GRE NOVEMBER 2017

PROJECT ID: 6190-16-72

WITH:

COUNTY: WINNEBAGO

ORDER OF SHEETS

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

TOTAL SHEETS = 384

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

E RIVER DRIVE, CITY OF OMRO

(SPRUCE STREET - NCL)

STH 116

WINNEBAGO COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6190-16-72	WISC 2017516	1

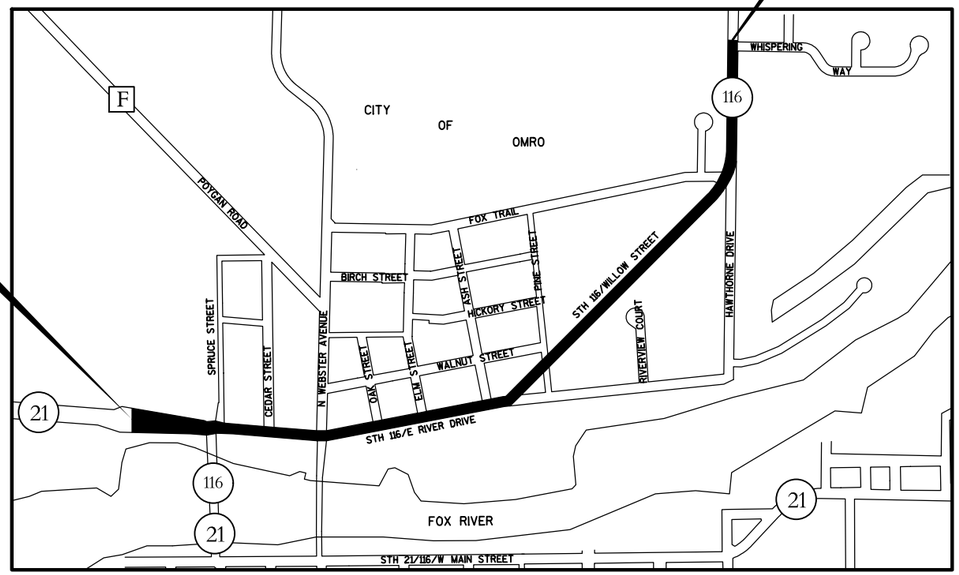
STATE PROJECT NUMBER
6190-16-72





BEGIN PROJECT
STA. 107+50.00
X= 482195.28
Y= 737455.57

END PROJECT
STA. 163+12.00



DESIGN DESIGNATION

A.A.D.T.	2018	=	5,200
A.A.D.T.	2038	=	6,100
D.H.V.	2038	=	5.1
D.D.		=	62/38
T.		=	6.3%
DESIGN SPEED		=	30 MPH/40 MPH
ESALS		=	883,300

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
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

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

LAYOUT

SCALE 0 .25 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.053 MI.

Coordinates on this plan are referenced to the Wisconsin County Coordinate System (WCCS), Winnebago County, NAD83 (1991).

Elevations shown on this plan are referenced to the National Geodetic Vertical Datum (NGVD29).

ORIGINAL PLANS PREPARED BY:

STRAND ASSOCIATES, INC. ENGINEERS
910 WEST WINGRA DRIVE
MADISON, WISCONSIN 53715
(608) 251-4843

WISCONSIN PROFESSIONAL ENGINEER
BRIAN M. ANDREAS
E-28413
Madison, WI

Brian M. Andreas 4/14/2017

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WisDOT
Designer	Strand Associates, Inc.
Project Manager	Bill Bertrand
Regional Examiner	
Regional Supervisor	Chuck Karow
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 4-18-2017 William R. Bertrand (Signature)

E

GENERAL NOTES

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

COORDINATES ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 WITH 1991 ADJUSTMENT (NAD83(91).

BEARINGS ON THIS PLAN ARE SHOWN TO THE NEAREST SECOND.

CURVE DATA BASED ON ARC DEFINITION.

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

MISCELLANEOUS REMOVAL ITEMS SHALL BE REMOVED TO AN EXISTING JOINT OR SAWCUT WHERE SHOWN.

THE LOCATION AND WIDTH OF DRIVEWAYS WILL BE DETERMINED BY THE ENGINEER.

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

RADIUS DIMENSIONS FOR THE CURB AND GUTTER ARE TO THE FLANGE LINE UNLESS OTHERWISE NOTED.

EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE SUGGESTED LOCATIONS. THE ENGINEER MAY MODIFY LOCATIONS AS NEEDED. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

PLACE SILT FENCE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER AND IN PLACE PRIOR TO CONSTRUCTION.

STORM SEWER PIPE ELEVATIONS, LENGTH, AND LOCATIONS AS SHOWN ON THE PLANS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

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

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

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

UTILITIES

UTILITY OR MUNICIPALITY	ADDRESS	CONTACT	UTILITY TYPE
ATC MANAGEMENT, INC.	801 O'KEEFE ROAD P.O. BOX 6113 DEPERE, WI 54115-6113 (920) 338-6582 molsen@atcllc.com	MIKE OLSEN	ELECTRIC
AT&T WISCONSIN	221 WEST WASHINGTON STREET APPLETON, WI 54911-4742 (920) 735-3206 jk572k@att.com	JOSEPH KASSAB	COMMUNICATION
CHARTER COMMUNICATIONS	3315 LINCOLN AVENUE TWO RIVERS, WI 54241 (920) 793-2216 Nick.Frase@charter.com	NICK FRASE	COMMUNICATION
CITY OF OMRO - SEWER	720 HAWTHORNE DRIVE P.O. BOX 399 OMRO, WI 54963-0399 (920) 685-7020	MARK VAN PELT	SEWER
CITY OF OMRO WATER AND SEWER UTILITY	720 HAWTHORNE DRIVE P.O. BOX 399 OMRO, WI 54963-0399 (920) 685-7025	STEVE BILKEY	WATER
ALLIANT ENERGY	SUITE 1000 4902 NORTH BILTMORE LANE MADISON, WI 53718 (608) 458-4871 jasonhogan@alliantenergy.com	JASON HOGAN	ELECTRIC
ALLIANT ENERGY	SUITE 1000 4902 NORTH BILTMORE LANE MADISON, WI 53718 (608) 458-4871 jasonhogan@alliantenergy.com	JASON HOGAN	GAS

ABBREVIATIONS

ABUT.	ABUTMENT	MIN.	MINIMUM
A.D.T.	AVERAGE DAILY TRAFFIC	NORM.	NORMAL
B.F.	BACK FACE	O.H.	OVERHEAD POWER LINE
B.M.	BENCH MARK	P.O.L.	POINT ON LINE
CTR.	CENTER	REQ'D.	REQUIRED
C.L.	CENTERLINE	RDWY.	ROADWAY
D.	LANE DISTRIBUTION	R.H.F.	RIGHT HAND FORWARD
D.H.V.	DESIGN HOURLY VOLUME	S.E.	SUPERELEVATION
DIA.	DIAMETER	SPA.	SPACE
DIM.	DIMENSION	STA.	STATION
EL. OR ELEV.	ELEVATION	SYM.	SYMMETRICAL
EXC.	EXCAVATION	T.	PERCENT OF TRUCKS
F.F.	FRONT FACE	TYP.	TYPICAL
IEP	INSIDE EDGE OF PAVEMENT	V.	DESIGN SPEED
MAX.	MAXIMUM		

DNR LIAISON

JAY SCHIEFELBEIN
DNR NORTHEAST REGIONAL HQ
2984 SHAWANO AVENUE
GREEN BAY, WI 54313
(920) 360-3784

WINNEBAGO COUNTY SURVEYOR

DEAN KADERABEK
WINNEBAGO COUNTY GIS SYSTEMS ANALYST
112 OTTER AVE., PO BOX 2808
OSHKOSH, WI 54903-2808
(920) 232-3363

WISDOT REGION SURVEY COORDINATOR

CORMAC MCINNIS
NORTHEAST REGION SURVEY COORDINATOR
944 VANDERPERREN WAY
GREEN BAY, WI 54304
(920) 492-5638

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
LAYOUT DETAILS
PAVING DETAILS
EROSION CONTROL
STORM SEWER
PLANTING
PERMANENT SIGNING
PAVEMENT MARKING
CONSTRUCTION STAGING
ALIGNMENT DETAIL

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

2

END PROJECT
STA. 163+12.00

N

STH 116

WHISPERING WAY

ANNRICH AVENUE

FOX TRAIL

HAWTHORNE DRIVE

STH 116/WILLOW STREET

PINE STREET

CITY OF OMRO

WALNUT STREET

ASH STREET

ELM STREET

OAK STREET

N WEBSTER AVENUE

CEDAR STREET

SPRUCE STREET

E RIVER DRIVE

END RECONSTRUCTION
BEGIN MILL & OVERLAY
STA. 137+50.00

STH 21

STH 116/W RIVER DRIVE

FOX RIVER

STH 21/STH 116

BEGIN PROJECT
STA. 107+50.00

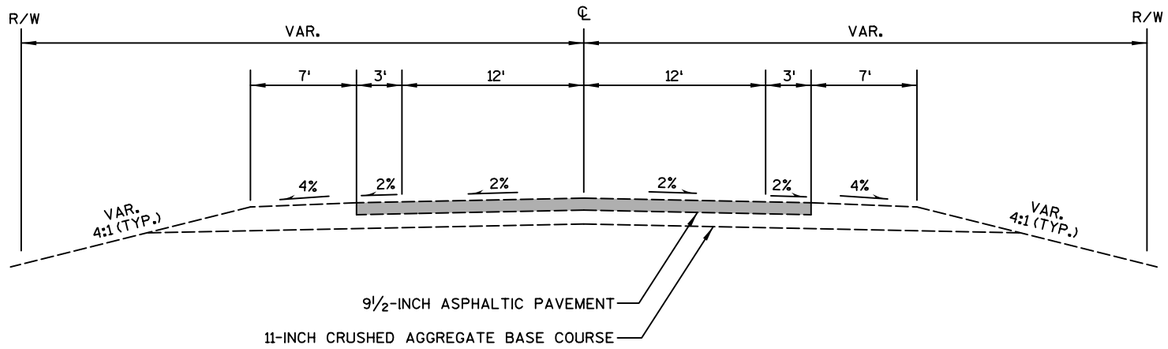
STH 21/W MAIN STREET

STH 116/JEFFERSON AVENUE

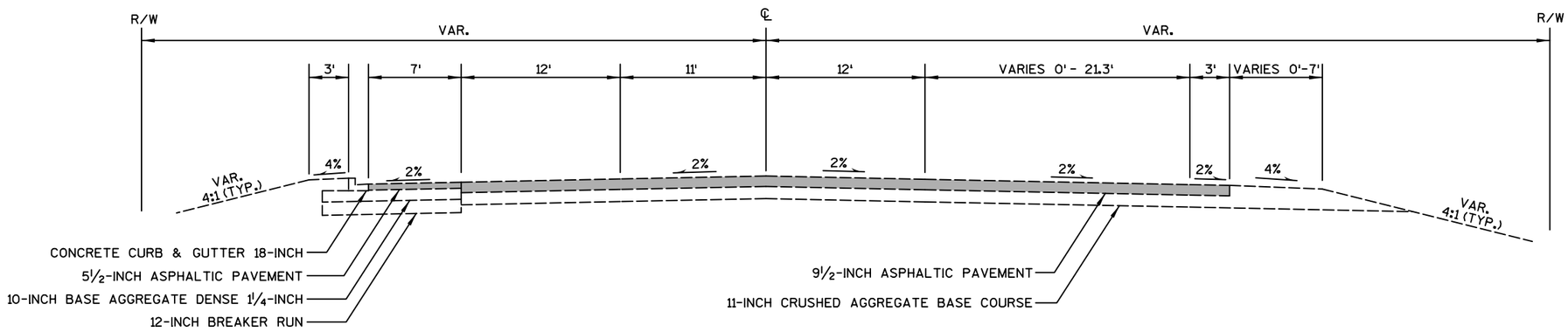
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PROJECT OVERVIEW	SHEET	E

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2

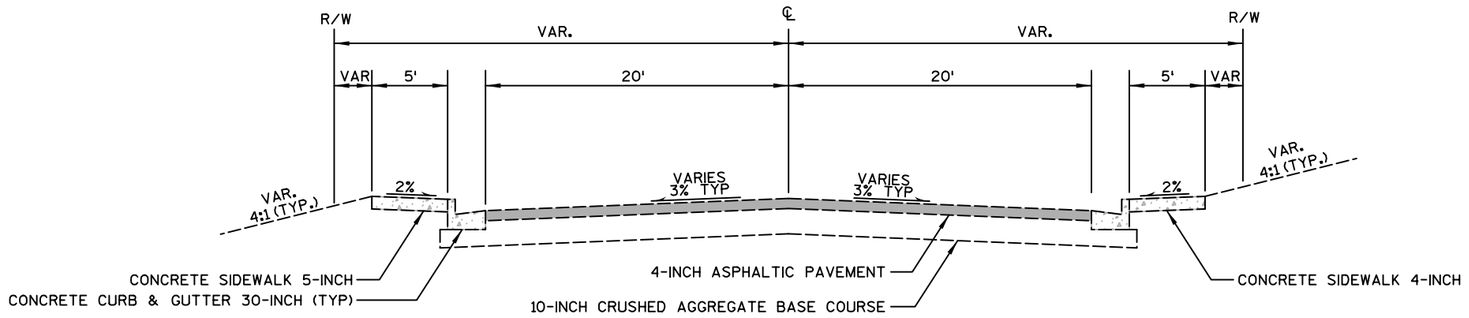


TYPICAL EXISTING SECTION - STH 21
STA. 107+50 - STA. 109+50

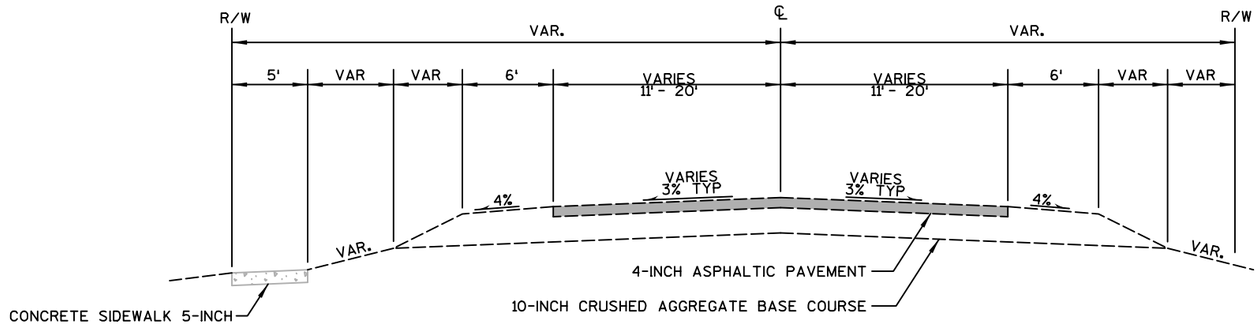


TYPICAL EXISTING SECTION - STH 21
STA. 109+50 - STA. 113+00

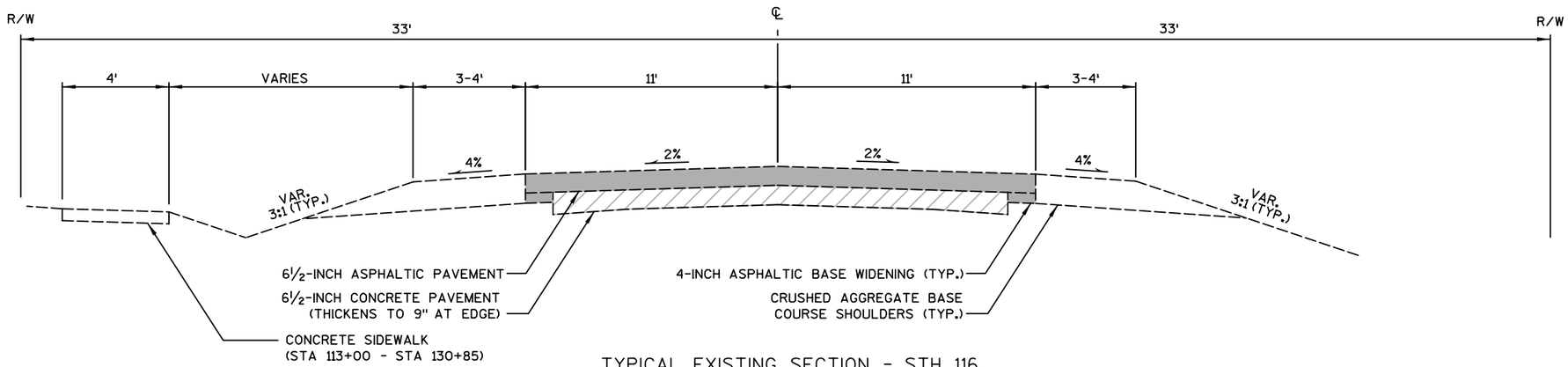
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	EXISTING TYPICAL SECTIONS	SHEET 4	E



TYPICAL EXISTING SECTION - STH 116
STA. 113+00 - STA. 115+13.6 LT
STA. 113+00 - STA. 115+50.1 RT

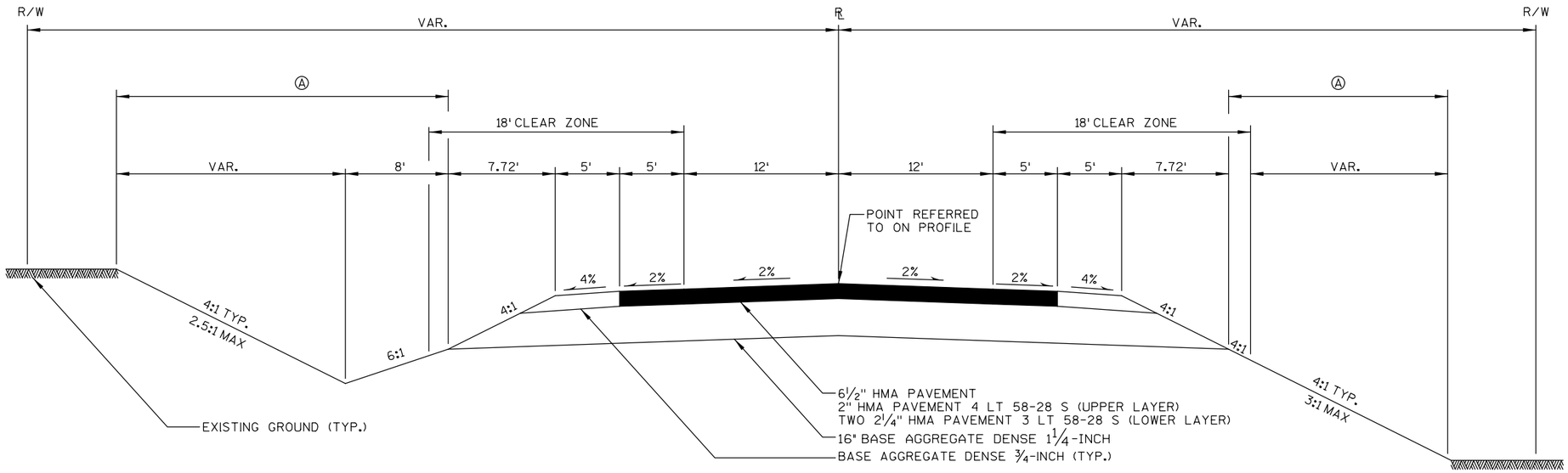


TYPICAL EXISTING SECTION - STH 116
STA. 115+13.6 - STA. 116+99 LT
STA. 115+50.1 - STA. 116+99 RT



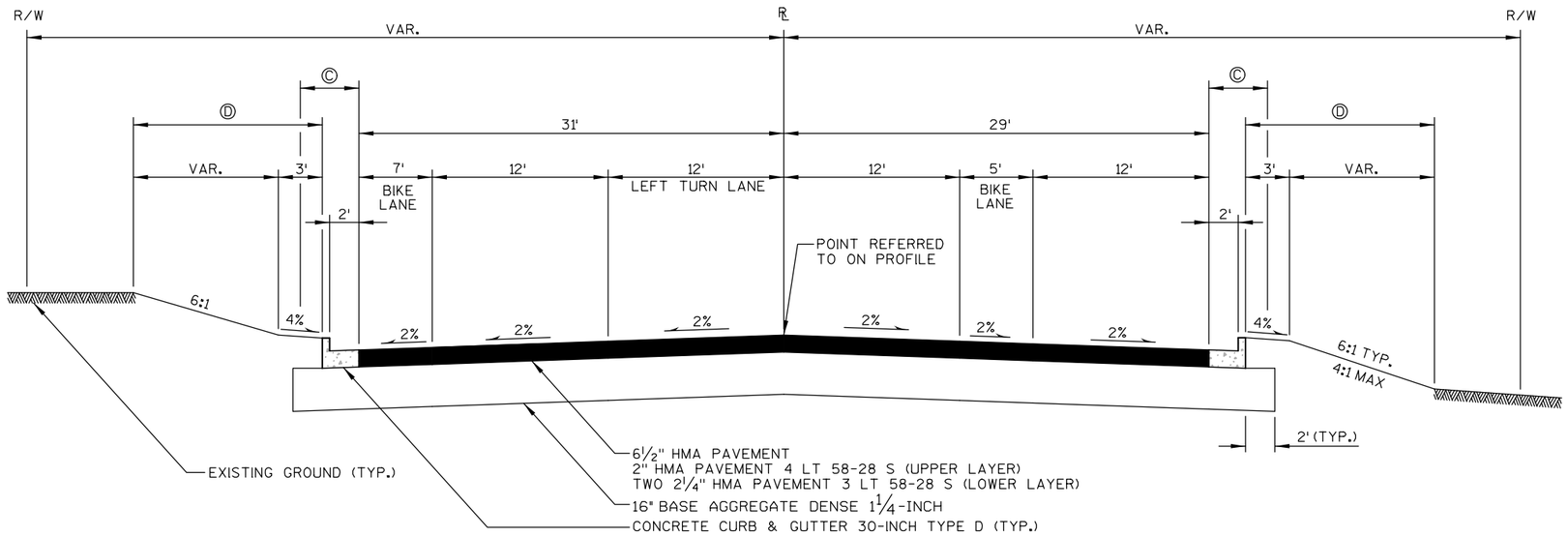
TYPICAL EXISTING SECTION - STH 116
STA. 116+99 - STA. 163+12

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	EXISTING TYPICAL SECTIONS	SHEET 5	E



Ⓐ TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A

TYPICAL FINISHED SECTION - STH 21
STA. 107+50.00 - STA. 110+50.00

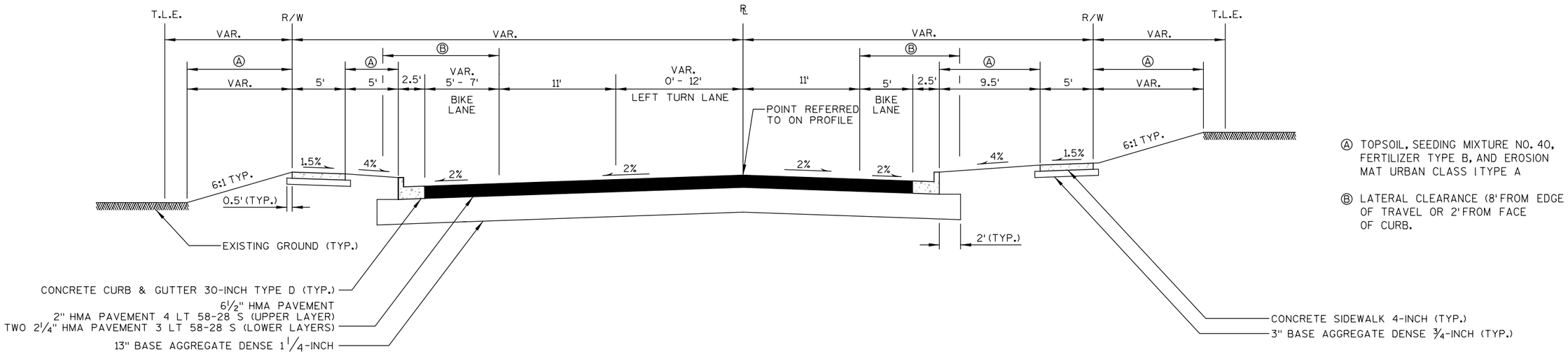


Ⓒ 4' LATERAL CLEARANCE

Ⓓ TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A

TYPICAL FINISHED SECTION - STH 21
STA. 110+50.00 - STA. 113+83.12

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PROPOSED TYPICAL SECTIONS	SHEET 6	E

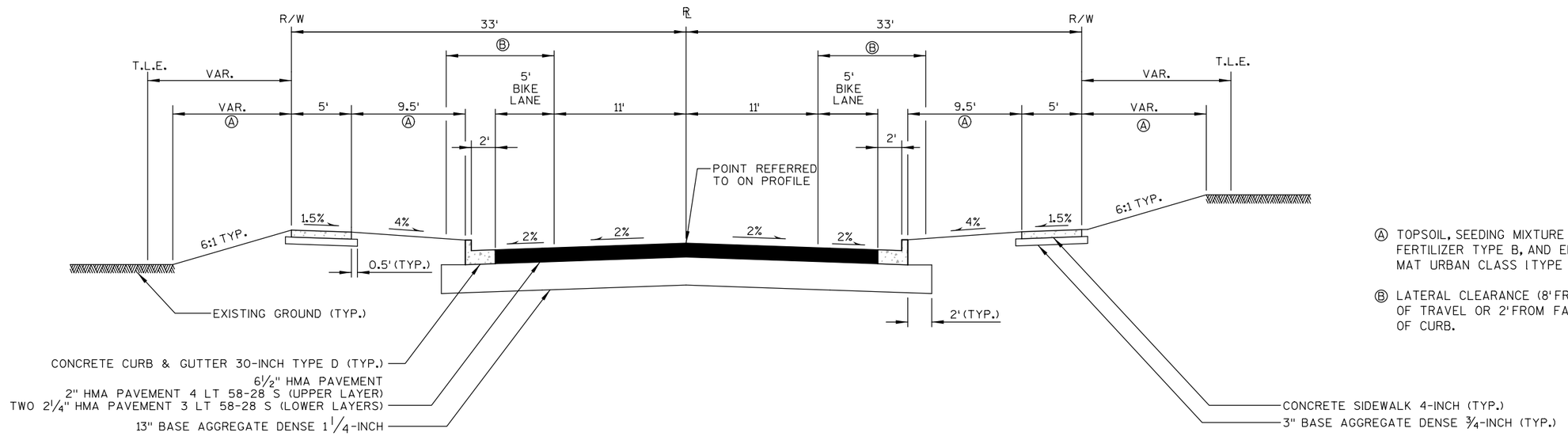


Ⓐ TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A

Ⓑ LATERAL CLEARANCE (8' FROM EDGE OF TRAVEL OR 2' FROM FACE OF CURB.

TYPICAL FINISHED SECTION - STH 116

STA. 113+83.12 - STA. 118+49.69



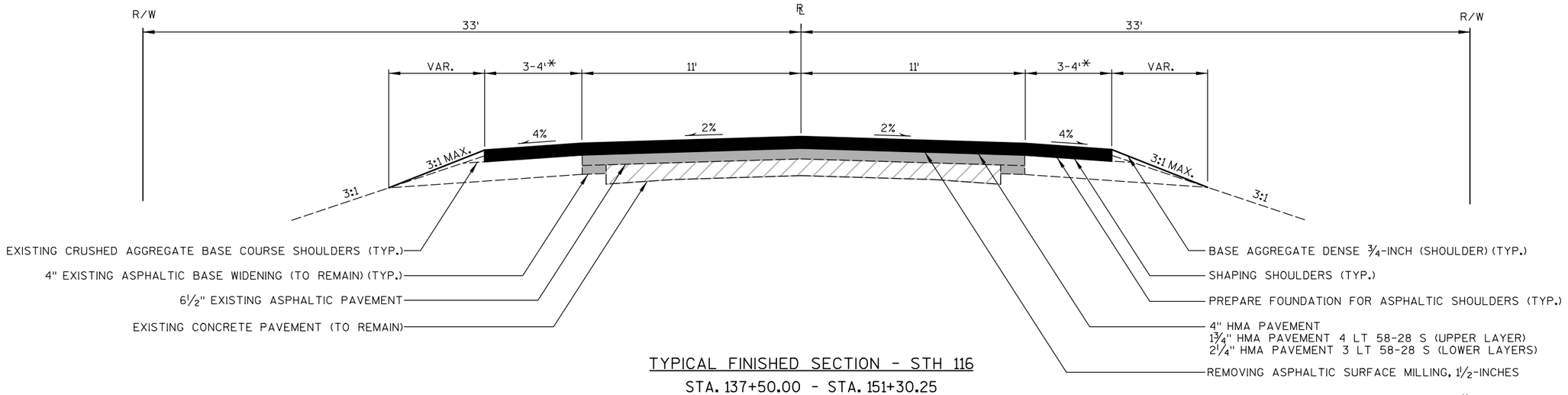
Ⓐ TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A

Ⓑ LATERAL CLEARANCE (8' FROM EDGE OF TRAVEL OR 2' FROM FACE OF CURB.

TYPICAL FINISHED SECTION - STH 116

STA. 118+49.69 - STA. 137+50.00

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PROPOSED TYPICAL SECTIONS	SHEET 7	E



TYPICAL FINISHED SECTION - STH 116

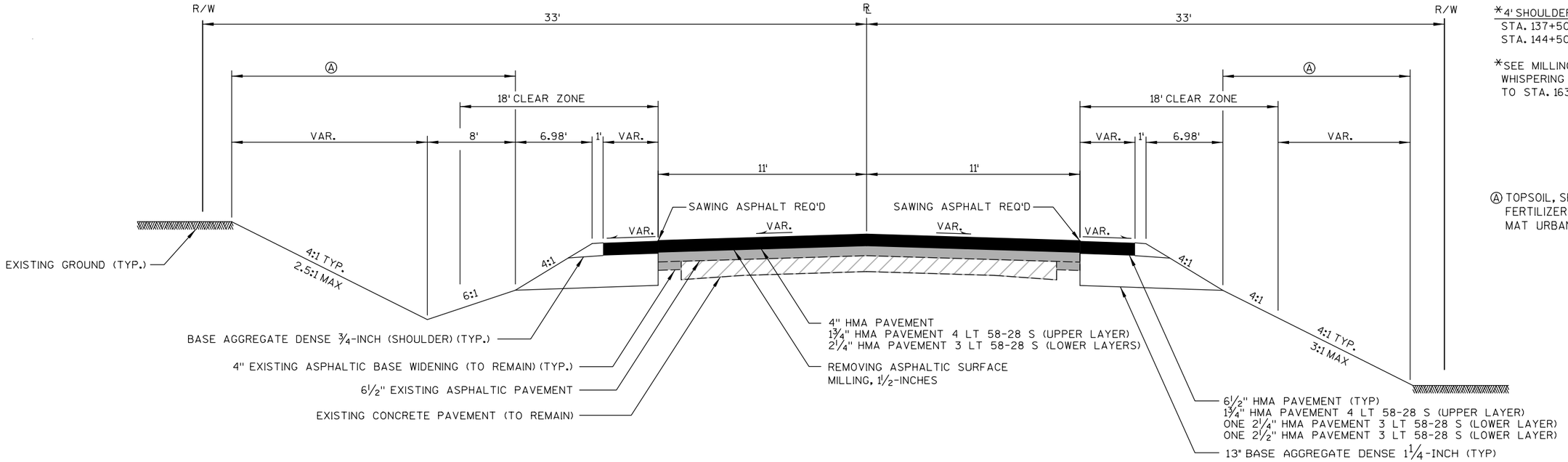
STA. 137+50.00 - STA. 151+30.25
STA. 154+33.12 - STA. 163+12.00

*3' SHOULDER WIDTH
STA. 137+50 - STA. 144+50 LT
STA. 148+00 - STA. 151+30.25 LT
STA. 154+33.12 - STA. 163+12 LT
STA. 144+25 - STA. 151+30.25 RT
STA. 154+33.12 - STA. 159+05 RT

*4' SHOULDER WIDTH
STA. 137+50 - STA. 144+25 RT
STA. 144+50 - STA. 148+00 LT

*SEE MILLING AND PAVING DETAIL AT WHISPERING WAY FOR STA. 159+05 TO STA. 163+12 RT.

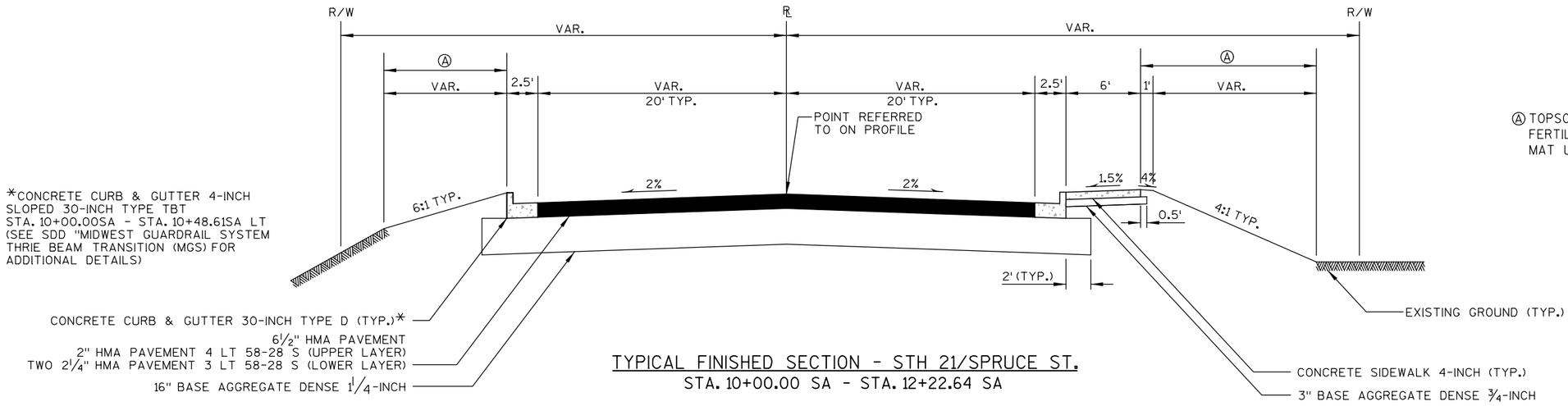
Ⓐ TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A



TYPICAL FINISHED SECTION - STH 116

STA. 151+30.25 - STA. 154+33.12

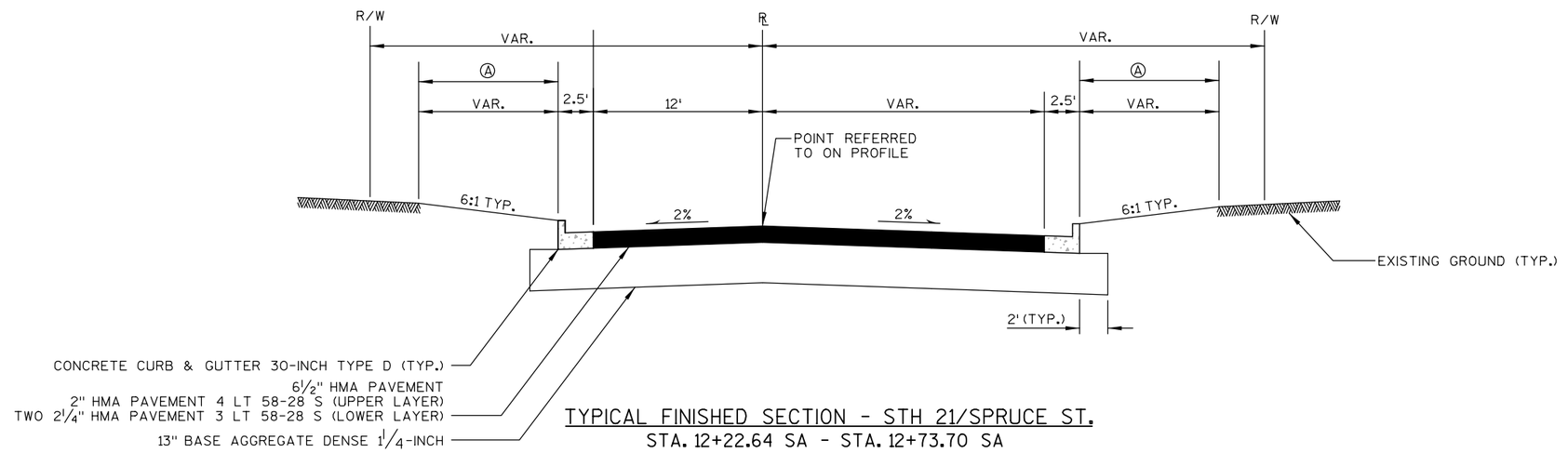
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PROPOSED TYPICAL SECTIONS	SHEET 8	E



*CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
STA. 10+00.00SA - STA. 10+48.61SA LT
(SEE SDD "MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS) FOR ADDITIONAL DETAILS)

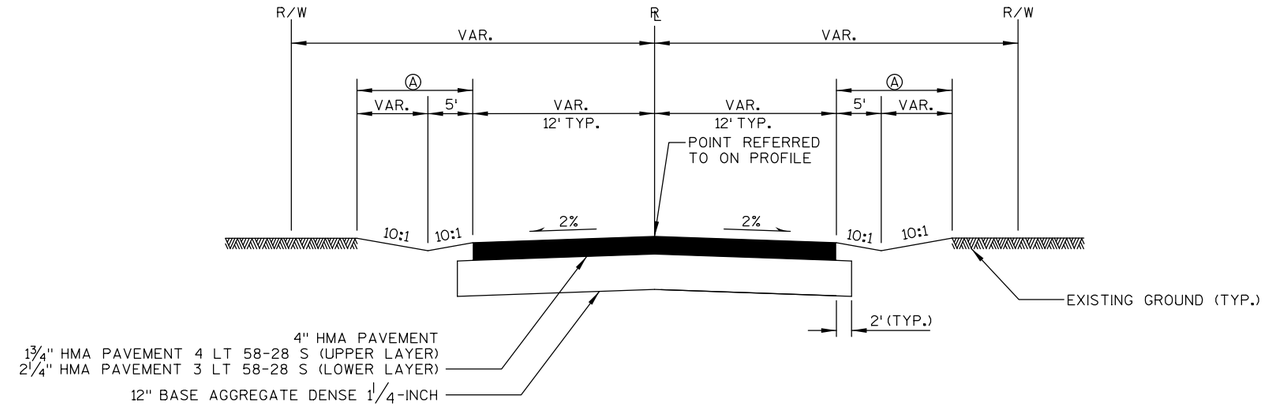
Ⓐ TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A

TYPICAL FINISHED SECTION - STH 21/SPRUCE ST.
STA. 10+00.00 SA - STA. 12+22.64 SA



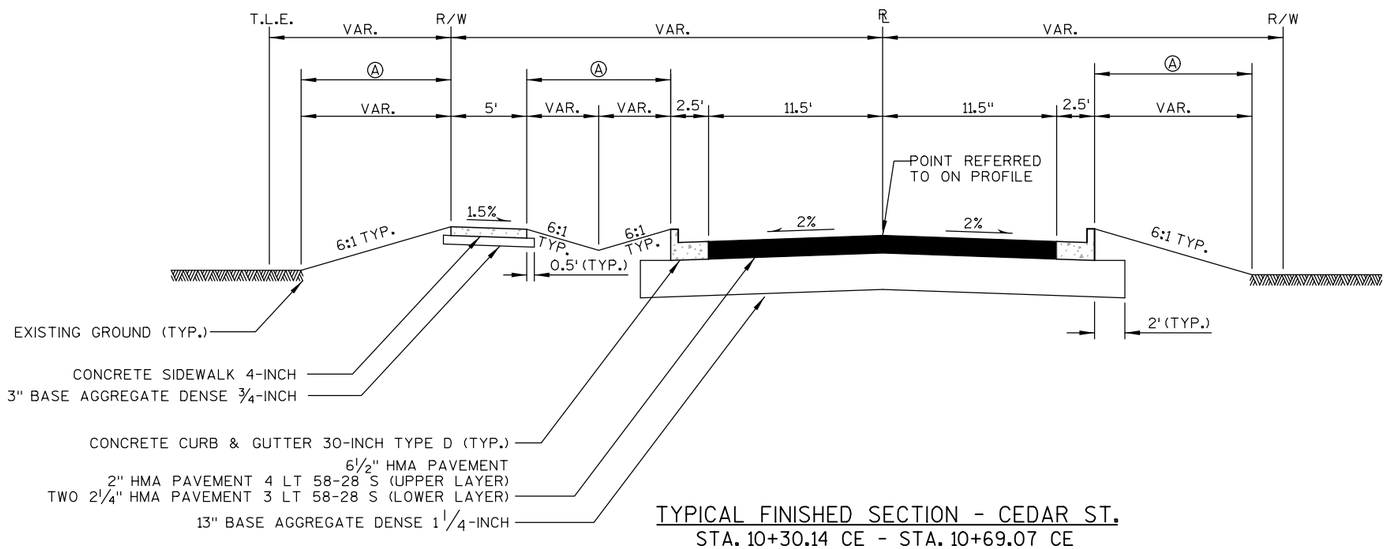
TYPICAL FINISHED SECTION - STH 21/SPRUCE ST.
STA. 12+22.64 SA - STA. 12+73.70 SA

PROJECT NO: 6190-16-72/73	HWY: STH 116	COUNTY: WINNEBAGO	PROPOSED TYPICAL SECTIONS	SHEET 9	E



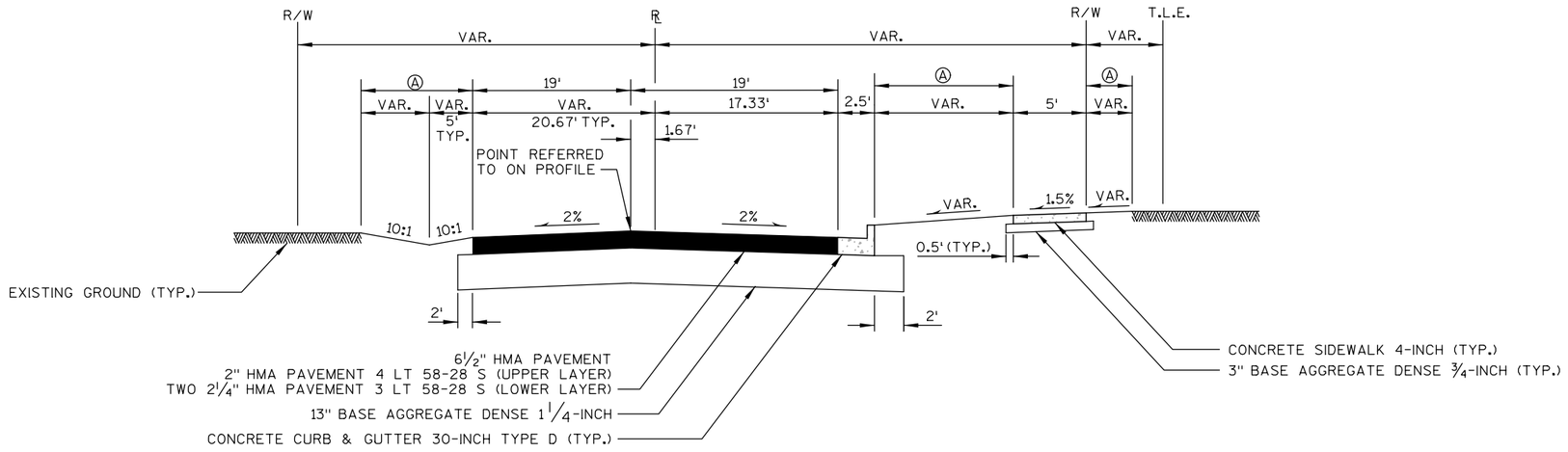
TYPICAL FINISHED SECTION - SPRUCE ST.
STA. 12+73.70 SA - STA. 13+55.00 SA

Ⓐ TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A



TYPICAL FINISHED SECTION - CEDAR ST.
STA. 10+30.14 CE - STA. 10+69.07 CE

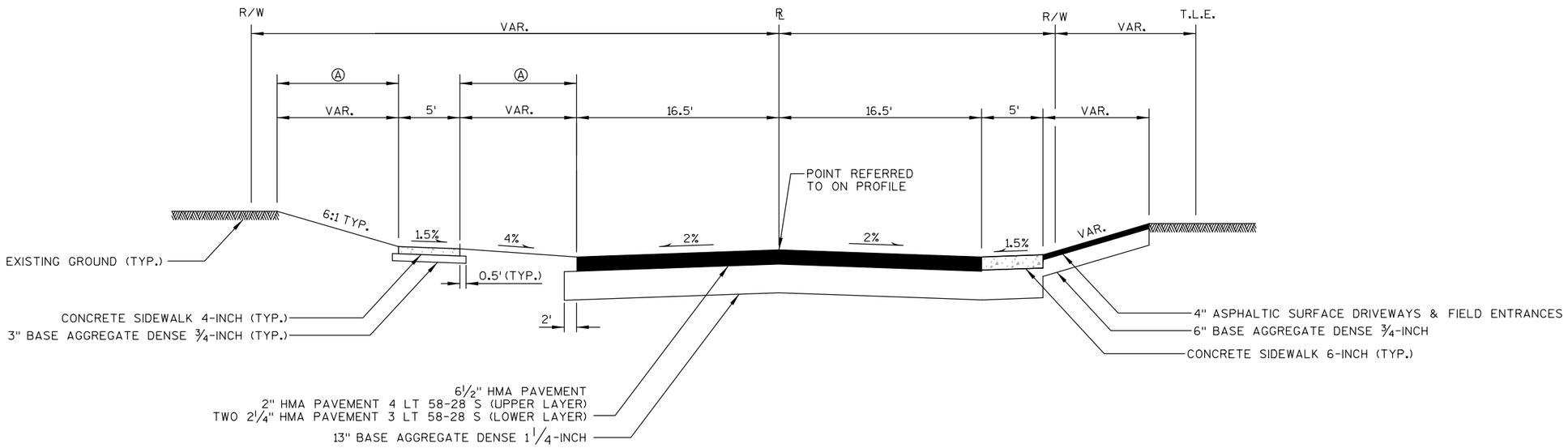
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PROPOSED TYPICAL SECTIONS	SHEET 10	E



TYPICAL FINISHED SECTION - WEBSTER AVE.

STA. 10+16.03 NWE - STA. 10+82.37 NWE

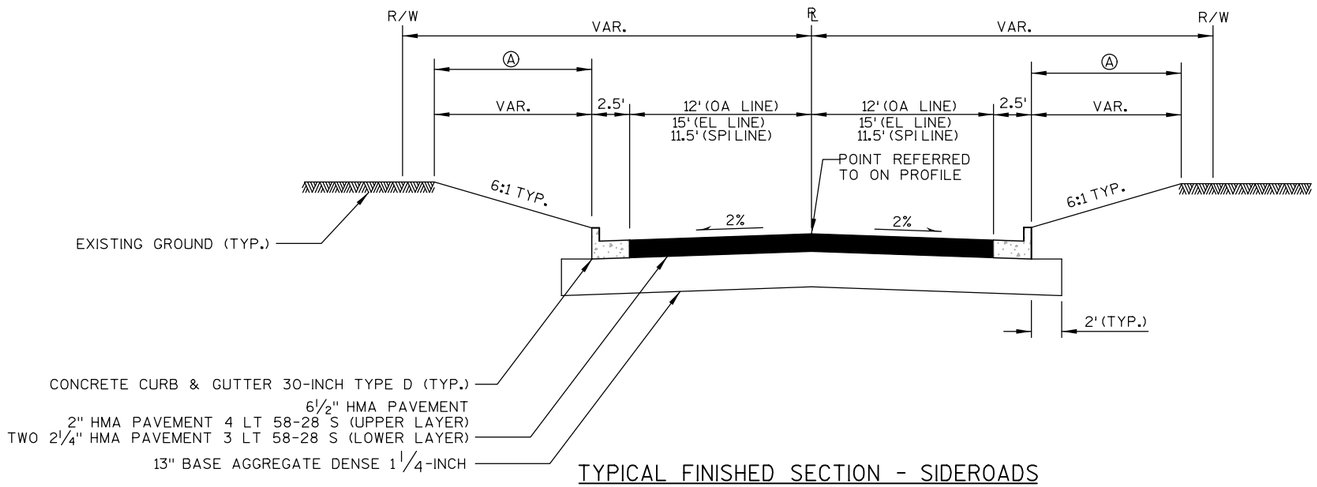
Ⓐ TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A



TYPICAL FINISHED SECTION - WEBSTER AVE.

STA. 9+20.00 SWE - STA. 9+83.94 SWE

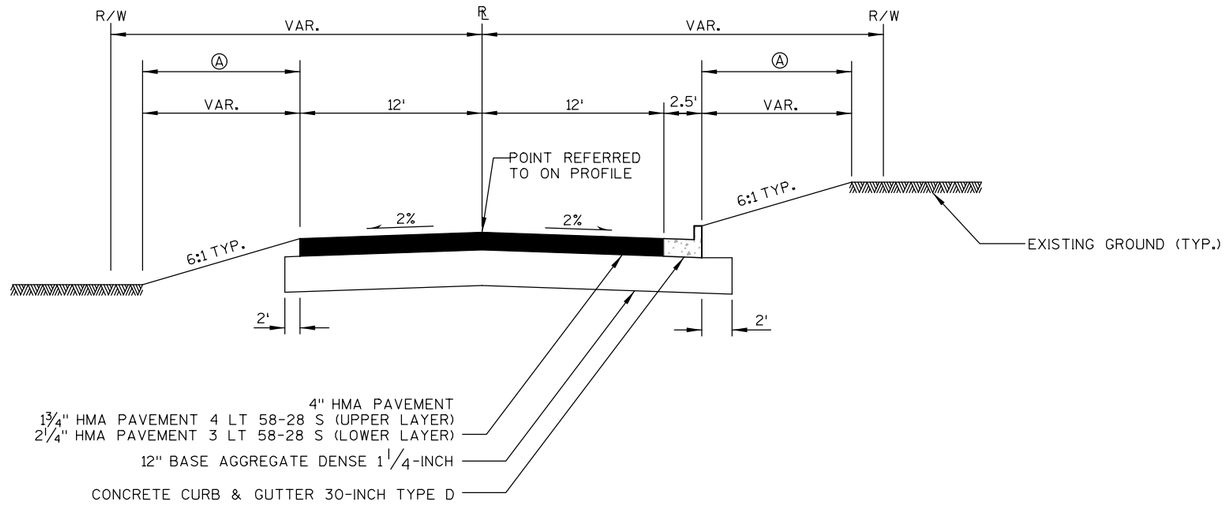
PROJECT NO: 6190-16-72/73	HWY: STH 116	COUNTY: WINNEBAGO	PROPOSED TYPICAL SECTIONS	SHEET 11	E



TYPICAL FINISHED SECTION - SIDEROADS

STA. 10+16.00 OA - STA. 10+75.00 OA (OAK ST.)
STA. 10+16+00 EL - STA. 10+55.00 EL (ELM ST.)
STA. 10+16.00 AS - STA. 10+54.00 AS (ASH ST.)
STA. 8+85.50 SPI - STA. 9+79.25 SPI (PINE ST.)

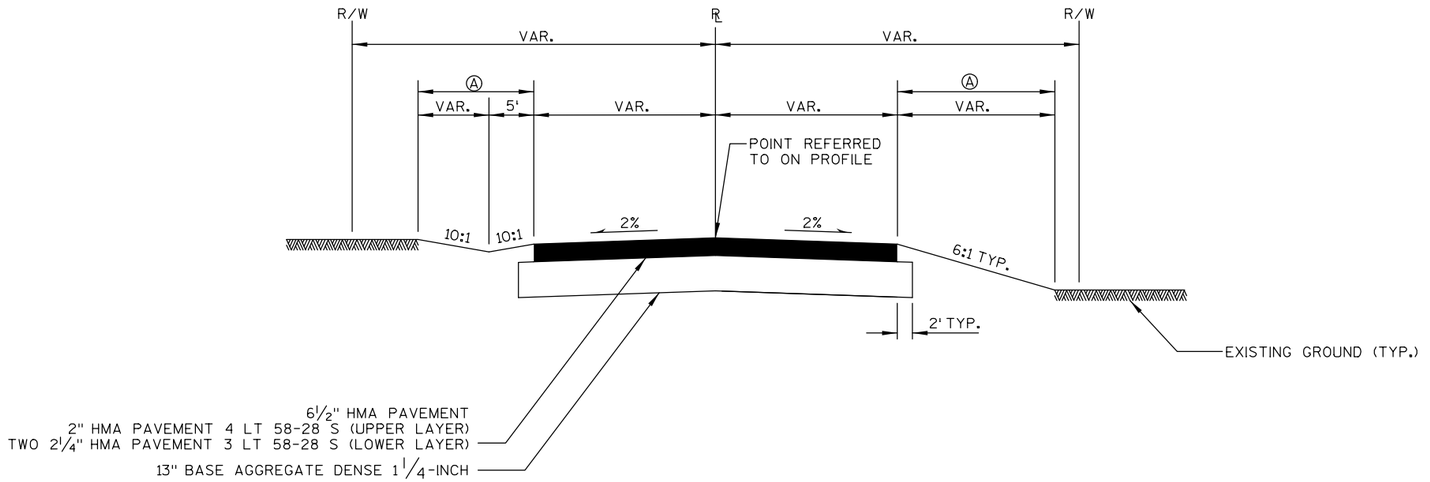
Ⓐ TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A



TYPICAL FINISHED SECTION - OAK ST.

STA. 10+75.00 OA - STA. 11+50.00 OA

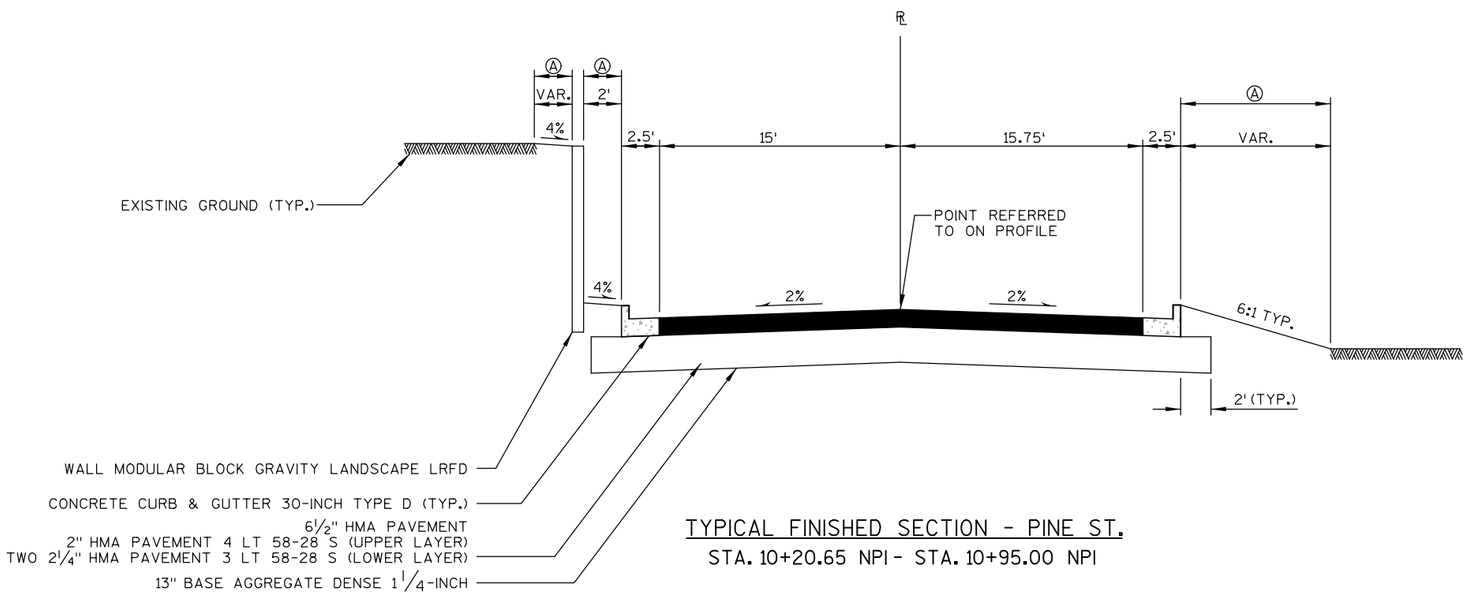
PROJECT NO: 6190-16-72/73	HWY: STH 116	COUNTY: WINNEBAGO	PROPOSED TYPICAL SECTIONS	SHEET 12	E



TYPICAL FINISHED SECTION - EAST RIVER DR.

STA. 10+16.03 ER - STA. 11+70.00 ER

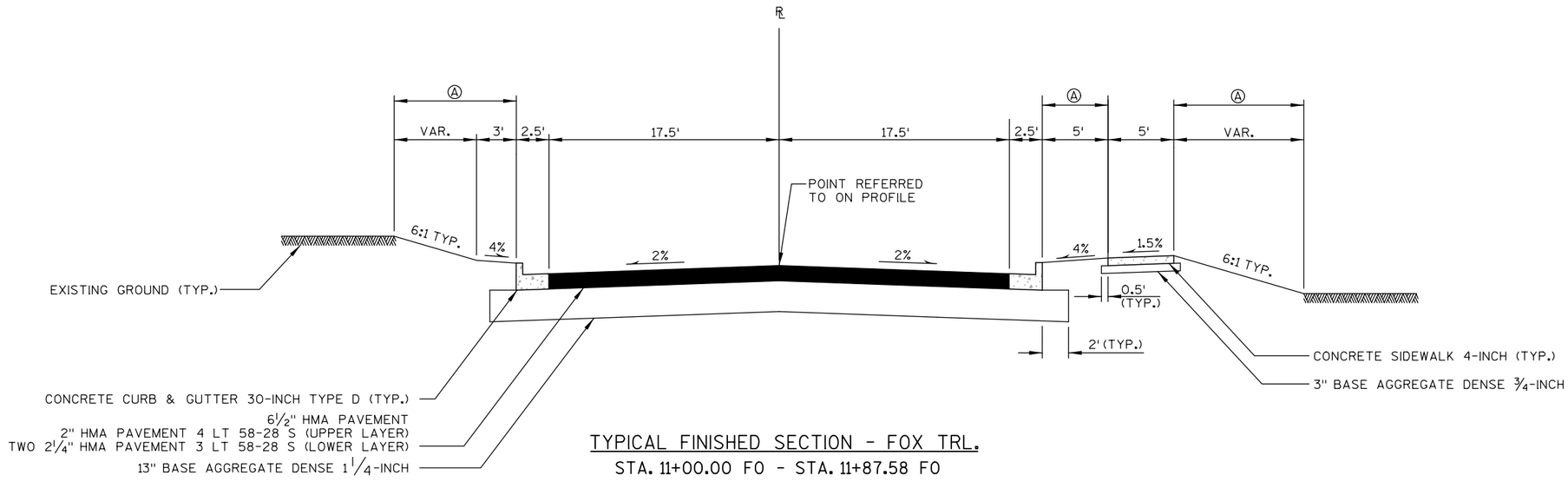
Ⓐ TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A



TYPICAL FINISHED SECTION - PINE ST.

STA. 10+20.65 NPI - STA. 10+95.00 NPI

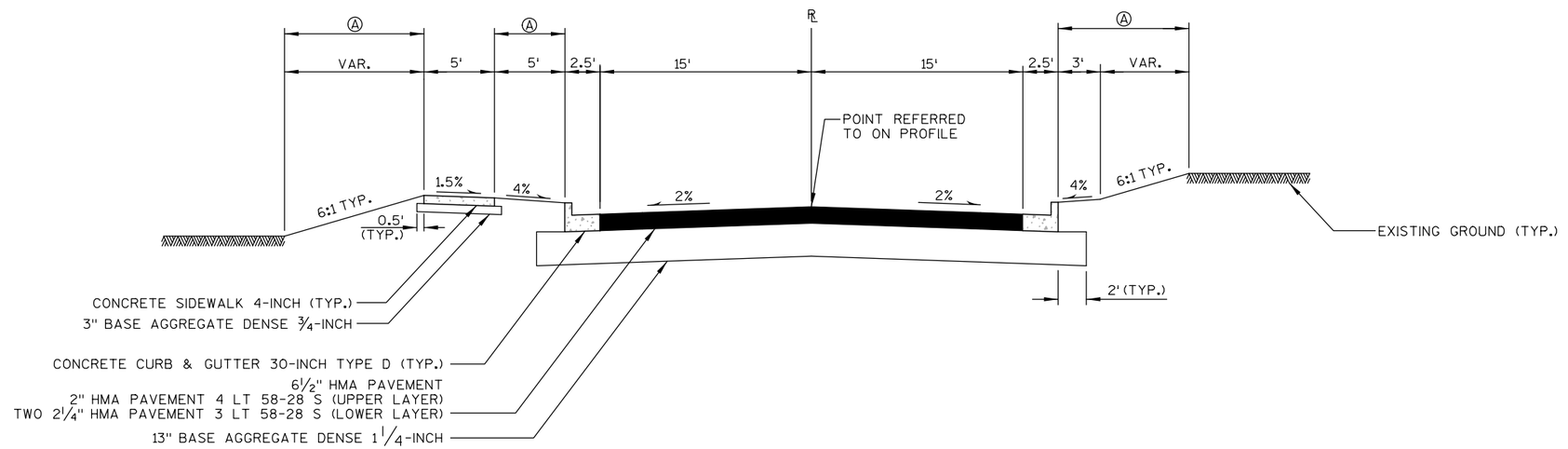
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PROPOSED TYPICAL SECTIONS	SHEET 13	E



TYPICAL FINISHED SECTION - FOX TRL.

STA. 11+00.00 FO - STA. 11+87.58 FO

Ⓐ TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A

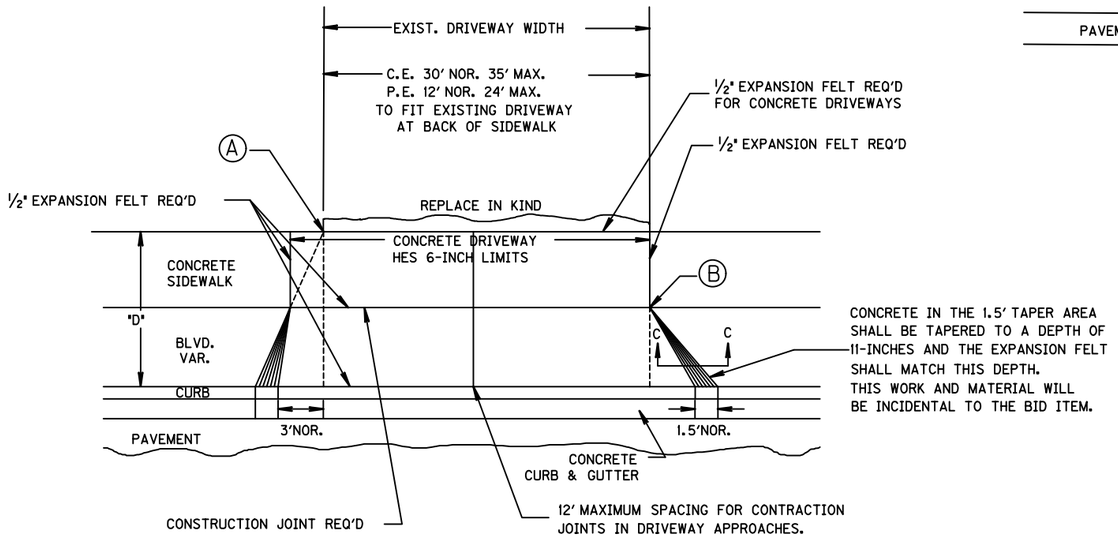


TYPICAL FINISHED SECTION - HAWTHORNE DR.

STA. 12+21.67 FO - STA. 13+47.00 FO

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PROPOSED TYPICAL SECTIONS	SHEET 14	E

DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER

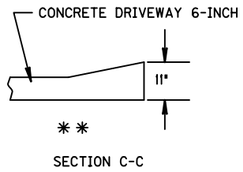


CONCRETE IN THE 1.5' TAPER AREA SHALL BE TAPERED TO A DEPTH OF 11-INCHES AND THE EXPANSION FELT SHALL MATCH THIS DEPTH. THIS WORK AND MATERIAL WILL BE INCIDENTAL TO THE BID ITEM.

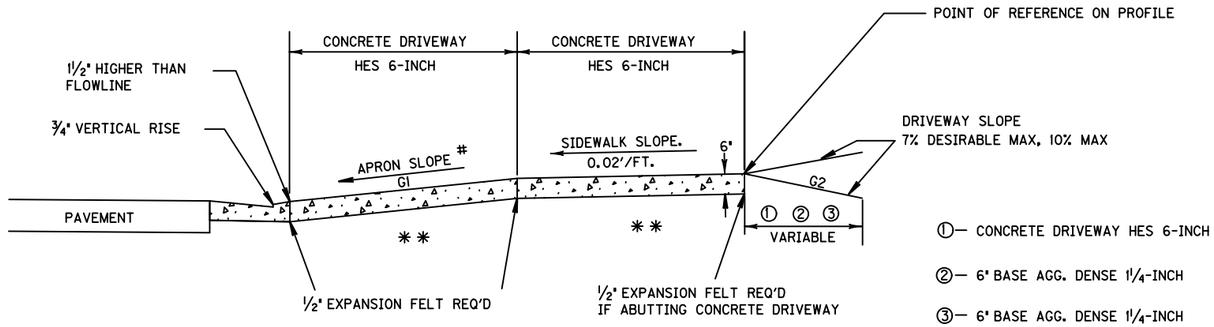
PLAN VIEW

Ⓐ WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF SIDEWALK

Ⓑ WHEN "D" IS GREATER THAN 13', ALIGN TAPER WITH FRONT OF SIDEWALK



SECTION C-C



TYPICAL SIDEWALK SECTION

① — CONCRETE DRIVEWAY HES 6-INCH

② — 6" BASE AGG. DENSE 1¼-INCH

③ — 6" BASE AGG. DENSE 1¼-INCH BASE WITH 2" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

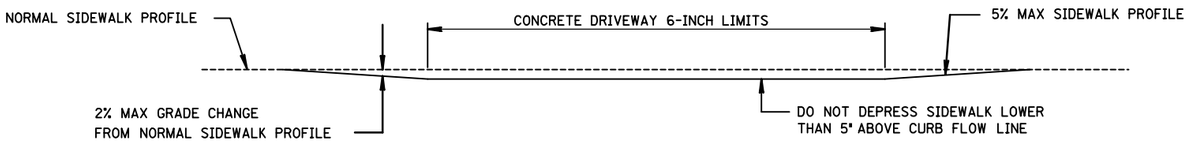
** = 6" BASE AGG. DENSE 1¼-INCH REQ'D UNDER CONCRETE DRWY

\#

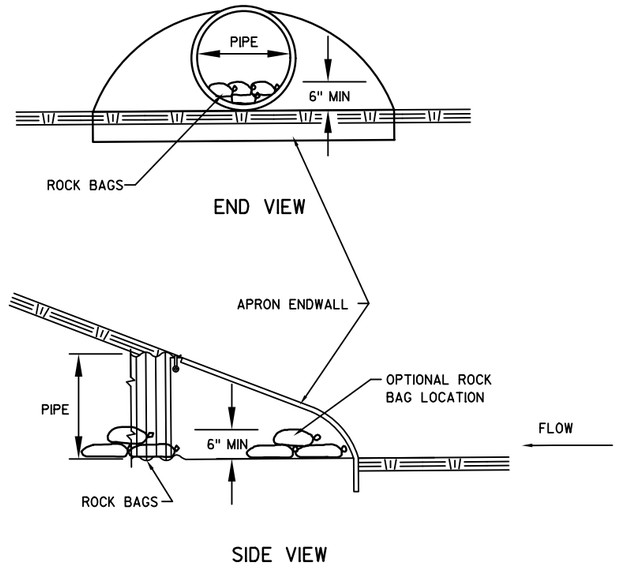
TERRACE WIDTH	APRON SLOPE (G1)		
	MIN %	DESIRABLE %	MAX %
3 FT	7.0	8.5	9.0
4 FT	5.0	7.0	9.0
5 FT	4.0	7.0	9.0
6 FT	4.0	7.0	9.0
7 FT	3.5	7.0	9.0
8 FT	3.0	7.0	9.0

NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE

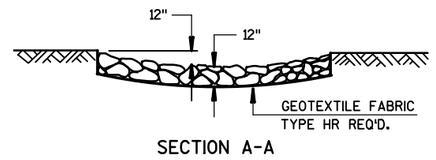


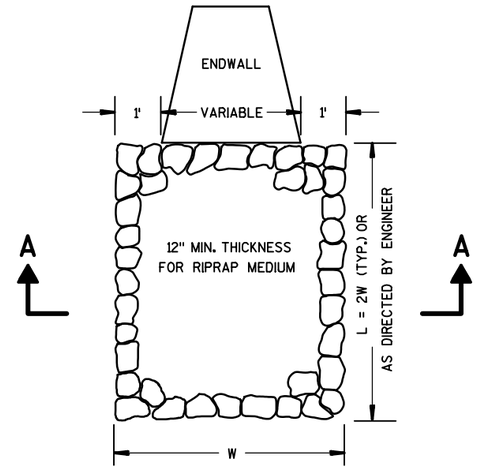
DEPRESSED SIDEWALK PROFILE DETAIL



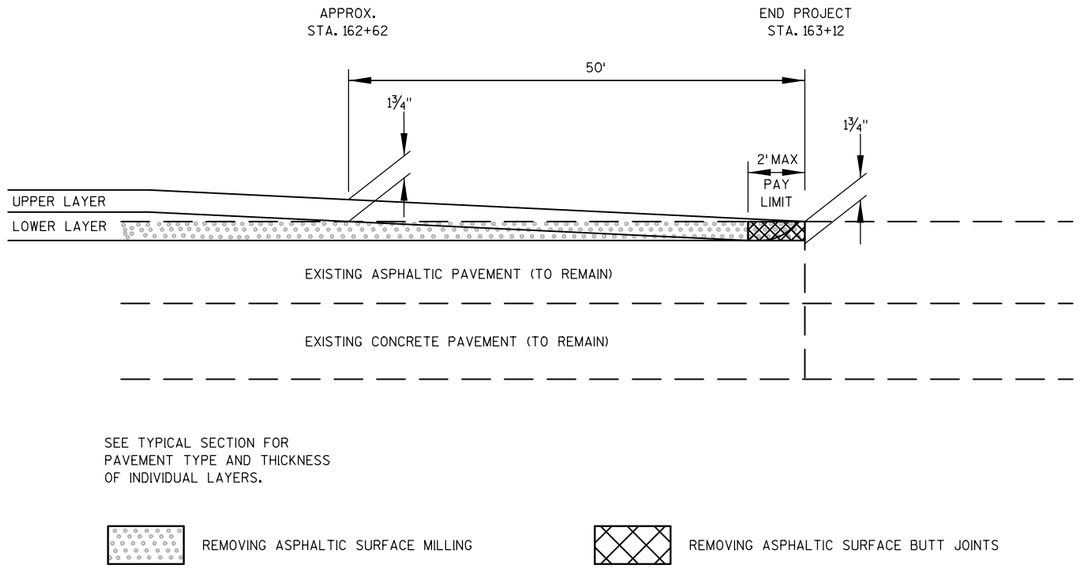
CULVERT PIPE CHECKS DETAIL

INSTALL AT INLET END ONLY
LOCATIONS SHOWN ON EROSION CONTROL PLANS

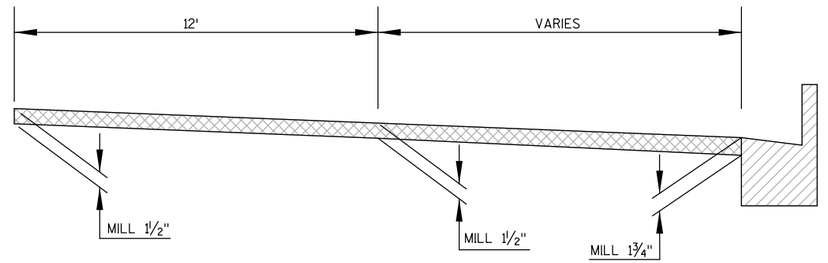




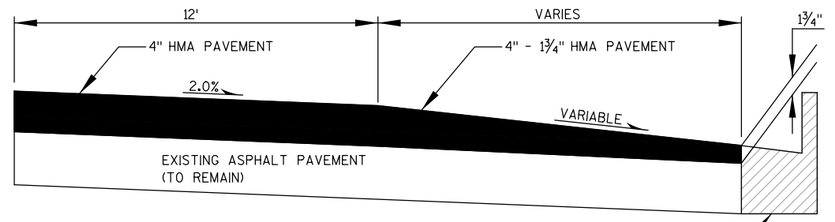
RIPRAP MEDIUM TREATMENT AT CULVERTS



DETAIL FOR OVERLAP JOINT BUTTED - END OF PROJECT



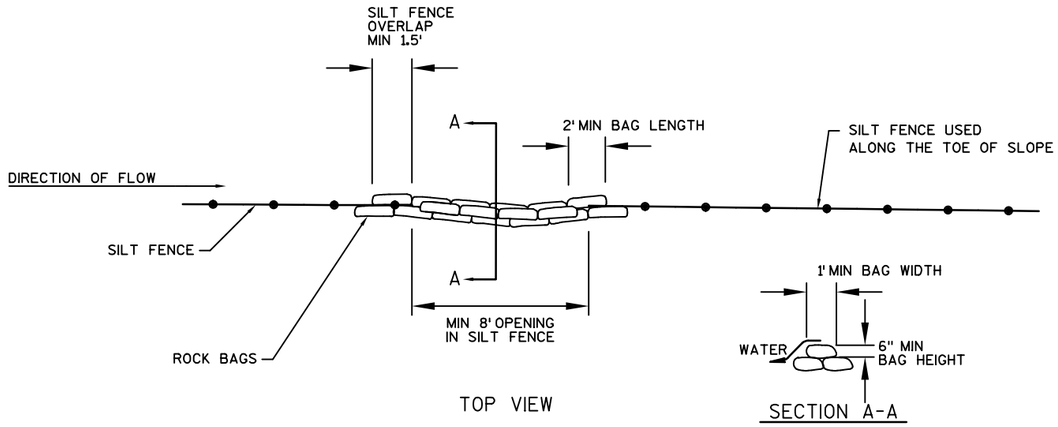
MILLING DETAIL



PAVING DETAIL

MILLING AND PAVING DETAIL AT WHISPERING WAY

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION DETAIL	SHEET 16	E



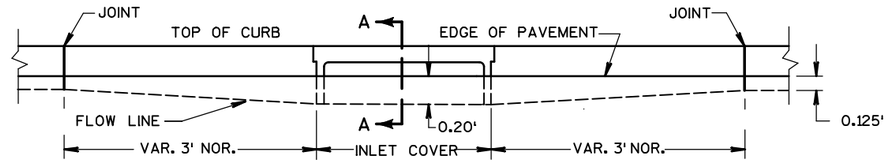
ROCK BAGS USED FOR SILT FENCE RELIEF

RUNOFF COEFFICIENT TABLE

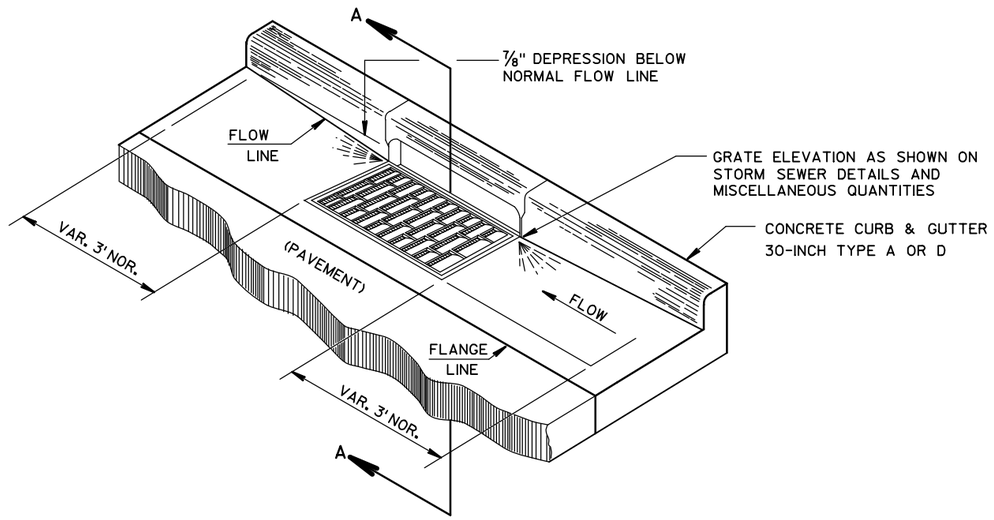
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33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

TOTAL PROJECT AREA = 13.3 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 8.9 ACRES

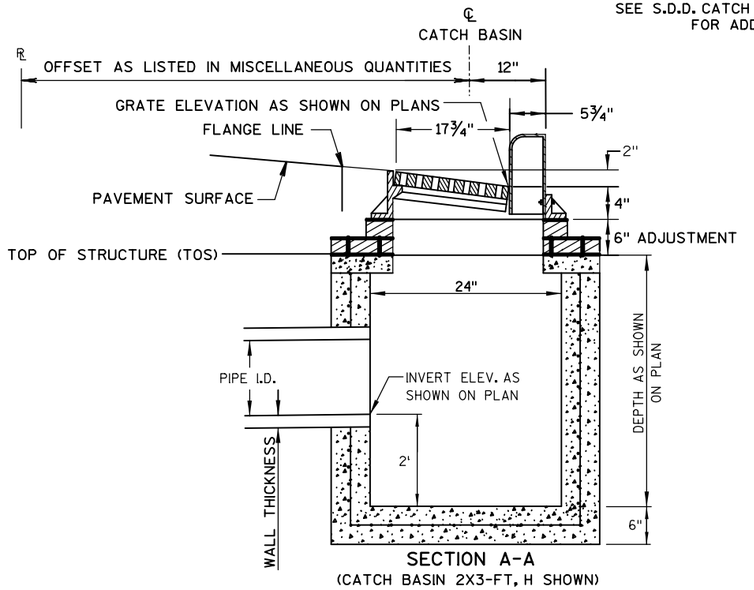
2



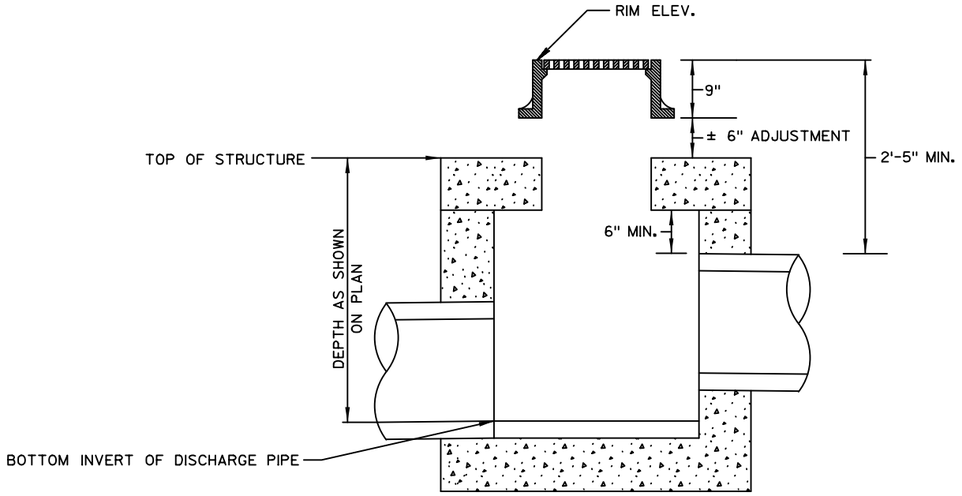
ELEVATION



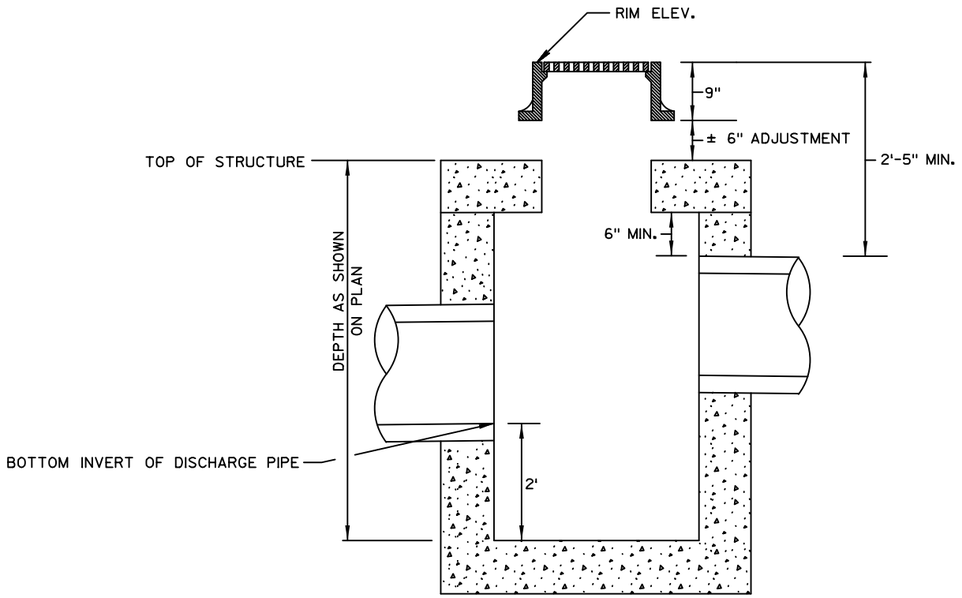
SEE S.D.D. CATCH BASINS 2X3-FT AND 2.5X3-FT FOR ADDITIONAL INFORMATION



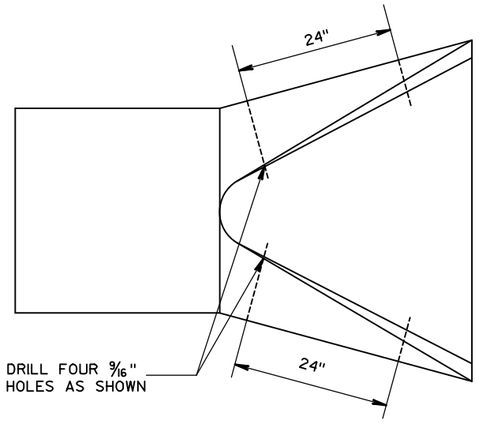
DETAIL OF CONCRETE CURB & GUTTER 30-INCH TYPE D OR TYPE A AT CATCH BASINS

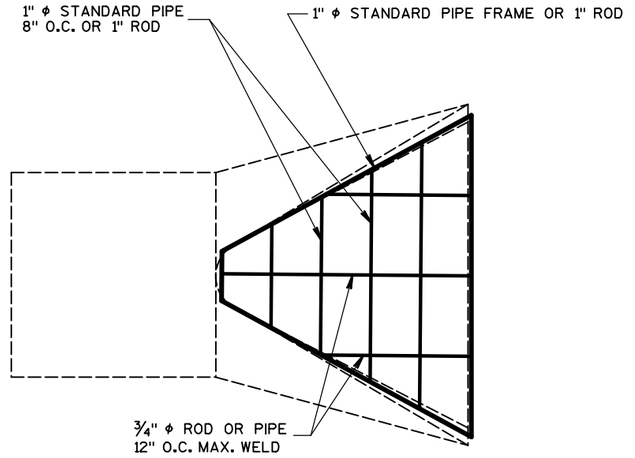


DETAIL FOR COMPUTING MANHOLE ELEVATIONS

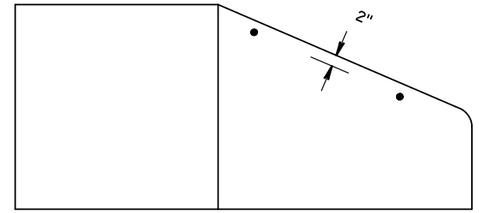


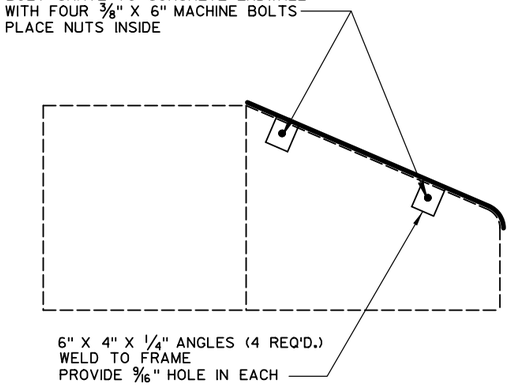
DETAIL FOR COMPUTING CATCH BASIN ELEVATIONS

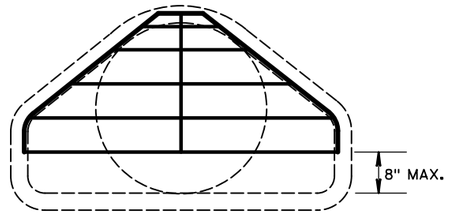




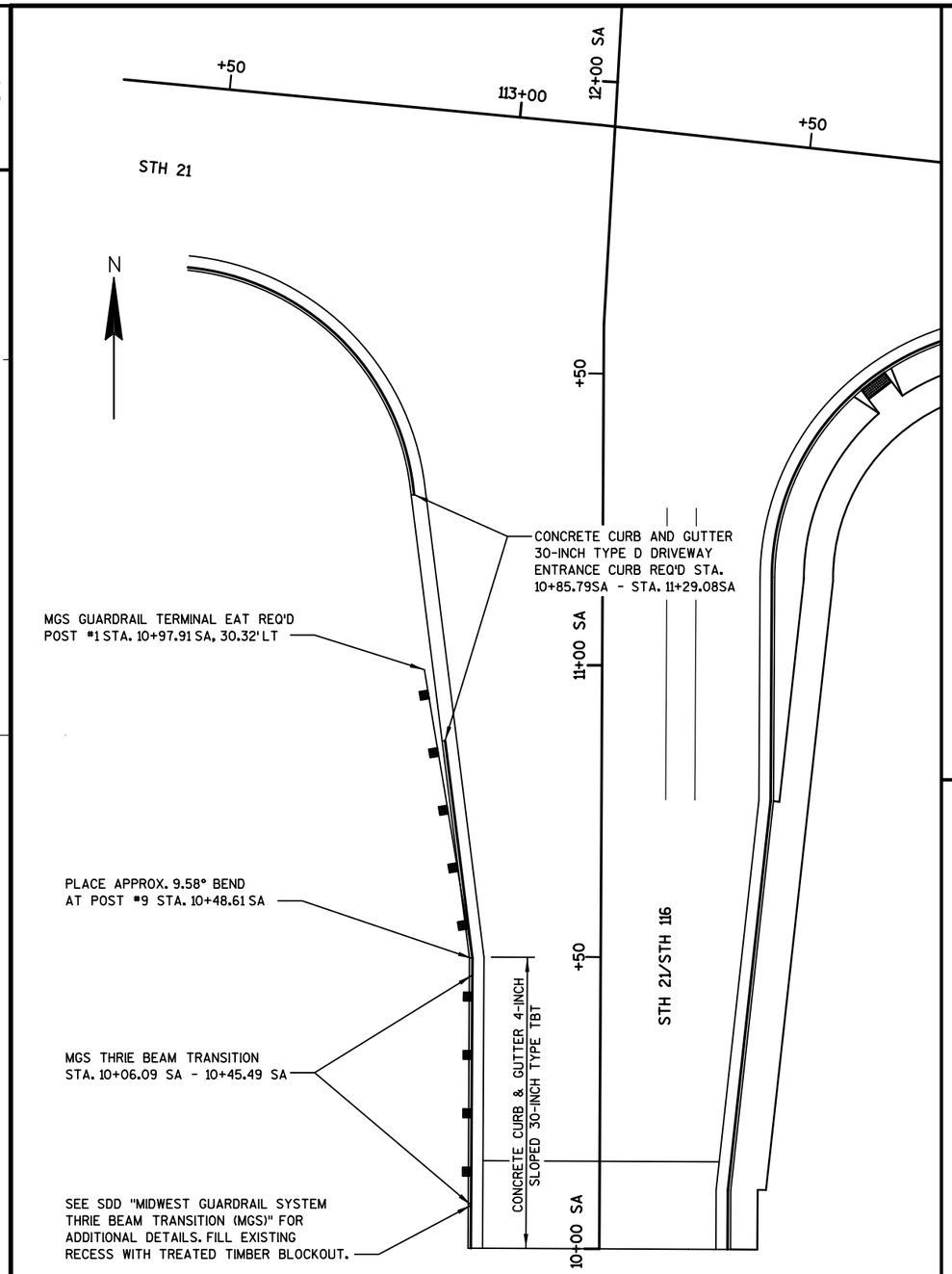
AT EACH PIPE



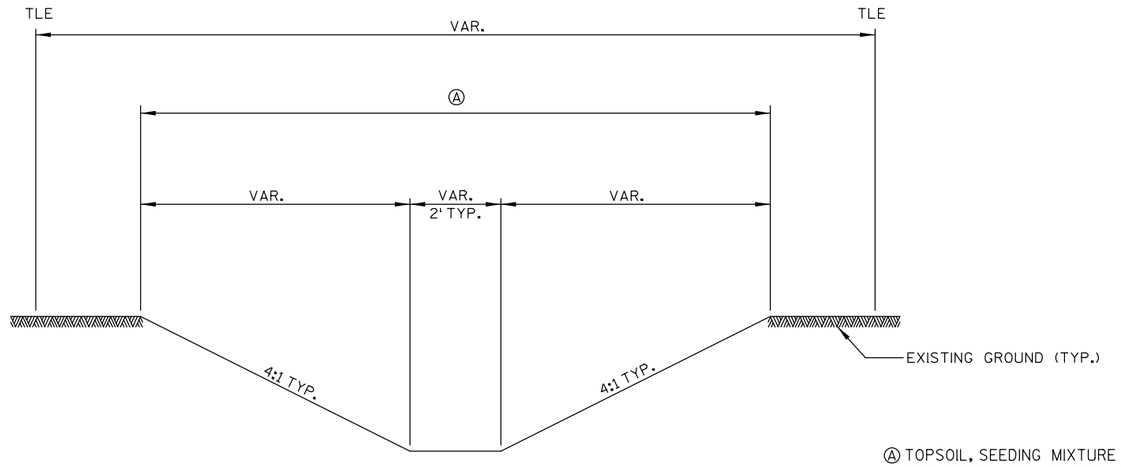




PIPE GRATE DETAIL



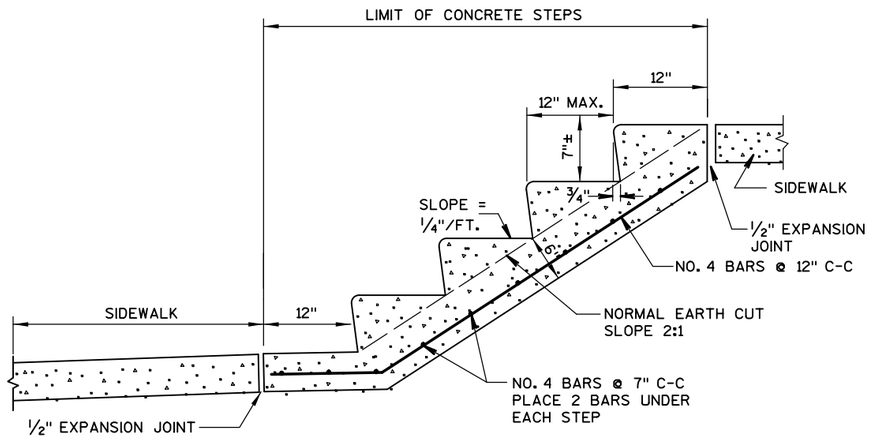
DETAIL FOR MGS GUARDRAIL



Ⓐ TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A

GRADING AT EW500A OUTFALL DETAIL

STA. 127+08 RT.



NOTE:

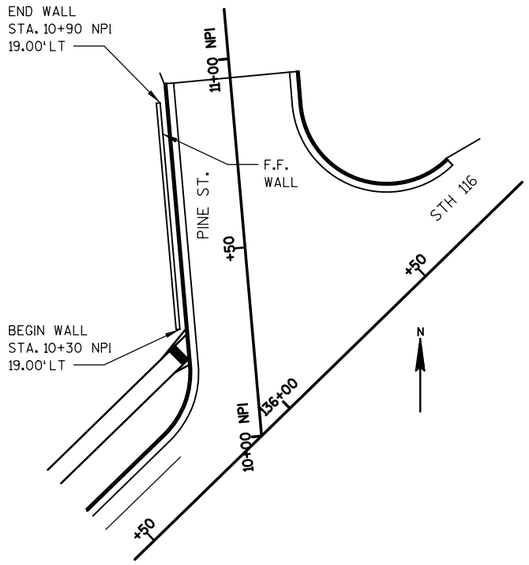
THE EXACT LOCATION, WIDTHS, & NUMBER OF STEPS TO BE VERIFIED BY THE ENGINEER IN THE FIELD.

STEEL REINFORCEMENT NOT REQUIRED ON STEPS WITH 2 RISERS OR LESS.

MINIMUM WIDTH OF STEP EQUALS 4 FEET.

CONCRETE STEPS SHALL MEET ALL STATE AND LOCAL BUILDING CODES.

CONCRETE STEPS DETAIL



PLAN VIEW

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

THE PLAN QUANTITY FOR THE BID ITEM "WALL MODULAR BLOCK GRAVITY LANDSCAPE LRFD" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF WALL TO A CONSTANT DEPTH OF 1'-6" BELOW FINISHED GRADE.

SOIL PARAMETERS

SOIL DESCRIPTIONS	TOTAL UNIT WEIGHT (PCF)	FRICTION ANGLE (DEGREES)	COHESION (PSF)
GRANULAR BACKFILL	125	30	0
LEAN CLAY (CL) RETAINED SOIL	120	27	1800

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL MODULAR BLOCK GRAVITY LANDSCAPE LRFD".

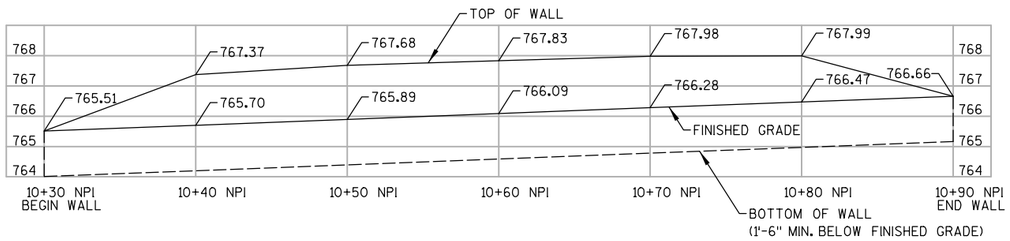
PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS DRAWING.

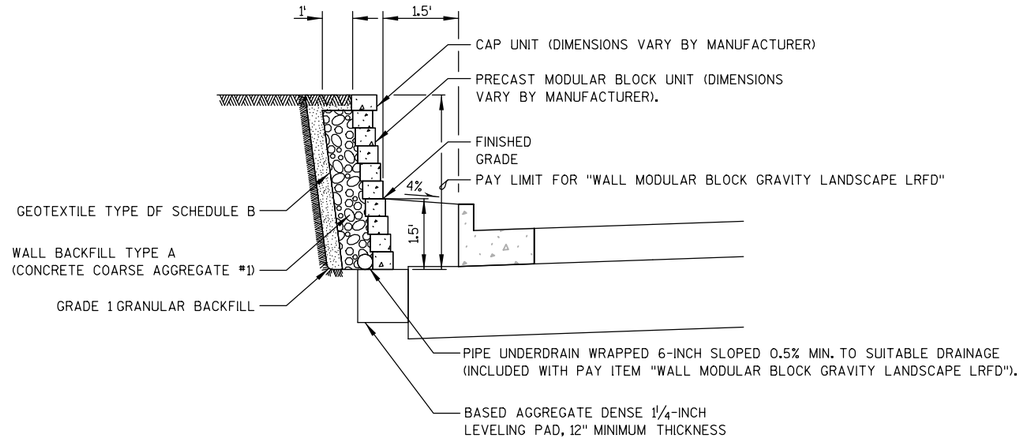
DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN.

SEE SPECIAL PROVISIONS FOR AESTHETIC TREATMENT TO WALL.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 100 PSF.



ELEVATION VIEW
(LOOKING AT F.F. OF WALL)



TYPICAL CROSS SECTION
STA. 10+30 SPI - 10+90 SPI

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		NON-CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX DIAMETER ** (OUTSIDE)	B	25	25
BOX LENGTH	C	36	42
COVER	D	25 1/2	25 1/2
FRAME	E	27	27
FRAME	F	25 3/4	25 3/4
FRAME	G	22 1/2	22 1/2
WEIGHT IN POUNDS *			
COVER		50	50

* THE ACTUAL WEIGHT OF THE COVER MAY VARY NOT TO EXCEED 100 LBS.

** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN 1/2" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN 1/4".

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

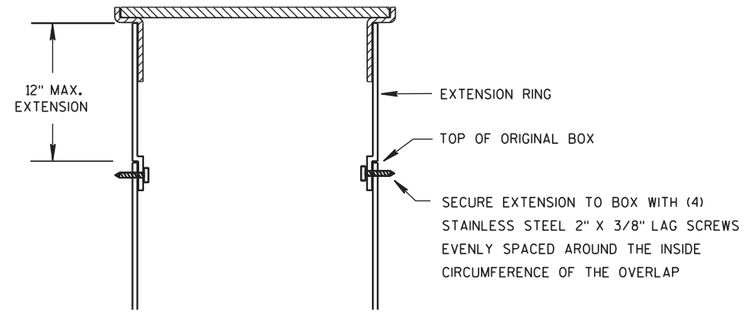
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

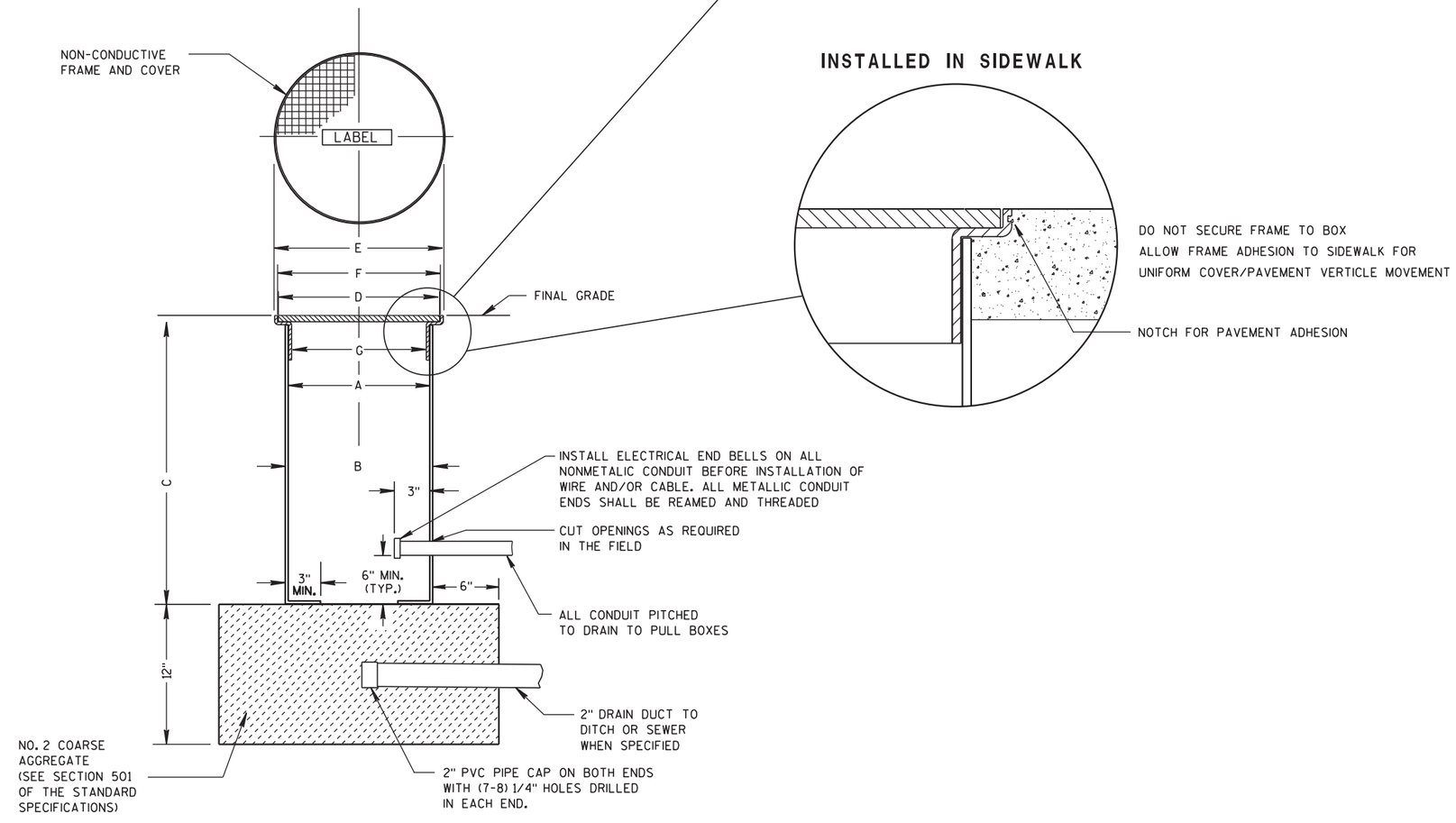
ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL OR LIGHTING SYSTEMS. "WISDOT COMMUNICATIONS" FOR COMMUNICATIONS SYSTEMS.

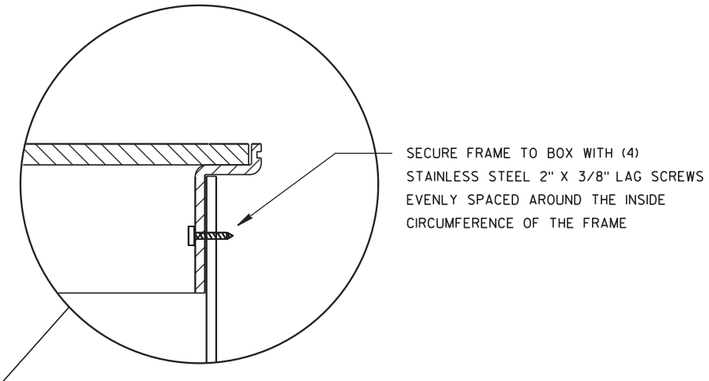


BOX EXTENSION

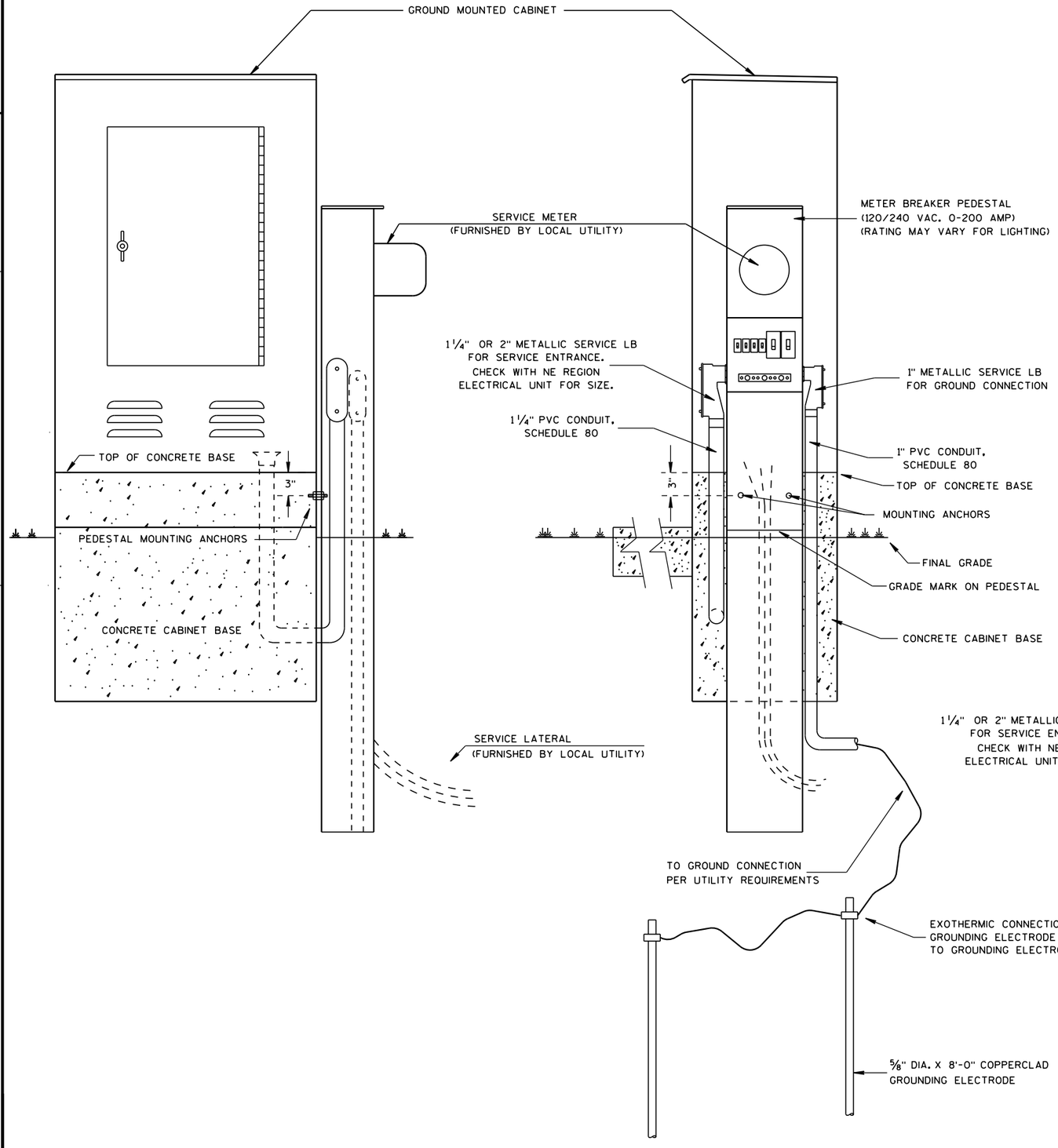


NON-CONDUCTIVE PULL BOX

INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

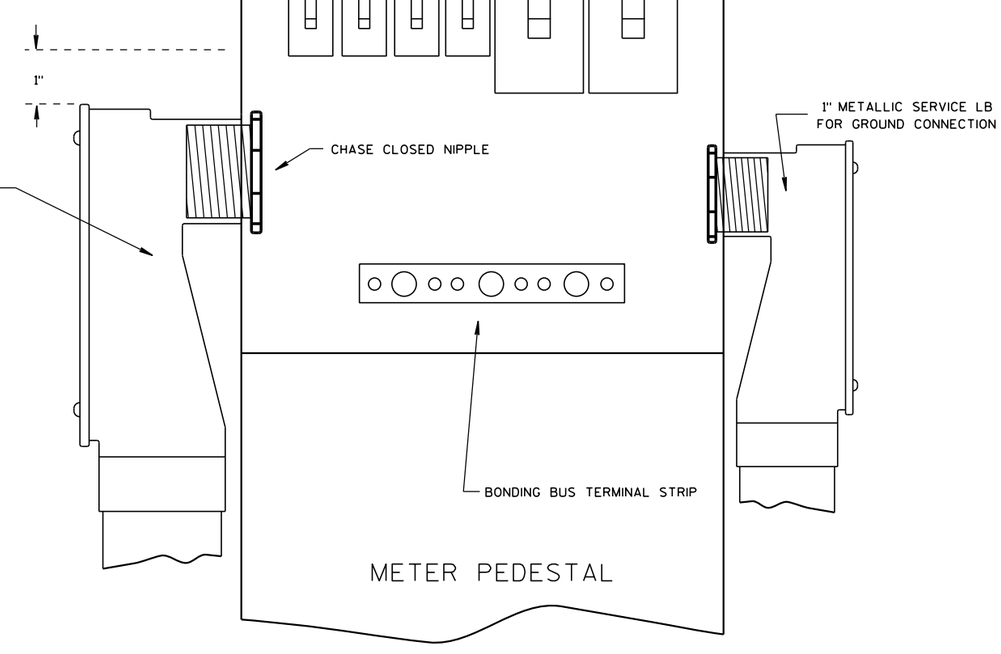
WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT OR SCHEDULE 80 PVC, NIPPLES AND/OR CONDULETS AS REQUIRED. CONDUIT LB SHALL BE OF METALLIC SERVICE ENTRANCE TYPE.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

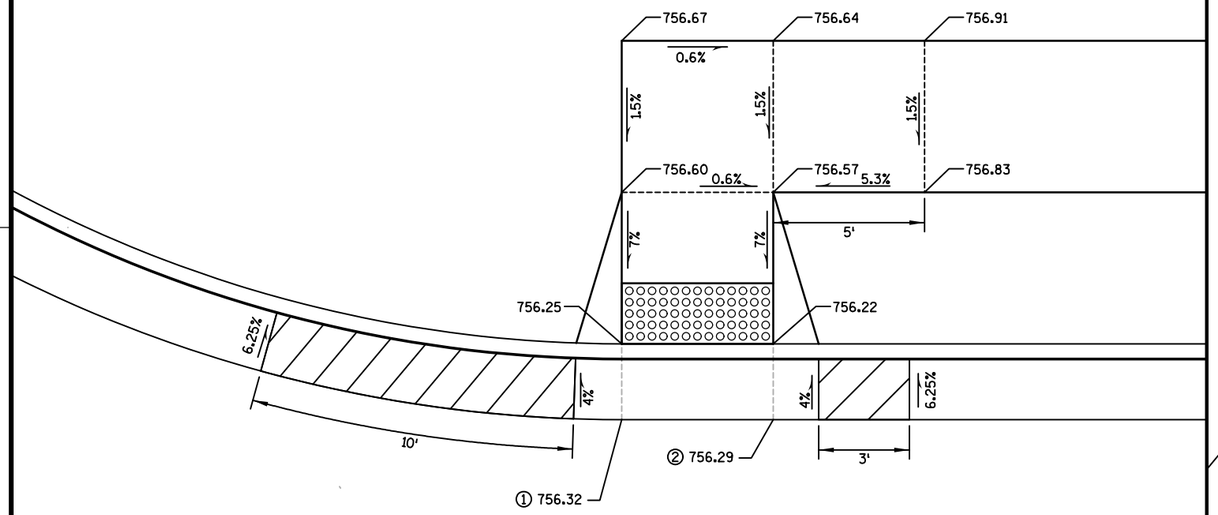
IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER NEC.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.



POINT	STATION	OFFSET
1	113+83.12	30.00' LT
2	113+88.12	30.00' LT

N



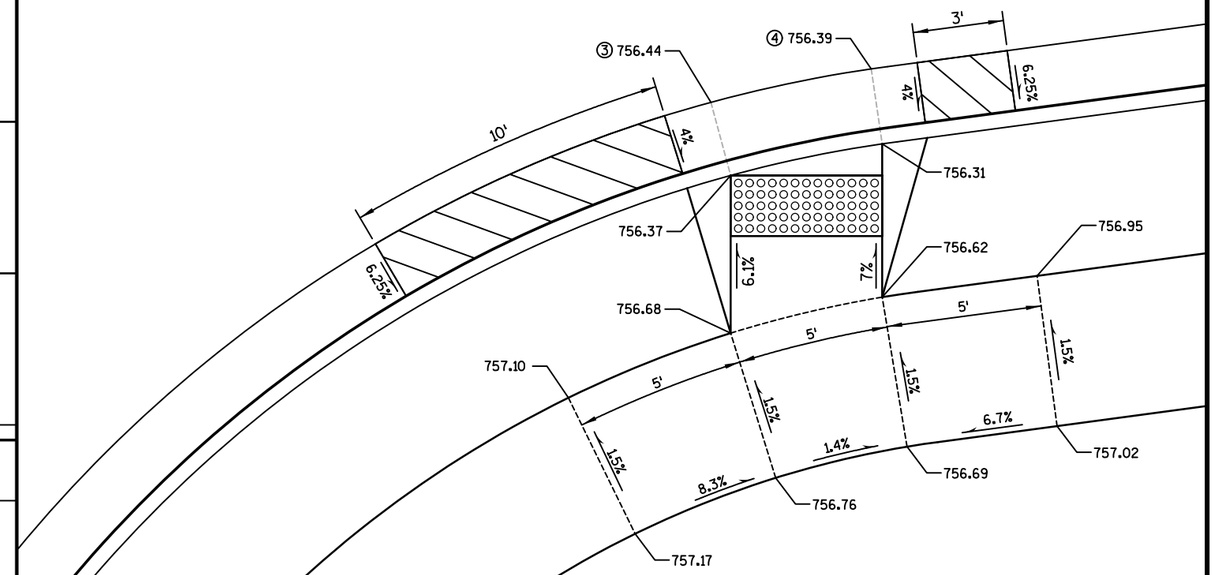
STH 116

STH 116 AND SPRUCE STREET
NORTHEAST QUADRANT

POINT	STATION	OFFSET
3	113+82.46	25.92' RT
4	113+87.75	24.82' RT

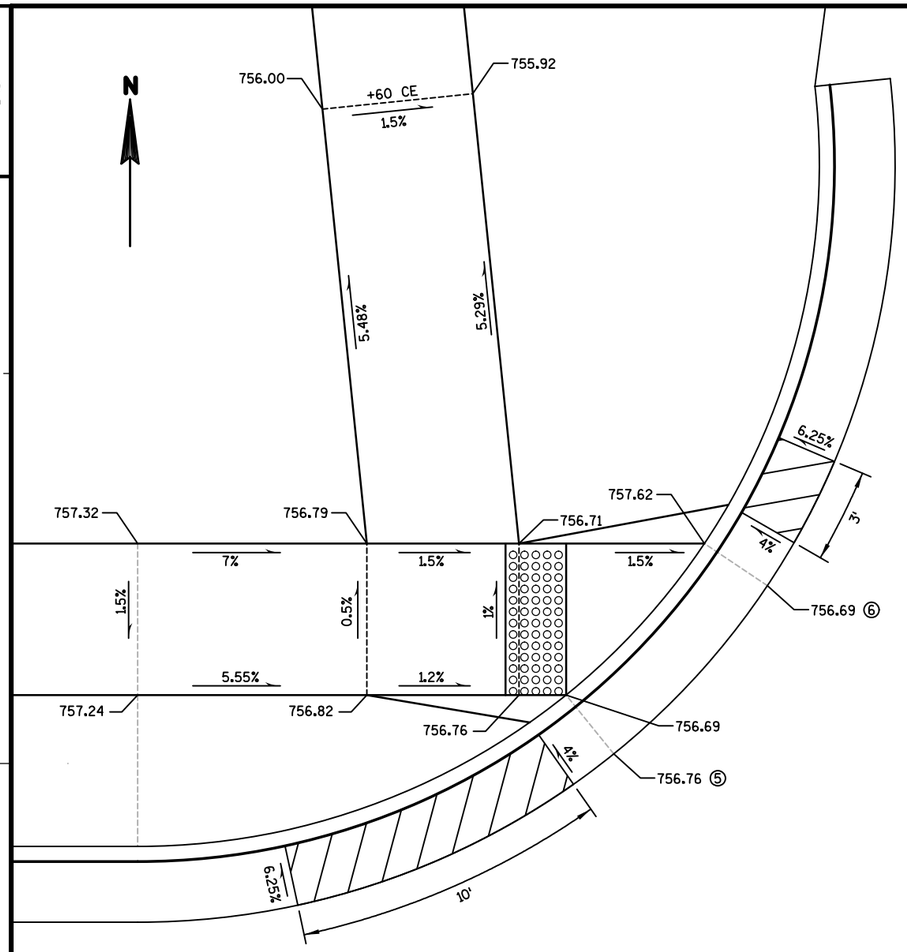
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STH 116



STH 116 AND SPRUCE STREET
SOUTHEAST QUADRANT

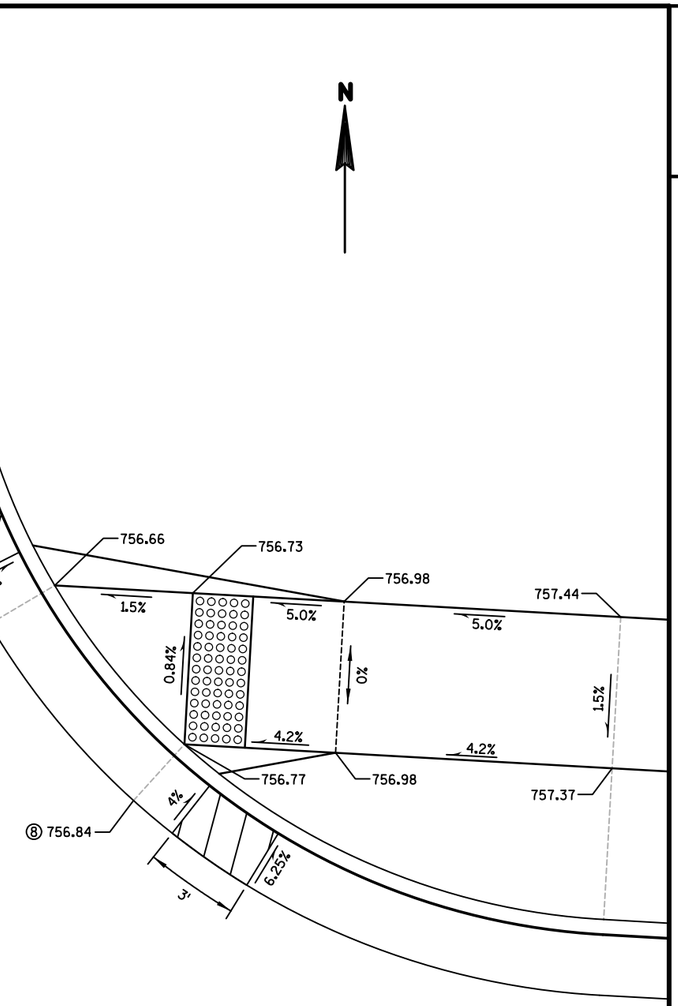
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION DETAILS: CURB RAMPS - SPRUCE ST.	SHEET 23	E



POINT	STATION	OFFSET
5	116+21.10	35.50' LT
6	116+26.22	41.01' LT

STH 116

STH 116 AND CEDAR STREET
NORTHWEST QUADRANT

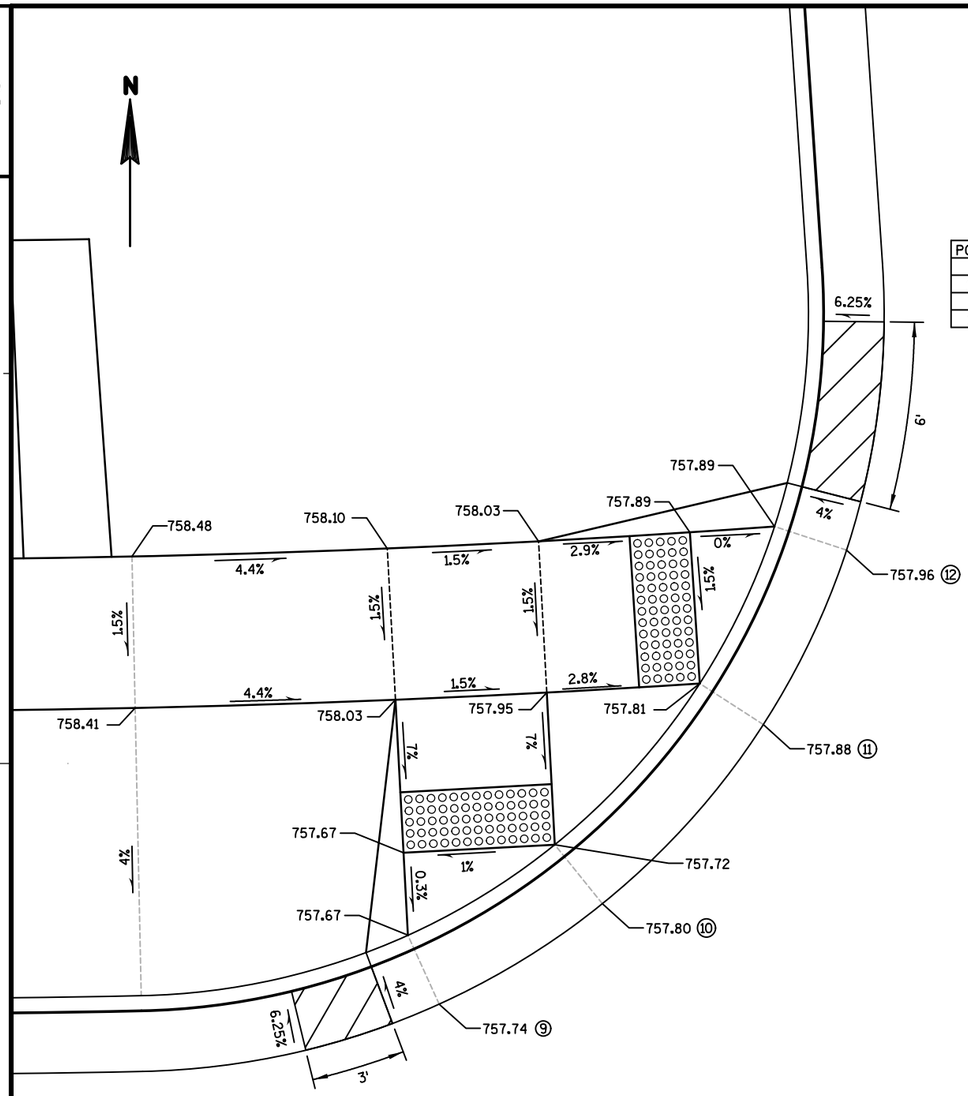


POINT	STATION	OFFSET
7	116+57.56	39.49' LT
8	116+62.27	33.62' LT

STH 116

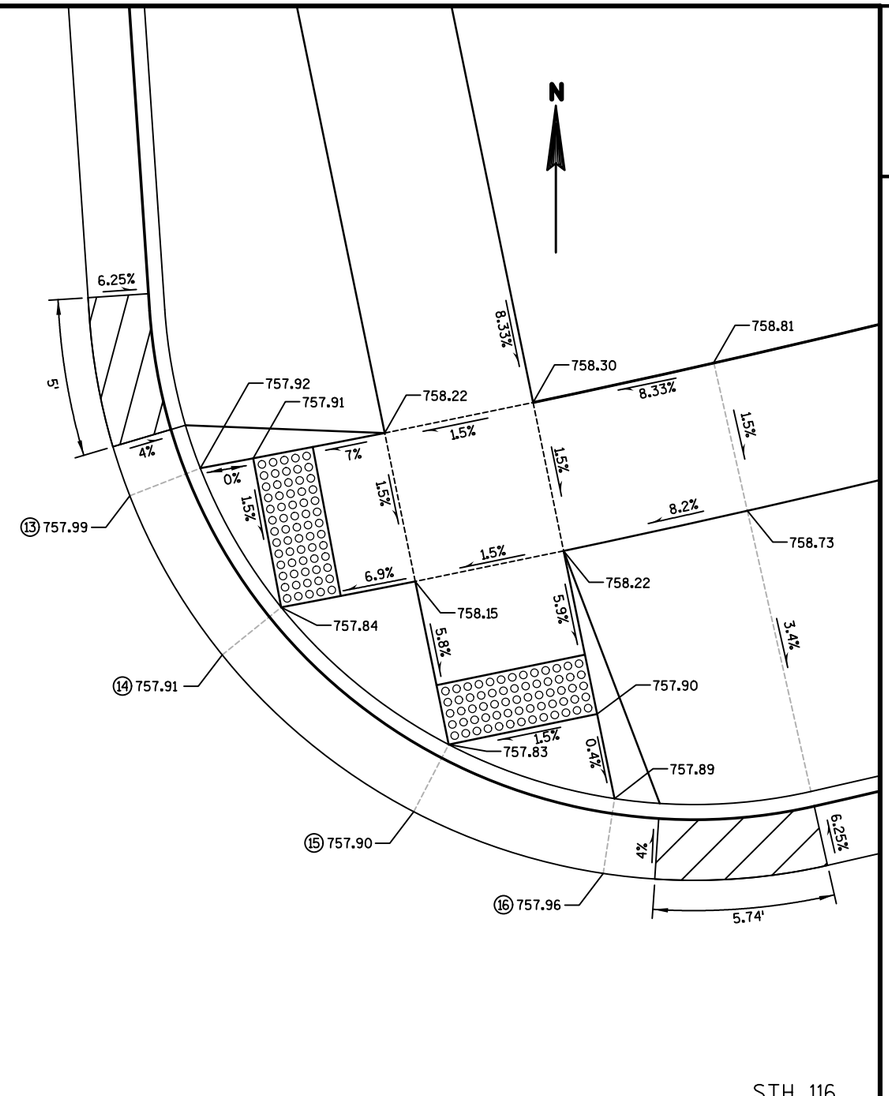
STH 116 AND CEDAR STREET
NORTHEAST QUADRANT

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION DETAILS: CURB RAMPS - CEDAR ST.	SHEET 24	E



POINT	STATION	OFFSET
9	119+60.92	17.90' LT
10	119+66.71	20.94' LT
11	119+72.70	26.51' LT
12	119+76.09	32.05' LT

STH 116 AND WEBSTER AVENUE
NORTHWEST QUADRANT



POINT	STATION	OFFSET
13	120+20.12	32.51' LT
14	120+22.34	26.81' LT
15	120+27.89	20.55' LT
16	120+33.86	17.31' LT

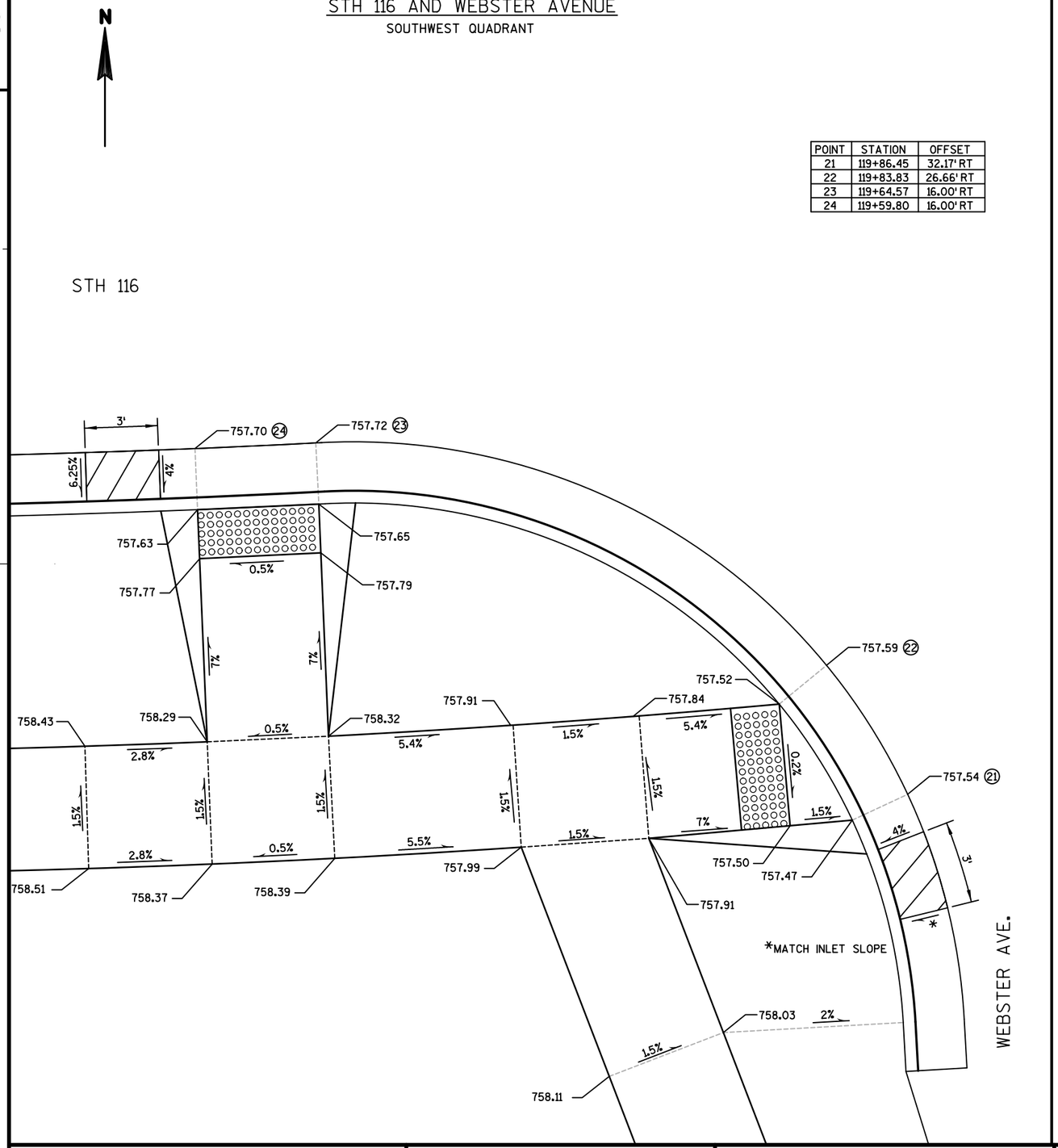
STH 116 AND WEBSTER AVENUE
NORTHEAST QUADRANT

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION DETAILS: CURB RAMPS - WEBSTER AVE.	SHEET 25	E

2

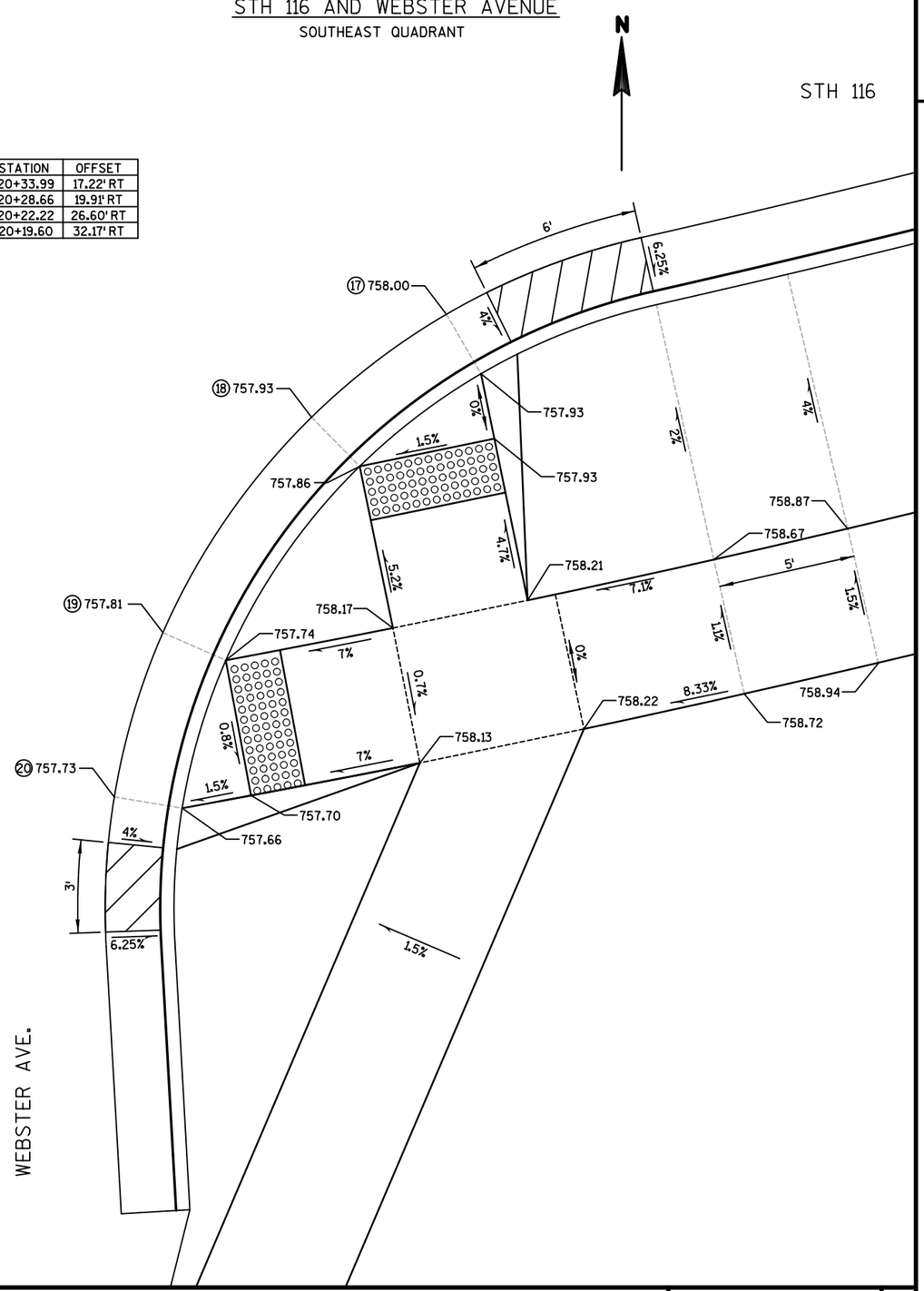
STH 116 AND WEBSTER AVENUE
SOUTHWEST QUADRANT

POINT	STATION	OFFSET
21	119+86.45	32.17' RT
22	119+83.83	26.66' RT
23	119+64.57	16.00' RT
24	119+59.80	16.00' RT



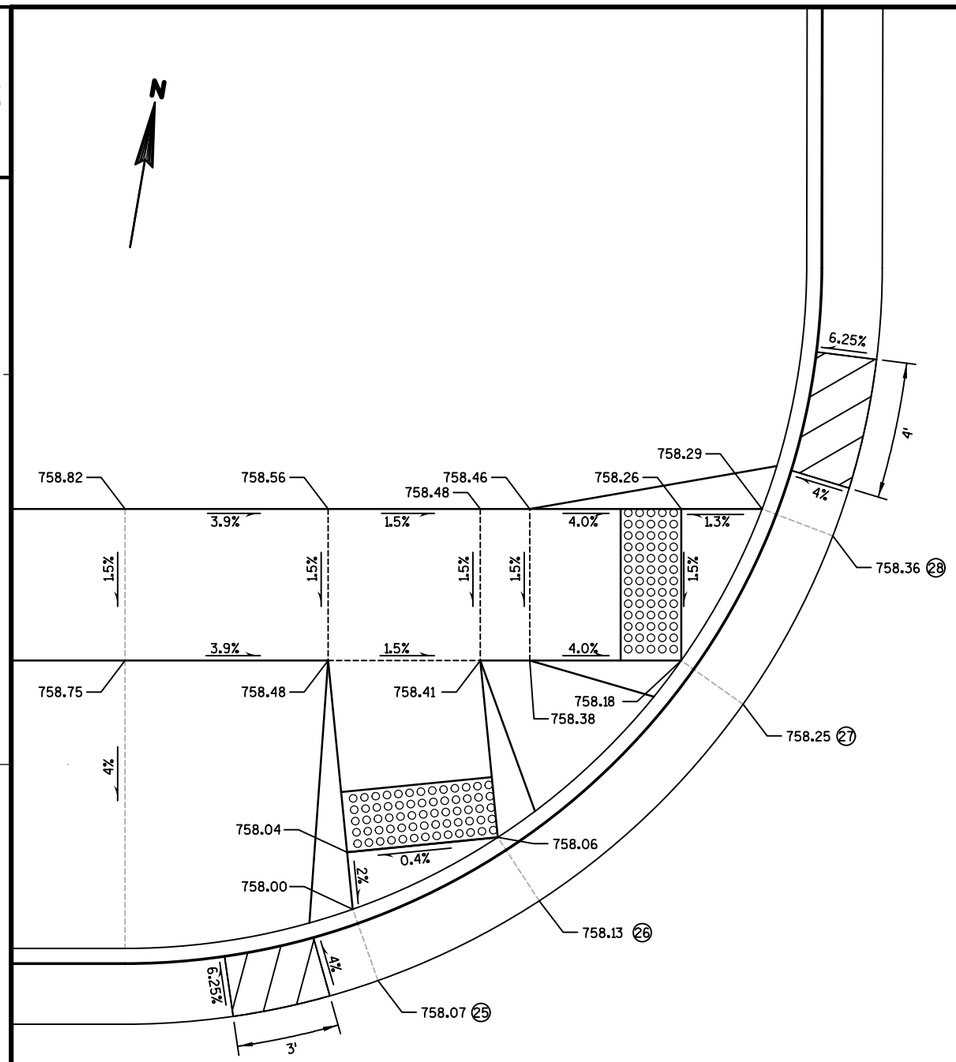
STH 116 AND WEBSTER AVENUE
SOUTHEAST QUADRANT

POINT	STATION	OFFSET
17	120+33.99	17.22' RT
18	120+28.66	19.91' RT
19	120+22.22	26.60' RT
20	120+19.60	32.17' RT



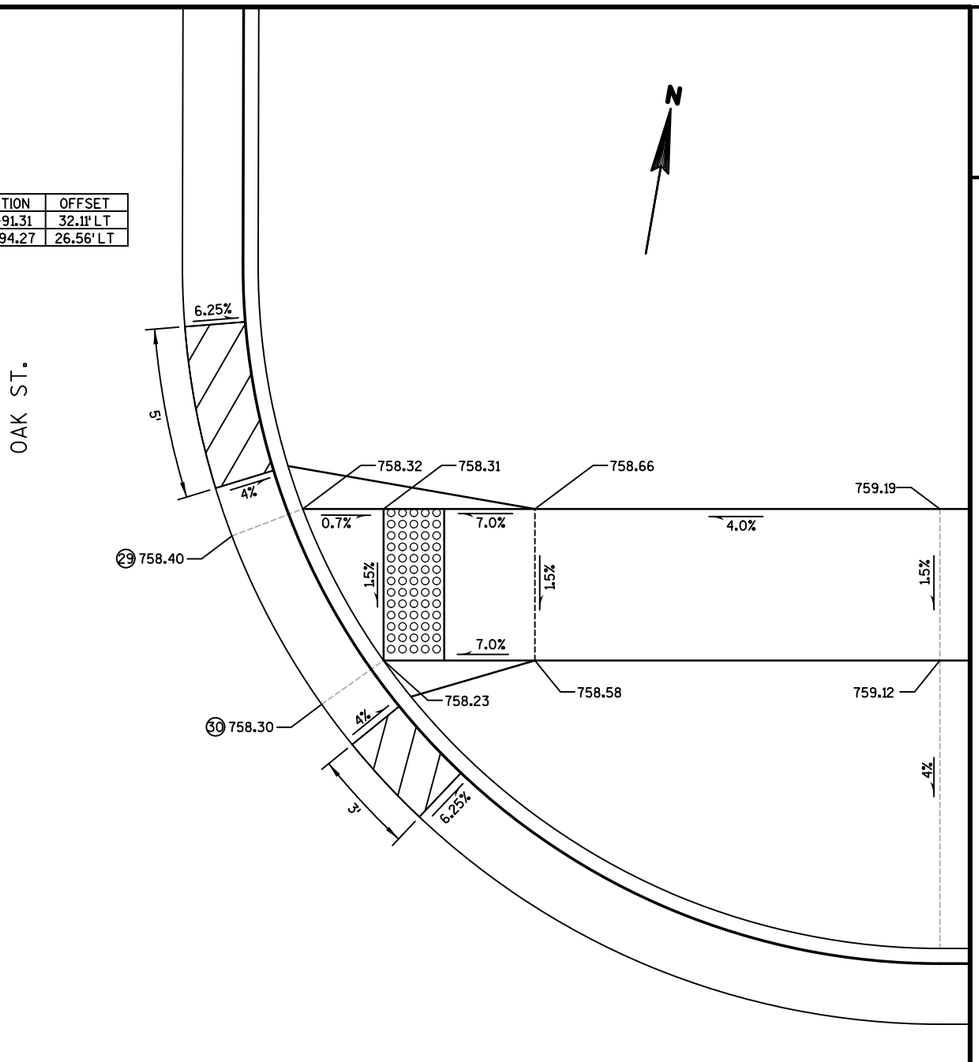
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION DETAILS: CURB RAMPS - WEBSTER AVE.	SHEET E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\021013_cd.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



POINT	STATION	OFFSET
25	123+49.02	17.44' LT
26	123+54.35	20.07' LT
27	123+61.08	26.56' LT
28	123+64.04	32.11' LT

STH 116 AND OAK STREET
NORTHWEST QUADRANT



POINT	STATION	OFFSET
29	123+91.31	32.11' LT
30	123+94.27	26.56' LT

STH 116 AND OAK STREET
NORTHEAST QUADRANT

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION DETAILS: CURB RAMPS - OAK ST.	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\021014_cd.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

2

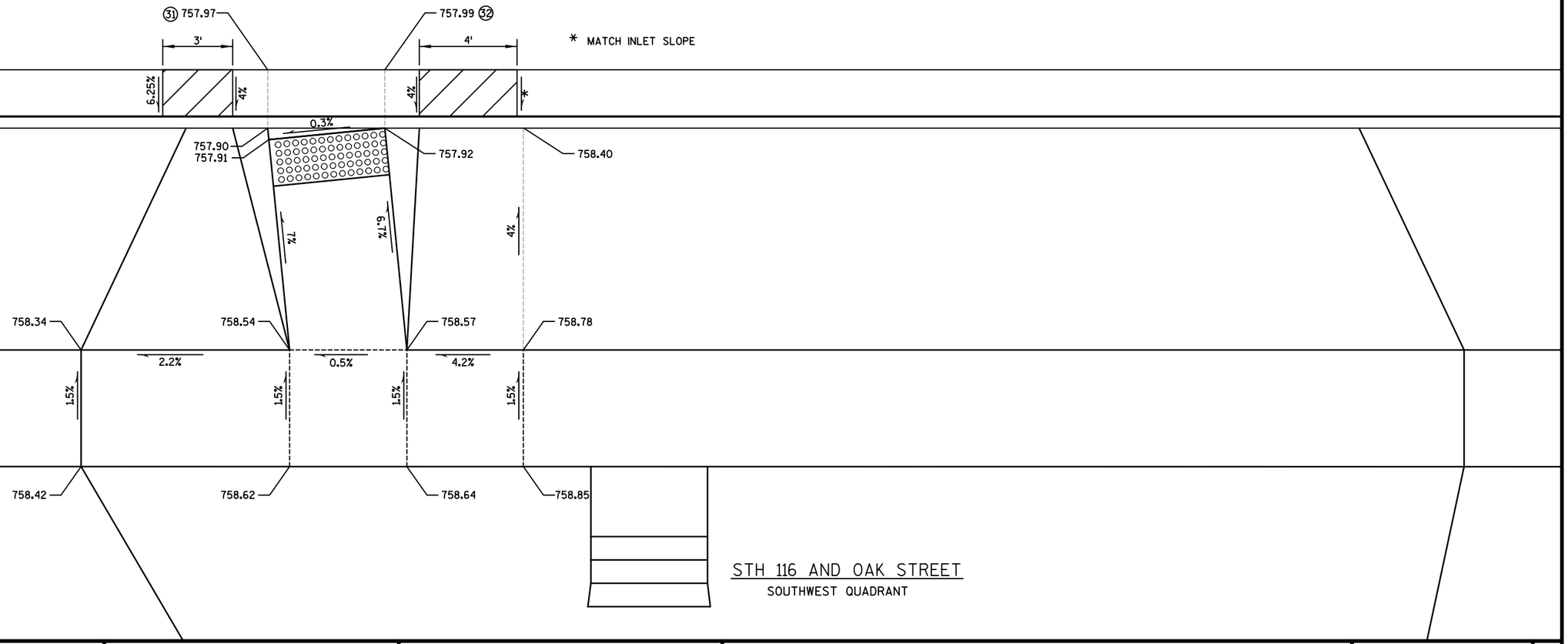
N

POINT	STATION	OFFSET
31	123+51.98	16.00' RT
32	123+57.01	16.00' RT

+50

124+00

STH 116

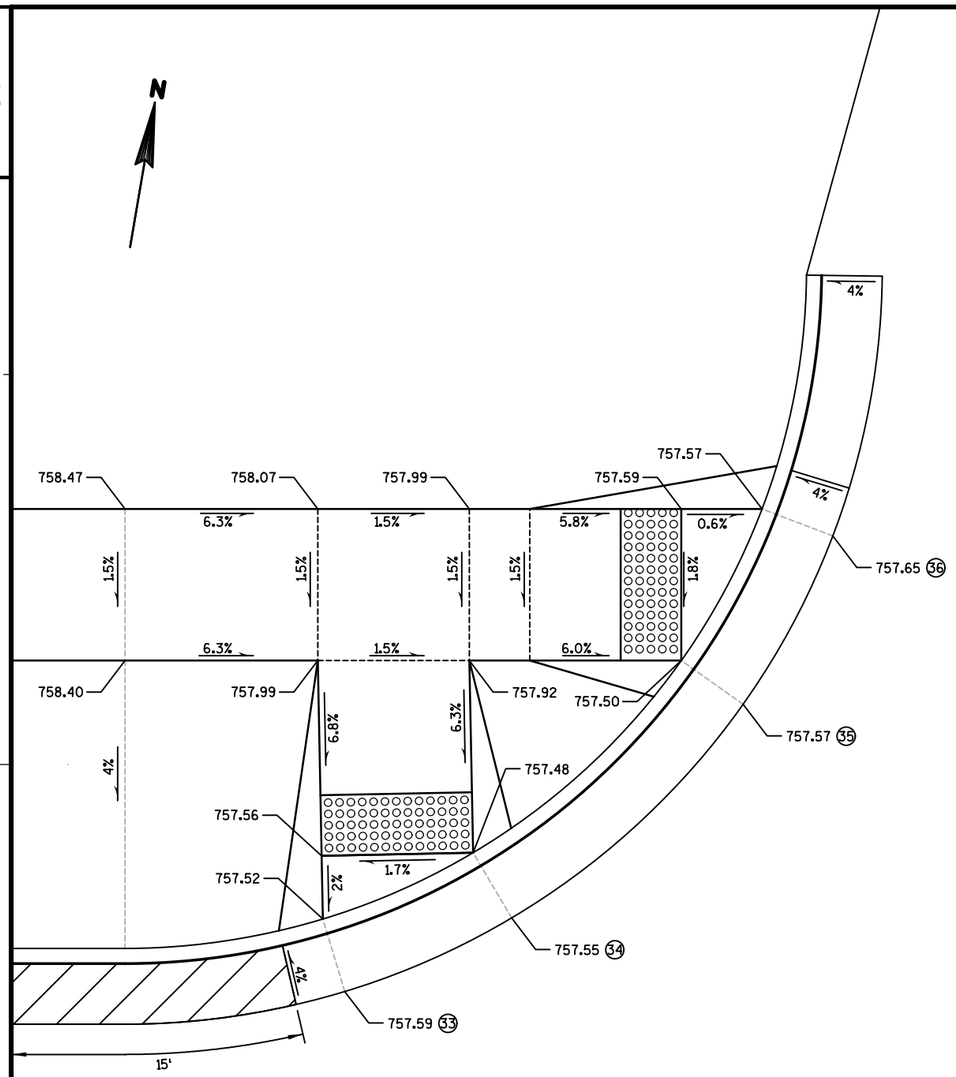


STH 116 AND OAK STREET

SOUTHWEST QUADRANT

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION DETAILS: CURB RAMPS - OAK ST.	SHEET 28	E

2

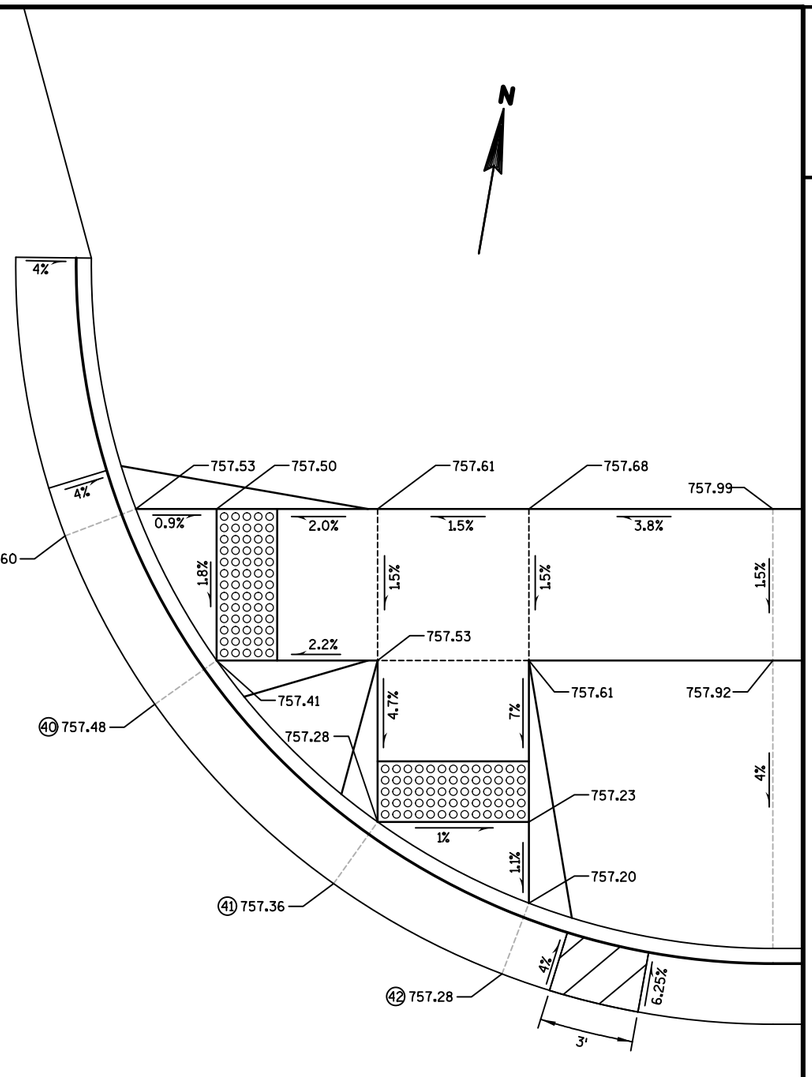


POINT	STATION	OFFSET
33	126+48.14	17.08' LT
34	126+53.65	19.51' LT
35	126+61.29	26.56' LT
36	126+64.25	32.11' LT

STH 116

STH 116 AND ELM STREET

NORTHWEST QUADRANT



POINT	STATION	OFFSET
39	126+91.53	32.11' LT
40	126+94.49	26.56' LT
41	127+00.38	20.64' LT
42	127+05.94	17.66' LT

STH 116

STH 116 AND ELM STREET

NORTHEAST QUADRANT

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION DETAILS: CURB RAMPS - ELM ST.	SHEET 29	E

2

+50

127+00

N

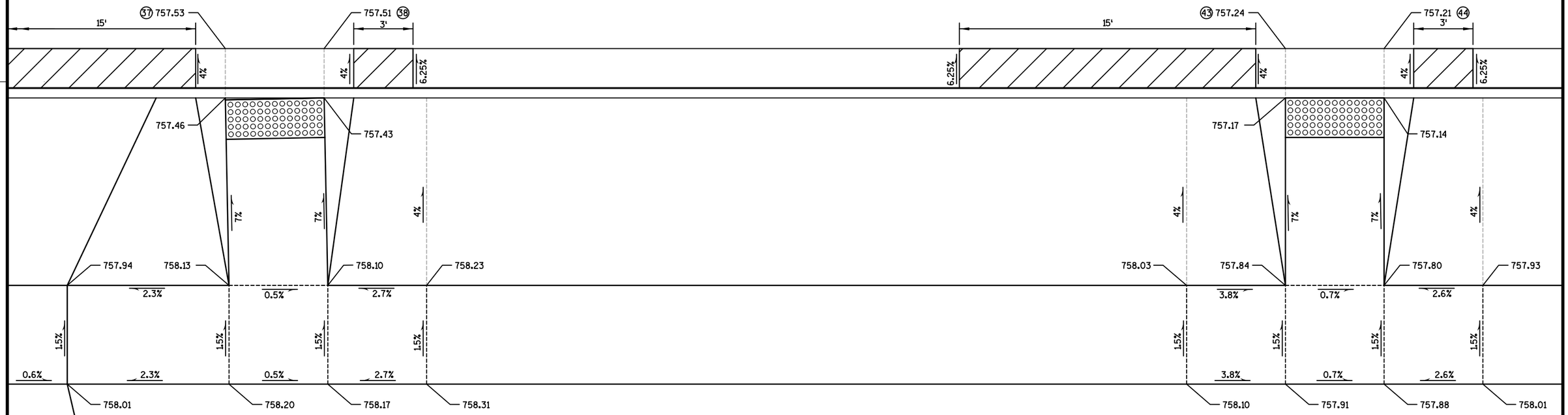
2

POINT	STATION	OFFSET
37	126+48.17	16.00' RT
38	126+53.17	16.00' RT

POINT	STATION	OFFSET
43	127+01.84	16.00' RT
44	127+06.84	16.00' RT

STH 116

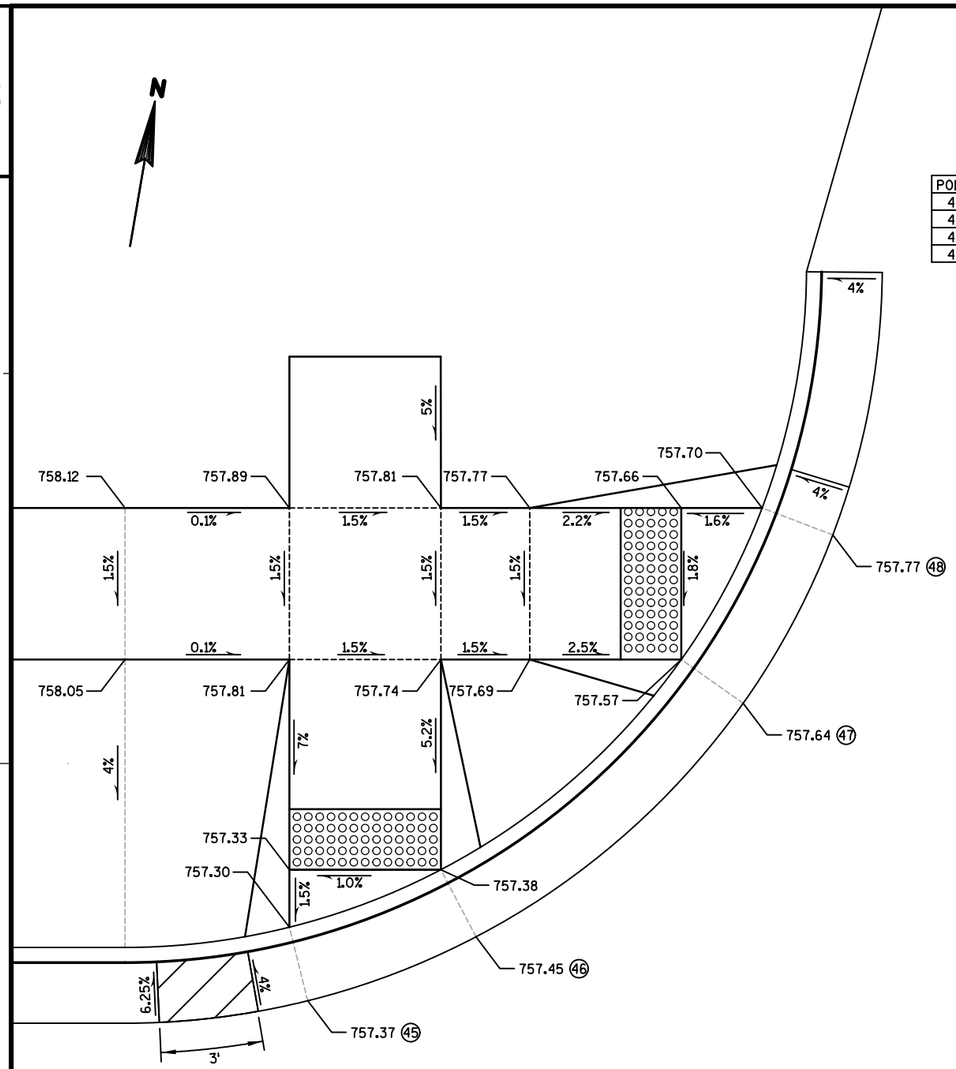
STH 116



STH 116 AND ELM STREET
NORTHWEST QUADRANT

STH 116 AND ELM STREET
NORTHEAST QUADRANT

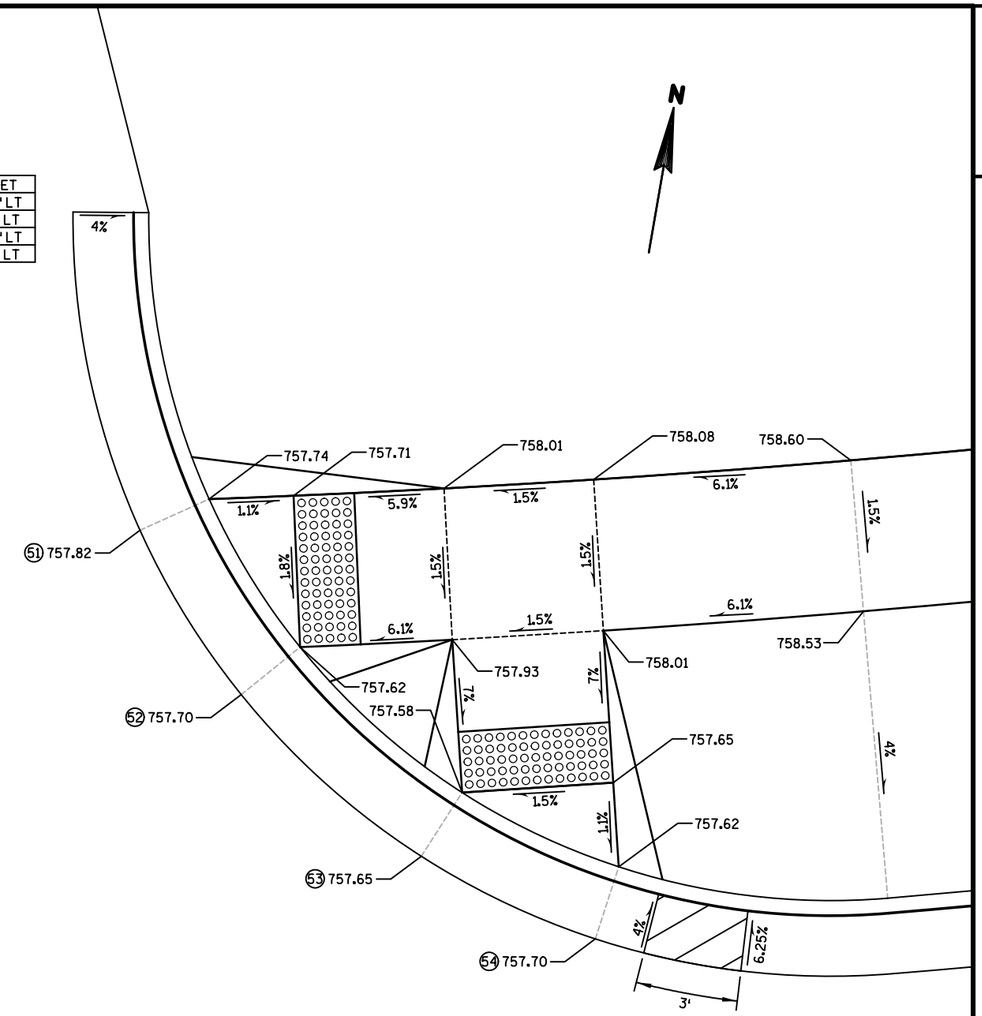
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION DETAILS: CURB RAMPS - ELM ST.	SHEET 30	E



POINT	STATION	OFFSET
45	130+80.79	16.74' LT
46	130+86.35	18.85' LT
47	130+95.16	26.56' LT
48	130+98.13	32.11' LT

STH 116

STH 116 AND ASH STREET
NORTHWEST QUADRANT



POINT	STATION	OFFSET
51	131+26.99	32.05' LT
52	131+30.34	26.51' LT
53	131+36.34	20.92' LT
54	131+42.16	17.87' LT

STH 116

STH 116 AND ASH STREET
NORTHEAST QUADRANT

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION DETAILS: CURB RAMPS - ASH ST.	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\021018_cd.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

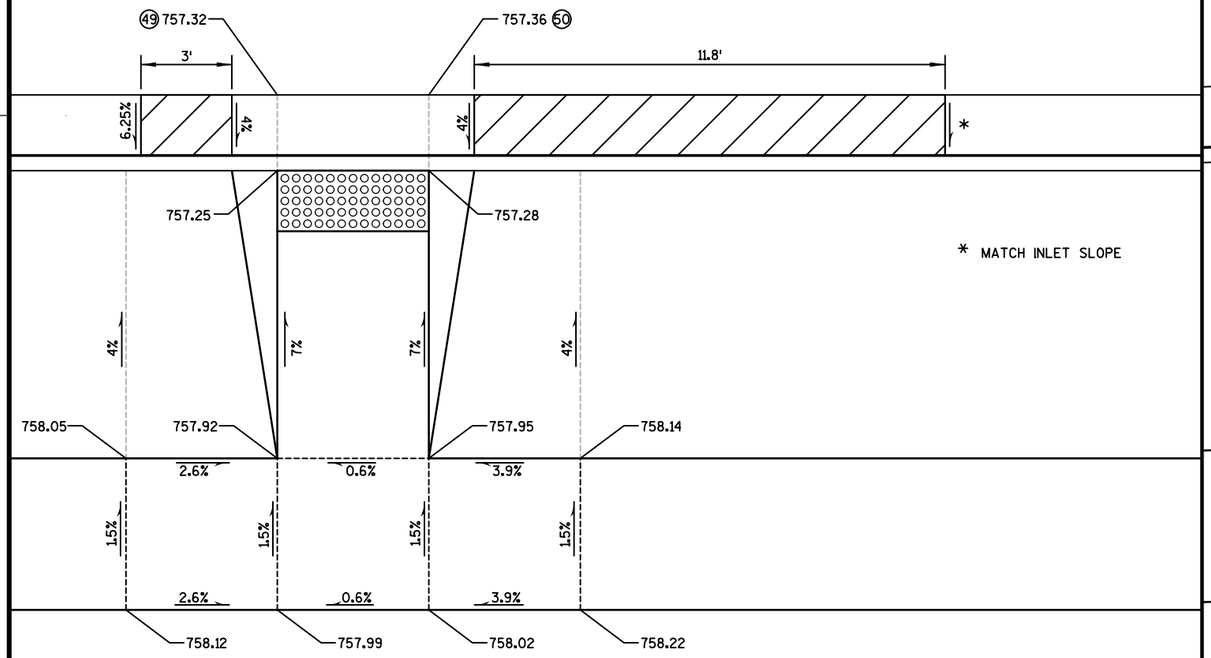
2

N

131+00

POINT	STATION	OFFSET
49	130+80.19	16.00' RT
50	130+85.19	16.00' RT

STH 116



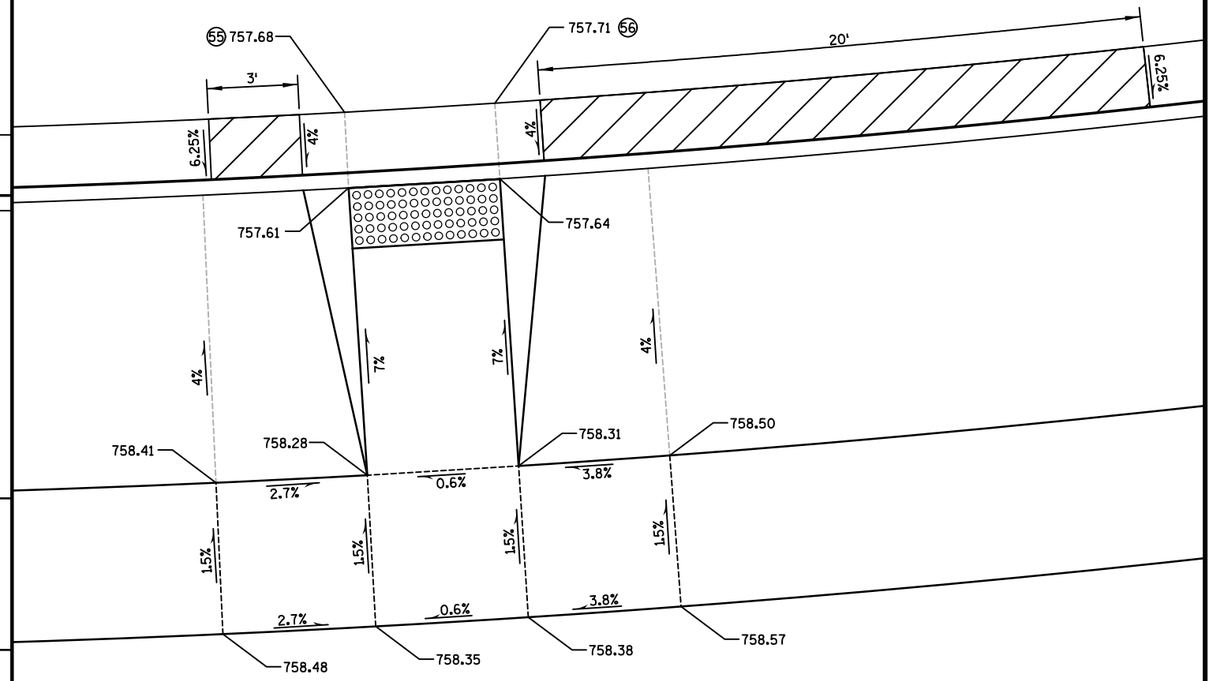
STH 116 AND ASH STREET

SOUTHWEST QUADRANT

2

POINT	STATION	OFFSET
55	131+38.31	16.00' RT
56	131+43.13	16.00' RT

STH 116



STH 116 AND ASH STREET

SOUTHEAST QUADRANT

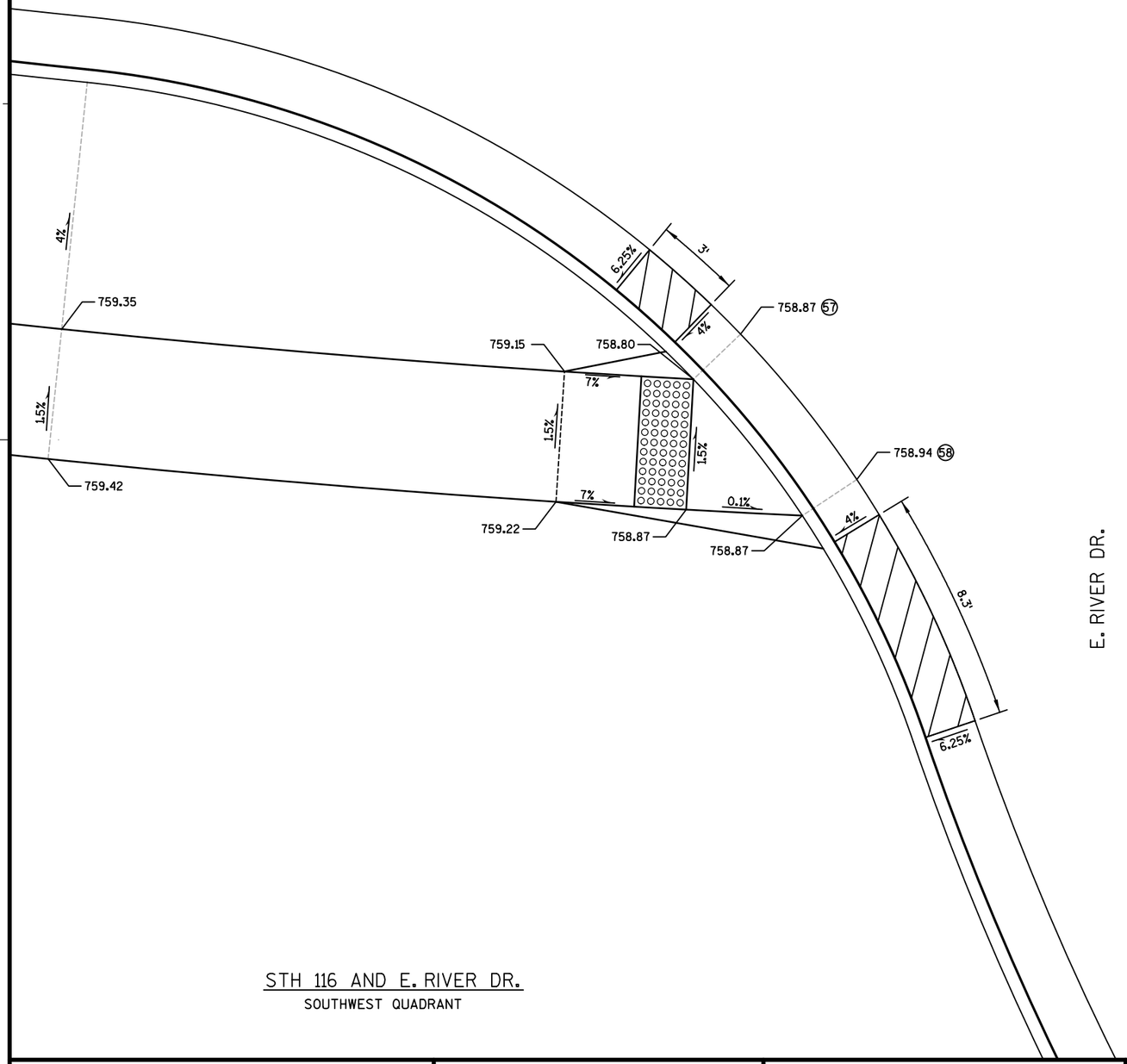
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION DETAILS: CURB RAMPS - ASH ST.	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\021019_cd.dgn PLOT DATE : 4/13/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

STH 116

POINT	STATION	OFFSET
57	132+99.76	26.18' RT
58	133+04.20	31.53' RT

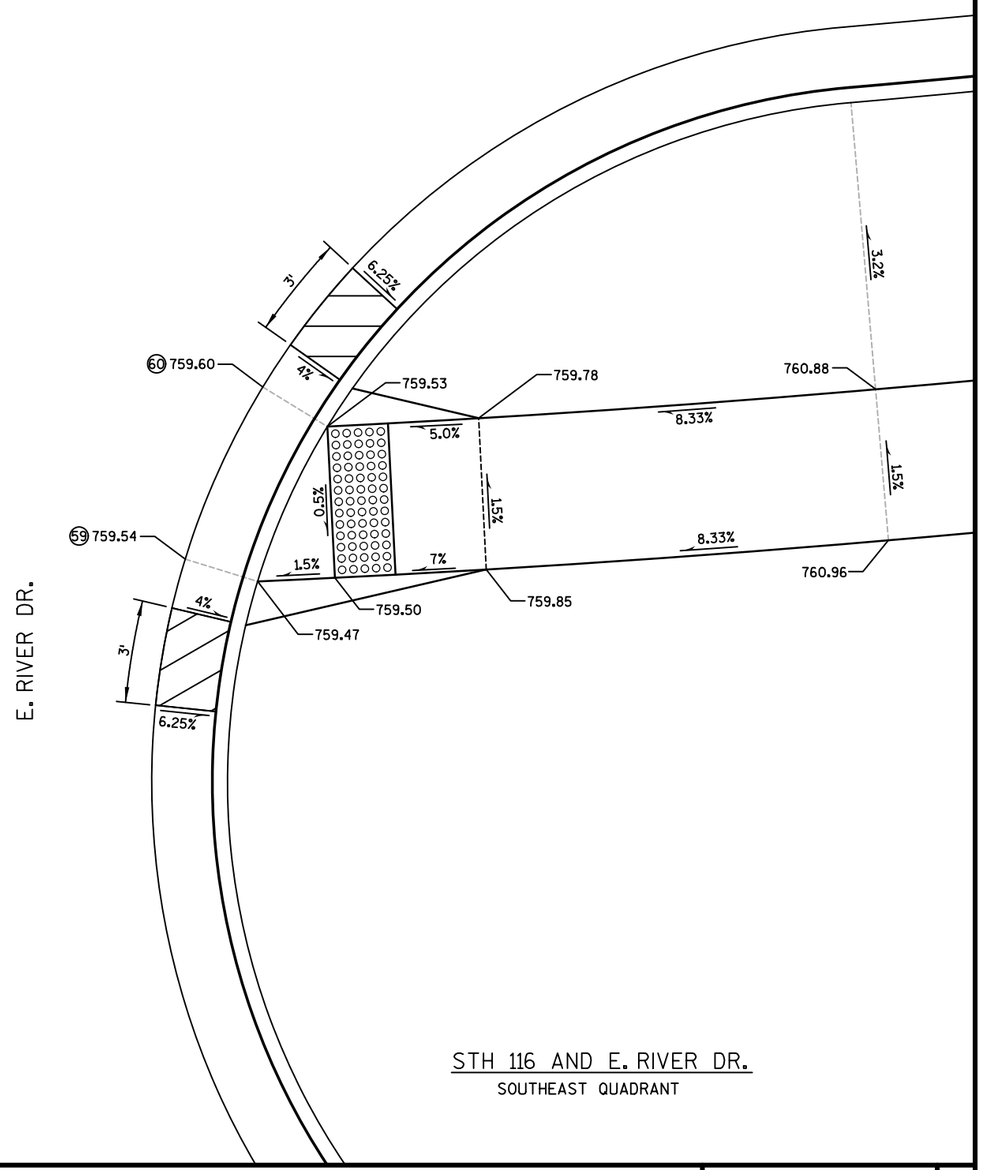


STH 116 AND E. RIVER DR.
SOUTHWEST QUADRANT

POINT	STATION	OFFSET
59	133+43.68	32.16' RT
60	133+46.32	26.60' RT

STH 116

2



STH 116 AND E. RIVER DR.
SOUTHEAST QUADRANT

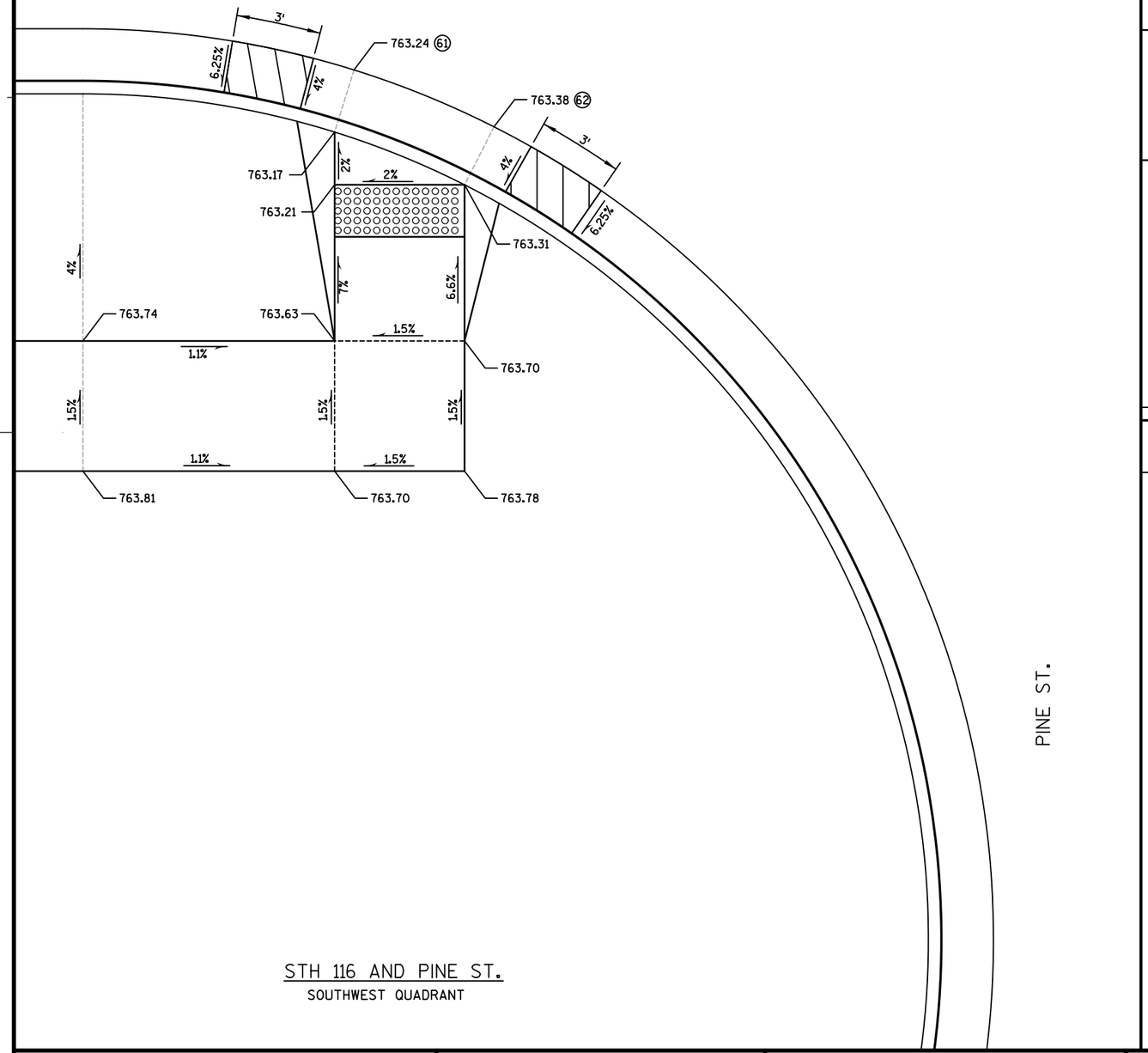
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION DETAILS: CURB RAMPS - E. RIVER DR.	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\021020_cd.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

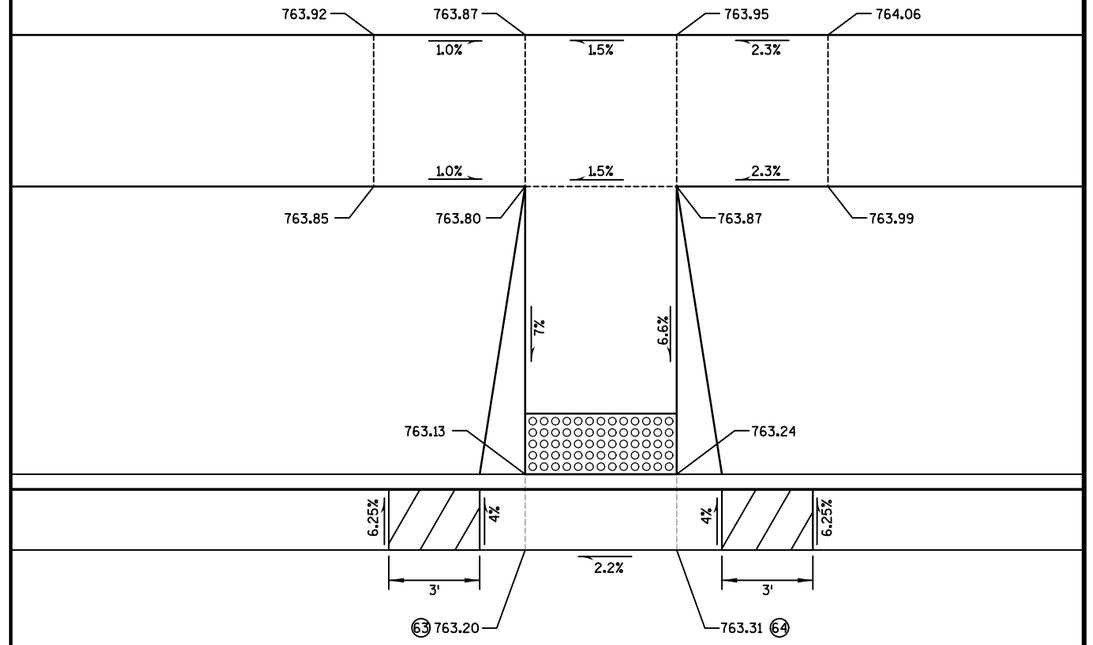
STH 116

POINT	STATION	OFFSET
61	134+94.12	17.59' RT
62	134+99.50	19.77' RT



STH 116 AND PINE ST.
SOUTHWEST QUADRANT

POINT	STATION	OFFSET
63	134+93.37	16.00' LT
64	134+98.37	16.00' LT



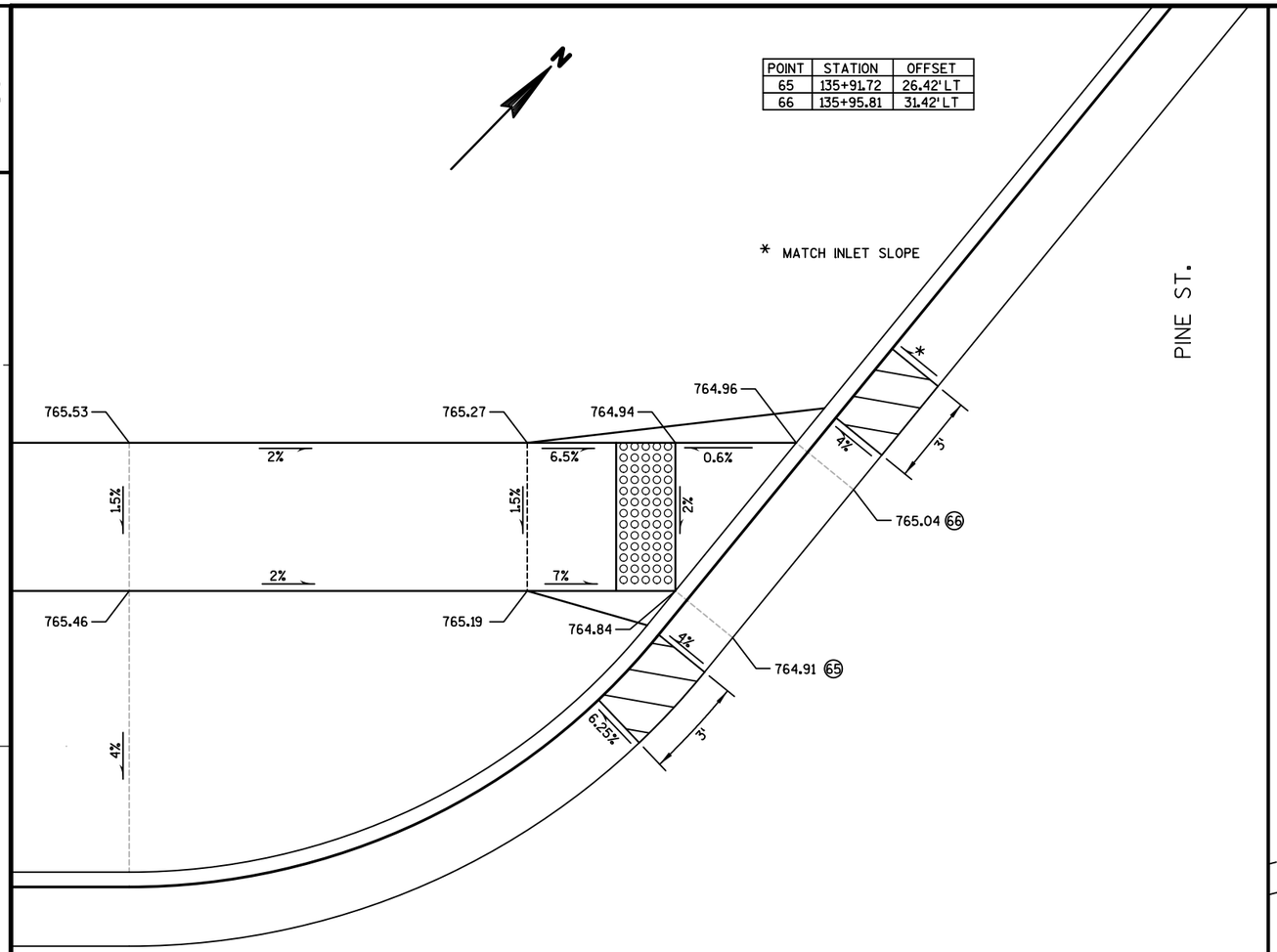
STH 116

STH 116 AND PINE ST.
NORTHWEST QUADRANT

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION DETAILS: CURB RAMPS - PINE ST.	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\021021_cd.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

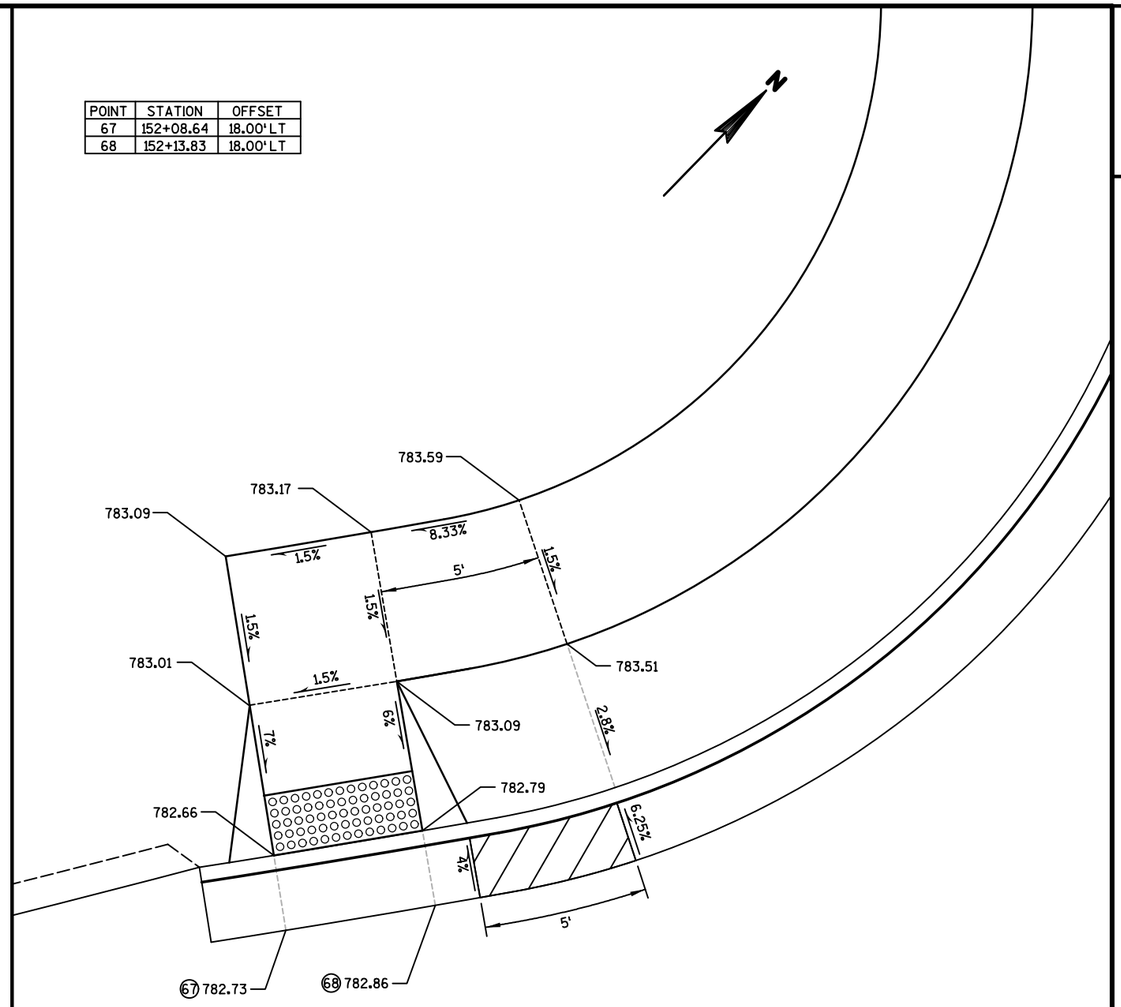
POINT	STATION	OFFSET
65	135+91.72	26.42' LT
66	135+95.81	31.42' LT



STH 116

STH 116 AND PINE ST.
NORTHWEST QUADRANT

POINT	STATION	OFFSET
67	152+08.64	18.00' LT
68	152+13.83	18.00' LT



STH 116

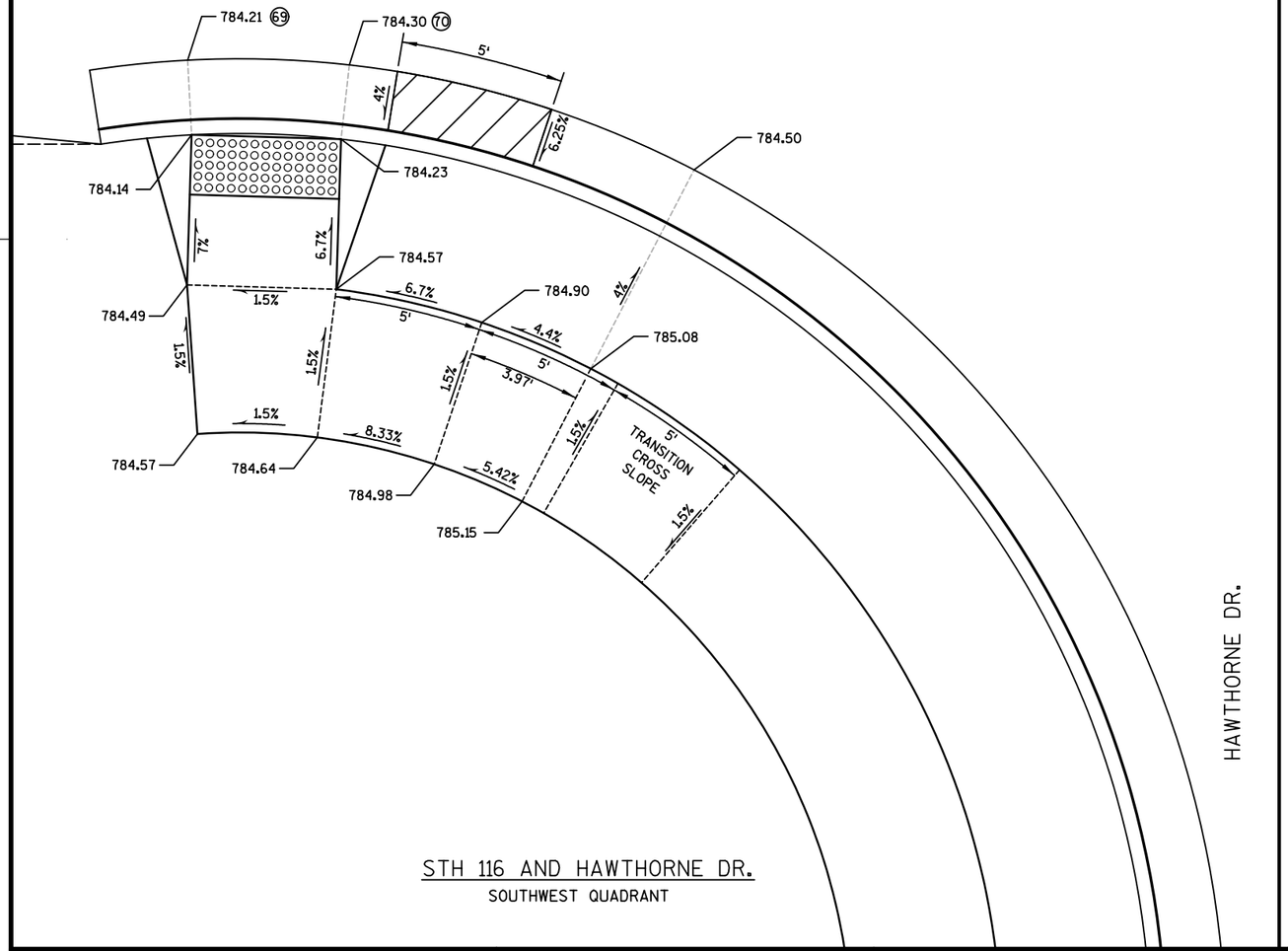
STH 116 AND FOX TR.
SOUTHWEST QUADRANT

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION DETAILS: CURB RAMPS - PINE ST./FOX TR	SHEET 35	E

2

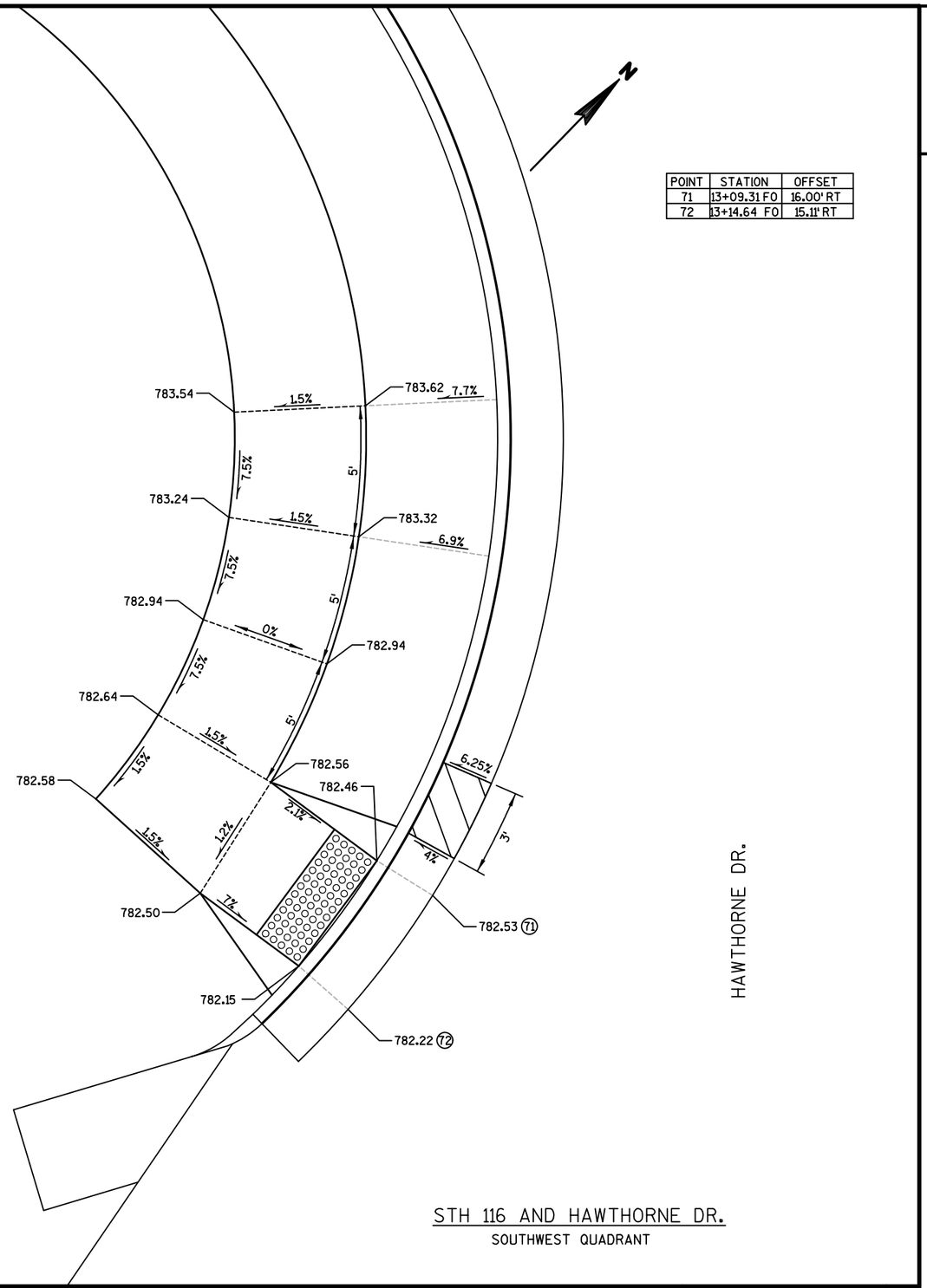
POINT	STATION	OFFSET
69	152+08.44	16.18' RT
70	152+13.57	17.22' RT

STH 116



STH 116 AND HAWTHORNE DR.
SOUTHWEST QUADRANT

POINT	STATION	OFFSET
71	13+09.31 FO	16.00' RT
72	13+14.64 FO	15.11' RT

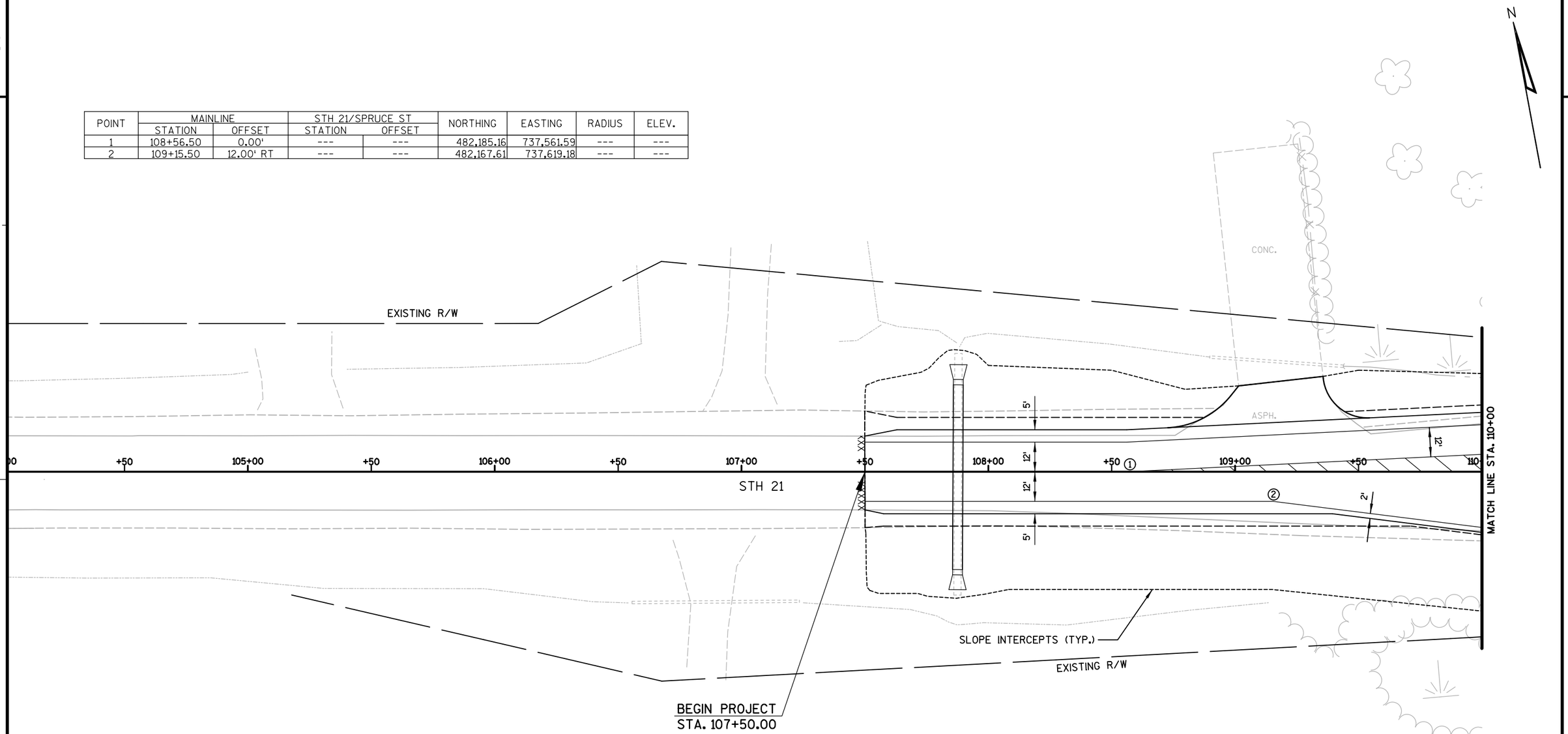


STH 116 AND HAWTHORNE DR.
SOUTHWEST QUADRANT

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION DETAILS: CURB RAMPS - HAWTHORNE DR	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\021023_cd.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 42

POINT	MAINLINE		STH 21/SPRUCE ST		NORTHING	EASTING	RADIUS	ELEV.
	STATION	OFFSET	STATION	OFFSET				
1	108+56.50	0.00'	---	---	482,185.16	737,561.59	---	---
2	109+15.50	12.00' RT	---	---	482,167.61	737,619.18	---	---



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	LAYOUT DETAIL - STH 116	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\021201_pd.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

POINT	MAINLINE STATION	MAINLINE OFFSET	STH 21/SPRUCE ST STATION	STH 21/SPRUCE ST OFFSET	NORTHING	EASTING	RADIUS	ELEV.
10	110+05.50	0.00'	---	---	482,171.00	737,709.92	---	---
11	110+51.50	29.00' RT	---	---	482,137.76	737,752.95	---	755.91
12	111+01.50	12.00' LT	---	---	482,173.82	737,806.62	---	---
13	110+98.91	28.89' LT	---	---	482,187.05	737,808.17	---	---
14	111+14.37	31.00' LT	---	---	482,191.50	737,821.24	---	755.68
15	112+45.78	29.00' RT	11+66.13	71.67' LT	482,119.29	737,946.35	---	756.49
16	112+45.78	74.00' RT	11+24.99	75.22' LT	482,074.49	737,942.07	45.00'	---
17	---	---	11+30.84	30.60' LT	482,080.11	737,986.72	---	756.83
18	112+71.99	31.00' LT	12+25.08	43.16' LT	482,176.53	737,978.15	---	756.60
19	---	---	12+55.05	12.00' LT	482,204.69	738,010.95	---	757.54
20	112+71.99	61.00' LT	12+55.05	42.00' LT	482,206.39	737,981.00	30.00'	---
21	---	---	12+73.70	12.00' LT	482,223.31	738,012.01	---	758.01
22	---	---	13+50.52	11.68' RT	482,298.67	738,039.99	---	---
23	118+18.55	210.96' LT	13+78.38	510.91' RT	482,298.26	738,539.99	500.00'	---
24	113+39.63	63.28' LT	12+54.32	26.54' RT	482,201.78	738,049.39	---	757.36
25	113+83.12	30.00' LT	---	---	482,163.96	738,088.99	---	756.30
26	113+83.12	75.00' LT	12+63.74	70.59' RT	482,208.70	738,093.90	45.00'	---
27	---	---	10+49.89	20.00' LT	481,999.11	737,996.91	---	758.13
28	---	---	10+77.00	27.00' RT	482,025.98	738,044.05	---	757.36
29	---	---	11+15.24	27.00' RT	482,064.22	738,044.24	---	757.06
30	113+88.29	24.74' RT	11+64.16	70.51' RT	482,108.98	738,088.17	---	756.38
31	113+94.26	69.34' RT	11+15.24	72.00' RT	482,064.00	738,089.24	45.00'	---
32	114+53.62	16.00' RT	---	---	482,110.55	738,154.06	---	756.62
33	115+73.68	0.00'	---	---	482,113.37	738,275.15	---	---
34	---	---	10+10.24	20.00' RT	481,959.26	738,036.71	---	759.40
35	112+73.91	38.87' RT	11+57.45	44.05' LT	482,106.79	737,973.41	---	756.66
36	112+93.61	40.20' LT	12+33.43	21.20' LT	482,183.63	738,000.54	---	756.94
37	113+56.54	38.68' LT	12+28.87	42.14' RT	482,175.49	738,063.52	---	756.55
38	113+58.90	41.51' RT	11+46.60	39.72' RT	482,095.52	738,057.13	---	756.72

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	LAYOUT DETAIL - STH 116	SHEET	E

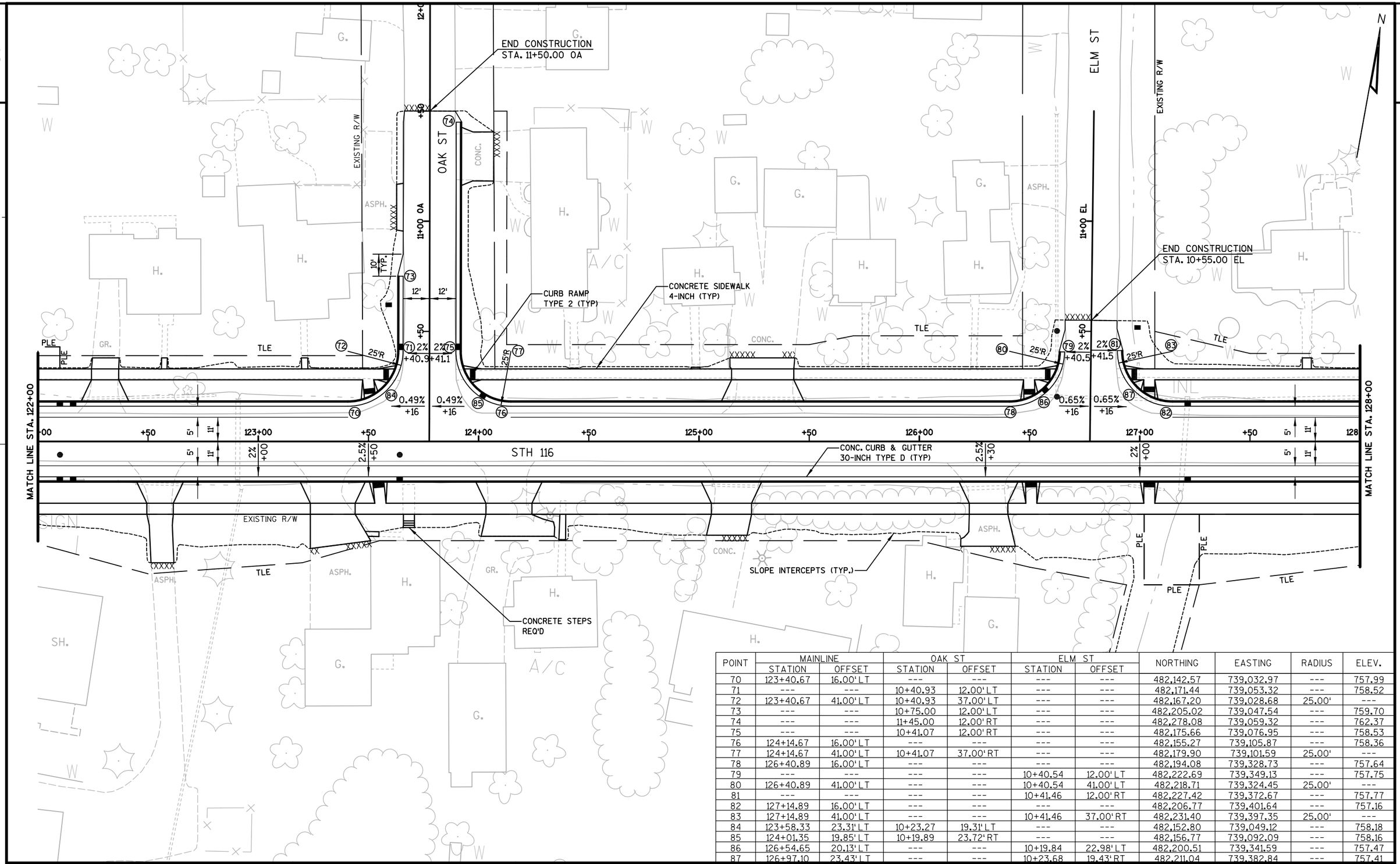
FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\021202_pd.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

POINT	MAINLINE STATION	MAINLINE OFFSET	CEDAR ST STATION	CEDAR ST OFFSET	NORTHING	EASTING	RADIUS	ELEV.
40	116+05.11	30.00' LT	---	---	482,139.77	738,309.67	---	756.93
41	---	---	10+59.07	11.53' LT	482,164.74	738,337.39	---	756.52
42	116+05.11	55.00' LT	10+58.81	36.53' LT	482,164.62	738,312.39	25.00'	---
43	---	---	10+59.17	11.50' RT	482,164.70	738,360.42	---	756.52
44	---	---	10+48.77	11.50' RT	482,154.31	738,360.36	---	756.56
45	116+77.62	27.07' LT	---	---	482,129.50	738,381.25	---	756.79
46	116+79.22	52.02' LT	10+48.77	36.50' RT	482,154.16	738,385.36	25.00'	---
47	116+69.78	11.54' LT	---	---	482,114.84	738,371.89	---	---
48	118+49.69	0.00'	---	---	482,085.24	738,549.72	---	757.47
49	118+50.04	11.00' LT	---	---	482,096.14	738,551.18	---	757.25
65	116+24.09	38.28' LT	10+40.33	19.69' LT	482,146.05	738,329.12	---	756.73
66	116+63.56	32.53' LT	10+30.86	19.06' RT	482,136.35	738,367.81	---	756.87

POINT	MAINLINE STATION	MAINLINE OFFSET	WEBSTER AVE STATION	WEBSTER AVE OFFSET	NORTHING	EASTING	RADIUS	ELEV.
50	119+50.68	16.00' LT	---	---	482,091.04	738,651.61	---	757.65
51	---	---	10+40.63	20.67' LT	482,114.88	738,678.79	---	758.08
52	119+50.68	41.00' LT	10+40.63	45.67' LT	482,115.94	738,653.81	25.00'	---
53	---	---	10+52.00	20.67' LT	482,126.25	738,679.27	---	758.29
54	---	---	10+72.00	17.33' RT	482,144.66	738,718.08	---	758.79
55	---	---	10+40.21	17.33' RT	482,112.86	738,716.74	---	758.07
56	120+41.44	16.00' LT	---	---	482,092.14	738,738.98	---	758.03
57	120+41.44	36.00' LT	10+40.21	37.33' RT	482,112.02	738,736.72	20.00'	---
58	119+64.82	16.00' RT	---	---	482,058.10	738,663.40	---	757.72
59	---	---	9+55.24	16.50' LT	482,029.81	738,686.84	---	757.48
60	119+64.82	41.00' RT	10+57.24	41.50' LT	482,033.14	738,661.98	25.00'	---
61	---	---	9+54.30	16.50' RT	482,027.29	738,719.24	---	757.62
62	---	---	9+64.01	16.50' RT	482,036.82	738,720.26	---	757.66
63	120+41.24	16.00' RT	---	---	482,060.33	738,742.40	---	758.10
64	120+41.23	41.00' RT	10+64.01	41.50' RT	482,035.49	738,745.22	25.00'	---
67	119+81.59	23.62' RT	9+74.89	23.79' LT	482,049.82	738,680.60	---	757.62
68	119+69.75	23.35' LT	10+22.55	28.40' LT	482,097.15	738,670.30	---	757.83
69	120+24.79	23.42' LT	10+25.62	23.65' RT	482,098.02	738,722.44	---	757.86
69A	120+25.85	22.19' RT	9+80.16	22.42' LT	482,052.63	738,727.02	---	757.88

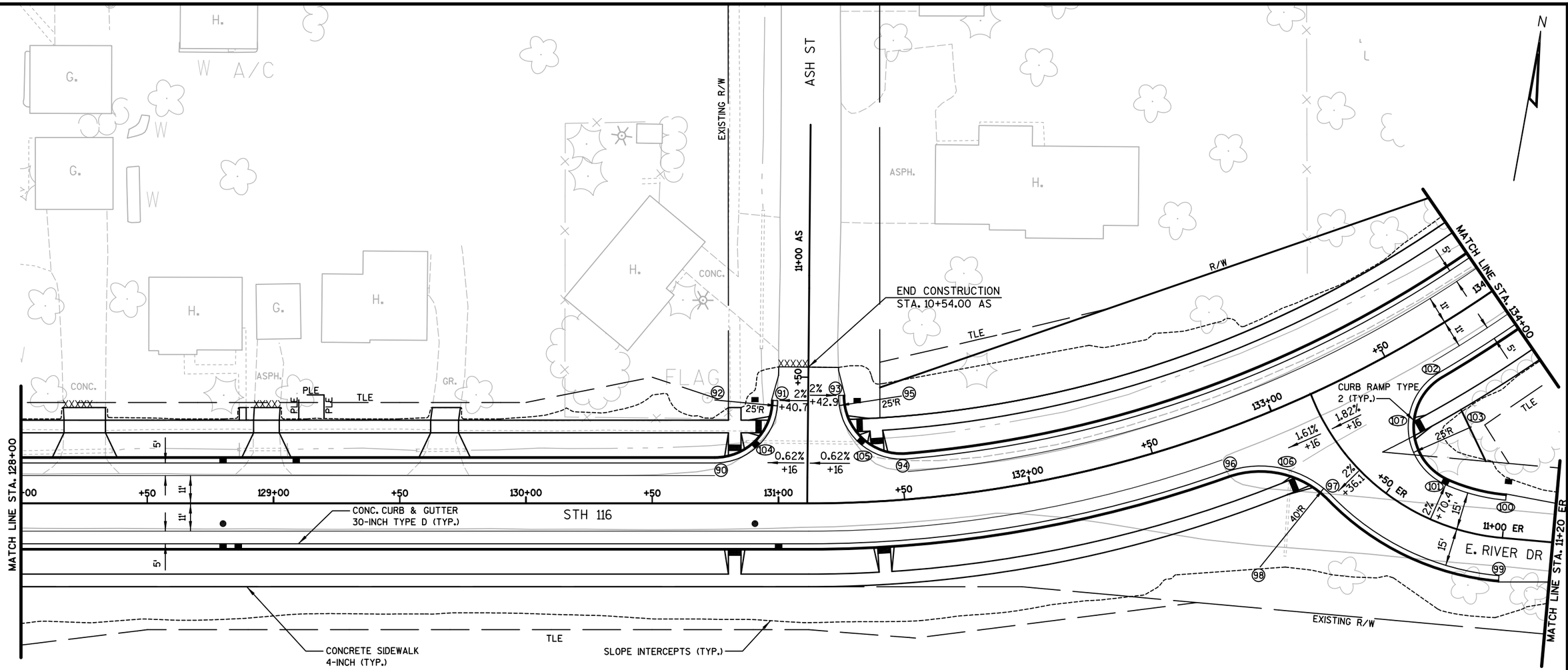
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	LAYOUT DETAIL - STH 116	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\021203_pd.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



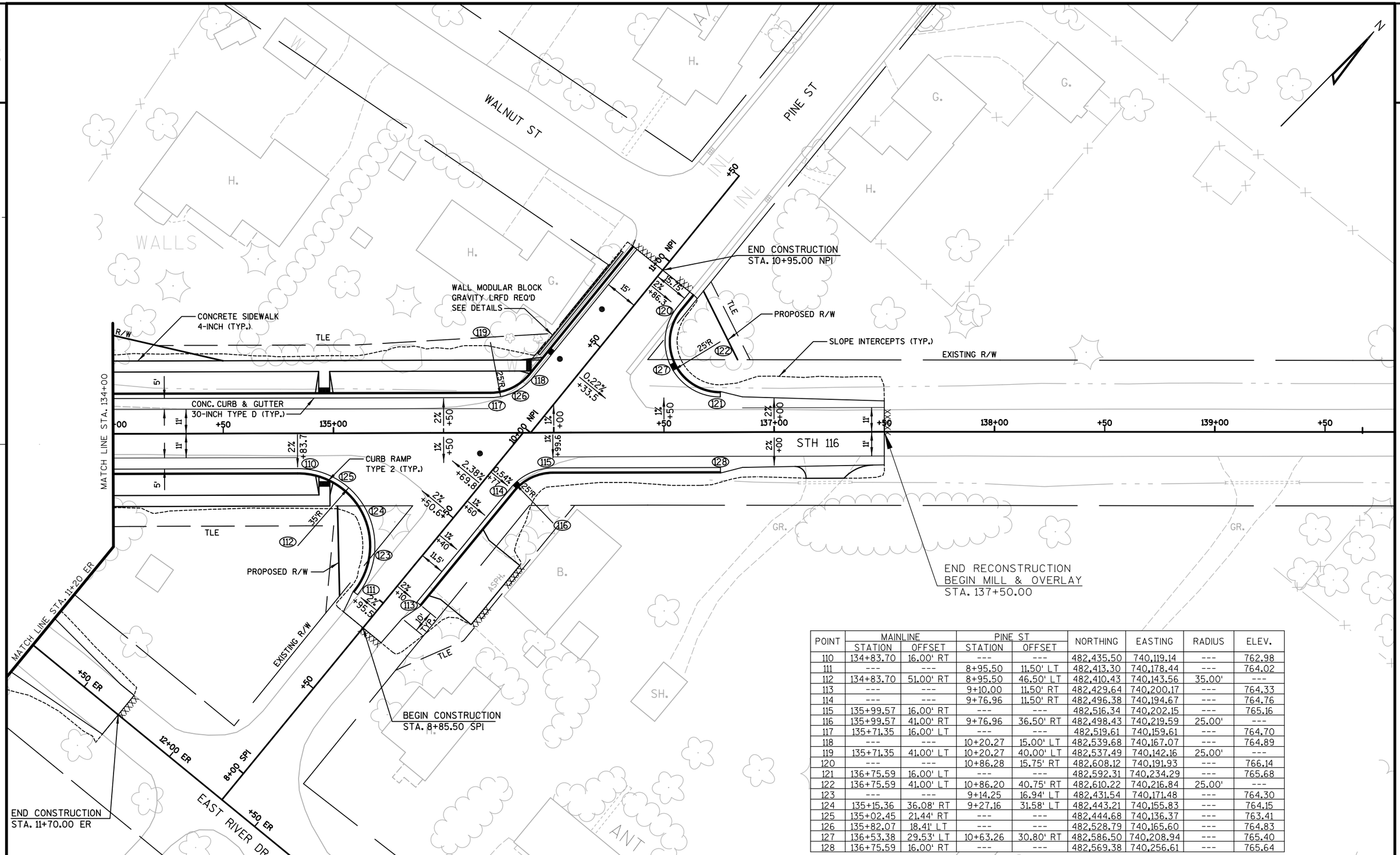
POINT	MAINLINE		OAK ST		ELM ST		NORTHING	EASTING	RADIUS	ELEV.
	STATION	OFFSET	STATION	OFFSET	STATION	OFFSET				
70	123+40.67	16.00' LT	---	---	---	---	482,142.57	739,032.97	---	757.99
71	---	---	10+40.93	12.00' LT	---	---	482,171.44	739,053.32	---	758.52
72	123+40.67	41.00' LT	10+40.93	37.00' LT	---	---	482,167.20	739,028.68	25.00'	---
73	---	---	10+75.00	12.00' LT	---	---	482,205.02	739,047.54	---	759.70
74	---	---	11+45.00	12.00' RT	---	---	482,278.08	739,059.32	---	762.37
75	---	---	10+41.07	12.00' RT	---	---	482,175.66	739,076.95	---	758.53
76	124+14.67	16.00' LT	---	---	---	---	482,155.27	739,105.87	---	758.36
77	124+14.67	41.00' LT	10+41.07	37.00' RT	---	---	482,179.90	739,101.59	25.00'	---
78	126+40.89	16.00' LT	---	---	---	---	482,194.08	739,328.73	---	757.64
79	---	---	---	---	10+40.54	12.00' LT	482,222.69	739,349.13	---	757.75
80	126+40.89	41.00' LT	---	---	10+40.54	41.00' LT	482,218.71	739,324.45	25.00'	---
81	---	---	---	---	10+41.46	12.00' RT	482,227.42	739,372.67	---	757.77
82	127+14.89	16.00' LT	---	---	---	---	482,206.77	739,401.64	---	757.16
83	127+14.89	41.00' LT	---	---	10+41.46	37.00' RT	482,231.40	739,397.35	25.00'	---
84	123+58.33	23.31' LT	10+23.27	19.31' LT	---	---	482,152.80	739,049.12	---	758.18
85	124+01.35	19.85' LT	10+19.89	23.72' RT	---	---	482,156.77	739,092.09	---	758.16
86	126+54.65	20.13' LT	---	---	10+19.84	22.98' LT	482,200.51	739,341.59	---	757.47
87	126+97.10	23.43' LT	---	---	10+23.68	19.43' RT	482,211.04	739,382.84	---	757.41

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	LAYOUT DETAIL - STH 116	SHEET 40	E



POINT	MAINLINE		ASH ST		EAST RIVE DR		NORTHING	EASTING	RADIUS	ELEV.
	STATION	OFFSET	STATION	OFFSET	STATION	OFFSET				
90	130+74.76	16.00' LT	---	---	---	---	482,268.51	739,756.18	---	757.29
91	---	---	10+40.67	12.00' LT	---	---	482,297.21	739,776.55	---	757.96
92	130+74.76	41.00' LT	10+40.67	37.00' LT	---	---	482,293.14	739,751.89	25.00'	---
93	---	---	10+42.88	12.00' RT	---	---	482,303.29	739,799.87	---	758.02
94	131+52.27	16.00' LT	---	---	---	---	482,283.18	739,830.89	---	757.77
95	131+52.27	41.00' LT	10+42.88	37.00' RT	---	---	482,307.36	739,824.54	25.00'	---
96	132+75.20	16.00' RT	---	---	---	---	482,299.85	739,956.42	---	758.59
97	---	---	---	---	10+36.07	15.00' RT	482,297.43	739,999.54	---	759.04
98	132+75.20	56.00' RT	---	---	10+36.07	55.00' RT	482,265.02	739,976.09	40.00'	---
99	---	---	---	---	10+99.96	15.00' RT	482,277.86	740,069.83	---	759.50
100	---	---	---	---	10+99.96	15.00' LT	482,307.75	740,067.33	---	759.50
101	---	---	---	---	10+70.38	15.00' LT	482,309.74	740,042.89	---	759.29
102	133+65.40	16.00' RT	---	---	---	---	482,353.06	740,032.79	---	760.21
103	133+65.40	41.00' RT	---	---	10+70.38	40.00' LT	482,333.99	740,048.95	25.00'	---
104	130+92.36	23.24' LT	10+23.07	19.24' LT	---	---	482,278.66	739,772.27	---	757.55
105	131+37.91	19.92' LT	10+20.82	25.24' RT	---	---	482,283.68	739,816.53	---	757.66
106	132+95.82	22.80' RT	---	---	10+18.83	23.40' RT	482,304.96	739,978.33	---	758.82
107	133+46.31	26.60' RT	---	---	10+35.22	27.57' LT	482,332.26	740,024.01	---	759.60

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	LAYOUT DETAIL - STH 116	SHEET 41	E



POINT	MAINLINE		PINE ST		NORTHING	EASTING	RADIUS	ELEV.
	STATION	OFFSET	STATION	OFFSET				
110	134+83.70	16.00' RT	---	---	482,435.50	740,119.14	---	762.98
111	---	---	8+95.50	11.50' LT	482,413.30	740,178.44	---	764.02
112	134+83.70	51.00' RT	8+95.50	46.50' LT	482,410.43	740,143.56	35.00'	---
113	---	---	9+10.00	11.50' RT	482,429.64	740,200.17	---	764.33
114	---	---	9+76.96	11.50' RT	482,496.38	740,194.67	---	764.76
115	135+99.57	16.00' RT	---	---	482,516.34	740,202.15	---	765.16
116	135+99.57	41.00' RT	9+76.96	36.50' RT	482,498.43	740,219.59	25.00'	---
117	135+71.35	16.00' LT	---	---	482,519.61	740,159.61	---	764.70
118	---	---	10+20.27	15.00' LT	482,539.68	740,167.07	---	764.89
119	135+71.35	41.00' LT	10+20.27	40.00' LT	482,537.49	740,142.16	25.00'	---
120	---	---	10+86.28	15.75' RT	482,608.12	740,191.93	---	766.14
121	136+75.59	16.00' LT	---	---	482,592.31	740,234.29	---	765.68
122	136+75.59	41.00' LT	10+86.20	40.75' RT	482,610.22	740,216.84	25.00'	---
123	---	---	9+14.25	16.94' LT	482,431.54	740,171.48	---	764.30
124	135+15.36	36.08' RT	9+27.16	31.58' LT	482,443.21	740,155.83	---	764.15
125	135+02.45	21.44' RT	---	---	482,444.68	740,136.37	---	763.41
126	135+82.07	18.41' LT	---	---	482,528.79	740,165.60	---	764.83
127	136+53.38	29.53' LT	10+63.26	30.80' RT	482,586.50	740,208.94	---	765.40
128	136+75.59	16.00' RT	---	---	482,569.38	740,256.61	---	765.64

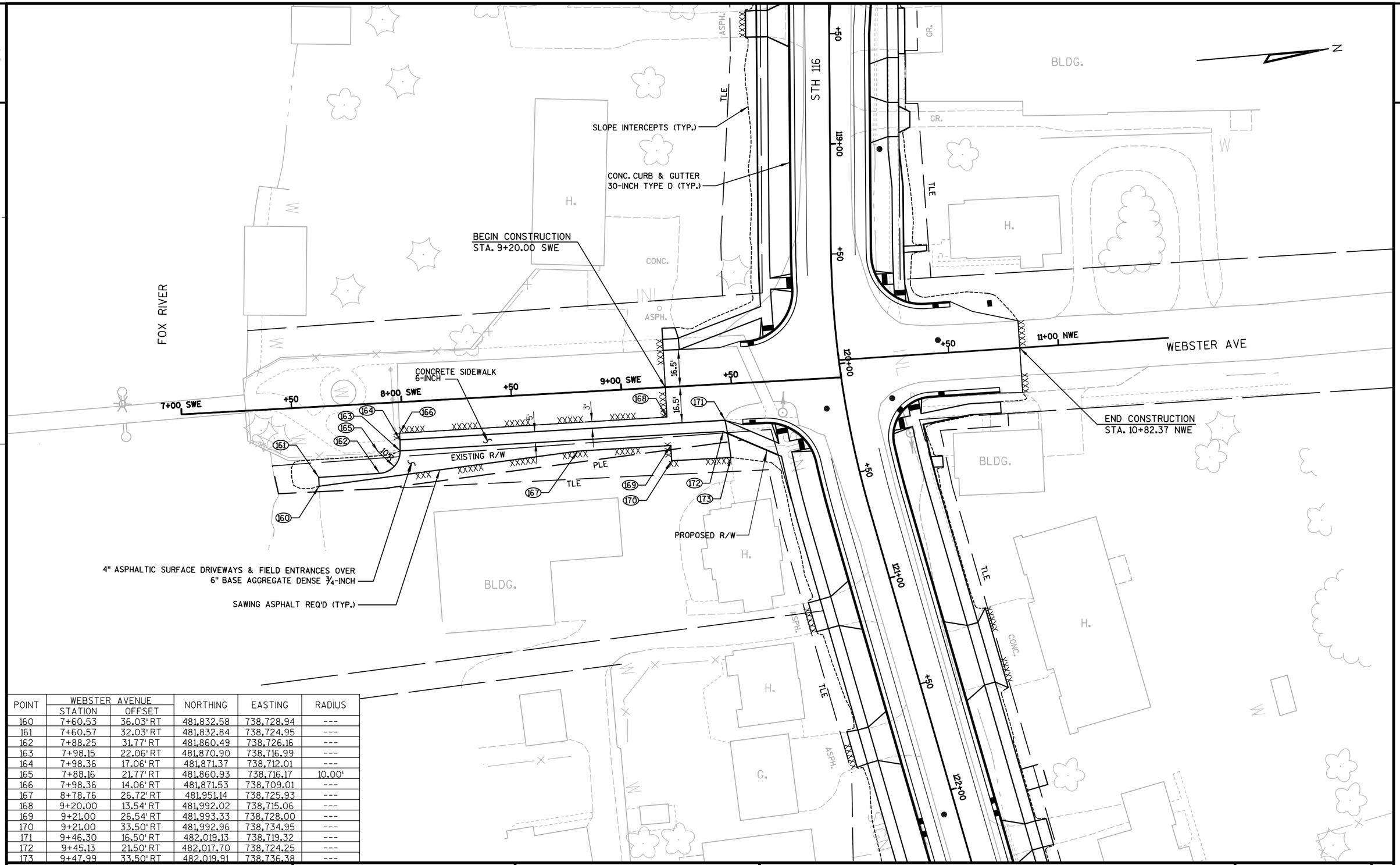
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	LAYOUT DETAIL - STH 116	SHEET 42	E

POINT	MAINLINE STATION	MAINLINE OFFSET	FOX TRL/HAWTHORNE DR STATION	FOX TRL/HAWTHORNE DR OFFSET	NORTHING	EASTING	RADIUS	ELEV.
130	152+05.25	16.00' RT	---	---	483,639.55	741,352.59	---	784.16
131	---	---	13+17.38	15.00' RT	483,618.67	741,411.92	---	782.07
132	152+05.25	49.00' RT	13+17.38	48.00' RT	483,619.68	741,378.94	33.00'	---
133	---	---	13+17.38	15.00' LT	483,617.74	741,441.91	---	782.07
134	---	---	12+50.02	15.00' LT	483,690.93	741,425.17	---	785.24
135	153+20.88	21.51' RT	---	---	483,740.38	741,417.55	---	786.79
136	153+28.09	81.05' RT	12+50.02	75.00' LT	483,723.96	741,475.26	60.00'	---
137	152+06.05	18.00' LT	---	---	483,660.63	741,325.89	---	782.66
138	---	---	11+31.30	17.50' RT	483,716.15	741,308.90	---	784.43
139	152+16.43	48.00' LT	11+31.30	47.50' RT	483,686.19	741,307.45	30.00'	---
140	---	---	11+48.45	17.50' LT	483,749.09	741,329.63	---	784.40
141	153+58.12	16.00' LT	---	---	483,788.82	741,396.10	---	785.79
142	153+58.12	76.00' LT	11+48.45	77.50' LT	483,808.30	741,339.35	60.00'	---
143	---	---	12+95.80	21.03' RT	483,638.34	741,406.16	---	783.24
144	152+34.33	39.95' RT	12+73.34	34.68' RT	483,650.81	741,389.89	---	784.35
145	152+23.87	41.00' LT	---	---	483,651.28	741,369.40	---	784.50
146	152+16.43	18.00' LT	---	---	483,668.68	741,331.82	---	782.93
147	152+32.49	21.96' LT	---	---	483,683.59	741,337.34	---	783.19
148	152+44.72	32.90' LT	11+64.58	30.23' RT	483,699.23	741,334.47	---	783.80
149	---	---	11+49.14	20.80' RT	483,711.20	741,324.01	---	784.33
150	---	---	11+68.19	23.48' LT	483,749.83	741,352.81	---	784.28
151	153+16.93	28.52' LT	11+79.95	35.74' LT	483,756.80	741,370.13	---	784.76
152	153+36.65	19.20' LT	---	---	483,770.51	741,385.95	---	785.45
153	152+98.22	30.74' RT	12+30.03	23.29' LT	483,714.82	741,415.96	---	785.87

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	LAYOUT DETAIL - STH 116	SHEET 43	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\021207_pd.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

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POINT	WEBSTER AVENUE STATION	WEBSTER AVENUE OFFSET	NORTHING	EASTING	RADIUS
160	7+60.53	36.03' RT	481,832.58	738,728.94	---
161	7+60.57	32.03' RT	481,832.84	738,724.95	---
162	7+88.25	31.77' RT	481,860.49	738,726.16	---
163	7+98.15	22.06' RT	481,870.90	738,716.99	---
164	7+98.36	17.06' RT	481,871.37	738,712.01	---
165	7+88.16	21.77' RT	481,860.93	738,716.17	10.00'
166	7+98.36	14.06' RT	481,871.53	738,709.01	---
167	8+78.76	26.72' RT	481,951.14	738,725.93	---
168	9+20.00	13.54' RT	481,992.02	738,715.06	---
169	9+21.00	26.54' RT	481,993.33	738,728.00	---
170	9+21.00	33.50' RT	481,992.96	738,734.95	---
171	9+46.30	16.50' RT	482,019.13	738,719.32	---
172	9+45.13	21.50' RT	482,017.70	738,724.25	---
173	9+47.99	33.50' RT	482,019.91	738,736.38	---

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	LAYOUT DETAIL - STH 116	SHEET 44	E

2

2

N

+50 105+00 +50 106+00 +50 107+00 +50 108+00 +50 109+00 +50 110+00

STH 21

MATCH LINE STA. 110+00

BEGIN PROJECT
STA. 107+50.00

LEGEND

- SILT FENCE
- TURBIDITY BARRIER
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS (ROCK BAGS REQ'D)
- (AB) INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE B
- (AC) INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE C
- (AD) INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE D

SEE TYPICAL SECTIONS FOR FINISHING LOCATIONS

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	EROSION CONTROL	SHEET 45	E

2

2

END CONSTRUCTION
STA. 13+55.00 SA

N

SPRUCE ST

14+

+50

G.

