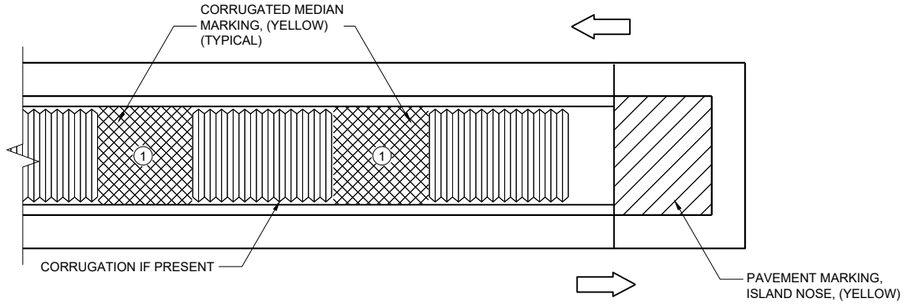
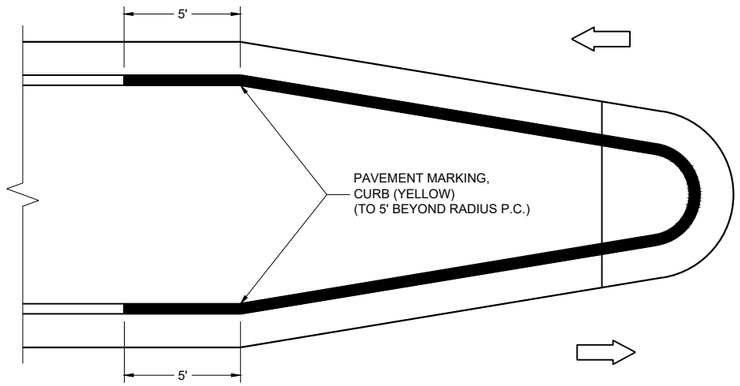
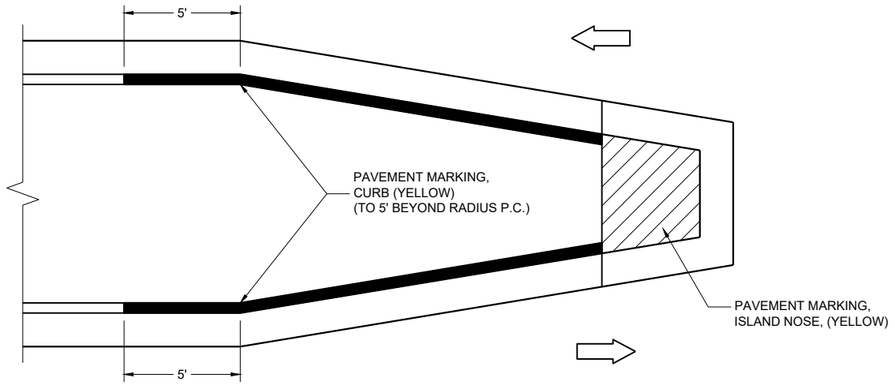


MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

**TYPICAL PLACEMENT OF
PAVEMENT MARKING ON MEDIAN ISLANDS**

GENERAL NOTES

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

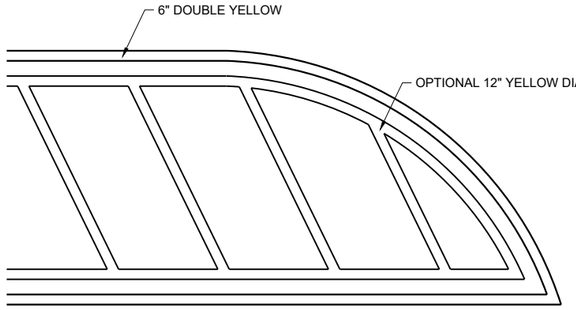
(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL



FLUSH MEDIAN ISLAND NOSE

**PAVEMENT MARKINGS,
MEDIAN ISLAND NOSE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

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REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED

GENERAL NOTES

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

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

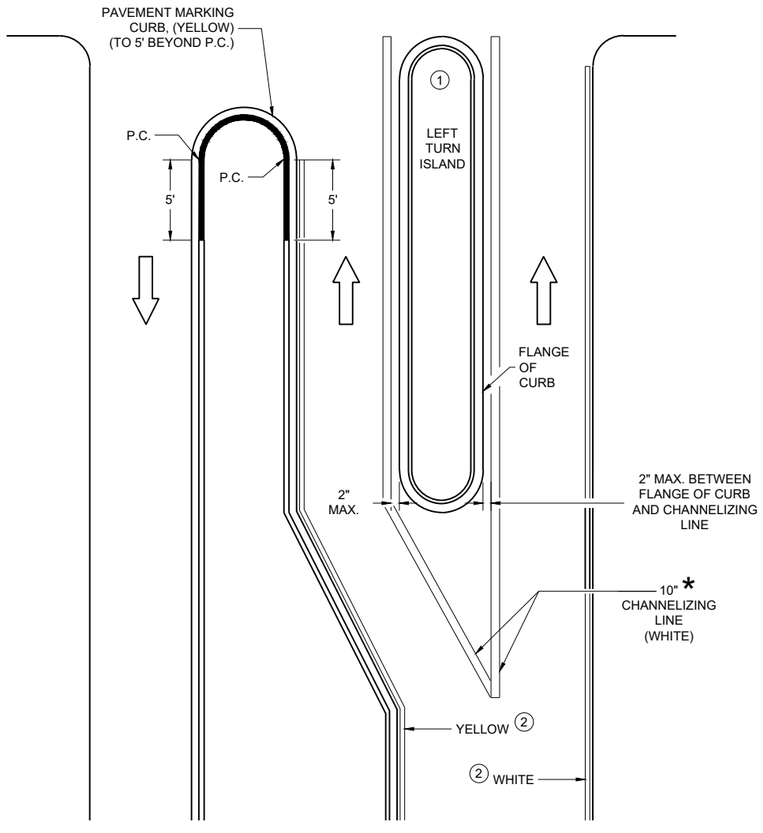
(1) MARK CURB NOSES YELLOW.

(2) MARK ACCORDING TO TABLE.

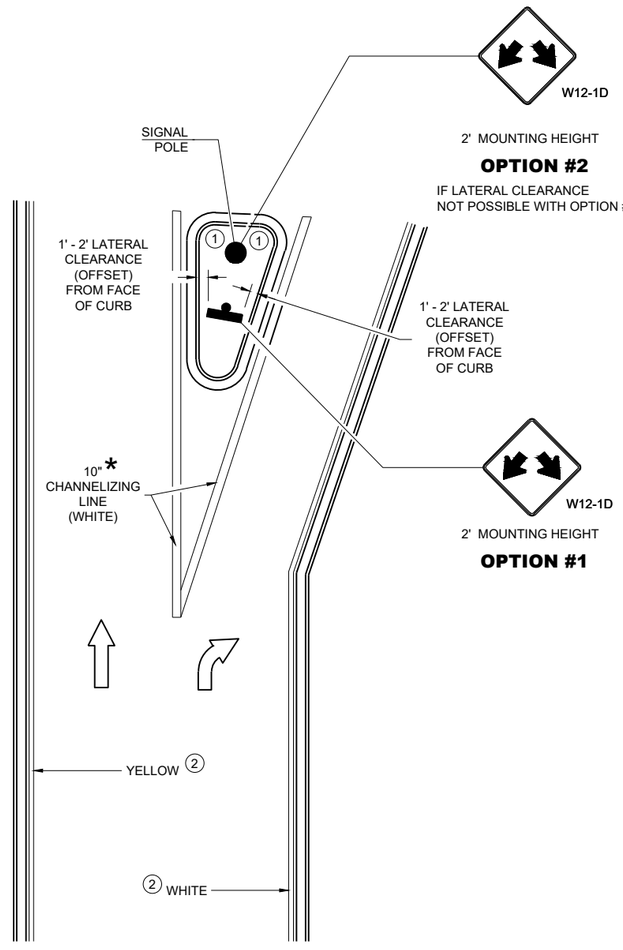
(3) CHEVRON MAY BE OMITTED IF LESS THAN 4" WIDE

DIRECTION OF TRAVEL

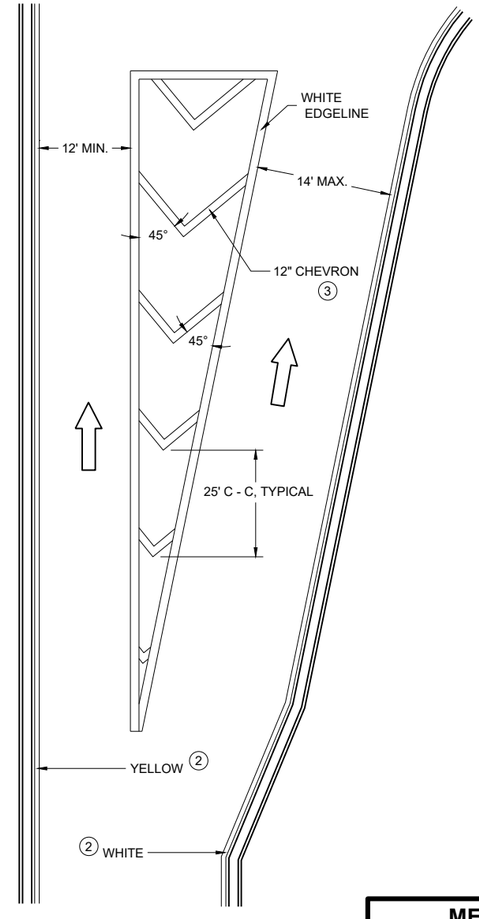
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



LEFT TURN & MEDIAN ISLAND



RIGHT TURN ISLAND



TURN LANE DETAIL

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024 — DATE
/S/ Jeannie Silver — Statewide Pavement Marking Engineer

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SDD 15C18-09c

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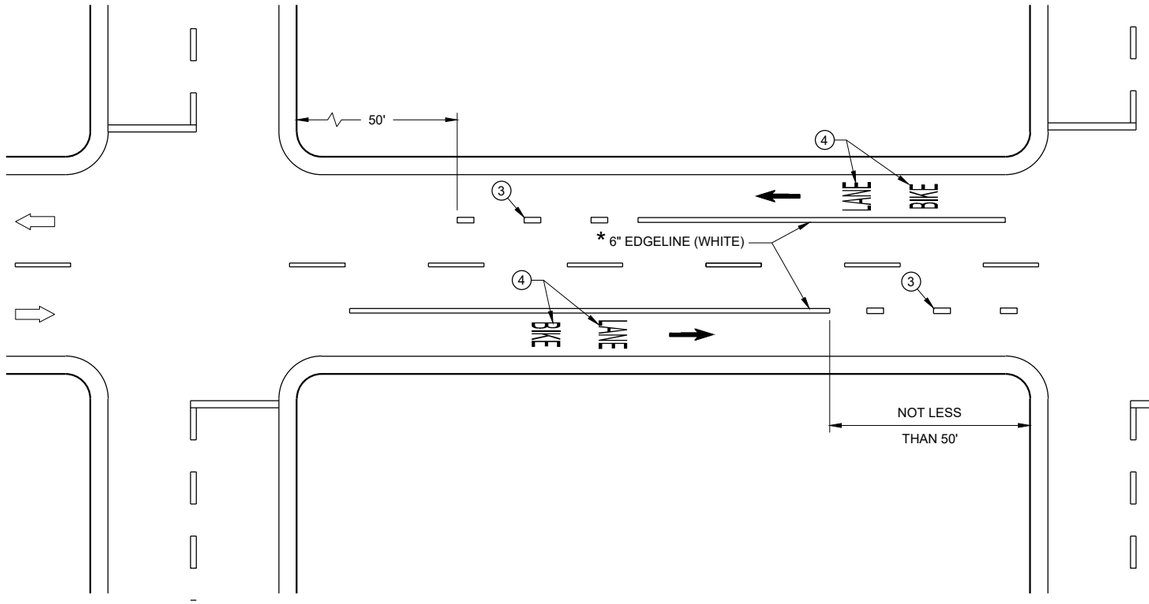
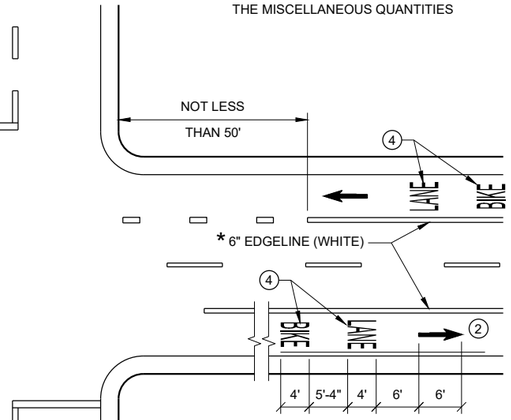




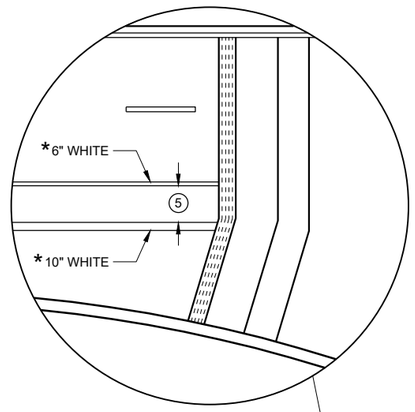
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

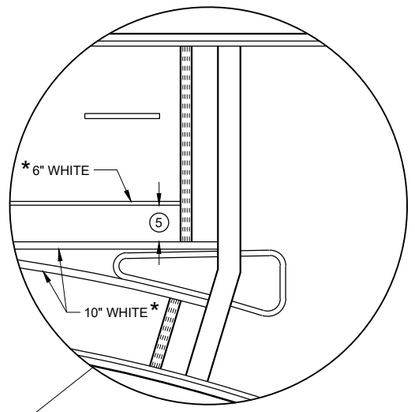
1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. MINIMUM OF ONE PER BLOCK. MAXIMUM OF 250 FEET.
3. DOTTED LINES (3' LINE, 9' GAP) SHOULD BE USED 50 FEET TO 200 FEET IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY 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

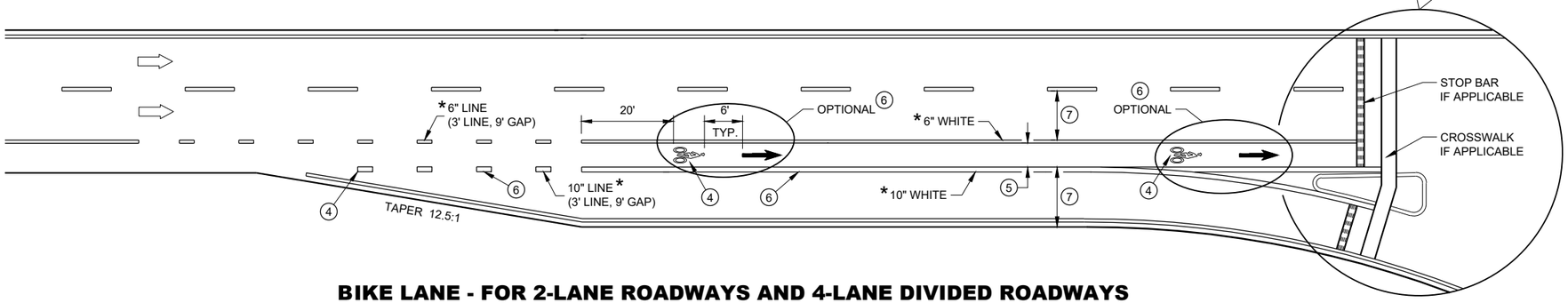
DESIGNATED BIKE LANE - NO PARKING



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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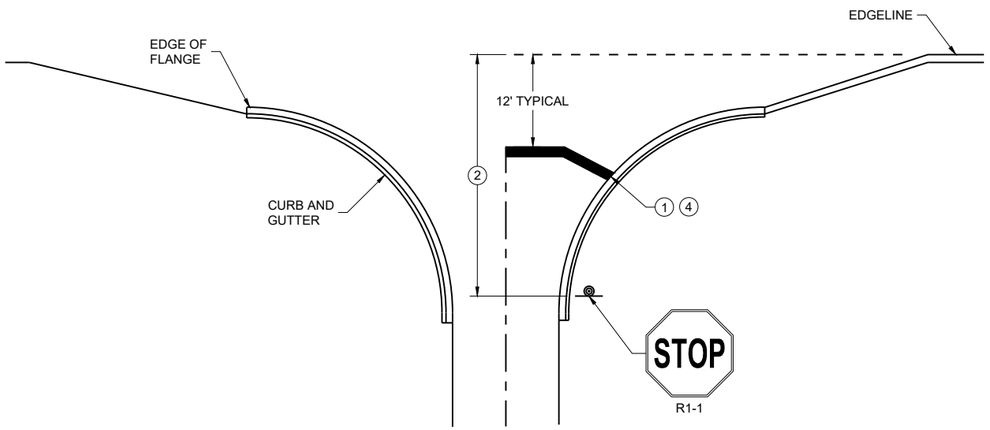
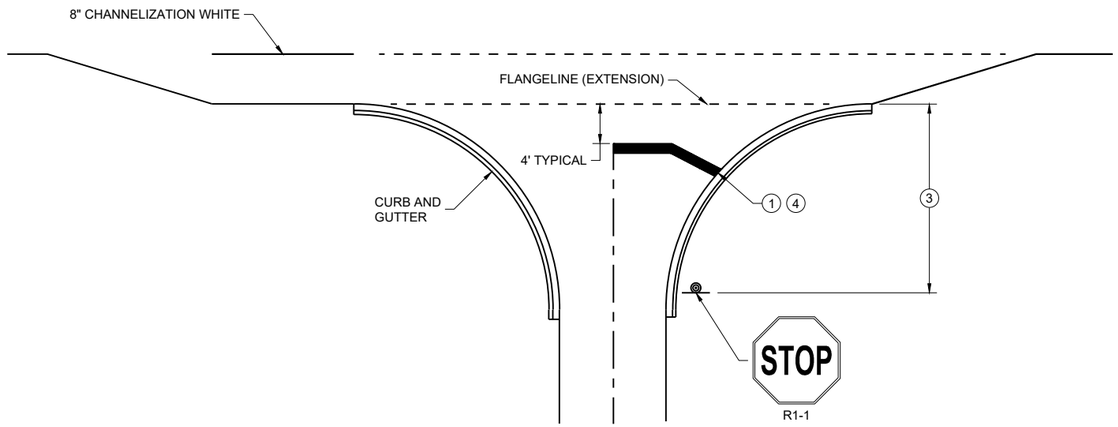
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

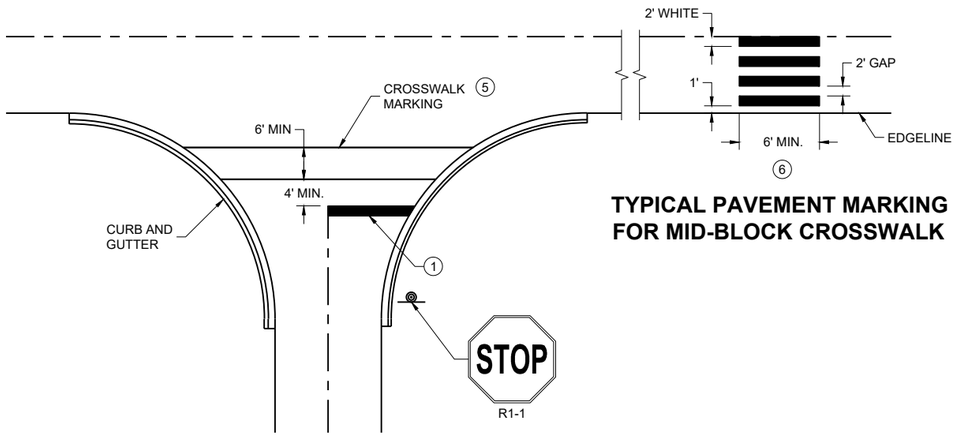
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE 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

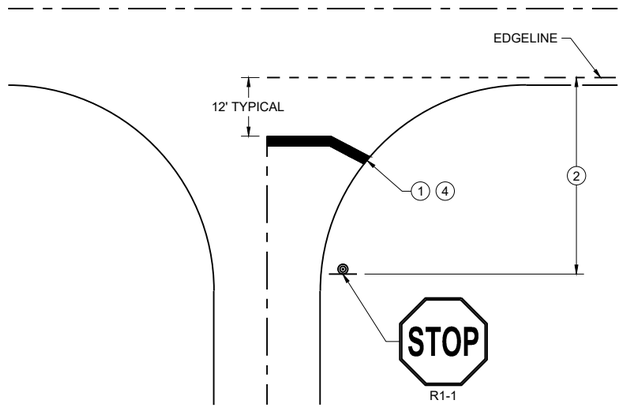


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



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

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SDD 15C33-05

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
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

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

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

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

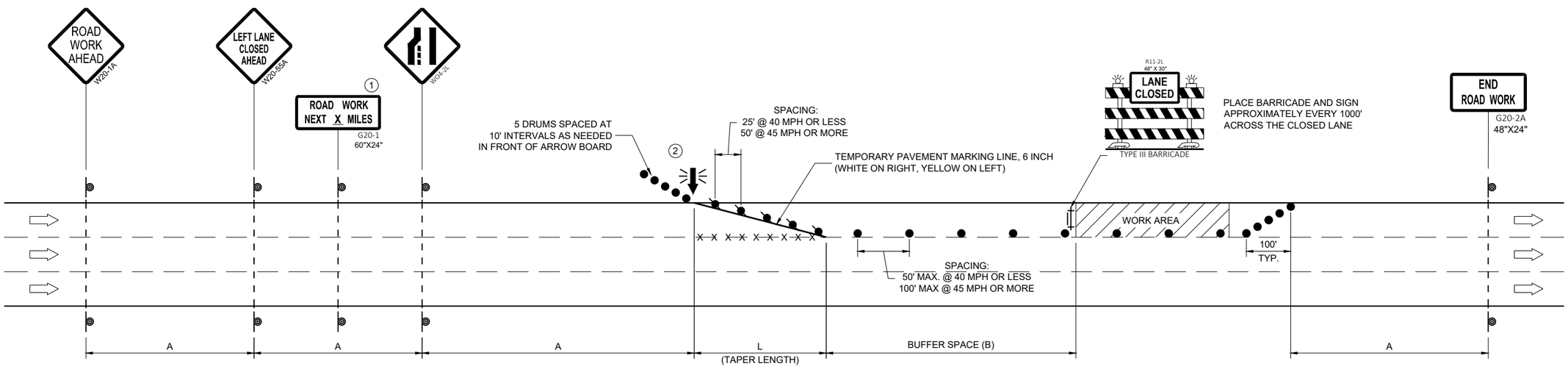
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

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SDD 15D20-08a

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
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- WORK AREA

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.

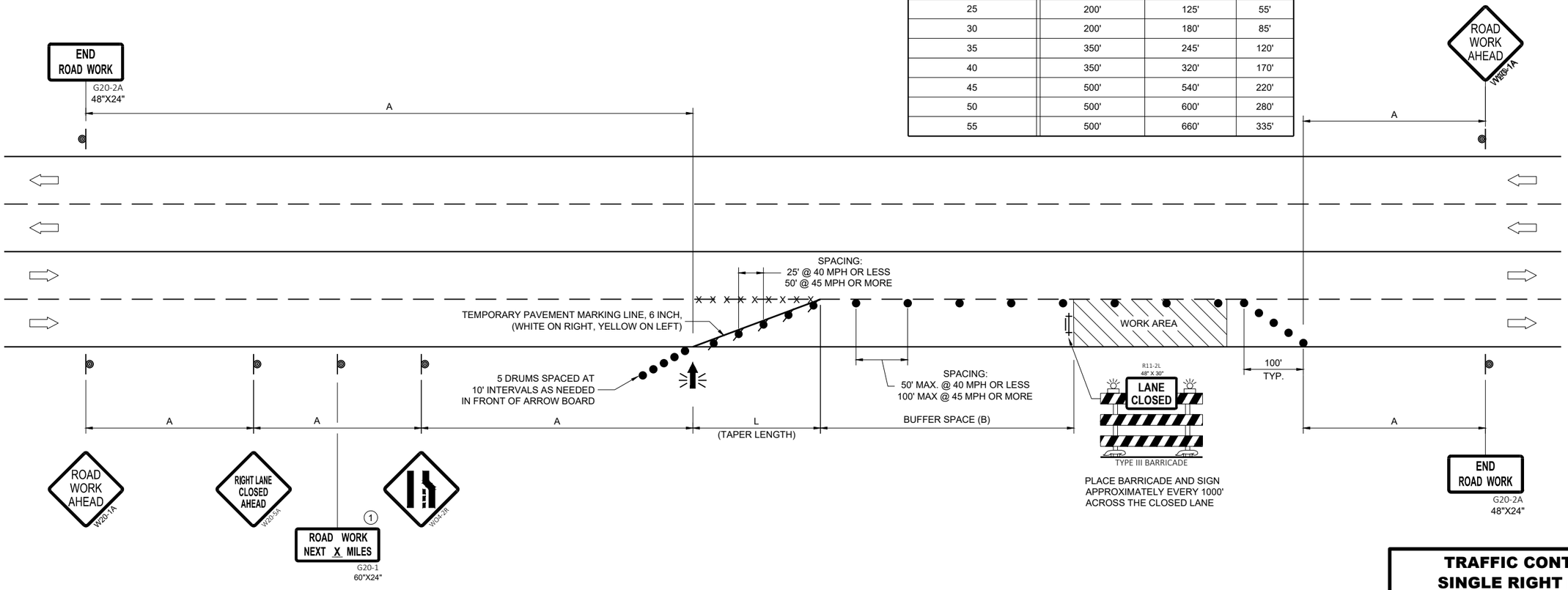
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

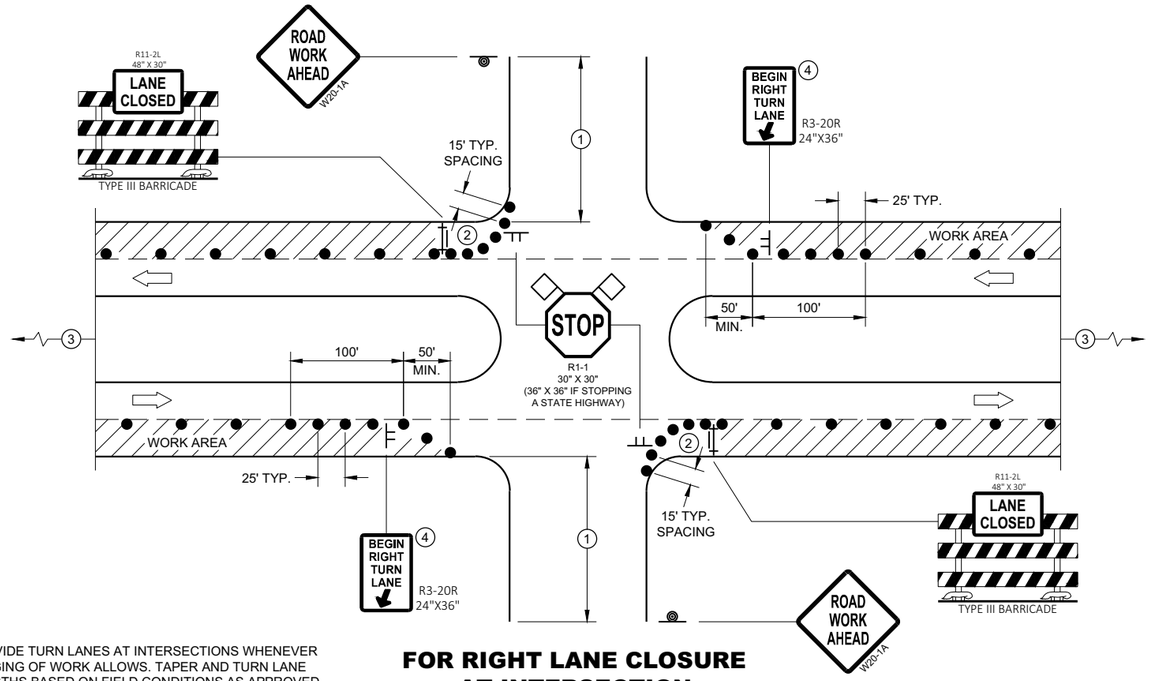
March 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

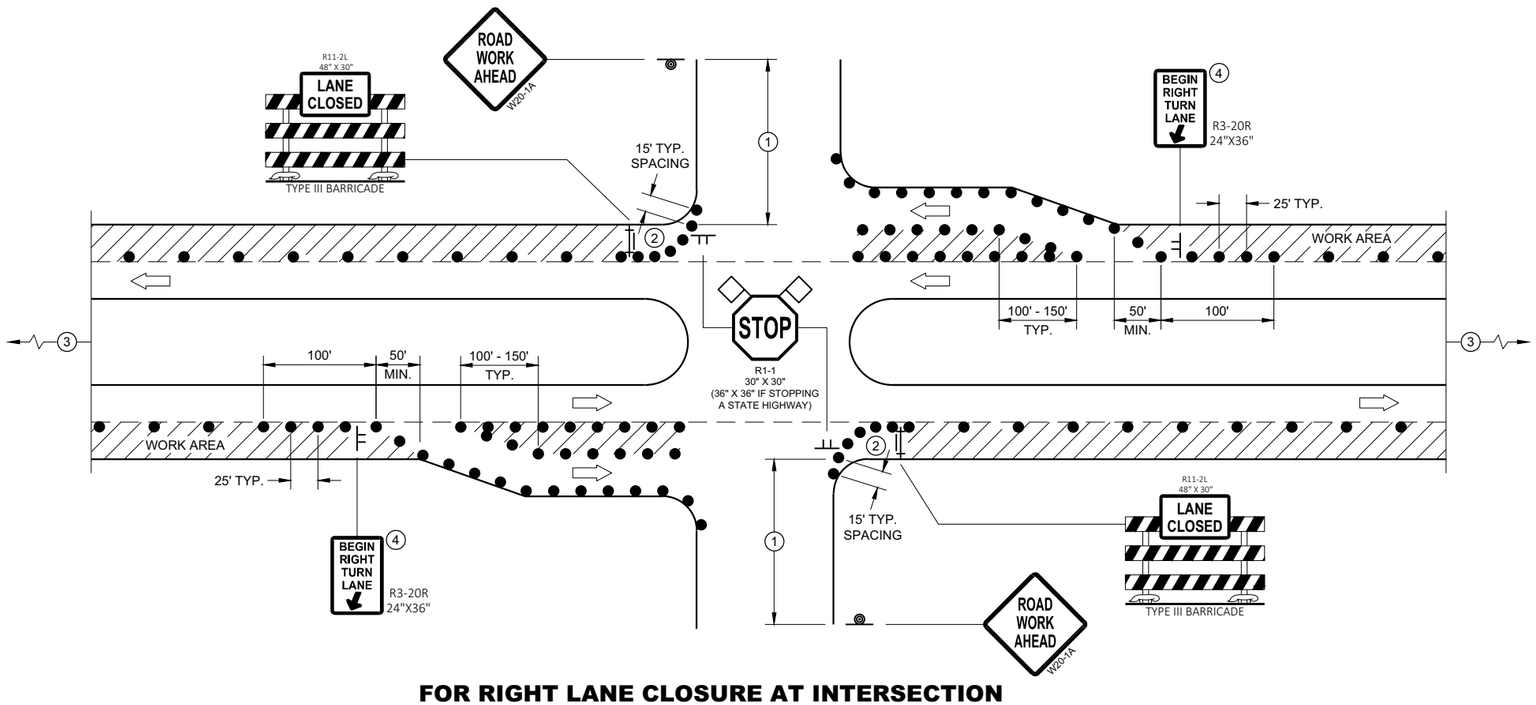
6

SDD 15D20-08b



FOR RIGHT LANE CLOSURE AT INTERSECTION

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



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

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

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

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

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

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

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

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

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

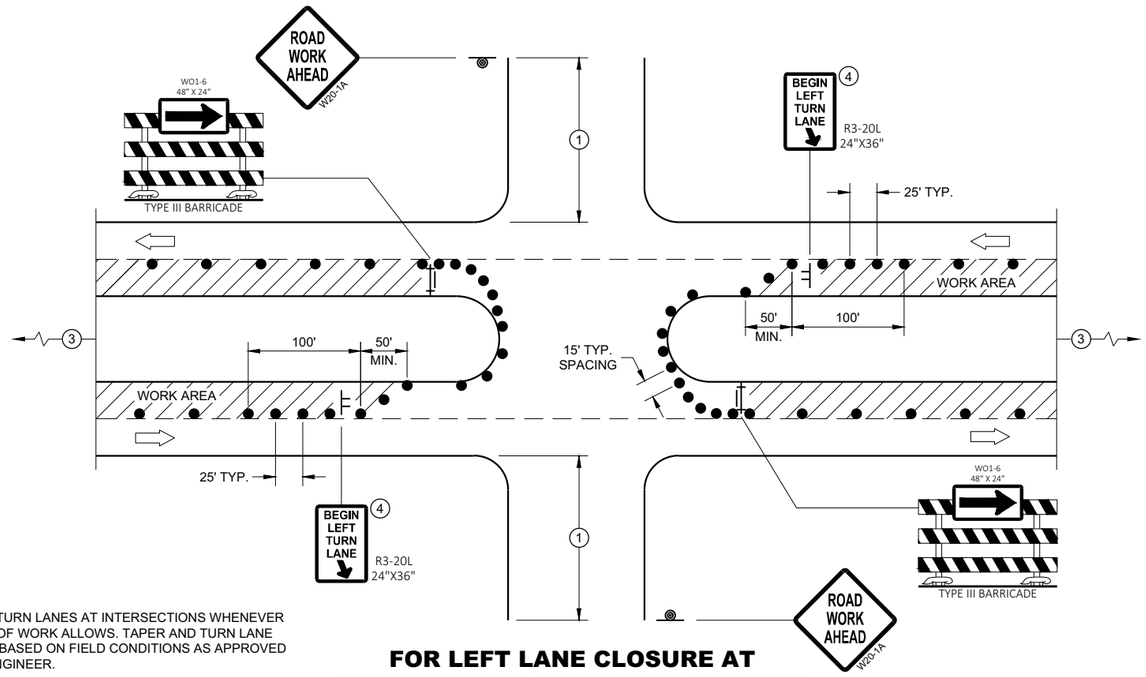
LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

6

SDD 15D21 - 07a



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

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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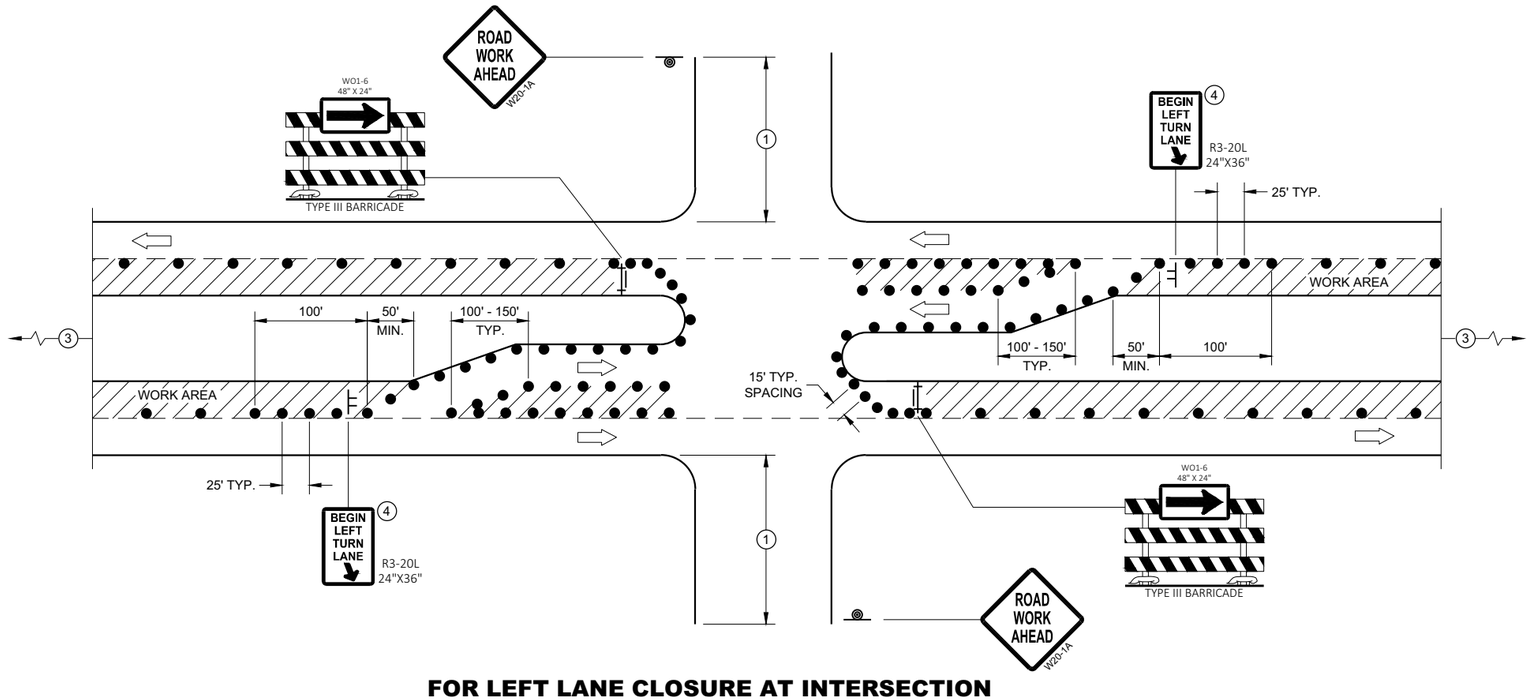
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D21 - 07b

6

SDD 15D21 - 07b

GENERAL NOTES

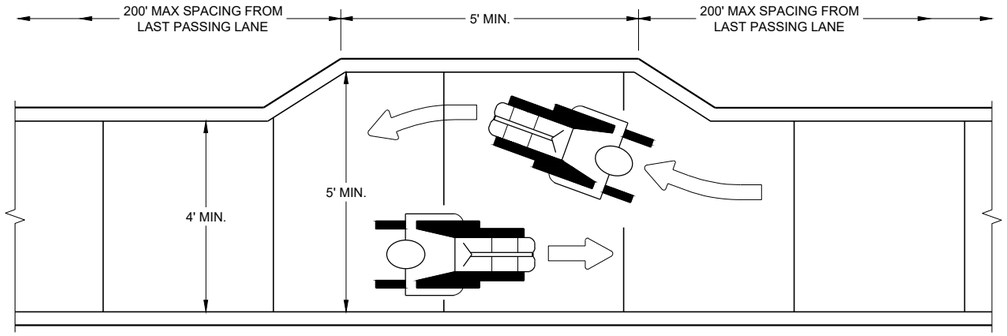
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

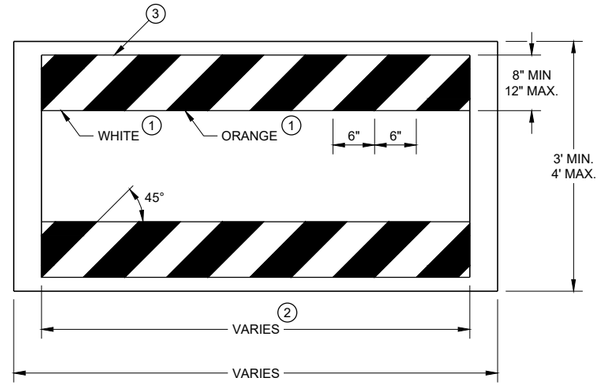
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

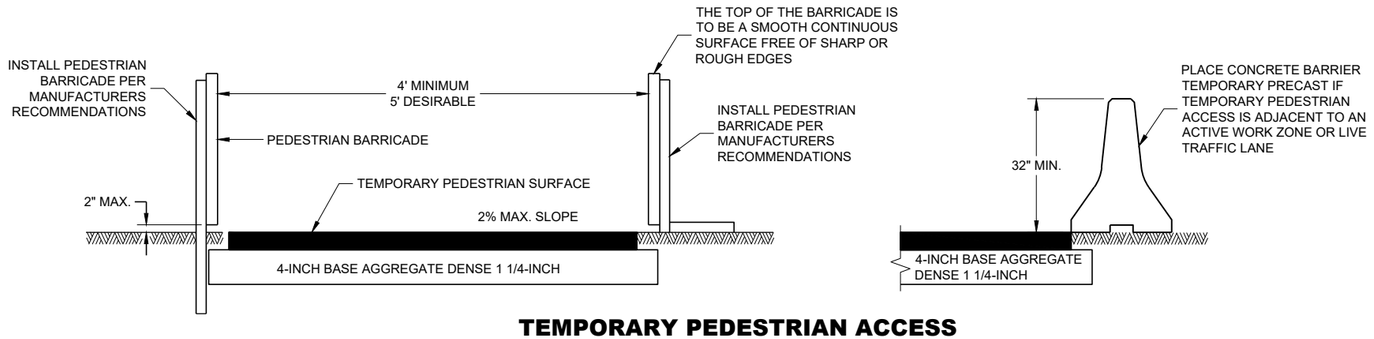
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN BARRICADE*



TEMPORARY PEDESTRIAN ACCESS

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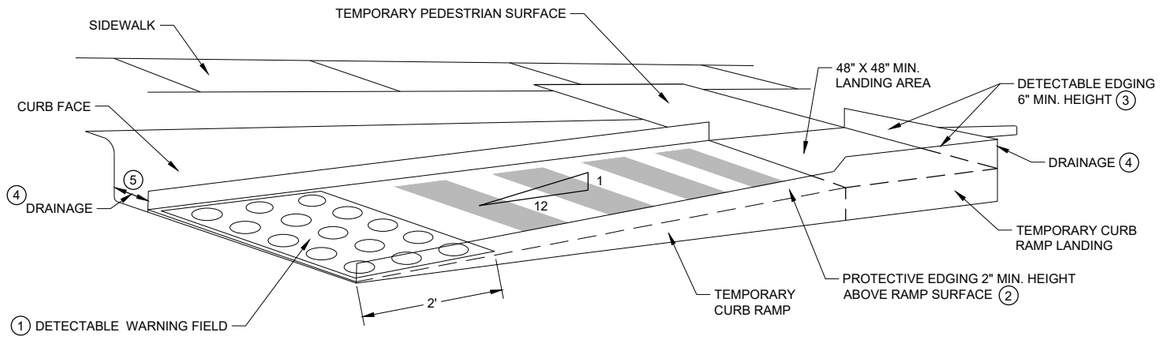
SDD 15D30 - 09a

SDD 15D30 - 09a

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



PERSPECTIVE VIEW

GENERAL NOTES

CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.

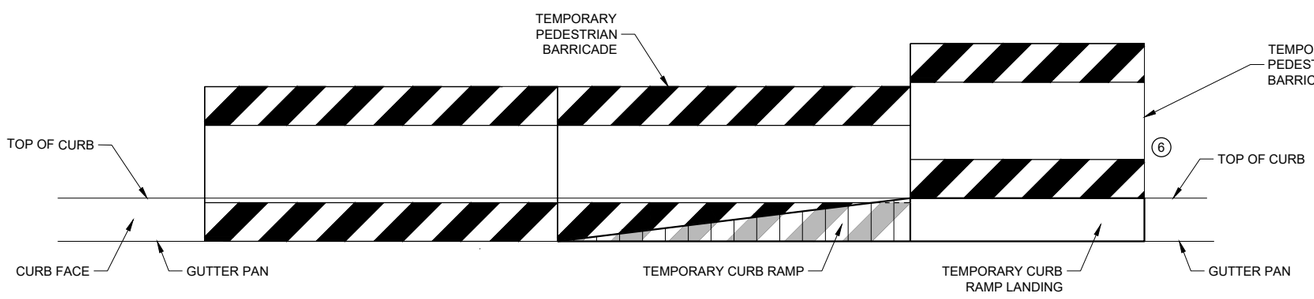
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

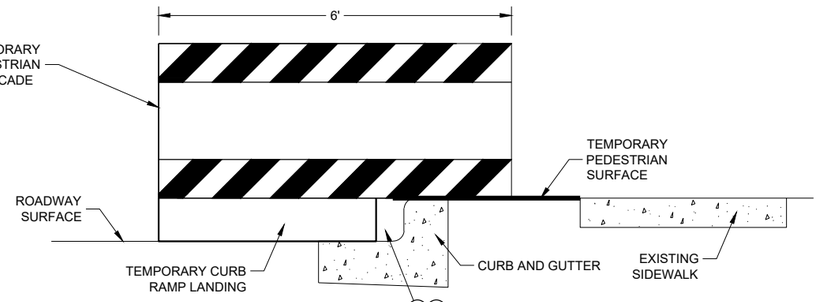
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.

(6) IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



FRONT VIEW



SIDE VIEW

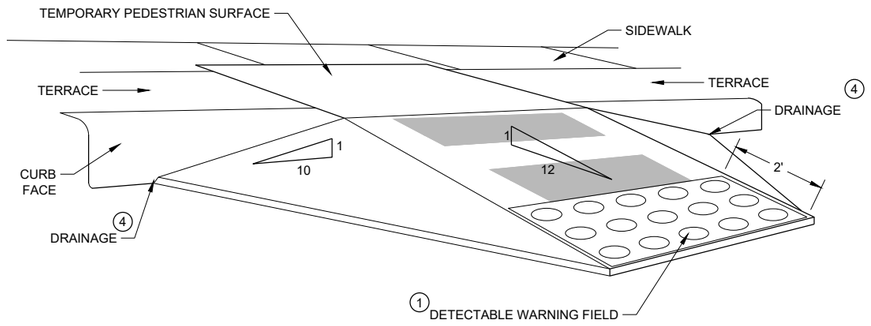
TEMPORARY CURB RAMP PARALLEL TO CURB

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

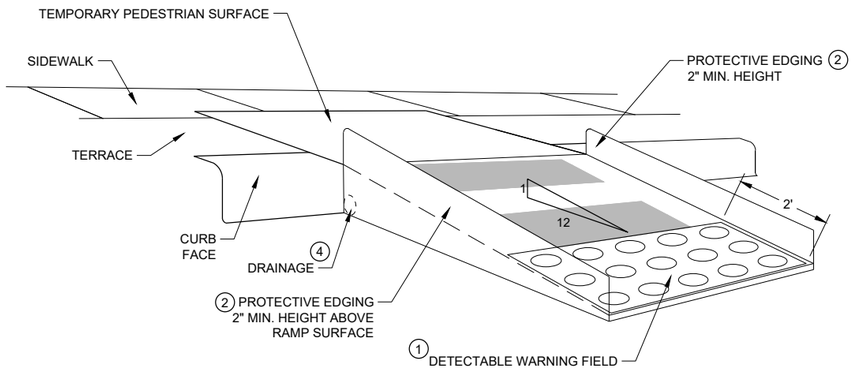
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 09b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

GENERAL NOTES

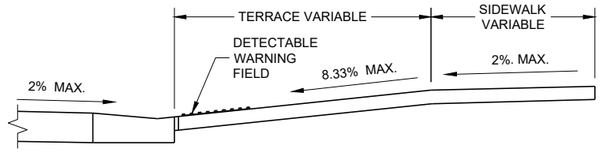
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

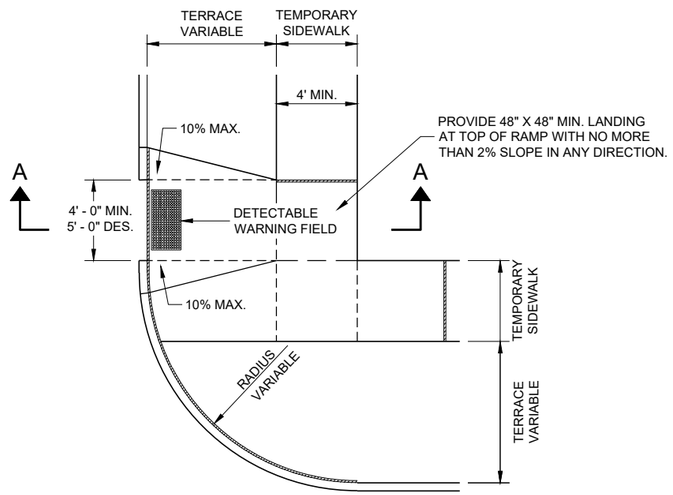
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



SECTION A - A



PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)

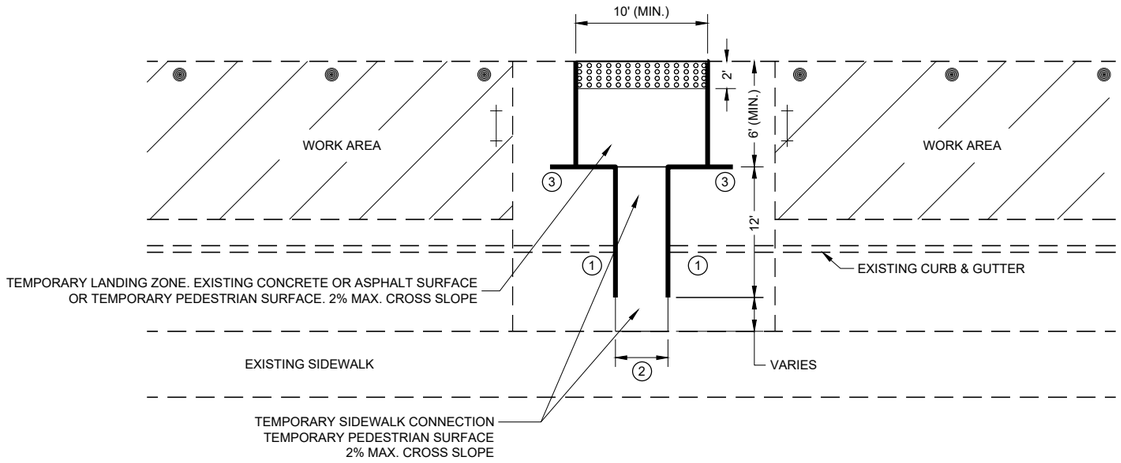
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

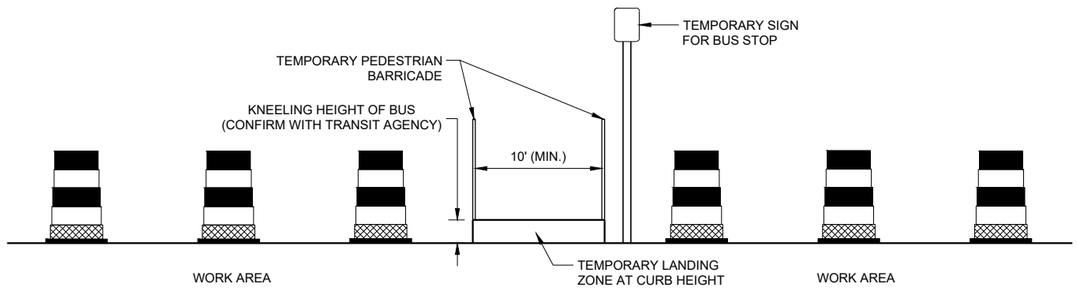
APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15D30-09d



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

6

SDD 15D30 - 09e

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

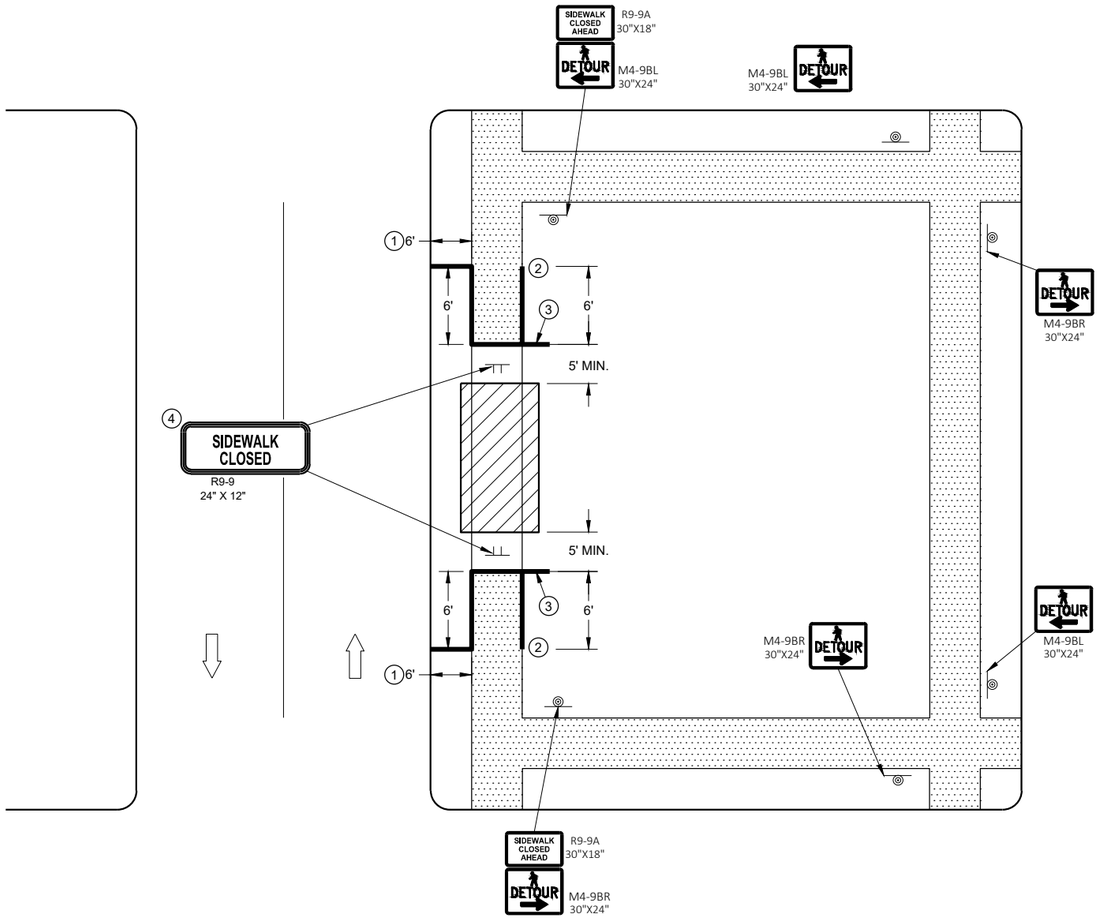
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 09e

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

6

SDD 15D30 - 09f

LEGEND

SIGN ON TEMPORARY SUPPORT

WORK AREA

UNDER PEDESTRIAN TRAFFIC

TEMPORARY PEDESTRIAN SURFACE

TEMPORARY PEDESTRIAN BARRICADE

OPTIONAL TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

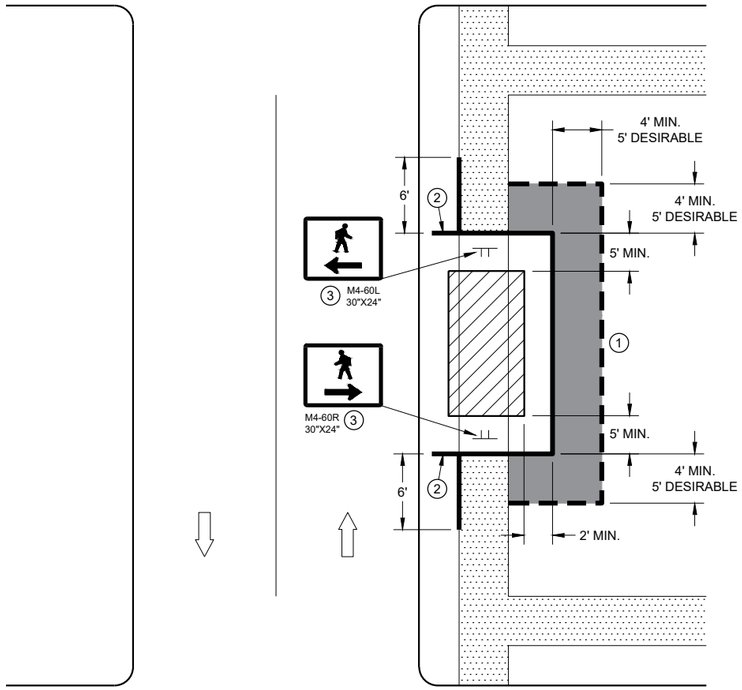
WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

(1) USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.

