SEL

PROJECT ID: 2595-00-71

COUNTY: MILWAUKEE

MAY 2016

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 = 156

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2595-00-71	WISC 2016171	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

NORTH 60TH STREET, CITY OF MILWAUKEE

W FLORIST AVE TO W MILL RD

LOCAL STREET

MILWAUKEE COUNTY

STATE PROJECT NUMBER
2595-00-71

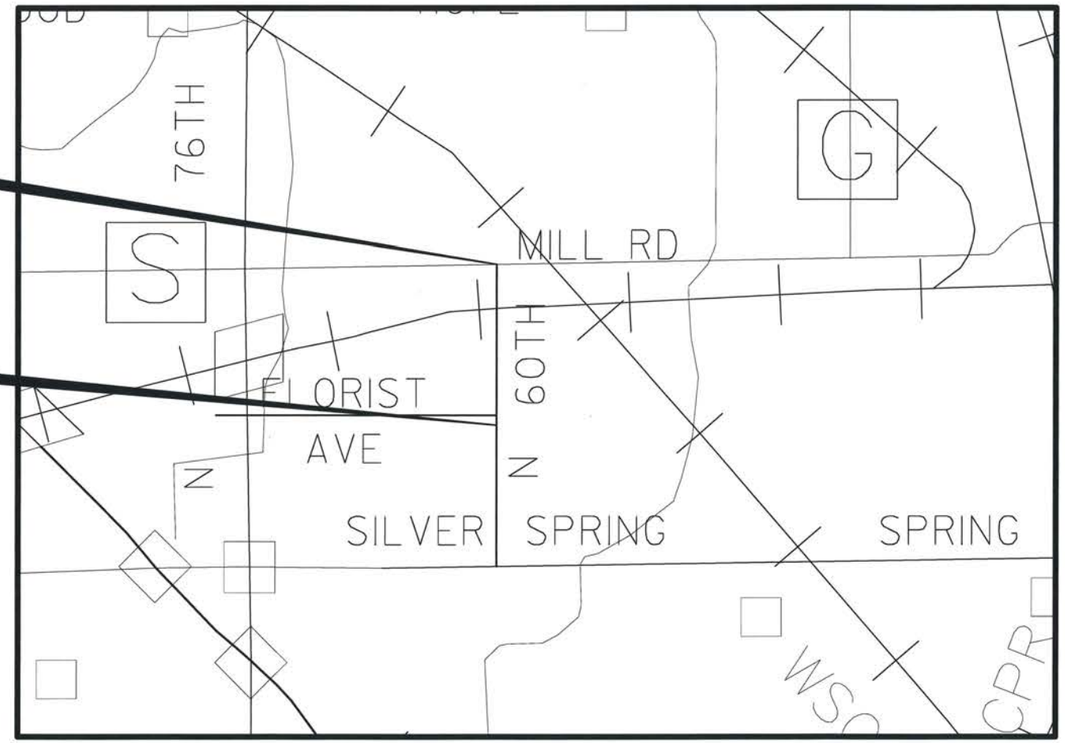
N

DESIGN DESIGNATION

A.A.D.T. 2016 =	20,700
A.A.D.T. 2036 =	23,800
D.H.V. =	2100
D.D. =	54%-46%
T. =	4.33%
DESIGN SPEED =	40 MPH
ESALS =	1,620,600

END PROJECT 2595-00-71
STA 37+31.91
X: 2,537,539.45
Y: 419,723.96

BEGIN PROJECT 2595-00-71
STA 9+96.99
X: 2,537,673.36
Y: 417,000.59



CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE		ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
		TELEPHONE	T
MARSH AREA		WATER	W
		OVERHEAD UTILITY	OH
		UTILITY PEDESTAL	
WOODED OR SHRUB AREA		POWER POLE	
		TELEPHONE POLE	

LAYOUT
SCALE 0 0.5 MILES

TOTAL NET LENGTH OF CENTERLINE = 0.522 MI.

THE COORDINATES ON THIS PLAN ARE BASED ON THE WISCONSIN STATE PLANE COORDINATE SYSTEM, MILWAUKEE COUNTY, NAD 27 SOUTH ZONE.

ELEVATION SHOWN ON THIS PLAN ARE REFERENCED TO THE CITY OF MILWAUKEE DATUM.

TO CONVERT ELEVATIONS SHOWN ON THIS PLAN TO NATIONAL GEODETIC VERTICAL DATUM OF 1929, ADD 580.603 TO ELEVATIONS SHOWN ON THIS PLAN.

ACCEPTED FOR

CITY OF MILWAUKEE

WISCONSIN — JEFFREY S. POLINSKE E-[illegible] MILWAUKEE WIS — PROFESSIONAL ENGINEER

2/22/16 (Date) (Signature & Title of Official)

ORIGINAL PLANS PREPARED BY

WISCONSIN — DARRELL J. BERRY E-16235 MILWAUKEE, WI — PROFESSIONAL ENGINEER

2/19/2016 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	CITY OF MILWAUKEE
Designer	MEAD & HUNT, INC.
Management Consultant	DAAR ENGINEERING
CO. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 2/22/16 (Management Consultant Signature)

E

SEQUENCE OF PLANS AND DETAILS IN SECTION 2

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAIL
REMOVAL PLAN
INTERSECTION DETAIL
PAVEMENT GRADES
STORM SEWER PLAN
PAVEMENT MARKING
TRAFFIC CONTROL/STAGING
ALIGNMENT LAYOUT

STANDARD ABBREVIATIONS

ADT	AVERAGE DAILY TRAFFIC
AGG	AGGREGATE
ASPH	ASPHALTIC
BM	BENCH MARK
C/L	CENTER OR CONSTRUCTION LINE
CONC	CONCRETE
CWT	HUNDREDWEIGHT
CY	CUBIC YARD
D	DEGREE OF CURVE
Δ	DELTA
DHV	DESIGN HOURLY VOLUME
DWY	DRIVEWAY
EL	ELEVATION
EXC	EXCAVATION
EX_R/W	EXISTING RIGHT-OF-WAY
FT	FOOT
FTG	FOOTING
HMA	HOT MIX ASPHALT
L	LENGTH OF CURVE
LB	POUND
LF	LINEAR FOOT
LS	LUMP SUM
LT	LEFT
MAX	MAXIUMUM
MIN	MINIMUM
PAVT	PAVEMENT
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSCETION
PL	PROPERTY LINE
PT	POINT OF TANGENT
P_R/W	PROPOSED RIGHT-OF-WAY
R	RADIUS OF CURVE
R/L	REFERENCE LINE
RT	RIGHT
SDD	STANDARD DETAIL DRAWINGS
SF	SQUARE FOOT
SHLDR	SHOULDER
SI	SLOPE INTERCEPT
STA	STATION
SY	SQUARE YARD
T	TRUCKS (PERCENT OF)
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL
VAR	VARIABLE
VC	VERTICAL CURVE
VCL	VERTICAL CURVE LENGTH
VPC	VERTICAL POINT OF CURVE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY

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

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THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

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

ELEVATIONS SHOWN FOR CURB AND GUTTER ARE FLANGE ELEVATION. DISTANCES SHOWN FOR CURB AND GUTTER RADII ARE MEASURED TO THE FLANGE (UNLESS OTHERWISE SHOWN OR NOTED).

CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND CONTACT JOHN WASHBURN AT (262) 547-6721, AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.

IMMEDIATELY AFTER CONSTRUCTION OF ANY INLET, CONTRACTOR SHALL INSTALL THE INLET PROTECTION TO MINIMIZE SEDIMENTATION IN THE INLET AND STORM SEWER.

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

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS.

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

EXPANSION JOINTS SHALL BE CONSTRUCTED AT ALL RADIUS POINTS IN CURB AND GUTTER.

ANY MESH OR REINFORCEMENT FOUND DURING REMOVAL OF THE PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE ITEM "REMOVING PAVEMENT"

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.

ALL PRIVATE EXISTING UTILITIES ARE TO BE ADJUSTED BY THE UTILITIES CONCERNED, UNLESS NOTED IN THE PLANS.

SAWCUT ASPHALTIC AND CONCRETE DRIVEWAYS AND/OR PARKING LOTS AT THE MATCHLINE AS SHOWN ON THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER.

UTILITIES

ELECTRIC
WE ENERGIES - ELECTRIC
MR. KENNETH FRANECKI
PHONE: (414) 944-5531 (OFFICE)
KENNETH.FRANECKI@WE-ENERGIES.COM

GAS
WE ENERGIES - GAS
MR. JOSHUA MOUNT
PHONE: (414) 218-2053
JOSH.MOUNT@WE-ENERGIES.COM

CABLE TELEVISION
TIME WARNER CABLE
STEVE STORM
1320 N DR. MARTIN LUTHER KING JR DRIVE
MILWAUKEE, WI 53212
PHONE: (414) 908-4789
STEVEN.STORM@TWCABLE.COM

TELEPHONE
AT&T WISCONSIN
MR. JEFF OLDENBURG
2005 PEWAUKEE ROAD
WAUKESHA, WI 53188
PHONE: (262) 896-7522
JO2376@ATT.COM

TELEPHONE
SPRINT
MR. GERRY CRAIN
SPRINT OSP FACILITIES ENGINEERING
5600 N. RIVER ROAD, SUITE 200
ROSEMONT, IL 60018
PHONE: (847) 447-1869
GERRY.A.CRAIN@SPRINT.COM

UNDERGROUND CONDUIT
CITY OF MILWAUKEE - UNDERGROUND CONDUIT
MS. KAREN ROGNEY
840 N BROADWAY
MILWAUKEE, WI 53202
PHONE: (414) 286-3243
KAREN.ROGNEY@MILWAUKEE.GOV

STREET LIGHTING
CITY OF MILWAUKEE STREET LIGHTING
MR. DENNIS MILLER
1540 W. CANAL ST
MILWAUKEE, WI 53233
PHONE: (414) 286-5942 (OFFICE),
(414) 708-4251 (CELL)

TRAFFIC SIGNALS
CITY OF MILWAUKEE TRAFFIC SIGNALS
MR. AL NICHOLS
1540 W. CANAL ST
MILWAUKEE, WI 53233
PHONE: (414) 286-5941 (OFFICE),
(414) 708-5148 (CELL)

WATER
MILWAUKEE WATER WORKS
MR. DAVE GOLDAPP
840 N BROADWAY, ROOM 409
MILWAUKEE, WI 53202
PHONE: (414) 286-6301 (OFFICE),
(414) 708-2695 (CELL)
DAVE.GOLDAPP@MILWAUKEE.GOV

SEWER
CITY OF MILWAUKEE – SEWER DEPARTMENT
MR. TIMOTHY THUR
840 N BROADWAY, SUITE 820
MILWAUKEE, WI 53202
PHONE: (414) 286-2463

AGENCIES/PROJECT CONTACTS

MILWAUKEE COUNTY TRANSIT SYSTEM (MCTS)
1942 NORTH 17TH STREET
MILWAUKEE, WISCONSIN 53205
ATTN: MS. MELANIE FLYNN

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION (SEWRPC)
W239 N1812 ROCKWOOD DRIVE
PO BOX 1607
WAUKESHA, WISCONSIN 53187
ATTN: MR. JOHN WASHBURN
(262) 547-6721

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2300 N. DR MARTIN LUTHER KING JR. DRIVE
MILWAUKEE, WI 53212
ATTN: KRISTINA BETZOLD
PHONE: (414) 263-8517
KRISTINA.BETZOLD@WISCONSIN.GOV

CONSULTANT CONTACT
MEAD & HUNT, INC.
10700 WEST RESEARCH DRIVE, SUITE 155
WAUWATOSA, WISCONSIN 53226
ATTN: DARRELL BERRY
(262) 790-0232

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N

BEGIN PROJECT 2595-00-71
STA. 9+96.99 NB
STA. 109+76.96 SB

WEST KAUL AVENUE

WEST DOUGLAS AVENUE

WEST DOUGLAS
AVENUE ALIGNMENT

BEGIN CONSTRUCTION
STA 201+00.00 DOUGLAS

PAVEMENT REPLACEMENT AREA
STA. 29+75 - STA. 31+00
STA. 129+77.06 - STA. 131+01.71

UNION PACIFIC RAILROAD

END PROJECT 2595-00-71
STA. 37+31.91 NB
STA. 137+34.19 SB

SOUTHBOUND PGL

110 10 115 15 120 20 125 25 130 30 135 35

201 202

NORTHBOUND PGL

STA 202+77.53 DOUGLAS =
STA 121+31.27 SB

WEST FLORIST AVENUE

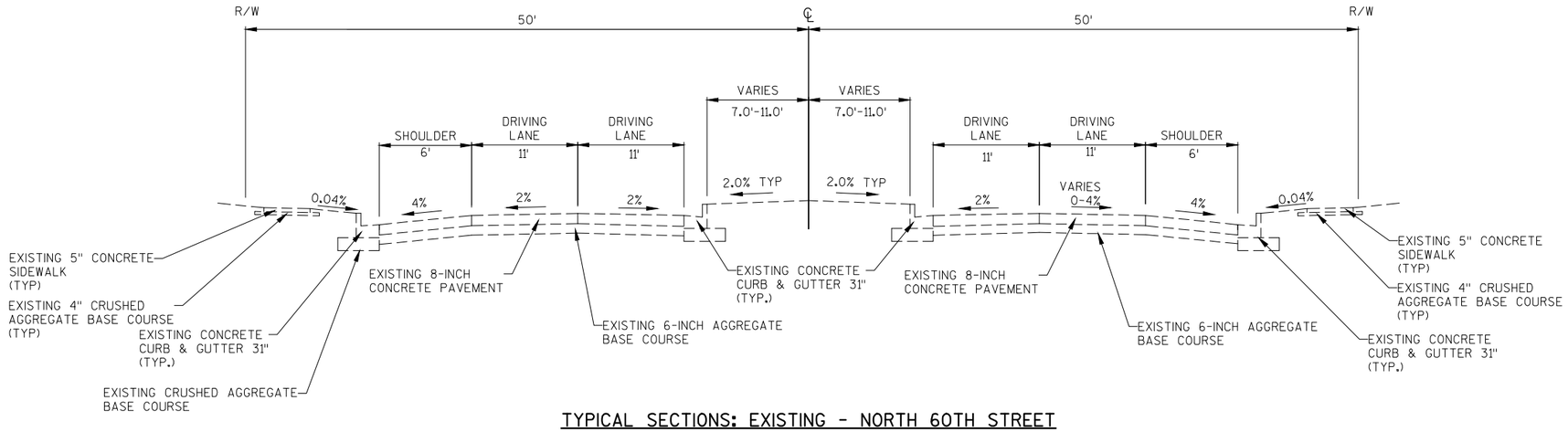
WEST DOUGLAS AVENUE

WEST BENDER COURT

UNION PACIFIC RAILROAD

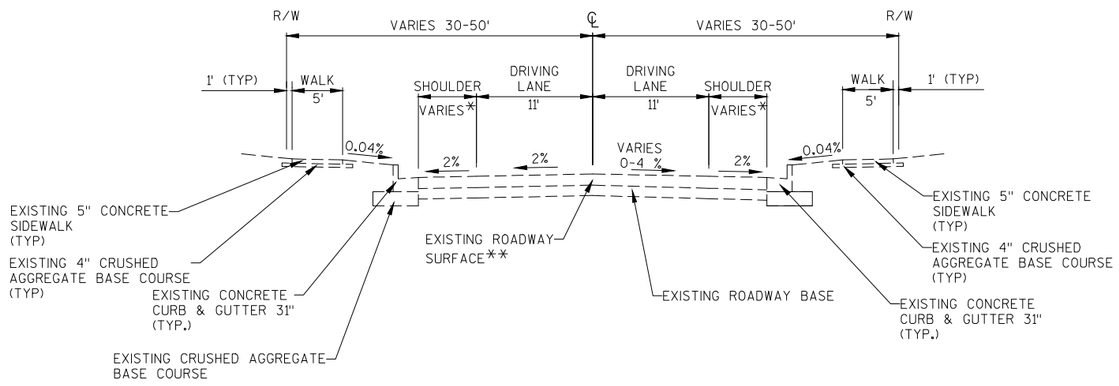
WEST MILL ROAD

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SHEET 3	E



TYPICAL SECTIONS: EXISTING - NORTH 60TH STREET

STA. 9+96.99 TO STA. 37+31.91 NORTHBOUND
STA. 109+76.96 TO STA. 137+34.19 SOUTHBOUND

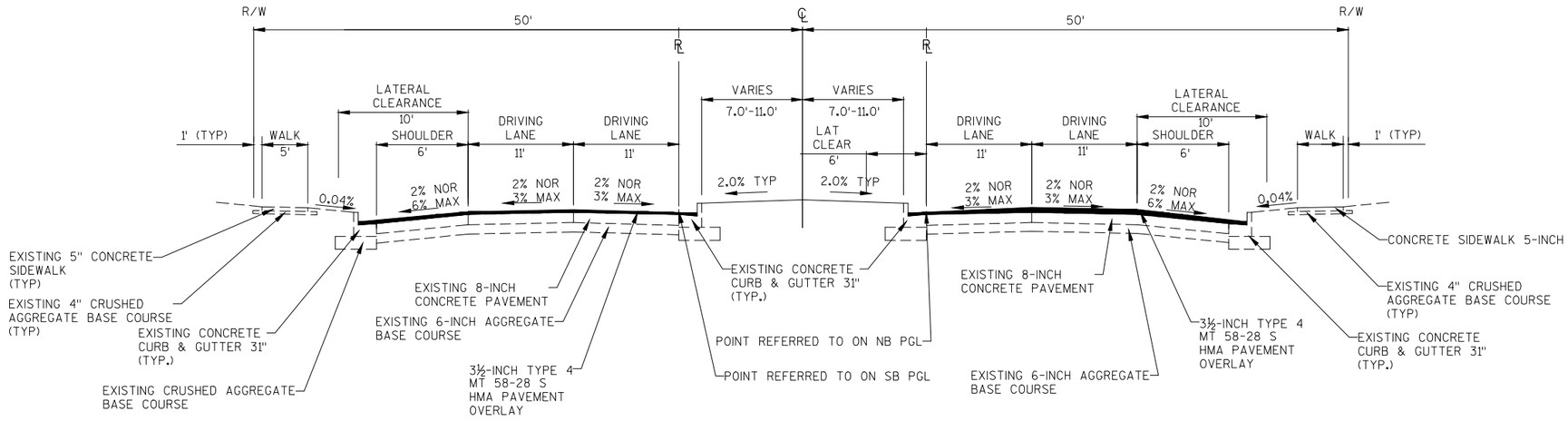


TYPICAL SECTIONS: EXISTING - SIDEROADS

*WEST FLORIST AVENUE
*WEST KAUL AVENUE
*WEST DOUGLAS AVENUE (EAST LEG)
*WEST DOUGLAS AVENUE (WEST LEG)
*WEST BENDER COURT

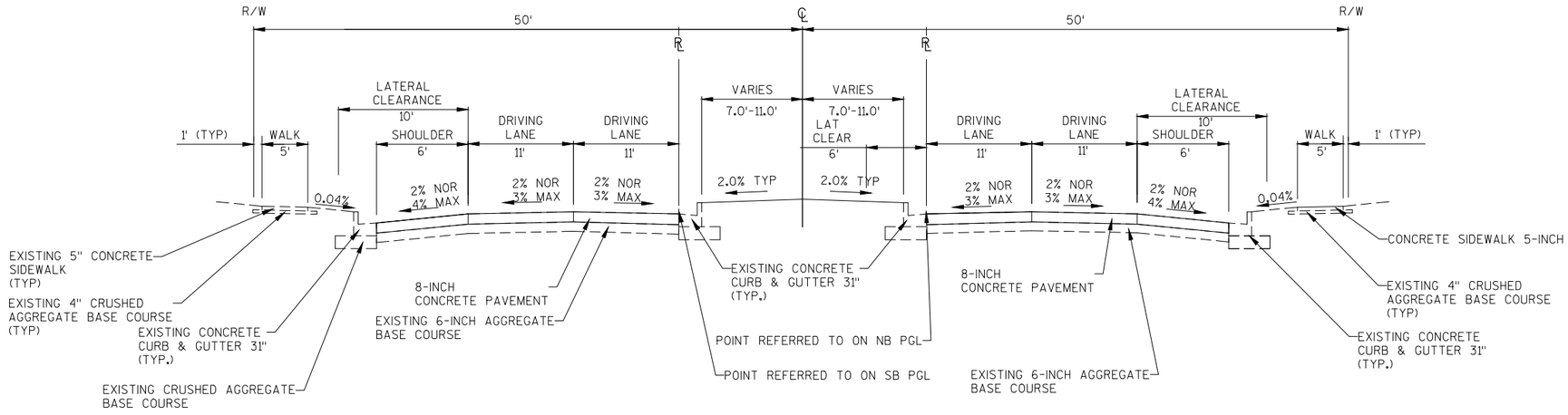
**WEST FLORIST AVENUE
INTERSECTION - VTAC OVER 8-INCHES RCP
EAST LEG - 9-INCH RCP
WEST LEG - VTAC OVER 8-INCHES RCP
WEST KAUL AVENUE
WEST OF INTERSECTION - 7-INCH CONCRETE PAVEMENT
WEST DOUGLAS AVENUE
EAST LEG - 8-INCH RCP
WEST LEG - 9-INCH RCP
WEST BENDER COURT
EAST OF INTERSECTION 8-INCH RCP

PROJECT NO:2595-00-71	HWY:NORTH 60TH STREET	COUNTY:MILWAUKEE	TYPICAL SECTIONS - EXISTING	SHEET 4	E



TYPICAL SECTIONS: PROPOSED - NORTH 60TH STREET

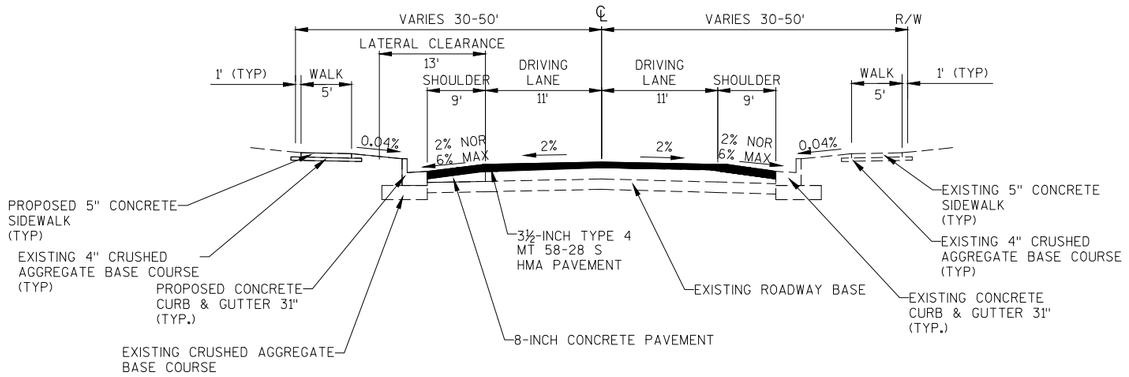
STA. 9+96.99 TO STA. 29+75 NORTHBOUND
STA. 109+76.96 TO STA. 129+77.06 SOUTHBOUND
STA. 31+00 TO STA. 37+31.91 NORTHBOUND
STA. 131+01.71 TO STA. 137+34.19 SOUTHBOUND



TYPICAL SECTIONS: PROPOSED - NORTH 60TH STREET

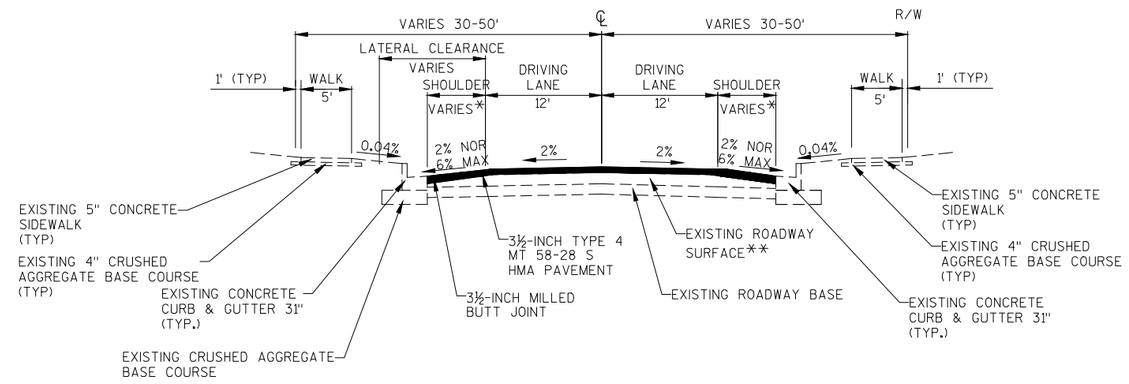
STA. 29+75 TO STA. 31+00 NORTHBOUND
STA. 129+77.06 TO STA. 131+01.71 SOUTHBOUND

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	TYPICAL SECTIONS - PROPOSED	SHEET 5	E



TYPICAL SECTIONS: PROPOSED - WEST LEG OF WEST DOUGLAS AVENUE

STATION 201+00 - STATION 202+51.91

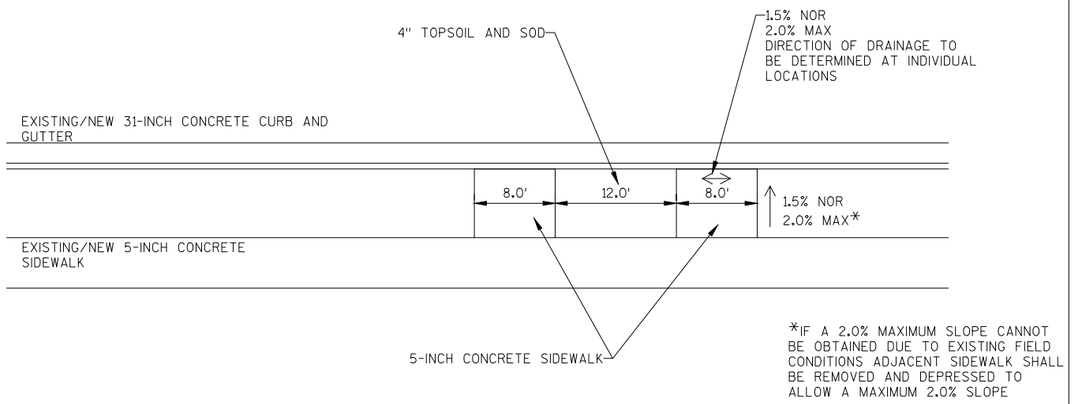


TYPICAL SECTIONS: PROPOSED - SIDEROADS

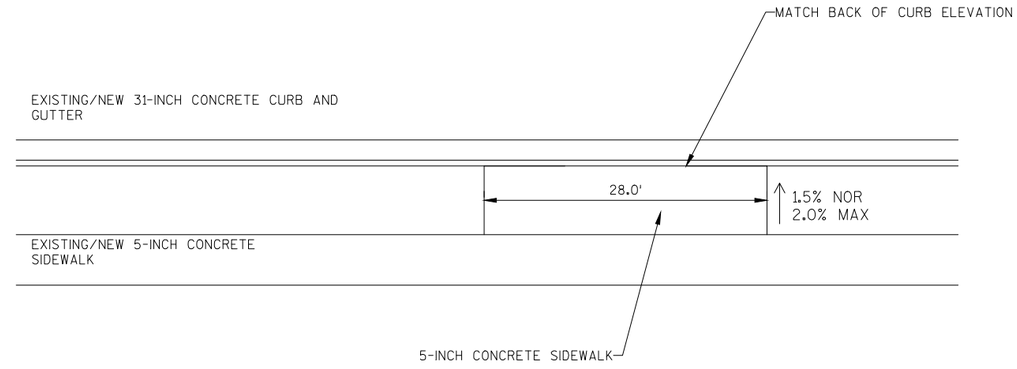
*WEST FLORIST AVENUE: SHOULDER 6'; LATERAL CLEARANCE 10'
*WEST KAUL AVENUE: SHOULDER 3'; LATERAL CLEARANCE 7'
*WEST DOUGLAS AVENUE (EAST LEG): SHOULDER 10.5'; LATERAL CLEARANCE 14.5'
*WEST DOUGLAS AVENUE (WEST LEG): SHOULDER 10.5'; LATERAL CLEARANCE 14.5'
*WEST BENDER COURT: SHOULDER 10'; LATERAL CLEARANCE 14'

**WEST FLORIST AVENUE
INTERSECTION - VTAC OVER 8-INCHES RCP
EAST LEG - 9-INCH RCP
WEST LEG - VTAC OVER 8-INCHES RCP
WEST KAUL AVENUE
WEST OF INTERSECTION - 7-INCH CONCRETE PAVEMENT
WEST DOUGLAS AVENUE
EAST LEG - 8-INCH RCP
WEST LEG - 9-INCH RCP
WEST BENDER COURT
EAST OF INTERSECTION 8-INCH RCP

PROJECT NO:2595-00-71	HWY:NORTH 60TH STREET	COUNTY:MILWAUKEE	TYPICAL SECTIONS - PROPOSED	SHEET 6	E

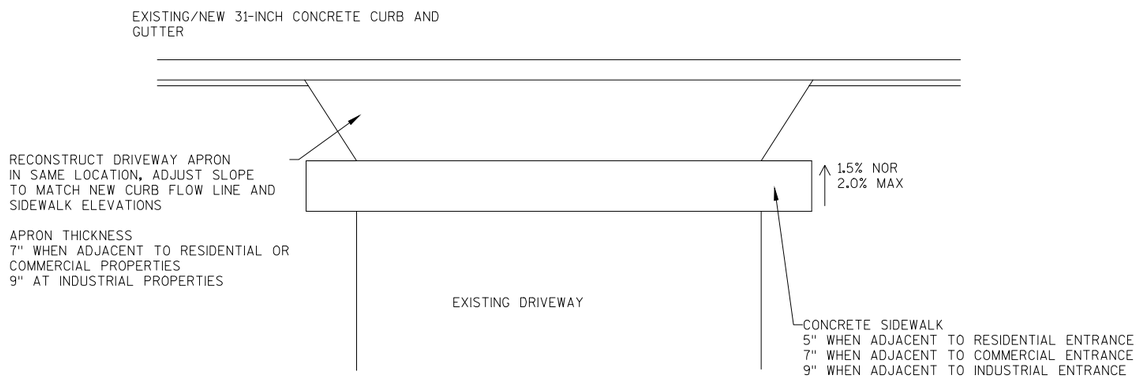


BUS STOP LOADING AND UNLOADING ZONE

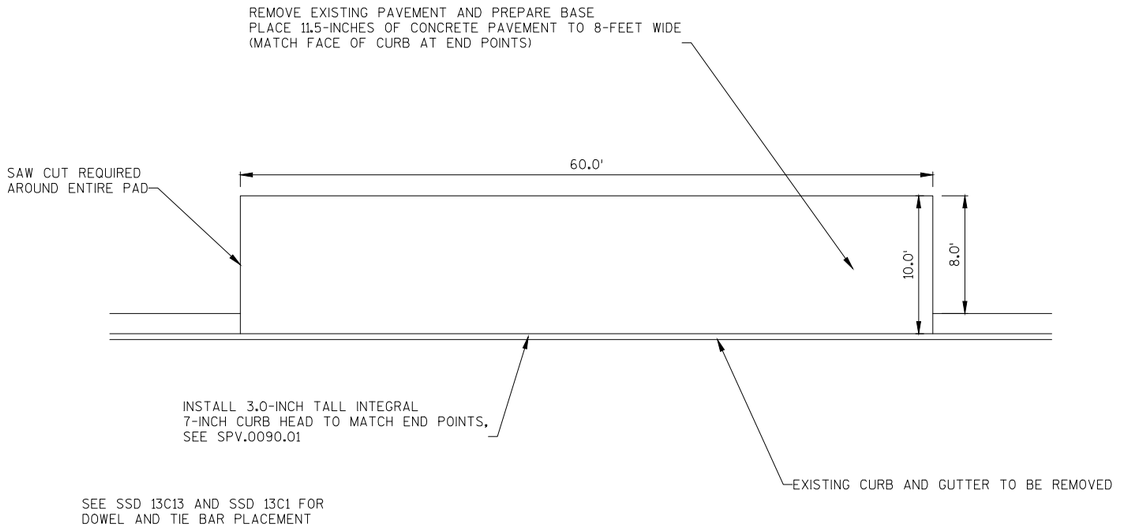


CONCRETE PAD FOR BUS SHELTER

NOTE:
BUS STOP TO BE REMOVED, STORED
AND INSTALLED BY OTHERS

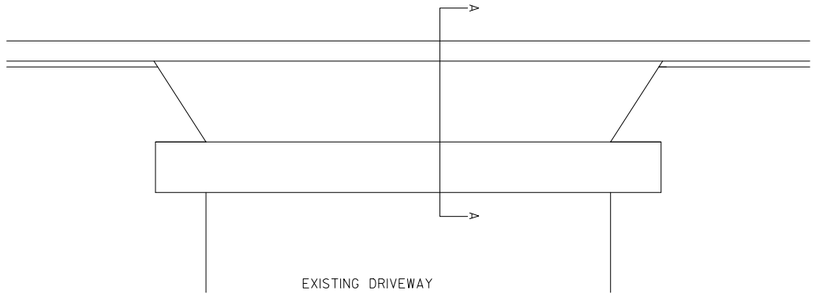


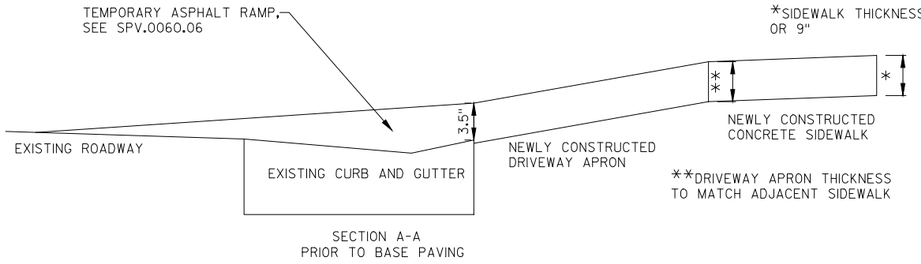
DRIVEWAY APRON AND CONCRETE SIDEWALK



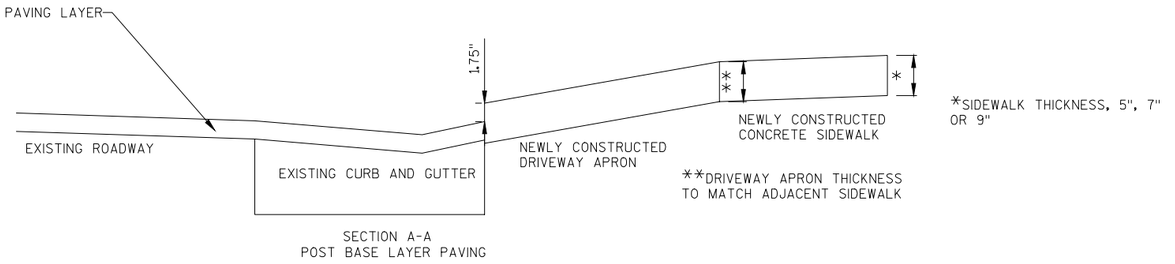
CONCRETE BUS STOPPING ZONE PAD

PROJECT NO:2595-00-71	HWY:NORTH 60TH STREET	COUNTY:MILWAUKEE	CONSTRUCTION DETAILS	SHEET 7	E

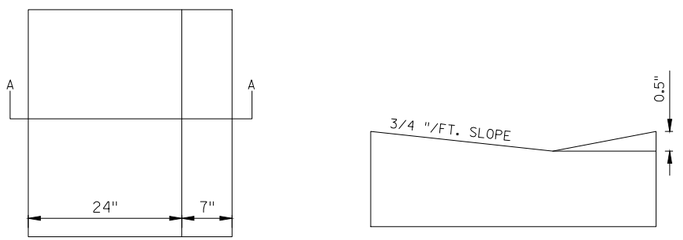




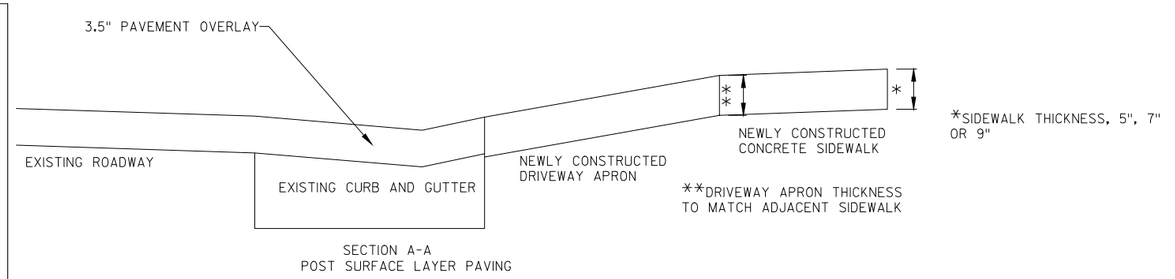
SECTION A-A
PRIOR TO BASE PAVING



SECTION A-A
POST BASE LAYER PAVING



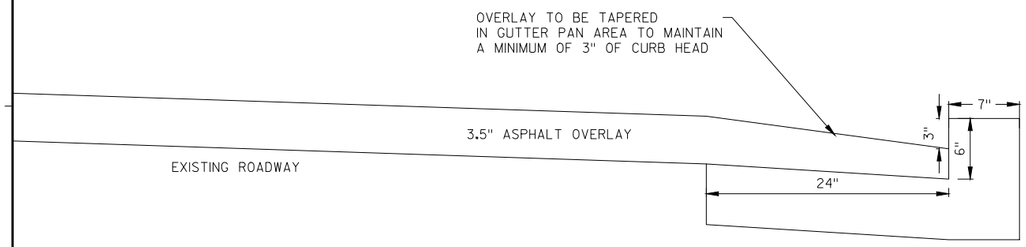
CONCRETE GUTTER TYPE D MODIFIED



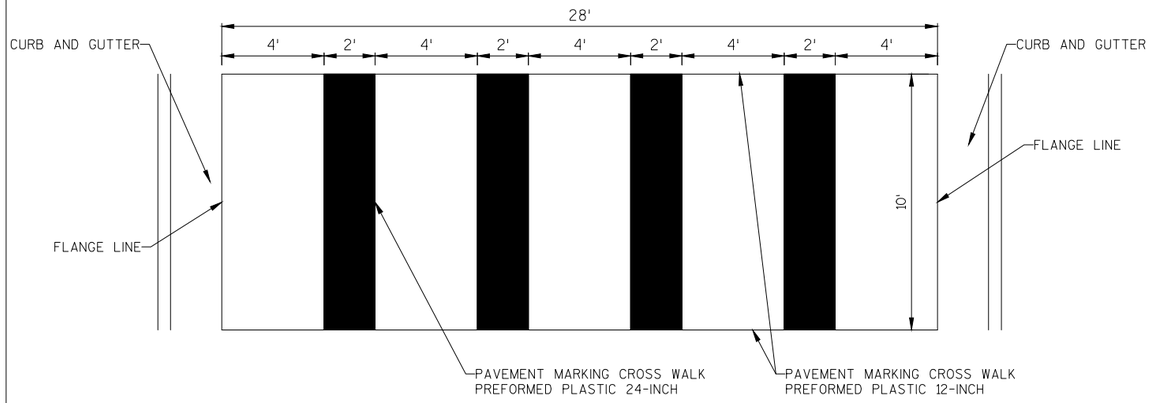
SECTION A-A
POST SURFACE LAYER PAVING

PAVING OPERATIONS AT DRIVEWAYS

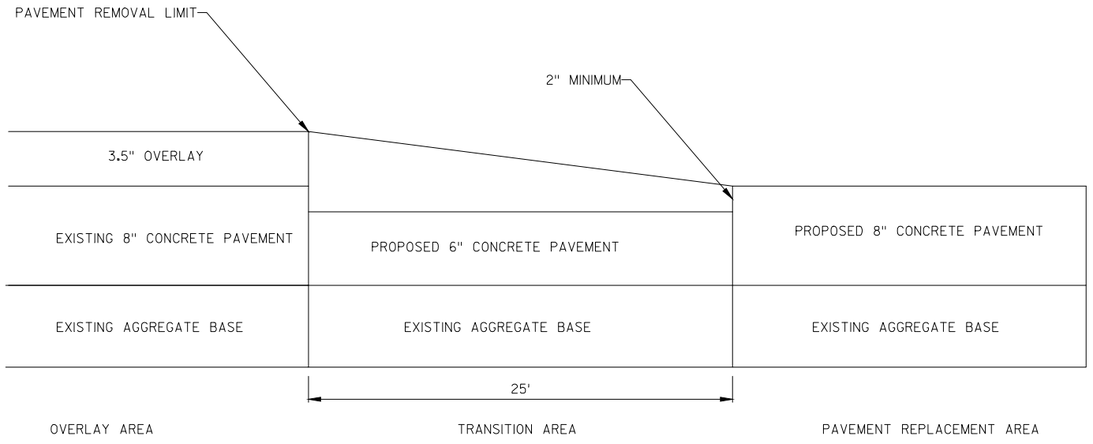
PROJECT NO:2595-00-71	HWY:NORTH 60TH STREET	COUNTY:MILWAUKEE	CONSTRUCTION DETAILS	SHEET 8	E



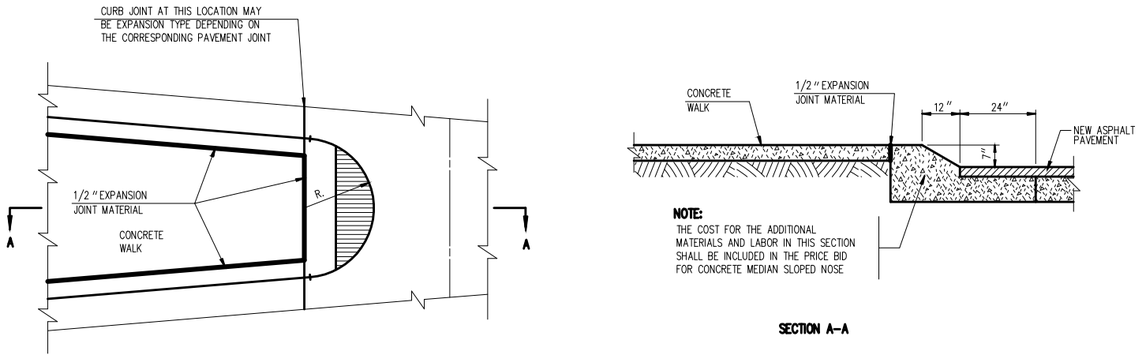
CURB AND GUTTER OVERLAY DETAIL



PAVEMENT MARKING CROSS WALK LADDER DETAIL



ASPHALT OVERLAY TO PAVEMENT REPLACEMENT DETAIL



SNOWPLOWABLE MEDIAN ISLAND NOSE

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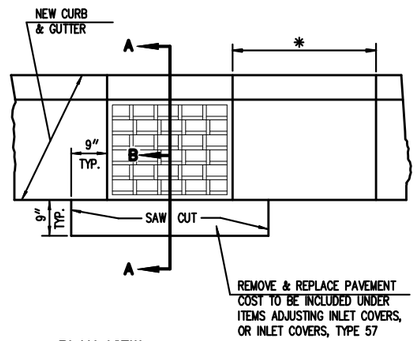
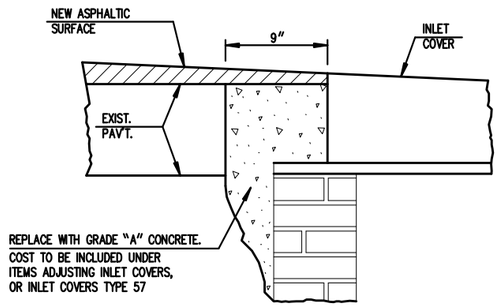
* REMOVE 3'–0" CURB & GUTTER MIN. OR TO THE NEAREST JOINT, 6'–0 MAX. UNLESS OTHERWISE DIRECTED ON THE PLAN.

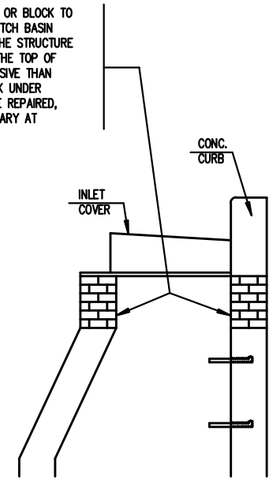


PLAN VIEW



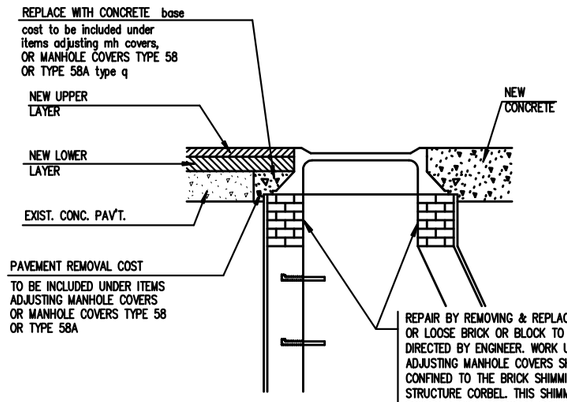
SECTION A–B

REPAIR BY REMOVING & REPLACING DAMAGED OR LOOSE BRICK OR BLOCK TO DEPTH AS DIRECTED BY ENGINEER. WORK UNDER ADJUSTING CATCH BASIN COVERS SHALL BE CONFINED TO THE BRICK SHIMMING ABOVE THE STRUCTURE CORBEL. THIS SHIMMING SHALL NOT EXCEED 1 FOOT BETWEEN THE TOP OF THE CORBEL AND THE FRAME BOTTOM. ANY WORK MORE EXTENSIVE THAN DESCRIBED IMMEDIATELY ABOVE SHALL BE CONSTRUED AS WORK UNDER RECONSTRUCTING CATCH BASINS. DEPTHS OF BRICKWORK TO BE REPAIRED, AS INDICATED ON THE PLAN, ARE ESTIMATES ONLY AND MAY VARY AT TIME OF CONSTRUCTION.

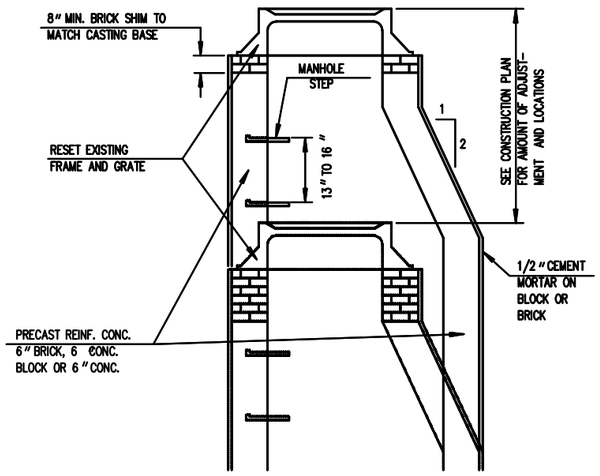


SECTION A–A

ADJUSTING INLET COVERS



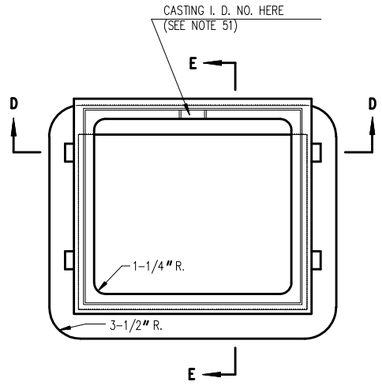
ADJUSTING MANHOLE COVERS OR MANHOLE COVERS TYPE 58A

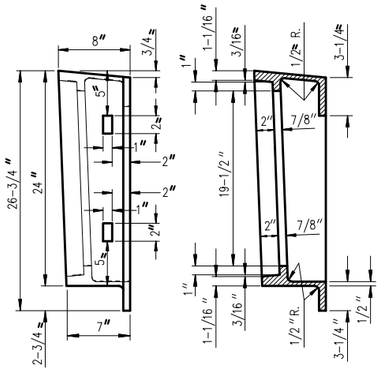


RECONSTRUCTING MANHOLES AND INLETS

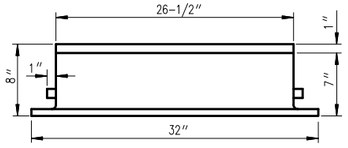
CONSTRUCTION NOTES

1. LOCATIONS OF STRUCTURES IN CURB & GUTTER SECTIONS REFER TO FACE OF CURB.
2. LOCATIONS OF STRUCTURES NOT IN CURB AND GUTTER SECTIONS REFER TO CENTERLINE OF STRUCTURE.
3. PIPE LENGTHS GIVEN ARE APPROXIMATE OUT TO OUT OF STRUCTURE.
4. GRATE & RIM ELEVATIONS ARE GIVEN AT FLOW LINE OF INLET COVER OR AT CENTER-LINE OF MANHOLE COVER.
5. WHEN NEW COVERS ARE PLACED, THE FIRST 12 OF" ADJUSTMENT OR REPAIRING SHALL BE INCLUDED IN THE COST OF THE NEW COVER. ANY ADJUSTMENT OR REPAIR OF BRICKWORK 12 "OR LESS WILL BE PAID AS ADJUSTING COVERS WHEN RESETTING EXISTING COVERS, ANY ADJUSTMENT OR REPAIR OF BRICKWORK MORE THAN 12 " WILL BE PAID AS A RECONSTRUCT.
6. MANHOLE ADJUSTMENTS IN ASPHALTIC PAVEMENT WILL BE MADE AFTER THE LOWER LAYER IS PLACED.
7. WHEN CONSTRUCTING CONCRETE CURB ADJACENT TO INLET COVER TYPE 57, TWO (2) DEFORMED TIE BARS SHALL BE PLACED LONGITUDINALLY THROUGH THE CURB SECTION AND EXTENDED ONE (1) FOOT BEYOND EACH SIDE OF THE FRAME. A DUMMY JOINT SHALL BE CUT IN THE CURB AT EACH SIDE OF THE FRAME.

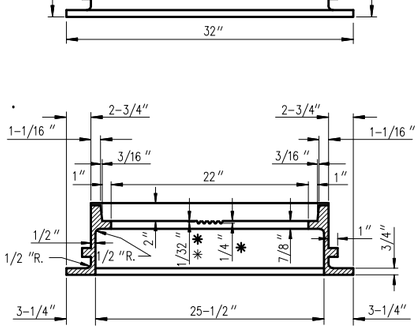




SECTION E-E



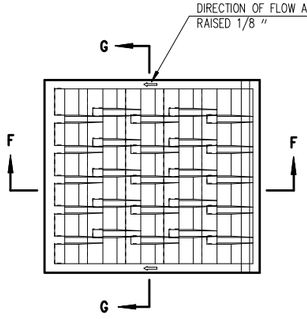
FRAME



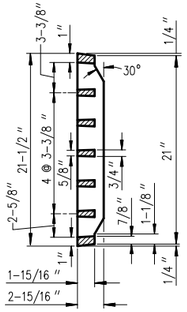
SECTION D-D

* DEPRESSION FOR LETTERS

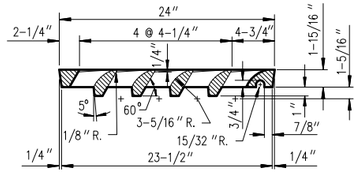
** CLEARANCE FROM TOP OF LETTERS TO FACE OF SEAT



GRATE



SECTION G-G



SECTION F-F

GENERAL NOTES

ALL EDGES ARE TO BE GROUND

ALL CASTINGS SHALL BEAR THE FOLLOWING IDENTIFICATION MARKS IN THE FORM OF LEGIBLE LETTERS OR NUMERALS RAISED 1/8 "

ON THE FRAME

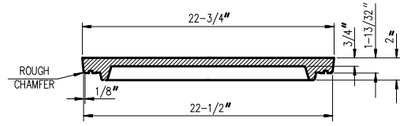
1. ON THE UPPER FACE OF THE FLANGE IN 1 INCH HIGH LETTERS THE INITIALS OR MONOGRAM OF THE FOUNDRY, THE YEAR MADE AND THE SERIAL NUMBER OF THE INDIVIDUAL CASTING.
2. ON THE SEAT OF THE FRAME IN 1 INCH HIGH LETTERS, THE CASTING IDENTIFICATION NUMBER (51).

ON THE GRATE

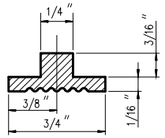
1. ON THE UPPER SIDE OF THE GRATE IN 1 INCH HIGH LETTERS, THE INITIALS OR MONOGRAM OF THE FOUNDRY, THE YEAR MADE, THE CASTING IDENTIFICATION NUMBER (57) AND THE SERIAL NUMBER OF THE INDIVIDUAL CASTING.

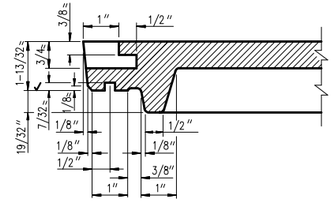
INLET COVER - TYPE MS 57

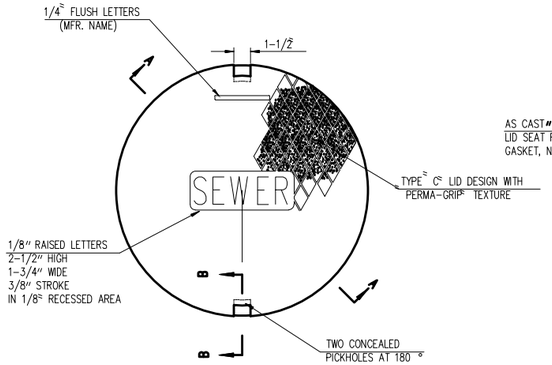
LID-145 LBS., FRAME-204 LBS.



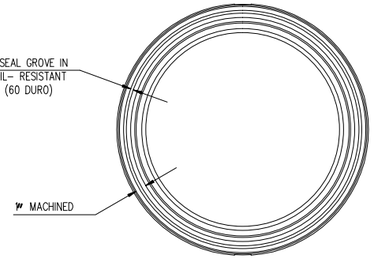
SECTION A-A







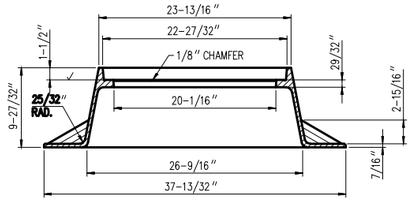
TOP VIEW



BOTTOM VIEW

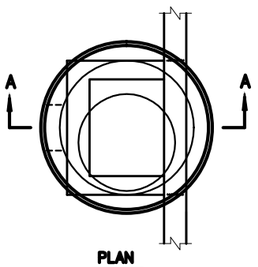
CONSTRUCTION NOTES

1. LOCATIONS OF STRUCTURES IN CURB & GUTTER SECTIONS REFER TO FACE OF CURB.
2. LOCATIONS OF STRUCTURES NOT IN CURB AND GUTTER SECTIONS REFER TO CENTERLINE OF STRUCTURE.
3. PIPE LENGTHS GIVEN ARE APPROXIMATE OUT TO OUT OF STRUCTURE.
4. GRATE & RIM ELEVATIONS ARE GIVEN AT FLOW LINE OF INLET COVER OR AT CENTER-LINE OF MANHOLE COVER.
5. WHEN NEW COVERS ARE PLACED, THE FIRST 12 OF ADJUSTMENT OR REPAIRING SHALL BE INCLUDED IN THE COST OF THE NEW COVER. ANY ADJUSTMENT OR REPAIR OF BRICKWORK 12 OR LESS WILL BE PAID AS ADJUSTING COVERS WHEN RESETTING EXISTING COVERS, ANY ADJUSTMENT OR REPAIR OF BRICKWORK MORE THAN 12 " WILL BE PAID AS A RECONSTRUCT.
6. MANHOLE ADJUSTMENTS IN ASPHALTIC PAVEMENT WILL BE MADE AFTER THE LOWER LAYER IS PLACED.
7. WHEN CONSTRUCTING CONCRETE CURB ADJACENT TO INLET COVER TYPE 57, TWO (2) DEFORMED TIE BARS SHALL BE PLACED LONGITUDINALLY THROUGH THE CURB SECTION AND EXTENDED ONE (1) FOOT BEYOND EACH SIDE OF THE FRAME. A DUMMY JOINT SHALL BE CUT IN THE CURB AT EACH SIDE OF THE FRAME.

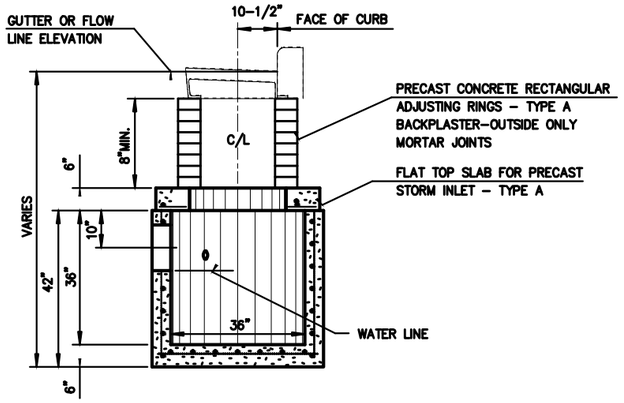


MANHOLE FRAME - TYPE MS21

FRAME - 182 LBS.



PLAN

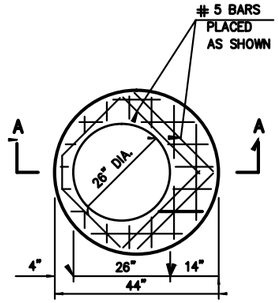


SECTION A–A

STORM INLET – TYPE 45A

GENERAL NOTES

1. PRECAST INLET UNITS AND BASES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199 AND ASTM DESIGNATION C–478 AND THESE DETAILED REQUIREMENTS WHICH SHALL GOVERN WHERE THEY ALTER THE AASHTO AND ASTM STANDARDS.
2. ALL REINFORCEMENT STEEL SHALL BE GRADE 60 OR GREATER AND EMBEDDED AT LEAST 1" CLEAR.
3. PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 4 IN DEPTH WHICH MEETS REQUIREMENTS FOR GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.



PLAN

SECTION A–A

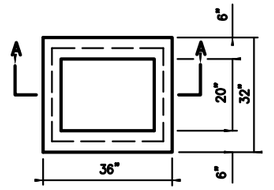
TOP SLAB – TYPE A

FLAT TOP SLAB SHALL BE 6" THICK REINFORCED WITH ONE LAYER OF STEEL WITH A MINIMUM AREA OF 0.32 SQ. IN. PER LINEAL FOOT IN BOTH DIRECTIONS, PLACED NEAR THE BOTTOM OF THE SLAB WITH 1" CLEAR COVER.

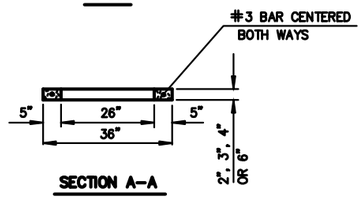
ADDITIONALLY, NO. 5 BARS SHALL BE PLACED AROUND TOP SLAB OPENING AS SHOWN.

REINFORCEMENT SHALL BE TIED OR WELDED TOGETHER.

THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE SHALL BE 4000 P.S.I.



PLAN

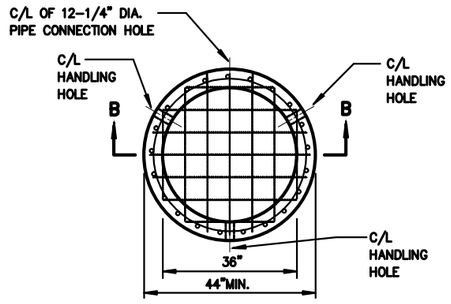


SECTION A–A

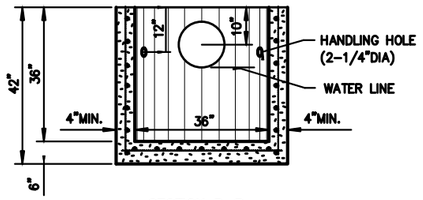
RECTANGULAR ADJUSTING RING – TYPE A

THE ADJUSTING RINGS SHALL BE 2", 3", 4" OR 6" IN HEIGHT.

THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE SHALL BE 3300 P.S.I.



RISER SECTION WITH INTEGRAL BASE PLAN



SECTION B–B

CIRCUMFERENTIAL AND LONGITUDINAL REINFORCEMENT IN THE RISER SECTON SHALL EACH CONSIST OF ONE LAYER OF STEEL NOT LESS THAN 0.12 SQ. IN. PER FOOT AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.

THE BASE SLAB SHALL BE REINFORCED WITH ONE LAYER OF STEEL WITH A MINIMUM AREA OF 0.32 SQ. IN. PER FOOT IN BOTH DIRECTIONS, PLACED ABOVE THE MIDPOINT OF THE SLAB.

RISER SECTION AND BASE SLAB REINFORCEMENT SHALL BE TIED OR WELDED TOGETHER.

TWO TO THREE HANDLING HOLES 2–1/4" IN DIAMETER AND A PIPE CONNECTION HOLE 12–1/4" IN DIAMETER SHALL BE CAST OR CORED IN THE RISER SECTION AT THE LOCATIONS SHOWN. LIFTING DEVICES MAY BE SUBSTITUTED FOR HANDLING HOLES.

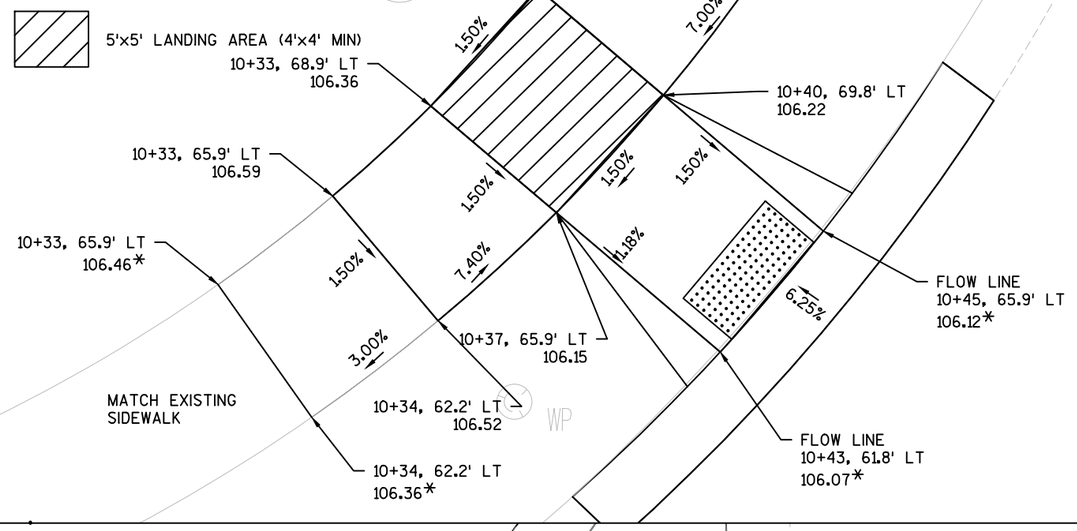
NO JOINTS OR HOLES SHALL BE BELOW THE WATERLINE.

THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE SHALL BE 4000 P.S.I.

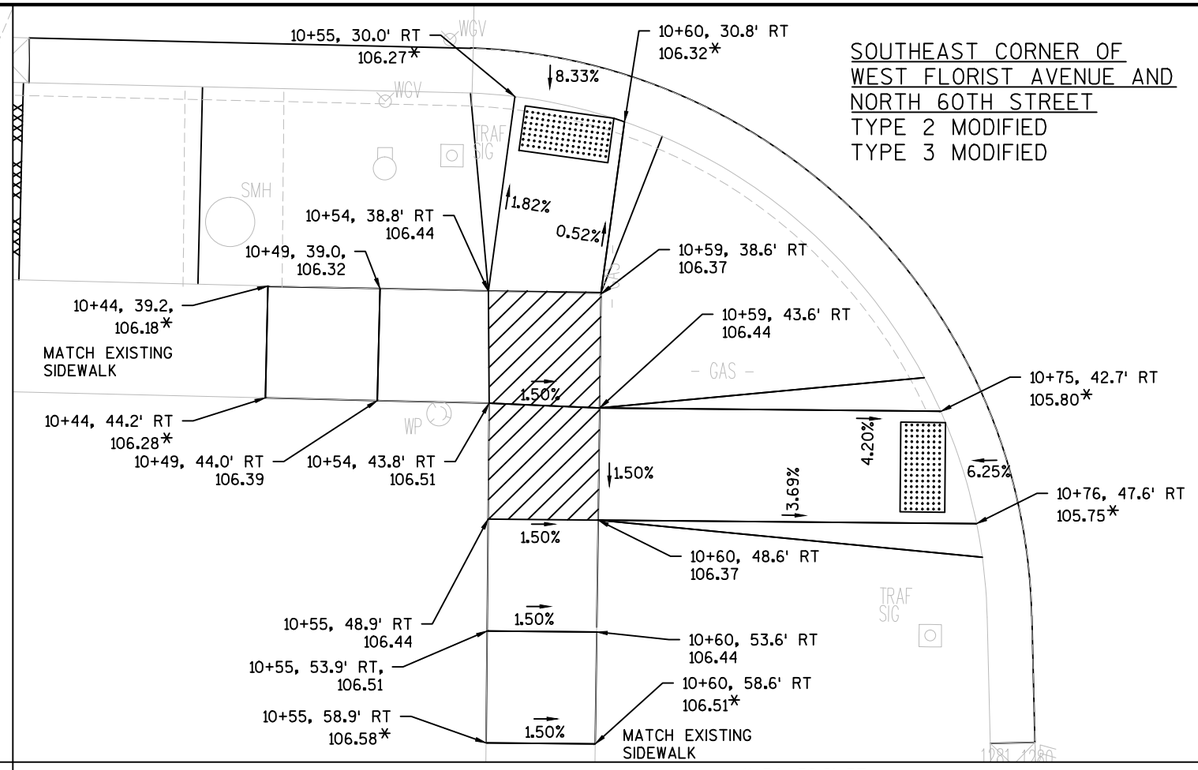
RISER SECTION MAY TAPER TO A 33" INTERNAL DIAMETER AT IT'S BOTTOM PROVIDED A 44" MINIMUM OUTSIDE DIAMETER IS MAINTAINED.

