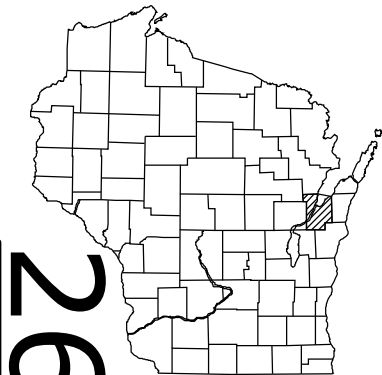


Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	~~Structure Plans~~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

TOTAL SHEETS = 176



DESIGN DESIGNATION

A.D.T.	2012	=	4,700
A.D.T.	2032	=	5,500
D.H.V.		=	375/230
D.		=	62 - 38%
T.		=	6.5
DESIGN SPEED		=	30 MPH
ESALS		=	803,000

CONVENTIONAL SYMBOLS

PLAN

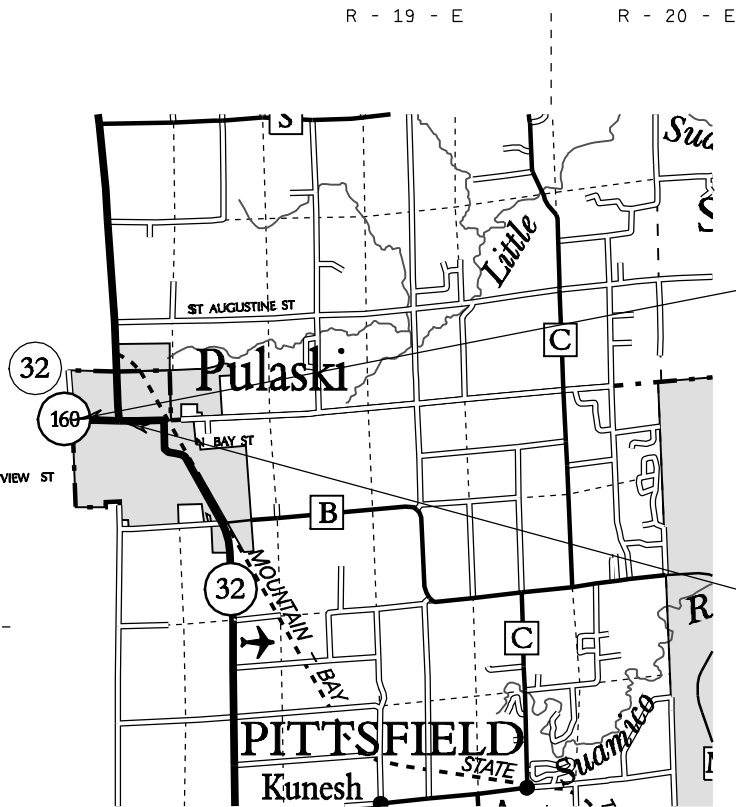
CORPORATE LIMITS	
PROPERTY LINE	
LOT LINE	
LIMITED HIGHWAY EASEMENT	
EXISTING RIGHT OF WAY	
PROPOSED OR NEW R/W LINE	
SLOPE INTERCEPT	
REFERENCE LINE	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
MARSH AREA	
WOODED OR SHRUB AREA	
EROSION MAT	

PROFILE

GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
VILLAGE OF PULASKI
HIGHVIEW ST - SAINT AUGUSTINE ST
STH 160
BROWN COUNTY

STATE PROJECT NUMBER
9532-03-71



BEGIN PROJECT

STA 113+00
X = 37321.09
Y = 624967.43

END PROJECT

STA 145+75

LAYOUT
SCALE 0 1 MI.
TOTAL NET LENGTH OF CENTERLINE = 0.63 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), BROWN COUNTY.
ALL ELEVATIONS ON THIS PROJECT ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF (NAV29).

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9532-03-71		

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	N E REGION
Designer	E. T. SIKORSKI
Project Manager	J. ASHAUER
District Examiner	
District Supervisor	D. J. SEGERSTROM
C.O. Examiner	WISDOT BPD
APPROVED FOR DISTRICT OFFICE DATE: 1/10/13	
(Signature)	

GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY FACILITIES AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

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

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ON THE PLAN ARE APPROXIMATE AND SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

CURB HEIGHTS AT THE END OF CURB AND GUTTER SHALL BE TAPERED FROM 0 TO 6 INCHES IN 6 FEET.

DISTURBED AREAS THAT WERE PREVIOUSLY LAWNS SHALL BE SEEDED WITH SEED MIXTURE NO. 40.

ASPHALT CONTENT FOR HMA PAVEMENT IS 5.5%.

TACK COAT APPLICATION RATE IS 0.025 GAL/SY.

ALL PAVEMENT GRADES ARE FLANGE ELEVATIONS.