H.

SH.

AB

AC

AD

MATCH LINE STA. 110+00

MATCH LINE STA. 116+00

STH 21

STH 116

111+00

112+00

113+00

114+00

115+00

+50

12+00 SA

11+00 SA

STH 21/STH 116

SILT FENCE RELIEF
(ROCK BAGS) REQ'D

SILT FENCE RELIEF
(ROCK BAGS) REQ'D

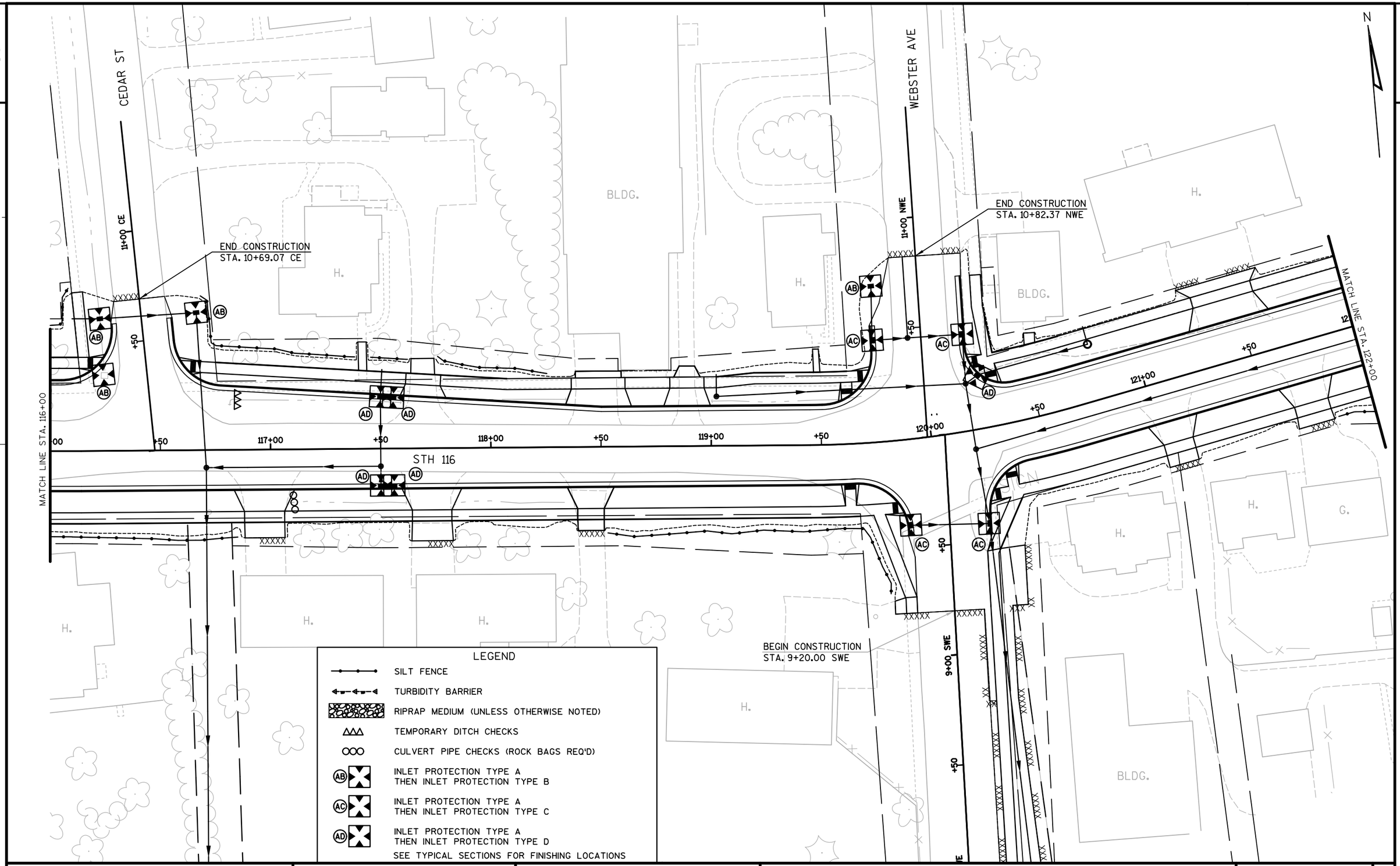
SILT FENCE RELIEF
(ROCK BAGS) REQ'D

LEGEND

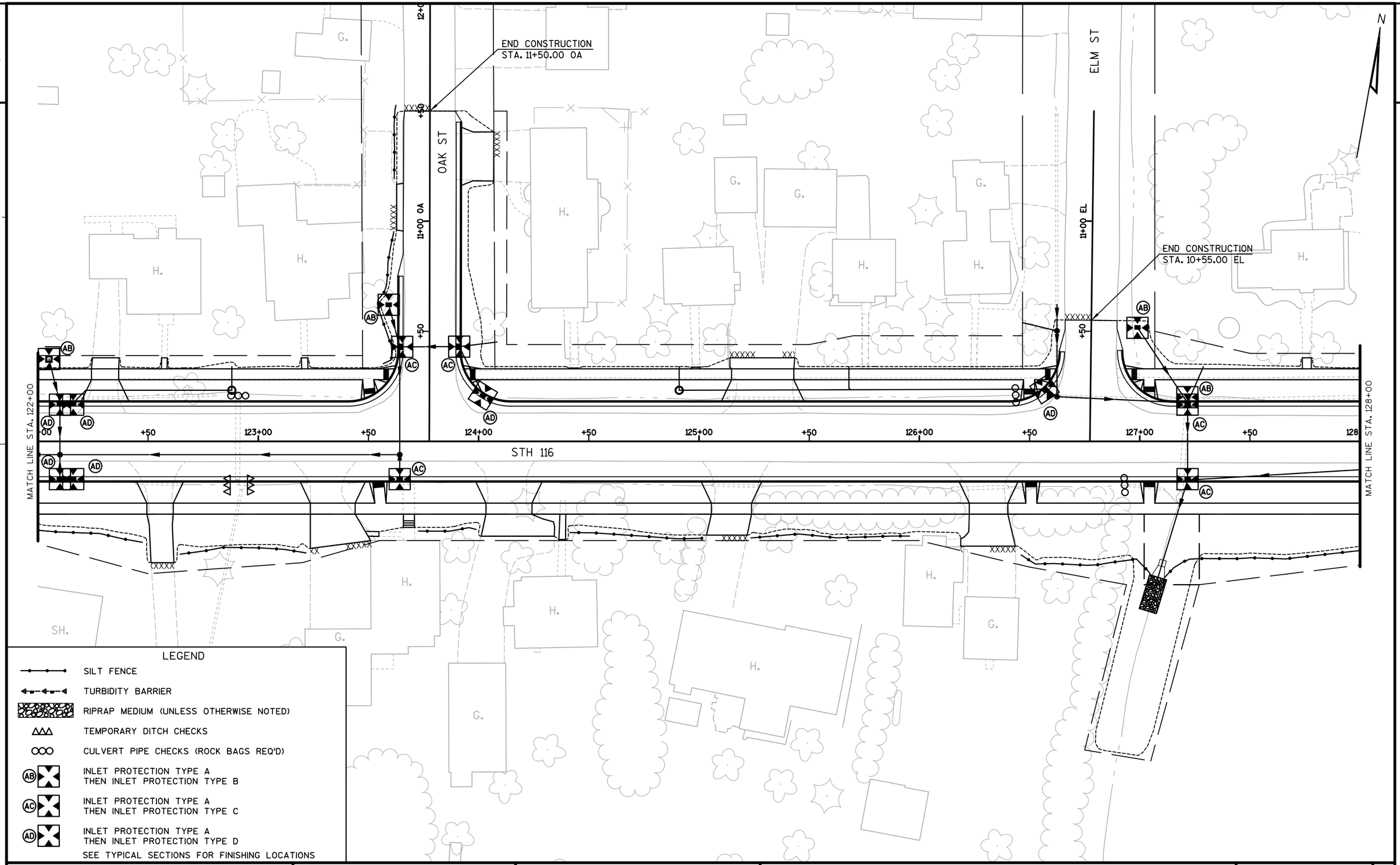
- SILT FENCE
- TURBIDITY BARRIER
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS (ROCK BAGS REQ'D)
- (AB) INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE B
- (AC) INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE C
- (AD) INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE D

SEE TYPICAL SECTIONS FOR FINISHING LOCATIONS

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	EROSION CONTROL	SHEET 46	E

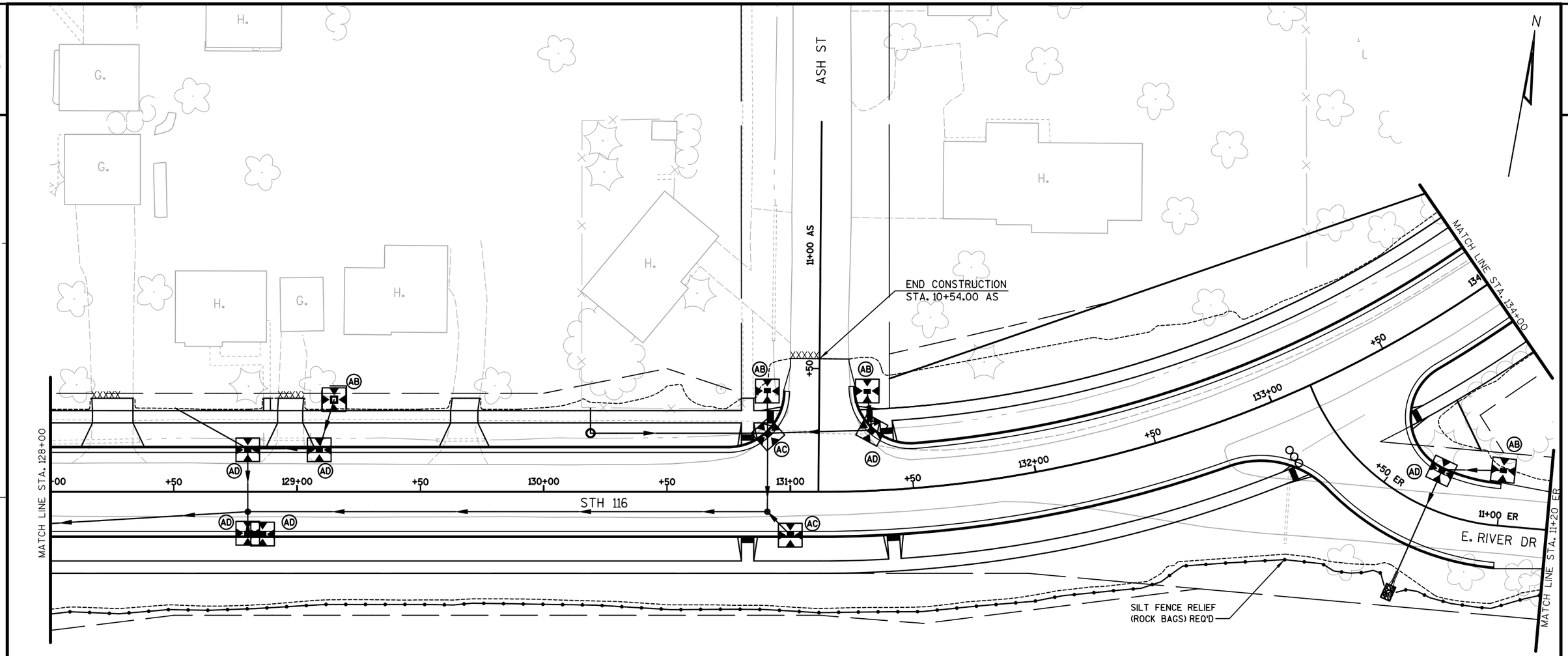


PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	EROSION CONTROL	SHEET 47 E



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	EROSION CONTROL	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\022004_ec.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



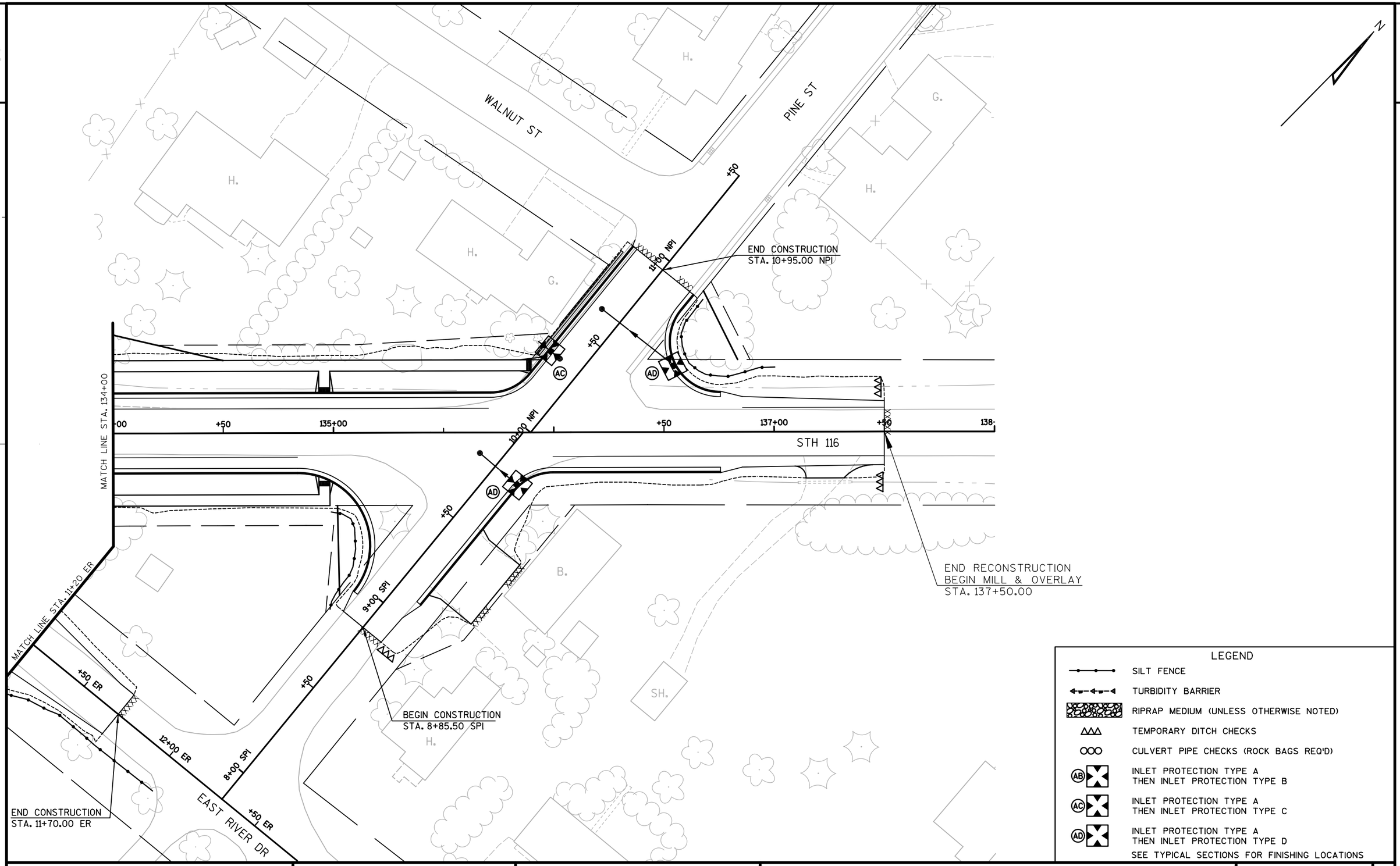
LEGEND

- SILT FENCE
- TURBIDITY BARRIER
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS (ROCK BAGS REQ'D)
- (AB) INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE B
- (AC) INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE C
- (AD) INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE D

SEE TYPICAL SECTIONS FOR FINISHING LOCATIONS

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	EROSION CONTROL	SHEET 49	E

2

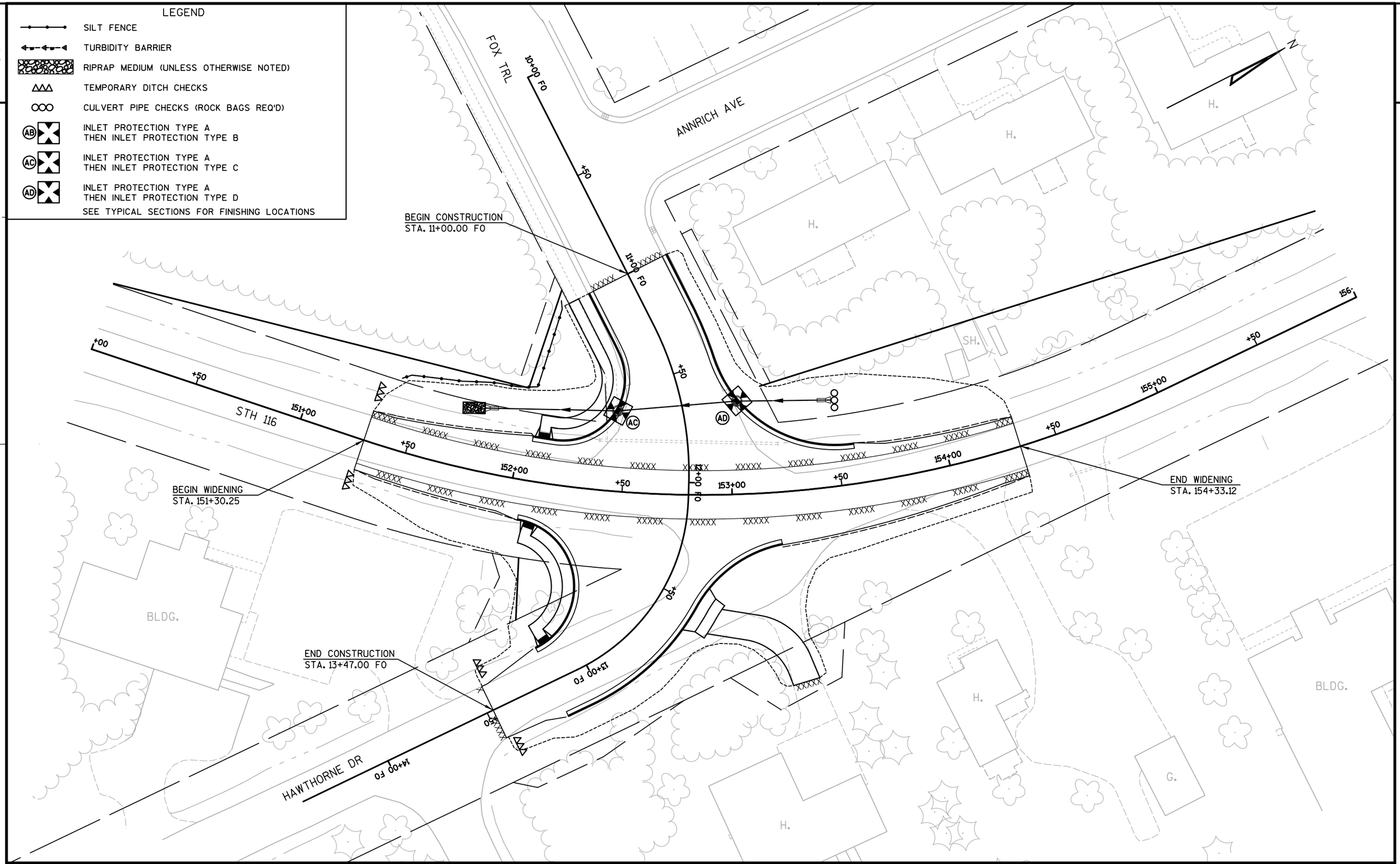


PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	EROSION CONTROL	SHEET 50	E

LEGEND

- SILT FENCE
- TURBIDITY BARRIER
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS (ROCK BAGS REQ'D)
- (AB) INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE B
- (AC) INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE C
- (AD) INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE D

SEE TYPICAL SECTIONS FOR FINISHING LOCATIONS



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	EROSION CONTROL	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\022007_ec.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

SIGN

STH 21/STH 116

10+00 SA

+50

11+00 SA

+50

AC

AC

AC

AD

AD

AD

EXISTING R/W

PLE

STH 116

BOAT H.

G.

H.

H.

H.

+50

12+00

+50

STH 21

R/W

G.

G.

G.

H.

TLE

+50

13+00 SA

+50

14+00 SA

SPRUCE ST

AB

EXISTING R/W

R/W

G.

TLE

H.

H.

H.

G.

N

LEGEND

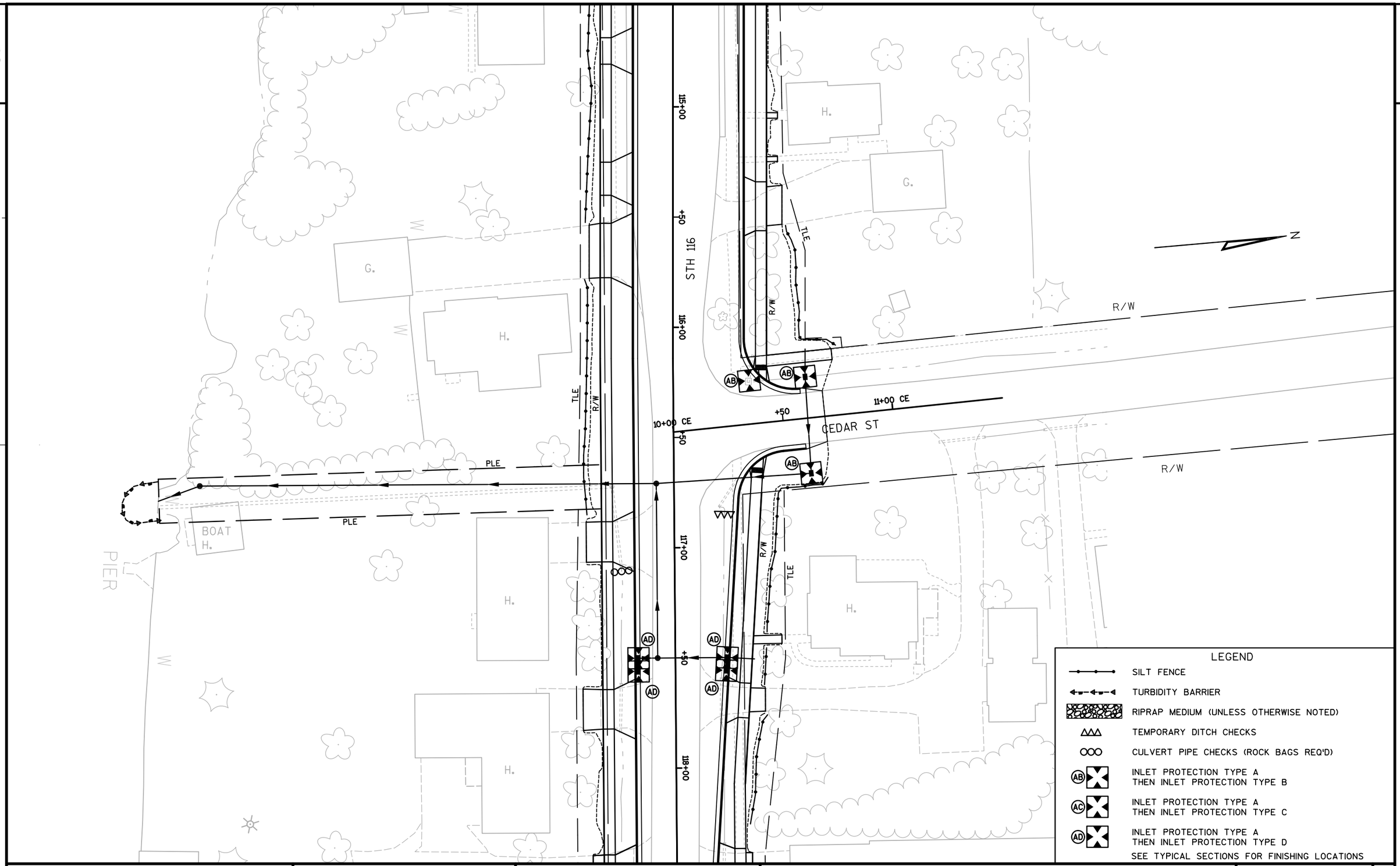
- SILT FENCE
- TURBIDITY BARRIER
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS (ROCK BAGS REQ'D)
- AB — INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE B
- AC — INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE C
- AD — INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE D

SEE TYPICAL SECTIONS FOR FINISHING LOCATIONS

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	EROSION CONTROL	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\022008_ec.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	EROSION CONTROL	SHEET 53	E

2

BOAT H.

BOAT H.

H.

R/W

R/W

TLE

STH 116

BLDG.

H.

R/W

W

N

R/W

WEBSTER AVE

7+00 SWE

+50

8+00 SWE

+50

9+00 SWE

+50

10+00 SWE

10+00 NWE

+50

11+00 NWE

+50

11900

+50

12100

+50

12200

AC

AB

AD

PLE

TLE

R/W

BLDG.

H.

H.

G.

BLDG.

H.

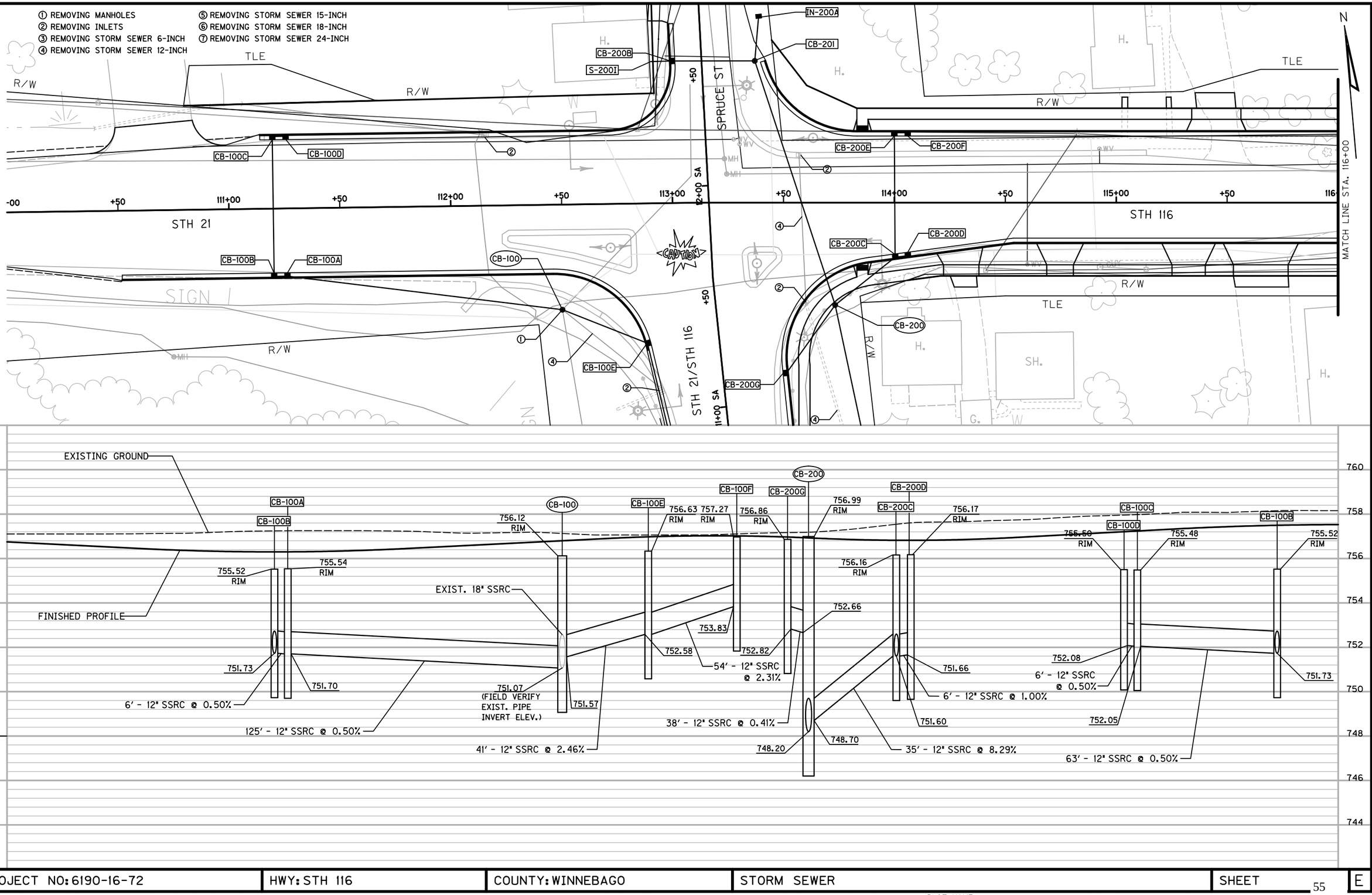
LEGEND

- SILT FENCE
- TURBIDITY BARRIER
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS (ROCK BAGS REQ'D)
- (AB) INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE B
- (AC) INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE C
- (AD) INLET PROTECTION TYPE A THEN INLET PROTECTION TYPE D

SEE TYPICAL SECTIONS FOR FINISHING LOCATIONS

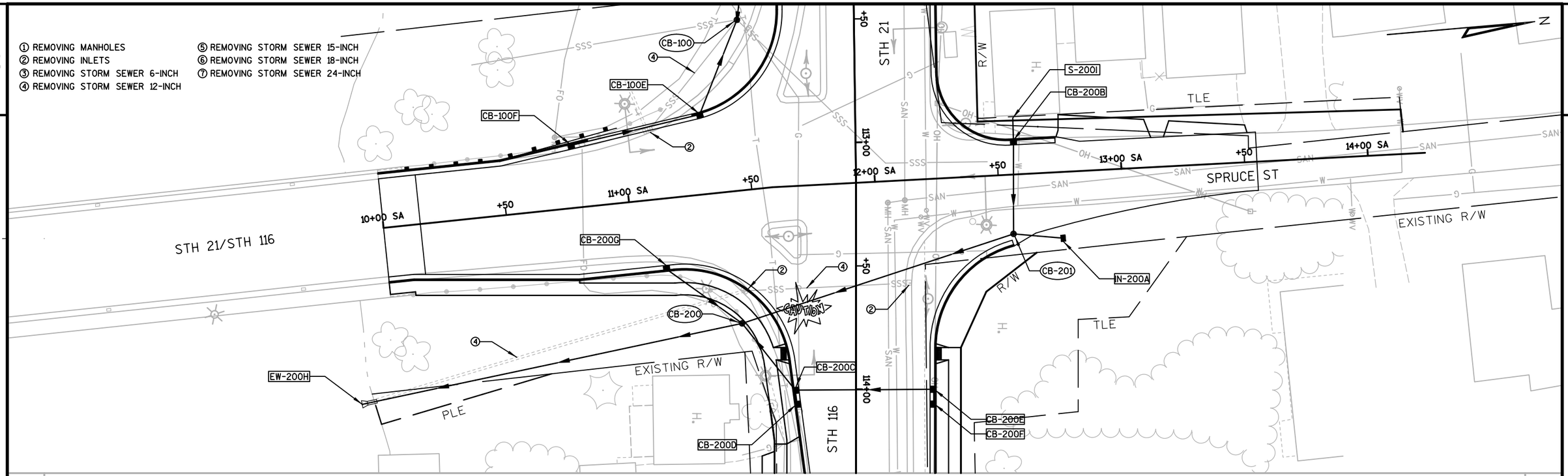
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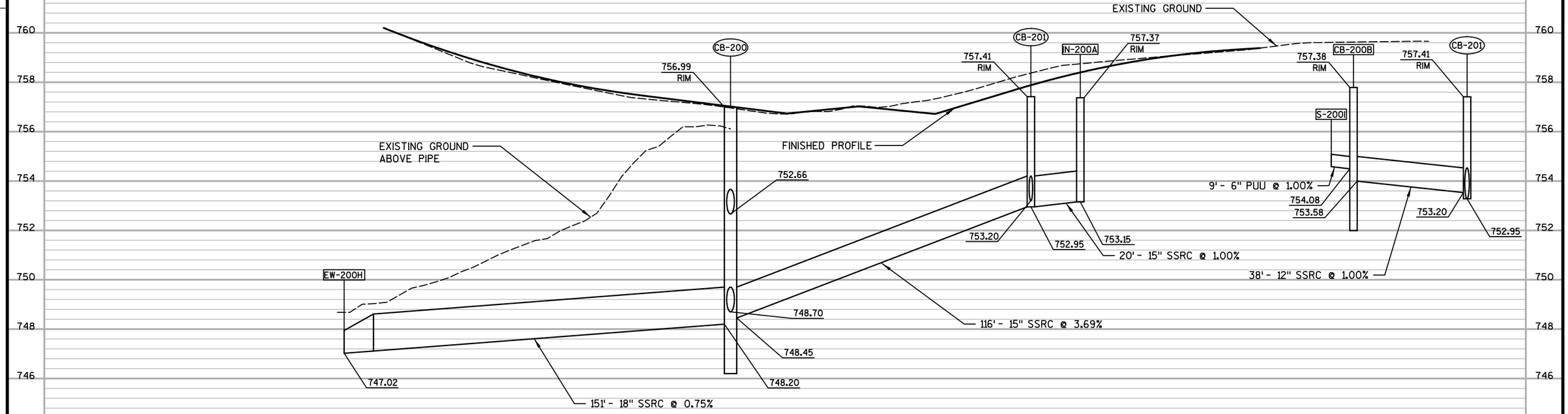
① REMOVING MANHOLES
② REMOVING INLETS
③ REMOVING STORM SEWER 6-INCH
④ REMOVING STORM SEWER 12-INCH
⑤ REMOVING STORM SEWER 15-INCH
⑥ REMOVING STORM SEWER 18-INCH
⑦ REMOVING STORM SEWER 24-INCH



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	STORM SEWER	SHEET 55	E

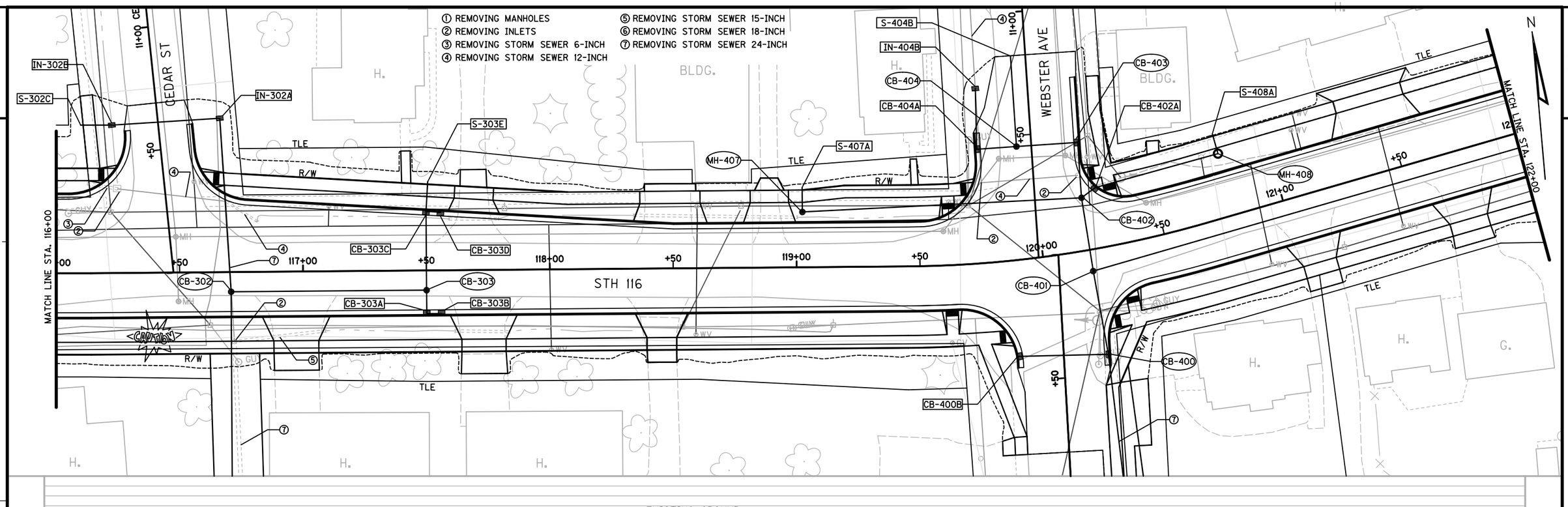
① REMOVING MANHOLES
② REMOVING INLETS
③ REMOVING STORM SEWER 6-INCH
④ REMOVING STORM SEWER 12-INCH
⑤ REMOVING STORM SEWER 15-INCH
⑥ REMOVING STORM SEWER 18-INCH
⑦ REMOVING STORM SEWER 24-INCH

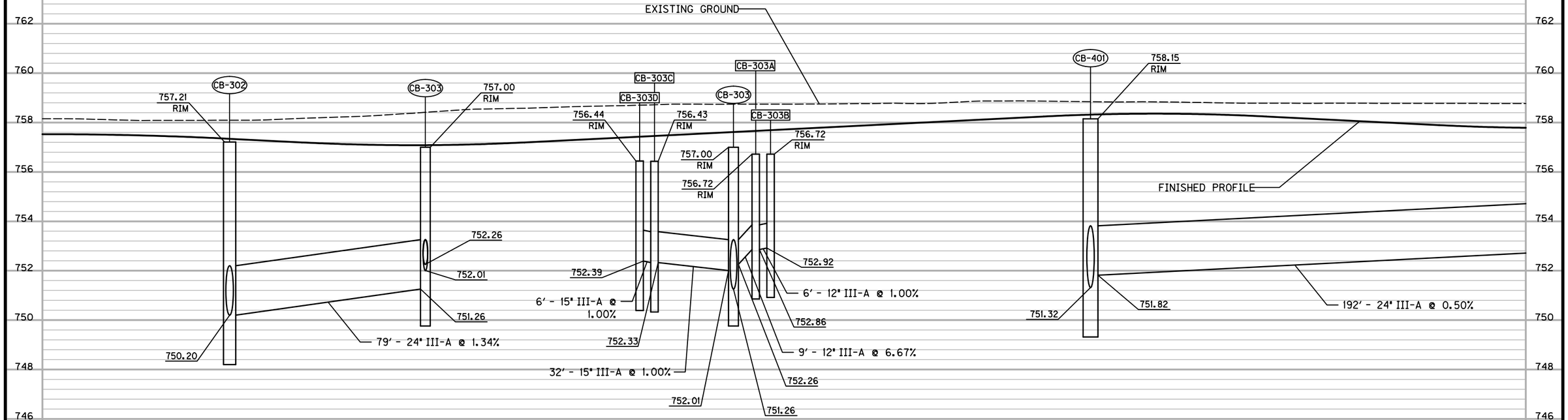




PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	STORM SEWER	SHEET 56	E

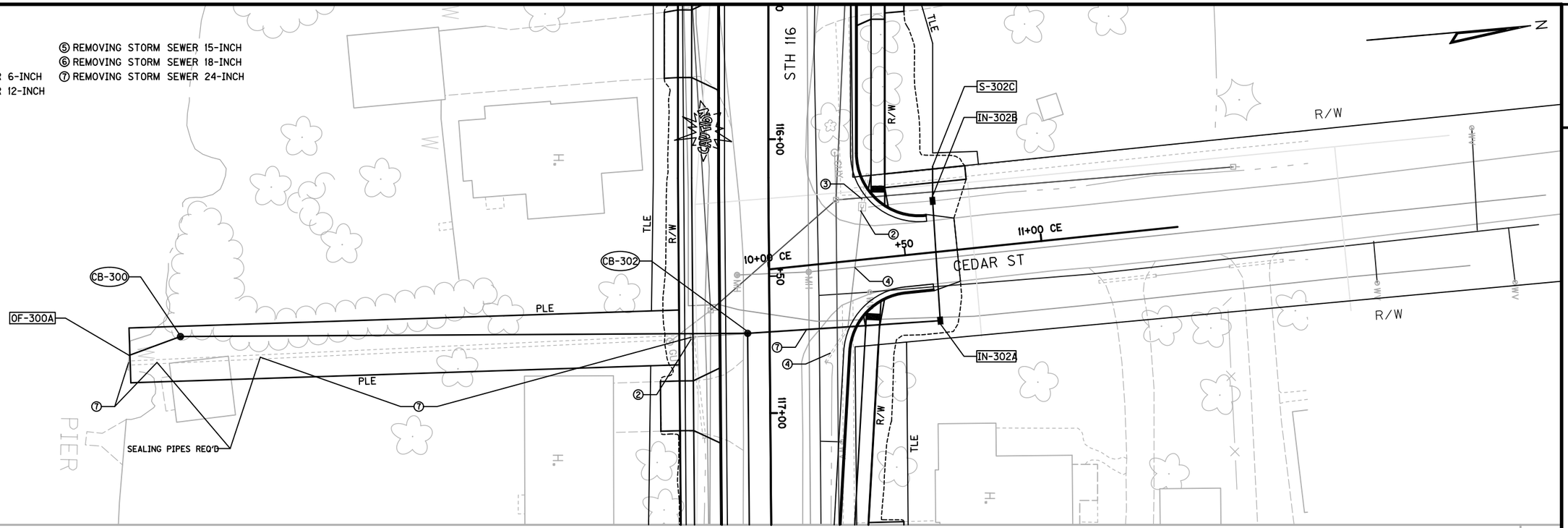
① REMOVING MANHOLES
② REMOVING INLETS
③ REMOVING STORM SEWER 6-INCH
④ REMOVING STORM SEWER 12-INCH
⑤ REMOVING STORM SEWER 15-INCH
⑥ REMOVING STORM SEWER 18-INCH
⑦ REMOVING STORM SEWER 24-INCH

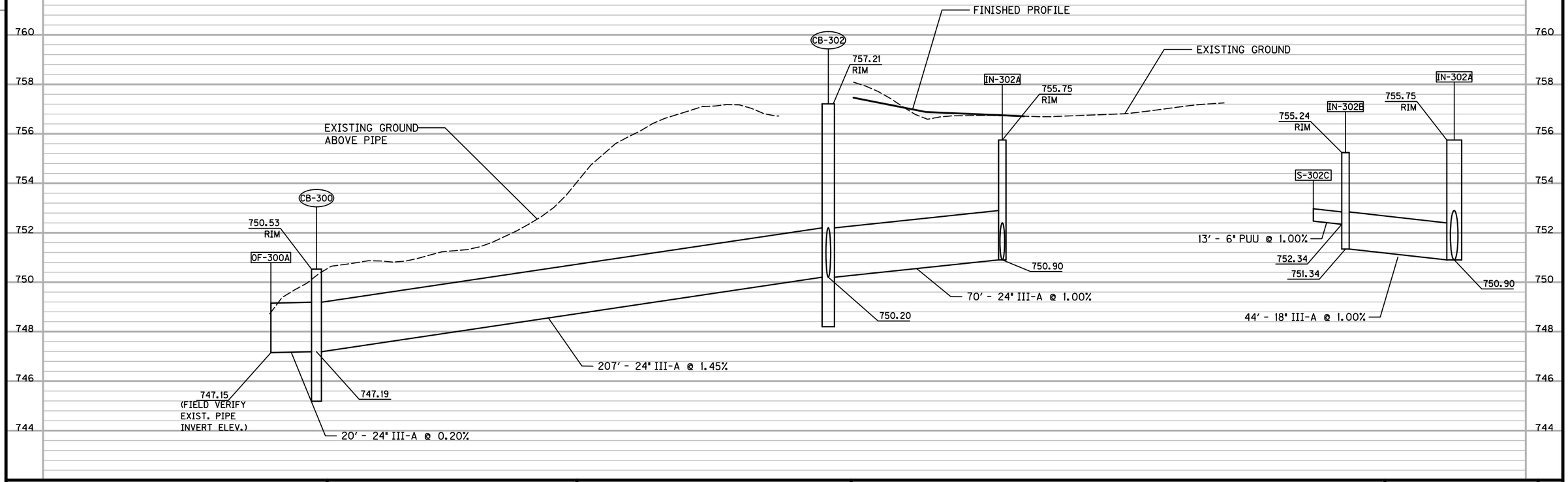




PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	STORM SEWER	SHEET 57	E

① REMOVING MANHOLES
② REMOVING INLETS
③ REMOVING STORM SEWER 6-INCH
④ REMOVING STORM SEWER 12-INCH
⑤ REMOVING STORM SEWER 15-INCH
⑥ REMOVING STORM SEWER 18-INCH
⑦ REMOVING STORM SEWER 24-INCH

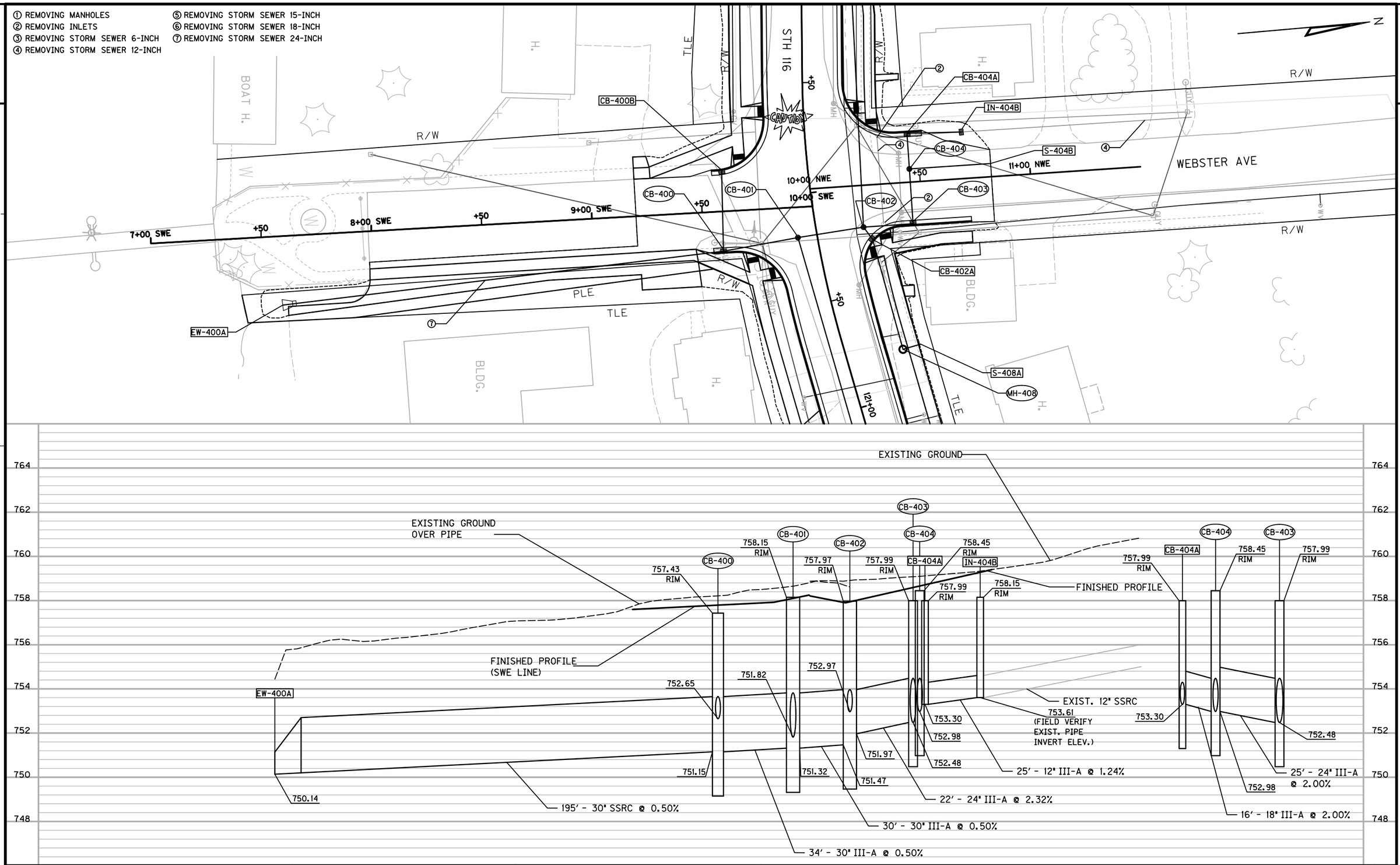




PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	STORM SEWER	SHEET	E

FILE NAME : S:\MAD01000--109901\08903420\MICROS\PLAN\0022504_SS.DGN PLOT DATE : 7/28/2017 PLOT BY : _USERNAME_ PLOT NAME : PLOT SCALE : $$.....PLOTSCALE.....$$

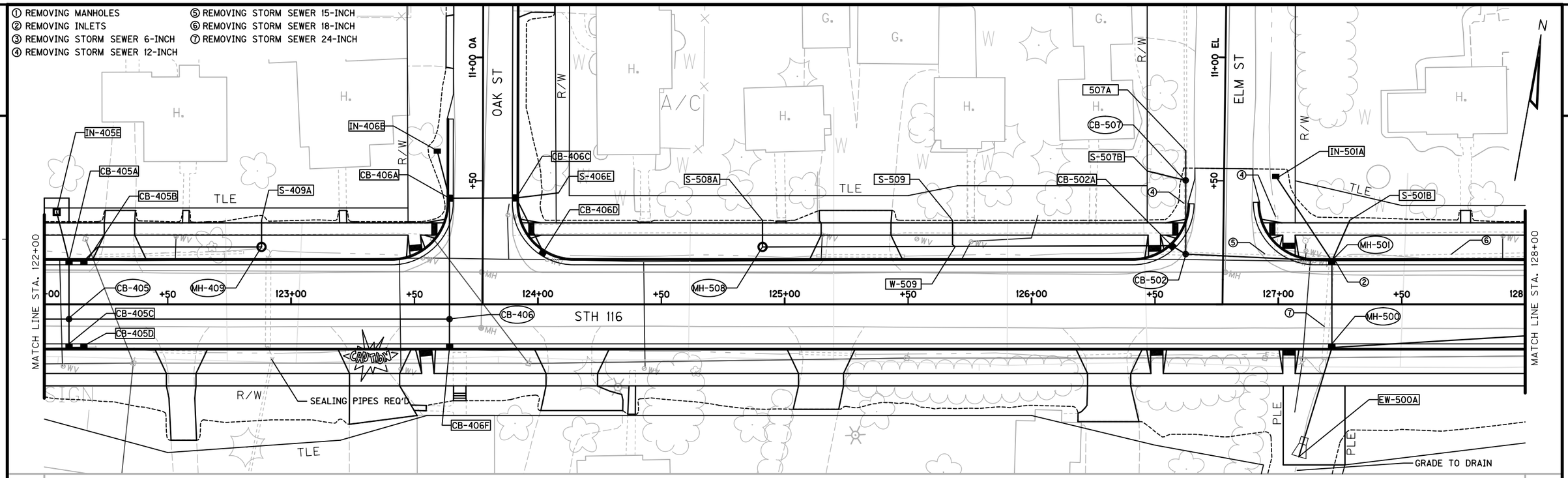
① REMOVING MANHOLES
② REMOVING INLETS
③ REMOVING STORM SEWER 6-INCH
④ REMOVING STORM SEWER 12-INCH
⑤ REMOVING STORM SEWER 15-INCH
⑥ REMOVING STORM SEWER 18-INCH
⑦ REMOVING STORM SEWER 24-INCH

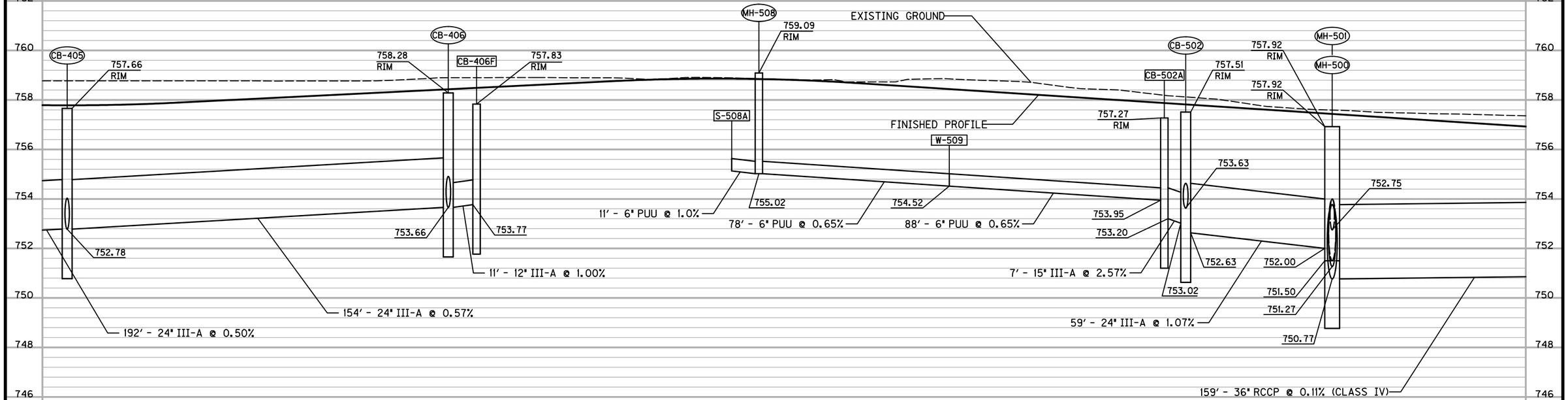


PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	STORM SEWER	SHEET	E

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① REMOVING MANHOLES
② REMOVING INLETS
③ REMOVING STORM SEWER 6-INCH
④ REMOVING STORM SEWER 12-INCH
⑤ REMOVING STORM SEWER 15-INCH
⑥ REMOVING STORM SEWER 18-INCH
⑦ REMOVING STORM SEWER 24-INCH





PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	STORM SEWER	SHEET	E

FILE NAME : S:\MAD\01000--109901\08903420\MICROS\PLAN\0022506_SS.DGN PLOT DATE : 7/28/2017 PLOT BY : _USERNAME_ PLOT NAME : PLOT SCALE : $$.....PLOTSCALE.....$$

① REMOVING MANHOLES
② REMOVING INLETS
③ REMOVING STORM SEWER 6-INCH
④ REMOVING STORM SEWER 12-INCH
⑤ REMOVING STORM SEWER 15-INCH
⑥ REMOVING STORM SEWER 18-INCH
⑦ REMOVING STORM SEWER 24-INCH

N

MATCH LINE STA. 128+00

S-503G
IN-503E
TLE
S-510A
IN-505A
R/W
11+00 AS
ASH ST
IN-506A
CB-506
CB-505
MH-510
CB-503C
CB-503D
CB-503
CB-504
STH 116
CB-503A
CB-503B
CB-504A
R/W
TLE
EW-700
CB-700A
IN-700B
R/W
TLE
MATCH LINE STA. 134+00
11+00 ER
EAST RIVER DR
CAUTION
GUY
GUY (POLE)

129+00 130+00 131+00 132+00 133+00 134+00 +50

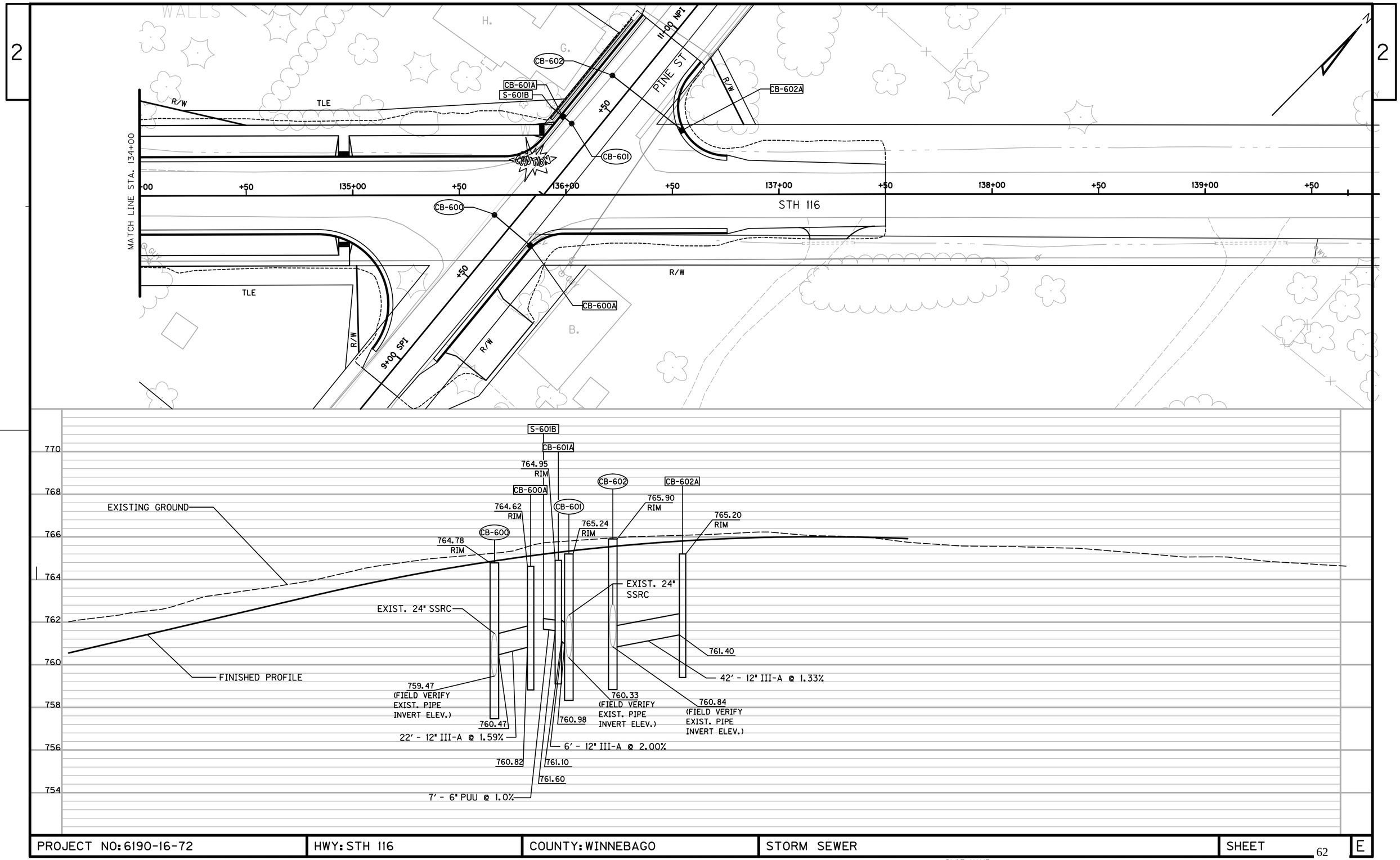
EXISTING GROUND
FINISHED PROFILE

CB-503: 756.41 RIM; 752.02; 751.45; 750.95; 751.16
CB-504: 757.55 RIM; 753.33; 752.29; 753.07
CB-504A: 757.05 RIM
IN-503E: 756.40 RIM; 752.44
CB-503D: 756.10 RIM; 752.33; 751.83
CB-503C: 756.05 RIM; 751.68
CB-503: 756.41 RIM; 751.45
CB-503B: 756.05 RIM; 752.25; 752.22; 752.02; 750.95
CB-503A: 756.05 RIM; 756.05 RIM

159′ - 36" SSRC @ 0.11% (CLASS IV)
211′ - 30" SSRC @ 0.40% (CLASS IV)
13′ - 12" III-A @ 2.00%
21′ - 12" III-A @ 0.52%
29′ - 18" III-A @ 0.52%
26′ - 18" III-A @ 2.00%
6′ - 12" III-A @ 0.50%
10′ - 12" III-A @ 2.00%

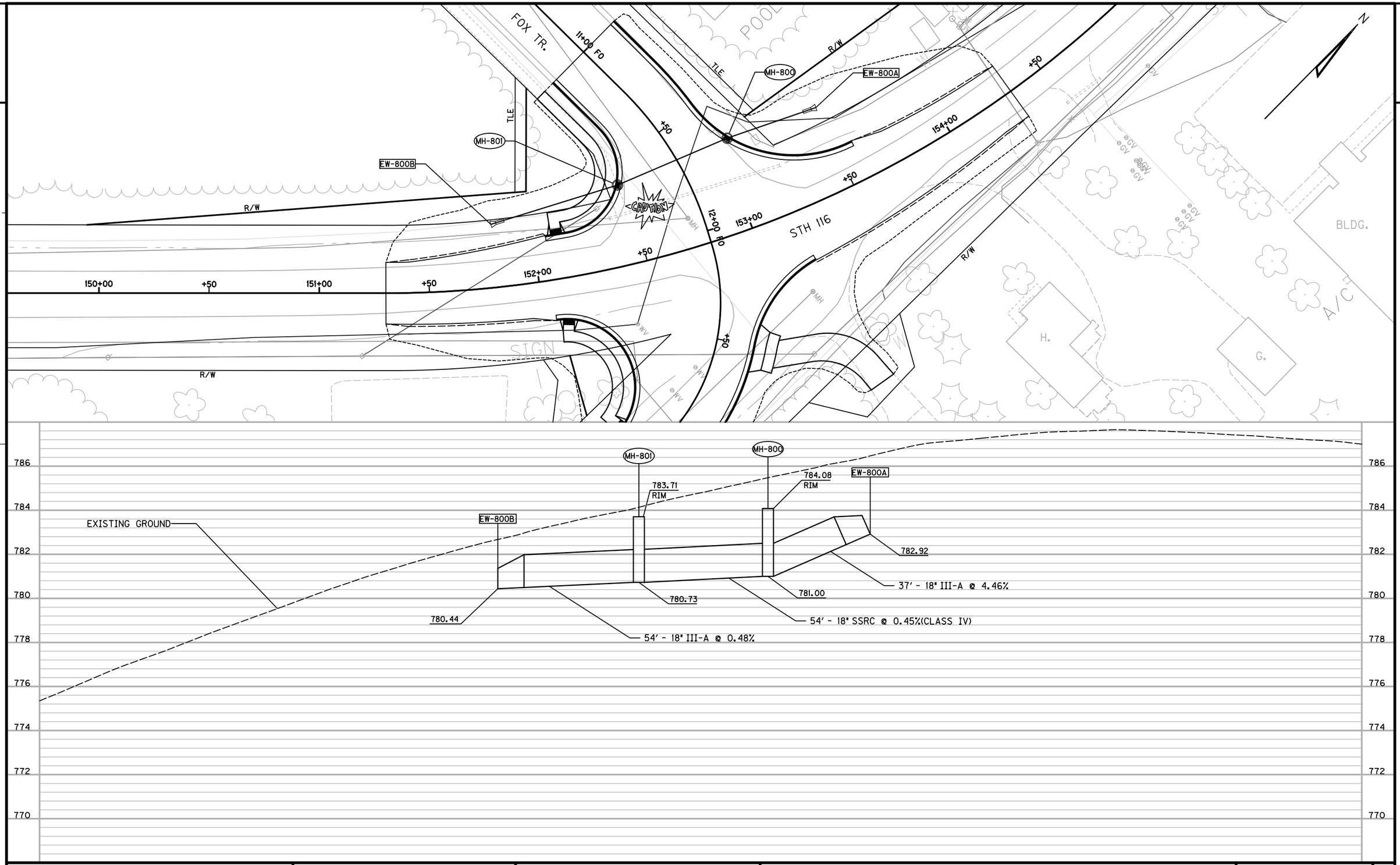
762 760 758 756 754 752 750 748 746

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	STORM SEWER	SHEET 61	E



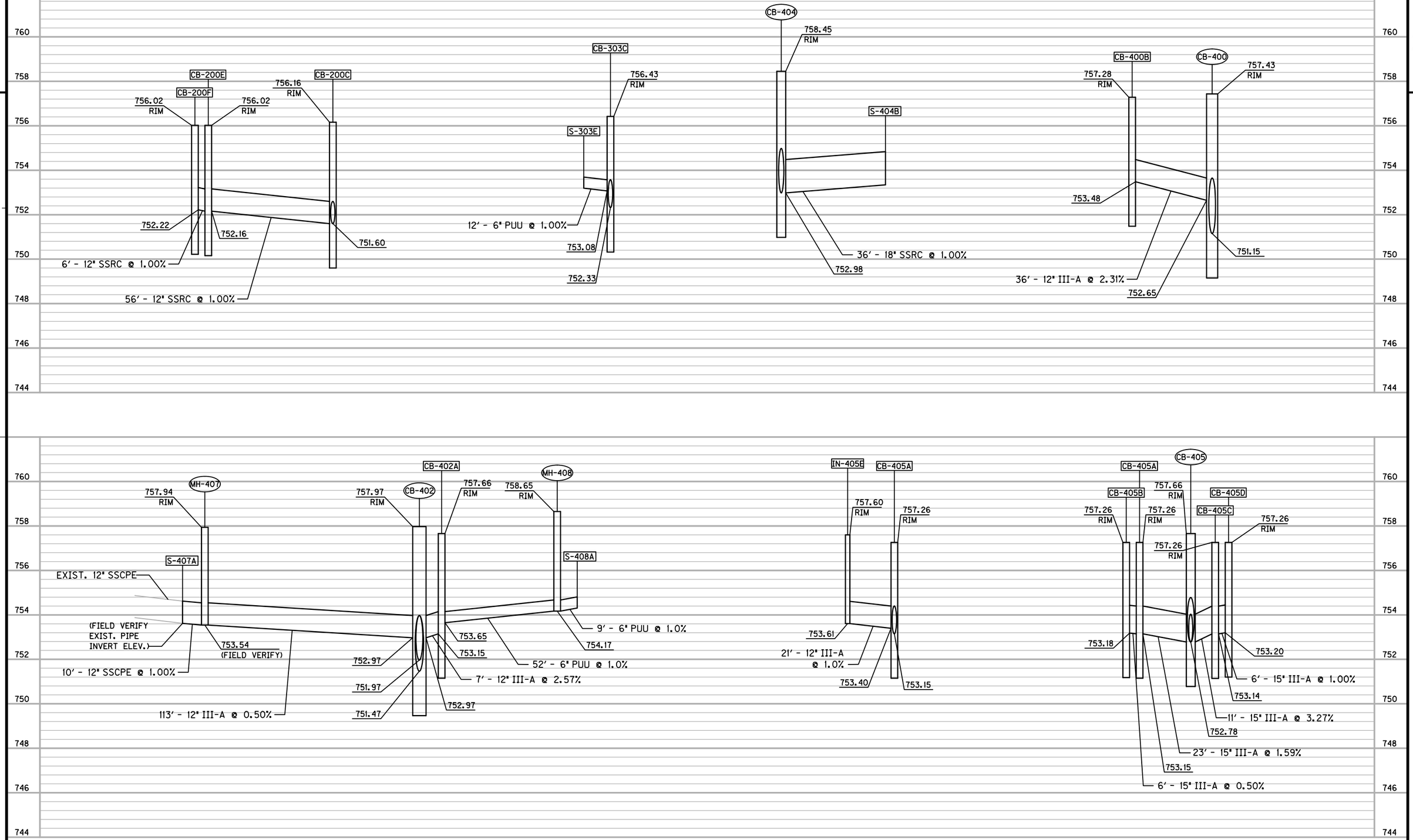
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2



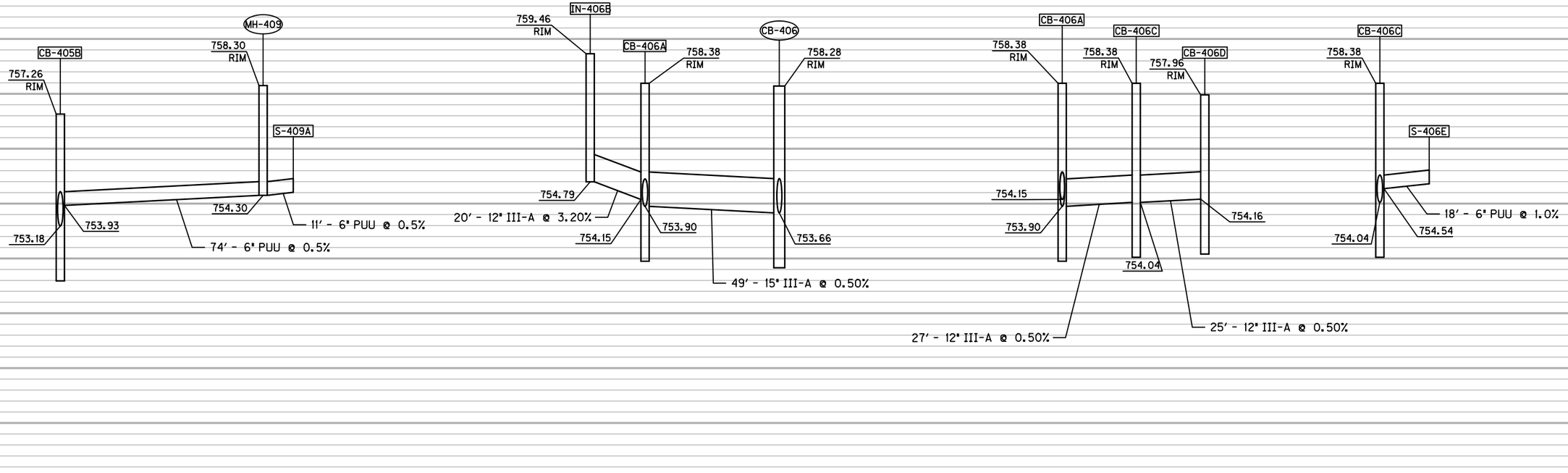
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	STORM SEWER	SHEET	E

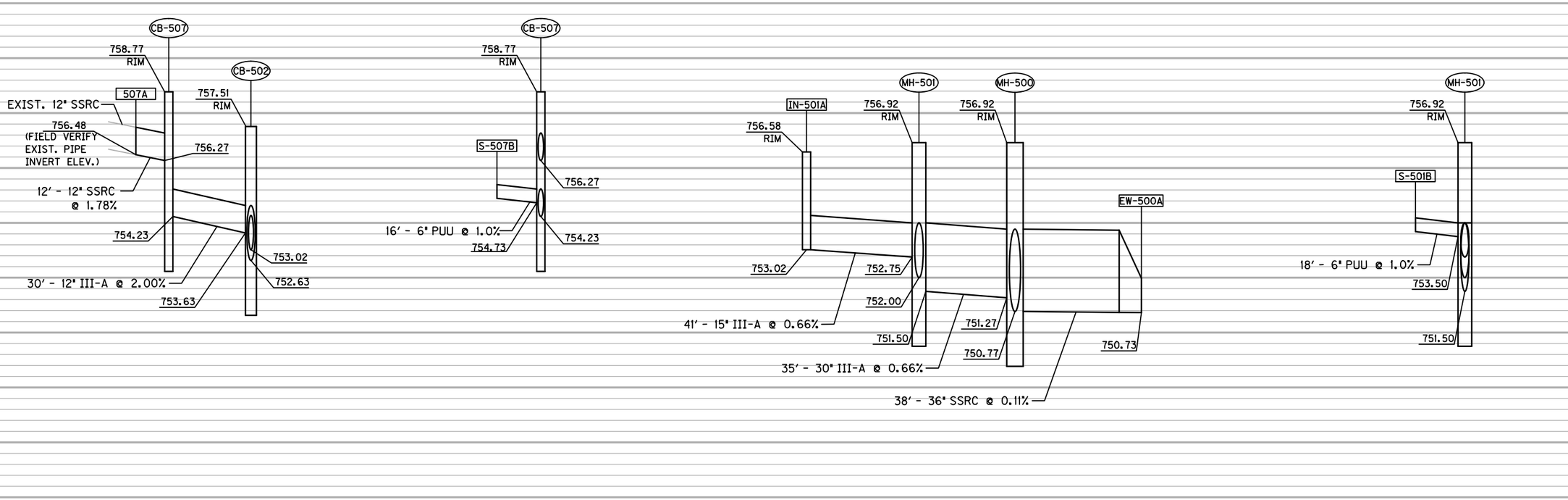
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	STORM SEWER	SHEET	E

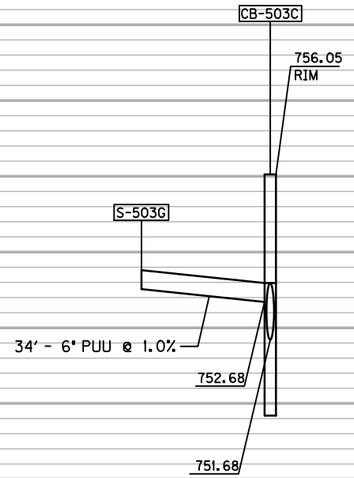
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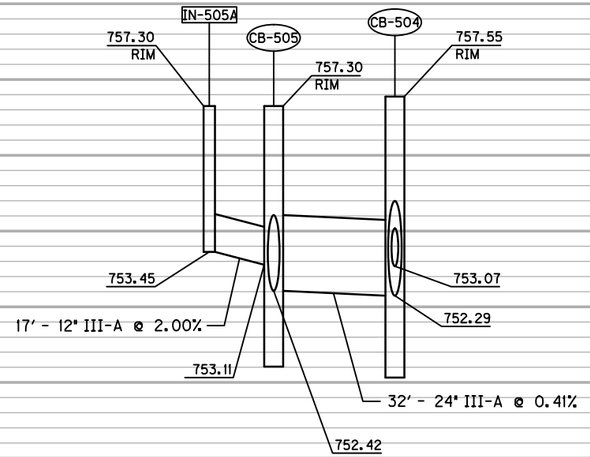


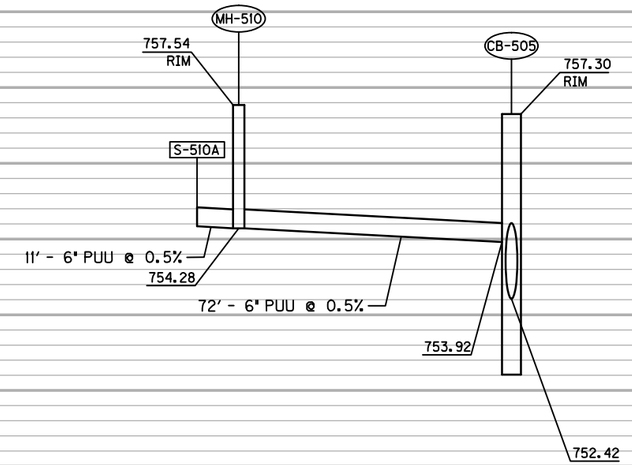


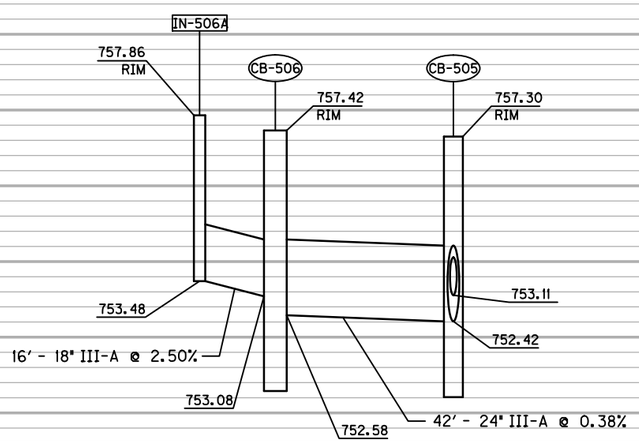
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	STORM SEWER	SHEET	E

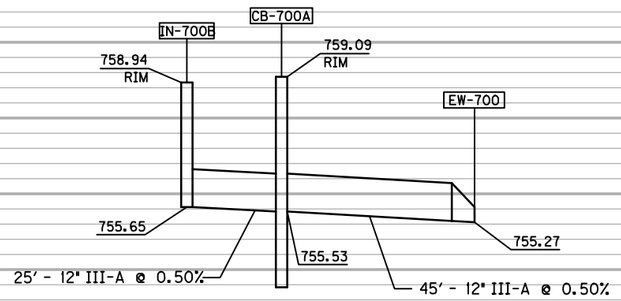
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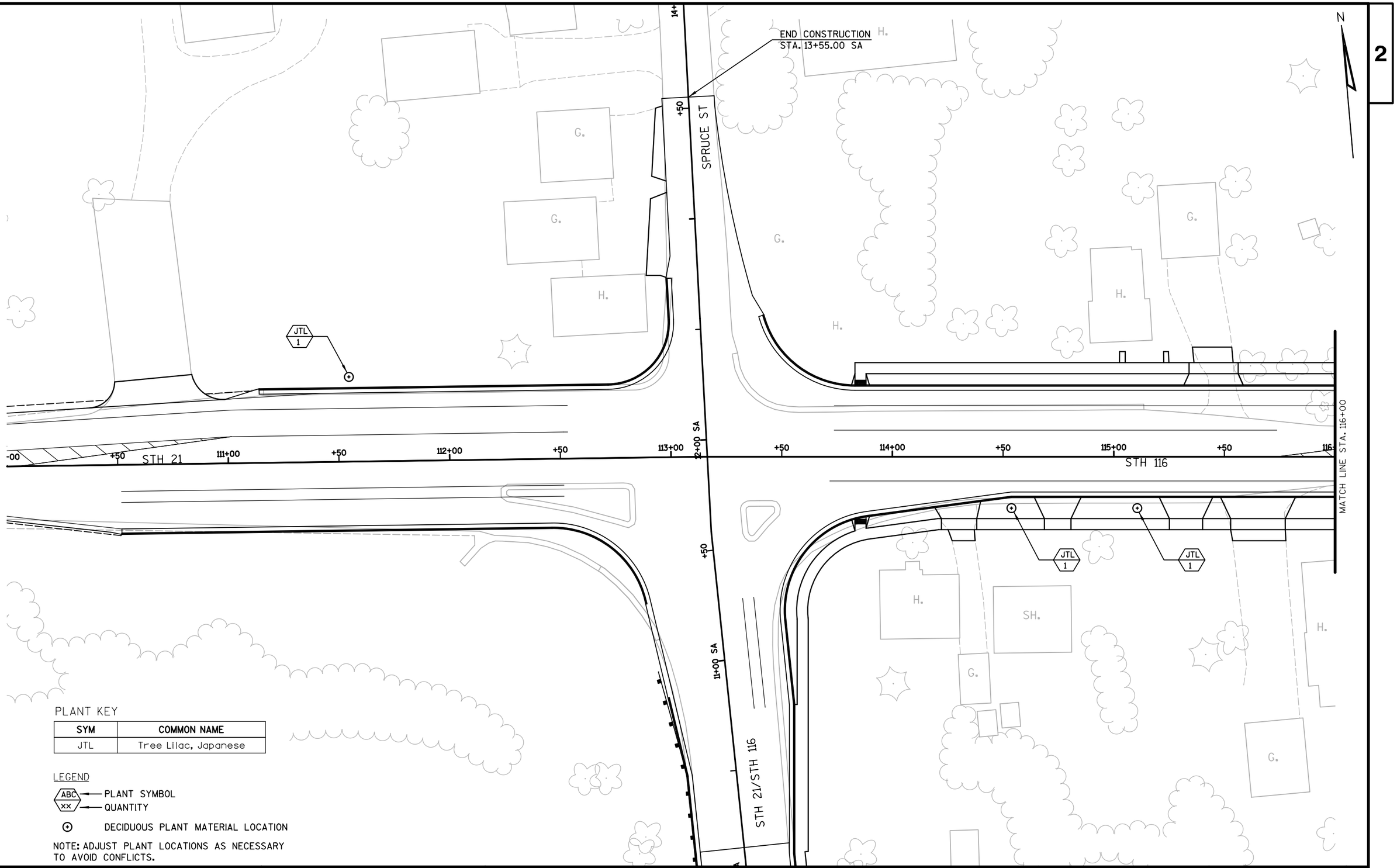
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	STORM SEWER	SHEET	E

FILE NAME : S:\MAD01000--109901\08903420\MICROS\PLAN002512_SS.DGN PLOT DATE : 7/28/2017 PLOT BY : _USERNAME_ PLOT NAME : PLOT SCALE : $$.....PLOTSCALE.....$$

STRUCT NO.	STATION	OFFSET	C-C (FT)	TO STRUCT	CATCH BASIN OR INLET TYPE	COVER	CB OR MH TYPE	COVER	RIM/ GRATE ELEV.	T.O.S. ELEV.	DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	INLET ELEV.	DISCHARGE ELEV.	LENGTH (FT)	SLOPE (%)	REMARKS
CB-100D	111+25.98	32.5'LT	6.0	CB-100C	2x3-FT	H-S	--	--	755.50	754.67	4.59	12	752.08	752.05	6	0.50%	
CB-100C	111+19.98	32.5'LT	63.0	CB-100B	2x3-FT	H-S	--	--	755.48	754.65	4.60	12	752.05	751.73	63	0.50%	
CB-100B	111+20.00	30.5'RT	6.0	CB-100A	2x3-FT	H-S	--	--	755.52	754.69	4.96	12	751.73	751.70	6	0.50%	
CB-100A	111+26.00	30.5'RT	124.9	CB-100	2x3-FT	H-S	--	--	755.54	754.71	5.01	12	751.70	751.07	125	0.50%	
CB-100	112+49.72	47.4'RT	--	--	--	--	6-FOOT	J	756.12	754.87	5.80	--	751.07	--	--	--	FIELD VERIFY EXIST. PIPE INVERT ELEV.
CB-100E	112+87.87	63.0'RT	41.2	CB-100	2x3-FT	H	--	--	756.63	755.80	5.22	12	752.58	751.57	41	2.46%	
CB-100F	112+99.61	115.3'RT	53.6	CB-100E	2x3-FT	H	--	--	757.27	756.44	4.61	12	753.83	752.58	54	2.31%	
CB-200B	113+00.40	64.0'LT	37.5	CB-201	2x3-FT	H	--	--	757.38	756.55	4.97	12	753.58	753.20	38	1.00%	
IN-200A	113+38.82	83.9'LT	20.2	CB-201	MEDIAN 1 GRATE	MS-A	--	--	757.37	757.37	4.22	15	753.15	752.95	20	1.00%	0% GRATE SLOPE
CB-201	113+37.05	63.8'LT	115.8	CB-200	--	--	4-FOOT	J	757.41	756.16	5.21	15	752.95	748.45	116	3.69%	
CB-200	113+73.31	46.2'RT	151.3	EW-200H	--	--	5-FOOT	J	756.99	755.74	9.54	18	748.20	747.02	151	0.75%	
EW-200H	114+06.09	200.1'RT	--	--	--	--	--	--	--	--	--	18	747.02	--	--	--	APRON ENDWALL FOR CPRC 18-INCH REQ'D
CB-200G	113+51.31	76.9'RT	37.8	CB-200	2x3-FT	H	--	--	756.86	756.03	5.21	12	752.82	752.66	38	0.41%	
CB-200C	114+00.33	24.6'RT	34.5	CB-200	2x3-FT	H-S	--	--	756.16	755.33	5.73	12	751.60	748.70	35	8.29%	
CB-200D	114+06.28	23.9'RT	6.0	CB-200C	2x3-FT	H-S	--	--	756.17	755.34	5.68	12	751.66	751.60	6	1.00%	
CB-200E	114+00.00	31.5'LT	56.1	CB-200C	2x3-FT	H-S	--	--	756.02	755.19	5.03	12	752.16	751.60	56	1.00%	
CB-200F	114+06.00	31.5'LT	6.0	CB-200E	2x3-FT	H-S	--	--	756.02	755.19	4.97	12	752.22	752.16	6	1.00%	
S-200I	112+91.05	63.8'LT	9.3	CB-200B	--	--	--	--	--	--	--	6	--	754.08	9	1.00%	LATERAL STUB FOR FUTURE CONNECTION, CAP END, VERIFY ELEVATION
S-302C	116+09.87	60.0'LT	12.6	IN-302B	--	--	--	--	--	--	--	6	--	752.34	13	1.00%	LATERAL STUB FOR FUTURE CONNECTION, CAP END, VERIFY ELEVATION
IN-302B	116+23.01	59.9'LT	43.8	IN-302A	MEDIAN 1 GRATE	MS-A	--	--	755.24	755.24	3.90	18	751.34	750.90	44	1.00%	0% GRATE SLOPE
IN-302A	116+66.74	62.4'LT	70.5	CB-302	MEDIAN 2 GRATE	MS-A	--	--	755.75	755.75	4.85	24	750.90	750.20	70	1.00%	0% GRATE SLOPE
CB-302	116+70.81	8.0'RT	207.2	CB-300	--	--	5-FOOT	J	757.21	755.96	7.76	24	750.20	747.19	207	1.45%	
CB-300	116+70.26	215.2'RT	20.0	OF-300A	--	--	4-FOOT	L	750.53	749.70	4.51	24	747.19	747.15	20	0.20%	FLAT SLAB TOP REQ'D
OF-300A	116+76.99	234.0'RT	--	--	--	--	--	--	--	--	--	24	747.15	--	--	--	FIELD VERIFY PIPE INVERT ELEV., SEA WALL MODIFICATIONS REQ'D
CB-303	117+50.00	8.0'RT	79.2	CB-302	--	--	5-FOOT	J	757.00	755.75	6.49	24	751.26	750.20	79	1.34%	
S-303E	117+50.77	35.9'LT	12.0	CB-303C	--	--	--	--	--	--	--	6	--	753.08	12	1.00%	LATERAL STUB FOR FUTURE CONNECTION, CAP END, VERIFY ELEVATION
CB-303D	117+55.99	23.6'LT	6.0	CB-303C	--	H-S	4-FOOT	--	756.44	755.61	5.22	15	752.39	752.33	6	1.00%	FLAT SLAB TOP REQ'D
CB-303C	117+50.00	23.9'LT	31.9	CB-303	--	H-S	4-FOOT	--	756.43	755.60	5.27	15	752.33	752.01	32	1.00%	FLAT SLAB TOP REQ'D
CB-303B	117+56.00	17.5'RT	6.0	CB-303A	2x3-FT	H-S	--	--	756.72	755.89	4.97	12	752.92	752.86	6	1.00%	
CB-303A	117+50.00	17.5'RT	9.5	CB-303	2x3-FT	H-S	--	--	756.72	755.89	5.03	12	752.86	752.26	9	6.67%	
IN-404B	119+78.24	70.8'LT	24.6	CB-404A	MEDIAN 1 GRATE	MS-A	--	--	758.15	758.15	4.54	12	753.61	753.30	25	1.24%	0% GRATE SLOPE. FIELD VERIFY EXIST. PIPE INVERT ELEV., CONNECT TO EXIST.
CB-404A	119+76.61	46.3'LT	16.2	CB-404	2x3-FT	H	--	--	757.99	757.16	3.86	18	753.30	752.98	16	2.00%	
S-407A	119+02.50	32.3'LT	9.9	MH-407	--	--	--	--	--	--	--	12	--	753.54	10	1.00%	FIELD VERIFY EXIST. PIPE INVERT ELEV., CONNECT TO EXIST. SSCPE
MH-407	119+02.51	22.4'LT	113.2	CB-402	--	--	4-FOOT	L	757.94	757.11	3.57	12	753.54	752.97	113	0.50%	4% COVER SLOPE. FIELD VERIFY EXIST. PIPE INVERT ELEV.
S-404B	119+96.94	82.5'LT	36.8	CB-404	--	--	--	--	--	--	--	18	--	752.98	36	1.00%	STUB FOR FUTURE CONNECTION, CAP END, VERIFY ELEVATION
CB-404	119+94.62	45.8'LT	24.8	CB-403	--	--	5-FOOT	J	758.45	757.20	6.22	24	752.98	752.48	25	2.00%	
CB-403	120+22.10	43.7'LT	22.5	CB-402	--	H	5-FOOT	--	757.99	757.16	6.68	24	752.48	751.97	22	2.32%	FLAT SLAB TOP REQ'D
CB-402	120+19.52	21.4'LT	30.1	CB-401	--	--	6-FOOT	J	757.97	756.72	7.25	30	751.47	751.32	30	0.50%	
CB-401	120+19.06	8.7'RT	34.3	CB-400	--	--	6-FOOT	J	758.15	756.90	7.58	30	751.32	751.15	34	0.50%	
CB-400	120+19.26	43.0'RT	194.9	EW-400A	--	H-S	5-FOOT	--	757.43	756.60	7.45	30	751.15	750.14	195	0.50%	FLAT SLAB TOP REQ'D
CB-400B	119+86.32	38.9'RT	36.2	CB-400	2x3-FT	H-S	--	--	757.28	756.45	4.97	12	753.48	752.65	36	2.31%	
EW-400A	120+12.52	243.9'RT	--	--	--	--	--	--	--	--	--	30	750.14	--	--	--	APRON ENDWALL FOR CPRC 30-INCH REQ'D. FIELD VERIFY ELEV. AND LOCATION.
CB-402A	120+26.01	24.4'LT	6.9	CB-402	2x3-FT	H-S	--	--	757.66	756.83	5.68	12	753.15	752.97	7	2.57%	
MH-408	120+80.00	25.7'LT	51.7	CB-402A	--	--	3-FOOT	J	758.65	757.40	3.23	6	754.17	753.65	52	1.00%	4% RIM SLOPE
S-408A	120+80.00	34.0'LT	8.3	MH-408	--	--	--	--	--	--	--	6	--	754.17	9	1.00%	LATERAL STUB FOR FUTURE CONNECTION, CAP END, VERIFY ELEVATION
S-409A	122+88.00	34.0'LT	10.8	MH-409	--	--	--	--	--	--	--	6	--	754.30	11	0.50%	LATERAL STUB FOR FUTURE CONNECTION, CAP END, VERIFY ELEVATION
MH-409	122+88.00	23.3'LT	72.2	CB-405B	--	--	3-FOOT	J	758.30	757.05	2.75	6	754.30	753.93	74	0.50%	4% RIM SLOPE
CB-405B	122+16.00	17.5'LT	6.0	CB-405A	--	H-S	4-FOOT	--	757.26	756.43	5.26	15	753.18	753.15	6	0.50%	FLAT SLAB TOP REQ'D
CB-405A	122+10.00	17.5'LT	23.5	CB-405	--	H-S	4-FOOT	--	757.26	756.43	5.28	15	753.15	752.78	23	1.59%	FLAT SLAB TOP REQ'D
CB-405C	122+10.00	17.5'RT	11.5	CB-405	--	H-S	4-FOOT	--	757.26	756.43	5.29	15	753.14	752.78	11	3.27%	FLAT SLAB TOP REQ'D
CB-405D	122+16.00	17.5'RT	6.0	CB-405C	--	H-S	4-FOOT	--	757.26	756.43	5.23	15	753.20	753.14	6	1.00%	FLAT SLAB TOP REQ'D
IN-405E	122+05.00	37.4'LT	20.5	CB-405A	2x2-FT	B	--	--	757.60	756.44	2.83	12	753.61	753.40	21	1.00%	YARD DRAIN, VERIFY GRATE ELEV.
CB-405	122+10.00	6.0'RT	191.8	CB-401	--	--	5-FOOT	J	757.66	756.41	5.63	24	752.78	751.82	192	0.50%	
CB-406	123+64.18	6.0'RT	154.2	CB-405	--	--	5-FOOT	J	758.28	757.03	5.38	24	753.66	752.78	154	0.57%	
CB-406A	123+64.18	43.0'LT	49.0	CB-406	--	H	4-FOOT	--	758.38	757.55	5.65	15	753.90	753.66	49	0.50%	FLAT SLAB TOP REQ'D
IN-406B	123+59.21	62.1'LT	19.7	CB-406A	MEDIAN 1 GRATE	MS-A	--	--	759.46	759.46	4.67	12	754.79	754.15	20	3.20%	0% GRATE SLOPE
S-406E	124+08.32	45.1'LT	17.3	CB-406C	--	--	--	--	--	--	--	6	--	754.54	18	1.00%	LATERAL STUB FOR FUTURE CONNECTION, CAP END, VERIFY ELEVATION
CB-406C	123+91.18	43.1'LT	27.0	CB-406A	2x3-FT	H	--	--	758.38	757.55	5.51	12	754.04	753.90	27	0.50%	
CB-406D	124+02.15	21.1'LT	24.5	CB-406C	2x3-FT	H-S	--	--	757.96	757.13	4.97	12	754.16	754.04	25	0.50%	
CB-406F	123+64.18	17.5'RT	11.5	CB-406	2x3-FT	H-S	--	--	757.83	757.00	5.23	12	753.77	753.66	11	1.00%	

STRUCT NO.	STATION	OFFSET	C-C (FT)	TO STRUCT	CATCH BASIN OR INLET TYPE	COVER	CB OR MH TYPE	COVER	RIM/ GRATE ELEV.	T.O.S. ELEV.	DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	DISCHARGE PIPE INLET ELEV.	DISCHARGE PIPE DISCHARGE ELEV.	DISCHARGE PIPE LENGTH (FT)	DISCHARGE PIPE SLOPE (%)	REMARKS
CB-502A	126+56.83	23.7' LT	6.6	CB-502	2x3-FT	H-S	--	--	757.27	756.44	5.24	15	753.20	753.02	7	2.57%	
W-509	125+69.00	23.3' LT	87.8	CB-502A	--	--	--	--	--	--	--	6	--	753.95	88	0.65%	WYE FOR STORM SEWER LATERAL
S-509	125+68.00	34.0' LT	10.8	W-509	--	--	--	--	--	--	--	6	--	754.52	12	1.00%	LATERAL STUB FOR FUTURE CONNECTION, CAP END, VERIFY ELEVATION
MH-508	124+91.00	23.3' LT	78.0	W-509	--	--	3-F00T	J	759.09	757.84	2.82	6	755.02	754.52	78	0.65%	4% RIM SLOPE
S-508A	124+91.00	34.0' LT	10.8	MH-508	--	--	--	--	--	--	--	6	--	755.02	11	1.00%	LATERAL STUB FOR FUTURE CONNECTION, CAP END, VERIFY ELEVATION
507A	126+62.47	62.2' LT	12.0	CB-507	--	--	--	--	--	--	--	12	756.48	756.27	12	1.78%	CONCRETE COLLARS FOR PIPE REQ'D. FIELD VERIFY EXIST. PIPE INVERT ELEV.
CB-507	126+62.46	50.2' LT	29.8	CB-502	--	--	3-F00T	L	758.77	757.94	5.71	12	754.23	753.63	30	2.00%	
S-507B	126+46.84	53.9' LT	16.1	CB-507	--	--	--	--	--	--	--	6	--	754.73	16	1.00%	LATERAL STUB FOR FUTURE CONNECTION, CAP END, VERIFY ELEVATION
CB-502	126+62.45	20.3' LT	59.3	MH-501	--	--	5-F00T	J	757.51	756.26	5.63	24	752.63	752.00	59	1.07%	
IN-501A	126+98.97	51.8' LT	41.1	MH-501	MEDIAN 1 GRATE	MS-A	--	--	756.58	756.58	3.56	15	753.02	752.75	41	0.66%	
S-501B	127+28.92	34.0' LT	18.0	MH-501	--	--	--	--	--	--	--	6	--	753.50	18	1.00%	LATERAL STUB FOR FUTURE CONNECTION, CAP END, VERIFY ELEVATION
MH-501	127+21.72	17.5' LT	35.0	MH-500	--	H	7-F00T	--	756.92	756.09	4.59	30	751.50	751.27	35	0.66%	FLAT SLAB TOP REQ'D
MH-500	127+21.72	17.5' RT	38.0	EW-500A	--	H	7-F00T	--	756.92	756.09	5.32	36	750.77	750.73	38	0.11%	FLAT SLAB TOP REQ'D
EW-500A	127+08.32	61.7' RT	--	--	--	--	--	--	--	--	--	36	750.73	--	--	--	APRON ENDWALL FOR CPRC 36-INCH REQ'D
CB-503	128+80.00	8.0' RT	158.6	MH-500	--	--	6-F00T	J	756.41	755.16	6.21	36	750.95	750.77	159	0.11%	CLASS IV PIPE
S-503G	128+50.61	34.0' LT	33.7	CB-503C	--	--	--	--	--	--	--	6	--	752.68	34	1.00%	LATERAL STUB FOR FUTURE CONNECTION, CAP END, VERIFY ELEVATION
IN-503E	129+15.00	37.4' LT	20.8	CB-503D	2x2-FT	B	--	--	756.40	755.24	2.80	12	752.44	752.33	21	0.52%	YARD DRAIN, VERIFY RIM/GRATE ELEV.
CB-503D	129+09.00	17.5' LT	29.0	CB-503C	--	H-S	4-F00T	--	756.10	755.27	5.44	18	751.83	751.68	29	0.52%	FLAT SLAB TOP REQ'D
CB-503C	128+80.00	17.5' LT	25.5	CB-503	--	H-S	4-F00T	--	756.05	755.22	5.54	18	751.68	751.16	26	2.00%	FLAT SLAB TOP REQ'D
CB-503B	128+86.00	17.5' RT	6.0	CB-503A	2x3-FT	H-S	--	--	756.05	755.22	4.97	12	752.25	752.22	6	0.50%	
CB-503A	128+80.00	17.5' RT	9.5	CB-503	2x3-FT	H-S	--	--	756.05	755.22	5.00	12	752.22	752.02	10	2.00%	
CB-504	130+90.70	8.0' RT	210.7	CB-503	--	--	6-F00T	J	757.55	756.30	6.01	30	752.29	751.45	211	0.40%	CLASS IV PIPE
CB-504A	131+00.00	17.5' RT	13.3	CB-504	2x3-FT	H	--	--	757.05	756.22	4.89	12	753.33	753.07	13	2.00%	
S-510A	130+19.00	34.0' LT	10.2	MH-510	--	--	--	--	--	--	--	6	--	754.28	11	0.50%	LATERAL STUB FOR FUTURE CONNECTION, CAP END, VERIFY ELEVATION
MH-510	130+19.00	23.8' LT	71.8	CB-505	--	--	3-F00T	J	757.54	756.29	2.01	6	754.28	753.92	72	0.50%	4% RIM SLOPE
CB-505	130+90.80	23.8' LT	31.8	CB-504	--	H	5-F00T	--	757.30	756.47	6.05	24	752.42	752.29	32	0.41%	FLAT SLAB TOP REQ'D
IN-505A	130+90.69	41.1' LT	17.3	CB-505	MEDIAN 1 GRATE	MS-A	--	--	757.30	757.30	3.85	12	753.45	753.11	17	2.00%	0% GRATE SLOPE
CB-506	131+34.23	24.6' LT	42.3	CB-505	--	H-S	5-F00T	--	757.42	756.59	6.01	24	752.58	752.42	42	0.38%	FLAT SLAB TOP REQ'D
IN-506A	131+32.96	40.3' LT	15.8	CB-506	MEDIAN 1 GRATE	MS-A	--	--	757.86	757.86	4.38	18	753.48	753.08	16	2.50%	0% GRATE SLOPE
CB-602A	136+54.71	30.2' LT	41.6	CB-602	2x3-FT	H-S	--	--	765.20	764.37	4.97	12	761.40	760.84	42	1.33%	
CB-602	136+21.98	56.0' LT	--	--	--	--	4-F00T	J	765.90	764.65	5.81	--	760.84	--	--	--	CONNECTO TO EXIST. 24" SSRC. FIELD VERIFY EXIST. PIPE INVERT ELEV.
S-601B	135+93.23	41.3' LT	6.7	CB-601A	--	--	--	--	--	--	--	6	--	761.60	7	1.00%	LATERAL STUB FOR FUTURE CONNECTION, CAP END, VERIFY ELEVATION
CB-601A	135+98.44	37.0' LT	5.7	CB-601	2x3-FT	H	--	--	764.95	764.12	5.02	12	761.10	760.98	6	2.00%	
CB-601	136+02.83	33.4' LT	--	--	--	--	4-F00T	J	765.24	763.99	5.66	--	760.33	--	--	--	CONNECTO TO EXIST. 24" SSRC. FIELD VERIFY EXIST. PIPE INVERT ELEV.
CB-600A	135+83.44	23.9' RT	22.4	CB-600	2x3-FT	H-S	--	--	764.62	763.79	4.97	12	760.82	760.47	22	1.59%	
CB-600	135+66.45	9.3' RT	--	--	--	--	4-F00T	J	764.78	763.53	6.06	--	759.47	--	--	--	CONNECTO TO EXIST. 24" SSRC. FIELD VERIFY EXIST. PIPE INVERT ELEV.
IN-700B	133+66.97	67.1' RT	24.8	CB-700A	MEDIAN 1 GRATE	MS-A	--	--	758.94	758.94	3.29	12	755.65	755.53	25	0.50%	0% GRATE SLOPE
CB-700A	133+47.99	54.6' RT	45.2	EW-700	2x3-FT	H-S	--	--	759.09	758.26	4.73	12	755.53	755.27	45	0.50%	
EW-700	133+13.69	87.5' RT	--	--	--	--	--	--	--	--	--	12	755.27	--	--	--	APRON ENDWALLS FOR CULVERT PIPE 12-INCH REQ'D
EW-800A	153+49.98	39.2' LT	36.5	MH-800	--	--	--	--	--	--	--	18	782.92	781.00	37	4.46%	APRON ENDWALLS FOR CULVERT PIPE 18-INCH REQ'D
MH-800	153+03.60	42.3' LT	54.1	MH-801	--	H-S	4-F00T	--	784.08	783.25	2.25	18	781.00	780.73	54	0.45%	FLAT SLAB TOP REQ'D; CLASS IV PIPE
MH-801	152+45.02	36.5' LT	54.1	EW-800B	--	H-S	4-F00T	--	783.71	782.88	2.15	18	780.73	780.44	54	0.48%	FLAT SLAB TOP REQ'D
EW-800B	151+80.98	28.7' LT	--	--	--	--	--	--	--	--	--	18	780.44	--	--	--	APRON ENDWALLS FOR CULVERT PIPE 18-INCH REQ'D

2



PLANT KEY

SYM	COMMON NAME
JTL	Tree Lilac, Japanese

LEGEND

ABC / XX — PLANT SYMBOL / QUANTITY

⊙ DECIDUOUS PLANT MATERIAL LOCATION

NOTE: ADJUST PLANT LOCATIONS AS NECESSARY TO AVOID CONFLICTS.

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PLANTING	SHEET 69	E

2

CEDAR ST

WEBSTER AVE

N

11+00 CE

11+00 NWE

END CONSTRUCTION
STA. 10+69.07 CE

END CONSTRUCTION
STA. 10+82.37 NWE

BEGIN CONSTRUCTION
STA. 9+20.00 SWE

9+00 SWE

MATCH LINE STA. 116+00

MATCH LINE STA. 122+00

STH 116

BLDG.

H.

G.

JTL
1

+50

117+00

118+00

119+00

120+00

121+00

12

PLANT KEY

SYM	COMMON NAME
JTL	Tree Lilac, Japanese

LEGEND

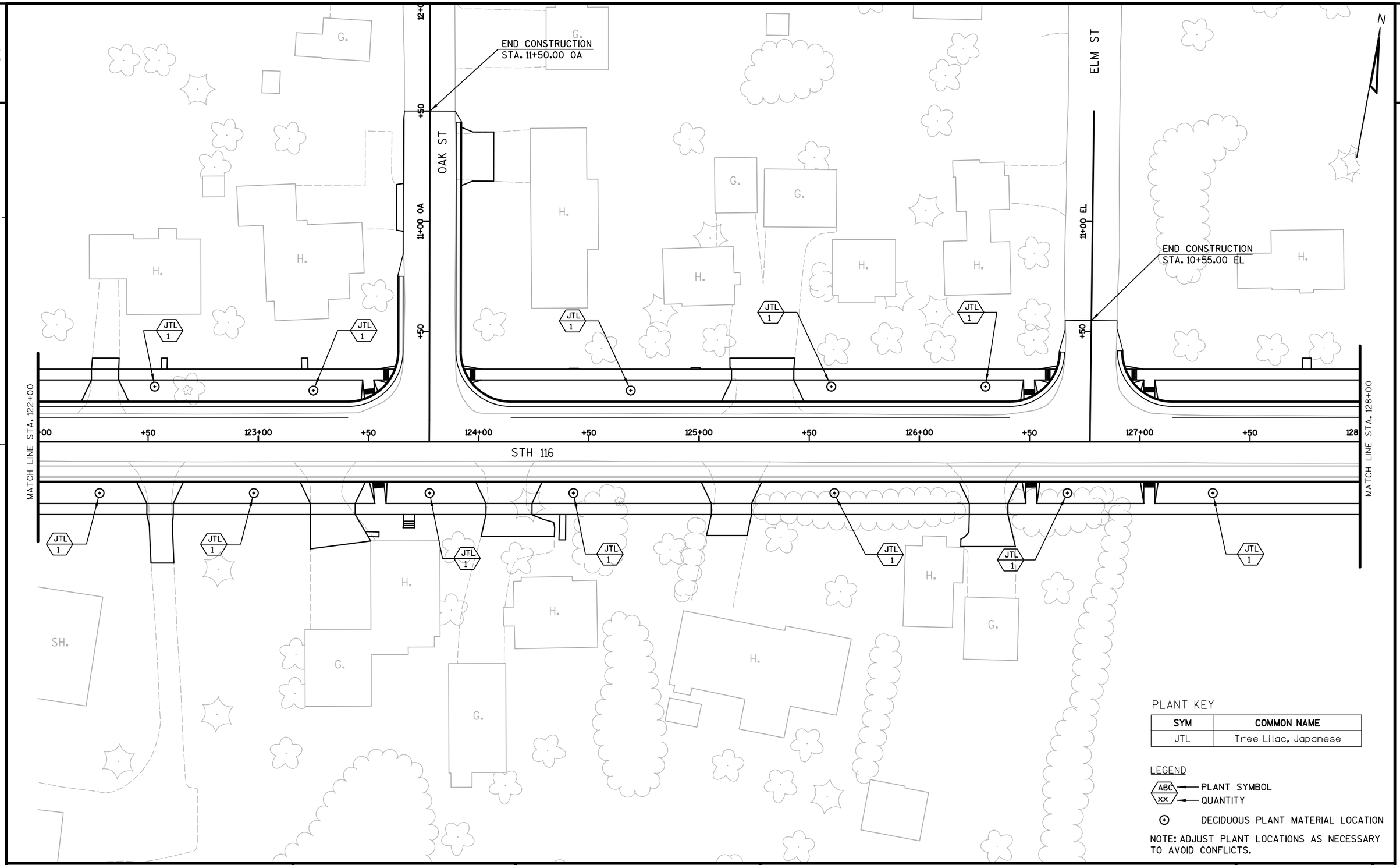
ABC
XX
PLANT SYMBOL
QUANTITY

DECIDUOUS PLANT MATERIAL LOCATION

NOTE: ADJUST PLANT LOCATIONS AS NECESSARY TO AVOID CONFLICTS.

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PLANTING	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\023102_pl.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



PLANT KEY

SYM	COMMON NAME
JTL	Tree Lilac, Japanese

LEGEND

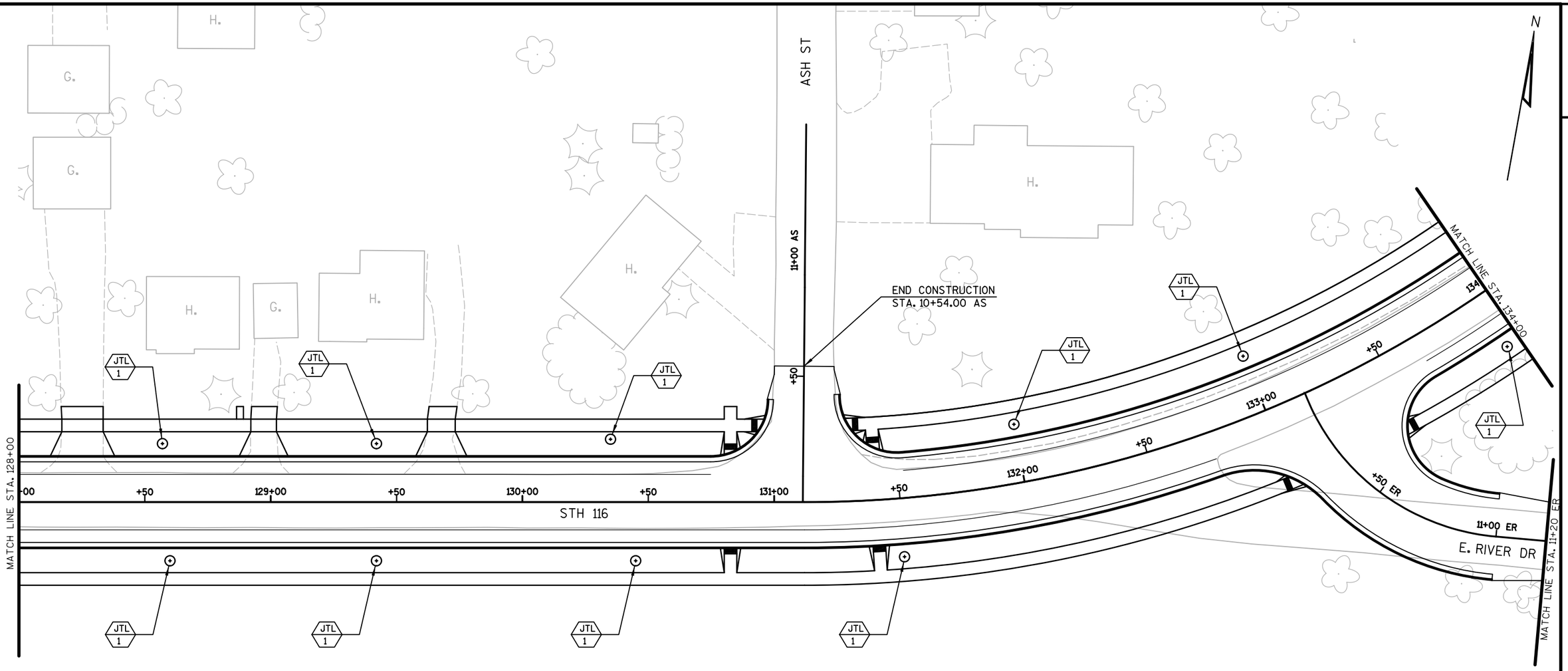
ABC / XX — PLANT SYMBOL / QUANTITY

⊙ DECIDUOUS PLANT MATERIAL LOCATION

NOTE: ADJUST PLANT LOCATIONS AS NECESSARY TO AVOID CONFLICTS.

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PLANTING	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\023103_pl.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



PLANT KEY

SYM	COMMON NAME
JTL	Tree Lilac, Japanese

LEGEND

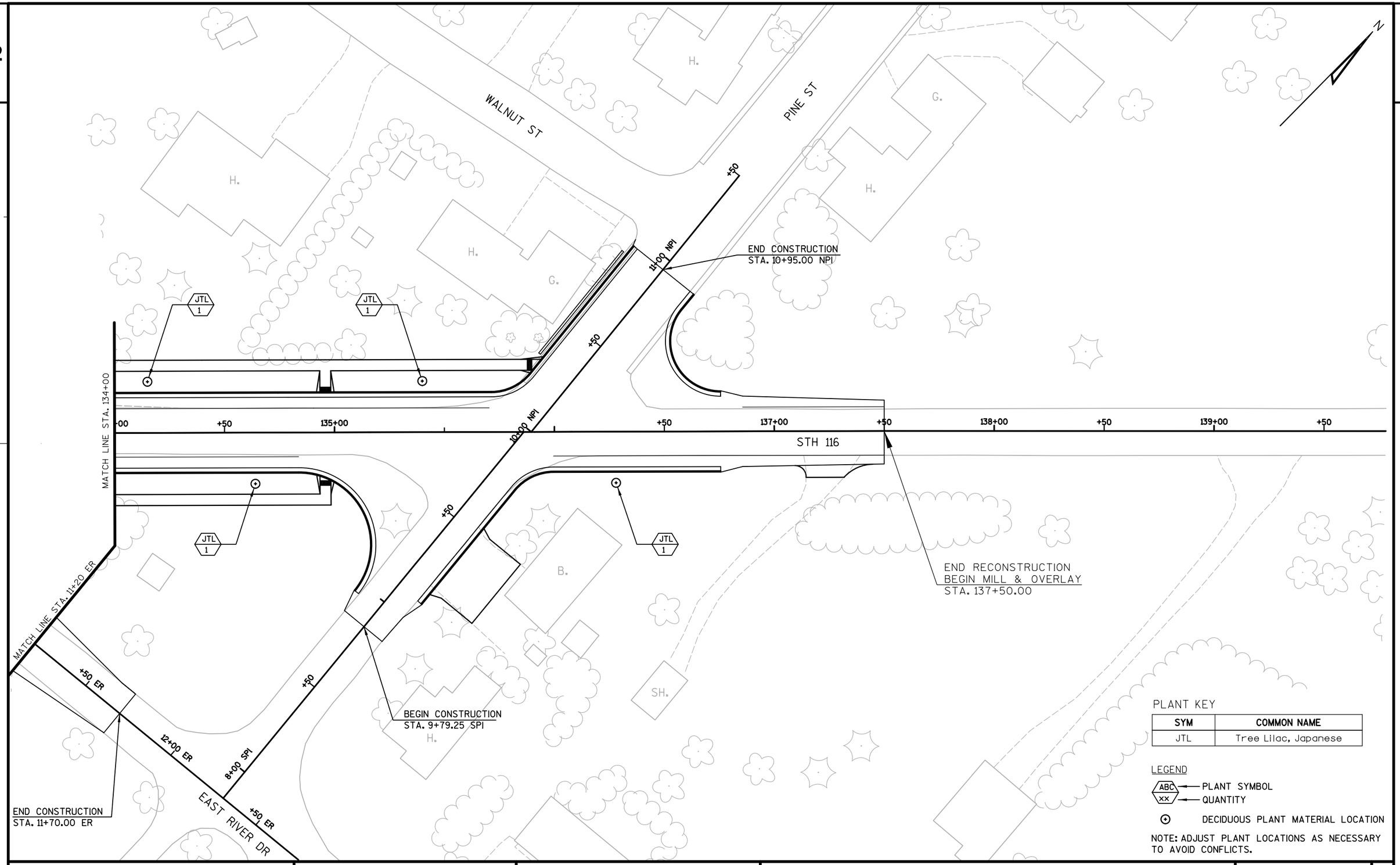
ABC / XX — PLANT SYMBOL / QUANTITY

⊙ DECIDUOUS PLANT MATERIAL LOCATION

NOTE: ADJUST PLANT LOCATIONS AS NECESSARY TO AVOID CONFLICTS.

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PLANTING	SHEET 72	E

2



PLANT KEY

SYM	COMMON NAME
JTL	Tree Lilac, Japanese

LEGEND

ABC / XX — PLANT SYMBOL / QUANTITY

⊙ DECIDUOUS PLANT MATERIAL LOCATION

NOTE: ADJUST PLANT LOCATIONS AS NECESSARY TO AVOID CONFLICTS.

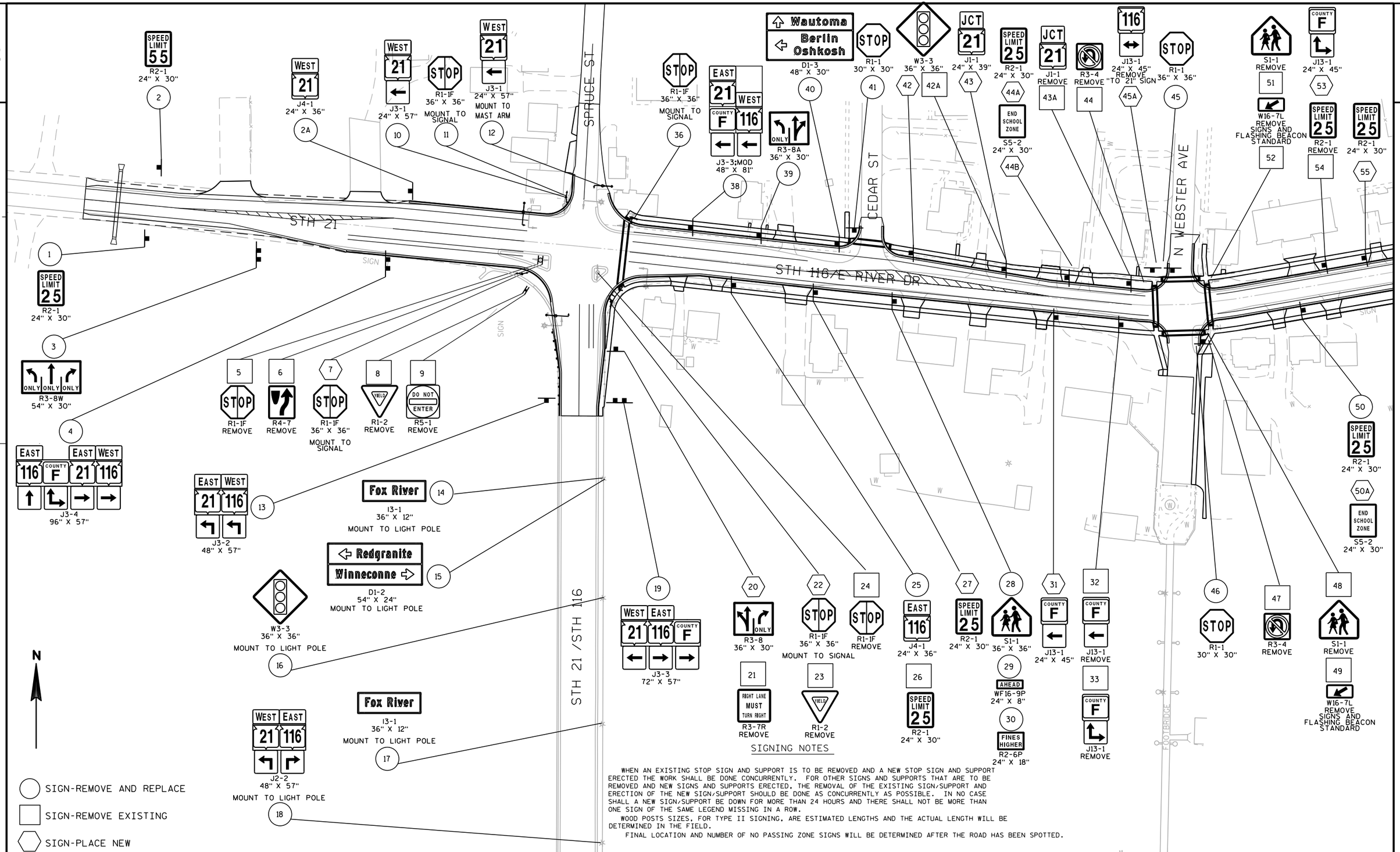
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PLANTING	SHEET 73	E

PLANT DATA TABLE

SYMBOL	Common Name	Scientific Name	Type	Average Mature Height	Size (Cal. Or Ht.) When Planted	Root Zone Mode	Minimum Size					Brace or Guy	Fertilizer Units Required	Rodent Protectbn Required	Mulch Ring Required	Plant Bed Detail
							Ball/Pot		Root Spread	Plant Hole						
							Diameter	Depth		Diameter	Depth					
MEDIUM DECIDUOUS TREES																
JTL	Tree Lilac, Japanese	*Syringa reticulata*	3T	15' - 25' Ht.	2 1/2" Cal.	B&B	28"	17"	---	52"	17"	Yes	4	Yes	64"	---

PLANT QUANTITIES TABLE

SYMBOL	Common Name	Scientific Name	Size (Cal. Or Ht.) When Planted	Root Zone Mode	Sheet 1	Sheet 2	Sheet 3	Sheet 4	Sheet 5	Totals
MEDIUM DECIDUOUS TREES										
JTL	Tree Lilac, Japanese	*Syringa reticulata*	2 1/2" Cal.	B&B	3	8	12	10	4	37



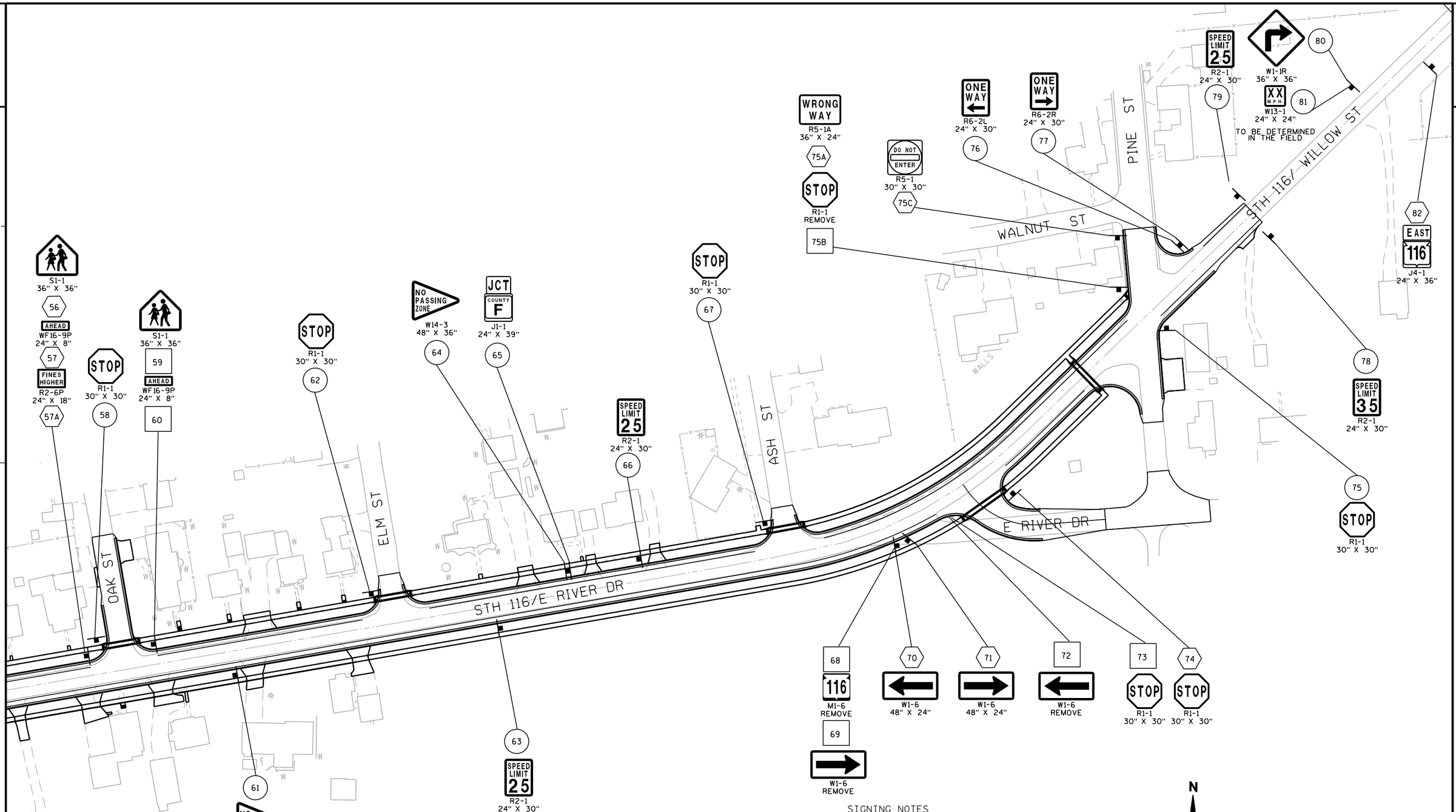
SIGNING NOTES

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

FINAL LOCATION AND NUMBER OF NO PASSING ZONE SIGNS WILL BE DETERMINED AFTER THE ROAD HAS BEEN SPOTTED.

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PERMANENT SIGNING	SHEET 75	E



SIGNING NOTES

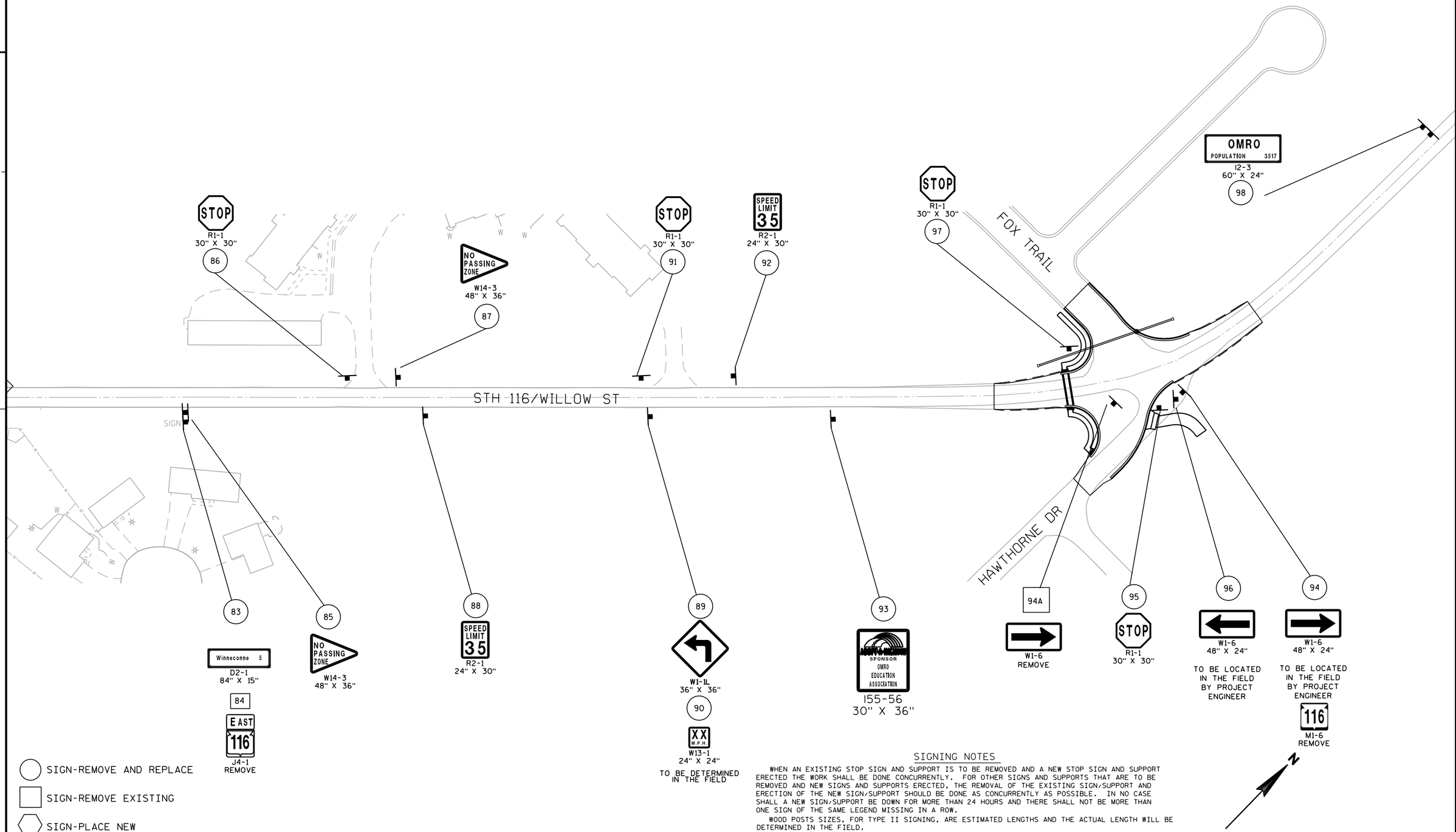
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FINAL LOCATION AND NUMBER OF NO PASSING ZONE SIGNS WILL BE DETERMINED AFTER THE ROAD HAS BEEN SPOTTED.

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PERMANENT SIGNING	SHEET 76	E

2



SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

SIGNING NOTES

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PERMANENT SIGNING	SHEET 77	E

2

2

N WEBSTER AVE

STH 116 / E RIVER DR

SIGN

100

S1-1 36" X 36"
S16-7R 30" X 18"
S1-1 36" X 36"
S16-7L 30"_X_18"
FLASHING LED PEDESTRIAN SIGN
*ALL SIGNS PAID AS PART OF SPV.0060.01

102

S1-1 36" X 36"
S16-7R 30" X 18"
S1-1 36" X 36"
S16-7L 30"_X_18"
FLASHING LED PEDESTRIAN SIGN
*ALL SIGNS PAID AS PART OF SPV.0060.01

101

S1-1 36" X 36"
S16-7L 30"_X_18"
S1-1 36" X 36"
S16-7R 30" X 18"
FLASHING LED PEDESTRIAN SIGN
*ALL SIGNS PAID AS PART OF SPV.0060.01

103

S1-1 36" X 36"
S16-7L 30"_X_18"
S1-1 36" X 36"
S16-7R 30" X 18"
FLASHING LED PEDESTRIAN SIGN
*ALL SIGNS PAID AS PART OF SPV.0060.01

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PERMANENT SIGNING - FLASHING LED PEDESTRIAN SIGN LOCATIONS	SHEET 78	E

GENERAL NOTE

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

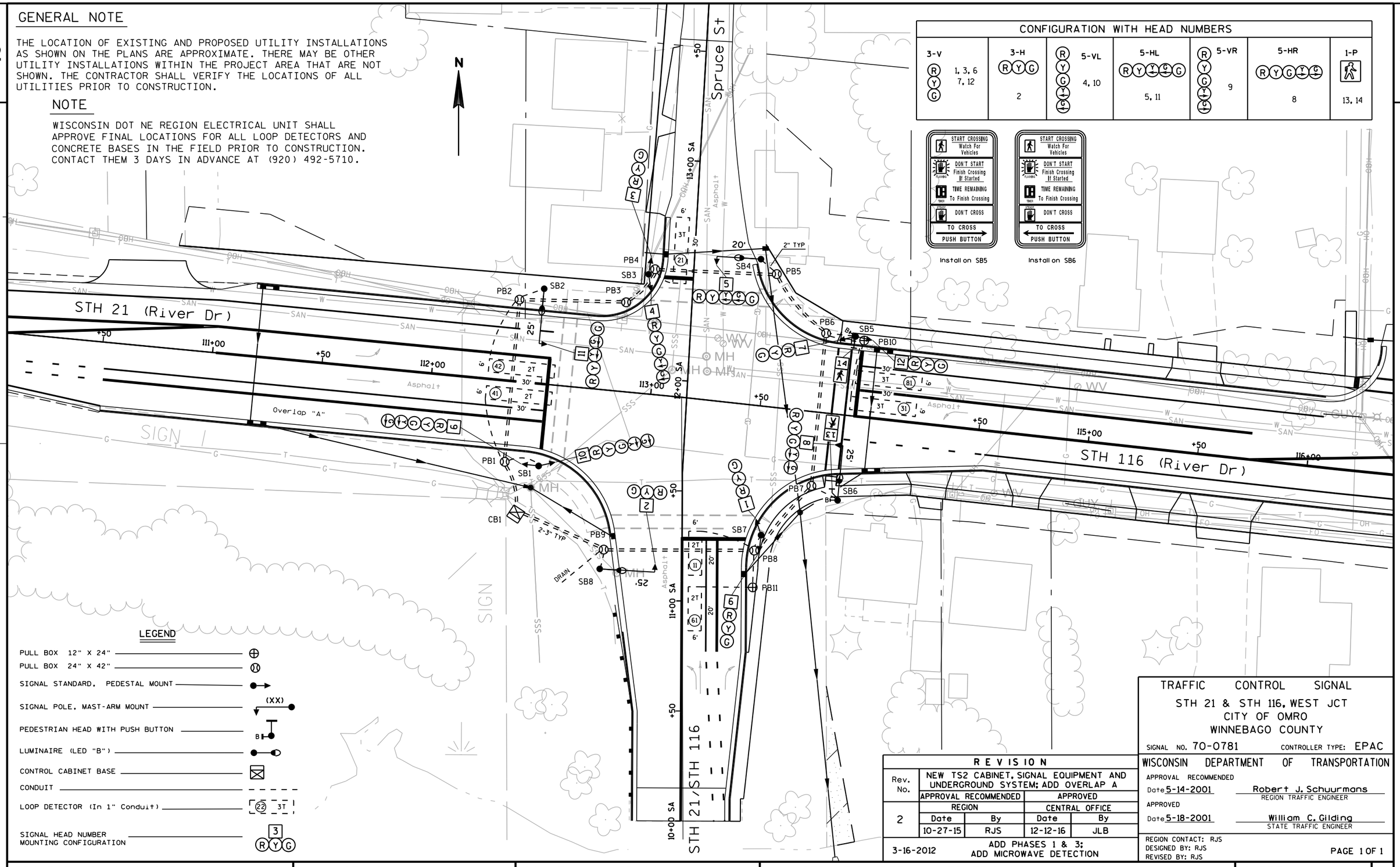
NOTE

WISCONSIN DOT NE REGION ELECTRICAL UNIT SHALL APPROVE FINAL LOCATIONS FOR ALL LOOP DETECTORS AND CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION. CONTACT THEM 3 DAYS IN ADVANCE AT (920) 492-5710.

CONFIGURATION WITH HEAD NUMBERS						
3-V	3-H	5-VL	5-HL	5-VR	5-HR	1-P
1, 3, 6 7, 12	2	4, 10	5, 11	9	8	13, 14

Install on SB5

Install on SB6



LEGEND

- PULL BOX 12" X 24"
- PULL BOX 24" X 42"
- SIGNAL STANDARD, PEDESTAL MOUNT
- SIGNAL POLE, MAST-ARM MOUNT (XX)
- PEDESTRIAN HEAD WITH PUSH BUTTON B
- LUMINAIRE (LED "B")
- CONTROL CABINET BASE
- CONDUIT
- LOOP DETECTOR (In 1" Conduit) (22) 3T
- SIGNAL HEAD NUMBER MOUNTING CONFIGURATION 3 (R Y G)

REVISION				
Rev. No.	NEW TS2 CABINET, SIGNAL EQUIPMENT AND UNDERGROUND SYSTEM; ADD OVERLAP A			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
	Date	By	Date	By
2	10-27-15	RJS	12-12-16	JLB
3-16-2012	ADD PHASES 1 & 3; ADD MICROWAVE DETECTION			

TRAFFIC CONTROL SIGNAL

STH 21 & STH 116, WEST JCT
CITY OF OMRO
WINNEBAGO COUNTY

SIGNAL NO. 70-0781 CONTROLLER TYPE: EPAC

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 5-14-2001 Robert J. Schuurmans, REGION TRAFFIC ENGINEER

APPROVED
Date 5-18-2001 William C. Gilding, STATE TRAFFIC ENGINEER

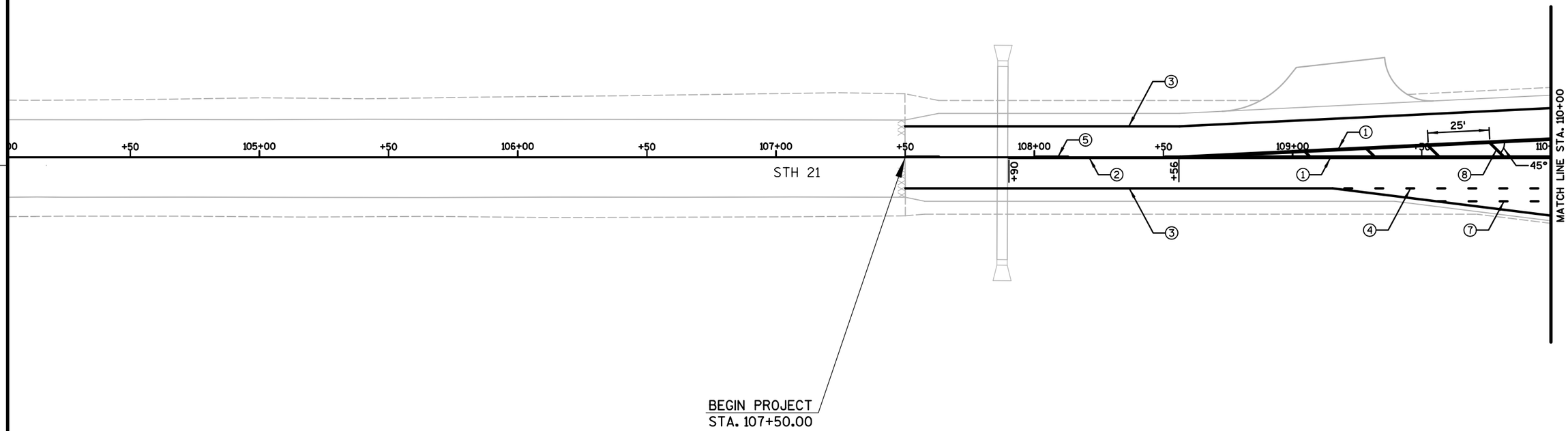
REGION CONTACT: RJS
DESIGNED BY: RJS
REVISED BY: RJS

PAGE 1 OF 1

PROJECT NO: 6190-16-72	HWY: STH 21	COUNTY: WINNEBAGO	CONSTRUCTION DETAIL - TRAFFIC SIGNAL REVISION	SHEET 79 E

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (DOUBLE YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
4. PAVEMENT MARKING EPOXY 4-INCH (WHITE)(3' LINE, 9' GAP)
5. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)(12.5' LINE, 37.5' GAP)
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10. PAVEMENT MARKING ARROWS EPOXY TYPE 2
11. PAVEMENT MARKING ARROWS EPOXY TYPE 3
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
13. PAVEMENT MARKING STOP LINE EPOXY 18-INCH
14. PAVEMENT MARKING WORDS EPOXY
15. PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY
16. PAVEMENT MARKING ARROWS BIKE LANE EPOXY
17. PAVEMENT MARKING WORDS BIKE LANE EPOXY



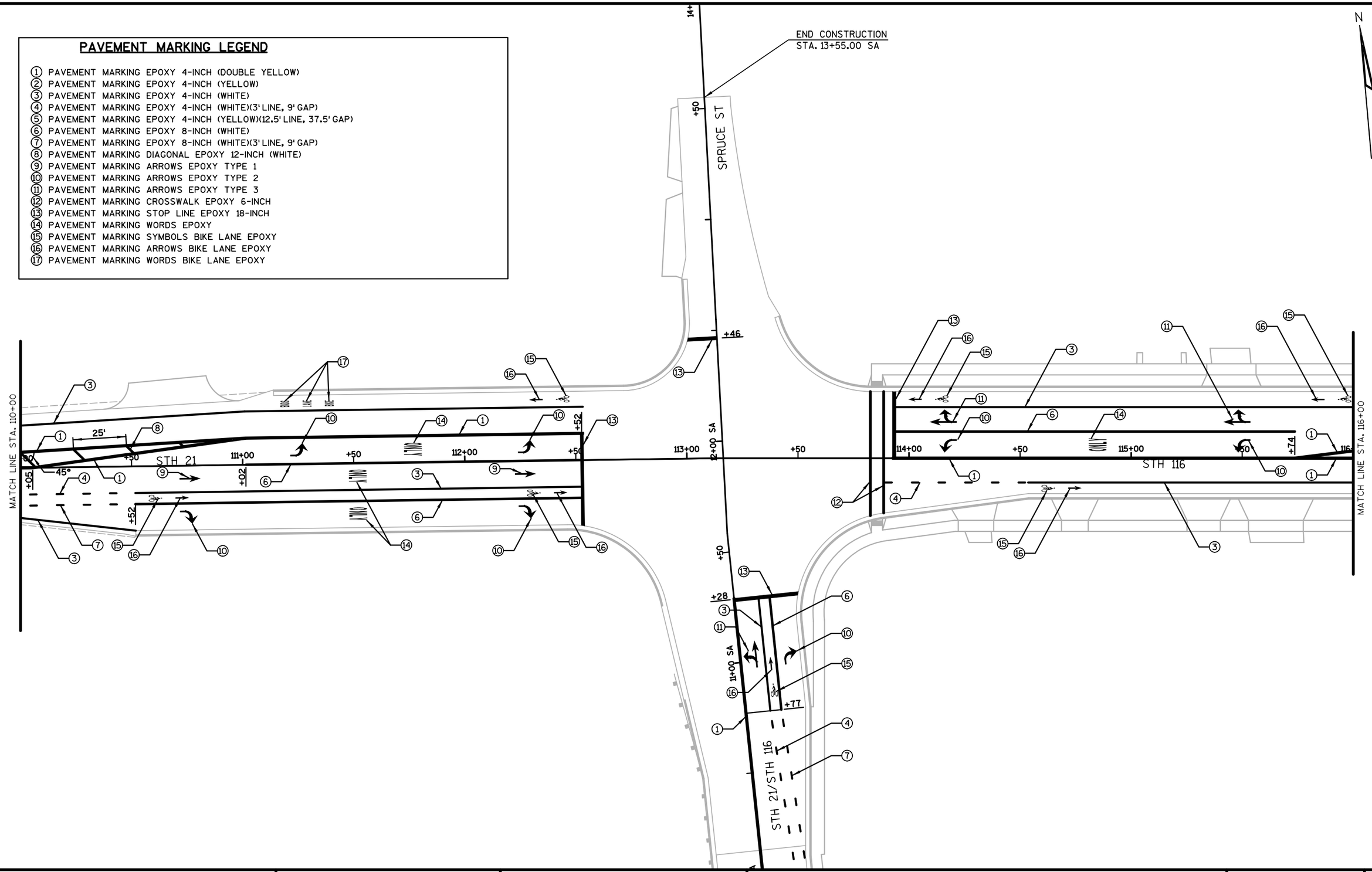
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PAVEMENT MARKING	SHEET	E

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WISDOT/CADDS SHEET 42

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (DOUBLE YELLOW)
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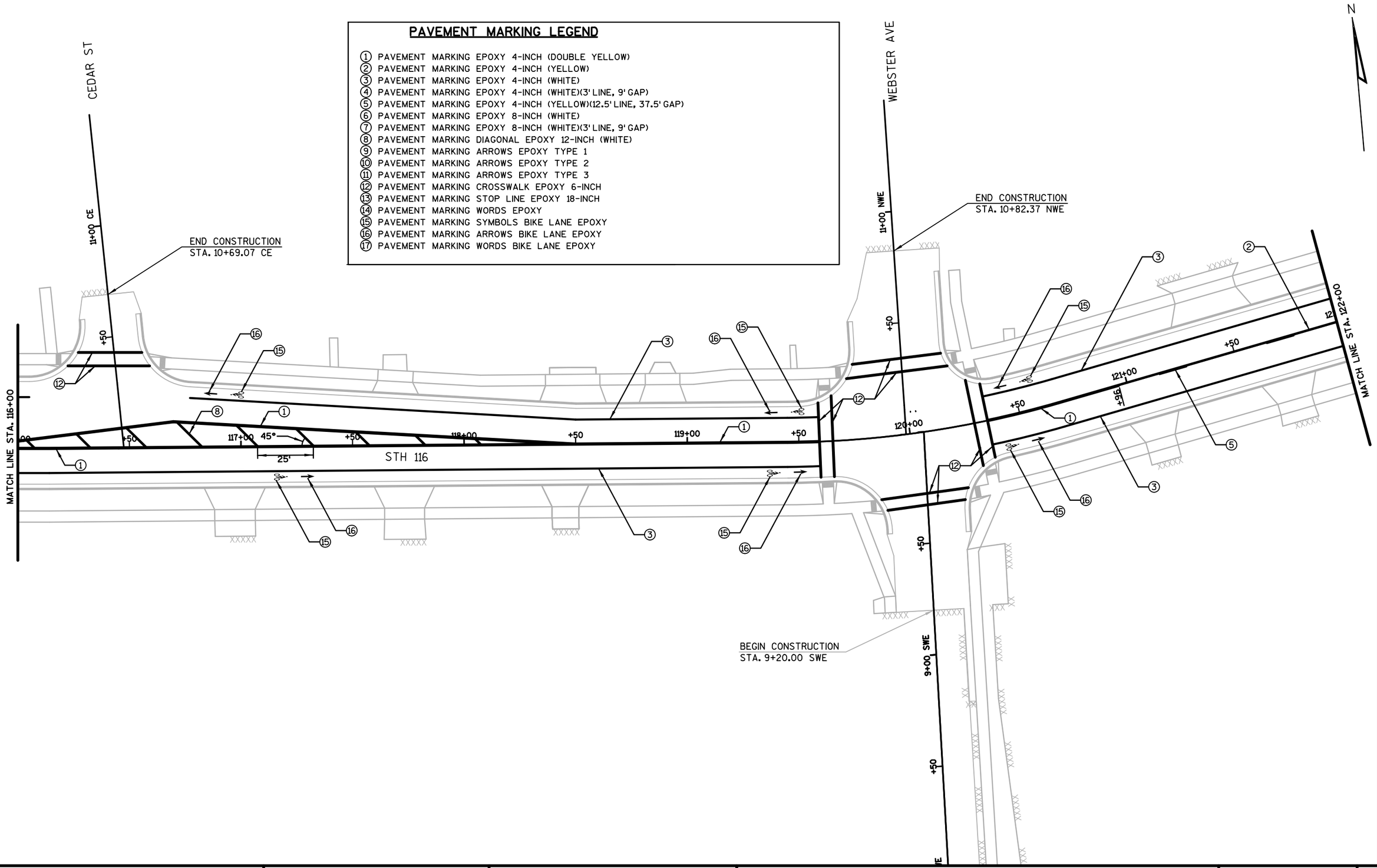


PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PAVEMENT MARKING	SHEET E

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PAVEMENT MARKING LEGEND

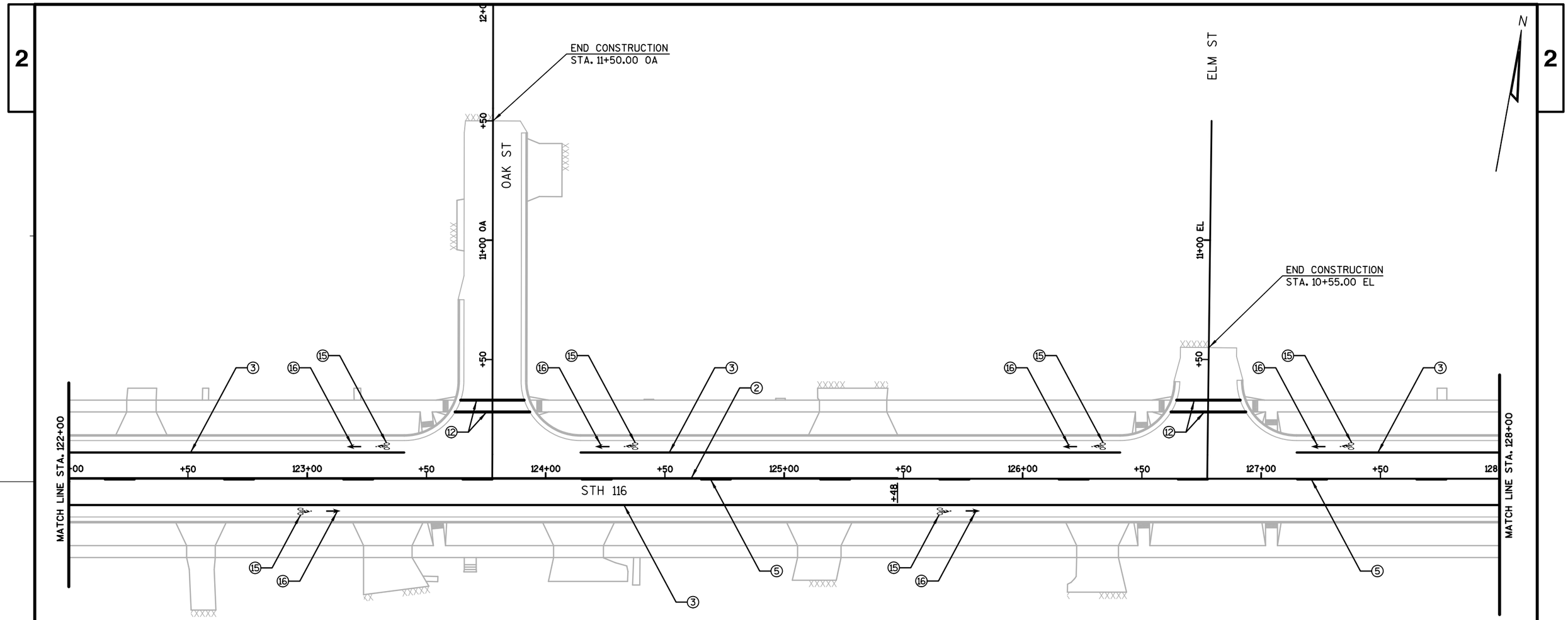
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PAVEMENT MARKING	SHEET	E

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WISDOT/CADDS SHEET 42



PAVEMENT MARKING LEGEND

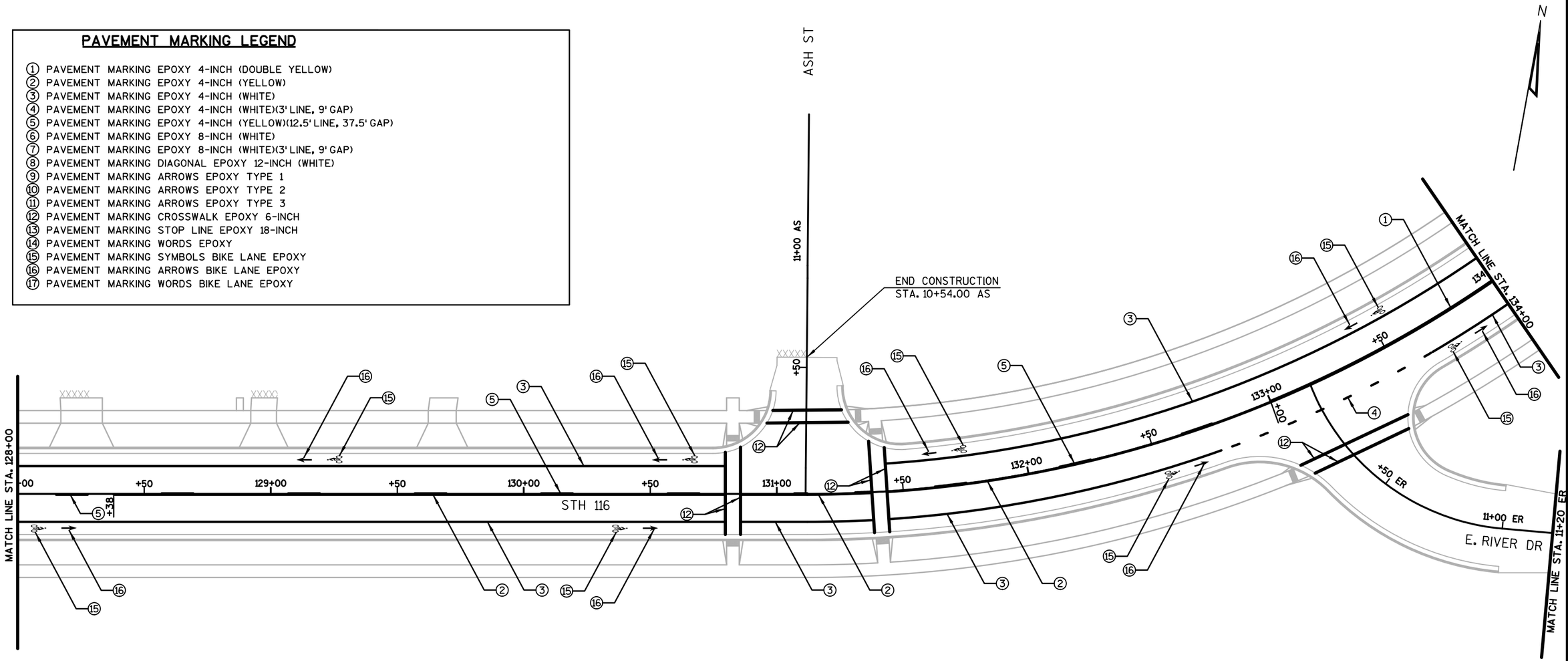
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PAVEMENT MARKING	SHEET 83	E

2

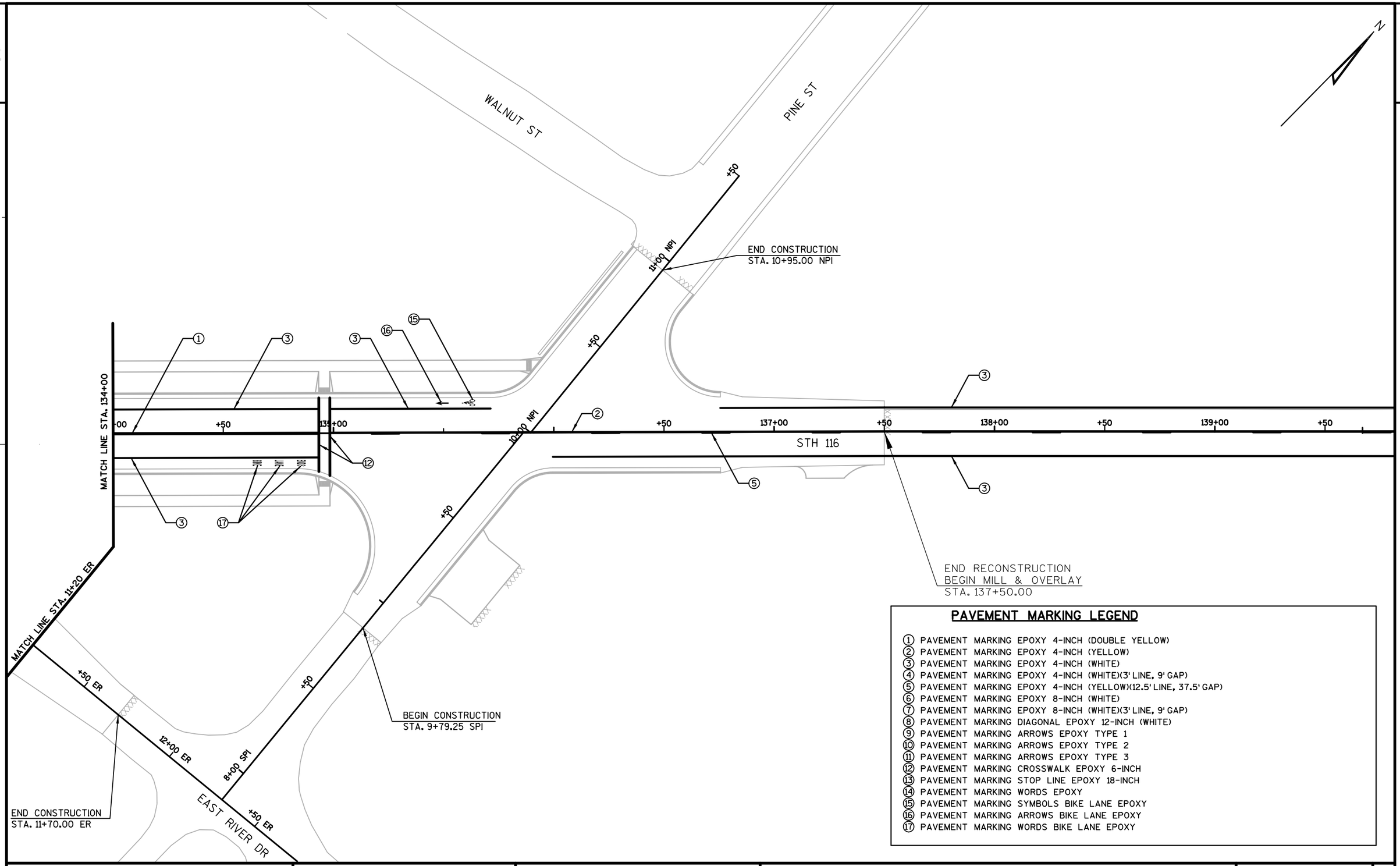
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PAVEMENT MARKING	SHEET 84	E

2



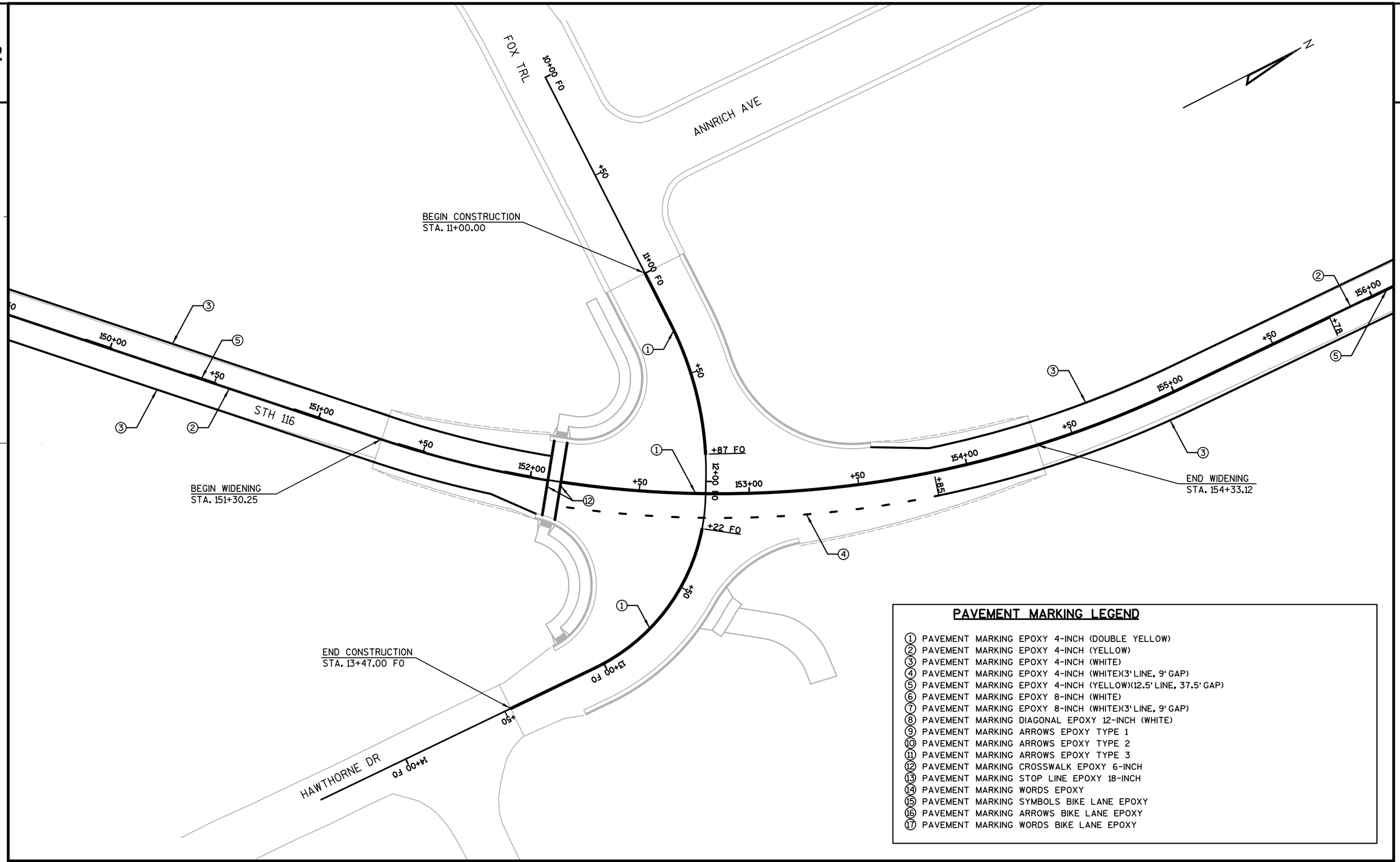
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PAVEMENT MARKING	SHEET	E

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2



PAVEMENT MARKING LEGEND

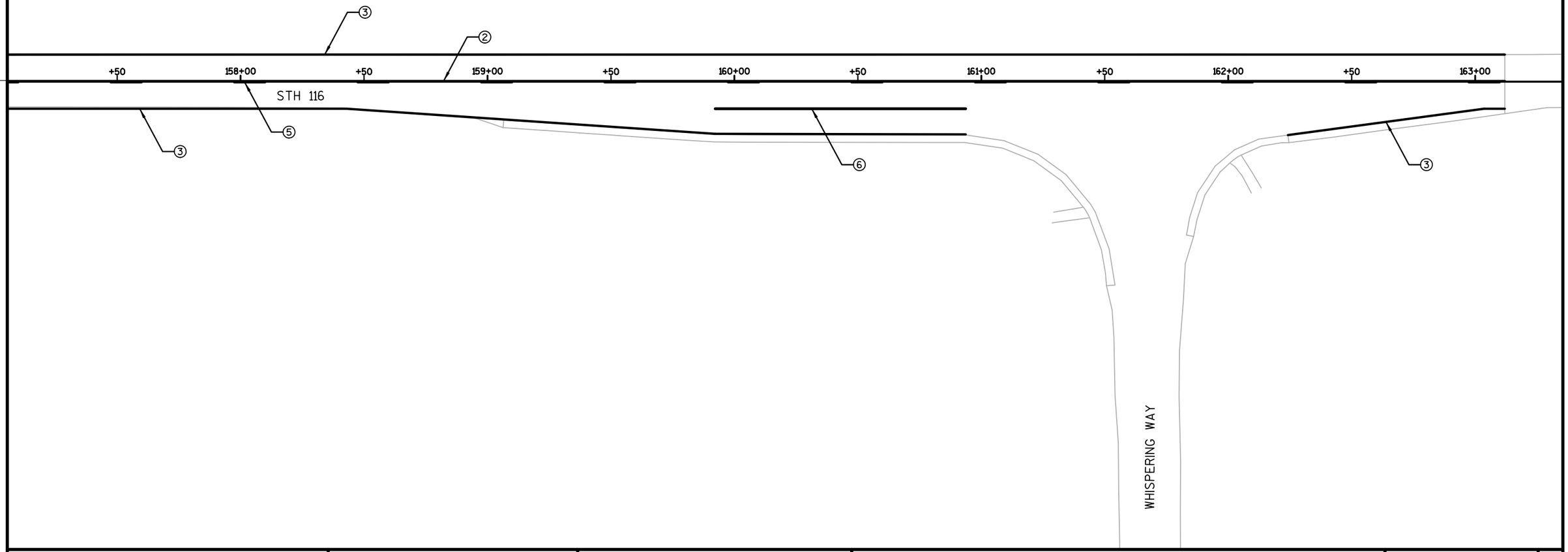
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PAVEMENT MARKING	SHEET 86	E

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (DOUBLE YELLOW)
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17. PAVEMENT MARKING WORDS BIKE LANE EPOXY

N



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PAVEMENT MARKING	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\024508_pm.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

GENERAL NOTES: TRAFFIC CONTROL

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET (500 FEET DESIRABLE) 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 AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

IF LANE CLOSURES OR SHOULDER CLOSURES ARE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

THE LANE CLOSURE SERIES SHALL BE INSTALLED AS A COMPLETE UNIT WHICH INCLUDES ALL ADVANCE WARNING SIGNING, DRUMS, AND ARROW BOARDS. PAVEMENT MARKING NOT APPROPRIATE TO THE TRAVEL PATH SHALL BE REMOVED.

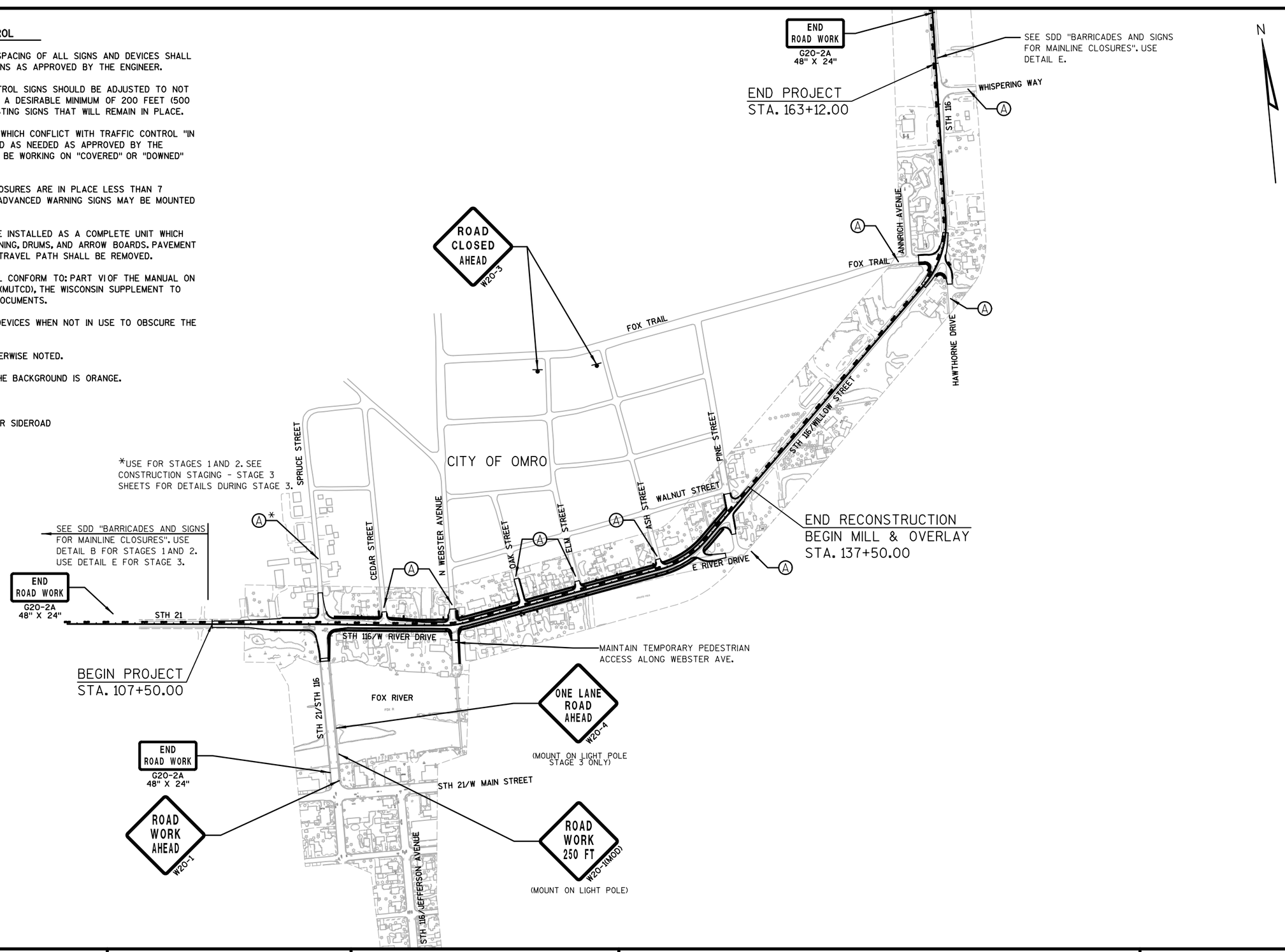
ALL TRAFFIC CONTROL SIGNING SHALL CONFORM TO: PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE WISCONSIN SUPPLEMENT TO THE MUTCD, AND OTHER CONTRACT DOCUMENTS.

THE TURNING OF TRAFFIC CONTROL DEVICES WHEN NOT IN USE TO OBSCURE THE MESSAGE WILL NOT BE ALLOWED.

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

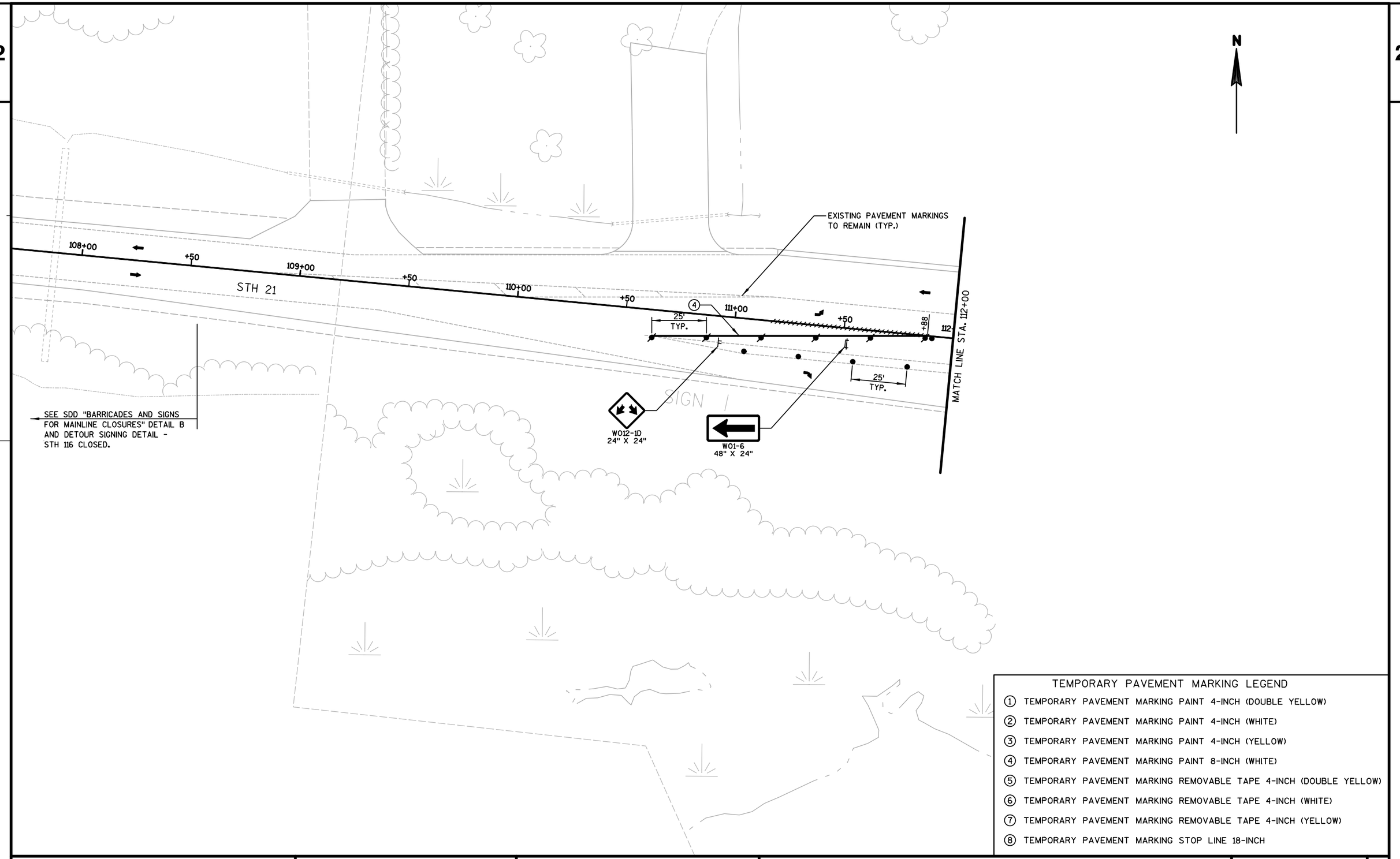
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

Ⓐ SEE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES". USE DETAIL 4.



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	ADVANCED WARNING SIGNING	SHEET E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\025001_tc.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



TEMPORARY PAVEMENT MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (DOUBLE YELLOW)
2. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)
3. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (YELLOW)
4. TEMPORARY PAVEMENT MARKING PAINT 8-INCH (WHITE)
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
8. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION STAGING - STAGE 1	SHEET 89	E

TEMPORARY PAVEMENT MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (DOUBLE YELLOW)
2. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)
3. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (YELLOW)
4. TEMPORARY PAVEMENT MARKING PAINT 8-INCH (WHITE)
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6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
8. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH

N

MATCH LINE STA. 112+00

LANE CLOSED
R11-2L
48" X 30"

REMOVING PAVEMENT REQ'D

PLACE 5" ASPHALTIC SURFACE TEMPORARY

R1-2 (ESTR)

STOP
R1-1
30" X 30"

EXISTING PAVEMENT MARKINGS TO REMAIN (TYP.)

STH 21/STH 116

STH 21

SPRUCE ST

10+00 SA | +50 | 11+00 SA | +50 | 12+00 SA | +50 | 13+00

25' TYP.

12'

4'

10'

7+10 SA

8+10 SA

100' TAPER

W01-6
48" X 24"

LANE CLOSED
R11-2L
48" X 30"

W3-3
REMOVE

W3-1
36" X 36"
MOUNT ON
LIGHT POLE

MATCH EXISTING PAVEMENT MARKING

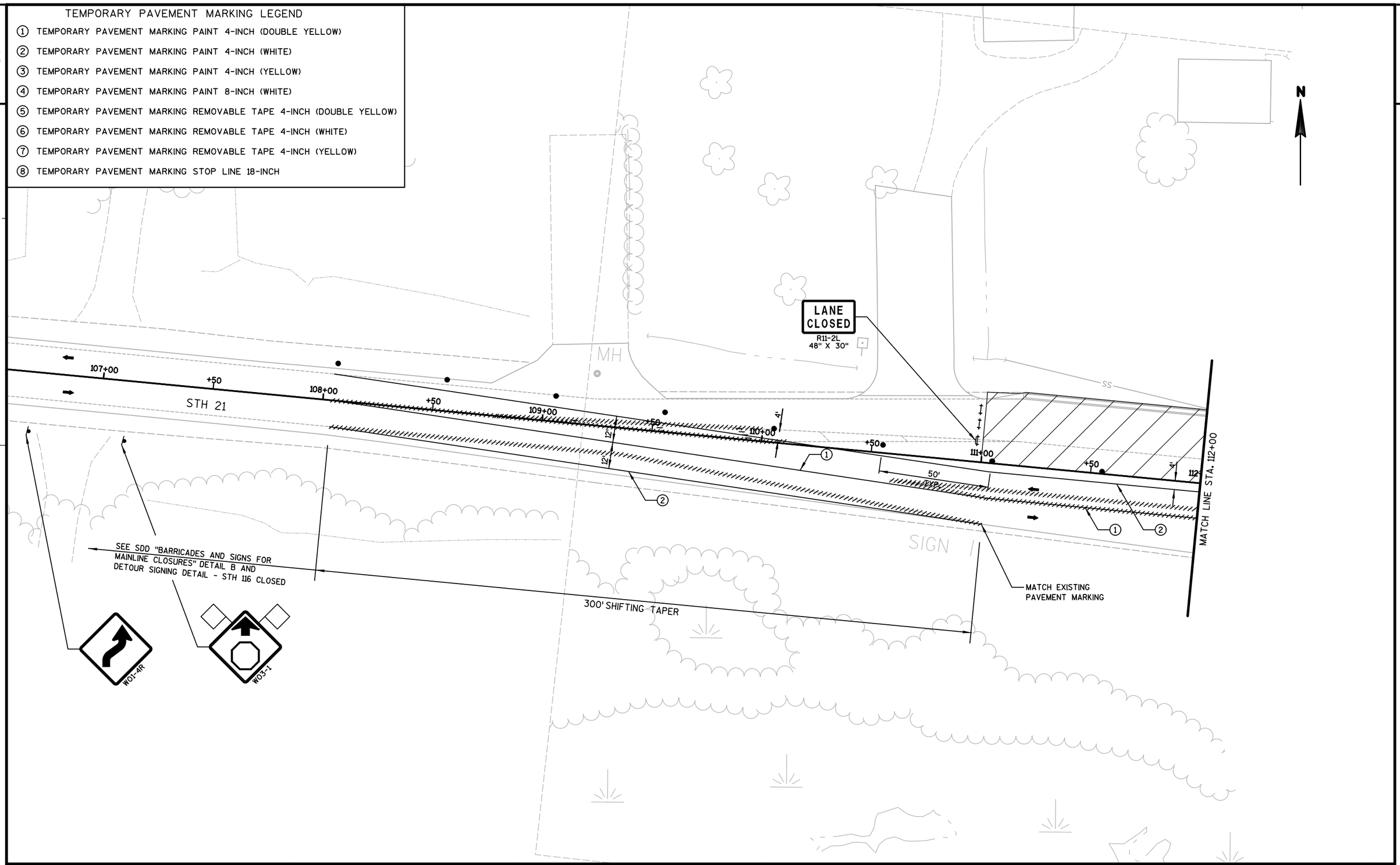
ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

STH 116

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION STAGING - STAGE 1	SHEET 90	E

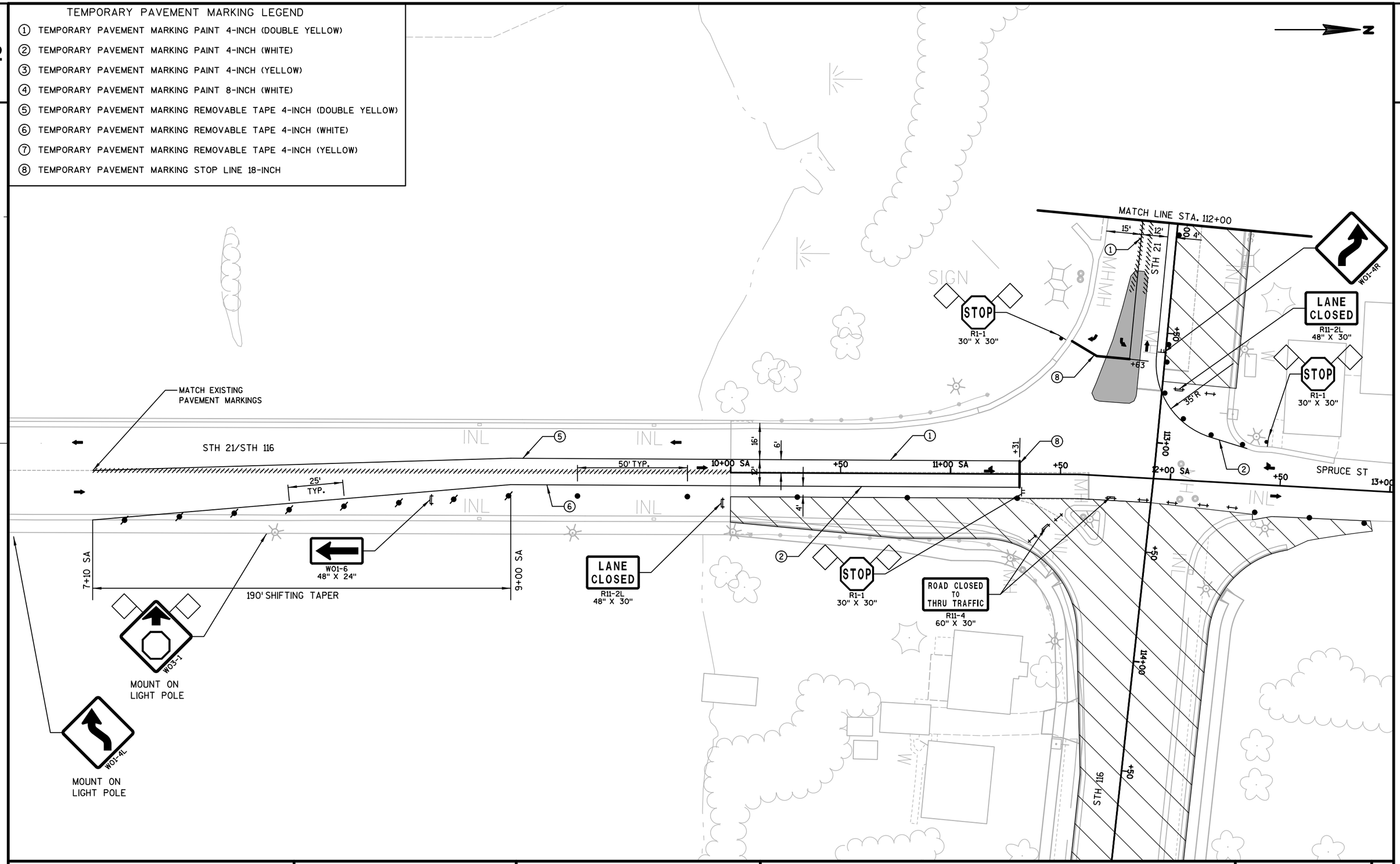
TEMPORARY PAVEMENT MARKING LEGEND

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2. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)
3. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (YELLOW)
4. TEMPORARY PAVEMENT MARKING PAINT 8-INCH (WHITE)
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
8. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH



TEMPORARY PAVEMENT MARKING LEGEND

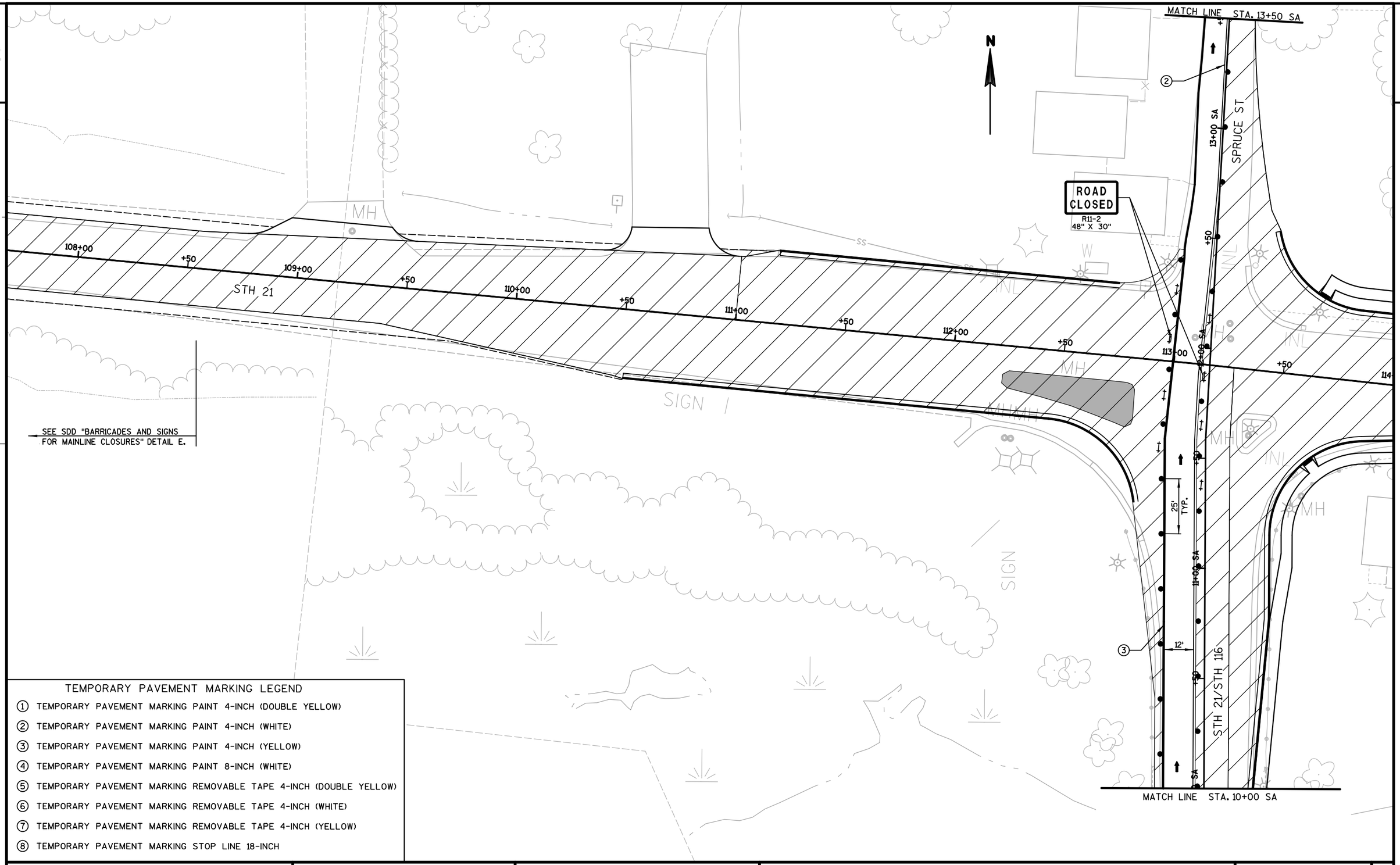
1. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (DOUBLE YELLOW)
2. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)
3. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (YELLOW)
4. TEMPORARY PAVEMENT MARKING PAINT 8-INCH (WHITE)
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
8. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION STAGING - STAGE 2	SHEET E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\026202_s2.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2



TEMPORARY PAVEMENT MARKING LEGEND

① TEMPORARY PAVEMENT MARKING PAINT 4-INCH (DOUBLE YELLOW)
② TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)
③ TEMPORARY PAVEMENT MARKING PAINT 4-INCH (YELLOW)
④ TEMPORARY PAVEMENT MARKING PAINT 8-INCH (WHITE)
⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
⑥ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
⑦ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
⑧ TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION STAGING - STAGE 3A	SHEET 93	E

TEMPORARY PAVEMENT MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (DOUBLE YELLOW)
2. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)
3. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (YELLOW)
4. TEMPORARY PAVEMENT MARKING PAINT 8-INCH (WHITE)
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
8. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH

N

FOX RIVER

INL

STH 21/STH 116

25' TYP.

6

7

10+00

MATCH LINE STA. 10+00 SA

W01-6
48" X 24"

LANE CLOSED
R11-2L
48" X 30"

5+40 SA

9+00 SA

SEE ADVANCED WARNING SIGNING AND DETOUR SIGNING DETAIL - STH 21/ STH 116 INTERSECTION CLOSED FOR ADDITIONAL INFORMATION.

360' SHIFTING TAPER

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION STAGING - STAGE 3A	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\026302_s3A.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

2

N

W01-4R

DO NOT ENTER
R5-1
36" X 36"

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
250 FT
W20-3

ROAD CLOSED
0.1 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3
60" X 30"

STA. 13+50 SA

MATCH LINE

25'
TYP.

10'
TYP.

14+00 SA

SPRUCE ST

ROAD CLOSED
R11-2
48" X 30"

DO NOT ENTER
R5-1
36" X 36"

W06-3

CHERRY ST

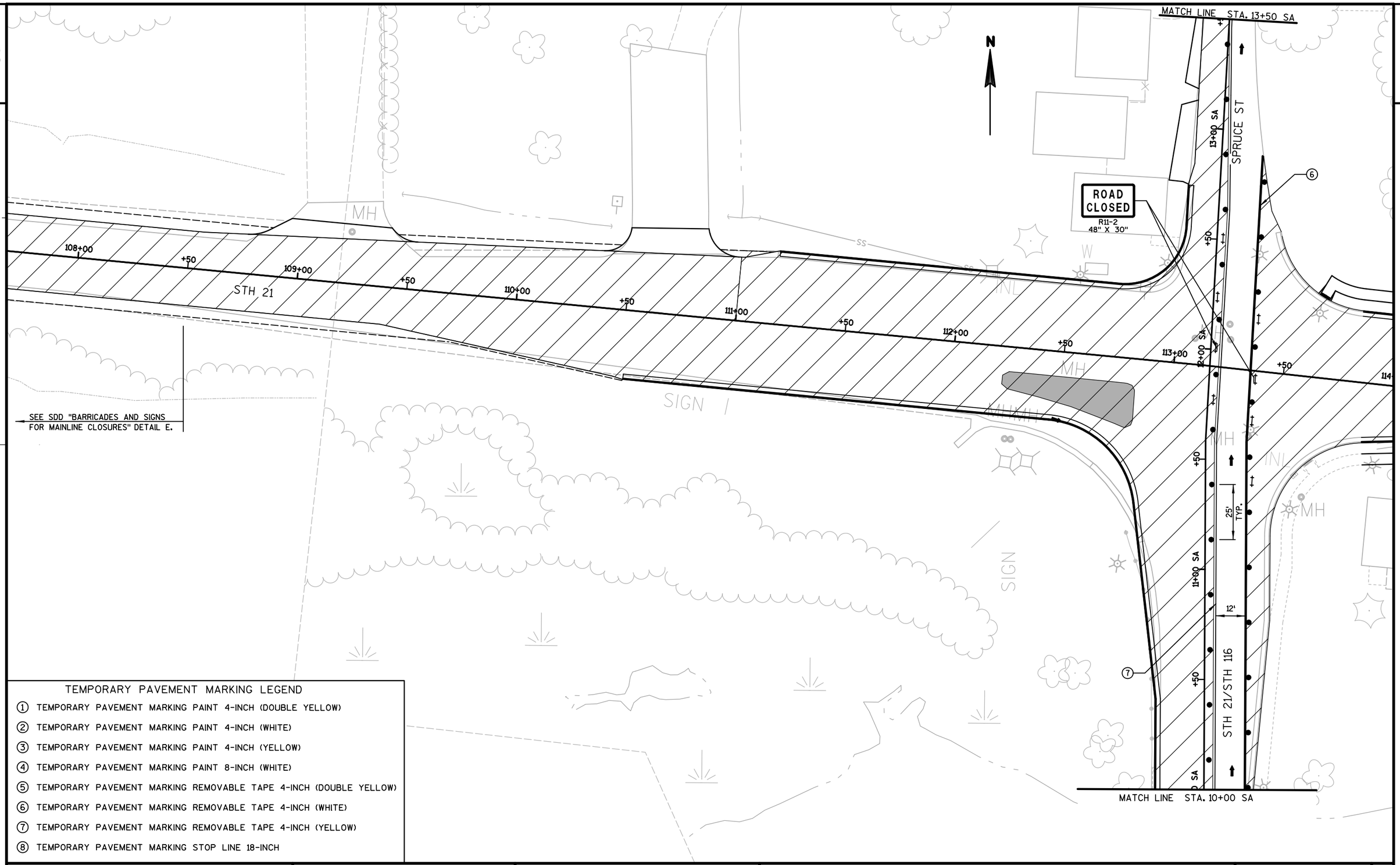
TEMPORARY PAVEMENT MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (DOUBLE YELLOW)
2. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)
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6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
8. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION STAGING - STAGE 3A	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\026303_s3A.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2



TEMPORARY PAVEMENT MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (DOUBLE YELLOW)
2. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)
3. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (YELLOW)
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6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
8. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION STAGING - STAGE 3B	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\026401_s3B.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

TEMPORARY PAVEMENT MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (DOUBLE YELLOW)
2. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)
3. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (YELLOW)
4. TEMPORARY PAVEMENT MARKING PAINT 8-INCH (WHITE)
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
8. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH

2

2

N

FOX RIVER

EXISTING PAVEMENT MARKINGS TO REMAIN (TYP.)

PROPOSED PAVEMENT MARKING (PAVEMENT MARKING EPOXY 4-INCH, DOUBLE YELLOW)

100' SHIFTING TAPER

50' BUFFER

5+40 SA

STH 21/STH 116

25' TYP.

MATCH LINE STA. 10+00 SA

SEE ADVANCED WARNING SIGNING AND DETOUR SIGNING DETAIL - STH 21/ STH 116 INTERSECTION CLOSED FOR ADDITIONAL INFORMATION.

LANE CLOSED
R11-2L
48" X 30"

WO1-6
48" X 24"

LANE CLOSED
R11-2L
48" X 30"

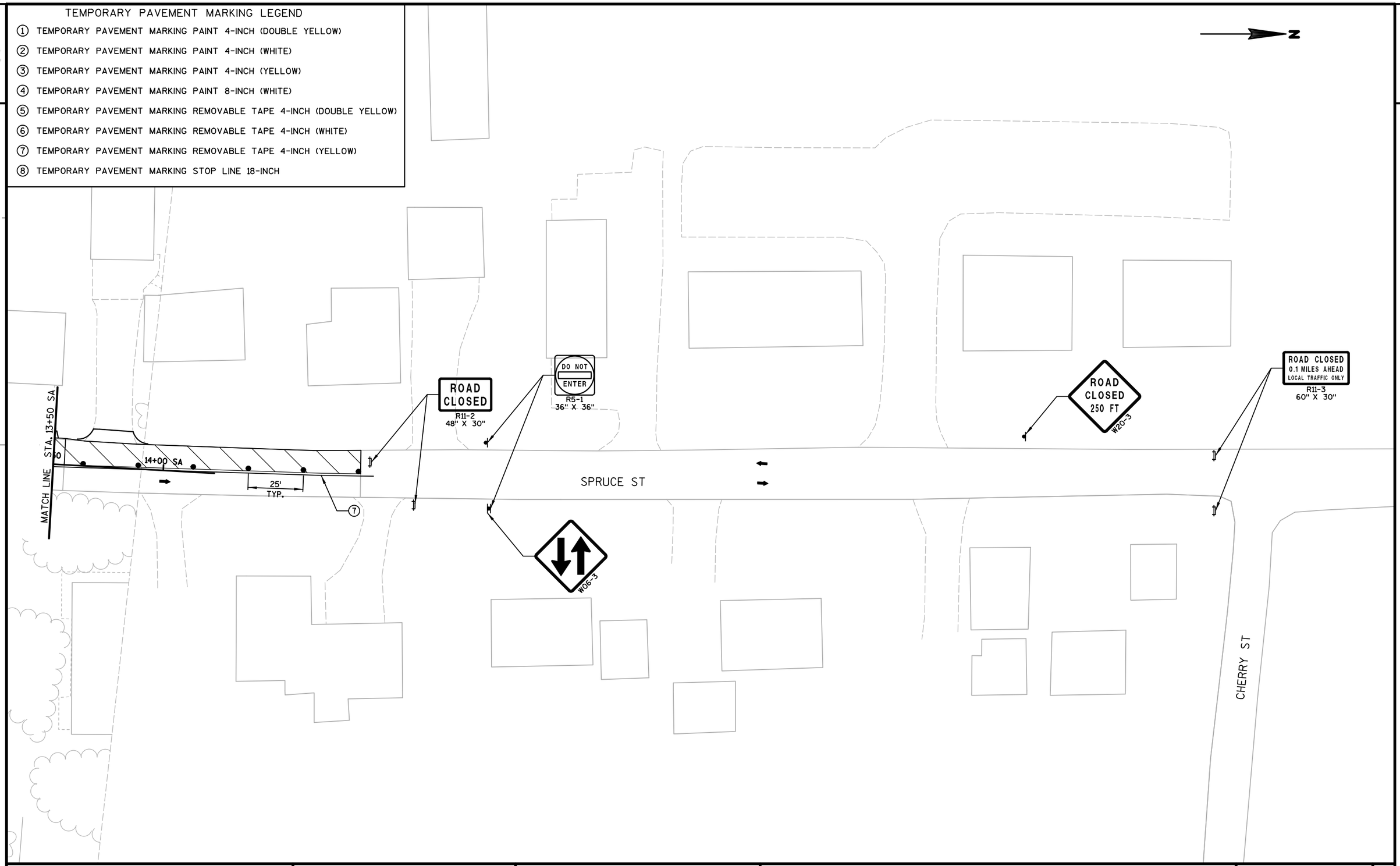
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION STAGING - STAGE 3B	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\026402_s3B.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

TEMPORARY PAVEMENT MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (DOUBLE YELLOW)
2. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)
3. TEMPORARY PAVEMENT MARKING PAINT 4-INCH (YELLOW)
4. TEMPORARY PAVEMENT MARKING PAINT 8-INCH (WHITE)
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
8. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH



2

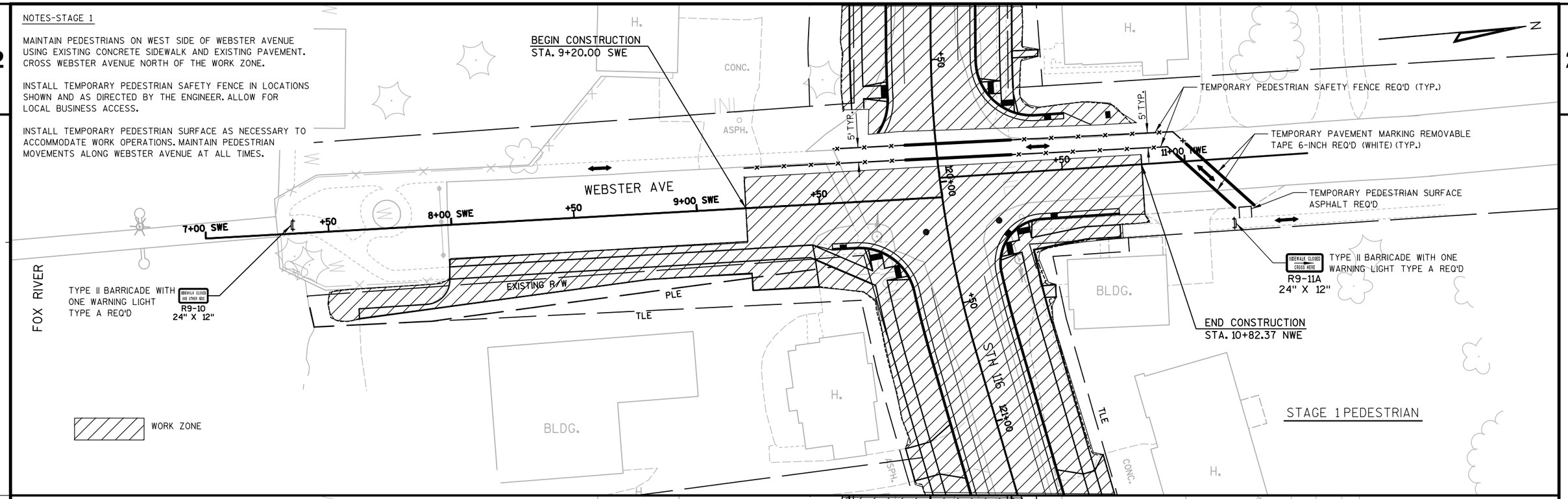
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION STAGING - STAGE 3B	SHEET 98	E

NOTES-STAGE 1

MAINTAIN PEDESTRIANS ON WEST SIDE OF WEBSTER AVENUE USING EXISTING CONCRETE SIDEWALK AND EXISTING PAVEMENT. CROSS WEBSTER AVENUE NORTH OF THE WORK ZONE.

INSTALL TEMPORARY PEDESTRIAN SAFETY FENCE IN LOCATIONS SHOWN AND AS DIRECTED BY THE ENGINEER. ALLOW FOR LOCAL BUSINESS ACCESS.

INSTALL TEMPORARY PEDESTRIAN SURFACE AS NECESSARY TO ACCOMMODATE WORK OPERATIONS. MAINTAIN PEDESTRIAN MOVEMENTS ALONG WEBSTER AVENUE AT ALL TIMES.



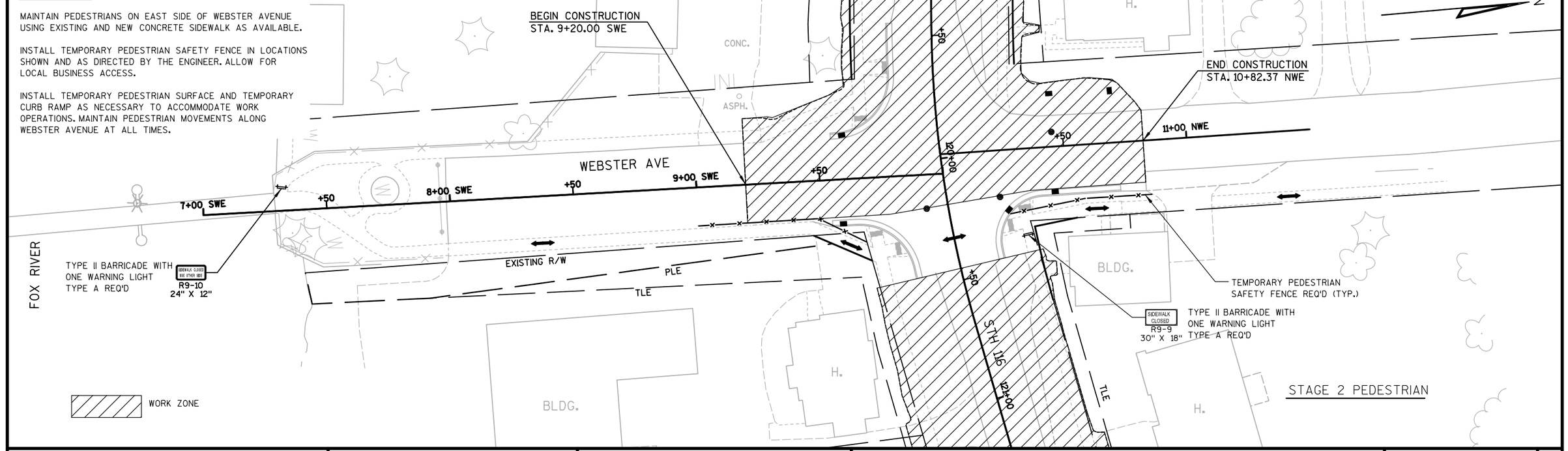
STAGE 1 PEDESTRIAN

NOTES-STAGE 2

MAINTAIN PEDESTRIANS ON EAST SIDE OF WEBSTER AVENUE USING EXISTING AND NEW CONCRETE SIDEWALK AS AVAILABLE.

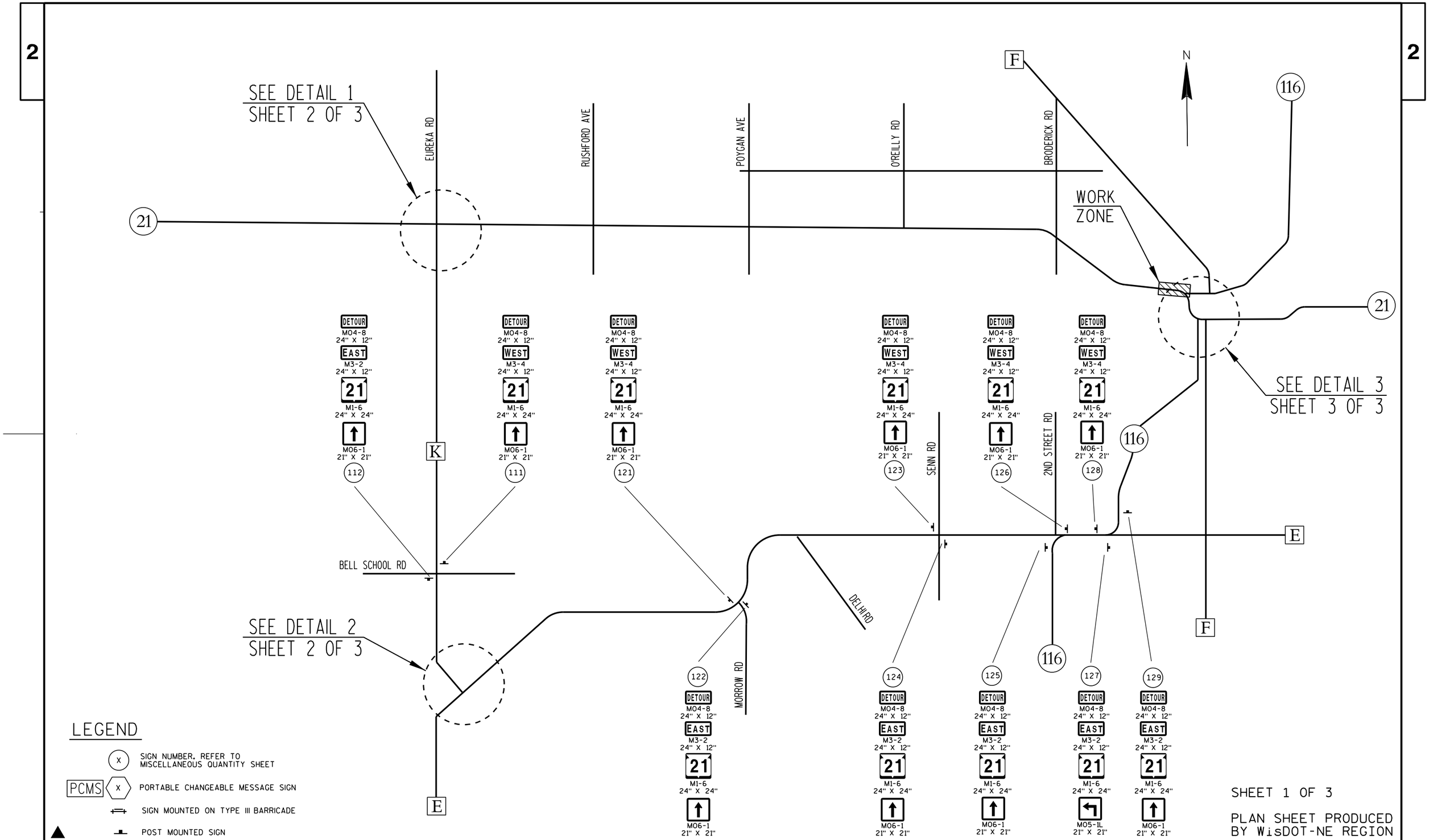
INSTALL TEMPORARY PEDESTRIAN SAFETY FENCE IN LOCATIONS SHOWN AND AS DIRECTED BY THE ENGINEER. ALLOW FOR LOCAL BUSINESS ACCESS.

INSTALL TEMPORARY PEDESTRIAN SURFACE AND TEMPORARY CURB RAMP AS NECESSARY TO ACCOMMODATE WORK OPERATIONS. MAINTAIN PEDESTRIAN MOVEMENTS ALONG WEBSTER AVENUE AT ALL TIMES.