SOUTHWEST CORNER OF WEST FLORIST AVENUE AND NORTH 60TH STREET
TYPE 7B MODIFIED

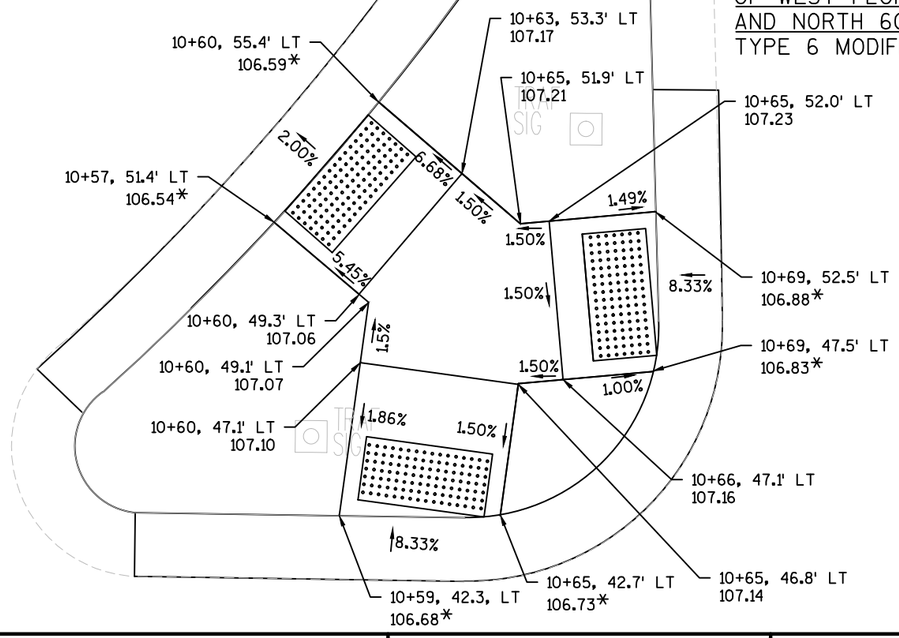
NOTES:
ALL ELEVATIONS IN CURB AND GUTTER AREA REFERENCE FLOW LINE
SEE CONSTRUCTION DETAILS FOR CURB AND GUTTER OVERLAY DETAILS
*ELEVATIONS TO BE FIELD VERIFIED

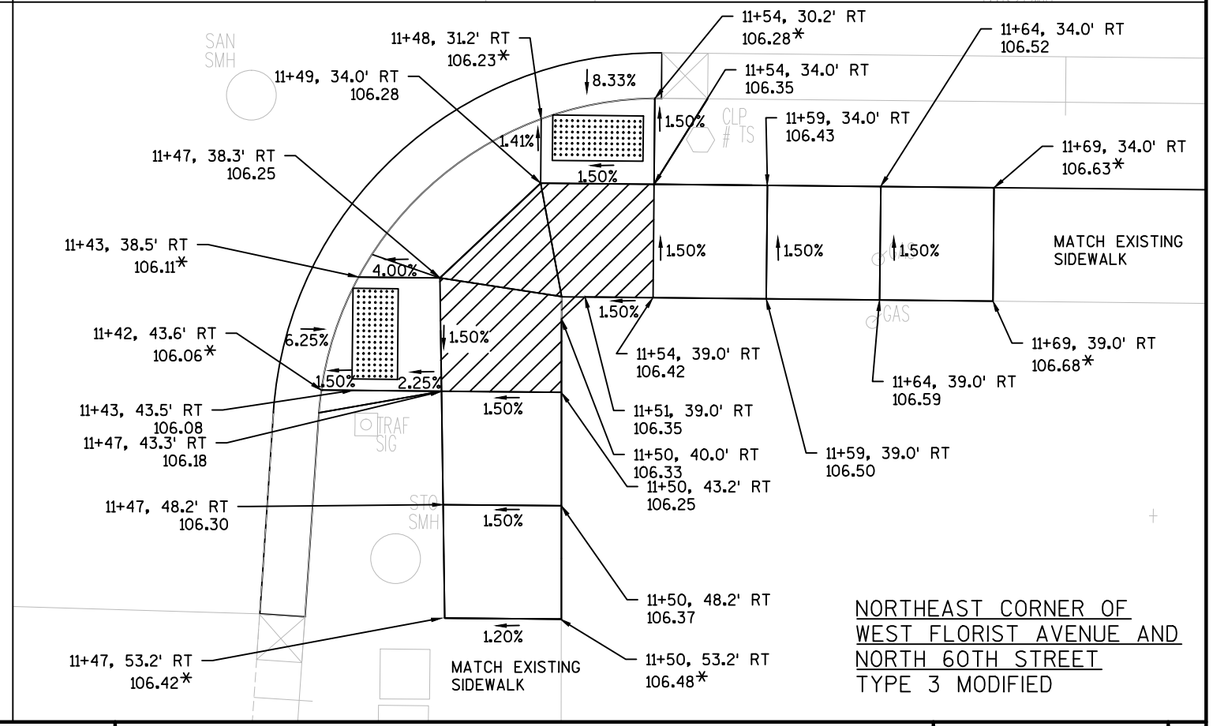


SOUTHEAST CORNER OF WEST FLORIST AVENUE AND NORTH 60TH STREET
TYPE 2 MODIFIED
TYPE 3 MODIFIED



MEDIAN AT INTERSECTION OF WEST FLORIST AVENUE AND NORTH 60TH STREET
TYPE 6 MODIFIED





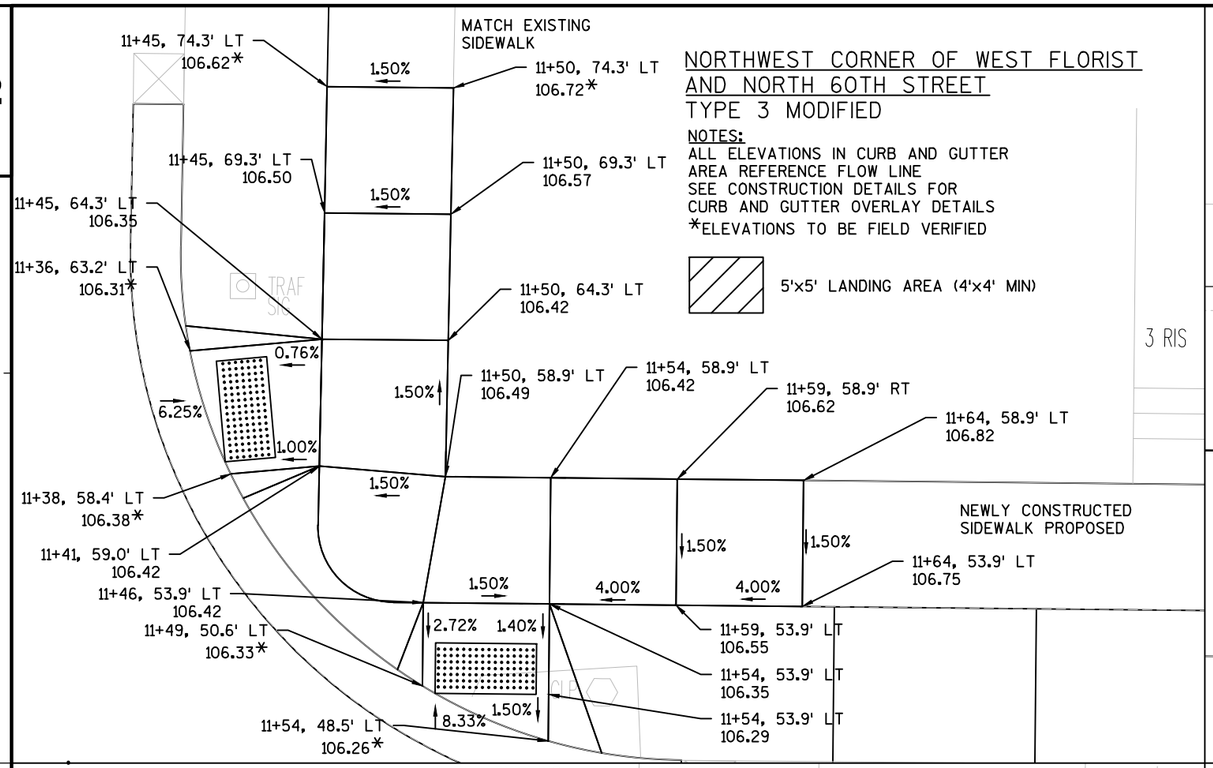
NORTHEAST CORNER OF WEST FLORIST AVENUE AND NORTH 60TH STREET
TYPE 3 MODIFIED

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PEDESTRIAN CURB RAMP DETAILS	SHEET 13	E

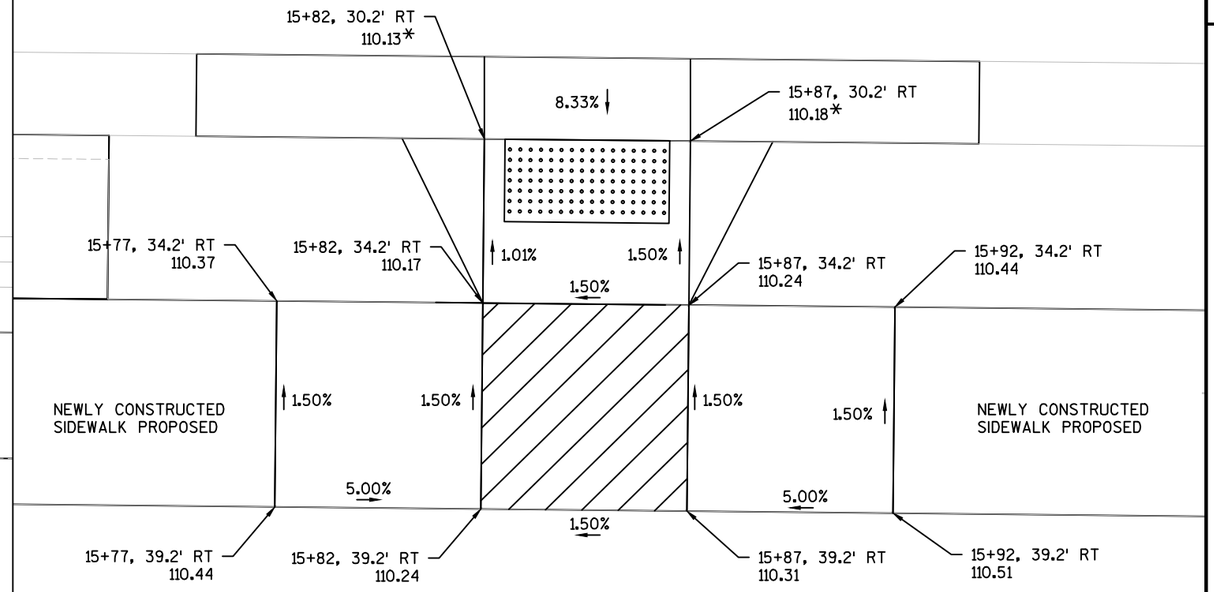
NORTHWEST CORNER OF WEST FLORIST AND NORTH 60TH STREET
TYPE 3 MODIFIED

NOTES:
ALL ELEVATIONS IN CURB AND GUTTER AREA REFERENCE FLOW LINE
SEE CONSTRUCTION DETAILS FOR CURB AND GUTTER OVERLAY DETAILS
*ELEVATIONS TO BE FIELD VERIFIED

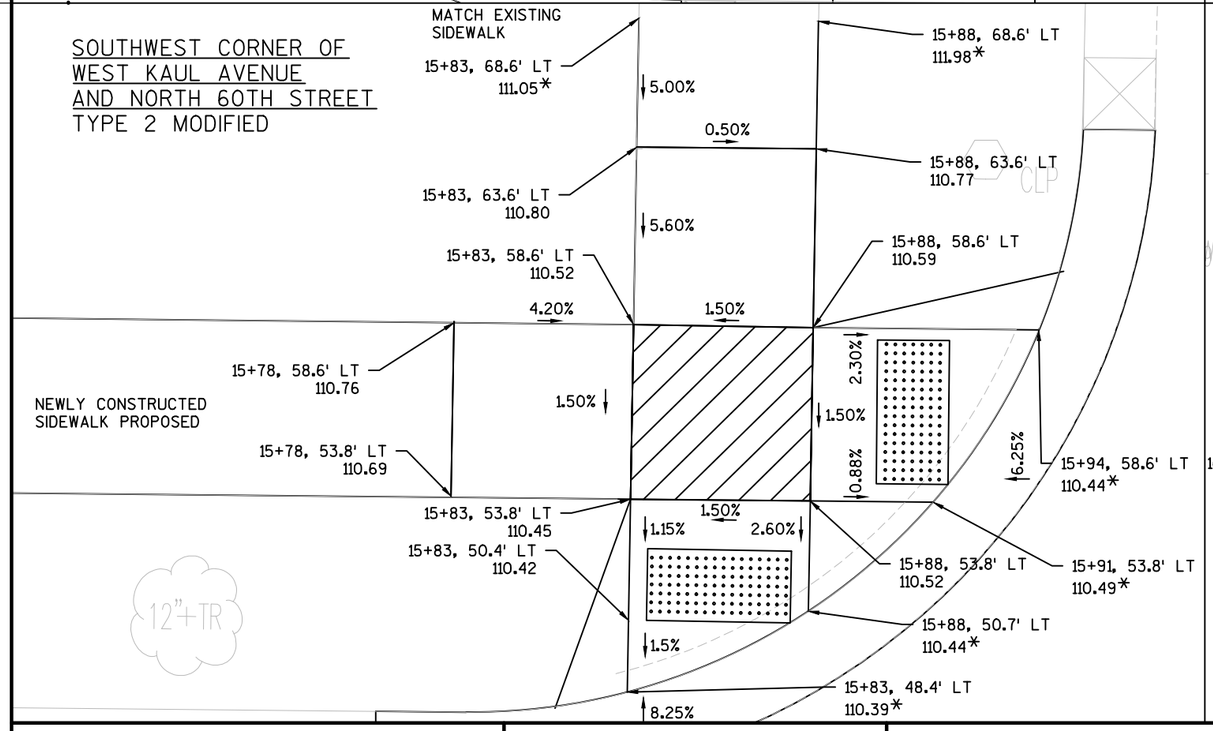
5'x5' LANDING AREA (4'x4' MIN)



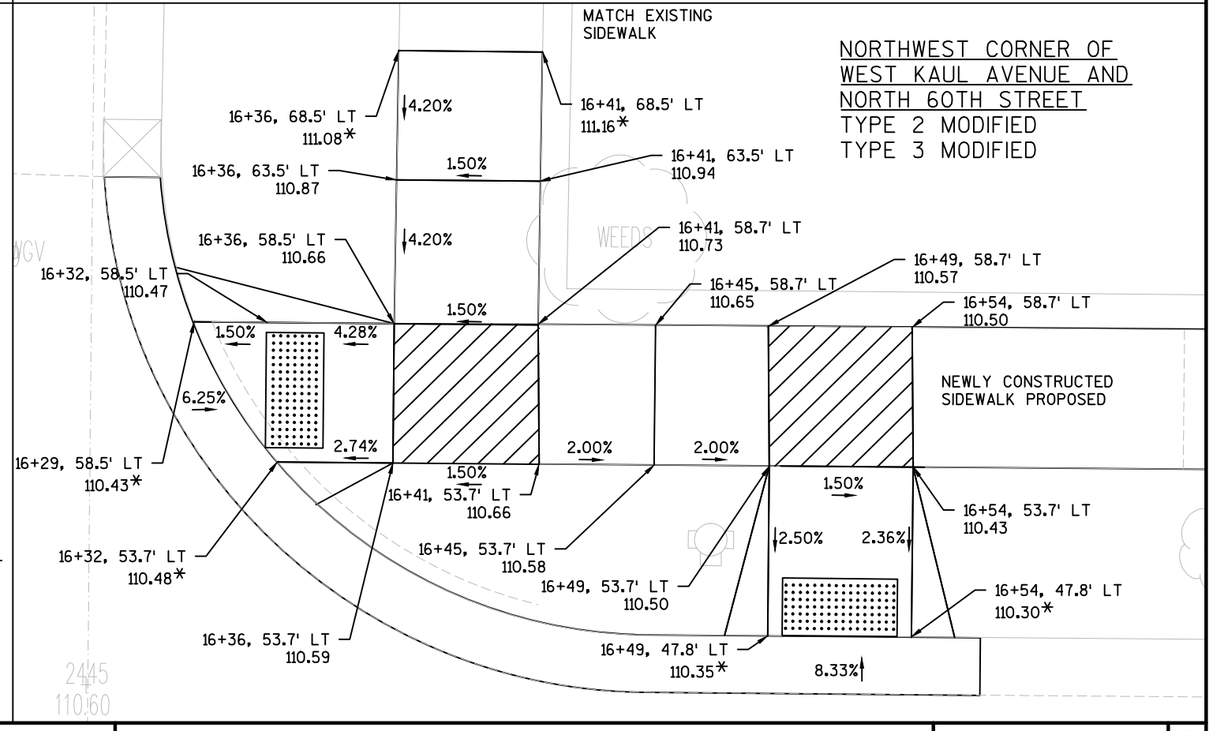
MID-BLOCK CROSSING SOUTH SIDE OF WEST KAUL AVENUE
TYPE 7B MODIFIED



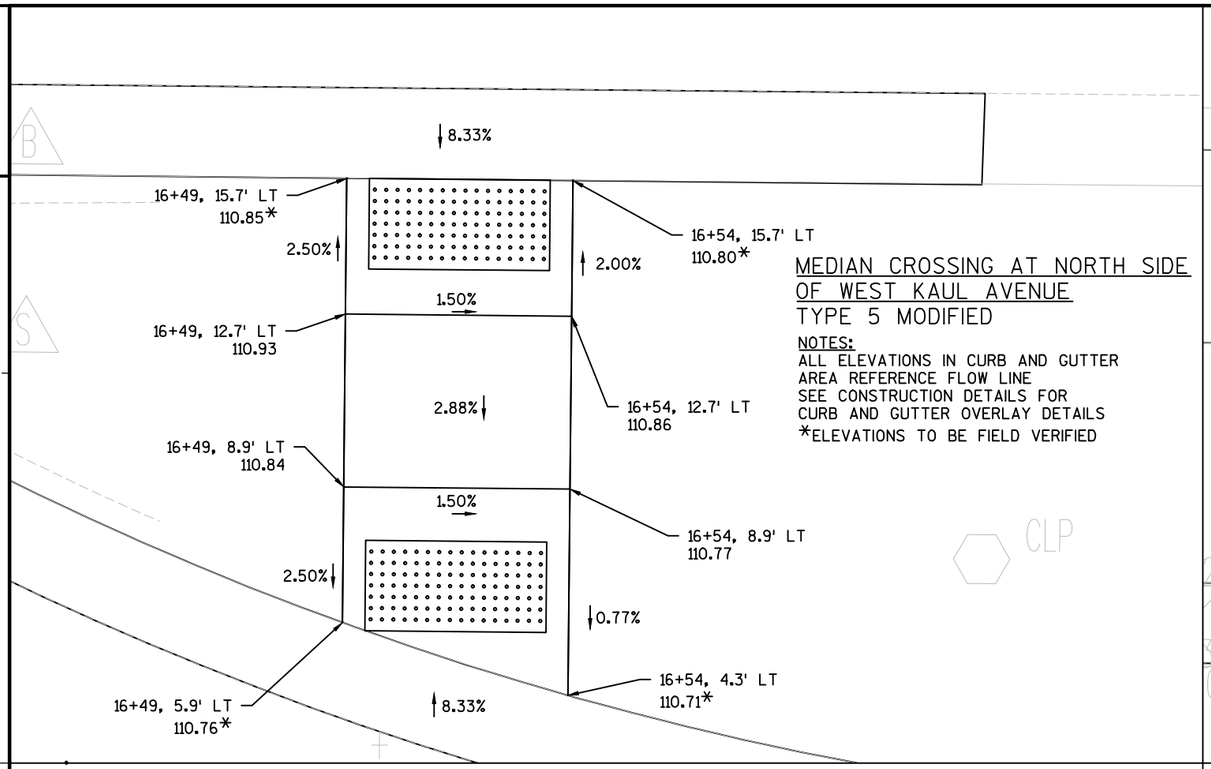
SOUTHWEST CORNER OF WEST KAUL AVENUE AND NORTH 60TH STREET
TYPE 2 MODIFIED



NORTHWEST CORNER OF WEST KAUL AVENUE AND NORTH 60TH STREET
TYPE 2 MODIFIED
TYPE 3 MODIFIED



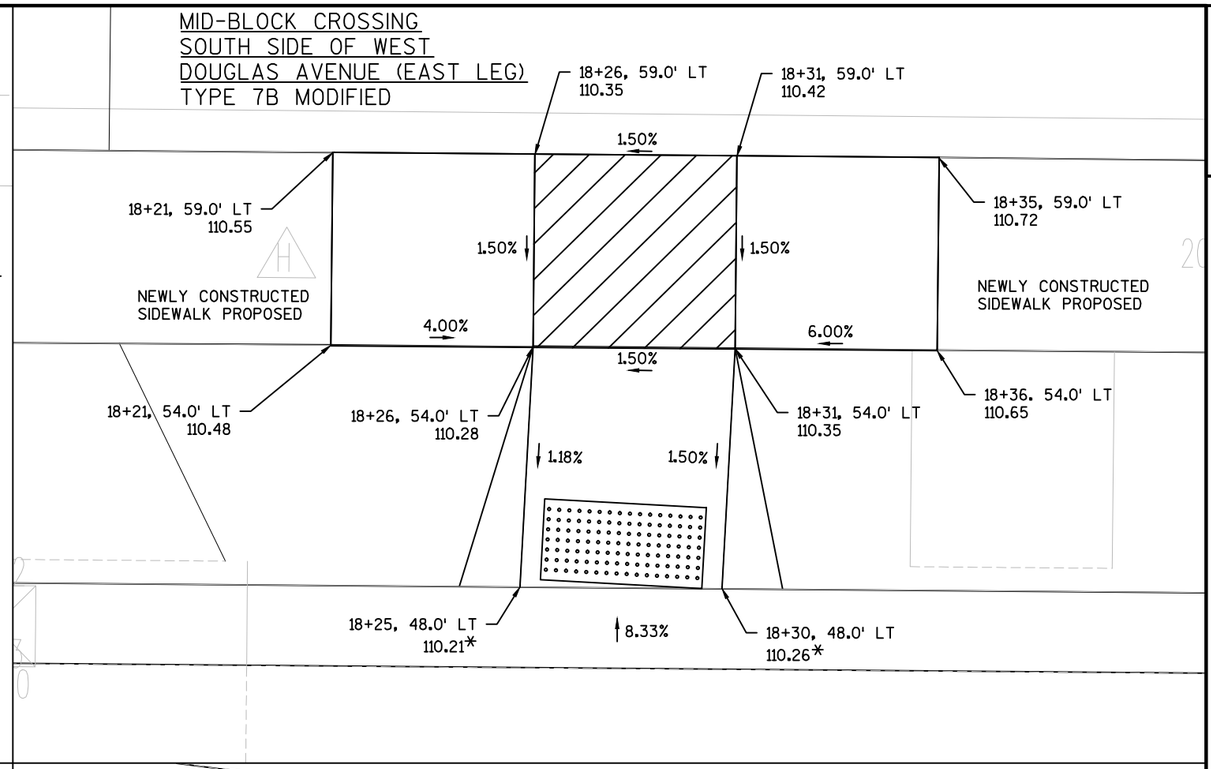
PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PEDESTRIAN CURB RAMP DETAILS	SHEET 14	E



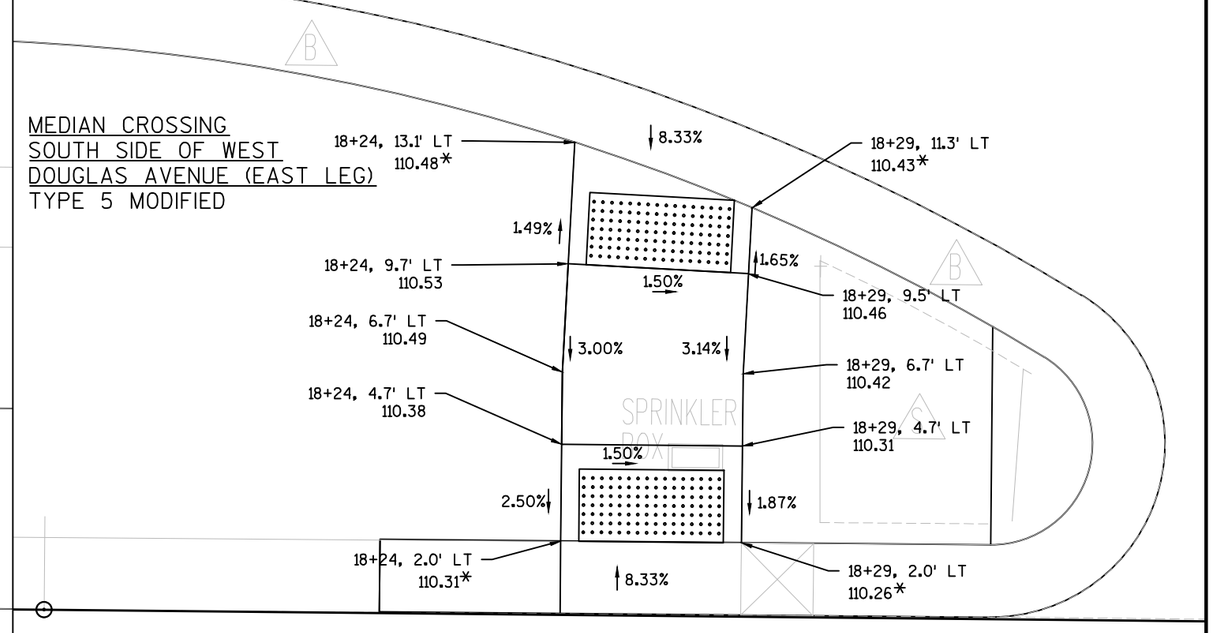
MEDIAN CROSSING AT NORTH SIDE OF WEST KAUL AVENUE
TYPE 5 MODIFIED

NOTES:
ALL ELEVATIONS IN CURB AND GUTTER AREA REFERENCE FLOW LINE
SEE CONSTRUCTION DETAILS FOR CURB AND GUTTER OVERLAY DETAILS
*ELEVATIONS TO BE FIELD VERIFIED

MID-BLOCK CROSSING
NORTH SIDE OF WEST
KAUL AVENUE
TYPE 7B MODIFIED

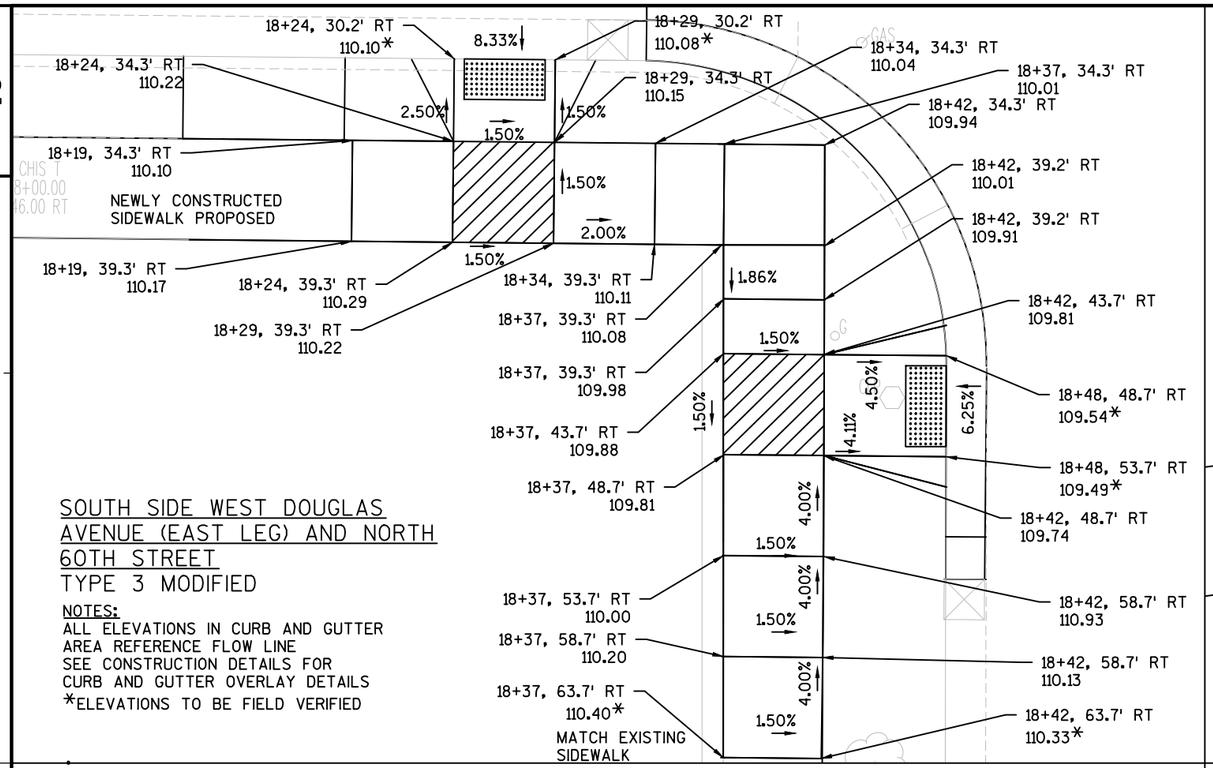


MID-BLOCK CROSSING
SOUTH SIDE OF WEST
DOUGLAS AVENUE (EAST LEG)
TYPE 7B MODIFIED



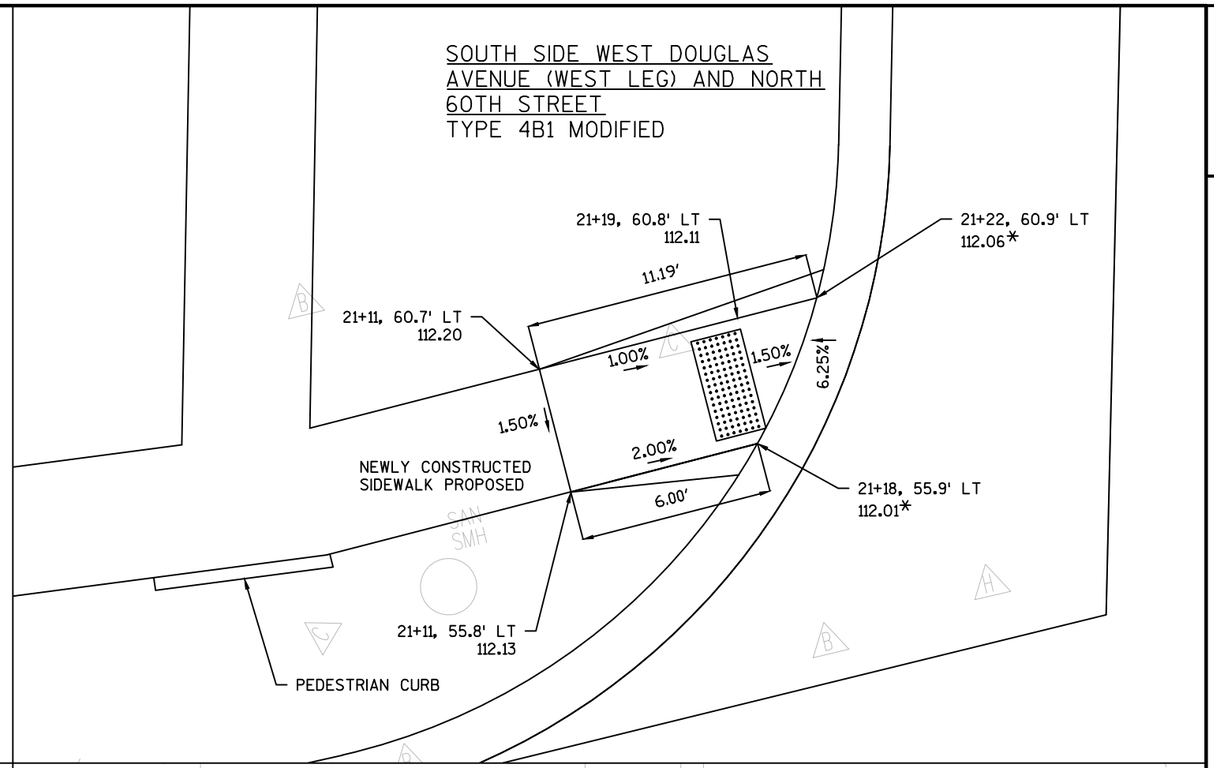
MEDIAN CROSSING
SOUTH SIDE OF WEST
DOUGLAS AVENUE (EAST LEG)
TYPE 5 MODIFIED

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PEDESTRIAN CURB RAMP DETAILS	SHEET 15	E

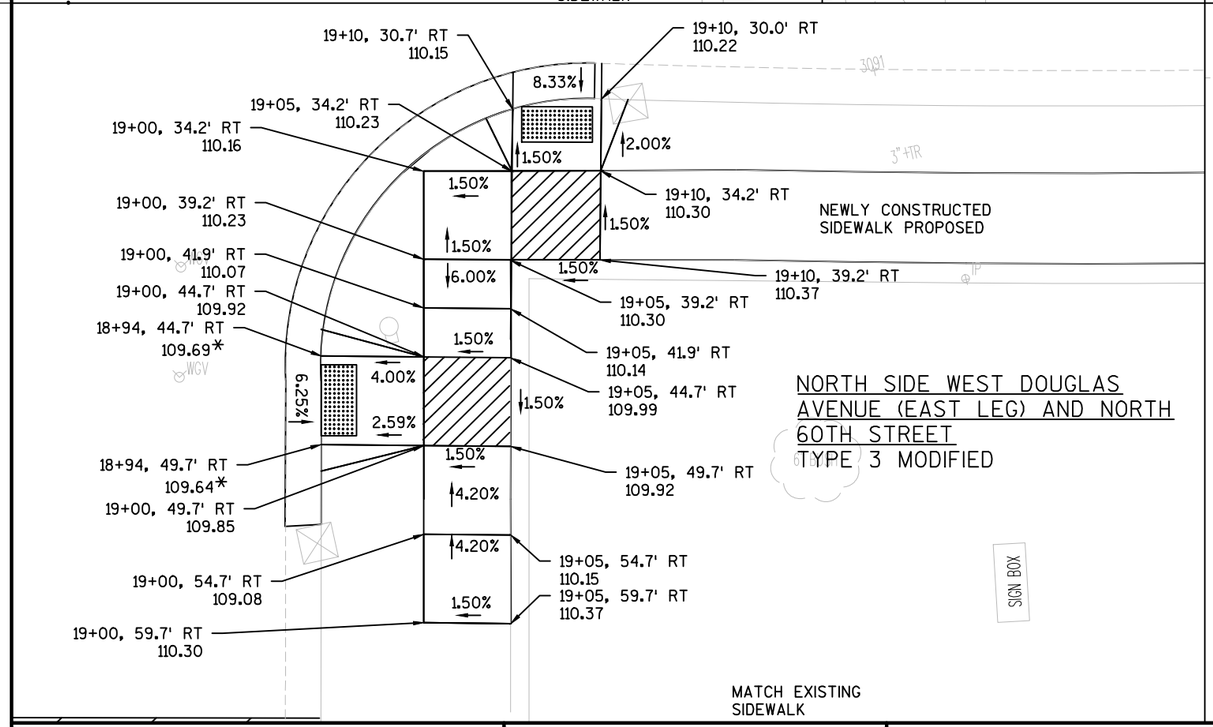


SOUTH SIDE WEST DOUGLAS AVENUE (EAST LEG) AND NORTH 60TH STREET
TYPE 3 MODIFIED

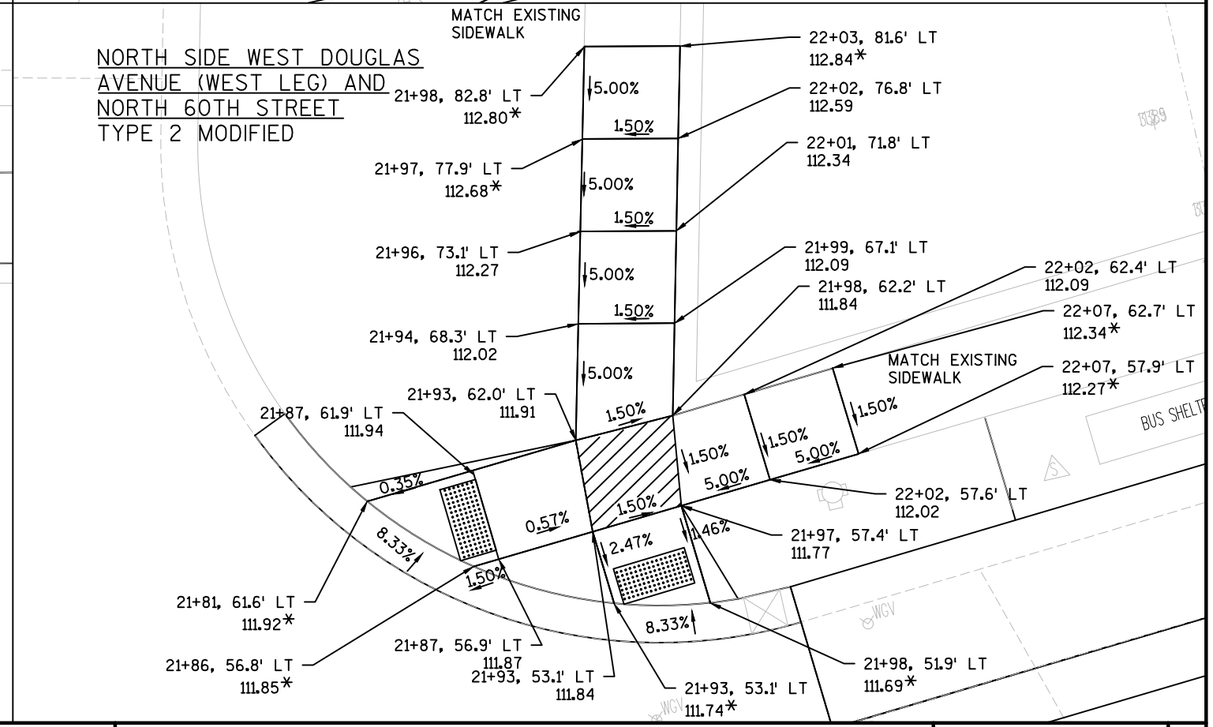
NOTES:
ALL ELEVATIONS IN CURB AND GUTTER AREA REFERENCE FLOW LINE
SEE CONSTRUCTION DETAILS FOR CURB AND GUTTER OVERLAY DETAILS
*ELEVATIONS TO BE FIELD VERIFIED



SOUTH SIDE WEST DOUGLAS AVENUE (WEST LEG) AND NORTH 60TH STREET
TYPE 4B1 MODIFIED

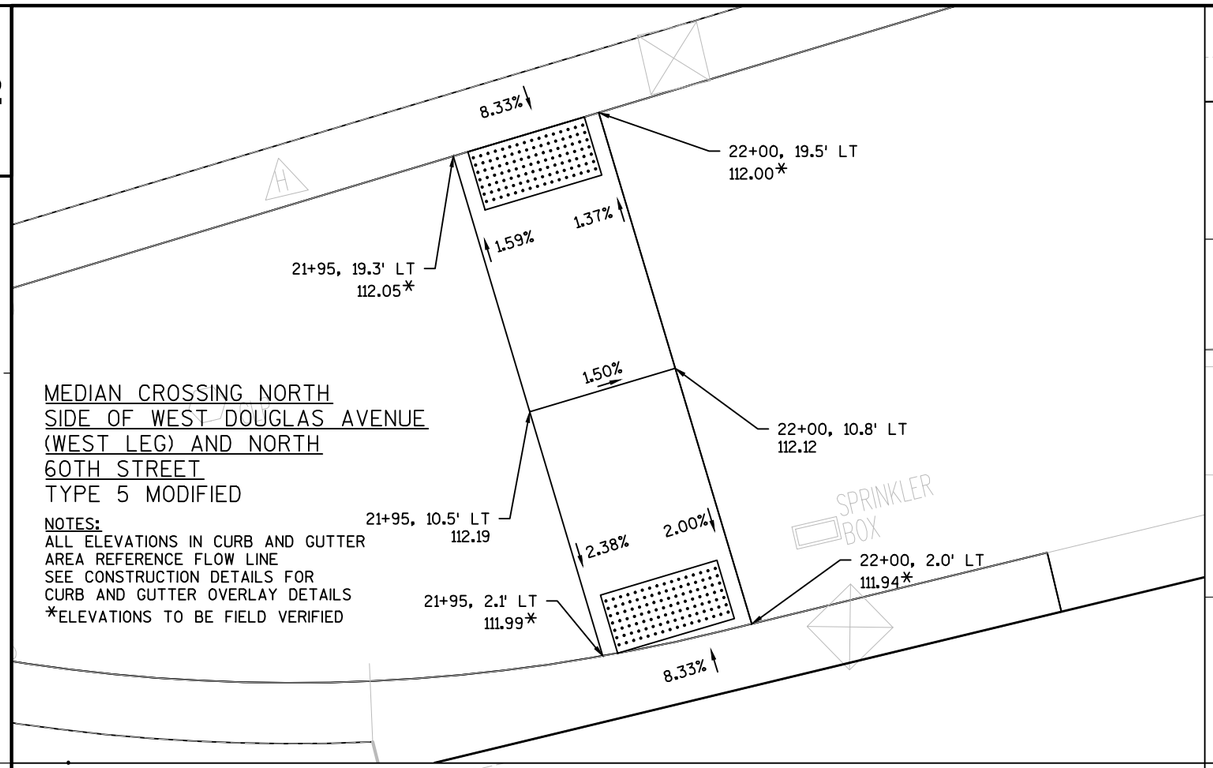


NORTH SIDE WEST DOUGLAS AVENUE (EAST LEG) AND NORTH 60TH STREET
TYPE 3 MODIFIED



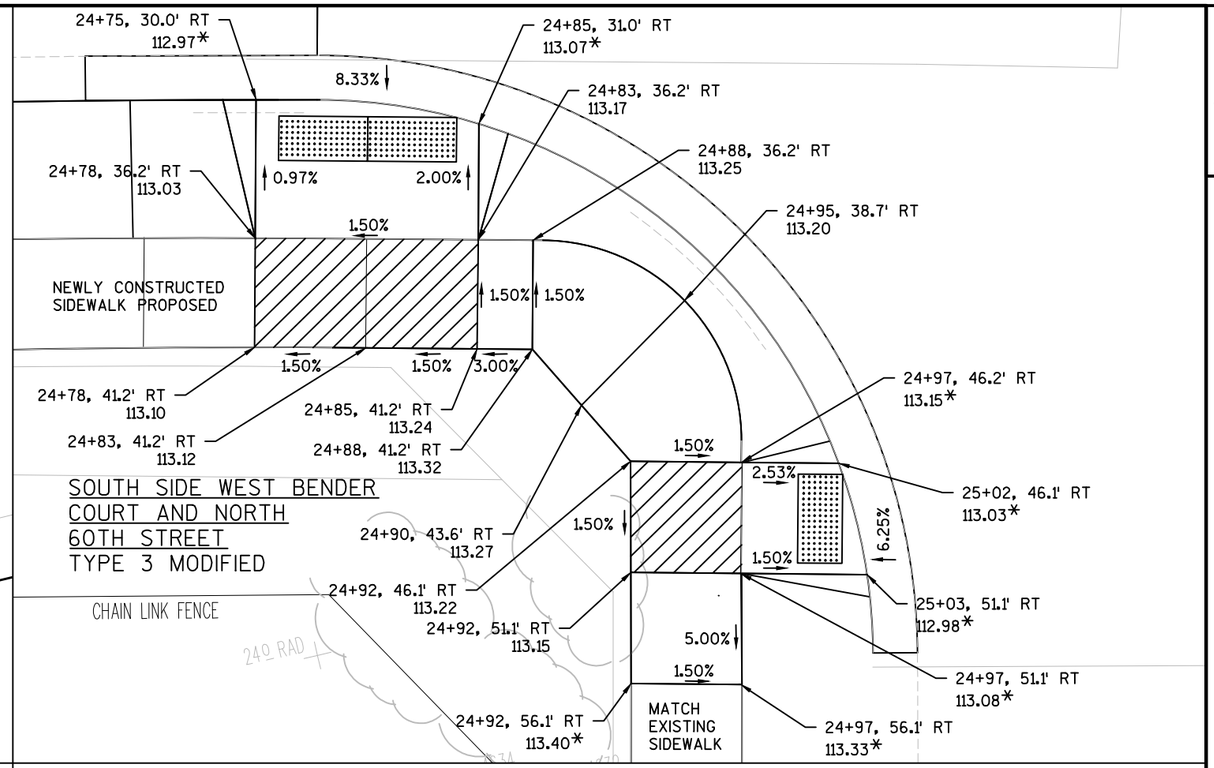
NORTH SIDE WEST DOUGLAS AVENUE (WEST LEG) AND NORTH 60TH STREET
TYPE 2 MODIFIED

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PEDESTRIAN CURB RAMP DETAILS	SHEET 16	E

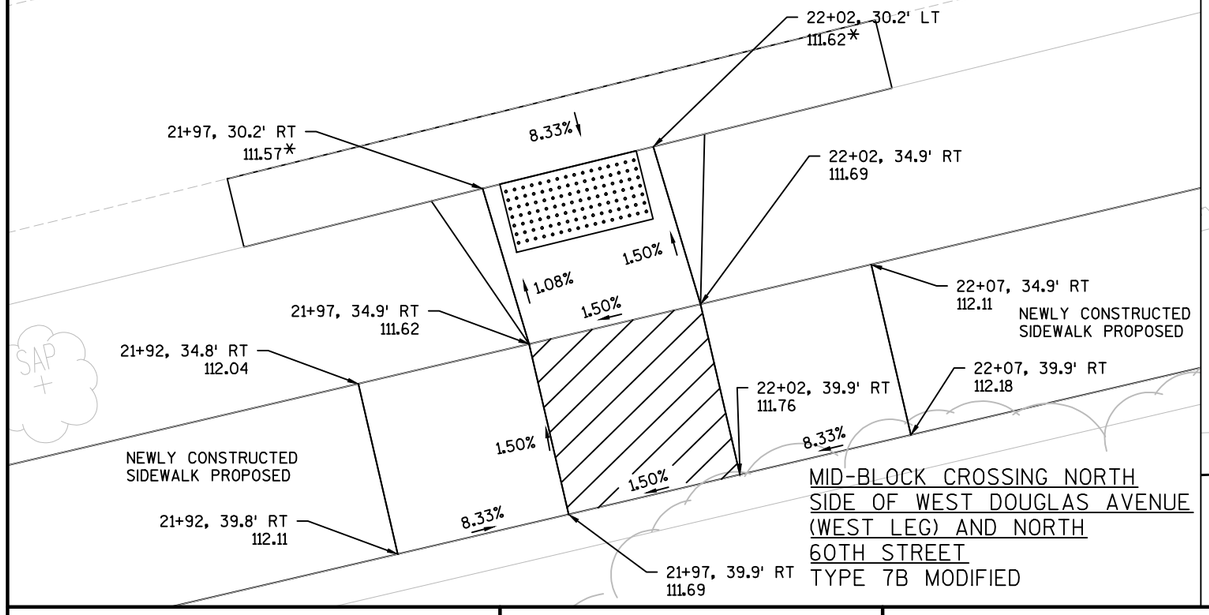


MEDIAN CROSSING NORTH SIDE OF WEST DOUGLAS AVENUE (WEST LEG) AND NORTH 60TH STREET
TYPE 5 MODIFIED

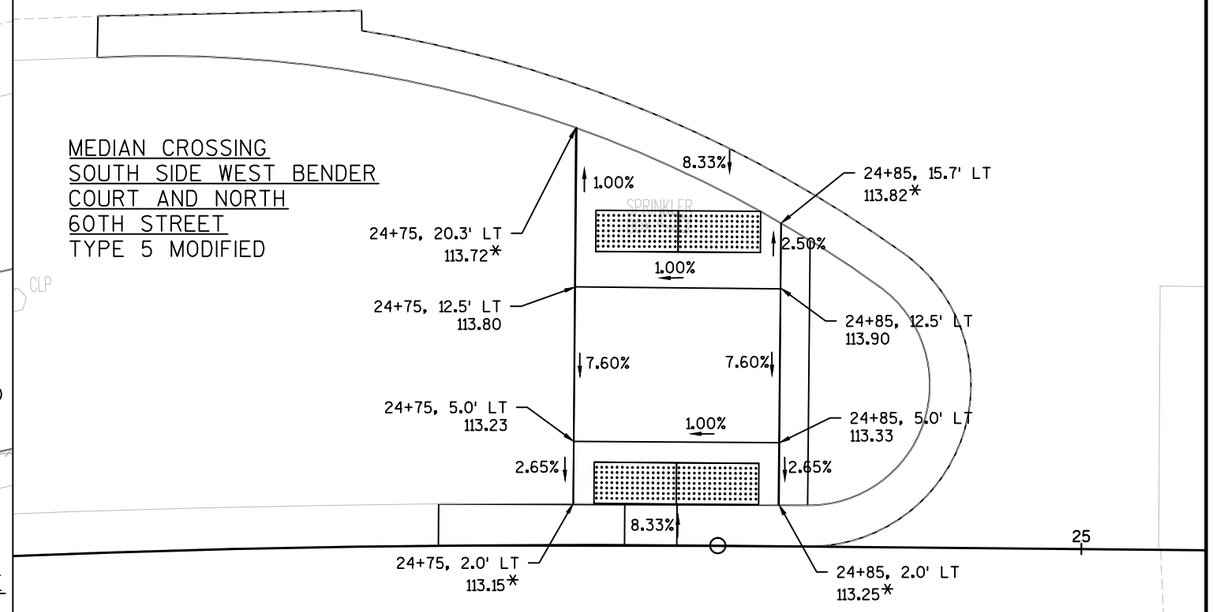
NOTES:
ALL ELEVATIONS IN CURB AND GUTTER AREA REFERENCE FLOW LINE
SEE CONSTRUCTION DETAILS FOR CURB AND GUTTER OVERLAY DETAILS
*ELEVATIONS TO BE FIELD VERIFIED



SOUTH SIDE WEST BENDER COURT AND NORTH 60TH STREET
TYPE 3 MODIFIED



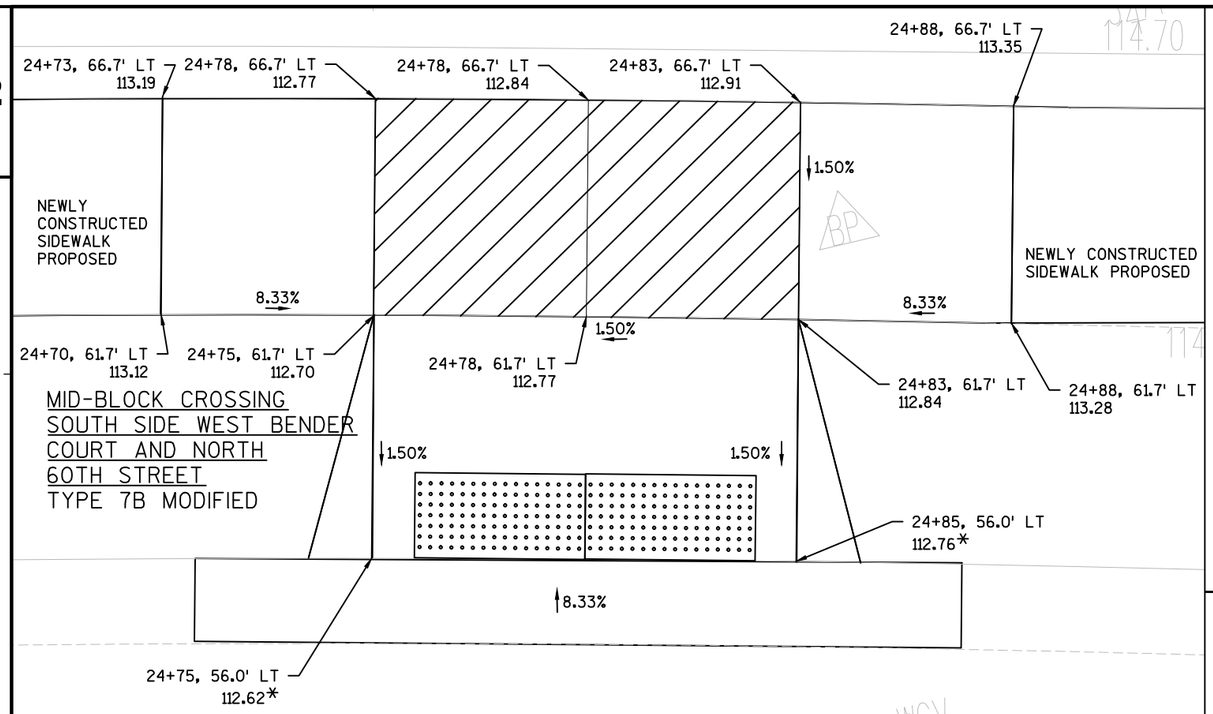
MID-BLOCK CROSSING NORTH SIDE OF WEST DOUGLAS AVENUE (WEST LEG) AND NORTH 60TH STREET
TYPE 7B MODIFIED

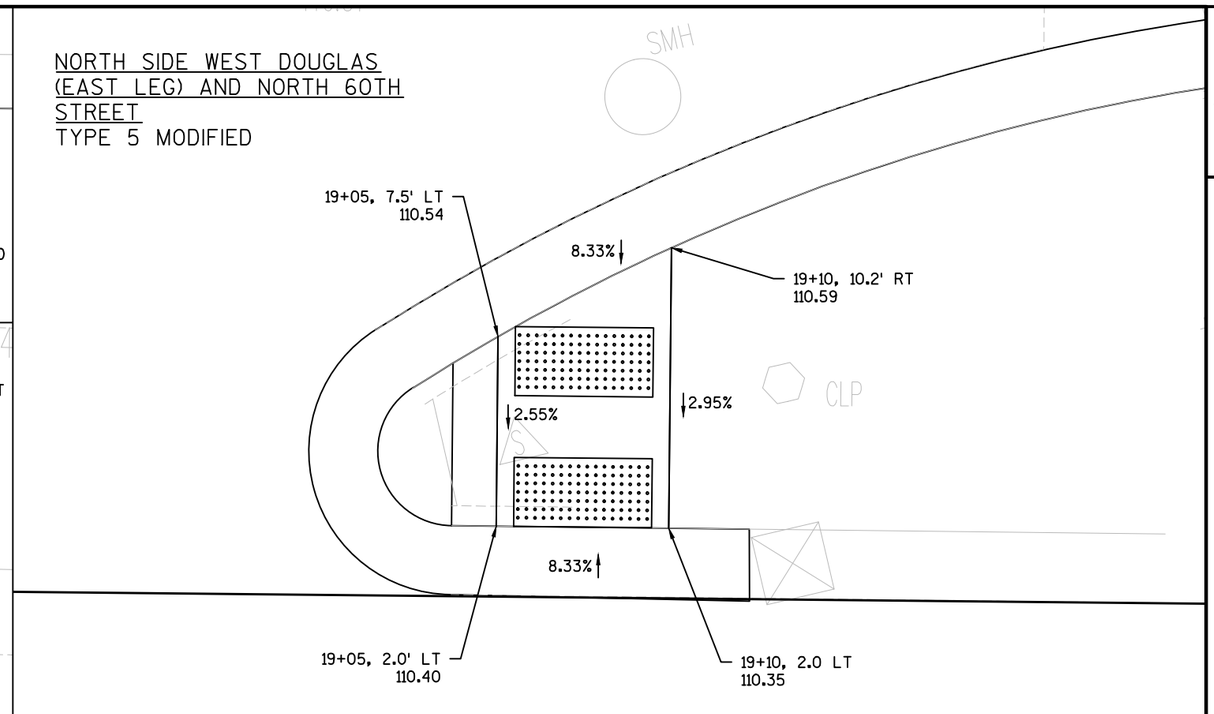


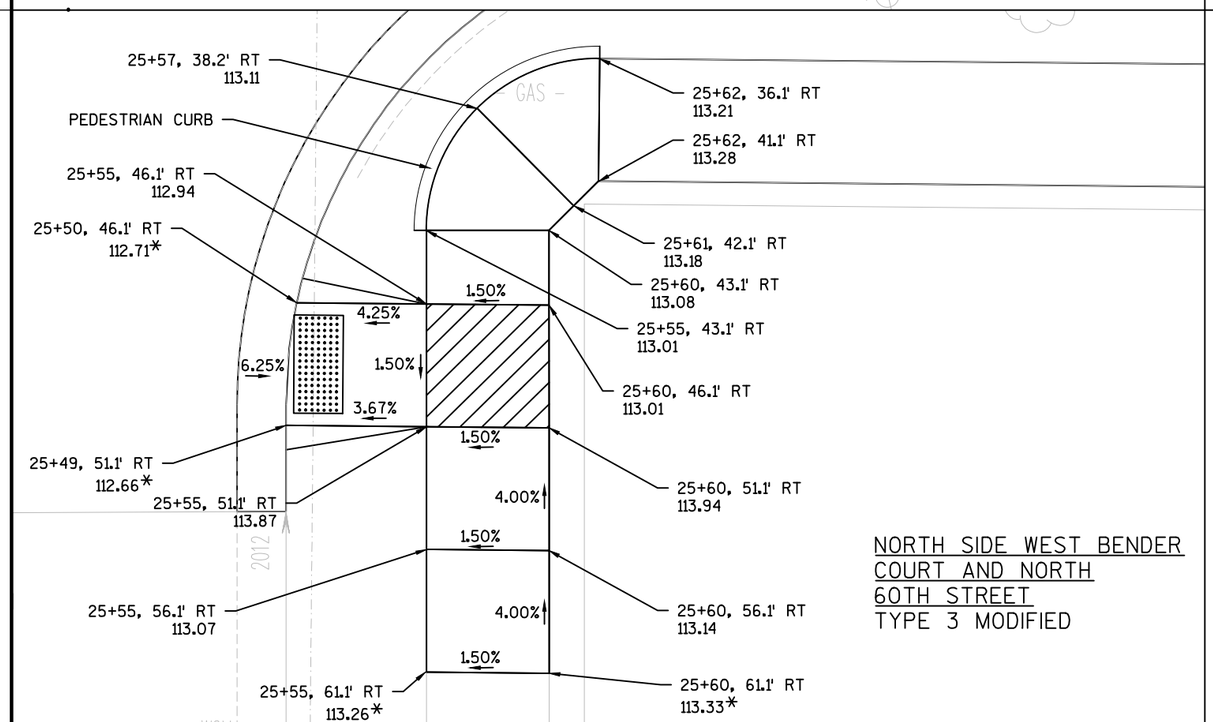
MEDIAN CROSSING SOUTH SIDE WEST BENDER COURT AND NORTH 60TH STREET
TYPE 5 MODIFIED

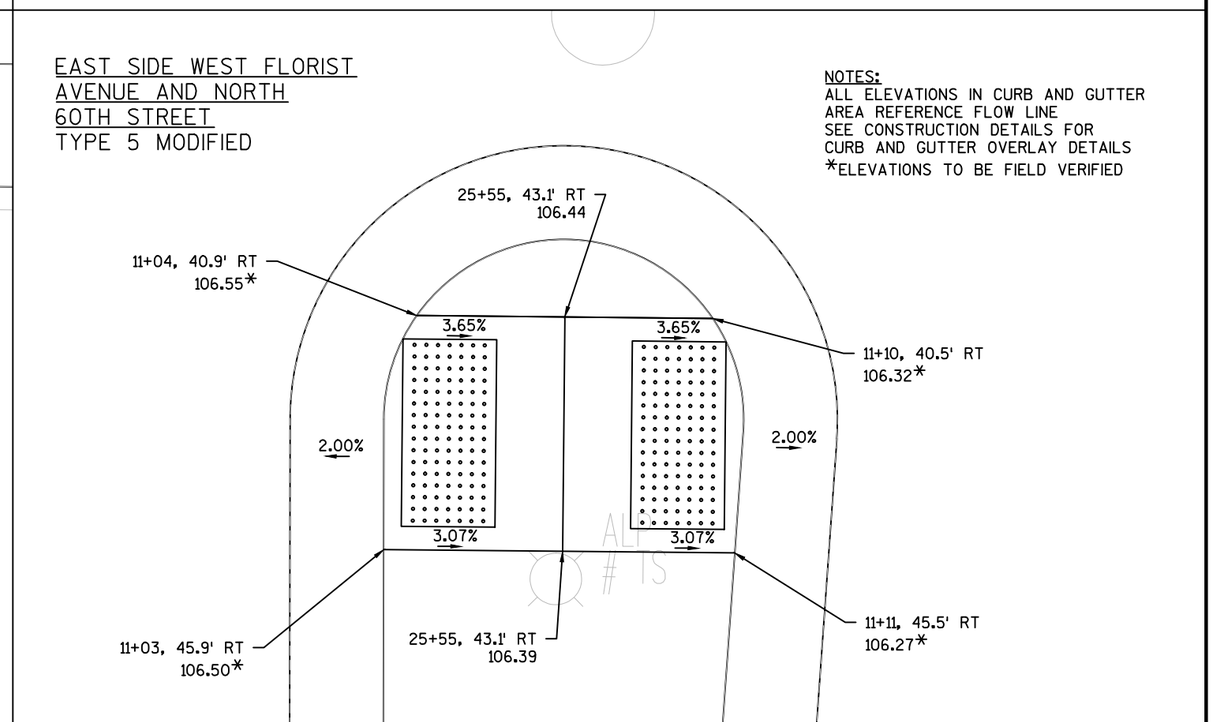
PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PEDESTRIAN CURB RAMP DETAILS	SHEET 17	E

2

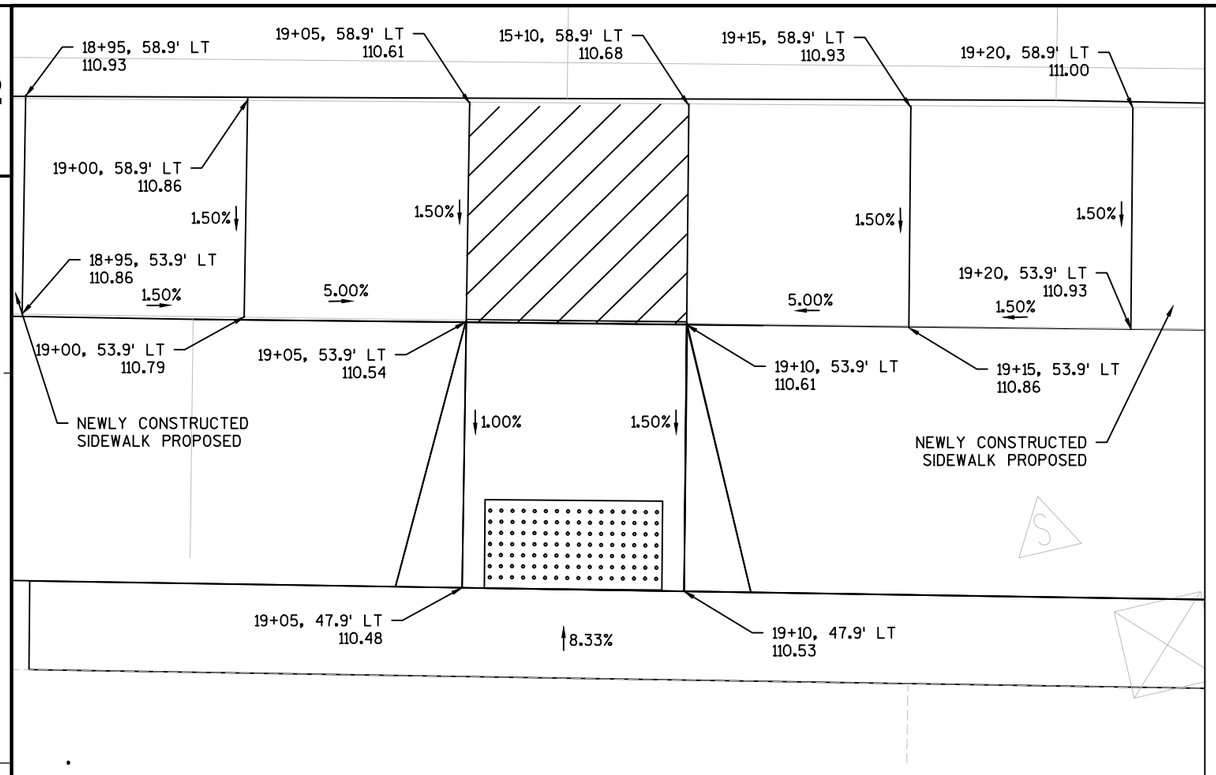






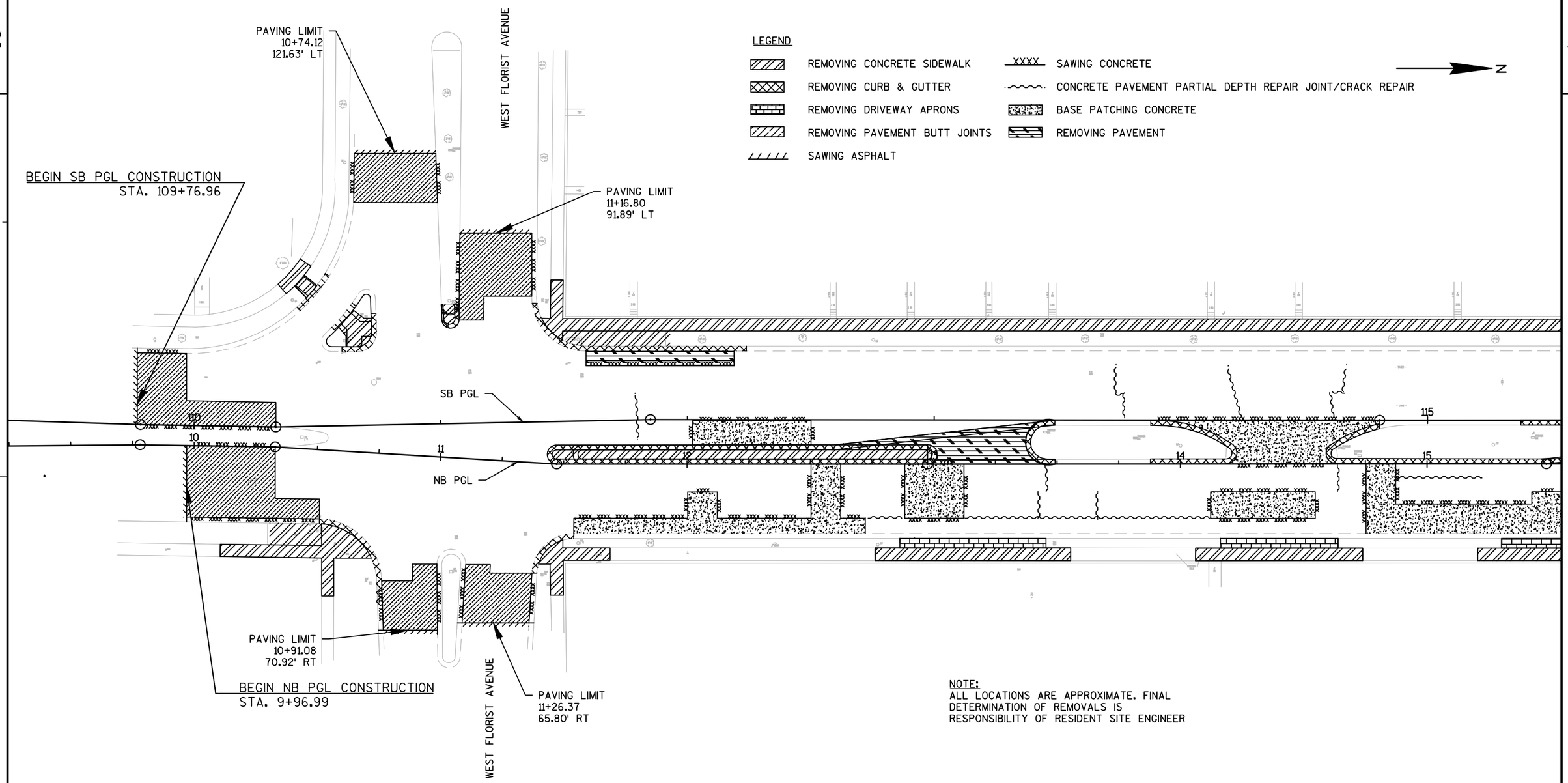


PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PEDESTRIAN CURB RAMP DETAILS	SHEET 18	E



MID-BLOCK CROSSING
NORTH SIDE WEST DOUGLAS
(EAST LEG) AND NORTH
60TH STREET
TYPE 7B MODIFIED

2



NOTE:
ALL LOCATIONS ARE APPROXIMATE. FINAL DETERMINATION OF REMOVALS IS RESPONSIBILITY OF RESIDENT SITE ENGINEER

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	REMOVAL AND BASE PATCHING PLAN	SHEET 20	E

2

LEGEND

- REMOVING CONCRETE SIDEWALK
- REMOVING CURB & GUTTER
- REMOVING DRIVEWAY APRONS
- REMOVING PAVEMENT BUTT JOINTS
- SAWING ASPHALT
- XXXX SAWING CONCRETE
- CONCRETE PAVEMENT PARTIAL DEPTH REPAIR JOINT/CRACK REPAIR
- BASE PATCHING CONCRETE
- REMOVING PAVEMENT

N

WEST KAUL AVENUE

PAVING LIMIT
16+11.88
85.70' LT

SB PGL

NB PGL

16

17

18

19

20

21

PAVING LIMIT
21+58.15
176.92' LT

WEST DOUGLAS AVENUE

WEST DOUGLAS AVENUE

PAVING LIMIT
18+71.37
65.33' RT

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	REMOVAL AND BASE PATCHING PLAN	SHEET 21	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020310_RP.DWG PLOT DATE : 2/22/2016 10:09 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- REMOVING CONCRETE SIDEWALK
- REMOVING CURB & GUTTER
- REMOVING DRIVEWAY APRONS
- REMOVING PAVEMENT BUTT JOINTS
- SAWING ASPHALT
- XXXX SAWING CONCRETE
- CONCRETE PAVEMENT PARTIAL DEPTH REPAIR JOINT/CRACK REPAIR
- BASE PATCHING CONCRETE
- REMOVING PAVEMENT

N

SB PGL

NB PGL

22

23

24

125

26

27

28

PAVING LIMIT
25+26.40
70.51' RT

WEST BENDER COURT

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	REMOVAL AND BASE PATCHING PLAN	SHEET 22	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020310_RP.DWG PLOT DATE : 2/22/2016 10:09 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

REMOVING CONCRETE SIDEWALK

REMOVING CURB & GUTTER

REMOVING DRIVEWAY APRONS

REMOVING PAVEMENT BUTT JOINTS

SAWING ASPHALT

SAWING CONCRETE

CONCRETE PAVEMENT PARTIAL DEPTH REPAIR JOINT/CRACK REPAIR

BASE PATCHING CONCRETE

REMOVING PAVEMENT

N

UNION PACIFIC RAILROAD

SB PGL

NB PGL

29

30

31

32

33

34

BEGIN PAVEMENT
REPLACEMENT AREA
STATION 29+50

APPROXIMATE GRADE
SEPARATION LOCAION

UNION PACIFIC RAILROAD

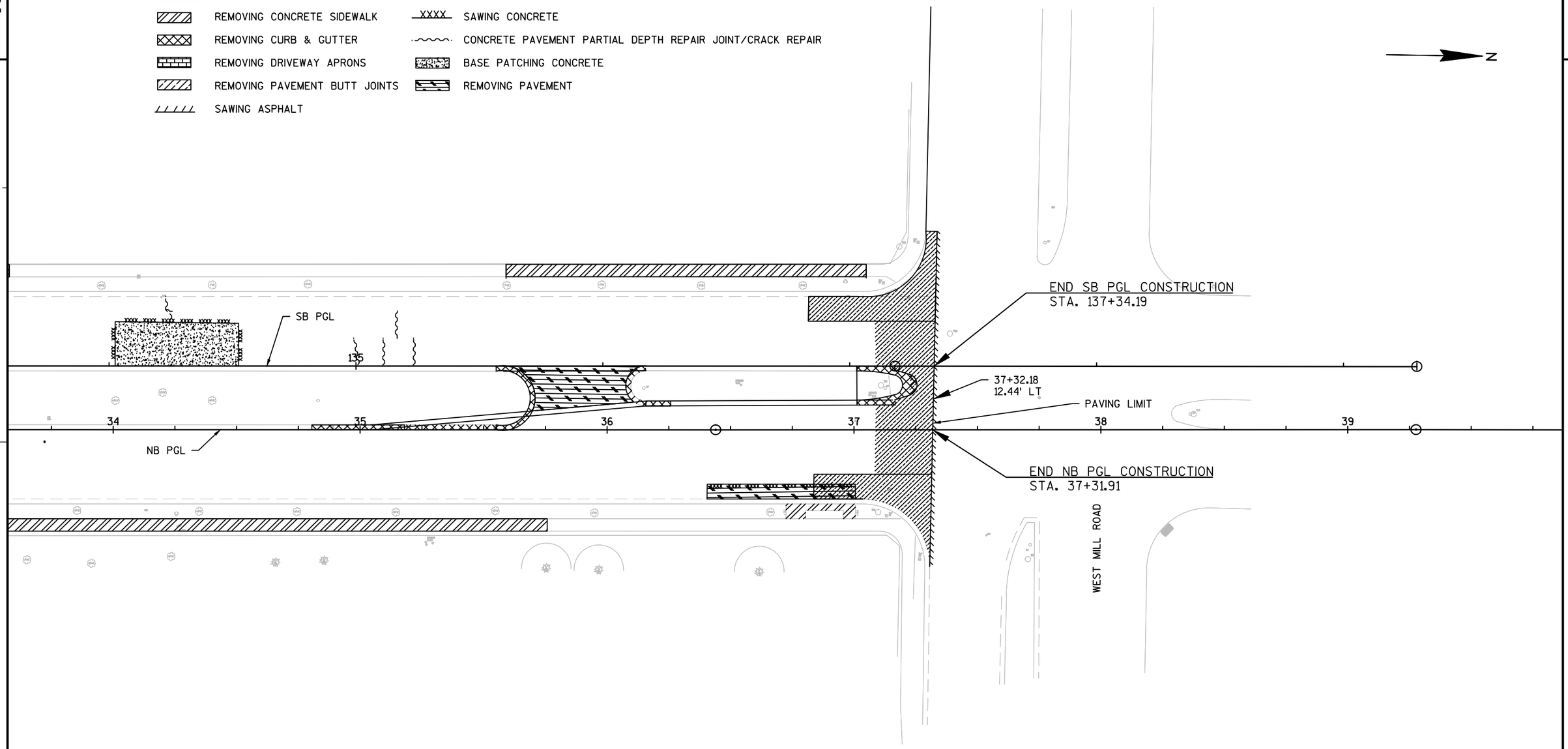
END PAVEMENT
REPLACEMENT AREA
STATION 31+00

PROJECT NO:2595-00-71	HWY:NORTH 60TH STREET	COUNTY:MILWAUKEE	REMOVAL AND BASE PATCHING PLAN	SHEET 23	E

2

LEGEND

	REMOVING CONCRETE SIDEWALK	XXXX	SAWING CONCRETE
	REMOVING CURB & GUTTER		CONCRETE PAVEMENT PARTIAL DEPTH REPAIR JOINT/CRACK REPAIR
	REMOVING DRIVEWAY APRONS		BASE PATCHING CONCRETE
	REMOVING PAVEMENT BUTT JOINTS		REMOVING PAVEMENT
	SAWING ASPHALT		



PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	REMOVAL AND BASE PATCHING PLAN	SHEET 24	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020310_RP.DWG PLOT DATE : 2/22/2016 10:09 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- REMOVING CONCRETE SIDEWALK
- REMOVING CURB & GUTTER
- REMOVING DRIVEWAY APRONS
- REMOVING PAVEMENT BUTT JOINTS
- SAWING ASPHALT
- XXXX SAWING CONCRETE
- CONCRETE PAVEMENT PARTIAL DEPTH REPAIR JOINT/CRACK REPAIR
- BASE PATCHING CONCRETE
- REMOVING PAVEMENT

N

PAVING LIMIT

WEST DOUGLAS AVENUE

120

22

23

2

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	REMOVAL AND BASE PATCHING PLAN	SHEET 25	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020310_RP.DWG PLOT DATE : 2/22/2016 10:09 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 0.035703

WISDOT/CADDS SHEET 42

NOTES:

*MATCH EXISTING ELEVATION

IN AREAS OF REMOVING EXISTING PAVEMENT, CURB AND GUTTER OR SIDEWALK, REMOVE THE SAID ITEM AND EXCAVATE BASE MATERIAL TO BOTTOM OF BASE OR 1 FOOT DEEP WHICH EVER IS LESS. PLACE BORROW MATERIAL, 4 INCHES OF TOPSOIL AND SOD TO FINAL ELEVATION

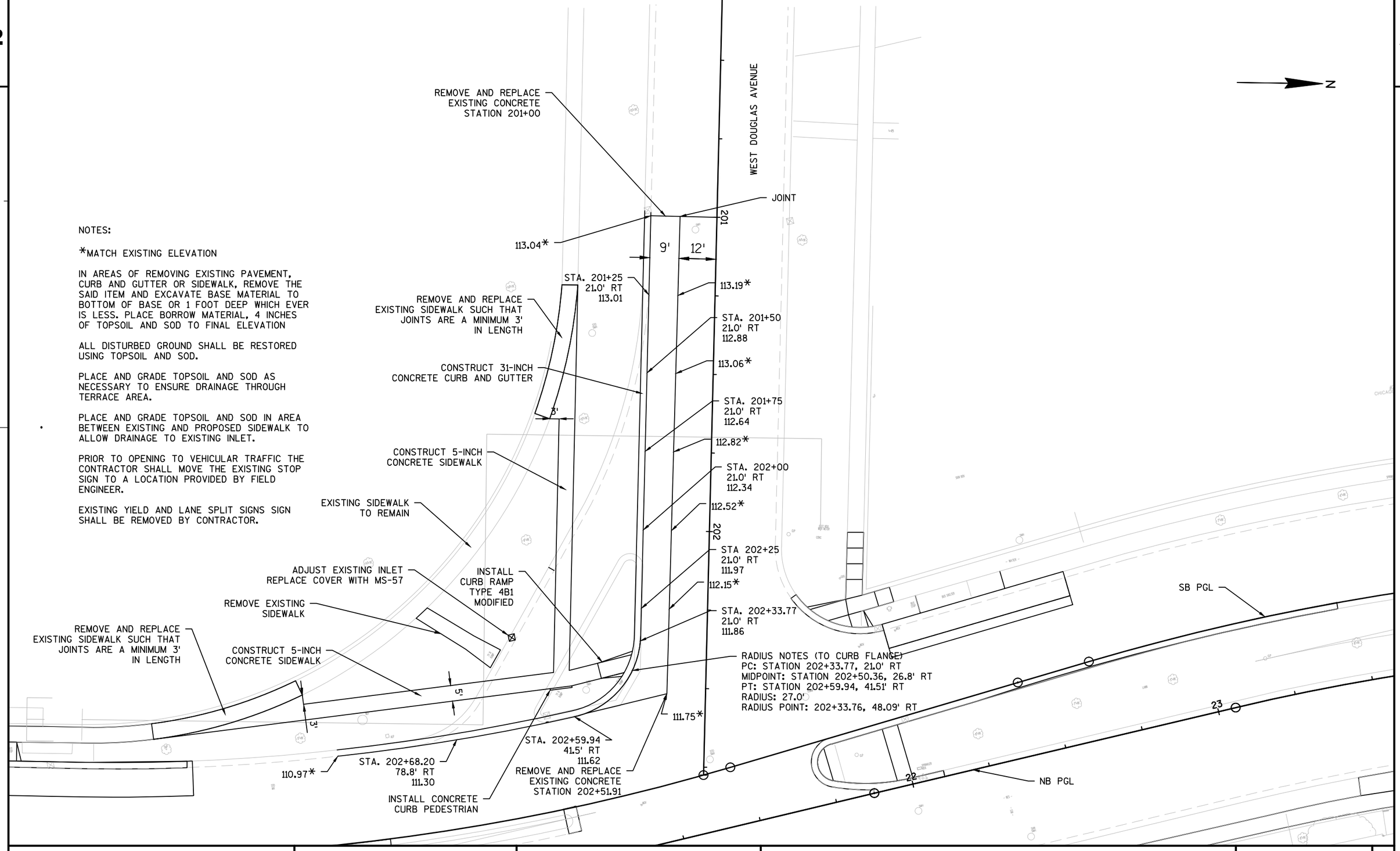
ALL DISTURBED GROUND SHALL BE RESTORED USING TOPSOIL AND SOD.

PLACE AND GRADE TOPSOIL AND SOD AS NECESSARY TO ENSURE DRAINAGE THROUGH TERRACE AREA.

PLACE AND GRADE TOPSOIL AND SOD IN AREA BETWEEN EXISTING AND PROPOSED SIDEWALK TO ALLOW DRAINAGE TO EXISTING INLET.