UTILITIES

DENNIS BAER
NET CABLE INC - COMMUNICATION LINE
NORTHEAST COMMUNICATIONS INC - COMMUNICATION LINE
NORTHEAST TELEPHONE COMPANY LLC - COMMUNICATION LINE
122 S ST AUGUSTINE ST
P O BOX 860
PULASKI WI 54162-0820
920-822-8895
DENNIS.BAER@NSIGHT.COM

TOM ROGERS
VILLAGE OF PULASKI - DEPT PUBLIC WORKS - SEWER
VILLAGE OF PULASKI - DEPT PUBLIC WORKS - WATER
355 N FOURTH AVE
PULASKI WI 54162
920-822-8618

DAN SANDE
WE ENERGIES - ELECTRICITY
WE ENERGIES - GAS/PETROLEUM
333 W EVERETT ST, A299
MILWAUKEE WI 53203
414-221-4578
DAN.SANDE@WE-ENERGIES.COM

STEVE ARMSTRONG
WE ENGERIES - ELECTRICITY
PO BOX 1699
APPLETON WI 54912
920-380-3563 OFFICE
920-428-2650 MOBILE
STEVE-E.ARMSTRONG@WE-ENERGIES.COM

TOM BORCHART
WE ENERGIES - GAS/PETROLEUM
PO BOX 1699
APPLETON WI 54912
920-380-5449
THOMAS.BORCHART@WE-ENERGIES.COM

SURVEY CONTACT

PAT FORD - BROWN COUNTY
305 EAST WALNUT STREET
GREEN BAY WI 54301
920-448-4493
FORD.PJ@CO.BROWN.WI.US

DNR AREA LIAISON

JAMES DOPERALSKI JR
DEPARTMENT OF NATURAL RESOURCES
2984 SHAWANO AVE
P.O. BOX 10448
GREEN BAY, WI 54307-0448
920-662-5119
JAMES.DOPERALSKI@WISCONSIN.GOV

DESIGN CONTACT

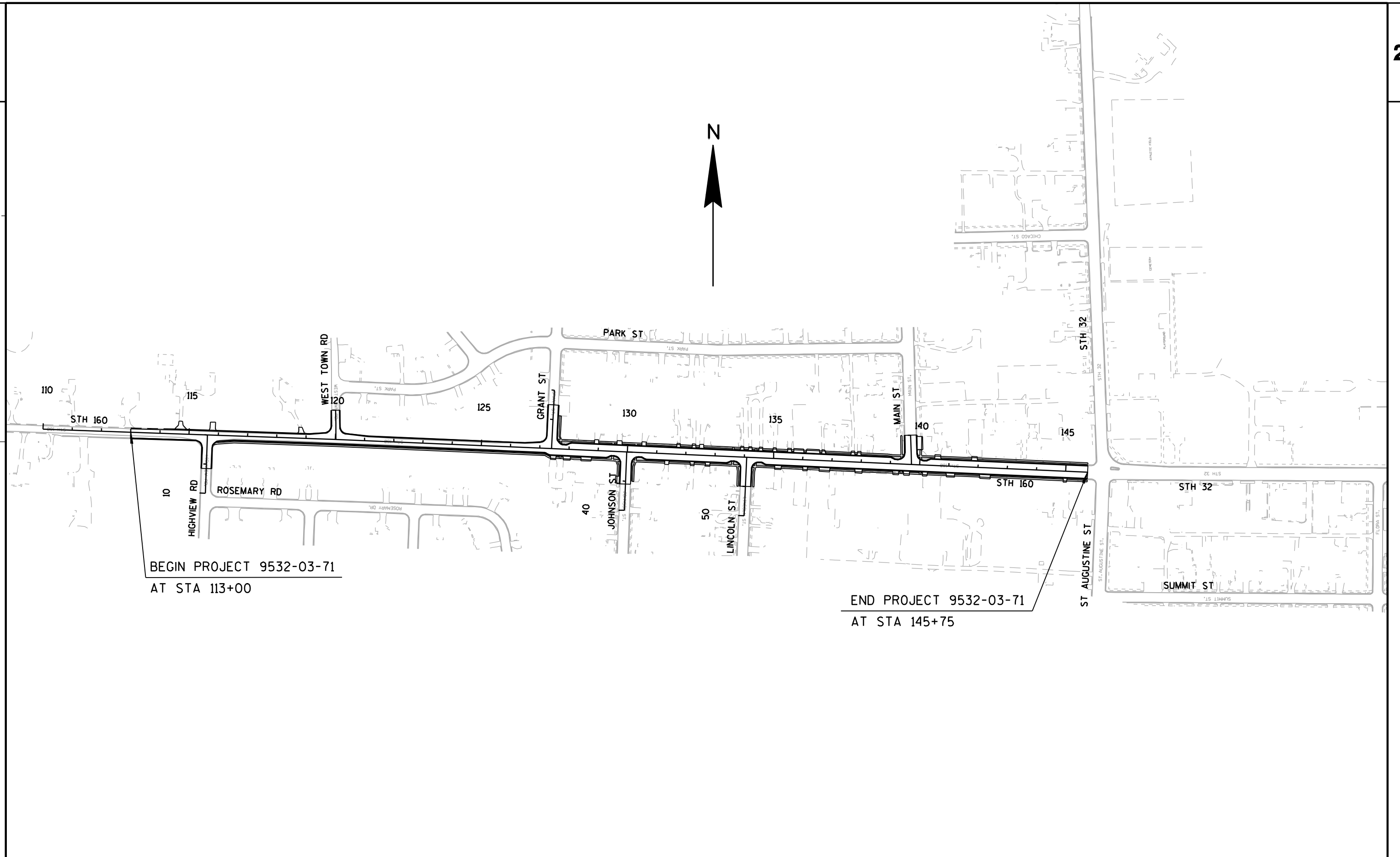
ERIC SIKORSKI
DEPARTMENT OF TRANSPORTATION
1940 WEST MASON ST
GREEN BAY, WI 54303
920-492-2236
ERIC.SIKORSKI@DOT.WI.GOV