(2) IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.

(3) MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK DIVERSION
SINGLE SIDE

6

SDD 15D30 - 09g

6

SDD15D30 - 09g

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

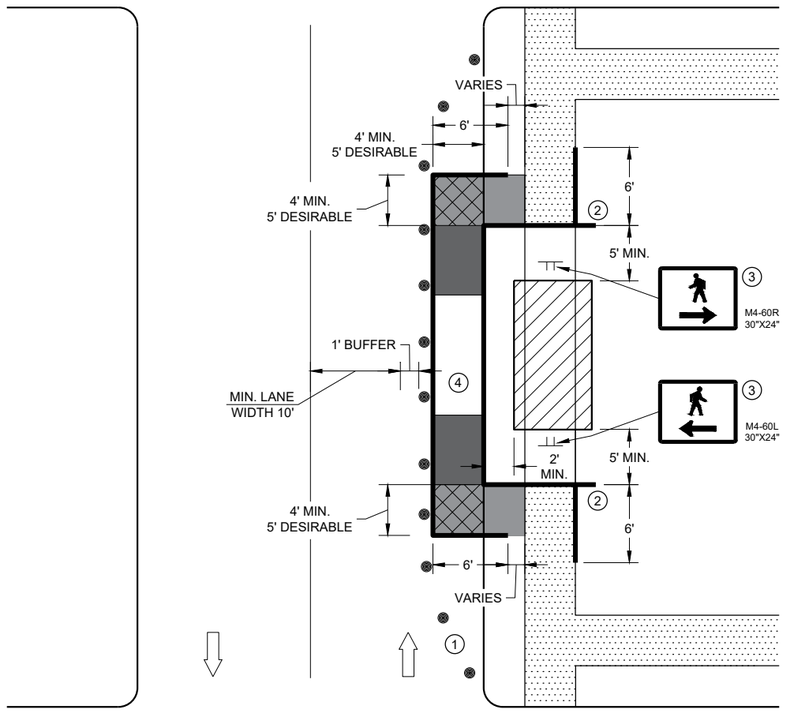
WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

(1) SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.

(2) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.

(3) MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

(4) USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.



SIDEWALK DIVERSION, SINGLE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

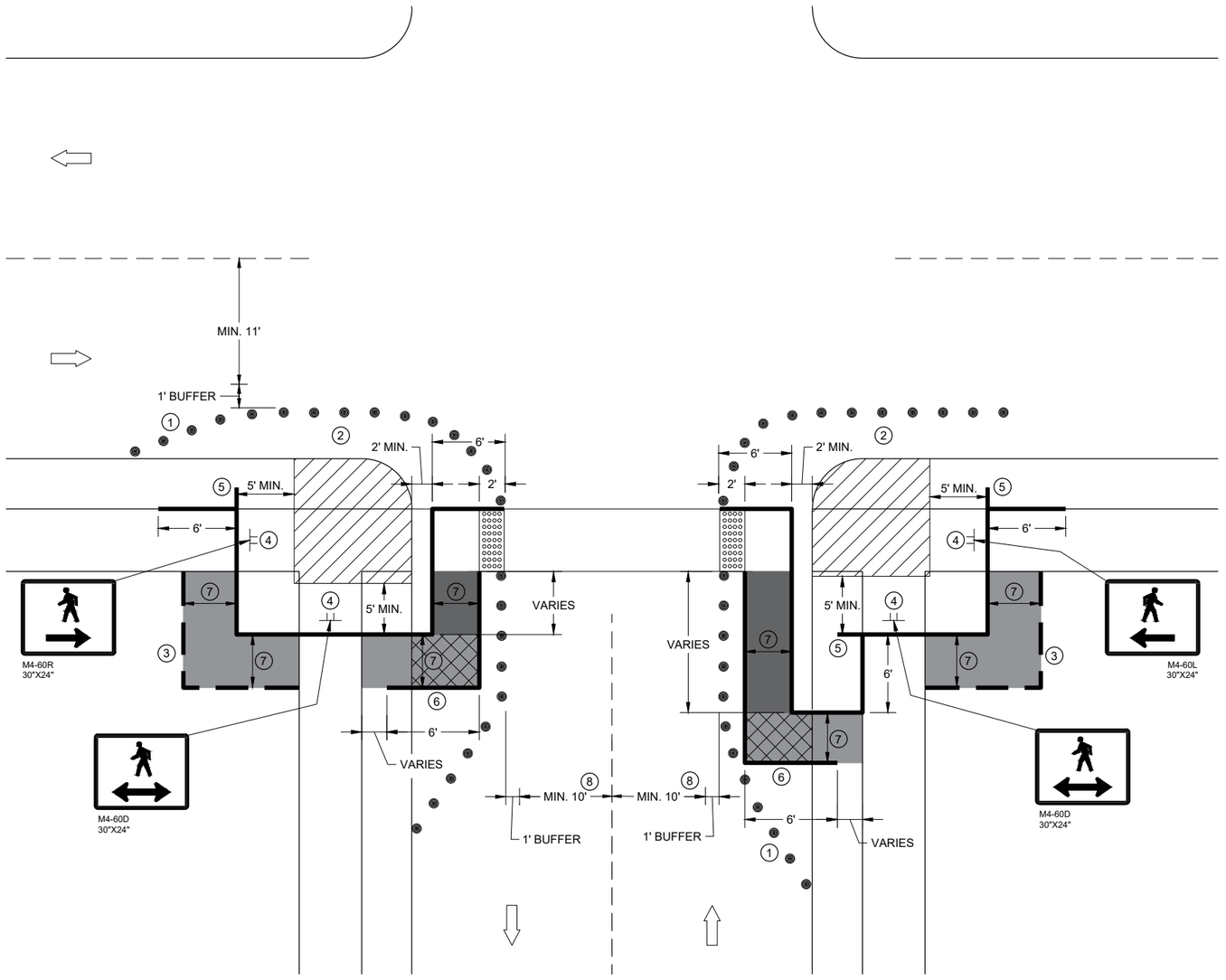
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 09h

6

SDD 15D30 - 09h



CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

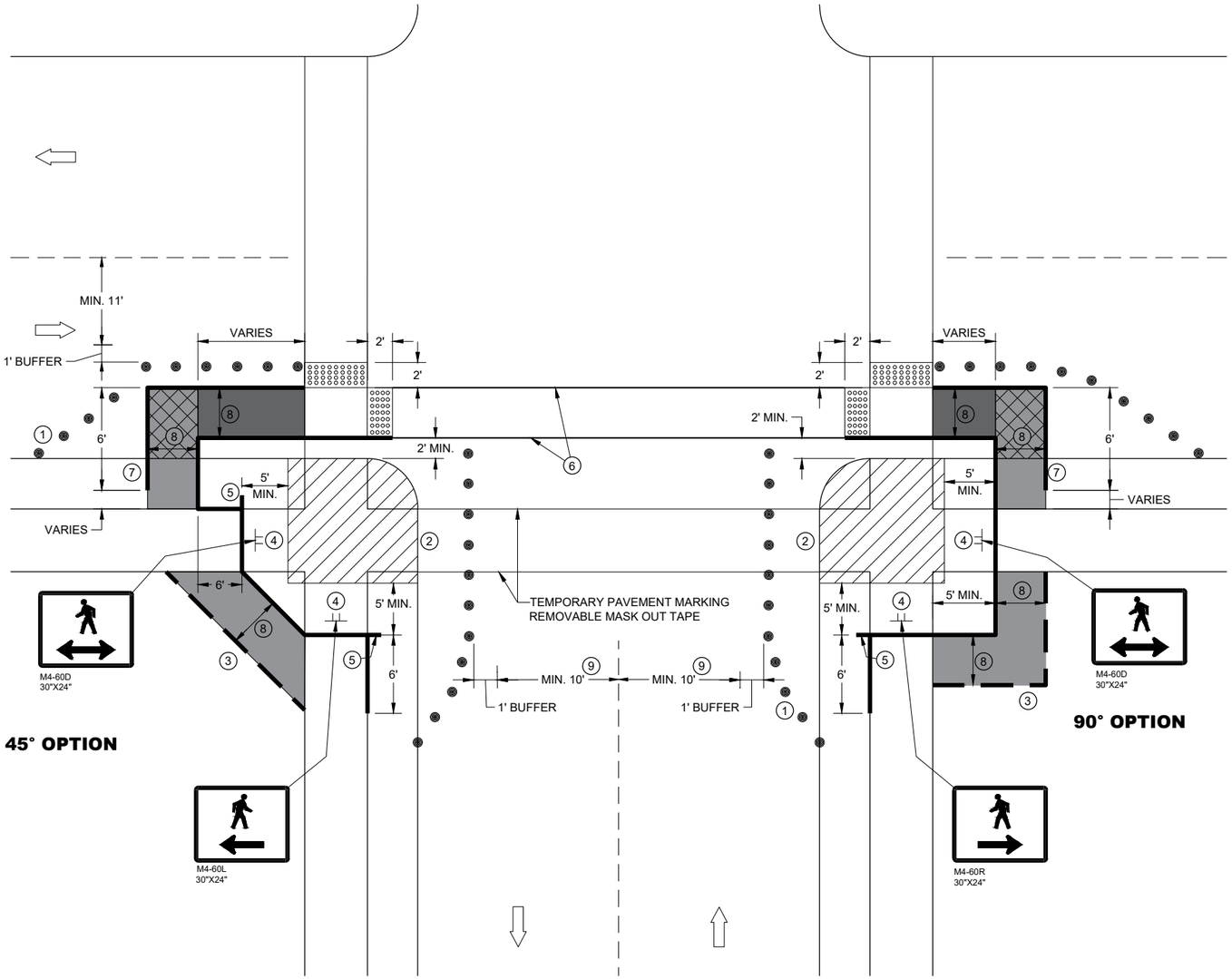
TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
7. 4 FEET MINIMUM, 5 FEET DESIRABLE
8. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. WHITE 6" TEMPORARY PAVEMENT MARKING
7. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
8. 4 FEET MINIMUM, 5 FEET DESIRABLE
9. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

LEGEND

SIGN ON PERMANENT SUPPORT

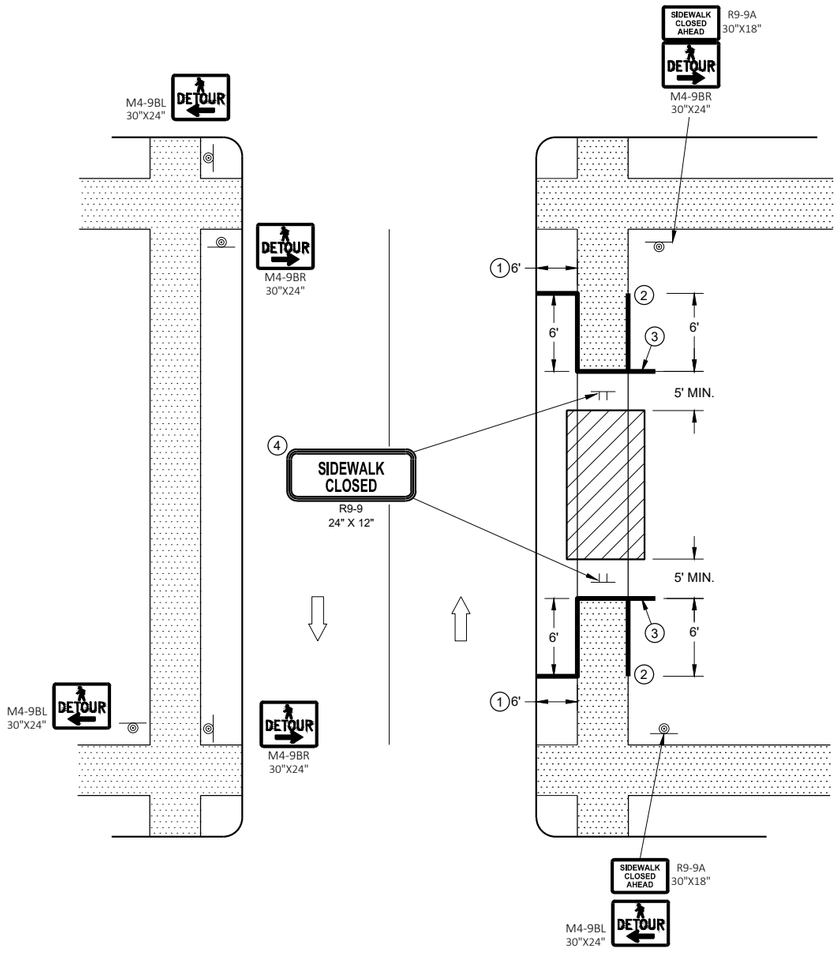
SIGN ON TEMPORARY SUPPORT

UNDER PEDESTRIAN TRAFFIC

WORK AREA

TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

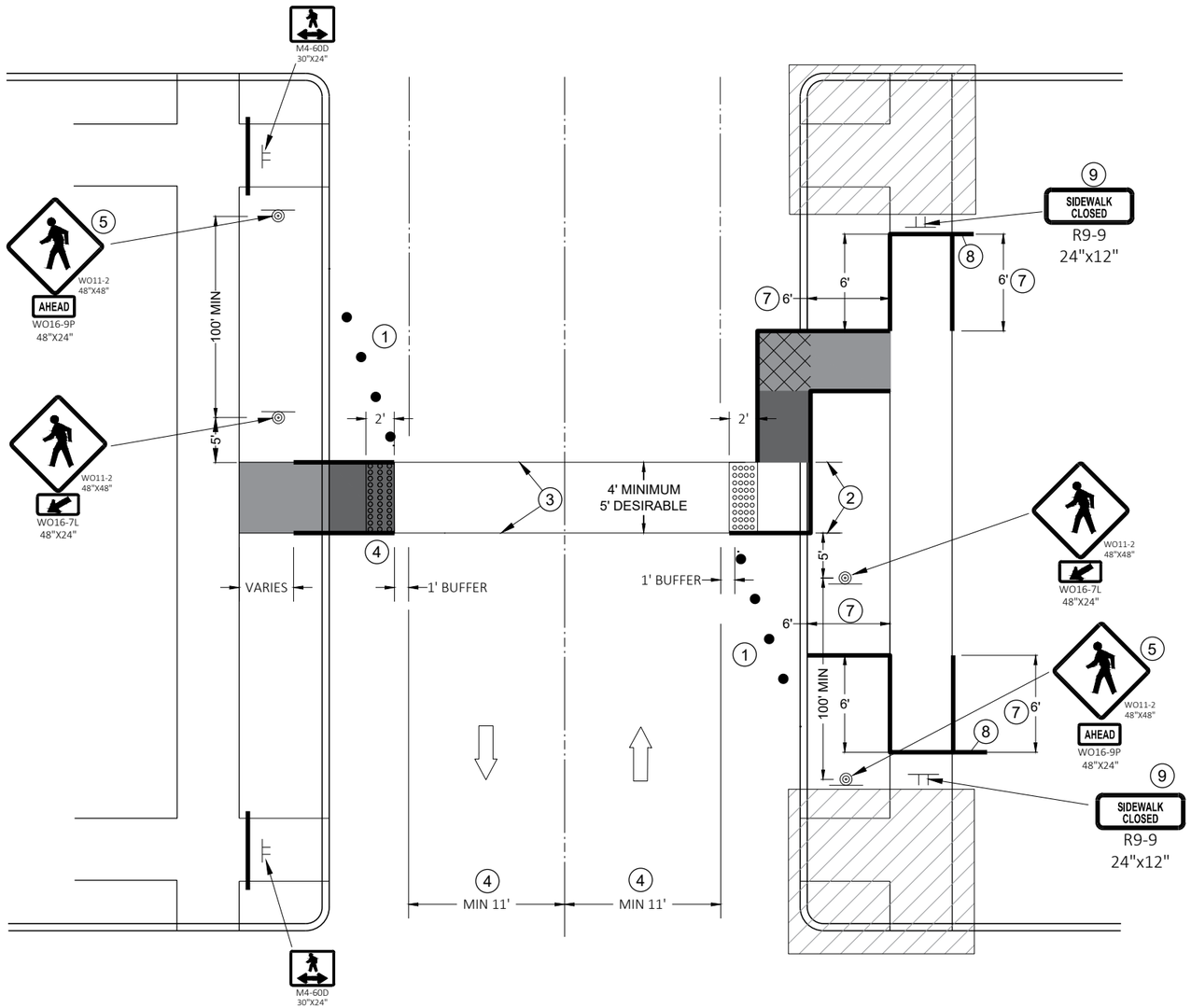
WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING 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.

SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES



TEMPORARY PEDESTRIAN CROSSING

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT PEDESTRIAN FACILITIES CLOSURES.

(1) SHOULDER OR LANE CLOSURE ADVANCED WARNING AND PROPER BUFFER SPACE REQUIRED.

(2) 4 FEET MINIMUM, 5 FEET DESIRABLE.

(3) WHITE 6" TEMPORARY PAVEMENT MARKING.

(4) IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, PERPENDICULAR CURB RAMPS MAY NEED TO BE UTILIZED.

(5) IF MINIMUM 100' SPACING FROM THE MID-BLOCK CROSSING CANNOT BE ATTAINED BEFORE THE INTERSECTION, REMOVE THIS SIGN ASSEMBLY.

(6) IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.

(7) PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.

(8) IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF THE EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.

(9) MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF THE SIGN.

LEGEND

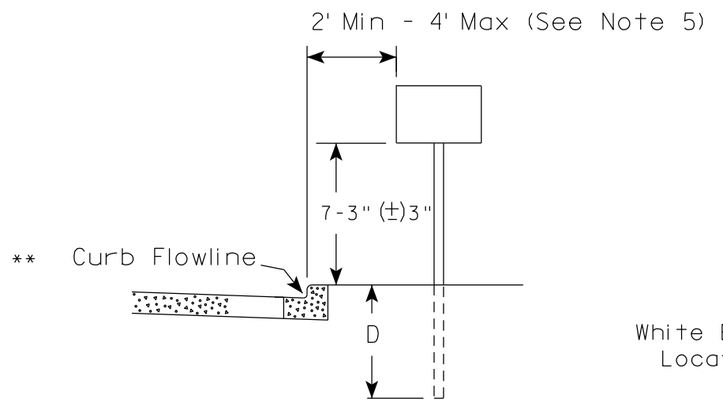
- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

6

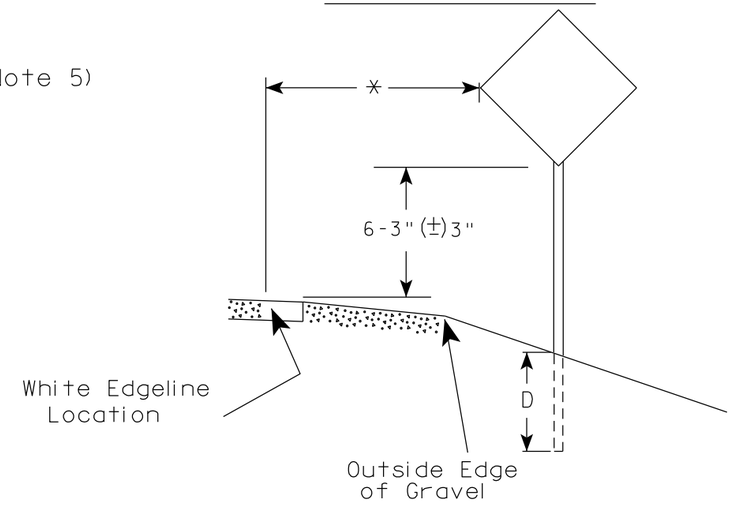
SDD 15D30 - 09L

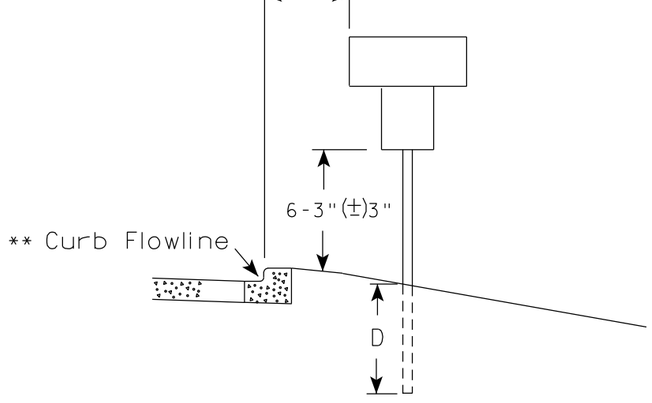
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

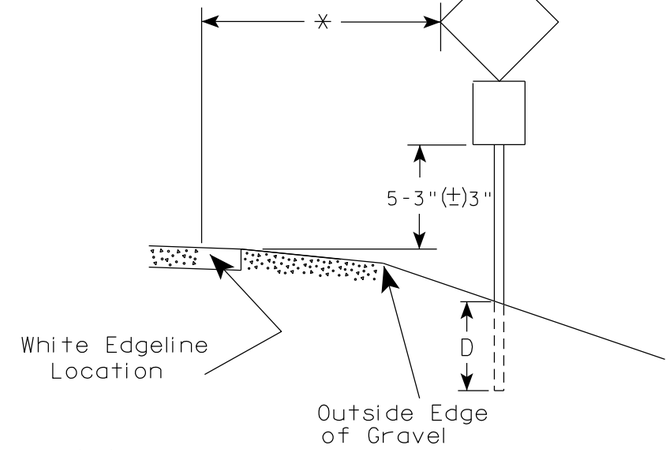
URBAN AREA



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.

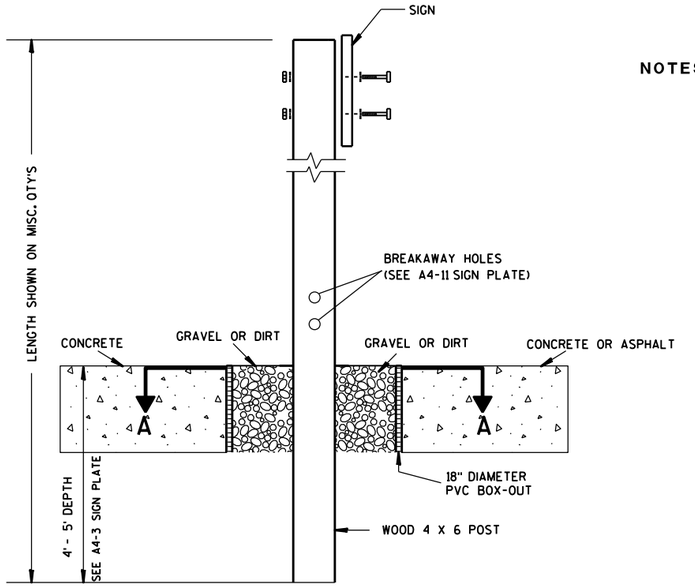
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

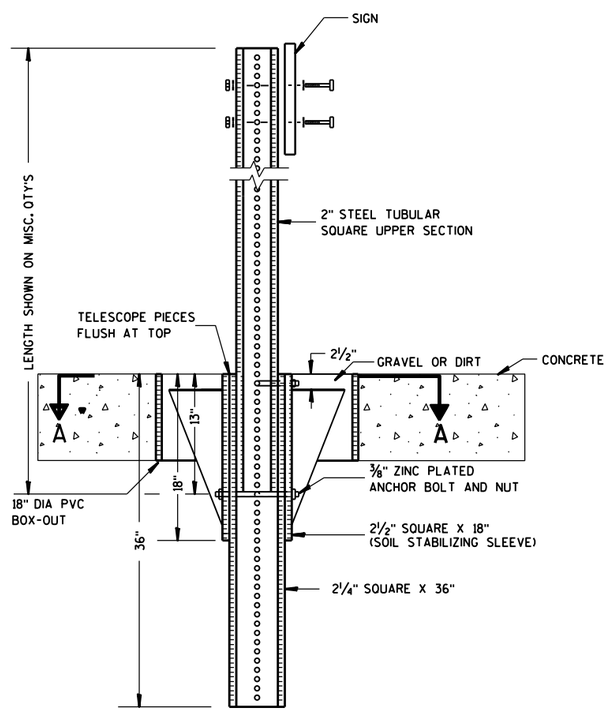
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 225	E



ELEVATION VIEW

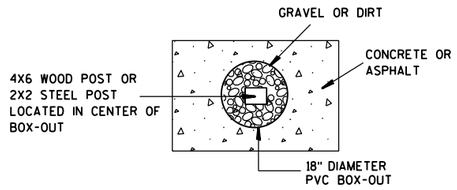
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

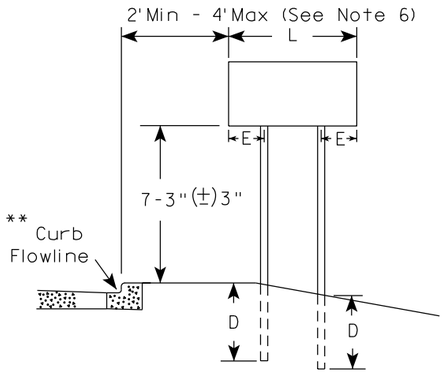
APPROVED Matthew R Rauch
for State Traffic Engineer

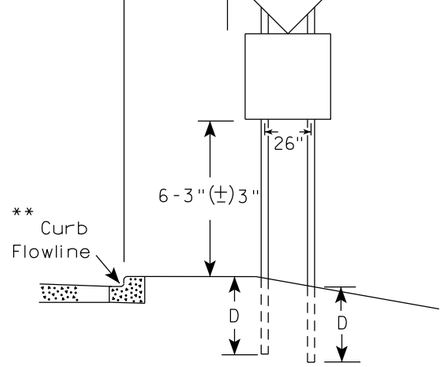
DATE 1/27/14 PLATE NO. A4-3B.1

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

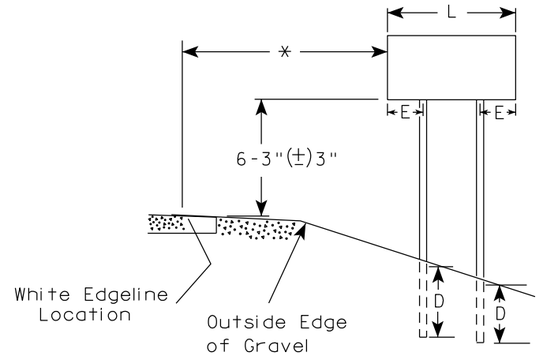
URBAN AREA

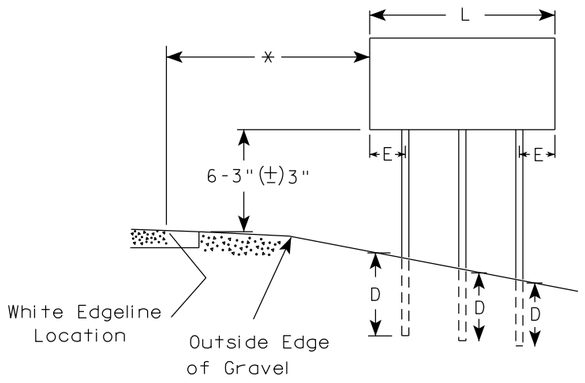


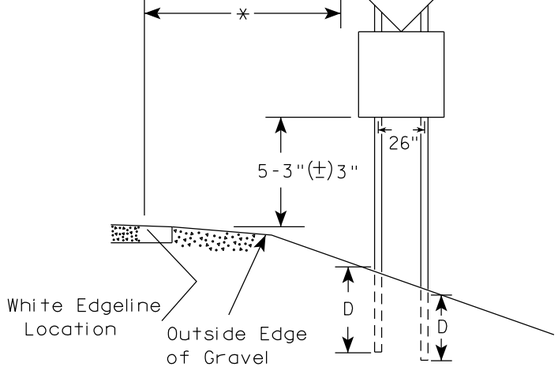


48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±) 3".

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

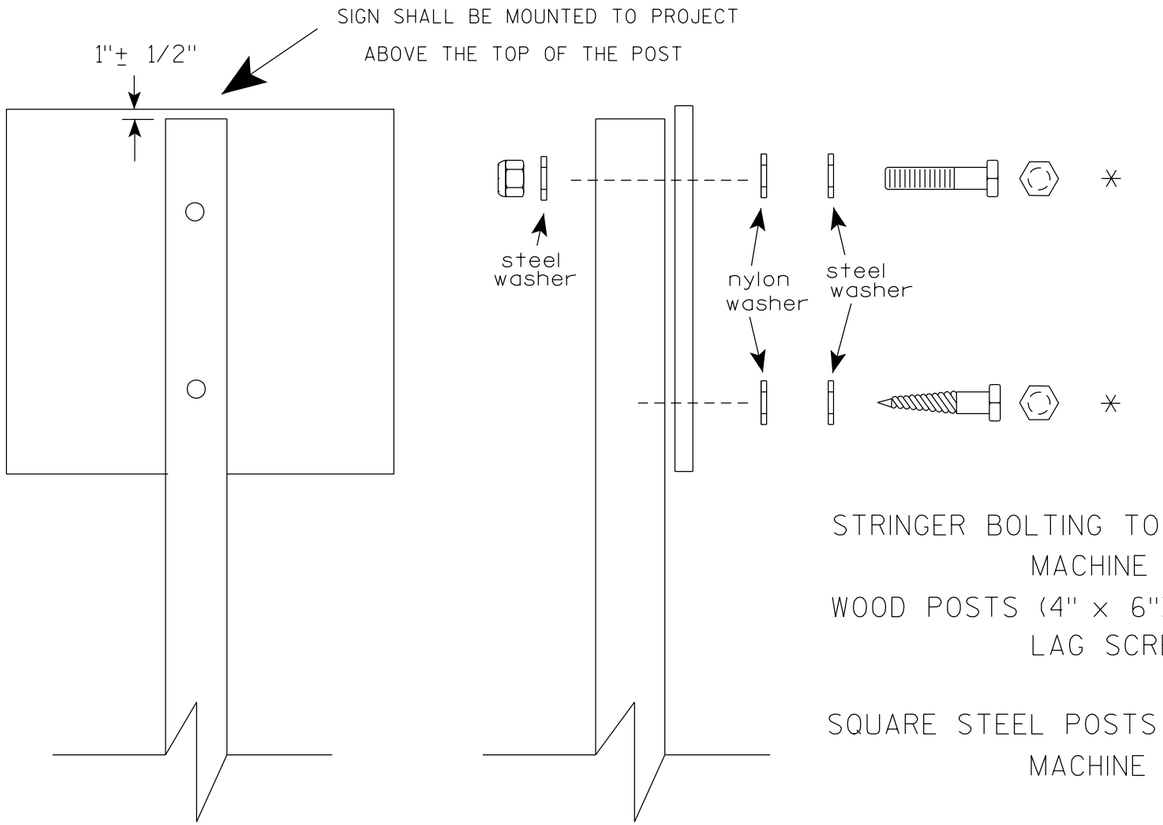
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 227	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

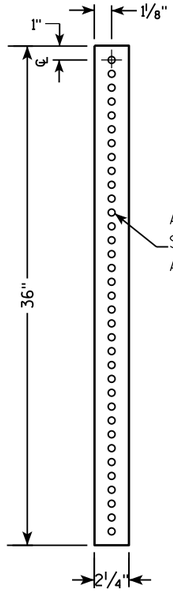
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

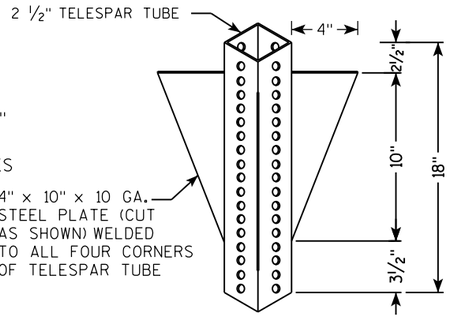
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

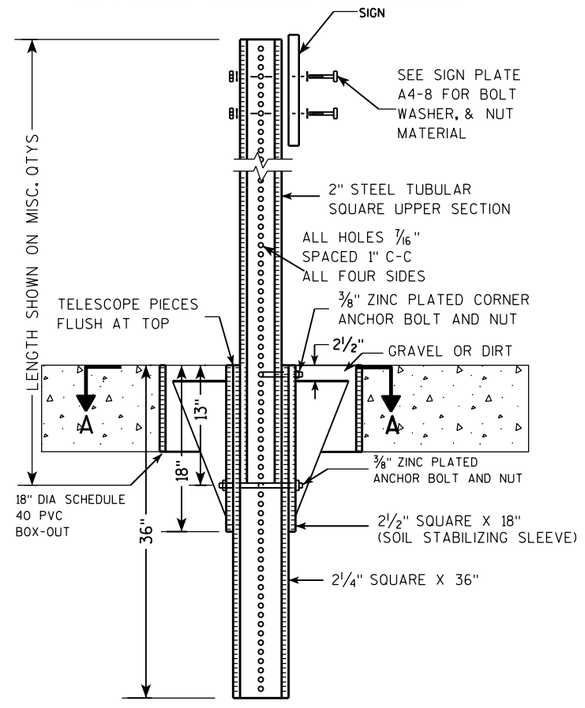
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



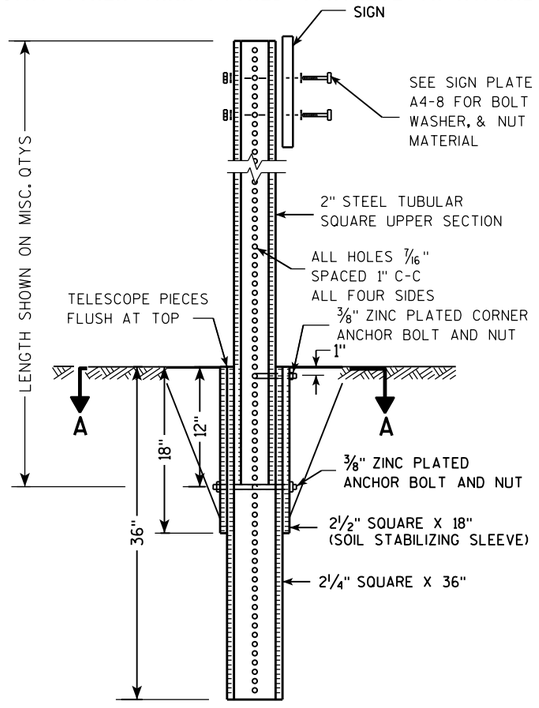
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

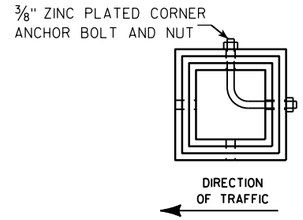


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

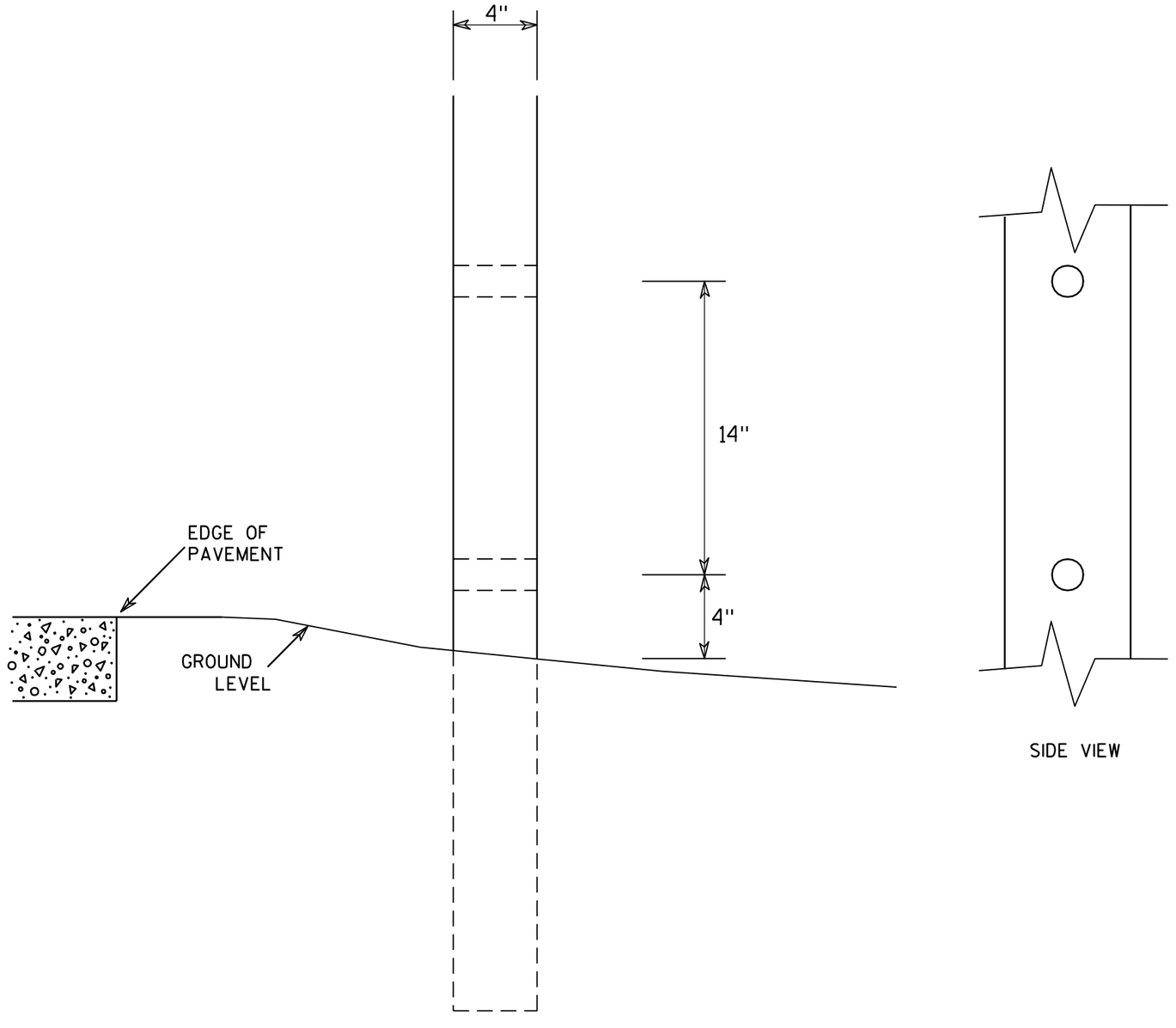
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 229 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

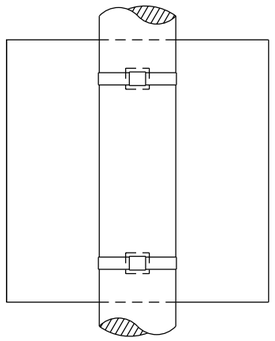
APPROVED Chester J Spang for State Traffic Engineer

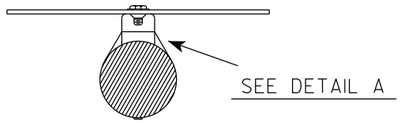
DATE 3/27/97 PLATE NO. A4-11.2

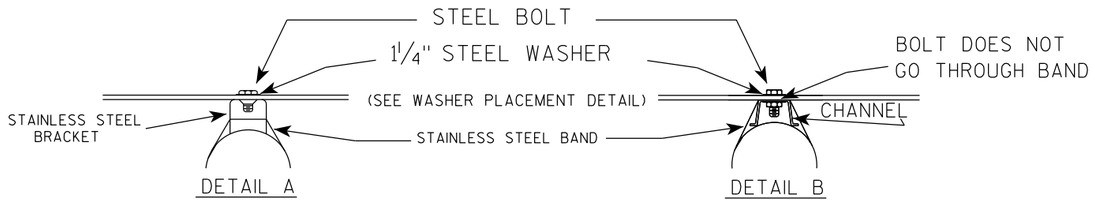
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 230	E

BANDING

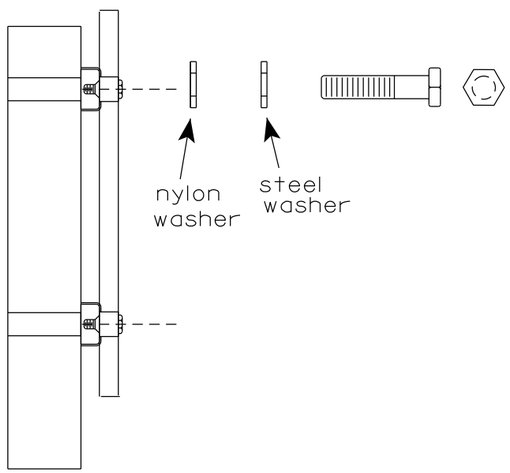
SINGLE SIGN







WASHER PLACEMENT

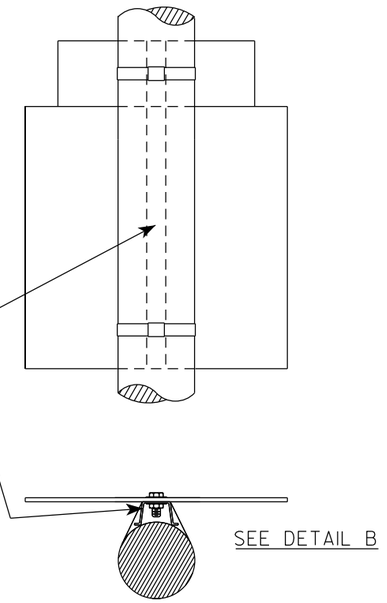


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

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

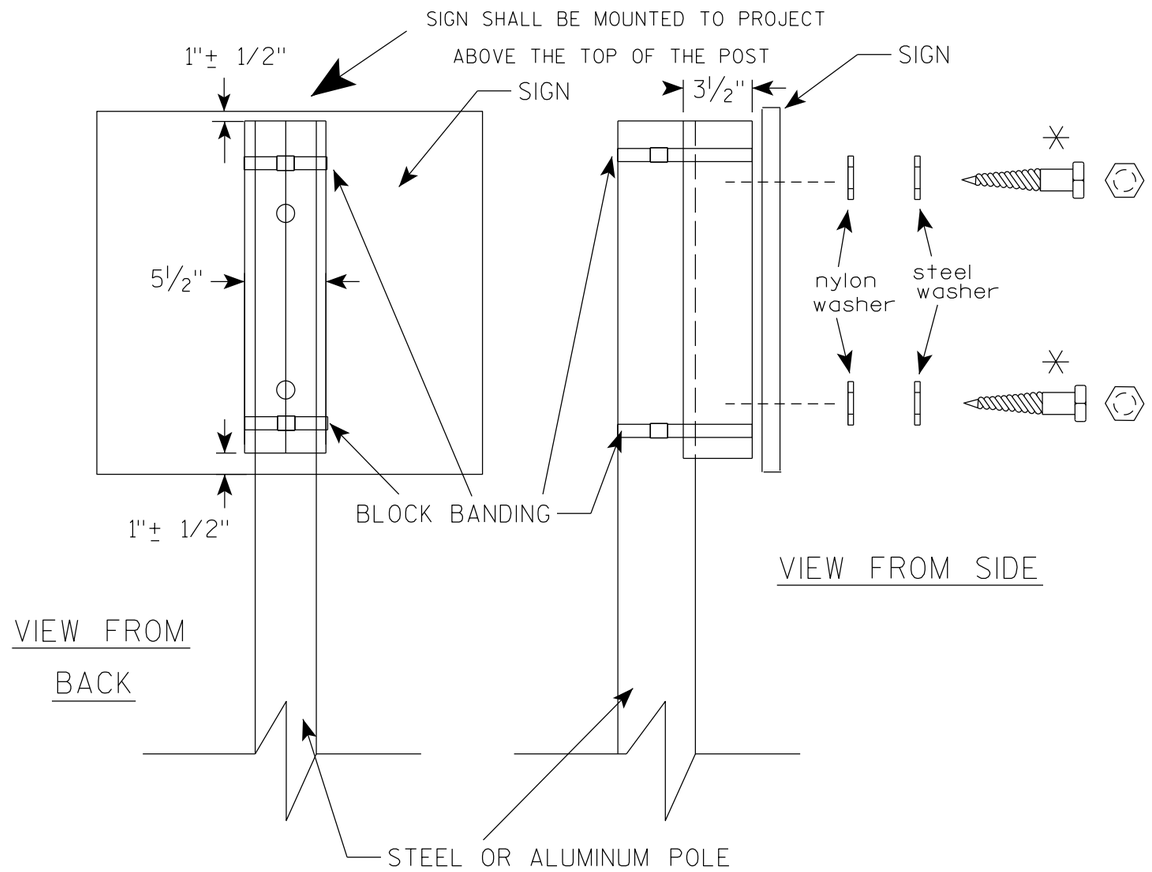
DATE 6/10/19 PLATE NO. A5-9.4

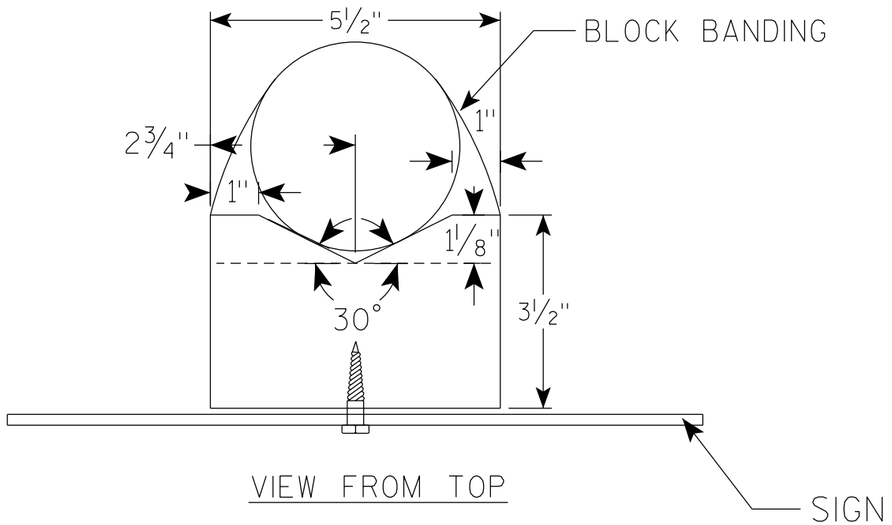
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 231	E

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)

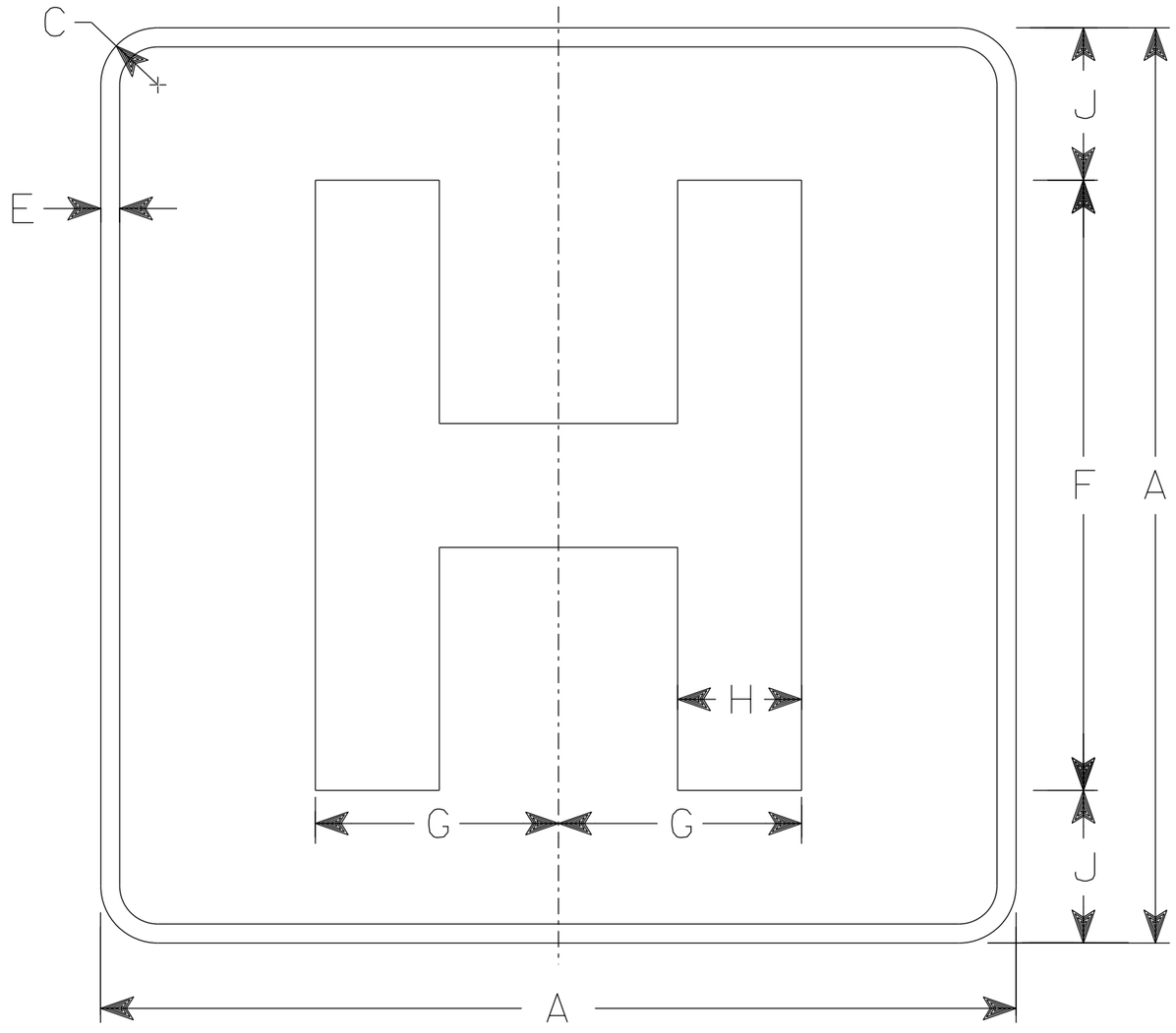
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 232 E