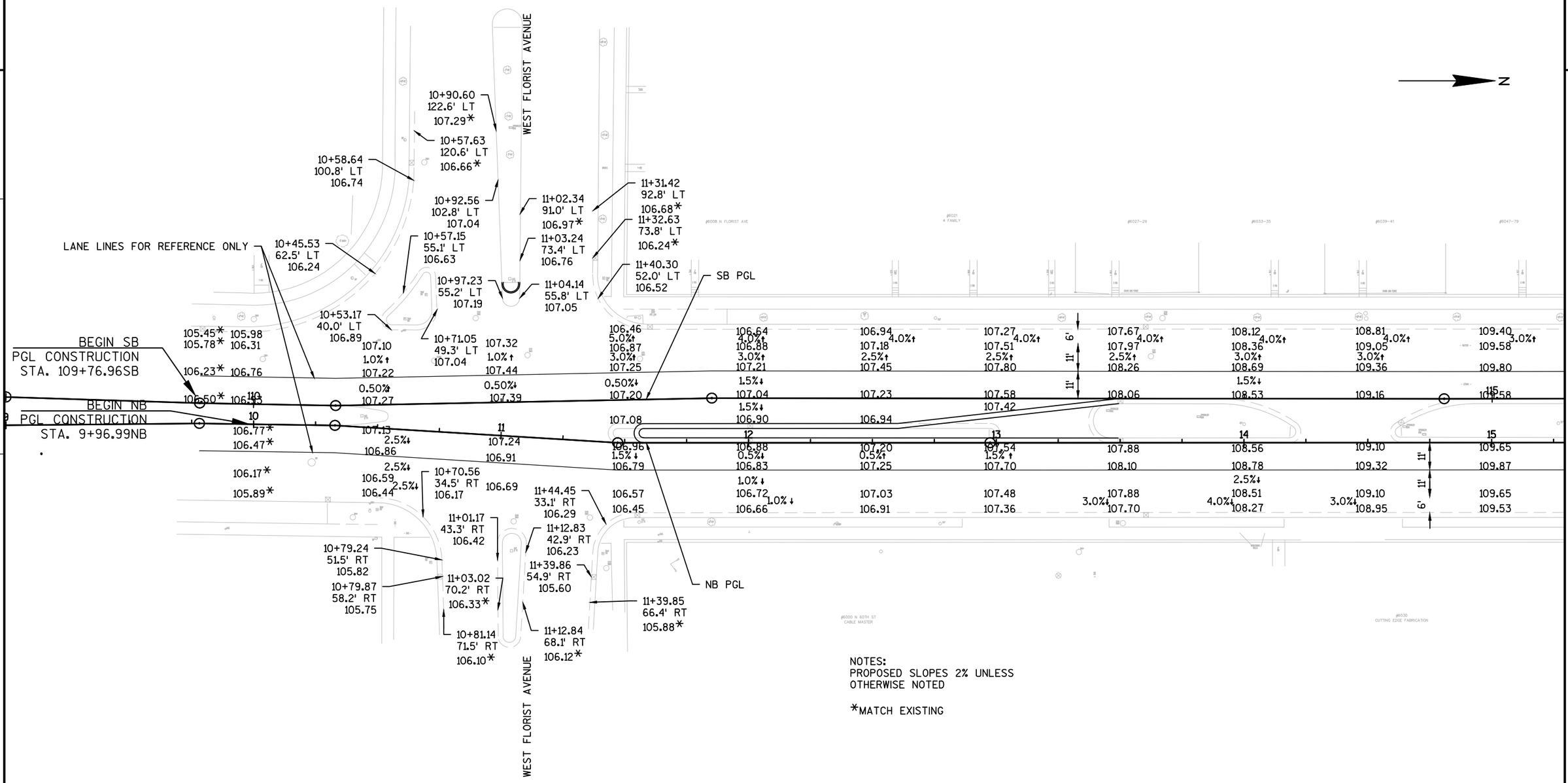
PRIOR TO OPENING TO VEHICULAR TRAFFIC THE CONTRACTOR SHALL MOVE THE EXISTING STOP SIGN TO A LOCATION PROVIDED BY FIELD ENGINEER.

EXISTING YIELD AND LANE SPLIT SIGNS SIGN SHALL BE REMOVED BY CONTRACTOR.



PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	INTERSECTION DETAIL: W DOUGLAS AVENUE (WEST LEG)	SHEET 26	E

2

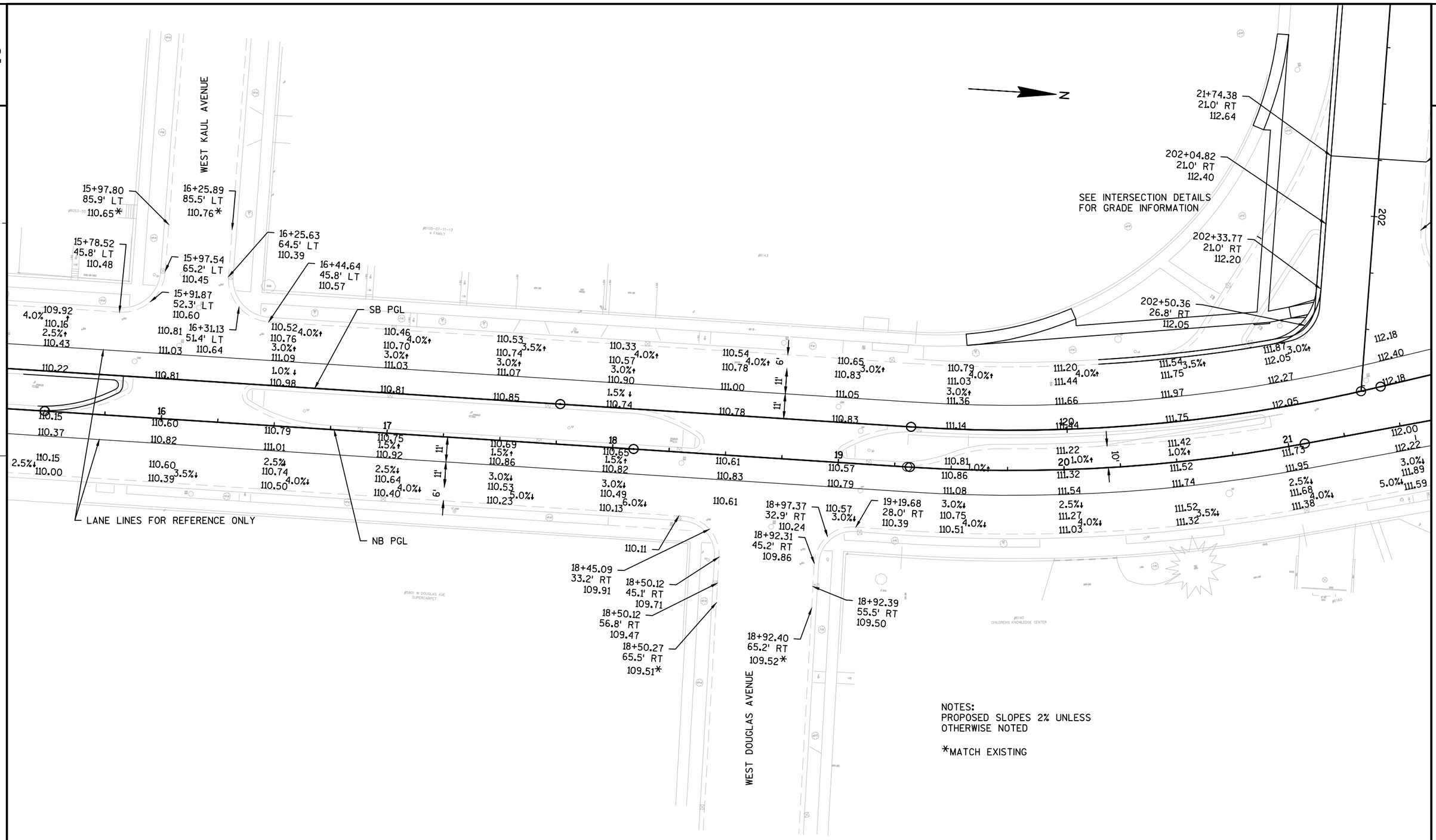


NOTES:
PROPOSED SLOPES 2% UNLESS
OTHERWISE NOTED

*MATCH EXISTING

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PAVING GRADES	SHEET 27	E

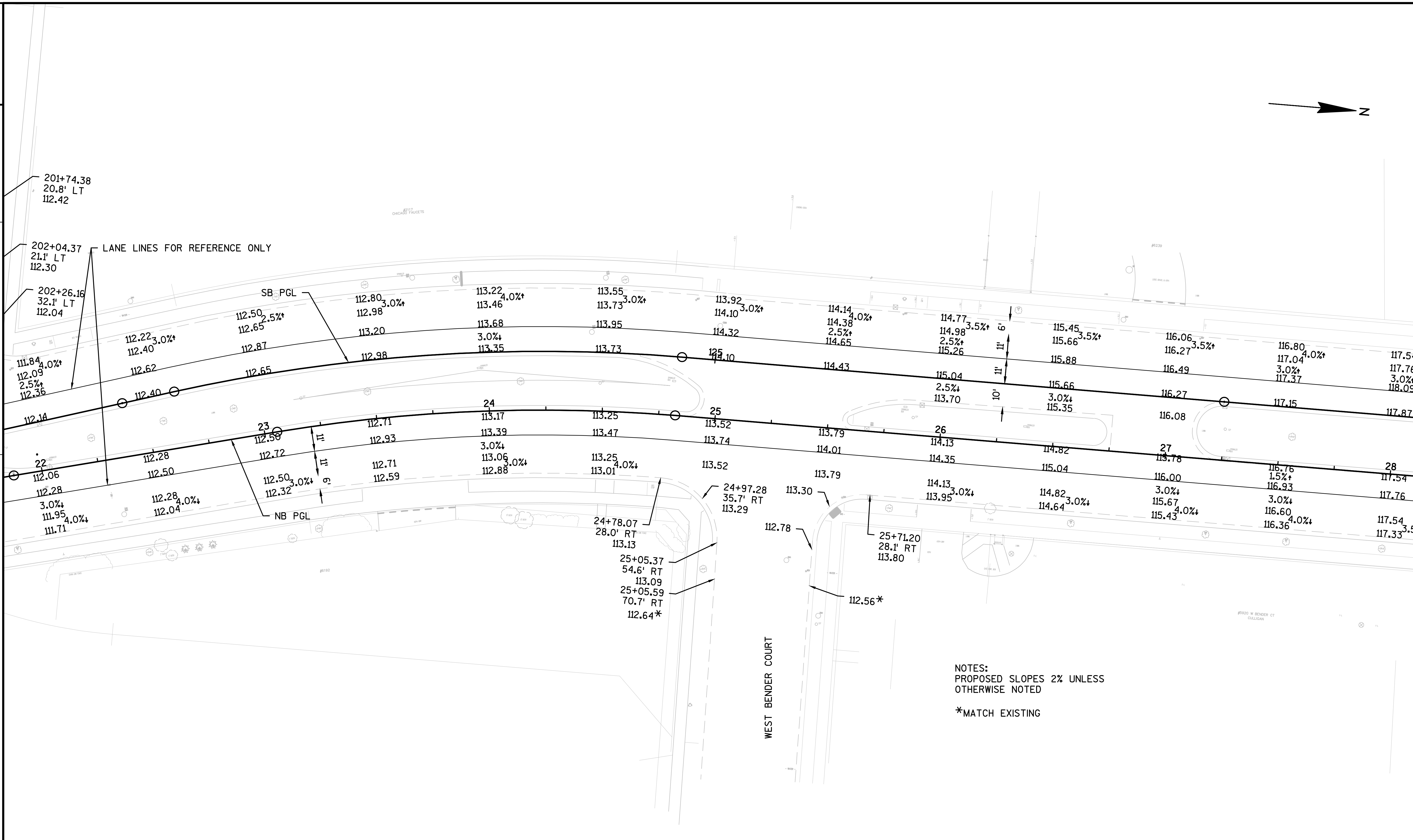
2



PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PAVING GRADES	SHEET 28	E

2

2



NOTES:
PROPOSED SLOPES 2% UNLESS
OTHERWISE NOTED

*MATCH EXISTING

PROJECT NO:2595-00-71	HWY:NORTH 60TH STREET	COUNTY:MILWAUKEE	PAVING GRADES	SHEET 29	E

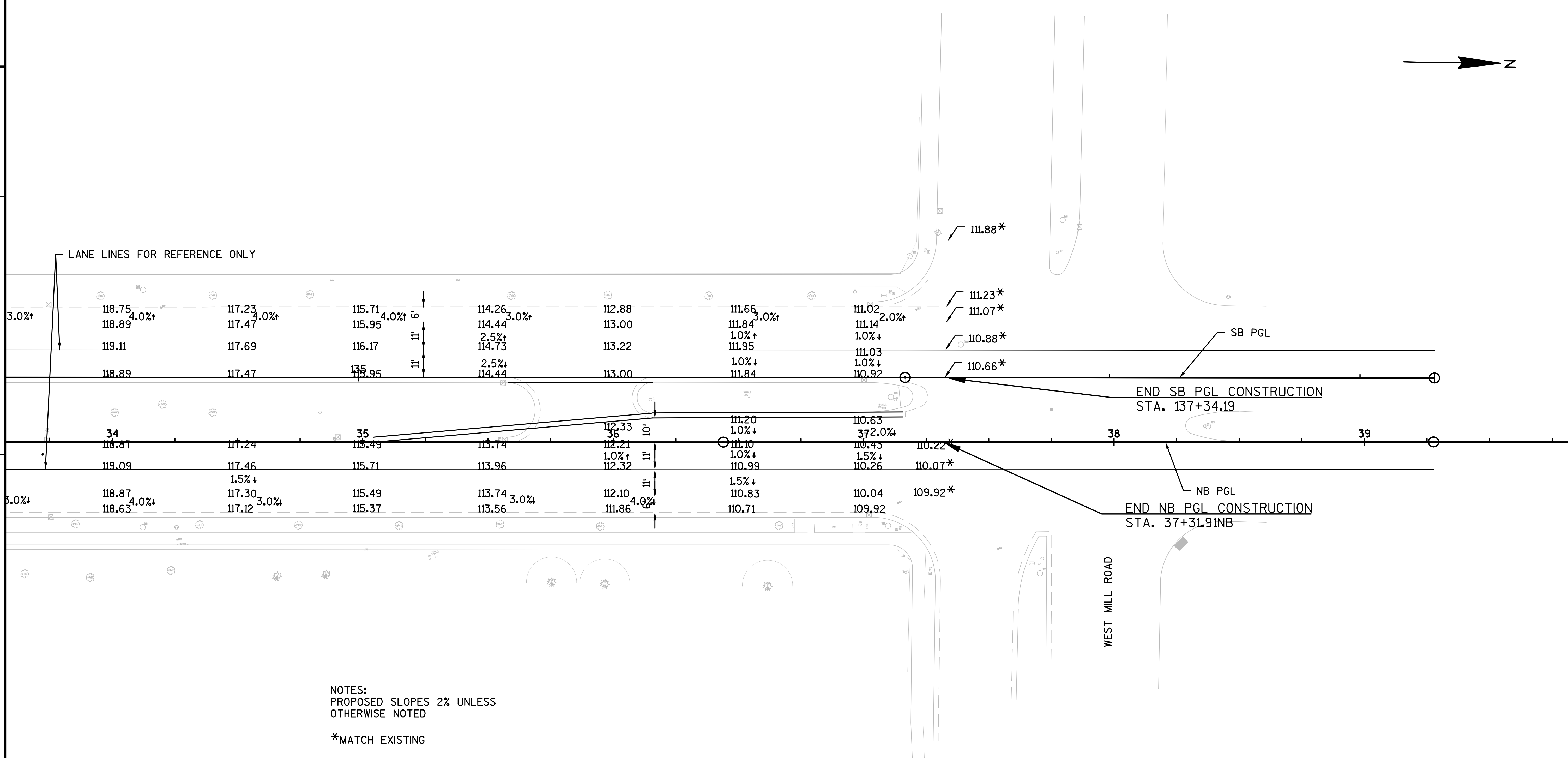
FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020601_GR.DWG PLOT DATE : 2/22/2016 10:19 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTES:
PROPOSED SLOPES 2% UNLESS OTHERWISE NOTED

*MATCH EXISTING

PROJECT NO:2595-00-71	HWY:NORTH 60TH STREET	COUNTY:MILWAUKEE	PAVING GRADES	SHEET 30	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020601_GR.DWG
PLOT DATE : 2/22/2016 10:19 AM
PLOT BY : ZACH VERHAGE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

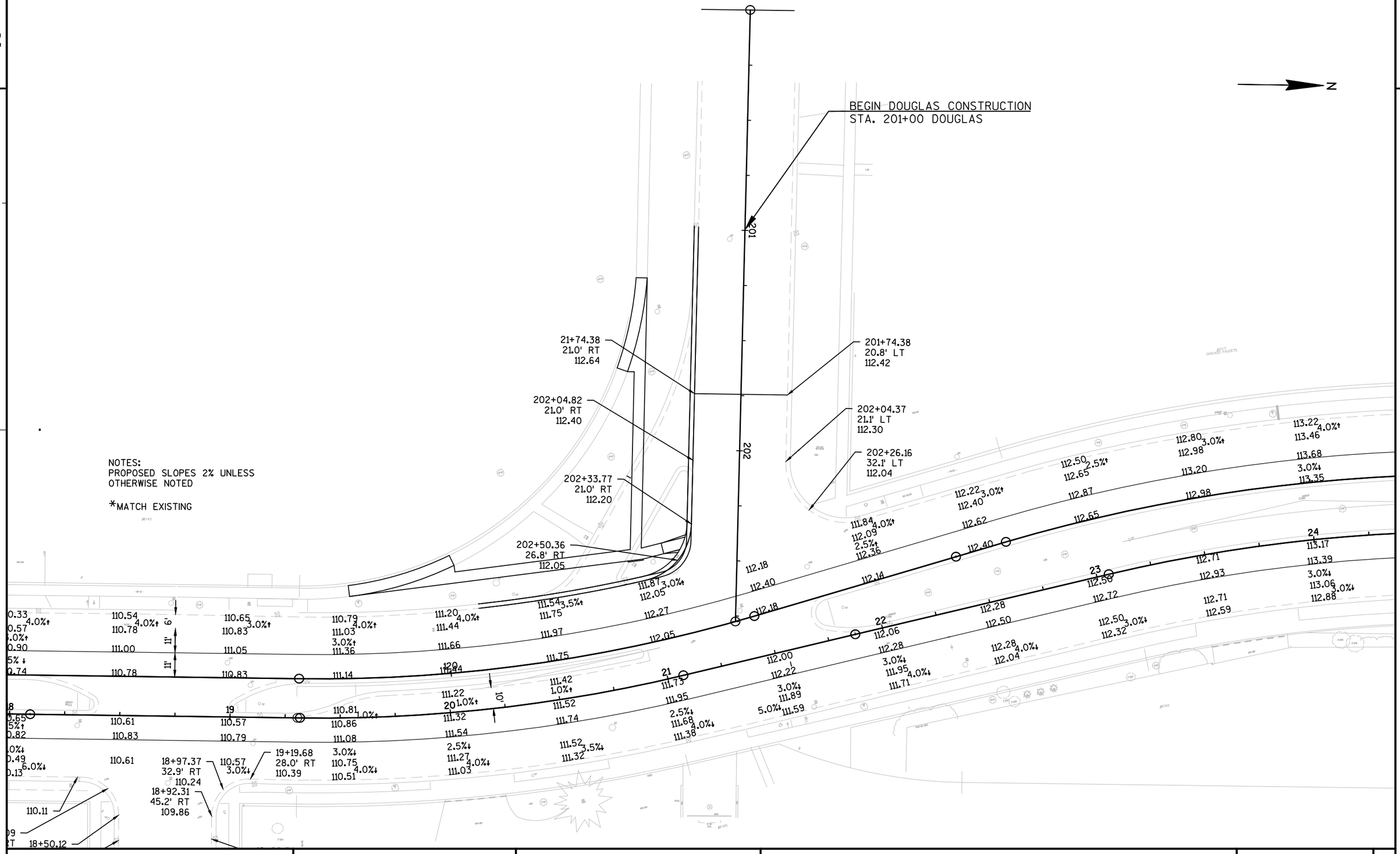


2
2
N
LANE LINES FOR REFERENCE ONLY
SB PGL
END SB PGL CONSTRUCTION
STA. 137+34.19
NB PGL
END NB PGL CONSTRUCTION
STA. 37+31.91NB
WEST MILL ROAD
34
35
135
36
37
38
39
6'
11'
11'
10'
11'
11'
6'
111.88*
111.23*
111.07*
110.88*
110.66*
110.22*
110.07*
109.92*
3.0%
118.75 4.0%
118.89
119.11
118.89
117.23 4.0%
117.47
117.69
117.47
115.71 4.0%
115.95
116.17
115.95
114.26 3.0%
114.44
2.5%
114.73
2.5%
114.44
112.88
113.00
113.22
113.00
111.66 3.0%
111.84
1.0%
111.95
1.0%
111.84
111.02 2.0%
111.14
1.0%
111.03
1.0%
110.92
112.33
111.20
1.0%
110.63
2.0%
118.87
117.24
115.49
113.74
112.21
111.10
110.43
119.09
117.46
115.71
113.96
1.0%
112.32
1.0%
110.99
1.5%
110.26
1.5%
1.5%
118.87 4.0%
118.63
117.30 3.0%
117.12
115.49
115.37
113.74 3.0%
113.56
112.10 4.0%
111.86
110.83
110.71
110.04
109.92
3.0%
NOTES:
PROPOSED SLOPES 2% UNLESS
OTHERWISE NOTED
*MATCH EXISTING

PROJECT NO:2595-00-71 | HWY:NORTH 60TH STREET | COUNTY:MILWAUKEE | PAVING GRADES | SHEET 31 | E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020601_GR.DWG PLOT DATE : 2/22/2016 10:19 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PAVING GRADES	SHEET 32	E

2

LEGEND

- ST — ADJUST STORM MANHOLE
- SS — ADJUST SANITARY MANHOLE
- MH — ADJUST MANHOLE
- RR — REMOVE EXISTING INLET AND CONSTRUCT INLET TYPE 45A WITH TYPE MS-57 COVER
- RC — RECONSTRUCT INLET/MANHOLE
- WM — ADJUST WATER VALVE BOX
- INL — ADJUST INLET COVER

N

WEST FLORIST AVENUE

WEST FLORIST AVENUE

BEGIN CONSTRUCTION
STA. 9+96.99
STA. 109+76.96

SB PGL

NB PGL

18" SS

21" SS

8" SS

24" SS

66" SS

48"x96" BOX SS

15" SS

STRUCTURE SUMMARY				
ITEM NUMBER	TYPE	STATION	OFFSET	RIM ELEVATION
1	RR	9+78.80	39.2 LT	105.15
2	WM	9+84.04	37.1 LT	105.81
3	ST	10+03.36	26.4 LT	106.52
4	ST	10+23.71	15.1 RT	106.55
5	RR	10+30.48	30.9 RT	106.11
6	WM	10+48.83	30.7 RT	106.40
7	WM	10+51.51	27.7 RT	106.44
8	WM	10+47.64	34.9 LT	107.08
9	RR	10+56.28	107.7 LT	106.70
10	ST	10+62.45	108.2 LT	106.76
11	MH	10+71.28	28.5 LT	107.04
12	SS	10+86.93	46.7 LT	107.11
13	SS	11+07.21	34.2 RT	106.51
14	ST	11+08.72	33.0 LT	107.36

STRUCTURE SUMMARY				
ITEM NUMBER	TYPE	STATION	OFFSET	RIM ELEVATION
15	RR	11+33.62	73.9 LT	106.24
16	SS	11+37.89	30.9 RT	106.31
17	WM	11+51.22	40.5 LT	106.80
18	ST	11+56.21	33.9 LT	107.34
19	RC	11+60.23	46.8 LT	106.52
20	RC	11+55.16	29.2 RT	106.45
21	RC	12+00.46	0.0 RT	106.88
22	RR	12+00.70	7.8 LT	106.90
23	RC	13+50.15	17.8 LT	108.06
24	RR	13+50.21	0.0 RT	107.88
25	RC	13+62.44	34.9 LT	108.18
26	RR	13+60.35	45.8 LT	107.72
27	RC	13+60.42	30.2 RT	107.77
28	INL	14+62.87	8.9 LT	109.13

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	STORM SEWER PLAN	SHEET 33	E

ITEM NUMBER	TYPE	STATION	OFFSET	RIM ELEVATION
66	ST	18+30.80	4.8 RT	110.75
67	INL	18+31.20	28.2 RT	110.11
68	RR	18+50.12	56.8 RT	109.47
69	SS	18+72.29	30.4 RT	110.45
70	WM	18.86.31	46.0 RT	109.90
71	WM	18+86.34	39.8 RT	110.01
72	RR	18+92.40	55.5 RT	109.50
73	WM	19+02.07	20.1 RT	110.57
74	MH	18+98.56	24.6 LT	110.97
75	RC	19+11.28	28.0 RT	110.39
76	SS	19+10.60	11.8 RT	110.84

ITEM NUMBER	TYPE	STATION	OFFSET	RIM ELEVATION
77	ST	19+09.09	14.5 LT	110.75
78	INL	19+21.08	46.0 LT	110.70
79	RC	19+34.48	18.0 LT	111.06
80	INL	20+85.39	73.7 LT	112.01
81	RC	20+94.69	46.0 LT	111.84
82	SS	21+05.74	53.3 LT	111.90
83	RC	21+02.77	28.0 RT	111.38
84	WM	21+14.49	13.6 LT	112.15
85	MH	21+38.99	22.6 LT	112.29
86	SS	21+61.59	27.7 RT	111.61
87	MH	21+73.25	34.9 LT	112.30
88	RC	19+13.56	1.1 LT	110.66

STRUCTURE SUMMARY				
ITEM NUMBER	TYPE	STATION	OFFSET	RIM ELEVATION
50	WM	15+62.55	37.0 LT	110.24
51	WM	15+80.15	42.7 LT	110.30
52	MH	15+86.57	24.5 LT	110.75
53	RR	15+97.54	65.2 LT	110.45
54	ST	16+05.32	64.3 LT	110.49
55	RC	16+05.92	32.7 LT	110.93
56	SS	16+13.51	50.0 LT	110.65
57	WM	16+22.02	60.4 LT	110.41
58	RR	16+25.63	64.5 LT	110.39
59	WM	16+41.39	39.7 LT	110.80
60	INL	16+88.16	0.0 RT	110.76
61	INL	17+00.29	28.0 RT	110.40
62	INL	17+00.36	17.8 LT	110.81
63	INL	17+00.37	46.0 LT	110.46
64	INL	18+12.47	46.0 LT	110.35
65	INL	18+29.60	0.0 RT	110.63

WEST KAUL AVENUE

WEST DOUGLAS AVENUE

SB PGL

NB PGL

48"X96" BOX

36"

15"

REPLACE EXISTING COVER WITH MS-57 AND ADJUST

INLET #2099 RECONSTRUCT EXISTING STRUCTURE IN PROPOSED CURB LINE

COMBINED MANHOLE REPLACE COVER WITH 58A AND ADJUST

LEGEND

- ST — ADJUST STORM MANHOLE
- SS — ADJUST SANITARY MANHOLE
- MH — ADJUST MANHOLE
- RR — REMOVE EXISTING INLET AND CONSTRUCT INLET TYPE 45A WITH TYPE MS-57 COVER
- RC — RECONSTRUCT INLET/MANHOLE
- WM — ADJUST WATER VALVE BOX
- INL — ADJUST INLET COVER

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	STORM SEWER PLAN	SHEET 34 E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020501_SS..DWG PLOT DATE : 2/22/2016 10:24 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- ST — ADJUST STORM MANHOLE
- SS — ADJUST SANITARY MANHOLE
- MH — ADJUST MANHOLE
- RR — REMOVE EXISTING INLET AND CONSTRUCT INLET TYPE 45A WITH TYPE MS-57 COVER
- RC — RECONSTRUCT INLET/MANHOLE
- WM — ADJUST WATER VALVE BOX
- INL — ADJUST INLET COVER

N

SB PGL

NB PGL

WEST BENDER COURT

100 RR
101 WM
102 WM
103 RC
104 ST
105 INL
106 SS
107 RC
108 WM
109 MH
110 RC
111 WM
112 INL
113 INL
114 RC
115 WM
116 SS
117 WM
118 RC
119 INL
120 RC

15" SS
36" SS
42" SS

22 23 24 25 26 27 28

STRUCTURE SUMMARY				
ITEM NUMBER	TYPE	STATION	OFFSET	RIM ELEVATION
100	RR	22+00.55	49.8 LT	111.84
101	WM	22+05.81	48.8 LT	111.87
102	WM	21+93.46	46.4 LT	112.05
103	RC	22+02.33	21.7 LT	112.14
104	ST	21+99.80	8.7 RT	112.28
105	INL	22+03.66	0.0 RT	112.06
106	SS	22+32.45	24.8 RT	112.00
107	WM	24+44.41	34.9 LT	13.89
108	RR	24+87.46	51.6 LT	13.80
109	ST	24+99.19	40.8 LT	114.25

STRUCTURE SUMMARY				
ITEM NUMBER	TYPE	STATION	OFFSET	RIM ELEVATION
110	RC	25+36.67	59.9 RT	112.64
111	WM	25+45.73	64.1 RT	112.56
112	INL	25+71.20	28.0 RT	113.80
113	INL	25+90.95	15.4 LT	113.68
114	RC	25+75.62	53.8 LT	114.31
115	WM	25+79.42	52.9 LT	114.45
116	SS	26+76.76	58.4 LT	115.73
117	WM	27+11.23	52.8 LT	116.17
118	RC	27+24.70	25.9 LT	116.44
119	INL	27+27.70	0.0 RT	116.40
120	RC	25+67.36	1.0 LT	113.89

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	STORM SEWER PLAN	SHEET 35	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020501_SS..DWG PLOT DATE : 2/22/2016 10:24 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

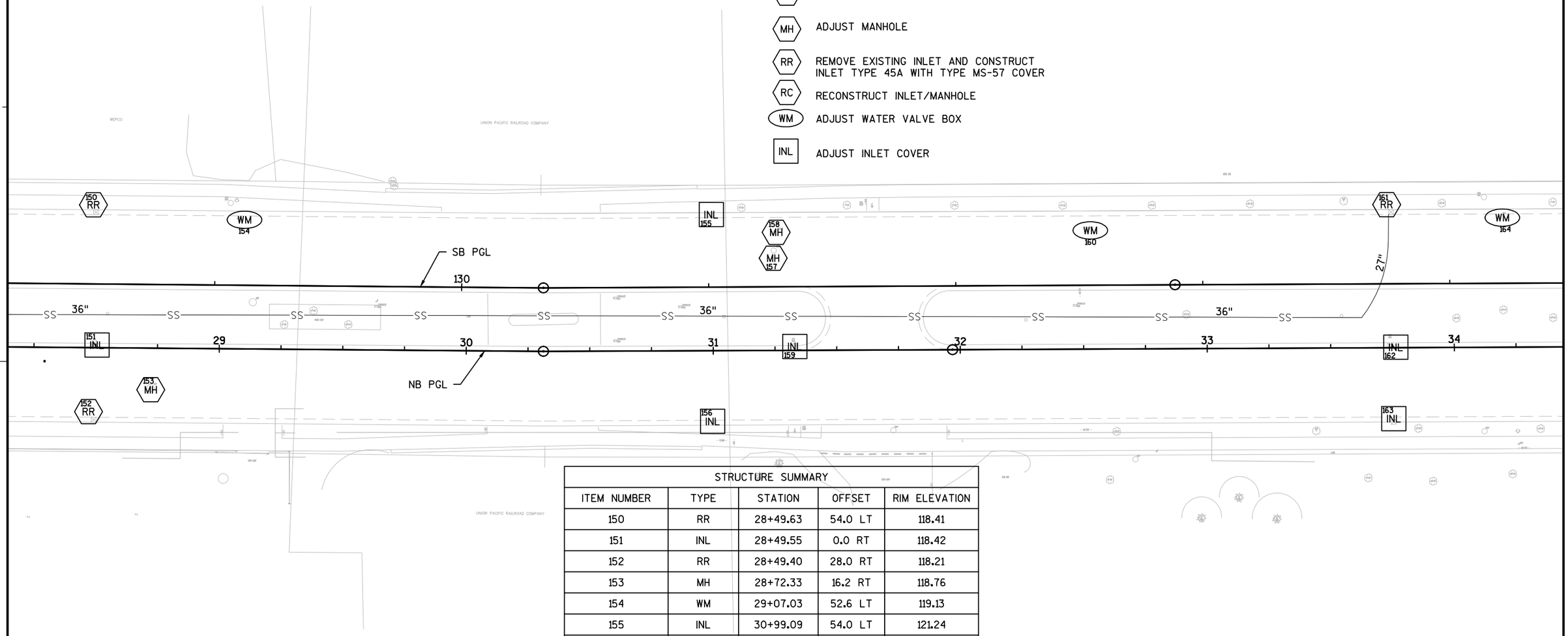
WISDOT/CADDS SHEET 42

2

LEGEND

- ST — ADJUST STORM MANHOLE
- SS — ADJUST SANITARY MANHOLE
- MH — ADJUST MANHOLE
- RR — REMOVE EXISTING INLET AND CONSTRUCT INLET TYPE 45A WITH TYPE MS-57 COVER
- RC — RECONSTRUCT INLET/MANHOLE
- WM — ADJUST WATER VALVE BOX
- INL — ADJUST INLET COVER

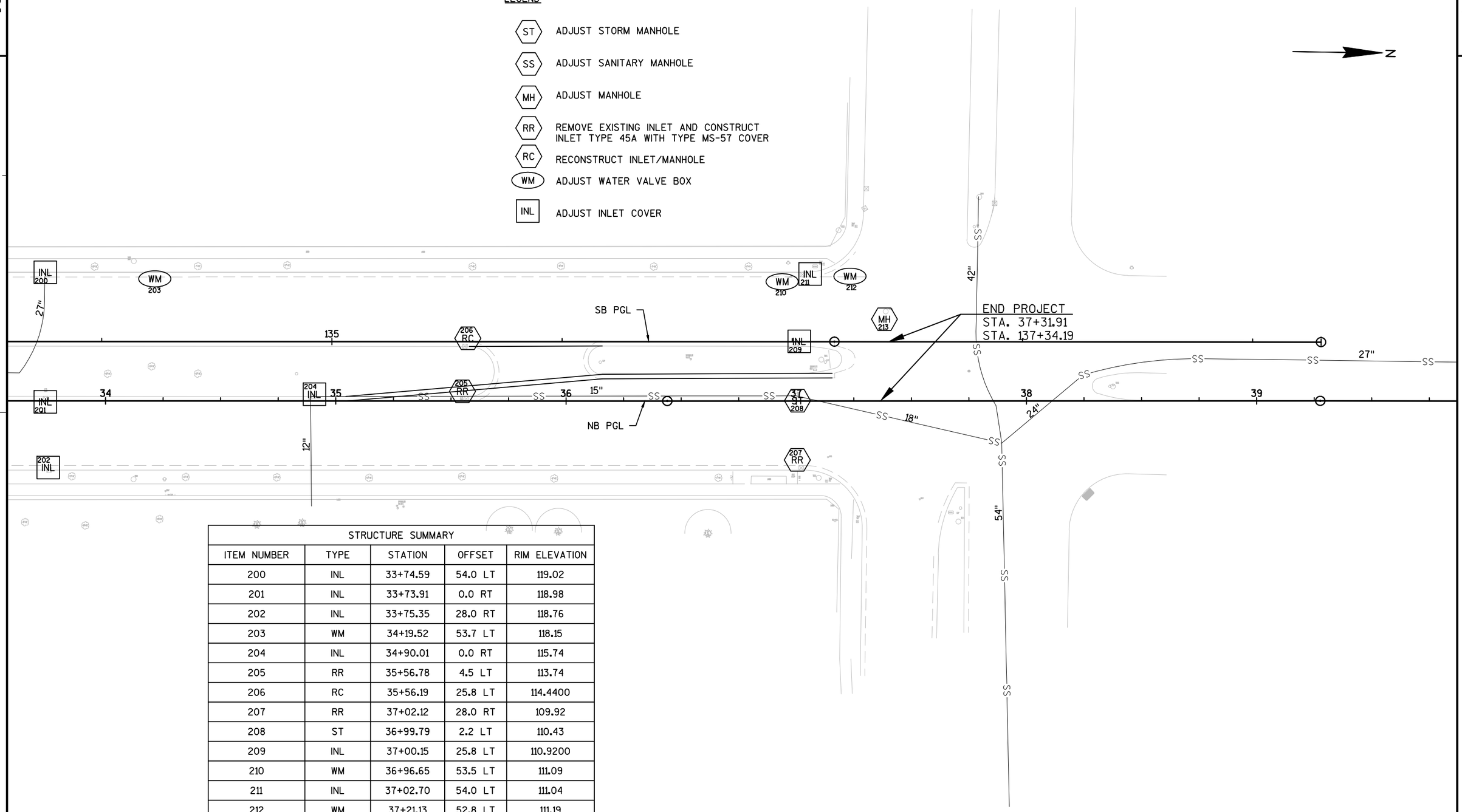
N



STRUCTURE SUMMARY				
ITEM NUMBER	TYPE	STATION	OFFSET	RIM ELEVATION
150	RR	28+49.63	54.0 LT	118.41
151	INL	28+49.55	0.0 RT	118.42
152	RR	28+49.40	28.0 RT	118.21
153	MH	28+72.33	16.2 RT	118.76
154	WM	29+07.03	52.6 LT	119.13
155	INL	30+99.09	54.0 LT	121.24
156	INL	31+00.16	28.1 RT	121.14
157	MH	31+24.67	40.5 LT	121.80
158	MH	31+25.62	47.7 LT	121.59
159	INL	31+33.33	0.0 RT	121.40
160	WM	32+52.40	48.6 LT	121.10
161	RR	33+74.59	54.0 LT	119.32
162	INL	33+73.91	0.0 RT	119.47
163	INL	33+75.35	28.0 RT	119.14
164	WM	34+19.52	53.7 LT	118.61

LEGEND

- ST — ADJUST STORM MANHOLE
- SS — ADJUST SANITARY MANHOLE
- MH — ADJUST MANHOLE
- RR — REMOVE EXISTING INLET AND CONSTRUCT INLET TYPE 45A WITH TYPE MS-57 COVER
- RC — RECONSTRUCT INLET/MANHOLE
- WM — ADJUST WATER VALVE BOX
- INL — ADJUST INLET COVER

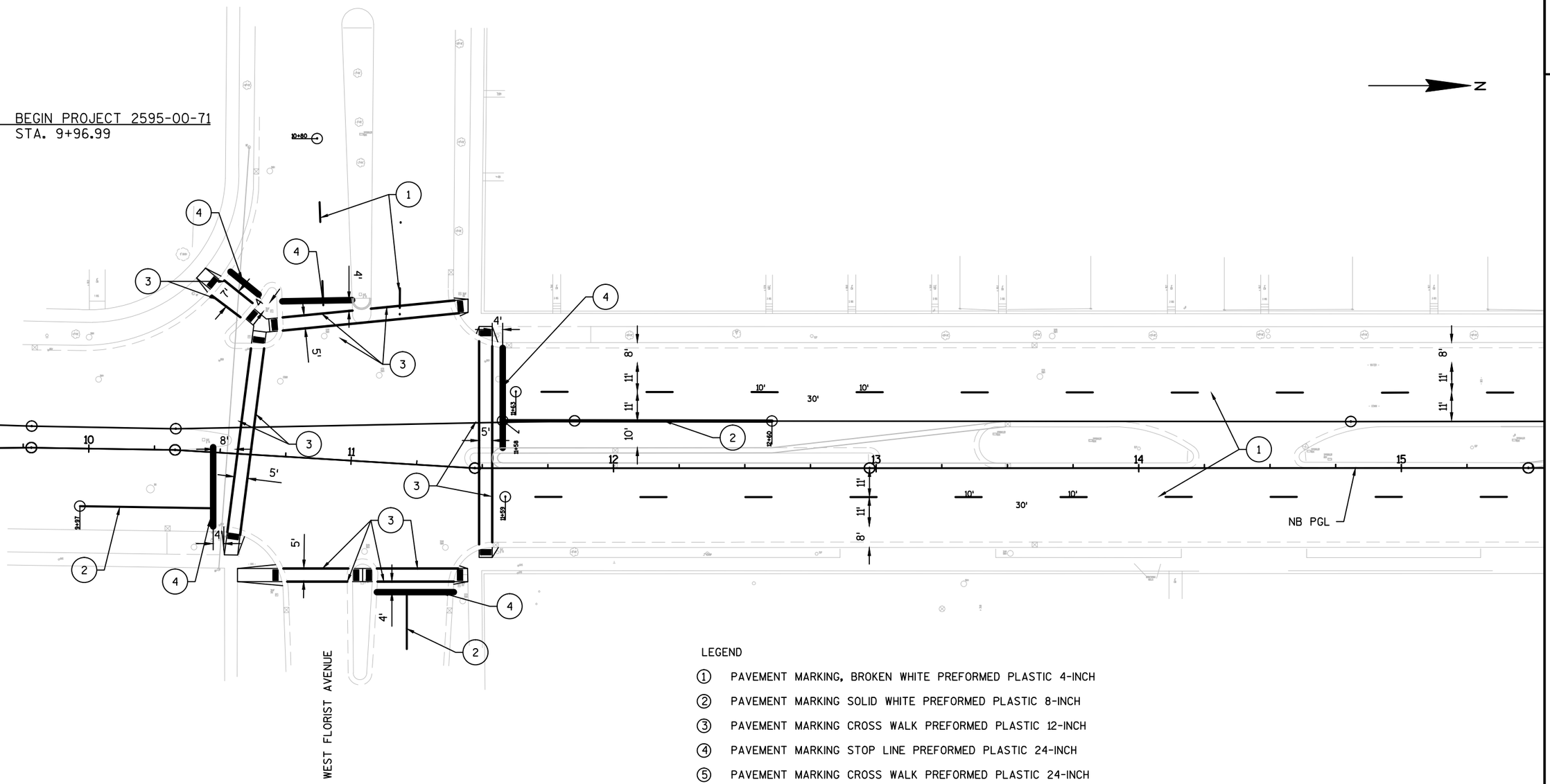


STRUCTURE SUMMARY				
ITEM NUMBER	TYPE	STATION	OFFSET	RIM ELEVATION
200	INL	33+74.59	54.0 LT	119.02
201	INL	33+73.91	0.0 RT	118.98
202	INL	33+75.35	28.0 RT	118.76
203	WM	34+19.52	53.7 LT	118.15
204	INL	34+90.01	0.0 RT	115.74
205	RR	35+56.78	4.5 LT	113.74
206	RC	35+56.19	25.8 LT	114.4400
207	RR	37+02.12	28.0 RT	109.92
208	ST	36+99.79	2.2 LT	110.43
209	INL	37+00.15	25.8 LT	110.9200
210	WM	36+96.65	53.5 LT	111.09
211	INL	37+02.70	54.0 LT	111.04
212	WM	37+21.13	52.8 LT	111.19
213	MH	37+38.87	38.9 LT	110.90

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	STORM SEWER PLAN	SHEET 37	E

2

BEGIN PROJECT 2595-00-71
STA. 9+96.99



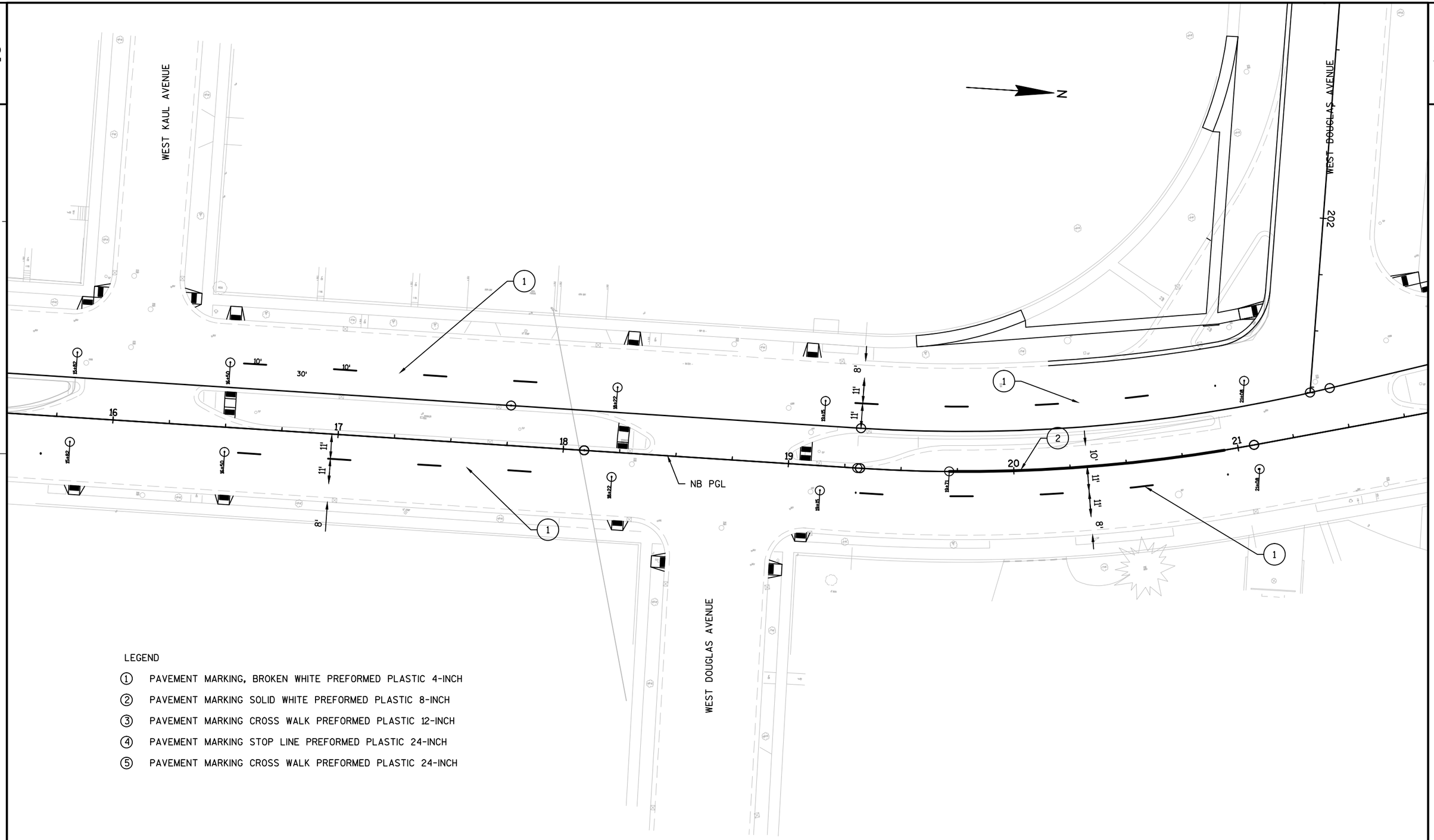
LEGEND

① PAVEMENT MARKING, BROKEN WHITE PREFORMED PLASTIC 4-INCH
② PAVEMENT MARKING SOLID WHITE PREFORMED PLASTIC 8-INCH
③ PAVEMENT MARKING CROSS WALK PREFORMED PLASTIC 12-INCH
④ PAVEMENT MARKING STOP LINE PREFORMED PLASTIC 24-INCH
⑤ PAVEMENT MARKING CROSS WALK PREFORMED PLASTIC 24-INCH

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING PLAN	SHEET 38	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020701_PM.DWG PLOT DATE : 2/22/2016 10:31 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



LEGEND

① PAVEMENT MARKING, BROKEN WHITE PREFORMED PLASTIC 4-INCH

② PAVEMENT MARKING SOLID WHITE PREFORMED PLASTIC 8-INCH

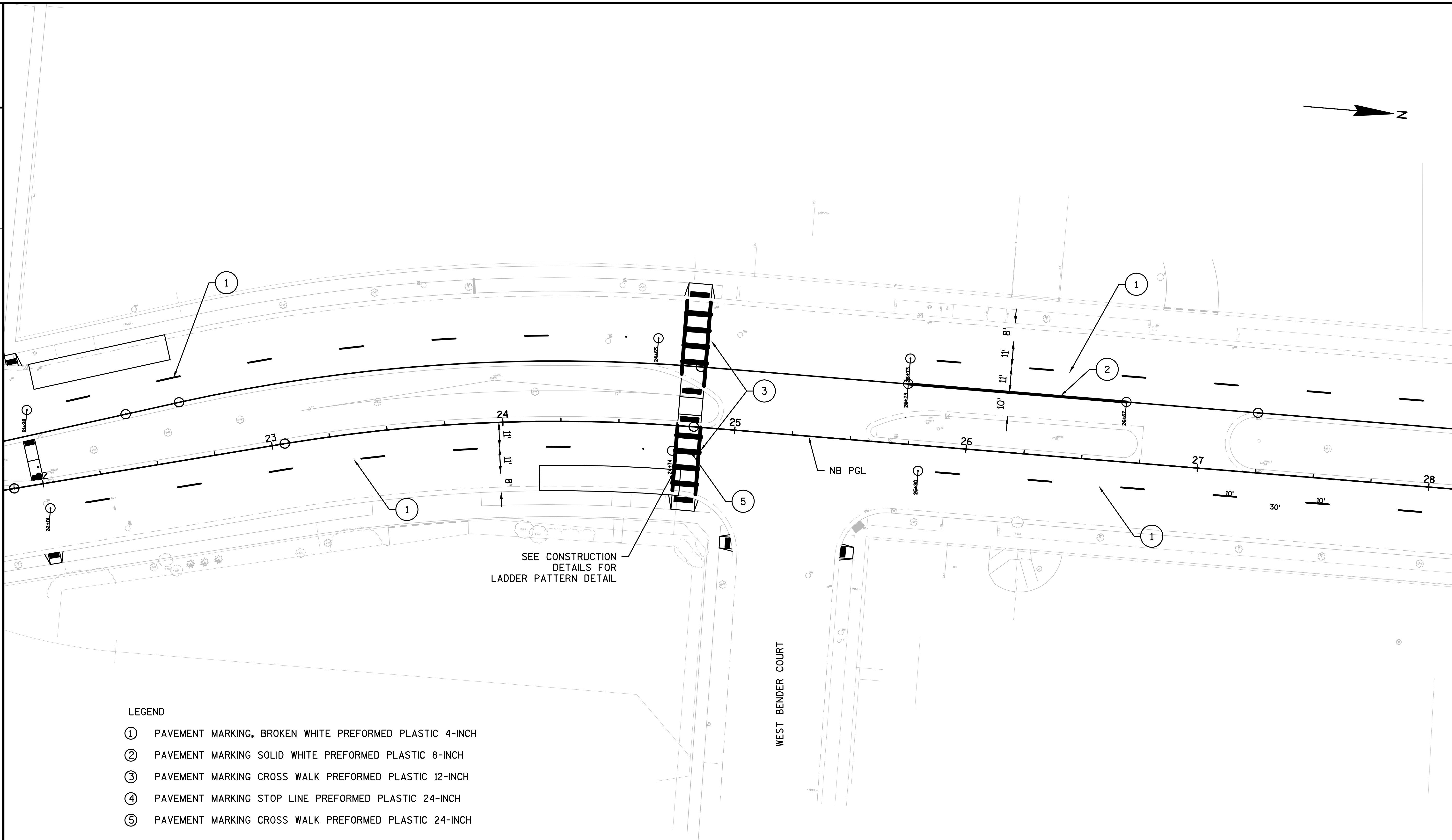
③ PAVEMENT MARKING CROSS WALK PREFORMED PLASTIC 12-INCH

④ PAVEMENT MARKING STOP LINE PREFORMED PLASTIC 24-INCH

⑤ PAVEMENT MARKING CROSS WALK PREFORMED PLASTIC 24-INCH

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING PLAN	SHEET 39	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020701_PM.DWG PLOT DATE : 2/22/2016 10:31 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT



LEGEND

① PAVEMENT MARKING, BROKEN WHITE PREFORMED PLASTIC 4-INCH

② PAVEMENT MARKING SOLID WHITE PREFORMED PLASTIC 8-INCH

③ PAVEMENT MARKING CROSS WALK PREFORMED PLASTIC 12-INCH

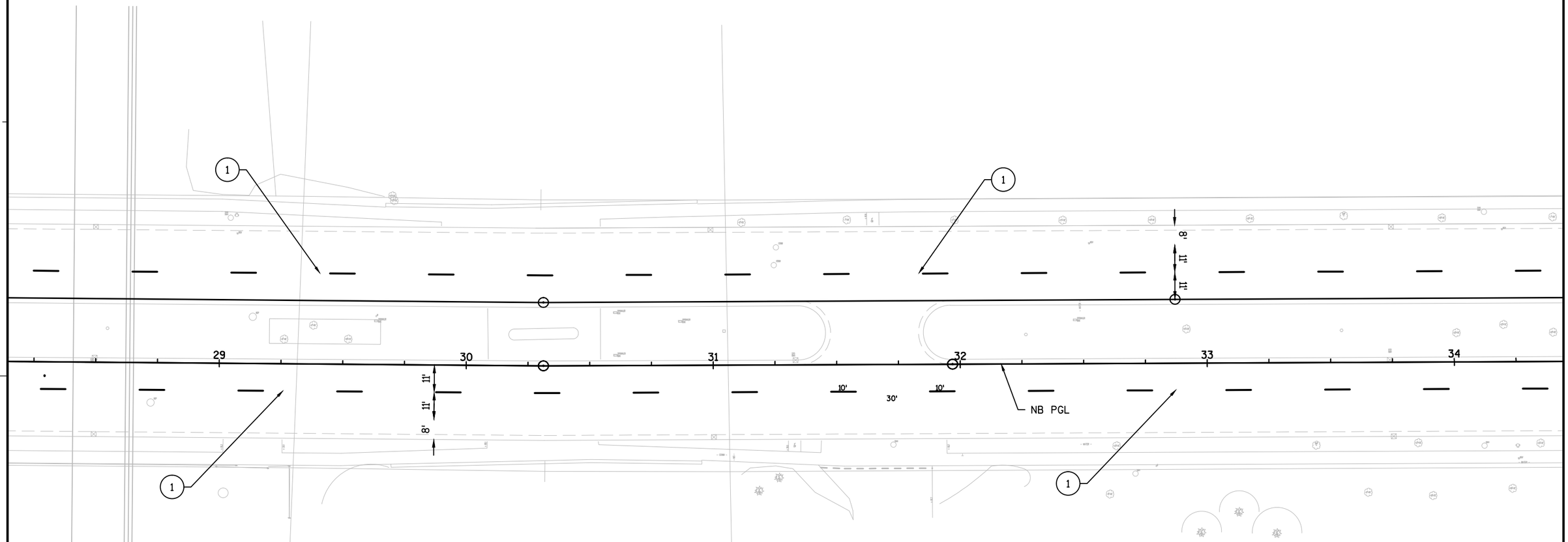
④ PAVEMENT MARKING STOP LINE PREFORMED PLASTIC 24-INCH

⑤ PAVEMENT MARKING CROSS WALK PREFORMED PLASTIC 24-INCH

PROJECT NO:2595-00-71	HWY:NORTH 60TH STREET	COUNTY:MILWAUKEE	PAVEMENT MARKING PLAN	SHEET 40	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020701_PM.DWG PLOT DATE : 2/22/2016 10:31 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



LEGEND

1. PAVEMENT MARKING, BROKEN WHITE PREFORMED PLASTIC 4-INCH
2. PAVEMENT MARKING SOLID WHITE PREFORMED PLASTIC 8-INCH
3. PAVEMENT MARKING CROSS WALK PREFORMED PLASTIC 12-INCH
4. PAVEMENT MARKING STOP LINE PREFORMED PLASTIC 24-INCH
5. PAVEMENT MARKING CROSS WALK PREFORMED PLASTIC 24-INCH

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING PLAN	SHEET 41	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020701_PM.DWG PLOT DATE : 2/22/2016 10:31 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

END PROJECT 2595-00-71
STA. 37+31.91

NB PGL

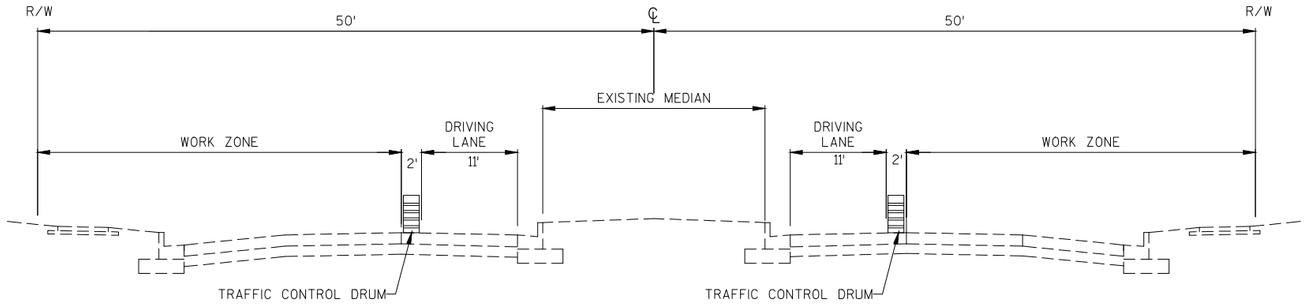
WEST MILL ROAD

LEGEND

1. PAVEMENT MARKING, BROKEN WHITE PREFORMED PLASTIC 4-INCH
2. PAVEMENT MARKING SOLID WHITE PREFORMED PLASTIC 8-INCH
3. PAVEMENT MARKING CROSS WALK PREFORMED PLASTIC 12-INCH
4. PAVEMENT MARKING STOP LINE PREFORMED PLASTIC 24-INCH
5. PAVEMENT MARKING CROSS WALK PREFORMED PLASTIC 24-INCH

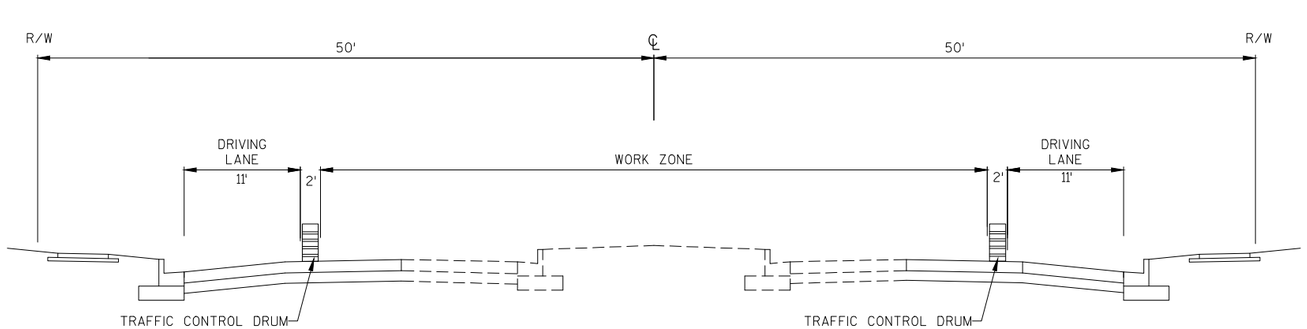
PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING PLAN	SHEET 42	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020701_PM.DWG PLOT DATE : 2/22/2016 10:31 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT



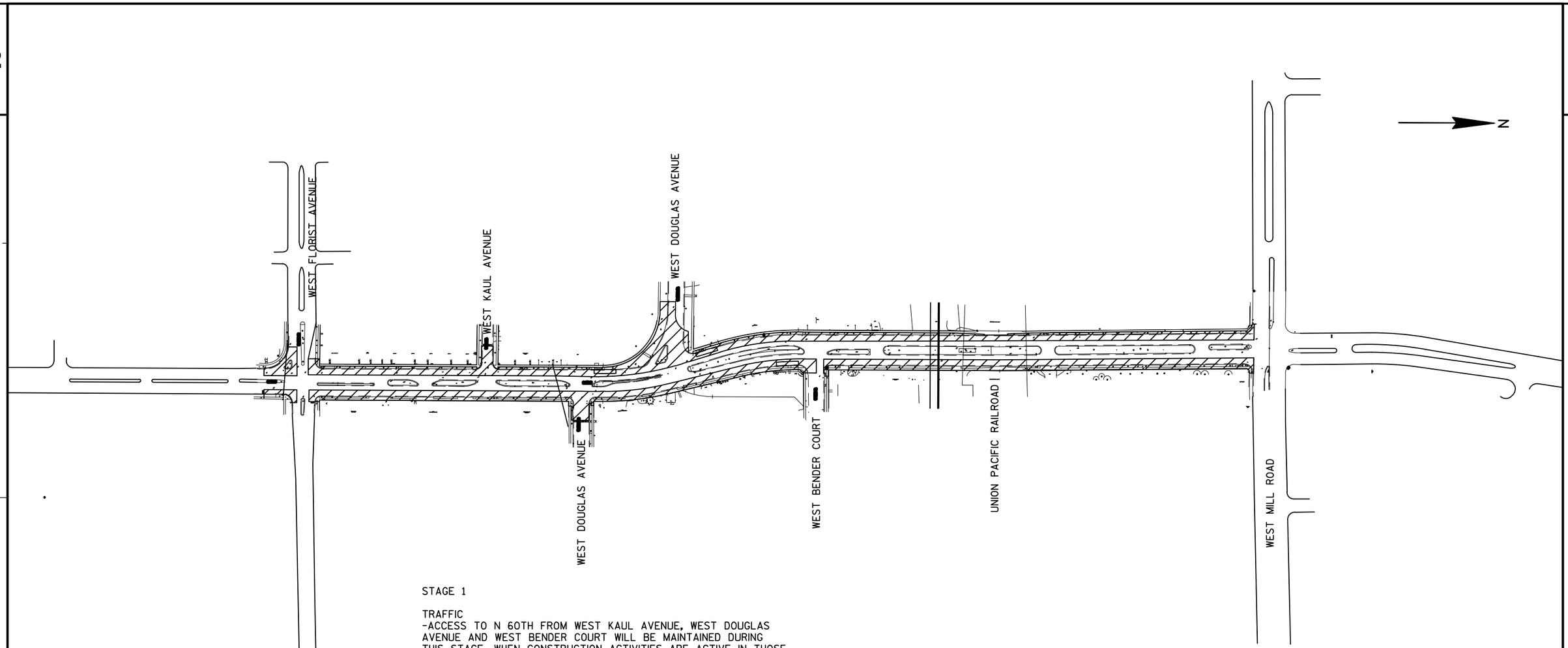
CONSTRUCTION TYPICAL - STAGE 1

CONSTRUCT OUTSIDE LANE, SHOULDER AND SIDEWALK
STA. 9+96.99 TO STA. 37+31.91 NORTHBOUND
STA. 109+76.96 TO STA. 137+34.19 SOUTHBOUND



CONSTRUCTION TYPICAL - STAGE 2

CONSTRUCT INSIDE LANE
STA. 9+96.99 TO STA. 37+31.91 NORTHBOUND
STA. 109+76.96 TO STA. 137+34.19 SOUTHBOUND



STAGE 1

TRAFFIC
-ACCESS TO N 60TH FROM WEST KAUL AVENUE, WEST DOUGLAS AVENUE AND WEST BENDER COURT WILL BE MAINTAINED DURING THIS STAGE. WHEN CONSTRUCTION ACTIVITIES ARE ACTIVE IN THOSE LOCATIONS THE CONTRACTOR WILL BE RESPONSIBLE FOR FLAGGING OPERATIONS.
-SINGLE LANE CLOSURE ON BOTH THE EAST AND WEST LEGS OF WEST FLORIST AVENUE
-SINGLE LANE CLOSURE BOTH NORTHBOUND AND SOUTHBOUND NORTH 60TH STREET
-SHOULDER CLOSURE ALONG EASTBOUND WEST MILL ROAD
-A DETOUR WILL BE PLACED STARTING SOUTH OF FLORIST AND AT MILL TO ROUTE PEDESTRIAN TRAFFIC AROUND THE PROJECT AREA.
-INDIVIDUAL SIDEWALK CLOSURES FOR RAMP CONSTRUCTION WILL BE SIGNED AS SHOWN IN DETAIL.