STAGE 2 PEDESTRIAN

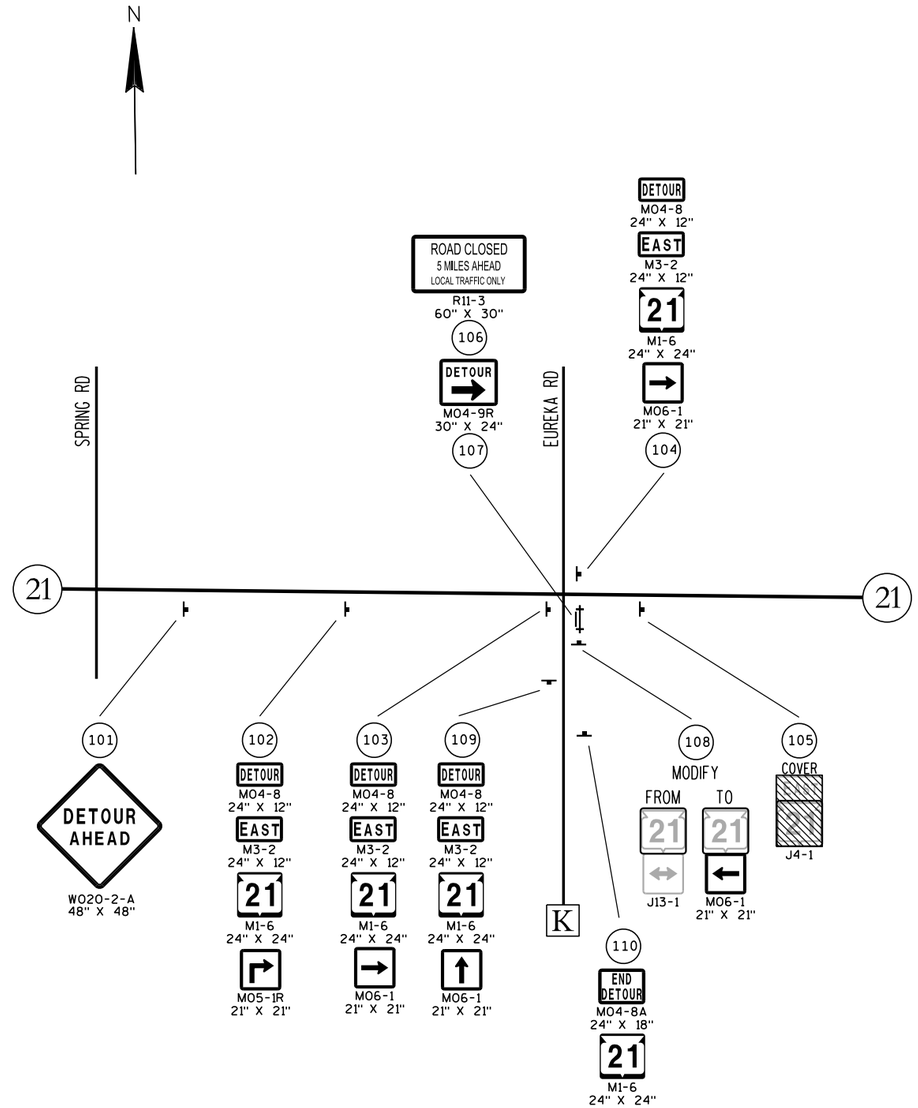
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION STAGING - WEBSTER AVE PEDESTRIAN	SHEET 99	E



SHEET 1 OF 3

PLAN SHEET PRODUCED BY WisDOT-NE REGION

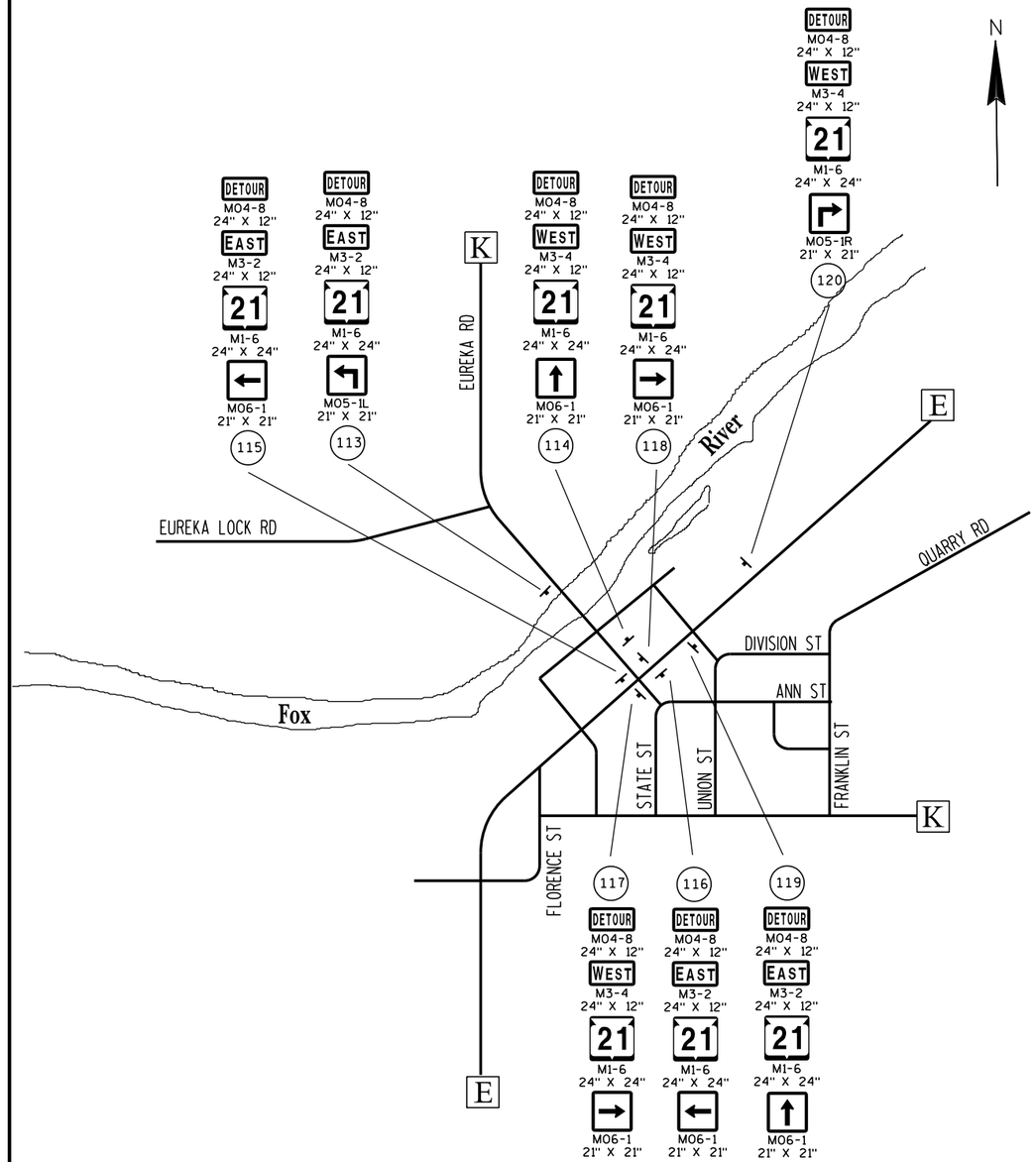
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	DETOUR SIGNING DETAIL-STH 21/STH 116 INTERSECTION CLOSED	SHEET 100	E



LEGEND

- (X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET
- PCMS (X) PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN MOUNTED ON TYPE III BARRICADE
- POST MOUNTED SIGN

DETAIL 1



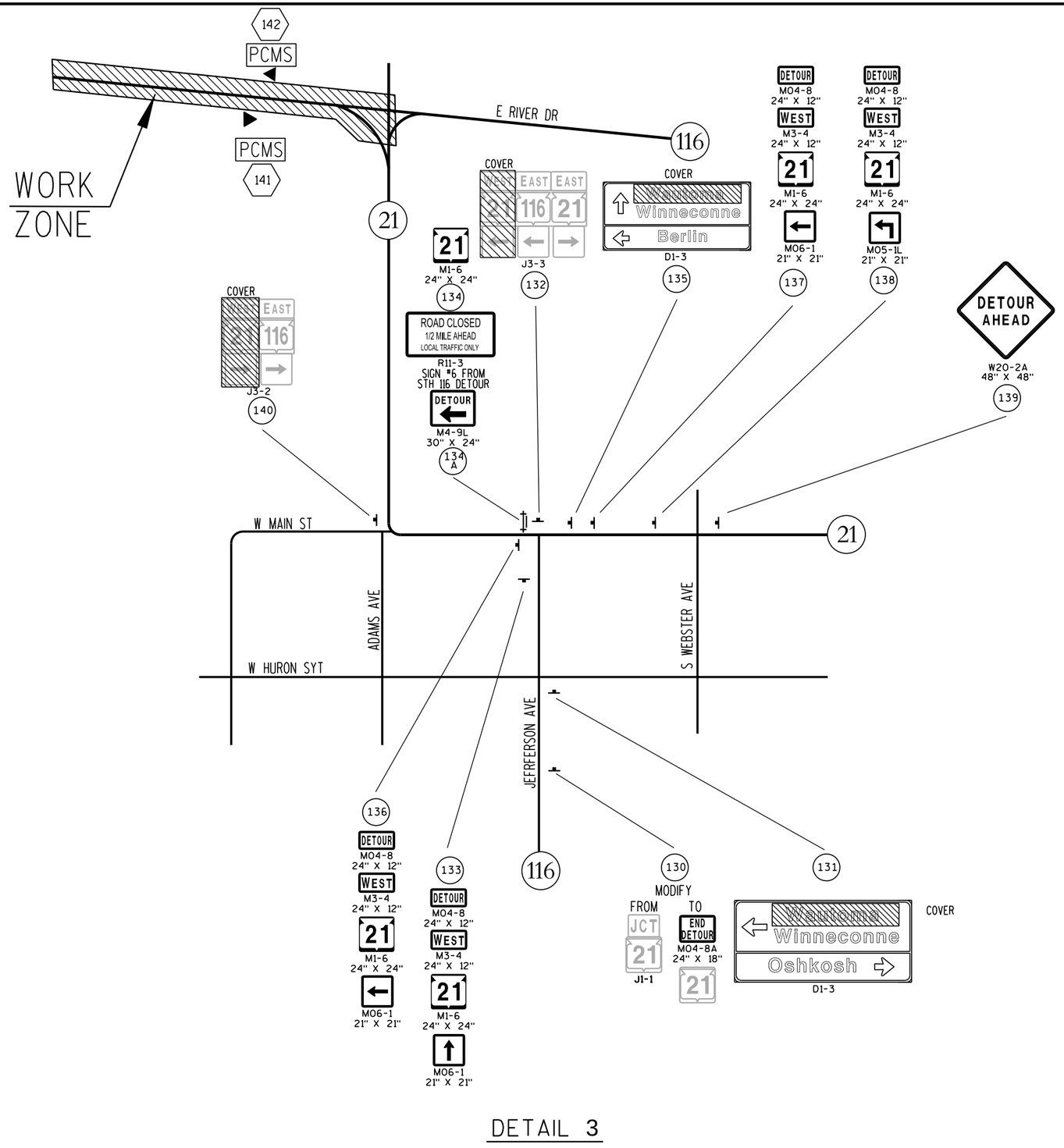
DETAIL 2

SHEET 2 OF 3

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	DETOUR SIGNING DETAIL-STH 21/STH 116 INTERSECTION CLOSED	SHEET 101	E

FILE NAME : N:\spo\traffic\A Work Zone\Detours\Winnebago County\STH 116\Omro --21 - Pine st\027006_dt.dgn PLOT DATE : 26-JUN-2017 15:20 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 200:1
WISDOT/CADDS SHEET 42



LEGEND

- (X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET
- PCMS (X) PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN MOUNTED ON TYPE III BARRICADE
- ▲ POST MOUNTED SIGN

DETAIL 3

SHEET 3 OF 3

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	DETOUR SIGNING DETAIL-STH 21/STH 116 INTERSECTION CLOSED	SHEET 102 E

P.I. 100+00.00
Y = 482,266.57
X = 738,708.97

P.I. 113+14.05
Y = 482,141.67
X = 738,017.07

P.I. 116+14.08
Y = 482,108.97
X = 738,315.31

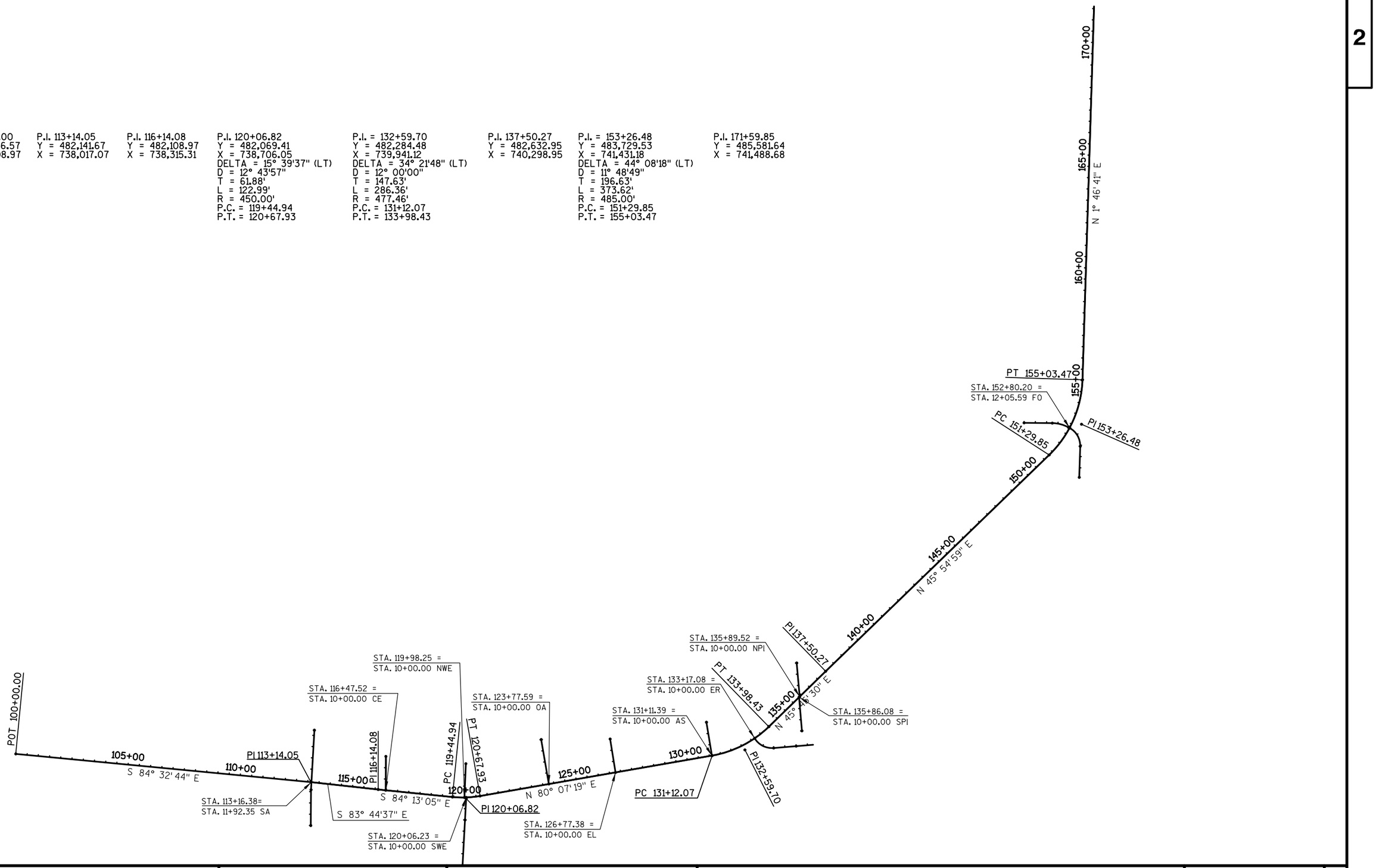
P.I. 120+06.82
Y = 482,069.41
X = 738,706.05
DELTA = 15° 39'37" (LT)
D = 12° 43'57"
T = 61.88'
L = 122.99'
R = 450.00'
P.C. = 119+44.94
P.T. = 120+67.93

P.I. = 132+59.70
Y = 482,284.48
X = 739,941.12
DELTA = 34° 21'48" (LT)
D = 12° 00'00"
T = 147.63'
L = 286.36'
R = 477.46'
P.C. = 131+12.07
P.T. = 133+98.43

P.I. 137+50.27
Y = 482,632.95
X = 740,298.95

P.I. = 153+26.48
Y = 483,729.53
X = 741,431.18
DELTA = 44° 08'18" (LT)
D = 11° 48'49"
T = 196.63'
L = 373.62'
R = 485.00'
P.C. = 151+29.85
P.T. = 155+03.47

P.I. 171+59.85
Y = 485,581.64
X = 741,488.68



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	ALIGNMENT DETAIL - STH 116	SHEET 103	E

P.I. 10+00.00 SA
Y = 481,949.12
X = 738,016.66

P.I. 11+58.31 SA
Y = 482,107.43
X = 738,017.46

P.I. 14+23.21 SA
Y = 482,371.90
X = 738,032.44

P.I. 10+00.00 CE
Y = 482,105.60
X = 738,348.58

P.I. 11+50.00 CE
Y = 482,255.60
X = 738,349.44

P.I. 7+00.00 SWE
Y = 481,774.06
X = 738,689.74

P.I. 10+00.00 SWE
Y = 482,073.63
X = 738,705.70

P.I. 10+00.00 NWE
Y = 482,073.42
X = 738,697.72

P.I. 11+50.00 NWE
Y = 482,223.29
X = 738,704.06

P.I. 10+00.00 OA
Y = 482,133.15
X = 739,072.09

P.I. 12+00.00 OA
Y = 482,330.25
X = 739,038.17

P.I. 10+00.00 EL
Y = 482,184.57
X = 739,367.43

P.I. 11+50.00 EL
Y = 482,332.66
X = 739,343.54

P.I. 10+00.00 AS
Y = 482,259.03
X = 739,795.01

P.I. 11+50.00 AS
Y = 482,407.03
X = 739,770.61

P.I. 10+00.00 ER
Y = 482,335.94
X = 739,984.06

P.I. = 10+55.84 ER
Y = 482,288.15
X = 740,012.95
DELTA = 63°38'18" (LT)
D = 63°39'43"
T = 55.84'
L = 99.96'
R = 90.00'
P.C. = 10+00.00 ER
P.T. = 10+99.96 ER

P.I. 12+75.00 ER
Y = 482,307.40
X = 740,243.02

P.I. 7+84.60 SPI
Y = 482,303.72
X = 740,199.01

P.I. 10+00.00 SPI
Y = 482,518.39
X = 740,181.32

P.I. 10+00.00 NPI
Y = 482,520.79
X = 740,183.78

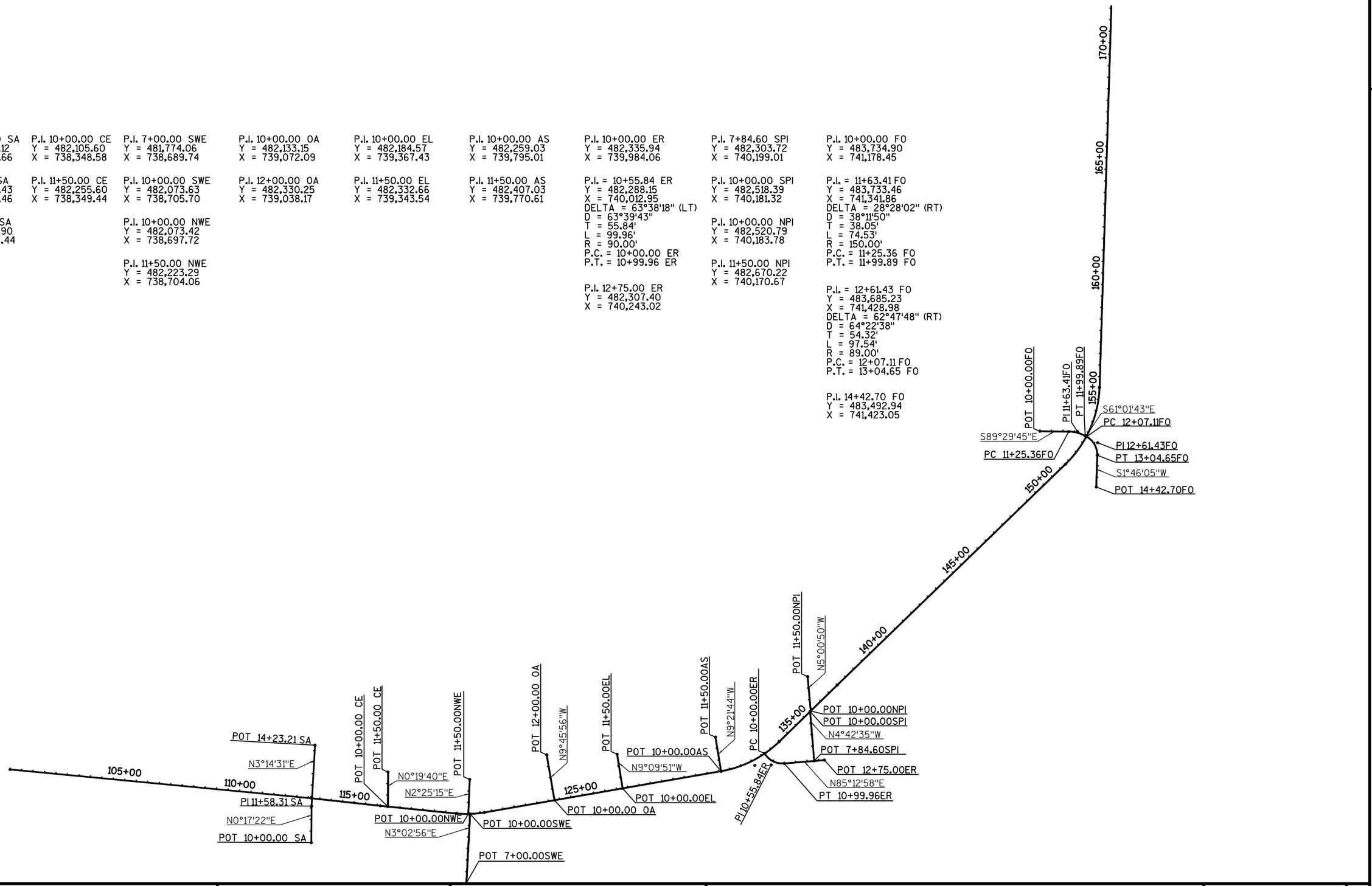
P.I. 11+50.00 NPI
Y = 482,670.22
X = 740,170.67

P.I. 10+00.00 FO
Y = 483,734.90
X = 741,178.45

P.I. = 11+63.41 FO
Y = 483,733.46
X = 741,341.86
DELTA = 28°28'02" (RT)
D = 38°11'50"
T = 38.05'
L = 74.53'
R = 150.00'
P.C. = 11+25.36 FO
P.T. = 11+99.89 FO

P.I. = 12+61.43 FO
Y = 483,685.23
X = 741,428.98
DELTA = 62°47'48" (RT)
D = 64°22'38"
T = 54.32'
L = 97.54'
R = 89.00'
P.C. = 12+07.11 FO
P.T. = 13+04.65 FO

P.I. 14+42.70 FO
Y = 483,492.94
X = 741,423.05



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	ALIGNMENT DETAIL - SIDEROADS	SHEET 104	E

6190-16-72

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	12.000	12.000
0004	201.0120	Clearing	ID	48.000	48.000
0006	201.0205	Grubbing	STA	12.000	12.000
0008	201.0220	Grubbing	ID	48.000	48.000
0010	203.0100	Removing Small Pipe Culverts	EACH	21.000	21.000
0012	204.0100	Removing Pavement	SY	5,830.000	5,830.000
0014	204.0115	Removing Asphaltic Surface Butt Joints	SY	5.000	5.000
0016	204.0120	Removing Asphaltic Surface Milling	SY	6,690.000	6,690.000
0018	204.0150	Removing Curb & Gutter	LF	1,225.000	1,225.000
0020	204.0155	Removing Concrete Sidewalk	SY	1,227.000	1,227.000
0022	204.0165	Removing Guardrail	LF	260.000	260.000
0024	204.0170	Removing Fence	LF	274.000	274.000
0026	204.0195	Removing Concrete Bases	EACH	12.000	12.000
0028	204.0210	Removing Manholes	EACH	1.000	1.000
0030	204.0220	Removing Inlets	EACH	9.000	9.000
0032	204.0245	Removing Storm Sewer (size) 01. 6-Inch	LF	12.000	12.000
0034	204.0245	Removing Storm Sewer (size) 02. 12-Inch	LF	447.000	447.000
0036	204.0245	Removing Storm Sewer (size) 03. 15-Inch	LF	113.000	113.000
0038	204.0245	Removing Storm Sewer (size) 04. 18-Inch	LF	114.000	114.000
0040	204.0245	Removing Storm Sewer (size) 05. 24-Inch	LF	610.000	610.000
0042	204.0280	Sealing Pipes	EACH	2.000	2.000
0044	204.9060.S	Removing (item description) 01. Commercial Sign	EACH	1.000	1.000
0046	204.9090.S	Removing (item description) 01. Block Retaining Wall	LF	62.000	62.000
0048	205.0100	Excavation Common	CY	16,600.000	16,600.000
0050	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	150.000	150.000
0052	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	50.000	50.000
0054	213.0100	Finishing Roadway (project) 01. 6190-16-72	EACH	1.000	1.000
0056	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,000.000	1,000.000
0058	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	17,550.000	17,550.000
0060	305.0500	Shaping Shoulders	STA	50.000	50.000
0062	311.0110	Breaker Run	TON	2,021.000	2,021.000
0064	415.0410	Concrete Pavement Approach Slab	SY	65.000	65.000
0066	416.0260	Concrete Driveway HES 6-Inch	SY	984.000	984.000
0068	440.4410	Incentive IRI Ride	DOL	4,210.000	4,210.000
0070	455.0605	Tack Coat	GAL	2,200.000	2,200.000
0072	460.2000	Incentive Density HMA Pavement	DOL	5,280.000	5,280.000
0074	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	5,710.000	5,710.000
0076	460.5223	HMA Pavement 3 LT 58-28 S	TON	5,502.000	5,502.000
0078	460.5224	HMA Pavement 4 LT 58-28 S	TON	2,764.000	2,764.000

6190-16-72

Line	Item	Item Description	Unit	Total	Qty
0080	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	73.400	73.400
0082	465.0125	Asphaltic Surface Temporary	TON	24.000	24.000
0084	465.0315	Asphaltic Flumes	SY	14.000	14.000
0086	520.1012	Apron Endwalls for Culvert Pipe 12-Inch	EACH	1.000	1.000
0088	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	2.000	2.000
0090	520.8000	Concrete Collars for Pipe	EACH	1.000	1.000
0092	522.0148	Culvert Pipe Reinforced Concrete Class III 48-Inch	LF	76.000	76.000
0094	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	1.000	1.000
0096	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	1.000	1.000
0098	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	1.000	1.000
0100	522.1048	Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	EACH	2.000	2.000
0102	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	30.000	30.000
0104	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	6,172.000	6,172.000
0106	601.0584	Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type TBT	LF	34.000	34.000
0108	602.0405	Concrete Sidewalk 4-Inch	SF	21,775.000	21,775.000
0110	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	360.000	360.000
0112	602.1500	Concrete Steps	SF	15.000	15.000
0114	606.0200	Riprap Medium	CY	26.000	26.000
0116	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	486.000	486.000
0118	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	136.000	136.000
0120	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	187.000	187.000
0122	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	195.000	195.000
0124	608.0336	Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	LF	38.000	38.000
0126	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	54.000	54.000
0128	608.0430	Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	LF	211.000	211.000
0130	608.0436	Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch	LF	159.000	159.000
0132	608.3012	Storm Sewer Pipe Class III-A 12-Inch	LF	547.000	547.000
0134	608.3015	Storm Sewer Pipe Class III-A 15-Inch	LF	181.000	181.000
0136	608.3018	Storm Sewer Pipe Class III-A 18-Inch	LF	222.000	222.000

6190-16-72

Line	Item	Item Description	Unit	Total	Qty
0138	608.3024	Storm Sewer Pipe Class III-A 24-Inch	LF	902.000	902.000
0140	608.3030	Storm Sewer Pipe Class III-A 30-Inch	LF	99.000	99.000
0142	611.0530	Manhole Covers Type J	EACH	20.000	20.000
0144	611.0545	Manhole Covers Type L	EACH	3.000	3.000
0146	611.0606	Inlet Covers Type B	EACH	2.000	2.000
0148	611.0624	Inlet Covers Type H	EACH	13.000	13.000
0150	611.0639	Inlet Covers Type H-S	EACH	32.000	32.000
0152	611.0645	Inlet Covers Type MS-A	EACH	10.000	10.000
0154	611.1003	Catch Basins 3-FT Diameter	EACH	1.000	1.000
0156	611.1004	Catch Basins 4-FT Diameter	EACH	14.000	14.000
0158	611.1005	Catch Basins 5-FT Diameter	EACH	11.000	11.000
0160	611.1006	Catch Basins 6-FT Diameter	EACH	5.000	5.000
0162	611.1230	Catch Basins 2x3-FT	EACH	28.000	28.000
0164	611.2003	Manholes 3-FT Diameter	EACH	4.000	4.000
0166	611.2004	Manholes 4-FT Diameter	EACH	3.000	3.000
0168	611.2007	Manholes 7-FT Diameter	EACH	2.000	2.000
0170	611.3220	Inlets 2x2-FT	EACH	2.000	2.000
0172	611.3901	Inlets Median 1 Grate	EACH	8.000	8.000
0174	611.3902	Inlets Median 2 Grate	EACH	1.000	1.000
0176	611.9800.S	Pipe Grates	EACH	1.000	1.000
0178	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	545.000	545.000
0180	614.2500	MGS Thrie Beam Transition	LF	39.400	39.400
0182	614.2610	MGS Guardrail Terminal EAT	EACH	1.000	1.000
0184	619.1000	Mobilization	EACH	0.750	0.750
0186	624.0100	Water	MGAL	247.000	247.000
0188	625.0100	Topsoil	SY	9,870.000	9,870.000
0190	628.1504	Silt Fence	LF	3,165.000	3,165.000
0192	628.1520	Silt Fence Maintenance	LF	3,165.000	3,165.000
0194	628.1905	Mobilizations Erosion Control	EACH	16.000	16.000
0196	628.1910	Mobilizations Emergency Erosion Control	EACH	8.000	8.000
0198	628.2006	Erosion Mat Urban Class I Type A	SY	12,340.000	12,340.000
0200	628.6005	Turbidity Barriers	SY	160.000	160.000
0202	628.7005	Inlet Protection Type A	EACH	58.000	58.000
0204	628.7010	Inlet Protection Type B	EACH	13.000	13.000
0206	628.7015	Inlet Protection Type C	EACH	17.000	17.000
0208	628.7020	Inlet Protection Type D	EACH	28.000	28.000
0210	628.7504	Temporary Ditch Checks	LF	88.000	88.000
0212	628.7555	Culvert Pipe Checks	EACH	27.000	27.000
0214	628.7570	Rock Bags	EACH	118.000	118.000
0216	629.0210	Fertilizer Type B	CWT	8.800	8.800

6190-16-72

Line	Item	Item Description	Unit	Total	Qty
0218	630.0140	Seeding Mixture No. 40	LB	222.000	222.000
0220	631.0300	Sod Water	MGAL	277.000	277.000
0222	632.0101	Trees (species) (size) (root) 01. Japanese Tree Lilac, 2 1/2-Inch CAL, B&B	EACH	37.000	37.000
0224	633.5200	Markers Culvert End	EACH	6.000	6.000
0226	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	40.000	40.000
0228	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	26.000	26.000
0230	637.2210	Signs Type II Reflective H	SF	441.910	441.910
0232	637.2215	Signs Type II Reflective H Folding	SF	29.840	29.840
0234	637.2230	Signs Type II Reflective F	SF	116.160	116.160
0236	638.2602	Removing Signs Type II	EACH	70.000	70.000
0238	638.3000	Removing Small Sign Supports	EACH	64.000	64.000
0240	642.5401	Field Office Type D	EACH	1.000	1.000
0242	643.0100	Traffic Control (project) 01. 6190-16-72	EACH	1.000	1.000
0244	643.0300	Traffic Control Drums	DAY	7,496.000	7,496.000
0246	643.0410	Traffic Control Barricades Type II	DAY	834.000	834.000
0248	643.0420	Traffic Control Barricades Type III	DAY	7,747.000	7,747.000
0250	643.0705	Traffic Control Warning Lights Type A	DAY	14,995.000	14,995.000
0252	643.0715	Traffic Control Warning Lights Type C	DAY	1,843.000	1,843.000
0254	643.0900	Traffic Control Signs	DAY	11,190.000	11,190.000
0256	643.0920	Traffic Control Covering Signs Type II	EACH	5.000	5.000
0258	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0260	643.2000	Traffic Control Detour (project) 01. 6190-16-72	EACH	1.000	1.000
0262	643.3000	Traffic Control Detour Signs	DAY	3,540.000	3,540.000
0264	644.1410.S	Temporary Pedestrian Surface Asphalt	SF	1,550.000	1,550.000
0266	644.1420.S	Temporary Pedestrian Surface Plywood	SF	320.000	320.000
0268	644.1430.S	Temporary Pedestrian Surface Plate	SF	80.000	80.000
0270	644.1601.S	Temporary Curb Ramp	EACH	6.000	6.000
0272	644.1616.S	Temporary Pedestrian Safety Fence	LF	650.000	650.000
0274	645.0120	Geotextile Type HR	SY	84.000	84.000
0276	646.0106	Pavement Marking Epoxy 4-Inch	LF	19,656.000	19,656.000
0278	646.0126	Pavement Marking Epoxy 8-Inch	LF	573.000	573.000
0280	646.0600	Removing Pavement Markings	LF	1,972.000	1,972.000
0282	647.0156	Pavement Marking Arrows Epoxy Type 1	EACH	2.000	2.000
0284	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	7.000	7.000
0286	647.0176	Pavement Marking Arrows Epoxy Type 3	EACH	3.000	3.000
0288	647.0206	Pavement Marking Arrows Bike Lane Epoxy	EACH	28.000	28.000
0290	647.0306	Pavement Marking Symbols Bike Lane Epoxy	EACH	28.000	28.000
0292	647.0356	Pavement Marking Words Epoxy	EACH	4.000	4.000
0294	647.0406	Pavement Marking Words Bike Lane Epoxy	EACH	6.000	6.000

6190-16-72

Line	Item	Item Description	Unit	Total	Qty
0296	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	113.000	113.000
0298	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	127.000	127.000
0300	647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	1,018.000	1,018.000
0302	647.0955	Removing Pavement Markings Arrows	EACH	2.000	2.000
0304	647.0965	Removing Pavement Markings Words	EACH	1.000	1.000
0306	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	2,958.000	2,958.000
0308	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	3,230.000	3,230.000
0310	649.0600	Temporary Pavement Marking Removable Tape 6-Inch	LF	160.000	160.000
0312	649.0801	Temporary Pavement Marking Removable Tape 8-Inch	LF	125.000	125.000
0314	649.0802	Temporary Pavement Marking Paint 8-Inch	LF	125.000	125.000
0316	649.1100	Temporary Pavement Marking Stop Line 18-Inch	LF	40.000	40.000
0318	650.4000	Construction Staking Storm Sewer	EACH	79.000	79.000
0320	650.4500	Construction Staking Subgrade	LF	4,532.000	4,532.000
0322	650.5000	Construction Staking Base	LF	4,517.000	4,517.000
0324	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	6,236.000	6,236.000
0326	650.6000	Construction Staking Pipe Culverts	EACH	1.000	1.000
0328	650.7000	Construction Staking Concrete Pavement	LF	15.000	15.000
0330	650.8000	Construction Staking Resurfacing Reference	LF	2,560.000	2,560.000
0332	650.9910	Construction Staking Supplemental Control (project) 01. 6190-16-72	LS	1.000	1.000
0334	650.9920	Construction Staking Slope Stakes	LF	4,532.000	4,532.000
0336	652.0210	Conduit Rigid Nonmetallic Schedule 40 1-Inch	LF	40.000	40.000
0338	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	110.000	110.000
0340	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	980.000	980.000
0342	652.0800	Conduit Loop Detector	LF	640.000	640.000
0344	653.0105	Pull Boxes Steel 12x24-Inch	EACH	2.000	2.000
0346	653.0905	Removing Pull Boxes	EACH	10.000	10.000
0348	654.0101	Concrete Bases Type 1	EACH	4.000	4.000
0350	654.0102	Concrete Bases Type 2	EACH	4.000	4.000
0352	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	1.000	1.000
0354	655.0230	Cable Traffic Signal 5-14 AWG	LF	760.000	760.000
0356	655.0240	Cable Traffic Signal 7-14 AWG	LF	900.000	900.000
0358	655.0260	Cable Traffic Signal 12-14 AWG	LF	760.000	760.000
0360	655.0305	Cable Type UF 2-12 AWG Grounded	LF	770.000	770.000
0362	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	1,070.000	1,070.000
0364	655.0610	Electrical Wire Lighting 12 AWG	LF	600.000	600.000
0366	655.0700	Loop Detector Lead In Cable	LF	1,150.000	1,150.000
0368	655.0800	Loop Detector Wire	LF	1,510.000	1,510.000
0370	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. (STH 21 & STH 116)	LS	1.000	1.000

6190-16-72

Line	Item	Item Description	Unit	Total	Qty
0372	657.0100	Pedestal Bases	EACH	4.000	4.000
0374	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	4.000	4.000
0376	657.0310	Poles Type 3	EACH	4.000	4.000
0378	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	2.000	2.000
0380	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	2.000	2.000
0382	657.0590	Trombone Arms 20-FT	EACH	1.000	1.000
0384	657.0595	Trombone Arms 25-FT	EACH	3.000	3.000
0386	657.0709	Luminaire Arms Truss Type 4-Inch Clamp 12-FT	EACH	4.000	4.000
0388	658.0110	Traffic Signal Face 3-12 Inch Vertical	EACH	5.000	5.000
0390	658.0120	Traffic Signal Face 5-12 Inch Vertical	EACH	3.000	3.000
0392	658.0155	Traffic Signal Face 3-12 Inch Horizontal	EACH	1.000	1.000
0394	658.0165	Traffic Signal Face 5-12 Inch Horizontal	EACH	3.000	3.000
0396	658.0215	Backplates Signal Face 3 Section 12-Inch	EACH	6.000	6.000
0398	658.0225	Backplates Signal Face 5 Section 12-Inch	EACH	6.000	6.000
0400	658.0416	Pedestrian Signal Face 16-Inch	EACH	2.000	2.000
0402	658.0500	Pedestrian Push Buttons	EACH	2.000	2.000
0404	658.0600	Led Modules 12-Inch Red Ball	EACH	12.000	12.000
0406	658.0605	Led Modules 12-Inch Yellow Ball	EACH	12.000	12.000
0408	658.0610	Led Modules 12-Inch Green Ball	EACH	12.000	12.000
0410	658.0620	Led Modules 12-Inch Yellow Arrow	EACH	6.000	6.000
0412	658.0625	Led Modules 12-Inch Green Arrow	EACH	6.000	6.000
0414	658.0635	Led Modules Pedestrian Countdown Timer 16-Inch	EACH	2.000	2.000
0416	658.5069	Signal Mounting Hardware (location) 01. (STH 21 & STH 116)	LS	1.000	1.000
0418	659.1120	Luminaires Utility LED B	EACH	4.000	4.000
0420	690.0150	Sawing Asphalt	LF	1,692.000	1,692.000
0422	690.0250	Sawing Concrete	LF	240.000	240.000
0424	715.0415	Incentive Strength Concrete Pavement	DOL	500.000	500.000
0426	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,000.000	2,000.000
0428	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,320.000	1,320.000
0430	SPV.0060	Special 01. Flashing LED Ped Sign	EACH	4.000	4.000
0432	SPV.0060	Special 02. Pull Box Non-Conductive (24x42-Inch)	EACH	9.000	9.000
0498	SPV.0075	Special 01. Street Sweeping	HRS	80.000	80.000
0538	SPV.0105	Special 01. Remove Flasher Standard (Station 120+17.5 RT)	LS	1.000	1.000
0540	SPV.0105	Special 02. Remove Flasher Standard (Station 120+37.5 LT)	LS	1.000	1.000
0542	SPV.0105	Special 03. Storm Sewer Opening Sea Wall	LS	1.000	1.000
0544	SPV.0105	Special 04. Remove Traffic Signal (STH 21 & STH 116)	LS	1.000	1.000
0550	SPV.0165	Special 01. Wall Modular Block Gravity Landscape LRFD	SF	175.000	175.000

CLEARING AND GRUBBING SUMMARY

CATEGORY	STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA	201.0120 CLEARING ID	201.0220 GRUBBING ID
0010	114+00 - 117+00	LT/RT	3	3	---	---
	116+00 - 117+00	RT (PLE AREA)	1	1	---	---
	119+57	44'RT	---	---	4	4
	122+00 - 123+00	LT/RT	1	1	---	---
	124+00 - 127+00	RT	3	3	---	---
	131+86	47'LT	---	---	10	10
	133+50	46'RT	---	---	10	10
	135+26	40'RT	---	---	12	12
	10+90 ER	20'RT	---	---	12	12
	11+00 ER - 12+00 ER	RT	1	1	---	---
	152+00 - 153+00	RT	1	1	---	---
	155+00 - 157+00	LT	2	2	---	---
		TOTALS	12	12	48	48

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	LOCATION	203.0100 EACH	REMARK
0010	107+87	CL	1	57"x38"x98' CSPA
	117+69	LT	1	15"x20' CMCP
	117+73	RT	1	15"x22' CMCP
	118+24 - 119+00	LT	1	15"x66' CMCP
	122+20 - 122+80	LT	1	15"x60' CPCPP
	122+29	RT	1	15"x15' CMCP
	122+58	RT	1	12"x20' CMCP
	122+91	CL	1	24"x36' CMCP
	123+30	RT	1	15"x19' CMCP
	123+62	LT	1	8"x6' CMCP
	125+15	RT	1	12"x22' CMCP
	125+30	LT	1	12"x35' CMCP
	125+92	RT	1	15"x12' CMCP
	126+30	RT	1	15"x26' CMCP
	127+03	RT	1	12"x16' RCCP
	129+00	LT	1	15"x20' CMCP
	129+68	LT	1	15"x19' CMCP
	130+91	LT	1	12"x16' CMCP
	10+24 AS	CL	1	12"x46' CMCP
	132+91	RT	1	12"x34' CMCP
	11+81 FO	CL	1	15"x80' CMCP
		TOTALS	21	

REMOVING PAVEMENT

CATEGORY	STATION - STATION	LOCATION	204.0100 SY
0010	10+00 SA - 11+72 SA	LT/RT	990
	116+99 - 137+50	LT/RT	4,560
	112+23 - 112+83	ISLAND RT	88
	114+30	RT	6
	117+73	RT	16
	121+50	LT	20
	125+15	RT	76
	125+30	LT	16
	128+25	LT	9
	7+61.7 SWE - 7+84.6 SWE	RT	8
	11+29 OA	RT	41
		TOTAL	5,830

REMOVING ASPHALTIC SURFACE

CATEGORY	STATION - STATION	LOCATION	204.0115 BUTT JOINTS SY	204.0120 MILLING SY
0010	137+50 - 163+12	LT/RT	5	6,690

REMOVING CURB & GUTTER

CATEGORY	STATION - STATION	LOCATION	204.0150 LF
0010	111+16 - 113+02	LT	230
	112+20 - 10+00 SA	RT	210
	10+00 SA - 115+50	RT	350
	113+27 - 115+14	LT	200
	10+15.7 NPI - 10+95 NPI	LT	80
	10+48.9 NPI - 10+95 NPI	RT	45
	11+00 FO - 11+48.5 FO	RT	45
	11+00 FO - 11+62.5 FO	LT	65
		TOTAL	1,225

REMOVING CONCRETE SIDEWALK

CATEGORY	STATION - STATION	LOCATION	204.0155 SY
0010	10+00 SA - 115+50	RT	210
	113+40 - 116+31	LT	160
	116+59 - 119+84	LT	150
	120+25 - 123+65	LT	180
	123+90 - 126+65	LT	140
	126+89 - 130+98	RT	190
	112+92 - 112+97	LT	2
	10+33 CE - 10+75 CE	LT	15
	9+20 SWE - 9+71 SWE	LT/RT	30
	7+98 SWE - 9+80 SWE	RT	95
	10+38 NWE - 10+72 NWE	RT	20
	11+00 FO - 11+78 FO	RT	35
		TOTAL	1,227

REMOVING GUARDRAIL

CATEGORY	STATION - STATION	LOCATION	204.0165 LF
0010	10+00 SA - 11+18 SA	LT	110
	10+00 SA - 11+45 SA	RT	150
		TOTAL	260

REMOVING FENCE

CATEGORY	STATION - STATION	LOCATION	204.0170 LF
0010	133+38 - 133+44	LT	15
	136+49 - 136+53	LT	9
	154+30 - 156+64	LT	250
		TOTAL	274

REMOVING CONCRETE BASES

CATEGORY	STATION	LOCATION	204.0195 EACH*
0010	120+17.5	29' RT	1
	120+37.5	27' LT	1
		TOTAL	2

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

REMOVING MANHOLES

CATEGORY	STATION	OFFSET	204.0210 EACH
0010	112+50	47' RT	1

REMOVING INLETS

CATEGORY	STATION	OFFSET	204.0220 EACH
0010	112+16	LT	1
	112+94	RT	1
	113+57	LT	1
	113+60	RT	1
	116+25	LT	1
	116+72	RT	1
	119+77	LT	1
	120+20	LT	1
	127+22	LT	1
		TOTAL	9

SEALING PIPES

CATEGORY	STATION	LOCATION	204.0280 EACH	REMARK
0010	116+80	RT	1	24" RCCP
	122+92	RT	1	12" RCCP
	TOTAL		2	

REMOVING COMMERCIAL SIGN

CATEGORY	STATION	OFFSET	204.9060.S EACH
0010	120+31	34' RT	1

REMOVING BLOCK RETAINING WALL

CATEGORY	STATION - STATION	LOCATION	204.9090.S LF
0010	10+25 NPI - 10+87 NPI	LT	62

REMOVING STORM SEWER

CATEGORY	STATION - STATION	LOCATION	204.0245 .01 6-INCH LF	.02 12-INCH LF	.03 15-INCH LF	.04 18-INCH LF	.05 24-INCH LF
0010	112+58 - 112+95	RT	---	22	---	---	---
	113+57 - 113+60	LT/RT	---	68	---	---	---
	113+60 - 114+06	RT	---	160	---	---	---
	116+12 - 116+25	LT	12	---	---	---	---
	116+25 - 116+69	LT	---	44	---	---	---
	116+69 - 116+72	LT/RT	---	---	---	---	88
	116+69 - 116+82	LT	---	15	---	---	---
	116+72 - 116+80	RT	---	---	---	---	206
	116+72 - 117+09	RT	---	---	37	---	---
	10+32 NWE - 10+71 NWE	LT	---	40	---	---	---
	10+32 NWE	LT/RT	---	40	---	---	---
	10+32 NWE - 7+58 SWE	RT	---	---	---	---	275
	126+45 - 127+22	LT	---	---	76	---	---
	10+20 EL - 10+62 EL	LT	---	42	---	---	---
	10+20 EL - 10+36 EL	RT	---	16	---	---	---
	127+22 - 127+18	LT/RT	---	---	---	---	41
	127+22 - 128+36	LT	---	---	---	114	---
		TOTALS	12	447	113	114	610

EARTHWORK

CATEGORY	LOCATION	STATION	-	STATION	205.0100 EXCAVATION COMMON (1) CUT (2) CY	205.0100 EXCAVATION COMMON (1) EBS EXCAVATION (3) 5% OF CUT CY	SALVAGED/UNUSABLE PAVEMENT MATERIAL CY	AVAILABLE MATERIAL (4) CY	EXPANDED EBS BACKFILL (5) FACTOR 1.42 CY	UNEXPANDED FILL CY	EXPANDED FILL (6) FACTOR 1.42 CY	MASS ORDINATE +/- (7)	WASTE (8) CY	311.0110 BREAKER RUN FACTOR 1.80 TON
0010	STH 116	107+50	-	137+50	11,709	585	0	11,709	831	1,719	2,440	9,268	10,100	1,496
	SPRUCE STREET	10+00 SA	-	13+55 SA	1,326	66	0	1,326	94	110	156	1,169	1,263	169
	CEDAR STREET	10+29 CE	-	10+70 CE	76	4	0	76	5	8	11	65	70	10
	N. WEBSTER AVENUE	10+16 NWE	-	10+82 NWE	194	10	0	194	14	2	2	191	205	25
	S. WEBSTER AVENUE	9+20 SWE	-	9+84 SWE	260	13	0	260	18	0	0	260	278	33
	OAK STREET	10+16 OA	-	11+50 OA	367	18	0	367	26	0	1	367	393	47
	ELM STREET	10+16 EL	-	10+55 EL	93	5	0	93	7	7	9	84	90	12
	ASH STREET	10+16 AS	-	10+55 AS	71	4	0	71	5	3	5	66	71	9
	E. RIVER DRIVE	10+16 ER	-	11+70 ER	329	16	0	329	23	29	42	287	310	42
	N. PINE STREET	10+21 NPI	-	10+95 NPI	228	11	0	228	16	0	0	228	244	29
	S. PINE STREET	8+86 SPI	-	9+79 SPI	376	19	0	376	27	0	0	376	403	48
	FOX TRAIL/HAWTHORNE DRIVE	11+00 FO	-	13+47 FO	787	39	0	787	56	14	20	767	823	101
		SUBTOTALS			15,816	791	0	15,816	1,123	1,893	2,688	13,128	14,251	2,021
		TOTAL			16,600									

1) EXCAVATION COMMON IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100.
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
3) EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN.
4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL.
5) EXPANDED EBS BACKFILL: THIS IS TO BE FILLED WITH BREAKER RUN. EBS BACKFILL EXPANSION FACTOR = 1.42.
6) EXPANDED FILL = UNEXPANDED FILL* EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.42.
7) MASS ORDINATE: MASS ORDINATE = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL
   PLUS MASS ORDINATE QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS MASS ORDINATE QUANTITY INDICATES A HORTAGE OF MATERIAL WITHIN THE DIVISION.
8) WASTE = MASS ORDINATE + EXPANDED EBS BACKFILL
9) BREAKER RUN IS USED FOR BACKFILL OF EBS. CONVERSION FACTOR = 1.8.

EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL

CATEGORY	STATION - STATION	LOCATION	205.0501.S TON
0010	120+00 - 120+50	RT	150

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

CATEGORY	STATION - STATION	LOCATION	211.0400 STA
0010	137+50 - 151+30.25	LT	15
	137+50 - 151+30.25	RT	15
	154+33.12 - 163+12	LT	10
	154+33.12 - 163+12	RT	10
		TOTAL	50

FINISHING ROADWAY

CATEGORY	PROJECT	213.0100.01 EACH
0010	6190-16-72	1

BASE AGGREGATE SUMMARY

CATEGORY	STATION - STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON•	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON•	624.0100 WATER MGAL
0010	107+50 - 113+88.29	LT/RT	150	3,950	57
	113+88.29 - 137+50	LT/RT	7	7,900	110
	137+50 - 163+12	LT/RT	340	---	5
	10+00 SA - 11+65 SA	LT/RT	---	1,050	15
	12+23 SA - 12+73.7 SA	LT/RT	---	250	4
	12+73.7 SA - 13+55 SA	LT/RT	---	190	3
	10+30 CE - 10+69 CE	LT/RT	---	130	2
	9+20 SWE - 9+84 SWE	LT/RT	---	380	5
	10+16 NWE - 10+82 NWE	LT/RT	---	260	4
	10+16 OA - 10+75 OA	LT/RT	---	190	3
	10+75 OA - 11+50 OA	LT/RT	---	170	2
	10+16 EL - 10+55 EL	LT/RT	---	130	2
	10+16 AS - 10+54 AS	LT/RT	---	130	2
	10+16 ER - 11+70 ER	LT/RT	---	490	7
	8+79 SPI - 9+79.26 SPI	LT/RT	---	340	5
	10+20.75 NPI - 10+95 NPI	LT/RT	---	300	4
	11+00 FO - 11+94.59 FO	LT/RT	---	550	8
	12+16.61 FO - 13+47 FO	LT/RT	---	660	9
		TOTALS	497	17,070	247

•ADDITIONAL QUANTITIES LISTED ELSEWHERE
WATER IS FOR COMPACTION

SHAPING SHOULDERS

CATEGORY	STATION - STATION	LOCATION	305.0500 STA
0010	137+50 - 151+30.25	LT	15
	137+50 - 151+30.25	RT	15
	154+33.12 - 163+12	LT	10
	154+33.12 - 163+12	RT	10
		TOTAL	50

DRIVEWAY SUMMARY

CATEGORY	STATION	LOCATION	416.0260 CONCRETE DRIVEWAY HES 6-INCH SY	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON•
0010	109+20	LT	---	10.0	20
	110+70	LT	---	6.0	10
	114+30	RT	30	---	9
	114+75	RT	25	---	8
	115+32	RT	30	---	10
	115+50	LT	25	---	15
	115+65	RT	45	1.0	20
	117+00	RT	35	2.0	15
	117+69	LT	20	---	9
	117+73	RT	50	---	15
	118+50	LT	35	---	15
	118+50	RT	25	0.7	10
	118+89	LT	25	---	10
	121+07	RT	25	0.9	10
	121+50	LT	70	---	25
	121+70	RT	30	1.0	10
	122+30	LT	25	---	10
	122+58	RT	25	3.0	15
	123+30	RT	40	4.0	20
	124+11	RT	40	---	25
	125+15	RT	55	---	20
	125+30	LT	65	---	20
	126+30	RT	35	4.0	20
	128+25	LT	40	---	15
	129+00	LT	20	0.6	8
	129+68	LT	25	---	10
	137+24	RT	---	---	5
	12+93 SA	LT	---	4.0	8
	13+35 SA	LT	---	2.0	4
	9+22 SWE	LT	4	0.4	2
	9+34 SWE	RT	85	15.0	30
	11+06 OA	LT	---	0.8	2
	11+29 OA	RT	35	---	10
	9+35 SPI	RT	---	10.0	20
	12+50 FO	LT	20	8.0	25
		TOTALS	984	73.4	480

• ADDITIONAL QUANTITIES LISTED ELSEWHERE

CONCRETE PAVEMENT APPROACH SLAB

CATEGORY	STATION - STATION	LOCATION	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY
0010	10+00 SA - 10+15 SA	LT/RT	65

ASPHALTIC ITEMS

CATEGORY	STATION - STATION	LOCATION	460.5223 HMA PAVEMENT 3 LT 58-28 S TON	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	455.0605 TACK COAT GAL	460.4110.S REHEATING HMA PAVEMENT LONGITUDINAL JOINTS LF
0010	107+50 - 113+88.29	LT/RT	870	420	350	640
	113+88.29 - 137+50	LT/RT	2,420	1,080	895	2,360
	137+50 - 163+12	LT/RT	775	605	400	2,560
	10+15 SA - 11+65 SA	LT/RT	255	115	94	150
	12+23 SA - 12+73.7 SA	LT/RT	75	34	28	---
	12+73.7 SA - 13+55 SA	LT/RT	34	26	25	---
	10+30 CE - 10+69 CE	LT/RT	36	16	13	---
	9+20 SWE - 9+84 SWE	LT/RT	75	33	28	---
	10+16 NWE - 10+82 NWE	LT/RT	81	36	30	---
	10+16 OA - 10+75 OA	LT/RT	51	22	19	---
	10+75 OA - 11+50 OA	LT/RT	27	21	20	---
	10+16 EL - 10+55 EL	LT/RT	37	16	14	---
	10+16 AS - 10+54 AS	LT/RT	37	16	14	---
	10+16 ER - 11+70 ER	LT/RT	150	67	56	---
	8+79 SPI - 9+79.26 SPI	LT/RT	100	45	38	---
	10+20.75 NPI - 10+95 NPI	LT/RT	89	40	33	---
	11+00 FO - 11+94.59 FO	LT/RT	175	77	64	---
	12+16.61 FO - 13+47 FO	LT/RT	215	95	79	---
		TOTALS	5,502	2,764	2,200	5,710

NOTE: A UNIT WEIGHT OF 110 POUNDS PER SQUARE YARD PER INCH OF THICKNESS WAS USED TO ESTIMATE ASPHALT QUANTITIES.

ASPHALTIC SURFACE TEMPORARY

CATEGORY	STAGE	STATION - STATION	LOCATION	465.0125 ASPHALTIC SURFACE TEMPORARY TON
0010	STAGE 1	112+23 - 112+83	ISLAND RT	24

NOTE: A UNIT WEIGHT OF 110 POUNDS PER SQUARE YARD PER INCH OF THICKNESS WAS USED TO ESTIMATE ASPHALT QUANTITIES.

ASPHALTIC FLUMES

CATEGORY	STATION	LOCATION	465.0315 ASPHALTIC FLUMES SY
0010	10+61.5 CE	LT	2
	10+61.5 CE	RT	5
	13+19.0 FO	RT	3
	13+20.0 FO	LT	4
		TOTAL	14

CONCRETE SIDEWALK

CATEGORY	STATION - STATION	LOCATION	602.0405 CONCRETE SIDEWALK 4-INCH SF	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON*
0010	113+63 - 115+34	LT	810	19
	10+00 SA - 114+22	RT	1,100	25
	114+38 - 114+69	RT	150	4
	114+81 - 115+25	RT	220	5
	115+40 - 115+53	RT	65	1
	115+56 - 116+25	LT	330	8
	115+78 - 116+88	RT	550	13
	116+59 - 117+62	LT	560	13
	117+06 - 117+64	RT	290	7
	117+77 - 118+37	LT	300	7
	117+82 - 118+39	RT	290	7
	118+51 - 119+85	RT	740	17
	118+61 - 118+81	LT	100	2
	118+97 - 119+74	LT	440	10
	120+21 - 121+01	RT	450	10
	120+23 - 121+31	LT	590	13
	121+14 - 121+62	RT	240	6
	121+59 - 122+24	LT	330	8
	121+78 - 122+49	RT	360	8
	122+37 - 123+62	LT	700	16
	122+61 - 123+24	RT	310	7
	123+44 - 124+03	RT	370	8
	123+49 - 123+55	RT	10	1
	123+93 - 125+15	LT	660	15
	124+24 - 125+06	RT	440	10
	125+24 - 126+23	RT	490	12
	125+43 - 126+62	LT	690	16
	126+40 - 133+03	RT	3,600	83
	126+93 - 128+17	LT	680	16
	128+33 - 128+92	LT	310	7
	129+02 - 129+62	LT	300	7
	129+73 - 130+96	LT	690	16
	131+29 - 135+94	LT	2,350	54
	133+45 - 135+00	RT	830	19
	10+45 CE - 10+75 CE	LT	150	3
	9+27 SWE - 9+65 SWE	LT	200	5
	9+46 SWE - 9+71 SWE	RT	130	3
	10+36 NWE - 10+72 NWE	RT	180	4
	11+00 FO - 11+69 FO	RT	430	10
	12+74 FO - 13+16 FO	RT	340	8
		TOTALS	21,775	503

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

CULVERT PIPE

CROSS DRAINS

CATEGORY	STATION	LOCATION	CPRC CLASS III DIAMETER 522.0148 48-INCH LF	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 522.1048 48-INCH EACH	JOINT TIES REQ'D EACH**	633.5200 MARKERS CULVERT END EACH*	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH
0010	107+87.7	CL	76	2	12	2	1

*ADDITIONAL QUANTITIES LISTED ELSEWHERE
**NON-BID ITEM (FOR INFORMATION ONLY)

CONCRETE CURB AND GUTTER ITEMS

CATEGORY	STATION - STATION	LOCATION	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF	601.0584 CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF
0010	110+51.50 - 112+45.78	RT	195	---	---	195
	111+14.37 - 112+71.99	LT	160	---	---	160
	113+83.12 - 116+05.11	LT	220	---	---	220
	114+53.62 - 119+64.82	RT	510	---	---	510
	116+77.62 - 119+50.68	LT	275	---	---	275
	120+41.24 - 132+75.20	RT	1,240	---	---	1,240
	120+41.44 - 123+40.67	LT	300	---	---	300
	124+14.67 - 126+40.89	LT	225	---	---	225
	127+14.89 - 130+74.76	LT	360	---	---	360
	131+52.27 - 135+70.38	LT	410	---	---	410
	133+65.40 - 134+83.70	RT	120	---	---	120
	135+99.57 - 136+75.59	RT	76	---	---	76
	112+45.78 - 10+48.61 SA	STH 21 LT	140	---	---	140
	10+48.61 SA - 10+15 SA	STH 21 LT	---	---	34	34
	10+15 SA - 10+00 SA	STH 21 LT	---	15	---	15
	10+00 SA - 10+15 SA	STH 21 RT	---	15	---	15
	10+15 SA - 114+53.62	STH 21 RT	235	---	---	235
	112+71.99 - 12+73.70 SA	SPRUCE ST LT	64	---	---	64
	12+54.32 SA - 113+83.12	SPRUCE ST RT	56	---	---	56
	116+05.11 - 10+59.07 CE	CEDAR ST LT	39	---	---	39
	10+59.17 CE - 116+77.62	CEDAR ST RT	43	---	---	43
	119+64.82 - 9+55.24 SWE	WEBSTER AVE LT	38	---	---	38
	119+50.68 - 10+52.00 NWE	WEBSTER AVE LT	49	---	---	49
	9+54.30 SWE - 120+41.24	WEBSTER AVE RT	42	---	---	42
	10+72.00 NWE - 120+41.44	WEBSTER AVE RT	63	---	---	63
	123+40.67 - 10+75.00 OA	OAK ST LT	70	---	---	70
	11+45.00 OA - 124+14.67	OAK ST RT	140	---	---	140
	126+40.89 - 10+40.54 EL	ELM ST LT	36	---	---	36
	10+41.46 EL - 127+14.89	ELM ST RT	36	---	---	36
	130+74.76 - 10+40.67 AS	ASH ST LT	36	---	---	36
	10+42.88 AS - 131+52.27	ASH ST RT	38	---	---	38
	132+75.20 - 10+99.96 ER	RIVER DR RT	120	---	---	120
	10+99.96 ER - 133+65.40	RIVER DR LT	74	---	---	74
	134+83.70 - 8+95.50 SPI	PINE ST LT	75	---	---	75
	135+70.38 - 10+95.00 NPI	PINE ST LT	96	---	---	96
	9+10.00 SPI - 135+99.57	PINE ST RT	87	---	---	87
	10+95.00 NPI - 136+75.59	PINE ST RT	61	---	---	61
	11+00.00 FO - 152+06.05	FOX TRAIL RT	100	---	---	100
	11+00.00 FO - 153+58.12	FOX TRAIL LT	135	---	---	135
	152+05.25 - 13+17.38 FO	HAWTHORNE RT	78	---	---	78
	13+17.38 FO - 153+20.88	HAWTHORNE LT	130	---	---	130
	TOTALS		6,172	30	34	6,236

CONCRETE STEPS SUMMARY

CATEGORY	STATION	LOCATION	602.1500 CONCRETE STEPS SF
0010	123+68	RT	15

CURB RAMP DETECTABLE WARNING FIELD YELLOW

CATEGORY	STATION	LOCATION	602.0505 SF
0010	113+86	LT	10
	113+85	RT	10
	116+18	LT	10
	116+66	LT	10
	119+62	LT	10
	119+62	RT	10
	119+68	LT	10
	119+80	RT	10
	120+26	LT	10
	120+26	RT	10
	120+32	LT	10
	120+32	RT	10
	123+52	LT	10
	123+54	RT	10
	123+57	LT	10
	123+98	LT	10
	126+50	LT	10
	126+50	RT	10
	126+57	LT	10
	126+98	LT	10
	127+03	LT	10
	127+03	RT	10
	130+83	LT	10
	130+83	RT	10
	130+91	LT	10
	131+34	LT	10
	131+41	LT	10
	131+41	RT	10
	132+96	RT	10
	133+50	RT	10
	134+96	RT	10
	134+96	LT	10
	135+87	LT	10
	152+10	RT	10
	152+11	LT	10
	152+23	RT	10
	TOTAL		360

RIPRAP ITEMS

CATEGORY	STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY
0010	107+87.7	RT	9	27
	127+00	RT	7	22
	11+70 ER	RT	1	6
	151+75	LT	3	11
	7+50 SWE	RT	5	18
	TOTALS		26	84

STORM SEWER

CATEGORY	FROM STRUCTURE	TO STRUCTURE	608.3012 STORM SEWER PIPE CLASS III-A 12-INCH LF	608.3015 STORM SEWER PIPE CLASS III-A 15-INCH LF	608.3018 STORM SEWER PIPE CLASS III-A 18-INCH LF	608.3024 STORM SEWER PIPE CLASS III-A 24-INCH LF	608.3030 STORM SEWER PIPE CLASS III-A 30-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	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0336 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH LF	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	608.0430 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF	608.0436 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 36-INCH LF	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	611.9800.S PIPE GRATES EACH	520.8000 CONCRETE COLLARS FOR PIPE EACH	520.1012 APRON ENDWALLS FOR CULVERT PIPE 12-INCH EACH	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	633.5200 MARKERS CULVERT END EACH•
0010	CB-100D	CB-100C	---	---	---	---	---	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-100C	CB-100B	---	---	---	---	---	63	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-100B	CB-100A	---	---	---	---	---	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-100A	CB-100	---	---	---	---	---	125	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-100E	CB-100	---	---	---	---	---	41	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-100F	CB-100E	---	---	---	---	---	54	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-200B	CB-201	---	---	---	---	---	38	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	IN-200A	CB-201	---	---	---	---	---	---	20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-201	CB-200	---	---	---	---	---	---	116	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-200	EW-200H	---	---	---	---	---	---	---	151	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	EW-200H	--	---	---	--	---	---	---	---	--	---	---	---	---	---	---	---	---	---	---	---	1	---	---
	CB-200G	CB-200	---	---	---	---	---	38	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-200C	CB-200	---	---	---	---	---	35	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-200D	CB-200C	---	---	---	---	---	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-200E	CB-200C	---	---	---	---	---	56	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-200F	CB-200E	---	---	---	---	---	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	IN-302B	IN-302A	---	---	44	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	IN-302A	CB-302	---	---	---	70	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-302	CB-300	---	---	---	207	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-300	OF-300A	---	---	---	20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-303	CB-302	---	---	---	79	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-303D	CB-303C	---	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-303C	CB-303	---	32	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-303B	CB-303A	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-303A	CB-303	9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	IN-404B	CB-404A	25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-404A	CB-404	---	---	16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S-404B	CB-404	---	---	---	---	---	---	---	36	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-404	CB-403	---	---	---	25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-403	CB-402	---	---	---	22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-402	CB-401	---	---	---	---	30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-401	CB-400	---	---	---	---	34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-400	EW-400A	---	---	---	---	---	---	---	---	---	195	---	---	---	---	---	---	---	---	---	---	---	---
	CB-400B	CB-400	36	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	EW-400A	--	---	---	---	---	--	---	---	---	---	--	---	---	---	---	---	---	---	---	---	---	1	---
	CB-402A	CB-402	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-405B	CB-405A	---	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-405A	CB-405	---	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-405C	CB-405	---	11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-405D	CB-405C	---	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SUBTOTAL (SHEET)			83	84	60	423	64	474	136	187	195	0	0	0	0	0	0	0	0	0	1	1	0	0

•ADDITIONAL QUANTITIES LISTED ELSEWHERE

CON'T ON NEXT PAGE

STORM SEWER (CON'T)

CATEGORY	FROM STRUCTURE	TO STRUCTURE	608.3012 STORM SEWER PIPE CLASS III-A 12-INCH LF	608.3015 STORM SEWER PIPE CLASS III-A 15-INCH LF	608.3018 STORM SEWER PIPE CLASS III-A 18-INCH LF	608.3024 STORM SEWER PIPE CLASS III-A 24-INCH LF	608.3030 STORM SEWER PIPE CLASS III-A 30-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	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0336 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH LF	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	608.0430 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF	608.0436 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 36-INCH LF	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	611.9800.S PIPE GRATES EACH	520.8000 CONCRETE COLLARS FOR PIPE EACH	520.1012 APRON ENDWALLS FOR CULVERT PIPE 12-INCH EACH	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	633.5200 MARKERS CULVERT END EACH*
0010	IN-405E	CB-405A	21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-405	CB-401	---	---	---	192	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-406	CB-405	---	---	---	154	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-406A	CB-406	---	49	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	IN-406B	CB-406A	20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-406C	CB-406A	27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-406D	CB-406C	25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-406F	CB-406	11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-502A	CB-502	---	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	507A	CB-507	---	---	---	---	---	12	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---
	CB-507	CB-502	30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-502	MH-501	---	---	---	59	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	IN-501A	MH-501	---	41	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	MH-501	MH-500	---	---	---	---	35	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	MH-500	EW-500A	---	---	---	---	---	---	---	---	---	---	38	---	---	---	---	---	---	---	---	---	---	---
	EW-500A	--	---	---	---	---	---	---	---	---	---	---	--	---	---	---	---	1	---	---	---	---	1	1
	CB-503	MH-500	---	---	---	---	---	---	---	---	---	---	---	---	---	---	159	---	---	---	---	---	---	---
	IN-503E	CB-503D	21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-503D	CB-503C	---	---	29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-503C	CB-503	---	---	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-503B	CB-503A	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-503A	CB-503	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-504	CB-503	---	---	---	---	---	---	---	---	---	---	---	---	---	211	---	---	---	---	---	---	---	---
	CB-504A	CB-504	13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-505	CB-504	---	---	---	32	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	IN-505A	CB-505	17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-506	CB-505	---	---	---	42	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	IN-506A	CB-506	---	---	16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-602A	CB-602	42	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-601A	CB-601	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-600A	CB-600	22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	IN-700B	CB-700A	25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-700A	EW-700	45	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	EW-700	--	--	---	---	---	---	--	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1
	EW-800A	MH-800	---	---	37	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	1
	MH-800	MH-801	---	---	---	---	---	---	---	---	---	---	---	54	---	---	---	---	---	---	---	---	---	---
	MH-801	EW-800B	---	---	54	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	EW-800B	--	---	---	--	---	---	---	---	--	---	---	---	---	---	---	---	---	---	1	---	---	---	1
SUBTOTAL (SHEET)			341	97	162	479	35	12	0	0	0	38	54	211	159	0	1	1	1	2	0	0	1	4
SUBTOTAL (CATEGORY 0010)			424	181	222	902	99	486	136	187	195	38	54	211	159	0	1	1	1	2	1	1	1	4

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

CON'T ON NEXT PAGE

STORM SEWER (CON'T)

CATEGORY	FROM STRUCTURE	TO STRUCTURE	608.3012 STORM SEWER PIPE CLASS III-A 12-INCH LF	608.3015 STORM SEWER PIPE CLASS III-A 15-INCH LF	608.3018 STORM SEWER PIPE CLASS III-A 18-INCH LF	608.3024 STORM SEWER PIPE CLASS III-A 24-INCH LF	608.3030 STORM SEWER PIPE CLASS III-A 30-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	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0336 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH LF	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	608.0430 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF	608.0436 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 36-INCH LF	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	611.9800.S PIPE GRATES EACH	520.8000 CONCRETE COLLARS FOR PIPE EACH	520.1012 APRON ENDWALLS FOR CULVERT PIPE 12-INCH EACH	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	633.5200 MARKERS CULVERT END EACH•
0030	S-200I	CB-200B	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9	---	---	---	---	---	---	---
	S-302C	IN-302B	---	---	---	---	---	---	---	---	---	---	---	---	---	---	13	---	---	---	---	---	---	---
	S-303E	CB-303C	---	---	---	---	---	---	---	---	---	---	---	---	---	---	12	---	---	---	---	---	---	---
	S-407A	MH-407	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	MH-407	CB-402	113	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	MH-408	CB-402A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	52	---	---	---	---	---	---	---
	S-408A	MH-408	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9	---	---	---	---	---	---	---
	S-409A	MH-409	---	---	---	---	---	---	---	---	---	---	---	---	---	---	11	---	---	---	---	---	---	---
	MH-409	CB-405B	---	---	---	---	---	---	---	---	---	---	---	---	---	---	74	---	---	---	---	---	---	---
	S-406E	CB-406C	---	---	---	---	---	---	---	---	---	---	---	---	---	---	18	---	---	---	---	---	---	---
	W-509	CB-502A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	88	---	---	---	---	---	---	---
	S-509	W-509	---	---	---	---	---	---	---	---	---	---	---	---	---	---	12	---	---	---	---	---	---	---
	MH-508	W-509	---	---	---	---	---	---	---	---	---	---	---	---	---	---	78	---	---	---	---	---	---	---
	S-508A	MH-508	---	---	---	---	---	---	---	---	---	---	---	---	---	---	11	---	---	---	---	---	---	---
	S-507B	CB-507	---	---	---	---	---	---	---	---	---	---	---	---	---	---	16	---	---	---	---	---	---	---
	S-501B	MH-501	---	---	---	---	---	---	---	---	---	---	---	---	---	---	18	---	---	---	---	---	---	---
	S-503G	CB-503C	---	---	---	---	---	---	---	---	---	---	---	---	---	---	34	---	---	---	---	---	---	---
	S-510A	MH-510	---	---	---	---	---	---	---	---	---	---	---	---	---	---	11	---	---	---	---	---	---	---
	MH-510	CB-505	---	---	---	---	---	---	---	---	---	---	---	---	---	---	72	---	---	---	---	---	---	---
	S-601B	CB-601A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7	---	---	---	---	---	---	---
	SUBTOTAL (CATEGORY 0030)		123	0	0	0	0	0	0	0	0	0	0	0	0	0	545	0	0	0	0	0	0	0
	TOTALS		547	181	222	902	99	486	136	187	195	38	54	211	159	545	1	1	1	2	1	1	1	4

•ADDITIONAL QUANTITIES LISTED ELSEWHERE

MGS GUARDRAIL SUMMARY

CATEGORY	STATION - STATION	LOCATION	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	REMARK
0010	10+06.09 SA - 10+45.49 SA	LT	39.4	---	
	10+97.91 SA	LT	---	1	STA LOCATION IS FOR POST 1
		TOTALS	39.4	1	

MOBILIZATION

CATEGORY	PROJECT	619.1000 EACH
0010	6190-16-72	0.75

INLETS, MANHOLES, MANHOLE COVERS, AND INLET COVERS

CATEGORY	STRUCT. ID#	STATION	OFFSET	611.1003 CATCH BASINS 3-FT DIAMETER EACH	611.1004 CATCH BASINS 4-FT DIAMETER EACH	611.1005 CATCH BASINS 5-FT DIAMETER EACH	611.1006 CATCH BASINS 6-FT DIAMETER EACH	611.1230 CATCH BASINS 2x3-FT EACH	611.2003 MANHOLES 3-FT DIAMETER EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2007 MANHOLES 7-FT DIAMETER EACH	611.3220 INLETS 2x2-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0545 MANHOLE COVERS TYPE L EACH	611.0606 INLET COVERS TYPE B EACH	611.0624 INLET COVERS TYPE H EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0645 INLET COVERS TYPE MS-A EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH
0010	CB-100D	111+25.98	32.5 'LT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-100C	111+19.98	32.5 'LT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-100B	111+20.00	30.5 'RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-100A	111+26.00	30.5 'RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-100	112+49.72	47.37 'RT	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	1
	CB-100E	112+87.87	63.02 'RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	---	1
	CB-100F	112+99.61	115.3 'RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	---	1
	CB-200B	113+00.40	63.97 'LT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	---	1
	IN-200A	113+38.82	83.94 'LT	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	1
	CB-201	113+37.05	63.82 'LT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	1
	CB-200	113+73.31	46.16 'RT	---	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	1
	CB-200G	113+51.31	76.85 'RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	---	1
	CB-200C	114+00.33	24.64 'RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-200D	114+06.28	23.85 'RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-200E	114+00.00	31.5 'LT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-200F	114+06.00	31.5 'LT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	IN-302B	116+23.01	59.93 'LT	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	1
	IN-302A	116+66.74	62.37 'LT	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	2	1
	CB-302	116+70.81	8 'RT	---	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	1
	CB-300	116+70.26	215.2 'RT	---	1	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1
	CB-303	117+50.00	8 'RT	---	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	1
	CB-303D	117+55.99	23.55 'LT	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-303C	117+50.00	23.93 'LT	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-303B	117+56.00	17.5 'RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-303A	117+50.00	17.5 'RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	IN-404B	119+78.24	70.8 'LT	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	1
	CB-404A	119+76.61	46.28 'LT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	---	1
	CB-404	119+94.62	45.76 'LT	---	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	1
	CB-403	120+22.10	43.72 'LT	---	---	1	---	---	---	---	---	---	---	---	---	---	---	1	---	---	1
	CB-402	120+19.52	21.38 'LT	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	1
	CB-401	120+19.06	8.7 'RT	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	1
	CB-400	120+19.26	42.96 'RT	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-400B	119+86.32	38.87 'RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-402A	120+26.01	24.38 'LT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-405B	122+16.00	17.5 'LT	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-405A	122+10.00	17.5 'LT	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-405C	122+10.00	17.5 'RT	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-405D	122+16.00	17.5 'RT	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1
	IN-405E	122+05.00	37.42 'LT	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---	---	---	1
	CB-405	122+10.00	6 'RT	---	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	1
	CB-406	123+64.18	6 'RT	---	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	1
	CB-406A	123+64.18	42.95 'LT	---	1	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	1
	IN-406B	123+59.21	62.06 'LT	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	1
	CB-406C	123+91.18	43.05 'LT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	---	1
	CB-406D	124+02.15	21.11 'LT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-406F	123+64.18	17.5 'RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	SUBTOTALS (SHEET)			0	9	8	3	20	0	0	0	1	4	1	10	1	1	8	21	6	46

CON'T ON NEXT PAGE

INLETS, MANHOLES, MANHOLE COVERS, AND INLET COVERS (CON'T.)

CATEGORY	STRUCT. ID#	STATION	OFFSET	611.1003 CATCH BASINS 3-FT DIAMETER EACH	611.1004 CATCH BASINS 4-FT DIAMETER EACH	611.1005 CATCH BASINS 5-FT DIAMETER EACH	611.1006 CATCH BASINS 6-FT DIAMETER EACH	611.1230 CATCH BASINS 2x3-FT EACH	611.2003 MANHOLES 3-FT DIAMETER EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2007 MANHOLES 7-FT DIAMETER EACH	611.3220 INLETS 2x2-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0545 MANHOLE COVERS TYPE L EACH	611.0606 INLET COVERS TYPE B EACH	611.0624 INLET COVERS TYPE H EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0645 INLET COVERS TYPE MS-A EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH
0010	CB-502A	126+56.83	23.73 'LT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-507	126+62.46	50.19 'LT	1	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1
	CB-502	126+62.45	20.34 'LT	---	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	1
	IN-501A	126+98.97	51.77 'LT	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	1
	MH-501	127+21.72	17.5 'LT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	1
	MH-500	127+21.72	17.5 'RT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	1
	CB-503	128+80.00	8 'RT	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	1
	IN-503E	129+15.00	37.42 'LT	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---	---	---	1
	CB-503D	129+09.00	17.5 'LT	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-503C	128+80.00	17.5 'LT	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-503B	128+86.00	17.5 'RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-503A	128+80.00	17.5 'RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-504	130+90.70	8 'RT	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	1
	CB-504A	131+00.00	17.5 'RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	---	1
	CB-505	130+90.80	23.83 'LT	---	---	1	---	---	---	---	---	---	---	---	---	---	---	1	---	---	1
	IN-505A	130+90.69	41.07 'LT	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	1
	CB-506	131+34.23	24.56 'LT	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1
	IN-506A	131+32.96	40.32 'LT	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	1
	CB-602A	136+54.71	30.22 'LT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-602	136+21.98	55.96 'LT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	1
	CB-601A	135+98.44	37.02 'LT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	---	1
	CB-601	136+02.83	33.44 'LT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	1
	CB-600A	135+83.44	23.91 'RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	CB-600	135+66.45	9.33 'RT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	1
	IN-700B	133+66.97	67.11 'RT	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	1
	CB-700A	133+47.99	54.62 'RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	1
	MH-800	153+03.60	42.28 'LT	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---	1
	MH-801	152+45.02	36.53 'LT	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---	1
	SUBTOTALS (SHEET)			1	5	3	2	8	0	2	2	1	4	0	6	1	1	5	11	4	28
	SUBTOTAL (CATEGORY 0010)			1	14	11	5	28	0	2	2	2	8	1	16	2	2	13	32	10	74
0030	MH-407	119+02.51	22.42 'LT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	1
	MH-408	120+80.00	25.66 'LT	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---	1
	MH-409	122+88.00	23.25 'LT	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---	1
	MH-508	124+91.00	23.25 'LT	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---	1
	MH-510	130+19.00	23.83 'LT	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---	1
	SUBTOTAL (CATEGORY 0030)			0	0	0	0	0	4	1	0	0	0	0	4	1	0	0	0	0	5
	TOTALS			1	14	11	5	28	4	3	2	2	8	1	20	3	2	13	32	10	79

FINISHING ITEMS

CATEGORY	STATION - STATION	LOCATION	625.0100 TOPSOIL SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	629.0210 FERTILIZER TYPE B CWT	630.0140 SEEDING MIXTURE NO. 40 LB	631.0300 SOD WATER MGAL
0010	107+50 - 10+00 SA	RT	1,300	1,300	0.8	23	30
	107+50 - 112+00	LT	320	320	0.2	6	7
	112+00 - 112+72	LT	60	60	0.1	1	1
	113+67 - 116+18	LT	260	260	0.2	5	6
	113+88 - 119+81	RT	610	610	0.4	11	15
	116+65 - 119+70	LT	260	260	0.2	5	6
	120+24 - 132+97	RT	2,650	2,650	1.7	48	60
	120+25 - 123+58	LT	310	310	0.2	6	7
	123+97 - 126+58	LT	270	270	0.2	5	6
	126+97 - 130+92	LT	420	420	0.3	8	9
	131+33 - 135+87	LT	760	760	0.5	14	15
	133+49 - 134+98	RT	170	170	0.1	3	4
	136+00 - 137+50	RT	70	70	0.1	1	2
	136+76 - 137+50	RT	75	75	0.1	1	2
	10+00 SA - 11+61 SA	RT	360	360	0.2	7	8
	12+28 SA - 13+55 SA	LT/RT	230	230	0.1	4	5
	10+38 CE - 10+75 CE	LT/RT	85	85	0.1	2	2
	9+26 SWE - 9+70 SWE	LT/RT	60	60	0.1	1	1
	10+33 NWE - 10+83 NWE	LT/RT	55	55	0.1	1	1
	10+33 OA - 11+50 OA	LT/RT	100	100	0.1	2	2
	10+33 EL - 10+55 EL	LT/RT	45	45	0.1	1	1
	10+33 AS - 10+54 AS	LT/RT	45	45	0.1	1	1
	10+26 ER - 11+70 ER	LT/RT	310	310	0.2	6	7
	8+86 SPI - 9+94 SPI	LT/RT	130	130	0.1	2	3
	10+23 NPI - 10+95 NPI	LT/RT	35	35	0.1	1	1
	11+00 FO - 11+86 FO	LT/RT	450	450	0.3	8	10
	12+20 FO - 13+47 FO	LT/RT	430	430	0.3	8	10
	UNDISTRIBUTED	LT/RT	---	2,470	1.8	45	55
	TOTALS		9,870	12,340	8.8	222	277

SILT FENCE SUMMARY

CATEGORY	STATION - STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF
0010	107+45 - 10+00 SA	RT	670	670
	107+45 - 108+96	LT	150	150
	109+42 - 110+42	LT	100	100
	10+00 SA - 113+80	RT	170	170
	114+39 - 115+52	RT	115	115
	115+54 - 10+75 CE	LT	70	70
	115+79 - 116+84	RT	105	105
	10+70 CE - 118+25	LT	155	155
	118+53 - 9+30 SWE	RT	150	150
	121+80 - 122+47	RT	68	68
	122+65 - 123+21	RT	58	58
	123+73 - 124+00	RT	26	26
	124+42 - 125+01	RT	60	60
	125+24 - 125+95	RT	72	72
	126+46 - 127+05	RT	65	65
	127+11 - 10+70 ER	RT	640	640
	10+75 ER - 12+00 ER	RT	145	145
	134+99 - 8+82 SPI	RT	54	54
	10+95 NPI - 137+00	LT	74	74
	151+40 - 10+95 FO	LT	120	120
	10+35 OA - 10+95 OA	LT	65	65
	11+20 OA - 11+53 OA	LT	33	33
		TOTALS	3,165	3,165

MOBILIZATIONS EROSION CONTROL

CATEGORY	PROJECT	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	6190-16-72	16	8

TURBIDITY BARRIERS

CATEGORY	STATION	LOCATION	628.6005 TURBIDITY BARRIERS SY
0010	113+95	RT	45
	116+70	RT	55
	7+30 SWE	RT	60
		TOTALS	160

PLANT QUANTITIES TABLE

CATEGORY	SYMBOL	Common Name	Scientific Name	Size (Cal. Or Ht.) When Planted	Root Zone Mode	Sheet 1	Sheet 2	Sheet 3	Sheet 4	Sheet 5	Totals	BID ITEM NUMBER
	MEDIUM DECIDUOUS TREES											
0020	JTL	Tree Lilac, Japanese	*Syringa reticulata*	2 1/2" Cal.	B&B	3	8	12	10	4	37	632.0101.01

INLET PROTECTION SUMMARY

CATEGORY	STRUCTURE	STATION	LOCATION	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH
0010	CB-100D	111+25.98	33 'LT	1	---	---	1
	CB-100C	111+19.98	33 'LT	1	---	---	1
	CB-100B	111+20.00	31 'RT	1	---	---	1
	CB-100A	111+26.00	31 'RT	1	---	---	1
	CB-100E	112+87.87	63 'RT	1	---	1	---
	CB-100F	112+99.61	115 'RT	1	---	1	---
	CB-200B	113+00.40	64 'LT	1	---	1	---
	IN-200A	113+38.82	84 'LT	1	1	---	---
	CB-200G	113+51.31	77 'RT	1	---	1	---
	CB-200C	114+00.33	25 'RT	1	---	---	1
	CB-200D	114+06.28	24 'RT	1	---	---	1
	CB-200E	114+00.00	32 'LT	1	---	---	1
	CB-200F	114+06.00	32 'LT	1	---	---	1
	IN-302B	116+23.01	60 'LT	1	1	---	---
	EXIST.	116+24.00	33 'LT	1	1	---	---
	IN-302A	116+66.74	62 'LT	1	1	---	---
	CB-303D	117+55.99	24 'LT	1	---	---	1
	CB-303C	117+50.00	24 'LT	1	---	---	1
	CB-303B	117+56.00	18 'RT	1	---	---	1
	CB-303A	117+50.00	18 'RT	1	---	---	1
	IN-404B	119+78.24	71 'LT	1	1	---	---
	CB-404A	119+76.61	46 'LT	1	---	1	---
	CB-403	120+22.10	44 'LT	1	---	1	---
	CB-400	120+19.26	43 'RT	1	---	1	---
	CB-400B	119+86.32	39 'RT	1	---	1	---
	CB-402A	120+26.01	24 'LT	1	---	---	1
	CB-405B	122+16.00	18 'LT	1	---	---	1
	CB-405A	122+10.00	18 'LT	1	---	---	1
	CB-405C	122+10.00	18 'RT	1	---	---	1
	CB-405D	122+16.00	18 'RT	1	---	---	1
	IN-405E	122+05.00	37 'LT	1	1	---	---
	CB-406A	123+64.18	43 'LT	1	---	1	---
	IN-406B	123+59.21	62 'LT	1	1	---	---
	CB-406C	123+91.18	43 'LT	1	---	1	---
	CB-406D	124+02.15	21 'LT	1	---	---	1
	CB-406F	123+64.18	18 'RT	1	---	1	---
	CB-502A	126+56.83	24 'LT	1	---	---	1
	IN-501A	126+98.97	52 'LT	1	1	---	---
	EXIST.	127+21.72	20 'LT	1	1	---	---
	MH-501	127+21.72	18 'LT	1	---	1	---
	MH-500	127+21.72	18 'RT	1	---	1	---
	IN-503E	129+15.00	37 'LT	1	1	---	---
	CB-503D	129+09.00	18 'LT	1	---	---	1
	CB-503C	128+80.00	18 'LT	1	---	---	1
	CB-503B	128+86.00	18 'RT	1	---	---	1
	CB-503A	128+80.00	18 'RT	1	---	---	1
	CB-504A	131+00.00	18 'RT	1	---	1	---
	CB-505	130+90.80	24 'LT	1	---	1	---
	IN-505A	130+90.69	41 'LT	1	1	---	---
	CB-506	131+34.23	25 'LT	1	---	---	1
	IN-506A	131+32.96	40 'LT	1	1	---	---
	CB-602A	136+54.71	30 'LT	1	---	---	1
	CB-601A	135+96.41	36 'LT	1	---	1	---
	CB-600A	135+83.44	24 'RT	1	---	---	1
	IN-700B	133+66.97	67 'RT	1	1	---	---
	CB-700A	133+47.99	55 'RT	1	---	---	1
	MH-801	152+45.02	37 'LT	1	---	1	---
	MH-800	153+03.60	42 'LT	1	---	---	1
			TOTALS	58	13	17	28

TEMPORARY DITCH CHECKS

CATEGORY	STATION	LOCATION	628.7504 TEMPORARY DITCH CHECKS LF
0010	12+80 SA	RT	10
	116+85	LT	8
	122+80	RT	8
	122+95	RT	8
	8+85 SPI	RT	6
	137+50	LT	8
	137+50	RT	8
	151+30	LT	8
	151+30	RT	8
	13+50 FO	LT	8
	13+50 FO	RT	8
		TOTALS	88

CULVERT PIPE CHECKS

CATEGORY	STATION	LOCATION	628.7555 CULVERT PIPE CHECKS EACH
0010	107+87.7	LT	10
	109+50	LT	2
	110+95	LT	2
	117+15	RT	2
	122+91	LT	3
	126+45	LT	2
	126+90	RT	2
	133+00	RT	2
	153+50	LT	2
		TOTALS	27

ROCK BAGS

CATEGORY	STATION	LOCATION	628.7570 EACH	REMARK
0010	110+52	RT	17	SILT FENCE RELIEF
	112+08	RT	17	SILT FENCE RELIEF
	114+00	RT	17	SILT FENCE RELIEF
	132+82	RT	17	SILT FENCE RELIEF
	UNDISTRIBUTED		50	
	TOTAL		118	

FIELD OFFICE TYPE D

CATEGORY	PROJECT	642.5401 EACH
0010	6190-16-72	1

ERECTION & REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2215 SIGNS TYPE II FOLDING REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	SPV.0060.01 FLASHING LED PED SIGN EACH	SPV.105.01 REMOVE FLASHER STANDARD LS	REMARKS
1	STH 21, W. OF STH 21/STH 116 INTER.	R2-1	24" X 30"	5.00	---	---	1	---	1	1	---	---	25 MPH
2	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	---	---	55 MPH
2A	"	J4-1	24" X 36"	6.00	---	---	1	---	1	1	---	---	WEST 21
3	"	R3-8W	54" X 30"	11.25	---	---	2	---	1	2	---	---	
4	"	J3-4	96" X 57"	38.00	---	---	---	2	1	2	---	---	SEE PLAN SHEET
5	"	R1-1F	---	---	---	---	---	---	1	---	---	---	LOCATED ON SIGNAL
6	"	R4-7	---	---	---	---	---	---	---	---	---	---	PART OF SIGN 5 REMOVAL
7	"	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	---	---	MOUNT TO SIGNAL
8	"	R1-2	---	---	---	---	---	---	1	1	---	---	
9	"	R5-1	---	---	---	---	---	---	---	---	---	---	PART OF SIGN 8 REMOVAL
10	STH 21/STH 116 INTERSECTION	J3-1	24" X 57"	9.50	---	---	---	1	1	1	---	---	WEST 21 LEFT
11	"	R1-1F	36" X 36"	---	7.46	---	---	---	1	---	---	---	MOUNT TO SIGNAL
12	"	J3-1	24" X 57"	9.50	---	---	---	---	1	---	---	---	WEST 21, MOUNT TO SIGNAL MAST AREM
13	STH 116, S. OF STH 21/STH 116 INTER.	J3-2	48" X 57"	19.00	---	---	---	1	1	1	---	---	EAST 21, WEST 116
14	"	I3-1	36" X 12"	3.00	---	---	---	---	1	---	---	---	MOUNT TO LIGHT POLE, SEE DETAIL SHEET
15	"	D1-2	54" X 24"	9.00	---	---	---	---	---	---	---	---	MOUNT TO LIGHT POLE, PART OF SIGN 14 REMOVAL, SEE DETAIL SHEET
16	"	W3-3	36" X 36"	---	---	9.00	---	---	---	---	---	---	SEE DETAIL SHEET
17	"	I3-1	36" X 12"	3.00	---	---	---	---	1	---	---	---	MOUNT TO LIGHT POLE
18	"	J2-2	48" X 57"	19.00	---	---	---	---	1	---	---	---	WEST 21, EAST 1116, MOUNT TO LIGHT POLE
19	"	J3-3	72" X 57"	28.50	---	---	---	2	1	2	---	---	WEST 21, EAST 116, CTH F
20	"	R3-8	36" X 30"	7.50	---	---	1	---	---	---	---	---	
21	"	R3-7R	---	---	---	---	---	---	1	1	---	---	
22	"	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	---	---	MOUNT TO SIGNAL
23	"	R1-2	---	---	---	---	---	---	1	1	---	---	
24	"	R1-1F	---	---	---	---	---	---	1	---	---	---	LOCATED ON SIGNAL
25	STH 116, W. OF WEBSTER AVE	J4-1	24" X 36"	6.00	---	---	---	1	1	1	---	---	EAST 116
26	"	R2-1	---	---	---	---	---	---	---	---	---	---	PART OF SIGN 25 REMOVAL
27	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	---	---	25 MPH
28	"	S1-1	36" X 36"	---	---	6.75	---	1	1	1	---	---	
29	"	WF16-9P	24" X 8"	---	---	1.33	---	---	---	---	---	---	MOUNT BELOW SIGN 28, PART OF SIGN 28 REMOVAL
30	"	R2-6P	24" X 18"	3.00	---	---	---	---	---	---	---	---	MOUNT BELOW SIGN 29, PART OF SIGN 28 REMOVAL
31	"	J13-1	24" X 45"	7.50	---	---	---	1	1	1	---	---	CTH F LEFT
32	"	J13-1	---	---	---	---	---	---	1	1	---	---	
33	"	J13-1	---	---	---	---	---	---	---	---	---	---	PART OF SIGN 32 REMOVAL
36	"	R1-1F	36" X 36"	---	7.46	---	---	---	1	---	---	---	MOUNT TO SIGNAL
37	VACANT	---	---	---	---	---	---	---	---	---	---	---	
38	STH 116, W. OF WEBSTER AVE	J3-3;MOD	48" X 81"	27.00	---	---	---	2	1	1	---	---	SEE PLAN SHEET
39	"	R3-8A	36" X 30"	7.50	---	---	1	---	1	1	---	---	
40	"	D1-3	48" X 30"	10.00	---	---	---	2	1	2	---	---	SEE DETAIL SHEET
41	CEDAR ST	R1-1	30" X 30"	5.18	---	---	1	---	1	1	---	---	
42	STH 116, W. OF WEBSTER AVE	W3-3	36" X 36"	---	---	9.00	---	1	---	---	---	---	
42A	"	W3-3	---	---	---	---	---	---	1	1	---	---	
43	"	J1-1	24" X 39"	6.50	---	---	---	1	---	---	---	---	JCT 21
43A	"	J1-1	---	---	---	---	---	---	1	1	---	---	
44A	"	R2-1	24" X 30"	5.00	---	---	1	---	---	---	---	---	25 MPH
44B	"	S5-2	24" X 30"	5.00	---	---	---	---	---	---	---	---	MOUNT BELOW SIGN 44B
44	"	R3-4	---	---	---	---	---	---	1	---	---	---	
45	"	R1-1	30" X 30"	5.18	---	---	1	---	1	1	---	---	
45A	"	J13-1	24" X 45"	7.50	---	---	---	1	1	1	---	---	STH 116 LEFT OR RIGHT, REMOVE "TO 21" J ASSEMBLY
46	"	R1-1	30" X 30"	5.18	---	---	1	---	1	1	---	---	
47	"	R3-4	---	---	---	---	---	---	1	---	---	---	
48	"	S1-1	---	---	---	---	---	---	1	---	---	1	REMOVE FLASHING BEACON STANDARD
49	"	W16-7L	---	---	---	---	---	---	---	---	---	---	PART OF SIGN 48 REMOVAL
	PAGE SUBTOTAL			278.79	29.84	26.08	12	16	36	29	0	1	

ERECTION & REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2215 SIGNS TYPE II FOLDING REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	SPV.0060.01 FLASHING LED PED SIGN EACH	SPV.105.01 REMOVE FLASHER STANDARD LS	REMARKS
50	STH 116, E. OF WEBSTER AVE	R2-1	24" X 30"	5.00	---	---	1	---	1	1	---	---	25 MPH
50A	"	S5-2	24" X 30"	5.00	---	---	---	---	---	---	---	---	MOUNT BELOW SIGN 50
51	"	S1-1	---	---	---	---	---	---	1	---	---	1	REMOVE FLASHING BEACON STANDARD
52	"	W16-7L	---	---	---	---	---	---	---	---	---	---	PART OF SIGN 51 REMOVAL
53	"	J13-1	24" X 45"	7.50	---	---	---	1	---	---	---	---	CTH F AHEAD/LEFT
54	"	R2-1	---	---	---	---	---	---	1	1	---	---	
55	"	R2-1	24" X 30"	5.00	---	---	1	---	---	---	---	---	25 MPH
56	"	S1-1	36" X 36"	---	---	6.75	---	1	---	---	---	---	
57	"	WF16-9P	24" X 8"	---	---	1.33	---	---	---	---	---	---	MOUNT BELOW SIGN 56
57A	"	R2-6P	24" X 18"	3.00	---	---	---	---	---	---	---	---	MOUNT BELOW SIGN 57
58	OAK ST	R1-1	30" X 30"	5.18	---	---	1	---	1	1	---	---	
59	STH 116 E. OF OAK ST	S1-1	---	---	---	---	---	---	1	1	---	---	
60	"	WF16-9P	---	---	---	---	---	---	---	---	---	---	PART OF SIGN 59 REMOVAL
61	"	W14-3	48" X 36"	---	---	6.00	---	1	1	1	---	---	
62	ELM ST	R1-1	30" X 30"	5.18	---	---	1	---	1	1	---	---	
63	STH 116, E. OF ELM ST	R2-1	24" X 30"	5.00	---	---	1	---	1	1	---	---	25 MPH
64		W14-3	48" X 36"	---	---	6.00	---	1	1	1	---	---	
65		J1-1	24" X 39"	6.50	---	---	---	1	---	---	---	---	JCT CTH F, MOUNT TO BACK OF SIGN 64, PART OF SIGN 64 REMOVAL
66		R2-1	24" X 30"	5.00	---	---	1	---	1	1	---	---	25 MPH
67	ASH ST	R1-1	30" X 30"	5.18	---	---	1	---	1	1	---	---	
68	STH 116, E. OF ASH ST	M1-6	---	---	---	---	---	---	1	1	---	---	
69		W1-6	---	---	---	---	---	---	---	---	---	---	PART OF SIGN 68 REMOVAL
70		W1-6	48" X 24"	---	---	8.00	1	---	---	---	---	---	
71		W1-6	48" X 24"	---	---	8.00	1	---	---	---	---	---	
72		W1-6	---	---	---	---	---	---	1	1	---	---	
73		R1-1	---	---	---	---	---	---	1	1	---	---	
74	E. RIVER DR	R1-1	30" X 30"	5.18	---	---	1	---	---	---	---	---	
75	PINE ST	R1-1	30" X 30"	5.18	---	---	1	---	1	1	---	---	
75A	"	R5-1A	36" X 24"	6.00	---	---	1	---	---	---	---	---	
75B	"	R1-1	---	---	---	---	---	---	1	1	---	---	
75C	"	R5-1	30" X 30"	6.25	---	---	1	---	---	---	---	---	
76	"	R6-2L	24" X 30"	5.00	---	---	1	---	1	1	---	---	
77	"	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 77, PART OF SIGN 77 REMOVAL
78	STH 116, E. OF PINE ST	R2-1	24" X 30"	5.00	---	---	1	---	1	1	---	---	35 MPH
79	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	---	---	25 MPH
80	"	W1-1R	36" X 36"	---	---	9.00	---	1	1	1	---	---	
81	"	W13-1	24" X 24"	---	---	4.00	---	---	---	---	---	---	MOUNT BELOW SIGN 80, PART OF SIGN 80 REMOVAL, SPEED TBD IN FIELD
82	"	J4-1	24" X 36"	6.00	---	---	---	1	---	---	---	---	EAST STH 116
83	"	D2-1	84" X 15"	8.75	---	---	2	---	1	2	---	---	SEE DETAIL SHEET
84	"	J4-1	---	---	---	---	---	---	---	---	---	---	PART OF SIGN 83 REMOVAL
85	"	W14-3	48" X 36"	---	---	6.00	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 83, PART OF SIGN 83 REMOVAL
86	"	R1-1	30" X 30"	5.18	---	---	1	---	1	1	---	---	
87	"	W14-3	48" X 36"	---	---	6.00	---	1	1	1	---	---	
88	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	---	---	35 MPH
89	"	W1-1L	36" X 36"	---	---	9.00	---	1	1	1	---	---	
90	"	W13-1	24" X 24"	---	---	4.00	---	---	---	---	---	---	MOUNT BELOW SIGN 89, PART OF SIGN 89 REMOVAL, SPEED TBD IN FIELD
91	"	R1-1	30" X 30"	5.18	---	---	1	---	1	1	---	---	
92	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	---	---	35 MPH
93	"	I55-56	30" X 36"	7.50	---	---	---	1	1	1	---	---	OMRO EDUCATION ASSOCIATION, SEE PLAN SHEET
94	"	W1-6	48" X 24"	---	---	8.00	1	---	1	1	---	---	REMOVE M1-6 WITH SIGN 94
94A	"	W1-6	---	---	---	---	---	---	1	1	---	---	
95	HAWTHORNE DR	R1-1	30" X 30"	5.18	---	---	1	---	1	1	---	---	
96	"	W1-6	48" X 24"	---	---	8.00	1	---	1	1	---	---	
97	"	R1-1	30" X 30"	5.18	---	---	1	---	1	1	---	---	
98	STH 116, E. OF HAWTHORNE DR	I2-3	60" X 24"	10.00	---	---	2	---	1	2	---	---	OMRO POPULATION 3517, SEE DETAIL SHEET
100	STH 116 AT WEBSTER AVE	---	---	---	---	---	---	---	---	---	1	---	S1-1, S16-7 SIGNS INCLUDED IN SPV.0060.01
101	"	---	---	---	---	---	---	---	---	---	1	---	S1-1, S16-7 SIGNS INCLUDED IN SPV.0060.01
102	"	---	---	---	---	---	---	---	---	---	1	---	S1-1, S16-7 SIGNS INCLUDED IN SPV.0060.01
103	"	---	---	---	---	---	---	---	---	---	1	---	S1-1, S16-7 SIGNS INCLUDED IN SPV.0060.01
	PAGE SUBTOTAL			163.12	0.00	90.08	28	10	34	35	4	1	
	PROJECT TOTAL			**441.91**	**29.84**	**116.16**	**40**	**26**	**70**	**64**	**4**	**2**	

TEMPORARY PEDESTRIAN ACCOMMODATION SUMMARY

CATEGORY	STATION - STATION	LOCATION	644.1410.S TEMPORARY PEDESTRIAN SURFACE ASPHALT SF	644.1420.S TEMPORARY PEDESTRIAN SURFACE PLYWOOD SF	644.1430.S TEMPORARY PEDESTRIAN SURFACE PLATE SF
0010	7+90 SWE - 10+75 NWE	RT	1,550	320	80

TEMPORARY CURB RAMP

CATEGORY	STATION - STATION	LOCATION	644.1601.S EACH
0010	7+90 SWE - 10+75 NWE	RT	6

TEMPORARY PEDESTRIAN SAFETY FENCE

CATEGORY	STATION - STATION	LOCATION	644.1616.S LF
0010	7+90 SWE - 10+75 NWE	RT	650

TRAFFIC CONTROL

CATEGORY	PROJECT	643.0100.01 EACH
0010	6190-16-72	1

TRAFFIC CONTROL DETOUR

CATEGORY	PROJECT	643.2000.01 EACH
0010	6190-16-72	1

REMOVING MARKINGS SUMMARY

CATEGORY	STAGE	STATION - STATION	LOCATION	646.0600 REMOVING PAVEMENT MARKINGS LF	647.0955 REMOVING PAVEMENT MARKING ARROWS EACH	647.0965 REMOVING PAVEMENT MARKING WORDS EACH
0010	STAGE 1	111+16 - 111+88	CL	72	---	---
	STAGE 2	108+03 - 110+01	CL	200	---	---
		108+04 - 111+03	RT	300	---	---
		108+78 - 110+00	LT	135	---	---
		110+59 - 112+33	RT	175	2	1
		110+63 - 112+33	RT	170	---	---
		7+10 SA - 10+00 SA	CL	580	---	---
		SUBTOTALS (STAGE 2)		1,560	2	1
	STAGE 3A	5+40 SA - 7+10 SA	CL	340	---	---
		TOTALS		1,972	2	1

PAVEMENT MARKING

CATEGORY	STATION - STATION	LOCATION	647.0206 ARROWS BIKE LANE EPOXY EACH	647.0306 SYMBOLS BIKE LANE EPOXY EACH	647.0406 WORDS BIKE LANE EPOXY EACH
0010	107+50 - 112+52	LT/RT	3	3	3
	113+62 - 119+65	LT/RT	7	7	---
	120+29 - 134+98	LT/RT	16	16	3
	134+98 - 137+50	LT/RT	1	1	---
	10+77 SA - 11+28 SA	LT/RT	1	1	---
	TOTALS		28	28	6

TRAFFIC CONTROL SUMMARY

CATEGORY	STAGE	LOCATION	DURATION DAYS	643.0300 DRUMS EACH	643.0300 DRUMS DAY	643.0410 BARRICADES TYPE II EACH	643.0410 BARRICADES TYPE II DAY	643.0420* BARRICADES TYPE III EACH	643.0420* BARRICADES TYPE III DAY	643.0705* WARNING LIGHTS TYPE A EACH	643.0705* WARNING LIGHTS TYPE A DAY	643.0715 WARNING LIGHTS TYPE C EACH	643.0715 WARNING LIGHTS TYPE C DAY	643.0900 SIGNS EACH	643.0900 SIGNS DAY
0010	1,2	ADVANCE WARNING STH 116 CLOSURE	136	0	0	0	0	22	2,992	44	5,984	0	0	37	5,032
	1	STH 21/STH 116	10	41	410	0	0	11	110	17	170	9	90	11	110
	2	STH 21/STH 116	126	31	3,906	0	0	15	1,890	22	2,772	8	1,008	14	1,764
	3A	ADVANCED WARNING	15	0	0	0	0	24	360	48	720	0	0	33	495
		STH 21/STH 116	15	69	1,035	0	0	15	225	29	435	20	300	13	195
					1,035		0		585		1,155		300		690
	3B	ADVANCED WARNING	15	0	0	0	0	24	360	48	720	0	0	33	495
		STH 21/STH 116	15	43	645	0	0	16	240	32	480	5	75	13	195
					645		0		600		1,200		75		690
	1,2	WEBSTER AVENUE PEDESTRIAN	166	0	0	4	664	0	0	4	664	0	0	4	664
		UNDISTRIBUTED			1,500		170		1,540		2,990		370		2,240
		TOTALS			7,496		834		7,717		14,935		1,843		11,190

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

TEMPORARY PAVEMENT MARKING

CATEGORY	STAGE	STATION - STATION	649.0402 PAINT 4-INCH (WHITE) LF	649.0402 PAINT 4-INCH (YELLOW) LF	649.0402 PAINT 4-INCH (DOUBLE YELLOW) LF	649.0400 REMOVABLE TAPE 4-INCH (WHITE) LF	649.0400 REMOVABLE TAPE 4-INCH (DOUBLE YELLOW) LF	649.0400 REMOVABLE TAPE 4-INCH (YELLOW) LF	649.0600 REMOVABLE TAPE 6-INCH (WHITE) LF	649.0801 REMOVABLE TAPE 8-INCH (WHITE) LF	649.0802 PAINT 8-INCH (WHITE) LF	649.1100 STOP LINE 18-INCH LF
0010	STAGE 1	110+63 - 111+88	---	---	---	---	---	---	---	---	125	---
	STAGE 1	7+10 SA - 10+00 SA	---	---	---	290	---	---	---	---	---	---
	STAGE 1	10+00 SA - 11+13 SA	115	---	---	---	---	---	---	---	---	---
	STAGE 1	WEBSTER TEMP PEDESTRIAN	---	---	---	---	---	---	160	---	---	---
	STAGE 1(AFTER STAGE 3)	110+05 - 111+02	---	---	---	---	---	---	---	125	---	---
	STAGE 1(AFTER STAGE 3)	7+10 SA - 10+00 SA	---	---	---	290	---	---	---	---	---	---
		SUBTOTALS (STAGE 1)	115	0	0	580	0	0	160	125	125	0
	STAGE 2	108+04 - 111+00	300	---	---	---	---	---	---	---	---	---
	STAGE 2	108+03 - 112+63	---	---	920	---	---	---	---	---	---	28
	STAGE 2	108+04 - 12+34 SA	525	---	---	---	---	---	---	---	---	---
	STAGE 2	7+10 SA - 10+00 SA	---	---	---	290	---	---	---	---	---	---
	STAGE 2	10+00 SA - 11+31 SA	130	---	---	---	---	---	---	---	---	---
	STAGE 2	7+10 SA - 10+00 SA	---	---	---	---	580	---	---	---	---	---
	STAGE 2	10+00 SA - 11+31 SA	---	---	260	---	---	---	---	---	---	12
		SUBTOTALS (STAGE 2)	955	0	1,180	290	580	0	0	0	0	40
	STAGE 3A	5+40 SA - 10+00 SA	---	---	---	460	---	18	---	---	---	---
	STAGE 3A	10+00 SA - 14+90 SA	490	490	---	---	---	---	---	---	---	---
	STAGE 3A	14+90 SA - 15+40 SA	---	---	---	50	---	50	---	---	---	---
		SUBTOTALS (STAGE 3A)	490	490	0	510	0	68	0	0	0	0
	STAGE 3B	8+50 - 14+90 SA	---	---	---	---	---	640	---	---	---	---
	STAGE 3B	10+00 SA - 12+89 SA	---	---	---	290	---	---	---	---	---	---
		SUBTOTALS (STAGE 3B)	0	0	0	290	0	640	0	0	0	0
		TOTALS		3,230			2,958		160	125	125	40

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 30 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO OF CYCLES	643.0910 COVERING SIGNS TYPE I EACH	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
	STH 21/STH 116 INTERSECTION - CLOSED												
101	500' E OF SPRING RD ON HWY 21 (EB)	W 20-2A	48"x48"	1	30	30							
102	LT OF J1-1 (JCT K) ON HWY 21 (EB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-2	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 5-1R	21"x21"	1	30	30							
103	LT OF J13-1 (K-LT & RT) ON HWY 21 (EB-NEAR RT)	MO 4-8	24"x12"	1	30	30							
	"	M 3-2	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							RIGHT
104	BACKSIDE OF J13-1 (K-LT & RT) ON HWY 21 (WB-FAR LT)	MO 4-8	24"x12"	1	30	30							
	"	M 3-2	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							RIGHT
105	J4-1 (EAST 21) ON HWY 21 (EB) @ CTY K									1		1	EAST 21
106	SE QUAD OF HWY 21 & CTY K INTERSECTION	R 11-3	60"x30"	1	30	30	30	60					5 MILES
107	BELOW SIGN # 106	MO 4-9R	30"x24"	1	30	30							
108	MODIFY J13-1 (21-LT & RT) ON CTY K (NB)	M 1-6	EXISTING										21
	"	MO 6-1	21"x21"	1	30	30							LEFT
109	LT OF J13-1 (K) ON CTY K (SB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-2	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							AHEAD
110	500' S OF SIGN # 108 ON CTY K (NB)	MO 4-8A	24"x18"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
111	200' N OF BELL SCHOOL RD INTERSECTION ON CTY K (NB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-4	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							AHEAD
112	200' S OF BELL SCHOOL RD INTERSECTION ON CTY K (SB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-2	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							AHEAD
113	50' N OF NORTH ABUTTMENT @ THE FOX RIVER BRIDHE ON CTY K (SB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-2	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 5-1L	21"x21"	1	30	30							
114	200' N OF CTY E INTERSECTION ON CTY K (NB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-4	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							AHEAD
115	RT OF R1-1 (STOP SIGN) @ CTY K & CTY E INTERSECTION ON CTY K (NEAR RT)	MO 4-8	24"x12"	1	30	30							
	"	M 3-2	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							LEFT
	PAGE SUBTOTALS			42		1,260	30	60	0		0	1	

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3

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 30 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO OF CYCLES	643.0910 COVERING SIGNS TYPE I EACH	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
116	LT OF J13-2 (K-AH; E LT & RT) ON CTY K (SB-FAR LT)	MO 4-8	24"x12"	1	30	30							
	"	M 3-2	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							LEFT
117	SW QUAD OF CTY K & CTY E INTERSECTION ON CTY E (EB-FAR LT)	MO 4-8	24"x12"	1	30	30							
	"	M 3-4	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							RIGHT
118	ABOVE J13-2 (E-AH; K LT & RT) ON CTY E (WB-NEAR RT)	MO 4-8	24"x12"	1	30	30							
	"	M 3-4	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							RIGHT
119	200' E OF CTY K INTERSECTION ON CTY E (EB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-2	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							AHEAD
120	500' E OF SIGN # 117 ON CTY E (WB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-4	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 5-1R	21"x21"	1	30	30							
121	200' W OF MORROW RD ON CTY E (WB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-4	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							AHEAD
122	200' E OF MORROW RD ON CTY E (EB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-2	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							AHEAD
123	200' W OF SENN RD ON CTY E (WB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-4	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							RIGHT
124	200' E OF SENN RD ON CTY E (EB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-2	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							AHEAD
125	ABOVE J13-2 (E-AH; 116 AH & RT) ON CTY E (EB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-2	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							AHEAD
126	RT OF J13-2 (116-TILT RT; E-AH) ON HWY 116 (EB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-4	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							AHEAD
	PAGE SUBTOTALS			44		1,320	0	0	0		0	0	

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BY WisDOT - NE REGION

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 30 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO OF CYCLES	643.0910 COVERING SIGNS TYPE I EACH	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
127	ABOVE J2-2 (116-AH LT; E-AH) ON HWY 116 (EB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-2	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 5-1L	21"x21"	1	30	30							
128	ABOVE J2-2 (116-AH LT; E-AH) ON HWY 116 (WB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-4	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							AHEAD
129	LT OF J4-1 (E-21) ON HWY 116 (EB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-2	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							AHEAD
130	MODIFY J1-1 (JCT 21) ON HWY 116 (EB)	MO 4-8A	24"x18"	1	30	30							
	"	M 1-6	EXISTING										21
131	D1-3 (LT WAUTOMA/WINNECONNE; OSHKOSH-RT) ON HWY 116 (EB)									1		1	WAUTOMA
132	J3-3 (W-21-LT; E-116-LT; E-21-RT) ON HWY 116 (EB)									1		1	WEST-21-LEFT
133	200' S OF HWY 21 INTERSECTION ON HWY 116 (WB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-4	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							AHEAD
134	ADD TO SIGN # 5 ON HWY 116 DETOUR PLAN	M 1-6	24"x24"	1	30	30							21
134A	ADD BELOW SIGN #6 ON HWY 116 DETOUR PLAN	M 4-9L	30"x24"	1	30	30							
135	D1-3 (AH-WAUTOMA/WINNECONNE; LT-BERLIN) ON HWY 21 (WB)									1		1	WAUTOMA
136	SW QUAD OF HWY 21 & HWY 116 INTERSECTION (FAR LT)	MO 4-8	24"x12"	1	30	30							
	"	M 3-4	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							RIGHT
137	ABOVE J2-2 (116-LT & AH; F-LT & AH) ON HWY 21 (WB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-4	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 6-1	21"x21"	1	30	30							RIGHT
138	500' E OF SIGN # 137 ON HWY 21 (WB)	MO 4-8	24"x12"	1	30	30							
	"	M 3-4	24"x12"	1	30	30							
	"	M 1-6	24"x24"	1	30	30							21
	"	MO 5-1L	21"x21"	1	30	30							
139	500' E OF SIGN # 138 ON HWY 21 (WB)	W 20-2A	48"x48"	1	30	30							
140	J3-2 (W-21-RT; E-116-RT) ON HWY 21 (WB)									1		1	WEST 21 RIGHT
141	FIELD DETERMINED - ON HWY 21 (EB)	PCMS		1					7				PRIOR TO CONSTRUCTION
142	FIELD DETERMINED - ON HWY 21 (WB)	PCMS		1					7				PRIOR TO CONSTRUCTION
	PAGE SUBTOTALS			34		960	0	0	14		0	4	
	PROJECT TOTALS			**120**		**3,540**	**30**	**60**	**14**		**0**	**5**	

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PAVEMENT MARKING

CATEGORY	STATION - STATION	LOCATION	646.0106 EPOXY 4-INCH (YELLOW) LF	(YELLOW SKIP) (12.5' SEG. 37.5' GAP) LF	(DOUBLE YELLOW) LF	(WHITE) LF	(WHITE SKIP) (3' SEG. 9' GAP) LF	646.0126 EPOXY 8-INCH (WHITE) LF	(WHITE SKIP) (3' SEG. 9' GAP) LF	647.0766 CROSSWALK EPOXY 6-INCH (WHITE) LF	647.0566 STOP LINE EPOXY 18-INCH LF	647.0726 DIAGONAL EPOXY 12-INCH (YELLOW) LF	647.0156 ARROWS EPOXY TYPE 1 EACH	647.0166 ARROWS EPOXY TYPE 2 EACH	647.0176 ARROWS EPOXY TYPE 3 EACH	647.0356 WORDS EPOXY EACH
0010	107+50 - 112+52	LT/RT	66	38	1,300	1,000	33	200	24	---	41	44	2	4	---	3
	113+82 - 119+65	LT/RT	---	---	1,700	1,000	18	180	---	250	30	83	---	2	2	1
	120+29 - 134+98	LT/RT	900	310	510	2,600	21	---	---	540	---	---	---	---	---	---
	134+98 - 137+50	LT/RT	250	63	---	300	---	---	---	---	---	---	---	---	---	---
	137+50 - 142+55	LT/RT	500	130	---	1,000	---	---	---	---	---	---	---	---	---	---
	142+55 - 144+69	LT/RT	---	50	---	380	---	---	---	---	---	---	---	---	---	---
	144+69 - 151+30	LT/RT	660	160	---	1,250	---	---	---	---	---	---	---	---	---	---
	151+30 - 154+33	LT/RT	78	25	440	280	45	---	---	69	---	---	---	---	---	---
	154+33 - 163+12	LT/RT	730	190	290	1,650	---	100	---	---	---	---	---	---	---	---
	5+40 SA - 11+28 SA	LT/RT	---	---	1,200	51	18	51	18	---	29	---	---	1	1	---
	12+46 SA	LT/RT	---	---	---	---	---	---	---	---	13	---	---	---	---	---
	9+67.3 SWE - 9+72.4 SWE	LT/RT	---	---	---	---	---	---	---	74	---	---	---	---	---	---
	10+28.2 NWE - 10+34.2 NWE	LT/RT	---	---	---	---	---	---	---	85	---	---	---	---	---	---
	11+00 FO - 11+87 FO	LT/RT	---	---	170	---	---	---	---	---	---	---	---	---	---	---
	12+22 FO - 13+47 FO	LT/RT	---	---	250	---	---	---	---	---	---	---	---	---	---	---
	SUBTOTALS		3,184	966	5,860	9,511	135	531	42							
	TOTALS				19,656				573	1,018	113	127	2	7	3	4

CONSTRUCTION STAKING

CATEGORY	STATION - STATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.7000 CONCRETE PAVEMENT LF	650.8000 RESURFACING REFERENCE LF	650.9920 SLOPE STAKES LF
0010	107+50 - 137+50	3,000	3,000	---	---	3,000
	137+50 - 163+12	---	---	---	2,560	---
	151+30 - 154+33	305	305	---	---	305
	10+00 SA - 10+15 SA	15	---	15	---	15
	10+15 SA - 11+65 SA	150	150	---	---	150
	12+23 SA - 13+55 SA	130	130	---	---	130
	10+30 CE - 10+69 CE	39	39	---	---	39
	9+20 SWE - 9+84 SWE	64	64	---	---	64
	10+16 NWE - 10+82 NWE	66	66	---	---	66
	10+16 OA - 11+50 OA	135	135	---	---	135
	10+16 EL - 10+55 EL	39	39	---	---	39
	10+16 AS - 10+54 AS	38	38	---	---	38
	10+16 ER - 11+70 ER	155	155	---	---	155
	8+79 SPI - 9+79.26 SPI	98	98	---	---	98
	10+20.75 NPI - 10+95 NPI	79	79	---	---	79
	11+00 FO - 11+94.59 FO	89	89	---	---	89
	12+16.61 FO - 13+47 FO	130	130	---	---	130
	TOTALS	4,532	4,517	15	2,560	4,532

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL

CATEGORY	PROJECT	650.9910.01 LS
0010	6190-16-72	1

Conduit Rigid Nonmetallic Schedule 40				
Location				
STH 21 & STH	116, west Jct (S70-0781)	652.0210	652.0225	652.0235
		1-Inch	2-Inch	3-Inch
FROM	TO	LF	LF	LF
CB1	PB1			20
CB1	PB1			20
PB1	SB1		15	
PB1	PB2			80
PB1	PB2			80
PB2	SB2		15	
PB2	PB3			50
PB2	PB3			50
PB3	PB4			20
PB3	PB4			20
PB4	SB3		5	
PB4	PB5			60
PB4	PB5			60
PB5	SB4		10	
PB5	PB6			40
PB5	PB6			40
PB6	SB5		15	
PB6	PB10	20		
PB6	PB7			70
PB6	PB7			70
PB7	SB6		15	
PB7	PB8			40
PB7	PB8			40
PB8	SB7		5	
PB8	PB11	20		
PB8	PB9			70
PB8	PB9			70
PB9	SB9		10	
PB9	Drain		20	
PB9	CB1			40
PB9	CB1			40
	TOTALS	40	110	980

Pull Boxes, Steel	
	653.0105
	12x24-Inch
LOCATION	EACH
STH 21 & STH 116, west Jct (S70-0781)	2
TOTALS	2

Pull Boxes, Non-Conductive	
	SPV.0060.02
	24x42-Inch
LOCATION	EACH
STH 21 & STH 116, west Jct (S70-0781)	9
TOTALS	9

Removing Pull Boxes	
	653.0905
LOCATION	EACH
STH 21 & STH 116, west Jct (S70-0781)	10
TOTALS	10

Concrete Bases			
			654.0217
			Control
	654.0101	654.0102	Cabinet
	Type 1	Type 2	Type 9
			Special
LOCATION	EACH	EACH	EACH
STH 21 & STH 116, west Jct (S70-0781)	4	4	1
TOTALS	4	4	1

Removing Concrete Bases	
	204.0195*
LOCATION	EACH
STH 21 & STH 116, west Jct (S70-0781)	10
TOTAL	10

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

Loop Detectors					
			652.0800	655.0700	
			Conduit	Lead In	655.0800
	LOOP	# OF		Cable	Wire
LOCATION	NO.	TURNS	LF	LF	LF
STH 21 & STH 116, west Jct (S70-0781)	11	2	80	130	170
	21	3	85	190	250
	31	3	100	260	280
	41	2	105	40	190
	42	2	105	120	190
	61	2	75	150	170
	81	3	90	260	260
		TOTALS	640	1,150	1,510

TRAFFIC SIGNALS

			657.0255		657.0420	657.0425
	656.0200		Transformer			
	Electrical Service	657.0100	Bases	657.0310	Traffic	Traffic
	Meter Breaker		Breakaway		Signal	Signal
	Pedestal	Pedestal	11 1/2-Inch	Poles	Standard	Standard
	(STH 21 & STH 116)	Bases	Bolt Circle	Type 3	Aluminum	Aluminum
					13-FT	15-FT
LOCATION	LS	EACH	EACH	EACH	EACH	EACH
STH 21 & STH 116, west Jct (S70-0781)	1	4	4	4	2	2
TOTALS	1	4	4	4	2	2

TRAFFIC SIGNALS

		657.0590	657.0595	658.0110	658.0120	658.0155
				Traffic	Traffic	Traffic
		Trombone	Trombone	Signal	Signal	Signal
		Arms	Arms	Face	Face	Face
		20-FT	25-FT	3-12 Inch	5-12 Inch	3-12 Inch
				Vertical	Vertical	Horizontal
LOCATION		EACH	EACH	EACH	EACH	EACH
STH 21 & STH 116, west Jct (S70-0781)		1	3	5	3	1
TOTALS		1	3	5	3	1

TRAFFIC SIGNALS

	658.0165	658.0416	658.0500	658.0600	658.0605	658.0610
	Traffic					
	Signal	Pedestrian	Pedestrian	LED Modules	LED Modules	LED Modules
	Face	Signal Face	Push	12-Inch	12-Inch	12-Inch
	5-12 Inch	16-Inch	Buttons	Red Ball	Yellow Ball	Green Ball
	Horizontal					
LOCATION	EACH	EACH	EACH	EACH	EACH	EACH
STH 21 & STH 116, west Jct (S70-0781)	3	2	2	12	12	12
TOTALS	3	2	2	12	12	12

TRAFFIC SIGNALS

	658.0620	658.0625	658.0635	658.5069	SPV.0105.01	
				Signal	Remove	
	LED Modules	LED Modules	LED Modules	Mounting	Traffic	
	12-Inch	12-Inch	Pedestrian Countdown	Hardware	Signal	
	Yellow Arrow	Green Arrow	Timer 16-Inch	(STH 21 & STH 116)	(STH 21 & STH 116)	
LOCATION	EACH	EACH	EACH	LS	LS	
STH 21 & STH 116, west Jct (S70-0781)	6	6	2	1	1	
TOTALS	6	6	2	1	1	

TRAFFIC SIGNAL CABLE

STH 21 & STH 116, west Jct (S70-0781)	655.0230	655.0240	655.0260		655.0230 Base to Head	655.0240 Base to Head	658.0215 Backplates	658.0225 Backplates
	5-14	7-14	12-14	HEAD	5-14	7-14	Signal Face	Signal Face
	AWG	AWG	AWG	NO.	AWG	AWG	3 Section	5 Section
							12-Inch	12-Inch
From CB1 to	LF	LF	LF		LF	LF	EACH	EACH
SB1			60	9		20		1
				10		20		1
SB2		160		11		50		1
SB3			240	3	20		1	
				4		20		1
SB4		310		5		50		1
SB5			300	7	15		1	
				12	15		1	
SB5	300			14	15			
SB6		220		8		50		1
SB6	220			13	15			
SB7			160	1	15		1	
				6	15		1	
SB8	80			2	50		1	
Sub Total	600	690	760		160	210	6	6
TOTALS	760	900	760				6	6

Signal Indication		Conductor Color
Red	=	Red
Yellow	=	Orange
Green	=	Green
Red Arrow	=	Red w/Black Tracer
Yellow Arrow	=	Black w/White
Yellow Flashing Arrow	=	White w/Black
Green Arrow	=	Blue w/Black

PEDS

Walk	=	Green
Don't Walk	=	Red
Button	=	Black & Orange

Electrical Wire Traffic Signals 10 AWG

LOCATION		655.0515
STH 21 & STH 116, west Jct (S70-0781)		
		(Equipment Grounding Conductor)
		(Green)
		LF
FROM	TO	
CB1	SB1	60
SB1	SB2	160
SB2	SB3	150
SB3	SB4	120
SB4	SB5	110
SB5	SB6	150
SB6	SB7	110
SB7	SB8	130
SB8	CB1	80
	TOTAL	1,070

Lighting Summary

	657.0709	659.1120
	Luminaire Arms	Luminaires
	Truss Type	Utility
	4-Inch Clamp	LED-B
	12-FT	
LOCATION	EACH	EACH
STH 21 & STH 116, west Jct (S70-0781)	4	4
TOTALS	4	4

Signal Lighting Cable

		655.0305
LOCATION		Type UF
STH 21 & STH 116, west Jct (S70-0781)		2-12 AWG
		Grounded
FROM	TO	LF
CB1	SB2	160
CB1	SB4	310
CB1	SB6	220
CB1	SB9	80
	TOTAL	770

Electrical Wire Lighting 12 AWG

LOCATION		
STH 21 & STH 116, west Jct (S70-0781)		
120 Volt System		655.0610
FROM	TO	LF
SB2	Luminaire	150
SB4	Luminaire	150
SB6	Luminaire	150
SB9	Luminaire	150
	TOTAL	600

SAWING ASPHALT

CATEGORY	STATION - STATION	LOCATION	690.0150 LF
0010	107+50	LT/RT	24
	137+50	LT/RT	22
	151+30 - 154+33	LT	305
	151+30 - 154+33	RT	305
	163+12	LT/RT	22
	13+55 SA	LT/RT	24
	10+69 CE	LT/RT	23
	10+82 NWE	LT/RT	33
	7+60.5 SWE - 9+48 SWE	LT/RT	365
	11+50 OA	LT/RT	23
	10+55 EL	LT/RT	24
	10+54 AS	LT/RT	24
	11+70 ER	LT/RT	23
	8+79 SPI	LT/RT	22
	10+95 NPI	LT/RT	32
	11+00 FO	LT/RT	35
	13+47 FO	LT/RT	26
	DRIVEWAYS	LT/RT	360
		TOTAL	1,692

SAWING CONCRETE

CATEGORY	STATION	LOCATION	690.0250 LF
0010	114+30	RT	10
	117+73	RT	19
	121+50	LT	38
	125+15	RT	19
	125+30	LT	30
	128+25	LT	17
	11+29 OA	RT	22
	SIDEWALK	LT/RT	85
		TOTAL	240

STORM SEWER OPENING SEA WALL

CATEGORY	STATION	LOCATION	SPV.0105.03 LS
0010	116+77	234' RT	1

WALL MODULAR BLOCK GRAVITY LANDSCAPE LRFD

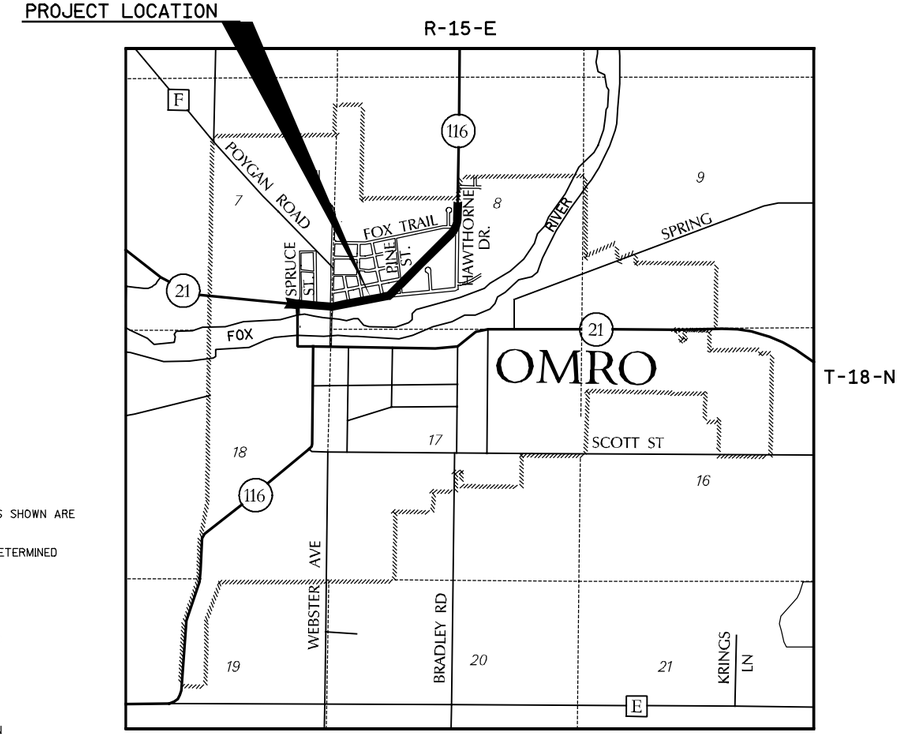
CATEGORY	STATION - STATION	LOCATION	SPV.0165.01 SF
0010	10+30 NPI - 10+90 NPI	LT	175

STREET SWEEPING

CATEGORY	LOCATION	SPV.0075.01 HRS
0010	UNDISTRIBUTED	80

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
PROJECT 6190-16-22
EAST RIVER DRIVE, CITY OF OMRO
(SPRUCE STREET TO NCL)
STH 116
WINNEBAGO COUNTY







LAYOUT SCALE

0 0.5 1

MILES

NOTES

THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 6190-16-22.

DISTANCES SHOWN FROM BUILDINGS TO RIGHT OF WAY LINES ARE APPROXIMATE.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WINNEBAGO COUNTY, NAD83/2007 IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES. GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 1" X 24" IRON PIPE) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE. INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLE'S) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A HIGHWAY EASEMENT (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS AND INTERESTS REQUIRED.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT	AP	POINT OF CURVATURE	PC
ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC.	POINT OF REVERSE CURVATURE	PRC
AGRICULTURAL	AG	PRIVATE DRIVEWAY	P.D.
AHEAD	AH	POINT ON TANGENT	POT
ALUMINUM	ALUM.	PROPERTY LINE	P.L.
AND OTHERS	ET.AL.	RECORDED AS	(100')
BACK	BK	REFERENCE LINE	R
BLOCK	BLK	REMAINING	REM.
CENTERLINE	C/L	RIGHT	RT.
CERTIFIED SURVEY MAP	CSM	RIGHT OF WAY	R/W
CONCRETE	CONC.	SECTION	SEC.
CORNER	COR.	SEPTIC VENT	SEPV.
COUNTY	CO.	SQUARE FEET	S.F.
COUNTY TRUNK HIGHWAY	CTH	STATE TRUNK HIGHWAY	STH
DISTANCE	DIST.	STATION	STA.
DOCUMENT NUMBER	DOC.	SUBDIVISION	SUBD
EASEMENT	EASE	TANGENT	TAN.
EXISTING	EX.	TELEPHONE PEDESTAL	T.P.
GAS VALVE	G.V.	TEMPORARY LIMITED EASEMENT	TLE
GRID NORTH	GN	TRANSPORTATION PROJECT PLAT	TPP
HIGHWAY EASEMENT	HE	UNITED STATES HIGHWAY	USH
IDENTIFICATION	ID.	VOLUME	V.
LAND CONTRACT	LC	WITH	W/
LEFT	LT.		
MONUMENT	MON.	LONG CHORD	L.C.
NATIONAL GEODETIC SURVEY	NGS	LONG CHORD BEARING	L.C.B.
NUMBER	NO.	RADIUS	R.
OUTLOT	O.L.	DEGREE OF CURVE	D.
PAGE	P.	CENTRAL ANGLE OR DELTA	△.
PART OF	PT.	LENGTH OF CURVE	L.
PERMANENT LIMITED EASEMENT	PLE	TANGENT	T.
POINT OF BEGINNING	P.O.B.	DIRECTION AHEAD	DA.
POINT OF COMPOUND CURVE	PCC	DIRECTION BACK	DB.

CURVE DATA

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN (1" IRON PIPE UNLESS NOTED)	⌀	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	● •(SET)	PROPERTY LINE	
R/W STANDARD	▲ •(SET)	LOT & TIE LINES	
SIGN	SIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT	●	CORPORATE LIMITS	
SECTION CORNER SYMBOL		ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL OR ACQUISITION)	
FEE (HATCH VARIES)		ACCESS RESTRICTED (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED/HIGHWAY EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	8730	QUARTER LINE	
BUILDING		SIXTEENTH LINE	
BUILDING TO BE REMOVED		EXISTING CENTERLINE	
		PROPOSED REFERENCE LINE	
PARCEL NUMBER	102	PARALLEL OFFSET	
UTILITY NUMBER	92	RECORD MEASUREMENT (TYP.)	(S 89°35'36" W)
SIGN NUMBER (OFF PREMISE)	21-1	NATIONAL GEODETIC SURVEY MONUMENT	⊗NGS

CONVENTIONAL UTILITY SYMBOLS

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

NON COMPENSABLE	COMPENSABLE
POWER POLE	
TELEPHONE POLE	
TELEPHONE PEDESTAL	
ELECTRIC TOWER	

TPP NUMBER 6190-16-22 - 4.01
SHEET 2 OF 2

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\TPP\040101_rt.dgn PLOT DATE : 5/28/2015 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

4.01

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W AC. OR S.F. REQUIRED NEW	EXISTING	TOTAL	TLE AC. OR S.F.	PLE AC. OR S.F.
1	J4, LLC	FEE,TLE	1,380 S.F.	---	1,380 S.F.	1,097 S.F.	---
2	RANDALL P. AND BONNIE FAY CHAPIN	FEE,TLE	1,482 S.F.	---	1,482 S.F.	269 S.F.	---
3	STEVEN E. AND TAMMY L. GILLES	FEE,TLE	715 S.F.	---	715 S.F.	266 S.F.	---
4	JAMES A. AND VIRGINIA L. VANDYKE	FEE,TLE	1,322 S.F.	---	1,322 S.F.	3,710 S.F.	---
6	ROGER AND BETTY CULVER	FEE,TLE	2,514 S.F.	---	2,514 S.F.	2,092 S.F.	---
7	GORDON AND LINDA CRAIG	FEE,PLE,TLE	27 S.F.	---	27 S.F.	431 S.F.	461 S.F.
8	JOHN I. TEGELMAN	FEE,TLE	52 S.F.	---	52 S.F.	457 S.F.	---
9	JOHN L. FREUND	FEE,PLE,TLE	287 S.F.	---	287 S.F.	1,500 S.F.	179 S.F.
11	GARY E. AND KAREN J. TENFEL	FEE,PLE,TLE	201 S.F.	---	201 S.F.	801 S.F.	3,837 S.F.
12	SCHETTL REVOCABLE TRUST	FEE,TLE	562 S.F.	---	562 S.F.	1,983 S.F.	---
13	VICTOR J. AND JANE F. LANCOUR	FEE,TLE	189 S.F.	---	189 S.F.	1,228 S.F.	---
14	DEAN S. MARTENS	TLE	---	---	---	454 S.F.	---
16	MARY L. CRAIG (VENDOR) / DEAN S. MARTENS (VENDEE)	FEE,TLE	86 S.F.	---	86 S.F.	690 S.F.	---
17	DENNIS AND MAUREEN WINKLER	FEE,TLE	185 S.F.	---	185 S.F.	1,678 S.F.	---

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
100	WISCONSIN POWER AND LIGHT COMPANY (ELECTRIC)	RELEASE OF RIGHTS
101	WISCONSIN POWER AND LIGHT COMPANY (GAS)	RELEASE OF RIGHTS
102	AT&T WISCONSIN	RELEASE OF RIGHTS

POT 10+00.00 SA
Y = 481,949.12
X = 738,016.66

PI 11+58.31 SA
Y = 482,107.43
X = 738,017.46
DELTA = 2° 56'59" RT

POT 14+23.21 SA
Y = 482,371.90
X = 738,032.44

PI 113+14.05
Y = 482,141.67
X = 738,017.07
DELTA = 0° 48'07" RT

POT 10+00.00 CE
Y = 482,105.60
X = 738,348.58

POT 11+50.00 CE
Y = 482,255.60
X = 738,349.44

PI 116+14.08
Y = 482,108.97
X = 738,315.31
DELTA = 0° 28'28" LT

P.I. = 120+06.82
Y = 482,069.41
X = 738,706.05
DELTA = 15° 39'37" (LT)
D = 12° 43'57"
T = 61.88'
L = 122.99'
R = 450.00'
P.C. = 119+44.94
P.T. = 120+67.93

SCALE, FEET 0 50 100

STRAND ASSOCIATES, INC.®
910 WEST WINGRA DRIVE, MADISON, WI 53715
(608) 251-4843

I, HEATHER S. BARTELT, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 6190-16-22-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

(SIGNATURE) Heather Bartelt DATE 6/28/15
(PRINTED NAME) HEATHER S. BARTELT
(REGISTRATION NUMBER) S - 2797

WISCONSIN HEATHER S. BARTELT S-2797 MADISON WI LAND SURVEYOR

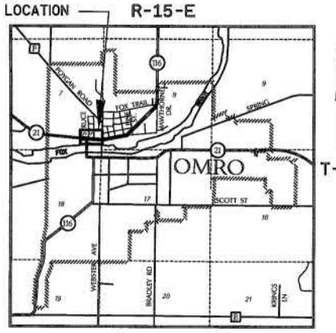
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
(SIGNATURE) Curt Van Erem DATE 5/28/2015
(PRINTED NAME) CURT VAN EREM

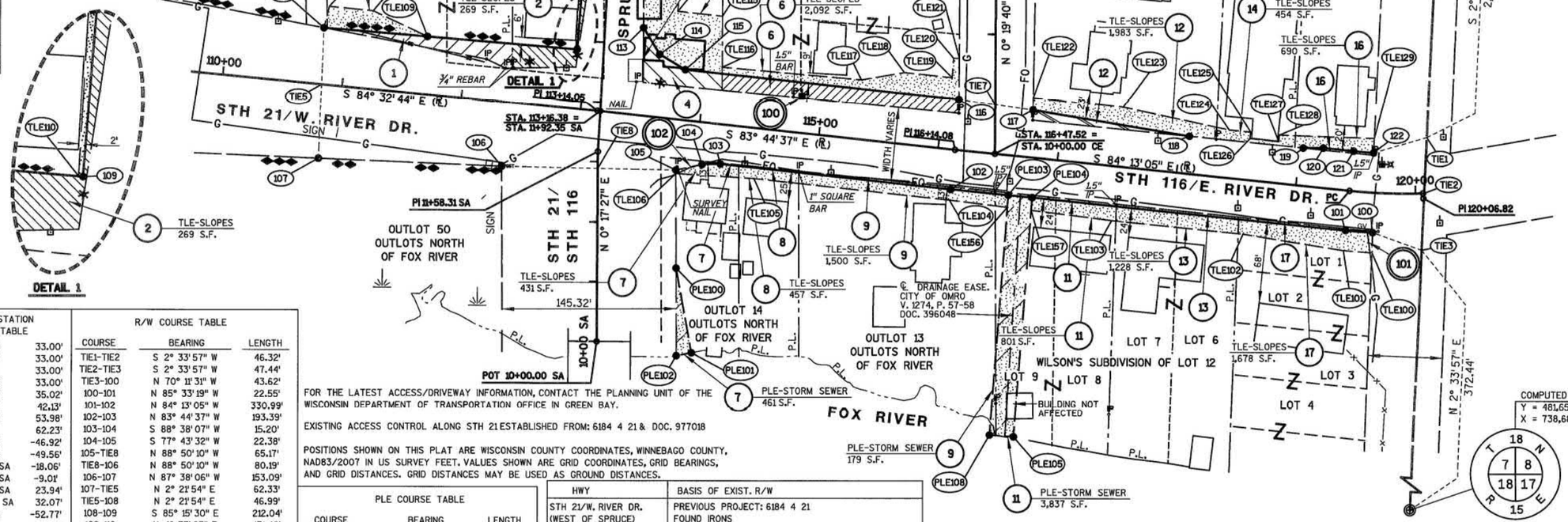
1688803
REGISTER'S OFFICE
WINNEBAGO COUNTY, WI
RECORDED ON
06/02/2015 12:40 PM
JULIE PAGEL
REGISTER OF DEEDS
RECORDING FEE 25.00
PAGES: 2

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6190-16-22-4.01
SHEET 1OF 2
AMENDMENT NO:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN WINNEBAGO COUNTY AS SHEET 2 OF 2 OF THIS DOCUMENT.

SHEET LOCATION — R-15-E





DETAIL 1

P.L.E. STATION & OFFSET TABLE		
PLE100	113+93.71	123.29'
PLE101	114+14.18	192.23'
PLE102	114+01.93	196.05'
PLE103	116+62.06	33.00'
PLE104	116+82.06	33.00'
PLE105	116+86.98	233.48'
PLE108	116+66.99	233.97'

T.L.E. STATION & OFFSET TABLE		
TLE100	119+66.22	50.00'
TLE101	119+44.94	50.00'
TLE102	118+60.00	45.00'
TLE103	117+50.00	45.00'
TLE104	116+14.00	42.00'
TLE105	114+50.00	42.00'
TLE106	113+84.87	45.00'
TLE107	110+83.00	-65.00'
TLE108	111+20.00	-65.00'
TLE109	111+67.00	-48.00'
TLE110	112+91.01	-49.54'
TLE111	14+13.98 SA	-23.06'
TLE112	13+25.00 SA	28.82'
TLE113	13+00.00 SA	60.00'
TLE114	12+79.32 SA	60.00'
TLE115	12+77.35 SA	97.26'
TLE116	14+13.51	-47.88'
TLE117	115+30.00	-50.00'
TLE118	115+65.00	-60.00'
TLE119	116+05.00	-60.00'
TLE120	10+80.00 CE	-35.00'
TLE121	10+80.00 CE	-30.26'
TLE122	116+74.46	-50.00'
TLE123	117+50.00	-50.00'
TLE124	118+40.00	-40.00'
TLE125	118+58.00	-40.00'
TLE126	118+58.00	-34.50'
TLE127	118+82.00	-34.50'
TLE128	118+82.00	-40.00'
TLE129	1119+62.91	-45.00'
TLE156	116+62.31	-43.07'
TLE157	119+82.32	-43.51'

R/W POINT STATION & OFFSET TABLE		
100	119+65.94	33.00'
101	119+44.94	33.00'
102	116+14.08	33.00'
103	114+20.82	33.00'
104	114+05.76	35.02'
105	113+84.54	42.13'
106	112+38.99	53.98'
107	110+86.13	62.23'
108	110+80.24	-46.92'
109	112+92.26	-49.56'
110	14+14.25 SA	-18.06'
111	14+14.73 SA	-9.01'
112	14+16.49 SA	23.94'
113	12+64.00 SA	32.07'
114	113+60.46	-52.77'
115	113+83.12	-42.50'
116	116+12.67	-42.50'
117	116+75.32	-39.74'
118	118+07.42	-31.27'
119	119+02.90	-31.33'
120	119+19.63	-33.00'
121	119+44.94	-33.00'
122	119+63.09	-33.00'
TIE1	120+11.59	-46.15'
TIE2	120+07.33	0.00'
TIE3	120+03.79	47.29'
TIE5	110+82.77	0.00'
TIE6	14+15.21 SA	0.00'
TIE7	10+41.34 CE	0.00'
TIE8	11+44.32 SA	0.00'

R/W COURSE TABLE		
COURSE	BEARING	LENGTH
TIE1-TIE2	S 2° 33' 57" W	46.32'
TIE2-TIE3	S 2° 33' 57" W	47.44'
TIE3-100	N 70° 11' 31" W	43.62'
100-101	N 85° 33' 19" W	22.55'
101-102	N 84° 13' 05" W	330.99'
102-103	N 83° 44' 37" W	193.39'
103-104	S 88° 38' 07" W	15.20'
104-105	S 77° 43' 32" W	22.38'
105-TIE8	N 88° 50' 10" W	65.17'
TIE8-106	N 88° 50' 10" W	80.19'
106-107	N 87° 38' 06" W	153.09'
107-TIE5	N 2° 21' 54" E	62.33'
TIE5-108	N 2° 21' 54" E	46.99'
108-109	S 85° 15' 30" E	212.04'
109-110	N 4° 37' 07" E	171.46'
110-111	S 89° 48' 47" E	9.06'
111-TIE6	S 89° 48' 47" E	9.03'
TIE6-112	S 89° 48' 47" E	23.97'
112-113	S 0° 11' 13" W	152.71'
113-114	S 31° 27' 24" E	25.87'
114-115	S 59° 20' 51" E	24.87'
115-116	S 83° 44' 37" E	229.56'
116-TIE7	S 81° 40' 26" E	30.60'
TIE7-117	S 81° 40' 26" E	31.76'
117-118	S 80° 32' 53" E	132.37'
118-119	S 84° 15' 10" E	95.48'
119-120	S 89° 55' 43" E	16.81'
120-121	S 84° 13' 05" E	25.31'
121-122	S 85° 22' 25" E	16.82'
122-TIE1	N 73° 50' 51" E	46.12'

PLE COURSE TABLE		
COURSE	BEARING	LENGTH
105-PLE100	S 0° 11' 21" E	81.68'
PLE100-PLE101	S 10° 17' 00" E	71.91'
PLE101-PLE102	S 78° 55' 35" W	12.83'
PLE102-PLE100	N 0° 11' 21" W	73.22'
102-PLE103	S 84° 13' 05" E	48.12'
PLE103-PLE104	S 84° 13' 05" E	20.01'
PLE104-PLE105	S 4° 22' 37" W	200.54'
PLE105-PLE108	N 85° 37' 23" W	20.00'
PLE108-PLE103	N 4° 22' 37" E	201.03'

HWY	BASIS OF EXIST. R/W
STH 21/W. RIVER DR. (WEST OF SPRUCE)	PREVIOUS PROJECT: 6184 4 21 FOUND IRONS
STH 116/E. RIVER DR. (SPRUCE TO WEBSTER)	NORTH SIDE ADDITION TO THE VILLAGE OF OMRO PLAT OF OUTLOTS NORTH OF FOX RIVER WILSON'S ADDITION TO OMRO WILSON'S SUBDIVISION OF LOT 12 PREVIOUS PROJECT: 6180 2 21 / T071(7) FOUND IRONS
STH 21/STH 116	PREVIOUS PROJECT: 6180 2 21 / T071(7)
SPRUCE ST. (NORTH OF RIVER DR.)	NORTH SIDE ADDITION TO THE VILLAGE OF OMRO 6180 2 21 / T 071-1(7)
CEDAR ST.	WILSON'S ADDITION PLAT OF OUTLOTS NORTH OF FOX RIVER FOUND IRONS (63')
WEBSTER AVE.	JOHNSON'S ADDITION PLAT OF OUTLOTS IN THE VILLAGE OF OMRO FOUND IRONS (63')

TRANSPORTATION PROJECT PLAT NO: 6190-16-22 - 4.01

THAT PART OF LOT 1 OF CERTIFIED SURVEY MAP 3782A AND PART OF LOTS 21, 22, 32, & 33 OF THE PLAT OF NORTH SIDE ADDITION TO THE VILLAGE OF OMRO, AND PART OF OUTLOTS 13, 14, 15, & 18 OF THE PLAT OF OUTLOTS NORTH OF THE FOX RIVER AND PART OF LOT 13 OF WILSON'S ADDITION AND PART OF LOTS 1, 6, 7, 8, 9 OF WILSON'S SUBDIVISION OF LOT 12 ALL LOCATED IN GOVERNMENT LOT 1 OF SECTION 7, T18N, R15E, CITY OF OMRO, WINNEBAGO COUNTY, WISCONSIN.

RELOCATION ORDER STH 116 WINNEBAGO COUNTY EAST RIVER DRIVE, CITY OF OMRO (SPRUCE STREET - NCL)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

FILE NAME : $$....designfile....$$
APPRAISAL PLAT DATE :
PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W AC. OR S.F. REQUIRED NEW	EXISTING	TOTAL	TLE AC. OR S.F.	PLE AC. OR S.F.
15	SCHETTL REVOCABLE TRUST	TLE	---	---	---	540 S.F.	---
18	OMRO COMMUNITY FOOD PANTRY - VENDEE GERALD F. AND KATHLEEN L. HITCHCOCK - VENDOR	PLE,TLE	---	---	---	610 S.F.	1,872 S.F.
19	CASA ESTHER, INC. - VENDEE GERALD F. AND KATHLEEN L. HITCHCOCK - VENDOR	FEE,PLE,TLE	120 S.F.	---	120 S.F.	1,318 S.F.	220 S.F.
21	KIMBERLY S. ANDERSON	FEE, TLE	36 S.F.	---	36 S.F.	491 S.F.	---
22	115 EAST RIVER DRIVE CONDO. OWNER'S ASSOC.	TLE	---	---	---	660 S.F.	---
23	GARY L. & HOLLY G. HERRING	TLE	---	---	---	726 S.F.	---
24	ALBERT L. REDA & DEIDRE M. PICKENS	TLE	---	---	---	2,683 S.F.	---
27	ANGEL C. CARTA AND MAGDALENA Y. CASILLAS	TLE	---	---	---	360 S.F.	---
28	JAY F. PAULSEN AND CHERYL A KIELKUCKI	TLE	---	---	---	1,141 S.F.	---
29	ETHEL BENJAMIN - VENDOR DANIEL L. & EMILY R. KRIER - VENDEE	TLE	---	---	---	1,176 S.F.	---
31	JUSTIN D. & CASSANDRA A. ELMERGREEN	TLE	---	---	---	1,255 S.F.	---
32	SCOTT R. AND LINDY N. LUDWIG	TLE	---	---	---	661 S.F.	---
33	ROBERT C. LUEDTKE	TLE	---	---	---	768 S.F.	---
36	KENNON JAEGER OLSON AND SIGRID KERRY JAEGER	TLE	---	---	---	3,294 S.F.	---
37	TODD J. MILLER AND TRACEY L. MILLER	TLE	---	---	---	900 S.F.	---
38	SHELLEY M. REYNOLDS	TLE	---	---	---	1,138 S.F.	---
39	KAREN S. WELCH	TLE	---	---	---	531 S.F.	---
41	CITY OF OMRO	PLE, TLE	---	---	---	12304 S.F.	800 S.F.
42	JASON J. WALTER	TLE	---	---	---	722 S.F.	---
43	MARVIN A. & DONNA A. MATULLE	TLE	---	---	---	839 S.F.	---
115	SCHETTL REVOCABLE TRUST	PLE	---	---	---	---	100 S.F.
139	KAREN S. WELCH	PLE	---	---	---	---	45 S.F.
142	JASON J. WALTER	PLE	---	---	---	---	55 S.F.

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
103	OMRO UTILITIES (WATER)	RELEASE OF RIGHTS

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WINNEBAGO COUNTY, NAD83/2007 IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

N

SCALE, FEET
0 50 100

STRAND ASSOCIATES, INC. ®
910 WEST WINGRA DRIVE, MADISON, WI 53715
(608) 251-4843

I, HEATHER S. BARTELT, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 6190-16-22-4.02 AMENDMENT NO. 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

(SIGNATURE) _____ DATE 3/1/16
(PRINTED NAME) HEATHER S. BARTELT
(REGISTRATION NUMBER) S - 2797

WISCONSIN HEATHER S. BARTELT S-2797 MADISON WI LAND SURVEYOR

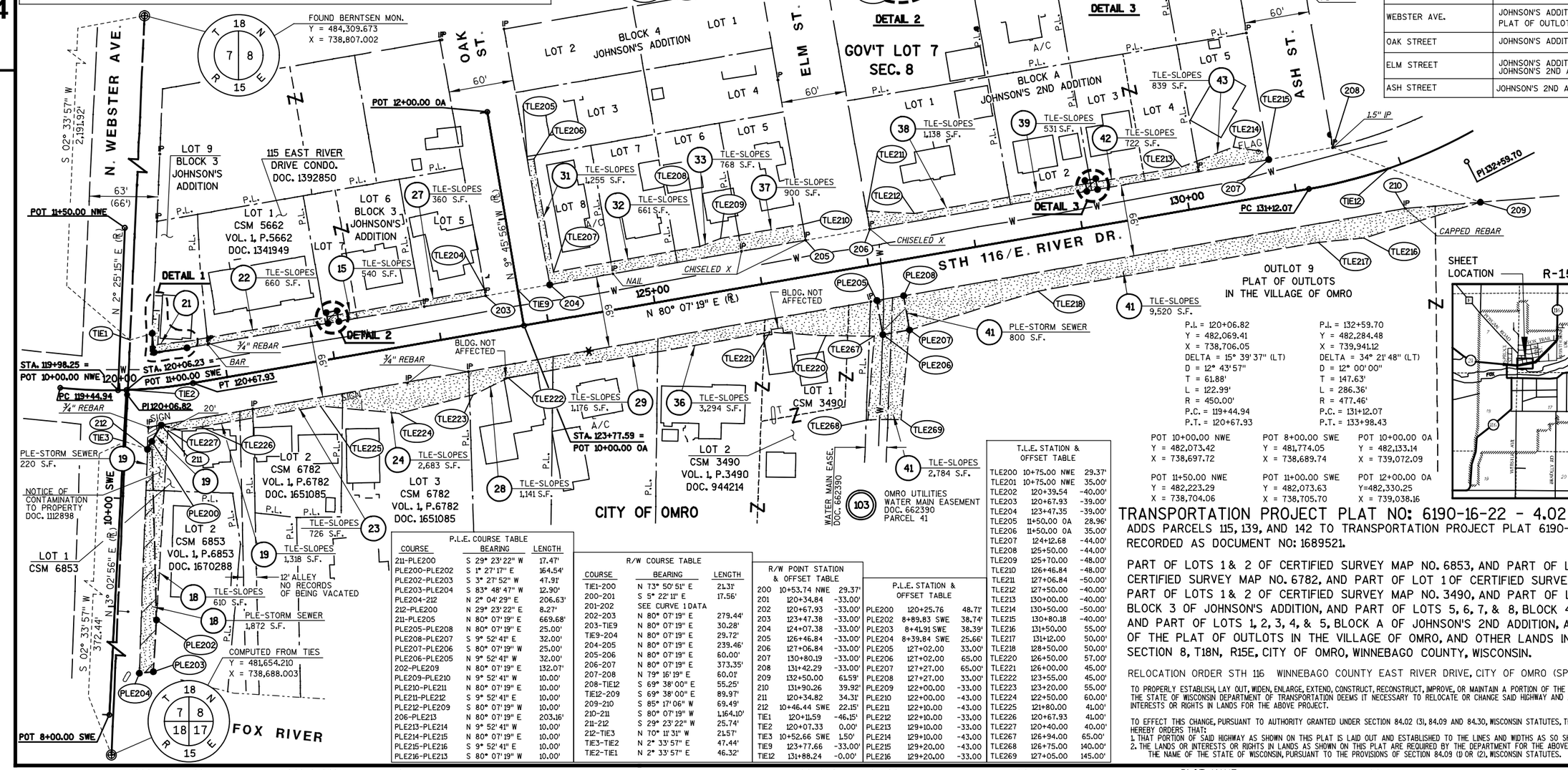
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
(SIGNATURE) _____ DATE 6/9/2015
(PRINTED NAME) CURT VAN EREM

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN WINNEBAGO COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 1688803.

1689521
REGISTER'S OFFICE
WINNEBAGO COUNTY, WI
RECORDED ON
06/10/2015 1:56 PM
JULIE PAGEL
REGISTER OF DEEDS
RECORDING FEE 25.00
PAGES: 1

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6190-16-22-4.02
AMENDMENT NO: 1

HWY	BASIS OF EXIST. R/W
STH 116/E. RIVER DR.	JOHNSON'S ADDITION JOHNSON'S 2ND ADDITION PLAT OF OUTLOTS IN THE VILLAGE OF OMRO FOUND IRONS
WEBSTER AVE.	JOHNSON'S ADDITION PLAT OF OUTLOTS IN THE VILLAGE OF OMRO
OAK STREET	JOHNSON'S ADDITION
ELM STREET	JOHNSON'S ADDITION JOHNSON'S 2ND ADDITION
ASH STREET	JOHNSON'S 2ND ADDITION



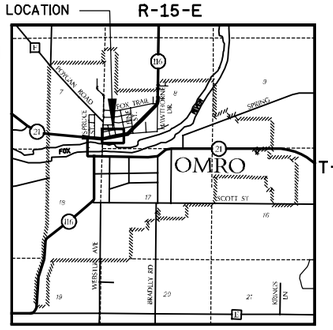
CURVE 1	
L.	30.66'
R.	417.00'
L.C.	30.66'
L.C.B.	N 82° 13' 42" E

OUTLOT 9
PLAT OF OUTLOTS
IN THE VILLAGE OF OMRO

P.I. = 120+06.82	P.I. = 132+59.70
Y = 482,069.41	Y = 482,284.48
X = 738,706.05	X = 739,941.12
DELTA = 15° 39' 37" (LT)	DELTA = 34° 21' 48" (LT)
D = 12° 43' 57"	D = 12° 00' 00"
T = 61.88'	T = 147.63'
L = 122.99'	L = 286.36'
R = 450.00'	R = 477.46'
P.C. = 119+44.94	P.C. = 131+12.07
P.T. = 120+67.93	P.T. = 133+98.43

POT 10+00.00 NWE	POT 8+00.00 SWE	POT 10+00.00 0A
Y = 482,073.42	Y = 481,774.05	Y = 482,133.14
X = 738,697.72	X = 738,689.74	X = 739,072.09
POT 11+50.00 NWE	**POT 11+00.00 SWE**	**POT 12+00.00 0A**
Y = 482,223.29	Y = 482,073.63	Y=482,330.25
X = 738,704.06	X = 738,705.70	X = 739,038.16

SHEET LOCATION — R-15-E



P.L.E. COURSE TABLE		
COURSE	BEARING	LENGTH
211-PLE200	S 29° 23' 22" W	17.47'
PLE200-PLE202	S 1° 27' 17" E	164.54'
PLE202-PLE203	S 3° 27' 52" W	47.91'
PLE203-PLE204	S 83° 48' 47" W	12.90'
PLE204-212	N 2° 04' 29" E	206.63'
212-PLE200	N 29° 23' 22" E	8.27'
211-PLE205	N 80° 07' 19" E	669.68'
PLE205-PLE208	N 80° 07' 19" E	25.00'
PLE208-PLE207	S 9° 52' 41" E	32.00'
PLE207-PLE206	S 80° 07' 19" W	25.00'
PLE206-PLE205	N 9° 52' 41" W	32.00'
202-PLE209	N 80° 07' 19" E	132.07'
PLE209-PLE210	N 9° 52' 41" W	10.00'
PLE210-PLE211	N 80° 07' 19" E	10.00'
PLE211-PLE212	S 9° 52' 41" E	10.00'
PLE212-PLE209	S 80° 07' 19" W	10.00'
206-PLE213	N 80° 07' 19" E	203.16'
PLE213-PLE214	N 9° 52' 41" W	10.00'
PLE214-PLE215	N 80° 07' 19" E	10.00'
PLE215-PLE216	S 9° 52' 41" E	10.00'
PLE216-PLE213	S 80° 07' 19" W	10.00'

R/W COURSE TABLE		
COURSE	BEARING	LENGTH
TIE1-200	N 73° 50' 51" E	21.31'
200-201	S 5° 22' 11" E	17.56'
201-202	SEE CURVE 1 DATA	
202-203	N 80° 07' 19" E	279.44'
203-TIE9	N 80° 07' 19" E	30.28'
TIE9-204	N 80° 07' 19" E	29.72'
204-205	N 80° 07' 19" E	239.46'
205-206	N 80° 07' 19" E	60.00'
206-207	N 80° 07' 19" E	373.35'
207-208	N 79° 16' 19" E	60.01'
208-TIE12	S 69° 38' 00" E	55.25'
TIE12-209	S 69° 38' 00" E	89.97'
209-210	S 85° 17' 06" W	69.49'
210-211	S 80° 07' 19" W	1,164.10'
211-212	S 29° 23' 22" W	25.74'
212-TIE3	N 70° 11' 31" W	21.57'
TIE3-TIE2	N 2° 33' 57" E	47.44'
TIE2-TIE1	N 2° 33' 57" E	46.32'

R/W POINT STATION & OFFSET TABLE		
200	10+53.74 NWE	29.37'
201	120+34.84	-33.00'
202	120+67.93	-33.00'
203	123+47.38	-33.00'
204	124+07.38	-33.00'
205	126+46.84	-33.00'
206	127+06.84	-33.00'
207	130+80.19	-33.00'
208	131+42.29	-33.00'
209	132+50.00	61.59'
210	131+90.26	39.92'
211	120+34.82	34.31'
212	10+46.44 SWE	22.15'
TIE1	120+11.59	-46.15'
TIE2	120+07.33	0.00'
TIE3	10+52.66 SWE	1.50'
TIE9	123+77.66	-33.00'
TIE12	131+88.24	-0.00'

P.L.E. STATION & OFFSET TABLE		
PLE200	120+25.76	48.71'
PLE202	8+89.83 SWE	38.74'
PLE203	8+41.91 SWE	38.39'
PLE204	8+39.84 SWE	25.66'
PLE205	127+02.00	33.00'
PLE206	127+02.00	65.00'
PLE207	127+27.00	65.00'
PLE208	127+27.00	33.00'
PLE209	122+00.00	-33.00'
PLE210	122+00.00	-43.00'
PLE211	122+10.00	-43.00'
PLE212	122+10.00	-33.00'
PLE213	129+10.00	-33.00'
PLE214	129+10.00	-43.00'
PLE215	129+20.00	-43.00'
PLE216	129+20.00	-33.00'

T.L.E. STATION & OFFSET TABLE		
TLE200	10+75.00 NWE	29.37'
TLE201	10+75.00 NWE	35.00'
TLE202	120+39.54	-40.00'
TLE203	120+67.93	-39.00'
TLE204	123+47.35	-39.00'
TLE205	11+50.00 0A	28.96'
TLE206	11+50.00 0A	35.00'
TLE207	124+12.68	-44.00'
TLE208	125+50.00	-44.00'
TLE209	125+70.00	-48.00'
TLE210	126+46.84	-48.00'
TLE211	127+06.84	-50.00'
TLE212	127+50.00	-40.00'
TLE213	130+00.00	-40.00'
TLE214	130+50.00	-50.00'
TLE215	130+80.18	-40.00'
TLE216	131+50.00	55.00'
TLE217	131+12.00	50.00'
TLE218	128+50.00	50.00'
TLE220	126+50.00	57.00'
TLE221	126+00.00	45.00'
TLE222	123+55.00	45.00'
TLE223	123+20.00	55.00'
TLE224	122+50.00	60.00'
TLE225	121+80.00	41.00'
TLE226	120+67.93	41.00'
TLE227	120+40.00	40.00'
TLE267	126+94.00	65.00'
TLE268	126+75.00	140.00'
TLE269	127+05.00	145.00'

TRANSPORTATION PROJECT PLAT NO: 6190-16-22 - 4.02 AMENDMENT NO: 1

ADDS PARCELS 115, 139, AND 142 TO TRANSPORTATION PROJECT PLAT 6190-16-22-4.02 RECORDED AS DOCUMENT NO: 1689521.

PART OF LOTS 1 & 2 OF CERTIFIED SURVEY MAP NO. 6853, AND PART OF LOTS 2, & 3 OF CERTIFIED SURVEY MAP NO. 6782, AND PART OF LOT 1 OF CERTIFIED SURVEY MAP NO. 5662, AND PART OF LOTS 1 & 2 OF CERTIFIED SURVEY MAP NO. 3490, AND PART OF LOTS 5, 6, 7, & 9, BLOCK 3 OF JOHNSON'S ADDITION, AND PART OF LOTS 5, 6, 7, & 8, BLOCK 4 OF JOHNSON'S ADDITION, AND PART OF LOTS 1, 2, 3, 4, & 5, BLOCK A OF JOHNSON'S 2ND ADDITION, AND PART OF OUTLOT 9 OF THE PLAT OF OUTLOTS IN THE VILLAGE OF OMRO, AND OTHER LANDS IN GOVERNMENT LOT 7 OF SECTION 8, T18N, R15E, CITY OF OMRO, WINNEBAGO COUNTY, WISCONSIN.

RELOCATION ORDER STH 116 WINNEBAGO COUNTY EAST RIVER DRIVE, CITY OF OMRO (SPRUCE STREET - NCL)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\TPP\040102_rp amend1.dgn
APPRAISAL PLAT DATE : 2/24/2016
PLOT DATE : 3/1/2016
PLOT BY : _username_
PLOT NAME :
PLOT SCALE : $$.....plotscale.....$$

4.02 AMENDMENT NO. 1

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W AC. OR S.F. REQUIRED NEW	EXISTING	TOTAL	TLE AC. OR S.F.
44	DORIS M. STREHLOW	FEE,TLE	3,612 S.F.	---	3,612 S.F.	445 S.F.
46	JEANNE M. FAUST	FEE,TLE	1,857 S.F.	---	1,857 S.F.	72 S.F.
47	BRUCE EDWARD AND SARAH JANE STINEMATES	FEE,TLE	7 S.F.	---	7 S.F.	1,246 S.F.
48	THOMAS E. FAUST AND JEANNE M. FAUST	FEE,TLE	1,090 S.F.	---	1,090 S.F.	1,520 S.F.
49	RICHARD L. SAUER, LORI A. SAUER AND KIM M. BUNKE	TLE	---	---	---	1,378 S.F.
51	DEVEN J. PAVLAK	FEE,TLE	636 S.F.	---	636 S.F.	186 S.F.

R/W COURSE TABLE

COURSE	BEARING	LENGTH
208-317	N 9° 55' 10" W	12.02'
317-320	N 61° 04' 37" E	228.50'
320-319	N 58° 51' 31" E	52.94'
319-301	N 45° 45' 31" E	139.78'
301-302	N 5° 00' 51" W	55.64'
302-TIE13	N 61° 21' 59" E	22.55'
TIE13-303	N 61° 21' 59" E	22.19'
303-304	S 70° 35' 10" E	34.83'
304-305	N 45° 58' 21" E	216.57'
305-306	S 44° 05' 01" E	66.00'
306-307	S 45° 58' 21" W	257.32'
307-308	S 45° 45' 31" W	53.76'
308-309	S 5° 00' 51" E	162.63'
309-310	S 85° 49' 20" W	41.00'
310-311	N 5° 00' 51" W	75.95'
311-312	N 45° 28' 16" W	40.76'
312-316	S 45° 45' 31" W	103.32'
316-313	SEE CURVE 2	
313-314	S 35° 25' 15" E	22.72'
314-310	N 85° 17' 06" E	123.11'
310-315	S 4° 42' 54" E	66.00'
315-209	S 85° 17' 06" W	232.14'
209-TIE12	N 69° 38' 00" W	89.97'
TIE12-208	N 69° 38' 00" W	55.25'

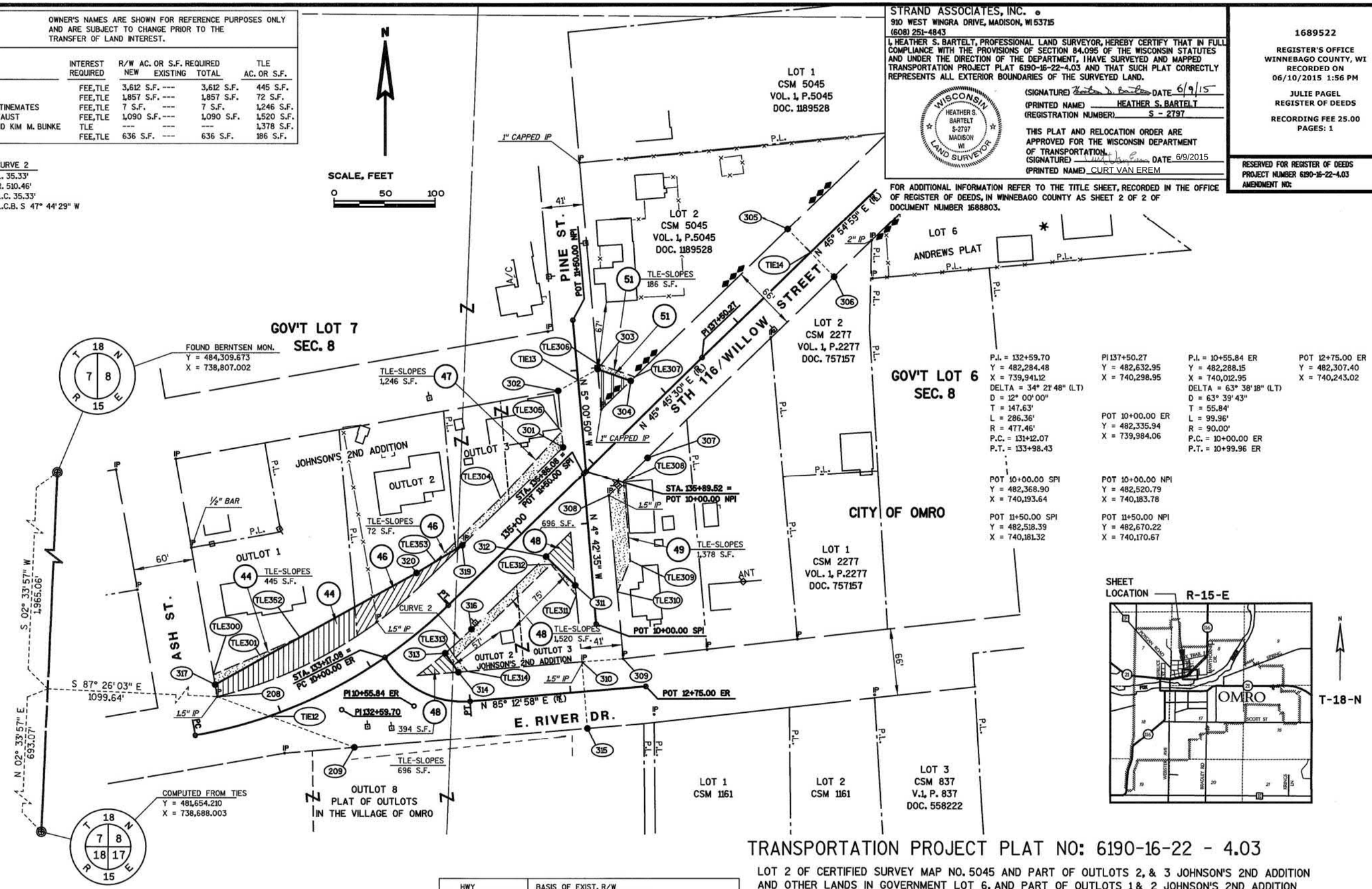
CURVE 2
L. 35.33'
R. 510.46'
L.C. 35.33'
L.C.B. S 47° 44' 29" W

R/W POINT STATION & OFFSET TABLE

208	131+42.29	-33.00'
209	132+50.00	61.59'
301	135+89.78	-33.00'
302	10+81.37 NPI	-20.67'
303	10+99.30 NPI	20.33'
304	136+83.52	-32.85'
305	139+00.00	-32.45'
306	139+00.00	33.55'
307	136+42.58	33.00'
308	135+88.83	33.00'
309	12+54.85 ER	-29.04'
310	12+13.85 ER	-29.48'
311	10+40.00 SPI	-17.42'
312	135+01.75	33.00'
313	133+65.38	33.00'
314	10+86.32 ER	-28.93'
315	12+13.77 ER	36.52'
316	133+98.43	33.00'
317	131+43.13	-45.00'
319	134+50.00	-33.00
320	133+98.43	-45.00
TIE12	131+88.24	-0.00'
TIE13	10+90.40 NPI	0.00'
TIE14	139+00.00	0.00'

T.L.E. STATION & OFFSET TABLE

TLE300	131+43.85	-55.00'
TLE301	132+00.00	-60.00'
TLE304	135+10.00	-40.00'
TLE305	10+41.22	-20.66'
TLE306	11+04.79 NPI	20.33'
TLE307	136+89.11	-32.83'
TLE308	136+09.41	33.00'
TLE309	10+60.00 SPI	39.00'
TLE310	10+30.00 SPI	23.63'
TLE311	10+30.00 SPI	-17.37'
TLE312	135+00.00	42.00'
TLE313	133+70.00	43.00'
TLE314	10+99.96 ER	-29.61'
TLE300	131+43.85	-55.00'
TLE301	132+00.00	-60.00'
TLE352	132+50.00	-59.97'
TLE353	134+19.92	-40.00



GOV'T LOT 6 SEC. 8

P.I. = 132+59.70	PI 137+50.27	P.I. = 10+55.84 ER	POT 12+75.00 ER
Y = 482,284.48	Y = 482,632.95	Y = 482,288.15	Y = 482,307.40
X = 739,941.12	X = 740,298.95	X = 740,012.95	X = 740,243.02
DELTA = 34° 21' 48" (LT)		DELTA = 63° 38' 18" (LT)	
D = 12° 00' 00"		D = 63° 39' 43"	
T = 147.63'		T = 55.84'	
L = 286.36'	POT 10+00.00 ER	L = 99.96'	
R = 477.46'	Y = 482,335.94	R = 90.00'	
P.C. = 131+12.07	X = 739,984.06	P.C. = 10+00.00 ER	
P.T. = 133+98.43		P.T. = 10+99.96 ER	

POT 10+00.00 SPI		POT 10+00.00 NPI	
Y = 482,368.90		Y = 482,520.79	
X = 740,193.64		X = 740,183.78	
POT 11+50.00 SPI		POT 11+50.00 NPI	
Y = 482,518.39		Y = 482,670.22	
X = 740,181.32		X = 740,170.67	

SHEET LOCATION — R-15-E

HWY	BASIS OF EXIST. R/W
STH 116/E. RIVER DR.	EXISTING CENTERLINE PREVIOUS WINNEBAGO COUNTY ROAD PROJECT: 3041 FOUND IRONS
ASH STREET	JOHNSON'S 2ND ADDITION
PINE STREET	JOHNSON'S 2ND ADDITION
E. RIVER DRIVE	PLAT OF OUTLOTS IN THE VILLAGE OF OMRO JOHNSON'S 2ND ADDITION

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

EXISTING ACCESS CONTROL ALONG STH 121 ESTABLISHED FROM: CSM 5045 & ANDREWS PLAT

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WINNEBAGO COUNTY, NAD83/2007 IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STRAND ASSOCIATES, INC.®
910 WEST WINGRA DRIVE, MADISON, WI 53715
(608) 251-4843

I, HEATHER S. BARTELT, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 6190-16-22-4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN HEATHER S. BARTELT S-2797 MADISON WI LAND SURVEYOR

(SIGNATURE) _____ DATE 6/9/15
(PRINTED NAME) HEATHER S. BARTELT
(REGISTRATION NUMBER) S - 2797

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
(SIGNATURE) _____ DATE 6/9/2015
(PRINTED NAME) CURT VAN EREM

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN WINNEBAGO COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 1688803.

1689522
REGISTER'S OFFICE
WINNEBAGO COUNTY, WI
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06/10/2015 1:56 PM
JULIE PAGEL
REGISTER OF DEEDS
RECORDING FEE 25.00
PAGES: 1

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6190-16-22-4.03
AMENDMENT NO:

TRANSPORTATION PROJECT PLAT NO: 6190-16-22 - 4.03

LOT 2 OF CERTIFIED SURVEY MAP NO. 5045 AND PART OF OUTLOTS 2, & 3 JOHNSON'S 2ND ADDITION AND OTHER LANDS IN GOVERNMENT LOT 6, AND PART OF OUTLOTS 1 & 2 JOHNSON'S 2ND ADDITION IN GOVERNMENT LOT 7 ALL IN SECTION 8, T18N, R15E, CITY OF OMRO, WINNEBAGO COUNTY, WISCONSIN.

RELOCATION ORDER STH 116 WINNEBAGO COUNTY EAST RIVER DRIVE, CITY OF OMRO (SPRUCE STREET - NCL)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (3) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W AC. OR S.F. REQUIRED NEW	EXISTING	TOTAL	TLE AC. OR S.F.
52	KATHLEEN M. TRAVANTY	FEE,TLE	2,757 S.F.	---	2,757 S.F.	248 S.F.
53	OMRO ANIMAL HOSPITAL	FEE,TLE	643 S.F.	---	643 S.F.	423 S.F.
54	GREGORY R. PETERS AND SUSAN J. PETERS	TLE	---	---	---	1,427 S.F.
56	PHILIP R. KOONCE AND DEBRA M. KOONCE	FEE,TLE	2,593 S.F.	---	2,593 S.F.	390 S.F.
57	KURT R. KRAEMER AND CHRISTINE A. KRAEMER	FEE	2,245 S.F.	---	2,245 S.F.	---
58	JAN T. CIESZYNSKI AND LAURIE L. CIESZYNSKI	FEE	1,286 S.F.	---	1,286 S.F.	---

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
100	WISCONSIN POWER AND LIGHT COMPANY (ELECTRIC)	RELEASE OF RIGHTS
101	WISCONSIN POWER AND LIGHT COMPANY (GAS)	RELEASE OF RIGHTS
102	AT&T WISCONSIN	RELEASE OF RIGHTS
105	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS

P.I. = 153+26.48
Y = 483,729.53
X = 741,431.18
DELTA = 44° 08' 18" (LT)
D = 11° 48' 49"
T = 196.63'
L = 373.62'
R = 485.00'
P.C. = 151+29.85
P.T. = 155+03.47

POT 10+00.00 FO
Y = 483,734.90
X = 741,178.45

POT 14+42.70 FO
Y = 483,492.94
X = 741,423.05

P.I. = 11+63.41 FO
Y = 483,733.46
X = 741,341.86
DELTA = 28° 28' 02" (RT)
D = 38° 11' 50"
T = 38.05'
L = 74.53'
R = 150.00'
P.C. = 11+25.36 FO
P.T. = 11+99.89 FO

P.I. = 12+61.43
Y = 483,685.23
X = 741,428.98
DELTA = 62° 47' 48" (RT)
D = 64° 22' 38"
T = 54.32'
L = 97.54'
R = 89.00'
P.C. = 12+07.11
P.T. = 13+04.65

R/W POINT STATION & OFFSET TABLE

400	13+75.00 FO	32.51'
401	13+20.03 FO	32.47'
402	152+08.43	35.19'
403	151+30.48	35.18'
404	149+94.58	34.99'
405	149+94.58	-31.01'
406	152+00.00	-41.50'
407	10+92.99 FO	29.95'
408	10+78.05 FO	-30.01'
409	153+15.47	-48.52'
410	156+63.96	-34.23'
411	156+63.92	31.77'
412	13+75.00 FO	-33.49'
413	154+47.10	35.16'
414	12+78.19 FO	-39.19'
TIE15	13+75.00 FO	0.00'
TIE16	13+75.00 FO	0.73'
TIE17	149+94.58	0.00'
TIE18	10+85.53 FO	0.00'
TIE19	156+63.94	-1.23'
TIE20	156+63.94	0.00'

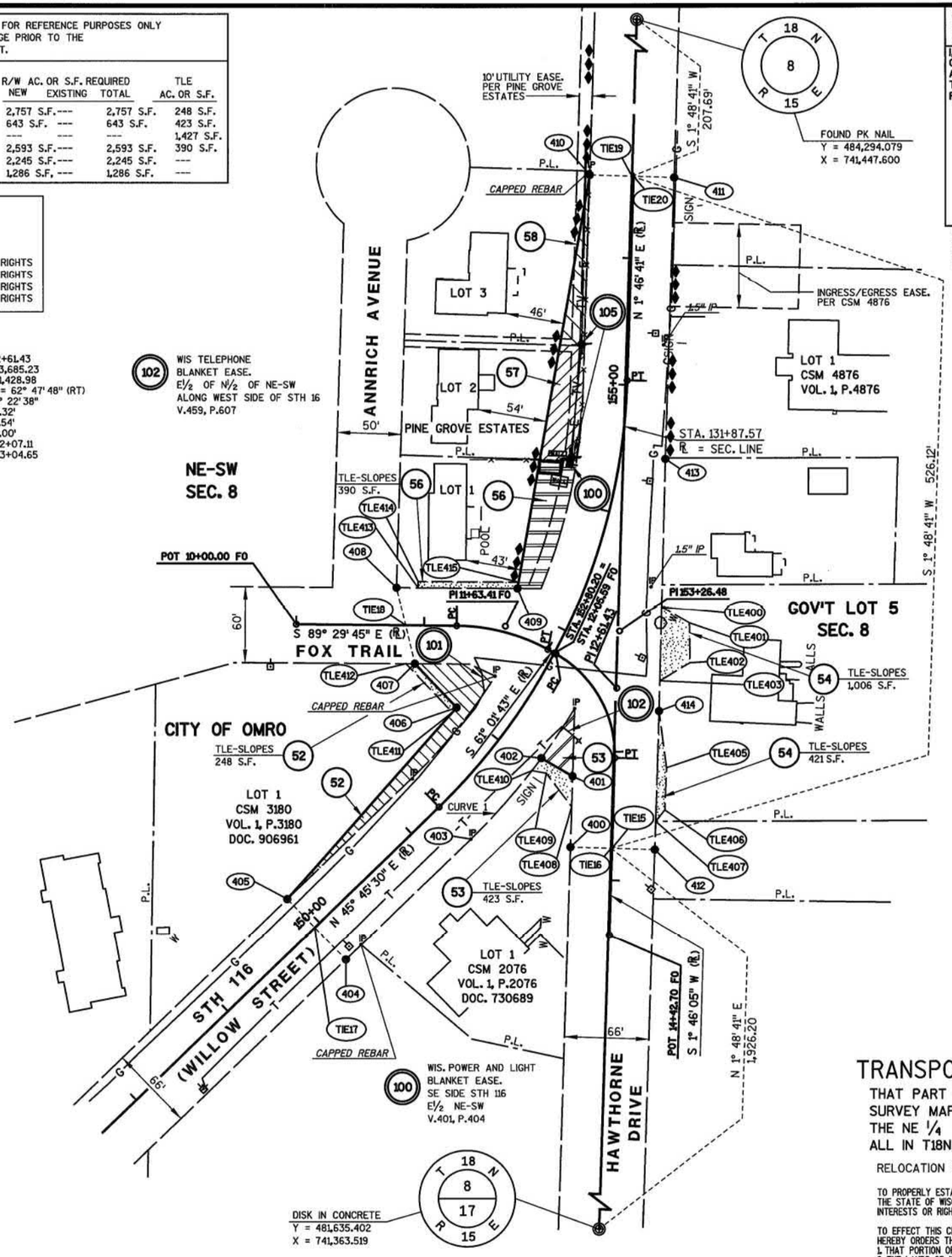
T.L.E. STATION & OFFSET TABLE

TLE400	153+43.98	61.58'
TLE401	153+40.33	86.38'
TLE402	153+16.30	98.72'
TLE403	152+97.33	83.17'
TLE405	13+11.20 FO	-40.73'
TLE406	13+44.08 FO	-40.37'
TLE407	13+53.08 FO	-33.50'
TLE408	13+43.76 FO	32.49'
TLE409	152+01.88	45.34'
TLE410	151+97.07	35.21'
TLE411	151+94.52	-41.82'
TLE412	10+86.00 FO	29.97'
TLE413	10+95.00 FO	-30.06'
TLE414	10+95.00 FO	-35.06'
TLE415	153+20.95	-49.72'

CURVE 1
L. 83.62'
R. 504.42'
L.C. 83.53'
L.C.B. S 41° 14' 43" W

R/W COURSE TABLE

COURSE	BEARING	LENGTH
TIE19-TIE20	S 88° 11' 19" E	1.23'
TIE20-411	S 88° 11' 19" E	31.77'
411-413	S 1° 48' 41" W	220.77'
413-414	S 1° 27' 31" W	197.44'
414-412	S 1° 48' 34" W	107.90'
412-TIE15	N 88° 13' 55" W	33.49'
TIE15-TIE16	N 88° 13' 55" W	0.73'
TIE16-400	N 88° 13' 55" W	31.78'
400-401	N 1° 48' 34" E	54.97'
401-402	N 59° 51' 56" W	28.24'
402-403	SEE CURVE 1	
403-404	S 45° 59' 40" W	135.94'
404-TIE17	N 44° 05' 01" W	34.99'
TIE17-405	N 44° 05' 01" W	31.01'
405-406	N 41° 34' 25" E	199.76'
406-407	N 43° 57' 11" W	46.95'
407-TIE18	N 13° 28' 47" W	30.86'
TIE18-408	N 13° 28' 47" W	30.93'
408-409	S 89° 39' 36" E	94.53'
409-410	N 9° 56' 21" E	328.81'
410-TIE19	S 88° 11' 19" E	33.00'



STRAND ASSOCIATES, INC.®
910 WEST WINGRA DRIVE, MADISON, WI 53715
(608) 251-4843

I, HEATHER S. BARTELT, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 6190-16-22-4.04 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN HEATHER S. BARTELT S-2797 MADISON WI LAND SURVEYOR

(SIGNATURE) _____ DATE 6/9/15
(PRINTED NAME) HEATHER S. BARTELT
(REGISTRATION NUMBER) S - 2797

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
(SIGNATURE) _____ DATE 6/9/2015
(PRINTED NAME) CURT VAN EREM

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN WINNEBAGO COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 1688803.

1689523
REGISTER'S OFFICE
WINNEBAGO COUNTY, WI
RECORDED ON
06/10/2015 1:57 PM
JULIE PAGEL
REGISTER OF DEEDS
RECORDING FEE 25.00
PAGES: 1

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6190-16-22-4.04
AMENDMENT NO:

EXISTING ACCESS CONTROL ALONG STH 116 ESTABLISHED FROM: PLAT OF PINE GROVE ESTATES AND CSM 4876

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

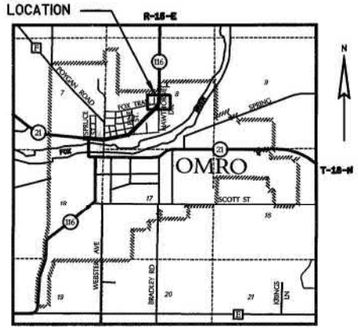
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WINNEBAGO COUNTY, NAD83/2007 IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

HWY	BASIS OF EXIST. R/W
STH 116 (WILLOW STREET)	EXISTING CENTERLINE PREVIOUS WINNEBAGO COUNTY ROAD PROJECT: 3041 FOUND IRONS
FOX TRAIL	PINE GROVE ESTATES CSM 3180 DOCUMENT NO. 983345
HAWTHORNE DRIVE	EXISTING CENTERLINE FOUND IRONS

N

SCALE, FEET
0 50 100

SHEET LOCATION



TRANSPORTATION PROJECT PLAT NO: 6190-16-22 - 4.04

THAT PART OF LOT 1 OF CERTIFIED SURVEY MAP NO. 2076, AND PART OF LOT 1 OF CERTIFIED SURVEY MAP NO. 3180, AND PART OF LOTS 1, 2, & 3 OF PINE GROVE ESTATES LOCATED IN THE NE 1/4 OF THE SW 1/4 OF SECTION 8, AND PART OF GOVERNMENT LOT 5 IN SECTION 8, ALL IN T18N, R15E, CITY OF OMRO, WINNEBAGO COUNTY, WISCONSIN.

RELOCATION ORDER STH 116 WINNEBAGO COUNTY EAST RIVER DRIVE, CITY OF OMRO (SPRUCE STREET - NCL)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

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STA. 109+20 LT
CONST. F.E.
EXIST. 18" CMCP
TO REMAIN

STA. 110+70 LT
CONST. F.E.
EXIST. 15" CMCP
TO REMAIN

STA. 115+50 LT
CONST. P.E.

STA. 117+69 LT
CONST. P.E.
REMOVE 15" CMCP

ATC MANAGEMENT, INC.
ALLIANT ENERGY (GAS)
ALLIANT ENERGY (ELECTRIC)
CHARTER COMMUNICATIONS
AT&T WISCONSIN
OMRO UTILITIES (SANITARY)
OMRO UTILITIES (STORM)
OMRO UTILITIES (WATER)
AT&T WISCONSIN
EXISTING R/W
PROPOSED R/W
TLE
BM 700
BM 701
BM 702
SPRUCE ST
CEDAR ST
STH 21
STH 116
STH 21/STH 116
SLOPE INTERCEPT (TYP.)
MATCH LINE STA. 118+00
PLE

BEGIN PROJECT
STA. 107+50.00
Y=482195.28
X=737455.57

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
700	104+25.4	CHISELED 'X' ON THE NW BURY BOLT OF FIRE HYDRANT	757.652
701	112+30.7	CHISELED SQUARE ON THE SE COR. OF CONC. PAD FOR SIGNAL BOX	755.449
702	116+22.4	RR SPIKE IN PPOL *18-15-7.4	756.839

STA. 107+88
REMOVE 1 - 57"X38"X98' CSPA

STA. 114+30 RT
CONST. P.E.

STA. 114+75 RT
CONST. P.E.

STA. 115+32 RT
CONST. P.E.

STA. 115+65 RT
CONST. P.E.

STA. 117+00 RT
CONST. P.E.
REMOVE 15" CMCP

STA. 117+73 RT
CONST. P.E.
REMOVE 15" CMCP

EXISTING GROUND
FINISHED PROFILE
FINISHED PROFILE ELEVATION
EXISTING PROFILE ELEVATION AT ℄

STA. 107+87.70
1 - 48" CPRC REQ'D

PC 108+39.21 EL 757.11
PI 109+00.00 EL 757.25
PT 109+60.80 EL 756.95
K = 167
L = 122'
SSD = 973'
+0.23%
-0.50%

PC 110+60.00 EL 756.45
PI 111+20.00 EL 756.15
PT 111+80.00 EL 756.45
K = 120
L = 120'
-0.50%
+0.50%

PC 112+71.38 EL 756.90
PI 113+16.38 EL 757.13
PT 113+61.38 EL 756.93
K = 95
L = 90'
SSD = 745'
+0.50%
-0.45%

PC 113+65.00 EL 756.91
PI 114+10.00 EL 756.71
PT 114+55.00 EL 756.95
K = 92
L = 90'
-0.45%
+0.53%

PC 115+25.00 EL 757.32
PI 116+00.00 EL 757.72
PT 116+75.00 EL 757.35
K = 145
L = 150'
SSD = 719'
+0.53%
-0.50%

PC 117+05.00 EL 757.20
PI 117+50.00 EL 756.97
PT 117+95.00 EL 757.36
K = 90
L = 90'
-0.50%
+0.50%

104+00	105+00	106+00	107+00	108+00	109+00	110+00	111+00	112+00	113+00	114+00	115+00	116+00	117+00	118+00
756.69	756.77	756.77	756.84	756.87	756.88	756.90	756.91	756.93	757.02	756.97	757.13	757.00	757.14	757.12	757.00	757.10	756.75	757.11	756.50	757.21	756.32	757.26	756.34	757.16	756.55	757.13	756.80	757.06	757.00	757.17	756.97	757.53	756.82	757.72	756.92	757.94	757.19	758.07	757.43	758.15	757.53	758.09	757.45	758.15	757.22	758.38	757.08	758.59	757.22
							756.91																																						

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE - STH 116	SHEET 142	E

STA. 118+50 LT
CONST. P.E.
REMOVE 15" CMCP

STA. 118+89 LT
CONST. P.E.
REMOVE 15" CMCP

STA. 121+50 LT
CONST. P.E.

STA. 122+30 LT
CONST. P.E.
REMOVE 12" CPP

STA. 125+30 LT
CONST. P.E.
REMOVE 12" CMCP

STA. 128+25 LT
CONST. P.E.
REMOVE 15" CMCP

STA. 129+00 LT
CONST. P.E.
REMOVE 15" CMCP

STA. 129+68 LT
CONST. P.E.
REMOVE 15" CMCP

ALLIANT ENERGY (GAS)
OMRO UTILITIES (WATER)
OMRO UTILITIES (SANITARY)
OMRO UTILITIES (STORM)
AT&T WISCONSIN
ALLIANT ENERGY (ELECTRIC)
CHARTER COMMUNICATIONS

N WEBSTER AVE
EXISTING R/W
OAK ST
ELM ST
ASH ST
STH 116
MATCH LINE STA. 118+00
MATCH LINE STA. 133+00
PROPOSED R/W
TLE
BM 703
BM 704
SLOPE INTERCEPT (TYP.)
ATHLETIC FIELD
A/C
FLAG

STA. 118+50 RT
CONST. P.E.

STA. 118+79 RT
REMOVE P.E.

STA. 121+07 RT
CONST. P.E.

STA. 121+70 RT
CONST. P.E.

STA. 122+58 RT
CONST. P.E.
REMOVE 12" CMCP

STA. 123+30 RT
CONST. P.E.
REMOVE 15" CMCP

STA. 124+11 RT
CONST. P.E.

STA. 125+15 RT
CONST. P.E.
REMOVE 12" CMCP

STA. 126+30 RT
CONST. P.E.
REMOVE 15" CMCP

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
703	120+73.1	CHISELED 'X' ON THE WEST BOLT OF FIRE HYDRANT	760.635
704	127+11.0	CHISELED 'X' ON THE NW 'BURY BOLT' OF FIRE HYDRANT	759.184

PC 120+05.00 EL 758.25
PI 120+50.00 EL 758.47
PT 120+95.00 EL 758.25
K = 90
L = 90'
SSD = 710'
+0.50%
-0.50%

PC 121+65.00 EL 757.89
PI 122+10.00 EL 757.67
PT 122+55.00 EL 757.89
K = 91
L = 90'
-0.50%
+0.49%

PC 124+30.00 EL 758.75
PI 124+80.00 EL 759.00
PT 125+30.00 EL 758.68
K = 88
L = 100'
SSD = 633'
+0.49%
-0.65%

PC 128+28.63 EL 756.74
PI 128+80.00 EL 756.41
PT 129+31.37 EL 756.73
K = 81
L = 103'
-0.65%
+0.62%

PC 132+48.25 EL 758.68
PI 133+00.00
K =
L =
+0.62%

EXISTING GROUND
FINISHED PROFILE
FINISHED PROFILE ELEVATION
EXISTING PROFILE ELEVATION AT ℄

118+00	119+00	120+00	121+00	122+00	123+00	124+00	125+00	126+00	127+00	128+00	129+00	130+00	131+00	132+00	133+00
758.59	757.22	758.73	757.47	758.74	757.72	758.77	757.97	758.87	758.22	758.84	758.36	758.78	758.22	758.77	757.97	758.77	757.79	758.77	757.87	758.76	758.11	758.84	758.36	758.90	758.61	758.84	758.83	758.83	758.82	758.83	758.55	758.71	758.22	758.23	757.90	757.70	757.58	757.47	757.25	757.36	756.93	757.26	756.63	757.34	756.59	757.40	756.84	757.61	757.15	757.86	757.46	758.28	757.77	758.67	758.07	759.10	758.38	759.88	758.69	760.74	759.22

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE - STH 116	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\050102_pp.dgn
PLOT DATE : 4/20/2017
PLOT BY : _username_
PLOT NAME :
PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 40

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
705	134+39.7	CHISELED 'X' ON THE WEST BOLT OF FIRE HYDRANT	762.275

OMRO UTILITIES (SANITARY)
OMRO UTILITIES (STORM)
ALLIANT ENERGY (GAS)
WALNUT ST
PINE ST
EXISTING R/W
SLOPE INTERCEPT (TYP.)
TLE
PROPOSED R/W
MATCH LINE STA. 133+00
11+00 NPI
11+00 SPI
11+00 ER
12+00 ER
BM 705
EXISTING R/W
EAST RIVER DR
STH 116
RIVERHILL DR
ALLIANT ENERGY (ELECTRIC)
CHARTER COMMUNICATIONS
AT&T WISCONSIN
OMRO UTILITIES (WATER)
MATCH LINE STA. 148+00
STA. 137+24 RT
CONST. P.E.
EXIST. 15" CMCP
TO REMAIN
END RECONSTRUCTION
BEGIN MILL & OVERLAY
STA. 137+50.00
STA. 139+19 RT
CONST. P.E.
EXIST. 24" CMCP
TO REMAIN
STA. 144+50 LT
CONST. C.E.
EXIST. 18" CMCP
TO REMAIN
STA. 147+75 LT
CONST. C.E.
EXIST. 18" CMCP
TO REMAIN
STA. 144+25
EXIST. 49"X33" CSPA
TO REMAIN
EXISTING GROUND
FINISHED PROFILE
PC 134+80.00
EL 763.22
PI 136+20.00
EL 766.50
PT 137+60.00
EL 765.92
RT 133+51.75
EL 760.21
EL 759.00
60
103'
+2.34%
-0.42%
K = 101
L = 280'
SSD = 381'
FINISHED PROFILE ELEVATION
EXISTING PROFILE ELEVATION AT ℄

760.74 759.22 761.69 760.17 762.49 761.34 763.48 762.52 764.41 763.67 765.10 764.62 765.80 765.32 766.06 765.78 766.18 765.99 765.87 765.95 765.55 765.39 765.06 764.72 764.35 764.22 764.01 763.93 763.56 763.22 762.92 762.56 762.32 762.10 762.02 762.00 762.70 763.64 765.05 766.70 768.38

133+00 134+00 135+00 136+00 137+00 138+00 139+00 140+00 141+00 142+00 143+00 144+00 145+00 146+00 147+00 148+00

775 770 765 760 755 750 745 740

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE - STH 116	SHEET 144	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\050103_pp.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
706	152+32.5	RAILROAD SPIKE IN PPOL #18-15-8.3	783.919
707	154+46.3	USGS MONUMENT STAMPED 22 L CK	787.766
708	161+41.0	CHISELED 'X' ON THE SE BURY BOLT ON FIRE HYDRANT	782.870

STA. 160+67 LT
CONST. C.E.
EXIST. 15" CMCP
TO REMAIN

N

MATCH LINE STA. 148+00

ALLIANT ENERGY (ELECTRIC)
CHARTER COMMUNICATIONS
OMRO UTILITIES (SANITARY)
ALLIANT ENERGY (GAS)
OMRO UTILITIES (WATER)
AT&T WISCONSIN
ALLIANT ENERGY (ELECTRIC)
CHARTER COMMUNICATIONS

FOX TRL
ANNRICH AVE
HAWTHORNE DR
STH 116
WHISPERING WAY

EXISTING R/W
PROPOSED R/W
TLE
SLOPE INTERCEPT (TYP.)

BM 706
BM 707
BM 708

AT&T WISCONSIN
STA. 154+09 RT
CONST. P.E.

STA. 154+59 RT
CONST. P.E.
EXIST. 15" CMCP
TO REMAIN

STA. 156+00 RT
CONST. C.E.

ALLIANT ENERGY (GAS)

STA. 159+38 RT
CONST. P.E.

END PROJECT
STA. 163+12.00

EXISTING GROUND

768.38	770.28	772.28	774.42	776.50	778.42	780.26	781.86	783.17	784.28	785.41	786.48	787.27	787.62	787.51	787.19	786.68	786.03	785.51	784.87	784.20	783.57	782.95	782.37	781.83	781.53	781.29	781.16	781.11	781.26	781.25
148+00	149+00	150+00	151+00	152+00	153+00	154+00	155+00	156+00	157+00	158+00	159+00	160+00	161+00	162+00	163+00															

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE - STH 116	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\050104_pp.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 40

CONCRETE CURB AND GUTTER 30-INCH TYPE D
DRIVEWAY ENTRANCE CURB REQ'D
STA. 10+85.79SA - STA. 11+29.08SA LT

MGS THRIE BEAM TRANSITION STA. 10+06.09SA - 10+45.49SA
MGS GUARDRAIL TERMINAL EAT REQ'D
POST *1
STA. 10+97.91SA
30.32' LT

STA. 12+93SA LT
CONST. C.E.

STA. 13+35SA LT
CONST. C.E.

N

OMRO UTILITIES (STORM)

AT&T WISCONSIN

ALLIANT ENERGY (GAS)

ALLIANT ENERGY (ELECTRIC)

OMRO UTILITIES (SANITARY)

CHARTER COMMUNICATIONS

OMRO UTILITIES (WATER)

SLOPE INTERCEPT (TYP.)

STH 21 / STH 116

STH 21

STH 116

SPRUCE ST

EXISTING R/W

PROPOSED R/W

TLE

PLE

SEE ID 6190-16-73 FOR UTILITY TRENCH REPAIR AREAS BEYOND THE END CONSTRUCTION LIMITS.

BEGIN CONSTRUCTION
STA. 10+00.00 SA

END CONSTRUCTION
STA. 13+55.00 SA
ID 6190-16-72

10+00 SA | +50 | 11+00 SA | +50 | 12+00 SA | +50 | 13+00 SA | +50 | 14+00 SA

K = 38
L = 104'

K = 37
L = 90'
SSD = 321'

PC 10+00.00 SA
EL 760.20

PI 10+52.00 SA
EL 758.12

PT 11+04.00 SA
EL 757.48

PI 11+63.36 SA
EL 756.73

PI 11+92.35 SA
EL 757.02

PI 12+23.39 SA
EL 756.71

PC 12+55.00 SA
EL 757.67

PI 13+00.00 SA
EL 759.03

PT 13+45.00 SA
EL 759.32

PI 13+55.00 SA
EL 759.38

EXISTING GROUND

FINISHED PROFILE

-4.00% -1.25% -1.25% +1.00% +1.00% -1.00% -1.00% +3.03% +3.03% +0.63%

FINISHED PROFILE ELEVATION
EXISTING PROFILE ELEVATION AT ℄

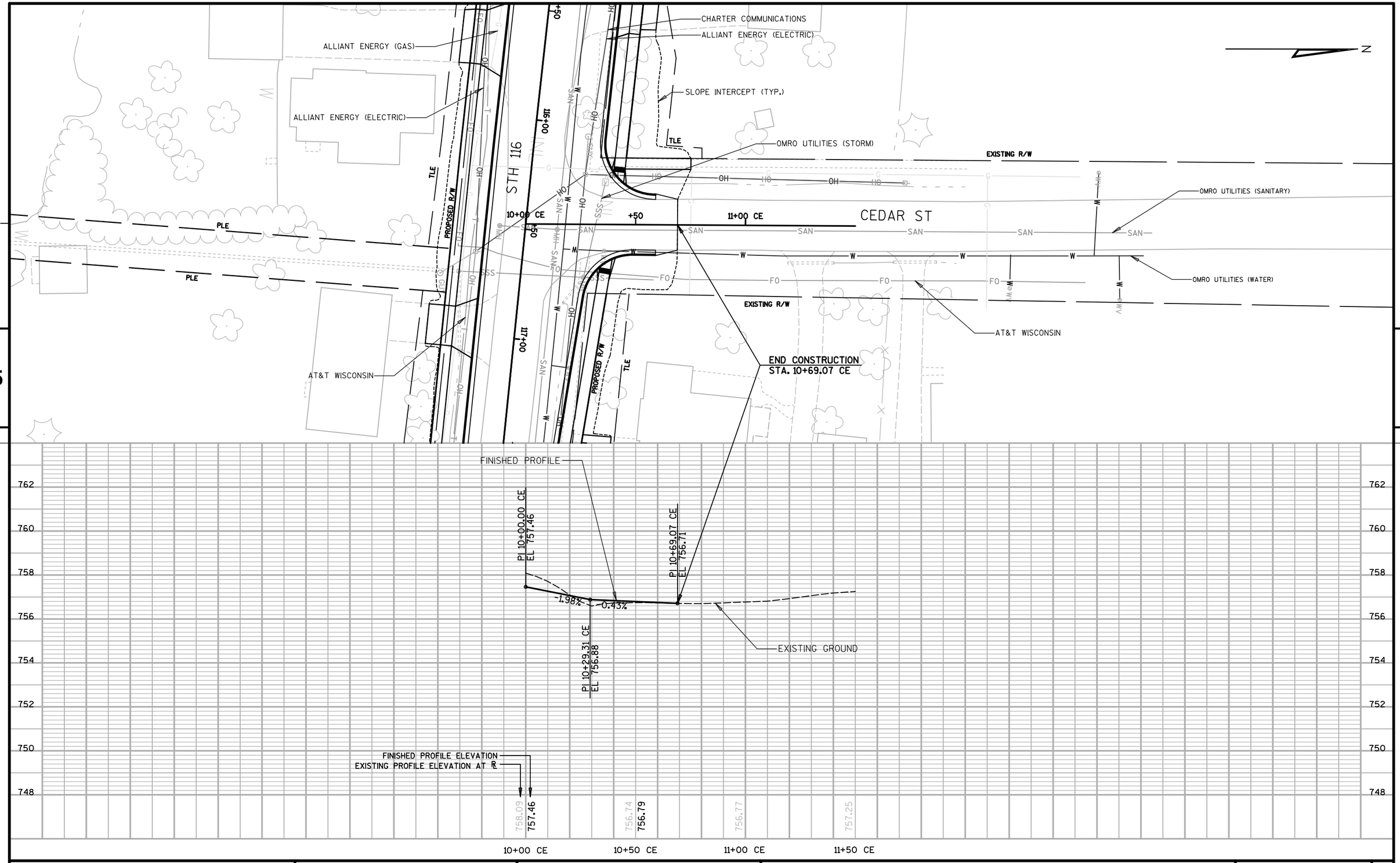
760.20	758.42	757.38	756.82	756.97	758.03	758.91	759.31	759.63	
760.20	758.52	757.52	756.90	756.94	757.52	758.76	759.35		

764 762 760 758 756 754 752 750

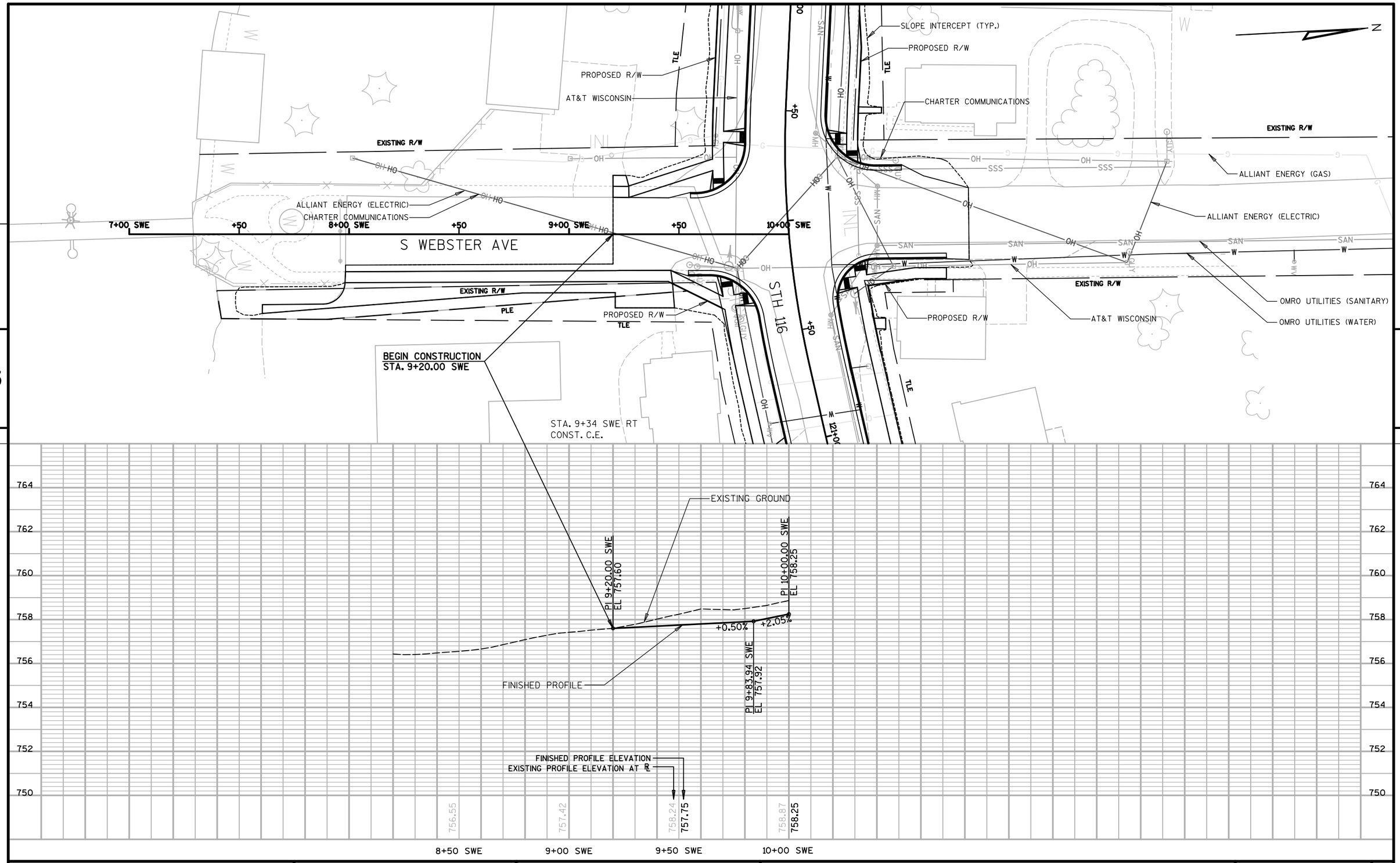
10+00 SA | 10+50 SA | 11+00 SA | 11+50 SA | 12+00 SA | 12+50 SA | 13+00 SA | 13+50 SA | 14+00 SA

PROJECT NO: 6190-16-72/73	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE - SPRUCE STREET	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_pp_SPRUCE.dgn
PLOT DATE : 4/20/2017
PLOT BY : _username_
PLOT NAME :
PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 40



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE - CEDAR STREET	SHEET 147	E



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE - SOUTH WEBSTER AVENUE	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_pp_S_WEBSTER.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

PROPOSED R/W
SLOPE INTERCEPT (TYP.)
PROPOSED R/W
AT&T WISCONSIN
CHARTER COMMUNICATIONS
STH 116
119+00
+50
EXISTING R/W
ALLIANT ENERGY (GAS)
EXISTING R/W
OMRO UTILITIES (SANITARY)
10+00 NWE
+50
11+00 NWE
N WEBSTER AVE
ALLIANT ENERGY (ELECTRIC)
CHARTER COMMUNICATIONS
ALLIANT ENERGY (ELECTRIC)
EXISTING R/W
EXISTING R/W
PLE
PROPOSED R/W
TLE
PROPOSED R/W
AT&T WISCONSIN
OMRO UTILITIES (WATER)
+50
END CONSTRUCTION
STA. 10+82.37 NWE
PI 10+00.00 NWE
EL 758.21
PI 10+82.37 NWE
EL 759.40
EXISTING GROUND
-1.93%
+2.26%
FINISHED PROFILE
PI 10+16.03 NWE
EL 757.90
FINISHED PROFILE ELEVATION
EXISTING PROFILE ELEVATION AT ℄
758.87
758.21
759.10
758.67
759.65
760.84
10+00 NWE
10+50 NWE
11+00 NWE
11+50 NWE
764
762
760
758
756
754
752
750

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE - NORTH WEBSTER AVENUE	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_pp_N_WEBSTER.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

ALLIANT ENERGY (GAS)
CHARTER COMMUNICATIONS
AT&T WISCONSIN
ALLIANT ENERGY (ELECTRIC)
STH 116
STA. 11+06 OA LT
CONST. P.E.
OMRO UTILITIES (WATER)
SLOPE INTERCEPT (TYP.)
EXISTING R/W
OMRO UTILITIES (SANITARY)
OAK ST
10+00 OA
+50
11+00 OA
+50
12+00 OA
END CONSTRUCTION
STA. 11+50.00 OA
STA. 11+29 OA RT
CONST. P.E.
TLE
A/C
N

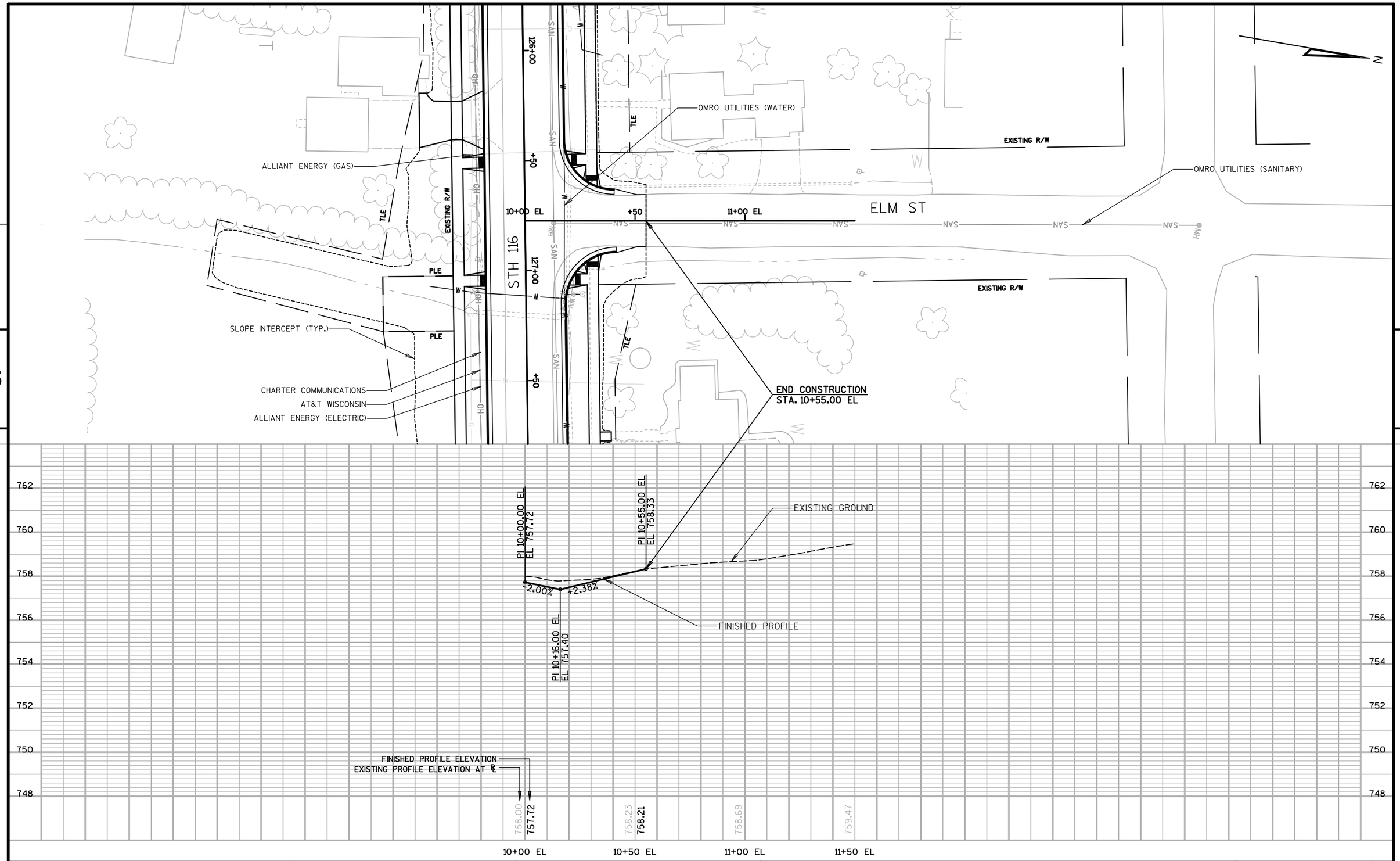
PI 10+00.00 OA
EL 758.50
PC 10+20.00 OA
EL 758.26
K = 26
L = 60'
PT 10+80.00 OA
EL 760.15
PI 11+20.00 OA
EL 761.87
EXISTING GROUND
+4.30%
+2.97%
FINISHED PROFILE
-2.00%
+2.00%
+4.30%
PI 10+16.00 OA
EL 758.18
PI 10+50.00 OA
EL 758.86
PC 10+90.00 OA
EL 760.58
PT 11+50.00 OA
EL 762.76
K = 45
L = 60'
SSD = 528'
FINISHED PROFILE ELEVATION
EXISTING PROFILE ELEVATION AT ℄

758.90	759.86	761.41	762.76	764.27
758.50	759.03	761.00	762.76	

766 764 762 760 758 756 754 752

10+00 OA 10+50 OA 11+00 OA 11+50 OA 12+00 OA

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE - OAK STREET	SHEET 150	E



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE - ELM STREET	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_pp_ELM.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

SLOPE INTERCEPT (TYP.)

ALLIANT ENERGY (ELECTRIC)
CHARTER COMMUNICATIONS
AT&T WISCONSIN
ALLIANT ENERGY (GAS)

OMRO UTILITIES (WATER)

STH 116

FLAG

EXISTING R/W

OMRO UTILITIES (SANITARY)

ASH ST

EXISTING R/W

EXISTING R/W

END CONSTRUCTION
STA. 10+54.00 AS

FINISHED PROFILE

PI 10+00.00 AS
El 757.84

PI 10+54.00 AS
El 758.56

-2.00%

+2.74%

PI 10+16.00 AS
El 757.52

EXISTING GROUND

FINISHED PROFILE ELEVATION
EXISTING PROFILE ELEVATION AT ℄

758.41 757.84 758.43 758.45 759.94 761.03

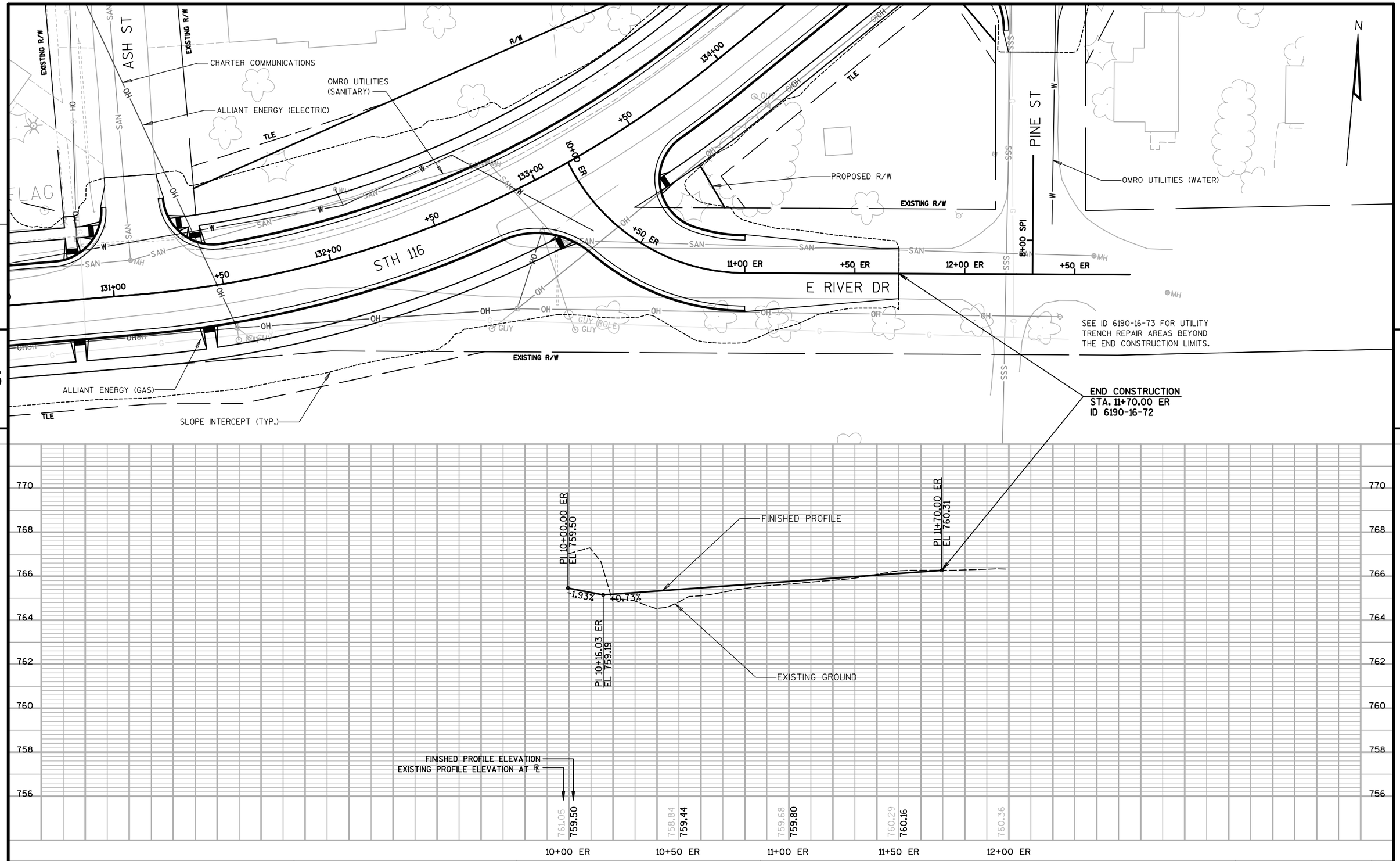
10+00 AS 10+50 AS 11+00 AS 11+50 AS

764 762 760 758 756 754 752 750

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE - ASH STREET	SHEET	E

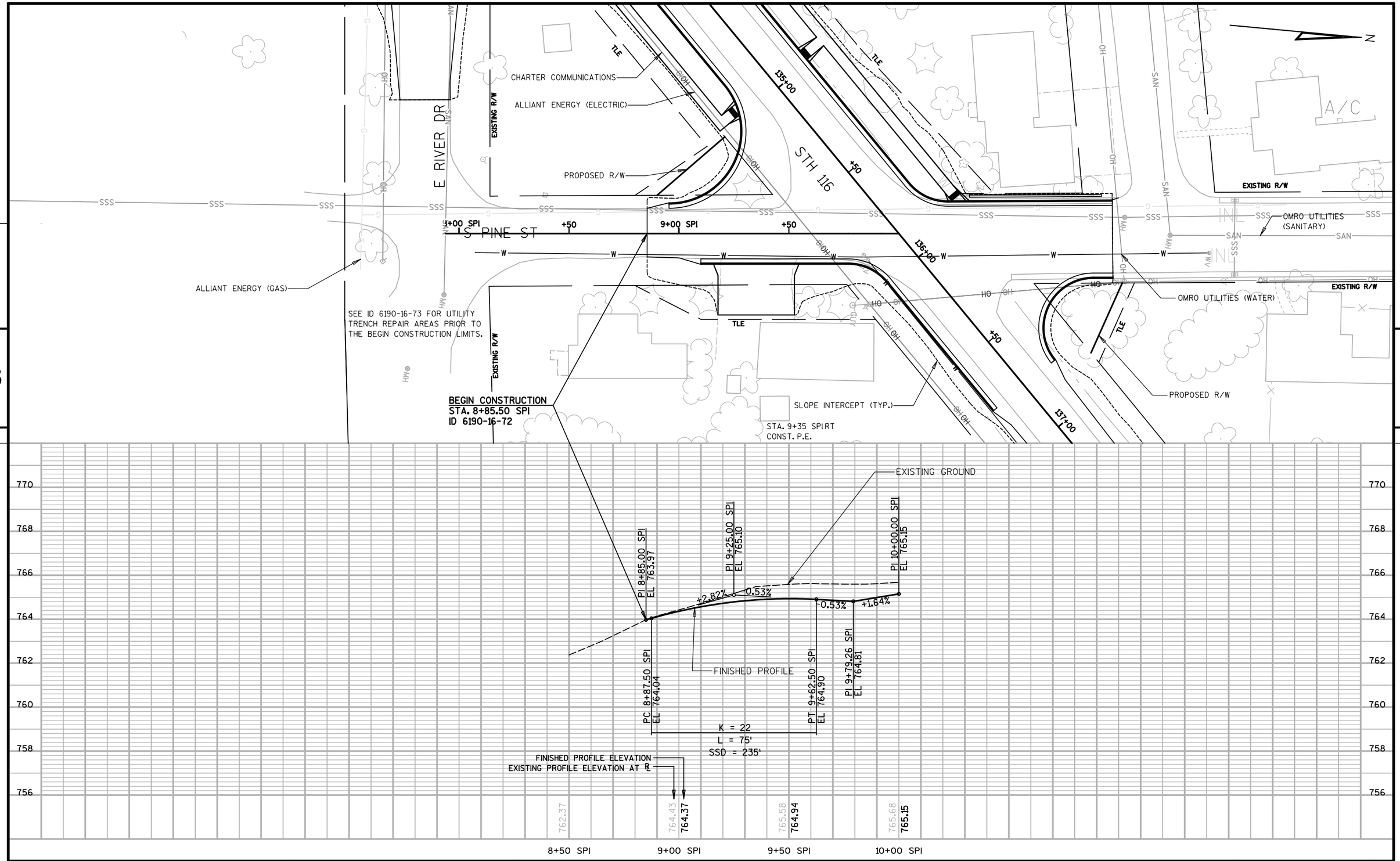
FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_pp_ASH.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 40



PROJECT NO: 6190-16-72/73	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE - EAST RIVER DRIVE	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_pp_ERIVER.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 40



PROJECT NO: 6190-16-72/73	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE - SOUTH PINE STREET	SHEET 154	E

STA. 10+29NPI - STA. 10+90NPILT
CONST. WALL MODULAR BLOCK GRAVITY LRFD

N

E RIVER DR

STH 116

N PINE ST

A/C

CHARTER COMMUNICATIONS

ALLIANT ENERGY (ELECTRIC)

ALLIANT ENERGY (GAS)

PROPOSED R/W

EXISTING R/W

OMRO UTILITIES (SANITARY)

OMRO UTILITIES (WATER)

TLE

8+00 SPI

10+00 NPI

11+00 NPI

+50

135+00

137+00

SLOPE INTERCEPT (TYP.)