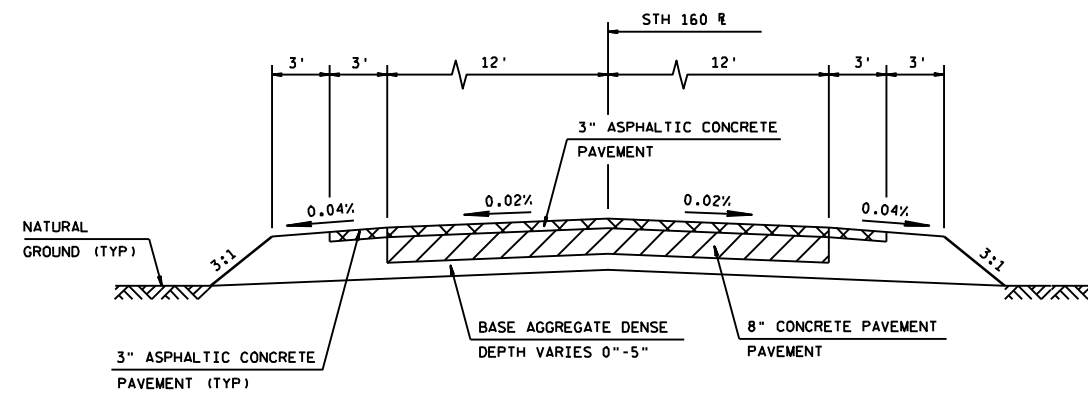
RUNOFF COEFFICIENTS

EXISTING PAVEMENT = 0.09
EXISTING SLOPES = 0.03
NEW PAVEMENT = 0.09
NEW SLOPES = 0.03
TOTAL PROJECT AREA = 4.84 ACRES
TOTAL AREA DISTRIBUTED = 1.58 ACRES



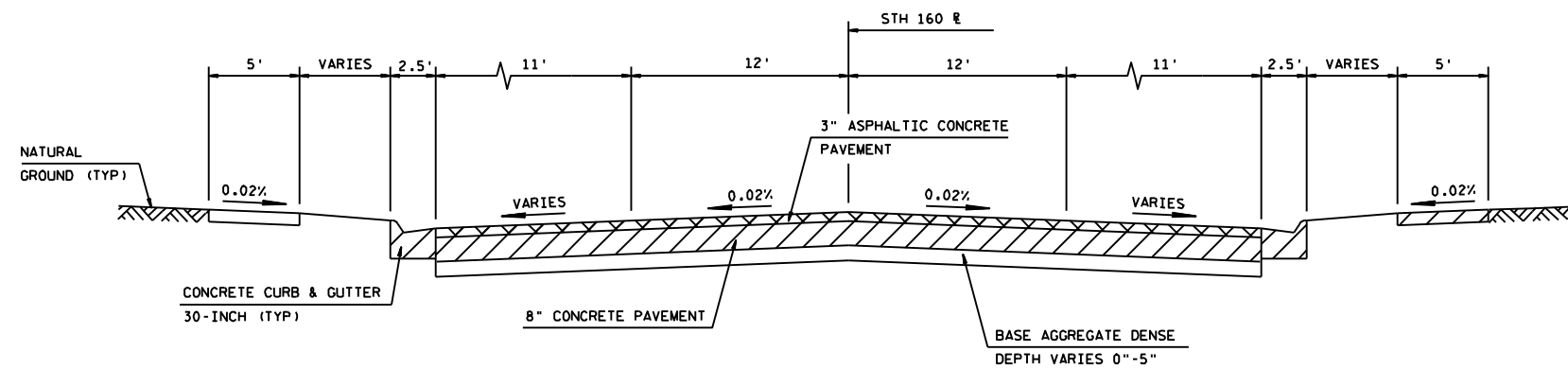
Call 811 3 Work Days Before You Dig
or Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com





