WIS

PROJECT ID: 6995-12-70

WITH: N/A

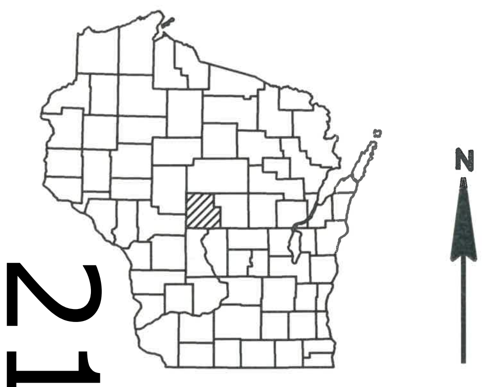
COUNTY: WOOD

21

MAY 2023

ORDER OF SHEETS

TOTAL SHEETS = 144



STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6995-12-70	WISC 2023397	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

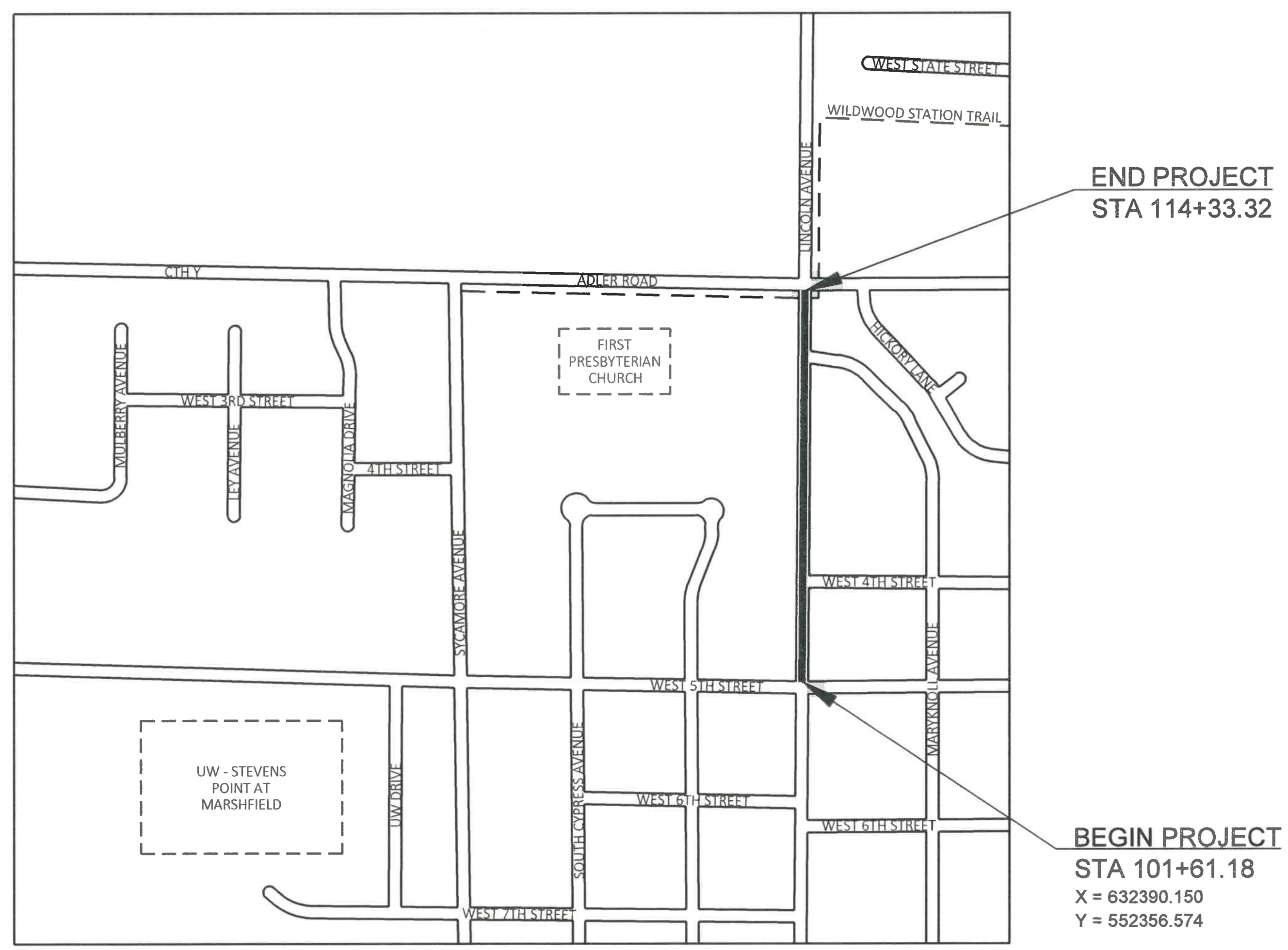
PLAN OF PROPOSED IMPROVEMENT

C MARSHFIELD, S LINCOLN AVE

WEST 5TH STREET TO ADLER ROAD

LOCAL STREET
WOOD COUNTY

STATE PROJECT NUMBER
6995-12-70



LAYOUT

SCALE 0 600 FT

TOTAL NET LENGTH OF CENTERLINE = 0.24 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), WOOD COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

DESIGN DESIGNATION

A.A.D.T.	2027	=	2175
A.A.D.T.	2044	=	2400
D.H.V.		=	
D.D.		=	50/50
T.		=	2.0%
DESIGN SPEED		=	30 MPH
ESALS		=	88,000 (PCC)

CONVENTIONAL SYMBOLS

PLAN

CORPORATE LIMITS
PROPERTY LINE
LOT LINE
LIMITED HIGHWAY EASEMENT
EXISTING RIGHT OF WAY
PROPOSED OR NEW R/W LINE
SLOPE INTERCEPT
REFERENCE LINE (300'EB')
EXISTING CULVERT
PROPOSED CULVERT (Box or Pipe)
COMBUSTIBLE FLUIDS (CAUTION)
MARSH AREA
WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

ELECTRIC — E —
FIBER OPTIC — FO —
GAS — G —
SANITARY SEWER — SAN —
FORCE MAIN — FCM —
STORM SEWER — SS —
TELEPHONE — T —
WATER — W —
UTILITY PEDESTAL
POWER POLE
TELEPHONE POLE

PLAN NO. 3689

APPROVED FOR
CITY OF MARSHFIELD
PROJECT ID: 6995-12-70

1/31/2023
DATE — THOMAS R. TURCHI, P.E.

ORIGINAL PLANS PREPARED BY

GREMMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Stevens Point • Fond du Lac
120 Wilshire Boulevard North • Stevens Point, WI 54481
(715) 341-4363 • fax (715) 341-1856

WISCONSIN
DEXTER D. KAETTERHENRY
E-43966
PLOVER
WI
PROFESSIONAL ENGINEER

1/30/2023
DATE — DEXTER D. KAETTERHENRY, PE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	GREMMER & ASSOCIATES, INC.
Designer	GREMMER & ASSOCIATES, INC.
Project Manager	JASON SCHAEFFER
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	DANIEL ERVA

APPROVED FOR THE DEPARTMENT

DATE: 1/31/2023 (Signature)

E

2

GENERAL NOTES

UTILITY FACILITIES SHOWN WITHIN THE PLANS ARE APPROXIMATE AND THERE MAY BE OTHER UTILITIES NOT SHOWN. PRIVATE UTILITIES AND OTHER UTILITIES NOT LOCATED BY A DIGGERS HOTLINE LOCATE ARE NOT SHOWN. FIELD VERIFY AND LOCATE ALL UTILITIES FOR ACTUAL LOCATIONS, OTHER FACILITIES SIZES, TYPES, MATERIAL AND DEPTHS.

CURB RADII ARE DIMENSIONED TO THE FACE OF CURB.

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

TOPSOIL IN DISTURBED AREAS WILL BE PLACED AT A THICKNESS OF 6 INCHES MINIMUM.

SECTIONS AS SHOWN ON THE CROSS-SECTIONS INCLUDE THE THICKNESS OF TOPSOIL WHERE REQUIRED.

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

A VERTICAL SAW CUT SHALL BE MADE THROUGH EXISTING DRIVEWAYS, SIDEWALKS AND PAVEMENTS AT THE REMOVAL LIMITS.

WHEN THE QUANTITY OF THE ITEMS OF SUBBASE, BASE AGGREGATE DENSE, OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON, OR C.Y. THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR'S PAVING OPERATION SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING, OR PARKING LANE.

PRIOR TO MANUFACTURING INLETS AND MANHOLES CONTRACTOR SHALL VERIFY EXISTING PIPE SIZES, MATERIALS, AND INVERT ELEVATIONS WHEN CONNECTING NEW STORM SEWER INTO EXISTING PIPES.

REMOVAL OF ASPHALTIC PAVEMENT SHALL BE MEASURED AND PAID FOR AS EXCAVATION COMMON IN RECONSTRUCTION SEGMENTS.

ORDER OF SECTION 2 SHEETS

WDNR CONTACT

DEPARTMENT OF NATURAL RESOURCES
ATTN: BRAD BETTHAUSER
473 GRIFFITH DRIVE
WISCONSIN RAPIDS, WI 54494
OFFICE: (715) 421-7851
EMAIL: Bradley.Betthauser@wisconsin.gov

CITY OF MARSHFIELD CONTACT

CITY ENGINEER
ATTN: TOM TURCHI
207 WEST 6TH STREET
MARSHFIELD, WI 54449
OFFICE: (715) 486-2034
EMAIL: tom.turchi@ci.marshfield.com

ASSISTANT CITY ENGINEER
ATTN: TIM CASSIDY
207 WEST 6TH STREET
MARSHFIELD, WI 54449
OFFICE: (715) 486-2034
CELL: (715) 305-1851
EMAIL: tim.cassidy@ci.marshfield.com

UTILITIES

MARSHFIELD UTILITIES - WATER
ATTN: JOHN RICHMOND
2000 SOUTH CENTRAL AVE.
MARSHFIELD, WI 54449
PHONE: (715) 898-2170
CELL: (715) 937-8302
EMAIL: john.richmond@marshfieldutilities.org

CITY OF MARSHFIELD - WASTEWATER
ATTN: MARK KIVELA
2601 EAST 34TH STREET
MARSHFIELD, WI 54449
PHONE: (715) 486-2007
CELL: (715) 305-1153
EMAIL: mark.kivela@ci.marshfield.wi.us

MARSHFIELD UTILITIES - ELECTRIC
ATTN: CODY KOLPACK
2000 SOUTH CENTRAL AVE.
MARSHFIELD, WI 54449
PHONE: (715) 898-2146
EMAIL: cody.kolpack@marshfieldutilities.org

ATC - ELECTRIC - HIGH VOLTAGE
ATTN: DOUG VOSBERG
2489 RINDEN ROAD
COTTAGE GROVE, WI 53527
PHONE: (608) 877-7650
EMAIL: dvosberg@atcllc.com

WE ENERGIES - GAS
ATTN: CRAIG KNAUF
1921 EIGHT STREET SOUTH
WISCONSIN RAPIDS, WI 54494
PHONE: (715) 421-7267
CELL: (715) 213-1954
EMAIL: craig.knauf@we-energies.com

FRONTIER COMMUNICATIONS - TELEPHONE
ATTN: JEREMY ZEHM
154 EAST 2ND STREET
NEW RICHMOUND, WI 54017
PHONE: (715) 243-9243
EMAIL: jeremy.zehm@ftr.com

CHARTER COMMUNICATIONS - COMMUNICATION LINE
ATTN: JESSE GRUNY
503 EAST IVES STREET
MARSHFIELD, WI 54449
PHONE: (715) 898-1616
CELL: (715) 651-5605
EMAIL: jesse.gruny@charter.com

ASTREA - COMMUNICATION LINE
ATTN: ANDY HEIGL
105 KENT STREET
PO BOX 885
IRON MOUNTAIN, MI 49801
PHONE: (906) 776-2609
CELL: (906) 221-7536
EMAIL: andy.heigl@astreaconnect.com

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

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP- TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE- TURF			.25 .32			.27 .34			.28 .36			.30 .38

PAVEMENT:	
ASPHALT	.70 - .95
CONCRETE	.80 - .95
BRICK	.70 - .80
DRIVES, WALKS	.75 - .85
ROOFS	.75 - .95
GRAVEL ROADS, SHOULDERS	.40 - .60

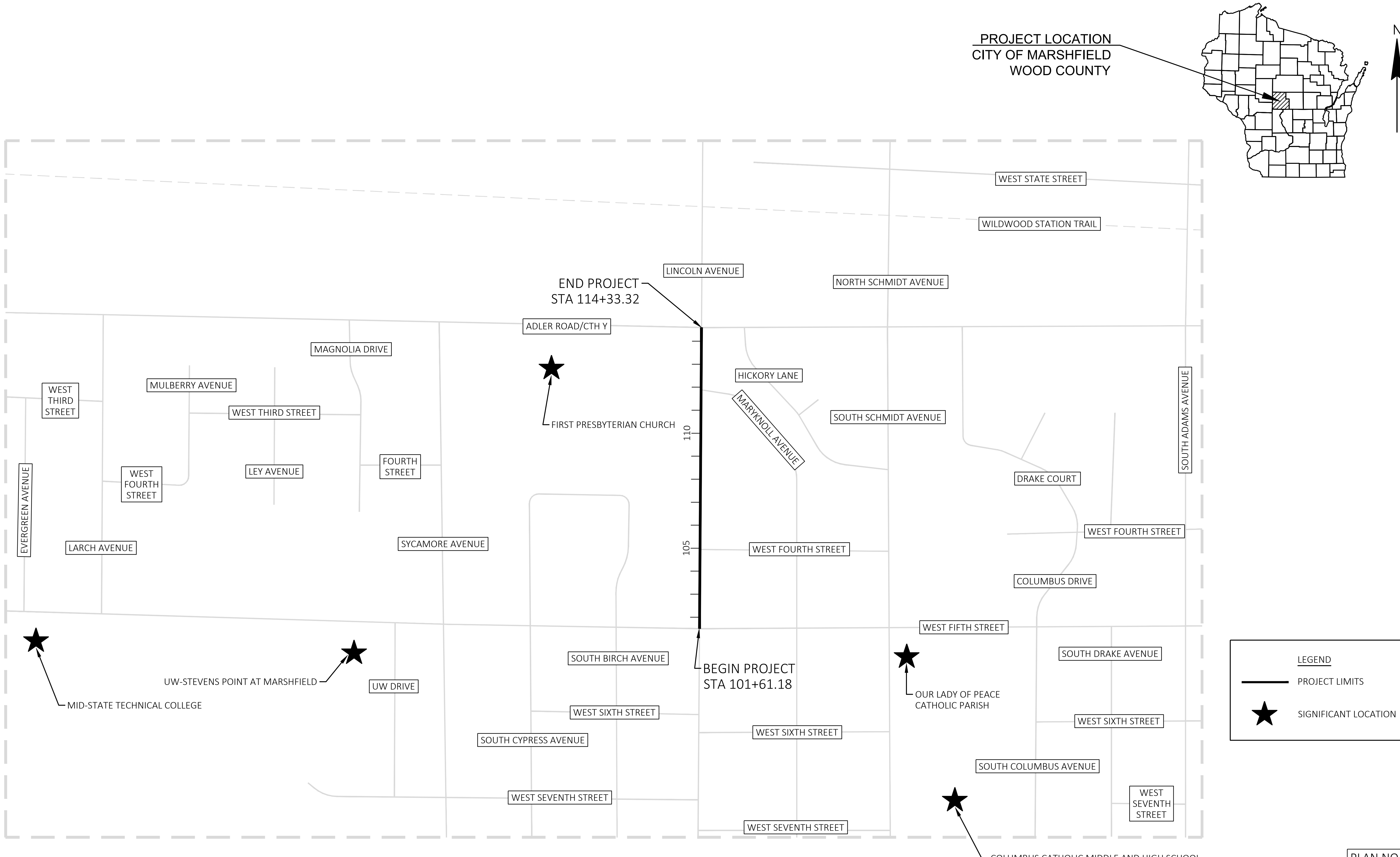
TOTAL PROJECT AREA = 2.47 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 2.47 ACRES

CONTROL POINTS / BENCHMARKS

POINT	NORTH	EAST	ELEV	DESCRIPTION
CP1	553616.478	632357.849	1271.41	MAG NAIL IN ASPHALT PATH NEAR LINCOLN AVE / ADLER RD INTERSECTION
CP2	552951.859	632384.049	1292.59	IRON PIPE WITH RED CAP ON WEST SIDE OF LINCOLN AVE 260' NORTH OF W 4TH ST
CP3	552308.058	632417.182	1301.98	MAG NAIL IN CONCRETE SIDEWALK NEAR LINCOLN AVE / W 5TH ST INTERSECTION
BM A			1304.44	SW TAG BOLT ON HYDRANT IN SE RAD OF W 5TH ST AND LINCOLN AVE (CITY BM #34)
BM B			1296.17	TIMBER SPIKE IN PP#115-38 ON WEST SIDE OF LINCOLN AVE JUST NORTH OF W 4TH ST
BM C			1280.19	TIMBER SPIKE IN PP#115-40 ON WEST SIDE OF LINCOLN AVE ACROSS FROM MARYKNOLL AVE
BM D			1272.10	60D SPIKE IN PP#115-41 IN SW RAD OF LINCOLN AVE AND ADLER AVE

PLAN NO. 3689

2

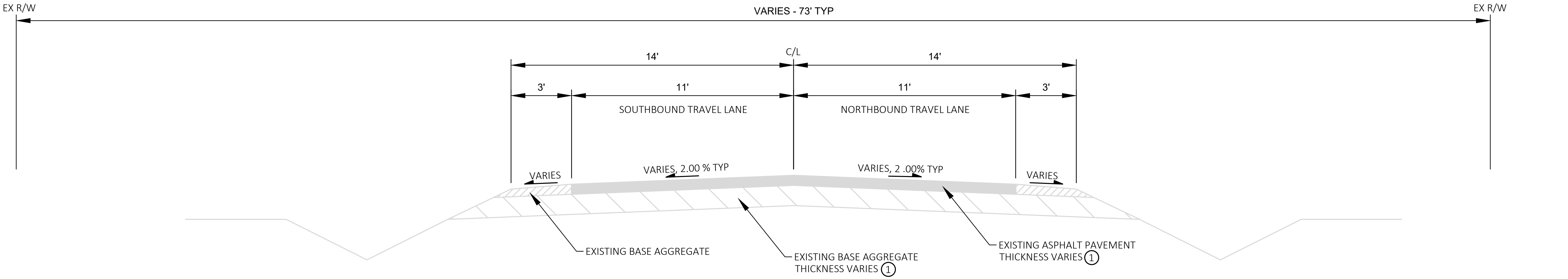


PLAN NO. 3689

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : P:\PROJECTS_CURRENT\WOOD\MARSHFIELD, CITY OF\LINCOLN AVE - 2021\ACAD\SHEETSPLAN\020201_PO\020201_PO.DWG
LAYOUT NAME - 01
PLOT DATE : 12/27/2022 8:49 AM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

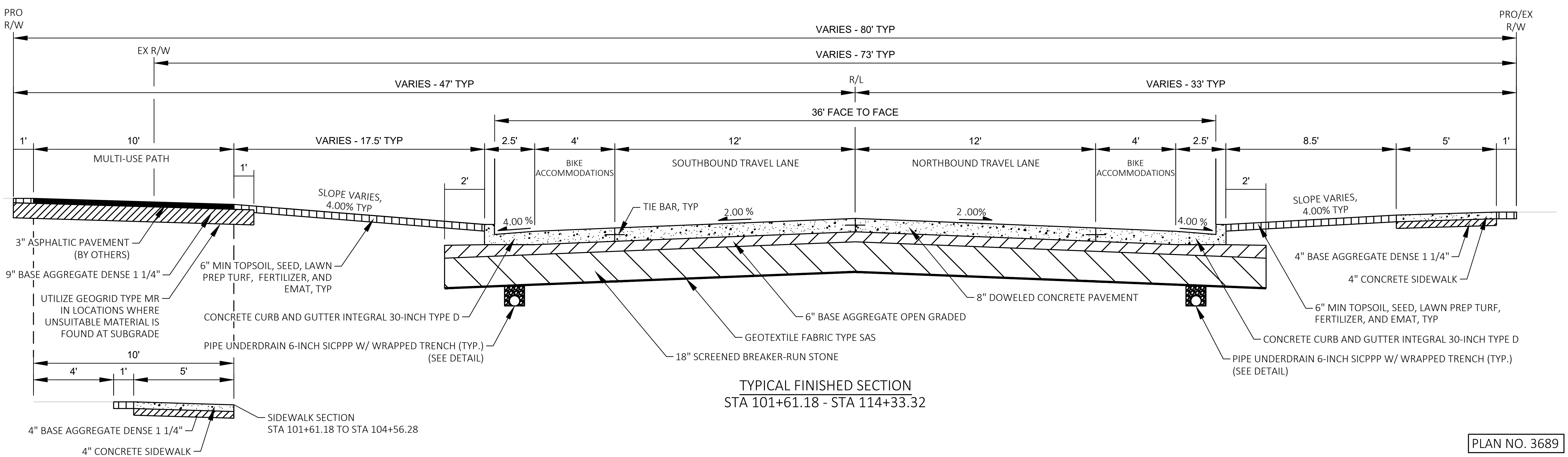


TYPICAL EXISTING SECTION
STA 101+61.18 - STA 114+33.32

TYPICAL SECTION NOTES:

1 BORING LOG

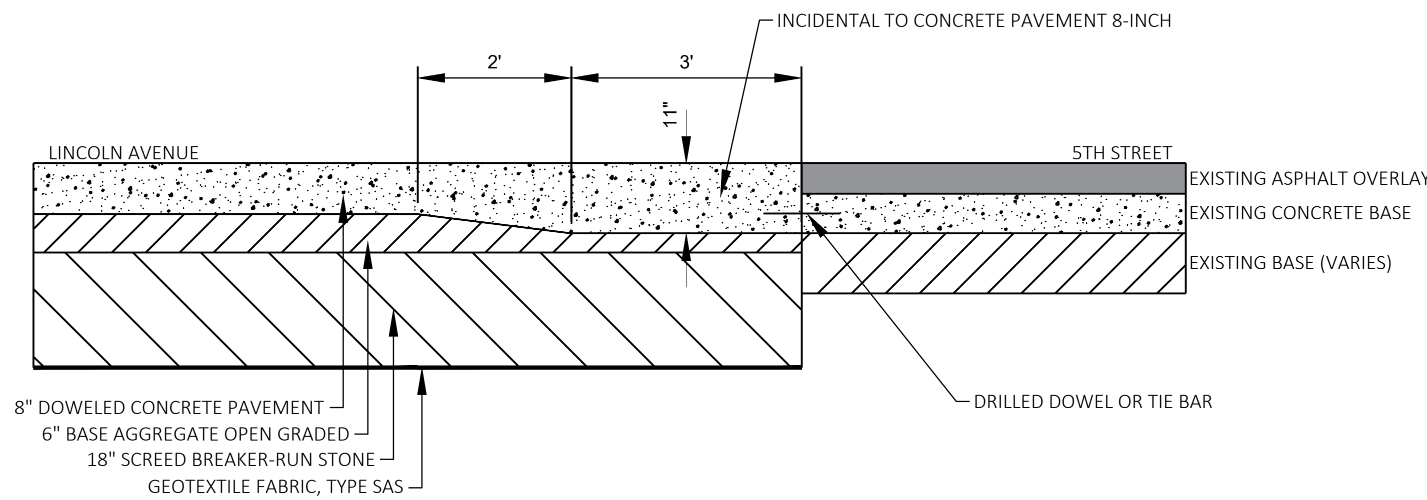
STA	EXISTING HMA	EXISTING BASE
105+86	5.00-INCHES	4.00-INCHES
110+08	5.75-INCHES	3.25-INCHES



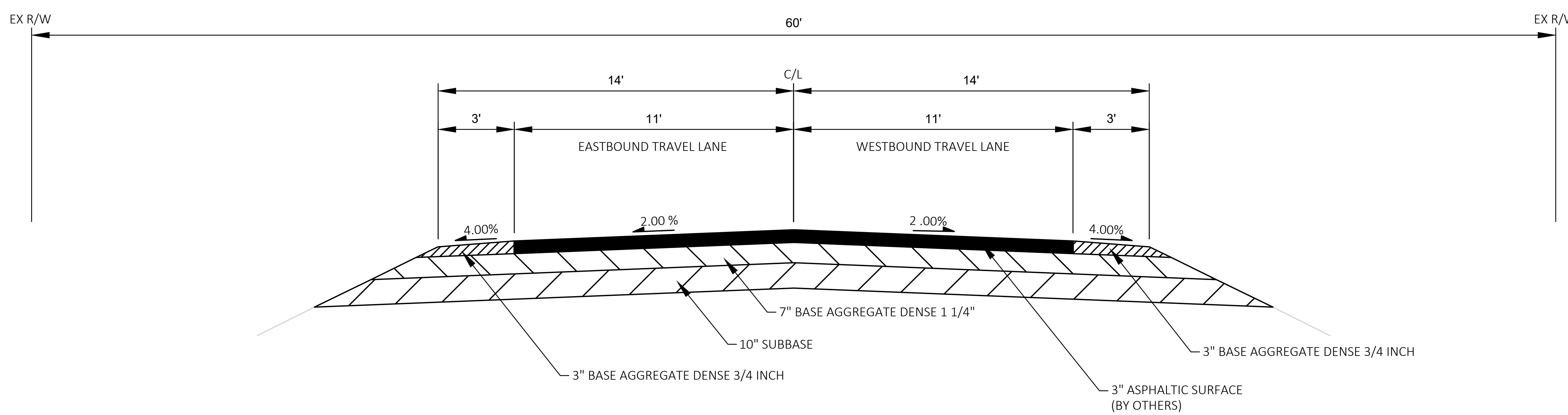
TYPICAL FINISHED SECTION
STA 101+61.18 - STA 114+33.32

PLAN NO. 3689

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	TYPICAL SECTIONS	SHEET 4	E



SPECIAL THICKENED EDGE CONCRETE DETAIL

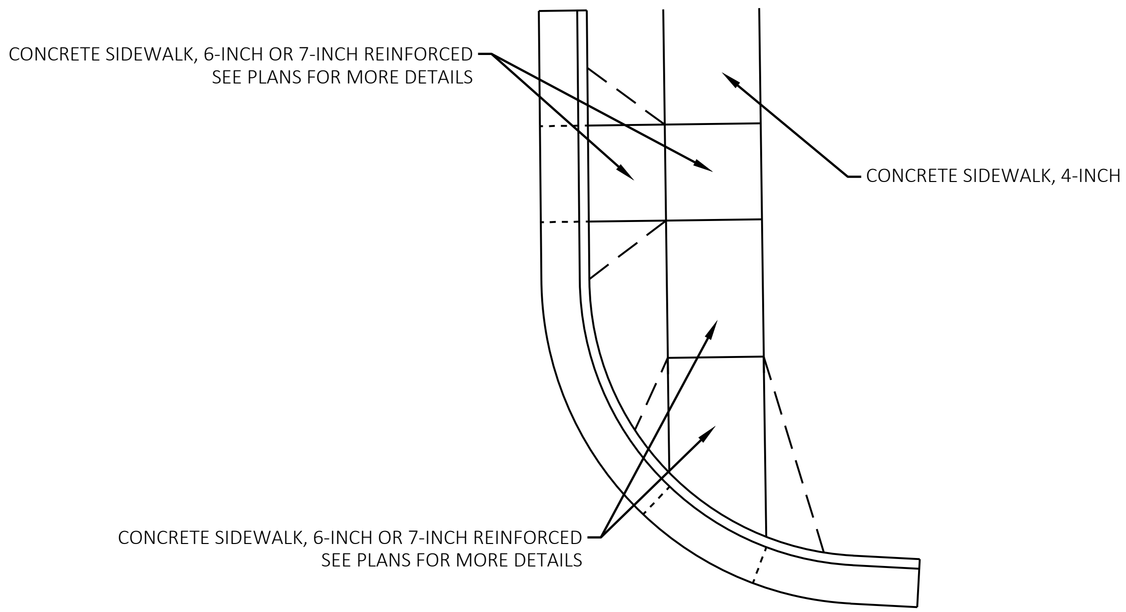


TYPICAL FINISHED SECTION
WEST 4TH STREET
MARYKNOLL AVENUE

PLAN NO. 3689

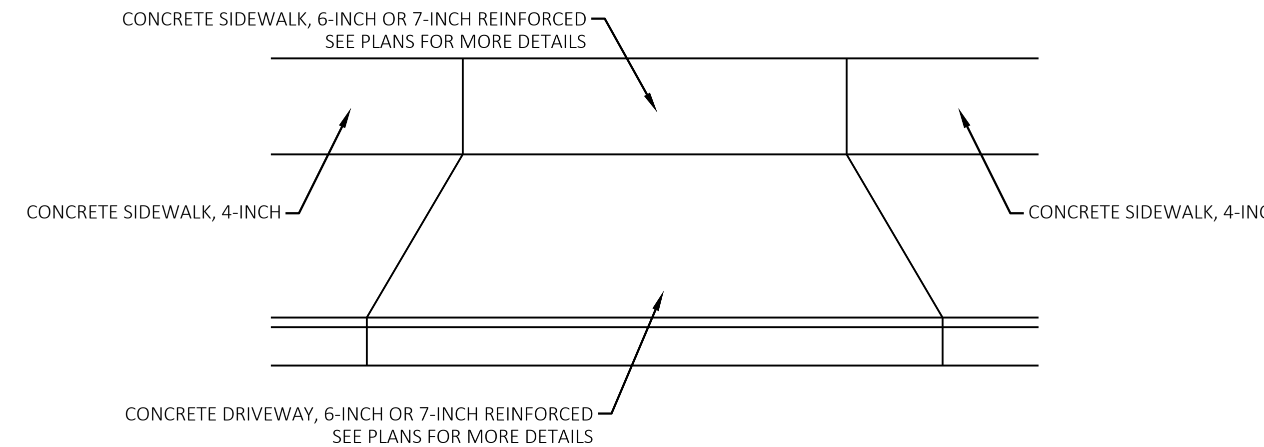
PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	TYPICAL SECTIONS	SHEET 5	E

2

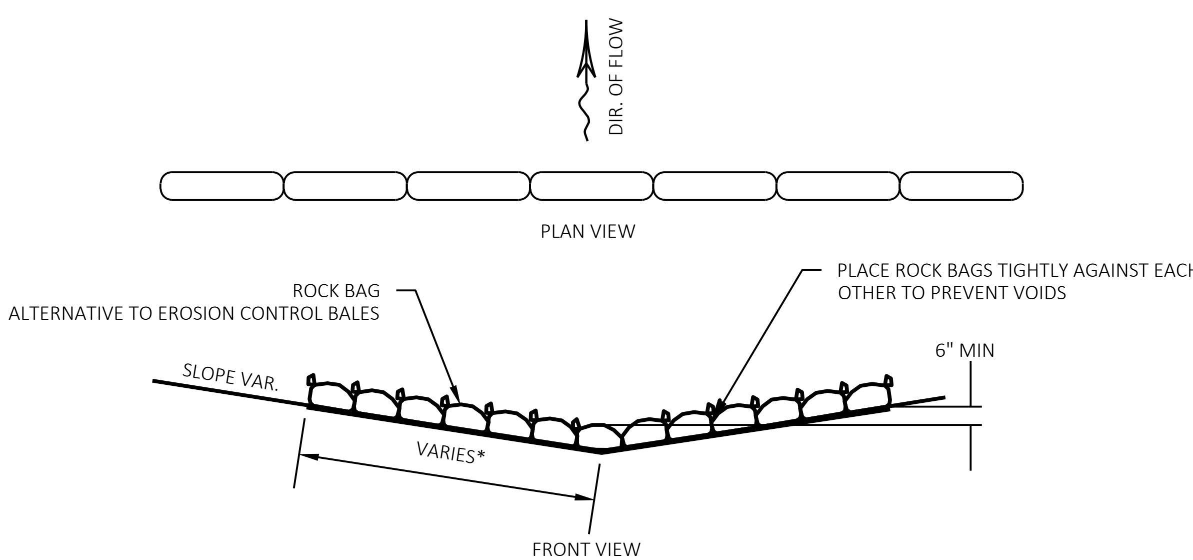


NOTES:
CURB RAMP GRADED FLARES TO BE 6" REINFORCED CONCRETE.

CONCRETE SIDEWALK AT CURB RAMPS DETAIL

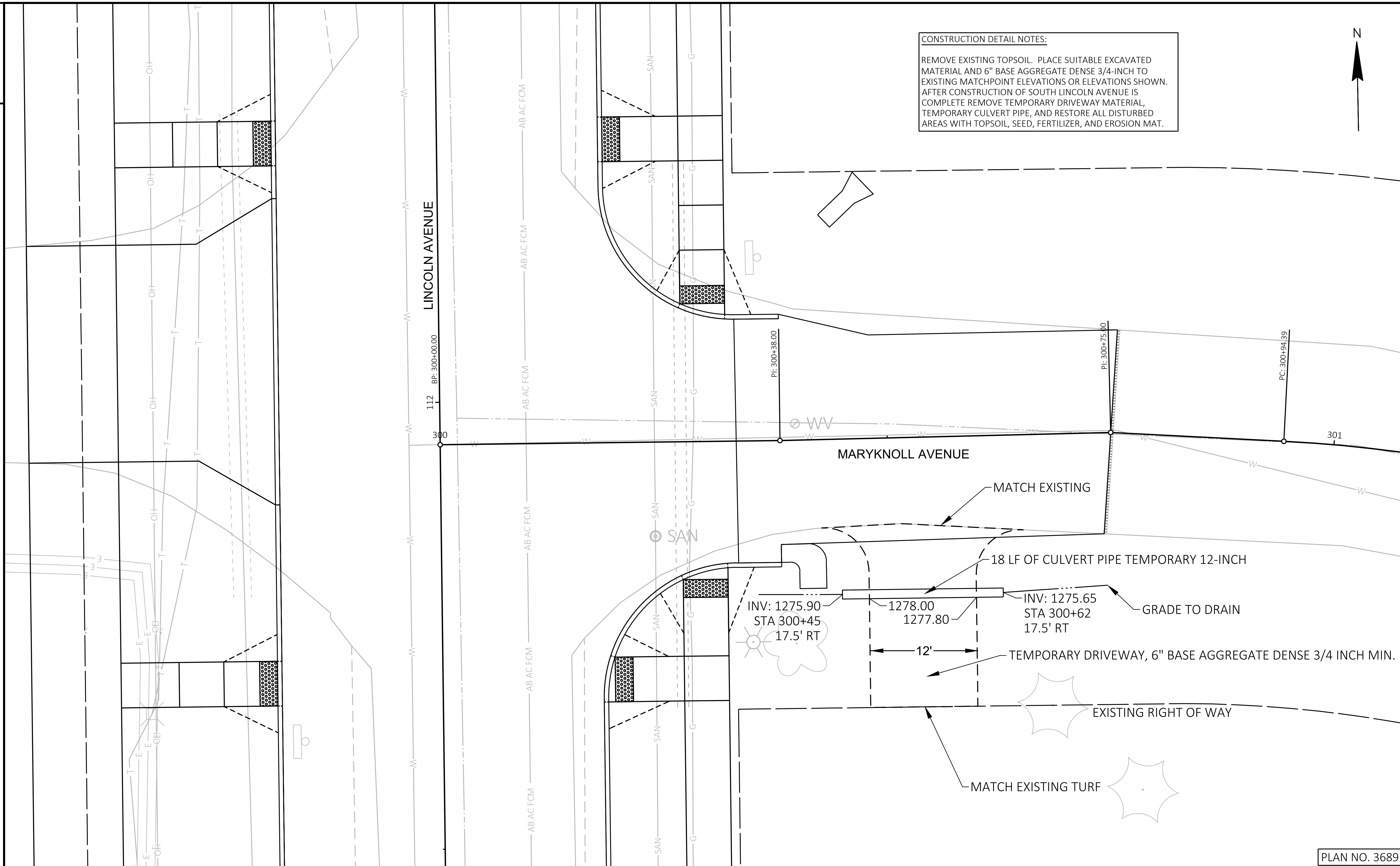


CONCRETE MATERIAL AT DRIVEWAYS DETAIL



TEMPORARY DITCH CHECK DETAIL
(ALTERNATIVE)

PLAN NO. 3689



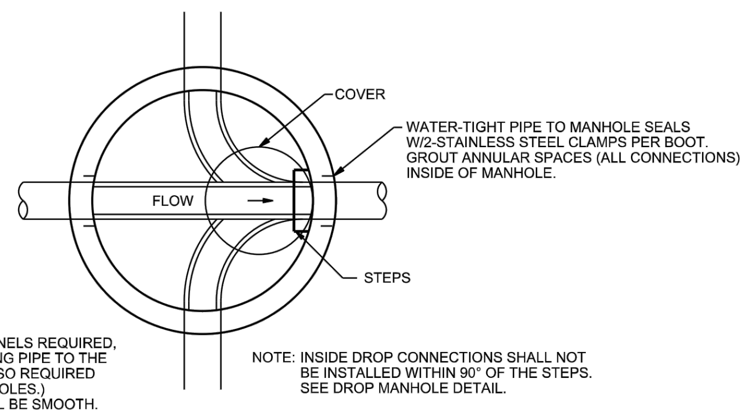
PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CONSTRUCTION DETAILS - TEMP DRIVEWAY	SHEET 7	E

FILE NAME : P:\PROJECTS_CURRENT\WOOD\MARSHFIELD, CITY OF\LINCOLN AVE - 2021\ACAD\SHEETSPLAN\021001_CD\021003_CD.DWG
LAYOUT NAME - Sheet-01
PLOT DATE : 12/27/2022 10:18 AM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 44

SPECIFICATIONS:

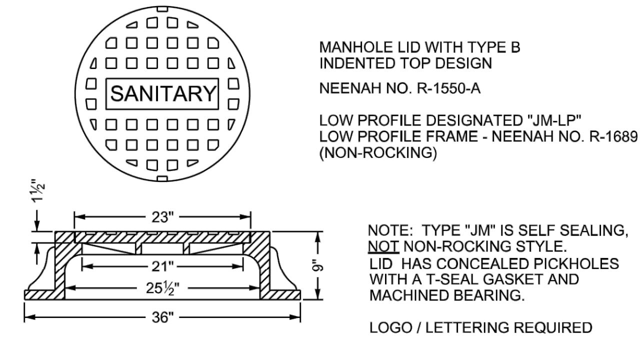
- MANUFACTURED TO ASTM C-478 SPECIFICATIONS
- CONCRETE STRENGTH - 4000 PSI
- STEEL DESIGN IN ACCORDANCE WITH ASTM C-478 0.12 SQ. IN./FT.
- ALL REINFORCING IS DESIGNED FOR MIN. 1" COVER
- STEP - STEEL, PLASTIC COATED 16" ON CENTER
- MONOLITHIC BASE WITH INLET AND OUTLET OPENING AS REQUIRED
- 48" DIAMETER MANHOLE WILL ACCOMMODATE A 24" DIAMETER PIPE PASSING STRAIGHT THROUGH.
- 48" DIAMETER-5" WALL 890 LBS./FT.

NOTE: ALL STRUCTURES AND COMPONENTS SHALL BE LABELED BY THE MANUFACTURER IN ACCORDANCE WITH PLAN/SCHEDULE IDENTIFICATION

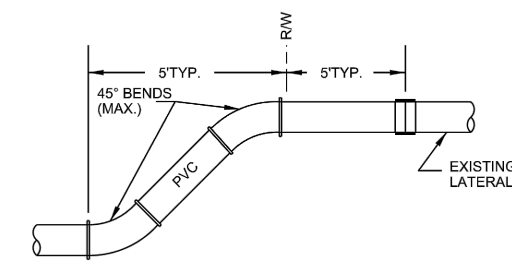


DEFINED FLOW CHANNELS REQUIRED, FROM EACH INFLOWING PIPE TO THE DISCHARGE PIPE. (ALSO REQUIRED FOR DEAD-END MANHOLES.) ALL FLOWLINES SHALL BE SMOOTH.

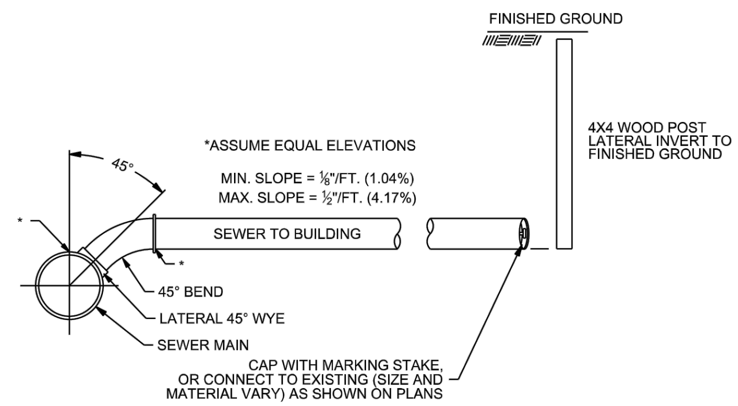
NOTE: INSIDE DROP CONNECTIONS SHALL NOT BE INSTALLED WITHIN 90° OF THE STEPS. SEE DROP MANHOLE DETAIL.



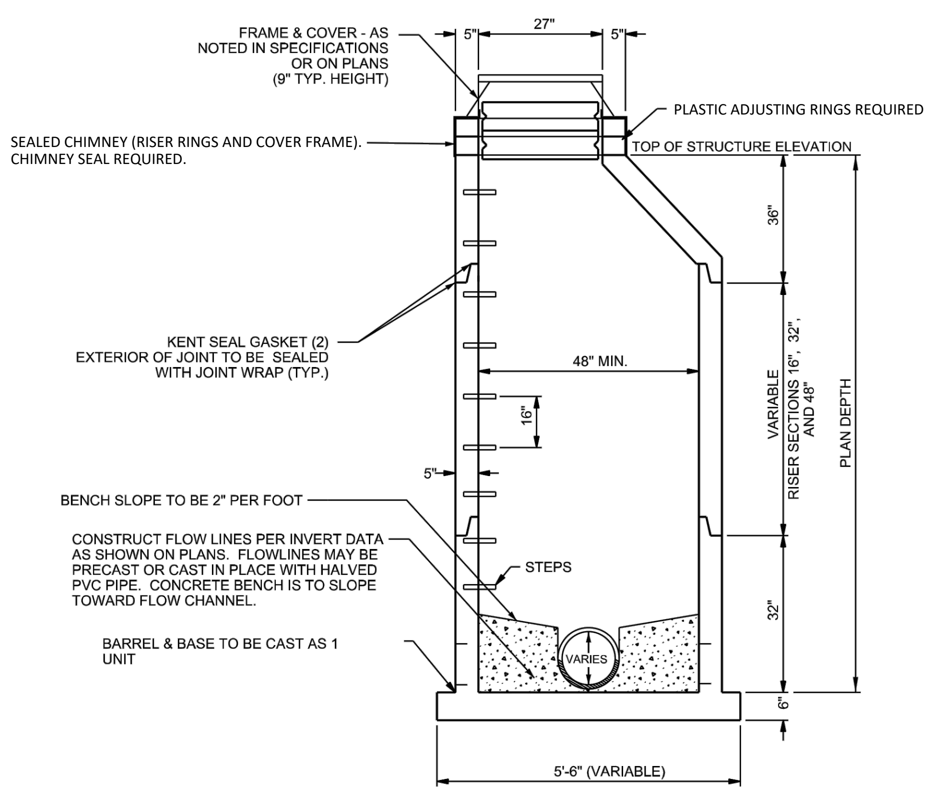
MANHOLE COVER-TYPE "JM"



DROP CONNECTION TO EXISTING LATERAL

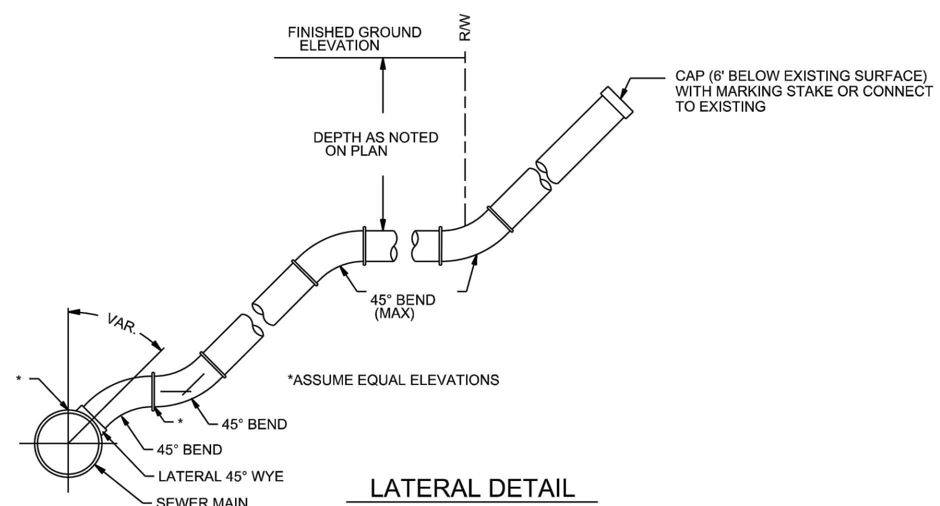


LATERAL DETAIL TYPE A



PRE-CAST CONCRETE SANITARY MANHOLE, TYPE 1 DETAIL

NOTE: LENGTH OF SANITARY SEWER MAINS = MANHOLE CENTER TO MANHOLE CENTER.
PIPE SLOPE CALCULATED FROM INSIDE MANHOLE WALL TO INSIDE MANHOLE WALL.
INVERT ELEVATION IS AT INSIDE MANHOLE WALL.
PAY DEPTH IS FROM BOTTOM OF CASTING TO LOWEST INVERT.



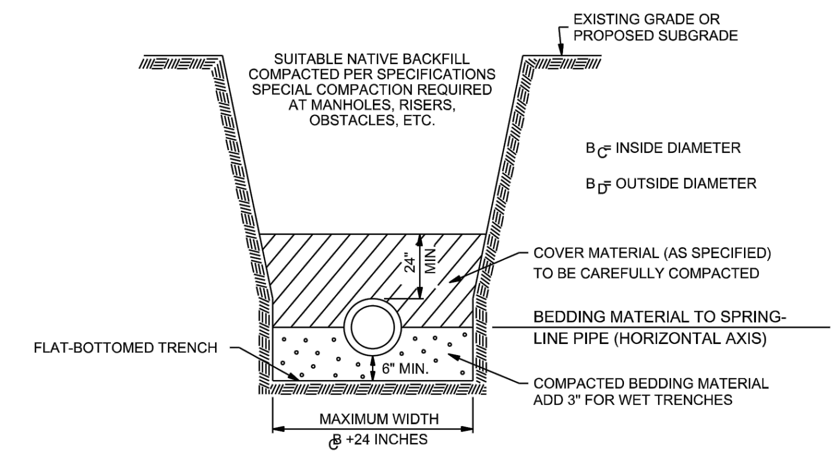
LATERAL DETAIL TYPE C

NOTES: MAINTAIN 30" HORIZONTAL CLEARANCE WHERE SANITARY SEWER LATERALS PARALLEL WATER SERVICES.

USE COVER MATERIAL AS BACKFILL FOR VERTICAL RISER

FERNCO STRONG-BACK CONNECTOR (OR BETTER) IF EXISTING LATERAL IS NOT PVC.

GASKETED COUPLING REQUIRED IF EXISTING LATERAL IS PVC.



NOTES:

BEDDING AND COVER MATERIAL: CRUSHED STONE CHIPS MEETING THE FOLLOWING GRADING REQUIREMENTS.

SIEVE SIZE	PERCENTAGE PASSING BY WEIGHT
½"	100
⅜"	90 TO 100
NO. 8	0 TO 15
NO. 30	0 TO 3

TRENCH WIDTH: THE MAXIMUM TRENCH WIDTH AT THE TOP OF THE PIPE SHALL BE B_C +24 INCHES.

SPECIAL COMPACTION REQUIRED AT MANHOLES, RISERS, ETC.

TYPICAL TRENCH SECTION SANITARY SEWER CONSTRUCTION

GRAVITY MAINS, LATERALS AND FORCE MAINS

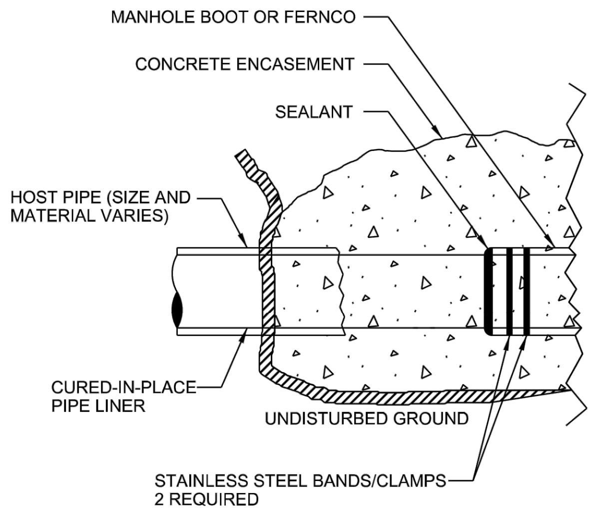
- AT APPROX. 20' UPSTREAM OF MANHOLES, OR MAINS. INSTALL APPROVED NATIVE MATERIAL (CLAY TRENCH PLUG) TO FULL TRENCH DEPTH, 6' ALONG PIPE, ACROSS FULL TRENCH WIDTH,IN LEU OF BEDDING AND COVER MATERIAL.

SANITARY SEWER

PLAN NO. 3689

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CONSTRUCTION DETAILS	SHEET 8	E

2



ELEVATION/PROFILE VIEW

CONNECT TO EXISTING LINED SANITARY SEWER MAIN (MANHOLE OR FERNCO)

WORK REQUIRED

CAREFULLY REMOVE THE HOST PIPE FROM THE LINER PIPE. EXPOSE LINER PIPE TO AT LEAST 18-INCHES FROM THE MANHOLE BOOT OR FERNCO. REMOVE ENTIRE CIRCUMFERENCE OF HOST PIPE (ALL AROUND THE PIPE). DO NOT DAMAGE/MAR/CUT LINER PIPE.

REMOVE IRREGULARITIES IN/ON THE SURFACE OF THE LINER PIPE NEAR THE CONNECTION. THIS SURFACE SHALL BE SMOOTH SUCH THAT A LEAK- FREE SEAL CAN BE ACCOMPLISHED.

INSTALL THE MANHOLE BOOT/FERNCO ONTO THE LINER PIPE. APPLY SEALANT TO THE EXTERIOR OF THE BOOT OR FERNCO JOINT CONNECTION. FASTEN BOOT/FERNCO TO LINER USING 2 STAINLESS STEEL TYPE CLAMPS.

BLOCK/SUPPORT PIPE TO STABILIZE AND ACHIEVE PROPER SLOPE.

FOR FERNCO INSTALLATIONS, FLOWLINES SHALL BE ALIGNED, WITHOUT OFFSET BETWEEN THE LINER AND PVC PIPES. REMOVE SHARP EDGES ON THE INSIDE OF THE UPSTREAM PIPE AND BEVEL (1/4") THE INSIDE EDGES OF THE DOWNSTREAM PIPE.

ENCASE THE MANHOLE BOOT/FERNCO, EXPOSED LINER PIPE AND AT LEAST 6-INCHES OF HOST PIPE IN CONCRETE. THICKNESS OF CONCRETE SHALL BE 6-INCHES MINIMUM, AND SHALL COMPLETELY ENCASE THE LENGTH AND CIRCUMFERENCE. EXTEND CONCRETE ENCASEMENT TO COVER DEFECTS IN THE HOST PIPE (CRACKS, ETC.). CONCRETE SHALL BE PLACED AGAINST UNDISTURBED GROUND UNDER ALL EXPOSED MAIN/HOST PIPE AND SHALL COMPLETELY FILL THE VOID UNDER SAID EXISTING MAIN.

VOIDS ALONGSIDE OF THE CONCRETE ENCASED MAINLINE PIPE SHALL BE FILLED USING CHIPPED STONE BEDDING/COVER MATERIAL (APPROVED FOR SANITARY SEWERS). COVER THE REMAINDER OF EXCAVATION WITH SAID STONE MATERIAL TO A POINT 2-FEET ABOVE THE CONCRETE ENCASEMENT.

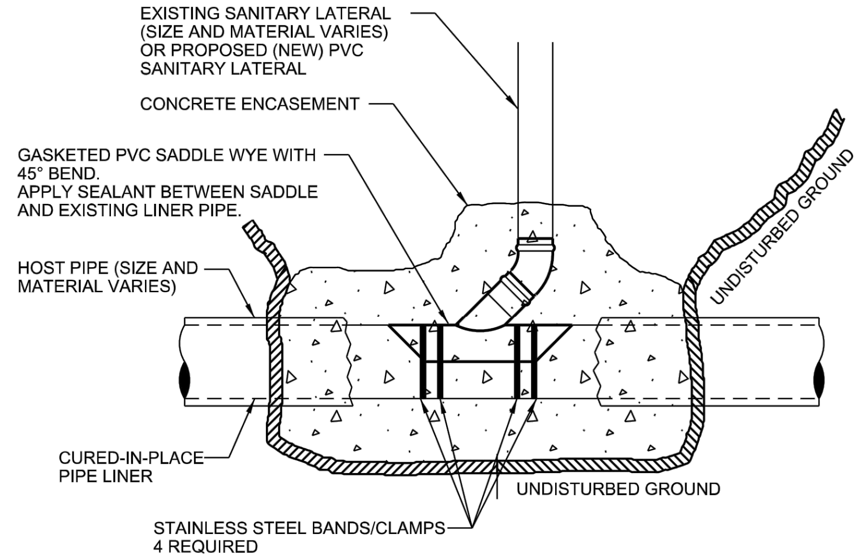
WATERTIGHT CONNECTIONS WILL BE VERIFIED BY INSPECTION AND/OR TELEVISING BY THE CITY. LEAKING OR OFFSET CONNECTIONS SHALL BE REMEDIED BY THE CONTRACTOR (INCIDENTAL). LEAKS SHALL BE ELIMINATED BY PRESSURE GROUTING FROM WITHIN THE MAIN. THE ENGINEER SHALL APPROVE THE MATERIALS/SUBCONTRACTOR FOR SAID REMEDY PRIOR TO USE.

MATERIALS

FERNCO'S (FLEXIBLE PLUMBING ADAPTORS WITH STAINLESS STEEL SHIELDS (STRONG BACK)) SHALL BE AS MANUFACTURED BY FERNCO INC.
PART NOS. LISTED BELOW ARE PROVIDED FOR INFORMATION ONLY (CONTRACTOR SHALL VERIFY THE SIZE/OUTSIDE DIAMETER OF THE EXISTING CIPP LINER PIPE AS THIS DIMENSION MAY VARY). CONFIRM PART NOS. WITH MANUFACTURER PRIOR TO ORDERING (810/503-9000).
- 8" LINER TO 8" PVC: #1056-88 RC WITH REDUCER BUSHING #8.525-8.160 R.
- 10" LINER TO 10" PVC: #1056-1010 RC WITH REDUCER BUSHING #10.600-250 MMR.
- 12" LINER TO 12" PVC: #LDC-13.00x12.00 WITH STAINLESS STEEL SHIELD # SRX-13.00.
- 15" LINER TO 15" PVC: #1056-1515RC.

SEALANT TO BE "PTI-707 ARCHITECTURAL SEALANT" AS MANUFACTURED BY H.B. FULLER CO., DAP BUTYL FLEX RUBBER GUTTER AND FLASHING SEALANT, OR APPROVED EQUAL.

CONCRETE TO BE A QUALITY MIX, FROM A READY MIX PLANT OR PROPERLY MIXED ON-SITE (3/8" MINUS AGGREGATE IS ACCEPTABLE). MIX MUST BE 6-BAG/GRADE A AS A MINIMUM AND CAPABLE OF ACHIEVING 4,000 PSI STRENGTH. SLUMP SHALL NOT EXCEED 3-INCH.



ELEVATION/PROFILE VIEW

SADDLE WYE INSTALLED ON EXISTING LINED SANITARY SEWER MAIN

WORK REQUIRED

CAREFULLY REMOVE THE HOST PIPE FROM THE LINER PIPE. EXPOSE LINER PIPE TO AT LEAST 6-INCHES FROM THE SADDLE AND CLAMPS. REMOVE ENTIRE CIRCUMFERENCE OF HOST PIPE (ALL AROUND THE PIPE). DO NOT DAMAGE/MAR LINER PIPE.

MARK PROPOSED HOLE FOR NEW SADDLE ON THE LINER PIPE, CENTERED ON EXISTING HOLE/DIMPLE (EXISTING LATERAL). PROPOSED HOLE SHALL BE THE SAME SIZE AND SHAPE AS THE HOLE IN THE SADDLE.

REMOVE IRREGULARITIES IN/ON THE SURFACE OF THE LINER NEAR THE SADDLE. THIS SURFACE SHALL BE SMOOTH SUCH THAT A LEAK-FREE SEAL TO THE SADDLE CAN BE ACCOMPLISHED.

SAW HOLE IN LINER PIPE USING HOLE/JIG SAW. HOLE MUST BE CLEANLY SAWED. FILE THE HOLE AND ALL EDGES AROUND THE HOLE.

INSTALL SADDLE WYE ONTO THE LINER PIPE. THE HOLE IN THE SADDLE SHALL BE ALIGNED WITH THE HOLE IN PIPE. APPLY ENTIRE TUBE OF SEALANT TO SADDLE/LINER CONNECTION. FASTEN SADDLE TO LINER USING 4 STAINLESS STEEL TYPE CLAMPS. WIPE AWAY ALL EXCESS SEALANT FROM THE INSIDE OF THE SADDLE WYE AND LINER PIPE.

ENCASE THE SADDLE, EXPOSED LINER PIPE AND AT LEAST 6-INCHES OF HOST PIPE IN CONCRETE. THICKNESS OF CONCRETE SHALL BE 6-INCHES MINIMUM, AND SHALL COMPLETELY ENCASE THE BRANCH OF THE WYE AND THE 45° BEND, FOR EITHER HORIZONTAL RUNS OR VERTICAL RISERS. EXTEND CONCRETE ENCASEMENT TO COVER DEFECTS IN THE HOST PIPE (CRACKS, ETC.). CONCRETE SHALL BE PLACED AGAINST UNDISTURBED GROUND UNDER ALL EXPOSED MAIN/HOST PIPE AND SHALL COMPLETELY FILL THE VOID UNDER SAID EXISTING MAIN.

VOIDS ALONGSIDE OF THE CONCRETE ENCASED MAINLINE PIPE SHALL BE FILLED USING CHIPPED STONE BEDDING/COVER MATERIAL (APPROVED FOR SANITARY SEWERS). COVER THE REMAINDER OF EXCAVATION WITH SAID STONE MATERIAL TO A POINT 2-FEET ABOVE THE CONCRETE ENCASEMENT.

WATER-TIGHT CONNECTIONS WILL BE VERIFIED BY MAINLINE TELEVISING BY THE CITY. LEAKING CONNECTIONS SHALL BE REMEDIED BY THE CONTRACTOR (INCIDENTAL). LEAKS SHALL BE ELIMINATED BY PRESSURE GROUTING FROM WITHIN THE MAIN. THE ENGINEER SHALL APPROVE THE MATERIALS/SUBCONTRACTOR FOR SAID REMEDY PRIOR TO USE.

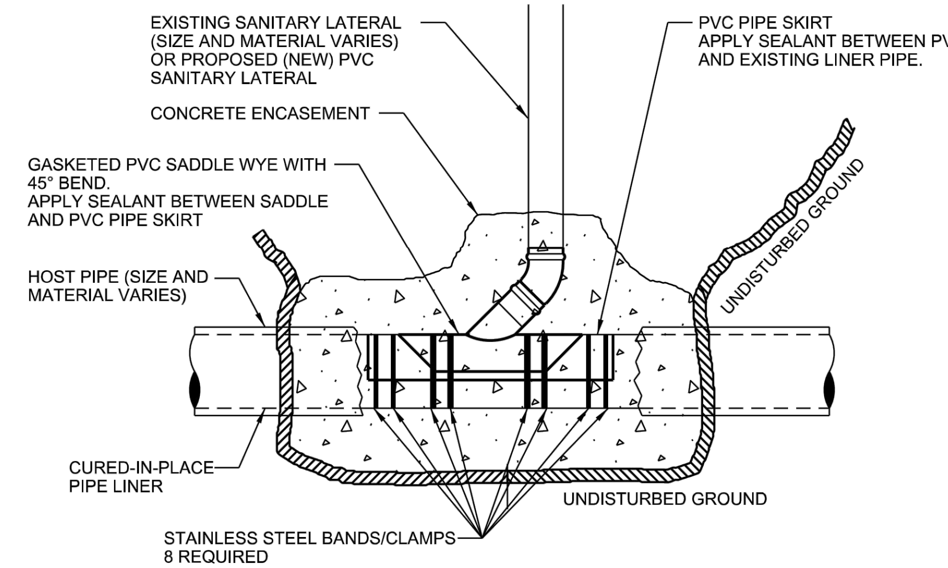
MATERIALS

SADDLE WYES SHALL BE AS MANUFACTURED BY GPK PRODUCTS, INC., OR APPROVED EQUAL (GASKET BRANCH, GASKET SKIRT W/STRAPS); OR PIPECONX UNIVERSAL SADDLES (WITH SADDLE SHIELD) (FISH MOUTH THE END OF THE PVC LATERAL PIPE AND PUSH/POSITION SO THE END IS FLUSH WITH THE INSIDE OF THE MAIN (BUT NOT PROTRUDING). ALL SADDLE WYES SHALL BE 6-INCH (UNLESS NOTED OTHERWISE) X NOMINAL DIAMETER OF THE MAIN.

SEALANT TO BE "PTI-707 ARCHITECTURAL SEALANT" AS MANUFACTURED BY H.B. FULLER CO., DAP BUTYL FLEX RUBBER GUTTER AND FLASHING SEALANT, OR APPROVED EQUAL. (ONE STANDARD 14 0Z CAULK GUN TYPE TUBE IS REQUIRED FOR EACH SADDLE)

CONCRETE TO BE A QUALITY MIX, FROM A READY MIX PLANT OR PROPERLY MIXED ON-SITE (3/8" MINUS AGGREGATE IS ACCEPTABLE). MIX MUST BE 6-BAG/GRADE A AS A MINIMUM AND CAPABLE OF ACHIEVING 4,000 PSI STRENGTH. SLUMP SHALL NOT EXCEED 3-INCH.

2



ELEVATION/PROFILE VIEW

PVC PIPE SKIRT FOR OVERSIZED LINER HOLE REPAIR OR ABANDON CUT OUT EXISTING LINED SANITARY SEWER MAIN

OVERSIZED HOLE REPAIR

IF THE EXISTING CUT-OUT HOLE IN THE LINER IS TOO LARGE (SADDLE WYE GASKET DOES NOT SURROUND HOLE / CONTACT LINER FOR FULL CIRCUMFERENCE) THEN DO THE FOLLOWING:

HOLE MUST BE CLEANLY SAWED. FILE THE HOLE AND ALL EDGES AROUND THE HOLE.

CUT / FABRICATE PVC PIPE SKIRT AS SHOWN. PVC PIPE SKIRT MUST BE 12 INCHES LONGER (TOTAL) THAN THE SADDLE WYE SKIRT, AND CIRCUMFERENTIALLY 1-INCH MORE THAN HALF PIPE.

PVC PIPE SKIRT TO LINER SHALL BE FABRICATED FROM SDR 35 SEWER PIPE (PER ASTM D-3034)

SEAL PVC PIPE SKIRT TO LINER USING FULL TUBE OF SEALANT.

SECURE PVC PIPE SKIRT TO LINER USING (4) STAINLESS STEEL BANDS/CLAMPS ((2) AT EACH END, AS SHOWN)

INSTALL SADDLE WYE AS SHOWN / DISCUSSED HEREIN.

ABANDON CUT-OUT

TO SEAL OR ABANDON A LATERAL CONNECTED TO A LINER, DO ALL WORK AS LISTED ABOVE (FOR SADDLE WYE, OVERSIZE HOLE REPAIR, ETC) EXCEPT:

LENGTH OF PVC PIPE SKIRT SHALL BE 12-INCHES LONGER THAN THE PREPARED HOLE.

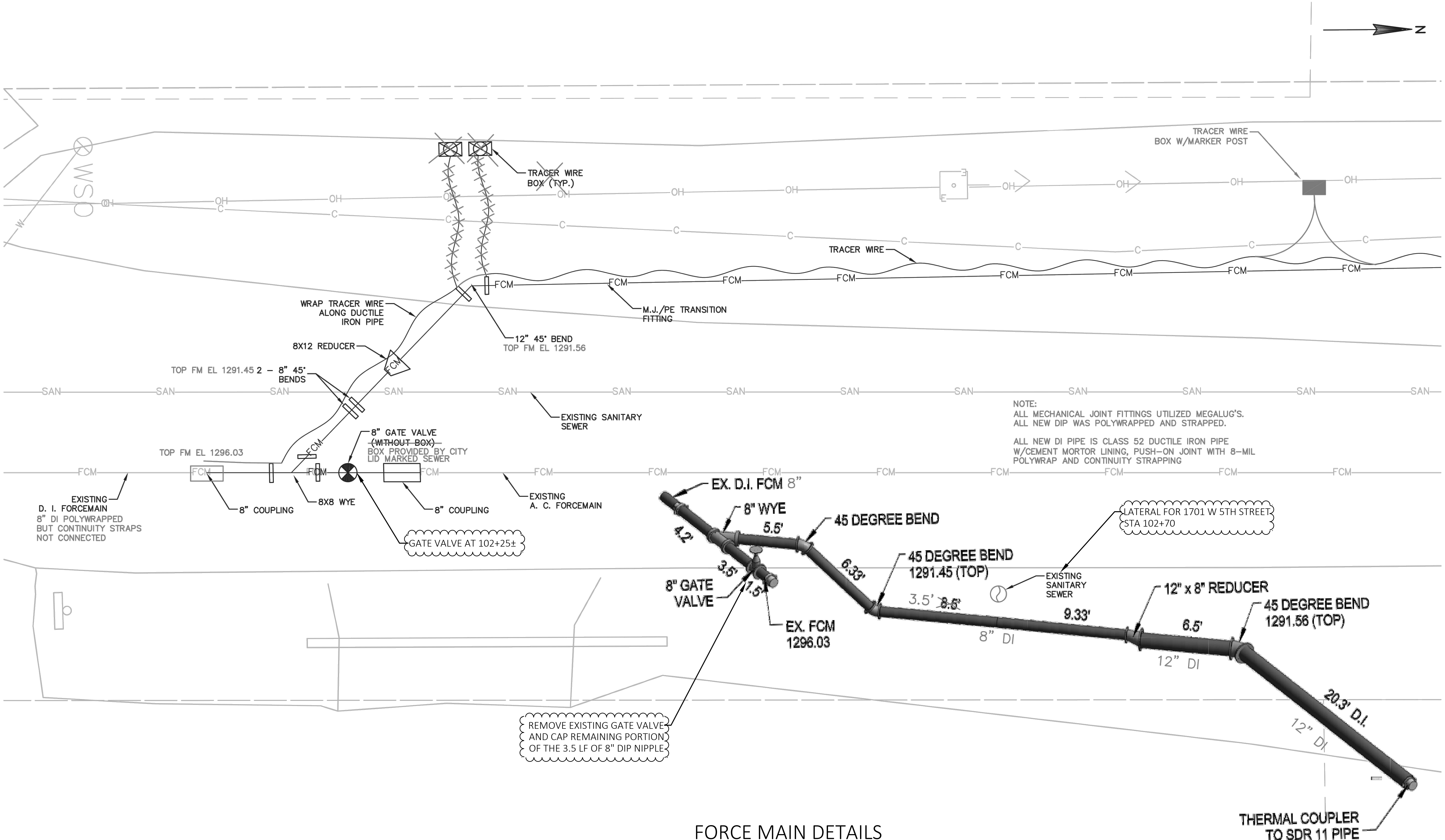
DO NOT CUT A HOLE IN THE PVC PIPE SKIRT.

USE (4) STAINLESS STEEL BANDS / CLAMPS EQUALLY SPACED.

ENCASE (CONCRETE), COVER, BACKFILL / COMPACT AS DESCRIBED.

PLAN NO. 3689

SANITARY SEWER



FORCE MAIN DETAILS

PLAN NO. 3689

SANITARY SEWER

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CONSTRUCTION DETAILS	SHEET 10	E

NOTES: EXISTING WATER SYSTEM AND PROPOSED ISOLATION GATE VALVES SHALL ONLY BE OPERATED BY MARSHFIELD UTILITIES.

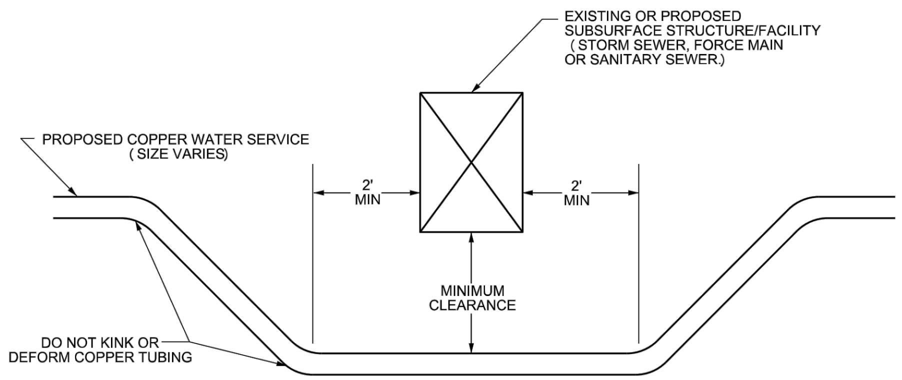
CONTRACTOR TO PROVIDE A CONTINUOUS SUPPLY OF SAFE WATER TO AFFECTED PROPERTIES, WHEN APPLICABLE.

ALL PIPE, VALVES, FITTINGS AND HYDRANTS TO BE POLYWRAPPED.

CONDUCTIVITY PROVISIONS SUCH AS STRAPS OR CABLES ARE REQUIRED FOR ALL JOINTS INCLUDING PIPE, VALVES, FITTINGS AND SLEEVES. CONDUCTIVITY TESTING WILL BE REQUIRED.

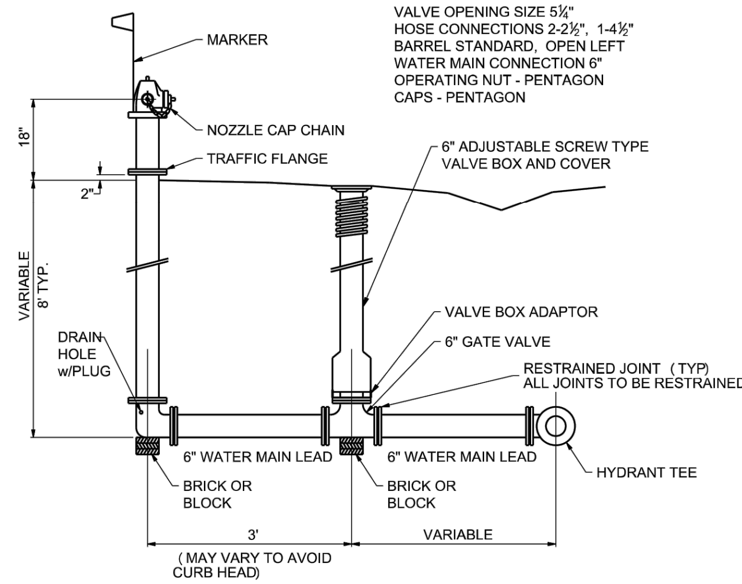
HYDROSTATIC TEST PRESSURE FOR WATER PIPE SHALL BE 150 PSI.

SPECIAL COMPACTION IS REQUIRED AT HYDRANTS, VALVE BOXES, CURB BOXES, AND OTHER RISERS.

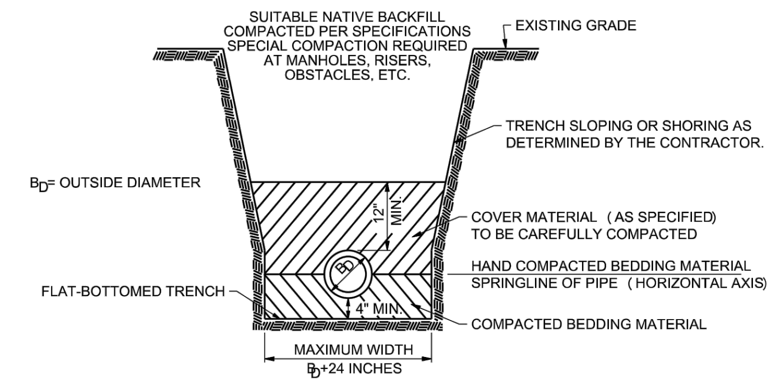


MINIMUM CLEARANCE SHALL BE 12" FOR EXISTING FACILITIES TO REMAIN AND 18" FOR PROPOSED FACILITIES.

WATER SERVICE OFFSET



TYPICAL HYDRANT, HYDRANT LEAD, AND GATE VALVE INSTALLATION

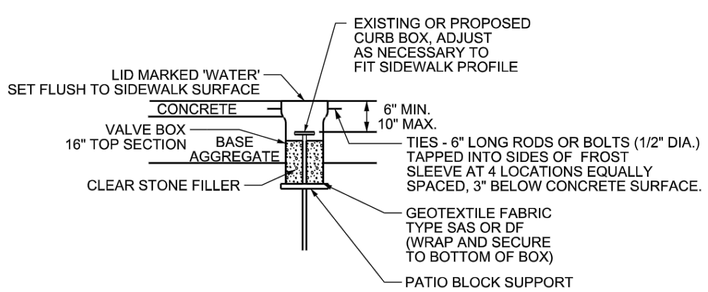


NOTES:

BEDDING AND COVER MATERIAL: MATERIAL SHALL BE BANK-RUN SAND, CRUSHED BANK RUN GRAVEL, OR OTHER APPROVED MATERIAL CONFORMING SUBSTANTIALLY TO THE FOLLOWING GRADING REQUIREMENTS.

SIEVE SIZE	PERCENTAGE PASSING BY WEIGHT
1"	100
¾"	85 TO 100
NO. 40	15 TO 35
NO. 200	2 TO 10

TYPICAL TRENCH SECTION WATER MAIN AND WATER SERVICE CONSTRUCTION



CURB BOX FROST SLEEVE

JOINT RESTRAINT SHALL BE REQUIRED. ACCEPTABLE MATERIALS INCLUDE ¾" THREADED RODS (2) W/RETAINER GLANDS, RESTRAINING PIPE JOINT GASKETS, OR RESTRAINING MECHANICAL JOINT GLANDS (MEGA LUGS, ETC.).

LENGTH OF PIPELINE TO BE RESTRAINED SHALL BE AS FOLLOWS:

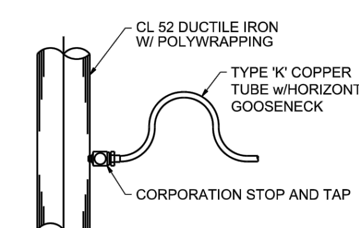
RUN OF TEE
ALL SIZES = 10 LF EACH SIDE OF BRANCH

BRANCH OF TEE:
6" & 8" PIPE = 35 LF
10" PIPE = 45 LF
12" PIPE = 55 LF
16" PIPE = 65 LF

BENDS:
6" & 8" PIPE = 25 LF EACH SIDE OF FITTING
10" PIPE = 35 LF EACH SIDE OF FITTING
12" PIPE = 45 LF EACH SIDE OF FITTING
16" PIPE = 55 LF EACH SIDE OF FITTING

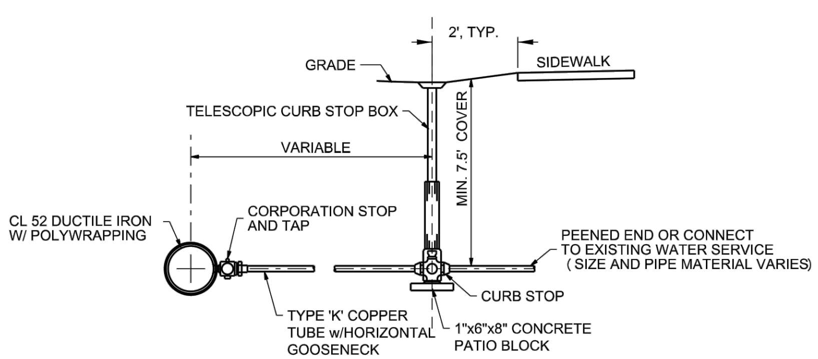
DEAD ENDS:
6" & 8" PIPE = 35 LF
10" PIPE = 45 LF
12" PIPE = 55 LF
16" PIPE = 65 LF

NOTE: MJ OFFSET FITTINGS MAY BE USED IF APPROVED BY THE ENGINEER.



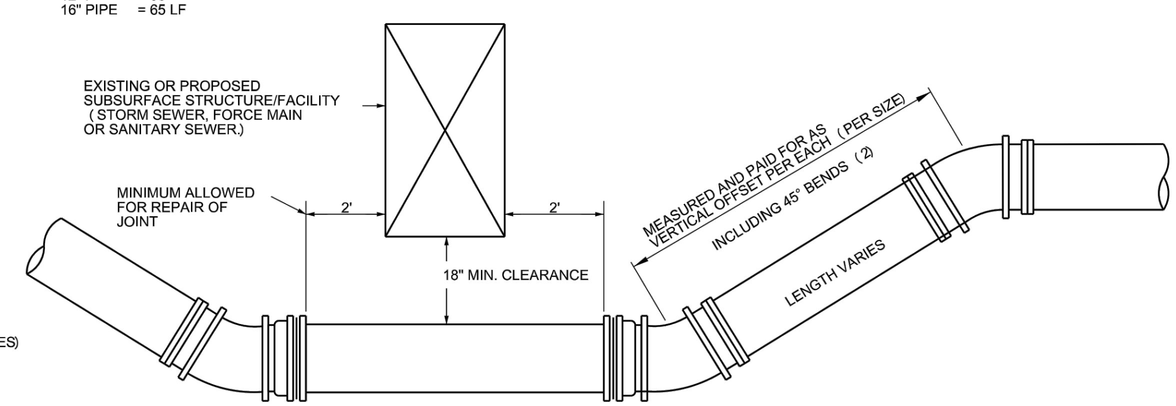
TYPICAL WATER SERVICE CONNECTION

PLAN VIEW



TYPICAL WATER SERVICE CONNECTION

PROFILE VIEW



WATER MAIN OR HYDRANT LEAD VERTICAL OFFSET

PLAN NO. 3689

WATER MAIN

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CONSTRUCTION DETAILS	SHEET 11	E

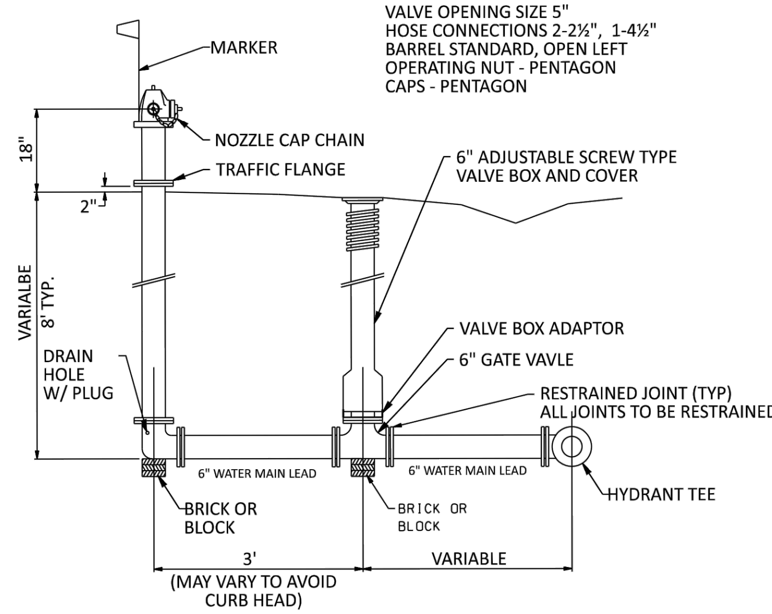
JOINT RESTRAINT SHALL BE REQUIRED. ACCEPTABLE MATERIALS INCLUDE
¾" THREADED RODS (2) W/RETAINER GLANDS,
RESTRAINING PIPE JOINT GASKETS, OR
RESTRAINING MECHANICAL JOINT GLANDS (MEGA LUGS, ETC.).
LENGTH OF PIPELINE TO BE RESTRAINED SHALL BE AS FOLLOWS:

RUN OF TEE
- ALL SIZES = 10 LF EACH SIDE OF BRANCH

BRANCH OF TEE:
- 6" & 8" PIPE = 35 LF
- 10" PIPE = 45 LF
- 12" PIPE = 55 LF
- 16" PIPE = 65 LF

BENDS:
- 6" & 8" PIPE = 25 LF EACH SIDE OF FITTING
- 10" PIPE = 35 LF EACH SIDE OF FITTING
- 12" PIPE = 45 LF EACH SIDE OF FITTING
- 16" PIPE = 55 LF EACH SIDE OF FITTING

DEAD ENDS:
- 6" & 8" PIPE = 35 LF
- 10" PIPE = 45 LF
- 12" PIPE = 55 LF
- 16" PIPE = 65 LF



TYPICAL HYDRANT, HYDRANT LEAD AND GATE VALVE INSTALLATION

NOTES: EXISTING WATER SYSTEM AND PROPOSED ISOLATION GATE VALVES SHALL ONLY BE OPERATED BY THE MARSHFIELD ELECTRIC AND WATER DEPARTMENT.

CONTRACTOR TO PROVIDE A CONTINUOUS SUPPLY OF SAFE WATER TO AFFECTED PROPERTIES.

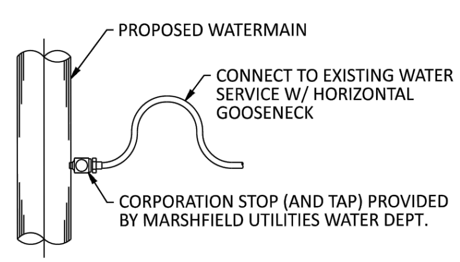
CONTRACTOR SHALL NEVER CONNECT TO AN EXISTING LEAD SERVICE LINE UNLESS DIRECTED BY MARSHFIELD UTILITIES.

ALL PIPE (EXCEPT PVC), VALVES, FITTINGS AND HYDRANTS TO BE POLYWRAPPED.

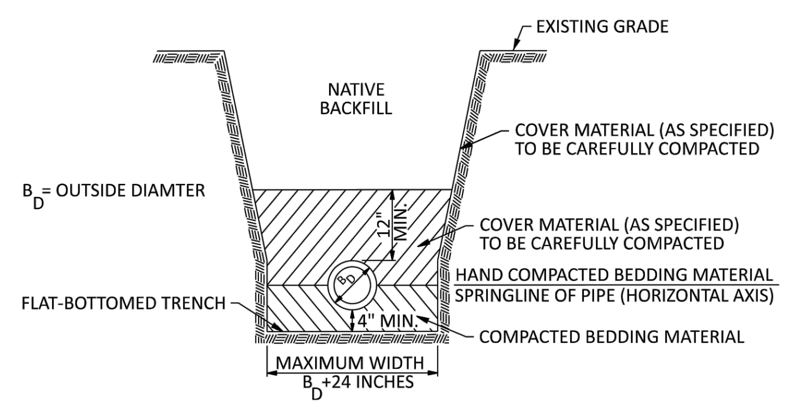
CONDUCTIVITY PROVISIONS SUCH AS STRAPS OR CABLES ARE REQUIRED FOR ALL JOINTS INCLUDING PIPE, VALVES, FITTINGS AND SLEEVES. CONDUCTIVITY TESTING WILL BE REQUIRED.

HYDROSTATIC TEST PRESSURE FOR WATER PIPE SHALL BE 150 PSI.

SPECIAL COMPACTION IS REQUIRED AT HYDRANTS, VALVE BOXES, CURB BOXES, AND OTHER RISERS.



TYPICAL WATER SERVICE RE-CONNECTION
PLAN VIEW



NOTES:

BEDDING AND COVER MATERIAL : MATERIAL SHALL BE BANK-RUN SAND, CRUSHED BANK RUN GRAVEL, OR OTHER APPROVED MATERIAL CONFORMING SUBSTANIALLY TO THE FOLLOWING 3 GRADING REQUIREMENT.

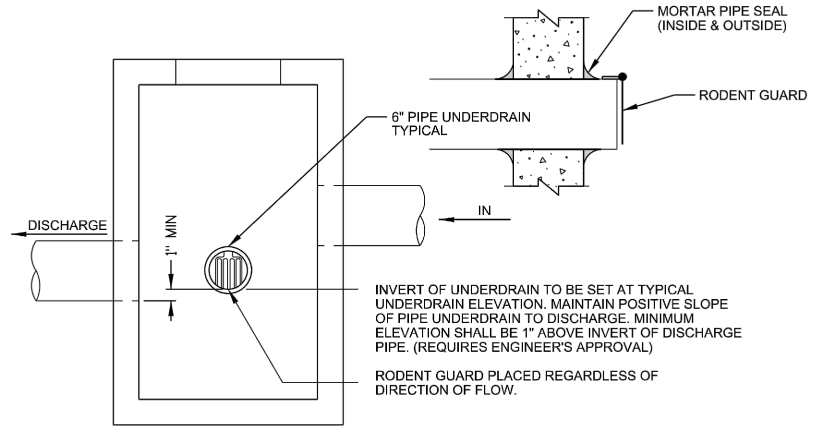
SIEVE SIZE	PERCENTAGE PASSING BY WEIGHT
1"	100
3/4"	85 TO 100
NO. 40	15 TO 35
NO. 200	2 TO 10

TYPICAL TRENCH SECTION
WATER MAIN AND WATER
SERVICE CONSTRUCTION

PLAN NO. 3689

WATER MAIN

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CONSTRUCTION DETAILS	SHEET 12	E

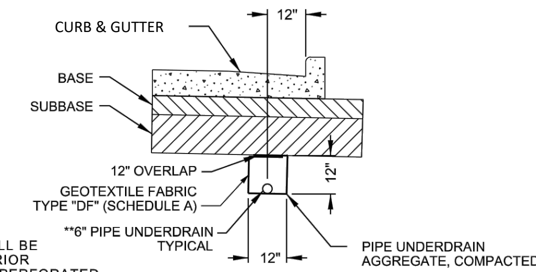


PIPE UNDERDRAIN CONNECTION DETAIL

TYPICAL FOR CATCH BASIN OR MANHOLE

PIPE UNDERDRAIN AGGREGATE SHALL BE CLEAN STONE AGGREGATE MEETING THE FOLLOWING GRADATION.

SIEVE SIZES	PERCENTAGE PASSING BY WEIGHT
1 INCH	100%
¾ INCH	90 - 100
⅜ INCH	20 - 55
NO. 4	0 - 10
NO. 8	0 - 5



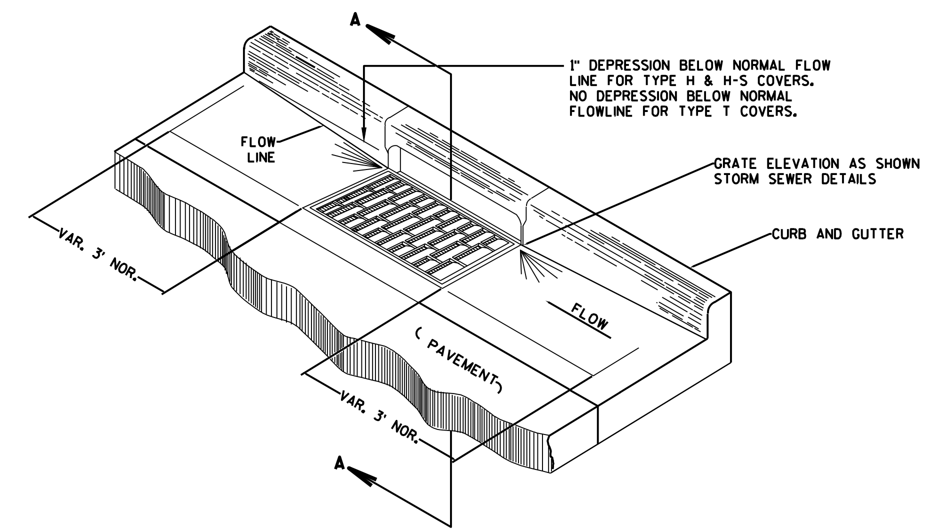
** MATERIAL SHALL BE SMOOTH INTERIOR CORRUGATED PERFORATED POLYETHYLENE EXCEPT IN A RADIUS (SICPPP)

GENERAL NOTES:

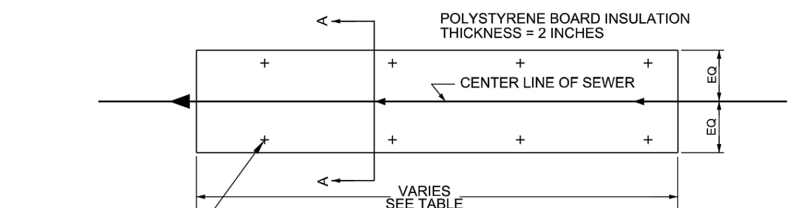
1. UNDERDRAIN SHALL BE CONNECTED TO INLETS AS SHOWN REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS. RODENT SCREEN IS REQUIRED AT EACH UNDERDRAIN CONNECTION.

2. UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROAD UNLESS SHOWN OR NOTED OTHERWISE ON THE PLAN SHEETS.

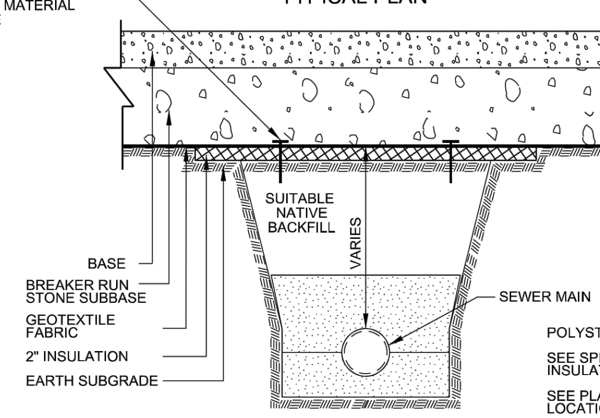
PIPE UNDERDRAIN DETAIL



CURB AND GUTTER DETAIL AT INLETS



TYPICAL PLAN



VIEW A - A

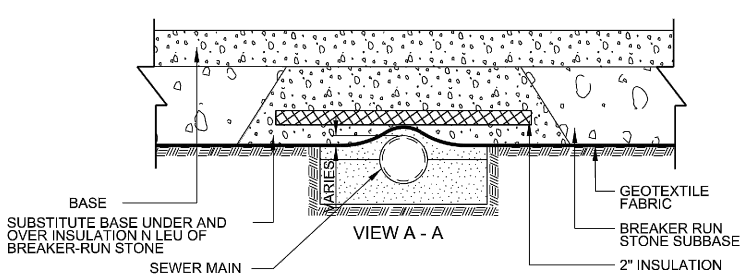
INSULATION NOTCHED INTO SUBGRADE

POLYSTYRENE BOARD INSULATION THICKNESS = 2 INCHES

SEE SPECS OR BID ITEM NAME FOR TYPE/CLASS OF INSULATION REQUIRED

SEE PLANS FOR EXACT DIMENSIONS OF THE DIFFERENT LOCATIONS OF INSULATION.

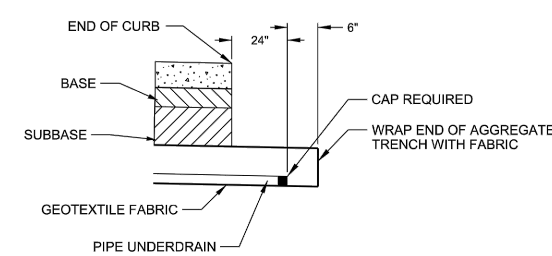
NO ADJUSTMENTS MADE FOR QUANTITIES OF EARTHWORK, SUBBASE OR BASE MATERIAL, AND BASE IS NCIDENTAL TO SEWER INSULATION.



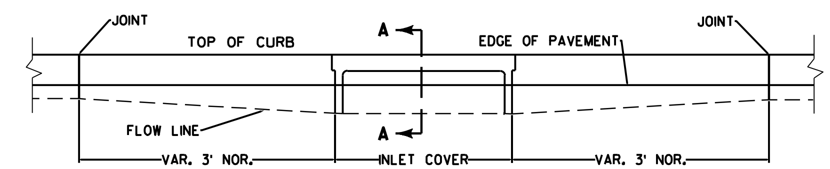
VIEW A - A

INSULATION WITHIN BREAKER-RUN STONE SUBBASE

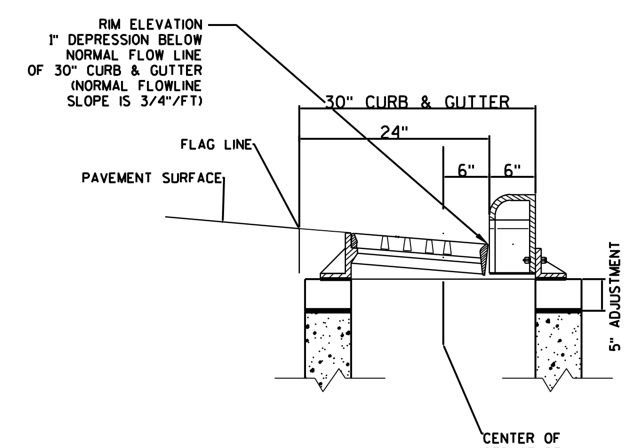
SEWER INSULATION



PIPE UNDERDRAIN DETAIL
AT END OF CURB & GUTTER



ELEVATION

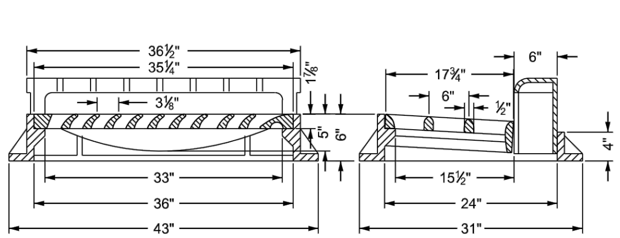


(TYPE H & TYPE HS)
SECTION A-A

STORM SEWER

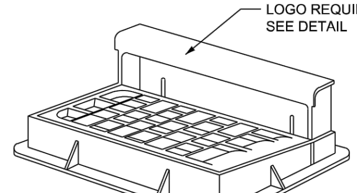
PLAN NO. 3689

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CONSTRUCTION DETAILS	SHEET 13	E



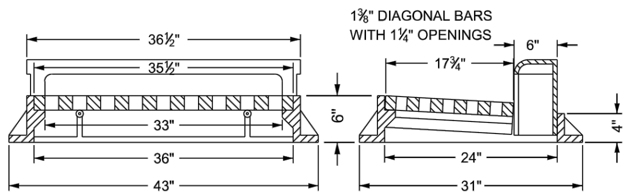
SIMILAR TO NEENAH FDY.
CO. CAT. NO. R-3067
WITH TYPE L GRATE

NOTE: GRATE SHALL BE ORIENTED TO THE DIRECTION OF FLOW. (GRATES ARE MANUFACTURED TO BE REVERSIBLE)

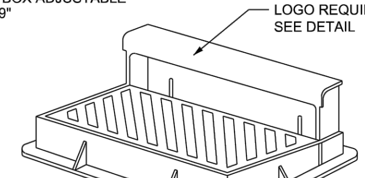


(GRATE TYPE "L")

CATCH BASIN COVER-TYPE "H"

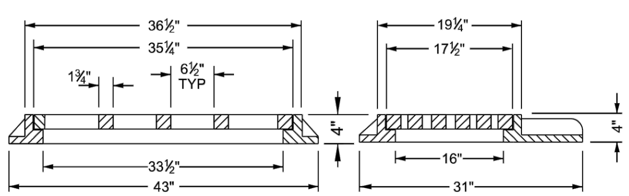


SIMILAR TO NEENAH FDY.
CO. CAT. NO. R-3067
WITH TYPE R GRATE



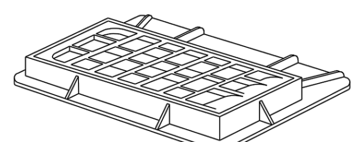
(GRATE TYPE "R")

CATCH BASIN COVER-TYPE "H-S"



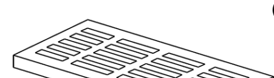
SIMILAR TO NEENAH FDY.
CO. CAT. NO. R-3067-C
WITH TYPE L GRATE ("E")
OR TYPE C GRATE ("E-S")

NOTE: GRATE SHALL BE ORIENTED TO THE DIRECTION OF FLOW. (GRATES ARE MANUFACTURED TO BE REVERSIBLE SHALL BE FURNISHED)



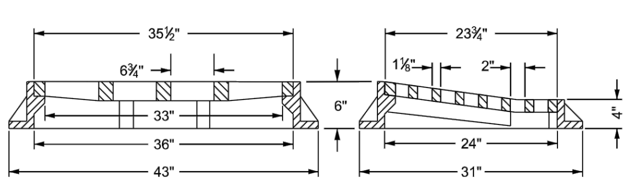
(GRATE TYPE "L")
(FOR CB COVER TYPE "E")

REVERSIBLE - ORIENTED TO THE DIRECTION OF FLOW

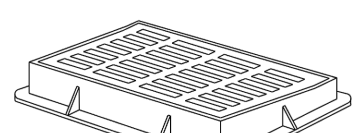


(GRATE TYPE "C")
(FOR CB COVER TYPE "E-S")

CATCH BASIN COVER-TYPE "E" AND "E-S"

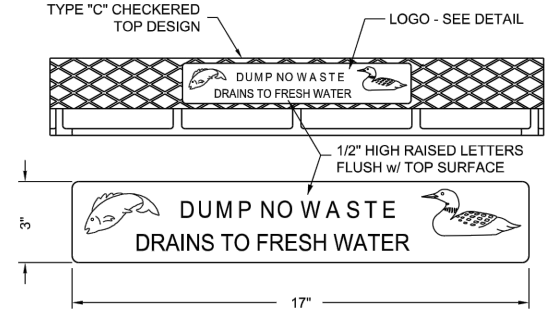


SIMILAR TO NEENAH FDY.
CO. CAT. NO. R-3290-A
WITH TYPE C GRATE

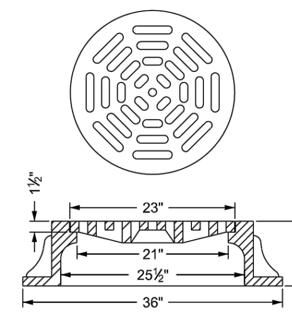


(GRATE TYPE "C")

CATCH BASIN COVER-TYPE "D"



LOGO DETAIL



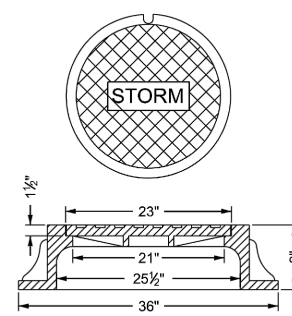
SIMILAR TO NEENAH MANHOLE LID WITH TYPE "D" STANDARD FLAT DESIGN

NEENAH NO. R-2050

LOW PROFILE DESIGNATED "C-LP"

LOW PROFILE FRAME - NEENAH NO. R-1689 (NON-ROCKING)

MANHOLE OR CATCH BASIN COVER-TYPE "C"



MANHOLE LID WITH TYPE C DIAMOND TOP DESIGN

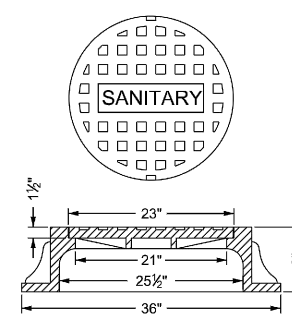
NEENAH NO. R-1550-A

LOW PROFILE DESIGNATED "J-LP"

LOW PROFILE FRAME - NEENAH NO. R-1689 (NON-ROCKING)

LOGO / LETTERING REQUIRED

MANHOLE COVER-TYPE "J"



MANHOLE LID WITH TYPE B INDENTED TOP DESIGN

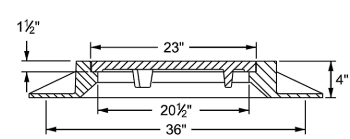
NEENAH NO. R-1550-A

LOW PROFILE DESIGNATED "JM-LP"
LOW PROFILE FRAME - NEENAH NO. R-1689 (NON-ROCKING)

NOTE: TYPE "JM" IS SELF SEALING, NOT NON-ROCKING STYLE. LID HAS CONCEALED PICKHOLES WITH A T-SEAL GASKET AND MACHINED BEARING.

LOGO / LETTERING REQUIRED

MANHOLE COVER-TYPE "JM"



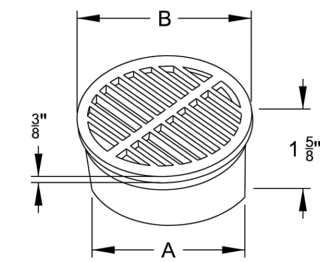
MANHOLE OR CATCH BASIN COVER FRAME-TYPE "XX-LP"

GENERAL NOTES

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

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

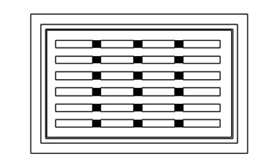


INLET COVER-TYPE "K"

TYPE K GRATES				
TYPE	SIZE	MATERIAL	A	B
12K	12"	DUCTILE IRON	11.47"	15.7"
15K	15"	DUCTILE IRON	14.225"	19.45"
18K	18"	DUCTILE IRON	17.33"	23.5"

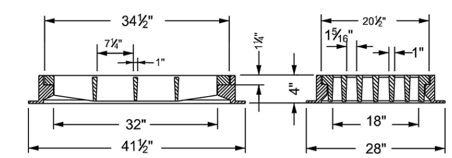
NOTE:
4.5' WIDE SOD STRIP REQUIRED AROUND INLET IF LOCATED IN GRASSED AREA.