CONSTRUCTION
-REPLACE CURB AND GUTTER ALONG OUTSIDE OF NORTH 60TH STREET
-REPLACE INLETS ALONG OUTSIDE SHOULDER OF NORTH 60TH STREET
-INSTALL BUS STOP PADS
-PAVE BASE LAYER TO OUTSIDE LANE AND SHOULDER AREA
-REMOVE AND REPLACE EXISTING SIDEWALK, DISTURBED SIDEWALK MUST HAVE TEMPORARY ACCOMMODATIONS PLACED IMMEDIATELY AFTER BEING DISTURBED.
- CONSTRUCT PEDESTRIAN CURB RAMPS ACCORDING TO DETAILS ANND IN THE ORDER SHOWN ON CONSTRUCTION STAGING: PEDESTRIAN RAMPS

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1 OVERVIEW	SHEET 44	E

2

2

N

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

500'

NORTH 60TH STREET

5

2' TYP

700'

700'

350'

245'
TAPER LENGTH

W01-6
48"X24"

ROAD
WORK
AHEAD
W20-1

RIGHT LANE
CLOSED
AHEAD
W20-5

W04-2R

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1 MAINLINE	SHEET 45	E

2

SEE SIDE ROAD STAGING DETAILS FOR ADDITIONAL INFORMATION

WEST FLORIST AVENUE

N

LANE CLOSED
R11-2(MOD)
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

100'
BUFFER ZONE

NORTH 60TH STREET

10

11'

10'

11'

11'

120'
BUFFER ZONE

LANE CLOSED
R11-2(MOD)
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

10

LANE CLOSED
R11-2(MOD)
48" X 30"

SEE SIDE ROAD STAGING DETAILS FOR ADDITIONAL INFORMATION

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1 MAINLINE	SHEET 46	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020412_CS.DWG PLOT DATE : 2/22/2016 10:48 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

WEST KAUL AVENUE

LANE CLOSED
R11-2(MOD)
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

#6047-79

#6053-55

#6105-07-11-13
4 FAMILY

#6143

#6030
DE FABRICATION

#5901 W DOUGLAS AVE
SUPERCARPET

#6140
CHILDRENS KNOWLEDGE CENTER

WEST DOUGLAS AVENUE

11'

11'

15

20

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1 MAINLINE	SHEET 47	E

SEE SIDE ROAD STAGING DETAILS FOR ADDITIONAL INFORMATION

WEST DOUGLAS AVENUE

N

25

10'

11'

11'

LANE CLOSED
R11-2(MOD)
48" X 30"

WEST BENDER COURT

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1 MAINLINE	SHEET 48	E

2

2

N

WEPCO

UNION PACIFIC RAILROAD COMPANY

11'

11'

30

NORTH 60TH STREET

9920 W BENDER CT
CULLIGAN

UNION PACIFIC RAILROAD COMPANY

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1 MAINLINE	SHEET 49	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020412_CS.DWG PLOT DATE : 2/22/2016 10:48 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

SEE SIDE ROAD STAGING DETAILS FOR ADDITIONAL INFORMATION

LANE CLOSED
R11-2(MOD)
48" X 30"

11'

35

NORTH 60TH STREET

10'

11'

105

N

LANE CLOSED
R11-2(MOD)
48" X 30"

120'
BUFFER ZONE

NORTH 60TH STREET

500'

WEST MILL ROAD

LEGEND

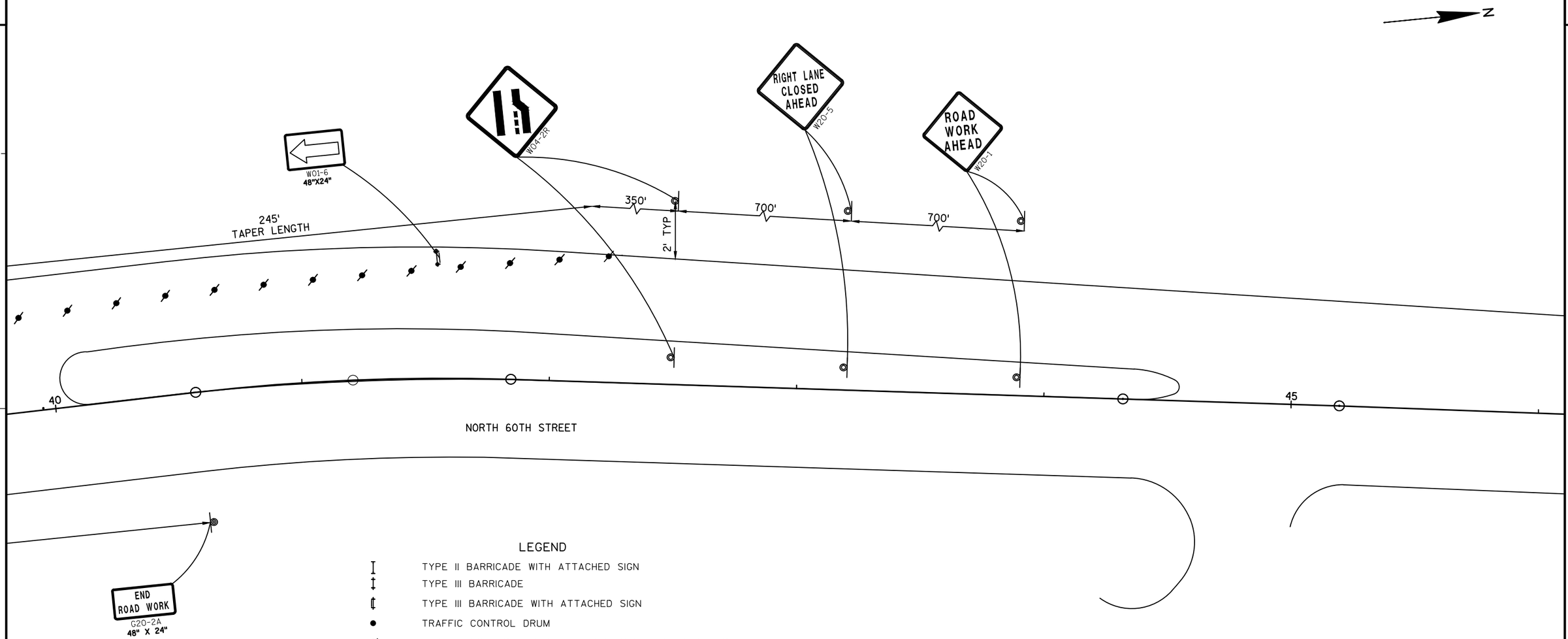
- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1 MAINLINE	SHEET 50	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020412_CS.DWG PLOT DATE : 2/22/2016 10:48 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

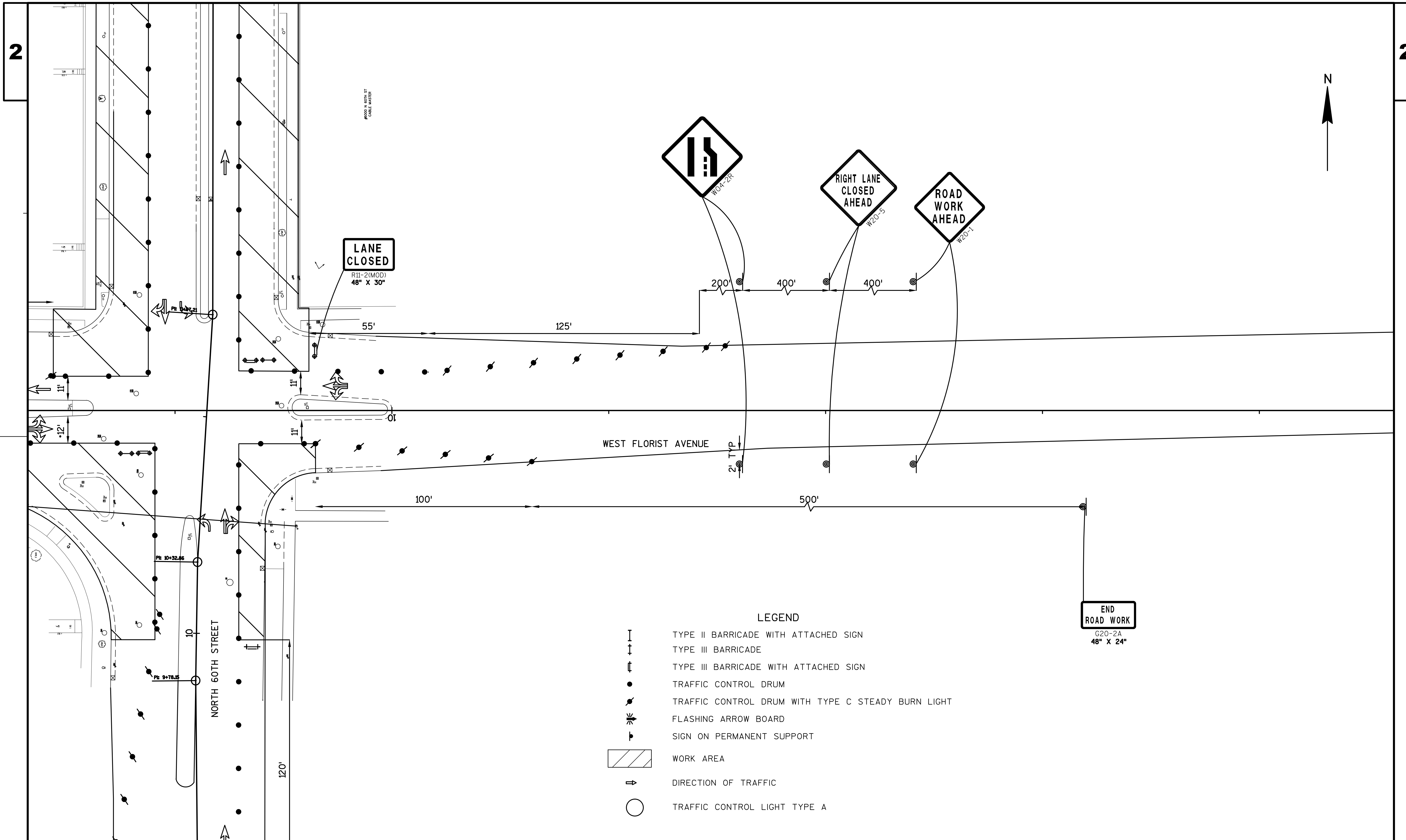
2



LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1 MAINLINE	SHEET 51	E



2
N
LANE CLOSED
R11-2(MOD)
48" X 30"
W04-2R
RIGHT LANE CLOSED AHEAD
W20-5
ROAD WORK AHEAD
W20-1
200'
400'
400'
55'
125'
11'
12'
WEST FLORIST AVENUE
2' TYP
100'
500'
END ROAD WORK
G20-2A
48" X 24"
NORTH 60TH STREET
120'
LEGEND
TYPE II BARRICADE WITH ATTACHED SIGN
TYPE III BARRICADE
TYPE III BARRICADE WITH ATTACHED SIGN
TRAFFIC CONTROL DRUM
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
FLASHING ARROW BOARD
SIGN ON PERMANENT SUPPORT
WORK AREA
DIRECTION OF TRAFFIC
TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO:2595-00-71	HWY:NORTH 60TH STREET	COUNTY:MILWAUKEE	CONSTRUCTION STAGING: STAGE 1 FLORIST AVENUE	SHEET 52	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020413_CS.DWG PLOT DATE : 2/22/2016 10:48 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

WEST FLORIST AVENUE

WEST FLORIST AVE

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

500'

100'

11'

12'

66'

125'

2' TYP

400'

400'

200'

ROAD
WORK
AHEAD
W20-1

RIGHT LANE
CLOSED
AHEAD
W20-5

W04-2R

LANE
CLOSED
R11-2(MOD)
48" X 30"

Pt 10+3

Pt 9+78

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1 FLORIST AVENUE	SHEET 53	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020413_CS.DWG PLOT DATE : 2/22/2016 10:48 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

N

PI: 39+27.64

105

WEST MILL ROAD

1600' 2' TYP 1000' 500' 200' 500'

ROAD WORK AHEAD W20-1

RIGHT SHOULDER CLOSED AHEAD W21-5b

RIGHT SHOULDER CLOSED W21-5a

PI: 36+48.04

NORTH 60TH STREET

500'

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

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1 MILL ROAD	SHEET 54	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020413_CS.DWG PLOT DATE : 2/22/2016 10:48 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

WEST DOUGLAS AVENUE

BPT 200+00.00

EPT 202+77.53

PC 23+05.60

PT 21+07.21

PC 21+87.42

18'

13'

1600'

1000'

500'

200'

500'

2' TYP

ROAD WORK AHEAD
W20-1

RIGHT SHOULDER CLOSED AHEAD
W21-5b

RIGHT SHOULDER CLOSED
W21-5a

LANE CLOSED
R11-2(MOD)
48" X 30"

N

20'

2

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1 WEST DOUGLAS AVENUE	SHEET 55	E

2

2

N

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

500'

NORTH 60TH STREET

5

2' (TYP)

700'

700'

350'

245'
TAPER LENGTH

W01-6
48"X24"

ROAD
WORK
AHEAD
W20-1

RIGHT LANE
CLOSED
AHEAD
W20-5

W04-2R

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1B MAINLINE	SHEET 56	E

2

2

SEE SIDE ROAD STAGING
DETAILS FOR ADDITIONAL
INFORMATION

N

WEST FLORIST AVENUE

LANE CLOSED
R11-2(MOD)
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

100'
BUFFER ZONE

NORTH 60TH STREET

10

11'

10'

11'

11'

120'
BUFFER ZONE

LANE CLOSED
R11-2(MOD)
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

10

#6008 N FLORIST AVE

#6021
4 FAMILY

#6027-29

#6033-35

#6039-4

#6000 N 60TH ST
CABLE MASTER

CUTTING

SEE SIDE ROAD STAGING
DETAILS FOR ADDITIONAL
INFORMATION

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1B MAINLINE	SHEET 57	E

2

2

N

WEST KAUL AVENUE

LANE CLOSED
R11-2(MOD)
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

11'

11'

15

20

#6047-79

#6053-55

#6105-07-11-13
4 FAMILY

#6143

#6030
DE FABRICATION

#5901 W DOUGLAS AVE
SUPERCARPET

#6140
CHILDRENS KNOWLEDGE CENTER

WEST DOUGLAS AVENUE

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1B MAINLINE	SHEET 58	E

SEE SIDE ROAD STAGING DETAILS FOR ADDITIONAL INFORMATION

WEST DOUGLAS AVENUE

N

25

10'

11'

11'

LANE CLOSED
R11-2(MOD)
48" X 30"

WEST BENDER COURT

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1B MAINLINE	SHEET 59 E

2

2

N

WEPCO

UNION PACIFIC RAILROAD COMPANY

11'

11'

30

NORTH 60TH STREET

#5920 W BENDER CT
CULLIGAN

UNION PACIFIC RAILROAD COMPANY

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1B MAINLINE	SHEET 60	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020412_CSB.DWG PLOT DATE : 2/22/2016 10:49 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

SEE SIDE ROAD STAGING DETAILS FOR ADDITIONAL INFORMATION

LANE CLOSED
R11-2(MOD)
48" X 30"

11'

35

NORTH 60TH STREET

10'

11'

11'

105

N

LANE CLOSED
R11-2(MOD)
48" X 30"

120'
BUFFER ZONE

NORTH 60TH STREET

500'

WEST MILL ROAD

LEGEND

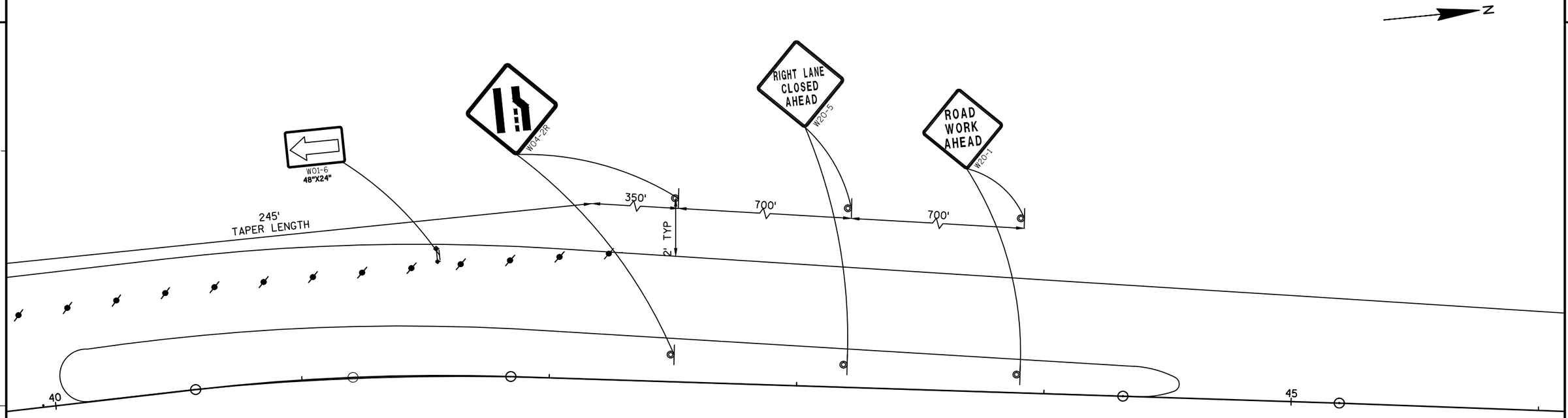
- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1B MAINLINE	SHEET	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020412_CSB.DWG PLOT DATE : 2/22/2016 10:49 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1B MAINLINE	SHEET 62	E

2

N

LANE CLOSED
R11-2(MOD)
48" X 30"

W04-2R

RIGHT LANE CLOSED AHEAD
W20-5

ROAD WORK AHEAD
W20-1

200'

400'

400'

WEST FLORIST AVENUE

18'

55'

16'

55'

125'

55'

13'

11'

2' TYP

150'

500'

LANE CLOSED
R11-2(MOD)
48" X 30"

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

NORTH 60TH STREET

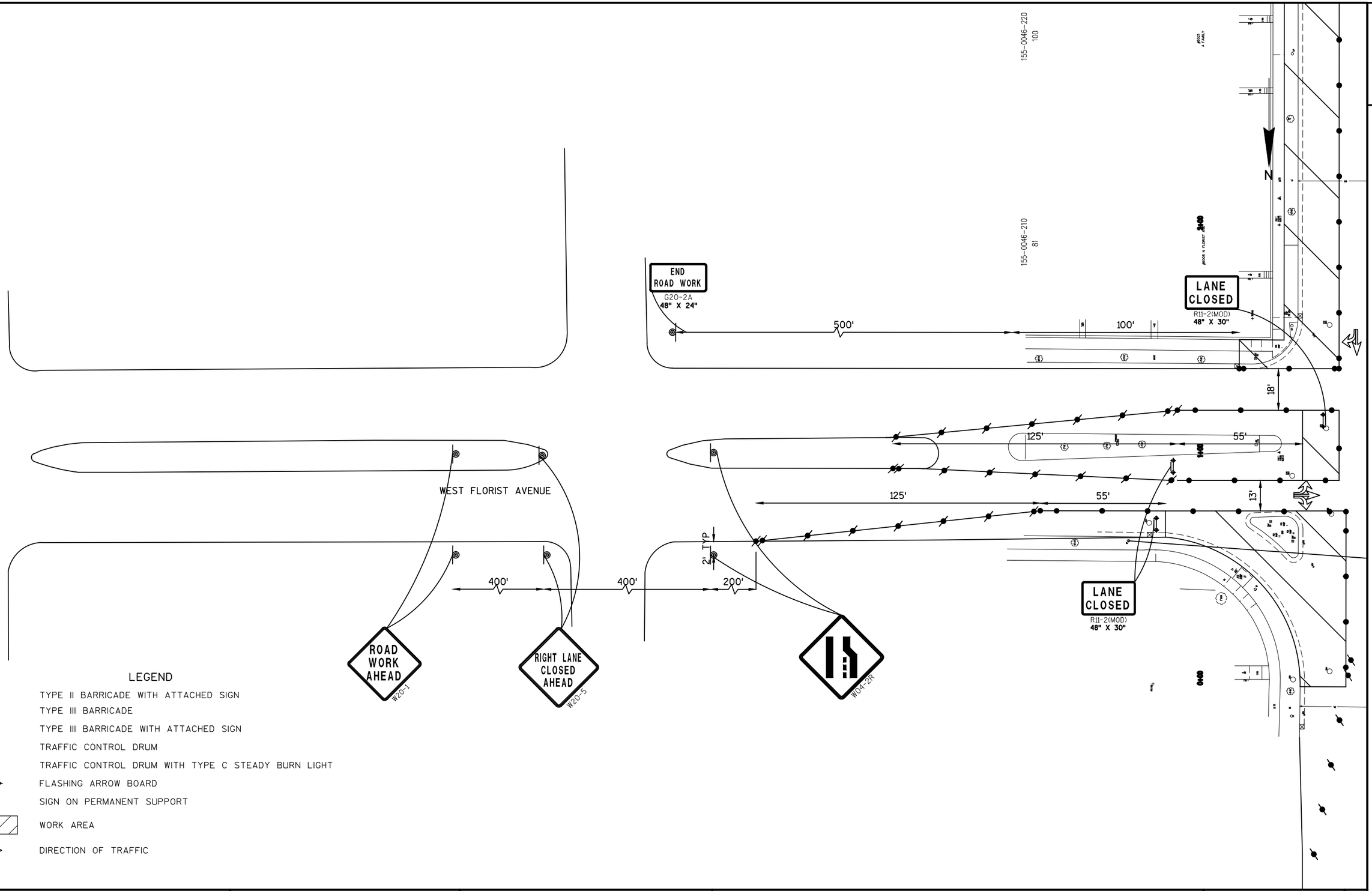
120'

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1B FLORIST AVENUE	SHEET 63 E

2



LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1B FLORIST AVENUE	SHEET 64	E

2

2

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

N

WEST MILL ROAD

NORTH 60TH STREET

1600' 1000' 2' TYP 500' 200' 500'

500'

ROAD WORK AHEAD
W20-1

RIGHT SHOULDER CLOSED AHEAD
W21-5b

RIGHT SHOULDER CLOSED
W21-5a

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

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1B MILL ROAD	SHEET	E

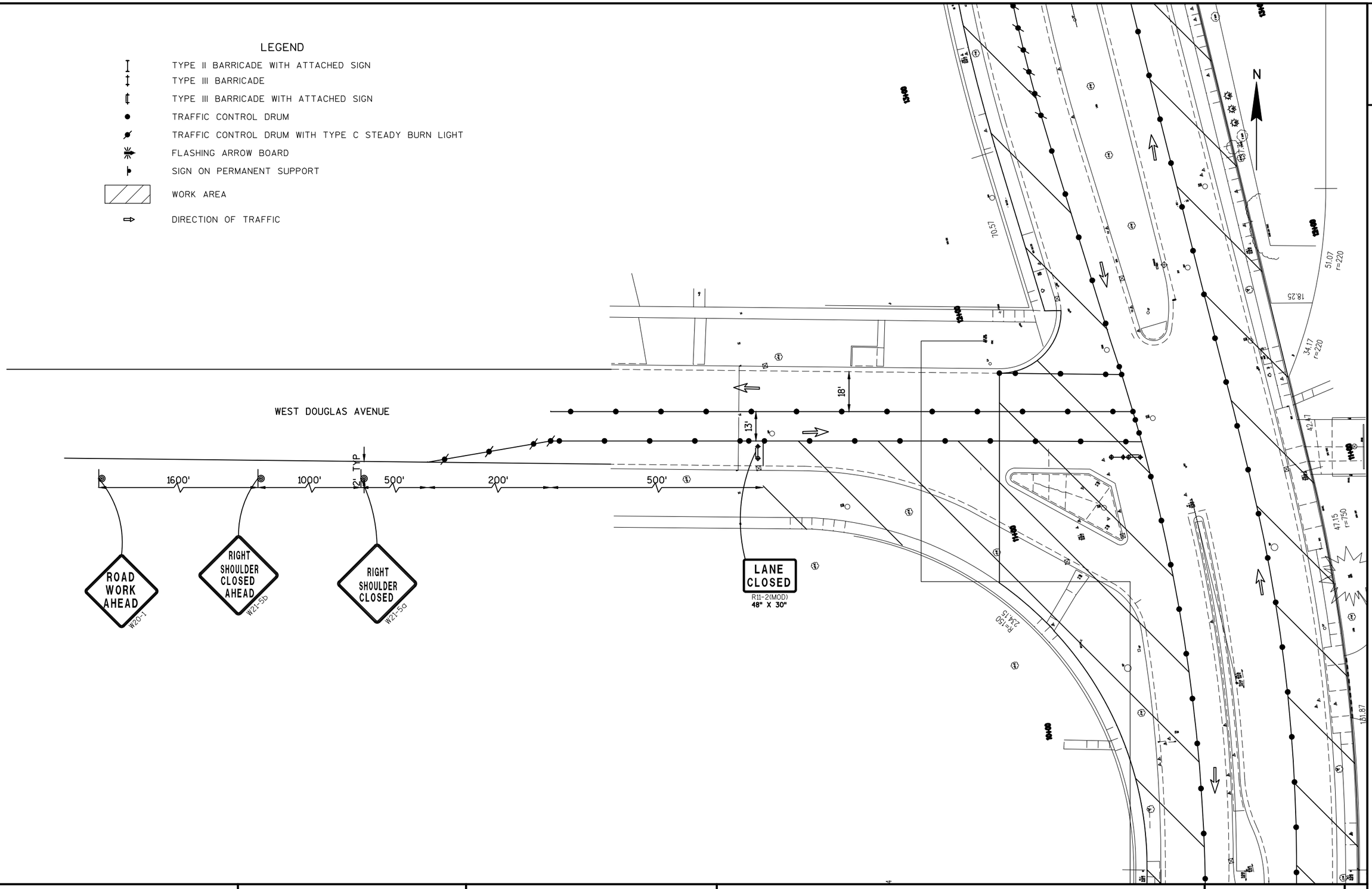
FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020413_CSB.DWG PLOT DATE : 2/22/2016 10:49 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

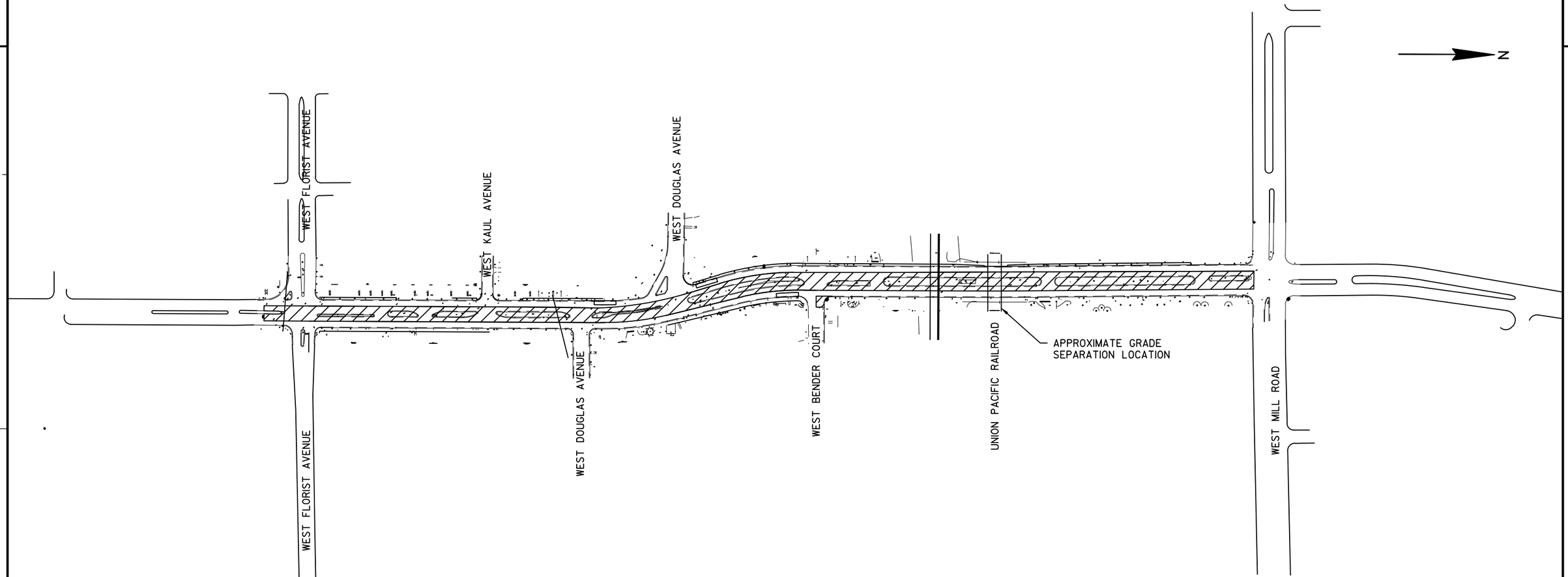


PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 1B WEST DOUGLAS AVENUE	SHEET 66 E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020413_CSB.DWG PLOT DATE : 2/22/2016 10:49 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



STAGE 2

TRAFFIC
-RIGHT TURN ONLY ACCESS TO NORTH 60TH STREET FROM KAUL AVENUE, DOUGLAS AVENUE, FLORIST AVENUE AND BENDER COURT
-SINGLE LANE CLOSURE ON BOTH THE EAST AND WEST LEGS OF WEST FLORIST AVENUE
-SINGLE LANE CLOSURE BOTH NORTHBOUND AND SOUTHBOUND NORTH 60TH STREET
-SHOULDER CLOSURE ALONG EASTBOUND WEST MILL ROAD
-A DETOUR WILL BE PLACED STARTING SOUTH OF FLORIST AND AT MILL TO ROUTE PEDESTRIAN TRAFFIC AROUND THE PROJECT AREA.
-INDIVIDUAL SIDEWALK CLOSURES FOR RAMP CONSTRUCTION WILL BE SIGNED AS SHOWN IN DETAIL.

CONSTRUCTION
-REPLACE CURB AND GUTTER ALONG MEDIANS OF NORTH 60TH STREET
-REPLACE INLETS ALONG INSIDE SHOULDER OF NORTH 60TH STREET
-MILL INSIDE LANE ALONG NORTH 60TH STREET
-OVERLAY INSIDE LANE

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 2 OVERVIEW	SHEET 67	E

2

N

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

500'

NORTH 60TH STREET

3 4 5 6 7 8

700' 700' 350' 245'
TAPER LENGTH

2' TYP

ROAD WORK AHEAD
W20-1

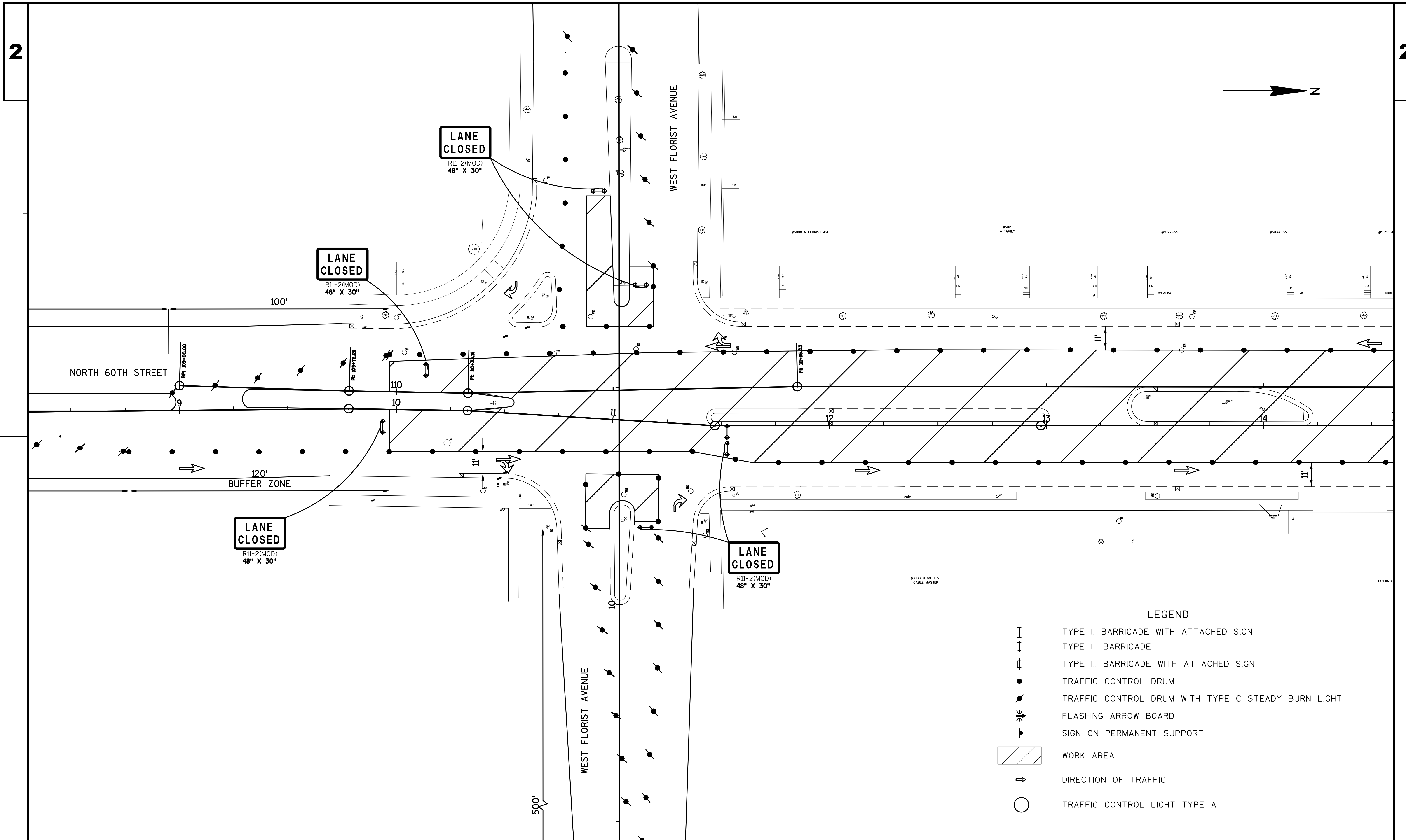
LEFT LANE CLOSED AHEAD
W20-5L

W04-2L

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 2 MAINLINE	SHEET 68	E



2
2
N
LANE CLOSED
R11-2(MOD)
48" X 30"
LANE CLOSED
R11-2(MOD)
48" X 30"
LANE CLOSED
R11-2(MOD)
48" X 30"
LANE CLOSED
R11-2(MOD)
48" X 30"
WEST FLORIST AVENUE
WEST FLORIST AVENUE
NORTH 60TH STREET
100'
120'
BUFFER ZONE
500'
11'
11'
11'
11'
LEGEND
TYPE II BARRICADE WITH ATTACHED SIGN
TYPE III BARRICADE
TYPE III BARRICADE WITH ATTACHED SIGN
TRAFFIC CONTROL DRUM
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
FLASHING ARROW BOARD
SIGN ON PERMANENT SUPPORT
WORK AREA
DIRECTION OF TRAFFIC
TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO:2595-00-71	HWY:NORTH 60TH STREET	COUNTY:MILWAUKEE	CONSTRUCTION STAGING: STAGE 2 MAINLINE	SHEET 69	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020422_CS.DWG PLOT DATE : 2/22/2016 10:49 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

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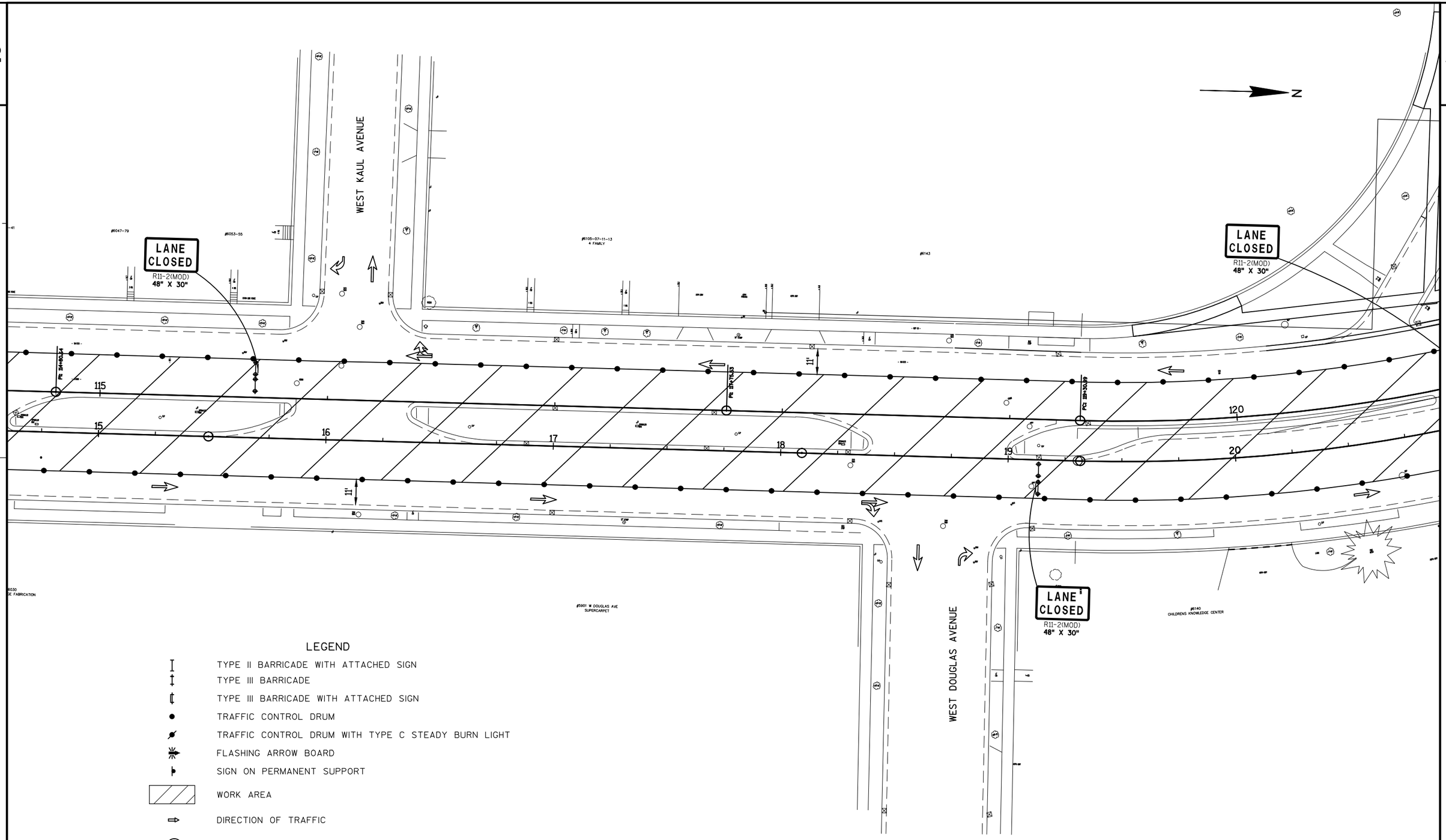


LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 2 MAINLINE	SHEET 70	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020422_CS.DWG PLOT DATE : 2/22/2016 10:49 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

WEST DOUGLAS AVENUE

WEST BENDER COURT

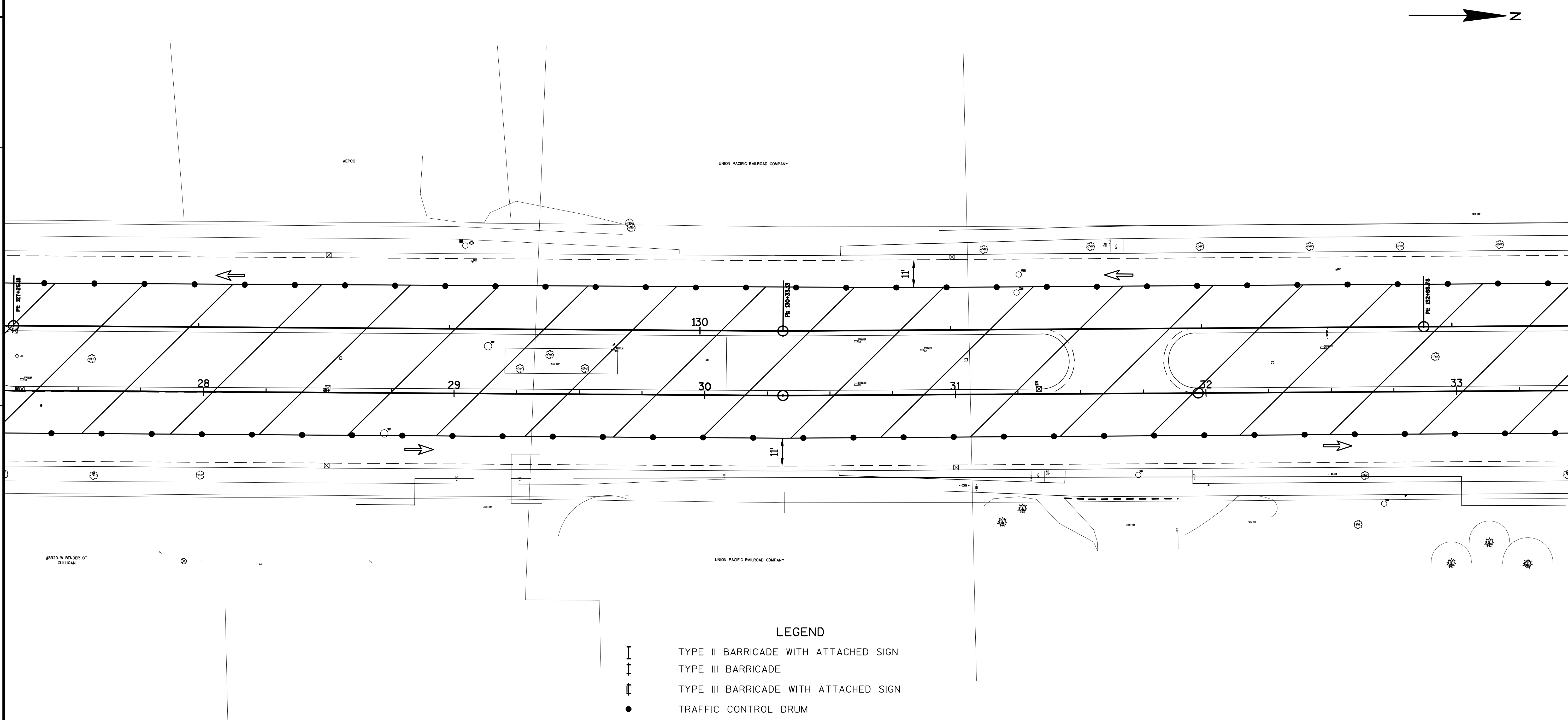
LANE CLOSED
R11-2(MOD)
48" X 30"

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 2 MAINLINE	SHEET 71	E

2



LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO:2595-00-71	HWY:NORTH 60TH STREET	COUNTY:MILWAUKEE	CONSTRUCTION STAGING: STAGE 2 MAINLINE	SHEET 72	E

2

N

LANE CLOSED
R11-2(MOD)
48" X 30"

11'

11'

16'

15'

135

34

35

36

37

38

39

105

500'

WEST MILL ROAD

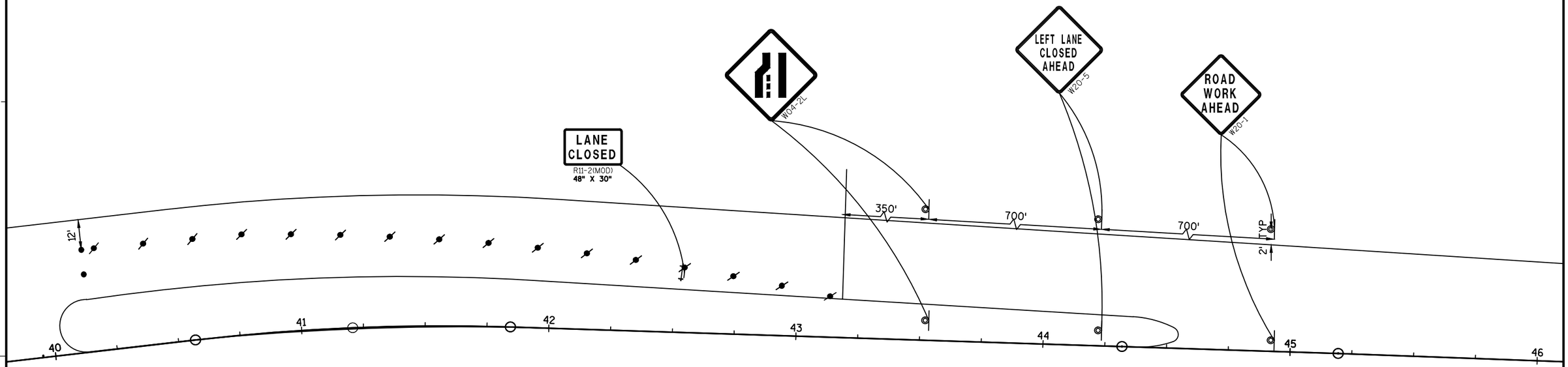
LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 2 MAINLINE	SHEET 73	E

2

N



LEGEND

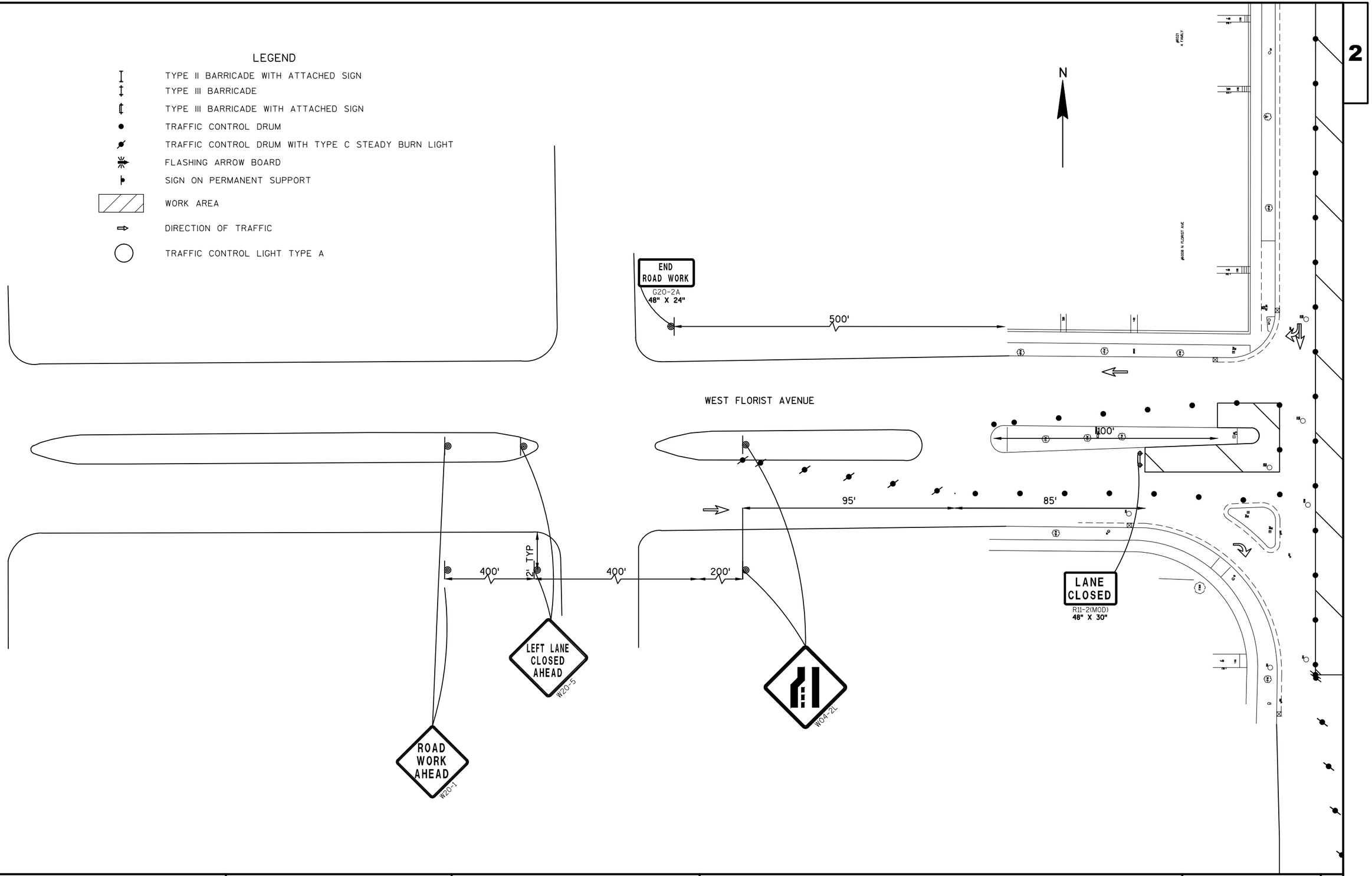
- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 2 MAINLINE	SHEET 74	E

2

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A



PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 2 FLORIST AVENUE	SHEET 75	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020423_CS .DWG PLOT DATE : 2/22/2016 10:50 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

LANE CLOSED
R11-2(MOD)
48" X 30"

W04-2L

LEFT LANE CLOSED AHEAD
W20-5

ROAD WORK AHEAD
W20-1

200'
400'
400'
2' TYP

85'
95'

55'

WEST FLORIST AVENUE

500'

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

NORTH 60TH STREET

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL LIGHT TYPE A

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 2 FLORIST AVENUE	SHEET 76	E

2

2

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

N

WEST MILL ROAD

1600'

1000'

500'

200'

2' TYP

500'

500'

ROAD WORK AHEAD
W20-1

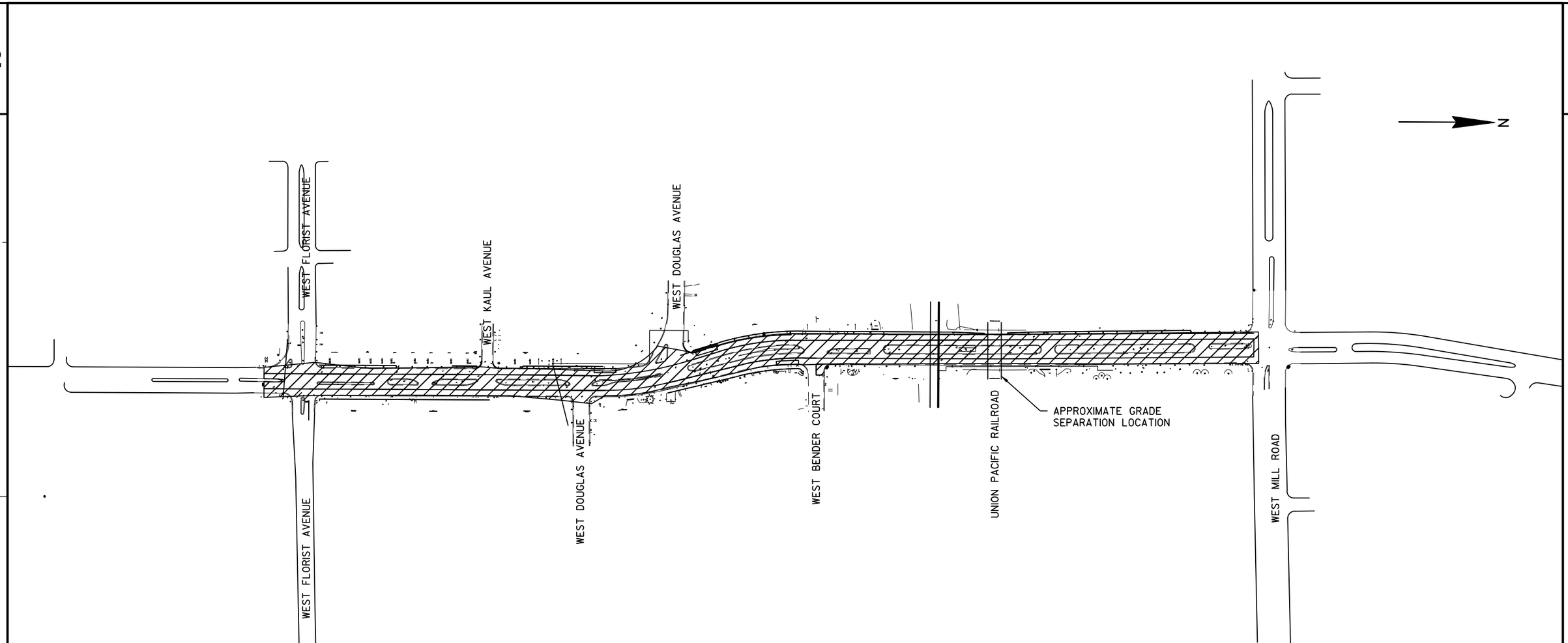
RIGHT SHOULDER CLOSED AHEAD
W21-5b

RIGHT SHOULDER CLOSED
W21-5a

END ROAD WORK
C20-2A
48" X 24"

NORTH 60TH STREET

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 2 MILL ROAD	SHEET 77 E



STAGE 3

TRAFFIC
-BOTH LANES OF THE ROADWAY WILL BE OPEN TO TRAFFIC. TEMPORARY LANE CLOSURES WILL BE NECESSARY AS THE PAVING AND PAINTING TO BE COMPLETED IN THIS STAGE WILL BE DONE UNDER TRAFFIC.
-TRAFFIC CONTROL DURING THIS STAGE WILL BE THE RESPONSIBILITY OF THE CONTRACTOR, SINGLE LANE CLOSURES FOR PAVING AND PAINTING MAY BE COMPLETED USING TRAFFIC CONTROL AS SHOWN IN SDD 15d20 AND 15c9, FLAGGING OPERATIONS OR A COMBINATION OF BOTH

CONSTRUCTION
-PAVE SURFACE HMA LAYER
-PAVEMENT MARKING

LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: STAGE 3 OVERVIEW	SHEET 78	E

PEDESTRIAN TRAFFIC CONTROL NOTES:

GENERAL

ALL PEDESTRIAN TRAFFIC CONTROL MUST BE PLACED PRIOR TO THE START OF ANY SIDEWALK WORK FOR EACH STAGE.

ANY MID-BLOCK SIDEWALK REMOVALS MUST HAVE TEMPORARY ACCOMMODATIONS PLACED IMMEDIATELY UPON REMOVAL. SEE SDD 15d30.

TEMPORARY OR PERMANENT ACCOMMODATIONS MUST BE PLACED AT ANY AREA OF SIDEWALK REMOVALS BEFORE ANOTHER AREA OF REMOVALS MAY BEGIN.

PEDESTRIAN ACCOMMODATIONS MUST BE PROVIDED TO ALL RESIDENCES AND BUSINESS USING EXISTING, NEWLY CONSTRUCTED OR TEMPORARY ACCOMMODATIONS DURING ALL STAGES OF CONSTRUCTION.

A SIGNED PEDESTRIAN DETOUR TO ROUTE PEDESTRIAN TRAFFIC AROUND THE WORK ZONE IS SHOWN ON THE FOLLOWING CONSTRUCTION STAGING PEDESTRIAN RAMPS SHEETS. FOR PEDESTRIANS WITH TRIPS STARTING OR ENDING INSIDE THE WORK ZONE, NO SIGNED DETOUR IS PLANNED. AREAS UNAVAILABLE TO PEDESTRIANS DURING CONSTRUCTION WILL BE SIGNED AND MARKED AS SHOWN IN THE 'CORNER SIDEWALK CLOSURE WITH NO TEMPORARY CROSSWALK' DETAIL.

STAGE 1

STAGE 1 WILL INCLUDE THE REMOVAL OF EXISTING SIDEWALK AND THE CONSTRUCTION OF PROPOSED SIDEWALK.

SEE THE PEDESTRIAN RAMP DETAILS FOR ADDITIONAL INFORMATION.

PEDESTRIAN RAMPS WILL BE RECONSTRUCTED DURING STAGE 1. TO ENSURE PEDESTRIAN ACCOMMODATIONS REMAIN AVAILABLE THE RAMPS HAVE BEEN DIVIDED INTO 3 GROUPS. EACH GROUP OF RAMPS MAY BE COMPLETED CONCURRENTLY BUT ALL RAMPS IN A GROUP MUST BE COMPLETE BEFORE STARTING WORK ON ANY OTHER RAMP.

GROUP 1
NORTHWEST CORNER OF WEST FLORIST AVENUE AND NORTH 60TH STREET
NORTHWEST CORNER OF WEST KAUL AVENUE AND NORTH 60TH STREET
SOUTHEAST CORNER OF THE EAST LEG OF WEST DOUGLAS AVENUE AND NORTH 60TH STREET
NORTHWEST CORNER OF THE WEST LEG OF WEST DOUGLAS AVENUE AND NORTH 60TH STREET
NORTHEAST CORNER OF WEST BENDER COURT AND NORTH 60TH STREET

GROUP 2
SOUTHWEST CORNER OF WEST FLORIST AVENUE AND NORTH 60TH STREET
NORTHEAST CORNER OF WEST FLORIST AVENUE AND NORTH 60TH STREET
SOUTHWEST CORNER OF WEST KAUL AVENUE AND NORTH 60TH STREET
NORTH EAST CORNER OF THE EAST LEG OF WEST DOUGLAS AVENUE AND NORTH 60TH STREET
SOUTHWEST CORNER OF THE WEST LEG OF WEST DOUGLAS AVENUE AND NORTH 60TH STREET

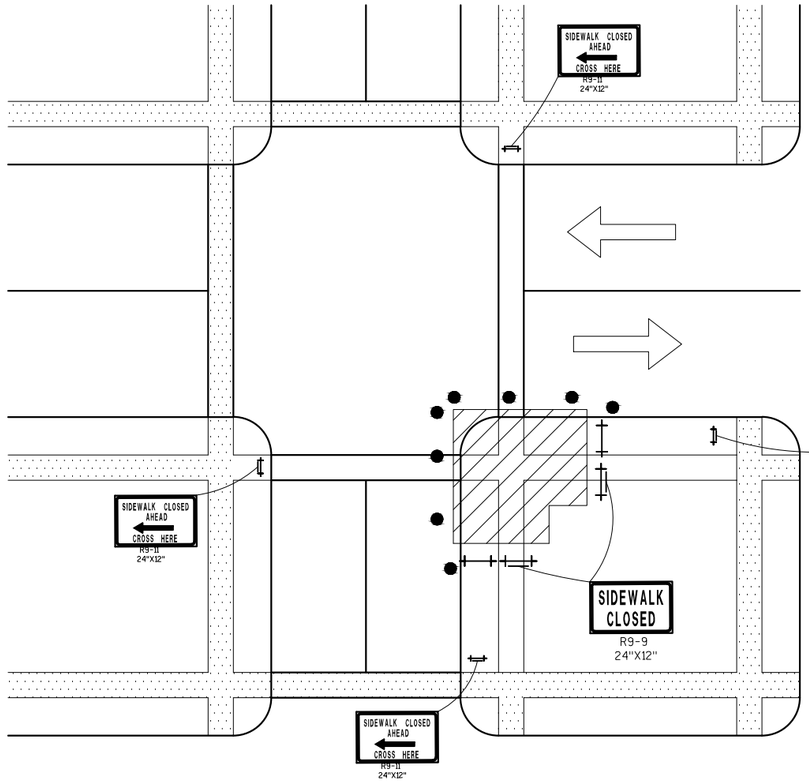
GROUP 3
SOUTHEAST CORNER OF WEST BENDER COURT AND NORTH 60TH STREET

GROUP 4
SOUTHEAST CORNER OF WEST FLORIST AVENUE AND NORTH 60TH STREET

STAGE 2

STAGE 2 WILL INCLUDE THE CONSTRUCTION OF MEDIAN PEDESTRIAN RAMPS.

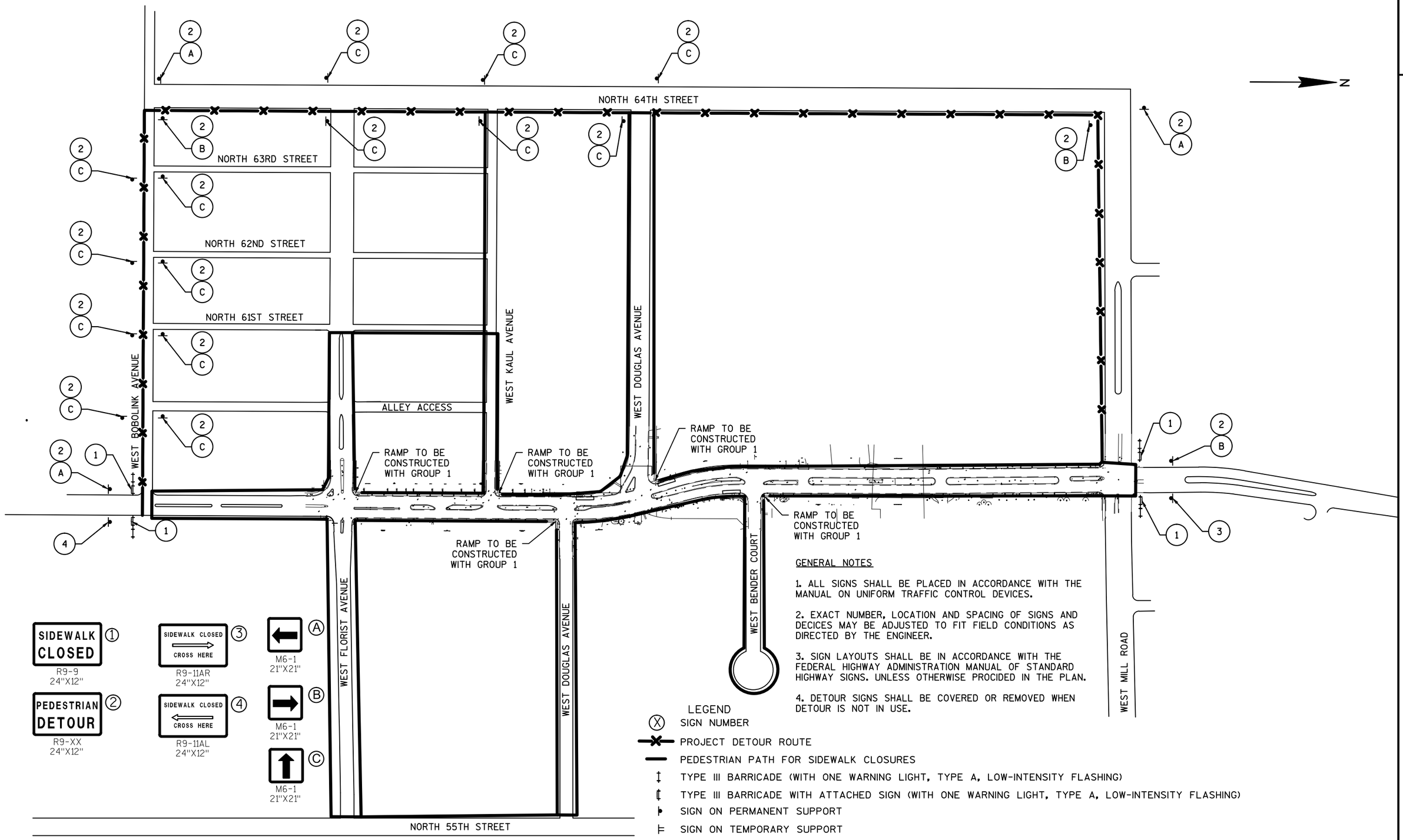
SEE THE PEDESTRIAN RAMP DETAILS FOR ADDITIONAL INFORMATION



CORNER SIDEWALK CLOSURE WITH NO TEMPORARY CROSSWALK

LEGEND

- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM



GENERAL NOTES

1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

2. EXACT NUMBER, LOCATION AND SPACING OF SIGNS AND DECICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

3. SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS. UNLESS OTHERWISE PROCIDED IN THE PLAN.

4. DETOUR SIGNS SHALL BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE.

LEGEND

- (X) SIGN NUMBER
- PROJECT DETOUR ROUTE
- PEDESTRIAN PATH FOR SIDEWALK CLOSURES
- TYPE III BARRICADE (WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH ATTACHED SIGN (WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: PEDESTRIAN RAMPS - STAGE 1, GROUP 1	SHEET 80	E

2

N

NORTH 64TH STREET

NORTH 63RD STREET

NORTH 62ND STREET

NORTH 61ST STREET

ALLEY ACCESS

NORTH 55TH STREET

WEST BOBOLINK AVENUE

WEST KAUL AVENUE

WEST DOUGLAS AVENUE

WEST FLORIST AVENUE

WEST BENDER COURT

WEST MILL ROAD

RAMP TO BE CONSTRUCTED WITH GROUP 2

RAMP TO BE CONSTRUCTED WITH GROUP 2

RAMP TO BE CONSTRUCTED WITH GROUP 2

RAMP TO BE CONSTRUCTED WITH GROUP 2

RAMP TO BE CONSTRUCTED WITH GROUP 2

SIDEWALK CLOSED
R9-9
24"X12"

PEDESTRIAN DETOUR
R9-XX
24"X12"

SIDEWALK CLOSED CROSS HERE
R9-11AR
24"X12"

SIDEWALK CLOSED CROSS HERE
R9-11AL
24"X12"

M6-1
21"X21"

M6-1
21"X21"

M6-1
21"X21"

GENERAL NOTES

1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

2. EXACT NUMBER, LOCATION AND SPACING OF SIGNS AND DECICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

3. SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS. UNLESS OTHERWISE PROCIDED IN THE PLAN.

4. DETOUR SIGNS SHALL BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE.

LEGEND

- (X) SIGN NUMBER
- PROJECT DETOUR ROUTE
- PEDESTRIAN PATH FOR SIDEWALK CLOSURES
- TYPE III BARRICADE (WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH ATTACHED SIGN (WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: PEDESTRIAN RAMPS - STAGE 1, GROUP 2	SHEET 81	E

2

N

NORTH 64TH STREET

NORTH 63RD STREET

NORTH 62ND STREET

NORTH 61ST STREET

ALLEY ACCESS

WEST BOBOLINK AVENUE

WEST KAUL AVENUE

WEST DOUGLAS AVENUE

WEST FLORIST AVENUE

WEST BENDER COURT

WEST MILL ROAD

NORTH 55TH STREET

RAMP TO BE CONSTRUCTED WITH GROUP 3

SIDEWALK CLOSED ① R9-9 24"X12"

PEDESTRIAN DETOUR ② R9-XX 24"X12"

SIDEWALK CLOSED CROSS HERE ③ R9-11AR 24"X12"

SIDEWALK CLOSED CROSS HERE ④ R9-11AL 24"X12"

Ⓐ M6-1 21"X21"

Ⓑ M6-1 21"X21"

Ⓒ M6-1 21"X21"

GENERAL NOTES

1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

2. EXACT NUMBER, LOCATION AND SPACING OF SIGNS AND DECICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

3. SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS. UNLESS OTHERWISE PROCIDED IN THE PLAN.

4. DETOUR SIGNS SHALL BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE.

LEGEND

- (X) SIGN NUMBER
- PROJECT DETOUR ROUTE
- PEDESTRIAN PATH FOR SIDEWALK CLOSURES
- TYPE III BARRICADE (WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH ATTACHED SIGN (WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: PEDESTRIAN RAMPS - STAGE 1, GROUP 3	SHEET 82	E

2

N

NORTH 64TH STREET

NORTH 63RD STREET

NORTH 62ND STREET

NORTH 61ST STREET

ALLEY ACCESS

WEST BOBOLINK AVENUE

WEST KAUL AVENUE

WEST DOUGLAS AVENUE

WEST BENDER COURT

WEST MILL ROAD

WEST FLORIST AVENUE

WEST DOUGLAS AVENUE

NORTH 55TH STREET

RAMP TO BE CONSTRUCTED WITH GROUP 4

SIDEWALK CLOSED ① R9-9 24"X12"

PEDESTRIAN DETOUR ② R9-XX 24"X12"

SIDEWALK CLOSED CROSS HERE ③ R9-11AR 24"X12"

SIDEWALK CLOSED CROSS HERE ④ R9-11AL 24"X12"

Ⓐ M6-1 21"X21"

Ⓑ M6-1 21"X21"

Ⓒ M6-1 21"X21"

GENERAL NOTES

1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

2. EXACT NUMBER, LOCATION AND SPACING OF SIGNS AND DECICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

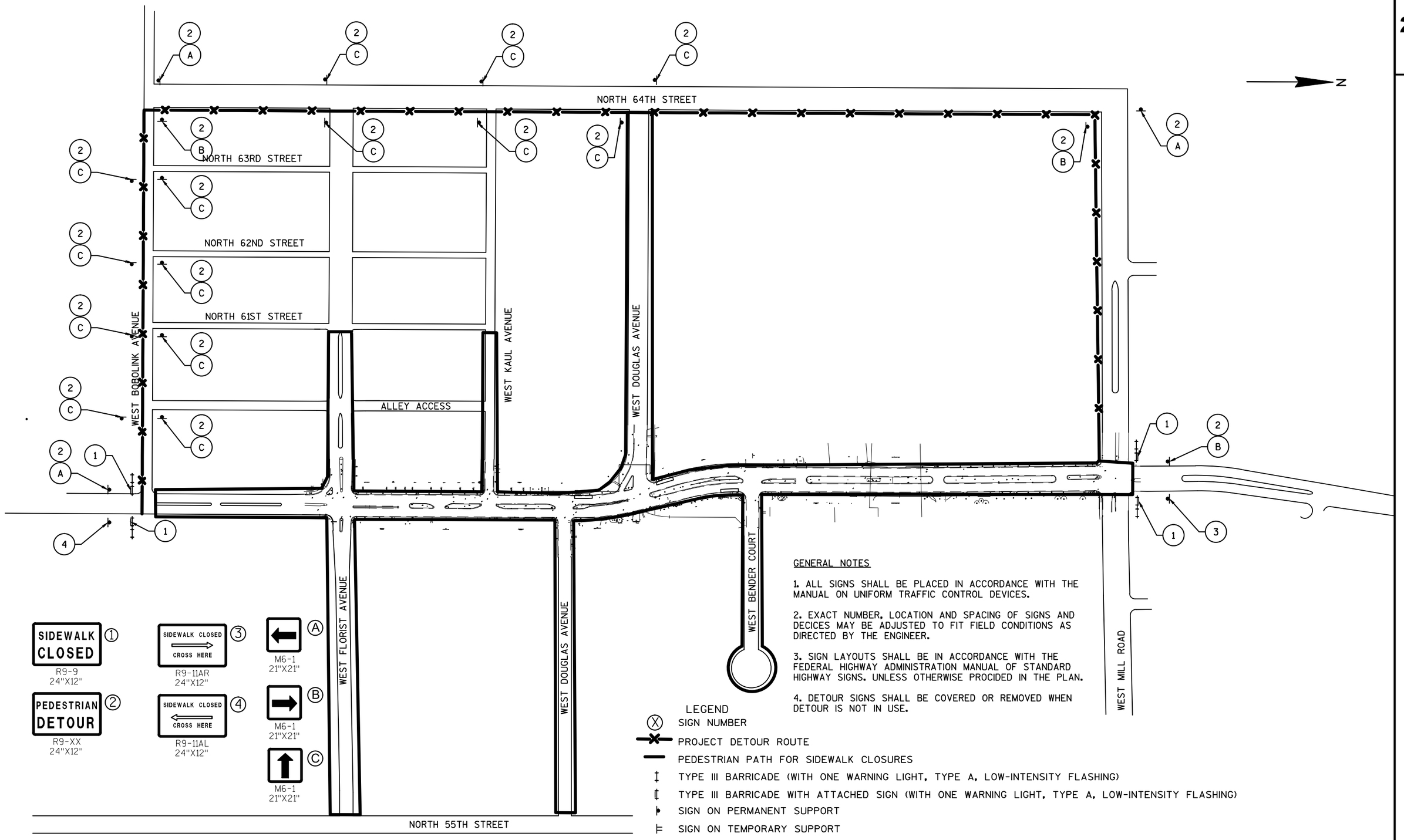
3. SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS. UNLESS OTHERWISE PROCIDED IN THE PLAN.

4. DETOUR SIGNS SHALL BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE.

LEGEND

- (X) SIGN NUMBER
- PROJECT DETOUR ROUTE
- PEDESTRIAN PATH FOR SIDEWALK CLOSURES
- TYPE III BARRICADE (WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH ATTACHED SIGN (WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: PEDESTRIAN RAMPS - STAGE 1, GROUP 4	SHEET 83	E



GENERAL NOTES

1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

2. EXACT NUMBER, LOCATION AND SPACING OF SIGNS AND DECICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

3. SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS. UNLESS OTHERWISE PROCIDED IN THE PLAN.

4. DETOUR SIGNS SHALL BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE.

LEGEND

- (X) SIGN NUMBER
- PROJECT DETOUR ROUTE
- PEDESTRIAN PATH FOR SIDEWALK CLOSURES
- TYPE III BARRICADE (WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH ATTACHED SIGN (WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING: PEDESTRIAN RAMPS - STAGE 2	SHEET 84 E

2

2

N

Pt: 2+00.00 NB
X: 2537692.2611
Y: 416203.8278

3+00 4+00 5+00 6+00 7+00 8+00

NB PGL

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	ALIGNMENT DETAIL: MAINILNE	SHEET 85	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020201_AD.DWG PLOT DATE : 2/22/2016 10:53 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

MONUMENT #1
STA. 110+99.93SB, 6.53'RT
STA. 10+99.75NB, 6.91'LT
X: 2537669.6934
Y: 417103.5663
EL: 106.90

BEGIN SB PGL CONSTRUCTION
STA. 109+76.96SB
X: 2537665.1530
Y: 416980.4331

SB PGL

PI: 109+00.00
X: 2537663.8191
Y: 416903.4844

PI: 109+78.28SB
X: 2537665.1759
Y: 416981.7529

PI: 110+33.16SB
X: 2537665.3565
Y: 417036.6316

PI: 111+85.03SB
X: 2537660.1252
Y: 417188.4142

109+00 N0° 59' 35"E 110+00 N1° 58' 26"W 111+00 112+00 113+00 N0° 47' 0"W

8+00 9+00 N1° 23' 38"W 10+00 N0° 4' 16"E 11+00 N2° 38' 40"E 12+00 N0° 49' 19"W 13+00 N0° 50' 42"W

N0° 11' 19"E

PI: 9+78.15NB
X: 2537673.3320
Y: 416981.7428

PI: 10+32.28NB
X: 2537673.999
Y: 417036.4602

PI: 11+47.21NB
X: 2537678.6755
Y: 417150.6847

PI: 12+97.54NB
X: 2537676.5188
Y: 417300.9982

NB PGL

BEGIN NB PGL CONSTRUCTION
STA. 9+96.99NB
X: 2537673.3554
Y: 417000.5875

BM #1
HYDRANT NW BOLT
STA. 10+49.29NB, 32.70'RT
STA 110+46.46SB, 41.95'LT
EL: 107.53

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	ALIGNMENT DETAIL: MAINILNE	SHEET	E

FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\020201_AD.DWG PLOT DATE : 2/22/2016 10:53 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

PC: 119+30.99SB
X: 2537649.3359
Y: 417934.2904

SB PGL

PI: 114+80.64SB
X: 2537656.0835
Y: 417483.9922

PI: 117+75.53SB
X: 2537651.6271
Y: 417778.8498

114+00 N0° 47' 0"W 115+00 116+00 N0° 51' 57"W 117+00 118+00 N0° 50' 40"W 119+00

14+00 N0° 50' 42"W 15+00 16+00 N0° 52' 5"W 17+00 18+00 N0° 49' 31"W 19+00

PI: 15+48.40NB
X: 2537672.8188
Y: 417551.8309

PI: 18+09.34NB
X: 2537668.8657
Y: 417812.7407

NB PGL

PC: 19+31.78NB
X: 2537667.1022
Y: 417935.1753

BM #3
HYDRANT NW BOLT
STA. 18+97.89NB, 43.47'RT
STA. 118+97.70SB, 61.23'LT
ELE: 111.69

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	ALIGNMENT DETAIL: MAINLINE	SHEET 87	E

2

2

N

PI: 200+00.00 DOUGLAS
X: 2537340.3158
Y: 418130.2466

BEGIN DOUGLAS CONSTRUCTION
STA. 201+00 DOUGLAS
X: 2537440.3150
Y: 418130.6587

201

N86° 33' 35"W

202

STA. 202+77.53 DOUGLAS=
STA. 121+31.27 SB

PI STA = 120+36.38SB
DELTA = 17°11'49"
D = 8°13'13"
T = 105.39'
L = 209.20'
R = 697.00'
PC STA = 119+30.99SB
PT STA = 121+40.19SB

PI STA = 20+19.95NB
DELTA = 14°14'13"
D = 8°06'56"
T = 88.17'
L = 175.43'
R = 706.00'
PC STA = 19+31.78NB
PT STA = 21+07.21NB

PI STA = 123+73.12SB
DELTA = 17°12'45"
D = 7°36'32"
T = 113.97'
L = 226.21'
R = 753.00'
PC STA = 122+59.16SB
PT STA = 124+85.37SB

PI STA = 23+94.42NB
DELTA = 14°05'06"
D = 7°58'08"
T = 88.82'
L = 176.75'
R = 719.00'
PC STA = 23+05.60NB
PT STA = 24+82.35NB

SB PGL

NB PGL

PI: 122+35.57SB
X: 2537585.5933
Y: 418230.5727

PC: 122+59.16SB
X: 2537578.2867
Y: 418253.0029

PT: 124+85.37SB
X: 2537541.3363
Y: 418475.3175

PT: 21+40.19SB
X: 2537615.1360
Y: 418139.8819

PI: 21+87.42NB
X: 2537622.0766
Y: 418185.9281

PC: 23+05.60NB
X: 2537591.5944
Y: 418300.1027

PT: 21+07.21NB
X: 2537642.9248
Y: 418108.4681

PT: 24+82.35NB
X: 2537567.3451
Y: 418474.7220

120+00 121+00 N18° 2' 35"W 122+00 123+00 124+00 125+00 N0° 50' 42"W

20+00 21+00 N15° 3' 43"W 22+00 N14° 56' 53"W 23+00 24+00 25+00 N0° 51' 48"W

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	ALIGNMENT DETAIL: MAINLINE	SHEET 88	E

2

N

BM #4
HYDRANT NW BOLT
STA. 25+79.83NB, 60.17'LT
STA. 125+81.86SB, 34.23'LT
ELE: 116.22

BM #5
HYDRANT NW BOLT
STA. 29+06.98NB, 60.43'LT
STA. 129+09.01SB, 34.68'LT
ELE: 120.27

SB PGL

NB PGL

PI: 127+26.18SB
X: 2537537.7846
Y: 418716.1025

PI: 130+33.13SB
X: 2537533.3973
Y: 419023.0364

PI: 30+31.26NB
X: 2537559.0753
Y: 419023.5877

+00 N0° 50' 42"W 126+00 127+00 128+00 N0° 49' 8"W 129+00 130+00 N1° 37' 35"W 131+00

+00 N0° 51' 48"W 26+00 27+00 28+00 29+00 30+00 N1° 34' 43"W 31+00

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	ALIGNMENT DETAIL: MAINLINE	SHEET 89	E

2

N

BM #7
HYDRANT NW BOLT
STA. 36+97.02NB, 60.24'LT
STA. 136+98.72SB, 34.46LT
ELE: 113.42

SB PGL

131+00 N1° 37' 35"W 132+00 PI: 132+88.78SB X: 2537526.1414 Y: 419278.5647 133+00 134+00 135+00 N1° 36' 16"W 136+00 N1° 36' 16"W 137+00

31+00 N1° 34' 43"W 32+00 PI: 31+96.93NB X: 2537554.5112 Y: 419189.1873 33+00 N1° 36' 45"W 34+00 35+00 36+00 PI: 36+44.04 NB X: 2537541.9289 Y: 419636.1278 37+00

NB PGL

BM #6
HYDRANT TOP OF NUT
STA. 34+26.10NB, 33.54'RT
STA. 134+27.82SB, 59.37'RT
ELE: 120.46

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	ALIGNMENT DETAIL: MAINLINE	SHEET 90	E

2

N

BM #7
HYDRANT NW BOLT
STA 36+97.02NB, 60.24'LT
STA 136+98.72SB, 34.46'LT
EL: 113.42

END SB PGL CONSTRUCTION
STA. 137+34.19SB
X: 2537513.6845
Y: 419723.7976

SB PGL

PI: 137+18.32SB
X: 2537514.1145
Y: 419707.9334

PI: 139+29.70SB
X: 2537508.3879
Y: 419919.2355

N1° 36' 16"W

137+00

138+00

N1° 33' 9"W

139+00

37+00

N1° 36' 59"W

38+00

39+00

PI: 39+27.64NB
X: 2537533.9292
Y: 419919.6123

N1° 34' 46"W

40+00

PC: 40+56.88NB
X: 2537530.3673
Y: 420048.8025

41+00

PI: 41+20.80NB
DELTA = 8° 24' 13"
D = 6° 35' 9"
T = 63.92'
L = 127.60'
R = 870'
PC STA = 40+56.88NB
PT STA = 41+84.48NB

42+00

PT: 41+84.48NB
X: 2537536.2004
Y: 420176.1573

N6° 49' 27"E

END NB PGL CONSTRUCTION
STA. 37+31.91NB
X: 2537539.4503
Y: 419723.9628

NB PGL

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	ALIGNMENT DETAIL: MAINLINE	SHEET 91	E

2

2

N

42+00

PT: 41+84.48NB
X: 2537536.2004
Y: 420176.1573

N6° 49' 27"E

43+00

44+00

PI: 44+32.00NB
X: 2537565.6114
Y: 420421.9207

NB PGL

N6° 50' 57"E

45+00

PI: 45+19.51NB
X: 2537565.0466
Y: 420508.8010

46+00

47+00

PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	ALIGNMENT DETAIL: MAINLINE	SHEET 92	E

DATE 03MAR16 — E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	2595-00-71 QUANTITY
0010	204.0100	Removing Pavement	SY	1,759.000	1,759.000
0020	204.0105	Removing Pavement Butt Joints	SY	1,836.000	1,836.000
0030	204.0150	Removing Curb & Gutter	LF	3,009.000	3,009.000
0040	204.0155	Removing Concrete Sidewalk	SY	2,690.000	2,690.000
0050	204.0220	Removing Inlets	EACH	17.000	17.000
0060	205.0100	Excavation Common	CY	120.000	120.000
0070	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	60.000	60.000
0080	208.0100	Borrow	CY	60.000	60.000
0090	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 2595-00-71	LS	1.000	1.000
0100	213.0100	Finishing Roadway (project) 01. 2595-00-71	EACH	1.000	1.000
0110	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	100.000	100.000
0120	390.0303	Base Patching Concrete	SY	3,928.000	3,928.000
0130	415.0060	Concrete Pavement 6-Inch	SY	312.000	312.000
0140	415.0080	Concrete Pavement 8-Inch	SY	779.000	779.000
0150	415.0115	Concrete Pavement 11 1/2-Inch	SY	442.000	442.000
0160	416.0170	Concrete Driveway 7-Inch	SY	296.000	296.000
0170	416.0190	Concrete Driveway 9-Inch	SY	155.000	155.000
0180	416.0270	Concrete Driveway HES 7-Inch	SY	72.000	72.000
0190	416.0610	Drilled Tie Bars	EACH	1,280.000	1,280.000
0200	416.0620	Drilled Dowel Bars	EACH	144.000	144.000
0210	416.0750.S	Concrete Pavement Partial Depth Repair Joint Repair	LF	2,519.000	2,519.000
0220	416.0752.S	Concrete Pavement Partial Depth Repair Crack Repair	LF	536.000	536.000
0230	455.0605	Tack Coat	GAL	1,127.000	1,127.000
0240	460.4000	HMA Cold Weather Paving	TON	700.000	700.000
0250	460.6224	HMA Pavement 4 MT 58-28 S	TON	5,889.000	5,889.000
0260	601.0331	Concrete Curb & Gutter 31-Inch	LF	2,444.000	2,444.000
0270	601.0600	Concrete Curb Pedestrian	LF	125.000	125.000
0280	602.0410	Concrete Sidewalk 5-Inch	SF	19,895.000	19,895.000
0290	602.0420	Concrete Sidewalk 7-Inch	SF	788.000	788.000
0300	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	352.000	352.000
0310	611.0420	Reconstructing Manholes	EACH	4.000	4.000
0320	611.0430	Reconstructing Inlets	EACH	15.000	15.000
0330	611.8110	Adjusting Manhole Covers	EACH	26.000	26.000
0340	611.8115	Adjusting Inlet Covers	EACH	23.000	23.000
0350	611.8120.S	Cover Plates Temporary	EACH	36.000	36.000
0360	619.1000	Mobilization	EACH	1.000	1.000
0370	620.0300	Concrete Median Sloped Nose	SF	1,852.000	1,852.000
0380	625.0100	Topsoil	SY	568.000	568.000
0390	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0400	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0410	628.7010	Inlet Protection Type B	EACH	38.000	38.000
0420	628.7015	Inlet Protection Type C	EACH	24.000	24.000
0430	628.7020	Inlet Protection Type D	EACH	15.000	15.000
0440	629.0210	Fertilizer Type B	CWT	0.360	0.360
0450	631.0300	Sod Water	MGAL	1.400	1.400
0460	631.1000	Sod Lawn	SY	8,800.000	8,800.000
0470	638.2102	Moving Signs Type II	EACH	1.000	1.000
0480	638.2602	Removing Signs Type II	EACH	2.000	2.000
0490	642.5001	Field Office Type B	EACH	1.000	1.000