D9-2

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Blue
   Message - White
3. Message Series - E Modified
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	18		1 1/2		1/2	12	4 3/4	2 3/8		3																	2.25
2S	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
2M	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
3	36		2 1/4		3/4	24	9 1/2	4 7/8		6																	9.0
4																											
5																											

STANDARD SIGN
D9-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/25/2023 PLATE NO. D9-2.6

PROJECT NO:

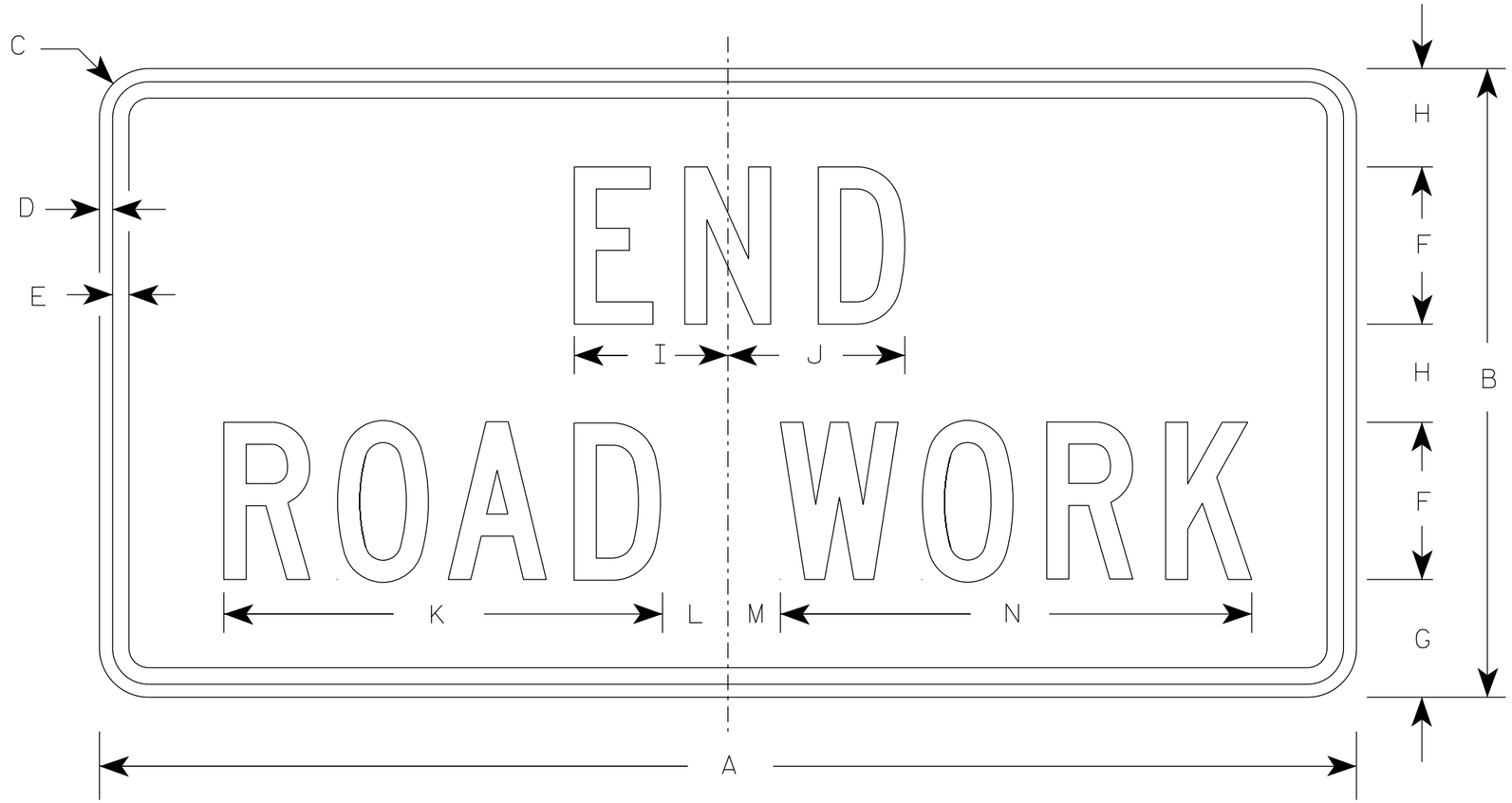
SHEET NO: 233 E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\D92.dgn PLOT DATE : 25-JAN 2023 1:20 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

7

7



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

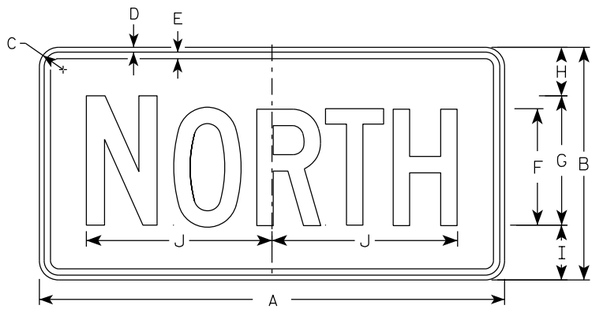
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

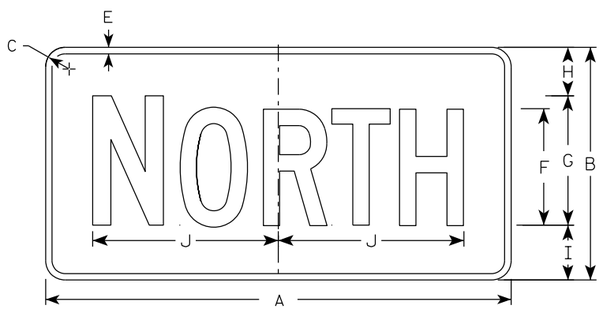
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-2A.10

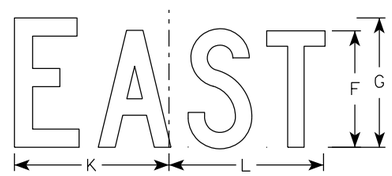
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 234 E



M3-1
MM3-1
MP3-1

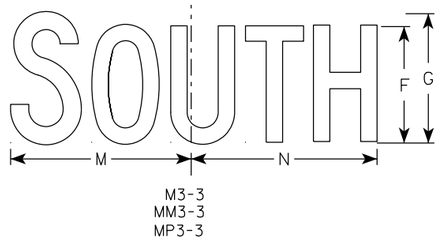


MB3-1
MK3-1
MN3-1

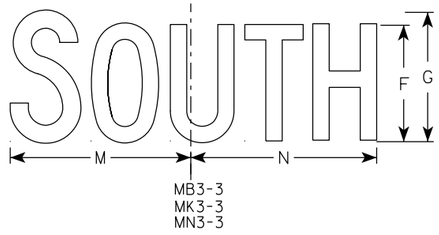


M3-2
MM3-2
MP3-2

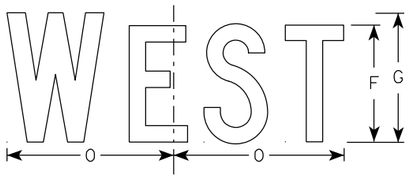
MB3-2
MK3-2
MN3-2



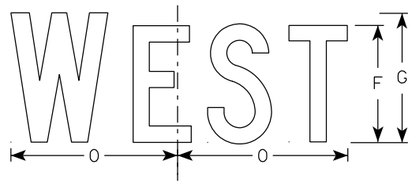
M3-3
MM3-3
MP3-3



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

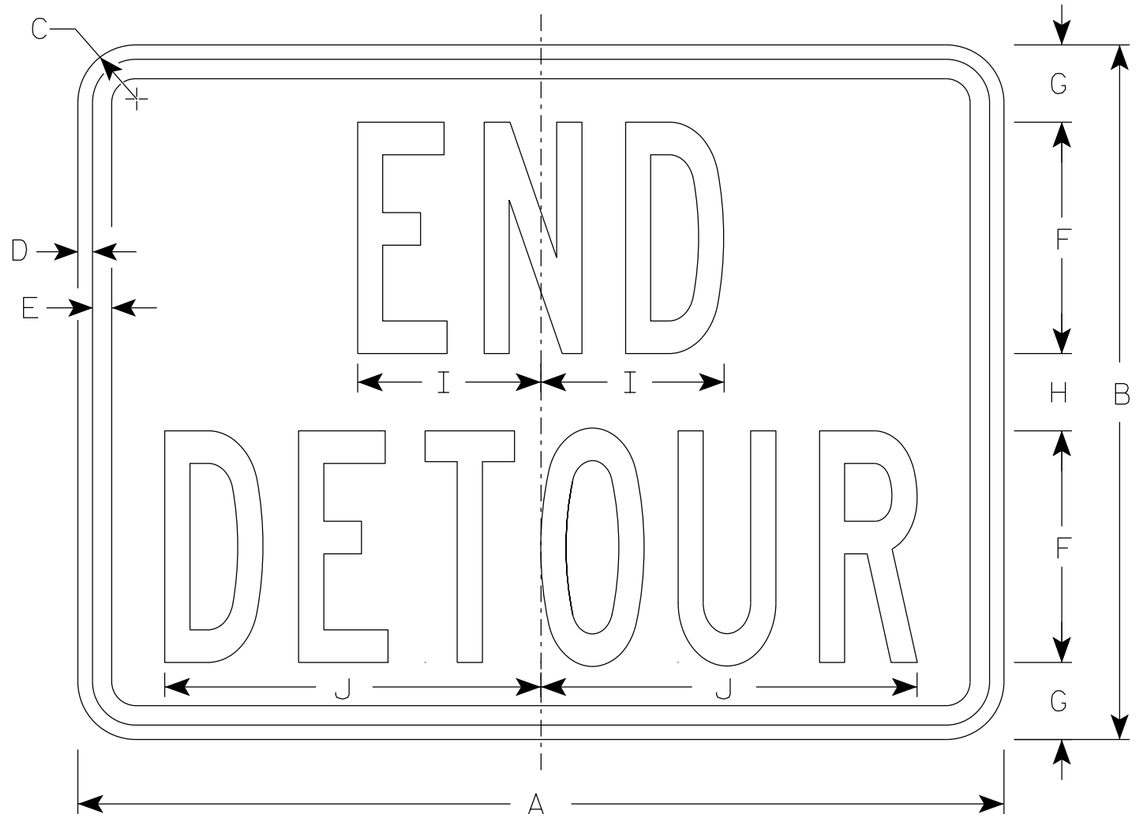
STANDARD SIGNS
M3-1 THRU M3-4
SERIES

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: 235 | 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

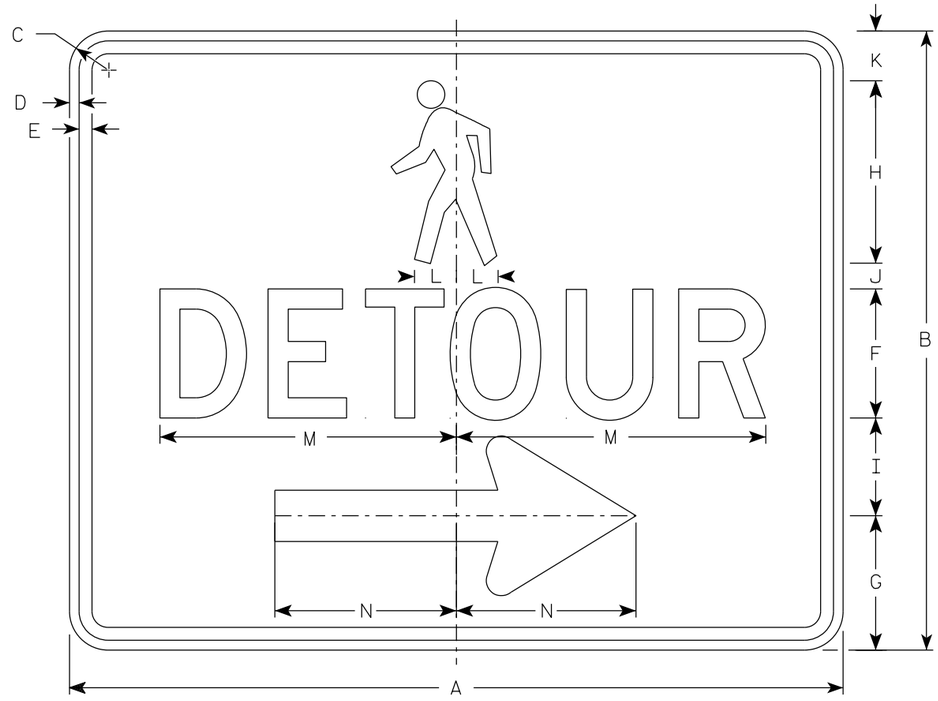
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

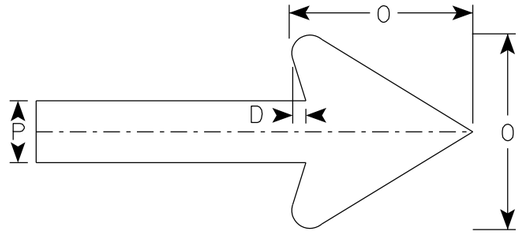
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 236 | E



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

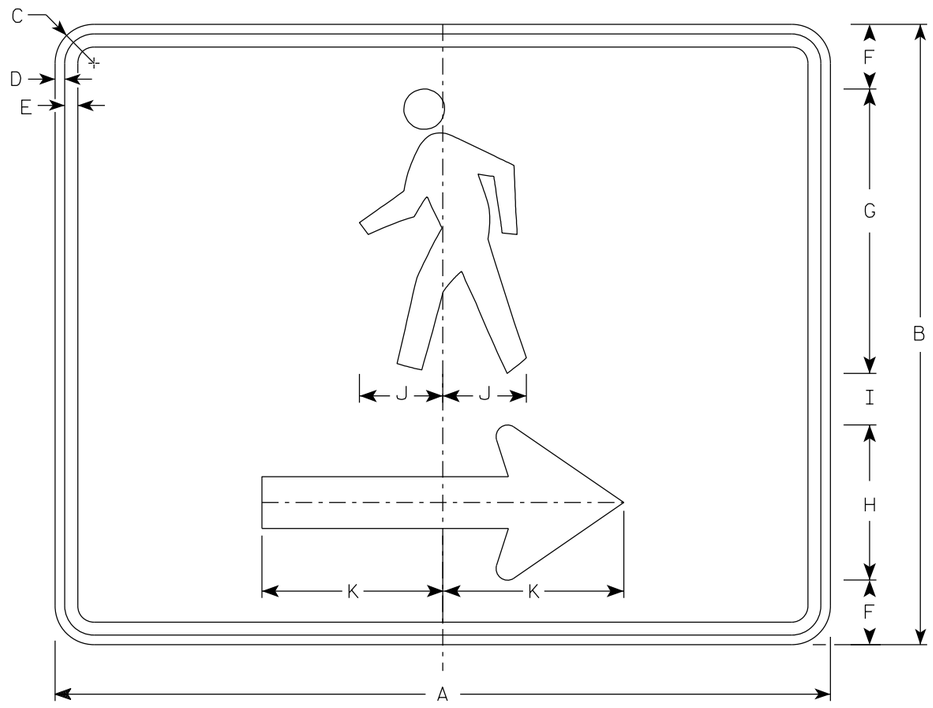
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9B.4

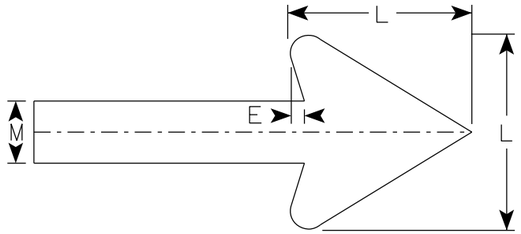
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 237 | E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M4-60L is the same as M4-60R except the arrow is reversed.



M4-60R



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 ½	⅜	½	2 ½	11	6	2	3 ¼	7	6	2														5.00
2M	30	24	1 ½	⅜	½	2 ½	11	6	2	3 ¼	7	6	2														5.00
3																											
4																											
5																											

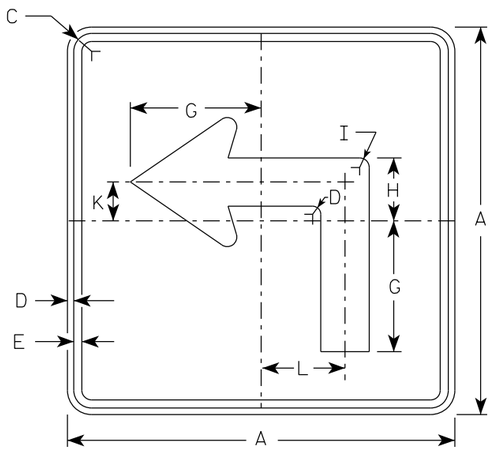
STANDARD SIGN
M4-60 L&R

WISCONSIN DEPT OF TRANSPORTATION

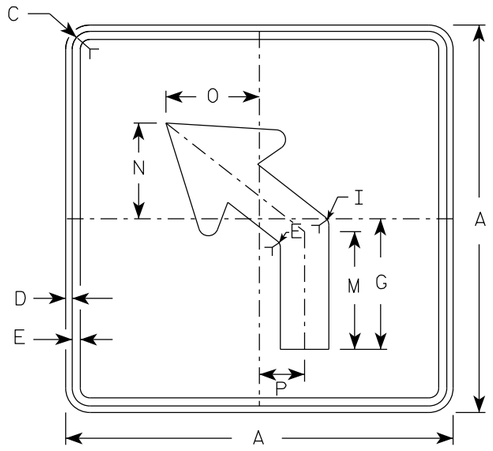
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/2023 PLATE NO. M4-60.2

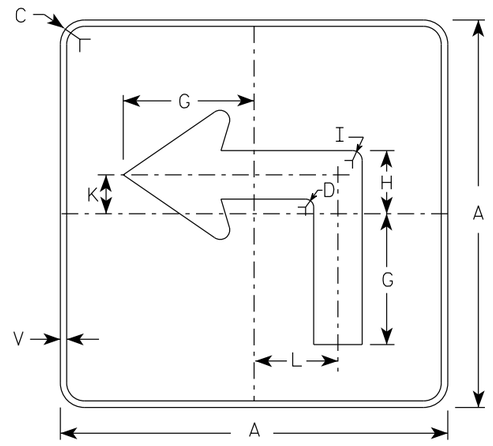
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 238 | E



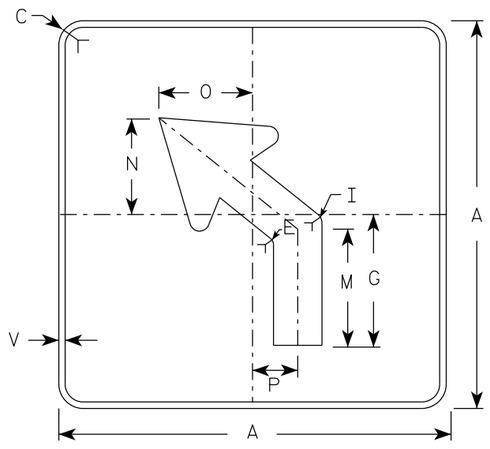
M5-1L
MM5-1L
MO5-1L
MP5-1L



M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L

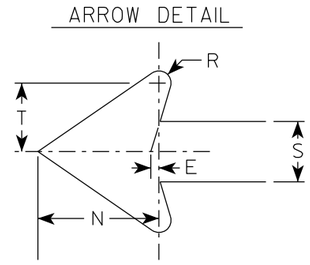


MB5-2L
MK5-2L
MN5-2L
MR5-2L

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

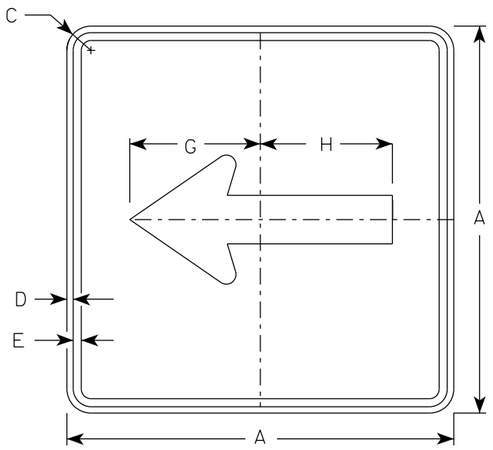
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

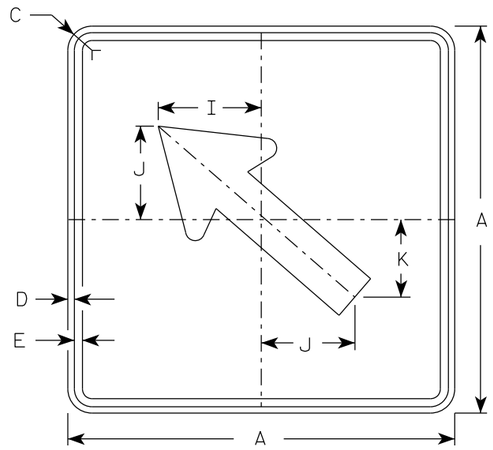
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

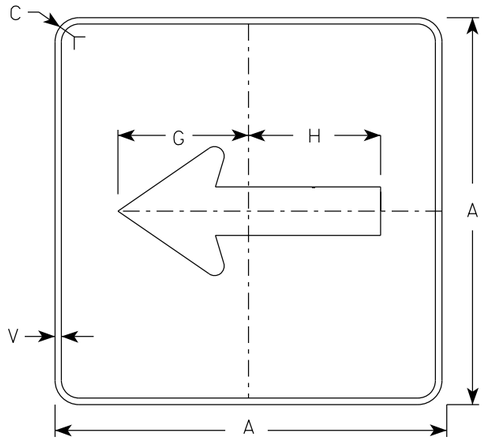
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 239 | E



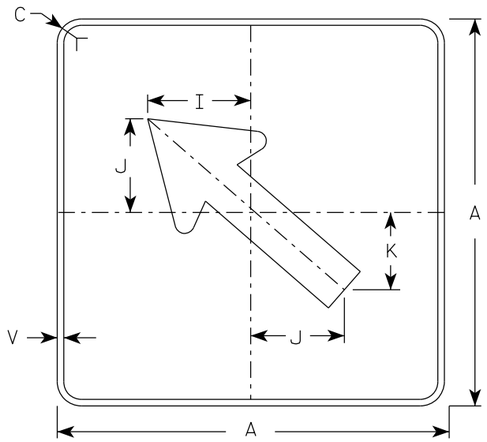
M6-1
MM6-1
MO6-1
MP6-1



M6-2
MM6-2
MO6-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1

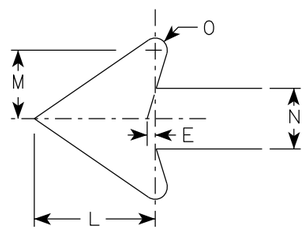


MB6-2
MK6-2
MN6-2
MR6-2

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

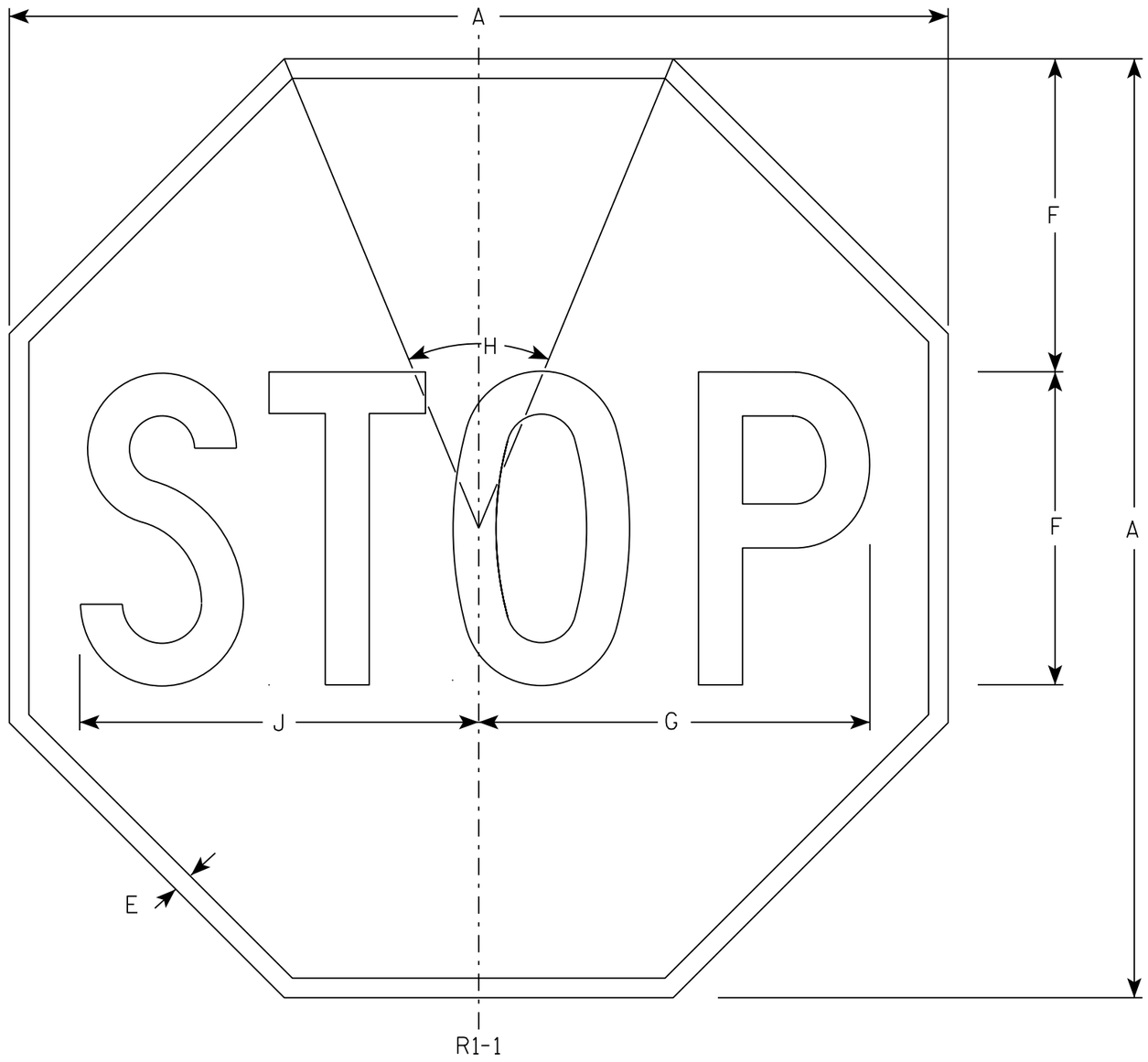
STANDARD SIGN M6-1 & M6-2 SERIES

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: 240 | 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

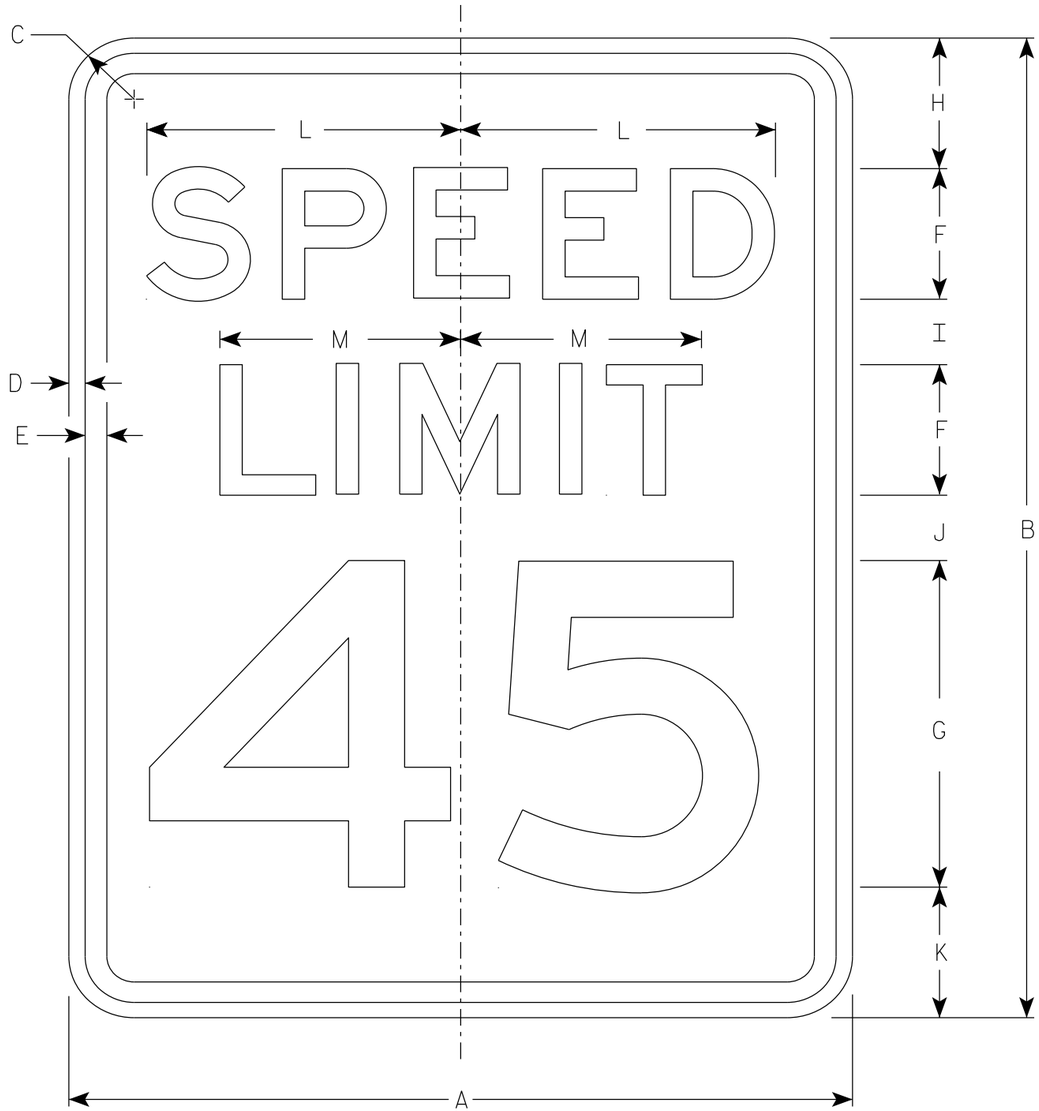
STANDARD SIGN
R1-1

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: 241	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

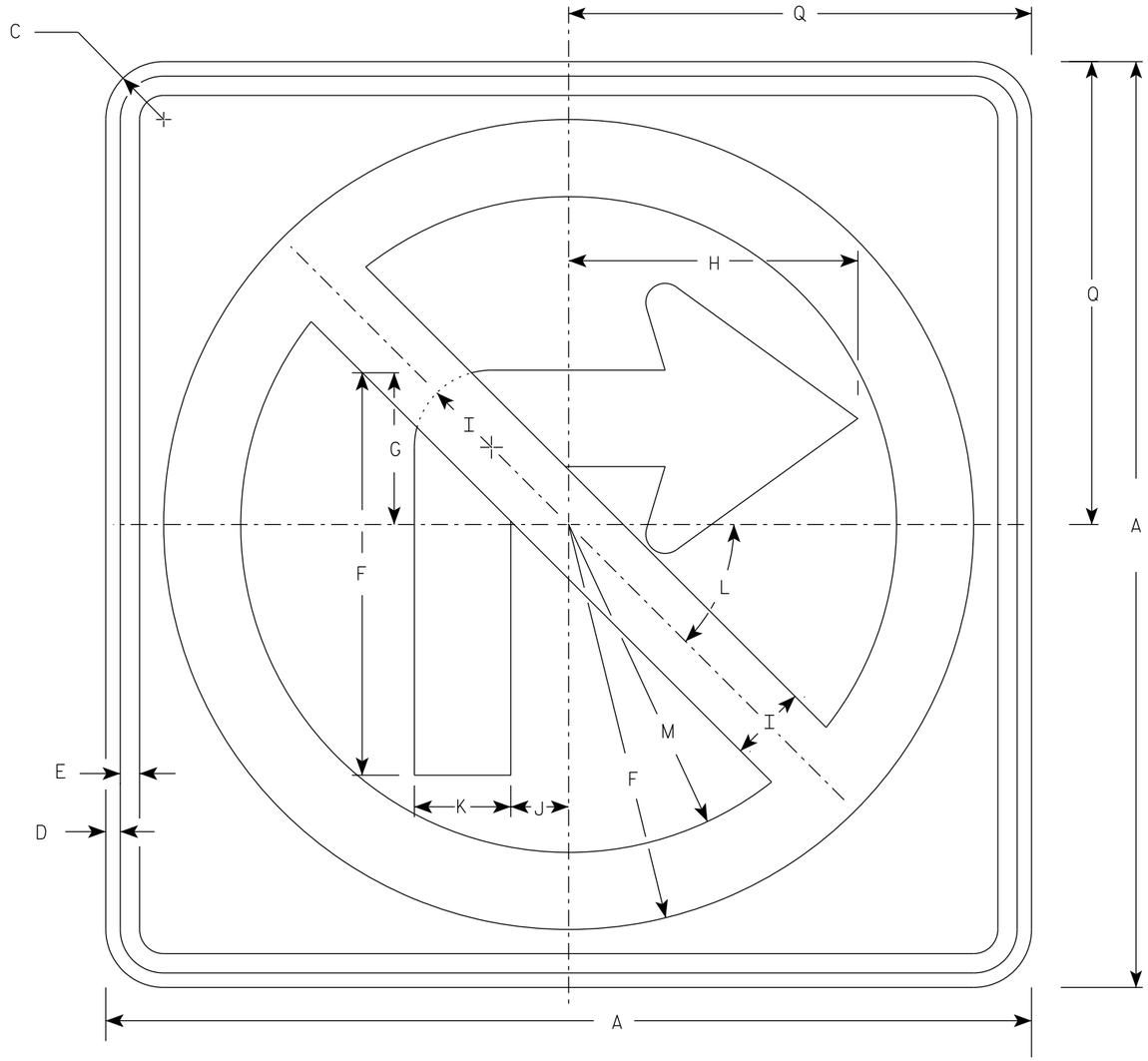
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/23 PLATE NO. R2-1.14

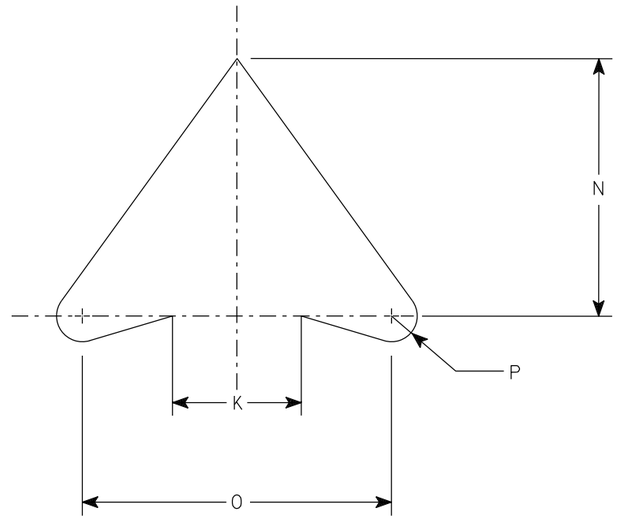
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 242 | E



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

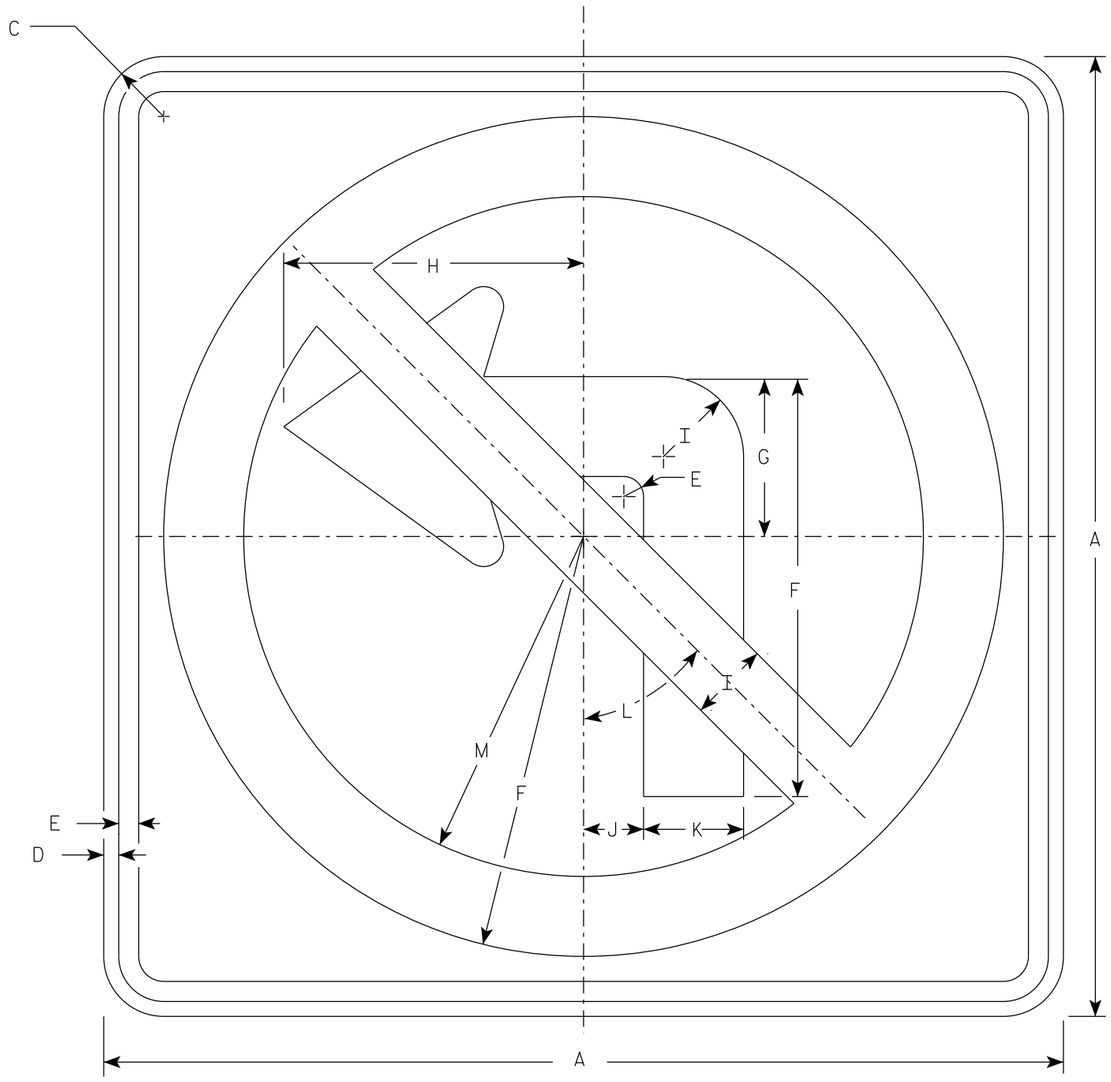
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/2/23 PLATE NO. R3-1.6

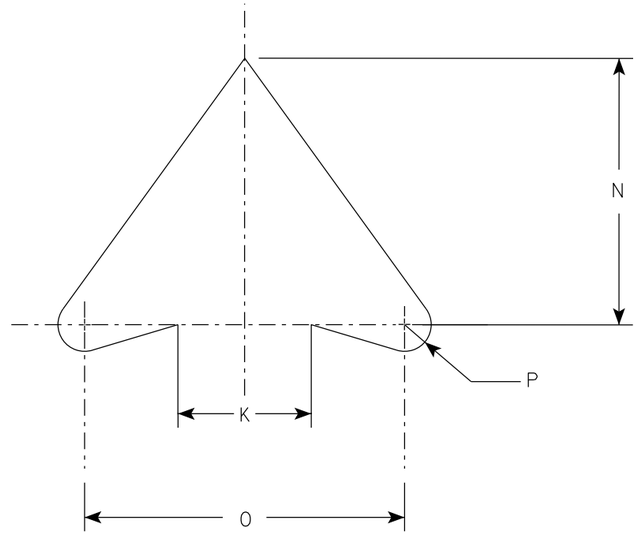
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 243 | E



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

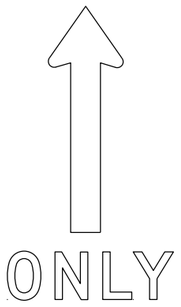
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

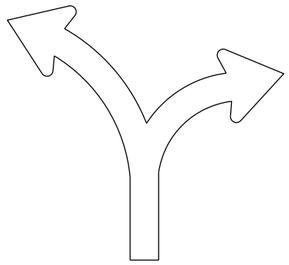
DATE 2/2/23 PLATE NO. R3-2.11

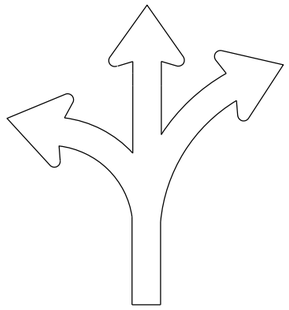
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 244 | E

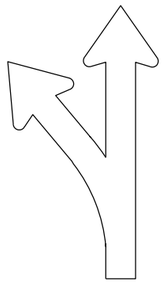


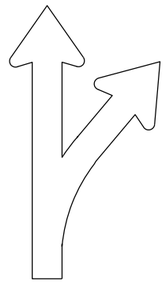
(A)

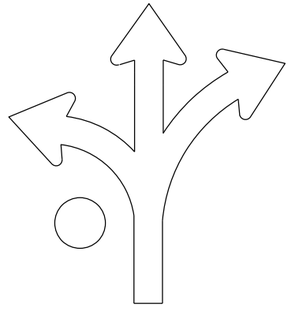
(B)

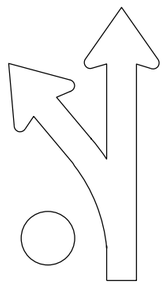

(C)

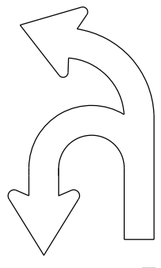

(D)

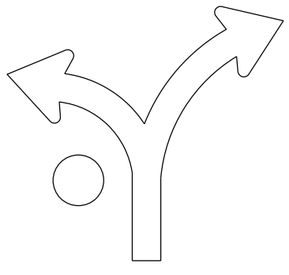

(E)

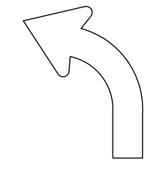

(F)


(G)

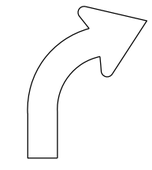

(H)


(I)


(J)



(L)



(R)

NOTES

1. Sigs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Use appropriate Letter for Sign Code
   Each letter added makes sign wider. Example R3-8EAR
5. Square footage of sign varies by letters

1 Letter =	3.75 sq ft	for Size 2
	6.0 sq ft	for Size 3
	10.0 sq ft	for Size 4 or 5
2 Letters =	7.5 sq ft	for Size 2
	12.0 sq ft	for Size 3
	20.0 sq ft	for Size 4 or 5
3 Letters =	11.25 sq ft	for Size 2
	18.0 sq ft	for Size 3
	30.0 sq ft	for Size 4 or 5
4 Letters =	15.0 sq ft	for Size 2
	24.0 sq ft	for Size 3
	40.0 sq ft	for Size 4 or 5
5 Letters =	18.75 sq ft	for Size 2
	30.0 sq ft	for Size 3
	50.0 sq ft	for Size 4 or 5
6 Letters =	22.5 sq ft	for Size 2
	36.0 sq ft	for Size 3
	60.0 sq ft	for Size 4 or 5

6. When letters C,D,G,J are used on the Left or Right end of the sign the Sq. Ft. changes.
   Add the amounts when these letters are used:
   1.25 sq ft for Size 2
   1.5 sq ft for Size 3
   2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

SHEET NO: 245 E

FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn PLOT DATE : 14-FEB 2023 3:01 PLOT BY : mscj9h PLOT NAME :

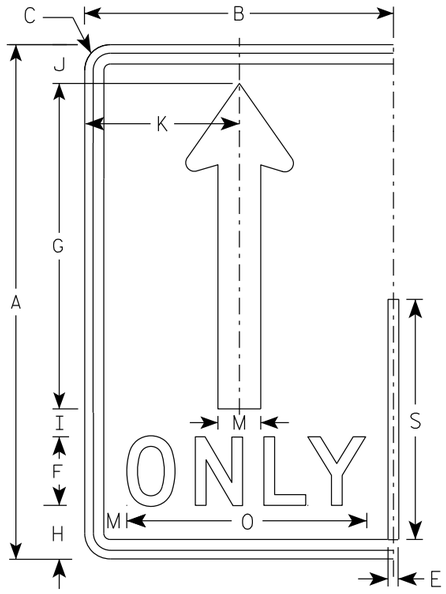
WISDOT/CADDS SHEET 42

7

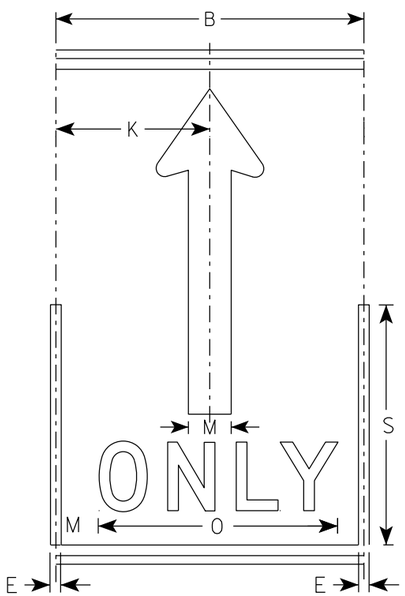
7

NOTES

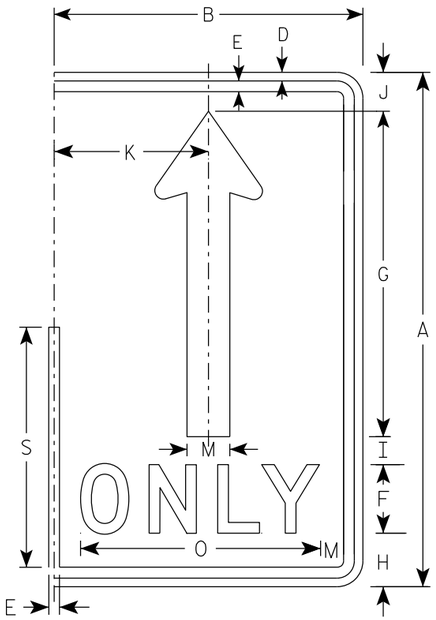
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



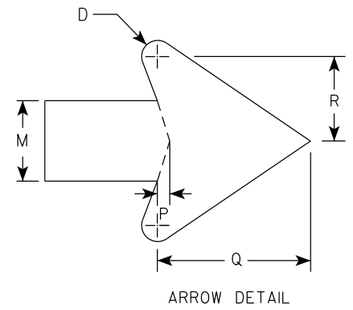
(A)



(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

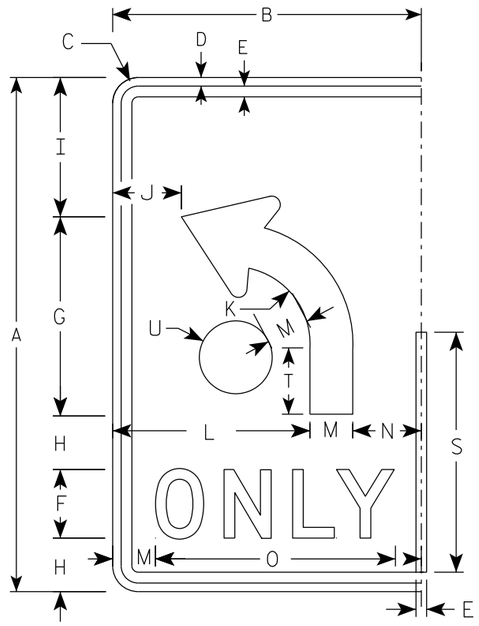
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

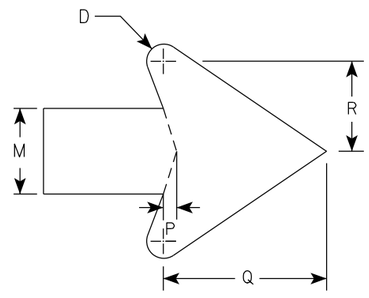
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 246 | E

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

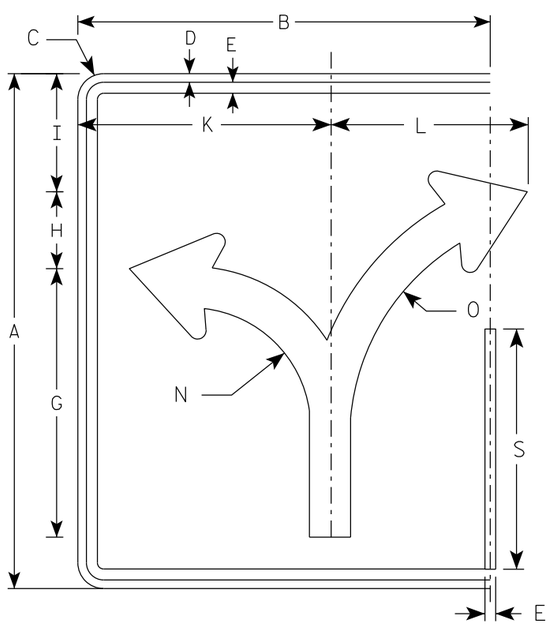
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

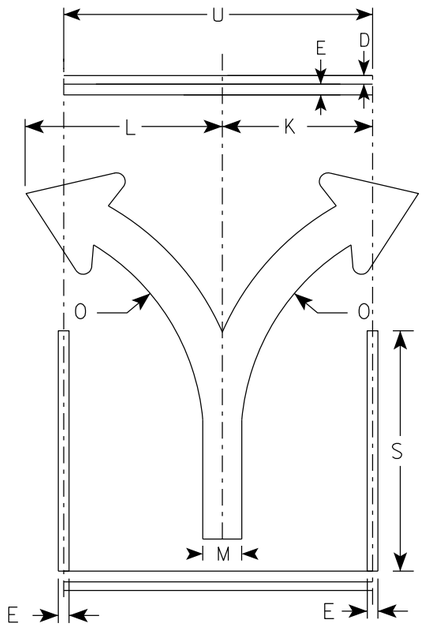
SHEET NO: 247 E

NOTES

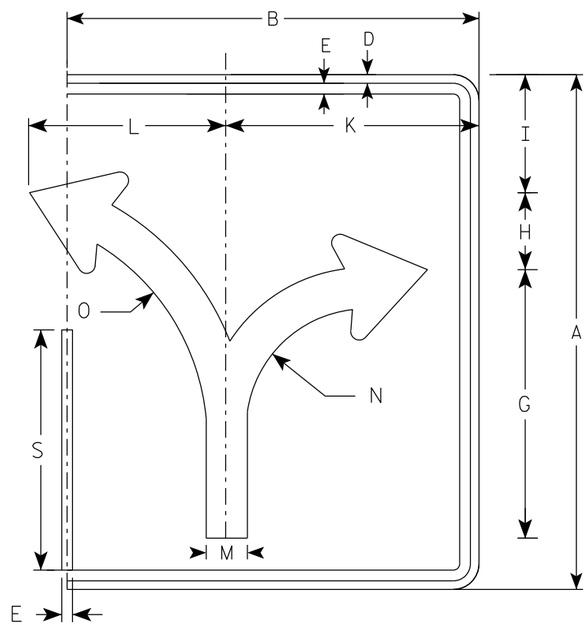
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