SIMILAR TO HARCO PEDESTRIAN DROP-IN GRATE

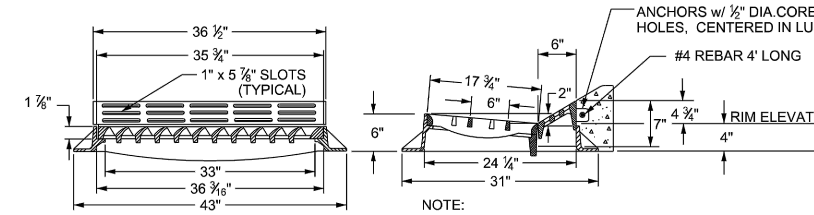


SIMILAR TO NEENAH FDY.
CO. CAT. NO. R-3577

(GRATE TYPE "D")



CATCH BASIN COVER-TYPE "U"



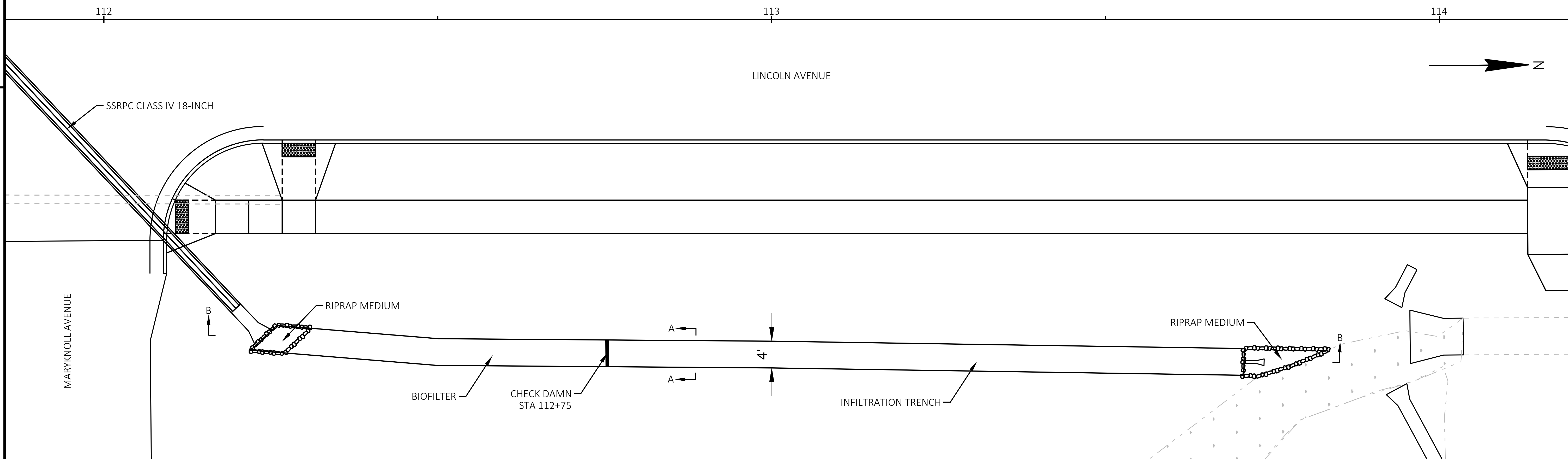
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM" COVER
SEE CATCH BASIN AND INLET COVER TYPE "HS" NOTED AS TYPE HM-S ON STRUCTURE TABLE

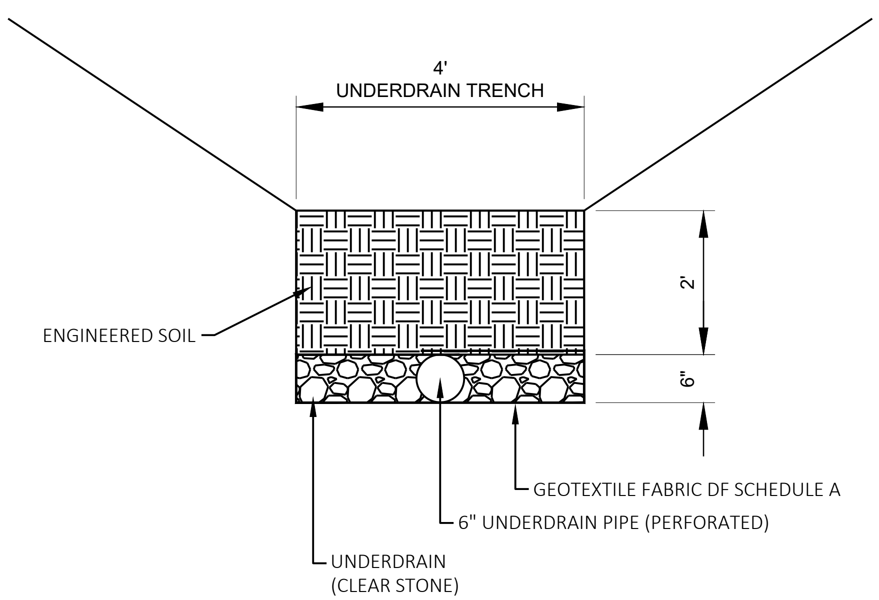
CATCH BASIN COVER-TYPE "HM"

STORM SEWER

PLAN NO. 3689

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CONSTRUCTION DETAILS	SHEET 14	E



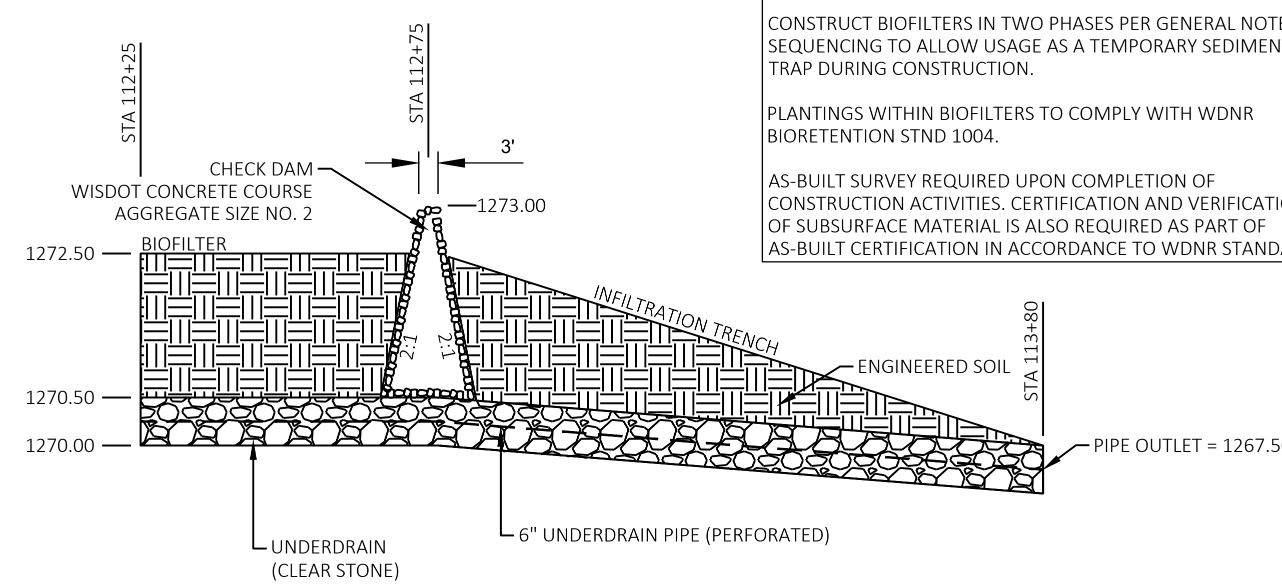


NOTES:

INFILTRATION TRENCH TO BE PLACED FROM STORM SEWER OUTLET (NE QUADRANT OF MARYKNOLL AVE) AND TERMINATE AT EXISTING CHANNELIZED DRAINAGE WAY (GREENWAY). AT TERMINAL END DAYLIGHT 6" PERFORATED PIPE INTO BANK OF DRAINAGE WAY.

INFILTRATION TRENCH DETAIL

SECTION A-A
STA 112+25 - STA 113+80 (RT)



NOTES:

EROSION CONTROL PLAN SHALL BE IMPLEMENTED PRIOR, DURING, AND AFTER BIOFILTER CONSTRUCTION.

CONSTRUCT BIOFILTERS IN TWO PHASES PER GENERAL NOTES SEQUENCING TO ALLOW USAGE AS A TEMPORARY SEDIMENT TRAP DURING CONSTRUCTION.

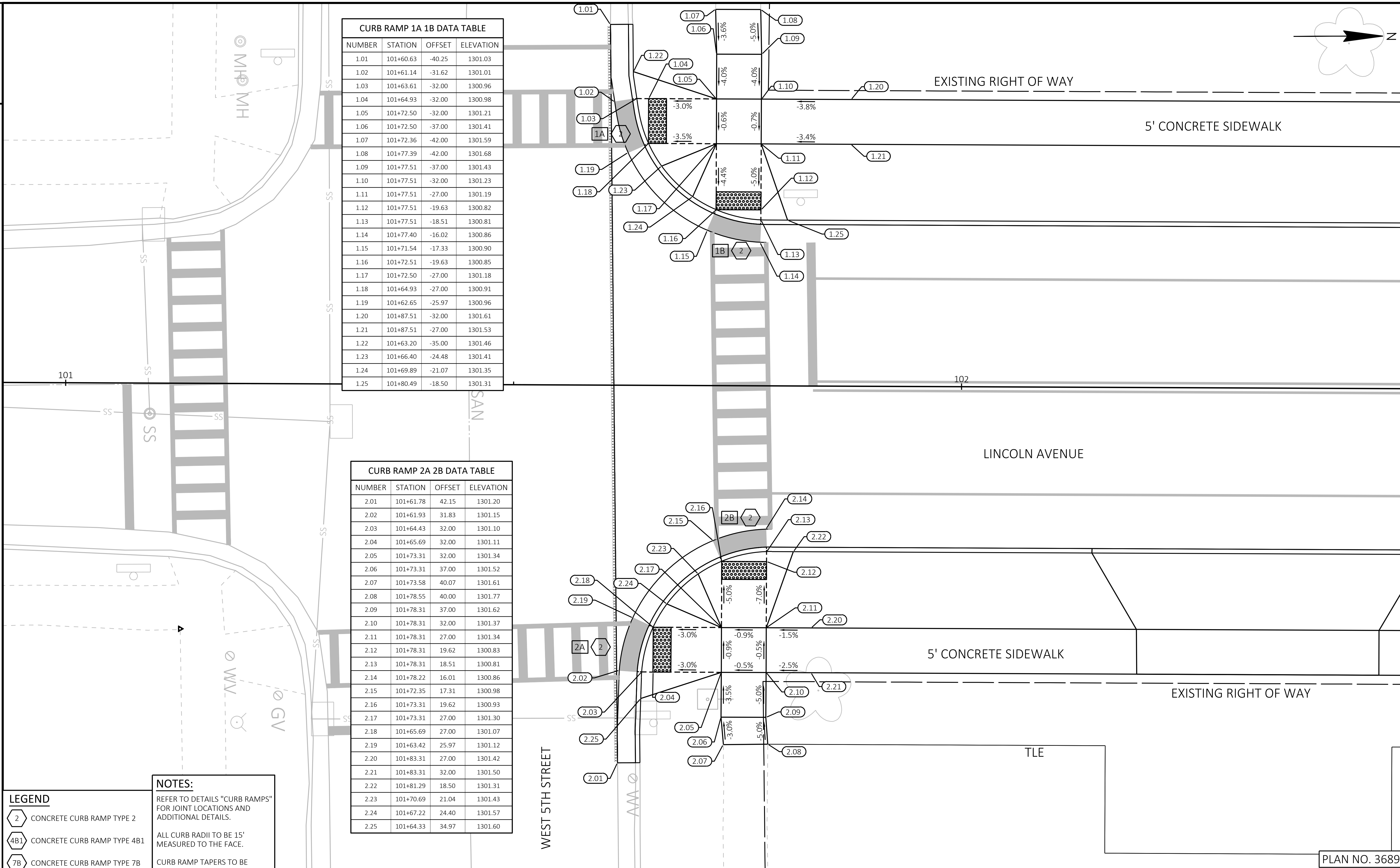
PLANTINGS WITHIN BIOFILTERS TO COMPLY WITH WDNR BIORETENTION STND 1004.

AS-BUILT SURVEY REQUIRED UPON COMPLETION OF CONSTRUCTION ACTIVITIES. CERTIFICATION AND VERIFICATION OF SUBSURFACE MATERIAL IS ALSO REQUIRED AS PART OF AS-BUILT CERTIFICATION IN ACCORDANCE TO WDNR STANDARDS.

CHECK DAMN DETAIL

SECTION B-B

PROJECT NO: 6995-12-70	HWY: LINCOLN AVENUE	COUNTY: WOOD	CONSTRUCTION DETAILS	SHEET 15	E



CURB RAMP 1A 1B DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
1.01	101+60.63	-40.25	1301.03
1.02	101+61.14	-31.62	1301.01
1.03	101+63.61	-32.00	1300.96
1.04	101+64.93	-32.00	1300.98
1.05	101+72.50	-32.00	1301.21
1.06	101+72.50	-37.00	1301.41
1.07	101+72.36	-42.00	1301.59
1.08	101+77.39	-42.00	1301.68
1.09	101+77.51	-37.00	1301.43
1.10	101+77.51	-32.00	1301.23
1.11	101+77.51	-27.00	1301.19
1.12	101+77.51	-19.63	1300.82
1.13	101+77.51	-18.51	1300.81
1.14	101+77.40	-16.02	1300.86
1.15	101+71.54	-17.33	1300.90
1.16	101+72.51	-19.63	1300.85
1.17	101+72.50	-27.00	1301.18
1.18	101+64.93	-27.00	1300.91
1.19	101+62.65	-25.97	1300.96
1.20	101+87.51	-32.00	1301.61
1.21	101+87.51	-27.00	1301.53
1.22	101+63.20	-35.00	1301.46
1.23	101+66.40	-24.48	1301.41
1.24	101+69.89	-21.07	1301.35
1.25	101+80.49	-18.50	1301.31

CURB RAMP 2A 2B DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
2.01	101+61.78	42.15	1301.20
2.02	101+61.93	31.83	1301.15
2.03	101+64.43	32.00	1301.10
2.04	101+65.69	32.00	1301.11
2.05	101+73.31	32.00	1301.34
2.06	101+73.31	37.00	1301.52
2.07	101+73.58	40.07	1301.61
2.08	101+78.55	40.00	1301.77
2.09	101+78.31	37.00	1301.62
2.10	101+78.31	32.00	1301.37
2.11	101+78.31	27.00	1301.34
2.12	101+78.31	19.62	1300.83
2.13	101+78.31	18.51	1300.81
2.14	101+78.22	16.01	1300.86
2.15	101+72.35	17.31	1300.98
2.16	101+73.31	19.62	1300.93
2.17	101+73.31	27.00	1301.30
2.18	101+65.69	27.00	1301.07
2.19	101+63.42	25.97	1301.12
2.20	101+83.31	27.00	1301.42
2.21	101+83.31	32.00	1301.50
2.22	101+81.29	18.50	1301.31
2.23	101+70.69	21.04	1301.43
2.24	101+67.22	24.40	1301.57
2.25	101+64.33	34.97	1301.60

LEGEND

- 2 CONCRETE CURB RAMP TYPE 2
- 4B1 CONCRETE CURB RAMP TYPE 4B1
- 7B CONCRETE CURB RAMP TYPE 7B

NOTES:

REFER TO DETAILS "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.

ALL CURB RADII TO BE 15' MEASURED TO THE FACE.

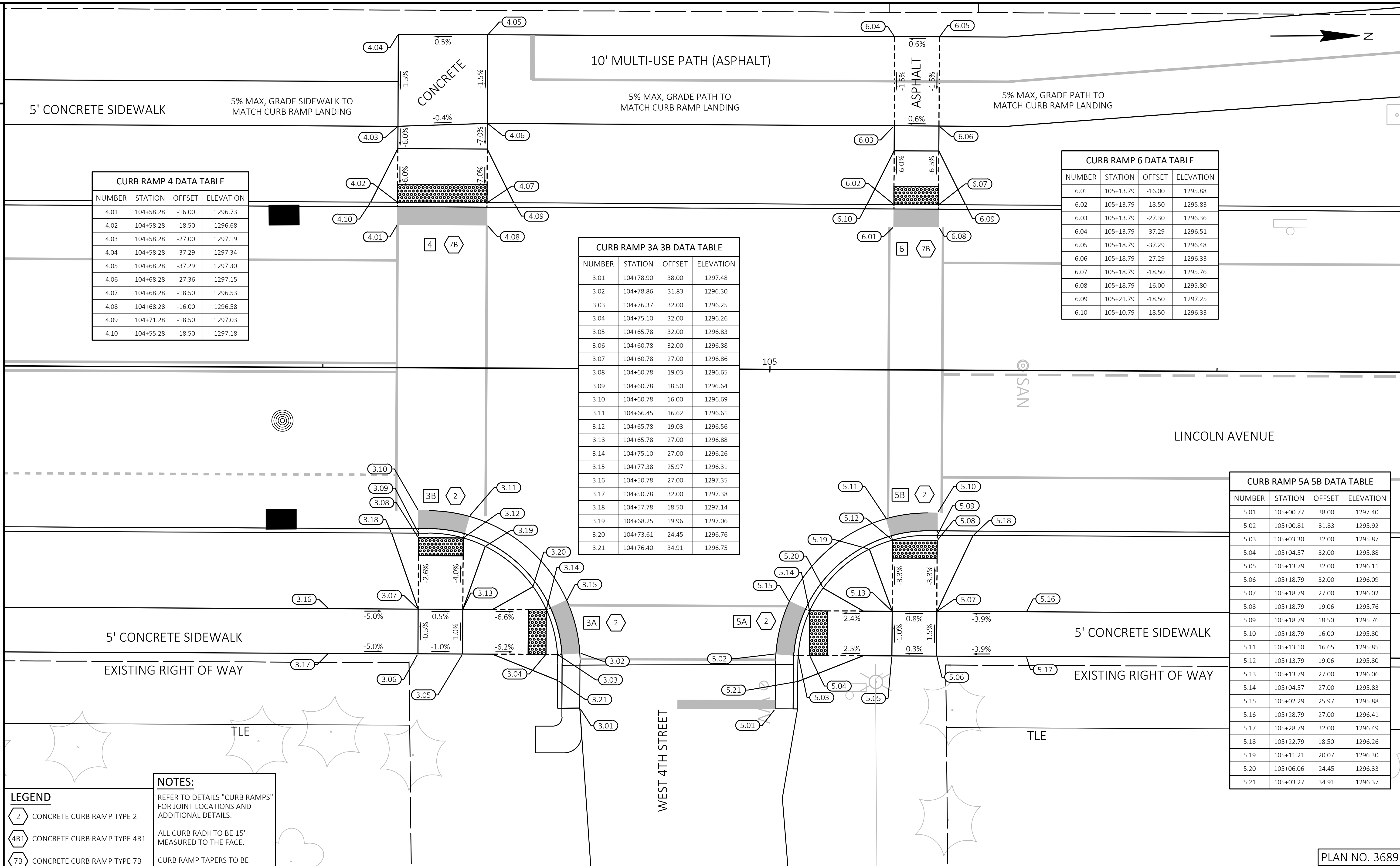
CURB RAMP TAPERS TO BE CONCRETE.

PLAN NO. 3689

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CURB RAMP LAYOUT	SHEET 16	E

2

2



CURB RAMP 4 DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
4.01	104+58.28	-16.00	1296.73
4.02	104+58.28	-18.50	1296.68
4.03	104+58.28	-27.00	1297.19
4.04	104+58.28	-37.29	1297.34
4.05	104+68.28	-37.29	1297.30
4.06	104+68.28	-27.36	1297.15
4.07	104+68.28	-18.50	1296.53
4.08	104+68.28	-16.00	1296.58
4.09	104+71.28	-18.50	1297.03
4.10	104+55.28	-18.50	1297.18

CURB RAMP 3A 3B DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
3.01	104+78.90	38.00	1297.48
3.02	104+78.86	31.83	1296.30
3.03	104+76.37	32.00	1296.25
3.04	104+75.10	32.00	1296.26
3.05	104+65.78	32.00	1296.83
3.06	104+60.78	32.00	1296.88
3.07	104+60.78	27.00	1296.86
3.08	104+60.78	19.03	1296.65
3.09	104+60.78	18.50	1296.64
3.10	104+60.78	16.00	1296.69
3.11	104+66.45	16.62	1296.61
3.12	104+65.78	19.03	1296.56
3.13	104+65.78	27.00	1296.88
3.14	104+75.10	27.00	1296.26
3.15	104+77.38	25.97	1296.31
3.16	104+50.78	27.00	1297.35
3.17	104+50.78	32.00	1297.38
3.18	104+57.78	18.50	1297.14
3.19	104+68.25	19.96	1297.06
3.20	104+73.61	24.45	1296.76
3.21	104+76.40	34.91	1296.75

CURB RAMP 6 DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
6.01	105+13.79	-16.00	1295.88
6.02	105+13.79	-18.50	1295.83
6.03	105+13.79	-27.30	1296.36
6.04	105+13.79	-37.29	1296.51
6.05	105+18.79	-37.29	1296.48
6.06	105+18.79	-27.29	1296.33
6.07	105+18.79	-18.50	1295.76
6.08	105+18.79	-16.00	1295.80
6.09	105+21.79	-18.50	1297.25
6.10	105+10.79	-18.50	1296.33

CURB RAMP 5A 5B DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
5.01	105+00.77	38.00	1297.40
5.02	105+00.81	31.83	1295.92
5.03	105+03.30	32.00	1295.87
5.04	105+04.57	32.00	1295.88
5.05	105+13.79	32.00	1296.11
5.06	105+18.79	32.00	1296.09
5.07	105+18.79	27.00	1296.02
5.08	105+18.79	19.06	1295.76
5.09	105+18.79	18.50	1295.76
5.10	105+18.79	16.00	1295.80
5.11	105+13.10	16.65	1295.85
5.12	105+13.79	19.06	1295.80
5.13	105+13.79	27.00	1296.06
5.14	105+04.57	27.00	1295.83
5.15	105+02.29	25.97	1295.88
5.16	105+28.79	27.00	1296.41
5.17	105+28.79	32.00	1296.49
5.18	105+22.79	18.50	1296.26
5.19	105+11.21	20.07	1296.30
5.20	105+06.06	24.45	1296.33
5.21	105+03.27	34.91	1296.37

LEGEND

- 2 CONCRETE CURB RAMP TYPE 2
- 4B1 CONCRETE CURB RAMP TYPE 4B1
- 7B CONCRETE CURB RAMP TYPE 7B

NOTES:

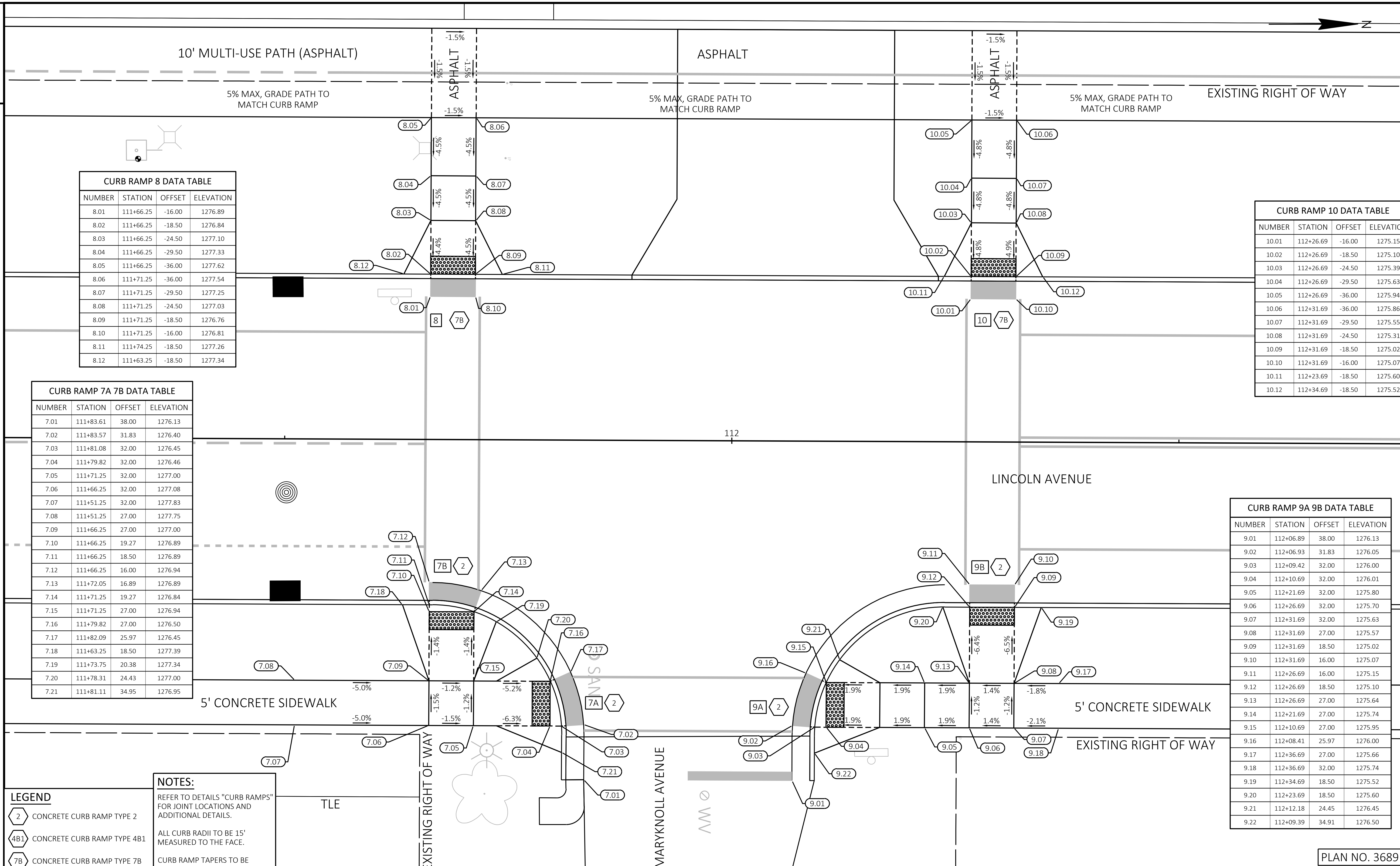
REFER TO DETAILS "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.

ALL CURB RADII TO BE 15' MEASURED TO THE FACE.

CURB RAMP TAPERS TO BE CONCRETE.

PLAN NO. 3689

2



CURB RAMP 8 DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
8.01	111+66.25	-16.00	1276.89
8.02	111+66.25	-18.50	1276.84
8.03	111+66.25	-24.50	1277.10
8.04	111+66.25	-29.50	1277.33
8.05	111+66.25	-36.00	1277.62
8.06	111+71.25	-36.00	1277.54
8.07	111+71.25	-29.50	1277.25
8.08	111+71.25	-24.50	1277.03
8.09	111+71.25	-18.50	1276.76
8.10	111+71.25	-16.00	1276.81
8.11	111+74.25	-18.50	1277.26
8.12	111+63.25	-18.50	1277.34

CURB RAMP 7A 7B DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
7.01	111+83.61	38.00	1276.13
7.02	111+83.57	31.83	1276.40
7.03	111+81.08	32.00	1276.45
7.04	111+79.82	32.00	1276.46
7.05	111+71.25	32.00	1277.00
7.06	111+66.25	32.00	1277.08
7.07	111+51.25	32.00	1277.83
7.08	111+51.25	27.00	1277.75
7.09	111+66.25	27.00	1277.00
7.10	111+66.25	19.27	1276.89
7.11	111+66.25	18.50	1276.89
7.12	111+66.25	16.00	1276.94
7.13	111+72.05	16.89	1276.89
7.14	111+71.25	19.27	1276.84
7.15	111+71.25	27.00	1276.94
7.16	111+79.82	27.00	1276.50
7.17	111+82.09	25.97	1276.45
7.18	111+63.25	18.50	1277.39
7.19	111+73.75	20.38	1277.34
7.20	111+78.31	24.43	1277.00
7.21	111+81.11	34.95	1276.95

CURB RAMP 10 DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
10.01	112+26.69	-16.00	1275.15
10.02	112+26.69	-18.50	1275.10
10.03	112+26.69	-24.50	1275.39
10.04	112+26.69	-29.50	1275.63
10.05	112+26.69	-36.00	1275.94
10.06	112+31.69	-36.00	1275.86
10.07	112+31.69	-29.50	1275.55
10.08	112+31.69	-24.50	1275.31
10.09	112+31.69	-18.50	1275.02
10.10	112+31.69	-16.00	1275.07
10.11	112+23.69	-18.50	1275.60
10.12	112+34.69	-18.50	1275.52

CURB RAMP 9A 9B DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
9.01	112+06.89	38.00	1276.13
9.02	112+06.93	31.83	1276.05
9.03	112+09.42	32.00	1276.00
9.04	112+10.69	32.00	1276.01
9.05	112+21.69	32.00	1275.80
9.06	112+26.69	32.00	1275.70
9.07	112+31.69	32.00	1275.63
9.08	112+31.69	27.00	1275.57
9.09	112+31.69	18.50	1275.02
9.10	112+31.69	16.00	1275.07
9.11	112+26.69	16.00	1275.15
9.12	112+26.69	18.50	1275.10
9.13	112+26.69	27.00	1275.64
9.14	112+21.69	27.00	1275.74
9.15	112+10.69	27.00	1275.95
9.16	112+08.41	25.97	1276.00
9.17	112+36.69	27.00	1275.66
9.18	112+36.69	32.00	1275.74
9.19	112+34.69	18.50	1275.52
9.20	112+23.69	18.50	1275.60
9.21	112+12.18	24.45	1276.45
9.22	112+09.39	34.91	1276.50

LEGEND

- (2) CONCRETE CURB RAMP TYPE 2
- (4B1) CONCRETE CURB RAMP TYPE 4B1
- (7B) CONCRETE CURB RAMP TYPE 7B

NOTES:

REFER TO DETAILS "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.

ALL CURB RADII TO BE 15' MEASURED TO THE FACE.

CURB RAMP TAPERS TO BE CONCRETE.

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CURB RAMP LAYOUT	SHEET 18	E

2

LEGEND

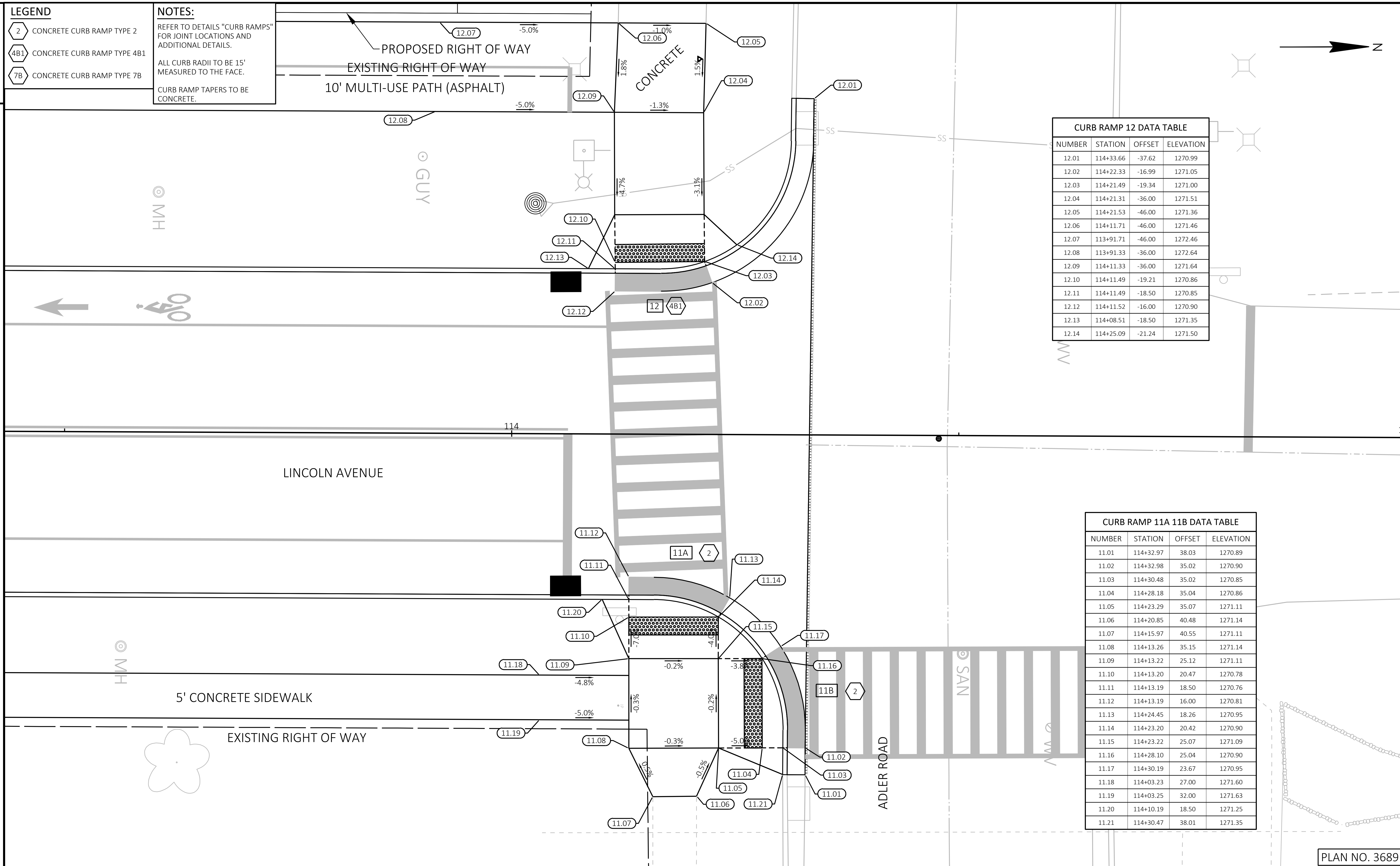
- 2 CONCRETE CURB RAMP TYPE 2
- 4B1 CONCRETE CURB RAMP TYPE 4B1
- 7B CONCRETE CURB RAMP TYPE 7B

NOTES:

REFER TO DETAILS "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.

ALL CURB RADII TO BE 15' MEASURED TO THE FACE.

CURB RAMP TAPERS TO BE CONCRETE.



CURB RAMP 12 DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
12.01	114+33.66	-37.62	1270.99
12.02	114+22.33	-16.99	1271.05
12.03	114+21.49	-19.34	1271.00
12.04	114+21.31	-36.00	1271.51
12.05	114+21.53	-46.00	1271.36
12.06	114+11.71	-46.00	1271.46
12.07	113+91.71	-46.00	1272.46
12.08	113+91.33	-36.00	1272.64
12.09	114+11.33	-36.00	1271.64
12.10	114+11.49	-19.21	1270.86
12.11	114+11.49	-18.50	1270.85
12.12	114+11.52	-16.00	1270.90
12.13	114+08.51	-18.50	1271.35
12.14	114+25.09	-21.24	1271.50

CURB RAMP 11A 11B DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
11.01	114+32.97	38.03	1270.89
11.02	114+32.98	35.02	1270.90
11.03	114+30.48	35.02	1270.85
11.04	114+28.18	35.04	1270.86
11.05	114+23.29	35.07	1271.11
11.06	114+20.85	40.48	1271.14
11.07	114+15.97	40.55	1271.11
11.08	114+13.26	35.15	1271.14
11.09	114+13.22	25.12	1271.11
11.10	114+13.20	20.47	1270.78
11.11	114+13.19	18.50	1270.76
11.12	114+13.19	16.00	1270.81
11.13	114+24.45	18.26	1270.95
11.14	114+23.20	20.42	1270.90
11.15	114+23.22	25.07	1271.09
11.16	114+28.10	25.04	1270.90
11.17	114+30.19	23.67	1270.95
11.18	114+03.23	27.00	1271.60
11.19	114+03.25	32.00	1271.63
11.20	114+10.19	18.50	1271.25
11.21	114+30.47	38.01	1271.35

PLAN NO. 3689

2

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CURB RAMP LAYOUT	SHEET 19	E

2

REMOVAL NOTES:
REMOVE ABANDONED 8" ASBESTOS CEMENT FOR MAIN PIPE.

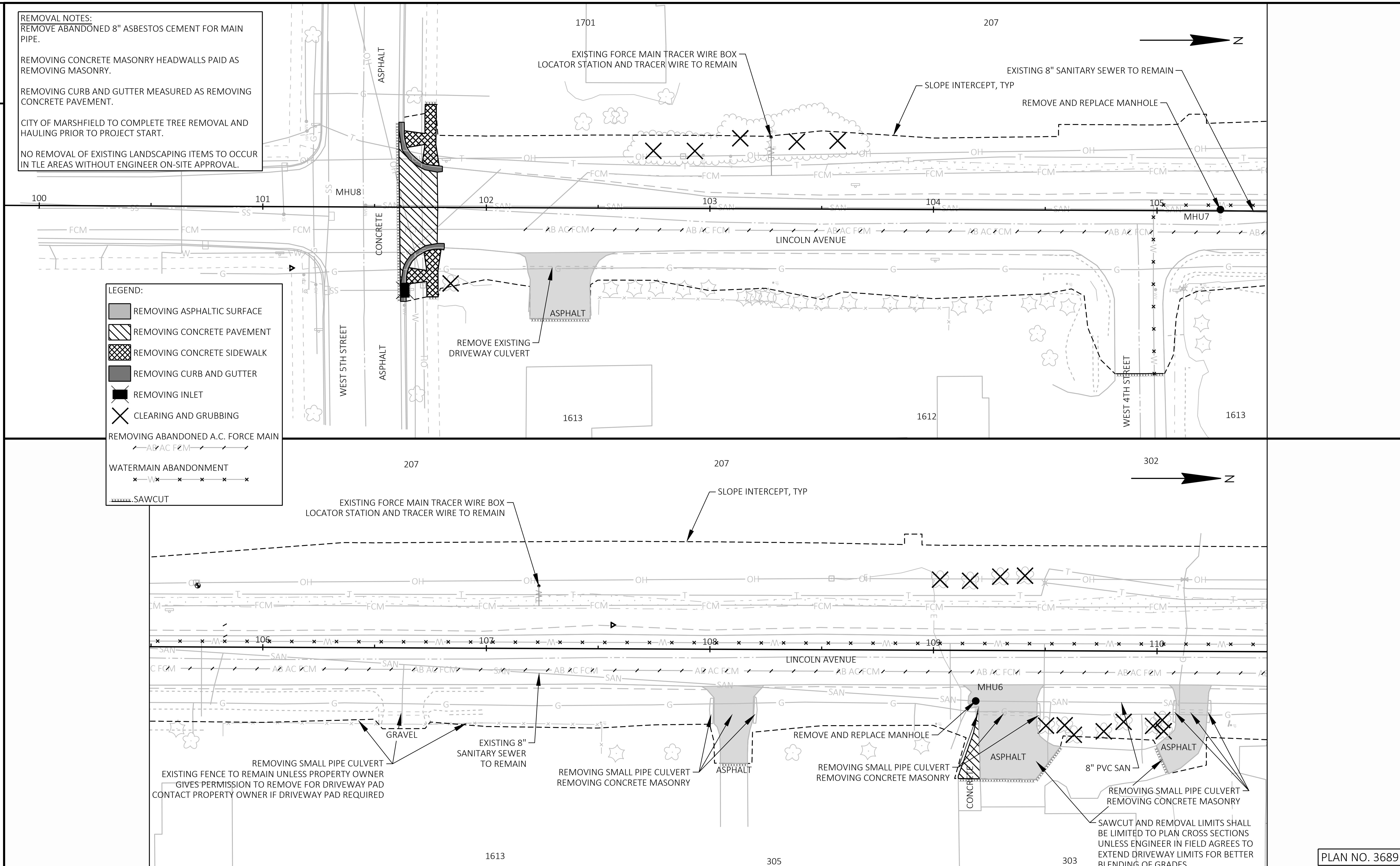
REMOVING CONCRETE MASONRY HEADWALLS PAID AS REMOVING MASONRY.

REMOVING CURB AND GUTTER MEASURED AS REMOVING CONCRETE PAVEMENT.

CITY OF MARSHFIELD TO COMPLETE TREE REMOVAL AND HAULING PRIOR TO PROJECT START.

NO REMOVAL OF EXISTING LANDSCAPING ITEMS TO OCCUR IN TLE AREAS WITHOUT ENGINEER ON-SITE APPROVAL.

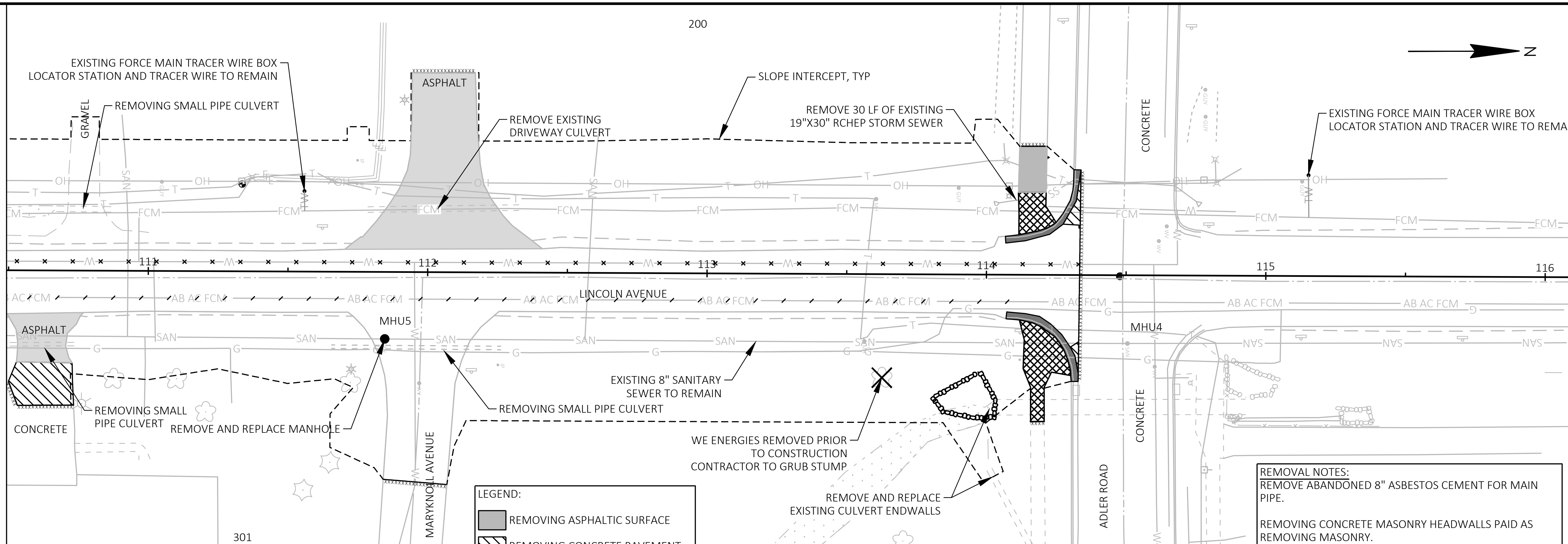
LEGEND:
- REMOVING ASPHALTIC SURFACE
- REMOVING CONCRETE PAVEMENT
- REMOVING CONCRETE SIDEWALK
- REMOVING CURB AND GUTTER
- REMOVING INLET
- CLEARING AND GRUBBING
- REMOVING ABANDONED A.C. FORCE MAIN
- WATERMAIN ABANDONMENT
- SAWCUT



PLAN NO. 3689

2

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	REMOVAL PLAN	SHEET 20	E



LEGEND:

- REMOVING ASPHALTIC SURFACE
- REMOVING CONCRETE PAVEMENT
- REMOVING CONCRETE SIDEWALK
- REMOVING CURB AND GUTTER
- REMOVING INLET
- CLEARING AND GRUBBING
- REMOVING ABANDONED A.C. FORCE MAIN
- WATERMAIN ABANDONMENT
- SAWCUT

REMOVAL NOTES:

REMOVE ABANDONED 8" ASBESTOS CEMENT FOR MAIN PIPE.

REMOVING CONCRETE MASONRY HEADWALLS PAID AS REMOVING MASONRY.

REMOVING CURB AND GUTTER MEASURED AS REMOVING CONCRETE PAVEMENT.

CITY OF MARSHFIELD TO COMPLETE TREE REMOVAL AND HAULING PRIOR TO PROJECT START.

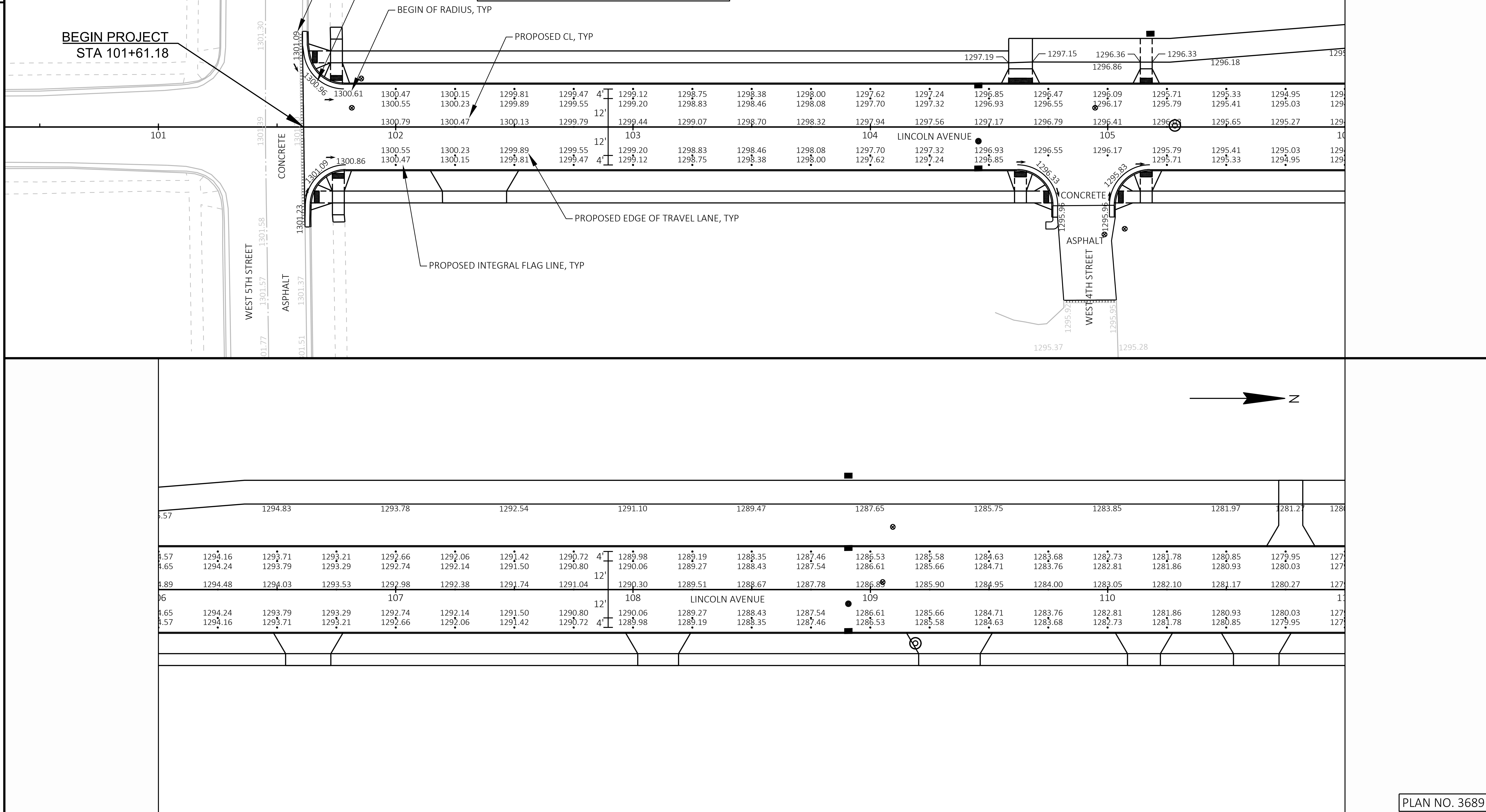
NO REMOVAL OF EXISTING LANDSCAPING ITEMS TO OCCUR IN TLE AREAS WITHOUT ENGINEER ON-SITE APPROVAL.

PLAN NO. 3689

2

NOTES:
DRILLED DOWELS AND/OR TIE BARS REQUIRED WHEN PROPOSED CONCRETE PAVEMENT ABUTS EXISTING CONCRETE PAVEMENT INCLUDING BASE CONCRETE.

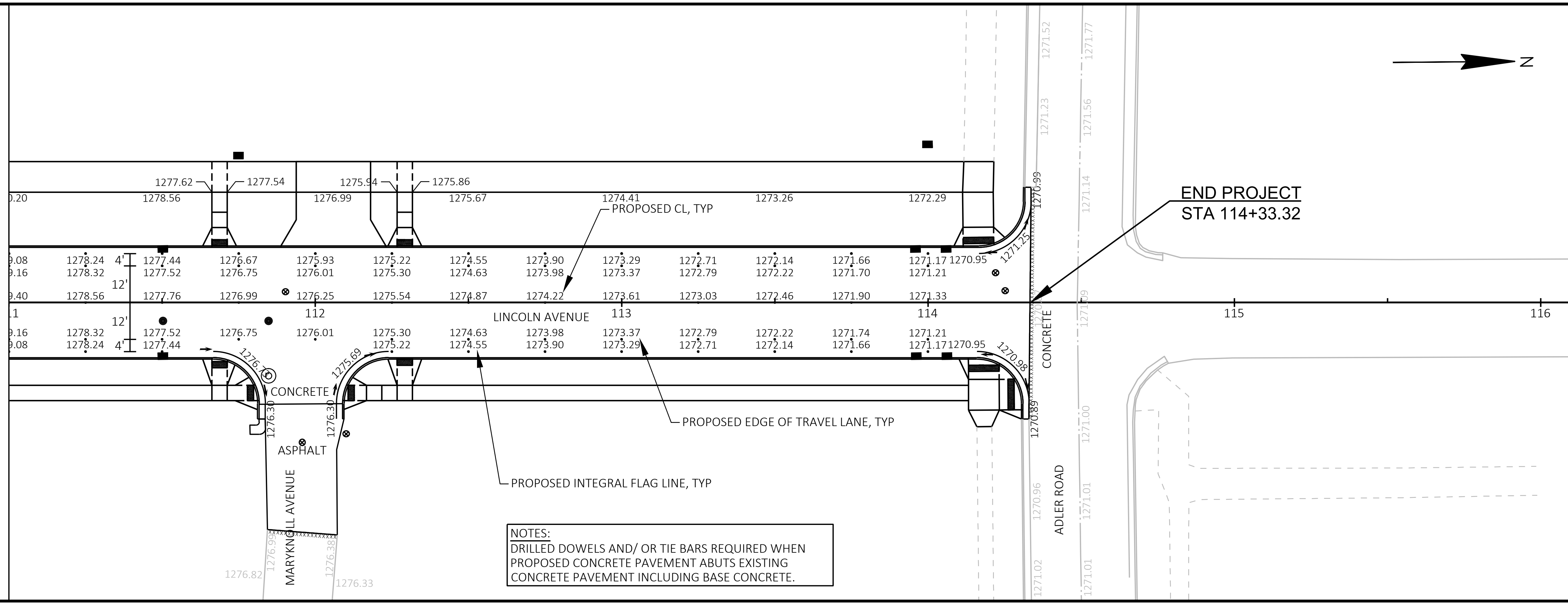
THICKER CONCRETE REQUIRED ALONG SAW CUT DUE TO DRILLED BARS INTO BASE CONCRETE. SEE CONSTRUCTION DETAILS FOR MORE INFO.



PLAN NO. 3689

2

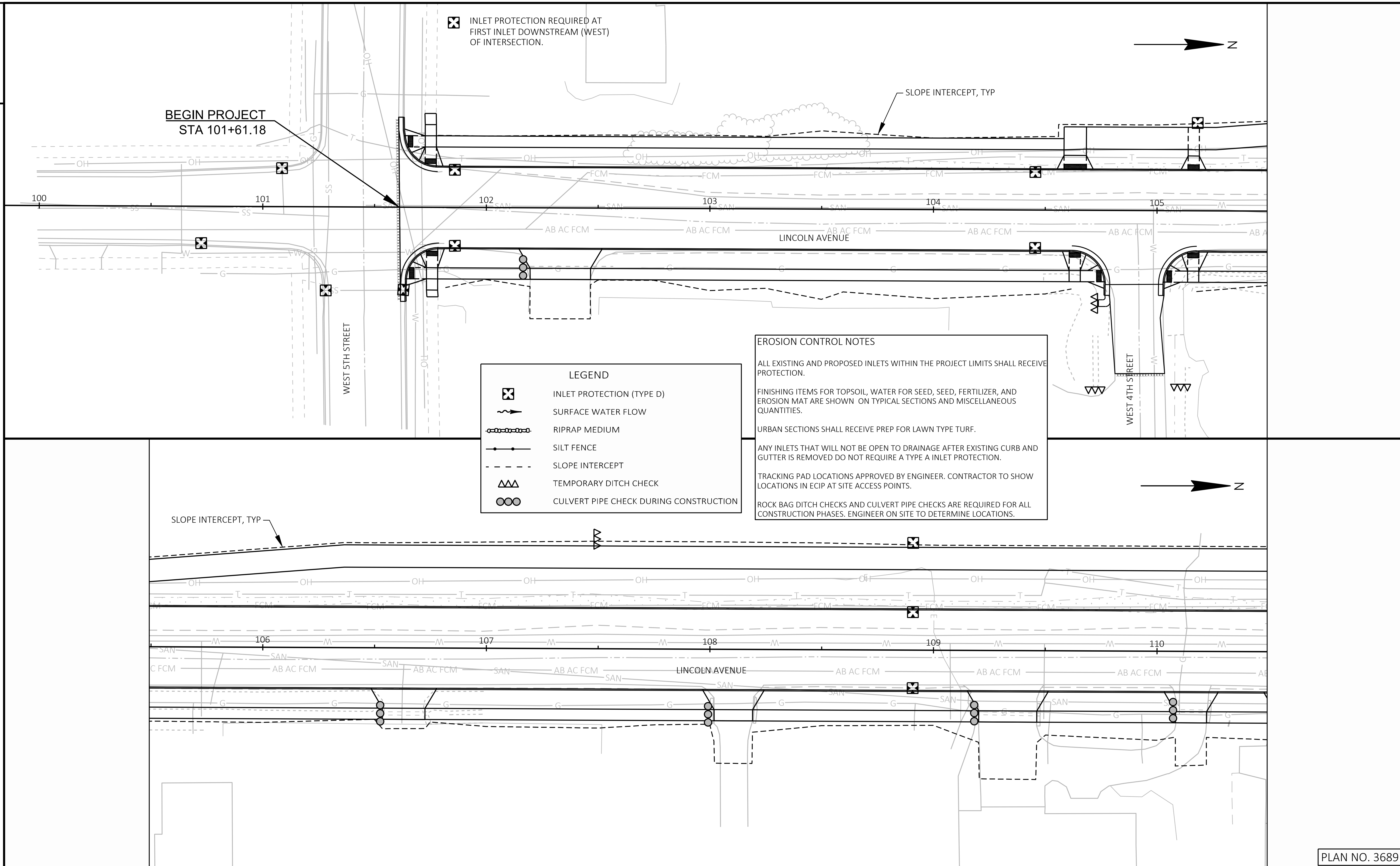
PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	PAVING PLAN	SHEET 22	E



NOTES:
DRILLED DOWELS AND/ OR TIE BARS REQUIRED WHEN PROPOSED CONCRETE PAVEMENT ABUTS EXISTING CONCRETE PAVEMENT INCLUDING BASE CONCRETE.

PLAN NO. 3689

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	PAVING PLAN	SHEET 23	E



LEGEND

☒	INLET PROTECTION (TYPE D)
	SURFACE WATER FLOW
	RIPRAP MEDIUM
	SILT FENCE
	SLOPE INTERCEPT
ΔΔΔ	TEMPORARY DITCH CHECK
○○○	CULVERT PIPE CHECK DURING CONSTRUCTION

EROSION CONTROL NOTES

ALL EXISTING AND PROPOSED INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE PROTECTION.

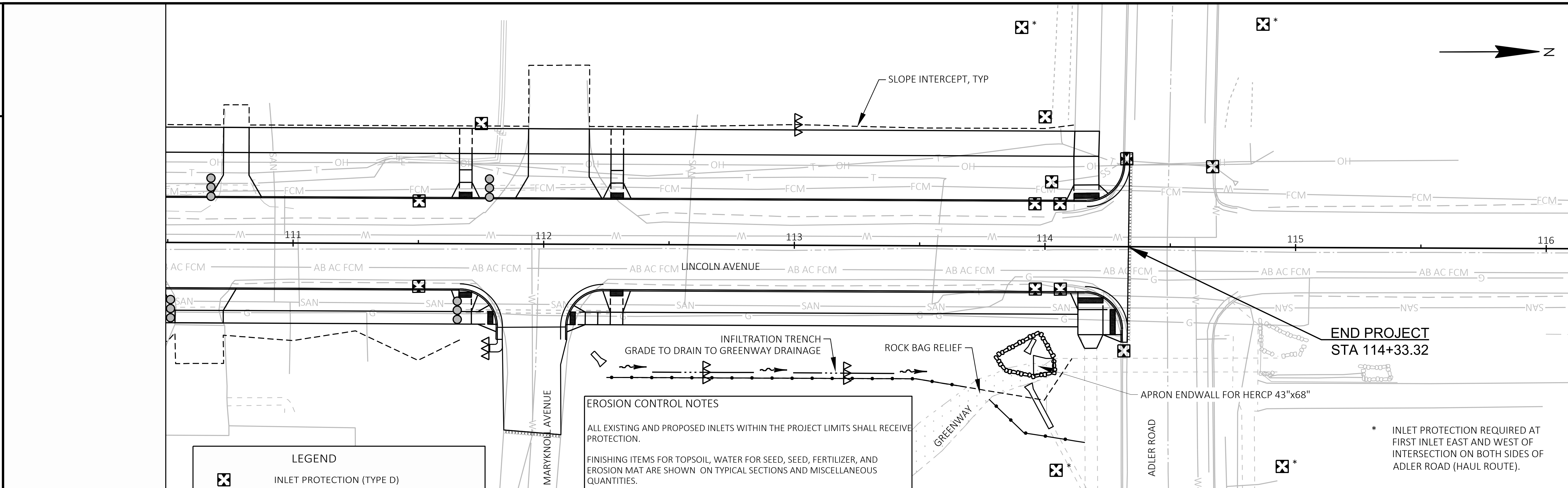
FINISHING ITEMS FOR TOPSOIL, WATER FOR SEED, SEED, FERTILIZER, AND EROSION MAT ARE SHOWN ON TYPICAL SECTIONS AND MISCELLANEOUS QUANTITIES.

URBAN SECTIONS SHALL RECEIVE PREP FOR LAWN TYPE TURF.

ANY INLETS THAT WILL NOT BE OPEN TO DRAINAGE AFTER EXISTING CURB AND GUTTER IS REMOVED DO NOT REQUIRE A TYPE A INLET PROTECTION.

TRACKING PAD LOCATIONS APPROVED BY ENGINEER. CONTRACTOR TO SHOW LOCATIONS IN ECIP AT SITE ACCESS POINTS.

ROCK BAG DITCH CHECKS AND CULVERT PIPE CHECKS ARE REQUIRED FOR ALL CONSTRUCTION PHASES. ENGINEER ON SITE TO DETERMINE LOCATIONS.



LEGEND

- INLET PROTECTION (TYPE D)
- SURFACE WATER FLOW
- RIPRAP MEDIUM
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK DURING CONSTRUCTION

EROSION CONTROL NOTES

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FINISHING ITEMS FOR TOPSOIL, WATER FOR SEED, SEED, FERTILIZER, AND EROSION MAT ARE SHOWN ON TYPICAL SECTIONS AND MISCELLANEOUS QUANTITIES.

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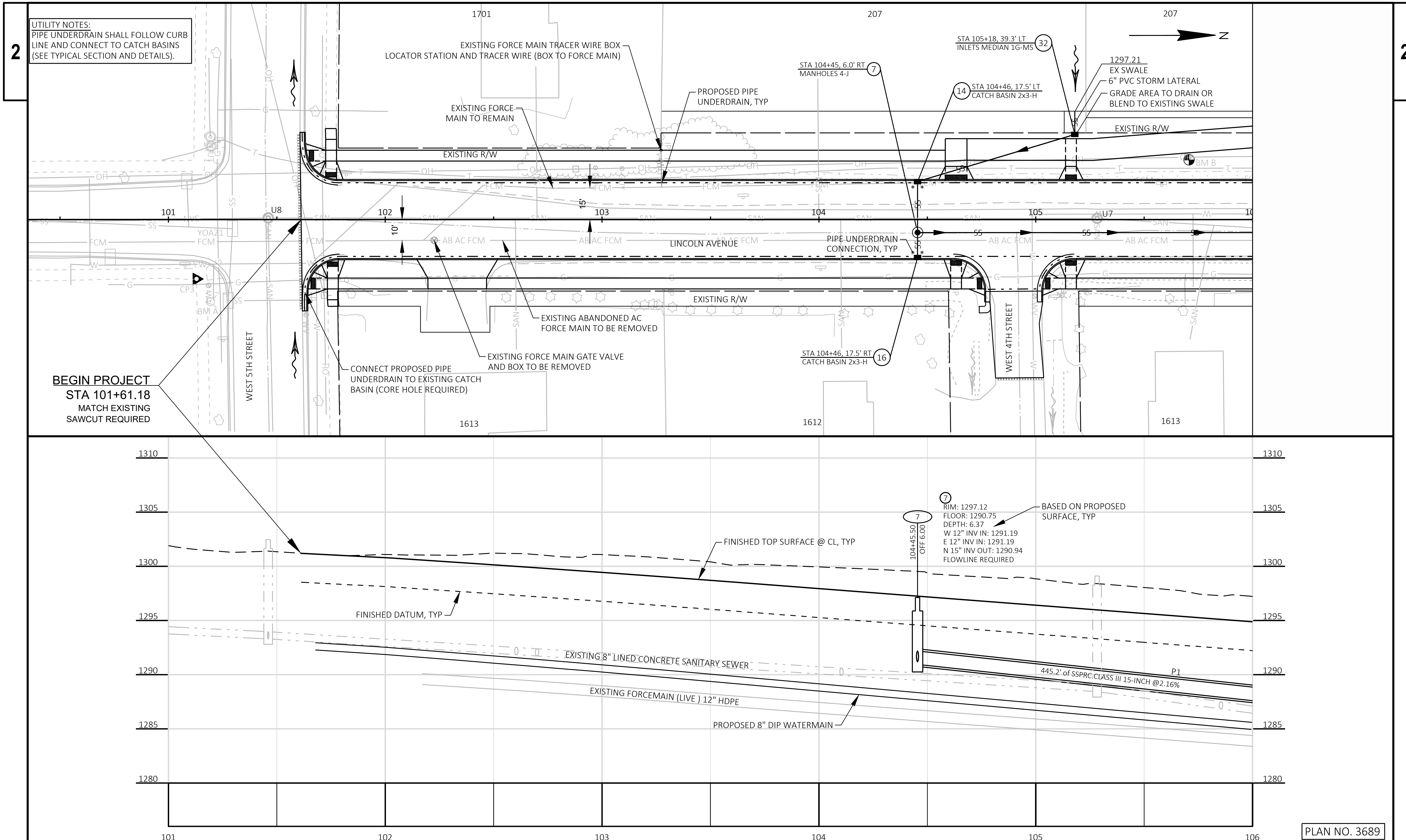
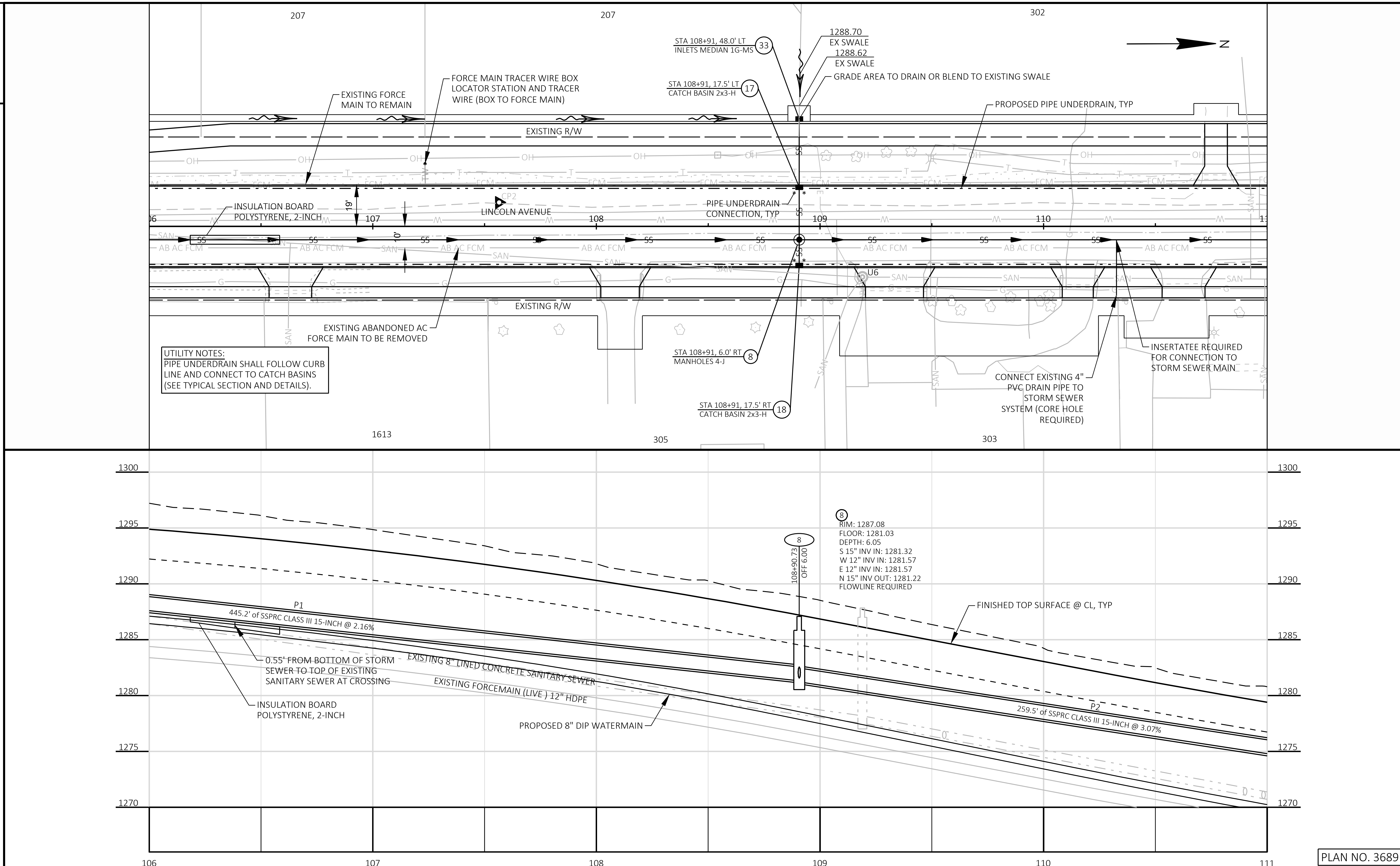
ROCK BAG DITCH CHECKS AND CULVERT PIPE CHECKS ARE REQUIRED FOR ALL CONSTRUCTION PHASES. ENGINEER ON SITE TO DETERMINE LOCATIONS.

PLAN NO. 3689



PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	STORM SEWER PLAN AND PROFILE: LINCOLN AVENUE	SHEET 26	E

2

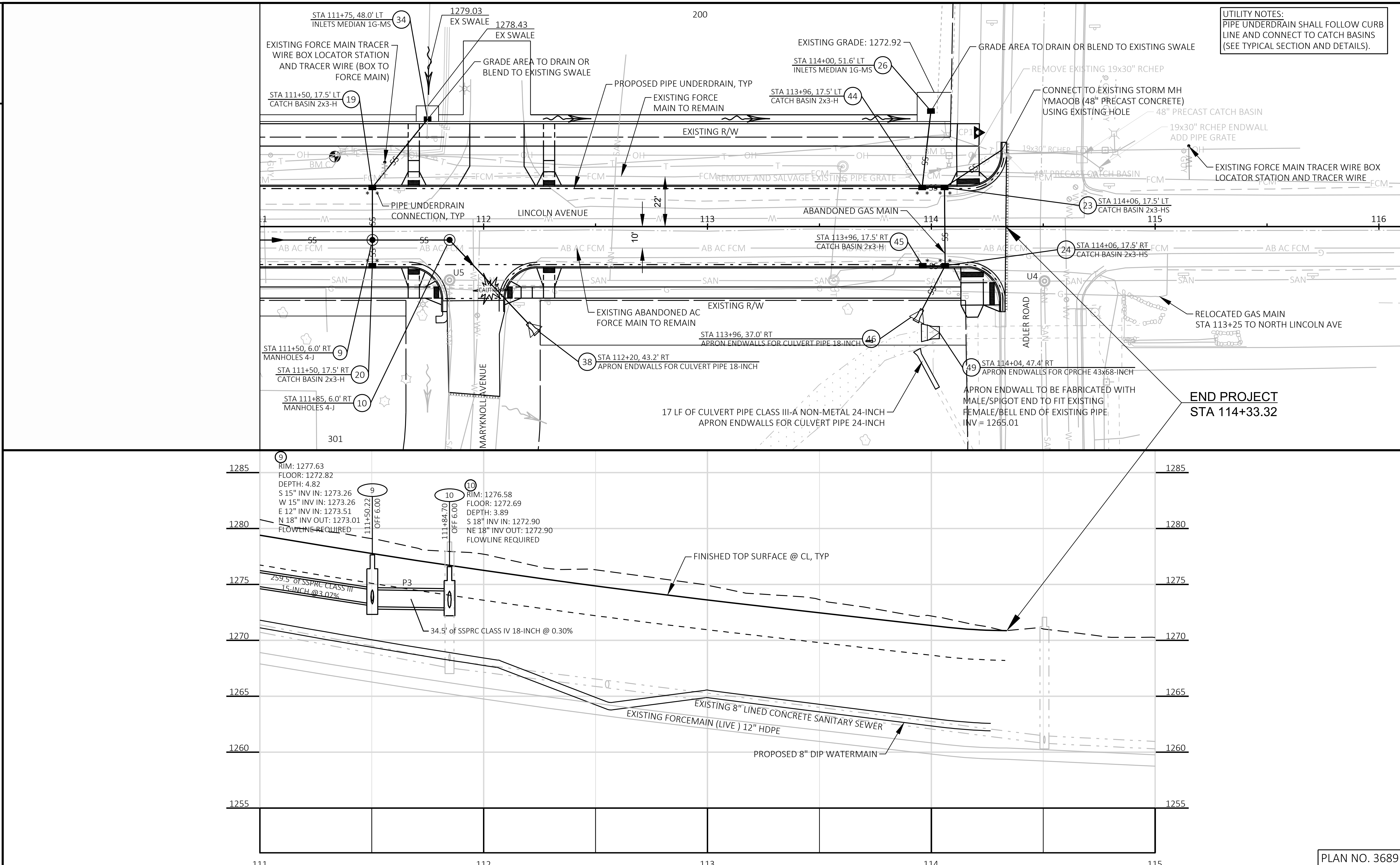


2

PLAN NO. 3689

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	STORM SEWER PLAN AND PROFILE: LINCOLN AVENUE	SHEET 27	E

2



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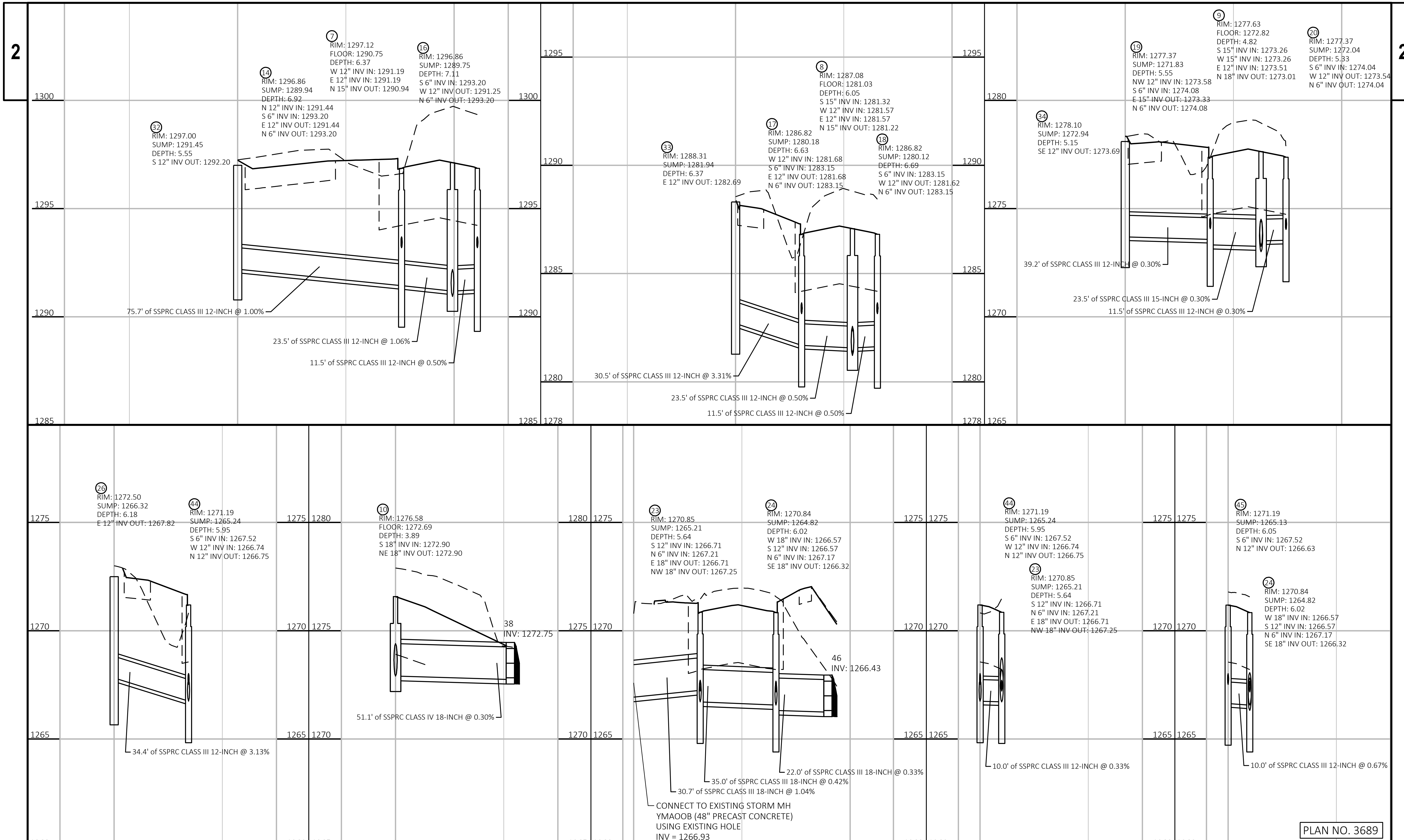
PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	STORM SEWER PLAN AND PROFILE: LINCOLN AVENUE	SHEET 28	E



PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	STORM SEWER DETAILS	SHEET 29	E

FILE NAME : P:\PROJECTS_CURRENT\WOOD\MARSHFIELD, CITY OF\LINCOLN AVE - 2021\ACAD\SHEETSPLAN\023001_UP\023001_UP.DWG PLOT DATE : 3/1/2023 7:56 AM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : ##########
LAYOUT NAME - Details

WISDOT/CADDS SHEET 44

2

STORM SEWER STRUCTURE DATA

STRUCTURE NUMBER	ALIGNMENT	STATION	OFFSET	LOCATION	TYPE	RIM/GRATE ELEVATION	STRUCTURE INV ELEV	TOTAL DEPTH	SUMP DEPTH	CONNECTING PIPES	PIPE DIRECTION	PIPE SIZE & TYPE	PIPE INVERT	PIPE ROUTE	PIPE LENGTH	PIPE SLOPE	REMARKS
7	LINCOLN_AVE_CL_FINAL	104+45.50	6.00	RT	MANHOLES 4-J	1297.12	1290.75	6.37	0.2	14-7 IN 16-7 IN 7-8 OUT	W E N	SSPRC CLASS III 12-INCH SSPRC CLASS III 12-INCH SSPRC CLASS III 15-INCH	1291.19 1291.19 1290.94	FROM STR: 14 FROM STR: 16 TO STR: 8	-- -- 445.23'	-- -- 2.16%	
8	LINCOLN_AVE_CL_FINAL	108+90.73	6.00	RT	MANHOLES 4-J	1287.08	1281.03	6.05	0.2	7-8 IN 17-8 IN 18-8 IN 8-9 OUT	S W E N	SSPRC CLASS III 15-INCH SSPRC CLASS III 12-INCH SSPRC CLASS III 12-INCH SSPRC CLASS III 15-INCH	1281.32 1281.57 1281.57 1281.22	FROM STR: 7 FROM STR: 17 FROM STR: 18 TO STR: 9	-- -- -- 259.48'	-- -- -- 3.07%	
9	LINCOLN_AVE_CL_FINAL	111+50.22	6.00	RT	MANHOLES 4-J	1277.63	1272.82	4.82	0.2	8-9 IN 19-9 IN 20-9 IN 9-10 OUT	S W E N	SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 12-INCH SSPRC CLASS IV 18-INCH	1273.26 1273.26 1273.51 1273.01	FROM STR: 8 FROM STR: 19 FROM STR: 20 TO STR: 10	-- -- -- 34.48'	-- -- -- 0.30%	
10	LINCOLN_AVE_CL_FINAL	111+84.70	6.00	RT	MANHOLES 4-J	1276.58	1272.69	3.89	0.2	9-10 IN 10-38 OUT	S NE	SSPRC CLASS IV 18-INCH SSPRC CLASS IV 18-INCH	1272.90 1272.90	FROM STR: 9 TO STR: 38	-- 51.10'	-- 0.30%	
14	LINCOLN_AVE_CL_FINAL	104+45.50	-17.50	LT	CATCH BASIN 2X3-H	1296.86	1289.94	6.92	1.5	32-14 IN BEGIN-14 IN 14-7 OUT 14-17 OUT	N S E N	SSPRC CLASS III 12-INCH PIPE UNDERDRAIN 6-INCH SSPRC CLASS III 12-INCH PIPE UNDERDRAIN 6-INCH	1291.44 1293.20 1291.44 1293.20	FROM STR: 32 FROM STR: TO STR: 7 TO STR: 17	-- -- 23.50' 445.23'	-- -- 1.06% 2.26%	
16	LINCOLN_AVE_CL_FINAL	104+45.50	17.50	RT	CATCH BASIN 2X3-H	1296.86	1289.75	7.11	1.5	BEGIN-16 IN 16-7 OUT 16-18 OUT	S W N	PIPE UNDERDRAIN 6-INCH SSPRC CLASS III 12-INCH PIPE UNDERDRAIN 6-INCH	1293.20 1291.25 1293.20	FROM STR: TO STR: 7 TO STR: 18	-- 11.50' 445.23'	-- 0.50% 2.26%	
17	LINCOLN_AVE_CL_FINAL	108+90.73	-17.50	LT	CATCH BASIN 2X3-H	1286.82	1280.18	6.63	1.5	33-17 IN 14-17 IN 17-8 OUT 17-19 OUT	W S E N	SSPRC CLASS III 12-INCH PIPE UNDERDRAIN 6-INCH SSPRC CLASS III 12-INCH PIPE UNDERDRAIN 6-INCH	1281.68 1283.15 1281.68 1283.15	FROM STR: 33 FROM STR: 14 TO STR: 8 TO STR: 19	-- -- 23.50' 259.49'	-- -- 0.50% 3.50%	
18	LINCOLN_AVE_CL_FINAL	108+90.73	17.50	RT	CATCH BASIN 2X3-H	1286.82	1280.12	6.69	1.5	16-18 IN 18-8 OUT 18-20 OUT	S W N	PIPE UNDERDRAIN 6-INCH SSPRC CLASS III 12-INCH PIPE UNDERDRAIN 6-INCH	1283.15 1281.62 1283.15	FROM STR: 16 TO STR: 8 TO STR: 20	-- 11.50' 259.48'	-- 0.50% 3.51%	
19	LINCOLN_AVE_CL_FINAL	111+50.22	-17.50	LT	CATCH BASIN 2X3-H	1277.37	1271.83	5.55	1.5	34-19 IN 17-19 IN 19-9 OUT 19-44 OUT	NW S E N	SSPRC CLASS III 12-INCH PIPE UNDERDRAIN 6-INCH SSPRC CLASS III 15-INCH PIPE UNDERDRAIN 6-INCH	1273.58 1274.08 1273.33 1274.08	FROM STR: 34 FROM STR: 17 TO STR: 9 TO STR: 44	-- -- 23.50' 245.70'	-- -- 0.30% 2.67%	
20	LINCOLN_AVE_CL_FINAL	111+50.22	17.50	RT	CATCH BASIN 2X3-H	1277.37	1272.04	5.33	1.5	18-20 IN 20-9 OUT 20-45 OUT	S W N	PIPE UNDERDRAIN 6-INCH SSPRC CLASS III 12-INCH PIPE UNDERDRAIN 6-INCH	1274.04 1273.54 1274.04	FROM STR: 18 TO STR: 9 TO STR: 45	-- 11.50' 245.97'	-- 0.30% 2.65%	
23	LINCOLN_AVE_CL_FINAL	114+05.91	-17.50	LT	CATCH BASIN 2X3-HS	1270.85	1265.21	5.64	1.5	44-23 IN END-23 IN 23-24 OUT 23 TO EX MH YMAOOB OUT	S N E NW	SSPRC CLASS III 12-INCH PIPE UNDERDRAIN 6-INCH SSPRC CLASS III 18-INCH SSPRC CLASS III 18-INCH	1266.71 1267.21 1266.71 1267.25	FROM STR: 44 FROM STR: TO STR: 24 TO STR:	-- -- 35.00' 30.72'	-- -- 0.42% 1.04%	
24	LINCOLN_AVE_CL_FINAL	114+06.18	17.50	RT	CATCH BASIN 2X3-HS	1270.84	1264.82	6.02	1.5	23-24 IN 45-24 IN END-24 IN 24-46 OUT	W S N SE	SSPRC CLASS III 18-INCH SSPRC CLASS III 12-INCH PIPE UNDERDRAIN 6-INCH SSPRC CLASS III 18-INCH	1266.57 1266.57 1267.17 1266.32	FROM STR: 23 FROM STR: 45 FROM STR: TO STR: 46	-- -- -- 22.05'	-- -- -- 0.33%	
26	LINCOLN_AVE_CL_FINAL	113+99.85	-51.65	LT	INLETS MEDIAN 1G-MS	1272.50	1266.32	6.18	1.5	26-37 OUT	E	SSPRC CLASS III 12-INCH	1267.82	TO STR: 44	34.37'	3.13%	
32	LINCOLN_AVE_CL_FINAL	105+18.02	-39.28	LT	INLETS MEDIAN 1G-MS	1297.00	1291.45	5.55	0.8	32-14 OUT	S	SSPRC CLASS III 12-INCH	1292.20	TO STR: 14	75.72'	1.00%	
33	LINCOLN_AVE_CL_FINAL	108+90.73	-48.00	LT	INLETS MEDIAN 1G-MS	1288.31	1281.94	6.37	0.8	33-17 OUT	E	SSPRC CLASS III 12-INCH	1282.69	TO STR: 17	30.50'	3.31%	
34	LINCOLN_AVE_CL_FINAL	111+74.90	-48.00	LT	INLETS MEDIAN 1G-MS	1278.10	1272.94	5.15	0.8	34-19 OUT	SE	SSPRC CLASS III 12-INCH	1273.69	TO STR: 19	39.24'	0.30%	
38	LINCOLN_AVE_CL_FINAL	112+19.76	43.18	RT	APRON ENDWALLS FOR CULVERT PIPE 18-INCH	1274.46			0.0	10-38 IN	SW	SSPRC CLASS IV 18-INCH	1272.75	FROM STR: 10	--	--	
44	LINCOLN_AVE_CL_FINAL	113+95.91	-17.50	LT	CATCH BASIN 2X3-H	1271.19	1265.24	5.95	1.5	19-44 IN 26-37 IN 44-23 OUT	S W N	PIPE UNDERDRAIN 6-INCH SSPRC CLASS III 12-INCH SSPRC CLASS III 12-INCH	1267.52 1266.74 1266.75	FROM STR: 19 FROM STR: 26 TO STR: 23	-- -- 10.00'	-- -- 0.33%	
45	LINCOLN_AVE_CL_FINAL	113+96.18	17.50	RT	CATCH BASIN 2X3-H	1271.19	1265.13	6.05	1.5	20-45 IN 45-24 OUT	S N	PIPE UNDERDRAIN 6-INCH SSPRC CLASS III 12-INCH	1267.52 1266.63	FROM STR: 20 TO STR: 24	-- 10.00'	-- 0.67%	
46	LINCOLN_AVE_CL_FINAL	113+95.94	37.03	RT	APRON ENDWALLS FOR CULVERT PIPE 18-INCH	1267.95			0.0	24-46 IN	NW	SSPRC CLASS III 18-INCH	1266.24	FROM STR: 24	--	--	
49	LINCOLN_AVE_CL_FINAL	114+03.63	47.40	RT	APRON ENDWALLS FOR CPRCHE 43X68-INCH	1269.28			0.0								

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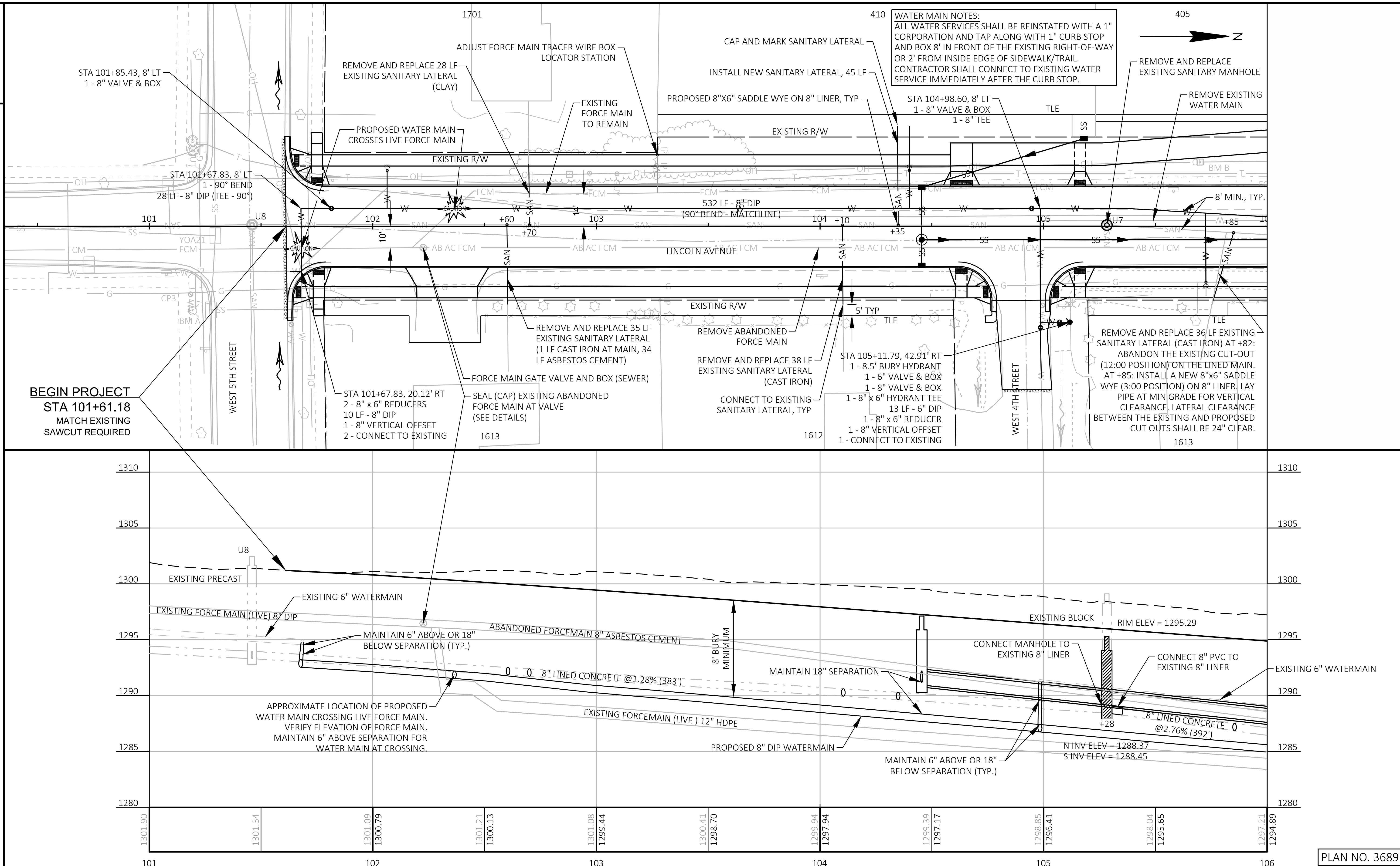
PLAN NO. 3689



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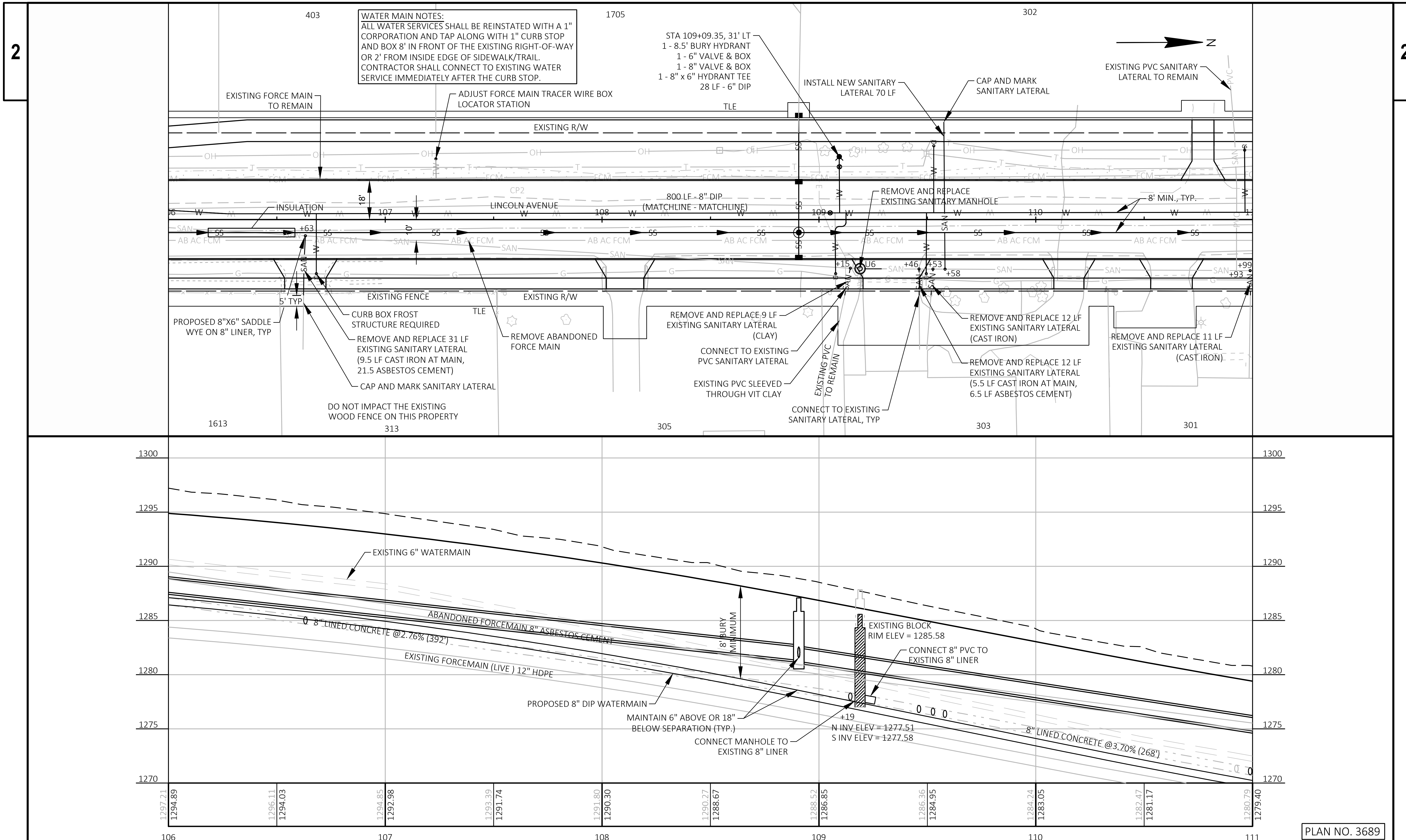
PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	UTILITY PLAN: LINCOLN AVENUE	SHEET 31	E

FILE NAME : P:\PROJECTS_CURRENT\WOOD\MARSHFIELD, CITY OF\LINCOLN AVE - 2021\ACAD\SHEETSPLAN\023001_UP\023002_UP.DWG
LAYOUT NAME - 04
PLOT DATE : 3/1/2023 8:06 AM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	UTILITY PLAN: LINCOLN AVENUE	SHEET 32	E

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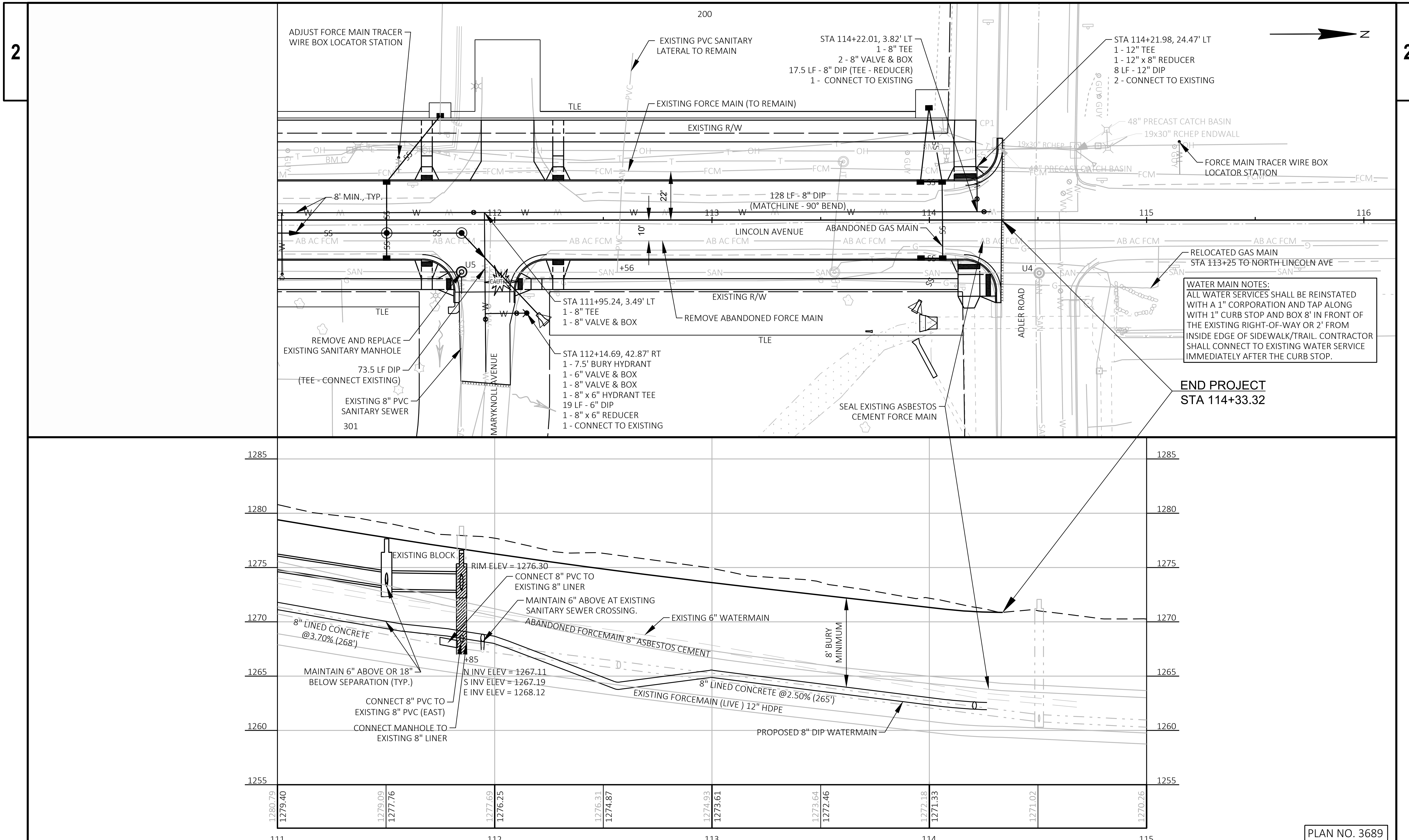
LAYOUT NAME - 05
PLOT DATE : 3/1/2023 8:06 AM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



PLAN NO. 3689

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	UTILITY PLAN: LINCOLN AVENUE	SHEET 33	E

2

PERMANENT SIGNING LEGEND:

1 STOP R1-1 36"X36"

2 STOP R1-1 36"X36" LINCOLN AVE D3-1 24"X9" WEST 4TH ST D3-1 24"X9"

4 TRAIL ENDS 24"X12"

5 NO PARKING ANY TIME R7-1D 18"X24" BIKE LANE R3-17 30"X24"

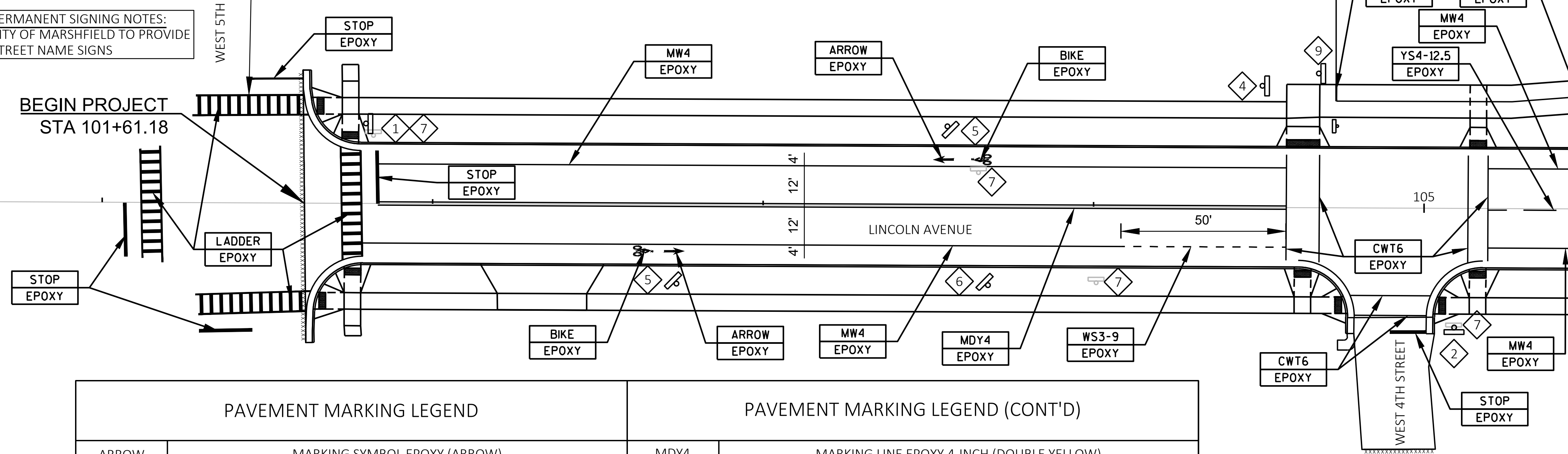
6 SPEED LIMIT 25 R2-1 24"X30"

7 SALVAGE EXISTING SIGN AND SUPPORT

9 STOP R1-1 18"X18"

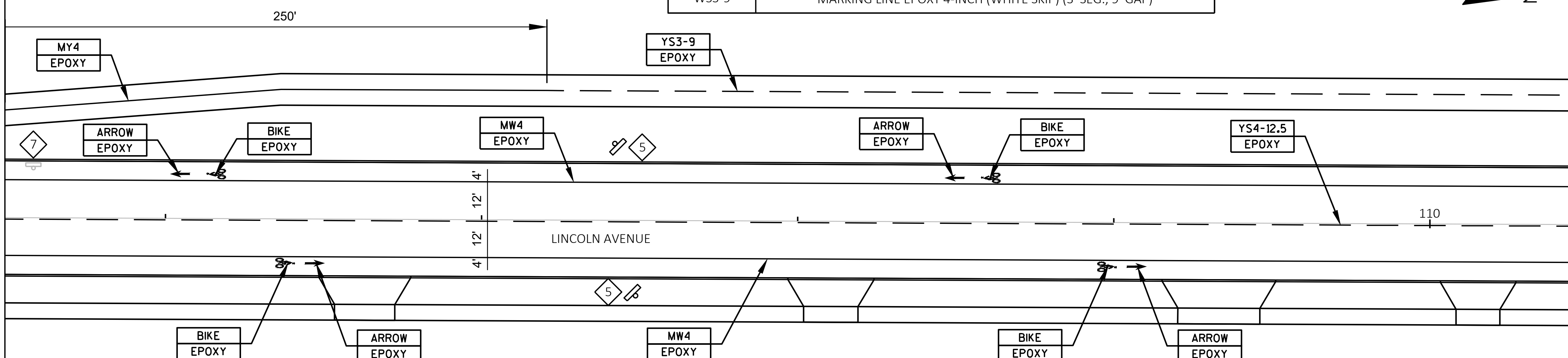
PERMANENT SIGNING NOTES:
CITY OF MARSHFIELD TO PROVIDE STREET NAME SIGNS

INSTALL PAVEMENT MARKING ACROSS WEST 5TH STREET AND SOUTH LINCOLN AVENUE (WEST) IN TWO STAGES UTILIZING A MOVING OPERATION.