END CONSTRUCTION
STA. 10+95.00 NPI

5

5

PI 10+00.00 NPI
EL 765.19

PI 10+20.65 NPI
EL 765.19

PI 10+95.00 NPI
EL 766.62

EXISTING GROUND

+0.00%

+1.93%

FINISHED PROFILE

770
768
766
764
762
760
758
756

FINISHED PROFILE ELEVATION
EXISTING PROFILE ELEVATION AT ℄

765.73
765.19

766.00
765.76

766.69

767.36

10+00 NPI
10+50 NPI
11+00 NPI
11+50 NPI

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE - NORTH PINE STREET	SHEET 155	E

AT&T WISCONSIN
PROPOSED R/W
SLOPE INTERCEPT (TYP.)
EXISTING R/W
STH 116
FOX TRL
HAWTHORNE DR
STA. 12+50 FO LT
CONST. P.E.
AT&T WISCONSIN
ALLIANT ENERGY (GAS)
OMRO UTILITIES (SANITARY)
EXISTING R/W
PROPOSED R/W
OMRO UTILITIES (SANITARY)
ALLIANT ENERGY (ELECTRIC)
CHARTER COMMUNICATIONS
ALLIANT ENERGY (ELECTRIC)
OMRO UTILITIES (WATER)
BEGIN CONSTRUCTION
STA. 11+00.00 FO
STA. 11+81.48 FO
REMOVE EXIST. 15" CMCP
END CONSTRUCTION
STA. 13+47.00 FO
N

PI 11+37.50 FO
EL 784.90
PI 12+16.61 FO
EL 785.63
PI 12+62.00 FO
EL 785.40
FINISHED PROFILE
+0.50%
-0.80%
-0.80%
-0.50%
-5.47%
PI 13+47.00 FO
EL 780.75
EXISTING GROUND
PC 11+00.00 FO
EL 784.71
PT 11+75.00 FO
EL 784.60
PI 11+94.59 FO
EL 784.44
PC 12+17.00 FO
EL 785.63
PT 13+07.00 FO
EL 782.94
K = 58
L = 75'
SSD = 547'
STA. 11+61.65 FO
1 - 18" CP REQ'D
SKEW 13°36'57" LHF
1 - MANHOLE 4-FT
DIAMETER REQ'D
(SEE STORM SEWER PLANS)
K = 18
L = 90'
SSD = 179'
FINISHED PROFILE ELEVATION
EXISTING PROFILE ELEVATION AT ℄

788 786 784 782 780 778 776 774

783.96 784.47 784.71 784.71 784.60 784.74 784.60 784.71 784.55 785.16 783.05 783.31 780.60 777.71

10+00 FO | 10+50 FO | 11+00 FO | 11+50 FO | 12+00 FO | 12+50 FO | 13+00 FO | 13+50 FO | 14+00 FO

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE - FOX TRAIL / HAWTHORNE DRIVE	SHEET 156	E

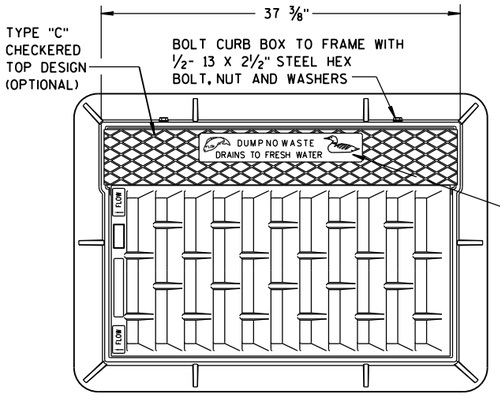
FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_pp_FOX.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 40

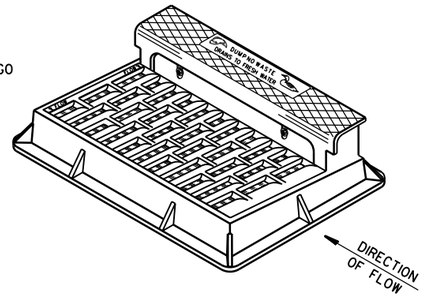
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-02	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08A09-02	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-02	INLETS MEDIAN 1 AND 2 GRATE
08D01-19	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-18A	CURB RAMPS TYPES 1 AND 1-A
08D05-18B	CURB RAMPS TYPES 2 AND 3
08D05-18C	CURB RAMPS TYPES 4A AND 4A1
08D05-18D	CURB RAMPS TYPE 4B AND 4B1
08D05-18E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E11-02	TURBIDITY BARRIER
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09E01-14B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-05	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09F08-04	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)
13B02-08A	CONCRETE PAVEMENT APPROACH SLAB
14A02-01	TREE PLANTING DETAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-04A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-13B	PAVEMENT MARKING WORDS
15C07-13C	PAVEMENT MARKING ARROWS
15C07-13E	PAVEMENT MARKING FOR BIKE LANES
15C08-17A	LONGITUDINAL MARKING (MAINLINE)
15C08-17B	PAVEMENT MARKING (TURN LANES)
15C18-03	MEDIAN ISLAND MARKING
15C29-05A	BICYCLE LANE MARKING
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-01A	PAVEMENT MARKING (INTERSECTIONS)
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D30-03A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-03B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-03C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D39-01	TRAFFIC CONTROL, DROP-OFF SIGNING

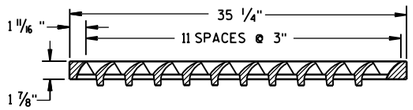
6

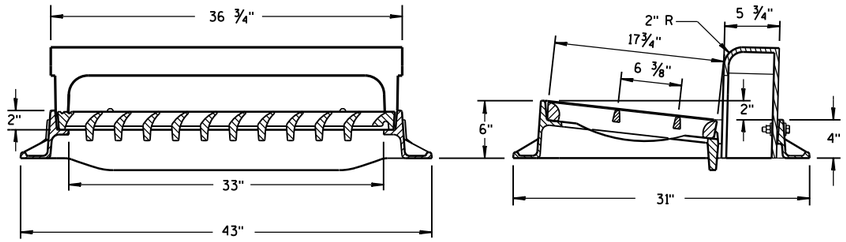


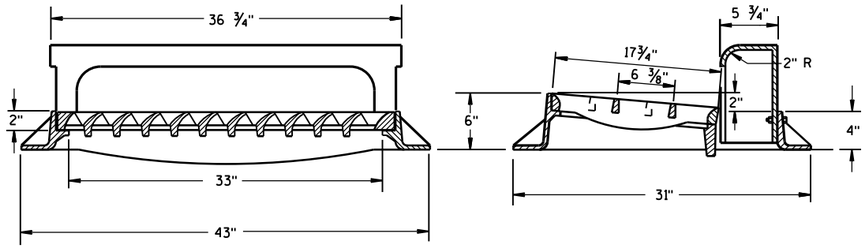
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

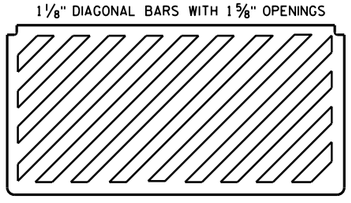






TYPE "H"

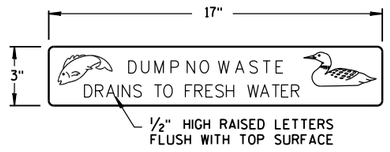
NOTE: EITHER CASTING IS ACCEPTABLE



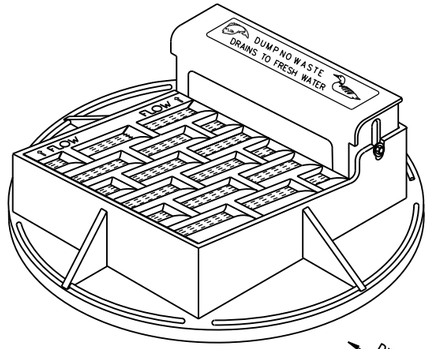
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

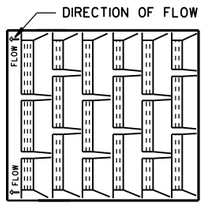
NOTE:
GRATE IS REVERSIBLE.

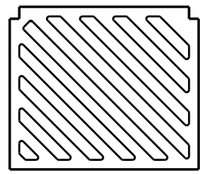
GENERAL NOTES

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.

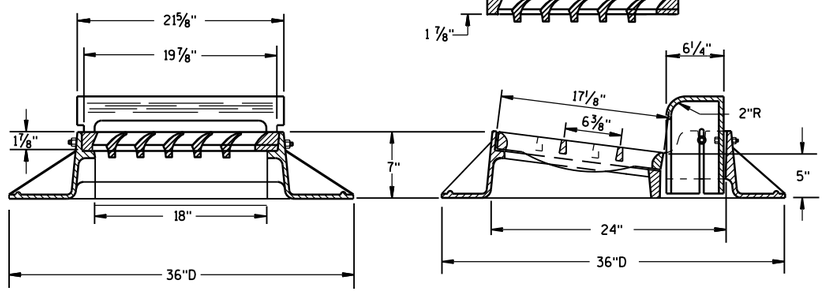




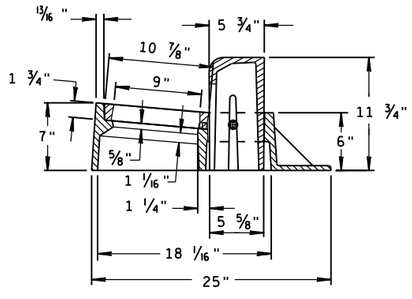
SPECIAL GRATE FOR TYPE "A" COVER

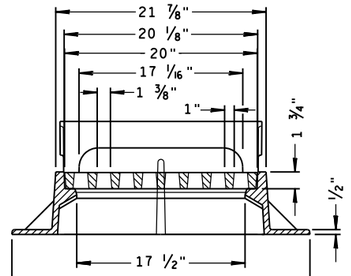
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

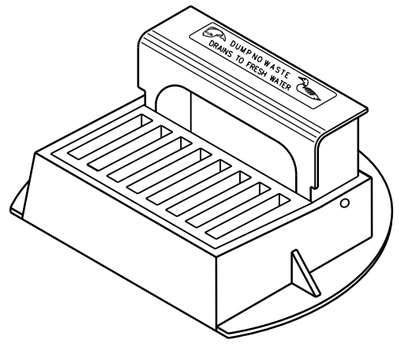


TYPE "A"





TYPE "Z"



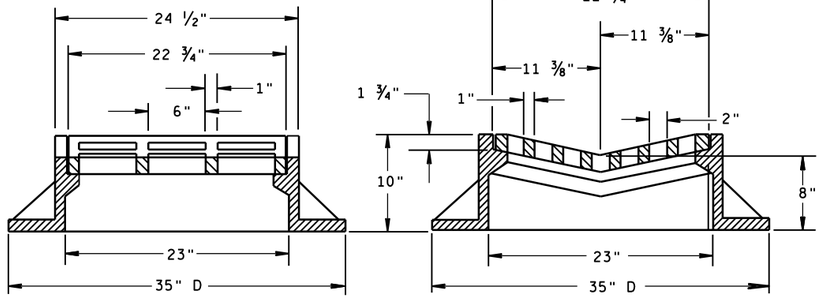
INLET COVERS
TYPE A, H, A-S, H-S & Z

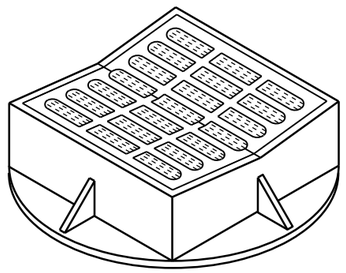
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

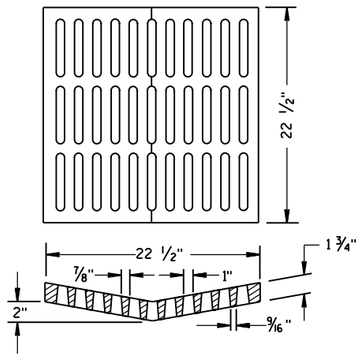
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S.D.D. 8 A 5-19a



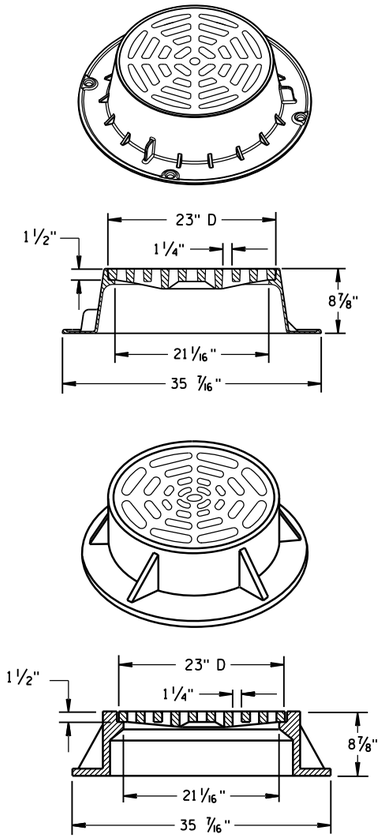


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

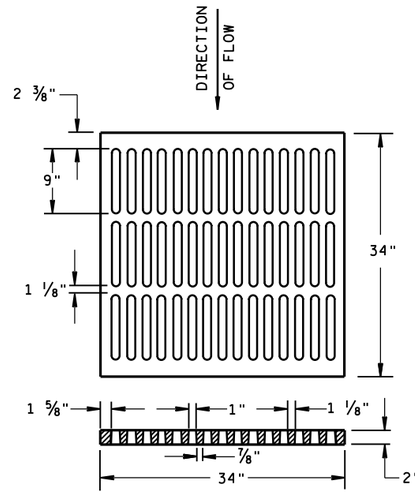
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

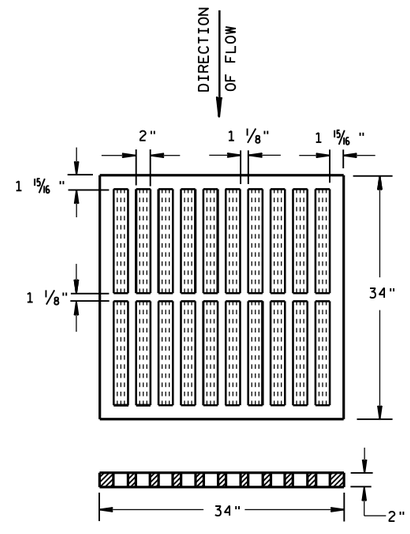
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



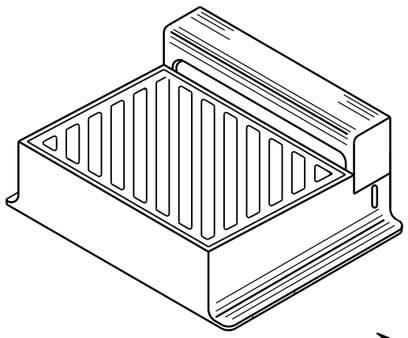
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

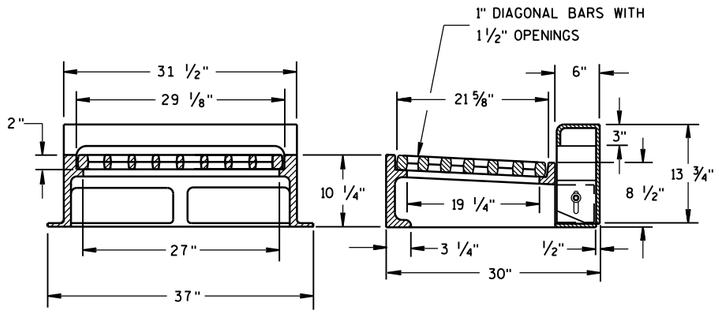


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



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



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

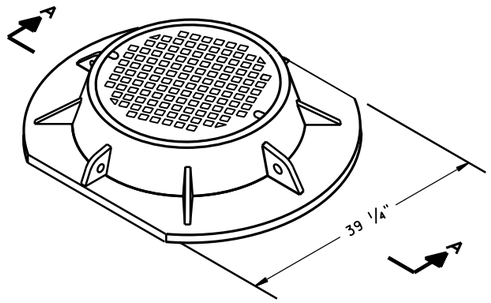
INLET COVERS
TYPE B, B-A, C, MS, MS-A, & WM

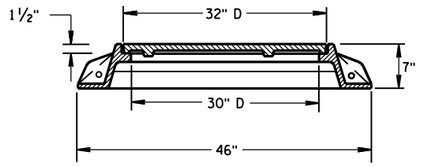
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

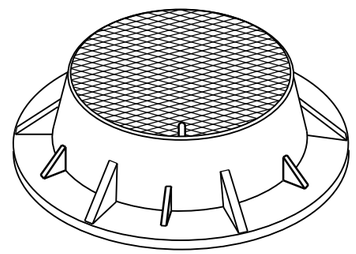
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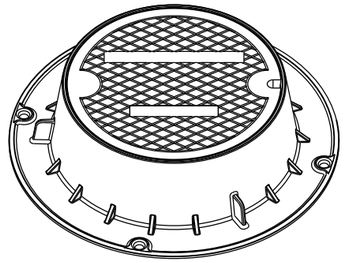
S.D.D. 8 A 5-19b

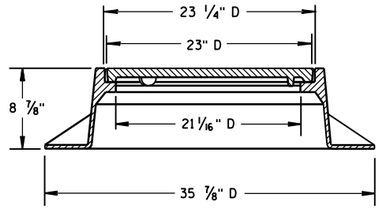


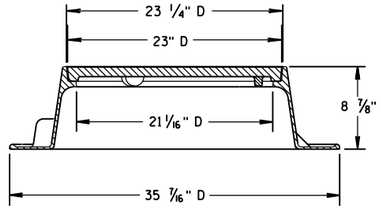


SECTION A-A
TYPE "K"









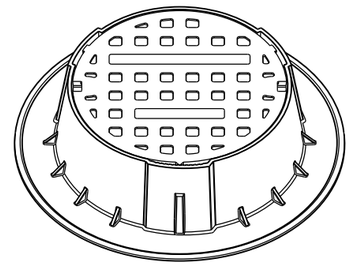
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

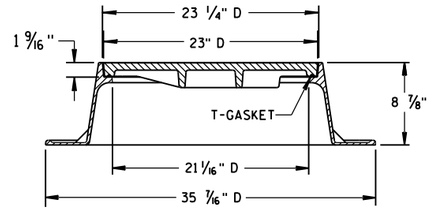
GENERAL NOTES

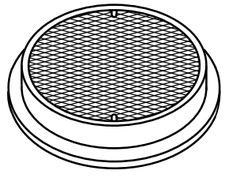
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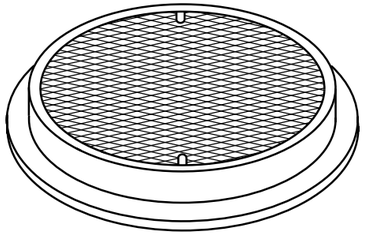
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

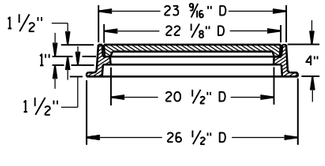
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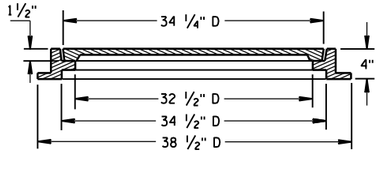




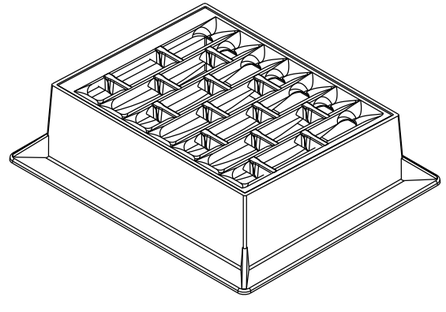


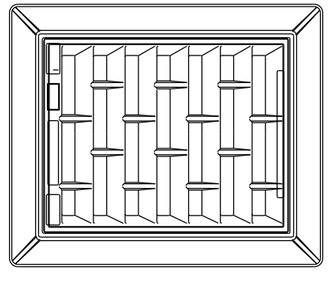


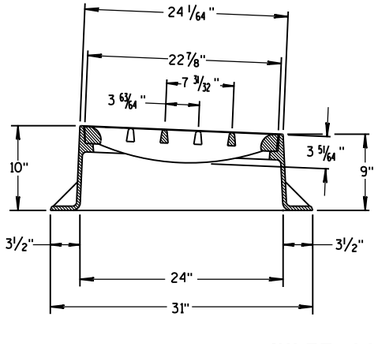
TYPE "L"

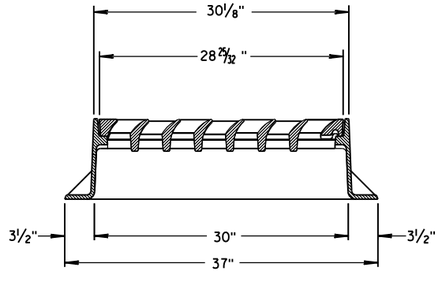


TYPE "M"

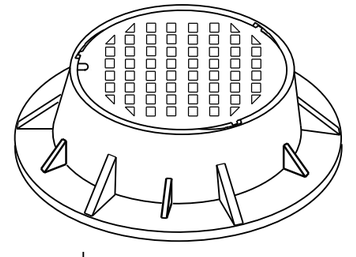


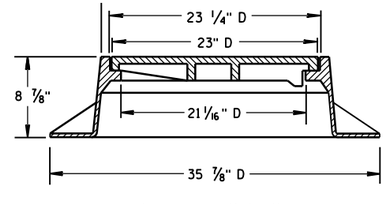






INLET COVER TYPE "BW"





TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

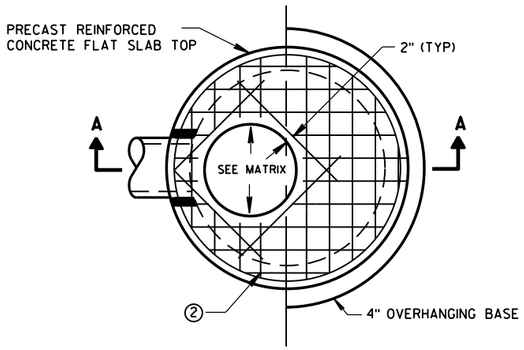
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

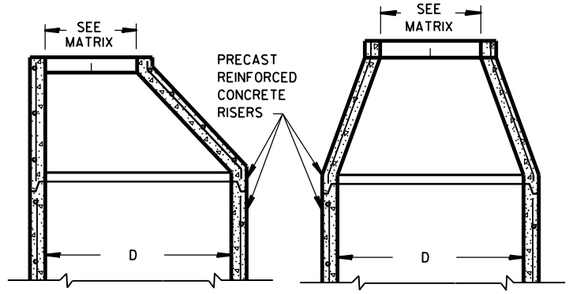
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

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

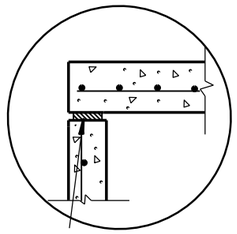


PLAN VIEW CIRCULAR OPENING

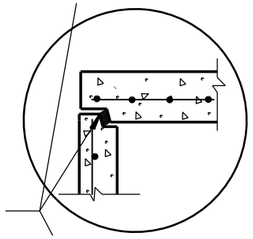


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

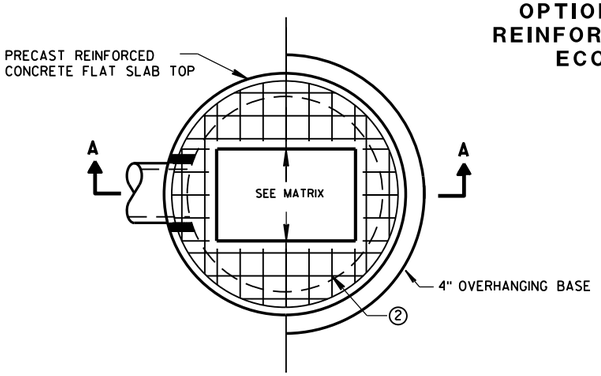
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



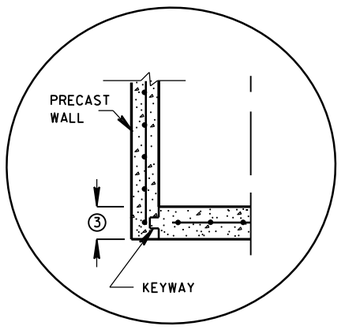
TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT

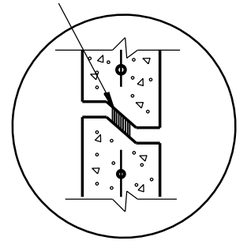


PLAN VIEW RECTANGULAR OPENING



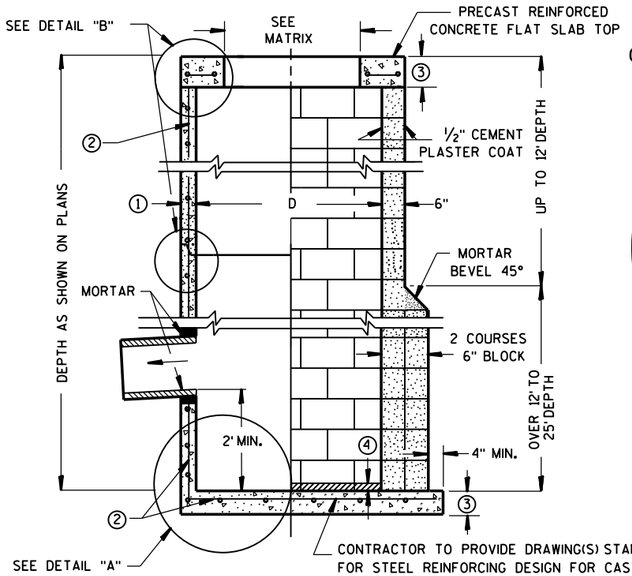
PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

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



RISER WITH TONGUE AND GROOVE JOINT

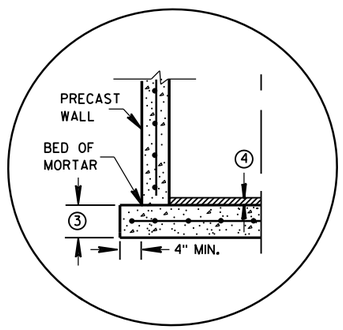
DETAIL "B"



SECTION A-A

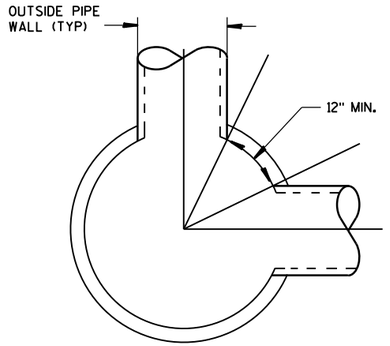
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

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

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

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

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

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND 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 INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

CONCRETE BLOCK WILL NOT BE PERMITED 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 "C".

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

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

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

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT)											
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT-6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

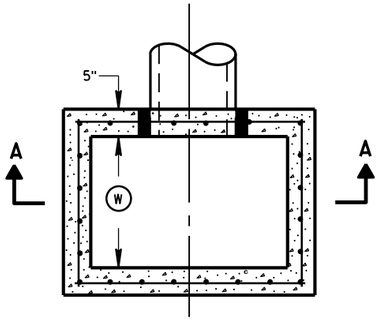
PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

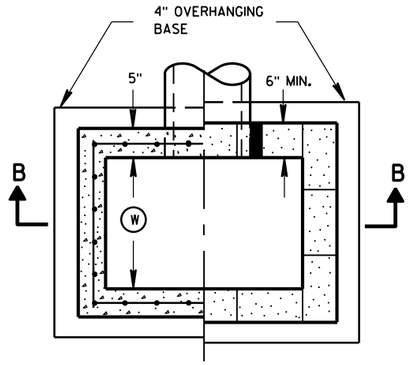
CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

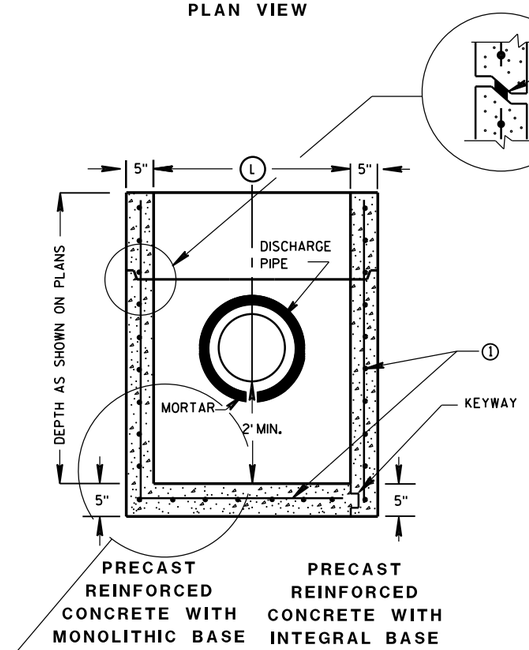
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/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVI
FHWA



PLAN VIEW



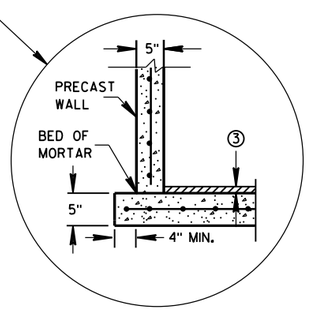
PLAN VIEW



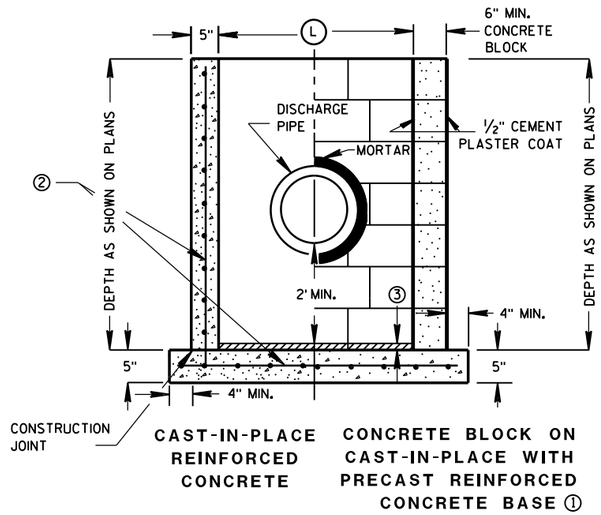
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

SECTION A-A



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



CAST-IN-PLACE REINFORCED CONCRETE

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

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 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.

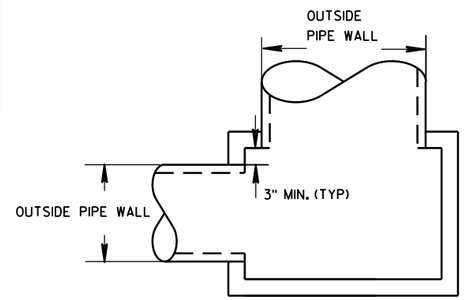
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

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

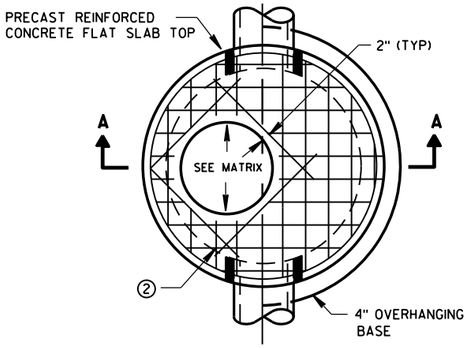


DETAIL "A"

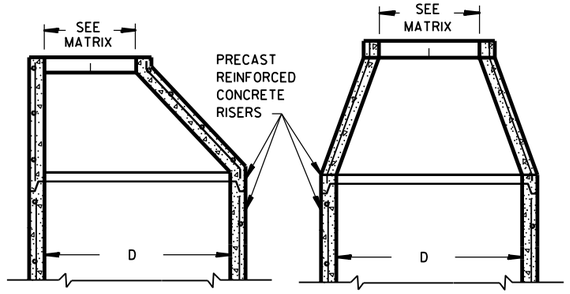
CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

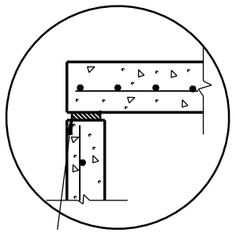


PLAN VIEW CIRCULAR OPENING

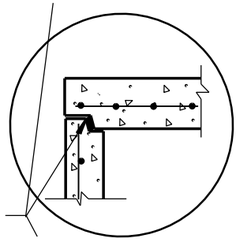


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

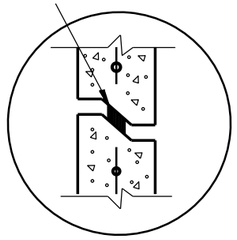


TOP WITH PLAIN END JOINT



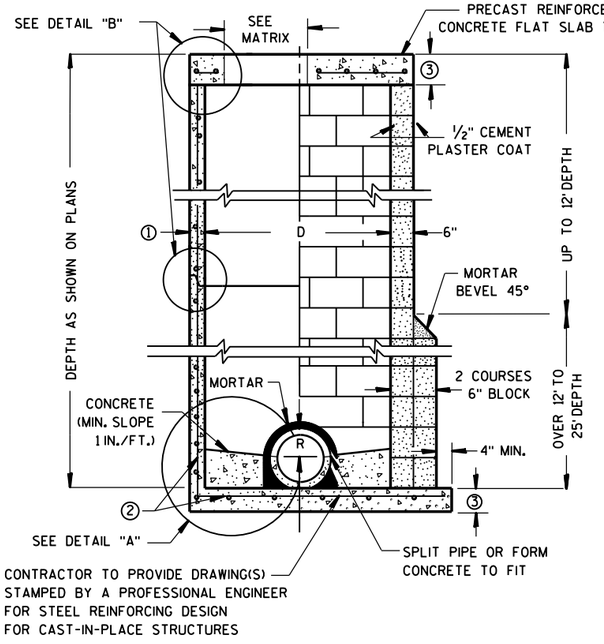
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



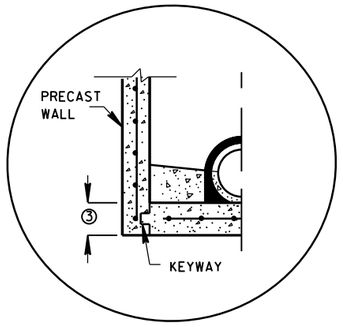
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

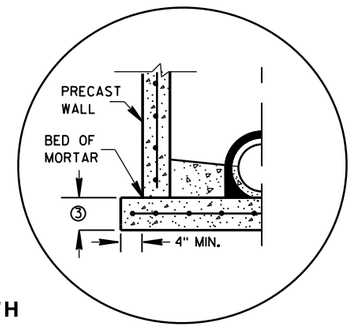


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

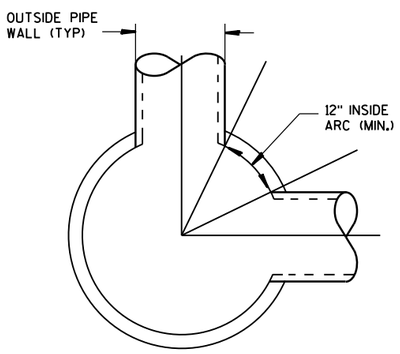


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

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

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

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

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

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND 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" 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.

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

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

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 "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

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

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

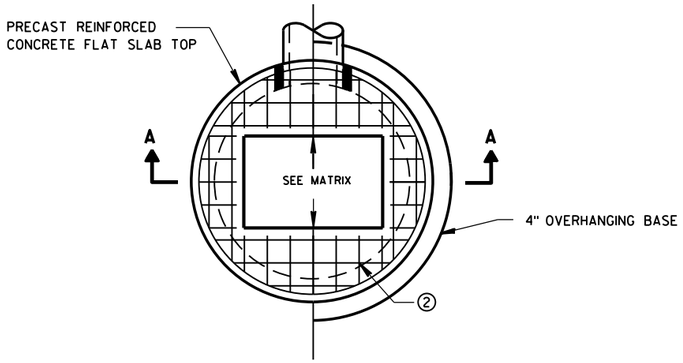
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Sept., 2016
DATE

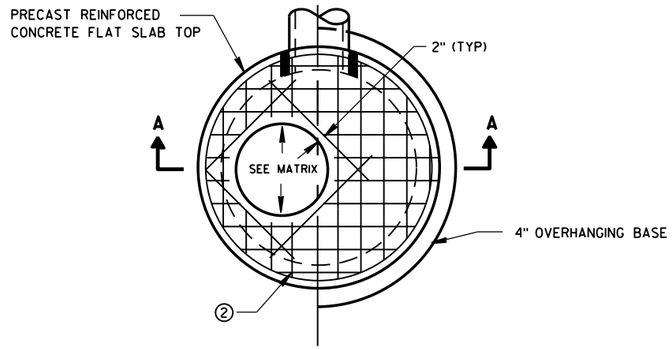
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

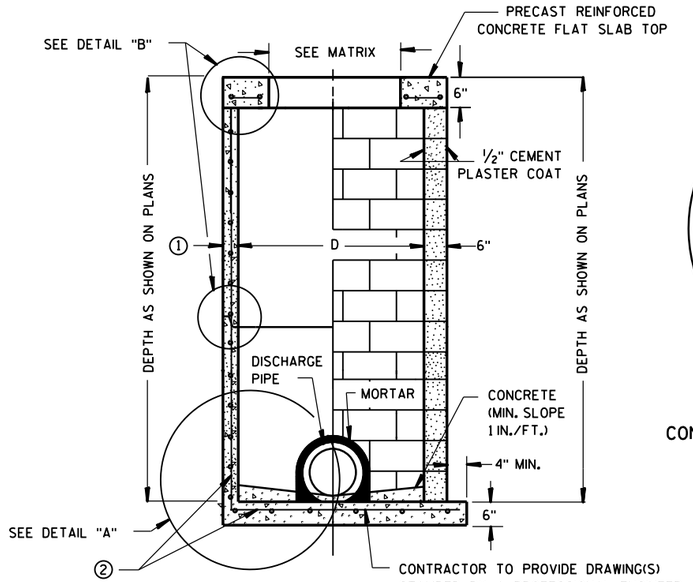
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PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

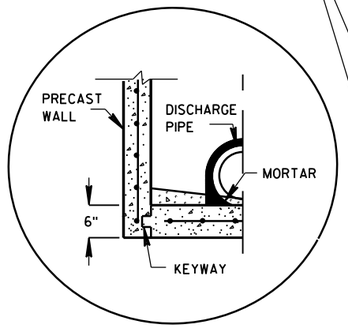


SECTION A-A

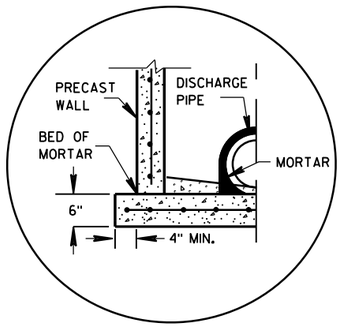
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

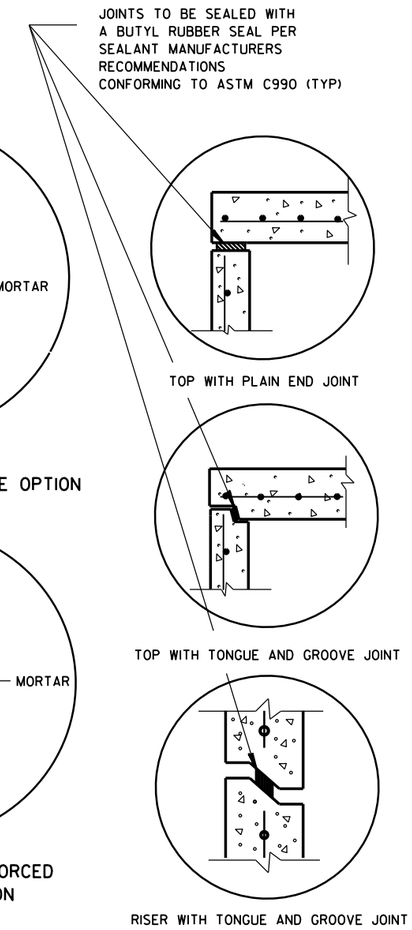


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



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

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

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

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

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

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

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

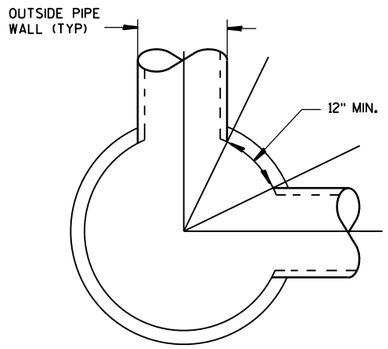
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

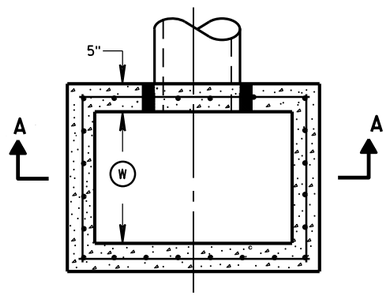
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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Sept.. 2016 — DATE
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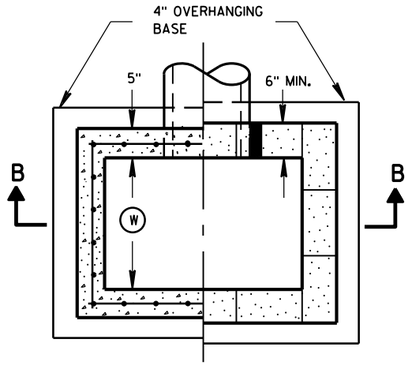
INLETS 3-FT AND 4-FT DIAMETER

6

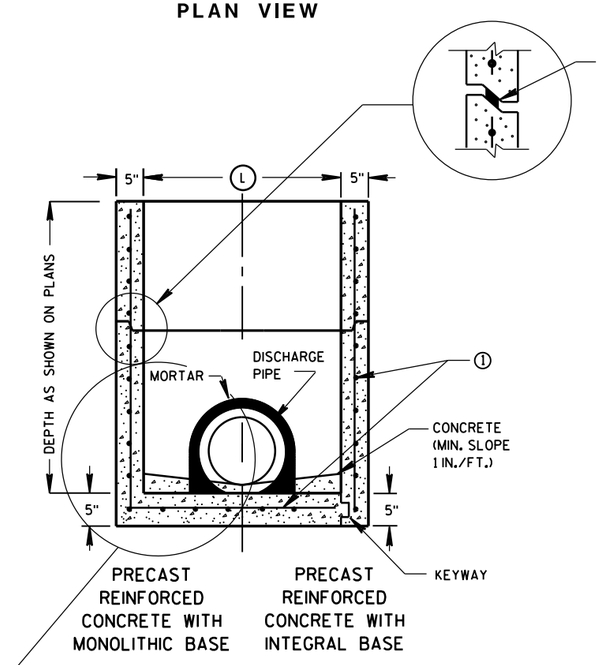
S.D.D. 8 C 6-2



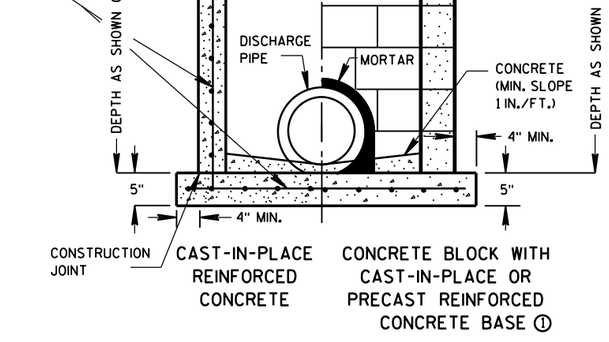
PLAN VIEW



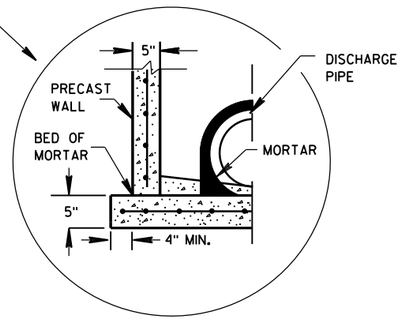
PLAN VIEW



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.

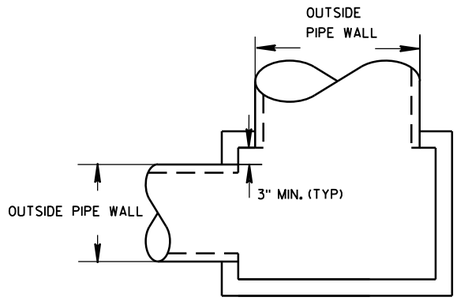
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (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



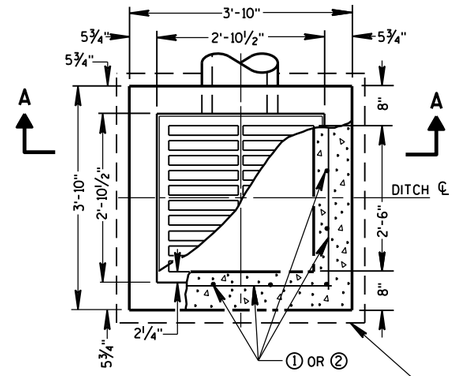
DETAIL "A"

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

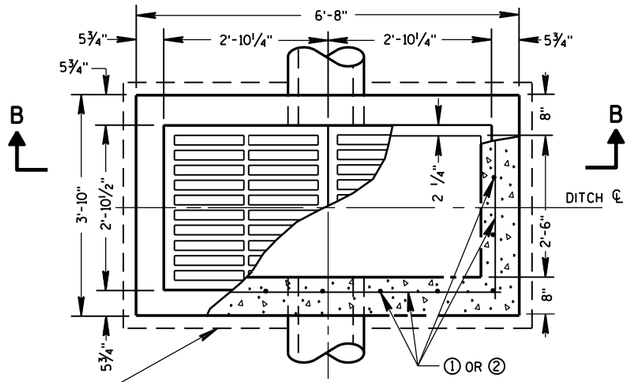
STATE OF WISCONSIN
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Sept., 2016
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ROADWAY STANDARDS D IT
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FHWA

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

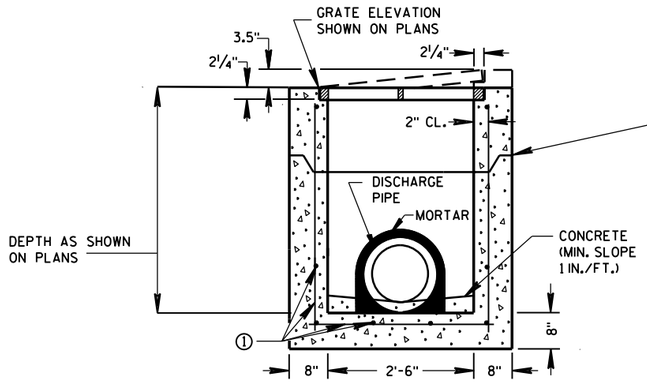


PLAN VIEW

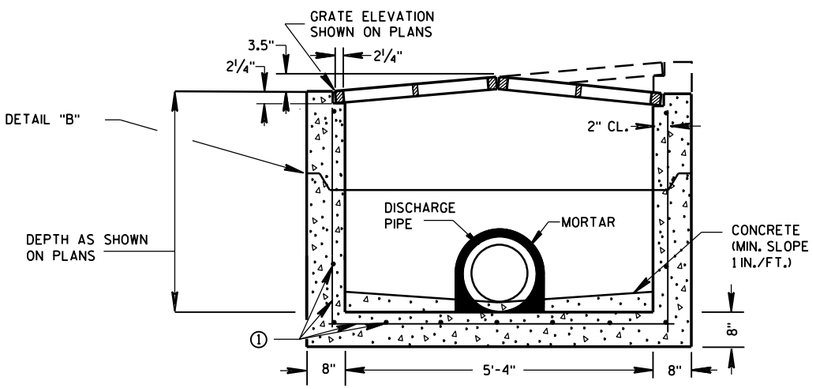


PLAN VIEW

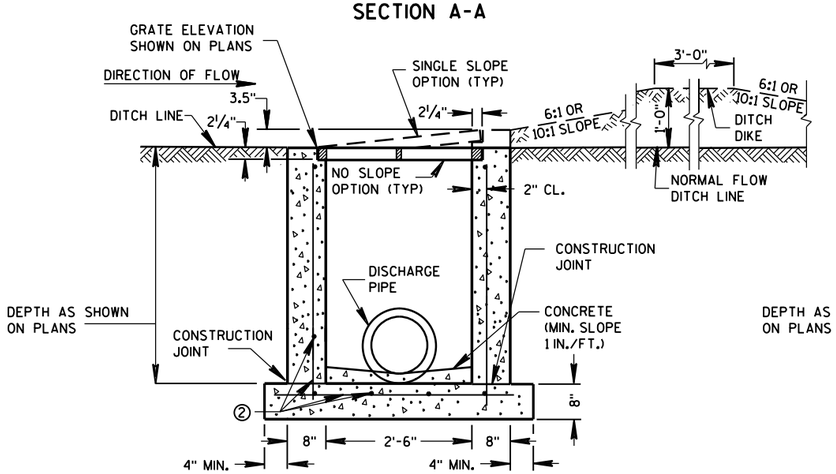
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



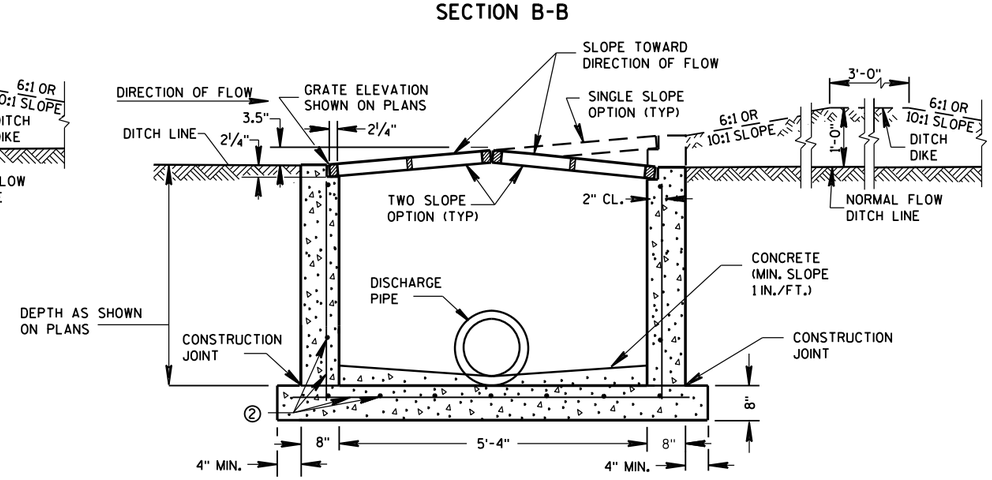
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

GENERAL NOTES

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

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

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

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

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

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

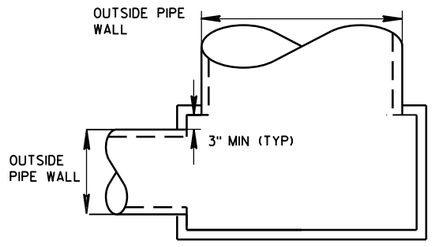
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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

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

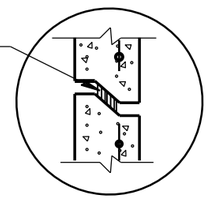
PIPE MATRIX

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



DETAIL "A"

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



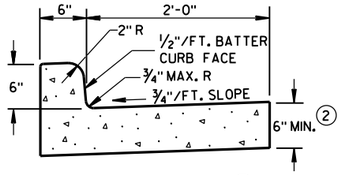
DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

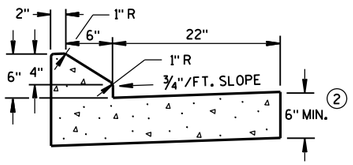
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FHWA

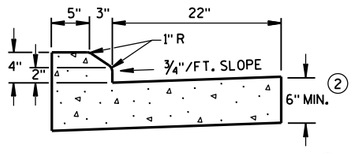
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S.D.D. 8 C 8-2



TYPES A & D ①

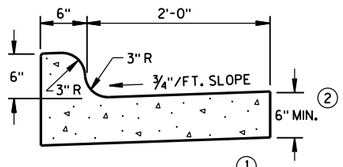


6" SLOPED CURB TYPES G & J ①

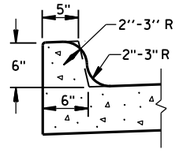


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

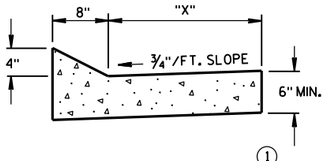


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

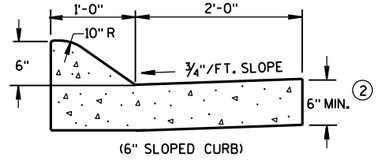
CONCRETE CURB & GUTTER 30"



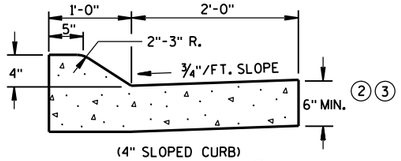
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

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

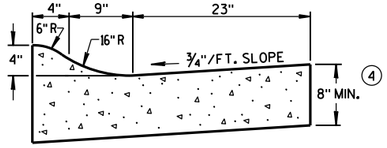


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ①⑤

CONCRETE CURB & GUTTER 36"

GENERAL NOTES

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

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

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

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

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

① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, C, K, R AND TBTT.

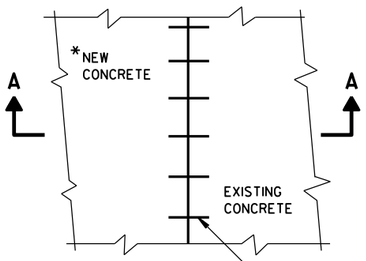
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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.

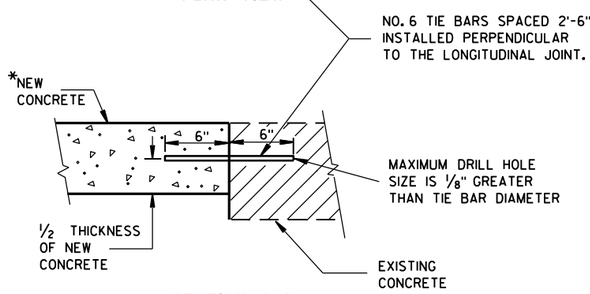
⑤ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

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



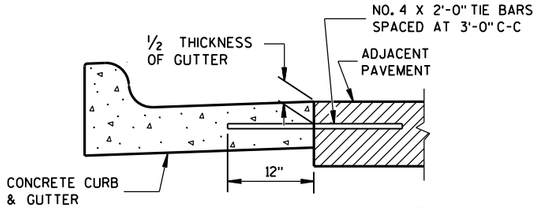
PLAN VIEW

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

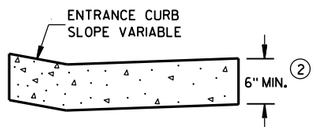


SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT

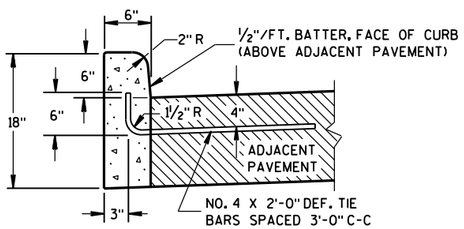


TYPICAL TIE BAR LOCATION ①

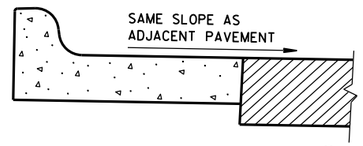


DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)

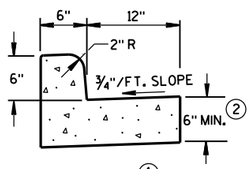


① TYPES A & D



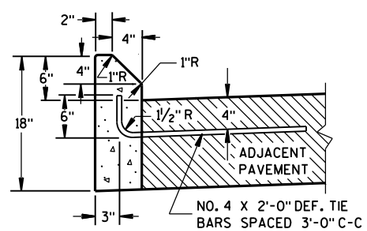
⑥ REVERSE SLOPE GUTTER

(TYPICAL FOR ALL CURB & GUTTER TYPES)



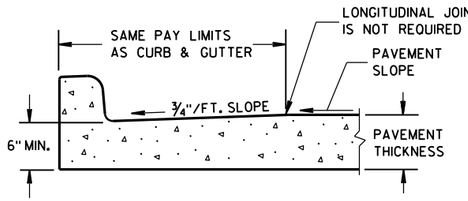
① TYPES A & D

CONCRETE CURB & GUTTER 18"

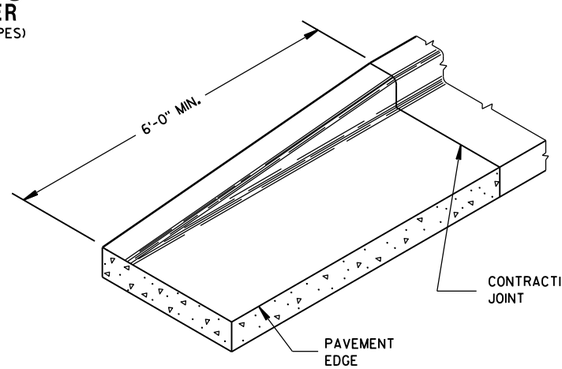


① TYPES G & J

CONCRETE CURB



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

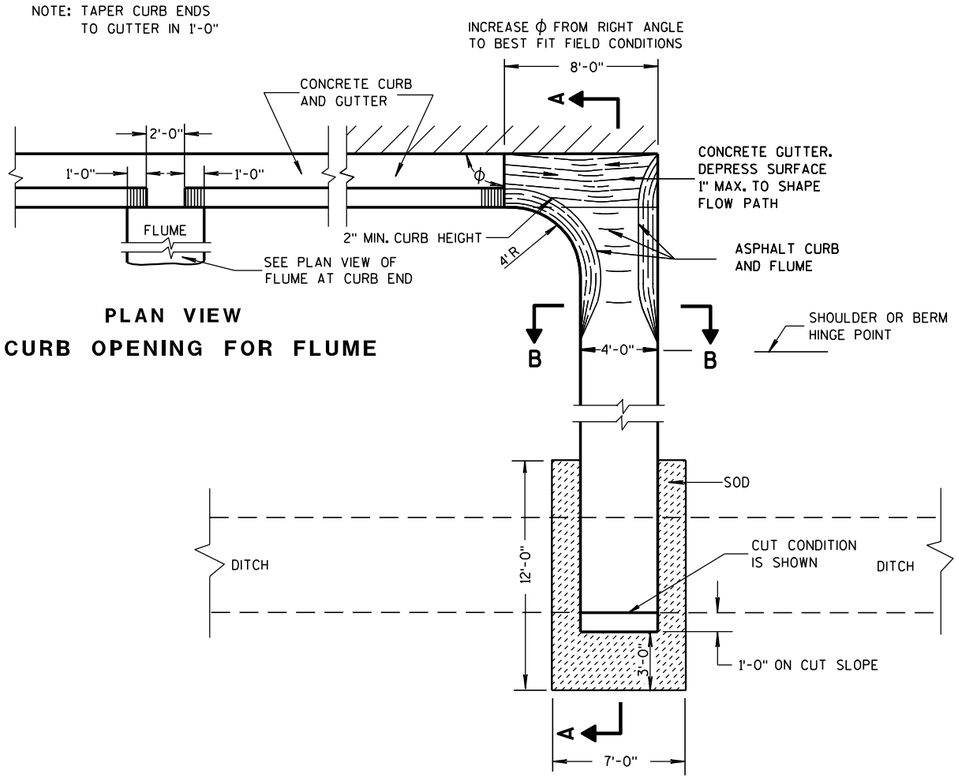
STATE OF WISCONSIN
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June, 2016 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

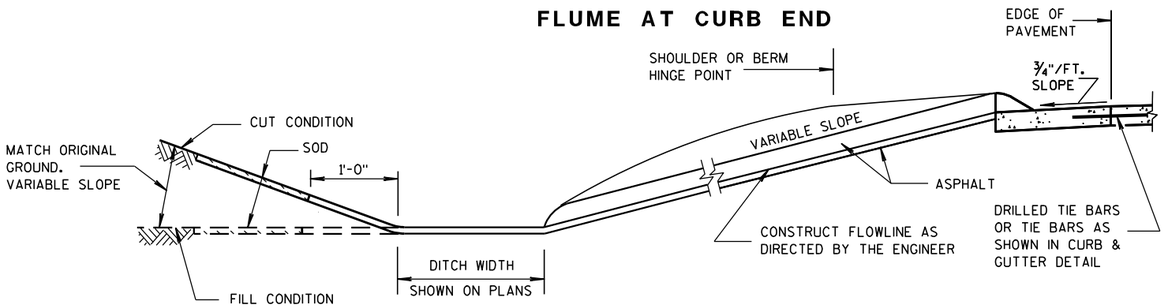
S.D.D. 8 D 1-19

ASPHALTIC FLUME

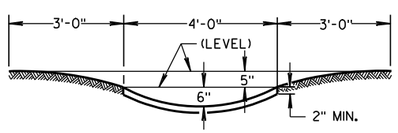


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

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.

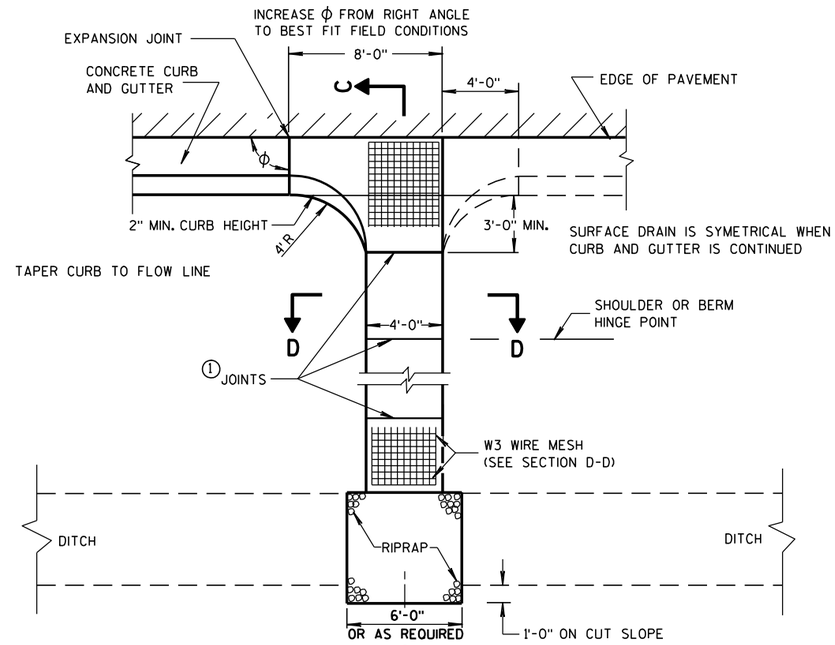
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

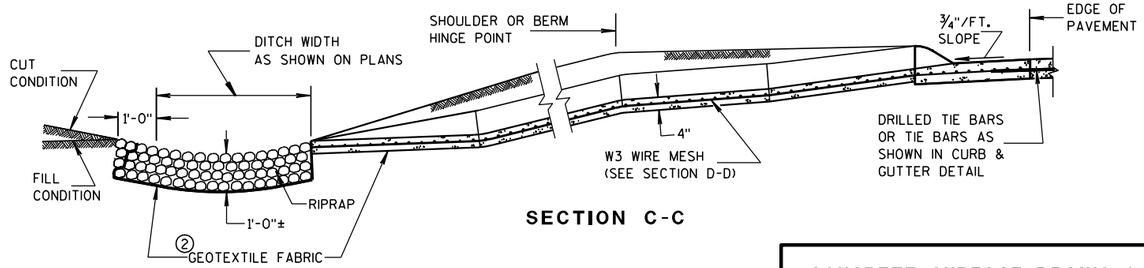
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

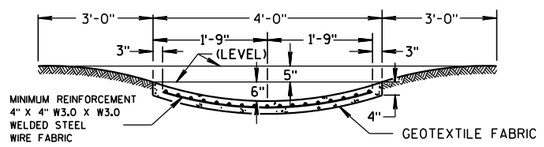
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



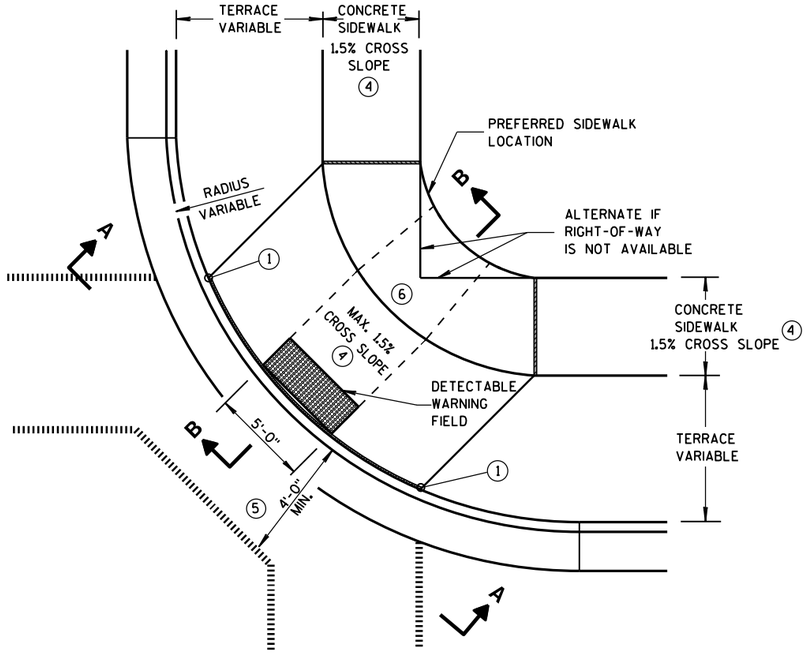
SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
MENT
FHWA

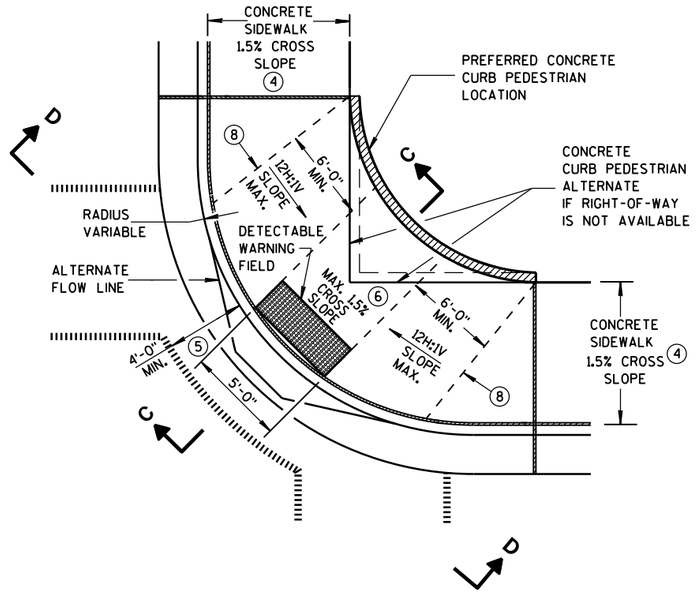
6
S.D.D. 8 D 4-5



PLAN VIEW

TYPE 1 RAMP

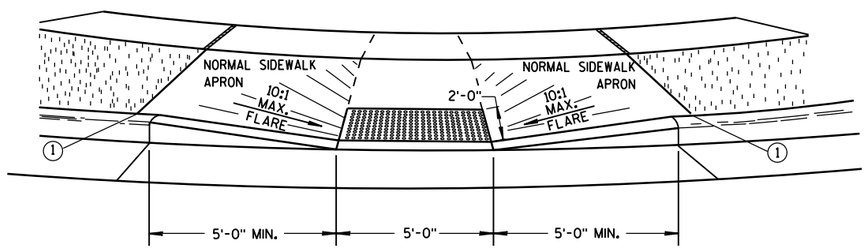
(CENTER OF CORNER RADIUS)



PLAN VIEW

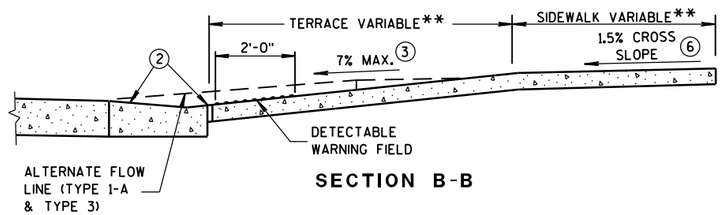
TYPE 1-A RAMP

(NO TERRACE)

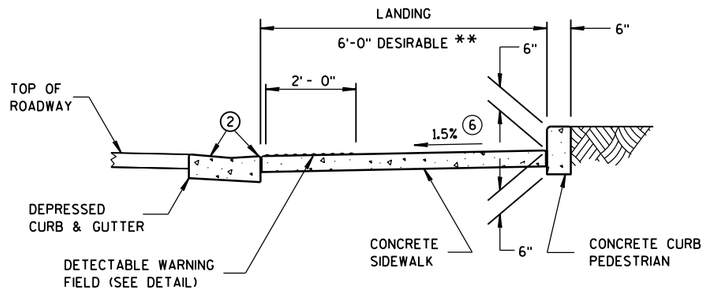


VIEW A-A

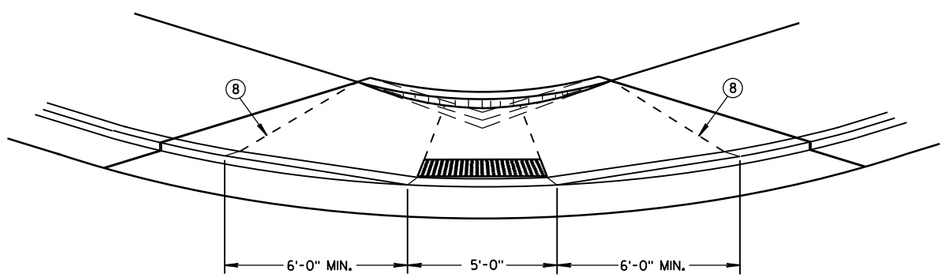
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



SECTION C-C



VIEW D-D

GENERAL NOTES

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

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

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

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

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

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

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

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. 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 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

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

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

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

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

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

LEGEND

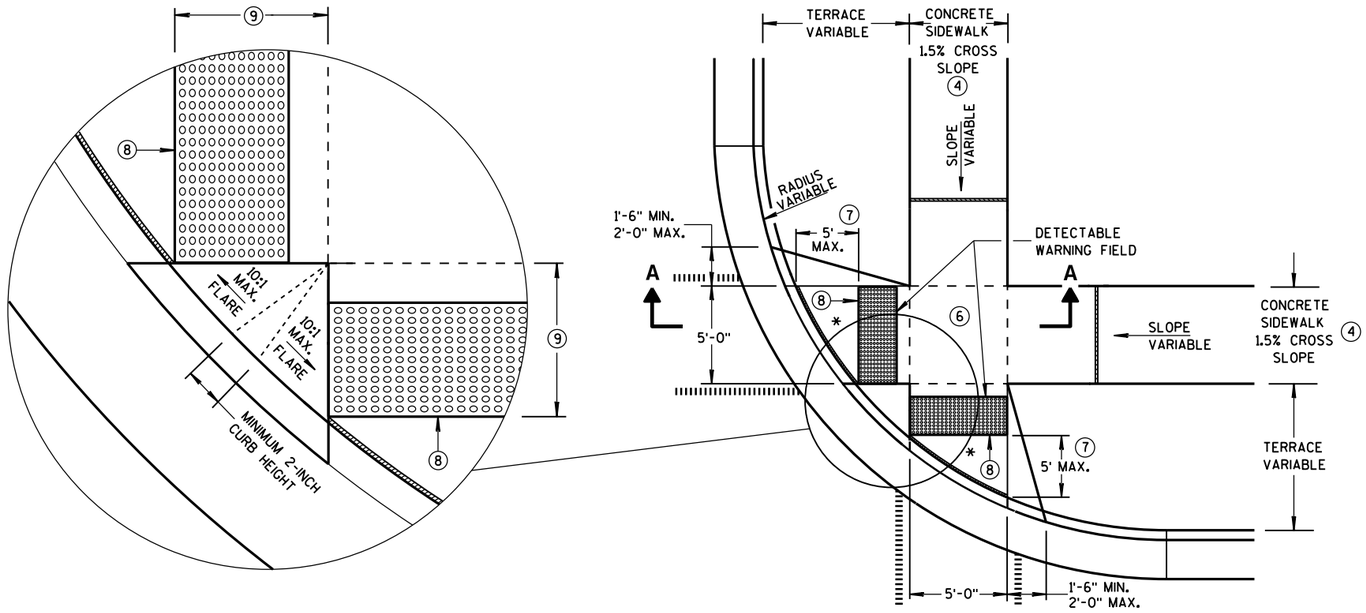
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 8 D 5-18a

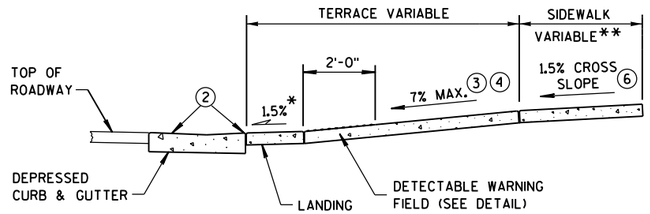


PLAN VIEW

TYPE 2 RAMP

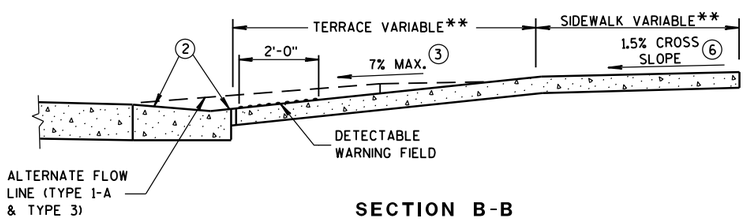
(ON LINE WITH SIDEWALK)

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



SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B

GENERAL NOTES

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 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

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

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

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

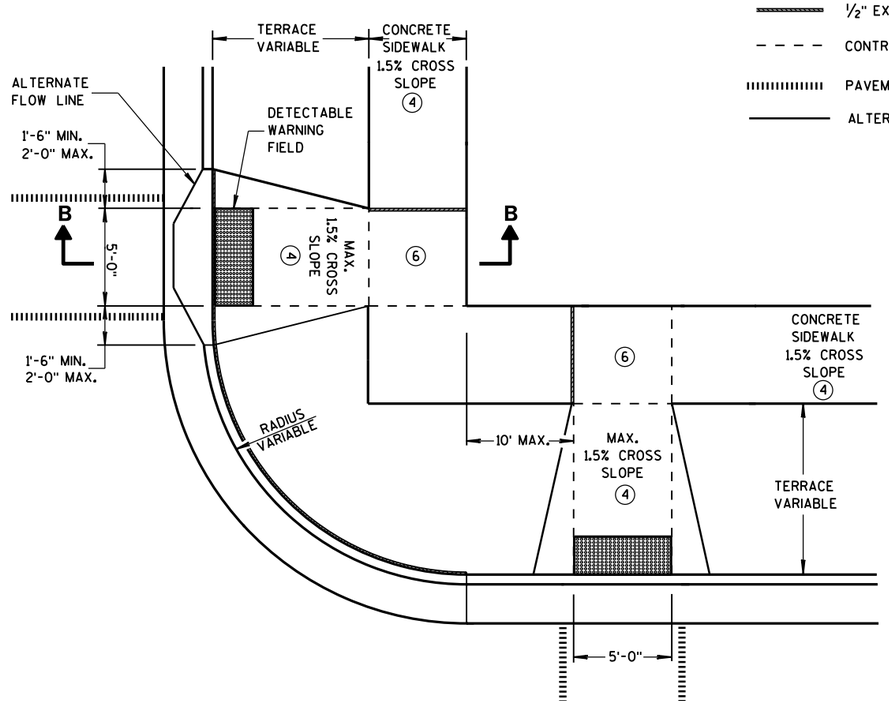
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

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

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

LEGEND

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



PLAN VIEW

TYPE 3 RAMP

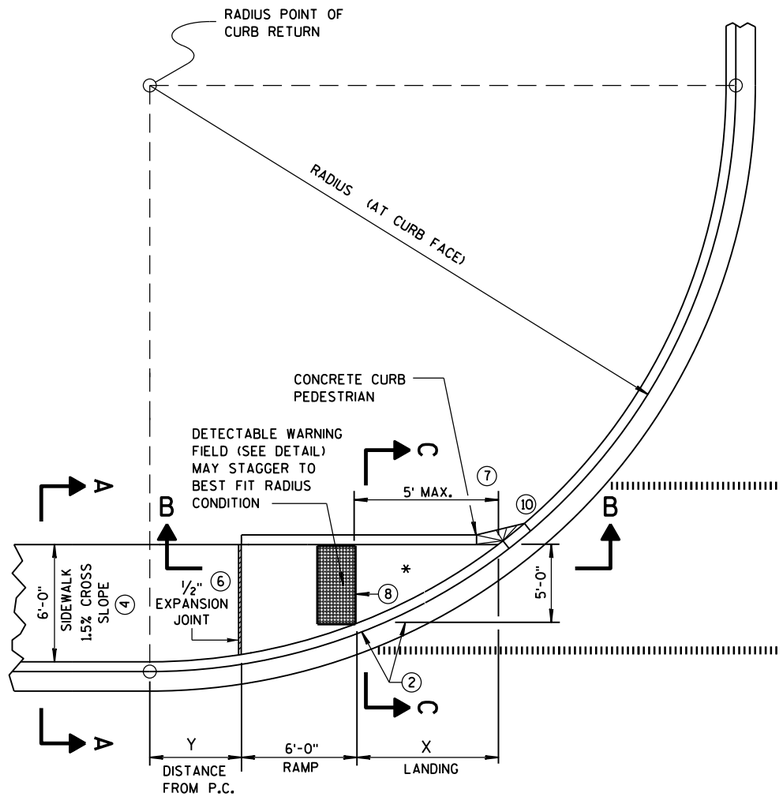
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

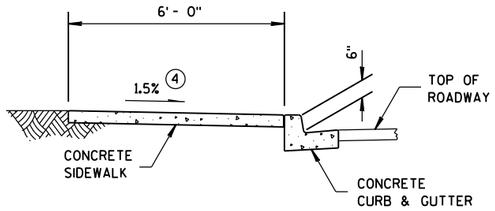
S.D.D. 8 D 5-18b



CURB RAMP TYPE 4A
PLAN VIEW

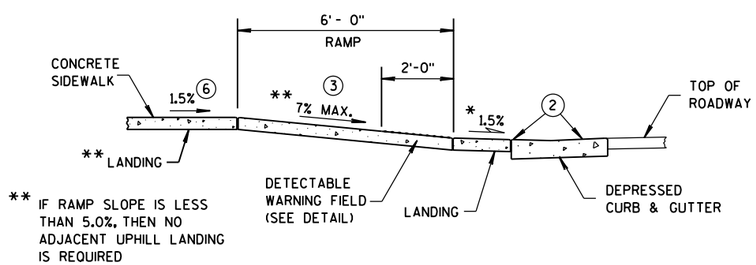
RADIUS (AT CURB FACE)	X	Y
20 FEET	7'-11"	0'-2"
30 FEET	10'-2¾"	1'-7½"
40 FEET	12'-1¼"	2'-10"
50 FEET	13'-8¾"	3'-10¾"
60 FEET	15'-2"	4'-10¼"

INTERMEDIATE RADII CAN BE INTERPOLATED

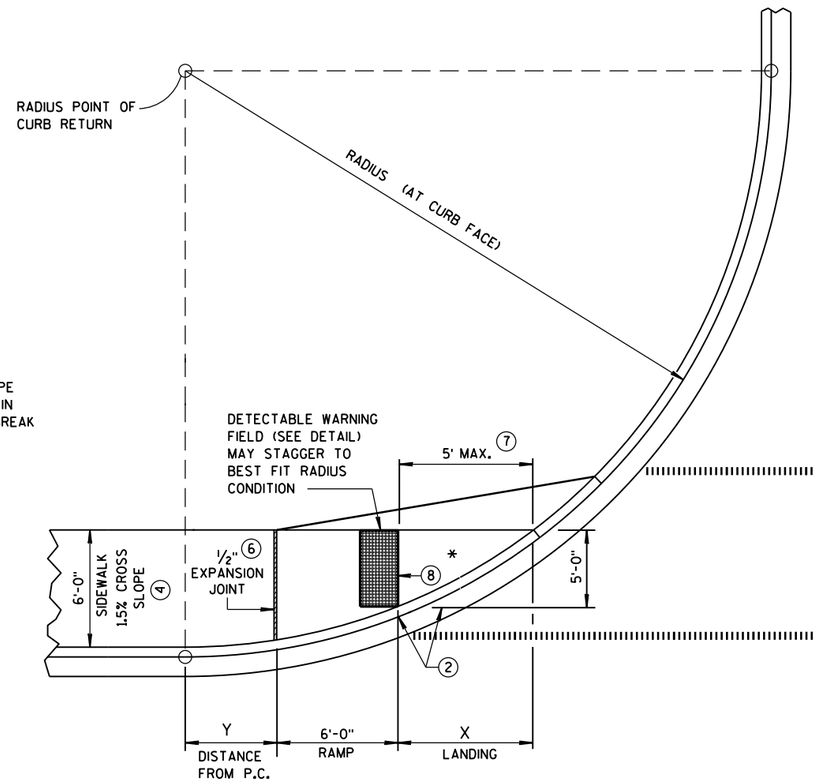


SECTION A-A FOR TYPE 4A

SECTION C-C FOR TYPE 4A



SECTION B-B FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW

GENERAL NOTES

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

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

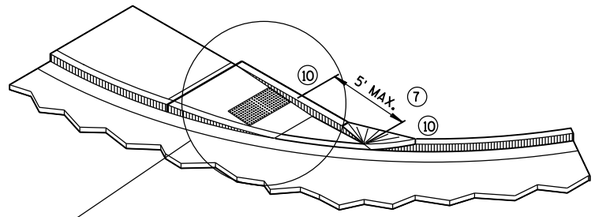
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

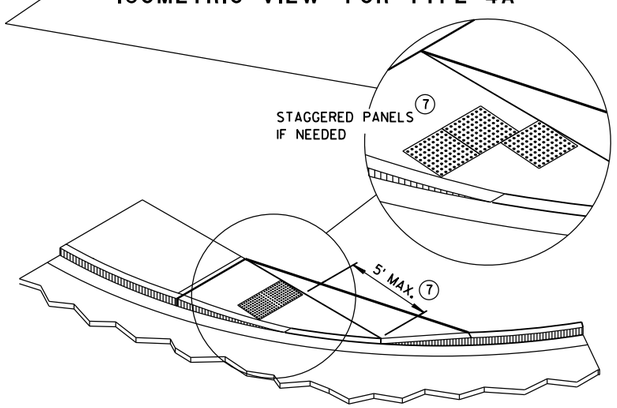
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

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

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



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

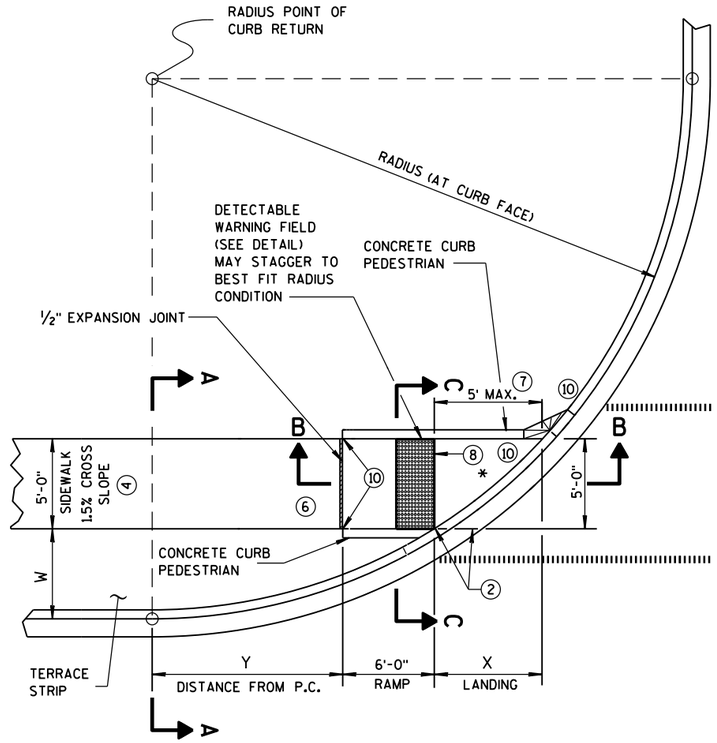
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPES 4A AND 4A1

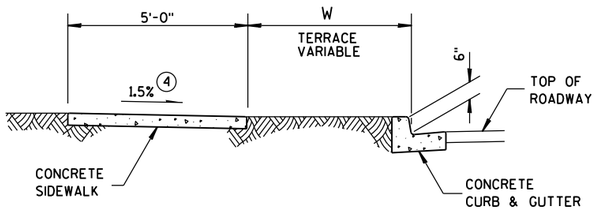
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

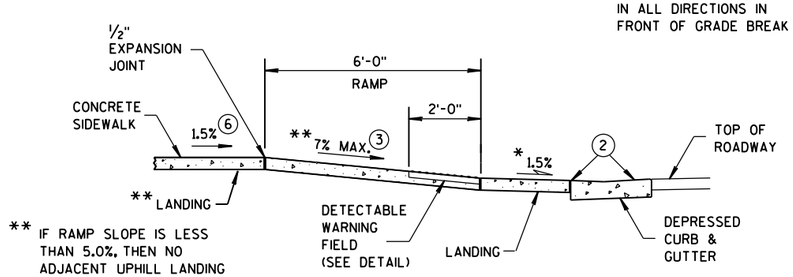
S.D.D. 8 D 5-18c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



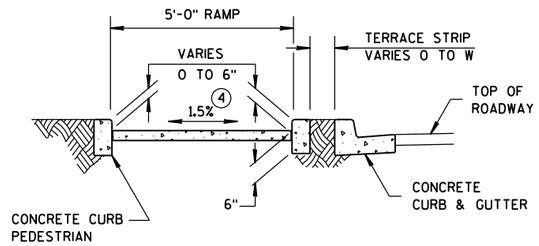
SECTION B-B FOR TYPE 4B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C-C FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-6¾"	3'-3"	8'-6¼"
30 FEET	7'-9¼"	5'-10½"	6'-9½"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"
40 FEET	9'-4"	7'-10"	8'-2¾"	10'-3"	7'-4¾"	12'-3¾"	6'-8½"	14'-1¼"	6'-1¾"	15'-8½"
50 FEET	10'-8"	9'-6½"	9'-5½"	12'-3¼"	8'-6½"	14'-7½"	7'-9¾"	16'-8¼"	7'-2½"	18'-6¼"
60 FEET	11'-10¼"	11'-0¾"	10'-6½"	14'-1¼"	9'-6½"	16'-8½"	8'-9¼"	18'-11¾"	8'-1½"	21'-0½"

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE 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 NOT EXCEED 7%.

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

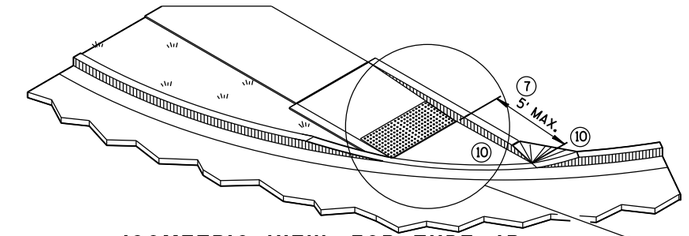
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

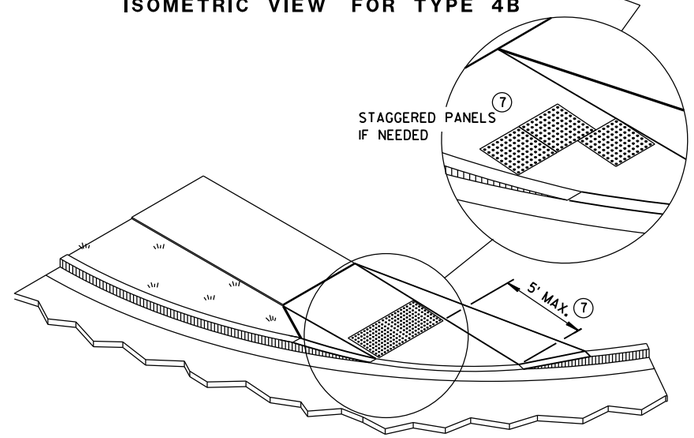
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

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

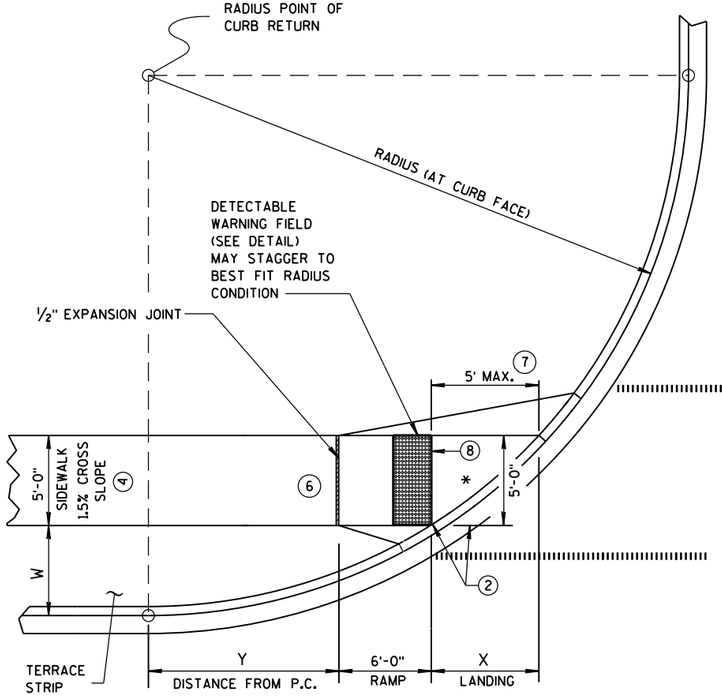
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1



CURB RAMP TYPE 4B1
PLAN VIEW

CURB RAMPS TYPE 4B AND 4B1

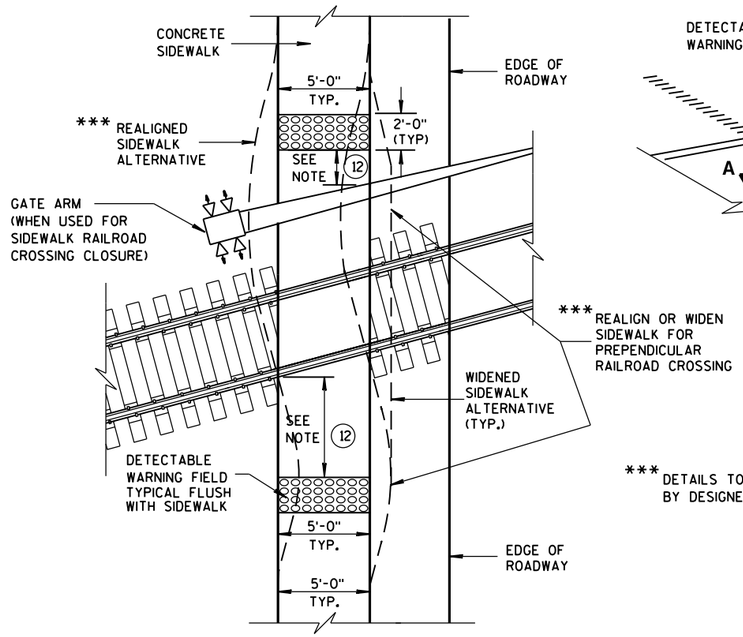
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 8 D 5-18d

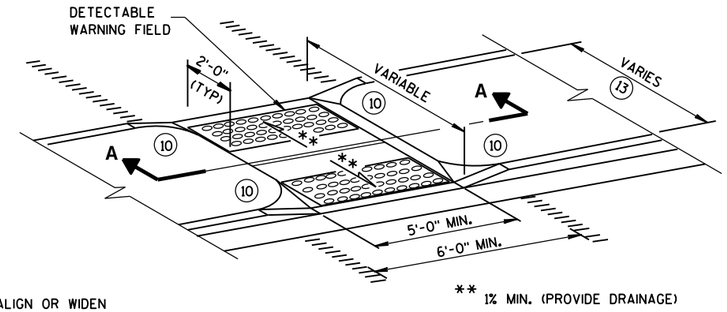
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S.D.D. 8 D 5-18d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING

*** DETAILS TO BE DETERMINED BY DESIGNER



** 1% MIN. (PROVIDE DRAINAGE)

MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

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

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

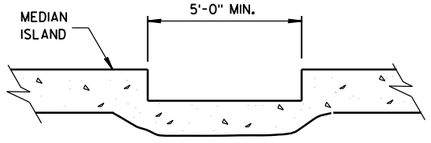
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

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

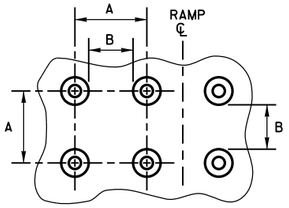
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

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

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



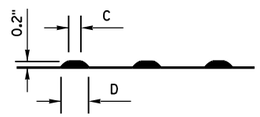
SECTION A-A



PLAN VIEW

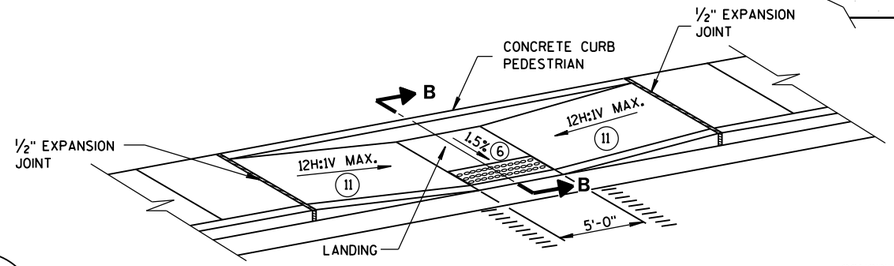
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

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

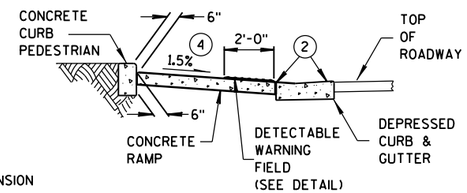


ELEVATION VIEW

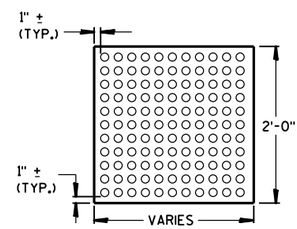
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



MID-BLOCK CROSSING
TYPE 7A



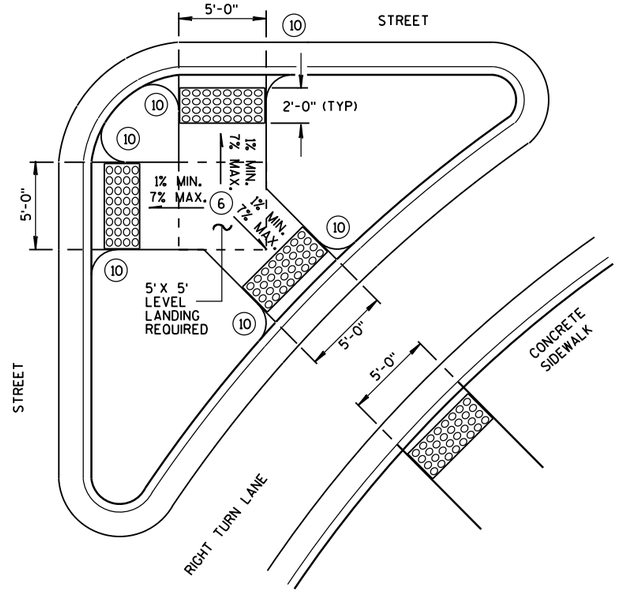
SECTION B-B



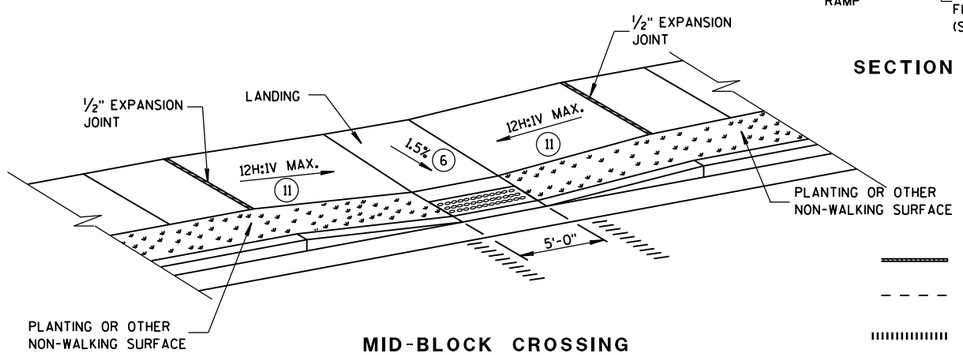
PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)

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



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

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

LEGEND

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

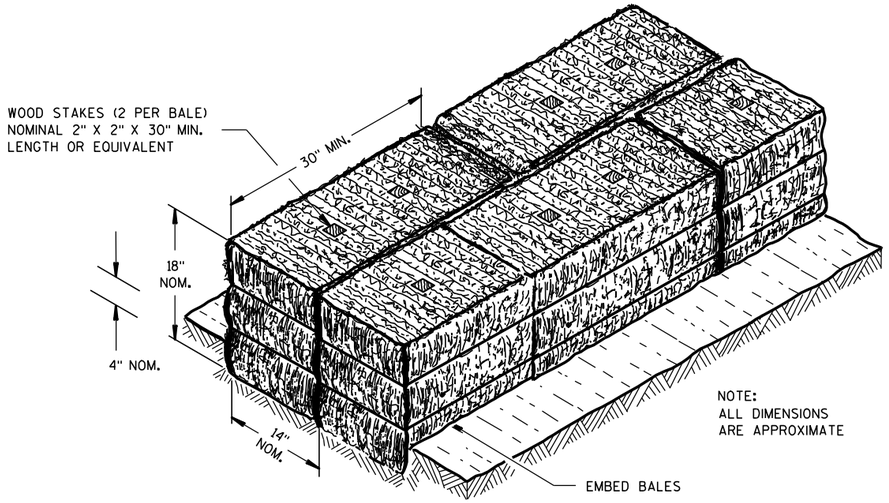
CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

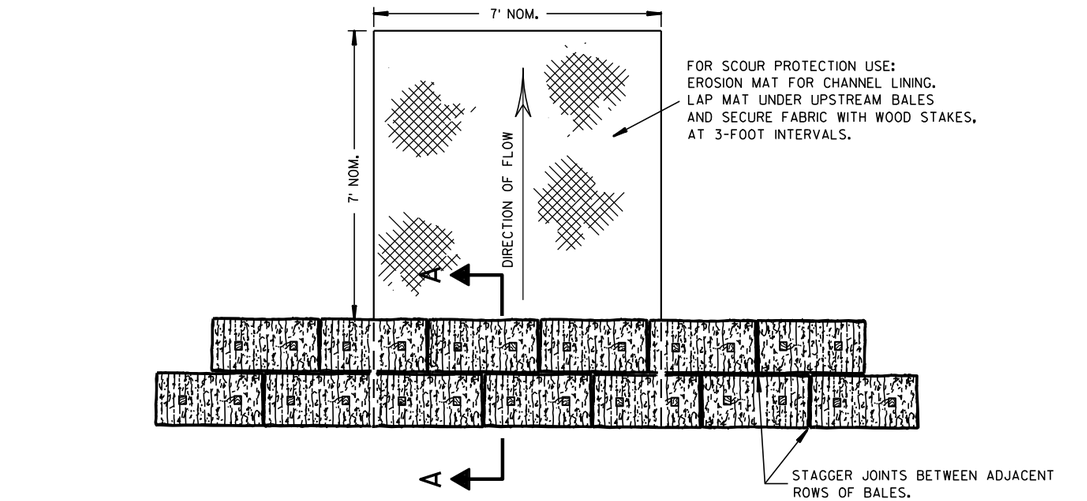
APPROVED
Sept., 2016
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERV
ENT
FHWA

6

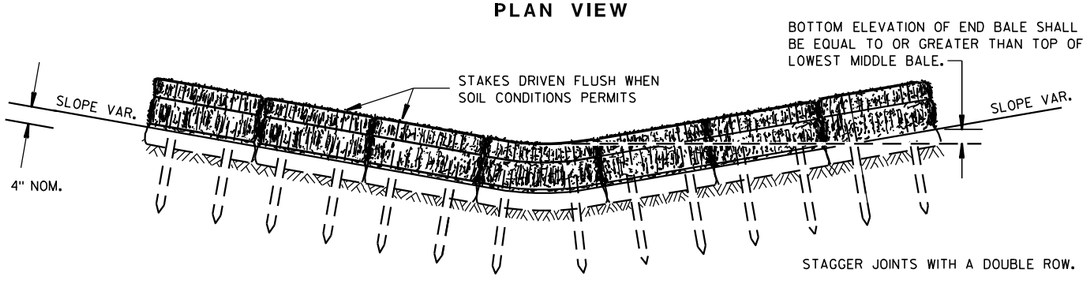
S.D.D. 8 D 5-18e



SECTION A-A



PLAN VIEW



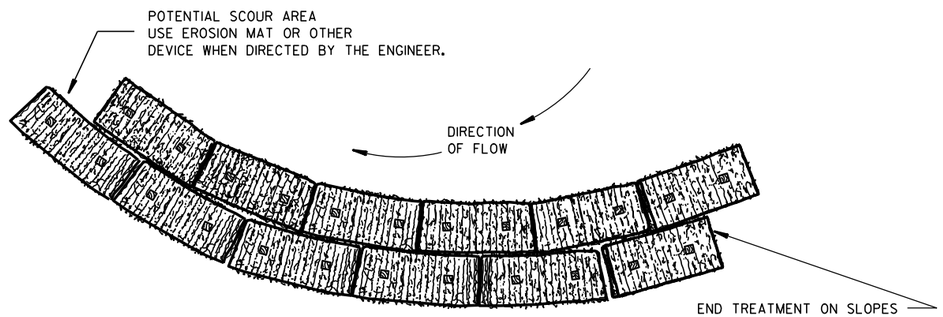
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

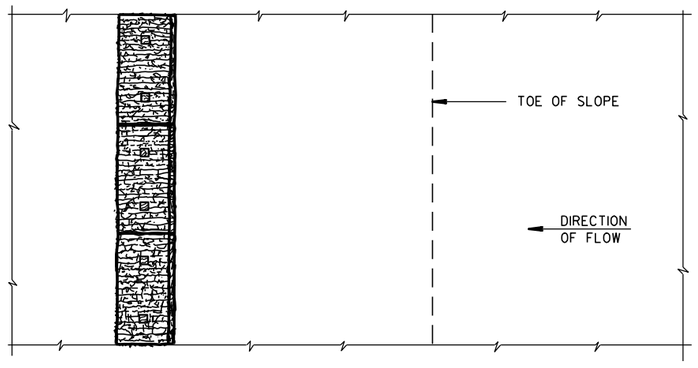
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

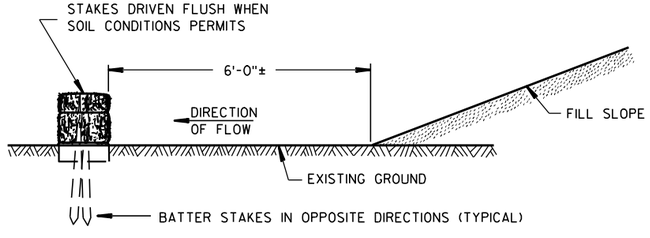


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

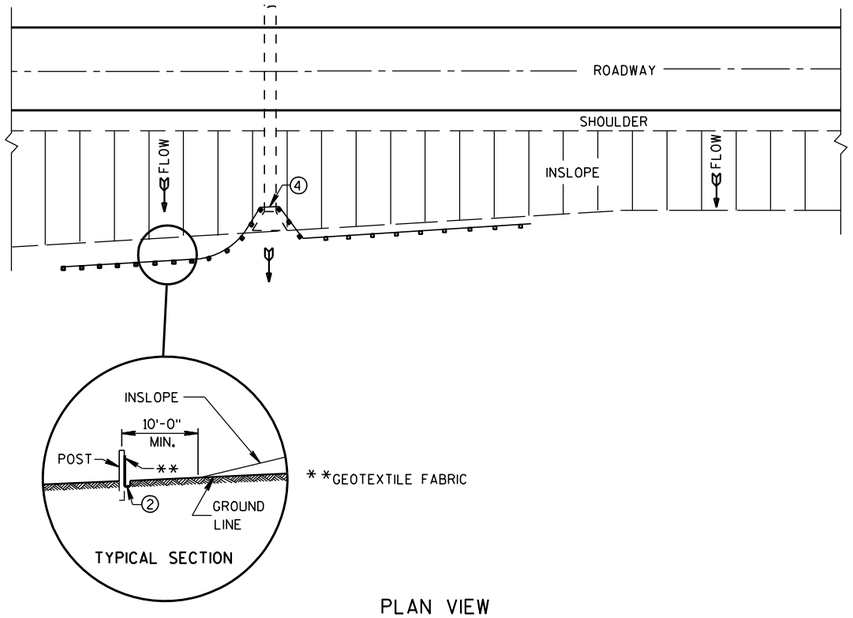
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

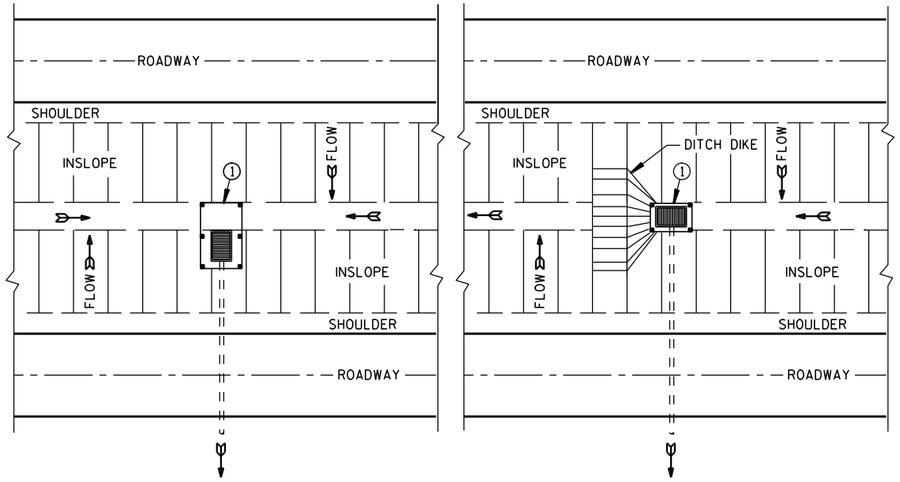
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

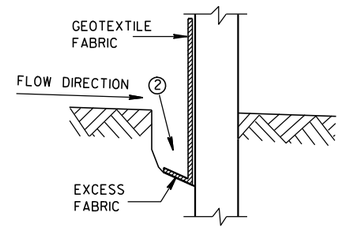
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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

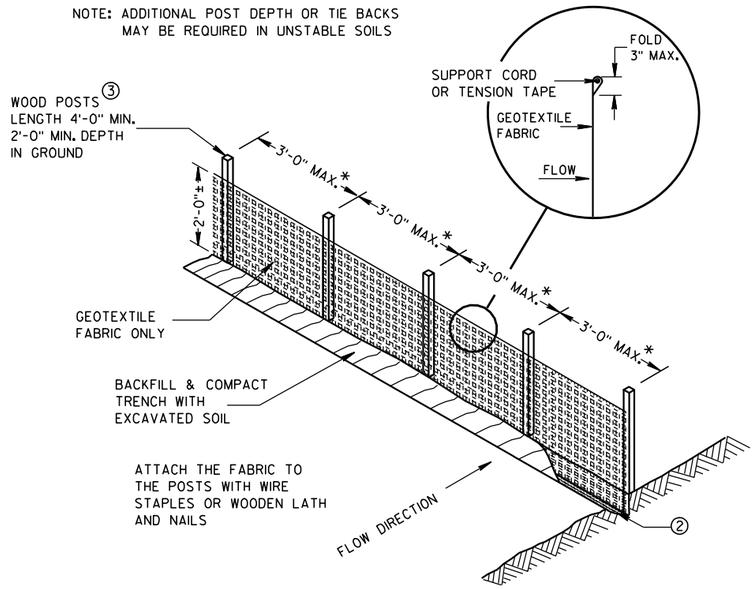
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

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

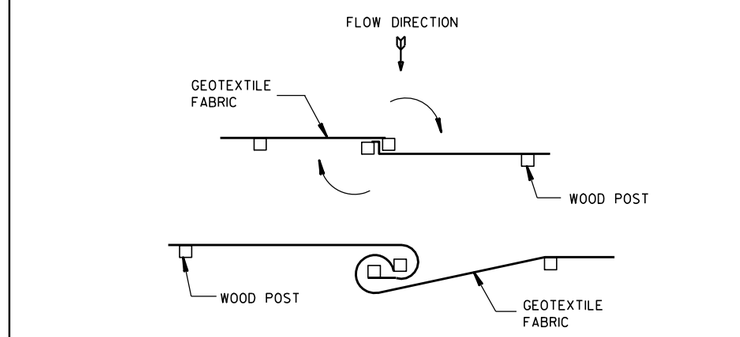


TRENCH DETAIL

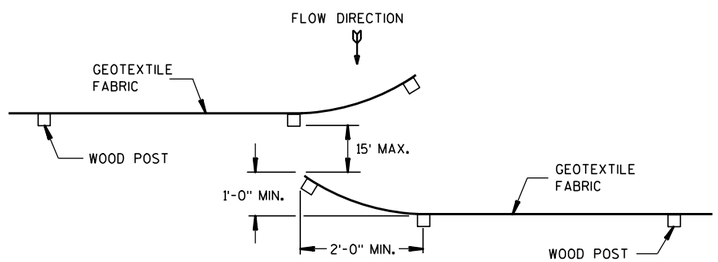


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

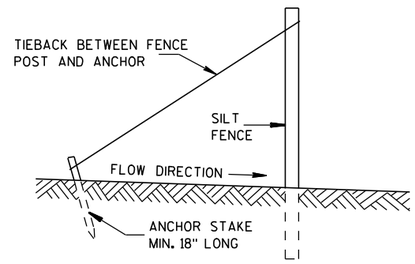


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

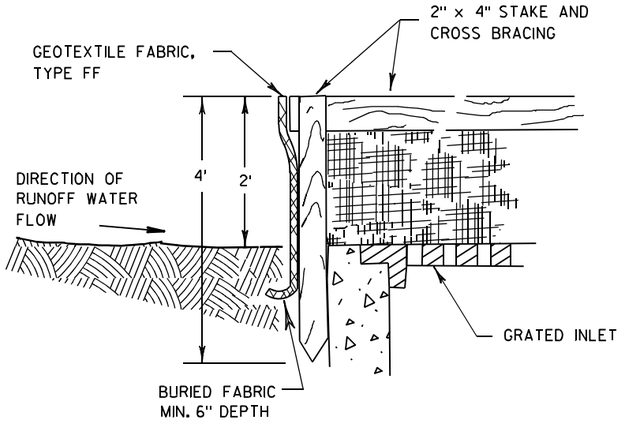
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

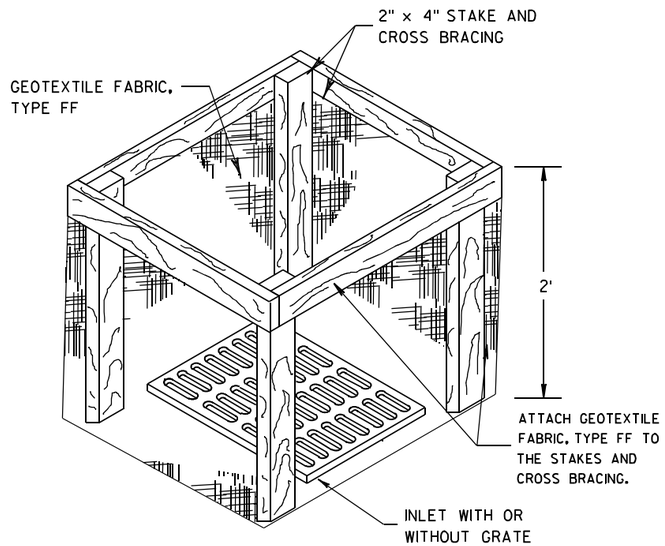
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S.D.D. 8 E 9-6

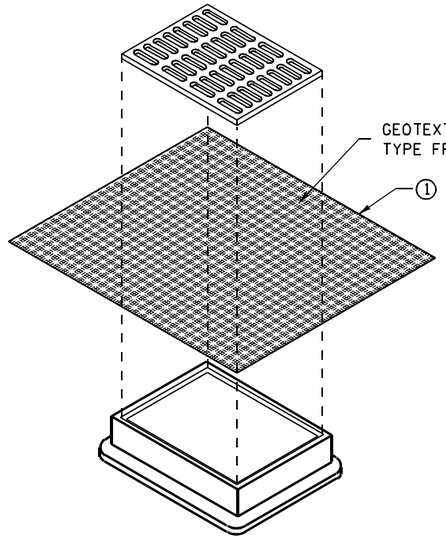
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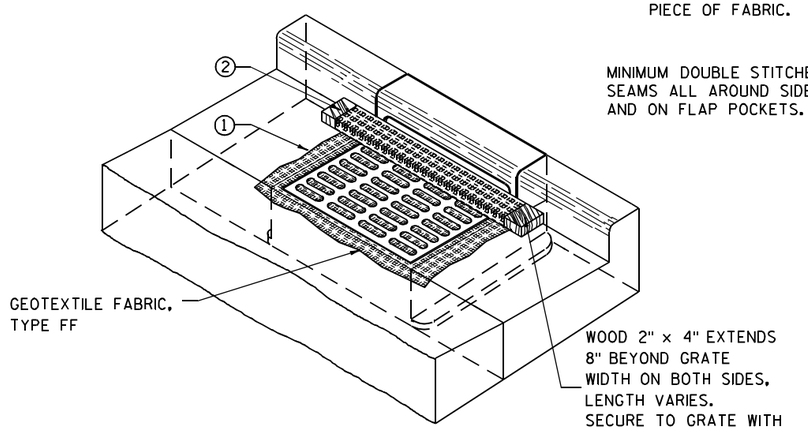


INLET PROTECTION, TYPE A

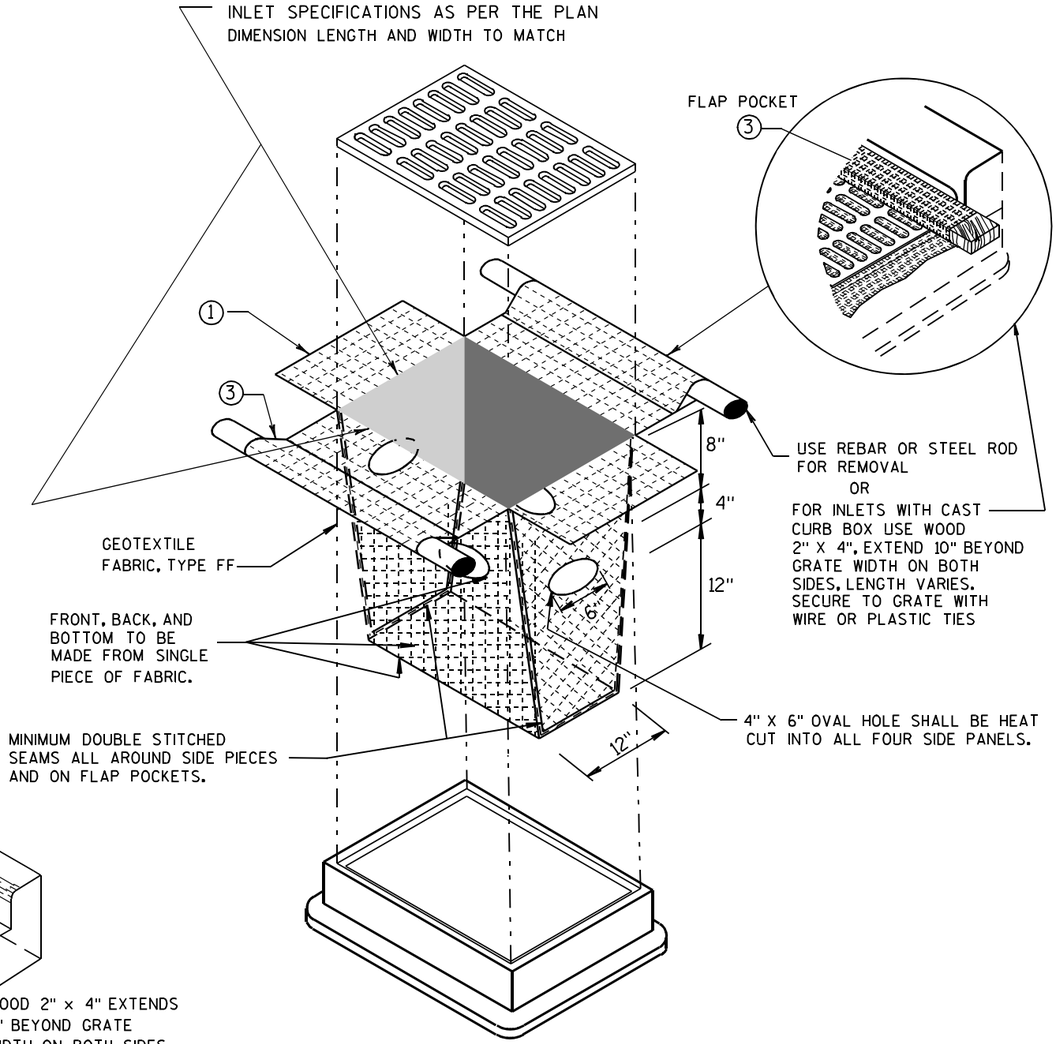


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

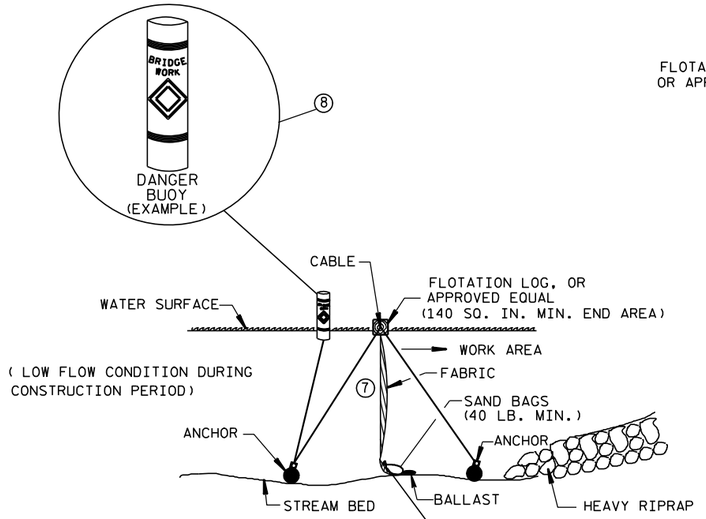
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

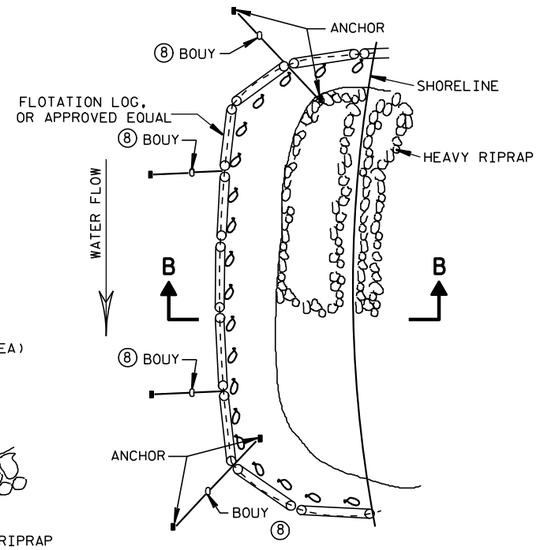
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

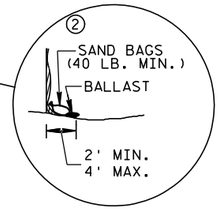
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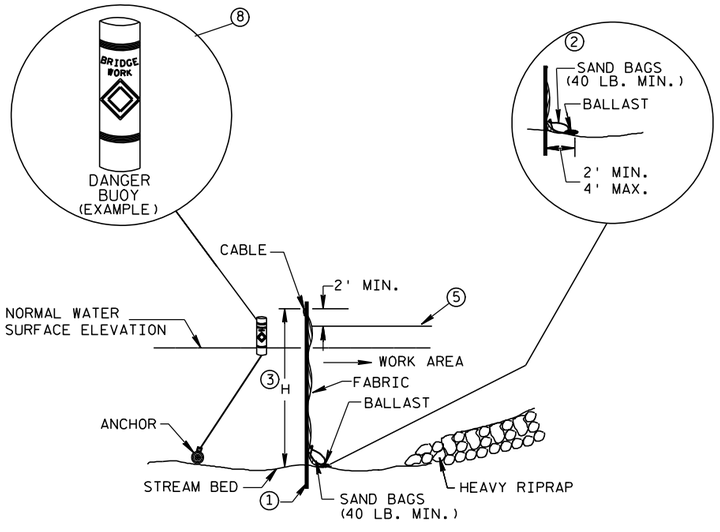


SECTION B-B

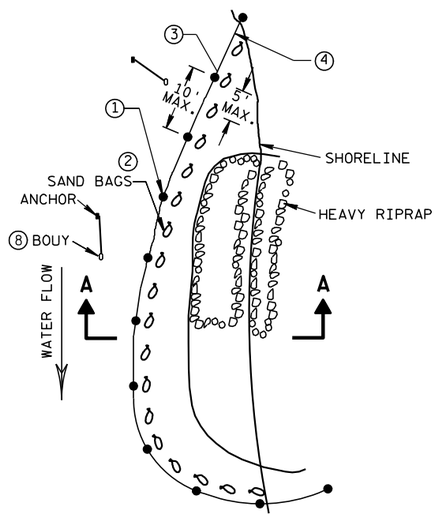


TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6





SECTION A-A



PLAN VIEW

TURBIDITY BARRIER STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT 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.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.

② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.

③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.

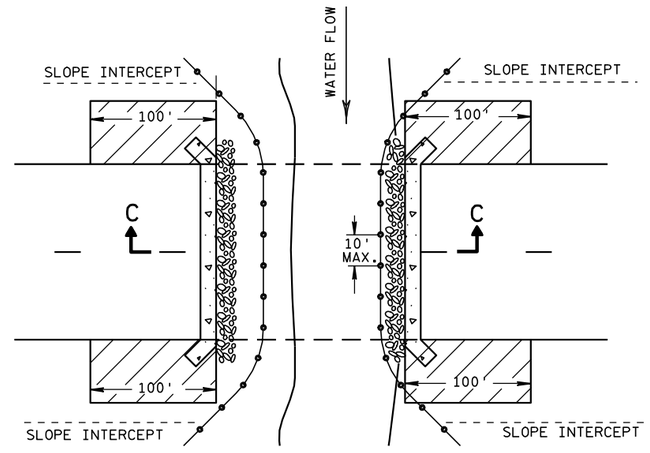
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE 02 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.

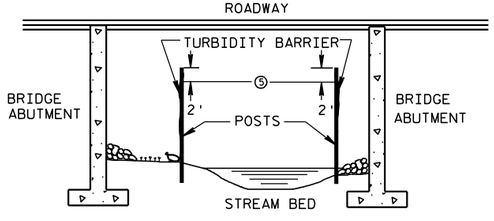
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.

⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 11-2

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S.D.D. 8 E 11-2

METAL APRON ENDWALLS

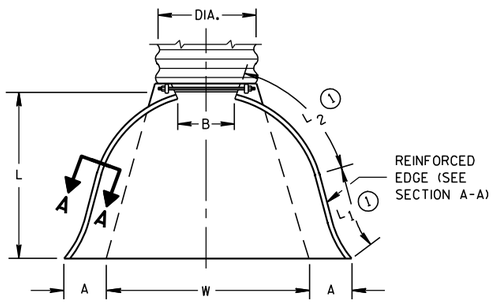
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

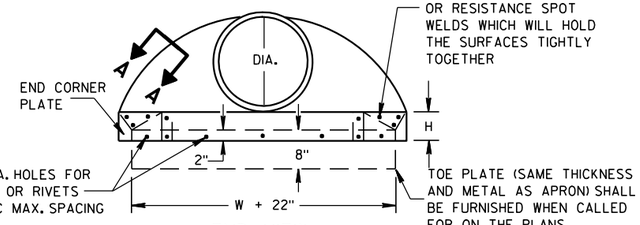
REINFORCED CONCRETE APRON ENDWALLS

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

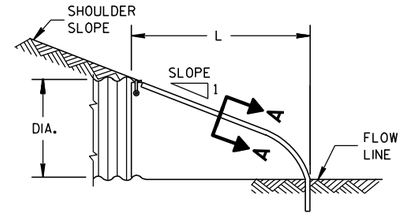
*MINIMUM
**MAXIMUM



PLAN VIEW

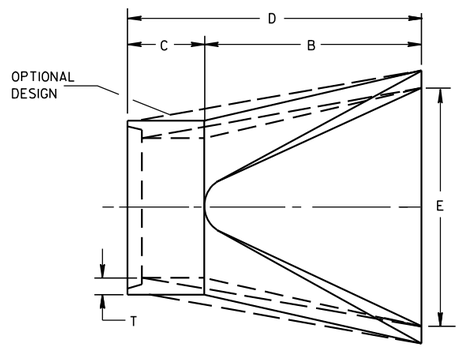


END VIEW

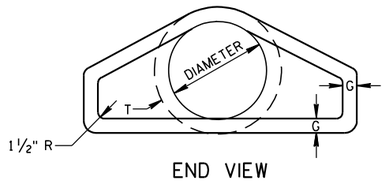


SIDE ELEVATION

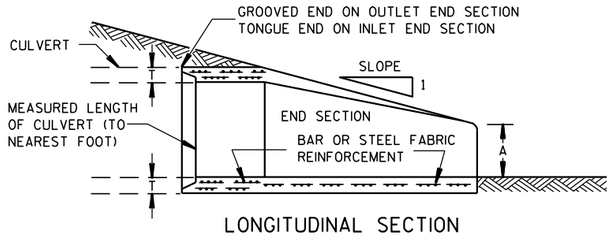
METAL ENDWALLS



PLAN

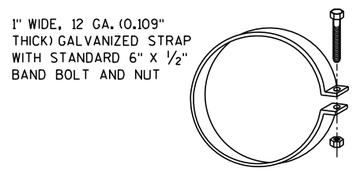


END VIEW



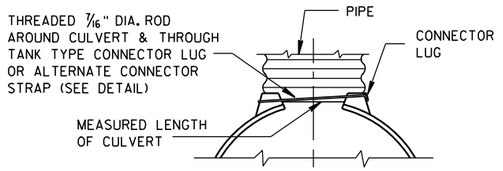
LONGITUDINAL SECTION

CONCRETE ENDWALLS

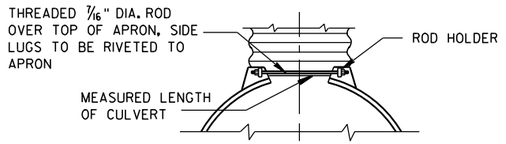


ALTERNATE FOR TYPE 1 CONNECTION

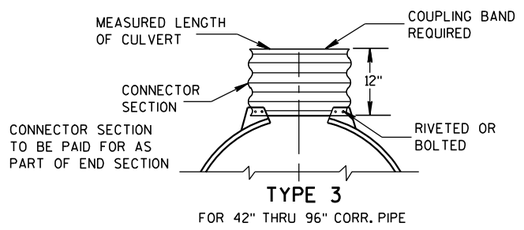
END SECTION CONNECTOR STRAP



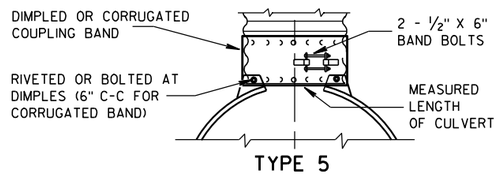
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

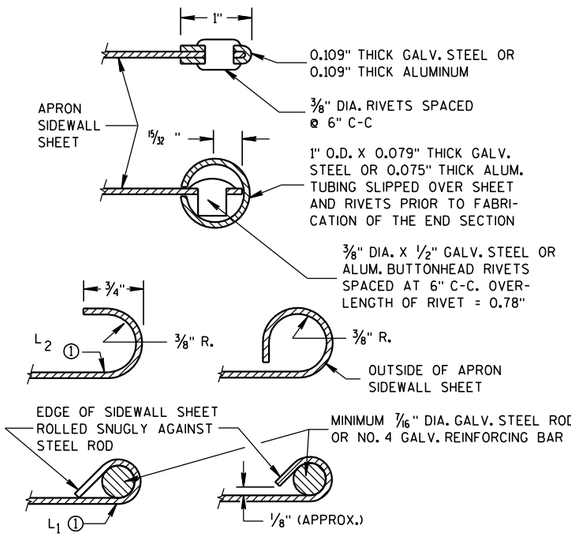
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

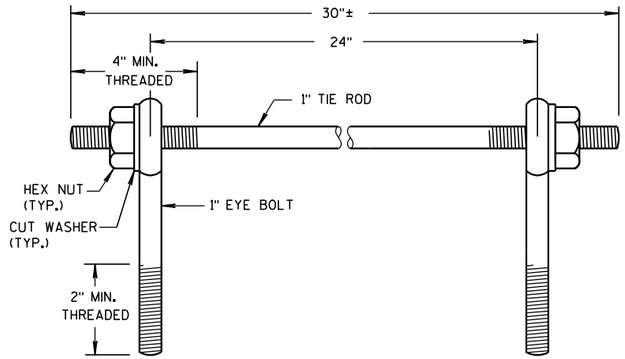
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

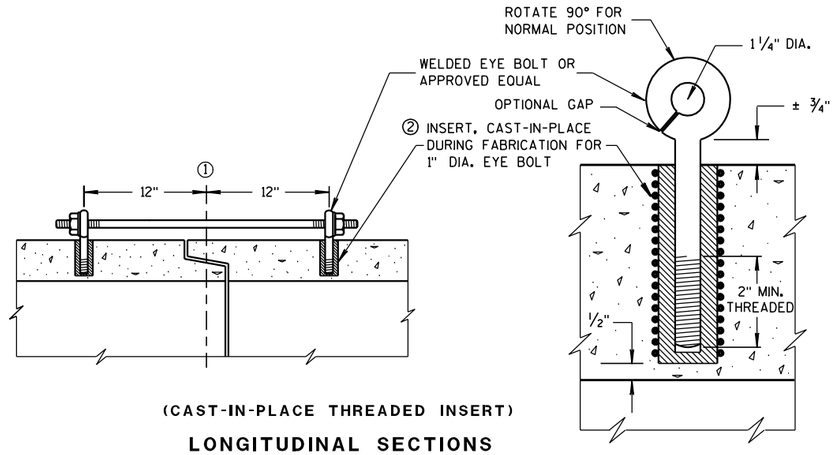
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6
S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

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

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

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

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

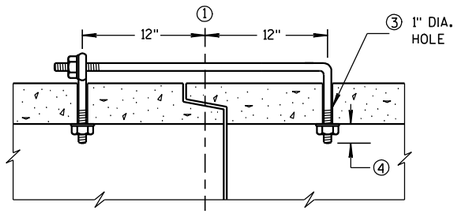
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

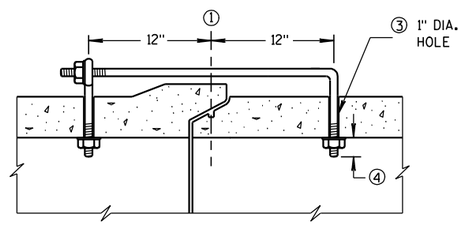
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

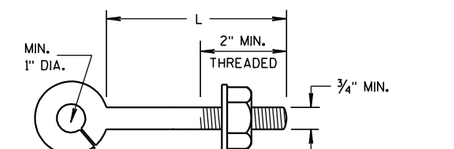


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

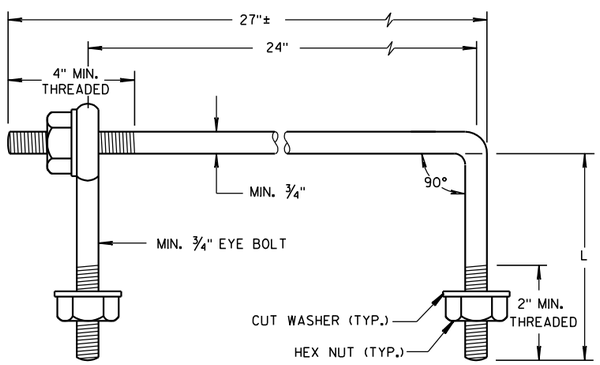
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

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



EYE BOLT AND TIE ROD

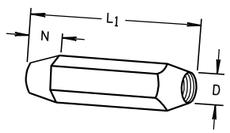
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

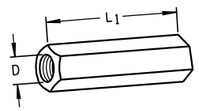
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES



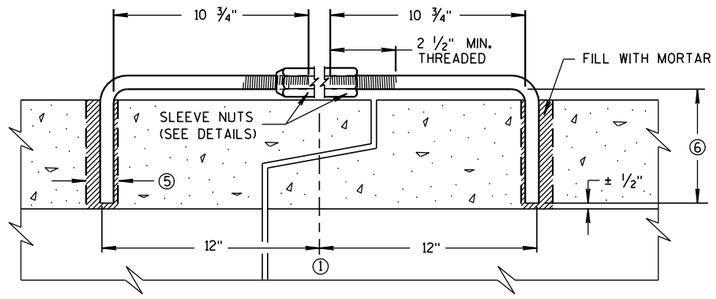
TAPERED



PLAIN

RIGHT AND LEFT THREADS

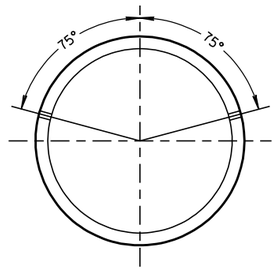
SLEEVE NUTS



LONGITUDINAL SECTION

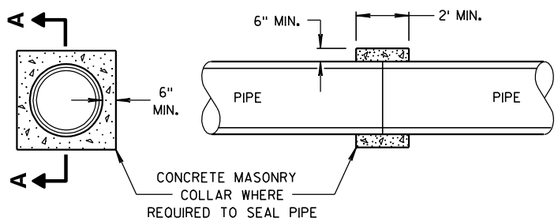
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

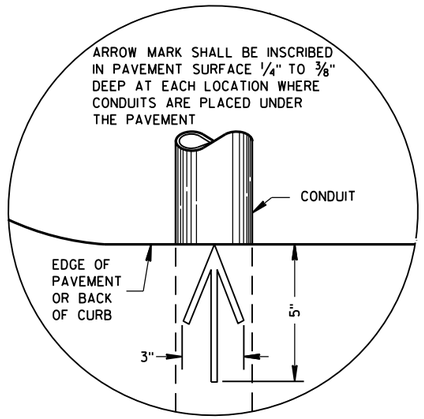
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
179
FHWA

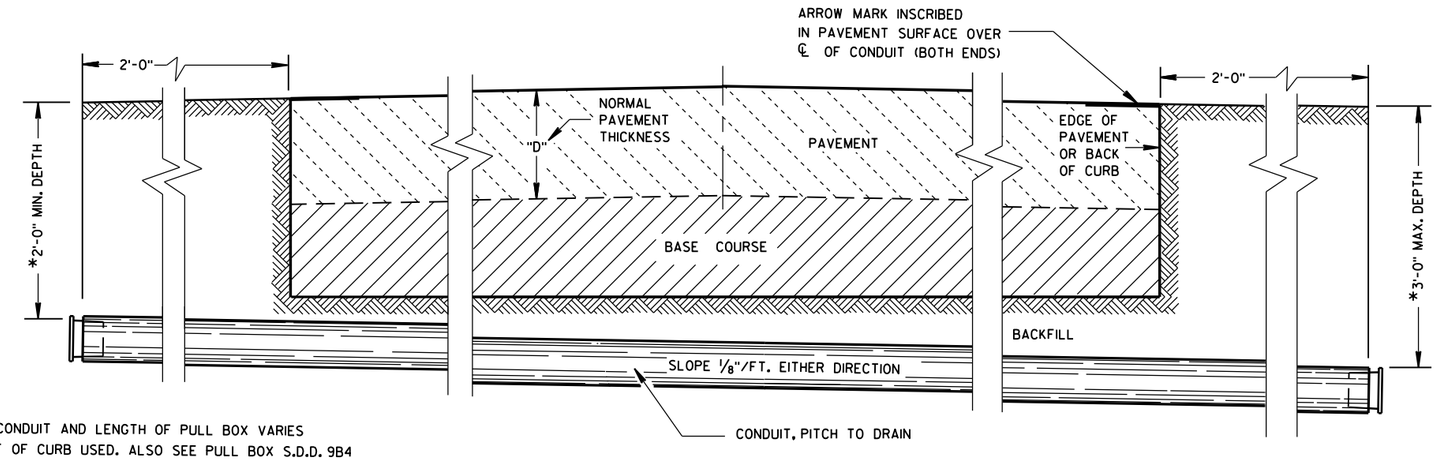
6

S.D.D. 8 F 4-7



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

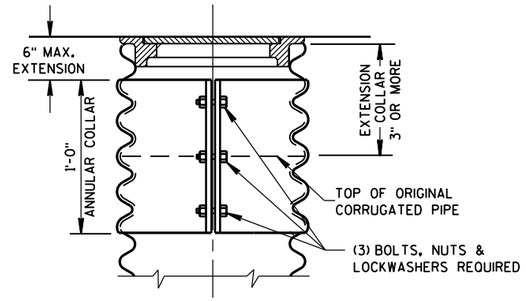
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

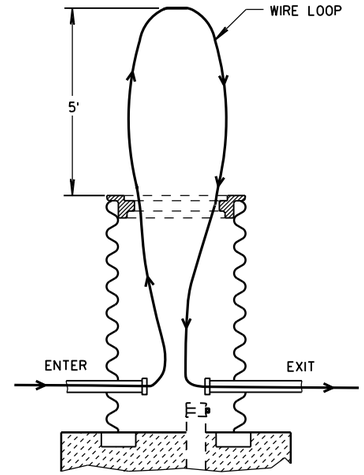
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

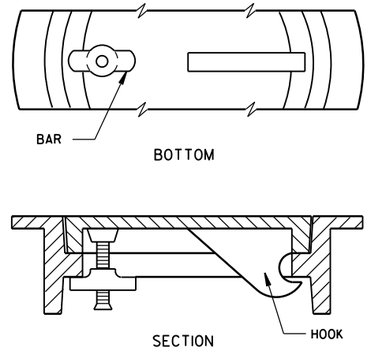
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

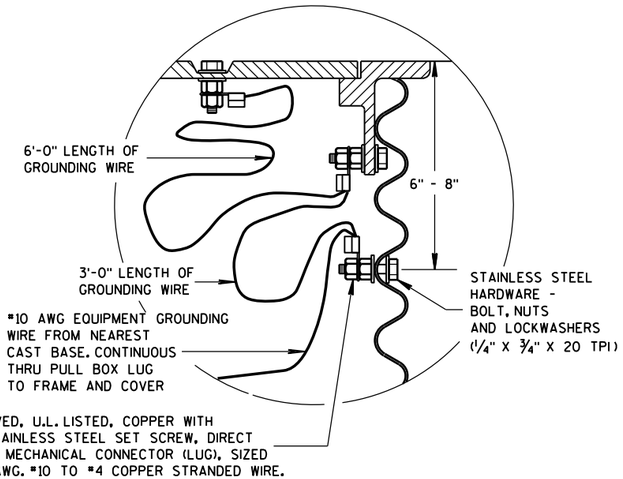


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

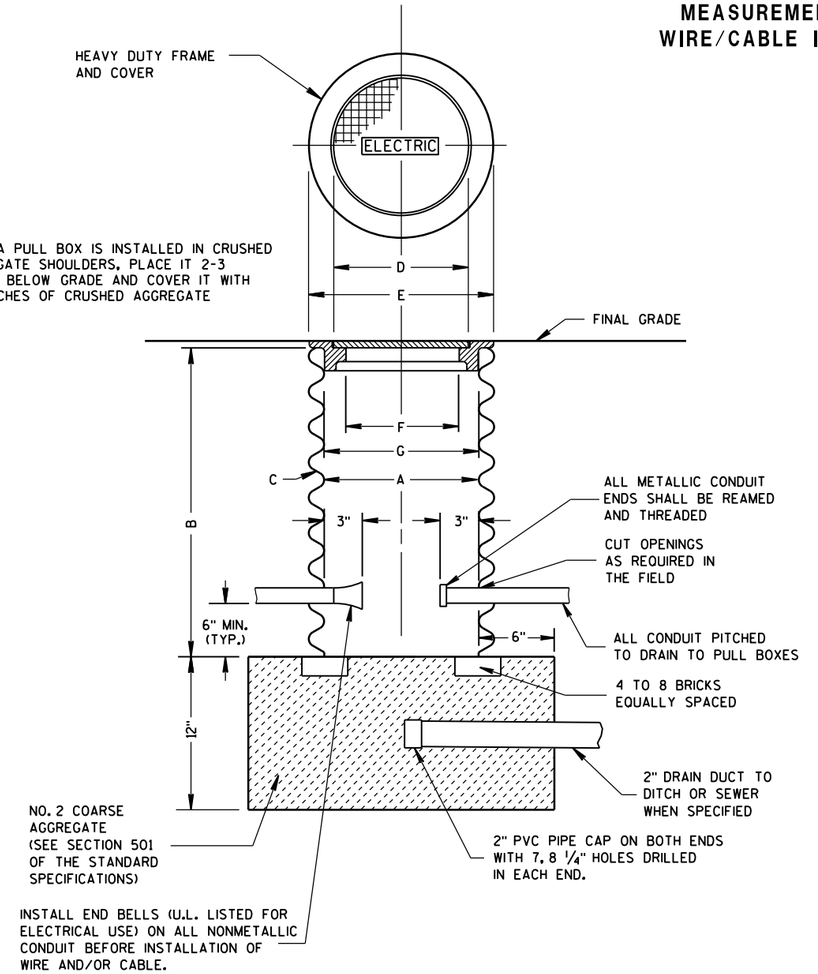


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

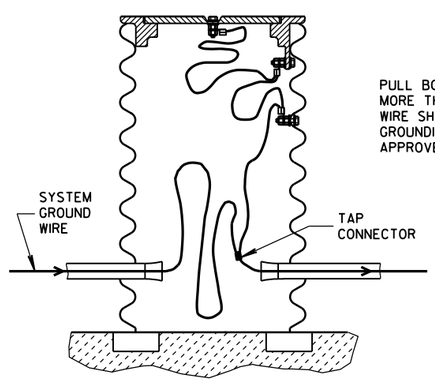
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

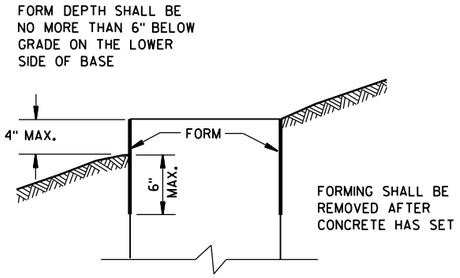
PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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6

S.D.D. 9 B 4-11



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

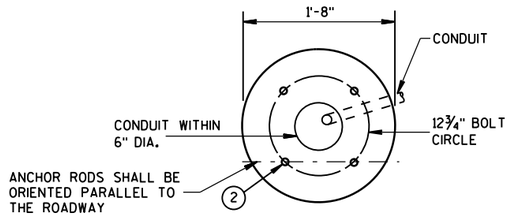
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

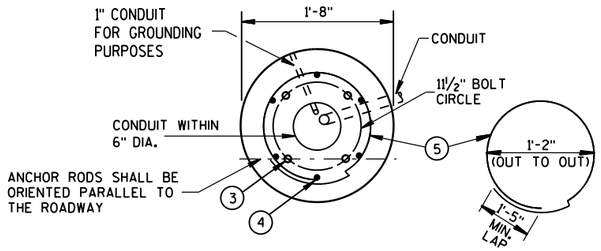
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

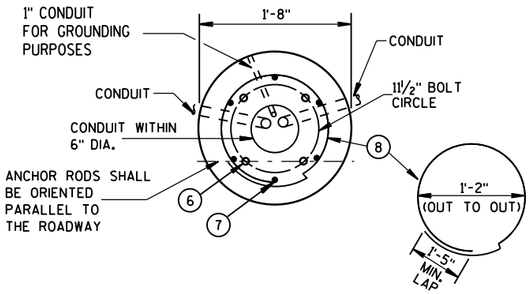
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

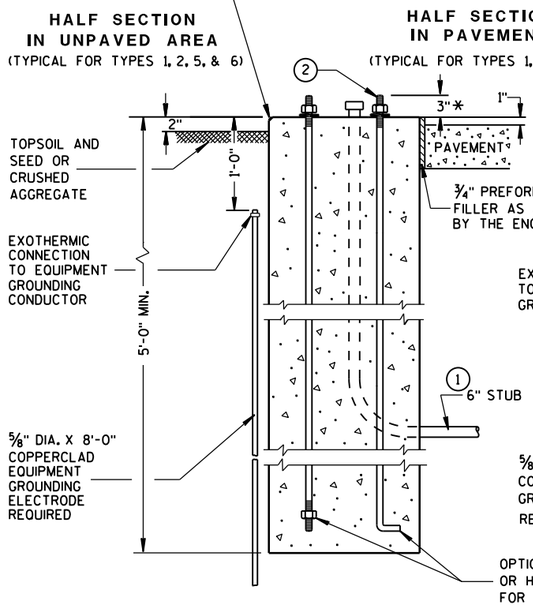
(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

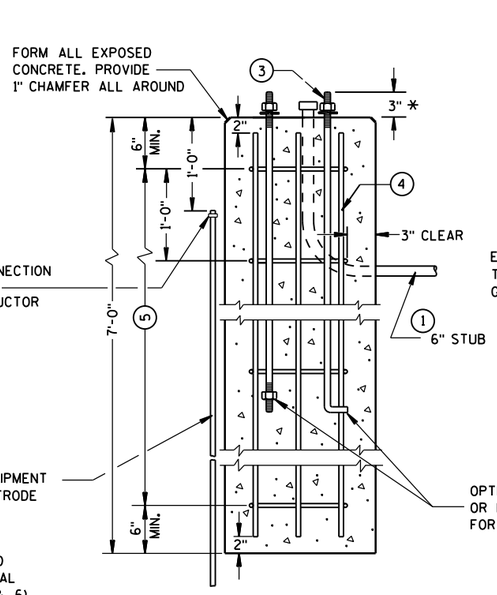
(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



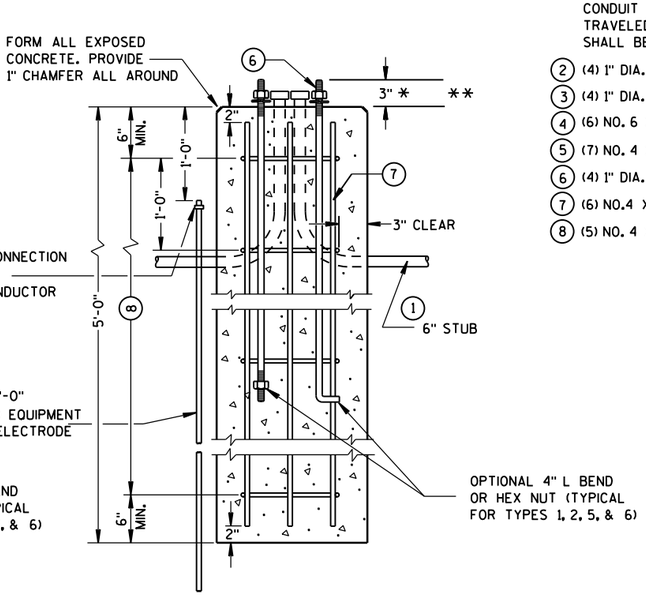








TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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S.D.D. 9 C 2-7

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

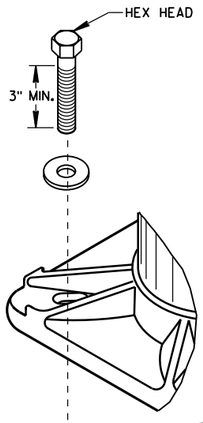
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

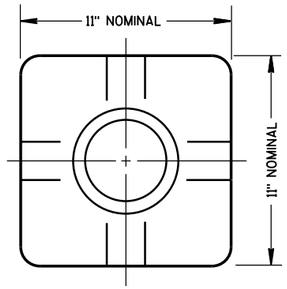
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

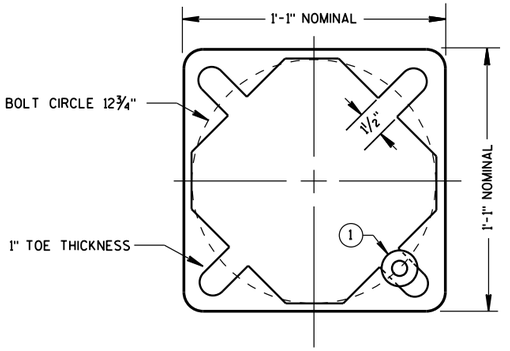
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

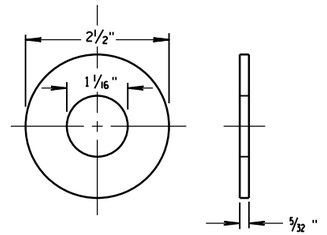




TOP VIEW
(PEDESTAL BASE)

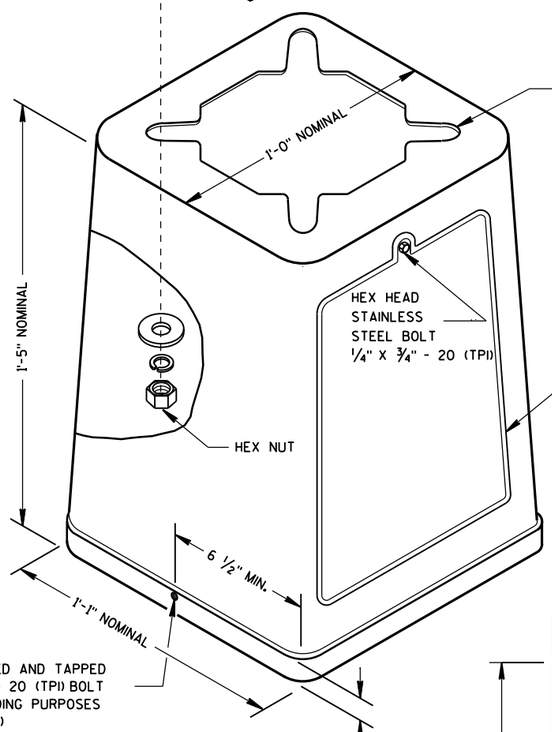


BOTTOM VIEW
(PEDESTAL BASE)

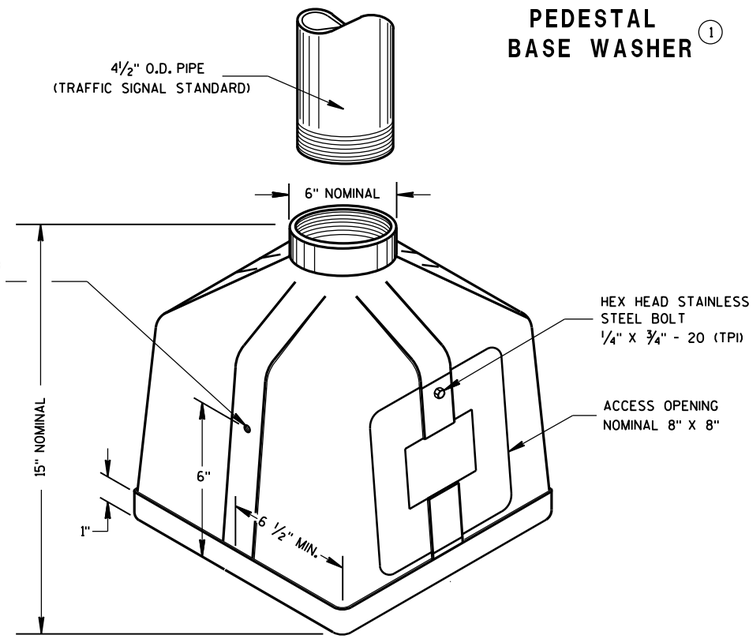


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

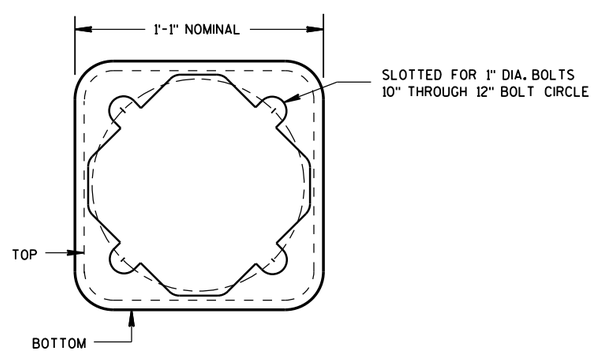


ISOMETRIC VIEW

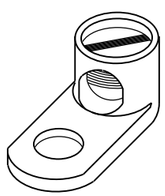


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

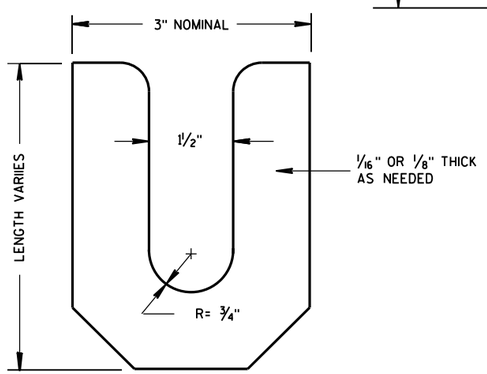


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

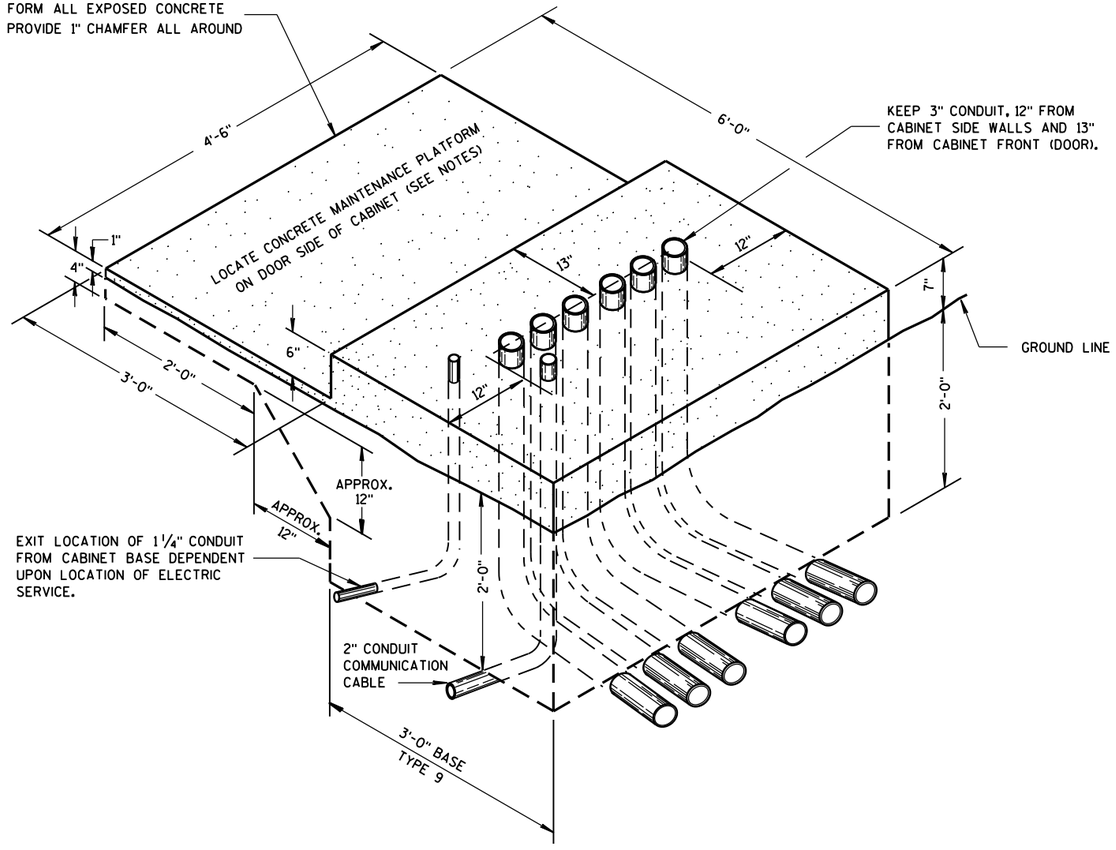
TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
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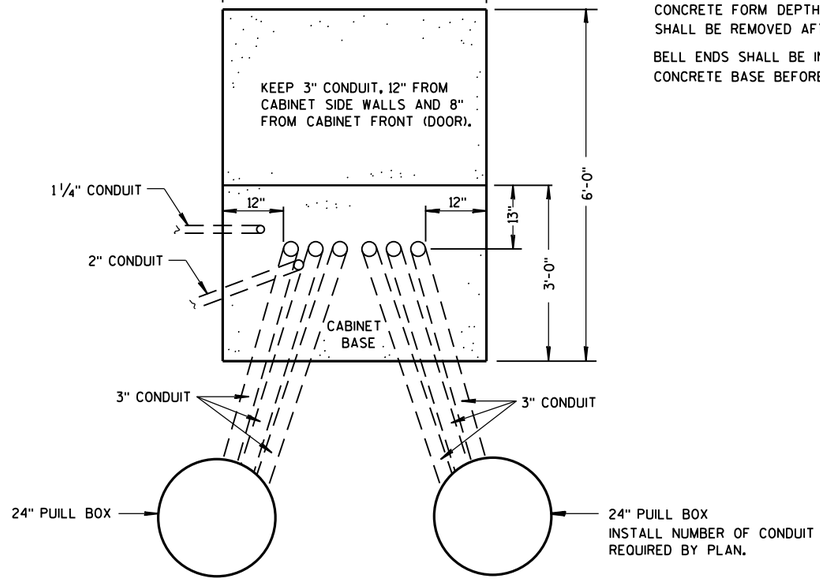
S.D.D. 9 C 3-4



ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

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

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

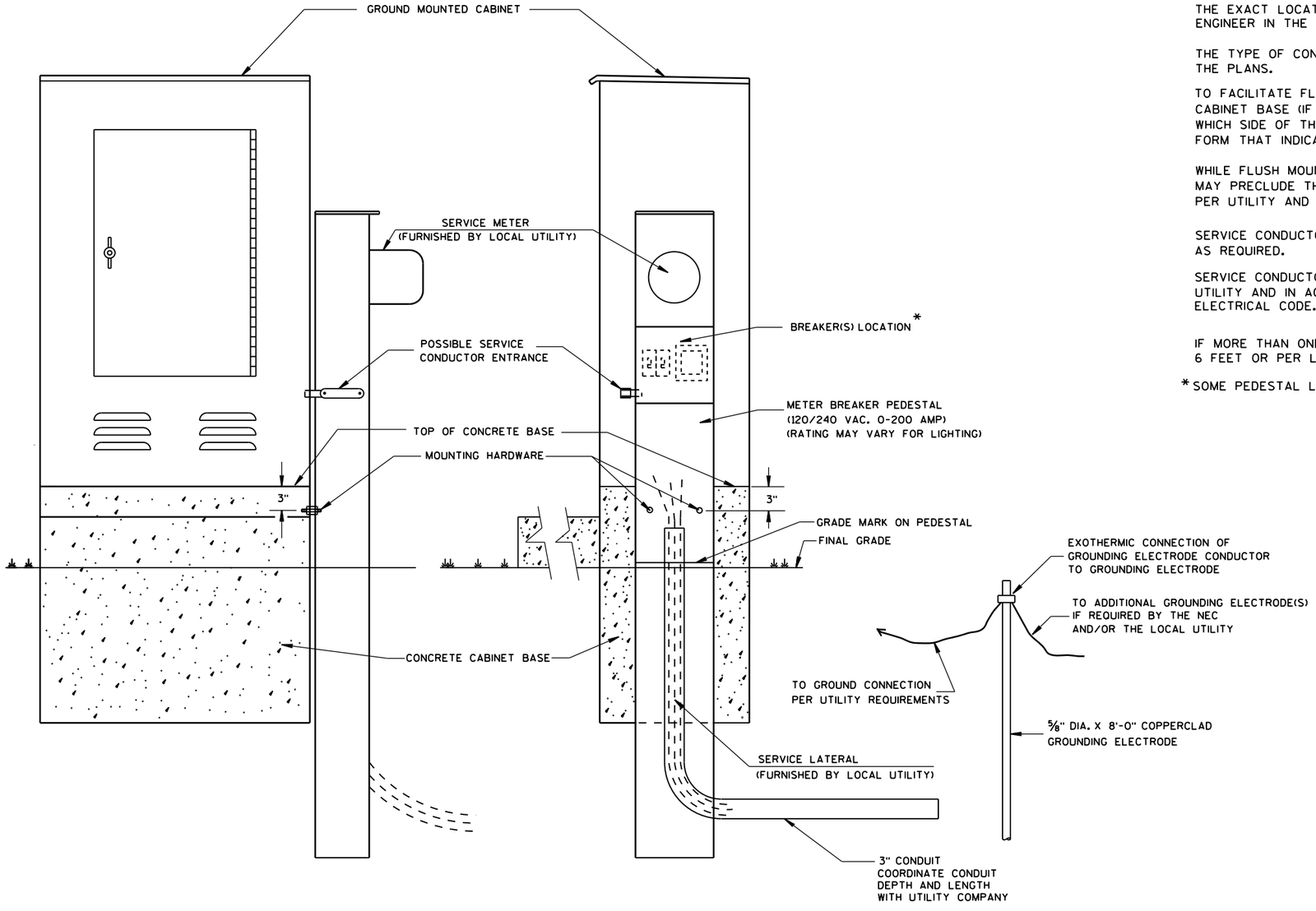
CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
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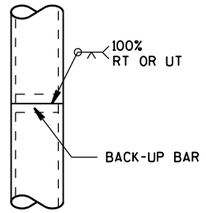
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Sept. 2014 — DATE
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FHWA

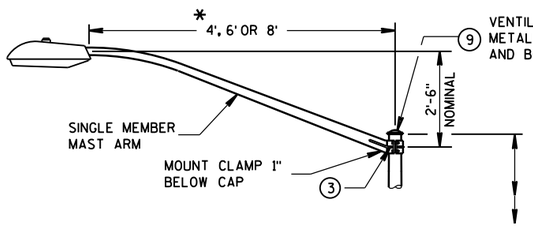
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FOR MANUFACTURERS USE ONLY

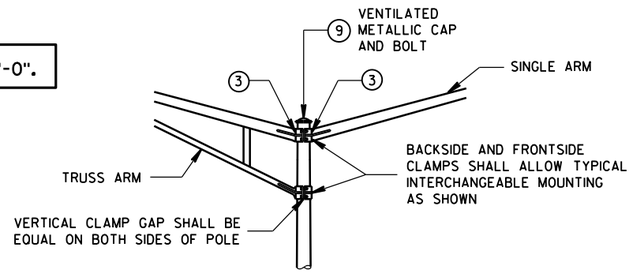
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.

*RISE FOR 4' ARM SHALL BE 2'-0".





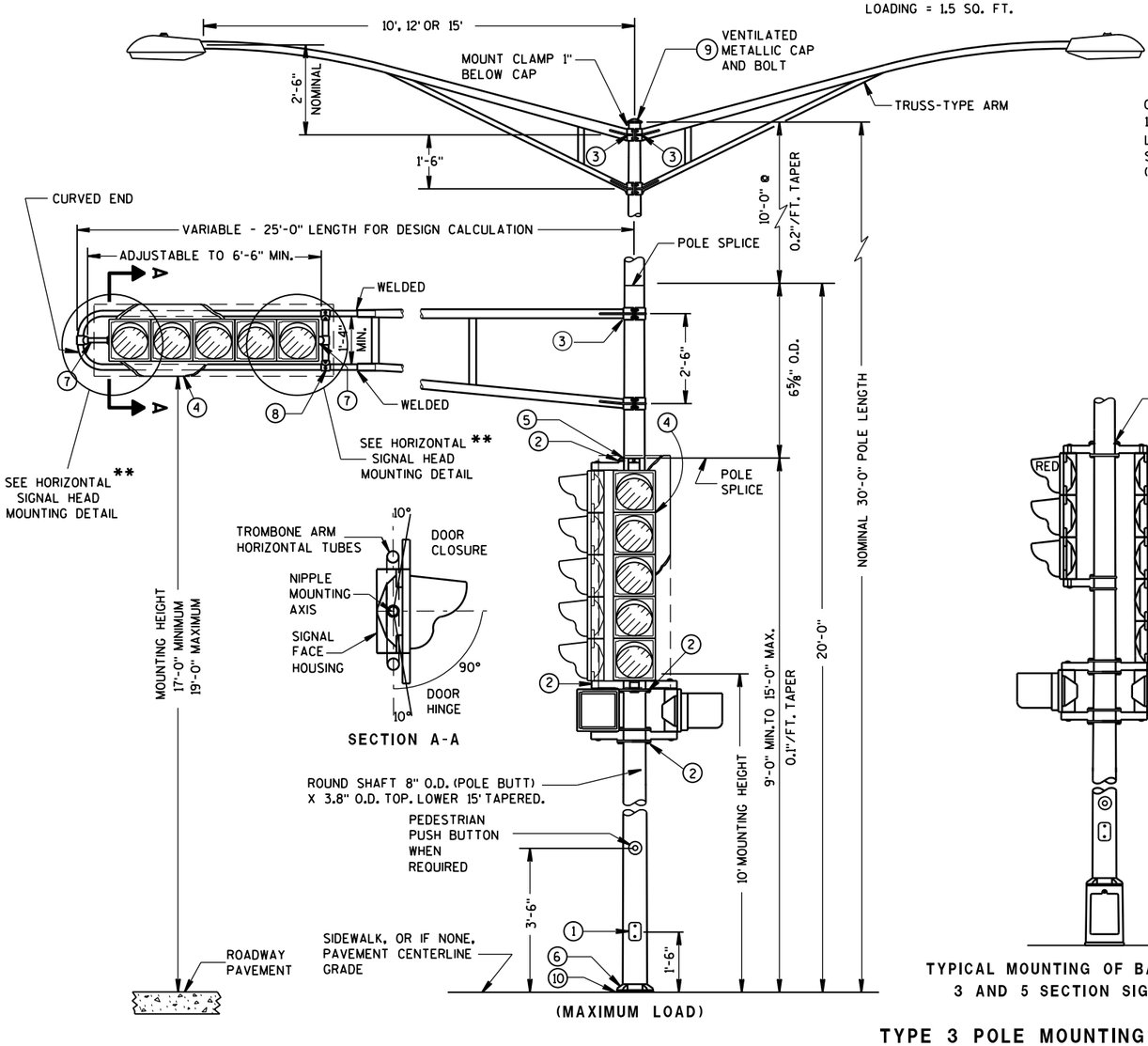
POLE SPLICE DETAIL

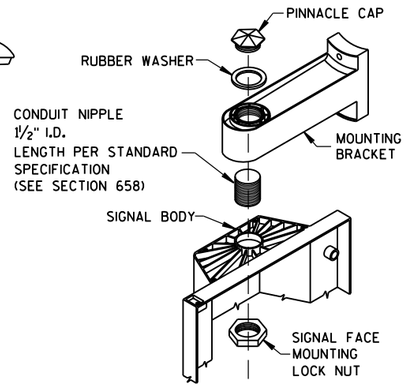


INTERCHANGEABLE MOUNTING DETAIL

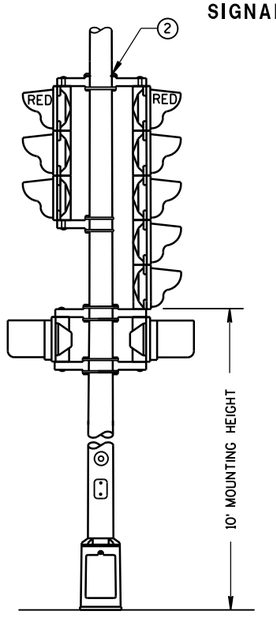
LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

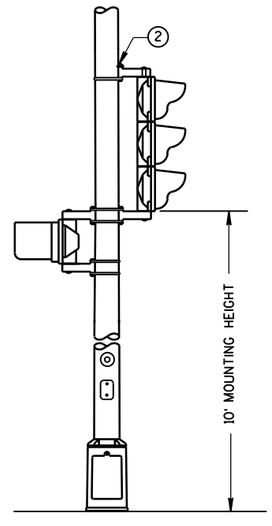




SIGNAL FACE MOUNTING DETAIL
(BANDED)



TYPICAL MOUNTING OF BACK TO BACK
3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION
SIGNAL FACE

GENERAL NOTES

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

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652, SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) TYPE 3 POLE CONFIGURATIONS SHALL BE MOUNTED DIRECTLY TO THEIR CONCRETE BASES.

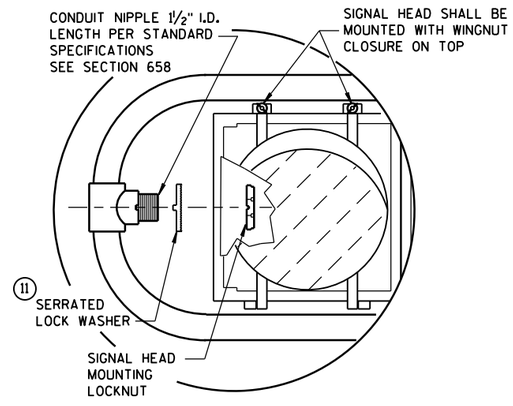
(7) MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658)

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (1/4 " X ¾" -20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.



HORIZONTAL SIGNAL HEAD MOUNTING DETAIL**

** SIGNAL HEAD ATTACHMENT ALSO APPLYS TO MOUNTING AT CROSS BAR

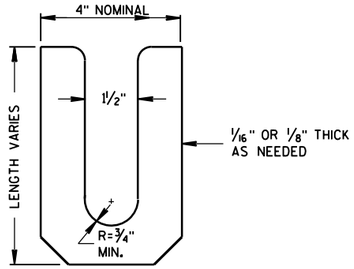
TYPE 3 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)

STATE OF WISCONSIN
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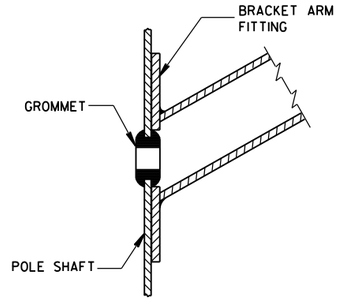
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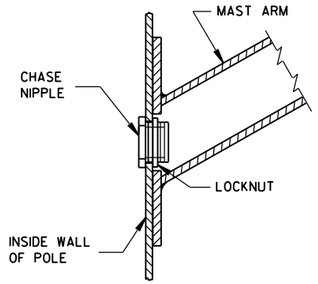


LEVELING SHIM (13)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

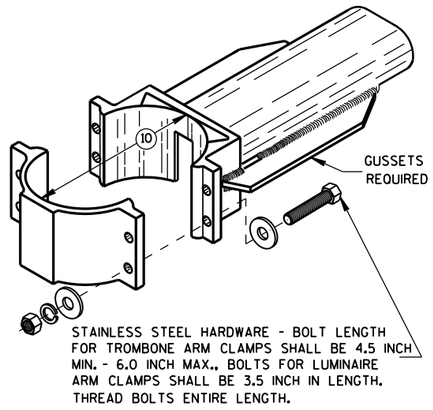
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

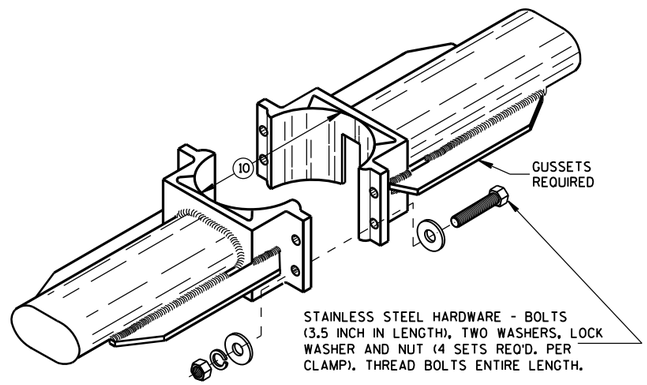
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

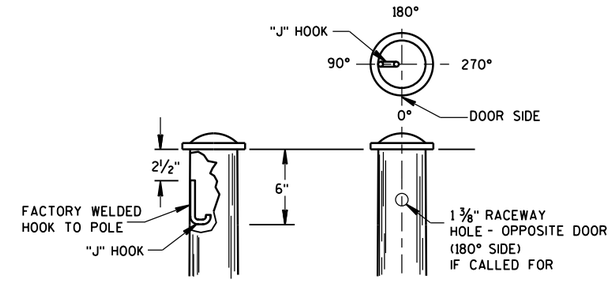
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



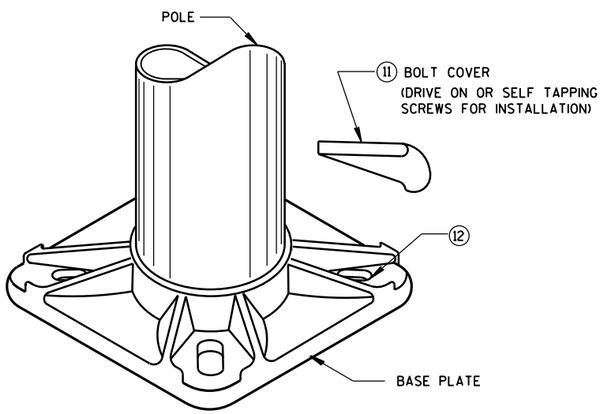
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



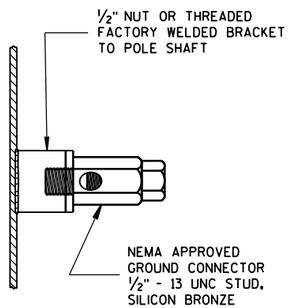
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

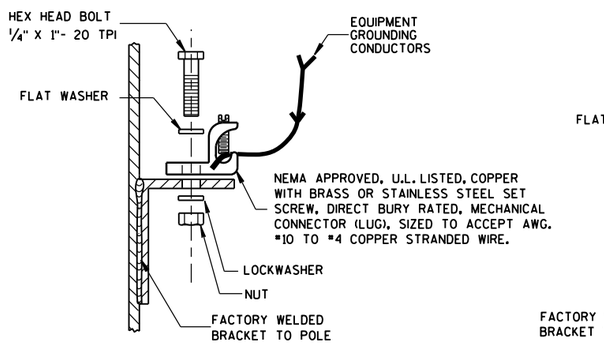


TYPICAL "J" HOOK LOCATION



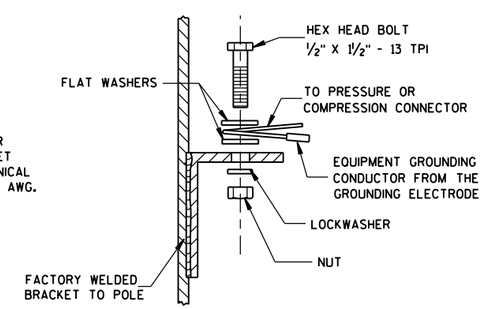
BASE PLATE





TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



HARDWARE DETAILS FOR POLE MOUNTINGS

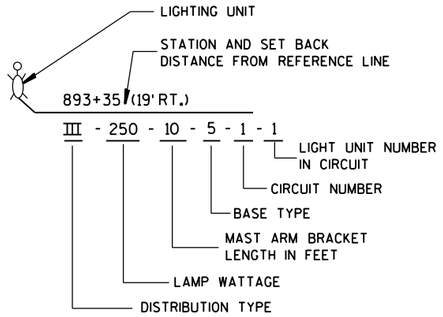
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015
DATE

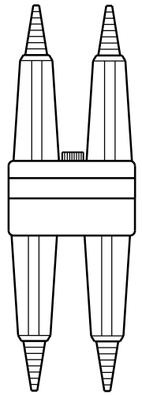
/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

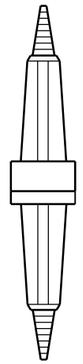
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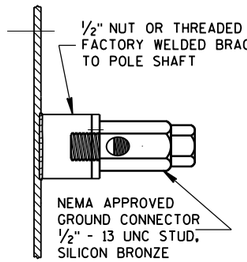
LIGHTING UNIT CODE
(TYPICAL)

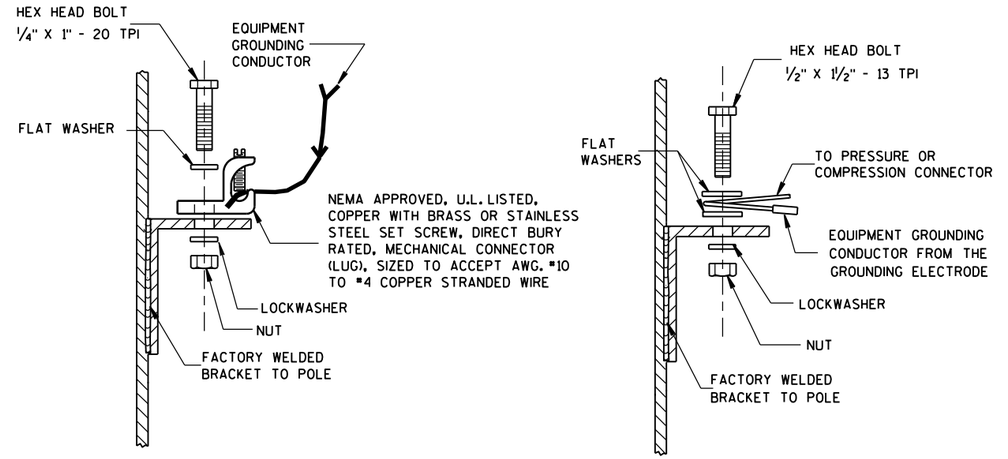


DETAIL "A"
BREAKAWY DOUBLE POLE WITH WATERPROOF INSULATING BOOT

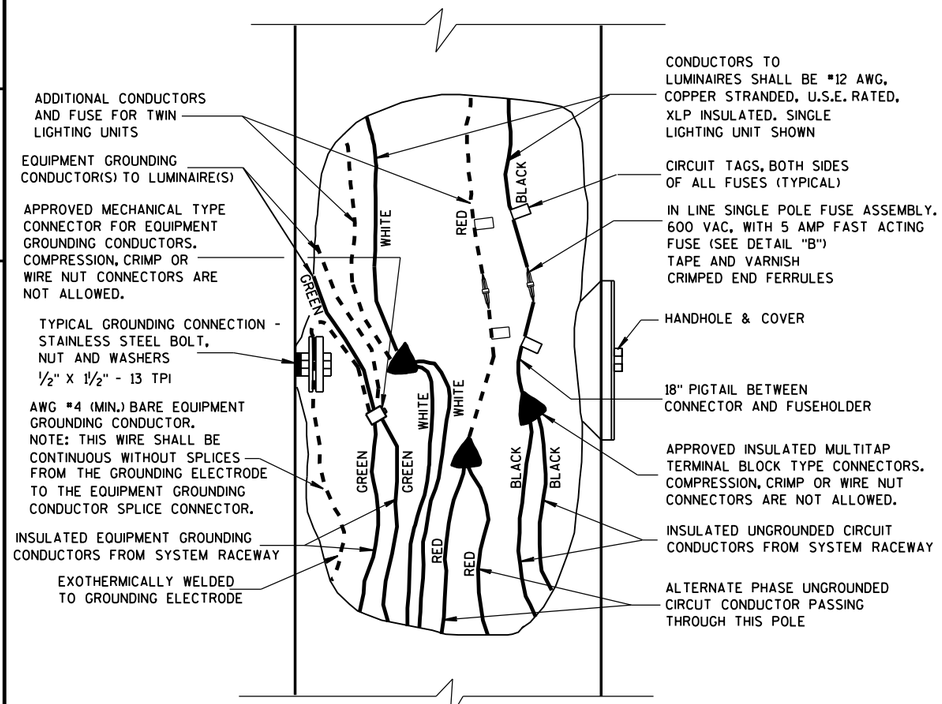


DETAIL "B"
BREAKAWY SINGLE POLE WITH WATERPROOF INSULATING BOOT

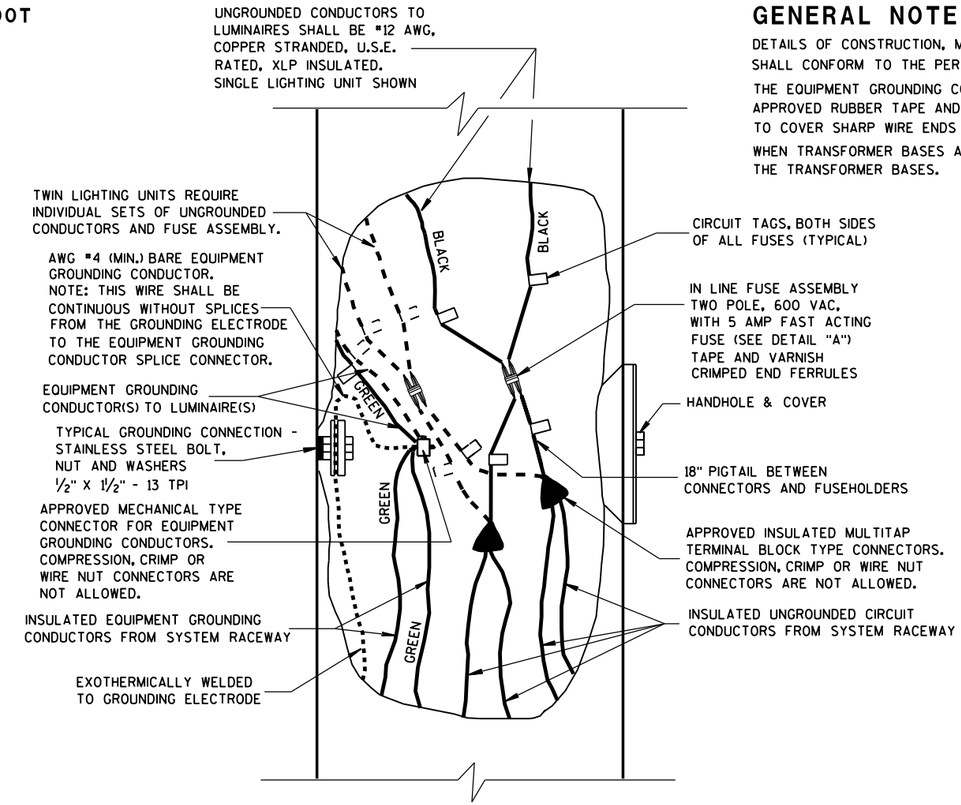




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

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

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

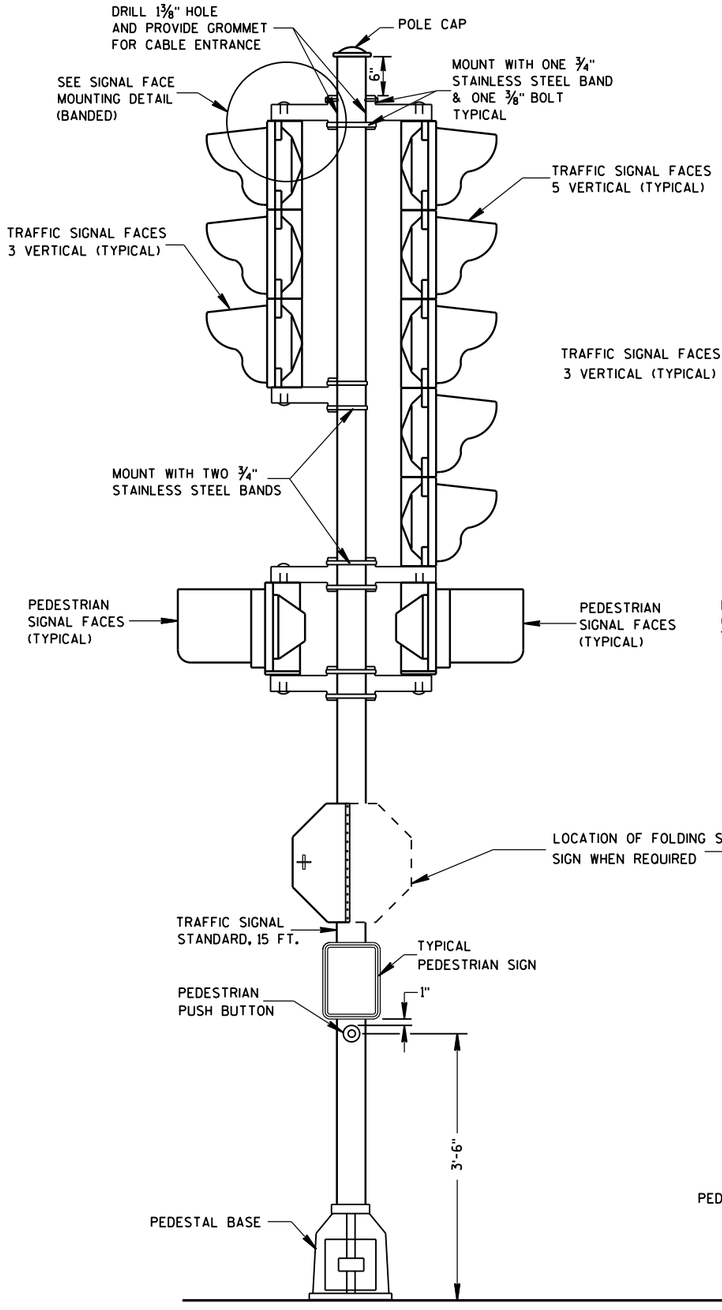
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

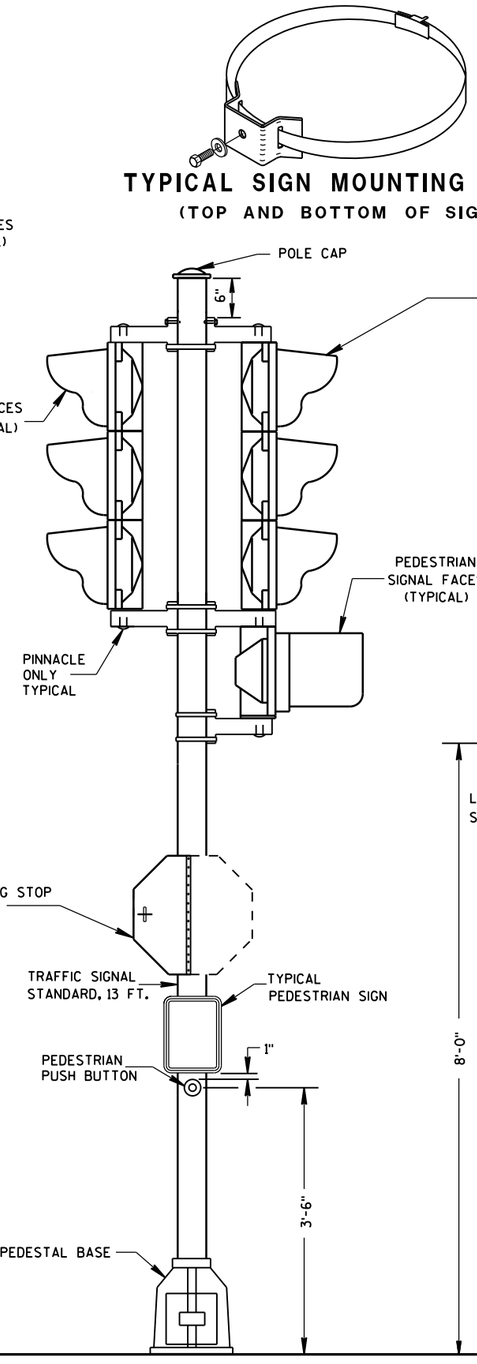
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DEPARTMENT OF TRANSPORTATION

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Sept. 2014 — DATE
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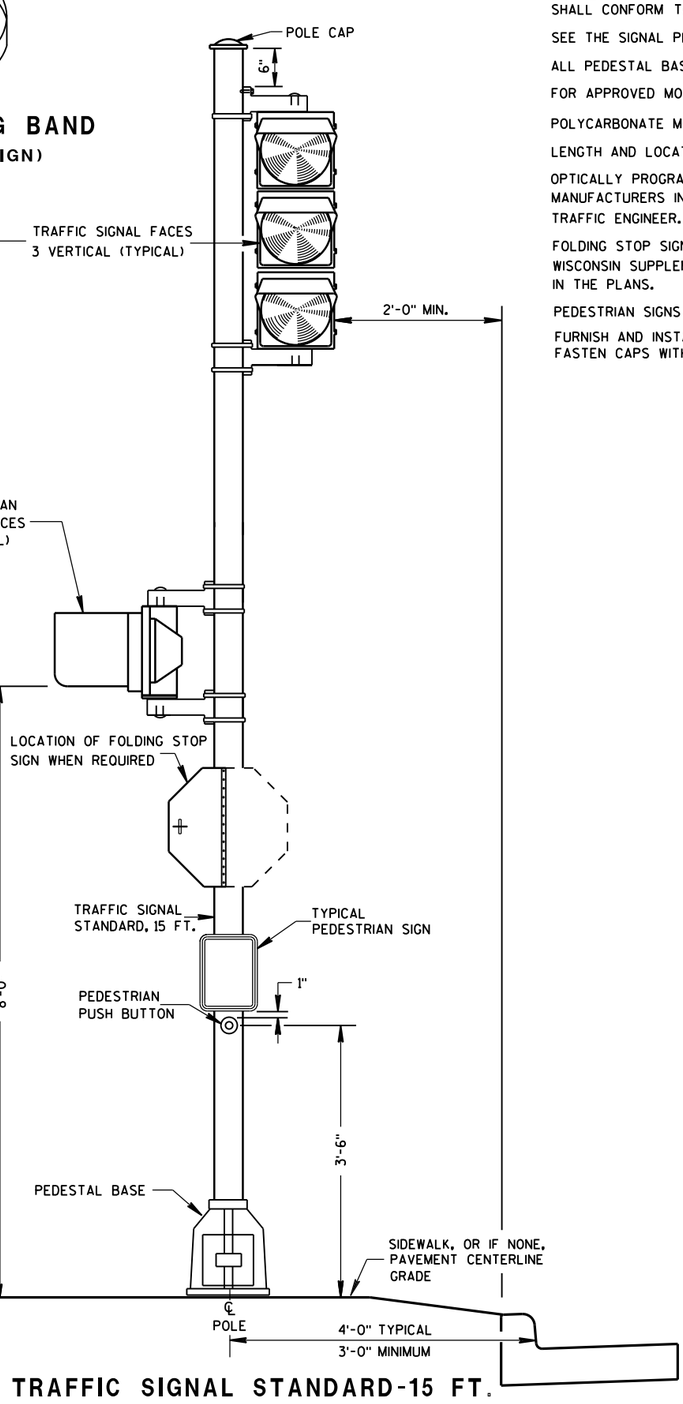


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

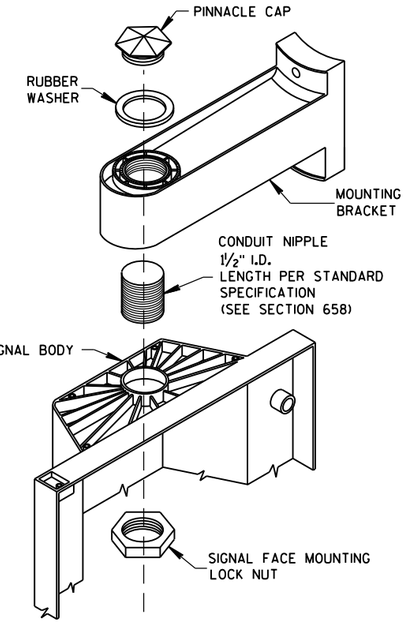
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



SIGNAL FACE MOUNTING DETAIL
(BANDED)

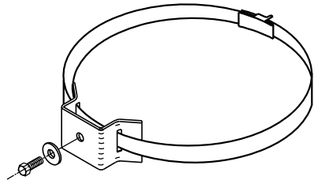
TRAFFIC SIGNAL STANDARD
POLY BRACKET MOUNTINGS
(TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

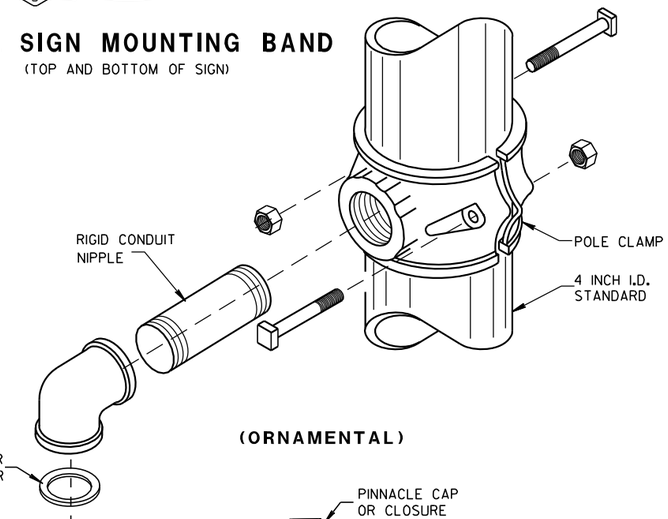
APPROVED
2/28/2013 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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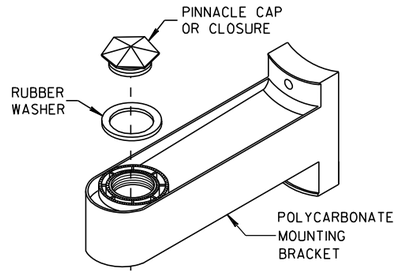
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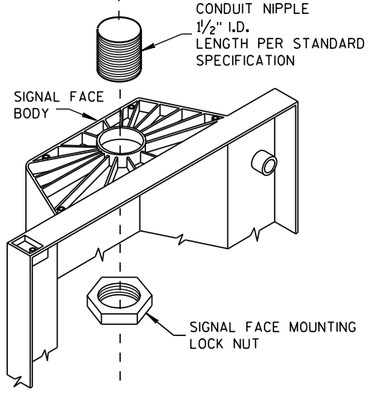
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



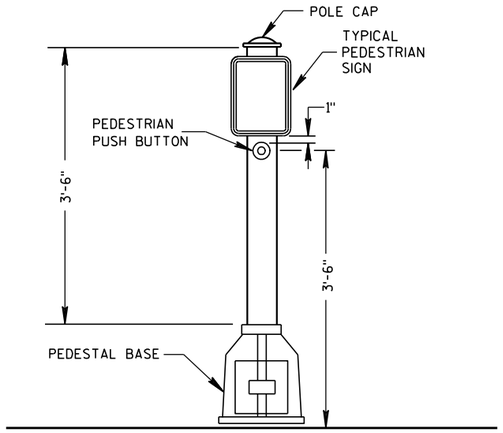
(ORNAMENTAL)



(BANDED)



SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

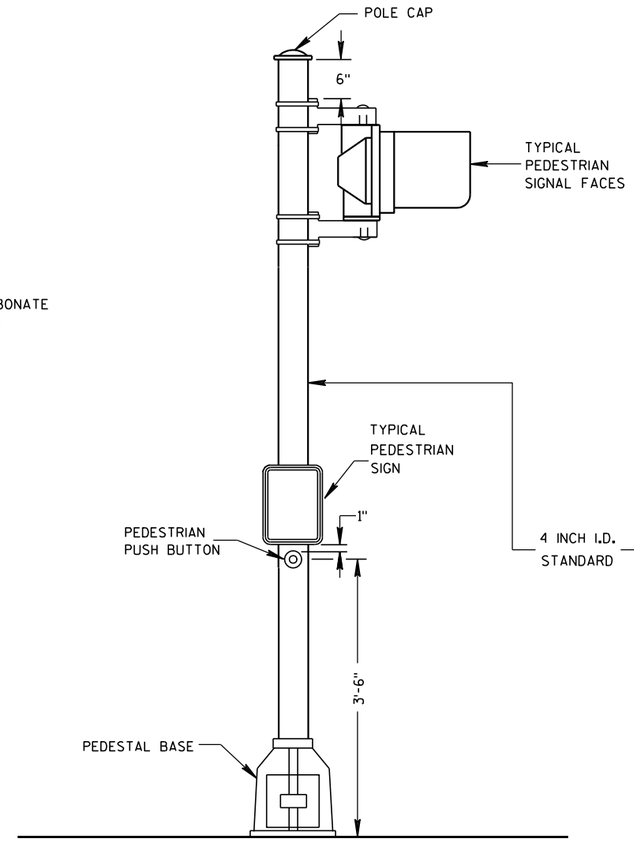
POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

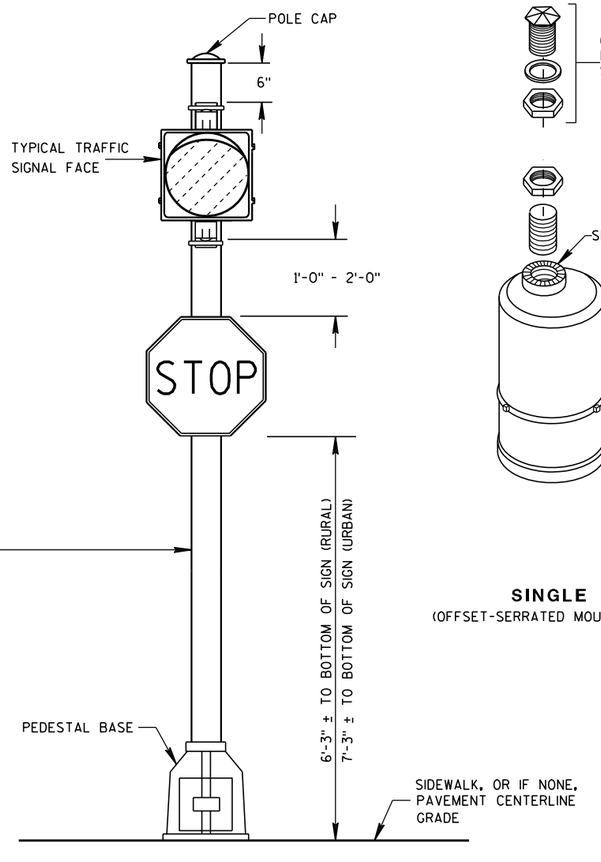
MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE DISTRICT TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

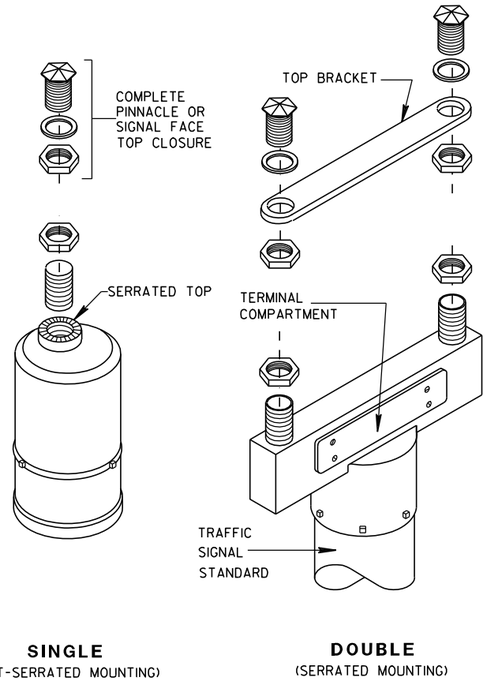
FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



PEDESTRIAN FACE STANDARD-10 FT.
(WALK-DON'T WALK)



STANDARD FLASHER.
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED



SINGLE
(OFFSET-SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/11/10
DATE

/S/ John Corbin
STATE ELECTRICAL ENGI

FHWA

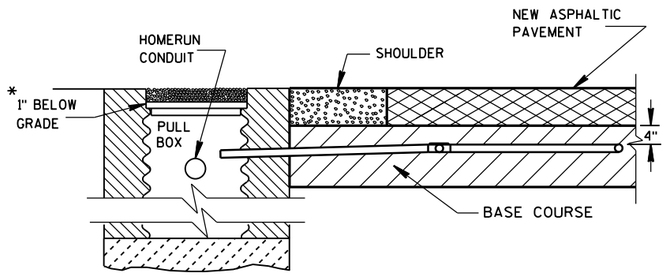
HWYS

6

S.D.D. 9 E 7-5

6

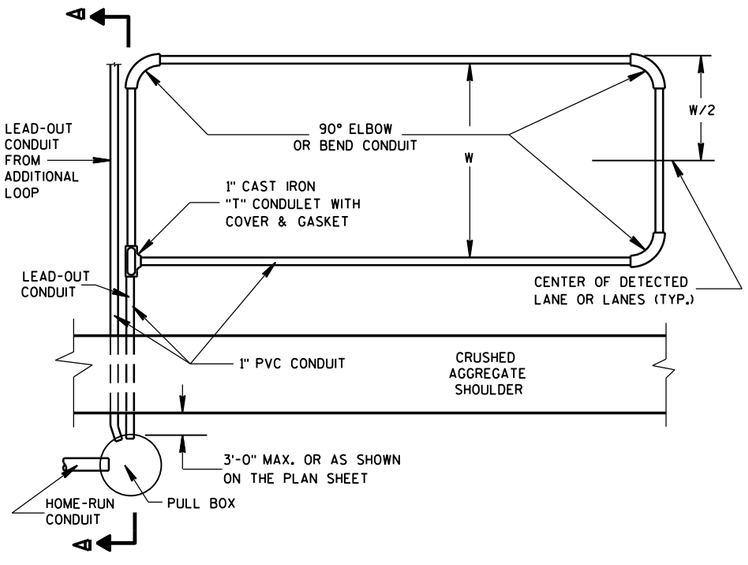
S.D.D. 9 E 7-5



SECTION A-A
NO CURB & GUTTER

DETECTOR LOOP INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.



TYPICAL PLAN OF LOOP DETECTOR

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD-OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

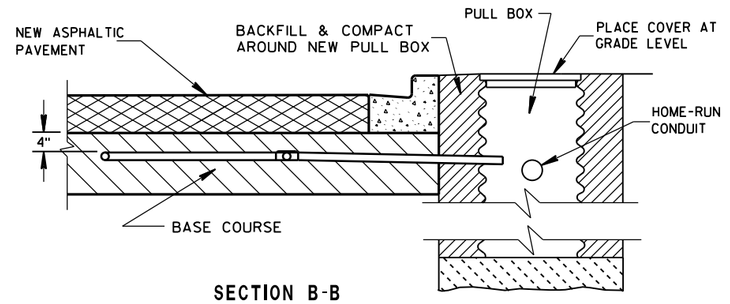
SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP DUCT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT AND CONDULET SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE ASPHALTIC PAVEMENT IS PLACED.

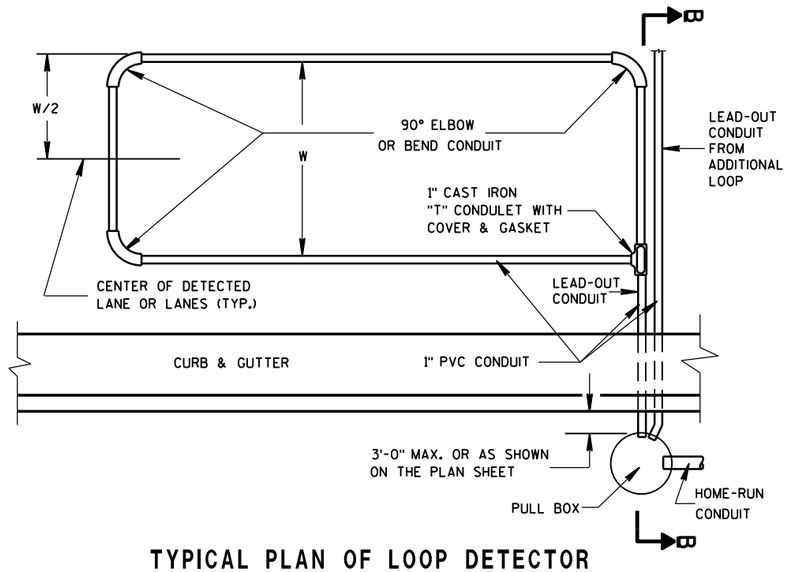
WHEN MULTIPLE LAYERS OF ASPHALTIC PAVEMENT ARE TO BE PLACED, LOOPS MAY BE INSTALLED BY SAWING A TWO INCH WIDE SLOT IN THE FIRST LAYER, DIG OUT THE ASPHALTIC MATERIAL AND BASE COURSE, PLACE THE LOOP, FILL THE SLOT WITH BASE COURSE MATERIAL AND NEW ASPHALTIC MATERIAL AND TAMP THE ASPHALTIC MATERIAL IN PLACE.

SHOULD TRAFFIC BE ALLOWED TO USE THE AREA OF ROADWAY WITH THE NEWLY INSTALLED LOOP BEFORE THE PLACEMENT OF THE NEXT LAYER OF ASPHALTIC PAVEMENT, THE SLOT/PAVEMENT OPENING SHALL BE SEALED WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".



SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL

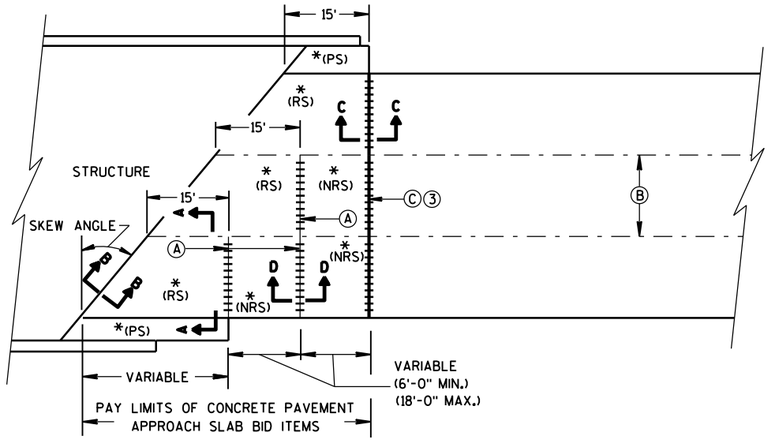


TYPICAL PLAN OF LOOP DETECTOR

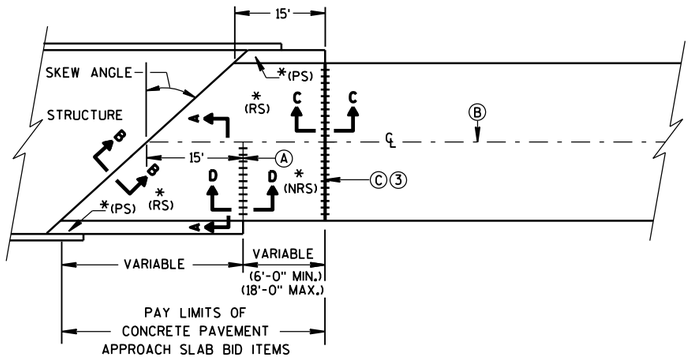
LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
Sept. 2014 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL
FHWA	

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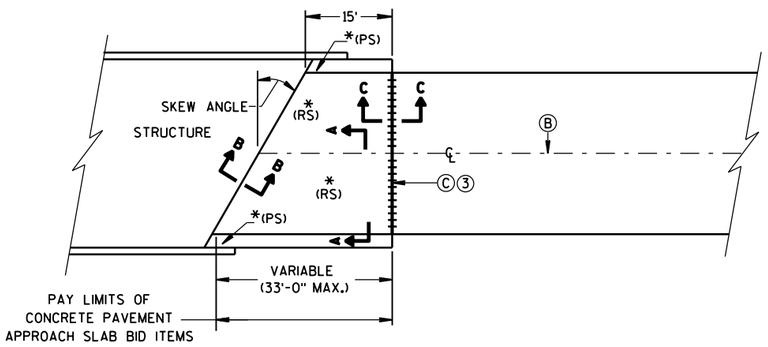
S.D.D. 9 F 8-4



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >20°
(PAVEMENT WIDTH ≤30')



SKEWS ≤20°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

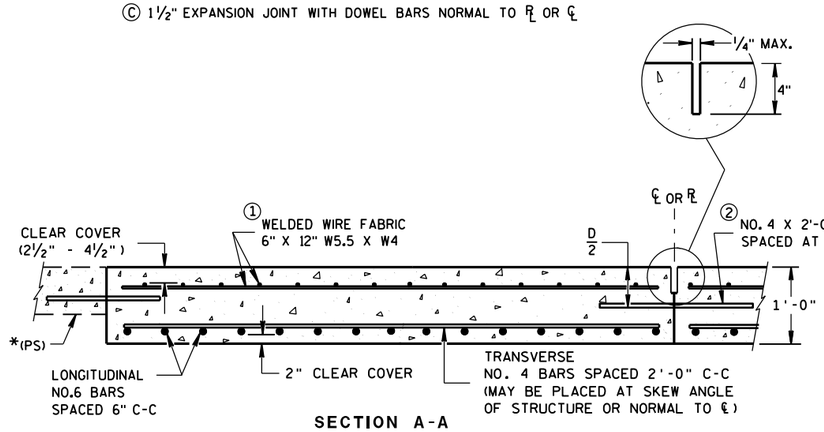
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

***STANDARD DOWEL BAR DIAMETER
(SEE SDD 13C11, & SDD 13C13)

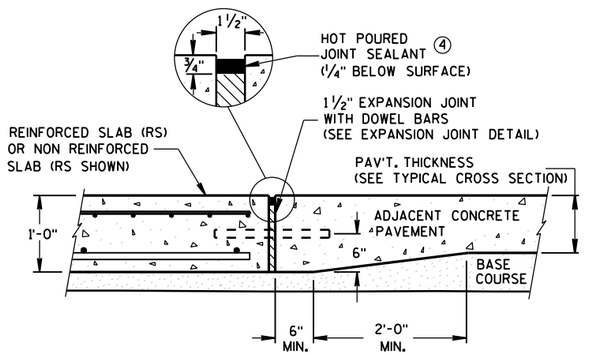
Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄

Ⓑ STANDARD LONGITUDINAL JOINT WITH TIE BARS.

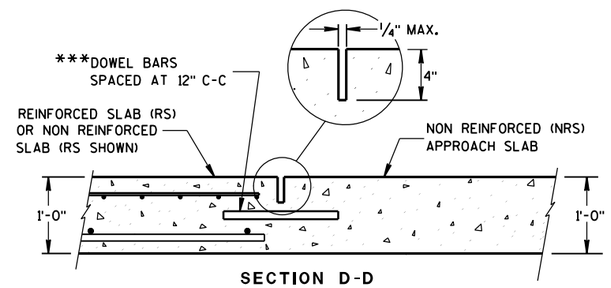
Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

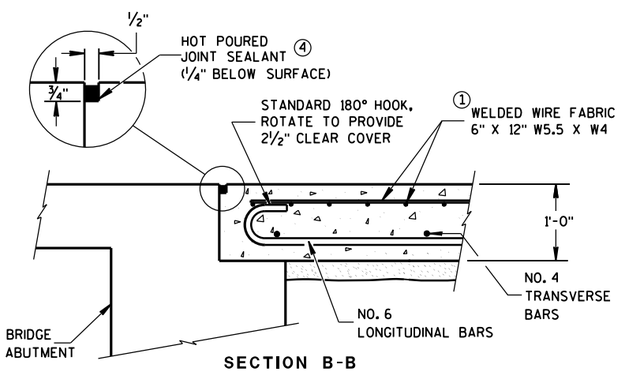
① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

② THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

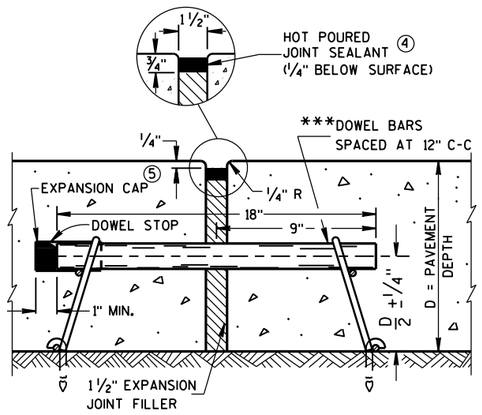
③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

④ USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.

⑤ PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

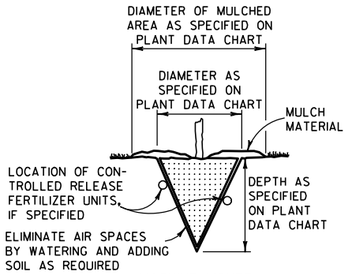
APPROVED
June, 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPER
FHWA

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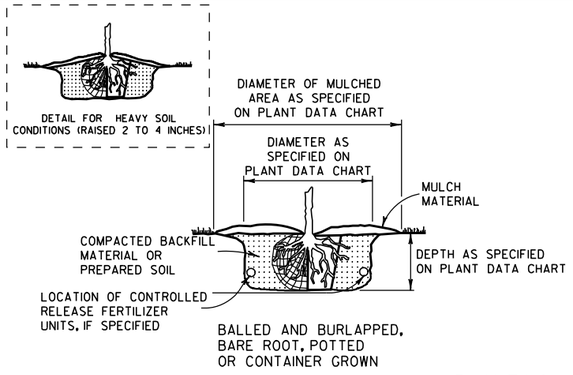
S.D.D. 13 B 2-8a

6

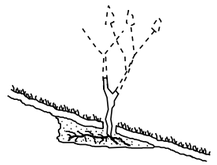
S.D.D. 13 B 2-8a



MACHINE MOVED

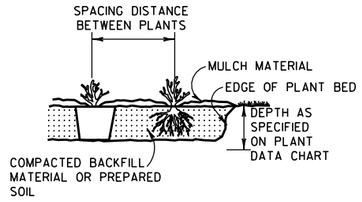


BALLED AND BURLAPPED, BARE ROOT, POTTED OR CONTAINER GROWN



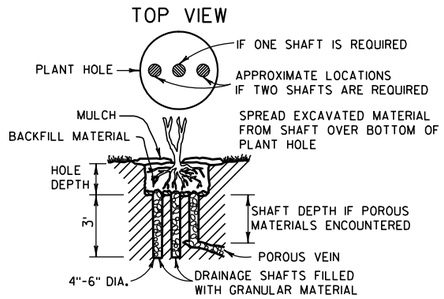
ACCOMMODATE ROOTS (SMOOTH AND STAGHORN SUMAC)

NOTE:
1) ENGINEER SHALL REQUIRE 3 SLITS IN POT TO SPEED DETERIORATION
2) METAL, PLASTIC OR OTHER NONDEGRADABLE POTS SHALL BE REMOVED PRIOR TO PLANTING



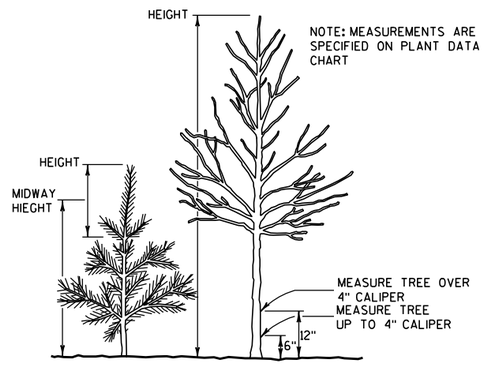
PREPARED BED (BARE ROOT AND POTTED)

PLANTING

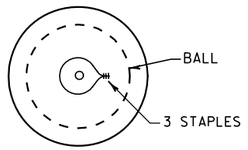


NOTE:
DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

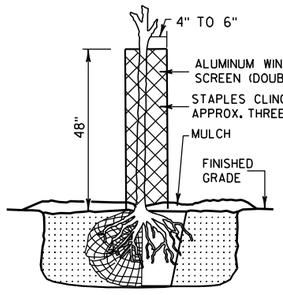
DRAINING



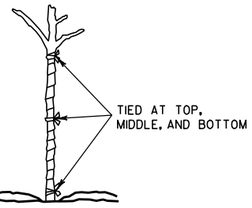
MEASURING



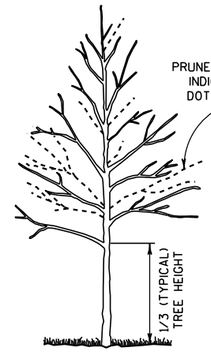
TOP VIEW



RODENT PROTECTION



WRAPPING



TALL DECIDUOUS TREES (ASH, MAPLE, LINDEN, OAK)

SINGLE STEMMED LOW DECIDUOUS TREES (CRABS AND OTHER SINGLE STEM TYPE)

MULTI-STEMMED LOW DECIDUOUS TREES OR LARGE SHRUBS (HAWTHORN, SERVICEBERRY)

NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES

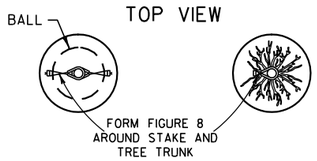


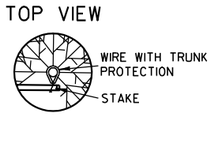
SHRUBS (GRAY DOGWOOD ARROWWOOD VIBURNUM)

SUMAC

TREE TYPE EVERGREENS (PINE, SPRUCE, FIR) EVERGREENS USUALLY ARE NOT PRUNED

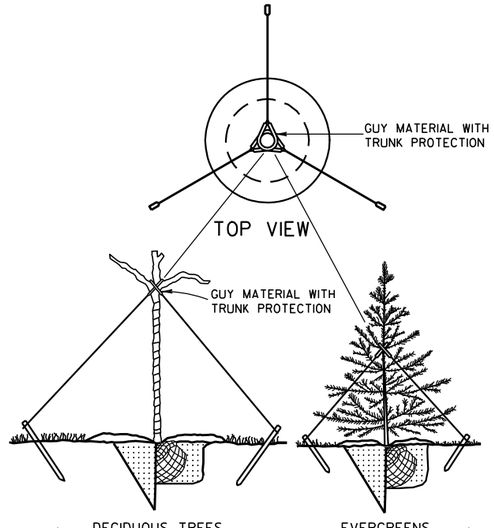
PRUNING



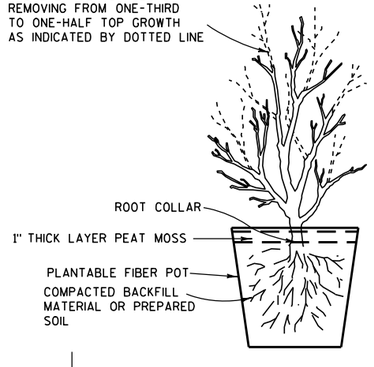


NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

BRACING



GUYING



POTTING

NOTES

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

BRACING, WRAPPING, GUYING, RODENT PROTECTION, FERTILIZER AND MULCH SHALL BE USED ONLY WHEN SPECIFIED ON THE PLANT DATA CHART (PART OF PLAN) OR SPECIAL PROVISIONS.

TREE PLANTING DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/11/94 — DATE
/S/ Rory L. Rhinesmith — CHIEF METHODS DEVELOPMENT ENGINEER
FHWA

S.D.D. 14 A 2-1

6
S.D.D. 14 A 2-1

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.