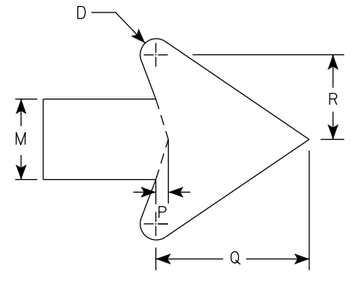
(C)



(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

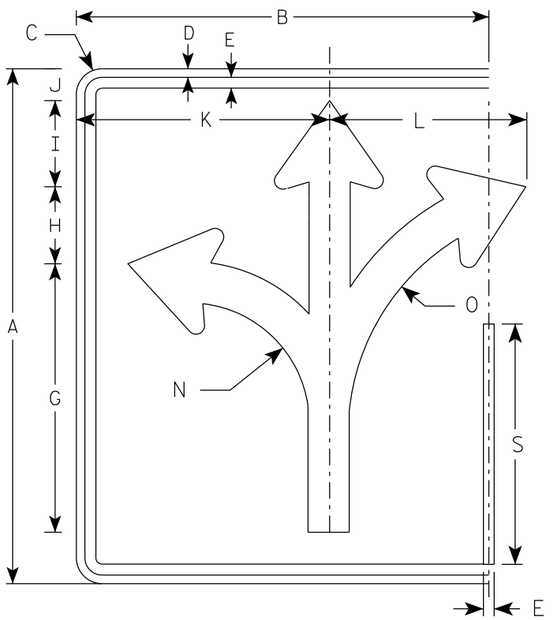
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 248 | E

7

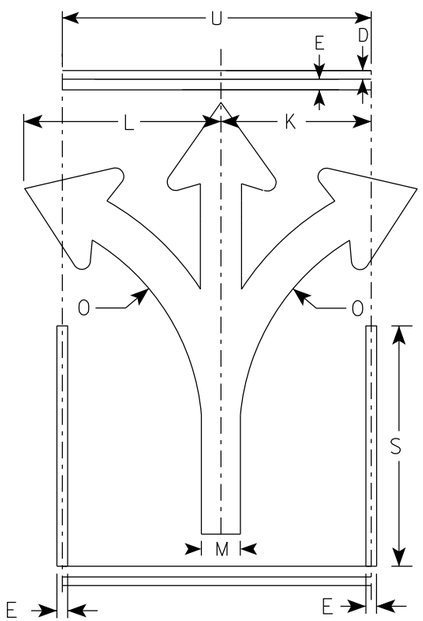
7

NOTES

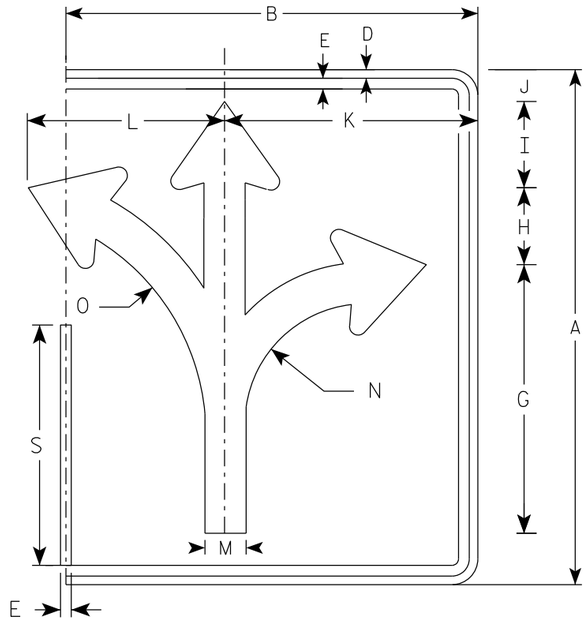
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



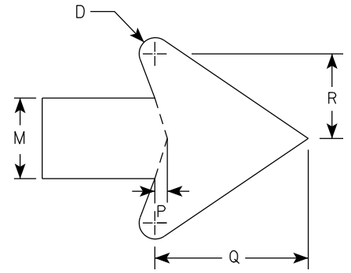
(D)



(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

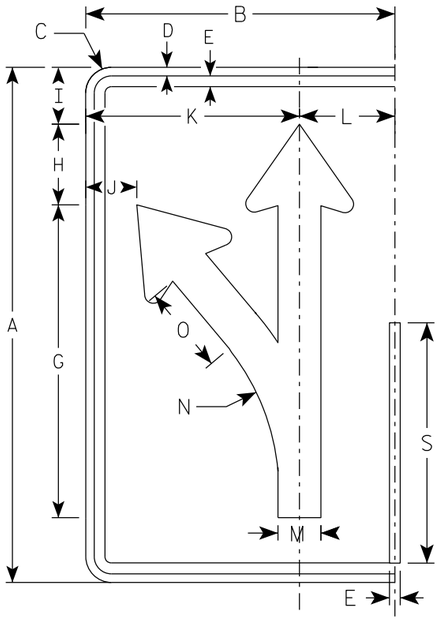
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

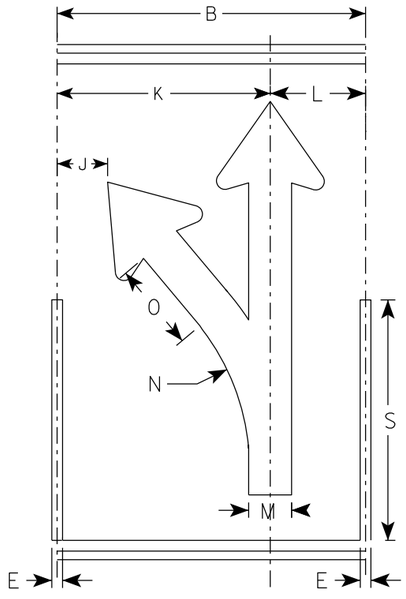
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 249 | E

NOTES

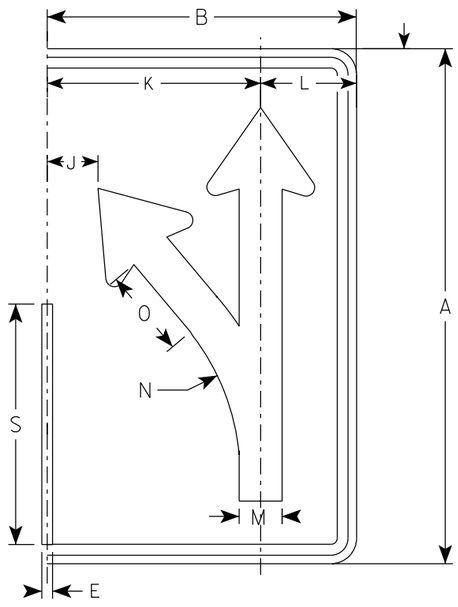
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



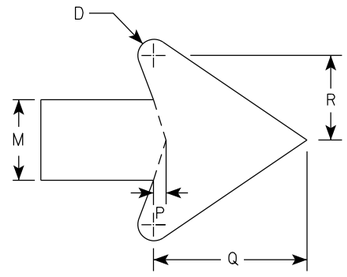
(E)



(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

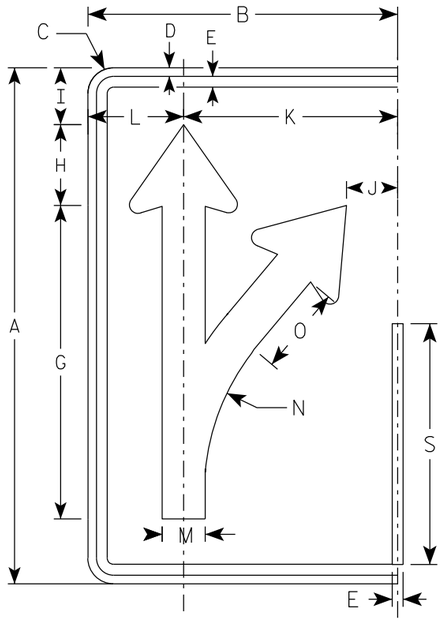
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

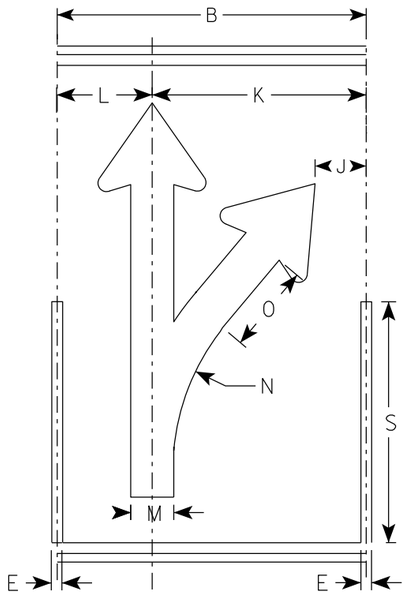
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 250 | E

NOTES

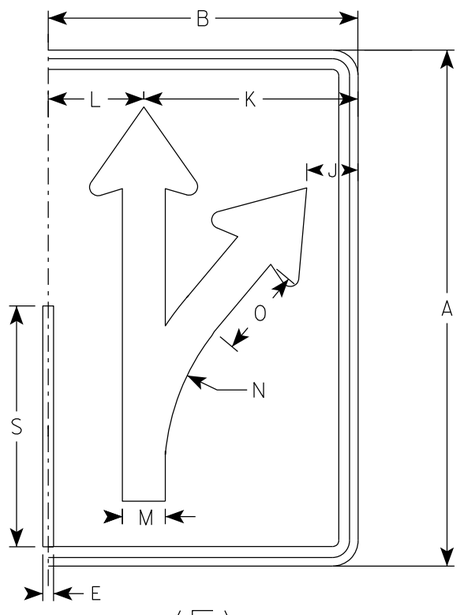
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



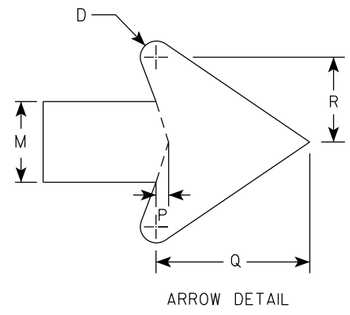
(F)



(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

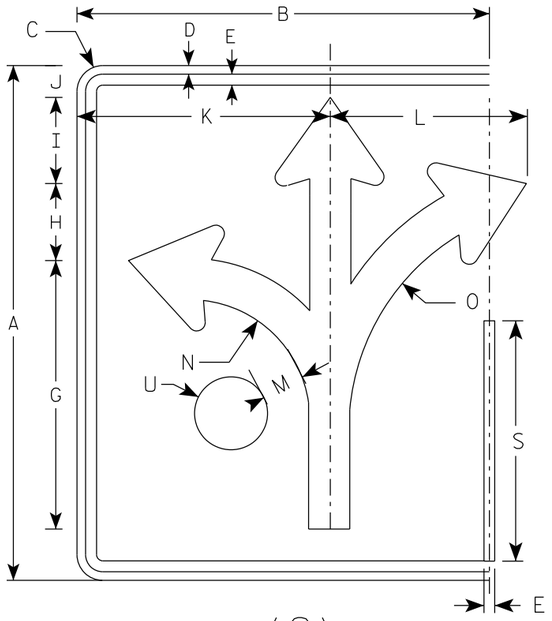
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

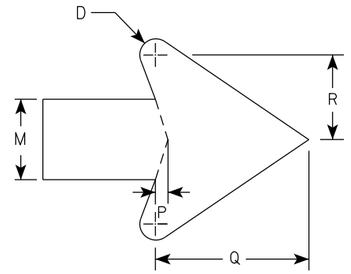
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 251 | E

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

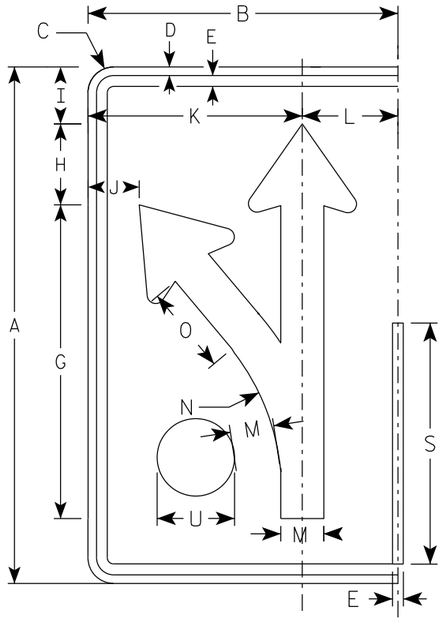
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

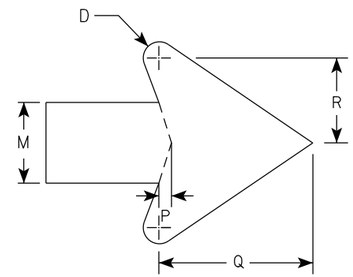
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 252	E

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

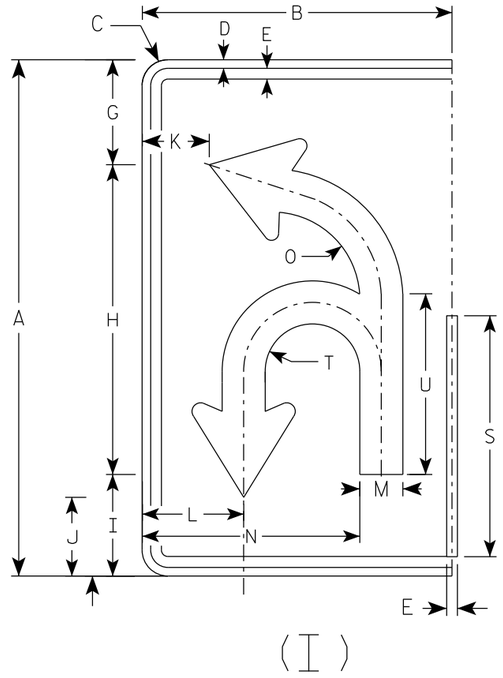
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

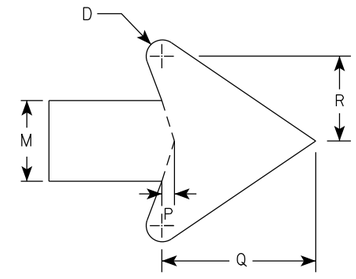
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 253 | E

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

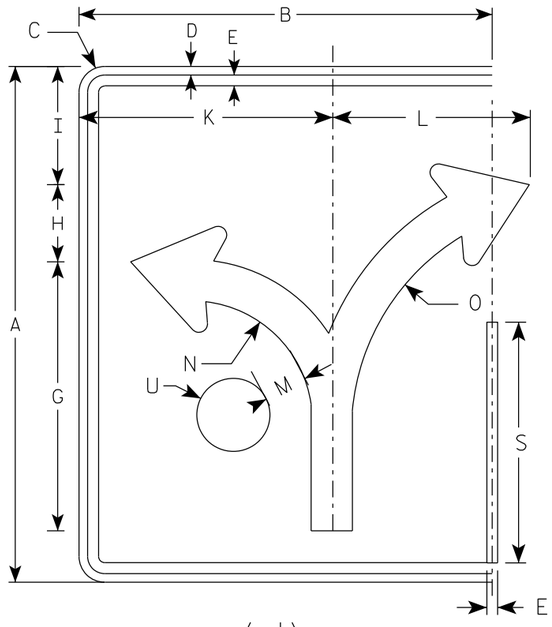
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

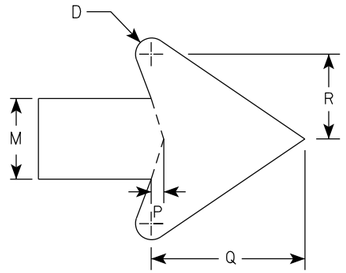
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 254 | E

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

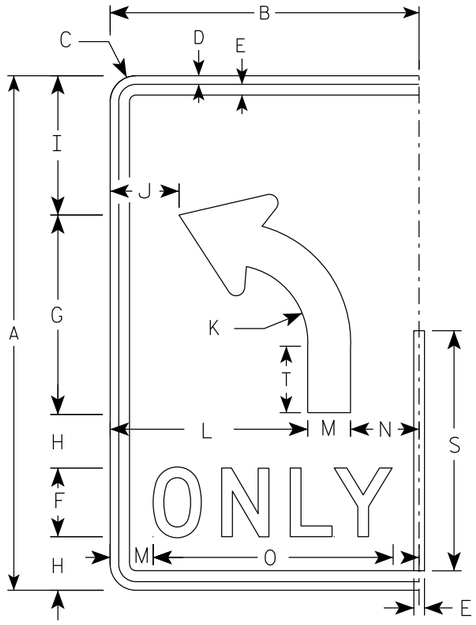
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

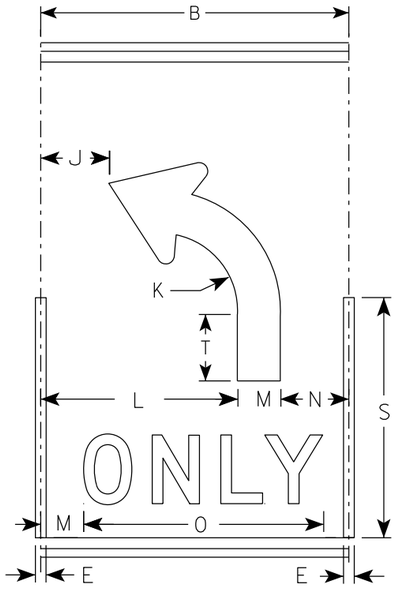
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 255 | E

NOTES

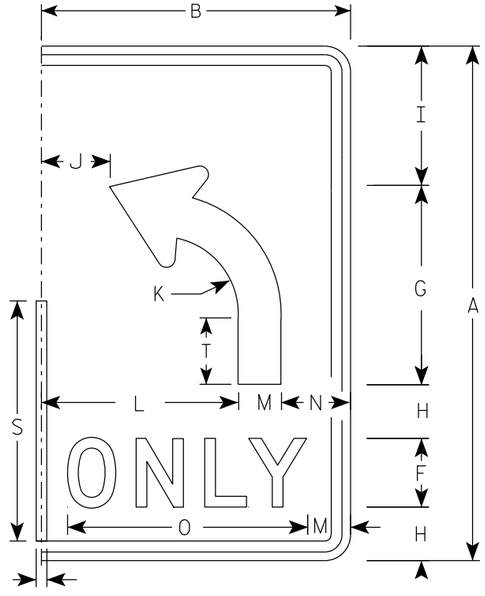
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



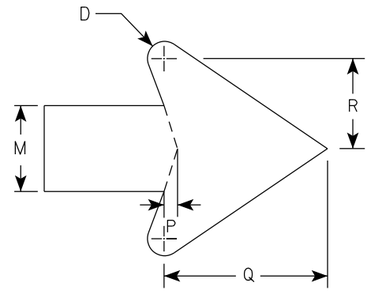
(L)



(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 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 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

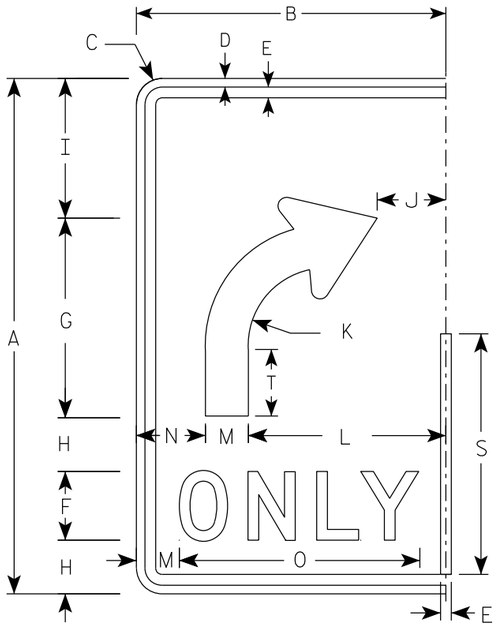
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

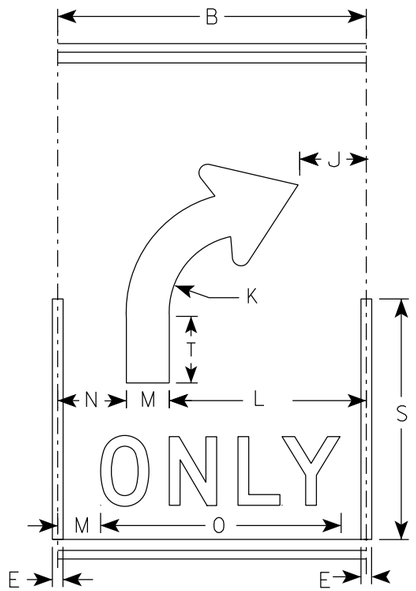
SHEET NO: 256 E

NOTES

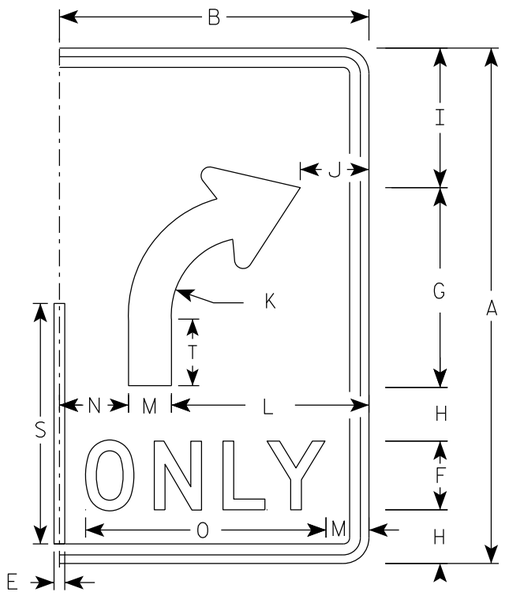
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



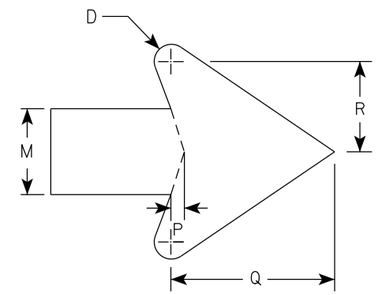
(R)



(R)



(R)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 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

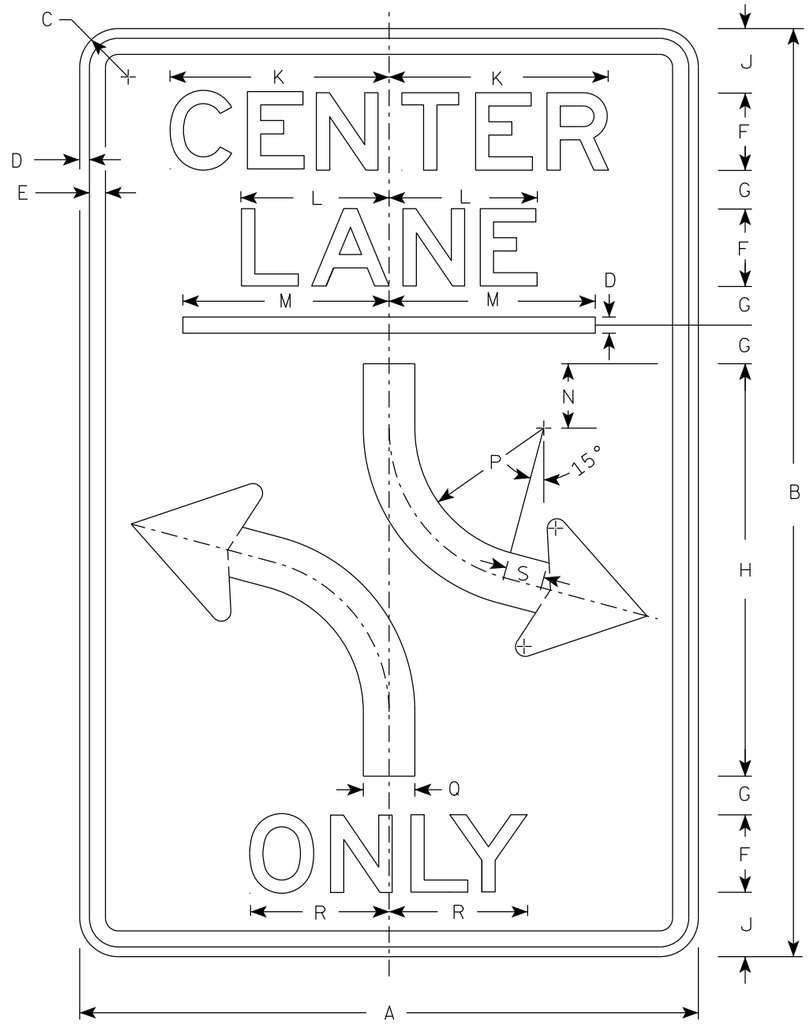
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

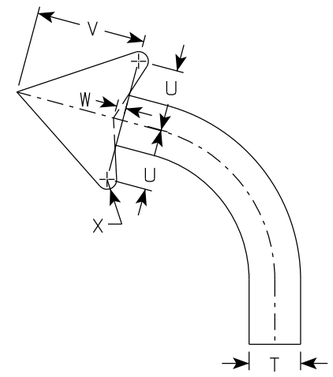
SHEET NO: 257 **E**



R3-9B

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 ½	⅜	½	3	1 ½	16		2 ½	8 ½	5 ¾	8	2 ½		6	2	5 ⅛	1 ½		2 ⅜	4 ⅜	⅜				6.0
2M	24	36	1 ½	⅜	½	3	1 ½	16		2 ½	8 ½	5 ¾	8	2 ½		6	2	5 ⅛	1 ½		2 ⅜	4 ⅜	⅜				6.0
3	36	48	1 ⅞	⅝	⅞	5	1 ½	20		3 ½	14 ⅛	9 ½	12	3		4	3	9 ⅞	2		3 ½	6 ⅛	½				12.0
4																											
5																											

STANDARD SIGN
R3-9B

WISCONSIN DEPT OF TRANSPORTATION

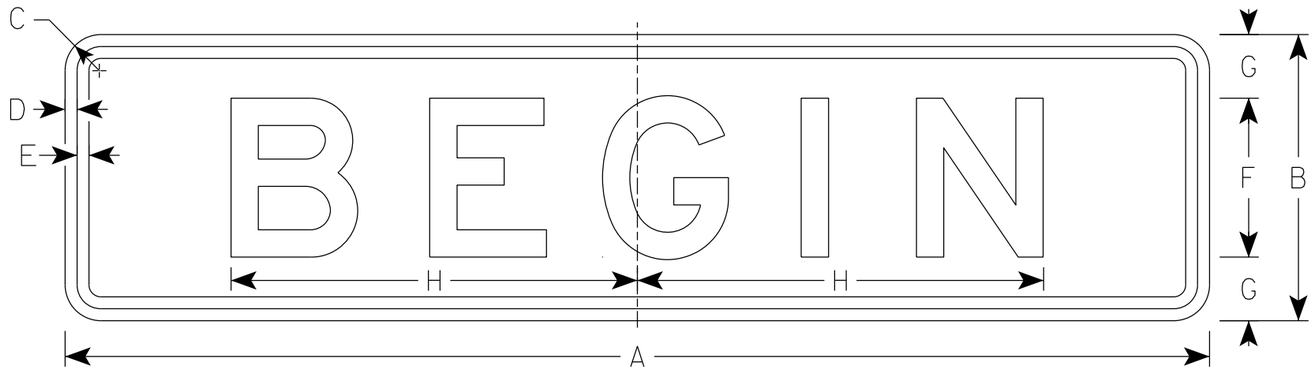
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/15/23 PLATE NO. R3-9B.6

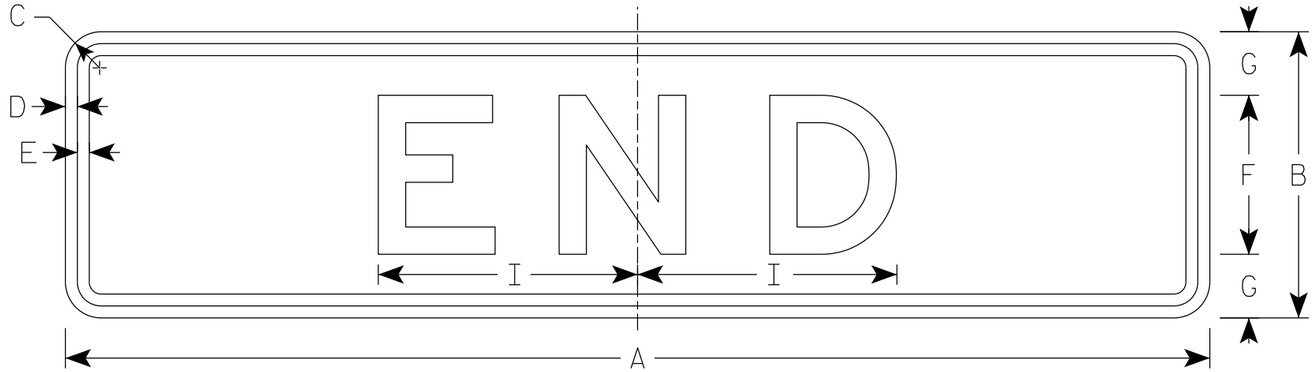
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 258 | E

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

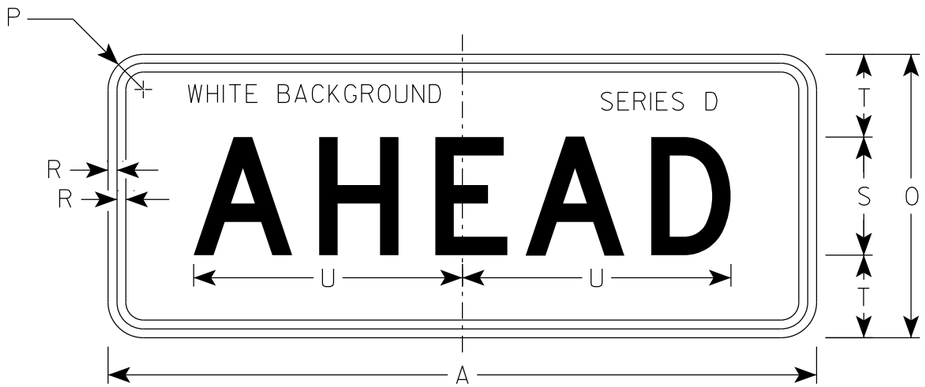
DATE 2/23/23 PLATE NO. R3-9C.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 259	E

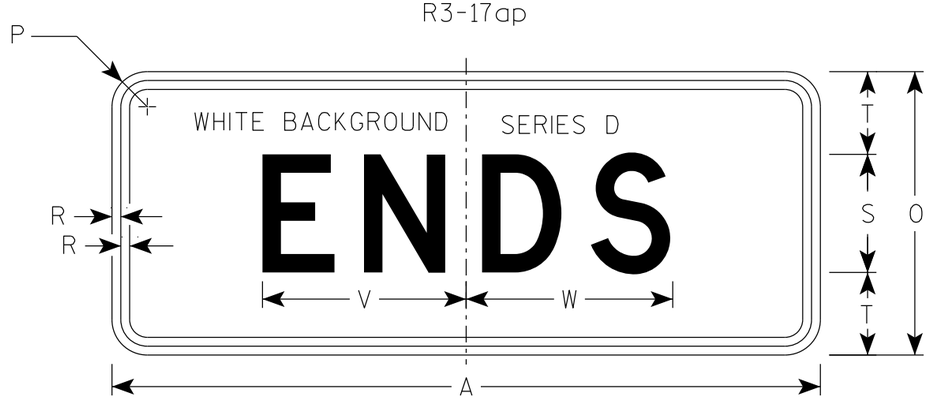
R3-17

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

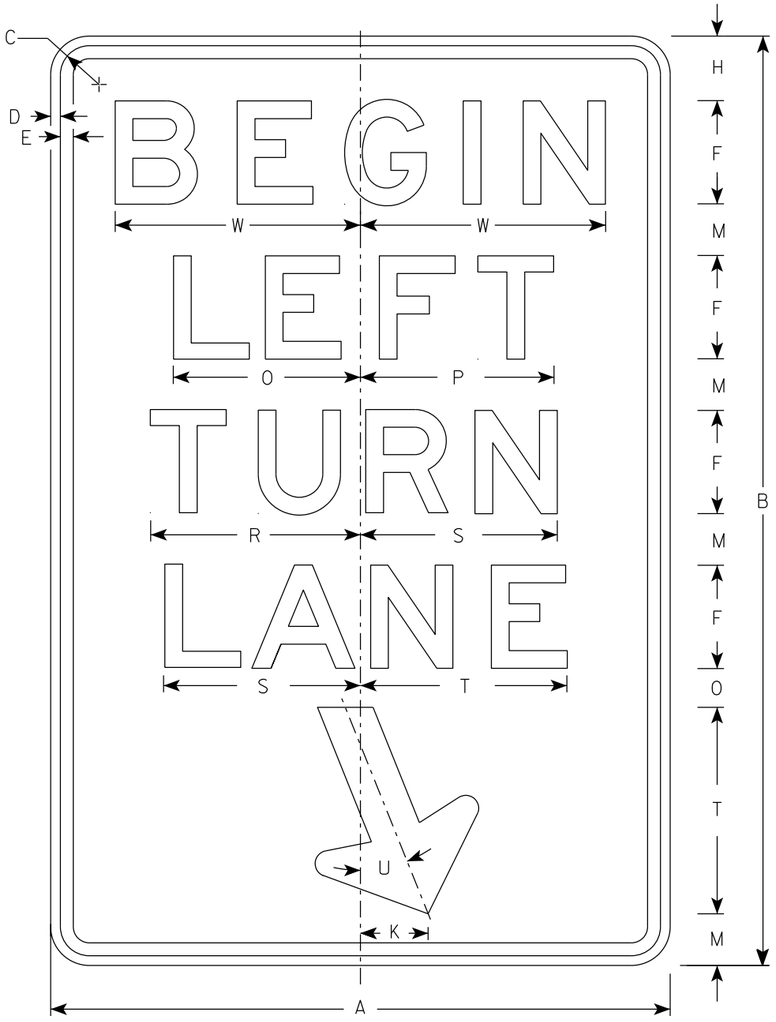
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-17.3

PROJECT NO:

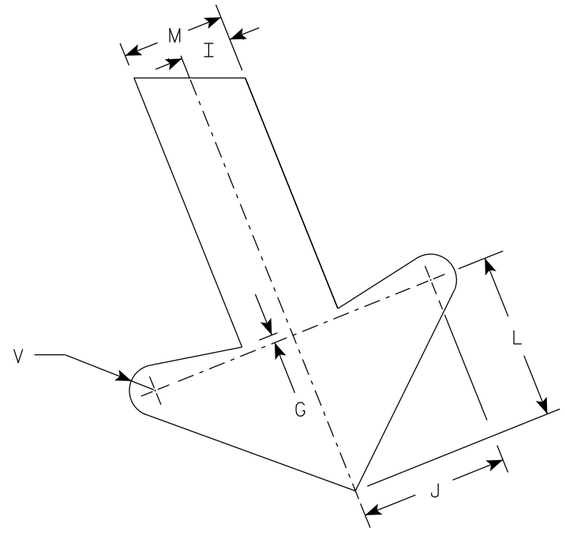
SHEET NO: 260 E



R3-20L

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/2	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/2	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 7/8	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

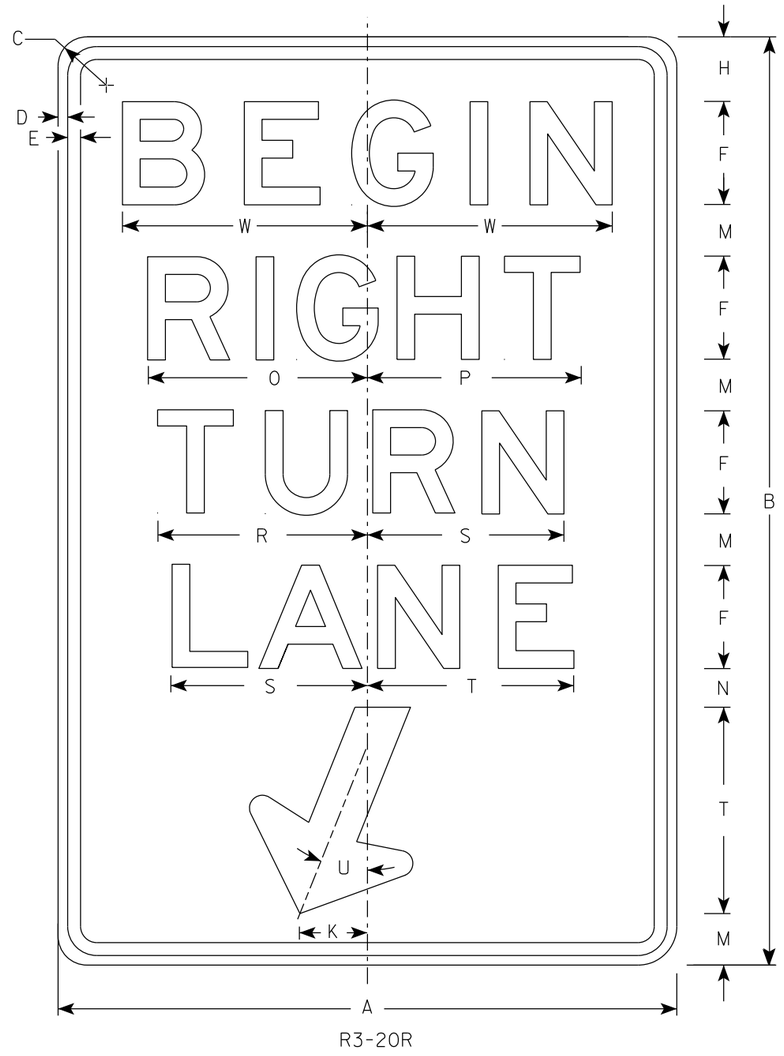
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-20L.8

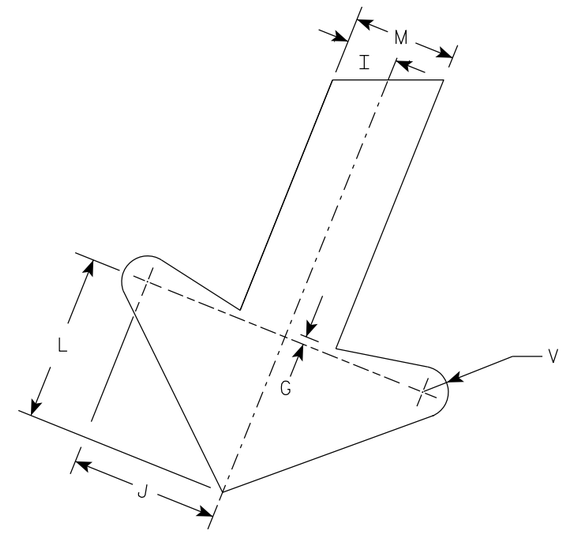
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 261	E



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

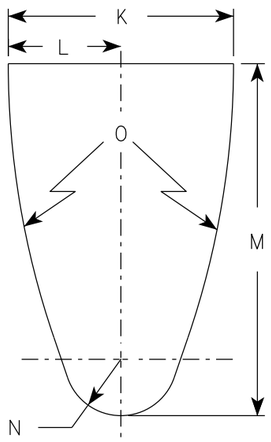
DATE 2/23/23 PLATE NO. R3-20R.7

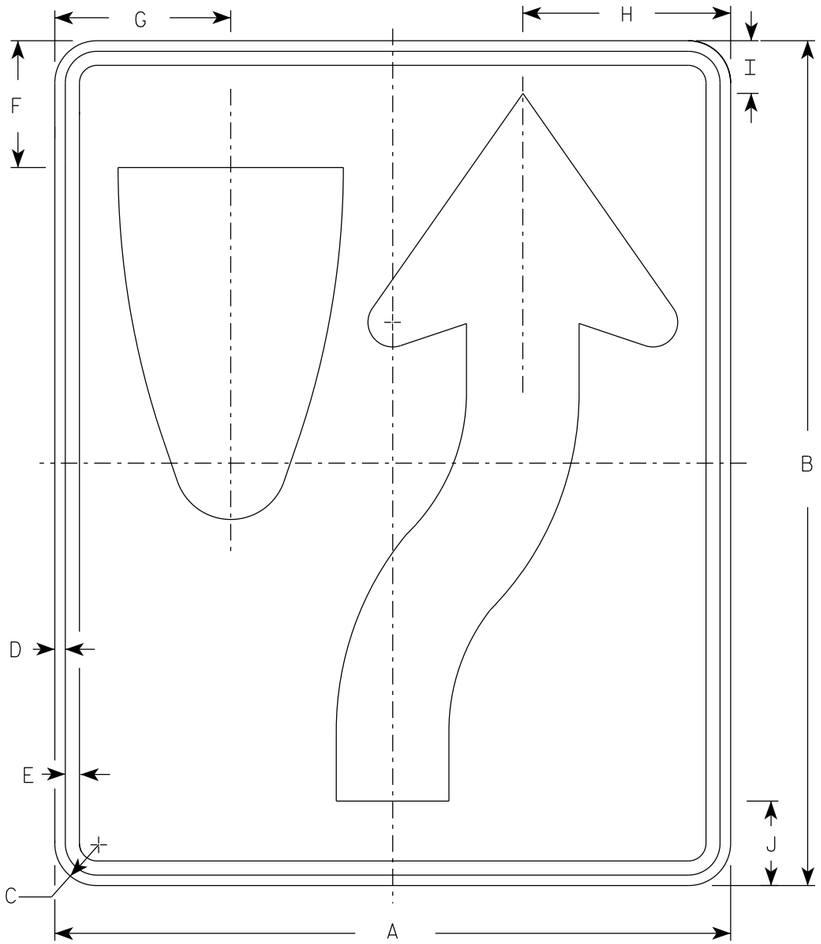
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 262 | E

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.

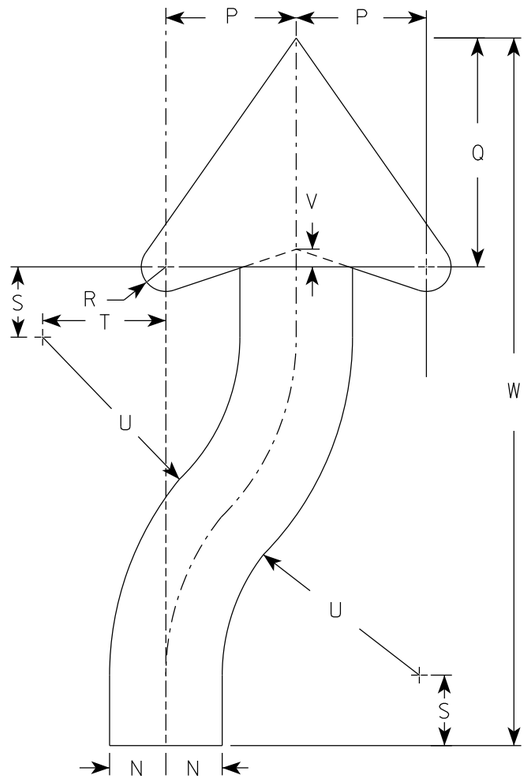
DIVIDER DETAIL





R4-7

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

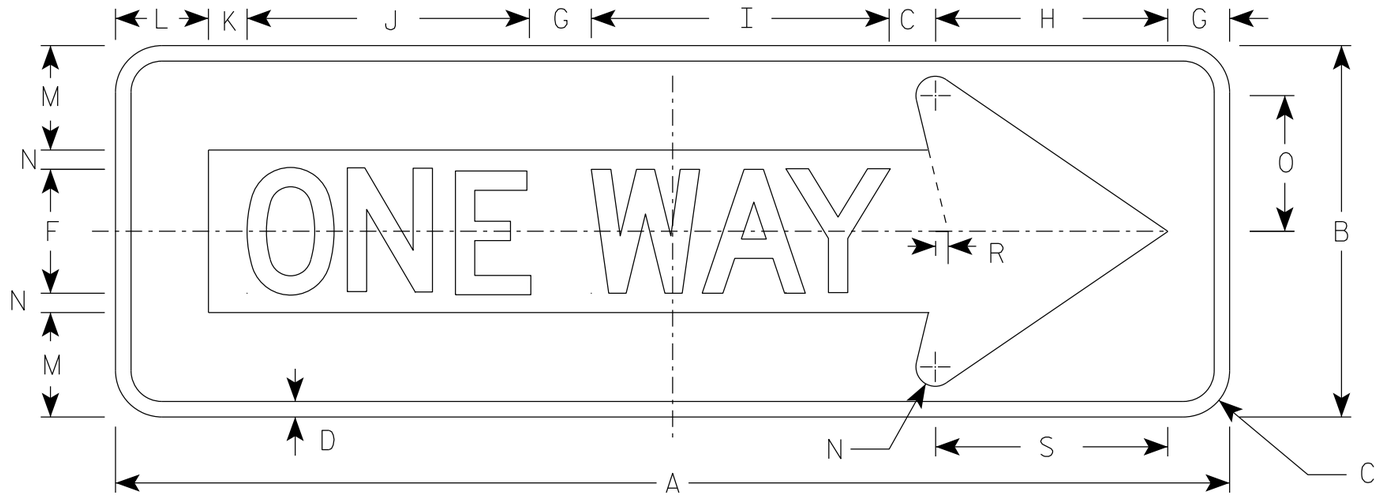
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/17/23 PLATE NO. R4-7.9

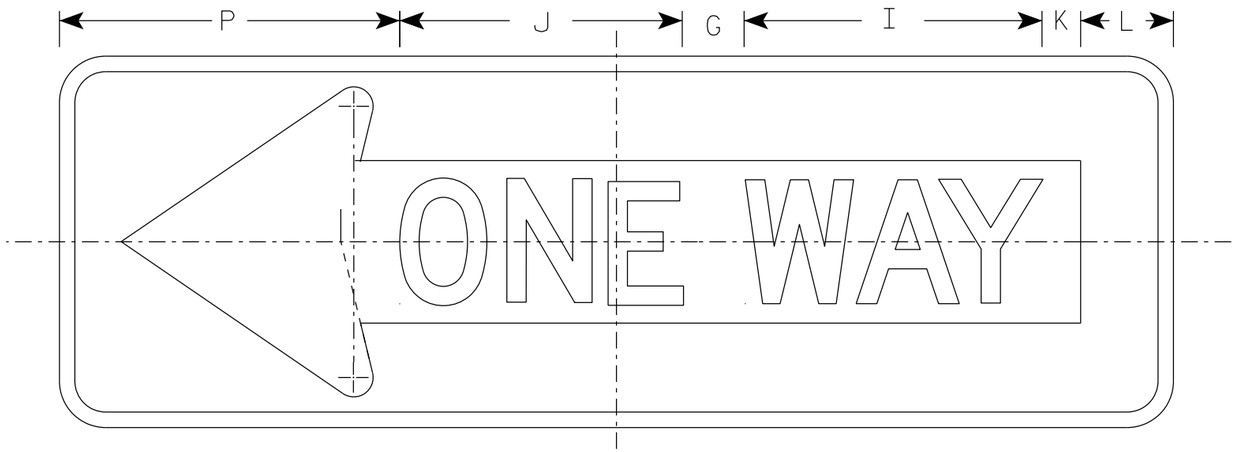
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 263	E



R6-1R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Black
   Message - Black Legend & White Arrow & Border
3. Message Series - D



R6-1L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	12	1 ½	½		4	2	7 ½	9 ⅝	9 ⅛	1 ¼	3	3 ⅜	⅝	4 ⅜	11		⅜	7 ½								3.0
2M	54	18	1 ½	¾		6	3	11 ¼	13 ⅝	14 ½	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
3	54	18	1 ½	¾		6	3	11 ¼	13 ⅝	14 ½	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
4	54	18	1 ½	¾		6	3	11 ¼	13 ⅝	14 ½	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
5																											

STANDARD SIGN
R6-1 L&R

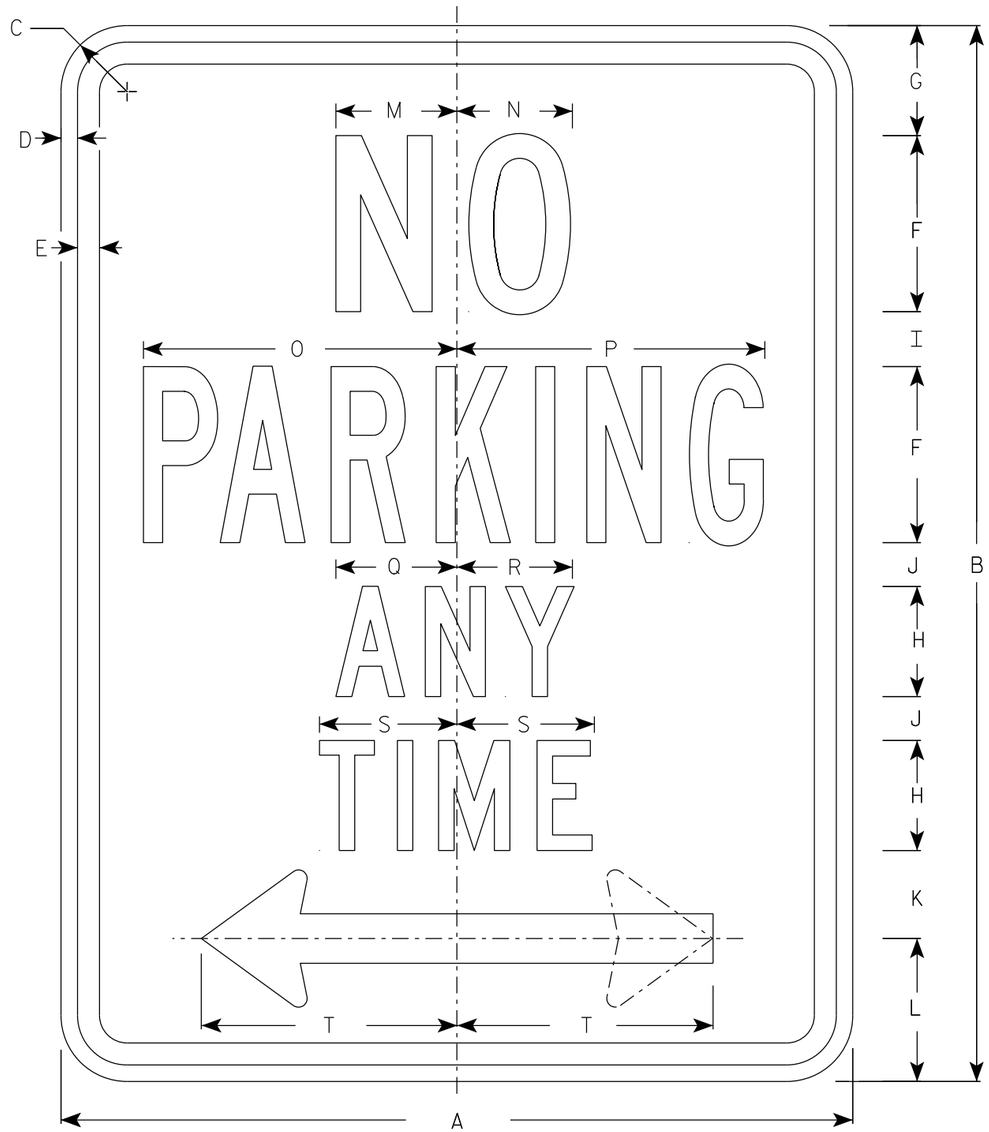
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/30/23 PLATE NO. R6-1.4

PROJECT NO:

SHEET NO: 264 E

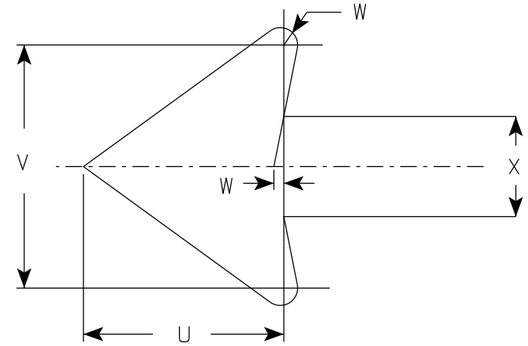


R7-1

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																											

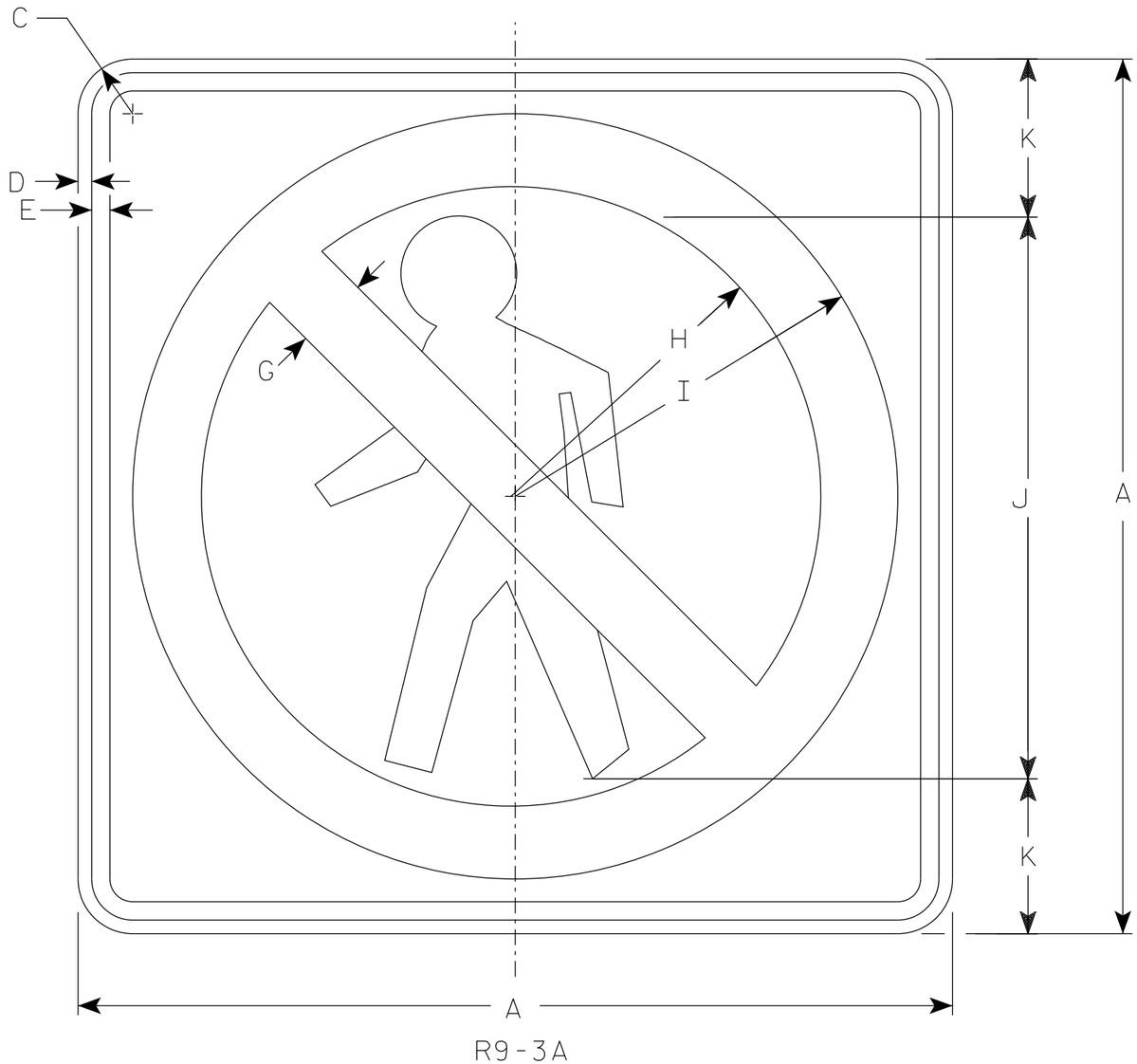
STANDARD SIGN
R7-1

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: 265 | 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

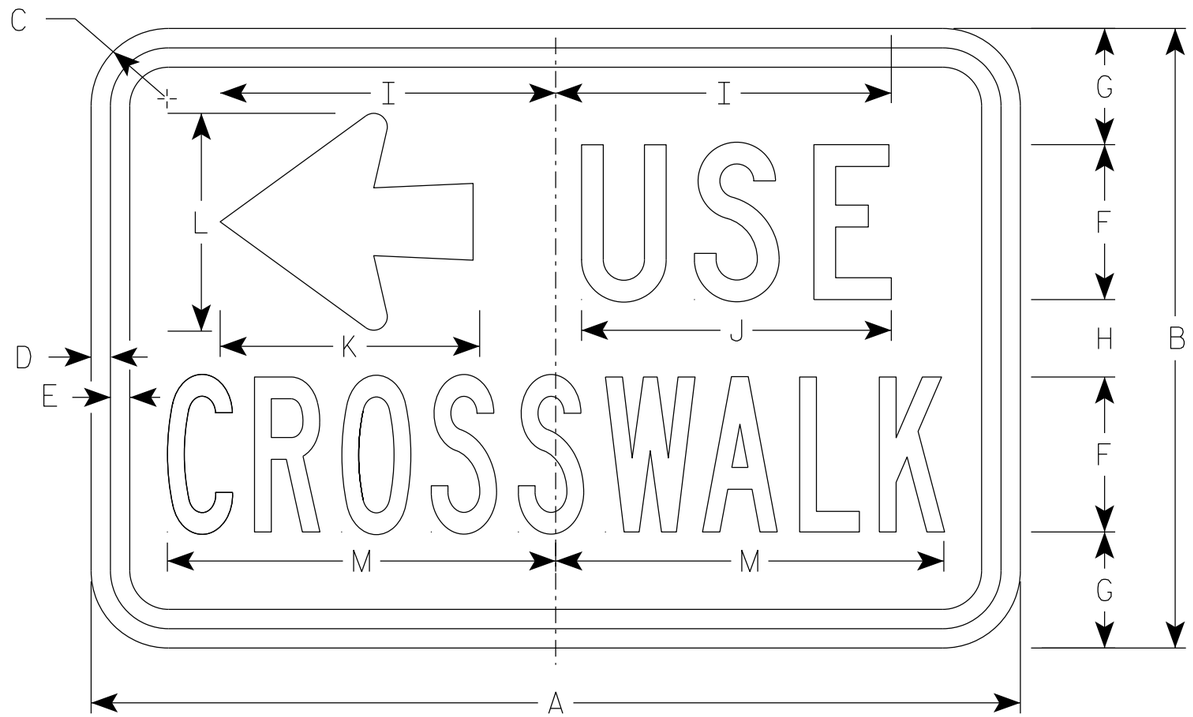
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/23/24 PLATE NO. R9-3A.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 266 E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C Line 1, Series B Line 2



R9-3BL

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 ½	⅜	⅜	3	2 ¼	1 ½	6 ½	6	5	4 ¼	7 ½														1.5
2M	18	12	1 ½	⅜	⅜	3	2 ¼	1 ½	6 ½	6	5	4 ¼	7 ½														1.5
3																											
4																											
5																											

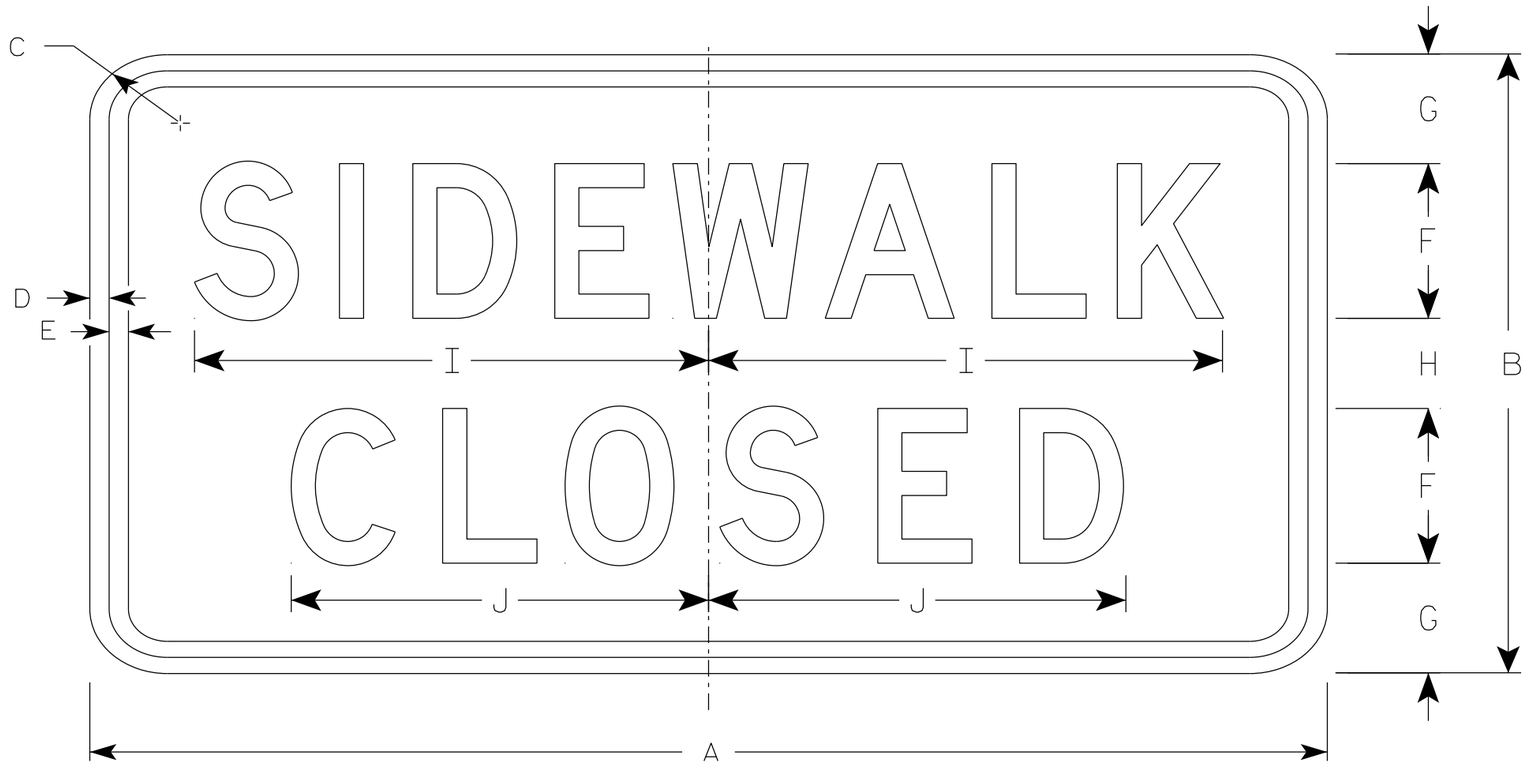
STANDARD SIGN
R9-3BL

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/23/24 PLATE NO. R9-3BL.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 267	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

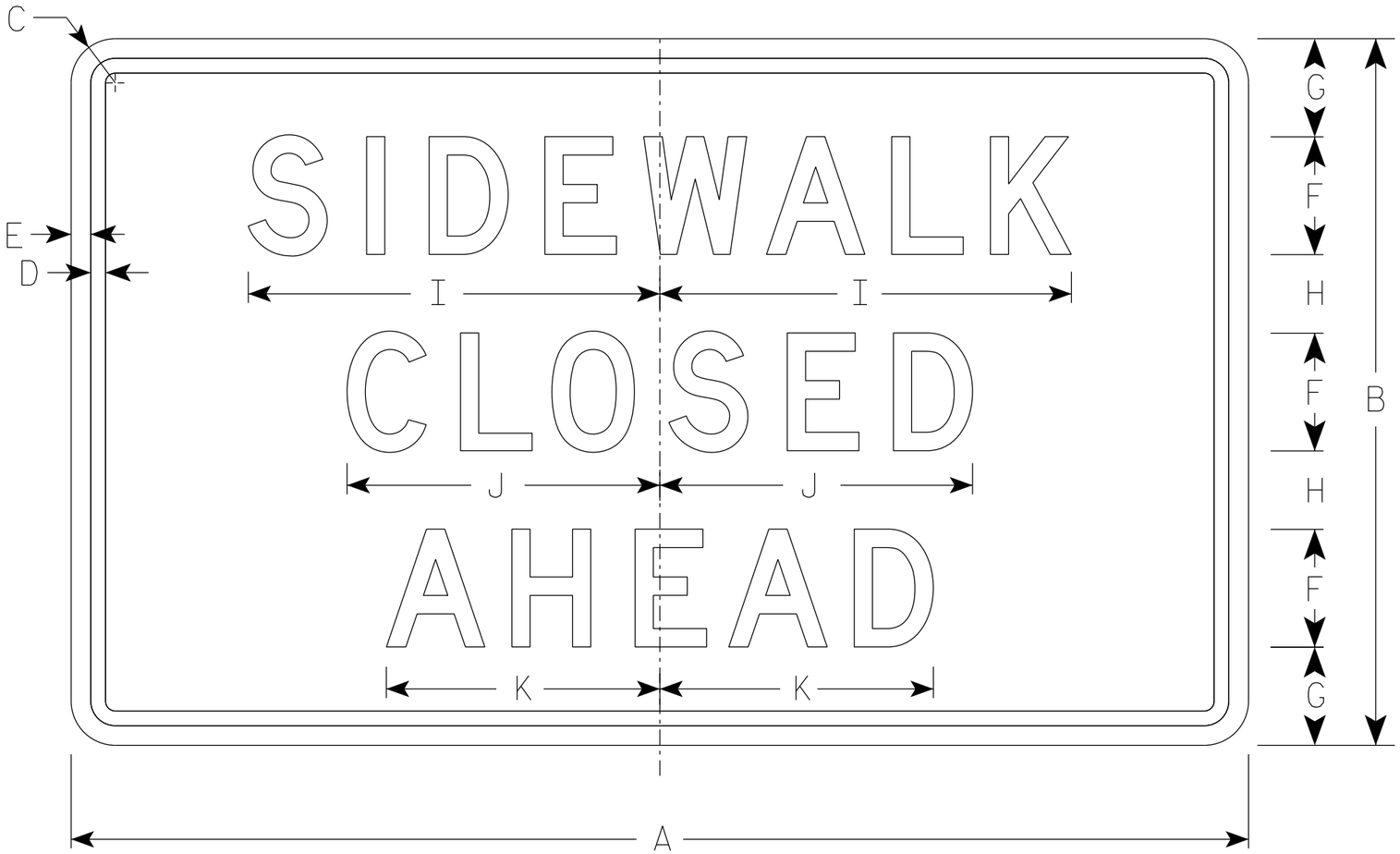
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 268 | 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																											

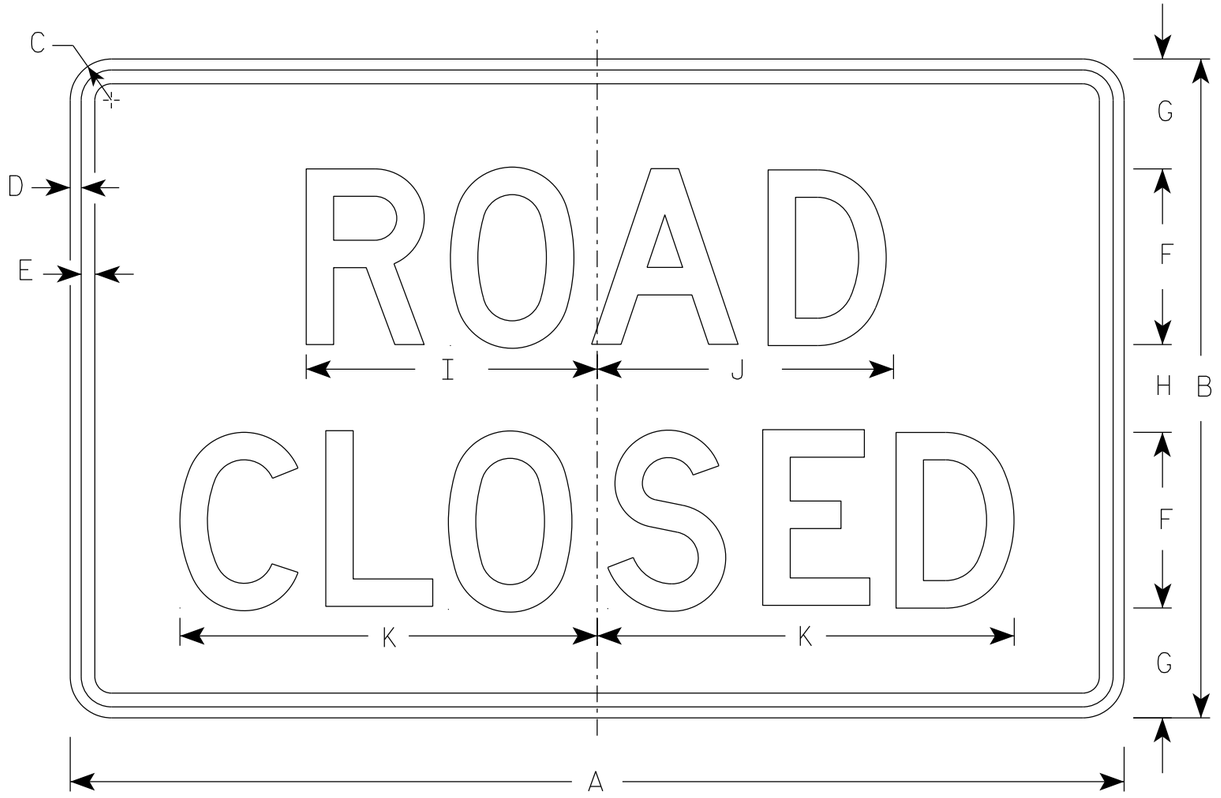
STANDARD SIGN
R9-9A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9A.2

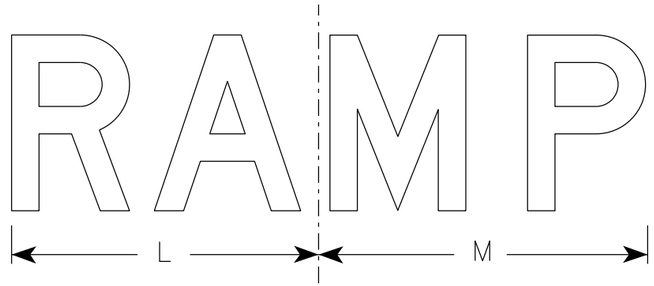
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 269	E



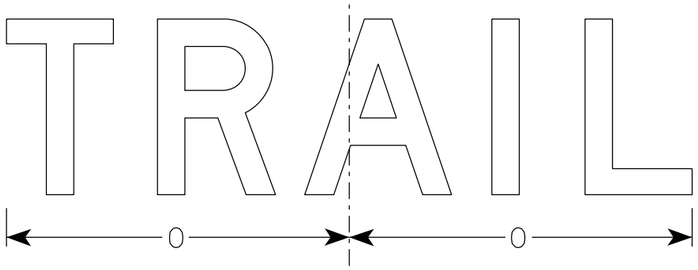
R11-2

NOTES

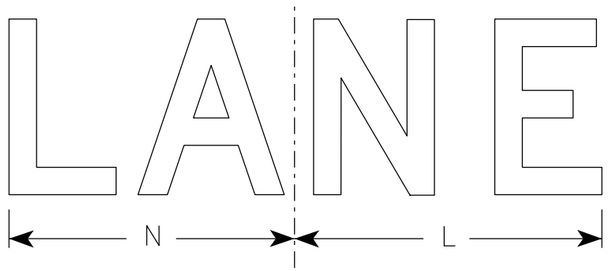
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

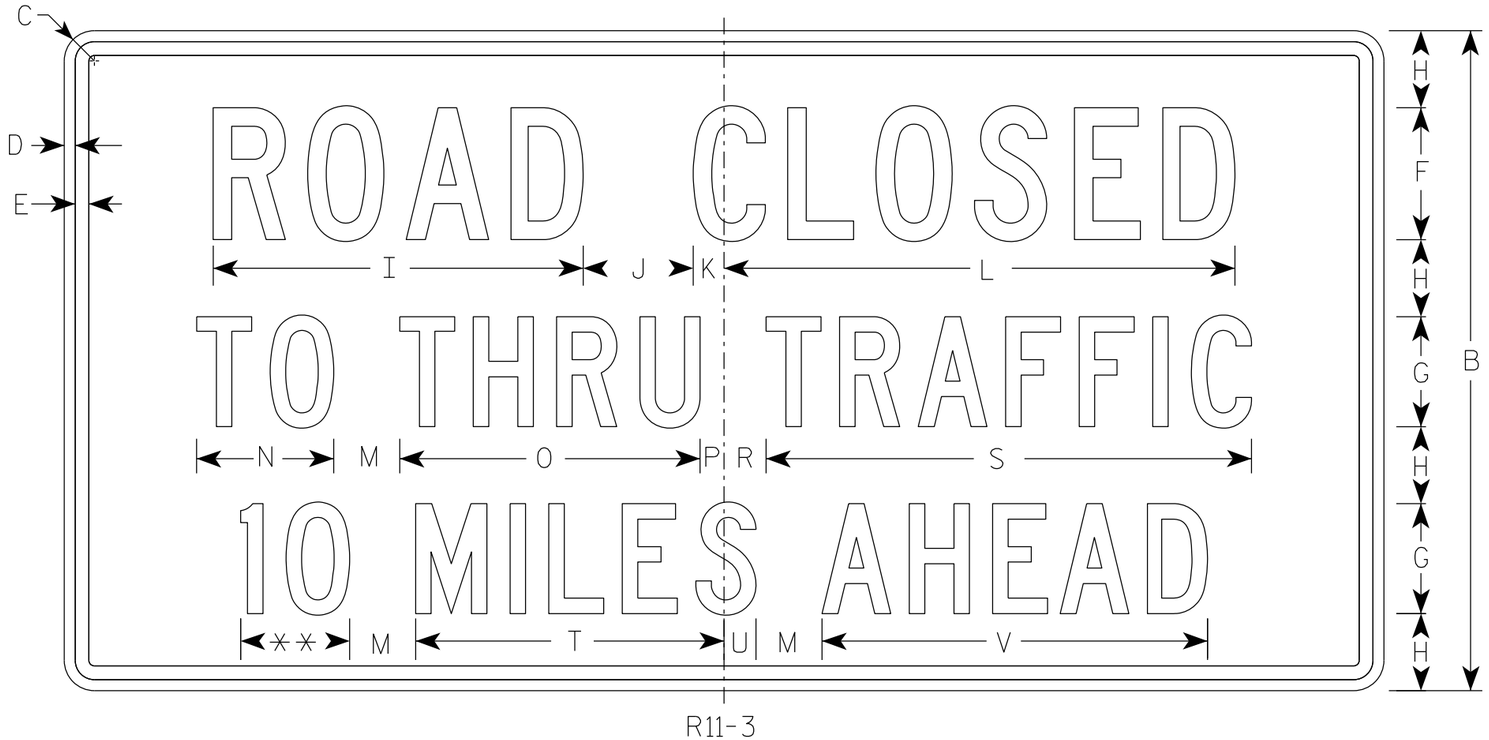
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 270	E

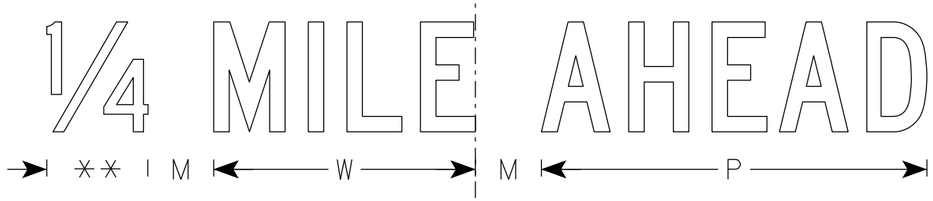
NOTES

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.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

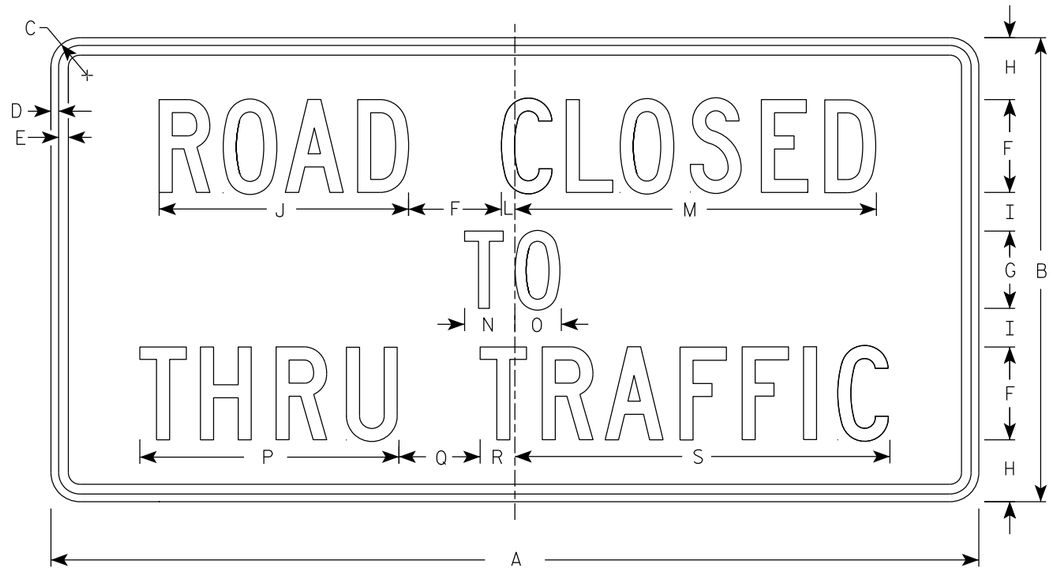
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-3.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 271 | 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																											

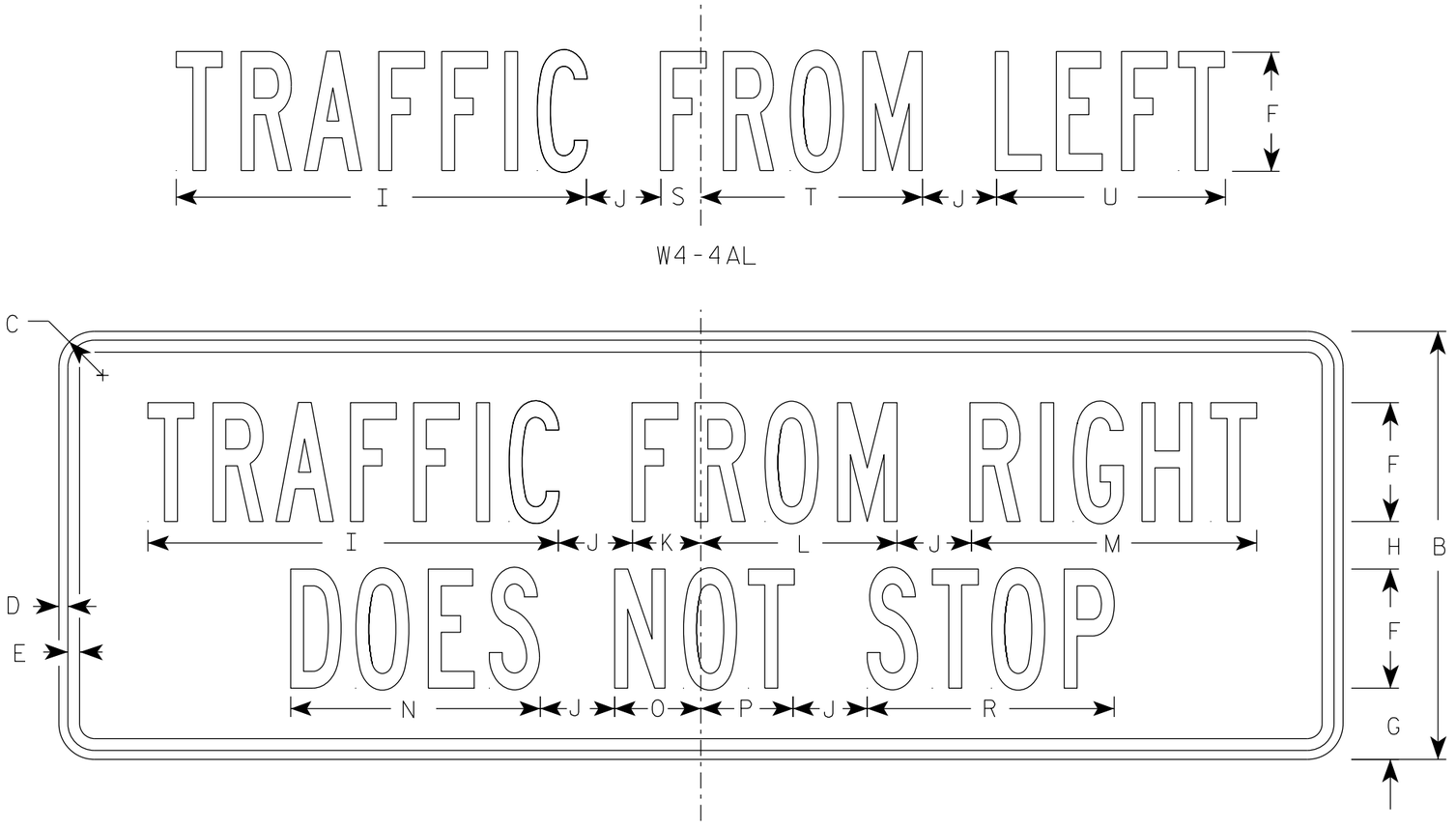
STANDARD SIGN
R11 - 4

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: 272 | E



W4-4AL

W4-4AR

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message 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	30	12	1 1/2	3/8	3/8	3	2 1/4	1 1/2	10 3/8	1 1/2	1 3/4	4 7/8	7 1/4	6 1/4	2 1/4	2 1/4		6 1/4	1	5 5/8	5 3/4						2.5
2M	30	12	1 1/2	3/8	3/8	3	2 1/4	1 1/2	10 3/8	1 1/2	1 3/4	4 7/8	7 1/4	6 1/4	2 1/4	2 1/4		6 1/4	1	5 5/8	5 3/4						2.5
3	42	15	1 1/2	3/8	1/2	4	2 5/8	1 3/4	13 7/8	2 3/8	2 1/8	6 3/4	9 3/4	8 3/8	2 3/4	3 3/8		8 3/8	1 1/8	7 3/4	7 3/4						4.38
4	54	18	1 1/2	3/8	1/2	5	3	2	17 1/4	3 1/8	2 7/8	8 1/4	12	10 1/2	3 5/8	3 7/8		10 3/8	1 3/4	9 3/8	9 5/8						6.75
5																											

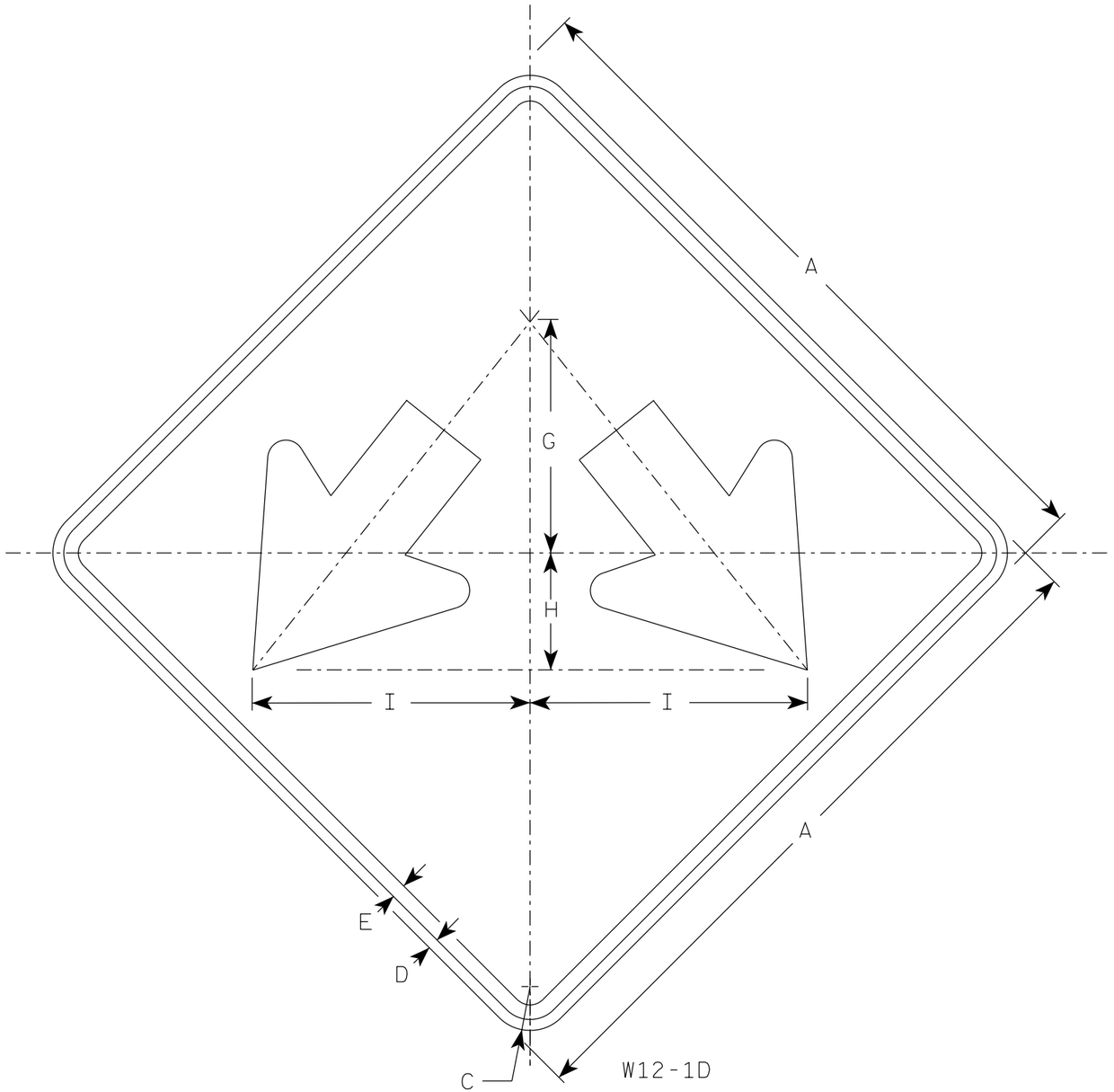
STANDARD SIGN
W4-4AL & W4-4AR

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

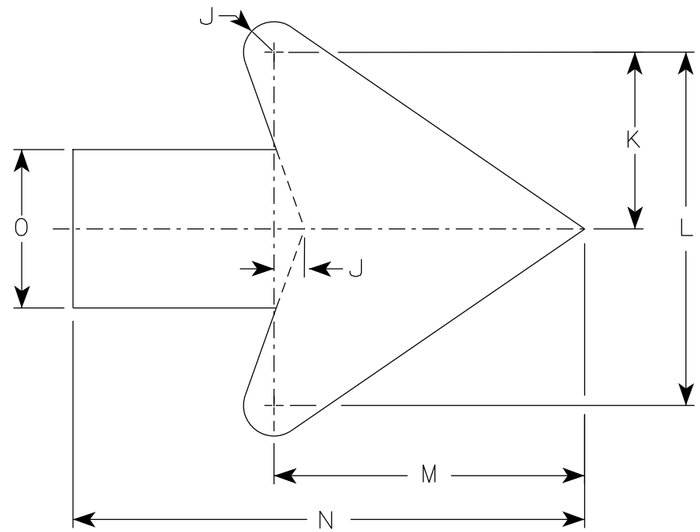
DATE 8/31/2023 PLATE NO. W4-4A.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 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

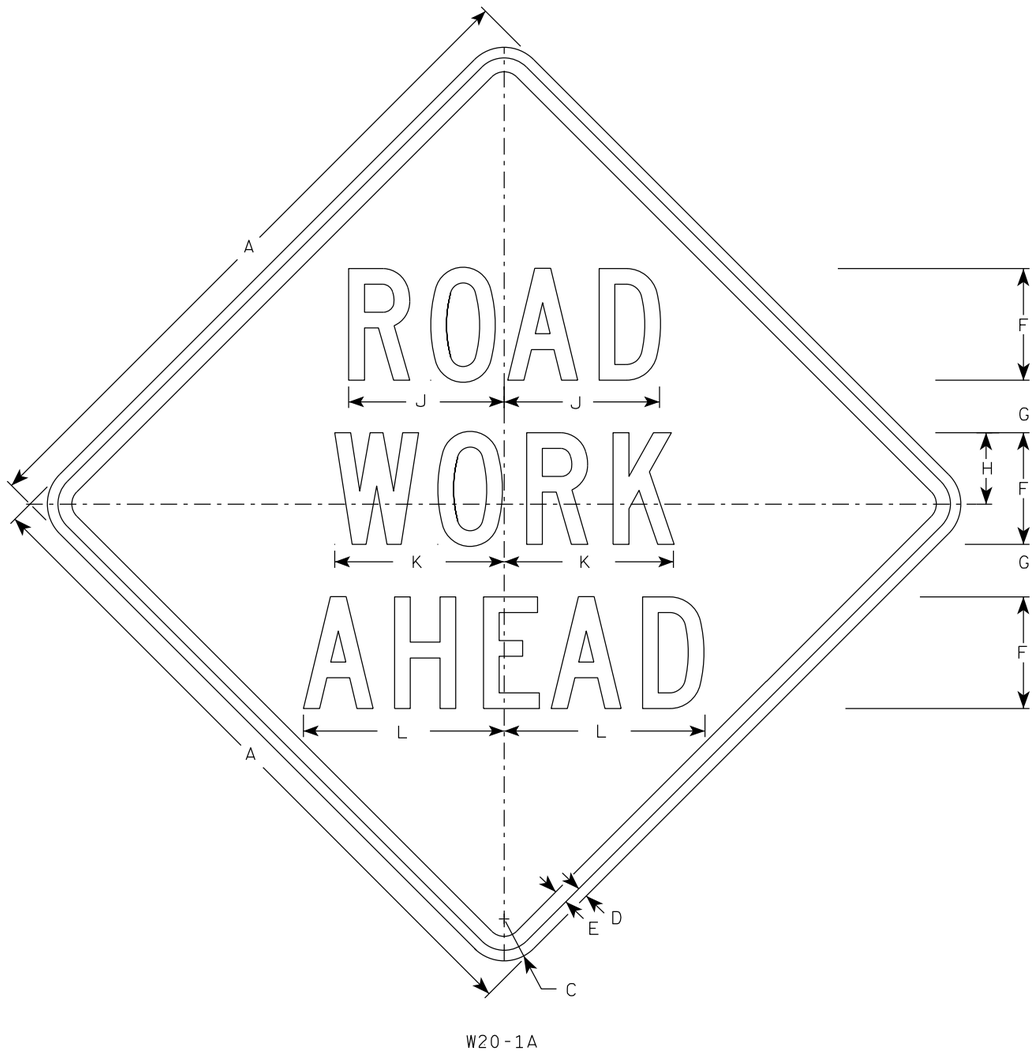
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

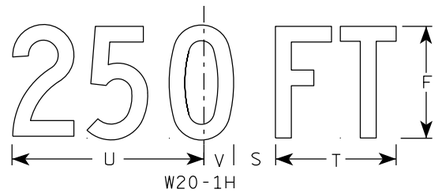
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/30/2023 PLATE NO. W12-1D.16

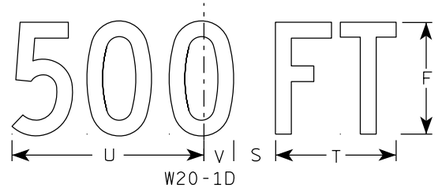
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 274	E



W20-1A

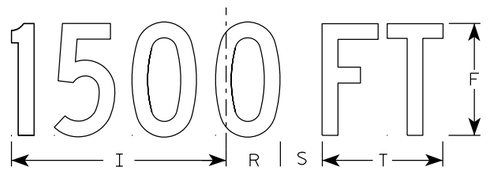


W20-1H



W20-1D

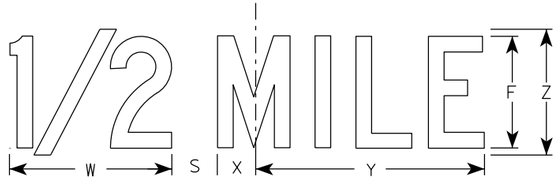
W20-1C



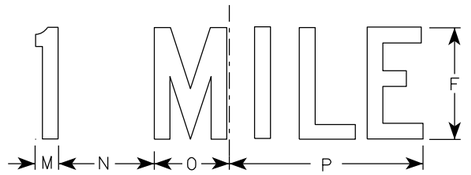
W20-1B

NOTES

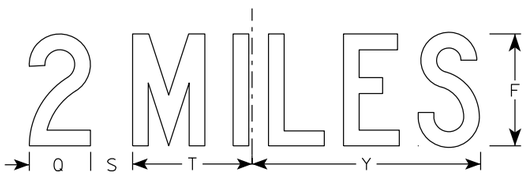
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



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

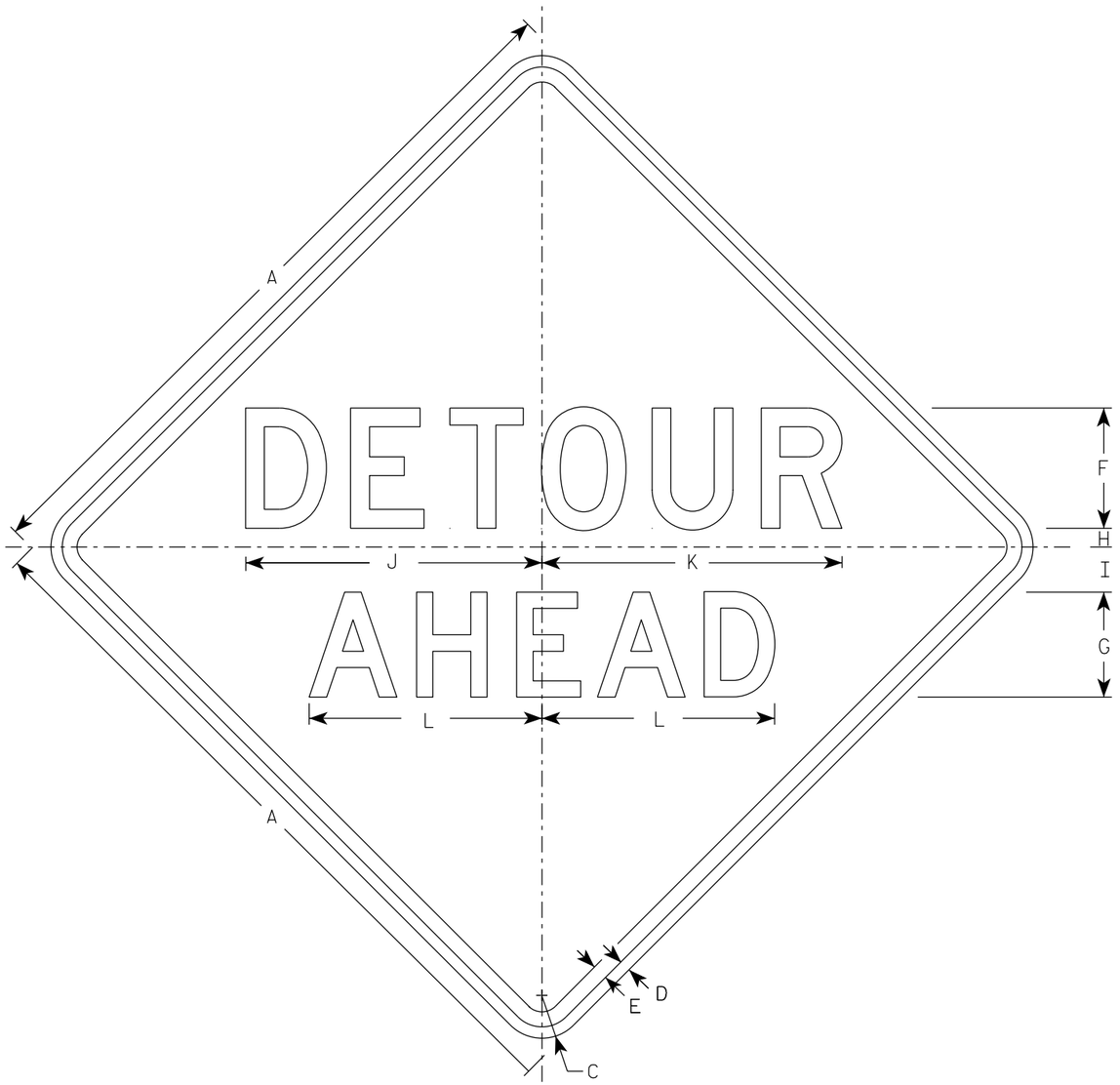
PROJECT NO:

SHEET NO: 275 E

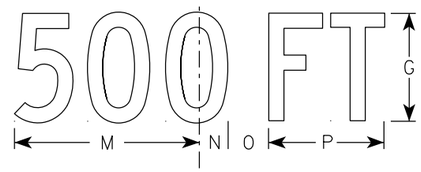
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 10-JAN 2024 11:16 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

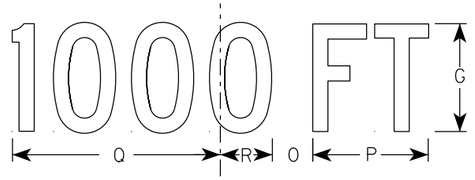
7



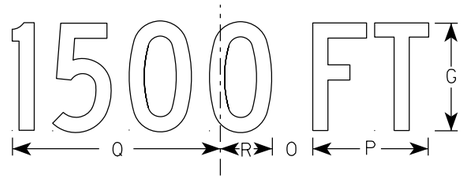
W20-2A



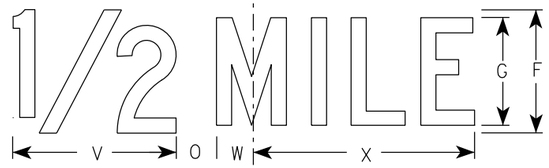
W20-2D



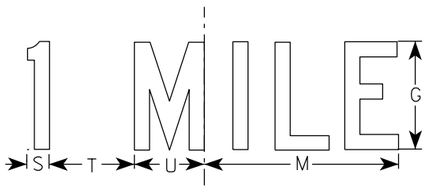
W20-2C



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

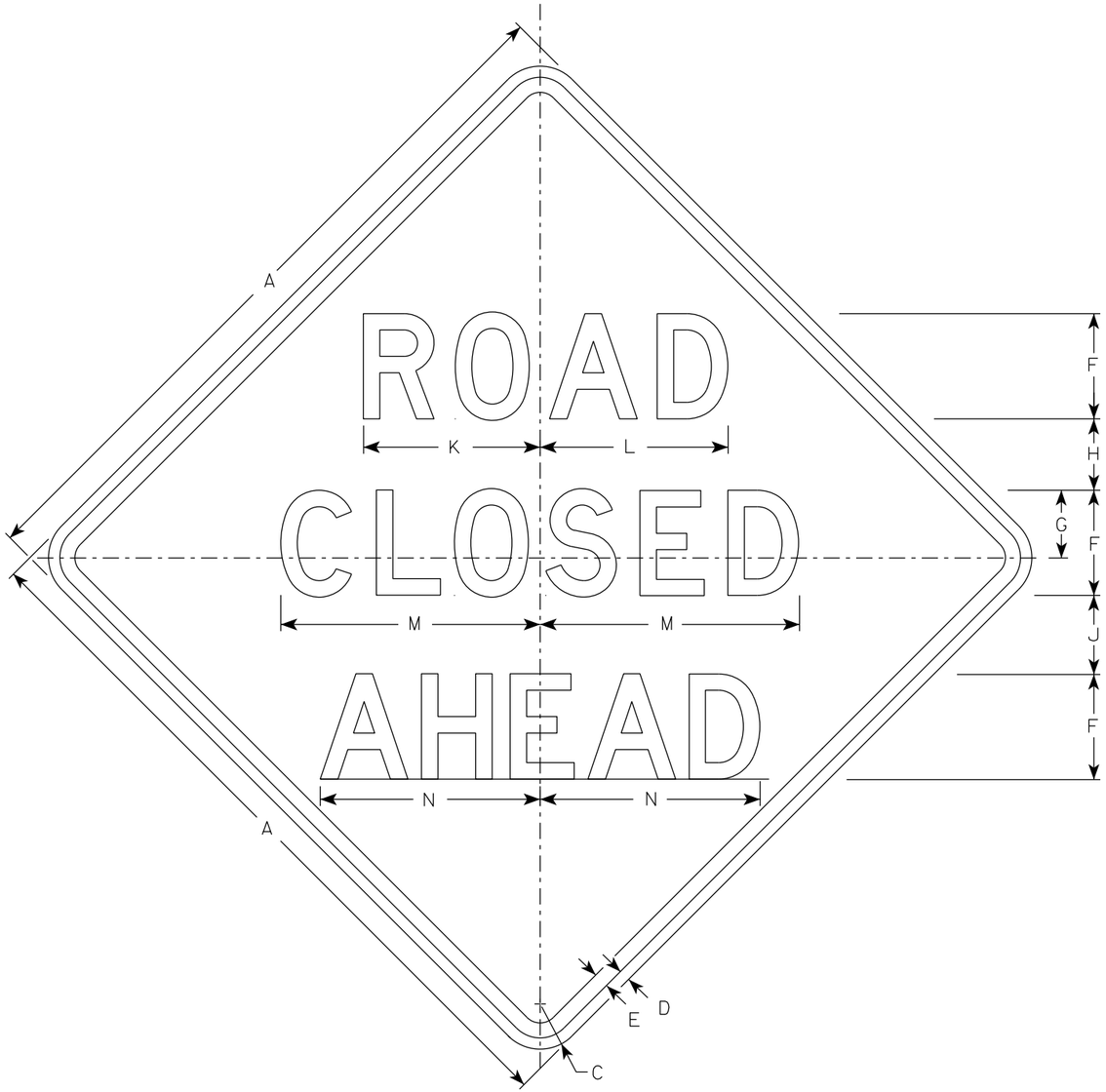
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

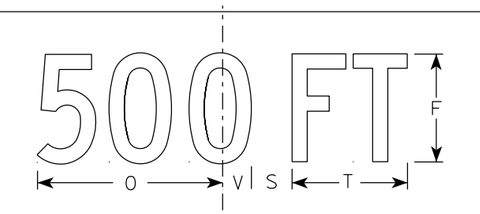
DATE 1/10/2024 PLATE NO. W20-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

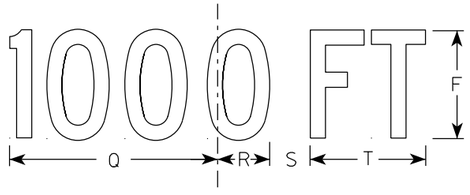
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W202.DGN PLOT DATE : 10-JAN 2024 11:36 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