3

DATE 03MAR16 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	2595-00-71 QUANTITY
0500	643.0100	Traffic Control (project) 01. 2595-00-71	EACH	1.000	1.000
0510	643.0300	Traffic Control Drums	DAY	27,530.000	27,530.000
0520	643.0420	Traffic Control Barricades Type III	DAY	1,562.000	1,562.000
0530	643.0705	Traffic Control Warning Lights Type A	DAY	2,656.000	2,656.000
0540	643.0715	Traffic Control Warning Lights Type C	DAY	6,570.000	6,570.000
0550	643.0800	Traffic Control Arrow Boards	DAY	120.000	120.000
0560	643.0900	Traffic Control Signs	DAY	4,136.000	4,136.000
0570	643.2000	Traffic Control Detour (project) 01. 2595-00-71	EACH	1.000	1.000
0580	643.3000	Traffic Control Detour Signs	DAY	1,342.000	1,342.000
0590	644.1410.S	Temporary Pedestrian Surface Asphalt	SF	12,150.000	12,150.000
0600	644.1420.S	Temporary Pedestrian Surface Plywood	SF	12,150.000	12,150.000
0610	644.1601.S	Temporary Curb Ramp	EACH	9.000	9.000
0620	646.0109	Pavement Marking Preformed Plastic 4-Inch	LF	4,504.000	4,504.000
0630	646.0129	Pavement Marking Preformed Plastic 8-Inch	LF	470.000	470.000
0640	647.0579	Pavement Marking Stop Line Preformed Plastic 24-Inch	LF	177.000	177.000
0650	647.0779	Pavement Marking Crosswalk Preformed Plastic 12-Inch	LF	586.000	586.000
0660	647.0799	Pavement Marking Crosswalk Preformed Plastic 24-Inch	LF	80.000	80.000
0670	650.8000	Construction Staking Resurfacing Reference	LF	5,597.000	5,597.000
0680	650.9910	Construction Staking Supplemental Control (project) 01. 2595-00-71	LS	1.000	1.000
0690	690.0150	Sawing Asphalt	LF	198.000	198.000
0700	690.0250	Sawing Concrete	LF	5,095.000	5,095.000
0710	715.0415	Incentive Strength Concrete Pavement	DOL	15,000.000	15,000.000
0720	ASP.1T0A	On-the-Job Training Apprentice at $5. 00/HR	HRS	600.000	600.000
0730	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	700.000	700.000
0740	SPV.0060	Special 01 Construction Staking Curb Ramps	EACH	24.000	24.000
0750	SPV.0060	Special 02 Inlet Covers Type 57	EACH	18.000	18.000
0760	SPV.0060	Special 03 Inlet Type 45A	EACH	17.000	17.000
0770	SPV.0060	Special 04 ADJUSTING WATER BOXES	EACH	25.000	25.000
0780	SPV.0060	Special 05 RELOCATING SPRINKLER BOXES	EACH	2.000	2.000
0790	SPV.0060	Special 06 Adjusting TES Manhole Covers	EACH	7.000	7.000
0800	SPV.0060	Special 07 Asphalt Driveway Ramps Temporary	EACH	20.000	20.000
0810	SPV.0090	Special 01 Concrete curb and Gutter 31" Integral Type D Special	LF	555.000	555.000
0820	SPV.0090	Special 02 Concrete Gutter Type D Modified	LF	80.000	80.000
0830	SPV.0165	Special 01 Concrete Sidewalk 9-Inch	SF	1,699.000	1,699.000

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REMOVING PAVEMENT

					REMOVING PAVEMENT 204.0100
STAGE	STA	TO	STA	SIDE	SY
1	11+59		12+19	LT	53
	17+73		18+33	RT	53
	20+45		21+23	LT	238
	22+03		22+63	LT	53
	24+15		24+78	RT	53
	25+86		26+46	LT	53
	29+50		31+00	RT	317
	29+50		31+00	LT	317
	32+38		32+98	RT	53
	32+52		33+12	LT	53
	36+41		37+01	RT	71
				STAGE 1 TOTAL	1314
2	12+60		13+49	LT	72
	29+50		31+00	RT	150
	29+50		31+00	LT	150
	35+55		36+15	LT	73
				STAGE 2 TOTAL	445
				PROJECT TOTAL	1759

BUTT JOINTS

					REMOVING PAVEMENT BUTT JOINTS 204.0105	
STAGE	STA	TO	STA	SIDE	SY	DESCRIPTION
1	9+77		9+96	LT	18	OUTSIDE CURB
	9+77		9+97	LT	41	FULL WIDTH
	9+97		10+52	RT	48	OUTSIDE CURB
	9+97		10+33	RT	76	FULL WIDTH
	10+59		10+67	LT	18	OUTSIDE CURB
	10+59		10+93	LT	25	FULL WIDTH
	10+79		10+87	RT	19	OUTSIDE CURB
	10+79		11+02	RT	25	FULL WIDTH
	11+25		11+33	LT	24	OUTSIDE CURB
	11+04		11+33	LT	52	FULL WIDTH
	11+12		11+40	RT	35	FULL WIDTH
	11+12		11+23	RT	26	MEDIAN CURB
	15+94		16+06	LT	28	SOUTH CURB
	15+98		16+26	LT	67	FULL WIDTH
	16+18		16+28	LT	27	NORTH CURB
	18+50		18+58	RT	18	SOUTH CURB
	18+50		18+92	RT	94	FULL WIDTH
	18+84		18+92	RT	18	NORTH CURB
	21+44		21+54	LT	52	SOUTH CURB
	21+44		21+83	LT	161	FULL WIDTH
	21+73		21+83	LT	52	NORTH CURB
	25+05		25+15	RT	23	SOUTH CURB
	25+05		25+47	RT	51	FULL WIDTH
	36+84		37+32	RT	71	OUTSIDE CURB
	36+82		37+33	LT	82	OUTSIDE CURB
	37+13		37+34	LT/RT	118	FULL WIDTH
				STAGE 1 TOTAL	1267	

BUTT JOINTS

					REMOVING PAVEMENT BUTT JOINTS 204.0105	
STAGE	STA	TO	STA	SIDE	SY	DESCRIPTION
2	9+77		9+97	LT	24	FULL WIDTH
	9+77		10+33	LT	62	MEDIAN CURB
	9+97		10+33	RT	39	FULL WIDTH
	9+97		10+33	RT	40	MEDIAN CURB
	10+81		10+93	LT	22	MEDIAN CURB
	10+59		10+93	LT	50	FULL WIDTH
	10+91		11+02	RT	29	MEDIAN CURB
	10+79		11+02	RT	25	FULL WIDTH
	11+04		11+14	LT	39	MEDIAN CURB
	11+04		11+33	LT	31	FULL WIDTH
	11+12		11+40	RT	26	FULL WIDTH
	11+32		11+40	RT	18	OUTSIDE CURB
	25+36		25+47	RT	26	NORTH CURB
	25+05		25+47	RT	44	FULL WIDTH
	37+13		37+34	LT/RT	93	FULL WIDTH
				STAGE 2 TOTAL	569	
				PROJECT TOTAL	1836	

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CONCRETE CURB AND GUTTER REMOVAL

					REMOVING CURB AND GUTTER 204.0150
STAGE	STA	TO	STA	SIDE	LF
1	10+38		10+51	LT	18
	10+53		10+77	RT	34
	10+53		10+63	LT	16
	10+54		10+68	LT	28
	10+98		11+04	LT	19
	11+35		12+24	LT	94
	11+40		11+54	RT	23
	15+75		15+94	RT	19
	15+76		15+96	LT	29
	16+28		16+56	LT	37
	16+37		16+55	RT	18
	17+68		18+48	RT	88
	18+19		18+37	LT	18
	18+94		19+66	LT	70
	18+94		19+10	RT	25
	20+27		21+54	LT	188
	21+78		22+67	LT	96
	21+91		22+09	RT	18
	24+15		25+02	RT	92
	24+69		24+91	LT	22
	25+50		25+60	RT	20
	25+81		26+62	LT	80
	32+33		33+03	RT	70
	32+47		33+17	LT	70
	-		-	RT	65
				STAGE 1 TOTAL	1257
2	11+43		13+01	MEDIAN	312
	13+37		13+49	MEDIAN	28
	13+88		14+21	MEDIAN	70
	14+59		15+86	MEDIAN	198
	16+37		16+73	MEDIAN	66
	17+41		18+40	MEDIAN	121
	19+10	19+02	20+32	MEDIAN	109
	20+89		21+22	ISLAND	129
	20+90	20+92	20+90	MEDIAN	7
	21+70		23+43	MEDIAN	214
	24+53		21+94	MEDIAN	81
	25+57		25+88	MEDIAN	41
	26+67		26+75	MEDIAN	19
	27+11		27+57	MEDIAN	101
	31+35	31+46	31+35	MEDIAN	35
	31+96	31+85	31+96	MEDIAN	35
	34+80		35+71	MEDIAN	115
	36+07		36+26	MEDIAN	29
	37+01		37+26	MEDIAN	42
				STAGE 2 TOTAL	1752
				PROJECT TOTAL	3009

CONCRETE SIDEWALK REMOVAL

					REMOVING CONCRETE SIDEWALK 204.0155
STAGE	STA	TO	STA	SIDE	SY
1	10+11		10+75	RT	71
	10+37		10+46	LT	5
	11+38		15+94	LT	289
	11+42		11+58	RT	51
	12+76		13+54	RT	69
	14+06		14+74	RT	59
	15+21		18+47	RT	229
	16+29		18+15	LT	135
	18+35		18+40	LT	3
	18+80		20+20	LT	68
	18+96		25+00	RT	435
	21+10		21+28	LT	24
	21+81		22+42	LT	53
	24+57		29+01	LT	329
	25+52		26+29	RT	62
	27+52		29+30	RT	115
	31+16		33+58	LT	138
	31+20		32+07	RT	82
	32+78		35+76	RT	165
	35+59		37+05	LT	81
	36+73		37+01	RT	13
			UNDISTRIBUTED		55
				STAGE 1 TOTAL	2531
2	10+56		10+69	ISLAND	15
	11+45		12+99	MEDIAN	64
	20+89		21+22	ISLAND	80
				STAGE 2 TOTAL	159
				PROJECT TOTAL	2690

INLET REMOVAL

				REMOVING INLETS 204.0220
STAGE	STA	OFF	SIDE	EACH
1	9+79	38	LT	1
	10+30	30	RT	1
	10+56	108	LT	1
	11+34	74	LT	1
	15+97	65	LT	1
	16+27	65	LT	1
	18+49	57	RT	1
	18+94	55	RT	1
	20+95	74	LT	1
	22+01	51	LT	1
	28+50	55	LT	1
	28+49	29	RT	1
	33+75	55	LT	1
	37+02	29	RT	1
			STAGE 1 TOTAL	14
2	12+01	7	LT	1
	13+50	1	LT	1
	35+57	1	LT	1
			STAGE 2 TOTAL	3
			PROJECT TOTAL	17

FINISHING ROADWAY (PROJECT)

	FINISHING ROADWAY (PROJECT) 213.0100
STAGE	EACH
1	0.25
2	0.25
3	0.5
TOTAL	1

BASE AGGREGATE

				BASE AGGREGATE DENSE 1 1/4-INCH 305.0120
STA	TO	STA	SIDE	TON
UNDISTRIBUTED				100
			TOTAL	100

BORROW

				BORROW 208.0100
STA	TO	STA	SIDE	CY
UNDISTRIBUTED				60
			TOTAL	60

CONTAMINATED SOIL

	EXCAVATION, HAULING AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL 205.0501.S
STAGE	TON
ALL	60
TOTAL	60

COMMON EXCAVATION

				EXCAVATION COMMON 205.0100
STA	TO	STA	SIDE	CY
UNDISTRIBUTED				120
			TOTAL	120

PREPARE FOUNDATION FOR ASPHALTIC PAVEMENT (PROJECT)

	PREPARE FOUNDATION FOR ASPHALTIC PAVEMENT 211.0100
STAGE	LS
TOTAL	1

CATEGORY 0010

3

BASE PATCHING					
					BASE PATCHING CONCRETE 390.0303
STAGE	STA	TO	STA	SIDE	SY
1	11+54		12+00	RT	32
	12+00		12+12	RT	23
	12+12		12+50	RT	26
	12+50		12+62	RT	22
	12+62		12+74	RT	7
	12+88		13+12	RT	32
	14+12		14+55	RT	50
	14+75		14+87	RT	22
	14+87		15+42	RT	73
	15+42		15+54	RT	22
	15+83		15+97	RT	26
	15+97		16+12	RT	9
	18+92		19+19	RT	18
	19+51		20+02	RT	100
	20+27		20+92	LT	83
	20+73		21+38	RT	88
	21+38		21+59	RT	92
	21+59		22+26	RT	28
	22+26		22+68	RT	70
	22+68		23+96	RT	169
	23+47		23+89	LT	83
	23+95		24+15	RT	13
	25+60		26+26	RT	35
	26+26		26+51	RT	44
	26+51		26+66	RT	9
	31+70		32+16	RT	61
	32+61		32+84	RT	28
	34+01		34+51	LT	37
				STAGE 1 TOTAL	1302
2	12+00		12+50	LT	41
	12+50		12+62	RT	16
	12+88		13+12	RT	27
	13+88		14+81	MEDIAN	98
	14+75		14+87	RT	16
	15+83		15+97	RT	20
	16+10		16+72	MEDIAN	42
	19+71		19+90	RT	20
	20+12		20+30	RT	19
	21+59		22+26	RT	63
	22+26		22+68	RT	36
	23+47		23+89	LT	57
	24+47		24+89	LT	39
	24+78		25+20	RT	95
	24+80		25+76	MEDIAN	160
	24+89		25+62	LT	96
	25+60		26+26	RT	45
	25+86		26+57	LT	47
	26+26		26+51	RT	18
	26+51		26+66	RT	10
	34+01		34+51	LT	61
				STAGE 2 TOTAL	1026
				UNDISTRIBUTED	1600
				PROJECT TOTAL	3928

CONCRETE PAVEMENT 6-INCH					
					CONCRETE PAVEMENT 6-INCH 415.0060
STAGE	STA	TO	STA	SIDE	SY
1	29+50		29+75	RT	53
	29+50		29+75	LT	53
	30+75		31+00	RT	53
	30+75		31+00	LT	53
				STAGE 1 TOTAL	212
2	29+50		29+75	RT	25
	29+50		29+75	LT	25
	30+75		31+00	RT	25
	30+75		31+00	LT	25
				STAGE 2 TOTAL	100
				PROJECT TOTAL	312

CONCRETE PAVEMENT 8-INCH					
					CONCRETE PAVEMENT 8-INCH 415.0080
STAGE	STA	TO	STA	SIDE	SY
1	29+75		30+75	RT	211
	29+75		30+75	LT	211
	WEST DOUGLAS AVENUE				
	201+00		202+52	RT	157
				STAGE 1 TOTAL	579
2	29+75		30+75	RT	100
	29+75		30+75	LT	100
				STAGE 2 TOTAL	200
				PROJECT TOTAL	779

CONCRETE PAVEMENT 11.5-INCH					
					CONCRETE PAVEMENT 11.5-INCH 415.0115
STAGE	STA	TO	STA	SIDE	SY
1	11+59		12+19	LT	53
	17+73		18+33	RT	53
	22+02		22+62	LT	53
	24+15		24+78	RT	53
	25+86		26+40	LT	53
	32+38		32+98	RT	53
	32+47		33+07	LT	53
	36+21		37+01	RT	71
				STAGE 1 TOTAL	442
				PROJECT TOTAL	442

CONCRETE DRIVEWAY APRONS						
					CONCRETE DRIVEWAY 7-INCH 416.0170	CONCRETE DRIVEWAY 9-INCH 416.0190
STAGE	STA	TO	STA	SIDE	SY	SY
1	12+86		13+46	RT	25	0
	14+16		14+64	RT	21	21
	15+31		15+73	RT	19	19
	17+53		17+69	LT	9	0
	17+91		18+18	LT	16	0
	19+89		20+25	RT	16	16
	20+67		21+29	RT	27	0
	23+40		23+89	RT	32	0
	24+97		25+64	LT	43	43
	26+75		27+12	LT	24	24
	25+93		26+16	RT	16	0
	29+02		29+26	RT	16	0
	31+43		31+94	RT	32	32
				STAGE 1 TOTAL	296	155
				PROJECT TOTAL	296	155

CONCRETE DRIVEWAY HES 7-INCH				
				CONCRETE DRIVEWAY HES 7-INCH 416.0270
STAGE	STA	TO	STA	SY
1	UNDISTRIBUTED			72

CATEGORY 0010

TIE BARS		
		DRILLED TIE BARS 416.0610
STAGE	SIDE	EACH
ALL	RT/LT	1280
	TOTAL	1280

DOWEL BARS		
		DRILLED DOWEL BARS 416.0620
STAGE	SIDE	EACH
ALL	RT/LT	144
	TOTAL	144

JOINT REPAIR					
					CONCRETE PAVEMENT PARTIAL DEPTH REPAIR JOINT REPAIR 416.0750.S
STAGE	STA	TO	DIR	SIDE	LF
1	12+72		N	RT	16
	13+12		N	RT	100
	13+42		W	RT	11
	13+66		E	RT	11
	13+74		E	LT	12
	16+50		N	RT	50
	19+19		N	RT	33
	20+02		NW	RT	74
	20+91		NW	LT	87
	20+91		NW	LT	88
	21+29		N	LT	43
	21+31		W	LT	26
	21+44		W	LT	22
	21+56		W	LT	18
	21+98		NE	RT	5
	22+54		SW	LT	11
	24+39		NE	LT	11
	24+59		E	LT	6
	24+63		E	LT	6
	24+68		E	LT	6
	25+69		E	RT	12
	25+96		N	RT	30
	28+45		W	LT	12
	31+77		W	LT	11
	32+39		E	RT	11
	32+54		E	RT	11
	32+59		W	LT	11
				STAGE 1 TOTAL	734

JOINT REPAIR					
					CONCRETE PAVEMENT PARTIAL DEPTH REPAIR JOINT REPAIR 416.0750.S
STAGE	STA	TO	DIR	SIDE	LF
2	11+79		E	LT	19
	13+46		E	RT	12
	13+74		N	LT	4
	13+78		E	LT	11
	14+87		N	RT	35
	15+97		W	LT	29
	16+03		W	LT	29
	16+10		W	LT	19
	17+25		N	RT	34
	17+75		N	LT	10
	18+18		N	LT	181
	18+27		E	RT	12
	18+31		N	RT	65
	18+50		W	LT	17
	18+50		N	LT	86
	18+75		N	LT	26
	19+25		N	ON	45
	19+35		W	LT	11
	19+99		NE	LT	12
	20+08		NE	LT	23
	20+29		NE	RT	11
	20+37		NE	LT	12
	20+46		NE	LT	10
	20+60		NE	LT	10
	20+61		NW	RT	51
	21+11		NE	LT	10
	21+10		NE	LT	9
	21+06		NE	LT	23
	22+09		NE	RT	6
	22+40		SW	LT	22
	23+74		NE	RT	11
	23+75		NW	RT	2
	23+76		NE	RT	5
	25+11		E	LT	12
	25+24		N	LT	27
	25+20		N	RT	28
	25+26		E	RT	22
	25+38		E	RT	22
	25+47		E	RT	22
	25+48		E	LT	11
	25+63		E	LT	11
	26+42		W	LT	10
	27+71		W	LT	11
	28+30		W	LT	28
	28+53		W	LT	12
	31+55		W	LT	26
	32+08		W	LT	22
	32+08		E	RT	12
	32+89		W	LT	12
	35+09		W	LT	12
	35+15		W	LT	11
	35+21		W	LT	12
				STAGE 2 TOTAL	1185
				UNDISTRIBUTED	600
				PROJECT TOTAL	2519

CRACK REPAIR					
					CONCRETE PAVEMENT PARTIAL DEPTH REPAIR CRACK REPAIR 416.0752.S
STAGE	STA	TO	DIR	SIDE	LF
1	14+66		NW	LT	12
	23+11		NW	RT	10
	23+21		NW	LT	12
	24+24		NE	LT	12
	31+51		NW	LT	12
	34+21		N	LT	2
	34+21		W	LT	6
				STAGE 1 TOTAL	66
2	14+19		NE	LT	23
	14+62		SW	LT	11
	16+36		NE	LT	12
	16+63		NE	LT	23
	17+85		NW	LT	12
	17+85		NE	LT	12
	18+12		NE	RT	15
	18+86		NE	LT	24
	22+08		W	LT	12
	24+24		N	LT	3
	24+27		NE	LT	12
	25+24		NE	LT	23
	25+38		NE	LT	12
	25+85		NE	LT	10
	25+96		NE	LT	11
	31+51		NW	LT	12
	31+76		W	LT	24
	31+96		NW	LT	23
	32+23		NW	RT	12
	34+23		W	LT	5
	34+97		NE	LT	12
	14+61		N	LT	5
	14+64		E	RT	12
				STAGE 2 TOTAL	320
				UNDISTRIBUTED	150
				PROJECT TOTAL	536

CATEGORY 0010

3

TACK COAT					
					TACK COAT 455.0605
STAGE	STA	TO	STA	SIDE	GAL
1	9+97		15+75	LT	92
	9+97		18+00	RT	86
	15+75		16+50	LT	16
	16+50		21+00	LT	52
	18+00		19+25	RT	17
	19+25		24+75	RT	50
	21+00		22+00	LT	54
	22+00		29+75	LT	100
	24+75		25+75	RT	28
	25+75		29+75	RT	43
	29+75		37+32	LT	86
	29+75		37+32	RT	72
				STAGE 1 TOTAL	696
2	9+97		15+75	LT	57
	9+97		18+00	RT	53
	15+75		16+50	LT	12
	16+50		21+00	LT	37
	18+00		19+25	RT	16
	19+25		24+75	RT	45
	21+00		22+00	LT	26
	22+00		29+75	LT	61
	24+75		25+75	RT	18
	25+75		29+75	RT	23
	29+75		37+32	LT	51
	29+75		37+32	RT	32
				STAGE 2 TOTAL	431
				PROJECT TOTAL	1127

HMA COLD WEATHER PAVING	
	HMA COLD WEATHER PAVING 460.4000
STAGE	TON
3	700
TOTAL	700

HMA COMBINED ITEMS					
					4 MT 58-28 S 460.6224
STAGE	STA	TO	STA	SIDE	TON
1	9+97		15+75	LT	247
	9+97		18+00	RT	295
	15+75		16+50	LT	40
	16+50		21+00	LT	208
	18+00		19+25	RT	54
	19+25		24+75	RT	185
	21+00		22+00	LT	207
	22+00		29+75	LT	302
	24+75		25+75	RT	38
	25+75		29+75	RT	122
	29+75		37+32	LT	153
	29+75		37+32	RT	130
				STAGE 1 TOTAL	1981
2	9+97		15+75	LT	157
	9+97		18+00	RT	188
	15+75		16+50	LT	26
	16+50		21+00	LT	130
	18+00		19+25	RT	33
	19+25		24+75	RT	117
	21+00		22+00	LT	132
	22+00		29+75	LT	189
	24+75		25+75	RT	24
	25+75		29+75	RT	77
	29+75		37+32	LT	97
	29+75		37+32	RT	89
				STAGE 2 TOTAL	1259
3	9+97		15+75	LT	330
	9+97		18+00	RT	395
	15+75		16+50	LT	54
	16+50		21+00	LT	276
	18+00		19+25	RT	71
	19+25		24+75	RT	247
	21+00		22+00	LT	277
	22+00		29+75	LT	402
	24+75		25+75	RT	51
	25+75		29+75	RT	163
	29+75		37+32	LT	205
	29+75		37+32	RT	179
				STAGE 3 TOTAL	2649
				PROJECT TOTAL	5889

CONCRETE CURB & GUTTER					
					CONCRETE CURB & GUTTER 31-INCH 601.0331
STAGE	STA	TO/MID	STA	SIDE	LF
1	10+40		10+51	LT	18
	10+53		10+61	LT	13
	10+53		10+77	RT	36
	10+57		10+68	LT	23
	11+35		11+59	LT	29
	11+42		11+54	RT	23
	15+75		15+94	RT	19
	15+76		15+96	LT	29
	16+28		16+56	LT	37
	16+37		16+56	RT	19
	18+19		18+37	LT	18
	18+33		18+48	RT	23
	18+94		19+10	RT	25
	20+18		21+51	LT	248
	21+78		22+02	LT	31
	21+90		22+09	RT	19
	24+72		24+89	LT	18
	24+75		25+02	RT	35
	25+50		25+60	RT	20
				STAGE 1 TOTAL	683
2	13+46	11+56	13+49	LT	386
	13+88	14+21	13+88	LT	71
	14+94		15+38	LT	202
	16+63	16+37	16+73	LT	66
	17+42	18+38	18+19	LT	121
	19+02		19+11	LT	10
	19+35		20+32	LT	95
	22+10	21+72	23+43	LT	219
	24+53	24+92	24+73	LT	69
	25+75	25+59	25+96	LT	57
	26+67	26+73	26+67	LT	19
	27+57	27+13	27+57	LT	102
	34+80	37+20	36+93	LT	271
	35+49		36+22	LT	73
				STAGE 2 TOTAL	1761
				PROJECT TOTAL	2444

3

PEDESTRIAN CURB

				CONCRETE CURB PEDESTRIAN 601.0600
STAGE	STA	SIDE	OFFSET	LF
1	20+97	LT	55	7
	25+55	RT	38	12
			STAGE 1 TOTAL	19
2	16+44	LT	12	8
	16+49	LT	12	10
	18+24	LT	7	11
	18+29	LT	7	10
	21+95	LT	11	17
	22+00	LT	11	18
	24+75	LT	11	18
	24+85	LT	11	14
			STAGE 2 TOTAL	106
			PROJECT TOTAL	125

CONCRETE SIDEWALK

					CONCRETE SIDEWALK 5-INCH 602.0410	CONCRETE SIDEWALK 7-INCH 602.0420	CONCRETE SIDEWALK 9-INCH SPV.0165.01
STAGE	STA	TO	STA	SIDE	SF	SF	SF
1	10+11		10+77	RT	440		
	10+37		10+45	LT	43		
	10+32		10+46	LT	117		
	10+57		10+69	LT	85		
	11+36		15+95	LT	2491		
	11+42		11+69	RT	232		
	12+76		12+86	RT	50		
	12+86		13+46	RT		302	
	13+46		13+56	RT	50		
	14+06		14+16	RT	50		
	14+16		14+64	RT			242
	14+64		14+74	RT	50		
	15+21		15+31	RT	50		
	15+31		15+73	RT			171
	15+73		18+47	RT	1648		
	16+28		17+94	LT	907		
	17+94		18+15	LT	100		
	18+80		21+23	LT	2036		
	18+94		19+89	RT	566		
	19+89		20+25	RT			195
	20+25		20+67	RT	210		
	20+67		21+29	RT			315
	21+29		23+40	RT	1093		
	22+15		22+43	LT	161		
	23+40		23+89	RT		247	
	23+89		25+03	RT	788		
	24+57		24+97	LT	249		
	24+78		24+92	LT	191		
	24+97		25+64	LT			333
	25+49		25+93	RT	309		
	25+64		26+75	LT	695		
	25+93		26+19	RT		119	
	26+19		26+29	RT	50		
	26+75		27+12	LT			186
	27+12		29+01	LT	941		
	27+52		29+02	RT	723		
	29+02		29+26	RT		120	
	29+26		29+36	RT	50		
	31+17		33+58	LT	1306		
	31+20		31+43	RT	127		
	31+43		31+94	RT			257
	31+94		32+07	RT	60		
	32+70		35+75	RT	1578		
	36+73		36+81	RT	48		
	36+93		37+01	RT	48		
	35+59		37+05	LT	729		
	UNDISTRIBUTED				495		
				STAGE 1 TOTAL	18766	788	1699
2	11+56		12+61	LT	393		
	16+44		16+49	LT	45		
	18+15		18+36	LT	136		
	18+23		18+28	LT	51		
	21+81		22+07	LT	258		
	21+95		22+00	LT	87		
	24+75		24+85	LT	159		
				STAGE 2 TOTAL	1129		
				PROJECT TOTAL	19895	788	1699

3

FILE NAME : X:\3242500\150172.01\TECH\PSE\90% DELIVERABLE\MISC Q\IN C3D\60THMISCQ.DWG
LAYOUT NAME - SHEET - (2)
PLOT DATE : 2/22/2016 10:54 AM PLOT BY : ZACH VERHAGE PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

CATEGORY 0010

PEDESTRIAN WARNING FIELDS			
			CURB RAMP DETECTABLE WARNING FIELD YELLOW 602.0505
STAGE	STA	SIDE	SF
1	10+42	LT	8
	10+63	LT	24
	10+65	RT	16
	11+43	LT	16
	11+47	RT	16
	15+85	RT	8
	15+88	LT	16
	16+40	LT	16
	16+47	RT	8
	18+28	LT	8
	18+37	RT	16
	19+01	RT	16
	19+01	LT	8
	21+23	LT	8
	21+94	LT	16
	22+00	RT	8
	24+80	LT	16
	24+92	RT	24
	25+56	RT	8
		STAGE 1 TOTAL	256
2	16+46	MEDIAN	16
	18+28	MEDIAN	16
	19+01	MEDIAN	16
	21+98	MEDIAN	16
	24+80	MEDIAN	32
		STAGE 2 TOTAL	96
		PROJECT TOTAL	352

INLET RECONSTRUCTION				
				RECONSTRUCTING INLETS 611.0430
STAGE	STA	OFF	SIDE	EACH
1	11+55	29	RT	1
	11+60	47	LT	1
	13+60	29	RT	1
	19+11	30	RT	1
	20+95	46	LT	1
	21+03	29	RT	1
			STAGE 1 TOTAL	6
2	12+00	1	LT	1
	13+50	17	LT	1
	19+14	1	LT	1
	19+35	17	LT	1
	22+02	21	LT	1
	25+68	1	LT	1
	25+76	56	LT	1
	27+25	24	LT	1
	35+56	24	LT	1
			STAGE 2 TOTAL	9
			PROJECT TOTAL	15

ADJUSTING INLET COVERS				
				ADJUSTING INLET COVERS 611.8115
STAGE	STA	OFF	SIDE	EACH
1	17+00	47	LT	1
	17+00	29	RT	1
	18+12	47	LT	1
	18+31	29	RT	1
	19+21	47	LT	1
	20+85	74	LT	1
	25+71	29	RT	1
	30+99	55	LT	1
	31+00	29	RT	1
	33+75	30	RT	1
	37+03	55	LT	1
			STAGE 1 TOTAL	11
2	14+63	8	LT	1
	16+88	1	LT	1
	17+00	17	LT	1
	18+30	1	LT	1
	22+04	1	LT	1
	25+91	13	LT	1
	27+28	1	LT	1
	28+50	2	LT	1
	31+33	2	LT	1
	33+74	1	LT	1
	34+90	2	LT	1
	37+00	25	LT	1
			STAGE 2 TOTAL	12
			PROJECT TOTAL	23

CONCRETE MEDIAN SLOPED NOSE					
					CONCRETE MEDIAN SLOPED NOSE 620.0300
STAGE	STA	TO	STA	SIDE	SF
2	11+54		11+58	LT	24
	14+18		14+23	LT	31
	14+59		14+63	LT	26
	15+78		15+82	LT	32
	16+35		16+40	LT	37
	18+35		18+40	LT	38
	19+00		19+04	LT	28
	20+90		20+94	LT	34
	21+70		21+75	LT	58
	24+87		24+95	LT	103
	25+57		25+61	LT	29
	26+67		26+75	LT	130
	27+11		27+24	LT	273
	31+35		31+48	LT	263
	31+83		31+96	LT	266
	37+17		37+26	LT	480
				STAGE 2 TOTAL	1852
				PROJECT TOTAL	1852

MANHOLE RECONSTRUCT				
				RECONSTRUCTING MANHOLES 611.0420
STAGE	STA	OFF	SIDE	EACH
1	13+62	35	LT	1
	16+06	33	LT	1
	25+37	60	RT	1
			STAGE 1 TOTAL	3
			PROJECT TOTAL	3

ADJUST MANHOLE COVERS				
				ADJUSTING MANHOLE COVERS 611.8110
STAGE	STA	OFF	SIDE	EACH
1	10+03	26	LT	1
	10+24	15	RT	1
	10+62	108	LT	1
	11+09	33	LT	1
	11+56	34	LT	1
	13+62	35	LT	1
	16+05	64	LT	1
	16+06	33	LT	1
	25+37	60	RT	1
			STAGE 1 TOTAL	9
2	18+31	5	RT	1
	19+09	15	LT	1
	22+00	9	RT	1
	37+00	2	LT	1
			STAGE 2 TOTAL	4
			PROJECT TOTAL	13

COVER PLATES TEMPORARY	
	COVER PLATES TEMPORARY 611.8120.S
STAGE	EACH
1	20
2	16
TOTAL	36

MOBILIZATION		
		MOBILIZATION 619.1000
STAGE	LOCATION	EACH
ALL	NORTH 60TH STREET	1
	TOTAL	1

3

RESTORATION					
		TOPSOIL 625.0100	FERTILIZER TYPE B 629.0210	SOD WATER 631.0300	SOD LAWN 631.1000
STAGE	LOCATION	SY	CWT	MGAL	SY
1	NORTH 60TH STREET	520	0.3	1.2	8200
2	NORTH 60TH STREET	48	0.06	0.2	600
	TOTAL	568	0.36	1.4	8800

EROSION CONTROL MOBILIZATION			
		MOBILIZATIONS EROSION CONTROL 628.1905	MOBILIZATIONS EMERGENCY EROSION CONTROL 628.1910
STAGE	LOCATION	EACH	EACH
ALL	NORTH 60TH STREET	3	2
	TOTAL	3	2

EROSION CONTROL DEVICES				
		INLET PROTECTION TYPE B 628.7010	INLET PROTECTION TYPE C 628.7015	INLET PROTECTION TYPE D 628.7020
STAGE	LOCATION	EACH	EACH	EACH
ALL	NORTH 60TH STREET	38	24	15
	TOTAL	38	24	15

SIGNS					
				MOVING SIGNS TYPE II 638.2102	REMOVING SIGNS TYPE II 638.2602
STAGE	STA	SIDE	OFFSET	EACH	EACH
1	20+81	LT	77	-	1
	21+20	LT	60	1	-
	21+28	LT	88	-	1
			STAGE 1 TOTAL	1	2
			PROJECT TOTAL	1	2

FIELD FACILITIES		
		FIELD OFFICE TYPE B 642.5001
STAGE	LOCATION	EACH
ALL	NORTH 60TH STREET	1
	TOTAL	1

TRAFFIC CONTROL PROJECT	
	TRAFFIC CONTROL (PROJECT) 643.0100
STAGE	EACH
1	0.25
2	0.25
3	0.5
TOTAL	1

TRAFFIC CONTROL DETOUR PROJECT	
	TRAFFIC CONTROL DETOUR (PROJECT) 643.2000
STAGE	EACH
1	0.25
2	0.25
3	0.5
TOTAL	1

TRAFFIC CONTROL DETOUR SIGNS	
	TRAFFIC CONTROL DETOUR SIGNS 643.3000
STAGE	DAY
1	704
2	396
3	242
TOTAL	1342

TRAFFIC CONTROL						
	TRAFFIC CONTROL DRUMS 643.0300	TRAFFIC CONTROL BARRICADES TYPE III 643.0420	TRAFFIC CONTROL WARNING LIGHTS TYPE A 643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE C 643.0715	TRAFFIC CONTROL ARROW BOARDS	TRAFFIC CONTROL SIGNS 643.0900
STAGE	DAY	DAY	DAY	DAY	DAY	DAY
1	15680	872	1388	3660	64	2318
2	8100	540	936	2160	36	1368
3	3750	150	332	750	20	450
TOTAL	27530	1562	2656	6570	120	4136

TEMPORARY PEDESTRIAN SURFACE			
		TEMPORARY PEDESTRIAN SURFACE ASPHALT 644.1410.S	TEMPORARY PEDESTRIAN SURFACE PLYWOOD 644.1420.S
STAGE	LOCATION	SF	SF
1	UNDISTRIBUTED	12150	12150
	STAGE 1 TOTAL	12150	12150
2	UNDISTRIBUTED	0	0
	STAGE 2 TOTAL	0	0
3	STAGE 3 TOTAL	0	0
	PROJECT TOTAL	12150	12150

TEMPORARY CURB RAMPS			
			TEMPORARY CURB RAMPS 644.1401.S
STAGE	STATION	LOCATION	LF
1	10+38	RT	1
	11+70	LT	1
	18+15	RT	1
	22+18	LT	1
	24+65	RT	1
	26+01	LT	1
	32+50	LT	1
	32+94	RT	1
	36+97	RT	1
		TOTAL	9

3

CATEGORY 0010

PAVEMENT MARKING LINES

						PAVEMENT MARKING PREFORMED PLASTIC 8-INCH	PAVEMENT MARKING PREFORMED PLASTIC 4-INCH BROKEN	PAVEMENT MARKING STOP LINE PREFORMED PLASTIC 24-INCH	PAVEMENT MARKING CROSSWALK PREFORMED PLASTIC 12-INCH	PAVEMENT MARKING CROSSWALK PREFORMED THERMOPLASTIC 24-INCH
						646.0129	646.0109	647.0579	647.0779	647.0799
						WHITE	WHITE	WHITE	WHITE	WHITE
STAGE	STA	TO	STA	LOCATION	LT/RT	LF	LF	LF	LF	LF
3	9+97		10+48	NORTH 60TH	RT	51	--	--	--	--
	10+43		10+55	NORTH 60TH	LT	--	--	--	14	--
	10+48		10+59	NORTH 60TH	LT	--	--	--	14	--
	10+49		10+49	NORTH 60TH	RT	--	--	30	--	--
	10+50		10+61	NORTH 60TH	LT	--	--	14	--	--
	10+53		10+59	NORTH 60TH	LT/RT	--	--	--	69	--
	10+59		10+66	NORTH 60TH	LT/RT	--	--	--	70	--
	10+68		11+48	NORTH 60TH	RT	--	--	--	81	--
	10+69		11+43	NORTH 60TH	LT	--	--	--	74	--
	10+70		10+97	NORTH 60TH	LT	--	--	27	--	--
	10+71		10+97	NORTH 60TH	LT	--	--	--	27	--
	10+77		11+01	NORTH 60TH	RT	--	--	--	25	--
	10+80		10+86	FLORIST	LT	--	64	--	0	--
	11+04		11+35	NORTH 60TH	LT	--	--	--	31	--
	11+12		11+41	NORTH 60TH	RT	--	--	--	28	--
	11+13		11+40	NORTH 60TH	RT	--	--	27	--	--
	11+13		11+15	FLORIST	LT	--	35	--	--	--
	11+24		11+24	FLORIST	RT	--	22	--	--	--
	11+45		11+48	NORTH 60TH	LT/RT	--	--	--	78	--
	11+54		11+54	NORTH 60TH	LT/RT	--	--	--	75	--
	11+58		11+58	NORTH 60TH	LT	--	--	38	--	--
	11+58		12+60	NORTH 60TH	LT	103	--	--	--	--
	11+59		15+82	NORTH 60TH	RT	--	423	--	--	--
	11+63		15+82	NORTH 60TH	LT	--	420	--	--	--
	16+50		18+22	NORTH 60TH	LT	--	172	--	--	--
	16+50		18+22	NORTH 60TH	RT	--	172	--	--	--
	19+15		21+08	NORTH 60TH	RT	--	196	--	--	--
	19+15		21+08	NORTH 60TH	LT	--	186	--	--	--
	19+71		20+94	NORTH 60TH	RT	122	--	--	--	--
	21+98		24+65	NORTH 60TH	LT	--	275	--	--	--
	22+01		24+65	NORTH 60TH	RT	--	261	--	--	--
	24+74		24+84	NORTH 60TH	LT/RT	--	--	--	--	80
	25+73		26+67	NORTH 60TH	LT	94	--	--	--	--
	25+73		37+17	NORTH 60TH	LT	--	1143	--	--	--
	25+80		36+80	NORTH 60TH	RT	--	1135	--	--	--
	36+16		37+15	NORTH 60TH	RT	100	--	--	--	--
	37+15		37+15	NORTH 60TH	RT	--	--	41	--	--
					TOTAL	470	4504	177	586	80

CONSTRUCTION STAKING

		CONSTRUCTION STAKING RESURFACING REFERENCE 650.8000
STAGE	LOCATION	LF
ALL	NB PGL	2735
	SB PGL	2757
	WEST DOUGLAS AVENUE	105
	TOTAL	5597

SAWING ASPHALT

					SAWING ASPHALT 690.0150
STAGE	STA	TO	STA	SIDE	LF
1	10+58		10+91	LT	34
	10+81		11+03	RT	24
	11+11		11+42	RT	32
	11+02		11+31	LT	30
	15+96		16+28	LT	33
	18+50		18+94	RT	45
				TOTAL	198

CONSTRUCTION STAKING

	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 650.9910
STAGE	LS
ALL	1
TOTAL	1

SAWING CONCRETE

					SAWING CONCRETE 690.0250
STAGE	STA	TO	STA	SIDE	LF
1	9+77		9+77	LT	32
	9+77		9+96	LT	20
	9+97		10+53	RT	31
	10+59		10+58	LT	20
	10+79		10+81	RT	21
	11+31		11+33	LT	26
	11+54		11+54	RT	7
	11+54		12+00	RT	47
	12+00		12+00	RT	12
	12+12		12+12	RT	11
	12+12		12+50	RT	36
	12+62		12+72	RT	10
	12+72		12+72	RT	7
	12+88		13+12	RT	24
	11+59		11+59	LT	6
	11+59		12+19	LT	60
	12+19		12+19	LT	6
	14+12		14+12	RT	11
	14+12		14+55	RT	43
	14+55		14+55	RT	11
	14+75		14+75	RT	29
	14+87		14+87	RT	17
	14+87		15+42	RT	56
	15+42		15+42	RT	5
	15+54		15+54	RT	17
	15+83		15+83	RT	29
	15+83		15+97	RT	15
	15+97		15+97	RT	22
	15+97		16+12	RT	15
	16+12		16+12	RT	6
	15+98		15+98	LT	22
	16+26		16+26	LT	20
	16+10		16+10	MEDIAN	10
	16+10		16+36	MEDIAN	27
	16+10		16+71	MEDIAN	63
	16+36		16+71	MEDIAN	38
	17+73		17+73	RT	6
	17+73		18+33	RT	60
	18+33		18+33	RT	6
	18+50		18+50	RT	21
	18+92		18+92	RT	20
	18+92		18+92	RT	6
	18+92		19+19	RT	27
	18+92		19+19	RT	27
	18+92		19+19	RT	27
	19+19		19+19	RT	6
	18+99		18+99	LT	6
	18+99		19+61	LT	60
	19+61		19+61	LT	6
	19+51		19+51	RT	18

SAWING CONCRETE

					SAWING CONCRETE 690.0250
STAGE	STA	TO	STA	SIDE	LF
1	20+02		20+02	RT	17
	19+71		19+71	MEDIAN	10
	19+71		19+90	MEDIAN	19
	19+90		19+90	MEDIAN	10
	20+12		20+12	MEDIAN	10
	20+12		20+30	MEDIAN	18
	20+30		20+30	MEDIAN	10
	20+27		20+27	LT	12
	20+27		20+46	LT	17
	20+27		20+92	LT	62
	20+46		20+90	LT	42
	20+92		20+91	LT	12
	21+23		21+58	LT	135
	20+73		20+73	RT	12
	20+73		21+38	RT	65
	21+38		21+38	RT	26
	21+38		21+59	MEDIAN	22
	21+44		21+82	LT	40
	21+82		21+82	LT	30
	21+59		21+59	RT	26
	21+59		22+26	RT	67
	22+26		22+26	RT	11
	22+02		22+03	LT	6
	22+03		22+63	LT	60
	22+63		22+62	LT	6
	22+67		23+96	RT	126
	23+96		23+95	RT	6
	23+96		24+78	RT	80
	24+78		24+78	RT	9
	24+78		25+20	RT	42
	25+20		25+20	RT	31
	25+05		25+20	RT	15
	25+03		25+49	RT	46
	23+47		23+47	LT	28
	23+89		23+89	LT	28
	23+47		23+89	LT	44
	24+89		24+89	LT	12
	24+89		25+62	LT	73
	25+62		25+62	LT	12
	25+60		26+26	RT	66
	26+26		26+26	RT	11
	26+51		26+51	RT	11
	26+51		26+67	RT	16
	25+86		25+86	LT	12
	25+86		26+57	LT	70
	26+57		26+57	LT	12
	29+50		29+50	LT	28
	29+50		29+50	RT	28
	31+01		31+01	LT/RT	84
	31+05		31+06	LT	28

3

CATEGORY 0010

3

SAWING CONCRETE

					SAWING CONCRETE 690.0250
STAGE	STA	TO	STA	SIDE	LF
1	31+06		31+35	RT	29
	31+35		31+35	RT	6
	31+70		31+70	RT	12
	31+70		32+16	RT	46
	32+16		32+16	RT	12
	32+52		32+52	LT	6
	32+52		33+12	LT	60
	33+12		33+12	LT	6
	32+61		32+61	RT	11
	32+61		32+84	RT	23
	32+84		32+84	RT	11
	34+00		34+51	LT	50
	36+41		36+41	RT	6
	36+41		37+01	RT	60
	37+01		37+01	RT	6
	37+31		37+34	LT/RT	136
	37+29		37+34	LT	5
				STAGE 1 TOTAL	3276

SAWING CONCRETE

					SAWING CONCRETE 690.0250
STAGE	STA	TO	STA	SIDE	LF
2	9+78		10+33	MEDIAN	55
	9+97		9+97	RT	36
	9+97		10+33	MEDIAN	54
	10+91		10+93	LT	20
	11+01		11+03	RT	27
	11+13		11+13	RT	24
	11+40		11+40	RT	21
	11+02		11+04	LT	36
	12+00		12+12	RT	12
	12+50		12+50	RT	22
	12+62		12+62	RT	22
	12+88		12+88	RT	22
	13+12		13+12	RT	22
	12+98		13+12	MEDIAN	15
	12+02		12+02	MEDIAN	8
	12+02		12+50	MEDIAN	48
	12+50		12+50	MEDIAN	8
	13+88		14+81	MEDIAN	93
	14+19		14+63	MEDIAN	45
	14+12		14+55	RT	43
	15+42		15+54	RT	12
	19+51		20+02	RT	52
	22+26		22+67	RT	42
	22+67		22+67	RT	11
	23+47		23+89	LT	45
	24+47		24+47	LT	6
	24+47		24+89	LT	44
	24+89		24+89	LT/MED	16
	24+91		25+76	MEDIAN	85
	24+80		25+60	RT	80
	25+60		25+60	RT	17
	25+60		26+67	RT	107
	26+67		26+67	RT	11
	32+61		32+76	RT	15
	32+76		32+84	RT	8
	34+00		34+00	LT	18
	34+51		34+51	LT	17
				STAGE 2 TOTAL	1219
				UNDISTRIBUTED	600
				PROJECT TOTAL	5095

INCENTIVE STRENGTH CONCRETE PAVEMENT

	INCENTIVE STRENGTH CONCRETE PAVEMENT 715.0415
STAGE	DOL
ALL	15000
PROJECT TOTAL	15000

CONSTRUCTION STAKING CURB RAMPS

	CONSTRUCTION STAKING CURB RAMPS SPV.0060.01
STAGE	EACH
1	24
TOTAL	24

INLET CONSTRUCTION SPECIAL

				INLET COVERS TYPE 57 SPV.0060.02	INLET TYPE 45A SPV.0060.03
STAGE	STA	OFF	SIDE	EACH	EACH
1	9+79	38	LT	1	1
	10+30	30	RT	1	1
	10+56	108	LT	1	1
	11+34	74	LT	1	1
	15+97	65	LT	1	1
	16+27	65	LT	1	1
	18+49	57	RT	1	1
	18+94	55	RT	1	1
	20+84	75	LT	1	0
	22+01	51	LT	1	1
	28+50	55	LT	1	1
	28+49	29	RT	1	1
	33+75	55	LT	1	1
	37+02	29	RT	1	1
			STAGE 1 TOTAL	14	13
2	12+01	7	LT	1	1
	13+50	1	LT	1	1
	13+60	46	LT	1	1
	35+57	1	LT	1	1
			STAGE 2 TOTAL	4	4
			PROJECT TOTAL	18	17

ASPHALT DRIVEWAY RAMPS TEMPORARY

		ASPHALT DRIVEWAY RAMPS TEMPORARY SPV.0060.07
STAGE	SIDE	EACH
1	RT/LT	20
	STAGE 1 TOTAL	20
	PROJECT TOTAL	20

CONCRETE CURB AND GUTTER SPECIAL

					CONCRETE CURB AND GUTTER 31" INTEGRAL TYPE D SPECIAL SPV.0090.01
STAGE	STA	TO	STA	SIDE	LF
1	11+59		12+24	LT	65
	17+68		18+33	RT	65
	18+94		19+66	LT	70
	22+02		22+67	LT	65
	24+10		24+78	RT	65
	32+33		33+05	RT	70
	32+42		33+12	LT	70
	36+15		37+01	RT	85
				STAGE 1 TOTAL	555
				PROJECT TOTAL	555

CONCRETE GUTTER

					CONCRETE GUTTER TYPE D MODIFIED SPV.0090.02
STAGE	STA	TO	STA	SIDE	LF
2	14+07		14+17	LT	10
	14+73		14+83	LT	10
	17+96		18+06	LT	10
	19+10		19+20	LT	10
	24+62		24+72	LT	10
	25+67		25+77	LT	10
	27+31		27+41	LT	10
	32+03		32+13	LT	10
				TOTAL	80

3

3

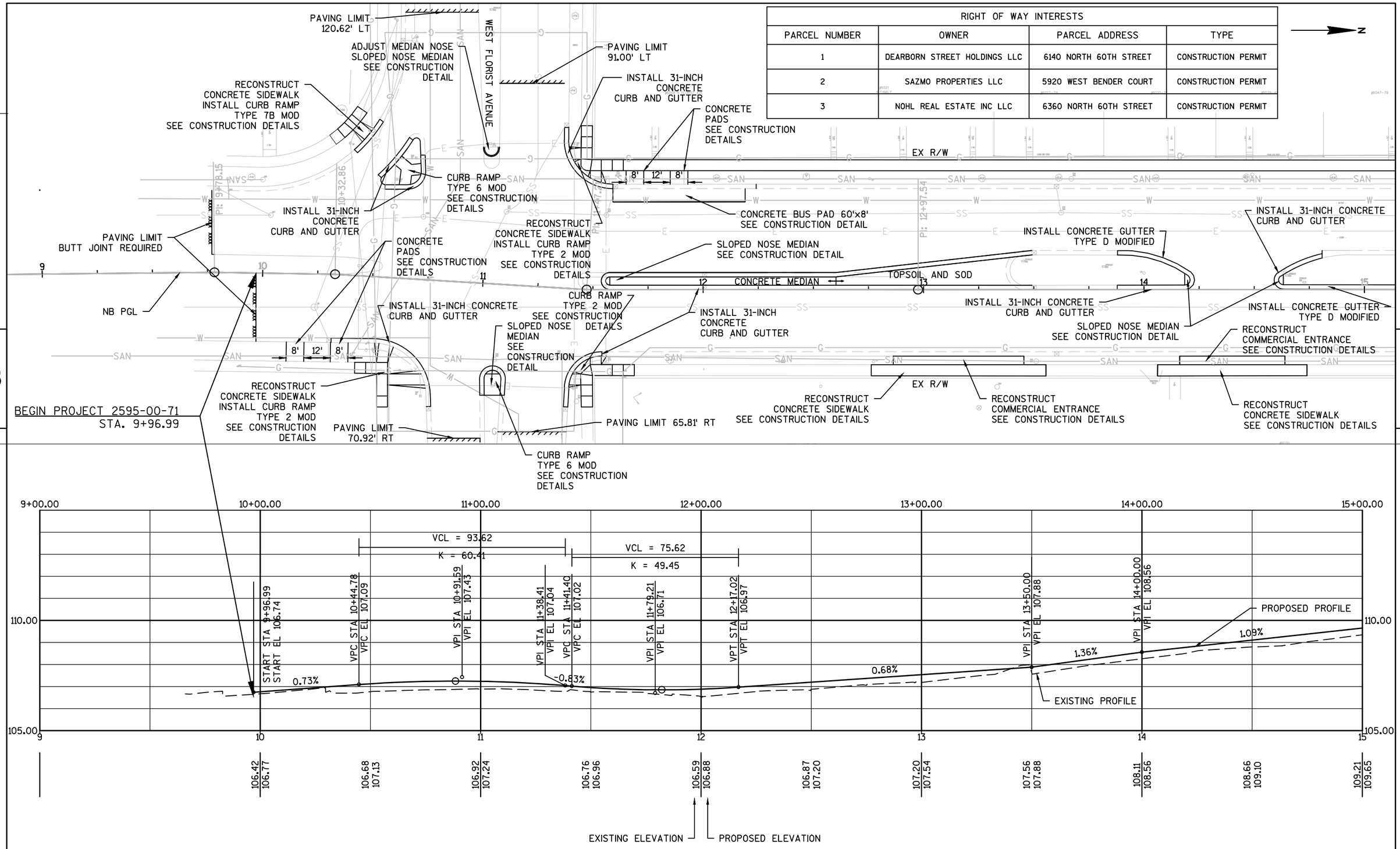
ADJUST MANHOLE COVERS				
				ADJUSTING MANHOLE COVERS 611.8110
STAGE	STA	OFF	SIDE	EACH
1	10+87	47	LT	1
	11+07	34	RT	1
	11+38	31	RT	1
	16+14	50	LT	1
	18+72	30	RT	1
	19+11	12	RT	1
	21+06	53	LT	1
	21+62	28	RT	1
	22+33	25	RT	1
	24+44	35	LT	1
	26+77	58	LT	1
	28+72	16	RT	1
	31+26	48	LT	1
			STAGE 1 TOTAL	13
			PROJECT TOTAL	13

MANHOLE RECONSTRUCT				
				RECONSTRUCTING MANHOLES 611.0420
STAGE	STA	OFF	SIDE	EACH
2	24+44	35	LT	1
			STAGE 2 TOTAL	1
			PROJECT TOTAL	1

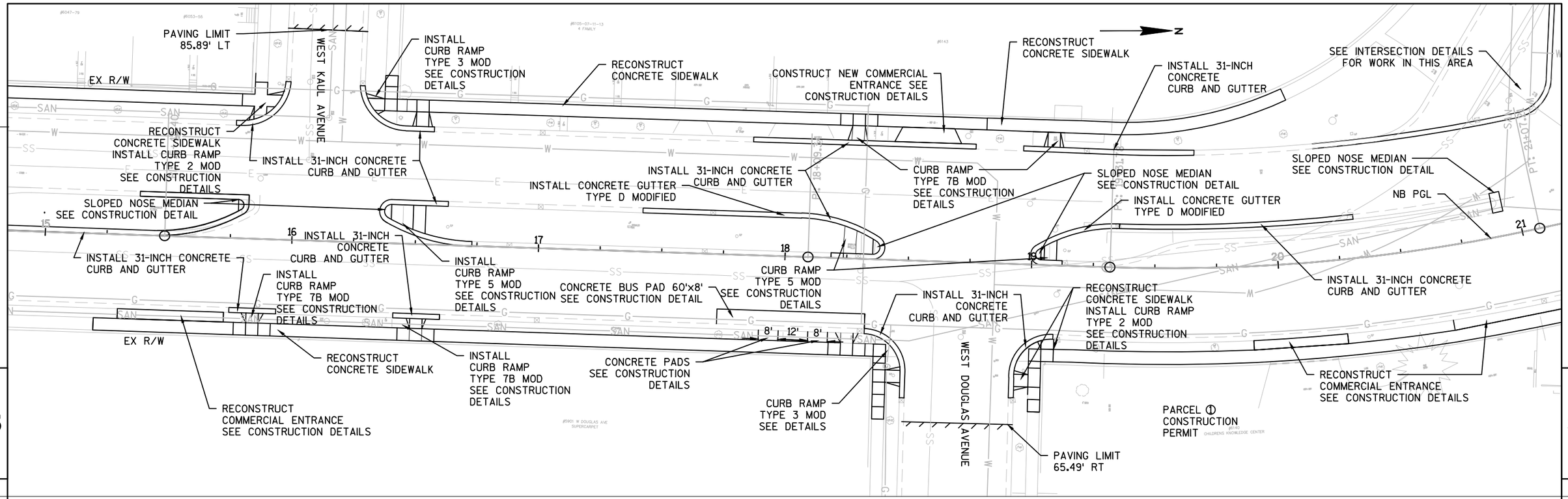
WATER SERVICES		
	ADJUSTING WATER BOX SPV.0060.04	RELOCATING SPRINKLER BOXES SPV.0060.05
STAGE	EACH	EACH
1	22	0
2	3	2
TOTAL	25	2

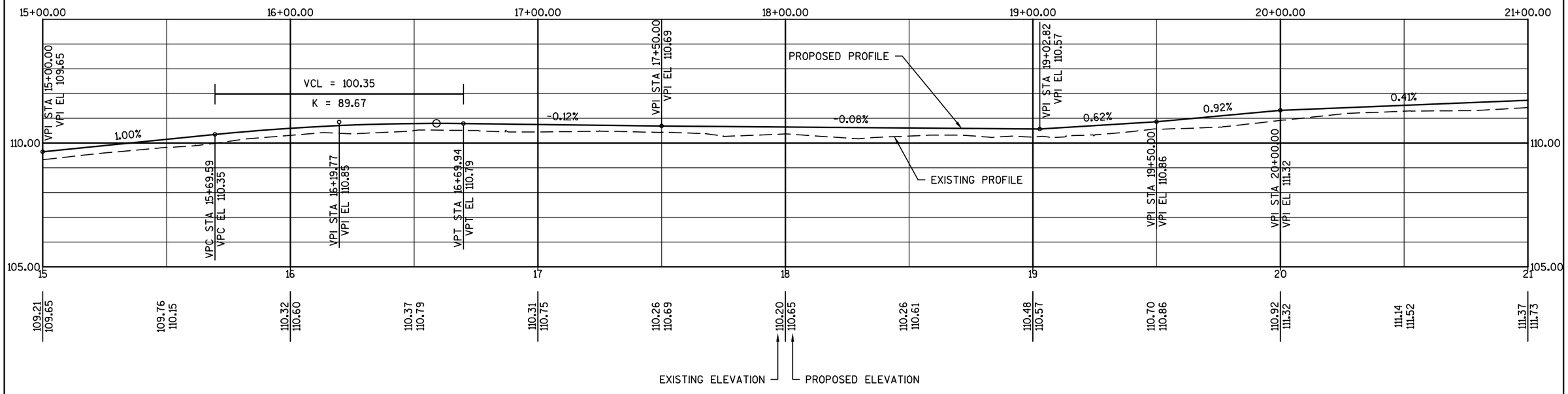
ADJUST TES MANHOLE COVERS				
				ADJUSTING TES MANHOLE COVERS SPV.0060.06
STAGE	STA	OFF	SIDE	EACH
1	10+71	28	LT	1
	21+73	35	LT	1
	24+99	41	LT	1
	31+25	40	LT	1
			STAGE 1 TOTAL	4
2	15+87	25	LT	1
	18+99	25	LT	1
	37+39	39	LT	1
			STAGE 2 TOTAL	3
			PROJECT TOTAL	7

RIGHT OF WAY INTERESTS			
PARCEL NUMBER	OWNER	PARCEL ADDRESS	TYPE
1	DEARBORN STREET HOLDINGS LLC	6140 NORTH 60TH STREET	CONSTRUCTION PERMIT
2	SAZMO PROPERTIES LLC	5920 WEST BENDER COURT	CONSTRUCTION PERMIT
3	NOHL REAL ESTATE INC LLC	6360 NORTH 60TH STREET	CONSTRUCTION PERMIT

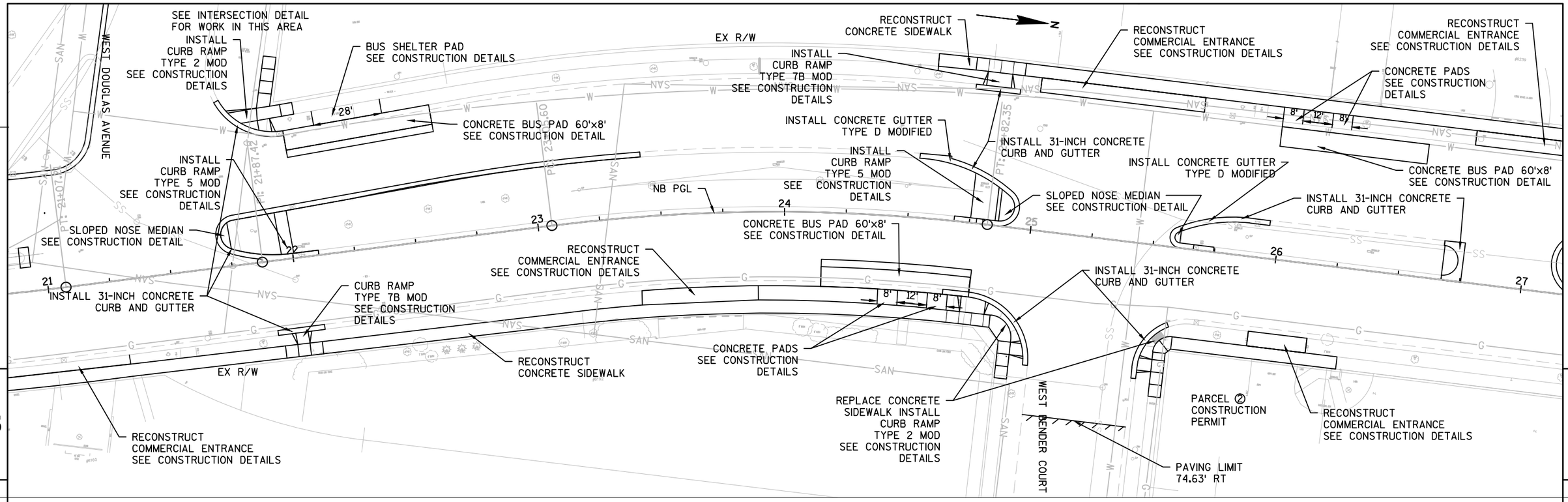


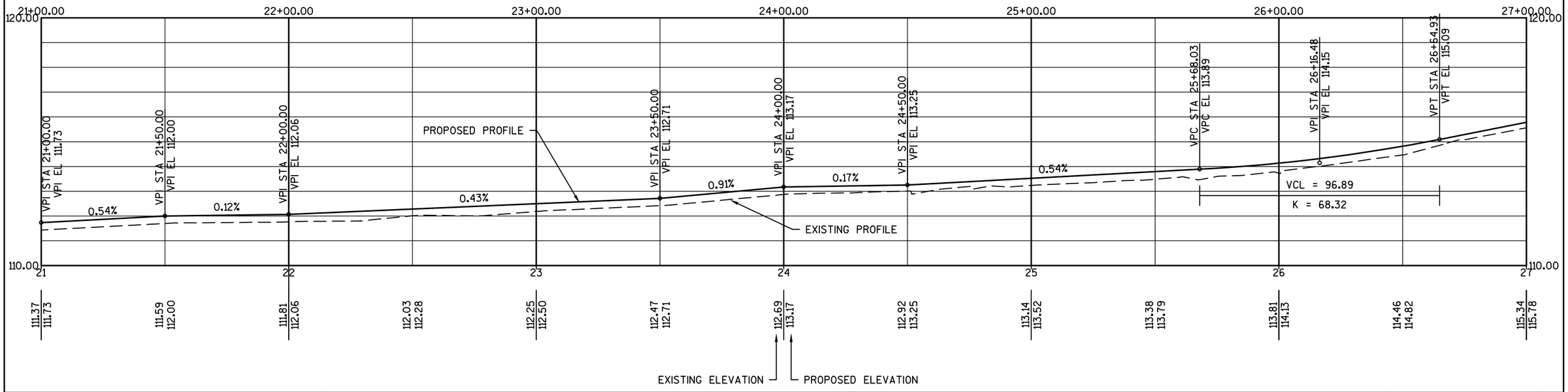
PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PLAN AND PROFILE - NORTHBOUND PGL	SHEET 106	E



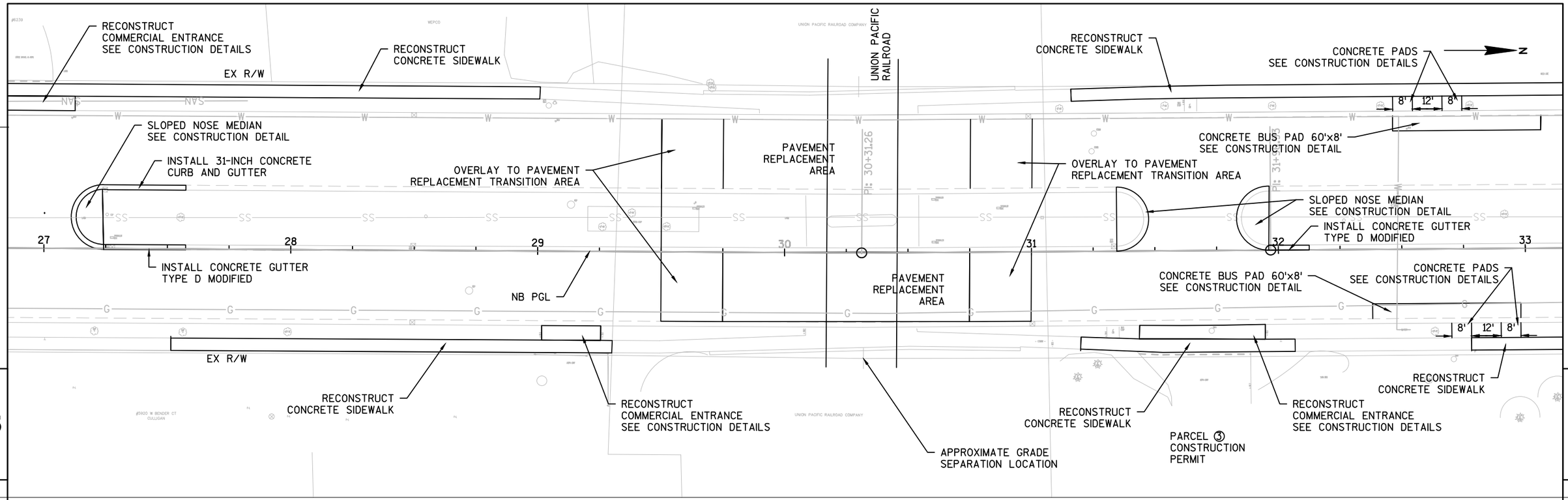


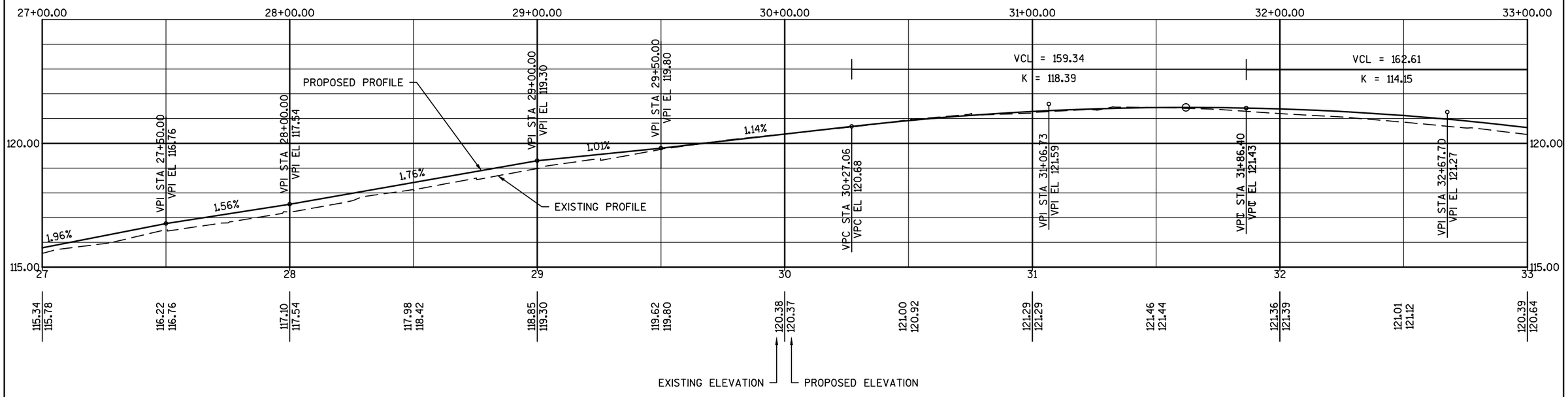
PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PLAN AND PROFILE - NORTHBOUND PGL	SHEET 107	E





PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PLAN AND PROFILE - NORTHBOUND PGL	SHEET 108	E





PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PLAN AND PROFILE - NORTHBOUND PGL	SHEET 109	E

RECONSTRUCT CONCRETE SIDEWALK

EX R/W

RECONSTRUCT CONCRETE SIDEWALK

INSTALL 31-INCH CONCRETE CURB AND GUTTER

INSTALL 31-INCH CONCRETE CURB AND GUTTER

PAVING LIMIT

4-INCH TOP SOIL AND SOD MEDIAN

SLOPED NOSE MEDIAN SEE CONSTRUCTION DETAIL

INSTALL 31-INCH CONCRETE CURB AND GUTTER

CONCRETE BUS PAD 80'x8' SEE CONSTRUCTION DETAIL

NB PGL

8' 12' 8'

EX R/W

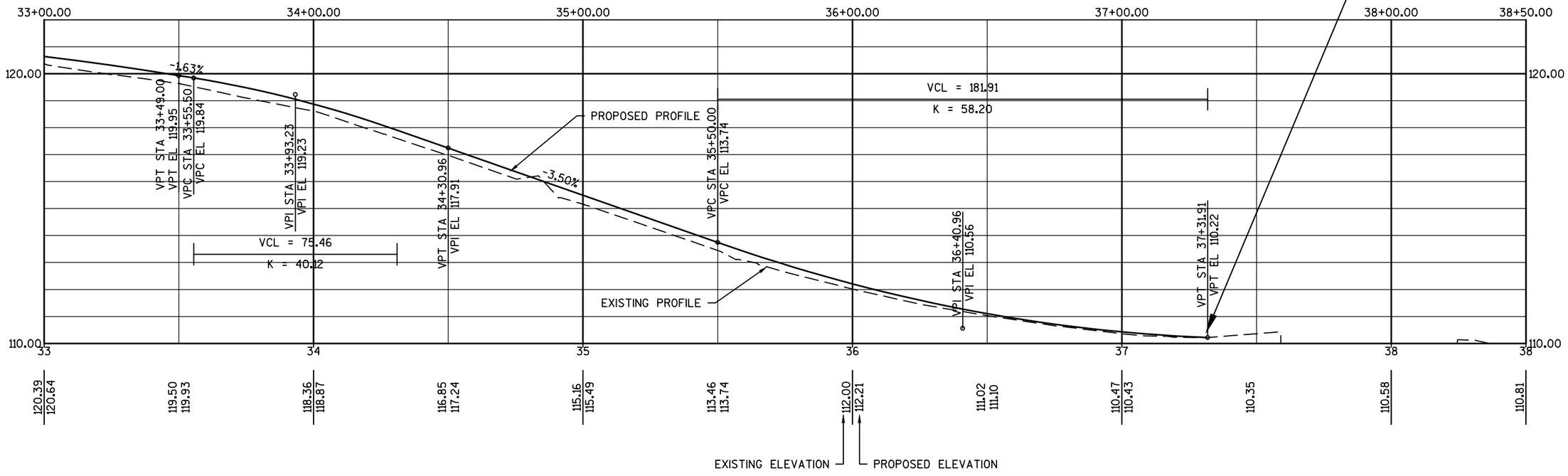
RECONSTRUCT CONCRETE SIDEWALK

CONCRETE PADS SEE CONSTRUCTION DETAILS

END PROJECT 2595-00-71
STA. 37+31.91

WEST MILL ROAD

N



PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PLAN AND PROFILE - NORTHBOUND PGL	SHEET 110	E