PAVEMENT MARKING LEGEND	
ARROW	MARKING SYMBOL EPOXY (ARROW)
BIKE	MARKING SYMBOL EPOXY (BIKER)
CWT6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
EPOXY	EPOXY
LADDER	MARKING LINE CROSSWALK EPOXY LADDER PATTERN 24-INCH (WHITE)
MW4	MARKING LINE EPOXY 4-INCH (WHITE)

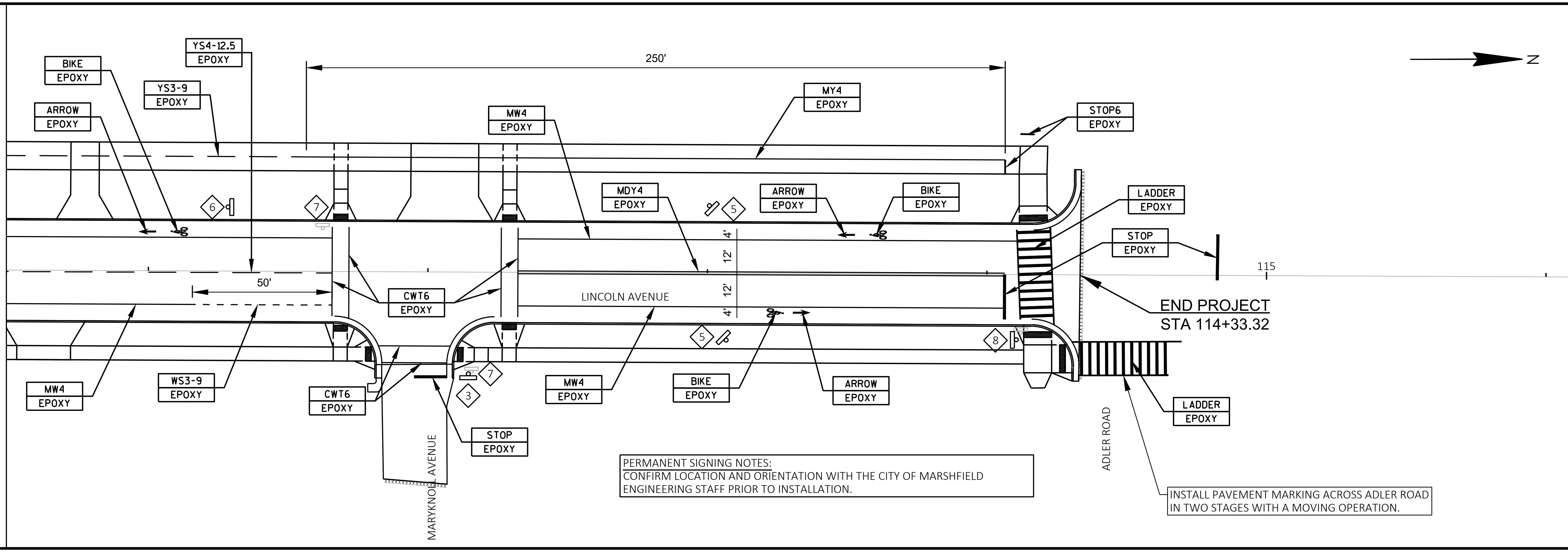
PAVEMENT MARKING LEGEND (CONT'D)	
MDY4	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
MY4	MARKING LINE EPOXY 4-INCH (YELLOW) [ASPHALT PATH]
STOP	MARKING STOP LINE EPOXY 12-INCH (WHITE)
STOP6	MARKING STOP LINE EPOXY 6-INCH (WHITE) [ASPHALT PATH]
YS4-12.5	MARKING LINE EPOXY 4-INCH (YELLOW SKIP) (8' SEG., 24' GAP)
YS3-9	MARKING LINE EPOXY 4-INCH (YELLOW SKIP) (3' SEG., 9' GAP) [ASPHALT PATH]
WS3-9	MARKING LINE EPOXY 4-INCH (WHITE SKIP) (3' SEG., 9' GAP)



PERMANENT SIGNING NOTES:
CONFIRM LOCATION AND ORIENTATION WITH THE CITY OF MARSHFIELD ENGINEERING STAFF PRIOR TO INSTALLATION.

PLAN NO. 3689

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	PAVEMENT MARKING & PERMANENT SIGNING	SHEET 34	E



PERMANENT SIGNING LEGEND:

- 3 — STOP R1-1 36"X36"; LINCOLN AVE D3-1 24"X9"; MARYKNOLL AVE D3-1 24"X9"
- 5 — NO PARKING ANY TIME R7-1D 18"X24"; BIKE LANE R3-17 30"X24"
- 6 — SPEED LIMIT 25 R2-1 24"X30"
- 7 — SALVAGE EXISTING SIGN AND SUPPORT
- 8 — SALVAGE AND REINSTALL EXISTING FLASHING STOP SIGN

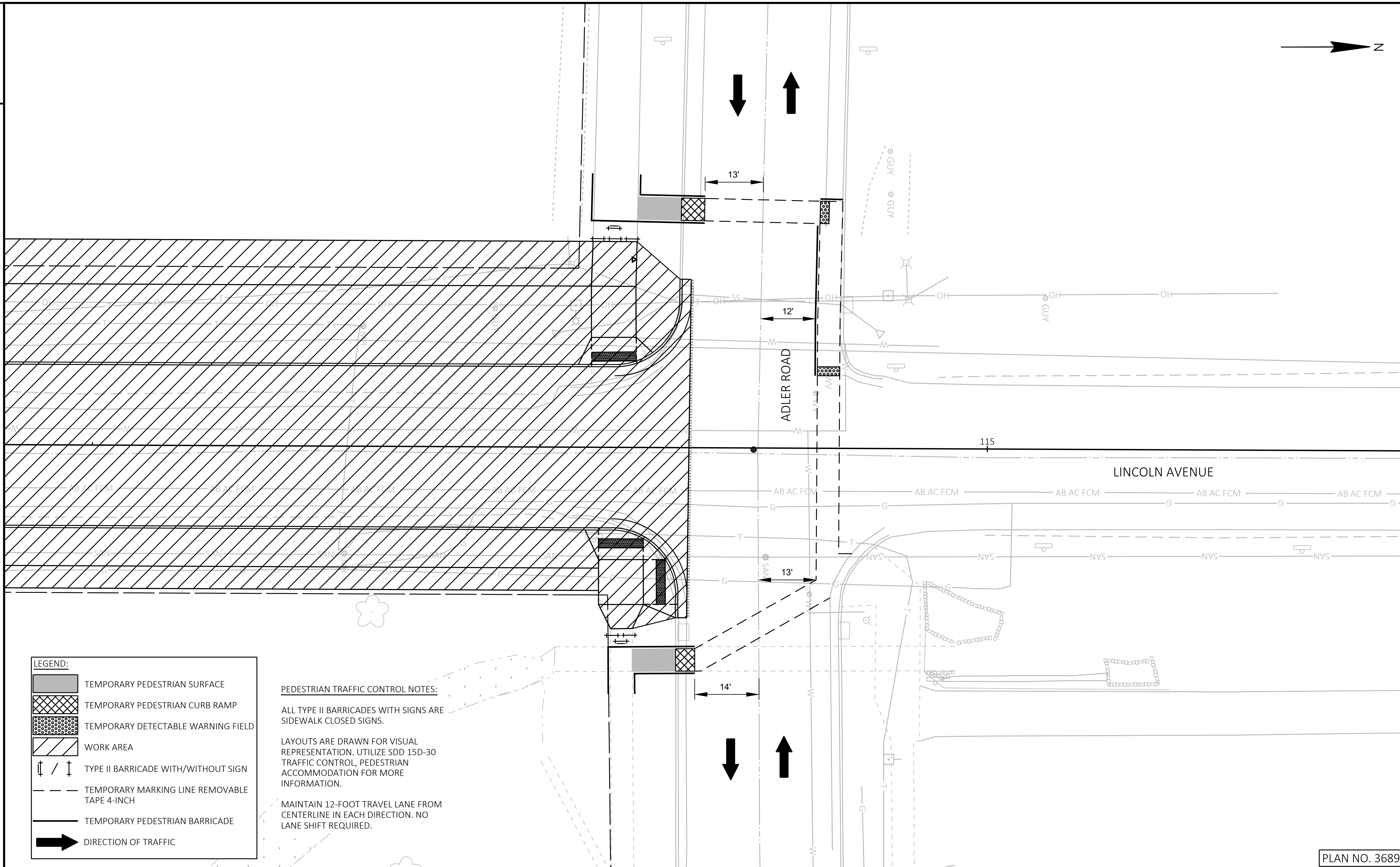
PERMANENT SIGNING NOTES:
CITY OF MARSHFIELD TO PROVIDE STREET NAME SIGNS

PAVEMENT MARKING LEGEND

ARROW	MARKING SYMBOL EPOXY (ARROW)
BIKE	MARKING SYMBOL EPOXY (BIKER)
CWT6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
EPOXY	EPOXY
LADDER	MARKING LINE CROSSWALK EPOXY LADDER PATTERN 24-INCH (WHITE)
MW4	MARKING LINE EPOXY 4-INCH (WHITE)
MDY4	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
MY4	MARKING LINE EPOXY 4-INCH (YELLOW) [ASPHALT PATH]
STOP	MARKING STOP LINE EPOXY 12-INCH (WHITE)
STOP6	MARKING STOP LINE EPOXY 6-INCH (WHITE) [ASPHALT PATH]
YS4-12.5	MARKING LINE EPOXY 4-INCH (YELLOW SKIP) (8' SEG., 24' GAP)
YS3-9	MARKING LINE EPOXY 4-INCH (YELLOW SKIP) (3' SEG., 9' GAP) [ASPHALT PATH]
WS3-9	MARKING LINE EPOXY 4-INCH (WHITE SKIP) (3' SEG., 9' GAP)

PLAN NO. 3689

2



LEGEND:

- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA
- TYPE II BARRICADE WITH/WITHOUT SIGN
- TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

PEDESTRIAN TRAFFIC CONTROL NOTES:

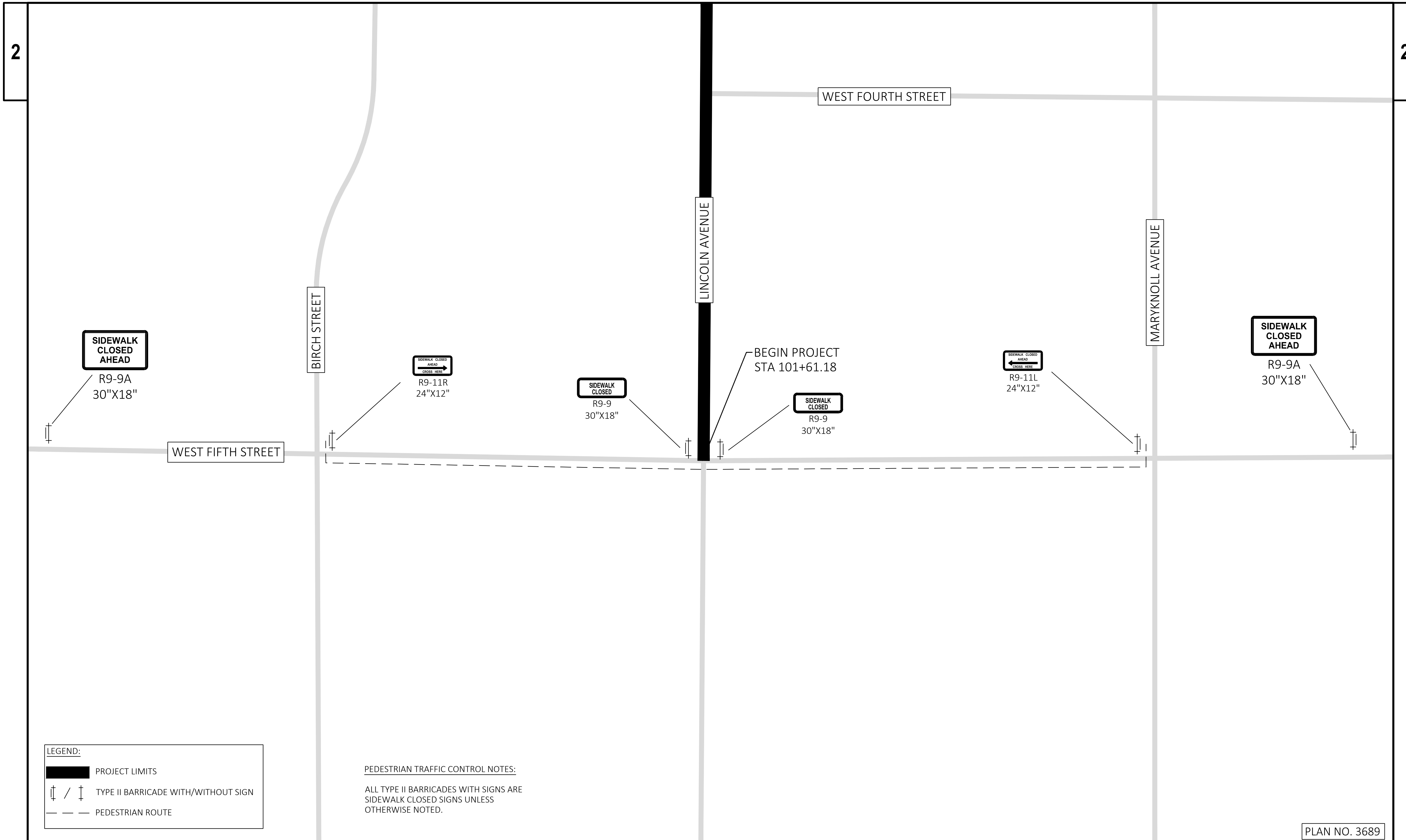
ALL TYPE II BARRICADES WITH SIGNS ARE SIDEWALK CLOSED SIGNS.

LAYOUTS ARE DRAWN FOR VISUAL REPRESENTATION. UTILIZE SDD 15D-30 TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION FOR MORE INFORMATION.

MAINTAIN 12-FOOT TRAVEL LANE FROM CENTERLINE IN EACH DIRECTION. NO LANE SHIFT REQUIRED.

2

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	PEDESTRIAN TRAFFIC CONTROL	SHEET 36	E



LEGEND:

PROJECT LIMITS

TYPE II BARRICADE WITH/WITHOUT SIGN

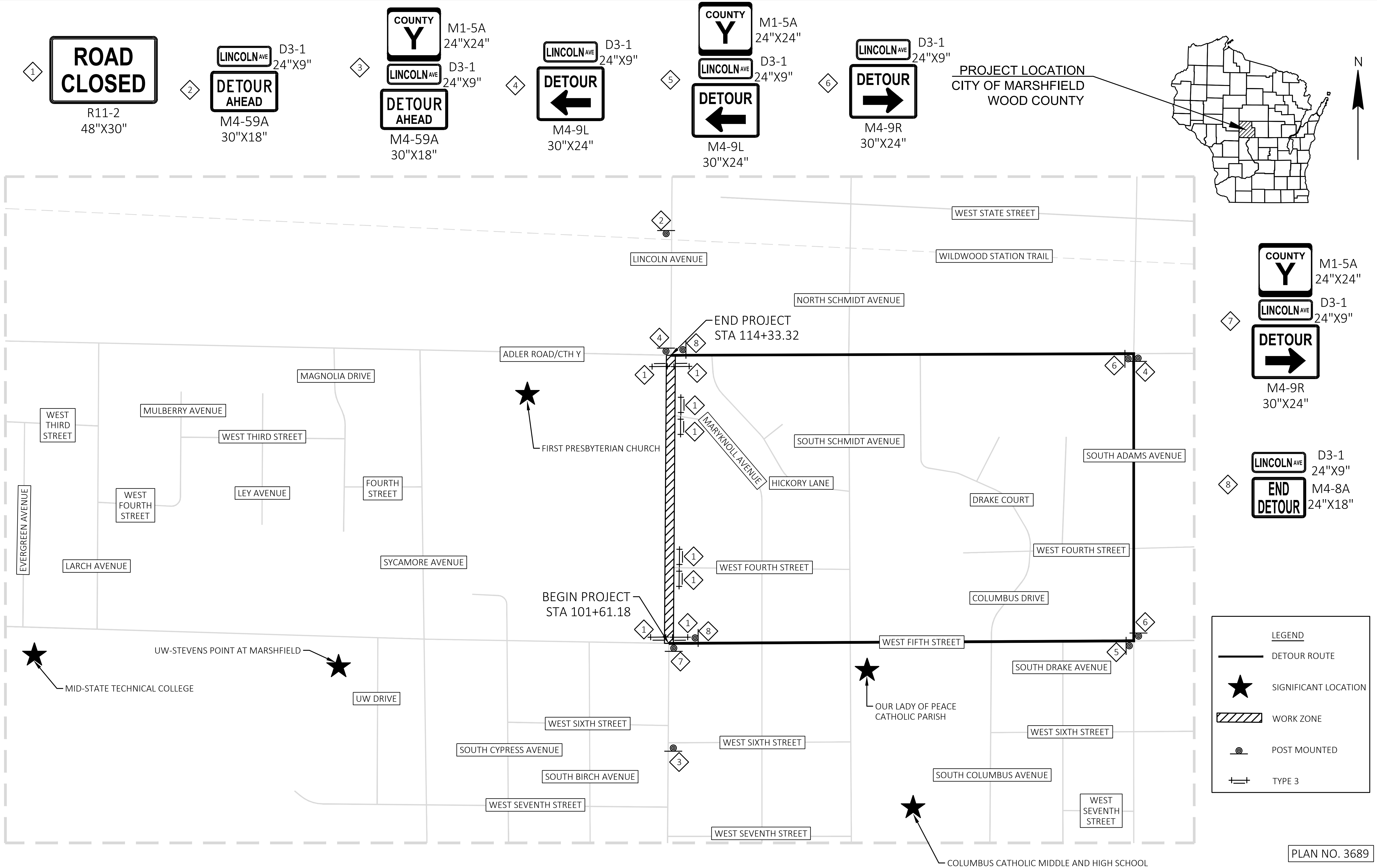
PEDESTRIAN ROUTE

PEDESTRIAN TRAFFIC CONTROL NOTES:

ALL TYPE II BARRICADES WITH SIGNS ARE SIDEWALK CLOSED SIGNS UNLESS OTHERWISE NOTED.

PLAN NO. 3689

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	PEDESTRIAN TRAFFIC CONTROL	SHEET 37	E



PLAN NO. 3689

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	TRAFFIC CONTROL / DETOUR PLAN	SHEET 38	E

6995-12-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	7.000	7.000
0004	203.0100	Removing Small Pipe Culverts	EACH	9.000	9.000
0006	203.0216.S	Abatement of Asbestos Containing Material	EACH	1.000	1.000
0008	204.0100	Removing Concrete Pavement	SY	180.000	180.000
0010	204.0110	Removing Asphaltic Surface	SY	680.000	680.000
0012	204.0155	Removing Concrete Sidewalk	SY	100.000	100.000
0014	204.0185	Removing Masonry	CY	10.000	10.000
0016	204.0220	Removing Inlets	EACH	1.000	1.000
0018	204.0245	Removing Storm Sewer (size) 01. 19x30-Inch	LF	30.000	30.000
0020	205.0100	Excavation Common	CY	8,605.000	8,605.000
0022	213.0100	Finishing Roadway (project) 01. Project: 6995-12-70	EACH	1.000	1.000
0024	305.0110	Base Aggregate Dense 3/4-Inch	TON	200.000	200.000
0026	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	780.000	780.000
0028	310.0110	Base Aggregate Open-Graded	TON	4,120.000	4,120.000
0030	350.0104	Subbase	TON	175.000	175.000
0032	415.0080	Concrete Pavement 8-Inch	SY	4,870.000	4,870.000
0034	416.0610	Drilled Tie Bars	EACH	40.000	40.000
0036	416.0620	Drilled Dowel Bars	EACH	40.000	40.000
0038	455.0605	Tack Coat	GAL	35.000	35.000
0040	465.0105	Asphaltic Surface	TON	255.000	255.000
0042	465.0315	Asphaltic Flumes	SY	2.000	2.000
0044	520.1015	Apron Endwalls for Culvert Pipe 15-Inch	EACH	1.000	1.000
0046	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	1.000	1.000
0048	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	1.000	1.000
0050	520.2012	Culvert Pipe Temporary 12-Inch	LF	18.000	18.000
0052	520.3424	Culvert Pipe Class III-A Non-metal 24-Inch	LF	17.000	17.000
0054	522.2643	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 43x68-Inch	EACH	1.000	1.000
0056	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	262.000	262.000
0058	601.0452	Concrete Curb & Gutter Integral 30-Inch Type D	LF	2,600.000	2,600.000
0060	602.0405	Concrete Sidewalk 4-Inch	SF	6,500.000	6,500.000
0062	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	150.000	150.000
0064	606.0200	Riprap Medium	CY	3.000	3.000
0066	606.0300	Riprap Heavy	CY	6.000	6.000
0068	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	281.000	281.000
0070	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	728.000	728.000
0072	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	88.000	88.000
0074	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	86.000	86.000
0076	611.0530	Manhole Covers Type J	EACH	5.000	5.000
0078	611.0624	Inlet Covers Type H	EACH	8.000	8.000
0080	611.0639	Inlet Covers Type H-S	EACH	2.000	2.000
0082	611.0642	Inlet Covers Type MS	EACH	4.000	4.000
0084	611.1230	Catch Basins 2x3-FT	EACH	8.000	8.000
0086	611.2004	Manholes 4-FT Diameter	EACH	5.000	5.000
0088	611.3230	Inlets 2x3-FT	EACH	1.000	1.000
0090	611.3901	Inlets Median 1 Grate	EACH	4.000	4.000
0092	611.8120.S	Cover Plates Temporary	EACH	7.000	7.000
0094	611.9850.S	Pipe Grates (size) 01. 15-Inch	EACH	1.000	1.000
0096	611.9850.S	Pipe Grates (size) 02. 18-Inch	EACH	1.000	1.000
0098	611.9850.S	Pipe Grates (size) 03. 24-Inch	EACH	1.000	1.000

6995-12-70

Line	Item	Item Description	Unit	Total	Qty
0100	611.9850.S	Pipe Grates (size) 04. 43x68-Inch	EACH	1.000	1.000
0102	612.0106	Pipe Underdrain 6-Inch	LF	151.000	151.000
0104	612.0600	Underdrain Trench	LF	155.000	155.000
0106	612.0806	Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	EACH	1.000	1.000
0108	612.0902.S	Insulation Board Polystyrene (inch) 01. 2-Inch	SY	20.000	20.000
0110	619.1000	Mobilization	EACH	1.000	1.000
0112	624.0100	Water	MGAL	25.000	25.000
0114	625.0100	Topsoil	SY	3,225.000	3,225.000
0116	628.1504	Silt Fence	LF	240.000	240.000
0118	628.1520	Silt Fence Maintenance	LF	120.000	120.000
0120	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0122	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0124	628.2006	Erosion Mat Urban Class I Type A	SY	3,225.000	3,225.000
0126	628.7020	Inlet Protection Type D	EACH	20.000	20.000
0128	628.7504	Temporary Ditch Checks	LF	96.000	96.000
0130	628.7555	Culvert Pipe Checks	EACH	54.000	54.000
0132	628.7560	Tracking Pads	EACH	4.000	4.000
0134	628.7570	Rock Bags	EACH	200.000	200.000
0136	629.0210	Fertilizer Type B	CWT	2.050	2.050
0138	630.0140	Seeding Mixture No. 40	LB	58.000	58.000
0140	630.0500	Seed Water	MGAL	81.000	81.000
0142	634.0812	Posts Tubular Steel 2x2-Inch X 12-FT	EACH	3.000	3.000
0144	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	6.000	6.000
0146	637.2210	Signs Type II Reflective H	SF	75.540	75.540
0148	638.2102	Moving Signs Type II	EACH	8.000	8.000
0150	642.5201	Field Office Type C	EACH	1.000	1.000
0152	643.0300	Traffic Control Drums	DAY	1,000.000	1,000.000
0154	643.0410	Traffic Control Barricades Type II	DAY	750.000	750.000
0156	643.0420	Traffic Control Barricades Type III	DAY	1,750.000	1,750.000
0158	643.0900	Traffic Control Signs	DAY	750.000	750.000
0160	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	250.000	250.000
0162	643.5000	Traffic Control	EACH	1.000	1.000
0164	644.1410	Temporary Pedestrian Surface Asphalt	SF	250.000	250.000
0166	644.1430	Temporary Pedestrian Surface Plate	SF	250.000	250.000
0168	644.1601	Temporary Pedestrian Curb Ramp	DAY	360.000	360.000
0170	644.1605	Temporary Pedestrian Detectable Warning Field	SF	20.000	20.000
0172	644.1810	Temporary Pedestrian Barricade	LF	50.000	50.000
0174	645.0111	Geotextile Type DF Schedule A	SY	175.000	175.000
0176	645.0120	Geotextile Type HR	SY	9.000	9.000
0178	645.0140	Geotextile Type SAS	SY	5,300.000	5,300.000
0180	645.0240	Geogrid Type MR	SY	350.000	350.000
0182	646.1020	Marking Line Epoxy 4-Inch	LF	3,490.000	3,490.000
0184	646.5020	Marking Arrow Epoxy	EACH	9.000	9.000
0186	646.5220	Marking Symbol Epoxy	EACH	9.000	9.000
0188	646.6020	Marking Stop Line Epoxy 12-Inch	LF	120.000	120.000
0190	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	355.000	355.000
0192	646.7520	Marking Crosswalk Epoxy Block Style 24-Inch	LF	420.000	420.000
0194	650.4000	Construction Staking Storm Sewer	EACH	20.000	20.000
0196	650.4500	Construction Staking Subgrade	LF	1,273.000	1,273.000

Line	Item	Item Description	Unit	Total	6995-12-70 Qty
0198	650.5000	Construction Staking Base	LF	82.000	82.000
0200	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	265.000	265.000
0202	650.6000	Construction Staking Pipe Culverts	EACH	1.000	1.000
0204	650.7000	Construction Staking Concrete Pavement	LF	1,273.000	1,273.000
0206	650.9000	Construction Staking Curb Ramps	EACH	12.000	12.000
0208	650.9911	Construction Staking Supplemental Control (project) 01. Project 6995-12-70	EACH	1.000	1.000
0210	650.9920	Construction Staking Slope Stakes	LF	1,273.000	1,273.000
0212	690.0150	Sawing Asphalt	LF	245.000	245.000
0214	690.0250	Sawing Concrete	LF	190.000	190.000
0216	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	1,461.000	1,461.000
0218	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	600.000	600.000
0220	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,200.000	1,200.000
0222	SPV.0030	Special 01. Fertilizer for Lawn Type Turf	CWT	2.050	2.050
0224	SPV.0060	Special 01. Water Valve 6-Inch	EACH	3.000	3.000
0226	SPV.0060	Special 02. Water Valve 8-Inch	EACH	8.000	8.000
0228	SPV.0060	Special 03. Fire Hydrant	EACH	3.000	3.000
0230	SPV.0060	Special 04. Bend 90 Degree	EACH	1.000	1.000
0232	SPV.0060	Special 05. Reducer 8-Inch x 6-Inch	EACH	4.000	4.000
0234	SPV.0060	Special 06. Tee 8-Inch x 6-Inch	EACH	3.000	3.000
0236	SPV.0060	Special 07. Tee 8-Inch x 8-Inch	EACH	4.000	4.000
0238	SPV.0060	Special 08. Tee 12-Inch x 12-Inch	EACH	1.000	1.000
0240	SPV.0060	Special 09. Connect to Existing	EACH	5.000	5.000
0242	SPV.0060	Special 10. Water Main Offset (8-Inch)	EACH	2.000	2.000
0244	SPV.0060	Special 11. Water Service Corporation Stop/Connection 1-Inch	EACH	8.000	8.000
0246	SPV.0060	Special 12. Water Service Curb Stop and Box 1-Inch	EACH	8.000	8.000
0248	SPV.0060	Special 13. Hydrant Assembly Removal	EACH	1.000	1.000
0250	SPV.0060	Special 14. Water Valve Removal	EACH	1.000	1.000
0252	SPV.0060	Special 15. Water Main Abandonment	EACH	1.000	1.000
0254	SPV.0060	Special 16. Storm Manhole and Catch Basin Adjustment/Chimney w/Plastic Rings	EACH	19.000	19.000
0256	SPV.0060	Special 17. Sanitary Manhole Adjustment/Chimney w/Plastic Rings	EACH	3.000	3.000
0258	SPV.0060	Special 18. Sanitary Manhole Frame and Cover, Type JM	EACH	3.000	3.000
0260	SPV.0060	Special 19. 8-Inch x 6-Inch Saddle Wye on Lined Main	EACH	11.000	11.000
0262	SPV.0060	Special 20. Abandon Cut-Out on Lined Main	EACH	1.000	1.000
0264	SPV.0060	Special 21. Connect to Existing Sanitary Lateral	EACH	9.000	9.000
0266	SPV.0060	Special 22. Cap and Mark New Sanitary Lateral	EACH	2.000	2.000
0268	SPV.0060	Special 23. Seal (Bulkhead) Existing Abandoned Asbestos-Cement Force Main	EACH	1.000	1.000
0270	SPV.0060	Special 24. Adjust Force Main Tracer Wire Box/Locator Station	EACH	3.000	3.000
0272	SPV.0060	Special 25. Remove and Replace (Owner Provided) Sanitary Manhole (#U5)	EACH	1.000	1.000
0274	SPV.0060	Special 26. Remove and Replace (Owner Provided) Sanitary Manhole (#U6)	EACH	1.000	1.000
0276	SPV.0060	Special 27. Remove and Replace (Owner Provided) Sanitary Manhole (#U7)	EACH	1.000	1.000
0278	SPV.0060	Special 28. Seal (Cap) Existing Abandon Force Main at Valve (STA 102+23)	EACH	1.000	1.000
0280	SPV.0060	Special 29. Construction Staking, Sanitary Sewer	EACH	10.000	10.000
0282	SPV.0060	Special 30. Research and Locate Existing Land Parcel Monuments	EACH	21.000	21.000
0284	SPV.0060	Special 31. Verify and Replace Existing Land Parcel Monuments	EACH	21.000	21.000
0286	SPV.0060	Special 32. Temporary Driveway Access	EACH	2.000	2.000
0288	SPV.0060	Special 33. Cored Tee Connection (to Storm Sewer Main or Structure)	EACH	2.000	2.000
0290	SPV.0060	Special 34. Treat and Seal New Concrete Pavement Joints	EACH	1.000	1.000
0292	SPV.0060	Special 35. Curb Box Frost Sleeve	EACH	8.000	8.000
0294	SPV.0060	Special 36. Biofilter	EACH	1.000	1.000

Line	Item	Item Description	Unit	Total 6995-12-70	Qty
0296	SPV.0060	Special 37. Temporary Water Supply	EACH	1.000	1.000
0298	SPV.0090	Special 01. Water Main 8-Inch D.I.P.	LF	1,465.000	1,465.000
0300	SPV.0090	Special 02. Water Main 12-Inch D.I.P.	LF	8.000	8.000
0302	SPV.0090	Special 03. Hydrant Lead 6-Inch D.I.P.	LF	63.000	63.000
0304	SPV.0090	Special 04. Water Service 1-Inch	LF	232.000	232.000
0306	SPV.0090	Special 05. Construction Staking Water Main	LF	1,473.000	1,473.000
0308	SPV.0090	Special 06. Remove (Existing Non-Asbestos) & Replace, Sanitary Lateral	LF	150.000	150.000
0310	SPV.0090	Special 07. Remove (Existing Asbestos Cement) & Replace, Sanitary Lateral	LF	62.000	62.000
0312	SPV.0090	Special 08. (New Location) Sanitary Lateral, 6-Inch PVC	LF	115.000	115.000
0314	SPV.0090	Special 09. Remove Existing Abandoned 8-Inch Asbestos-Cement Force Main	LF	1,202.000	1,202.000
0316	SPV.0090	Special 10. Pipe Underdrain SICPP (Wrapped-Trench) 6-inch	LF	2,600.000	2,600.000
0318	SPV.0090	Special 11. Marking Stop Line Epoxy 6-Inch	LF	10.000	10.000
0320	SPV.0090	Special 12. PVC Storm Lateral 6-Inch	LF	5.000	5.000
0322	SPV.0165	Special 01. Concrete Sidewalk Reinforced, 6-Inch	SF	940.000	940.000
0324	SPV.0165	Special 02. Concrete Sidewalk Reinforced, 7-Inch	SF	695.000	695.000
0326	SPV.0180	Special 01. Preparing Topsoil for Lawn Type Turf	SY	3,225.000	3,225.000
0328	SPV.0180	Special 02. Concrete Driveway Reinforced 6-Inch	SY	200.000	200.000
0330	SPV.0180	Special 03. Concrete Driveway Reinforced 7-Inch	SY	52.000	52.000
0332	SPV.0180	Special 04. Engineered Soil	SY	50.000	50.000
0334	SPV.0195	Special 01. Screened Breaker Run Stone	TON	4,400.000	4,400.000

3

GRUBBING

STATION	LOCATION	201.0205 GRUBBING STA
CATEGORY CODE 0010		
101+84	RT	1
102+61 - 103+70	LT	2
102+99	RT	1
109+03 - 109+41	LT	1
109+50 - 110+03	RT	2
	TOTALS	**7**

CONCRETE PAVEMENT ITEMS

STATION - STATION	415.0080 CONCRETE PAVEMENT 8-INCH SY	SPV.0060.34 TREAT AND SEAL NEW CONCRETE PAVEMENT JOINTS EACH*	SPV.0180.02 CONCRETE DRIVEWAY REINFORCED 6-INCH SY	SPV.0180.03 CONCRETE DRIVEWAY REINFORCED 7-INCH SY	COMMENTS
CATEGORY CODE 0010					
101+61.18 - 114+33.32	4,870	1	--	--	ROADWAY
101+61.18 - 114+33.32	--	--	200	52	DRIVEWAYS
TOTALS	**4,870**	**1**	**200**	**52**	

* USED FOR ENTIRE PROJECT 6995-12-70

REMOVING ASPHALTIC SURFACE

STATION - STATION	LOCATION	204.0110 SY	COMMENTS
102+33	RT	100	DRIVEWAY
108+11	RT	67	DRIVEWAY
109.29	RT	152	DRIVEWAY
110+03	RT	68	DRIVEWAY
110+63	RT	43	DRIVEWAY
112+05	LT	250	DRIVEWAY
	TOTALS	**680**	

3

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	COMMENTS
CATEGORY CODE 0010			
102+37	RT	1	12" DWY CULVERT PCP
106+63	RT	1	18" DWY CULVERT CMCP
108+11	RT	1	15" DWY CULVERT CMCP
109+33	RT	1	15" DWY CULVERT CMCP
110+16	RT	1	15" DWY CULVERT CMCP
110+62	RT	1	15" DWY CULVERT CMCP
110+77	LT	1	24" DWY CULVERT CMCP
111+96	RT	1	MARYKNOLL AVE CULVERT 15" PCP
112+06	LT	1	24" DWY CULVERT CMCP
	TOTALS	**9**	

REMOVING CONCRETE PAVEMENT

STATION - STATION	LOCATION	204.0100 SY	COMMENTS
101+61.18	CL	100	
109+17	RT	18	DRIVEWAY
110+63	RT	42	DRIVEWAY
114+33.32	CL	20	
	TOTALS	**180**	

REMOVING MASONRY

STATION - STATION	LOCATION	204.0185 CY
PROJECT	LT/RT	10
	TOTALS	**10**

REMOVING INLETS

STATION	LOCATION	204.0220 REMOVING INLETS EACH
CATEGORY CODE 0010		
101+64	RT	1
	TOTAL	**1**

REMOVING CONCRETE SIDEWALK

STATION - STATION	LOCATION	204.0155 REMOVING CONCRETE SIDEWALK SY	COMMENTS
CATEGORY CODE 0010			
101+62 - 101+82	LT & RT	45	NW & NE QUADS OF 5TH ST
114+08 - 114+33	LT & RT	55	SW & SE QUADS OF ADLER
	TOTAL	**100**	

EARTHWORK SUMMARY

FROM/TO STATION	LOCATION	COMMON EXCAVATION (ITEM #205.0100) (NOTE 1)		SALVAGED / UNUSABLE PAVEMENT MATERIAL (NOTE 4)	AVAILABLE MATERIAL (NOTE 5)	UNEXPANDED FILL	EXPANDED FILL (NOTE 6)	MASS ORDINATE +/- (NOTE 7)	WASTE	COMMENTS
		CUT (NOTE 2)	EBS EXCAVATION (NOTE 3)				FACTOR 1.25			
101+61.18 - 114+33.03	LINCOLN AVENUE	8,129	0	620	0	0	1,342	0	0	
--	WEST 4TH STREET	261	0	0	0	0	0	0	0	
--	MARYKNOLL AVENUE	215	0	0	0	0	0	0	0	
	TOTAL COMMON EXCAVATION	8,605							0	

1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS.
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
3) EBS ECAVATION TO BE BACKFILLED WITH SCREENED BREAKER RUN STONE.
4) SALVAGED/UNUSABLE PAVEMENT MATERIAL = LENGTH * TYPICAL WIDTH * TYPICAL DEPTH
5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
6) EXPANDED FILL. FACTOR = 1.25. EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR
7) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATED A SHORTAGE OF MERTIAL WITHIN THE DEVISION

MISC. SHEET 1

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BASE AGGREGATE AND BREAKER RUN ITEMS

STATION - STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	310.0110 BASE AGGREGATE OPEN-GRADED TON	350.0104 SUBBASE TON	SPV.0195.01 SCREENED BREAKER RUN STONE (SPECIAL) TON	COMMENTS
CATEGORY CODE 0010						
101+61.77 - 114+33.68	--	--	4,120	--	4,140	ROADWAY
101+61.77 - 114+33.68	190	--	--	--	--	SIDEWALK
101+61.77 - 114+33.68	--	520	--	--	--	MULTI-USE PATH
101+61.77 - 114+33.68	10	260	--	175	260	SIDE STREETS
	200	**780**	**4,120**	**175**	**4,400**	

CONCRETE CURB AND GUTTER ITEMS

STATION - STATION	LOCATION	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0452 CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D LF
CATEGORY CODE 0010			
101+61.18 - 114+33.32	LT&RT	--	2,600
101+61.18 - 101+79	LT&RT	70	--
104+62 - 105+18	RT	64	--
111+67 - 112+24	RT	64	--
114+16 - 114+33.32	LT&RT	64	--
	TOTALS	**262**	**2,600**

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CULVERT PIPE ITEMS

STATION	LOCATION	520.3424 CULVERT PIPE CLASS III-A NON-METAL 24-INCH LF	520.1015 APRON ENDWALLS FOR CULVERT PIPE 15-INCH EACH	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH EACH	520.2012 CULVERT PIPE TEMPORARY 12-INCH LF	522.2643 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 43X68-INCH EACH	611.9850.S PIPE GRATES EACH	COMMENTS
CATEGORY CODE 0010									
112+24	RT	--	--	1	--	--	--	1	18-INCH
113+93	RT	--	1	--	--	--	--	1	15-INCH
113+94	RT	17	--	--	1	--	--	1	24-INCH
113+96	RT	--	--	--	--	--	1	1	43X68-INCH
MARY KNOLL		--	-- --	-- --	--	18	--	--	
	TOTALS	**17**	**1**	**1**	**1**	**18**	**1**	**4**	

RIPRAP AND GEOTEXTILE ITEMS

STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	606.0300 RIPRAP HEAVY CY	645.0120 GEOTEXTILE TYPE HR SY	645.0140 GEOTEXTILE TYPE SAS SY	645.0240 GEOFABRIC TYPE MR SY	645.0111 GEOTEXTILE TYPE DF SCHEDULE A SY
CATEGORY CODE 0010							
113+81 - 114+04	RT	3	6	9	5,300	350	175
	TOTALS	**3**	**6**	**9**	**5,300**	**350**	**175**

ASPHALTIC ITEMS

STATION - STATION	LOCATION	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON	465.0315 ASPHALTIC FLUMES SY	COMMENTS
CATEGORY CODE 0010					
104+56 - 114+12	LT	29	205	--	MULTI-USE PATH
104+90	RT	3	25	1	WEST 4TH STREET
111+96	RT	3	25	1	MARYKNOLL AVENUE
		35	**255**	**2**	

WATER

STATION	LOCATION	624.0100 WATER MGAL	COMMENTS
CATEGORY CODE 0010			
PROJECT	LT/RT	25	DUST CONTROL/ COMPACTION
	TOTALS	**25**	

MISC. SHEET 2

3

CONCRETE SIDEWALK ITEMS

STATION - STATION	LOCATION	602.0405 CONCRETE SIDEWALK 4-INCH SF	SPV.0165.01 CONCRETE SIDEWALK REINFORCED, 6-INCH SF	SPV.0165.02 CONCRETE SIDEWALK REINFORCED, 7-INCH SF	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF
CATEGORY CODE 0030					
101+61.18 - 114+33.32	LT	6,500	--	--	--
101+70	LT	--	110	--	10
101+70	RT	--	110	--	10
104+65	LT	--	--	190	20
104+70	RT	--	110	--	10
105+10	RT	--	45	--	10
105+15	LT	--	115	--	10
111+70	LT	--	90	--	10
111+75	RT	--	115	--	10
112+20	RT	--	155	--	10
112+30	LT	--	90	--	10
114+20	LT	--	--	275	20
114+25	RT	--	--	230	20
		6,500	**940**	**695**	**150**

EROSION CONTROL

STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECK EACH	628.7560 TRACKING PADS EACH	628.7570 ROCK BAGS EACH
CATEGORY CODE 0010									
PROJECT	LT/RT	240	120	2	1	96	54	4	200
	TOTALS	**240**	**120**	**2**	**1**	**96**	**54**	**4**	**200**

3

CORED TEE

STATION	LOCATION	SPV.0060.33 CORED TEE CONNECTION (TO STORM SEWER MAIN OR STRUCTURE) EACH
CATEGORY CODE 0010		
101+62	RT	1
110+30	RT	1
	SUBTOTALS	**2**

SAWING ITEMS

LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	COMMENTS
CATEGORY CODE 0010			
101+61.77	--	72	BEGIN PROJECT
101+63	--	5	CURB AND GUTTER
101+76	--	5	SIDEWALK
101+77	--	5	SIDEWALK
102+34	27	--	DRIVEWAY
104+93	22	--	WEST 4TH STREET
108+11	17	--	DRIVEWAY
109+34	26	--	DRIVEWAY
110+16	14	--	DRIVEWAY
110+63	18	--	DRIVEWAY
111+97	23	--	MARYKNOLL AVENUE
112+07	35	--	DRIVEWAY
114+17	10	--	SIDEWALK
114+19	--	5	SIDEWALK
114+32	--	5	CURB AND GUTTER
114+33.68	53	--	END PROJECT
114+50	--	88	STORM SEWER
114+68	--	5	CURB AND GUTTER
TOTALS	**245**	**190**	

LANDSCAPING ITEMS

STATION - STATION	LOCATION	625.0100 TOPSOIL SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	629.0210 FERTILIZER TYPE B CWT	SPV.0030.01 FERTILIZER FOR LAWN TYPE TURF CWT	630.0140 SEEDING MIXTURE NO. 40 LBS	630.0500 SEED WATER MGAL	SPV.0180.01 PREPARING TOPSOIL FOR LAWN TYPE TURF SY
CATEGORY CODE 0010								
101+61.18 - 114+33.32	LT&RT	3,225	3,225	2.05	2.05	58.0	81.0	3,225
	TOTALS	**3,225**	**3,225**	**2.05**	**2.05**	**58.0**	**81.0**	**3,225**

STORM SEWER ITEMS

LOCATION	204.0245 REMOVING STORM SEWER 19X30-INCH LF	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	611.0530 MANHOLE COVERS TYPE J EACH	611.0624 INLET COVERS TYPE H EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0642 INLET COVERS TYPE MS EACH	611.1230 CATCH BASINS 2X3-FT EACH	611.2004 MAHOLES 4-FT DIAMETER EACH	611.3230 INLETS 2X3-FT EACH	612.0106 PIPE UNDERDRAIN 6-INCH LF	SPV.0090.10 PIPE UNDERDRAIN SICPP (WRAPPED-TRENCH) 6-INCH LF	611.3901 INLETS MEDIAN 1 GRATE EACH	612.0806 APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH EACH	SPV.0090.12 PVC STORM LATERAL 6-INCH LF
CATEGORY CODE 0010																	
PROJECT	30	281	728	88	86	5	8	2	4	8	5	1	151	2,600	4	1	5
TOTALS	**30**	**281**	**728**	**88**	**86**	**5**	**8**	**2**	**4**	**8**	**5**	**1**	**151**	**2,600**	**4**	**1**	**5**

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PERMANENT SIGNING

SIGN NUMBER	STATION	LOCATION	SIGN CODE	DESCRIPTION	SIZE	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	638.2102 MOVING SIGNS TYPE II EACH	634.0812 POSTS TUBLAR STEEL 2x2-INCH x 12-FT EACH	634.0812 POSTS TUBLAR STEEL 2x2-INCH x 14-FT EACH	COMMENTS
CATEGORY CODE 0010										
100	101+82	LT	R1-1	STOP	36"X36"	5.18	1	--	--	
101	103+56	LT	R7-1D	NO PARKING	18"X24"	3.00	--	--	1	
"	"	"	R3-17	BIKE LANE	30"X24"	5.00	--	--	--	MOUNT ON SAME POST AS SIGN 101
102	103+65	LT	--	--	--	--	1	--	--	SALVAGE EXISTING SIGN AND SUPPORT
103	103+68	RT	R7-1D	NO PARKING	18"X24"	3.00	--	--	1	
"	"	"	R3-17	BIKE LANE	30"X24"	5.00	--	--	--	MOUNT ON SAME POST AS SIGN 103
104	104+01	RT	--	--	--	--	1	--	--	SALVAGE EXISTING SIGN AND SUPPORT
105	104+51	LT	--	TRAIL ENDS	24"X12"	2.00	--	1	--	
106	105+09	RT	R1-1	STOP	36"X36"	5.18	1	--	--	
107	105+34	RT	R2-1	SPEED LIMIT 25	24"X30"	5.00	--	1	--	
108	105+58	LT	--	--	--	--	1	--	--	
109	107+42	LT	R7-1D	NO PARKING	18"X24"	3.00	--	--	1	
"	"	"	R3-17	BIKE LANE	30"X24"	5.00	--	--	--	MOUNT ON SAME POST AS SIGN 109
110	107+49	RT	R7-1D	NO PARKING	18"X24"	3.00	--	--	1	
"	"	"	R3-17	BIKE LANE	30"X24"	5.00	--	--	--	MOUNT ON SAME POST AS SIGN 110
111	111+51	LT	R2-1	SPEED LIMIT 25	24"X30"	5.00	--	1	--	
112	111+62	LT	--	--	--	--	1	--	--	SALVAGE EXISTING SIGN AND SUPPORT
113	111+72	LT	R7-1D	NO PARKING	18"X24"	3.00	--	--	1	
"	"	"	R3-17	BIKE LANE	30"X24"	5.00	--	--	--	MOUNT ON SAME POST AS SIGN 113
114	112+15	RT	R1-1	STOP	36"X36"	5.18	1	--	--	
115	112+65	RT	R7-1D	NO PARKING	18"X24"	3.00	--	--	1	
"	"	"	R3-17	BIKE LANE	30"X24"	5.00	--	--	--	MOUNT ON SAME POST AS SIGN 115
116	114+11	RT	--	--	--	--	1	--	--	SALVAGE AND REINSTALL EXISTING FLASHING STOP SIGN
					TOTAL	**75.54**	**8**	**3**	**6**	

FIELD OFFICE

STATION	LOCATION	642.5201 FIELD OFFICE TYPE C EACH
CATEGORY CODE 0010		
PROJECT		1
	TOTALS	**1**

3

INLET PROTECTION ITEMS

STATION	LOCATION	628.7020 INLET PROTECTION TYPE D EACH
CATEGORY CODE 0010		
PROEJCT	LT/RT	20
	SUBTOTALS	**20**

TRAFFIC CONTROL ITEMS

LOCATION	643.0300 DRUMS DAY	643.0410 BARRICADES TYPE II DAY	643.0420 BARRICADES TYPE III DAY	643.0900 SIGNS DAY	643.5000 TRAFFIC CONTROL EACH	644.1605 TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD SF	644.1410 TEMPORARY PEDESTRIAN SURFACE ASPHALT SF	644.1430 TEMPORARY PEDESTRIAN SURFACE PLATE SF	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF
CATEGORY CODE 0010										
101+61.18 - 114+33.32	1,000	750	1,750	750	1	20	250	250	360	50
TOTALS	**1,000**	**750**	**1,750**	**750**	**1**	**20**	**250**	**250**	**360**	**50**

MARKING LINE ITEMS

STATION - STATION	LOCATION	646.1020 EPOXY 4-INCH YELLOW/WHITE LF	646.6020 STOP LINE EPOXY 12-INCH WHITE LF	646.5020 MARKING ARROW EPOXY WHITE EACH	646.5220 MAKRING SYMBOL EPOXY WHITE EACH	646.7420 CROSSWALK EPOXY TRANSVERSE LINE 6-INCH WHITE LF	646.7520 CROSSWALK EPOXY LADDER PATTERN 24-INCH WHITE LF	SPV.0090.11 MARKING STOP LINE EPOXY 6-INCH WHITE LF	643.3150 TEMPORARY MARKNIG LINE REMOVEABLE TAPE 4-INCH WHITE LF
CATEGORY CODE 0010									
101+61.18 - 114+33.32	LT/ RT/CL	3,490	120	9	9	355	420	10	250
	TOTALS	**3,490**	**120**	**9**	**9**	**355**	**420**	**10**	**250**

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CONSTRUCTION STAKING ITEMS

STATION - STATION	LOCATION	650.4000 STORM SEWER EACH	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB GUTTER CURB & GUTTER LF	650.6000 PIPE CULVERTS EACH	650.7000 CONCRETE PAVEMENT LF	650.9000 CURB RAMPS EACH	650.9910 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKES LF	SPV.0060.29 SANITARY SEWER EACH	SPV.0090.05 WATER MAIN LF
CATEGORY CODE 0010												
101+61.18 - 114+33.32	LT/RT/CL	20	1,273	82	265	1	1,273	12	1	1,273	--	--
CATEGORY CODE 0020												
101+61.18 - 114+33.32	LT/RT/CL	--	--	--	--	--	--	--	--	--	10	1,473
	TOTALS	**20**	**1,273**	**82**	**265**	**1**	**1,273**	**12**	**1**	**1,273**	**10**	**1,473**

STORM MANHOLE AND CATCH BASIN ADJUSTMENT

STATION	LOCATION	SPV.0060.16 STORM MANHOLE AND CATCH BASIN ADJUSTMENT/CHIMNEY W/PLASTIC RINGS EACH
CATEGORY CODE 0010		
PROEJCT	LT/RT	19
	SUBTOTALS	**19**

3

DRILLED BARS

STATION - STATION	LOCATION	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH
CATEGORY CODE 0010			
6995-12-70	LT & RT	40	40
	TOTAL	**40**	**40**

TEMPORARY DRIVEWAY

STATION	LOCATION	SPV.0060.32 TEMPORARY DRIVEWAY ACCESS EACH	COMMENTS
CATEGORY CODE 0010			
MARY KNOLL		1	COORDINATE WITH
UNDISTRIBUTED		1	ALL RESIDENTS
	SUBTOTALS	**2**	

ENGINEERED SOIL

STATION	LOCATION	612.0600 UNDERDRAIN TRENCH LF	SPV.0180.04 ENGINEERED SOIL SY	SPV.0060.36 BIOFILTER EACH
CATEGORY CODE 0010				
112+25 - 113+79	RT	155	50	--
112+25 - 112+75	RT	--	--	1
	SUBTOTALS	**155**	**50**	**1**

COVER PLATES TEMPORARY

STATION	LOCATION	611.8120.S COVER PLATES TEMPORARY EACH	COMMENTS
CATEGORY CODE 0010			
104+45.50	RT	1	Storm Sewer (MH-7)
105+28.30	LT	1	Sanitary (MH-U7)
108+90.73	RT	1	Storm Sewer (MH-8)
109+18.98	RT	1	Sanitary (MH-U6)
111+50.22	RT	1	Storm Sewer (MH-9)
111+84.70	RT	1	Storm Sewer (MH-10)
111+84.72	RT	1	Sanitary (MH-U5)
	SUBTOTALS	**7**	

EXISTING LAND PARCEL MONUMENTS

STATION	LOCATION	SPV.0060.30 RESEARCH AND LOCATE EACH	SPV.0060.31 VERIFY AND REPLACE EACH
CATEGORY CODE 0010			
103+27	LT	1	1
103+27	LT	1	1
103+28	RT	1	1
104+60	RT	1	1
105+20	RT	1	1
107+51	RT	1	1
109+01	RT	1	1
110+33	RT	1	1
111+75	LT	1	1
111+75	LT	1	1
112+25	RT	1	1
114+12	RT	1	1
UNDISTRIBUTED		9	9
	SUBTOTALS	**21**	**21**

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PROPOSED WATER SERVICES							
				SPV.0060.11	SPV.0060.12 CURB STOP	SPV.0090.04	SPV.0060.35 CURB BOX
				TAP & CORP, 1"	& BOX, 1"	COPPER, 1"	FROST SLEEVE
ADDRESS		STATION	LOCATION	EACH	EACH	LF	EACH
1701	WEST 5TH STREET	102+06.35	25.00' LT	1	1	18	1
1613	WEST 4TH STREET	105+72.66	25.00' RT	1	1	32	1
313	SOUTH LINCOLN AVENUE	106+63.00	25.00' RT	1	1	28	1
305	SOUTH LINCOLN AVENUE	109+07.68	25.00' RT	1	1	32	1
303	SOUTH LINCOLN AVENUE	109+49.66	25.00' RT	1	1	29	1
		109+58.00	35.00' LT	1	1	32	1
302	SOUTH LINCOLN AVENUE	110+96.32	35.00' LT	1	1	32	1
301	SOUTH LINCOLN AVENUE	111+01.89	25.00' RT	1	1	29	1
PROJECT TOTAL				8	8	232	8

WATER ITEMS

STATION	LOCATION	SPV.0060.13 HYDRANT ASSEMBLY REMOVAL EACH	SPV.0060.14 WATER VALVE REMOVAL EACH	SPV.0060.15 WATER MAIN ABANDONMENT EACH
CATEGORY CODE 0020				
	PROJECT	1	1	1
	SUBTOTALS	**1**	**1**	**1**

3

PROPOSED WATER MAIN								
					SPV.0090.02	SPV.0090.01	SPV.0090.03	
	FROM		TO		12" DIP	8" DIP	6" DIP	
NO.	STATION	LOCATION	STATION	LOCATION	LF	LF	LF	REMARKS:
	101+67.83	8.00' LT	107+00.00	2.77' LT		532		90 BEND TO MATCHLINE
	101+67.83	25.12' RT	101+67.83	8.00' LT		38		Connect to existing - 90 Bend
	104+98.60	8' LT	104+98.60	27.95' RT		76		Connect to existing W. 4th St.
	104+98.60	42.91' RT	105+11.79	42.91' RT			13	HYD LEAD
	107+00.00	2.77' LT	113+00.00	3.64' LT		600		MATCHLINE - MATCHLINE
	109+09.35	3.07' LT	109+09.35	34' RT			31	HYD LEAD
	111+95.24	3.49' LT	111+95.24	70' RT		73.5		Connect to existing Mayrknoll
	111+95.24	42.87' RT	112+14.69	42.87' RT			19	HYD LEAD
	113+00.00	3.64' LT	114+28.33	3.83' LT		128		MATCHLINE - Connect to Existing
	114+22.01	3.82' LT	114+22.01	21.32' LT		17.5		Connection at Adler Avenue
	114+21.98	21.32' LT	114+21.98	24.47' LT	8			Connection at Adler Avenue
PROJECT TOTAL					8	1465	63	

PROPOSED VALVES, FITTINGS, AND HYDRANTS													
			SPV.0060.02	SPV.0060.01							SPV.0060.09		
			VALVE	VALVE	SPV.0060.08	SPV.0060.07	SPV.0060.06	SPV.0060.05	SPV.0060.10	SPV.0060.04	CONNECT		
			& BOX	& BOX	TEE	TEE	TEE	REDUCER			TO	SPV.0060.03	SPV.0060.03
			8"	6"	12"	8"	8" X 6"	8" X 6"	8" VERTICAL	90 DEGREE	EXISTING	7.5' BURY	8.5' BURY
NO	STATION	LOCATION	EACH	EACH	EACH	EACH	EACH	EACH	OFFSET	BEND	EACH	HYDRANT	HYDRANT
	101+67.83	20.12' RT				1		2	1		2		
	101+67.83	9.10' LT								1			
	101+85.43	25' LT	1										
	104+98.60	8' LT	1			1							
	105+11.79	42.91' RT	1	1			1	1	1		1		1
	109+09.35	34.00' LT	1	1			1						1
	111+95.24	3.49' LT	1			1							
	112+14.69	42.87' RT	1	1			1	1			1	1	
	114+22.01	3.82' LT	2			1					1		
	114+21.98	24.47' LT			1								
PROJECT TOTAL			8	3	1	4	3	4	2	1	5	1	2

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SANITARY SEWER ITEMS

STATION	LOCATION	SPV.0060.18 SANITARY MANHOLE FRAME AND COVER TYPE JM EACH	SPV.0060.19 8-INCH X 6-INCH SADDLE WYE ON LINED MAIN EACH	SPV.0060.20 ABANDON CUT-OUT ON LINED MAIN EACH	SPV.0060.21 CONNECT TO EXISTING SANITARY LATERAL EACH	SPV.0060.22 CAP AND MARK NEW SANITARY LATERAL EACH	SPV.0060.23 SEAL (BULKHEAD) EXISTING ABANDON ASBESTOS-CEMENT FORCE MAIN EACH	SPV.0060.24 ADJUST FORCE MAIN TRACER WIRE BOX/LOCATOR STATION EACH	SPV.0090.06 REMOVE (EXISTING NON-ASBESTOS) & REPLACE SANITARY LATERAL LF	SPV.0090.07 REMOVE (EXISTING ASBESTOS CEMENT) & REPLACE SANITARY LATERAL LF
CATEGORY CODE 0020										
102+60	CL	--	1	--	1	--	--	--	1	34
102+70	CL	--	1	--	1	--	--	--	28	--
103+27	LT	--	--	--	--	--	--	1	--	--
104+10	CL	--	1	--	1	--	--	--	38	--
104+35	CL	--	1	--	--	1	--	--	--	--
105+28.30	LT	1	--	--	--	--	--	--	--	--
105+85	RT	--	1	1	1	--	--	--	36	--
106+63	RT	--	1	--	1	--	--	--	9.5	21.5
107+23	LT	--	--	--	--	--	--	1	--	--
109+15	RT	--	1	--	1	--	--	--	9	--
109+18.98	RT	1	--	--	--	--	--	--	--	--
109+46	RT	--	1	--	1	--	--	--	5.5	6.5
109+53	RT	--	1	--	1	--	--	--	12	--
109+58	RT	--	1	--	--	1	--	--	--	--
110+99	RT	--	1	--	1	--	--	--	11	--
111+57	LT	--	--	--	--	--	--	1	--	--
111+84.72	RT	1	--	--	--	--	--	--	--	--
114+25	RT	--	--	--	--	--	1	--	--	--
TOTALS		**3**	**11**	**1**	**9**	**2**	**1**	**3**	**150**	**62**

3

SANITARY SEWER ITEMS

STATION - STATION	LOCATION	SPV.0090.08 (NEW LOCATION) SANITARY LATERAL 6-INCH PVC LF	SPV.0090.09 REMOVE EXISTING ABANDON 8-INCH ASBESTOS-CEMENT FORCE MAIN LF	SPV.0060.25 - SPV.0060.27 REMOVE AND REPLACE (OWNER PROVIDED) SANITARY MANHOLE (U5, U6, U7) EACH	SPV.0060.28 SEAL (CAP) EXISTING ABANDON FORCE MAIN AT VALAVE (STA 102+23) EACH	SPV.0060.17 SANITARY MANHOLE ADJUSTMENT/CHIMNEY W/PLASTIC RINGS EACH	612.0902.S INSULATION BOARD POLYSTYRENE 2-INCH 40 PSI SY
CATEGORY CODE 0020							
102+23 - 114+25		--	1,202	--	--	--	--
102+23	RT	--	--	--	1	--	--
104+35	LT	45	--	--	--	--	--
105+28.30	LT	--	--	1	--	1	--
106+35	RT	--	--	--	--	--	20
109+18.98	RT	--	--	1	--	1	--
109+58	LT/RT	70	--	--	--	--	--
111+84.72	RT	--	--	1	--	1	--
TOTALS		**115**	**1,202**	**3**	**1**	**3**	**20**

ABATEMENT OF ASBESTOS CONTAINING MATERAIL

STATION - STATION	LOCATION	203.0216.S ABATEMENT OF ASBESTOS CONTAINING MATERAIL EACH	COMMENTS
CATEGORY CODE 0020			
6995-12-70	LT & RT	1	ENTIRE PROJECT
TOTAL		**1**	

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R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
6995-12-00	4.01	5

PLAT OF RIGHT OF WAY REQUIRED FOR

SOUTH LINCOLN AVENUE
5TH STREET TO ADLER ROAD (CTH Y)

SOUTH LINCOLN AVENUE	WOOD COUNTY

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE (P.L.)
LOT, TIE, AND OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) — W — (TYPE)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMP. LIMITED EASEMENT AREA
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
BUILDING (TO BE REMOVED)
BRIDGE

PARCEL NUMBER (25)
SECTION CORNER (18, 23, 24, 16, 15, 9)
NOTATION FOR COMBUSTABLE FLUIDS (CAUTION)
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES (CAUTION)

UTILITY NUMBER (40)
R/W MONUMENT
NON-MONUMENTED R/W POINT
FOUND IRON PIN (IP)
VALVE (GAS, WATER, ETC.) (TYPE)
SIGN (SIGN)
OFF-PREMISE SIGN (#1-25, SIGN)

ACCESS CONTROLLED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
NATIONAL GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
PARALLEL OFFSETS

CONVENTIONAL UTILITY SYMBOLS

WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS
ELECTRIC TOWER	

	NON-COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		

CURVE DATA ABBREVIATIONS

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

CONVENTIONAL ABBREVIATIONS

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

NOTES:

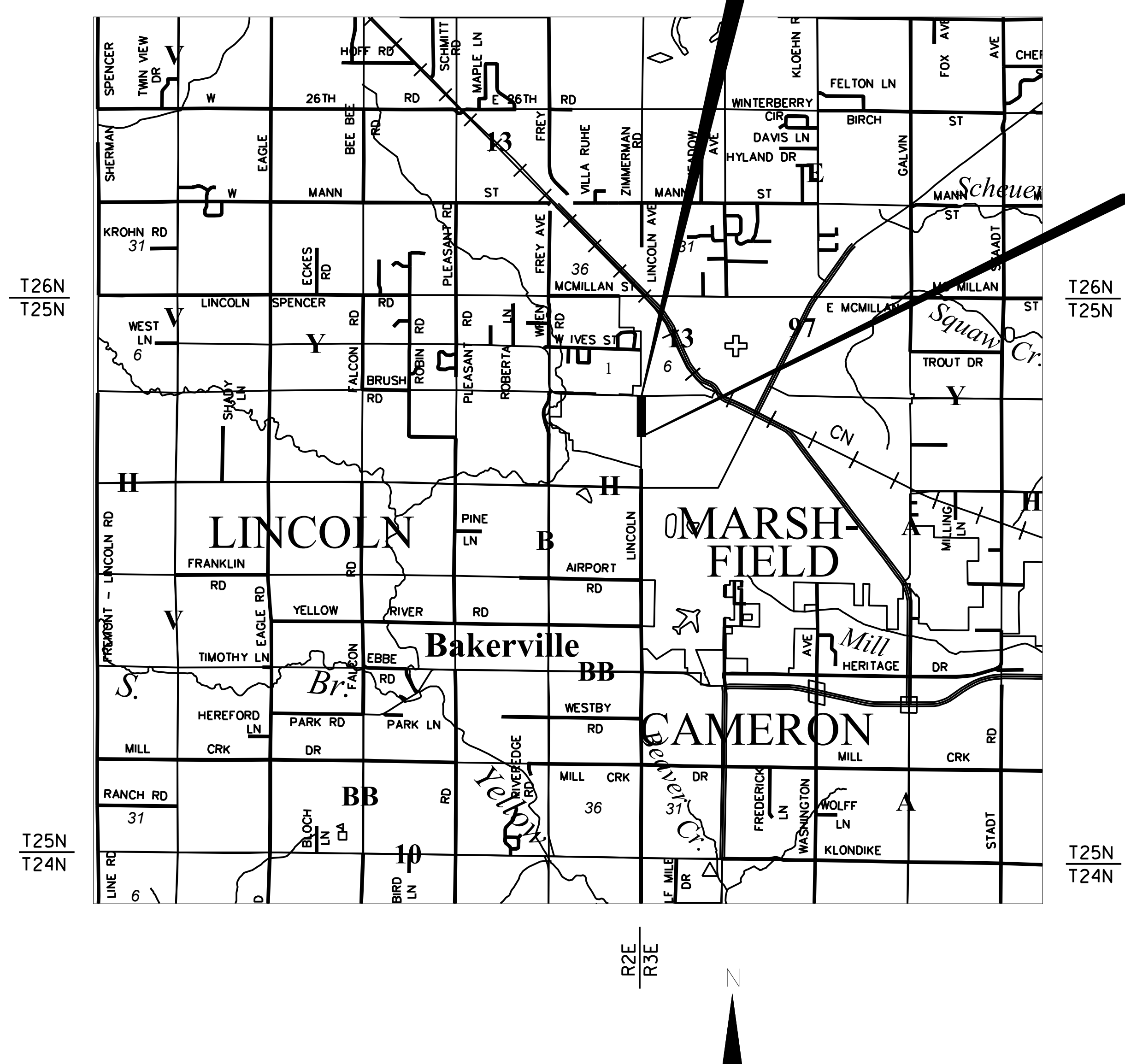
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), WOOD COUNTY, NAD83 2011 IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (1 1/4" O.D. X 18" IRON PIPES) AND ARE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

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

END RELOCATION ORDER
STA. 114+47.77
0.01' NORTH AND 0.35' WEST OF THE NORTHEAST CORNER OF SECTION 12, T25N, R2E
Y 553643.13
X 632400.07

BEGIN RELOCATION ORDER
STA. 101+44.67
1303.38' NORTH AND 1.91' WEST OF THE EAST QUARTER CORNER OF SECTION 12, T25N, R2E
Y 552340.06
X 632390.02



LAYOUT
SCALE 0 2 MILES

TOTAL NET LENGTH OF CENTERLINE = 0.25 MILES

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

APPROVED BY
CITY OF MARSHFIELD

DATE DIRECTOR OF PUBLIC WORKS

ORIGINAL PLANS PREPARED BY
GREMMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Stevens Point • Fond du Lac

3/07/2022
DATE AARON PARKS, PLS

WISCONSIN
AARON PARKS
S-2861
STEVENS POINT
WIS
LAND SURVEYOR

REVISION DATE
07/25/2022

PLAT SHEET NO: 4.01
PS&E SHEET NO: E

SCHEDULE OF LANDS & INTERESTS REQUIRED

AREAS SHOWN ON THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

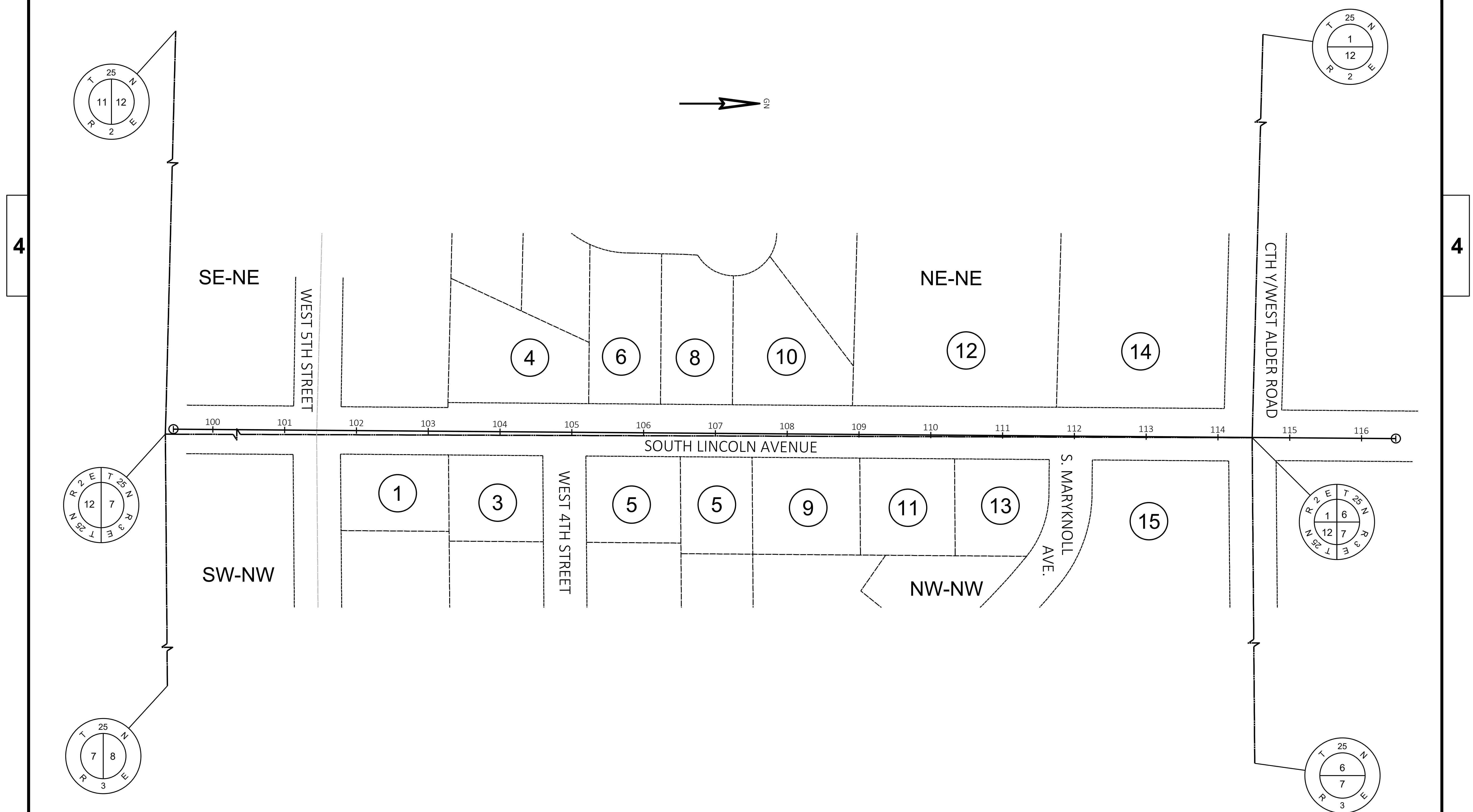
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE COUNTY.

PARCEL NUMBER	SHEET NUMBER	OWNER (S)	INTEREST REQUIRED	TOTAL ACRES EXISTING	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TOTAL ACRES REMAINING	HIGHWAY EASEMENT ACRES	T.L.E. ACRES TEMP.	P.L.E. ACRES PERM.	REMARKS
1	4.04	RUSSELL S. & JENNIFER R. KENNY	TLE	0.37	0.00	0.00	0.00	0.37	0.00	0.03	0.00	3303352A
3	4.04	PAUL R. GUMABON & KATRINA R. STONE	TLE	0.36	0.00	0.00	0.00	0.36	0.00	0.02	0.00	3305755
4	4.04	CITY OF MARSHFIELD	PLE, TLE	0.50	0.00	0.00	0.00	0.50	0.00	0.04	0.002	3307243
5	4.04	YEENAN GREGORY & ELGA R. LIN	TLE	0.36	0.00	0.00	0.00	0.36	0.00	0.02	0.00	3305756
			TLE	0.31	0.00	0.00	0.00	0.31	0.00	0.02	0.00	3305766
			TOTAL	0.67	0.00	0.00	0.00	0.67	0.00	0.04	0.00	
6	4.04	CITY OF MARSHFIELD	FEE, TLE	0.49	0.02	0.00	0.02	0.47	0.00	0.01	0.00	3307242
8	4.04	CITY OF MARSHFIELD	FEE, TLE	0.44	0.02	0.00	0.02	0.42	0.00	0.01	0.00	3307241
9	4.04	RYAN O'LEARY & DOREEN KOSTKA	TLE	0.47	0.00	0.00	0.00	0.47	0.00	0.03	0.00	3305765
10	4.04	CITY OF MARSHFIELD	FEE, PLE & TLE	0.57	0.03	0.00	0.03	0.54	0.00	0.01	0.001	3307240
11	4.05	TIMOTHY J. & ROSEMARIE COEN	TLE	0.41	0.00	0.00	0.00	0.41	0.00	0.07	0.00	3305764
12	4.05	DAVID HERMAN	FEE, PLE & TLE	2.04	0.05	0.00	0.05	1.99	0.00	0.02	0.002	3304325C
13	4.05	JASON D. & KAYLLE R. WIDMANN	TLE	0.38	0.00	0.00	0.00	0.38	0.00	0.03	0.00	3305763
14	4.05	FIRST PRESBYTERIAN CHURCH	FEE, PLE & TLE	9.01	0.04	0.00	0.04	8.97	0.00	0.04	0.005	3304325B
15	4.05	CITY OF MARSHFIELD	TLE	1.94	0.00	0.00	0.00	1.94	0.00	0.11	0.00	3305767
80	4.04 4.05	AMERICAN TRANSMISSION COMPANY (ATC.)	RELEASE OF RIGHTS	---	---	---	---	---	---	---	---	---
81	4.04 4.05	GENERAL TELEPHONE COMPANY OF WISCONSIN	RELEASE OF RIGHTS	---	---	---	---	---	---	---	---	---

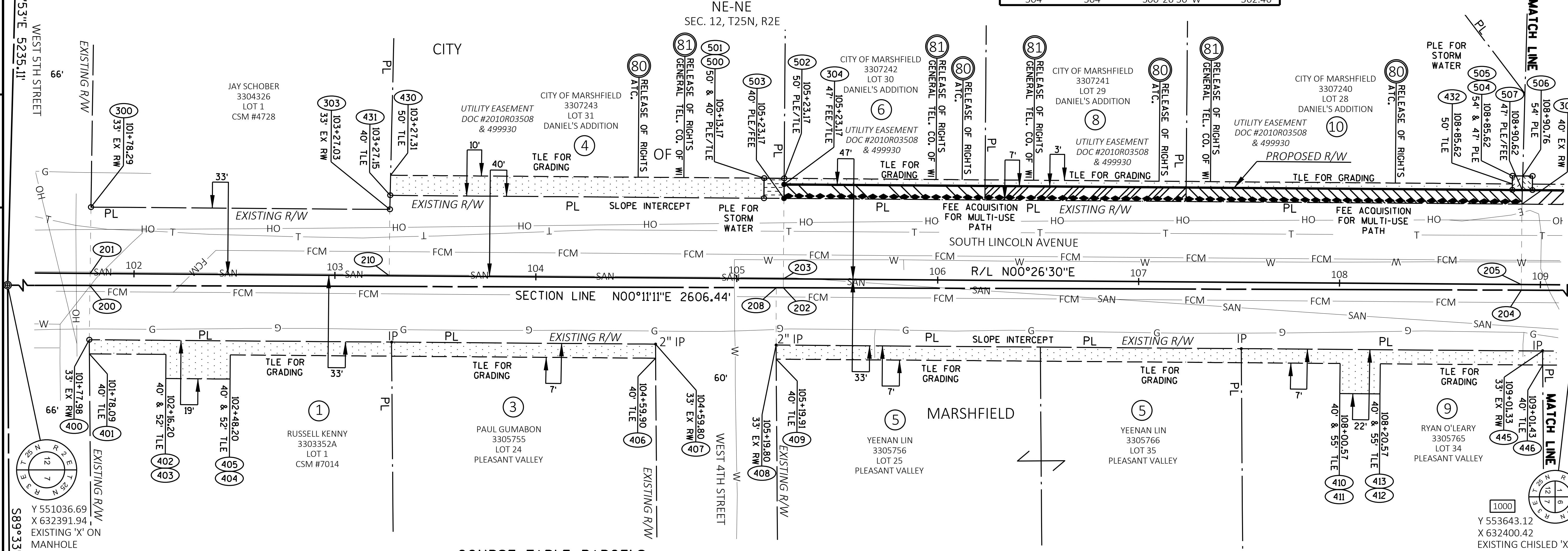
4

4

REVISION DATE	DATE 3/07/2022		HWY: SOUTH LINCOLN AVENUE	R/W PROJECT NUMBER 6995-12-00	PLAT SHEET NO: 4.02
07/25/2022			COUNTY: WOOD	CONSTRUCTION PROJECT NUMBER 6995-12-70	PS&E SHEET NO: E



REVISION DATE	DATE 3/07/2022		HWY: SOUTH LINCOLN AVENUE	R/W PROJECT NUMBER 6995-12-00	PLAT SHEET NO: 4.03
07/25/2022			COUNTY: WOOD	CONSTRUCTION PROJECT NUMBER 6995-12-70	PS&E SHEET NO: E



COURSE TABLE PARCEL 4 TLE

FROM POINT	TO POINT	BEARING	DISTANCE
1001	200	N00°11'11"E	1336.77'
200	201	N89°17'27"W	6.01'
201	210	N00°26'30"E	148.90'
210	303	N89°33'30"W	33.00'
303	431	N88°38'01"W	7.00'
431	430	N88°38'01"W	10.00'
430	501	N00°26'30"E	185.86'
501	500	S89°33'30"E	10.00'
500	431	S00°26'30"W	186.02'

COURSE TABLE PARCEL 4 PLE

FROM POINT	TO POINT	BEARING	DISTANCE
1001	202	N00°11'11"E	1681.85'
202	203	N89°48'49"W	4.47'
203	503	N89°33'30"W	40.00'
503	500	S00°26'30"W	10.00'
500	501	N89°33'30"W	10.00'
501	502	N00°26'30"E	10.00'
502	503	S89°33'30"E	10.00'

COURSE TABLE PARCELS 6, 8 & 10 TLE

FROM POINT	TO POINT	BEARING	DISTANCE
1001	202	N00°11'11"E	1681.85'
202	203	N89°48'49"W	4.47'
203	503	N89°33'30"W	40.00'
503	304	N89°33'30"W	7.00'
304	502	N89°33'30"W	3.00'
502	432	N00°26'30"E	362.46'
432	504	S89°33'30"E	3.00'
504	304	S00°26'30"W	362.46'

COURSE TABLE PARCELS 6, 8 & 10 FEE

FROM POINT	TO POINT	BEARING	DISTANCE
1001	202	N00°11'11"E	1681.85'
202	203	N89°48'49"W	4.47'
203	503	N89°33'30"W	40.00'
503	304	N89°33'30"W	7.00'
304	507	N00°26'30"E	367.46'
507	307	S88°26'26"E	7.00'
307	503	S00°26'30"W	367.32'

COURSE TABLE PARCELS 1 & 3 TLE

FROM POINT	TO POINT	BEARING	DISTANCE
1001	200	N00°11'11"E	1336.77'
200	400	S89°17'27"E	27.00'
400	407	N00°26'30"E	281.82'
407	406	N89°35'27"E	7.00'
406	405	S00°26'30"W	211.70'
405	404	S89°33'30"E	12.00'
404	403	S00°26'30"W	32.00'
403	402	N89°33'30"W	12.00'
402	401	S00°26'30"W	38.11'
401	400	S89°32'46"W	7.00'

COURSE TABLE PARCELS 5 & 9 TLE

FROM POINT	TO POINT	BEARING	DISTANCE
1001	208	N00°11'11"E	1678.34'
208	408	S89°48'49"E	28.52'
408	445	N00°26'30"E	381.53'
445	446	N89°35'27"E	7.00'
446	413	S00°26'30"W	80.86'
413	412	S89°33'30"E	15.00'
412	411	S00°26'30"W	20.00'
411	410	N89°33'30"W	15.00'
410	409	S00°26'30"W	280.66'
409	408	S89°35'27"W	7.00'

COURSE TABLE PARCEL 10 PLE

FROM POINT	TO POINT	BEARING	DISTANCE
1001	204	N00°11'11"E	2049.17'
204	205	N89°48'49"W	2.83'
205	307	N89°33'30"W	40.00'
307	507	N88°26'26"W	7.00'
507	504	S00°26'30"W	5.00'
504	505	N89°33'30"W	7.00'
505	506	N00°26'30"E	5.14'
506	507	S88°26'26"E	7.00'

SEE SHEET 4.05

BASIS FOR EXISTING R/W

ROUTE	SOURCE
SOUTH LINCOLN AVE.	DANIEL'S ADDITION, PLEASANT VALLEY SUBDIVISION AND CSM #7885, CSM #4728 AND CSM #6936
WEST 4TH ST.	PLEASANT VALLEY SUBDIVISION
WEST 5TH ST.	CSM #4728, CSM #7013 AND CSM #7014

NOTE - EXISTING ACCESS CONTROL ALONG SOUTH LINCOLN AVENUE ESTABLISHED FROM DANIEL'S ADDITION TO THE CITY OF MARSHFIELD, AS DOCUMENT #2004R10018.

NOTE - PROPERTY LINE STATIONS AND LOCATIONS ARE COMPUTED FROM INFORMATION OF RECORD AND ARE APPROXIMATE ONLY.

REVISION DATE 07/25/2022	DATE 3/07/2022	SCALE, FEET 0 25' 50'	HWY: SOUTH LINCOLN AVENUE	R/W PROJECT NUMBER 6995-12-00	PLAT SHEET 4.04
	GRID FACTOR N/A		COUNTY: WOOD	CONSTRUCTION PROJECT NUMBER 6995-12-70	PS&E SHEET 53	E

COURSE TABLE PARCELS 12 & 14 FEE

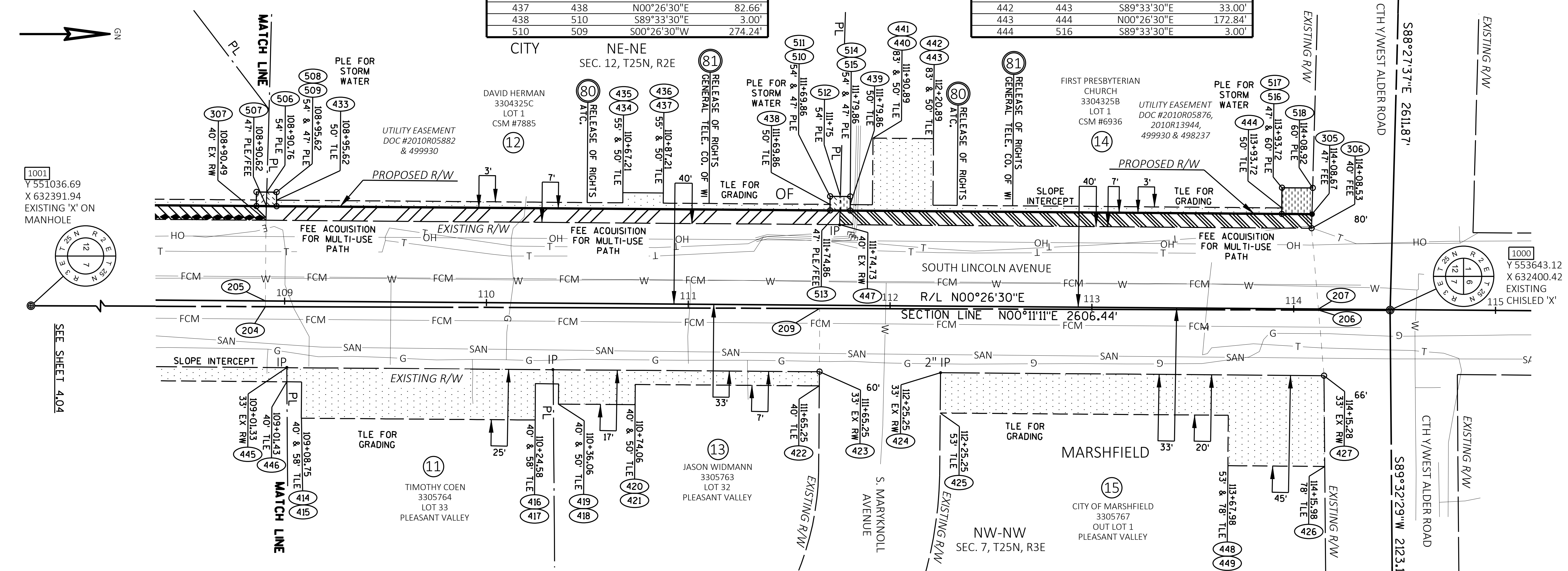
FROM POINT	TO POINT	BEARING	DISTANCE
1000	206	S00°11'11"W	35.49'
206	207	S85°09'51"W	0.51'
207	306	S85°09'51"W	40.17'
306	307	S00°26'30"W	518.05'
307	507	N88°26'26"W	7.00'
507	305	N00°26'30"E	518.04'
305	306	S88°27'37"E	7.00'

COURSE TABLE PARCEL 12 TLE

FROM POINT	TO POINT	BEARING	DISTANCE
1000	204	S00°11'11"W	557.27'
204	205	N89°48'49"W	2.83'
205	307	N89°33'30"W	40.00'
307	507	N88°26'26"W	7.00'
507	509	N00°26'30"E	5.00
509	433	N89°33'30"W	3.00'
433	434	N00°26'30"E	171.58'
434	435	N89°33'30"W	5.00'
435	436	N00°26'30"E	20.00'
436	437	S89°33'30"E	5.00'
437	438	N00°26'30"E	82.66'
438	510	S89°33'30"E	3.00'
510	509	S00°26'30"W	274.24'

COURSE TABLE PARCEL 14 TLE

FROM POINT	TO POINT	BEARING	DISTANCE
1000	206	S00°11'11"W	35.49'
206	207	S85°09'51"W	0.51'
207	306	S85°09'51"W	40.17'
306	305	N88°27'37"W	7.00'
305	516	S00°26'30"W	14.94'
516	515	S00°26'30"W	213.86'
515	439	N89°33'30"W	3.00'
439	440	N00°26'30"E	11.02'
440	441	N89°33'30"W	33.00'
441	442	N00°26'30"E	30.00'
442	443	S89°33'30"E	33.00'
443	444	N00°26'30"E	172.84'
444	516	S89°33'30"E	3.00'



COURSE TABLE PARCELS 11 & 13 TLE

FROM POINT	TO POINT	BEARING	DISTANCE
1000	209	S00°11'11"W	282.66'
209	423	S89°48'49"E	31.39'
423	422	S89°34'09"E	7.00'
422	420	S00°26'30"W	91.20'
420	421	S89°33'30"E	10.00'
421	418	S00°26'30"W	38.00'
418	419	N89°33'30"W	10.00'
419	416	S00°26'30"W	11.48'
416	417	S89°33'30"E	18.00'
417	415	S00°26'30"W	115.83'
415	414	N89°33'30"W	18.00'
414	446	S00°26'30"W	7.31'
446	445	S89°35'27"W	7.00'
445	423	N00°26'30"E	263.92'

COURSE TABLE PARCEL 12 PLE

FROM POINT	TO POINT	BEARING	DISTANCE
1000	206	S00°11'11"W	35.49'
206	207	S85°09'51"W	0.51'
207	306	S85°09'51"W	40.17'
306	305	N88°27'37"W	7.00'
305	513	S00°26'30"W	233.80'
513	510	S00°26'30"W	5.00'
510	511	N89°33'30"W	7.00'
511	512	N00°26'30"E	5.14'
512	513	S88°27'37"E	7.00'
513	509	S00°26'30"W	279.24'
509	507	S00°26'30"W	5.00'
507	506	N88°26'26"W	7.00'
506	508	N00°26'30"E	4.86'
508	509	S89°33'30"E	7.00'

COURSE TABLE PARCEL 14 PLE

FROM POINT	TO POINT	BEARING	DISTANCE
1000	206	S00°11'11"W	35.49'
206	207	S85°09'51"W	0.51'
207	306	S85°09'51"W	40.17'
306	305	N88°27'37"W	7.00'
305	516	S00°26'30"W	14.94'
516	517	N89°33'30"W	13.00'
517	518	N00°26'30"E	15.19'
518	305	S88°27'37"E	13.00'
305	515	S00°26'30"W	228.80'
515	513	S00°26'30"W	5.00'
513	512	N88°27'37"W	7.00'
512	514	N00°26'30"E	4.87'
514	515	S89°33'30"E	7.00'

COURSE TABLE PARCEL 15 TLE

FROM POINT	TO POINT	BEARING	DISTANCE
1000	206	S00°11'11"W	35.49'
206	427	N85°09'51"E	32.63'
427	426	N89°32'29"E	45.01'
426	449	S00°26'30"W	48.00'
449	448	N89°33'30"W	25.00'
448	425	S00°26'30"W	142.73'
425	424	N89°33'30"W	20.00'
424	427	N00°26'30"E	190.02'

BASIS FOR EXISTING R/W

ROUTE	SOURCE
SOUTH LINCOLN AVE.	DANIEL'S ADDITION, PLEASANT VALLEY SUBDIVISION AND CSM #7885, CSM #4728 AND CSM #6936
CTH Y/WEST ADLER RD.	DANIEL'S ADDITION, PLEASANT VALLEY SUBDIVISION AND CSM #6936
SOUTH MARYKNOLL AVE.	PLEASANT VALLEY SUBDIVISION

NOTE - PROPERTY LINE STATIONS AND LOCATIONS ARE COMPUTED FROM INFORMATION OF RECORD AND ARE APPROXIMATE ONLY.