(D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

(G) ½" DIAMETER X 3" LONG LAG BOLT AND WASHER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

(I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

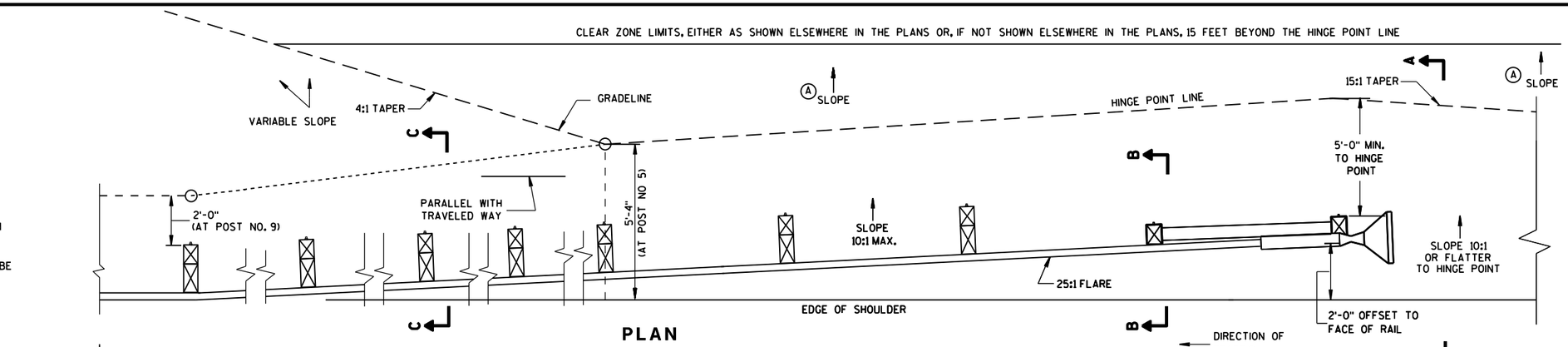
SEE SDD 14B42 FOR MORE INFORMATION.

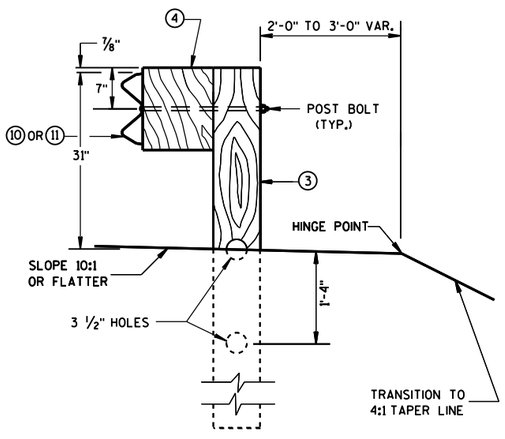
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

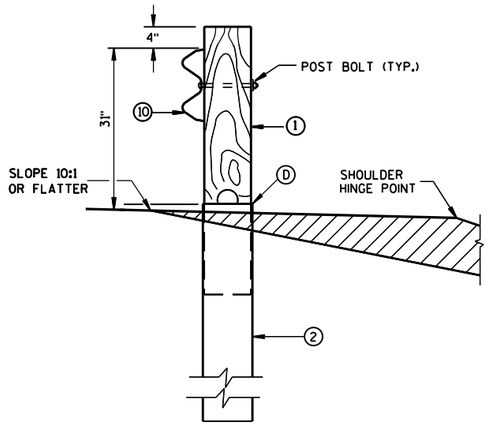
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.

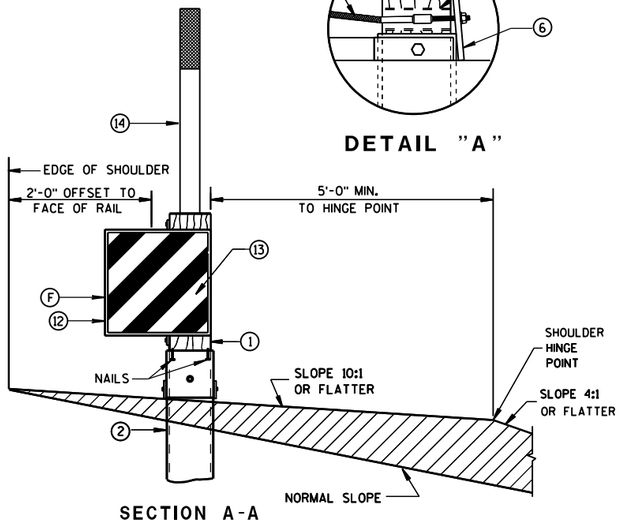




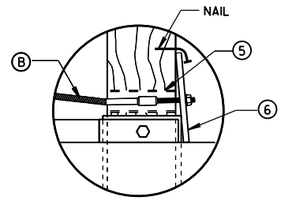
SECTION C-C
TYPICAL AT POST NOS. 3-9



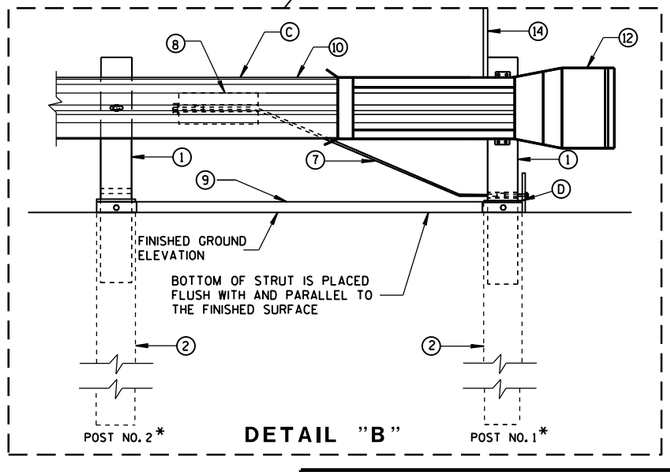
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



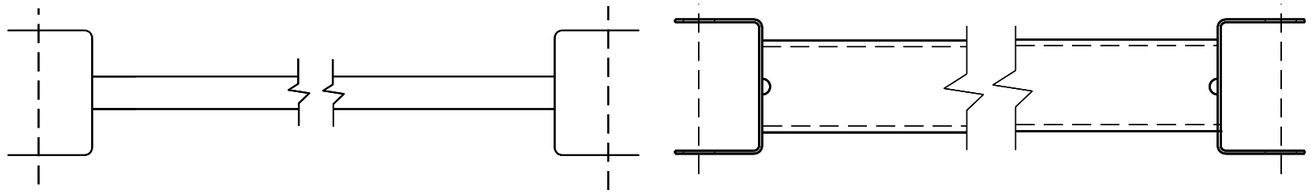
DETAIL "B"

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

S.D.D. 14 B 44-2a

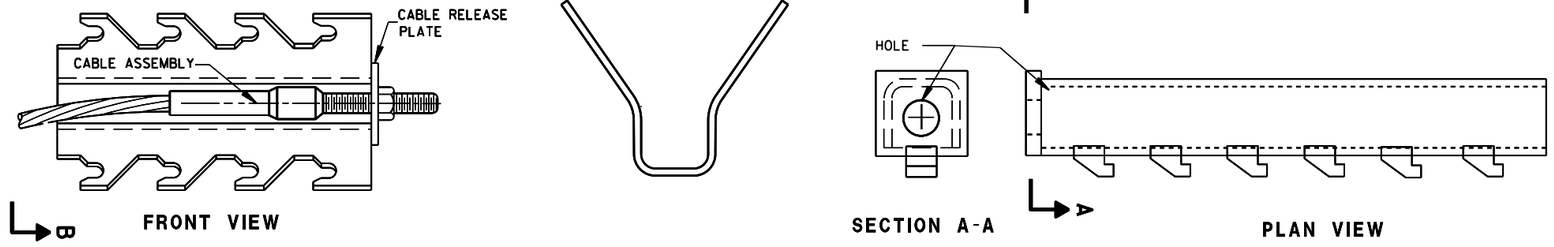
S.D.D. 14 B 44-2a



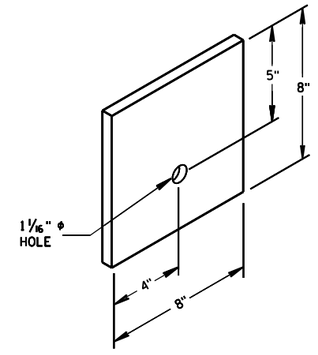
GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	END SECTION EAT
(13)	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
(14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



GENERIC ANCHOR CABLE BOX (8) (H)



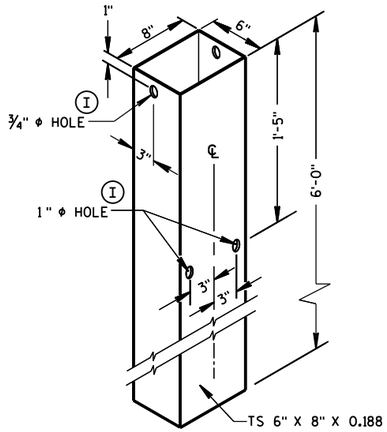
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

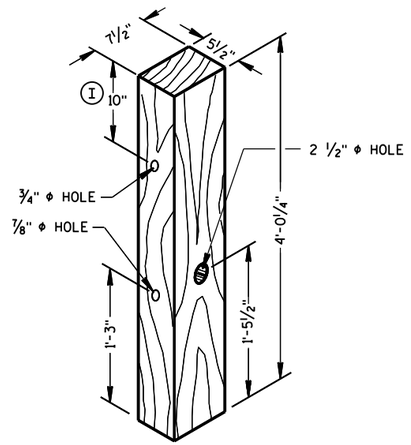
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 44-2b

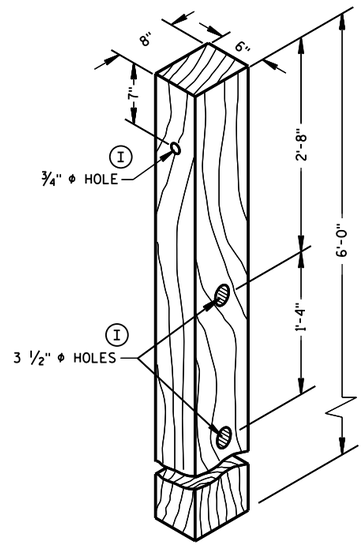


FOUNDATION TUBE (2)



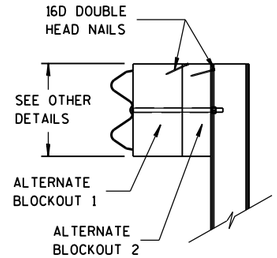
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

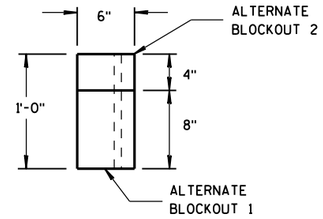


POSTS NUMBER 3-9

WOOD CRT POST (3)

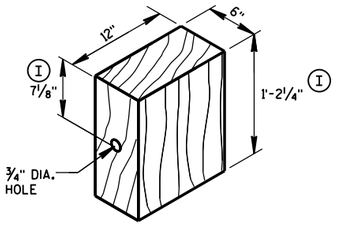


SIDE VIEW



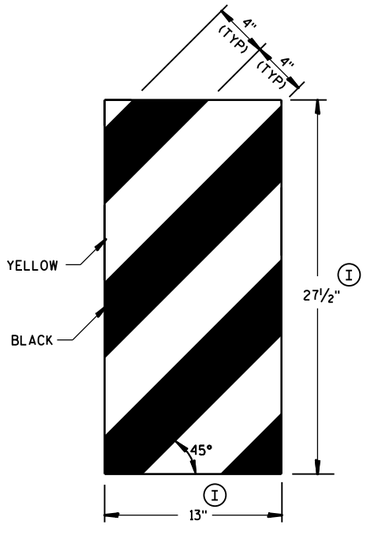
TOP VIEW

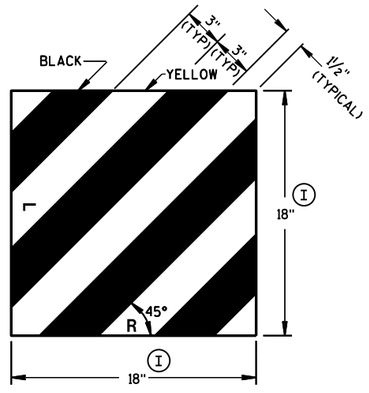
ALTERNATE WOOD BLOCKOUT DETAIL



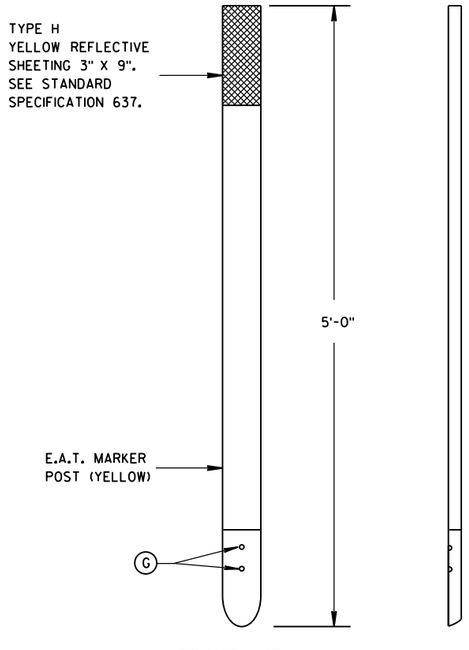
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





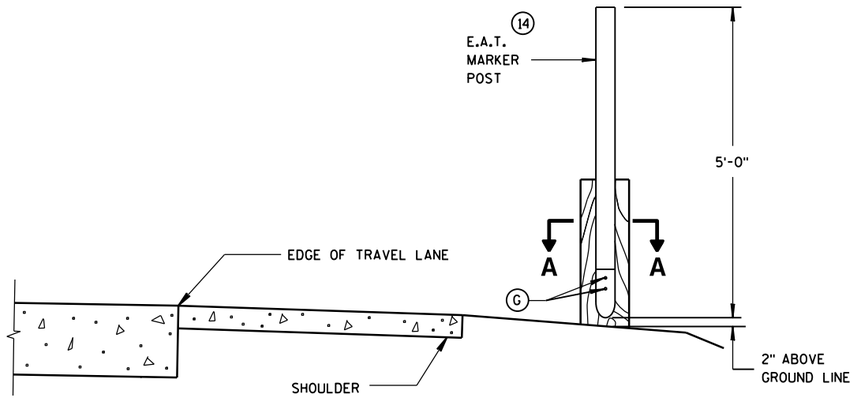
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

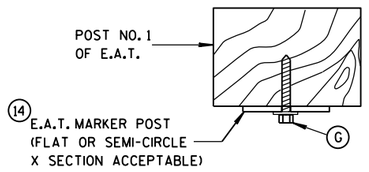
SIDE VIEW

E.A.T. MARKER POST (14)



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1

(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

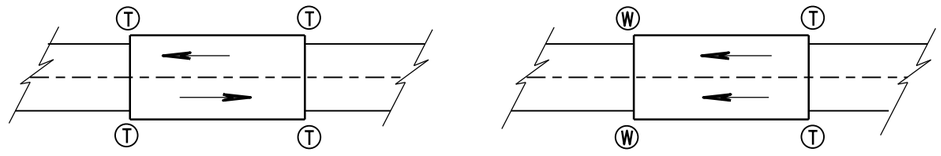
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 14 B 44-2c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

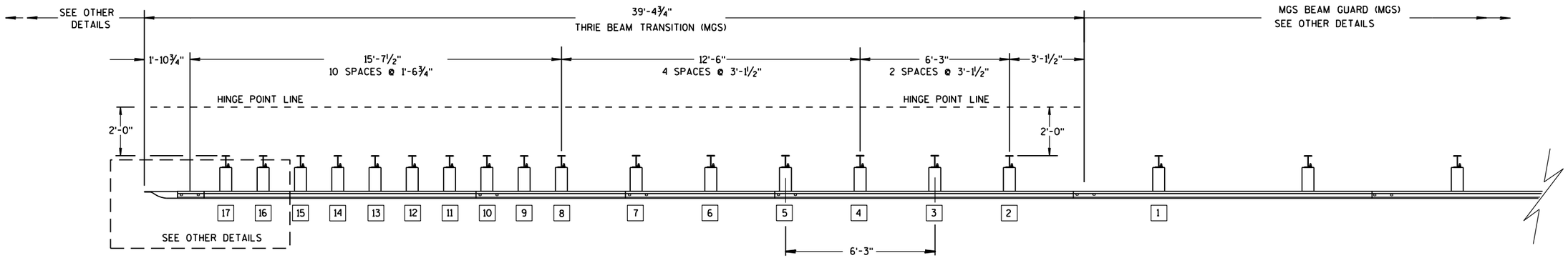
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

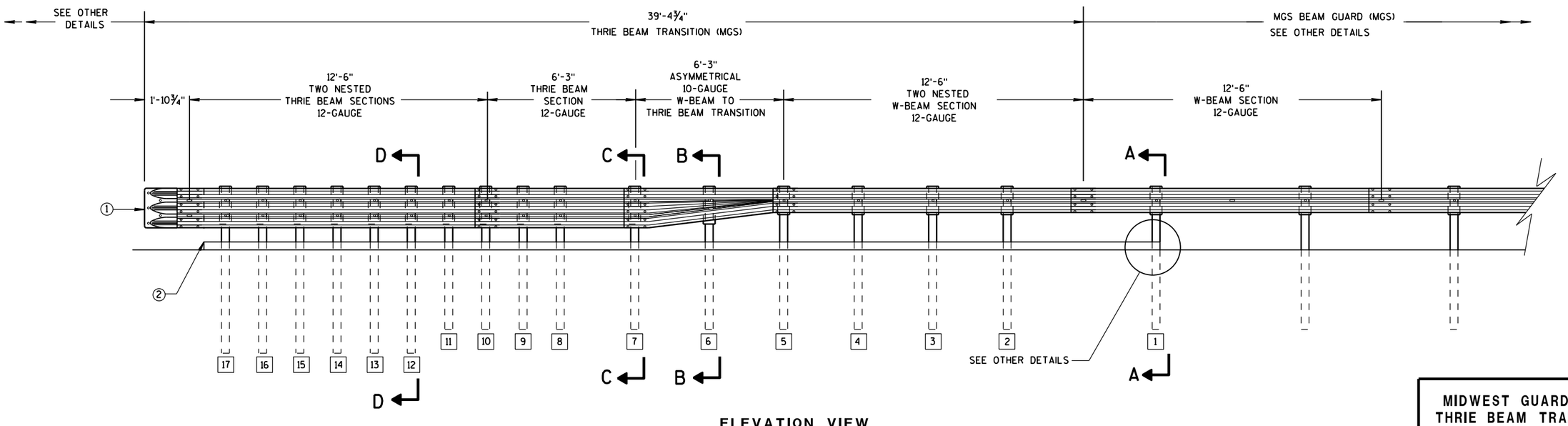
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-4a

6

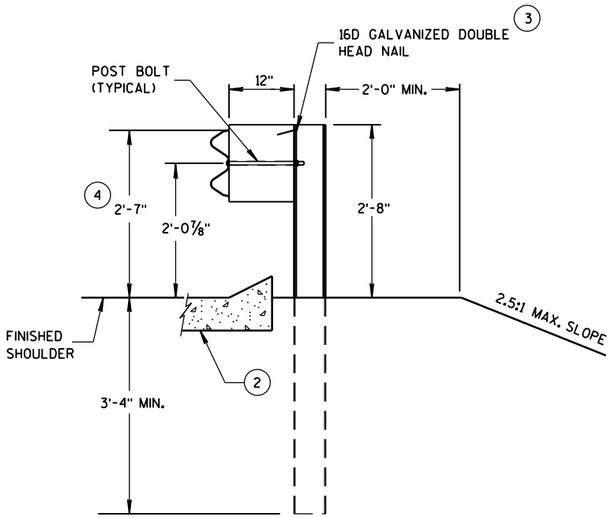
S.D.D. 14 B 45-4a

GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE_FEATURE SEE PLAN FOR INFORMATION.

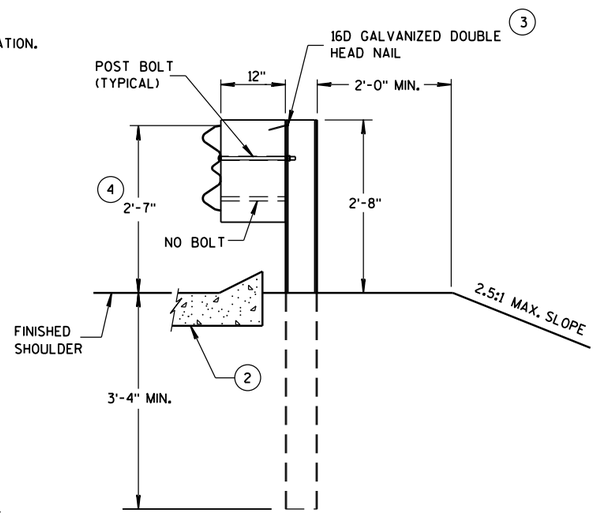
(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



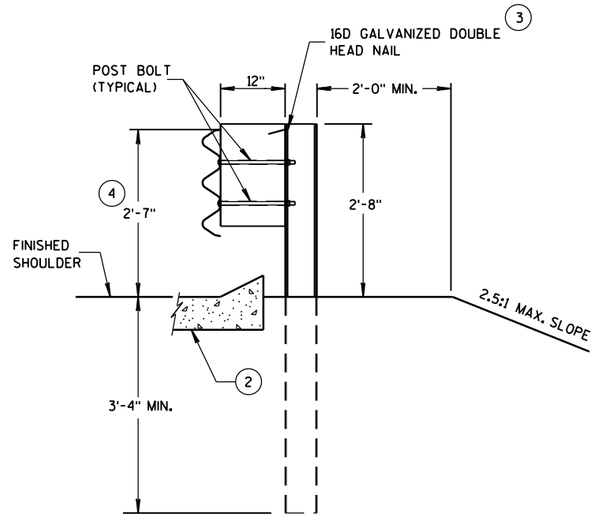
SECTION A-A

POSTS 1-5



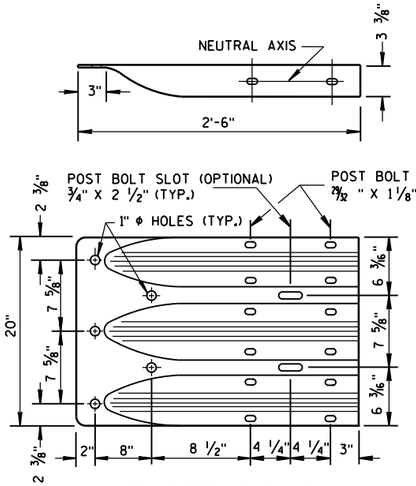
SECTION B-B

POST 6



SECTION C-C

POSTS 7-11



THRIE BEAM TERMINAL CONNECTOR

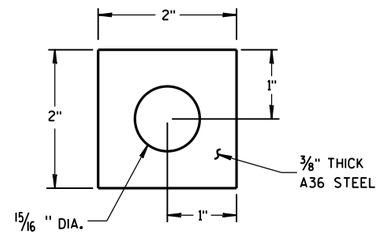
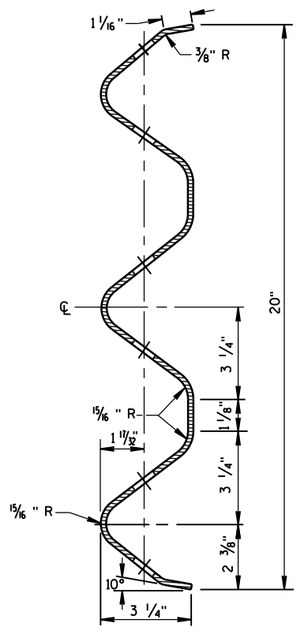
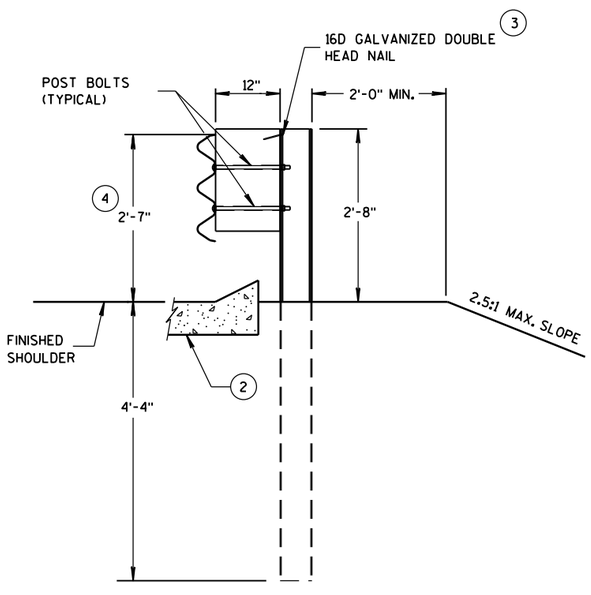


PLATE WASHER DETAIL

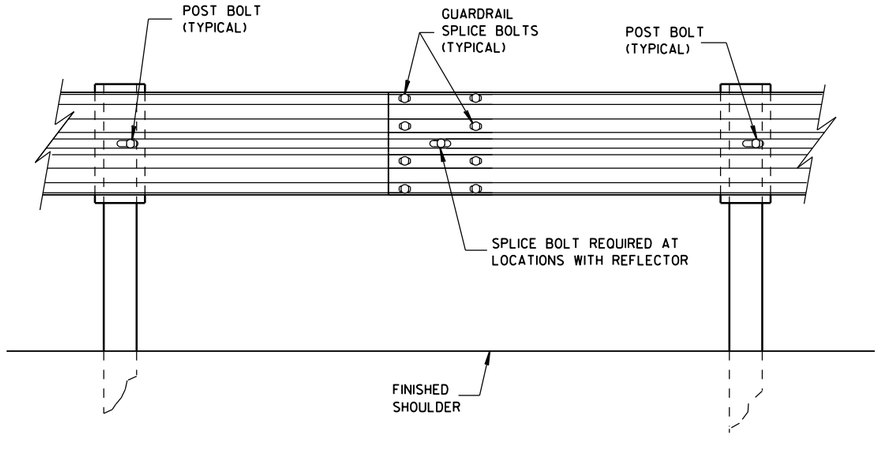


SECTION THRU THRIE BEAM RAIL ELEMENT



SECTION D-D

POSTS 12-17



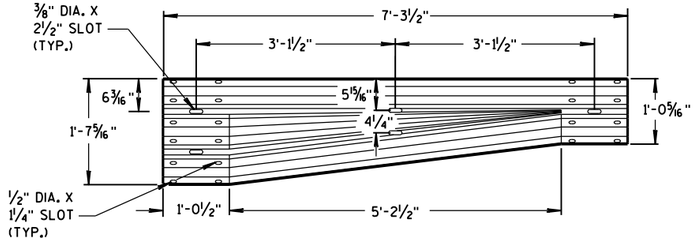
SPLICE DETAIL

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

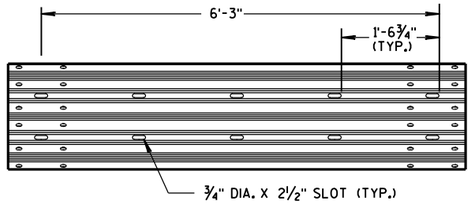
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

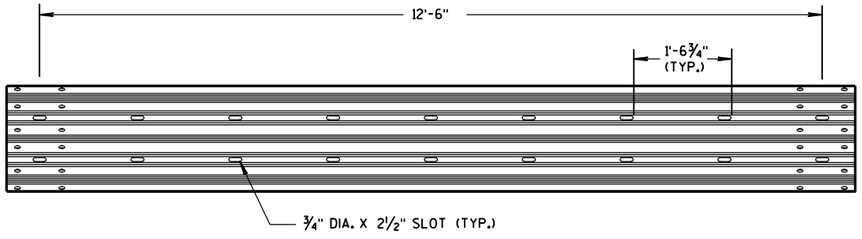
S.D.D. 14 B 45-4b



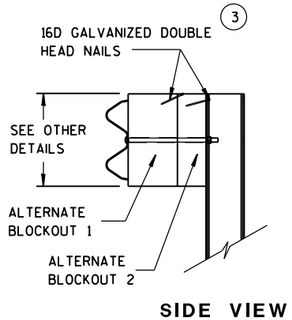
W-BEAM TO THRIE BEAM TRANSITION SECTION



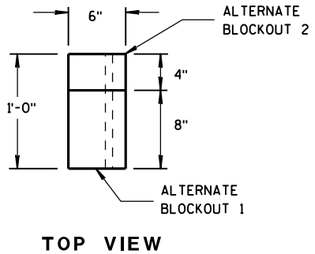
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

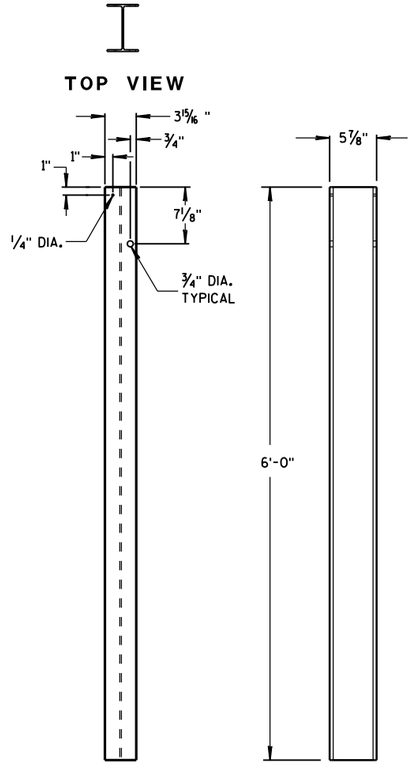


SIDE VIEW

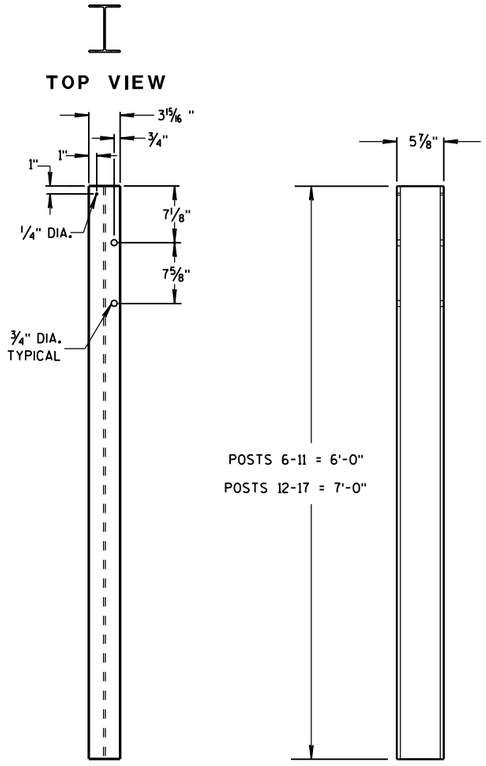


TOP VIEW

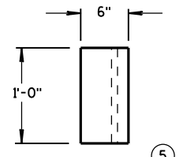
ALTERNATE WOOD BLOCKOUT DETAIL



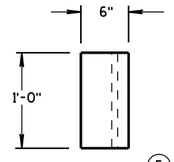
STEEL POSTS 1-5



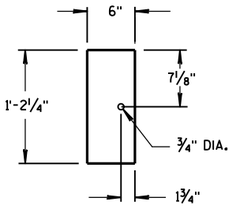
STEEL POSTS 6-17



TOP VIEW (5)

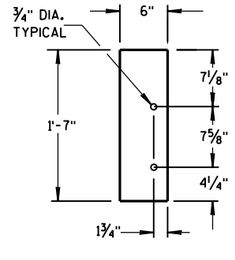


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

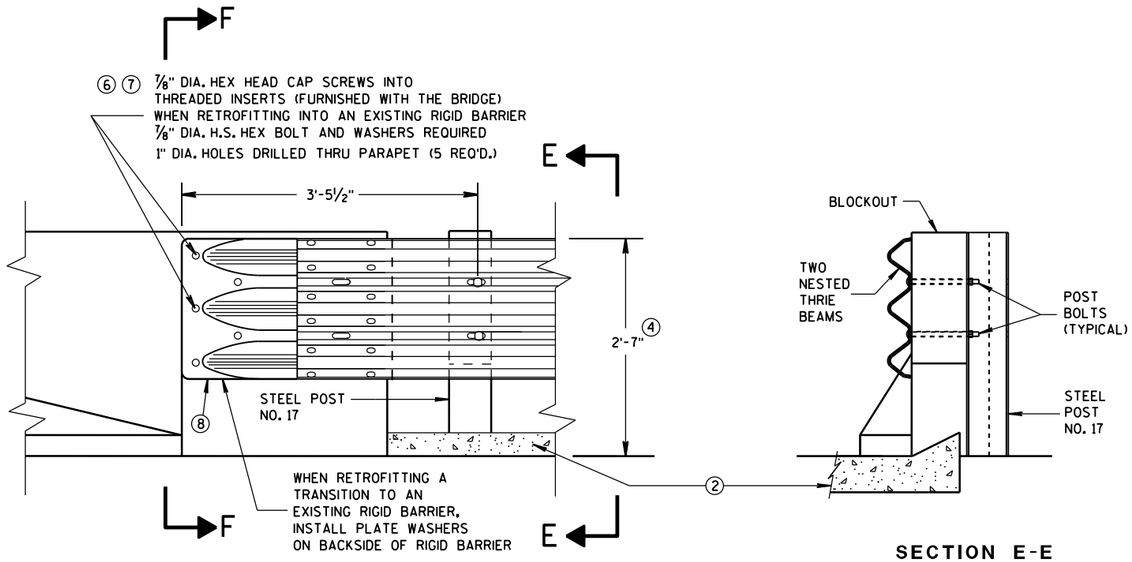
(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 45-4c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

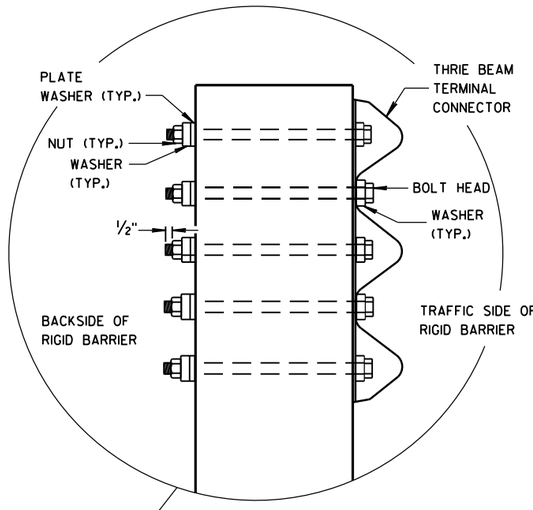
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

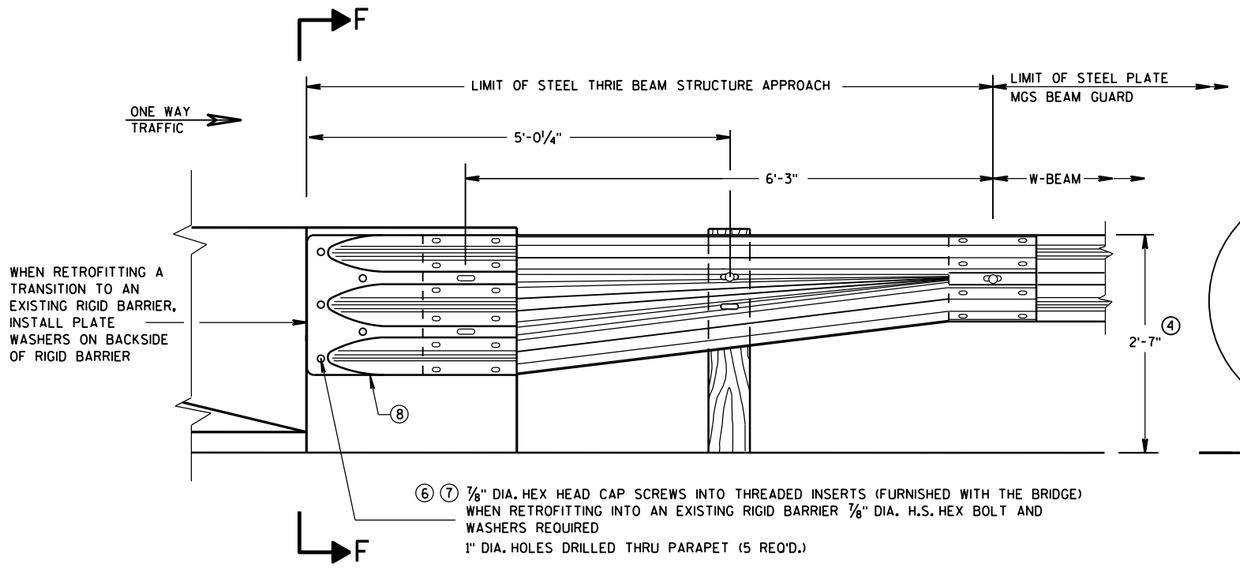
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

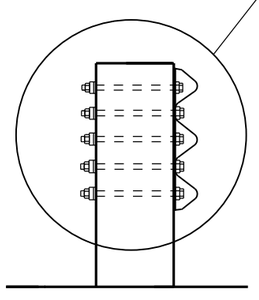
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

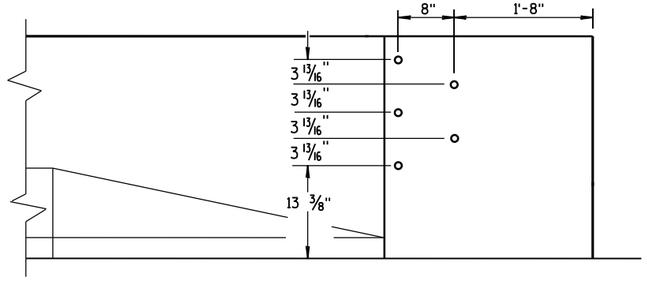




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

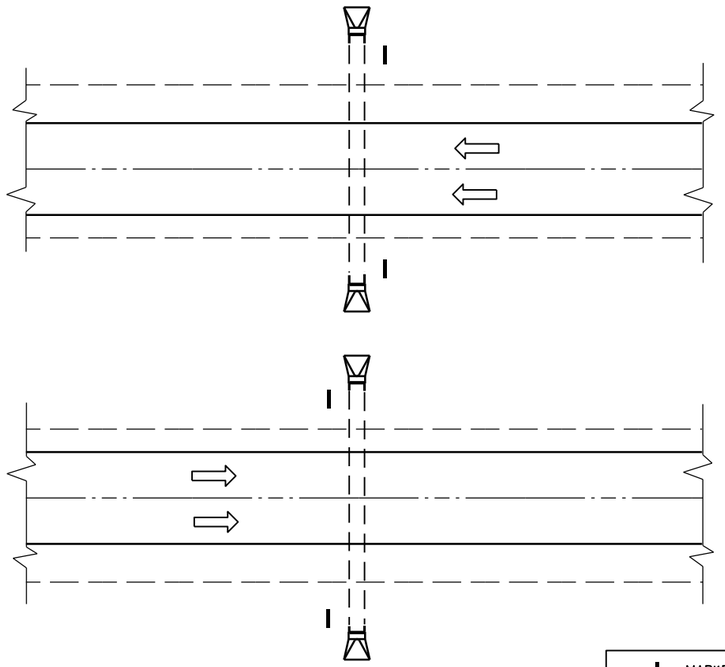
APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA
200
NT

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S.D.D. 14 B 45-4d

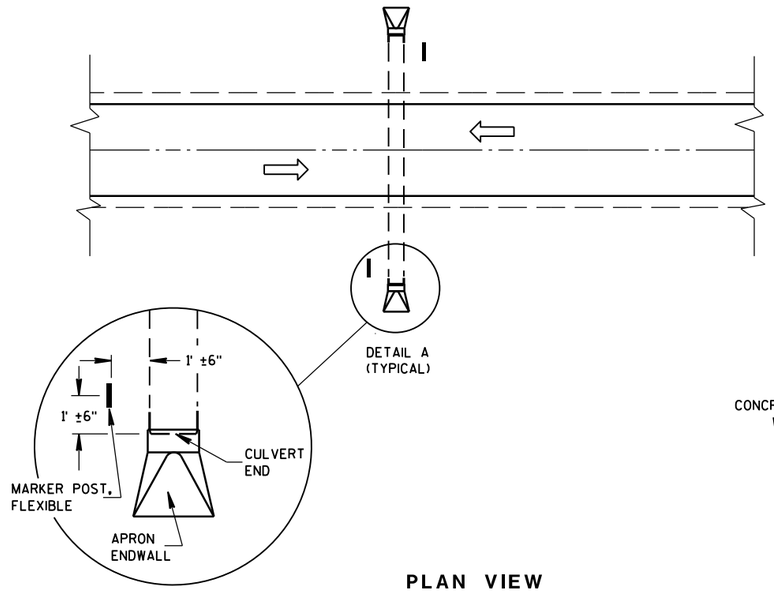
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S.D.D. 14 B 45-4d



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

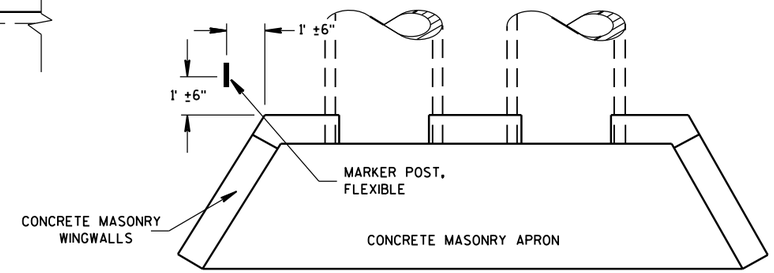
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

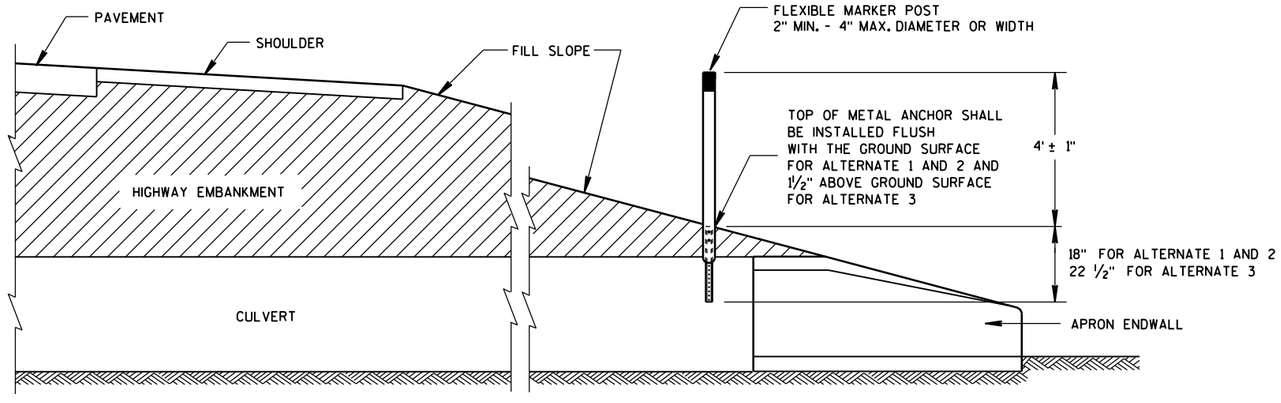
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

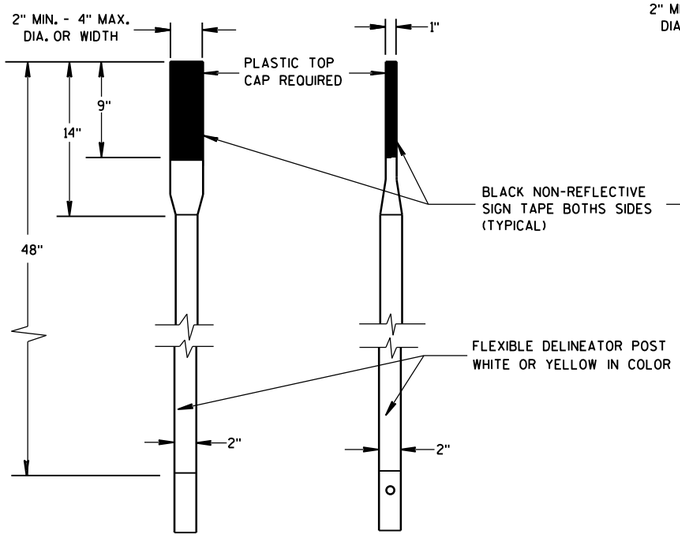
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

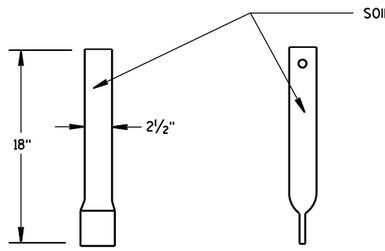
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S.D.D. 15 A 3-2a

6

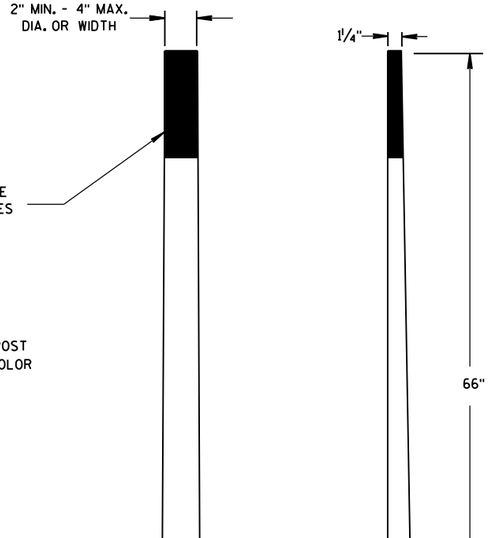
S.D.D. 15 A 3-2a





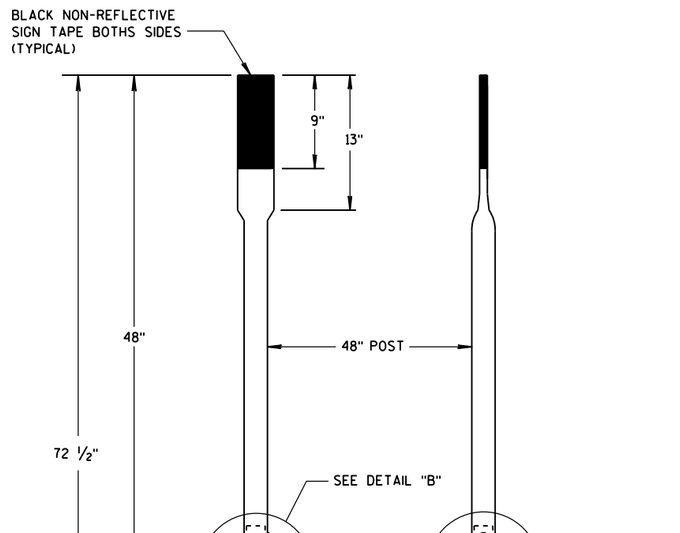
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

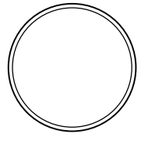
ALTERNATE 2



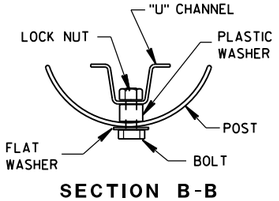
FRONT VIEW SIDE VIEW

ALTERNATE 3

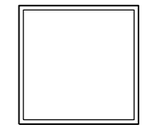
FLEXIBLE MARKER POSTS



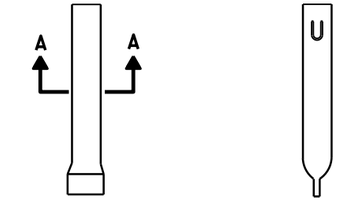
SECTION A-A



SECTION B-B

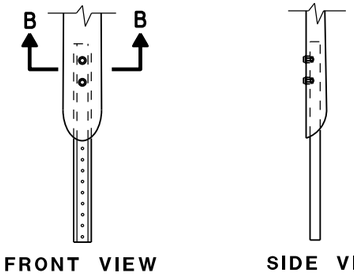


SECTION C-C



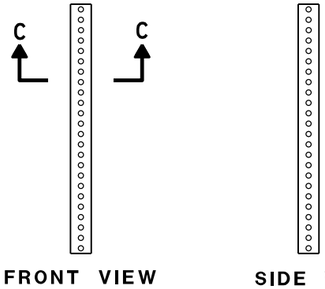
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

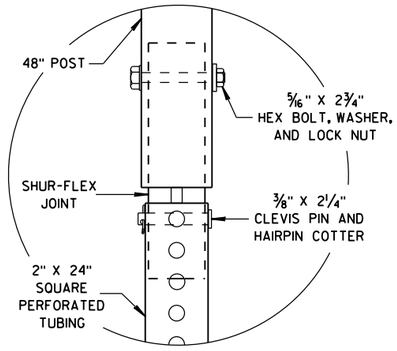
ALTERNATE 2



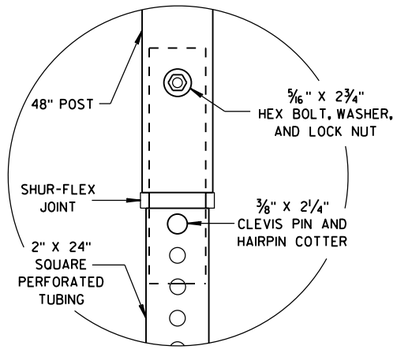
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

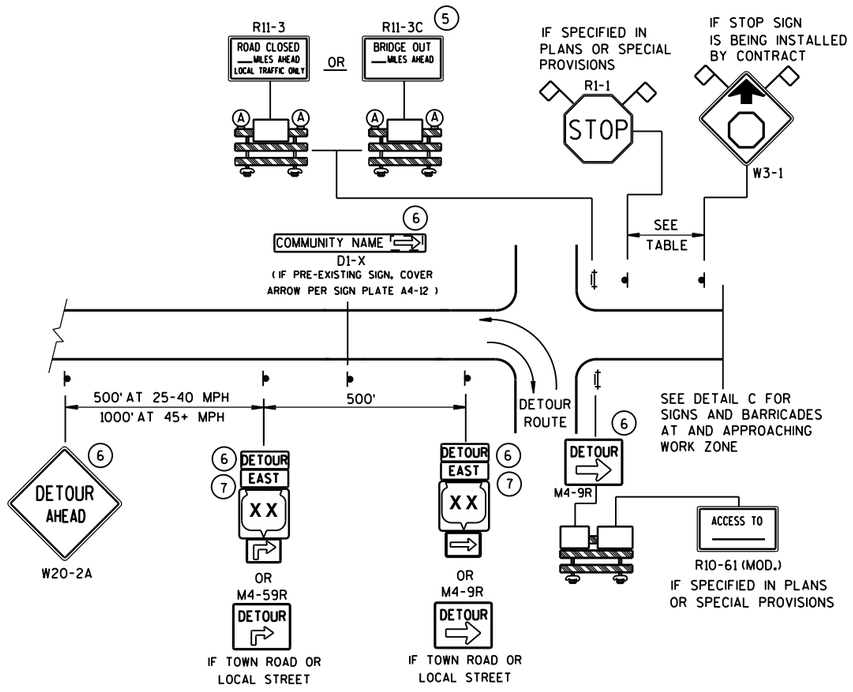
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 A 3-2b

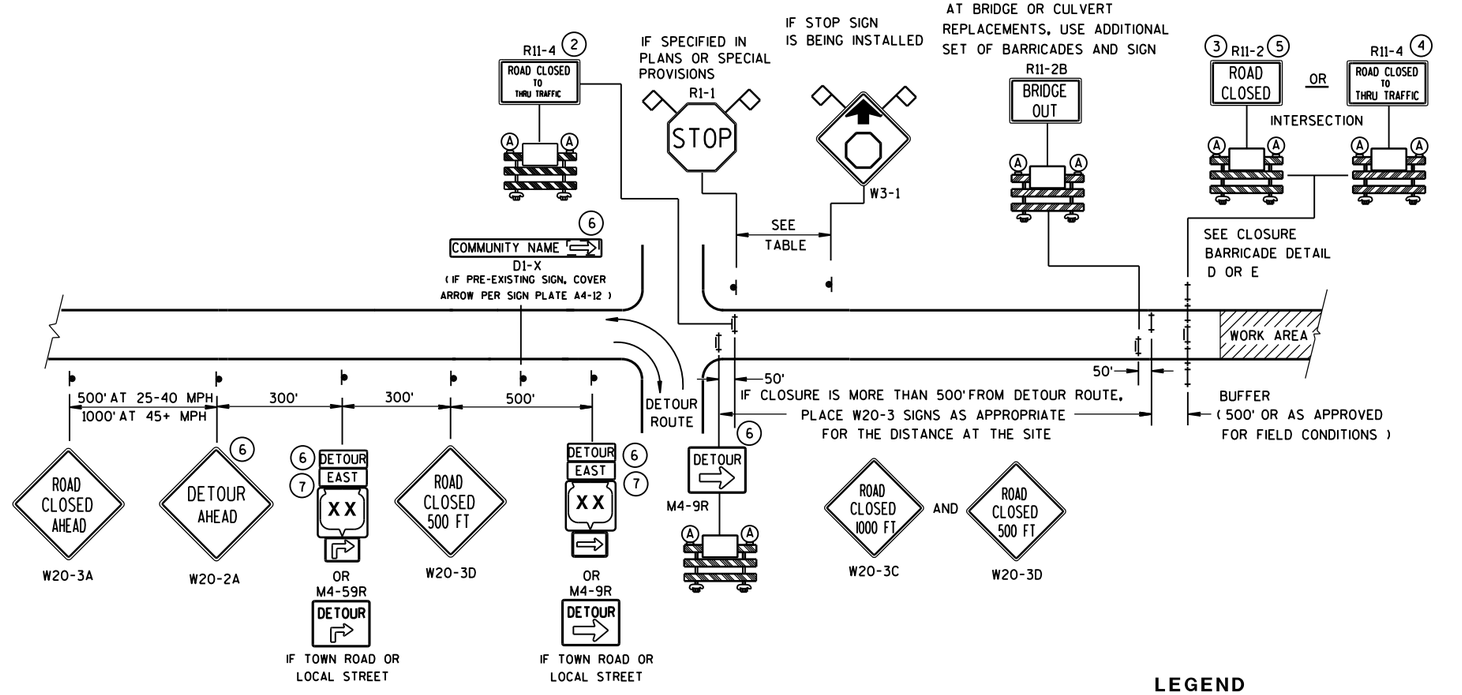
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S.D.D. 15 A 3-2b



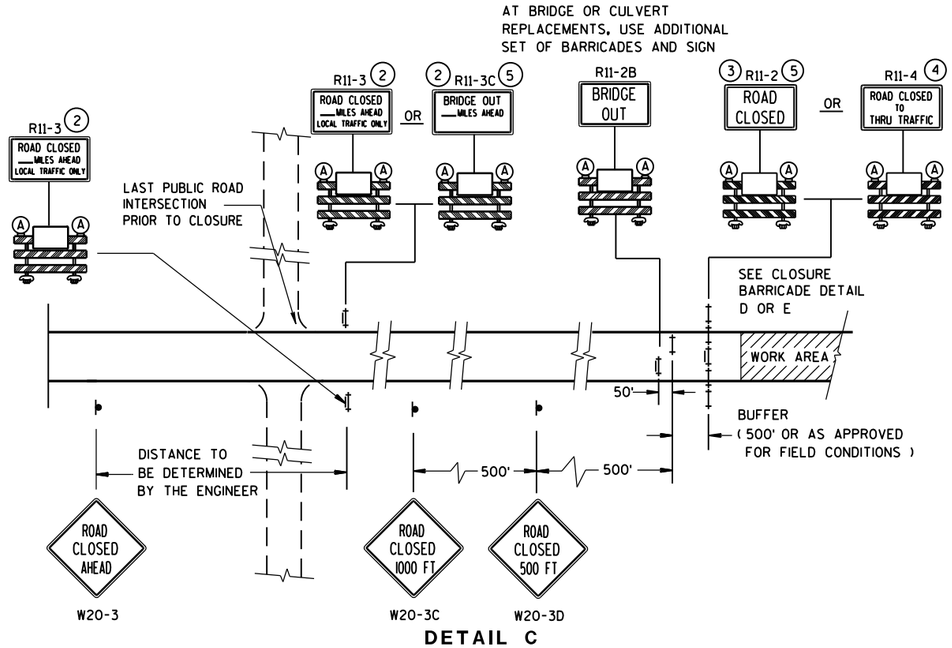
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

SEE SDD 15C2-SHEET "**b**" FOR GENERAL NOTES AND FOOTNOTES (1) THROUGH (7)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

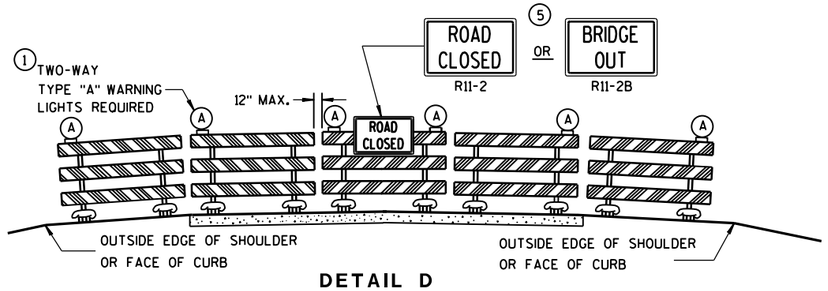
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

S.D.D. 15 C 2-6a

6

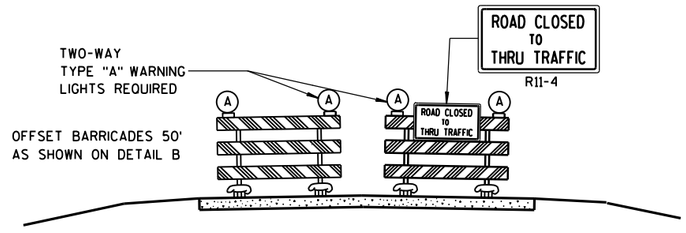
S.D.D. 15 C 2-6a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI — FIC

FHWA

6

S.D.D. 15 C 2-6b

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

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.

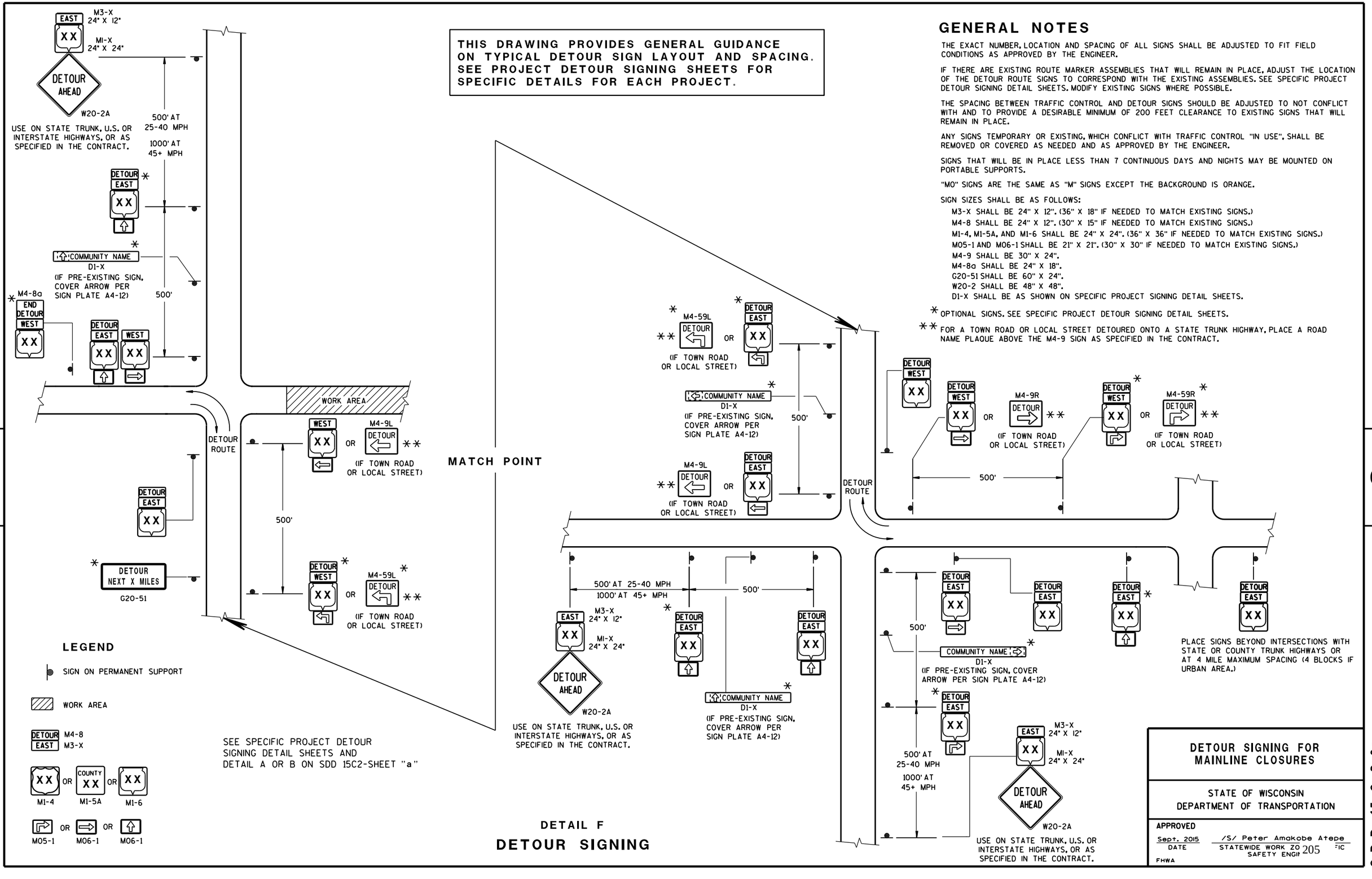
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- MO5-1 AND MO6-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 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.



LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST — M4-8 / M3-X
- XX OR COUNTY XX OR XX — M1-4 / M1-5A / M1-6
- MO5-1 OR MO6-1 OR MO6-1

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

DETAIL F

DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

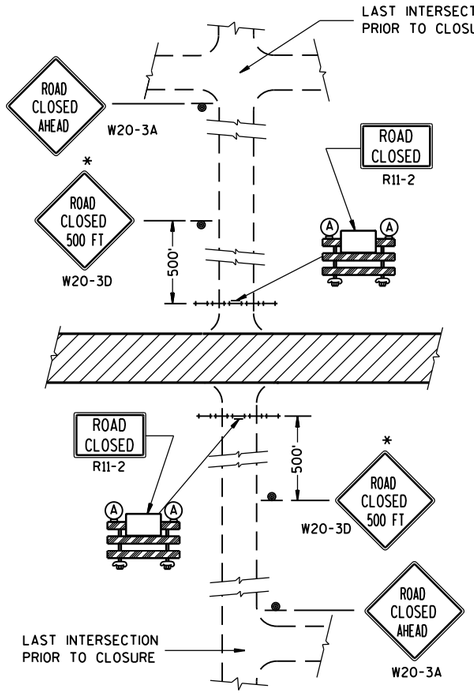
Sept. 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

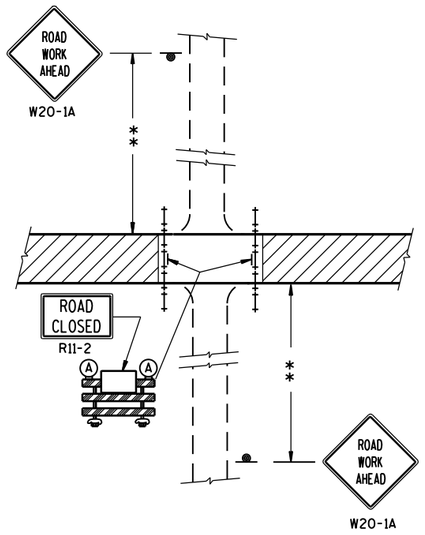
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S.D.D. 15 C 2-6c



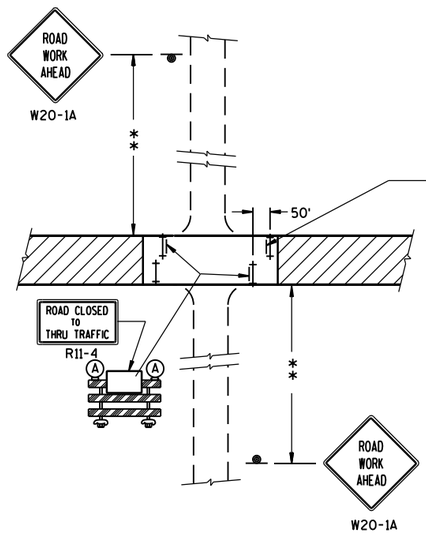
DETAIL 1

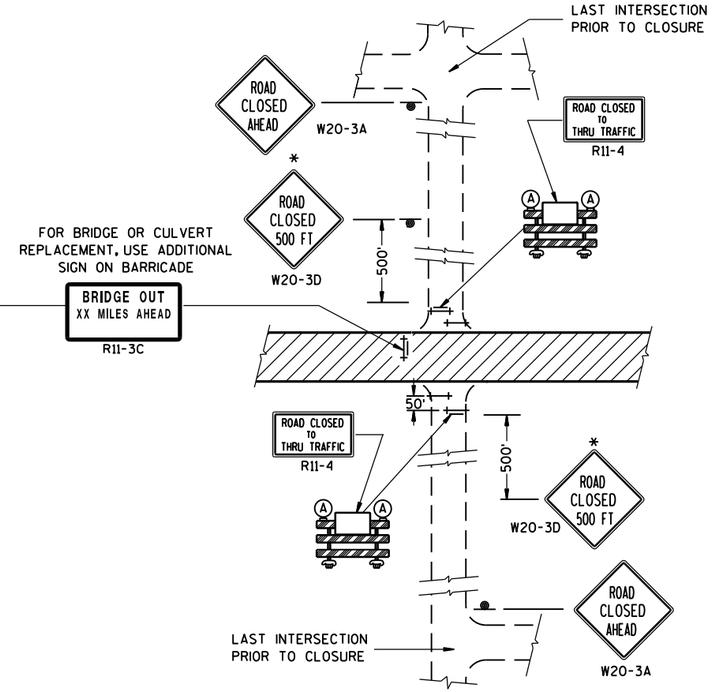
(NO ACCESS TO PROJECT)



DETAIL 2

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





DETAIL 3

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

DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

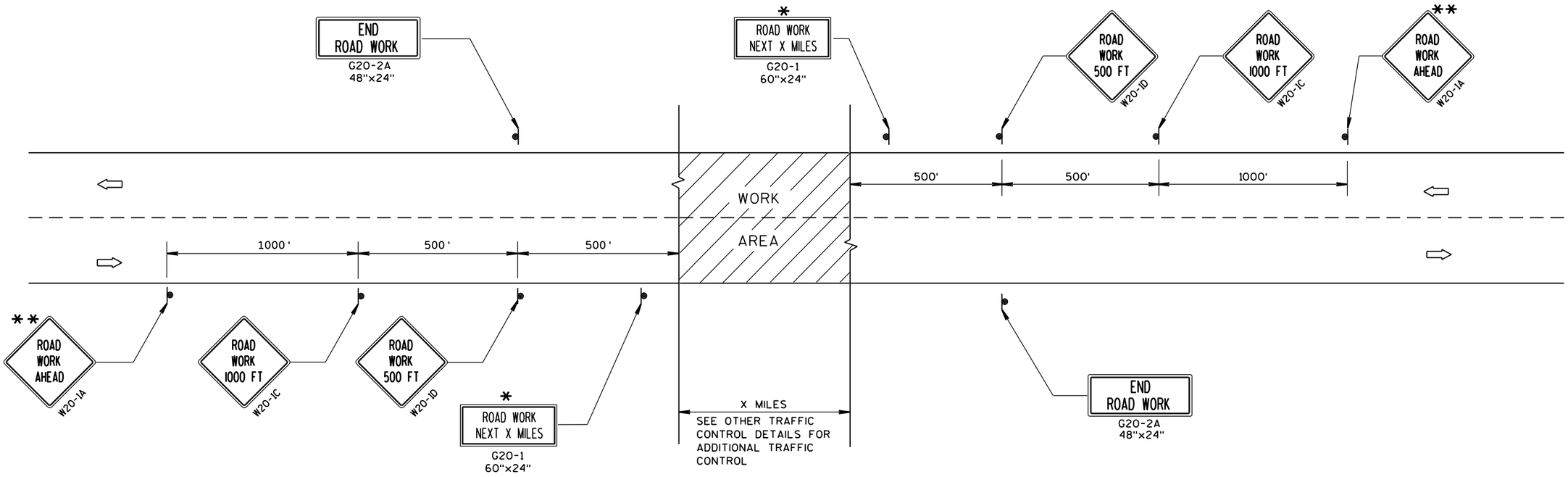
APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible]FIC SAFETY ENGI[illegible]
FHWA

6

S.D.D. 15 C 3-3

6

S.D.D. 15 C 3-3



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

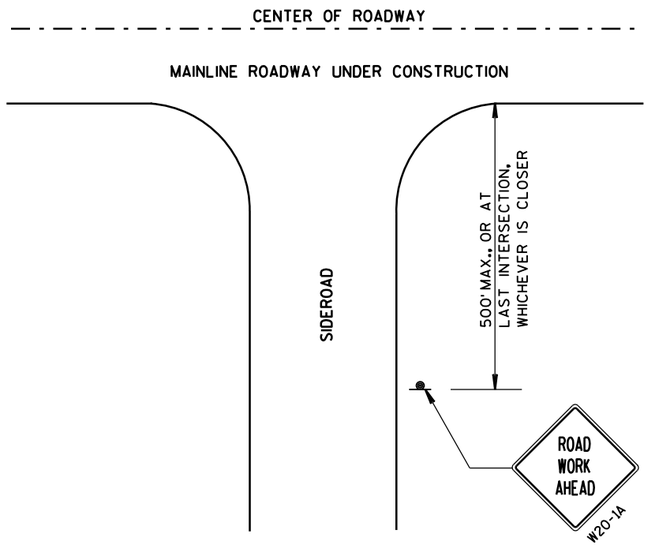
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



LEGEND

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

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE SAFETY ENGINEER

FHWA

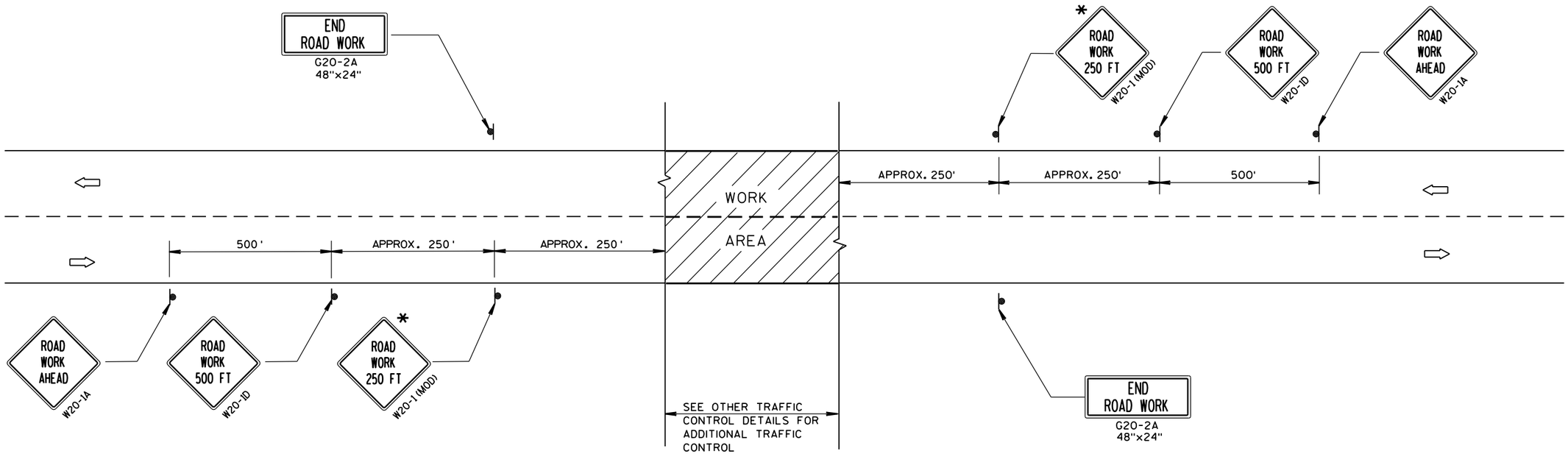
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S.D.D. 15 C 4-3

6

S.D.D. 15 C 4-3

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

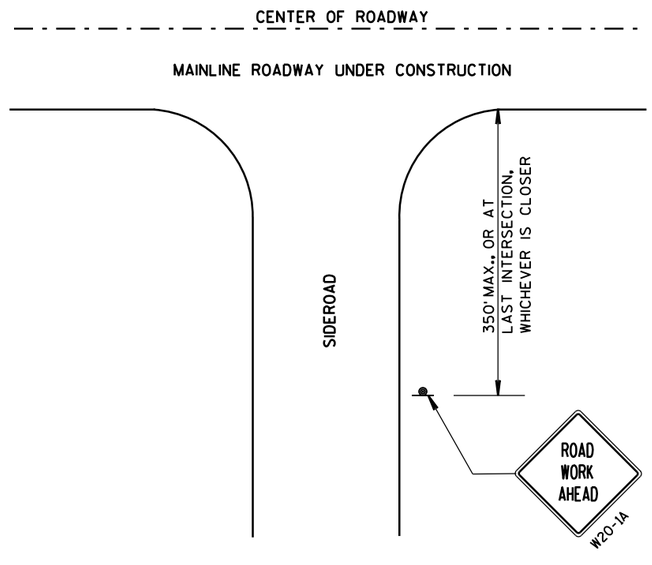
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

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



LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

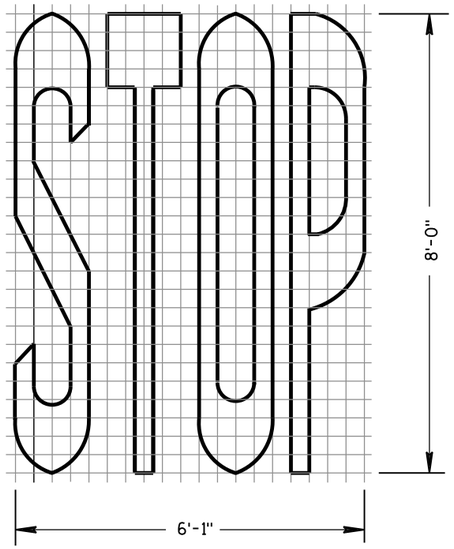
APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

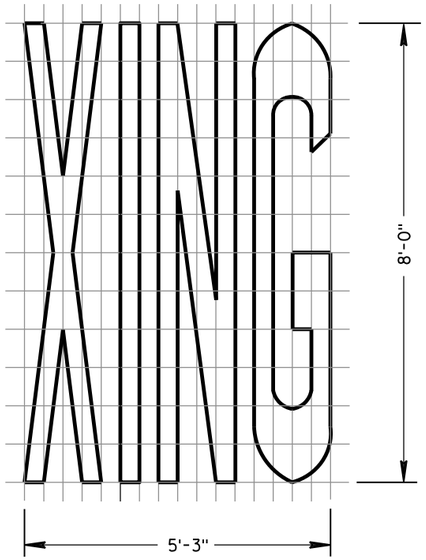
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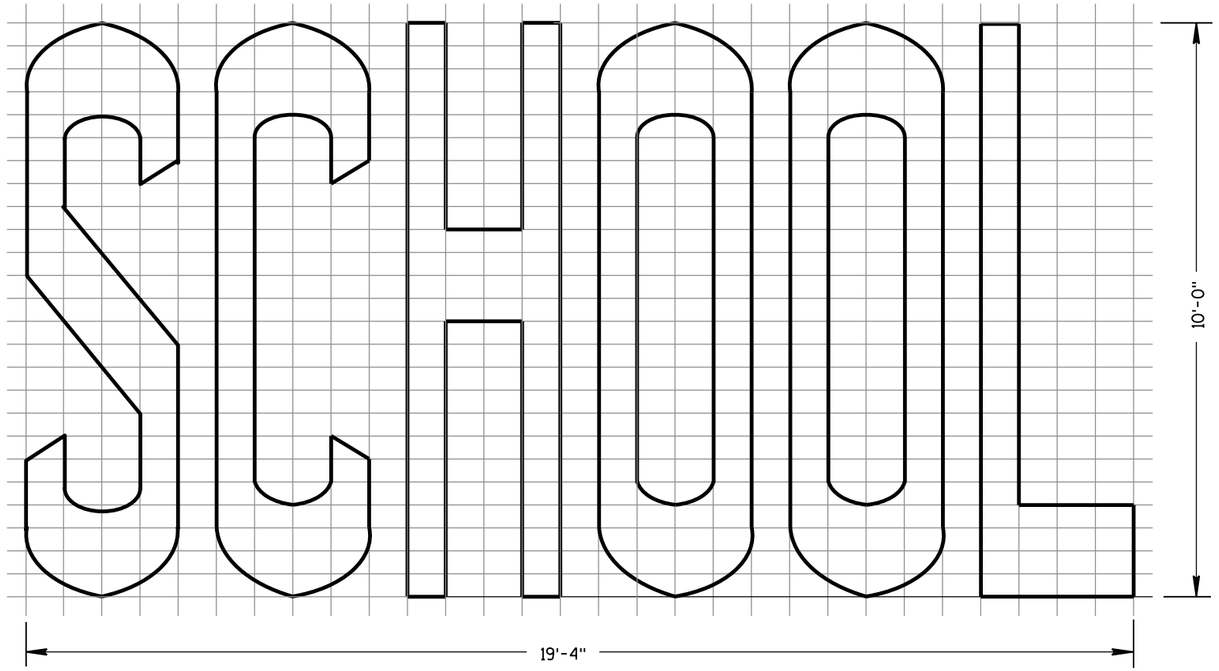
S.D.D. 15 C 5-3

GENERAL NOTES

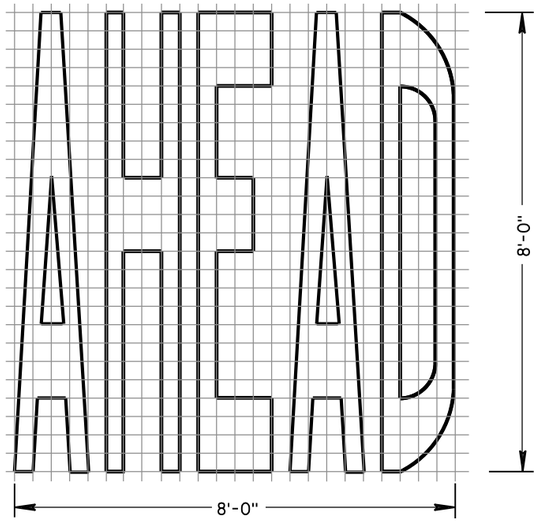
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

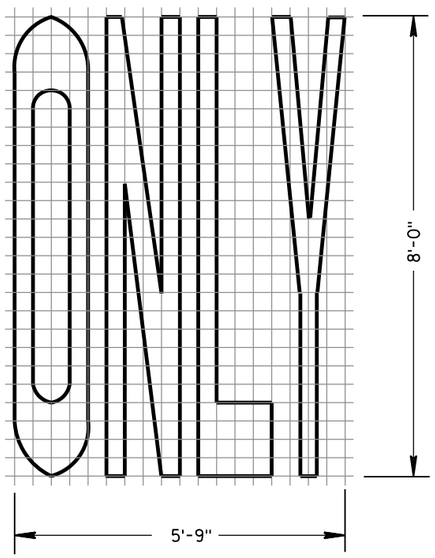


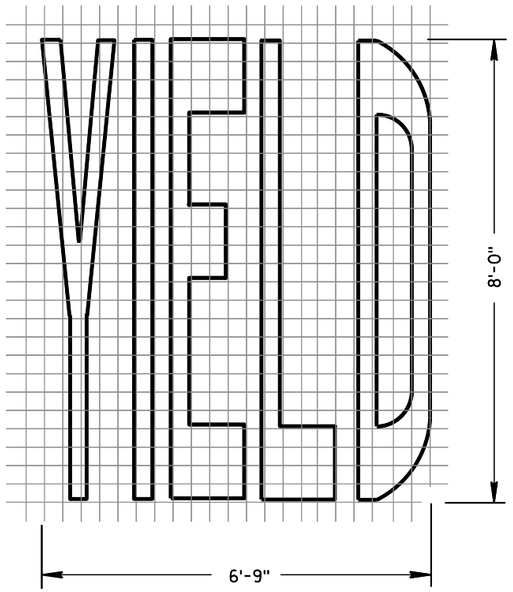


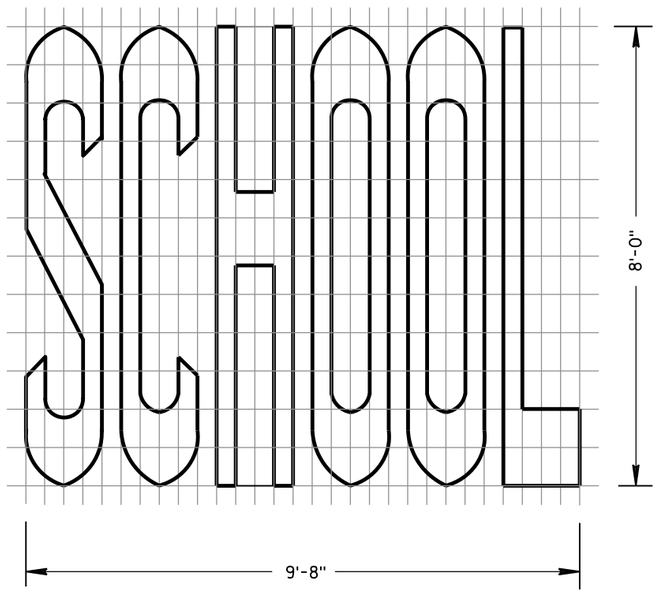


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-16	/S/ Matthew R. Rauch	
DATE	STATE SIGNING AND MARK	EER

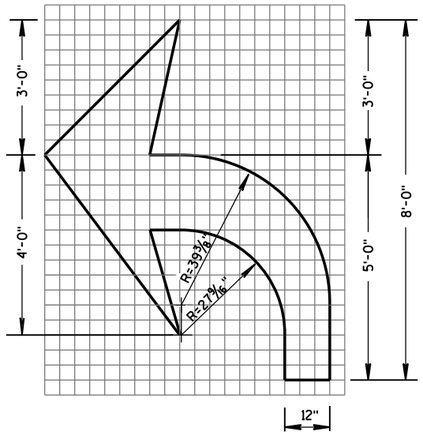
FHWA

6

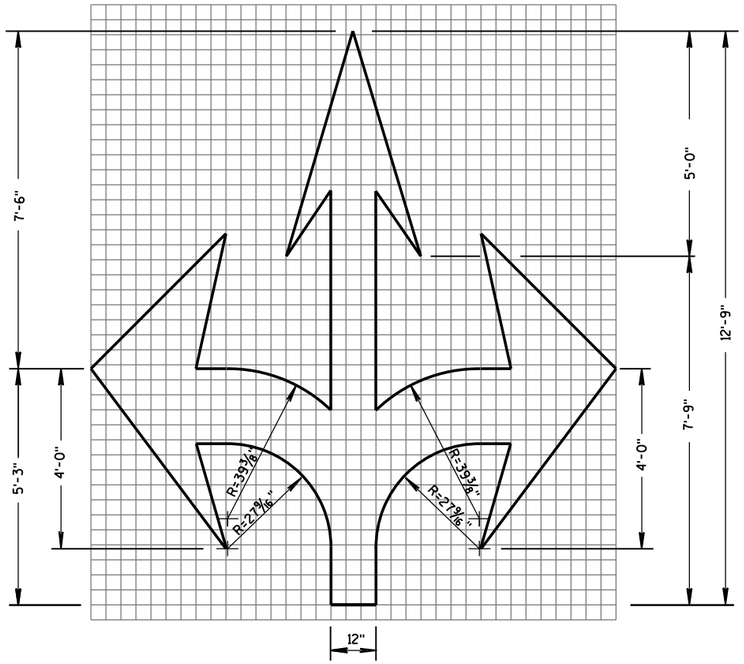
S.D.D. 15 C 7-13b

6

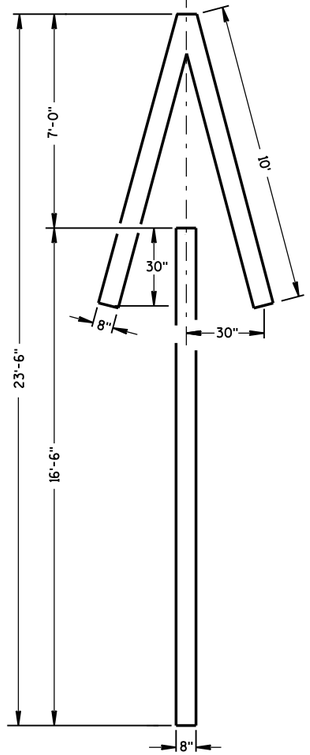
S.D.D. 15 C 7-13b



TYPE 2



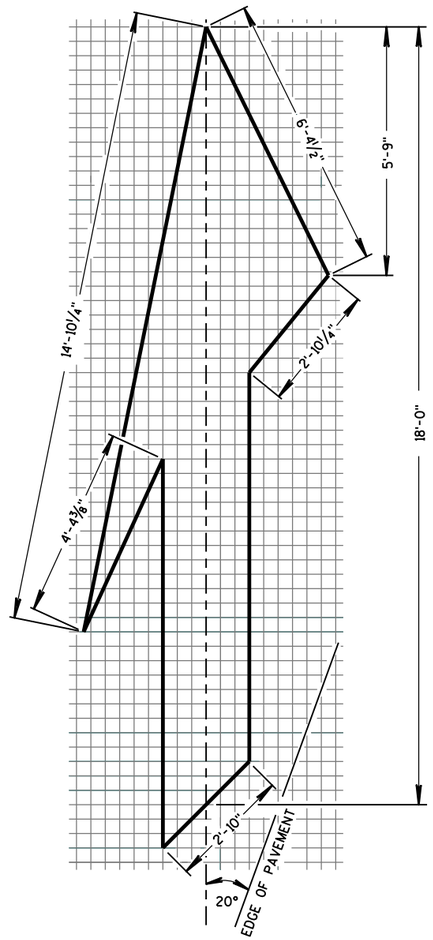
TYPE 6



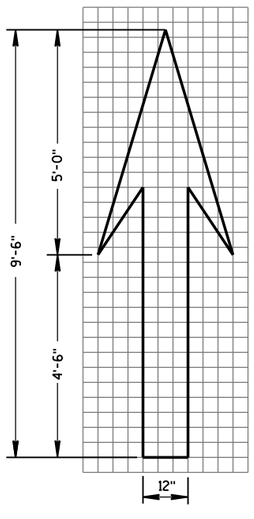
TYPE 4

GENERAL NOTES

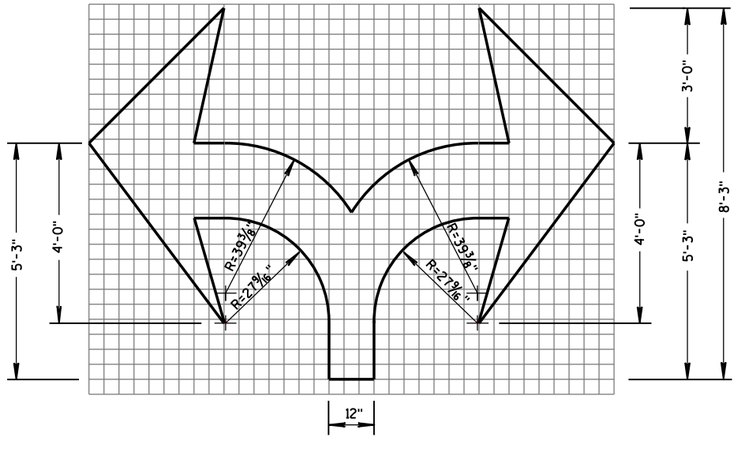
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



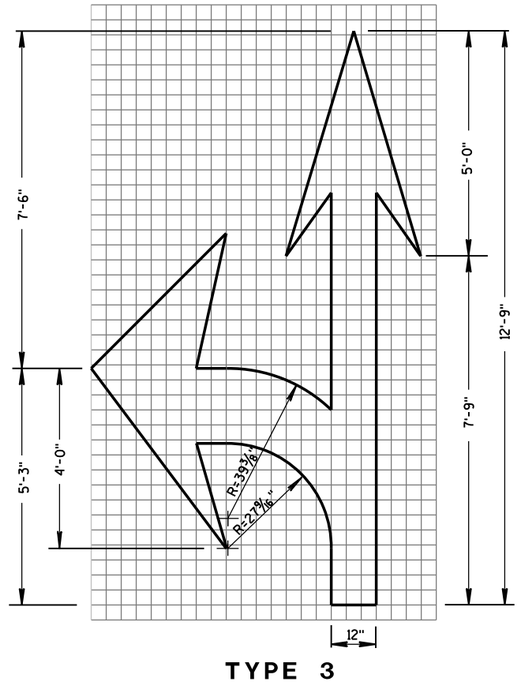
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

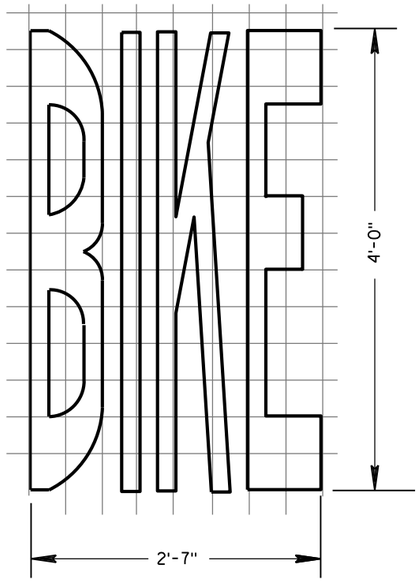
APPROVED
4-18-16 DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAR 210 NEER
FHWA

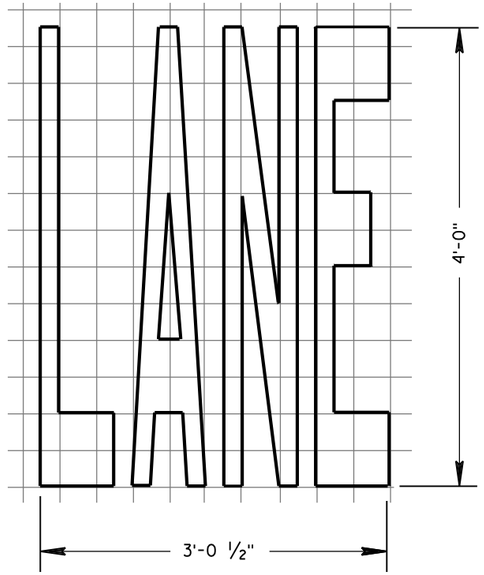
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S.D.D. 15 C 7-13c

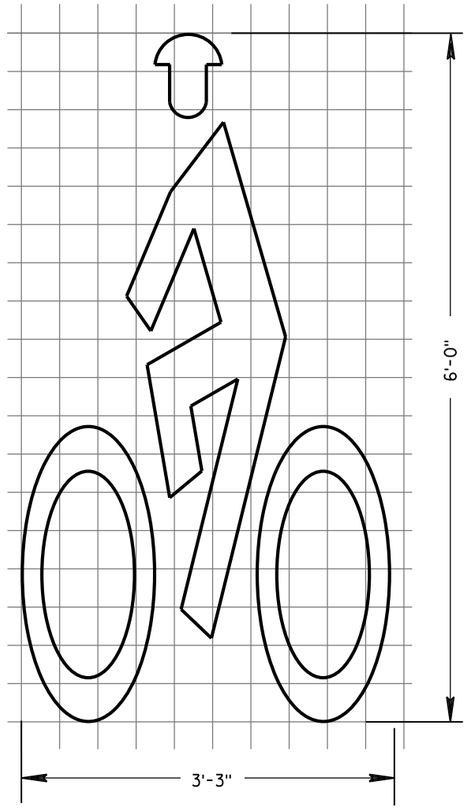
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S.D.D. 15 C 7-13c

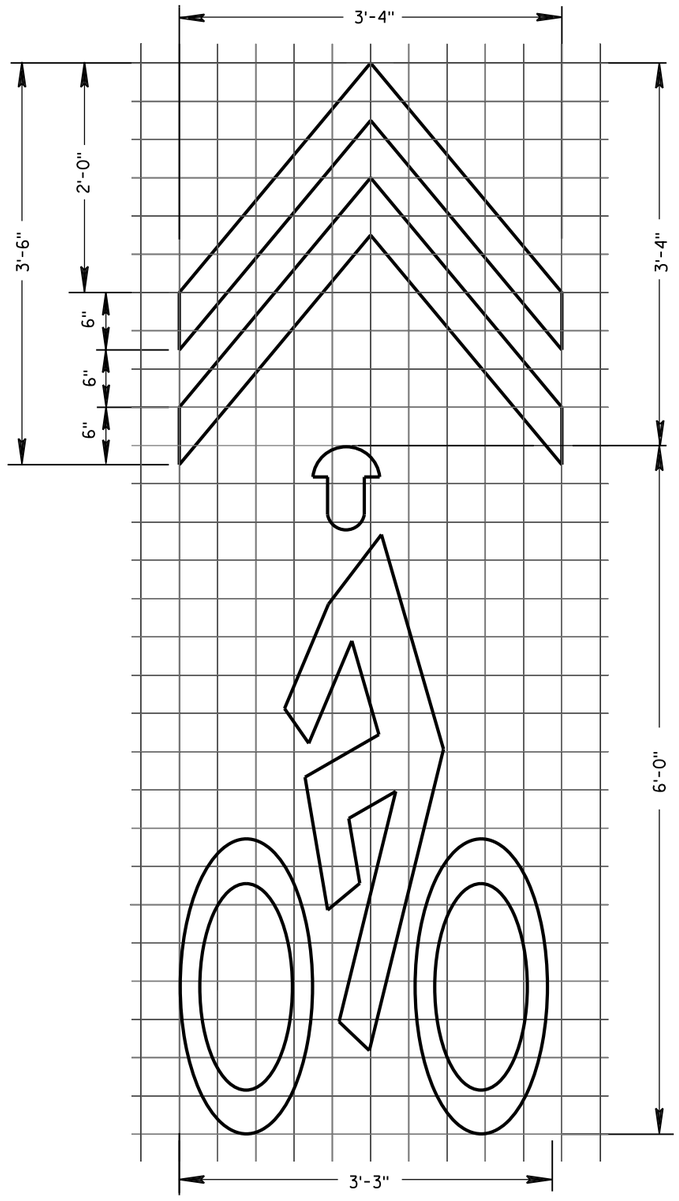




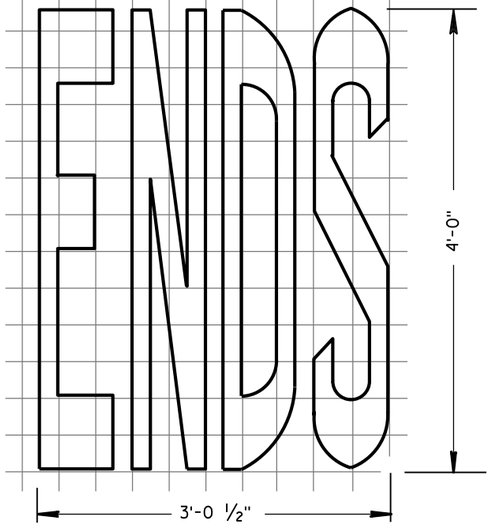
BIKE LANE WORDS



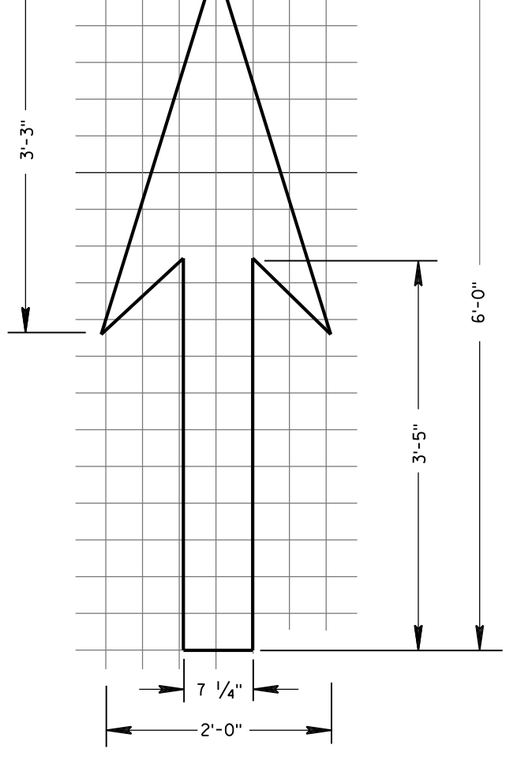
BIKE LANE SYMBOL



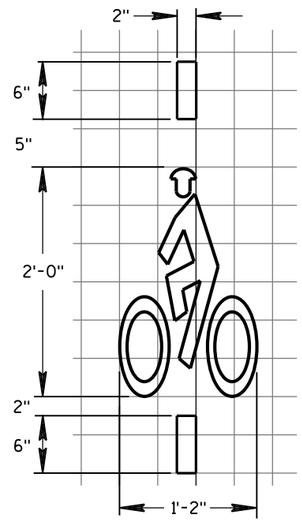
BIKE SYMBOL FOR SHARED LANE



BIKE LANE WORDS



BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING

GENERAL NOTES

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

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-2016 DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MARK ENGINEER

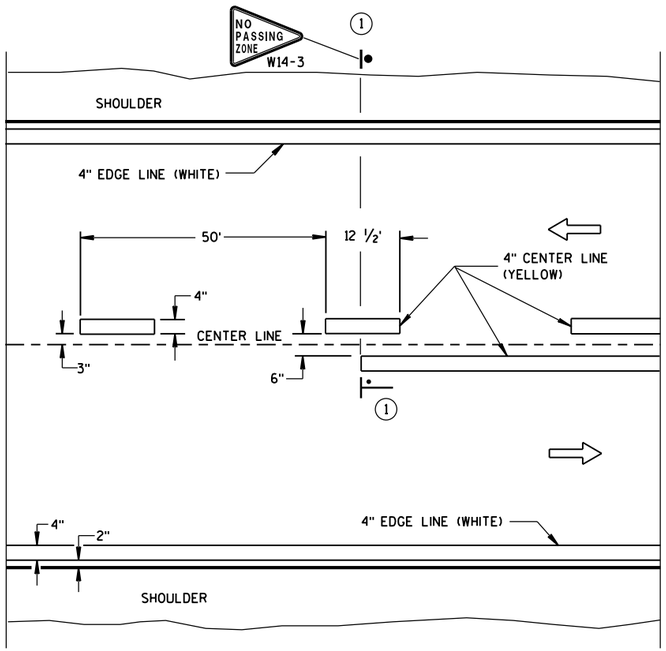
FHWA

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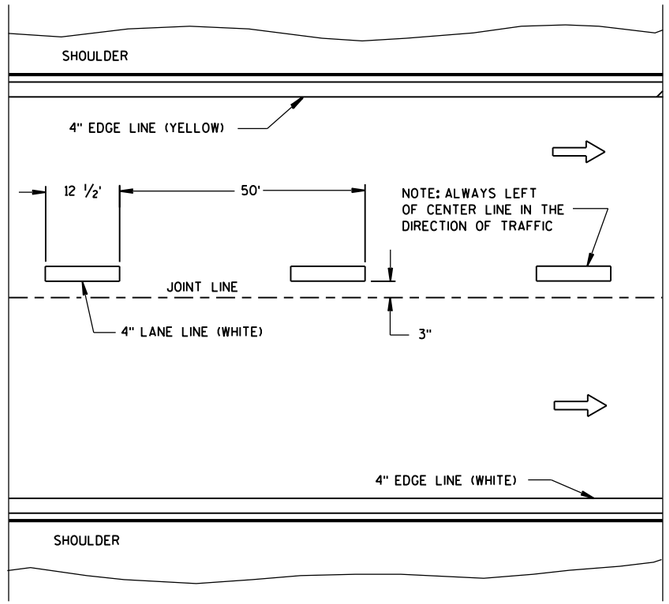
S.D.D. 15 C 7-13e

6

S.D.D. 15 C 7-13e



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

(1) NO PASSING ZONE W14-3 SIGN SHALL BE LOCATED WITHIN 50 FEET OF THE "T" MARKING.

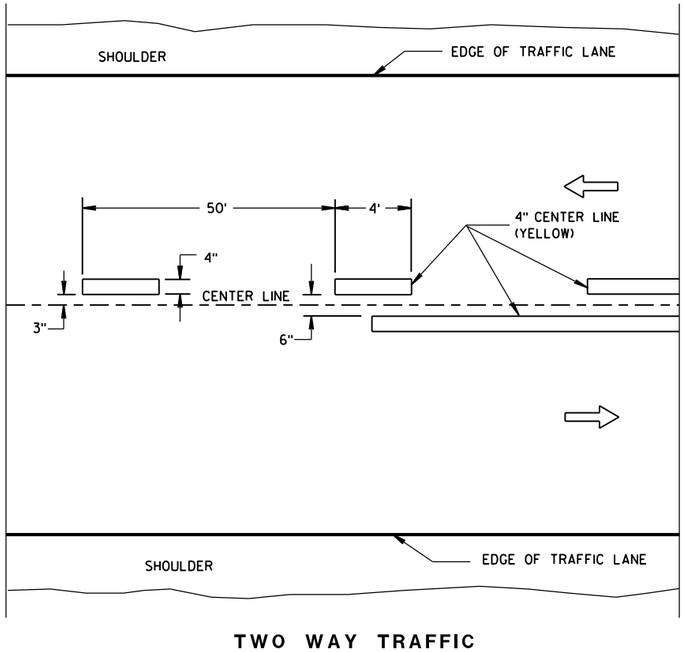
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

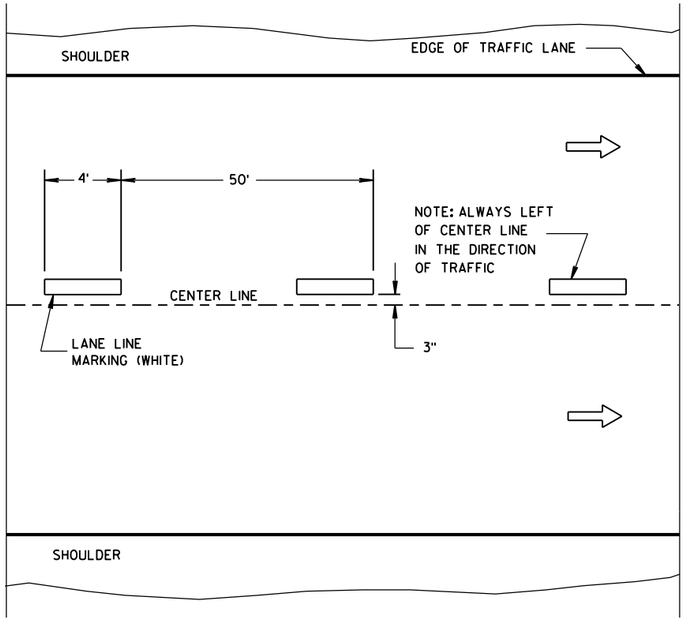
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

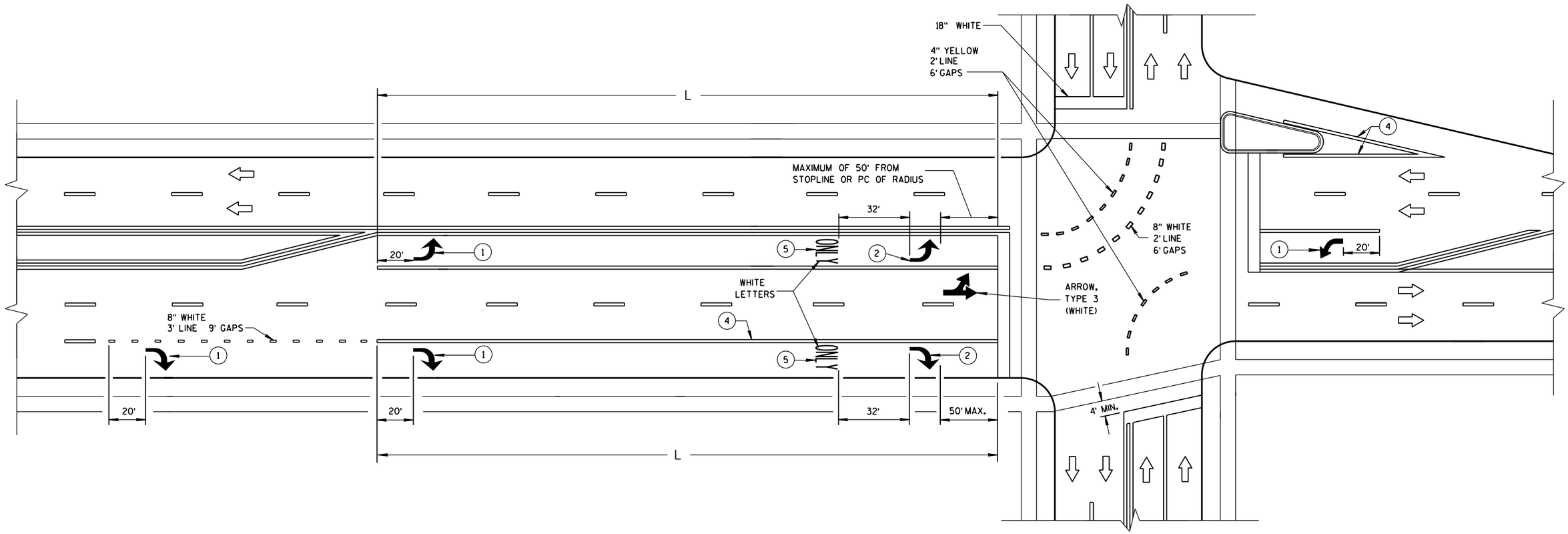
APPROVED
Sept., 2016 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]INEER
FHWA

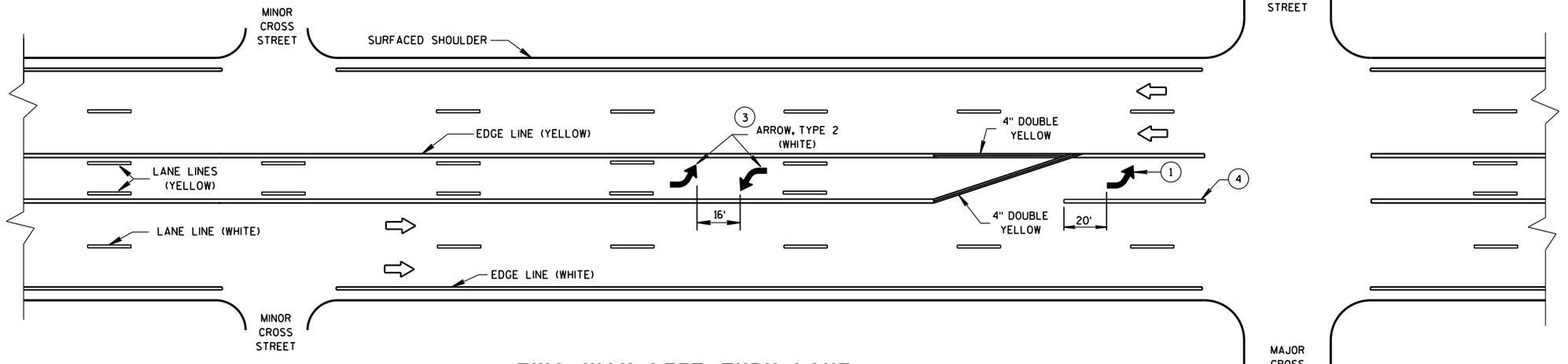
6

S.D.D. 15 C 8-17a

6

S.D.D. 15 C 8-17a





GENERAL NOTES

(1) REQUIRED ARROW, TYPE 2 (WHITE).

(2) REQUIRED ARROW, TYPE 2 (WHITE) WHEN L IS GREATER THAN 78 FEET AND LESS THAN OR EQUAL TO 166 FEET.

(3) A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

(4) 8" WHITE

(5) REQUIRED WORD ONLY WHEN L IS GREATER THAN 166 FEET.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

L = LENGTH OF TURN BAY

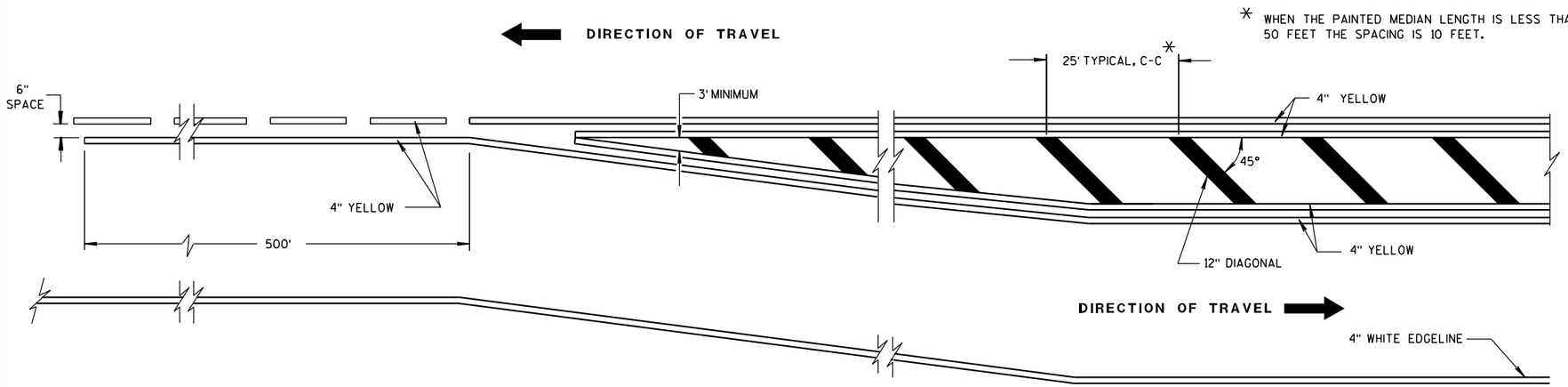
TWO WAY LEFT TURN LANE

PAVEMENT MARKING
(TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

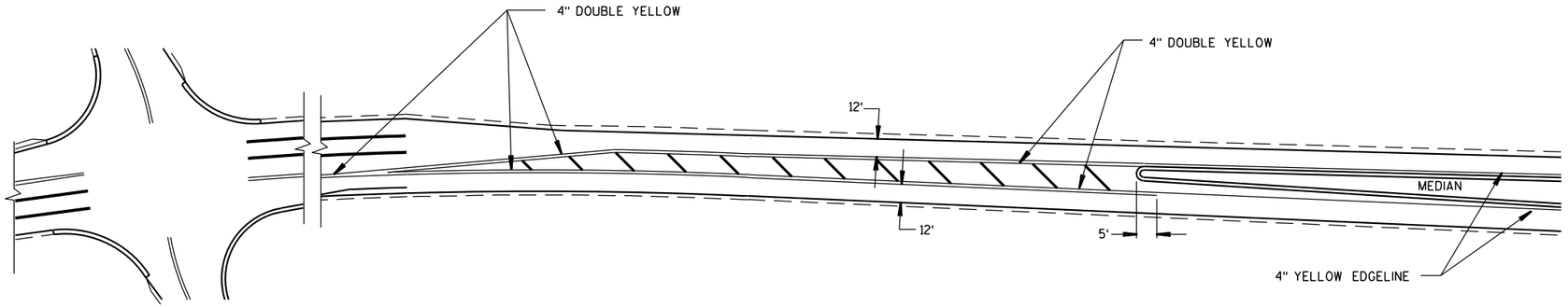
S.D.D. 15 C 8-17b



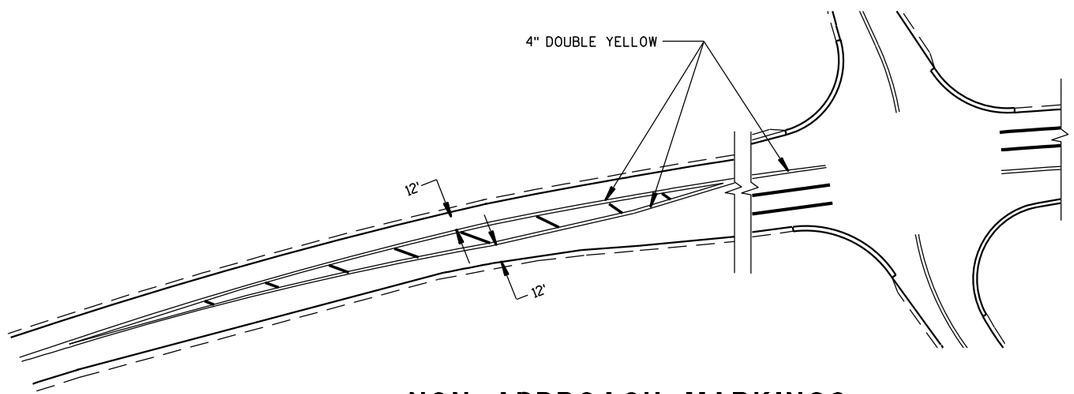
MEDIAN ISLAND DETAIL

GENERAL NOTE

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



APPROACH MARKINGS FOR OTHER MEDIAN TYPES

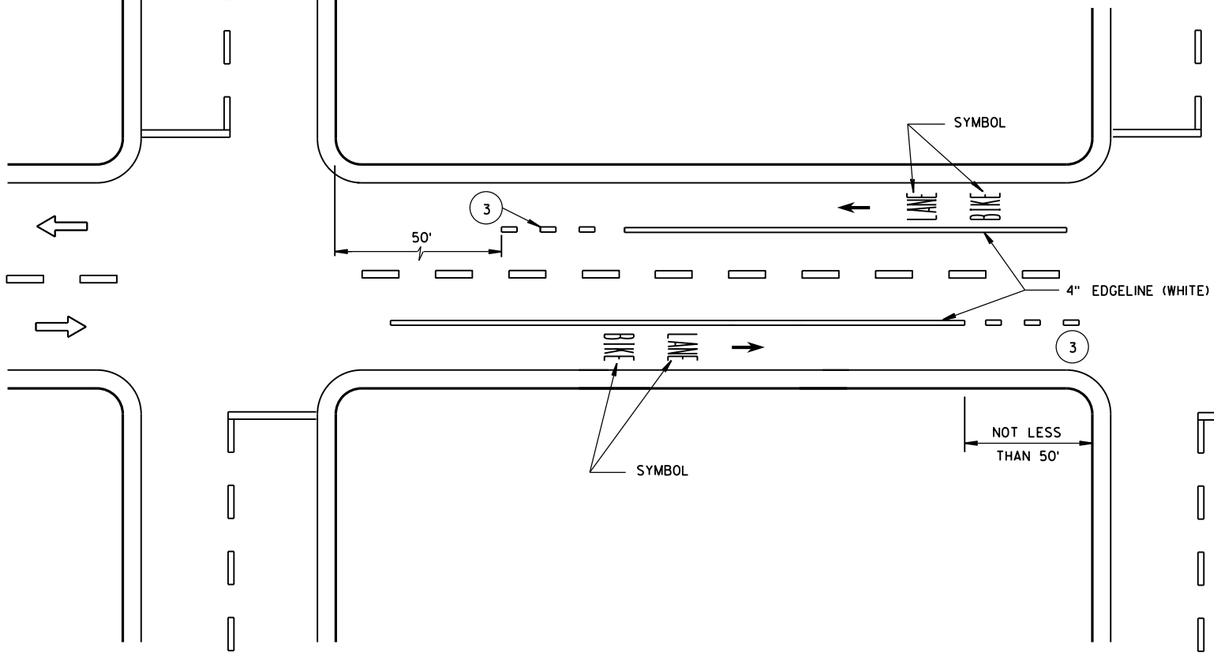


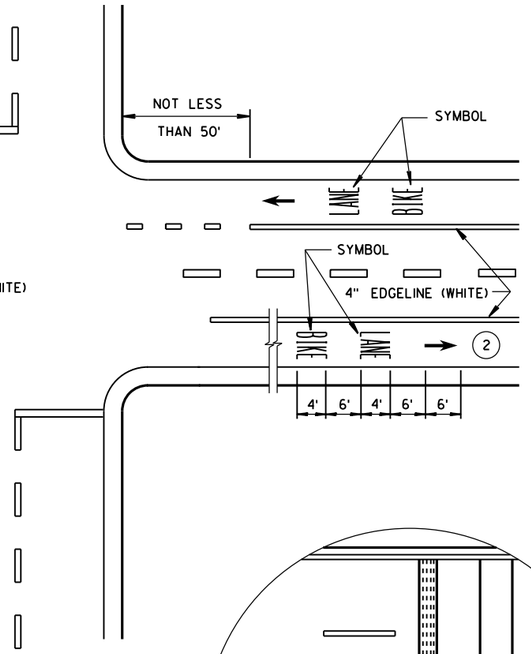
NON APPROACH MARKINGS

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

6

S.D.D. 15 C 18-3



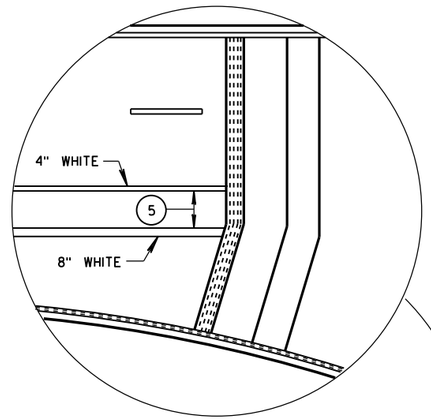


DESIGNATED BICYCLE LANE
NO PARKING

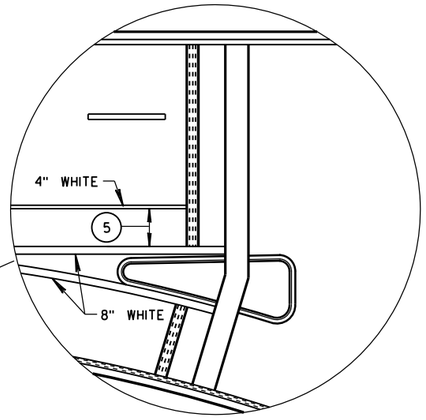
GENERAL NOTES

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. IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
5. BIKE ACCOMODATION FOR CONCRETE PAVEMENT IS 5 FEET WIDE. BIKE ACCOMODATION FOR ASPHALT PAVEMENT IS A MINIMUM OF 4 FEET. USE 5 FEET AT ≥45 MPH.
6. OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FEET WIDE TURN LANE).
7. REFER TO CONTRACT PLANS FOR LANE WIDTH.

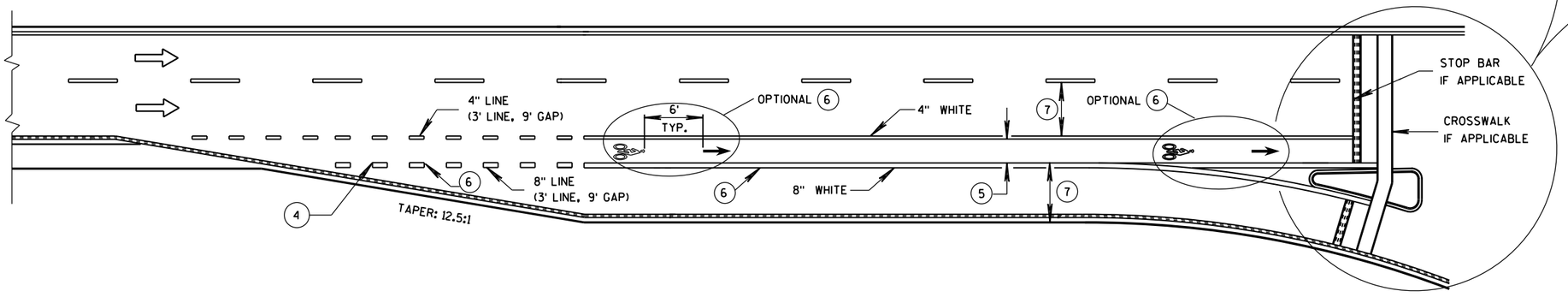
⇨ DIRECTION OF TRAVEL



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)

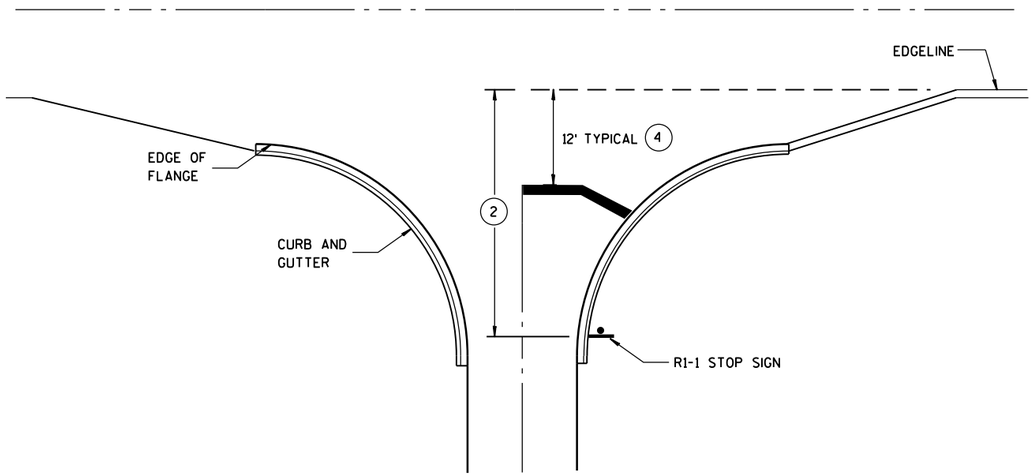
BICYCLE LANE MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 12-2016 DATE	/S/ Matthew R. Rauch STATE SIGNING AND MAR NEER
FHWA	

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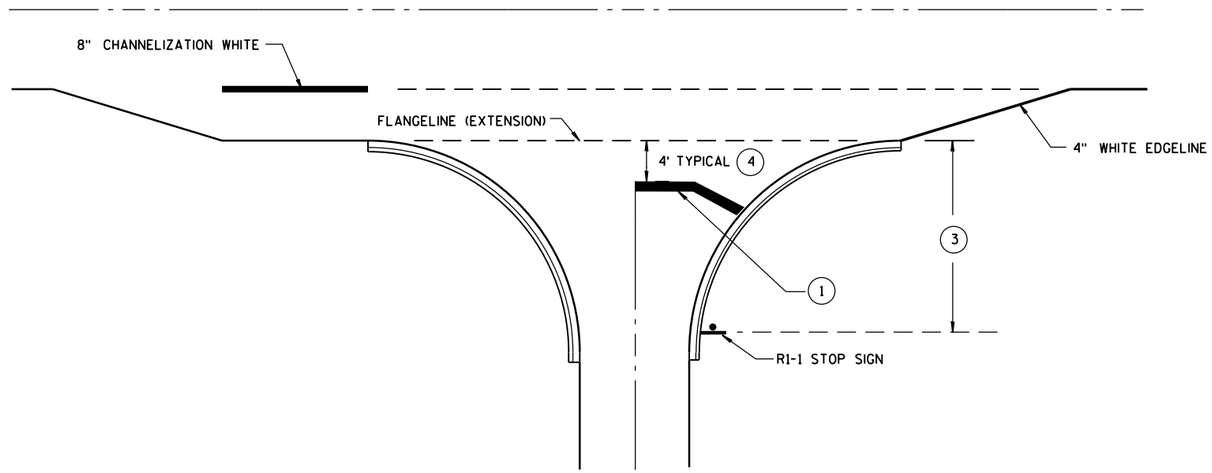
S.D.D. 15 C 29-5a

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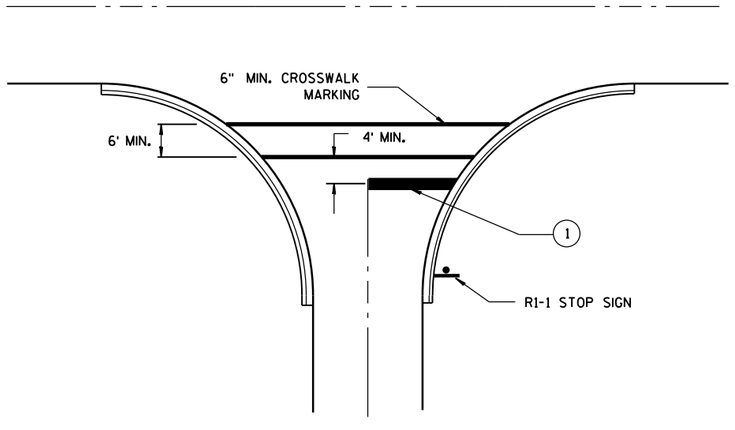
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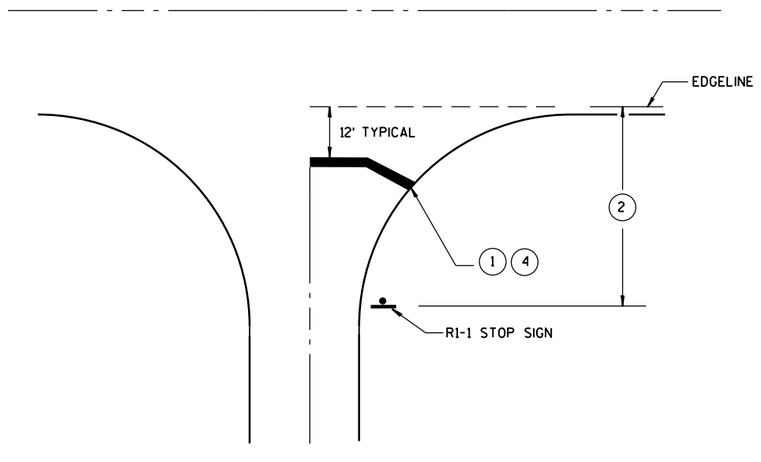
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

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

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

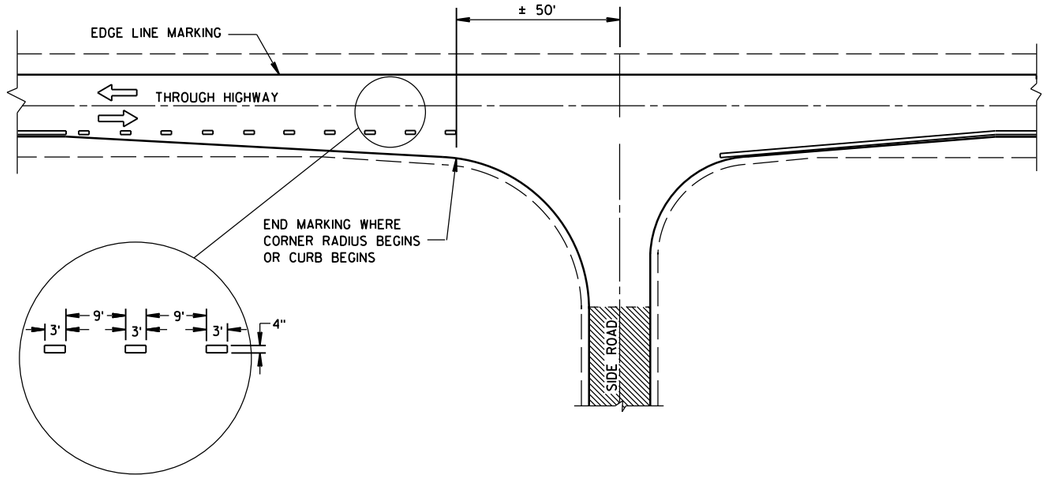
4-18-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR[illegible]NEER

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S.D.D. 15 C 33-2



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

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

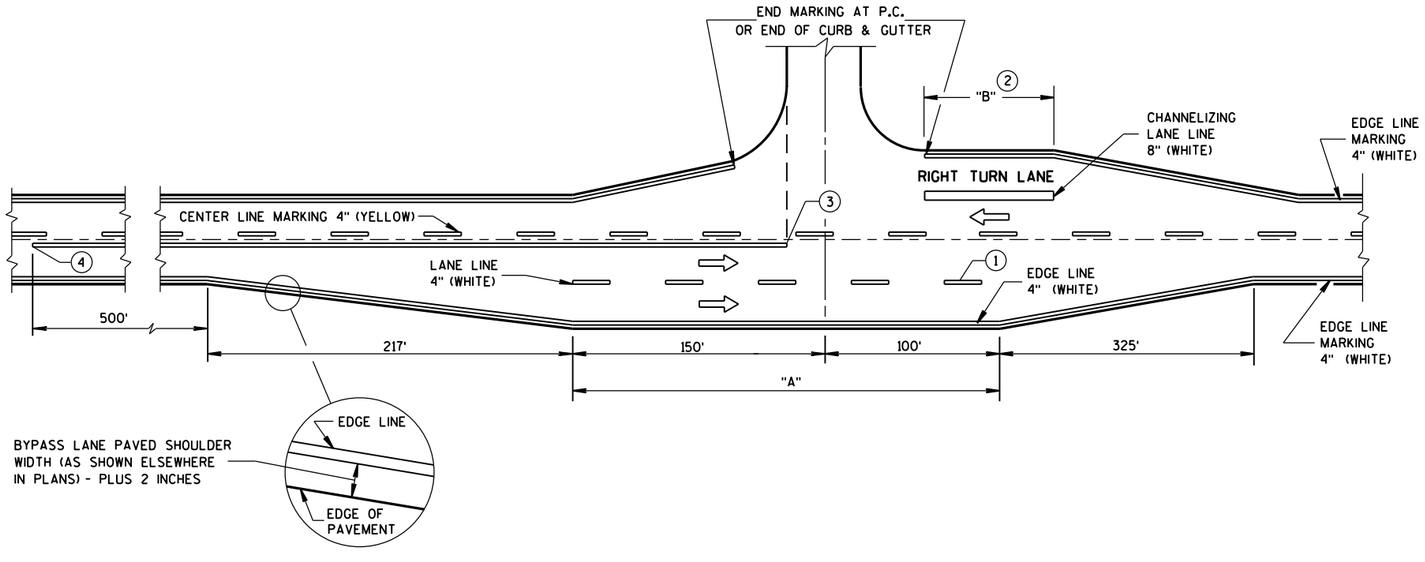
(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

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

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

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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



MAJOR INTERSECTIONS

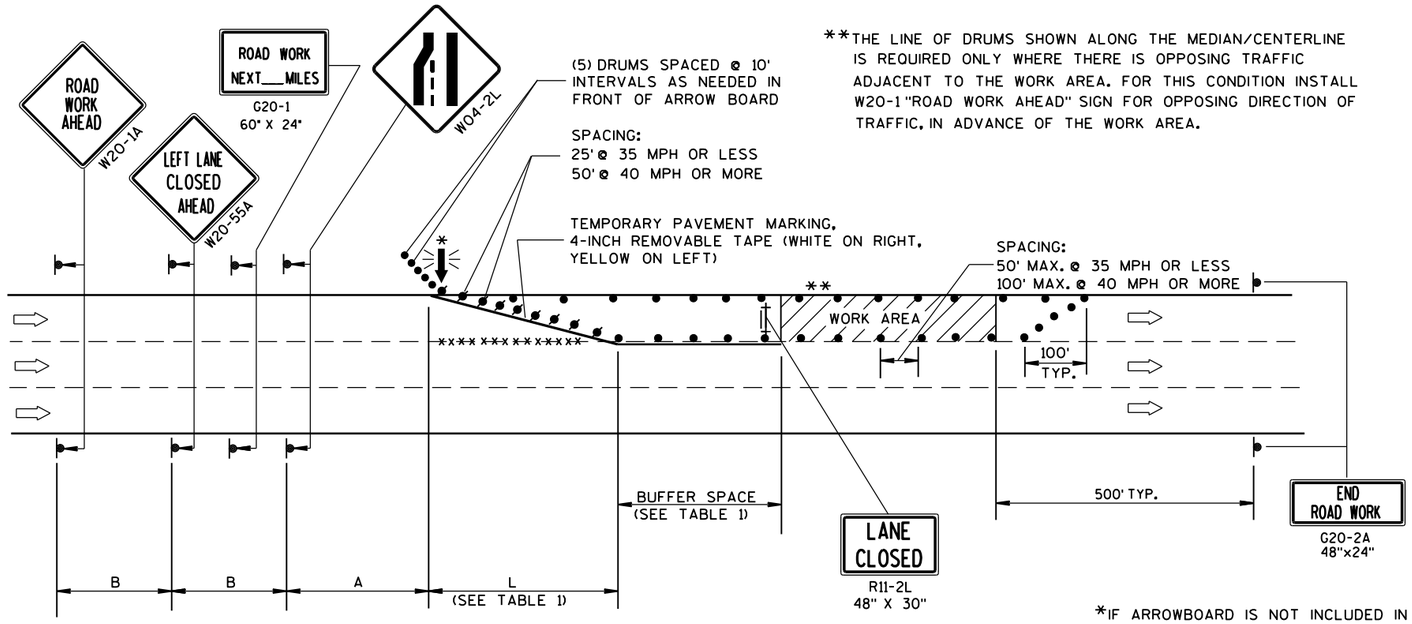
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 15 C 35-1a



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

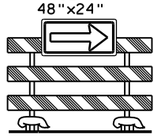


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

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

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

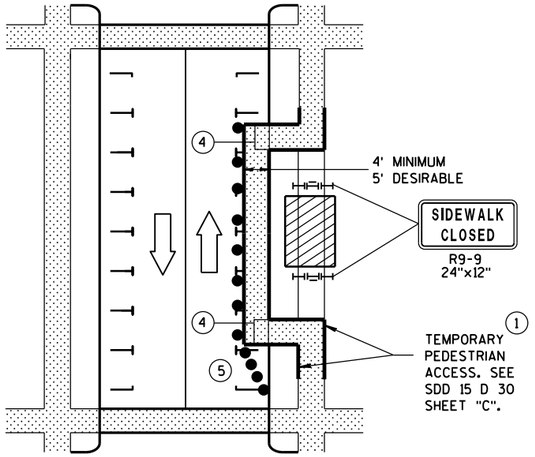
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S.D.D. 15 D 20-4

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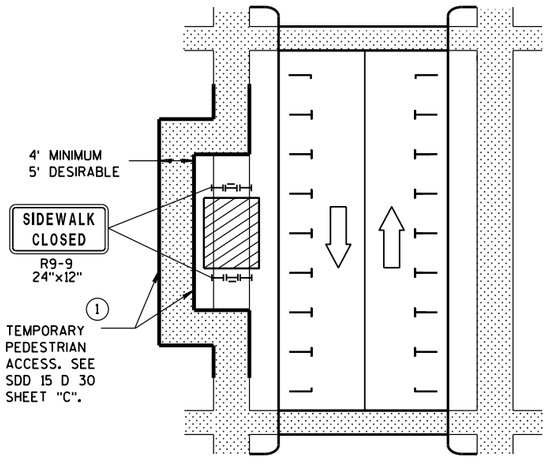
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NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

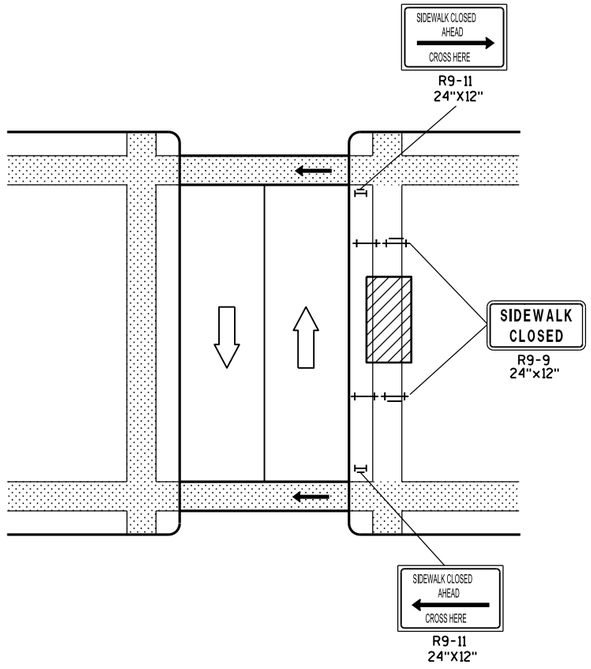


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

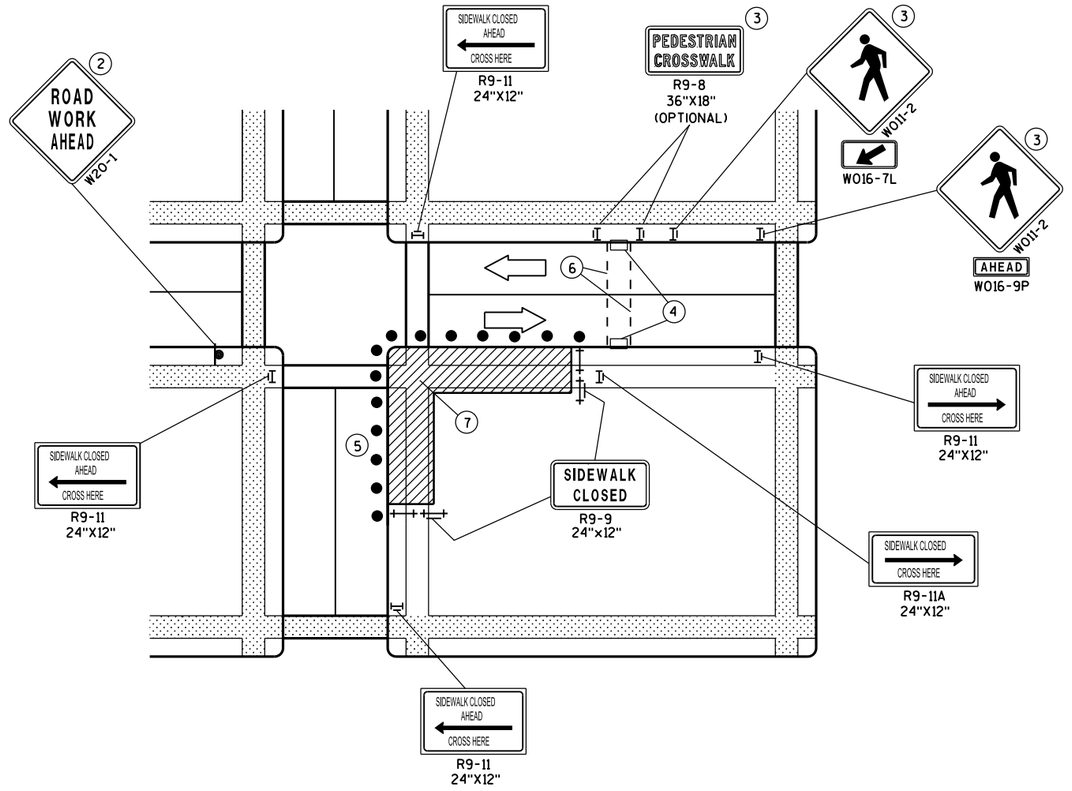
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

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

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

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

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.

(2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

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

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

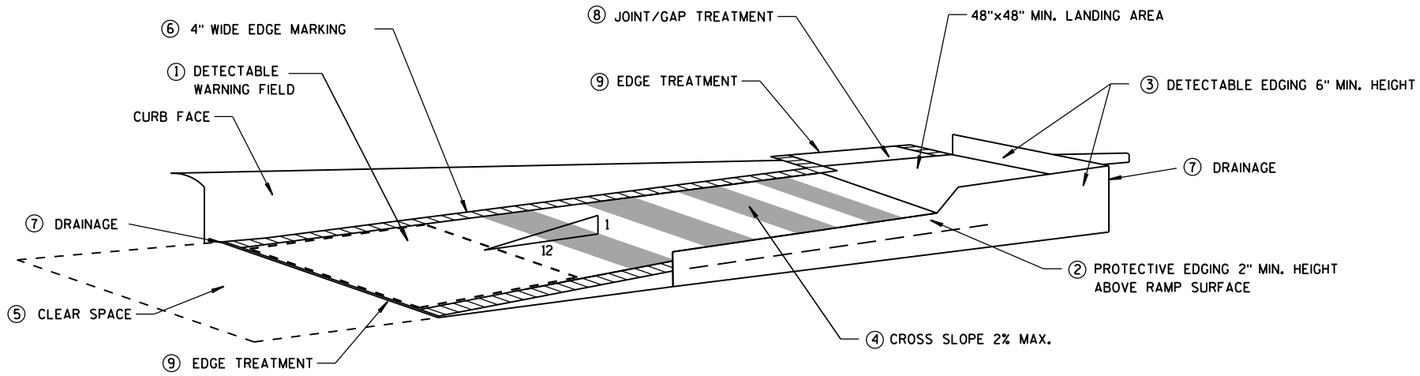
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 15 D 30-3a

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S.D.D. 15 D 30-3a



TEMPORARY CURB RAMP PARALLEL TO CURB

GENERAL NOTES

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

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

① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".

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

③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

④ CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

⑤ CLEAR SPACE OF 48"X48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

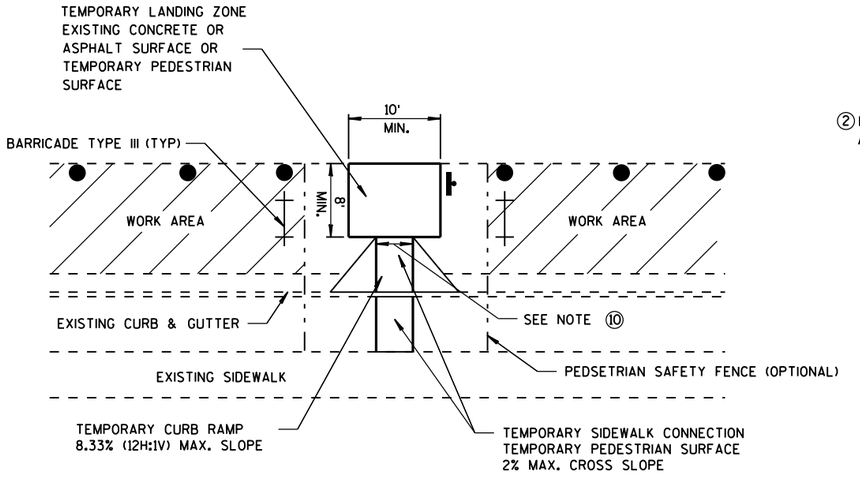
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

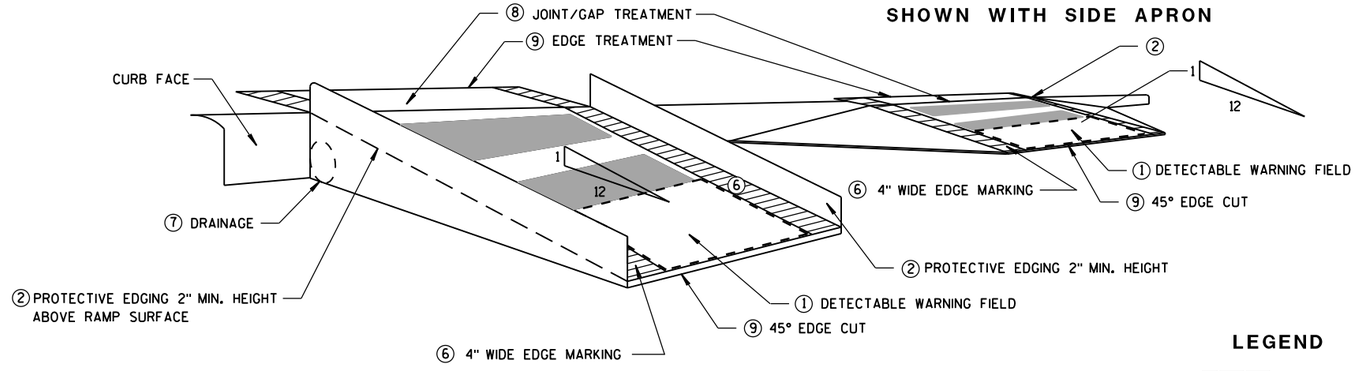
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

⑩ 5' WIDE MIN. WITH PEDSETRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



TEMPORARY BUS STOP PAD



SHOWN WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

LEGEND

WORK AREA

TYPE III BARRICADE

TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

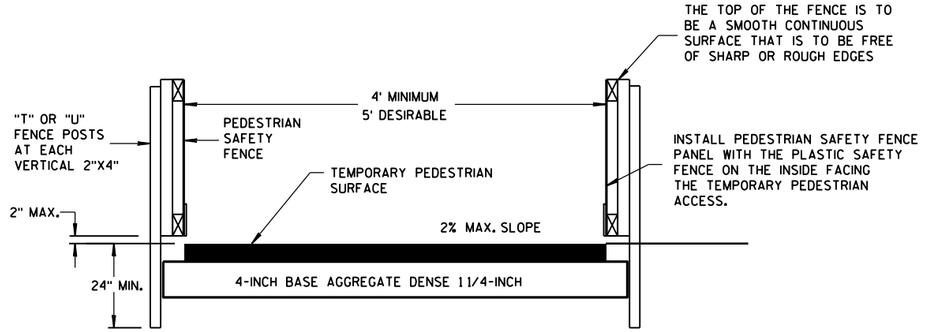
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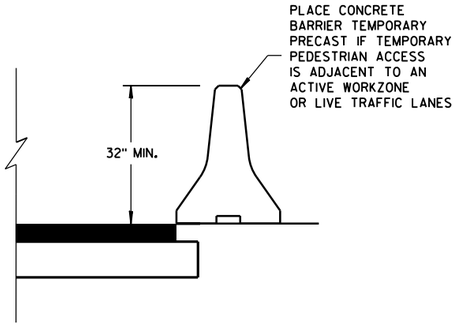
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S.D.D. 15 D 30-3b

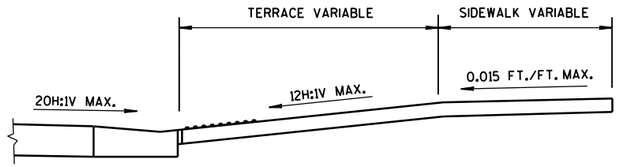




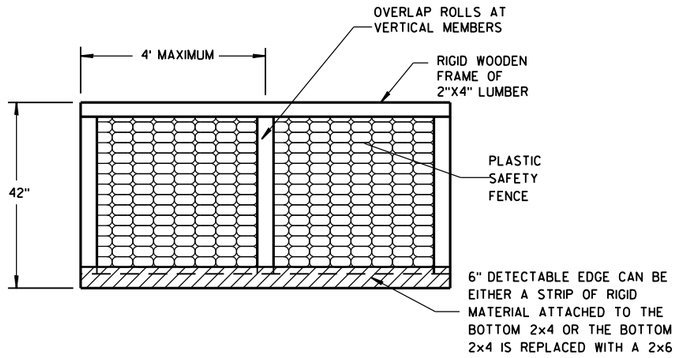
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

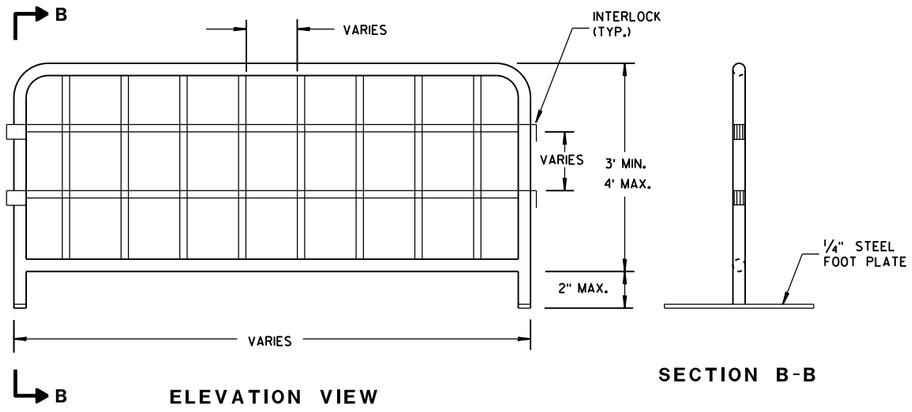
(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



SECTION A-A



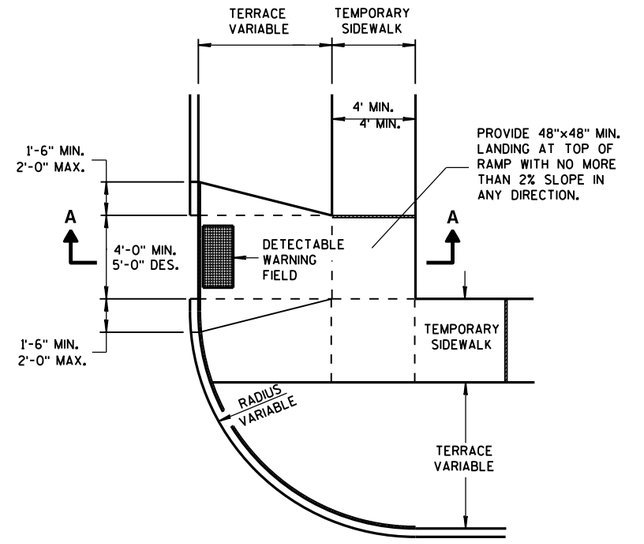
PEDESTRIAN SAFETY FENCE



ELEVATION VIEW

SECTION B-B

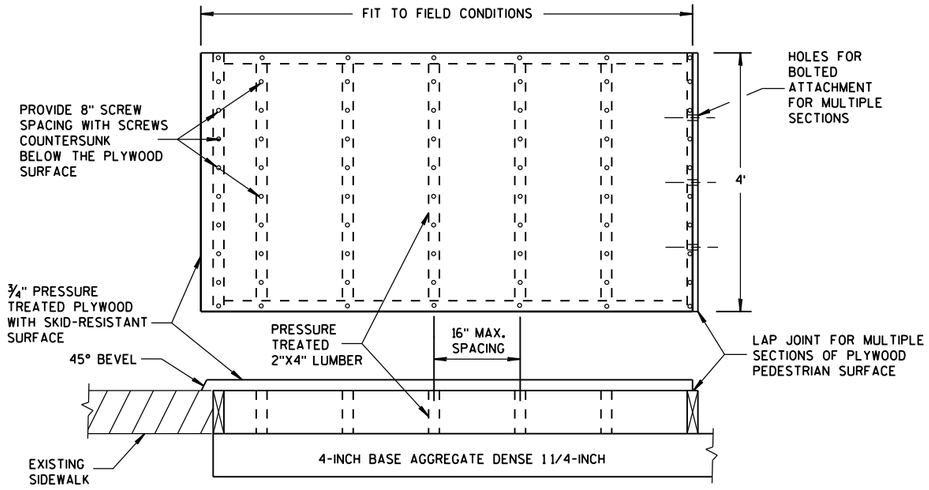
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)



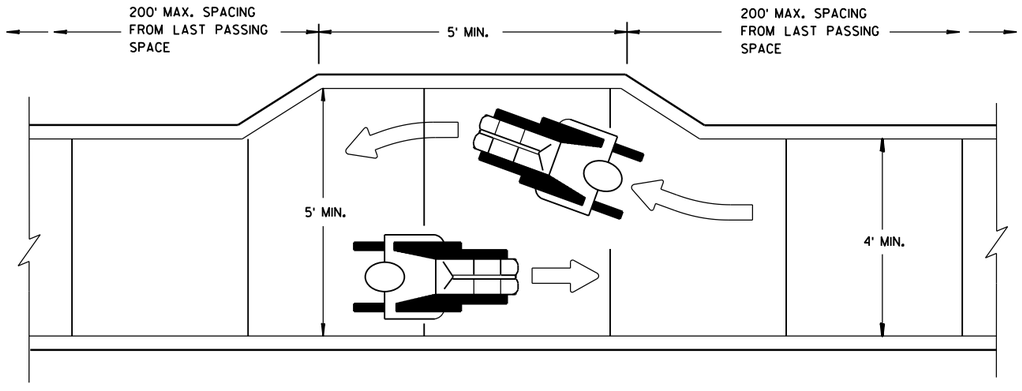
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

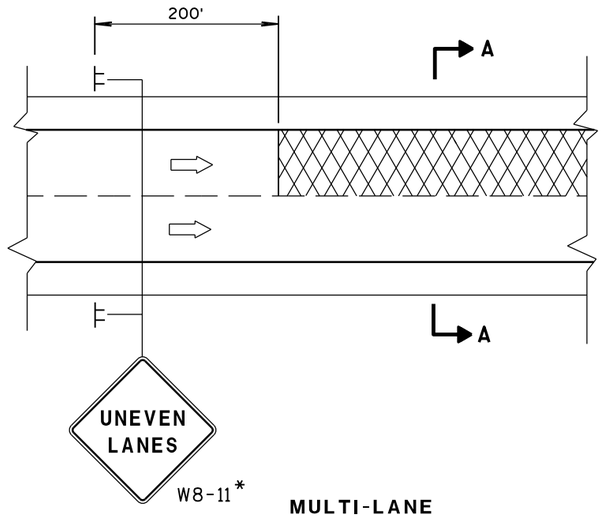
APPROVED
June 2016
DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZON SAFETY ENGIN IC
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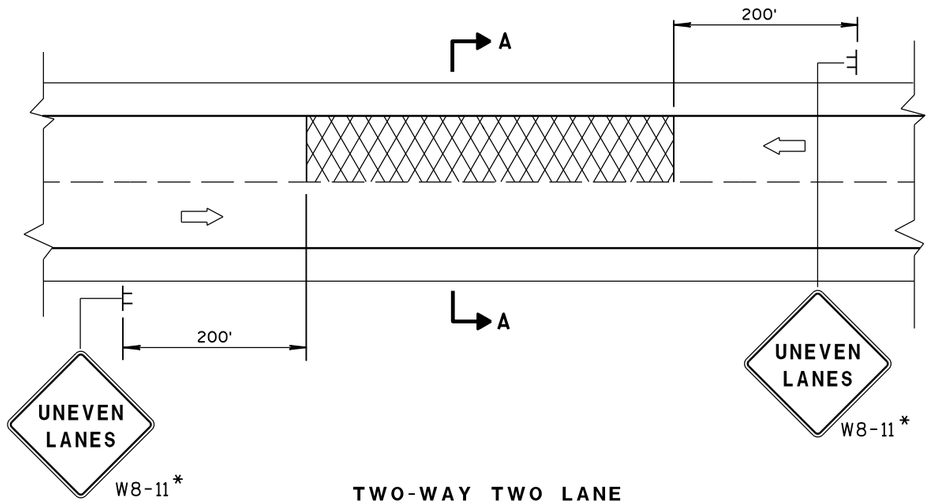
S.D.D. 15 D 30-3c

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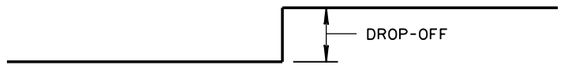
S.D.D. 15 D 30-3c



MULTI-LANE

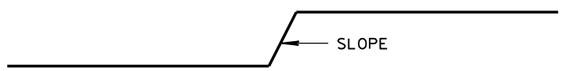


TWO-WAY TWO LANE

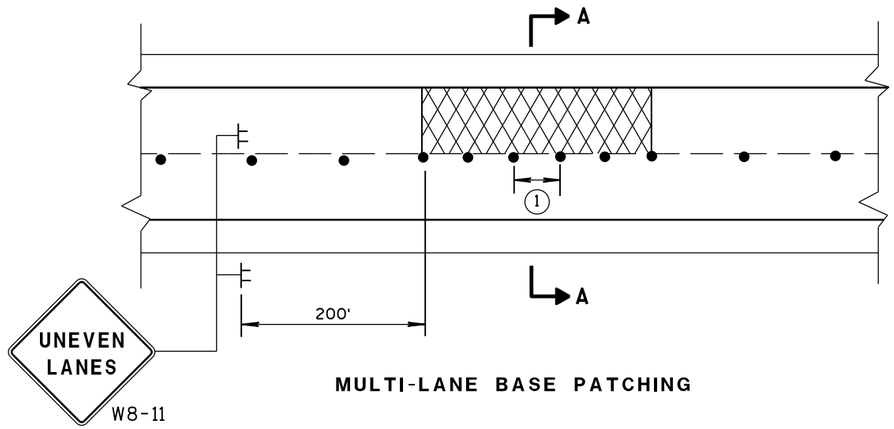


SECTION A-A

OR

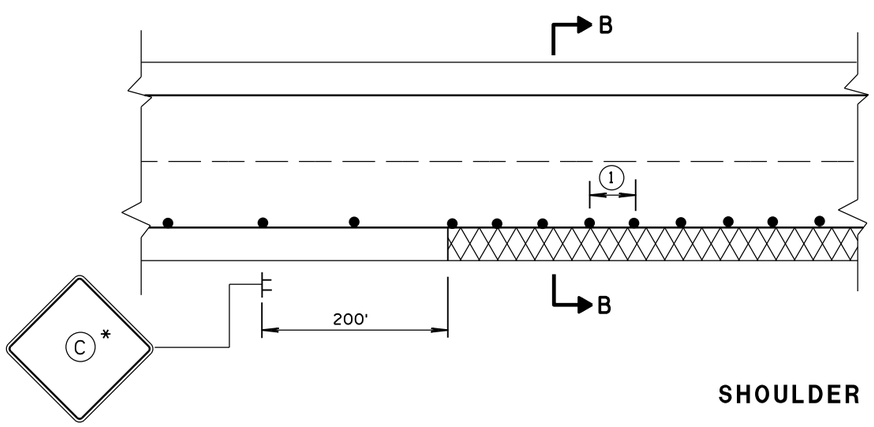


SECTION A-A

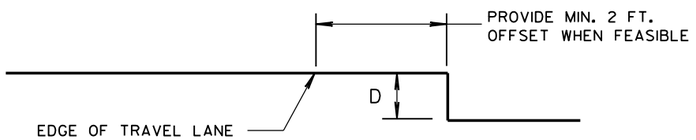


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B-B

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY ½ MILE.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER W08-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP-OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENGI
FHWA

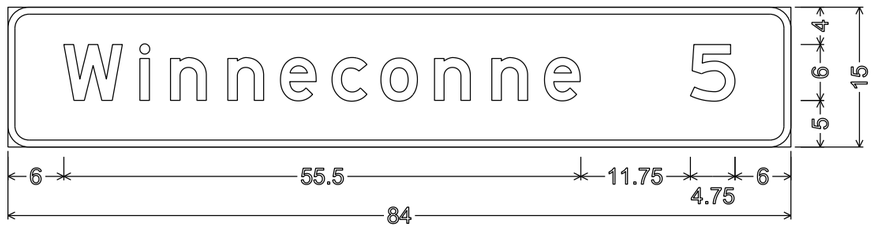
6

S.D.D. 15 D 39-1

NOTES

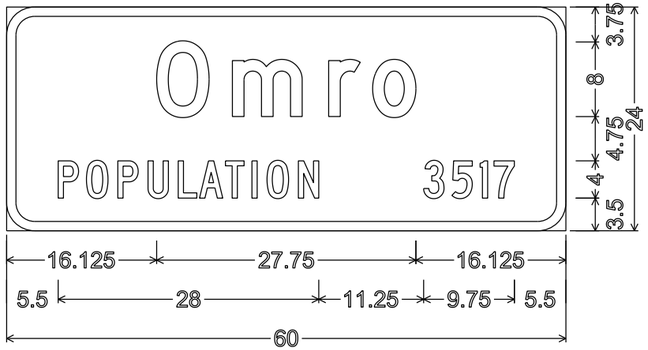
1. Signs are Type II- Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted

83



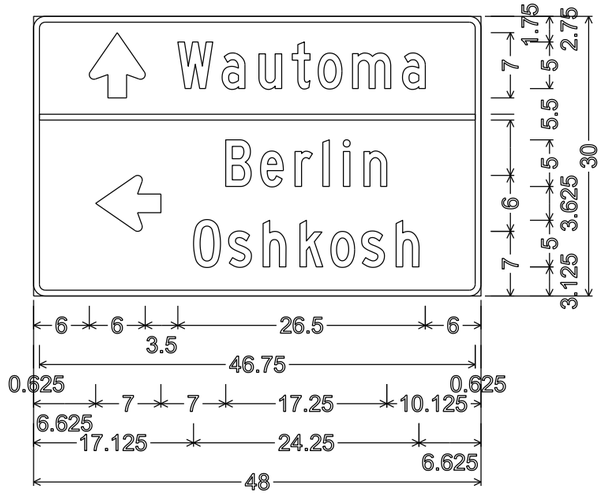
D2-1; 2.250" Radius, 0.750" Border,

98



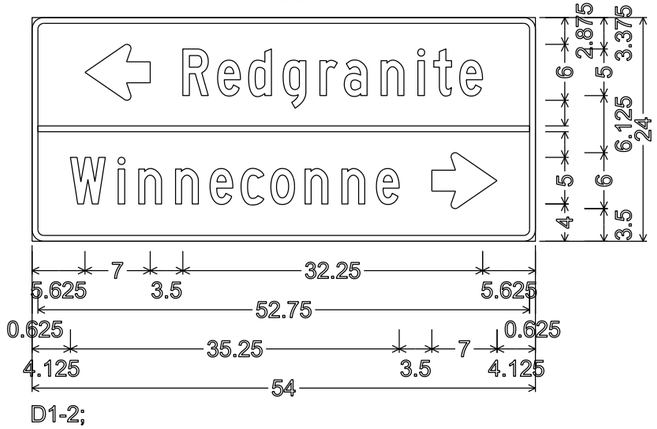
I2-3; 3.000" Radius, 1.000" Border,
"Omro" D; "POPULATION" C ; "3517" C;

40



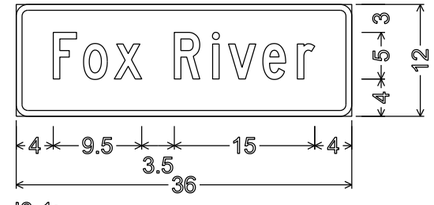
D1-3;
1.250" Radius, 0.625" Border
"Wautoma" C; "Berlin" C; "Oshkosh" C

15



D1-2;
1.250" Radius, 0.625" Border
"Redgranite" C; "Winneconne" C;

14 17



I3-1;
1.250" Radius, 0.625" Border
"Fox" C; "River" C

7

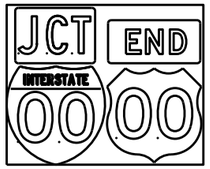
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	PERMANENT SIGNING	SHEET NO: 223	E

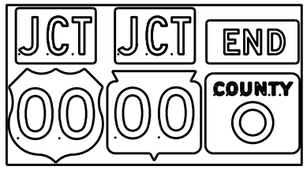
TYPICAL ASSEMBLIES



J1-1



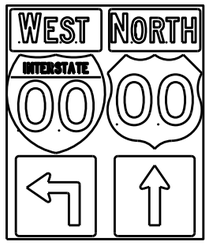
J1-2



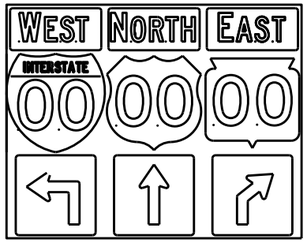
J1-3



J2-1



J2-2

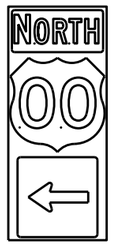


J2-3

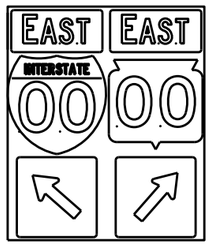


JV

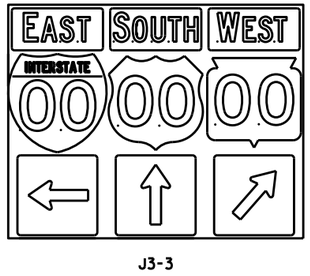
(Typical Vertical J-Assembly
See Note 10 and 11)



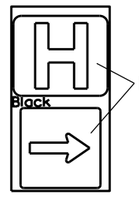
J3-1



J3-2



J3-3

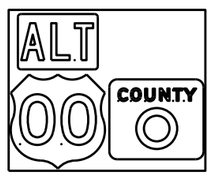


Blue Background

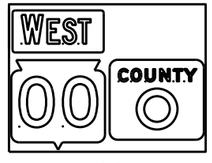
JH-1



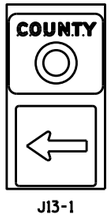
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

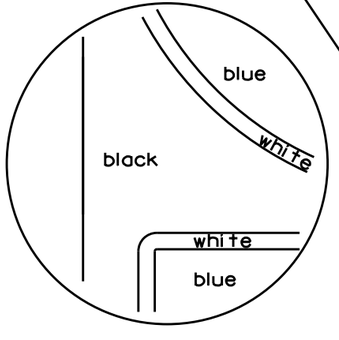


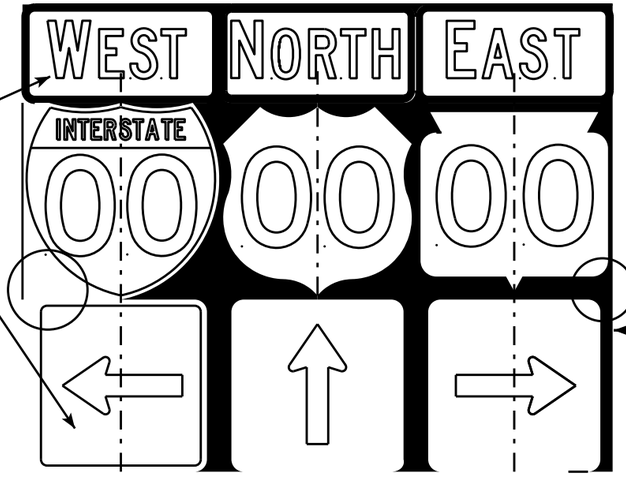
J23-1

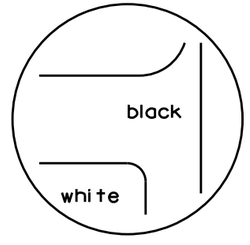


J22-1

[blue background with interstate]







[black background]

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

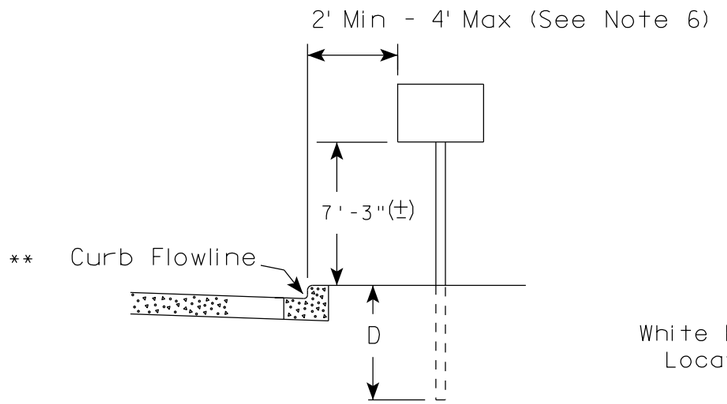
DATE 2/06/14 PL... A2-1S.8

PROJECT NO: | SHEET NO: E

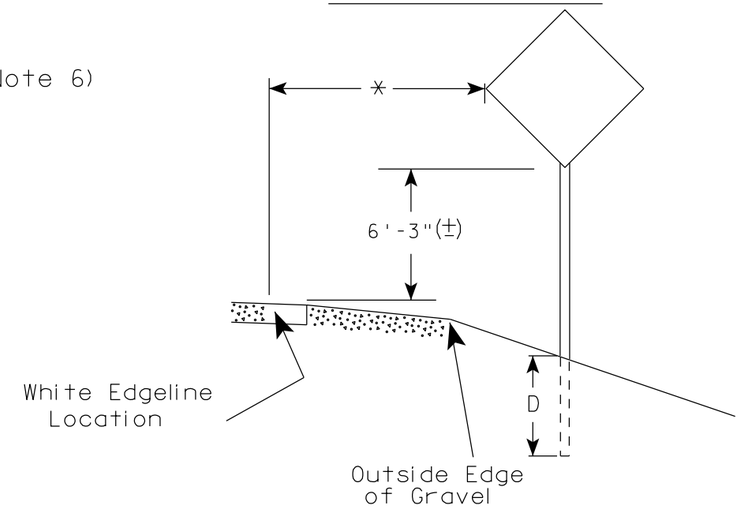
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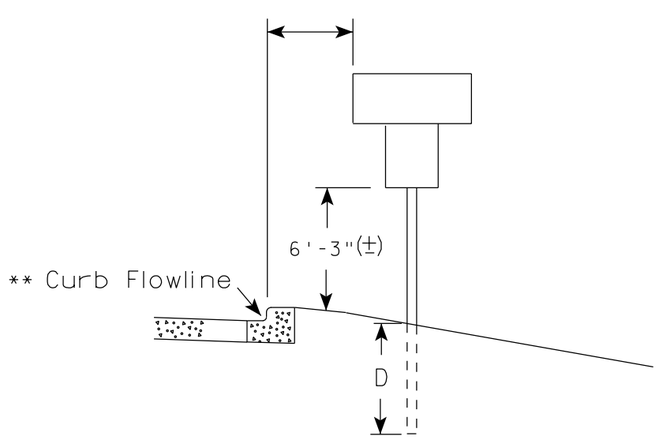
WISDOT/CADDS SHEET 42

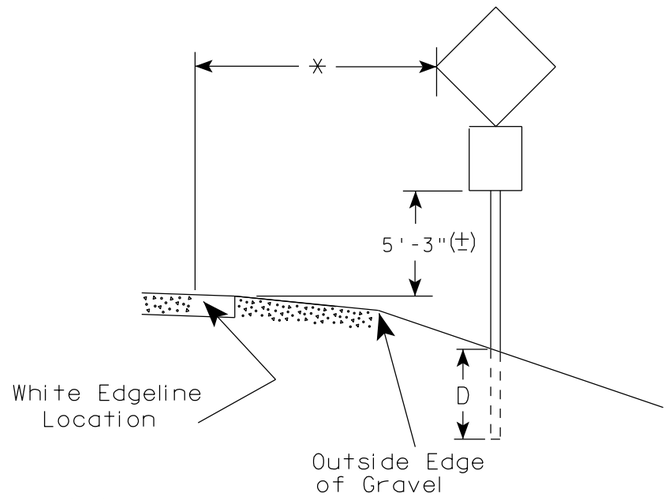
URBAN AREA



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 barrier wall, see A4-10 sign plate.
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 J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. 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), 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" (±).

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.

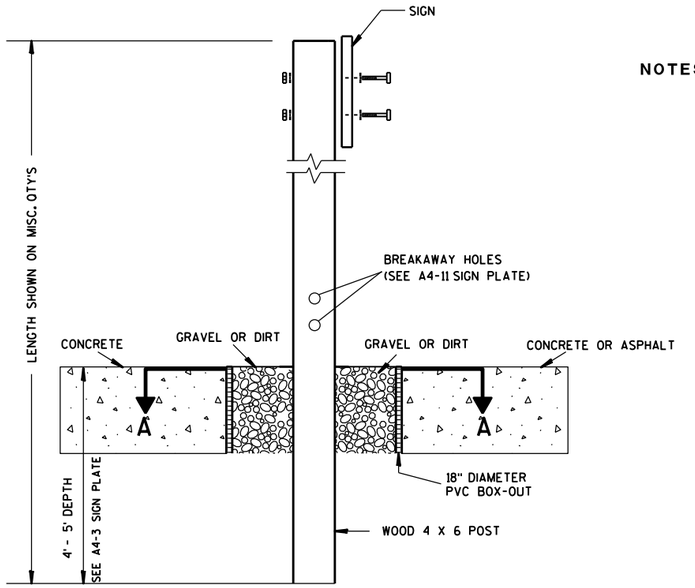
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

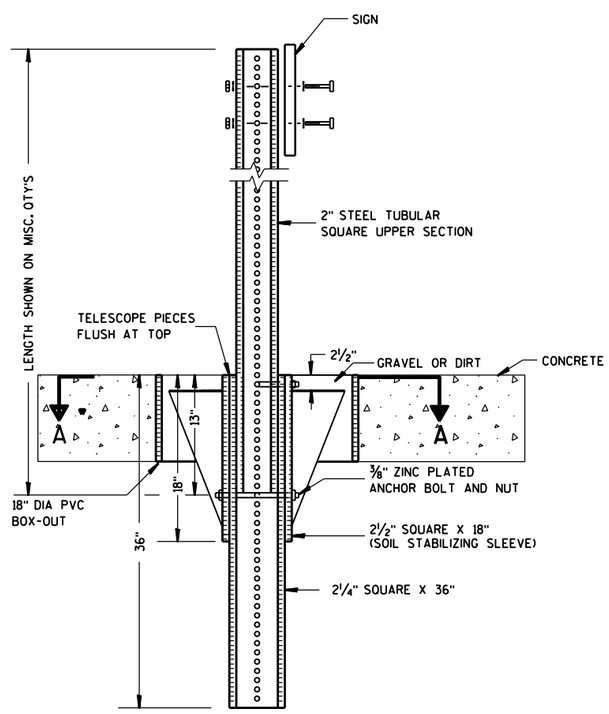
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

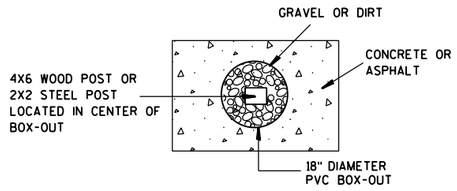
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

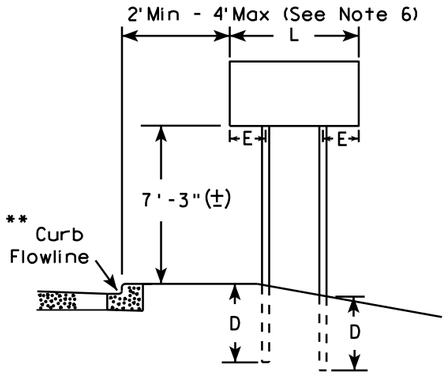
APPROVED Matthew R Rauch
for State Traffic Engineer

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

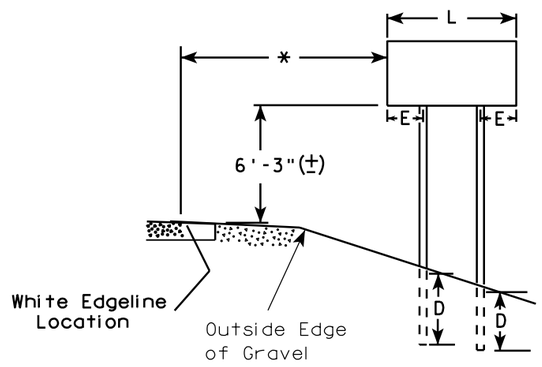
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

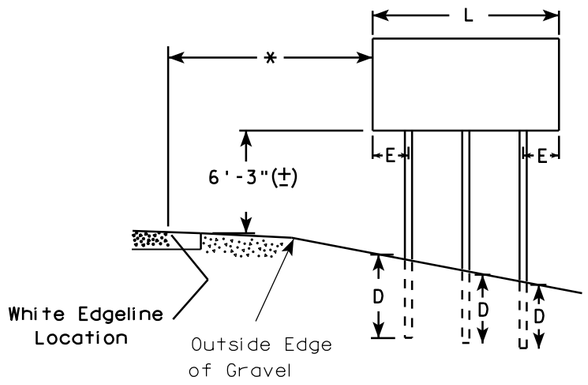
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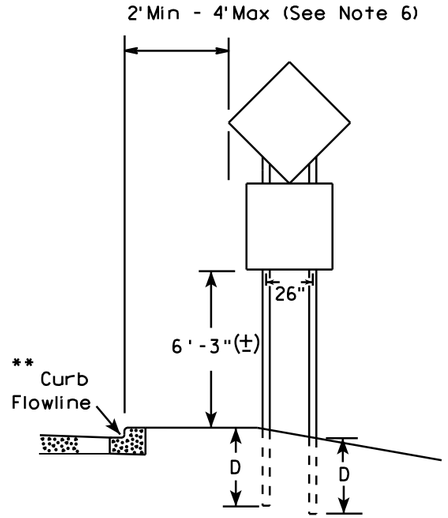
URBAN AREA



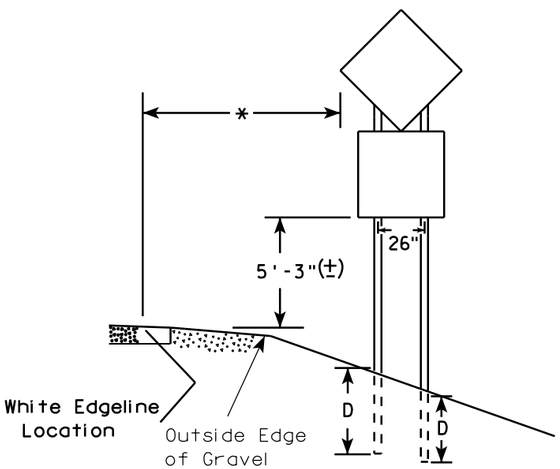
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
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 120"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	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

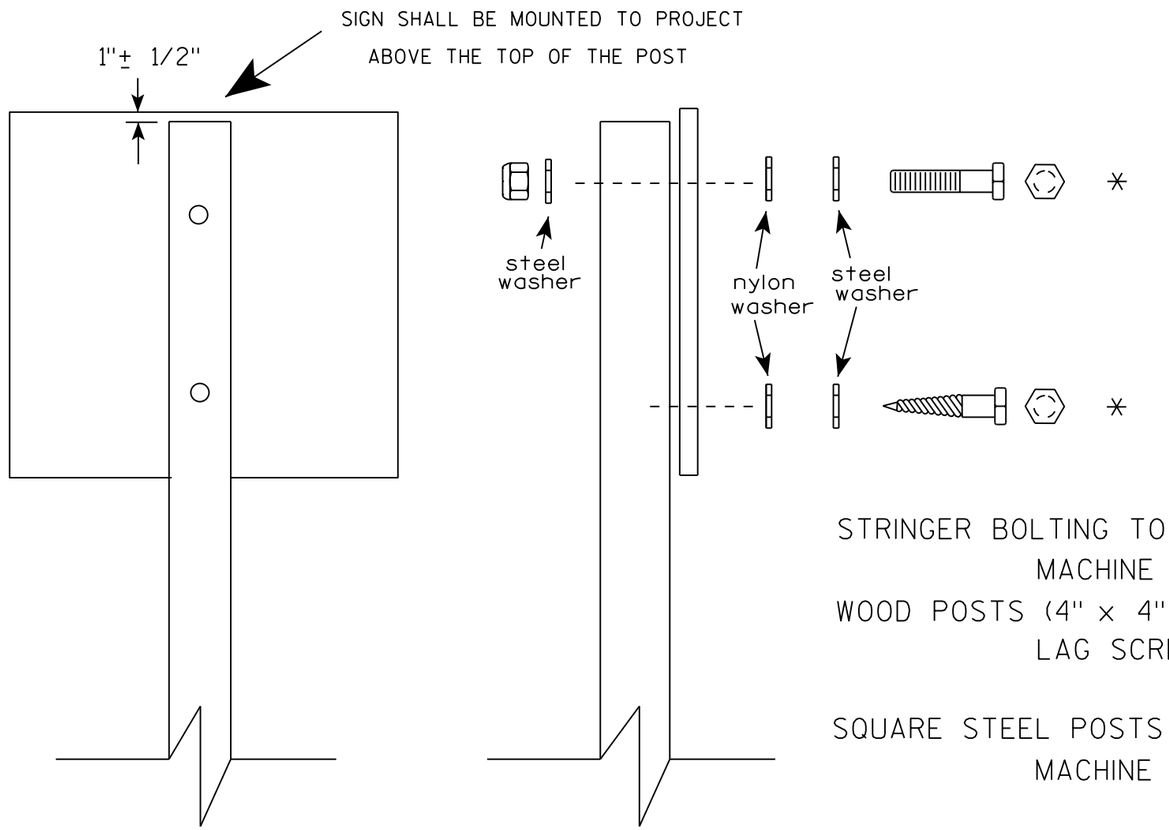
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4 227 14

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 23-JUL-2015 15:23 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 107.021305:1.000000

WISDOT/CADDS SHEET 42



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 4" or 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

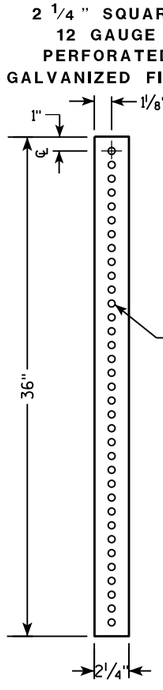
DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E

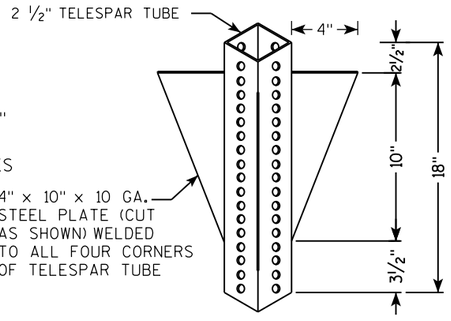
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

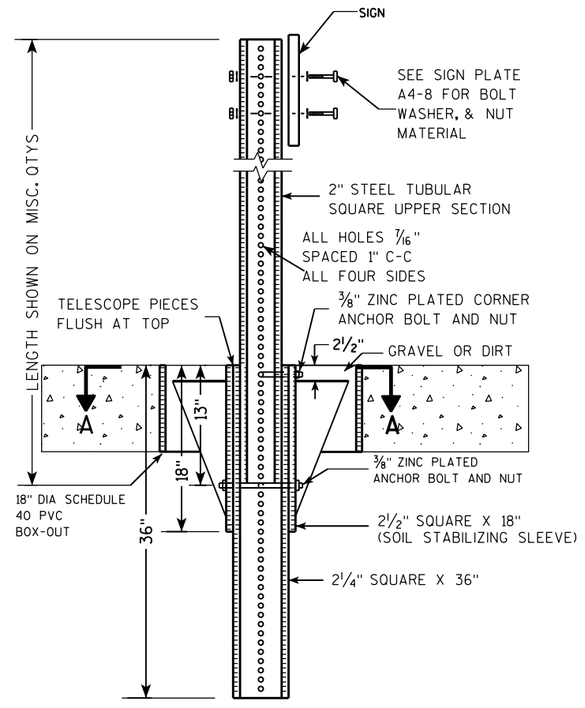
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



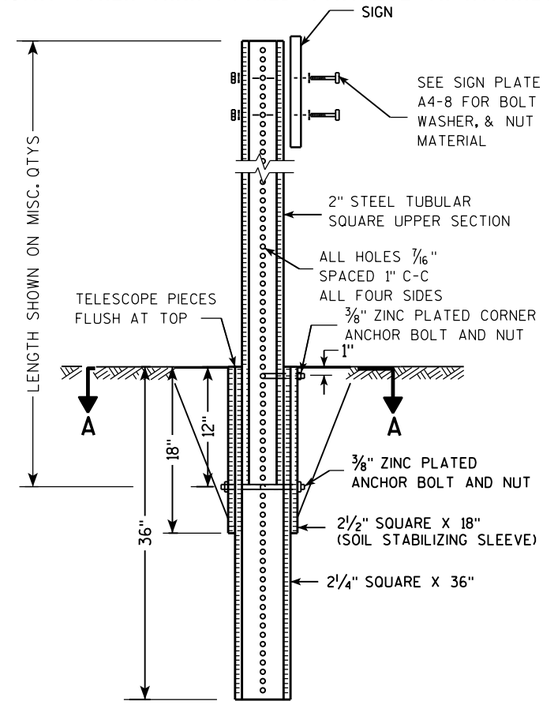
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

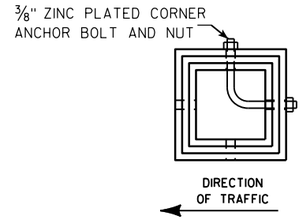


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

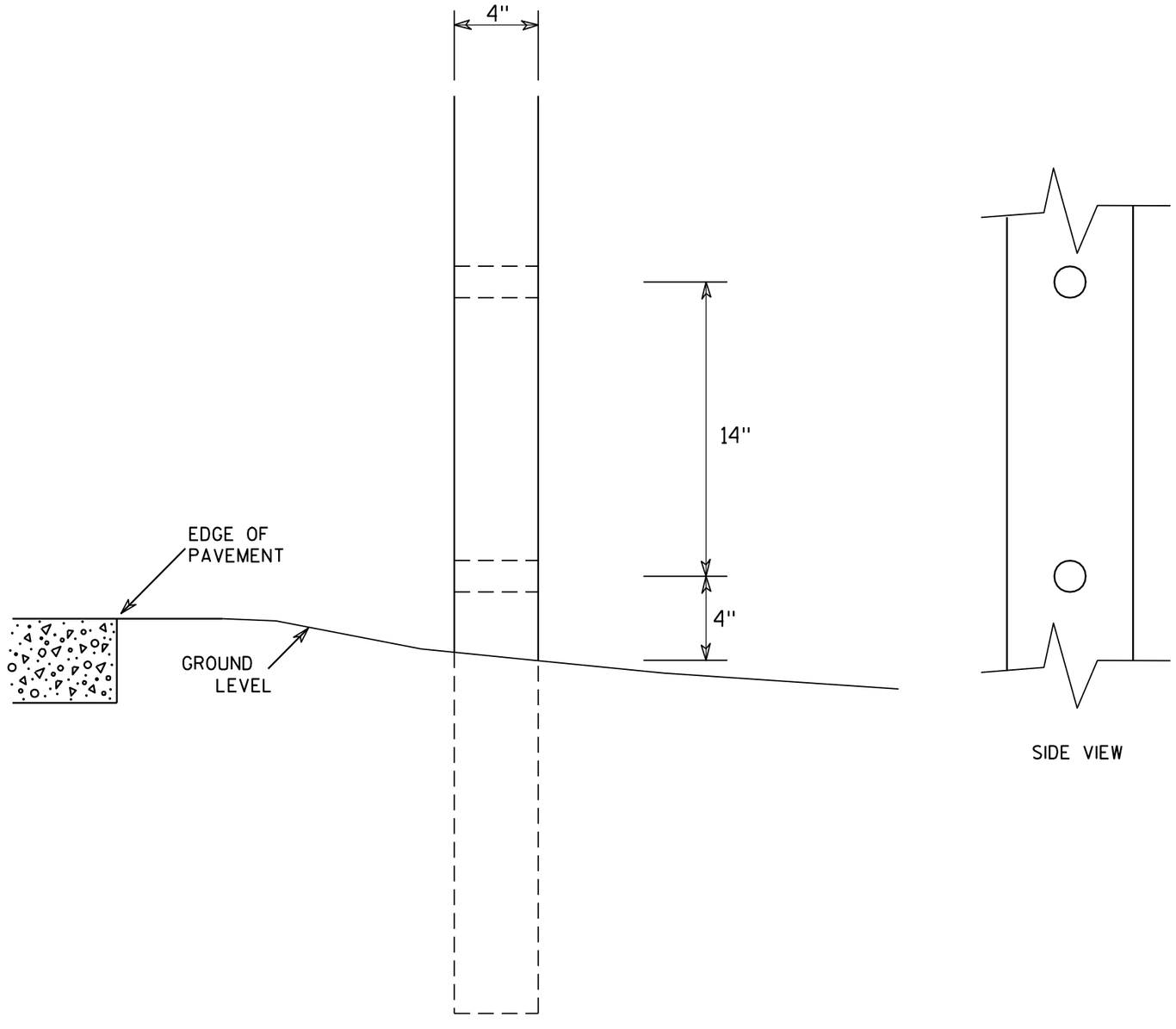
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 229 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

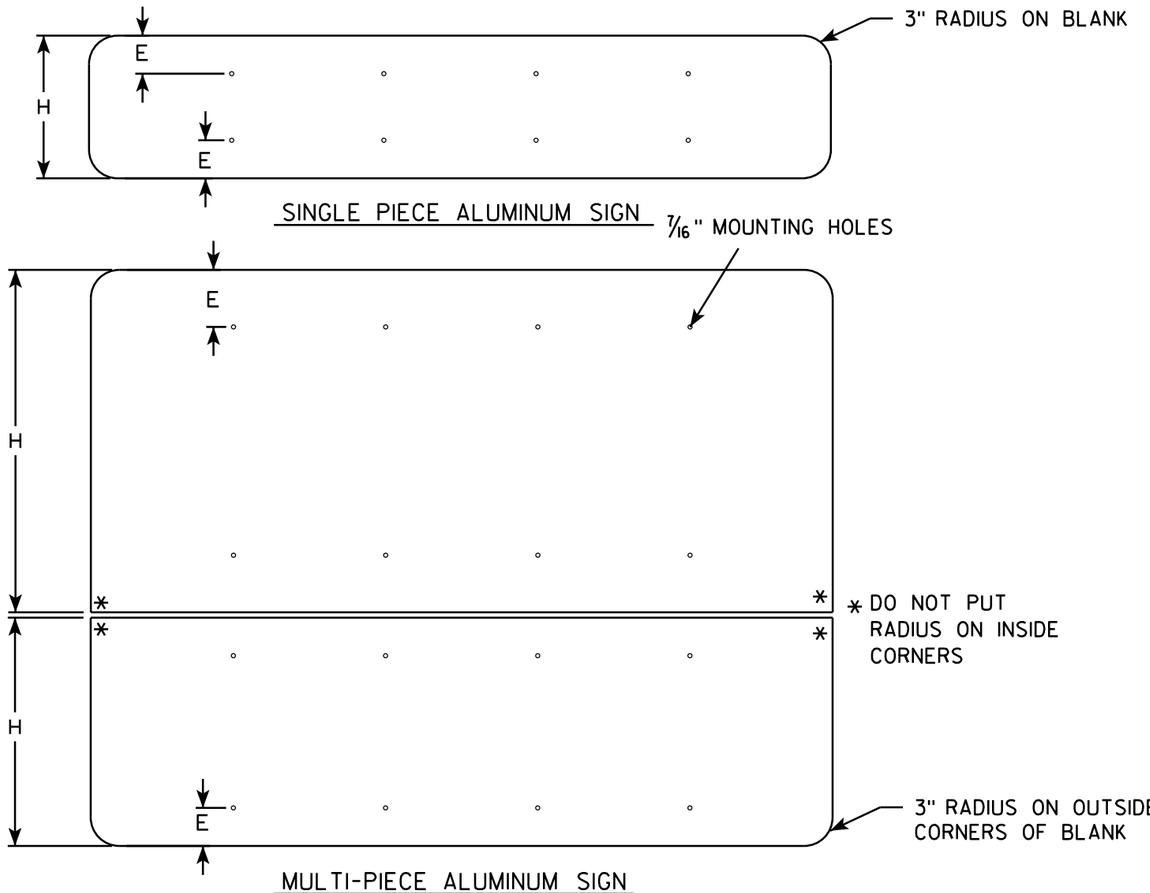
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

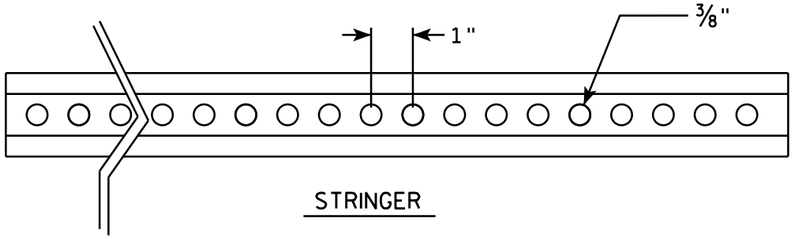
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 230	E



GENERAL NOTES

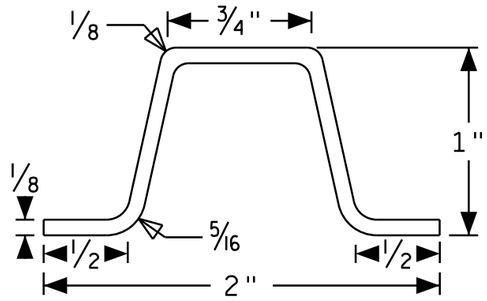
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

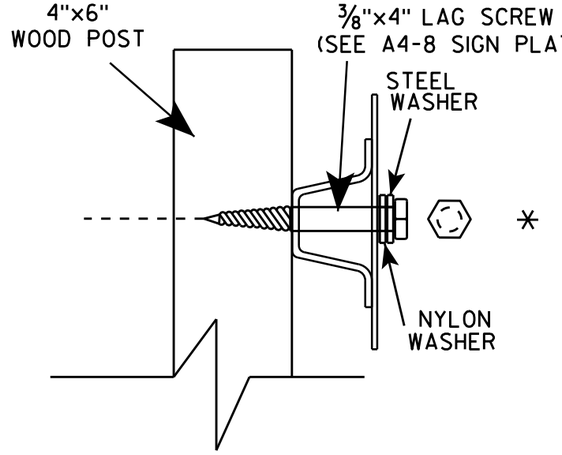


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

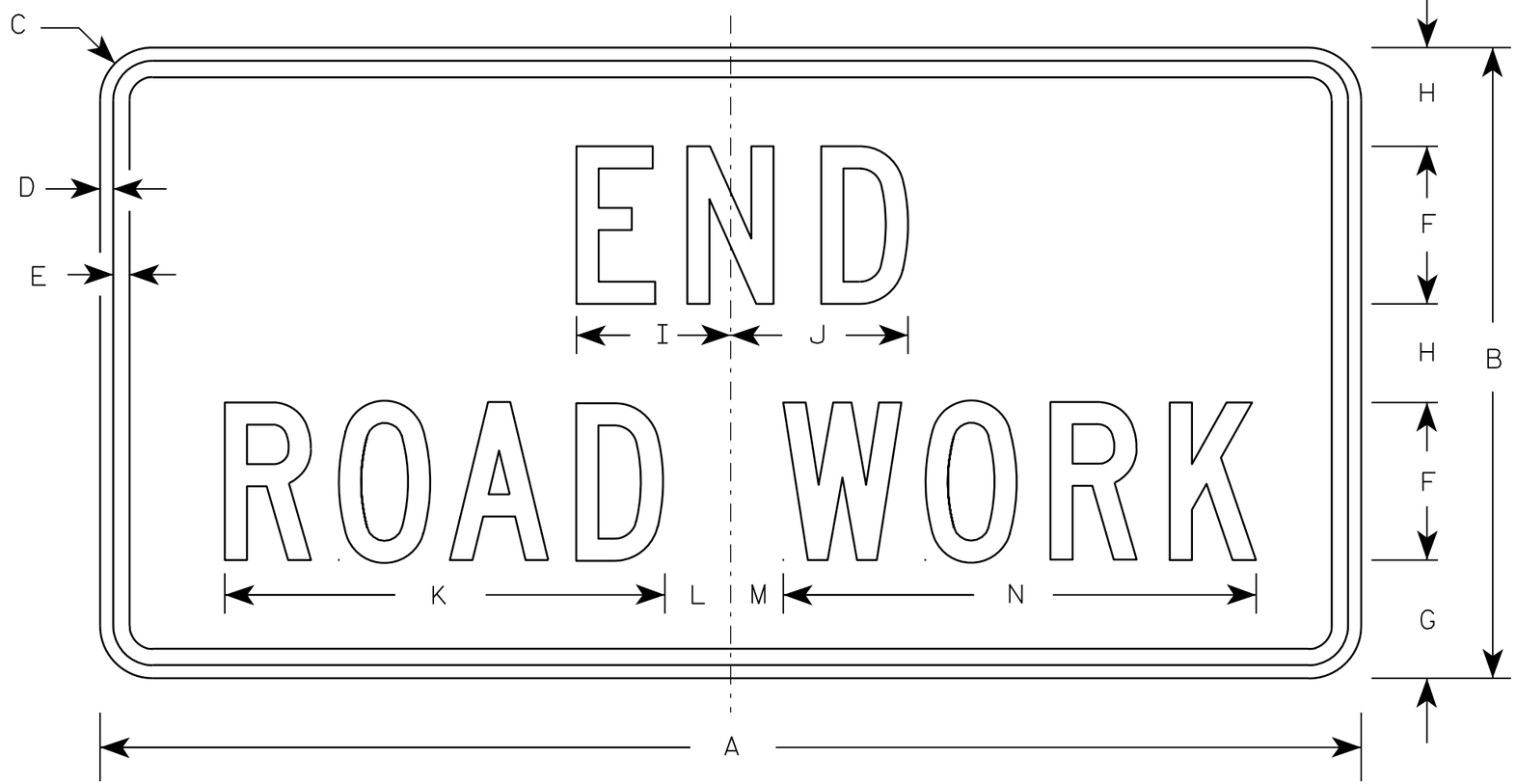
APPROVED Matthew R Rauch

for State Traffic Engineer

DATE 4/26/16 PLATE NO A4-18.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42



G20-2A

NOTES

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

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

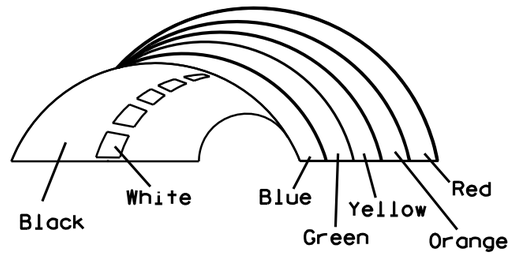
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 232	E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - (See Note 5)
3. Message Series - (See Note 6)
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Border - Blue
   Line 1 - Red
   Line 2 - Black
   Line 3-5 - Blue
6. Line 1 - Dutch 8011L
   Line 2 - Series E
   Line 3-5 - Series C
7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.

Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

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	36	1 1/2	1/2	5/8	3	2	3 1/2	2 7/8	1	8	2 1/8	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2							7.5
3																											
4																											
5																											

STANDARD SIGN
I55-56

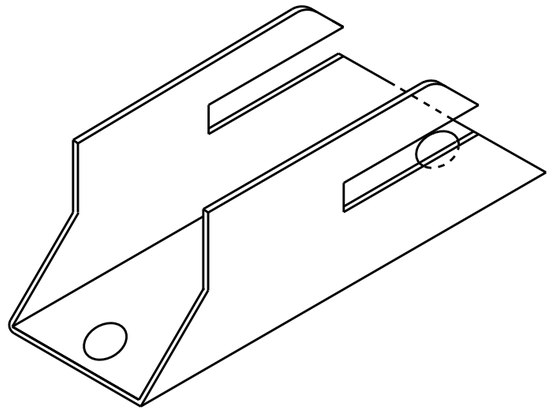
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

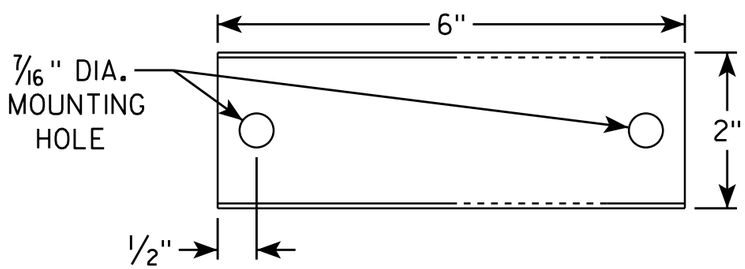
DATE 4/27/11 PLATE NO. 155-56.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 233

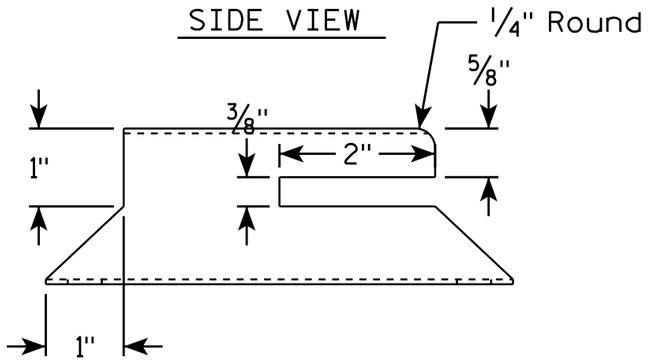
ISOMETRIC VIEW



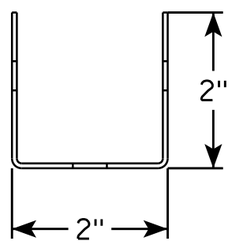
TOP VIEW



SIDE VIEW



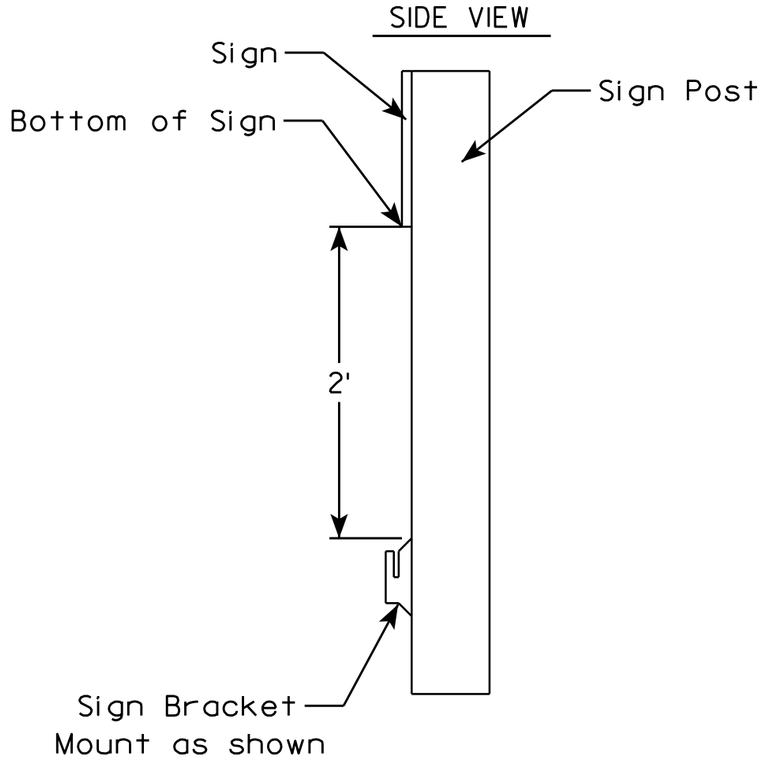
END VIEW



NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

SIDE VIEW



ROLLUP SIGN BRACKET
I55-56B

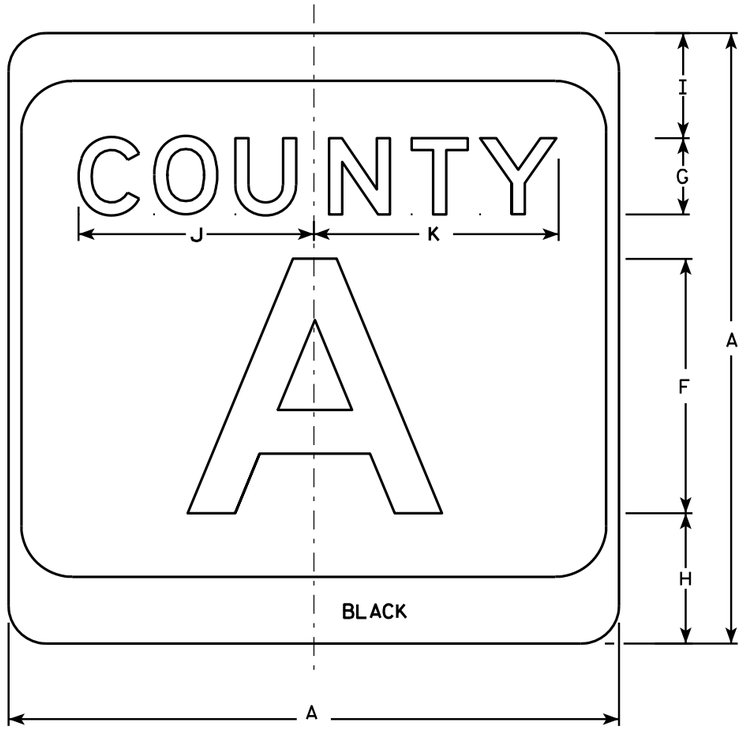
WISCONSIN DEPT OF TRANSPORTATION

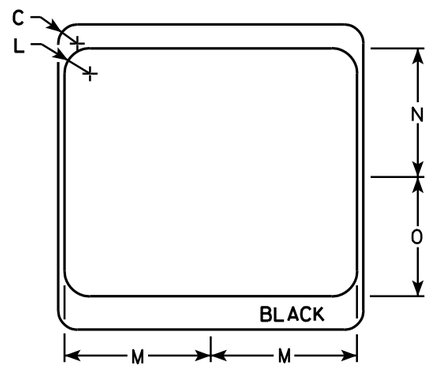
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/26/16 PLATE I55-56B.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

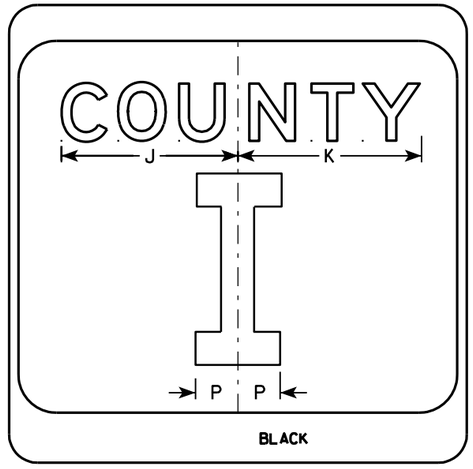
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\I5556B.DGN PLOT DATE : 26-APR-2016 17:29 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 1.945842:1.000000
WISDOT/CADDS SHEET 42

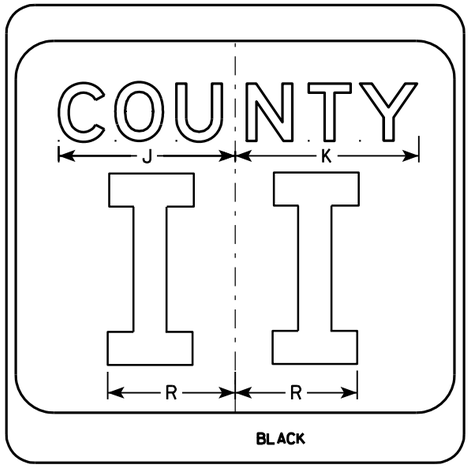




NOTES

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

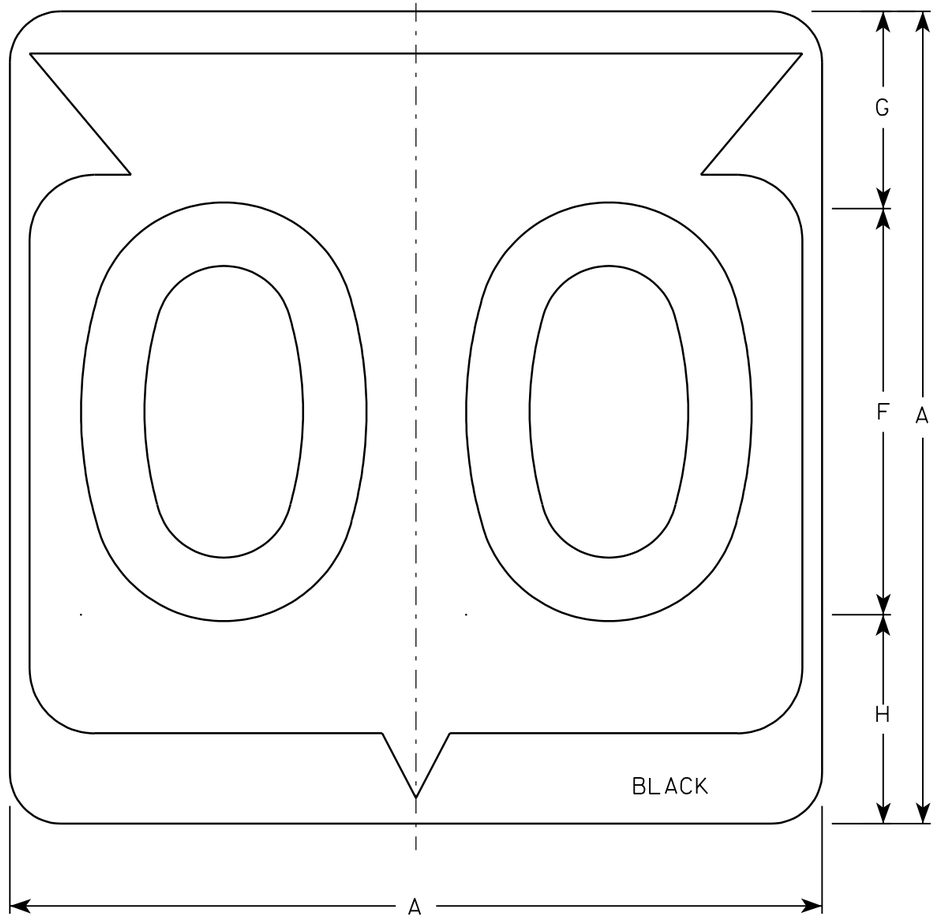
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

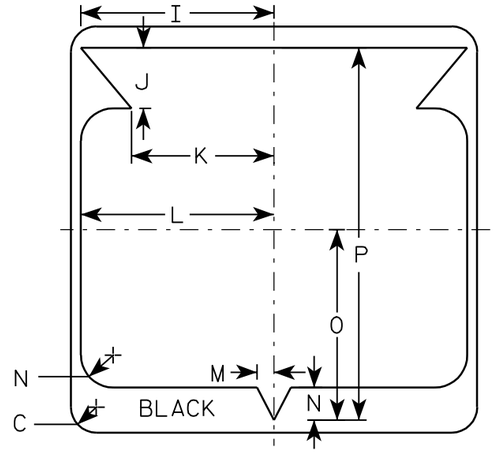
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 235	E



M1-6

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   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. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective



Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

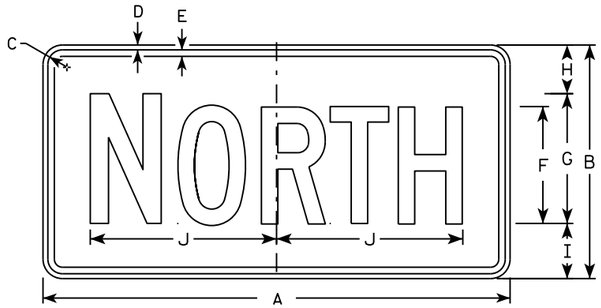
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

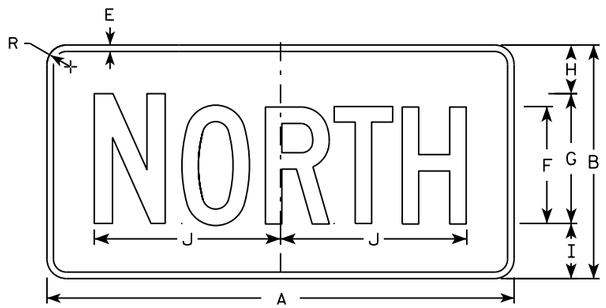
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 236	E



M3-1
MM3-1
MP3-1



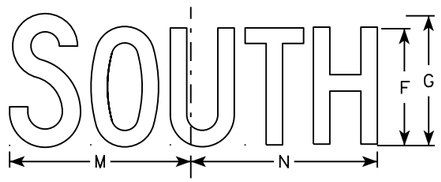
MB3-1
MK3-1
MN3-1



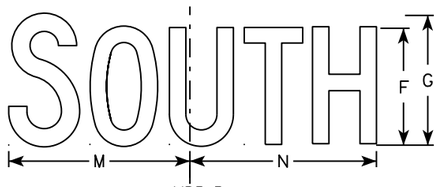
M3-2
MM3-2
MP3-2



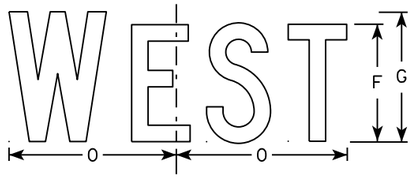
MB3-2
MK3-2
MN3-2



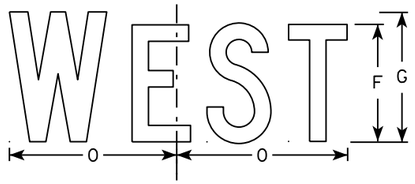
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

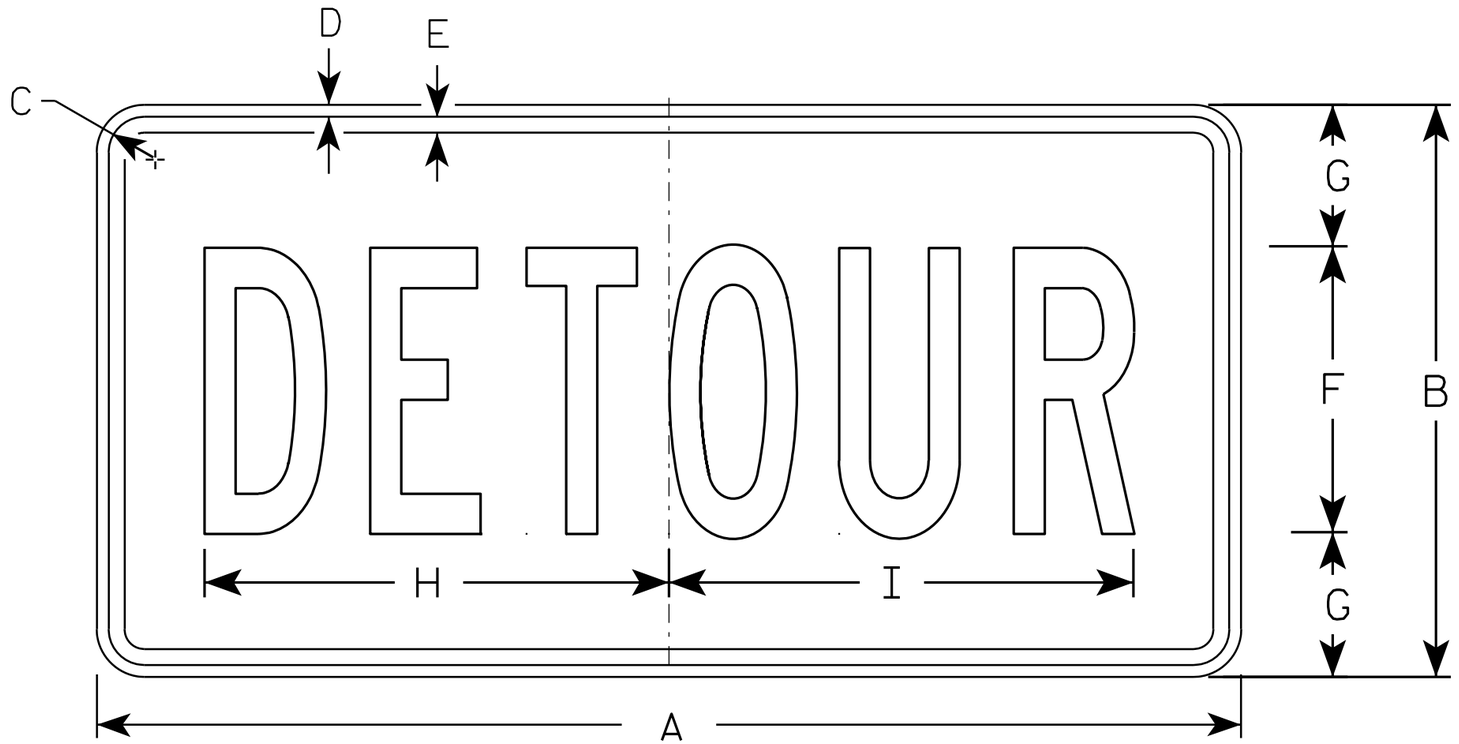
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-8

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.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

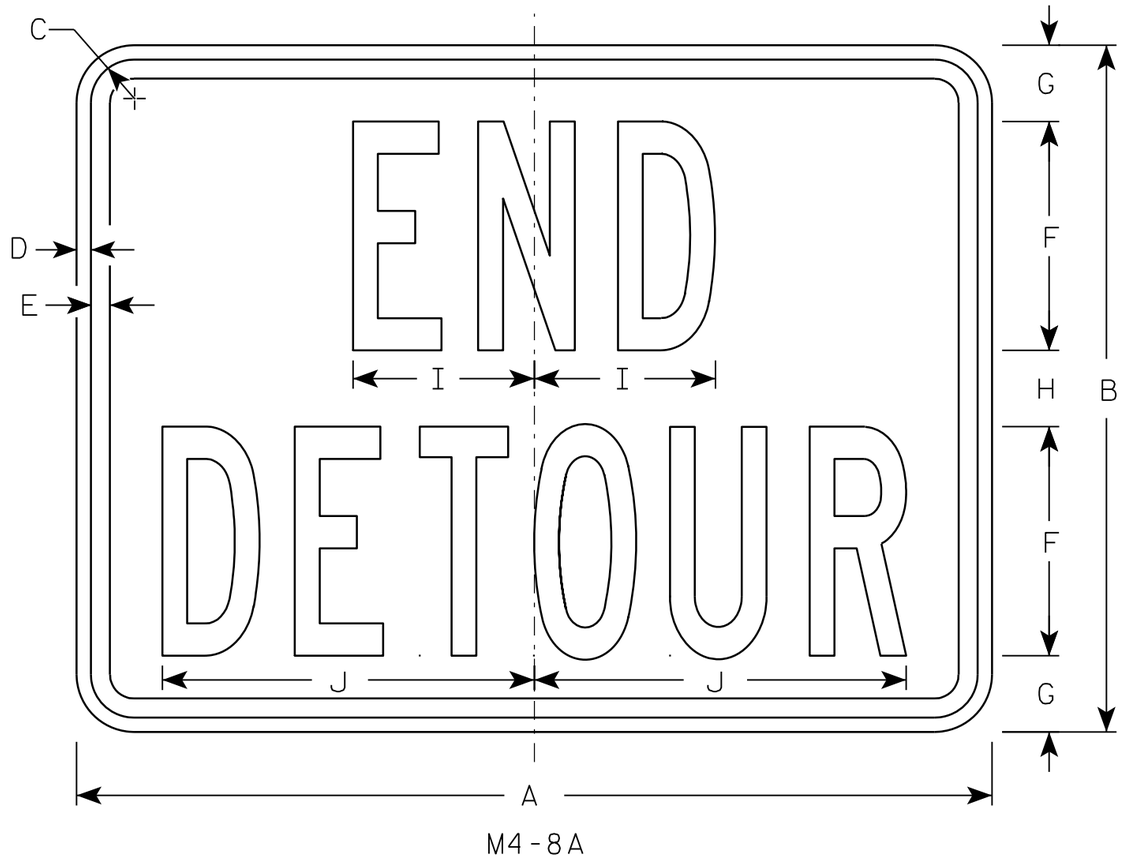
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 238	E



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.