SEE NORTHBOUND PGL
PLAN AND PROFILE SHEETS
FOR PLAN DETAILS

SB PGL

110 111 112 113 114 115

BEGIN PROJECT 2595-00-71
STA. 109+76.96

109+00.00 110+00.00 111+00.00 112+00.00 113+00.00 114+00.00 115+00.00

VCL = 101.12
K = 79.91

VCL = 81.37
K = 69.94

START STA 109+76.96
VPI EL 106.76

VPC STA 110+37.84
VPC EL 107.19

VPI STA 110+88.40
VPI EL 107.55

VPT STA 111+38.96
VPT EL 107.26

VPC STA 111+58.39
VPC EL 107.15

VPI STA 111+99.08
VPI EL 106.92

VPT STA 112+39.76
VPT EL 107.17

VPI STA 112+98.35
VPI EL 107.57

VPI STA 114+54.86
VPI EL 108.58

VPI STA 114+50.00
VPI EL 109.16

PROPOSED PROFILE

0.70% -0.56% 0.60% 0.95% 1.30% 0.83%

EXISTING PROFILE

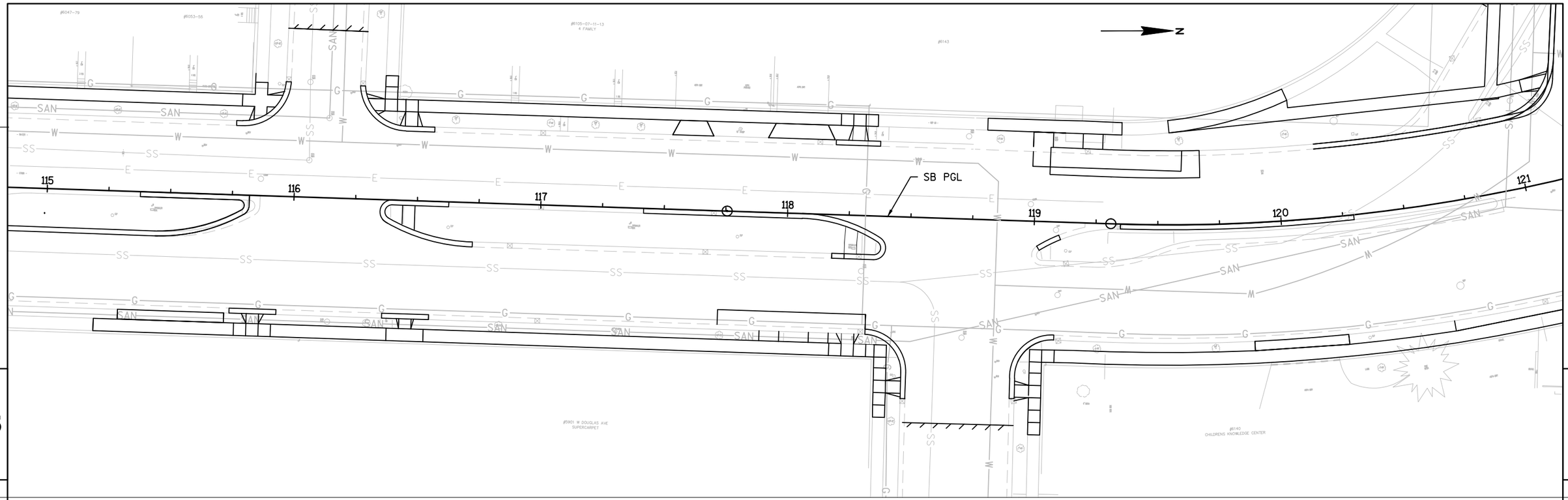
110.00 105.00

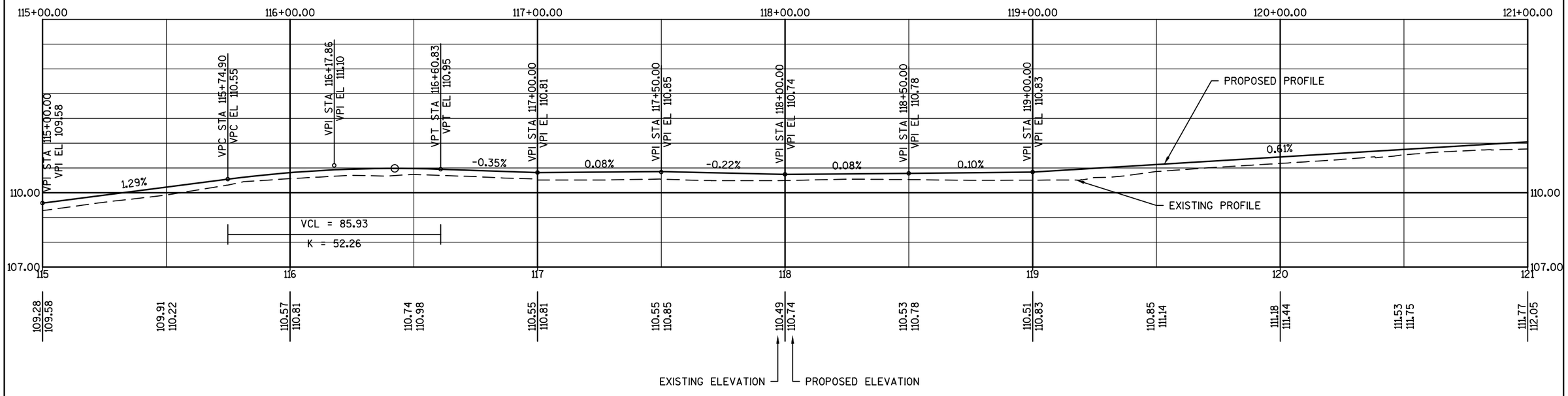
109 110 111 112 113 114 115

106.72	106.90	107.05	106.88	106.62	106.93	107.23	107.58	108.25	108.84	109.28
106.93	107.27	107.39	107.20	107.04	107.23	107.58	108.06	108.53	109.16	109.58

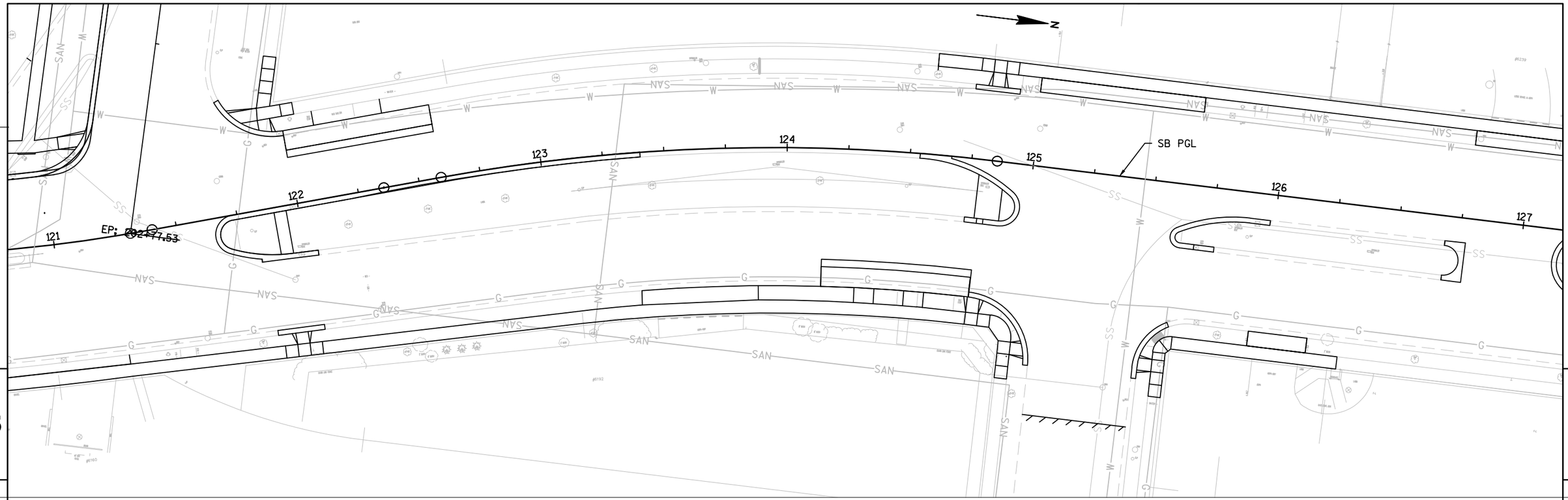
EXISTING ELEVATION — PROPOSED ELEVATION

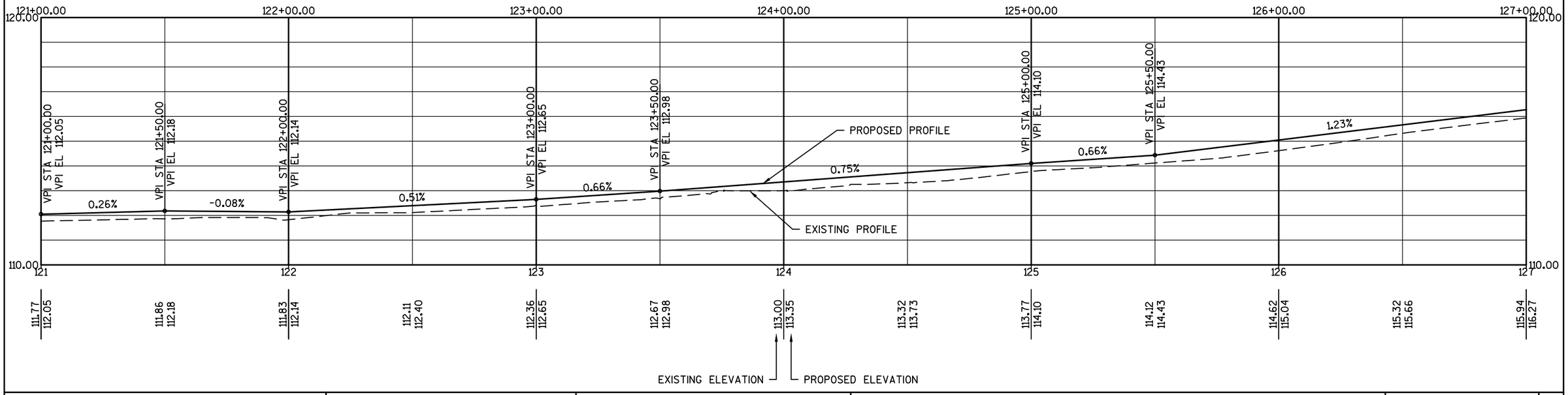
PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PLAN AND PROFILE - SOUTHBOUND PGL	SHEET 111	E





PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PLAN AND PROFILE - SOUTHBOUND PGL	SHEET 112	E

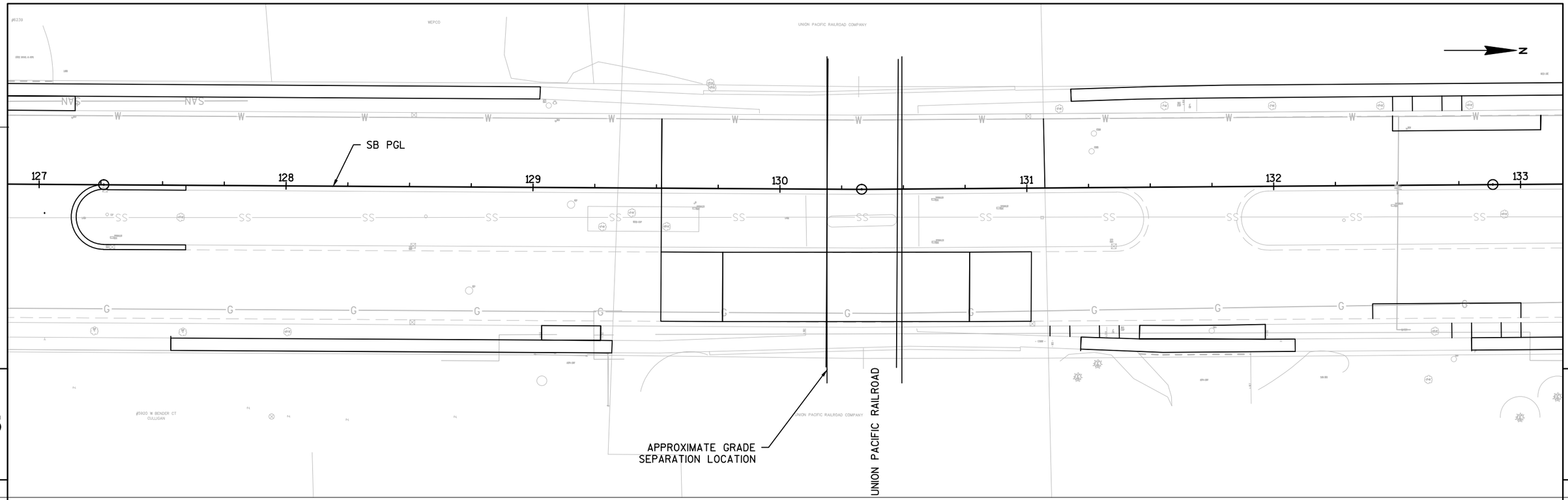


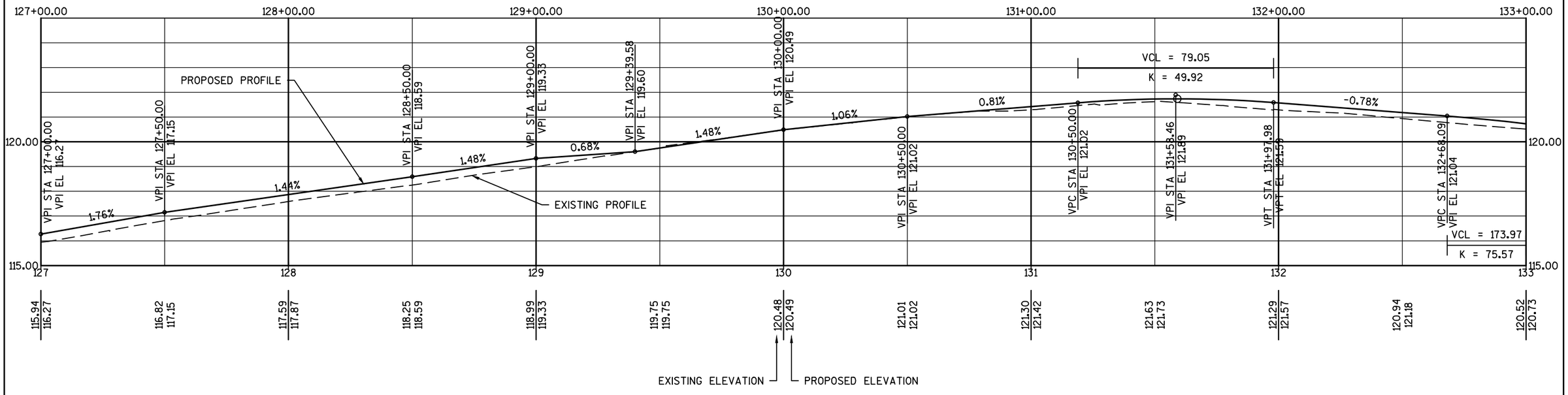


PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PLAN AND PROFILE - SOUTHBOUND PGL	SHEET 113	E

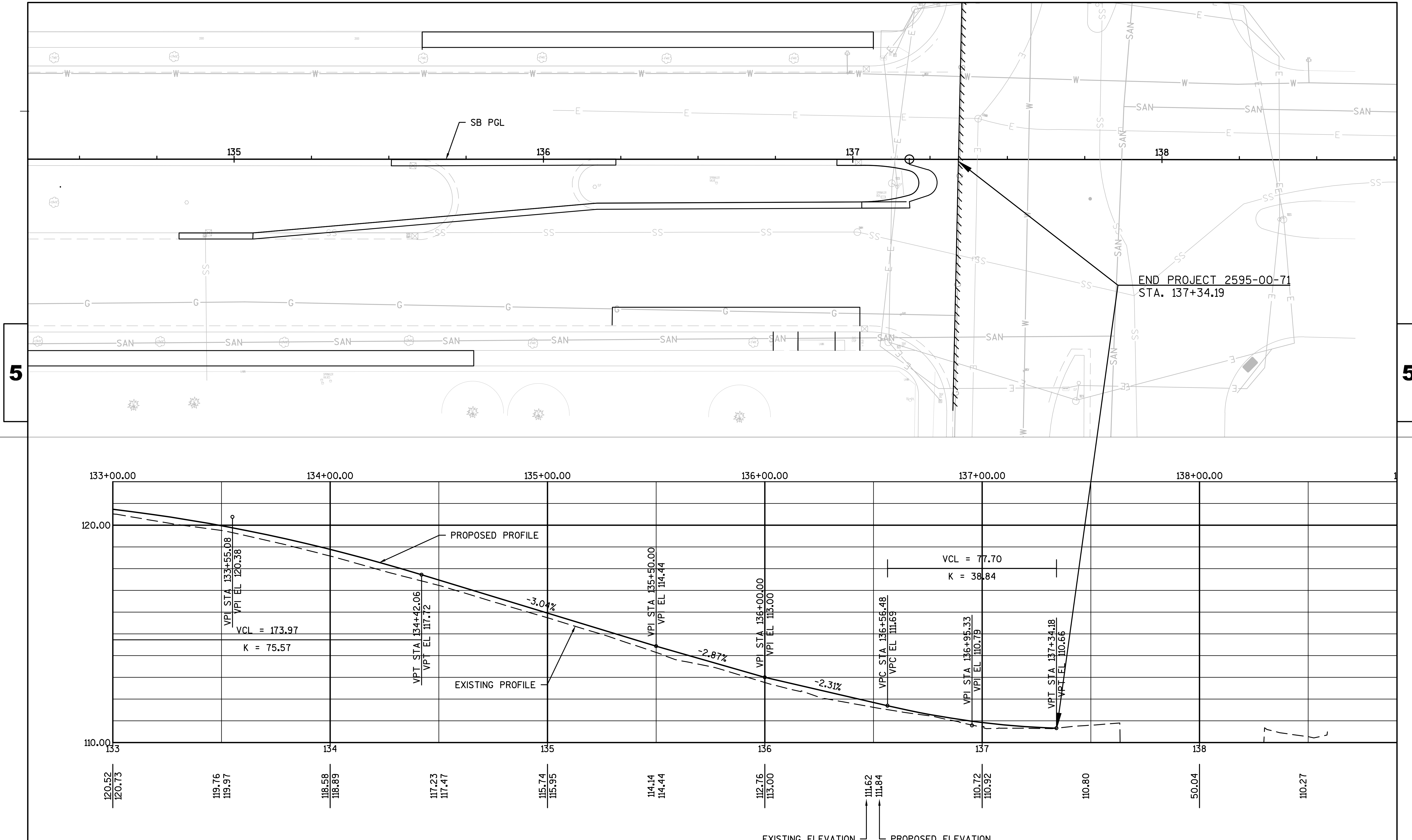
FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\050102_PP.DWG PLOT DATE : 2/22/2016 10:58 AM PLOT BY : ZACH VERHAGE PLOT NAME : 19 PLOT SCALE : 1"IN=40'FT

WISDOT/CADDS SHEET 46





PROJECT NO: 2595-00-71	HWY: NORTH 60TH STREET	COUNTY: MILWAUKEE	PLAN AND PROFILE - SOUTHBOUND PGL	SHEET 114	E


SB PGL
135
136
137
138
END PROJECT 2595-00-71
STA. 137+34.19
5
133+00.00
134+00.00
135+00.00
136+00.00
137+00.00
138+00.00
120.00
110.00
PROPOSED PROFILE
EXISTING PROFILE
VPI STA 133+55.08
VPI EL 120.38
VCL = 173.97
K = 75.57
VPT STA 134+42.06
VPT EL 117.72
-3.04%
VPI STA 135+50.00
VPI EL 114.44
-2.87%
VPI STA 136+00.00
VPI EL 113.00
-2.31%
VPC STA 136+56.48
VPC EL 111.69
VCL = 77.70
K = 38.84
VPI STA 136+95.33
VPI EL 110.79
VPT STA 137+34.18
VPT EL 110.66
133
134
135
136
137
138
120.52
120.73
119.76
119.97
118.58
118.89
117.23
117.47
115.74
115.95
114.14
114.44
112.76
113.00
111.62
111.84
110.72
110.92
110.80
50.04
110.27
EXISTING ELEVATION
PROPOSED ELEVATION

PROJECT NO:2595-00-71	HWY:NORTH 60TH STREET	COUNTY:MILWAUKEE	PLAN AND PROFILE - SOUTHBOUND PGL	SHEET 115	E

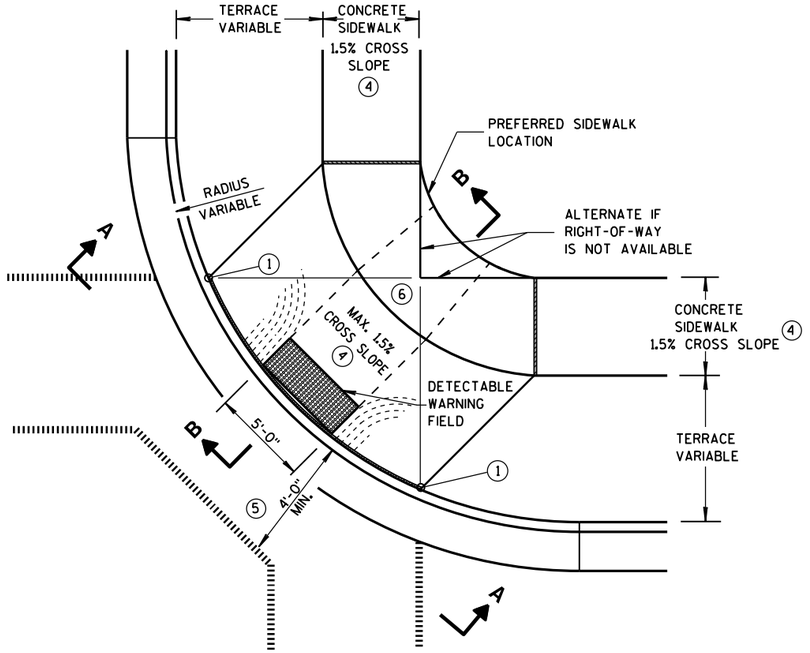
FILE NAME : X:\3242500\150172.01\TECH\CAD\DRAWINGS\050102_PP.DWG PLOT DATE : 2/22/2016 10:58 AM PLOT BY : ZACH VERHAGE PLOT NAME : 21 PLOT SCALE : 0:033373""

WISDOT/CADDS SHEET 46

Standard Detail Drawing List

08D05-16A	CURB RAMPS TYPES 1 AND 1-A
08D05-16B	CURB RAMPS TYPES 2 AND 3
08D05-16C	CURB RAMPS TYPES 4A AND 4A1
08D05-16D	CURB RAMPS TYPE 4B AND 4B1
08D05-16E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D16-10	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08E10-02	INLET PROTECTION TYPE A, B, C AND D
11B02-02	CONCRETE MEDIAN NOSE
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C08-02	CONCRETE PAVEMENT PARTIAL DEPTH REPAIR
13C09-12B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-13A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-13B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-13C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C14-05A	BASE PATCHING CONCRETE
13C14-05B	BASE PATCHING CONCRETE
13C14-05C	BASE PATCHING CONCRETE
13C18-03A	CONCRETE PAVEMENT JOINTING
13C18-03B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-03C	CONCRETE PAVEMENT JOINT TIES
13C18-03D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C18-03	MEDIAN ISLAND MARKING
15C19-02A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-05A	TRAFFIC CONTROL, LANE CLOSURE
15D21-03	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D30-02A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-02B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-02C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

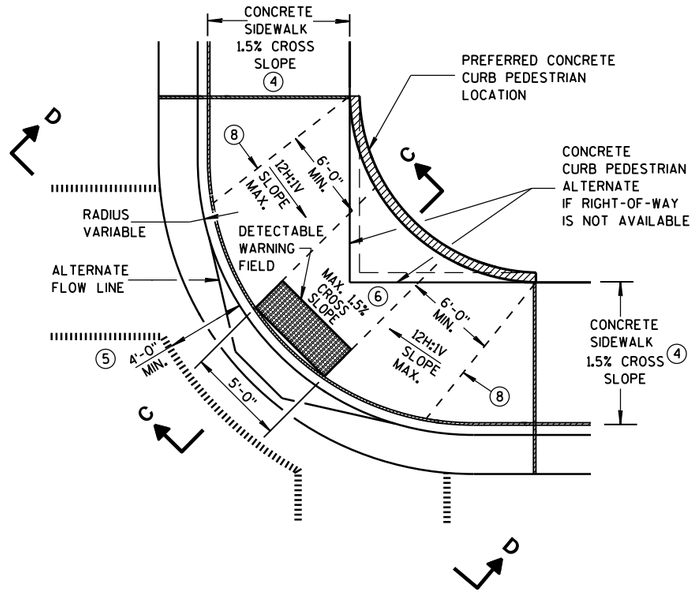
6



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

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.

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

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

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

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

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

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

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

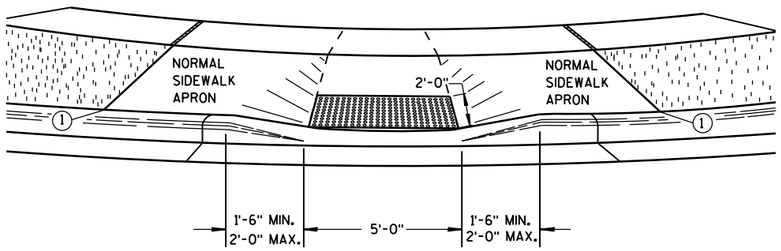
(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

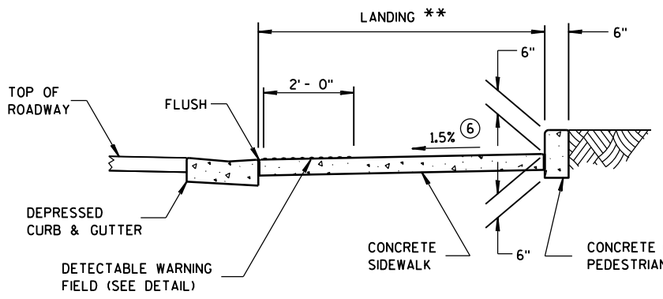
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

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



VIEW A-A

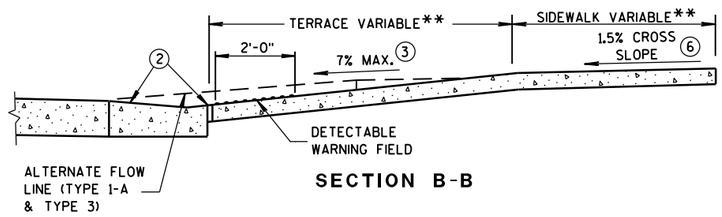
** WIDTH SHOWN ELSEWHERE IN THE PLANS



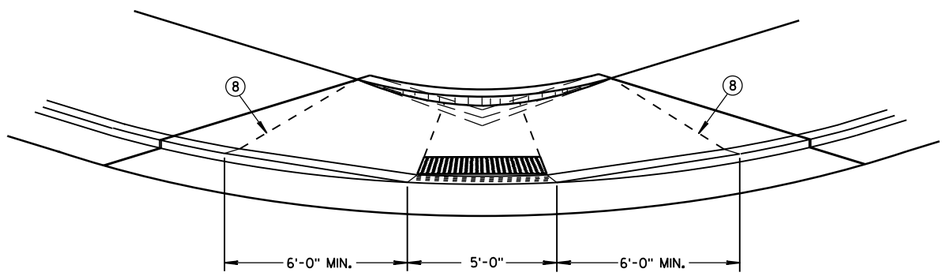
SECTION C-C

LEGEND

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

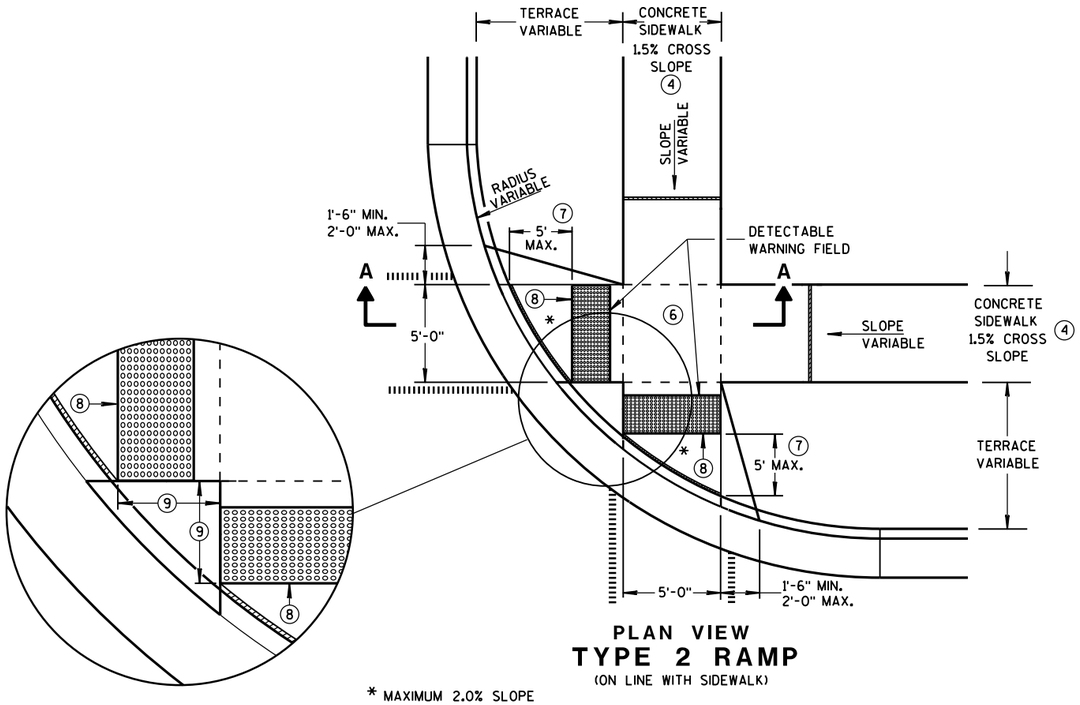


SECTION B-B



VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

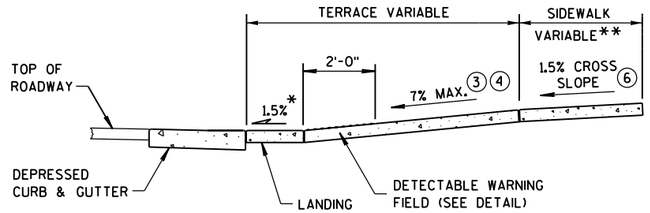


PLAN VIEW

TYPE 2 RAMP

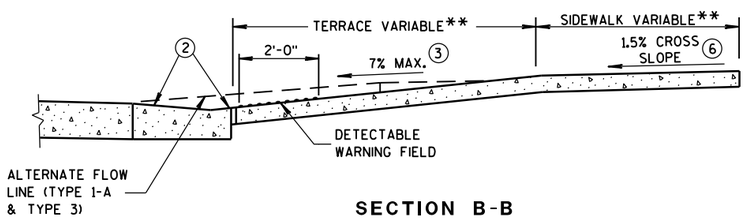
(ON LINE WITH SIDEWALK)

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



SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B

GENERAL NOTES

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (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 X 5 FEET (MINIMUM 4 FEET X 4 FEET).

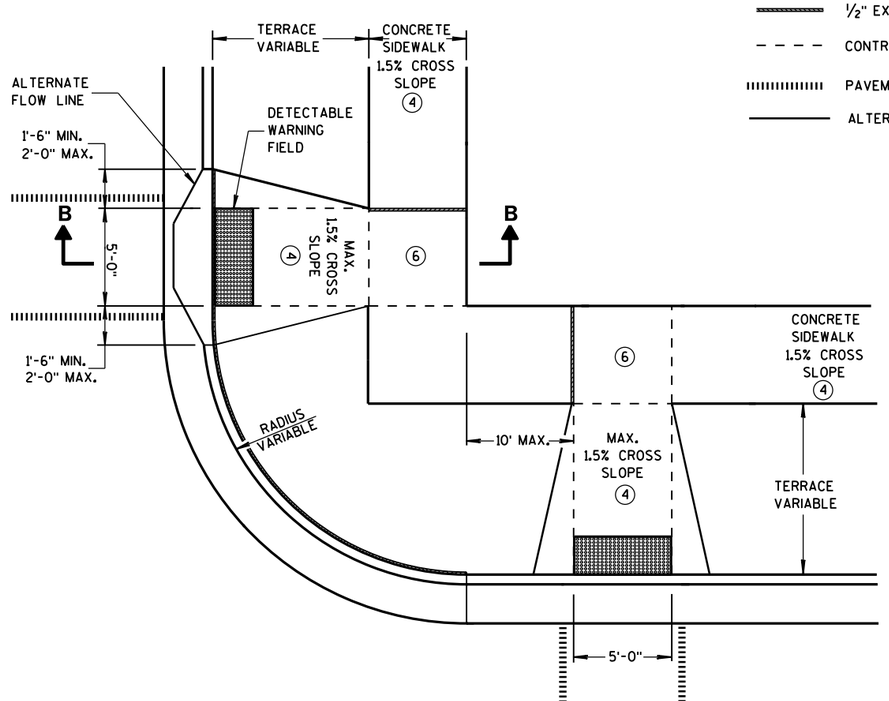
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

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

(9) WHEN THIS 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. 2" MINIMUM CURB HEIGHT.

LEGEND

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



PLAN VIEW

TYPE 3 RAMP

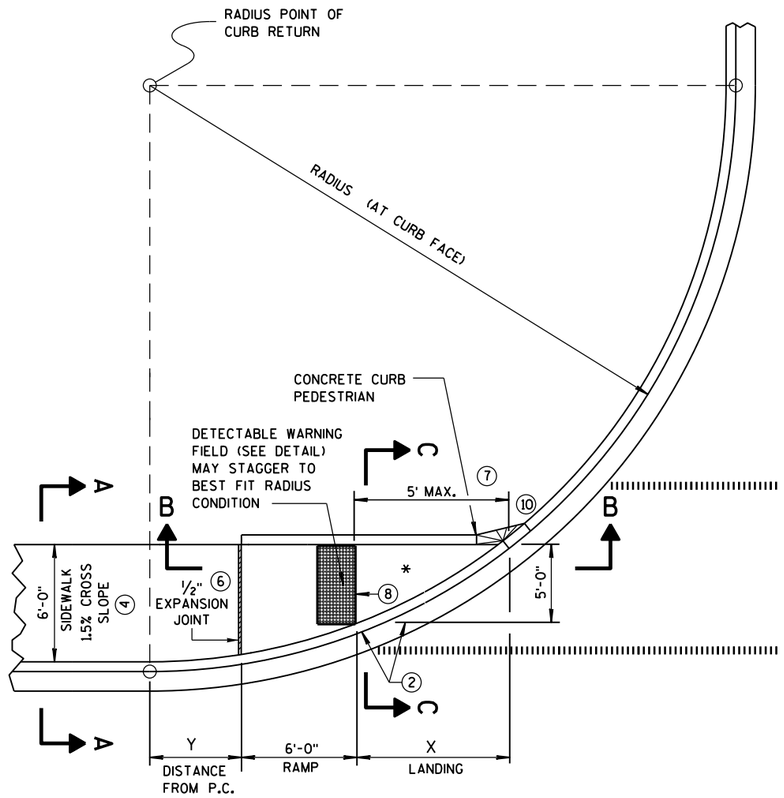
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

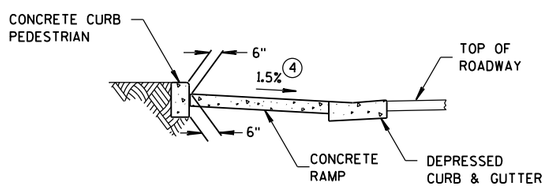
S.D.D. 8 D 5-16b



CURB RAMP TYPE 4A
PLAN VIEW

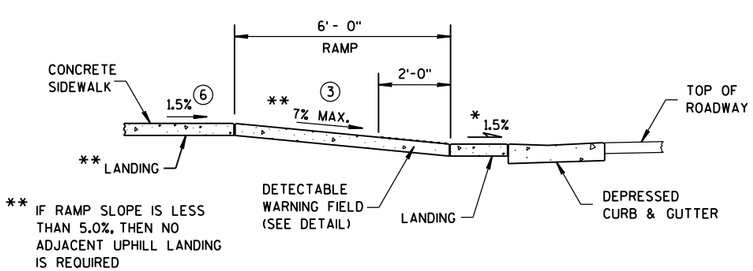
RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION C-C FOR TYPE 4A

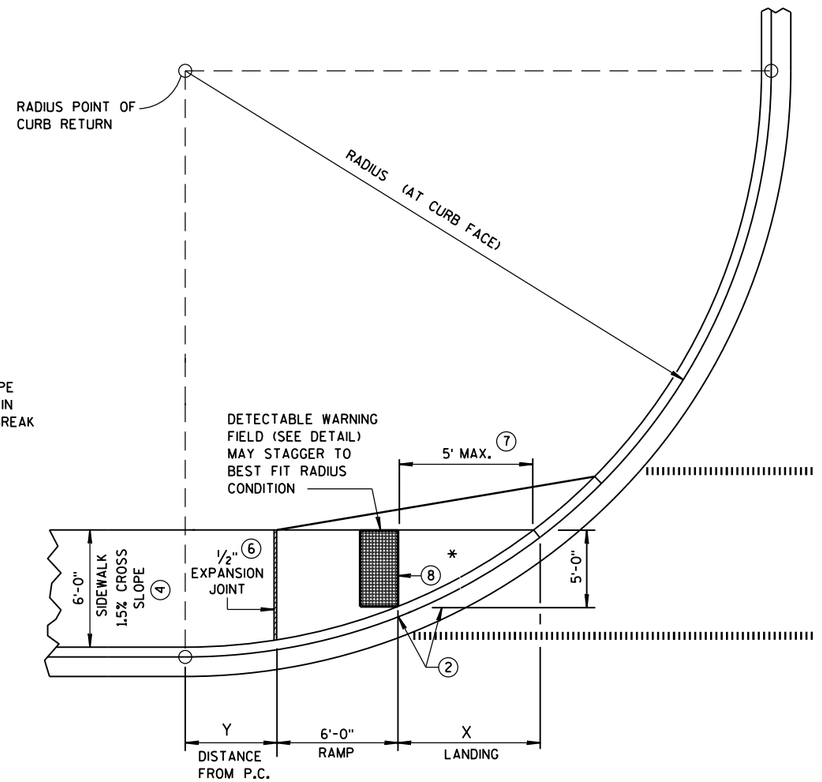
SECTION A-A FOR TYPE 4A



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

SECTION B-B FOR TYPE 4A

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



CURB RAMP TYPE 4A1
PLAN VIEW

GENERAL NOTES

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

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 DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

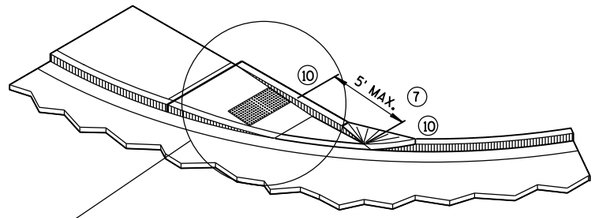
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

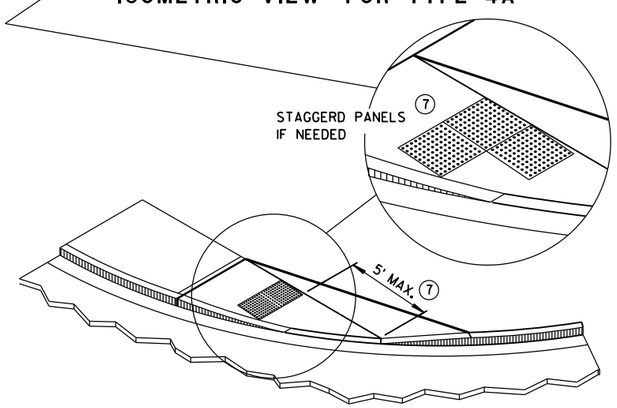
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

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

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



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

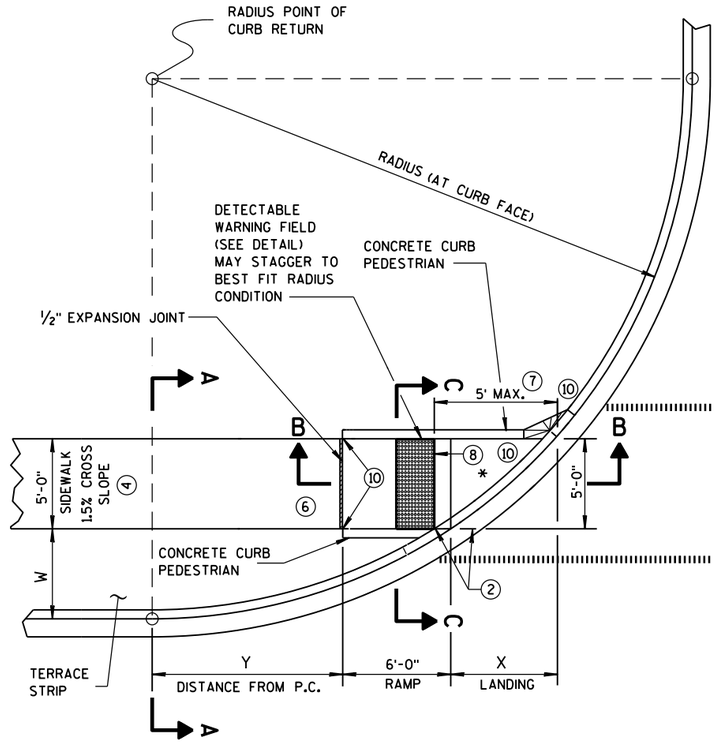
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

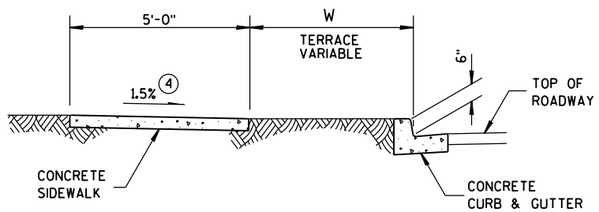
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

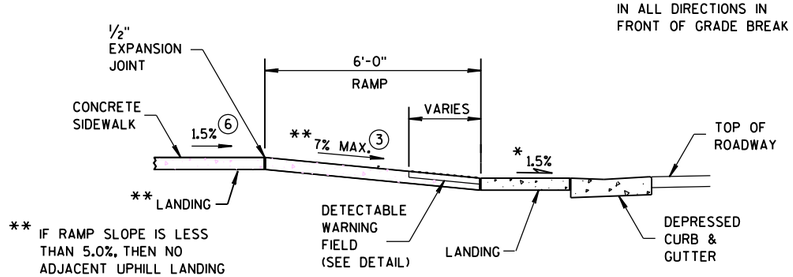
S.D.D. 8 D 5-16c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



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

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

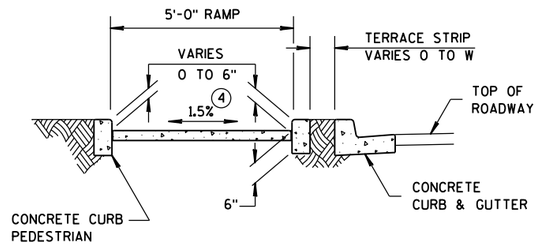
SECTION B-B FOR TYPE 4B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C-C FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

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

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 DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

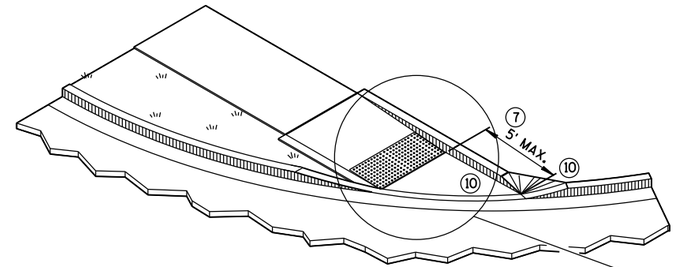
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

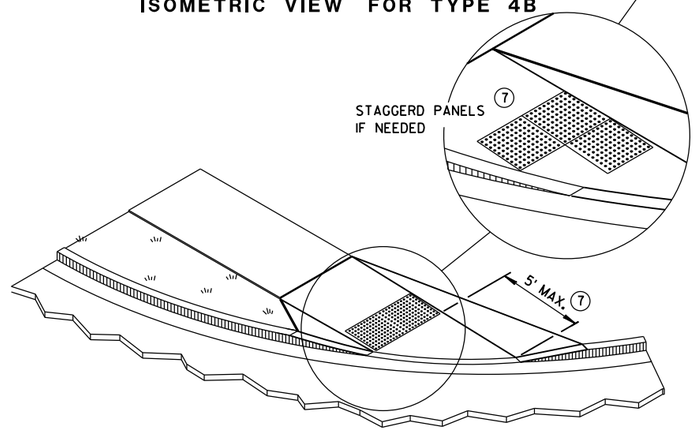
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

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

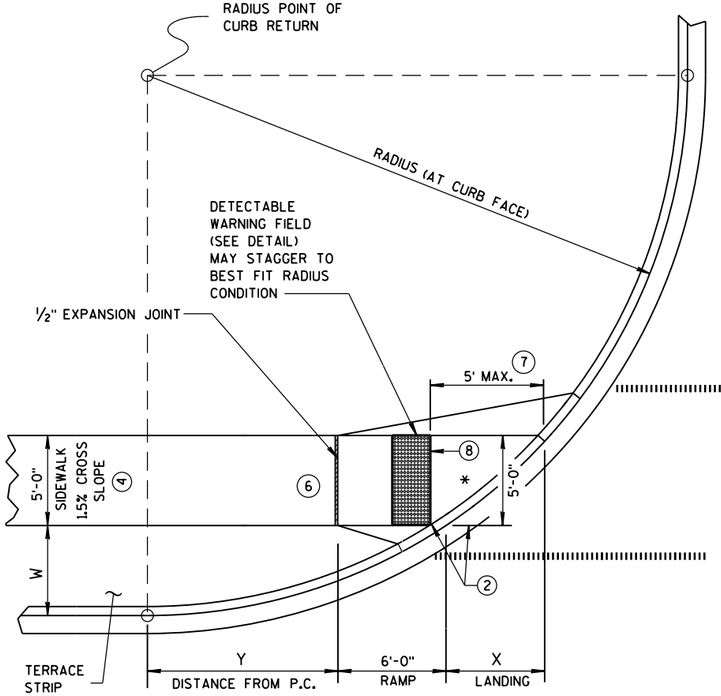
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1



CURB RAMP TYPE 4B1
PLAN VIEW

CURB RAMPS
TYPE 4B AND 4B1

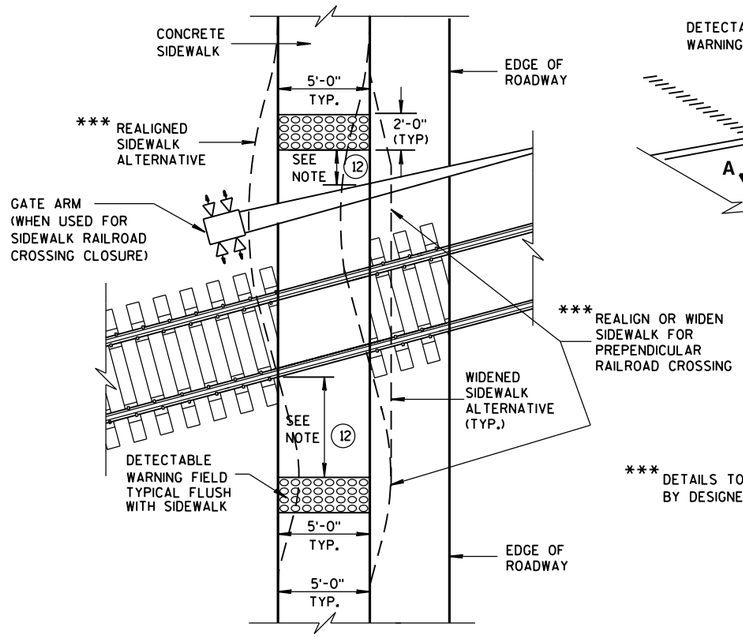
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 8 D 5-16d

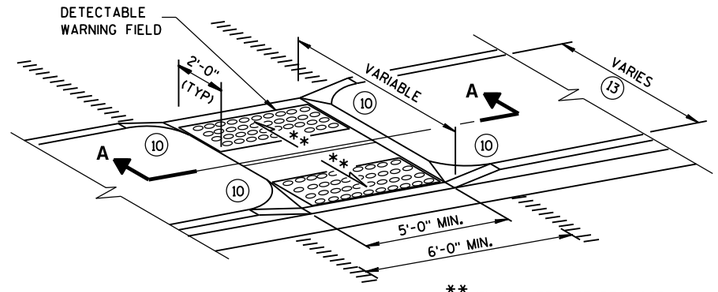
6

S.D.D. 8 D 5-16d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING

*** DETAILS TO BE DETERMINED BY DESIGNER



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (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.

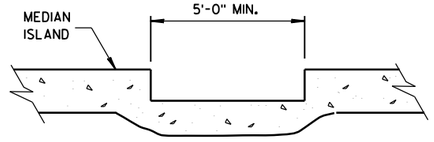
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

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

(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

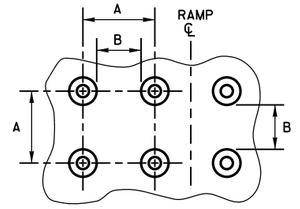
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



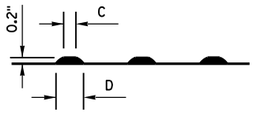
SECTION A-A

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

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

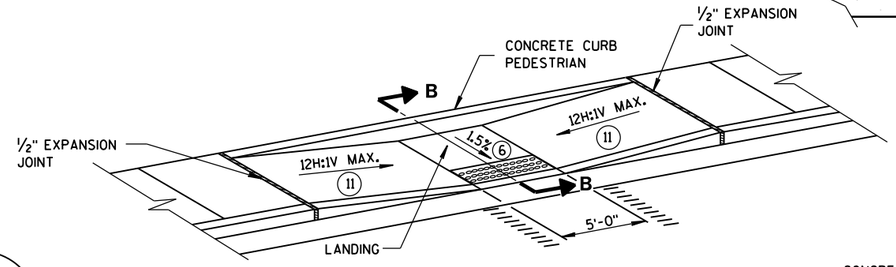


PLAN VIEW

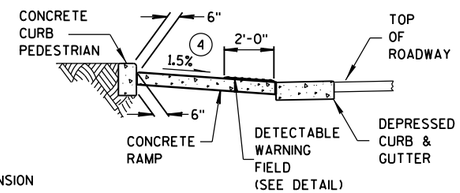


ELEVATION VIEW

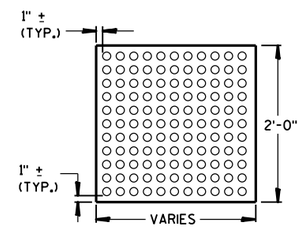
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



MID-BLOCK CROSSING
TYPE 7A

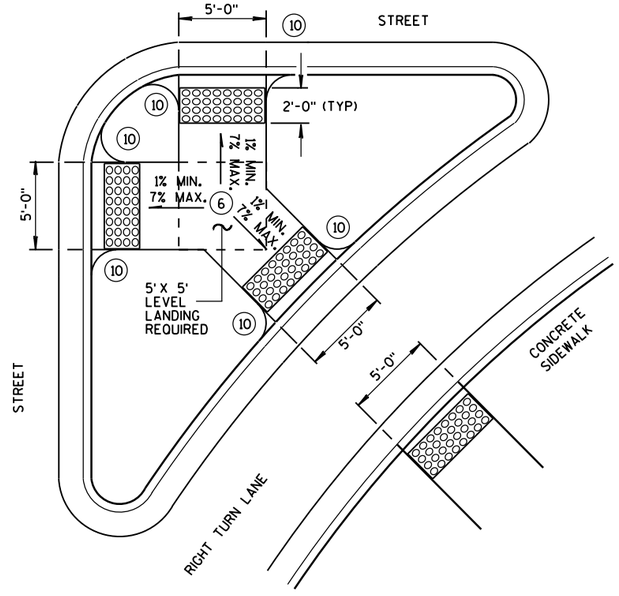


SECTION B-B

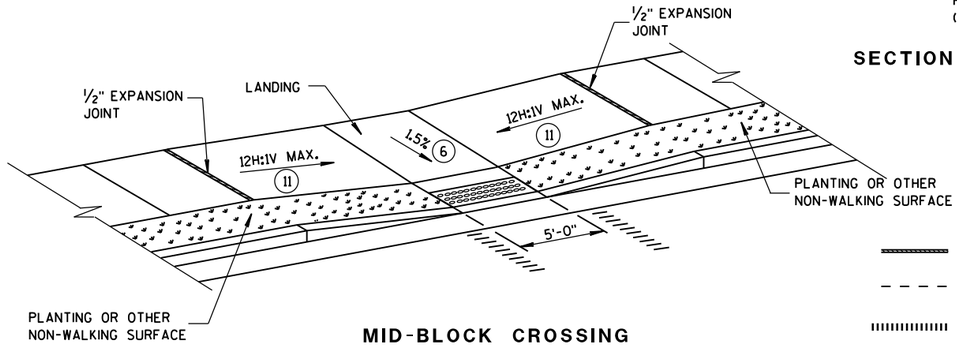


PLAN VIEW
DETECTABLE WARNING FIELD (TYPICAL)

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

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

LEGEND

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

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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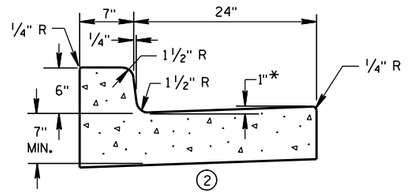
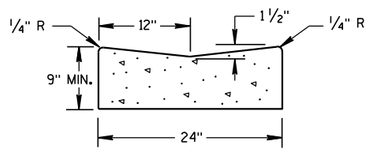
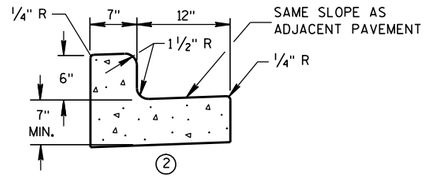


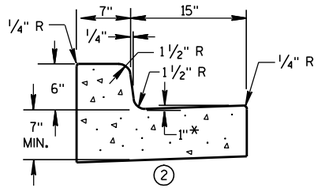
① CONCRETE CURB & GUTTER 31"



① CONCRETE GUTTER 24"

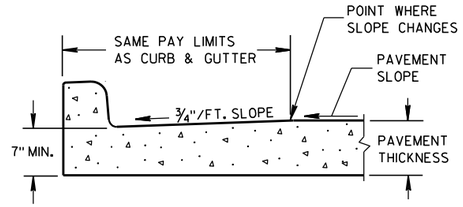


① CONCRETE CURB & GUTTER 19"



① CONCRETE CURB & GUTTER 22"

* TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER

GENERAL NOTES

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

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

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

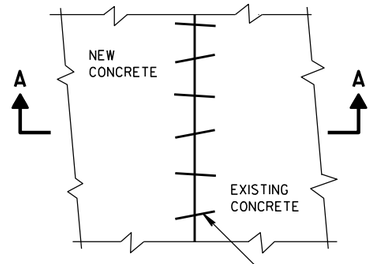
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURB.

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUIRED 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" MIMIMUM GUTTER THICKNESS IS MAINTAINED.

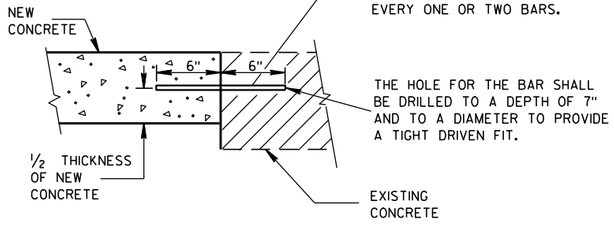
③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLAN.



PLAN VIEW

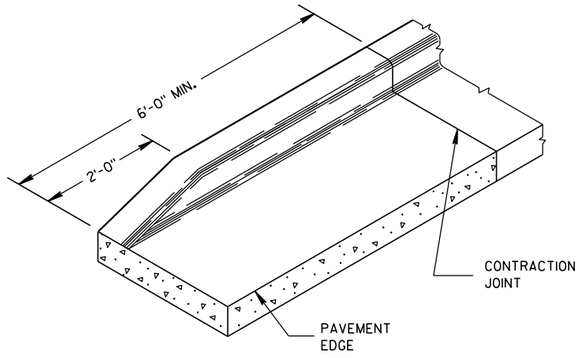
EXISTING AND NEW CONCRETE MAY BE CURB & GUTTER, SURFACE DRAIN, PAVEMENT OR OTHER CONCRETE STRUCTURE.

NO. 6 X 12" DEF. BARS SPACED 3'-0" C-C, INSTALLED ON 6:1 SKEW HORIZONTALLY. DIRECTION OF SKEW ALTERNATING AFTER EVERY ONE OR TWO BARS.

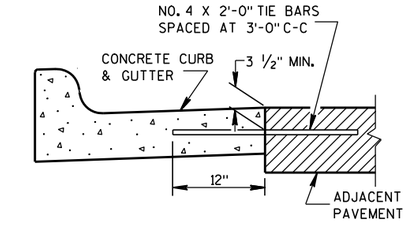


SECTION A-A

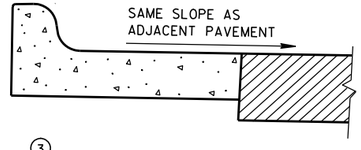
PAVEMENT TIES



END SECTION CURB & GUTTER



① TYPICAL TIE BAR LOCATION



③ HIGH SIDE SECTION

(TYPICAL FOR ALL CURB & GUTTER)

CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES

(For Optional Use in Milwaukee Co. Only)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/2/2010 — DATE

/S/ Jerry Zogg — ROADWAY STANDARDS ENGINEER

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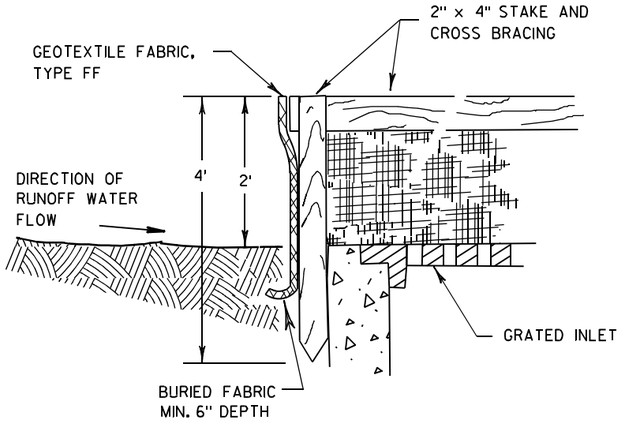
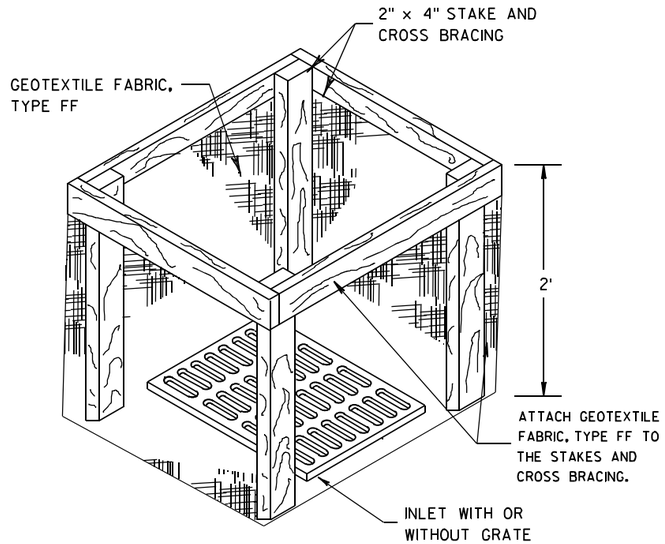
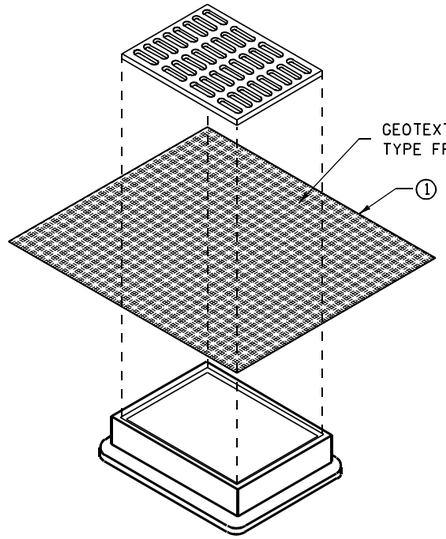


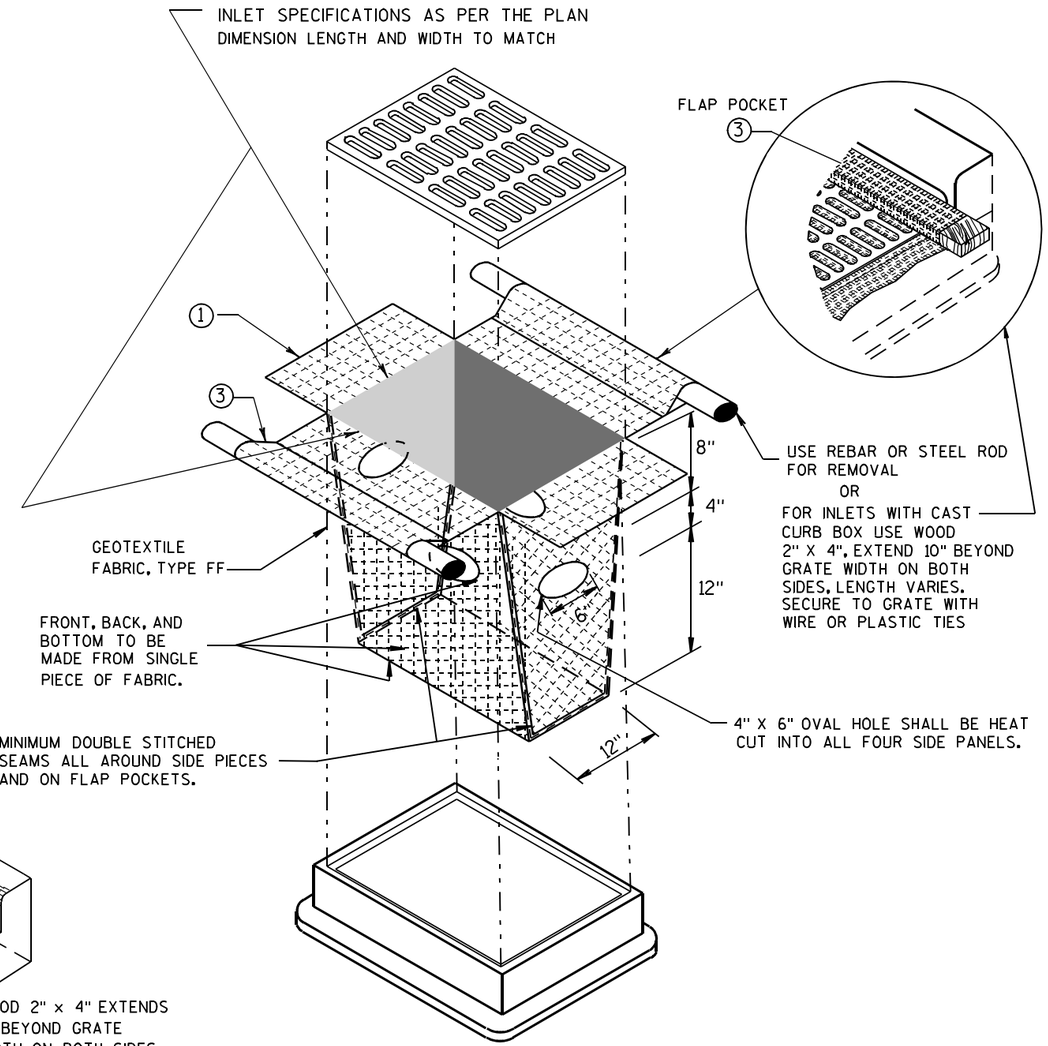


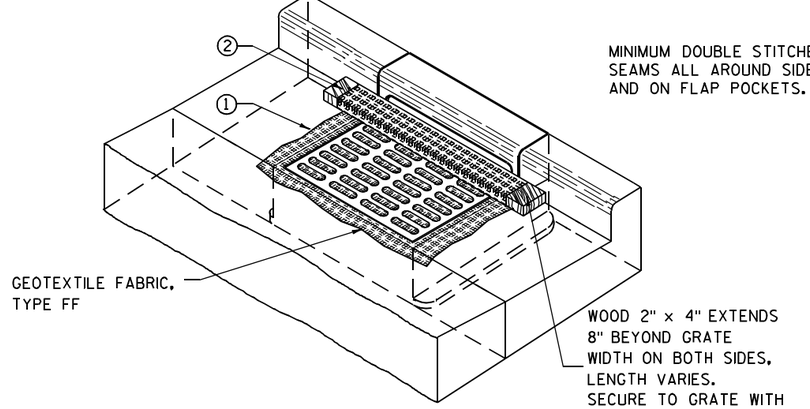
INLET PROTECTION, TYPE A



INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)





INLET PROTECTION, TYPE C (WITH CURB BOX)

INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

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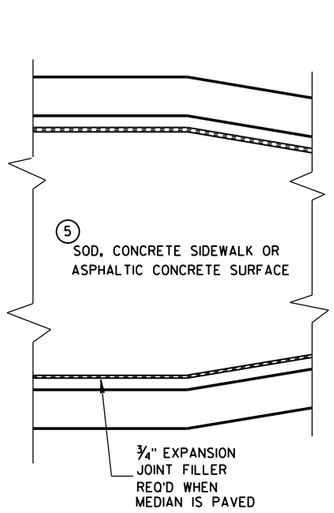
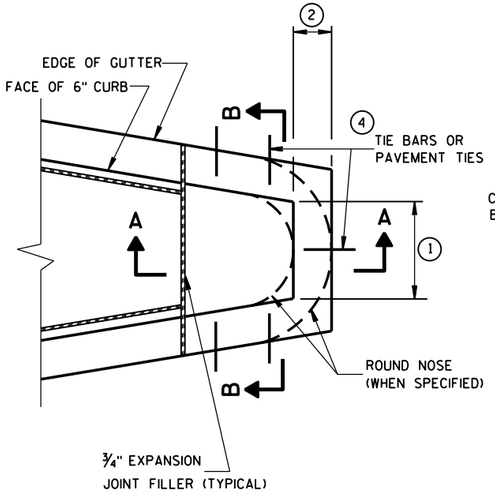
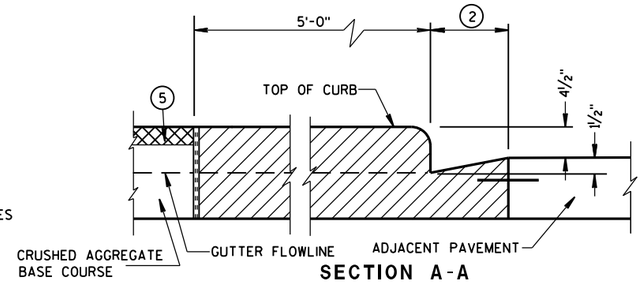
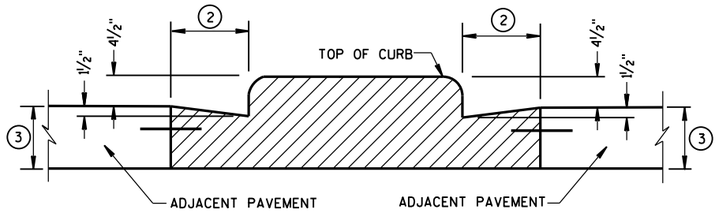
S.D.D. 8 E 10-2







SECTION A-A



SECTION B-B

CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

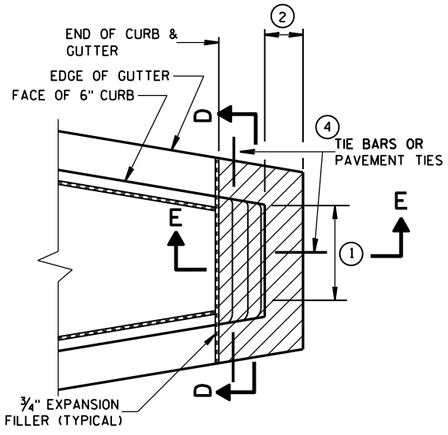
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

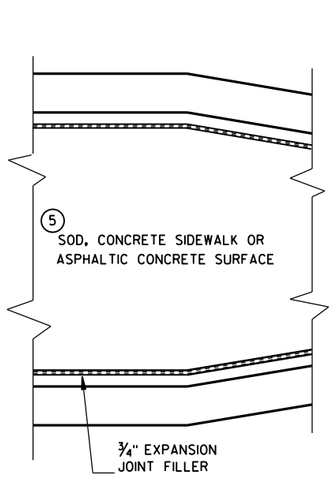
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

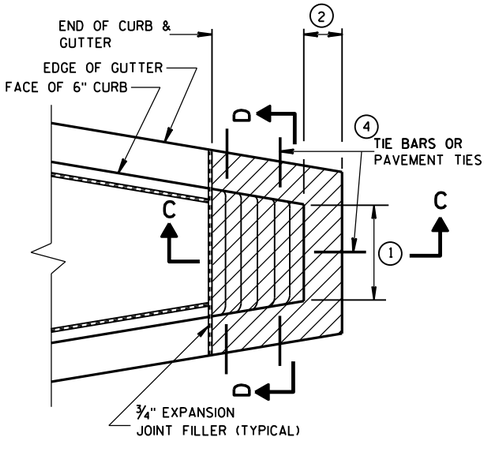
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

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

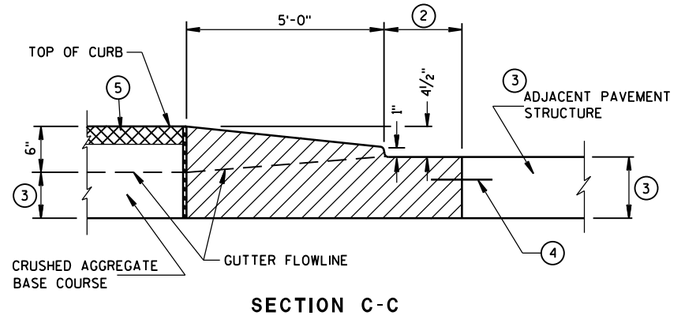
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



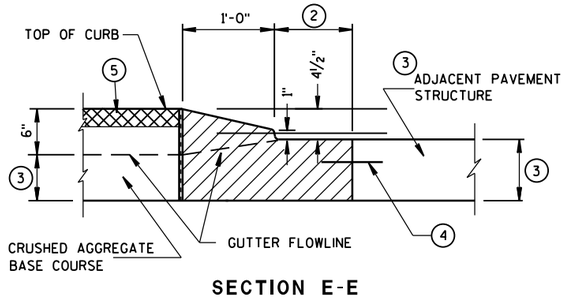




CONCRETE MEDIAN SLOPED NOSE TYPE 1

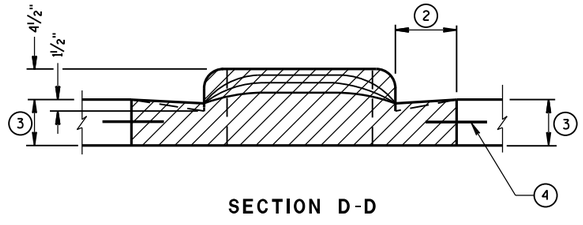


SECTION C-C



SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER
FHWA

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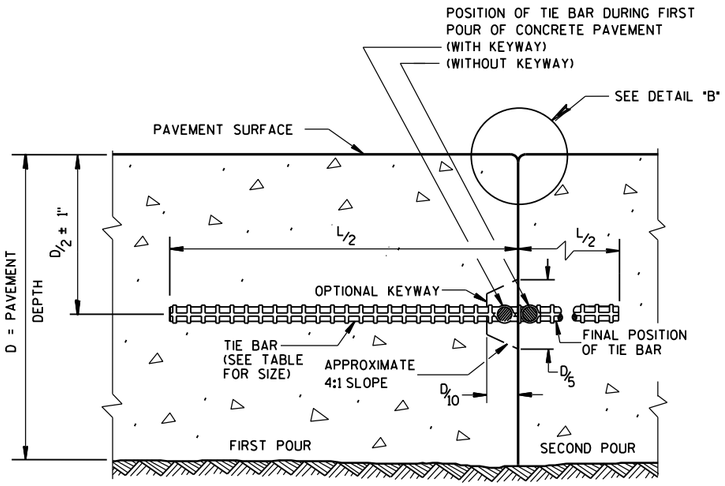
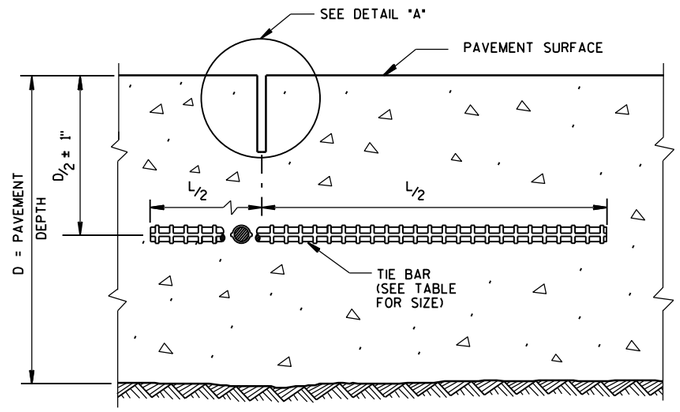
S.D.D. 11 B 2-2



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(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"

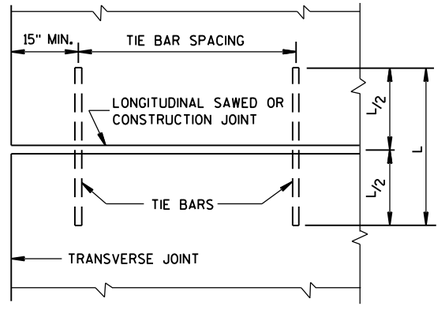
DETAIL "C"

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
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

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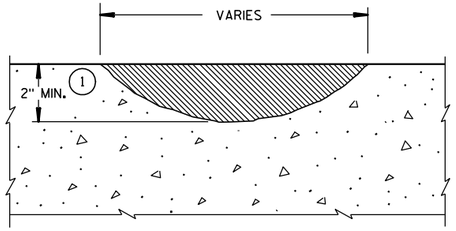
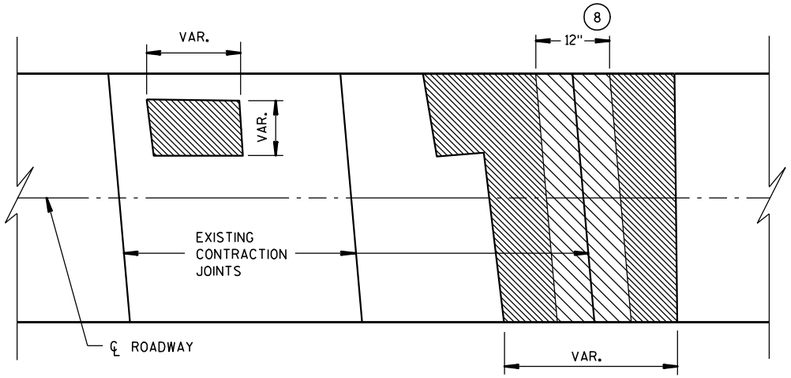
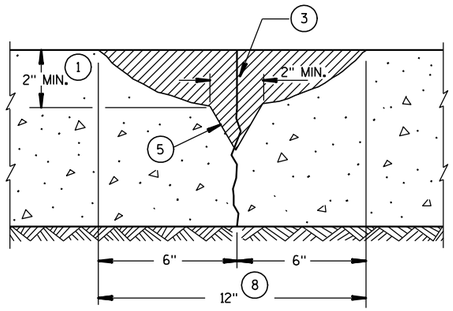


PROFILE VIEW

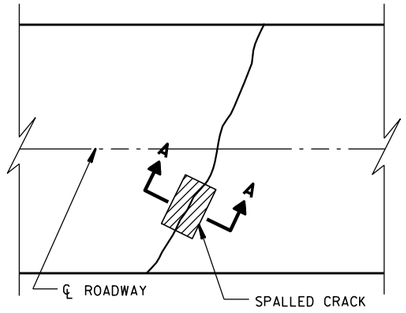


PLAN VIEW

SURFACE REPAIR



SECTION A-A

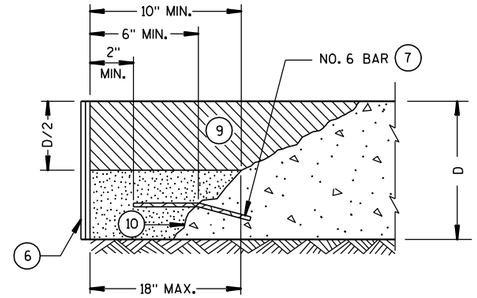


PLAN VIEW

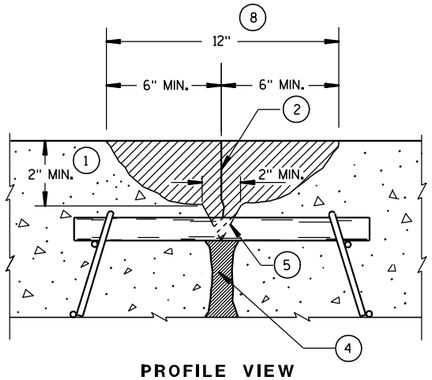
CRACK REPAIR

GENERAL NOTES

1. REMOVE ALL CONCRETE, TO LIMITS SHOWN, TO A MAXIMUM OF ½ THE PAVEMENT DEPTH OR TOP OF DOWELS.
2. IF REPAIR IS DEEPER THAN ANTICIPATED SAWCUT, COMPRESSION RELIEF MATERIAL MUST BE USED. THE THICKNESS OF COMPRESSION RELIEF MATERIAL MUST BE EQUAL TO OR GREATER THAN THE WIDTH OF THE JOINT OR CRACK (1/4"). THIS MATERIAL SHOULD EXTEND FULL DEPTH OF THE REPAIR.
3. COMPRESSION RELIEF MATERIAL MUST BE USED. THE THICKNESS OF COMPRESSION RELIEF MATERIAL MUST BE EQUAL TO OR GREATER THAN THE WIDTH OF THE JOINT OR CRACK (1/4"). THIS MATERIAL SHOULD EXTEND FULL DEPTH OF THE REPAIR.
4. CLEAN, DRY SAND WHEN NECESSARY.
5. REMOVE UNSOUND MATERIAL BY CHIPPING AT 1:1 SLOPE.
6. ¼" MINIMUM PREFORMED JOINT FILLER IF ADJACENT TO CONCRETE. EDGING REQUIRED. FULLY FORMED EDGE IF ADJACENT TO SHOULDER.
7. PAVEMENT TIES AS SHOWN. ALL EMBEDMENTS 6" MINIMUM AND INSTALLED WITH GROUT.
8. OVER 12" (NOMINAL WIDTH) WILL BE PAID AS SURFACE REPAIR.
9. PAID AS JOINT OR CRACK REPAIR.
10. FULL-DEPTH ADJUSTMENT SHALL BE CHIPPED TO BOTTOM OF PCC PAVEMENT AT 1:1 SLOPE.
11. BEYOND 18" WILL BE PAID AS SURFACE REPAIR.