REVISION DATE 07/25/2022	DATE 3/07/2022	SCALE, FEET 0 25' 50'	HWY: SOUTH LINCOLN AVENUE	R/W PROJECT NUMBER 6995-12-00
	GRID FACTOR N/A		COUNTY: WOOD	CONSTRUCTION PROJECT NUMBER 6995-12-70

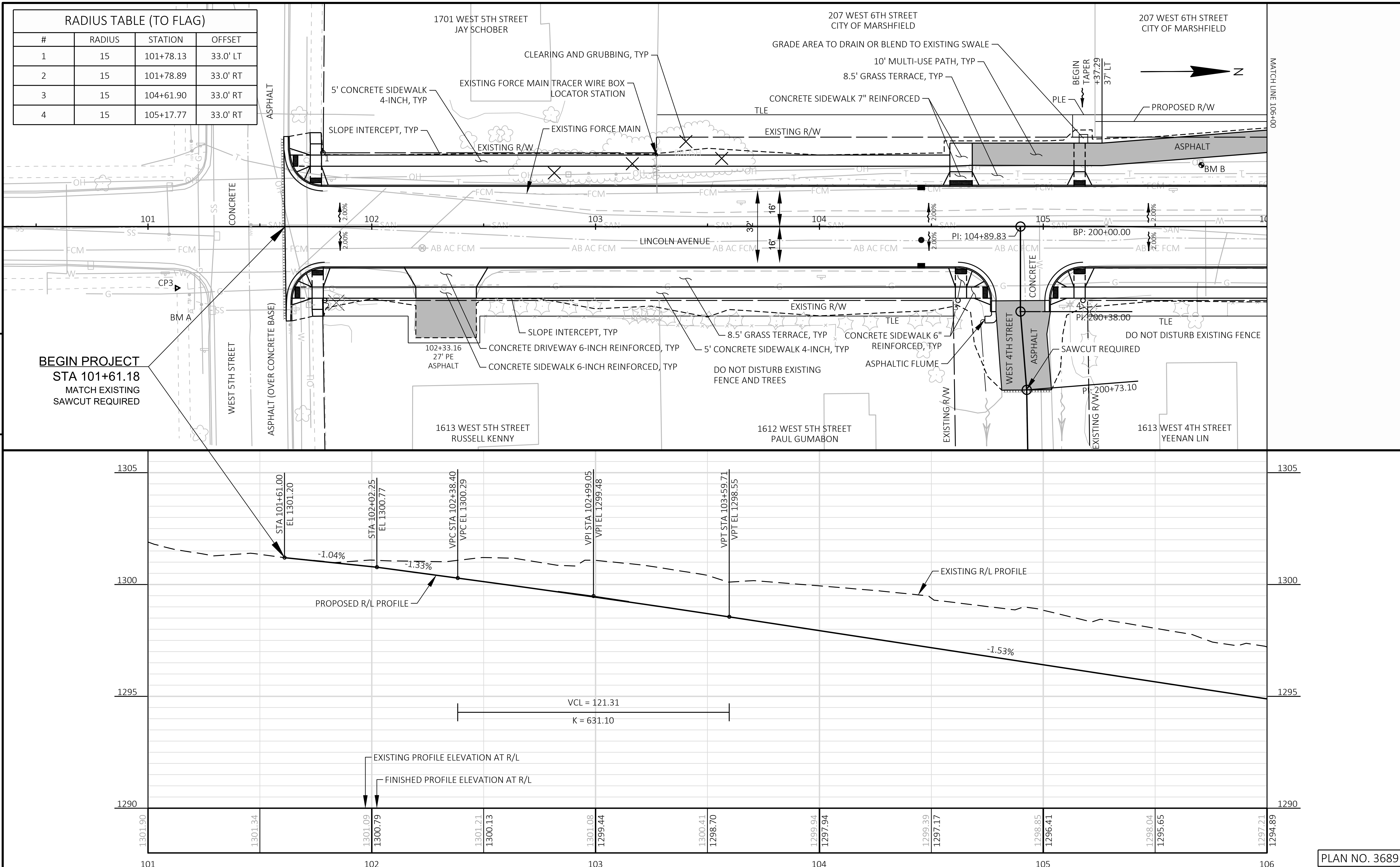
PLAT SHEET 4.05

PS&E SHEET 54

E

FILE NAME : LINCOLN AVE PLAT 7-22-22.DWG
LAYOUT NAME - 4.05
PLOT DATE : 7/27/2022 5:28 PM
PLOT BY : AARON PARKS
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 75

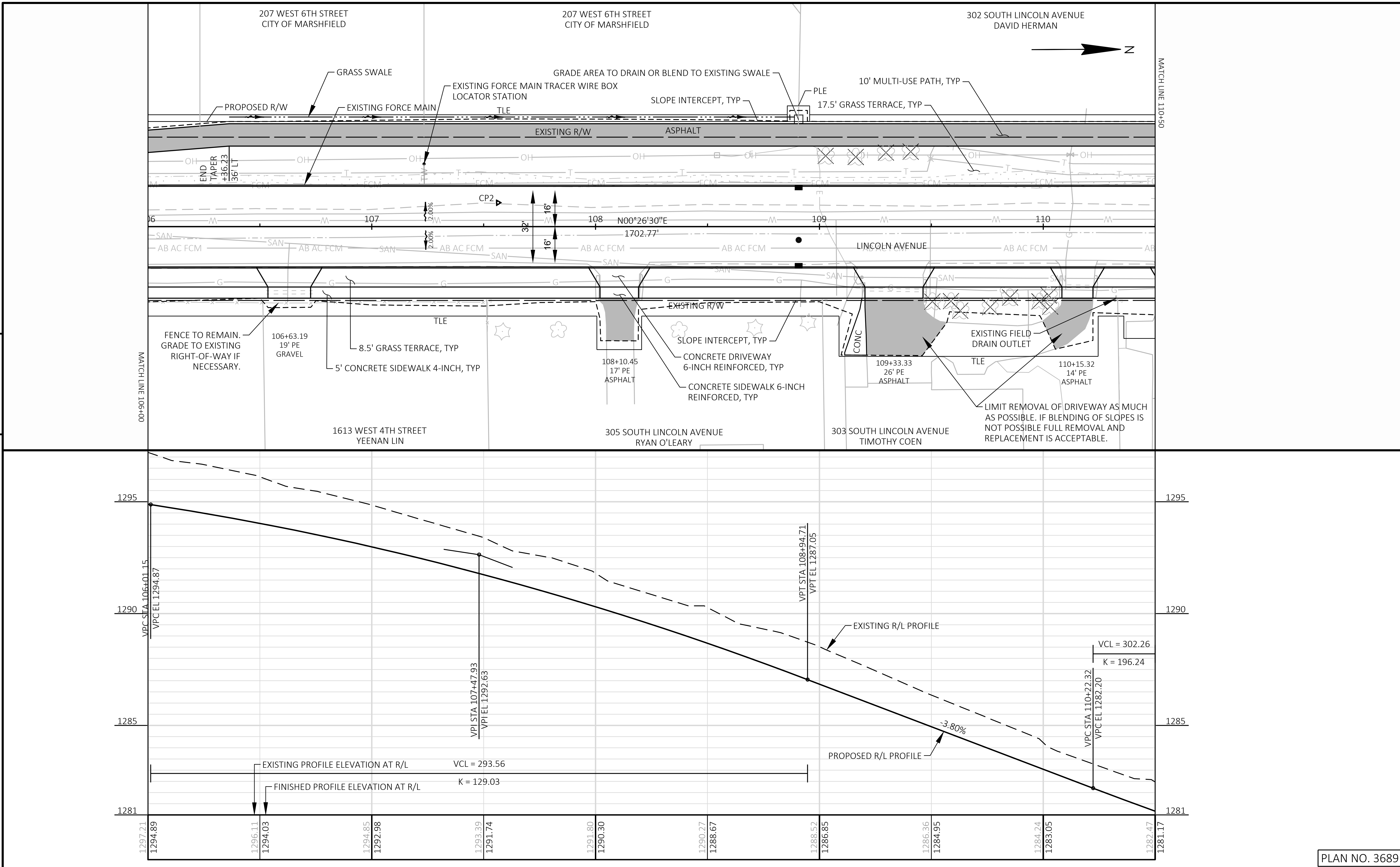
RADIUS TABLE (TO FLAG)			
#	RADIUS	STATION	OFFSET
1	15	101+78.13	33.0' LT
2	15	101+78.89	33.0' RT
3	15	104+61.90	33.0' RT
4	15	105+17.77	33.0' RT



PLAN NO. 3689

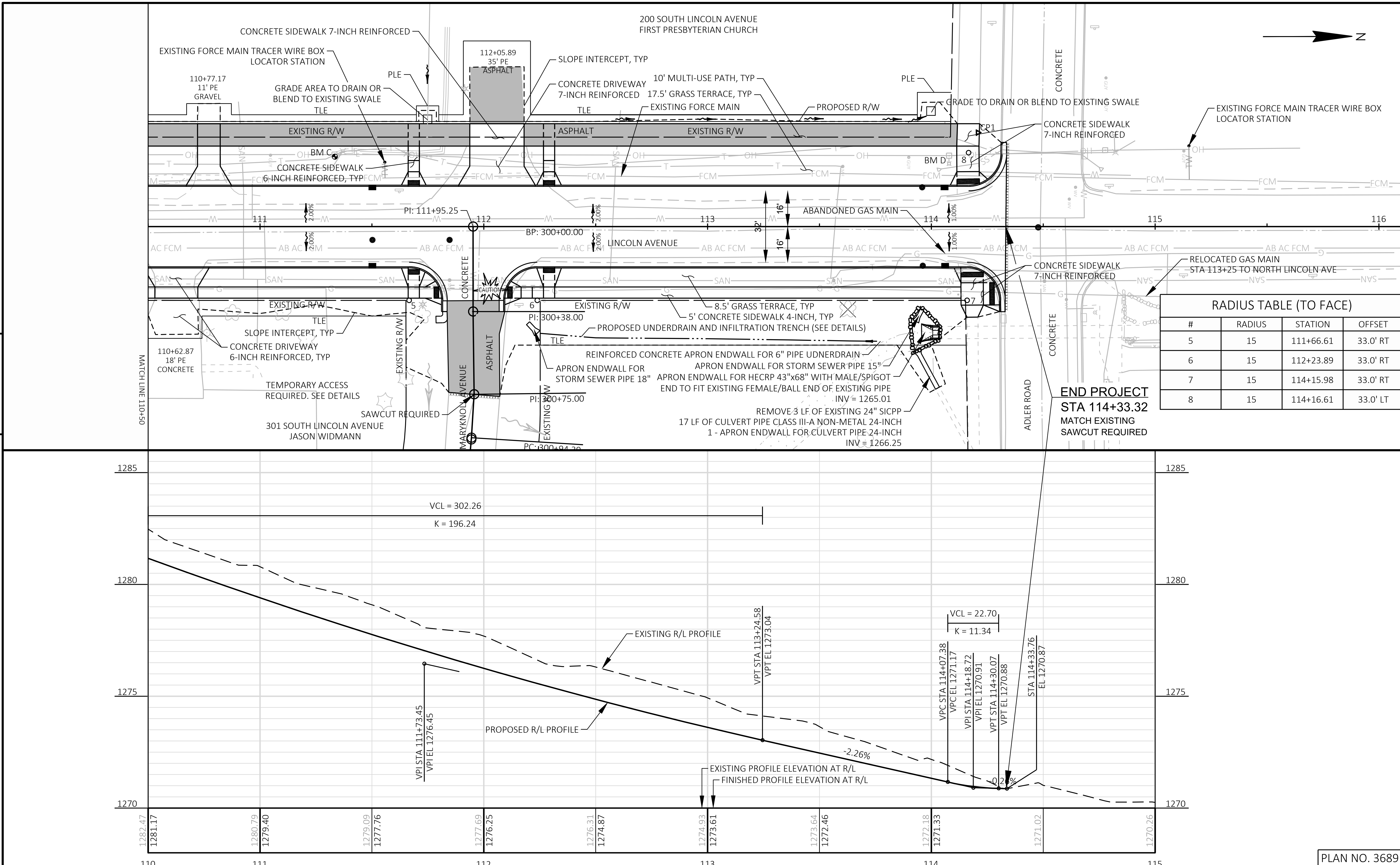
PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	PLAN AND PROFILE: LINCOLN AVENUE	SHEET 55	E

FILE NAME : P:\PROJECTS_CURRENT\WOOD\MARSHFIELD, CITY OF\LINCOLN AVE - 2021\ACAD\SHEETSPLAN\050101_PP\050101_PP-DDK2.DWG
LAYOUT NAME - 13
PLOT DATE : 2/1/2023 2:30 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	PLAN AND PROFILE: LINCOLN AVENUE	SHEET 56	E

FILE NAME : P:\PROJECTS_CURRENT\WOOD\MARSHFIELD, CITY OF\LINCOLN AVE - 2021\ACAD\SHEETSPLAN\050101_PP\050101_PP-DDK2.DWG
LAYOUT NAME - 14
PLOT DATE : 2/1/2023 2:30 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



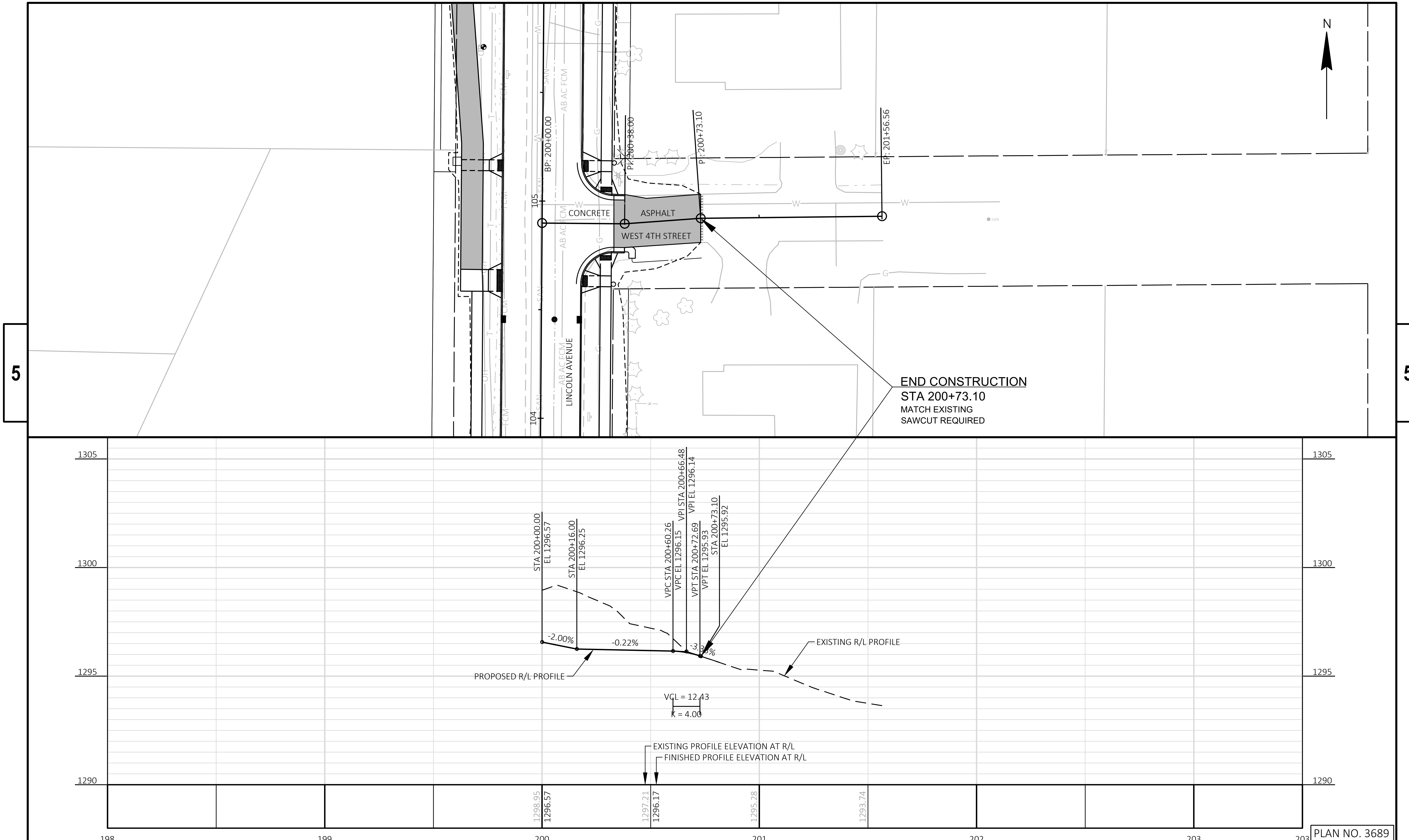
RADIUS TABLE (TO FACE)

#	RADIUS	STATION	OFFSET
5	15	111+66.61	33.0' RT
6	15	112+23.89	33.0' RT
7	15	114+15.98	33.0' RT
8	15	114+16.61	33.0' LT

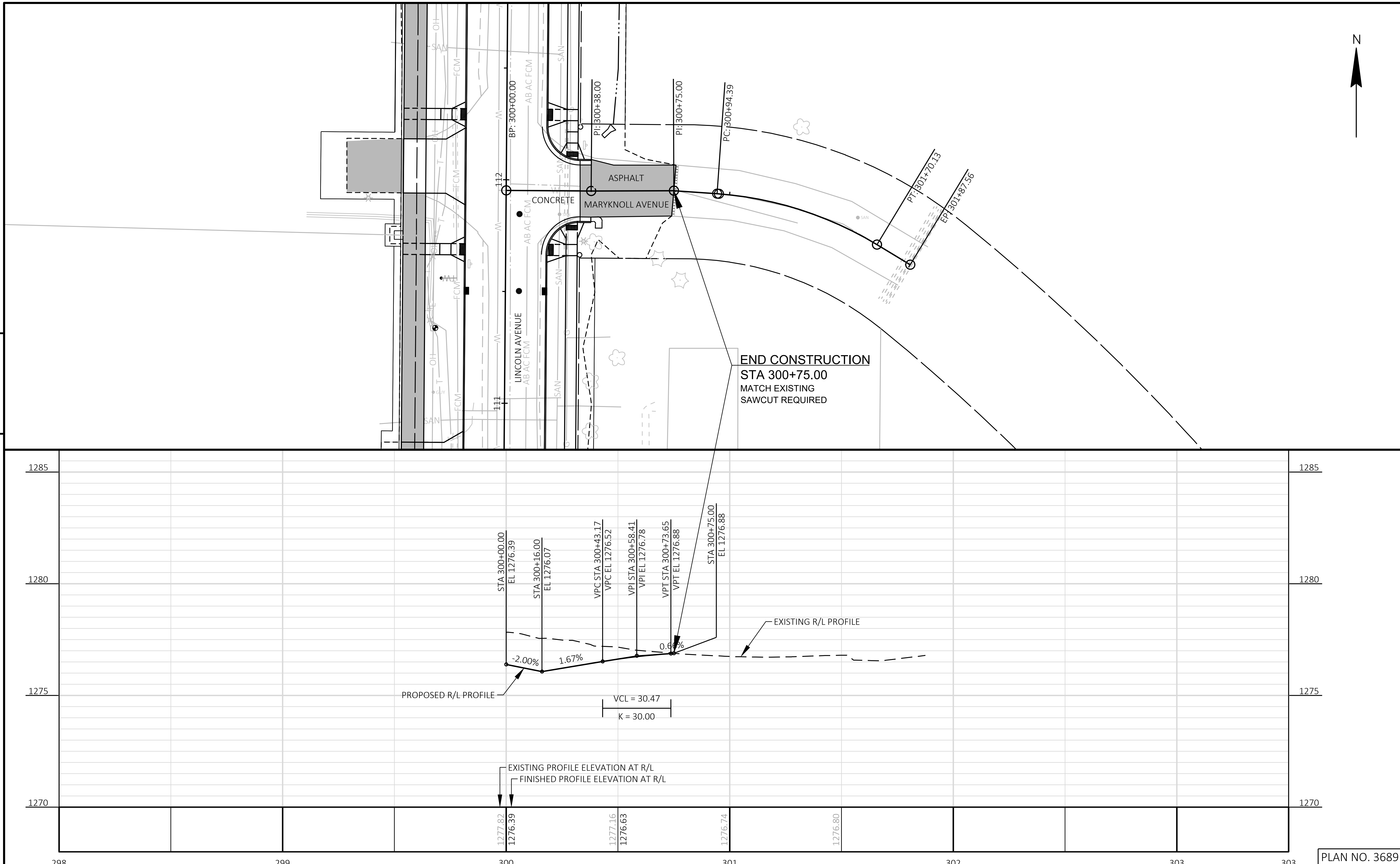
PLAN NO. 3689

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	PLAN AND PROFILE: LINCOLN AVENUE	SHEET 57	E

FILE NAME : P:\PROJECTS_CURRENT\WOOD\MARSHFIELD, CITY OF\LINCOLN AVE - 2021\ACAD\SHEETSPLAN\050101_PP\050101_PP-DDK2.DWG
LAYOUT NAME - 15
PLOT DATE : 2/1/2023 2:30 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	PLAN AND PROFILE: WEST 4TH STREET	SHEET 58 E



PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	PLAN AND PROFILE: MARYKNOLL AVENUE	SHEET 59	E

FILE NAME : P:\PROJECTS_CURRENT\WOOD\MARSHFIELD, CITY OF\LINCOLN AVE - 2021\ACAD\SHEETSPLAN\050101_PP\050101_PP-DDK2.DWG
LAYOUT NAME - 17
PLOT DATE : 2/1/2023 2:30 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A09-02	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B09-03	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-02	INLETS MEDIAN 1 AND 2 GRATE
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-06	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D19-03	DRIVEWAY AND SIDEWALK RAMPS TYPE Z
08D20-01	DRIVEWAYS WITH CURB & GUTTER RETURNS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F06-04	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-11	URBAN DOWELED CONCRETE PAVEMENT
13C18-07A	CONCRETE PAVEMENT JOINTING
13C18-07B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-07C	CONCRETE PAVEMENT JOINT TYPES
13C18-07D	CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES
13C18-07F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C07-15E	PAVEMENT MARKING FOR BIKE LANES
15C08-22A	LONGITUDINAL MARKING (MAINLINE)
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C29-07A	BICYCLE LANE MARKING
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-05A	PAVEMENT MARKING (INTERSECTIONS)
15D30-08A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-08C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

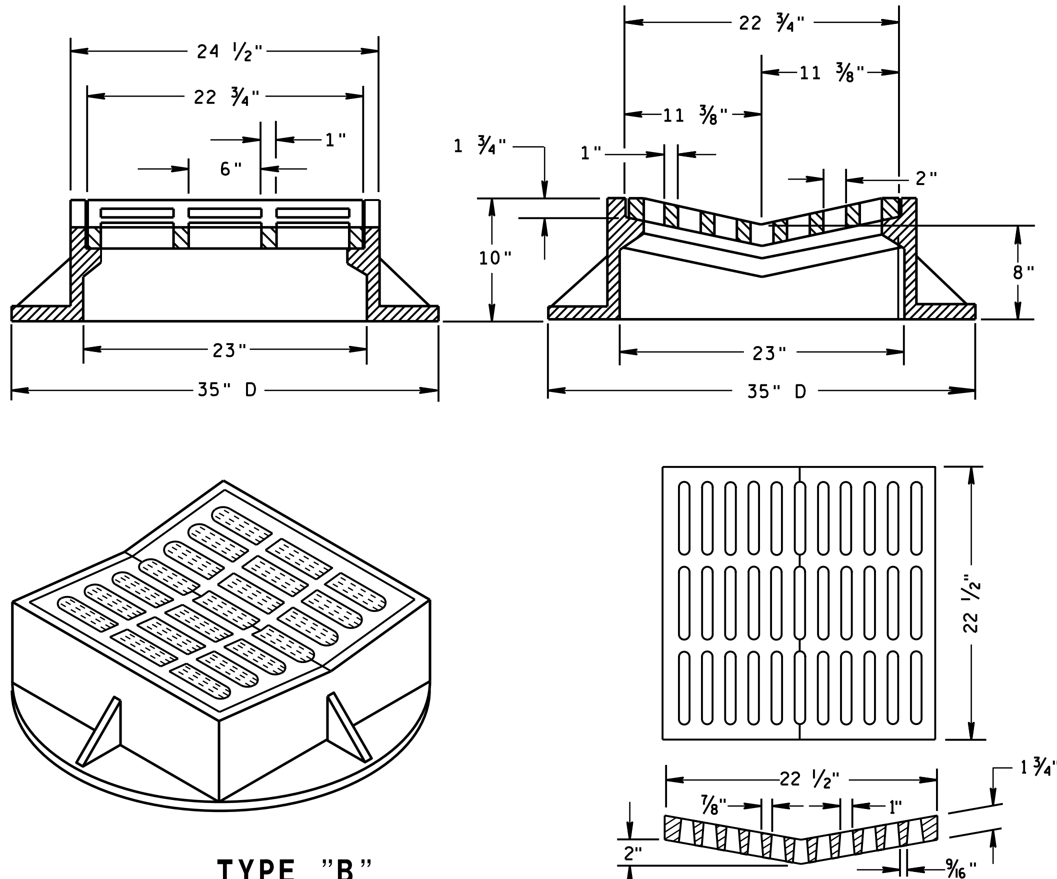
6

GENERAL NOTES

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

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

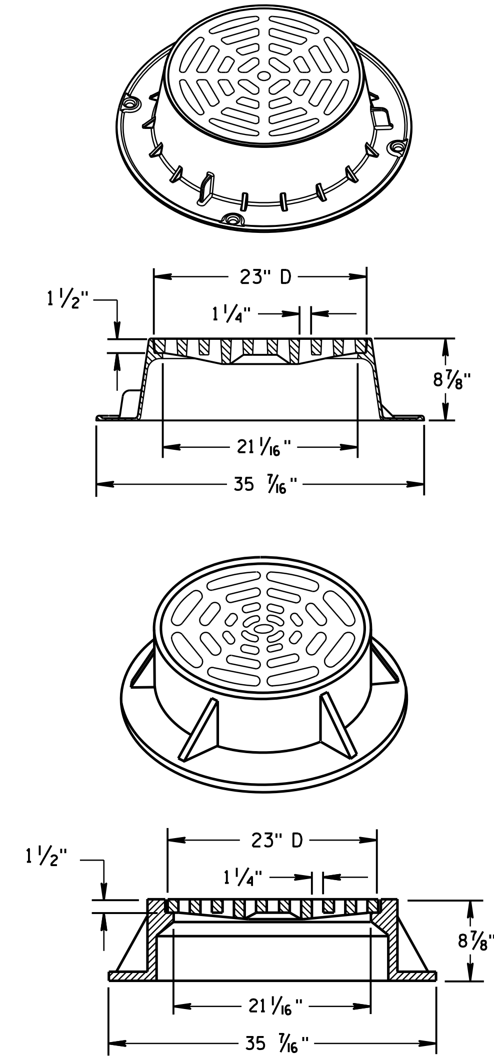


TYPE "B"

ALTERNATIVE GRATE FOR TYPE "B" COVER

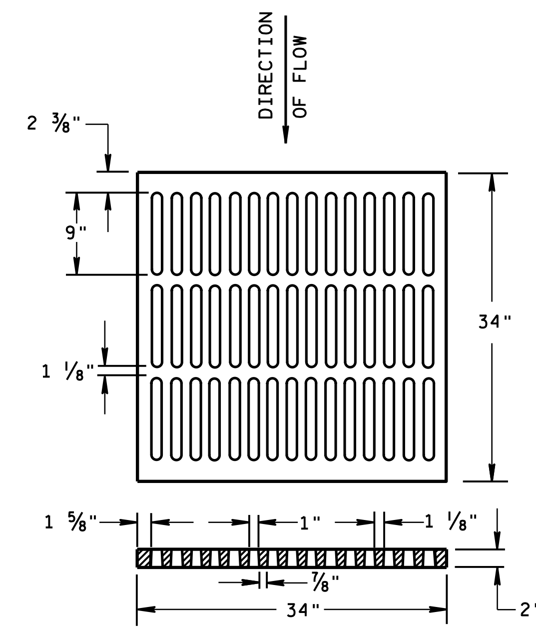
USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.

NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

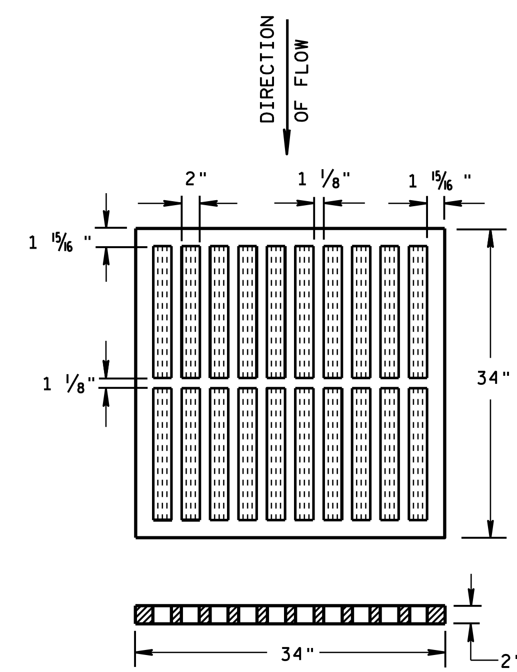
NOTE: EITHER CASTING IS ACCEPTABLE



ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED

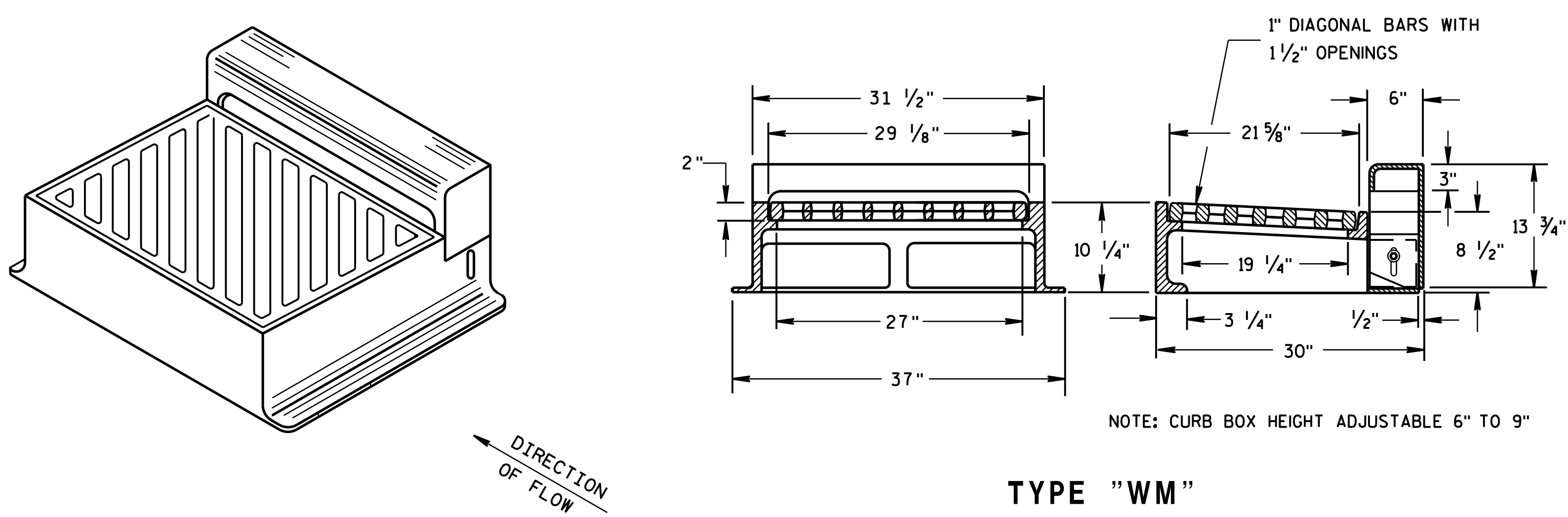
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON DRAINAGE TABLE



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.

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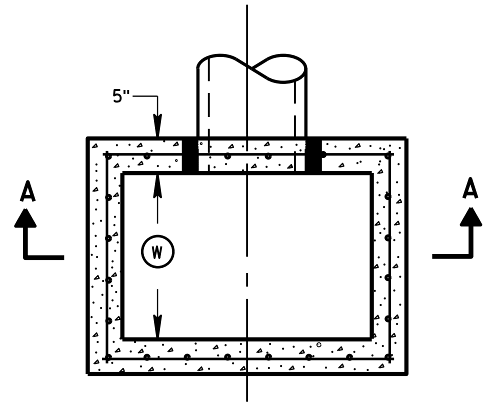
INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM

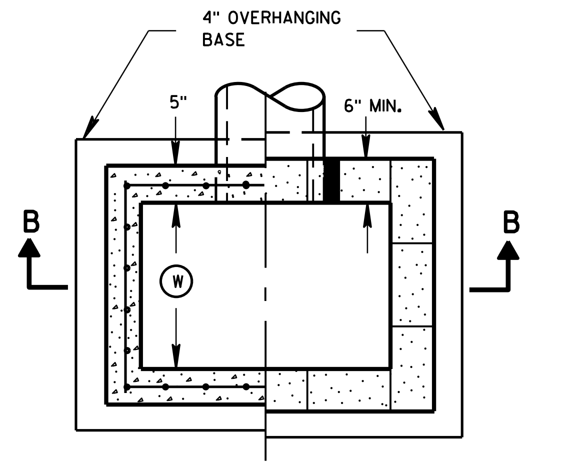
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED	
11/27/2013	/S/ Jerry H. Zogg
DATE	ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

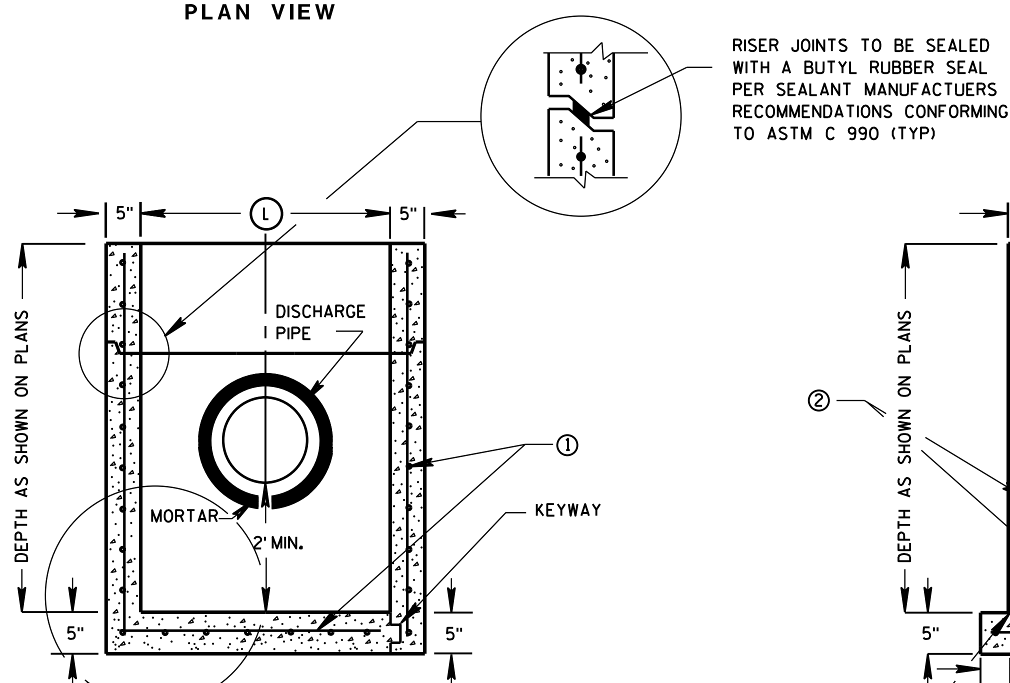
S.D.D. 8 A 5-19b



PLAN VIEW



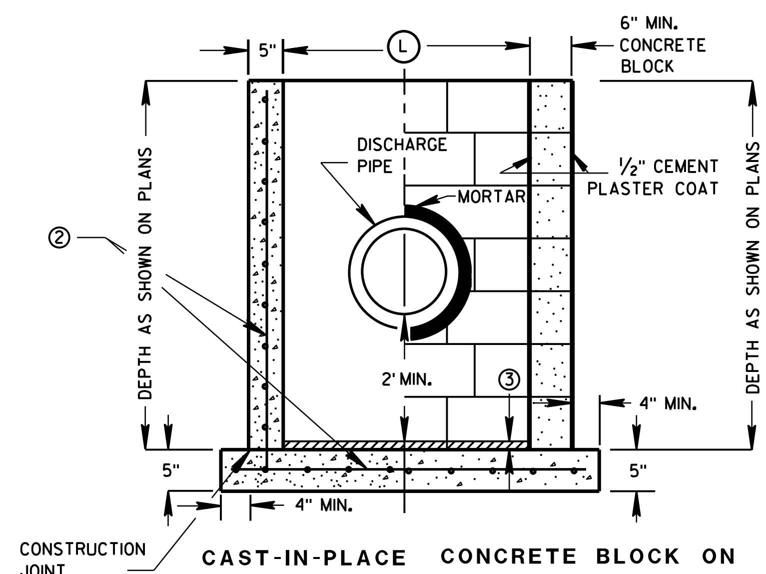
PLAN VIEW



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

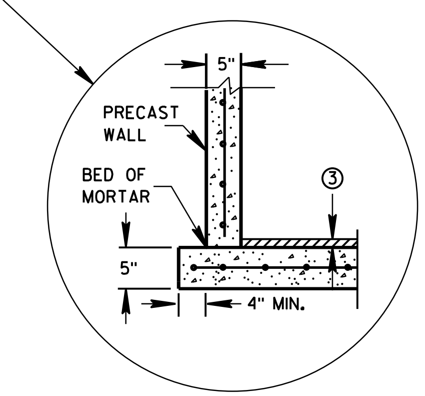
SECTION A-A



CAST-IN-PLACE REINFORCED CONCRETE

CONCRETE BLOCK ON CAST-IN-PLACE WITH PRECAST REINFORCED CONCRETE BASE ①

SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST CATCH BASIN UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

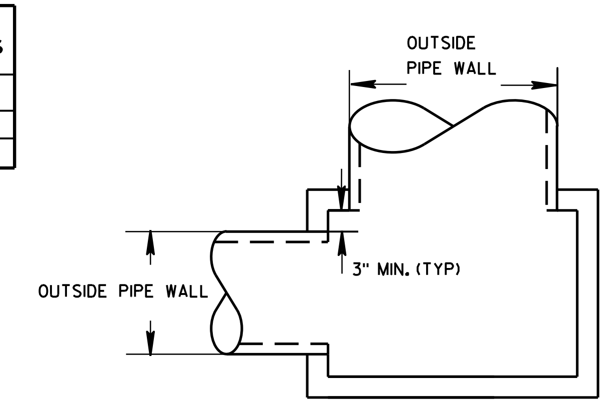
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE	INLET COVER TYPE		F	ALL H'S
	WIDTH (W) (FT)	LENGTH (L) (FT)		
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

CATCH BASINS 2X3-FT AND 2.5X3-FT

CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS UNIT SUPERVISOR
FHWA NT

S.D.D. 8 A 9-2

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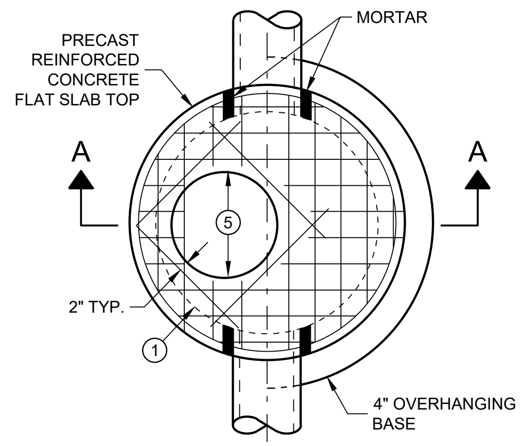
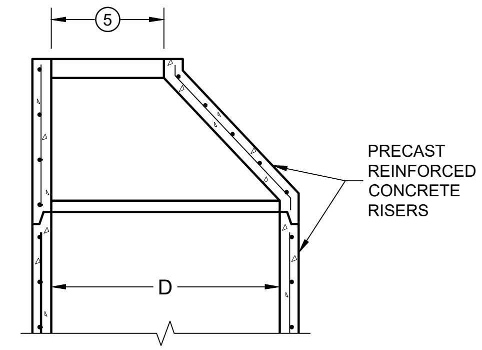
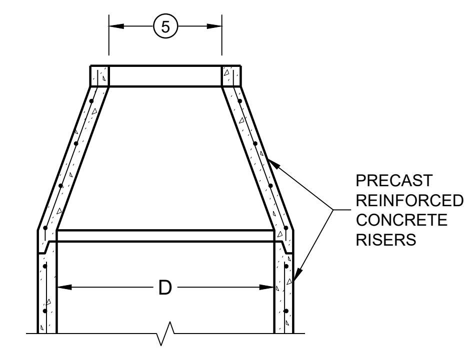


PLAN VIEW
CIRCULAR OPENING



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

MANHOLE COVER OPENING MATRIX

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

PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42 *	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

* A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES. SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

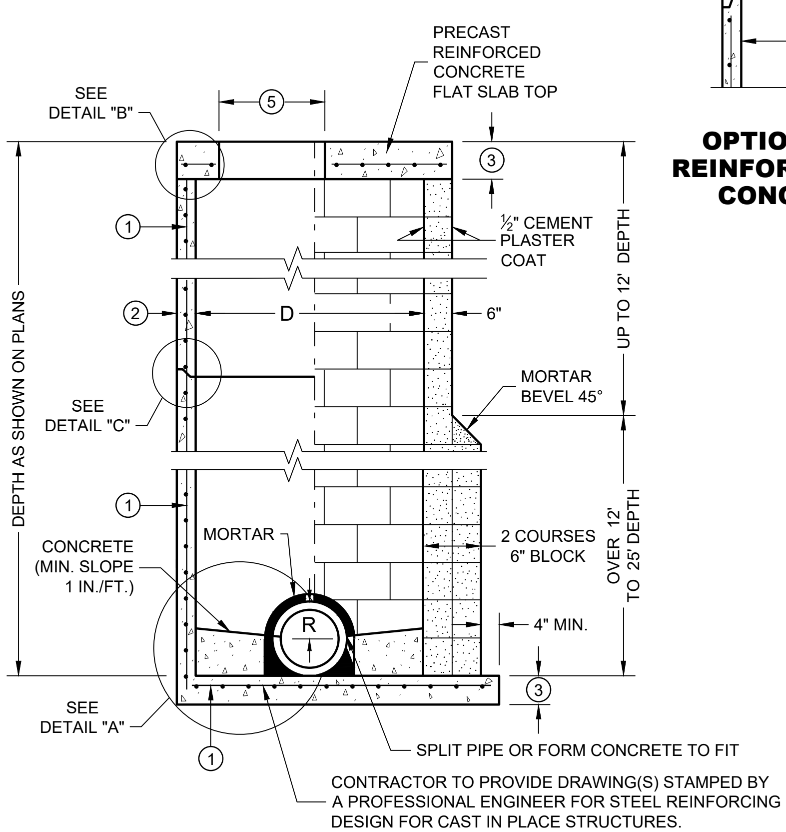
PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

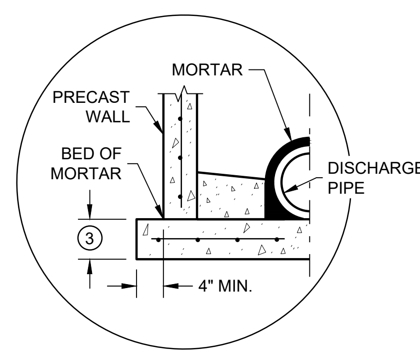
1. FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.
2. SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES
3. SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.
4. JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP.).
5. SEE MANHOLE COVER OPENING MATRIX.



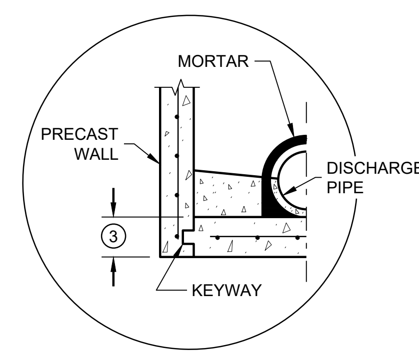
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE 1

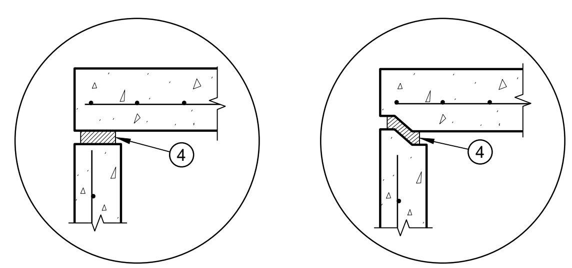


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

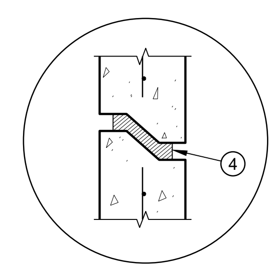
DETAIL "A"



TOP WITH PLAIN END JOINT

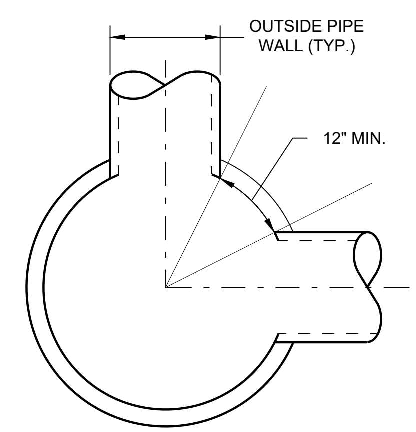
TOP WITH TONGUE AND GROOVE JOINT

DETAIL "B"



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "C"



MINIMUM HORIZONTAL PIPE SEPARATION

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

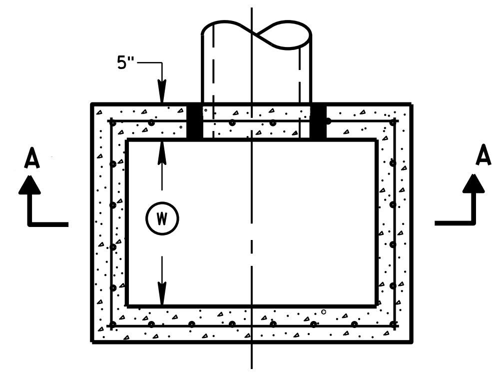
MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

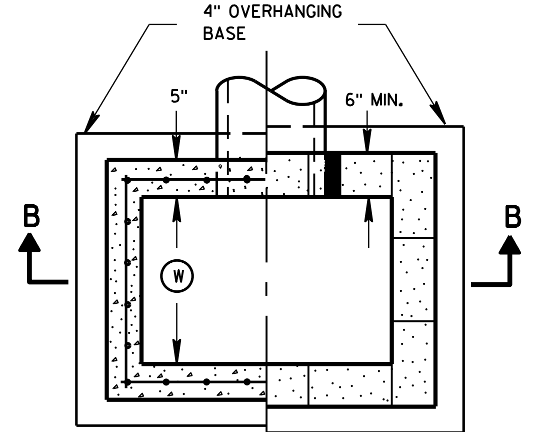
APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

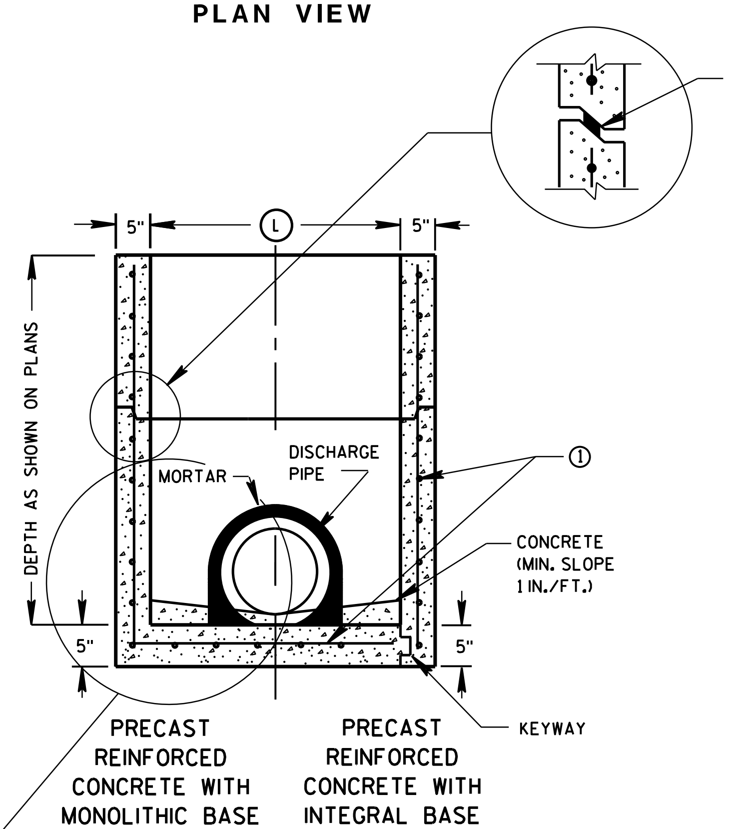
SDD 08B09 - 03



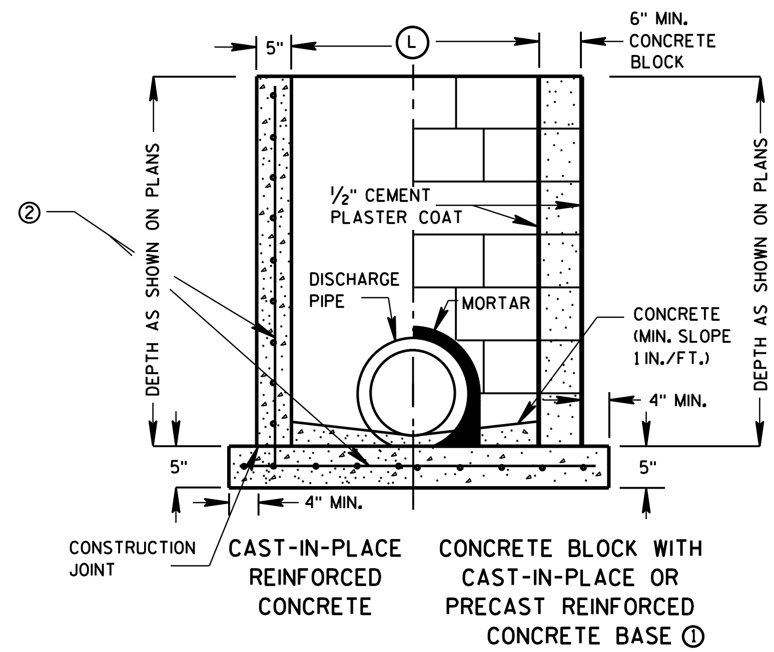
PLAN VIEW



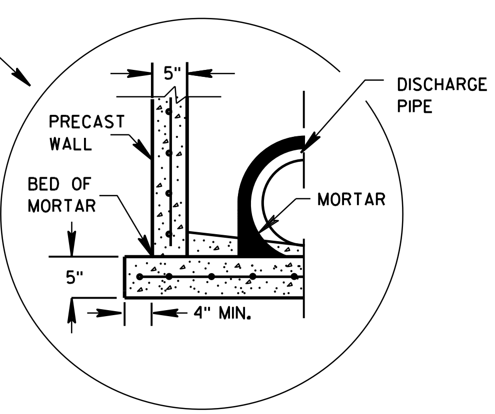
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED
CONCRETE BASE OPTION

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

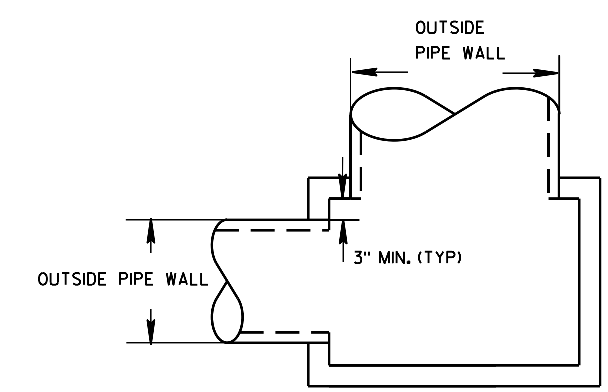
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH Ⓦ (FT)	LENGTH Ⓛ (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24

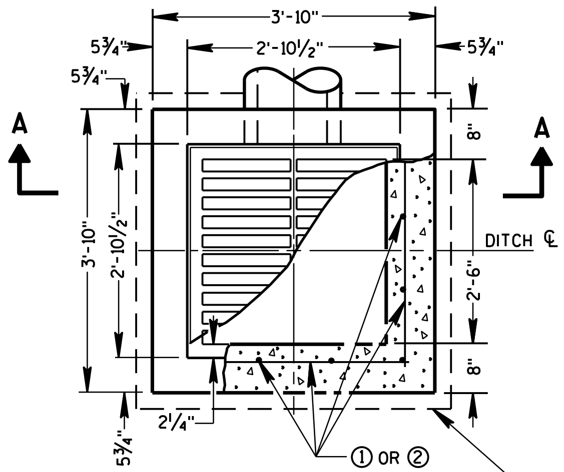


DETAIL "A"

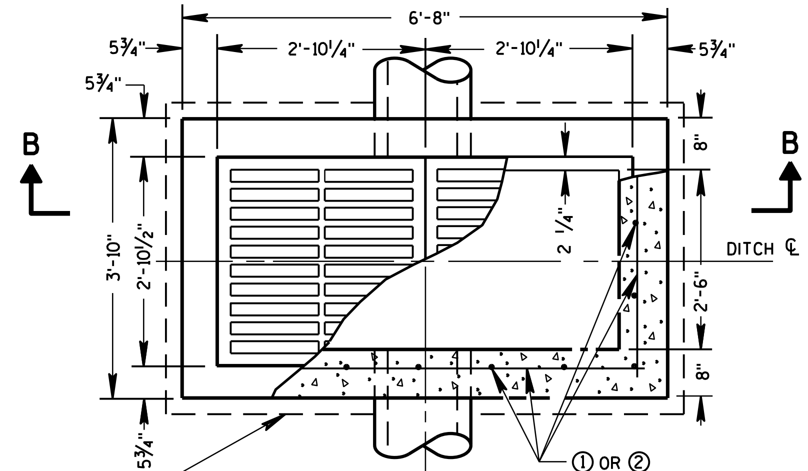
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept., 2016 DATE	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA	

S.D.D. 8 C 7-2

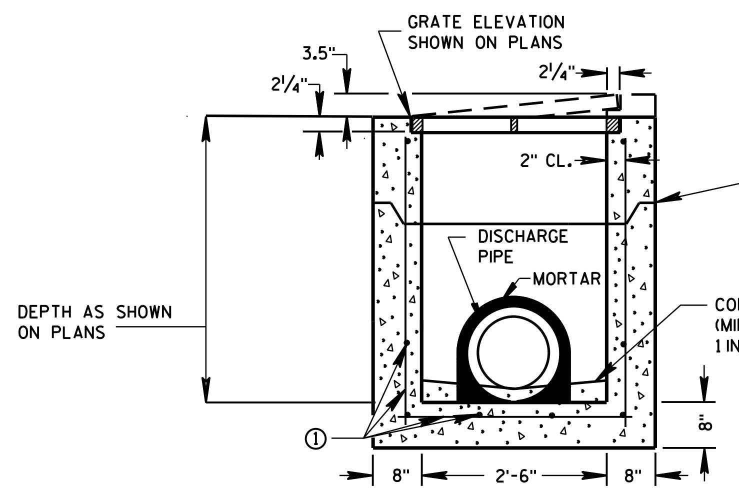


PLAN VIEW

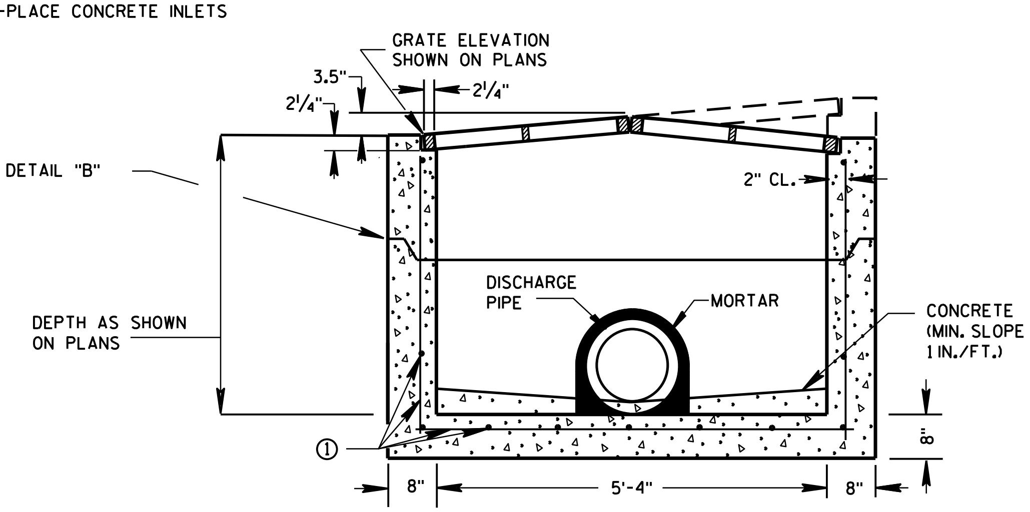


PLAN VIEW

4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



PRECAST REINFORCED CONCRETE
SECTION A-A



PRECAST REINFORCED CONCRETE
SECTION B-B

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

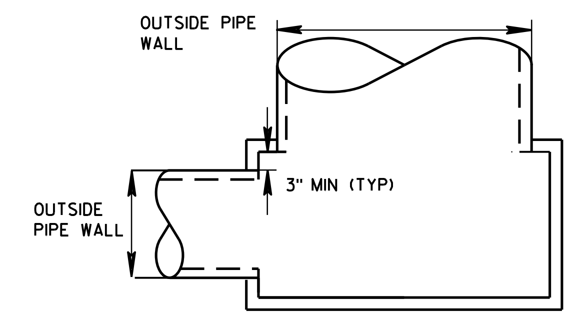
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

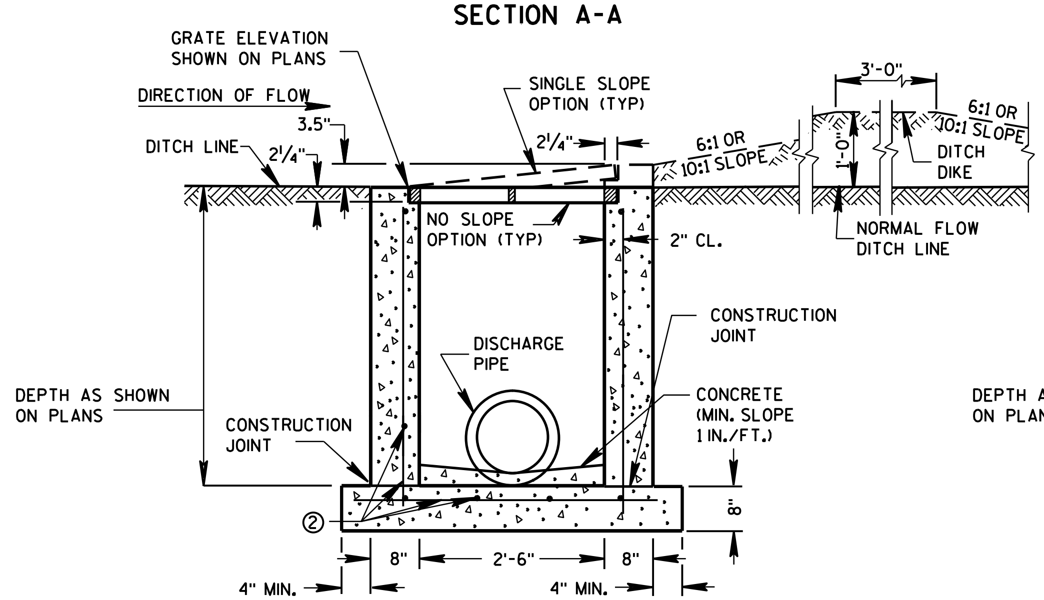
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

PIPE MATRIX

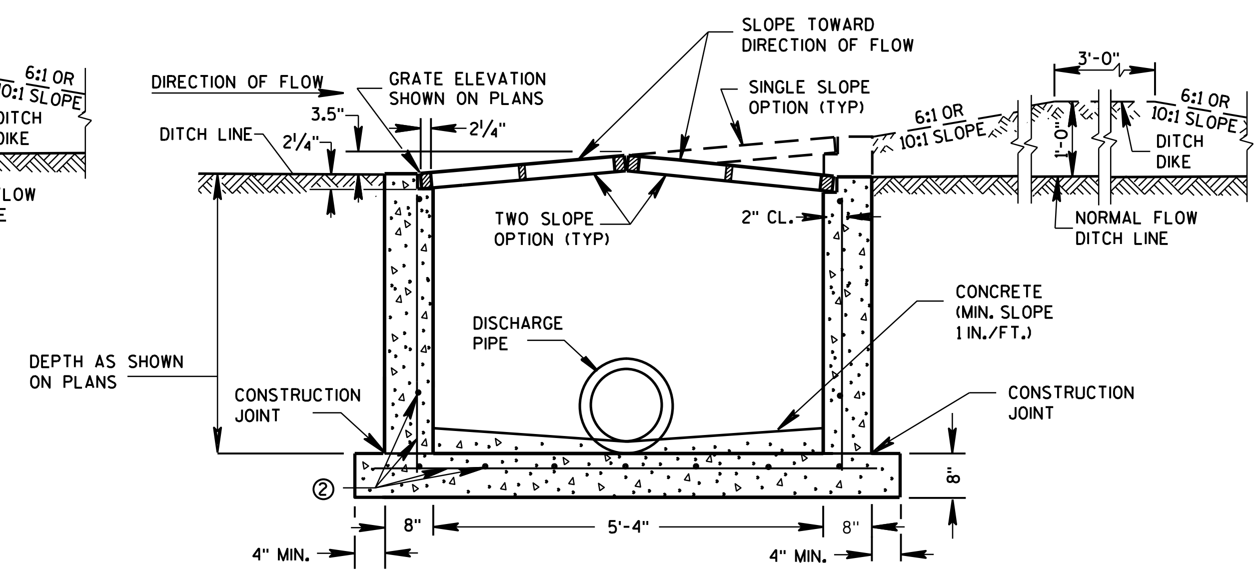
	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

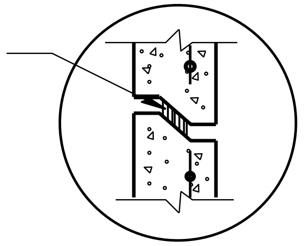


REINFORCED CAST-IN-PLACE CONCRETE
SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE
SECTION B-B

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



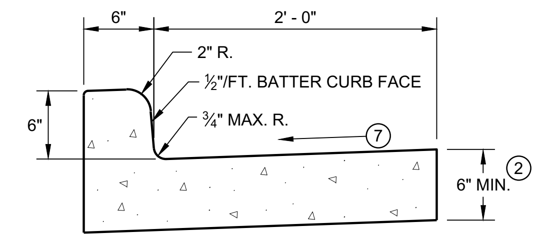
DETAIL "B"

INLETS MEDIAN 1 GRATE

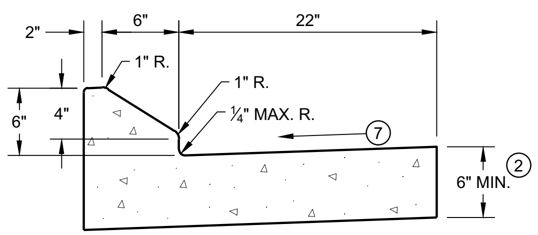
INLETS MEDIAN 2 GRATE

INLETS MEDIAN 1 AND 2 GRATE
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED Sept., 2016 DATE /S/ Rodney Taylor ROADWAY STANDARDS UNIT SUPERVISOR FHWA

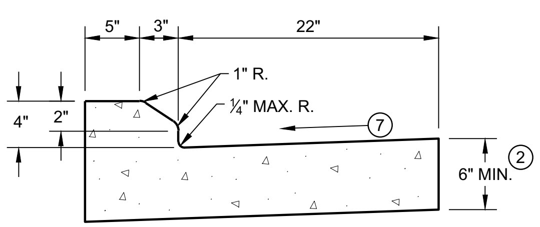
6



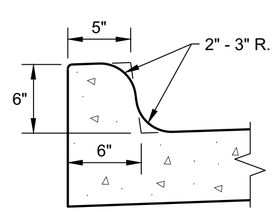
TYPES A(1) & D



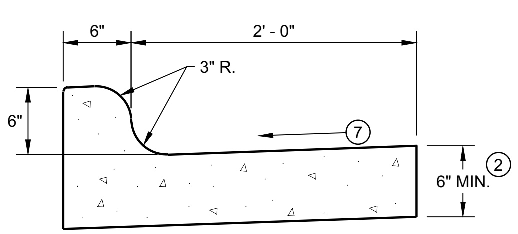
6" SLOPED CURB TYPES G(1) & J



4" SLOPED CURB TYPES G(1) & J

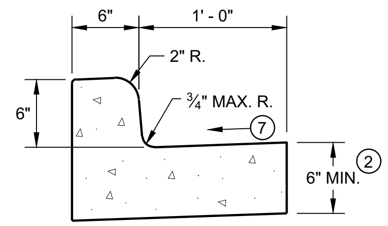


TYPES K(1) & L
(OPTIONAL CURB SHAPE)



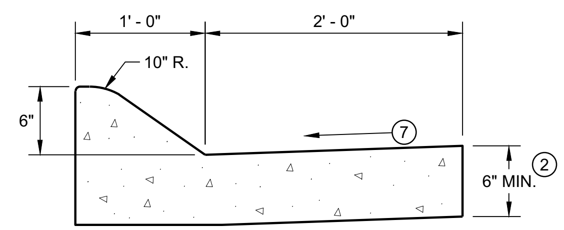
TYPES K(1) & L

CONCRETE CURB AND GUTTER 30"

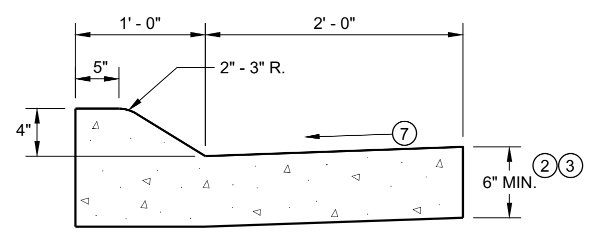


TYPES A(1) & D

CONCRETE CURB AND GUTTER 18"

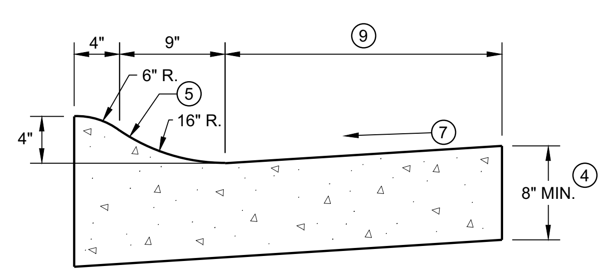


6" SLOPED CURB TYPES A(1) & D



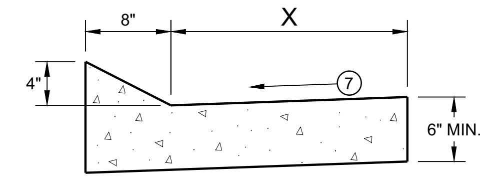
4" SLOPED CURB TYPES A(1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R(1) & T

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



TYPES TBT & TBTT(1)

CONCRETE CURB AND GUTTER

GENERAL NOTES

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

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

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

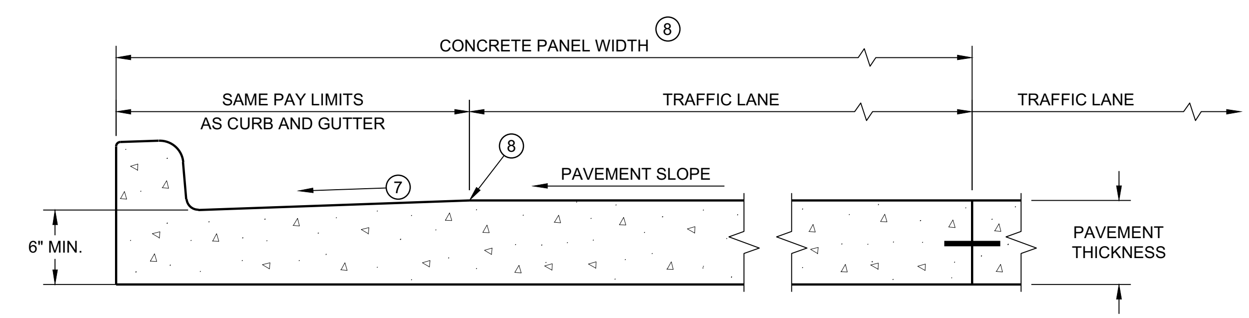
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

1. TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
2. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
3. USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
4. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
5. UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
6. WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
7. USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
8. INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.
9. CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

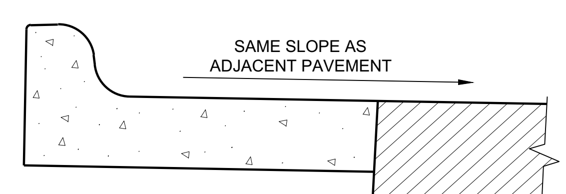
PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'

6



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01 - 22a

SDD 08D01 - 22a

GENERAL NOTES

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

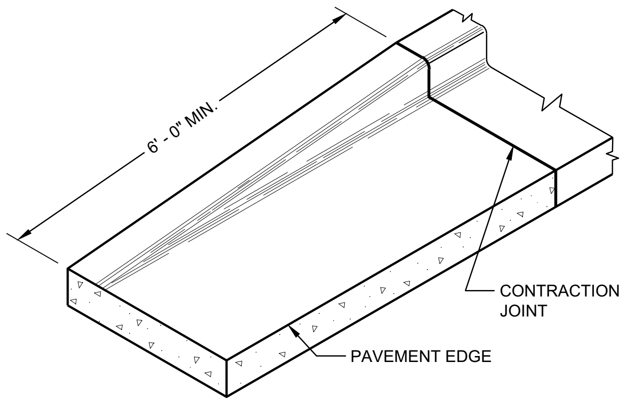
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

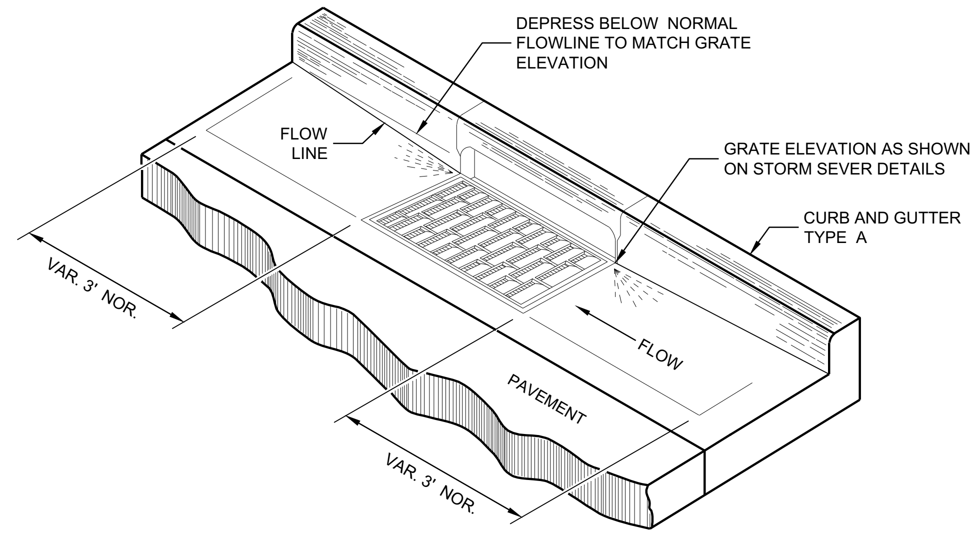
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

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

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

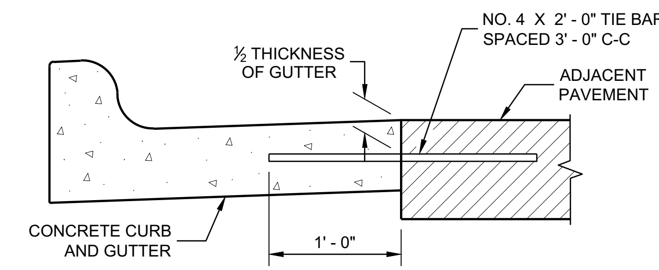


END SECTIONCURB AND GUTTER

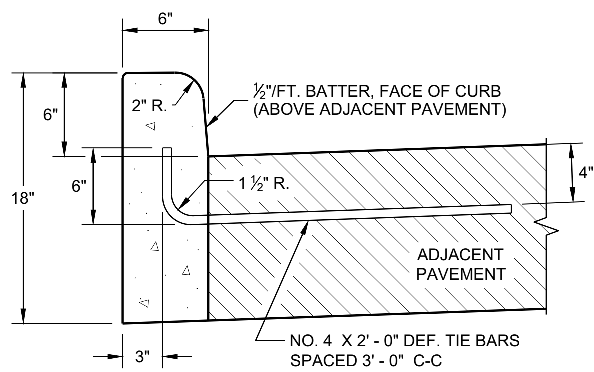


DETAIL OF CURB AND GUTTER AT INLETS

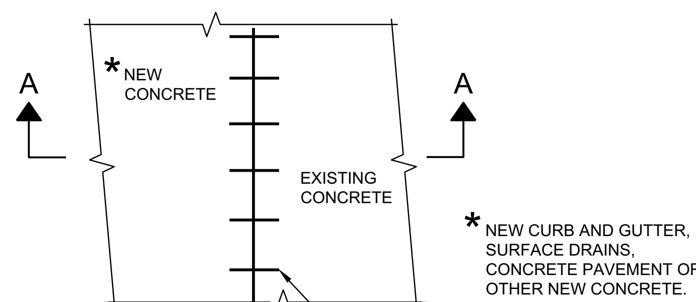
(TYPICAL H INLET COVER SHOWN)



TYPICAL TIE BAR LOCATION (1)

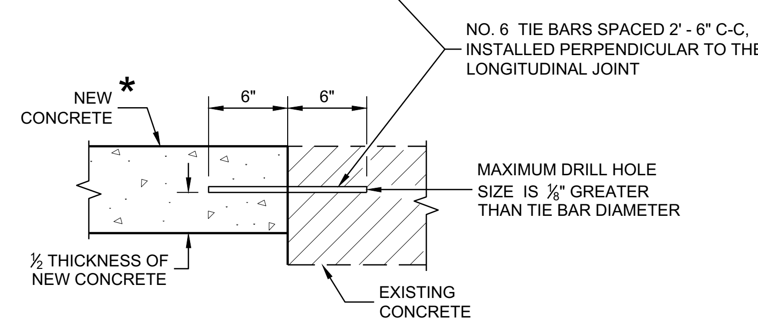


TYPES A (1) & D



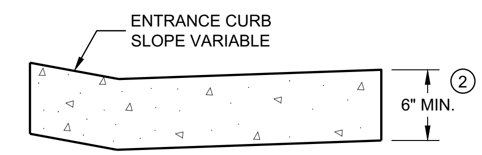
* NEW CURB AND GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW



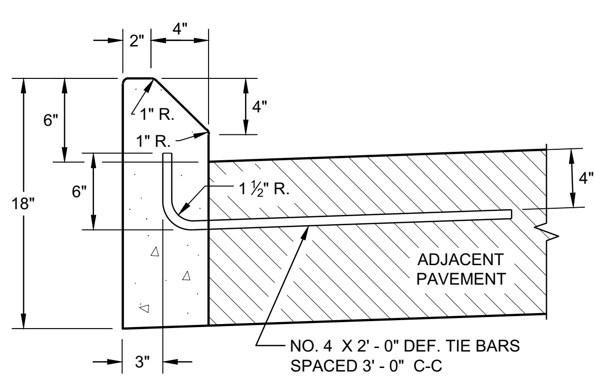
SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)



TYPES G (1) & J

CONCRETE CURB

6

6

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

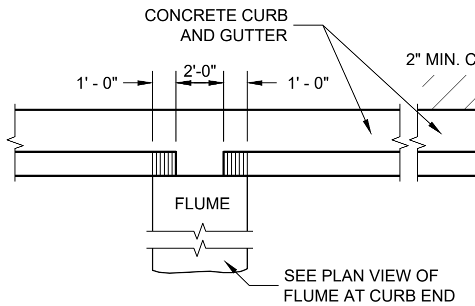
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

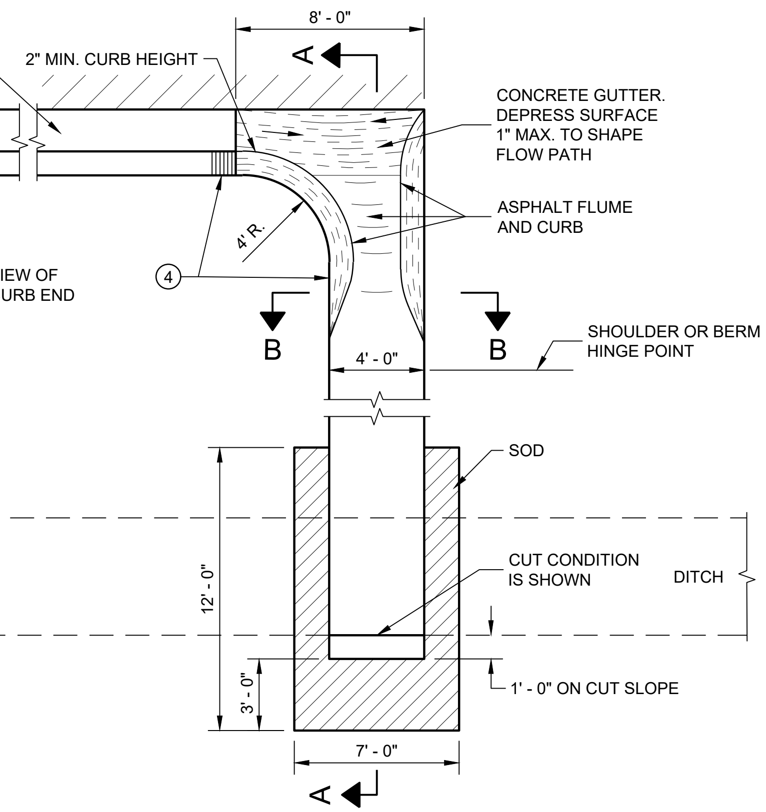
SDD 08D01 - 22b

NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME



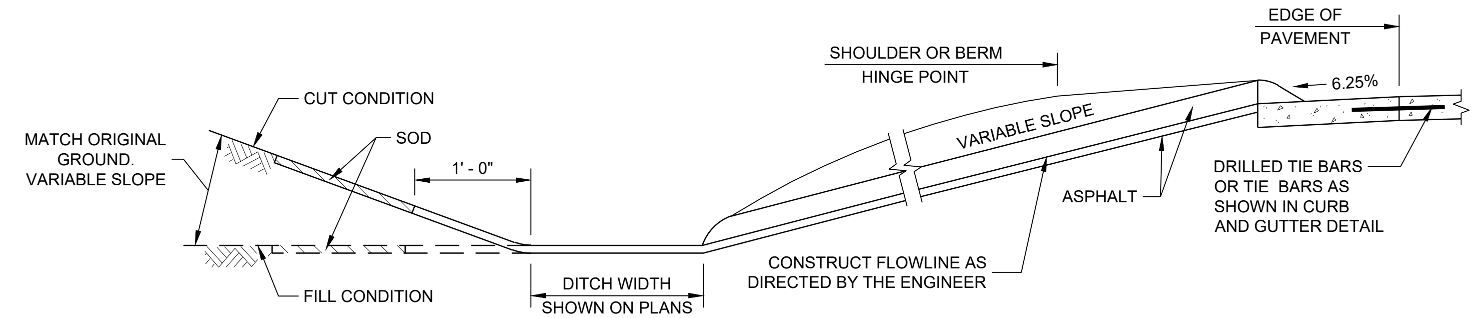
PLAN VIEW
FLUME AT CURB END

GENERAL NOTES

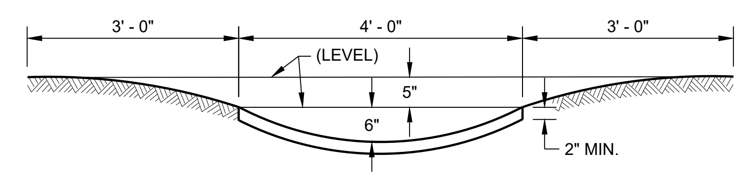
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

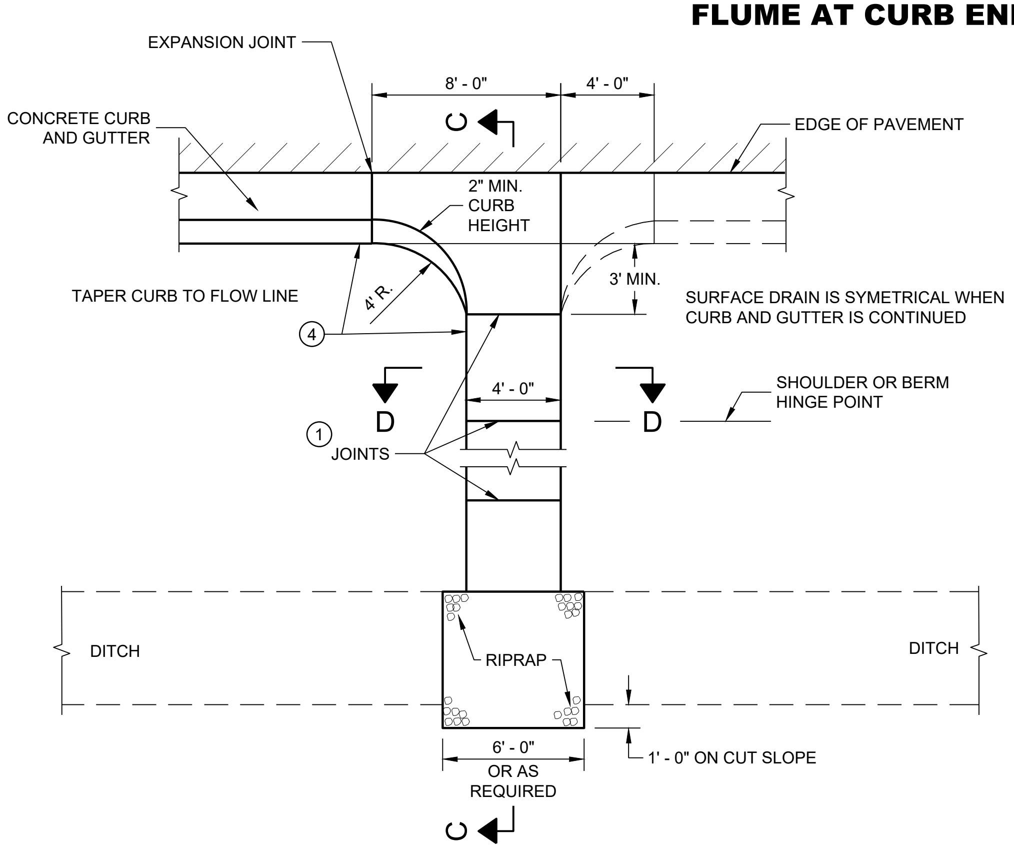
1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.



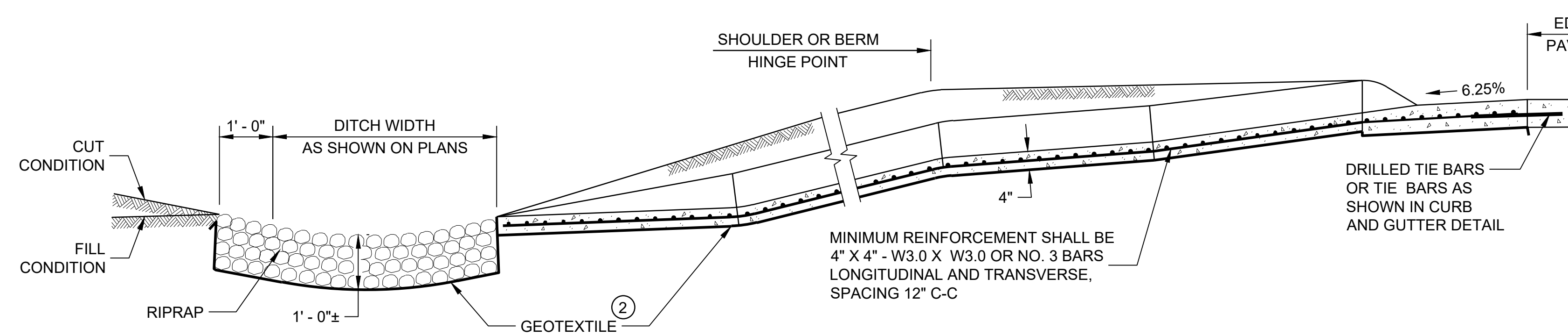
SECTION A - A



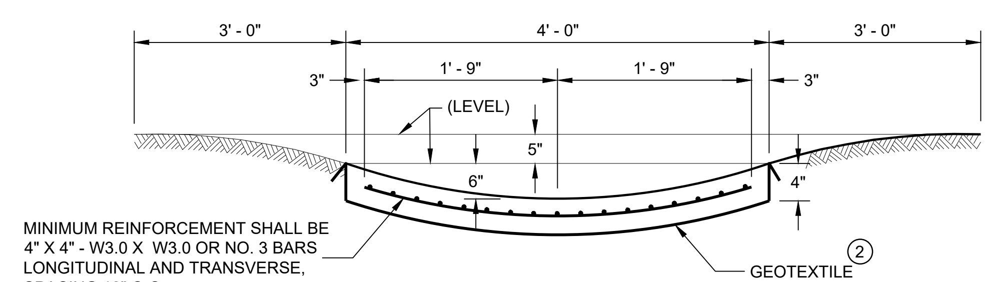
SECTION B - B



PLAN VIEW
CONCRETE SURFACE DRAIN

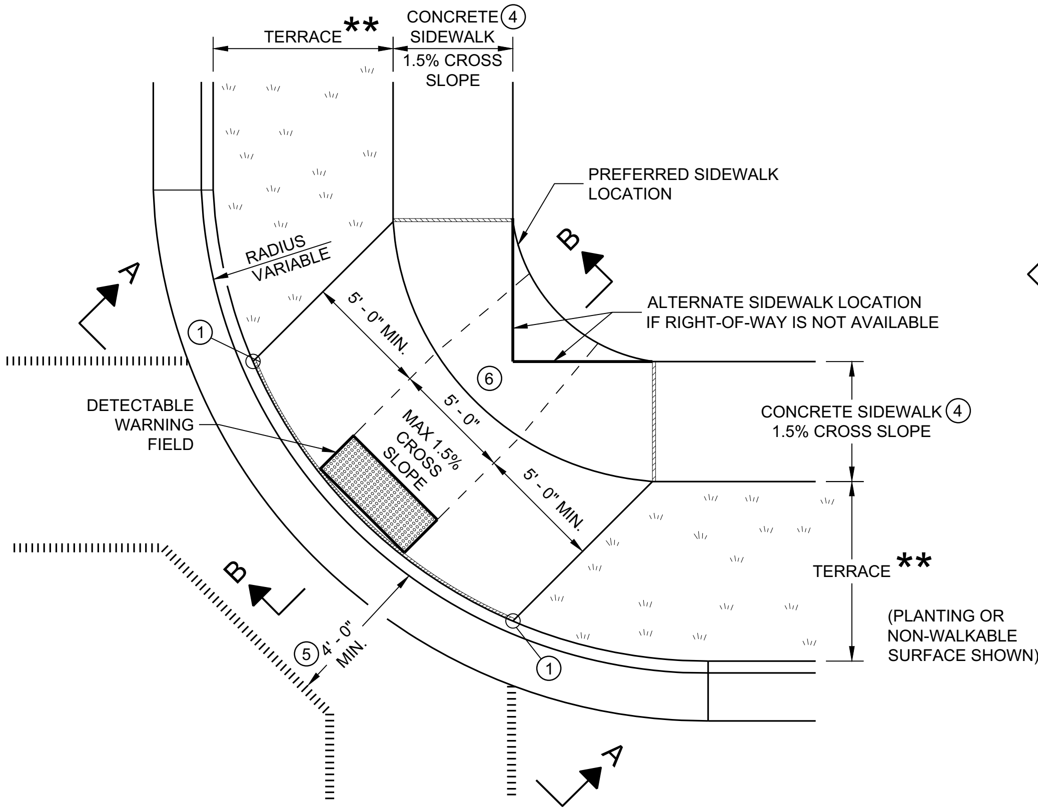


SECTION C - C



SECTION D - D

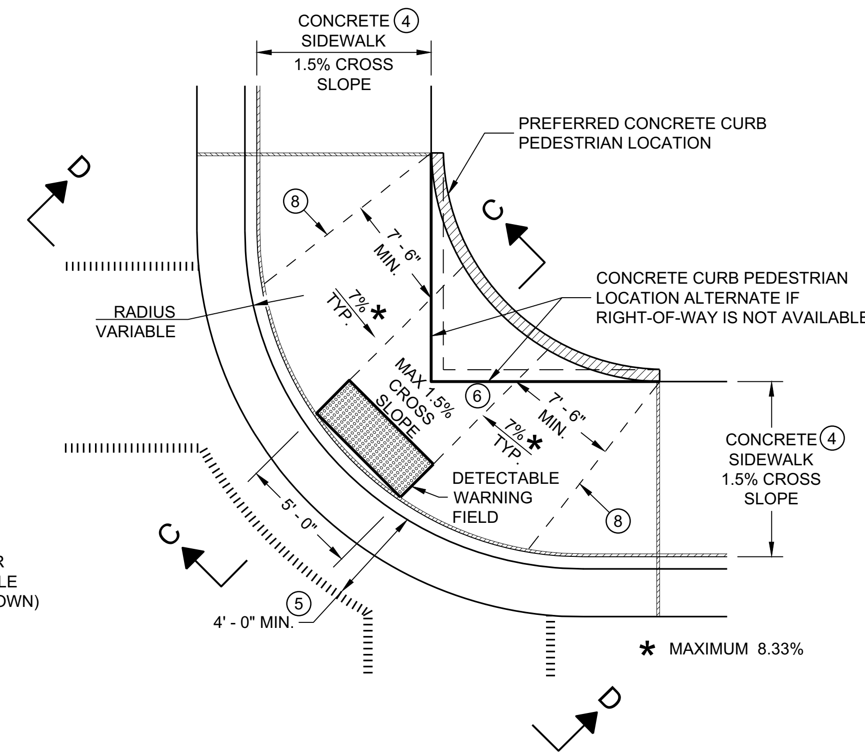
CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED November 2021 — DATE /S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT ENGINEER FHWA



PLAN VIEW

CURB RAMP TYPE 1

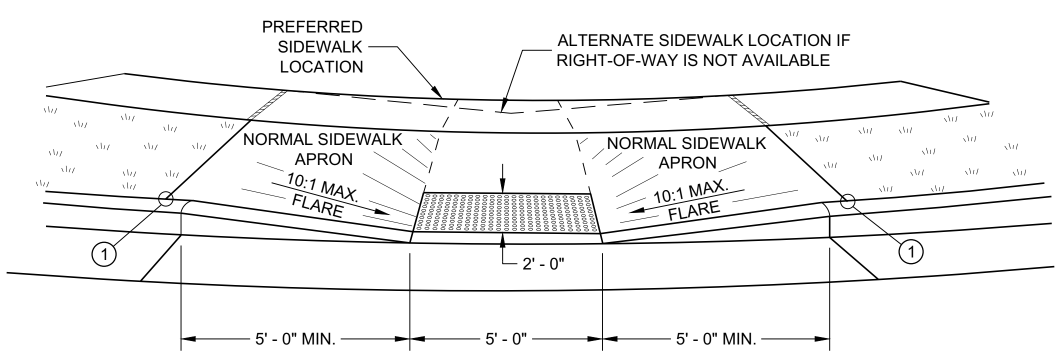
(CENTER OF CORNER RADIUS)



PLAN VIEW

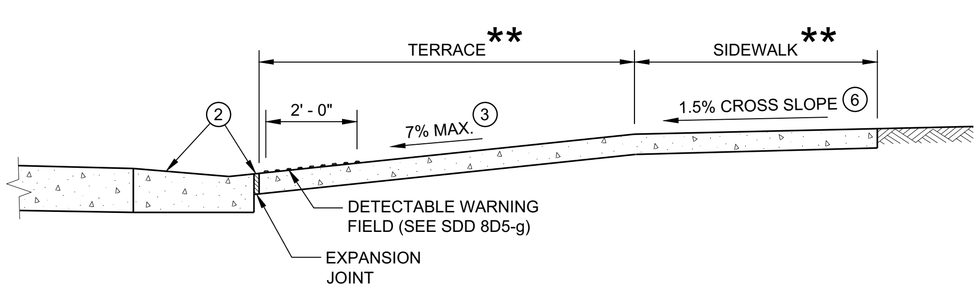
CURB RAMP TYPE 1 - A

(NO TERRACE)



VIEW A - A FOR TYPE 1

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

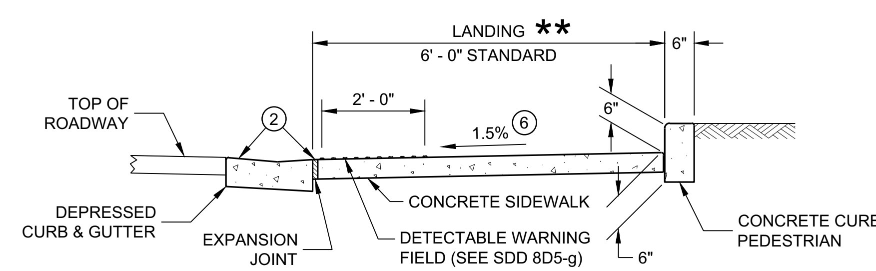
(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

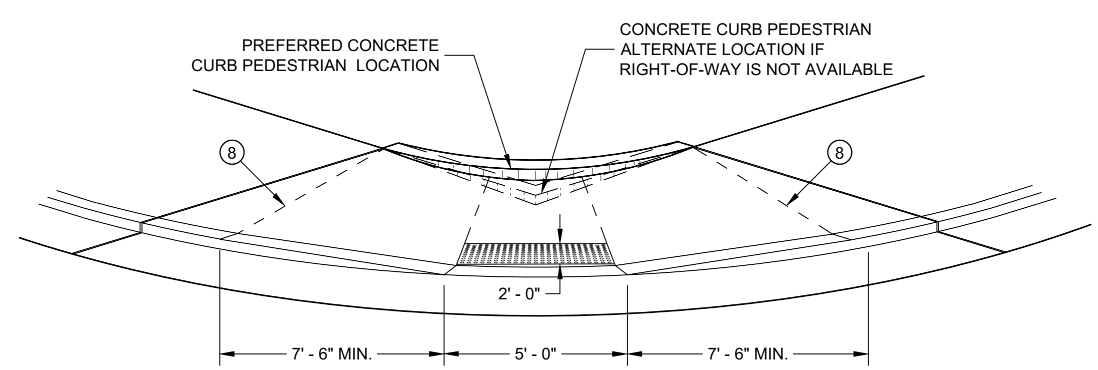
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C - C FOR TYPE 1 - A



VIEW D - D FOR TYPE 1 - A

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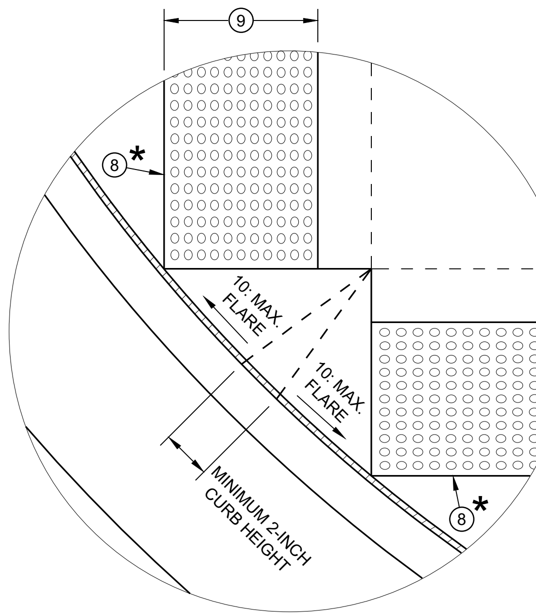
SDD 08D05 - 20a

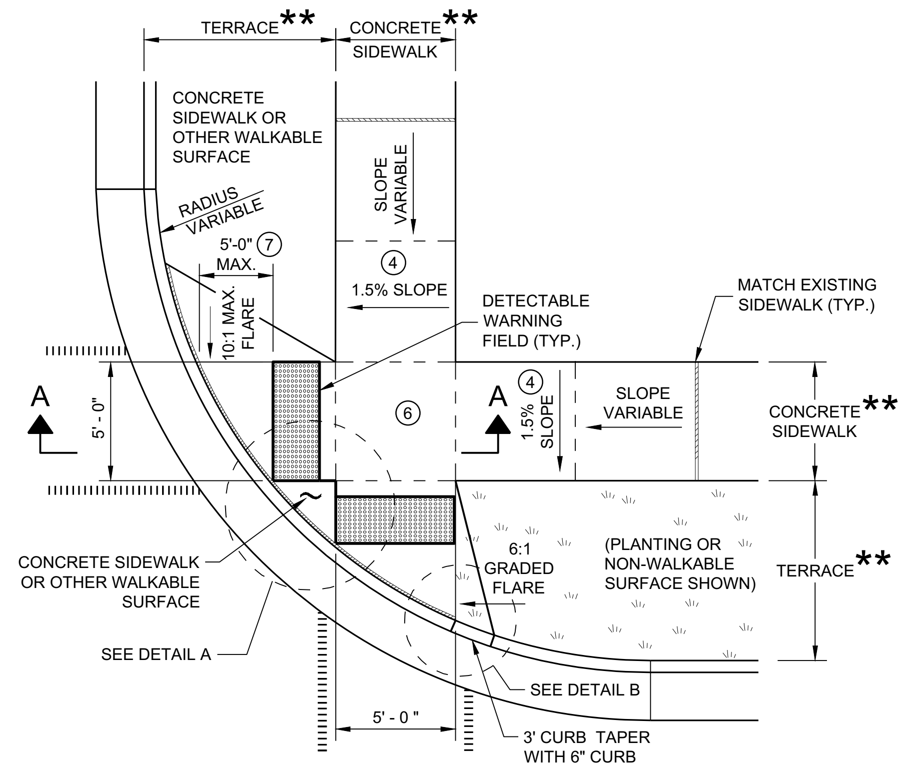
SDD 08D05 - 20a

CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATI



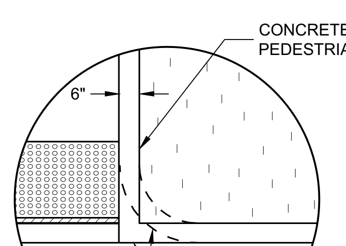
DETAIL A



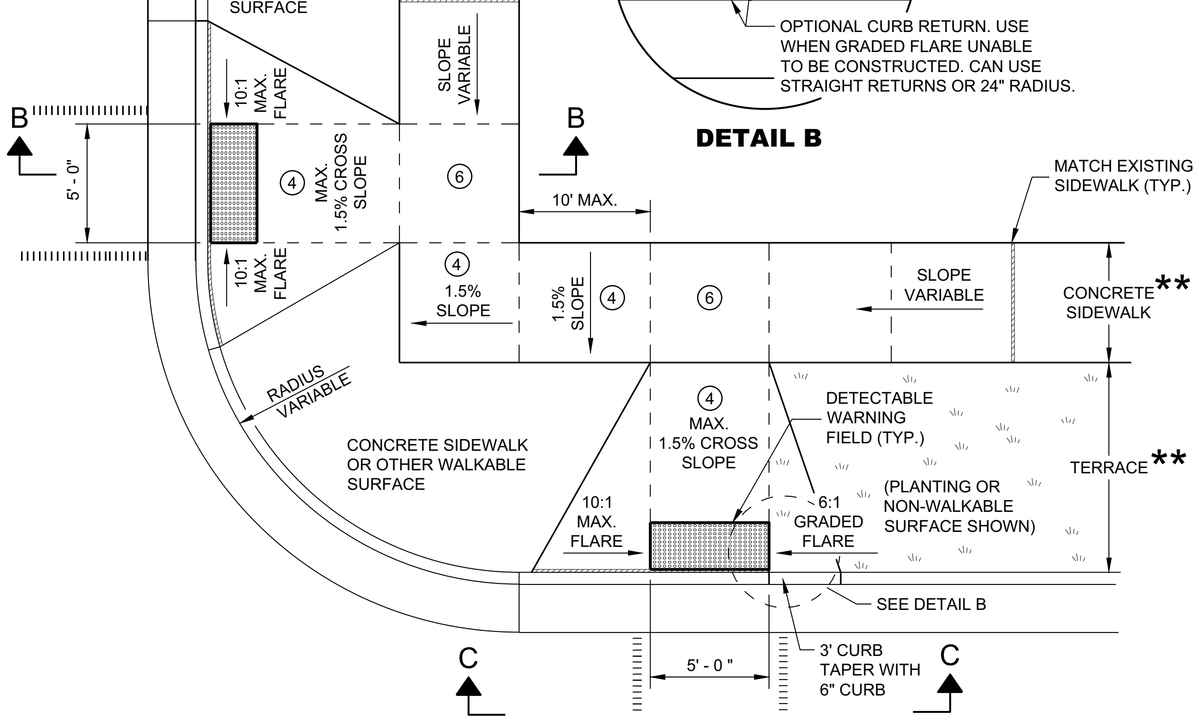
PLAN VIEW

CURB RAMP TYPE 2

(CENTER OF CORNER RADIUS)



DETAIL B



PLAN VIEW

CURB RAMP TYPE 3

(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

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

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

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

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

3 AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

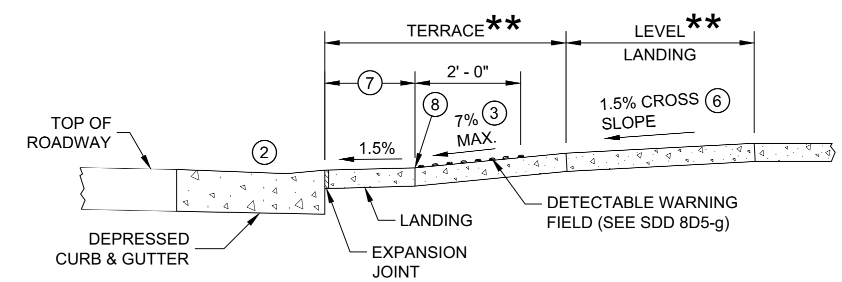
4 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

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

8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

9 WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

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

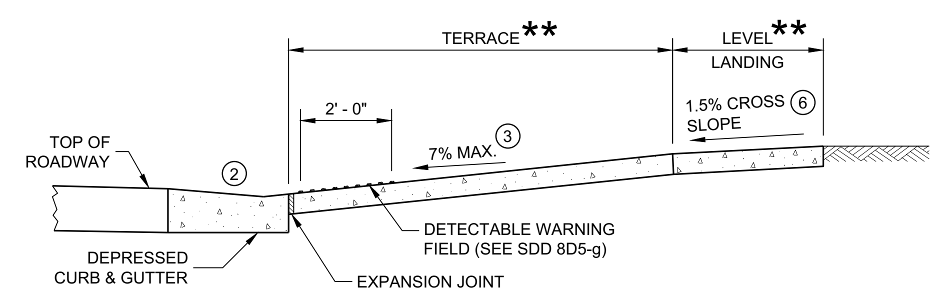
** WIDTH SHOWN ELSEWHERE IN THE PLANS

LEGEND

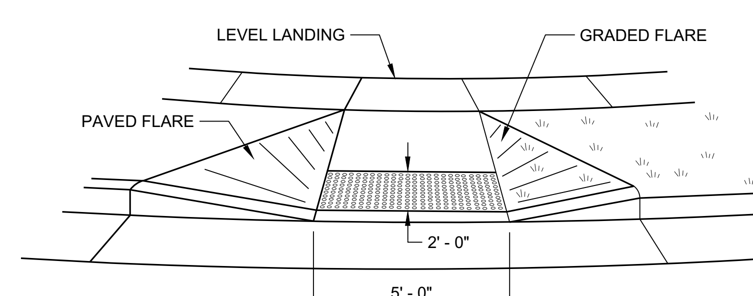
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



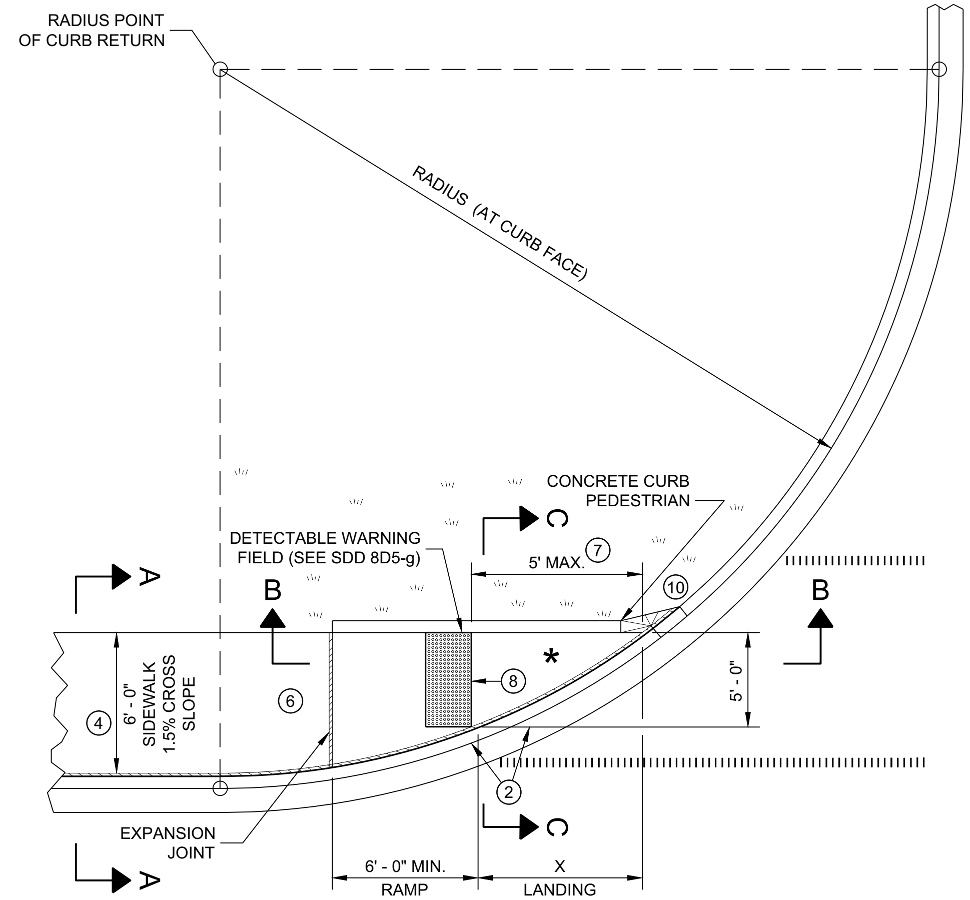
SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

CURB RAMPS TYPE 2 AND 3

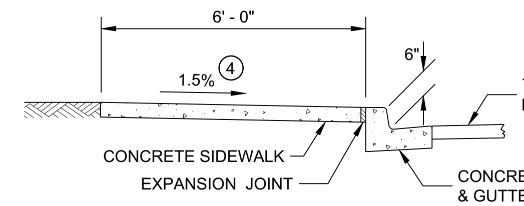
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW
CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5 ½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

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

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

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

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

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

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

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

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

8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

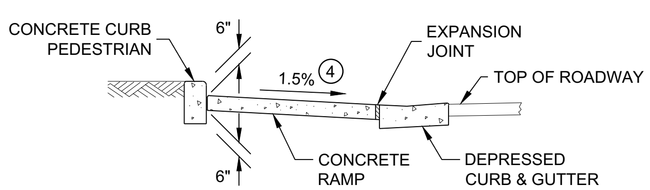
10 INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

½" EXPANSION JOINT SIDEWALK

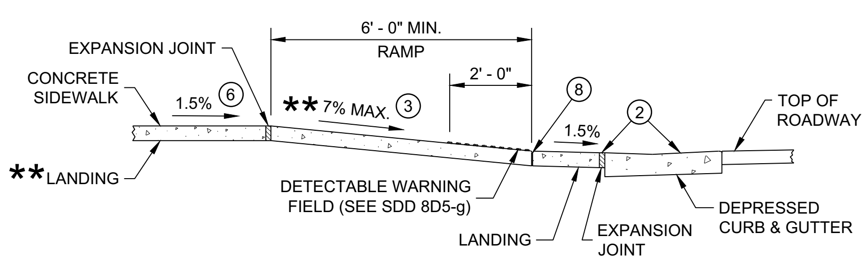
CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