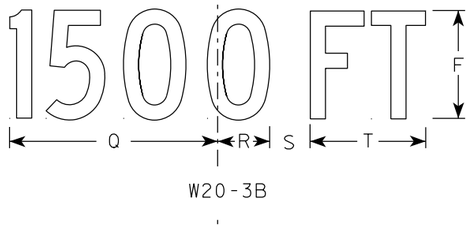
W20-3A



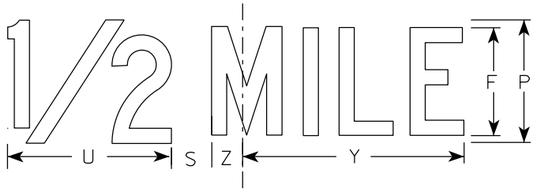
W20-3D



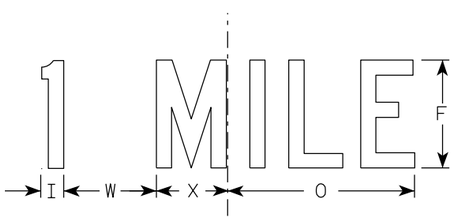
W20-3C



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

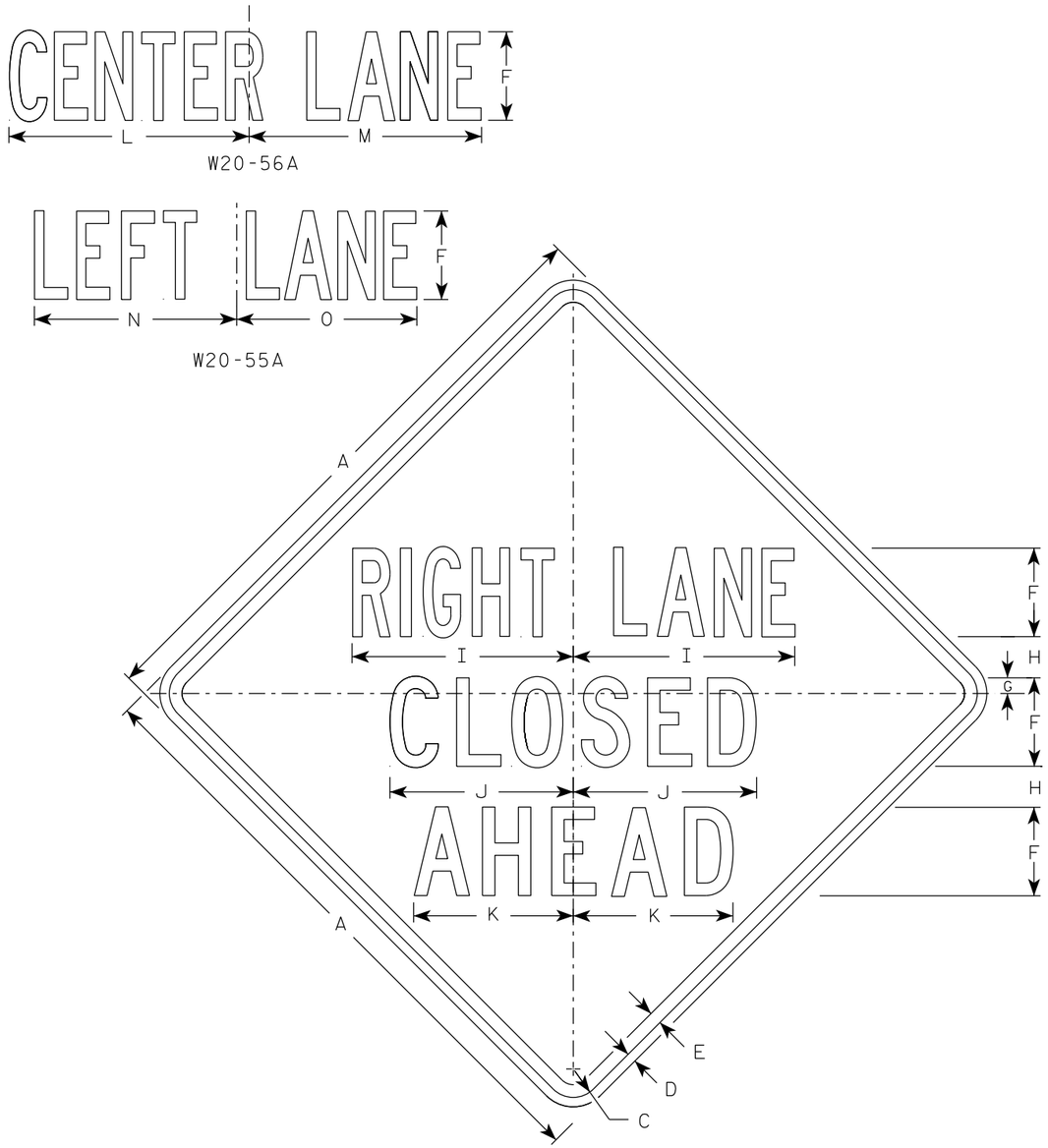
STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

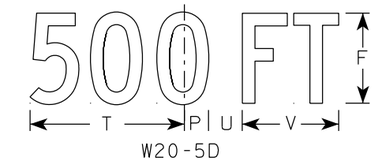
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-3.8

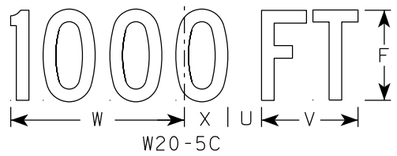
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 277 | E



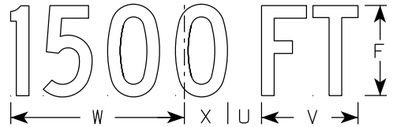
W20-5A



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

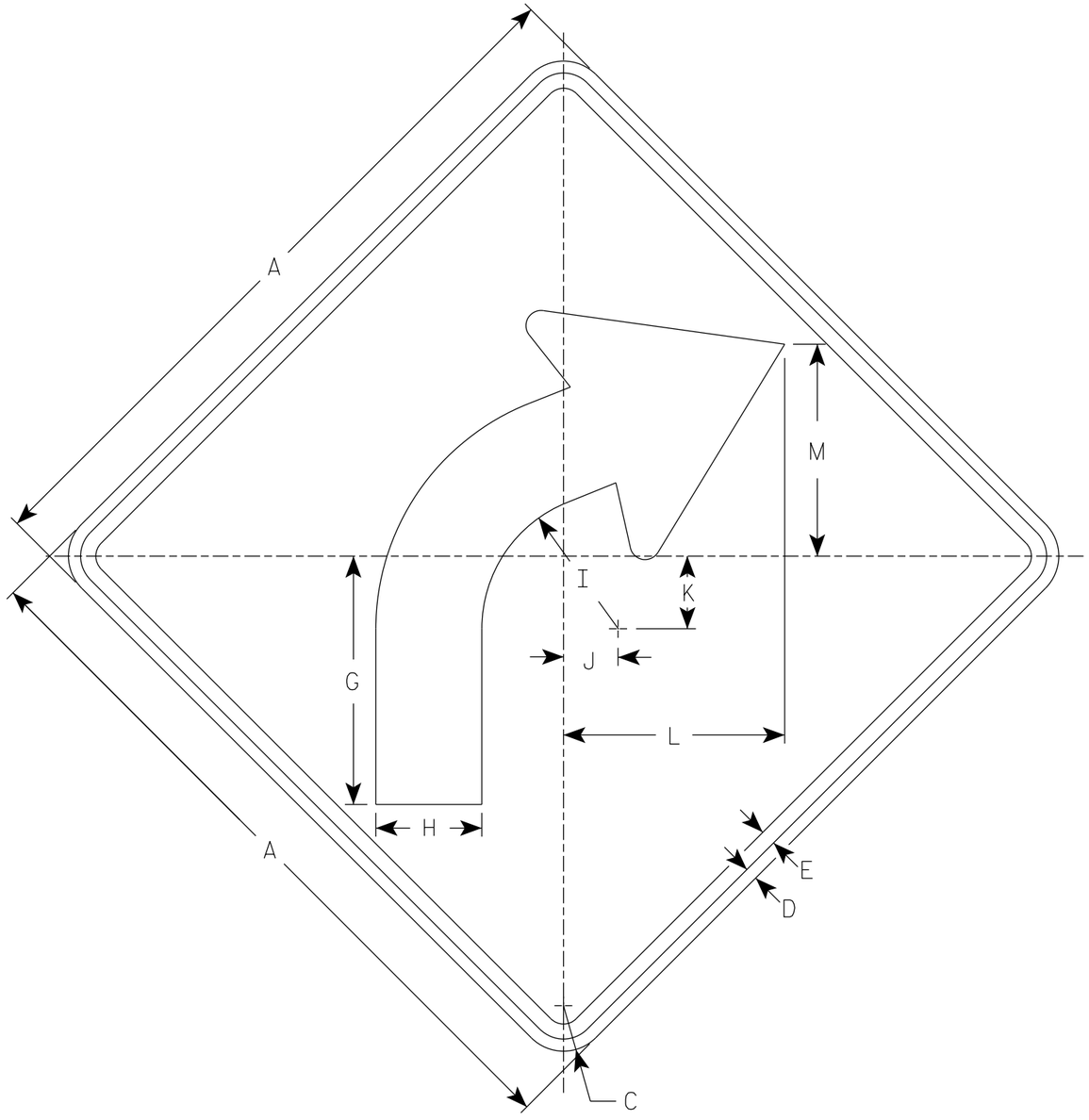
STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/27/24 PLATE NO. W20-5.12

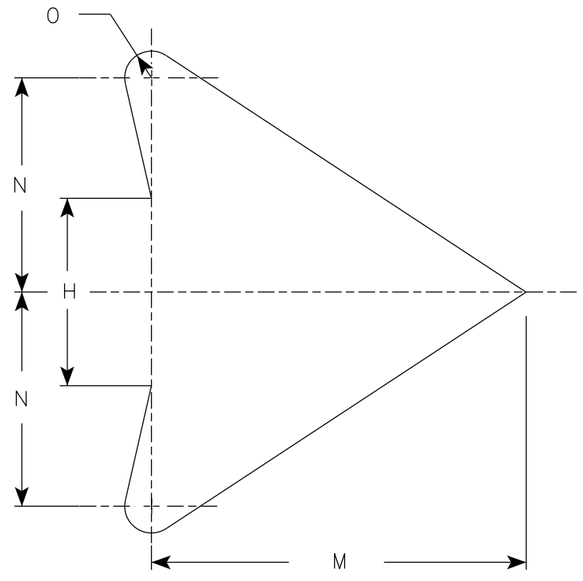
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 278	E



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

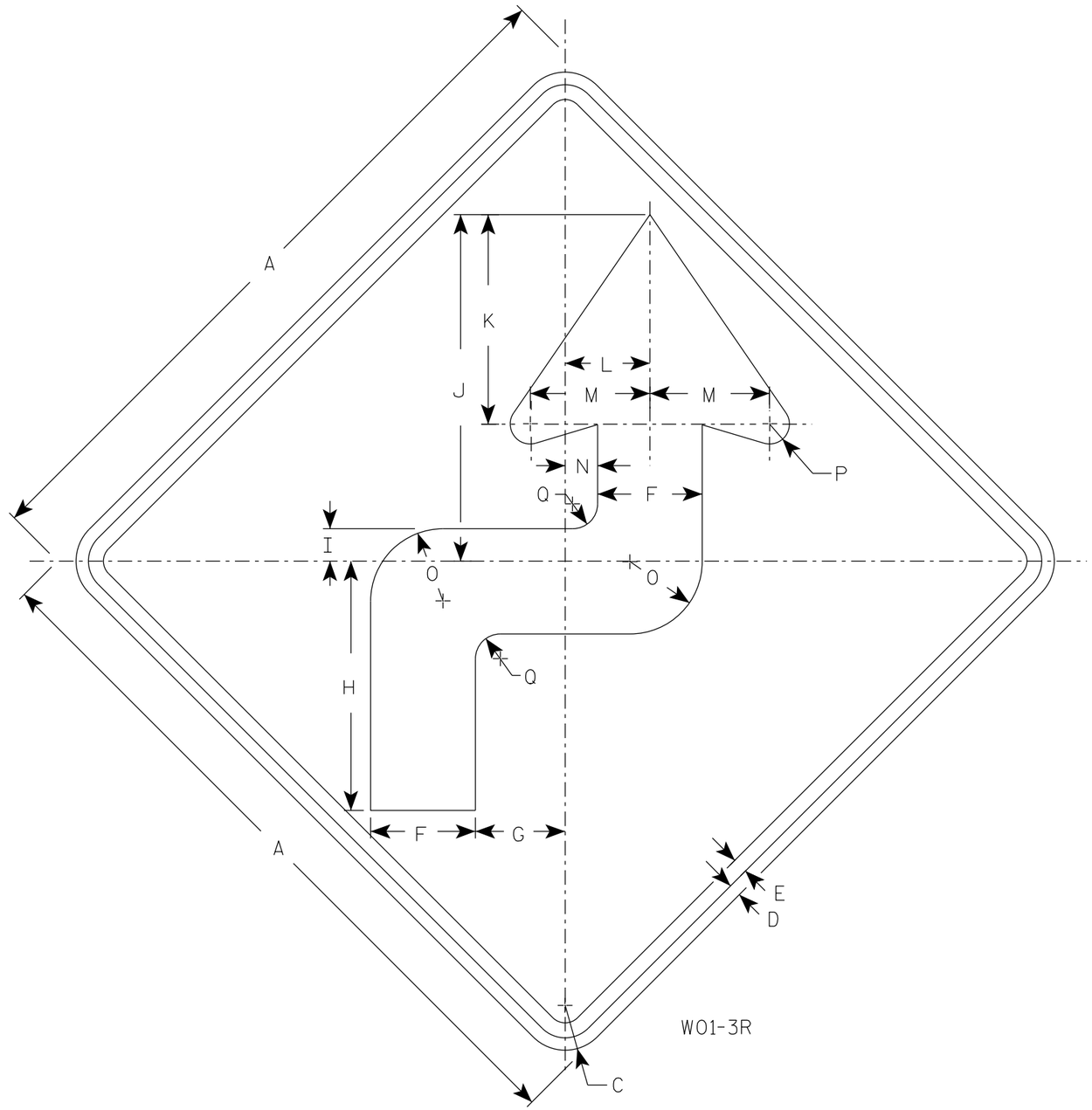
STANDARD SIGN
W01-2

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: 279	E



W01-3R

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. W01-3L is the same as W01-3R 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 1/2	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
2S	48		3	3/4	1	7	6	16 5/8	2 1/4	23 1/4	14	5 5/8	8	2 1/8	4 7/8	1 1/4	1 5/8										16.0
2M	48		3	3/4	1	7	6	16 5/8	2 1/4	23 1/4	14	5 5/8	8	2 1/8	4 7/8	1 1/4	1 5/8										16.0
3	48		3	3/4	1	7	6	16 5/8	2 1/4	23 1/4	14	5 5/8	8	2 1/8	4 7/8	1 1/4	1 5/8										16.0
4	48		3	3/4	1	7	6	16 5/8	2 1/4	23 1/4	14	5 5/8	8	2 1/8	4 7/8	1 1/4	1 5/8										16.0
5	48		3	3/4	1	7	6	16 5/8	2 1/4	23 1/4	14	5 5/8	8	2 1/8	4 7/8	1 1/4	1 5/8										16.0

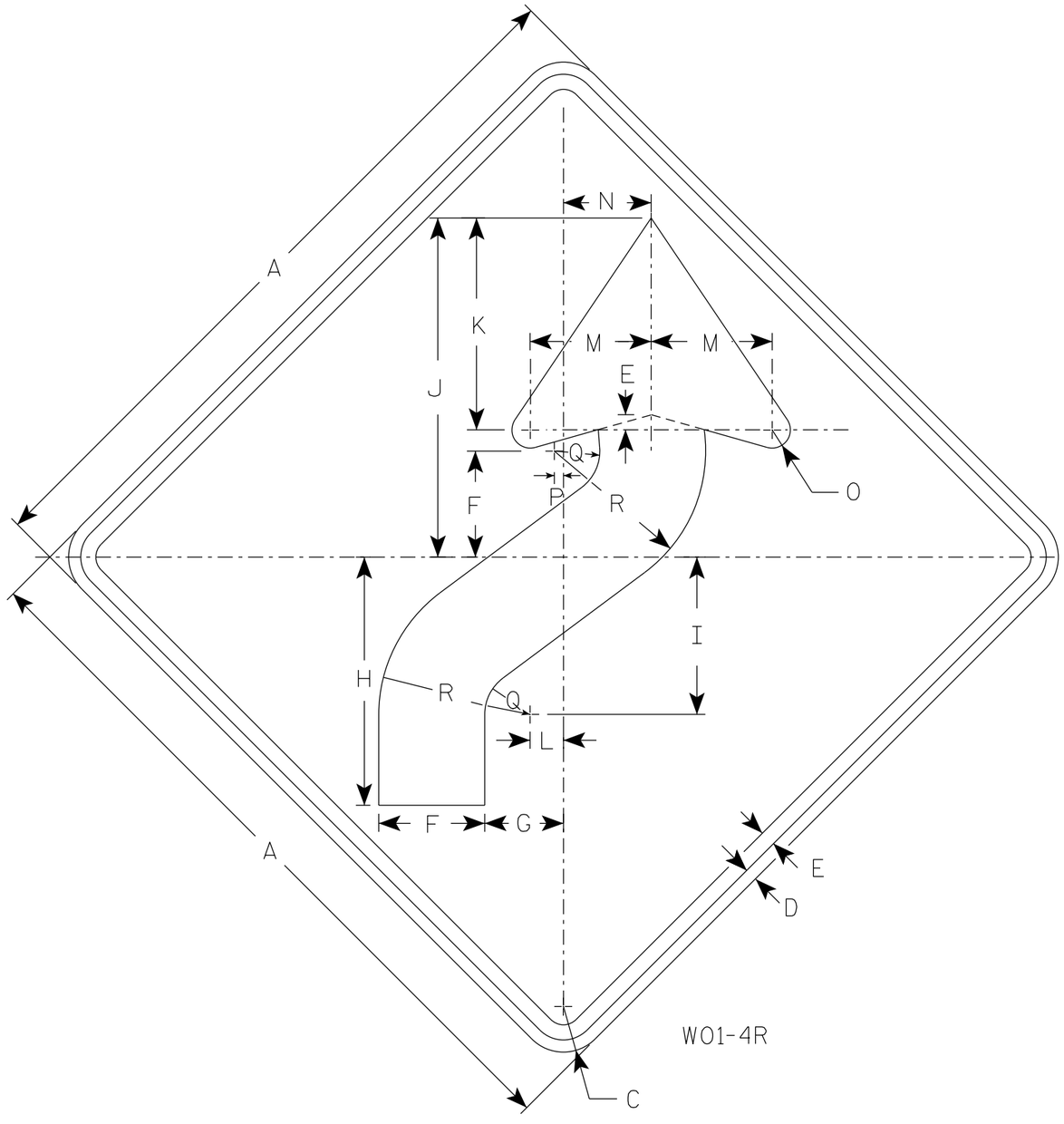
STANDARD SIGN
W01-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-3.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 280 | E



WO1-4R

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. WO1-4L is the same as WO1-4R 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

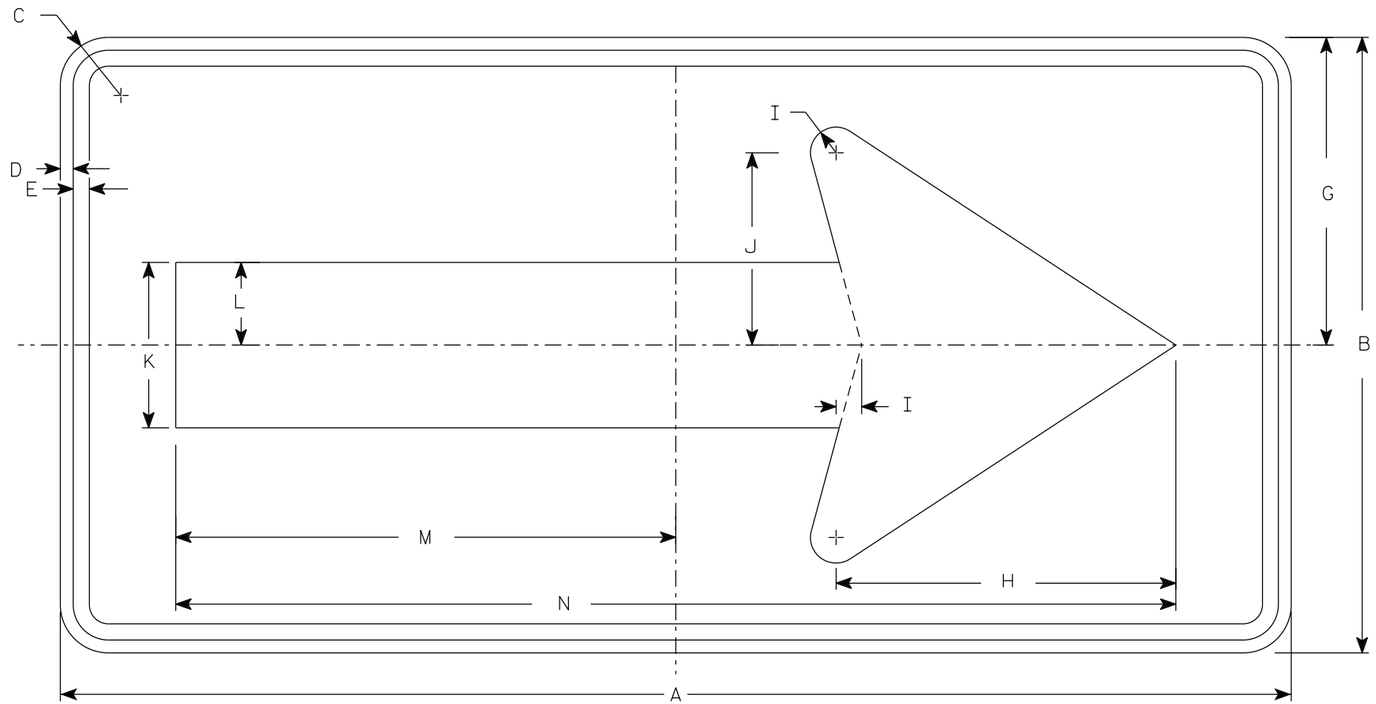
STANDARD SIGN
WO1-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-4.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 281 E



WO1-6

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

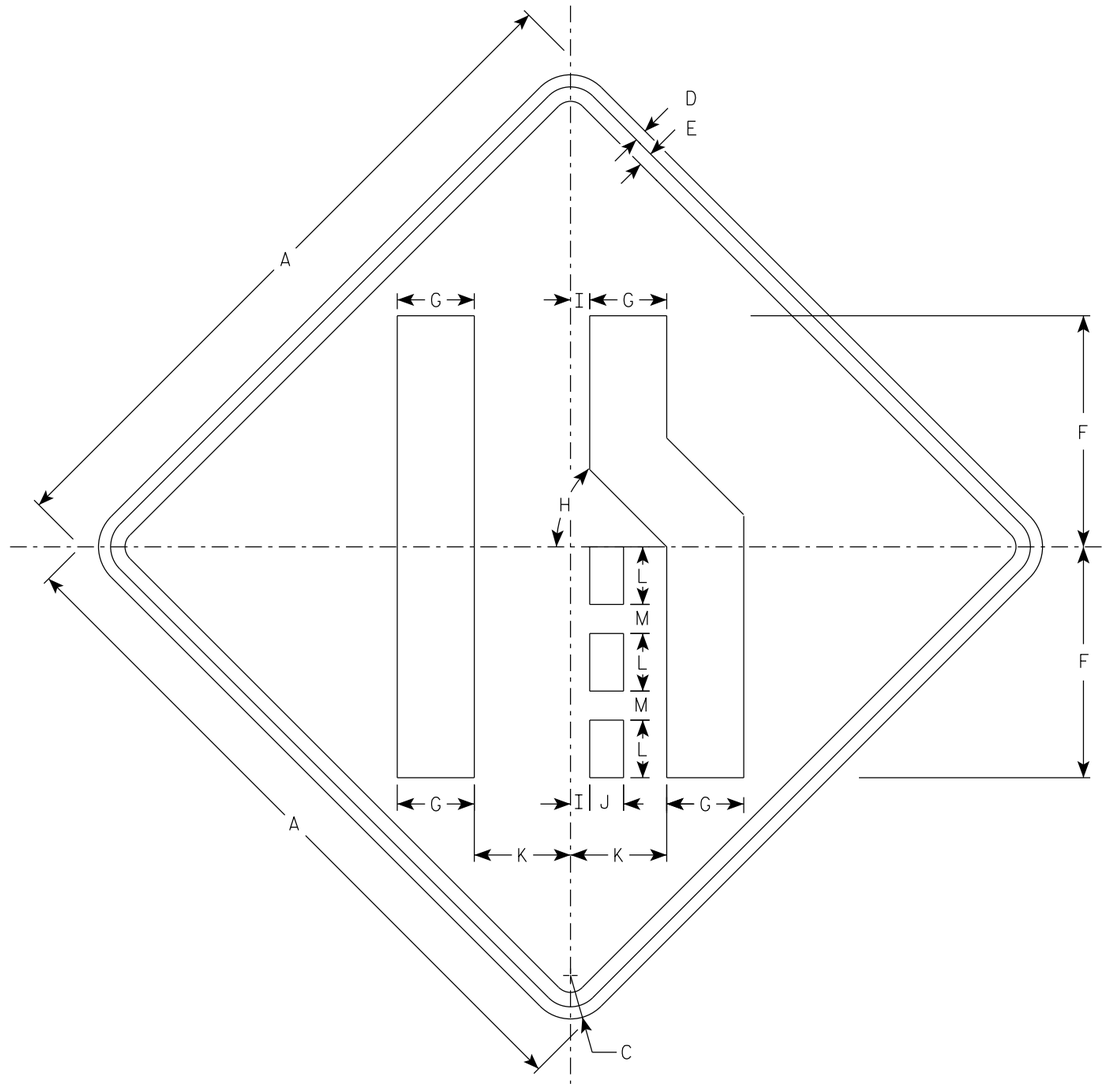
STANDARD SIGN
WO1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-6.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



W04-2R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

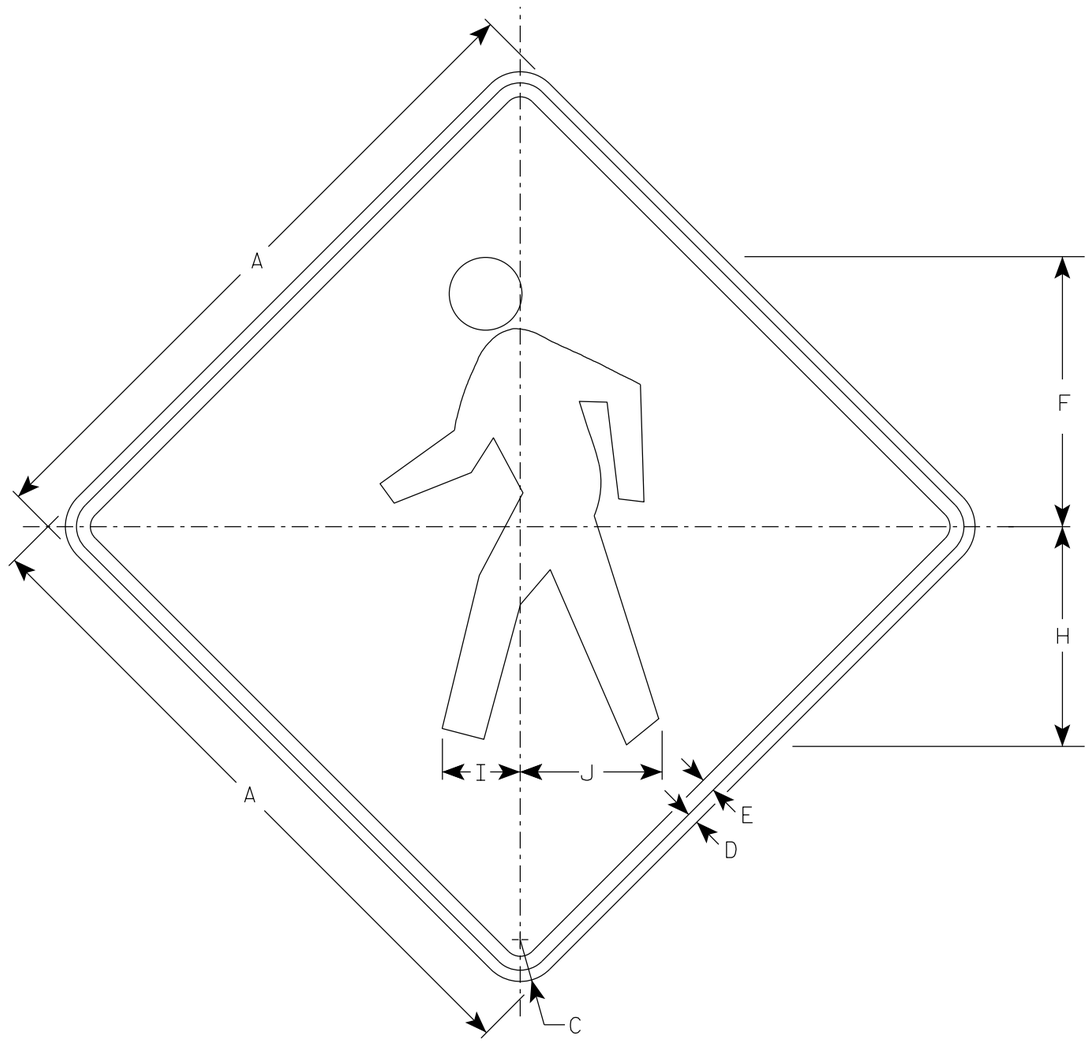
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-2.2

PROJECT NO:

SHEET NO: 283 E



WO11-2

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	36		2 1/4	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
2S	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
2M	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
3	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
4	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN

WO11-2

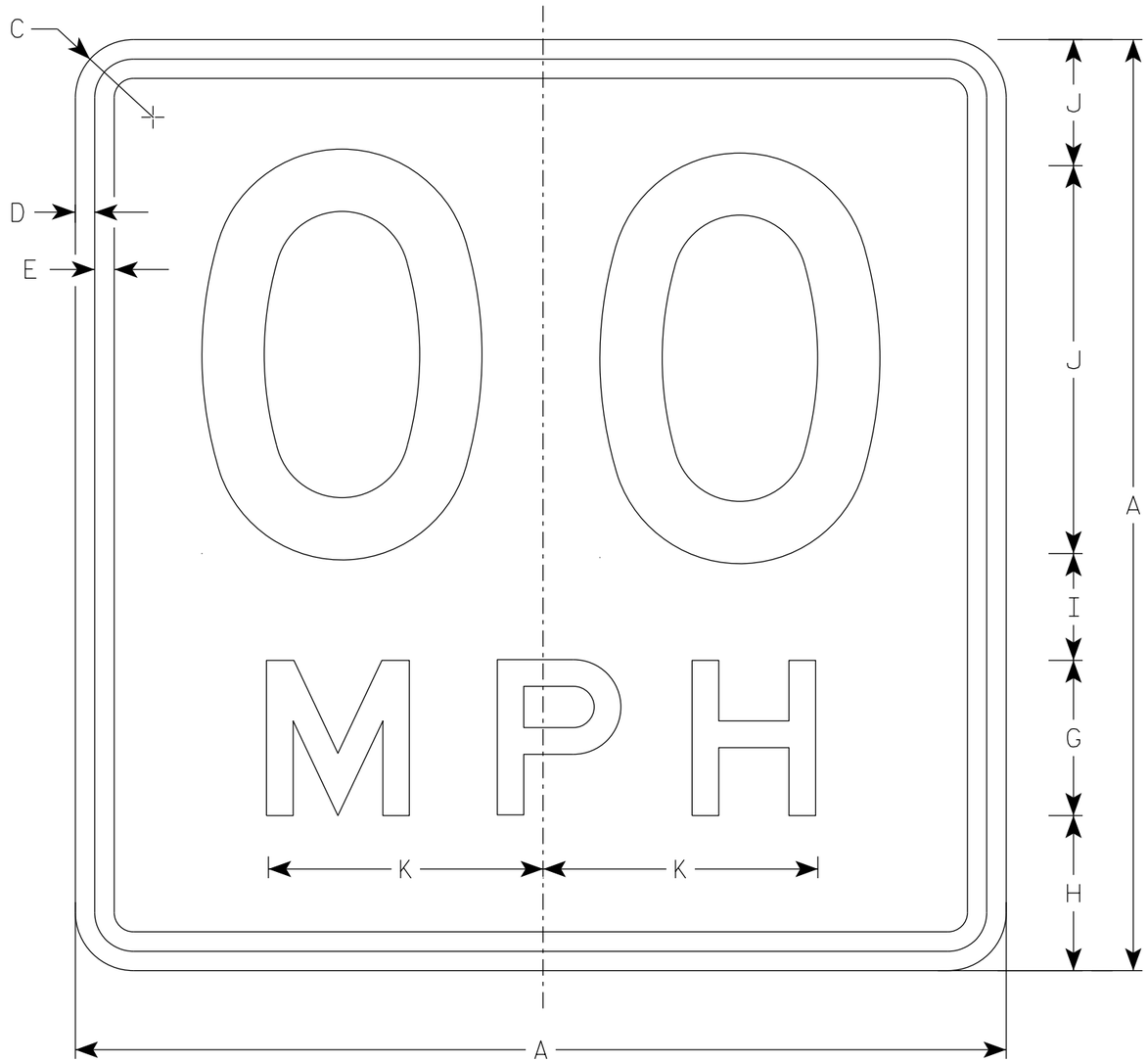
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

For State Traffic Engineer

DATE 2/1/2024 PLATE NO. WO11-2.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 284 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

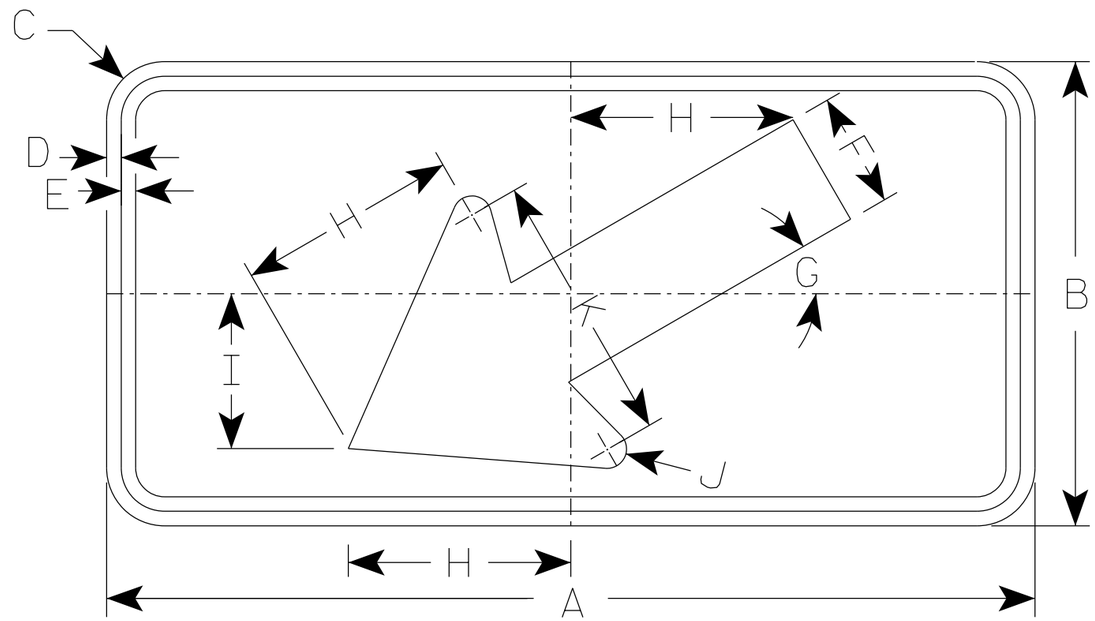
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W013-1.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W0131.dgn PLOT DATE : 1-FEB 2024 9:56 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W016-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded but corners shall be rounded when base material is metal.
4. W016-7R is the same as W016-L 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	18	1 1/2	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2S	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
2M	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
3	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
4	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
5	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0

STANDARD SIGN
W016-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

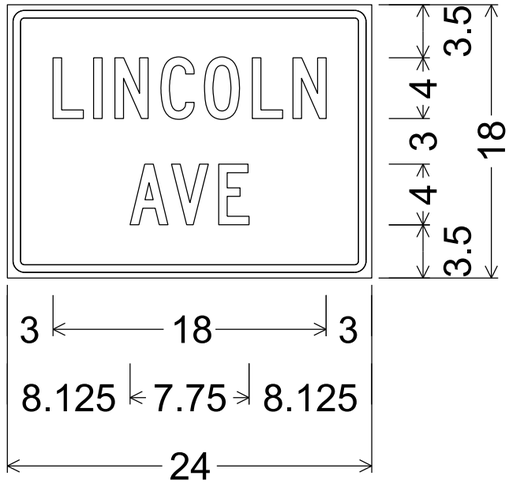
DATE 2/1/2024 PLATE NO. W016-7.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 286 | E

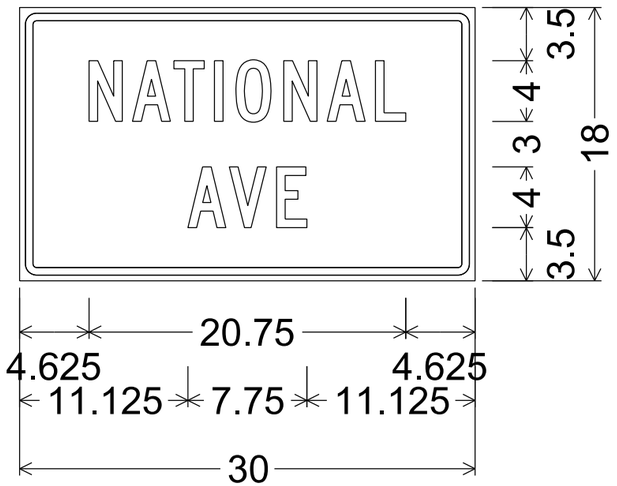
7

NOTES

1. Fixed Message Signs Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C



1.125" Radius, 0.500" Border, 0.375" Indent



1.125" Radius, 0.500" Border, 0.375" Indent

W LINCOLN AVENUE

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.15	MASS ORDINATE
98+72.00		163	50	1	0	0	0	0	0	0
98+84.00	12	163	50	1	73	22	0	73	0	50
99+00.00	16	173	50	1	100	30	1	172	1	119
99+25.00	25	153	50	3	151	46	2	323	3	222
99+42.00	17	165	50	1	100	32	1	423	5	289
99+50.00	8	159	50	3	48	15	1	471	5	321
99+75.00	25	166	50	2	150	46	3	622	8	422
99+84.50	10	171	50	1	59	18	1	681	9	463
100+00.00	16	166	50	2	97	29	1	778	10	530
100+12.00	12	165	50	2	74	22	1	851	11	580
100+25.00	13	168	50	1	80	24	1	931	12	635
100+50.00	25	153	50	2	149	46	2	1080	14	736
100+75.00	25	182	50	0	155	46	1	1235	15	843
101+00.00	25	164	50	1	160	46	1	1395	16	956
101+25.00	25	182	50	0	160	46	1	1555	16	1069
101+50.00	25	180	50	0	168	46	0	1723	17	1190
101+75.00	25	217	62	0	184	52	0	1907	17	1321
102+00.00	25	194	50	0	190	52	0	2097	17	1459
102+25.00	25	201	50	0	183	46	0	2279	17	1596
102+50.00	25	184	48	0	178	45	0	2458	17	1729
102+75.00	25	178	48	0	168	45	0	2626	17	1852
103+00.00	25	167	48	0	160	45	0	2785	17	1967
103+25.00	25	171	48	0	156	45	0	2942	17	2079
103+50.00	25	162	48	0	154	45	0	3095	17	2188
103+75.00	25	169	48	0	153	45	0	3249	17	2297
104+00.00	25	138	46	0	142	44	0	3391	17	2395
104+25.00	25	169	46	0	142	43	0	3533	17	2495
104+50.00	25	164	50	0	154	44	0	3687	17	2604
104+75.00	25	169	50	0	154	46	0	3841	17	2713
105+00.00	25	233	64	0	186	53	0	4027	17	2846
105+25.00	25	223	64	0	211	59	0	4238	17	2998
105+50.00	25	210	52	0	200	54	0	4438	17	3145
105+56.50	7	219	52	0	52	12	0	4490	17	3184
105+75.00	19	192	52	0	141	36	0	4631	17	3289
106+00.00	25	187	52	1	175	49	0	4806	17	3416
106+25.00	25	194	52	0	176	49	0	4983	18	3543
106+50.00	25	200	51	0	182	48	0	5165	18	3677
106+64.00	14	216	51	0	108	26	0	5273	18	3759
106+75.00	11	188	52	0	82	21	0	5355	18	3820
107+00.00	25	174	51	0	168	48	0	5523	18	3939
107+11.00	11	179	52	1	72	21	0	5595	18	3990
107+25.00	14	163	52	3	89	27	1	5684	20	4050

9

9

ALL CATEGORY 0010

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	EARTHWORK DATA	SHEET: 288	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

W LINCOLN AVENUE

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.15	MASS ORDINATE
107+50.00	25	165	51	4	152	48	3	5836	24	4151
107+75.00	25	173	52	4	157	48	4	5992	28	4255
108+00.00	25	172	52	2	159	49	3	6152	31	4363
108+15.00	15	192	50	0	101	28	1	6253	31	4435
108+25.00	10	219	63	0	76	21	0	6329	31	4491
108+50.00	25	211	63	0	199	58	0	6528	31	4632
108+75.00	25	193	52	0	187	53	0	6716	31	4766
109+00.00	25	185	56	0	175	50	0	6891	31	4891
109+25.00	25	176	50	1	167	49	0	7058	32	5009
109+50.00	25	173	50	1	161	46	1	7219	32	5123
109+66.00	16	187	51	0	107	30	0	7326	33	5199
109+75.00	9	174	52	1	60	17	0	7386	33	5242
110+00.00	25	171	52	1	160	48	1	7546	34	5352
110+25.00	25	177	52	1	161	48	1	7707	35	5464
110+50.00	25	165	50	1	158	47	1	7865	37	5574
110+75.00	25	181	51	0	160	47	1	8025	37	5687
111+00.00	25	162	50	1	159	47	1	8184	38	5798
111+25.00	25	158	50	3	148	46	2	8332	40	5897
111+39.00	14	171	52	0	85	26	1	8417	41	5955
111+50.00	11	186	54	1	73	22	0	8490	41	6006
111+75.00	25	226	69	0	191	57	1	8680	42	6139
111+81.50	7	222	69	0	54	17	0	8734	42	6176
					8734	2516	37			

W NATIONAL AVENUE

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.15	MASS ORDINATE
7+66.00		114	28	0	0	0	0	0	0	0
8+00.00	34	116	34	0	145	39	0	145	0	106
8+25.00	25	173	30	0	134	29	0	279	0	210
8+30.00	5	254	54	0	39	8	0	318	0	242
8+50.00	20	254	54	0	188	40	0	506	0	390
8+75.00	25	251	54	0	234	50	0	740	1	574
9+00.00	25	250	58	1	232	51	1	972	1	754
9+25.00	25	222	78	1	219	63	1	1191	2	909
9+50.00	25	230	66	2	209	66	1	1400	4	1051
9+75.00	25	189	55	1	194	56	1	1594	6	1187
10+00.00	25	149	51	2	157	49	1	1750	7	1293
10+25.00	25	114	39	0	122	42	1	1872	8	1372
10+50.00	25	68	28	2	84	31	1	1957	10	1424
10+75.00	25	0	16	0	32	20	1	1988	11	1435
10+75.00		0	0	0	0	0	0	1988	11	1435
11+00.00	50	45	16	0	42	15	0	2030	11	1462
11+25.00	25	80	27	0	58	20	0	2088	11	1500
11+50.00	25	124	39	0	94	31	0	2183	11	1564
11+75.00	25	162	50	0	133	41	0	2315	11	1655
12+00.00	25	188	61	0	162	52	0	2477	11	1766
12+25.00	25	247	64	0	201	58	0	2679	11	1909
12+50.00	25	213	67	1	213	61	0	2892	11	2061
12+75.00	25	141	44	0	164	52	0	3056	12	2172
12+91.00	16	141	38	0	84	24	0	3139	12	2231
					3139	896	10			

9

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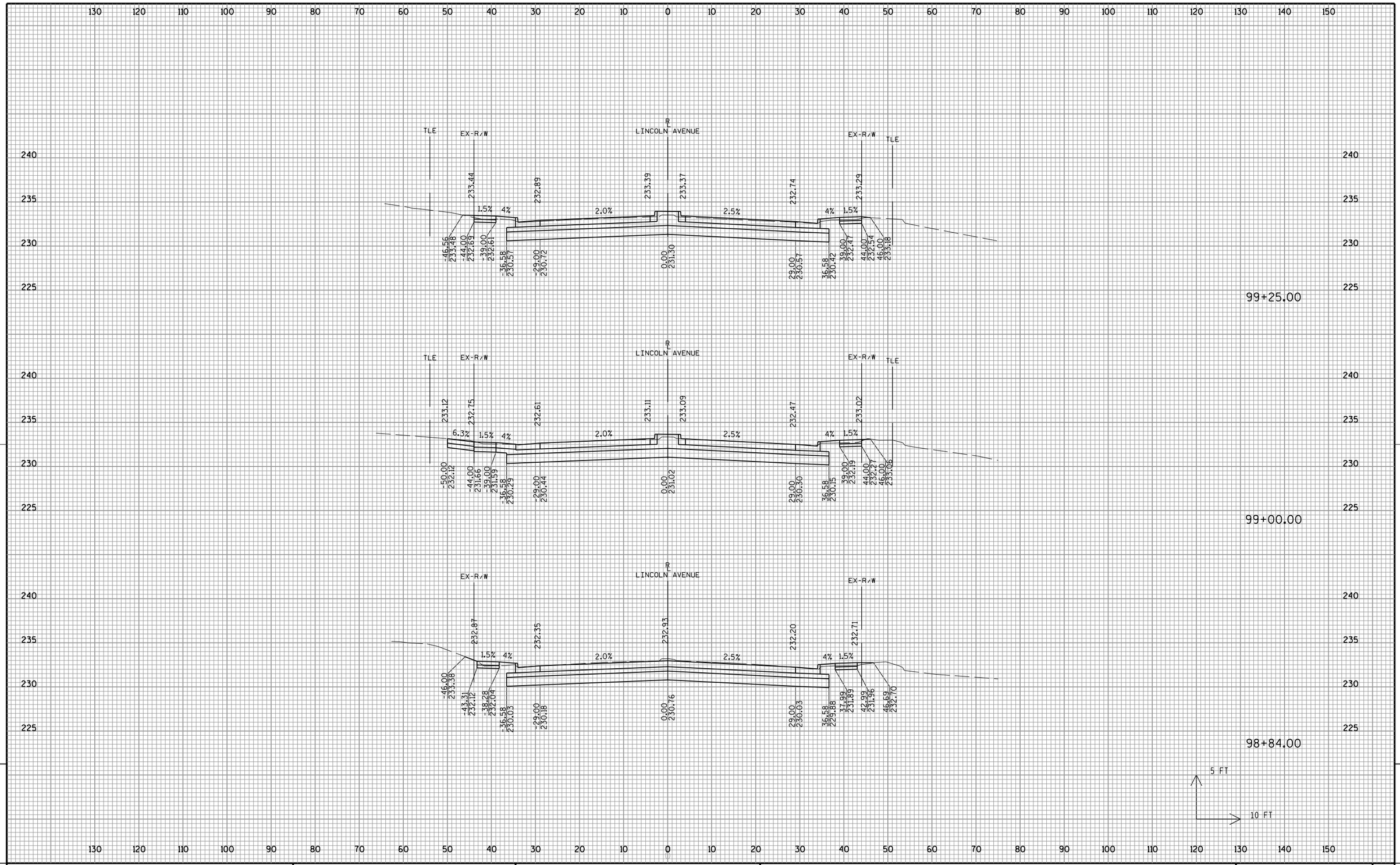
ALL CATEGORY 0010

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	EARTHWORK DATA	SHEET: 290	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1



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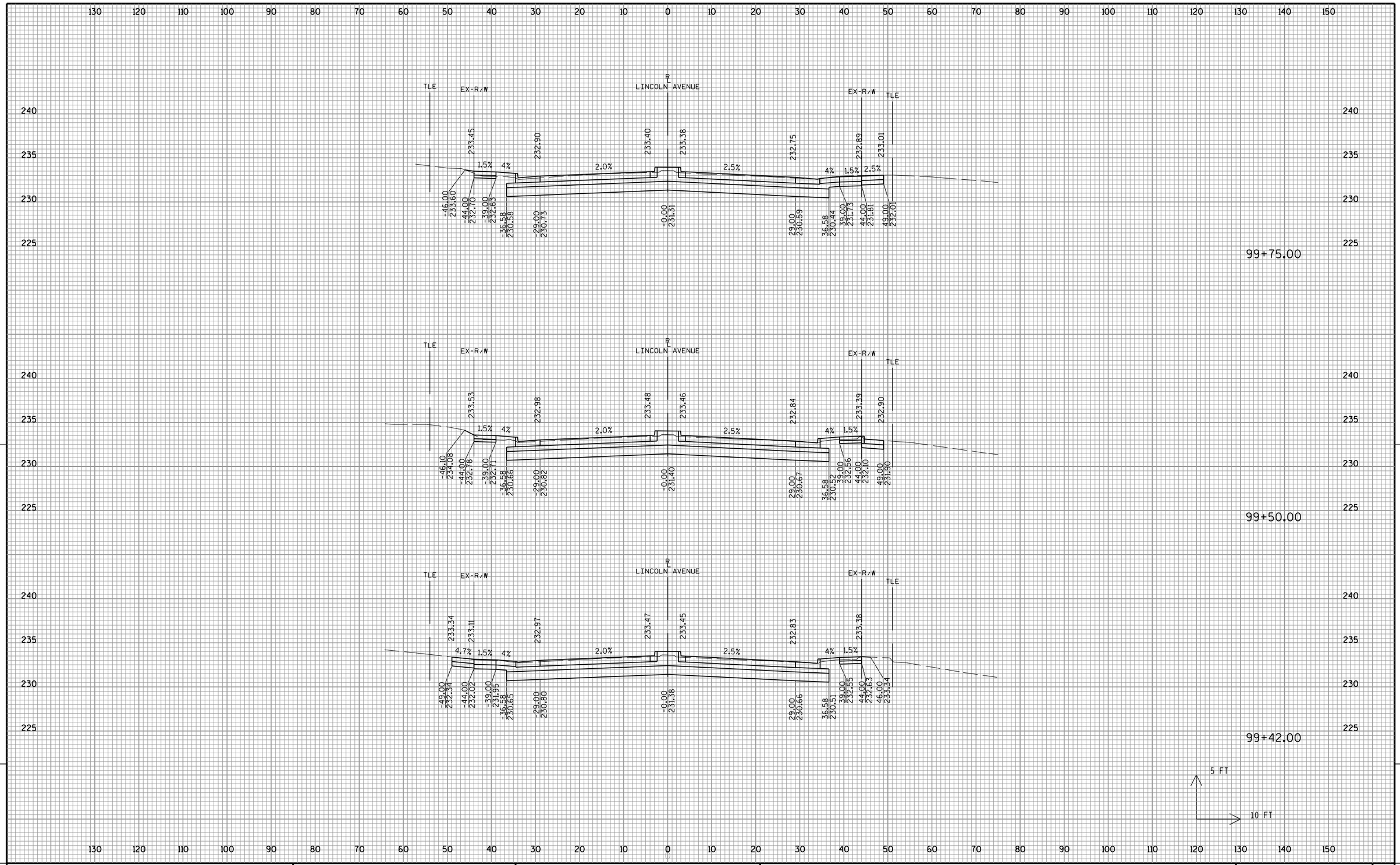
PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 291	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\090201_xs_Lincoln.dgn PLOT DATE : 10/30/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 20.0000 sf / in.