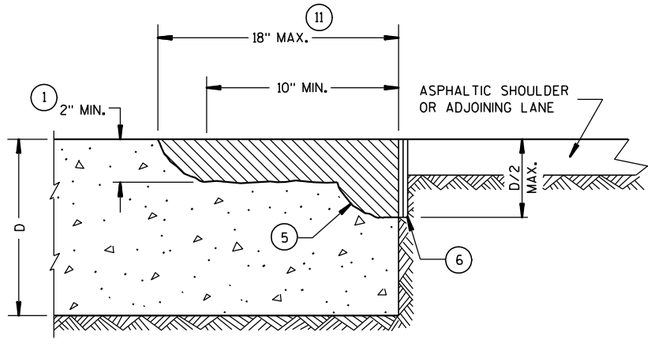


PROFILE VIEW

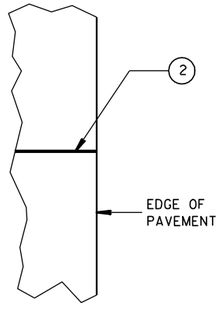


PROFILE VIEW

JOINT REPAIR

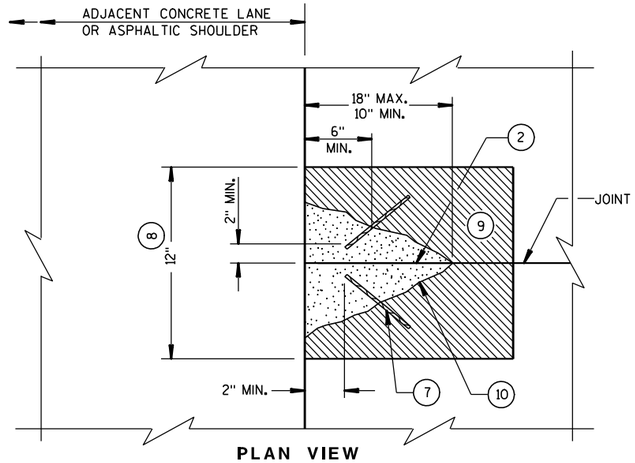


PROFILE VIEW



PLAN VIEW

EDGE REPAIR



PLAN VIEW

FULL DEPTH REPAIR ADJUSTMENT

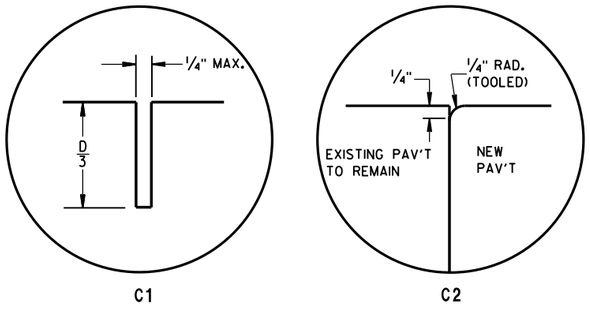
CONCRETE PAVEMENT PARTIAL DEPTH REPAIR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/21/03 DATE
/S/ Bill Ducker PAVEMENT ENGR
FHWA

6

S.D.D. 13 C 8-2



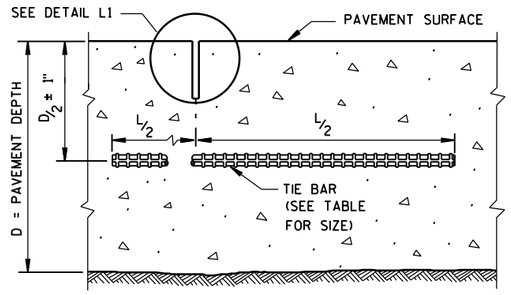
TRANSVERSE JOINTS

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" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



SECTION C-C

SAWED LONGITUDINAL JOINT

GENERAL NOTES

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

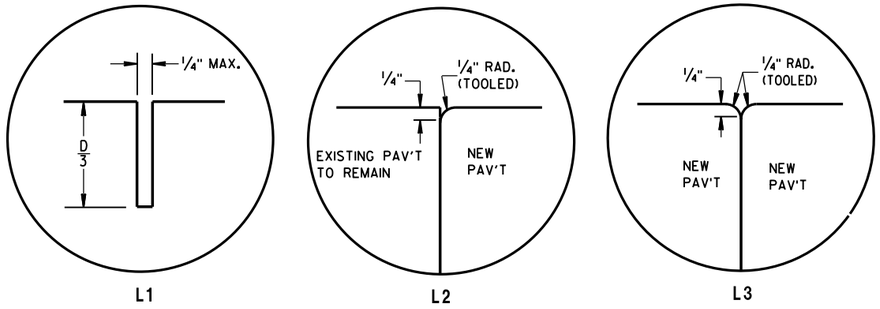
CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

DO NOT SEAL OR FILL JOINTS.

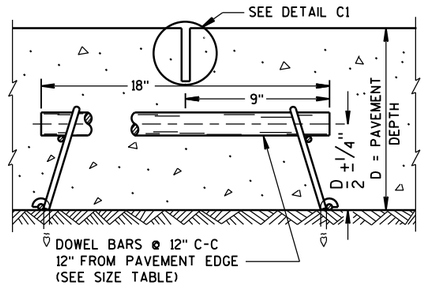
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

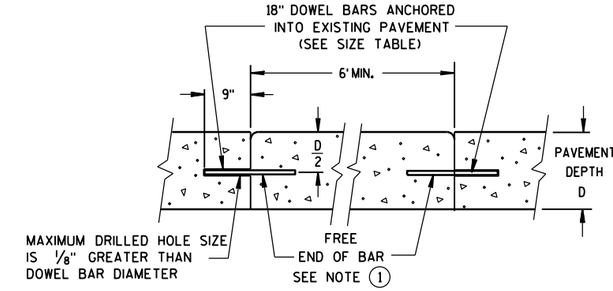


LONGITUDINAL JOINTS

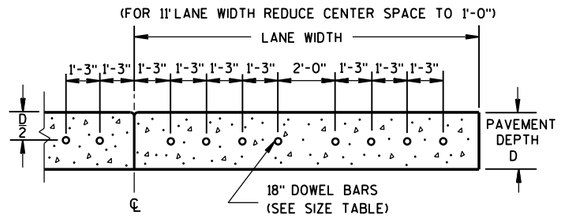


SECTION F-F

CONTRACTION JOINT



SECTION D-D

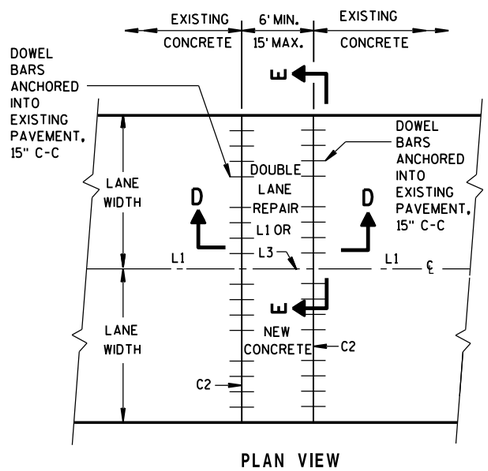


SECTION E-E

DRILLED DOWEL BAR CONSTRUCTION JOINT

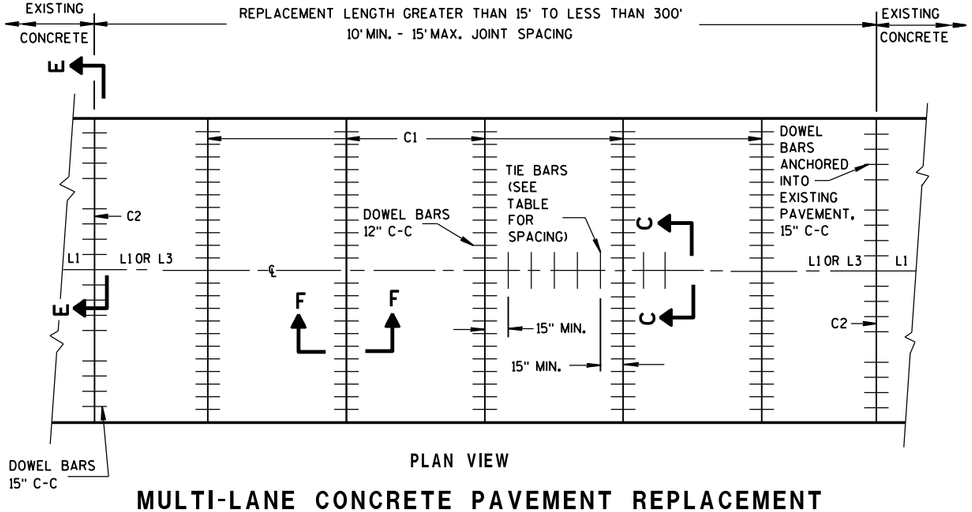
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 13 C 9-12b

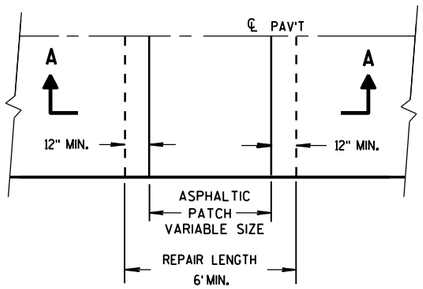
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

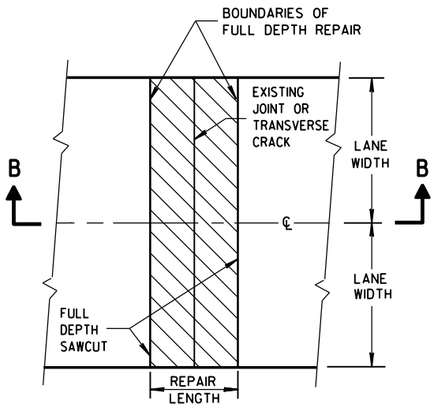
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

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

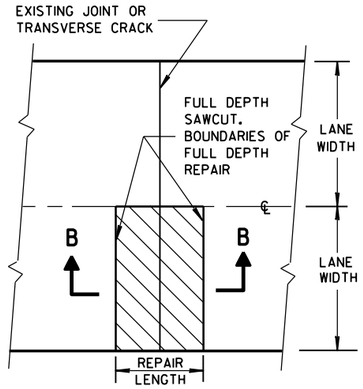
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

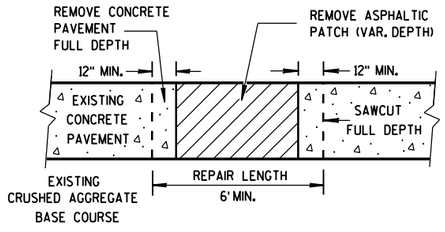


PLAN VIEW
(DOUBLE LANE REPAIR)



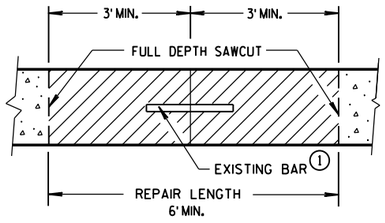
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

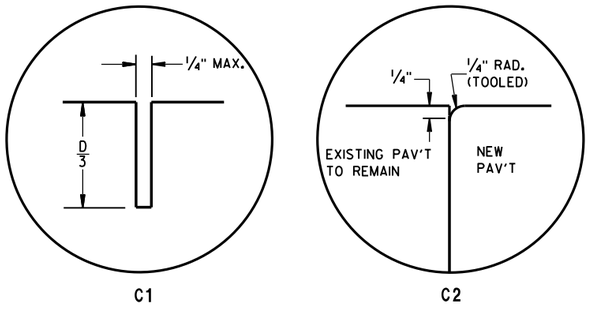
CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

S.D.D. 13 C 9-13a



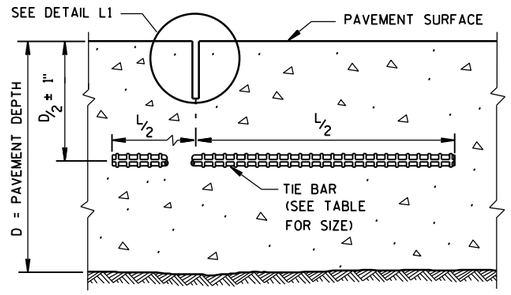
TRANSVERSE JOINTS

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" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



SECTION C-C

SAWED LONGITUDINAL JOINT

GENERAL NOTES

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

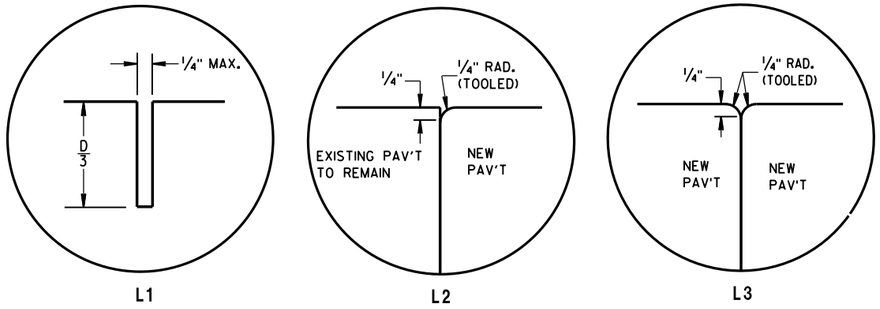
CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

DO NOT SEAL OR FILL JOINTS.

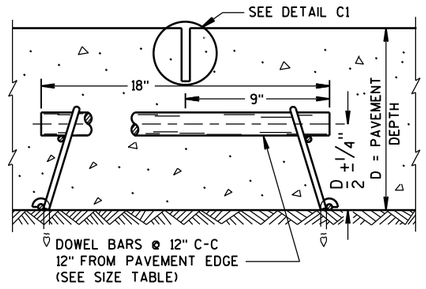
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

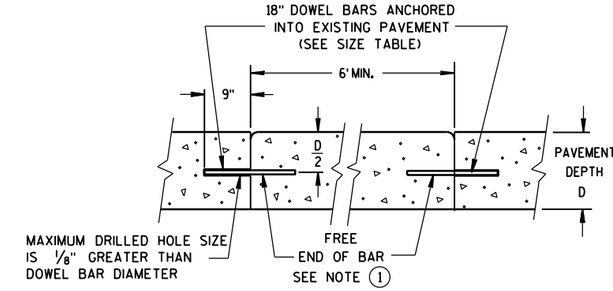


LONGITUDINAL JOINTS

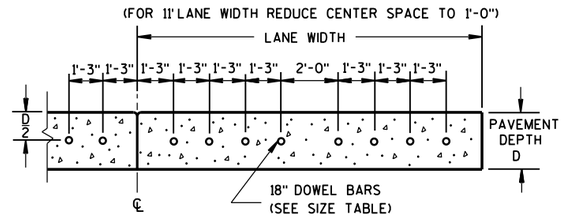


SECTION F-F

CONTRACTION JOINT



SECTION D-D

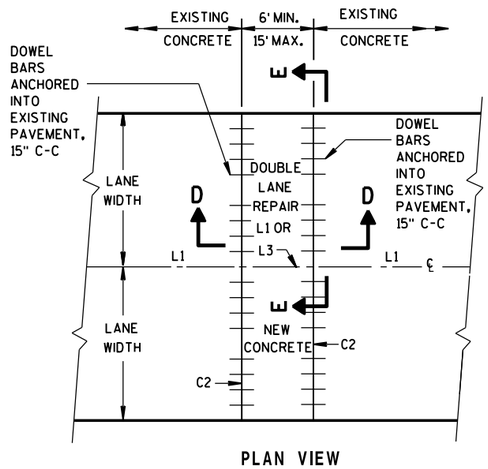


SECTION E-E

DRILLED DOWEL BAR CONSTRUCTION JOINT

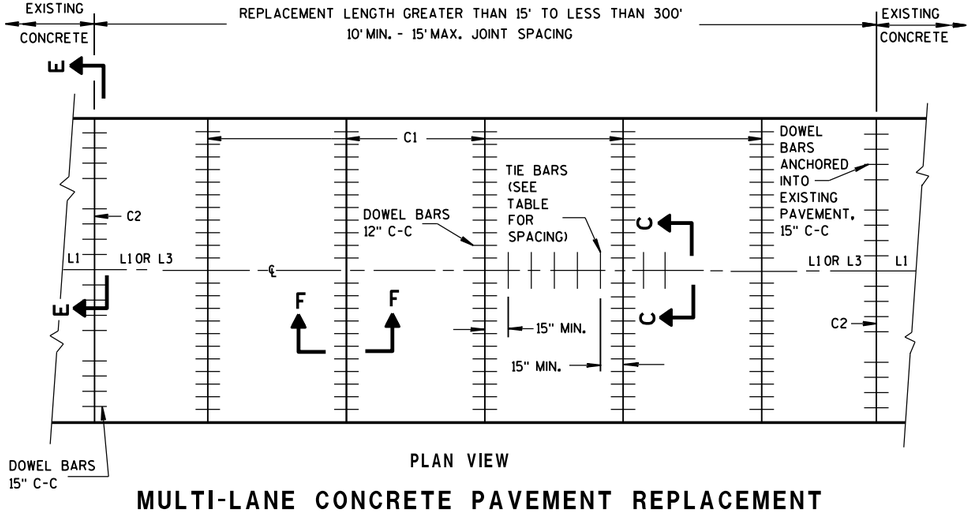
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6",6 ½"	NONE	12'
7",7 ½"	1"	14'
8",8 ½"	1 ¼"	15'
9",9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPAIR



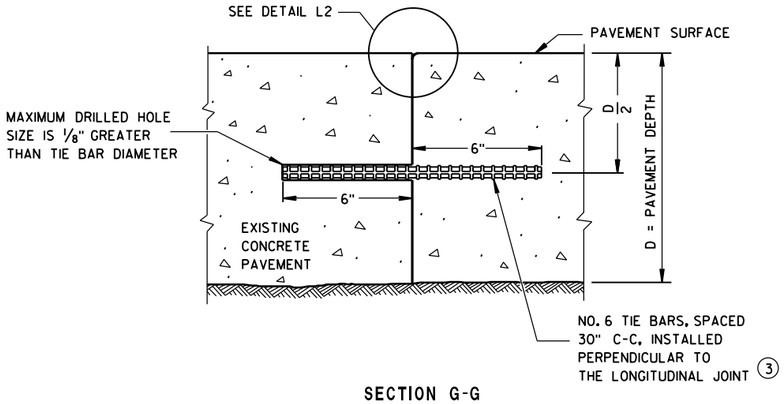
PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 13 C 9-13b



SECTION G-G

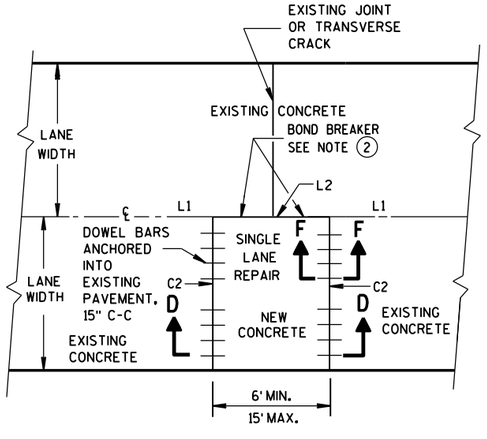
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

(1) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

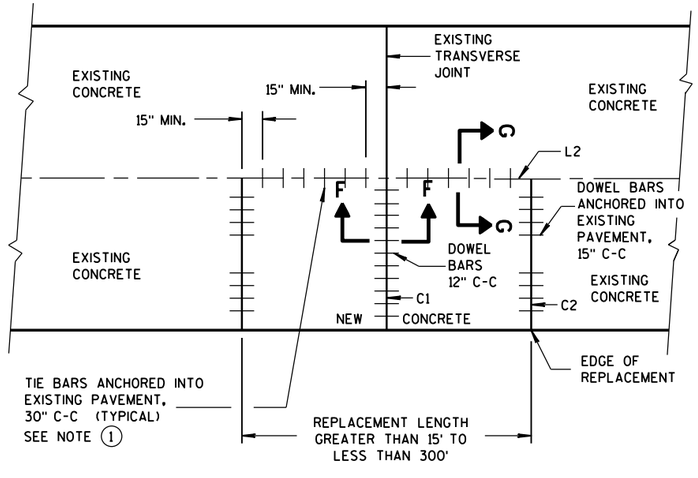
(2) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

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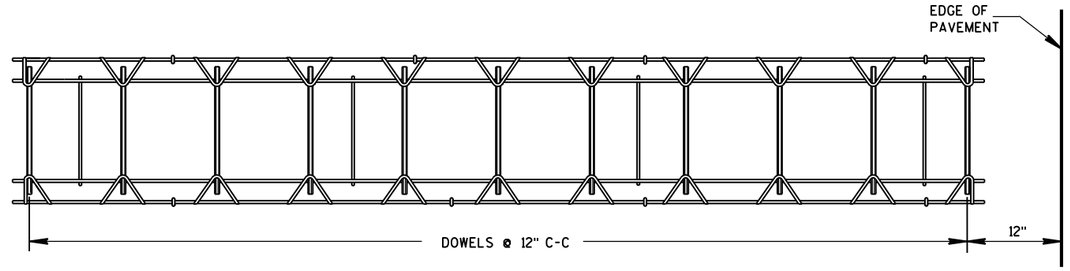
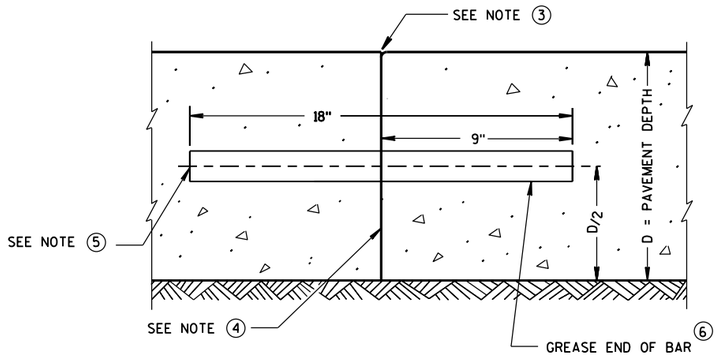
S.D.D. 13 C 9-13c



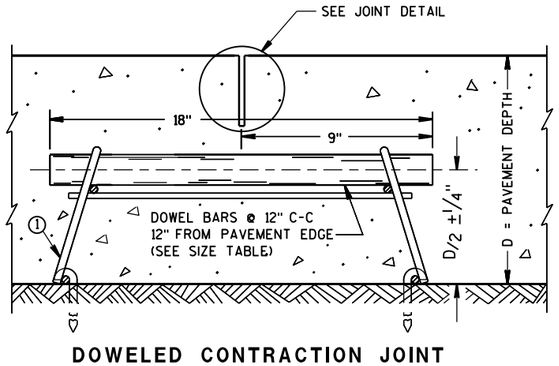
PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



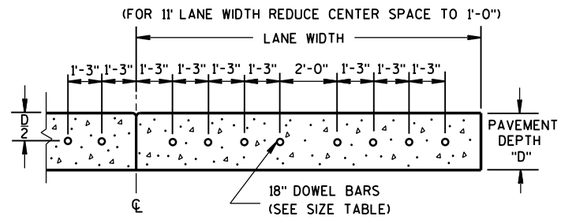
TRANSVERSE CONSTRUCTION JOINT



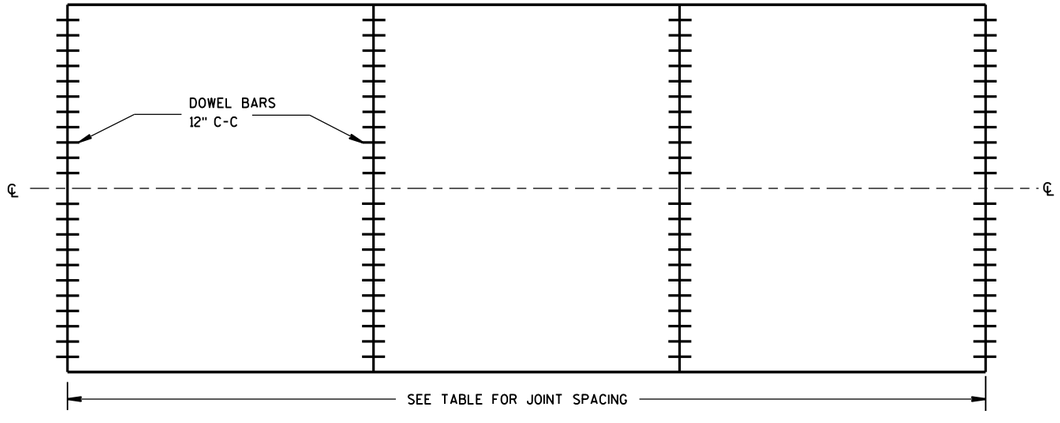
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

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

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

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

① **OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.**

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

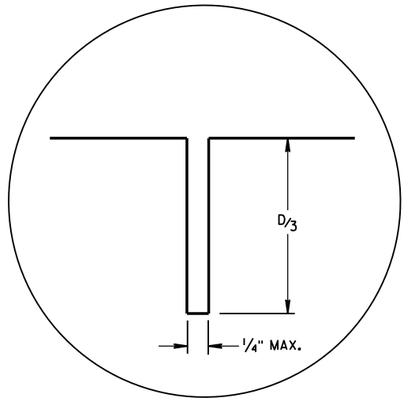
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



JOINT DETAIL

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/3/2013 DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER
FHWA

6

S.D.D. 13 C 13-8

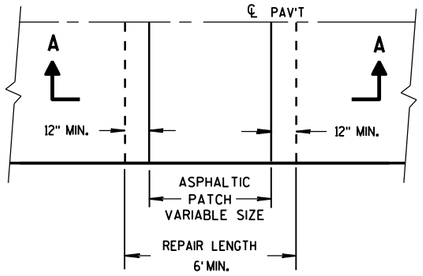
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES. ADDITIONAL SAW CUTS ARE NOT PAID FOR BY THE DEPARTMENT.

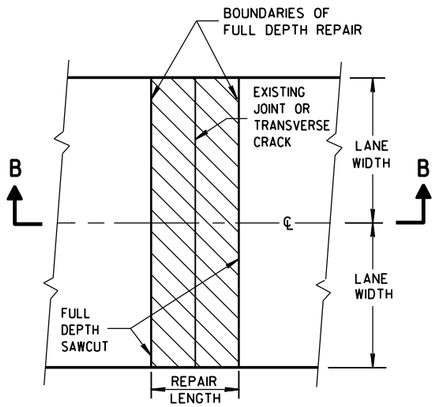
PROVIDE 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK.

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

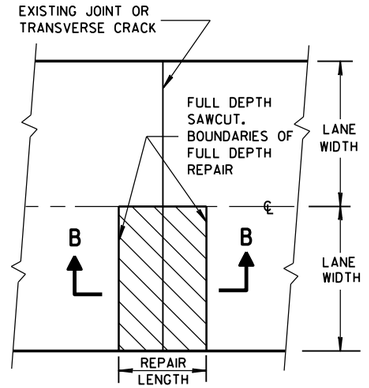
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

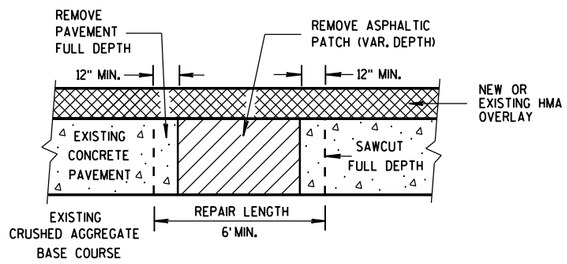


PLAN VIEW
(DOUBLE LANE REPAIR)



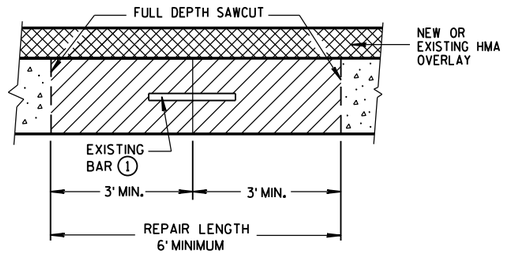
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

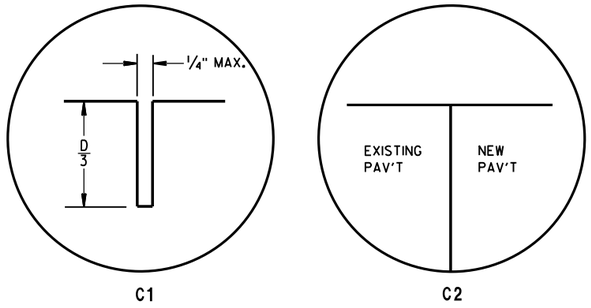
CONCRETE REMOVAL

BASE PATCHING CONCRETE

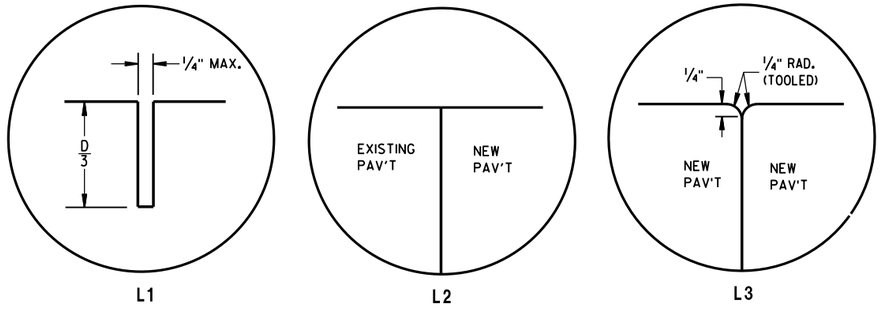
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

S.D.D. 13 C 14-5a

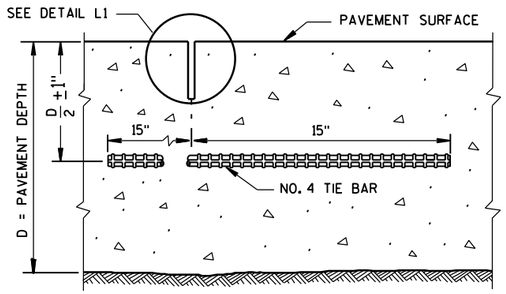
S.D.D. 13 C 14-5a



TRANSVERSE JOINTS

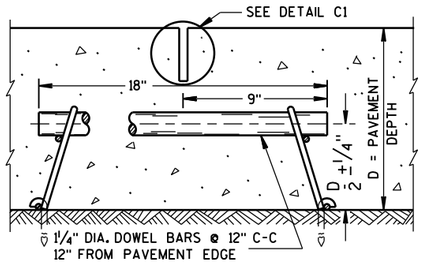


LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT



SECTION F-F

CONTRACTION JOINT

GENERAL NOTES

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

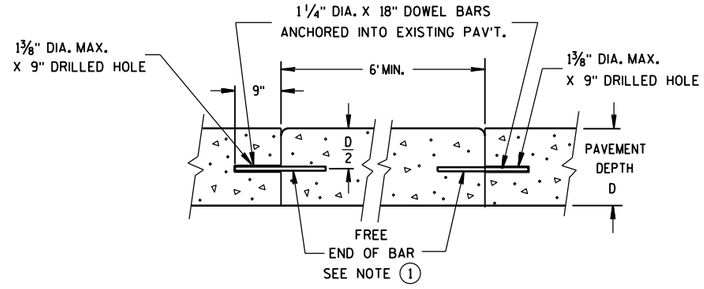
CONCRETE BASE PATCHES OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

DO NOT SEAL OR FILL JOINTS.

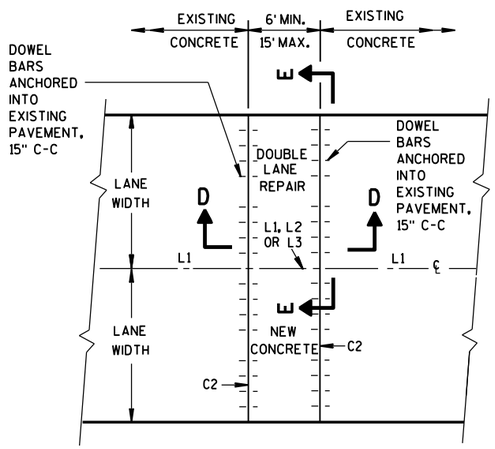
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

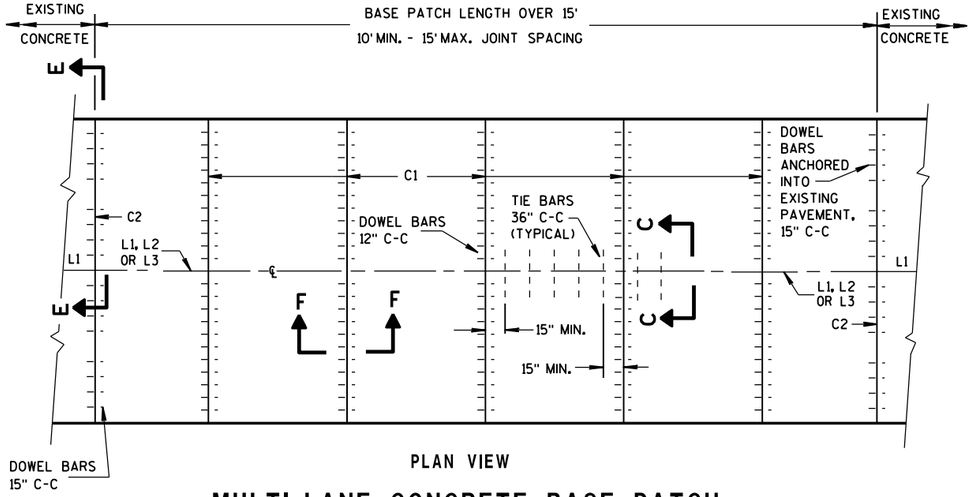


SECTION D-D



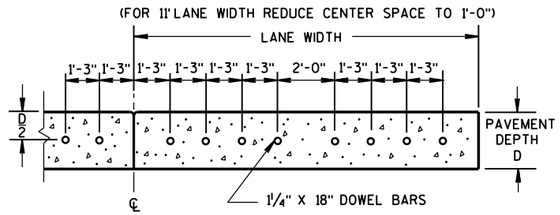
PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH



SECTION E-E

SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT

BASE PATCHING CONCRETE

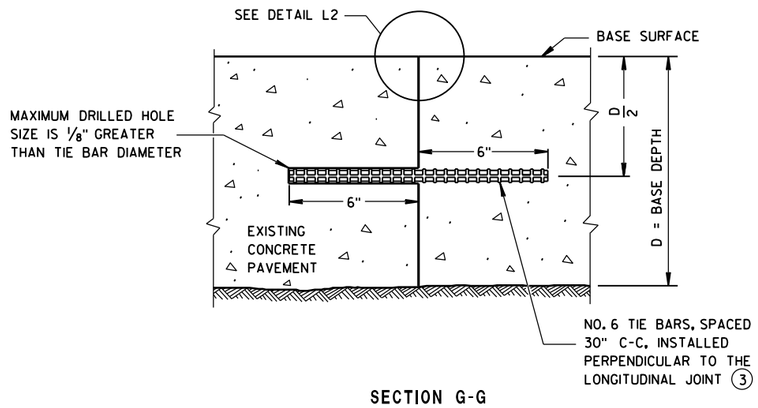
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 13 C 14-5b

6

S.D.D. 13 C 14-5b



SECTION G-G

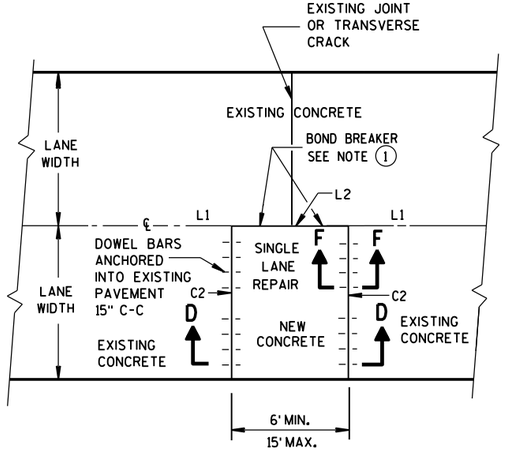
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

(1) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE BASE PATCHES UP TO 15 FEET IN LENGTH.

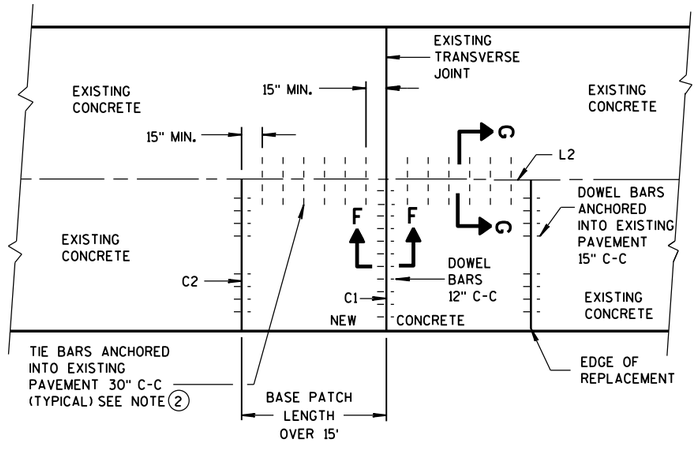
(2) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, DRILLED TIE BARS MAY BE INSTALLED ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH

BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

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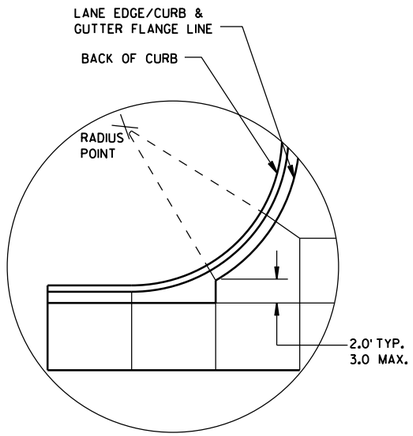
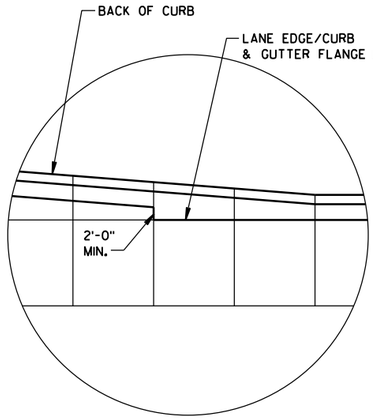
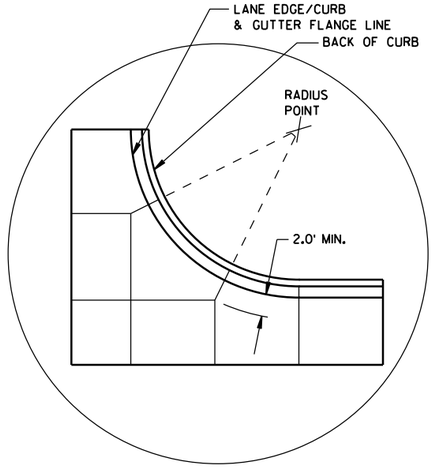
S.D.D. 13 C 14-5c



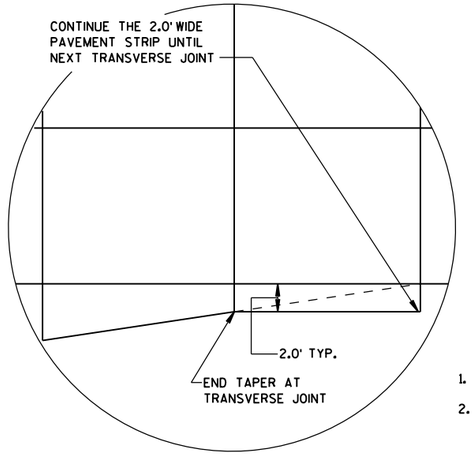
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

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

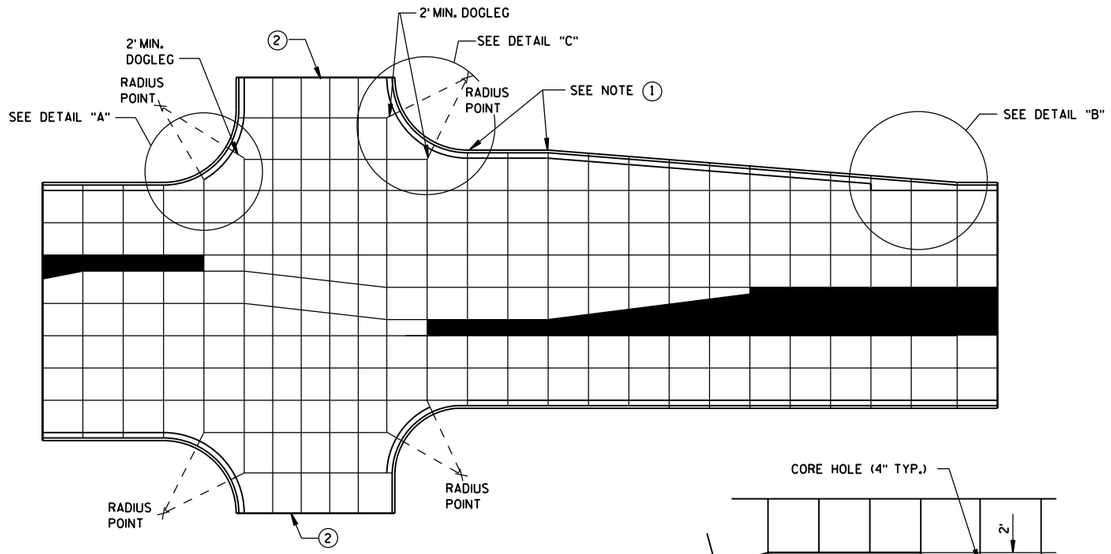
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

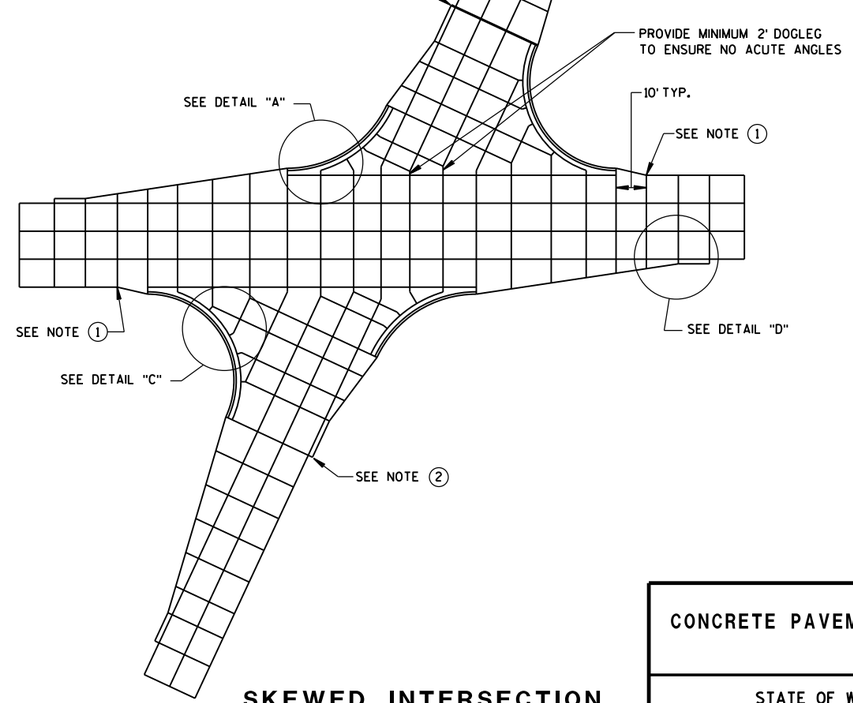
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM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



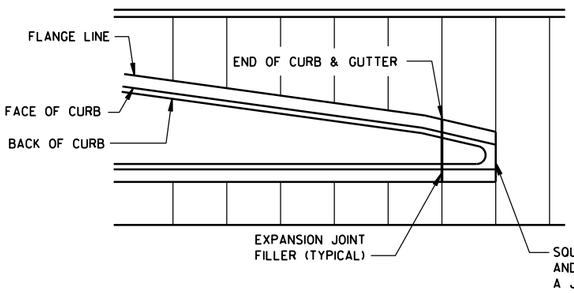
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

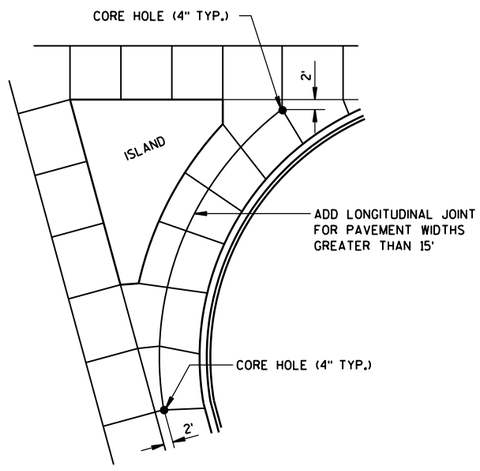
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

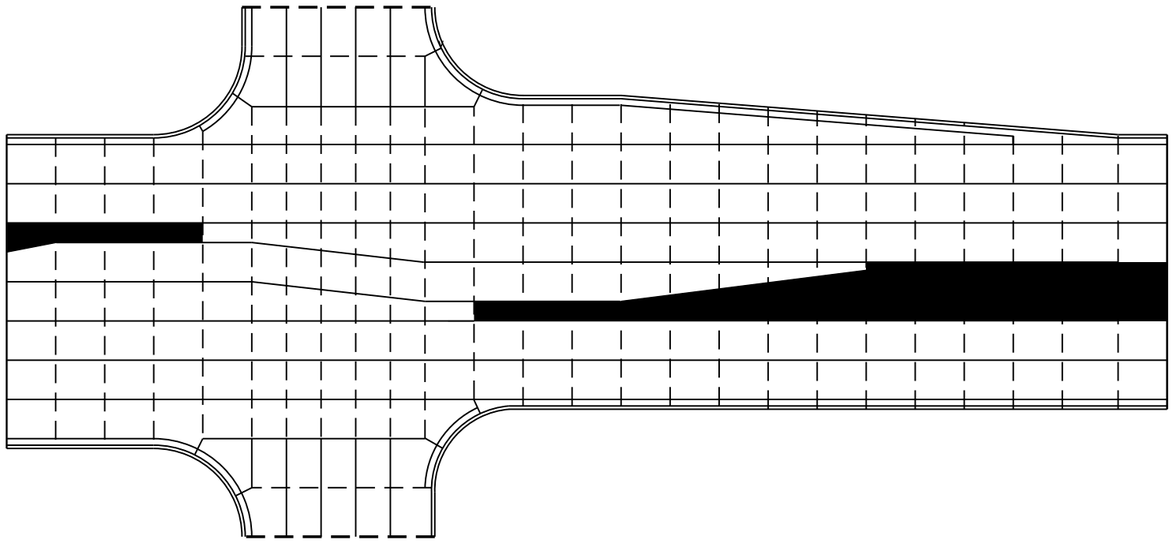
6
S.D.D. 13 C 18-3a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

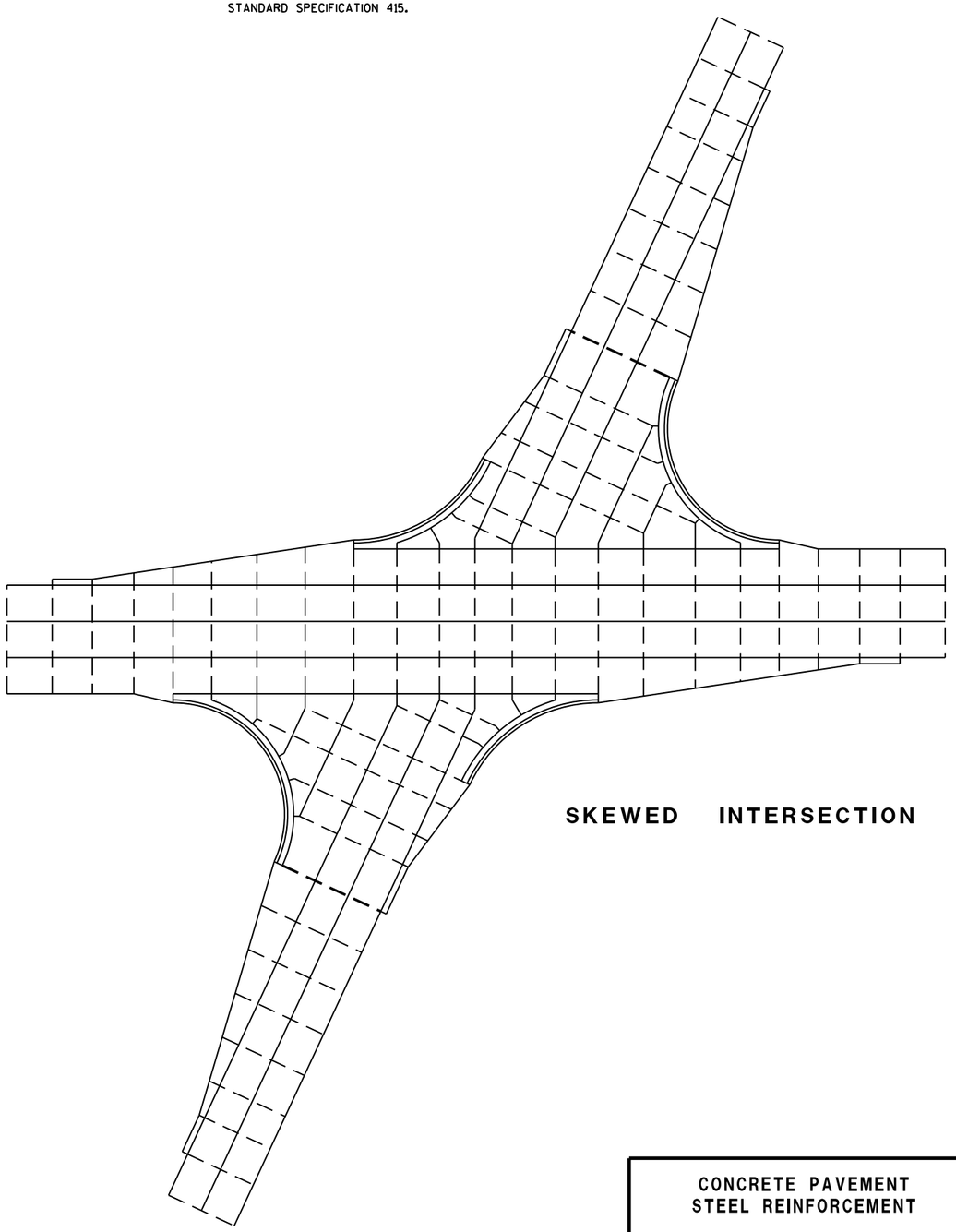
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

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



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

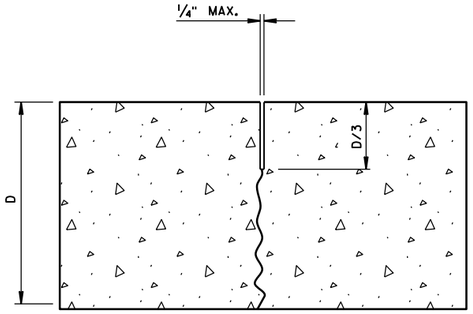
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

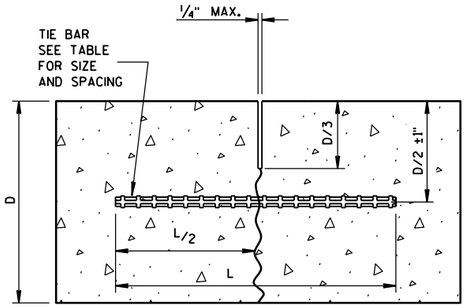
S.D.D. 13 C 18-3b

6

S.D.D. 13 C 18-3b



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

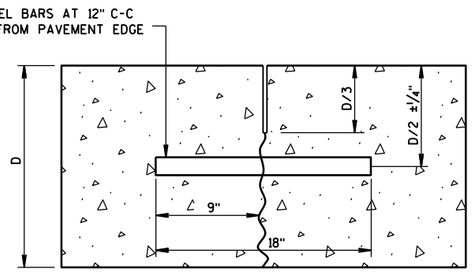
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* 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.

GENERAL NOTES

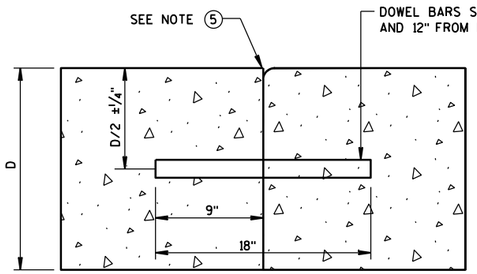
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



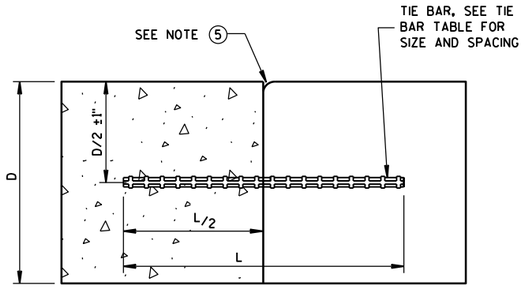
DOWELED-TRANSVERSE

CONTRACTION JOINTS

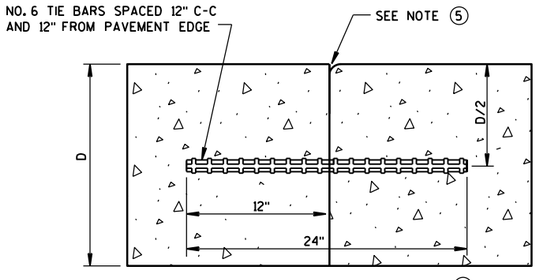
SEE NOTE (2)



DOWELED TRANSVERSE (3)

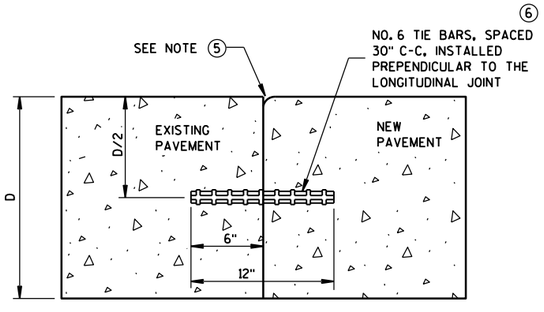


TIED LONGITUDINAL



TIED TRANSVERSE (3)

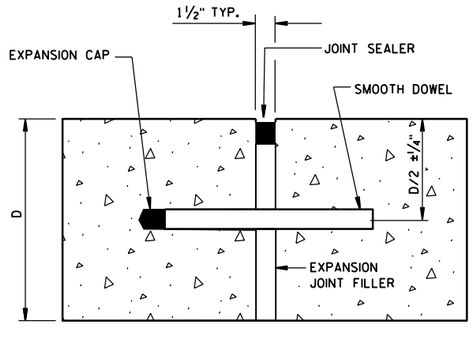
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

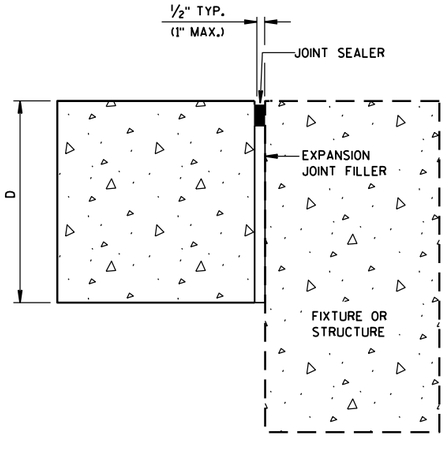
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

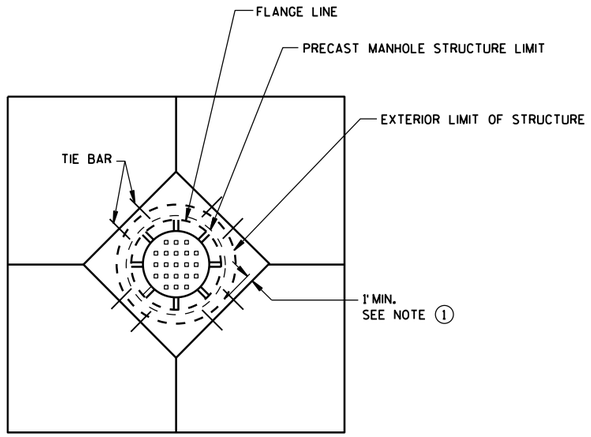
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

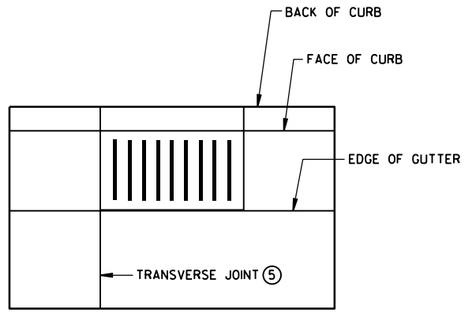
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

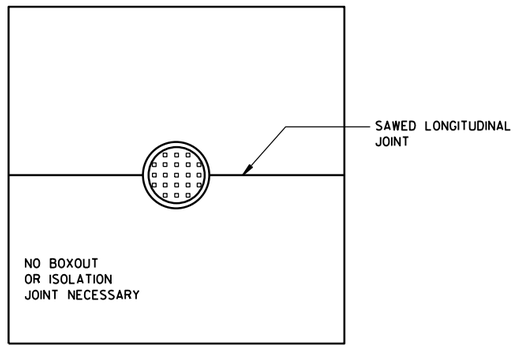
S.D.D. 13 C 18-3c



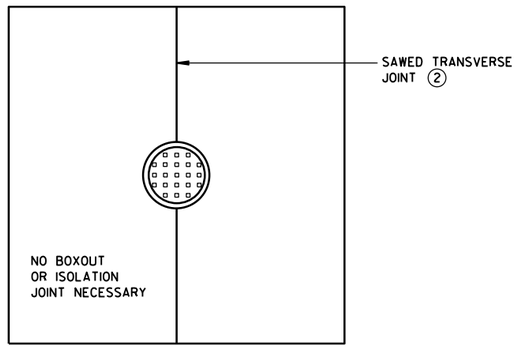
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



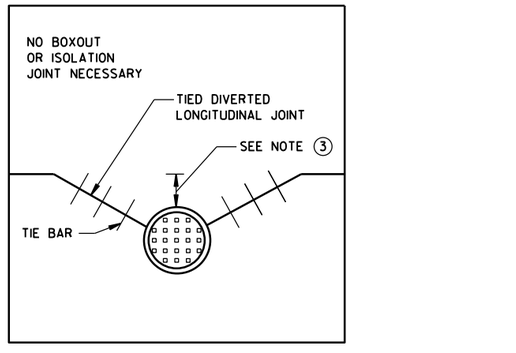
INLET WITH TRANSVERSE JOINT



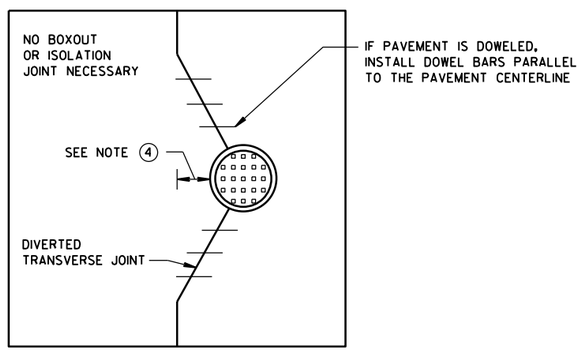
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

(3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPER
FHWA

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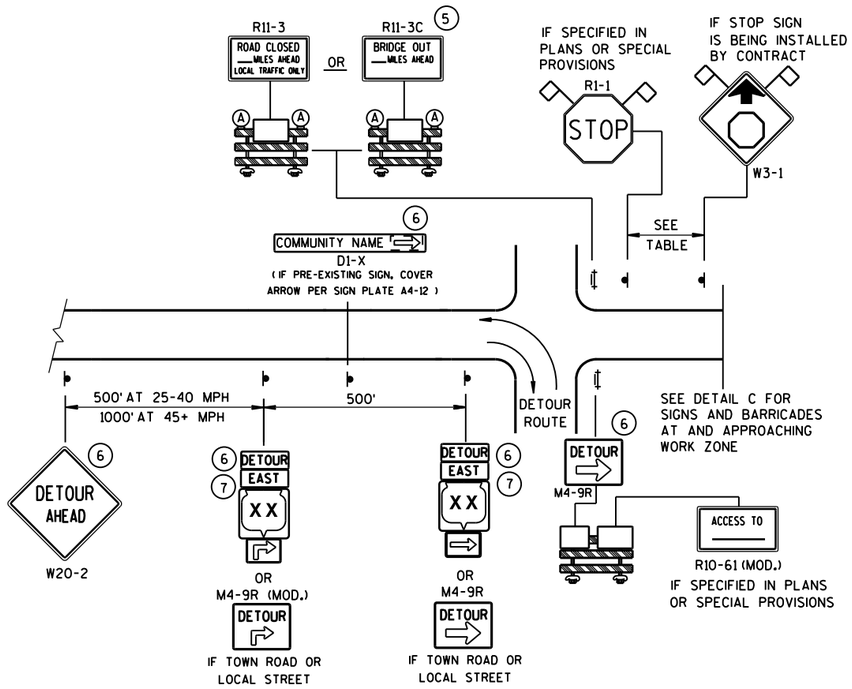
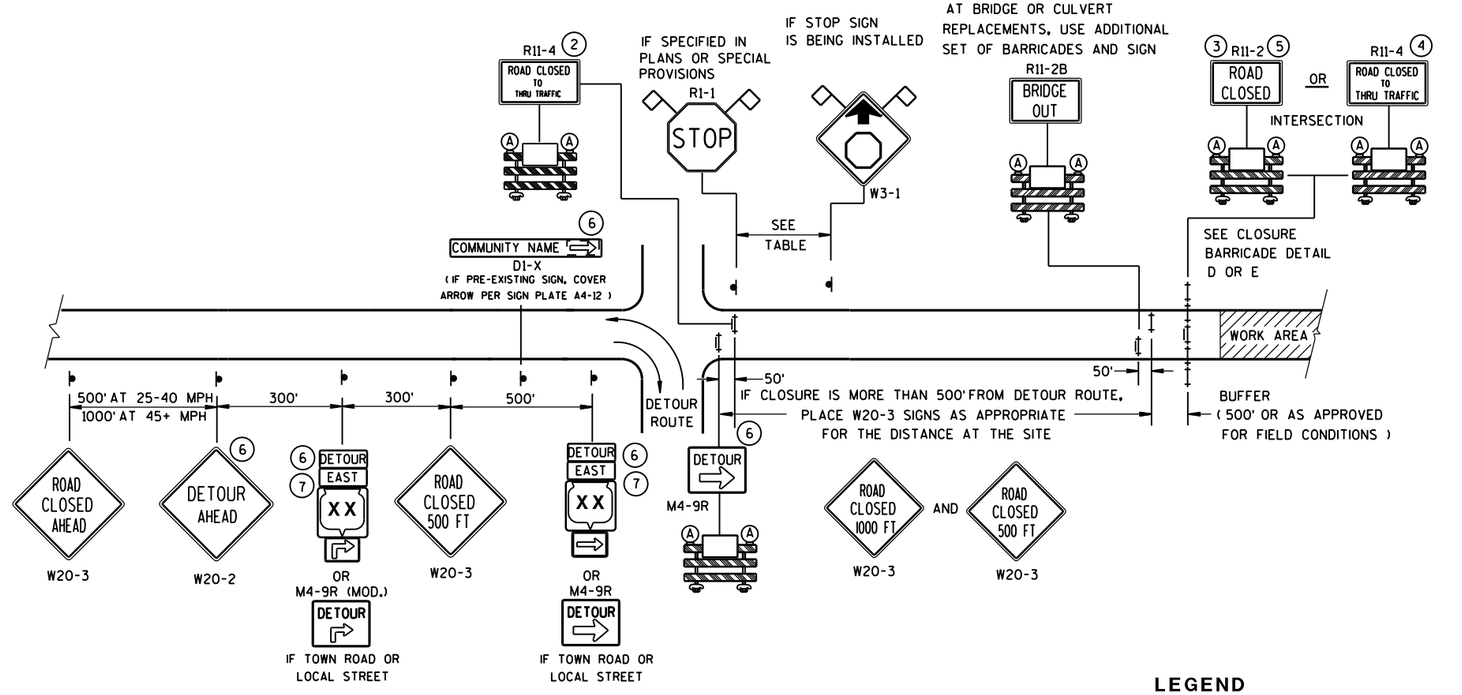
S.D.D. 13 C 18-3d



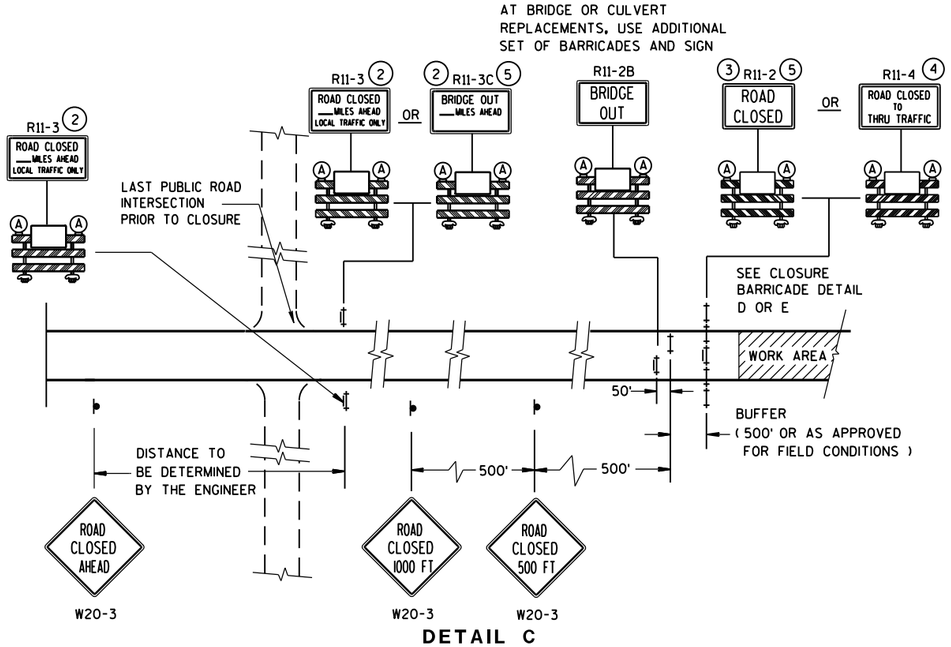
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN 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
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

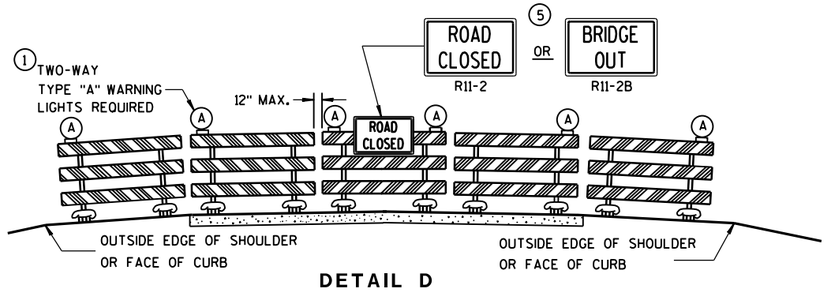
8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

6

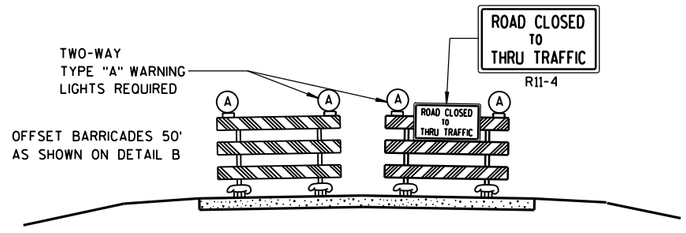
S.D.D. 15 C 2-5a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

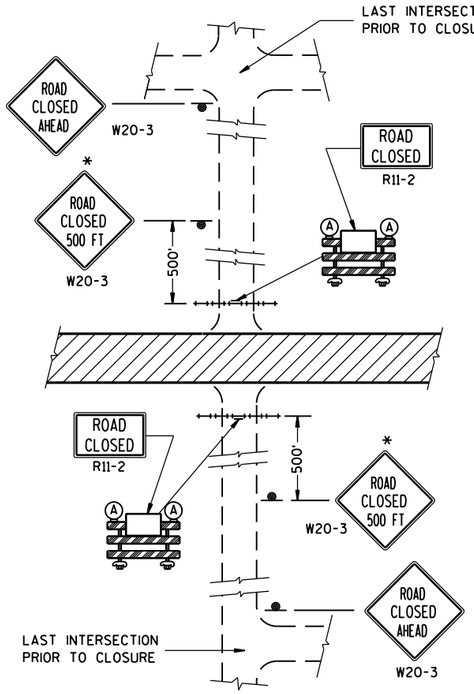
8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

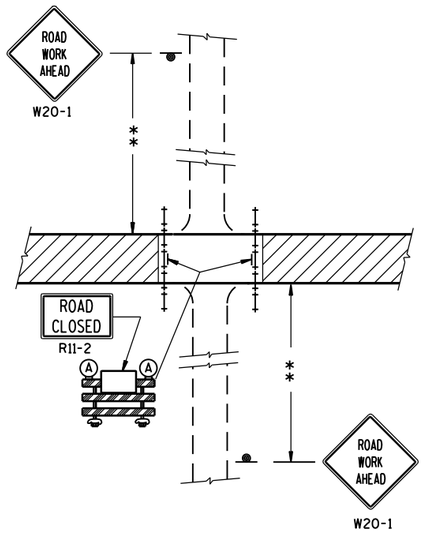
6

S.D.D. 15 C 2-5b



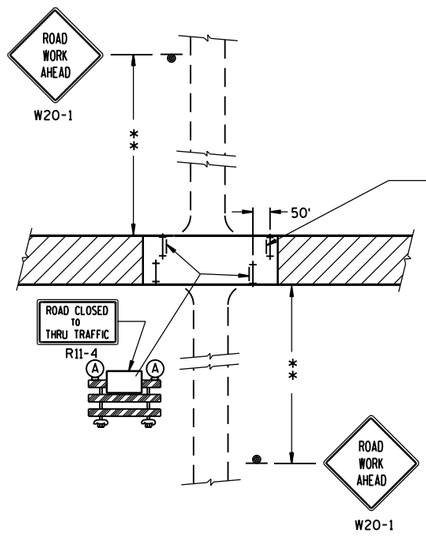
DETAIL 1

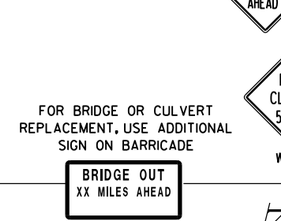
(NO ACCESS TO PROJECT)



DETAIL 2

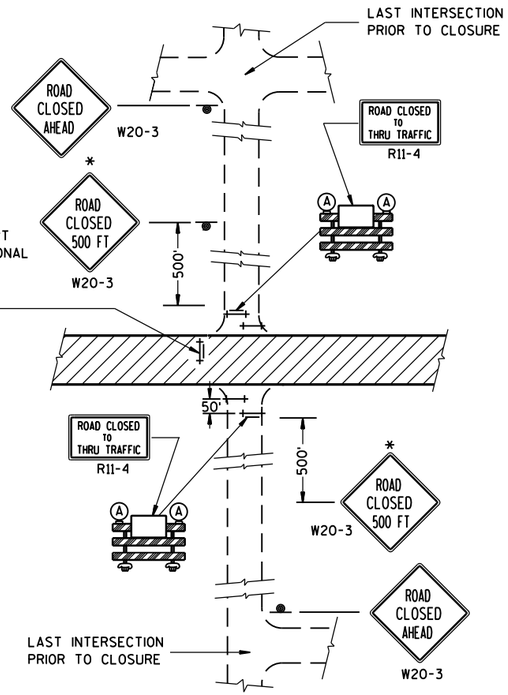
(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).