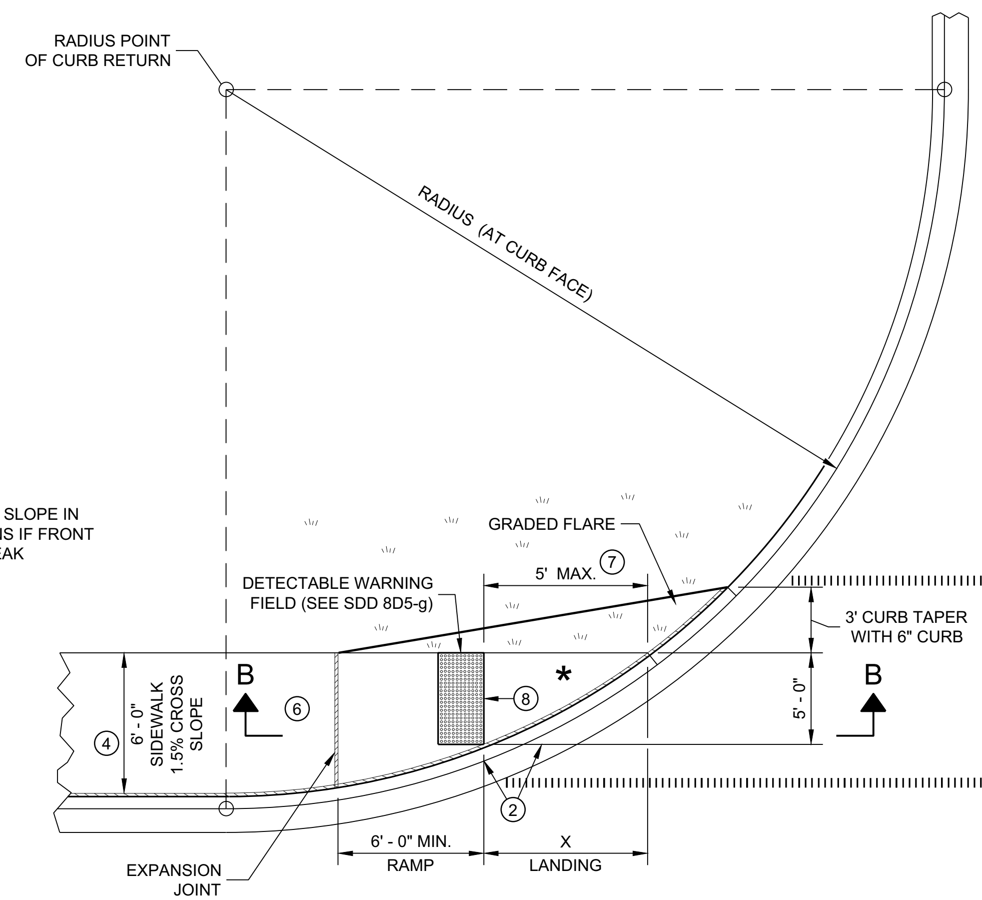
SECTION C - C FOR TYPE 4A

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

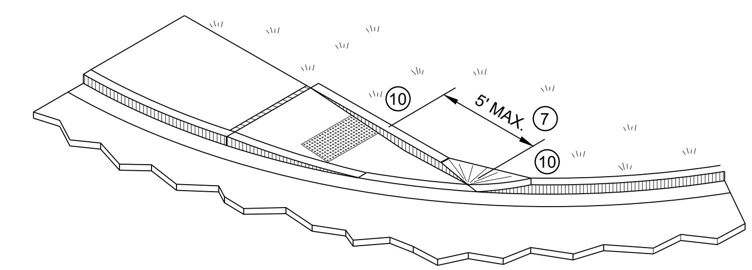


** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

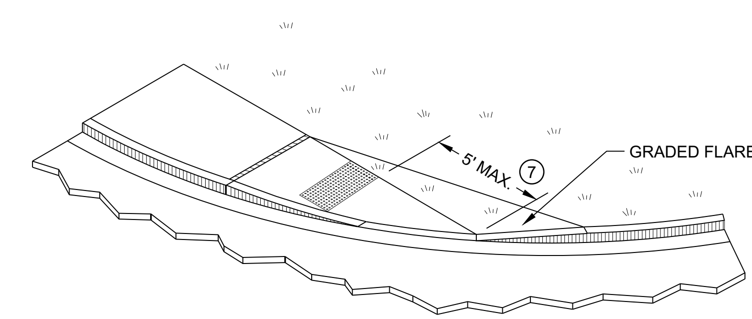
SECTION B - B FOR TYPE 4A AND TYPE 4A1



PLAN VIEW
CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

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DEPARTMENT OF TRANSPORTATI

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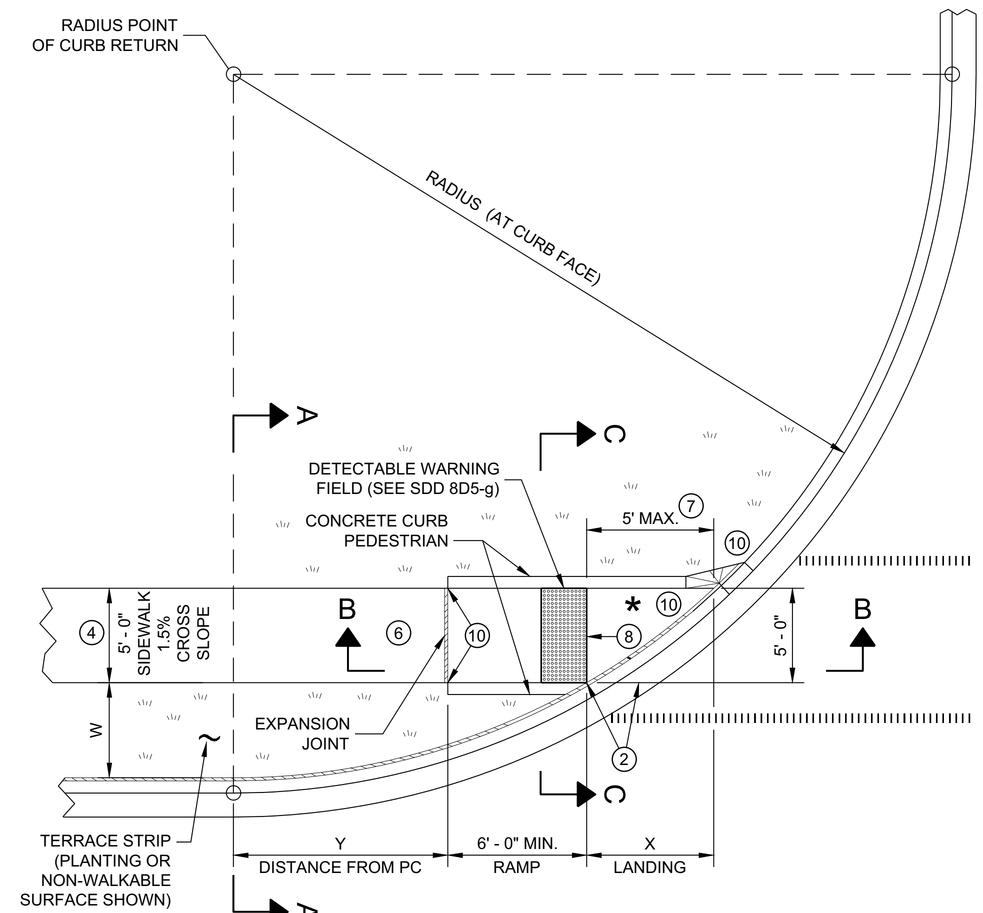
SDD 08D05 - 20c

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¼"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¼"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ¼"
20 FEET	5' - 9 ¾"	3' - 6 ½"	4' - 11 ½"	5' - 1 ¾"	4' - 3 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ¼"	10' - 9"
30 FEET			6' - 9 ¼"	7' - 11 ¼"	6' - 0 ¼"	9' - 8"	5' - 5"	11' - 1 ¾"	4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ¼"
40 FEET									6' - 1 ¾"	15' - 8 ½"	5' - 8"	17' - 2"	5' - 3"	18' - 5 ¾"	4' - 10 ¾"	19' - 8 ¼"
50 FEET															5' - 10 ¼"	23' - 2"

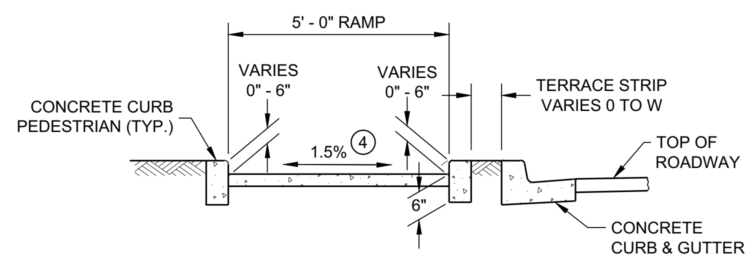
INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

LEGEND

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



PLAN VIEW
CURB RAMP TYPE 4B



SECTION C - C FOR TYPE 4B

GENERAL NOTES

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

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

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

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

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

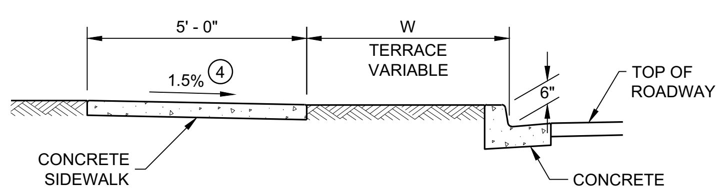
4 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

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

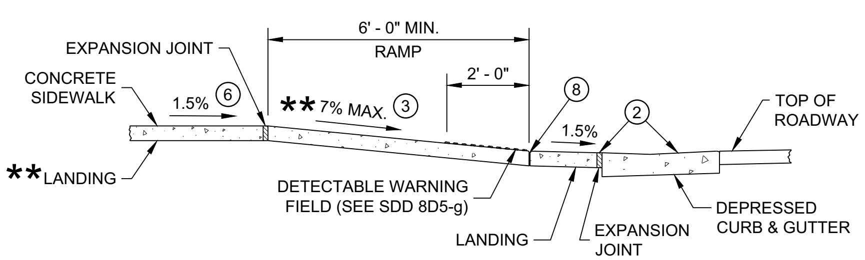
8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

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



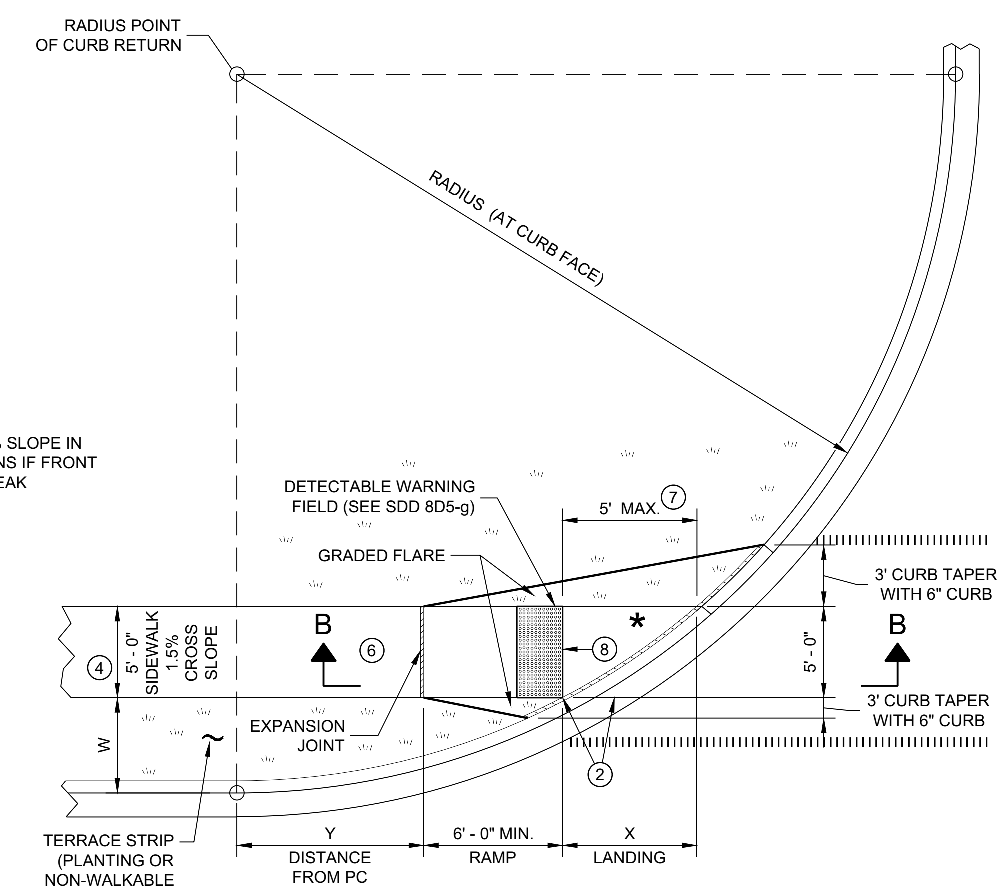
SECTION A - A FOR TYPE 4B

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

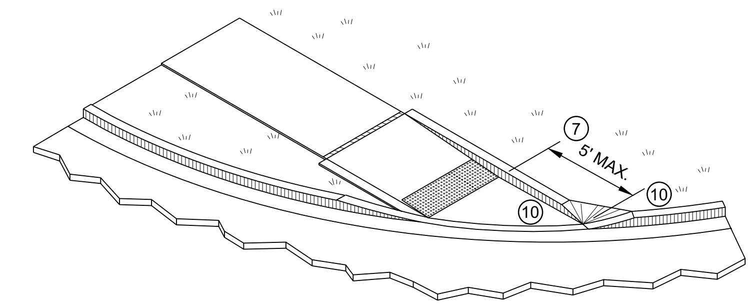


** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

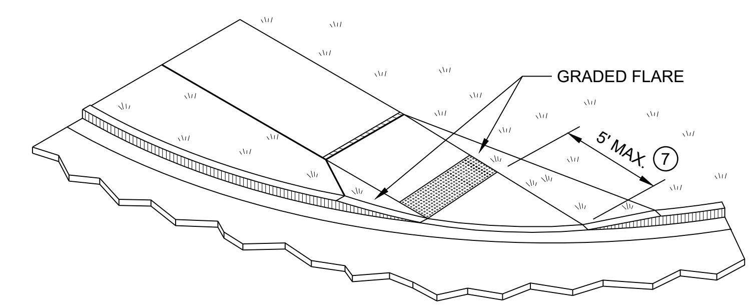
SECTION B - B FOR TYPE 4B AND TYPE 4B1



PLAN VIEW
CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

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CURB RAMPS
TYPE 4B AND 4B1

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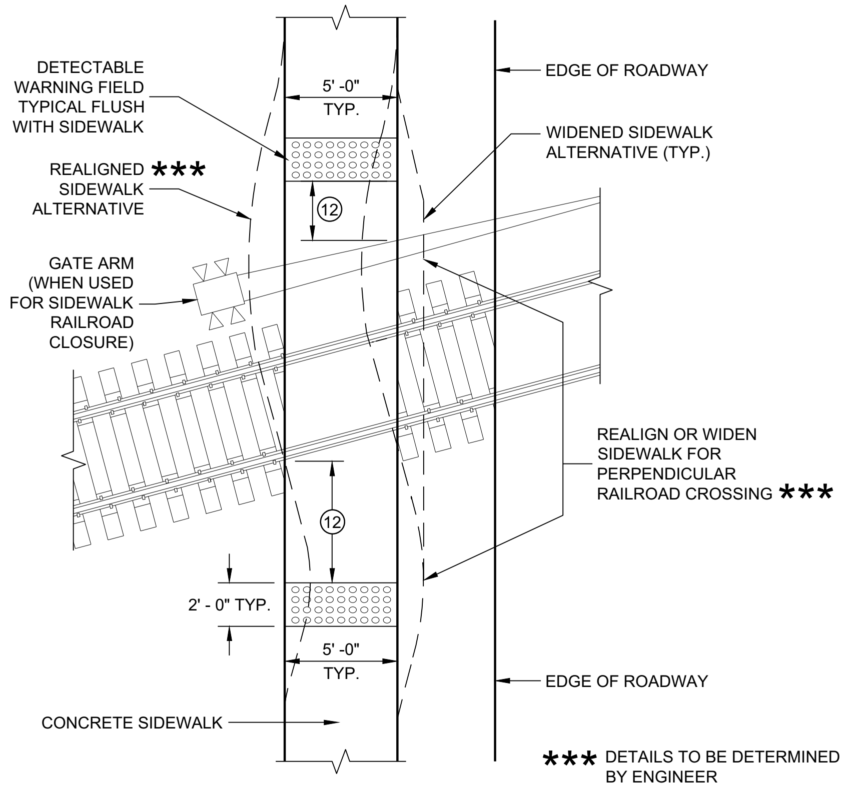
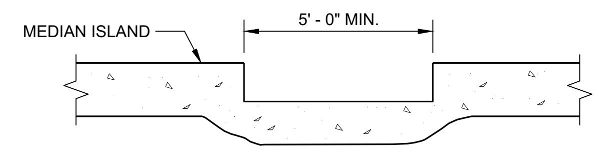
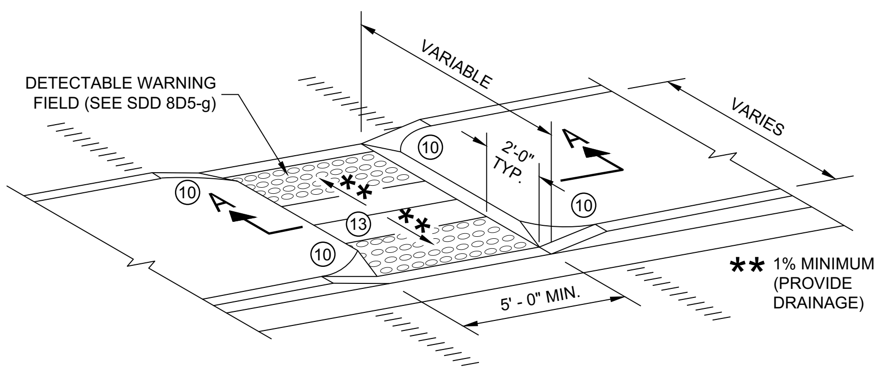


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

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

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

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

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

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

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

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

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

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

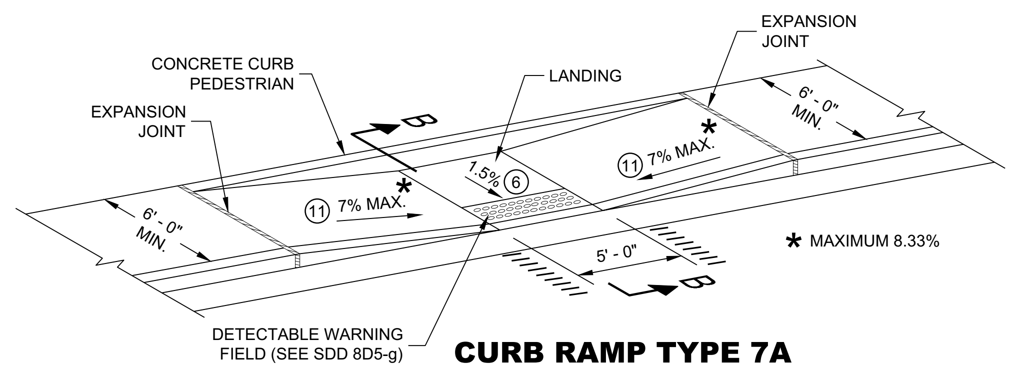
(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET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

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

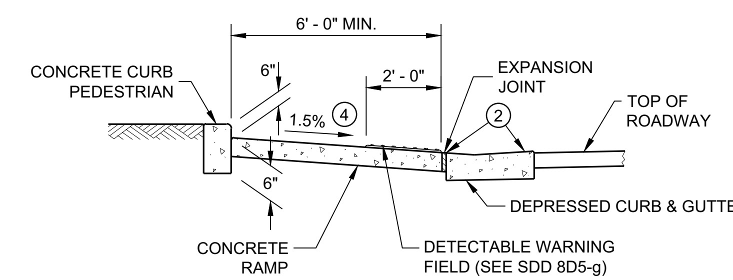
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

6

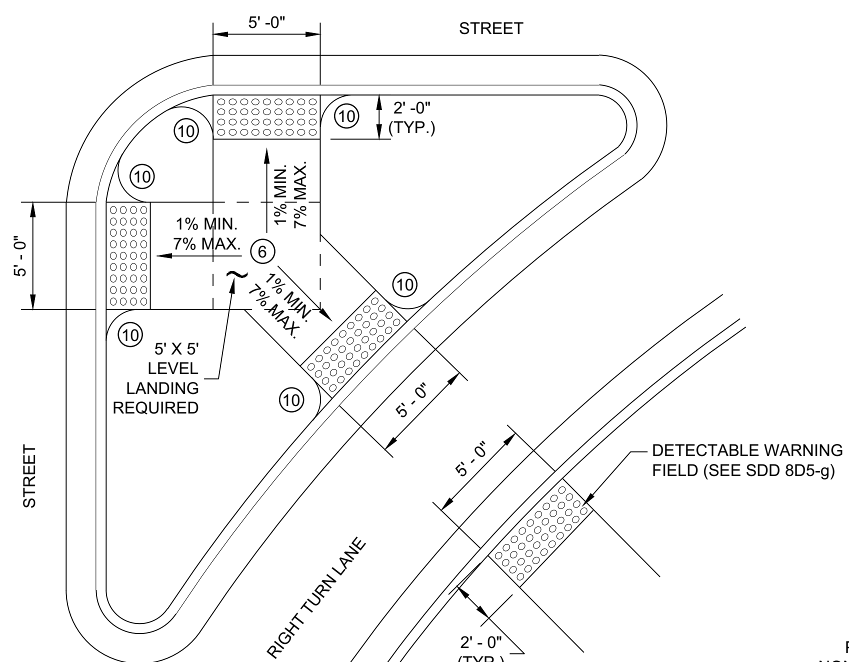


CURB RAMP TYPE 7A

MID BLOCK CROSSING



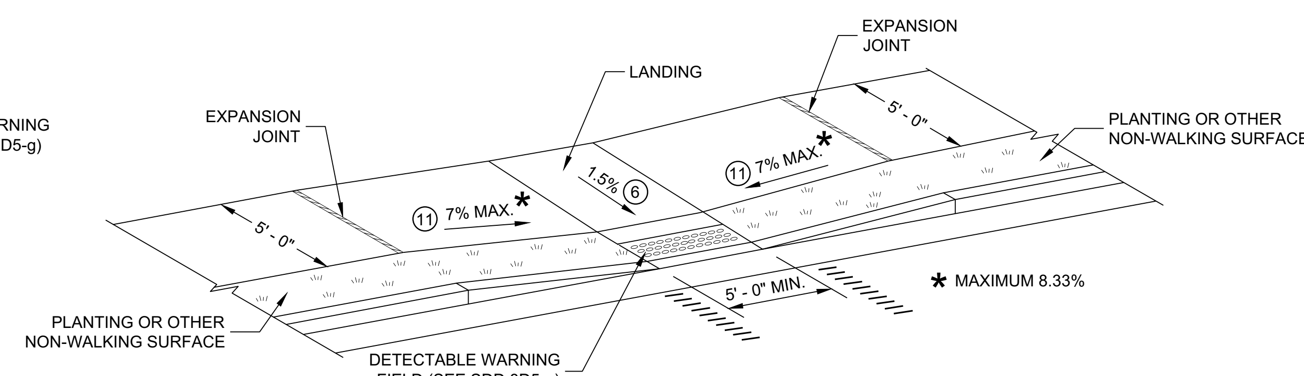
SECTION B - B FOR TYPE 7A



CURB RAMP TYPE 6

DETECTABLE WARNING AT ISLANDS

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



CURB RAMP TYPE 7B

MID BLOCK CROSSING

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

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

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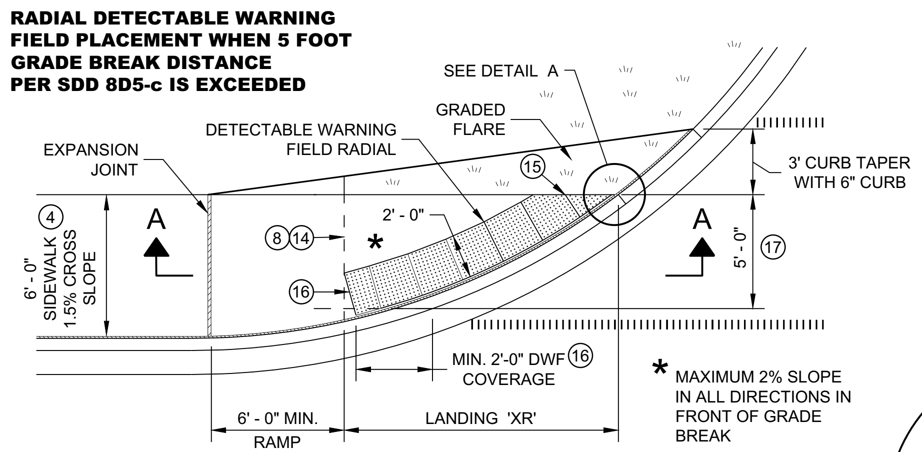
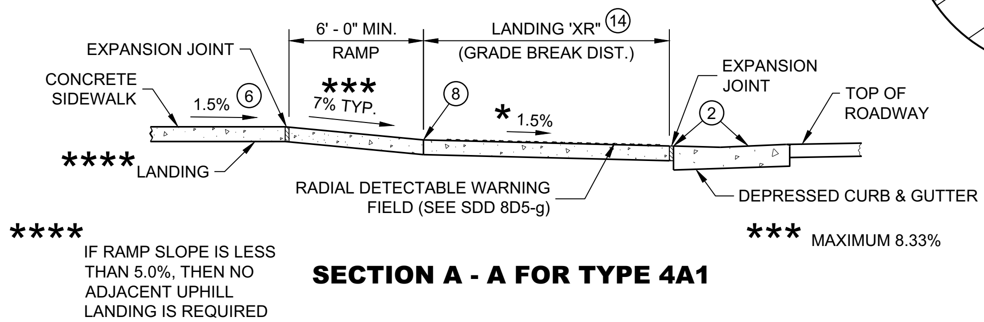
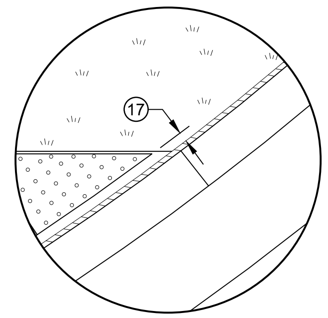


PLAN VIEW
CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



SECTION A - A FOR TYPE 4A1



DETAIL A

LEGEND

½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

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

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

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

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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

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

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

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

8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

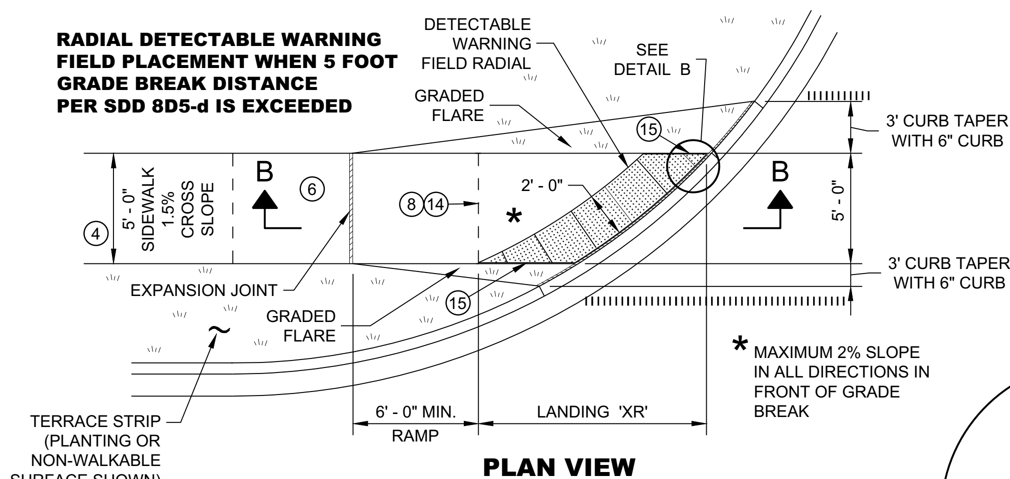
14 CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

15 FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

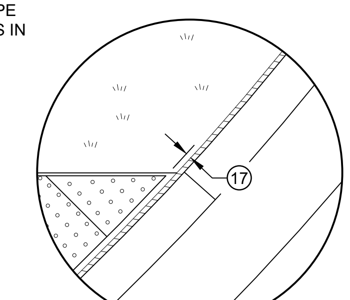
16 USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

17 A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

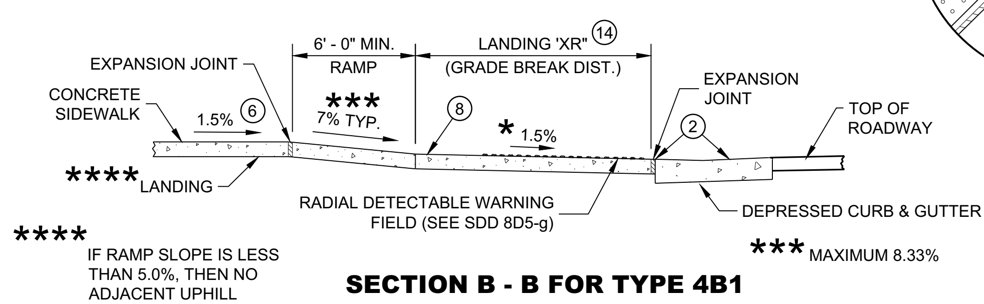
6



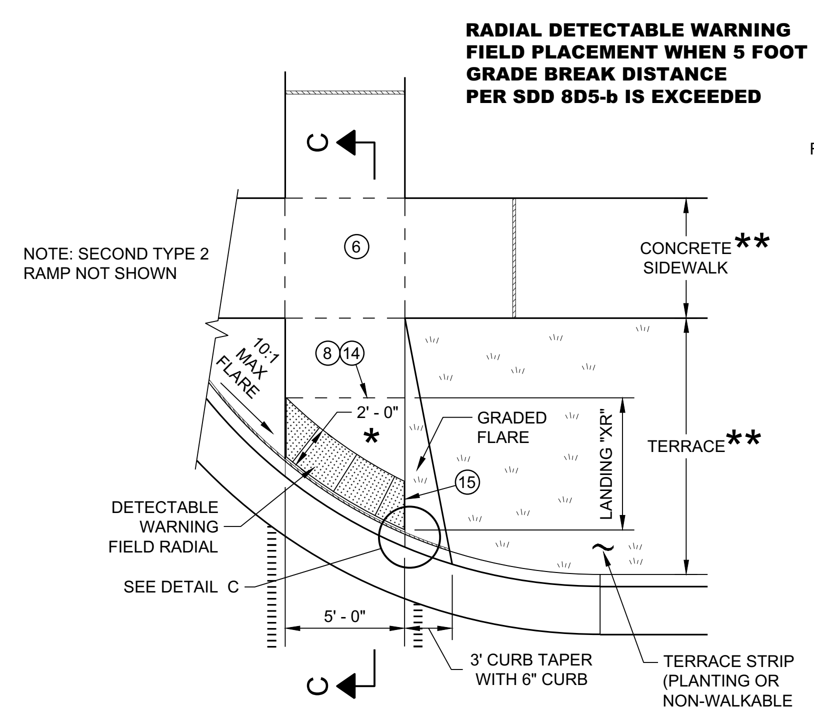
PLAN VIEW
CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



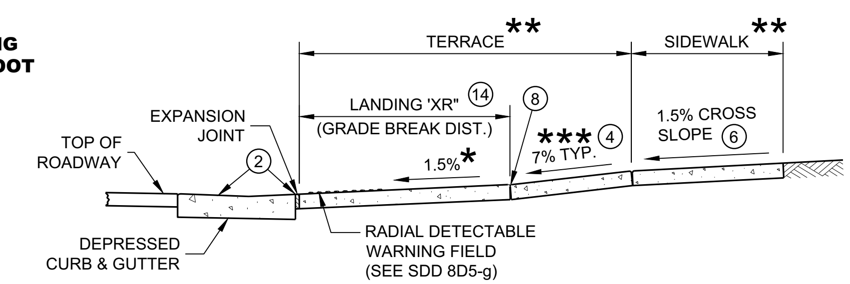
DETAIL B



SECTION B - B FOR TYPE 4B1



PLAN VIEW
CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)

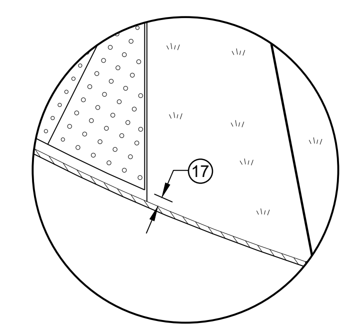


SECTION C - C FOR TYPE 2

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



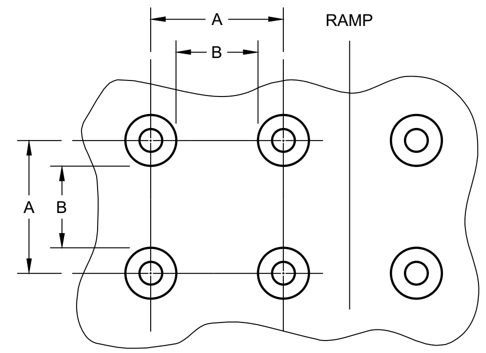
DETAIL C

6

CURB RAMPS
RADIAL DETECTABLE WARNING
FIELD APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTAT

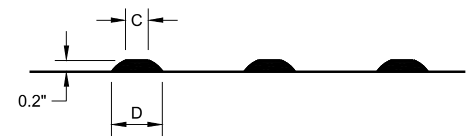
SDD 08D05 - 20f



PLAN VIEW

	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.



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

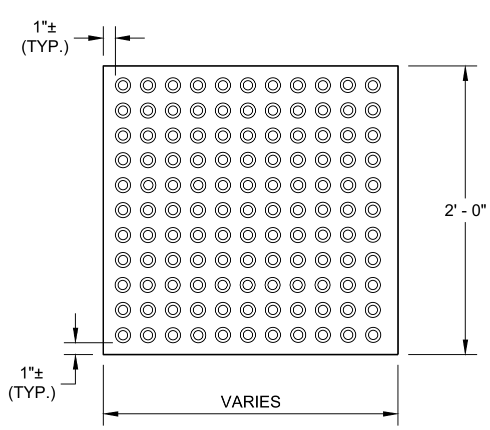
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

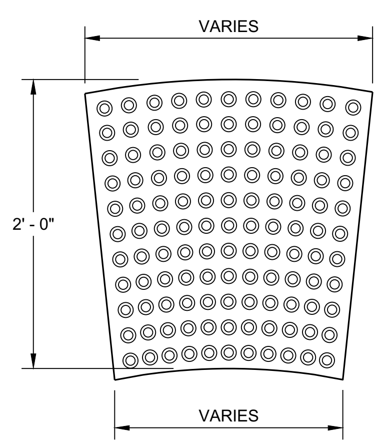
DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

6

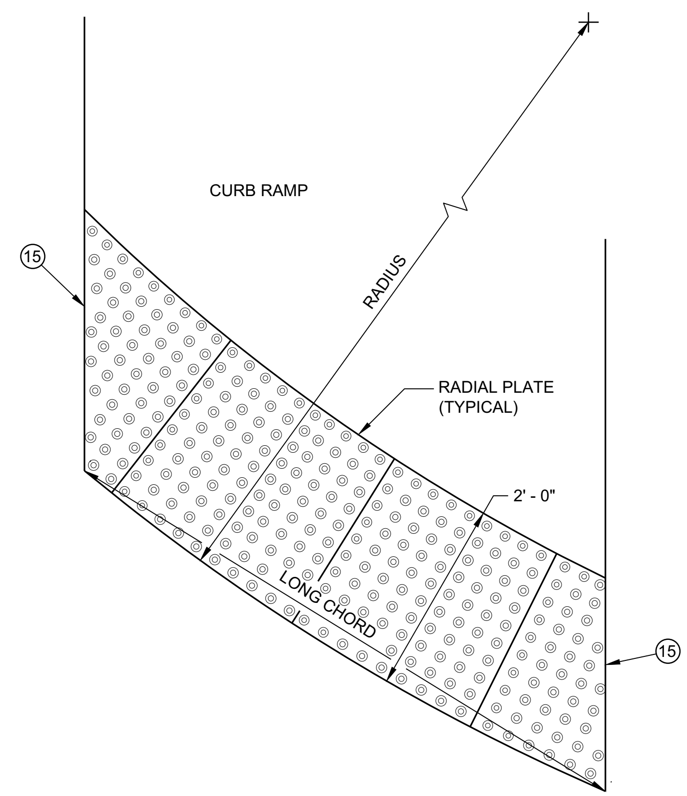


RECTANGULAR PLATES

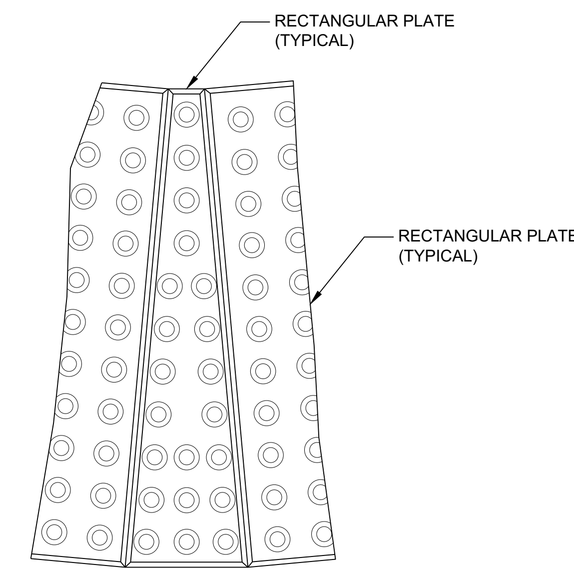


RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

6

CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

SDD 08D05 - 20g

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

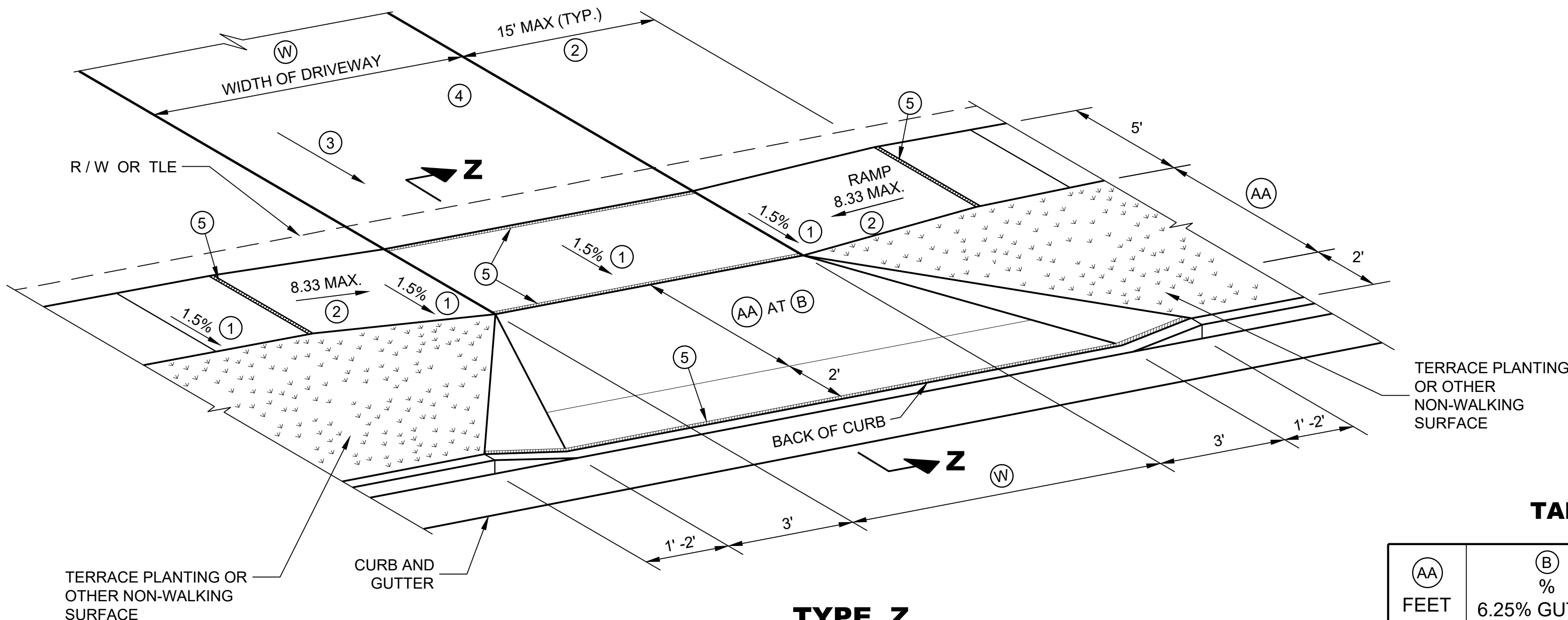
(1) CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

(2) THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.

(3) DRIVEWAY SLOPES: DESIRABLE MAXIMUM
- 10.5% UP AWAY FROM SIDEWALK (SAG)
- 8.5% DOWN AWAY FROM SIDEWALK (CREST)
- ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

(4) DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

(5) ½" EXPANSION JOINT FILLER.



TYPE Z
SIDEWALK WITH WIDER TERRACE
TERRACE VARIES 7 TO 12 FEET

TABLE Z

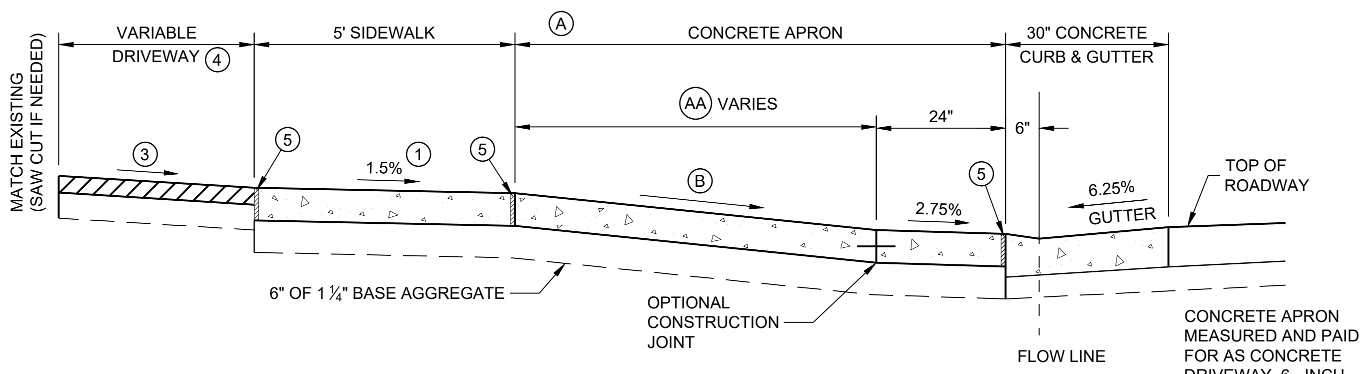
(AA) FEET	(B) % 6.25% GUTTER	(B) % 4% GUTTER
4.5'	11.5%	9% TO 11.5%
5.5'	9% TO 11.5%	8% TO 11.5%
6.5'	8% TO 11.5%	6% TO 11.5%
7.5'	7% TO 11.5%	6% TO 11.5%
8.5'	6% TO 11.5%	5% TO 11.5%
9.5'	5% TO 11.5%	4% TO 11.5%

(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)

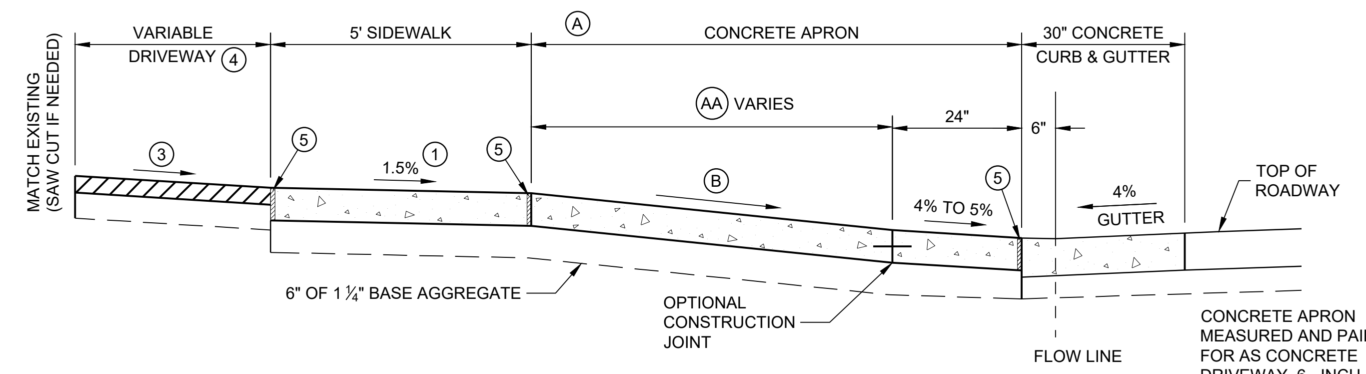
6

6



PROVIDE (AA) AND (B) AS SHOWN ON CROSS SECTIONS.

6.25% GUTTER SLOPE



PROVIDE (AA) AND (B) AS SHOWN ON CROSS SECTIONS.

4% GUTTER SLOPE

NOTE: SIDEWALK MY BE DEPRESSED IN DRIVEWAY AREAS FOR (B) VALUES NOT SHOWN IN TABLE Z.

SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY 6-INCH.

SEPARATE PAYMENT FOR BASE AGGREGATE WILL BE MADE.

SECTION Z - Z
DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER
(URBAN AND SUBURBAN)

DRIVEWAY AND SIDEWALK RAMPS TYPE Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

SDD 08D19 - 03

SDD 08D19 - 03

GENERAL NOTES

A MAXIMUM RADIUS OF 10 FEET SHALL BE USED FOR NON-COMMERCIAL PRIVATE ENTRANCES. RADII FOR COMMERCIAL DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER BASED ON TRAFFIC AND DRIVEWAY PERMIT RESTRICTIONS.

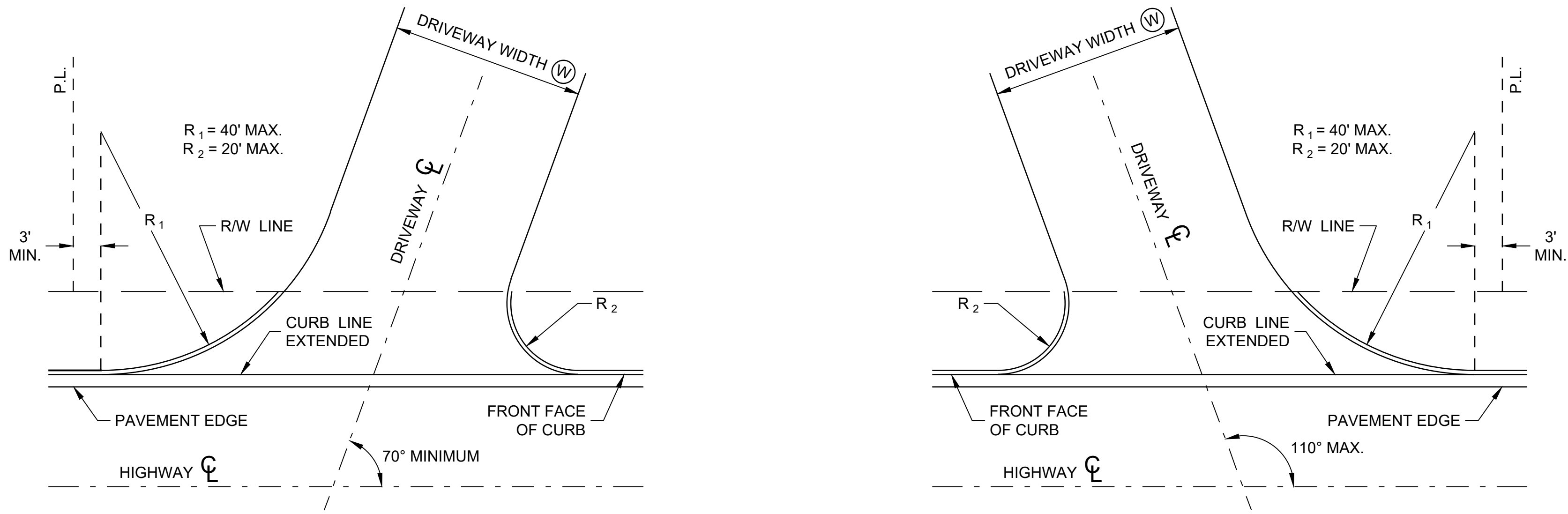
THE MINIMUM ANGLE OF INTERSECTION BETWEEN THE DRIVEWAY AND HIGHWAY CENTERLINES SHALL BE 70°.

ALL CURVILINEAR PRIVATE ENTRANCE OUTLINES SHALL BE CONTAINED WITHIN THE HIGHWAY R/W.

NO DRIVEWAY SHALL BE BUILT WITHIN 3 FEET OF THE PROPERTY LINE EXCEPT FOR EXISTING JOINT DRIVEWAY SHARED BY TWO OWNERS.

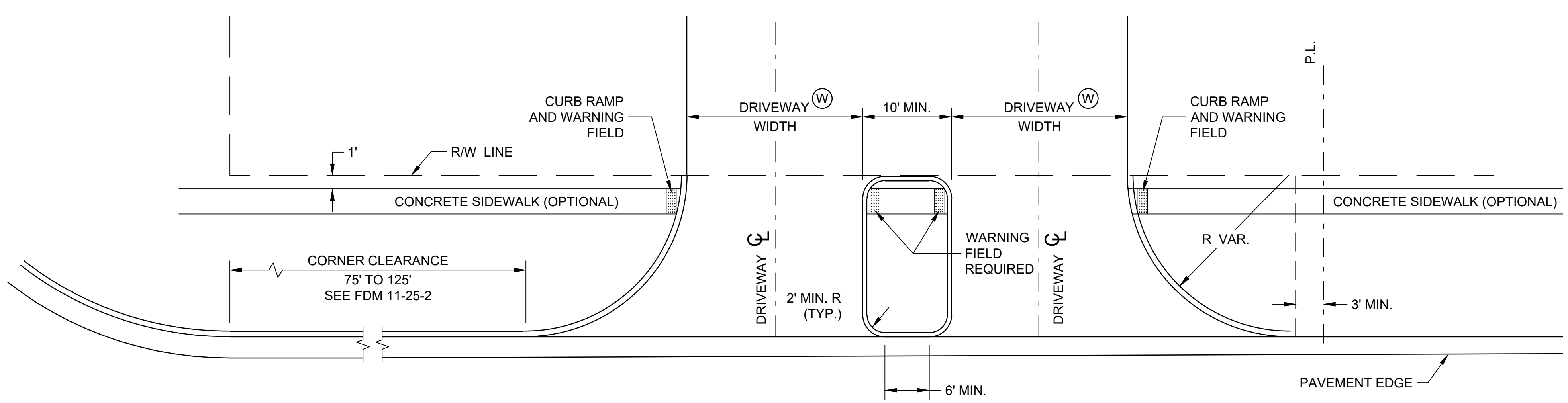
(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)



SKEWED DRIVEWAY DETAILS
(COMMERCIAL AND NON-COMMERCIAL)
SIDEWALK NOT SHOWN

6

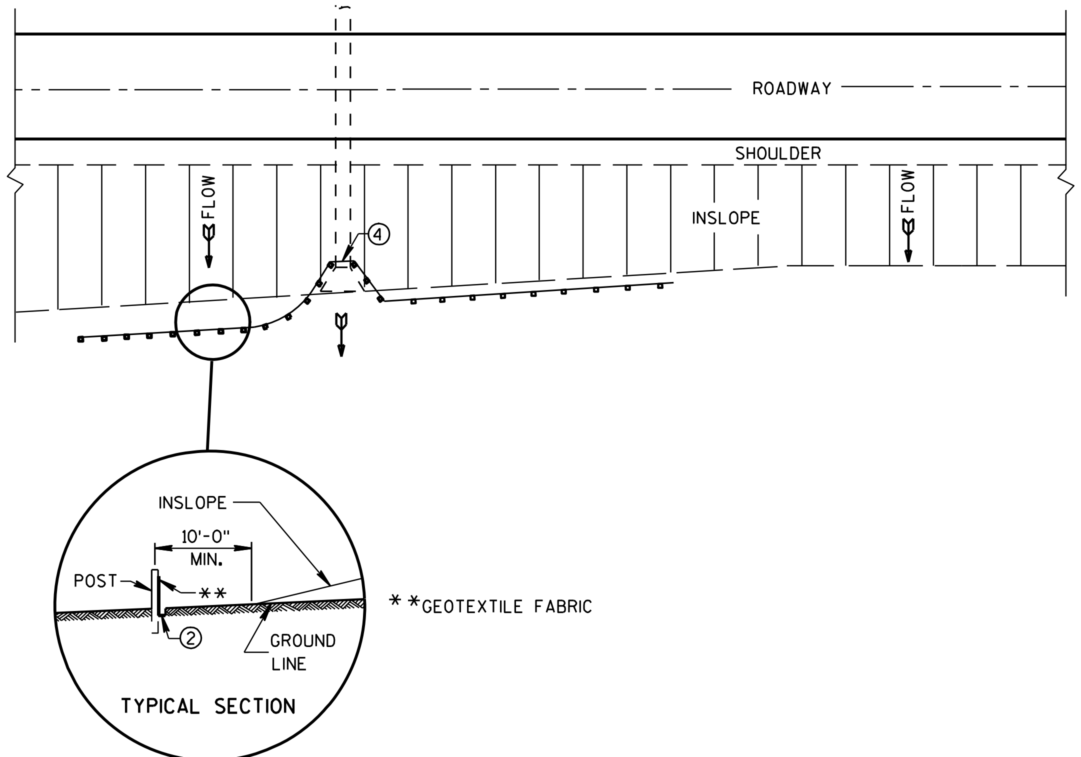


DRIVEWAY LOCATION AND SPACING DETAILS
SIDEWALK SHOWN

DRIVEWAYS WITH CURB AND GUTTER RETURNS

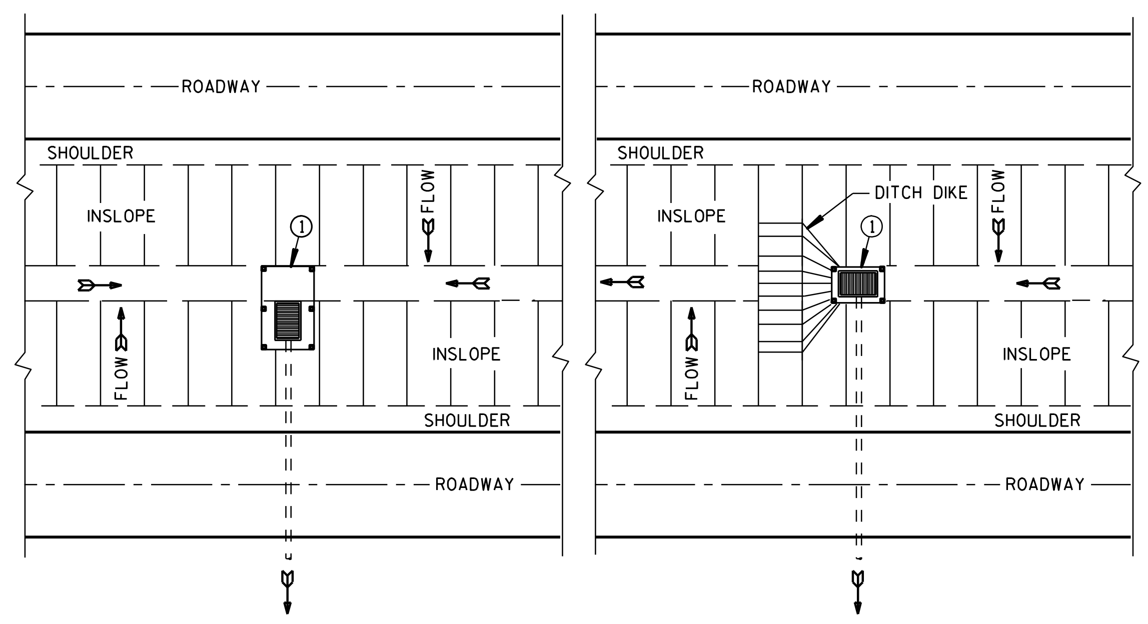
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
00-00-00 DATE
/S/ <AUTHOR> ROADWAY STANDARDS DEVE ENGINEER
FHWA



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

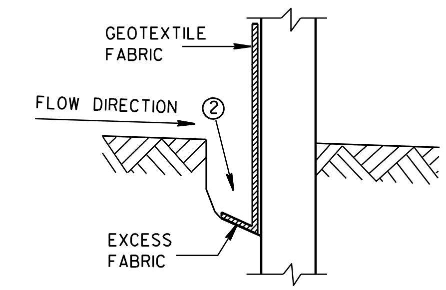
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

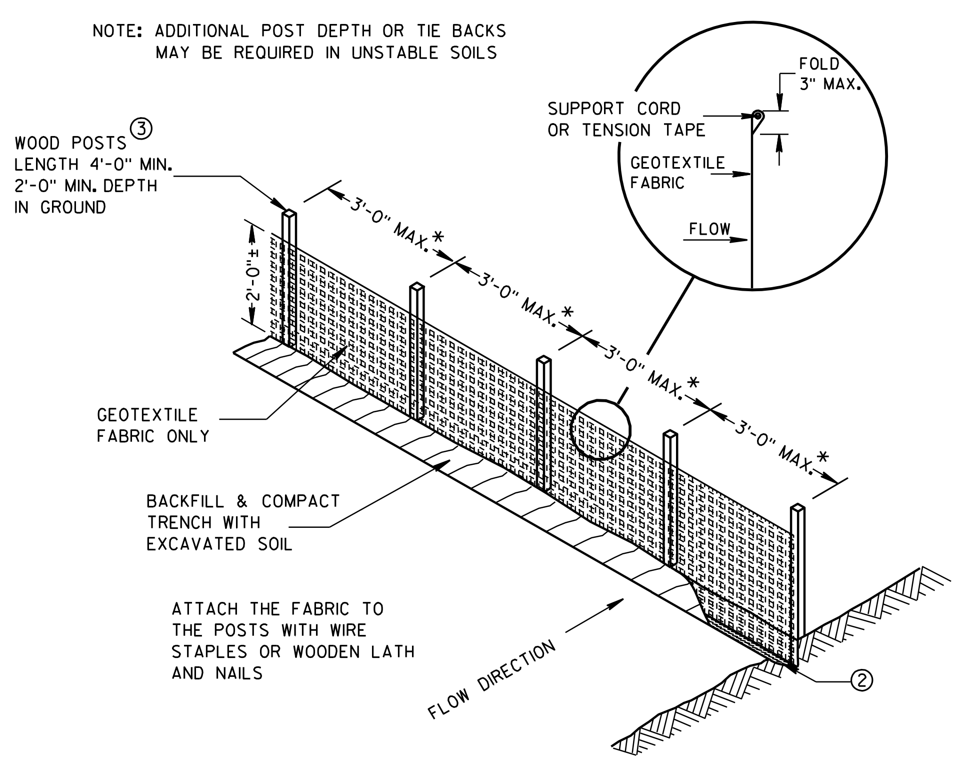
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



TRENCH DETAIL

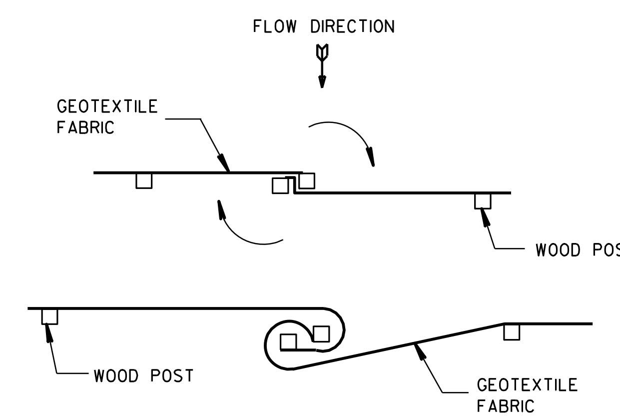
6

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

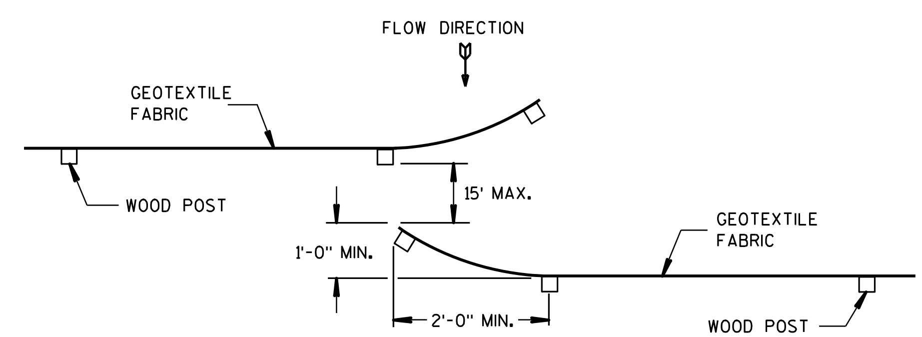


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

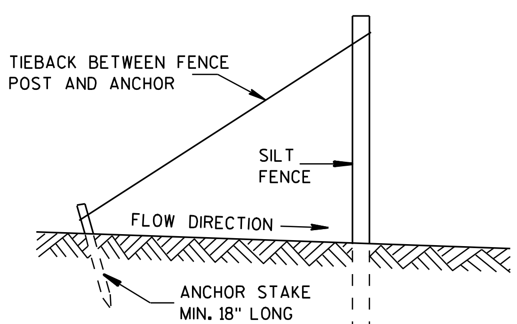


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

6

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

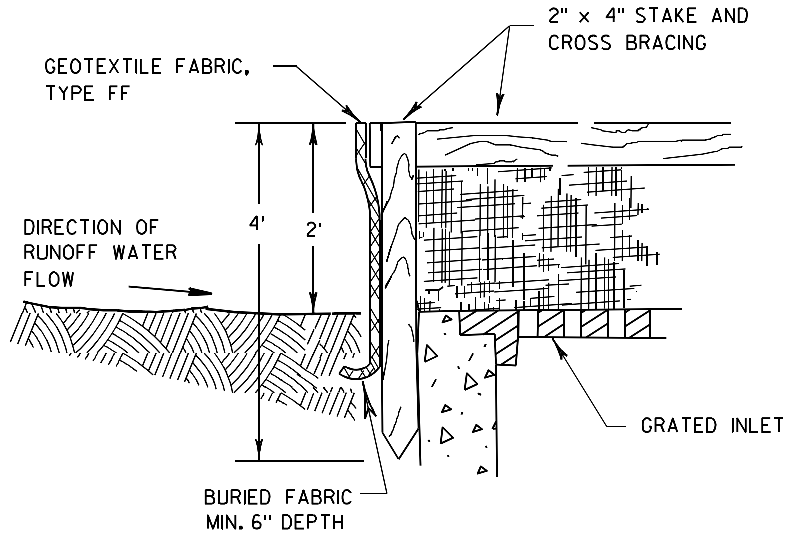
APPROVED

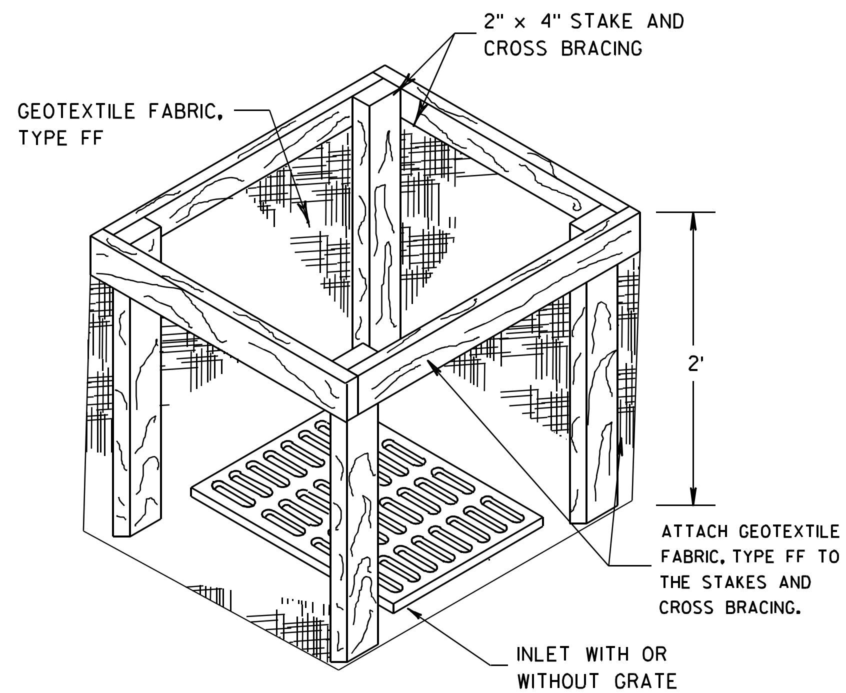
4-29-05 /S/ Beth Cann
DATE CHIEF ROADWAY DEVELOP 78 INEER

FHWA

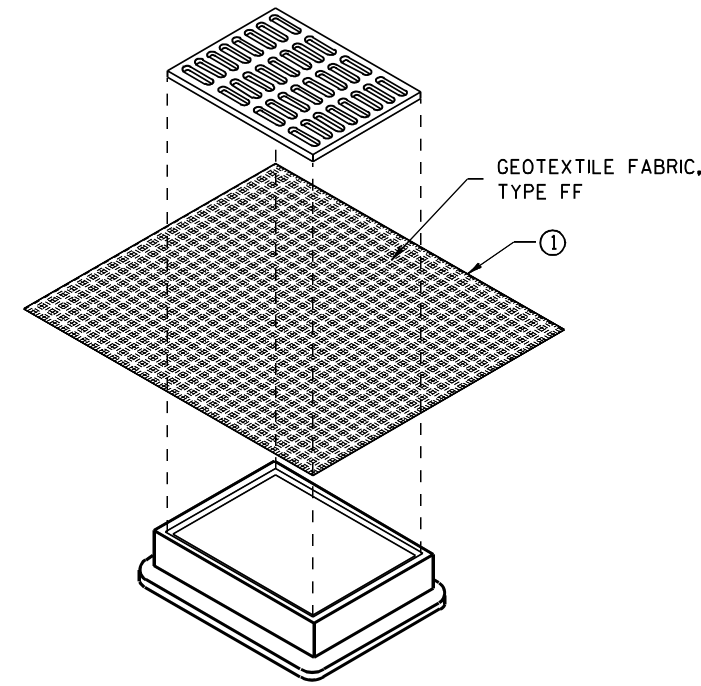
S.D.D. 8 E 9-6

S.D.D. 8 E 9-6



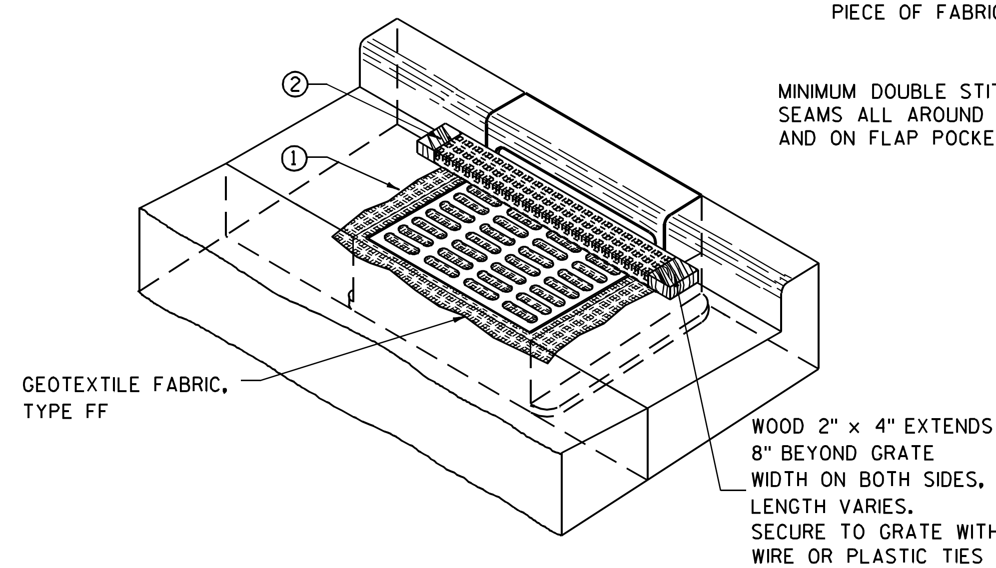


INLET PROTECTION, TYPE A

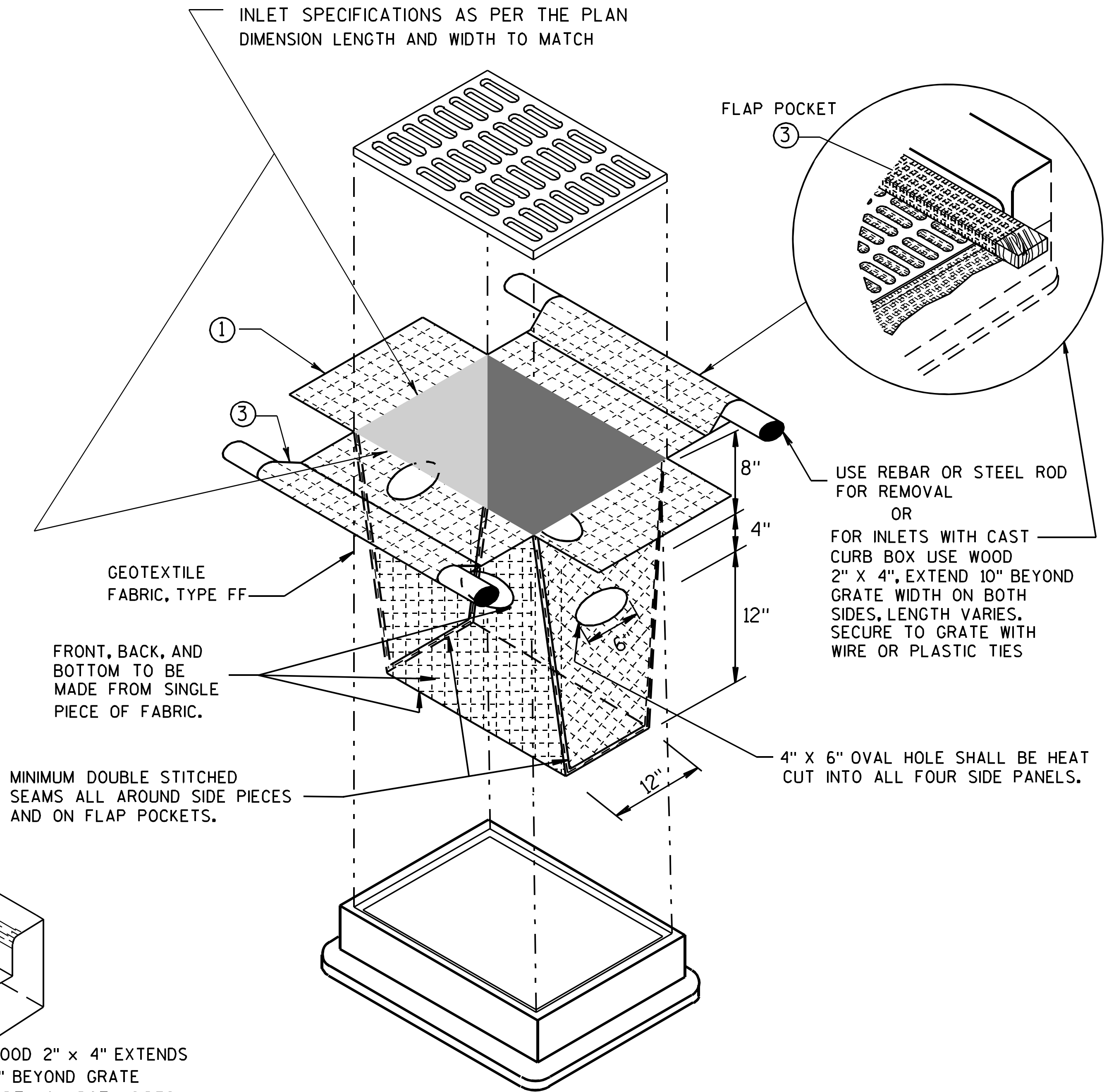


INLET PROTECTION, TYPE B (WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE 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.

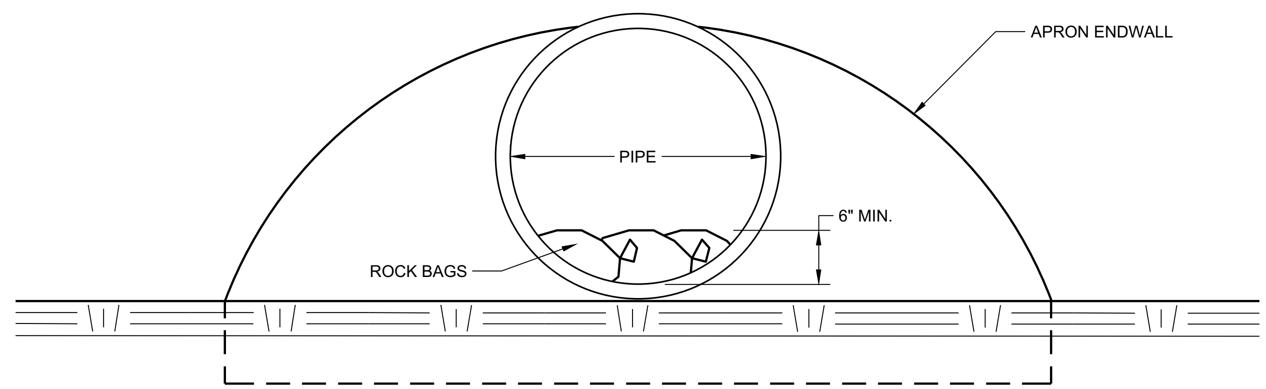
INLET PROTECTION TYPE A, B, C, AND D
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 10/16/02 DATE   /S/ Beth Cann[illegible] FHWA   CHIEF ROADWAY DEVELOP[illegible]NEER

6

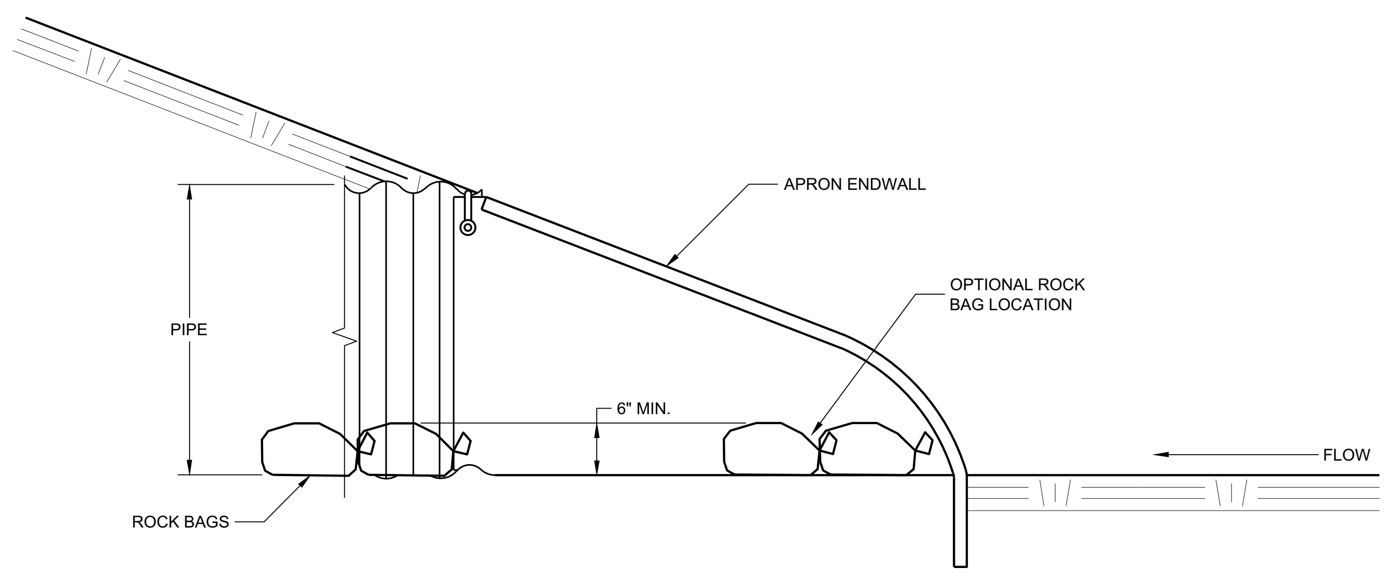
6

S.D.D. 8 E 10-2

S.D.D. 8 E 10-2



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

6

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SDD 08E15 - 01

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

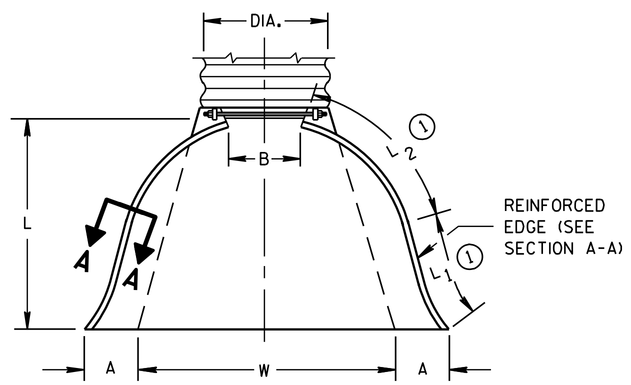
SDD 08E15 - 01

METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L_1 ①	L_2 ①	W (±2")		
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

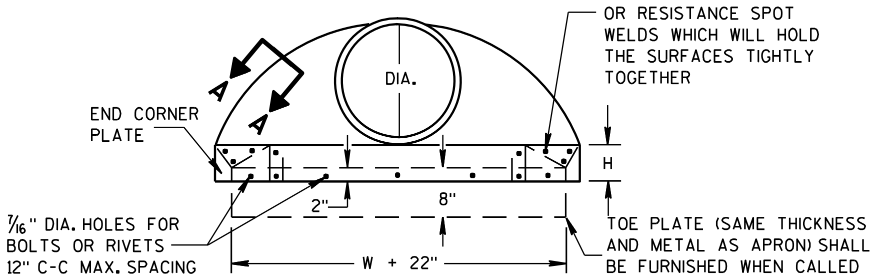
× EXCEPT CENTER PANEL
SEE GENERAL NOTES

REINFORCED CONCRETE APRON ENDWALLS								
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE
	T	A	B	C	D	E	G	
12	2	4	24	48 7/8	72 7/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	*33 1/4-35**	*98 1/4-100**	90	5 1/2	2 2/5 to 1
60	6	*30-35**	60	39	99	96	5	2 to 1
66	6 1/2	*24-30**	*72-78**	*21-27**	99	102	5 1/2	2 to 1
72	7	*24-36**	78	21	99	108	6	2 to 1
78	7 1/2	*24-36**	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

*MINIMUM
**MAXIMUM



PLAN VIEW



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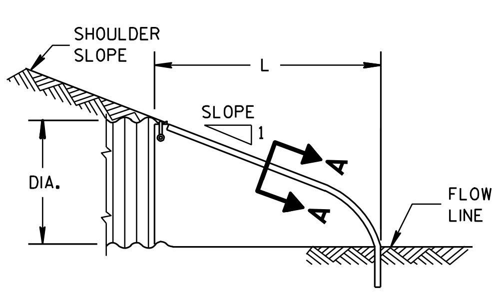
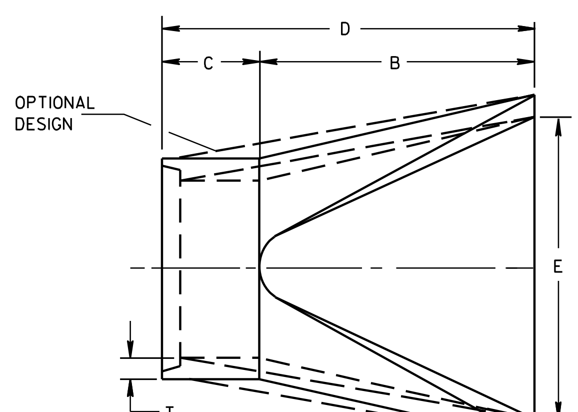
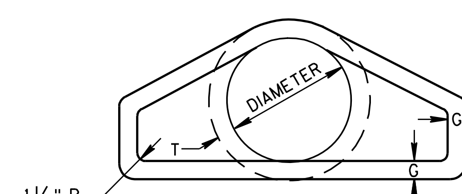


SIDE ELEVATION

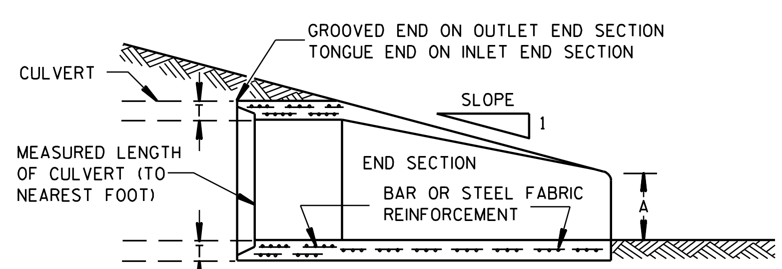
METAL ENDWALLS



PLAN

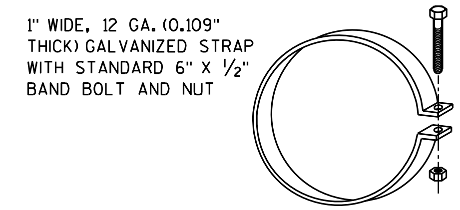


END VIEW



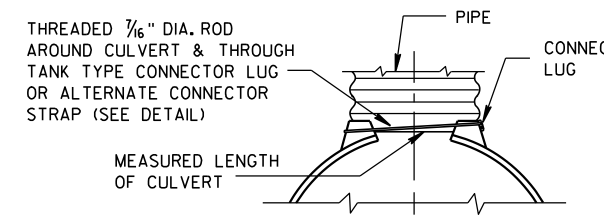
LONGITUDINAL SECTION

CONCRETE ENDWALLS

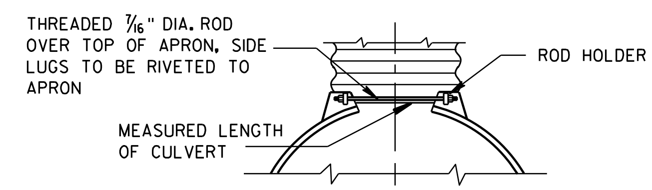


ALTERNATE FOR TYPE 1 CONNECTION

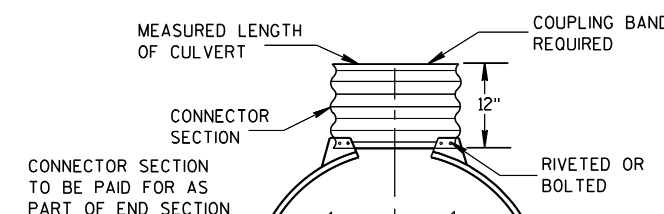
END SECTION CONNECTOR STRAP



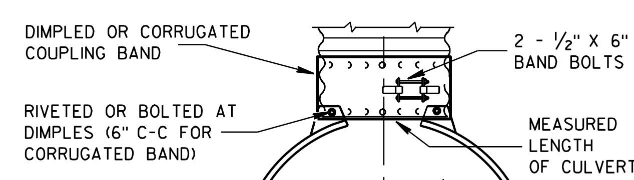
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

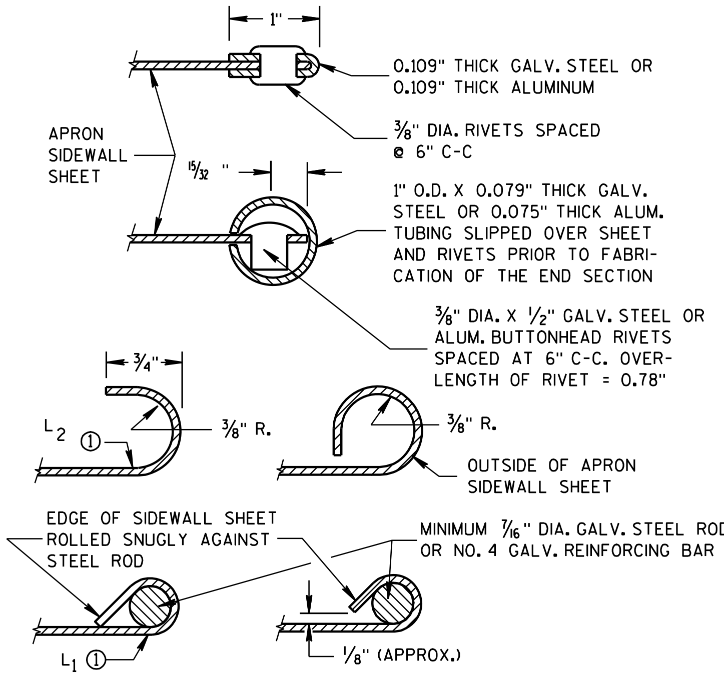
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

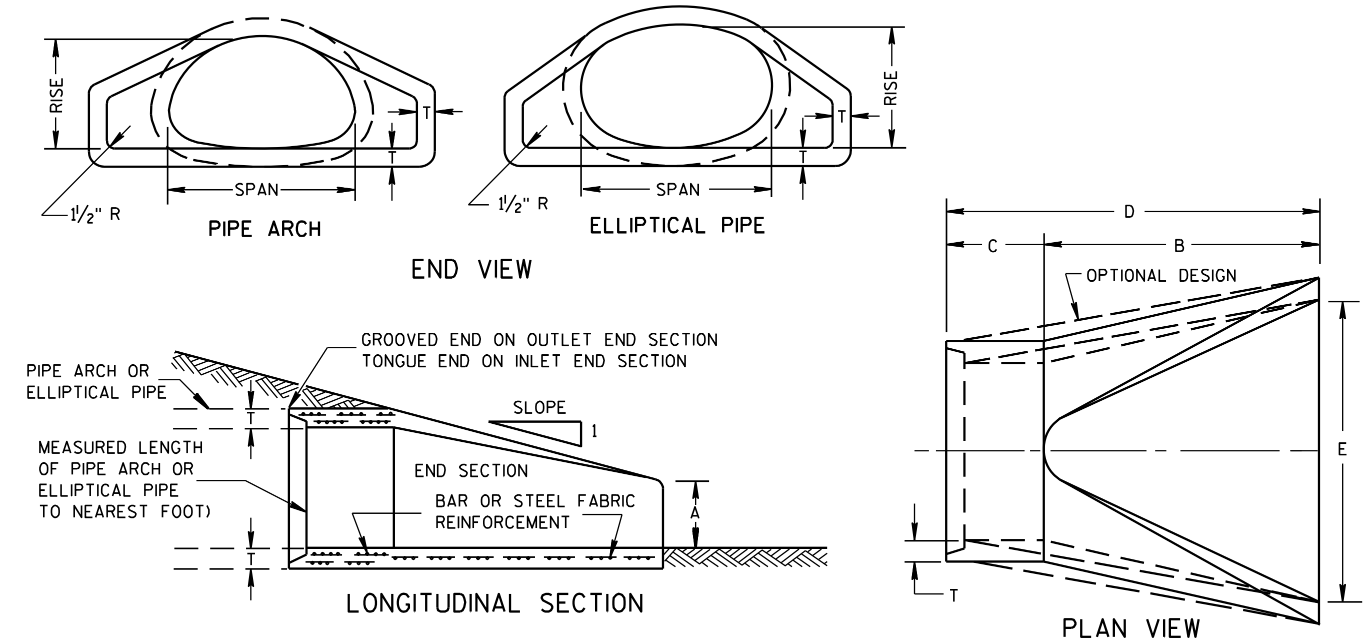
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

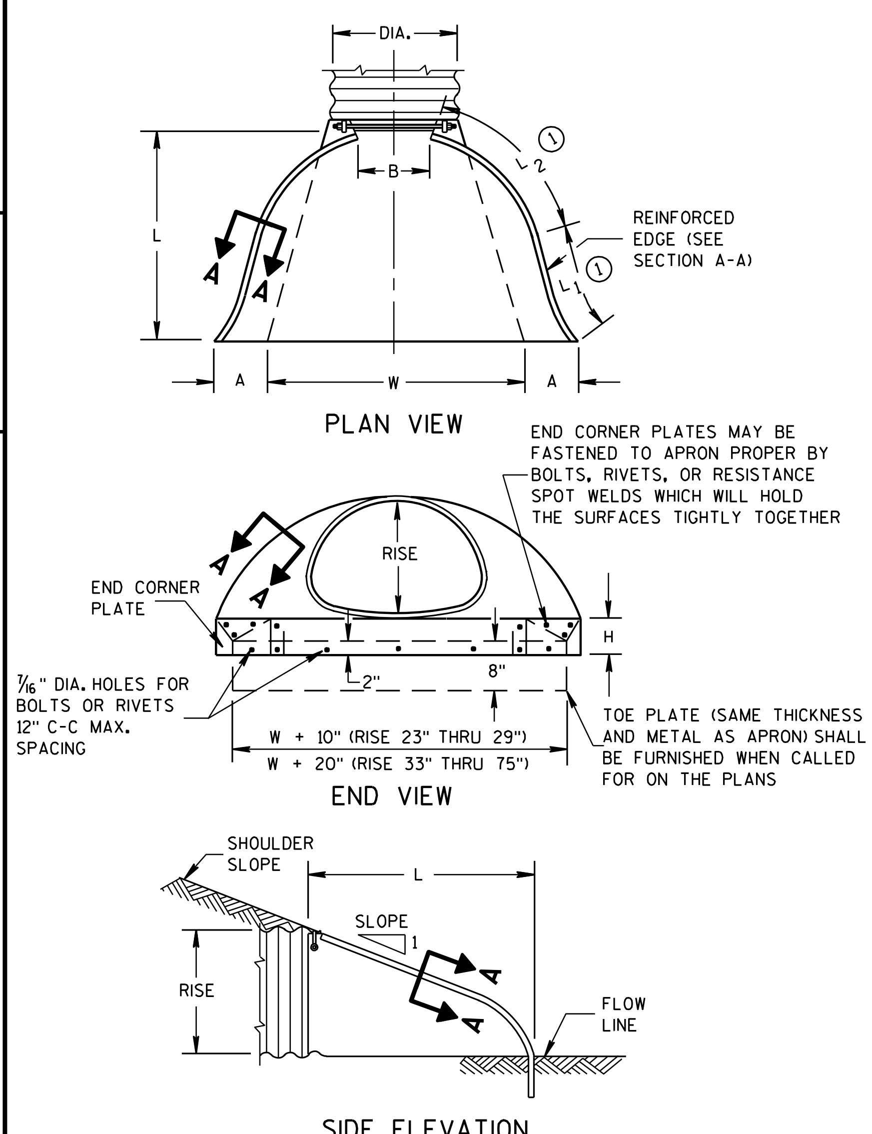
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

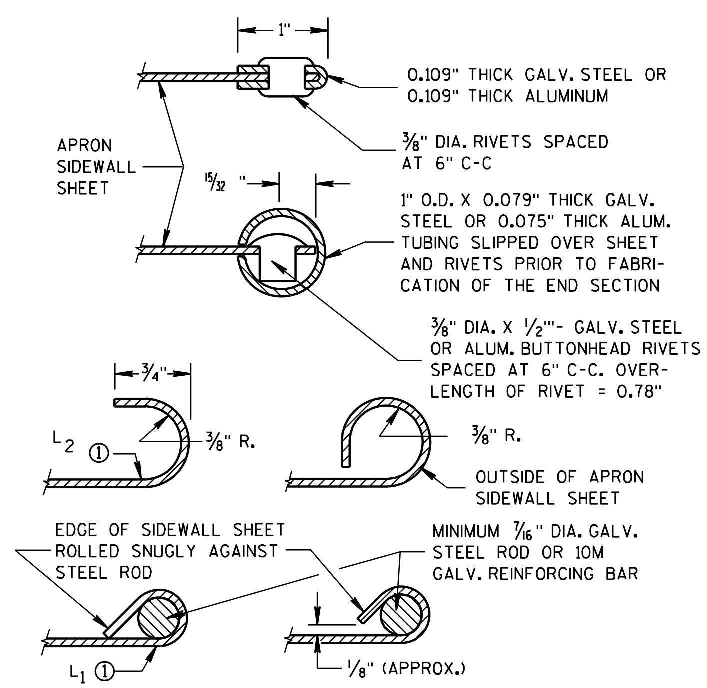
APPROVED
11/30/94 /S/ Rory L. Rhinesmith
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



CONCRETE ENDWALLS



METAL ENDWALLS



SECTION A-A

2- $\frac{2}{3}$" X $\frac{1}{2}$" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 $\frac{1}{2}$")	L_1 ①	L_2 ①	W (±2")		
15	17	13	.064	.060	7	9	6	19	14	16	30	$2\frac{1}{2}$ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	$19\frac{3}{8}$	36	$2\frac{1}{2}$ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	$21\frac{3}{4}$	42	$2\frac{1}{2}$ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	$27\frac{1}{2}$	48	$2\frac{1}{2}$ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	$37\frac{5}{8}$	60	$2\frac{1}{2}$ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	$45\frac{3}{8}$	75	$2\frac{1}{2}$ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	$54\frac{3}{4}$	85	$2\frac{1}{2}$ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	$2\frac{1}{2}$ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	$72\frac{3}{4}$	102	$2\frac{1}{4}$ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	$82\frac{1}{4}$	114	$2\frac{1}{4}$ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 $\frac{1}{2}$")	L_1 ①	L_2 ①	W (±2")		
48	53	41	.109	.105	18	26	12	63	24	$72\frac{3}{4}$	90	$2\frac{1}{2}$ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	$82\frac{1}{4}$	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	$1\frac{1}{2}$ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	$1\frac{1}{2}$ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	$1\frac{1}{2}$ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	$1\frac{1}{2}$ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	$1\frac{1}{2}$ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	$1\frac{1}{2}$ to 1	3 Pc.

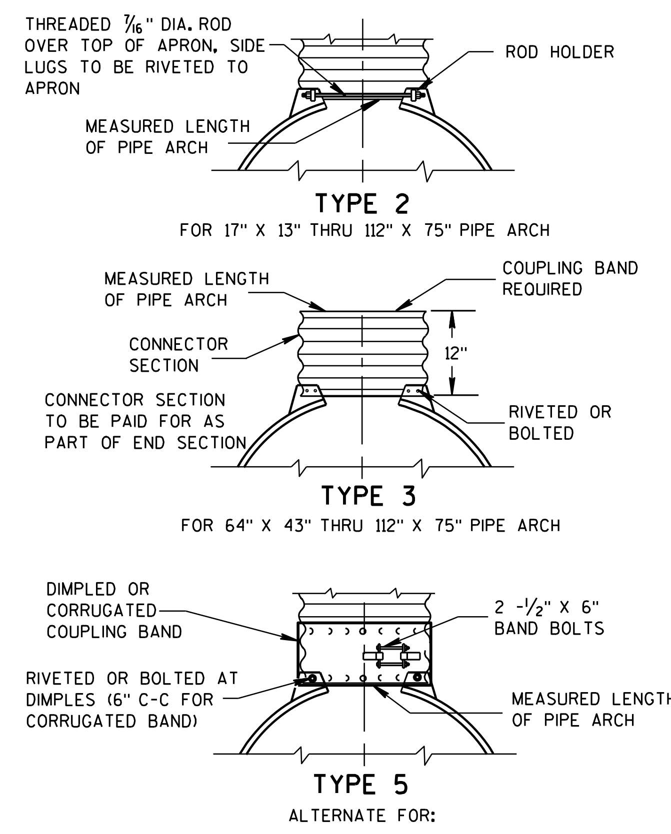
NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

REINFORCED CONCRETE PIPE ARCH									
EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
24	29	18	3	$8\frac{1}{2}$	39	33	72	48	3 to 1
30	36	22	$3\frac{1}{2}$	$9\frac{1}{2}$	50	46	96	60	3 to 1
36	44	27	4	$11\frac{1}{8}$	60	36	96	72	3 to 1
42	51	31	$4\frac{1}{2}$	$15\frac{13}{16}$	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	$5\frac{1}{2}$	$25\frac{1}{2}$	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	$28\frac{1}{2}$	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE									
EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
24	30	19	$3\frac{1}{4}$	$8\frac{1}{2}$	39	33	72	48	3 to 1
30	38	24	$3\frac{3}{4}$	$9\frac{1}{2}$	54	18	72	60	3 to 1
36	45	29	$4\frac{1}{2}$	$11\frac{1}{8}$	60	24	84	72	$2\frac{1}{2}$ to 1
42	53	34	5	$15\frac{3}{4}$	60	36	96	78	$2\frac{1}{2}$ to 1
48	60	38	$5\frac{1}{2}$	21	60	36	96	84	$2\frac{1}{2}$ to 1
54	68	43	6	$25\frac{1}{2}$	60	36	96	90	$2\frac{1}{2}$ to 1
60	76	48	$6\frac{1}{2}$	30	60	36	96	96	$2\frac{1}{2}$ to 1

** NOMINAL SIZE



NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

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

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

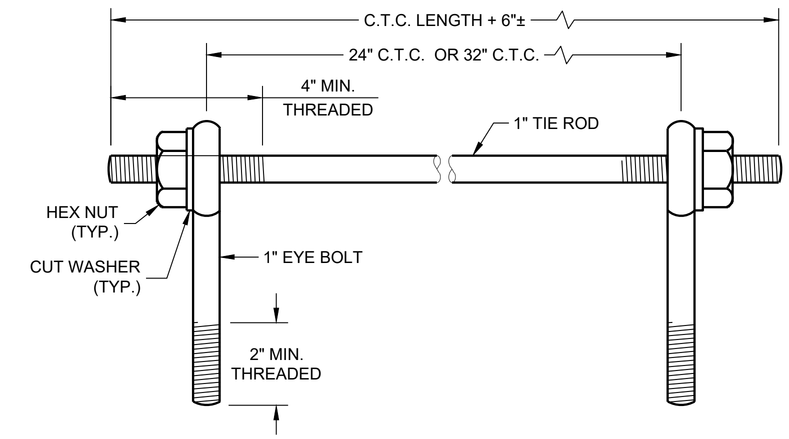
6

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

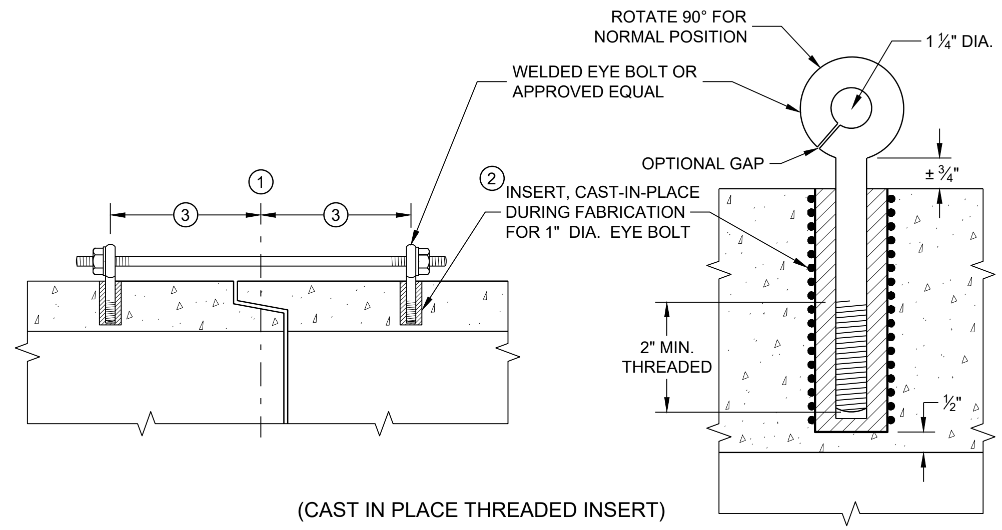
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 /S/ Rory L. Rhinesmith
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

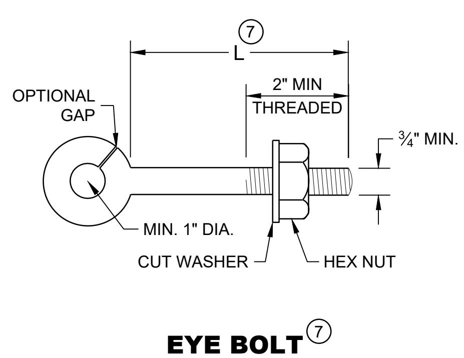
CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

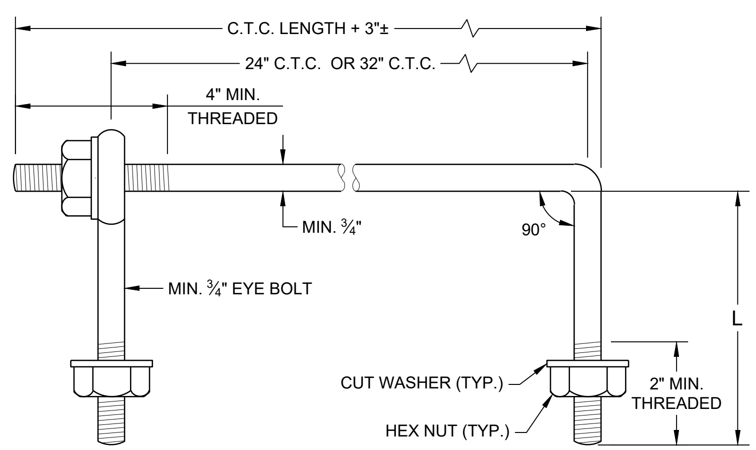
1. CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
2. THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.
3. HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.
4. BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.
5. OPENING TO BE ROD DIAMETER PLUS 1 INCH.
6. LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.
7. EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

6

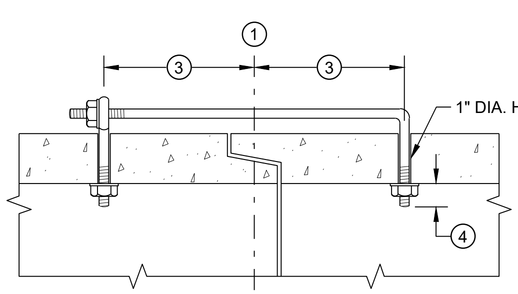


EYE BOLT 7

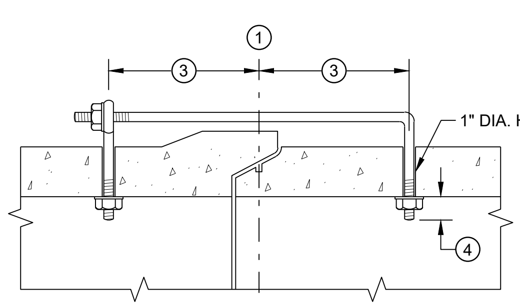
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

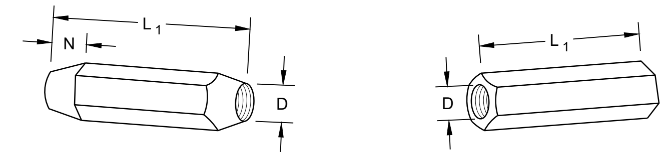
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

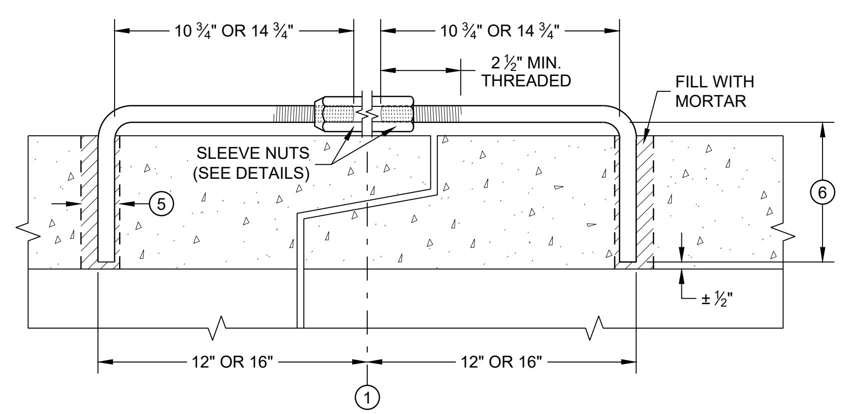
PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 $\frac{7}{16}$

DIMENSIONS SHOWN ARE IN INCHES



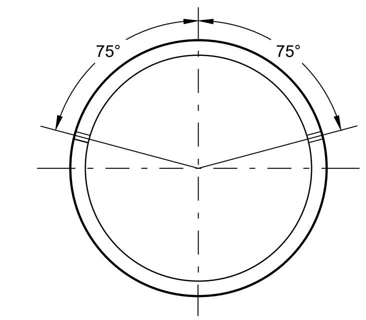
RIGHT AND LEFT THREADS

SLEEVE NUTS



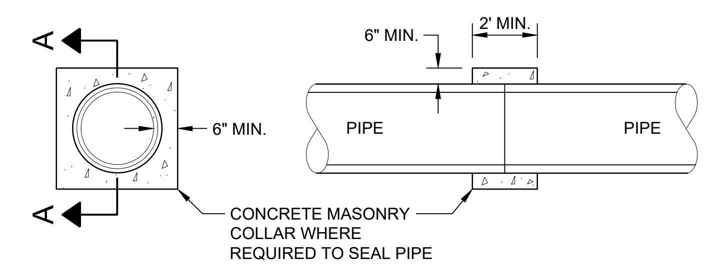
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

6

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

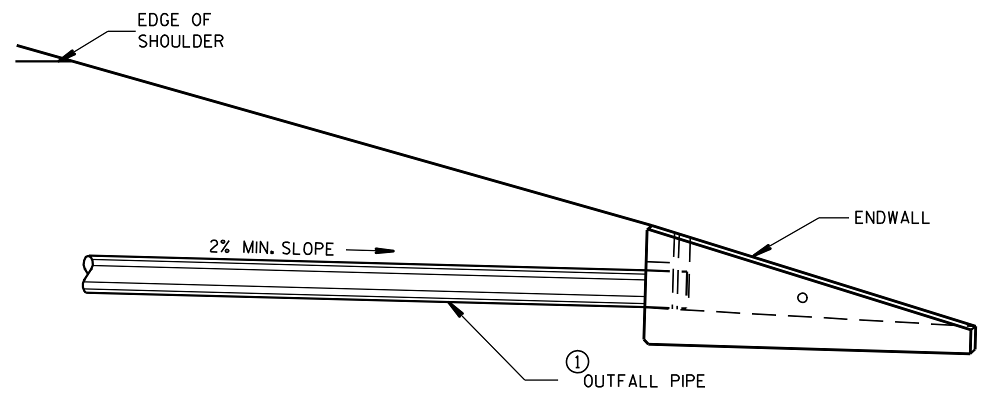
APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

SDD 08F04 - 08

SDD 08F04 - 08

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**4	6	12	5¼	9	8	32	36	11	2⅜	6½	4
6	8	14	7¼	11	10	42	44	13	3⅝	8½	6

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION DETAIL

GENERAL NOTES

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

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

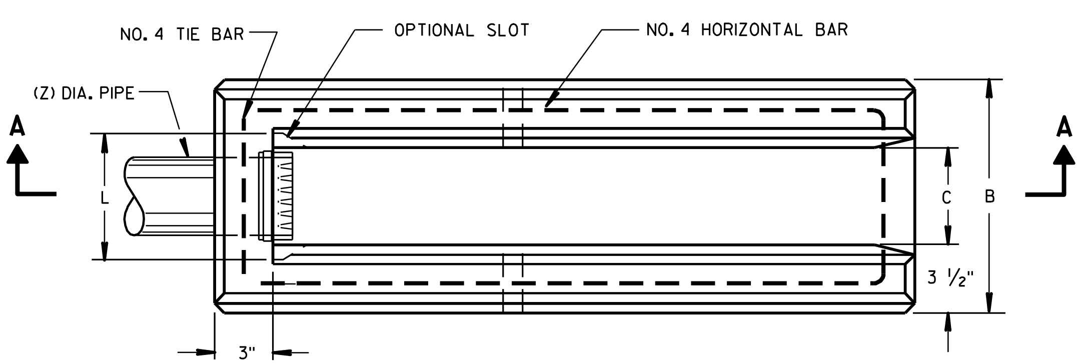
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

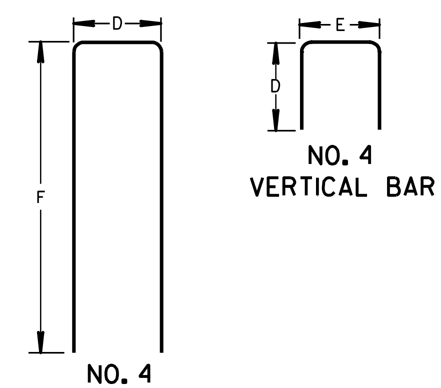
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

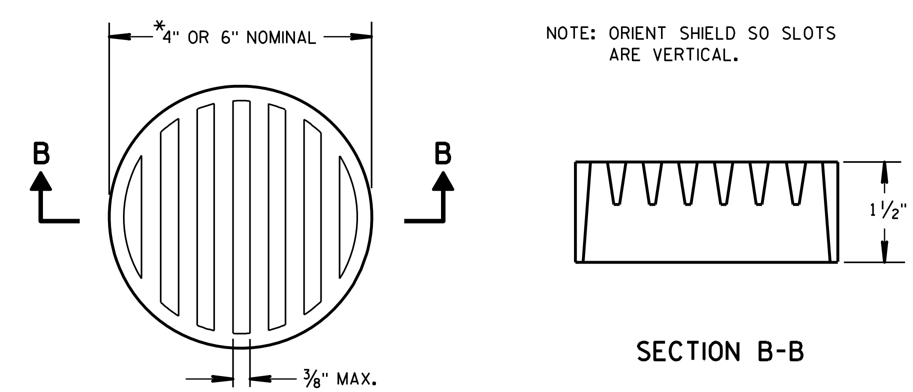
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



PLAN VIEW

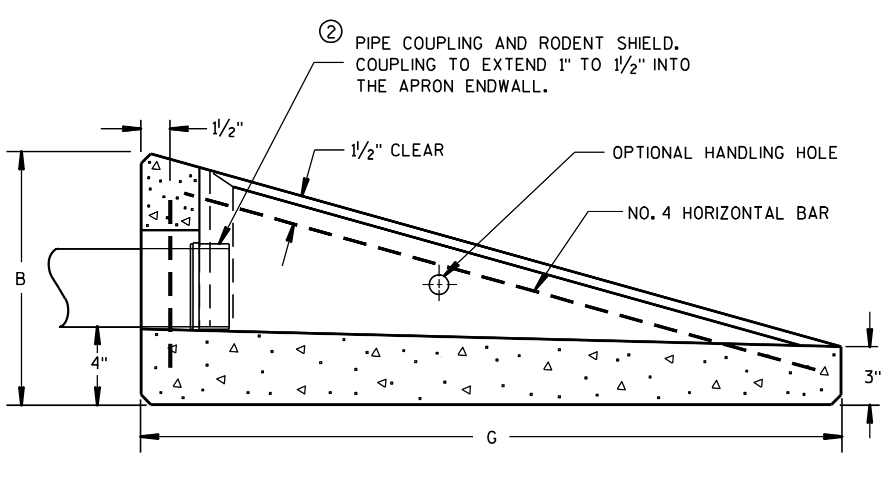


BAR STEEL REINFORCEMENT DETAILS

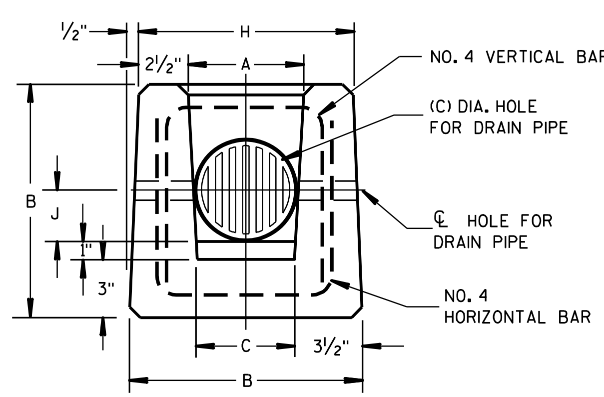


② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.