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																											

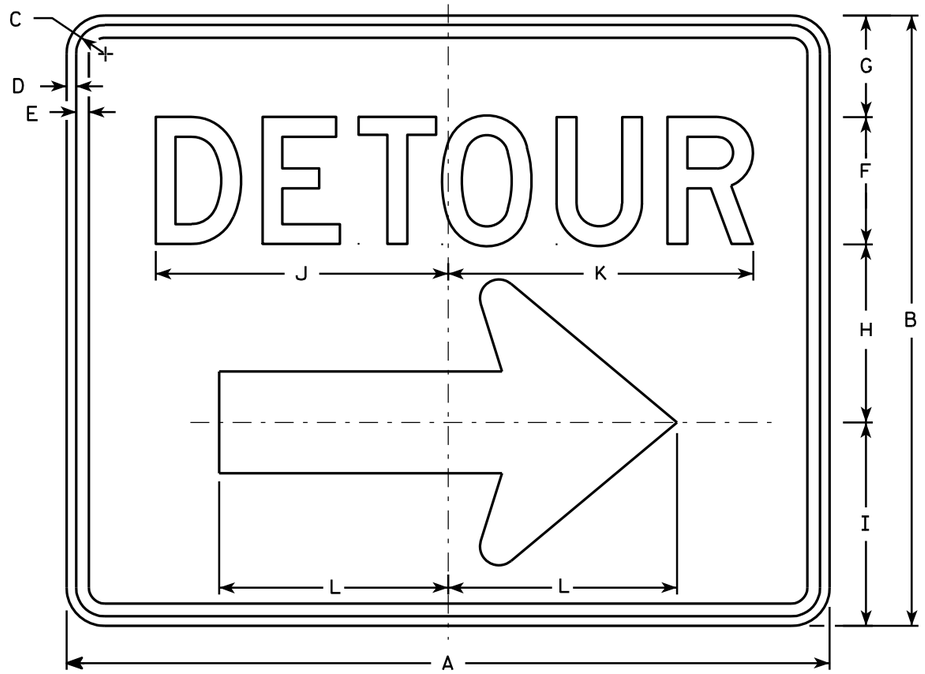
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

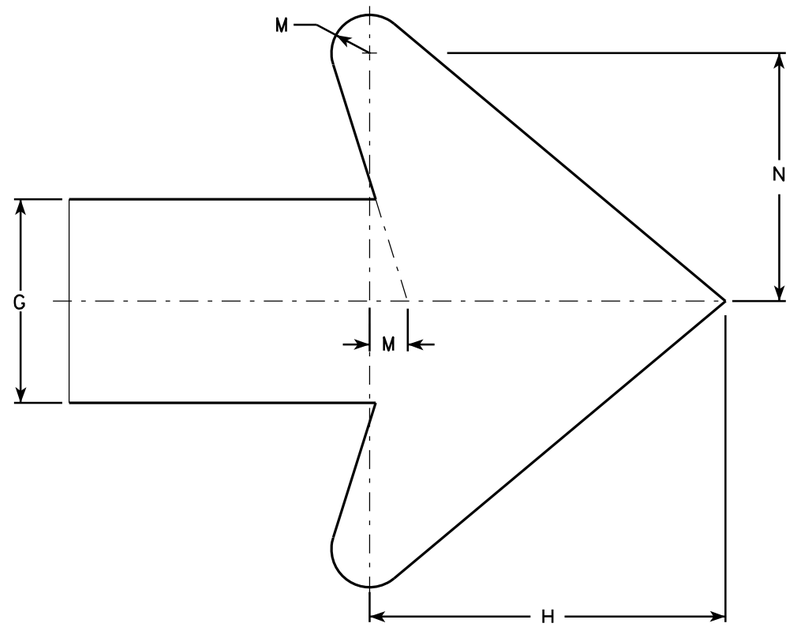
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 239	E



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

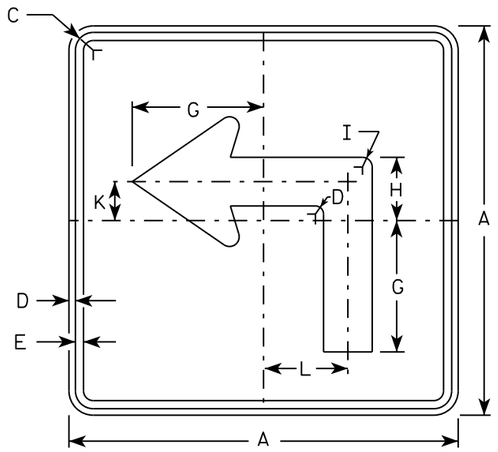
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

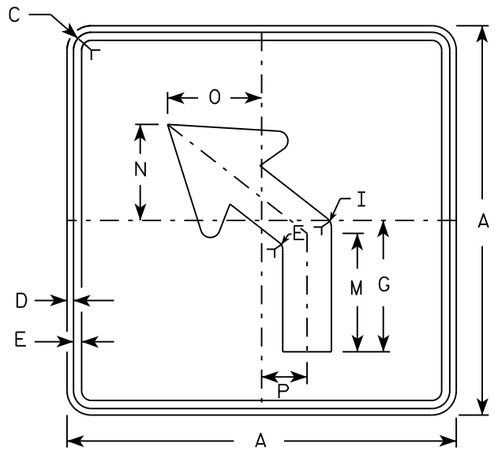
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

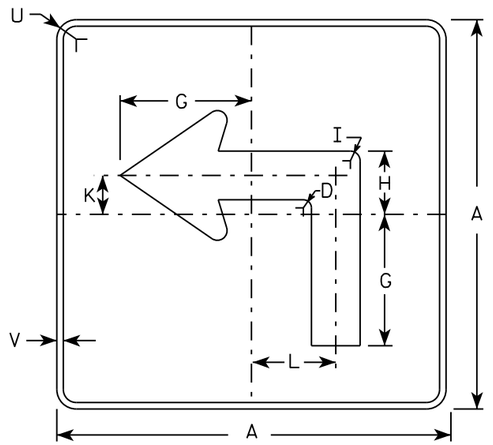
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 240 | E



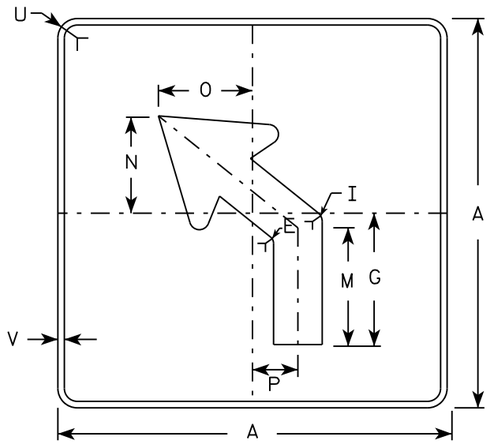
M5-1L
MM5-1L
MO5-1L
MP5-1L



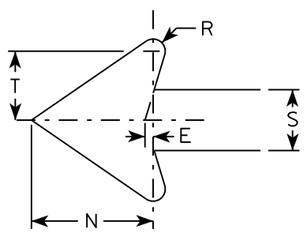
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

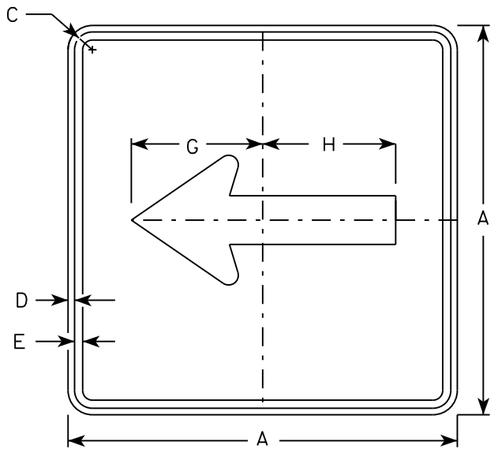
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

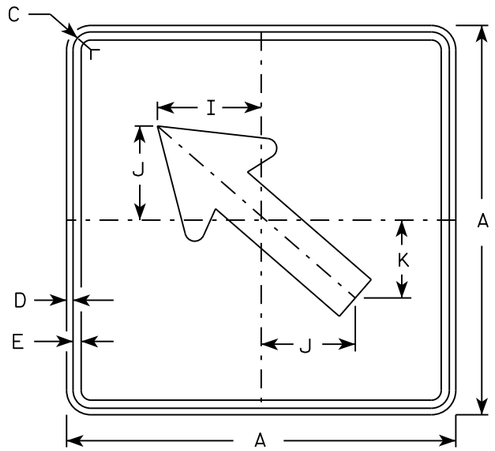
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



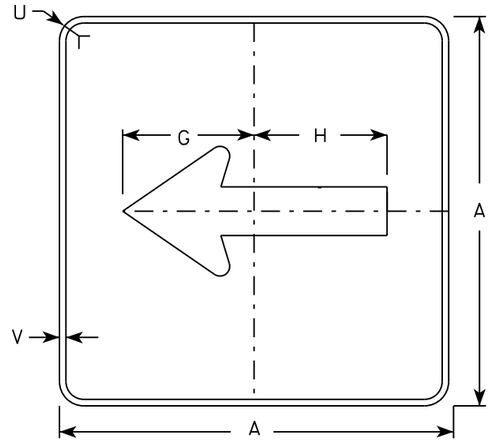
M6-1
MM6-1
MO6-1
MP6-1



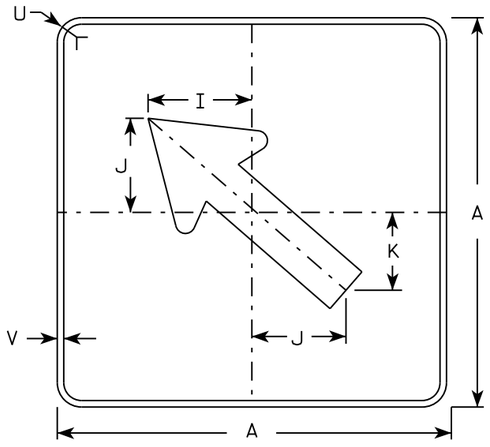
M6-2
MM6-2
MO6-2
MP6-2

NOTES

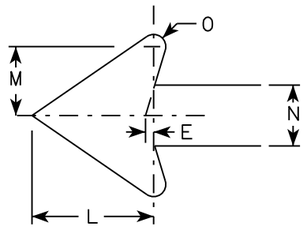
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

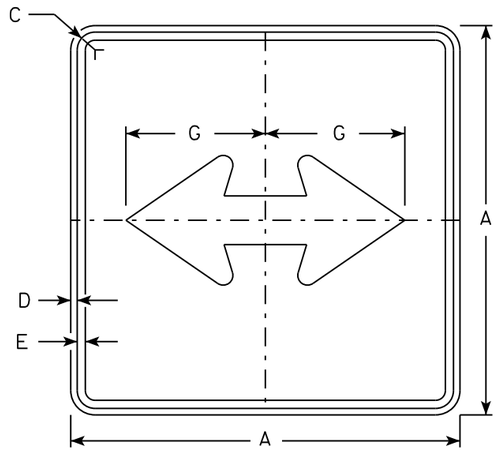
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

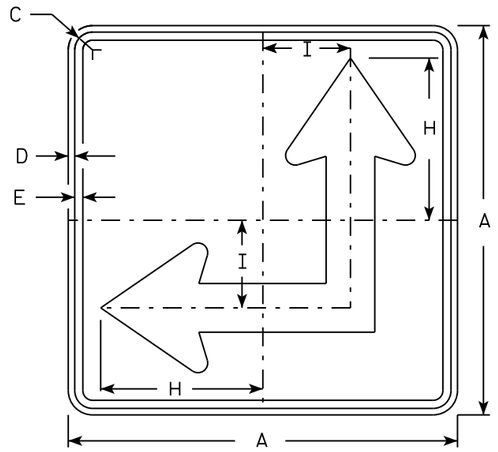
DATE 10/15/15 PLATE 242 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



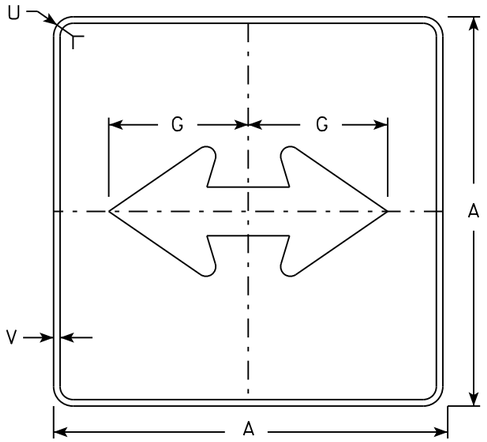
M6-4
MM6-4
MO6-4
MP6-4



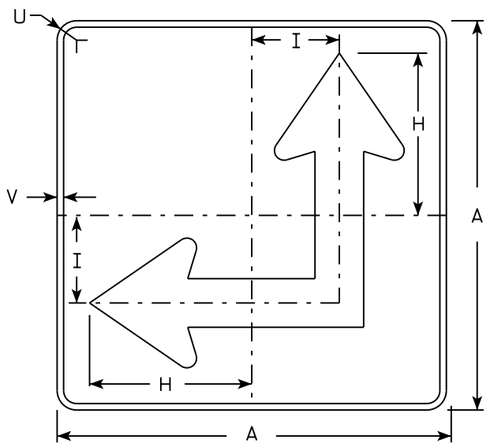
M6-6
MM6-6
MO6-6
MP6-6

NOTES

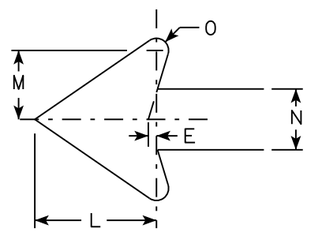
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN
M6-4 & M6-6
SERIES

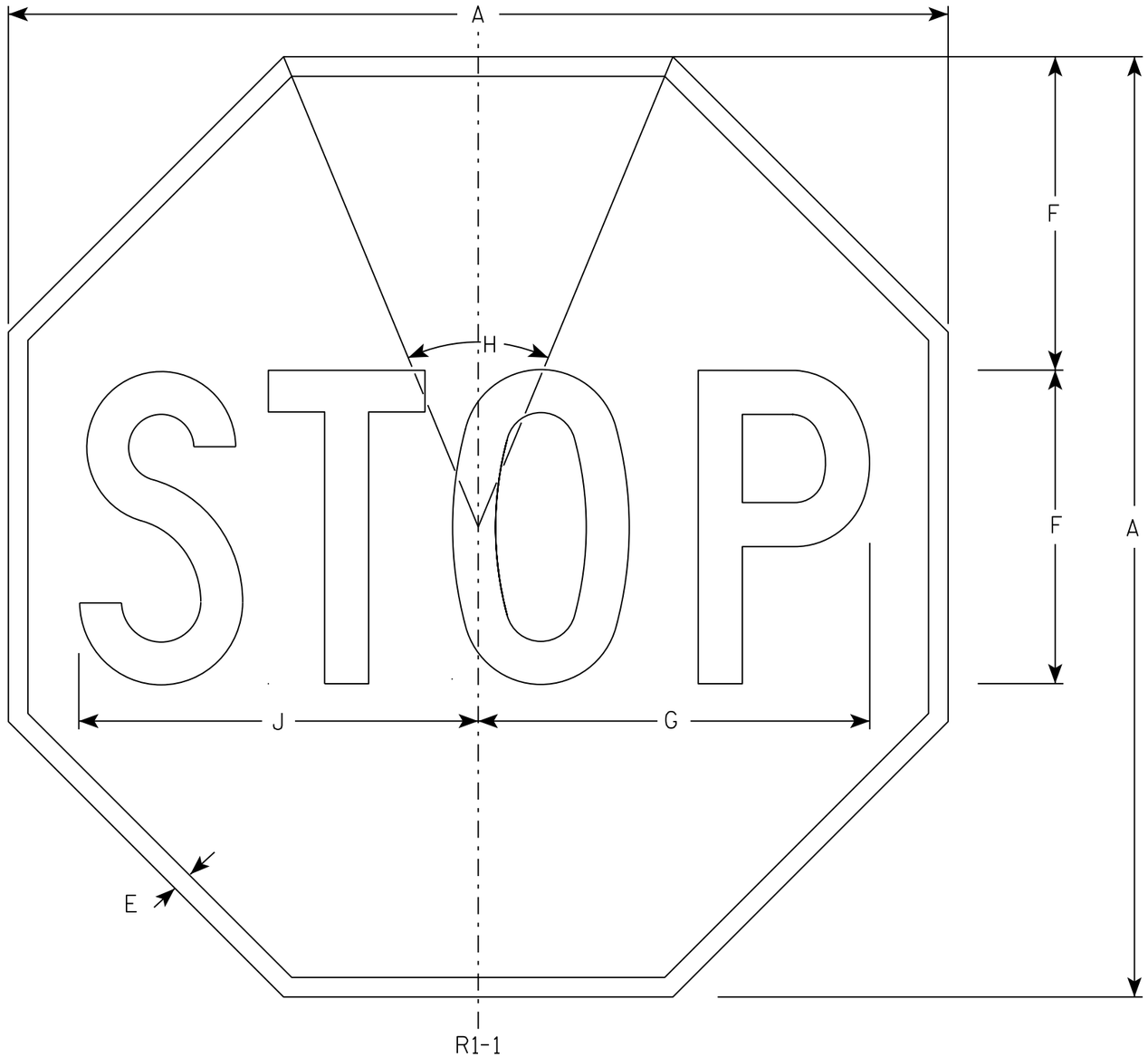
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 243 M6-4.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 01-DEC-2015 17:58 PLOT BY : $$ platuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

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

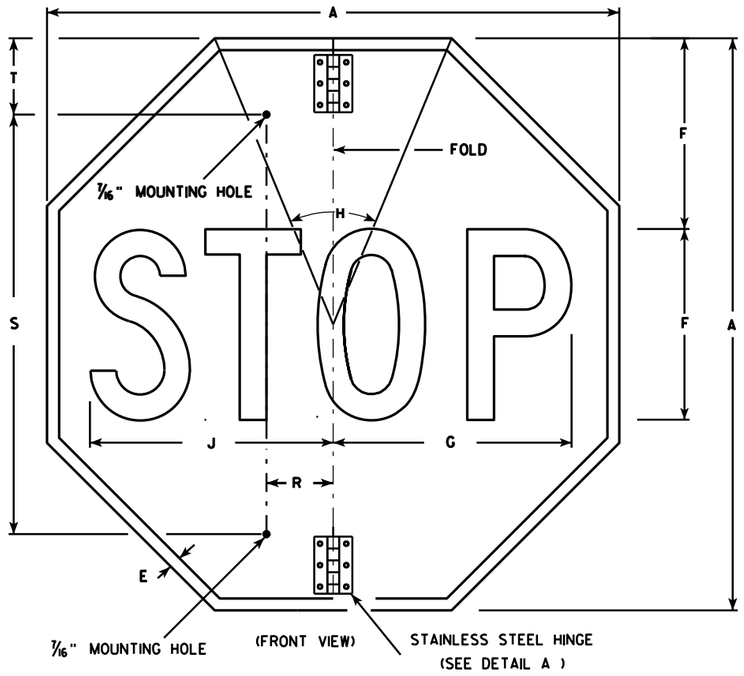
WISCONSIN DEPT OF TRANSPORTATION

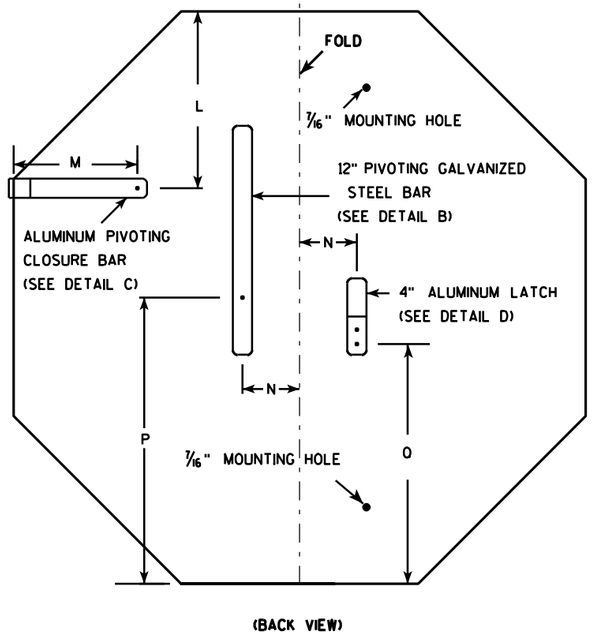
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE 244 R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

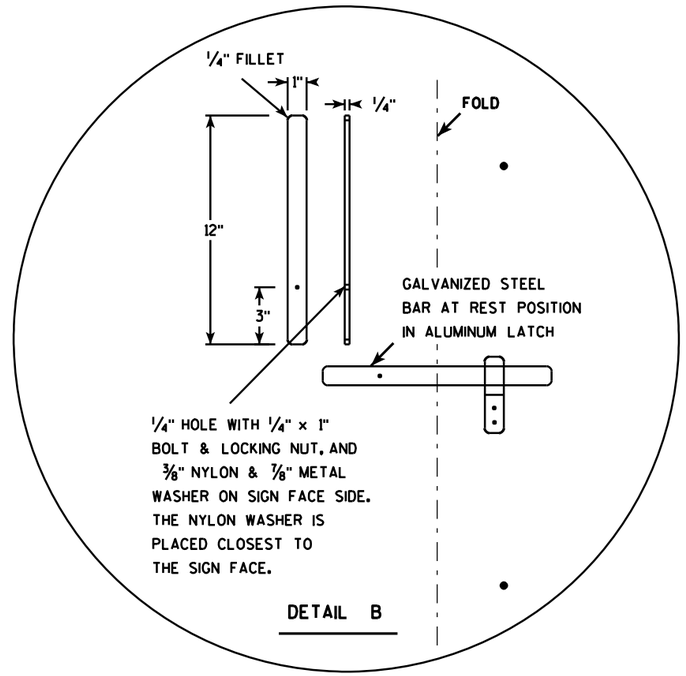
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R11.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.378143:1.000000

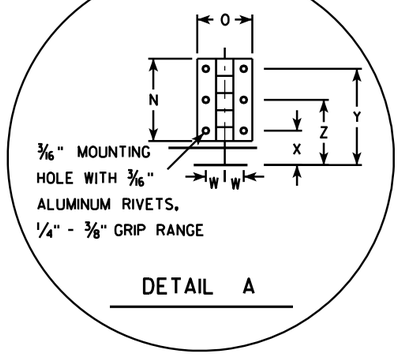


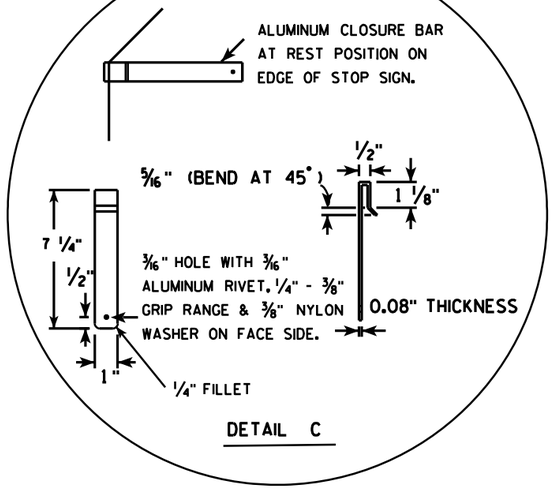


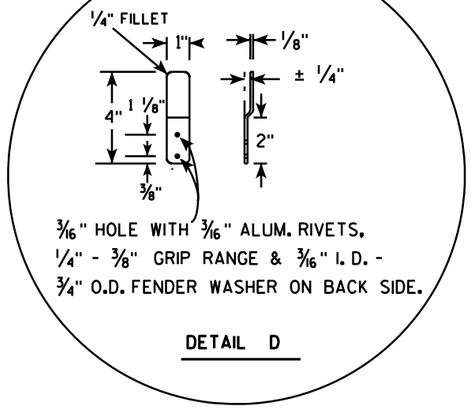
NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.









SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

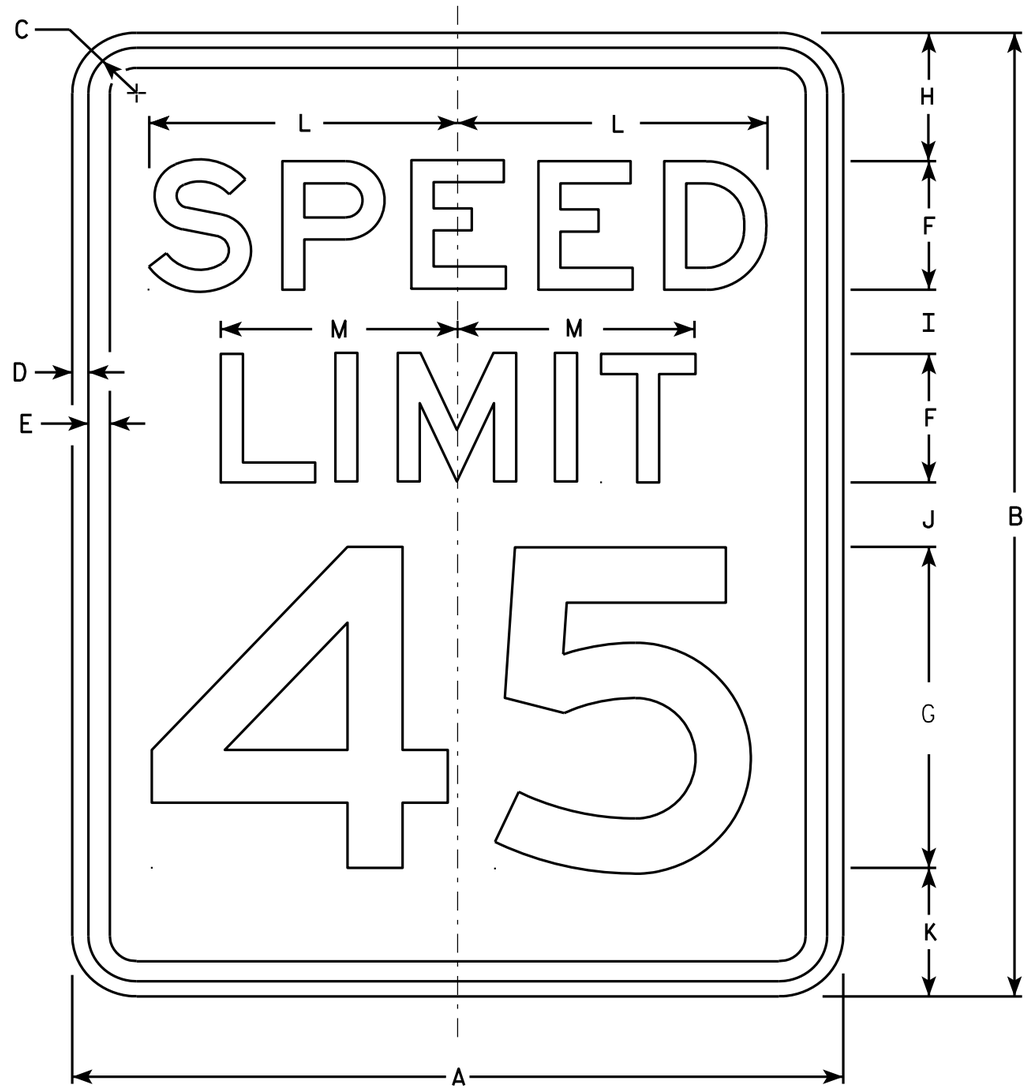
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 245 | E



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

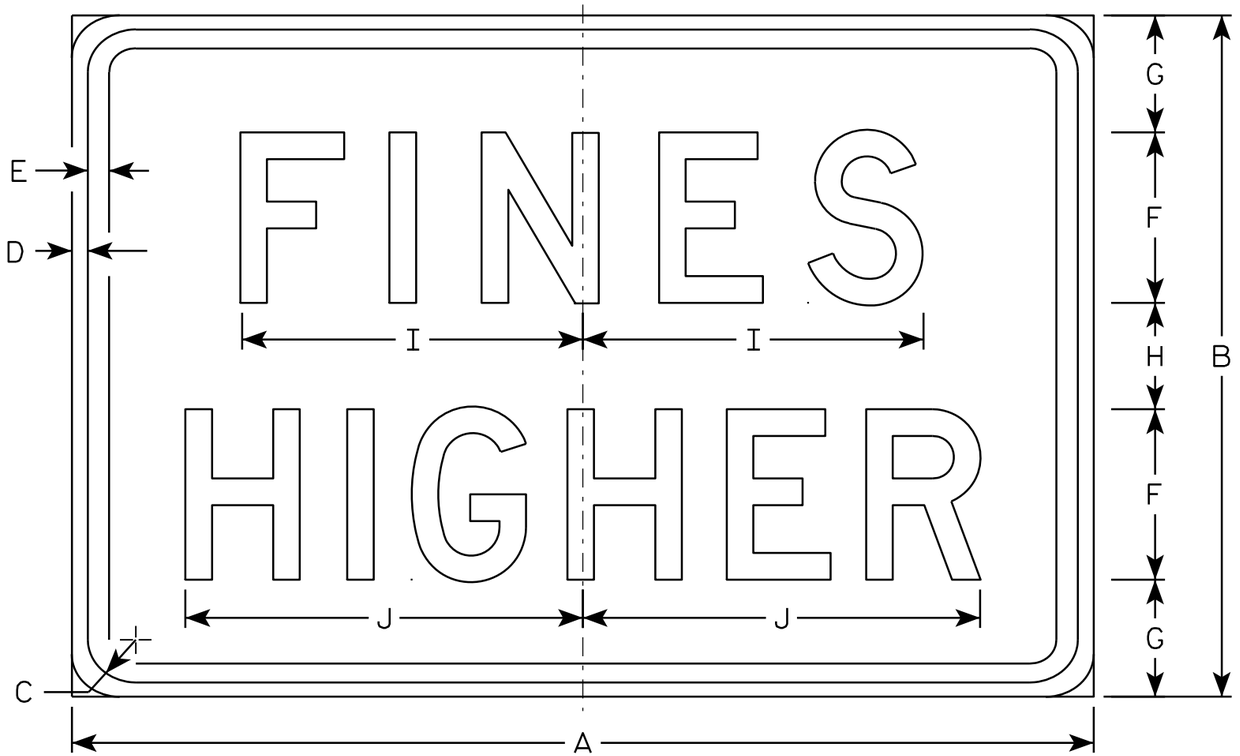
STANDARD SIGN
R2-1

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: 246 | E



R2-6P

NOTES

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

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	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
2M	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
3	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
4	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
5	48	36	1 3/8	1/2	5/8	8	7	6	15 1/8	19																	12.0

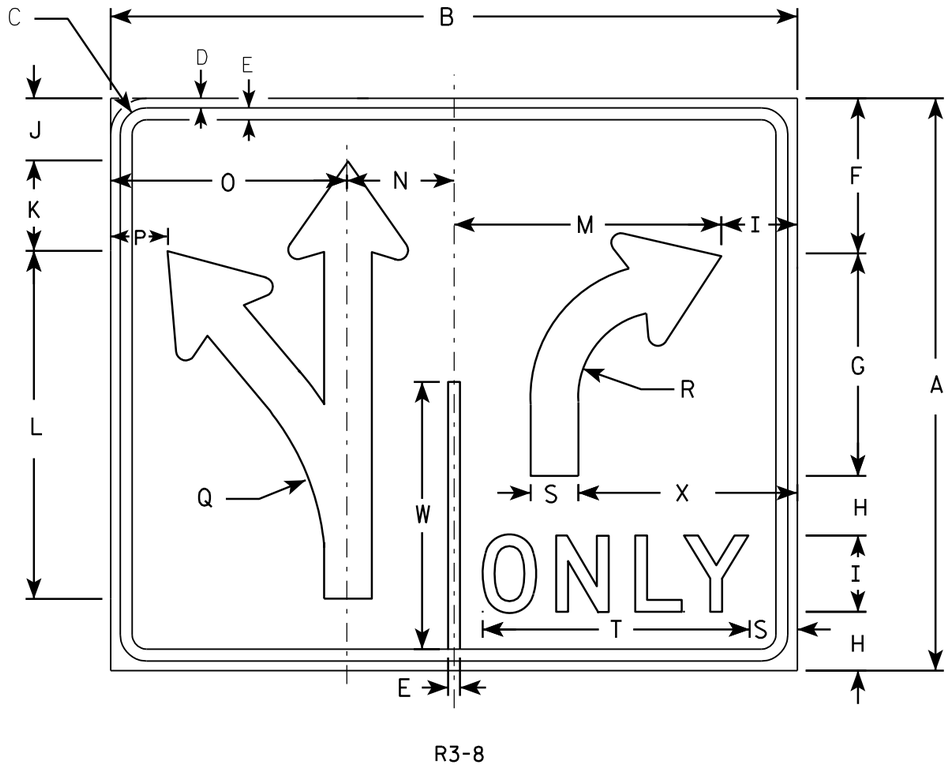
STANDARD SIGN
R2-6P

WISCONSIN DEPT OF TRANSPORTATION

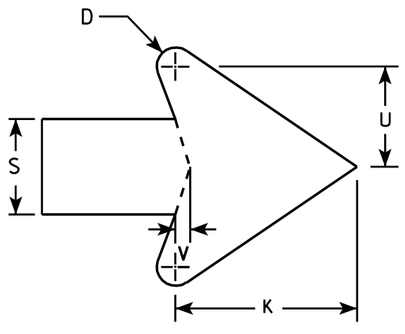
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/10 PLATE NO. R2-6P.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 247 | E



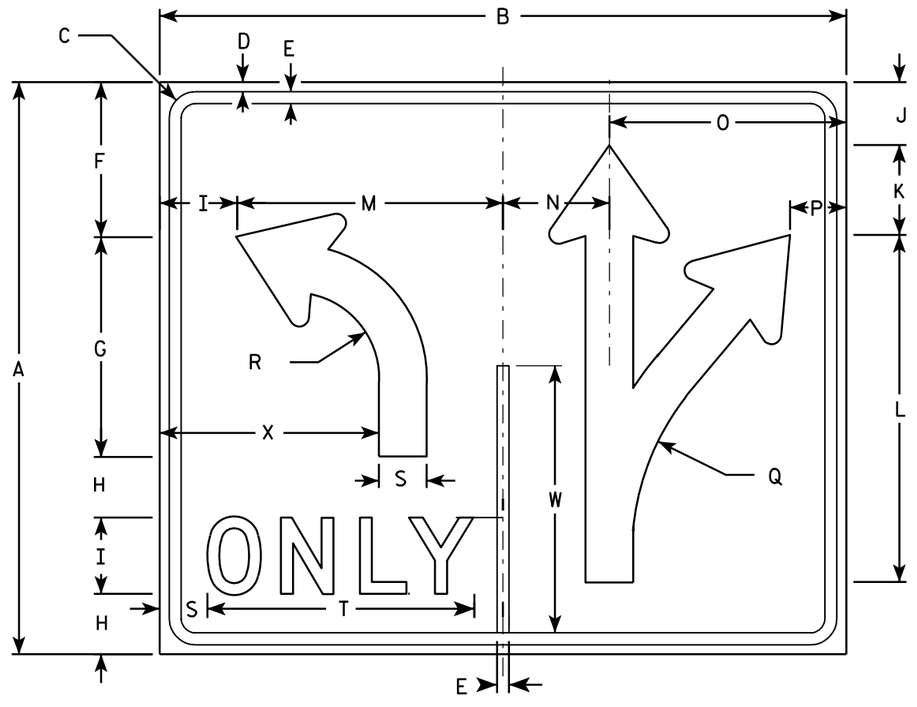
R3-8



ARROW DETAIL

NOTES

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



R3-8A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0

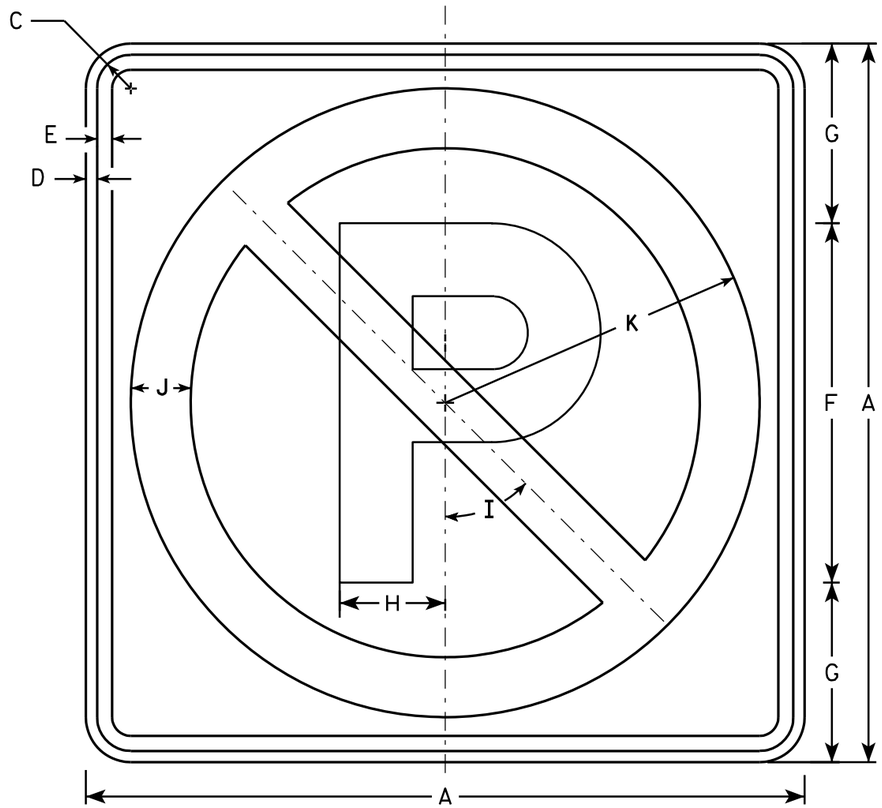
STANDARD SIGN
R3-8 & R3-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 248	E



R3-8A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Letter P are non reflective black, the circle with diagonal bar is reflective red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2	12	6	3 1/2	45°	2	10 1/2																4.0
2M	24		1 1/8	3/8	1/2	12	6	3 1/2	45°	2	10 1/2																4.0
3																											
4																											
5																											

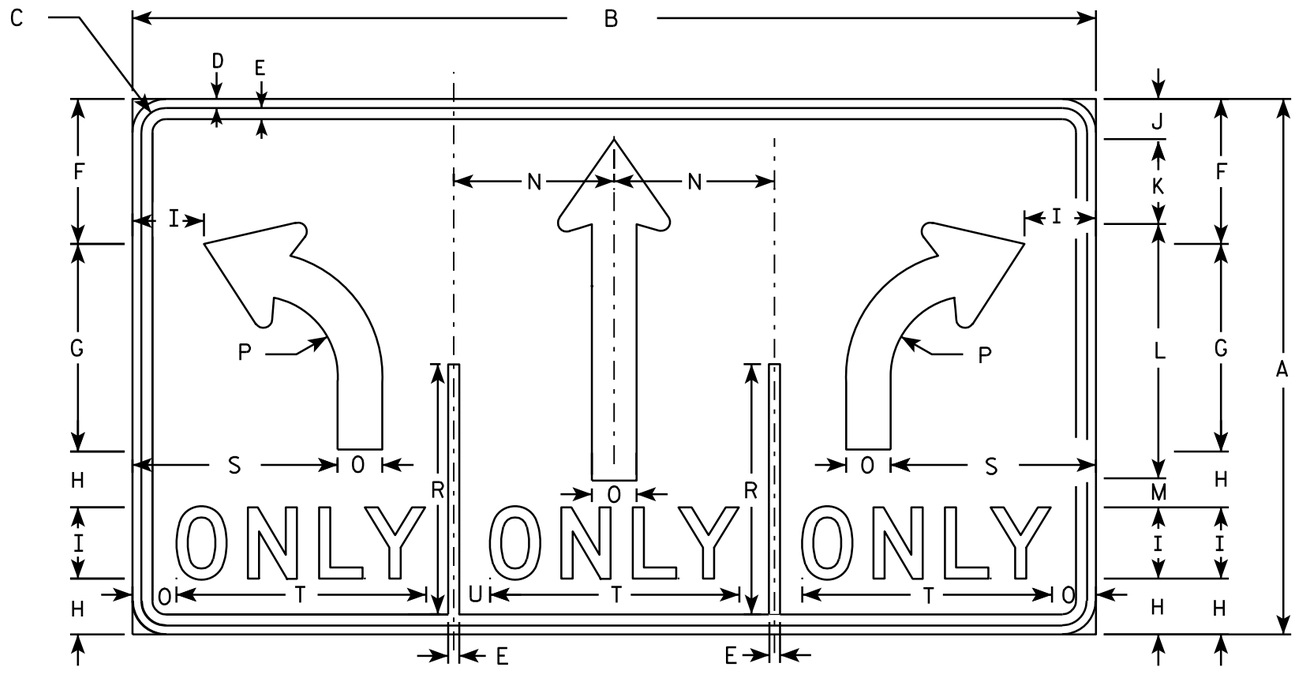
STANDARD SIGN
R3-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/01/12 PLATE NO. R3-8A.1

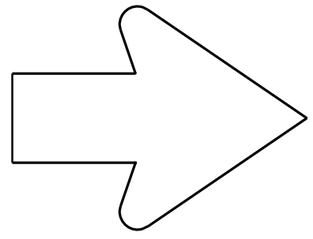
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 249 | E



R3-8W

NOTES

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



SEE R3-8 FOR ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
2M	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
3																											
4	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 3/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0
5	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 7/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0

STANDARD SIGN
R3-8W

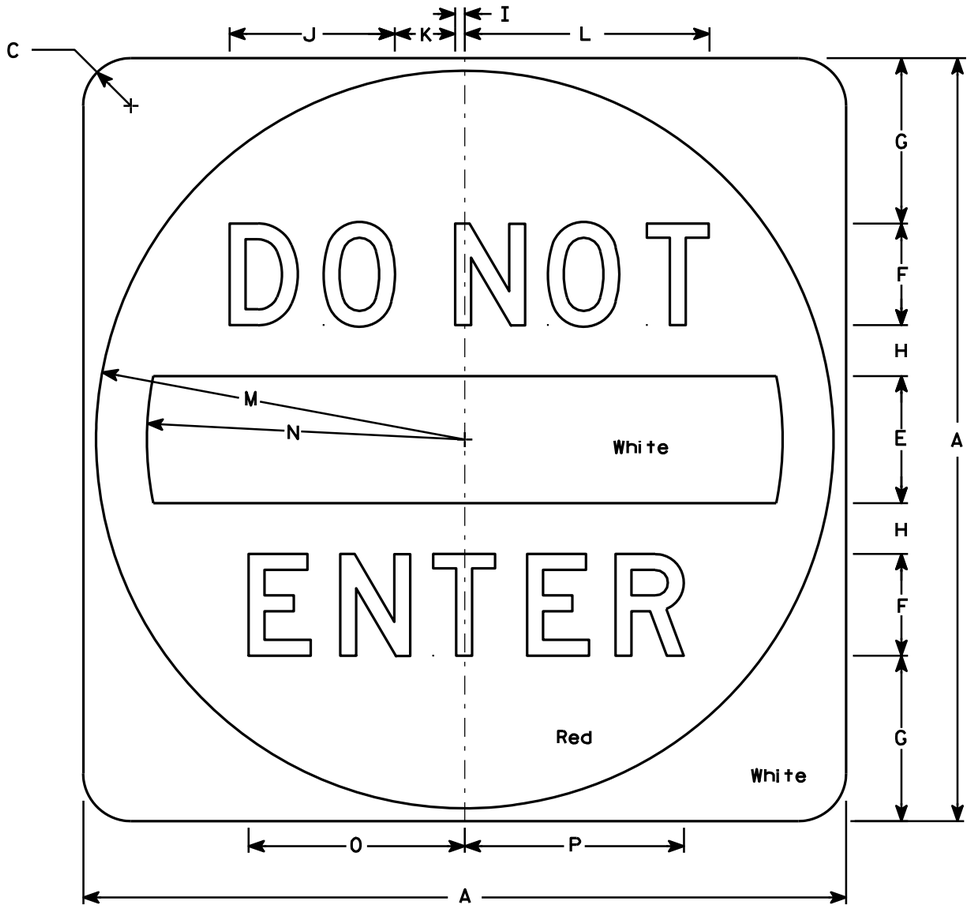
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-8W.4

PROJECT NO:

SHEET NO: 250 E



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

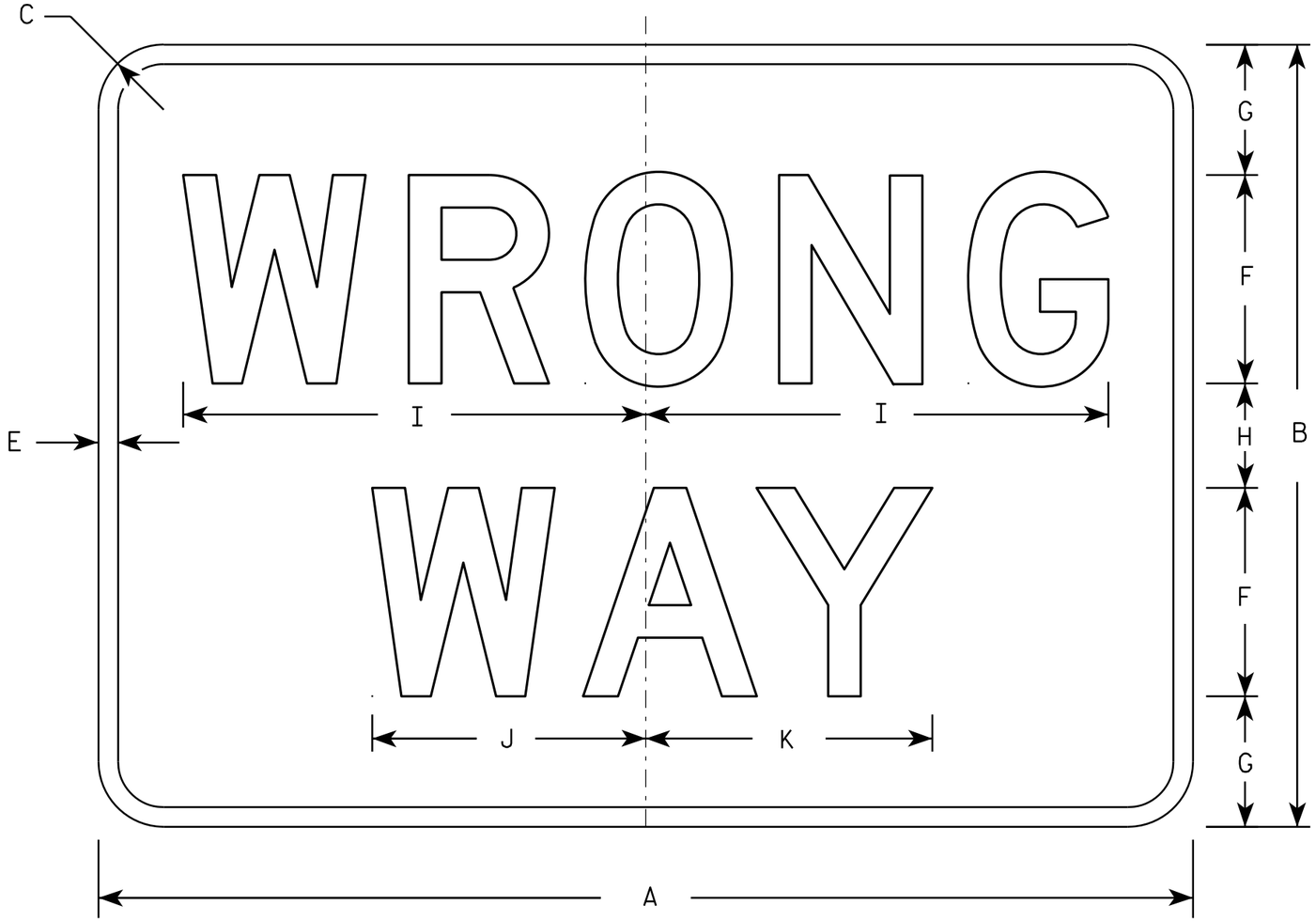
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 251 | E



R5-1A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

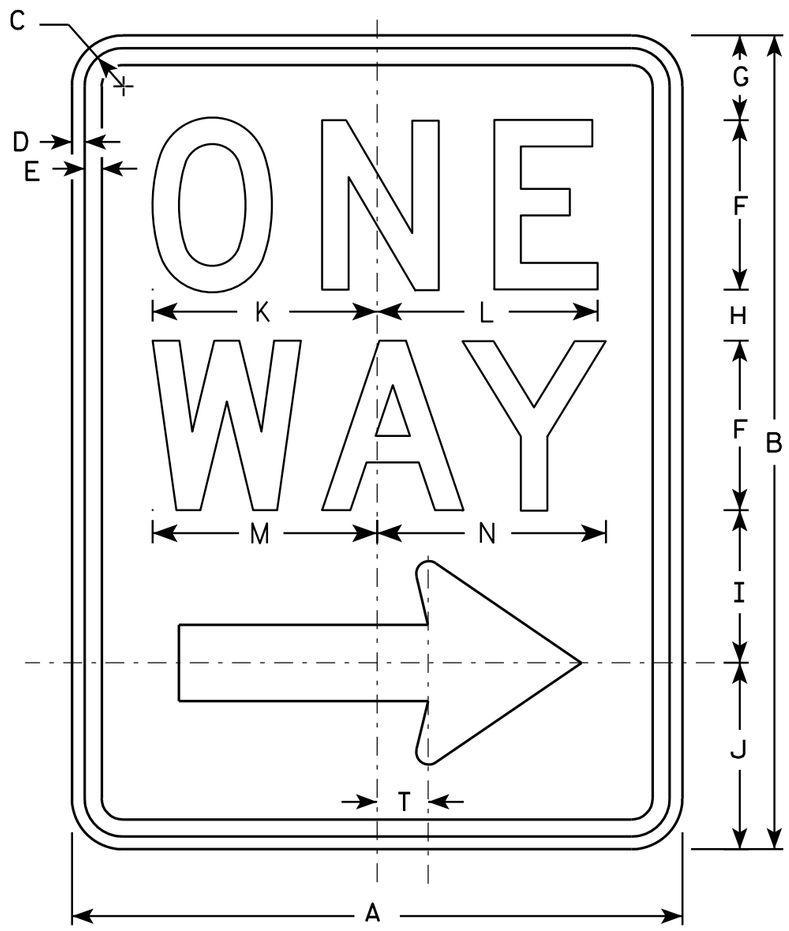
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 252 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R51A.DGN PLOT DATE : 17-DEC-2010 12:42 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 5.462457:1.000000

WISDOT/CADDS SHEET 42

7

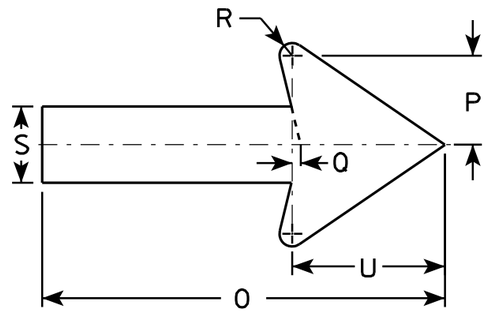
7



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

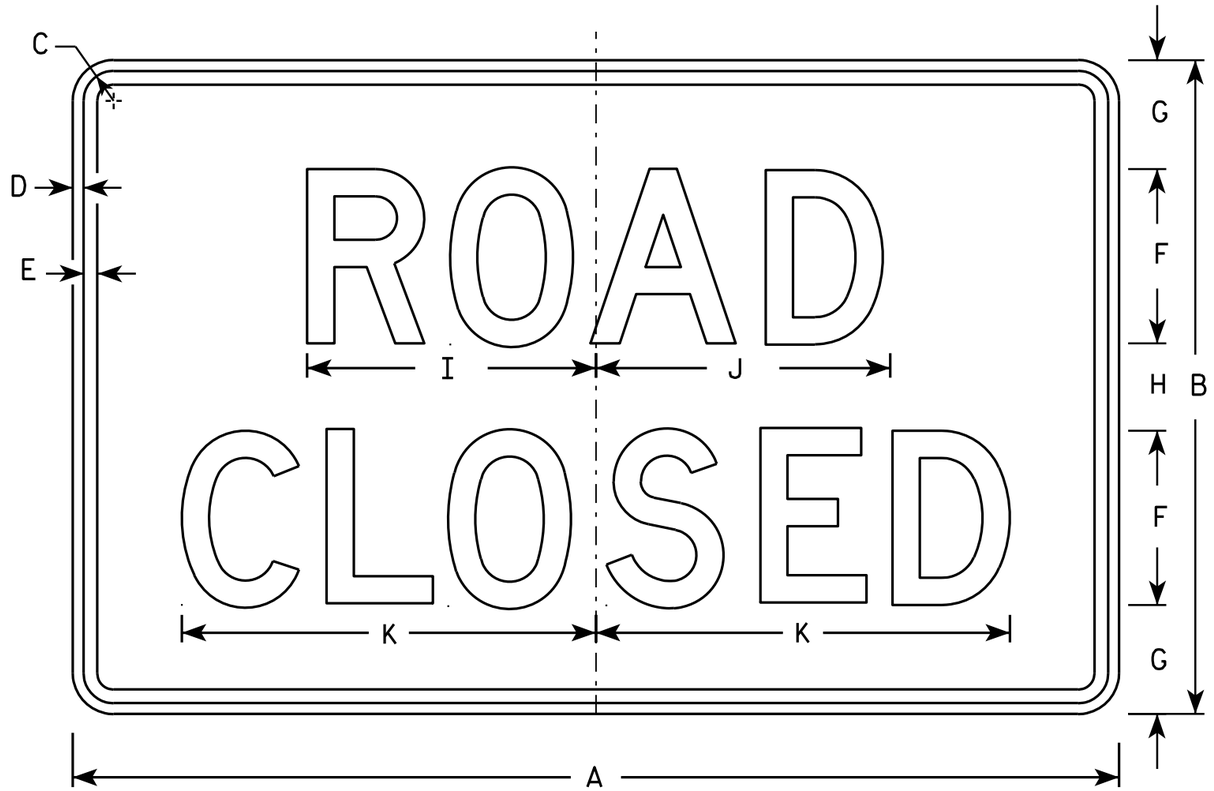
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

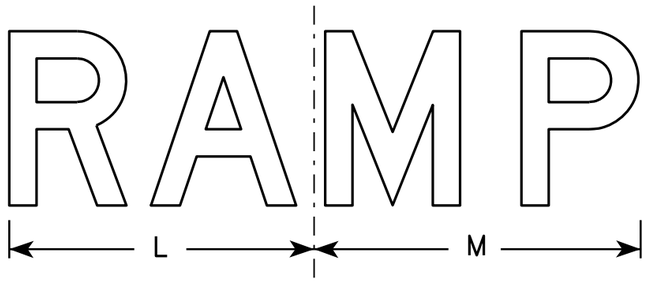
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 253	E



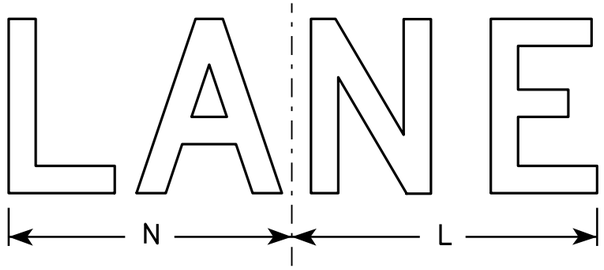
R11-2

NOTES

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



R11-2R



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													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													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													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													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													10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

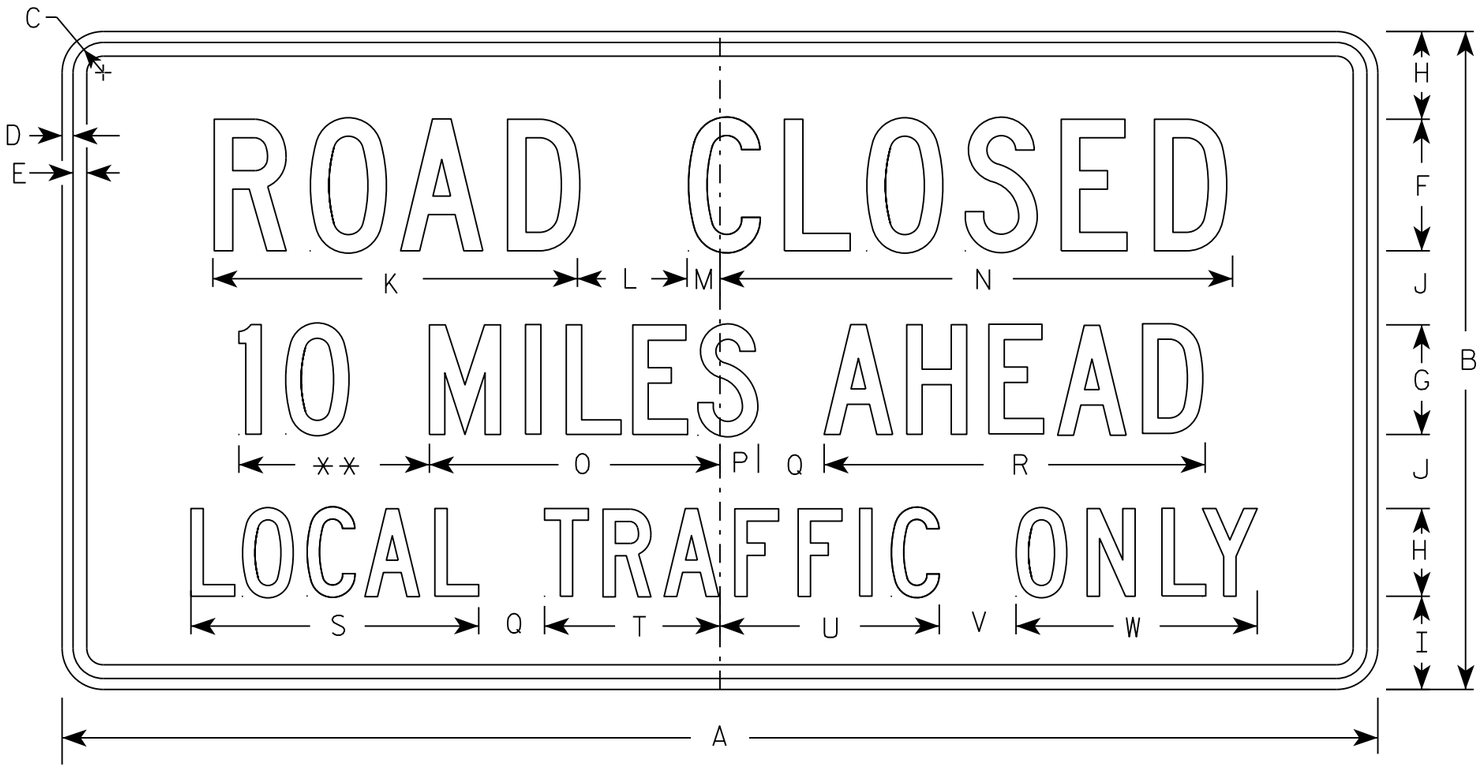
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 254 | E

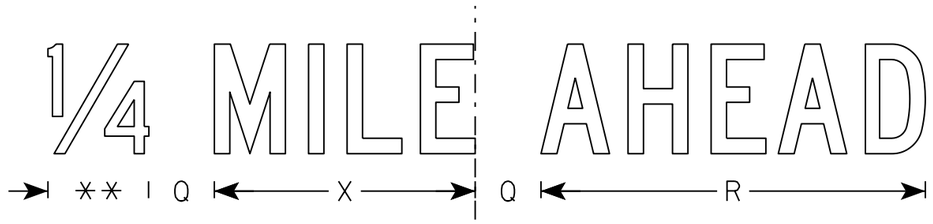
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4	7 1/8			4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
3																											
4																											
5																											

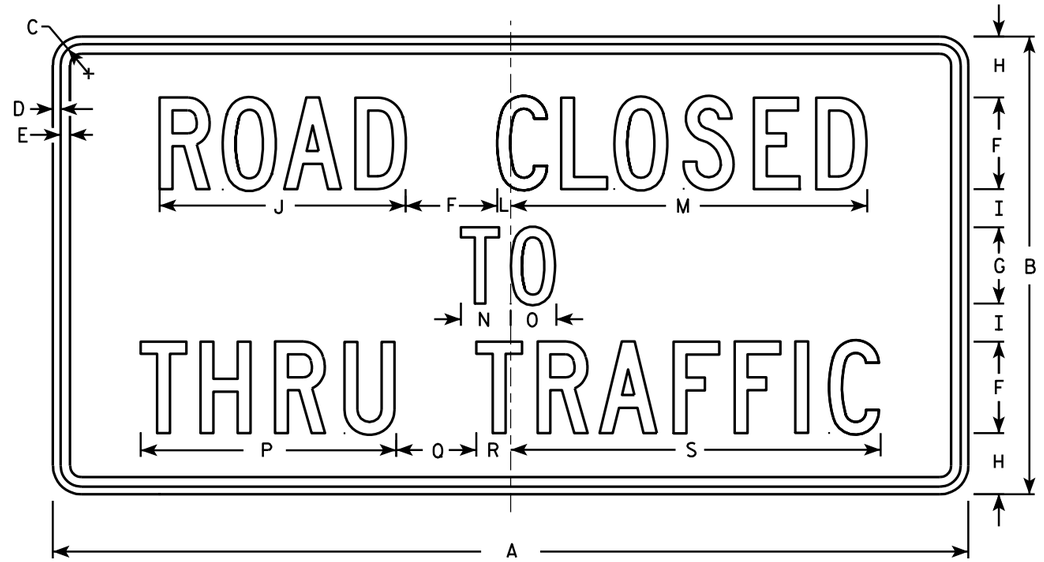
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/17 PLATE NO. R11-3.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 255	E



R11-4

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

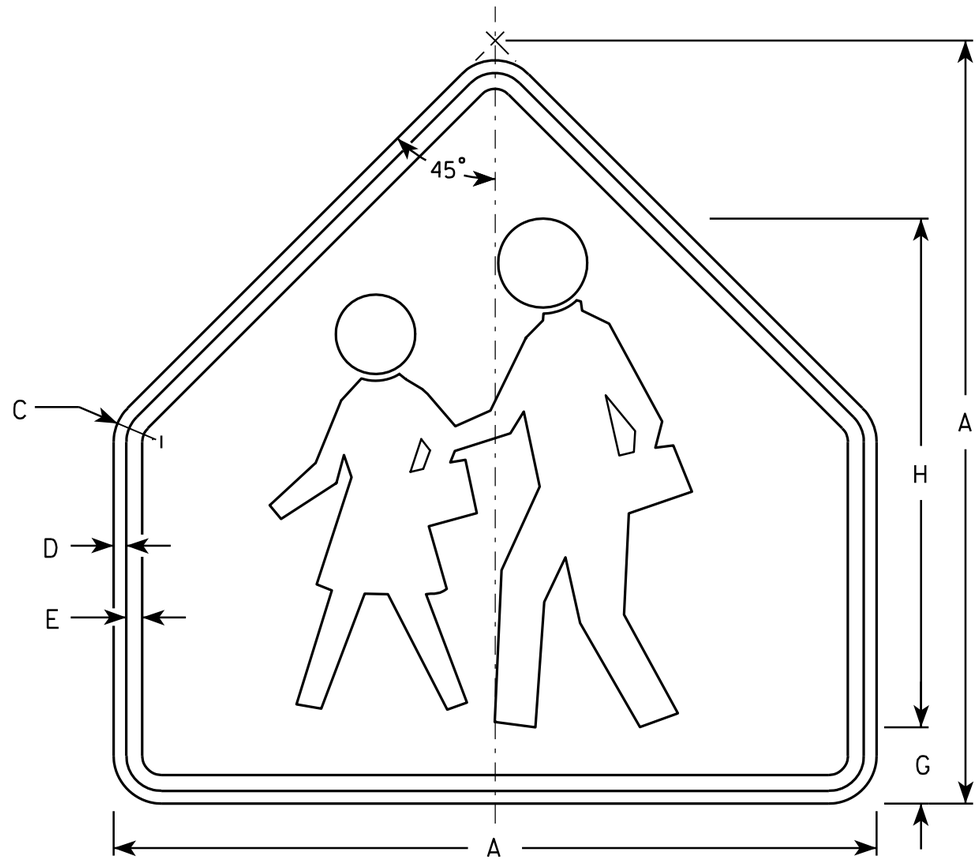
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 256 | E



S1-1

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

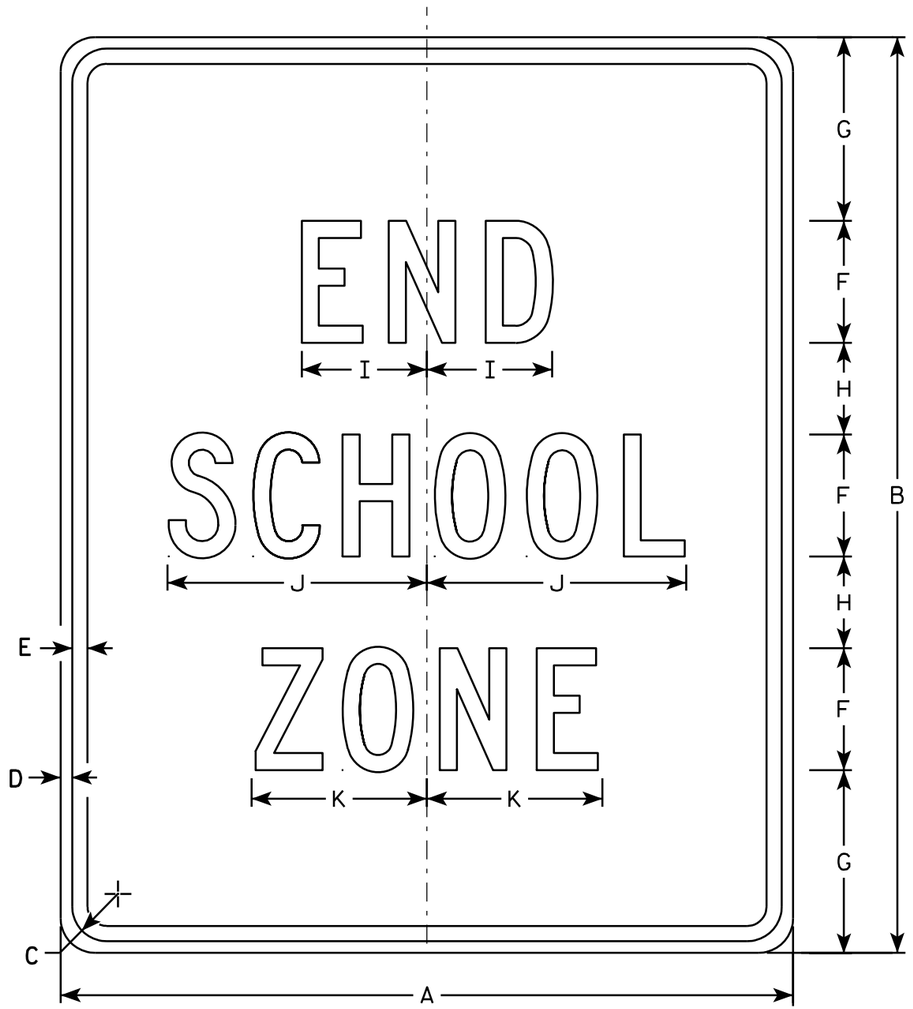
STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 257	E



S5-2

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	30	1 1/8	3/8	1/2	4	6	3	4 1/8	8 1/2	5 3/4																5.0
3	36	42	1 5/8	5/8	3/4	6	7	5	6 1/8	12 5/8	8 5/8																10.5
4																											
5																											

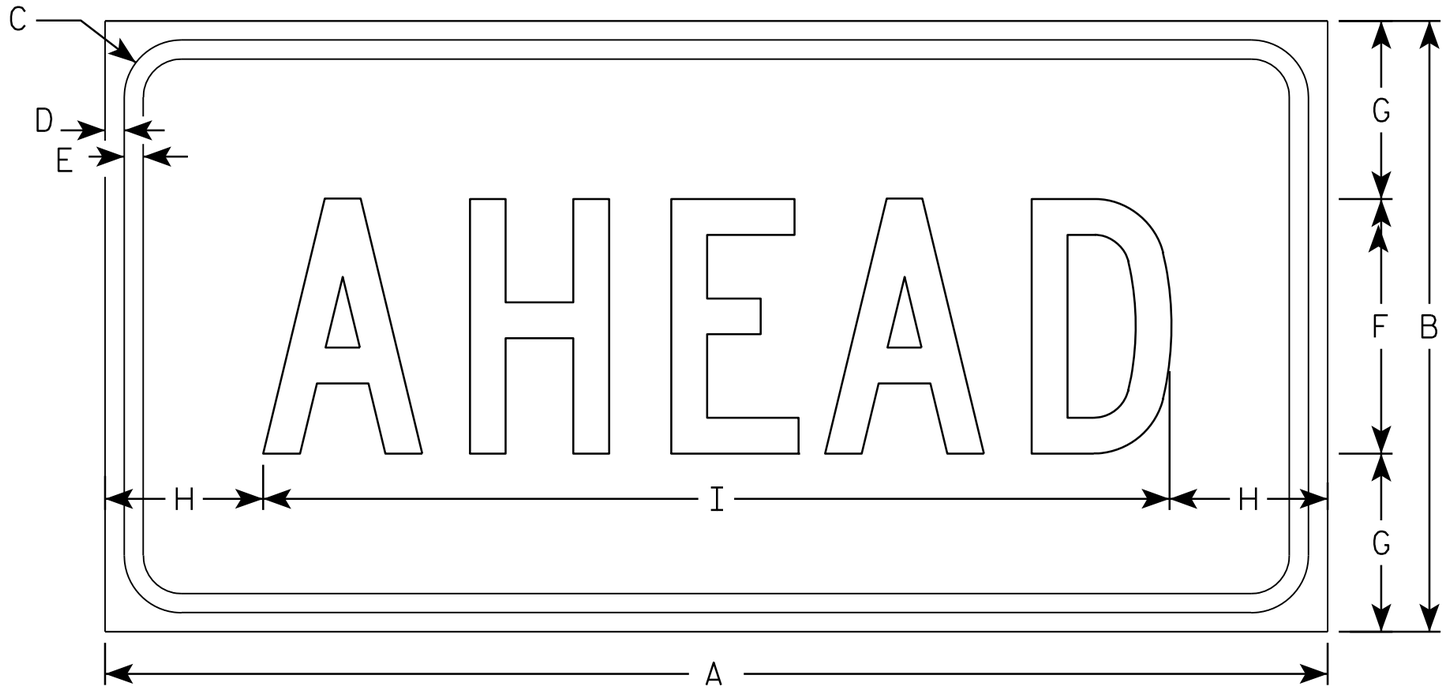
STANDARD SIGN
S5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/8/11 PLATE NO. S5-2.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 258 | E



S16-9P

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2S	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

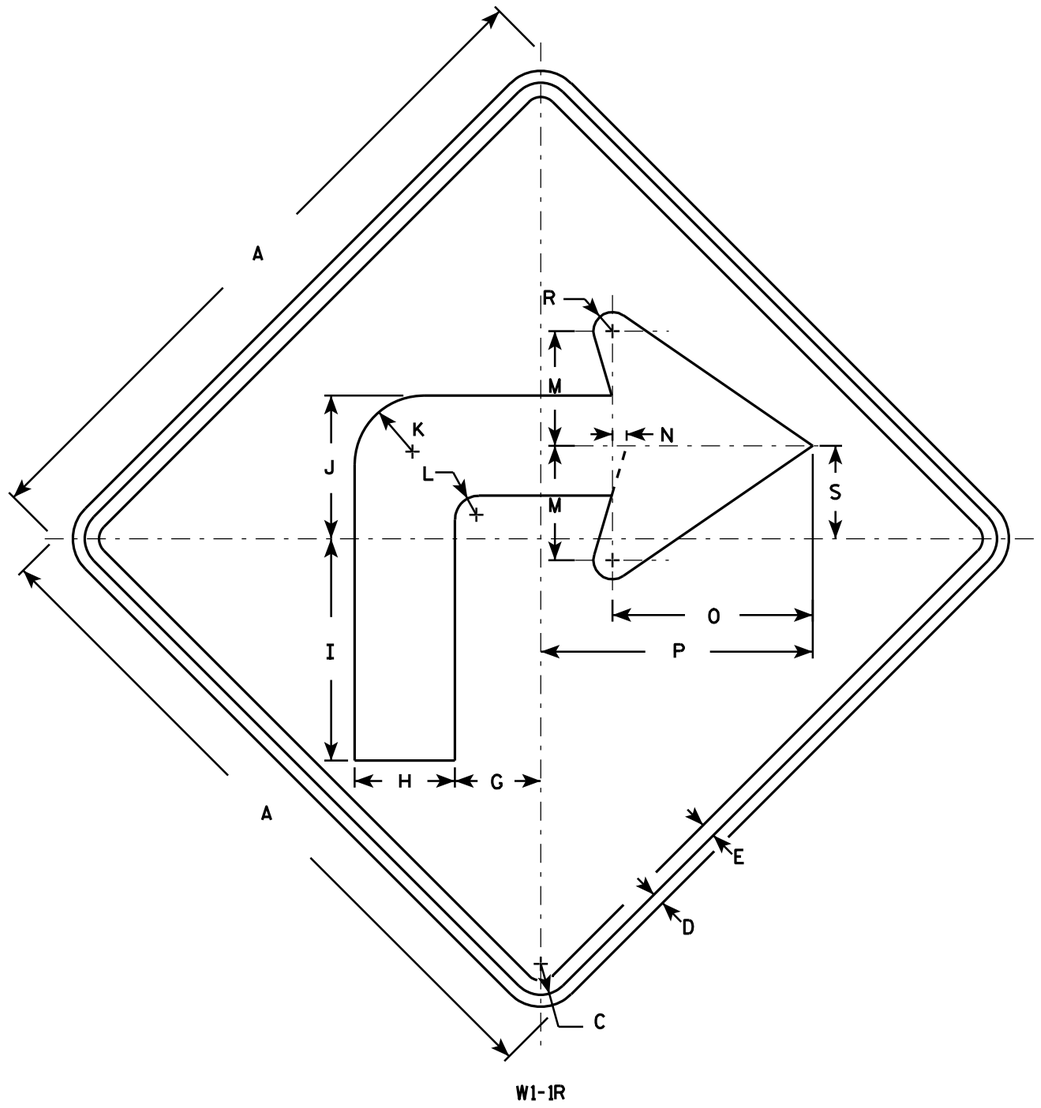
STANDARD SIGN
S16-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-9P.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 259 | E



W1-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-1L is the same as W1-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		3	3 1/2	7 3/4	5	2 1/2	7/8	4	1/2	7	9 1/2		5/8	3 1/4								4.0
2S	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
2M	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
3	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
4	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0
5	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0

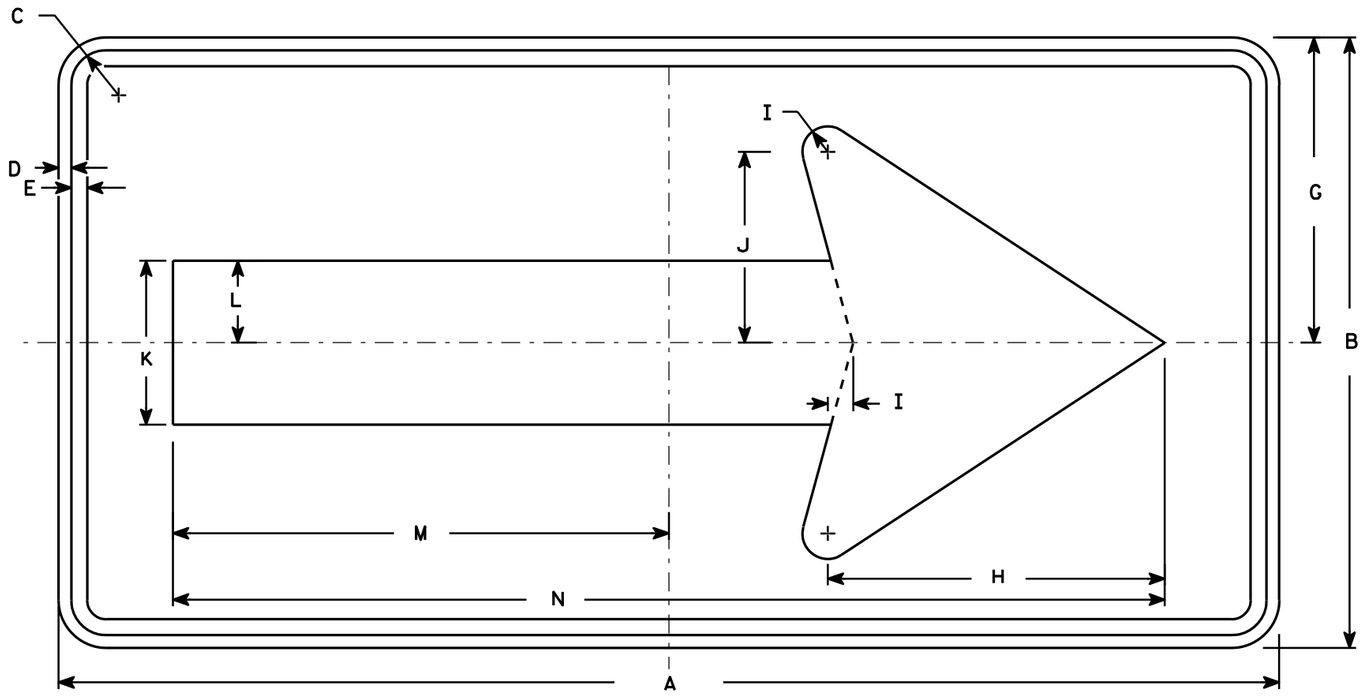
STANDARD SIGN
W1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-1.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 260 | E



W1-6

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

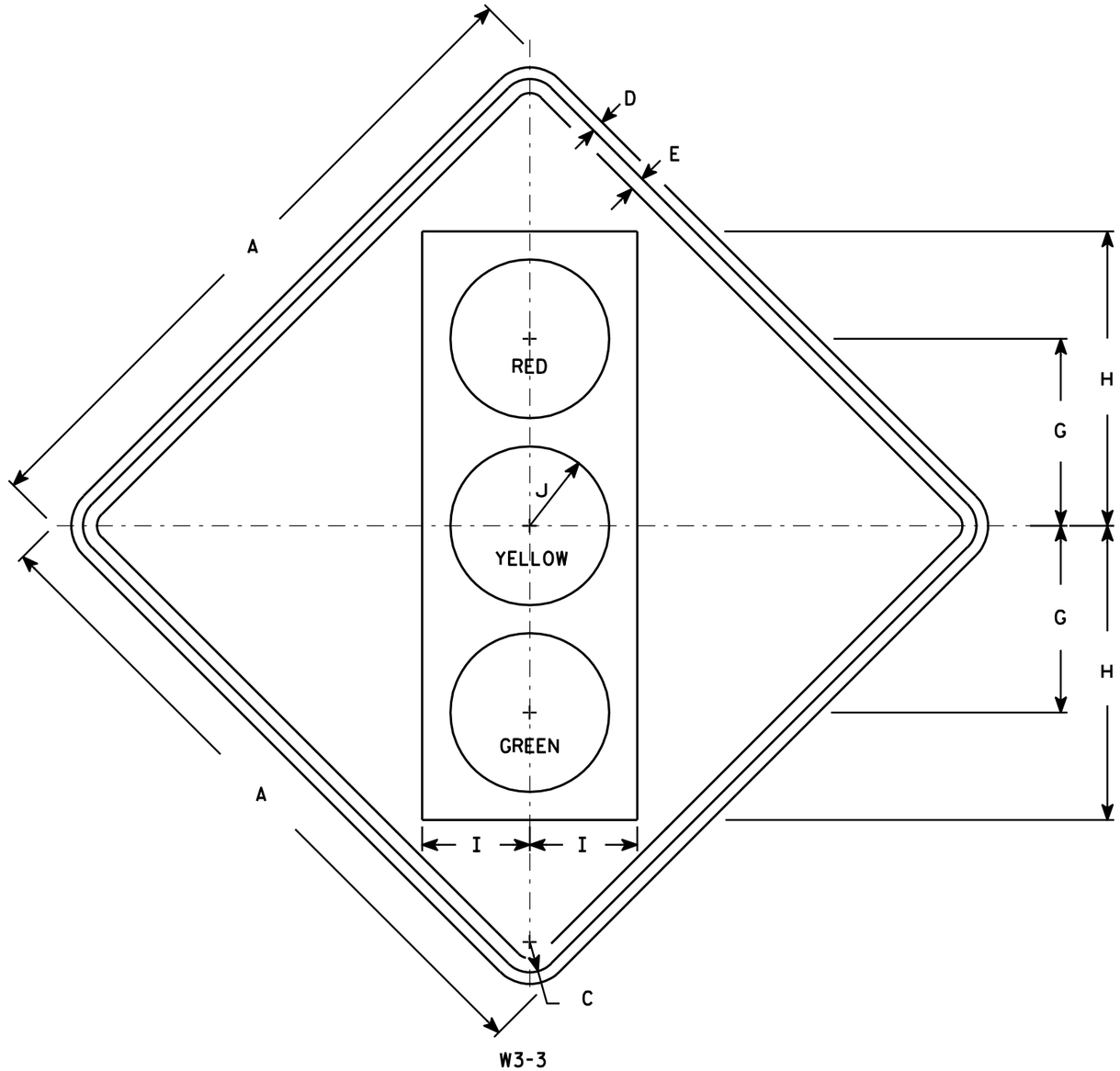
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 261



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

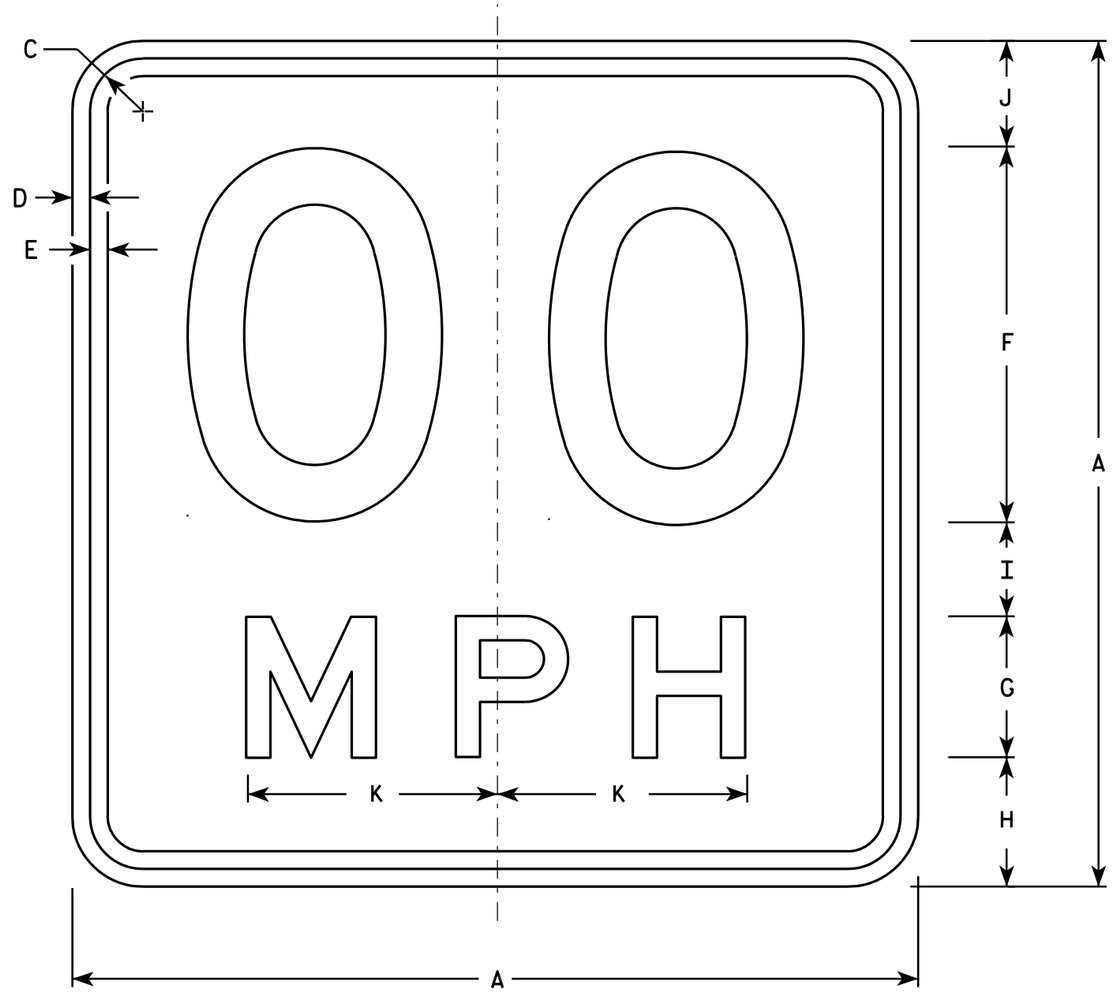
STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 262 | E



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

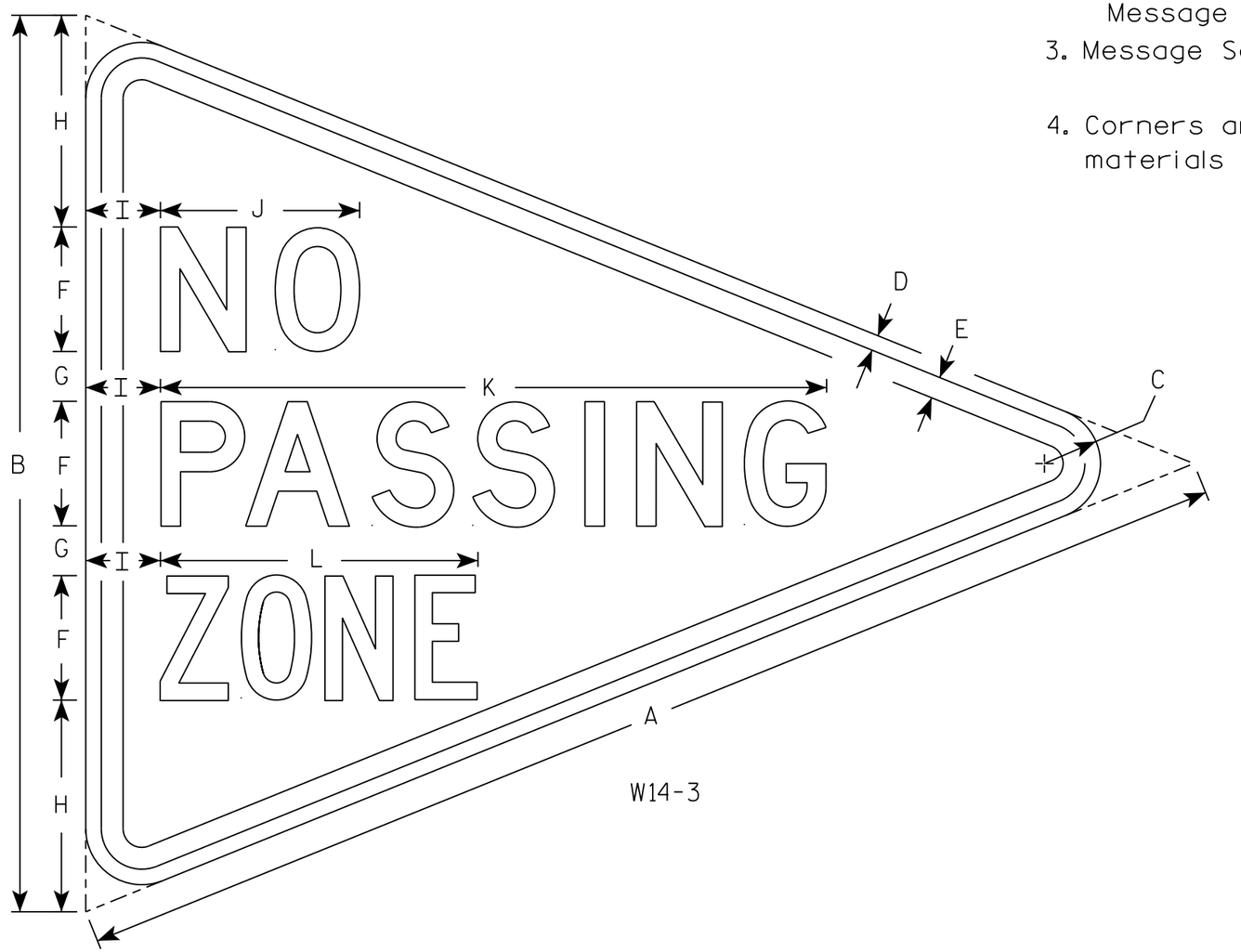
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 263 | E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - Lines 1 and 2 are Series D.
   Line 3 is series C.
4. Corners and borders shall be rounded on all base materials for this sign.



W14-3

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	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10

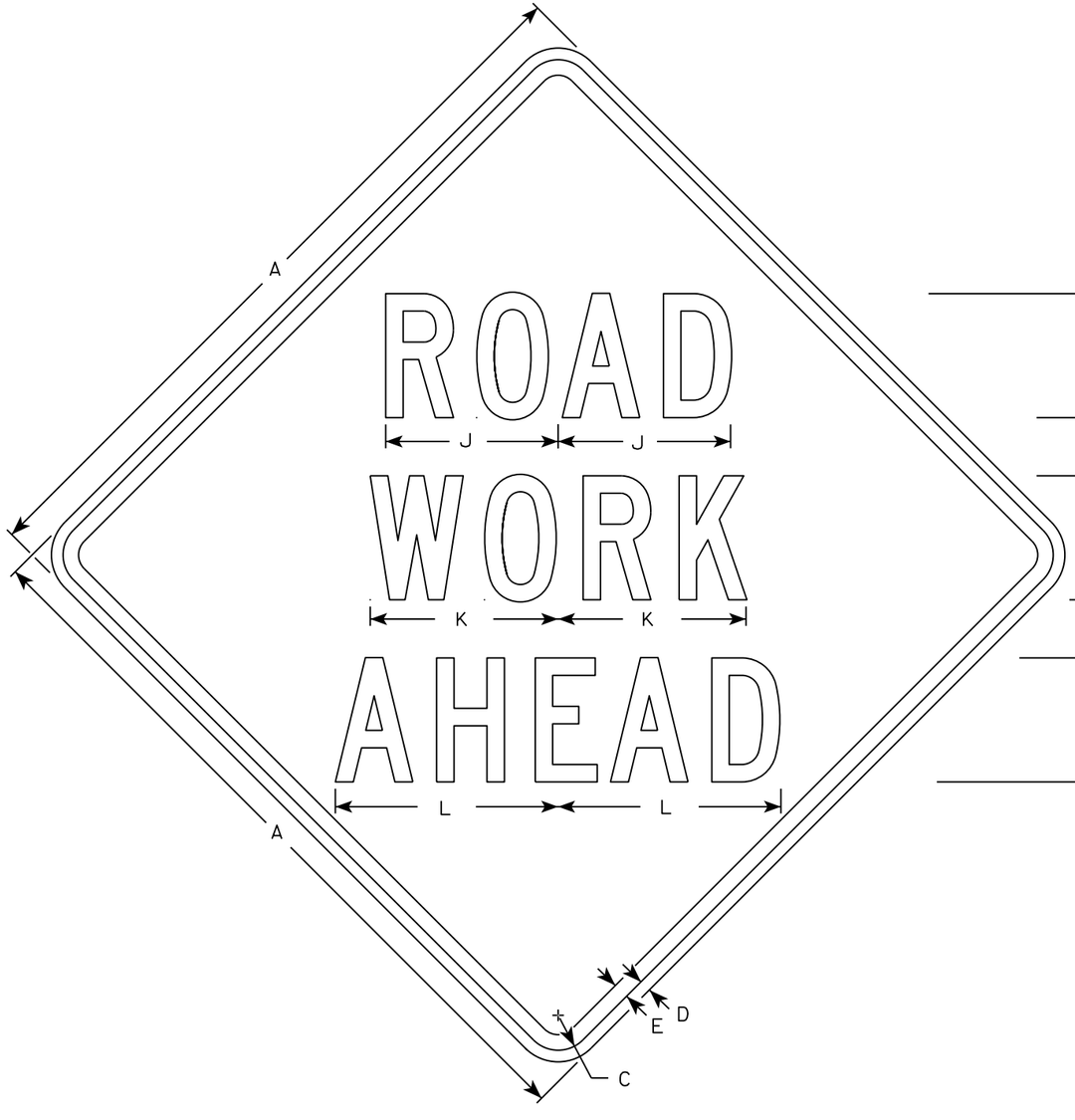
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 264 | E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W143.DGN PLOT DATE : 21-MAR-2017 08:48 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 5.650195:1.000000

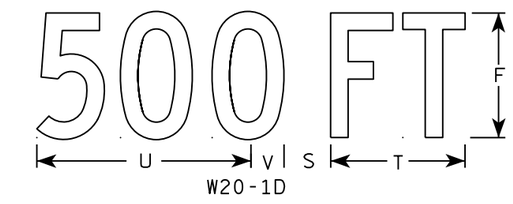
WISDOT/CADDS SHEET 42

7

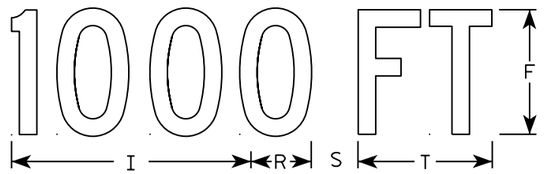
7



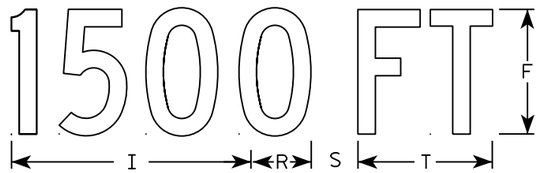
W20-1A



W20-1D



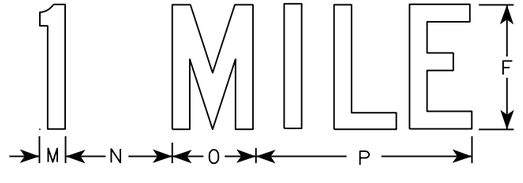
W20-1C



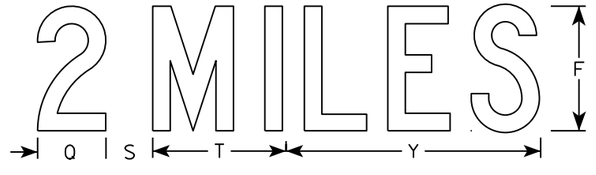
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

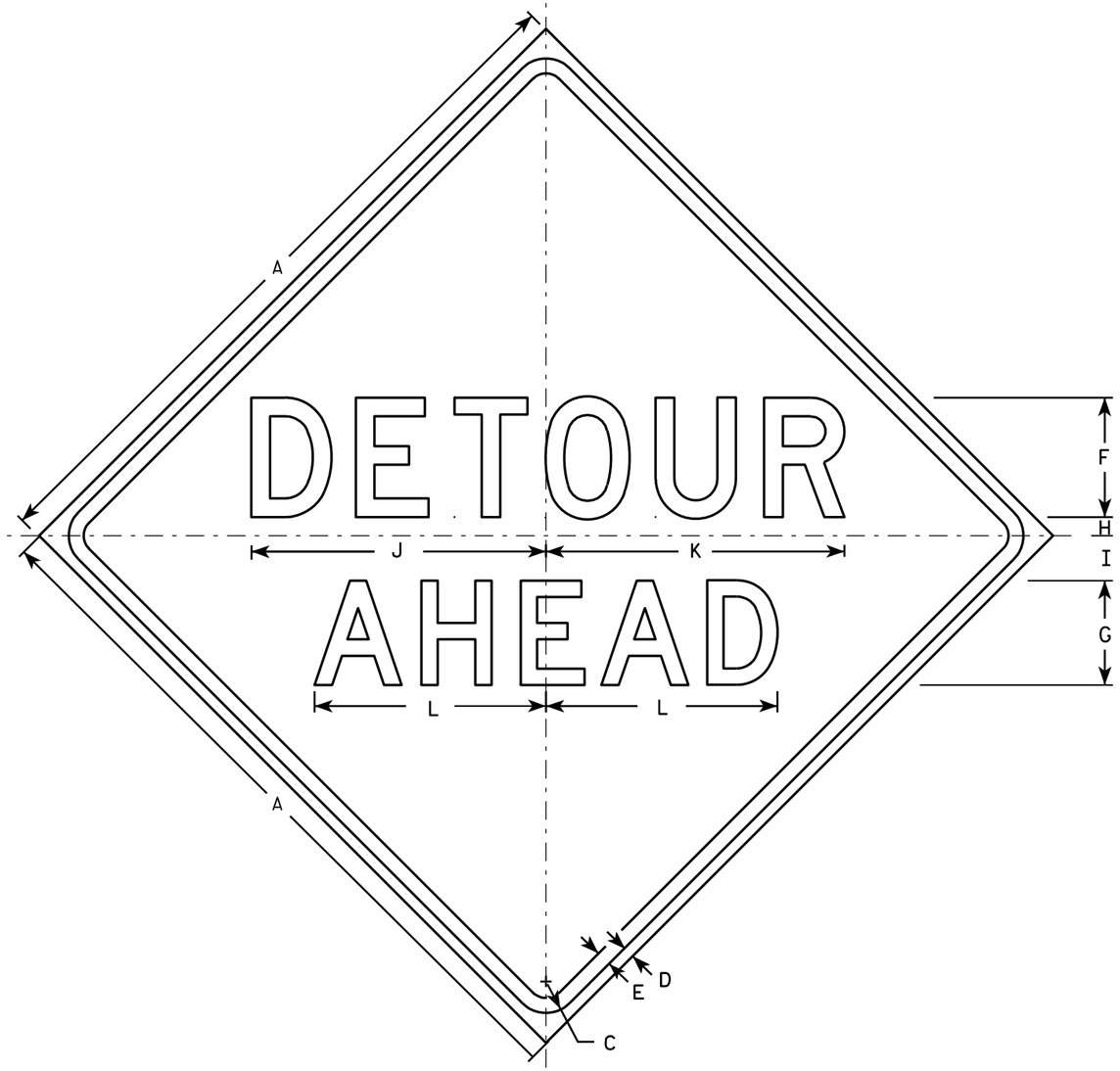
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

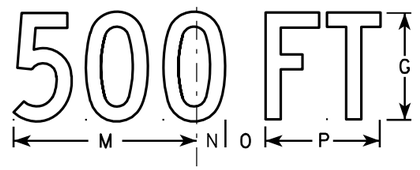
PROJECT NO:

SHEET NO: E

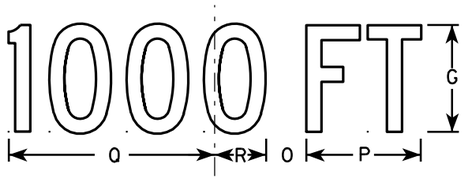
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



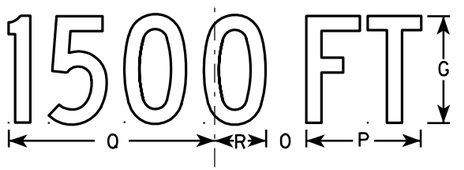
W20-2A



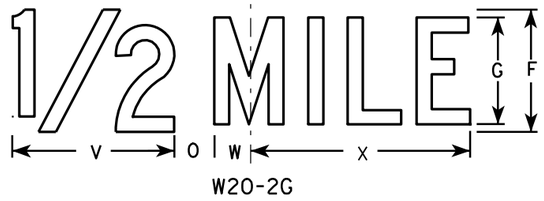
W20-2D



W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

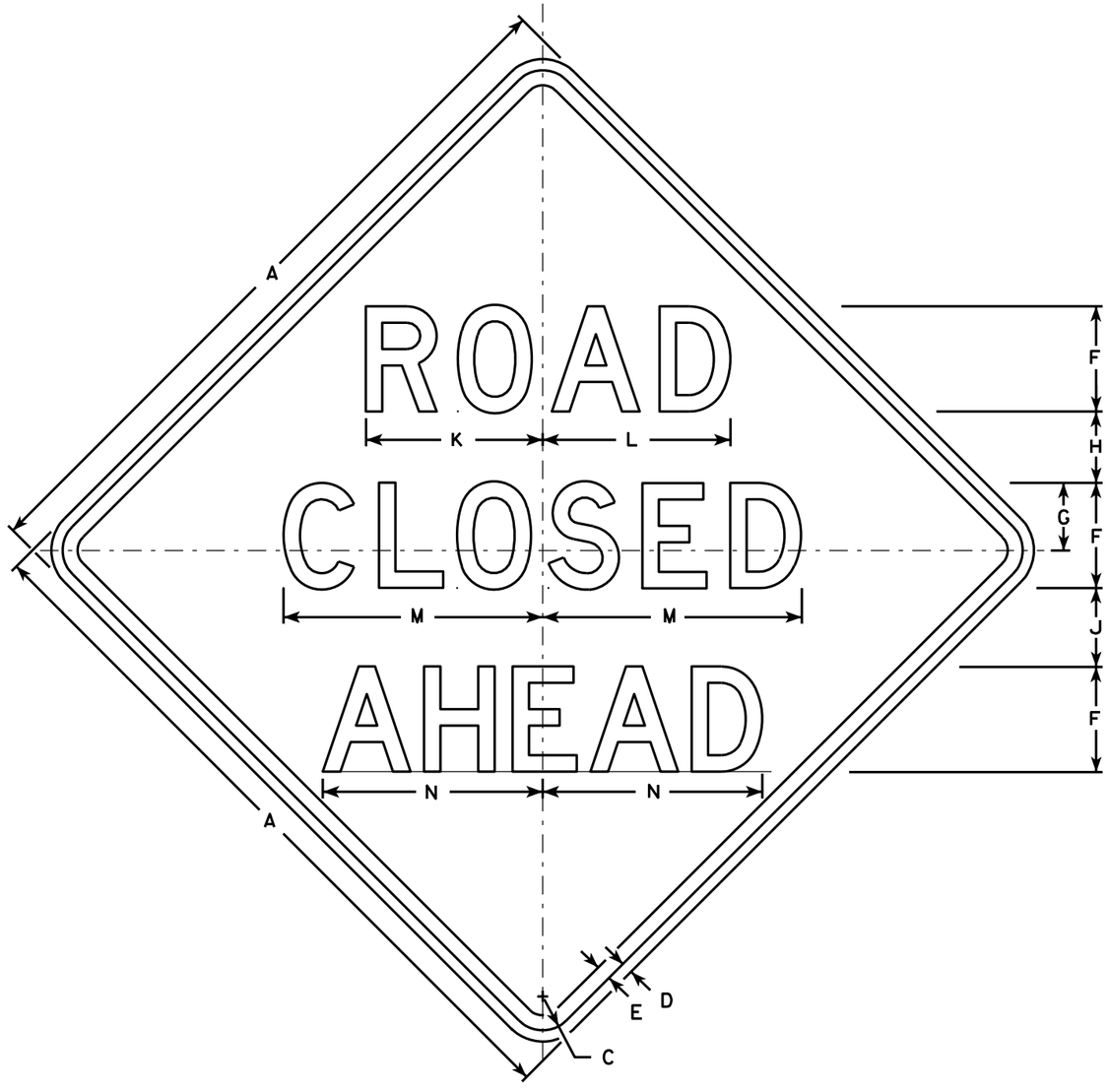
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

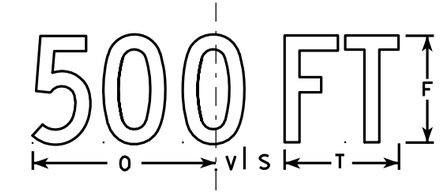
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 266 | E

7

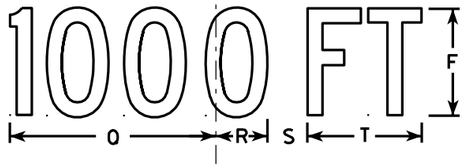
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W202.DGN PLOT DATE : 18-MAR-2011 10:00 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



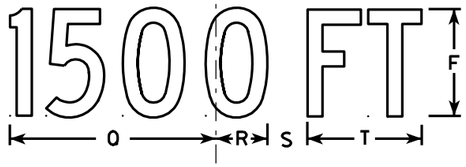
W20-3A



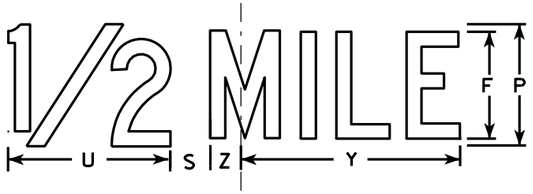
W20-3D



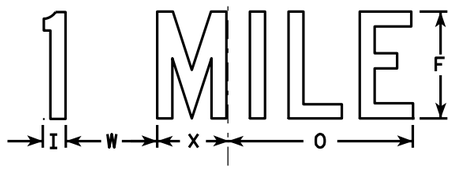
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

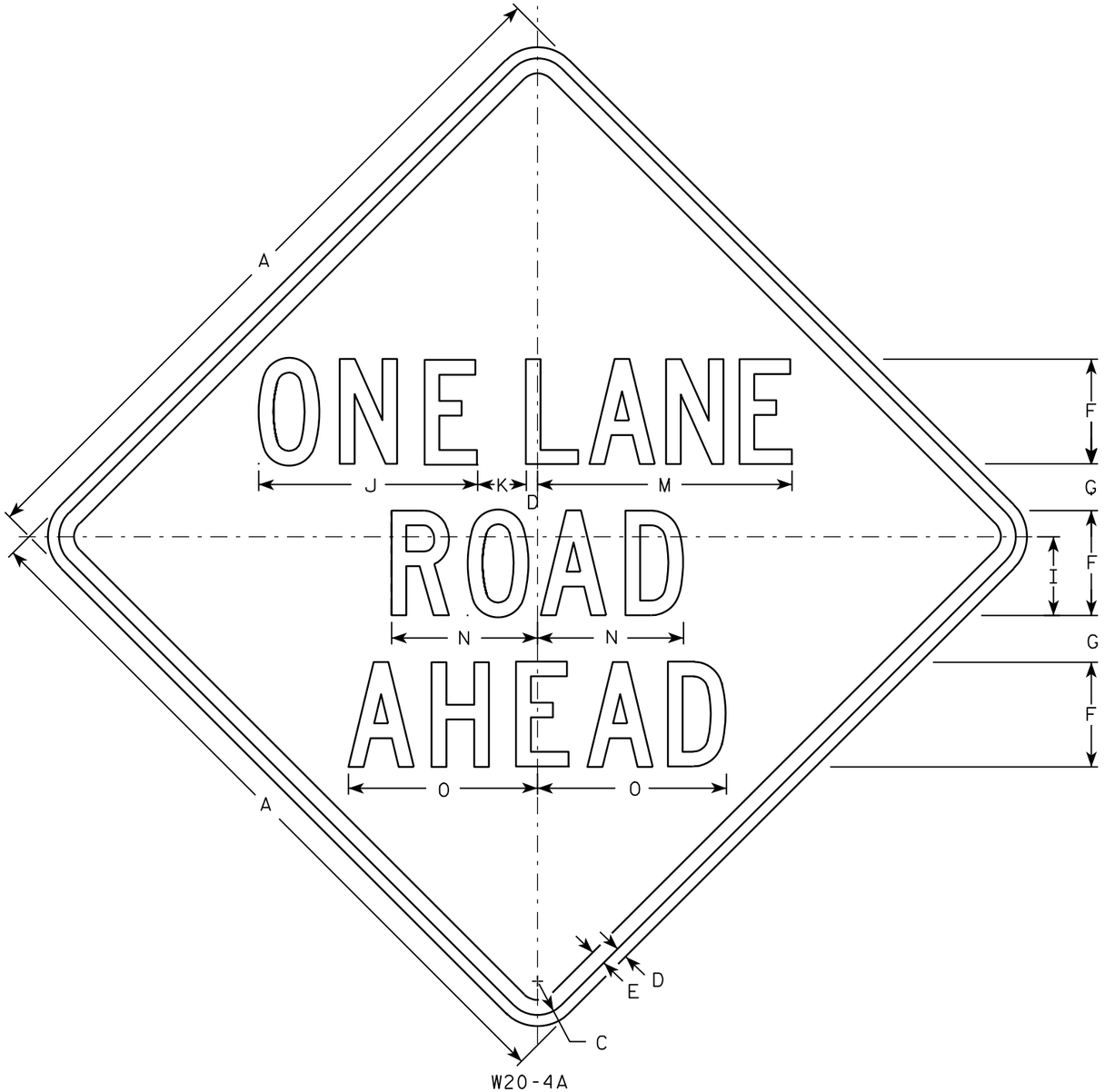
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

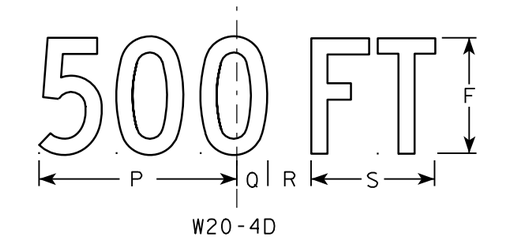
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 267 | E

7

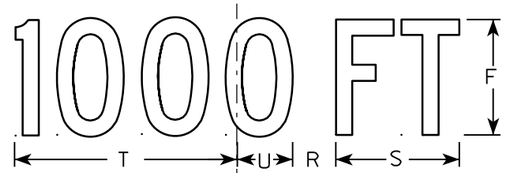
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



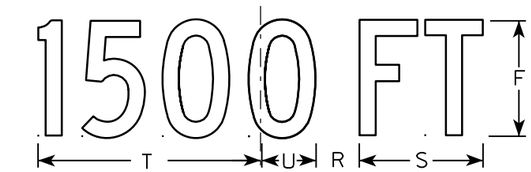
W20-4A



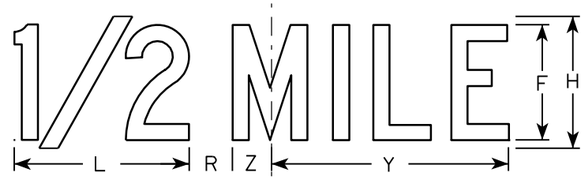
W20-4D



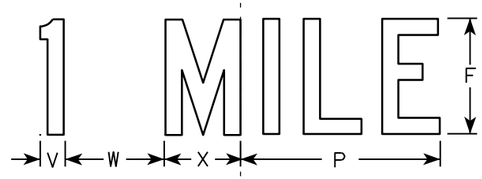
W20-4C



W20-4B



W20-4G



W20-4F

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 3/8	6	3 3/4	10 3/8	2 3/8	8	13 1/2	7	8 7/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-4A, B, C, D, F & G

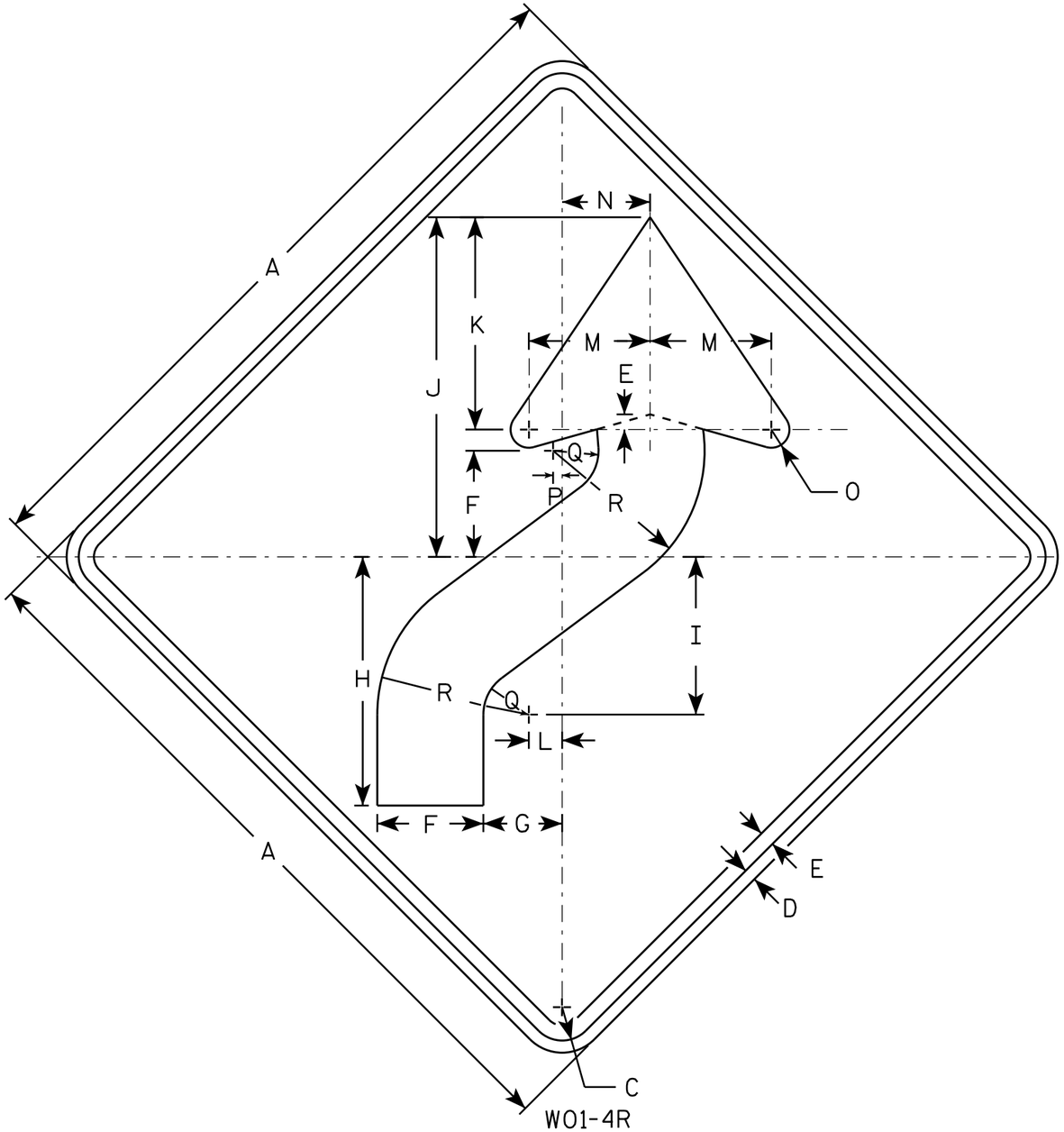
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-4.9

PROJECT NO:

SHEET NO: 268 E



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

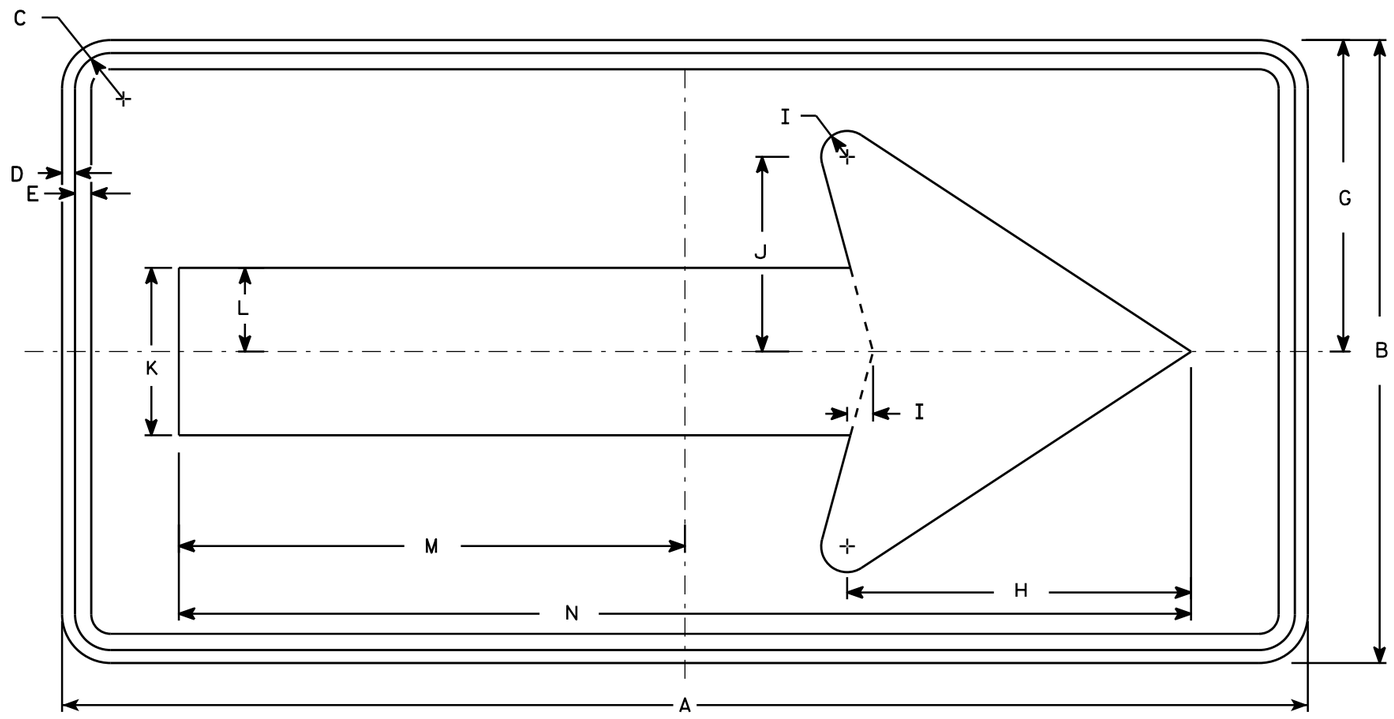
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000
WISDOT/CADDS SHEET 42



W01-6

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

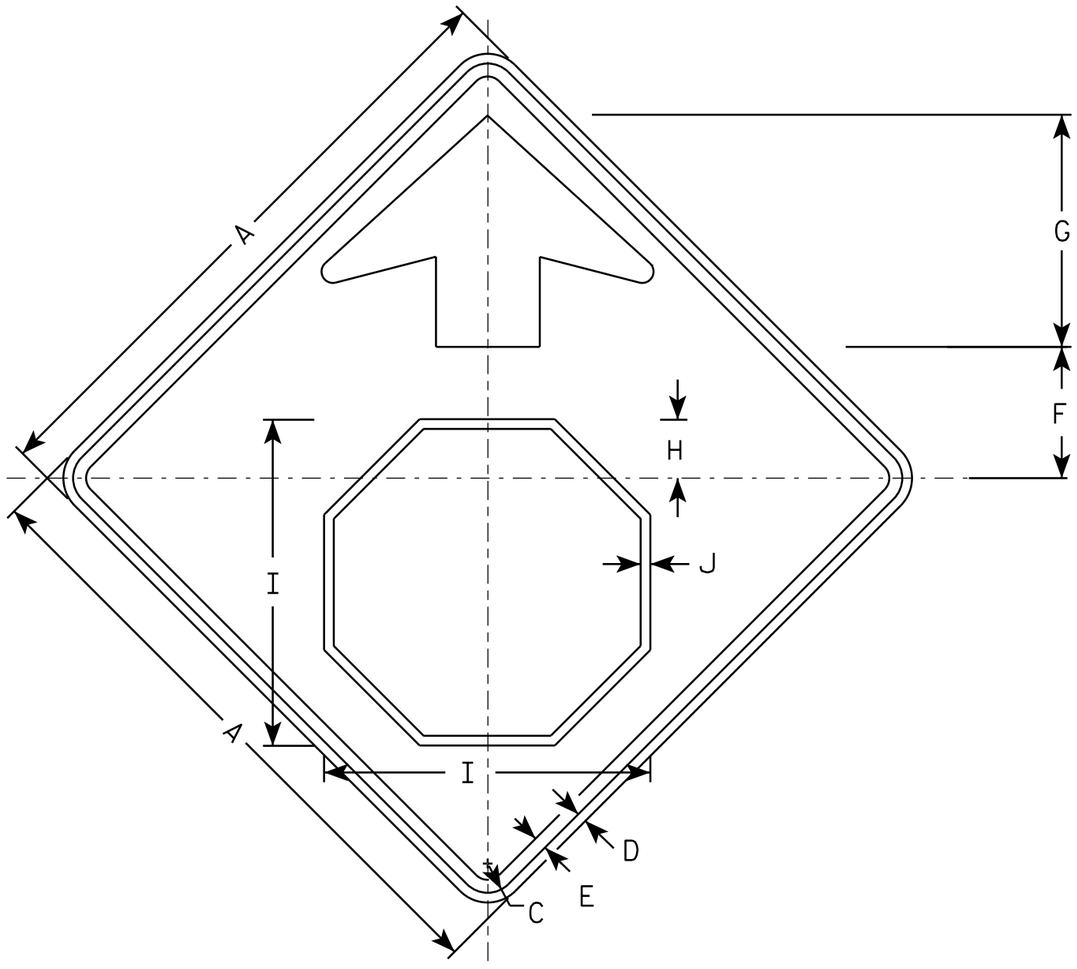
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE W01-6.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

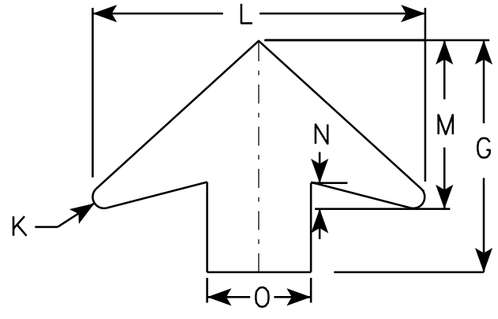
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



W03-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2S	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
2M	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
3	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W03-1

WISCONSIN DEPT OF TRANSPORTATION

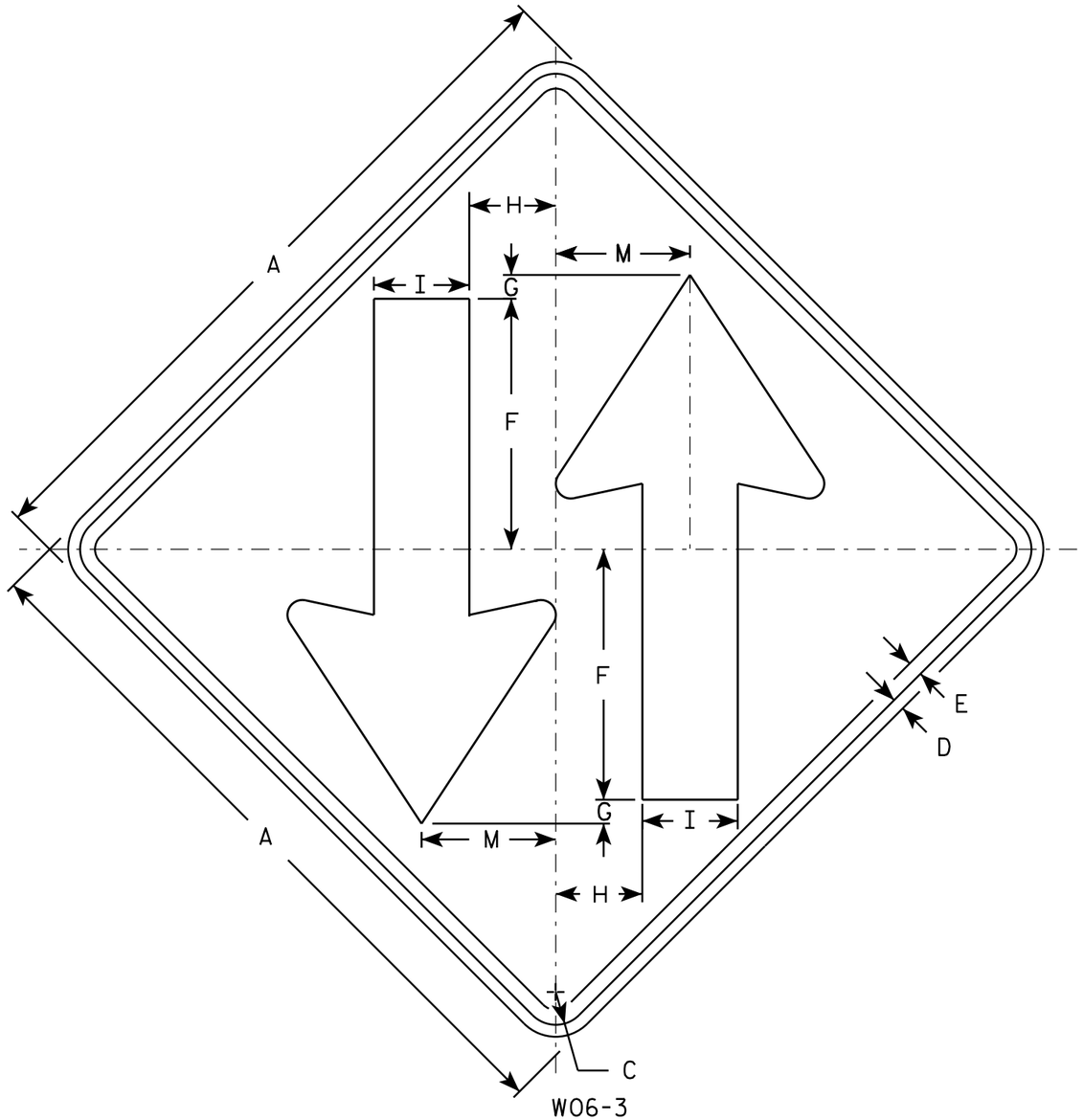
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 271 03-1.1

PROJECT NO: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W031.DGN PLOT DATE : 20-NOV-2013 10:54 PLOT BY : mscsja

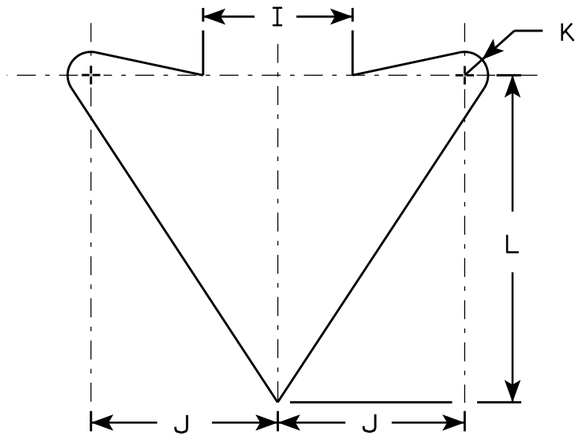
WISDOT/CADDS SHEET 42



W06-3

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2S	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
2M	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
3	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

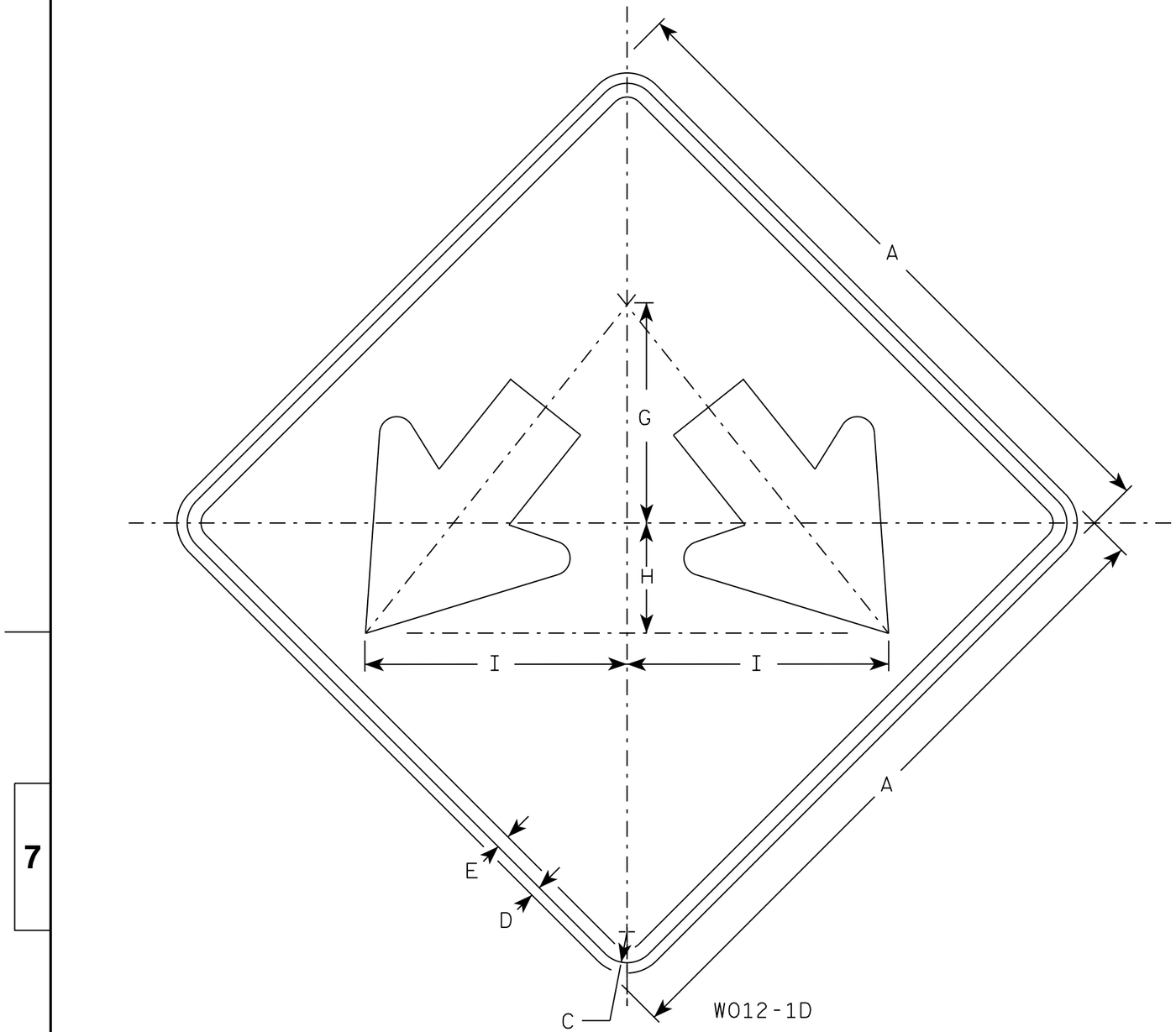
STANDARD SIGN
W06-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 272 W06-3.1

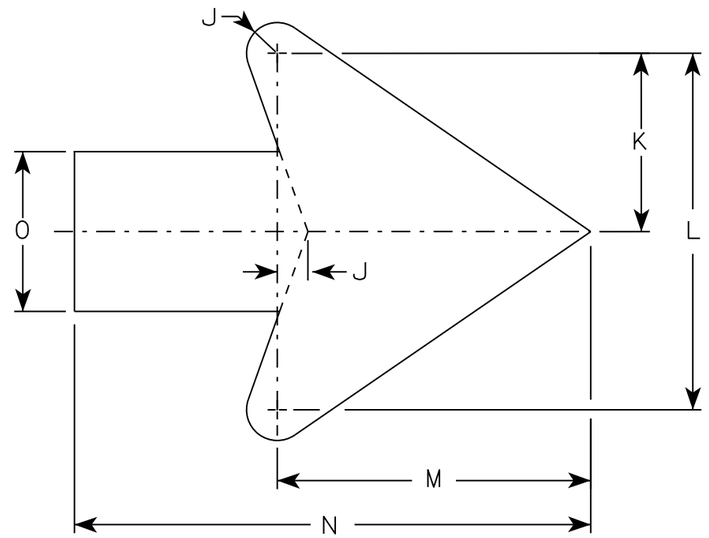
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W012-1D

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0

STANDARD SIGN
W012-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/28/16 PLATE NO W012-1D.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CADfiles\Projects\tr_stdplate\W0121D.DGN PLOT DATE : 11-AUG-2016 11:28 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.621375:1.000000

STH 116						INCREMENTAL VOL (CY)(UNADJUSTED)				CUMULATIVE VOL (CY)			
STATION	DISTANCE	CUT END AREA (NOTE 1) SF	UNUSABLE PAVEMENT MATERIAL (NOTE 2) SF	FILL (NOTE 3) SF	EBS (NOTE 4) SF	CUT VOLUME (NOTE 1) CY	UNUSABLE PAVEMENT MATERIAL (NOTE 2) CY	FILL (NOTE 3) CY	EBS (NOTE 4) CY	EXCAVATION COMMON 1.00 CY	EXPANDED FILL 1.42 (NOTE 5) CY	EXPANDED EBS BACKFILL 1.42 (NOTE 6) CY	MASS ORDINATE (NOTE 7) CY
107+50		96.1	0.0	2.5	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
107+88	38	99.5	0.0	0.0	5.0	137.6	0.0	1.8	6.9	137.6	2.5	9.8	135.1
108+00	12	96.1	0.0	0.0	4.8	43.5	0.0	0.0	2.2	181.1	2.5	12.9	178.6
108+50	50	97.0	0.0	0.0	4.9	178.8	0.0	0.0	8.9	359.9	2.5	25.6	357.4
109+00	50	94.9	0.0	0.0	4.7	177.7	0.0	0.0	8.9	537.6	2.5	38.2	535.1
109+20	20	98.3	0.0	0.0	4.9	71.5	0.0	0.0	3.6	609.1	2.5	43.2	606.6
109+50	30	122.8	0.0	0.0	6.1	122.8	0.0	0.0	6.1	732.0	2.5	52.0	729.5
110+00	50	140.7	0.0	1.9	7.0	244.0	0.0	1.8	12.2	976.0	5.0	69.3	971.0
110+50	50	161.8	0.0	2.1	8.1	280.2	0.0	3.7	14.0	1256.2	10.3	89.2	1,245.9
110+70	20	167.0	0.0	4.9	8.3	121.8	0.0	2.6	6.1	1378.0	14.0	97.8	1,363.9
111+00	30	192.2	0.0	0.0	9.6	199.5	0.0	2.7	10.0	1577.5	17.9	112.0	1,559.6
111+50	50	172.5	0.0	1.7	8.6	337.6	0.0	1.5	16.9	1915.1	20.1	136.0	1,895.0
112+00	50	154.4	0.0	1.4	7.7	302.7	0.0	2.9	15.1	2217.8	24.1	157.5	2,193.7
112+50	50	154.9	0.0	4.0	7.7	286.4	0.0	5.0	14.3	2504.2	31.3	177.8	2,472.9
113+00	50	108.0	0.0	0.0	5.4	243.4	0.0	3.7	12.2	2747.6	36.6	195.1	2,711.0
113+50	50	107.4	0.0	0.0	5.4	199.4	0.0	0.0	10.0	2947.0	36.6	209.2	2,910.4
114+00	50	157.1	21.8	1.2	7.9	244.8	20.2	1.1	12.2	3191.8	38.2	226.6	3,133.4
114+31	31	156.5	21.8	0.0	7.8	179.2	25.0	0.7	9.0	3371.0	39.2	239.3	3,286.7
114+50	19	136.9	21.8	0.7	6.8	103.9	15.5	0.2	5.2	3474.9	39.5	246.7	3,374.8
114+75	25	152.8	21.8	0.0	7.6	134.1	20.2	0.3	6.7	3609.1	40.0	256.2	3,488.2
115+00	25	135.9	21.8	0.5	6.8	133.7	20.2	0.2	6.7	3742.7	40.3	265.7	3,601.3
115+04	4	139.2	21.8	0.5	7.0	20.4	3.2	0.1	1.0	3763.1	40.4	267.2	3,618.4
115+24	20	130.6	21.8	0.9	6.5	99.9	16.2	0.5	5.0	3863.0	41.1	274.3	3,701.4
115+50	26	137.9	21.8	0.9	6.9	129.3	21.0	0.8	6.5	3992.3	42.3	283.5	3,808.5
115+65	15	136.5	21.8	11.8	6.8	76.2	12.1	3.5	3.8	4068.5	47.3	288.9	3,867.5
116+00	35	105.6	21.8	24.9	5.3	156.9	28.3	23.8	7.8	4225.3	81.2	300.0	3,962.3
116+43	43	94.8	21.8	7.3	4.7	159.5	34.8	25.7	8.0	4384.9	117.6	311.3	4,050.6
116+50	7	94.9	21.8	8.2	4.7	24.6	5.7	2.0	1.2	4409.5	120.5	313.1	4,066.6
117+00	50	125.4	21.8	8.1	6.3	203.9	40.4	15.1	10.2	4613.4	142.0	327.6	4,208.6
117+42	42	119.6	21.8	11.6	6.0	190.5	34.0	15.4	9.5	4803.9	163.8	341.1	4,343.4
117+50	8	111.7	21.8	12.4	5.6	34.3	6.5	3.6	1.7	4838.2	168.9	343.5	4,366.1
117+69	19	158.4	21.8	0.0	7.9	95.0	15.4	4.4	4.8	4933.2	175.1	350.3	4,439.6
117+73	4	162.2	21.8	0.0	8.1	23.7	3.2	0.0	1.2	4957.0	175.1	351.9	4,460.1
118+00	27	114.4	21.8	9.3	5.7	138.3	21.8	4.7	6.9	5095.2	181.7	361.8	4,569.9
118+50	50	143.3	21.8	0.0	7.2	238.5	40.4	8.6	11.9	5333.8	193.9	378.7	4,755.8

CONTINUED ON NEXT SHEET

NOTES:

1) CUT END AREA INCLUDES UNUSABLE PAVEMENT MATERIAL.
2) UNUSABLE PAVEMENT MATERIAL INCLUDES UNDERLYING CONCRETE PAVEMENT AND ASPHALT PAVEMENT OVERLAY.THE EXISTING PAVEMENT STRUCTUREIS NOT SHOWN IN THE CROSS SECTIONS.
3) FILL END AREA DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) EBS = 5% OF CUT. EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN.
5) EXPANDED FILL = INCREMENTAL FILL * FILL FACTOR OF 1.42
6) EXPANDED EBS BACKFILL = INCREMENTAL EBS * EXPANSION FACTOR OF 1.42
7) MASS ORDINATE = CUMULATIVE EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL - (FILL * FILL FACTOR)

STH 116 (CONT.)						INCREMENTAL VOL (CY)(UNADJUSTED)				CUMULATIVE VOL (CY)			
STATION	DISTANCE	CUT END AREA (NOTE 1) SF	UNUSABLE PAVEMENT MATERIAL (NOTE 2) SF	FILL (NOTE 3) SF	EBS (NOTE 4) SF	CUT VOLUME (NOTE 1) CY	UNUSABLE PAVEMENT MATERIAL (NOTE 2) CY	FILL (NOTE 3) CY	EBS (NOTE 4) CY	EXCAVATION COMMON 1.00 CY	EXPANDED FILL 1.42 (NOTE 5) CY	EXPANDED EBS BACKFILL 1.42 (NOTE 6) CY	MASS ORDINATE (NOTE 7) CY
118+70	20	111.2	21.8	4.4	5.6	94.2	16.2	1.6	4.7	5428.0	196.2	385.4	4,831.6
118+79	9	112.6	21.8	2.4	5.6	37.3	7.3	1.1	1.9	5465.3	197.8	388.0	4,860.0
118+89	10	128.6	21.8	1.3	6.4	44.7	8.1	0.7	2.2	5510.0	198.8	391.2	4,895.6
119+00	11	109.5	21.8	0.9	5.5	48.5	8.9	0.4	2.4	5558.5	199.4	394.7	4,934.6
119+48	48	109.8	21.8	3.2	5.5	194.9	38.8	3.7	9.7	5753.4	204.7	408.5	5,085.4
119+50	2	100.9	21.8	3.3	5.0	7.8	1.6	0.2	0.4	5761.2	205.0	409.0	5,091.3
120+00	50	75.5	21.8	0.0	3.8	163.3	40.4	3.0	8.2	5924.5	209.3	420.6	5,209.9
120+50	50	94.5	21.8	0.1	4.7	157.4	40.4	0.1	7.9	6081.9	209.4	431.8	5,326.7
120+54	4	97.8	21.8	0.1	4.9	14.2	3.2	0.0	0.7	6096.1	209.5	432.8	5,337.7
120+73	19	94.6	21.8	0.1	4.7	67.7	15.4	0.1	3.4	6163.8	209.6	437.6	5,389.9
121+00	27	111.1	21.8	0.1	5.6	102.8	21.8	0.1	5.1	6266.7	209.7	444.9	5,470.8
121+07	7	117.0	21.8	0.1	5.8	29.6	5.7	0.0	1.5	6296.2	209.7	447.0	5,494.7
121+50	43	119.7	21.8	0.0	6.0	188.5	34.8	0.0	9.4	6484.7	209.8	460.4	5,648.3
121+70	20	119.7	21.8	0.1	6.0	88.7	16.2	0.1	4.4	6573.4	209.9	466.7	5,720.8
122+00	30	99.4	21.8	9.7	5.0	121.7	24.3	5.5	6.1	6695.1	217.7	475.4	5,810.5
122+30	30	123.7	21.8	6.8	6.2	123.9	24.3	9.2	6.2	6819.0	230.7	484.2	5,897.1
122+50	20	117.5	21.8	1.7	5.9	89.3	16.2	3.1	4.5	6908.4	235.2	490.5	5,965.7
122+58	8	118.2	21.8	3.1	5.9	34.9	6.5	0.7	1.7	6943.3	236.2	493.0	5,993.2
123+00	42	82.1	21.8	43.2	4.1	155.8	34.0	36.0	7.8	7099.1	287.3	504.0	6,063.9
123+21	21	86.1	21.8	30.8	4.3	65.4	17.0	28.8	3.3	7164.5	328.3	508.7	6,071.4
123+30	9	97.6	21.8	3.7	4.9	30.6	7.3	5.8	1.5	7195.1	336.4	510.9	6,086.6
123+50	20	71.6	21.8	14.7	3.6	62.7	16.2	6.8	3.1	7257.8	346.1	515.3	6,123.4
123+68	18	71.0	21.8	11.7	3.6	47.5	14.6	8.8	2.4	7305.3	358.5	518.7	6,143.9
123+77	9	69.2	21.8	12.1	3.5	23.4	7.3	4.0	1.2	7328.7	364.2	520.3	6,154.3
124+00	23	68.3	21.8	5.8	3.4	58.6	18.6	7.7	2.9	7387.2	375.1	524.5	6,183.4
124+11	11	87.8	21.8	0.0	4.4	31.8	8.9	1.2	1.6	7419.0	376.8	526.8	6,204.6
124+38	27	72.4	21.8	12.1	3.6	80.1	21.8	6.1	4.0	7499.1	385.4	532.4	6,254.3
124+43	5	74.2	21.8	14.1	3.7	13.6	4.0	2.4	0.7	7512.7	388.8	533.4	6,260.4
124+50	7	65.6	21.8	13.7	3.3	18.1	5.7	3.6	0.9	7530.8	393.9	534.7	6,267.7
125+00	50	70.6	21.8	30.6	3.5	126.0	40.4	41.0	6.3	7656.9	452.1	543.6	6,295.2
125+15	15	100.6	21.8	0.0	5.0	47.5	12.1	8.5	2.4	7704.4	464.2	547.0	6,318.5
125+30	15	83.1	21.8	19.5	4.2	51.0	12.1	5.4	2.6	7755.5	471.9	550.6	6,349.7
125+50	20	74.9	21.8	28.0	3.7	58.5	16.2	17.6	2.9	7814.0	496.9	554.8	6,367.1
125+75	25	86.6	21.8	28.3	4.3	74.7	20.2	26.1	3.7	7888.7	533.9	560.1	6,384.6
126+00	25	82.6	21.8	21.6	4.1	78.3	20.2	23.1	3.9	7967.0	566.7	565.7	6,409.9

CONTINUED ON NEXT SHEET

NOTES:

1) CUT END AREA INCLUDES UNUSABLE PAVEMENT MATERIAL.
2) UNUSABLE PAVEMENT MATERIAL INCLUDES UNDERLYING CONCRETE PAVEMENT AND ASPHALT PAVEMENT OVERLAY.THE EXISTING PAVEMENT STRUCTUREIS NOT SHOWN IN THE CROSS SECTIONS.
3) FILL END AREA DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) EBS = 5% OF CUT. EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN.
5) EXPANDED FILL = INCREMENTAL FILL * FILL FACTOR OF 1.42
6) EXPANDED EBS BACKFILL = INCREMENTAL EBS * EXPANSION FACTOR OF 1.42
7) MASS ORDINATE = CUMULATIVE EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL - (FILL * FILL FACTOR)

STH 116 (CONT.)						INCREMENTAL VOL (CY)(UNADJUSTED)				CUMULATIVE VOL (CY)			
STATION	DISTANCE	CUT END AREA (NOTE 1) SF	UNUSABLE PAVEMENT MATERIAL (NOTE 2) SF	FILL (NOTE 3) SF	EBS (NOTE 4) SF	CUT VOLUME (NOTE 1) CY	UNUSABLE PAVEMENT MATERIAL (NOTE 2) CY	FILL (NOTE 3) CY	EBS (NOTE 4) CY	EXCAVATION COMMON 1.00 CY	EXPANDED FILL 1.42 (NOTE 5) CY	EXPANDED EBS BACKFILL 1.42 (NOTE 6) CY	MASS ORDINATE (NOTE 7) CY
126+25	25	102.1	21.8	6.5	5.1	85.5	20.2	13.0	4.3	8052.5	585.1	571.7	6,456.8
126+30	5	96.8	21.8	7.1	4.8	18.4	4.0	1.3	0.9	8070.9	586.9	573.0	6,469.4
126+50	20	65.8	21.8	47.9	3.3	60.2	16.2	20.4	3.0	8131.2	615.8	577.3	6,484.5
126+77	27	61.2	21.8	58.9	3.1	63.5	21.8	53.4	3.2	8194.7	691.7	581.8	6,450.4
127+00	23	61.0	21.8	58.5	3.0	52.0	18.6	50.0	2.6	8246.7	762.6	585.5	6,412.8
127+19	19	64.3	21.8	94.7	3.2	44.1	15.4	53.9	2.2	8290.8	839.2	588.6	6,365.0
127+50	31	68.8	21.8	78.4	3.4	76.4	25.1	99.4	3.8	8367.2	980.3	594.1	6,275.2
127+76	26	74.6	21.8	70.3	3.7	69.0	21.0	71.6	3.5	8436.2	1081.9	599.0	6,221.5
128+00	24	78.8	21.8	56.3	3.9	68.1	19.4	56.2	3.4	8504.4	1161.8	603.8	6,190.4
128+25	25	107.7	21.8	51.1	5.4	86.3	20.2	49.7	4.3	8590.7	1232.4	609.9	6,186.0
128+50	25	85.9	21.8	54.6	4.3	89.6	20.2	48.9	4.5	8680.3	1301.8	616.3	6,185.9
128+88	38	92.9	21.8	47.4	4.6	125.8	30.7	71.8	6.3	8806.2	1403.8	625.2	6,179.1
129+00	12	109.9	21.8	44.9	5.5	45.0	9.7	20.5	2.3	8851.2	1432.9	628.4	6,185.3
129+50	50	81.2	21.8	51.1	4.1	176.9	40.4	88.9	8.8	9028.1	1559.2	641.0	6,195.5
129+68	18	104.7	21.8	38.2	5.2	62.0	14.6	29.8	3.1	9090.1	1601.5	645.4	6,200.6
130+00	32	77.0	21.8	47.6	3.8	107.6	25.9	50.8	5.4	9197.7	1673.7	653.0	6,210.2
130+50	50	76.3	21.8	60.4	3.8	141.9	40.4	100.0	7.1	9339.6	1815.7	663.1	6,169.7
130+83	33	74.4	21.8	47.7	3.7	92.1	26.7	66.0	4.6	9431.7	1909.5	669.7	6,141.3
131+00	17	76.4	21.8	49.5	3.8	47.5	13.7	30.6	2.4	9479.2	1952.9	673.0	6,131.6
131+12	12	77.3	21.8	49.2	3.9	34.1	9.7	21.9	1.7	9513.3	1984.0	675.4	6,124.9
131+50	38	77.5	21.8	52.9	3.9	108.9	30.7	71.8	5.4	9622.3	2086.0	683.2	6,101.2
132+00	50	91.6	21.8	76.0	4.6	156.6	40.4	119.3	7.8	9778.9	2255.4	694.3	6,047.9
132+50	50	119.4	21.8	16.5	6.0	195.4	40.4	85.7	9.8	9974.2	2377.1	708.2	6,081.2
133+00	50	108.5	21.8	7.0	5.4	211.0	40.4	21.8	10.5	10185.2	2408.0	723.1	6,220.8
133+50	50	112.8	21.8	2.7	5.6	204.8	40.4	9.0	10.2	10390.0	2420.8	737.7	6,372.4
134+00	50	120.7	21.8	0.0	6.0	216.1	40.4	2.5	10.8	10606.2	2424.4	753.0	6,544.6
134+50	50	110.7	21.8	0.2	5.5	214.2	40.4	0.2	10.7	10820.4	2424.7	768.3	6,718.0
135+00	50	87.9	21.8	1.5	4.4	183.8	40.4	1.6	9.2	11004.3	2427.0	781.3	6,859.2
135+50	50	87.8	21.8	1.6	4.4	162.7	40.4	2.9	8.1	11167.0	2431.0	792.9	6,977.4
136+00	50	77.0	21.8	0.0	3.9	152.6	40.4	1.5	7.6	11319.6	2433.1	803.7	7,087.5
136+50	50	70.1	21.8	0.1	3.5	136.2	40.4	0.1	6.8	11455.7	2433.3	813.4	7,183.1
136+76	26	74.2	21.8	4.0	3.7	68.4	20.7	1.9	3.4	11524.1	2436.0	818.2	7,228.0
137+00	24	71.5	21.8	0.0	3.6	65.8	19.7	1.8	3.3	11589.9	2438.6	822.9	7,271.5
137+23	23	66.2	21.8	0.0	3.3	58.6	18.6	0.0	2.9	11648.6	2438.6	827.0	7,311.6
137+50	27	54.0	21.8	2.6	2.7	60.1	21.8	1.3	3.0	11708.7	2440.4	831.3	7,348.1
				TOTALS		11708.7	1920.2	1718.6	585.4				

NOTES:

1) CUT END AREA INCLUDES UNUSABLE PAVEMENT MATERIAL.
2) UNUSABLE PAVEMENT MATERIAL INCLUDES UNDERLYING CONCRETE PAVEMENT AND ASPHALT PAVEMENT OVERLAY.THE EXISTING PAVEMENT STRUCTUREIS NOT SHOWN IN THE CROSS SECTIONS.
3) FILL END AREA DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) EBS = 5% OF CUT. EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN.
5) EXPANDED FILL = INCREMENTAL FILL * FILL FACTOR OF 1.42
6) EXPANDED EBS BACKFILL = INCREMENTAL EBS * EXPANSION FACTOR OF 1.42
7) MASS ORDINATE = CUMULATIVE EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL - (FILL * FILL FACTOR)

SPRUCE ST. (SA)						INCREMENTAL VOL (CY)(UNADJUSTED)				CUMULATIVE VOL (CY)			
STATION	DISTANCE	CUT END AREA (NOTE 1) SF	UNUSABLE PAVEMENT MATERIAL (NOTE 2) SF	FILL (NOTE 3) SF	EBS (NOTE 4) SF	CUT VOLUME (NOTE 1) CY	UNUSABLE PAVEMENT MATERIAL (NOTE 2) CY	FILL (NOTE 3) CY	EBS (NOTE 4) CY	EXCAVATION COMMON 1.00 CY	EXPANDED FILL 1.42 (NOTE 5) CY	EXPANDED EBS BACKFILL 1.42 (NOTE 6) CY	MASS ORDINATE (NOTE 7) CY
10+00 SA		97.7	0.0	0.1	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10+25 SA	25	97.7	0.0	0.1	4.9	90.5	0.0	0.1	4.5	90.5	0.1	6.4	90.4
10+50 SA	25	100.8	0.0	42.2	5.0	91.0	0.0	19.4	4.6	181.5	27.7	12.9	153.9
10+50 SA	0	100.7	0.0	42.2	5.0	0.9	0.0	0.4	0.0	182.4	28.2	13.0	154.2
10+74 SA	24	105.7	0.0	38.1	5.3	93.3	0.0	36.3	4.7	275.7	79.8	19.6	196.0
10+75 SA	1	105.6	0.0	38.0	5.3	2.3	0.0	0.8	0.1	278.0	80.9	19.7	197.1
10+99 SA	24	99.5	0.0	30.3	5.0	91.5	0.0	30.5	4.6	369.5	124.2	26.2	245.3
11+00 SA	1	99.0	0.0	28.3	5.0	3.4	0.0	1.0	0.2	372.8	125.6	26.5	247.3
11+25 SA	25	97.9	0.0	7.9	4.9	91.2	0.0	16.8	4.6	464.0	149.4	32.9	314.6
11+50 SA	25	77.8	0.0	0.0	3.9	81.4	0.0	3.7	4.1	545.4	154.6	38.7	390.8
12+50 SA	100	116.2	0.0	0.1	5.8	359.3	0.0	0.2	18.0	904.7	154.8	64.2	749.8
12+75 SA	25	94.9	0.0	0.0	4.7	97.7	0.0	0.0	4.9	1002.4	154.9	71.2	847.5
13+00 SA	25	68.1	0.0	0.0	3.4	75.4	0.0	0.0	3.8	1077.8	154.9	76.5	922.9
13+25 SA	25	49.4	0.0	0.1	2.5	54.4	0.0	0.0	2.7	1132.2	154.9	80.4	977.2
13+50 SA	25	41.5	0.0	1.5	2.1	42.1	0.0	0.7	2.1	1174.2	156.0	83.4	1,018.3
13+55 SA	5	41.5	0.0	1.5	2.1	7.7	0.0	0.3	0.4	1181.9	156.4	83.9	1,025.5
				SUBTOTALS		1181.9	0.0	110.1	59.1				

EARTHWORK FOR INTERSECTION RADII

INTERSECTION RADIUS QUADRANT	FLOODED AREAS SF	PAVEMENT THICKNESS FT	DISTANCE ABOVE OR BELOW EXISTING GROUND FT				CUT VOLUME CY	UNUSABLE PAVEMENT MATERIAL CY	FILL CY	EBS CY	EXCAVATION COMMON CY	EXPANDED FILL 1.42 CY	EXPANDED EBS BACKFILL 1.42 CY	MASS ORDINATE CY
NW	198.20	1.9	0.6				18.1	0.0	0.0	0.9	1200.1	156.4	85.2	1,043.7
NE	313.16	1.9	0.8				31.5	0.0	0.0	1.6	1231.6	156.4	87.4	1,075.2
SE	638.05	1.9	-0.5				32.9	0.0	0.0	1.6	1264.4	156.4	89.8	1,108.1
SW	959.18	1.9	-0.2				61.2	0.0	0.0	3.1	1325.6	156.4	94.1	1,169.3
			SUBTOTALS				143.7	0.0	0.0	7.2				
						TOTALS	**1325.6**	**0.0**	**110.1**	**66.3**	**1325.6**	**156.4**	**94.1**	**1169.3**

NOTES:

1) CUT END AREA INCLUDES UNUSABLE PAVEMENT MATERIAL.
2) UNUSABLE PAVEMENT MATERIAL INCLUDES UNDERLYING CONCRETE PAVEMENT AND ASPHALT PAVEMENT OVERLAY.THE EXISTING PAVEMENT STRUCTUREIS NOT SHOWN IN THE CROSS SECTIONS.
3) FILL END AREA DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) EBS = 5% OF CUT. EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN.
5) EXPANDED FILL = INCREMENTAL FILL * FILL FACTOR OF 1.25
6) EXPANDED EBS BACKFILL = INCREMENTAL EBS * EXPANSION FACTOR OF 1.25
7) MASS ORDINATE = CUMULATIVE EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL - (FILL * FILL FACTOR)

CEDAR ST. (CE)						INCREMENTAL VOL (CY)(UNADJUSTED)				CUMULATIVE VOL (CY)			
STATION	DISTANCE	CUT END AREA (NOTE 1) SF	UNUSABLE PAVEMENT MATERIAL (NOTE 2) SF	FILL (NOTE 3) SF	EBS (NOTE 4) SF	CUT VOLUME (NOTE 1) CY	UNUSABLE PAVEMENT MATERIAL (NOTE 2) CY	FILL (NOTE 3) CY	EBS (NOTE 4) CY	EXCAVATION COMMON 1.00 CY	EXPANDED FILL 1.42 (NOTE 5) CY	EXPANDED EBS BACKFILL 1.42 (NOTE 6) CY	MASS ORDINATE (NOTE 7) CY
10+29 CE		47.8	0.0	2.5	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10+50 CE	21	47.8	0.0	11.1	2.4	38.0	0.0	5.4	1.9	38.0	7.7	2.7	30.3
10+60 CE	10	47.1	0.0	1.3	2.4	17.6	0.0	2.3	0.9	55.6	10.9	3.9	44.6
10+70 CE	10	3.5	0.0	0.6	0.2	9.4	0.0	0.4	0.5	64.9	11.4	4.6	53.5
				SUBTOTALS		64.9	0.0	8.0	3.2				

EARTHWORK FOR INTERSECTION RADII

INTERSECTION RADIUS QUADRANT	FLOODED AREAS SF	PAVEMENT THICKNESS FT	DISTANCE ABOVE OR BELOW EXISTING GROUND FT				CUT VOLUME CY	UNUSABLE PAVEMENT MATERIAL CY	FILL CY	EBS CY	EXCAVATION COMMON CY	EXPANDED FILL 1.42 CY	EXPANDED EBS BACKFILL 1.42 CY	MASS ORDINATE CY
NW	136.9	1.6	-0.4				6.1	0.0	0.0	0.3	71.0	11.4	5.0	59.6
NE	93.5	1.6	-0.2				5.1	0.0	0.0	0.3	76.1	11.4	5.4	64.7
			SUBTOTALS				11.2	0.0	0.0	0.6				
			TOTALS				**76.1**	**0.0**	**8.0**	**3.8**	**76.1**	**11.4**	**5.4**	**64.7**

NOTES:

1) CUT END AREA INCLUDES UNUSABLE PAVEMENT MATERIAL.
2) UNUSABLE PAVEMENT MATERIAL INCLUDES UNDERLYING CONCRETE PAVEMENT AND ASPHALT PAVEMENT OVERLAY.THE EXISTING PAVEMENT STRUCTUREIS NOT SHOWN IN THE CROSS SECTIONS.
3) FILL END AREA DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) EBS = 5% OF CUT. EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN.
5) EXPANDED FILL = INCREMENTAL FILL * FILL FACTOR OF 1.25
6) EXPANDED EBS BACKFILL = INCREMENTAL EBS * EXPANSION FACTOR OF 1.25
7) MASS ORDINATE = CUMULATIVE EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL - (FILL * FILL FACTOR)

9

9

N. WEBSTER (NWE)						INCREMENTAL VOL (CY)(UNADJUSTED)				CUMULATIVE VOL (CY)			
STATION	DISTANCE	CUT END AREA (NOTE 1) SF	UNUSABLE PAVEMENT MATERIAL (NOTE 2) SF	FILL (NOTE 3) SF	EBS (NOTE 4) SF	CUT VOLUME (NOTE 1) CY	UNUSABLE PAVEMENT MATERIAL (NOTE 2) CY	FILL (NOTE 3) CY	EBS (NOTE 4) CY	EXCAVATION COMMON 1.00 CY	EXPANDED FILL 1.42 (NOTE 5) CY	EXPANDED EBS BACKFILL 1.42 (NOTE 6) CY	MASS ORDINATE (NOTE 7) CY
10+16 NWE		77.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10+40 NWE	24	77.0	0.0	0.0	3.9	68.4	0.0	0.0	3.4	68.4	0.0	4.9	68.4
10+50 NWE	10	72.7	0.0	1.2	3.6	27.7	0.0	0.2	1.4	96.1	0.3	6.8	95.8
10+60 NWE	10	63.0	0.0	1.6	3.2	25.1	0.0	0.5	1.3	121.2	1.0	8.6	120.2
10+70 NWE	10	58.6	0.0	1.6	2.9	22.5	0.0	0.6	1.1	143.8	1.9	10.2	141.9
10+80 NWE	10	52.5	0.0	0.1	2.6	20.6	0.0	0.3	1.0	164.3	2.3	11.7	162.0
10+82 NWE	2	52.5	0.0	0.1	2.6	4.6	0.0	0.0	0.2	168.9	2.3	12.0	166.6
				SUBTOTALS		168.9	0.0	1.6	8.4				

EARTHWORK FOR INTERSECTION RADII

INTERSECTION RADIUS QUADRANT	FLOODED AREAS SF	PAVEMENT THICKNESS FT	DISTANCE ABOVE OR BELOW EXISTING GROUND FT				CUT VOLUME CY	UNUSABLE PAVEMENT MATERIAL CY	FILL CY	EBS CY	EXCAVATION COMMON CY	EXPANDED FILL 1.42 CY	EXPANDED EBS BACKFILL 1.42 CY	MASS ORDINATE CY
NW	129.1	1.6	0.7				11.2	0.0	0.0	0.6	180.1	2.3	12.8	177.8
NE	156.3	1.6	0.7				13.6	0.0	0.0	0.7	193.7	2.3	13.8	191.4
			SUBTOTALS				24.7	0.0	0.0	1.2				
			TOTALS				**193.7**	**0.0**	**1.6**	**9.7**	**193.7**	**2.3**	**13.8**	**191.4**

NOTES:

1) CUT END AREA INCLUDES UNUSABLE PAVEMENT MATERIAL.
2) UNUSABLE PAVEMENT MATERIAL INCLUDES UNDERLYING CONCRETE PAVEMENT AND ASPHALT PAVEMENT OVERLAY.THE EXISTING PAVEMENT STRUCTUREIS NOT SHOWN IN THE CROSS SECTIONS.
3) FILL END AREA DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) EBS = 5% OF CUT. EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN.
5) EXPANDED FILL = INCREMENTAL FILL * FILL FACTOR OF 1.25
6) EXPANDED EBS BACKFILL = INCREMENTAL EBS * EXPANSION FACTOR OF 1.25
7) MASS ORDINATE = CUMULATIVE EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL - (FILL * FILL FACTOR)

9

9

S. WEBSTER (SWE)						INCREMENTAL VOL (CY)(UNADJUSTED)				CUMULATIVE VOL (CY)			
STATION	DISTANCE	CUT END AREA (NOTE 1) SF	UNUSABLE PAVEMENT MATERIAL (NOTE 2) SF	FILL (NOTE 3) SF	EBS (NOTE 4) SF	CUT VOLUME (NOTE 1) CY	UNUSABLE PAVEMENT MATERIAL (NOTE 2) CY	FILL (NOTE 3) CY	EBS (NOTE 4) CY	EXCAVATION COMMON 1.00 CY	EXPANDED FILL 1.42 (NOTE 5) CY	EXPANDED EBS BACKFILL 1.42 (NOTE 6) CY	MASS ORDINATE (NOTE 7) CY
9+20 SWE		88.7	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9+30 SWE	10	88.7	0.0	0.0	4.4	32.9	0.0	0.0	1.6	32.9	0.0	2.3	32.9
9+40 SWE	10	97.2	0.0	0.0	4.9	34.4	0.0	0.0	1.7	67.3	0.0	4.8	67.3
9+50 SWE	10	99.2	0.0	0.0	5.0	36.4	0.0	0.0	1.8	103.7	0.0	7.4	103.7
9+60 SWE	10	111.3	0.0	0.0	5.6	39.0	0.0	0.0	1.9	142.7	0.0	10.1	142.7
9+84 SWE	24	111.3	0.0	0.0	5.6	98.7	0.0	0.0	4.9	241.4	0.0	17.1	241.4
				SUBTOTALS		241.4	0.0	0.0	12.1				

EARTHWORK FOR INTERSECTION RADII

INTERSECTION RADIUS QUADRANT	FLOODED AREAS SF	PAVEMENT THICKNESS FT	DISTANCE ABOVE OR BELOW EXISTING GROUND FT				CUT VOLUME CY	UNUSABLE PAVEMENT MATERIAL CY	FILL CY	EBS CY	EXCAVATION COMMON CY	EXPANDED FILL 1.42 CY	EXPANDED EBS BACKFILL 1.42 CY	MASS ORDINATE CY
SE	91.4	1.6	0.5				7.3	0.0	0.0	0.4	248.7	0.0	17.7	248.7
SW	127.9	1.6	0.7				11.1	0.0	0.0	0.6	259.8	0.0	18.4	259.8
			SUBTOTALS				18.4	0.0	0.0	0.9				

TOTALS	**259.8**	**0.0**	**0.0**	**13.0**	**259.8**	**0.0**	**18.4**	**259.8**

NOTES:

1) CUT END AREA INCLUDES UNUSABLE PAVEMENT MATERIAL.
2) UNUSABLE PAVEMENT MATERIAL INCLUDES UNDERLYING CONCRETE PAVEMENT AND ASPHALT PAVEMENT OVERLAY.THE EXISTING PAVEMENT STRUCTUREIS NOT SHOWN IN THE CROSS SECTIONS.
3) FILL END AREA DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) EBS = 5% OF CUT. EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN.
5) EXPANDED FILL = INCREMENTAL FILL * FILL FACTOR OF 1.25
6) EXPANDED EBS BACKFILL = INCREMENTAL EBS * EXPANSION FACTOR OF 1.25
7) MASS ORDINATE = CUMULATIVE EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL - (FILL * FILL FACTOR)

OAK ST. (OA)						INCREMENTAL VOL (CY)(UNADJUSTED)					CUMULATIVE VOL (CY)		
STATION	DISTANCE	CUT END AREA (NOTE 1) SF	UNUSABLE PAVEMENT MATERIAL (NOTE 2) SF	FILL (NOTE 3) SF	EBS (NOTE 4) SF	CUT VOLUME (NOTE 1) CY		UNUSABLE PAVEMENT MATERIAL (NOTE 2) CY	FILL (NOTE 3) CY	EBS (NOTE 4) CY	EXCAVATION COMMON 1.00 CY	EXPANDED FILL 1.42 (NOTE 5) CY	EXPANDED EBS BACKFILL 1.42 (NOTE 6) CY
10+16 OA		82.4	0.0	0.0	4.1	0.0		0.0	0.0	0.0	0.0	0.0	0.0
10+40 OA	24	82.4	0.0	0.0	4.1	73.1		0.0	0.0	3.7	73.1	0.0	5.2
10+50 OA	10	81.1	0.0	0.0	4.1	30.3		0.0	0.0	1.5	103.4	0.0	7.3
10+60 OA	10	82.3	0.0	0.0	4.1	30.3		0.0	0.0	1.5	133.7	0.0	9.5
10+70 OA	10	77.0	0.0	0.1	3.9	29.5		0.0	0.0	1.5	163.2	0.0	11.6
10+80 OA	10	67.5	0.0	0.0	3.4	26.8		0.0	0.0	1.3	190.0	0.0	13.5
10+90 OA	10	61.3	0.0	0.0	3.1	23.8		0.0	0.0	1.2	213.8	0.0	15.2
11+00 OA	10	62.8	0.0	0.0	3.1	23.0		0.0	0.0	1.1	236.8	0.0	16.8
11+10 OA	10	59.0	0.0	0.0	3.0	22.6		0.0	0.0	1.1	259.3	0.0	18.4
11+20 OA	10	71.8	0.0	0.3	3.6	24.2		0.0	0.1	1.2	283.5	0.1	20.1
11+30 OA	10	66.8	0.0	0.2	3.3	25.7		0.0	0.1	1.3	309.2	0.3	22.0
11+40 OA	10	46.1	0.0	0.3	2.3	20.9		0.0	0.1	1.0	330.1	0.4	23.4
11+50 OA	10	46.1	0.0	0.3	2.3	17.1		0.0	0.1	0.9	347.2	0.5	24.6
				SUBTOTALS		347.2		0.0	0.4	17.4			

EARTHWORK FOR INTERSECTION RADII

INTERSECTION RADIUS QUADRANT	FLOODED AREAS SF	PAVEMENT THICKNESS FT	DISTANCE ABOVE OR BELOW EXISTING GROUND FT				CUT VOLUME CY		UNUSABLE PAVEMENT MATERIAL CY	FILL CY	EBS CY	EXCAVATION COMMON CY	EXPANDED FILL 1.42 CY	EXPANDED EBS BACKFILL 1.42 CY
NW	126.5	1.6	0.5				10.2		0.0	0.0	0.5	357.3	0.5	25.4
NE	127.4	1.6	0.5				10.0		0.0	0.0	0.5	367.4	0.5	26.1
			SUBTOTALS				20.2		0.0	0.0	1.0			
			TOTALS				**367.4**		**0.0**	**0.4**	**18.4**	**367.4**	**0.5**	**26.1**

NOTES:

1) CUT END AREA INCLUDES UNUSABLE PAVEMENT MATERIAL.
2) UNUSABLE PAVEMENT MATERIAL INCLUDES UNDERLYING CONCRETE PAVEMENT AND ASPHALT PAVEMENT OVERLAY.THE EXISTING PAVEMENT STRUCTUREIS NOT SHOWN IN THE CROSS SECTIONS.
3) FILL END AREA DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) EBS = 5% OF CUT. EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN.
5) EXPANDED FILL = INCREMENTAL FILL * FILL FACTOR OF 1.25
6) EXPANDED EBS BACKFILL = INCREMENTAL EBS * EXPANSION FACTOR OF 1.25
7) MASS ORDINATE = CUMULATIVE EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL - (FILL * FILL FACTOR)

ELM ST. (EL)						INCREMENTAL VOL (CY)(UNADJUSTED)				CUMULATIVE VOL (CY)			
STATION	DISTANCE	CUT END AREA (NOTE 1) SF	UNUSABLE PAVEMENT MATERIAL (NOTE 2) SF	FILL (NOTE 3) SF	EBS (NOTE 4) SF	CUT VOLUME (NOTE 1) CY	UNUSABLE PAVEMENT MATERIAL (NOTE 2) CY	FILL (NOTE 3) CY	EBS (NOTE 4) CY	EXCAVATION COMMON 1.00 CY	EXPANDED FILL 1.42 (NOTE 5) CY	EXPANDED EBS BACKFILL 1.42 (NOTE 6) CY	MASS ORDINATE (NOTE 7) CY
10+16 EL		54.2	0.0	5.5	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10+40 EL	24	54.2	0.0	5.5	2.7	48.2	0.0	4.9	2.4	48.2	7.0	3.4	41.2
10+50 EL	10	44.4	0.0	1.9	2.2	18.2	0.0	1.4	0.9	66.4	9.0	4.7	57.4
10+55 EL	5	44.4	0.0	1.9	2.2	8.2	0.0	0.4	0.4	74.6	9.5	5.3	65.1
				SUBTOTALS		74.6	0.0	6.7	3.7				

EARTHWORK FOR INTERSECTION RADII

INTERSECTION RADIUS QUADRANT	FLOODED AREAS SF	PAVEMENT THICKNESS FT	DISTANCE ABOVE OR BELOW EXISTING GROUND FT				CUT VOLUME CY	UNUSABLE PAVEMENT MATERIAL CY	FILL CY	EBS CY	EXCAVATION COMMON CY	EXPANDED FILL 1.42 CY	EXPANDED EBS BACKFILL 1.42 CY	MASS ORDINATE CY
NW	123.9	1.6	0.7				10.5	0.0	0.0	0.5	85.1	9.5	6.0	75.6
NE	130.0	1.6	0.0				7.9	0.0	0.0	0.4	93.0	9.5	6.6	83.6
			SUBTOTALS				18.4	0.0	0.0	0.9				
			TOTALS				**93.0**	**0.0**	**6.7**	**4.7**	**93.0**	**9.5**	**6.6**	**83.6**

NOTES:

1) CUT END AREA INCLUDES UNUSABLE PAVEMENT MATERIAL.
2) UNUSABLE PAVEMENT MATERIAL INCLUDES UNDERLYING CONCRETE PAVEMENT AND ASPHALT PAVEMENT OVERLAY.THE EXISTING PAVEMENT STRUCTUREIS NOT SHOWN IN THE CROSS SECTIONS.
3) FILL END AREA DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) EBS = 5% OF CUT. EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN.
5) EXPANDED FILL = INCREMENTAL FILL * FILL FACTOR OF 1.25
6) EXPANDED EBS BACKFILL = INCREMENTAL EBS * EXPANSION FACTOR OF 1.25
7) MASS ORDINATE = CUMULATIVE EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL - (FILL * FILL FACTOR)

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PROJECT NO: 6190-16-72 | HWY: STH 116 | COUNTY: WINNEBAGO | EARTHWORK - ELM ST. (EL LINE) | SHEET 282 | E

ASH ST. (AS)						INCREMENTAL VOL (CY)(UNADJUSTED)				CUMULATIVE VOL (CY)			
STATION	DISTANCE	CUT END AREA (NOTE 1) SF	UNUSABLE PAVEMENT MATERIAL (NOTE 2) SF	FILL (NOTE 3) SF	EBS (NOTE 4) SF	CUT VOLUME (NOTE 1) CY	UNUSABLE PAVEMENT MATERIAL (NOTE 2) CY	FILL (NOTE 3) CY	EBS (NOTE 4) CY	EXCAVATION COMMON 1.00 CY	EXPANDED FILL 1.42 (NOTE 5) CY	EXPANDED EBS BACKFILL 1.42 (NOTE 6) CY	MASS ORDINATE (NOTE 7) CY
10+16 AS		40.2	0.0	3.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10+40 AS	24	40.2	0.0	3.1	2.0	35.7	0.0	2.8	1.8	35.7	3.9	2.5	31.8
10+50 AS	10	32.1	0.0	0.0	1.6	13.4	0.0	0.6	0.7	49.1	4.7	3.5	44.4
10+54 AS	4	32.1	0.0	0.0	1.6	4.8	0.0	0.0	0.2	53.9	4.7	3.8	49.1
				SUBTOTALS		53.9	0.0	3.3	2.7				

EARTHWORK FOR INTERSECTION RADII

INTERSECTION RADIUS QUADRANT	FLOODED AREAS SF	PAVEMENT THICKNESS FT	DISTANCE ABOVE OR BELOW EXISTING GROUND FT				CUT VOLUME CY	UNUSABLE PAVEMENT MATERIAL CY	FILL CY	EBS CY	EXCAVATION COMMON CY	EXPANDED FILL 1.42 CY	EXPANDED EBS BACKFILL 1.42 CY	MASS ORDINATE CY
NW	124.8	1.6	0.2				8.5	0.0	0.0	0.4	62.3	4.7	4.4	57.6
NE	144.9	1.6	0.0				8.7	0.0	0.0	0.4	71.0	4.7	5.0	66.3
			SUBTOTALS				17.1	0.0	0.0	0.9				

TOTALS	71.0	0.0	3.3	3.6	71.0	4.7	5.0	66.3

NOTES:

1) CUT END AREA INCLUDES UNUSABLE PAVEMENT MATERIAL.
2) UNUSABLE PAVEMENT MATERIAL INCLUDES UNDERLYING CONCRETE PAVEMENT AND ASPHALT PAVEMENT OVERLAY.THE EXISTING PAVEMENT STRUCTUREIS NOT SHOWN IN THE CROSS SECTIONS.
3) FILL END AREA DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) EBS = 5% OF CUT. EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN.
5) EXPANDED FILL = INCREMENTAL FILL * FILL FACTOR OF 1.25
6) EXPANDED EBS BACKFILL = INCREMENTAL EBS * EXPANSION FACTOR OF 1.25
7) MASS ORDINATE = CUMULATIVE EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL - (FILL * FILL FACTOR)

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E. RIVER DR (ER)						INCREMENTAL VOL (CY)(UNADJUSTED)				CUMULATIVE VOL (CY)			
STATION	DISTANCE	CUT END AREA (NOTE 1) SF	UNUSABLE PAVEMENT MATERIAL (NOTE 2) SF	FILL (NOTE 3) SF	EBS (NOTE 4) SF	CUT VOLUME (NOTE 1) CY	UNUSABLE PAVEMENT MATERIAL (NOTE 2) CY	FILL (NOTE 3) CY	EBS (NOTE 4) CY	EXCAVATION COMMON 1.00 CY	EXPANDED FILL 1.42 (NOTE 5) CY	EXPANDED EBS BACKFILL 1.42 (NOTE 6) CY	MASS ORDINATE (NOTE 7) CY
10+16 ER		45.6	0.0	0.1	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10+40 ER	24	45.6	0.0	0.1	2.3	40.5	0.0	0.1	2.0	40.5	0.2	2.9	40.3
10+50 ER	10	57.7	0.0	0.7	2.9	19.1	0.0	0.2	1.0	59.6	0.4	4.2	59.2
10+60 ER	10	50.7	0.0	4.0	2.5	20.1	0.0	0.9	1.0	79.7	1.6	5.7	78.1
10+70 ER	10	51.3	0.0	11.6	2.6	18.9	0.0	2.9	0.9	98.6	5.7	7.0	92.9
10+80 ER	10	50.2	0.0	21.7	2.5	18.8	0.0	6.2	0.9	117.4	14.4	8.3	102.9
10+90 ER	10	51.0	0.0	23.9	2.6	18.8	0.0	8.4	0.9	136.1	26.4	9.7	109.7
11+00 ER	10	62.9	0.0	8.1	3.1	21.1	0.0	5.9	1.1	157.2	34.8	11.2	122.4
11+10 ER	10	55.2	0.0	5.8	2.8	21.9	0.0	2.6	1.1	179.1	38.5	12.7	140.6
11+20 ER	10	53.0	0.0	2.9	2.6	20.0	0.0	1.6	1.0	199.1	40.8	14.1	158.4
11+30 ER	10	51.4	0.0	0.5	2.6	19.3	0.0	0.6	1.0	218.5	41.7	15.5	176.8
11+40 ER	10	49.9	0.0	0.1	2.5	18.8	0.0	0.1	0.9	237.2	41.8	16.8	195.4
11+50 ER	10	47.5	0.0	0.0	2.4	18.0	0.0	0.0	0.9	255.3	41.9	18.1	213.4
11+60 ER	10	43.2	0.0	0.0	2.2	16.8	0.0	0.0	0.8	272.1	41.9	19.3	230.2
11+70 ER	10	39.8	0.0	0.0	2.0	15.4	0.0	0.0	0.8	287.5	41.9	20.4	245.6
				SUBTOTALS		287.5	0.0	29.5	14.4				

EARTHWORK FOR INTERSECTION RADII

INTERSECTION RADIUS QUADRANT	FLOODED AREAS SF	PAVEMENT THICKNESS FT	DISTANCE ABOVE OR BELOW EXISTING GROUND FT				CUT VOLUME CY	UNUSABLE PAVEMENT MATERIAL CY	FILL CY	EBS CY	EXCAVATION COMMON CY	EXPANDED FILL 1.42 CY	EXPANDED EBS BACKFILL 1.42 CY	MASS ORDINATE CY
SE	336.7	1.6	0.6				27.6	0.0	0.0	1.4	315.0	41.9	22.4	273.2
SW	153.0	1.6	0.8				13.7	0.0	0.0	0.7	328.7	41.9	23.3	286.8
			SUBTOTALS				41.2	0.0	0.0	2.1				
			TOTALS				**328.7**	**0.0**	**29.5**	**16.4**	**328.7**	**41.9**	**23.3**	**286.8**

NOTES:

1) CUT END AREA INCLUDES UNUSABLE PAVEMENT MATERIAL.
2) UNUSABLE PAVEMENT MATERIAL INCLUDES UNDERLYING CONCRETE PAVEMENT AND ASPHALT PAVEMENT OVERLAY.THE EXISTING PAVEMENT STRUCTUREIS NOT SHOWN IN THE CROSS SECTIONS.
3) FILL END AREA DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) EBS = 5% OF CUT. EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN.
5) EXPANDED FILL = INCREMENTAL FILL * FILL FACTOR OF 1.25
6) EXPANDED EBS BACKFILL = INCREMENTAL EBS * EXPANSION FACTOR OF 1.25
7) MASS ORDINATE = CUMULATIVE EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL - (FILL * FILL FACTOR)

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N. PINE ST (NPI)						INCREMENTAL VOL (CY)(UNADJUSTED)				CUMULATIVE VOL (CY)			
STATION	DISTANCE	CUT END AREA (NOTE 1) SF	UNUSABLE PAVEMENT MATERIAL (NOTE 2) SF	FILL (NOTE 3) SF	EBS (NOTE 4) SF	CUT VOLUME (NOTE 1) CY	UNUSABLE PAVEMENT MATERIAL (NOTE 2) CY	FILL (NOTE 3) CY	EBS (NOTE 4) CY	EXCAVATION COMMON 1.00 CY	EXPANDED FILL 1.42 (NOTE 5) CY	EXPANDED EBS BACKFILL 1.42 (NOTE 6) CY	MASS ORDINATE (NOTE 7) CY
10+21 NPI		37.4	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10+30 NPI	9	37.4	0.0	0.0	1.9	13.0	0.0	0.0	0.6	13.0	0.0	0.9	13.0
10+40 NPI	10	60.9	0.0	0.0	3.0	18.2	0.0	0.0	0.9	31.2	0.0	2.2	31.1
10+50 NPI	10	61.3	0.0	0.0	3.1	22.6	0.0	0.0	1.1	53.8	0.0	3.8	53.8
10+60 NPI	10	65.5	0.0	0.1	3.3	23.5	0.0	0.0	1.2	77.3	0.1	5.5	77.2
10+70 NPI	10	83.0	0.0	0.2	4.2	27.5	0.0	0.0	1.4	104.8	0.1	7.4	104.7
10+80 NPI	10	70.0	0.0	0.1	3.5	28.3	0.0	0.0	1.4	133.1	0.2	9.5	133.0
10+90 NPI	10	65.6	0.0	0.2	3.3	25.1	0.0	0.0	1.3	158.3	0.2	11.2	158.0
10+95 NPI	5	65.6	0.0	0.2	3.3	12.2	0.0	0.0	0.6	170.4	0.3	12.1	170.1
				SUBTOTALS		170.4	0.0	0.2	8.5				

EARTHWORK FOR INTERSECTION RADII

INTERSECTION RADIUS QUADRANT	FLOODED AREAS SF	PAVEMENT THICKNESS FT	DISTANCE ABOVE OR BELOW EXISTING GROUND FT				CUT VOLUME CY	UNUSABLE PAVEMENT MATERIAL CY	FILL CY	EBS CY	EXCAVATION COMMON CY	EXPANDED FILL 1.42 CY	EXPANDED EBS BACKFILL 1.42 CY	MASS ORDINATE CY
NE	874.3	1.6	0.2				57.5	0.0	0.0	2.9	227.9	0.3	16.2	227.6
			SUBTOTALS				57.5	0.0	0.0	2.9				
			TOTALS				**227.9**	**0.0**	**0.2**	**11.4**	**227.9**	**0.3**	**16.2**	**227.6**

NOTES:

1) CUT END AREA INCLUDES UNUSABLE PAVEMENT MATERIAL.
2) UNUSABLE PAVEMENT MATERIAL INCLUDES UNDERLYING CONCRETE PAVEMENT AND ASPHALT PAVEMENT OVERLAY.THE EXISTING PAVEMENT STRUCTUREIS NOT SHOWN IN THE CROSS SECTIONS.
3) FILL END AREA DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) EBS = 5% OF CUT. EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN.
5) EXPANDED FILL = INCREMENTAL FILL * FILL FACTOR OF 1.25
6) EXPANDED EBS BACKFILL = INCREMENTAL EBS * EXPANSION FACTOR OF 1.25
7) MASS ORDINATE = CUMULATIVE EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL - (FILL * FILL FACTOR)

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S. PINE ST (SPI)						INCREMENTAL VOL (CY)(UNADJUSTED)				CUMULATIVE VOL (CY)			
STATION	DISTANCE	CUT END AREA (NOTE 1) SF	UNUSABLE PAVEMENT MATERIAL (NOTE 2) SF	FILL (NOTE 3) SF	EBS (NOTE 4) SF	CUT VOLUME (NOTE 1) CY	UNUSABLE PAVEMENT MATERIAL (NOTE 2) CY	FILL (NOTE 3) CY	EBS (NOTE 4) CY	EXCAVATION COMMON 1.00 CY	EXPANDED FILL 1.42 (NOTE 5) CY	EXPANDED EBS BACKFILL 1.42 (NOTE 6) CY	MASS ORDINATE (NOTE 7) CY
8+86 SPI		41.9	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8+90 SPI	5	41.9	0.0	0.0	2.1	7.0	0.0	0.0	0.3	7.0	0.0	0.5	7.0
9+00 SPI	10	49.6	0.0	0.3	2.5	17.0	0.0	0.1	0.8	23.9	0.1	1.7	23.9
9+10 SPI	10	66.0	0.0	0.3	3.3	21.4	0.0	0.1	1.1	45.4	0.2	3.2	45.1
9+20 SPI	10	90.4	0.0	0.0	4.5	29.0	0.0	0.0	1.4	74.3	0.3	5.3	74.0
9+30 SPI	10	94.4	0.0	0.0	4.7	34.2	0.0	0.0	1.7	108.6	0.3	7.7	108.3
9+40 SPI	10	100.0	0.0	0.0	5.0	36.0	0.0	0.0	1.8	144.6	0.3	10.3	144.3
9+50 SPI	10	103.8	0.0	0.0	5.2	37.7	0.0	0.0	1.9	182.3	0.3	12.9	182.0
9+60 SPI	10	77.2	0.0	0.0	3.9	33.5	0.0	0.0	1.7	215.8	0.3	15.3	215.6
9+70 SPI	10	48.6	0.0	0.0	2.4	23.3	0.0	0.0	1.2	239.2	0.3	17.0	238.9
9+76 SPI	6	44.4	0.0	0.0	2.2	10.3	0.0	0.0	0.5	249.5	0.3	17.7	249.2
9+79 SPI	3	44.4	0.0	0.0	2.2	5.3	0.0	0.0	0.3	254.8	0.3	18.1	254.6
				SUBTOTALS		254.8	0.0	0.2	12.7				

EARTHWORK FOR INTERSECTION RADII

INTERSECTION RADIUS QUADRANT	FLOODED AREAS SF	PAVEMENT THICKNESS FT	DISTANCE ABOVE OR BELOW EXISTING GROUND FT				CUT VOLUME CY	UNUSABLE PAVEMENT MATERIAL CY	FILL CY	EBS CY	EXCAVATION COMMON CY	EXPANDED FILL 1.42 CY	EXPANDED EBS BACKFILL 1.42 CY	MASS ORDINATE CY
SW	1519.8	1.6	0.5				121.4	0.0	0.0	6.1	376.2	0.3	26.7	375.9
			SUBTOTALS				121.4	0.0	0.0	6.1				
			TOTALS				**376.2**	**0.0**	**0.2**	**18.8**	**376.2**	**0.3**	**26.7**	**375.9**

NOTES:

1) CUT END AREA INCLUDES UNUSABLE PAVEMENT MATERIAL.
2) UNUSABLE PAVEMENT MATERIAL INCLUDES UNDERLYING CONCRETE PAVEMENT AND ASPHALT PAVEMENT OVERLAY.THE EXISTING PAVEMENT STRUCTUREIS NOT SHOWN IN THE CROSS SECTIONS.
3) FILL END AREA DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) EBS = 5% OF CUT. EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN.
5) EXPANDED FILL = INCREMENTAL FILL * FILL FACTOR OF 1.25
6) EXPANDED EBS BACKFILL = INCREMENTAL EBS * EXPANSION FACTOR OF 1.25
7) MASS ORDINATE = CUMULATIVE EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL - (FILL * FILL FACTOR)

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PROJECT NO: 6190-16-72 | HWY: STH 116 | COUNTY: WINNEBAGO | EARTHWORK - S. PINE ST. (SPI LINE) | SHEET 286 | E

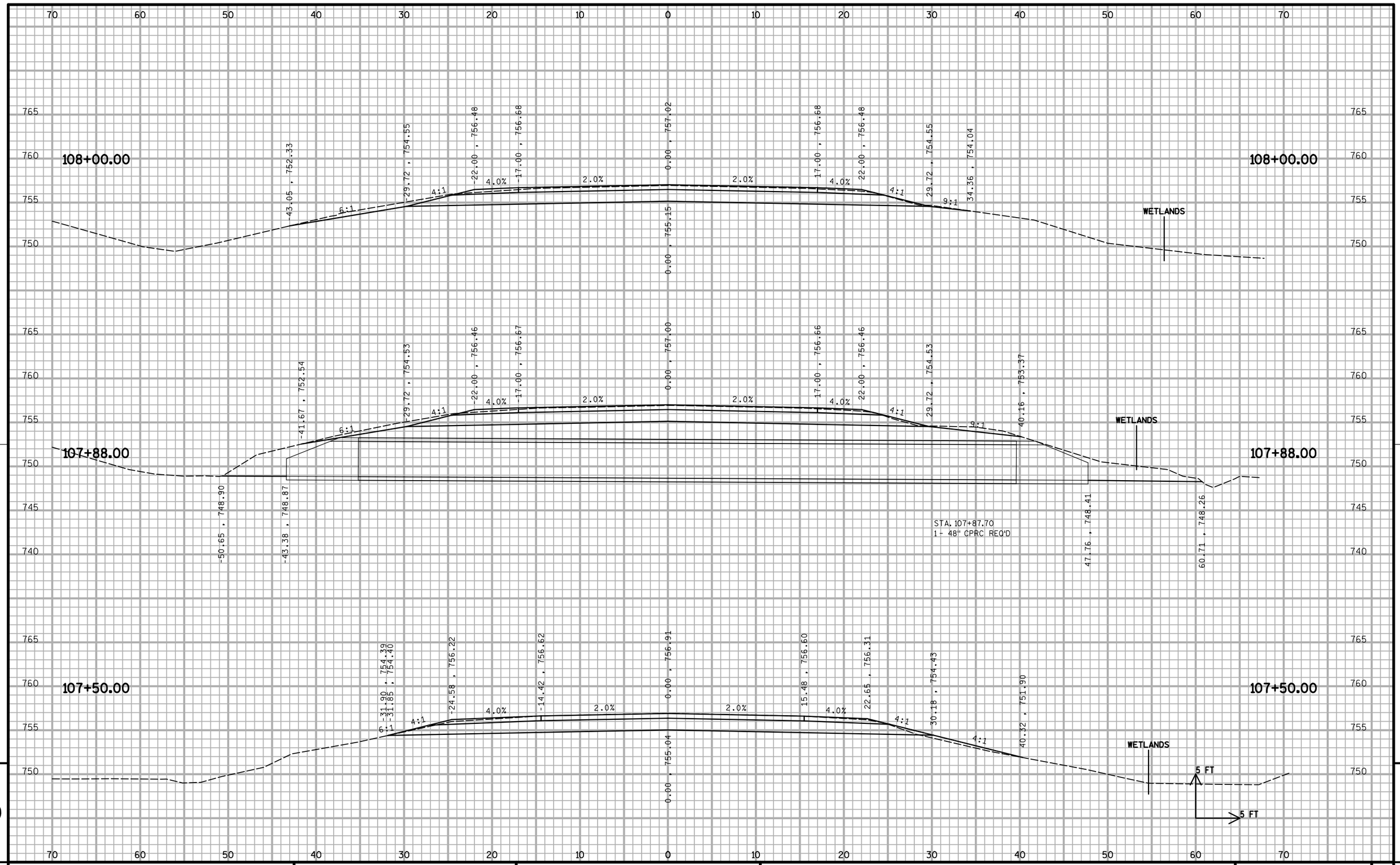
FOX TRAIL (FO)						INCREMENTAL VOL (CY)(UNADJUSTED)				CUMULATIVE VOL (CY)			
STATION	DISTANCE	CUT END AREA (NOTE 1) SF	UNUSABLE PAVEMENT MATERIAL (NOTE 2) SF	FILL (NOTE 3) SF	EBS (NOTE 4) SF	CUT VOLUME (NOTE 1) CY	UNUSABLE PAVEMENT MATERIAL (NOTE 2) CY	FILL (NOTE 3) CY	EBS (NOTE 4) CY	EXCAVATION COMMON 1.00 CY	EXPANDED FILL 1.42 (NOTE 5) CY	EXPANDED EBS BACKFILL 1.42 (NOTE 6) CY	MASS ORDINATE (NOTE 7) CY
11+00 FO		71.3	0.0	0.8	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11+10 FO	10	70.8	0.0	1.2	3.5	26.3	0.0	0.4	1.3	26.3	0.5	1.9	25.8
11+20 FO	10	70.9	0.0	1.9	3.5	26.2	0.0	0.6	1.3	52.5	1.3	3.7	51.2
11+30 FO	10	71.2	0.0	3.0	3.6	26.3	0.0	0.9	1.3	78.9	2.7	5.6	76.2
11+40 FO	10	72.3	0.0	3.2	3.6	26.6	0.0	1.1	1.3	105.4	4.3	7.5	101.1
11+50 FO	10	72.9	0.0	4.7	3.6	26.9	0.0	1.5	1.3	132.3	6.4	9.4	125.9
11+60 FO	10	59.2	0.0	0.0	3.0	24.5	0.0	0.9	1.2	156.7	7.6	11.1	149.2
12+50 FO		98.6	0.0	0.0	4.9	0.0	0.0	0.0	0.0	156.7	7.6	11.1	149.2
12+60 FO	10	40.9	0.0	0.0	2.0	25.8	0.0	0.0	1.3	182.6	7.6	13.0	175.0
12+70 FO	10	39.8	0.0	2.1	2.0	14.9	0.0	0.4	0.7	197.5	8.1	14.0	189.4
12+80 FO	10	40.8	0.0	3.3	2.0	14.9	0.0	1.0	0.7	212.4	9.6	15.1	202.9
12+90 FO	10	42.3	0.0	3.5	2.1	15.4	0.0	1.3	0.8	227.8	11.4	16.2	216.5
13+00 FO	10	43.6	0.0	3.9	2.2	15.9	0.0	1.4	0.8	243.7	13.3	17.3	230.4
13+10 FO	10	56.4	0.0	7.5	2.8	18.5	0.0	2.1	0.9	262.2	16.3	18.6	245.9
13+20 FO	10	36.8	0.0	2.5	1.8	17.2	0.0	1.9	0.9	279.5	18.9	19.8	260.5
13+30 FO	10	31.1	0.0	0.6	1.6	12.6	0.0	0.6	0.6	292.0	19.7	20.7	272.3
13+40 FO	10	28.2	0.0	0.2	1.4	11.0	0.0	0.1	0.5	303.0	19.9	21.5	283.1
13+47 FO	7	28.2	0.0	0.2	1.4	7.3	0.0	0.0	0.4	310.3	20.0	22.0	290.3
				SUBTOTALS		310.3	0.0	14.1	15.5				

EARTHWORK FOR INTERSECTION RADII

INTERSECTION RADIUS QUADRANT	FLOODED AREAS SF	PAVEMENT THICKNESS FT	DISTANCE ABOVE OR BELOW EXISTING GROUND FT				CUT VOLUME CY	UNUSABLE PAVEMENT MATERIAL CY	FILL CY	EBS CY	EXCAVATION COMMON CY	EXPANDED FILL 1.42 CY	EXPANDED EBS BACKFILL 1.42 CY	MASS ORDINATE CY
EAST HALF	4055.12	1.6	-0.1				224.9	0.0	0.0	11.2	535.2	20.0	38.0	515.2
WEST HALF	4709.93	1.6	-0.3				226.6	0.0	0.0	11.3	761.8	20.0	54.1	741.8
DRIVEWAY	621.29	1.0	0.1				25.7	0.0	0.0	1.3	787.5	20.0	55.9	767.5
			SUBTOTALS				477.2	0.0	0.0	23.9				
			TOTALS				**787.5**	**0.0**	**14.1**	**39.4**	**787.5**	**20.0**	**55.9**	**767.5**

NOTES:

1) CUT END AREA INCLUDES UNUSABLE PAVEMENT MATERIAL.
2) UNUSABLE PAVEMENT MATERIAL INCLUDES UNDERLYING CONCRETE PAVEMENT AND ASPHALT PAVEMENT OVERLAY.THE EXISTING PAVEMENT STRUCTUREIS NOT SHOWN IN THE CROSS SECTIONS.
3) FILL END AREA DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL
4) EBS = 5% OF CUT. EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN.
5) EXPANDED FILL = INCREMENTAL FILL * FILL FACTOR OF 1.25
6) EXPANDED EBS BACKFILL = INCREMENTAL EBS * EXPANSION FACTOR OF 1.25
7) MASS ORDINATE = CUMULATIVE EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL - (FILL * FILL FACTOR)



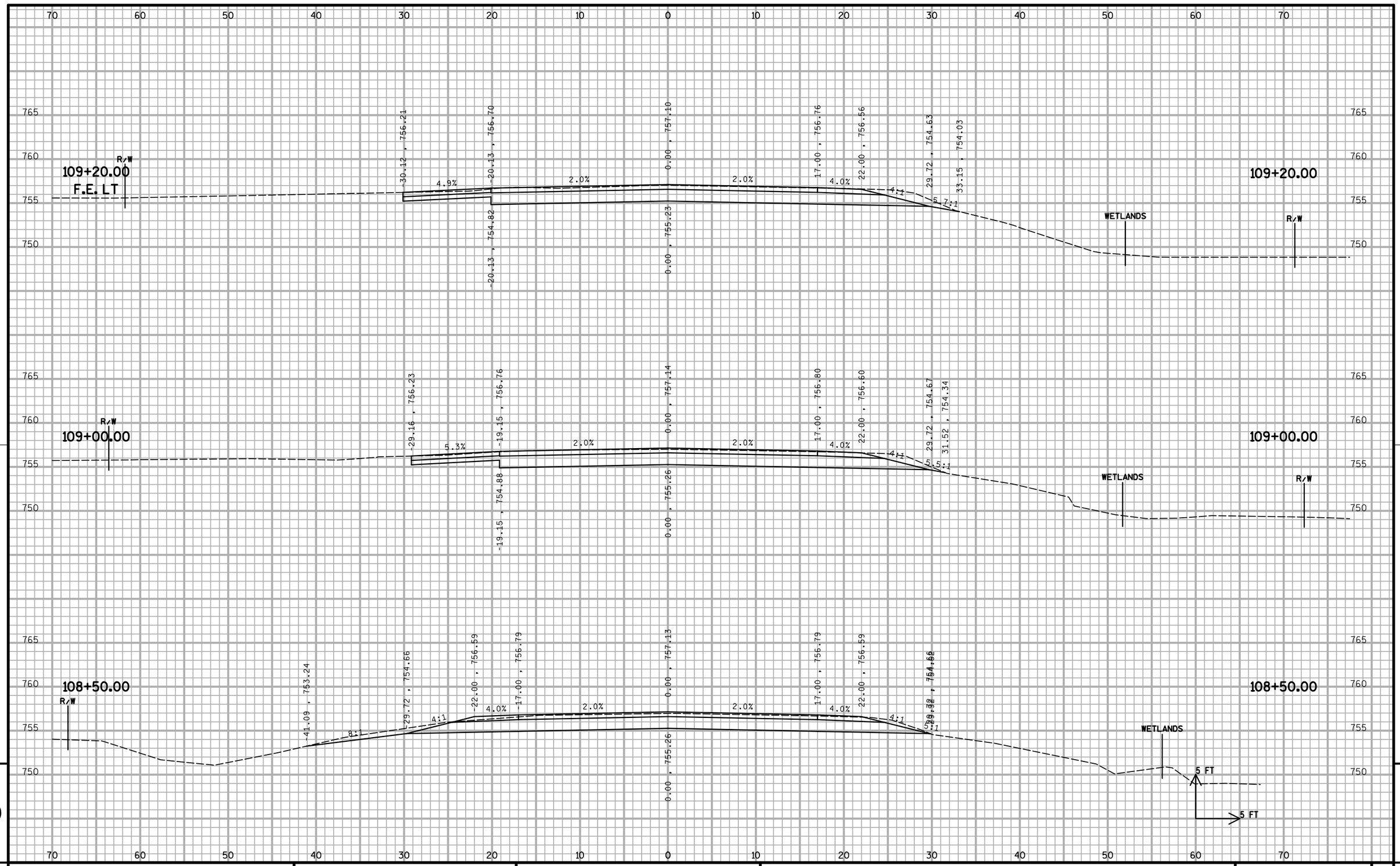
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 288	E

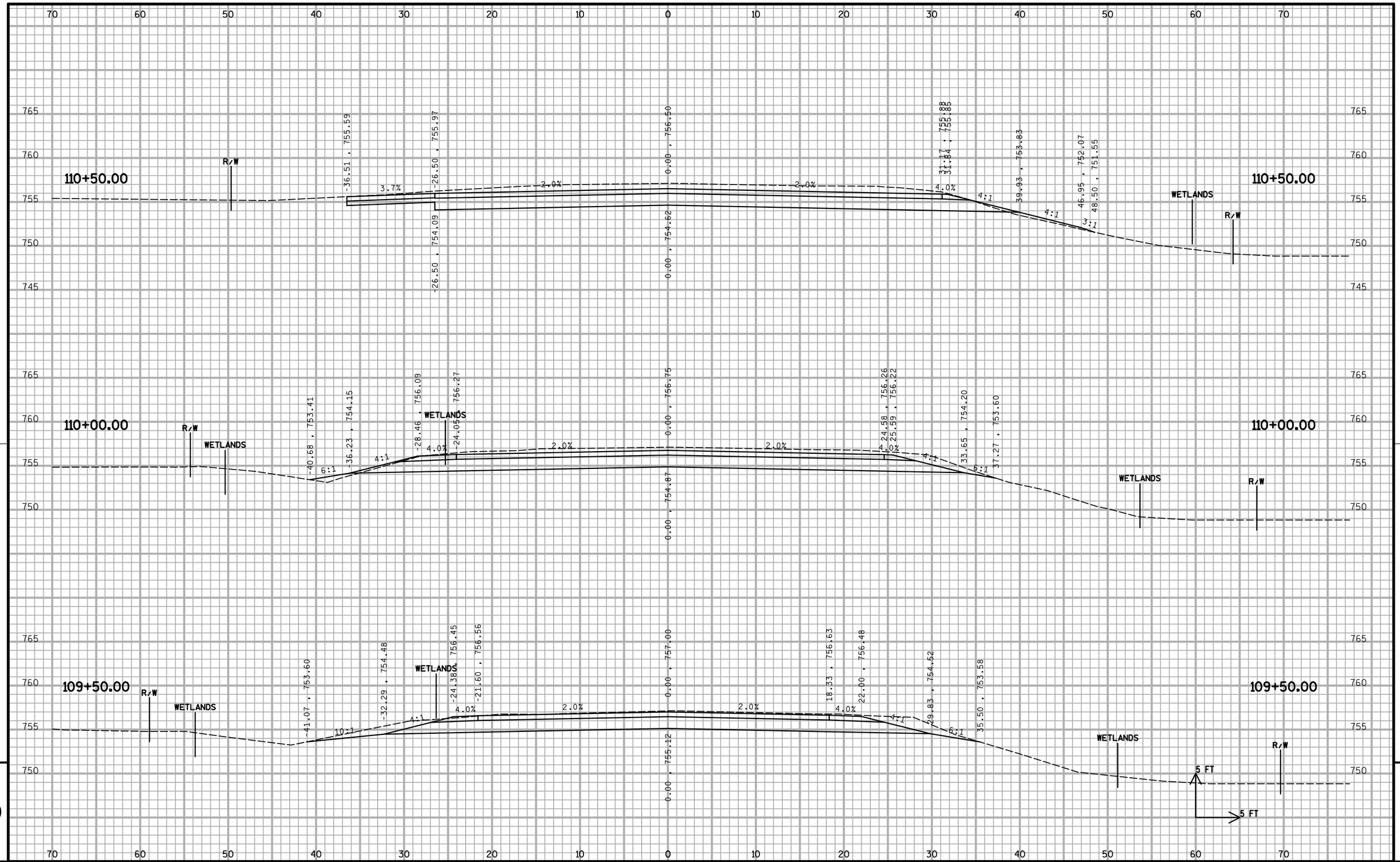
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WISDOT/CADDS SHEET 21



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\090201_xs.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



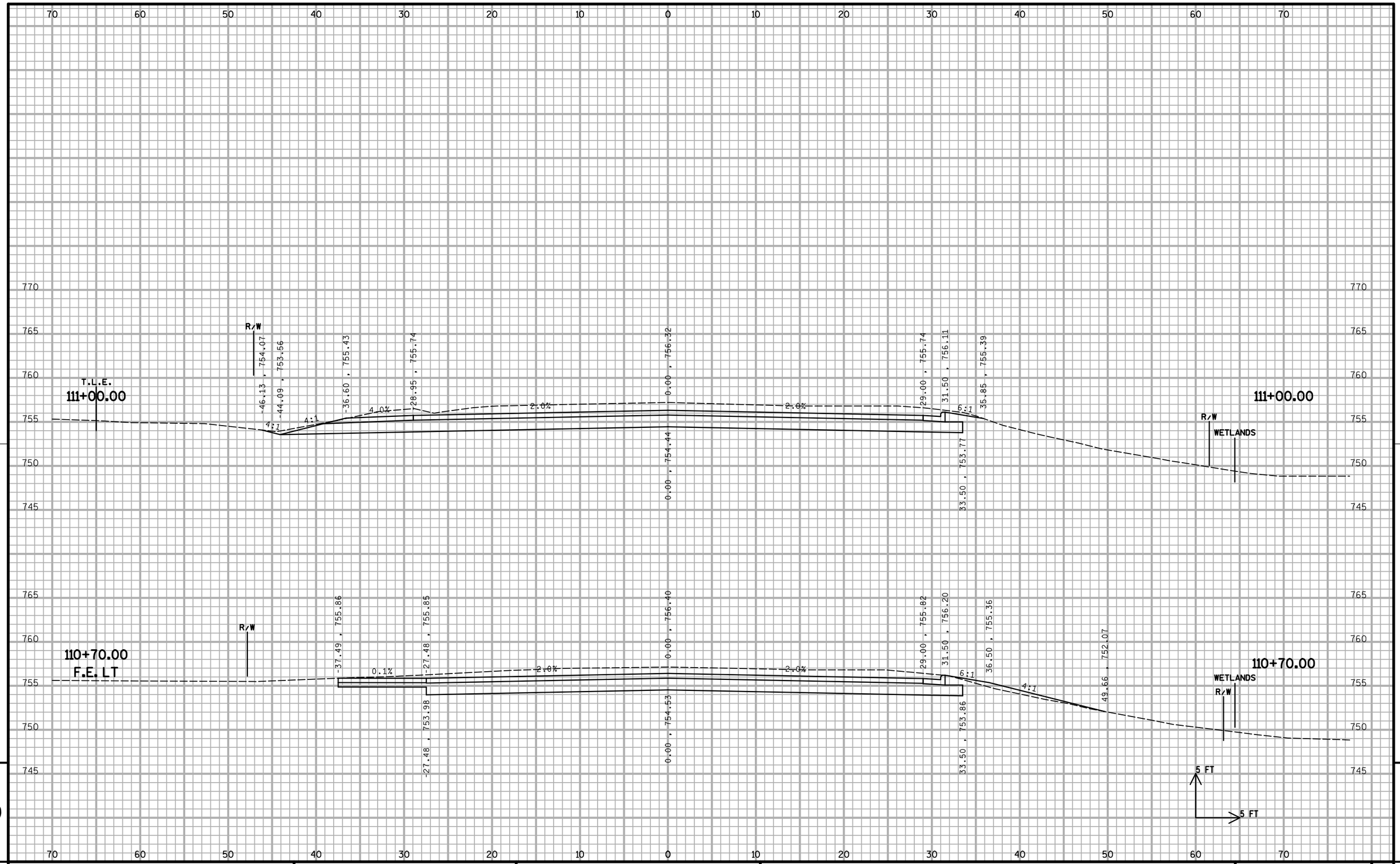
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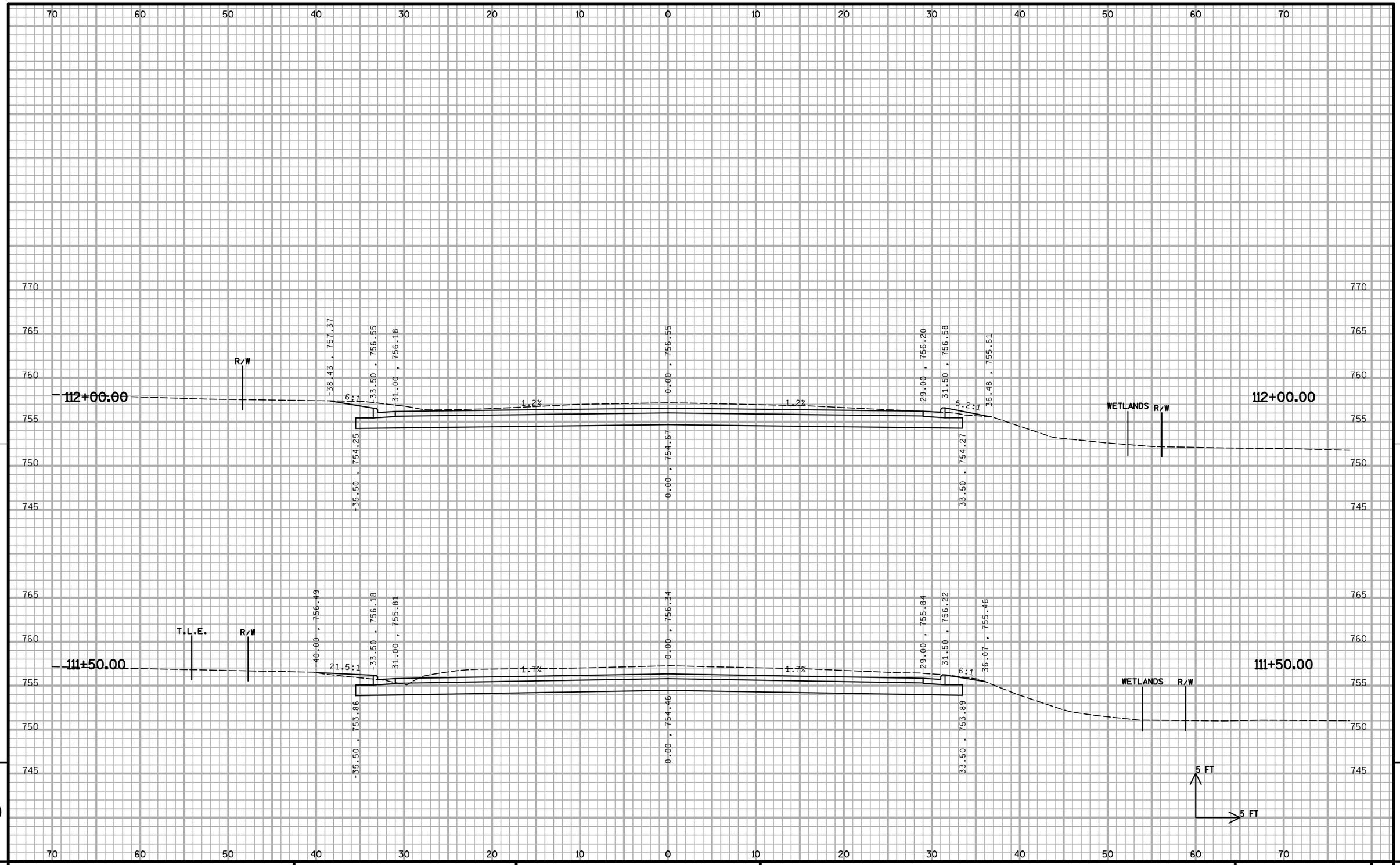
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WISDOT/CADDS SHEET 21



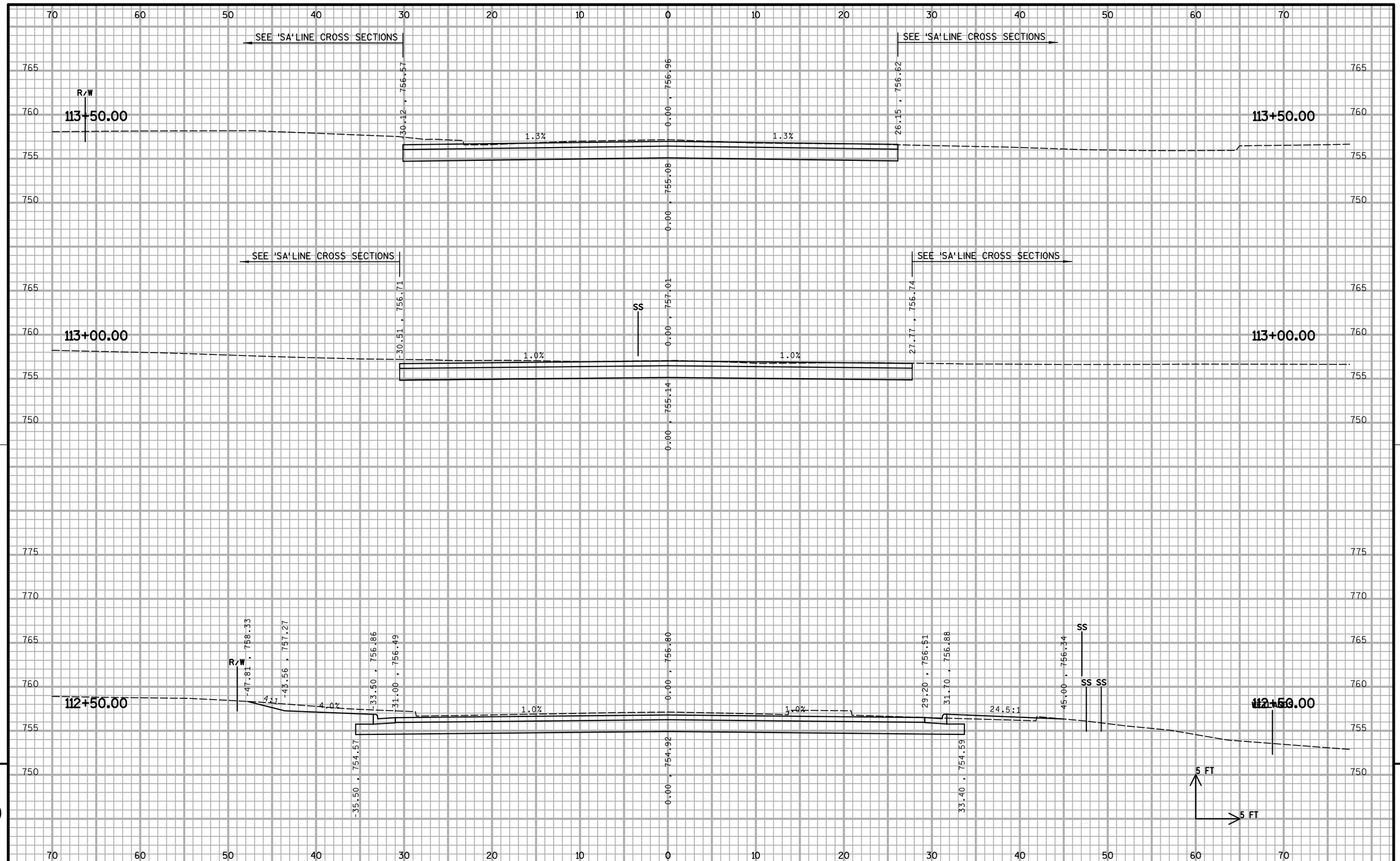
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 292	E

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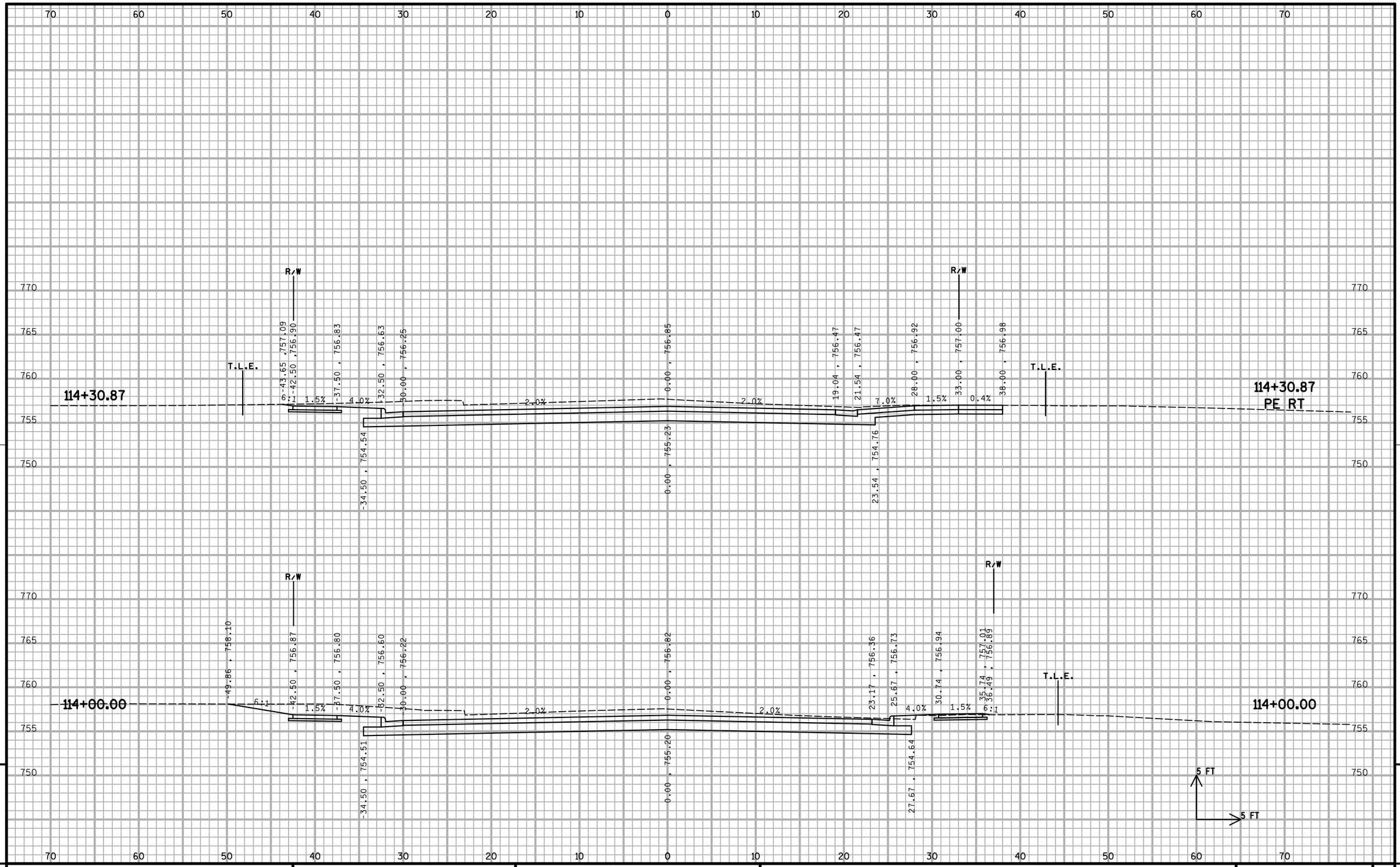


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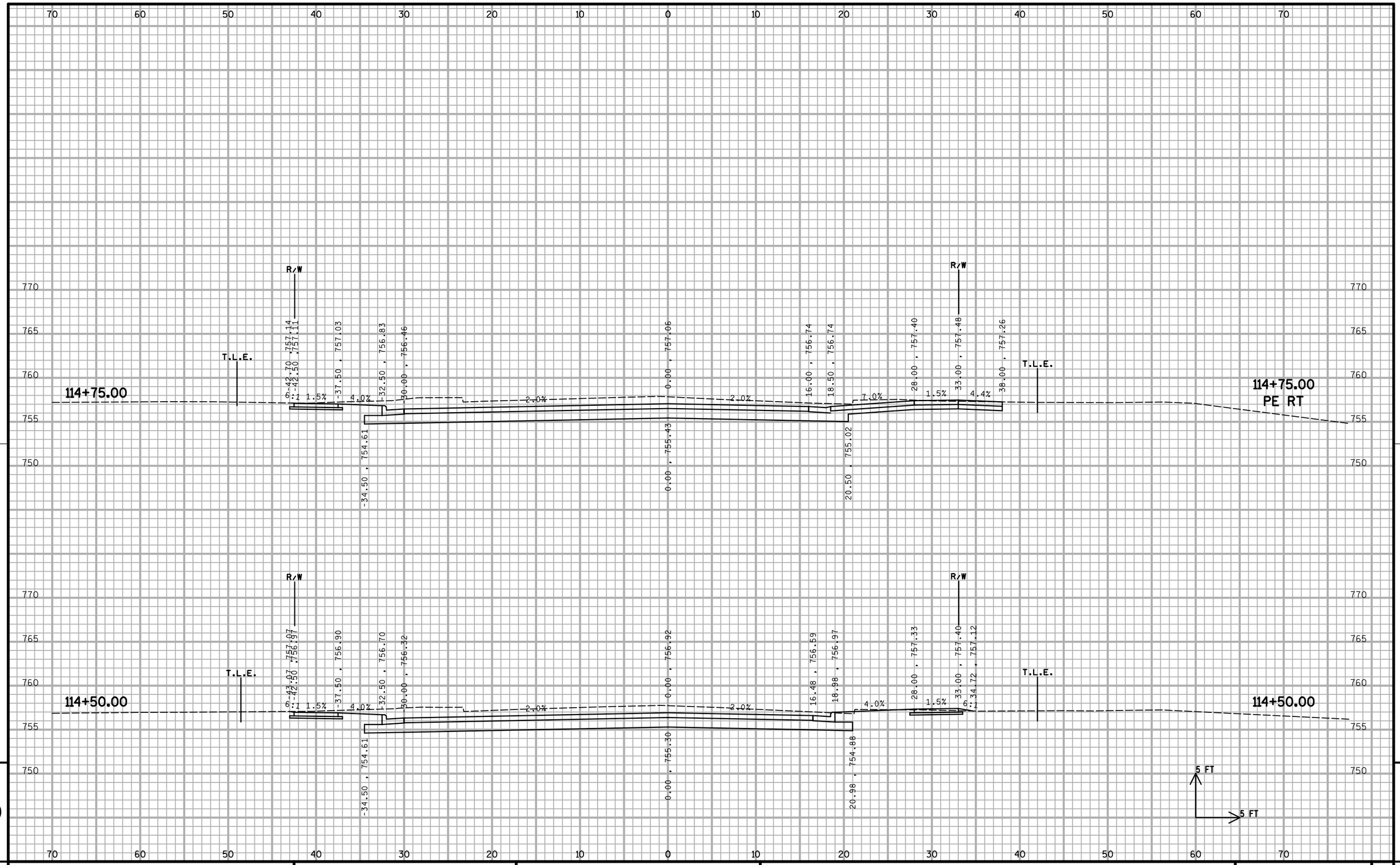
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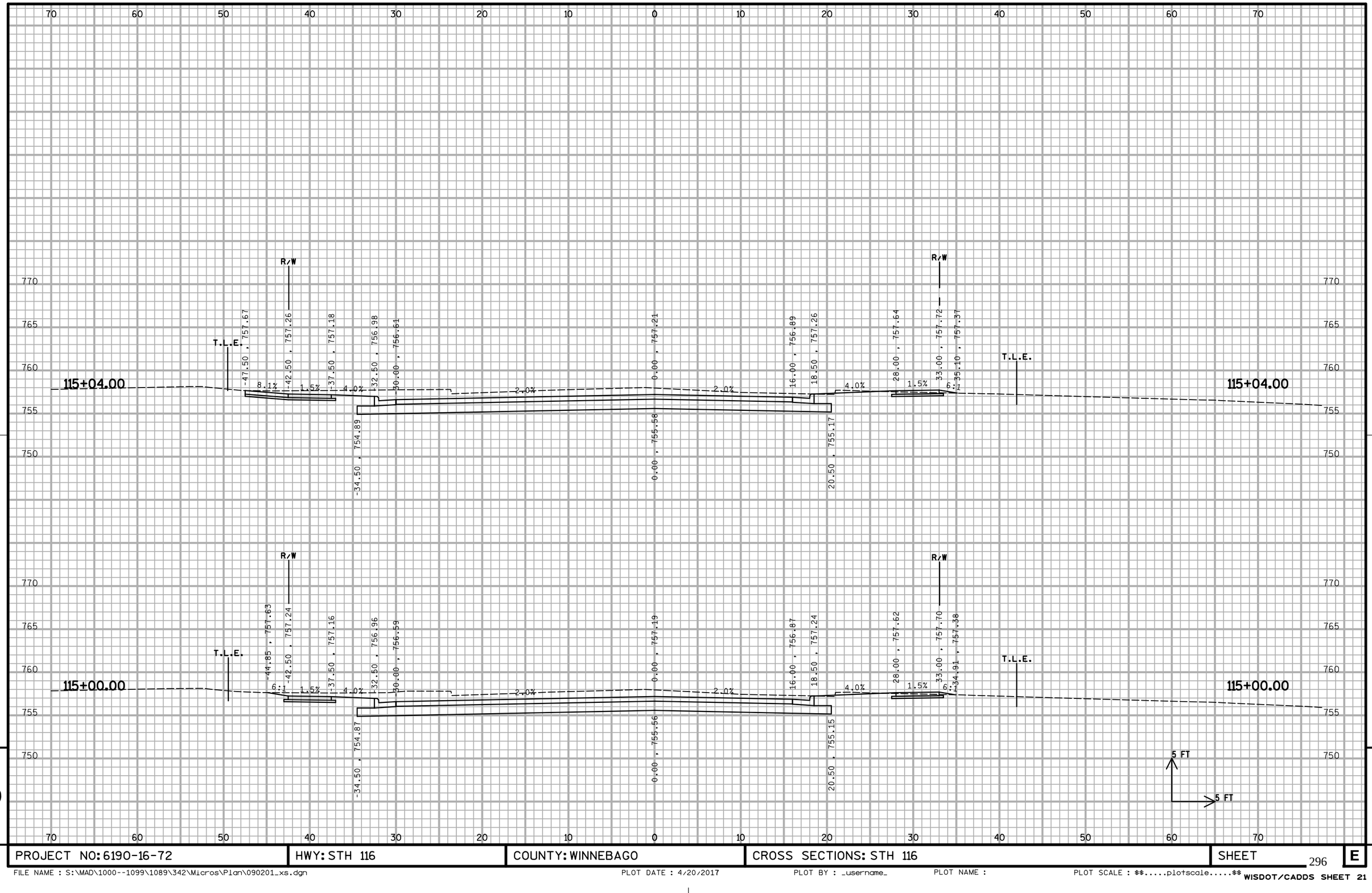