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PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 292	E

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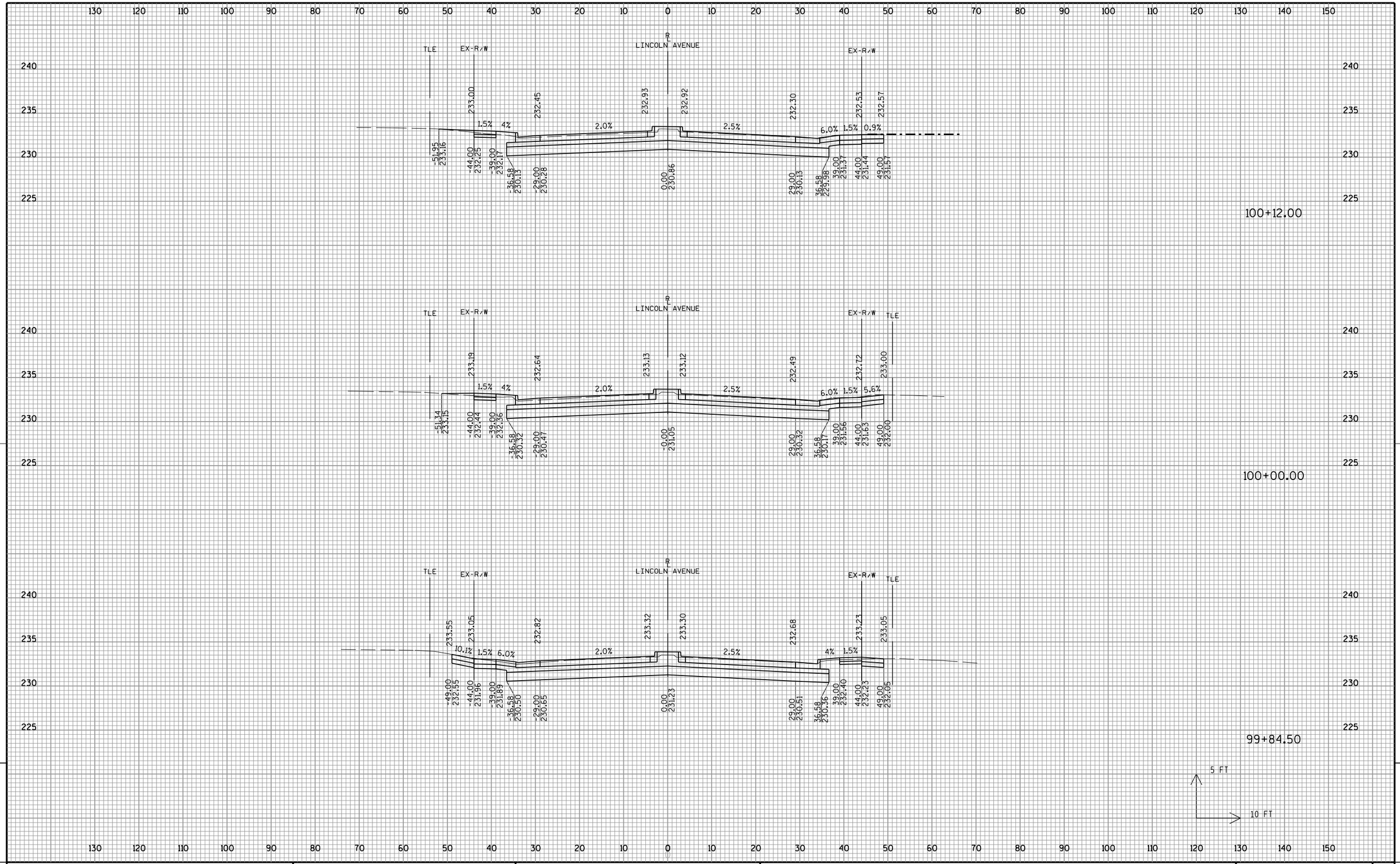
WISDOT/CADDS SHEET 21



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PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 293	E

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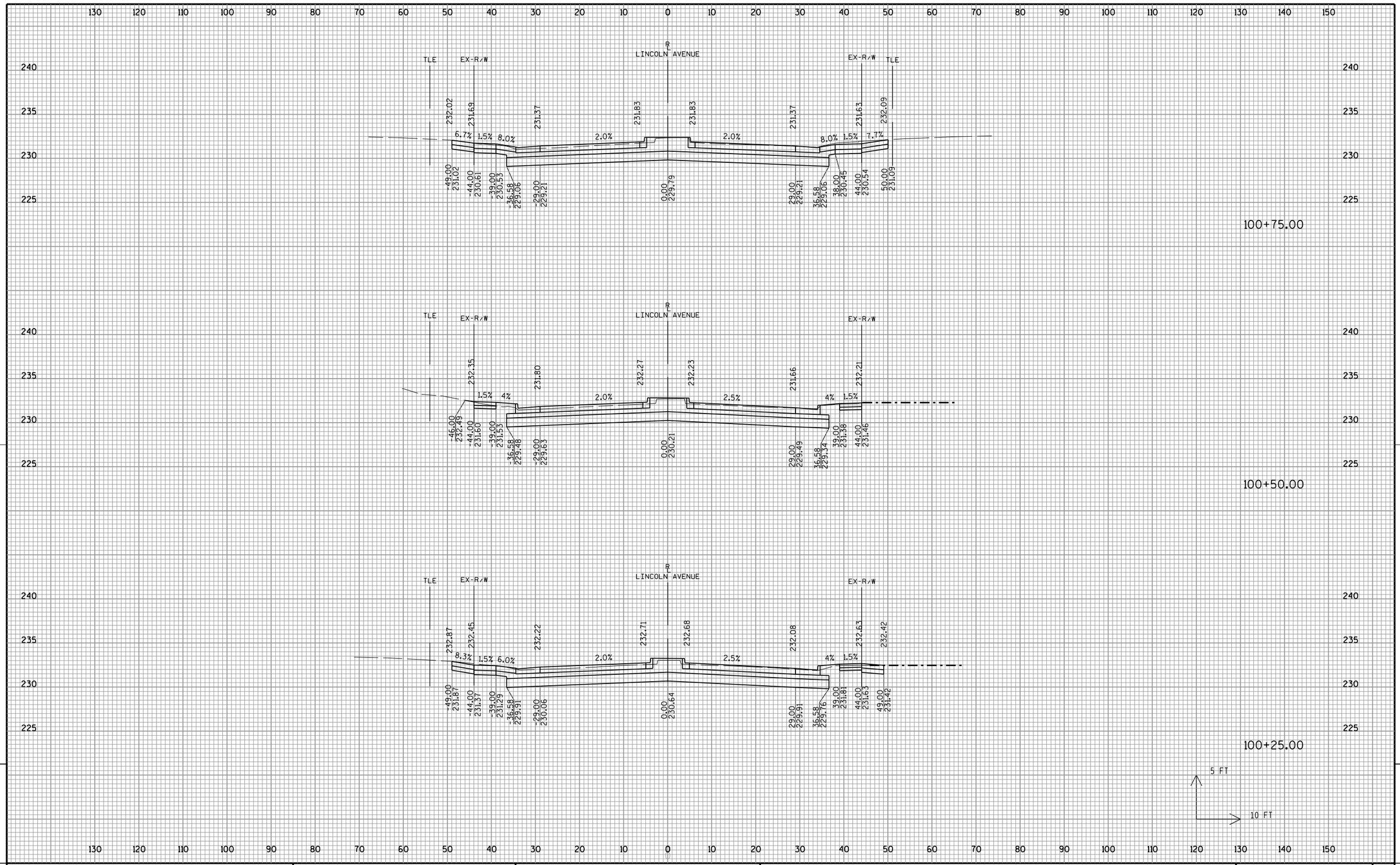

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PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 294	E

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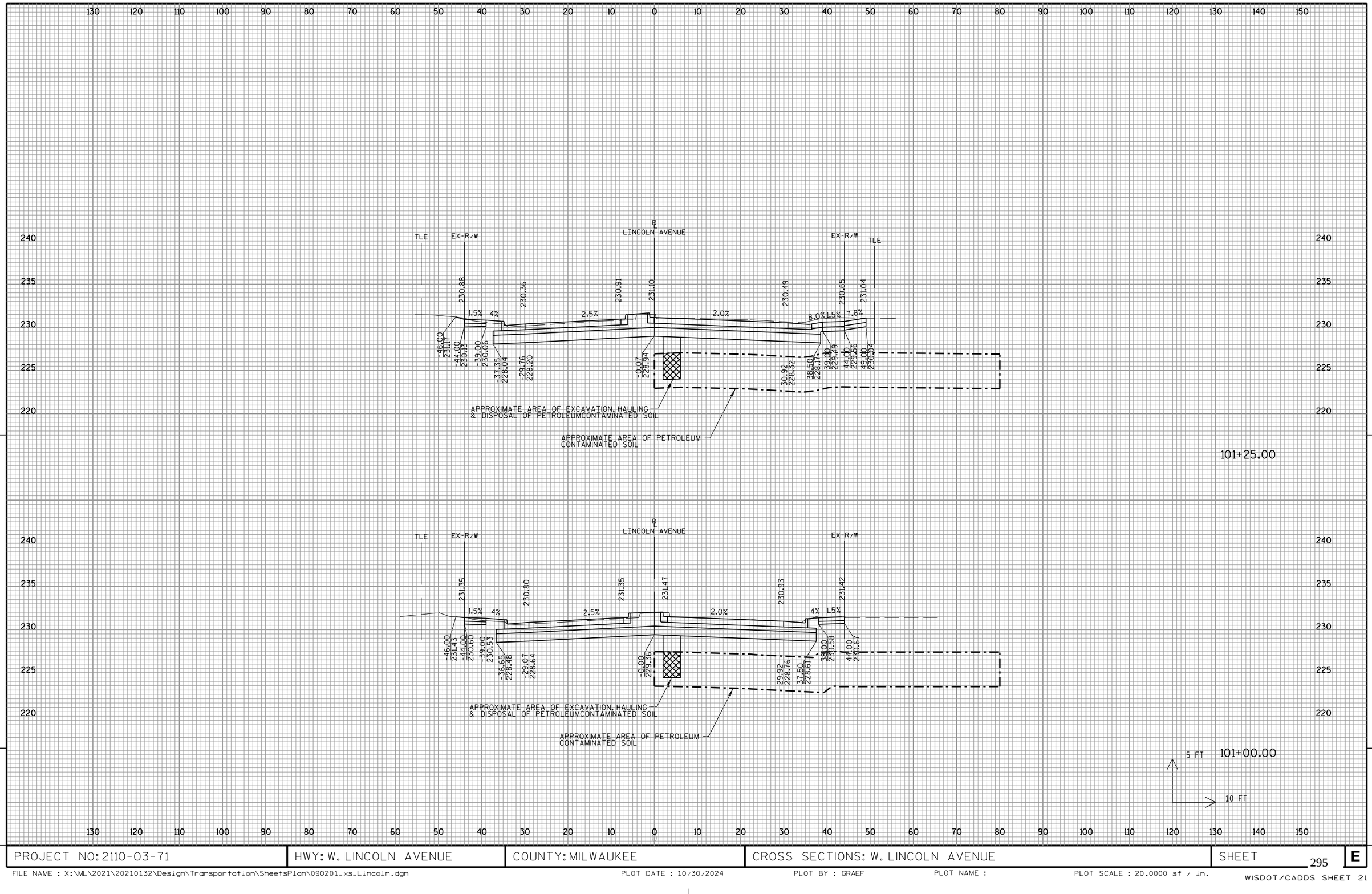
WISDOT/CADDS SHEET 21



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 295	E

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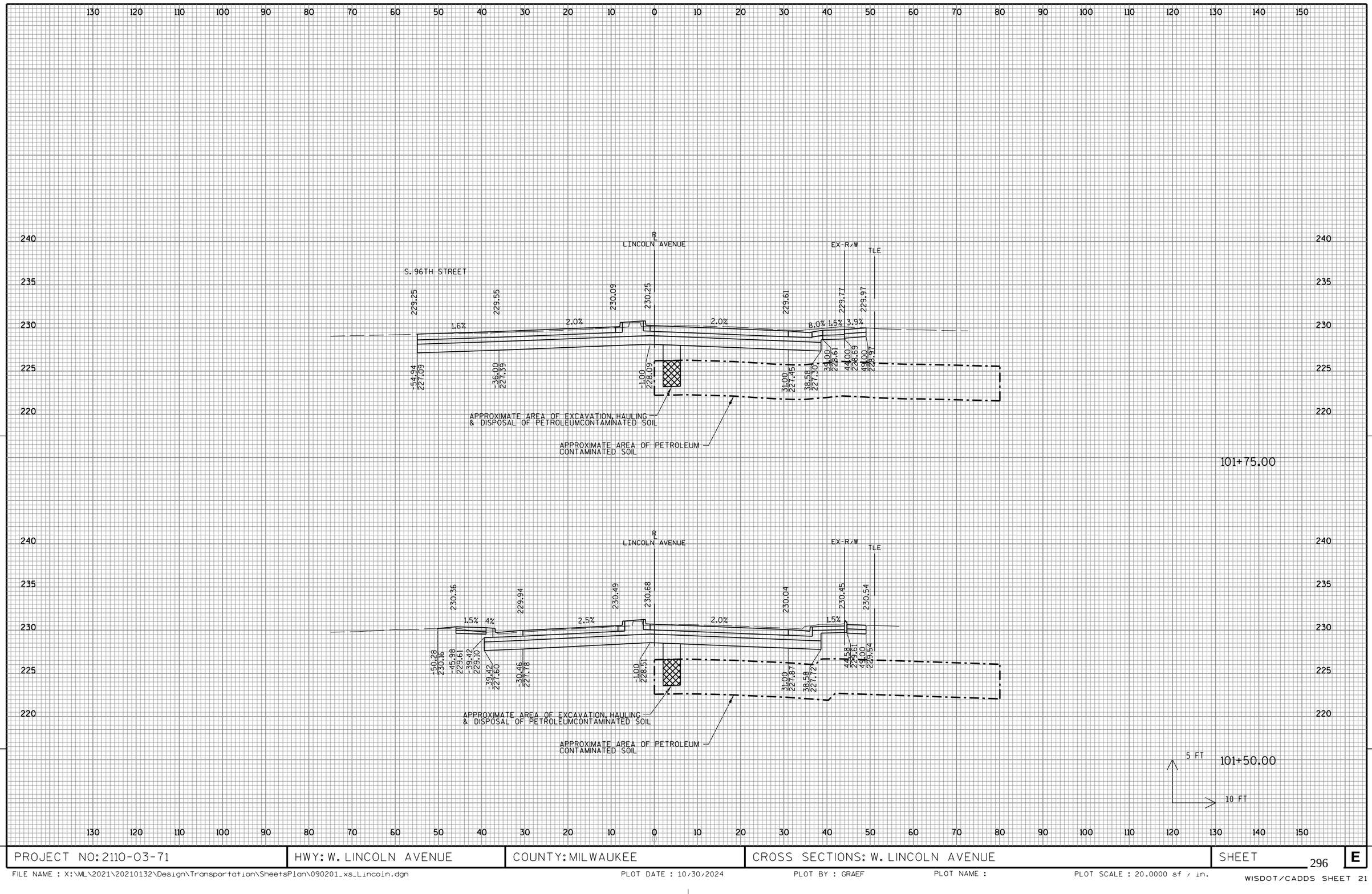

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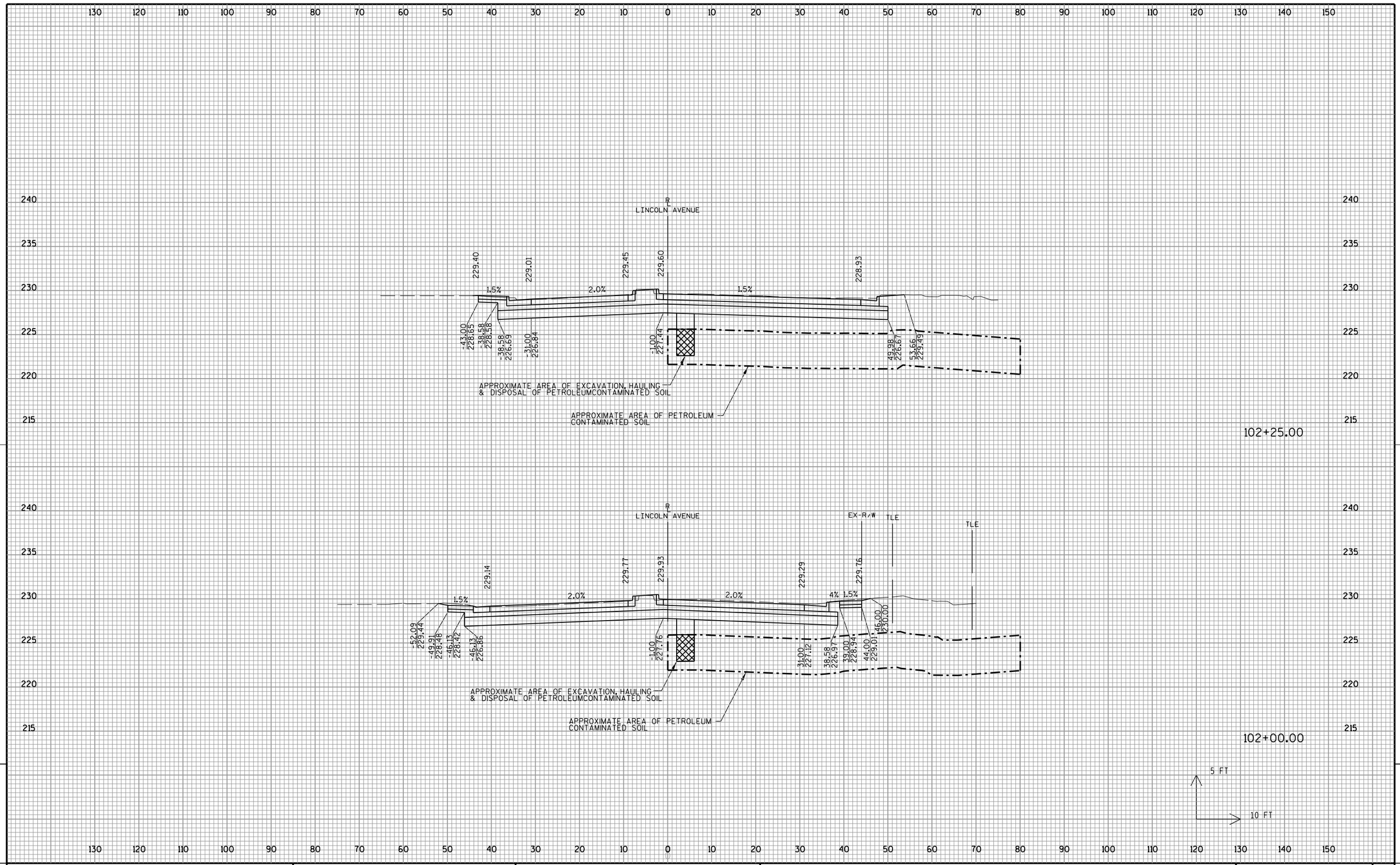
PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 296	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\090201_xs_Lincoln.dgn | PLOT DATE : 10/30/2024 | PLOT BY : GRAEF | PLOT NAME : | PLOT SCALE : 20.0000 sf / in.



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 297	E

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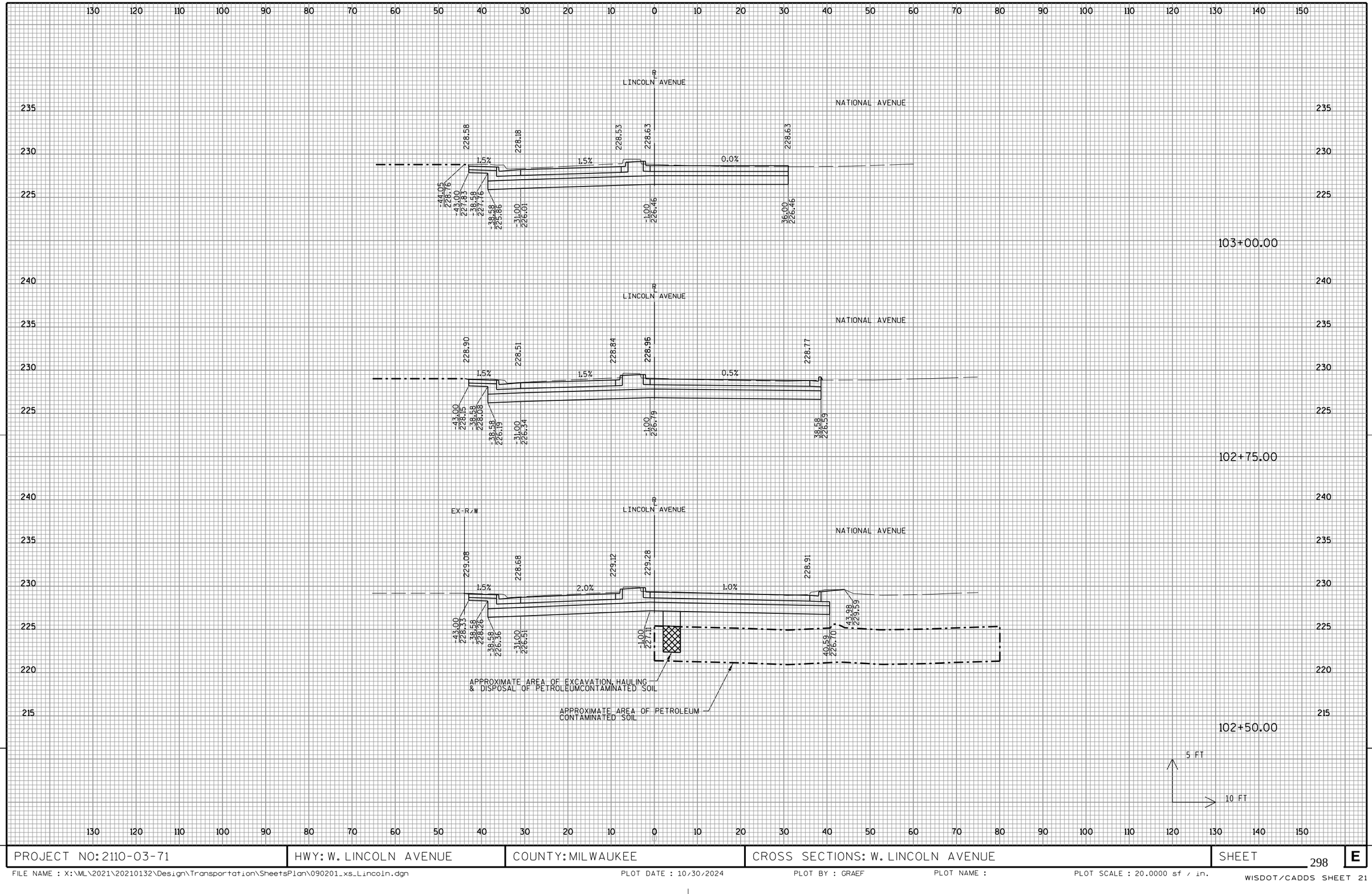

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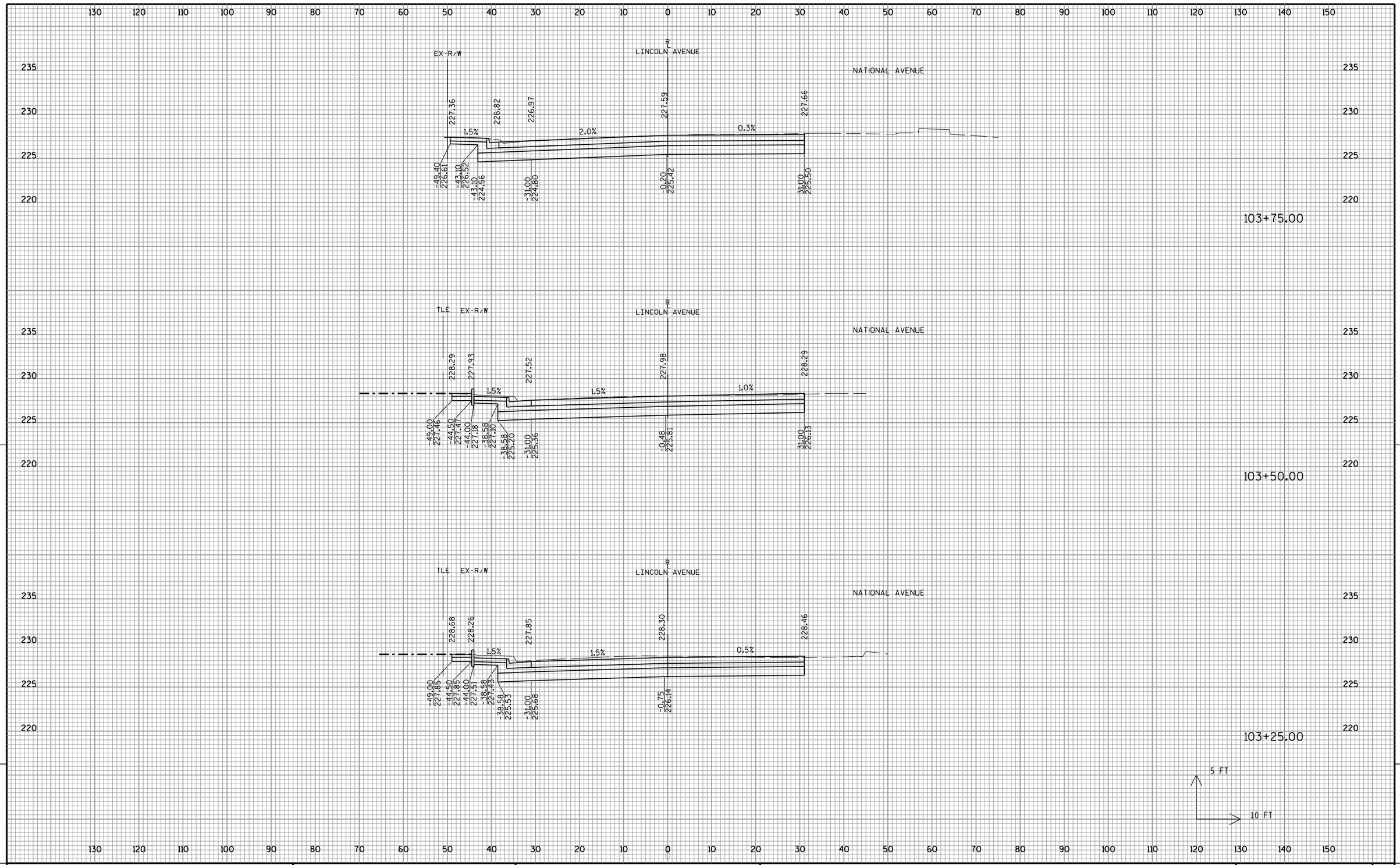
FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\090201_xs_Lincoln.dgn | PLOT DATE : 10/30/2024 | PLOT BY : GRAEF | PLOT NAME : | PLOT SCALE : 20.0000 sf / in.

WISDOT/CADDS SHEET 21



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PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 299	E

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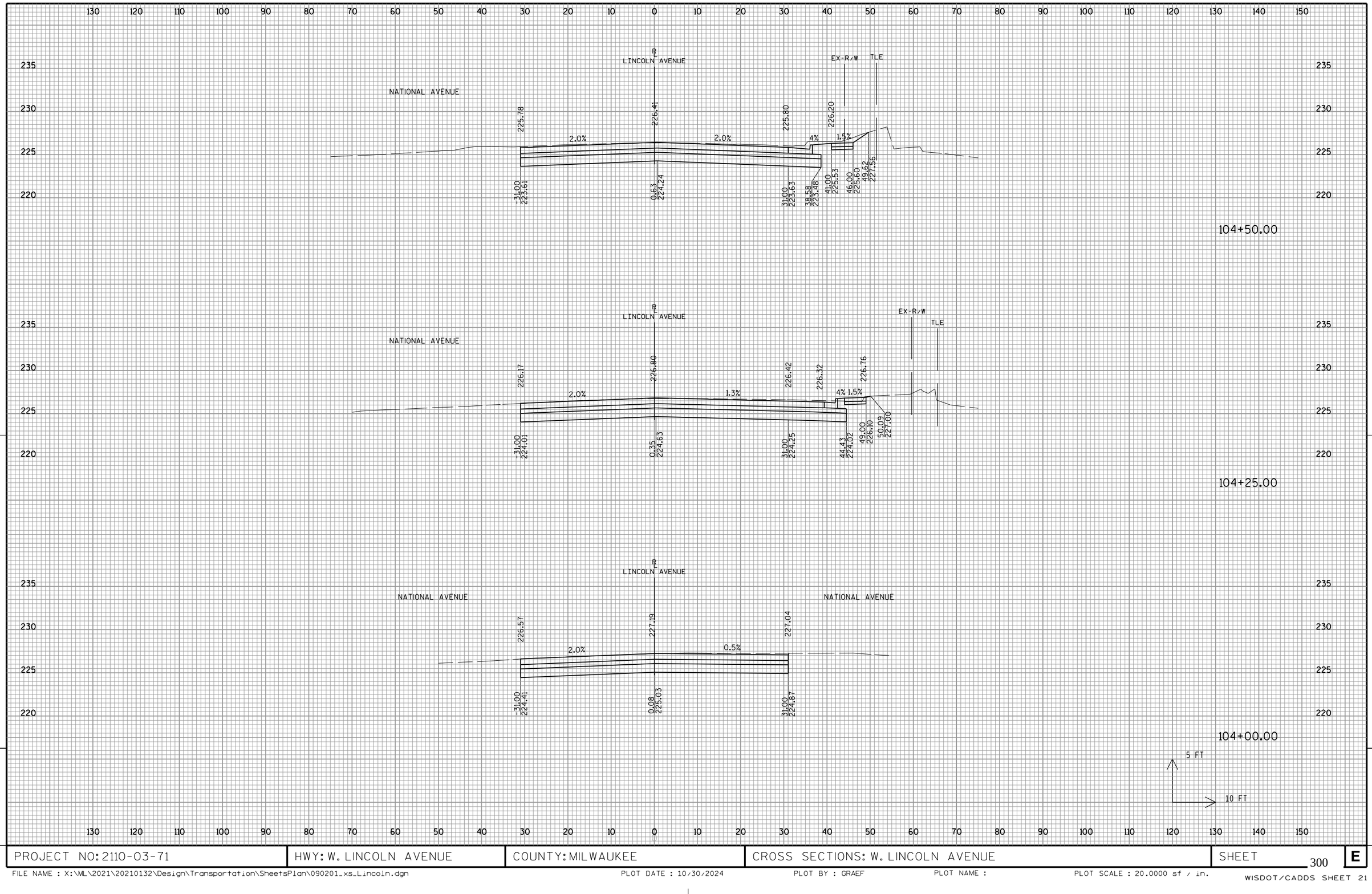

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PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 300	E

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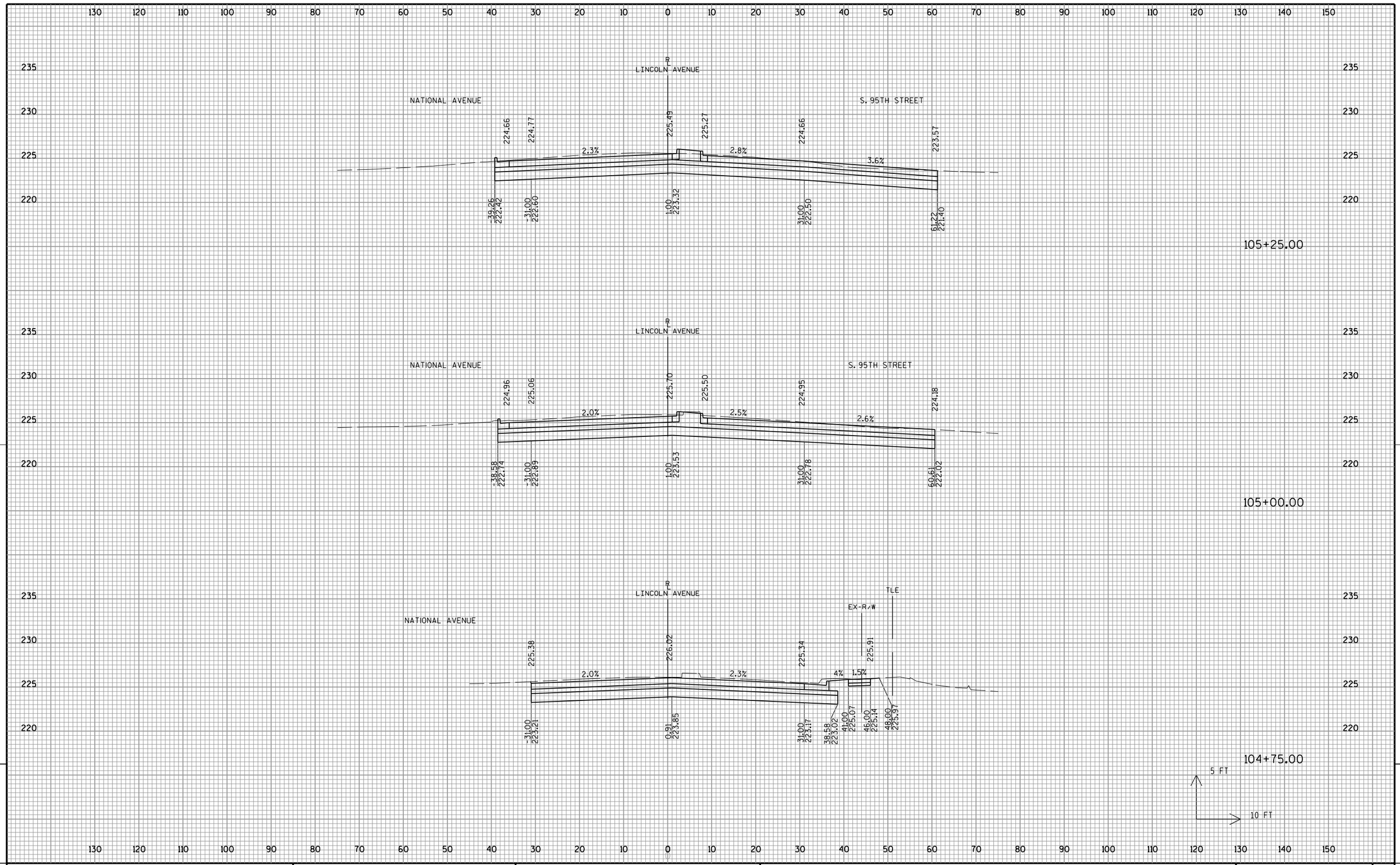

PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 301	E

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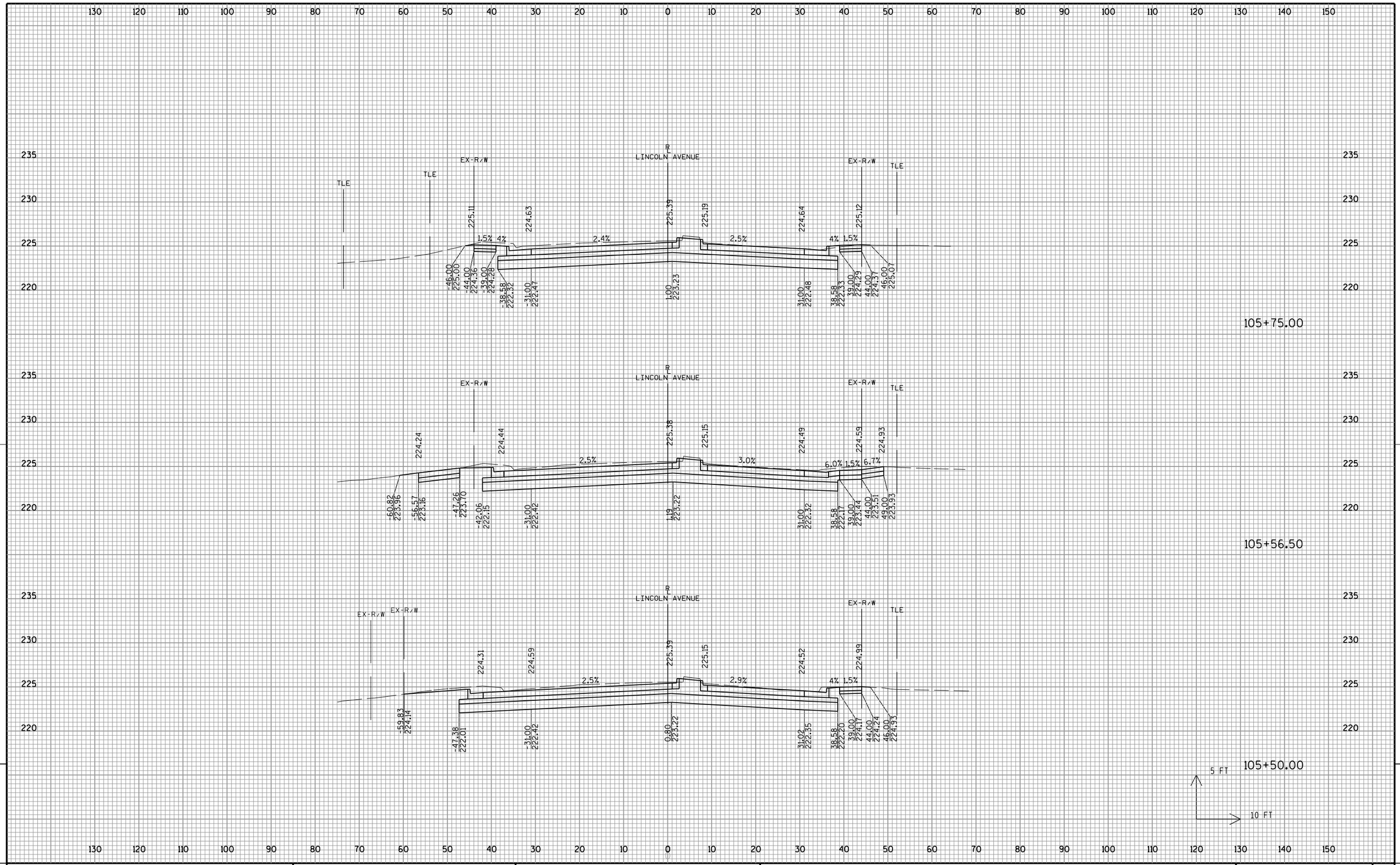
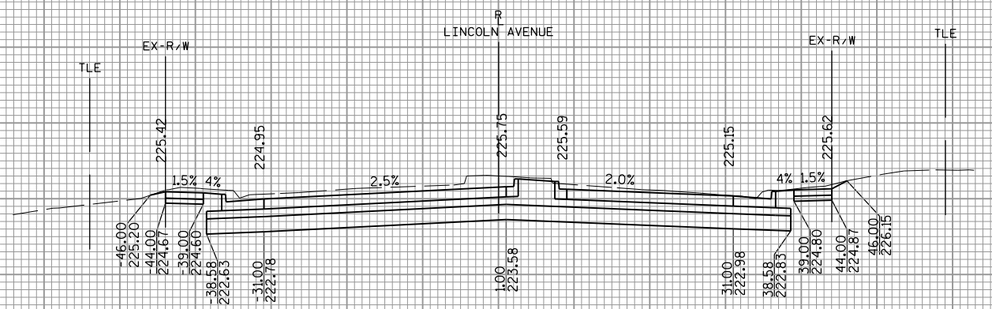
WISDOT/CADDS SHEET 21



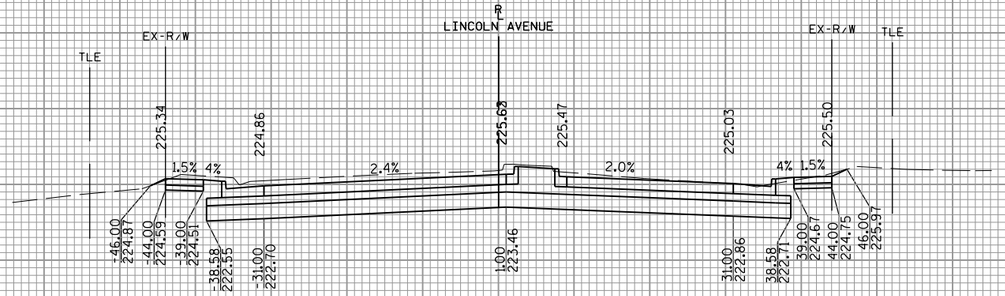
PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 302	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\090201_xs_Lincoln.dgn PLOT DATE : 10/30/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 20.0000 sf / in.

WISDOT/CADDS SHEET 21



106+50.00



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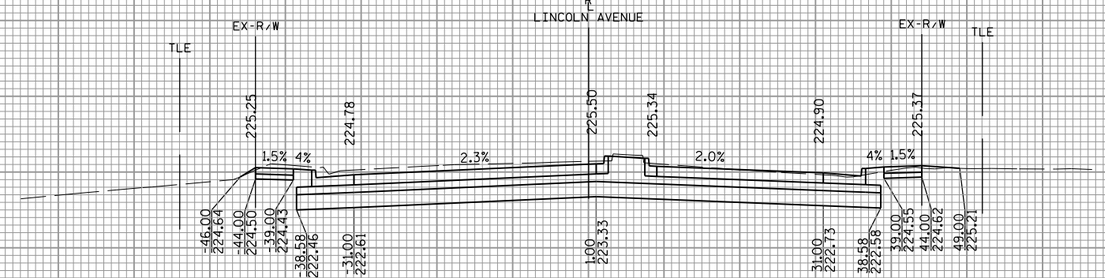
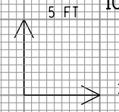


106+00.00



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 303	E

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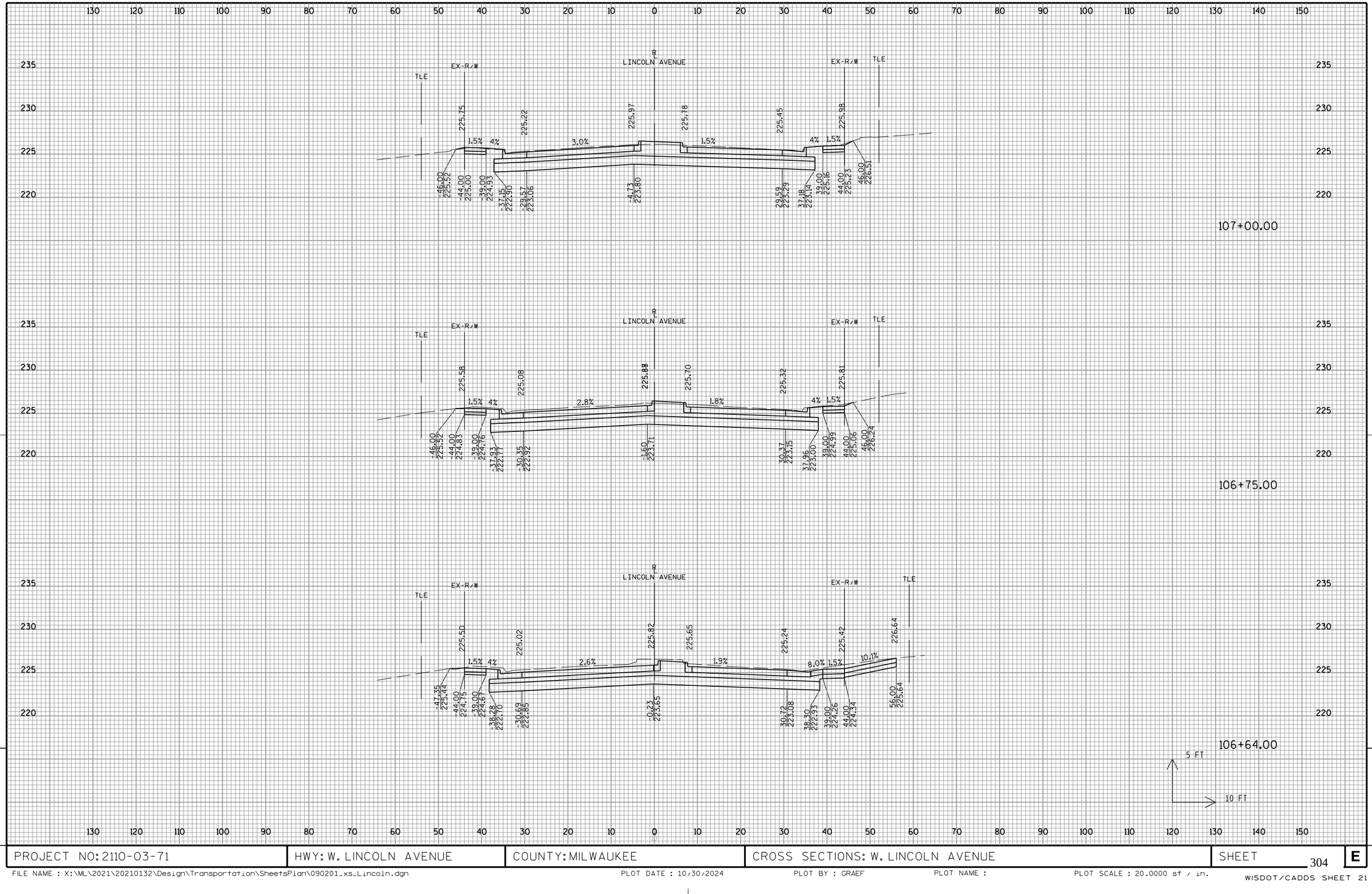
WISDOT/CADDS SHEET 21



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PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 304	E

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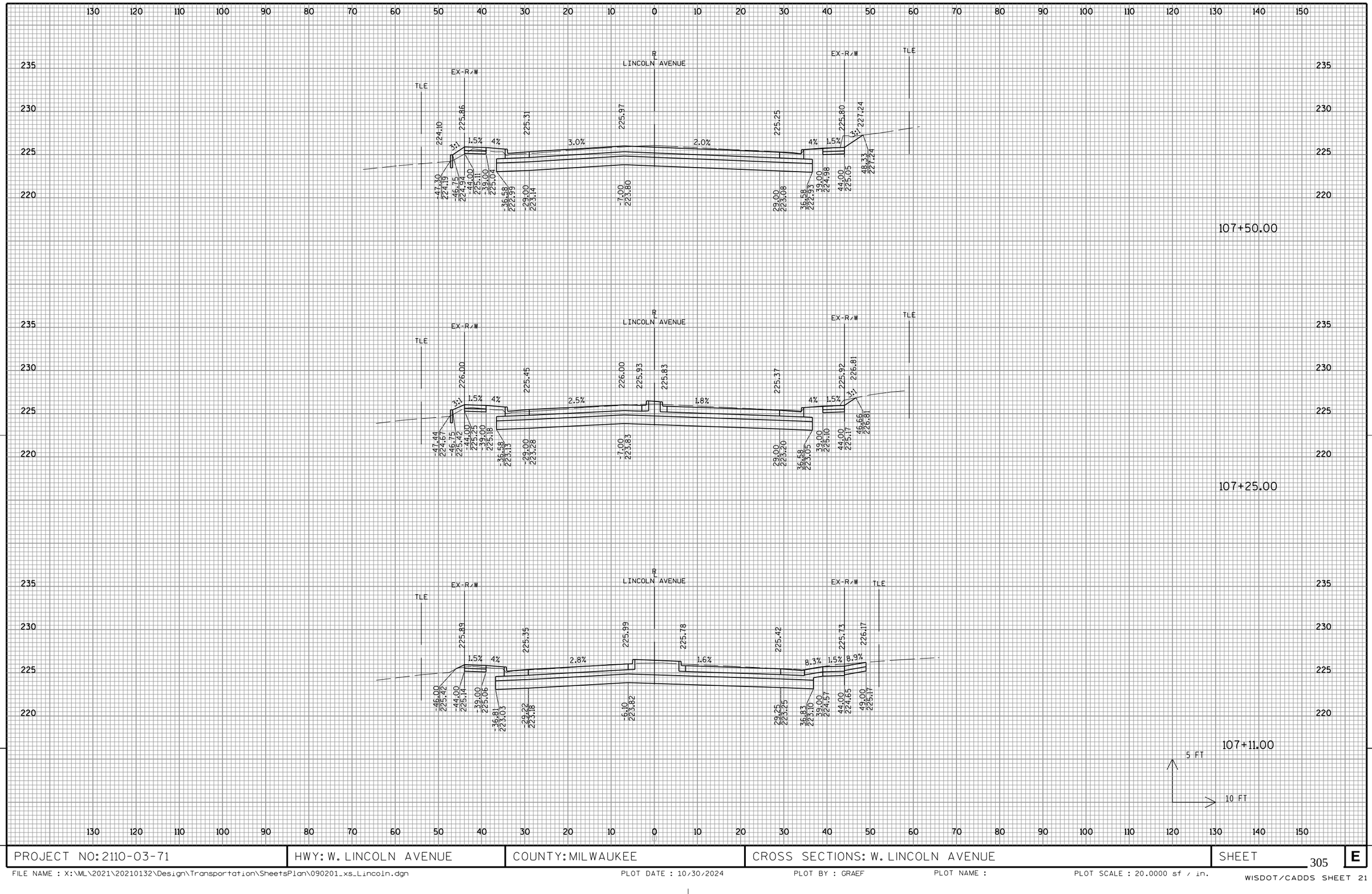
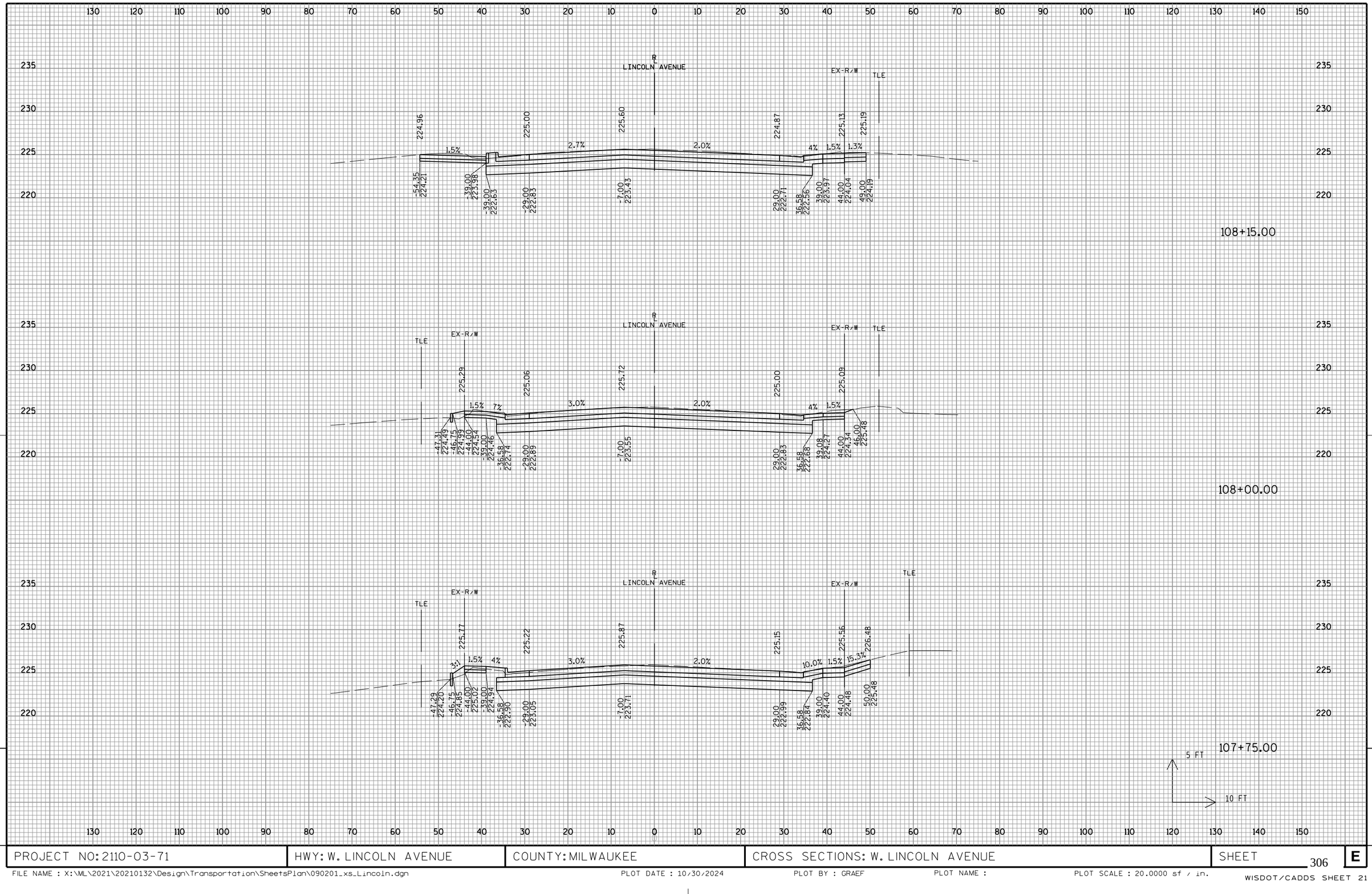
WISDOT/CADDS SHEET 21



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 305	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\090201_xs_Lincoln.dgn PLOT DATE : 10/30/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 20.0000 sf / in.