SECTION A-A



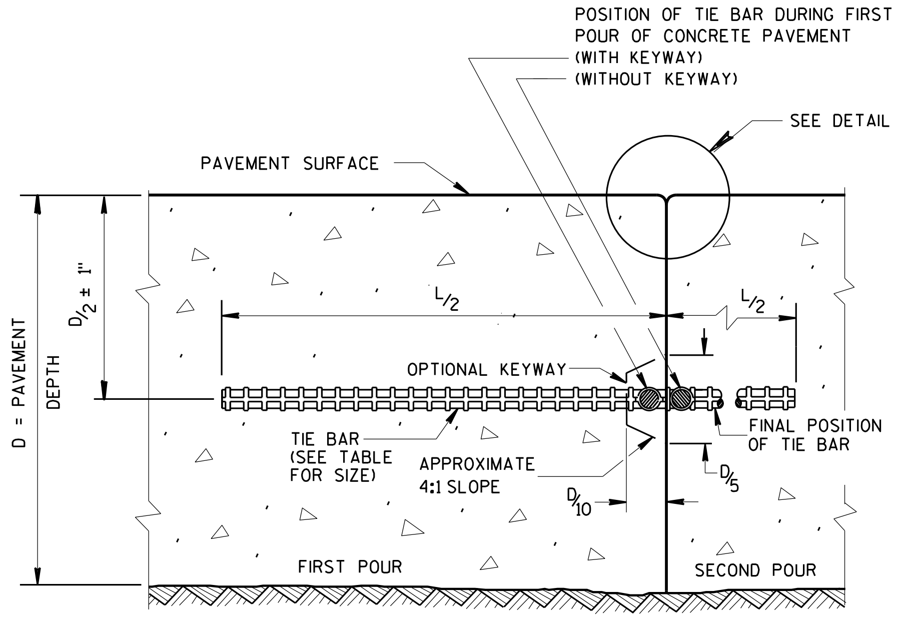
END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN

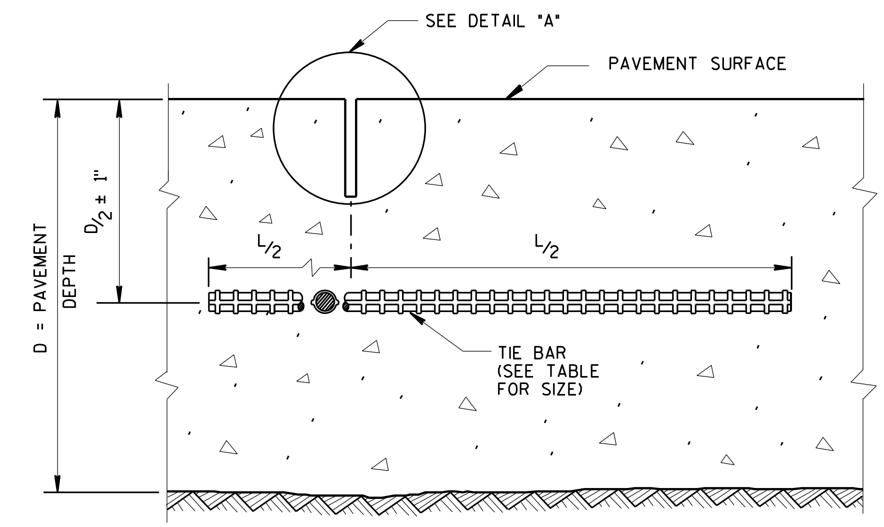
REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/10/98 /S/ Rory L. Rhinesmith
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



CONSTRUCTION JOINT



SAWED JOINT

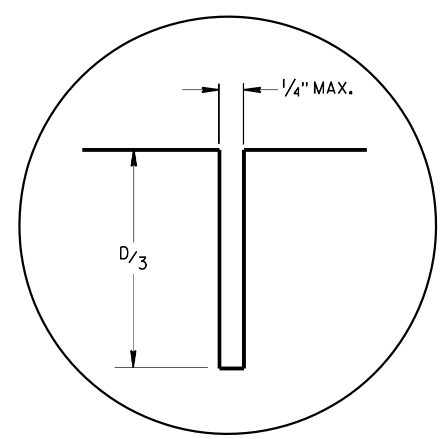
GENERAL NOTES

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

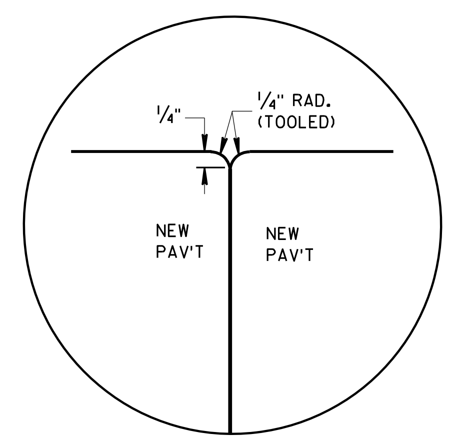
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

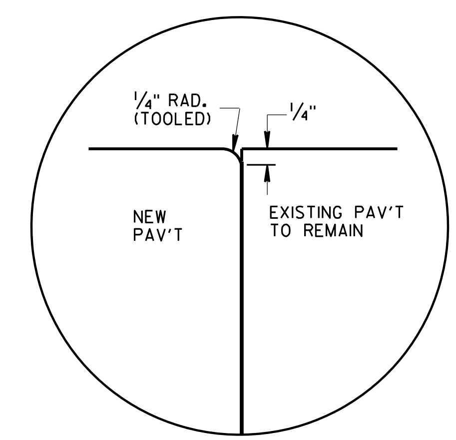
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



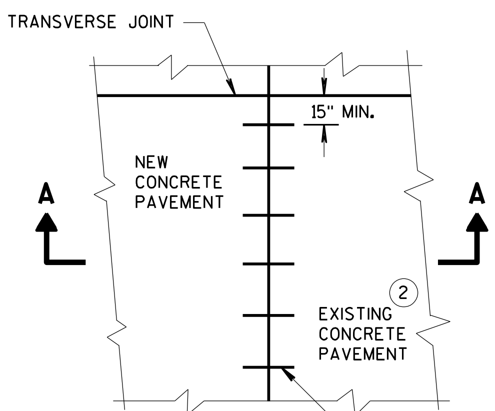
DETAIL "A"



DETAIL "B"

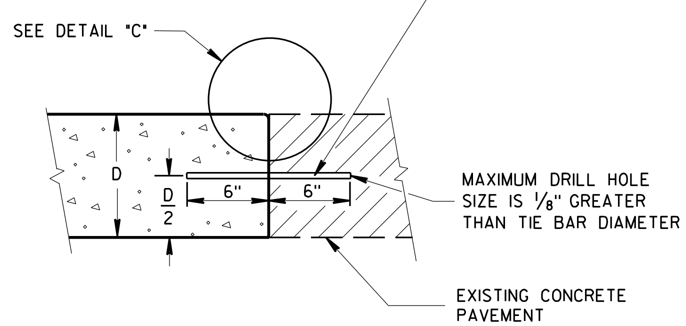


DETAIL "C"



PLAN VIEW

NO. 6 TIE BARS SPACED 30" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT. (1)



SECTION A-A

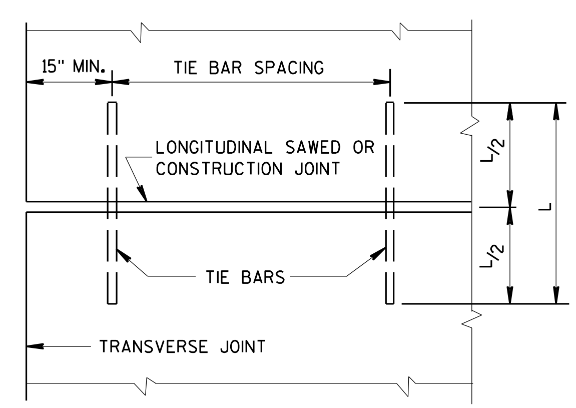
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

TIE BAR TABLE

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

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — /S/ Peter Kemp P.E.
DATE — PAVEMENT SUPERVISOR
FHWA

6

S.D.D. 13 C 1-19

GENERAL NOTES

CONTRACTION JOINTS

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

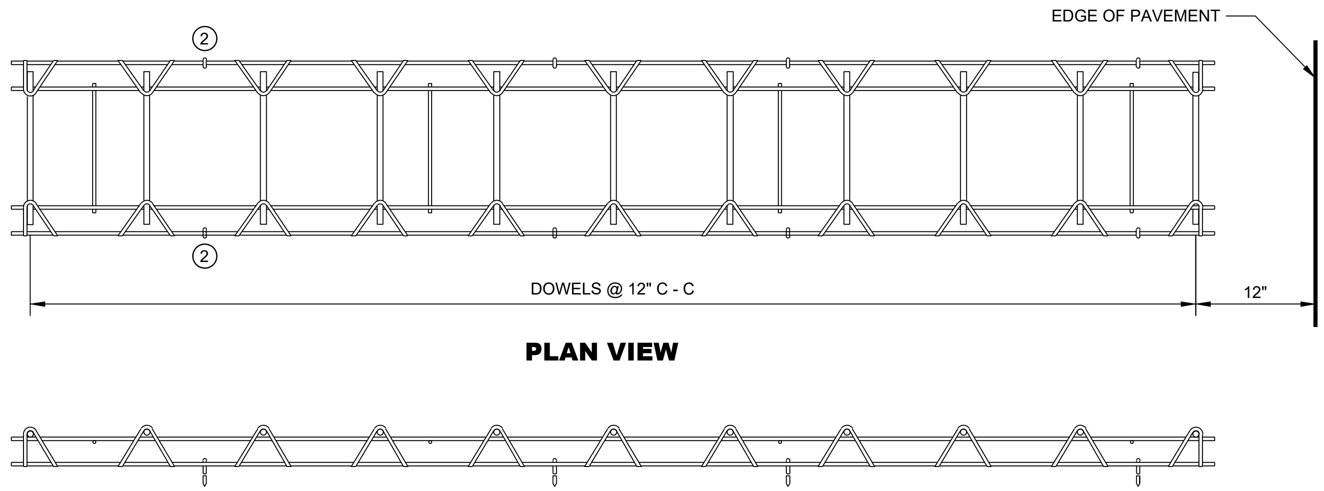
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

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

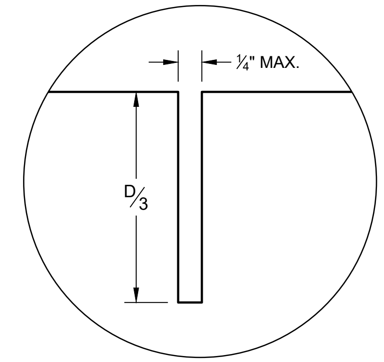
CONSTRUCTION JOINTS

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

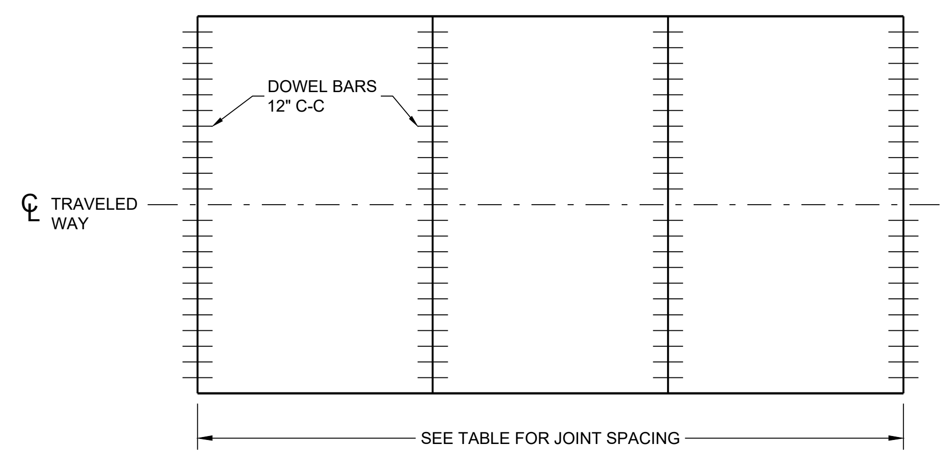
1. OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.
2. SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.
3. FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.
4. PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.
5. INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.
6. APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
7. ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



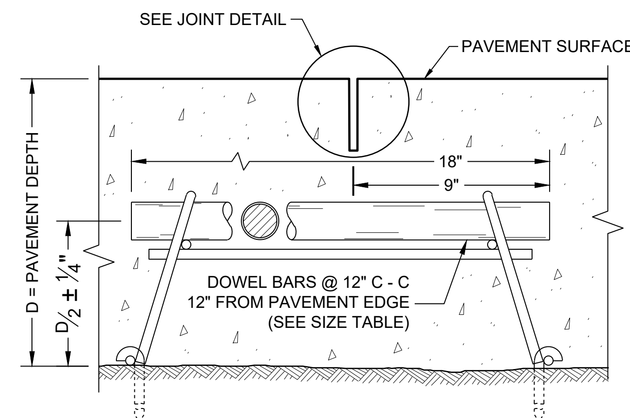
CONTRACTION JOINT DOWEL ASSEMBLY (1)



JOINT DETAIL



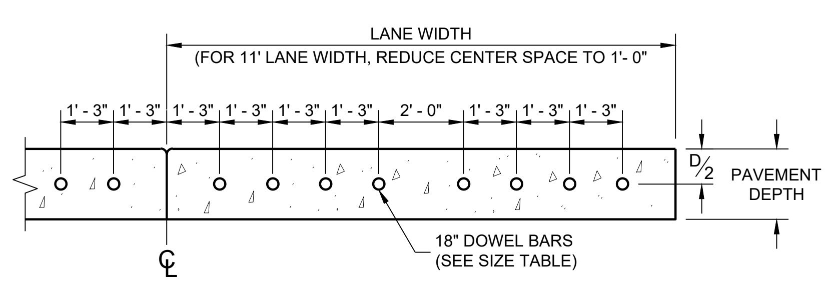
CONTRACTION JOINT LOCATIONS



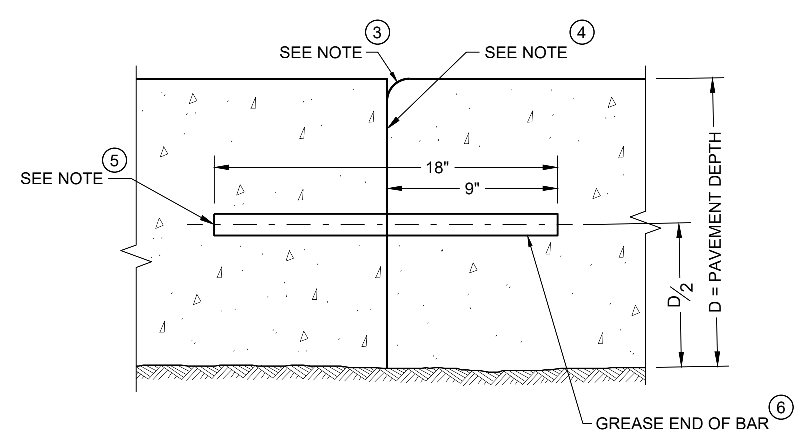
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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



DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



TRANSVERSE CONSTRUCTION JOINT

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 /S/ Peter Kemp P.E.
DATE PAVEMENT SUPERVISI 86
FHWA

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.

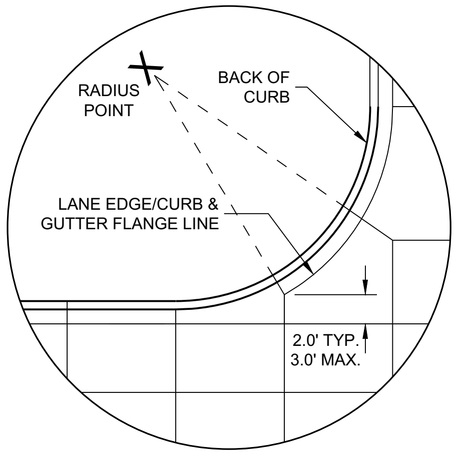
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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

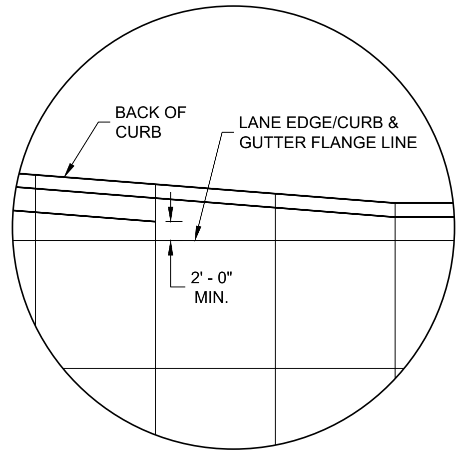
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

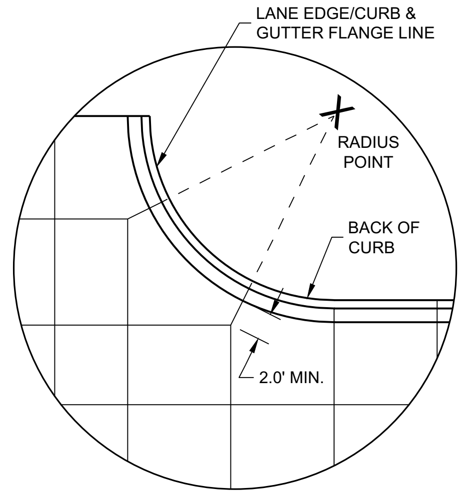
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITHEDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM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



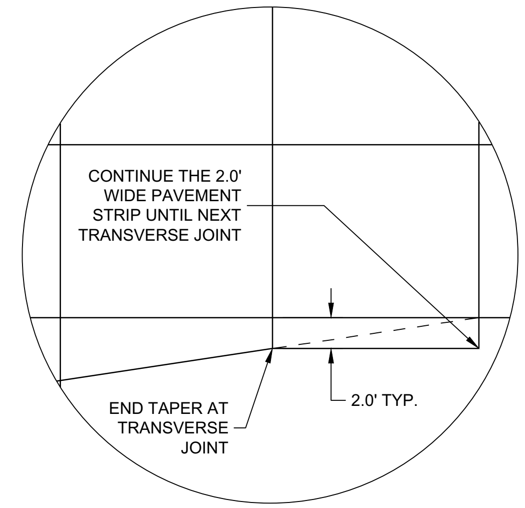
DETAIL "A"



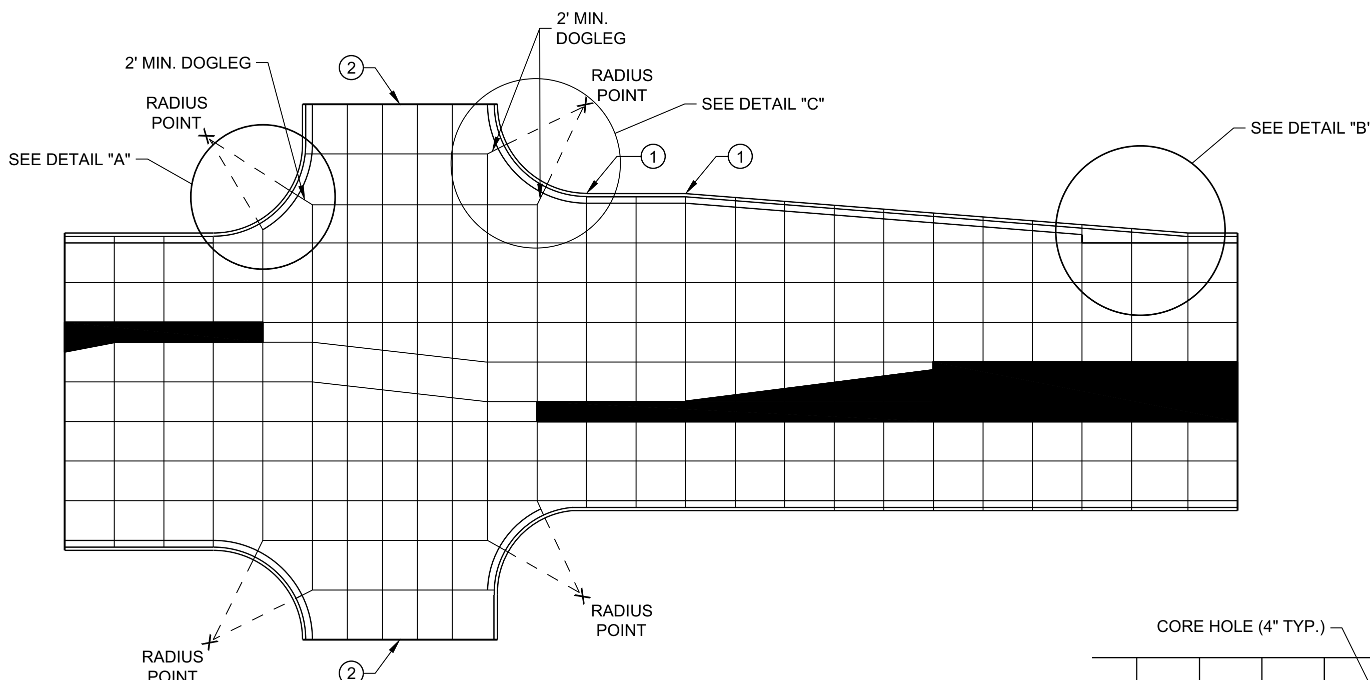
DETAIL "B"



DETAIL "C"



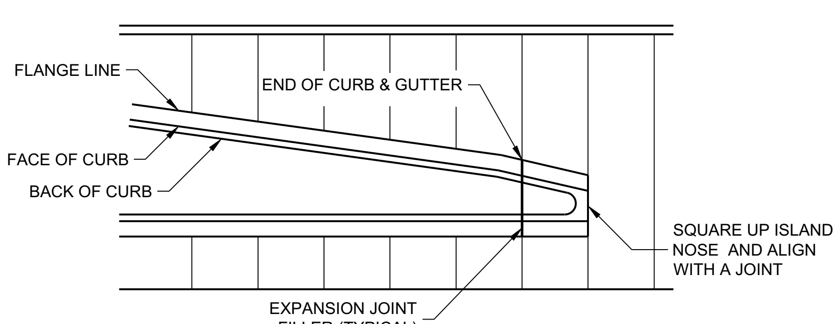
DETAIL "D"



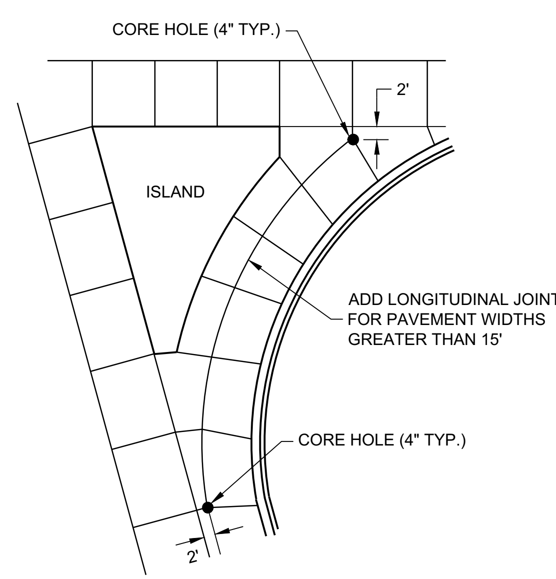
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

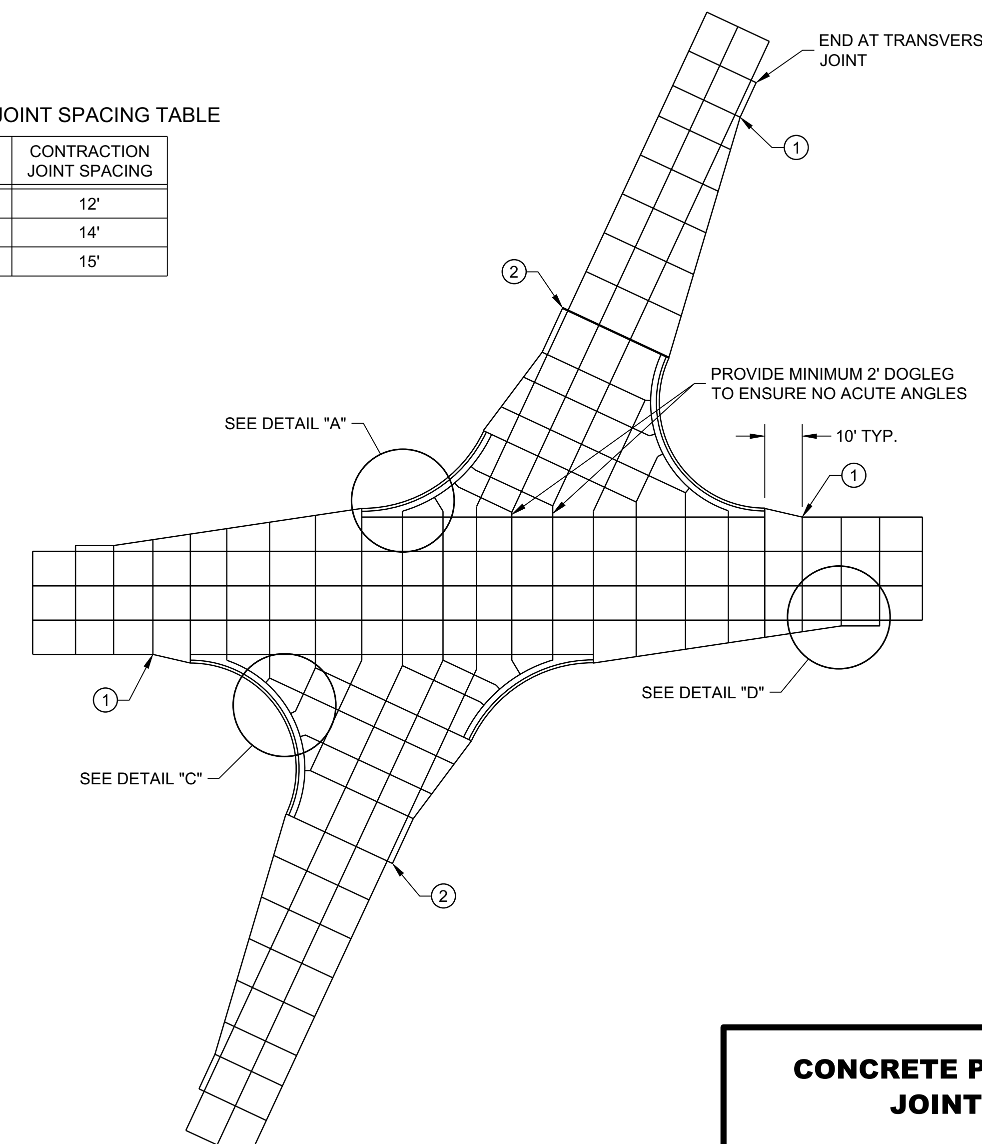
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



APPROACH TO MEDIAN



LARGE RIGHT TURN



SKEWED INTERSECTION

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

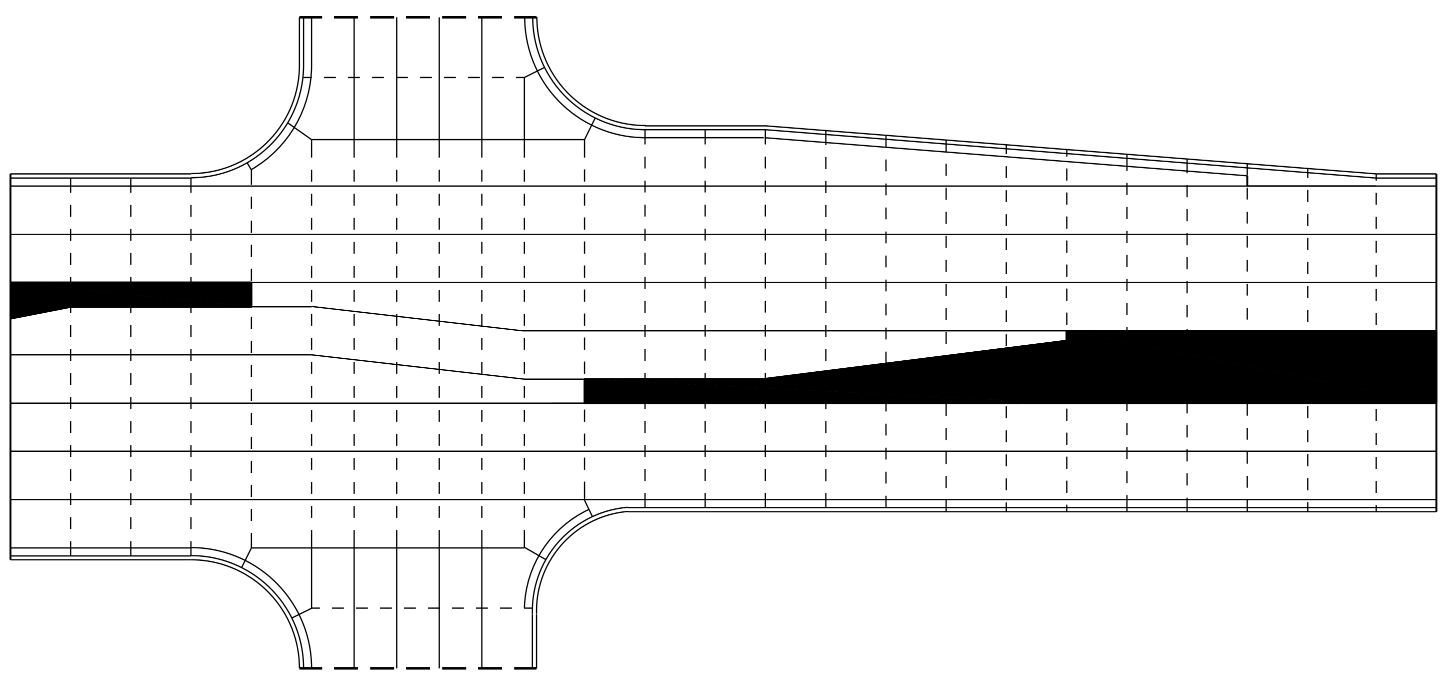
POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

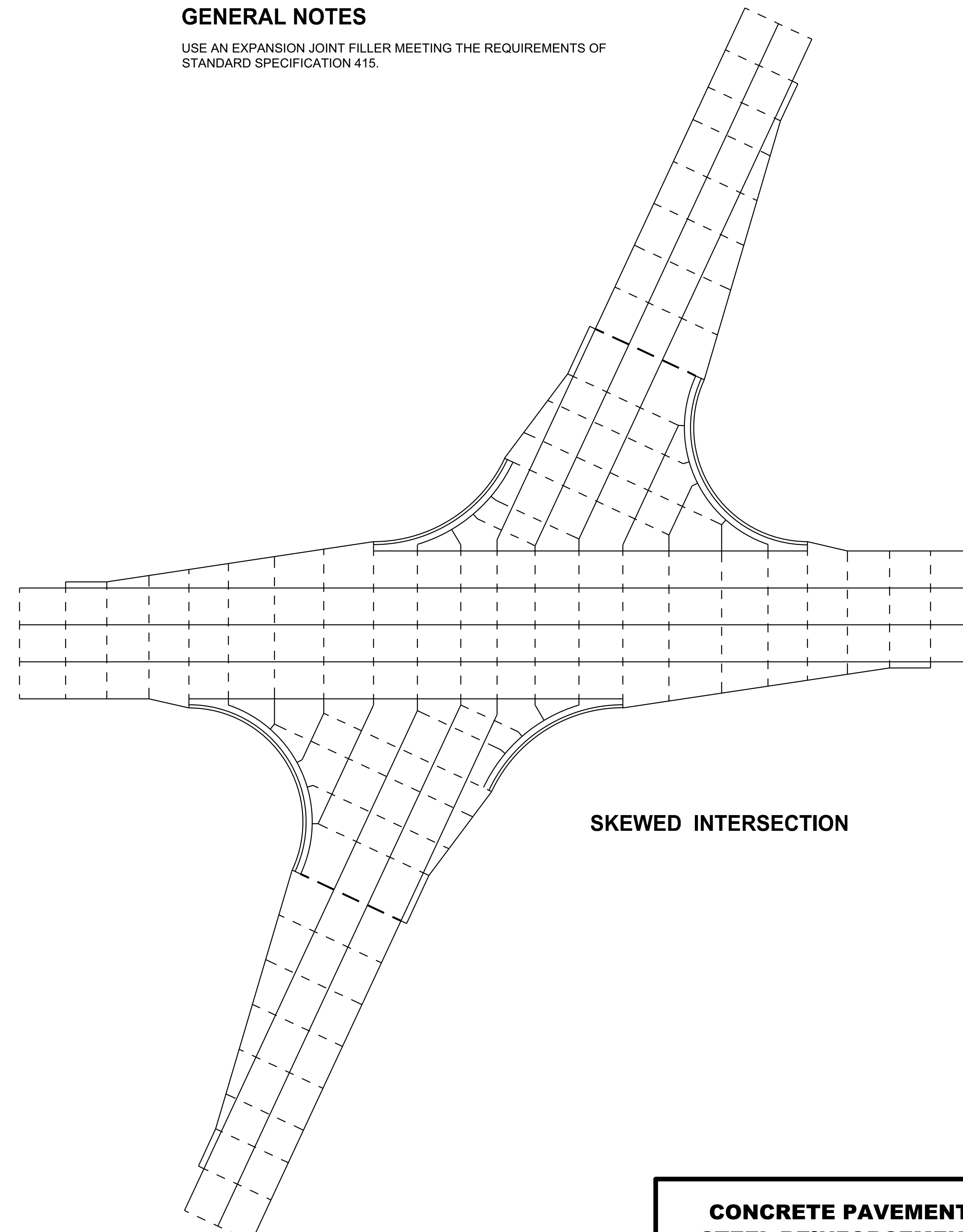
TIED JOINT

GENERAL NOTES

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



STANDARD INTERSECTION



SKEWED INTERSECTION

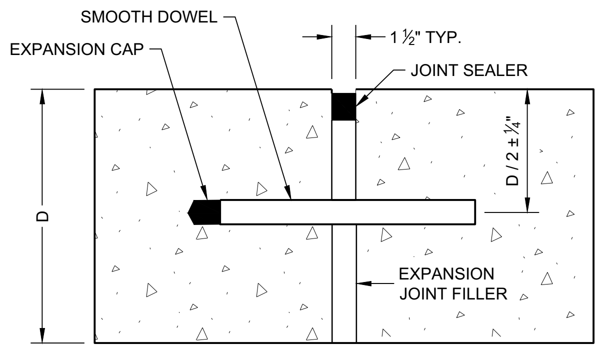
6

6

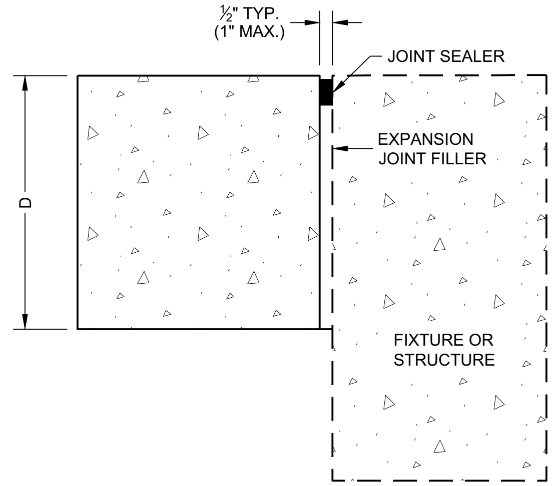
CONCRETE PAVEMENT STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

EXPANSION JOINTS



DOWELED TRANSVERSE ①



UNTIED - LONGITUDINAL

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

① USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.

② SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.

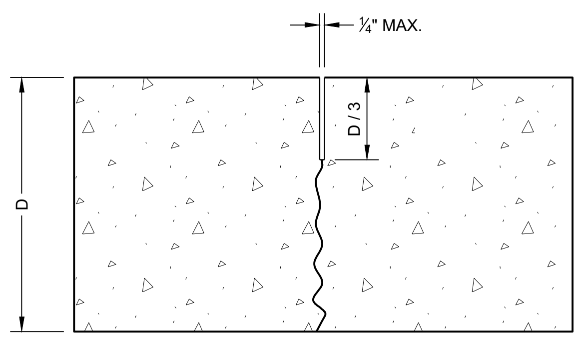
③ LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

④ CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.

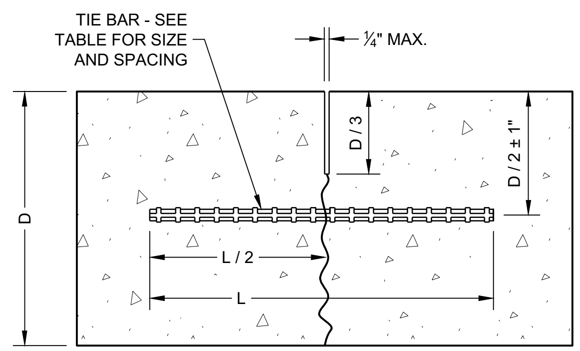
⑤ IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.

⑥ ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

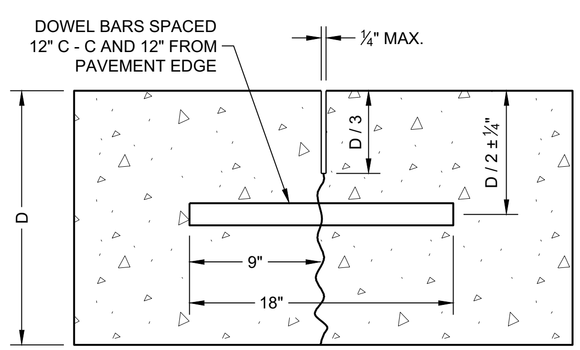
CONTRACTION JOINTS ②



UNDOWELED TRANSVERSE

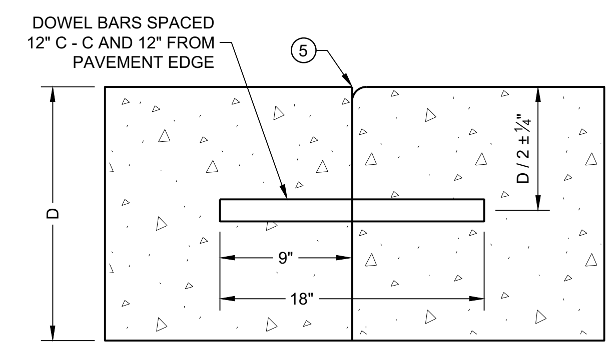


TIED LONGITUDINAL

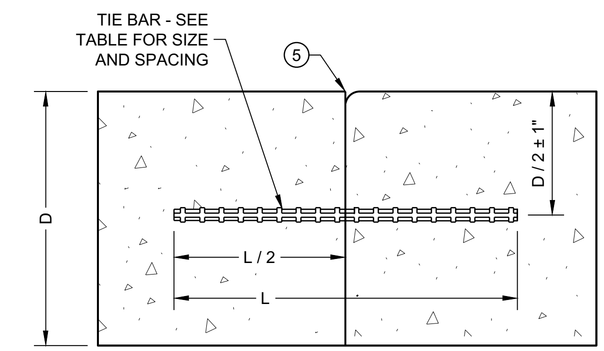


DOWELED TRANSVERSE

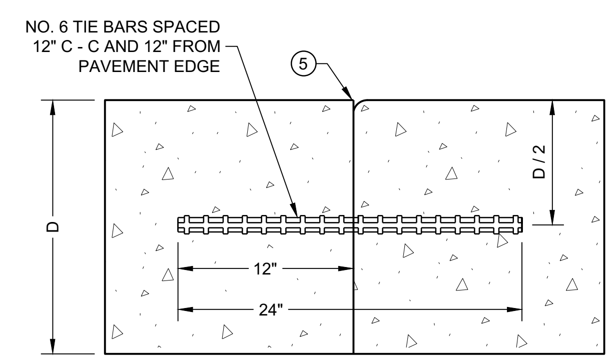
CONSTRUCTION JOINTS ④



DOWELED TRANSVERSE ③

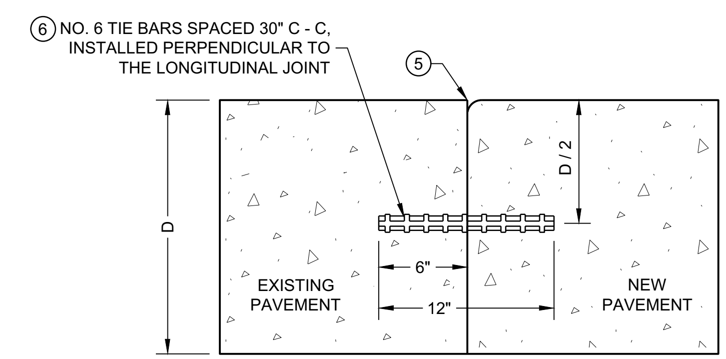


TIED LONGITUDINAL



TIED TRANSVERSE ③

(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



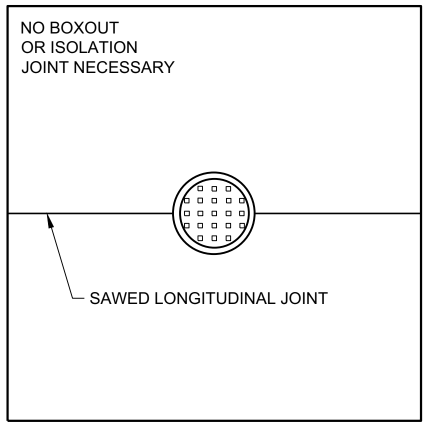
TIED LONGITUDINAL TO EXISTING

CONCRETE PAVEMENT JOINT TYPES

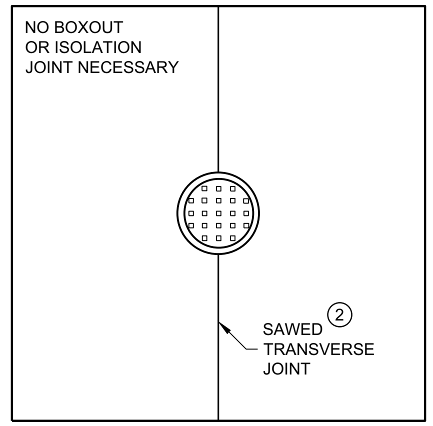
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

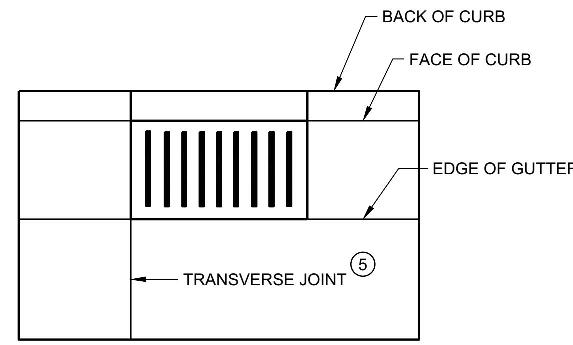
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



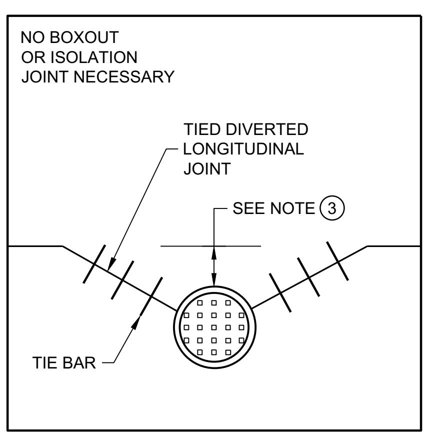
MANHOLE WITH LONGITUDINAL JOINT



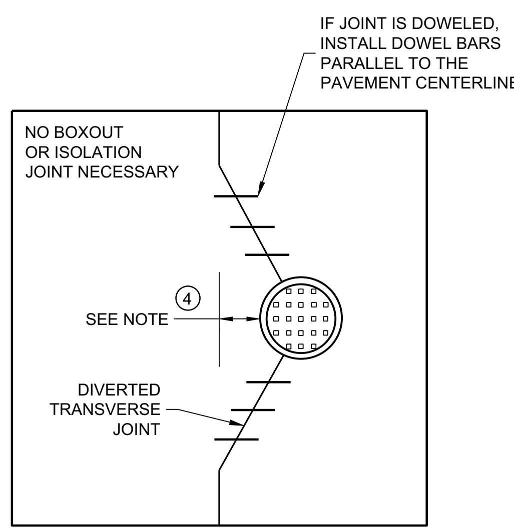
MANHOLE WITH TRANSVERSE JOINT



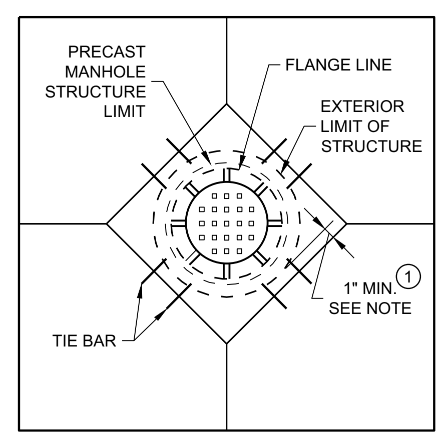
INLET WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

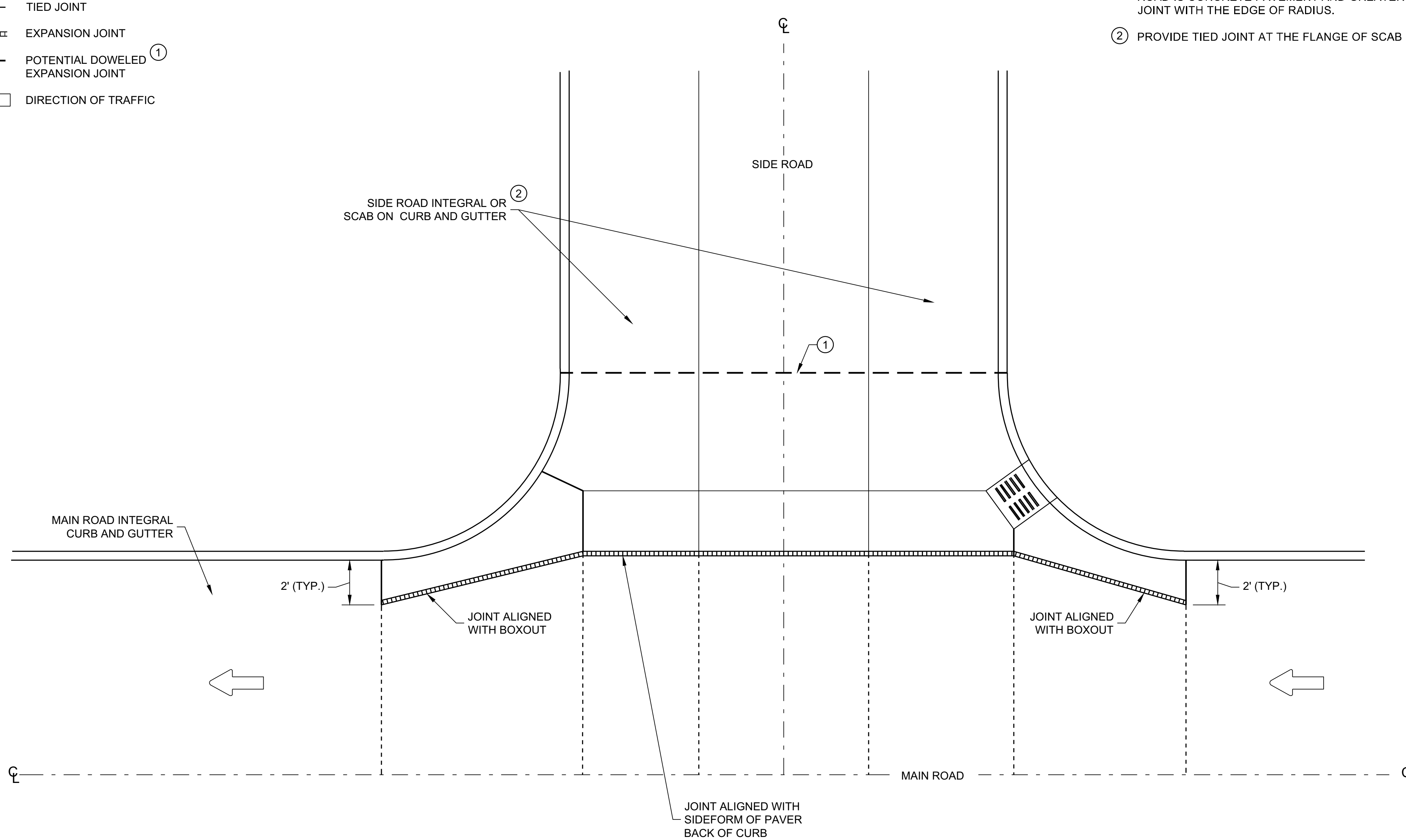
APPROVED
November 2018 /S/ Peter Kemp P.E.
DATE PAVEMENT SUPERVISI
FHWA

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED (1) EXPANSION JOINT
- DIRECTION OF TRAFFIC

GENERAL NOTES

1. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.
2. PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.



INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

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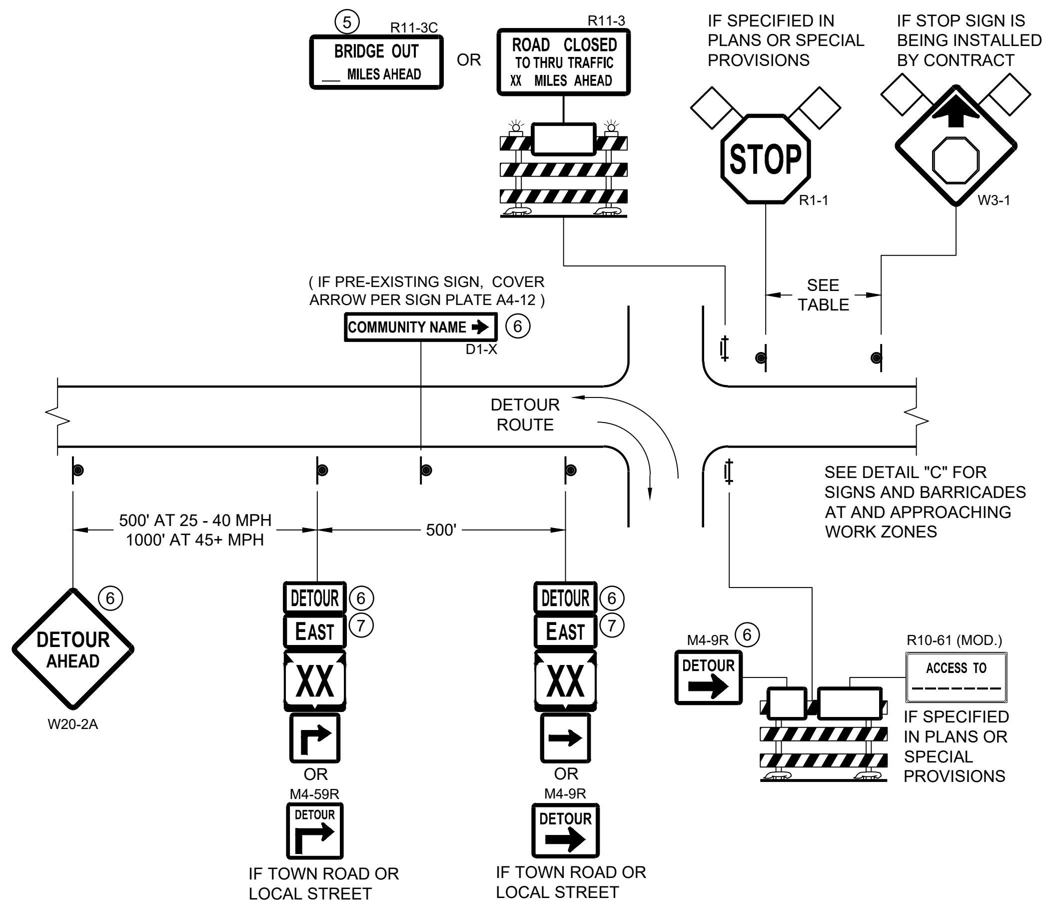
SDD 13C18 - 07f

SDD 13C18 - 07f

CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

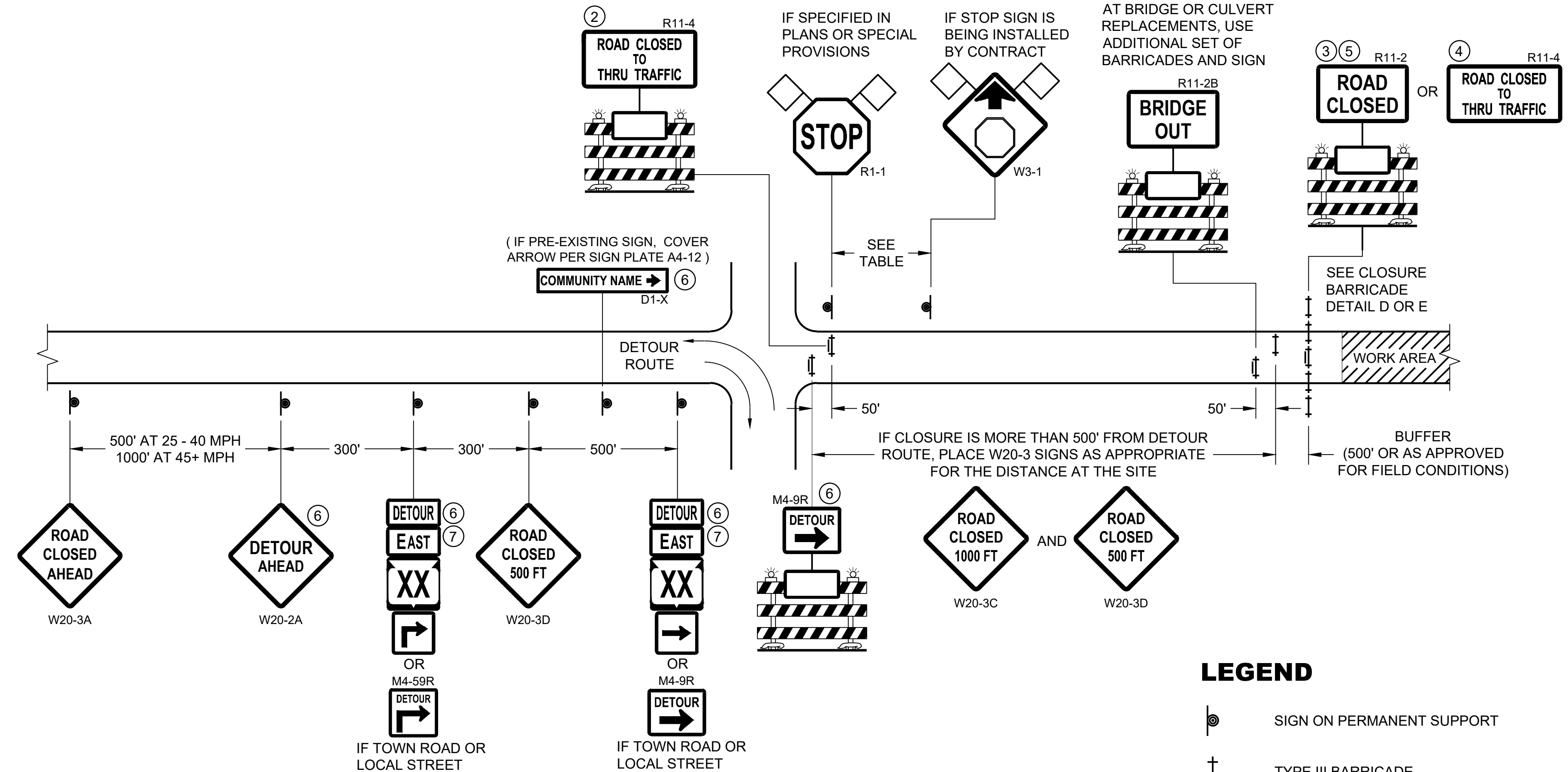
APPROVED
November 2018 — DATE
/S/ Peter Kemp P.E. — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

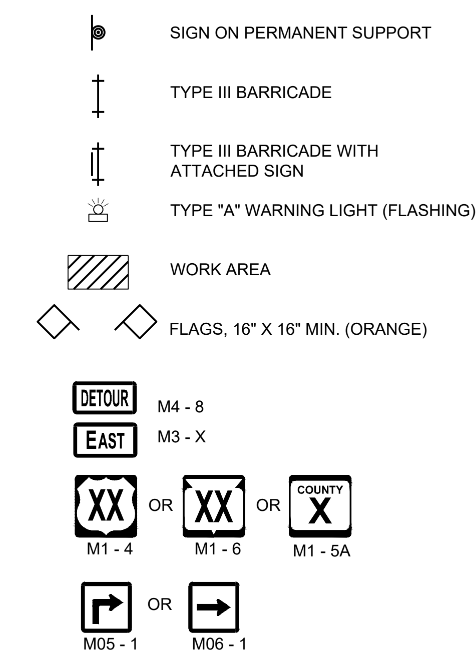


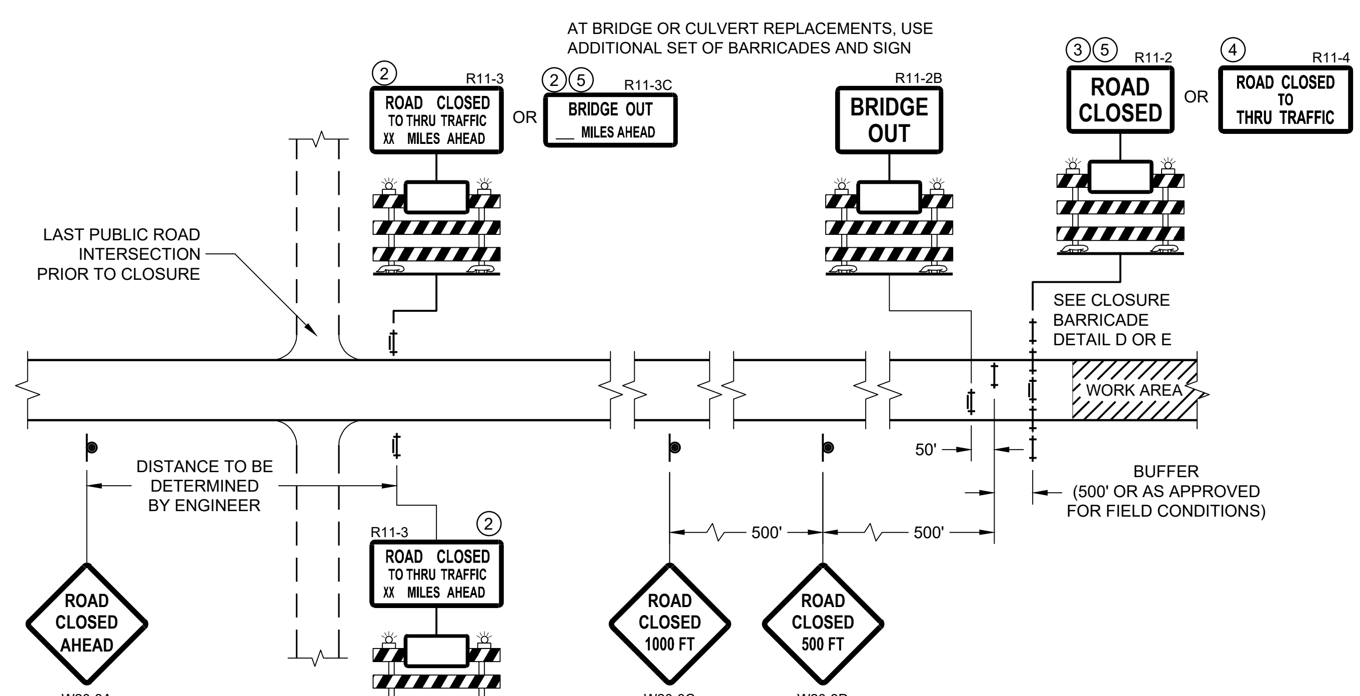
DETAIL B

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

LEGEND





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

DETAIL C

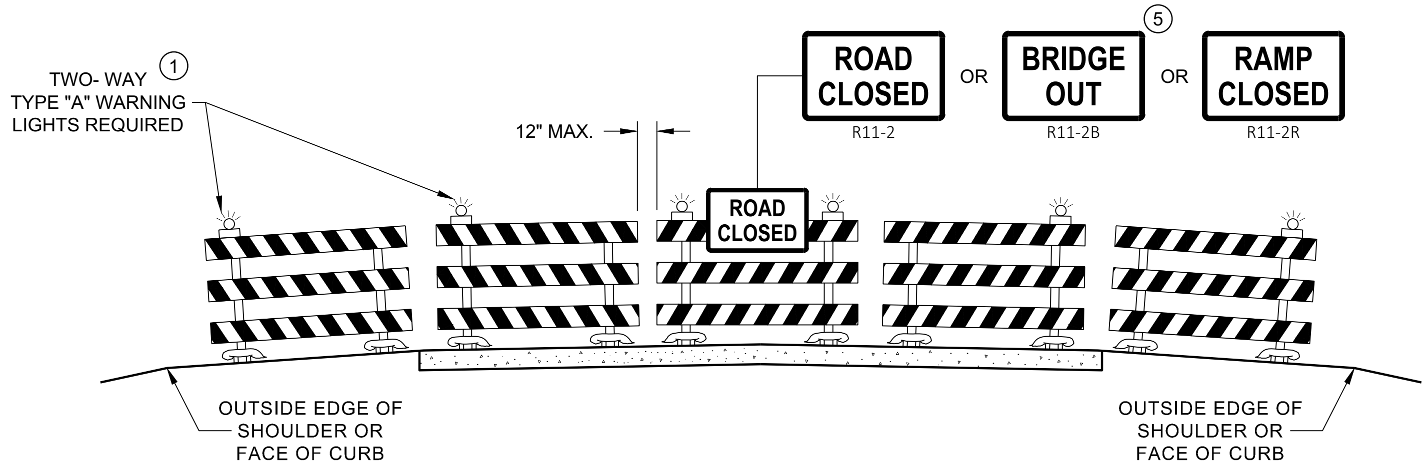
MAINLINE CLOSURE, NO POSTED DETOUR

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

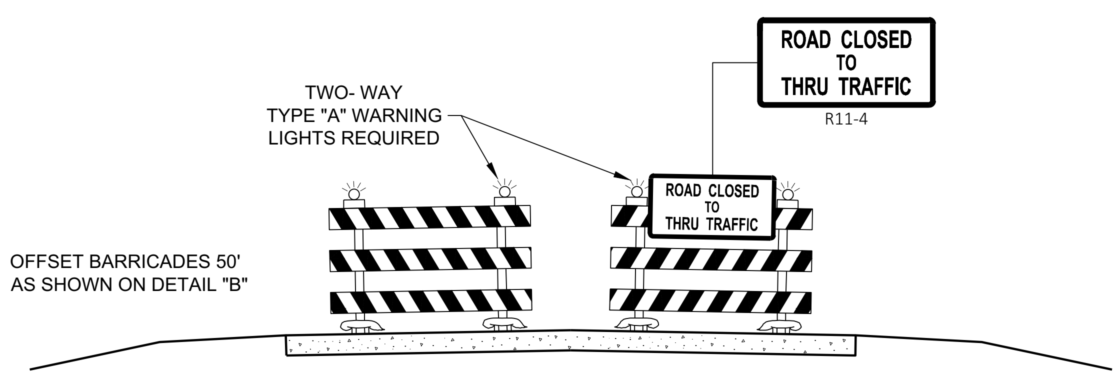
FHWA



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

1. TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.
2. THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
3. FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".
4. FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".
5. FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.
6. INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
7. "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

SIGN ON PERMANENT SUPPORT

WORK AREA

DETOUR M4 - 8

EAST M3 - X

XX OR XX OR COUNTY X — M1 - 4, M1 - 6, M1 - 5A

OR OR — M05 - 1, M06 - 1, M06 - 1

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

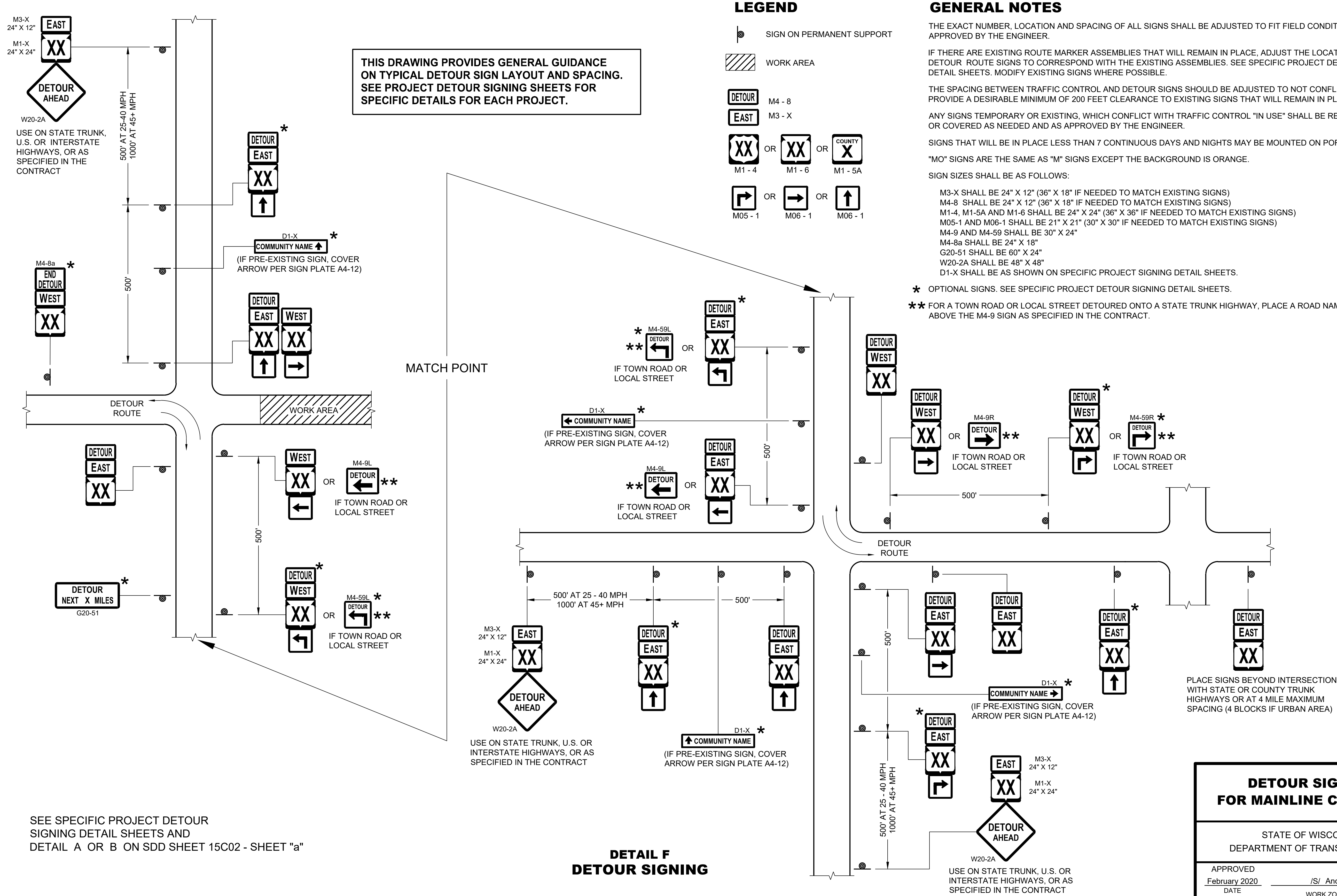
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

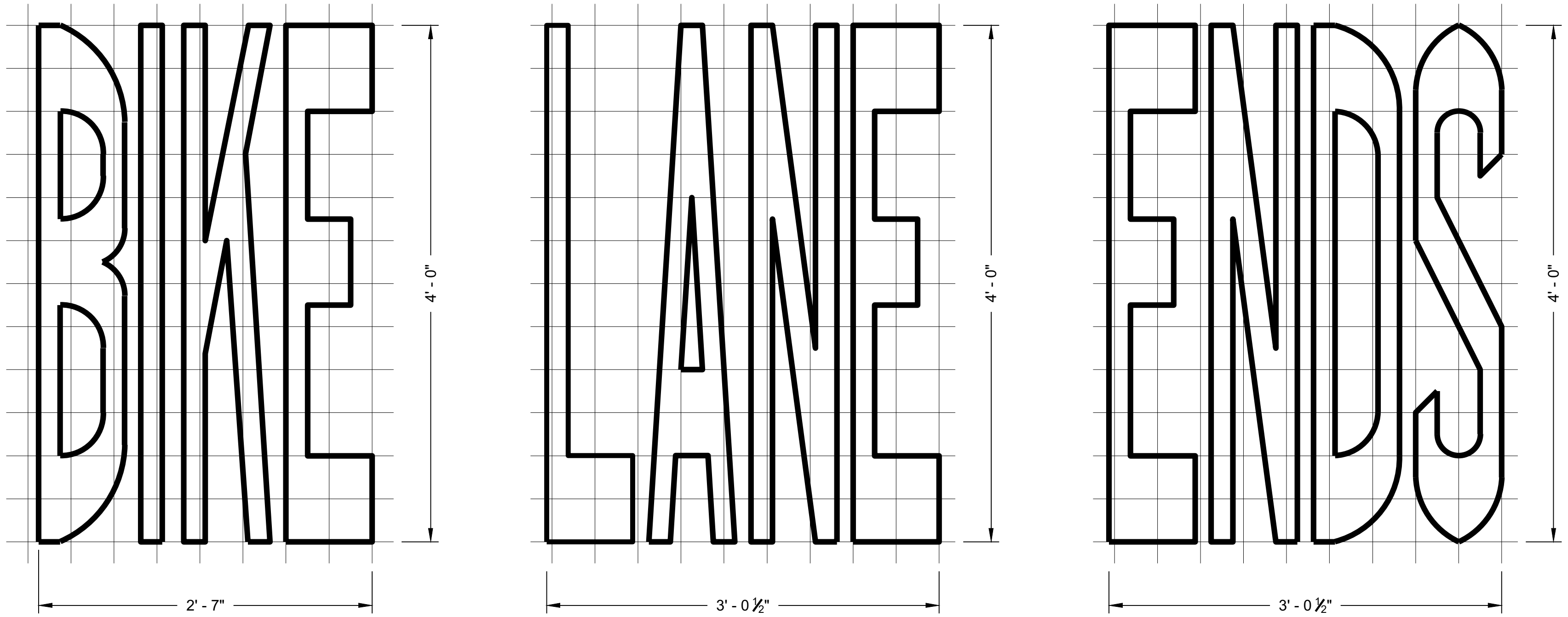
DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

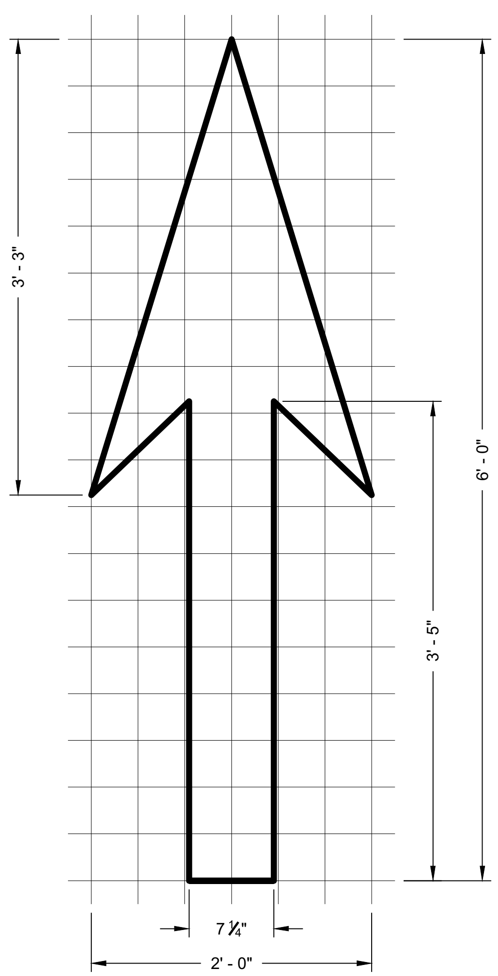
SDD 15C02 - 08c



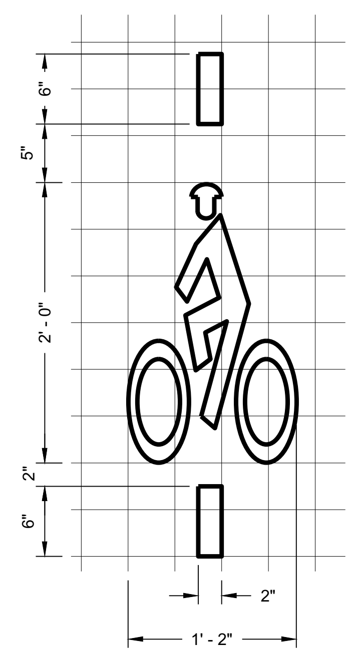
BIKE LANE WORDS

GENERAL NOTES

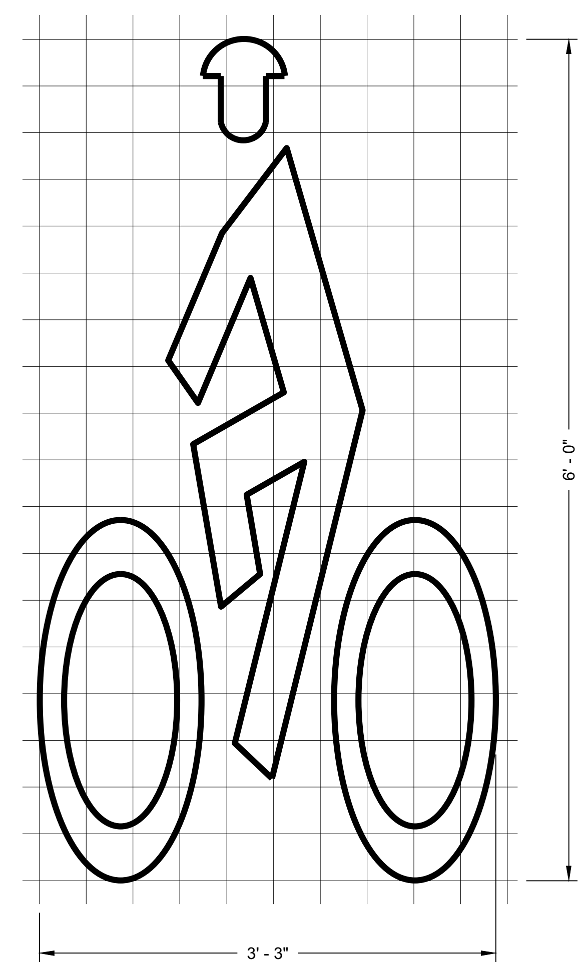
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



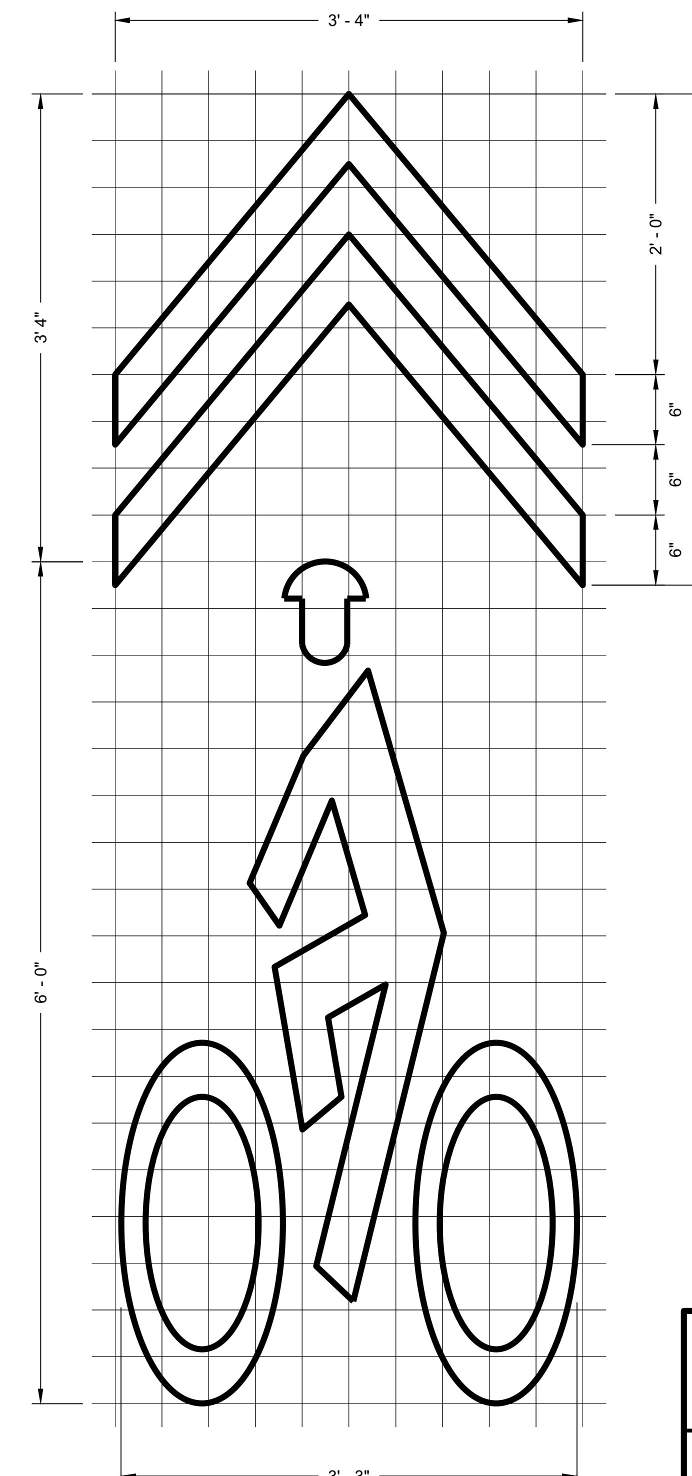
BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING



BIKE LANE SYMBOL



BIKE LANE SYMBOL FOR SHARED LANE

6

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SDD 15C07 - 15e

SDD 15C07 - 15e

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

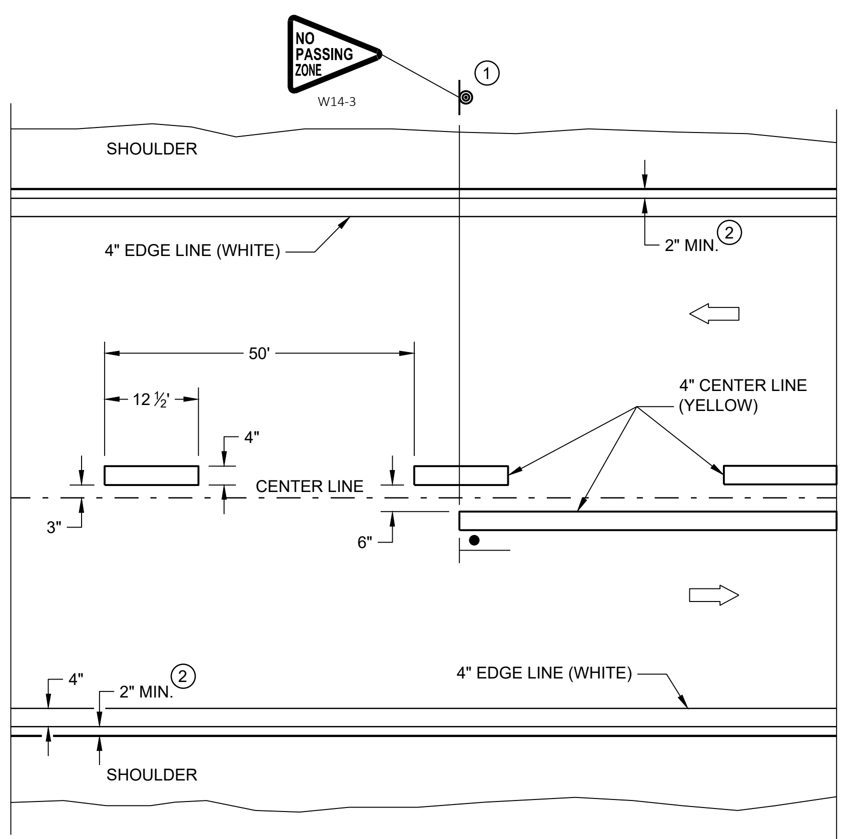
GENERAL NOTES

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

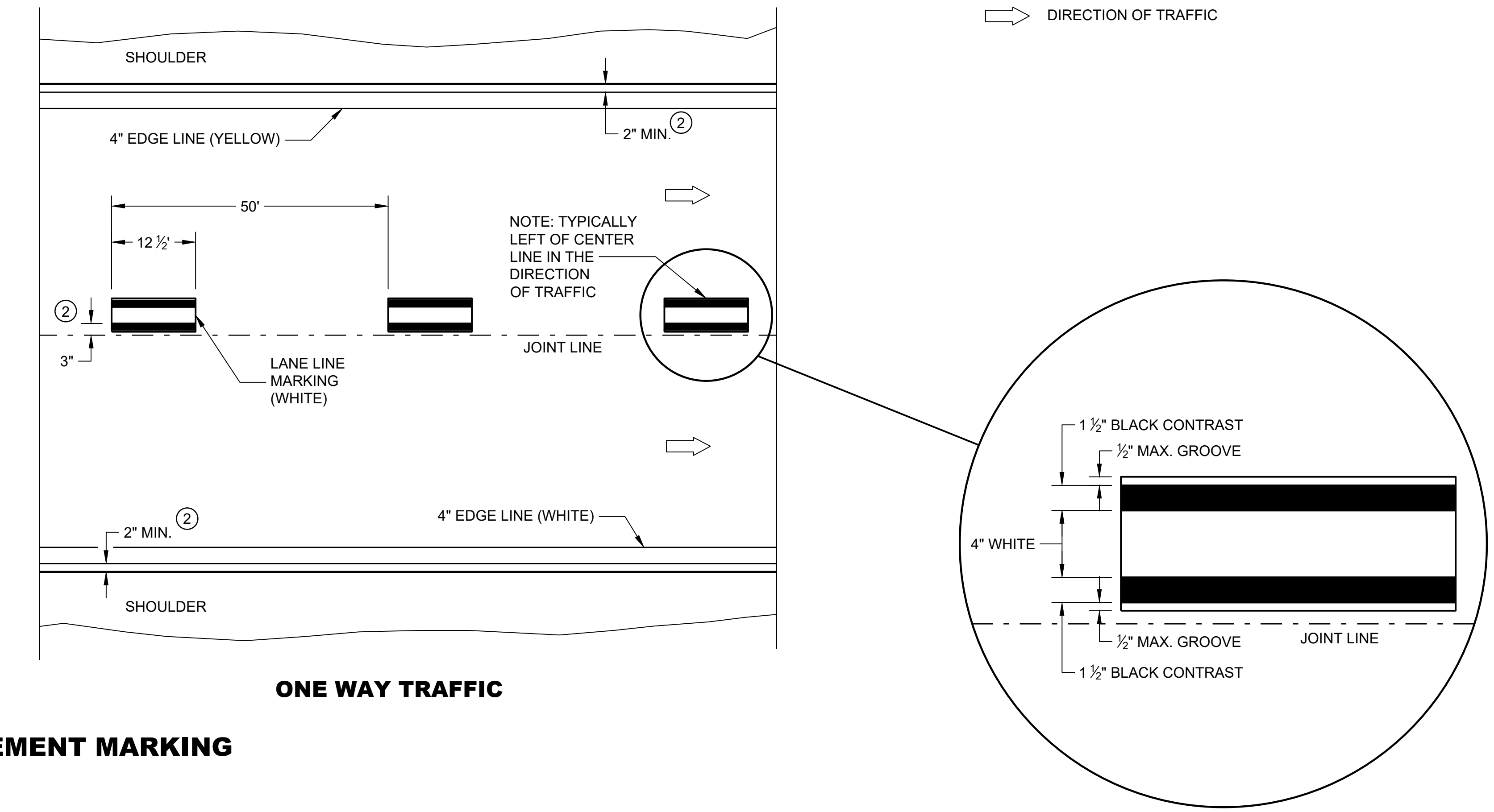
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

- "T" MARKING
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

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SDD 15C08 - 22a

SDD 15C08 - 22a

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2022 — DATE

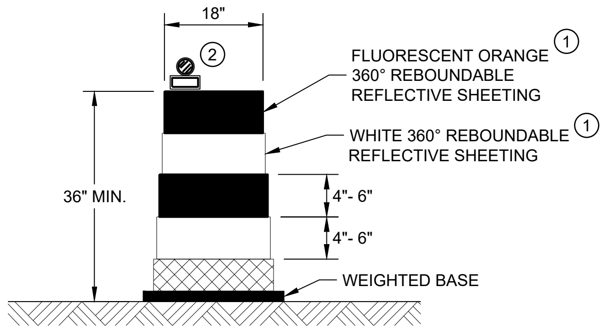
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

FHWA

GENERAL NOTES

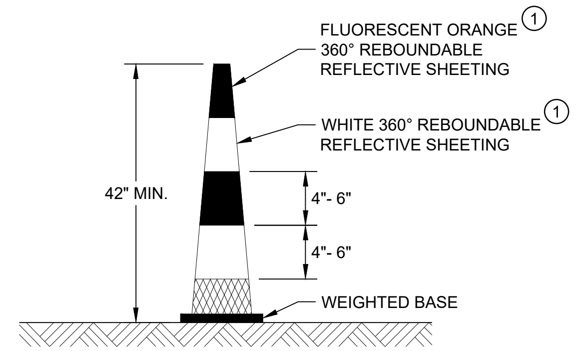
(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

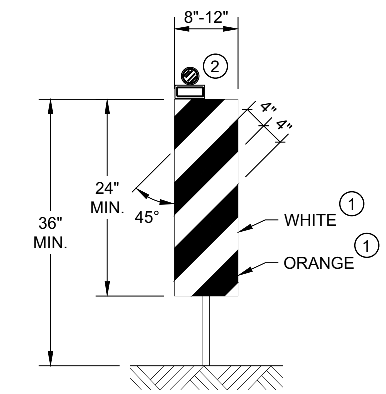
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS

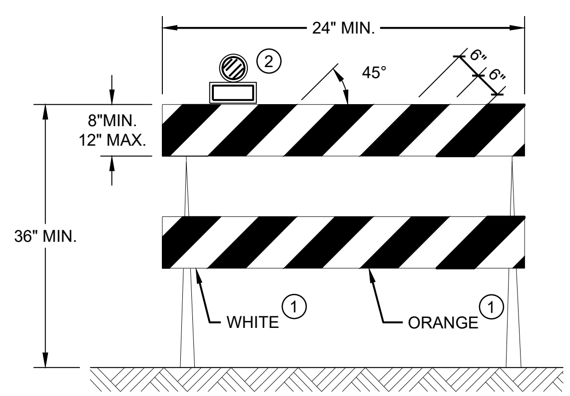
BALLAST WIDTHS
RANGE FROM 14"-20"



VERTICAL PANEL

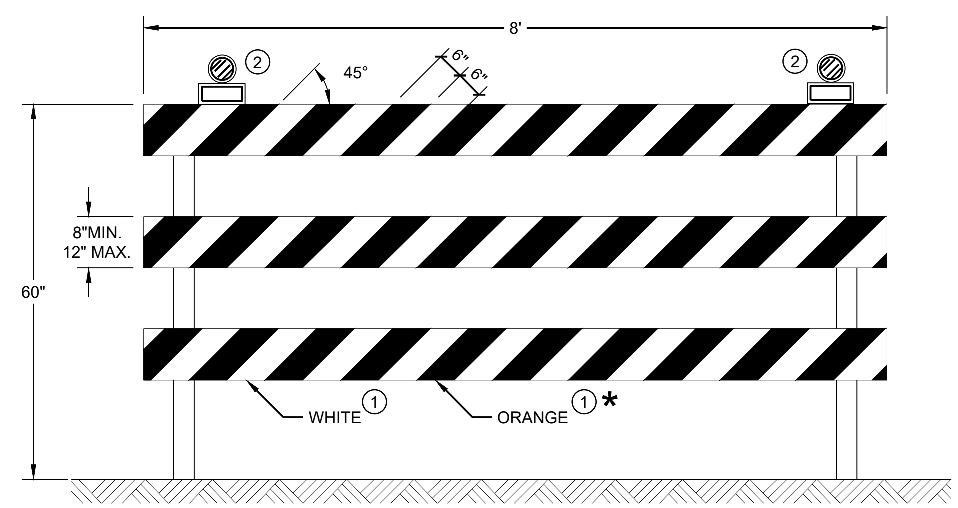
THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.

6



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA

SDD 15C11 - 10b

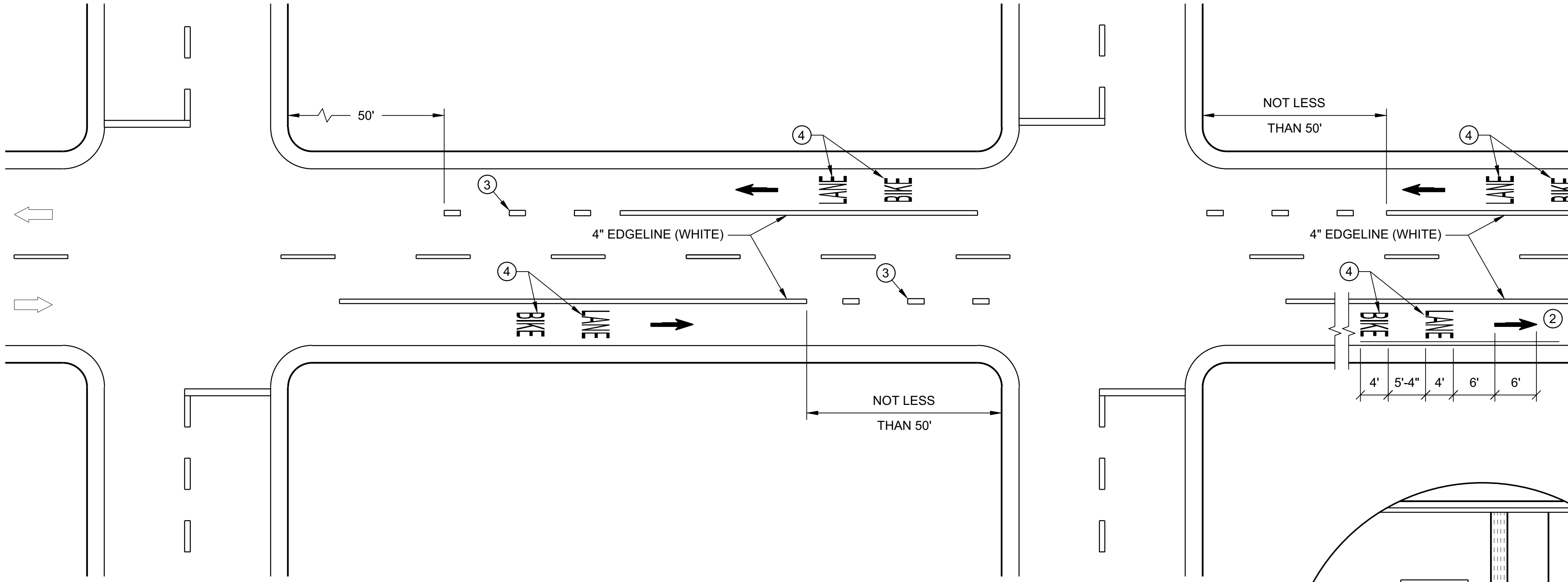
SDD 15C11 - 10b

6

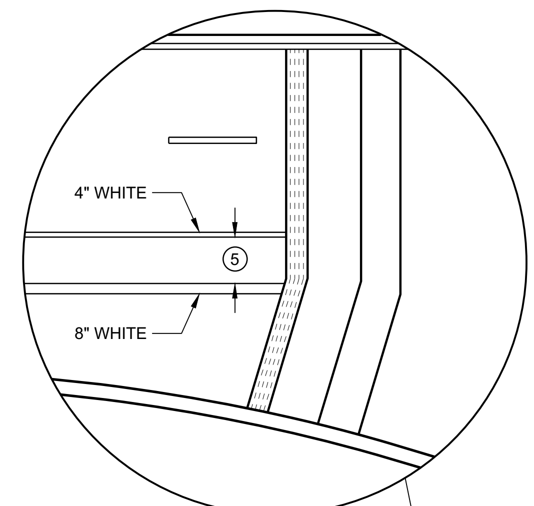
GENERAL NOTES

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. MINIMUM OF ONE PER BLOCK. MAXIMUM OF 250 FEET.
3. DOTTED LINES (3' LINE, 9' GAP) SHOULD BE USED 50 FEET TO 200 FEET IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. BIKE SYMBOLS OR WORDS MAY BE USED.
5. BIKE ACCOMMODATION IS TYPICAL 5 FEET WIDE AND MINIMUM OF 4 FEET FROM A LONGITUDINAL JOINT. USE 5 FEET AT ≥ 45 MPH.
6. OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FOOT WIDE TURN LANE).
7. REFER TO CONTRACT PLANS FOR LANE WIDTH.