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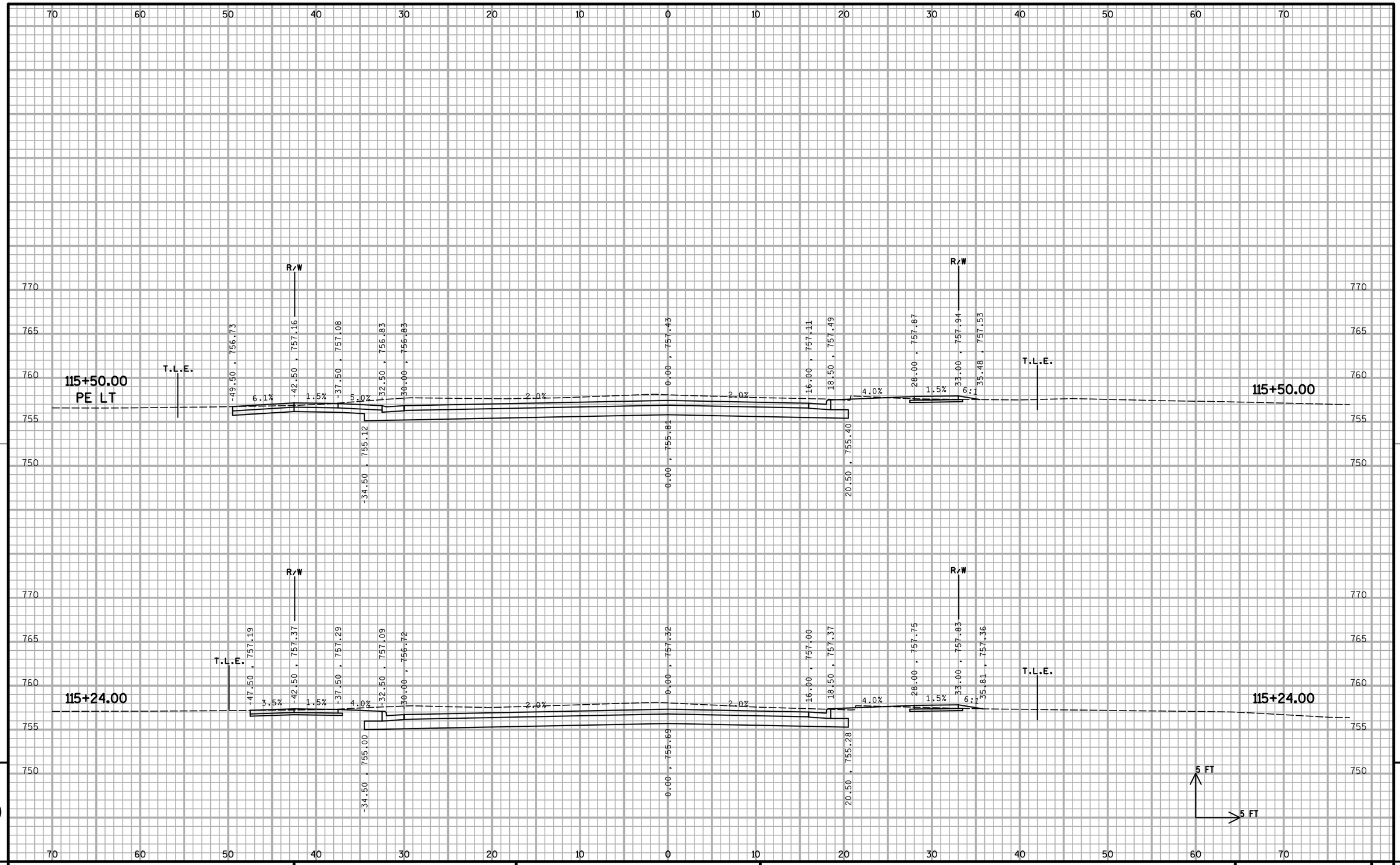
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 296	E

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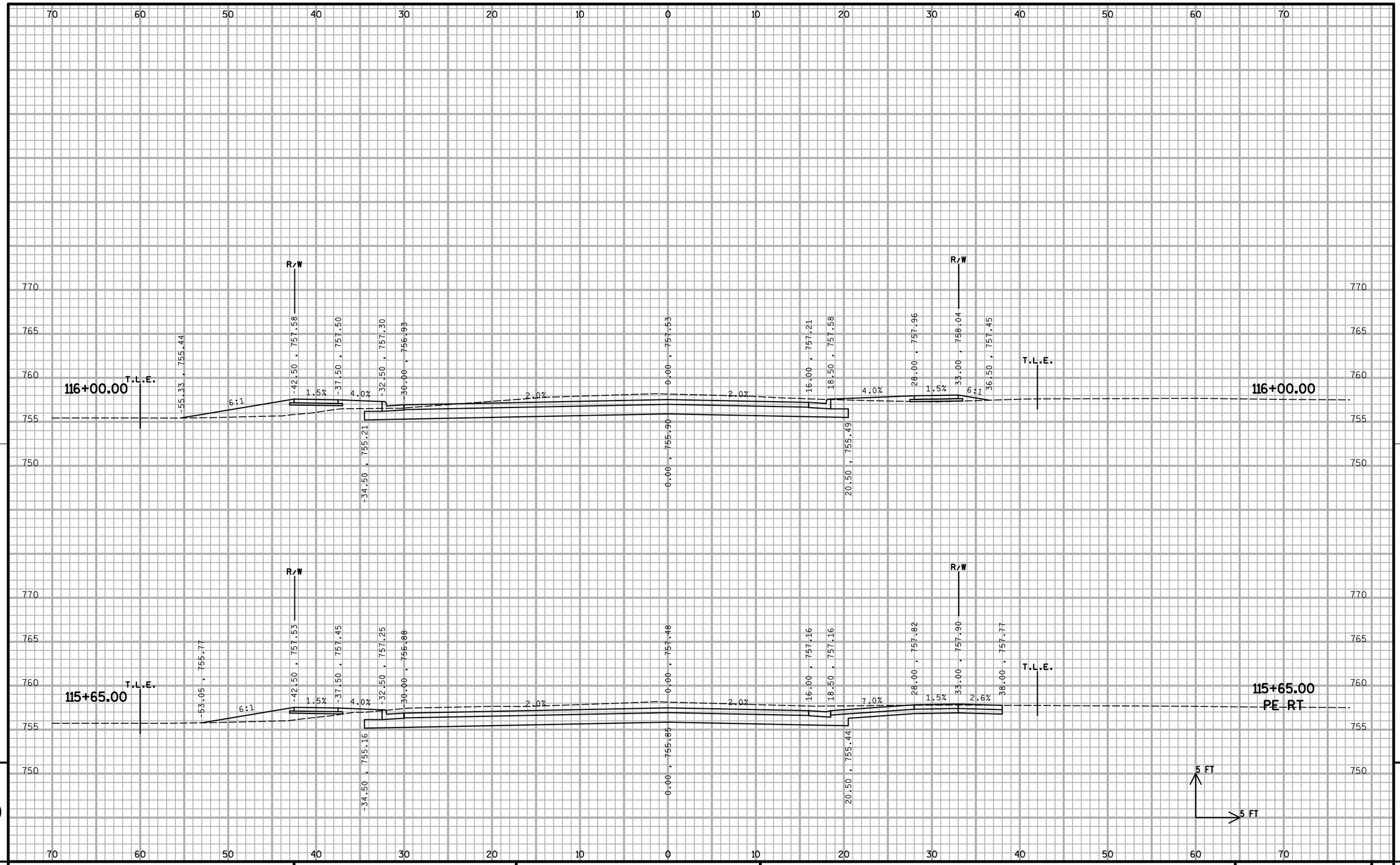


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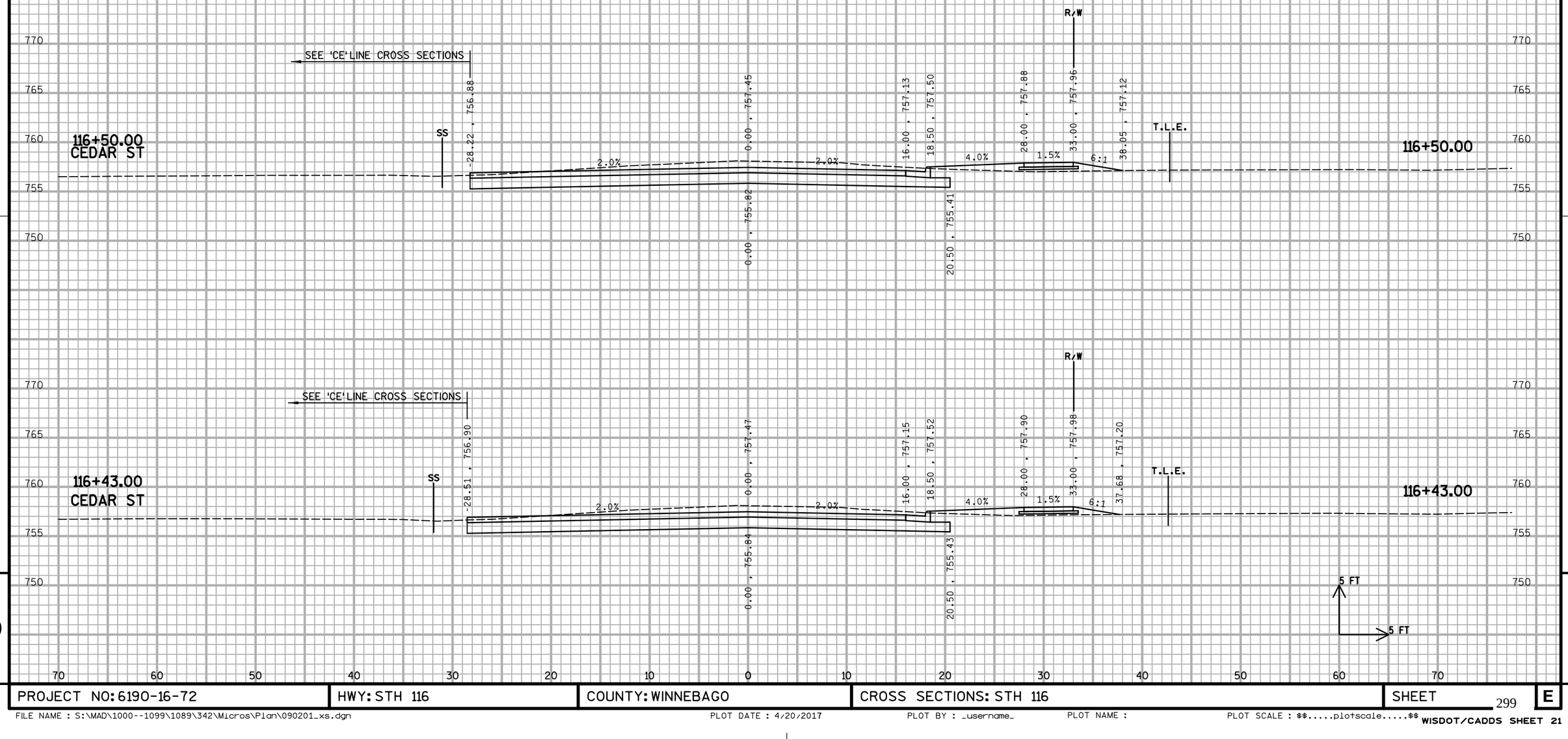
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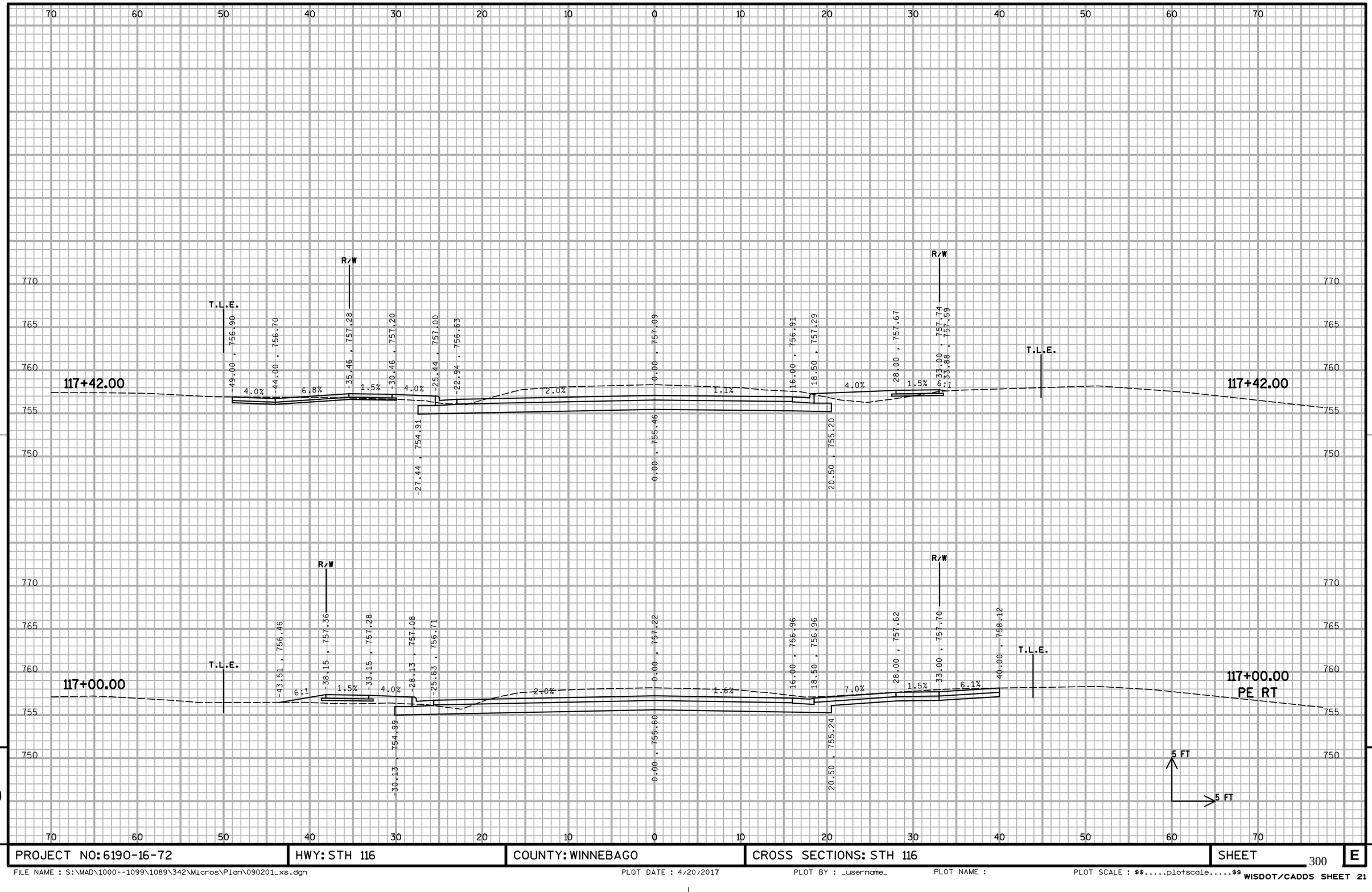
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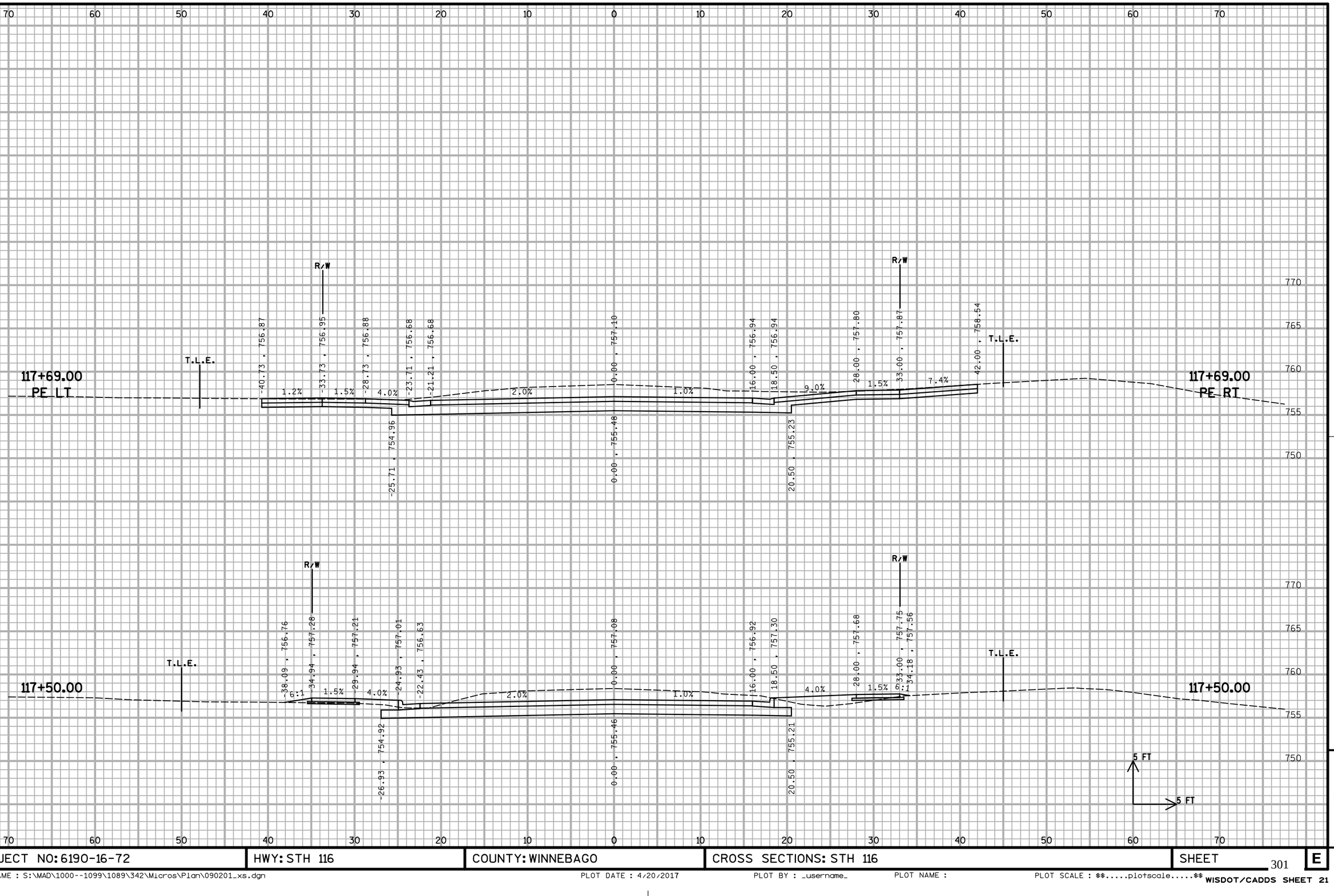
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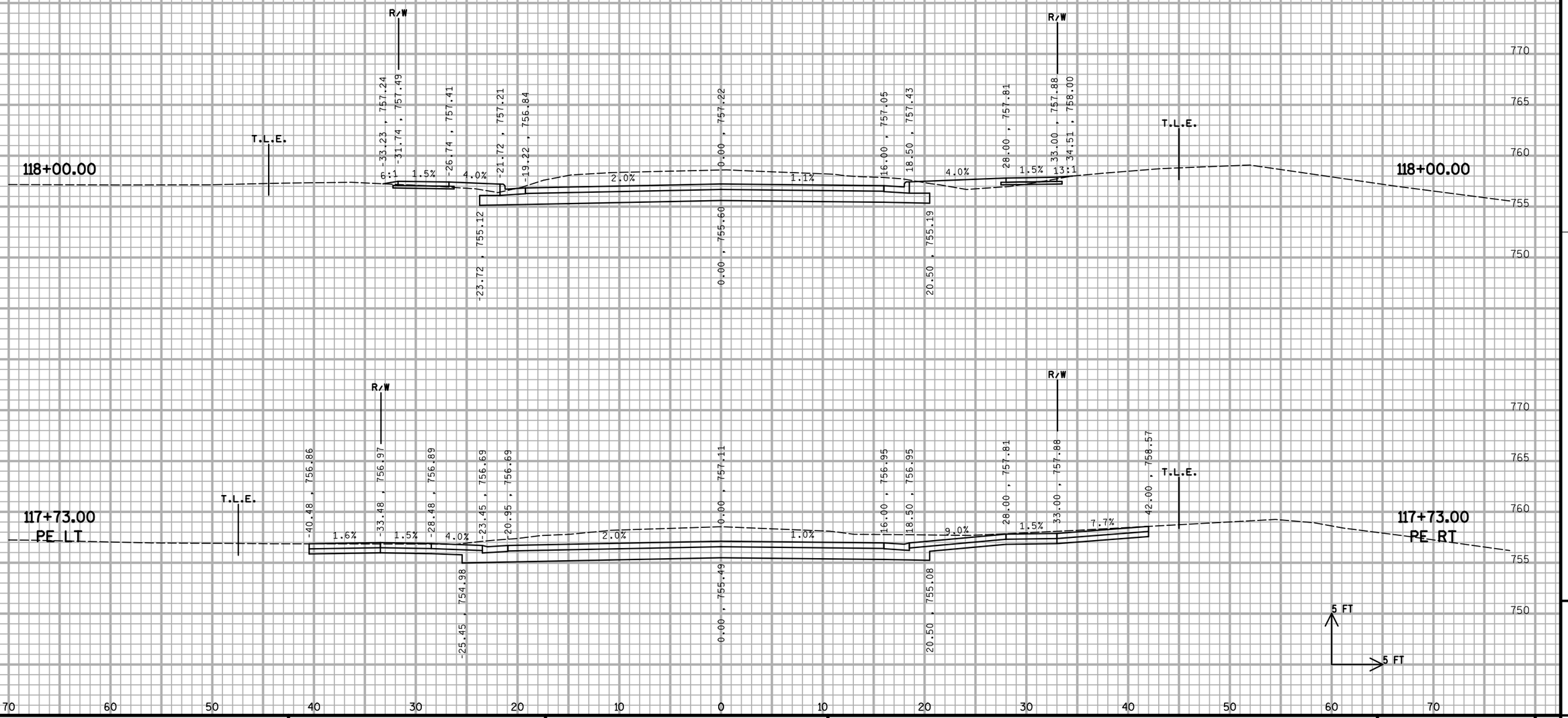
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 301	E

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WISDOT/CADDS SHEET 21

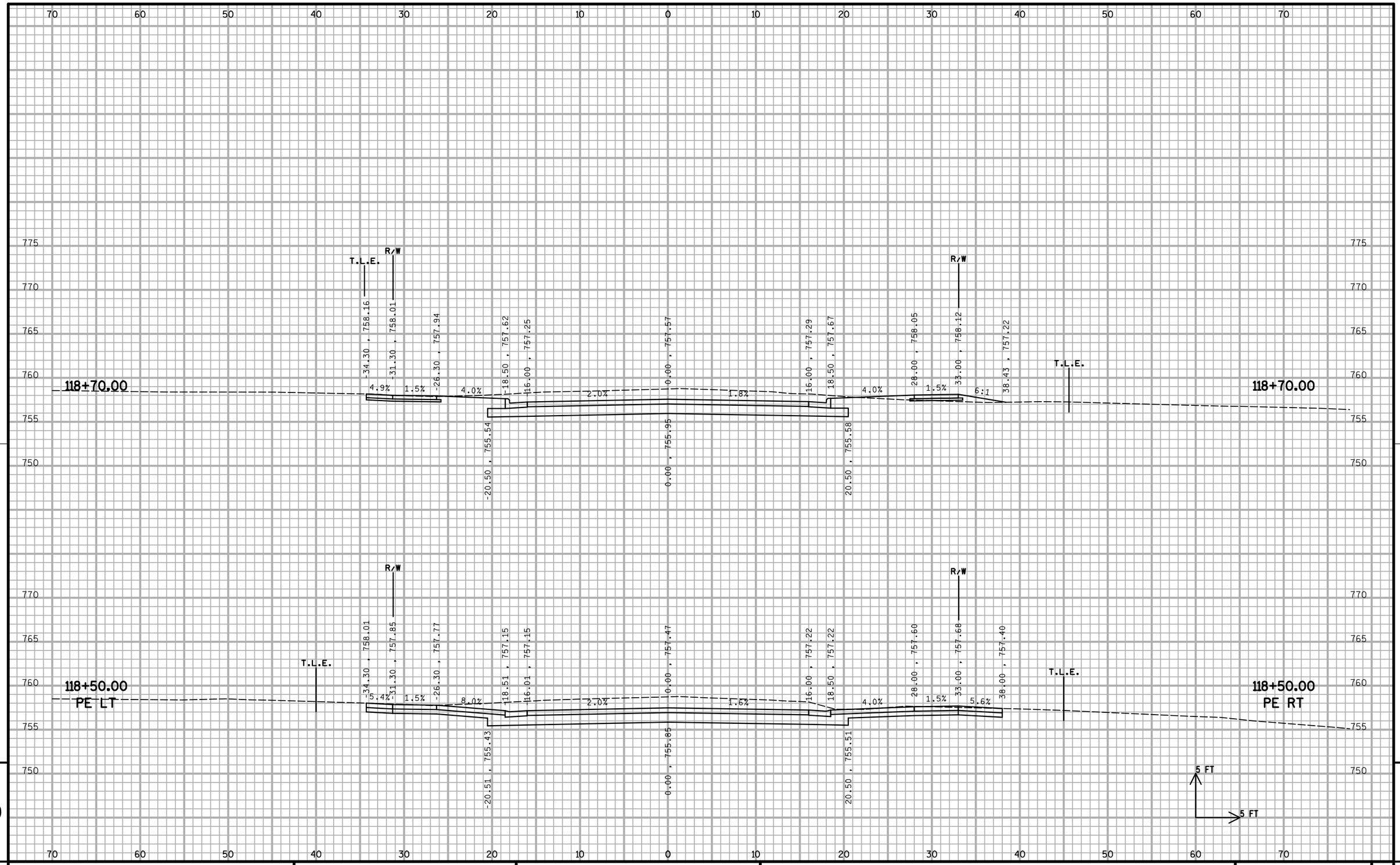


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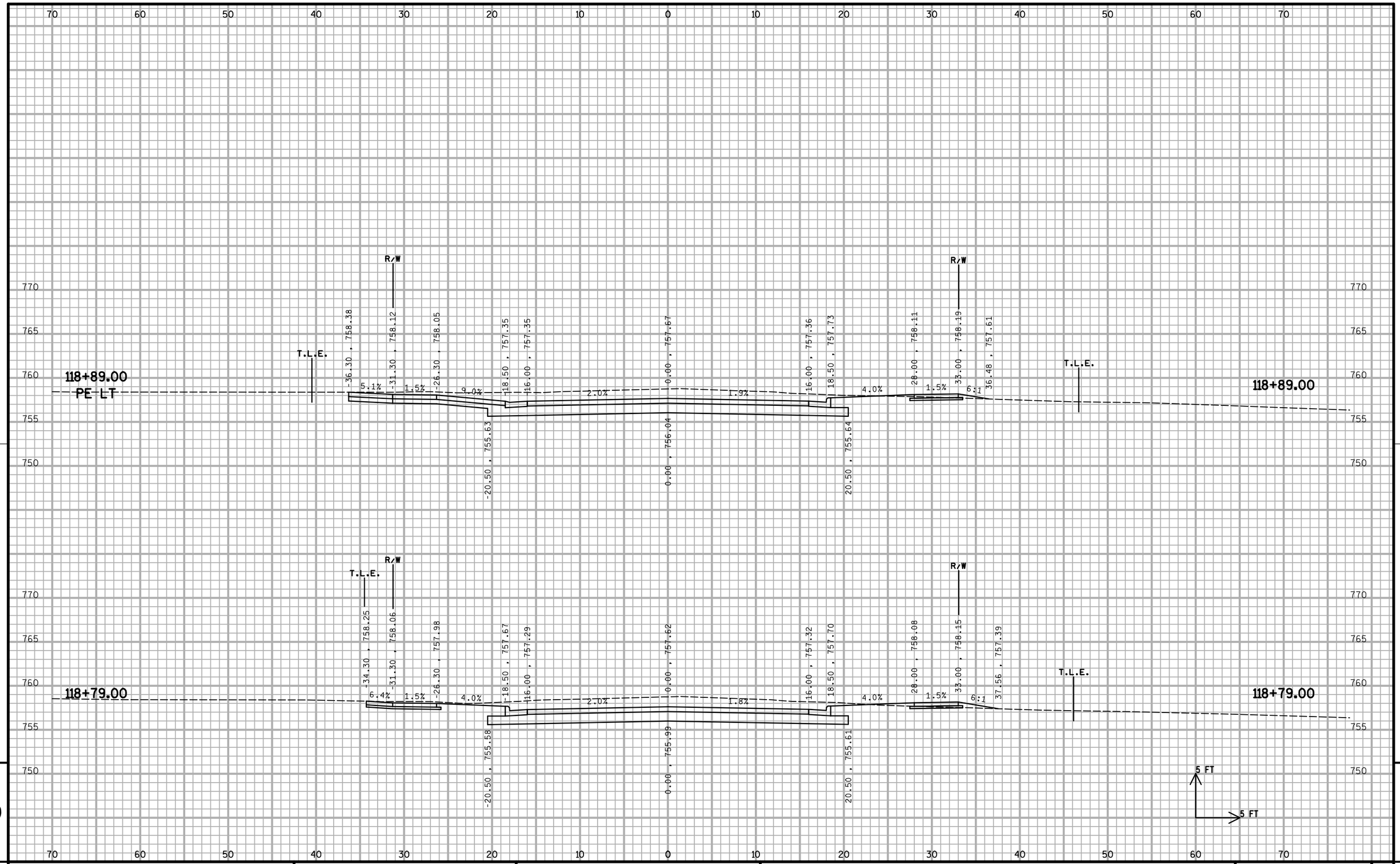
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET	E

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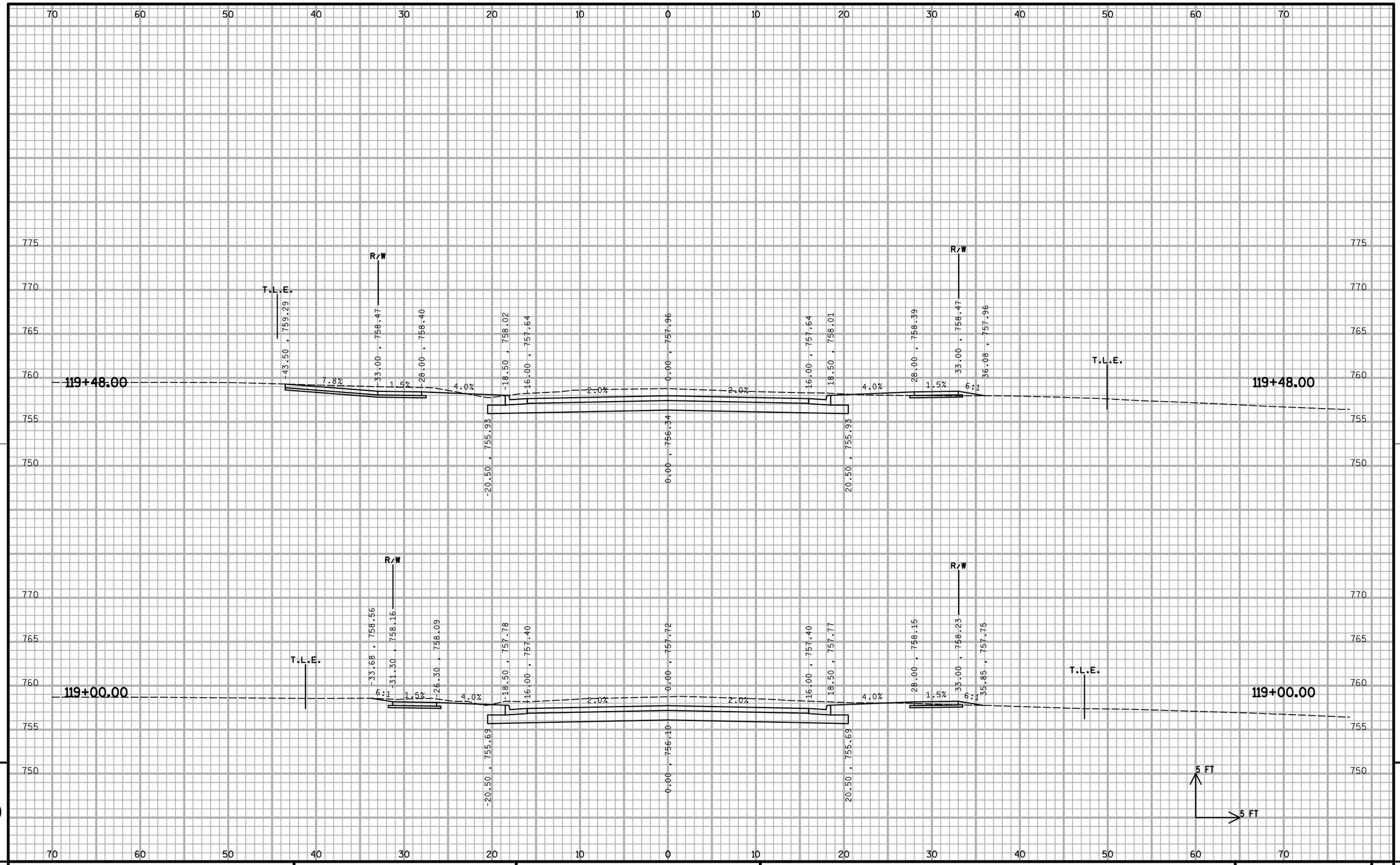


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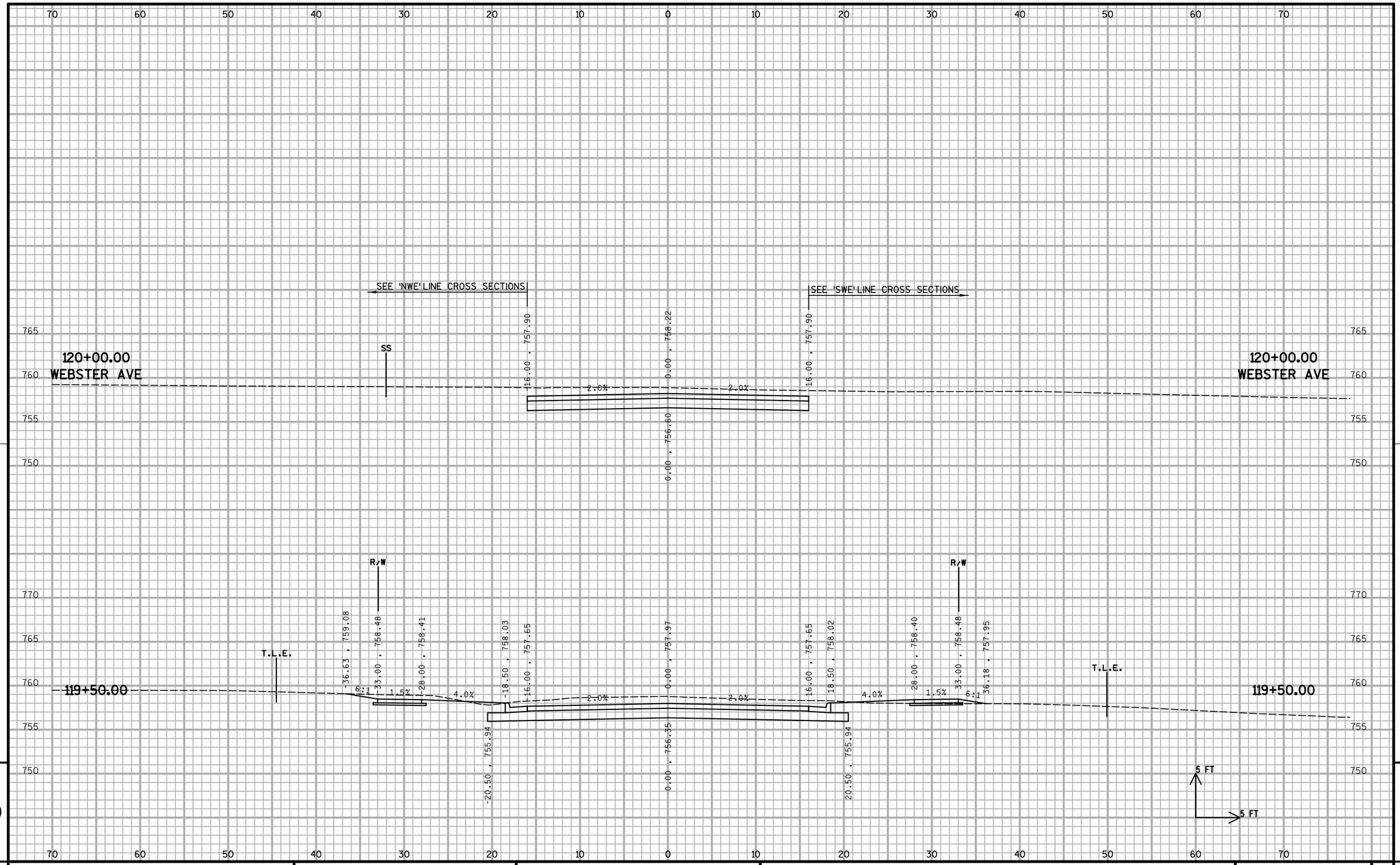


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 305	E

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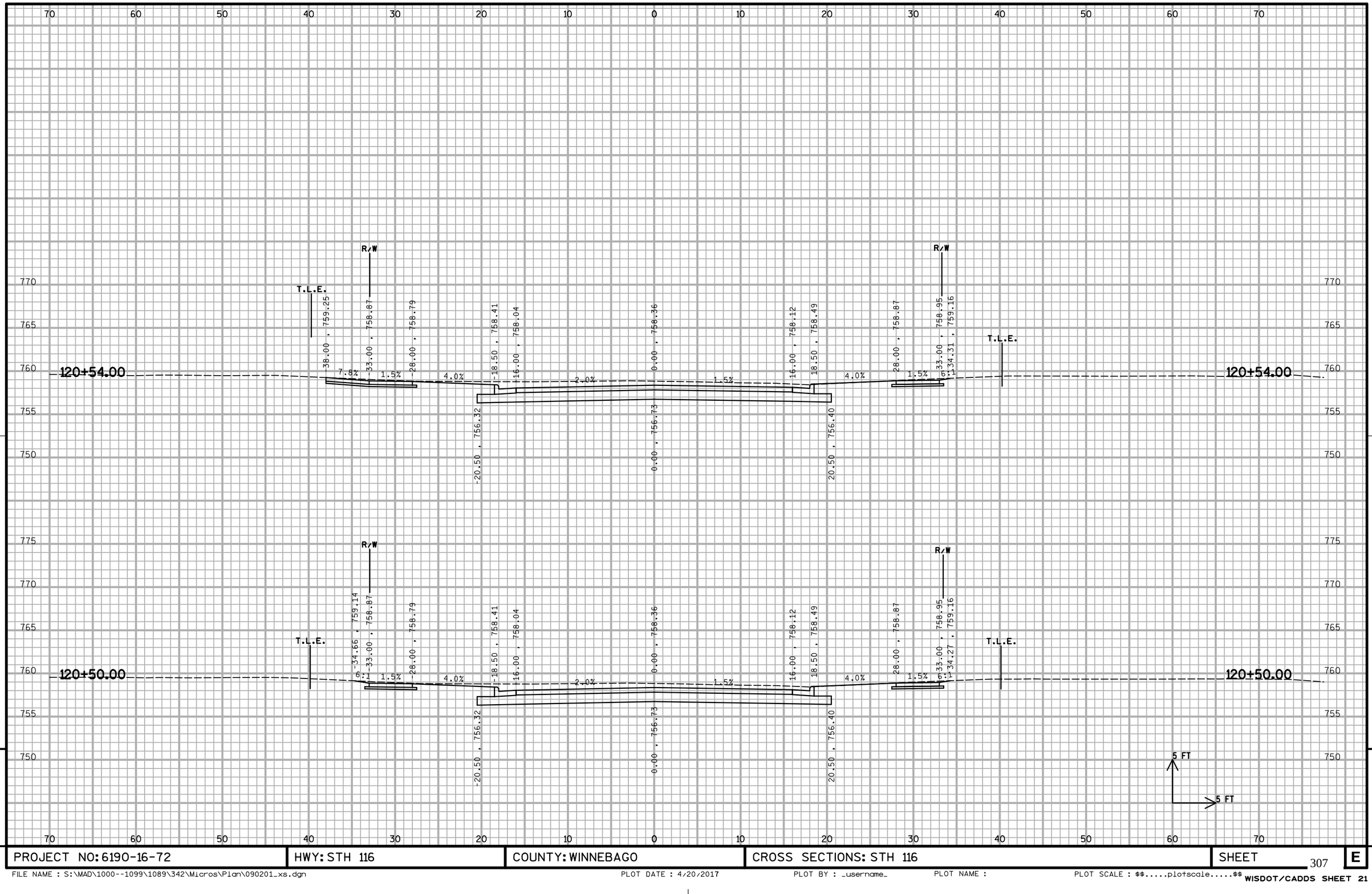


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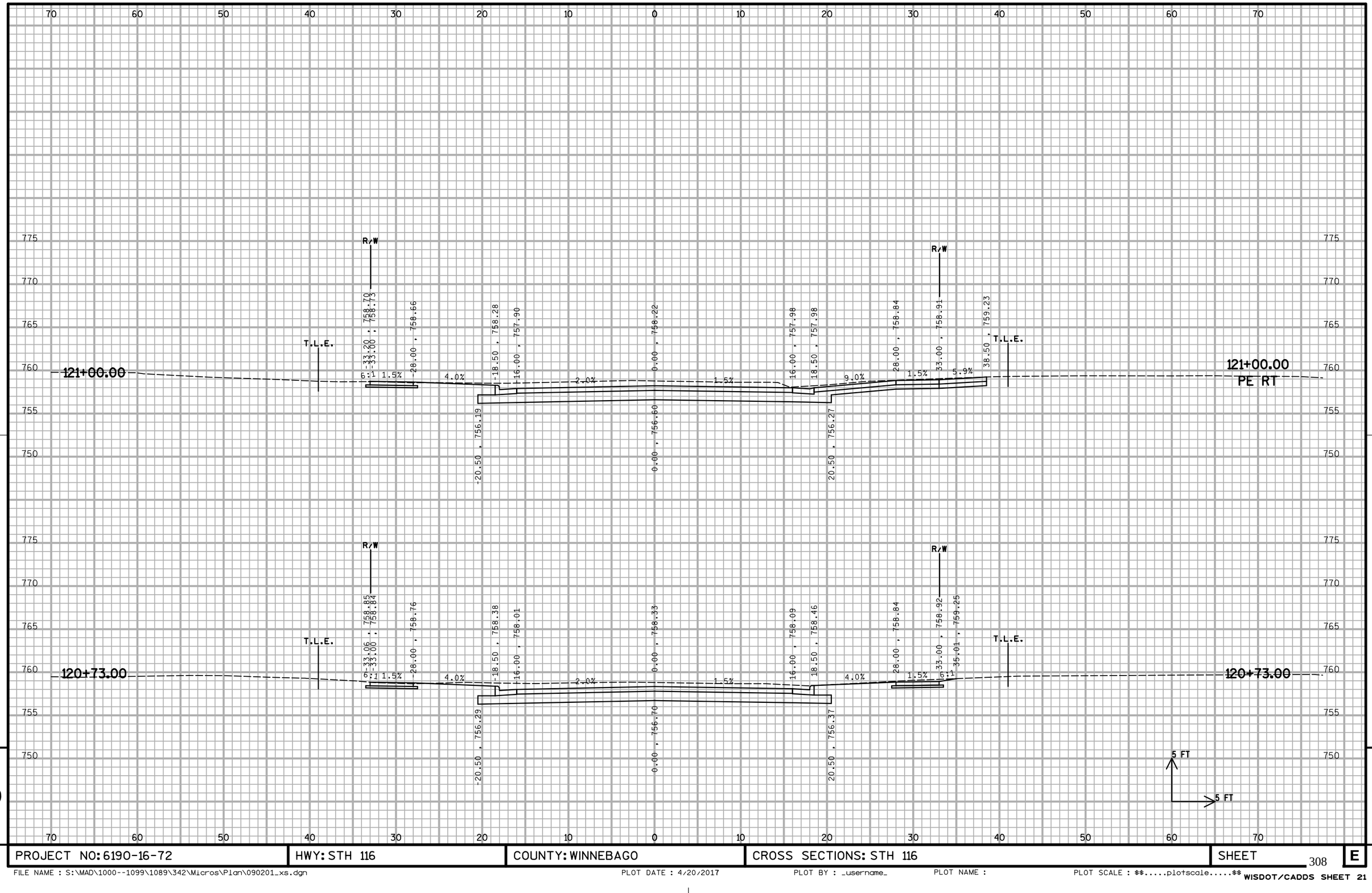
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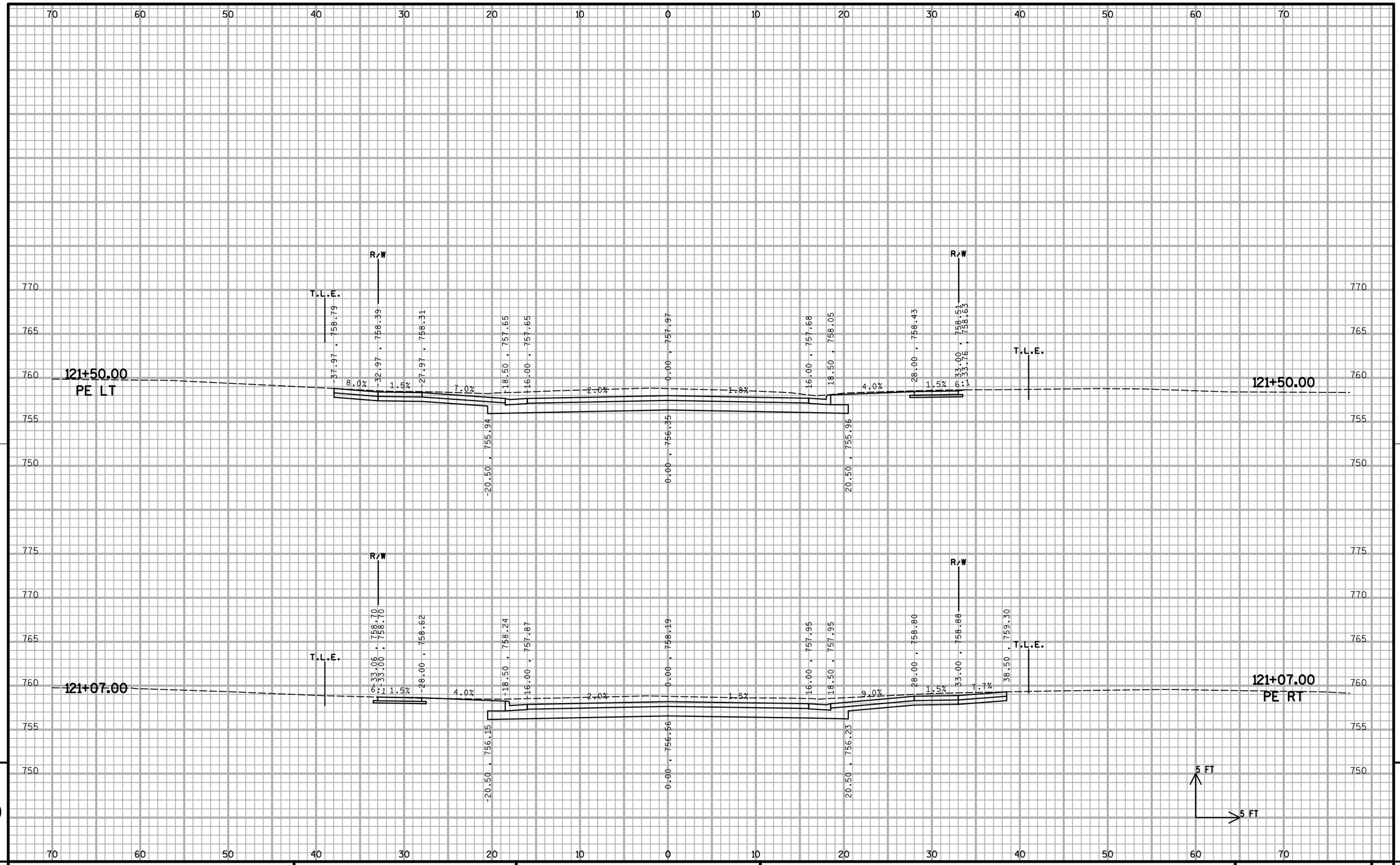
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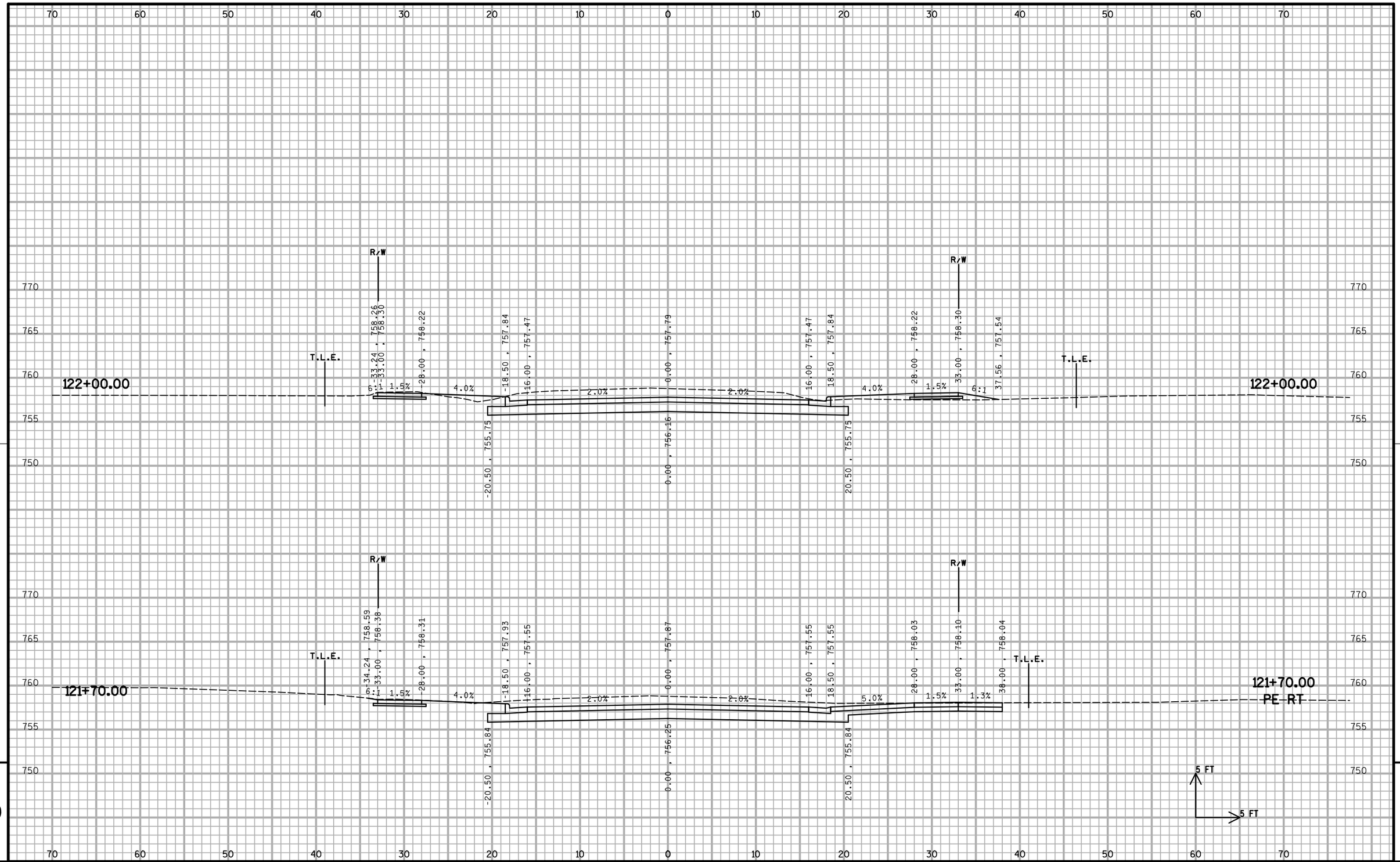
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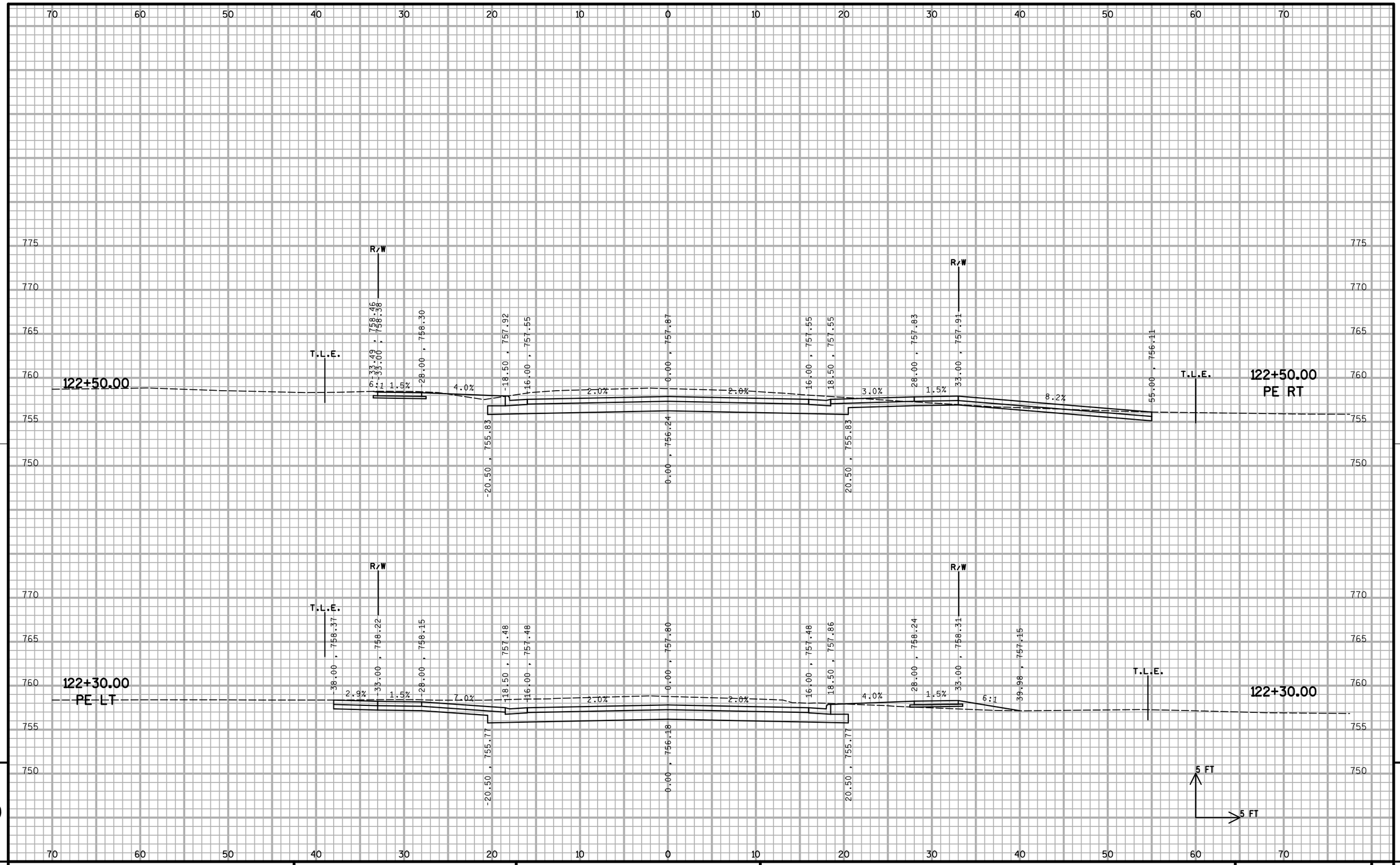
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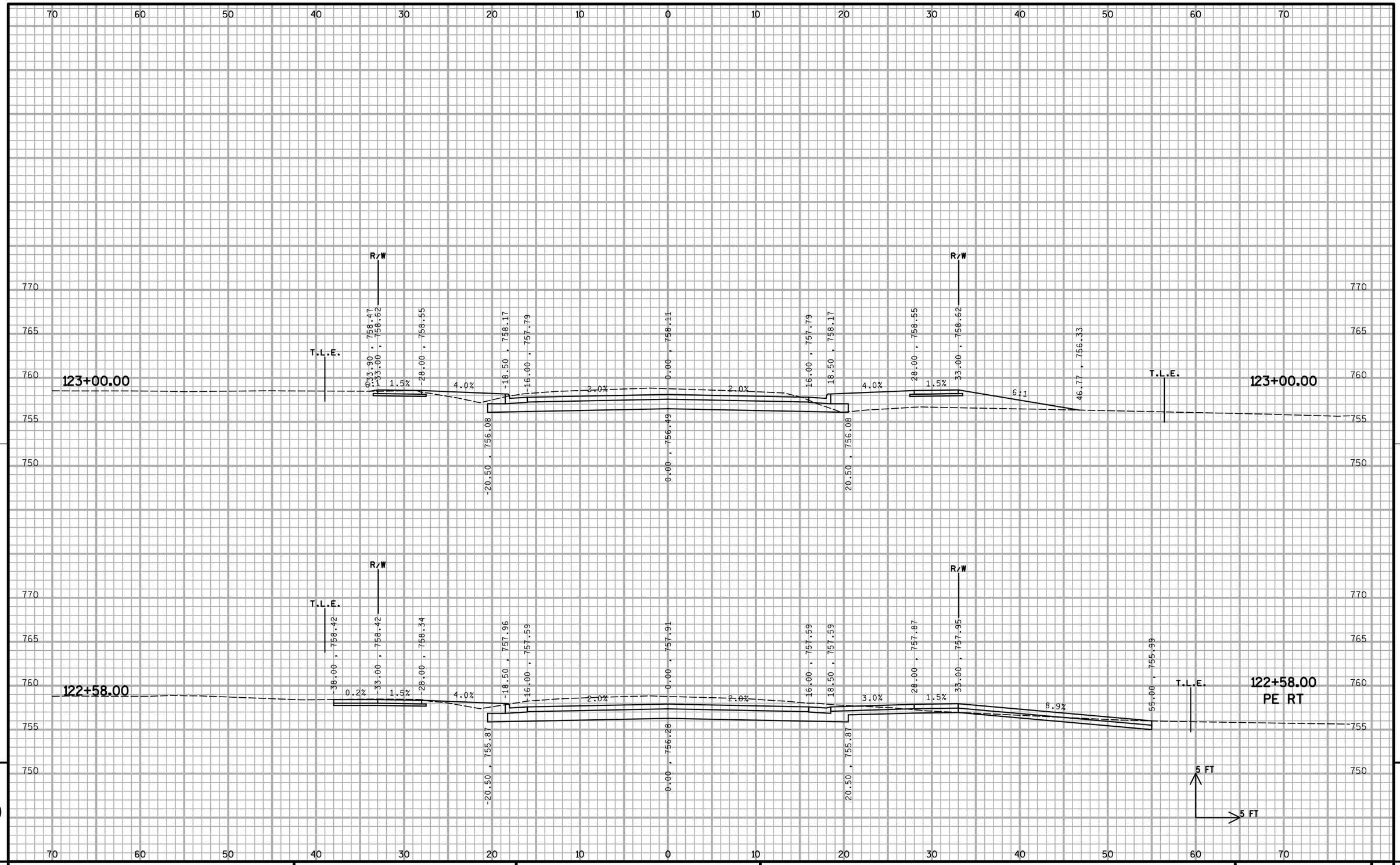
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 310	E



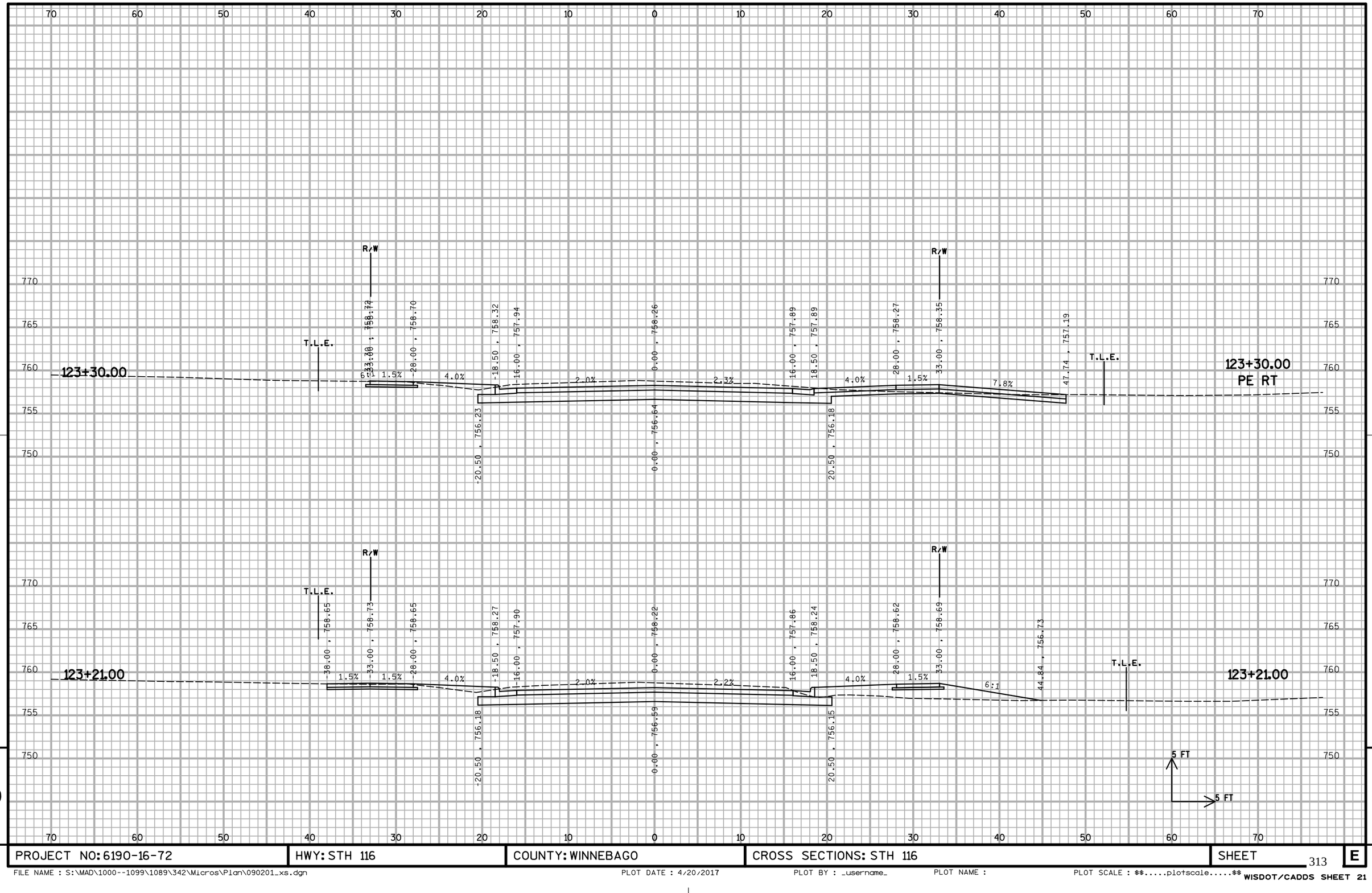
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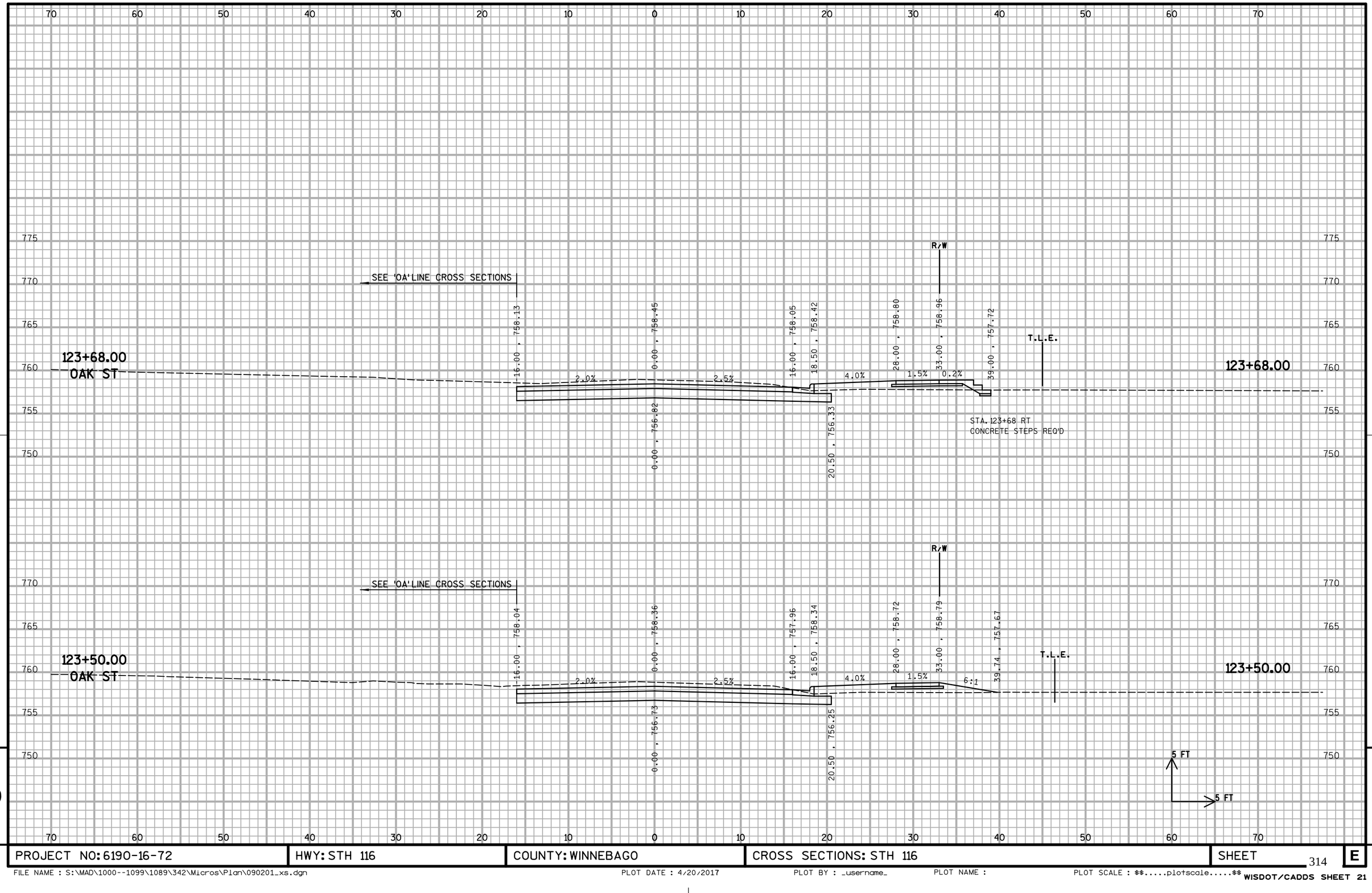
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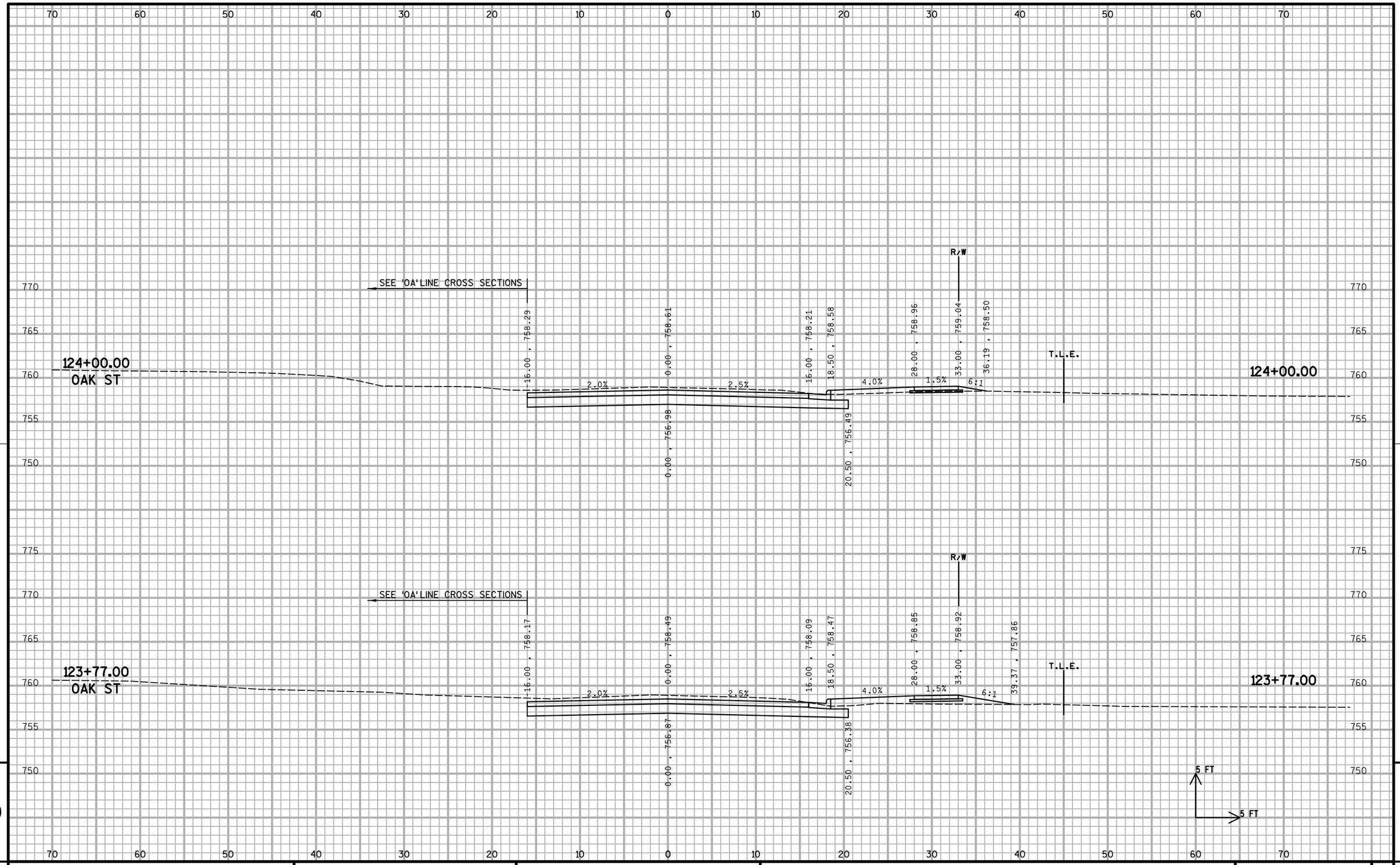
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FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\090201_xs.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



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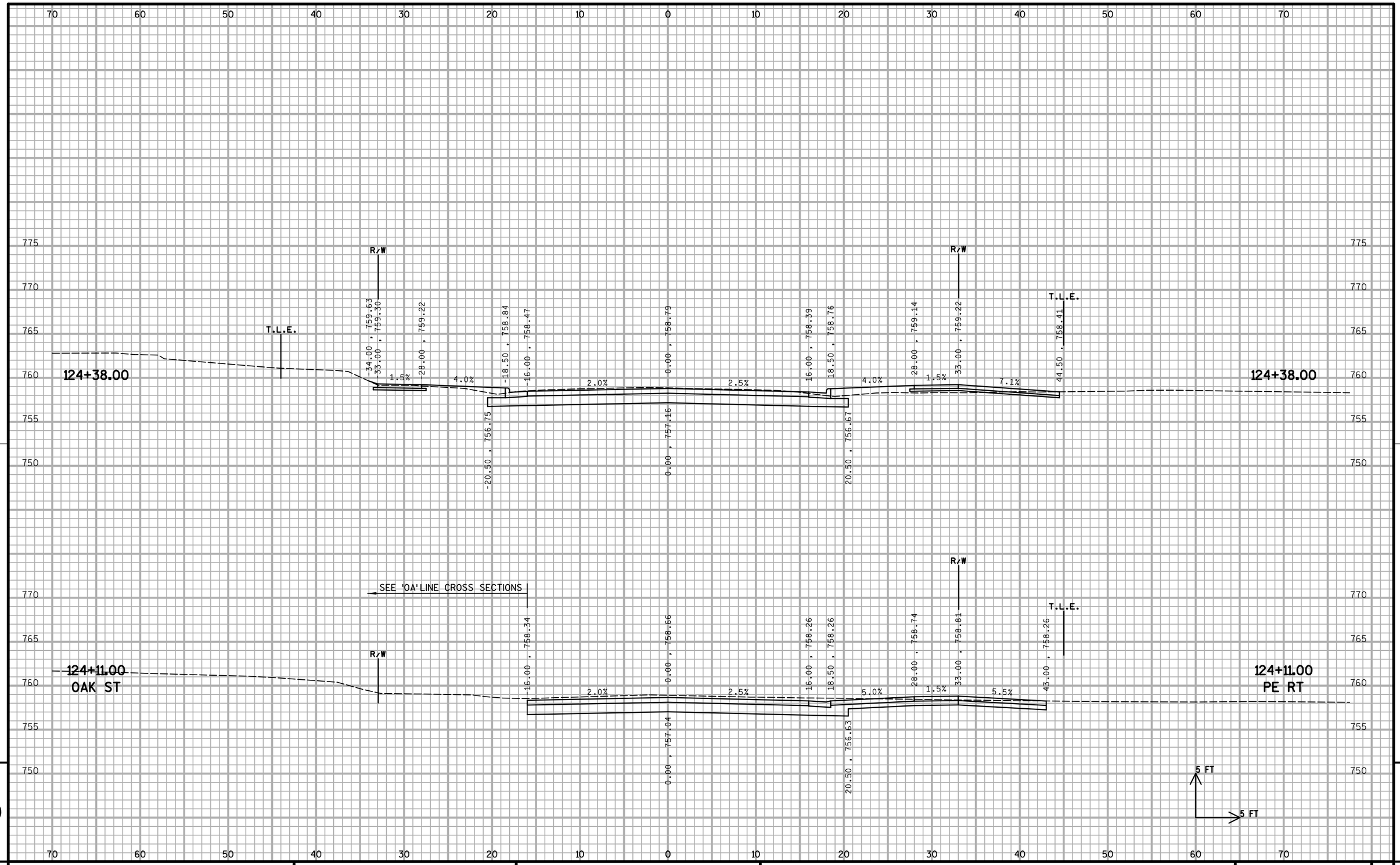
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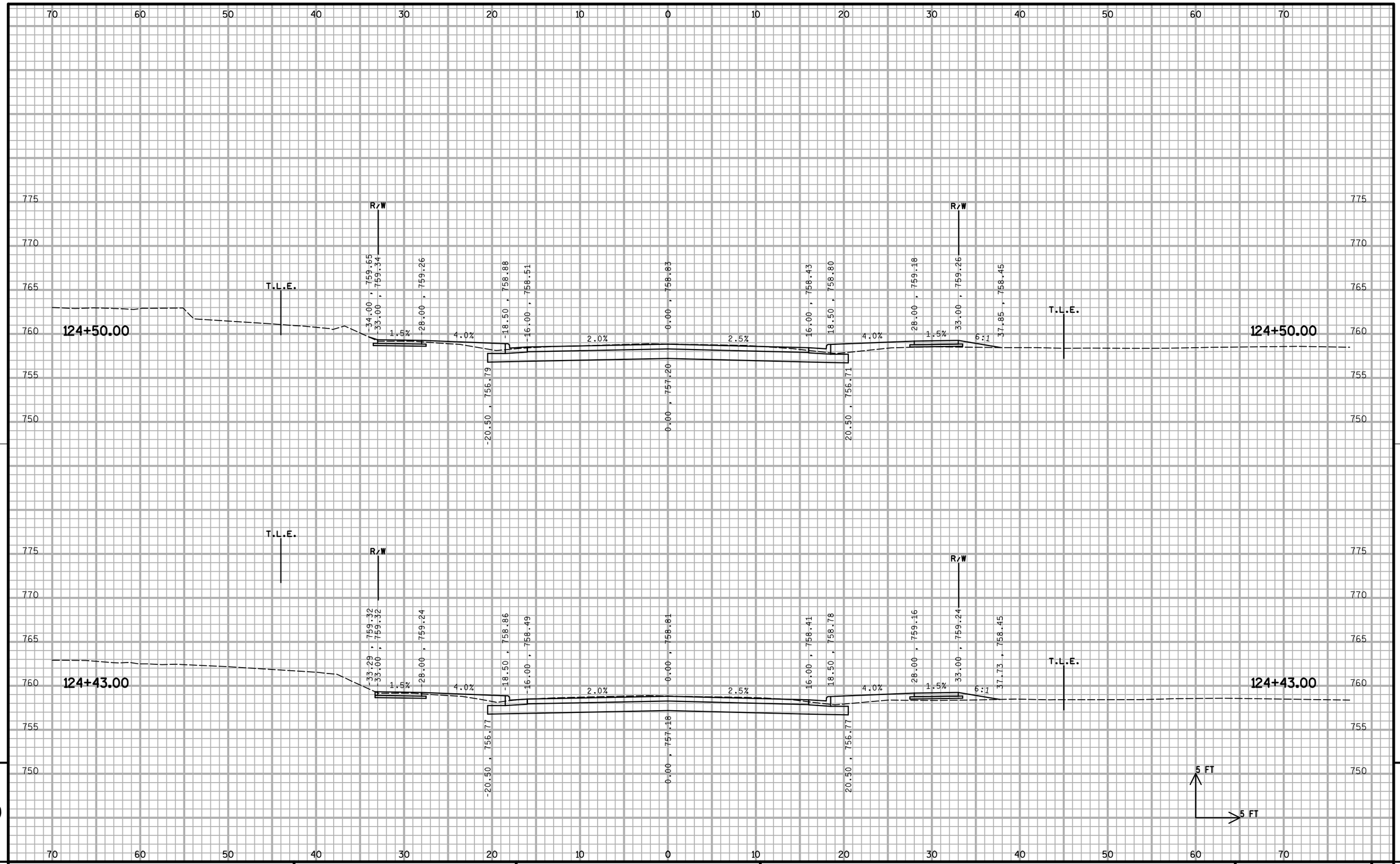
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 315	E

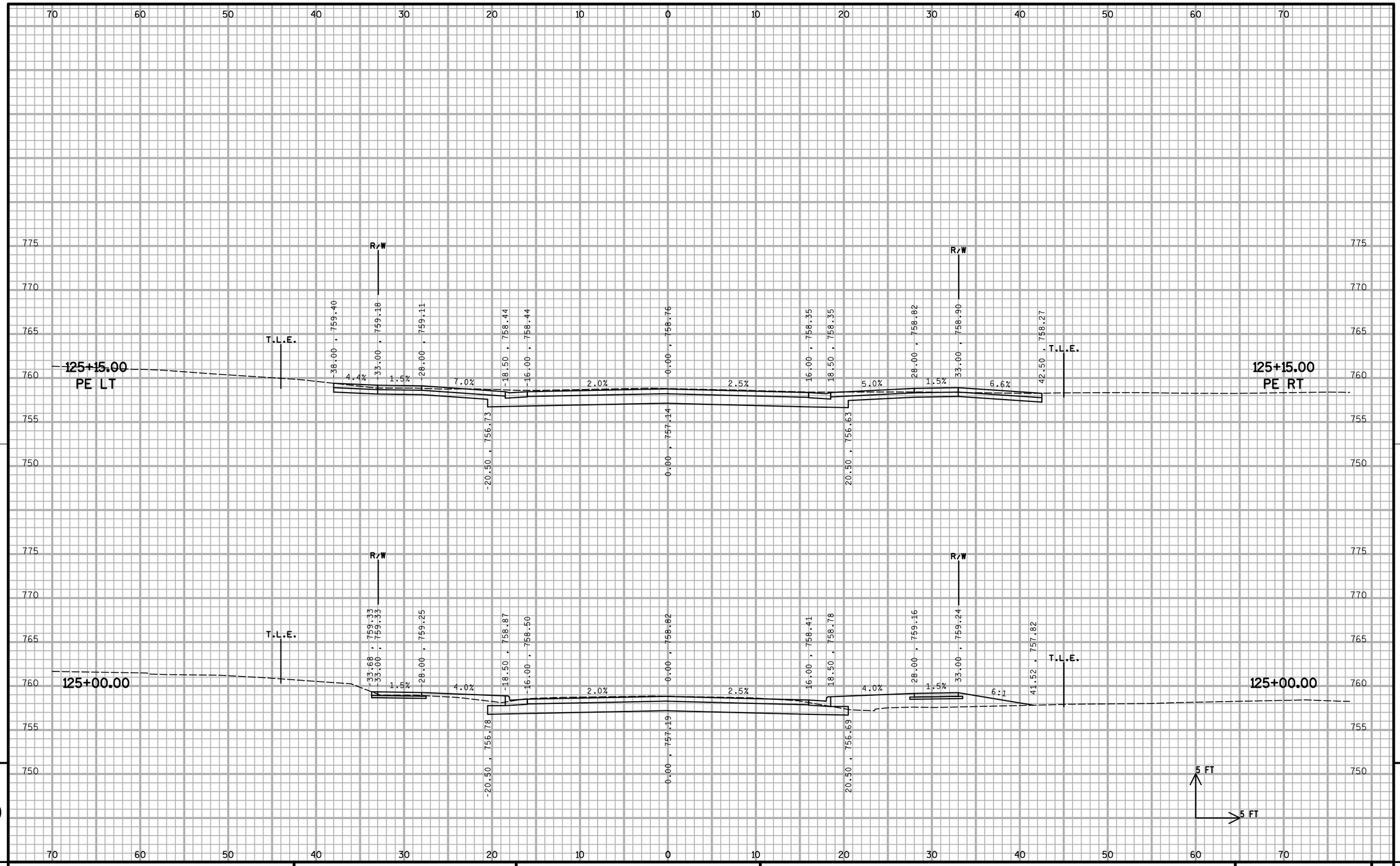


PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 316	E

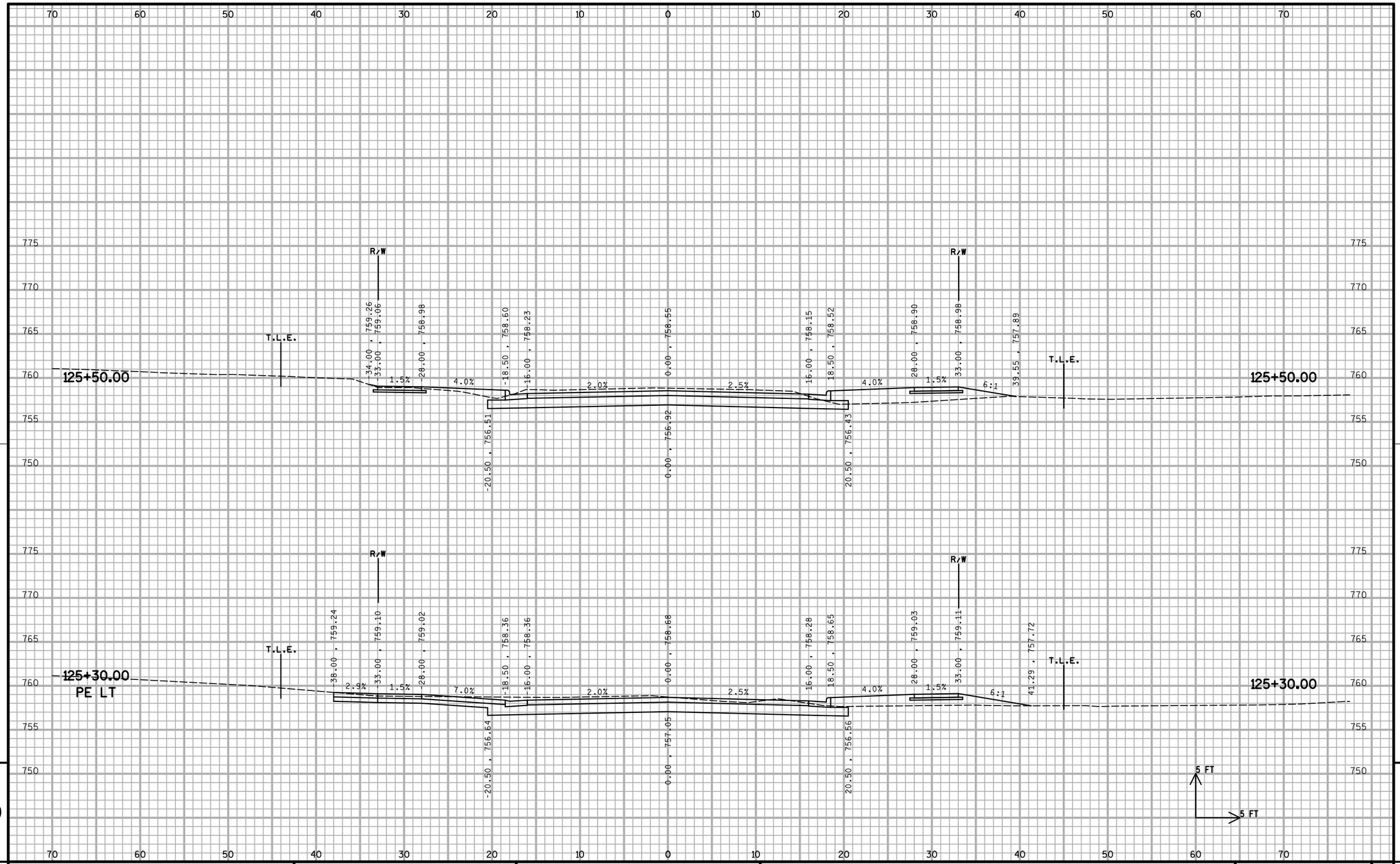


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 317 E



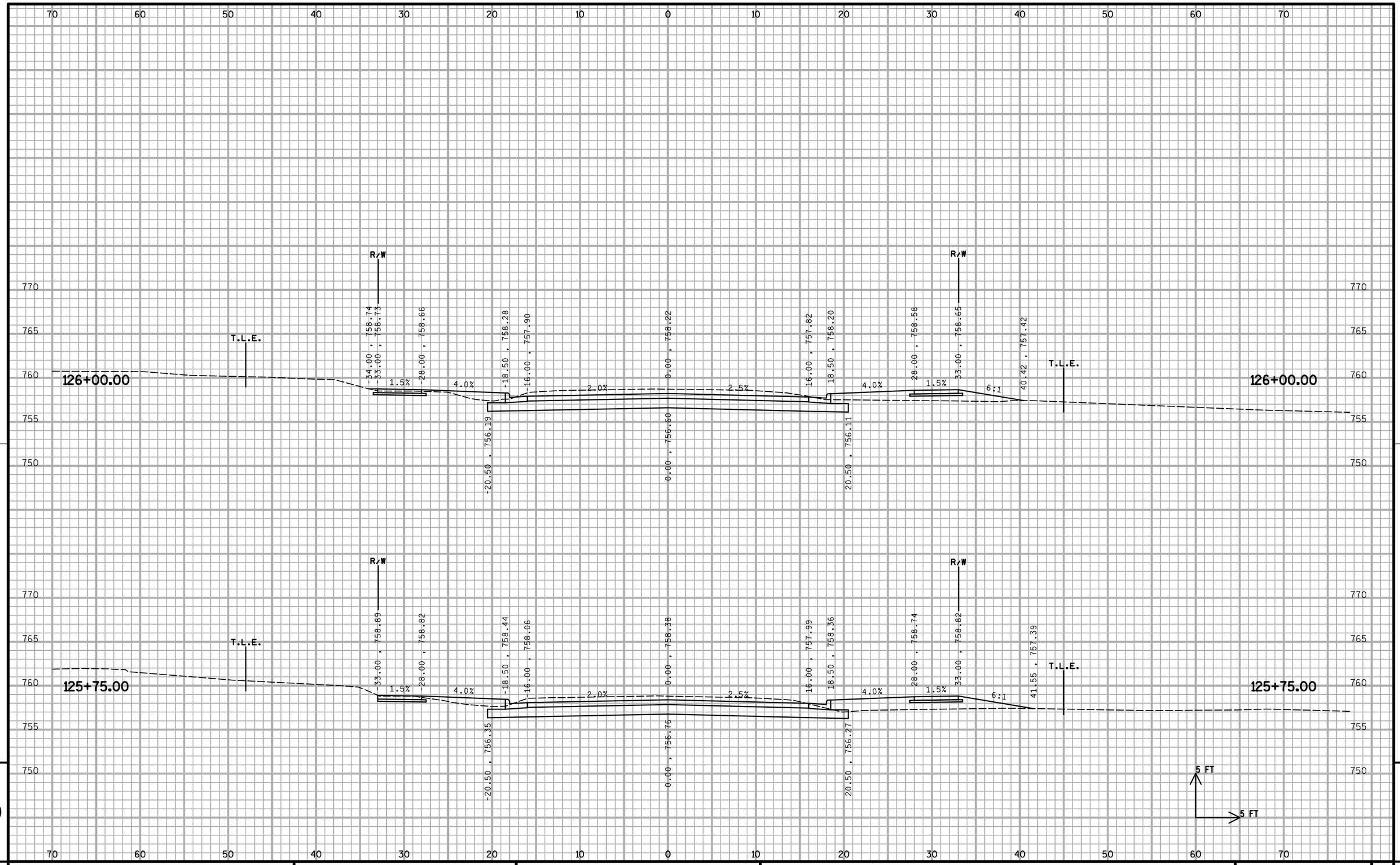
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 318	E



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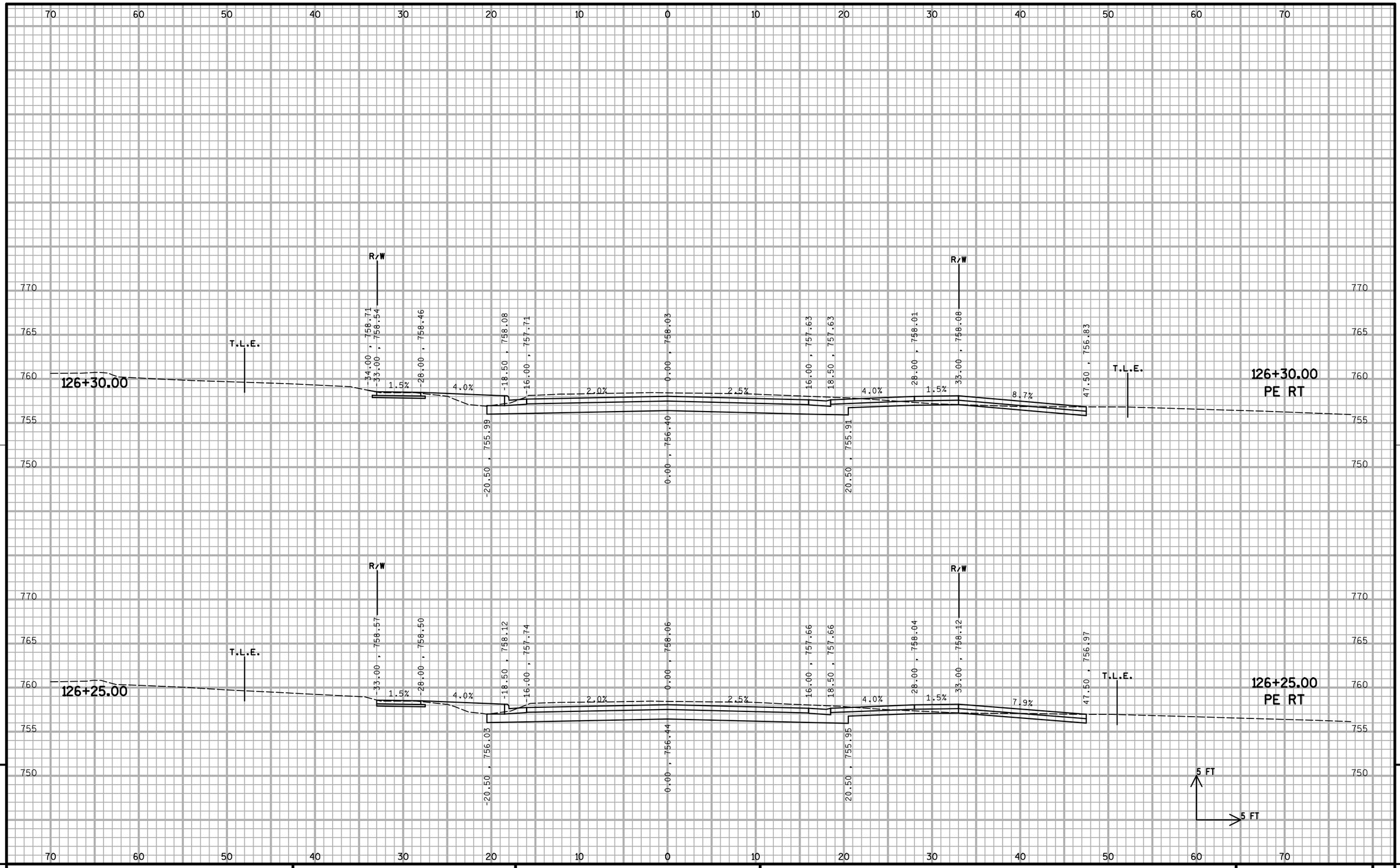
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 319	E



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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 320	E



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 321	E

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

770 765 760 755 750

SEE 'EL' LINE CROSS SECTIONS

126+77.00
ELM ST

16.00 , 757.40
0.00 , 757.72
16.00 , 757.38
18.50 , 757.75
28.00 , 758.13
33.00 , 758.21
53.44 , 754.49
0.00 , 756.10
20.50 , 755.68

2.0% 2.2% 4.0% 1.5% 5.5:1

R/W

T.L.E.

126+77.00

SEE 'EL' LINE CROSS SECTIONS

126+50.00
ELM ST

16.00 , 757.58
0.00 , 757.90
16.00 , 757.52
18.50 , 757.90
28.00 , 758.28
33.00 , 758.35
51.16 , 755.33
0.00 , 756.27
20.50 , 755.81

2.0% 2.4% 4.0% 1.5% 6:1

R/W

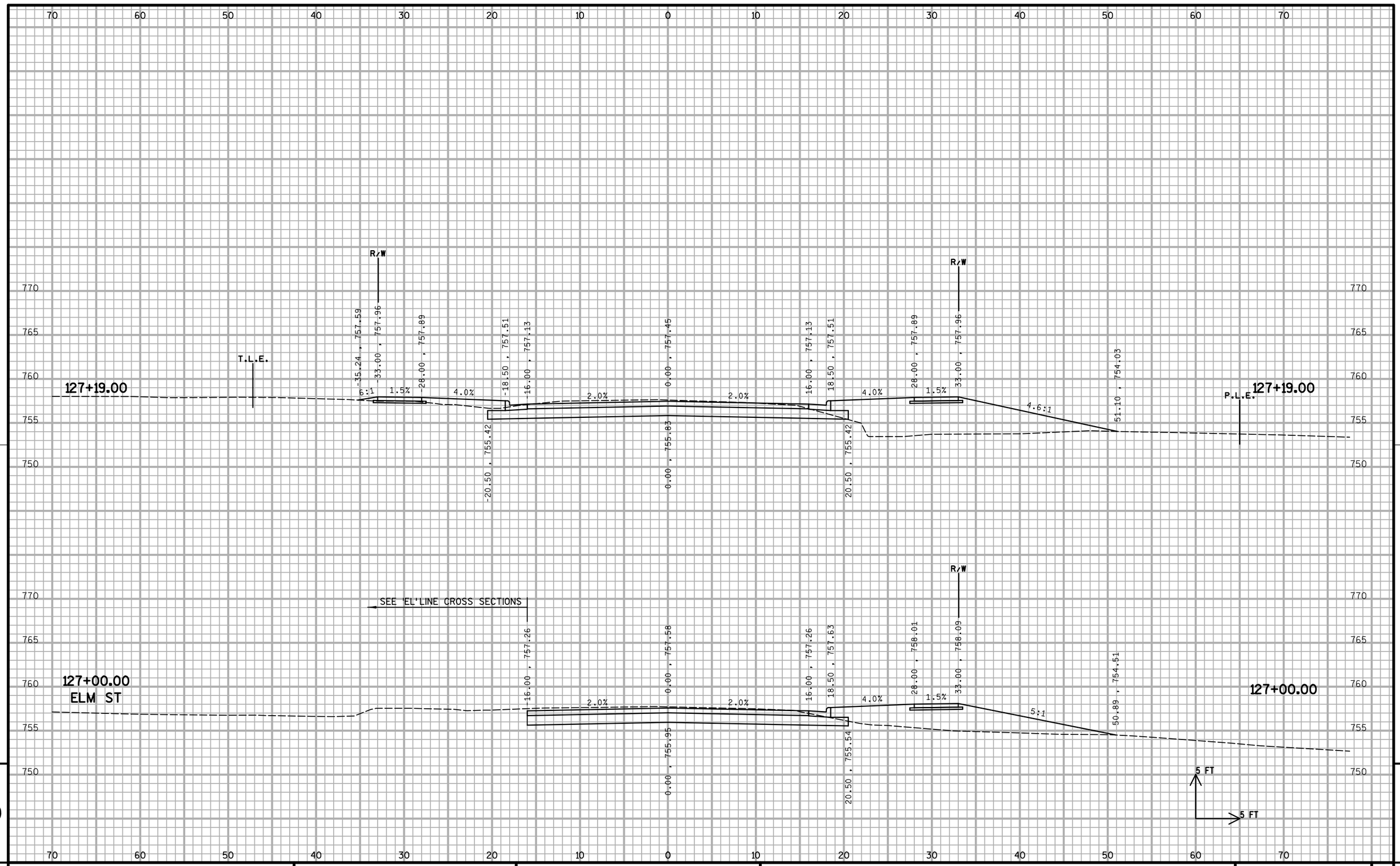
T.L.E.

126+50.00

5 FT
5 FT

9 9

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 322	E

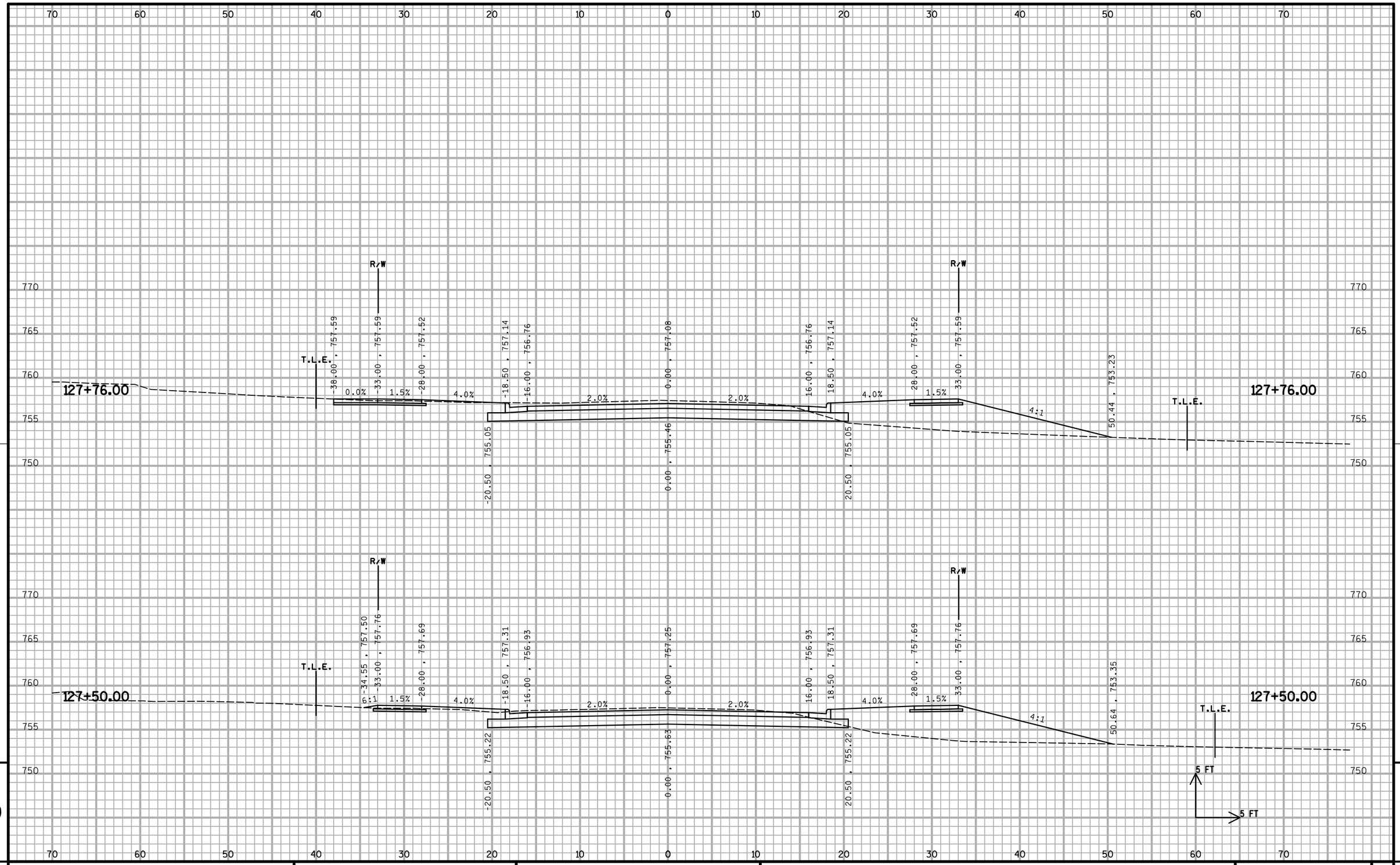


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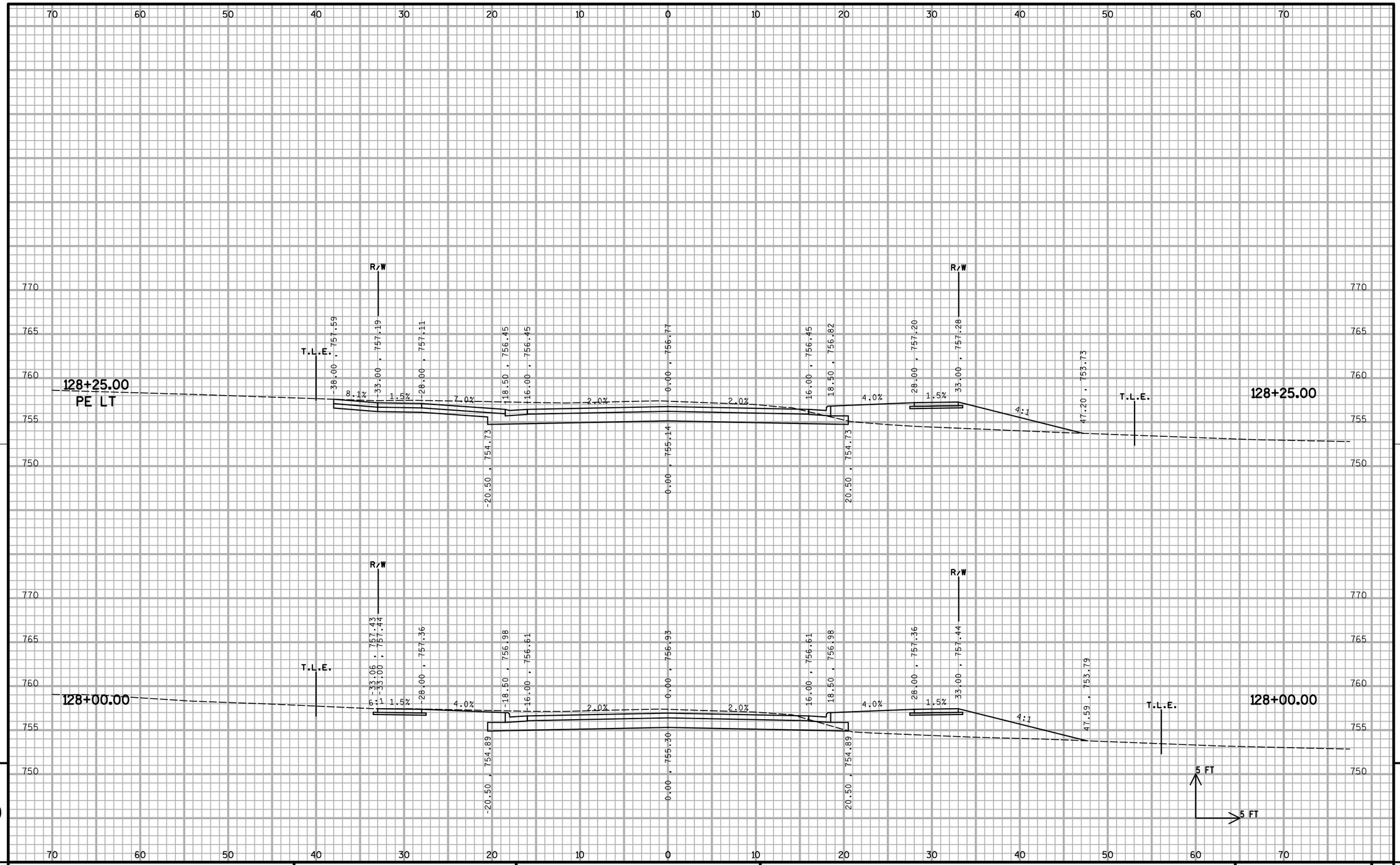
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\090201_xs.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 324	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\090201_xs.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

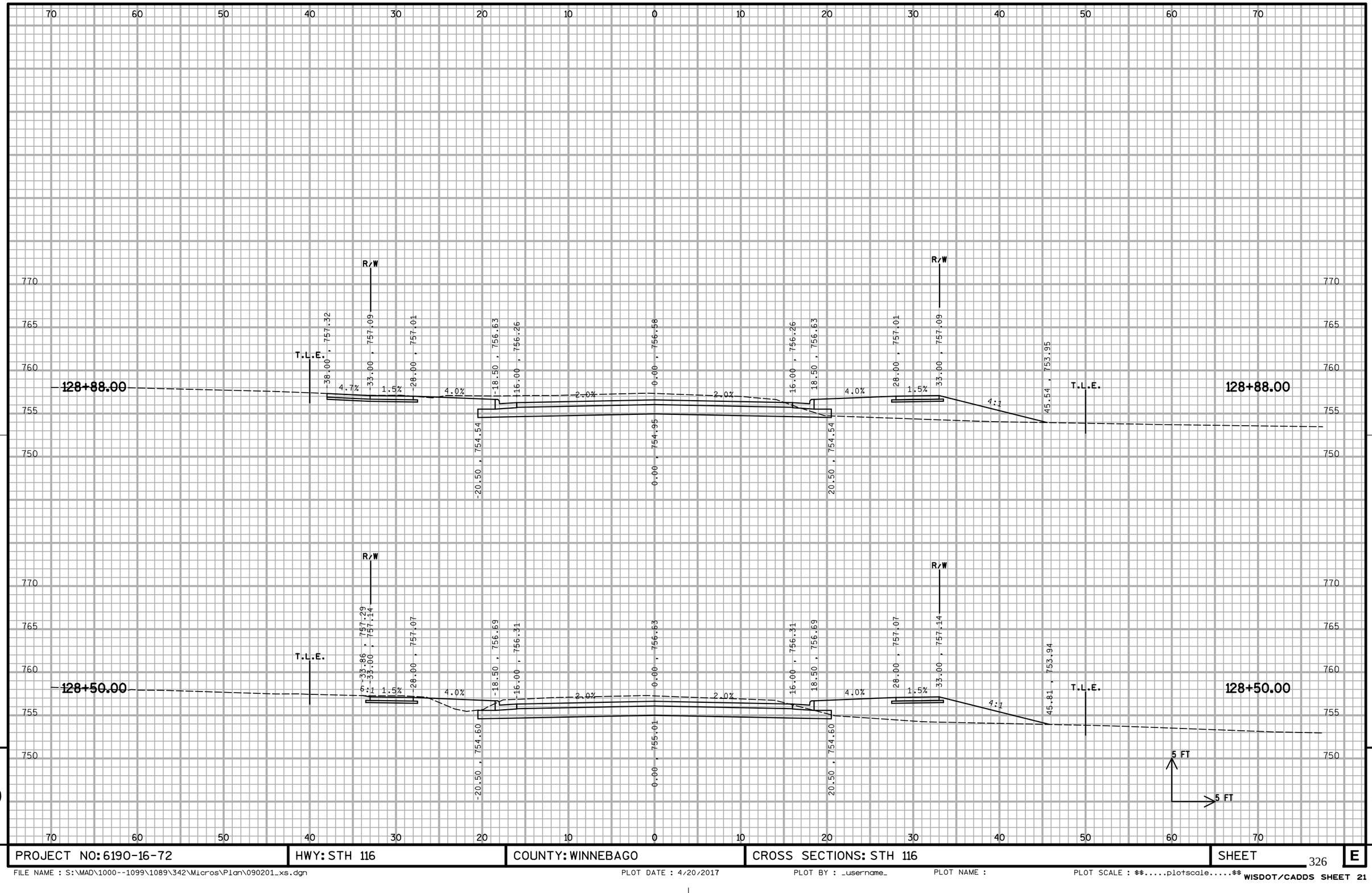


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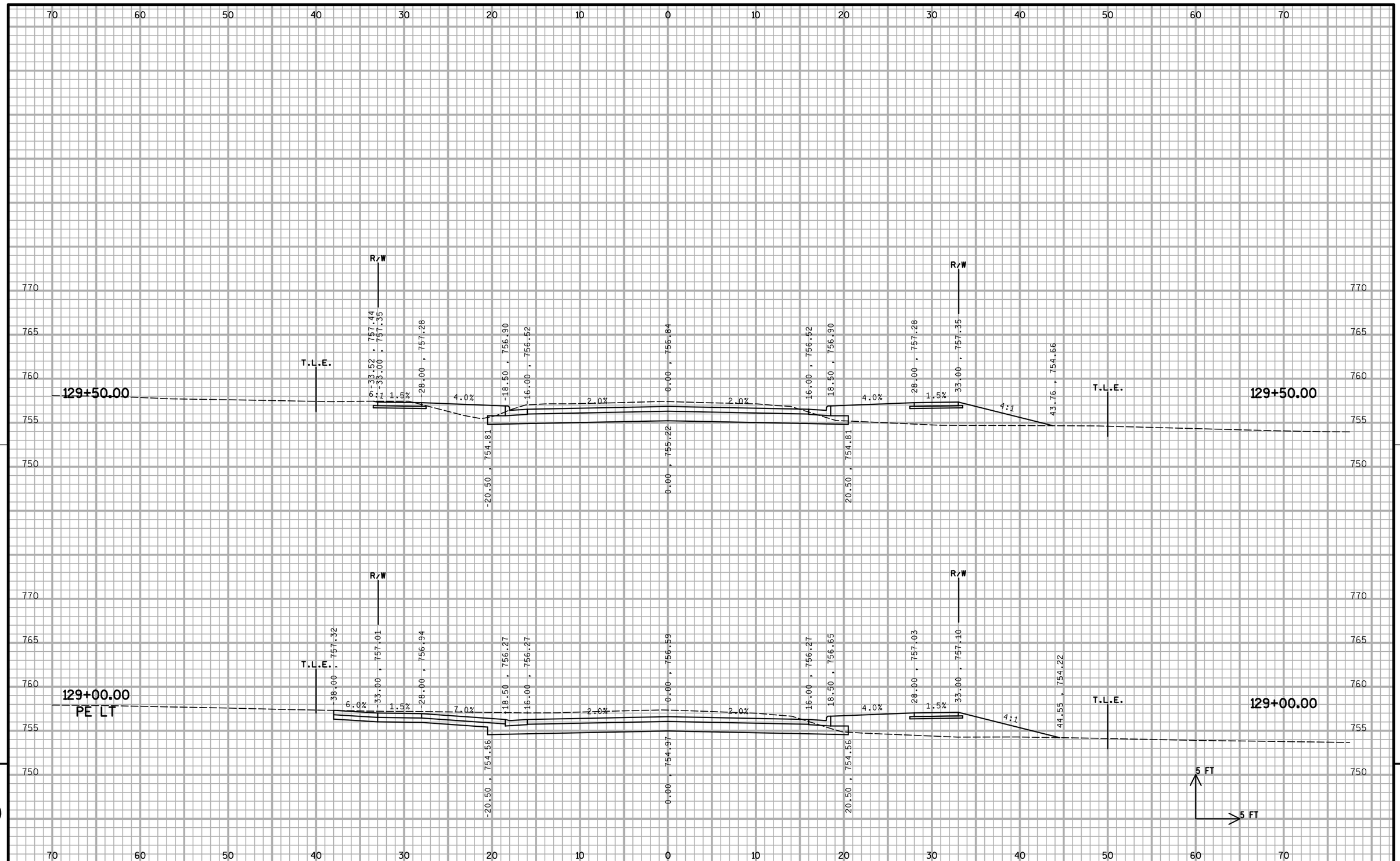
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 325	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\090201_xs.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



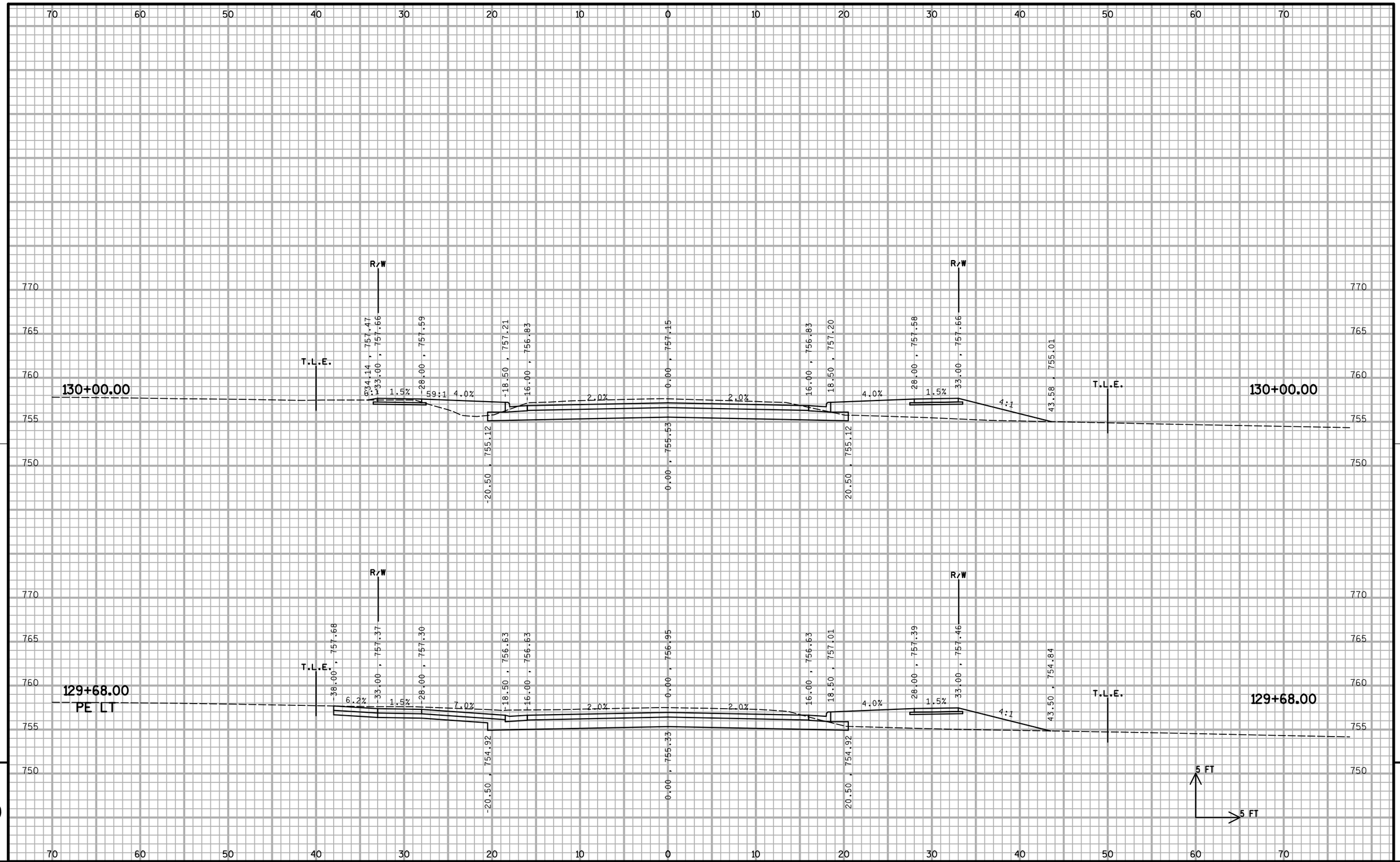
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\090201_xs.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 327	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\090201_xs.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

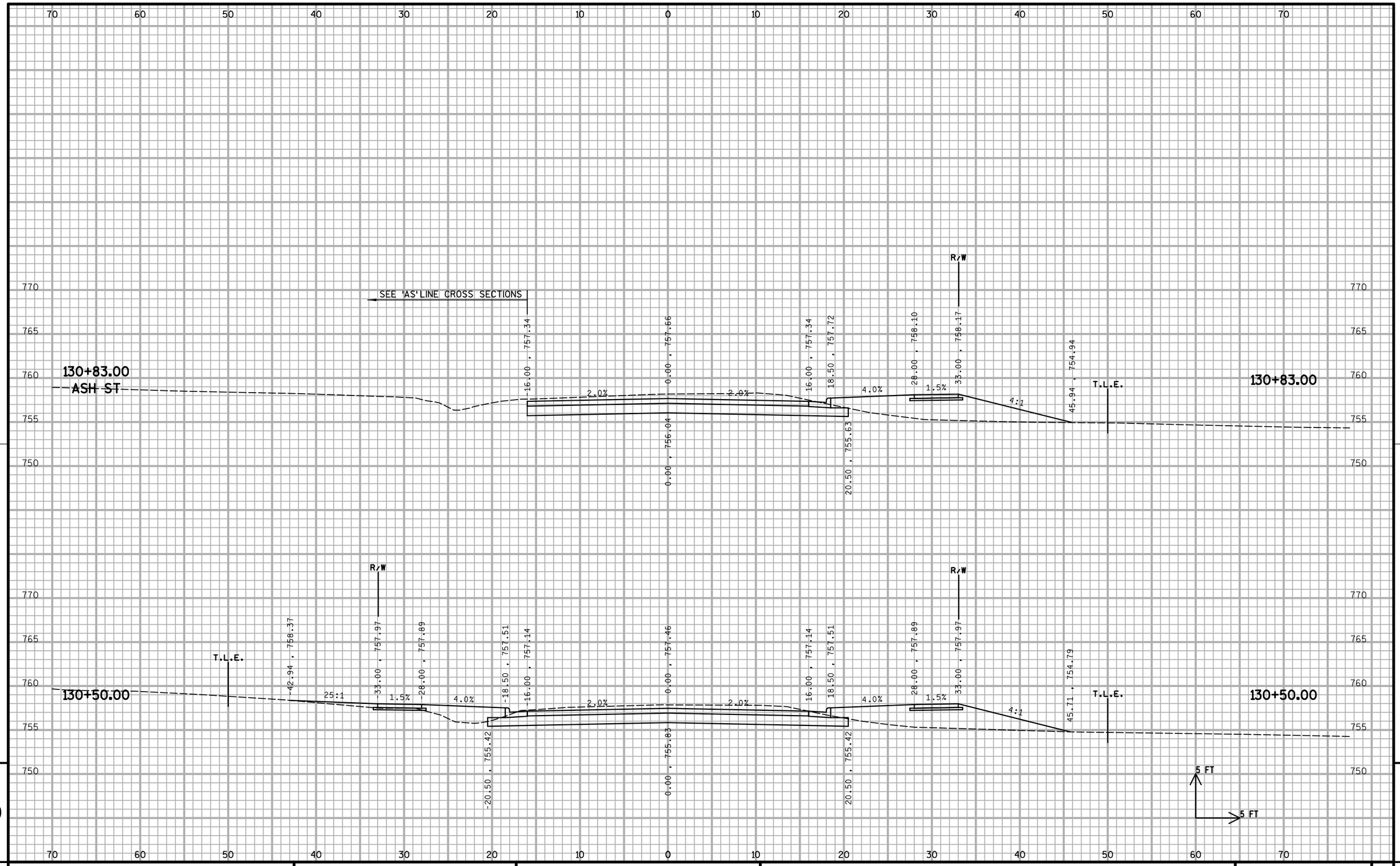


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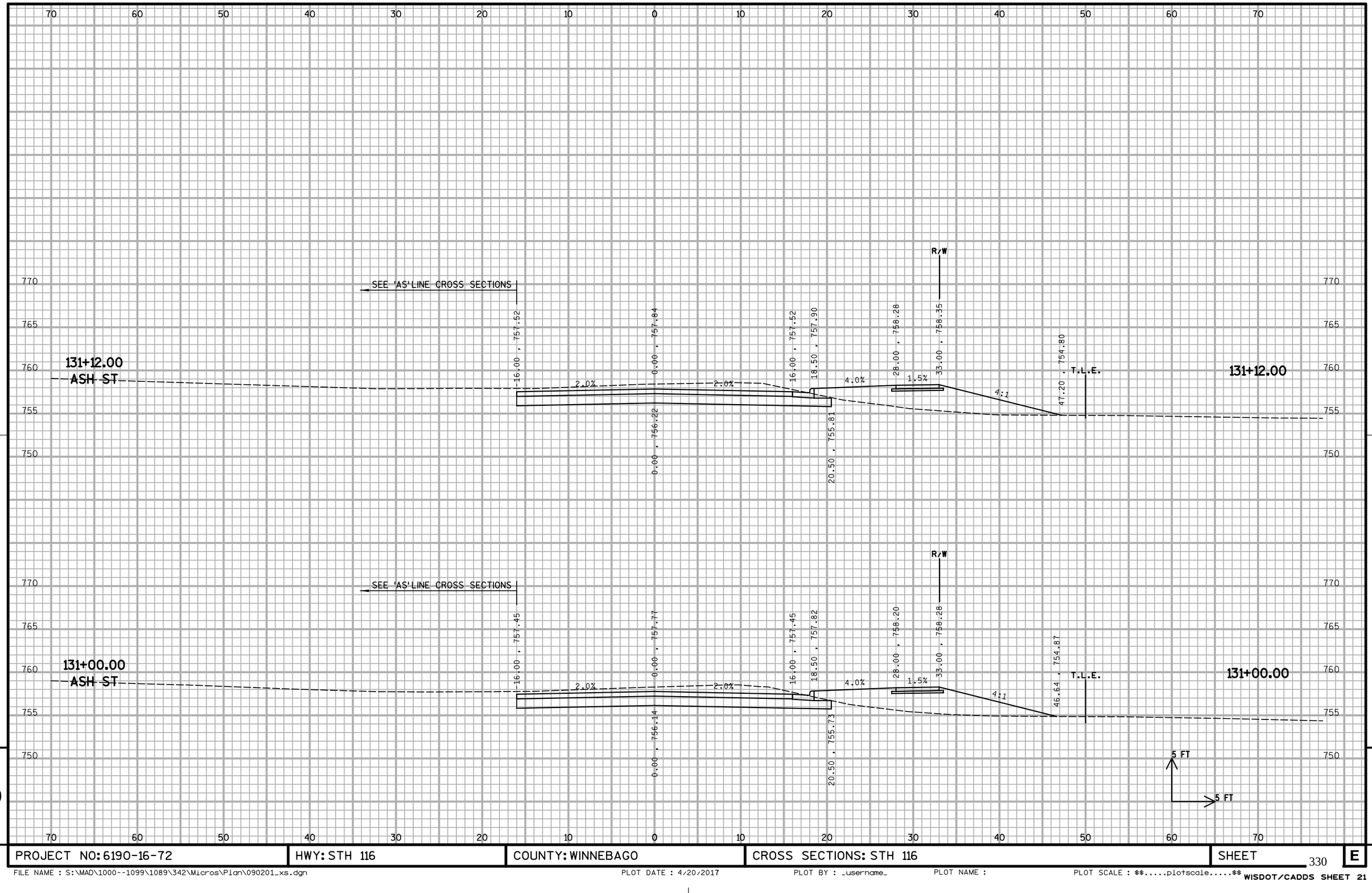
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 328	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\090201_xs.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

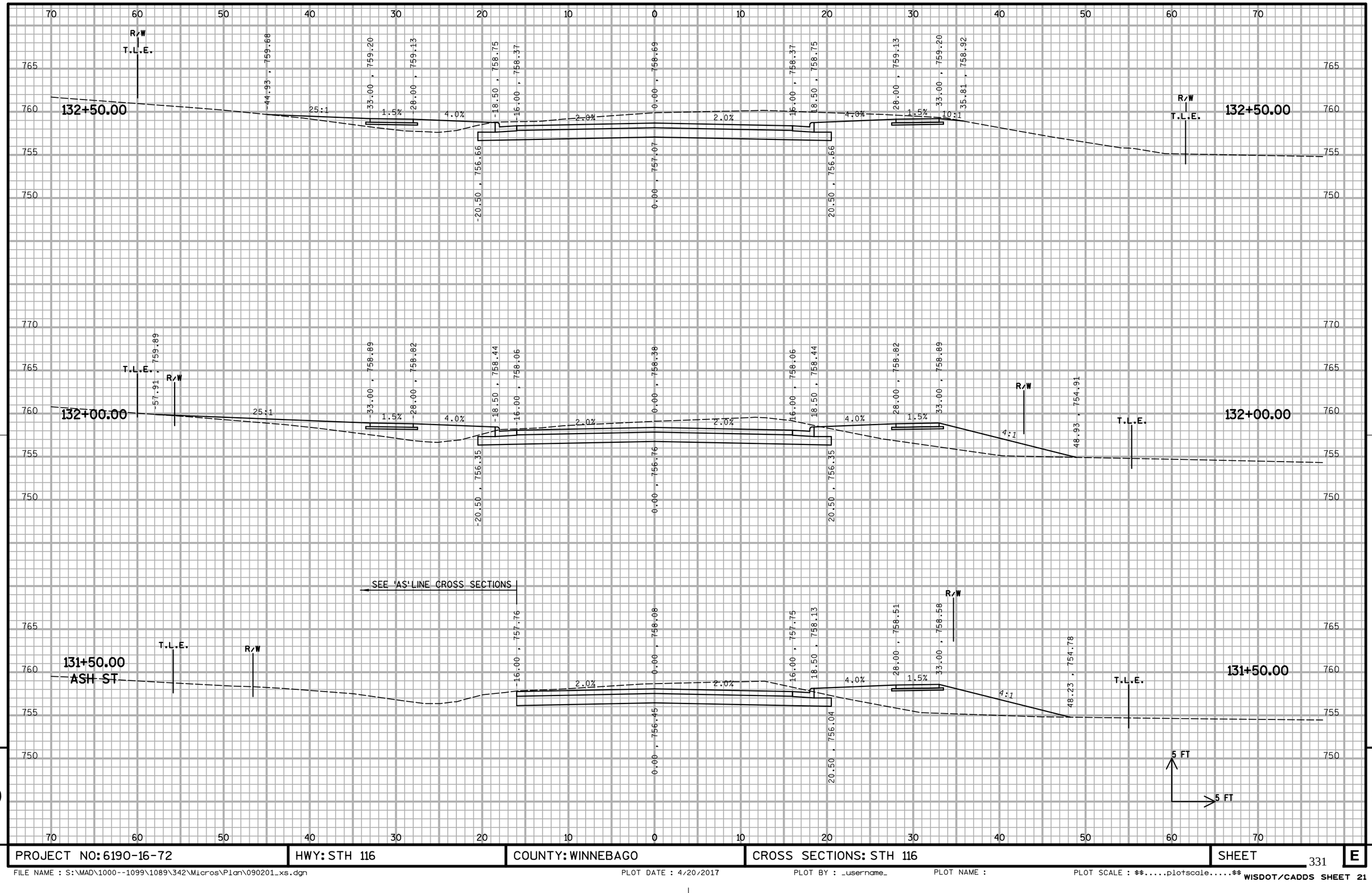


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 329	E



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 330	E

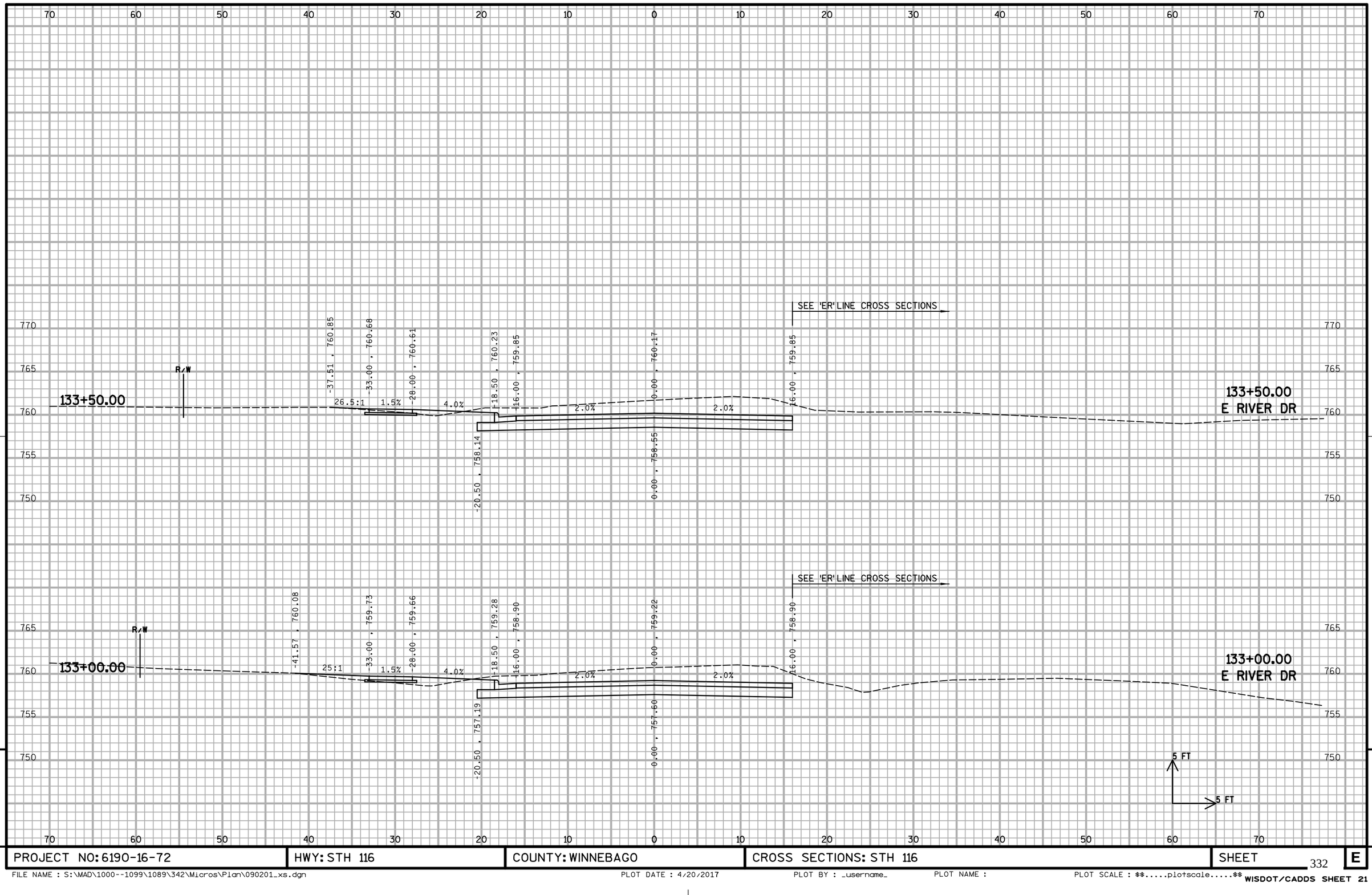


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\090201_xs.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

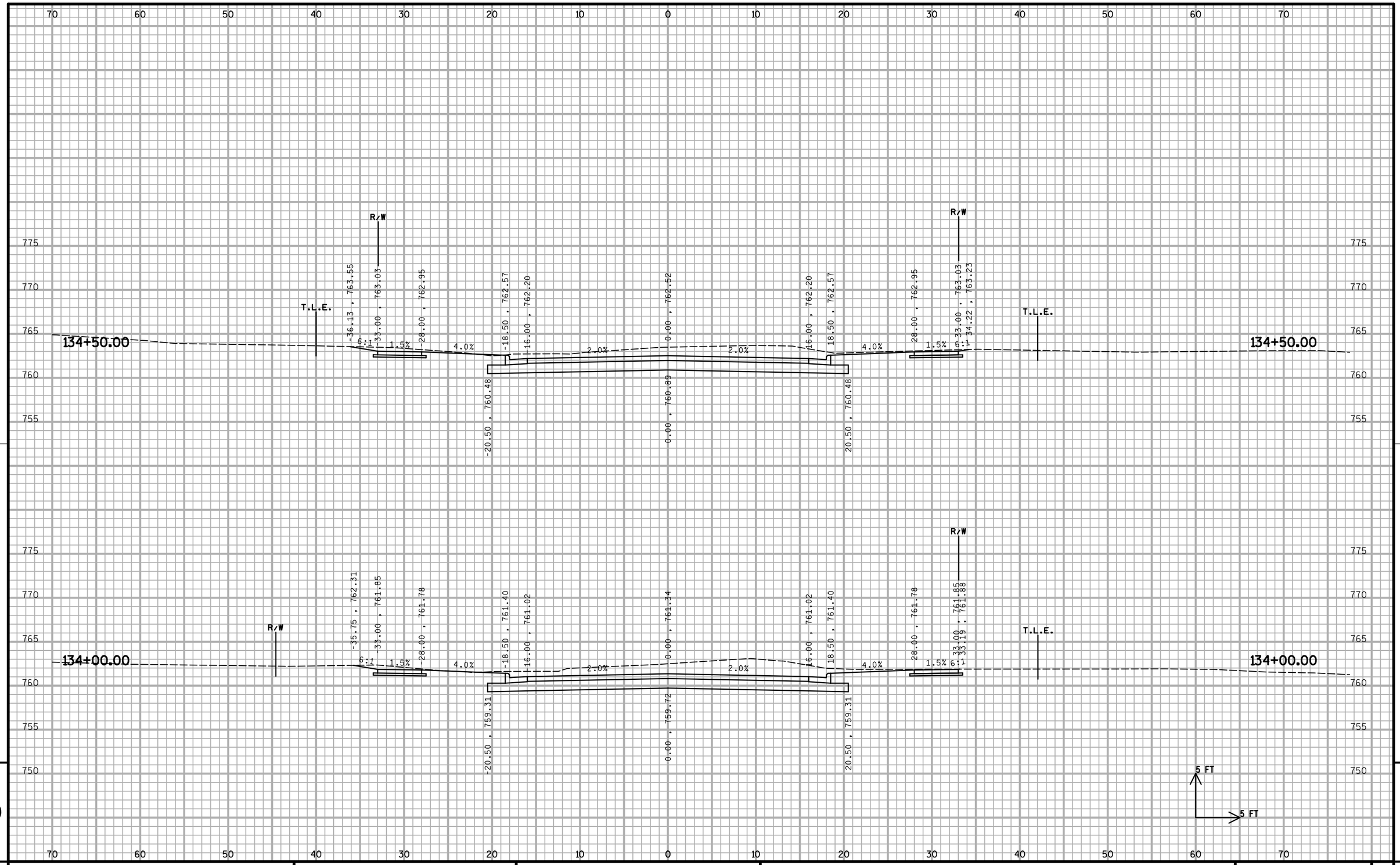


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\090201_xs.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

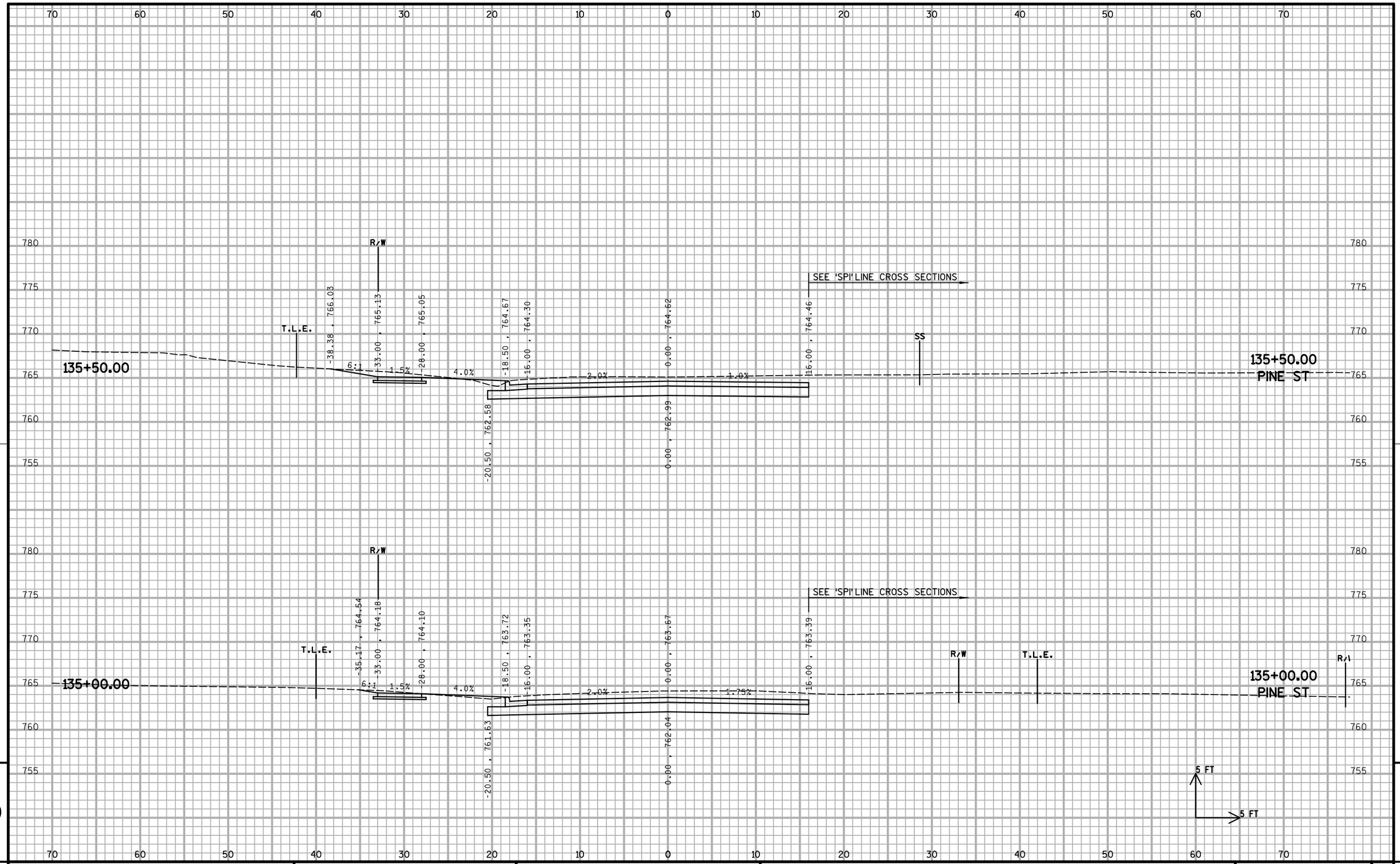


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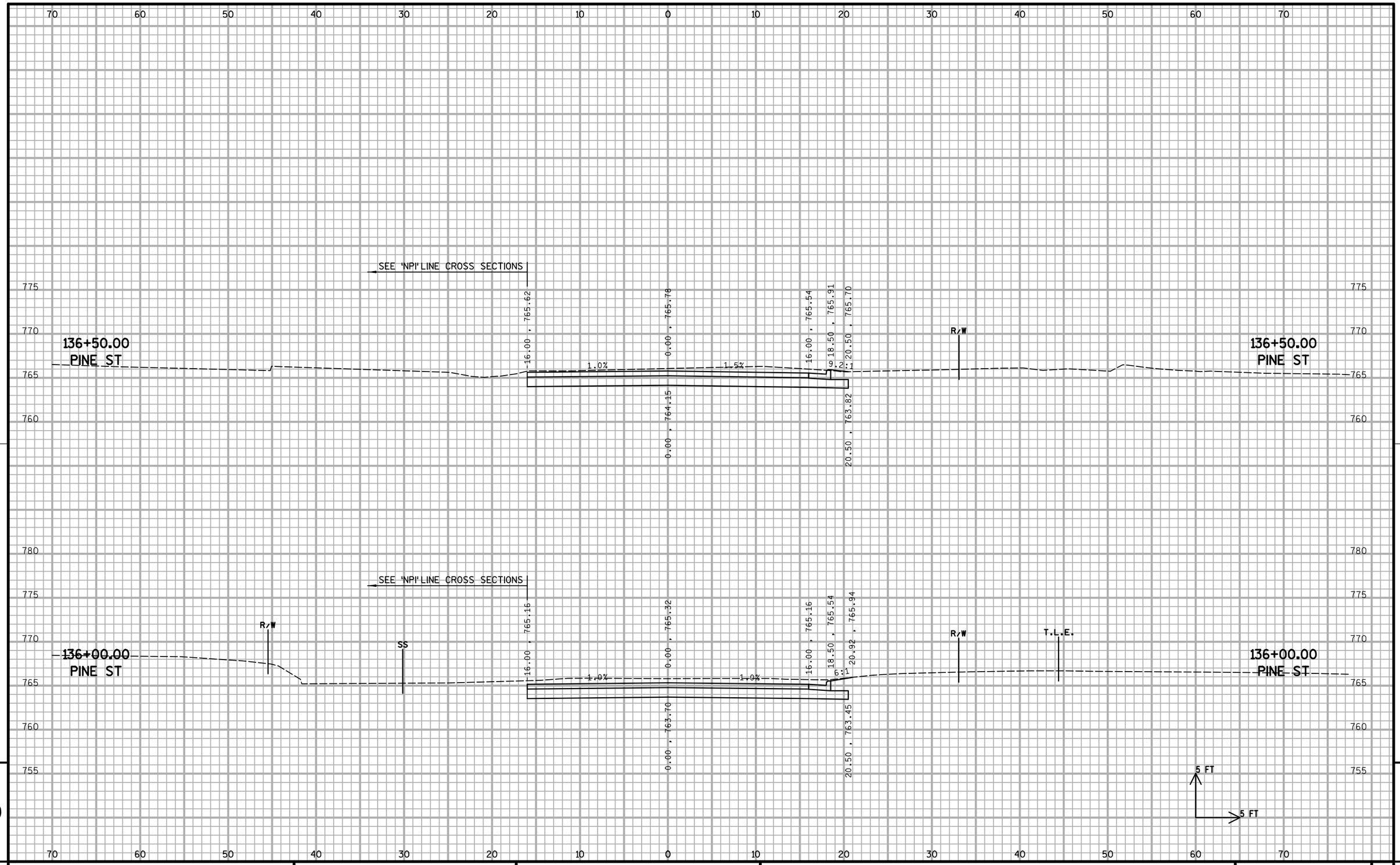
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 333	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\090201_xs.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



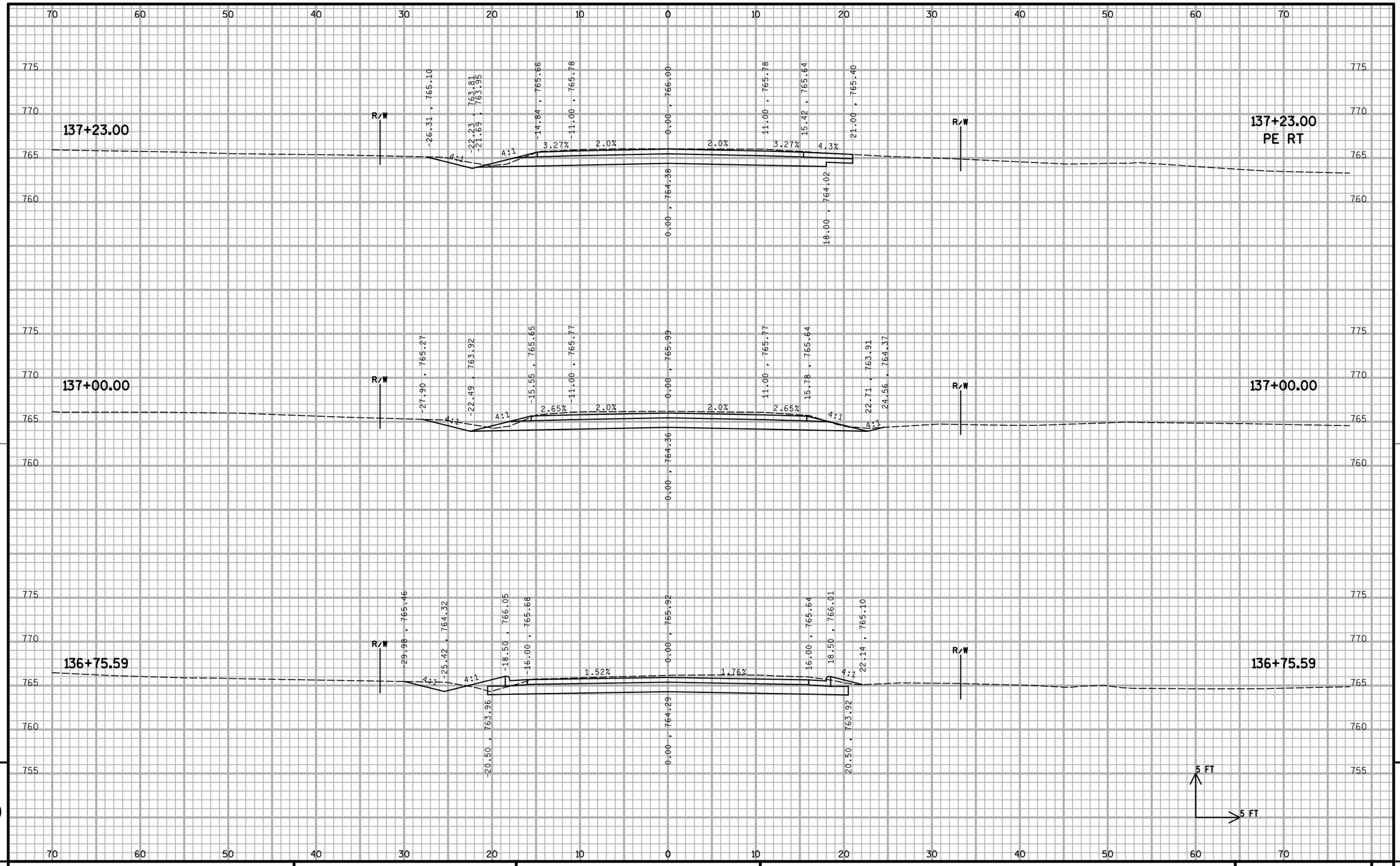
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 334	E



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 335	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\090201_xs.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

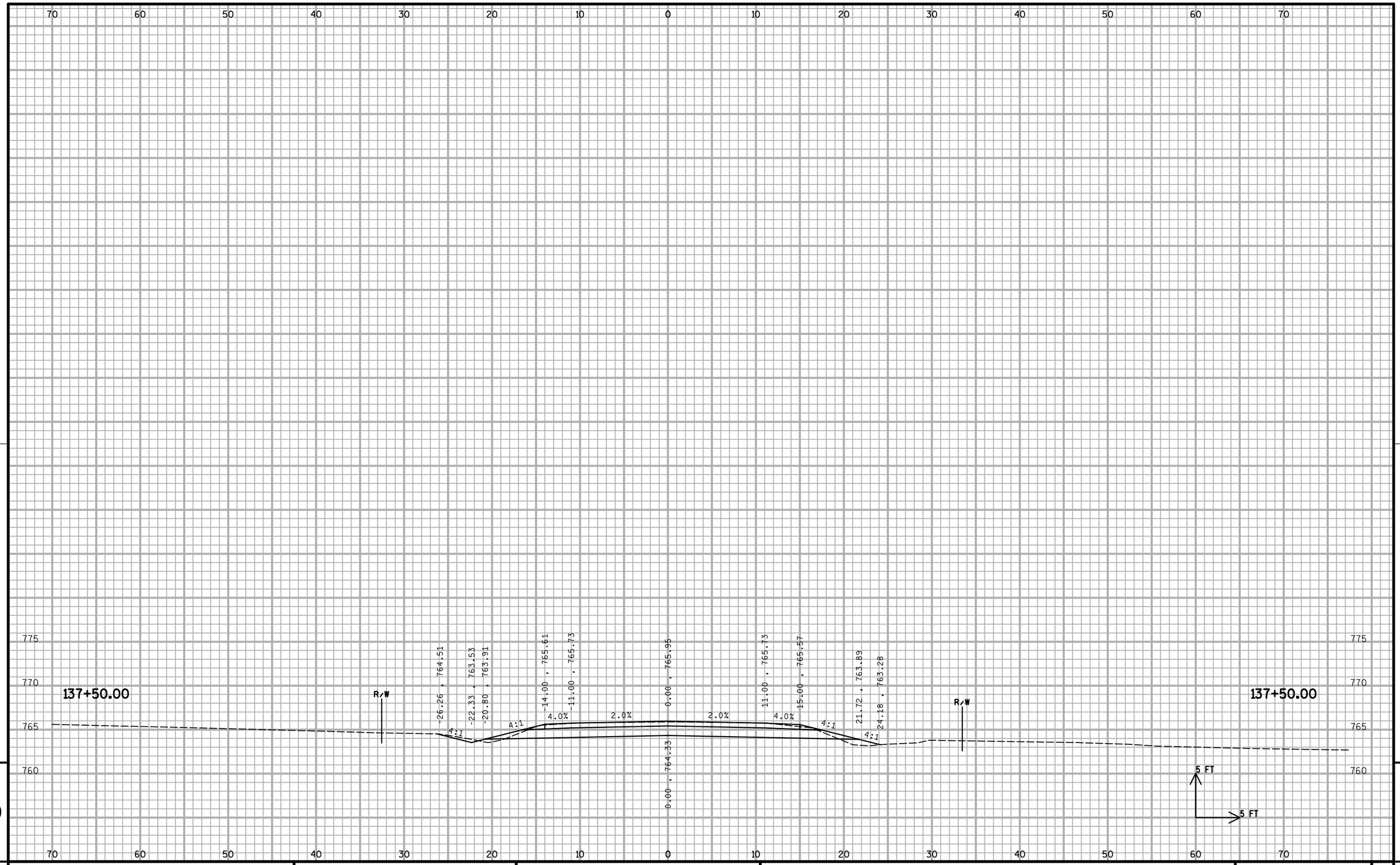


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\090201_xs.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

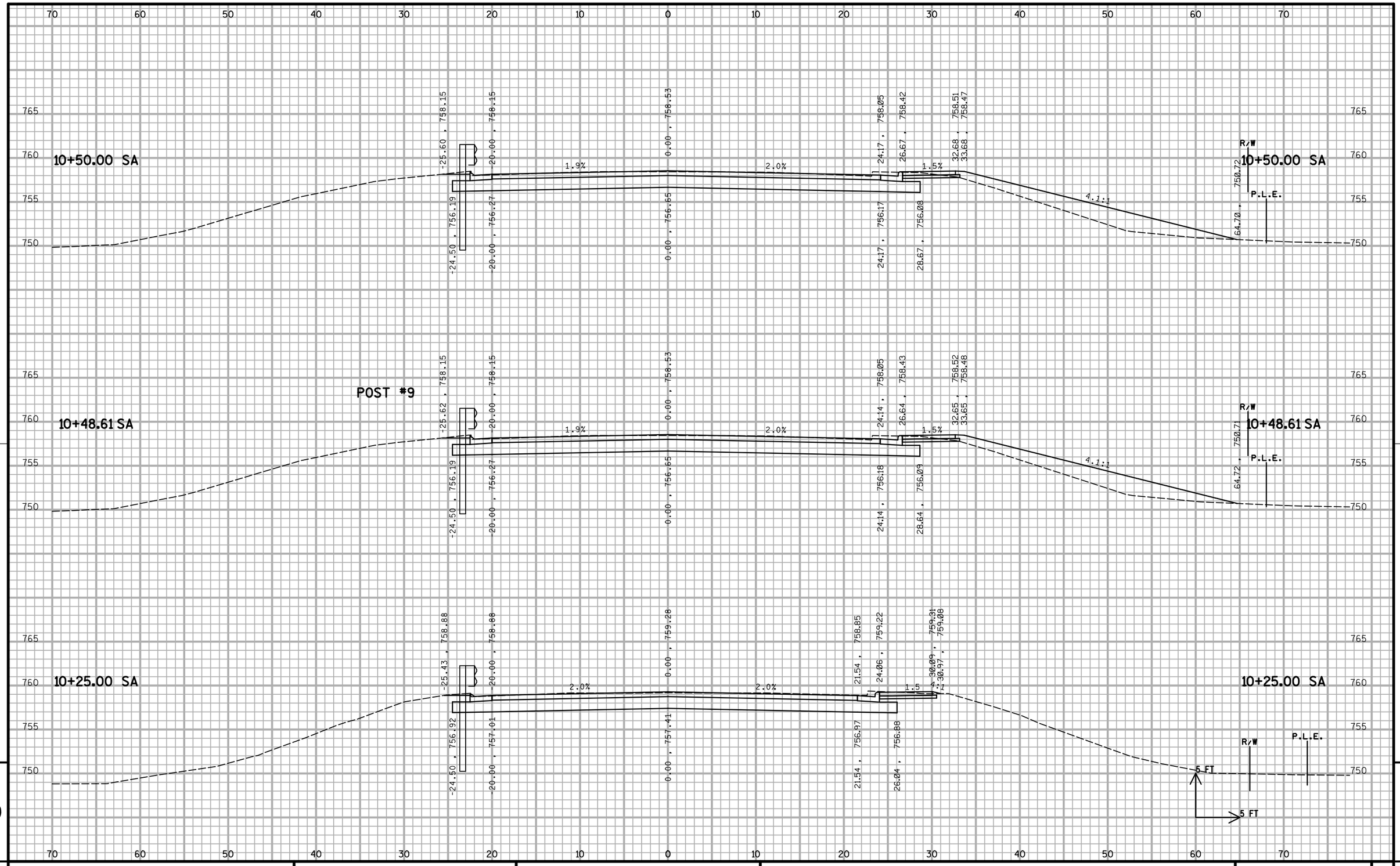


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 337	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\090201_xs.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

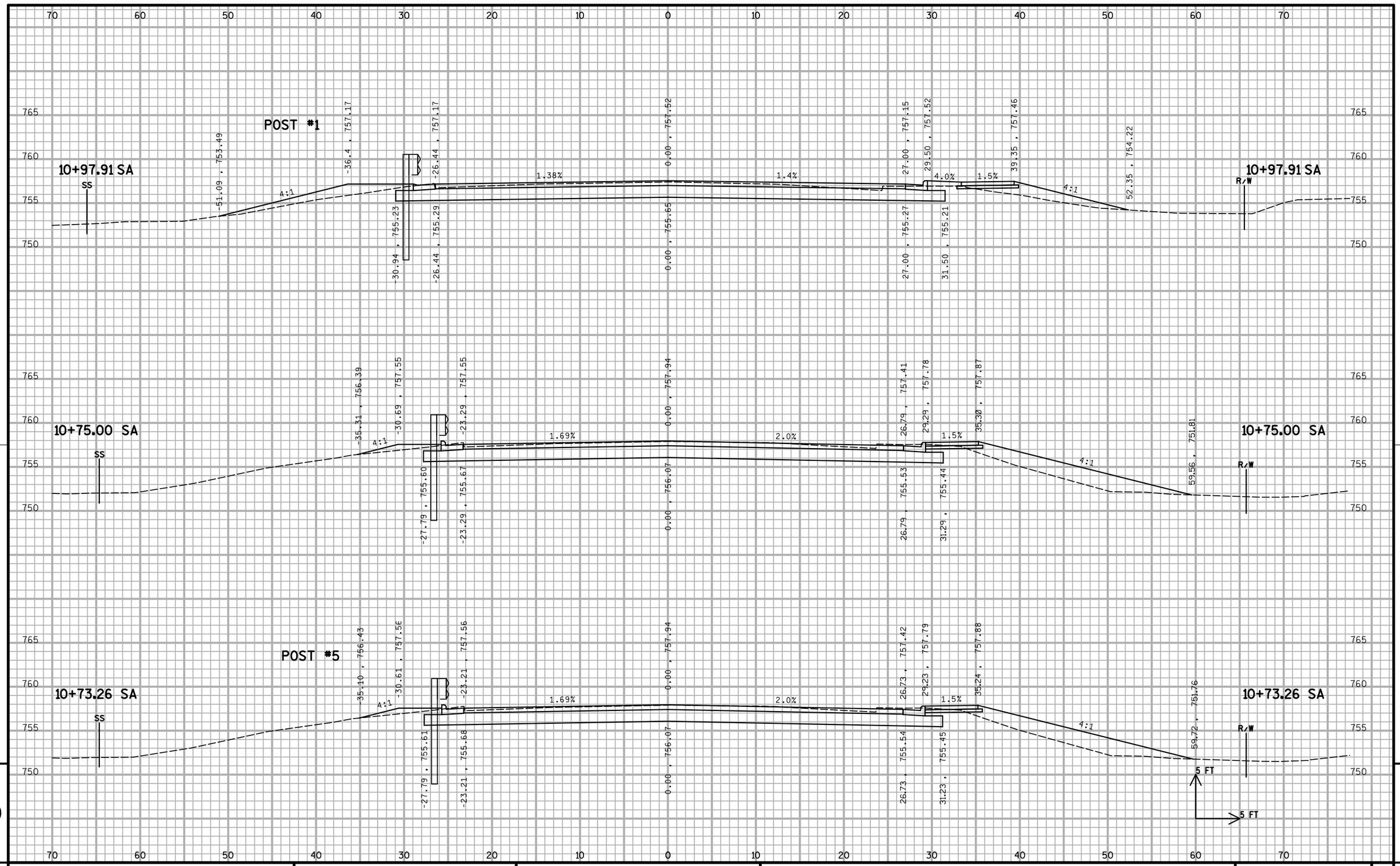


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: SPRUCE STREET	SHEET 338	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_SPRUCE.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

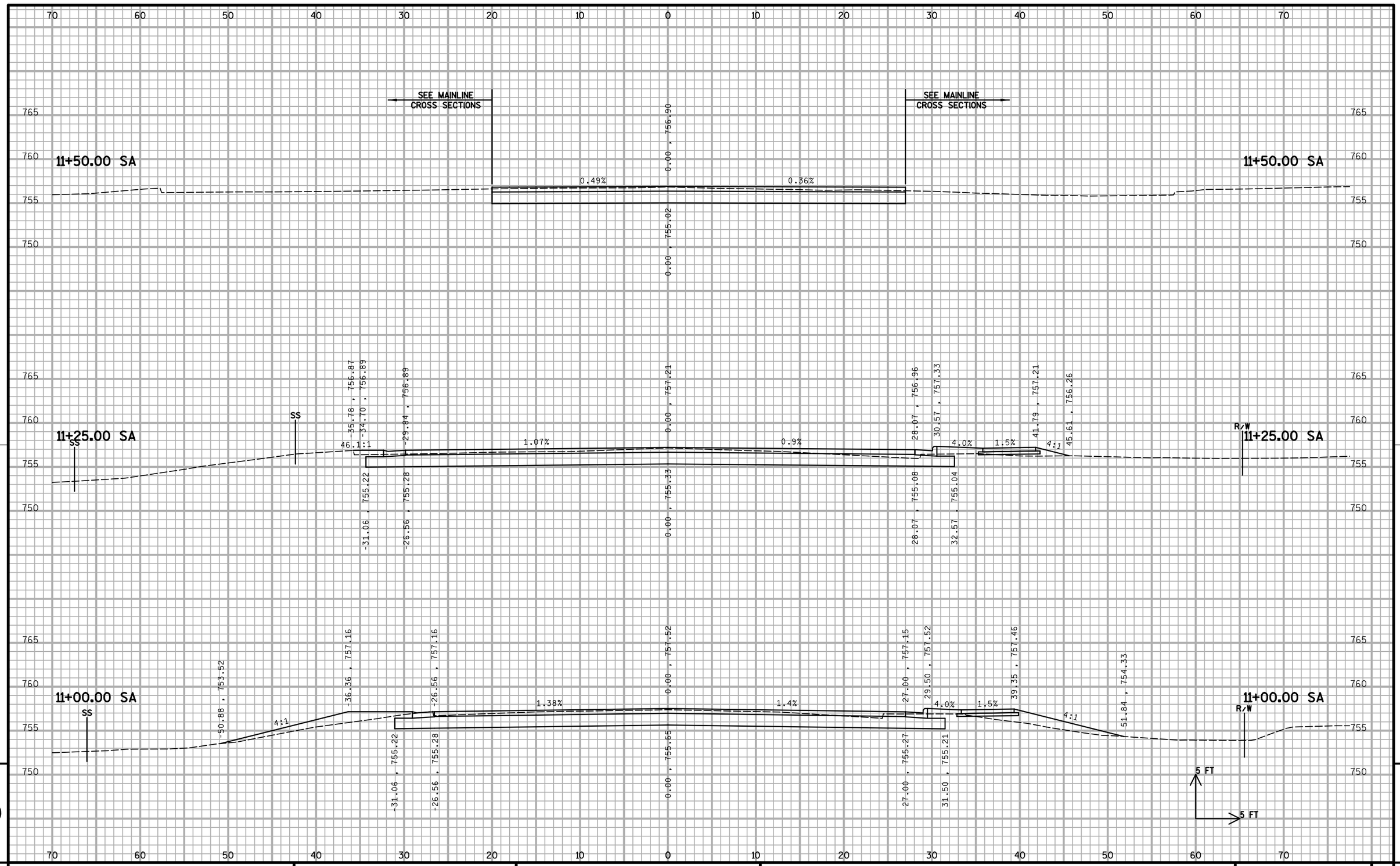


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: SPRUCE STREET	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_SPRUCE.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

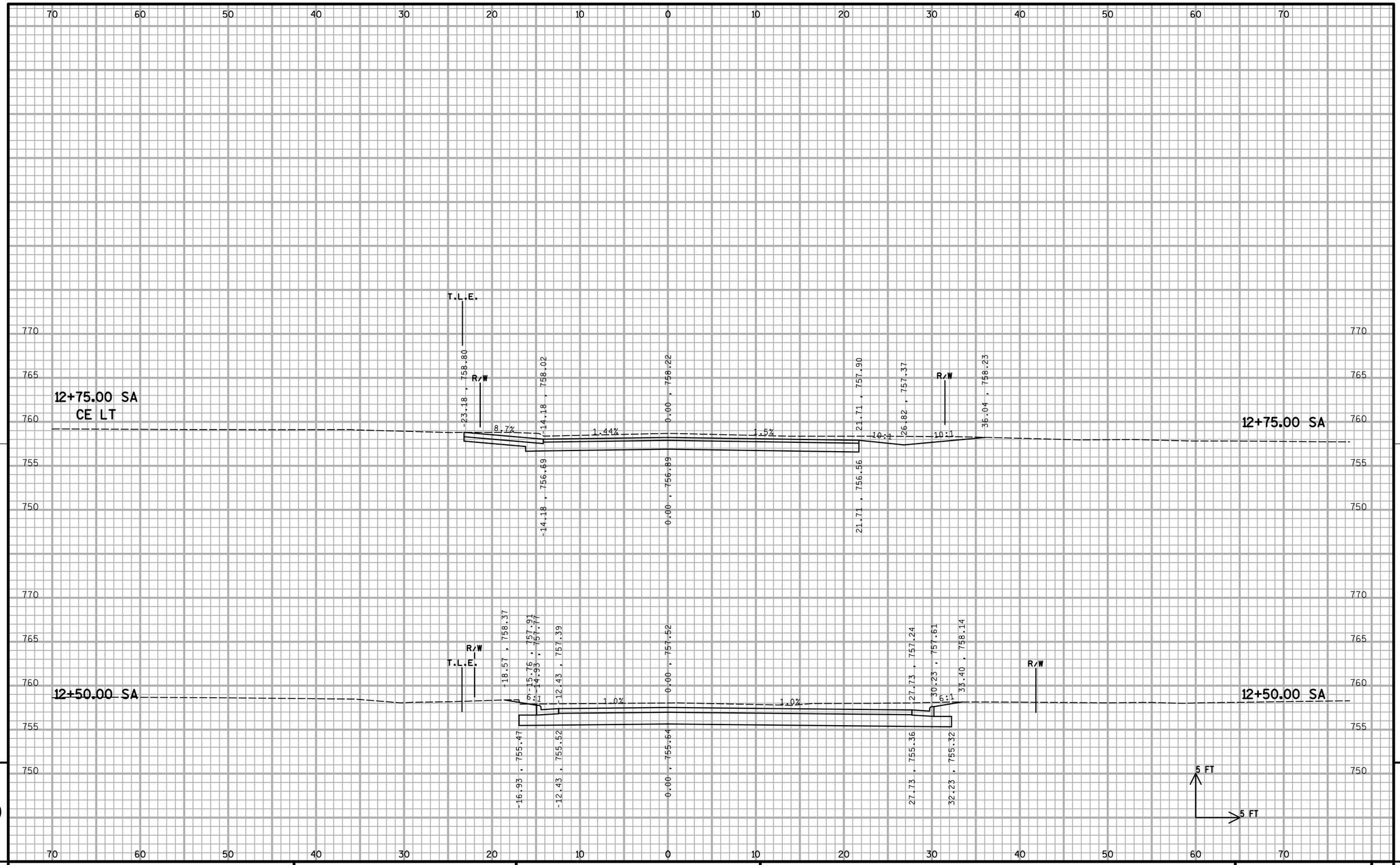


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: SPRUCE STREET	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_SPRUCE.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

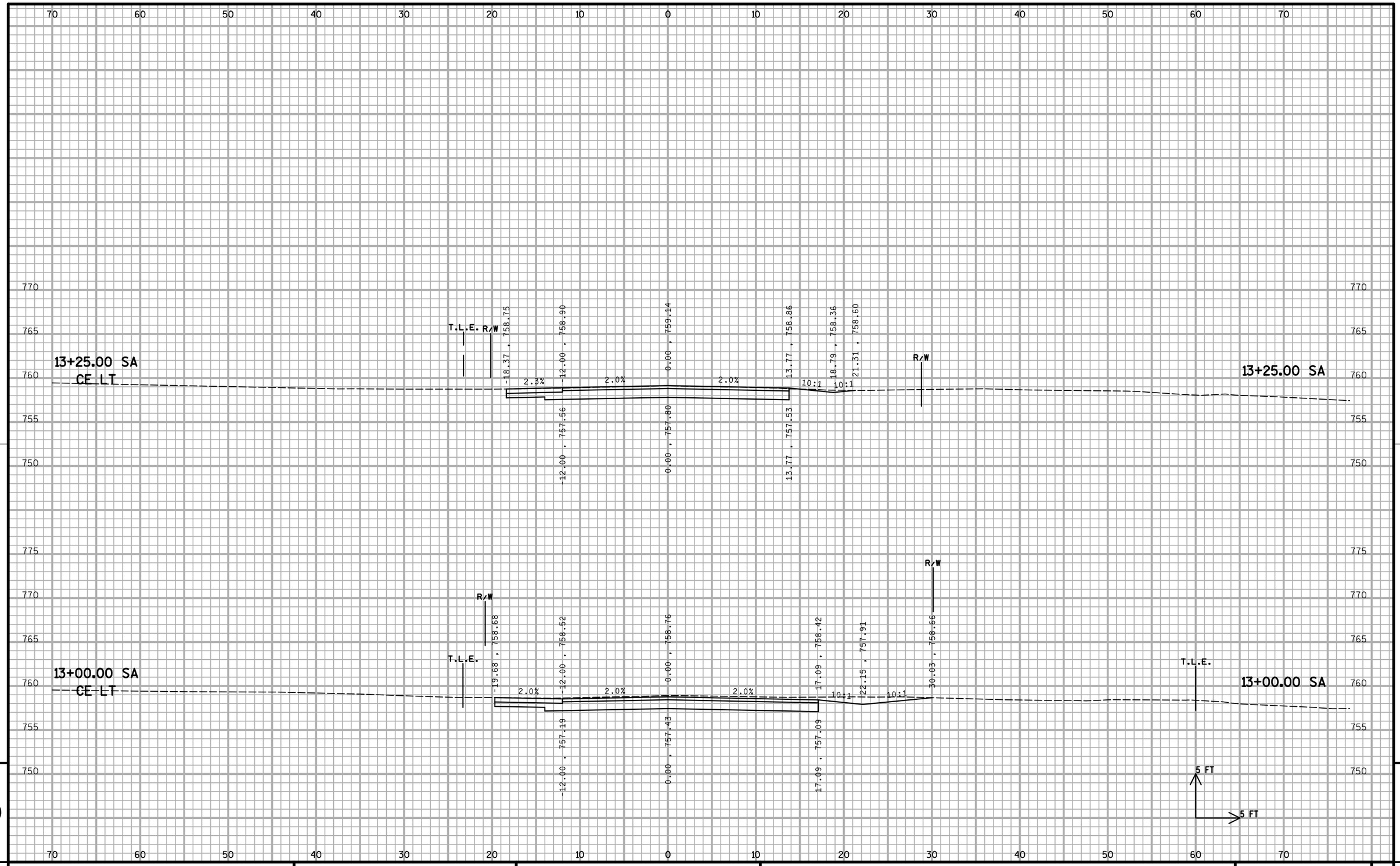


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: SPRUCE STREET	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_SPRUCE.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

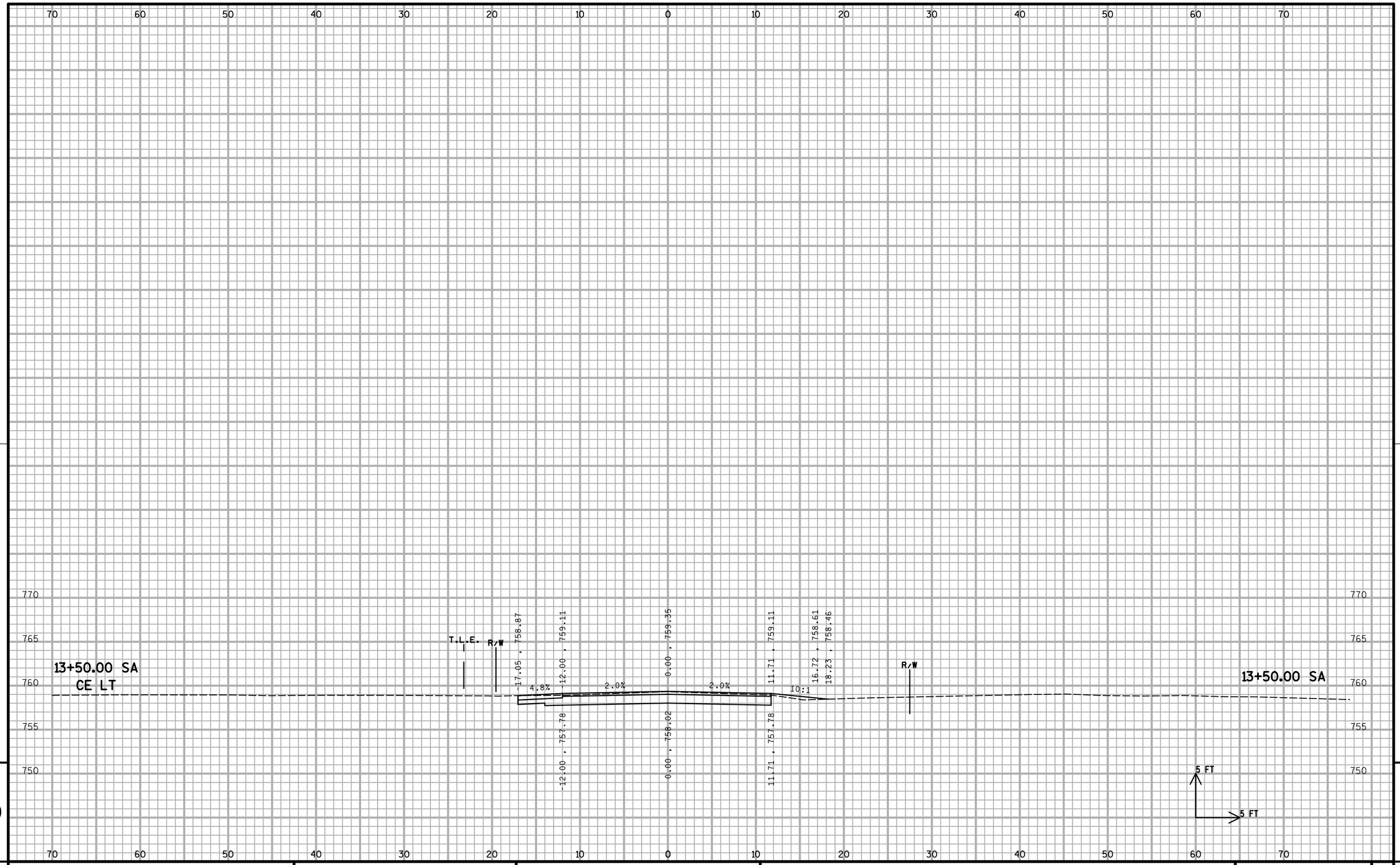


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: SPRUCE STREET	SHEET 342	E

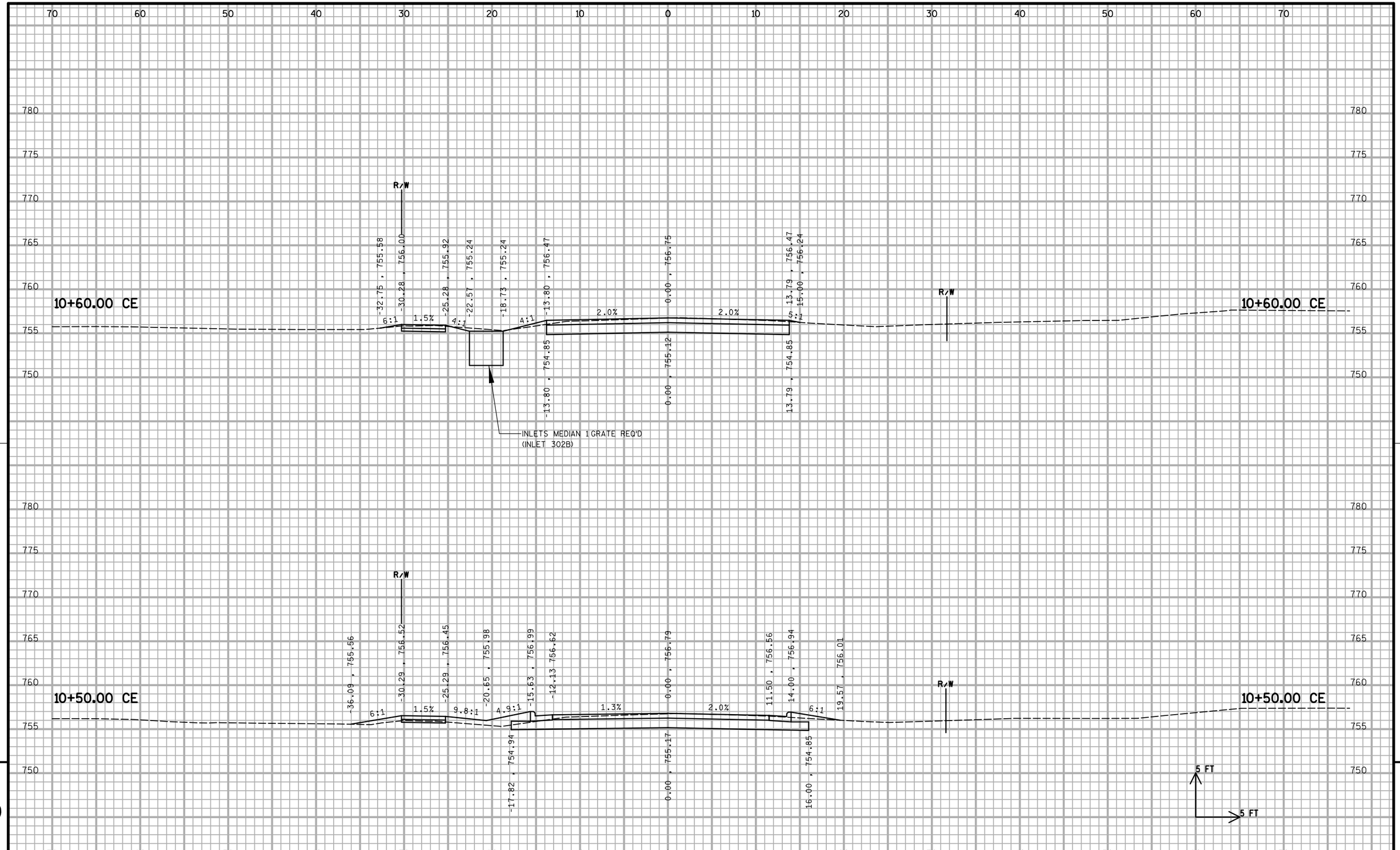
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: SPRUCE STREET	SHEET 343	E



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: CEDAR STREET	SHEET 344	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_CEDAR.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

775
770
765
760
755

10+70.00 CE

R/W

-33.10 , 765.62
-30.29 , 755.98
-25.29 , 755.90
-18.77 , 755.28

T.L.E.

6:1 1.6% 10.6:1 4:1

R/W

10+70.00 CE

5 FT
5 FT

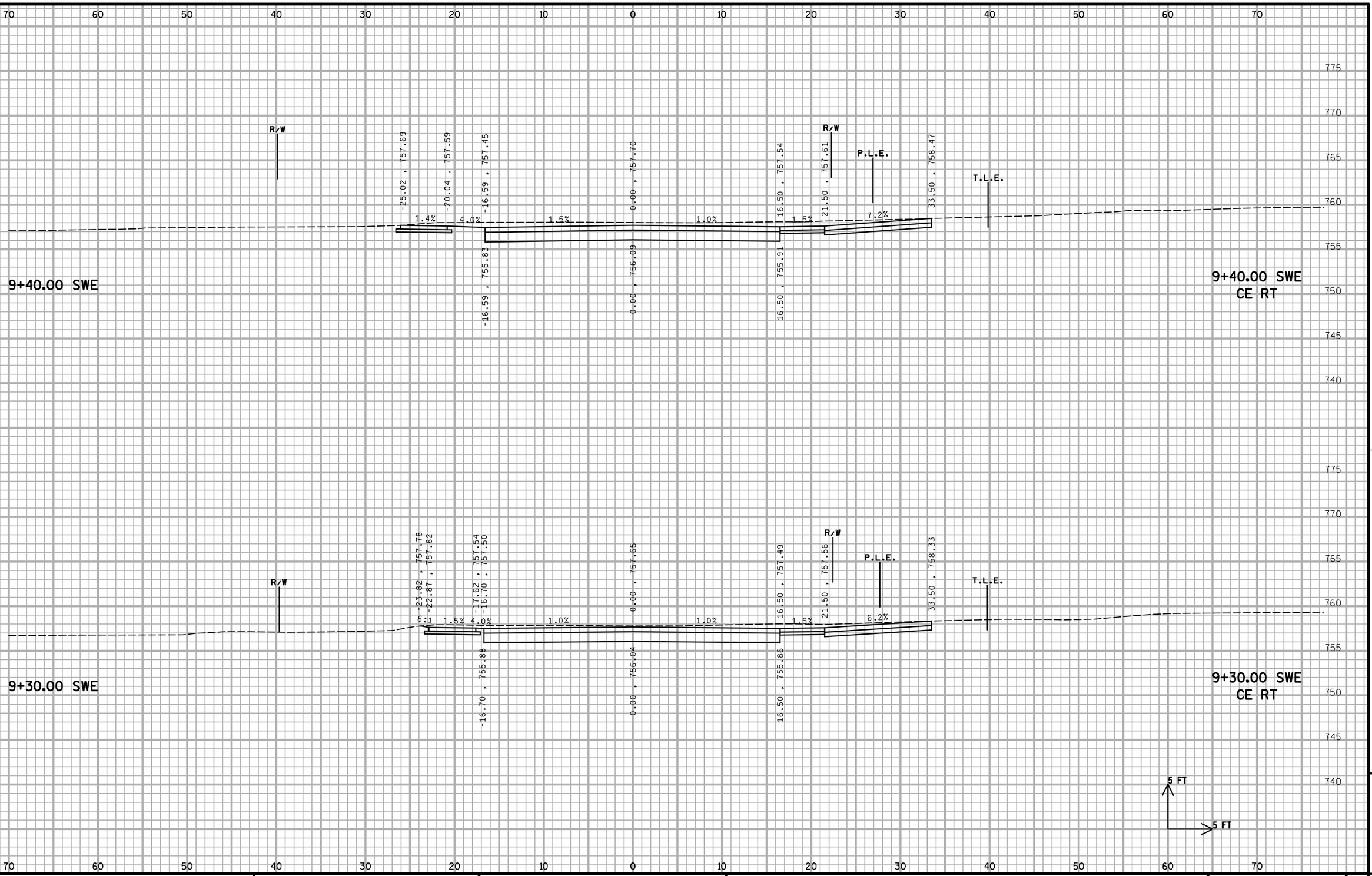
9

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70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: CEDAR STREET	SHEET 345	E

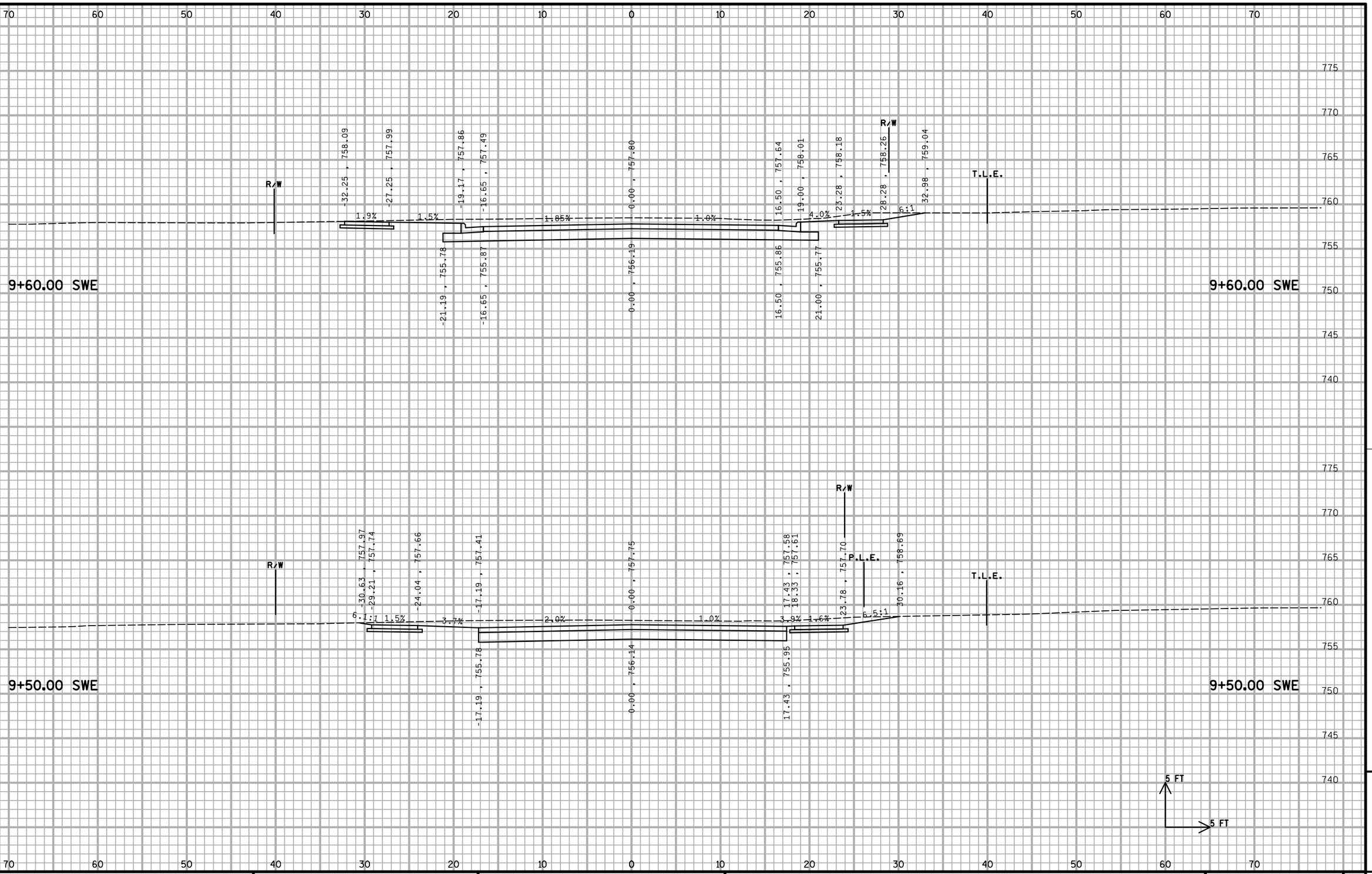
FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_CEDAR.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



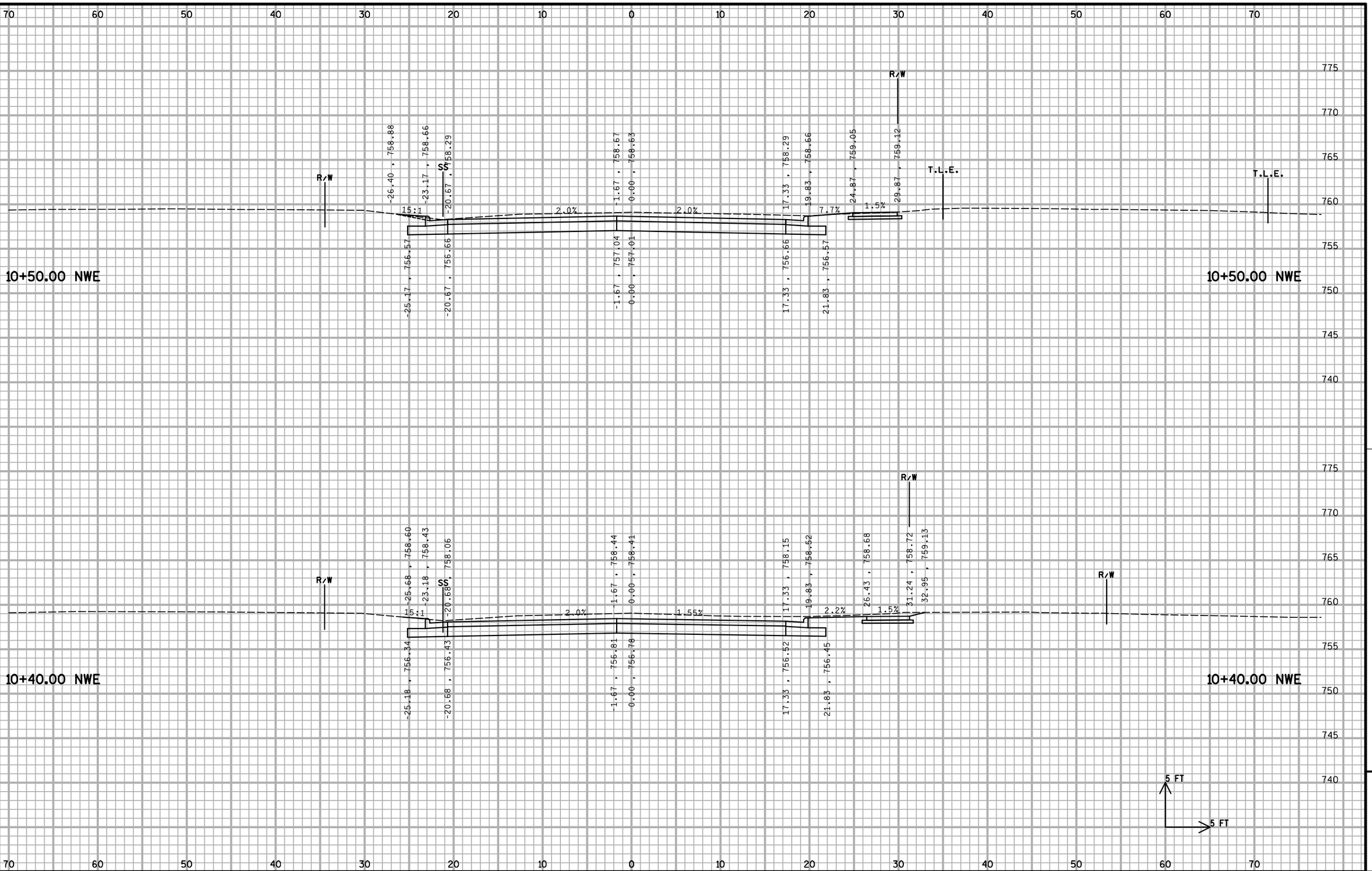
9 9

PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: SOUTH WEBSTER AVENUE	SHEET 346	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_S_WEBSTER.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

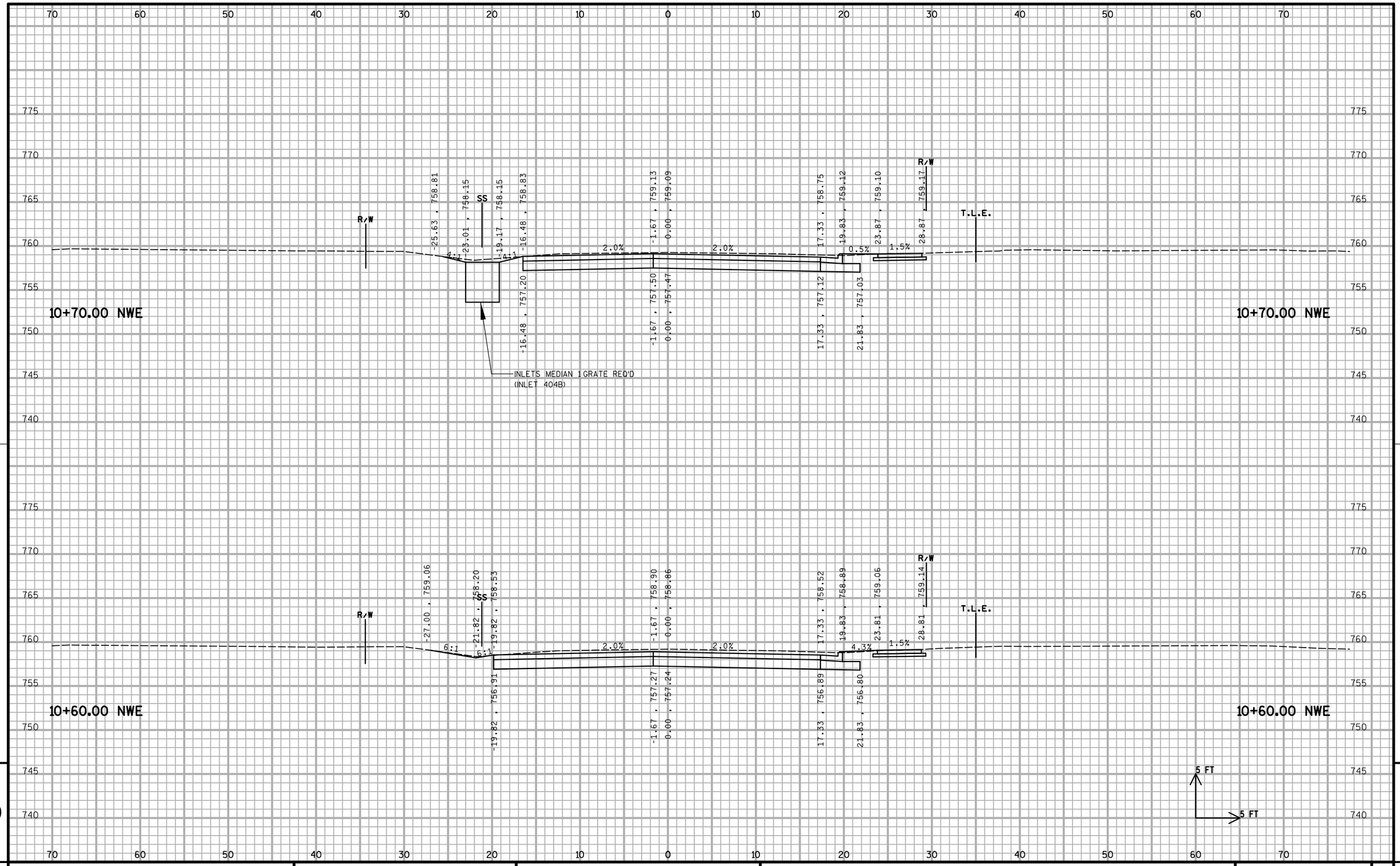


PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: SOUTH WEBSTER AVENUE	SHEET 347	E



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: NORTH WEBSTER AVENUE	SHEET 348	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_N_WEBSTER.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



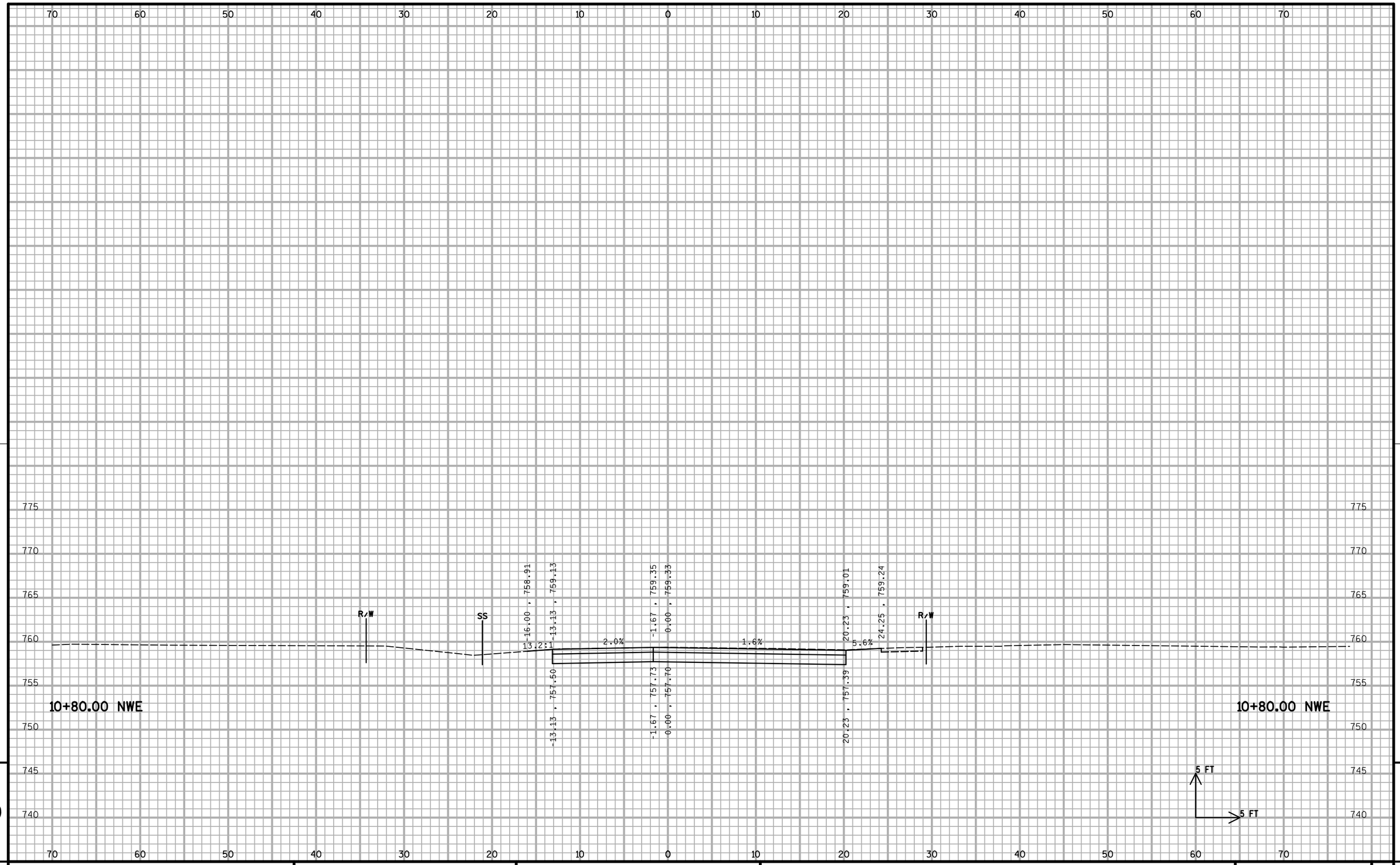
9

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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: NORTH WEBSTER AVENUE	SHEET 349	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_N_WEBSTER.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

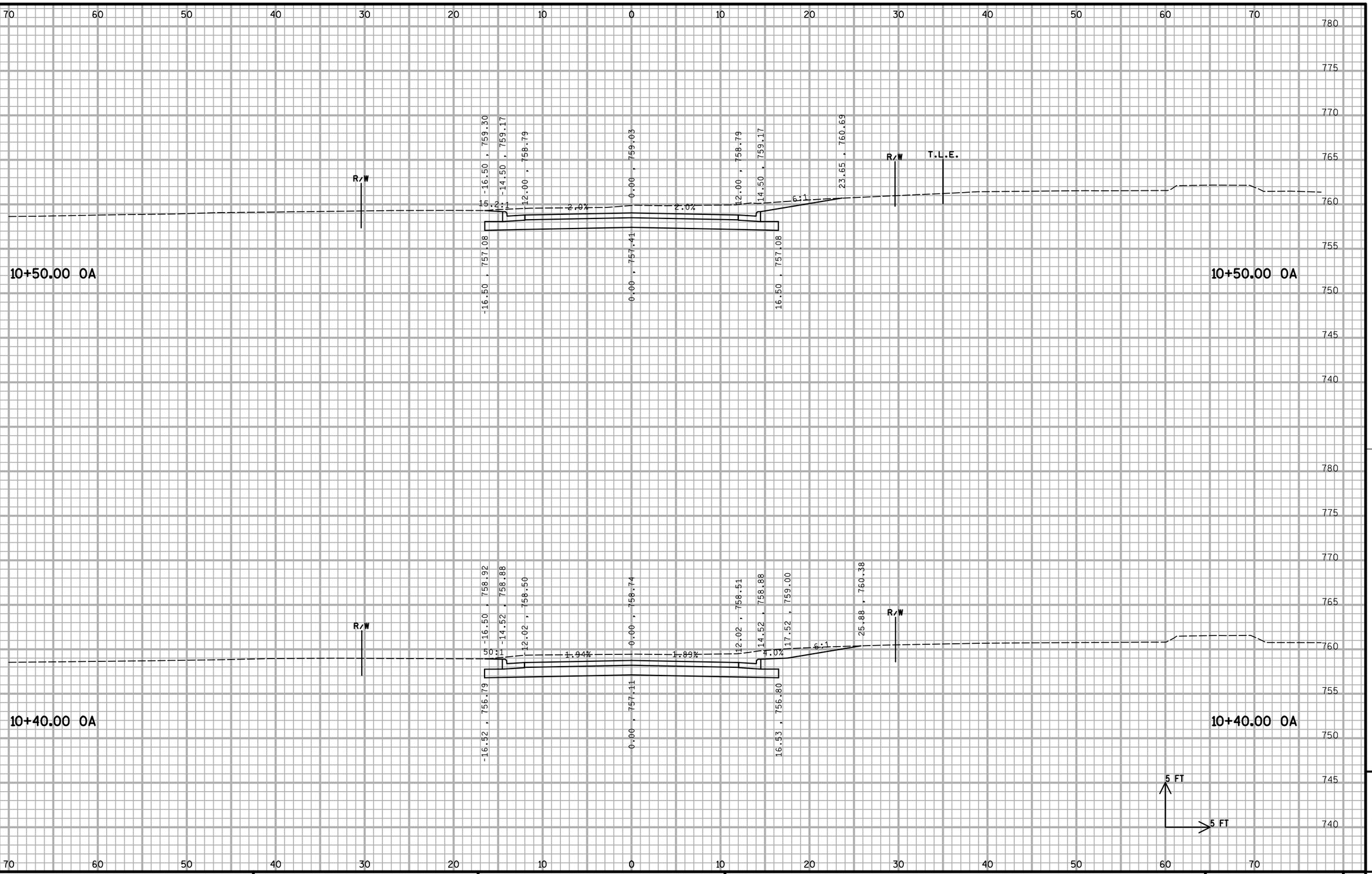


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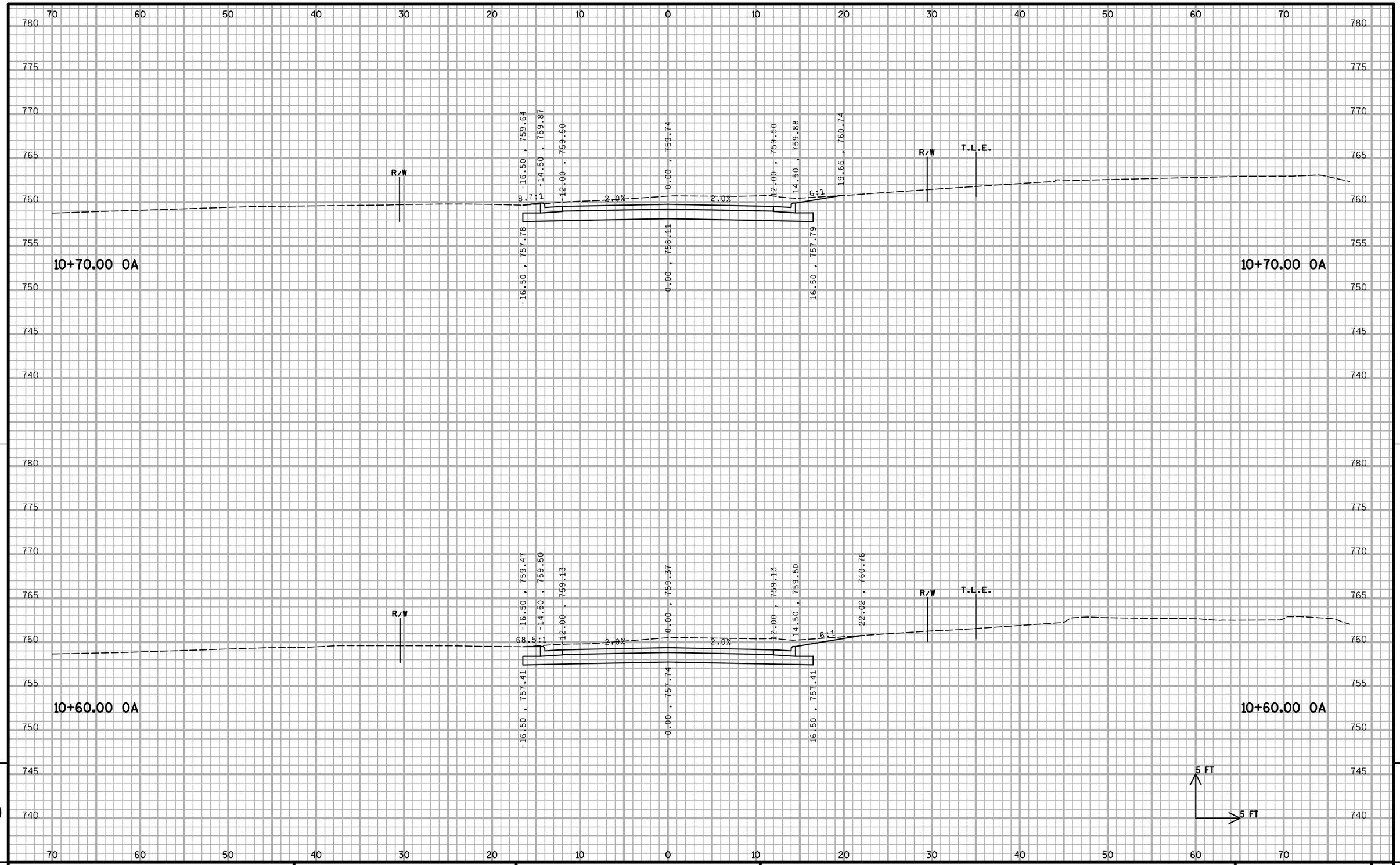
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: NORTH WEBSTER AVENUE	SHEET 350	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_N_WEBSTER.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: OAK STREET	SHEET 351	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_OAK.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

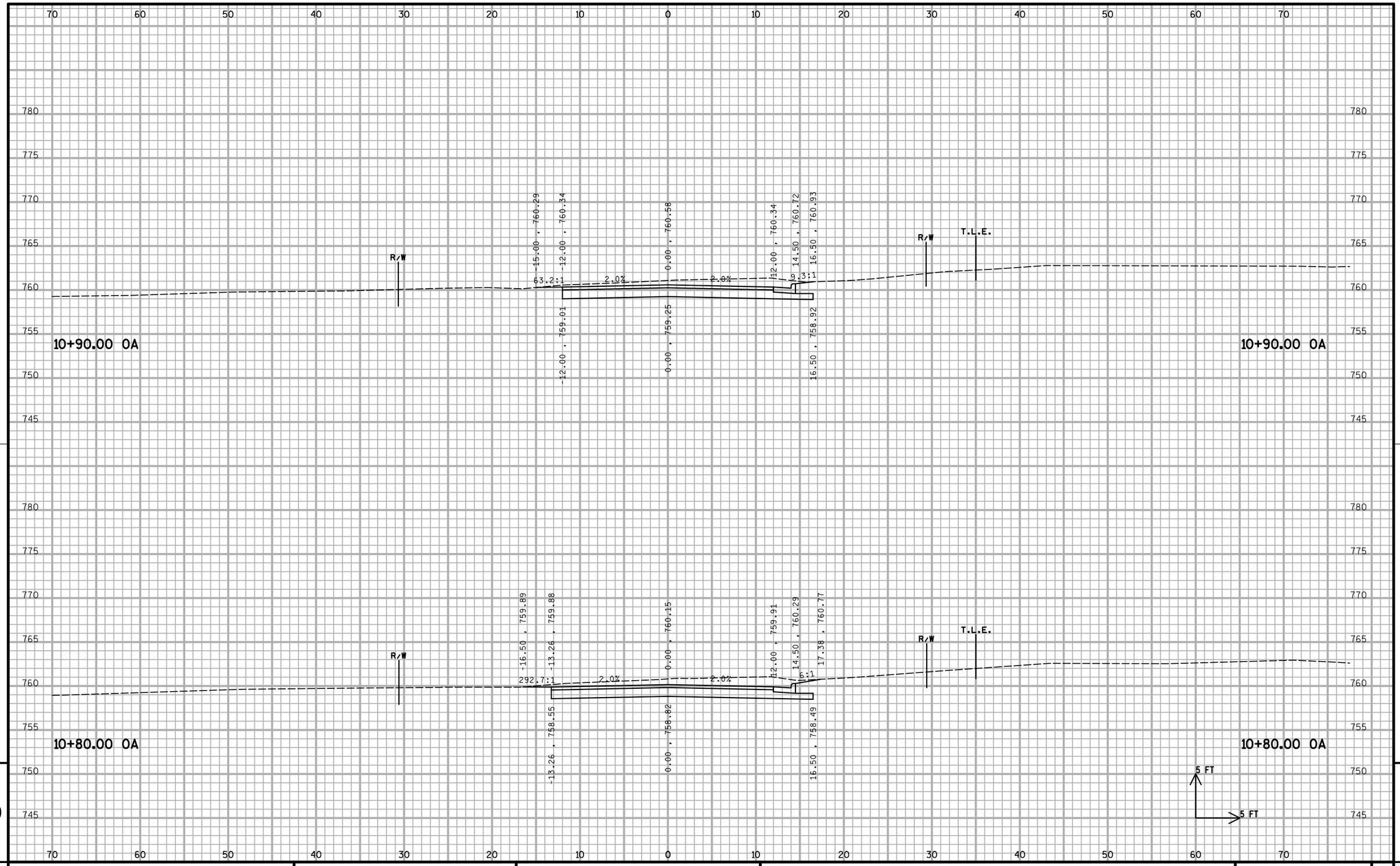


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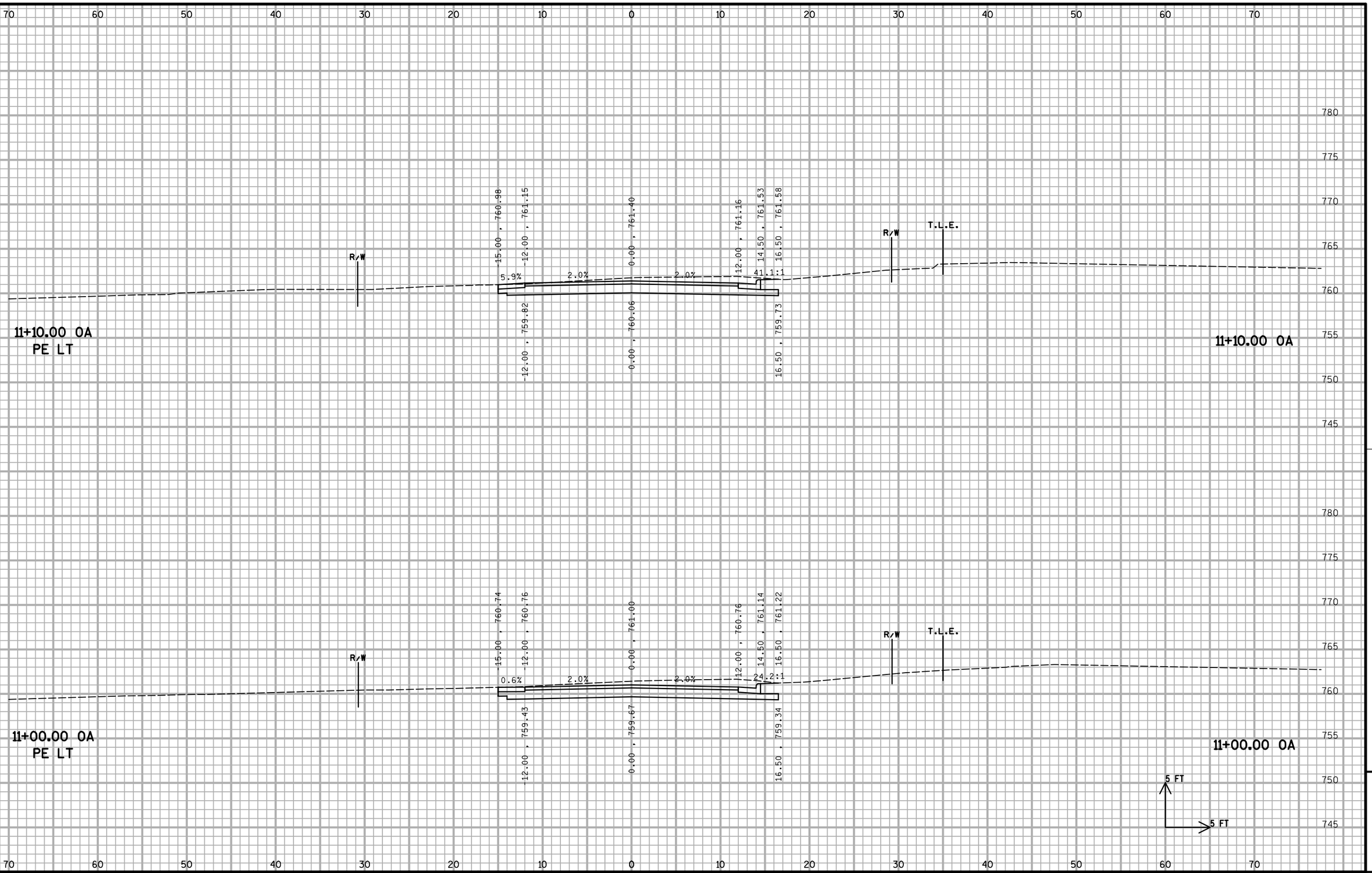
PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: OAK STREET	SHEET 352	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_OAK.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: OAK STREET	SHEET 353	E

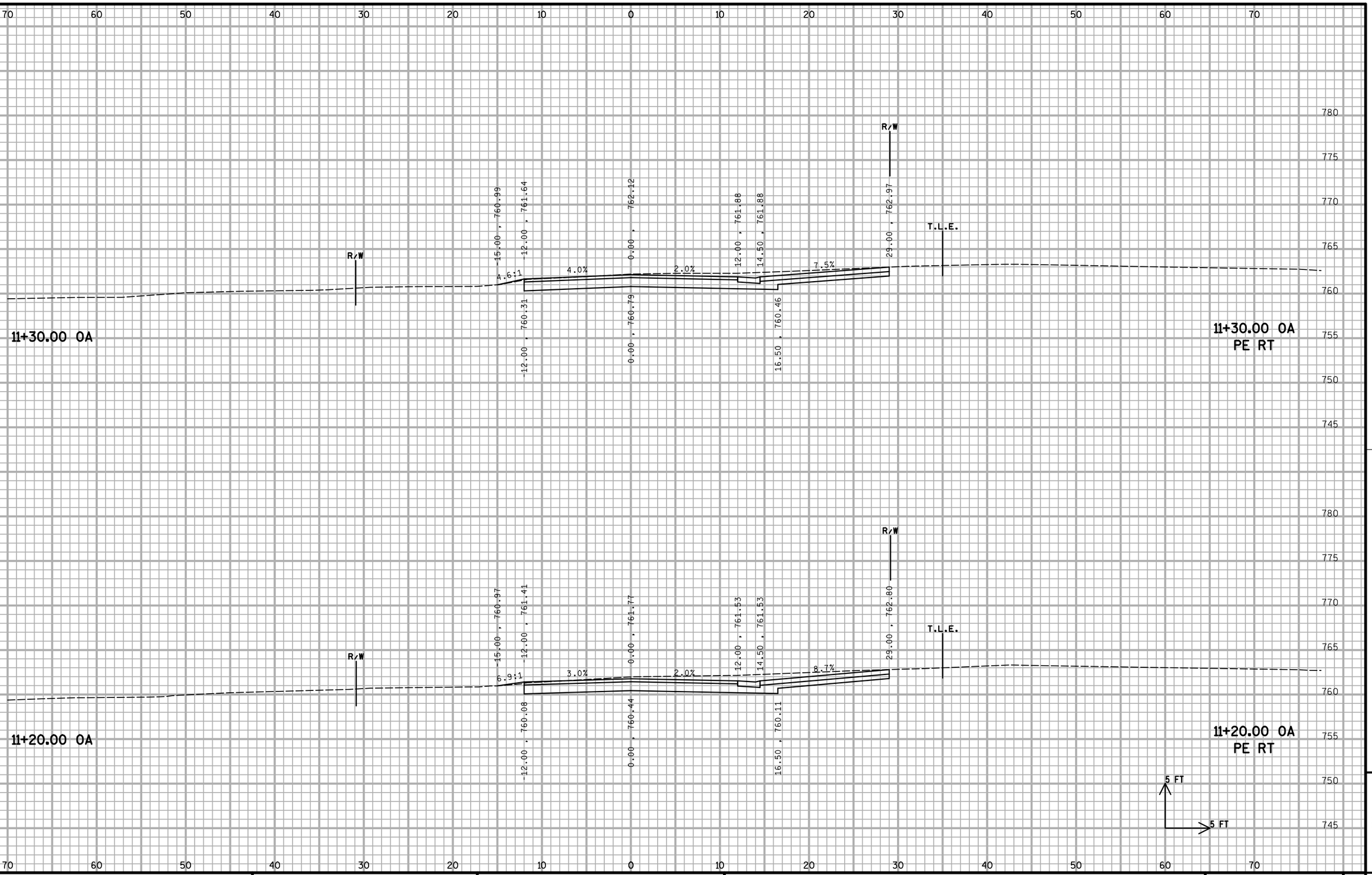
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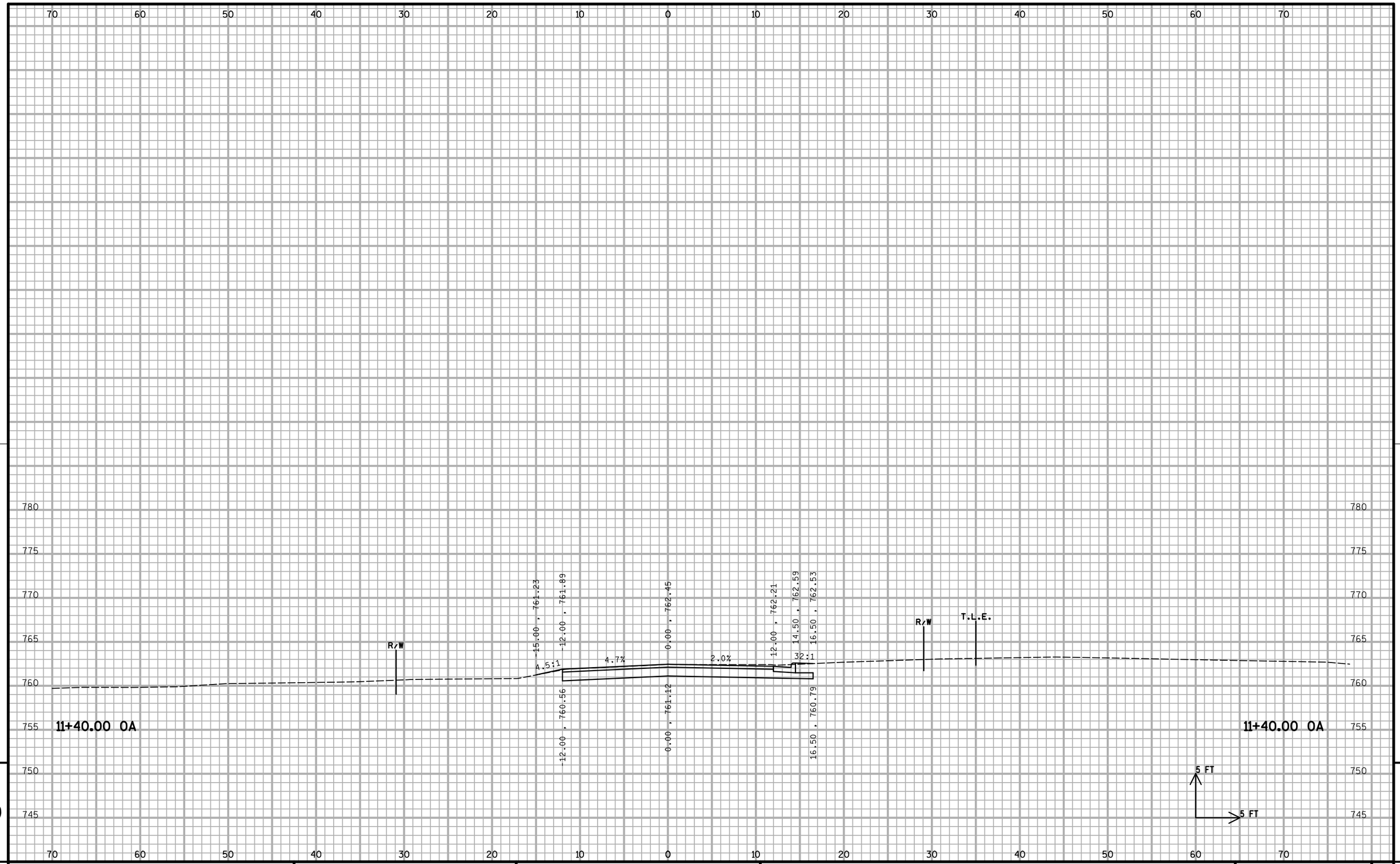
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: OAK STREET	SHEET 354	E



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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: OAK STREET	SHEET 355	E