DETAIL 3

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



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

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

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

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

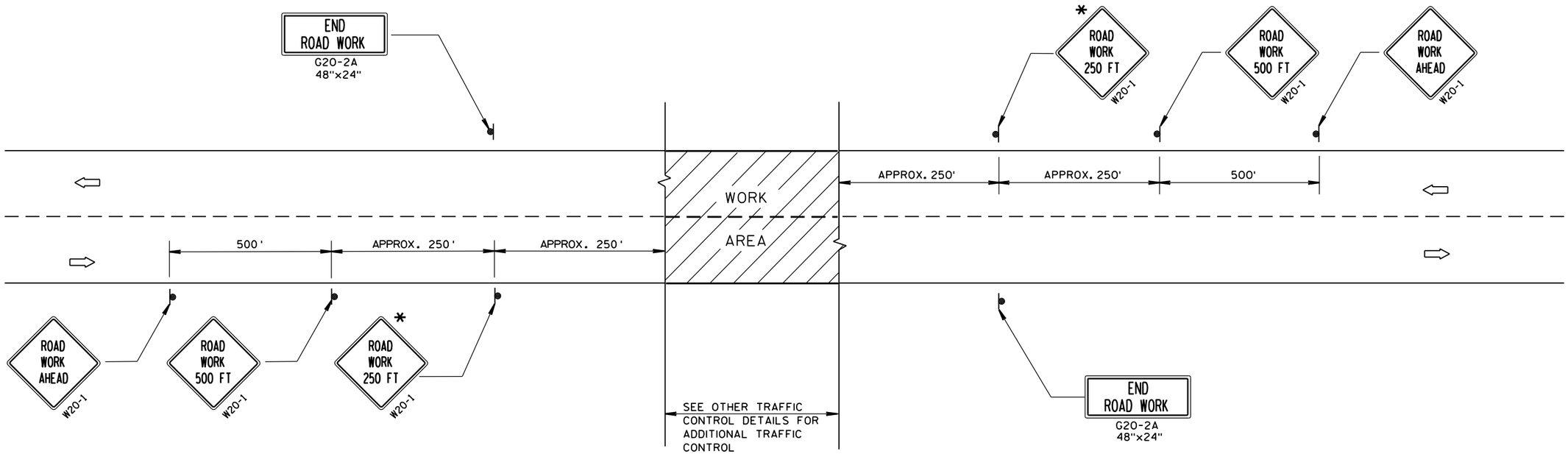
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 3-2

6

S.D.D. 15 C 3-2



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

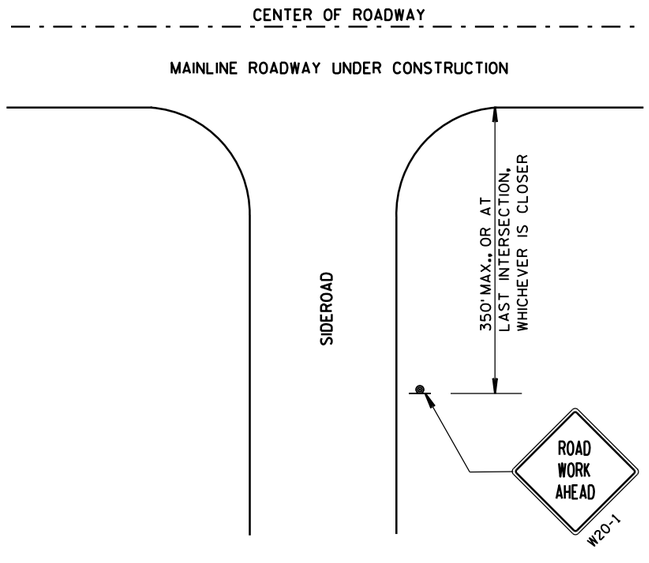
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 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 RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

142

SIGN

FHWA

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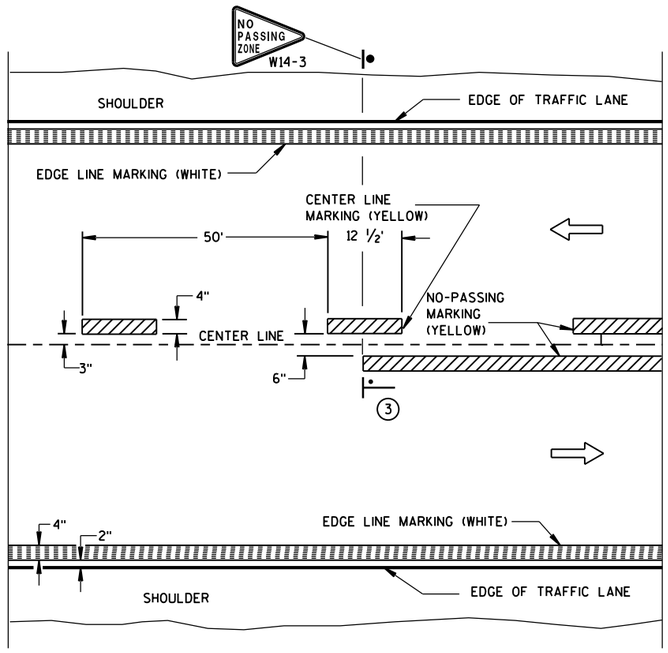
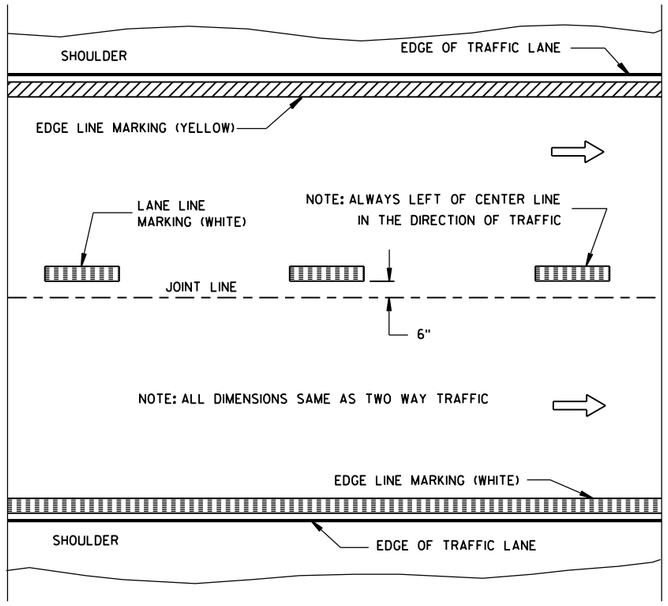
S.D.D. 15 C 5-2

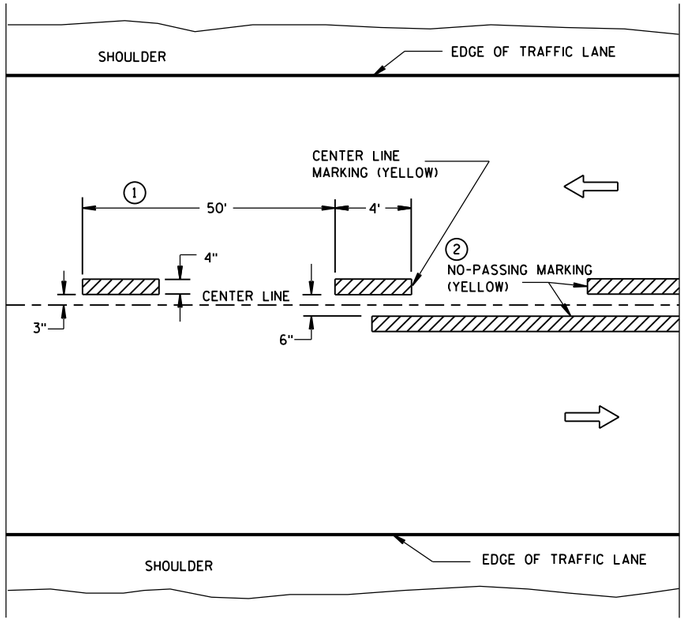


TWO WAY TRAFFIC

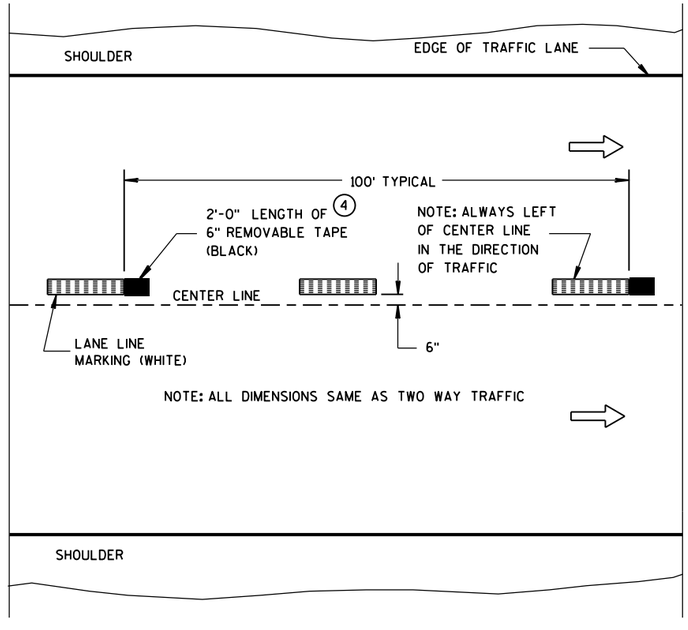


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

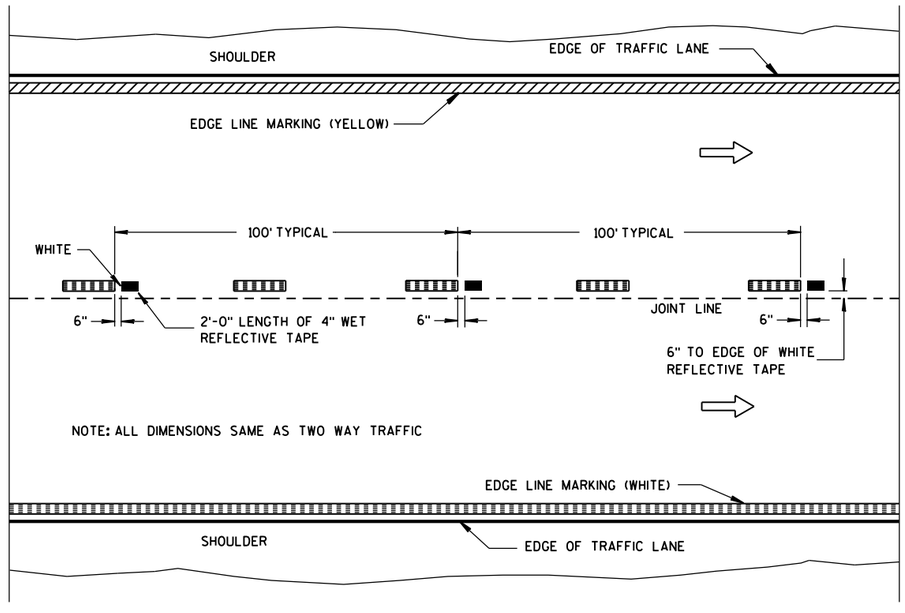
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



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

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

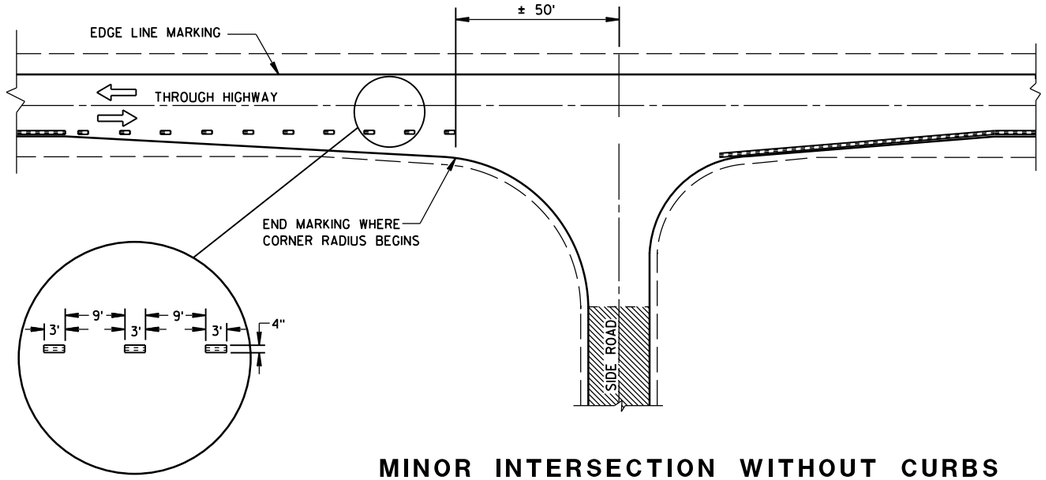
FHWA

6

S.D.D. 15 C 8-16a

6

S.D.D. 15 C 8-16a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

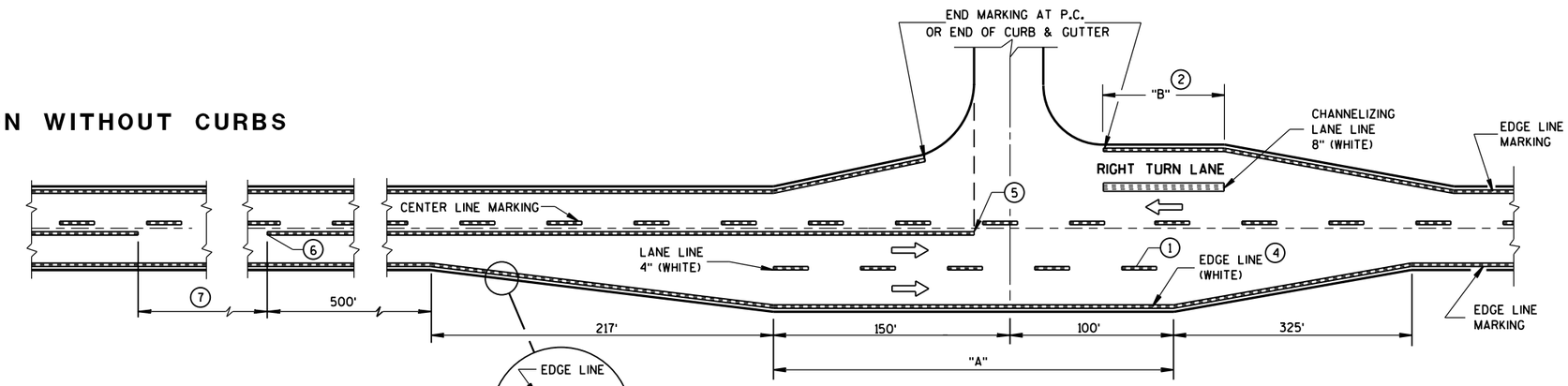
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

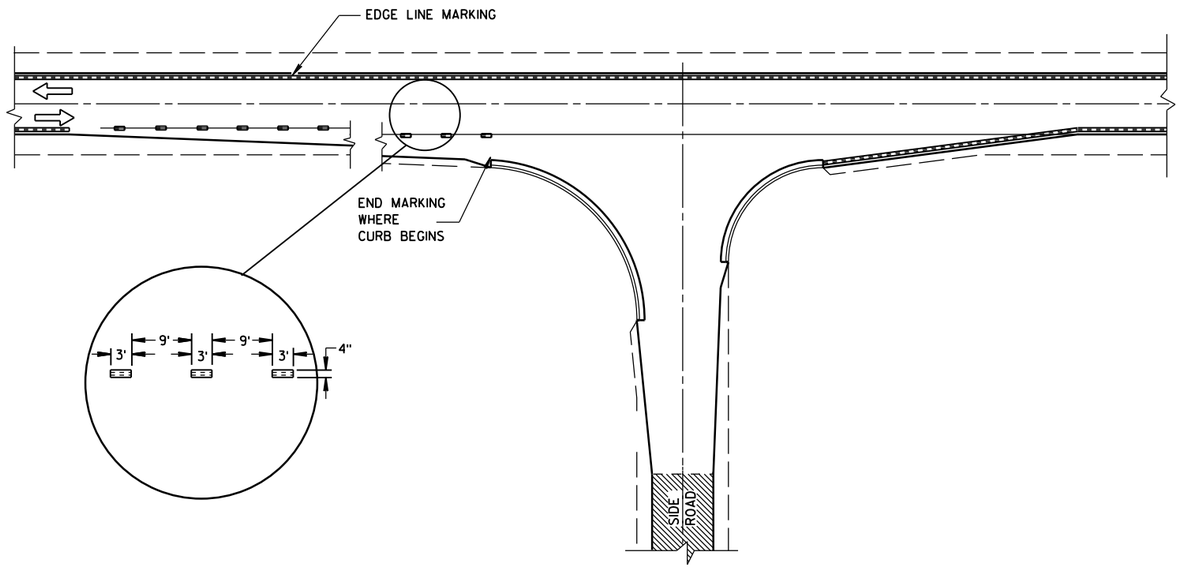
(7)

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



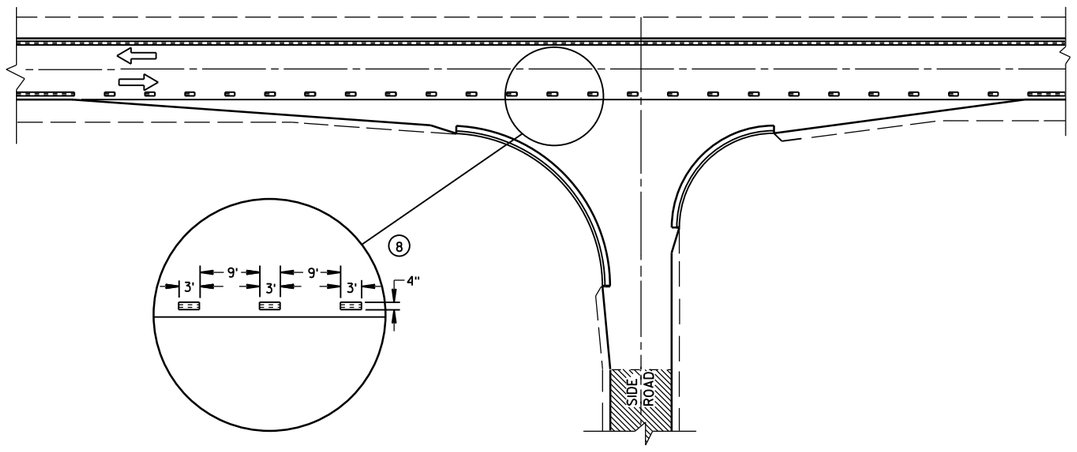
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

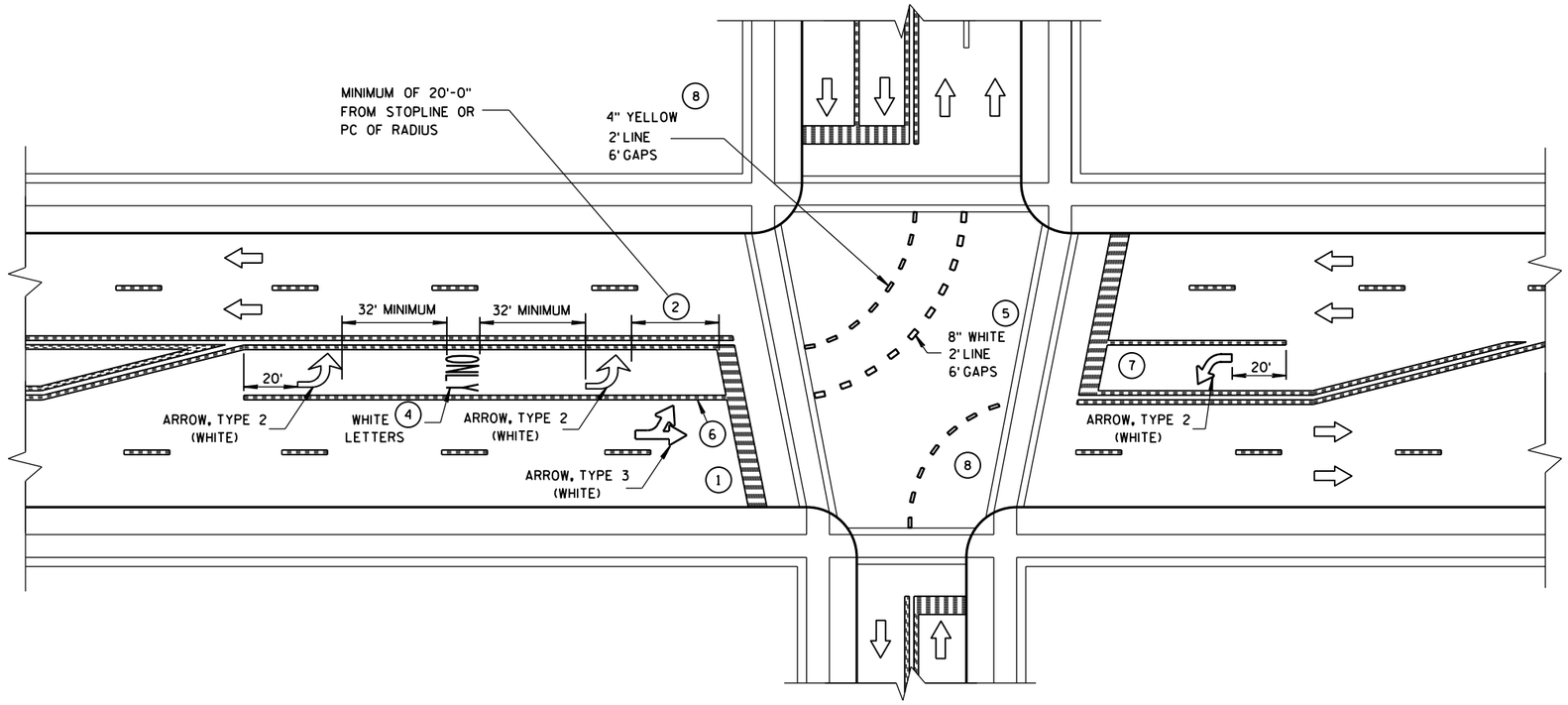
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 144

6

S.D.D. 15 C 8-16b

6

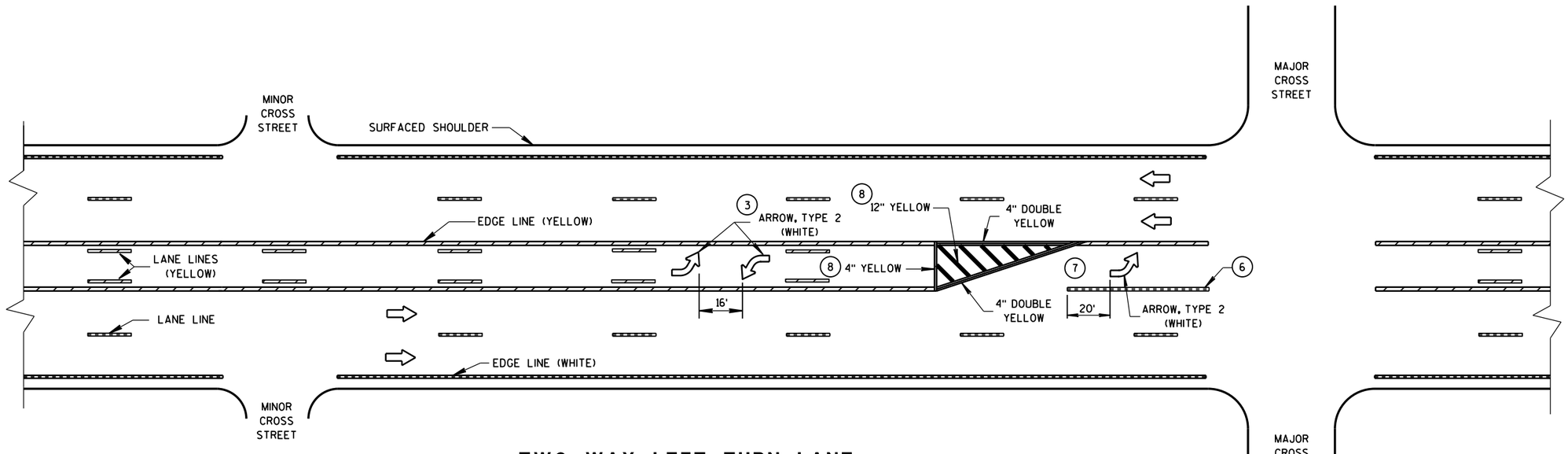
S.D.D. 15 C 8-16b



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 C 8-16e

6

S.D.D. 15 C 8-16e

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

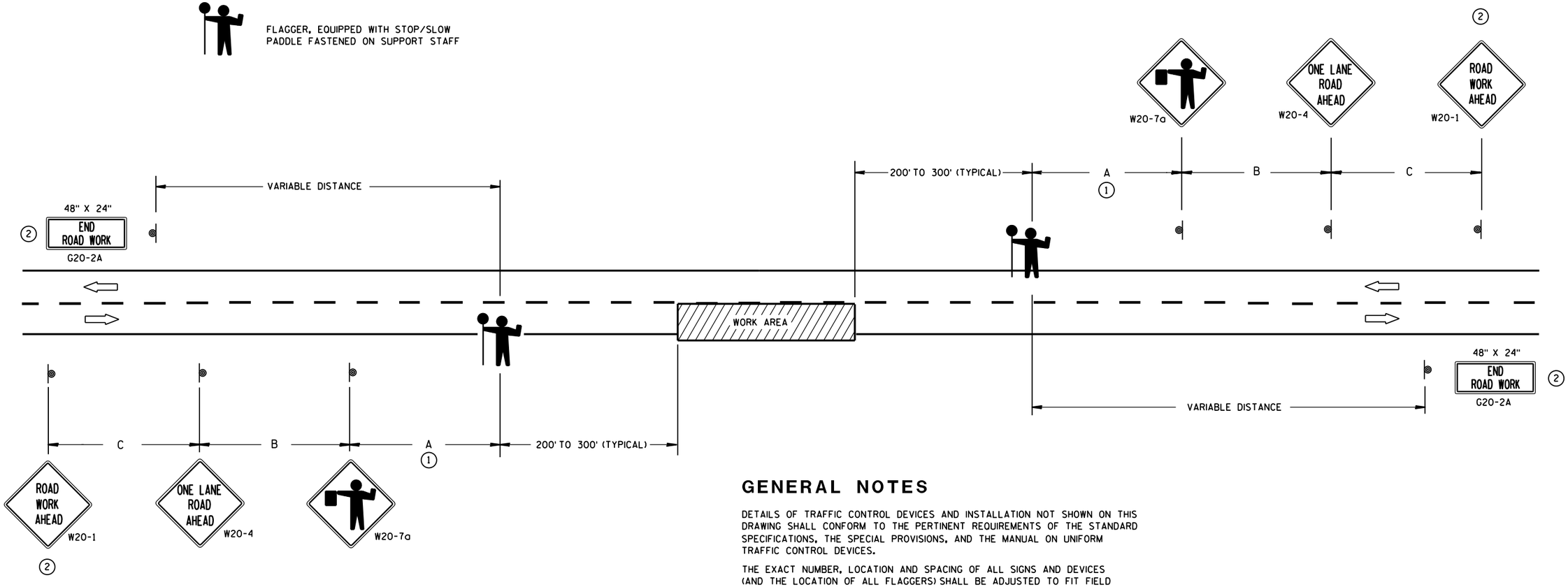
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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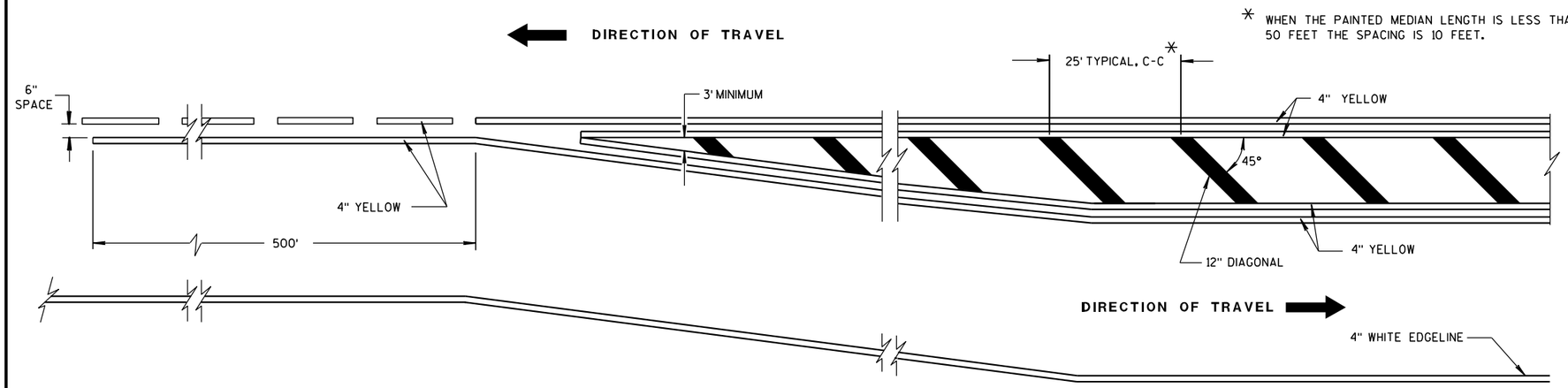
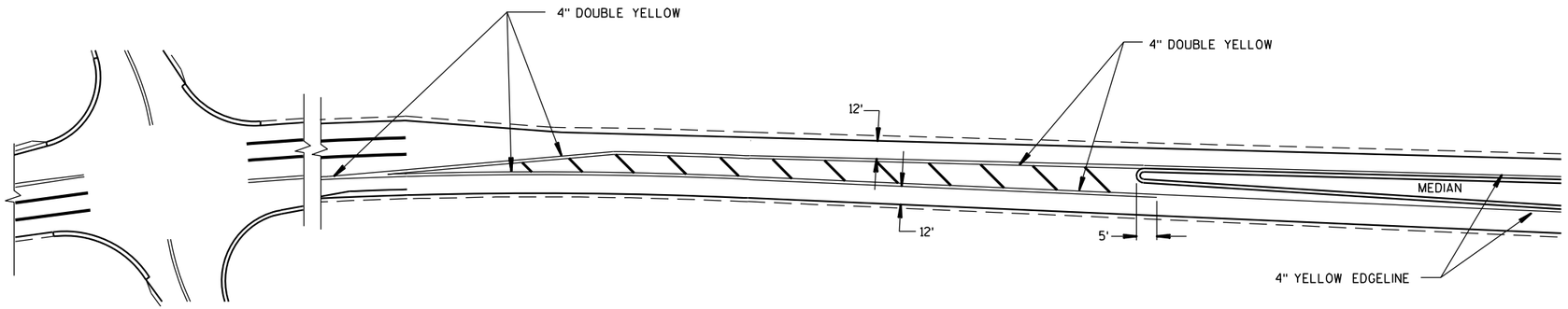
S.D.D. 15 C 12-4



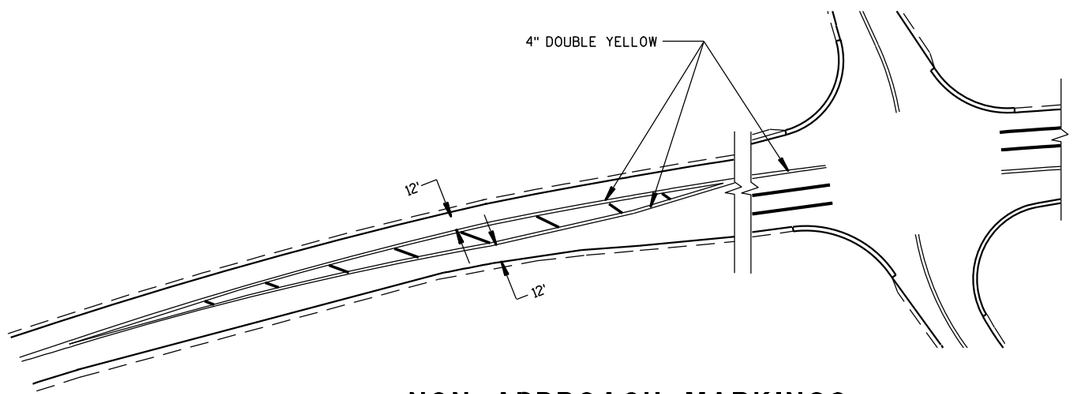
MEDIAN ISLAND DETAIL

GENERAL NOTE

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



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE	/S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER 147 IGN
FHWA	

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S.D.D. 15 C 18-3

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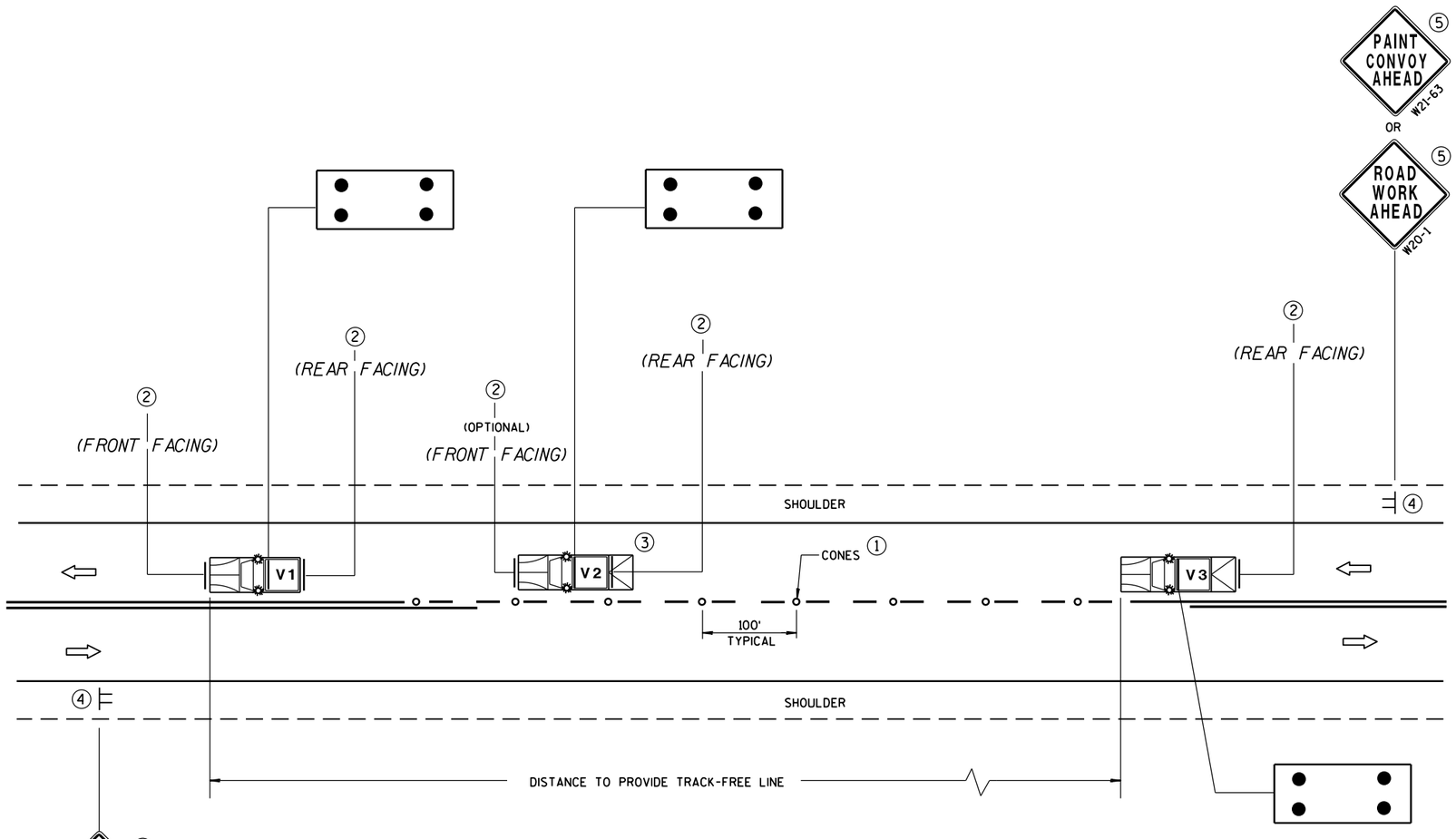

MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1	LEAD VEHICLE
V2	SHADOW VEHICLE
V3	TRAIL VEHICLE WITH TMA
TMA	TRUCK-MOUNTED ATTENUATOR
	SIGN ON TEMPORARY SUPPORT
	DIRECTION OF TRAFFIC
	CONES
	FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/3/2013 DATE	/S/ Travis Feltes STATE TRAFFIC E
FHWA	

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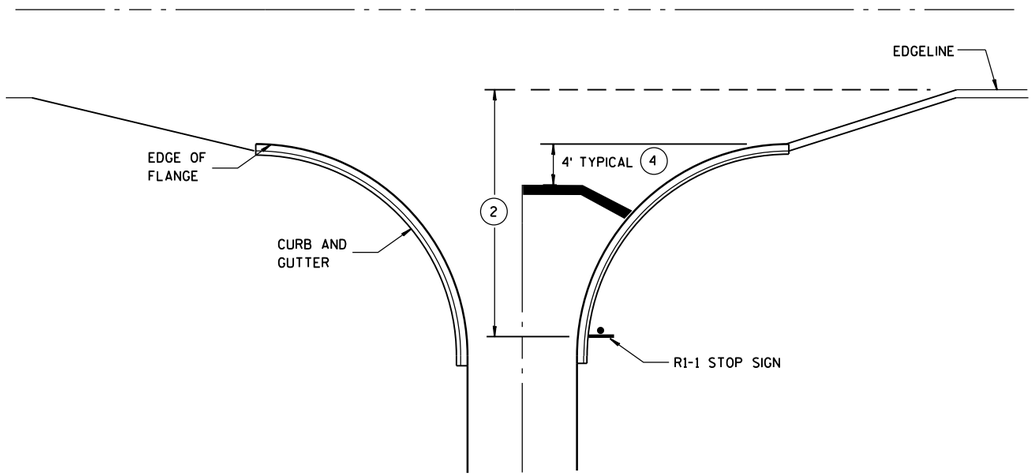
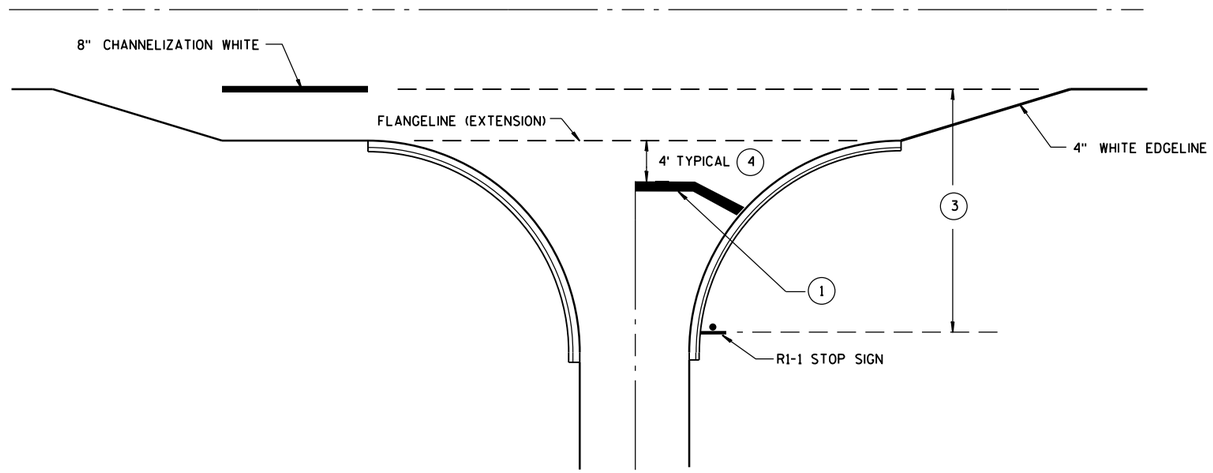
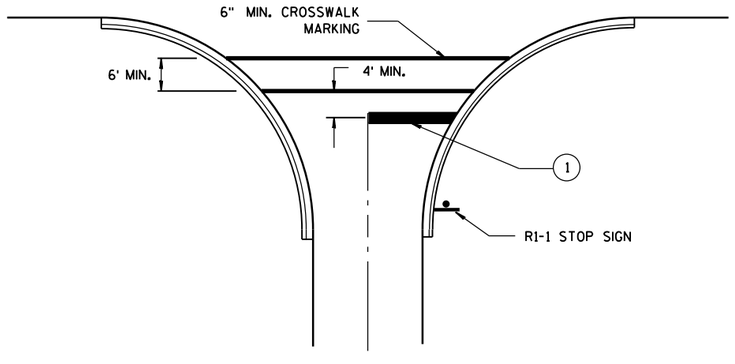
S.D.D. 15 C 19-2a



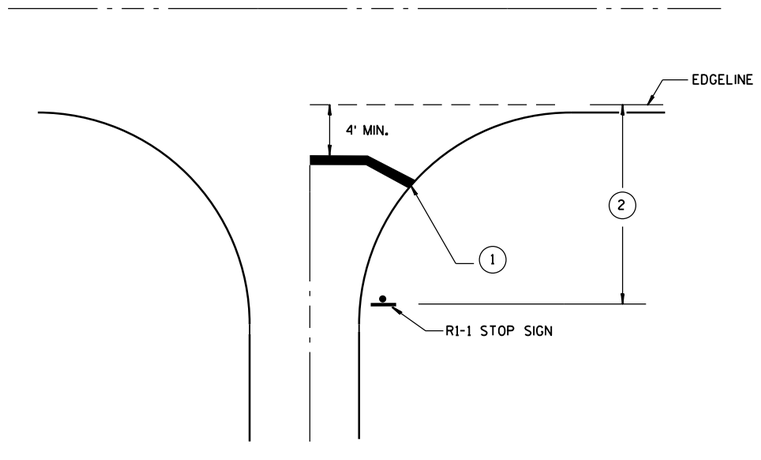
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

6

S.D.D. 15 C 33-1

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

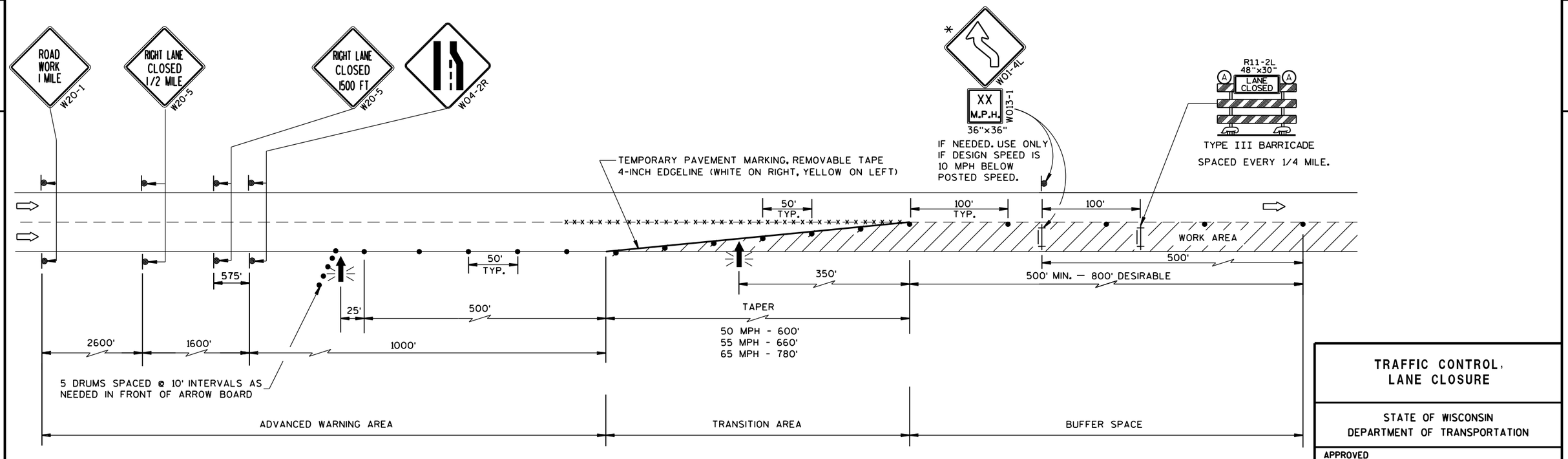
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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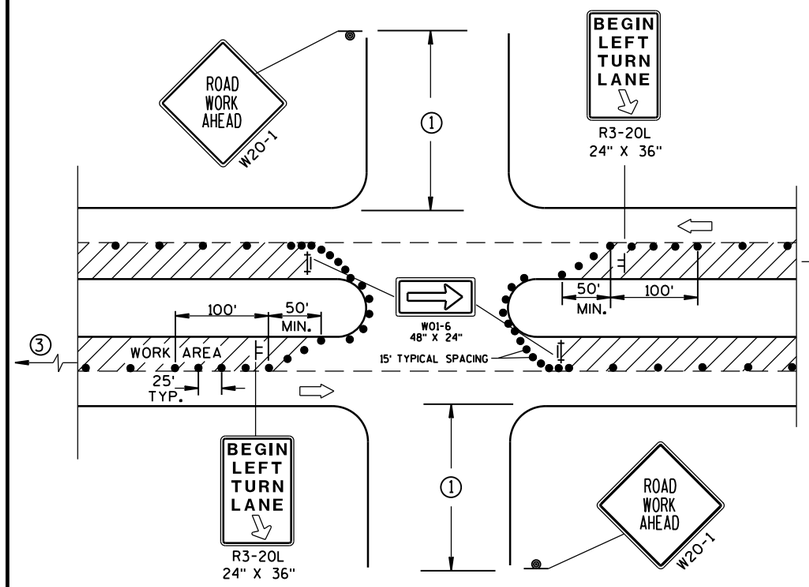
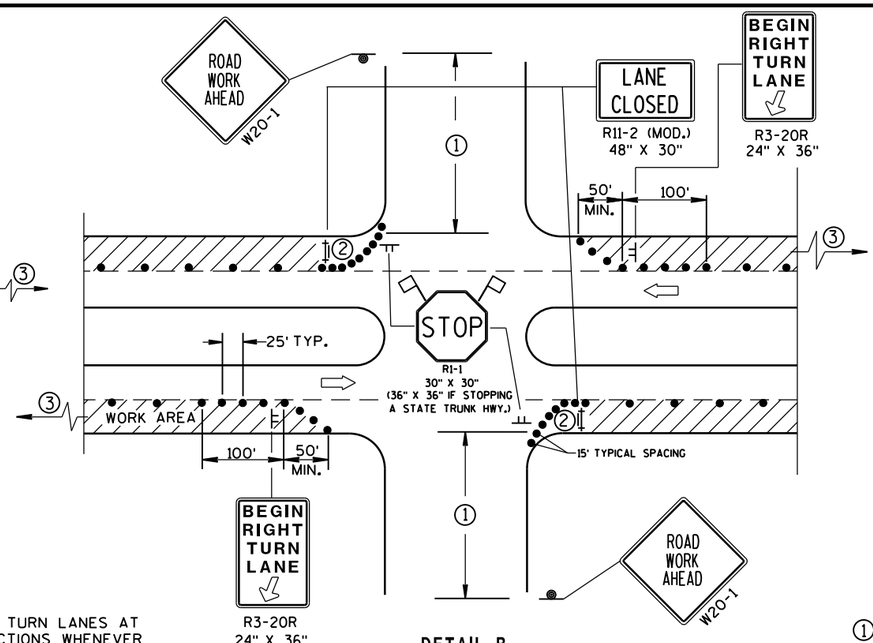
S.D.D. 15 D 12-5a



DETAIL A

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



DETAIL B

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

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

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

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 DISTRICT TRAFFIC UNIT.

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

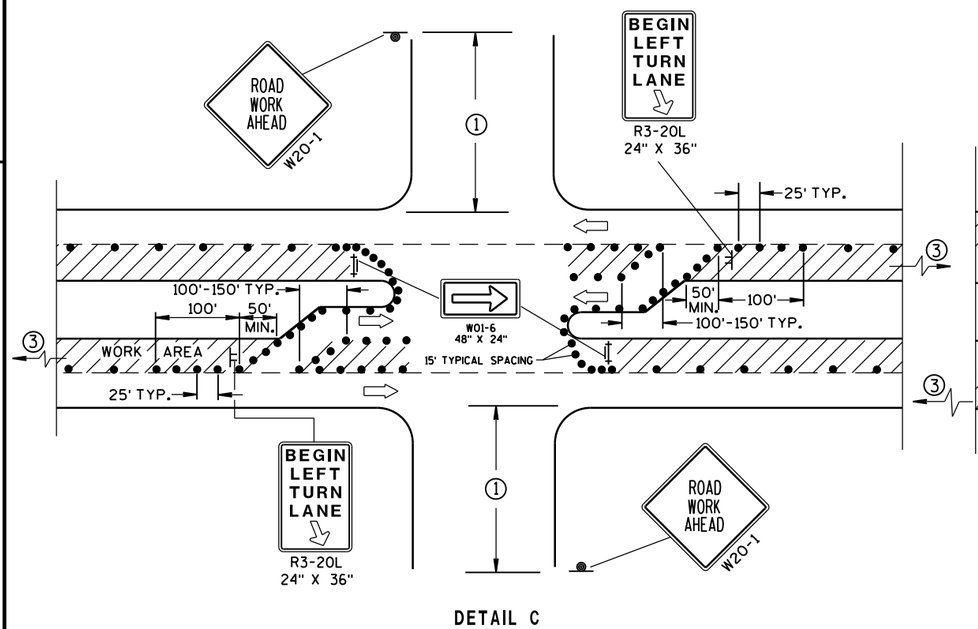
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE 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.

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

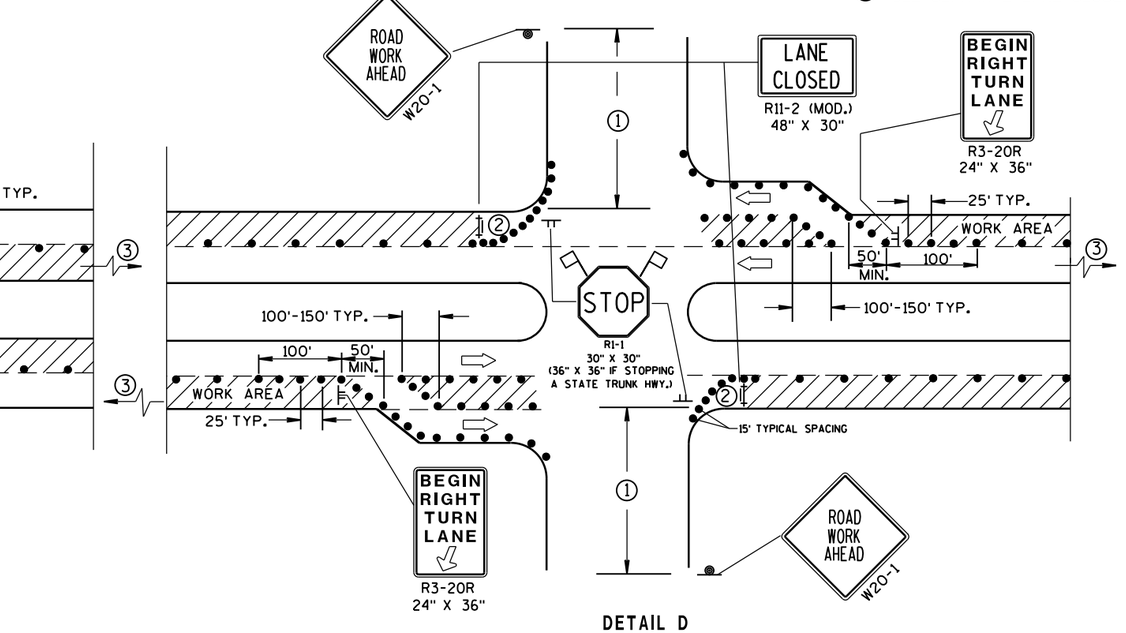
② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



DETAIL C

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D

FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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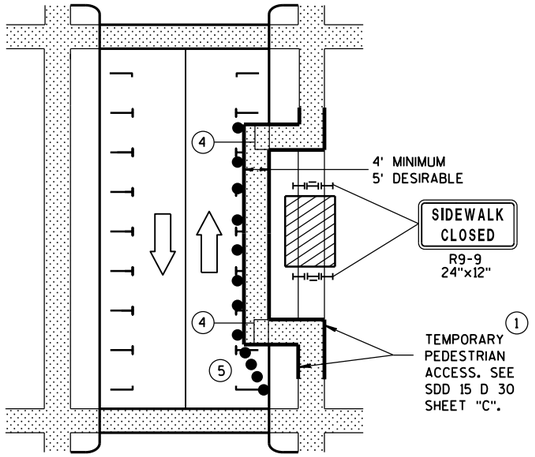
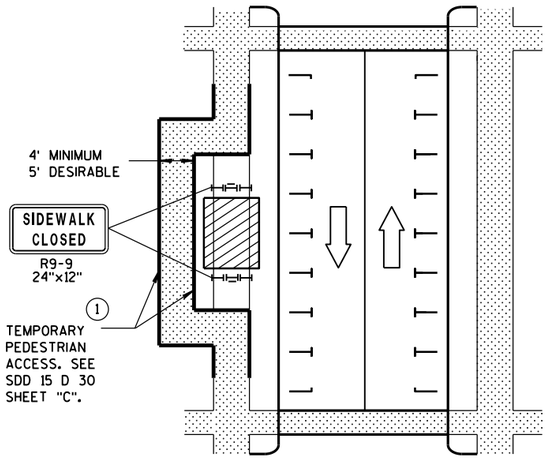
S.D.D. 15 D 21-3

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

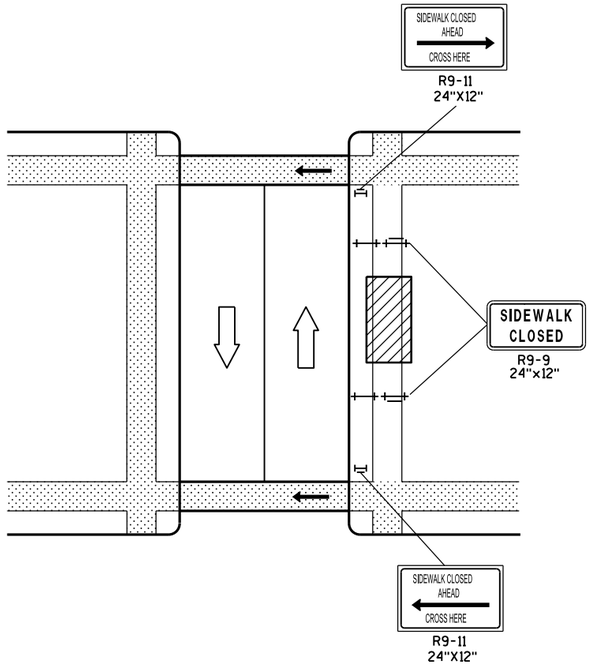


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

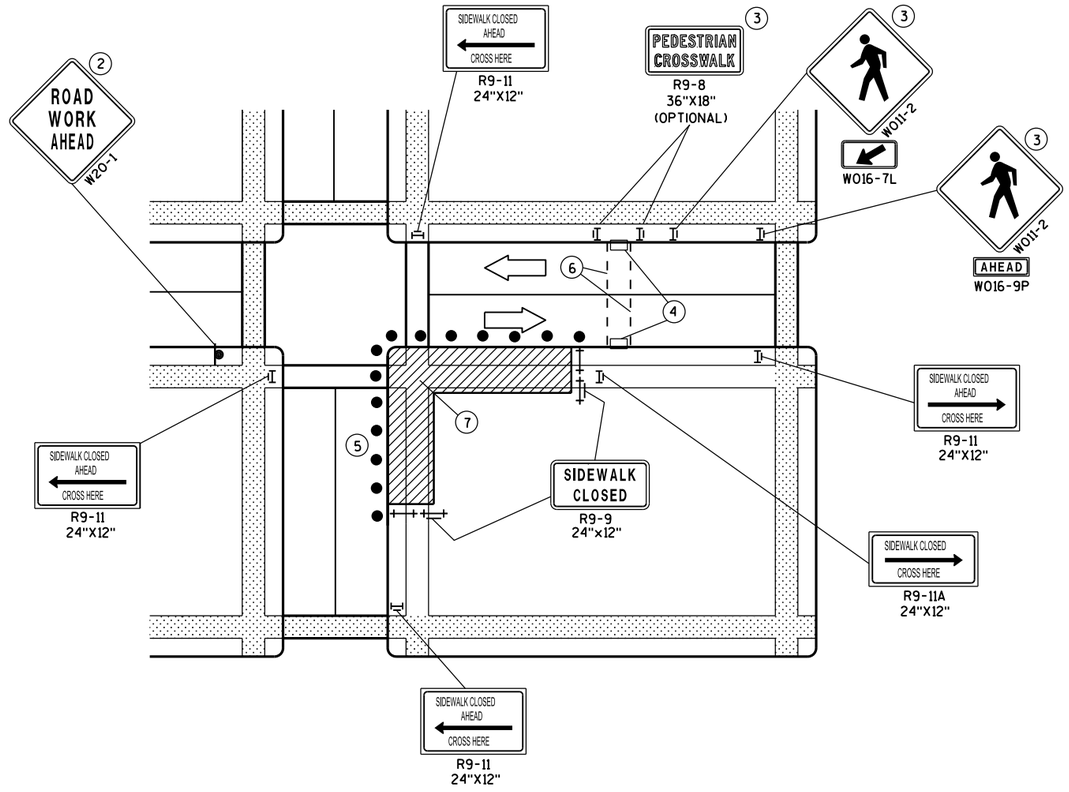
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.

(2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

- SIGN ON PERMANENT SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- DIRECTION OF TRAFFIC
- TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 15 D 30-2a

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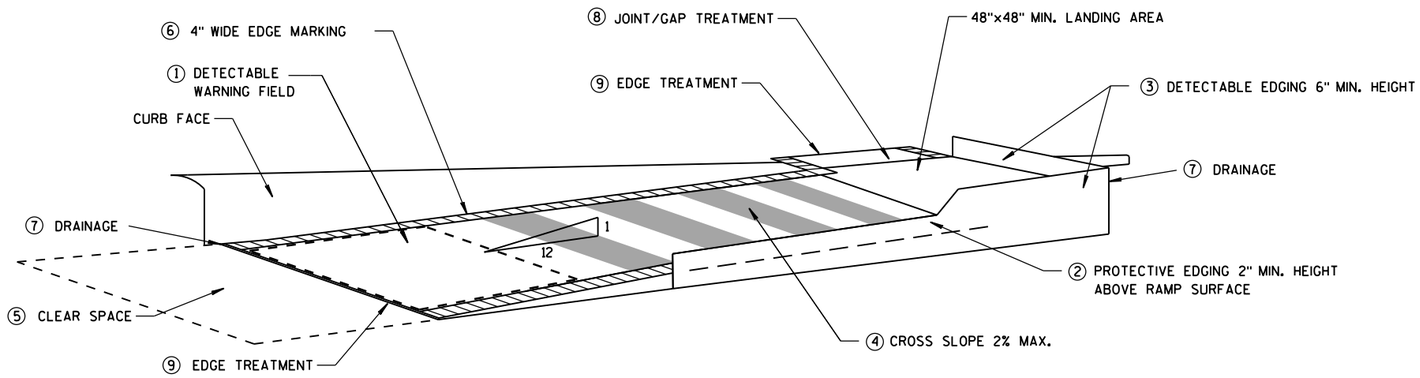
S.D.D. 15 D 30-2a



TEMPORARY CURB RAMP PARALLEL TO CURB

GENERAL NOTES

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".

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 CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

⑤ CLEAR SPACE OF 48"X48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

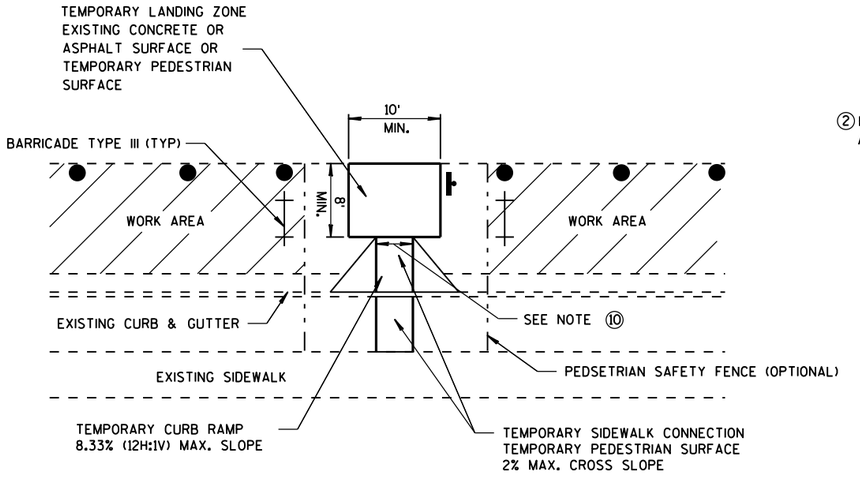
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

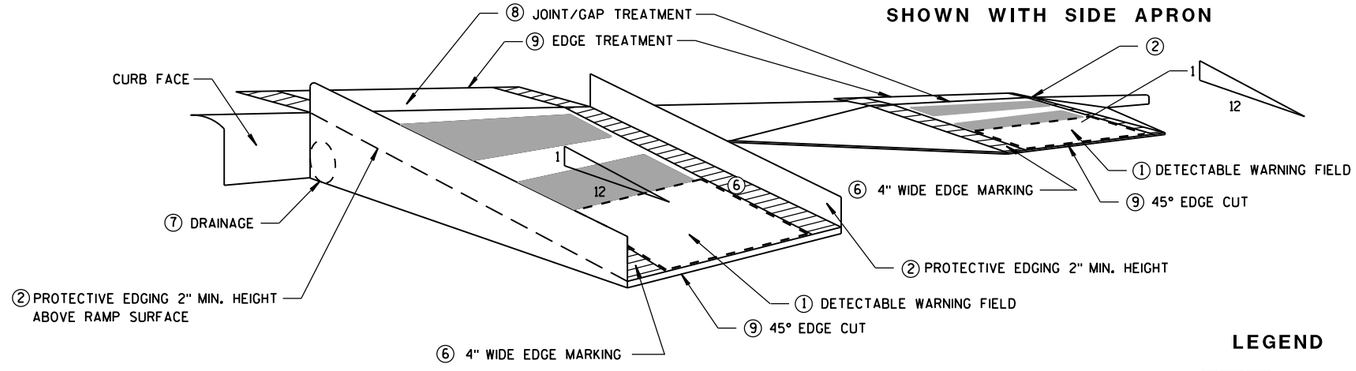
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

⑩ 5' WIDE MIN. WITH PEDSETRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



TEMPORARY BUS STOP PAD



SHOWN WITH SIDE APRON

SHOWN WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

LEGEND

WORK AREA

TYPE III BARRICADE

TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

March 2015 DATE — /S/ Travis Feltes STATE TRAFFIC ENGINEER — SIGN

FHWA

6

S.D.D. 15 D 30-2b

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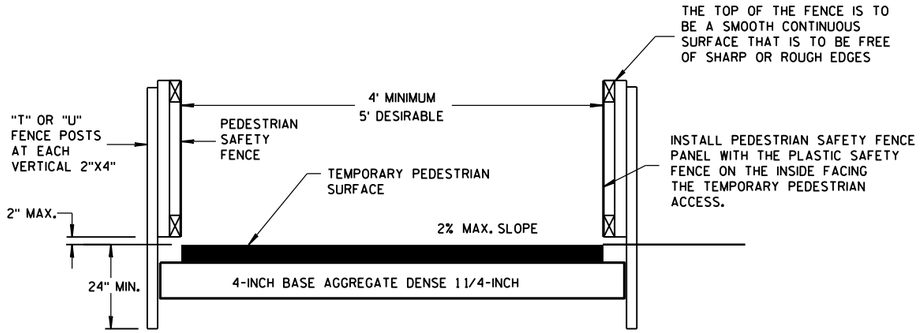
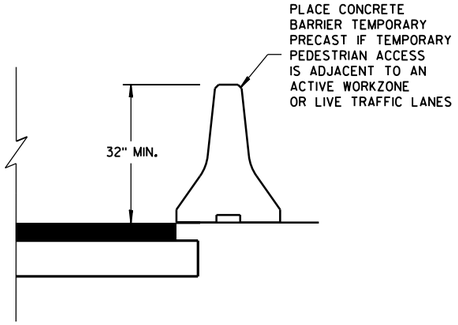
S.D.D. 15 D 30-2b

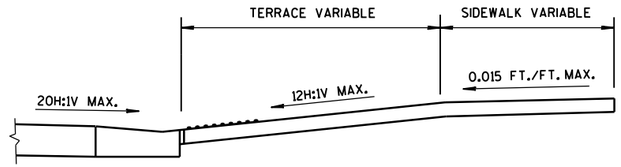




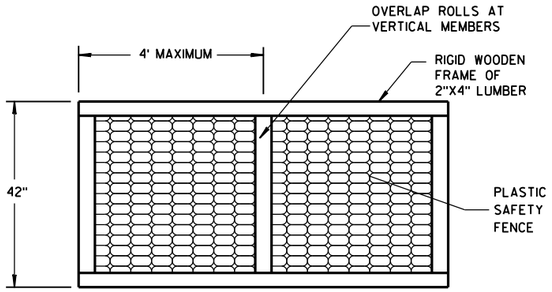
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

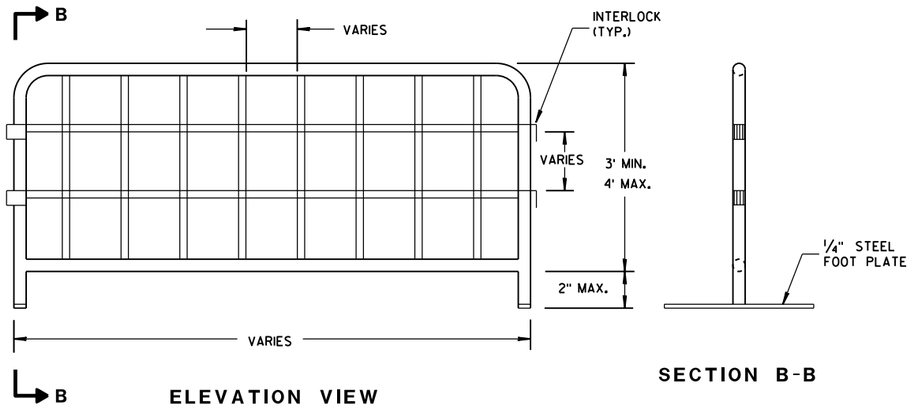
(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



SECTION A-A



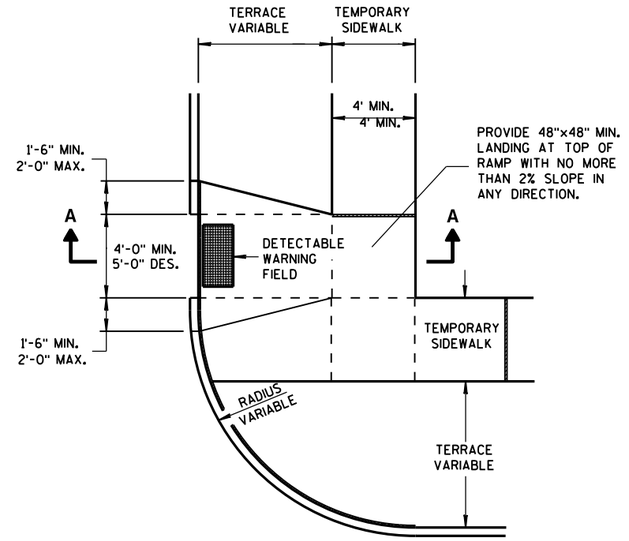
PEDESTRIAN SAFETY FENCE



ELEVATION VIEW

SECTION B-B

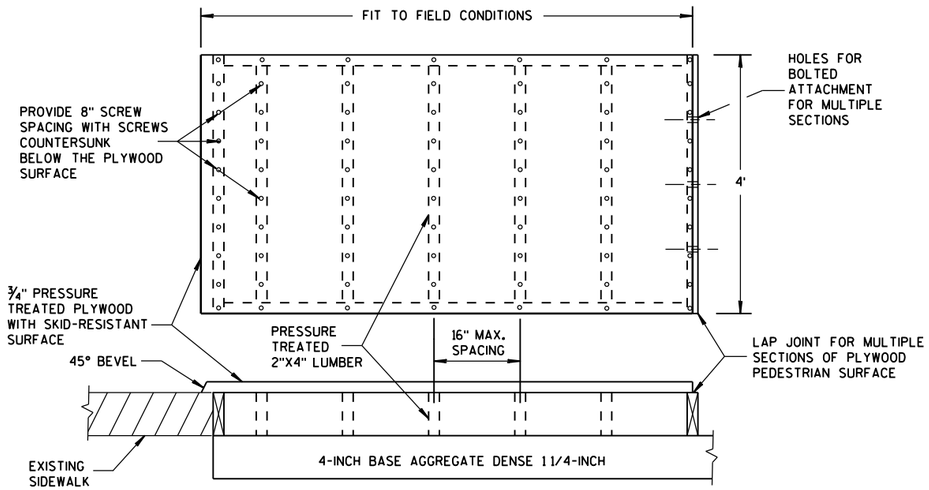
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)



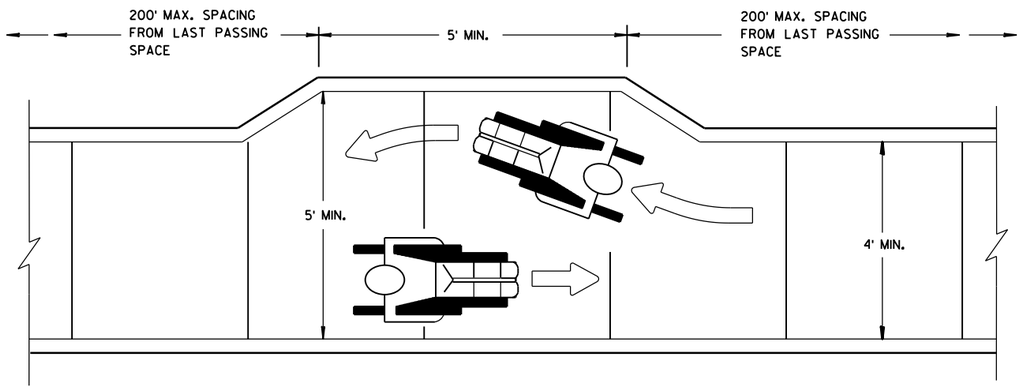
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER — SIGN
FHWA

6

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Notes

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