WISDOT/CADDS SHEET 21



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PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 306	E

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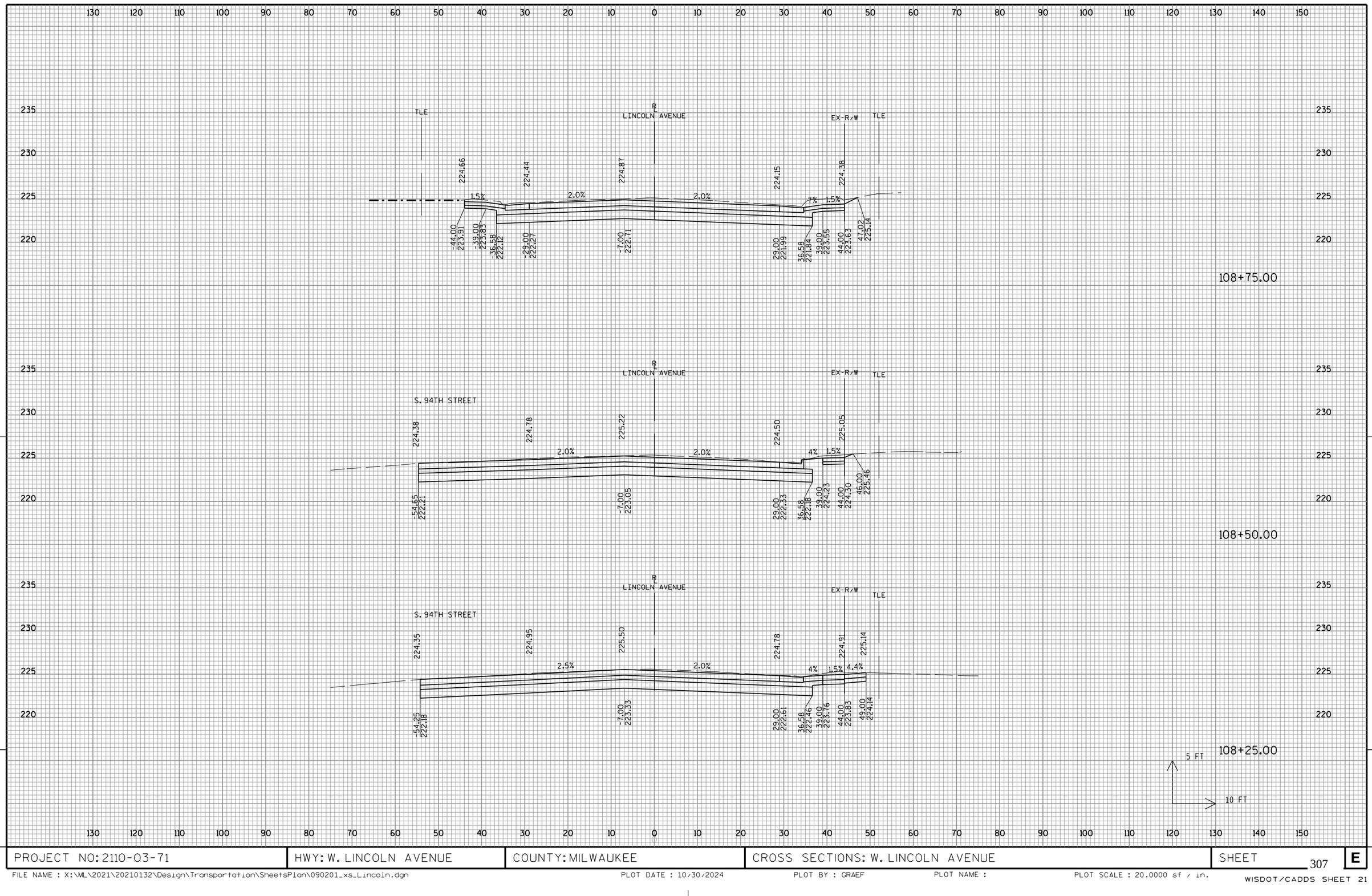
WISDOT/CADDS SHEET 21



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 307	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\090201_xs_Lincoln.dgn PLOT DATE : 10/30/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 20.0000 sf / in.

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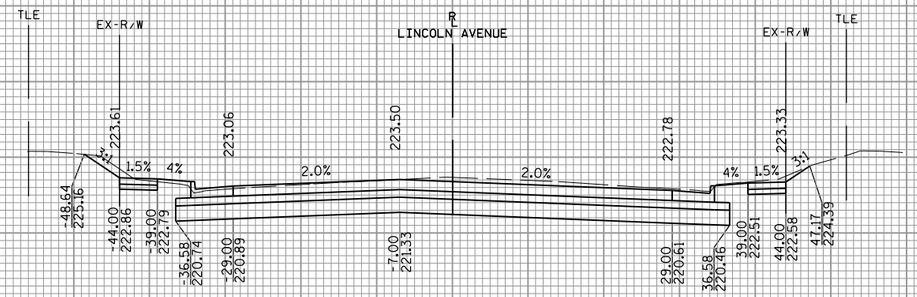

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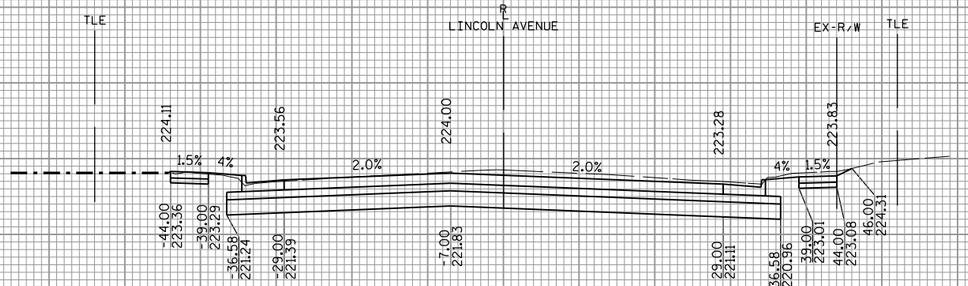

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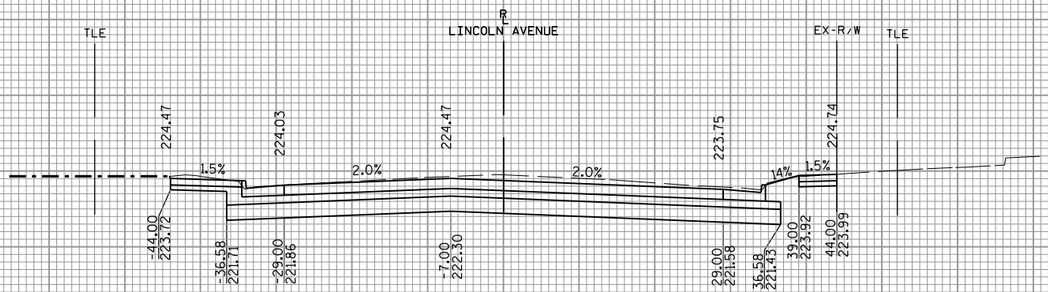

109+00.00

5 FT

10 FT

9

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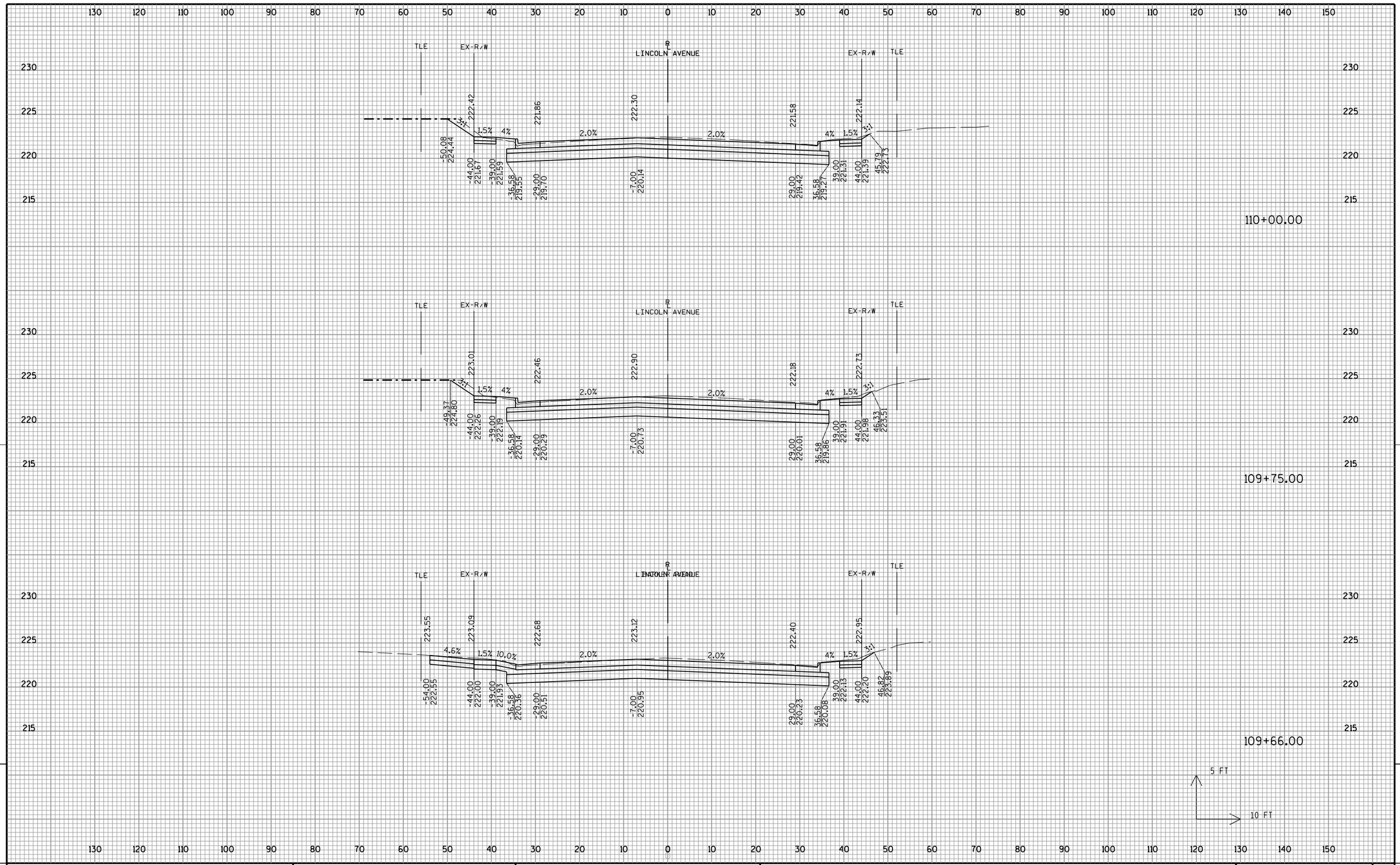
PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 308	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\090201_xs_Lincoln.dgn PLOT DATE : 10/31/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 20.0000 sf / in.

WISDOT/CADDS SHEET 21



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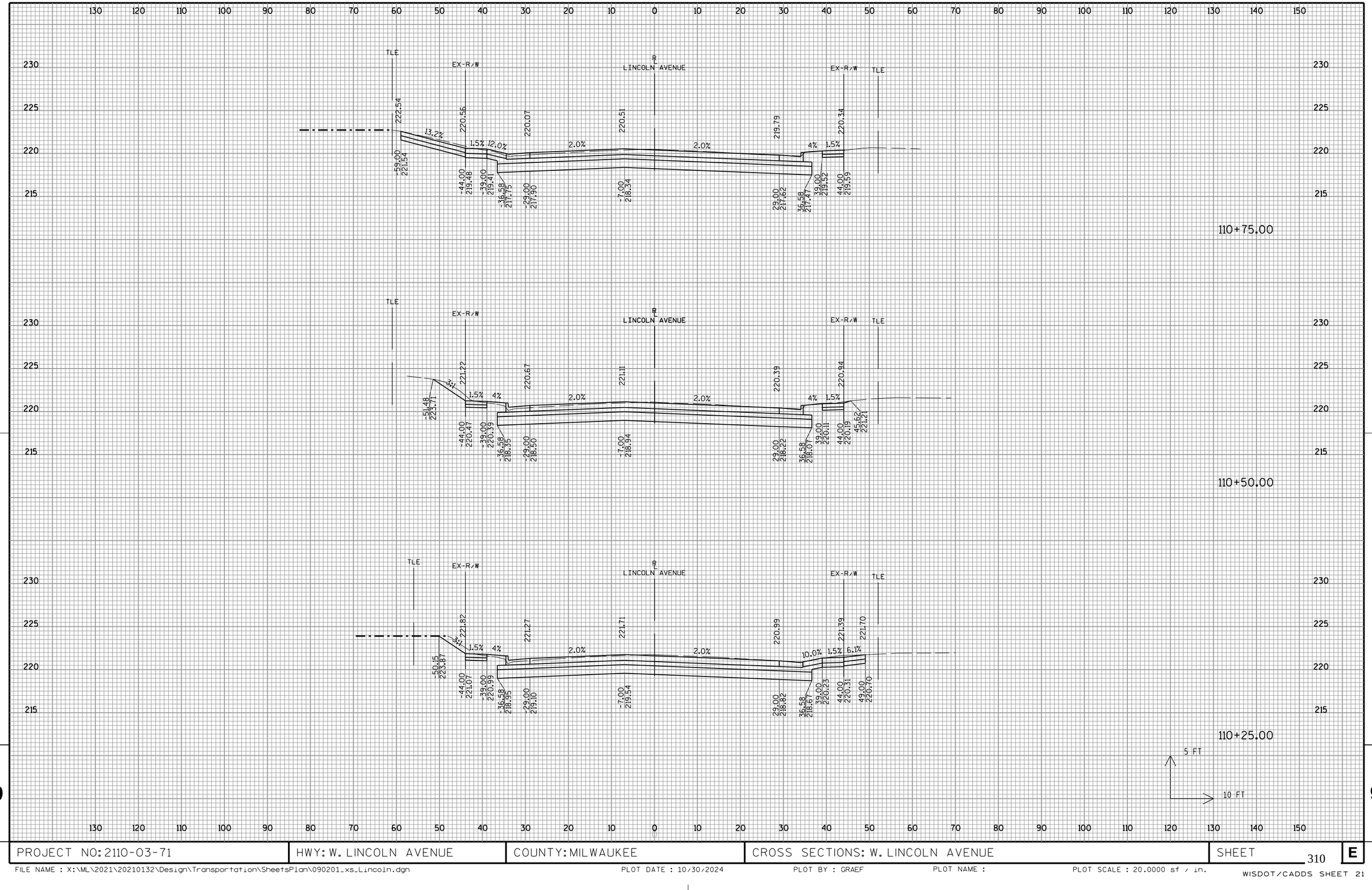
PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 309	E



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 310	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\090201_xs_Lincoln.dgn
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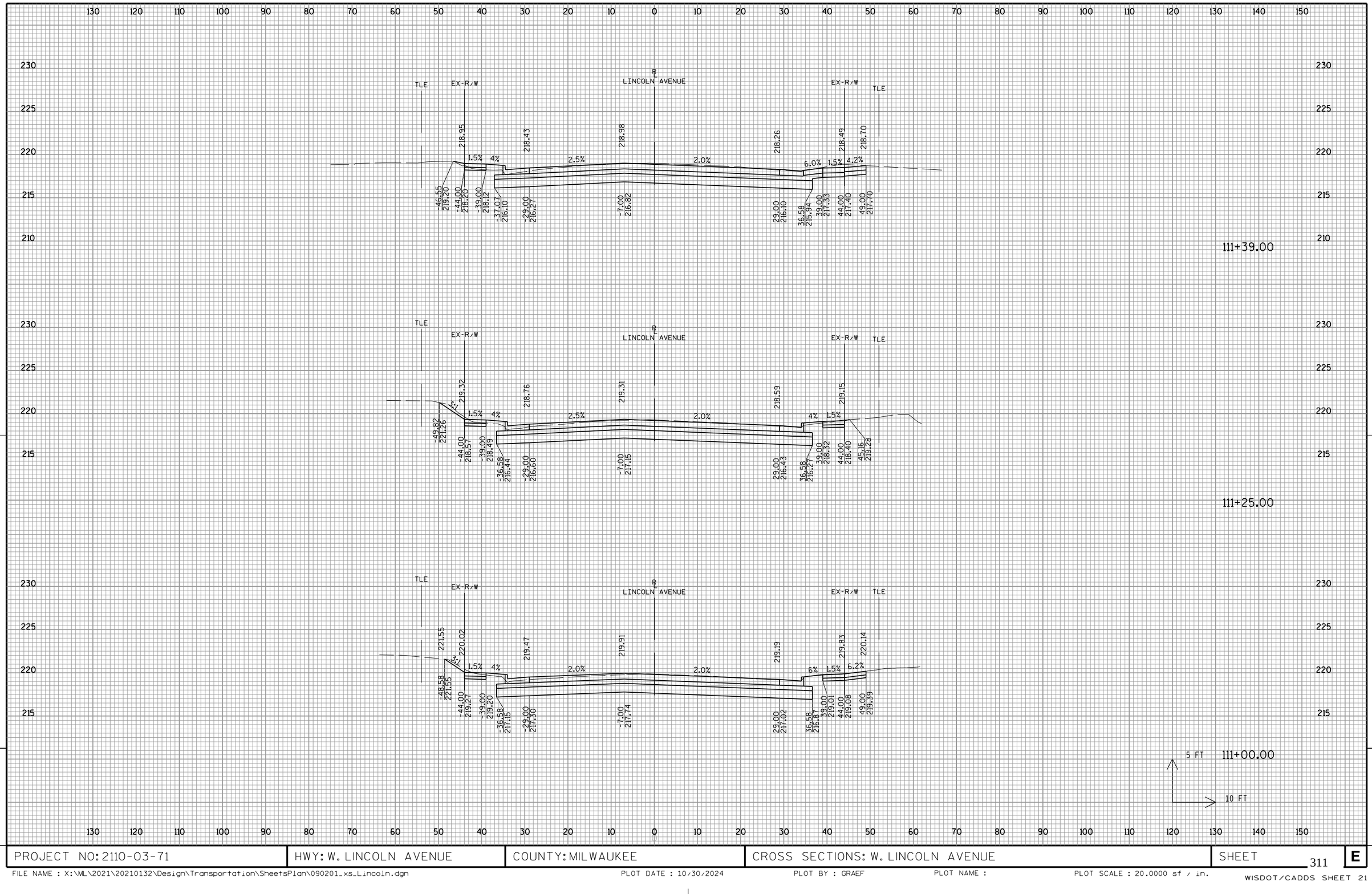
PLOT BY : GRAEF
PLOT NAME :
PLOT SCALE : 20.0000 sf / in.
WISDOT/CADDS SHEET 21



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PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 311	E

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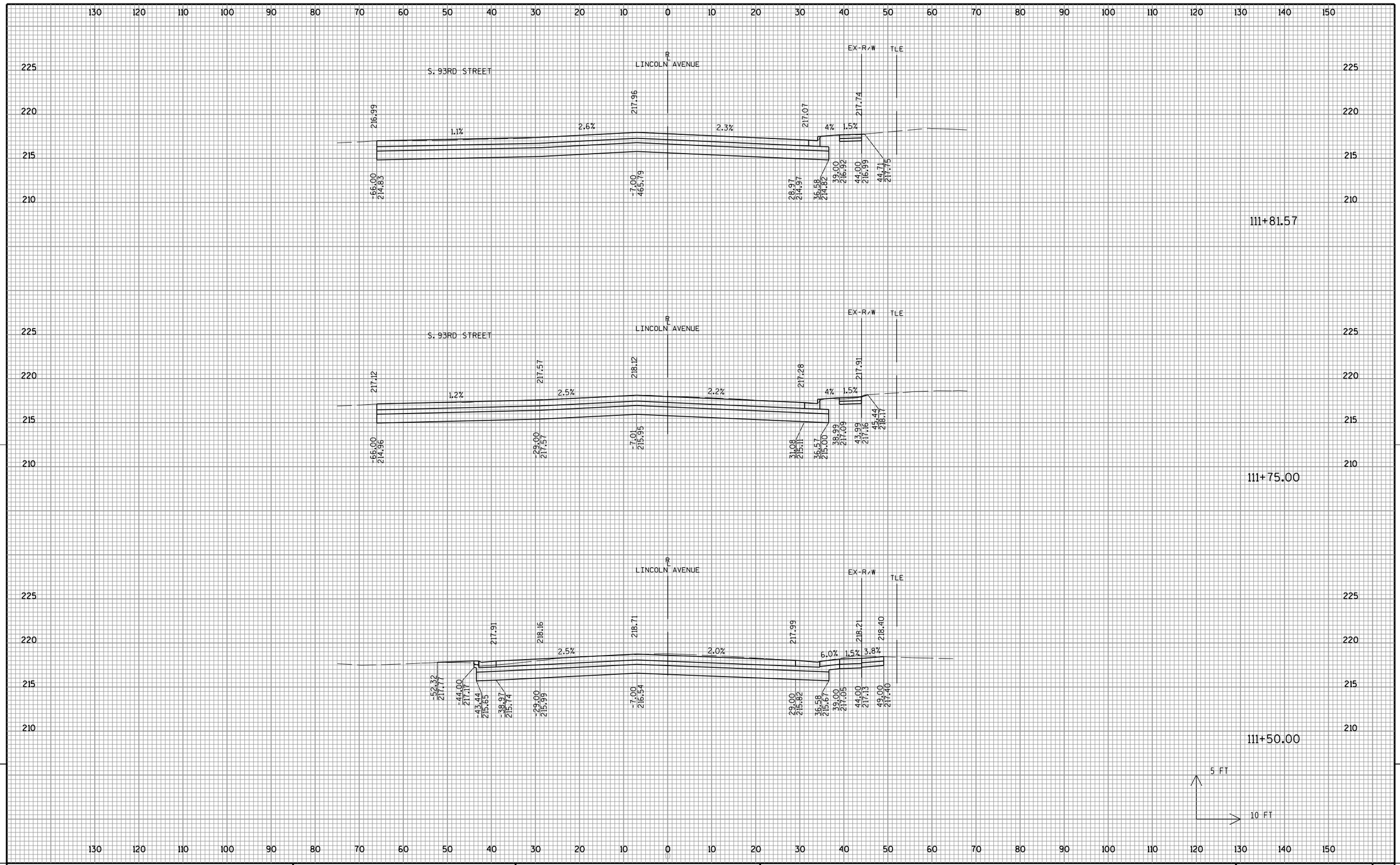

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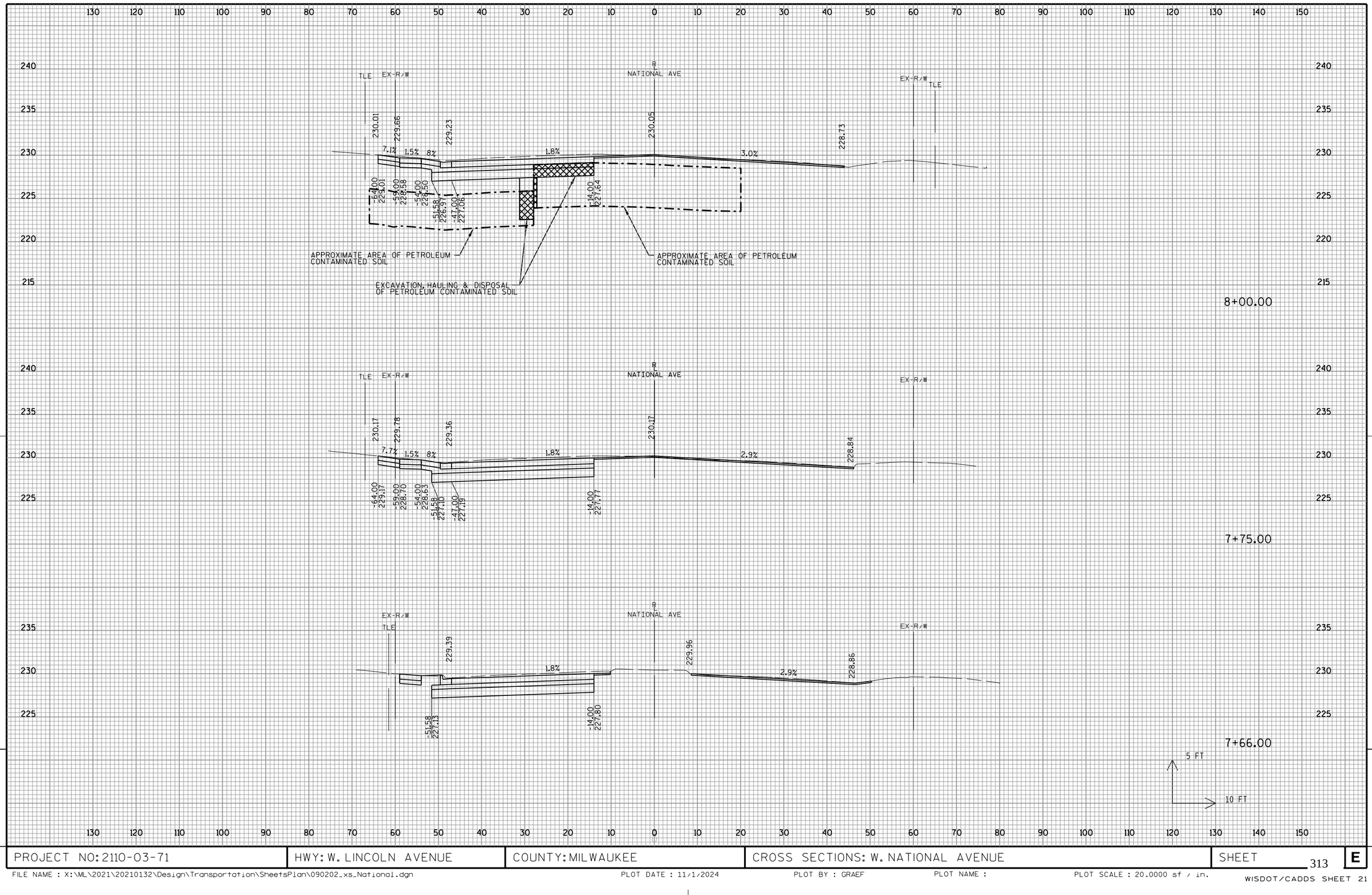
PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. LINCOLN AVENUE	SHEET 312	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\090201_xs_Lincoln.dgn PLOT DATE : 10/30/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 20.0000 sf / in.

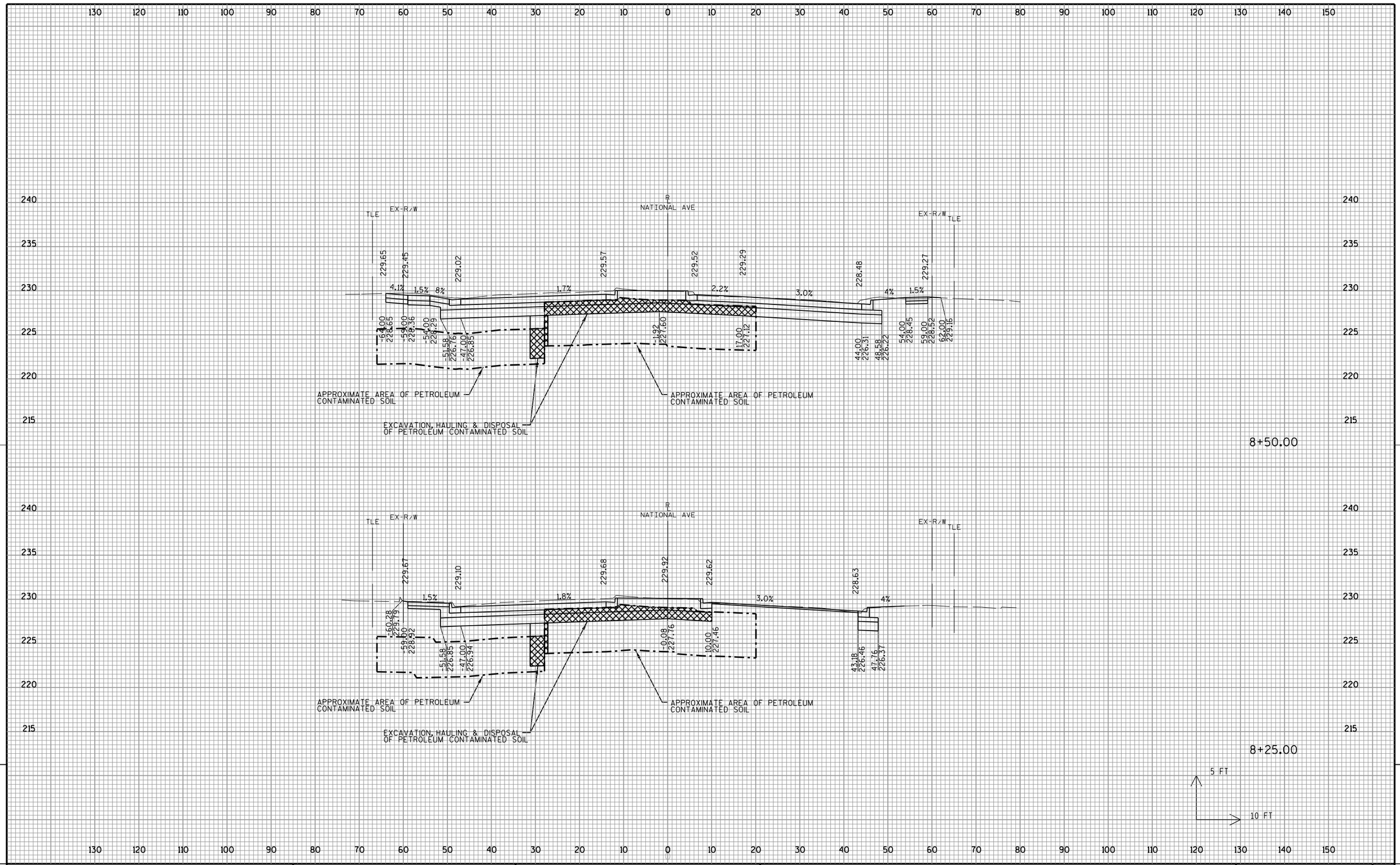
WISDOT/CADDS SHEET 21



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. NATIONAL AVENUE	SHEET 313 E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\090202_xs_National.dgn PLOT DATE : 11/1/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 20.0000 sf / in.

WISDOT/CADDS SHEET 21



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PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. NATIONAL AVENUE	SHEET 314	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\090202_xs_National.dgn
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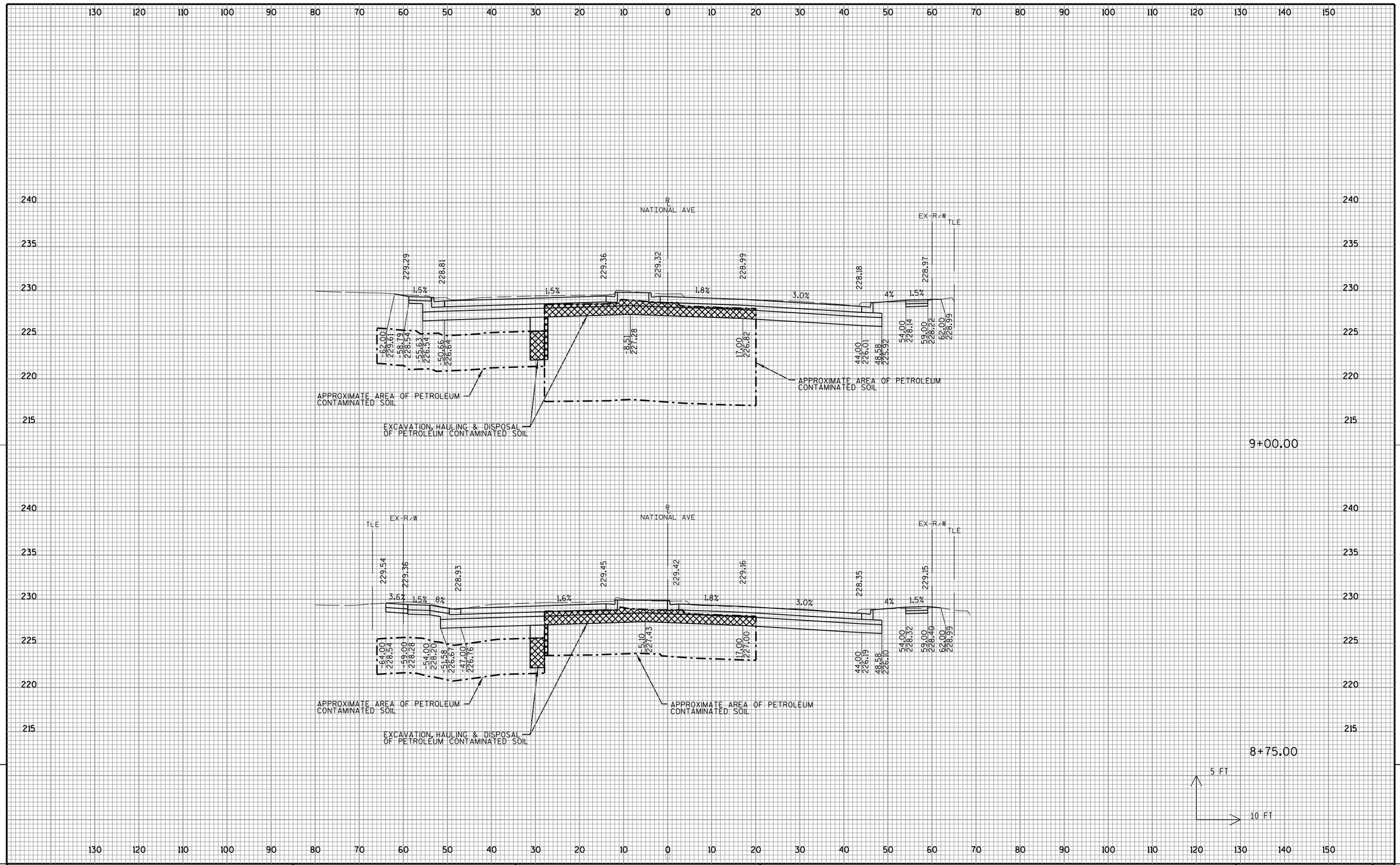
PLOT BY : GRAEF
PLOT NAME :
PLOT SCALE : 20.0000 sf / in.
WISDOT/CADDS SHEET 21



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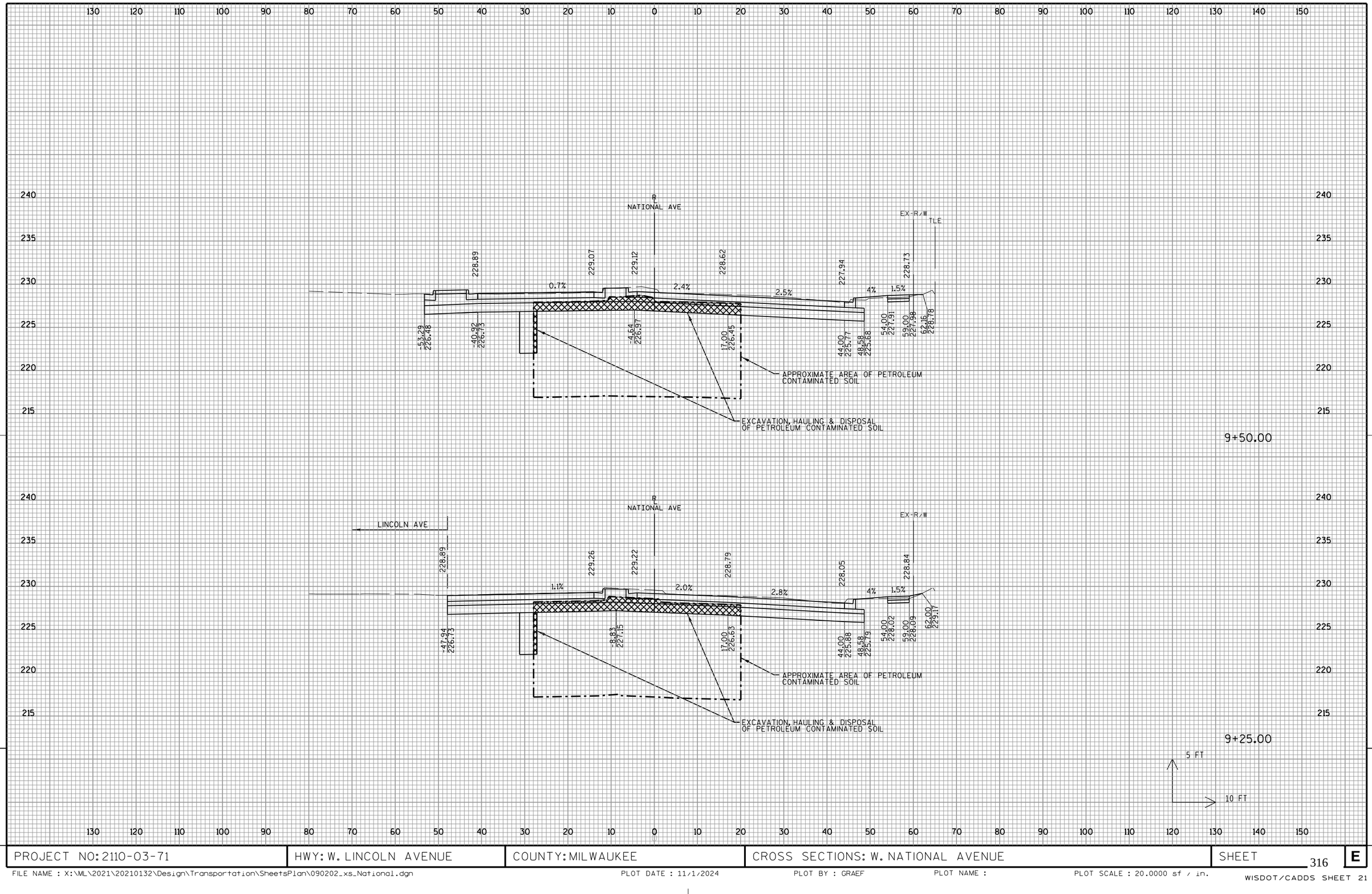
PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. NATIONAL AVENUE	SHEET 315	E

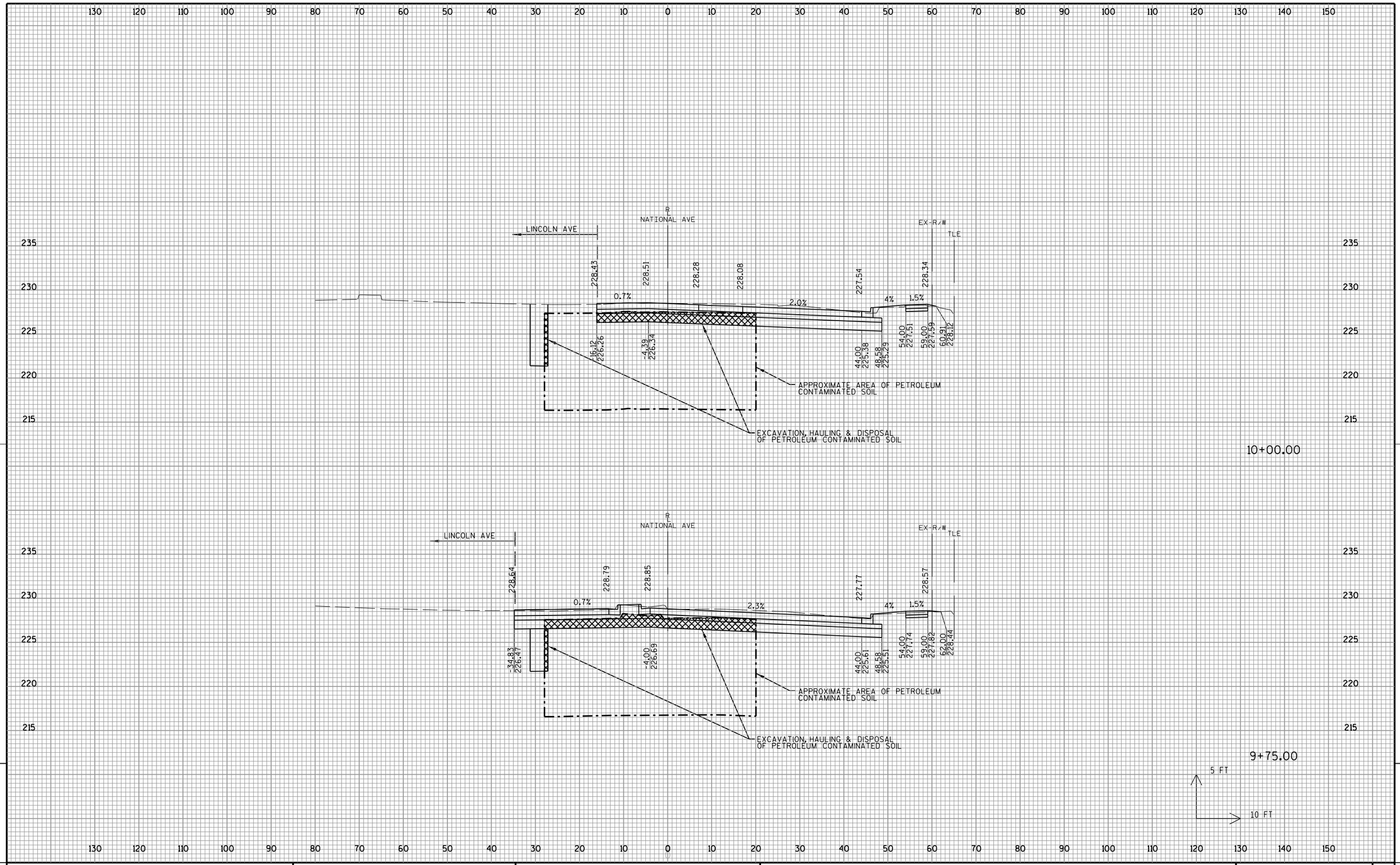
FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\090202_xs_National.dgn PLOT DATE : 11/1/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 20.0000 sf / in.
WISDOT/CADDS SHEET 21



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. NATIONAL AVENUE	SHEET 316	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\090202_xs_National.dgn | PLOT DATE : 11/1/2024 | PLOT BY : GRAEF | PLOT NAME : | PLOT SCALE : 20.0000 sf / in.

WISDOT/CADDS SHEET 21



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PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. NATIONAL AVENUE	SHEET 317	E

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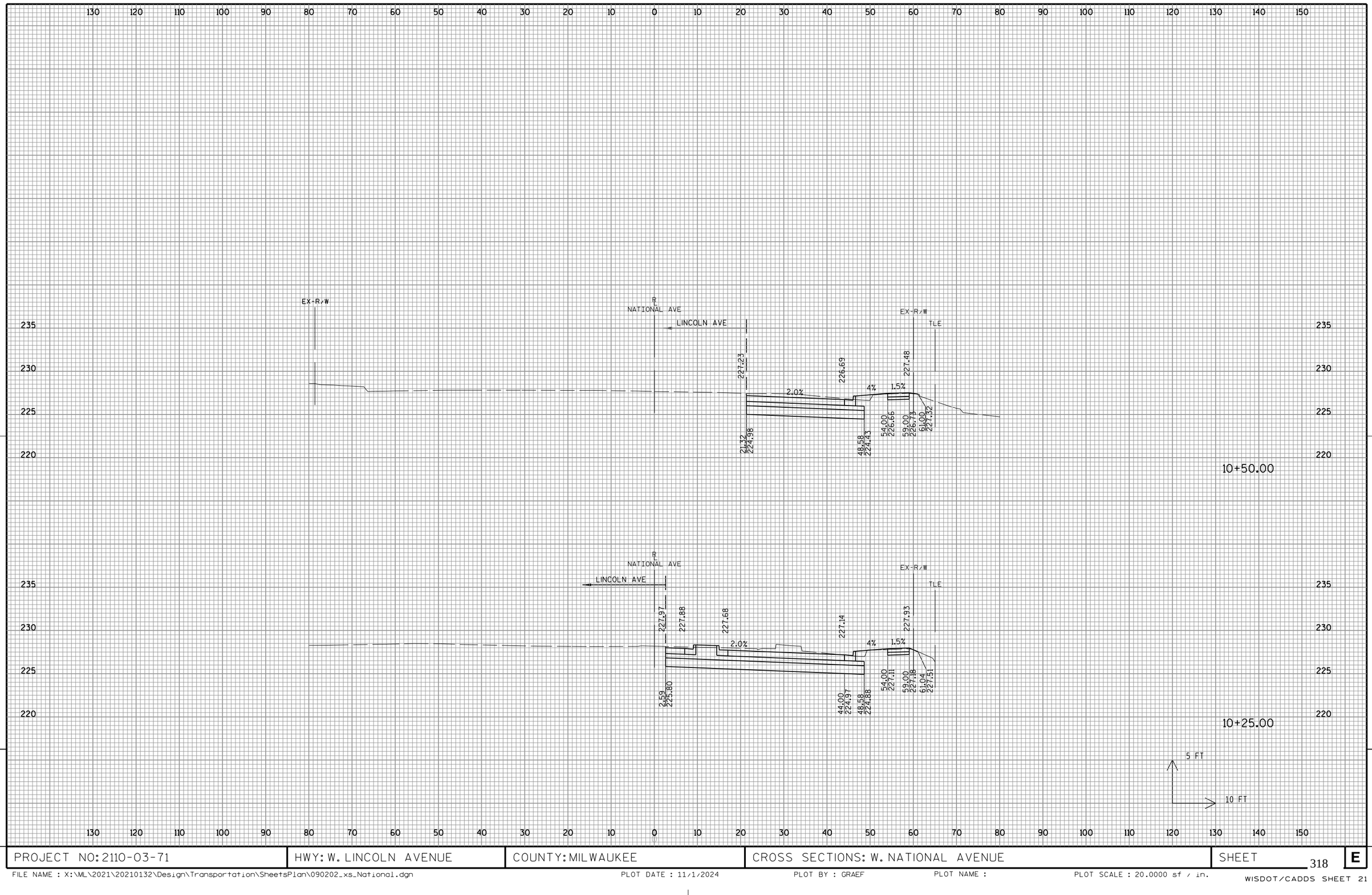
WISDOT/CADDS SHEET 21



PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. NATIONAL AVENUE	SHEET 318	E

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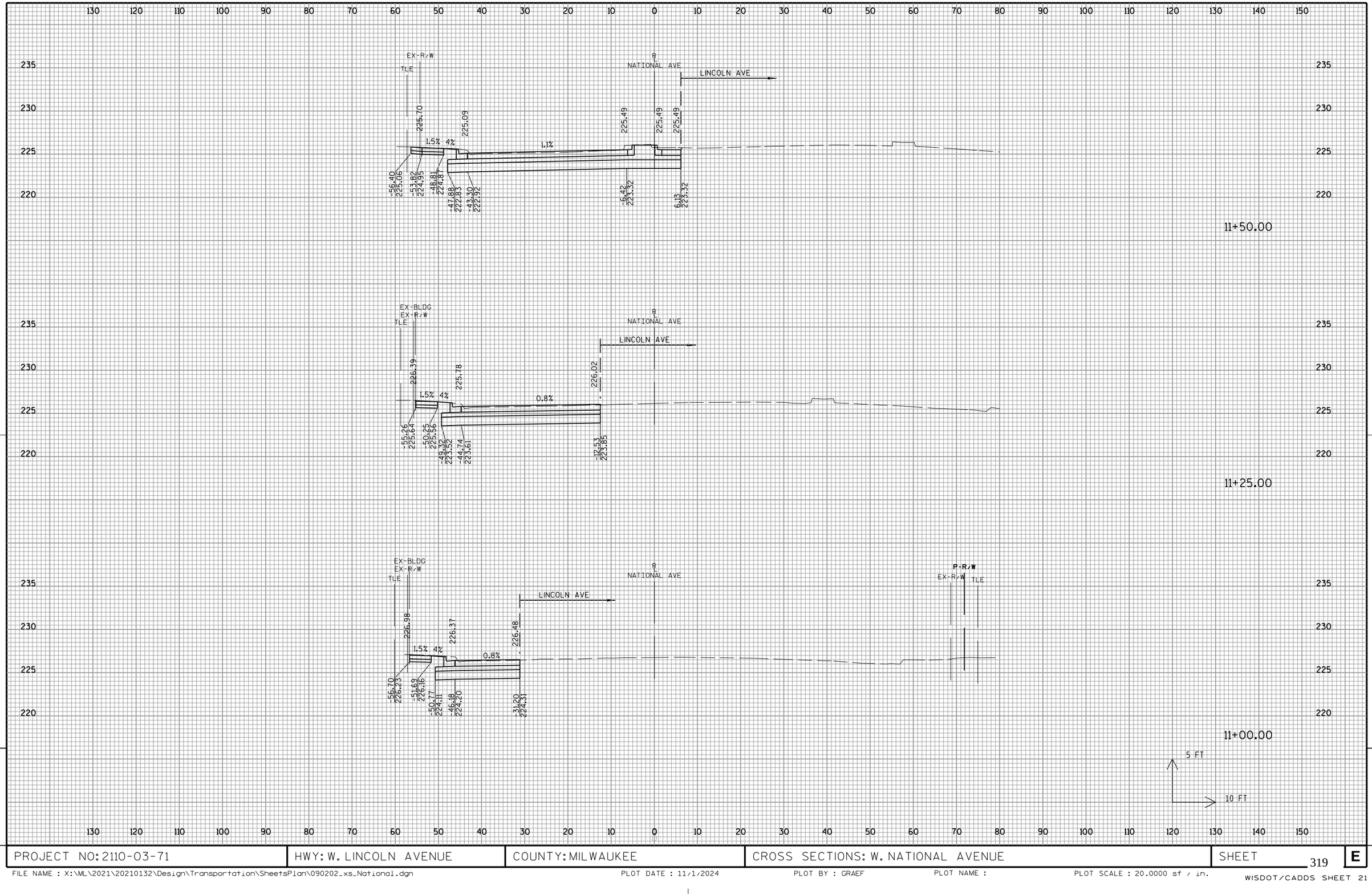

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PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. NATIONAL AVENUE	SHEET 319	E

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WISDOT/CADDS SHEET 21

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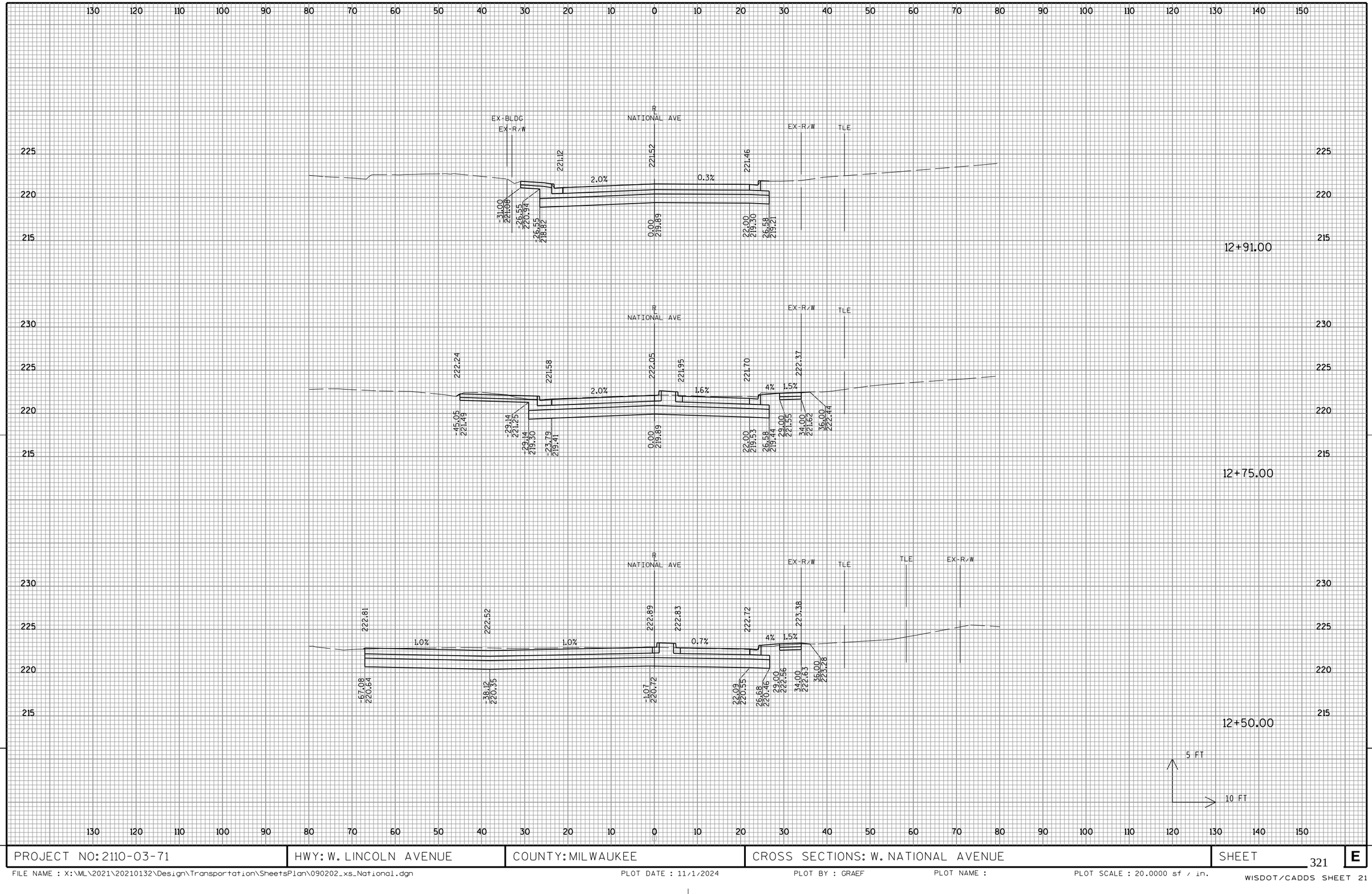
PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. NATIONAL AVENUE	SHEET 320	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\090202_xs_National.dgn PLOT DATE : 11/1/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 20.0000 sf / in.

WISDOT/CADDS SHEET 21



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PROJECT NO: 2110-03-71	HWY: W. LINCOLN AVENUE	COUNTY: MILWAUKEE	CROSS SECTIONS: W. NATIONAL AVENUE	SHEET 321	E

FILE NAME : X:\ML\2021\20210132\Design\Transportation\SheetsPlan\090202_xs_National.dgn PLOT DATE : 11/1/2024 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 20.0000 sf / in.

WISDOT/CADDS SHEET 21

Wisconsin Department of Transportation

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