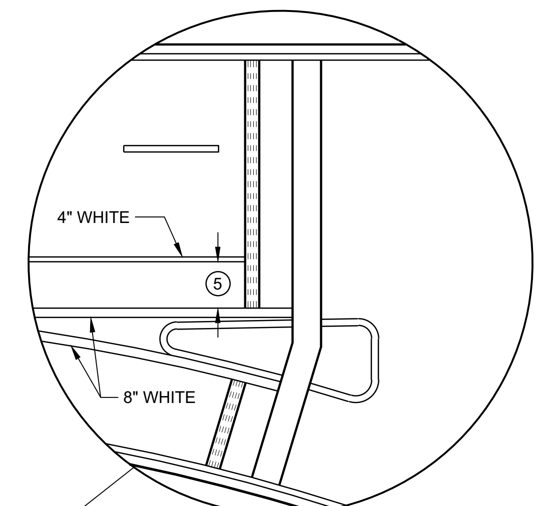
⇨ DIRECTION OF TRAVEL



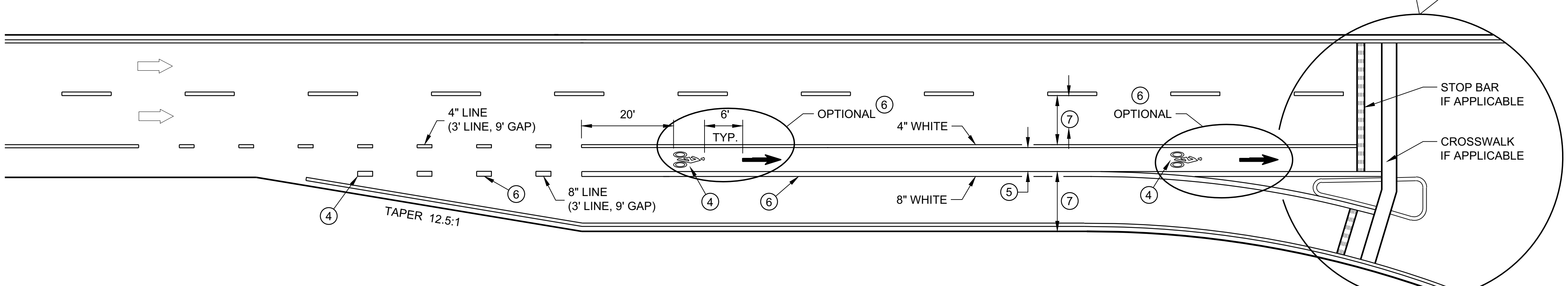
DESIGNATED BIKE LANE - NO PARKING



4 LANE DIVIDED WITHOUT ISLAND



4 LANE DIVIDED WITH ISLAND



BIKE LANE - FOR 2-LANE ROADWAYS AND 4-LANE DIVIDED ROADWAYS (4-LANE DIVIDED WITH RIGHT TURN LANE SHOWN)

6

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SDD 15C29 - 07a

SDD 15C29 - 07a

BIKE LANE MARKING

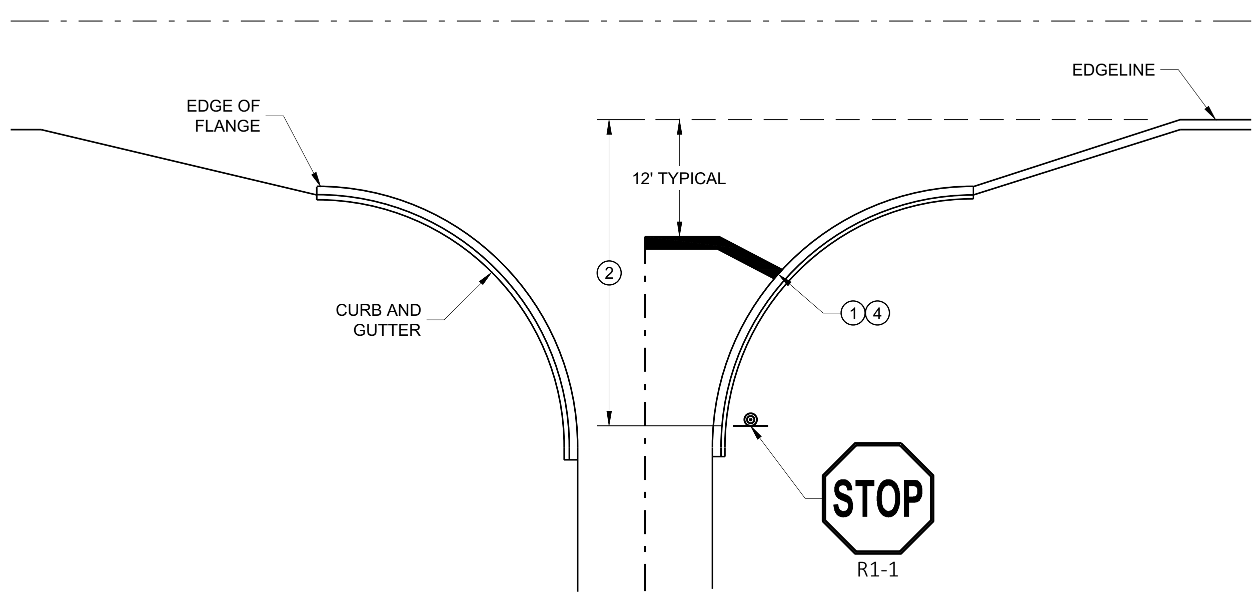
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

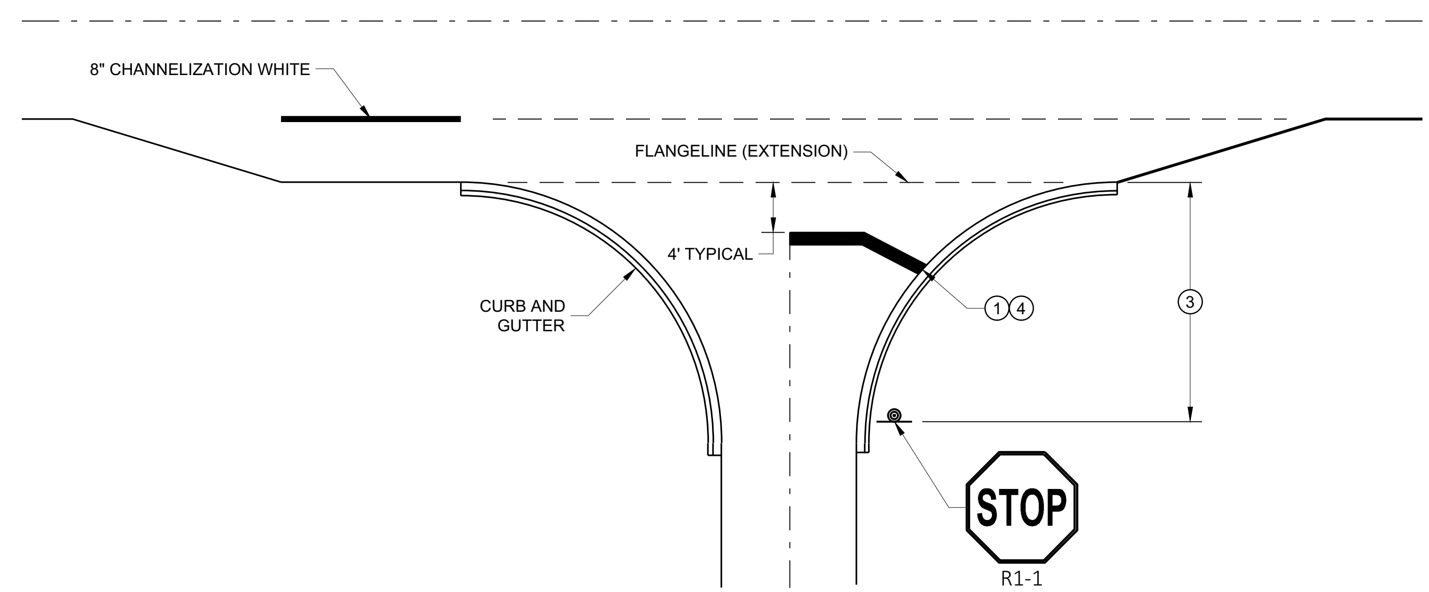
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

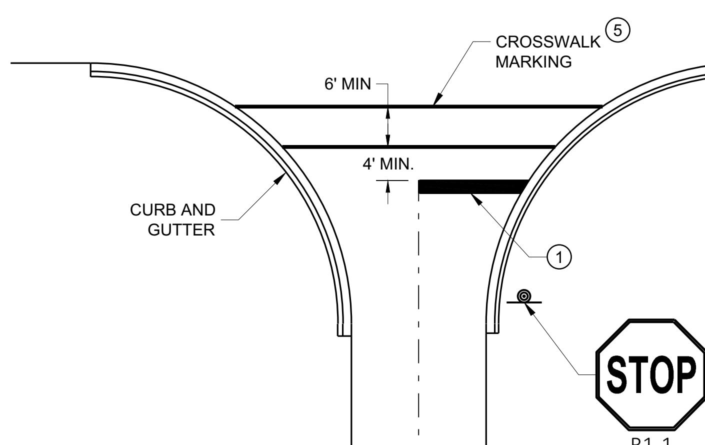
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



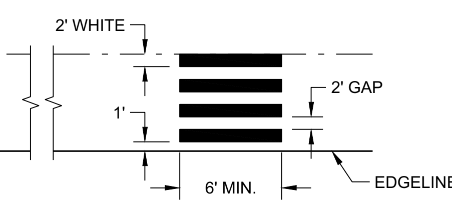
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



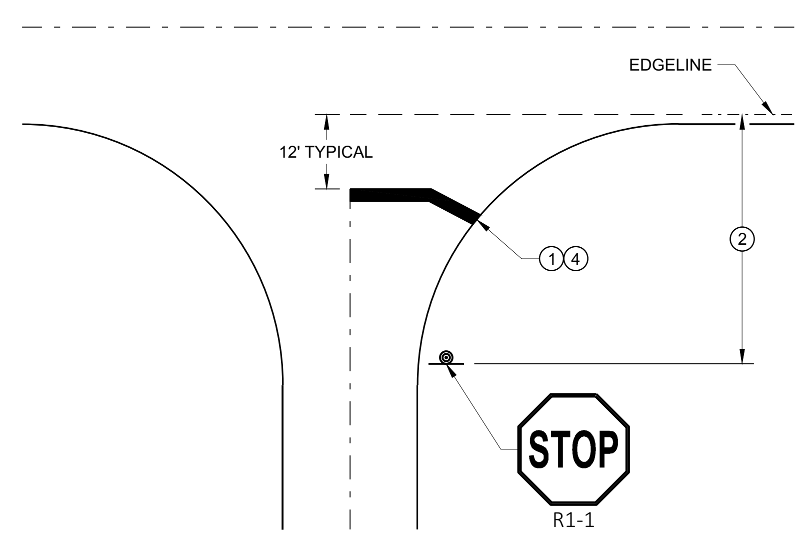
TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

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STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA

SDD 15C33 - 04

SDD 15C33 - 04

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SDD 15C35 - 05a

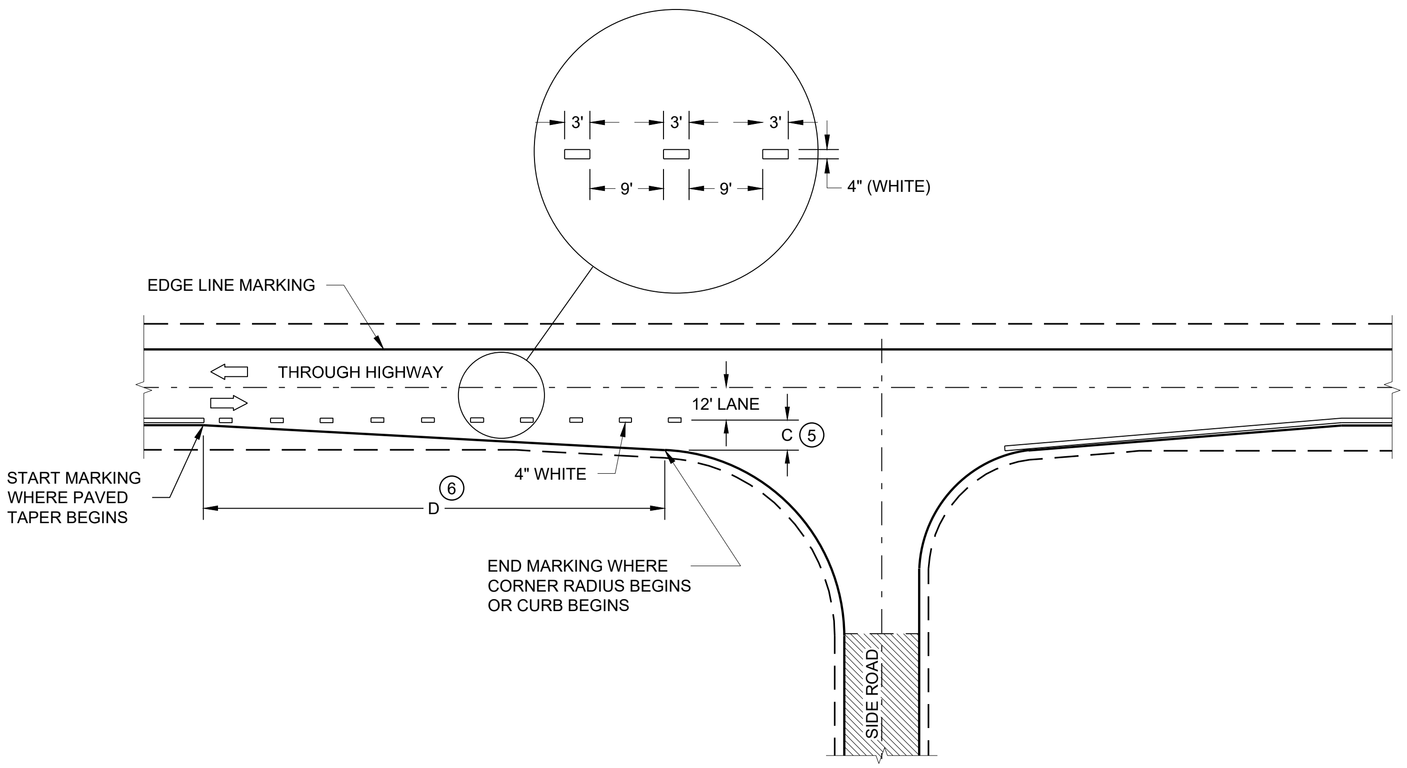
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

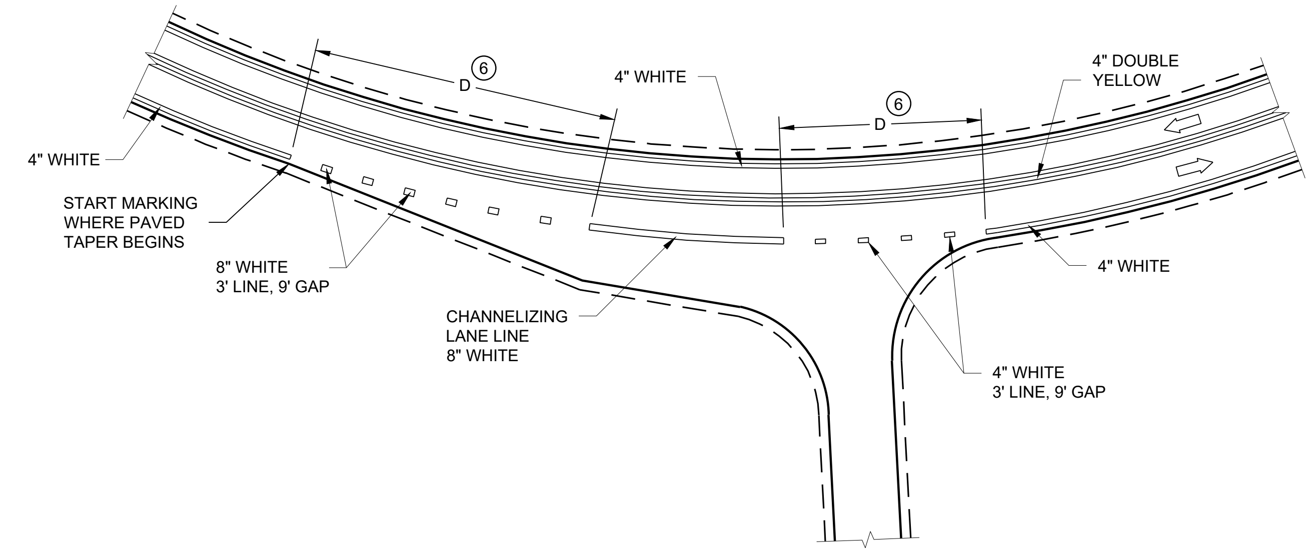
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

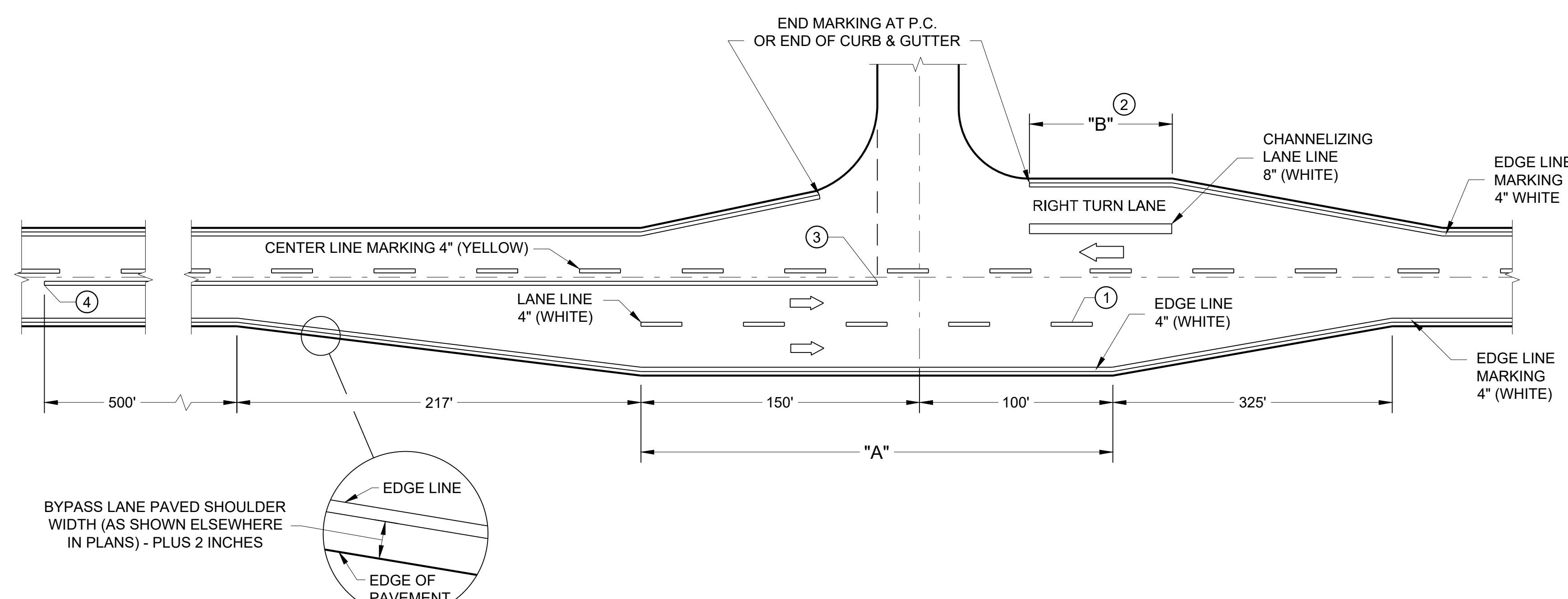
⇨ DIRECTION OF TRAVEL



MINOR INTERSECTION



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTAT

6

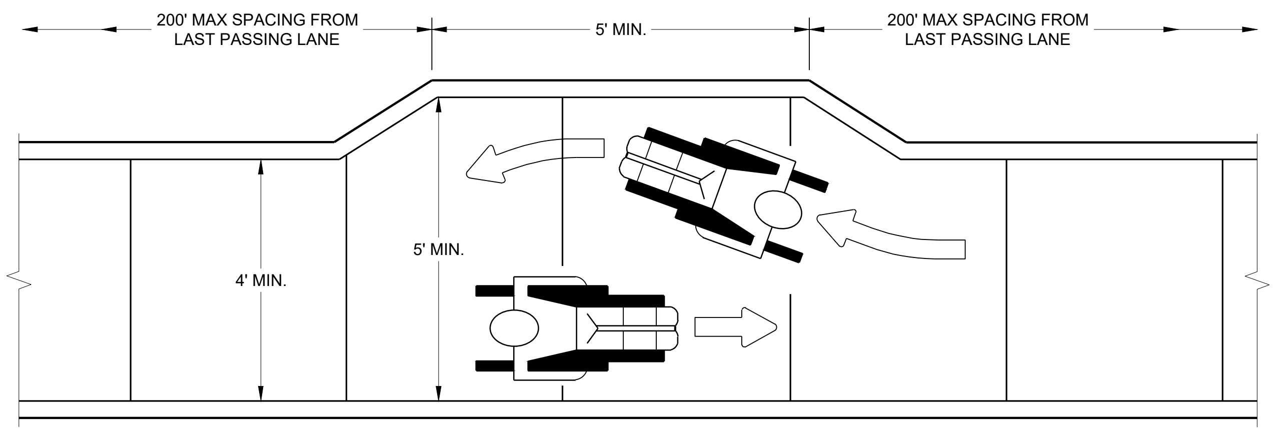
SDD 15C35 - 05a

GENERAL NOTES

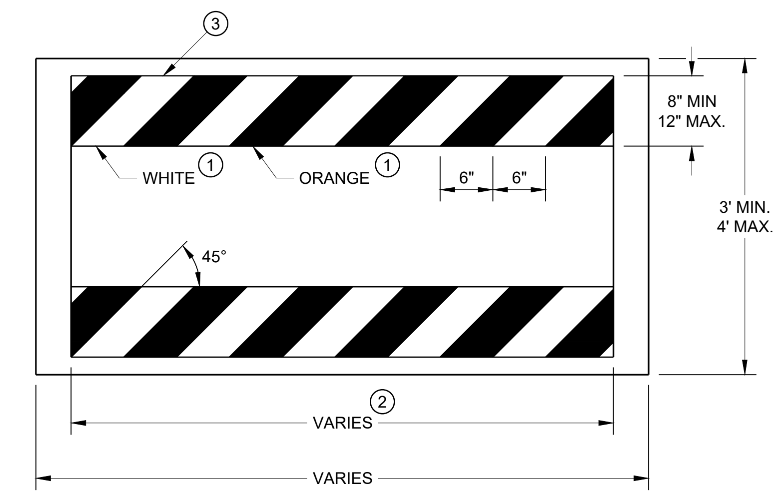
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
3. PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

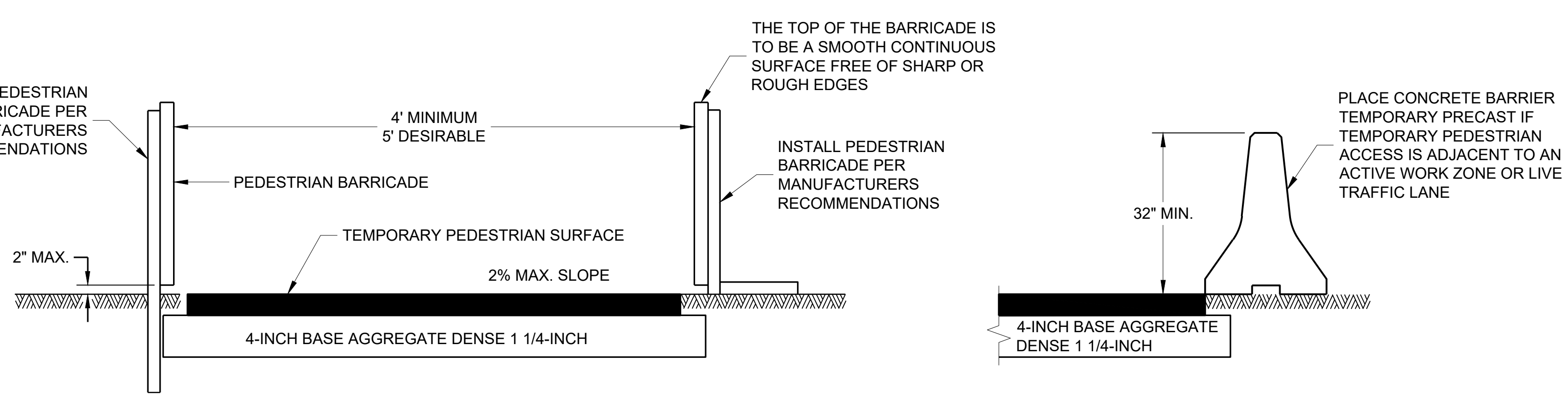
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN BARRICADE*



TEMPORARY PEDESTRIAN ACCESS

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SDD 15D30 - 08a

SDD 15D30 - 08a

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTAT

GENERAL NOTES

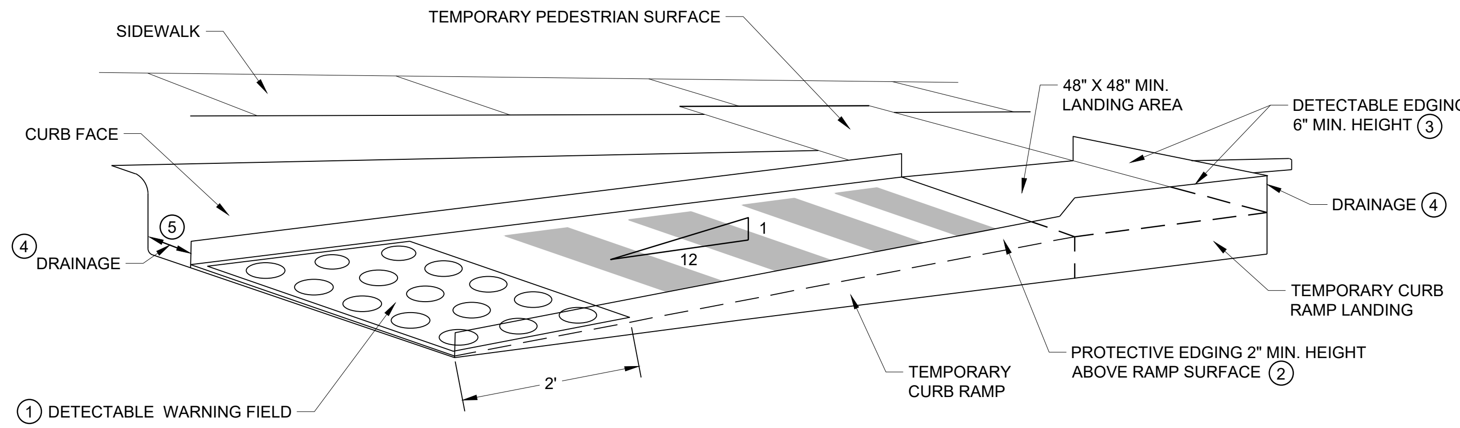
CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

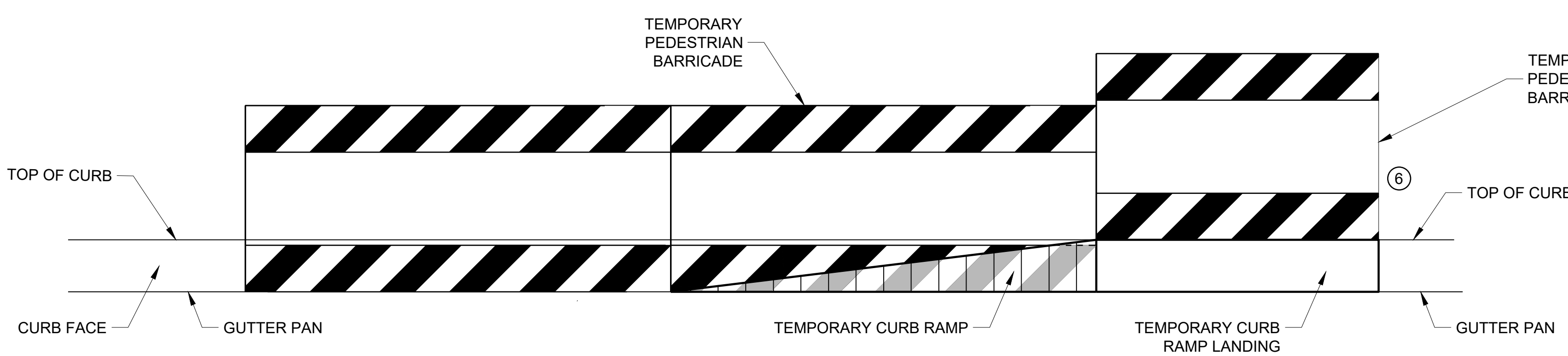
CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

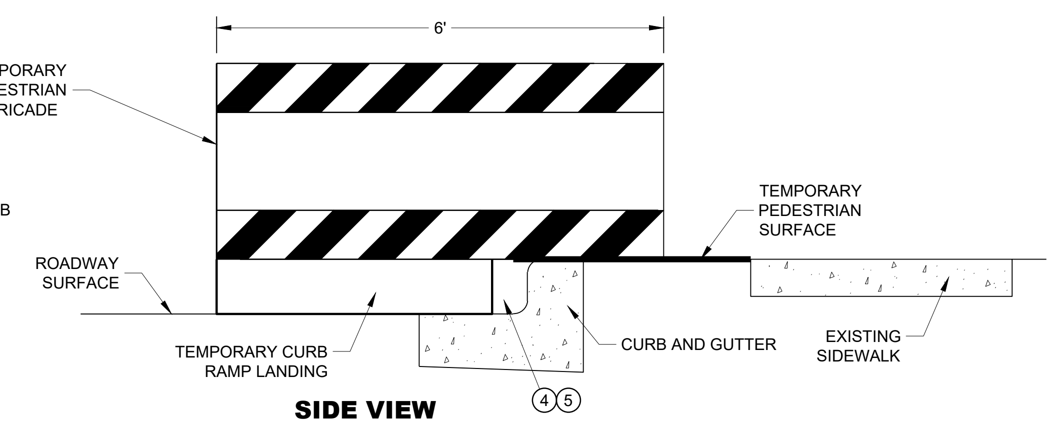
1. INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.
2. PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
3. DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
5. ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.
6. IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



PERSPECTIVE VIEW



FRONT VIEW



SIDE VIEW

TEMPORARY CURB RAMP PARALLEL TO CURB

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SDD 15D30 - 08b

SDD 15D30 - 08b

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

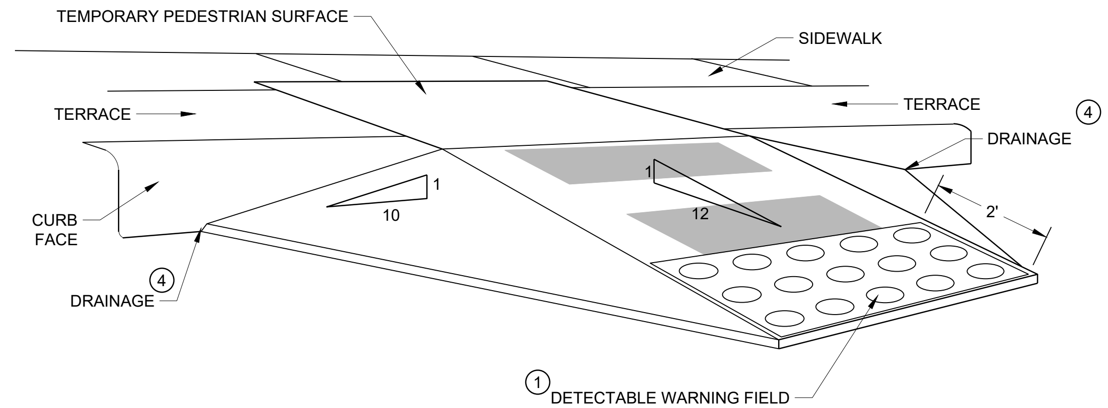
CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

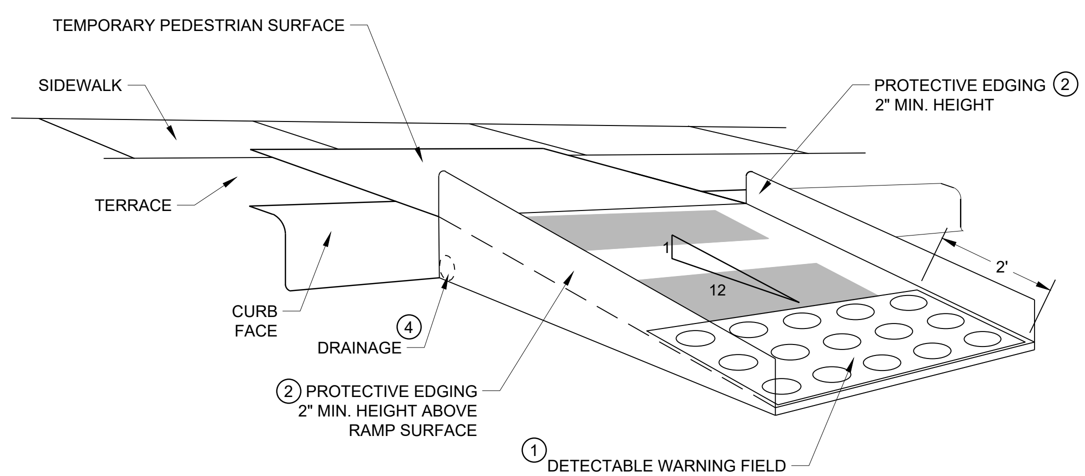
LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

1. INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS
2. PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
3. DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
5. CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.



WITH SIDE APRON 5



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTAT

6

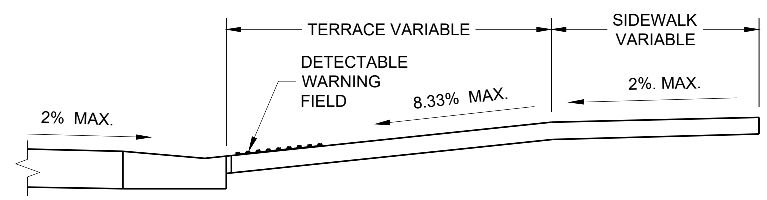
SDD 15D30 - 08c

GENERAL NOTES

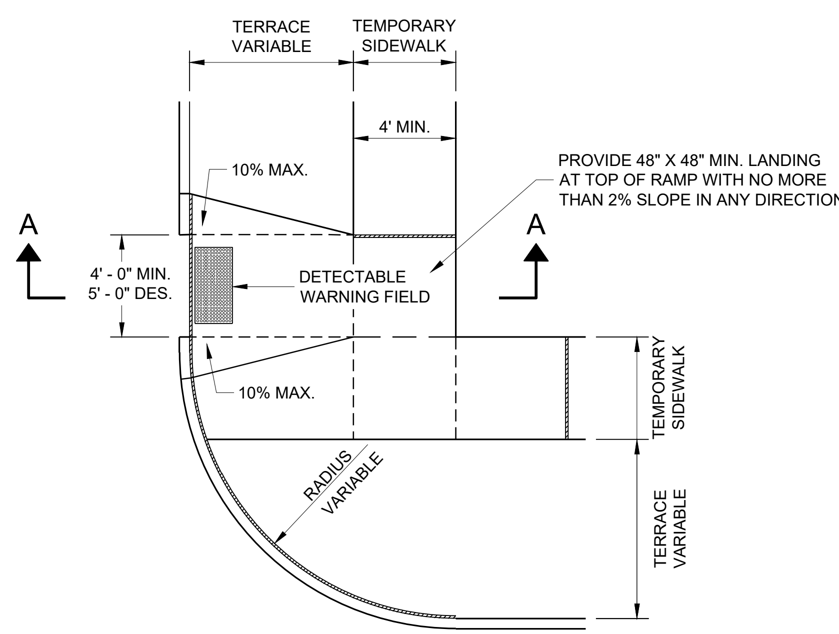
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
3. PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



SECTION A - A



PLAN VIEW
TEMPORARY TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

6

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SDD 15D30-08d

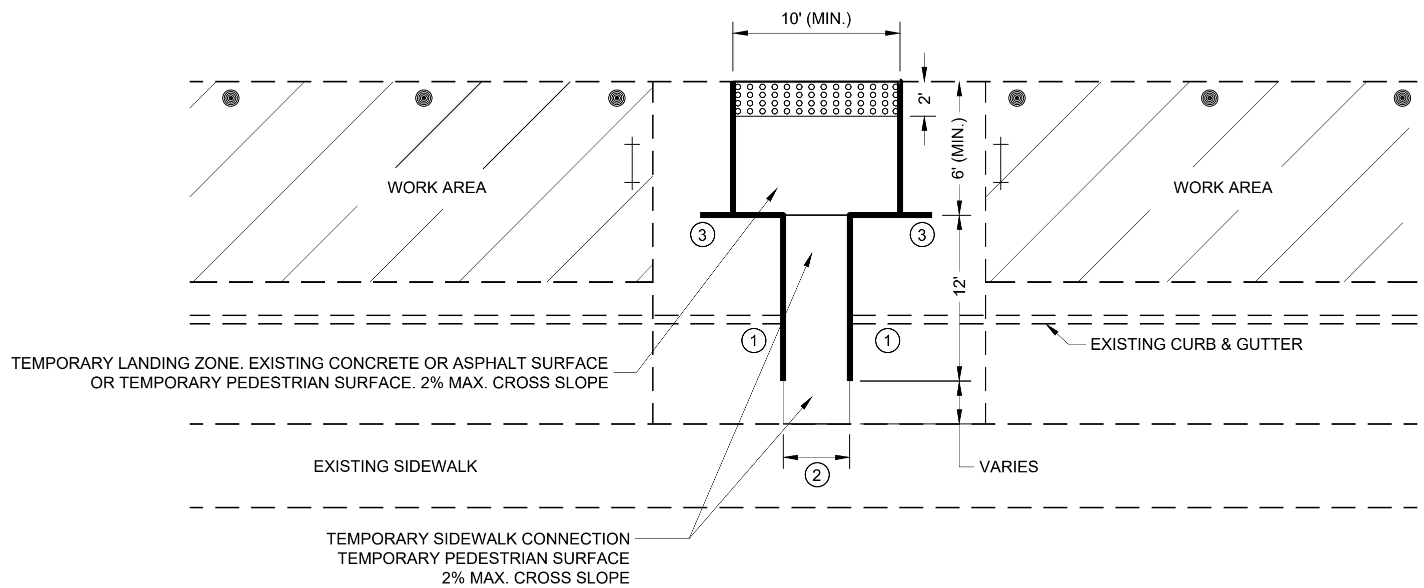
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

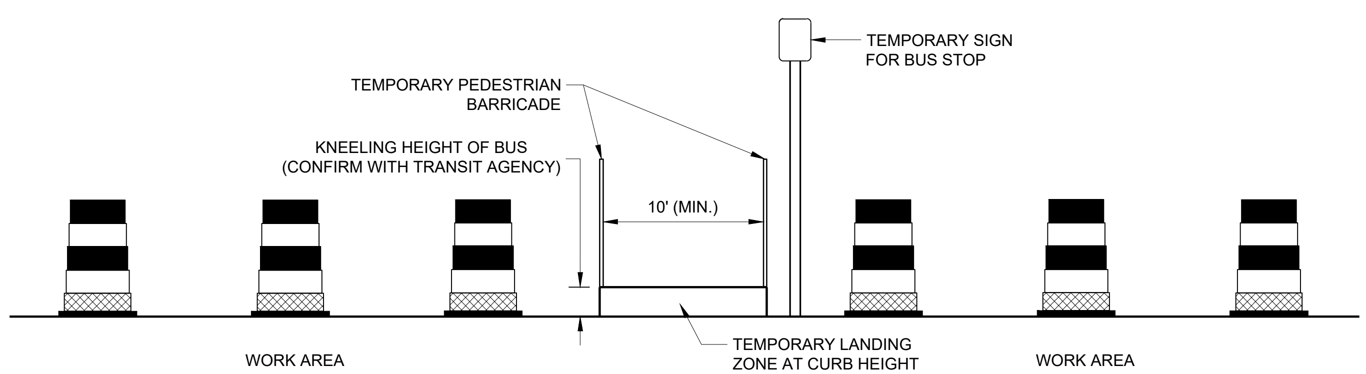
APPROVED
November 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

SDD 15D30-08d



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

1 DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

2 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.

3 PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

TRAFFIC CONTROL DRUM

TYPE III BARRICADE

TEMPORARY PEDESTRIAN BARRICADE

TEMPORARY DETECTABLE WARNING FIELD

WORK AREA

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 08e

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

UNDER PEDESTRIAN TRAFFIC

WORK AREA

TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC

GENERAL NOTES

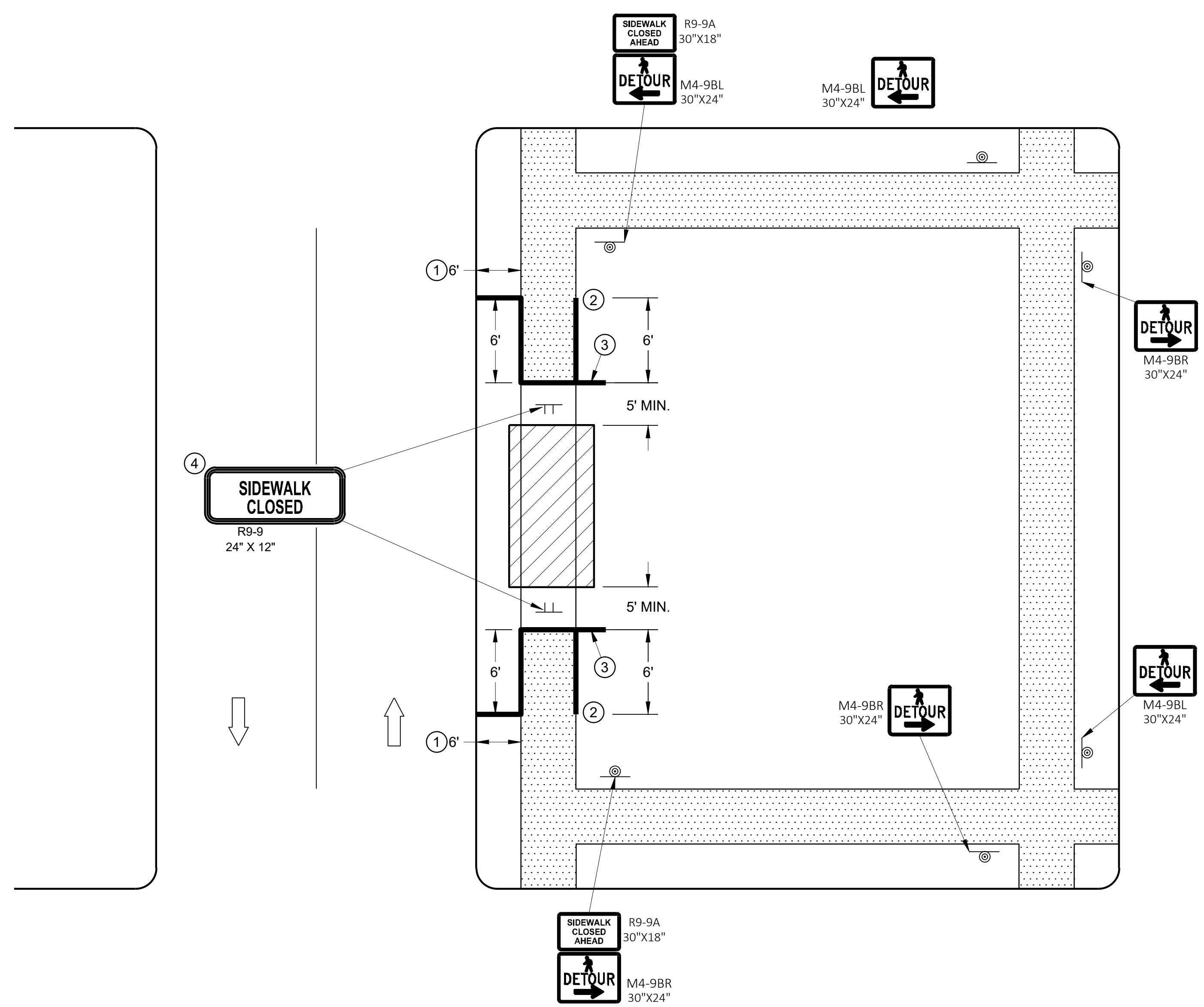
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

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TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 15D30 - 08f

SDD 15D30 - 08f

LEGEND

SIGN ON TEMPORARY SUPPORT

WORK AREA

UNDER PEDESTRIAN TRAFFIC

TEMPORARY PEDESTRIAN SURFACE

TEMPORARY PEDESTRIAN BARRICADE

OPTIONAL TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC

GENERAL NOTES

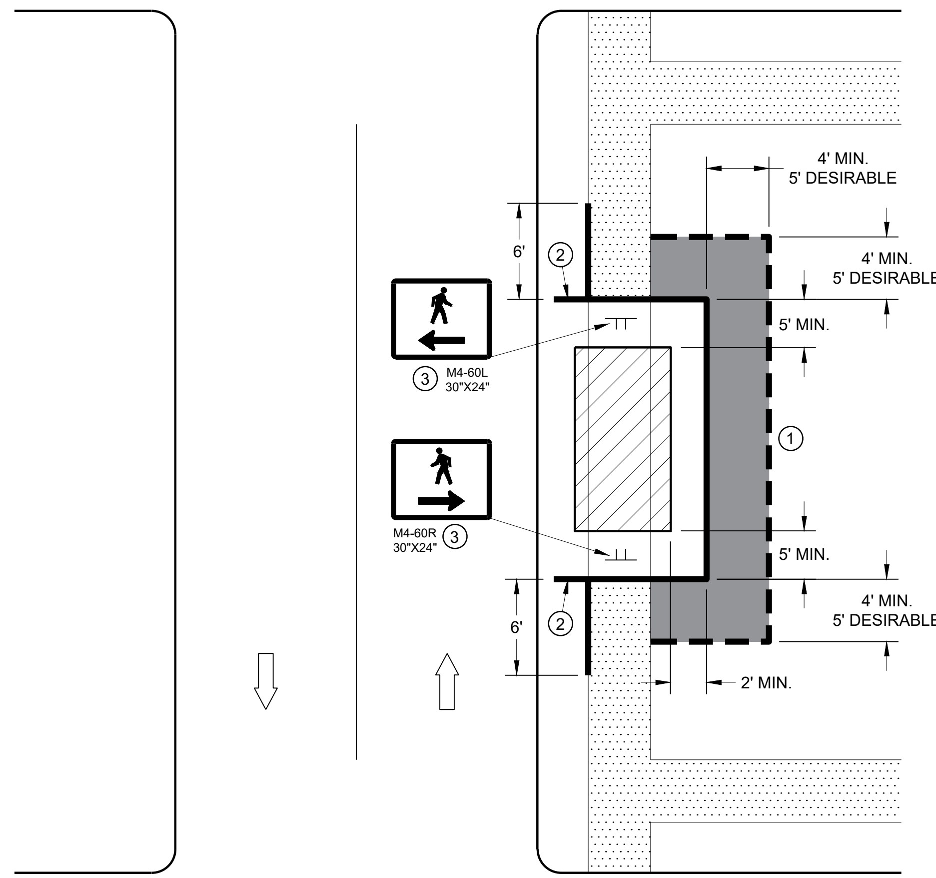
TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

1. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
2. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK DIVERSION
SINGLE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATI

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SDD 15D30 - 08g

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

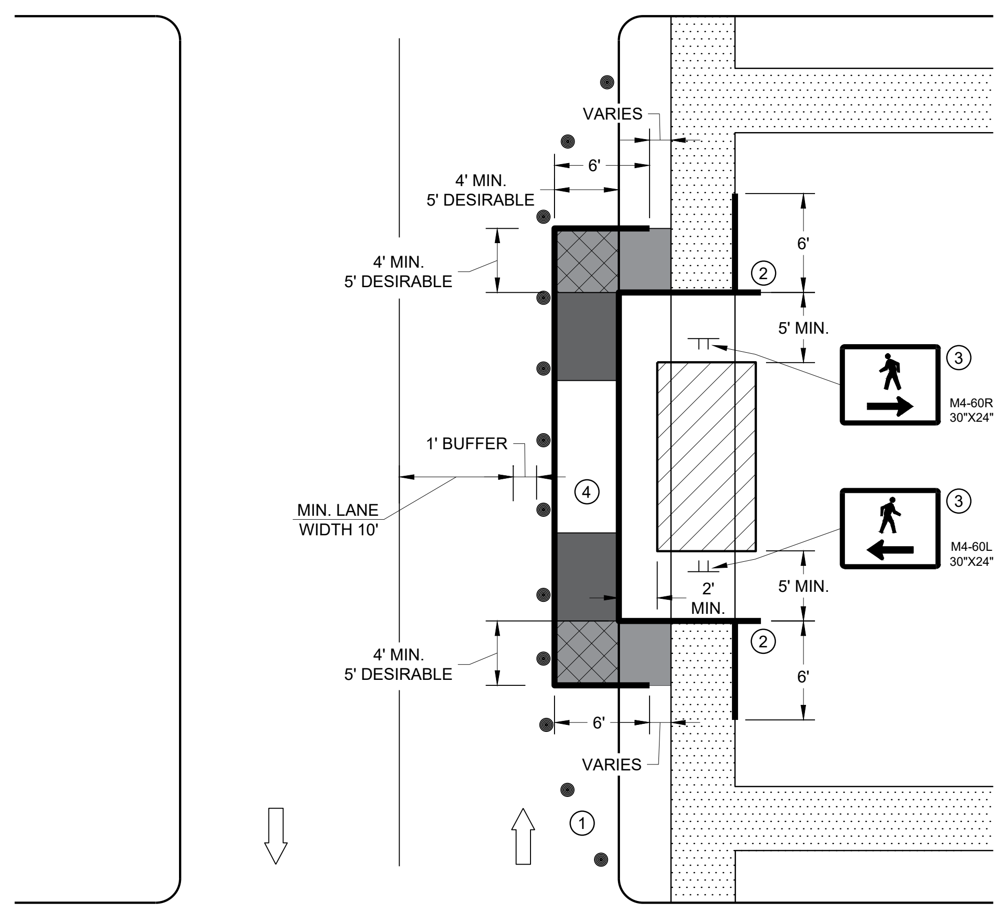
GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
2. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
4. USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.



SIDEWALK DIVERSION, SINGLE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATI

6

SDD 15D30 - 08h
SDD 15D30 - 08h

GENERAL NOTES

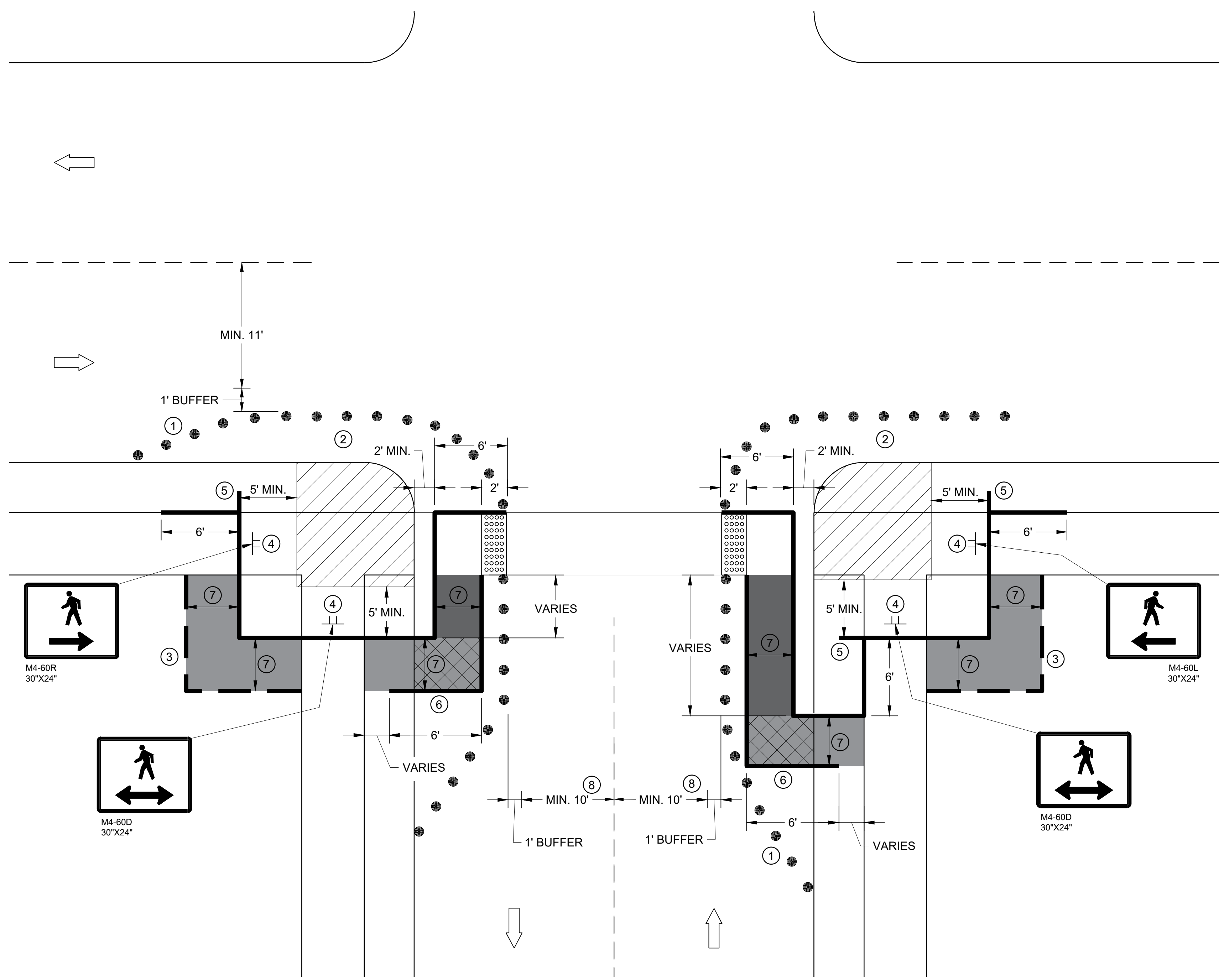
IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
7. 4 FEET MINIMUM, 5 FEET DESIRABLE
8. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.



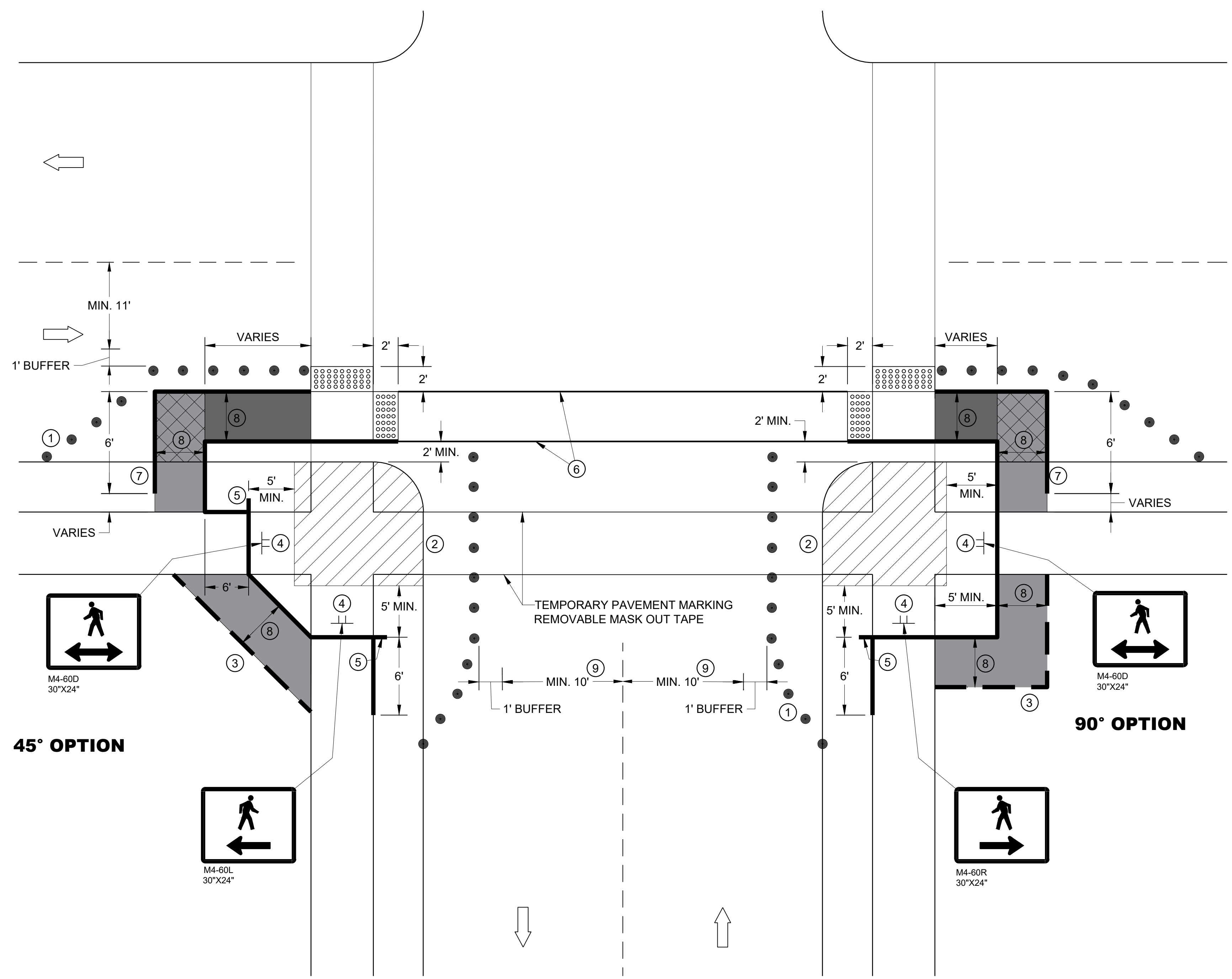
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATI



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. WHITE 6" TEMPORARY PAVEMENT MARKING
7. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
8. 4 FEET MINIMUM, 5 FEET DESIRABLE
9. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

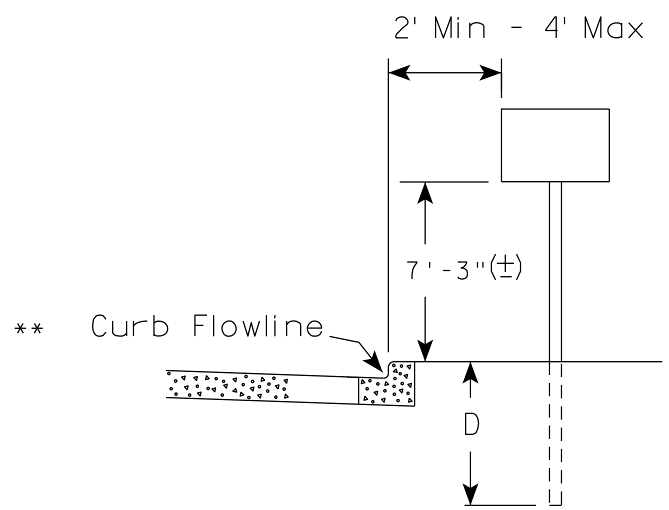
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

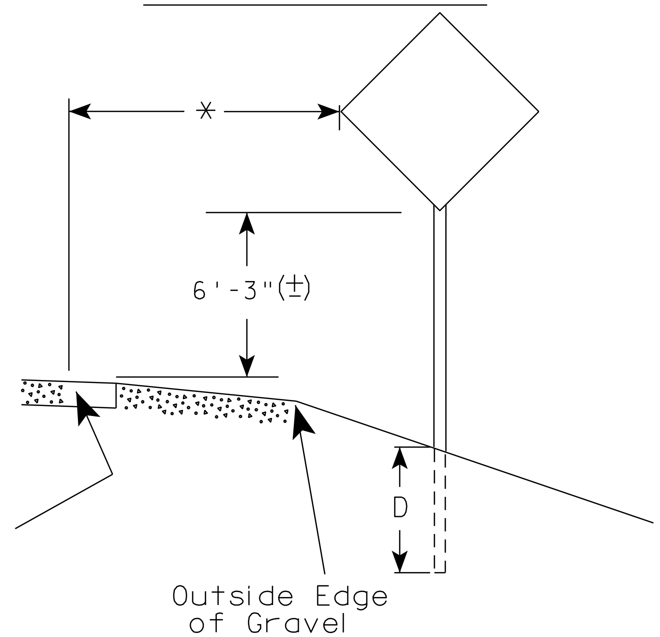
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

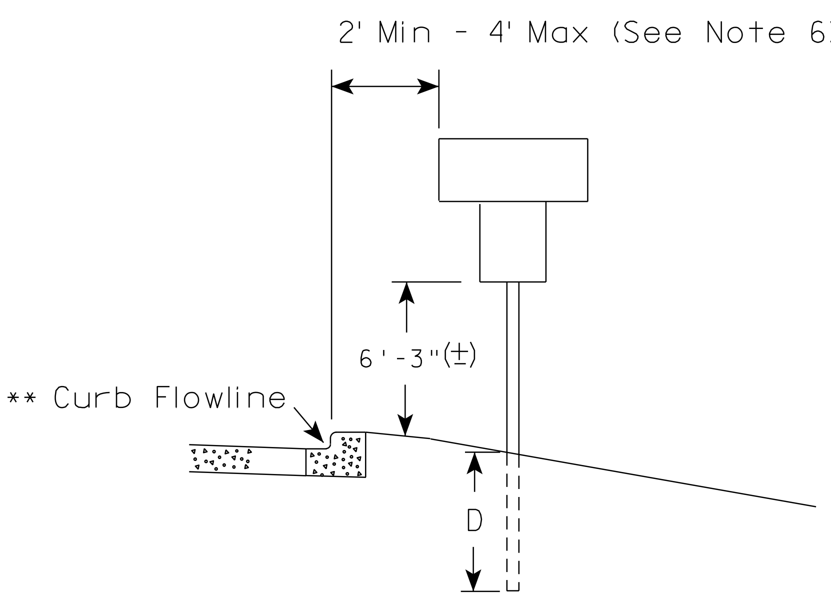
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

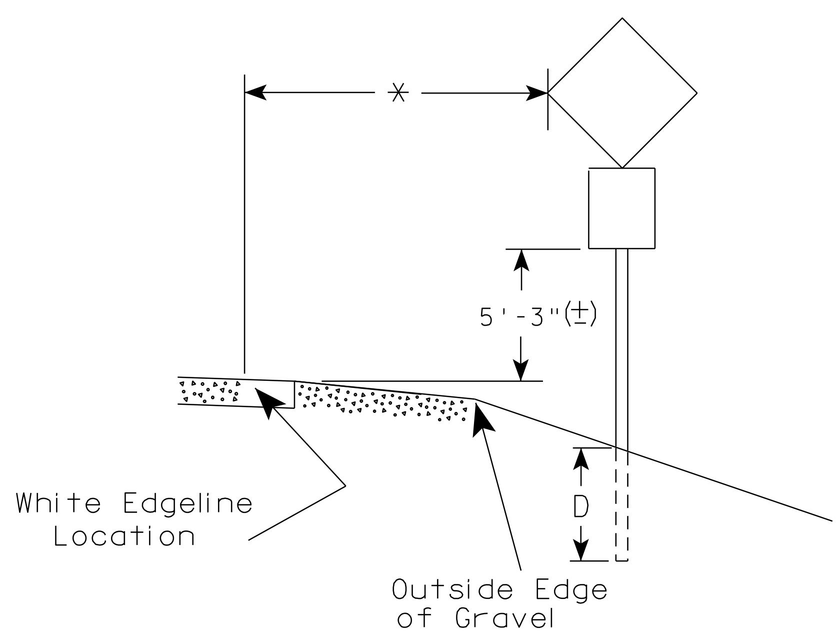
URBAN AREA



RURAL AREA (See Note 2)







GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.

   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

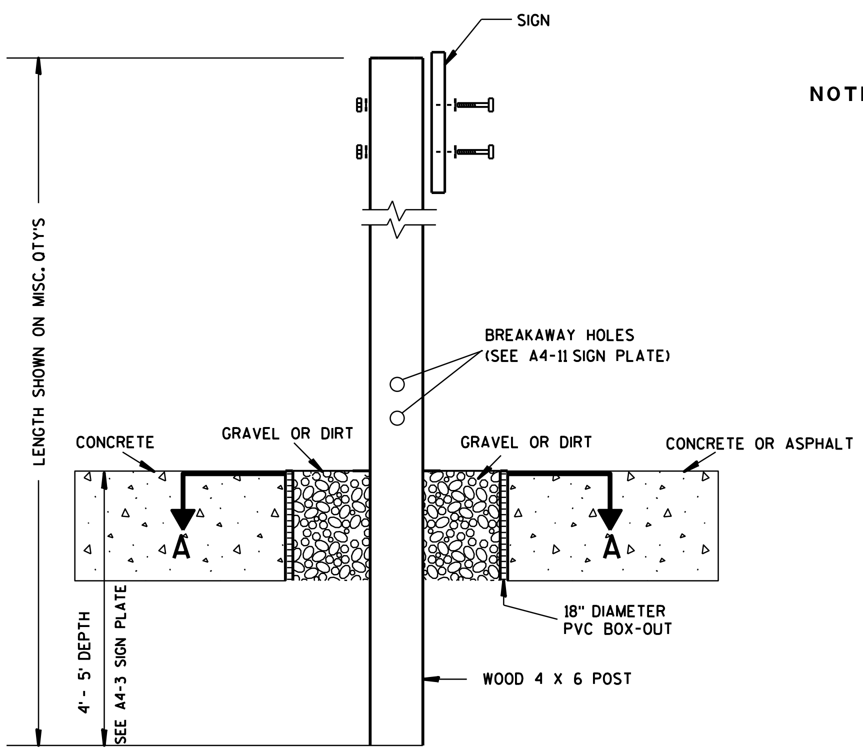
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22



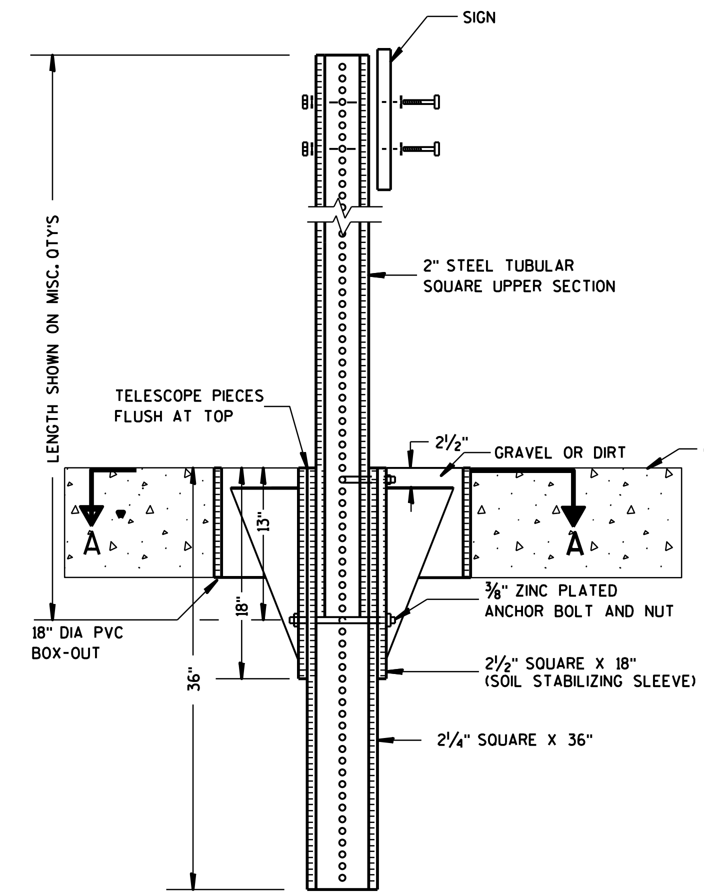
NOTES: 1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION

2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS

3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.

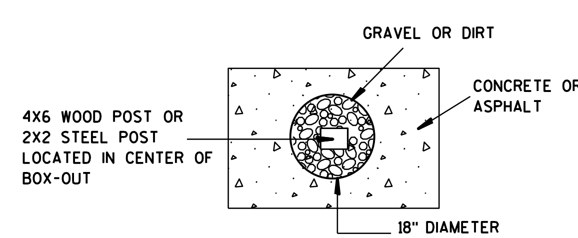
ELEVATION VIEW

DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

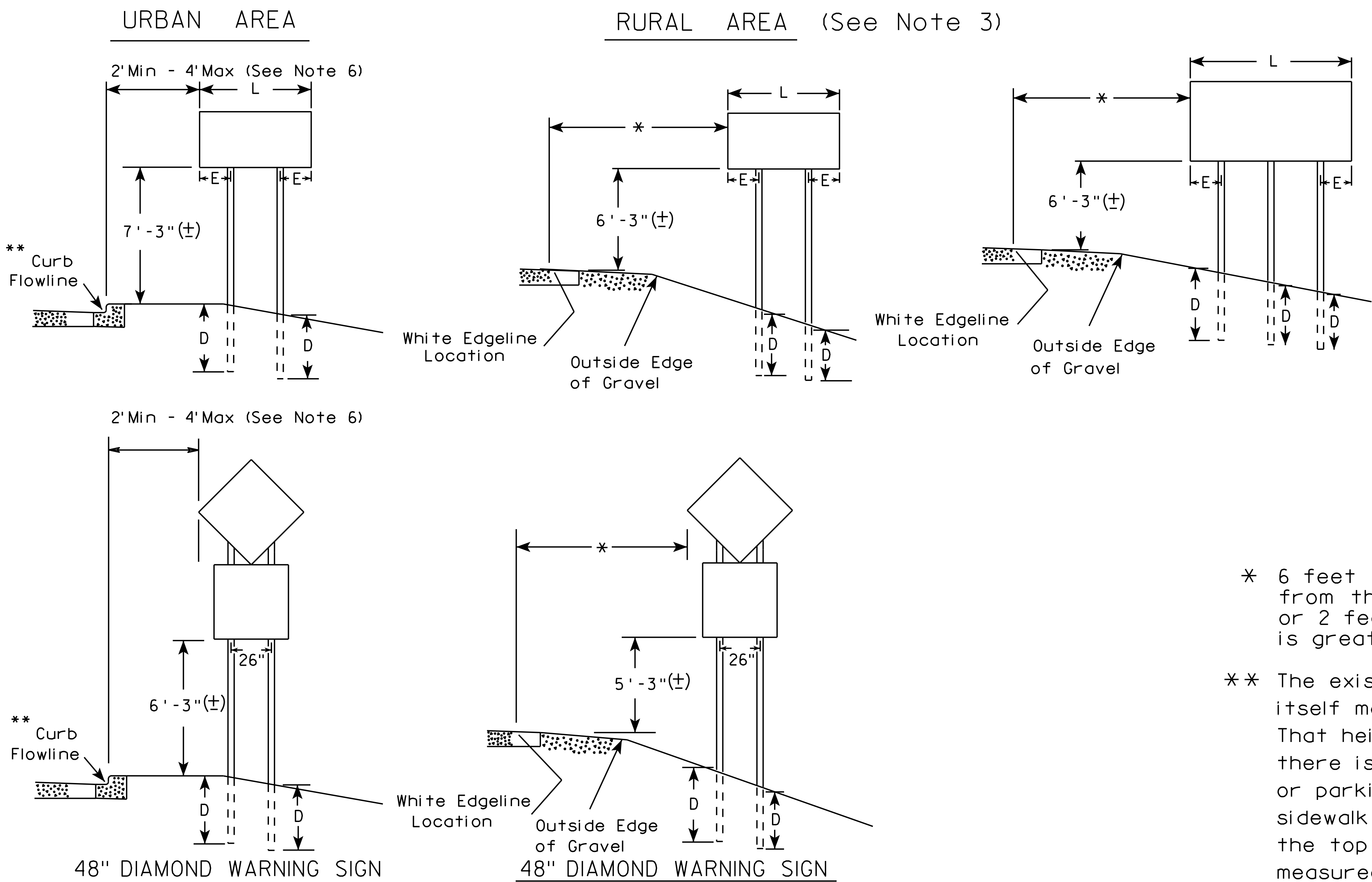
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42



GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

	SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

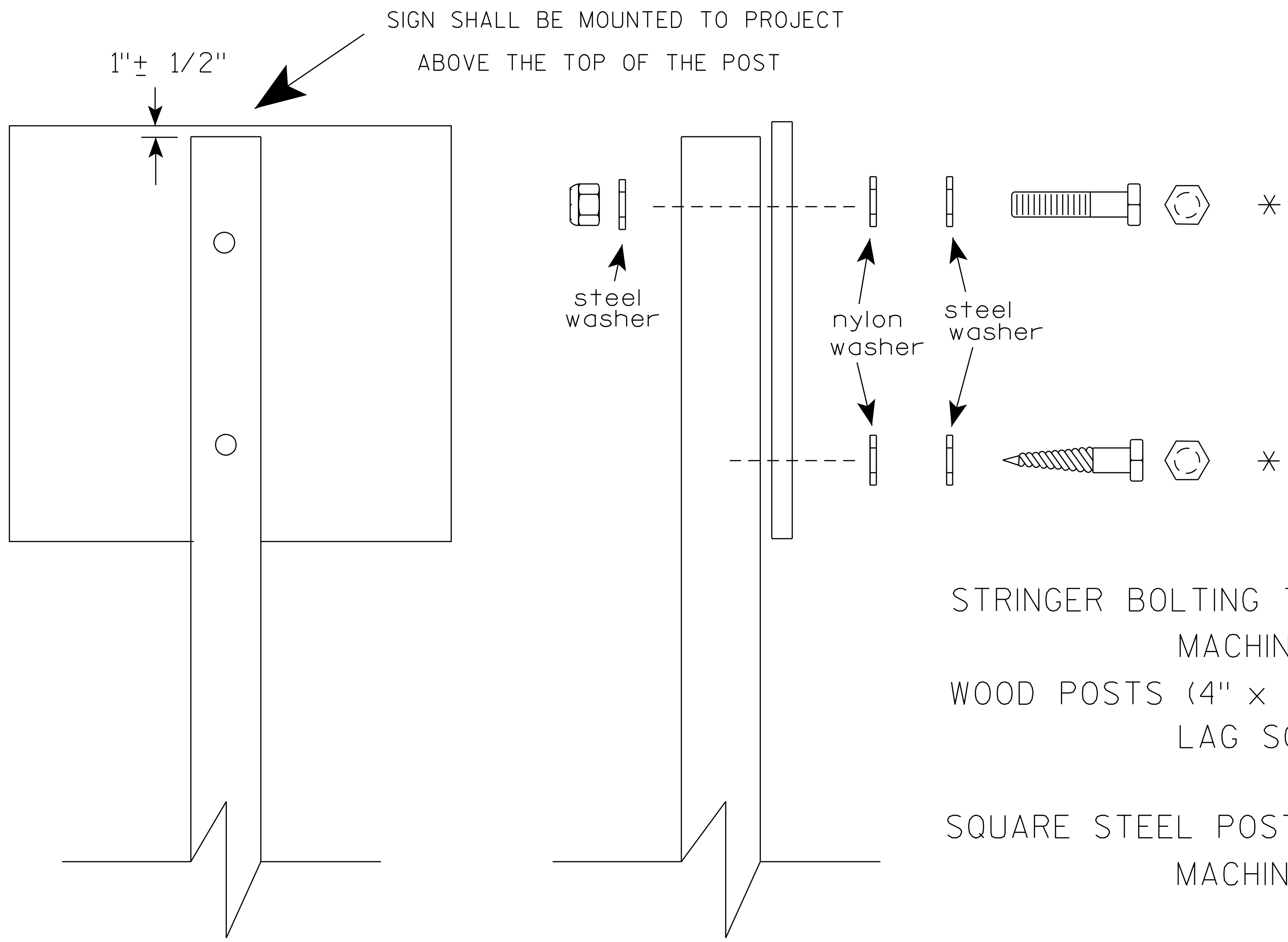
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

7

7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 113	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")
LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

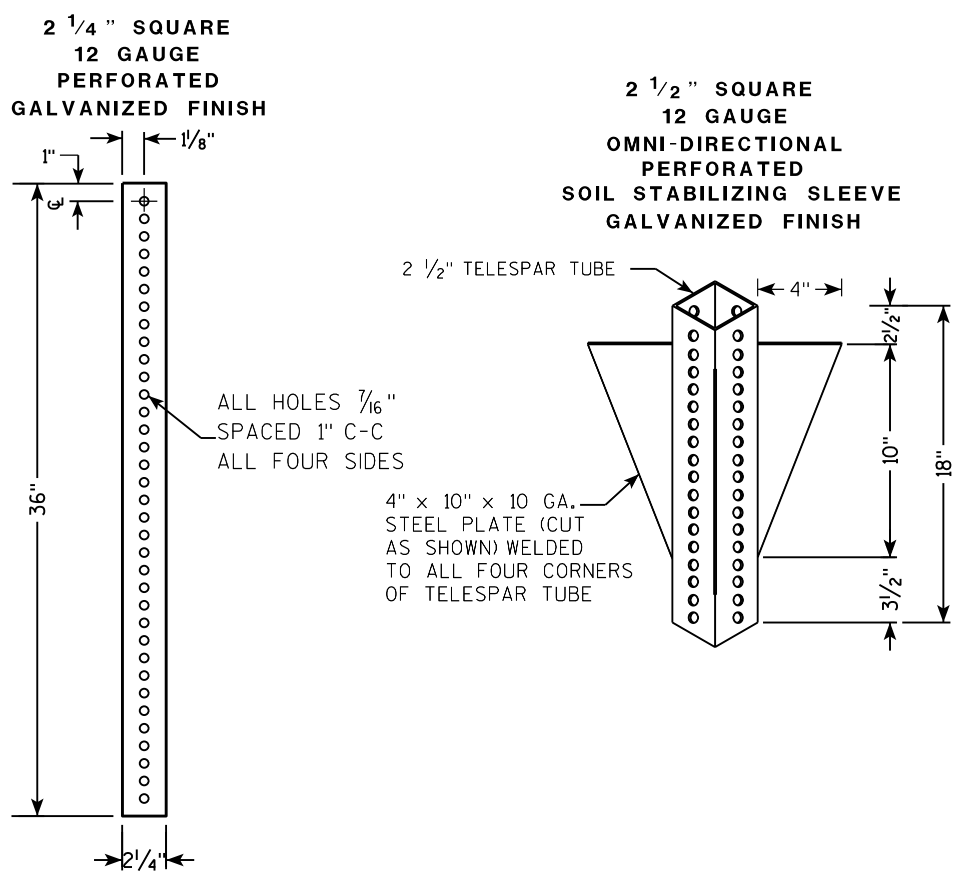
ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

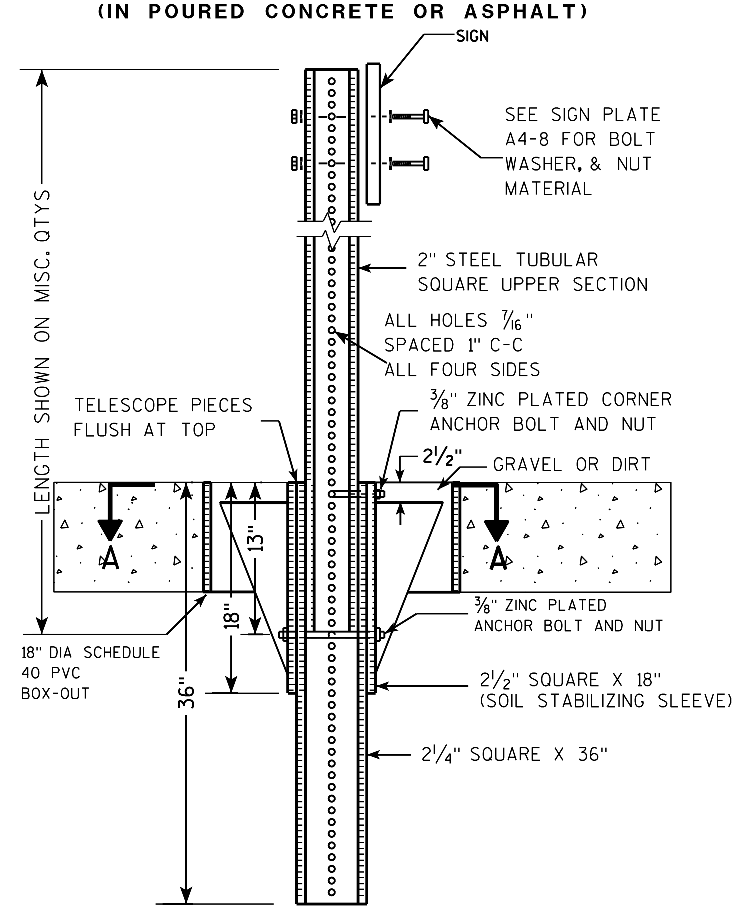
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/2020 PLATE NO. A4-8.9

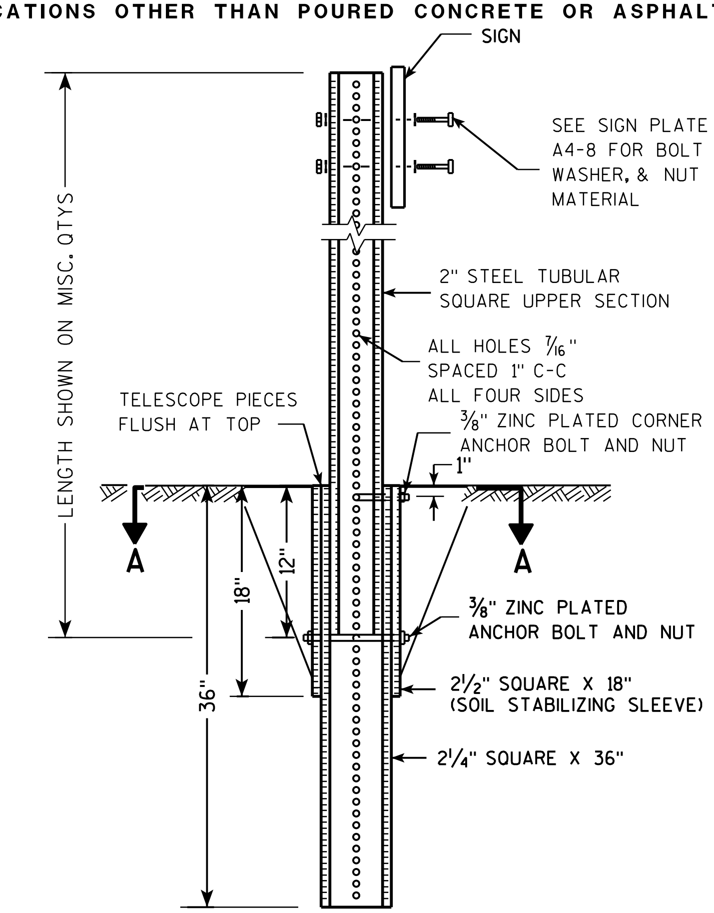
TELESCOPIC TUBING ANCHORS TWO PIECE SYSTEM

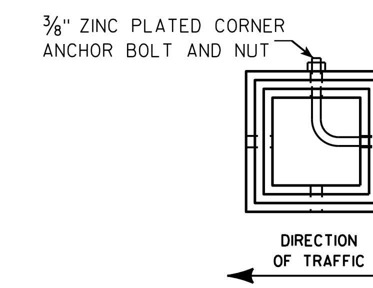


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

7

7

TUBULAR STEEL
SIGN POST
A4-9

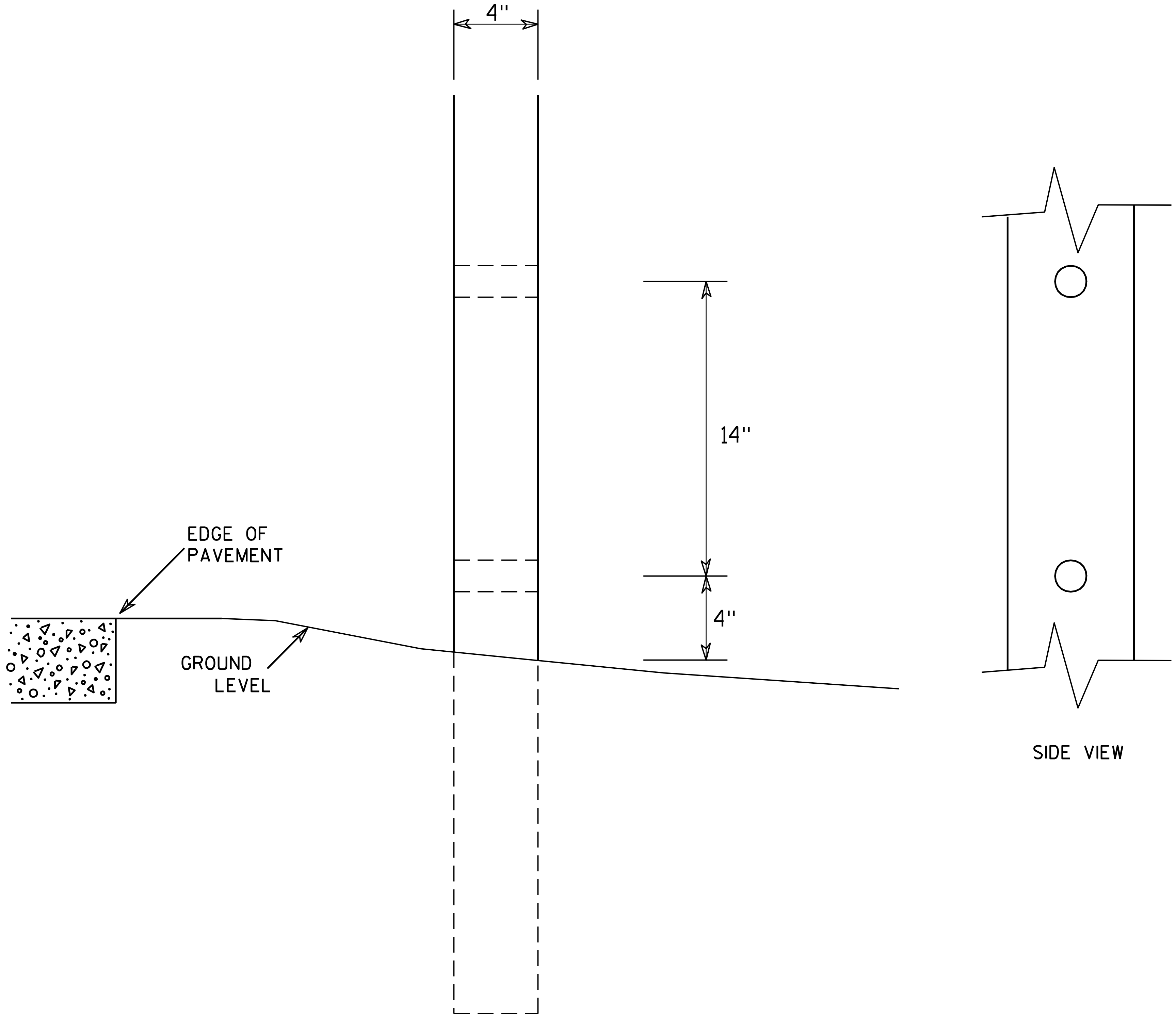
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsjo PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42



GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two $1\frac{1}{2}$" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

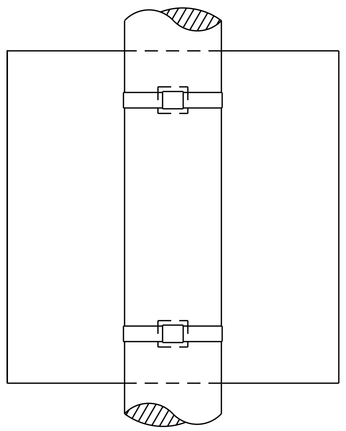
DATE 3/27/97 PLATE NO. A4-11.2

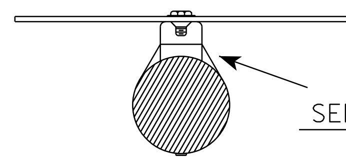
7

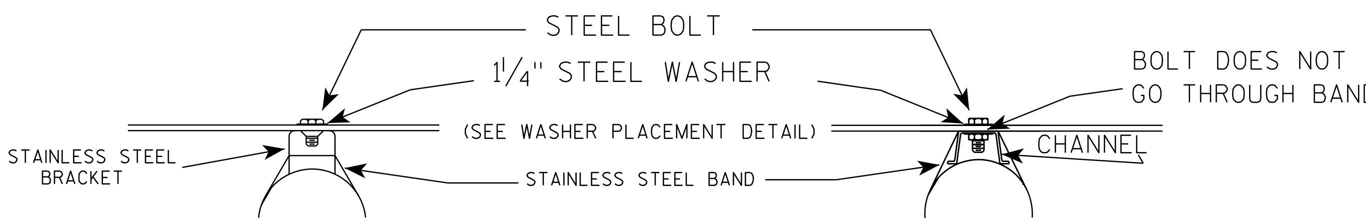
7

BANDING

SINGLE SIGN







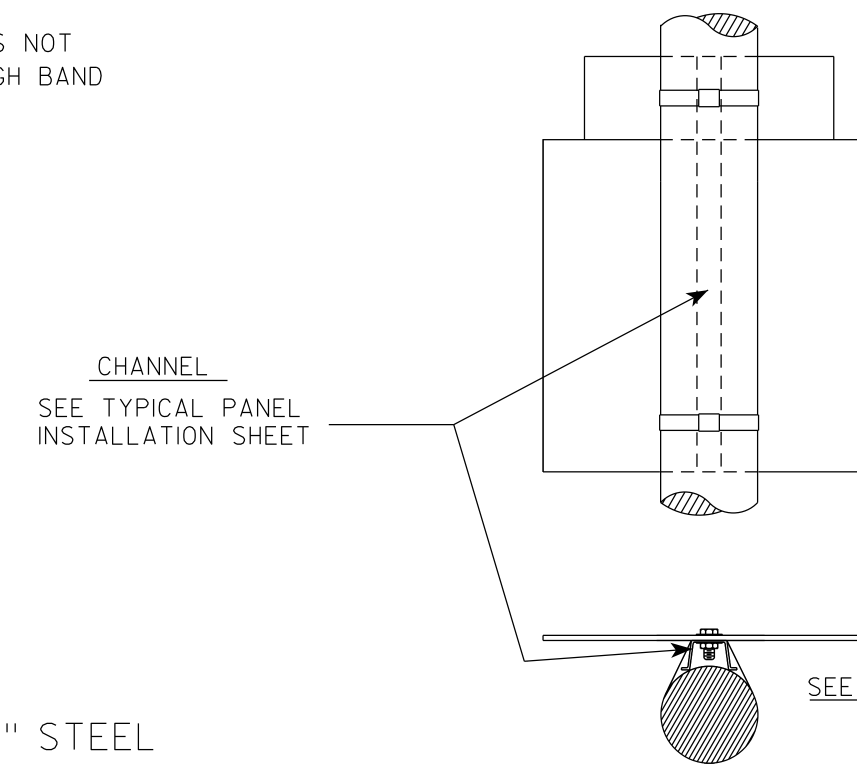
DETAIL A

DETAIL B

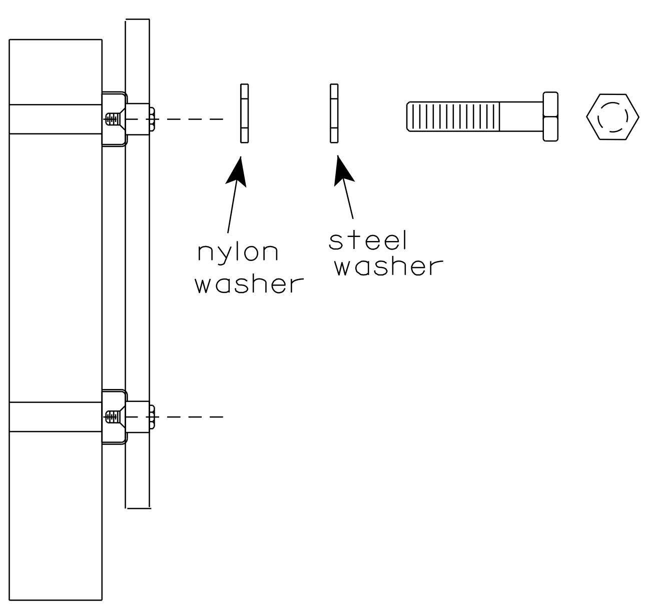
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be $\frac{3}{4}$" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT

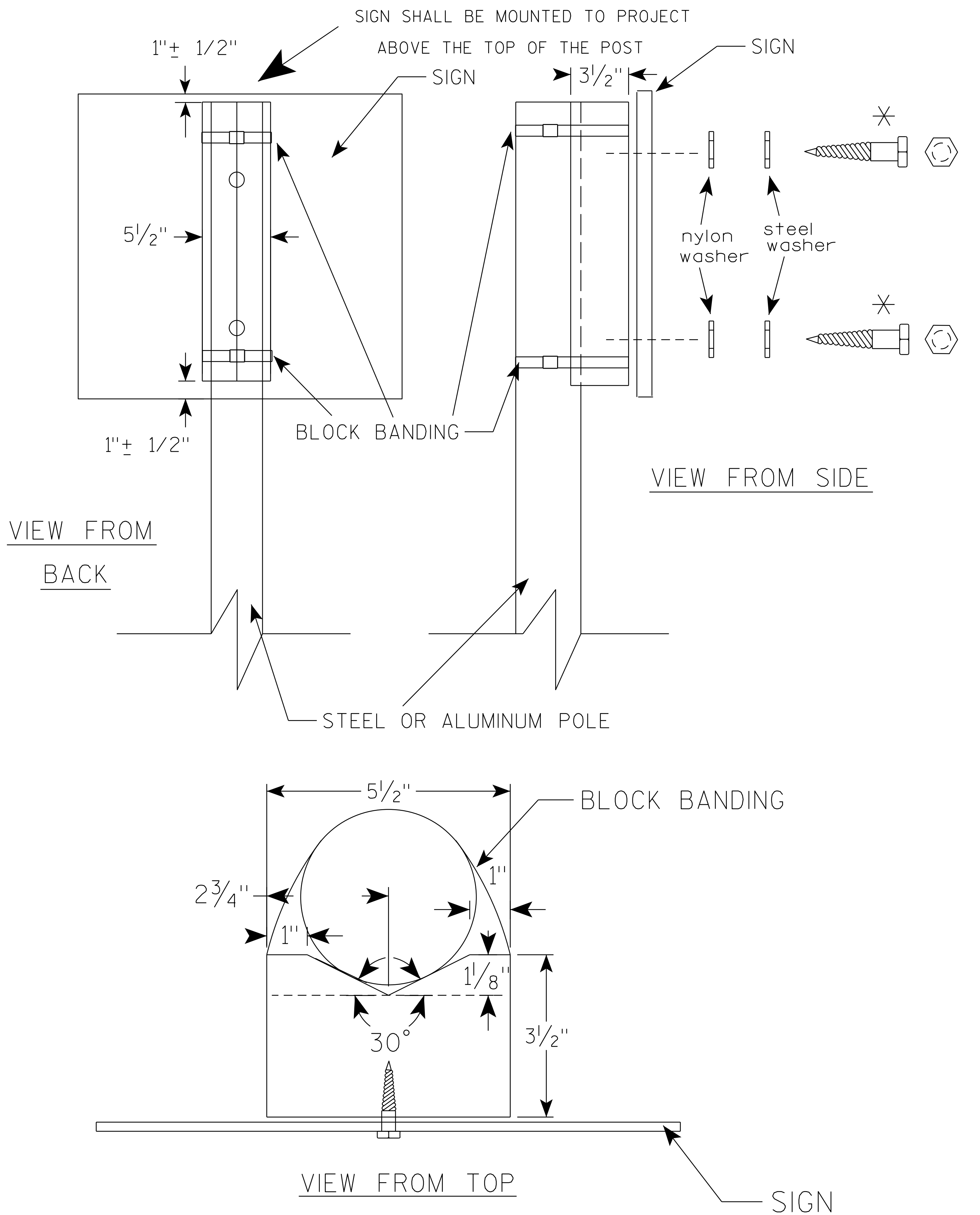


WASHERS (ALL POSTS) -
1-1/4" O.D. X$\frac{3}{8}$" I.D. X$\frac{1}{16}$" STEEL
1-1/4" O.D. X$\frac{3}{8}$" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

7

7

STANDARD SIGN SIGN BANDING DETAILS
WISCONSIN DEPT OF TRANSPORTATION
APPROVED Matthew R Rauch for State Traffic Engineer
DATE 6/10/19 PLATE NO. A5-9.4



GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

* LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

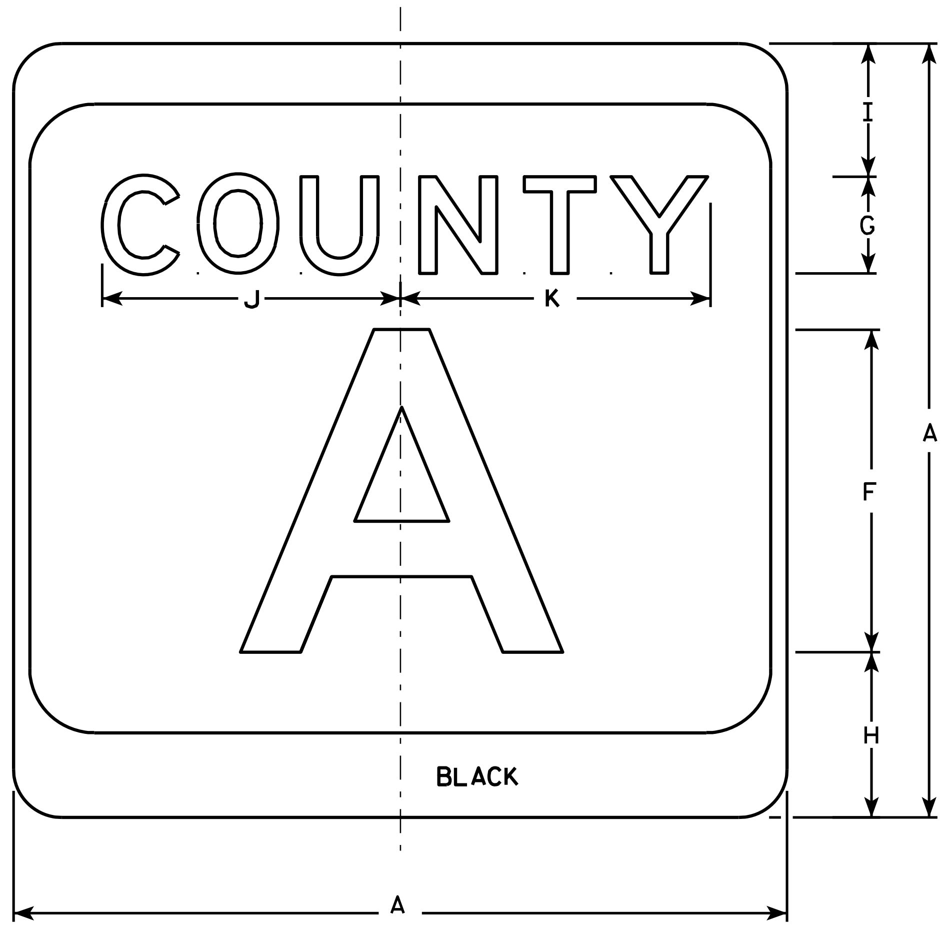
DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

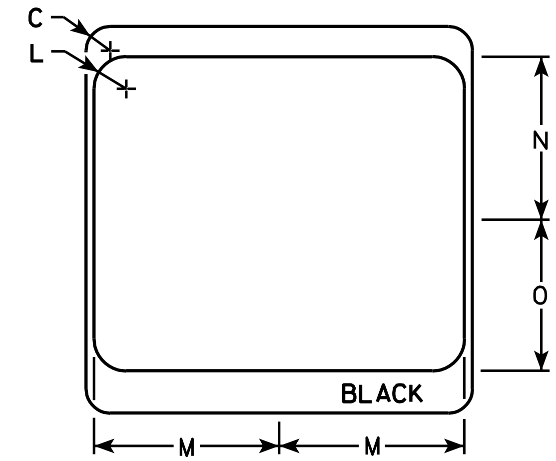
SHEET NO: 118 E

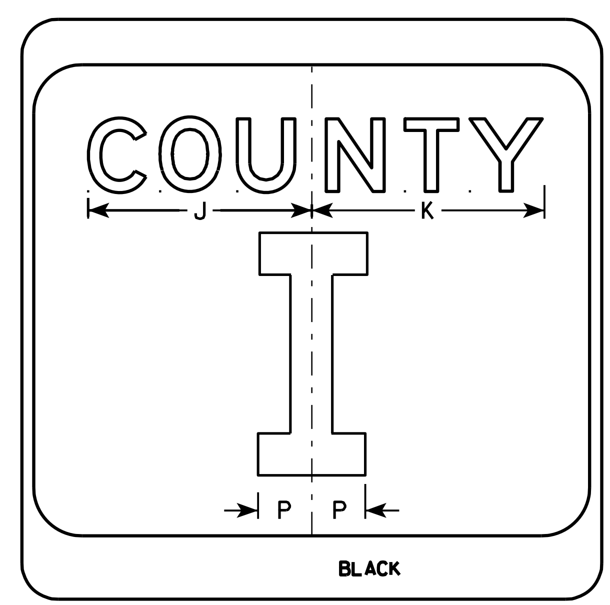
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A510.dgn PLOT DATE : 19-APRIL 2022 11:55 PLOT BY : dotc4c