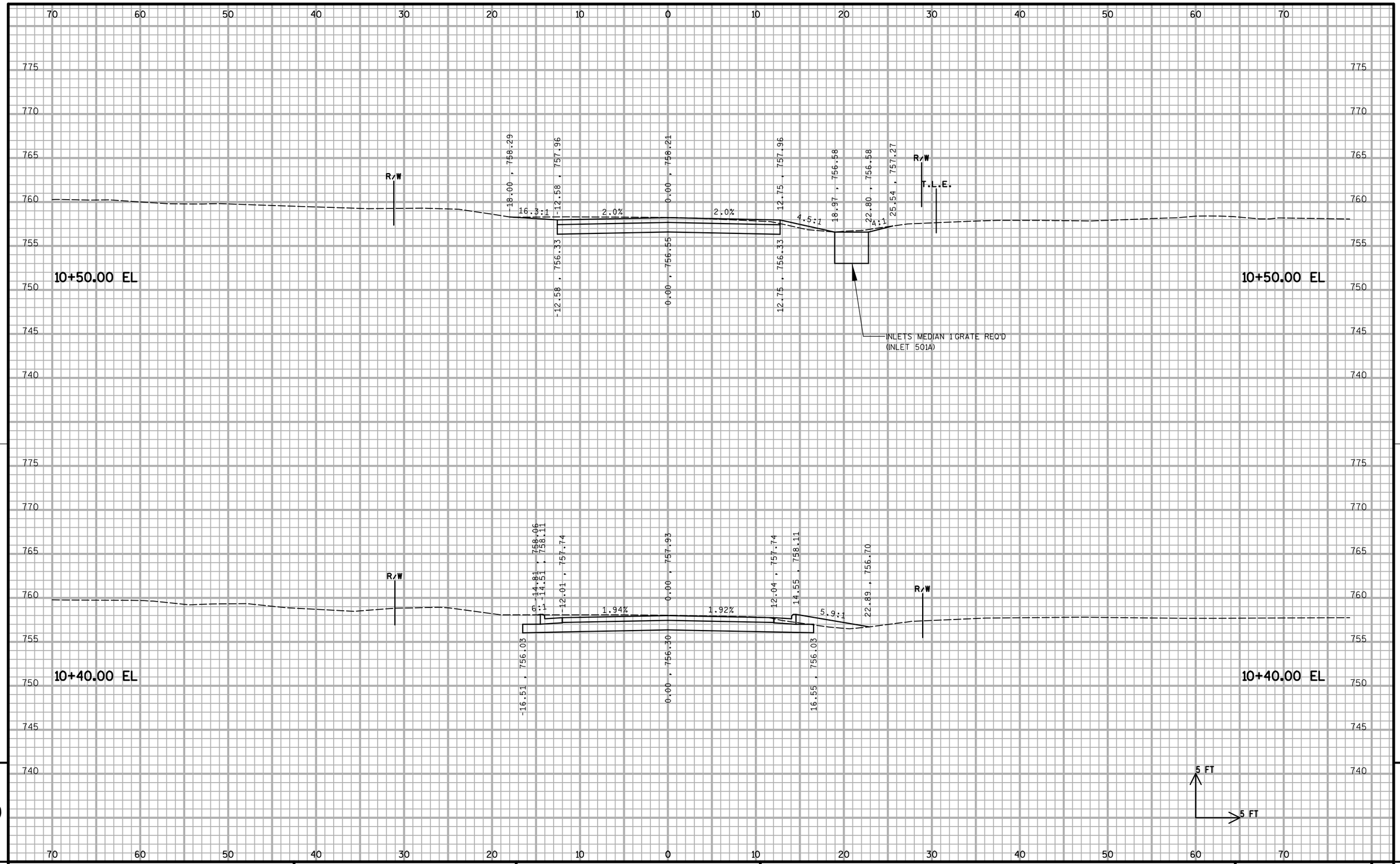


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: OAK STREET	SHEET 356	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_OAK.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

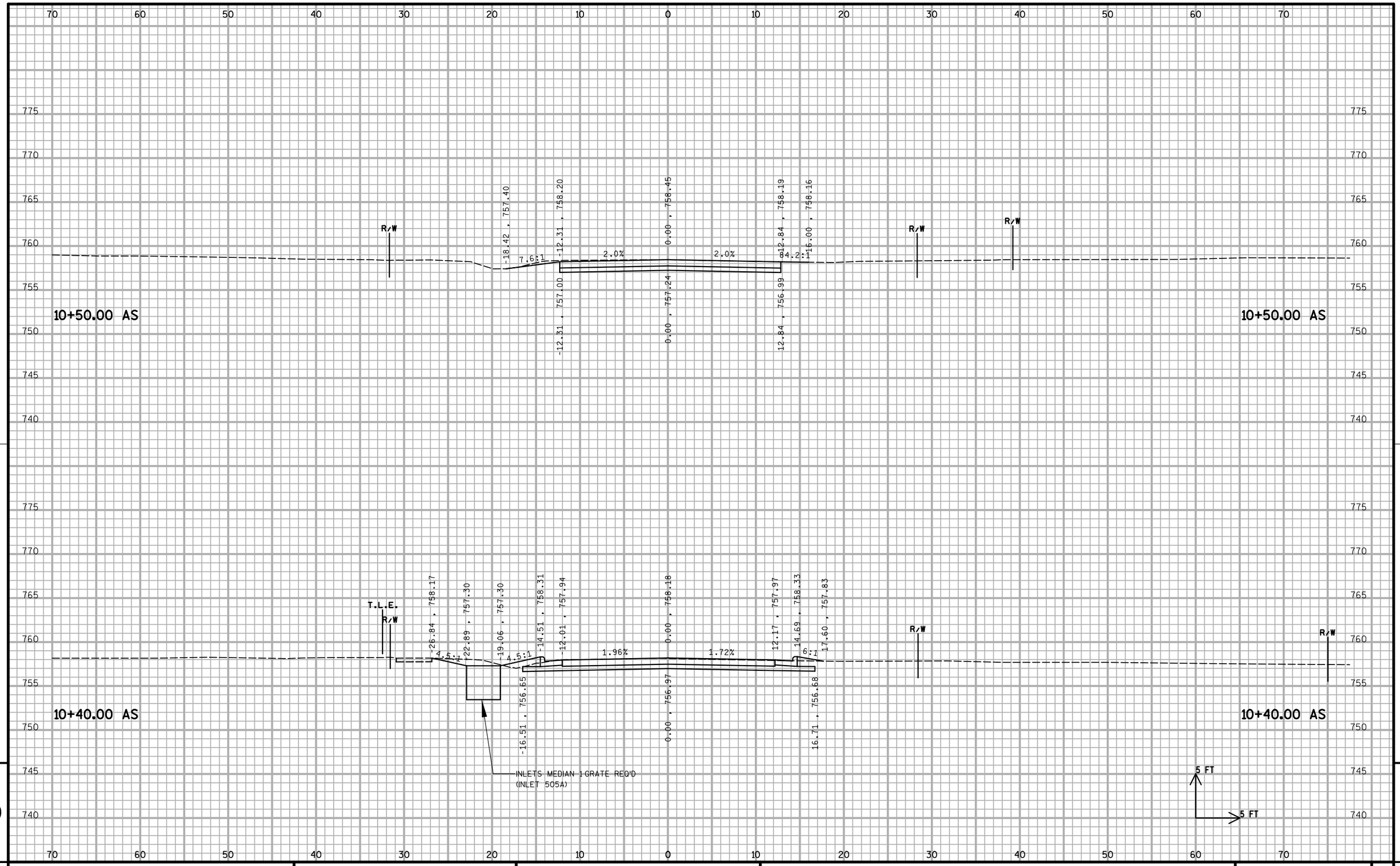


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: ELM STREET	SHEET 357	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_ELM.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

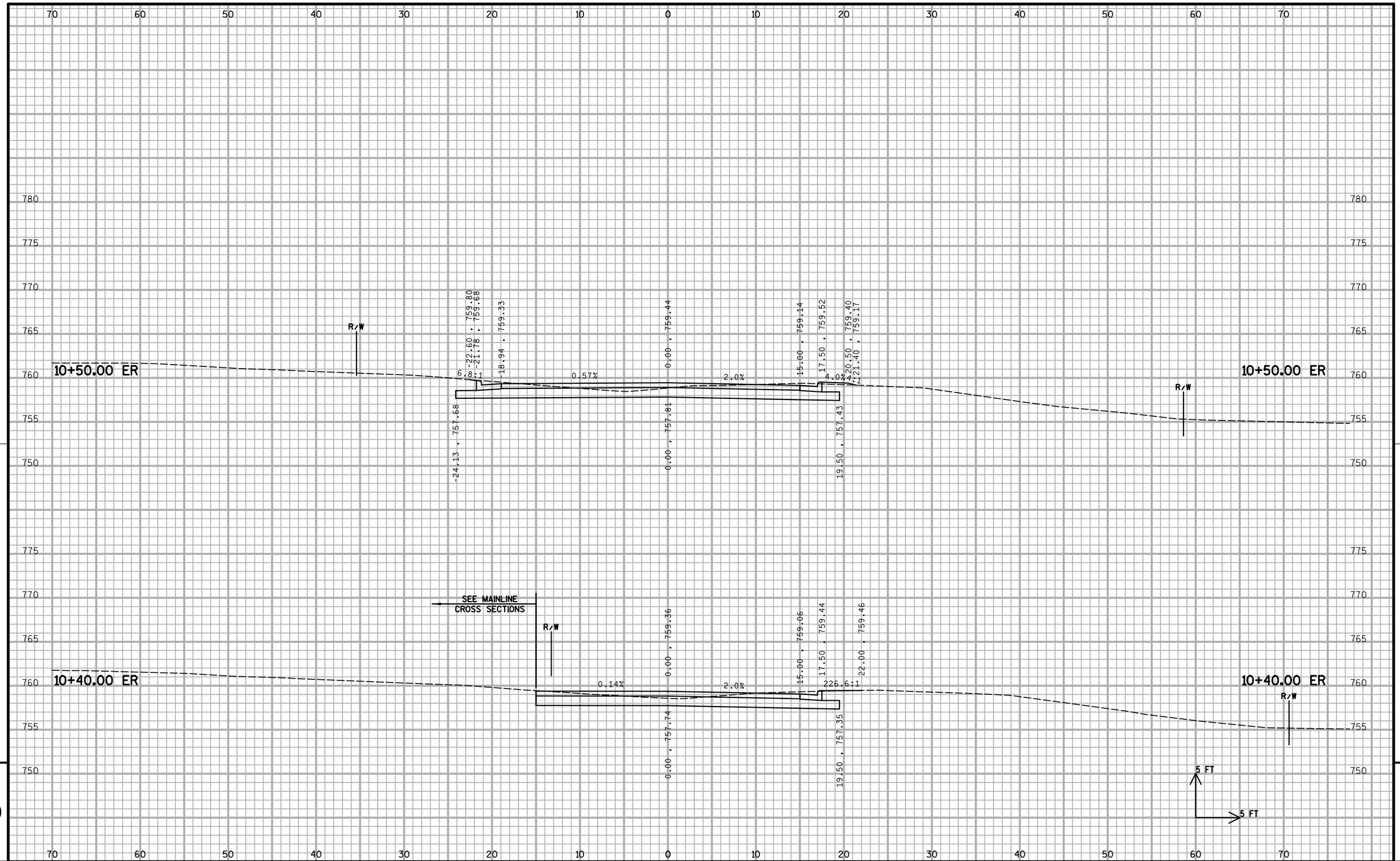


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: ASH STREET	SHEET 358	E

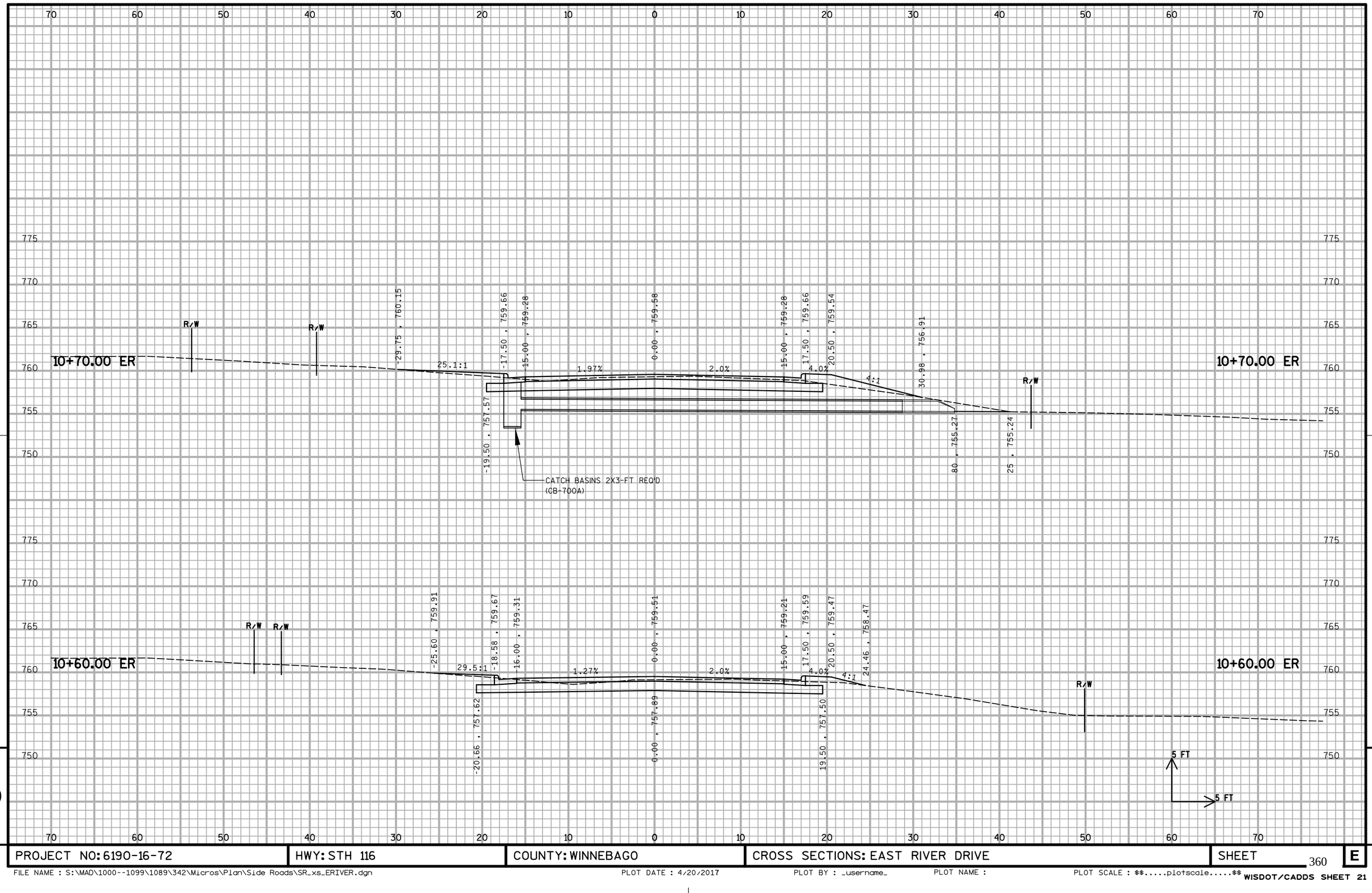
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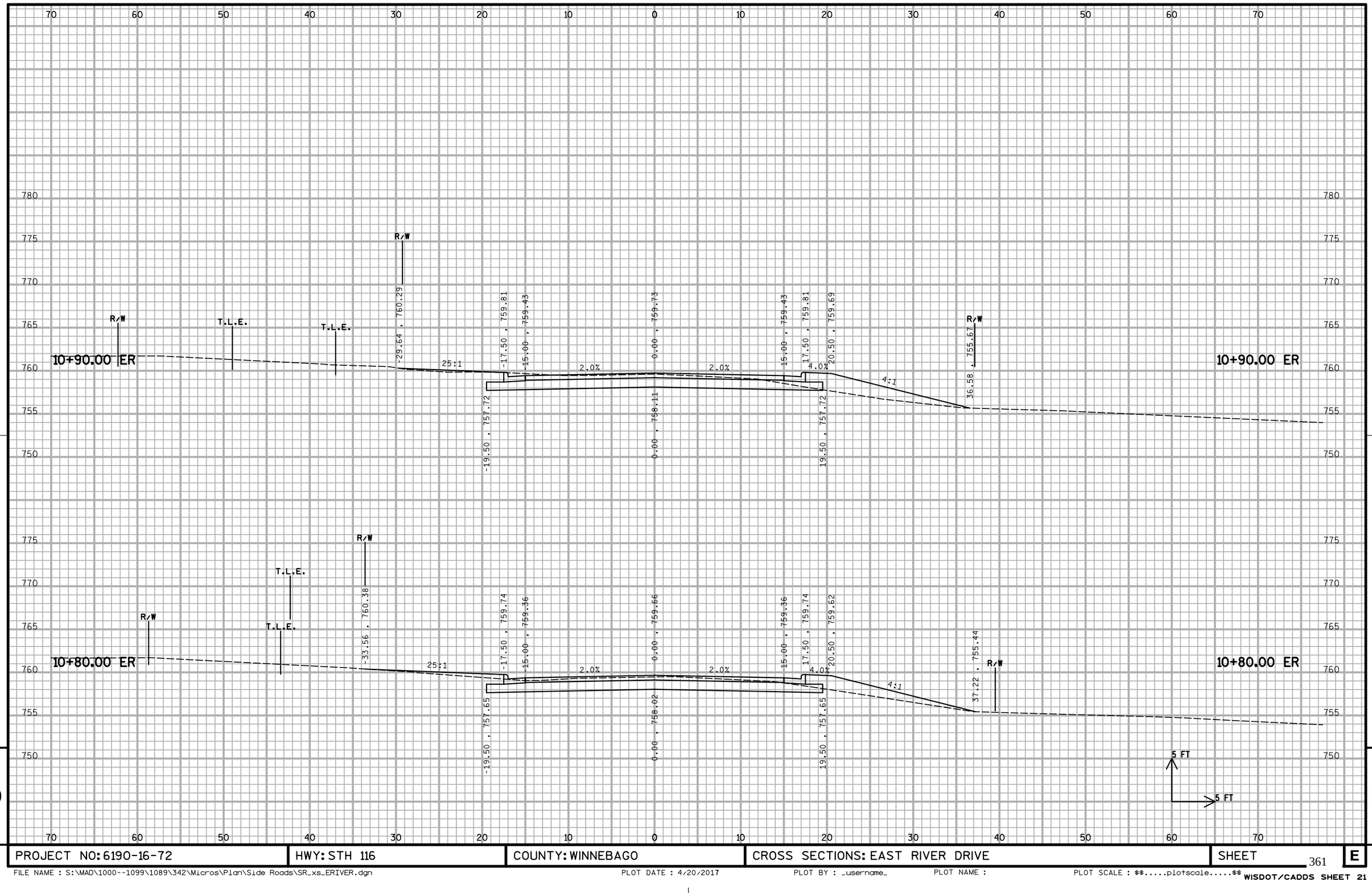
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: EAST RIVER DRIVE	SHEET 359	E



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: EAST RIVER DRIVE	SHEET 360	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_ERIVER.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

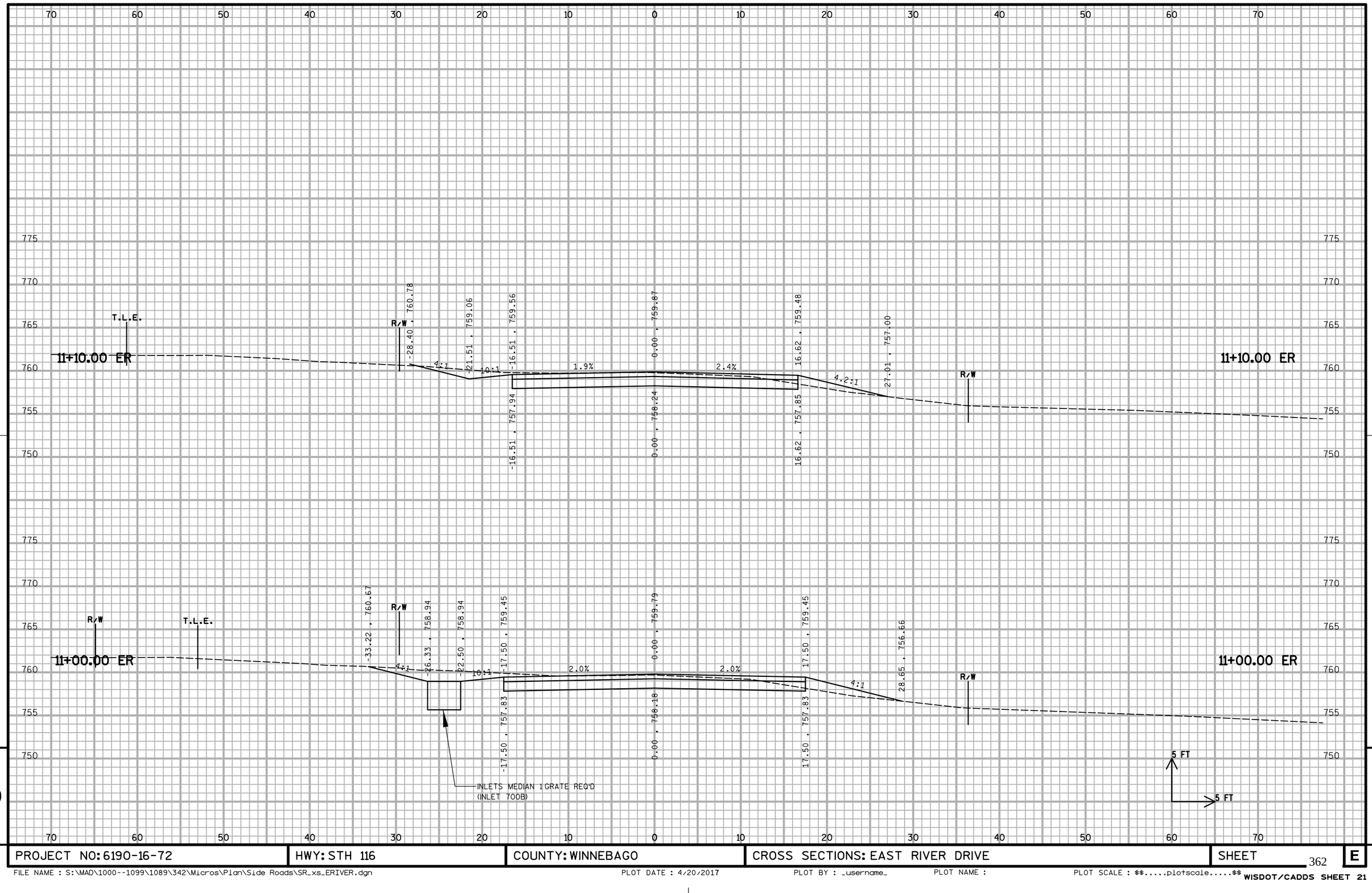


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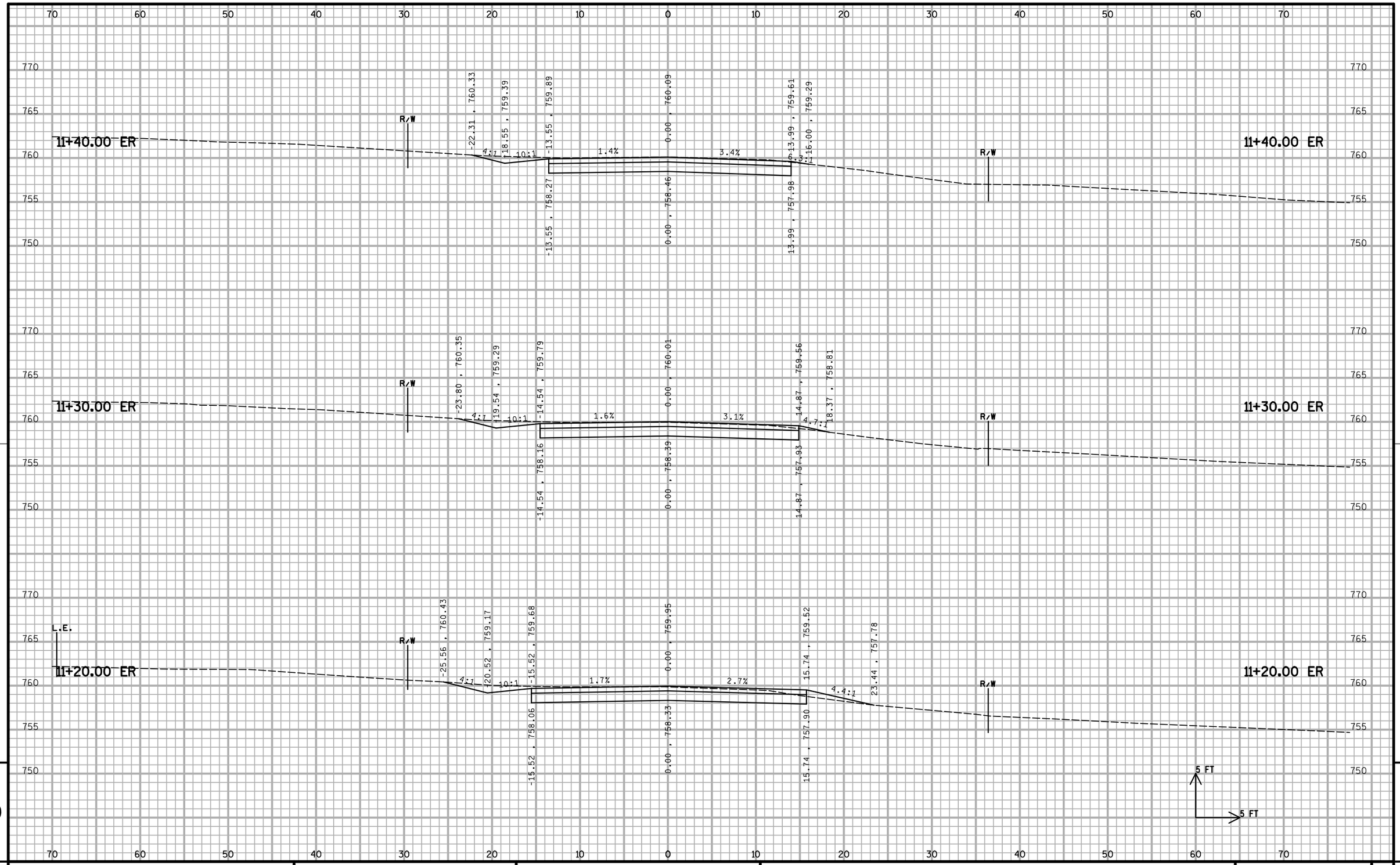
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FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_ERIVER.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: EAST RIVER DRIVE	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_ERIVER.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

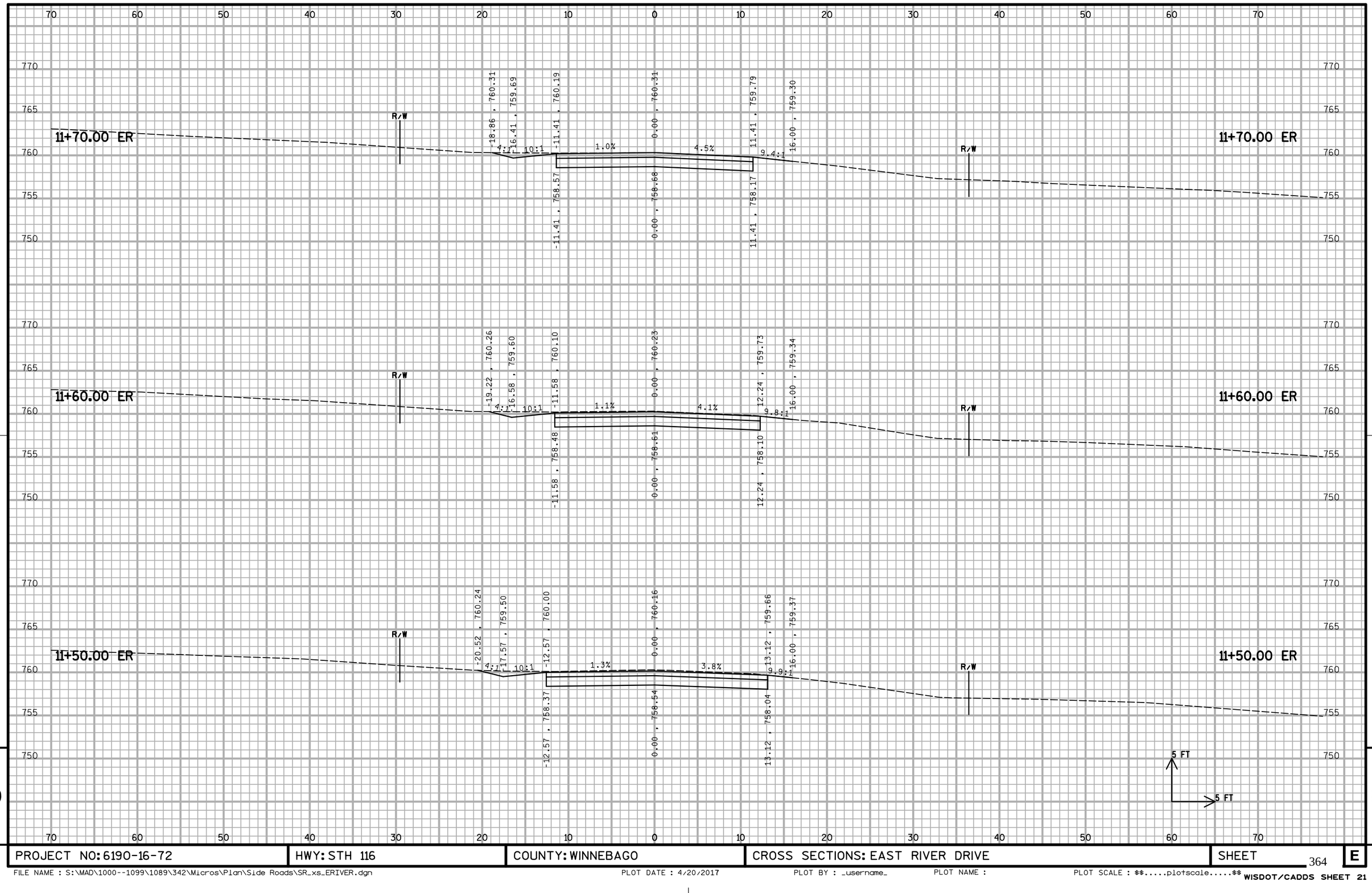


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: EAST RIVER DRIVE	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_ERIVER.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

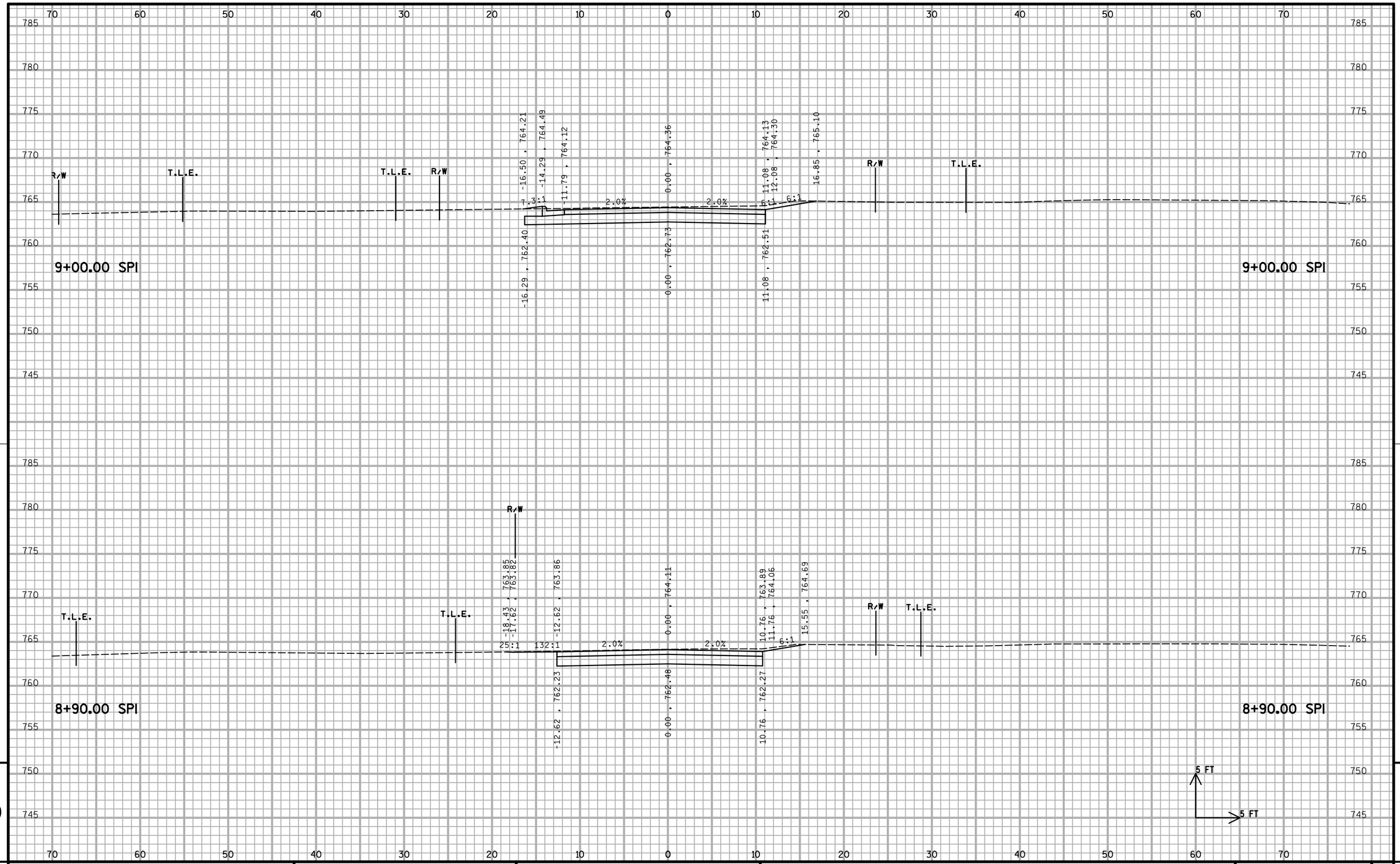


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: EAST RIVER DRIVE	SHEET	E

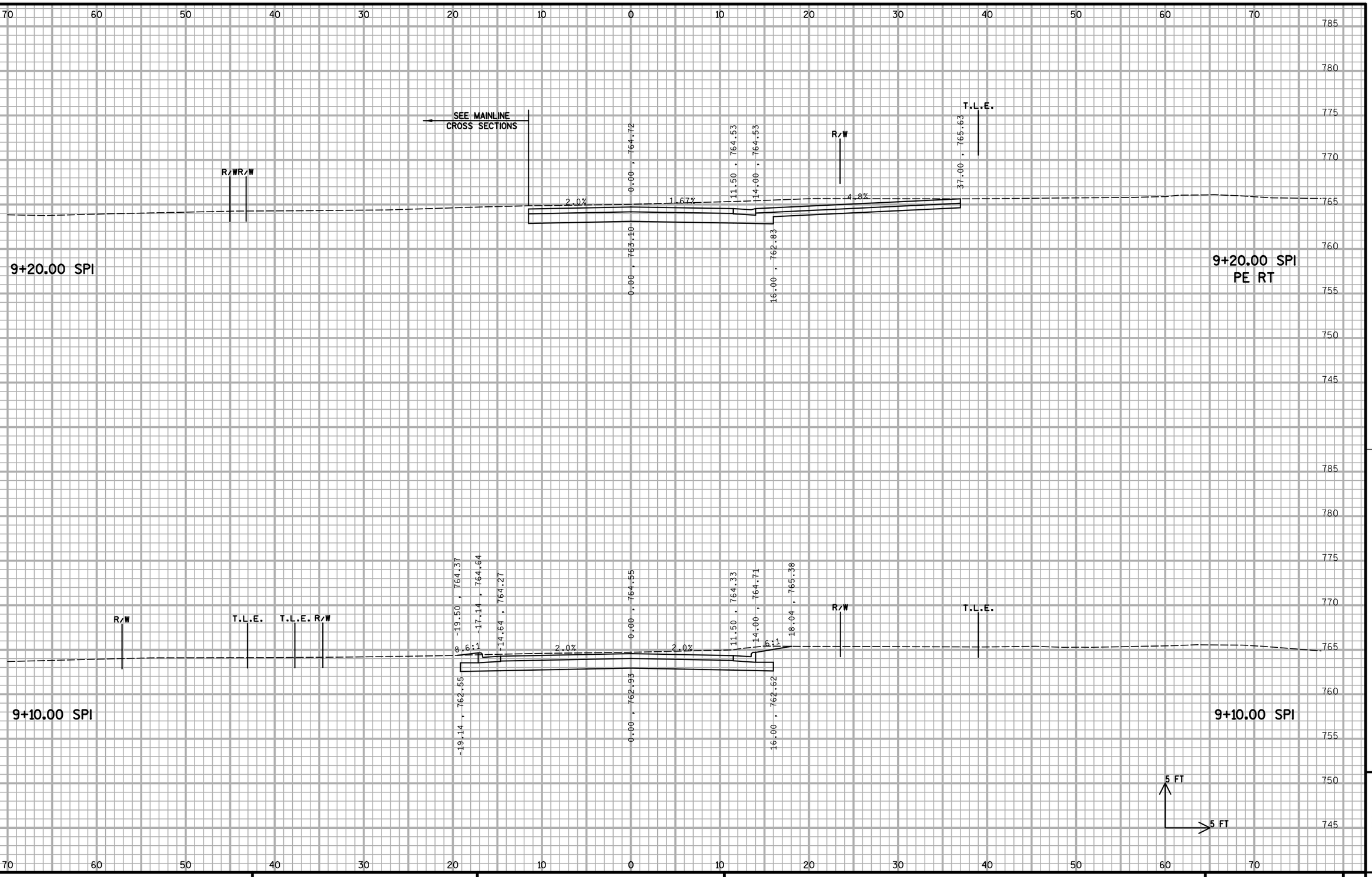
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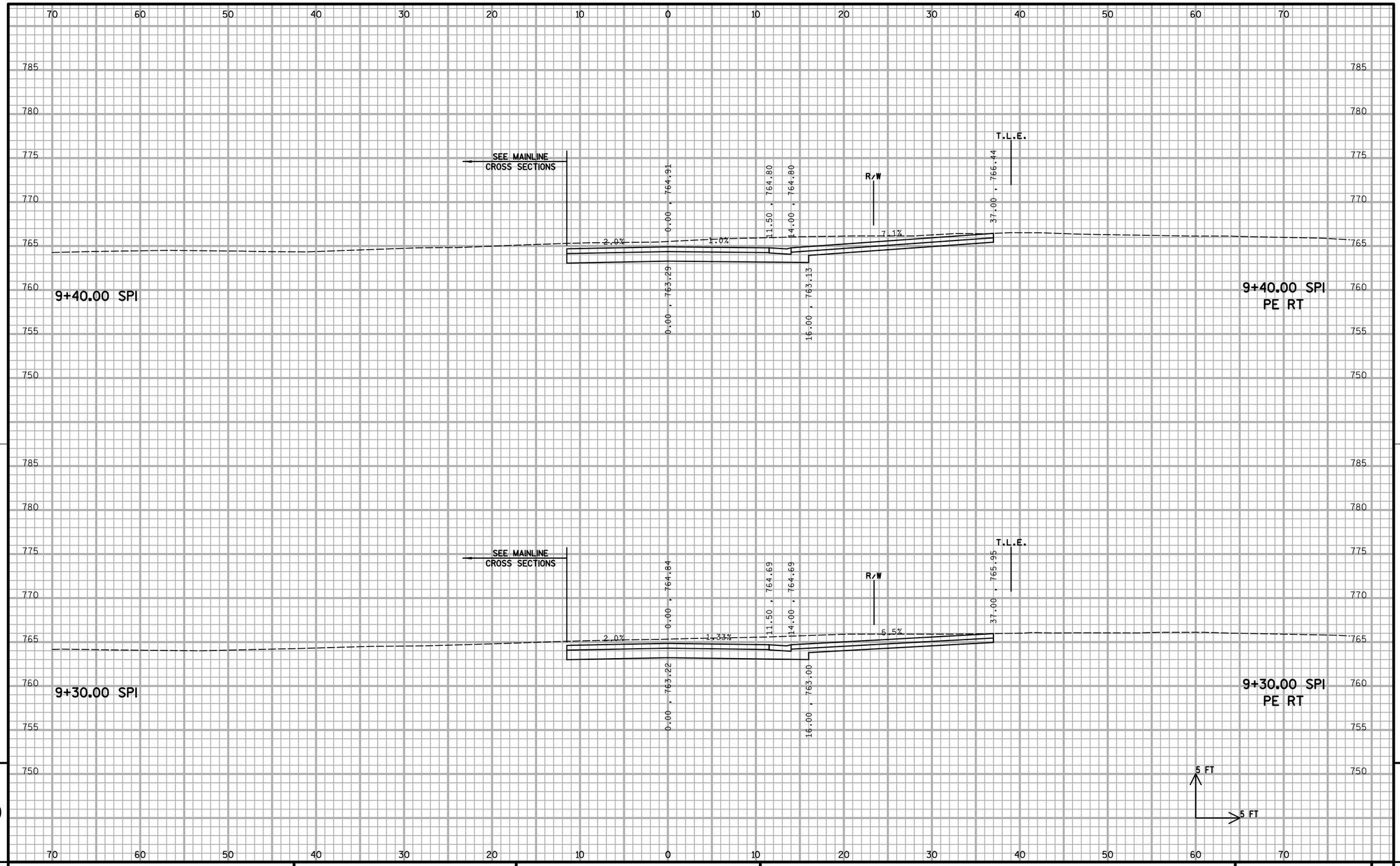
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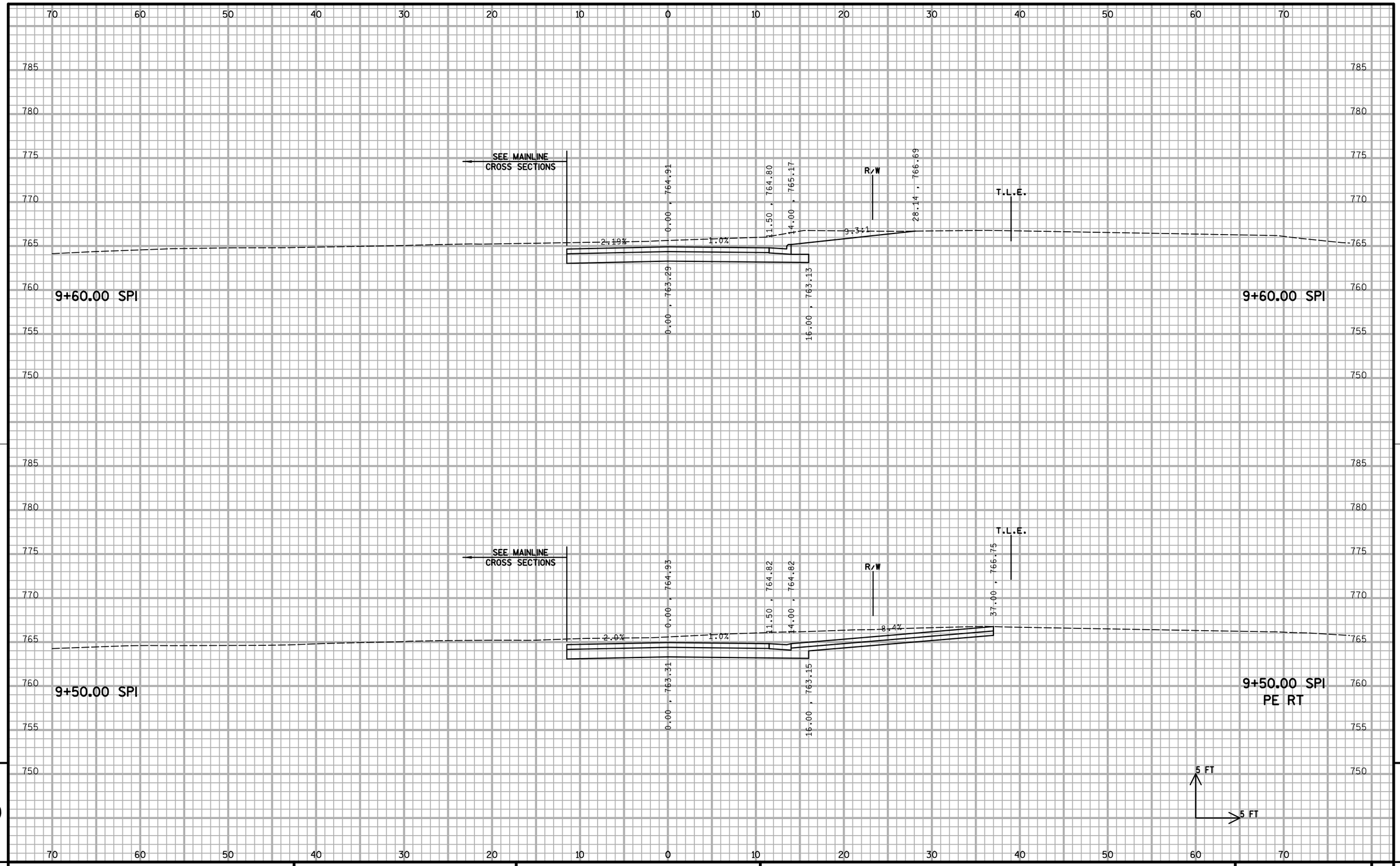
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: SOUTH PINE STREET	SHEET 367	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_S_PINE.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

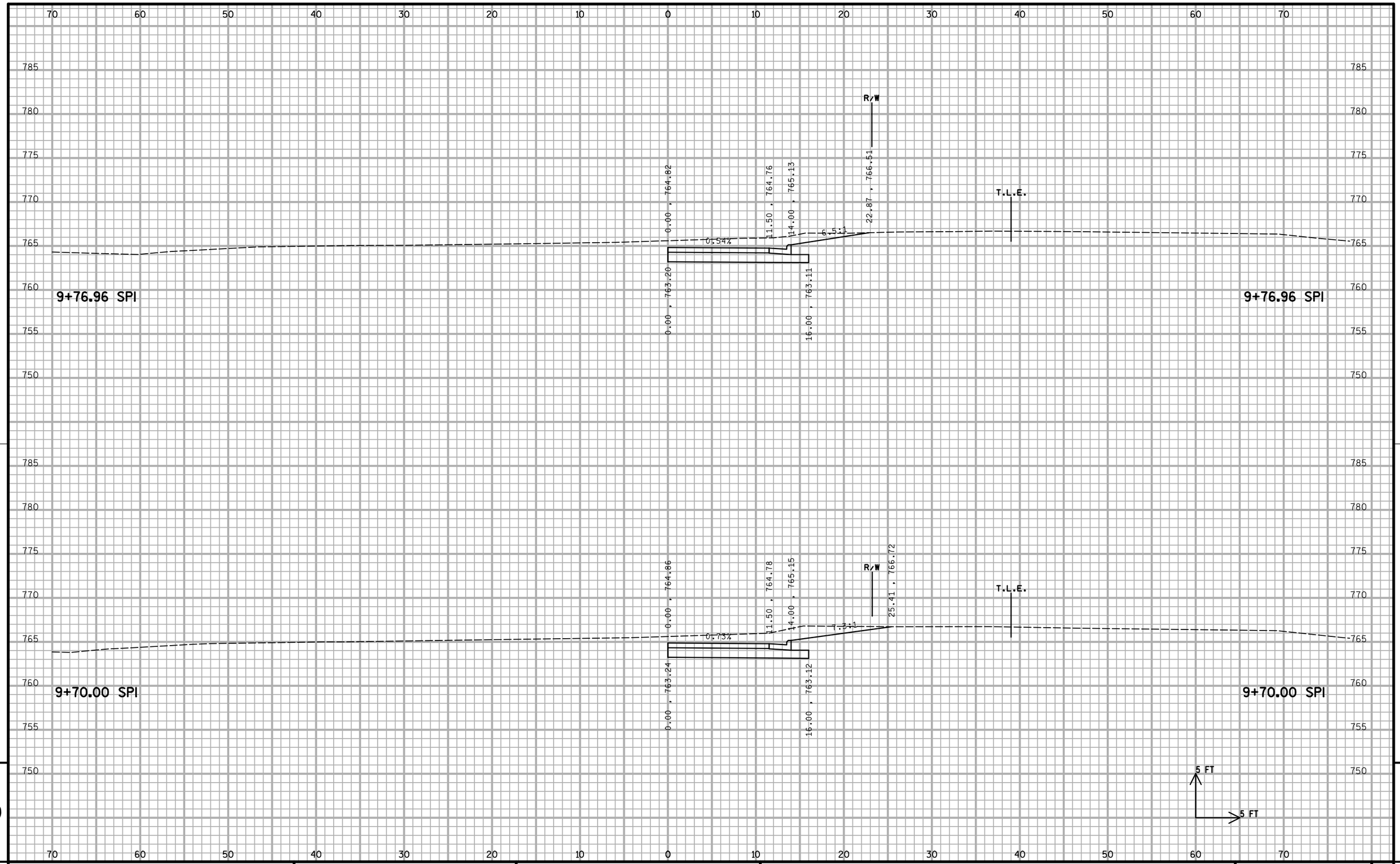


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: SOUTH PINE STREET	SHEET 368	E

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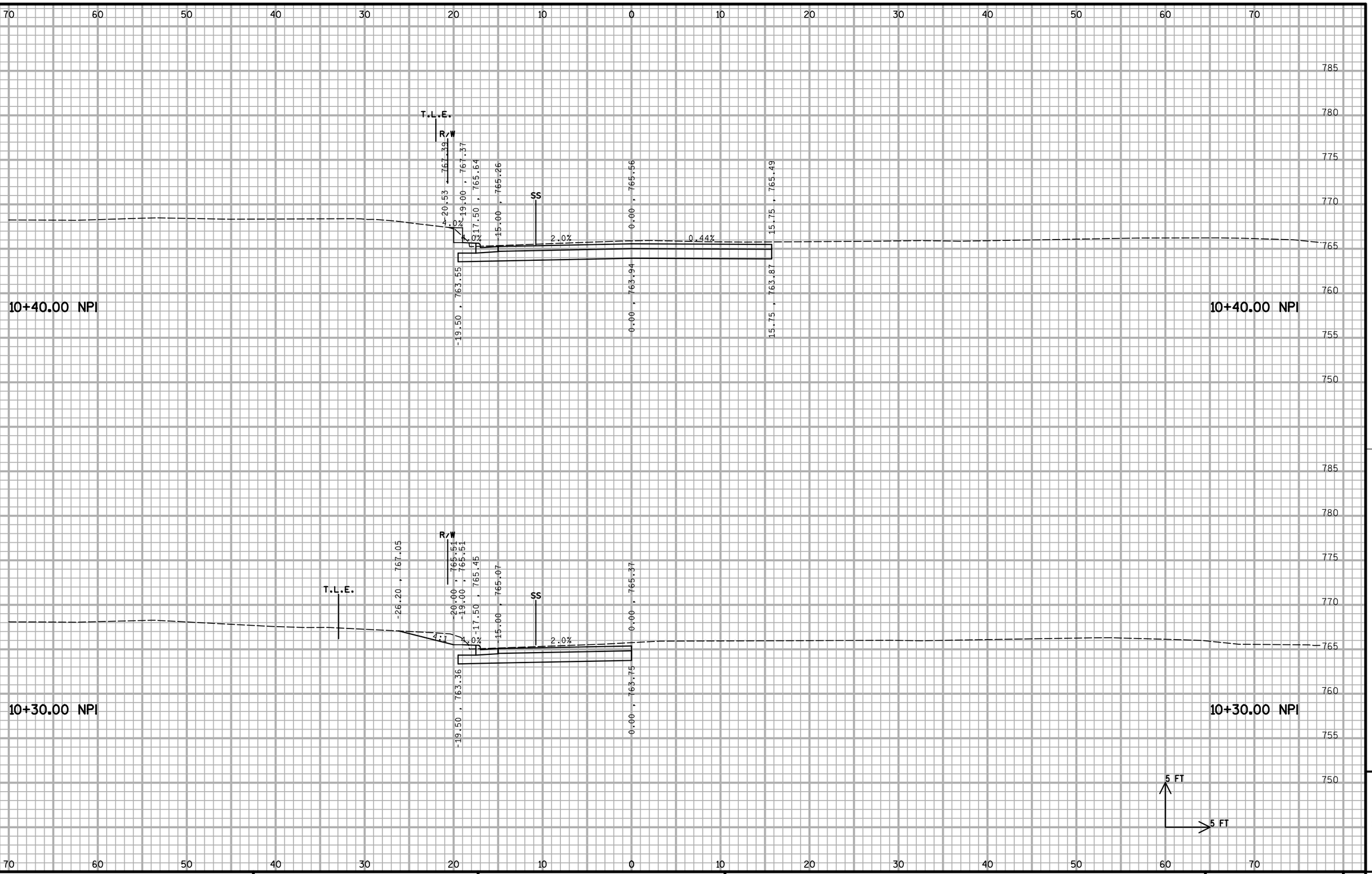


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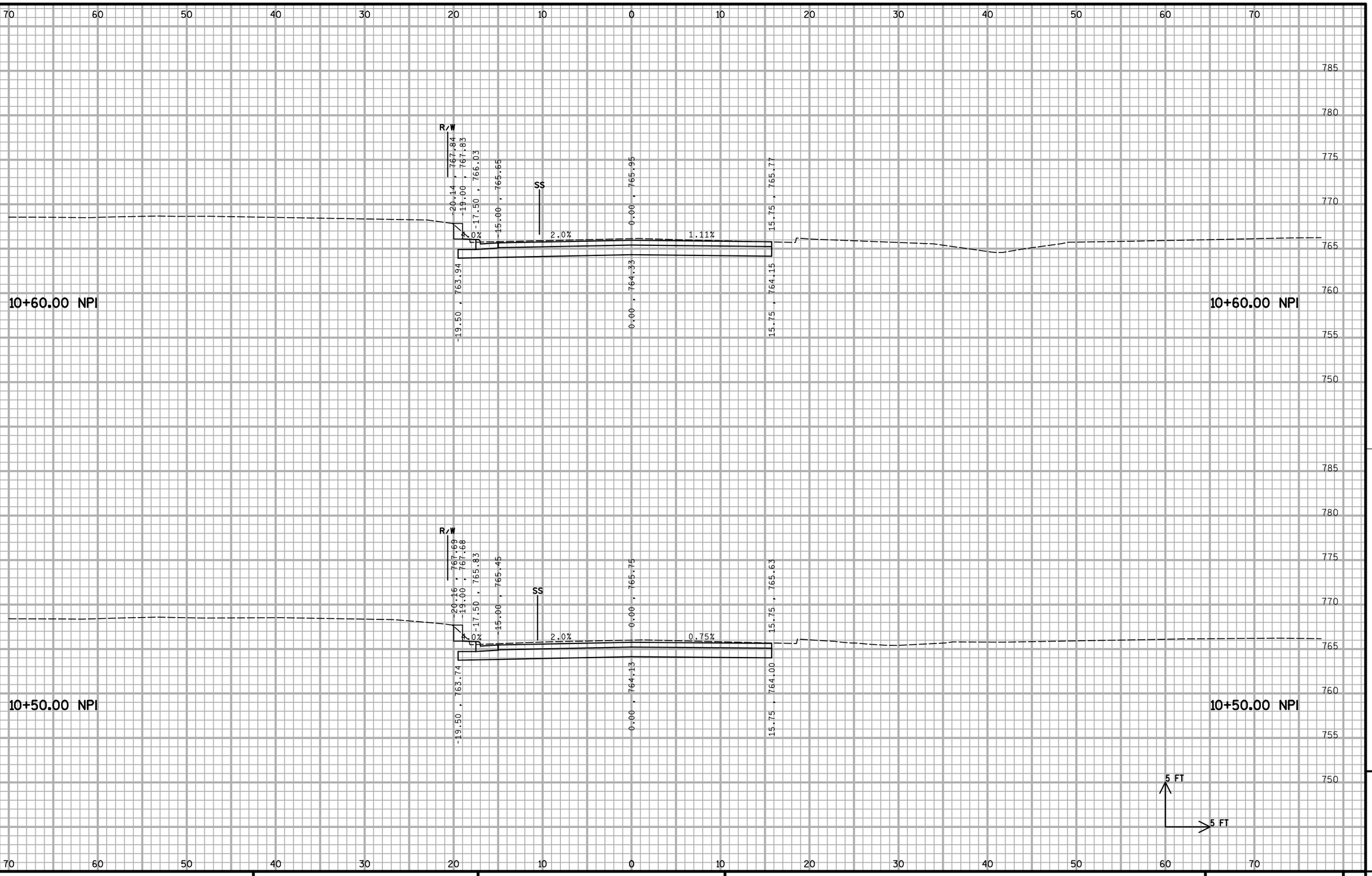
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: NORTH PINE STREET	SHEET 370	E

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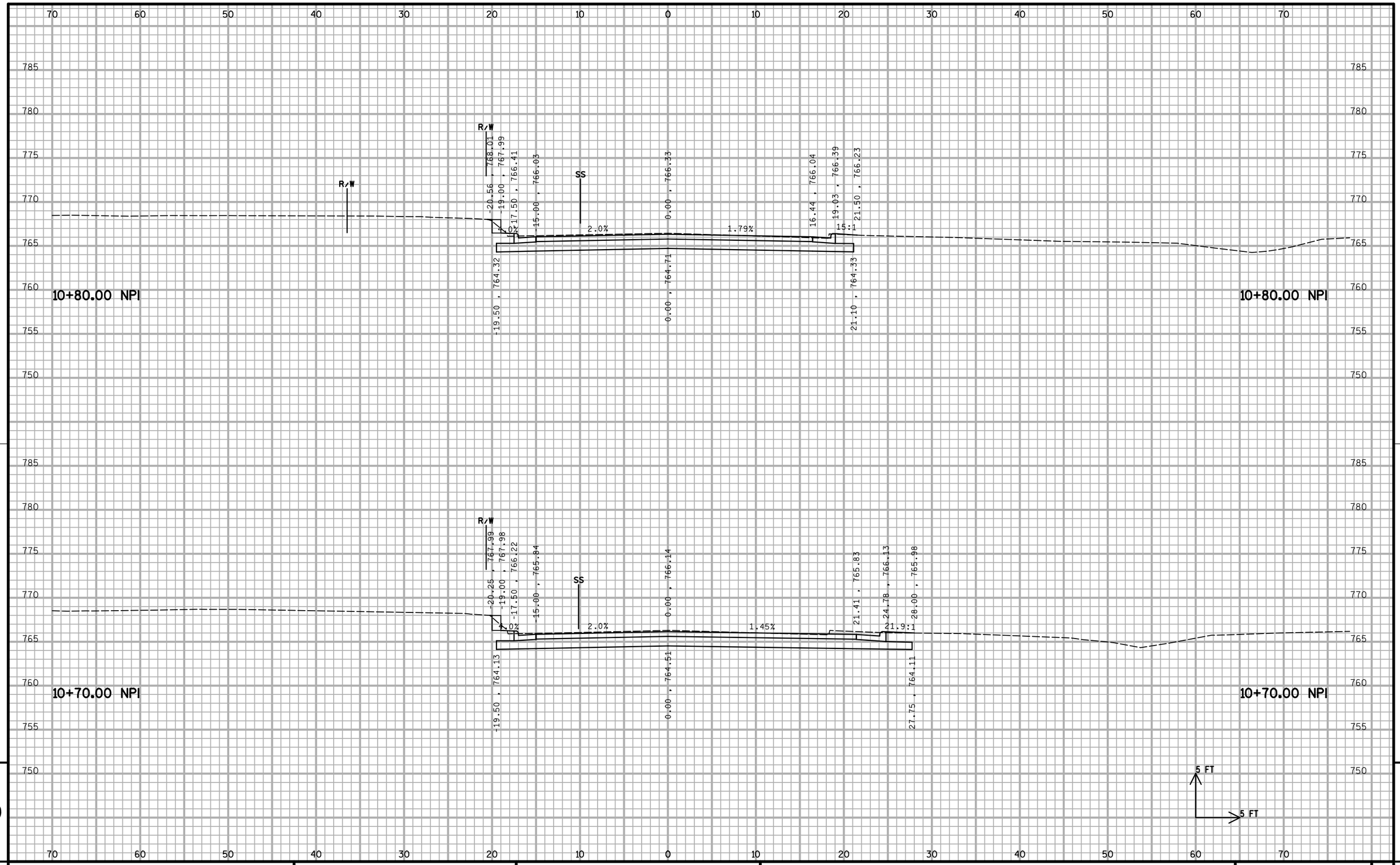


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: NORTH PINE STREET	SHEET 371	E

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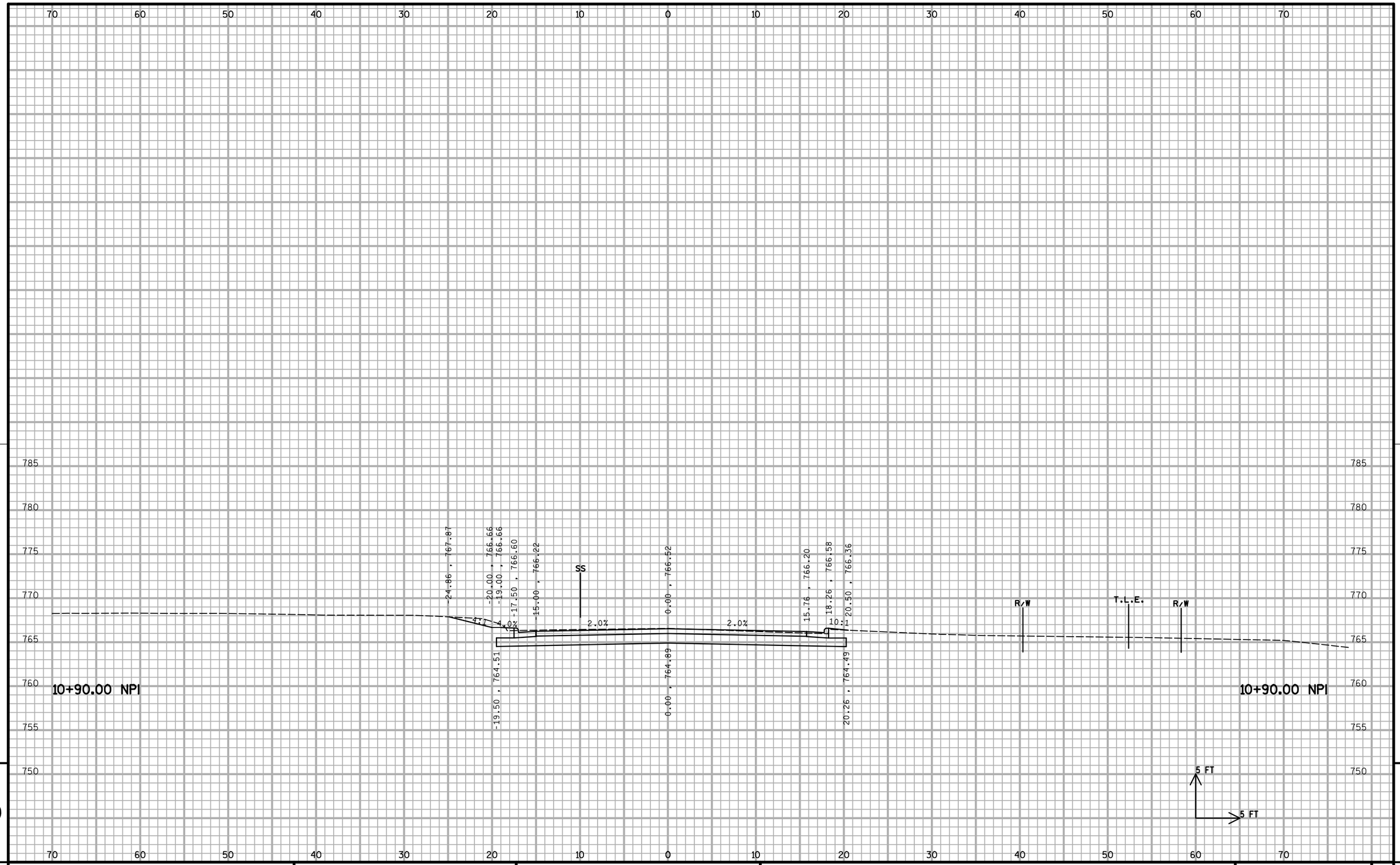


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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: NORTH PINE STREET	SHEET 372	E

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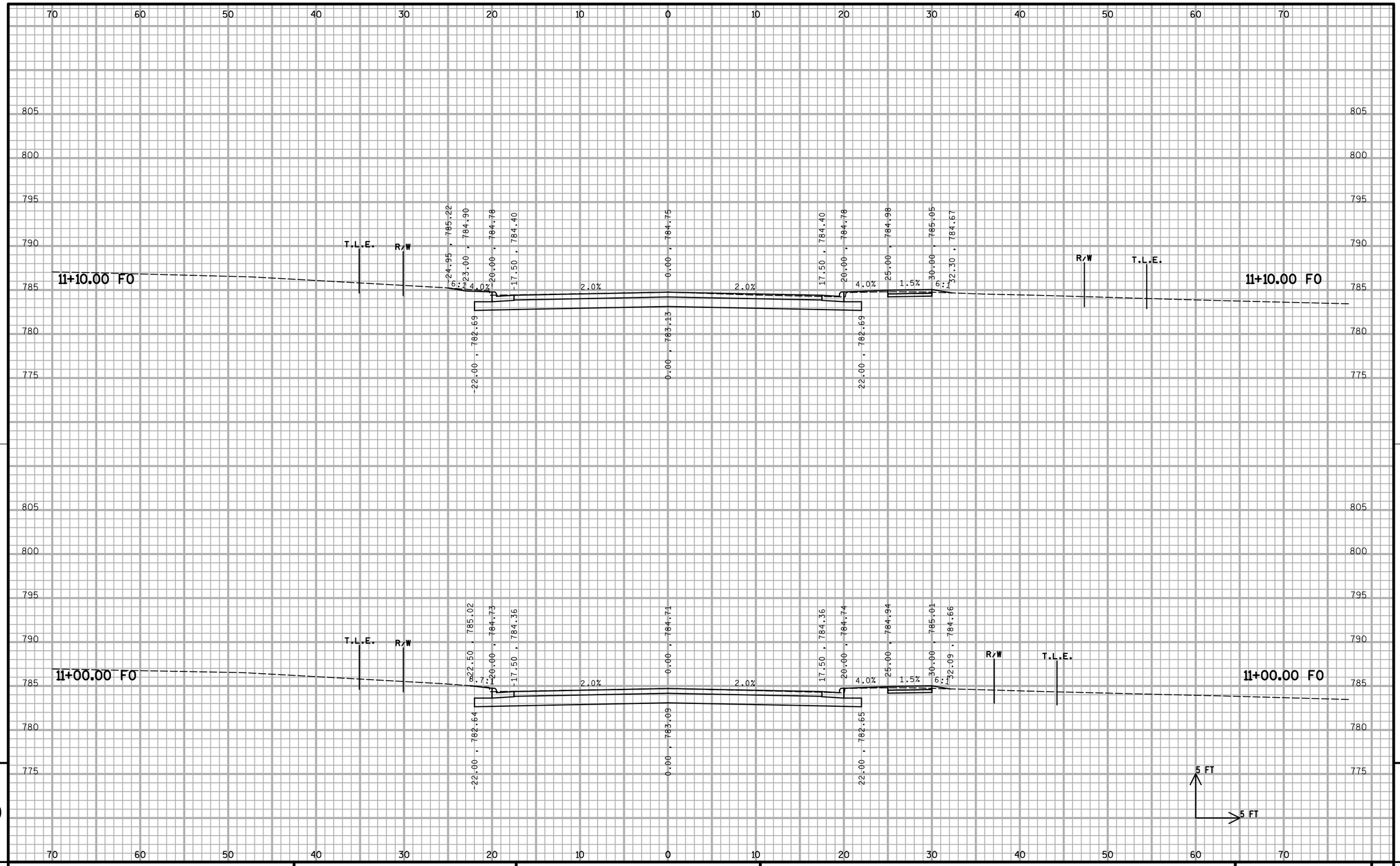


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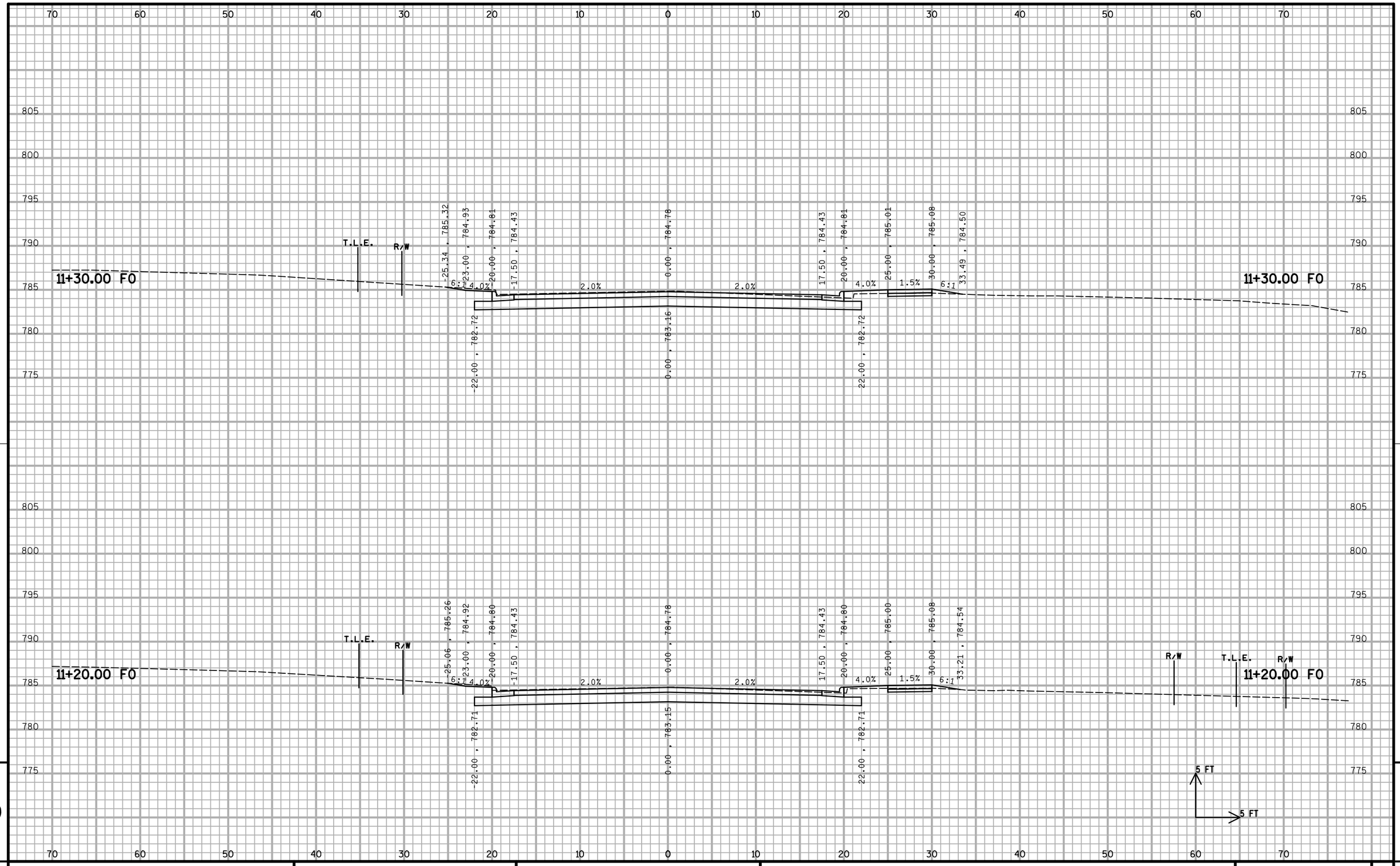
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: FOX TRAIL / HAWTHORNE DRIVE	SHEET 374	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_F0X.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

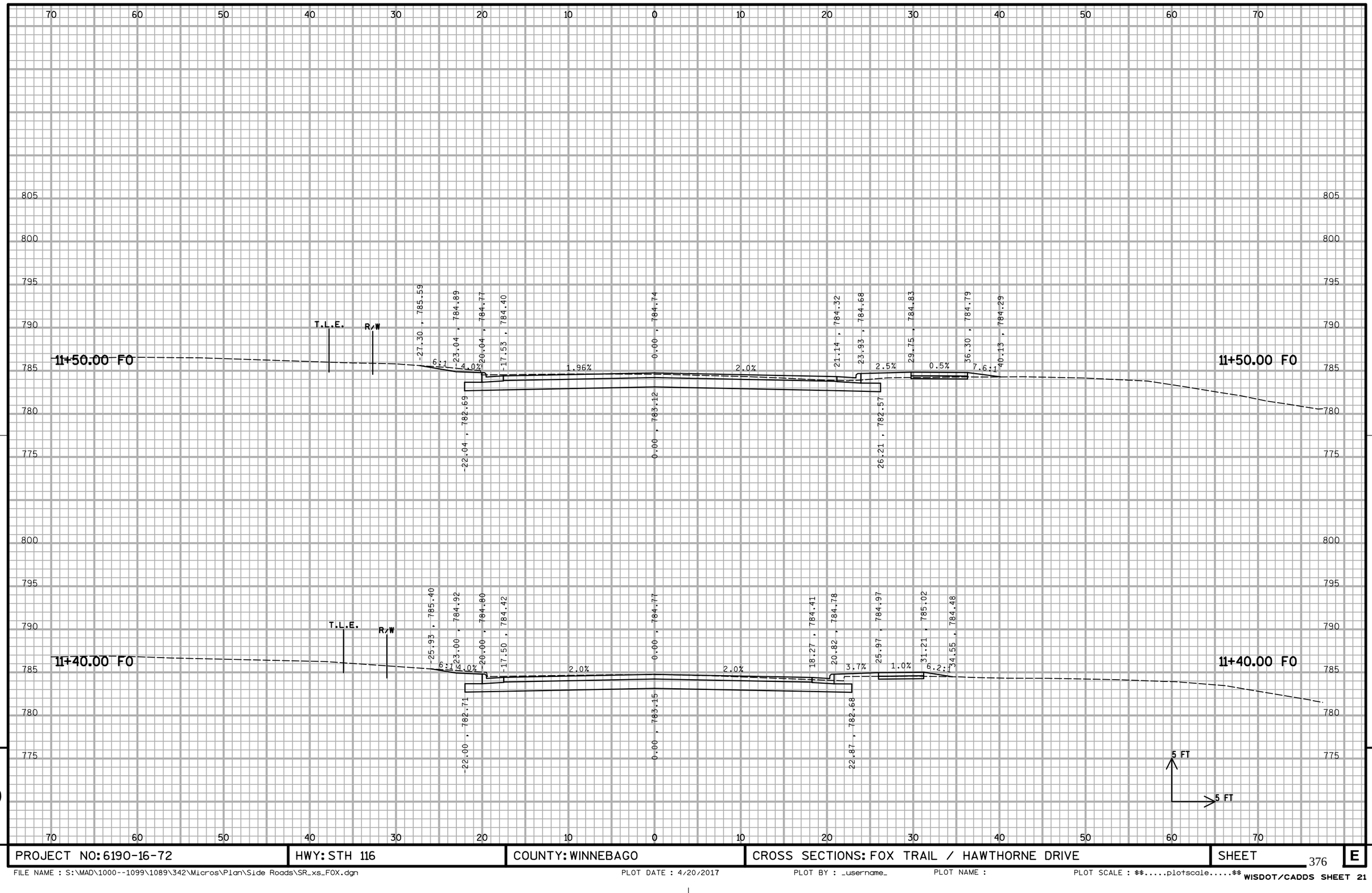


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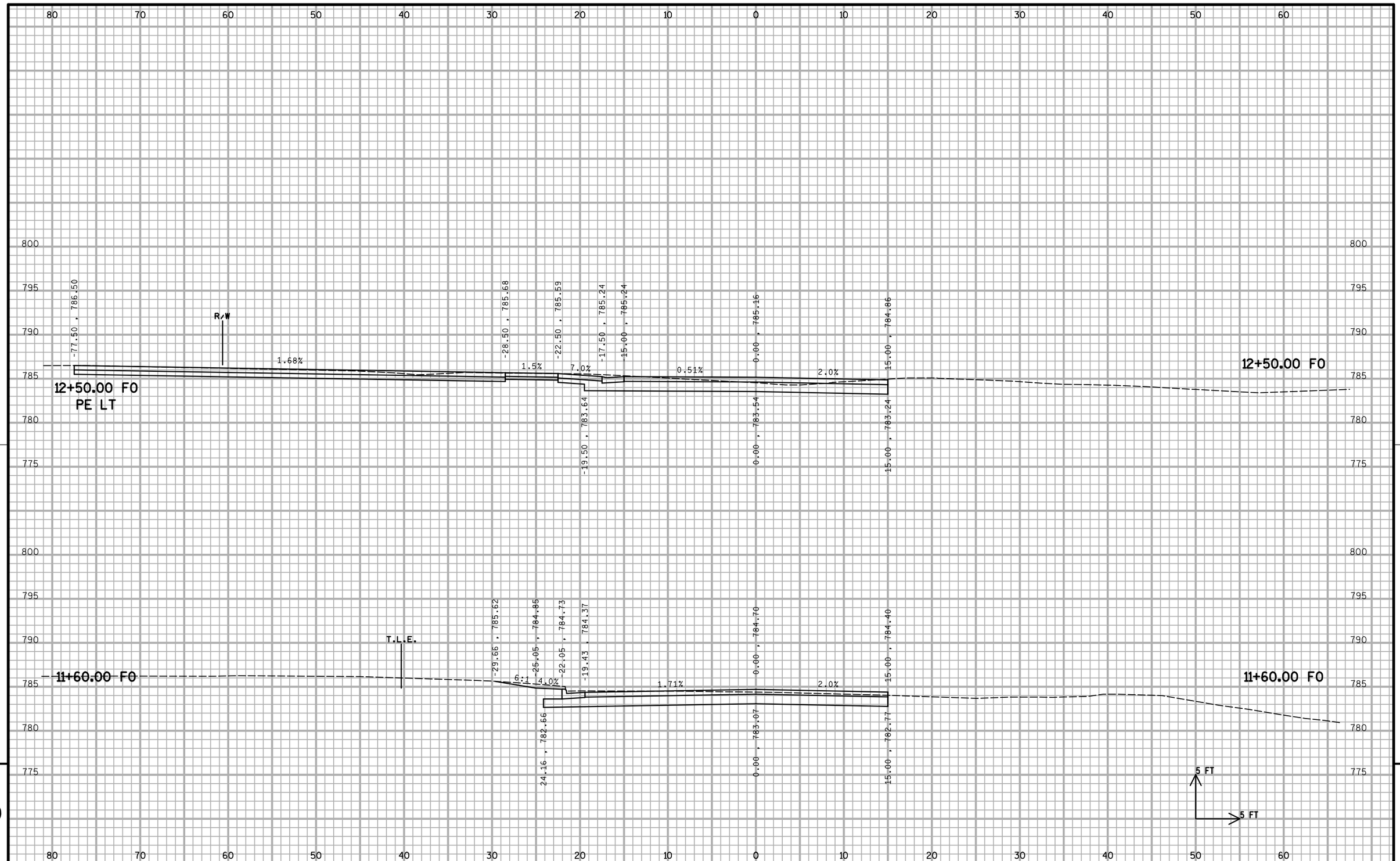
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FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_F0X.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: FOX TRAIL / HAWTHORNE DRIVE	SHEET 376	E

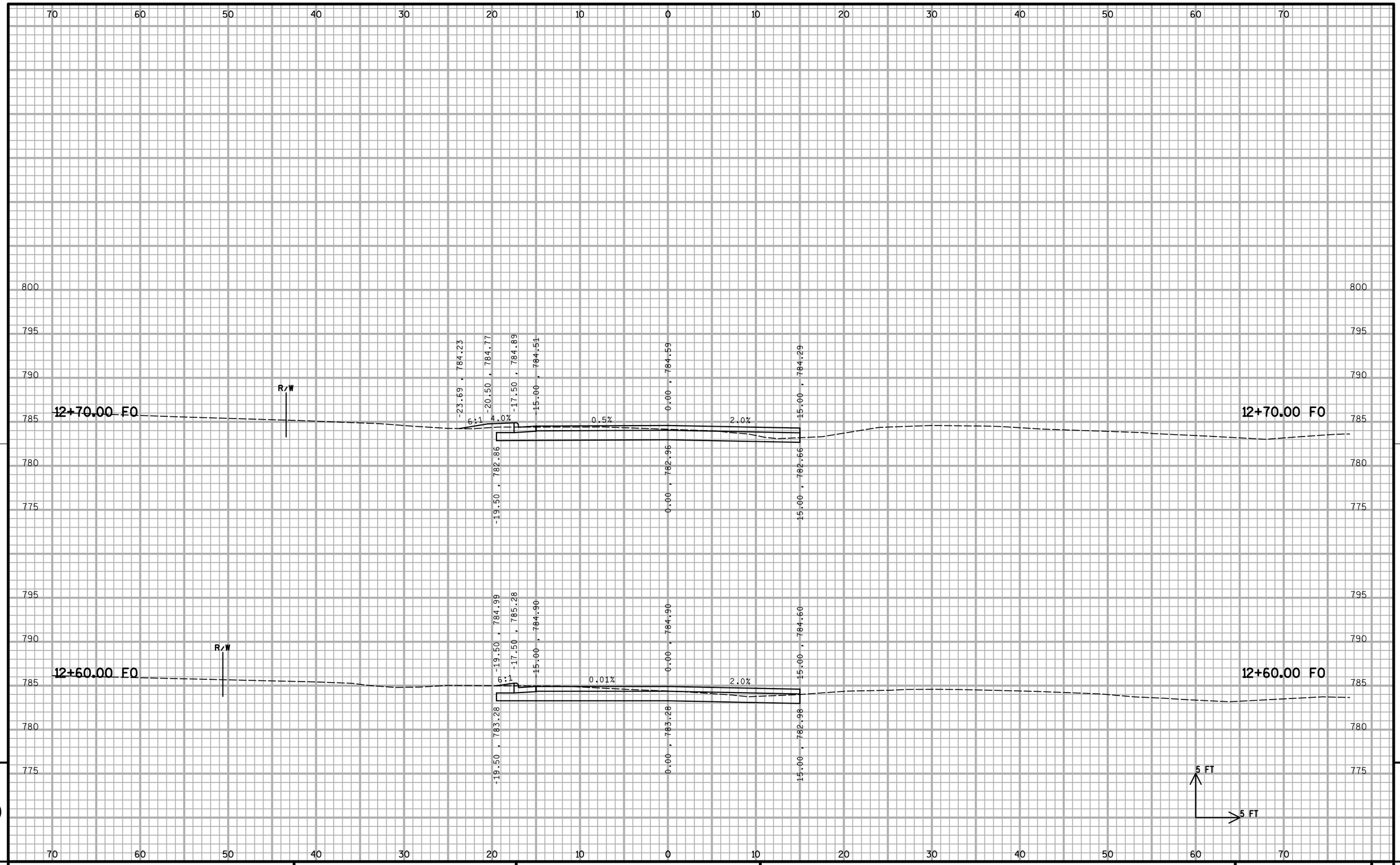
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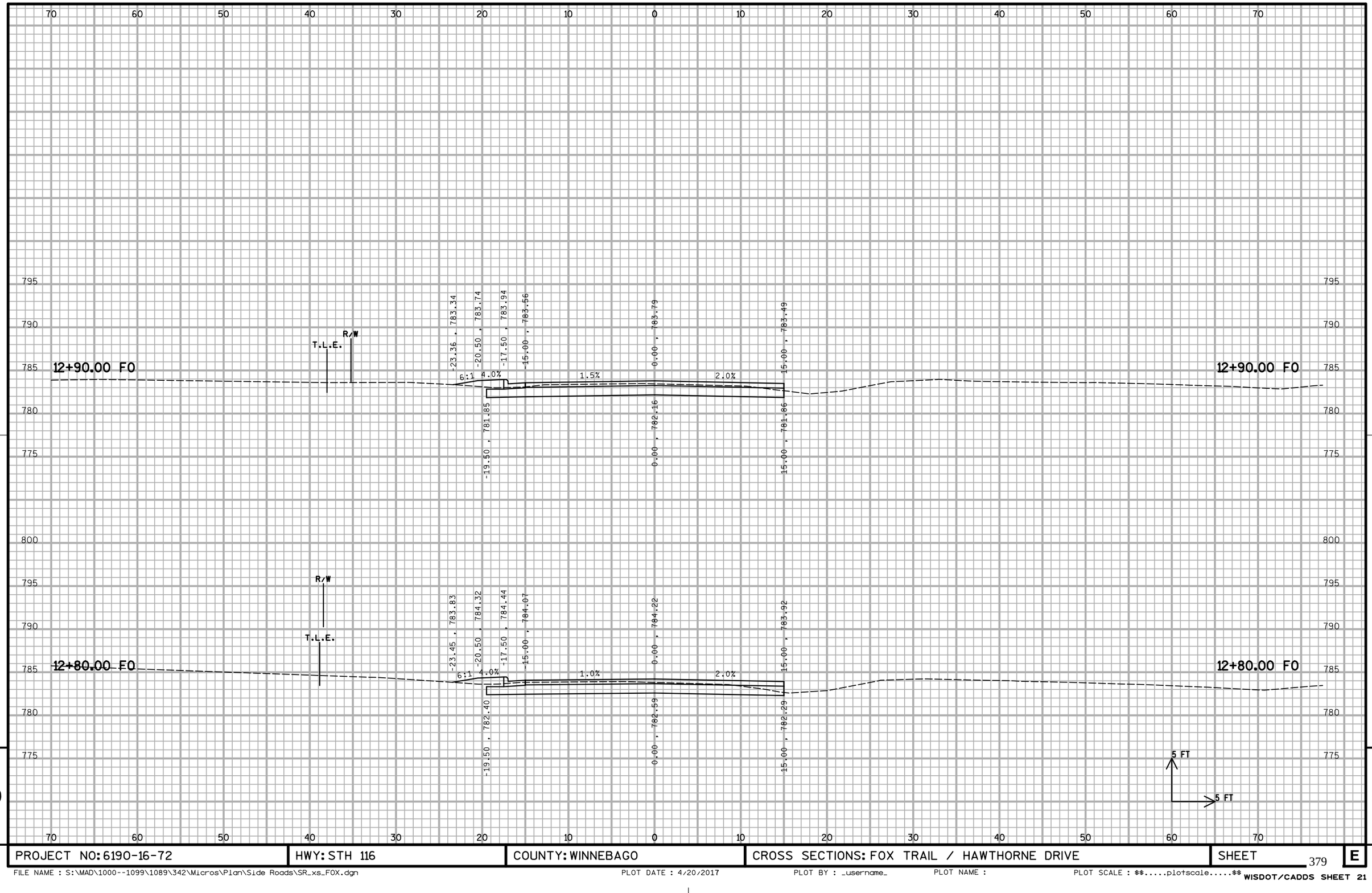
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: FOX TRAIL / HAWTHORNE DRIVE	SHEET 377	E

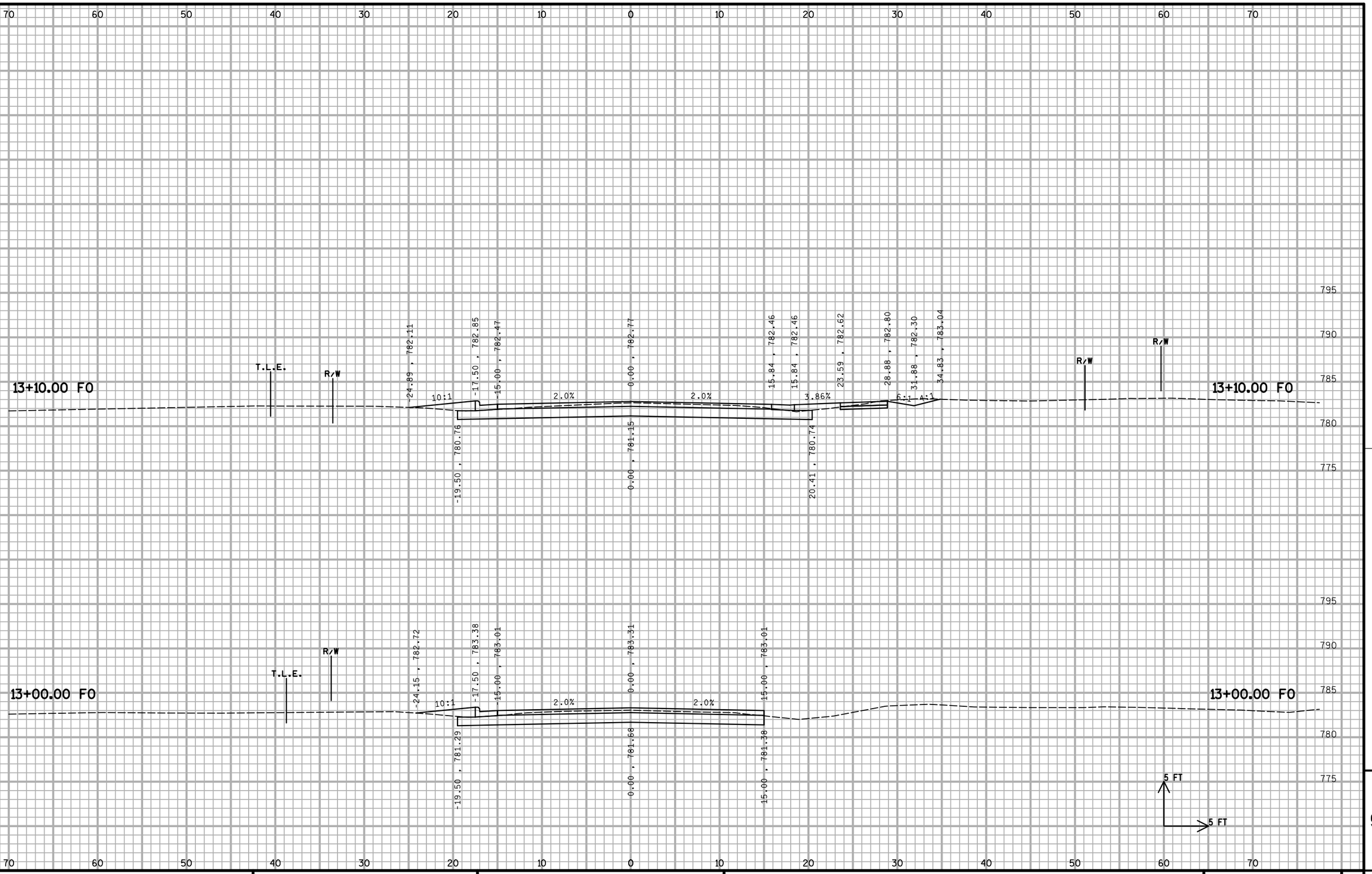


PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: FOX TRAIL / HAWTHORNE DRIVE	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_F0X.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: FOX TRAIL / HAWTHORNE DRIVE	SHEET 379	E

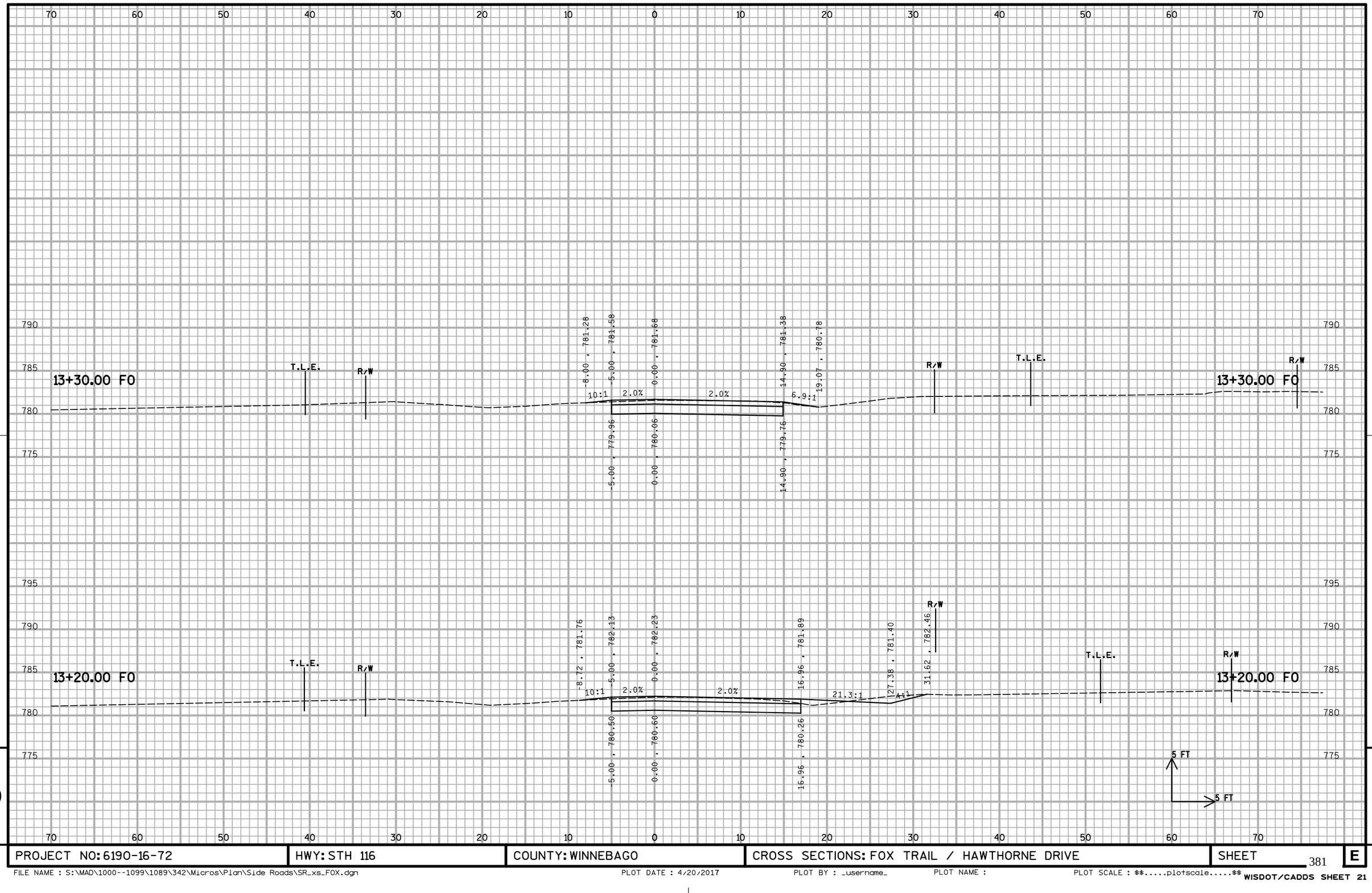


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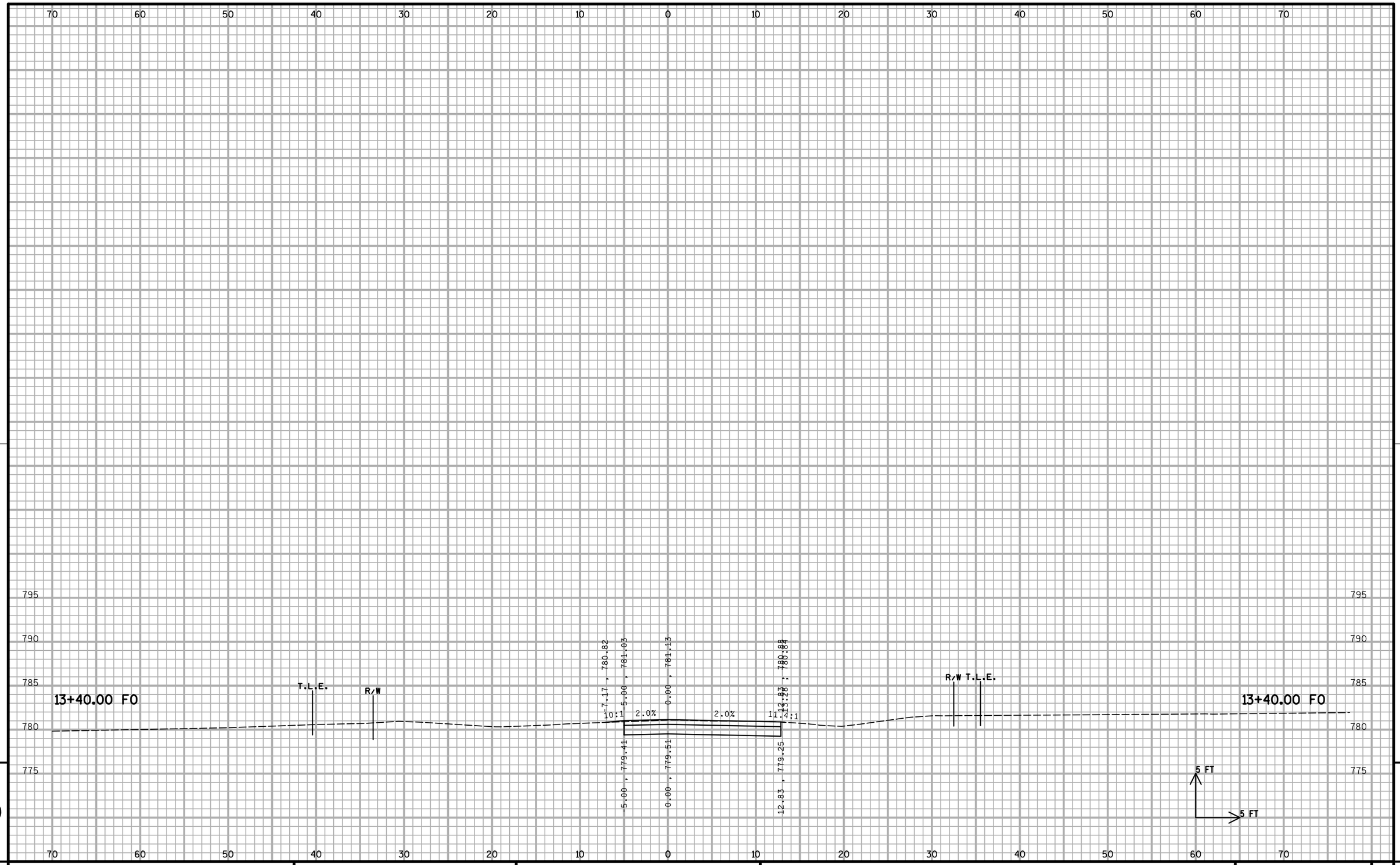
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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: FOX TRAIL / HAWTHORNE DRIVE	SHEET 381	E

FILE NAME : S:\MAD\1000--1099\1089\342\Micros\Plan\Side Roads\SR_xs_F0X.dgn PLOT DATE : 4/20/2017 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



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PROJECT NO: 6190-16-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: FOX TRAIL / HAWTHORNE DRIVE	SHEET 382	E

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

GRE NOVEMBER 2017

PROJECT ID: 6190-16-73

COUNTY: WINNEBAGO

ORDER OF SHEETS

Sheet T 01	Title
Sheets S&W 01-13	Sanitary Sewer & Water Main
Sheets MQ 01-06	Miscellaneous Quantities

TOTAL SHEETS = 24

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
E RIVER DRIVE, CITY OF OMRO
SPRUCE STREET - PINE STREET
STH 116

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6190-16-73		



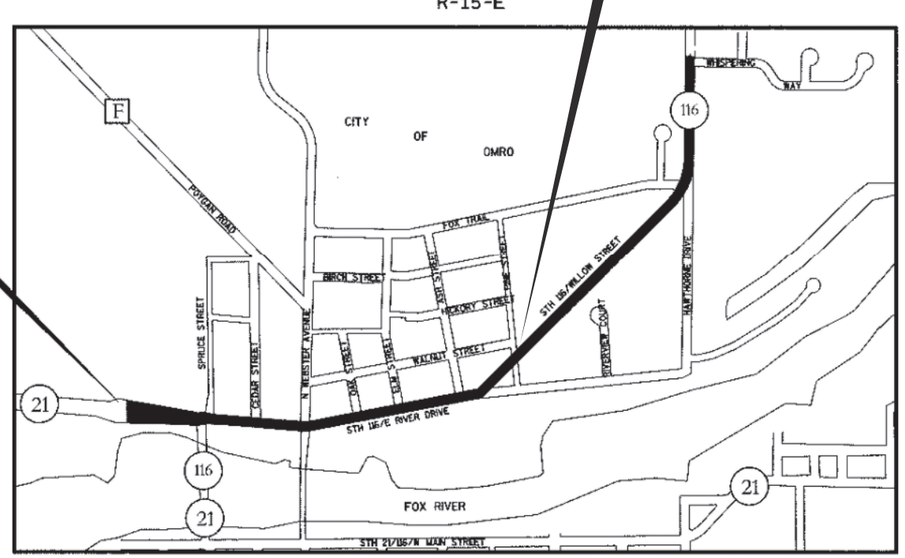


WINNEBAGO COUNTY

STATE PROJECT NUMBER
6190-16-73

END PROJECT
STA. 136+50

BEGIN PROJECT
STA. 107+50.00
X= 482195.28
Y= 737455.57



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
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

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

LAYOUT
SCALE 0 .25 MI.

TOTAL NET LENGTH OF CENTERLINE = 0 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), WINNEBAGO COUNTY, NAD83 (1991).

ACCEPTED FOR
CITY OF OMRO
4/18/17 DATE
DIRECTOR OF PUBLIC WORKS

ORIGINAL PLANS PREPARED BY:

MSA PROFESSIONAL SERVICES
TRANSPORTATION • MUNICIPAL DEVELOPMENT • ENVIRONMENTAL
201 Corporate Drive, Beaver Dam, WI 53916
920-887-4242 1-800-552-6330 Fax: 920-887-4250
Web Address: www.msa-ps.com
© MSA Professional Services, Inc.

WISCONSIN
MICHAEL J. LAUE
E-22833
BEAVER DAM
WI
PROFESSIONAL ENGINEER
03/03/2017

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WisDOT
Designer	MSA PROFESSIONAL SERVICES, INC.
Project Manager	BILL BERTRAND
Regional Examiner	
Regional Supervisor	CHUCK KAROW
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 4-18-2017 William R. Bertrand
(Signature)

E

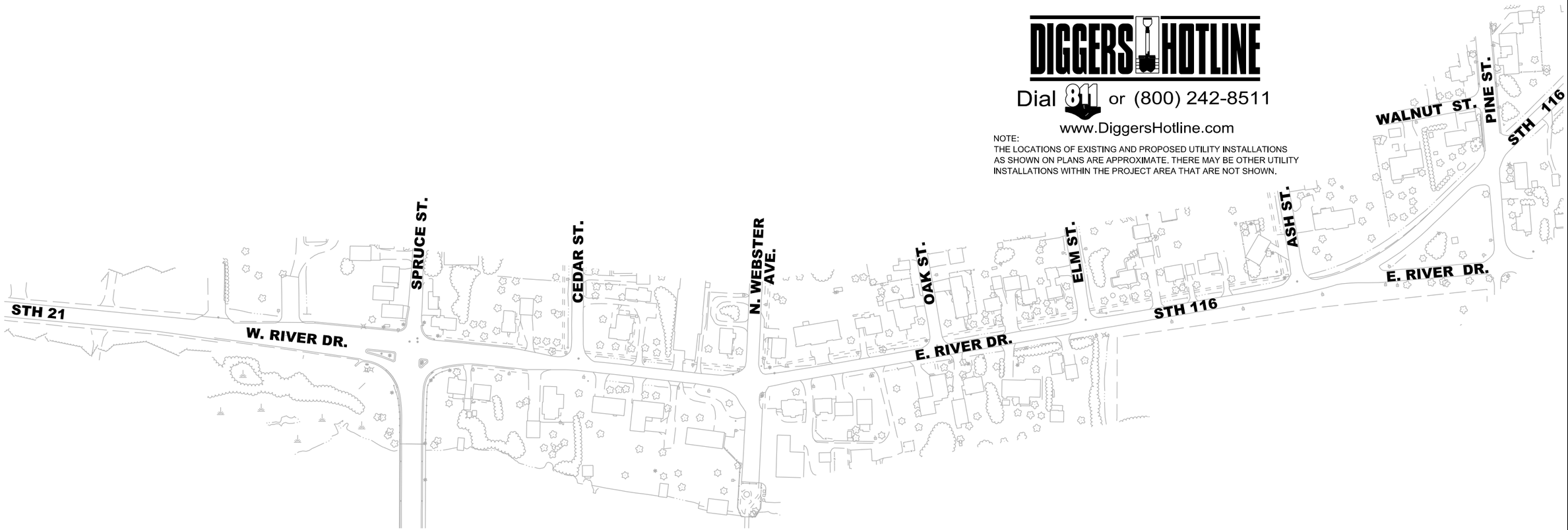
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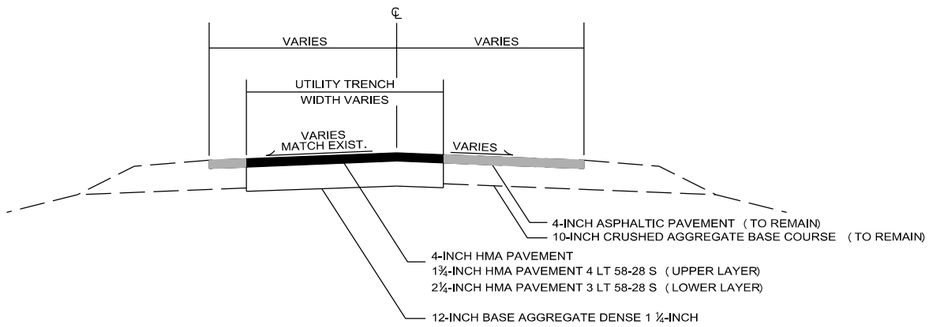
DIGGERS HOTLINE

Dial 811 or (800) 242-8511

www.DiggersHotline.com

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





TYPICAL FINISHED SECTION - UTILITY TRENCH REPAIR AREA
STA. 13+55 SA - STA. 14+87 SA
STA. 11+70 ER - STA. 12+75 ER

PROJECT NO: 6190-16-73	HWY: S.T.H. 116	COUNTY: WINNEBAGO		SHEET 2	E

2

PARCEL #2650092
321 W. RIVER DRIVE

N

STA 108+82.4 @ 30.3' LT
INSTALL 10" VALVE & BOX

10" SANITARY PLUG
STA = 108+71.5 @ 22.7' LT
I.E. = 746.14 (10")

SOIL BORING #5

3 L.F. - 10" PVC SAN. SEWER @ 0.28%

SAN. SEWER MH, TYPE 1
STA = 108+75.0 @ 22.7' LT

S.T.H. "21"

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

MATCHLINE STA. 109+50
SEE SHEET S&W 03

760

750

SAN. SEWER MH, TYPE 1
STA = 108+75.0 @ -22.7' LT
RIM = 756.58
I.E. = 746.03 (10" E)
I.E. = 746.13 (10" W)

EX. PROFILE @ REFERENCE LINE

10" X 6" REDUCER
STA = 108+75.4 @ -30.7' LT
T/P = 749.20 (10")

EXISTING 6" WATER MAIN

126 L.F. - 10" PVC W.M. @ 0.95%

STUB & CAP
FOR FUTURE

104+00 105+00 106+00 107+00 108+00 109+00 109+50

PROJECT NO: 6190-16-73	HWY: S.T.H. "116"	COUNTY: WINNEBAGO	PLAN AND PROFILE: SANITARY SEWER & WATER (S&W 02)	SHEET: E

FILE NAME : P:\4000S\4040S\4048\04048005\C3D\DESIGN\ALIPROFS\04048005 ALIPROFS-STH116-S&WDESIGN.DWG PLOT DATE : 11/28/2016 10:10 AM PLOT BY : JML PLOT NAME : PLOT SCALE : 1 IN:40 FT.

WISDOT/CADDS SHEET 44

SEE SHEET S&W 08

PARCEL #265009202
401 W. RIVER DRIVE

PARCEL #2650092
321 W. RIVER DRIVE

PARCEL #2650953
305 W. RIVER DRIVE

PARCEL #2650940
233 W. RIVER DRIVE

PARCEL #2650939
223 W. RIVER DRIVE

PARCEL #2650088
223 W. RIVER DRIVE

STA 109+66.1 @ 57.5' LT
6" SANITARY LATERAL STUB
(NO RISER)

6" WATER SERVICE STUB
STA 109+76.1 @ 56.6' LT

STA 110+01.2 @ 46.5' LT
INSTALL 6" VALVE & BOX
@ 52.7' LT INSTALL HYD.

STA 111+40.0 @ 47.7' LT
6" WATER SERVICE STUB

STA 111+50.0 @ 47.8' LT
6" SANITARY LATERAL STUB
(NO RISER)

STA 112+66.0 @ 20.6' LT
INSTALL 10" VALVE & BOX

SPRUCE ST.

STA 113+00
288 L.F. - 10" PVC W.M. @ 0.00%

INSTALL 6" GATE VALVE & BC
STA 113+52.8 @ 41.2' LT

22 L.F. - 8" PVC W.M. @ 0.00%

STA 113+90 @ 25.5' LT
INSTALL 6" VALVE & BOX
@ 35.0' LT INSTALL HYD.

STA 114+43.3 @ 42.5' LT
1.25" WATER SERVICE STUB
4" SANITARY LATERAL STUB
STA 114+47.8 @ 42.5' LT
(RISER TO 10' DEPTH)

MATCHLINE STA. 109+50
SEE SHEET S&W 02

308 L.F. - 10" PVC W.M. @ -0.26%

451 L.F. - 10" PVC SAN. SEWER @ 0.28%

126 L.F. - 10" PVC W.M. @ 0.95%

110+00

111+00

112+00

113+00

Pt: 113+14.05

SAN. SEWER MH, TYPE 1
STA = 113+25.4 @ 0.0'

54 L.F. - 10" PVC W.M. @ -0.18%

RIVER DR. S.T.H. "116"

114+00

115+00

268 L.F. - 10" PVC W.M. @ 0.11%

SOIL BORING #4

325 L.F. - 10" PVC SAN. SEWER @ 0.28%

S.T.H. "21"

STA 113+40.5 @ 12.1' LT
INSTALL 10" VALVE & BOX

28 L.F. - 10" PVC W.M. @ 0.00%

SAN. SEWER MH, TYPE 1
STA = 113+25.4 @ 0.0'

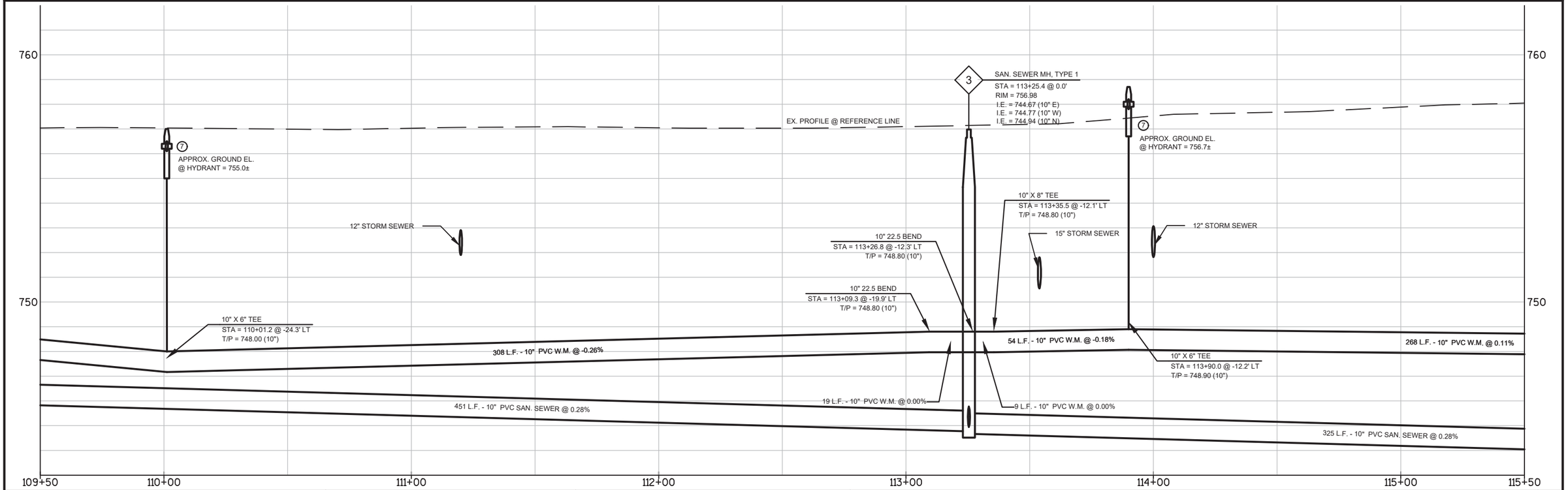
Pt: 11+58.31

MATCHLINE STA. 115+50
SEE SHEET S&W 04

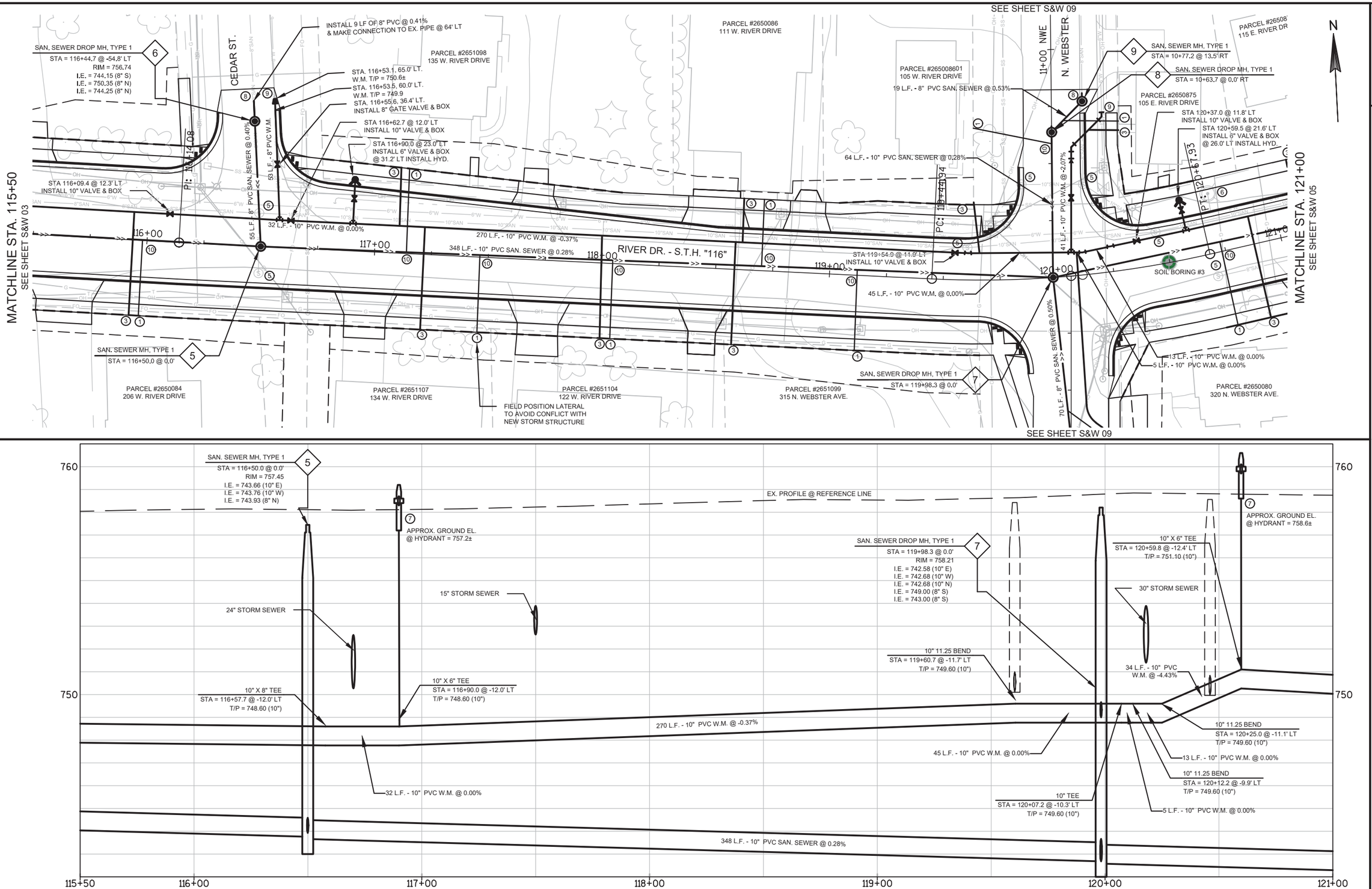
PARCEL #265008502
228 W. RIVER DRIVE

PARCEL #265008501
224 W. RIVER DRIVE

SEE SHEET S&W 08



PROJECT NO: 6190-16-73	HWY: S.T.H. "116"	COUNTY: WINNEBAGO	PLAN AND PROFILE: SANITARY SEWER & WATER (S&W 03)	SHEET: 4 E



PROJECT NO: 6190-16-73	HWY: S.T.H. "116"	COUNTY: WINNEBAGO	PLAN AND PROFILE: SANITARY SEWER & WATER (S&W 04)	SHEET: E

FILE NAME : P:\4000S\4040S\4048\04048005\C3D\DESIGN\ALIPROFS\04048005 ALIPROFS-STH116-S&WDESIGN.DWG PLOT DATE : 11/28/2016 10:14 AM PLOT BY : JML PLOT NAME : PLOT SCALE : 1 IN:40 FT.

WISDOT/CADDS SHEET 44

2

PARCEL #2650873
115 E. RIVER DRIVE

/H, TYPE 1
RT

PARCEL #265087301
117 E. RIVER DRIVE

PARCEL #2650871
133A E. RIVER DRIVE

PARCEL #2650870
141 E. RIVER DRIVE

SEE SHEET S&W 10

OAK ST. 11+

PARCEL #2650883
205 E. RIVER DRIVE

PARCEL #2650882
213 E. RIVER DRIVE

PARCEL #2650881
221 E. RIVER DRIVE

N

FIELD POSITION CURB STOP TO AVOID CONFLICT WITH NEW STORM PIPING

FIELD POSITION CURB STOPS TO AVOID CONFLICT WITH NEW STORM PIPING

145 L.F. - 8" PVC SAN. SEWER @ -3.23%

100 L.F. - 8" PVC W.M. @ -3.45%

STA 123+48.2 @ 12.0' LT
INSTALL 10" VALVE & BOX

28 L.F. - 8" PVC W.M. @ -2.93%

31 L.F. - 10" PVC W.M. @ -0.49%

STA 124+25.0 @ 21.6' LT
INSTALL 6" VALVE & BOX
@ 26.0' LT INSTALL HYD.

MATCHLINE STA. 121+00
SEE SHEET S&W 04

150 L.F. - 10" PVC W.M. @ 0.58%

184 L.F. - 10" PVC W.M. @ -0.49%

RIVER DR. - S.T.H. "116"

379 L.F. - 10" PVC SAN. SEWER @ 0.28%

278 L.F. - 10" PVC W.M. @ 0.60%

301 L.F. - 10" PVC SAN. SEWER @ 0.28%

MATCHLINE STA. 126+00
SEE SHEET S&W 06

STA 124+08.2 @ 12.0' LT
INSTALL 10" VALVE & BOX

FIELD POSITION LATERAL AND SERVICE PIPES TO AVOID CONFLICT WITH NEW STORM STRUCTURES

SAN. SEWER DROP MH, TYPE 1
STA = 123+77.2 @ 0.0'

PARCEL #2650083
114 E. RIVER DRIVE

PARCEL #2650077
124 E. RIVER DRIVE

PARCEL #2650076
130 E. RIVER DRIVE

PARCEL #2650078
148 E. RIVER DRIVE

PARCEL #265007502
206 E. RIVER DRIVE

PARCEL #265007501
214 E. RIVER DRIVE

760

750

EX. PROFILE @ REFERENCE LINE

APPROX. GROUND EL.
@ HYDRANT = 759.0±

15" STORM SEWER

SAN. SEWER DROP MH, TYPE 1
STA = 123+77.2 @ 0.0'
RIM = 758.50
I.E. = 741.42 (10" E)
I.E. = 741.52 (10" W)
I.E. = 748.70 (8" N)
I.E. = 741.84 (8" N)

15" STORM SEWER

10" X 6" TEE
STA = 124+25.0 @ -12.0' LT
T/P = 751.28 (10")

10" VERTICAL DEFLECTION
STA = 122+10.0 @ -12.3' LT
T/P = 750.23 (10")

184 L.F. - 10" PVC W.M. @ -0.49%

278 L.F. - 10" PVC W.M. @ 0.60%

31 L.F. - 10" PVC W.M. @ -0.49%

150 L.F. - 10" PVC W.M. @ 0.58%

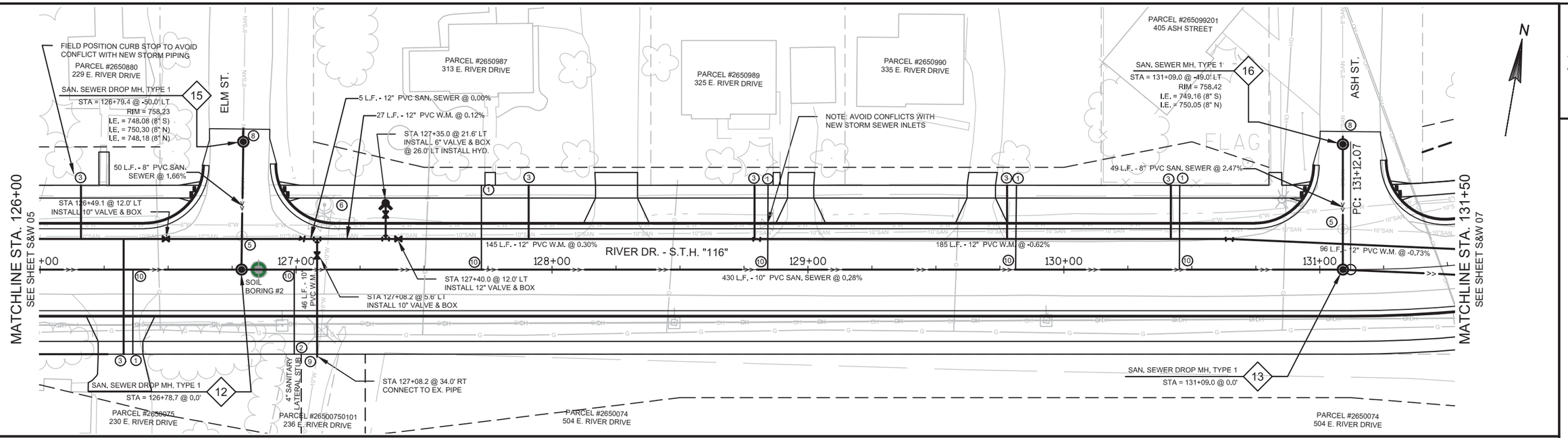
10" X 8" TEE
STA = 123+94.2 @ -12.0' LT
T/P = 751.13 (10")

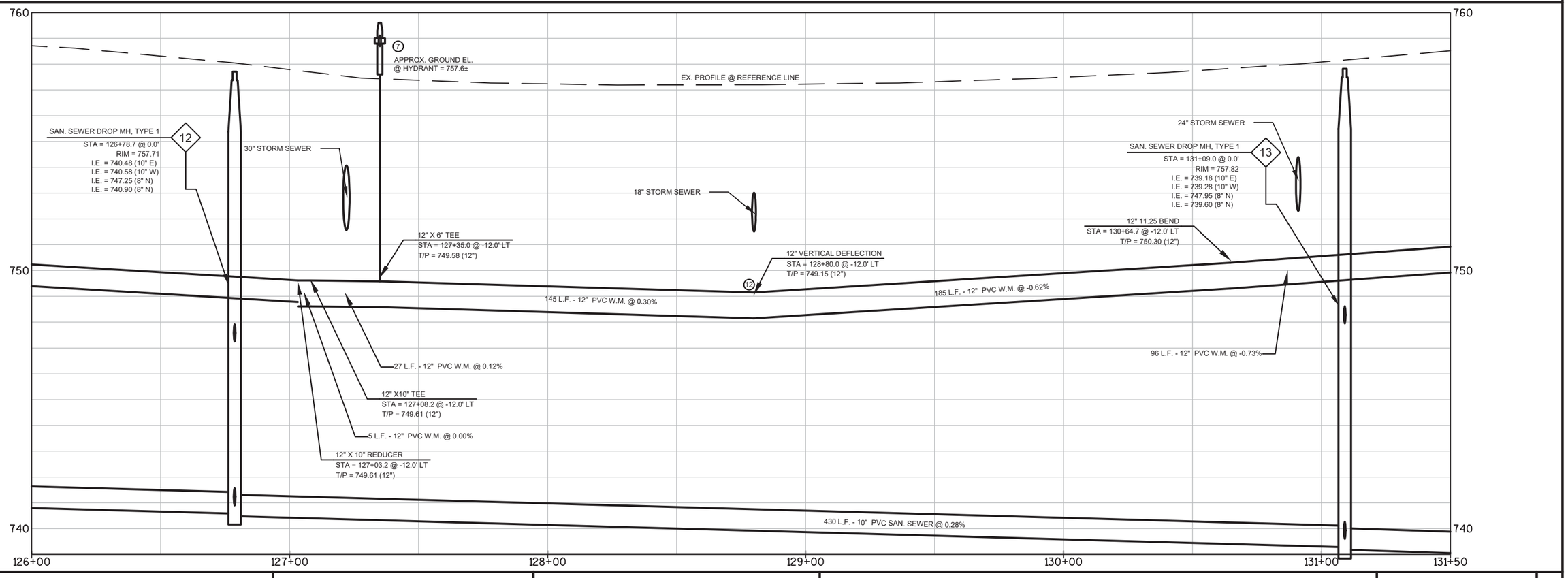
379 L.F. - 10" PVC SAN. SEWER @ 0.28%

301 L.F. - 10" PVC SAN. SEWER @ 0.28%

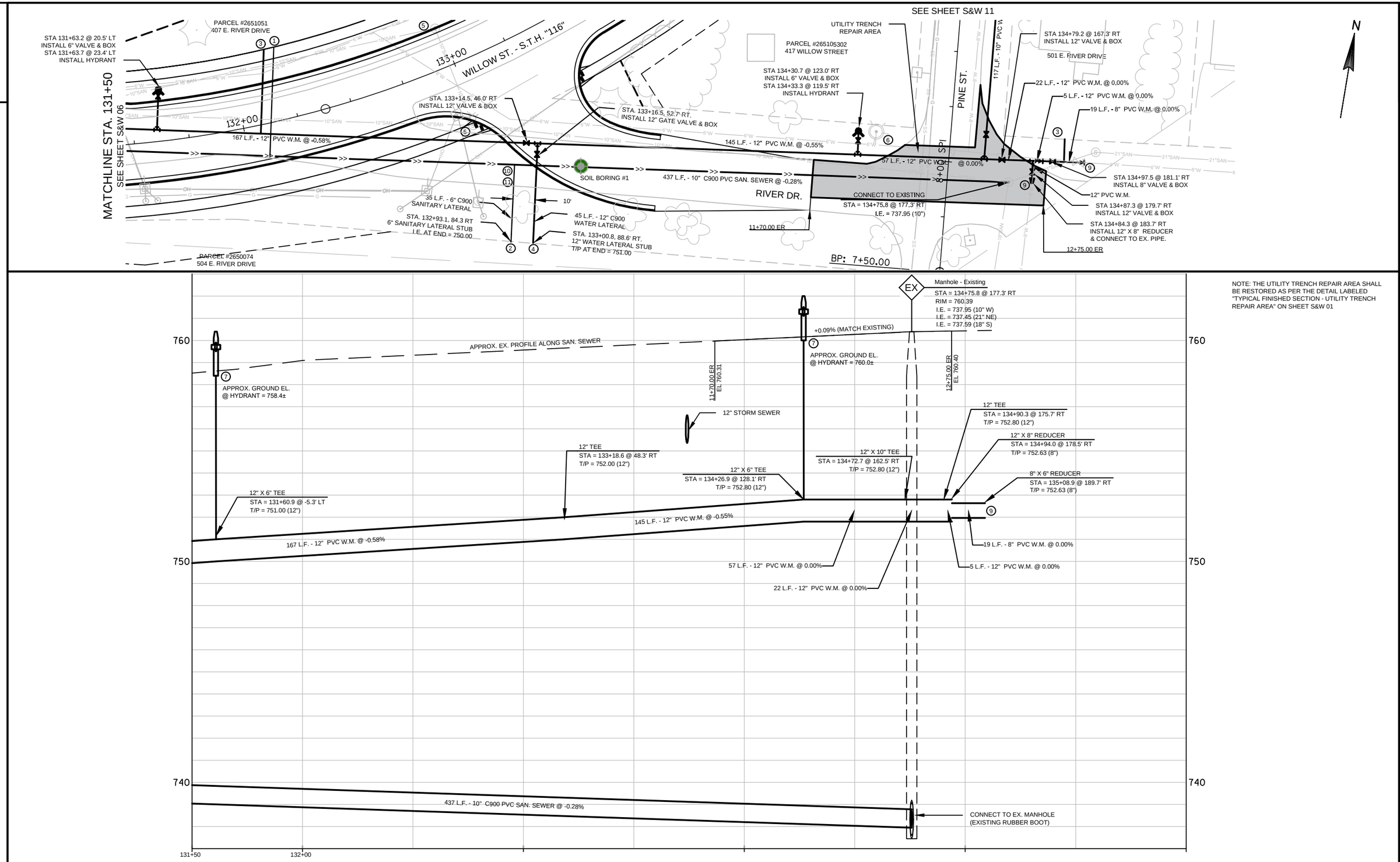
121+00 122+00 123+00 124+00 125+00 126+00

PROJECT NO: 6190-16-73	HWY: S.T.H. "116"	COUNTY: WINNEBAGO	PLAN AND PROFILE: SANITARY SEWER & WATER (S&W 05)	SHEET:	E





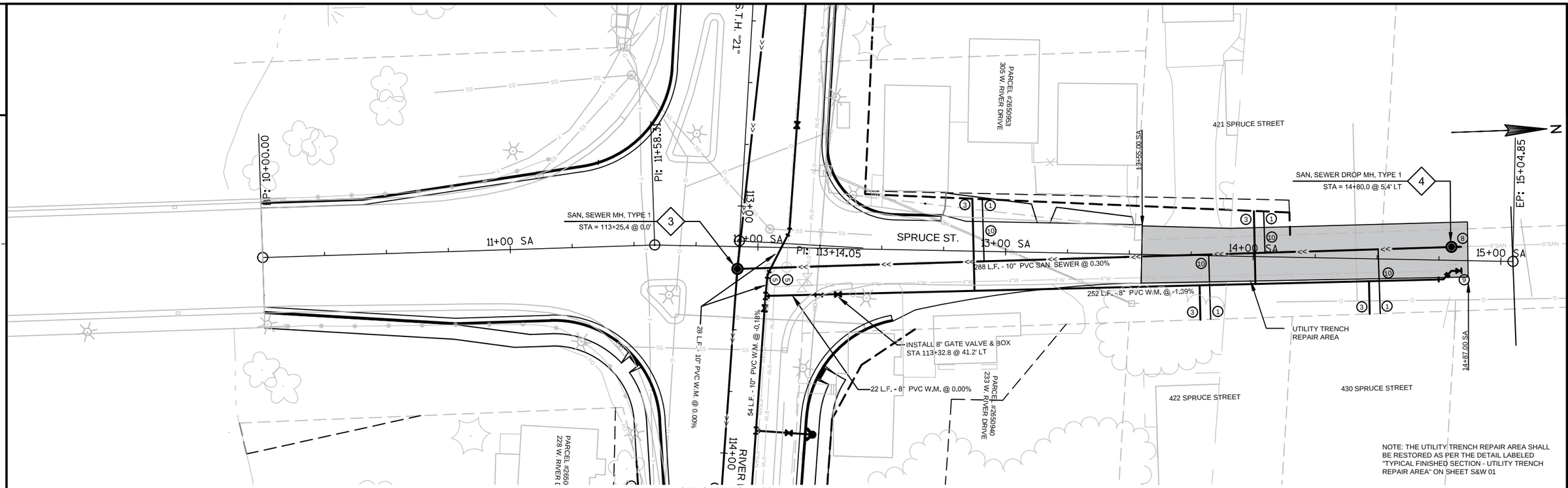
PROJECT NO: 6190-16-73	HWY: S.T.H. "116"	COUNTY: WINNEBAGO	PLAN AND PROFILE: SANITARY SEWER & WATER (S&W 06)	SHEET: 7 E



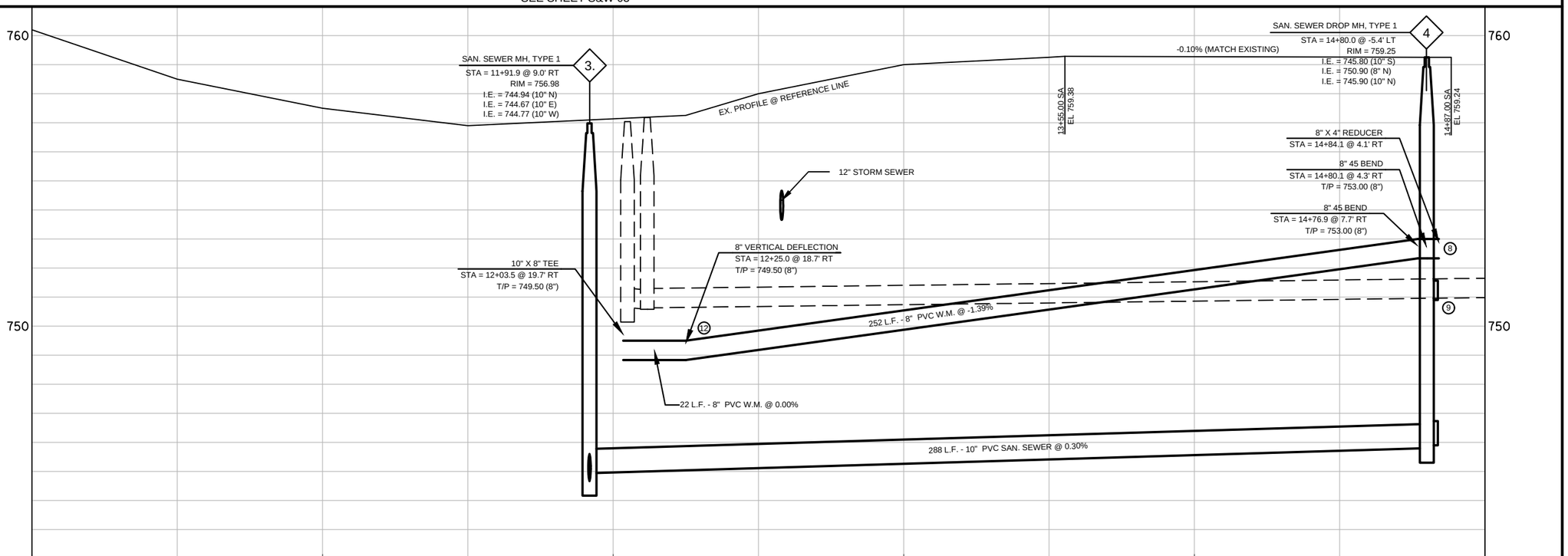
NOTE: THE UTILITY TRENCH REPAIR AREA SHALL BE RESTORED AS PER THE DETAIL LABELED "TYPICAL FINISHED SECTION - UTILITY TRENCH REPAIR AREA" ON SHEET S&W 01

PROJECT NO: 6190-16-73	HWY: S.T.H. "116"	COUNTY: WINNEBAGO	PLAN AND PROFILE: SANITARY SEWER & WATER (S&W 07)	SHEET: 8	E

SEE SHEET S&W 03

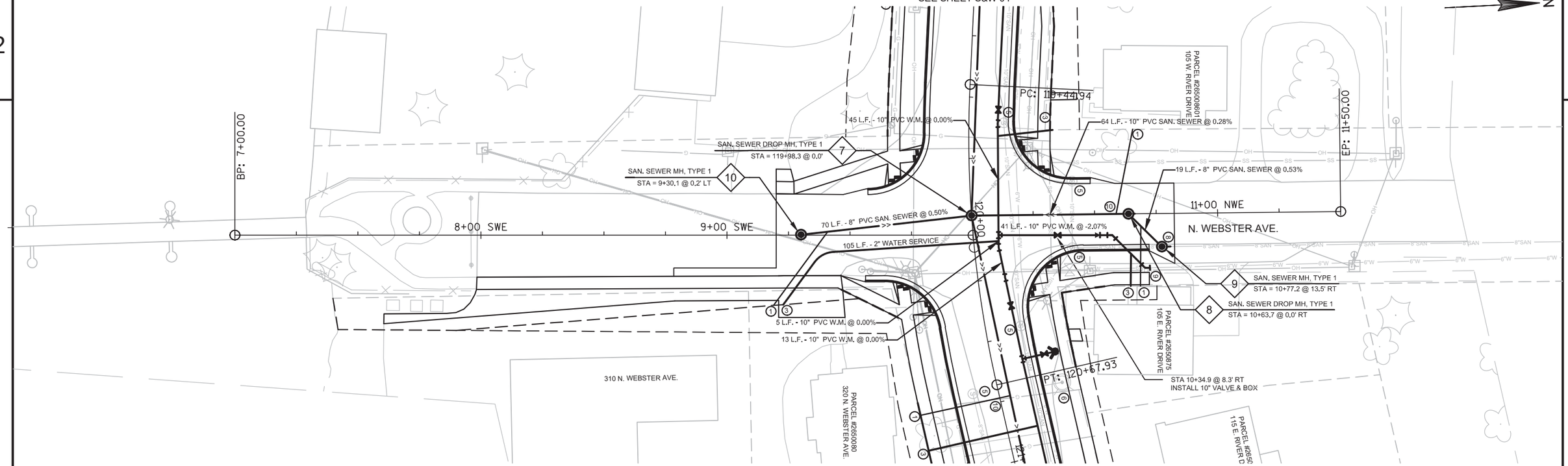


SEE SHEET S&W 03

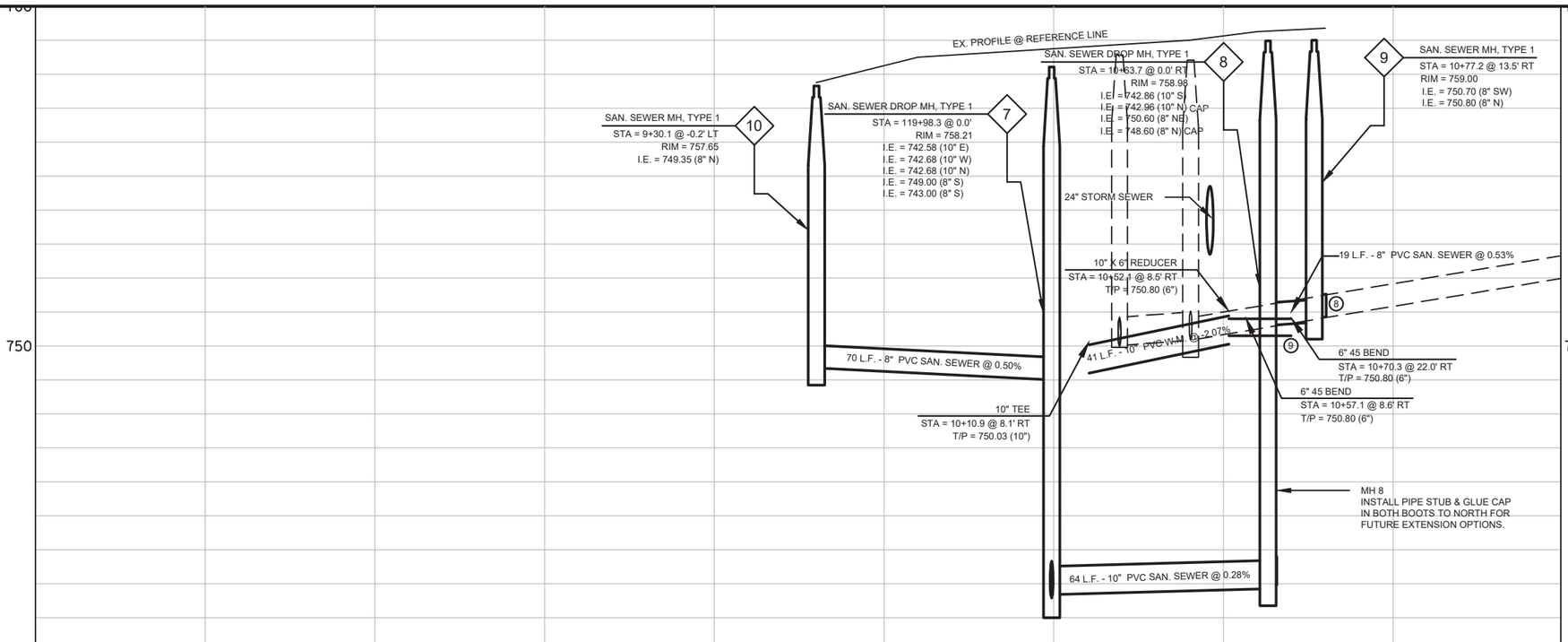


PROJECT NO: 6190-16-73	HWY: S.T.H. "116"	COUNTY: WINNEBAGO	PLAN AND PROFILE: SANITARY SEWER & WATER (S&W 08)	SHEET: 9	E

SEE SHEET S&W 04

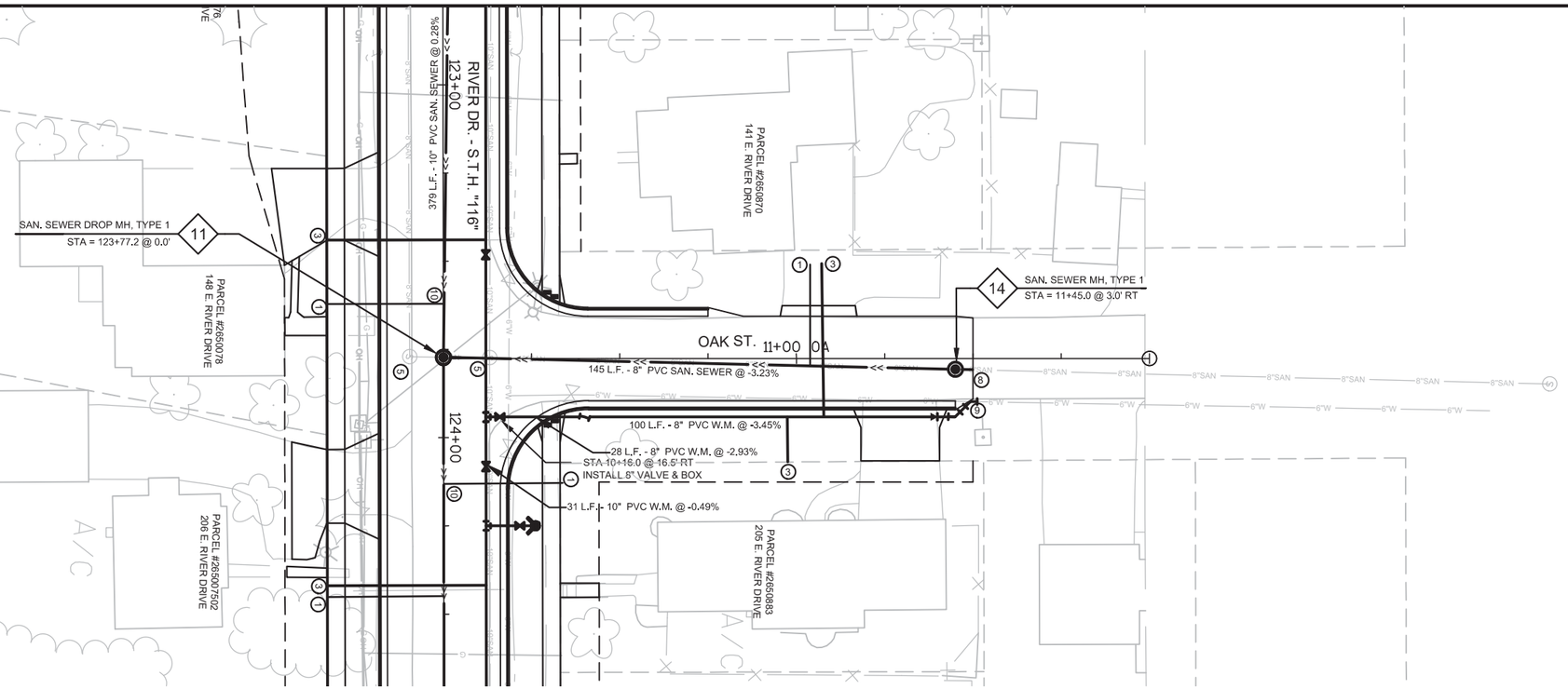


SEE SHEET S&W 04

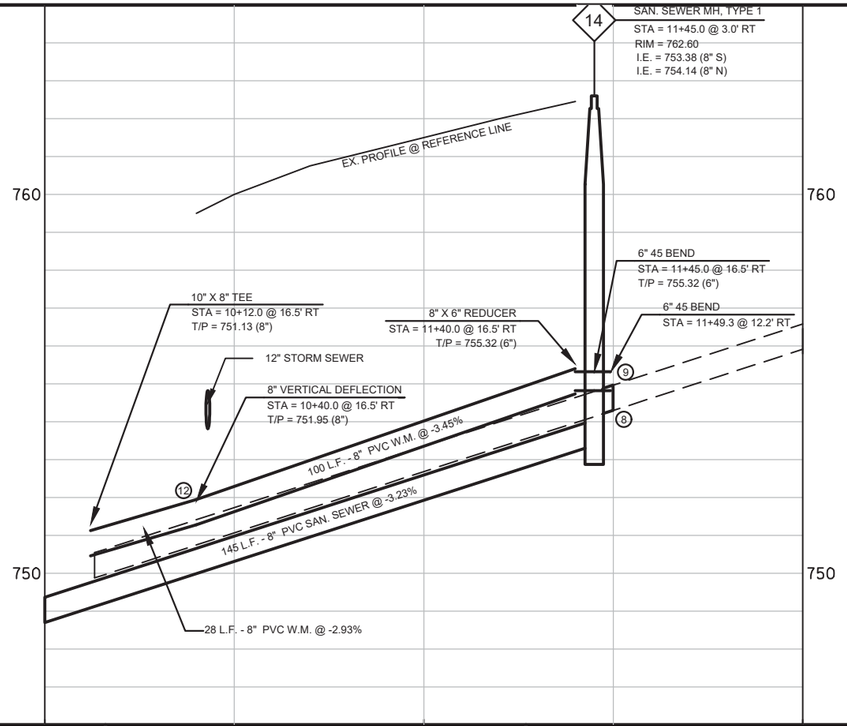


PROJECT NO: 6190-16-73	HWY: S.T.H. "116"	COUNTY: WINNEBAGO	PLAN AND PROFILE: SANITARY SEWER & WATER (S&W 09)	SHEET: E

2



SEE SHEET S&W 05



PROJECT NO: 6190-16-73	HWY: S.T.H. "116"	COUNTY: WINNEBAGO	PLAN AND PROFILE: SANITARY SEWER & WATER (S&W 10)	SHEET:	E

SEE SHEET S&W 07

2

2

RIVER DR.

437 L.F. - 10" C900 PVC SAN

145 L.F. - 12" PVC W.M. @ -0.55%

PARCEL #265105302
417 WILLOW STREET

135+00

BP: 7+50.00

CONNECT TO EXISTING
STA = 134+75.8 @ 177.3' RT
I.E. = 737.95 (10")

8+00 SPI

57 L.F. - 12" PVC W.M. @ 0.00%

PINE ST.

9+00 SPI

UTILITY TRENCH REPAIR AREA
SEE SHEET S&W 07 FOR
ADDITIONAL DETAILS

STA 9+70.4 @ 16.0' RT
INSTALL 10" VALVE & BOX

STA 10+53.7 @ 13.6' RT
INSTALL 10" VALVE & BOX

PINE ST.

11+00 NPI

EP: 11+50.00

A/C

N

136+00

117 L.F. - 10" PVC W.M. @ -4.15%

77 L.F. - 10" PVC W.M. @ -0.25%

62 L.F. - 10" PVC W.M. @ -1.61%

STA 8+13.8 @ 16.0' RT
INSTALL 10" VALVE & BOX

22 L.F. - 12" PVC W.M. @ 0.00%

5 L.F. - 12" PVC W.M. @ 0.00%

19 L.F. - 8" PVC W.M. @ 0.00%

501 E RIVER DRIVE

12" PVC W.M.

STA 9+97.0 @ 23.0' RT
INSTALL 10" X 8" REDUCER

STA 9+97.0 @ 26.5' RT
INSTALL 8" - 45° BEND

23 L.F. - 10" PVC W.M. @ -0.25%

WILLOW ST. - S.T.H. "116"

137+00

EX. PROFILE @ REFERENCE LINE

6" 45 BEND
STA = 10+90.1 @ 8.2' RT

6" 45 BEND
STA = 10+84.3 @ 13.8' RT
T/P = 758.67 (6")

12" STORM SEWER

10" VERTICAL DEFLECTION
STA = 10+17.7 @ 13.4' RT
T/P = 757.85 (10")

10" X 6" REDUCER
STA = 10+79.3 @ 13.8' RT
T/P = 758.67 (6")

10" VERTICAL DEFLECTION
STA = 9+20.0 @ 16.0' RT
T/P = 757.60 (10")

10" X 10" TEE
STA = 9+97.0 @ 16.0' RT
T/P = 757.79 (10")

760

750

12" X 10" TEE
STA = 8+02.5 @ 16.0' RT
T/P = 752.72 (10")

117 L.F. - 10" PVC W.M. @ -4.15%

77 L.F. - 10" PVC W.M. @ -0.25%

62 L.F. - 10" PVC W.M. @ -1.61%

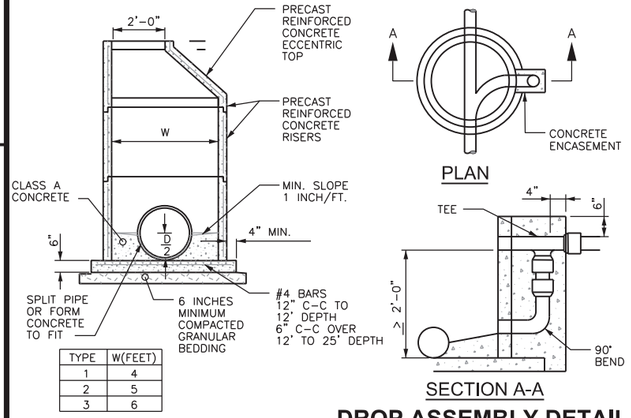
5 L.F. - 6" PVC W.M. @ 0.00%

23 L.F. - 10" PVC W.M. @ -0.25%

8 L.F. - 6" PVC W.M. @ 0.00%

PROJECT NO: 6190-16-73	HWY: S.T.H. "116"	COUNTY: WINNEBAGO	PLAN AND PROFILE: SANITARY SEWER & WATER (S&W 11)	SHEET: 12	E

FILE NAME : P:\4000S\4040S\4048\04048005\C3D\DESIGN\ALIPROFS\04048005 ALIPROFS-STH116-S&WDESIGN.DWG PLOT DATE : 3/6/2017 11:04 AM PLOT BY : SARA WATRY PLOT NAME : PLOT SCALE : 1:40_XREF



TYPE	W(FEET)
1	4
2	5
3	6

PLAN

SECTION A-A

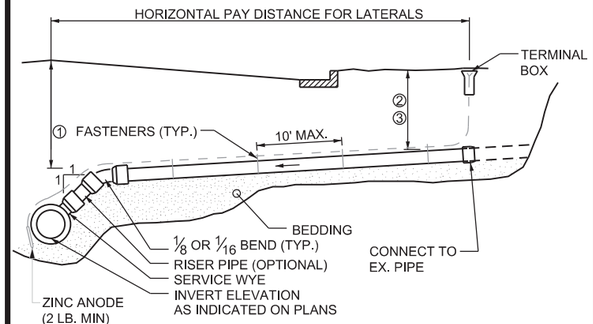
DROP ASSEMBLY DETAIL

GENERAL NOTES:

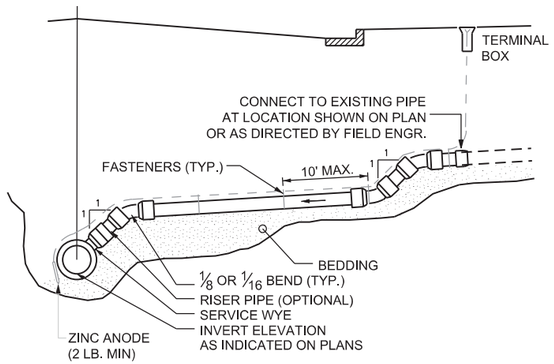
1. DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE SPECIFICATIONS AND THE APPLICABLE SPECIAL CONDITIONS.
2. DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.
3. PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS FOR GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.
4. ECCENTRIC CONE TOPS SHALL BE USED ON ALL STRUCTURES UNLESS SHOWN OTHERWISE ON THE PLANS OR DIRECTED BY THE ENGINEER.
5. PRECAST REINFORCED CONCRETE RISERS MAY BE PLACED WITH TONGUE UP OR DOWN.
6. ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.
7. DROP CONNECTIONS SHALL BE USED WHEN THE PIPE INVERT IS MORE THAN 2 FEET ABOVE THE MANHOLE INVERT.

PRECAST REINFORCED CONCRETE MANHOLE DETAIL

SCALE: NONE



ELEVATION VIEW



DOUBLE RISER-ELEVATION VIEW

NOTES FOR LATERAL INSTALLATION:

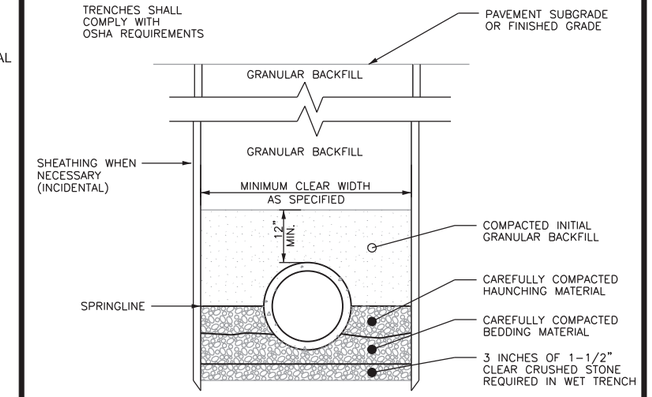
1. MININUM DEPTH OF COVER UNDER ROADWAY = 7 FEET.
2. MININUM DEPTH OF COVER UNDER GRASS AREAS = 5 1/2 FEET.
3. MININUM DEPTH OF COVER UNDER GRASS AREAS WITH FROST PROTECTION = 3 FEET 6 INCHES.
4. LATERAL SLOPES SHALL BE 1/8 INCH PER FOOT MINIMUM AND 1/2 INCH PER FOOT MAXIMUM.

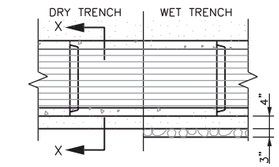
NOTES FOR TRACER WIRE INSTALLATION:

1. THE TRACER WIRE SHALL REMAIN CONTINUOUS TO THE GREATEST EXTENT POSSIBLE.
2. NO. 12 GAUGE GREEN INSULATED COPPER TRACER WIRE SHALL BE INSTALLED WITH THE NON-CONDUCTIVE SERVICE. PIPE TRACER WIRE TERMINAL BOXES SHALL BE INSTALLED DIRECTLY ABOVE THE SEWER MAIN OR AS DETERMINED BY THE ENGINEER OR OWNER. TRACER WIRE INSTALLATION REQUIRES ACCESS POINTS AT LEAST EVERY 300 FEET.
3. TRACER WIRE SHALL BE RESTRAINED BY CABLE-TIES, TAPE, OR BY NON-CORRESIVE FASTNER APPROVED BY THE OWNER, INSTALLED EVERY 10 FEET ALONG SERVICE. DO NOT WRAP TRACER WIRE AROUND THE PIPE.
4. TRACER WIRE SHALL RUN FROM THE WYE AND TERMINATED IN A FLUSH MOUNTED TERMINAL BOX WITH A CAST IRON LOCKABLE TOP. SPLICES IN TRACER WIRE SHOULD BE MADE WITH SPLIT BOLT OR COMPRESSION-TYPE CONNECTORS. WIRE NUTS SHALL NOT BE USED. A WATER-PROOF CONNECTION IS NECESSARY TO PREVENT CORROSION.

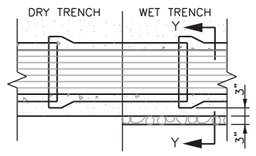
SANITARY SEWER LATERAL DETAIL

SCALE: NONE





TONGUE AND GROOVE PIPE



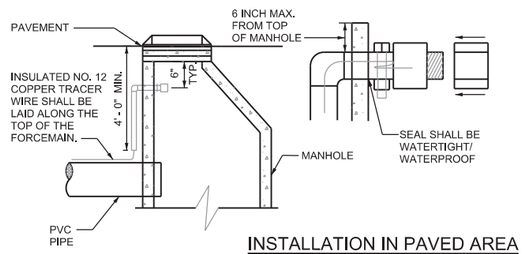
BELL AND SPIGOT PIPE

GENERAL NOTES:

1. BEDDING AND HAUNCHING MATERIAL SHALL BE GRANULAR AS PER SPECS.
2. BEDDING MATERIAL TO BE PLACED BEFORE SETTING PIPE, 4 INCH MINIMUM UNDER BARREL WITH 3 INCH MINIMUM UNDER BELL.
3. INITIAL GRANULAR BACKFILL SHALL BE DENSELY COMPACTED, NON-COHESIVE FINELY DIVIDED MATERIAL FREE OF DEBRIS, ORGANIC MATERIAL, AND LARGE STONES.
4. IN ROCK OR OTHER INCOMPRESSABLE MATERIALS, THE TRENCH SHALL BE OVEREXCAVATED A MINIMUM OF 6-INCHES AND REFILLED WITH GRANULAR MATERIAL.
5. INSTALL AND COMPACT HAUNCHING IN 6-INCH MAXIMUM LAYERS. WORK IN AROUND PIPE BY HAND TO PROVIDE UNIFORM SUPPORT.

SANITARY SEWER EMBEDMENT DETAIL

SCALE: NONE



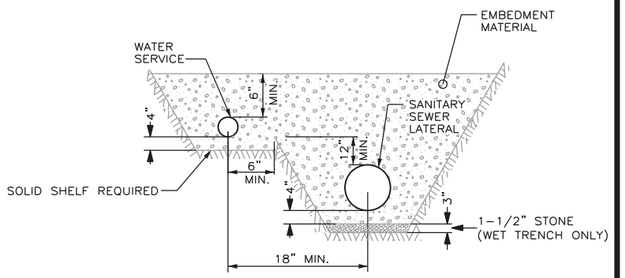
INSTALLATION IN PAVED AREA

GENERAL NOTES:

1. THE TRACER WIRE SHALL REMAIN CONTINUOUS TO THE GREATEST EXTENT POSSIBLE.
2. A THREADED, FEMALE PVC SCHEDULE 40 PLUG AND MALE COUPLING GLUED TO 3/4 INCH SCHEDULE 40 SHALL BE INSTALLED IN THE MANHOLE.
3. WIRE PIGTAIL SHALL BE WRAPPED AROUND BOLT AND READILY ACCESSIBLE, WITH SUFFICIENT LENGTH FOR EASY CONNECTION.

TRACER WIRE INSTALLATION FOR PVC MAIN DETAIL

SCALE: NONE

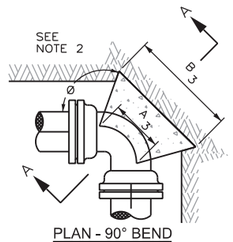


GENERAL NOTES:

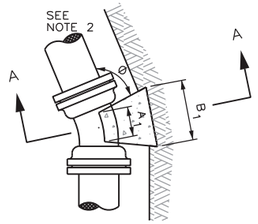
1. WATER SERVICES 3 INCHES IN DIAMETER AND LARGER SHALL BE LAID WITH A CLEAR HORIZONTAL SEPERATION NOT LESS THAN 2 FEET FROM THE SANITARY LATERAL.

WATER SERVICE AND SANITARY SEWER LATERAL DETAIL

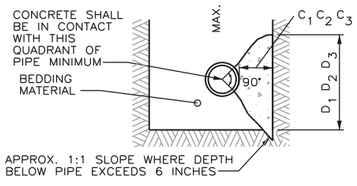
SCALE: NONE



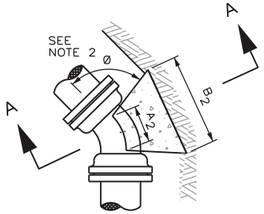
PLAN - 90° BEND



PLAN - 22 1/2 ° BEND



SECTION A-A



PLAN - 45° BEND

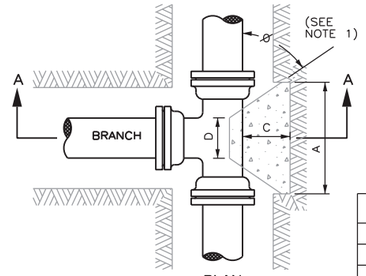
NOTES:

1. DIMENSIONS IN TABLE ARE BASED ON A WATER PRESSURE OF 150 P.S.I. AND AN EARTH RESISTANCE OF 2 TONS PER SQ. FT. INFORM THE ENGINEER IF PRESSURES EXCEED 150 PSI, OR ON-SITE SOIL DOES NOT MEET THIS CONDITION.
2. DIMENSION C_1 C_2 C_3 SHOULD BE LARGE ENOUGH TO MAKE ANGLE Ø EQUAL TO OR LARGER THAN 45°.
3. DIMENSION A_1, A_2 A_3 SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERRING WITH THE MECHANICAL JOINT.
4. BUTTRESS TO BE POURED AGAINST FIRM UNDISTURBED SOIL, OR DISTURBED SOIL COMPACTED TO 95% OF MODIFIED PROCTOR DENSITY, ASTM D1557.
5. ALL BUTTRESSED FITTINGS SHALL BE WRAPPED IN POLYETHYLENE.
6. CONCRETE SHALL HAVE A MINIMUM 7-DAY COMPRESSIVE STRENGTH OF 2000 PSI.

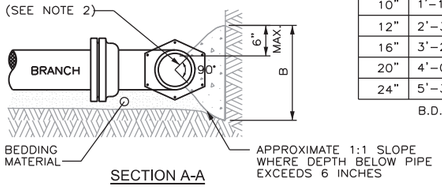
BUTTRESS DIMENSIONS						
PIPE SIZE	22 1/2 ° BENDS		45° BENDS		90° BENDS	
	B_1	D_1	B_2	D_2	B_3	D_3
6"	1'-0"	1'-0"	1'-0"	1'-0"	1'-4"	1'-2"
8"	1'-0"	1'-0"	1'-4"	1'-2"	1'-10"	1'-6"
10"	1'-2"	1'-2"	1'-7"	1'-7"	2'-3"	1'-10"
12"	1'-4"	1'-4"	1'-10"	1'-10"	2'-8"	2'-3"
16"	1'-10"	1'-8"	2'-6"	2'-4"	3'-10"	2'-10"
20"	2'-4"	2'-0"	3'-3"	2'-10"	5'-0"	3'-4"
24"	2'-10"	2'-4"	4'-0"	3'-3"	6'-4"	3'-10"

BUTTRESS FOR BENDS DETAIL

SCALE: NONE



PLAN



SECTION A-A

BUTTRESS DIMENSIONS				
B.D	A	B	C	D
6"	1'-3"	1'-0"	SEE NOTE NO. 1	SEE NOTE NO. 3
8"	1'-6"	1'-4"		
10"	1'-10"	1'-8"		
12"	2'-3"	2'-0"		
16"	3'-2"	2'-6"		
20"	4'-0"	3'-0"		
24"	5'-3"	3'-4"		

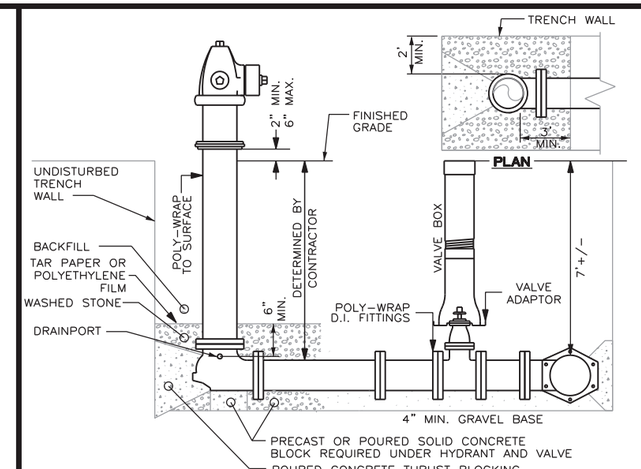
B.D. = BRANCH DIAMETER

NOTES:

1. DIMENSION 'C' SHOULD BE LARGE ENOUGH TO MAKE ANGLE Ø GREATER THAN OR EQUAL TO 45°.
2. CONCRETE SHOULD BEAR ON THIS QUADRANT OF PIPE AT A MINIMUM.
3. DIMENSION 'D' SHOULD BE AS LARGE AS POSSIBLE BUT CONCRETE SHOULD NOT INTERFERE WITH MECHANICAL JOINTS.
4. BUTTRESS DIMENSIONS ARE BASED ON A SOIL RESISTANCE OF TWO TONS PER SQ. FT. AND A WATER PRESSURE OF 150 PSI. INFORM THE ENGINEER IF ON-SITE SOIL DOES NOT MEET THIS CONDITION OR PRESSURES EXCEED 150 PSI.
5. BUTTRESS TO BE POURED AGAINST FIRM UNDISTURBED SOIL, OR DISTURBED SOIL COMPACTED TO 95% OF MODIFIED PROCTOR DENSITY, ASTM D1557.
6. CONCRETE SHALL HAVE A MINIMUM 7-DAY COMPRESSIVE STRENGTH OF 2000 PSI.
7. ALL BUTTRESSED FITTINGS SHALL BE WRAPPED IN POLYETHYLENE.

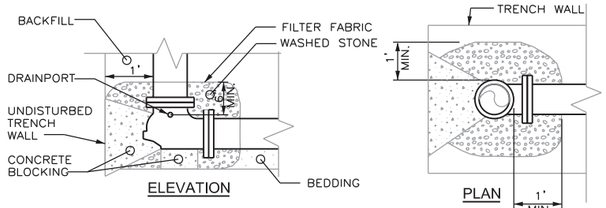
BUTTRESS FOR TEES DETAIL

SCALE: NONE



ELEVATION

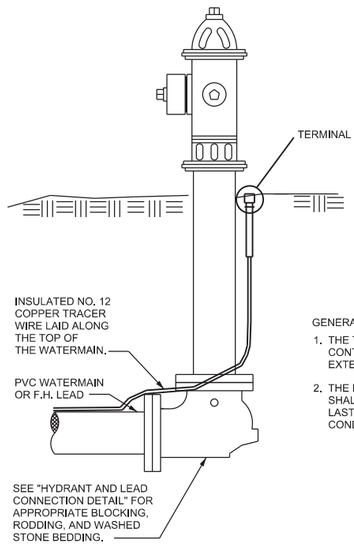
IMPERVIOUS SOIL SUMP DETAIL



PERVIOUS SOIL SUMP DETAIL

HYDRANT AND LEAD CONNECTION DETAIL

SCALE: NONE

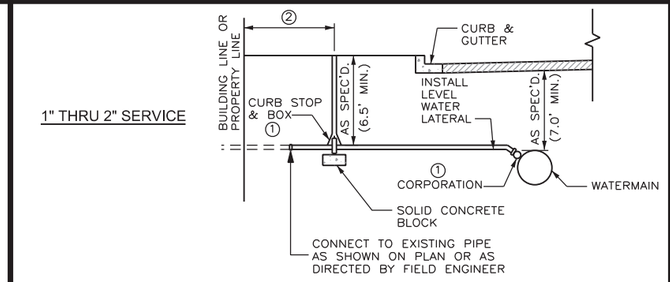


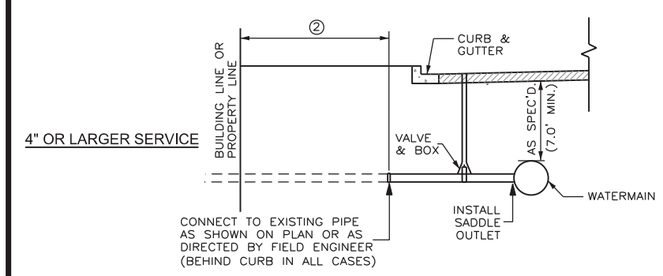
GENERAL NOTES:

1. THE TRACER WIRE SHALL REMAIN CONTINUOUS TO THE GREATEST EXTENT POSSIBLE.
2. THE END(S) OF THE TRACER WIRE SHALL BE WRAPPED AROUND THE LAST FITTING INSTALLED - NO CONDUCTIVE BOND SHALL BE MADE.

TRACER WIRE INSTALLATION FOR PVC WATERMAIN DETAIL

SCALE: NONE



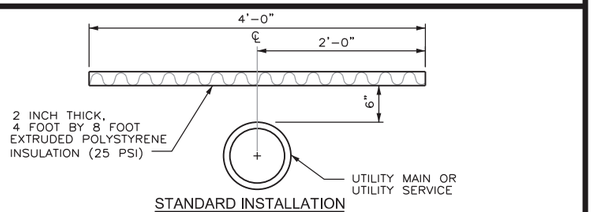


GENERAL NOTES:

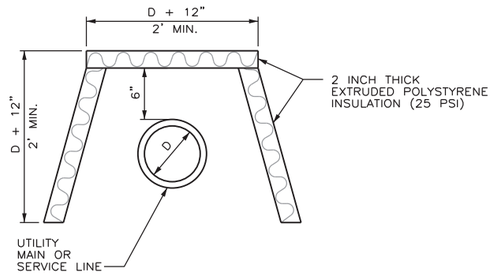
1. SEE PLANS AND SPECIFICATIONS FOR SIZE AND TYPE OF CURB STOP AND BOX CORPORATION AND SERVICE LINE.
2. AS SHOWN ON PLAN OR AS DIRECTED BY FIELD ENGINEER.

WATER SERVICE DETAIL

SCALE: NONE



STANDARD INSTALLATION



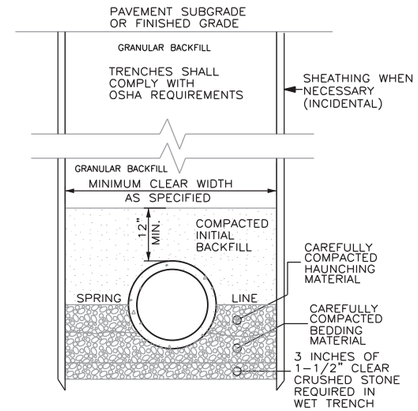
SIDE PROTECTION INSTALLATION

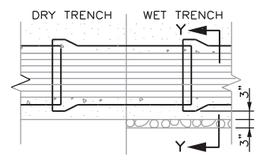
GENERAL NOTES:

1. THE SIDE PROTECTION INSTALLATION SHALL BE USED WHEN THE TOP OF THE PIPE IS LESS THAN 5.5 FEET BELOW FINISH GRADE.
2. A DOUBLE THICKNESS OF INSTALLATION SHALL BE USED WHEN THE TOP OF PIPE IS LESS THAN 5 FEET BELOW FINISH GRADE.

PIPE INSULATION DETAIL

SCALE: NONE





BELL AND SPIGOT PIPE

GENERAL NOTES:

1. BEDDING AND HAUNCHING MATERIAL SHALL BE GRANULAR AS PER SPECS.
2. BEDDING MATERIAL TO BE PLACED BEFORE SETTING PIPE, 4 INCH MIN. UNDER BARREL WITH 3 INCH MIN. UNDER BELL.
3. INITIAL BACKFILL SHALL BE DENSELY COMPACTED, NON-COHESIVE FINELY DIVIDED MATERIAL FREE OF DEBRIS, ORGANIC MATERIAL, AND LARGE STONES.
4. IN ROCK OR OTHER INCOMPRESSABLE MATERIALS, THE TRENCH SHALL BE OVEREXCAVATED A MINIMUM OF 6-INCHES AND REFILLED WITH GRANULAR MATERIAL.
5. INSTALL AND COMPACT HAUNCHING IN 6-INCH MAXIMUM LAYERS. WORK IN AROUND PIPE BY HAND TO PROVIDE UNIFORM SUPPORT.

WATER PIPE EMBEDMENT DETAIL

SCALE: NONE

6190-16-73

Line	Item	Item Description	Unit	Total	Qty
0058	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	350.500	350.500
0072	460.2000	Incentive Density HMA Pavement	DOL	90.000	90.000
0078	460.5224	HMA Pavement 4 LT 58-28 S	TON	190.000	190.000
0184	619.1000	Mobilization	EACH	0.250	0.250
0186	624.0100	Water	MGAL	5.000	5.000
0434	SPV.0060	Special 50. Sanitary Manhole Covers Type J - Special	EACH	15.000	15.000
0436	SPV.0060	Special 51. Standard Sanitary Mainline Pipe Connection	EACH	7.000	7.000
0438	SPV.0060	Special 52. Sanitary Wye 8-Inch Main	EACH	3.000	3.000
0440	SPV.0060	Special 53. Sanitary Wye 10-Inch Main	EACH	34.000	34.000
0442	SPV.0060	Special 54. Sanitary C900 Tee & Bend 10-Inch Main	EACH	2.000	2.000
0444	SPV.0060	Special 55. Water Valve & Box 6-Inch	EACH	10.000	10.000
0446	SPV.0060	Special 56. Water Valve & Box 8-Inch	EACH	4.000	4.000
0448	SPV.0060	Special 57. Water Valve & Box 10-Inch	EACH	15.000	15.000
0450	SPV.0060	Special 58. Water Valve & Box 12-Inch	EACH	5.000	5.000
0452	SPV.0060	Special 59. Fire Hydrant	EACH	8.000	8.000
0454	SPV.0060	Special 60. Tee 10"X6"X10"	EACH	7.000	7.000
0456	SPV.0060	Special 61. Tee 10"X8"X10"	EACH	3.000	3.000
0458	SPV.0060	Special 62. Tee 10"X10"X10"	EACH	2.000	2.000
0460	SPV.0060	Special 63. Tee 12"X6"X12"	EACH	3.000	3.000
0462	SPV.0060	Special 64. Tee 12"X10"X12"	EACH	2.000	2.000
0464	SPV.0060	Special 65. Tee 12"X12"X12"	EACH	1.000	1.000
0466	SPV.0060	Special 66. Bend 11.25-Degree 10-Inch	EACH	3.000	3.000
0468	SPV.0060	Special 67. Bend 11.25-Degree 12-Inch	EACH	1.000	1.000
0470	SPV.0060	Special 68. Bend 22.5-Degree 10-Inch	EACH	2.000	2.000
0472	SPV.0060	Special 69. Bend 45-Degree 6-Inch	EACH	6.000	6.000
0474	SPV.0060	Special 70. Bend 45-Degree 8-Inch	EACH	3.000	3.000
0476	SPV.0060	Special 71. Reducer 8"X4"	EACH	1.000	1.000
0478	SPV.0060	Special 72. Reducer 8"X6"	EACH	3.000	3.000
0480	SPV.0060	Special 73. Reducer 10"X6"	EACH	3.000	3.000
0482	SPV.0060	Special 74. Reducer 10"X8"	EACH	1.000	1.000
0484	SPV.0060	Special 75. Reducer 12"X8"	EACH	2.000	2.000
0486	SPV.0060	Special 76. Reducer 12"X10"	EACH	1.000	1.000
0488	SPV.0060	Special 77. Standard Water Mainline Pipe Connection	EACH	10.000	10.000
0490	SPV.0060	Special 78. Corporation, Curb Stop & Box (Set) 1 To 1-1/2 Inch	EACH	39.000	39.000
0492	SPV.0060	Special 79. Corporation, Curb Stop & Box (Set) 2 Inch	EACH	1.000	1.000
0494	SPV.0060	Special 80. Remove Existing Sanitary Sewer	EACH	16.000	16.000
0496	SPV.0060	Special 81. Remove Existing Hydrant	EACH	4.000	4.000
0500	SPV.0090	Special 50. Sanitary Sewer Pipe 8-Inch	LF	422.000	422.000
0502	SPV.0090	Special 51. Sanitary Sewer Pipe 10-Inch	LF	2,589.000	2,589.000

6190-16-73

Line	Item	Item Description	Unit	Total	Qty
0504	SPV.0090	Special 52. C900 Sanitary Sewer Pipe 10-Inch	LF	437.000	437.000
0506	SPV.0090	Special 53. Sanitary Lateral 4-Inch Or 6-Inch	LF	1,331.000	1,331.000
0508	SPV.0090	Special 54. C900 Sanitary Lateral 4-Inch Or 6-Inch	LF	85.000	85.000
0510	SPV.0090	Special 55. Water Main 4-Inch	LF	5.000	5.000
0512	SPV.0090	Special 56. Water Main 6-Inch	LF	242.000	242.000
0514	SPV.0090	Special 57. Water Main 8-Inch	LF	486.000	486.000
0516	SPV.0090	Special 58. Water Main 10-Inch	LF	2,197.000	2,197.000
0518	SPV.0090	Special 59. Water Main 12-Inch	LF	909.000	909.000
0520	SPV.0090	Special 60. Water Service 1 To 1-1/2 Inch	LF	1,337.000	1,337.000
0522	SPV.0090	Special 61. Water Service 2 Inch	LF	105.000	105.000
0524	SPV.0090	Special 62. Remove Existing Sanitary Pipe 8-Inch	LF	1,617.000	1,617.000
0526	SPV.0090	Special 63. Remove Existing Sanitary Pipe 10-Inch	LF	1,996.000	1,996.000
0528	SPV.0090	Special 64. Abandon Existing Sanitary Pipe 10-Inch	LF	228.000	228.000
0530	SPV.0090	Special 65. Abandon Existing Water Pipe 4-Inch	LF	262.000	262.000
0532	SPV.0090	Special 66. Abandon Existing Water Pipe 6-Inch	LF	3,039.000	3,039.000
0534	SPV.0090	Special 67. Abandon Existing Water Pipe 8-Inch	LF	233.000	233.000
0536	SPV.0090	Special 68. Abandon Existing Water Pipe 10-Inch	LF	52.000	52.000
0546	SPV.0105	Special 50. Construction Staking Sanitary Sewer	LS	1.000	1.000
0548	SPV.0105	Special 51. Construction Staking Water	LS	1.000	1.000
0552	SPV.0200	Special 50. Sanitary Manhole (Type 1)	VF	62.980	62.980
0554	SPV.0200	Special 51. Sanitary Drop Manhole (Type 1)	VF	110.890	110.890

SANITARY MANHOLES

CATEGORY	STRUCTURE NUMBER	STATION	OFFSET DIST.	OFFSET DIR.	LOCATION	SHEET NO.	STRUCTURE	INSIDE DIAMETER FT	TOP OF COVER ELEV.	TOP OF STRUCTURE ELEV.	PIPE INVERT ELEV.	PIPE SIZE INCHES	(SPV.0200.50) SANITARY MANHOLE (TYPE 1) SPECIAL VF	(SPV.0200.51) SANITARY DROP MANHOLE (TYPE 1) SPECIAL VF	(SPV.0060.50) SANITARY MH COVERS TYPE J-S EACH
020	2	108+75.00	22.70	LT.	S.T.H. 21	02	MANHOLE	4	756.58	755.33	746.03	-	9.30	-	1
	3	113+25.40	0.00	RT.	RIVER DR.	03	MANHOLE	4	756.98	755.73	744.67	-	11.06	-	1
	4	14+80.00	5.40	LT.	SPRUCE ST.	08	MANHOLE	4	759.25	758.00	745.80	-	-	12.20	1
	5	116+50.00	0.00	RT.	RIVER DR.	04	MANHOLE	4	757.45	756.20	743.66	-	12.54	-	1
	6	116+44.70	54.80	LT.	CEDAR ST.	04	MANHOLE	4	756.74	755.49	744.15	-	-	11.34	1
	7	119+98.30	0.00	RT.	RIVER DR.	04	MANHOLE	4	758.21	756.96	742.58	-	-	14.38	1
	8	10+63.7	0.00	RT.	N. WEBSTER AVE.	09	MANHOLE	4	758.98	757.73	742.86	-	-	14.87	1
	9	10+77.2	13.50	RT.	N. WEBSTER AVE.	09	MANHOLE	4	759.00	757.75	750.70	-	7.05	-	1
	10	9+30.10	0.20	LT.	N. WEBSTER AVE.	09	MANHOLE	4	757.65	756.40	749.35	-	7.05	-	1
	11	123+77.20	0.00	RT.	RIVER DR.	05	MANHOLE	4	758.50	757.25	741.42	-	-	15.83	1
	12	126+78.70	0.00	RT.	RIVER DR.	06	MANHOLE	4	757.71	756.46	740.48	-	-	15.98	1
	13	131+09.00	0.00	RT.	RIVER DR.	06	MANHOLE	4	757.82	756.57	739.18	-	-	17.39	1
	14	11+45.00	3.00	RT.	OAK ST.	10	MANHOLE	4	762.60	761.35	753.38	-	7.97	-	1
	15	126+79.40	50.00	LT.	ELM ST.	06	MANHOLE	4	758.23	756.98	748.08	-	-	8.90	1
	16	131+09.00	49.00	LT.	ASH ST.	06	MANHOLE	4	758.42	757.17	749.16	-	8.01	-	1
TOTAL													62.98	110.89	15

SANITARY SEWER PIPE SUMMARY

CATEGORY	LOCATION FROM M.H.	LOCATION TO M.H.	LOCATION STREET	SHEET NO.	(SPV.0090.50) SANITARY SEWER PIPE 8-INCH LF	(SPV.0090.51) SANITARY SEWER PIPE 10-INCH LF	(SPV.0090.52) C900 SANITARY SEWER PIPE 10-INCH LF	(SPV.0060.51) STANDARD SAN. MAINLINE PIPE CONNECTION EACH	FT/FT	%	INLET ELEV.	DISCHARGE ELEV.	COMMENTS
020	CAP	2	S.T.H. 21	02		3.0			0.0028	0.28%	746.14	746.13	CAP FOR FUTURE
	2	3	S.T.H. 21	02 & 03		451.0			0.0028	0.28%	746.03	744.77	
	3	4	SPRUCE ST.	08		288.0			0.0030	0.30%	745.80	744.94	
	4	CONNECT N.	SPRUCE ST.	08	5.0			1	0.0040	0.40%	750.92	750.90	CONNECT TO EX. PIPE
	3	5	RIVER DR.	03 & 04		325.0			0.0028	0.28%	744.67	743.76	
	5	6	CEDAR ST.	04	55.0				0.0040	0.40%	744.15	743.93	
	6	CONNECT N.	CEDAR ST.	04	9.0			1	0.0041	0.41%	750.39	750.35	CONNECT TO EX. PIPE
	5	7	RIVER DR.	04		348.0			0.0028	0.28%	743.66	742.68	
	7	8	N. WEBSTER AVE.	09		64.0			0.0028	0.28%	742.86	742.68	
	8	9	N. WEBSTER AVE.	09	19.0				0.0053	0.53%	750.70	750.60	
	9	CONNECT N.	N. WEBSTER AVE.	09	5.0			1	0.0040	0.40%	750.82	750.80	CONNECT TO EX. PIPE
	7	10	N. WEBSTER AVE.	09	70.0				0.0050	0.50%	749.35	749.00	
	7	11	RIVER DR.	04 & 05		379.0			0.0028	0.28%	742.58	741.52	
	11	14	OAK ST.	10	145.0				0.0323	3.23%	753.38	748.70	
	14	CONNECT N.	OAK ST.	10	5.0			1	0.0320	3.20%	754.30	754.14	CONNECT TO EX. PIPE
	11	12	RIVER DR.	05 & 06		301.0			0.0028	0.28%	741.42	740.58	
	12	15	ELM ST.	06	50.0				0.0166	1.66%	748.08	747.25	
	15	CONNECT N.	ELM ST.	06	5.0			1	0.0165	1.65%	750.38	750.30	CONNECT TO EX. PIPE
	12	13	RIVER DR.	06		430.0			0.0028	0.28%	740.48	739.28	
	13	16	ASH ST.	06	49.0				0.0247	2.47%	749.16	747.95	
	16	CONNECT N.	ASH ST.	06	5.0			1	0.0247	2.47%	750.17	750.05	CONNECT TO EX. PIPE
	13	EX. MH	RIVER DR.	06 & 07			437	1	0.0028	0.28%	739.18	737.95	CONNECT TO EX. MH
TOTAL					422.0	2589.0	437	7					

WATER MAIN PIPE SUMMARY

CATEGORY	STATION	OFFSET DIST.	OFFSET DIR.	TO	STATION	OFFSET DIST.	OFFSET DIR.	LOCATION	SHEET NO.	(SPV.0090.55) WATER MAIN 4-INCH SPECIAL LF	(SPV.0090.56) WATER MAIN 6-INCH SPECIAL LF	(SPV.0090.57) WATER MAIN 8-INCH SPECIAL LF	(SPV.0090.58) WATER MAIN 10-INCH SPECIAL LF	(SPV.0090.59) WATER MAIN 12-INCH SPECIAL LF	(SPV.0060.77) STANDARD WATER MAINLINE PIPE CONNECTION EACH	COMMENTS
010	108+75.4	30.70	LT.		110+01.2	24.30	LT.	S.T.H. 21	02 & 03	-	-	-	126.0	-	1	CONNECT TO EX PIPE
	110+01.2	24.30	LT.		110+01.2	52.70	LT.	S.T.H. 21	03	-	28.0	-	-	-	-	HYDRANT PIPE
	110+01.2	24.30	LT.		113+09.3	19.90	LT.	S.T.H. 21	03	-	-	-	308.0	-	-	
	113+09.3	19.90	LT.		113+26.8	12.30	LT.	S.T.H. 21	03	-	-	-	19.0	-	-	
	113+26.8	12.30	LT.		113+35.5	12.10	LT.	S.T.H. 21	03	-	-	-	9.0	-	-	
	12+03.5	19.70	RT.		14+76.9	7.70	RT.	SPRUCE ST.	08	-	-	274.0	-	-	-	
	14+76.9	7.70	RT.		14+80.1	4.30	RT.	SPRUCE ST.	08	-	-	3.0	-	-	-	
	14+80.1	4.30	RT.		14+84.1	4.10	RT.	SPRUCE ST.	08	5.0	-	4.0	-	-	1	CONNECT TO EX PIPE
	113+35.5	12.10	LT.		113+90.0	12.20	LT.	RIVER DR.	03	-	-	-	54.0	-	-	
	113+90.0	12.20	LT.		113+90.0	35.00	LT.	RIVER DR.	03	-	23.0	-	-	-	-	HYDRANT PIPE
	113+90.0	12.20	LT.		116+57.7	12.00	LT.	RIVER DR.	03 & 04	-	-	-	268.0	-	-	
	116+57.7	12.00	LT.		116+53.1	65.00	LT.	CEDAR ST.	04	-	-	53.0	-	-	1	CONNECT TO EX PIPE
	116+57.7	12.00	LT.		116+90.0	12.00	LT.	RIVER DR.	04	-	-	-	32.0	-	-	
	116+90.0	12.00	LT.		116+90.0	31.20	LT.	RIVER DR.	04	-	19.0	-	-	-	-	HYDRANT PIPE
	116+90.0	12.00	LT.		119+60.7	11.70	LT.	RIVER DR.	04	-	-	-	270.0	-	-	
	119+60.7	11.70	LT.		120+07.2	10.30	LT.	RIVER DR.	04	-	-	-	45.0	-	-	
	10+10.9	8.10	RT.		10+52.1	8.50	RT.	N. WEBSTER AVE.	09	-	-	-	41.0	-	-	10"x6" REDUCER
	10+52.1	8.50	RT.		10+57.1	8.60	RT.	N. WEBSTER AVE.	09	-	5.0	-	-	-	-	
	10+57.1	8.60	RT.		10+70.3	22.00	RT.	N. WEBSTER AVE.	09	-	18.0	-	-	-	1	CONNECT TO EX PIPE
	120+07.2	10.30	LT.		120+12.2	9.90	LT.	RIVER DR.	04	-	-	-	5.0	-	-	
	120+12.2	9.90	LT.		120+25.0	11.10	LT.	RIVER DR.	04	-	-	-	13.0	-	-	
	120+25.0	11.10	LT.		120+59.8	12.40	LT.	RIVER DR.	04	-	-	-	34.0	-	-	
	120+59.8	12.40	LT.		120+59.8	26.00	LT.	RIVER DR.	04	-	14.0	-	-	-	-	HYDRANT PIPE
	120+59.8	12.40	LT.		123+94.2	12.00	LT.	RIVER DR.	04 & 05	-	-	-	334.0	-	-	
	10+12.0	16.50	RT.		11+40.0	16.50	RT.	OAK ST.	10	-	-	128.0	-	-	-	8"x6" REDUCER
	11+40.0	16.50	RT.		11+49.3	12.20	RT.	OAK ST.	10	-	10.0	-	-	-	1	CONNECT TO EX PIPE
	123+94.2	12.00	LT.		124+25.0	12.00	LT.	RIVER DR.	05	-	-	-	31.0	-	-	
	124+25.0	12.00	LT.		124+25.0	26.00	LT.	RIVER DR.	05	-	14.0	-	-	-	-	HYDRANT PIPE
	124+25.0	12.00	LT.		127+03.2	12.00	LT.	RIVER DR.	05 & 06	-	-	-	278.0	-	-	
	127+03.2	12.00	LT.		127+08.2	12.00	LT.	RIVER DR.	06	-	-	-	-	5.0	-	
	127+03.2	12.00	LT.		127+08.2	34.00	RT.	RIVER DR.	06	-	-	-	46.0	-	1	CONNECT TO EX PIPE
	127+08.2	12.00	LT.		127+35.0	12.00	LT.	RIVER DR.	06	-	-	-	-	27.0	-	
	127+35.0	12.00	LT.		127+35.0	26.00	LT.	RIVER DR.	06	-	14.0	-	-	-	-	HYDRANT PIPE
	127+35.0	12.00	LT.		130+64.7	12.00	LT.	RIVER DR.	06	-	-	-	-	330.0	-	
	130+64.7	12.00	LT.		131+60.9	5.30	LT.	RIVER DR.	06 & 07	-	-	-	-	96.0	-	
	131+60.9	5.30	LT.		131+60.9	23.40	LT.	RIVER DR.	07	-	18.0	-	-	-	-	HYDRANT PIPE
	131+60.9	5.30	LT.		133+18.6	48.30	RT.	RIVER DR.	07	-	-	-	-	167.0	-	
	133+18.6	48.30	RT.		133+00.8	88.60	RT.	RIVER DR.	07	-	-	-	-	45.0	-	FUTURE WELL
	133+18.6	48.30	LT.		134+26.9	128.10	RT.	RIVER DR.	07	-	-	-	-	145.0	-	
	134+26.9	128.10	RT.		134+33.3	119.50	RT.	RIVER DR.	07	-	10.0	-	-	-	-	HYDRANT PIPE
	134+26.9	128.10	RT.		134+72.7	162.50	RT.	RIVER DR.	07	-	-	-	-	57.0	-	
	8+02.5	16.00	RT.		9+97.0	16.00	RT.	PINE ST.	11	-	-	-	194.0	-	-	
	9+97.0	16.00	RT.		9+97.0	21.00	RT.	PINE ST.	11	-	-	-	5.0	-	-	
	9+97.0	21.00	RT.		9+97.0	26.00	RT.	PINE ST.	11	-	-	5.0	-	-	1	CONNECT TO EX PIPE
	9+97.0	16.00	RT.		10+79.3	13.80	RT.	PINE ST.	11	-	-	-	85.0	-	-	10"x6" REDUCER
	10+79.3	13.80	RT.		10+84.3	13.80	RT.	PINE ST.	11	-	5.0	-	-	-	-	
	10+84.3	13.80	RT.		10+90.1	8.20	RT.	PINE ST.	11	-	8.0	-	-	-	1	CONNECT TO EX PIPE
	134+72.7	162.50	RT.		134+90.3	175.70	RT.	RIVER DR.	07	-	-	-	-	22.0	-	
	134+90.3	175.70	RT.		134+84.3	183.70	RT.	RIVER DR.	07	-	-	-	-	10.0	1	CONNECT TO EX PIPE
	134+90.3	175.70	RT.		134+94.0	178.50	RT.	RIVER DR.	07	-	-	-	-	5.0	-	12"x8" REDUCER
	134+94.0	178.50	RT.		135+08.9	189.70	RT.	RIVER DR.	07	-	-	19.0	-	-	1	CONNECT TO EX PIPE
TOTAL										5.0	186.0	486.0	2197.0	909.0	10	

PROJECT NO: 6190-16-73	HWY: S.T.H. "116"	COUNTY: WINNEBAGO	MISCELLANEOUS QUANTITIES	SHEET	E

FILE NAME : P:\4000S\4040S\4048\04048005\C3D\DESIGN\ALIPROFS\04048005 ALIPROFS-STH116-S&WDESIGN QUANTITIES.DWG PLOT DATE : 10/7/2016 PLOT BY : SEW PLOT NAME : PLOT SCALE :
WISDOT/CADDS SHEET 42

WATER APPURTENANCES SUMMARY

CATEGORY	STATION	OFFSET DIST.	OFFSET DIR.	STREET	SHEET NO.	(SPV.0060.55) VALVES & BOXES 6-INCH SPECIAL EACH	(SPV.0060.56) VALVES & BOXES 8-INCH SPECIAL EACH	(SPV.0060.57) VALVES & BOXES 10-INCH SPECIAL EACH	(SPV.0060.58) VALVES & BOXES 12-INCH SPECIAL EACH	(SPV.0060.59) FIRE HYDRANTS SPECIAL EACH	(SPV.0060.60) TEES 10X6X10 SPECIAL EACH	(SPV.0060.61) TEES 10X8X10 SPECIAL EACH	(SPV.0060.62) TEES 10X10X10 SPECIAL EACH	(SPV.0060.63) TEES 12X6X12 SPECIAL EACH	(SPV.0060.64) TEES 12X10X12 SPECIAL EACH	(SPV.0060.65) TEES 12X12X12 SPECIAL EACH	(SPV.0060.66) BEND 11.25-DEG. 10-INCH SPECIAL EACH	(SPV.0060.67) BEND 11.25-DEG. 12-INCH SPECIAL EACH	(SPV.0060.68) BEND 22.5-DEG. 10-INCH SPECIAL EACH	(SPV.0060.69) BEND 45-DEG. 6-INCH SPECIAL EACH	(SPV.0060.70) BEND 45-DEG. 8-INCH SPECIAL EACH	(SPV.0060.71) REDUCER 8X4 SPECIAL EACH	(SPV.0060.72) REDUCER 8X6 SPECIAL EACH	(SPV.0060.73) REDUCER 10X6 SPECIAL EACH	(SPV.0060.74) REDUCER 10X8 SPECIAL EACH	(SPV.0060.75) REDUCER 12X8 SPECIAL EACH	(SPV.0060.76) REDUCER 12X10 SPECIAL EACH
010	108+75.4	30.70	LT.	S.T.H. 21	02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
	108+82.4	30.30	LT.	S.T.H. 21	02	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	109+76.1	25.50	LT.	S.T.H. 21	03	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	110+01.2	24.30	LT.	S.T.H. 21	03	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	110+01.2	46.50	LT.	S.T.H. 21	03	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	110+01.2	52.70	LT.	S.T.H. 21	03	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111+40.0	22.50	LT.	S.T.H. 21	03	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	112+66.0	20.60	LT.	S.T.H. 21	03	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	113+09.3	19.90	LT.	S.T.H. 21	03	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
	113+26.8	12.30	LT.	S.T.H. 21	03	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
	113+35.5	12.10	LT.	RIVER DR.	03	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	113+32.8	41.20	LT.	SPRUCE ST.	08	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14+76.9	7.70	RT.	SPRUCE ST.	08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
	14+80.1	4.30	RT.	SPRUCE ST.	08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
	14+84.1	4.10	RT.	SPRUCE ST.	08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	113+40.5	12.10	LT.	RIVER DR.	03	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	113+90.0	12.20	LT.	RIVER DR.	03	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	113+90.0	25.50	LT.	RIVER DR.	03	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	113+90.0	35.00	LT.	RIVER DR.	03	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	116+09.4	12.30	LT.	RIVER DR.	04	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	116+57.7	12.00	LT.	RIVER DR.	04	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	116+55.6	36.40	LT.	CEDAR ST.	04	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	116+53.1	65.00	LT.	CEDAR ST.	04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
	116+62.7	12.00	LT.	RIVER DR.	04	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	116+90.0	12.00	LT.	RIVER DR.	04	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	116+90.0	23.00	LT.	RIVER DR.	04	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	116+90.0	31.20	LT.	RIVER DR.	04	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	119+54.9	11.90	LT.	RIVER DR.	04	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	119+60.7	11.70	LT.	RIVER DR.	04	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
	120+07.2	10.30	LT.	RIVER DR.	04	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10+34.9	8.30	RT.	N. WEBSTER AVE.	09	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10+52.1	8.50	RT.	N. WEBSTER AVE.	09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
	10+57.1	8.60	RT.	N. WEBSTER AVE.	09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
	10+70.3	22.00	RT.	N. WEBSTER AVE.	09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
	120+12.2	9.90	LT.	RIVER DR.	04	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
	120+25.0	11.10	LT.	RIVER DR.	04	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
	120+37.0	11.80	LT.	RIVER DR.	04	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	120+59.8	12.40	LT.	RIVER DR.	04	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	120+59.5	21.60	LT.	RIVER DR.	04	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	120+59.5	26.00	LT.	RIVER DR.	04	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	123+48.2	12.00	LT.	RIVER DR.	05	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	123+94.2	12.00	LT.	RIVER DR.	05	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10+16.0	16.50	RT.	OAK ST.	10	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11+40.0	16.50	RT.	OAK ST.	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
	11+45.0	16.50	RT.	OAK ST.	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
	11+49.3	12.20	RT.	OAK ST.	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
	124+08.2	12.00	LT.	RIVER DR.	05	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	124+25.0	12.00	LT.	RIVER DR.	05	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	124+25.0	21.60	LT.	RIVER DR.	05	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	124+25.0	26.00	LT.	RIVER DR.	05	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	126+49.1	12.00	LT.	RIVER DR.	06	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	127+03.2	12.00	LT.	RIVER DR.	06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	127+08.2	12.00	LT.	RIVER DR.	06	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
	127+08.2	5.60	LT.	RIVER DR.	06	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	127+35.0	12.00	LT.	RIVER DR.	06	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
	127+35.0	21.60	LT.	RIVER DR.	06	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	127+35.0	26.00	LT.	RIVER DR.	06	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	127+40.0	12.00	LT.	RIVER DR.	06	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	130+64.7	12.00	LT.	RIVER DR.	06	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
	131+60.9	5.30	LT.	RIVER DR.	07	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
	131+60.9	20.50	LT.	RIVER DR.	07	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	131+60.9	23.40	LT.	RIVER DR.	07	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	133+14.5	46.00	RT.	RIVER DR.	07	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	133+16.5	52.70	RT.	RIVER DR.	07	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	134+26.9	128.10	RT.	RIVER DR.	07	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
	134+30.7	123.00	RT.	RIVER DR.	07	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	134+33.3	119.50	RT.	RIVER DR.	07	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	134+72.7	162.50	RT.	RIVER DR.	07	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
	9+13.8	16.00	RT.	PINE ST.	11	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9+70.4	16.00	RT.	PINE ST.	11	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9+97.0	16.00	RT.	PINE ST.	11	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9+97.0	23.00	RT.	PINE ST.	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
	9+97.0	26.50	RT.	PINE ST.	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
	10+53.7	13.60	RT.	PINE ST.	11	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10+79.3	13.80	RT.	PINE ST.	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
	10+84.3	13.80	RT.	PINE ST.	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
	10+90.1	8.20	RT.	PINE ST.	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
	134+79.2	167.30	RT.	RIVER DR.	07	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	134+90.3	175.70	RT.	RIVER DR.	07	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
	134+87.3	179.70	RT.	RIVER DR.	07	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	134+84.3	183.70	RT.	RIVER DR.	07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
	134+94.0	178.50	RT.	RIVER DR.	07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
	134+97.5	181.10	RT.	RIVER DR.	07	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	135+08.9	189.70	RT.	RIVER DR.	07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
TOTAL						8	4	15	5	8	7	3	2	3	2	1	3	1	2	6	3	1	3	3	1	2	1

PROJECT NO: 6190-16-73	HWY: S.T.H. "116"	COUNTY: WINNEBAGO	MISCELLANEOUS QUANTITIES	SHEET E

SANITARY LATERAL AND WATER SERVICE SUMMARY

CATEGORY	STATION	OFFSET DIR.	SHEET NO.	(SPV.0060.52) SANITARY WYE 8-INCH MAIN SPECIAL EACH	(SPV.0060.53) SANITARY WYE 10-INCH MAIN SPECIAL EACH	(SPV.0060.54) SANITARY C900 TEE & BEND 10-INCH MAIN SPECIAL EACH	(SPV.0090.53) SANITARY LATERAL 4 OR 6-INCH SPECIAL LF	(SPV.0090.54) SANITARY C900 LATERAL 4 OR 6-INCH SPECIAL LF	(SPV.0090.56) WATER SERVICE 6-INCH SPECIAL LF	(SPV.0060.55) VALVES & BOXES 6-INCH SPECIAL EACH	(SPV.0090.60) WATER SERVICE 1 TO 1-1/2-INCH SPECIAL LF	(SPV.0090.61) WATER SERVICE 2-INCH SPECIAL LF	(SPV.0060.78) CORP., CURB STOP & BOX (set) 1 TO 1-1/2 SPECIAL EACH	(SPV.0060.79) CORP., CURB STOP & BOX (set) 2-INCH SPECIAL EACH	ADDRESS	STREET
020	109+66.1	LT.	03	-	1	-	40	-	-	-	-	-	-	-	401	W. RIVER DR.
010	109+76.1	LT.	03	-	-	-	-	-	31	1	-	-	-	-	401	W. RIVER DR.
010	111+40.0	LT.	03	-	-	-	-	-	25	1	-	-	-	-	321	W. RIVER DR.
020	111+50.0	LT.	03	-	1	-	40	-	-	-	-	-	-	-	321	W. RIVER DR.
010	12+87.0	LT.	08	-	-	-	-	-	-	-	37	-	1	-	305	W. RIVER DR.
020	12+91.0	LT.	08	-	1	-	25	-	-	-	-	-	-	-	305	W. RIVER DR.
010	13+78.0	RT.	08	-	-	-	-	-	-	-	14	-	1	-	422	SPRUCE ST.
020	13+82.0	RT.	08	-	1	-	26	-	-	-	-	-	-	-	422	SPRUCE ST.
010	14+00.0	LT.	08	-	-	-	-	-	-	-	30	-	1	-	421	SPRUCE ST.
020	14+05.0	LT.	08	-	1	-	17	-	-	-	-	-	-	-	421	SPRUCE ST.
010	14+46.0	RT.	08	-	-	-	-	-	-	-	18	-	1	-	430	SPRUCE ST.
020	14+50.0	RT.	08	-	1	-	26	-	-	-	-	-	-	-	430	SPRUCE ST.
020	114+17.0	RT.	03	-	1	-	33	-	-	-	-	-	-	-	228	W. RIVER DR.
010	114+21.0	RT.	03	-	-	-	-	-	-	-	45	-	1	-	228	W. RIVER DR.
010	114+43.3	LT.	03	-	-	-	-	-	-	-	30	-	1	-	223	W. RIVER DR.
020	114+47.8	LT.	03	-	1	-	43	-	-	-	-	-	-	-	223	W. RIVER DR.
010	114+59.0	RT.	03	-	-	-	-	-	-	-	45	-	1	-	224	W. RIVER DR.
020	114+62.0	RT.	03	-	1	-	33	-	-	-	-	-	-	-	224	W. RIVER DR.
010	114+93.0	LT.	03	-	-	-	-	-	-	-	30	-	1	-	223	W. RIVER DR.
020	114+96.0	LT.	03	-	1	-	43	-	-	-	-	-	-	-	223	W. RIVER DR.
010	115+94.0	RT.	04	-	-	-	-	-	-	-	46	-	1	-	206	W. RIVER DR.
020	115+98.0	RT.	04	-	1	-	34	-	-	-	-	-	-	-	206	W. RIVER DR.
010	117+10.0	LT.	04	-	-	-	-	-	-	-	26	-	1	-	135	W. RIVER DR.
020	117+14.0	LT.	04	-	1	-	37	-	-	-	-	-	-	-	135	W. RIVER DR.
010	117+21.0	RT.	04	-	-	-	-	-	-	-	45	-	1	-	134	W. RIVER DR.
020	117+46.0	RT.	04	-	1	-	34	-	-	-	-	-	-	-	134	W. RIVER DR.
010	118+00.0	RT.	04	-	-	-	-	-	-	-	45	-	1	-	122	W. RIVER DR.
010	118+05.0	RT.	04	-	1	-	35	-	-	-	-	-	-	-	122	W. RIVER DR.
010	118+58.0	RT.	04	-	-	-	-	-	-	-	45	-	1	-	315	N. WEBSTER AVE.
010	118+62.0	LT.	04	-	-	-	-	-	-	-	20	-	1	-	111	W. RIVER DR.
020	118+70.0	LT.	04	-	1	-	30	-	-	-	-	-	-	-	111	W. RIVER DR.
020	119+12.0	RT.	04	-	1	-	35	-	-	-	-	-	-	-	315	N. WEBSTER AVE.
010	119+65.0	LT.	04	-	-	-	-	-	-	-	23	-	1	-	105	W. RIVER DR.
020	10+59.0	LT.	09	-	1	-	35	-	-	-	-	-	-	-	105	W. RIVER DR.
010	10+65.0	RT.	09	-	-	-	-	-	-	-	14	-	1	-	105	E. RIVER DR.
020	10+68.0	RT.	09	1	-	-	24	-	-	-	-	-	-	-	105	E. RIVER DR.
010	9+40.0	RT.	09	1	-	-	38	-	-	-	-	-	-	-	310	N. WEBSTER AVE.
020	120+10.0	RT.	09	-	-	-	-	-	-	-	-	105	-	1	310	N. WEBSTER AVE.
020	120+73.0	RT.	04	-	1	-	38	-	-	-	-	-	-	-	320	N. WEBSTER AVE.
010	120+88.0	RT.	04	-	-	-	-	-	-	-	46	-	1	-	320	N. WEBSTER AVE.
010	121+09.0	LT.	05	-	-	-	-	-	-	-	21	-	1	-	115	E. RIVER DR.
010	121+12.0	LT.	05	-	-	-	-	-	-	-	21	-	1	-	115	E. RIVER DR.
020	121+14.0	LT.	05	-	1	-	30	-	-	-	-	-	-	-	115	E. RIVER DR.
020	121+37.0	RT.	05	-	1	-	37	-	-	-	-	-	-	-	114	E. RIVER DR.
010	121+43.0	RT.	05	-	-	-	-	-	-	-	45	-	1	-	114	E. RIVER DR.
010	122+07.0	RT.	05	-	-	-	-	-	-	-	45	-	1	-	124	E. RIVER DR.
020	122+13.0	RT.	05	-	1	-	36	-	-	-	-	-	-	-	124	E. RIVER DR.
010	122+52.0	LT.	05	-	-	-	-	-	-	-	21	-	1	-	133	E. RIVER DR.
020	122+56.0	LT.	05	-	1	-	32	-	-	-	-	-	-	-	133	E. RIVER DR.
010	122+60.0	RT.	05	-	-	-	-	-	-	-	45	-	1	-	130	E. RIVER DR.
010	122+63.0	RT.	05	-	-	-	-	-	-	-	45	-	1	-	130	E. RIVER DR.
020	122+69.0	RT.	05	-	1	-	35	-	-	-	-	-	-	-	130	E. RIVER DR.
010	123+44.0	RT.	05	-	-	-	-	-	-	-	45	-	1	-	148	E. RIVER DR.
020	123+62.0	RT.	05	-	1	-	35	-	-	-	-	-	-	-	148	E. RIVER DR.
010	10+97.0	RT.	10	-	-	-	-	-	-	-	14	-	1	-	205	E. RIVER DR.
020	11+04.0	LT.	10	1	-	-	29	-	-	-	-	-	-	-	141	E. RIVER DR.
010	11+08.0	LT.	10	-	-	-	-	-	-	-	45	-	1	-	141	E. RIVER DR.
020	124+13.0	LT.	05	-	1	-	34	-	-	-	-	-	-	-	205	E. RIVER DR.
010	124+41.0	RT.	05	-	-	-	-	-	-	-	45	-	1	-	206	E. RIVER DR.
020	124+44.0	RT.	05	-	1	-	33	-	-	-	-	-	-	-	206	E. RIVER DR.
010	125+14.0	LT.	05	-	-	-	-	-	-	-	21	-	1	-	213	E. RIVER DR.
020	125+17.0	LT.	05	-	1	-	33	-	-	-	-	-	-	-	213	E. RIVER DR.
010	125+28.0	RT.	05	-	-	-	-	-	-	-	45	-	1	-	214	E. RIVER DR.
020	125+33.0	RT.	05	-	1	-	33	-	-	-	-	-	-	-	214	E. RIVER DR.
020	125+49.0	LT.	05	-	1	-	33	-	-	-	-	-	-	-	221	E. RIVER DR.
010	125+54.0	LT.	05	-	-	-	-	-	-	-	21	-	1	-	221	E. RIVER DR.
010	126+15.0	LT.	06	-	-	-	-	-	-	-	21	-	1	-	229	E. RIVER DR.
010	126+32.0	RT.	06	-	-	-	-	-	-	-	45	-	1	-	230	E. RIVER DR.
020	126+36.0	RT.	06	-	1	-	33	-	-	-	-	-	-	-	230	E. RIVER DR.
020	127+72.0	LT.	06	-	1	-	33	-	-	-	-	-	-	-	313	E. RIVER DR.
010	127+91.0	LT.	06	-	-	-	-	-	-	-	21	-	1	-	313	E. RIVER DR.
010	128+79.0	LT.	06	-	-	-	-	-	-	-	21	-	1	-	325	E. RIVER DR.
020	128+84.0	LT.	06	-	1	-	33	-	-	-	-	-	-	-	325	E. RIVER DR.
010	129+78.0	LT.	06	-	-	-	-	-	-	-	21	-	1	-	335	E. RIVER DR.
020	129+81.0	LT.	06	-	1	-	33	-	-	-	-	-	-	-	335	E. RIVER DR.
010	130+42.0	LT.	06	-	-	-	-	-	-	-	21	-	1	-	405	ASH ST.
020	130+45.0	LT.	06	-	1	-	33	-	-	-	-	-	-	-	405	ASH ST.
010	132+07.0	LT.	07	-	-	-	-	-	-	-	39	-	1	-	407	E. RIVER DR.
020	132+12.0	LT.	07	-	-	1	-	50	-	-	-	-	-	-	407	E. RIVER DR.
020	133+08.0	RT.	07	-	-	1	-	35	-	-	-	-	-	-		FUTURE WELL
010	135+00.0	RT.	07	-	-	-	-	-	-	-	10	-	1	-	501	E. RIVER DR.
020	UNALLOCATED			-	-	-	100	-	-	-	-	-	-	-		
010	UNALLOCATED			-	-	-	-	-	-	-	100	-	-	-		
TOTAL				3	34	2	1331	85	56	2	1337	105	39	1		

CONSTRUCTION STAKING

CATEGORY	(SPV.0105.50) SANITARY LS	(SPV.0105.51) WATER LS
010	-	1
020	1	-
TOTAL	1	1

ABANDON/REMOVE EXISTING SANITARY PIPE OR STRUCTURE SUMMARY

CATEGORY	STATION	OFFSET DIST.	OFFSET DIR.	TO STATION	OFFSET DIST.	OFFSET DIR.	LOCATION	SHEET NO.	(SPV.0090.62) REMOVE EX PIPE (8") SPECIAL LF	(SPV.0090.63) REMOVE EX PIPE (10") SPECIAL LF	(SPV.0090.64) ABANDON EX PIPE (10") SPECIAL LF	(SPV.0060.80) REMOVE EX MANHOLE SPECIAL EACH	COMMENTS
020	109+22.8	23.50	LT.				S.T.H. 21	02	-	-	-	1	
	109+22.8	23.50	LT.	113+23.4	19.80	LT.	S.T.H. 21	02 & 03	401	-	-	-	
	113+23.4	19.80	LT.				E. RIVER DR.	03	-	-	-	1	
	113+23.4	19.80	LT.	14+85.0	5.40	LT.	SPRUCE ST.	08	269	-	-	-	
	113+23.4	19.80	LT.	113+24.4	13.00	LT.	E. RIVER DR.	03	7	-	-	-	
	113+24.4	13.00	LT.				E. RIVER DR.	03	-	-	-	1	
	113+24.4	13.00	LT.	116+48.6	14.60	LT.	E. RIVER DR.	03 & 04	324	-	-	-	
	116+48.6	14.60	LT.				E. RIVER DR.	04	-	-	-	1	
	116+48.6	14.60	LT.	116+43.9	63.70	LT.	E. RIVER DR.	04	50	-	-	-	
	116+48.6	14.60	LT.	116+49.7	11.80	RT.	E. RIVER DR.	04	26	-	-	-	
	116+49.7	11.80	RT.				E. RIVER DR.	04	-	-	-	1	
	116+48.6	14.60	LT.	119+60.2	14.10	LT.	E. RIVER DR.	04	-	311	-	-	
	119+60.2	14.10	LT.				E. RIVER DR.	04	-	-	-	1	
	119+60.2	14.10	LT.	120+46.1	14.30	LT.	E. RIVER DR.	04	-	83	-	-	
	119+60.2	14.10	LT.	10+40.5	13.50	LT.	N. WEBSTER AVE.	04 & 09	-	37	-	-	
	10+40.5	13.50	LT.				N. WEBSTER AVE.	09	-	-	-	1	
	10+40.5	13.50	LT.	10+40.5	13.50	RT.	N. WEBSTER AVE.	09	-	27	-	-	
	10+40.5	13.50	RT.				N. WEBSTER AVE.	09	-	-	-	1	
	10+40.5	13.50	RT.	10+82.0	13.50	RT.	N. WEBSTER AVE.	09	40	-	-	-	
	10+40.5	13.50	RT.	120+46.1	14.30	LT.	N. WEBSTER AVE.	04 & 09	-	38	-	-	
	120+46.1	14.30	LT.				E. RIVER DR.	04	-	-	-	1	
	120+46.1	14.30	LT.	123+77.6	13.10	LT.	E. RIVER DR.		-	331	-	-	
	120+69.3	10.30	RT.				E. RIVER DR.	04	-	-	-	1	
	120+69.3	10.30	RT.	123+77.6	9.60	RT.	E. RIVER DR.	04 & 05	308	-	-	-	
	123+77.6	9.60	RT.				E. RIVER DR.	05	-	-	-	1	
	123+77.6	9.60	RT.	123+77.6	13.10	LT.	E. RIVER DR.	05	23	-	-	-	
	123+77.6	13.10	LT.				E. RIVER DR.	05	-	-	-	1	
	123+77.6	13.10	LT.	11+50.0	3.00	RT.	OAK ST.	10	132	-	-	-	
	123+77.6	13.10	LT.	126+78.8	13.00	LT.	E. RIVER DR.	05 & 06	-	301	-	-	
	126+78.8	13.00	LT.				E. RIVER DR.	06	-	-	-	1	
	126+78.8	13.00	LT.	126+79.4	55.00	LT.	ELM ST.	06	37	-	-	-	
	126+78.8	13.00	LT.	131+09.3	15.90	LT.	E. RIVER DR.	06	-	430	-	-	
	131+09.3	15.90	LT.				E. RIVER DR.	06	-	-	-	1	
	131+09.3	15.90	LT.	132+96.9	29.00	RT.	E. RIVER DR.	06 & 07	-	194	-	-	
	131+09.3	15.90	LT.	132+98.1	18.10	LT.	E. RIVER DR.	06 & 07	-	-	181	-	
	132+98.1	18.10	LT.				E. RIVER DR.	07	-	-	-	1	
	132+98.1	18.10	LT.	132+96.9	29.00	RT.	E. RIVER DR.	07	-	-	47	-	
	132+96.9	29.00	RT.				E. RIVER DR.	07	-	-	-	1	
	132+96.9	29.00	RT.	134+75.8	177.30	RT.	E. RIVER DR.	07	-	244	-	-	
TOTAL									1617	1996	228	16	

ABANDON/REMOVE EXISTING WATER MAIN PIPE OR STRUCTURE SUMMARY

CATEGORY	STATION	OFFSET DIST.	OFFSET DIR.	TO STATION	OFFSET DIST.	OFFSET DIR.	LOCATION	SHEET NO.	(SPV.0090.65) ABANDON EX PIPE (4") SPECIAL LF	(SPV.0090.66) ABANDON EX PIPE (6") SPECIAL LF	(SPV.0090.67) ABANDON EX PIPE (8") SPECIAL LF	(SPV.0090.68) ABANDON EX PIPE (10") SPECIAL LF	(SPV.0060.81) REMOVE EX HYDRANT SPECIAL EACH	COMMENTS
010	108+75.4	30.70	LT.	109+96.0	29.50	LT.	S.T.H. 21	02 & 03	-	120	-	-	-	
	109+96.0	53.00	LT.				S.T.H. 21	03	-	-	-	-	1	
	109+96.0	29.50	LT.	113+30.6	28.70	LT.	E. RIVER DR.	03	-	335	-	-	-	
	113+30.6	28.70	LT.	14+84.1	4.10	RT.	SPRUCE ST.	08	262	-	-	-	-	
	113+30.6	28.70	LT.	113+31.8	15.50	LT.	E. RIVER DR.	03	-	13	-	-	-	
	113+31.8	15.50	LT.	116+57.4	18.20	LT.	E. RIVER DR.	03 & 04	-	326	-	-	-	
	116+57.4	18.20	LT.	116+53.1	65.00	LT.	CEDAR ST.	04	-	47	-	-	-	
	116+57.4	18.20	LT.	120+24.4	17.90	LT.	E. RIVER DR.	04	-	365	-	-	-	
	120+24.4	17.90	LT.	10+70.3	22.00	RT.	N. WEBSTER AVE.	09	-	53	-	-	-	
	120+24.4	17.90	LT.	120+72.7	17.70	LT.	E. RIVER DR.	04	-	48	-	-	-	
	120+72.7	26.00	LT.				E. RIVER DR.	04	-	-	-	-	1	
	120+72.7	17.70	LT.	123+88.0	18.60	LT.	E. RIVER DR.	04 & 05	-	315	-	-	-	
	123+88.0	18.60	LT.	11+49.3	12.20	RT.	OAK ST.	10	-	130	-	-	-	
	123+88.0	18.60	LT.	127+11.0	17.60	LT.	E. RIVER DR.	05 & 06	-	323	-	-	-	
	127+11.0	17.60	LT.	127+08.2	34.00	RT.	E. RIVER DR.	06	-	-	-	52	-	
	127+11.0	26.00	LT.						-	-	-	-	1	
	127+11.0	17.60	LT.	134+36.1	128.90	RT.	E. RIVER DR.	06 & 07	-	790	-	-	-	
	134+34.1	124.70	RT.				E. RIVER DR.	07	-	-	-	-	1	
	134+36.1	128.90	RT.	134+70.0	162.50	RT.	E. RIVER DR.	07	-	42	-	-	-	
	134+70.0	162.50	RT.	9+97.0	16.00	RT.	PINE ST.	11	-	-	180	-	-	
	9+97.0	16.00	RT.	9+97.0	26.50	RT.	PINE ST.	11	-	-	11	-	-	
	9+97.0	16.00	RT.	10+90.1	8.20	RT.	PINE ST.	11	-	110	-	-	-	
	134+70.0	162.50	RT.	134+90.3	175.70	RT.	E. RIVER DR.	07	-	-	30	-	-	
	134+90.3	175.70	RT.	134+84.3	183.70	RT.	E. RIVER DR.	07	-	-	12	-	-	
	134+90.3	175.70	RT.	135+08.9	189.70	RT.	E. RIVER DR.	07	-	22	-	-	-	
TOTAL									262	3039	233	52	4	

BASE AGGREGATE

CATEGORY	STATION	TO STATION	LOCATION	(305.0120) BASE AGGREGATE DENSE 1 1/4-INCH TON
020	13+55 SA	14+87 SA	SPRUCE ST.	175
010	11+70 ER	8+35 SPI	E. RIVER DR. & PINE ST.	175
		TOTAL		350

NOTE: ADDITIONAL QUANTITIES LISTED ELSEWHERE

ASPHALTIC PAVEMENT

CATEGORY	STATION	TO STATION	LOCATION	(460.2000) INCENTIVE DENSITY HMA PAVEMENT DOL	(460.5224) HMA PAVEMENT 4 LT 58-28 S TON
020	13+55 SA	14+87 SA	SPRUCE ST.	30	95
010	11+70 ER	8+35 SPI	E. RIVER DR. & PINE ST.	60	95
		TOTAL		90	190

NOTE: ADDITIONAL QUANTITIES LISTED ELSEWHERE

MOBILIZATION

CATEGORY	STATION	LOCATION	(619.1000) MOBILIZATION EACH
010	UNDISTRIBUTED		0.12
020	UNDISTRIBUTED		0.13
	TOTAL		0.25

NOTE: ADDITIONAL QUANTITIES LISTED ELSEWHERE

WATER

CATEGORY	STATION	LOCATION	(624.0100) WATER MGAL
010	UNDISTRIBUTED		2.5
020	UNDISTRIBUTED		2.5
	TOTAL		5

NOTE: ADDITIONAL QUANTITIES LISTED ELSEWHERE

Notes

Wisconsin Department of Transportation

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through innovation and exceptional service.

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