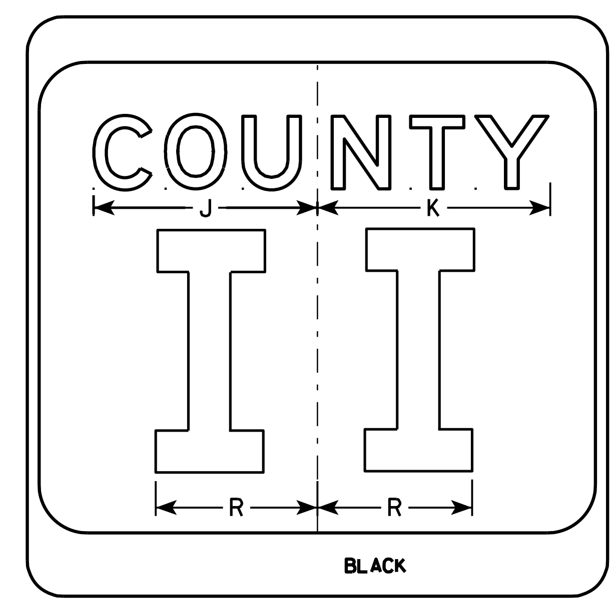
7



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

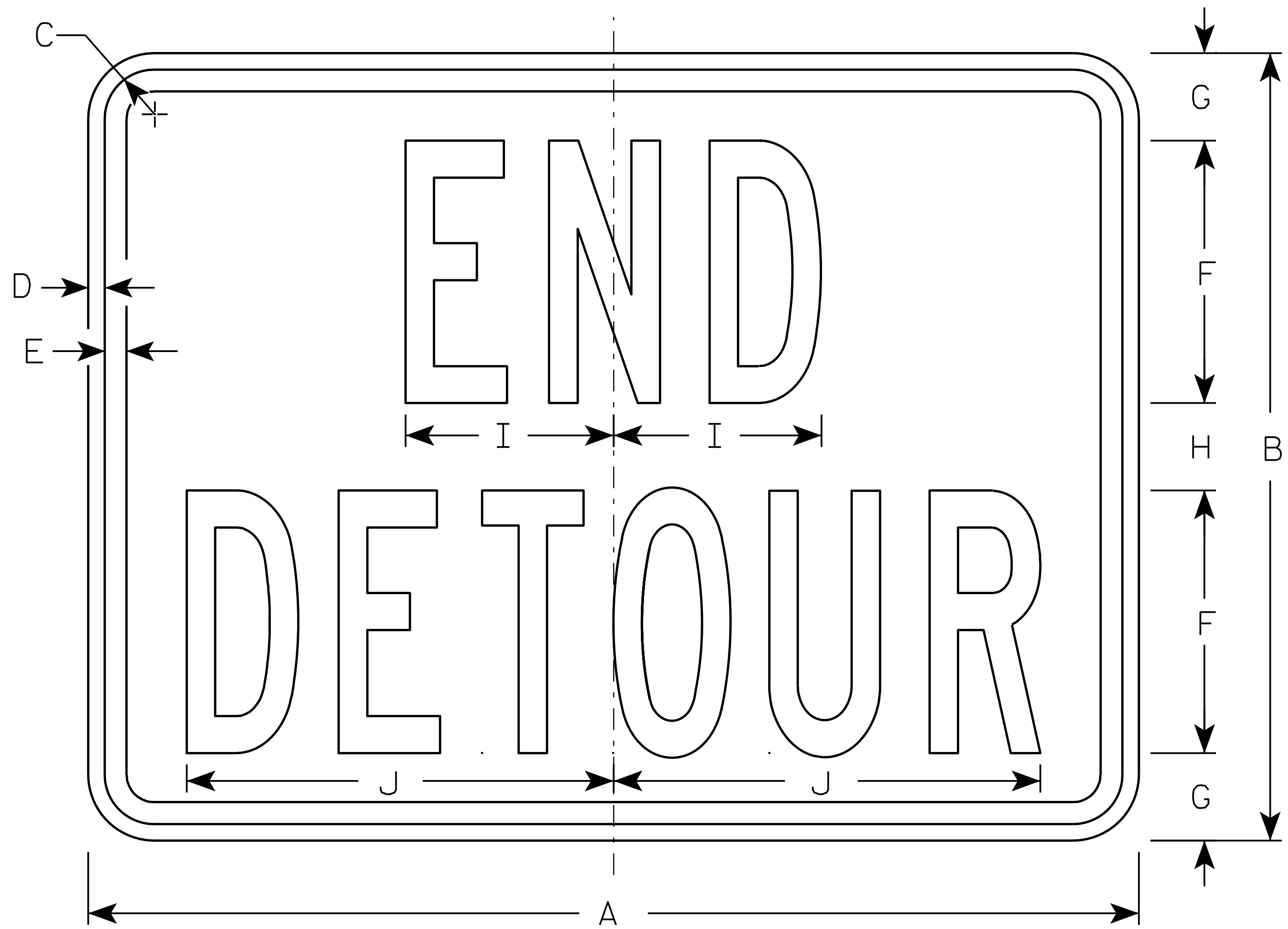
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

7



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

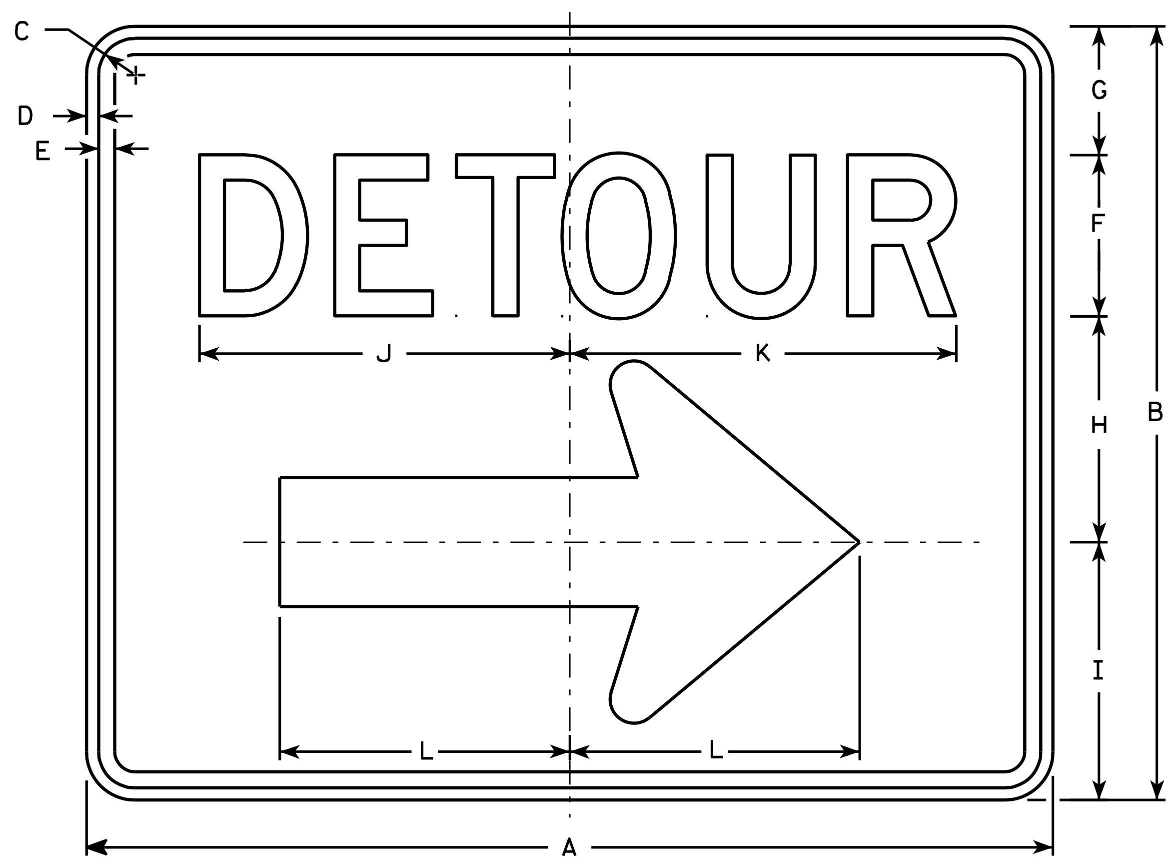
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

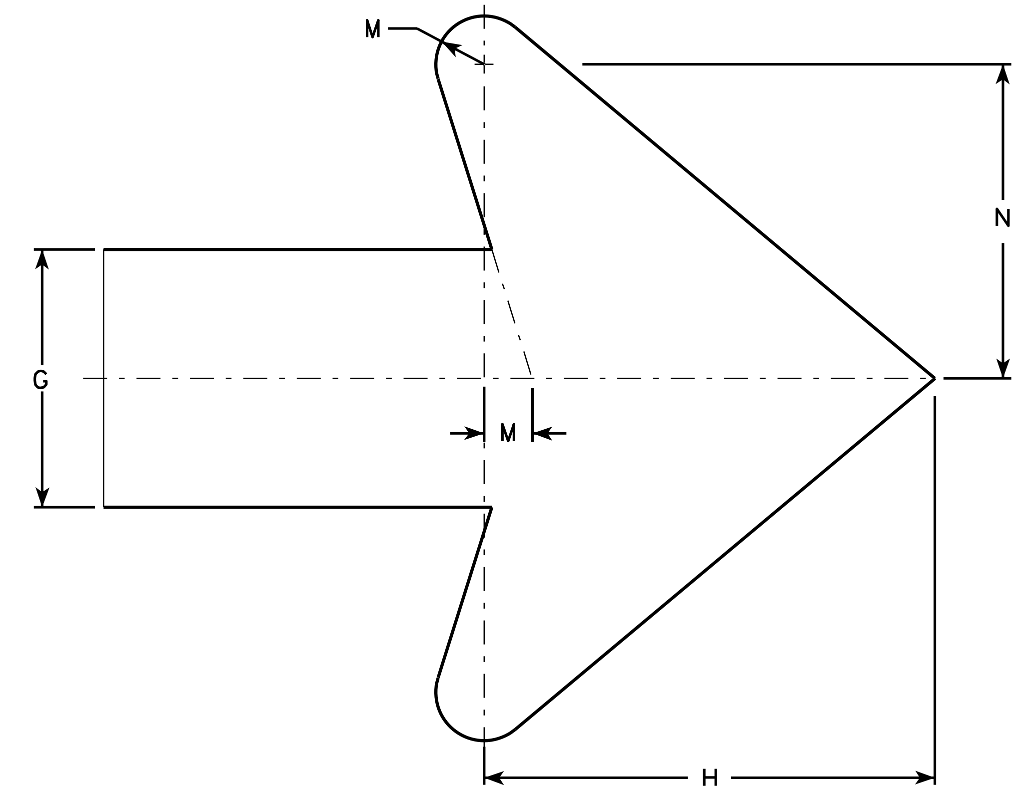
PROJECT NO: HWY: COUNTY: SHEET NO: 120 E



M4-9R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9L is the same as M4-9R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

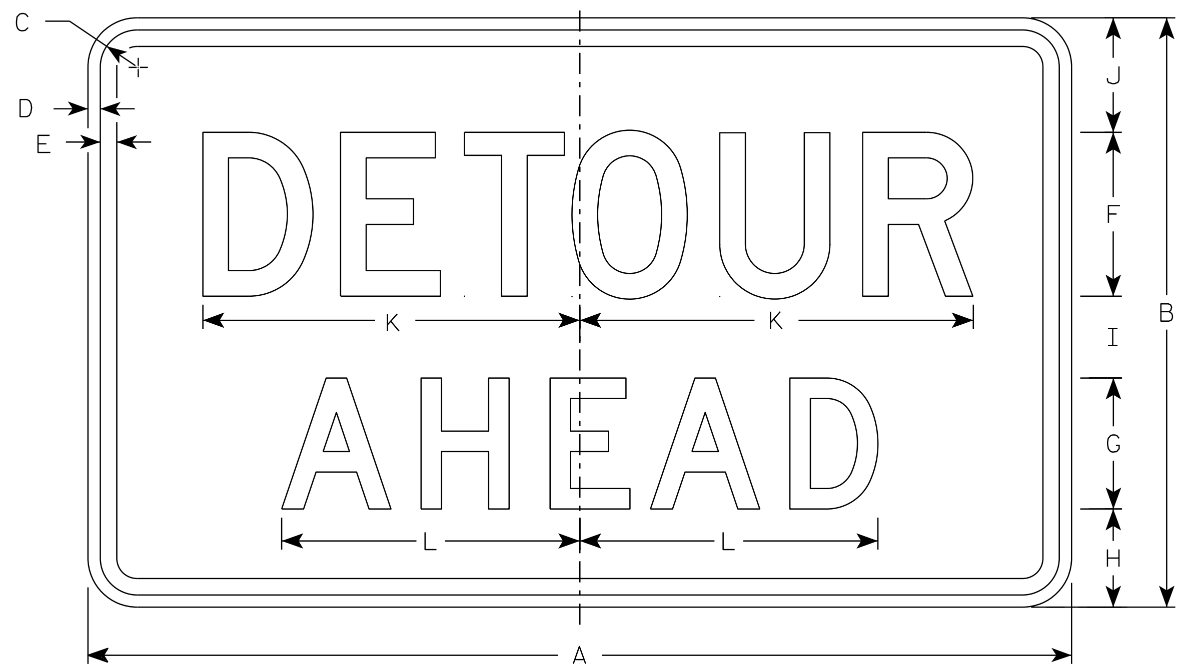
DATE 3/9/11 PLATE NO. M4-9R.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 121 | E

7 7

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



M4-59A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	18	1 1/8	3/8	1/2	5	4	3	2 1/2	3 1/2	11 3/4	9 1/8															3.75
3																											
4																											
5																											

STANDARD SIGN
M4-59A

WISCONSIN DEPT OF TRANSPORTATION

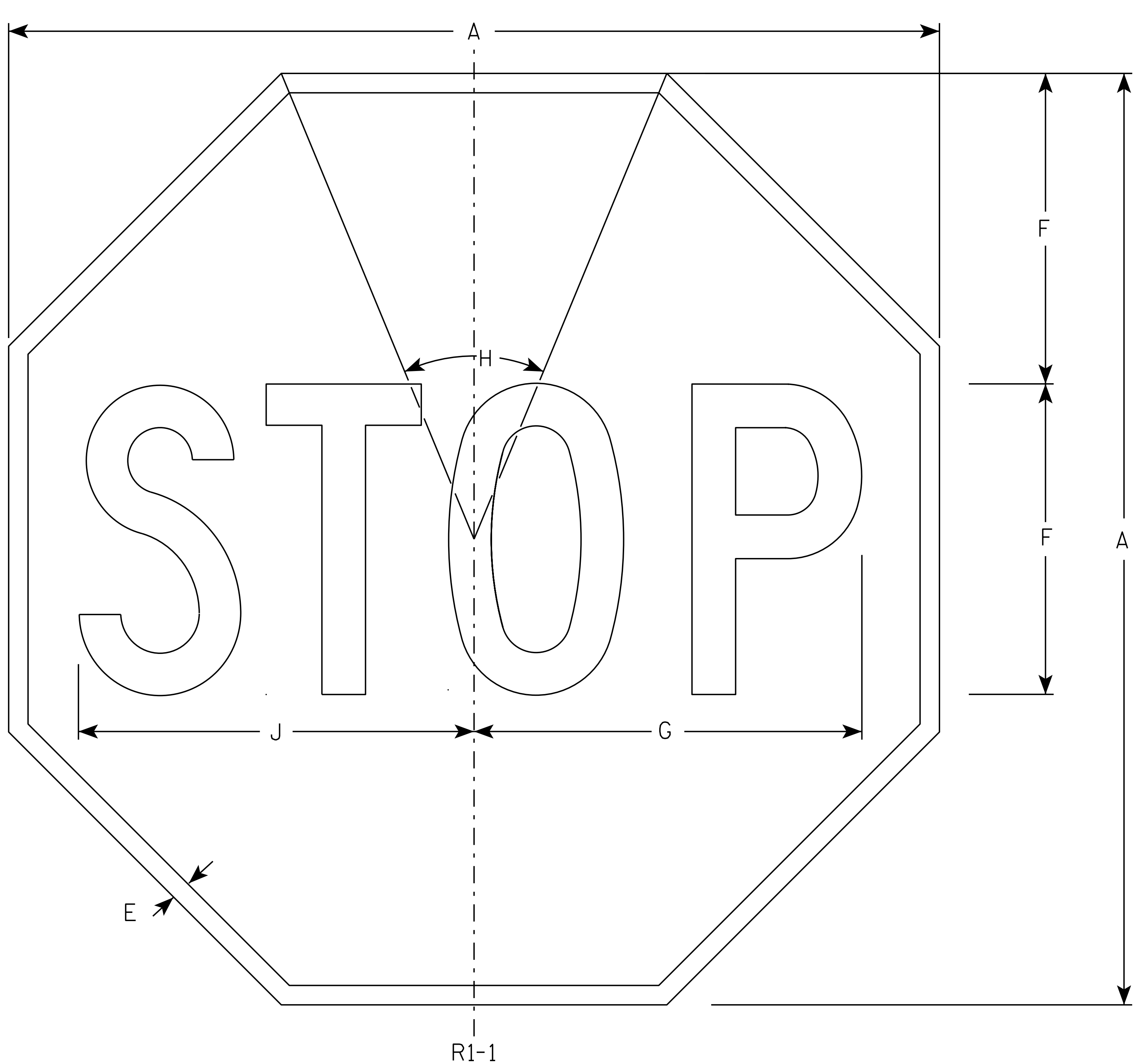
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 7/1/19 PLATE NO. M4-59A.1

PROJECT NO: HWY: COUNTY: SHEET NO: 122 E

7

7



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

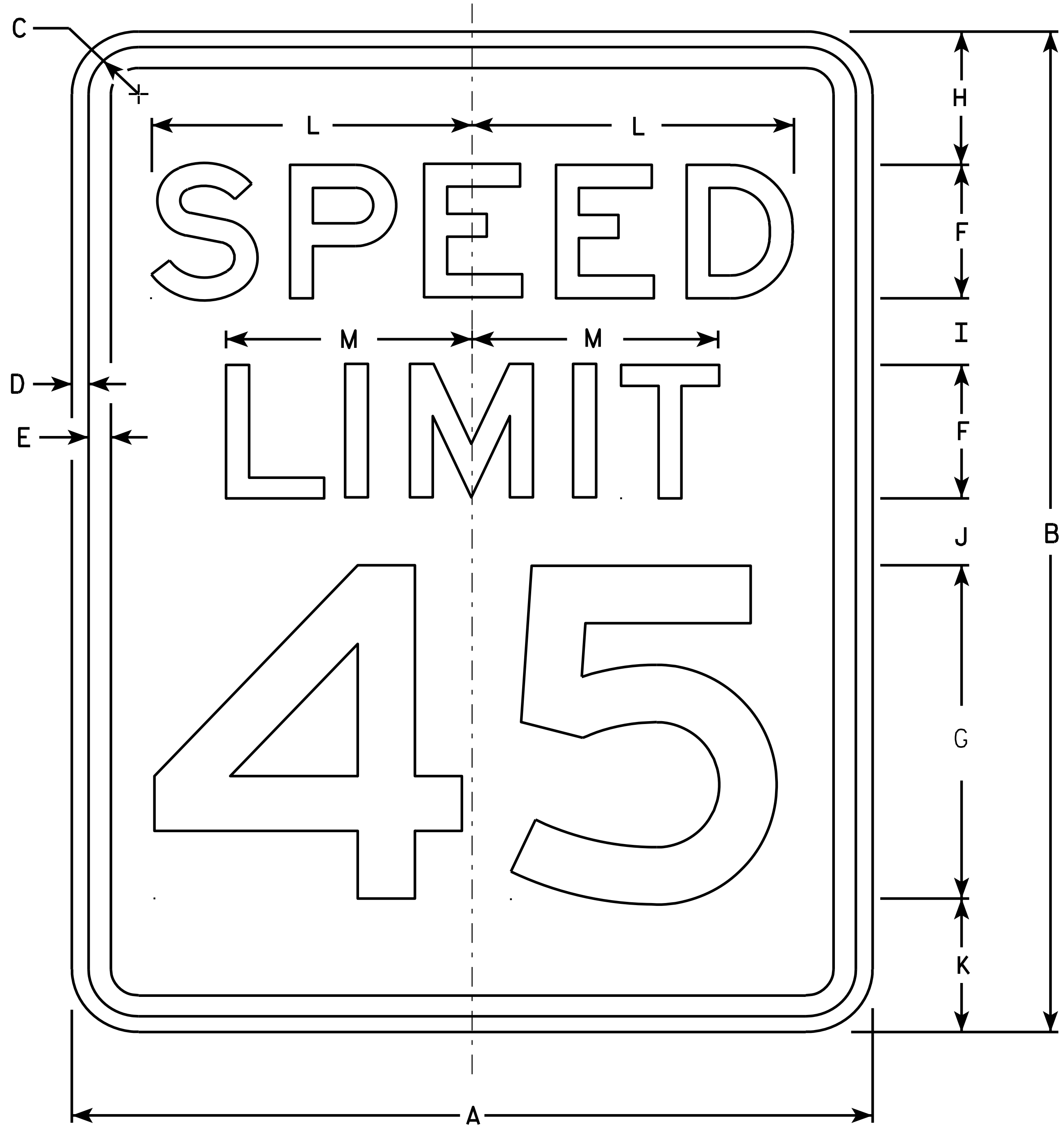
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: 123 E

7

7



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 124 | E

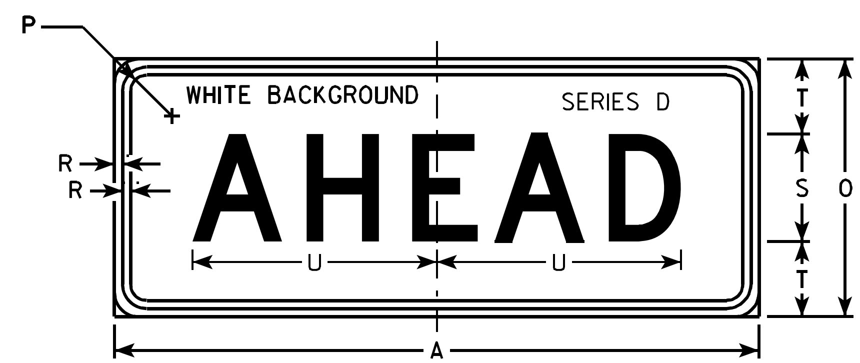
7

7

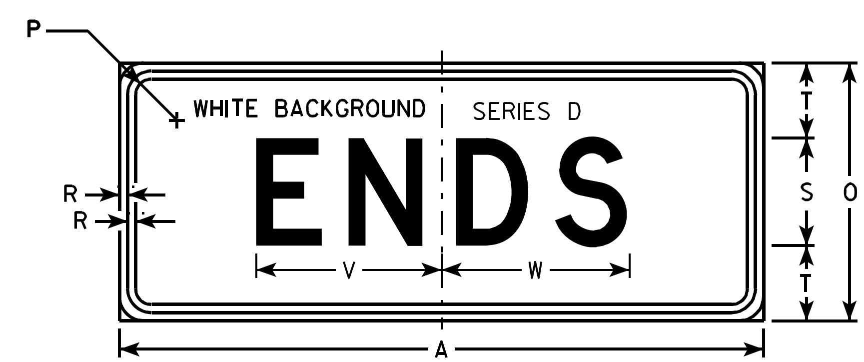
R3-17

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - AS SHOWN
   Message - BLACK
3. Message Series - C or as noted on the Signs.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R3-17ap



R3-17bp

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	R3-17 Area sq. ft.	R3-17ap Area sq. ft.	R3-17bp Area sq. ft.
1																													
2S	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
2M	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
3																													
4																													
5																													

7

7

STANDARD SIGN
R3-17 & R3-17a&bp

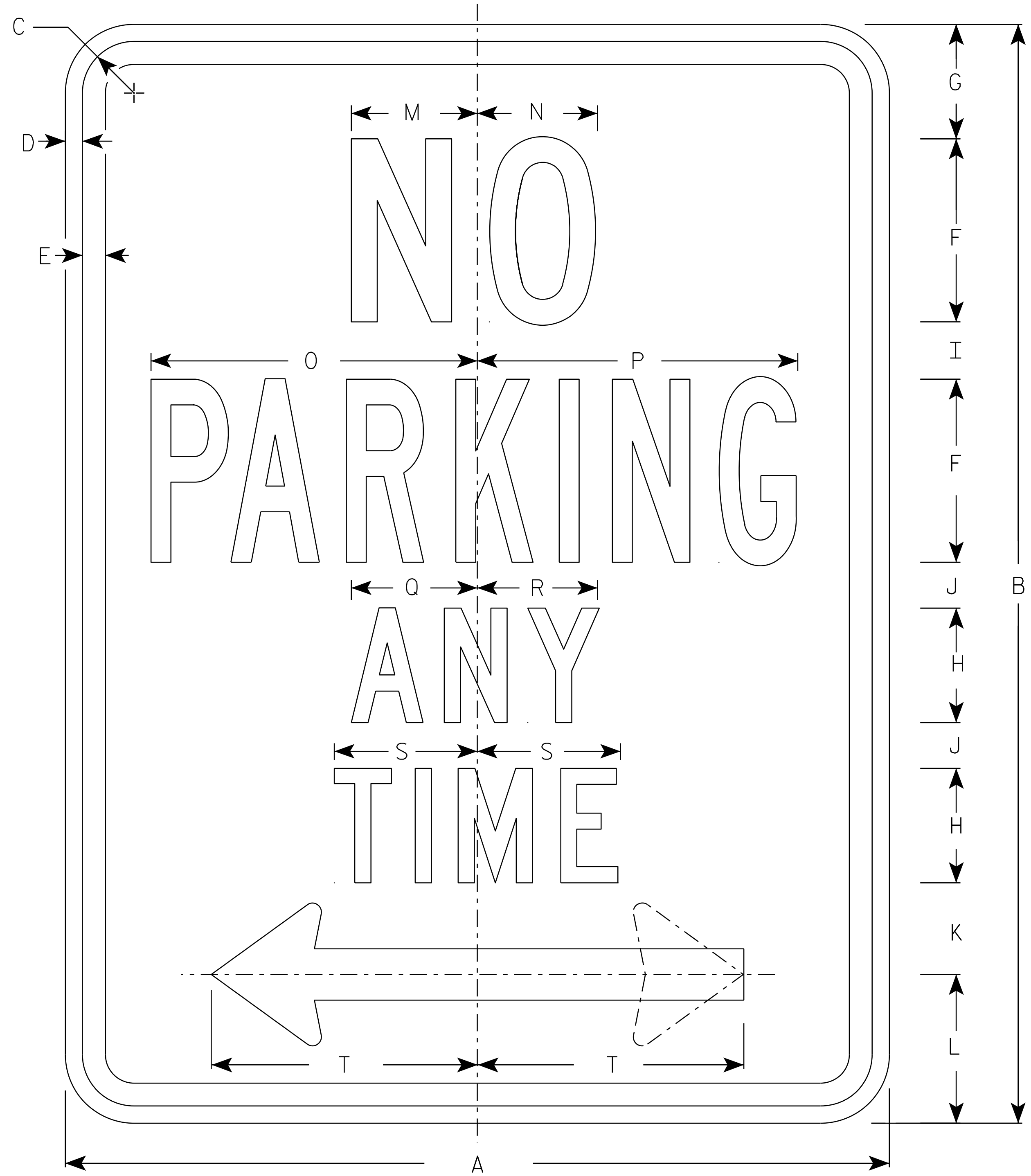
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/12/2011 PLATE NO. R3-17.2

PROJECT NO:

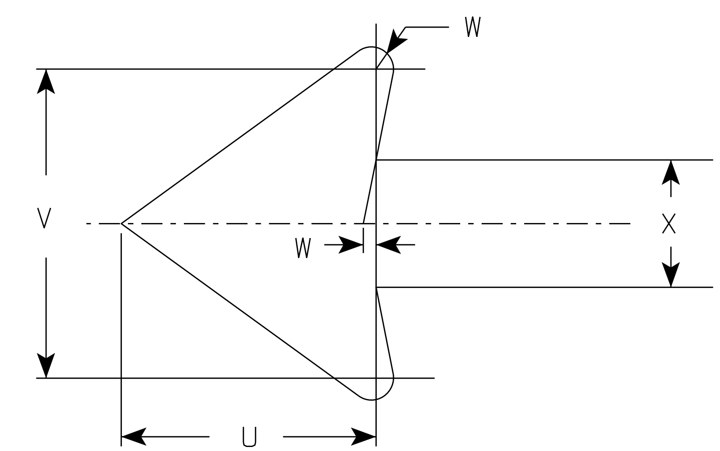
SHEET NO: 125 E



R7-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Lines 1, 3 and 4 are series C, line 2 is series B.
5. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

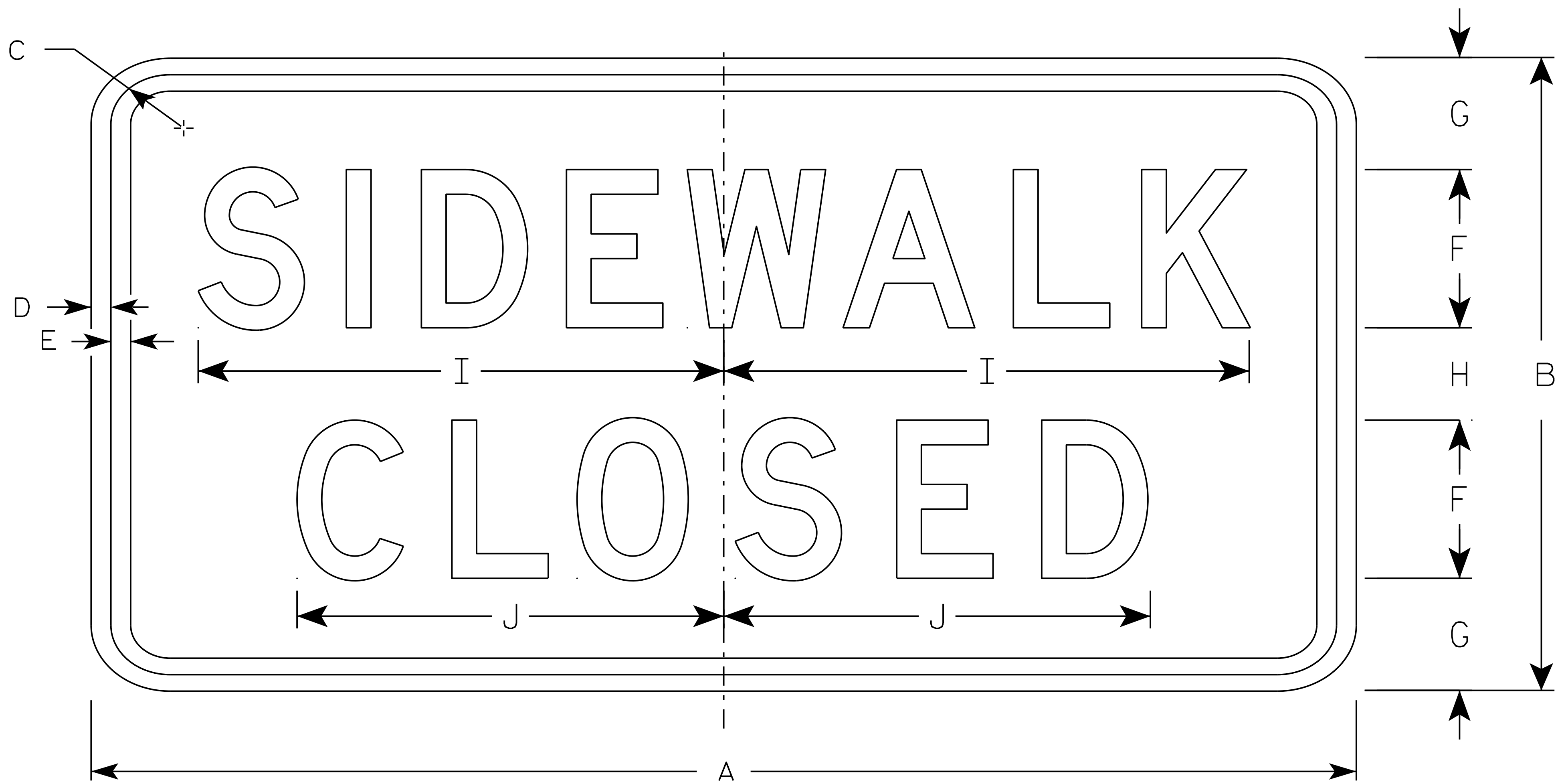
DATE 3/31/2021 PLATE NO. R7-1.10

7

7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 126 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R71.dgn PLOT DATE : 30-MAR 2021 1:22 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

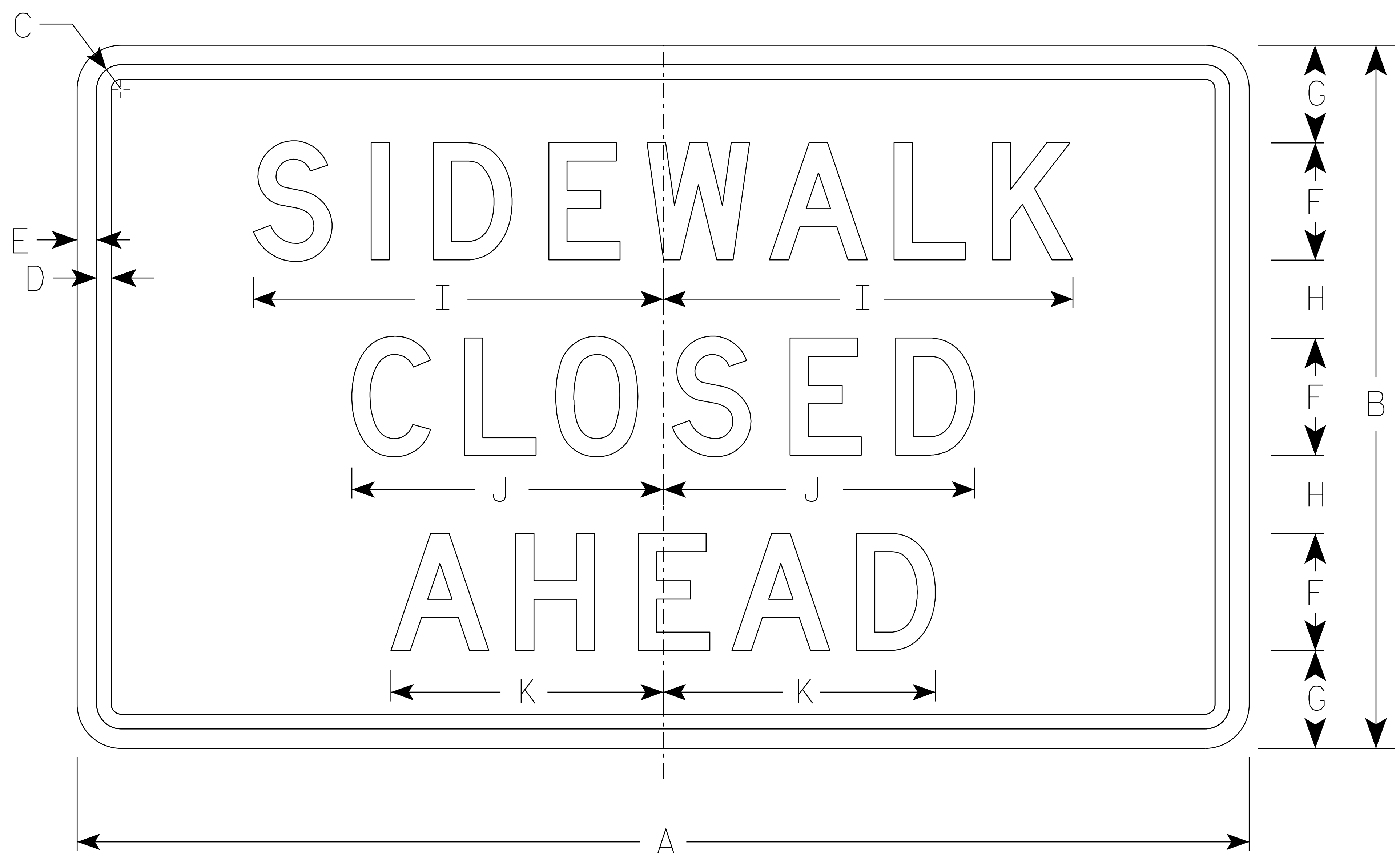
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE R9-9.6

7

PROJECT NO: HWY: COUNTY: SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R9-9A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/8	3/8	1/2	3	2 1/2	2	10 1/2	8	7																3.75
2M	30	18	1 1/8	3/8	1/2	3	2 1/2	2	10 1/2	8	7																3.75
3																											
4																											
5																											

STANDARD SIGN
R9-9A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/31/2020 PLATE NO. R9-9A.1

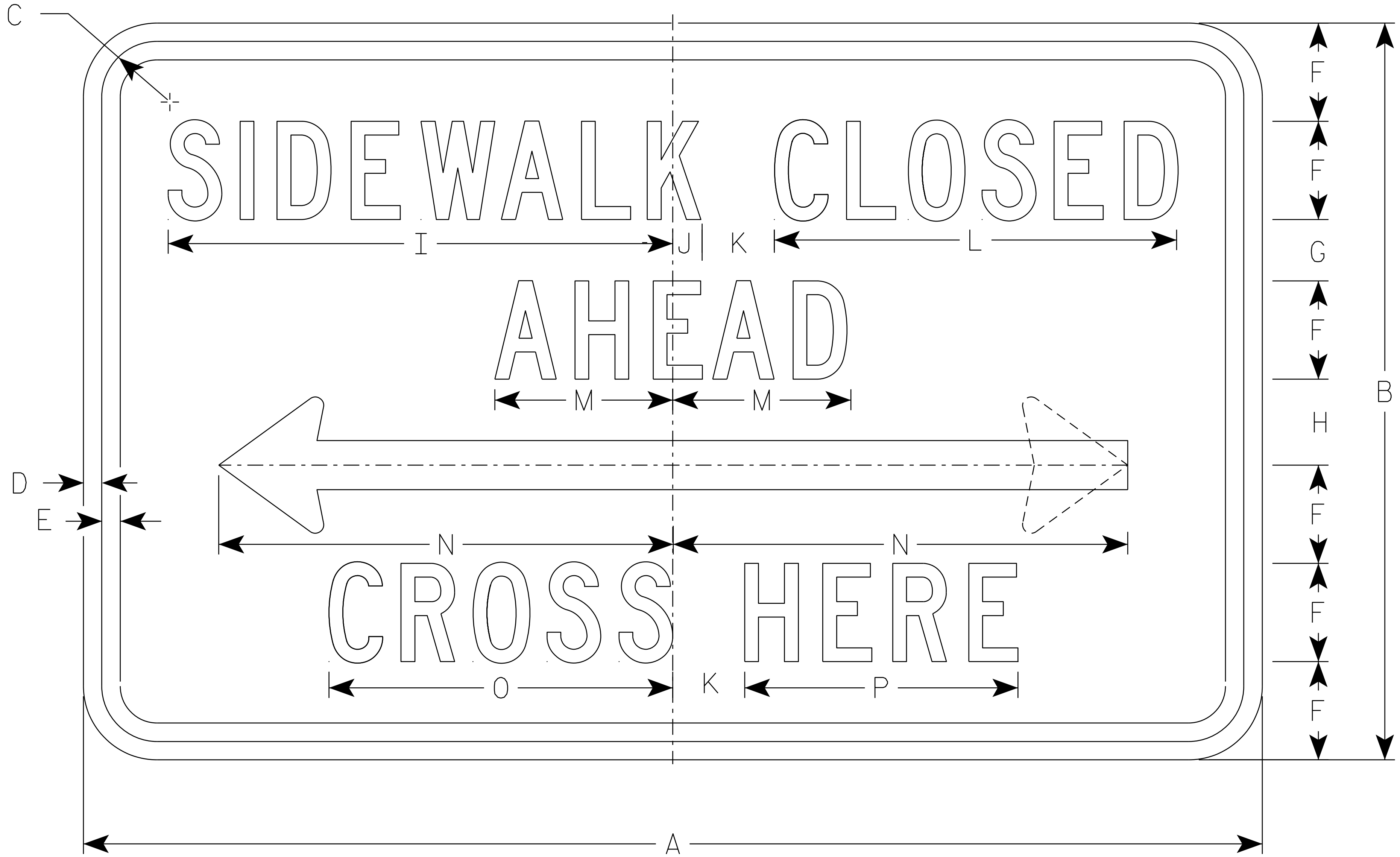
PROJECT NO: HWY: COUNTY: SHEET NO: 128 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R99A.DGN PLOT DATE : 31-AUG-2020 3:26 PLOT BY : dotc4c PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

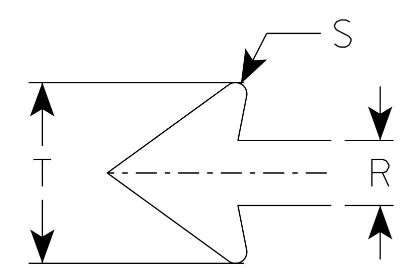
7 7

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C except Size 1 is Series D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.
6. R9-11 D (double arrow)
   R9-11 L (left arrow)
   R9-11 R (right arrow)



R9-11



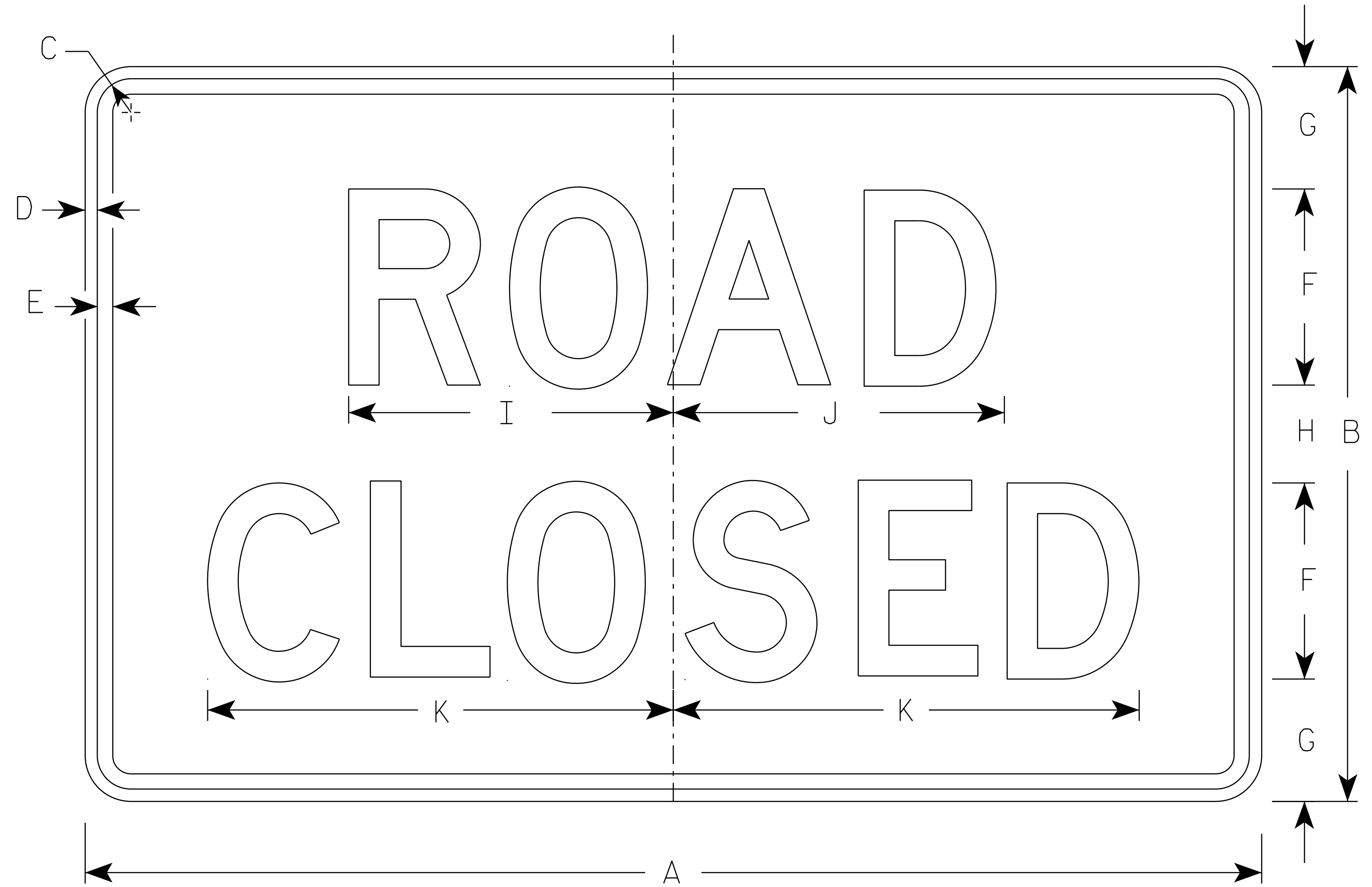
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
2M	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
3	30	15	1 1/8	3/8	1/2	2	1 1/2	1 1/2	13	3/4	2	10 1/4	4 5/8	12 3/8	8 7/8	6 7/8		1 1/4	1/4	3 5/8							3.125
4																											
5																											

STANDARD SIGN
R9-11

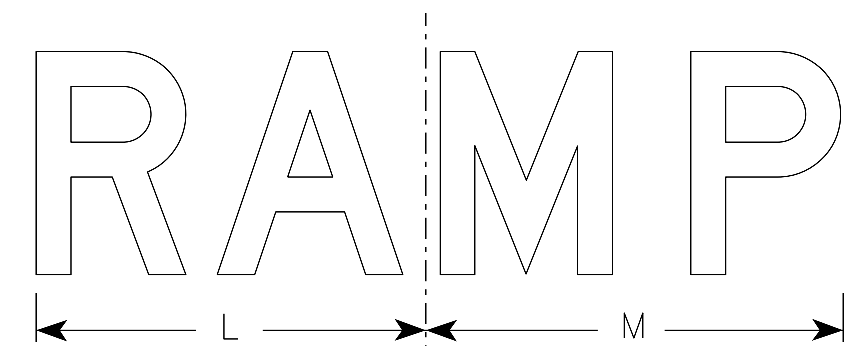
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

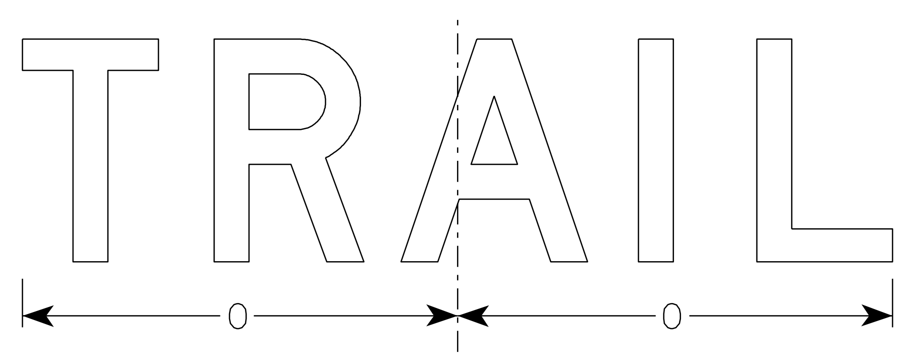
DATE 3/30/2021 PLATE NO. R9-11.4



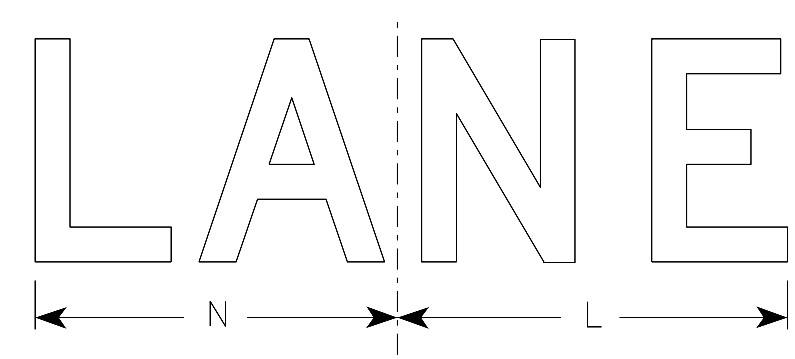
R11-2



R11-2R



R11-2T



R11-2L

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.dgn PLOT DATE : 29-MAR 2021 8:15 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

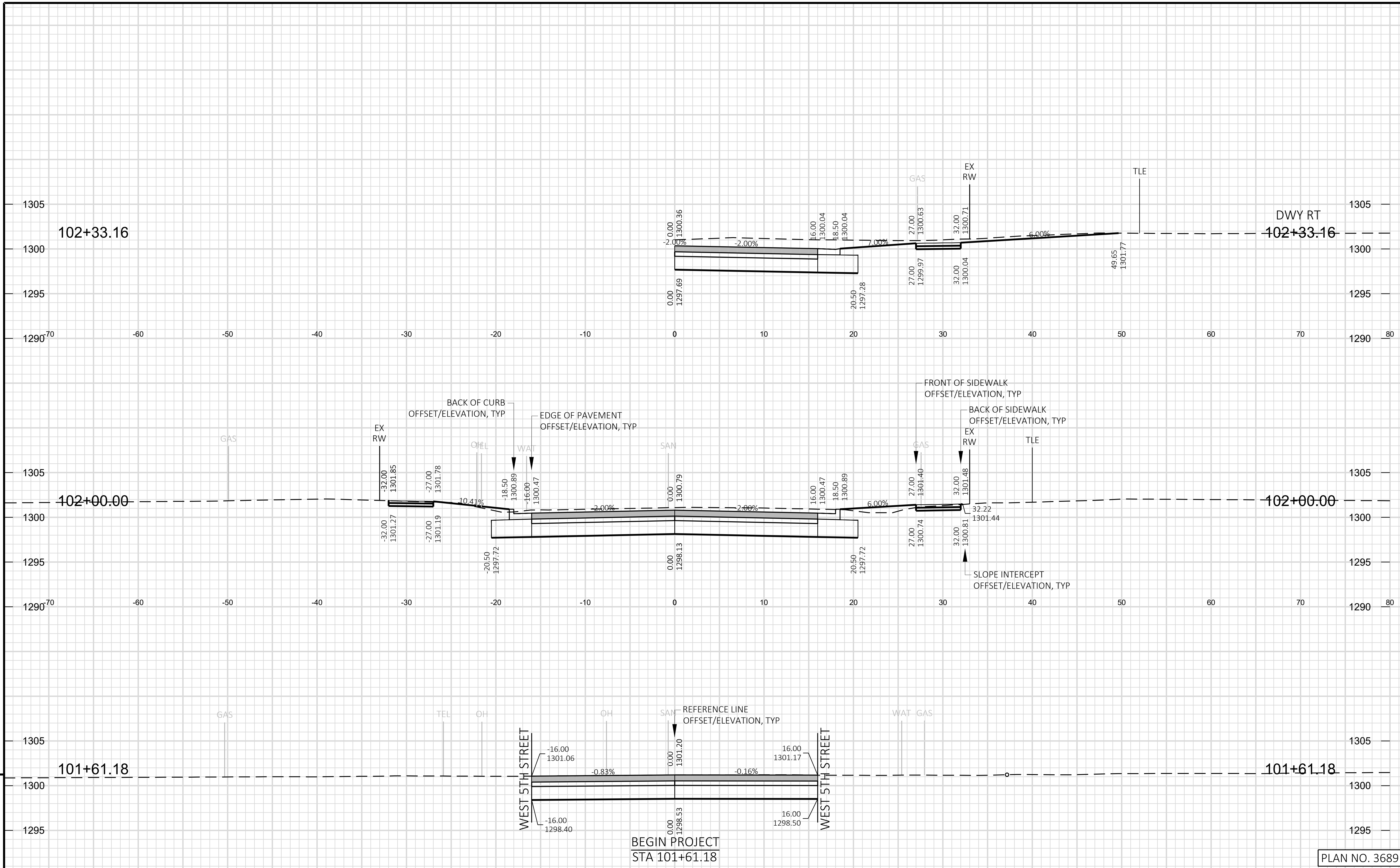
7

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT	INCREMENTAL VOL (CY) (UNADJUSTED) FILL	CUMULATIVE VOL (CY) CUT 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE
101+61.184	10161.18	0.00	85.6	0.0	0.0	0.0	0.0	0.0	0.0
102+00.000	10200.00	38.82	129.1	4.0	154.3	2.9	154.3	3.6	150.7
102+50.000	10250.00	50.00	161.8	0.0	269.3	3.8	423.6	8.3	415.3
103+00.000	10300.00	50.00	176.0	4.8	312.8	4.5	736.4	13.9	722.4
103+50.000	10350.00	50.00	178.8	10.5	328.6	14.2	1064.9	31.6	1033.3
104+00.000	10400.00	50.00	187.4	8.7	339.1	17.7	1404.1	53.8	1350.3
104+50.000	10450.00	50.00	195.0	4.9	354.1	12.6	1758.2	69.5	1688.7
105+00.000	10500.00	50.00	189.7	1.1	356.2	5.5	2114.4	76.4	2038.0
105+50.000	10550.00	50.00	218.7	1.7	378.2	2.6	2492.6	79.6	2412.9
106+00.000	10600.00	50.00	209.3	4.6	396.4	5.9	2888.9	87.0	2801.9
106+50.000	10650.00	50.00	195.9	6.5	375.2	10.3	3264.1	99.9	3164.3
107+00.000	10700.00	50.00	180.2	11.7	348.2	16.8	3612.3	120.9	3491.5
107+50.000	10750.00	50.00	168.1	19.1	322.5	28.5	3934.8	156.5	3778.3
108+00.000	10800.00	50.00	163.5	13.3	307.0	30.0	4241.8	194.0	4047.8
108+50.000	10850.00	50.00	175.5	16.9	313.9	28.0	4555.7	229.0	4326.7
109+00.000	10900.00	50.00	186.9	14.7	335.6	29.3	4891.2	265.6	4625.6
109+50.000	10950.00	50.00	186.0	22.0	345.3	34.0	5236.6	308.1	4928.5
110+00.000	11000.00	50.00	168.9	37.0	328.6	54.6	5565.2	376.4	5188.8
110+50.000	11050.00	50.00	164.7	33.5	308.9	65.3	5874.2	458.0	5416.2
111+00.000	11100.00	50.00	173.0	25.5	312.7	54.6	6186.9	526.2	5660.7
111+50.000	11150.00	50.00	159.8	32.7	308.1	53.9	6495.0	593.5	5901.5
112+00.000	11200.00	50.00	192.2	0.0	325.9	30.3	6820.9	631.4	6189.5
112+50.000	11250.00	50.00	160.0	61.4	326.1	56.8	7147.0	702.5	6444.6
113+00.000	11300.00	50.00	154.1	66.0	290.8	118.0	7437.8	849.9	6587.9
113+50.000	11350.00	50.00	150.9	71.7	282.4	127.5	7720.2	1009.3	6710.9
114+00.000	11400.00	50.00	140.8	130.2	270.0	186.9	7990.2	1243.0	6747.3
114+33.025	11433.03	33.02	86.8	0.0	139.2	79.6	8129.4	1342.5	6786.9
					8129.4			1342.5	

EARTHWORK SUMMARY:

ROADWAY	EXCAVATION COMMON
LINCOLN AVE:	8129 CY
WEST 4TH STREET:	261 CY
MARYKNOLL AVE:	215 CY
TOTAL:	8605 CY

9 9



9

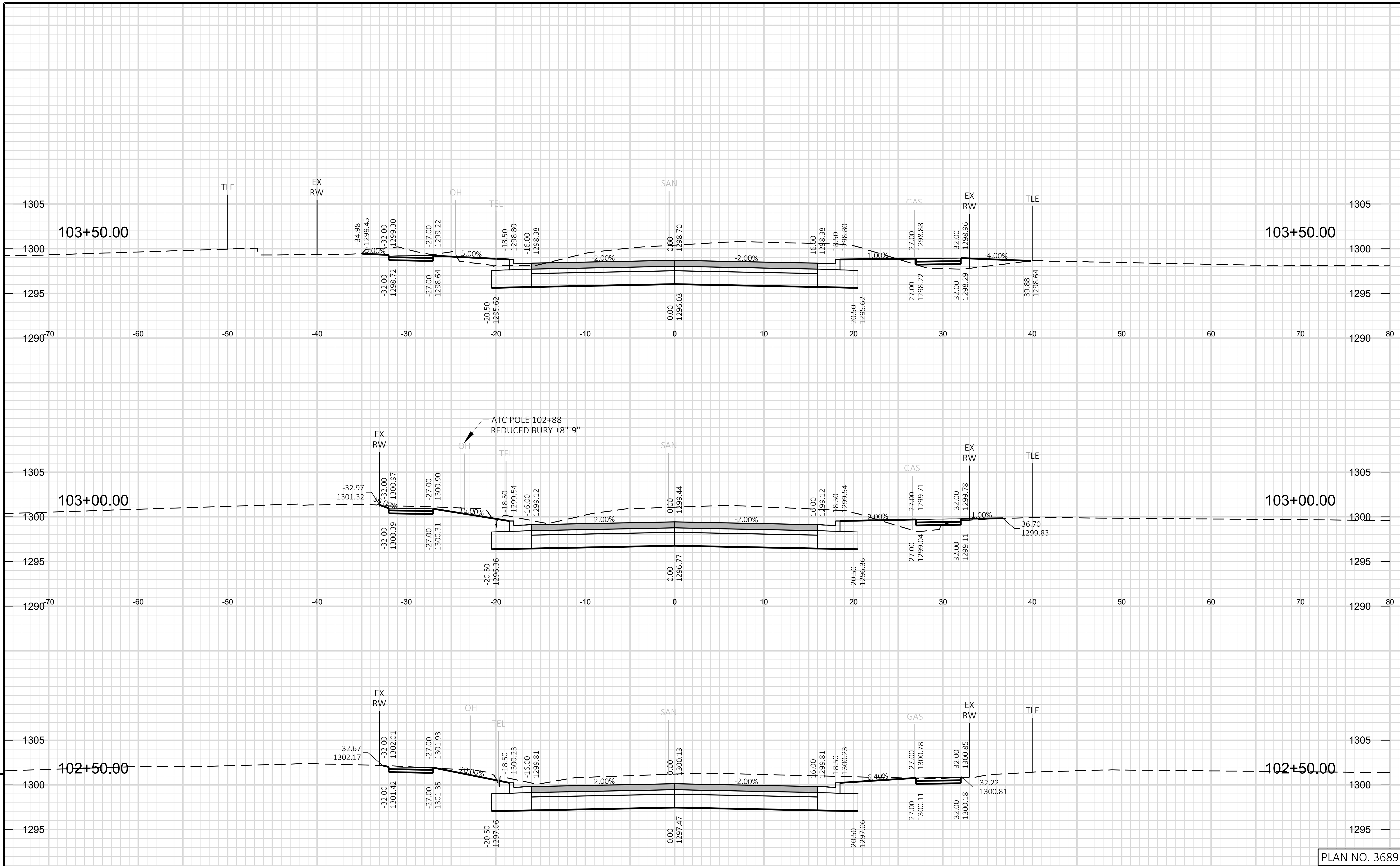
9

PLAN NO. 3689

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CROSS SECTIONS: LINCOLN AVENUE	SHEET 132	E

FILE NAME : P:\PROJECTS_CURRENT\WOOD\MARSHFIELD, CITY OF\LINCOLN AVE - 2021\ACAD\DESIGN\CORRIDOR\LINCOLNAVE_CORRIDOR - 012022.DWG PLOT DATE : 1/26/2023 10:29 AM PLOT BY : JARED HALBUR PLOT NAME :

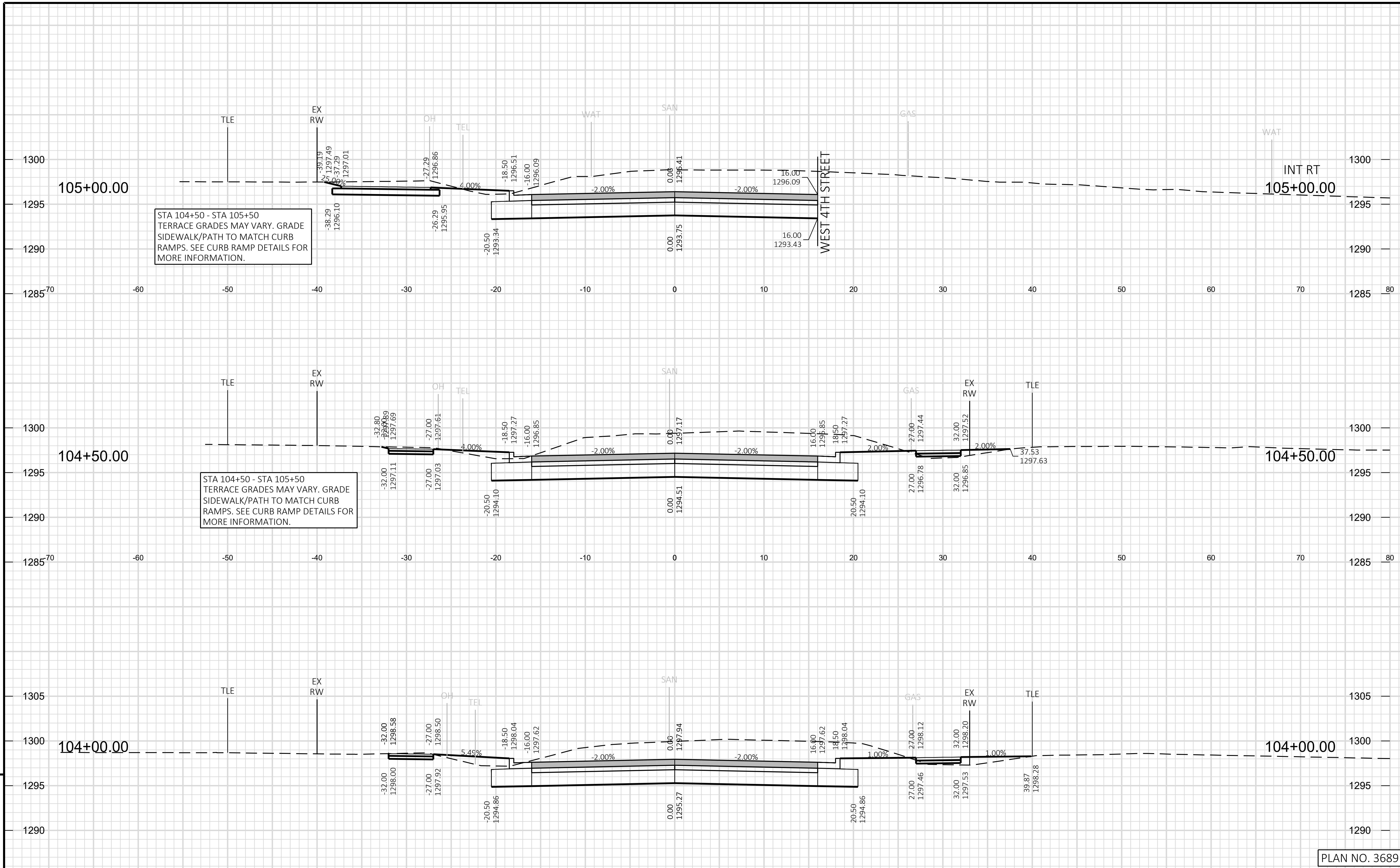
WISDOT/CADDS SHEET 49



9

9

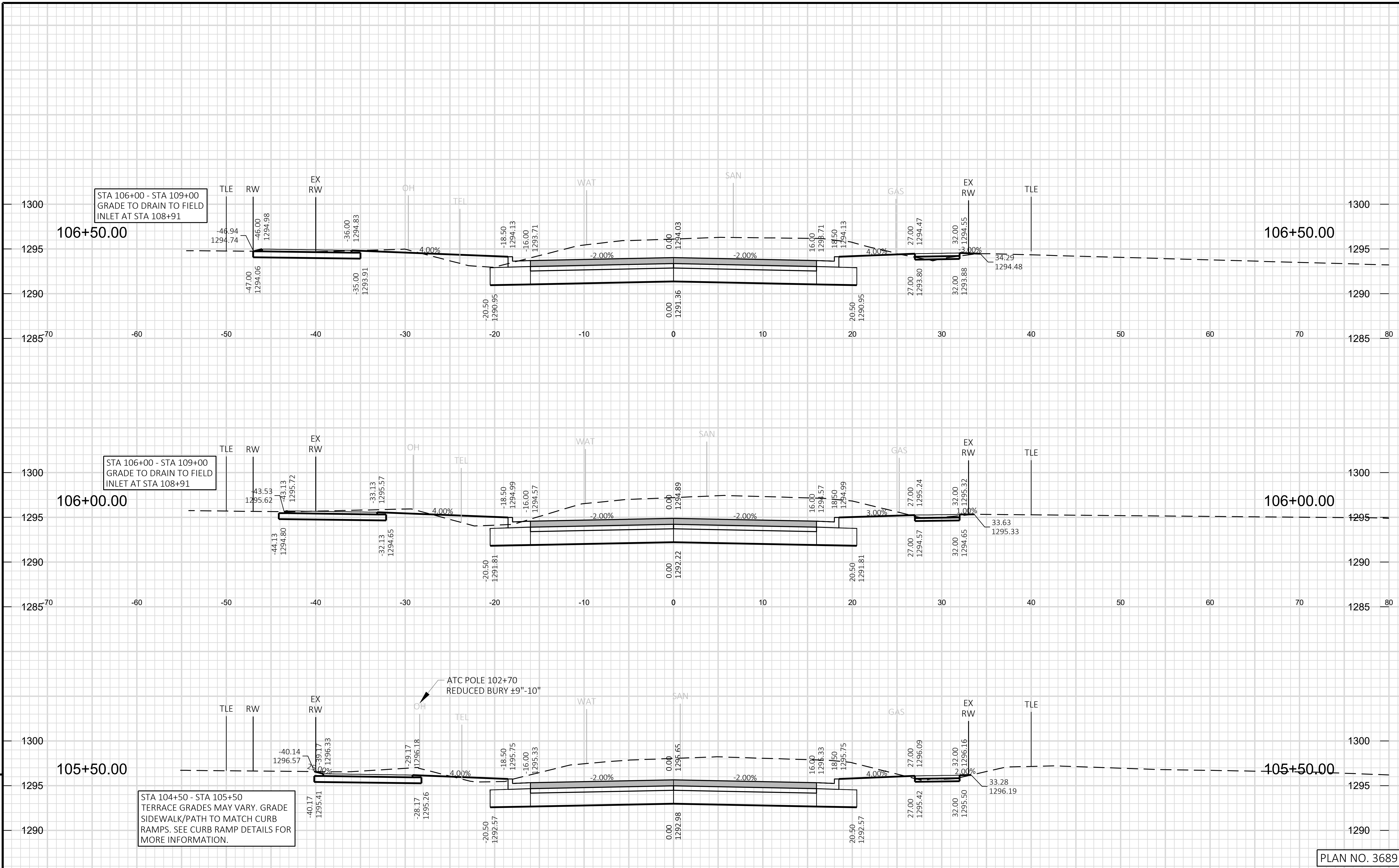
PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CROSS SECTIONS: LINCOLN AVENUE	SHEET 133	E



PROJECT NO: 6995-12-70 | ROADWAY: LINCOLN AVENUE | COUNTY: WOOD | CROSS SECTIONS: LINCOLN AVENUE | SHEET 134 | E

FILE NAME : P:\PROJECTS_CURRENT\WOOD\MARSHFIELD, CITY OF\LINCOLN AVE - 2021\ACAD\DESIGN\CORRIDOR\LINCOLNAVE_CORRIDOR - 012022.DWG PLOT DATE : 1/26/2023 10:30 AM PLOT BY : JARED HALBUR PLOT NAME :

WISDOT/CADDS SHEET 49



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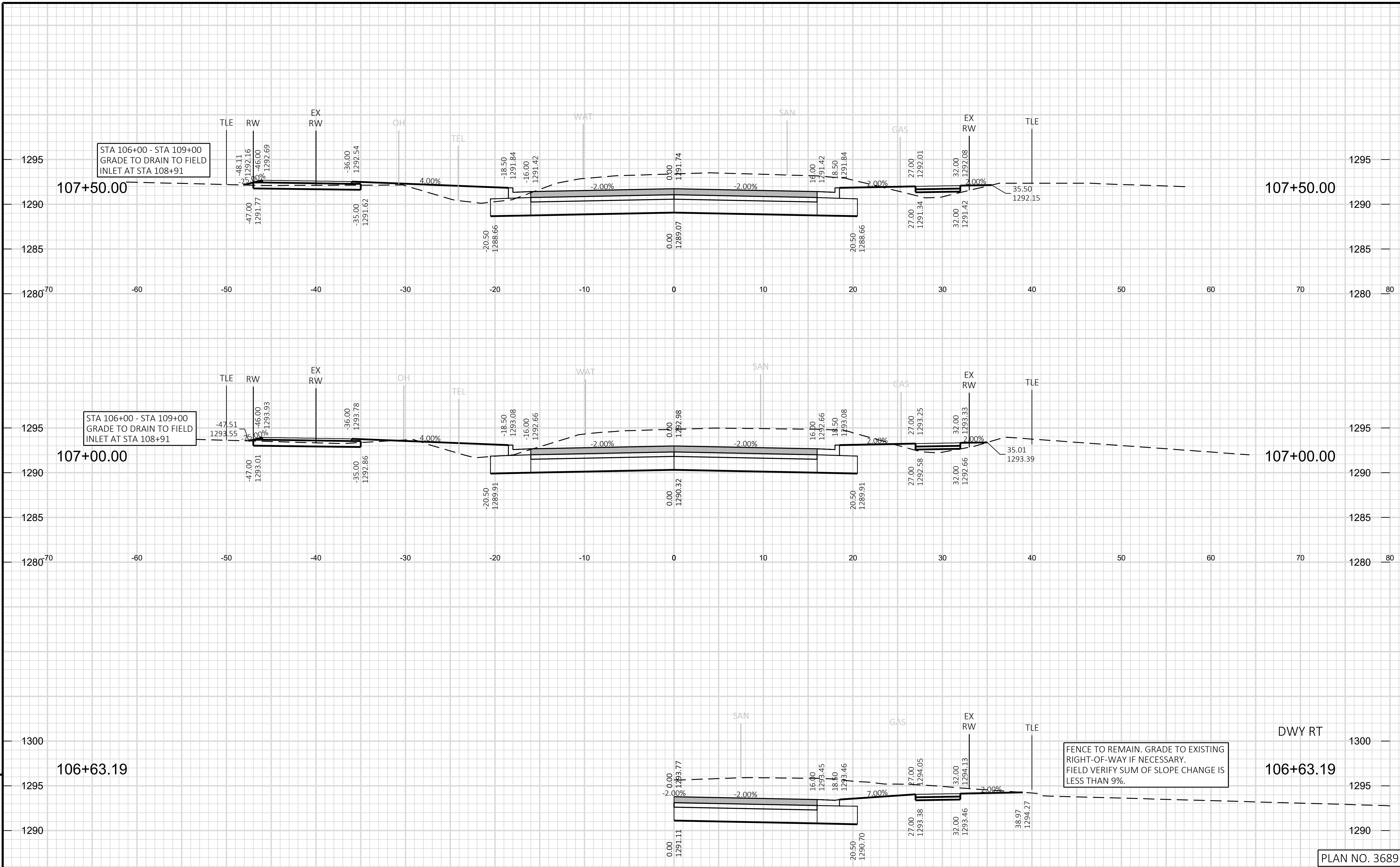
PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CROSS SECTIONS: LINCOLN AVENUE	SHEET 135	E

FILE NAME : P:\PROJECTS_CURRENT\WOOD\MARSHFIELD, CITY OF\LINCOLN AVE - 2021\ACAD\DESIGN\CORRIDOR\LINCOLNAVE_CORRIDOR - 012022.DWG PLOT DATE : 1/26/2023 10:30 AM PLOT BY : JARED HALBUR PLOT NAME :

WISDOT/CADDS SHEET 49



PLAN NO. 3689

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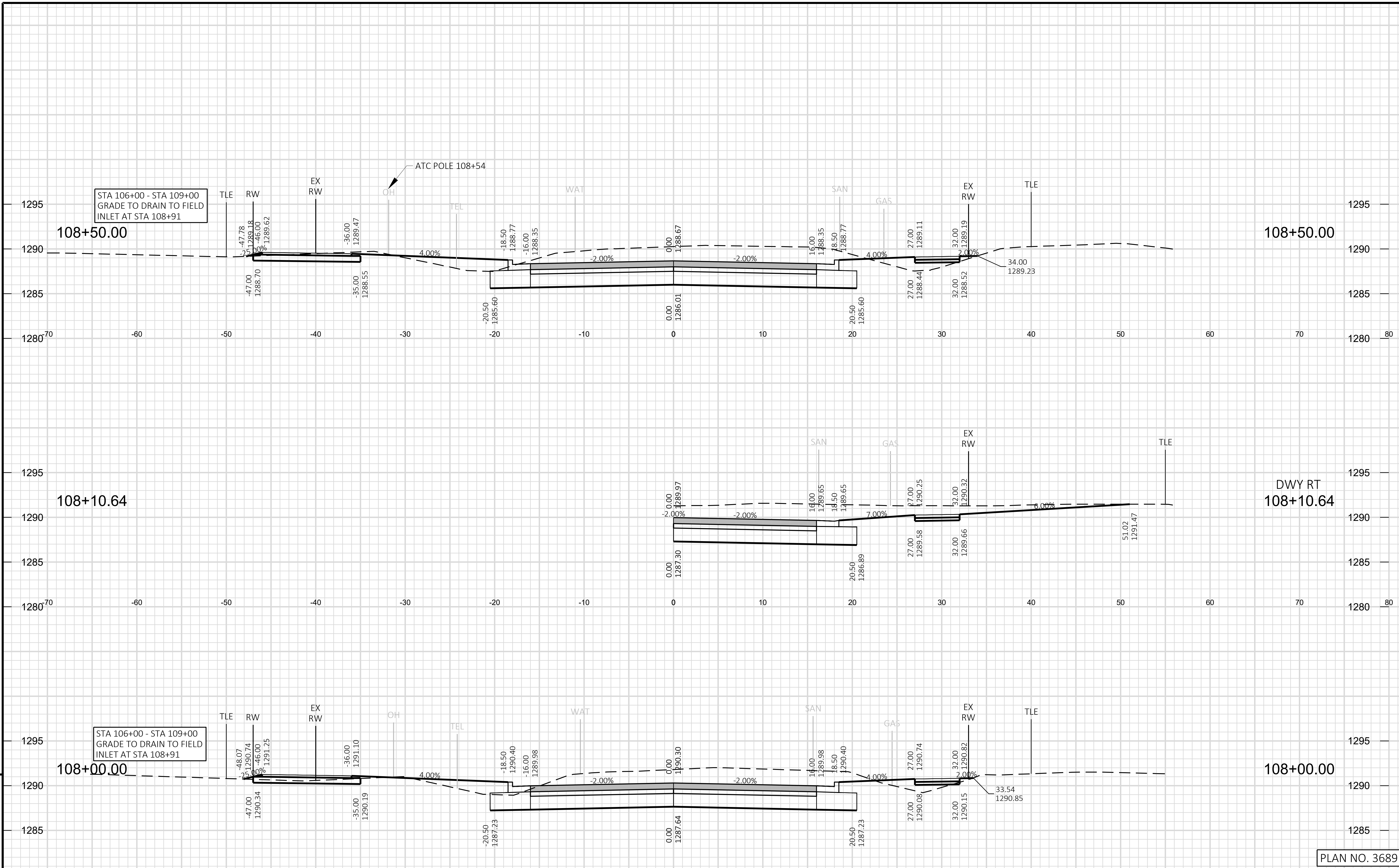
PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CROSS SECTIONS: LINCOLN AVENUE	SHEET 136	E

FILE NAME : P:\PROJECTS_CURRENT\WOOD\MARSHFIELD, CITY OF\LINCOLN AVE - 2021\ACAD\DESIGN\CORRIDOR\LINCOLNAVE_CORRIDOR - 012022.DWG PLOT DATE : 1/26/2023 10:30 AM PLOT BY : JARED HALBUR PLOT NAME :

WISDOT/CADDS SHEET 49



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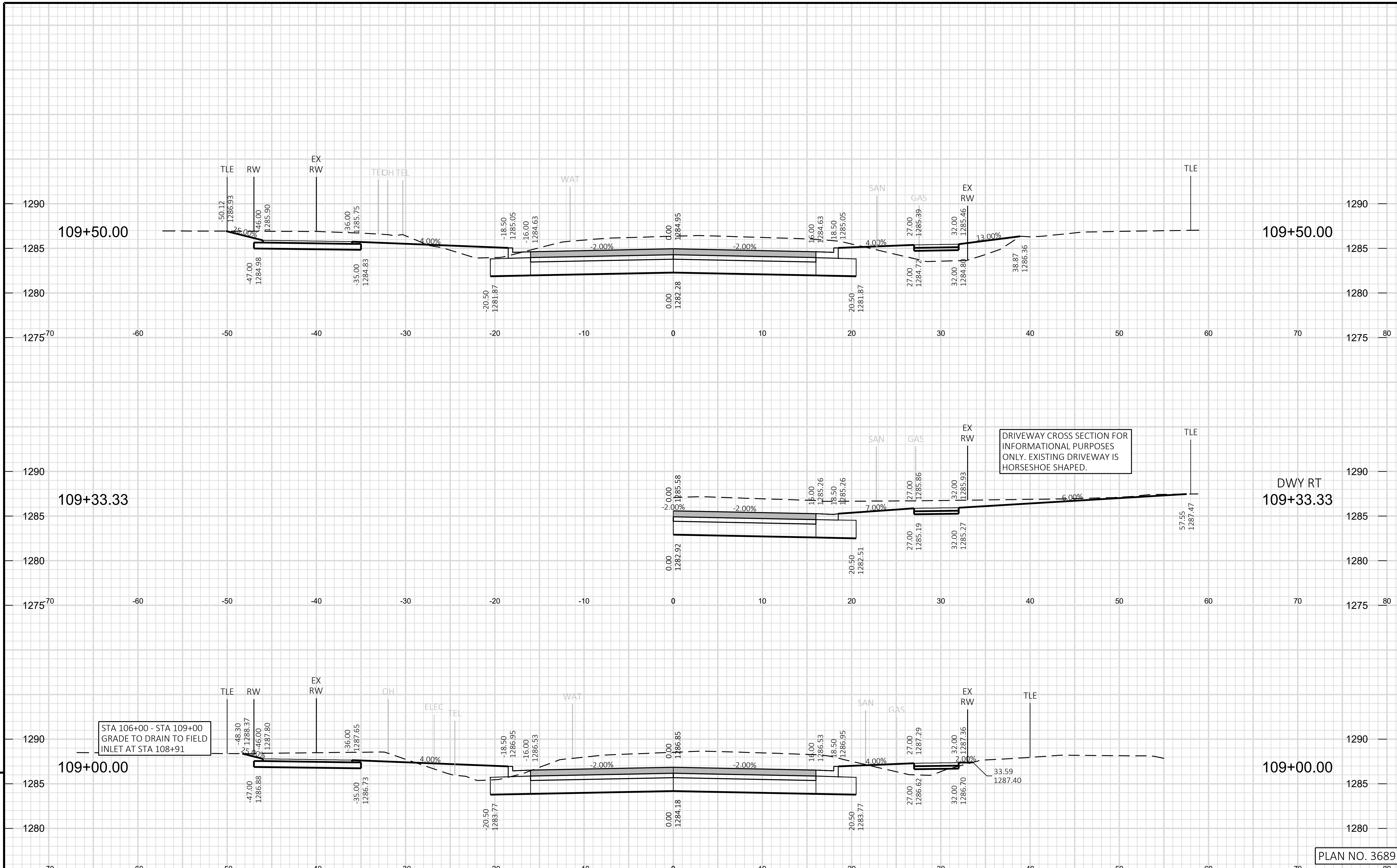
PLAN NO. 3689

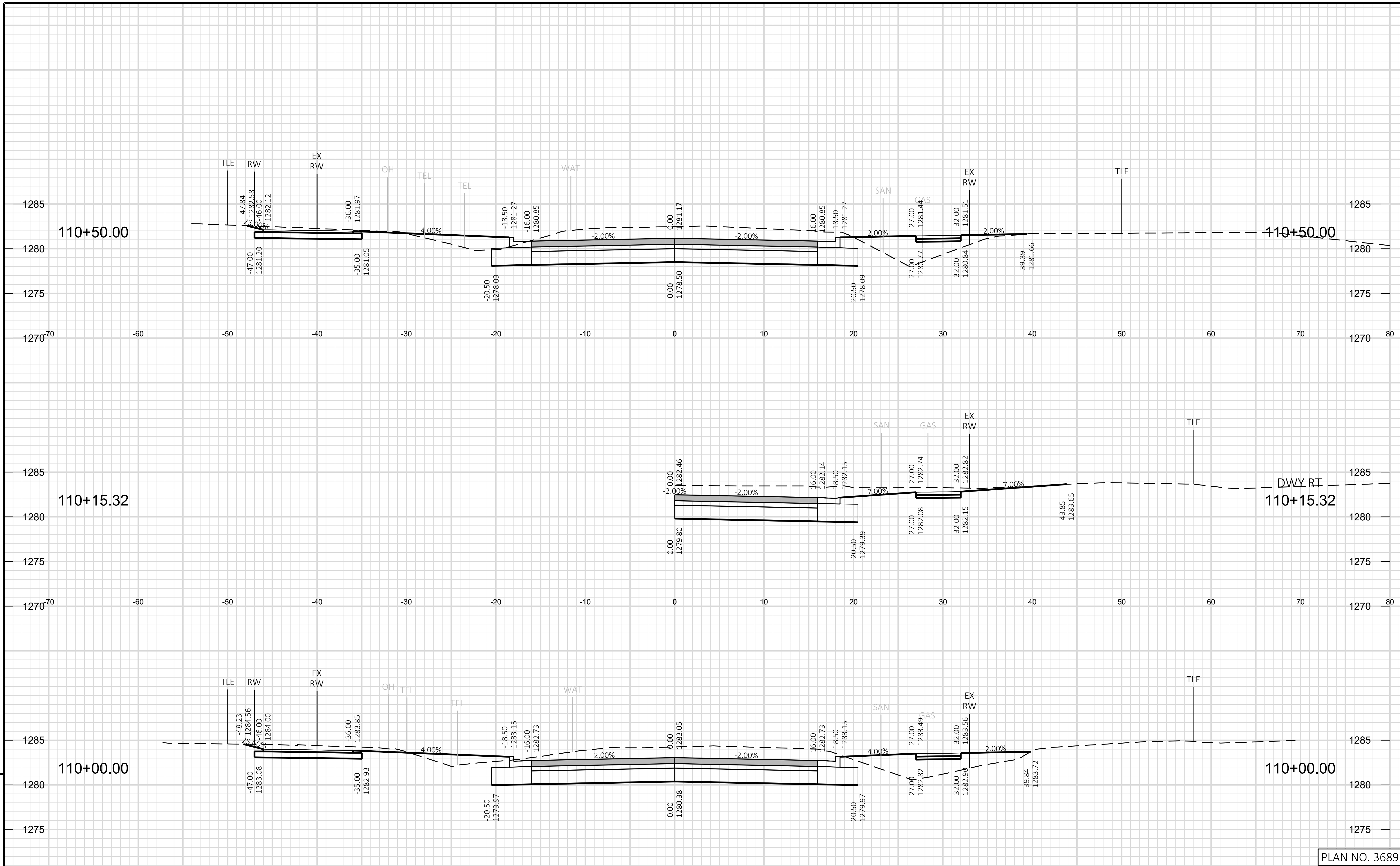
PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CROSS SECTIONS: LINCOLN AVENUE	SHEET 137	E

FILE NAME : P:\PROJECTS_CURRENT\WOOD\MARSHFIELD, CITY OF\LINCOLN AVE - 2021\ACAD\DESIGN\CORRIDOR\LINCOLNAVE_CORRIDOR - 012022.DWG PLOT DATE : 1/26/2023 10:31 AM PLOT BY : JARED HALBUR PLOT NAME :

WISDOT/CADDS SHEET 49



PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CROSS SECTIONS: LINCOLN AVENUE	SHEET 138	E



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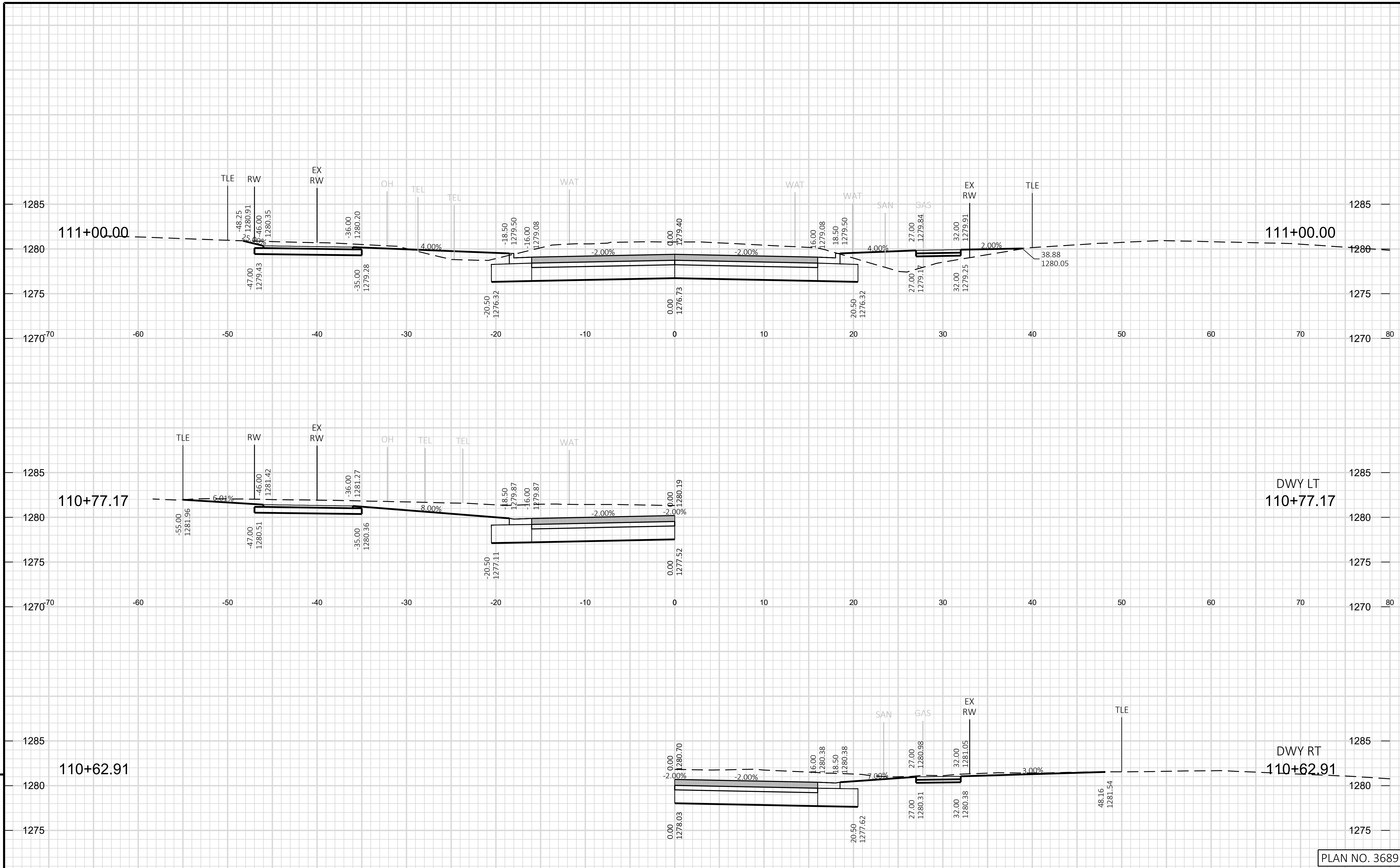
PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CROSS SECTIONS: LINCOLN AVENUE	SHEET 139	E

FILE NAME : P:\PROJECTS_CURRENT\WOOD\MARSHFIELD, CITY OF\LINCOLN AVE - 2021\ACAD\DESIGN\CORRIDOR\LINCOLNAVE_CORRIDOR - 012022.DWG PLOT DATE : 1/26/2023 10:32 AM PLOT BY : JARED HALBUR PLOT NAME :

WISDOT/CADDS SHEET 49



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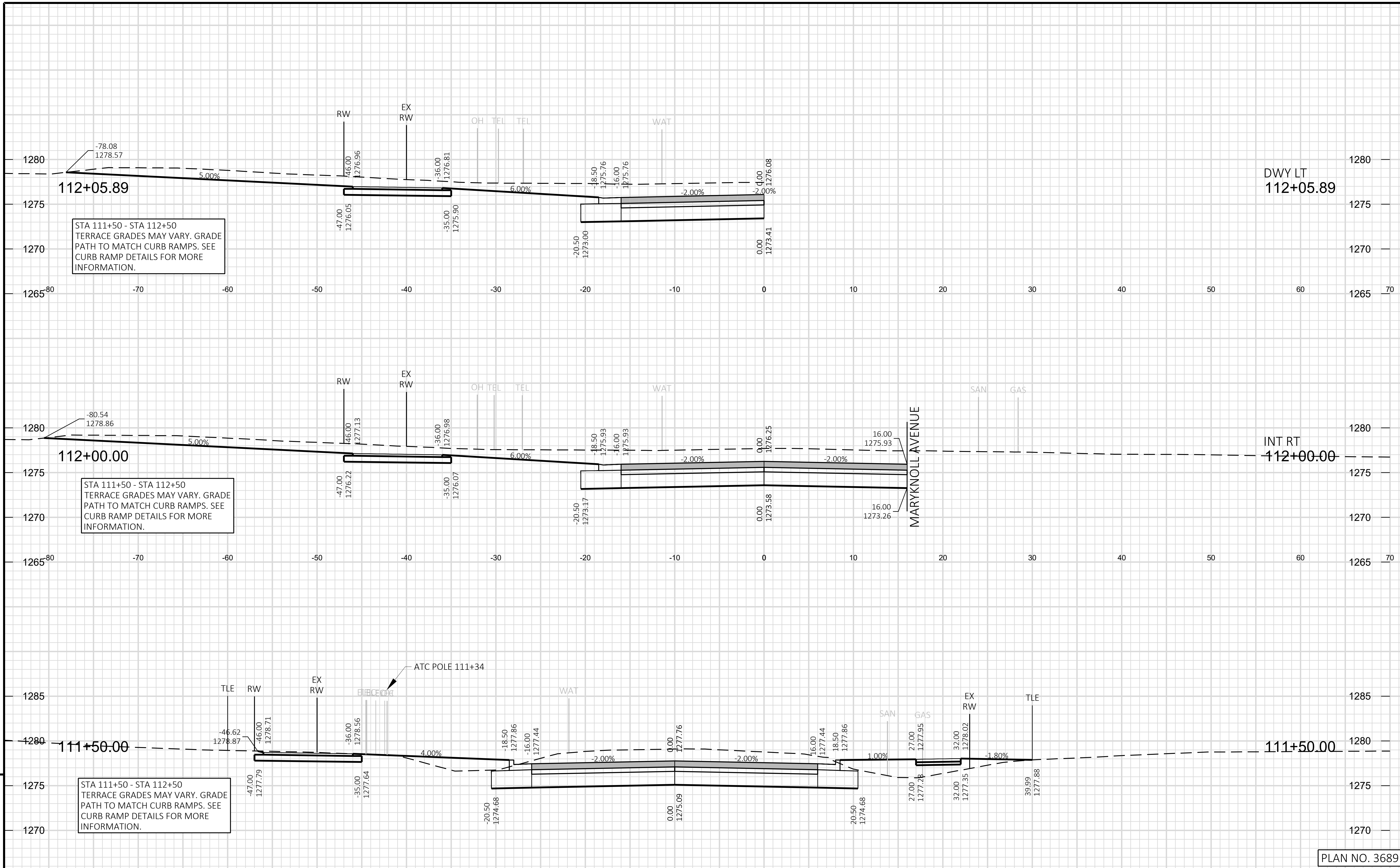
PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CROSS SECTIONS: LINCOLN AVENUE	SHEET 140	E



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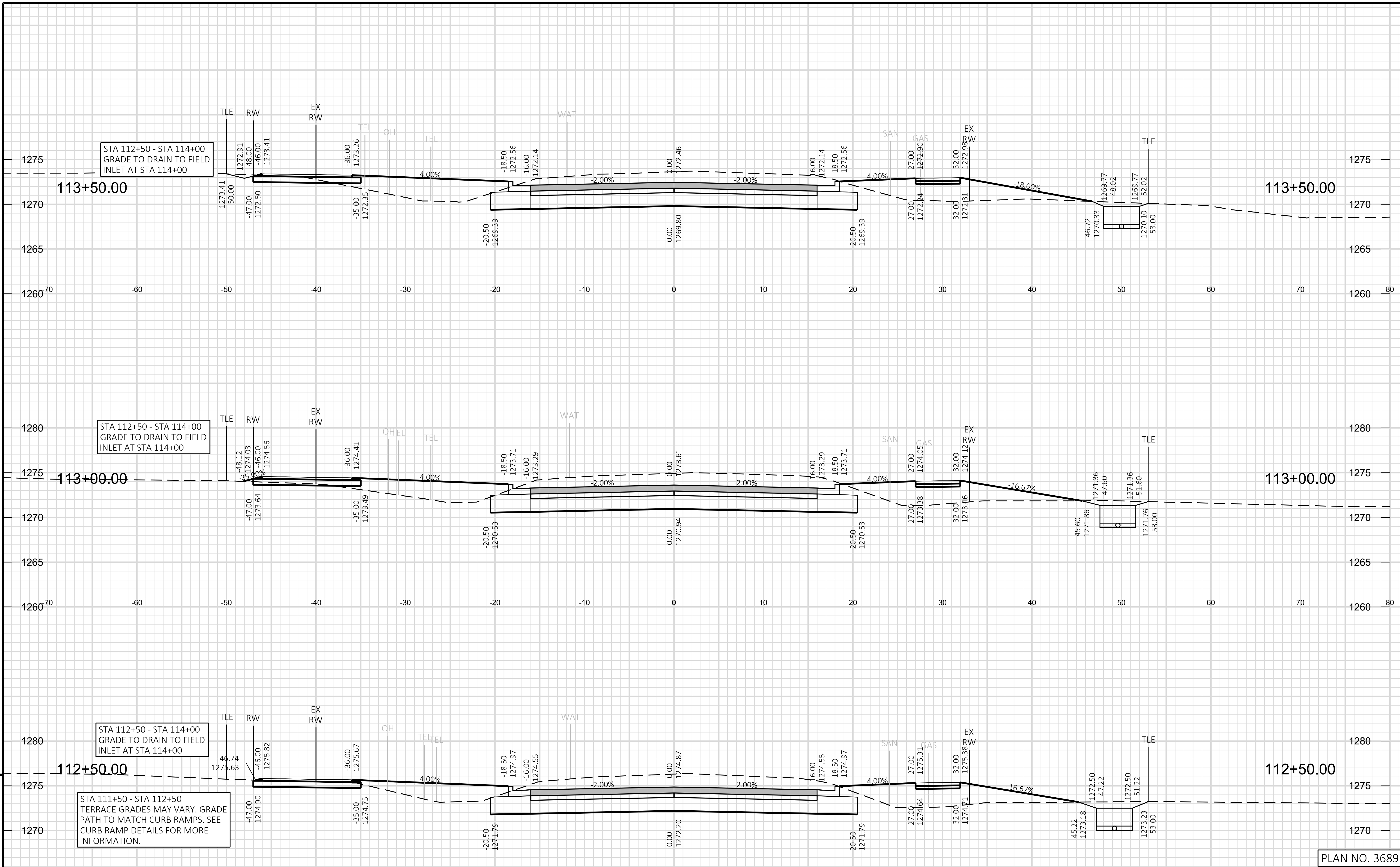
PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CROSS SECTIONS: LINCOLN AVENUE	SHEET 141	E

FILE NAME : P:\PROJECTS_CURRENT\WOOD\MARSHFIELD, CITY OF\LINCOLN AVE - 2021\ACAD\DESIGN\CORRIDOR\LINCOLNAVE_CORRIDOR - 012022.DWG PLOT DATE : 1/26/2023 10:32 AM PLOT BY : JARED HALBUR PLOT NAME :

WISDOT/CADDS SHEET 49



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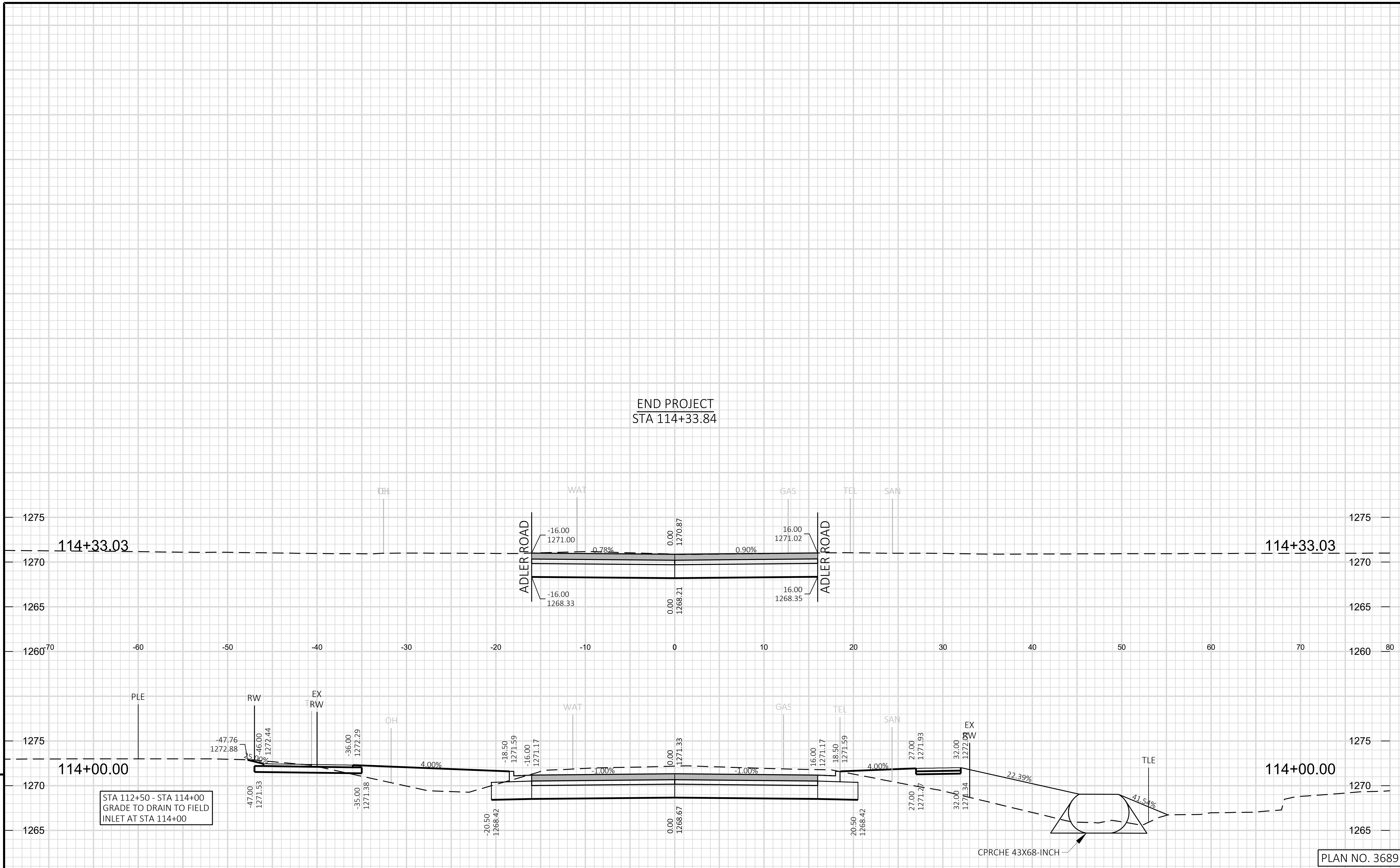
PLAN NO. 3689

PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CROSS SECTIONS: LINCOLN AVENUE	SHEET 142	E

FILE NAME : P:\PROJECTS_CURRENT\WOOD\MARSHFIELD, CITY OF\LINCOLN AVE - 2021\ACAD\DESIGN\CORRIDOR\LINCOLNAVE_CORRIDOR - 012022.DWG PLOT DATE : 2/1/2023 9:25 AM PLOT BY : JARED HALBUR PLOT NAME :

WISDOT/CADDS SHEET 49



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PROJECT NO: 6995-12-70	ROADWAY: LINCOLN AVENUE	COUNTY: WOOD	CROSS SECTIONS: LINCOLN AVENUE	SHEET 143	E

FILE NAME : P:\PROJECTS_CURRENT\WOOD\MARSHFIELD, CITY OF\LINCOLN AVE - 2021\ACAD\DESIGN\CORRIDOR\LINCOLNAVE_CORRIDOR - 012022.DWG PLOT DATE : 1/26/2023 10:33 AM PLOT BY : JARED HALBUR PLOT NAME :

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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