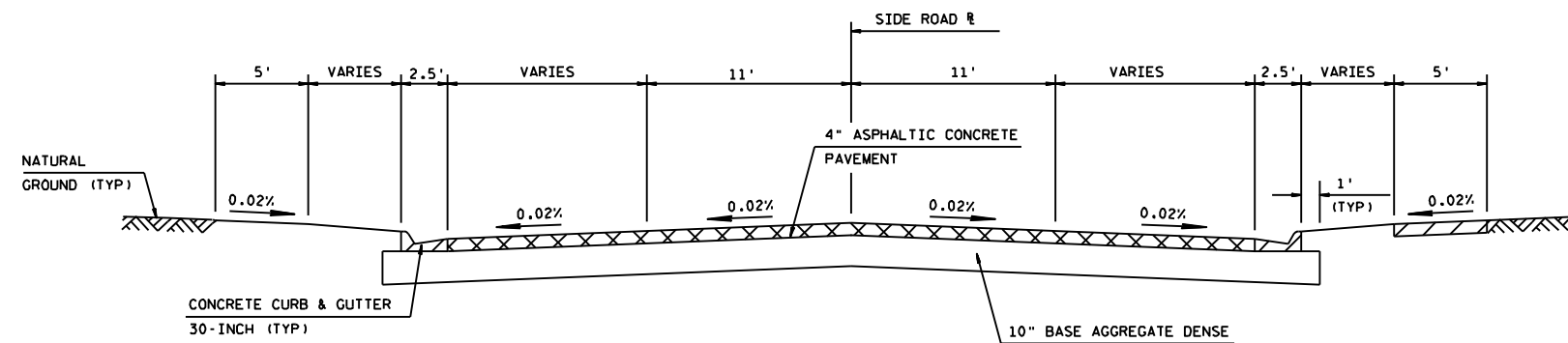
TYPICAL EXISTING CROSS SECTION FOR STH 160

STA 113+00-127+40

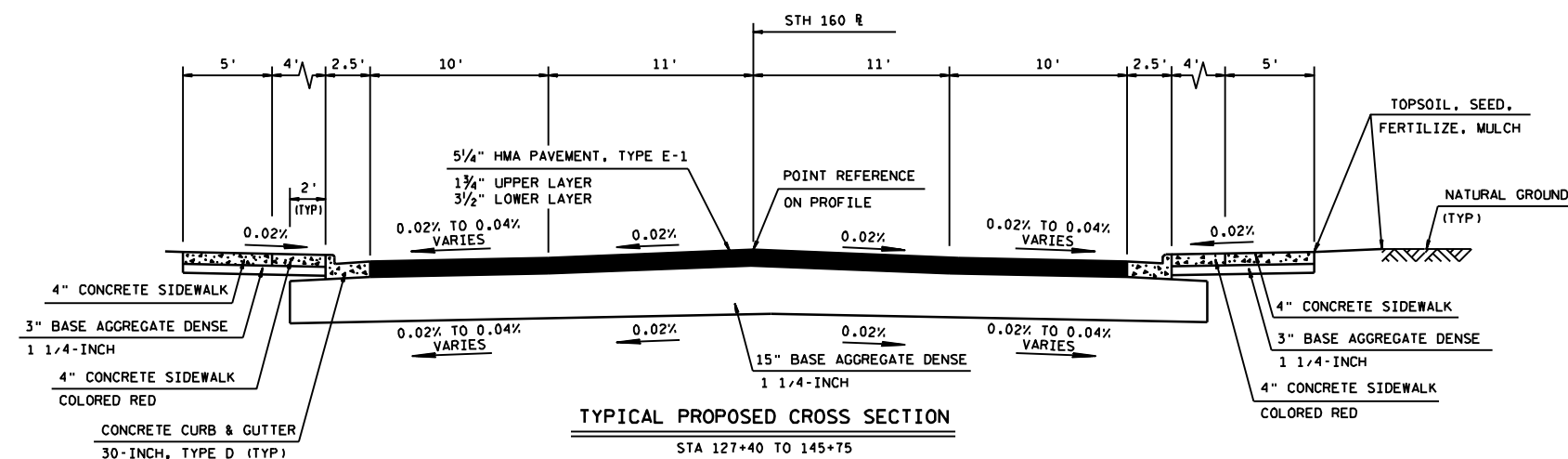
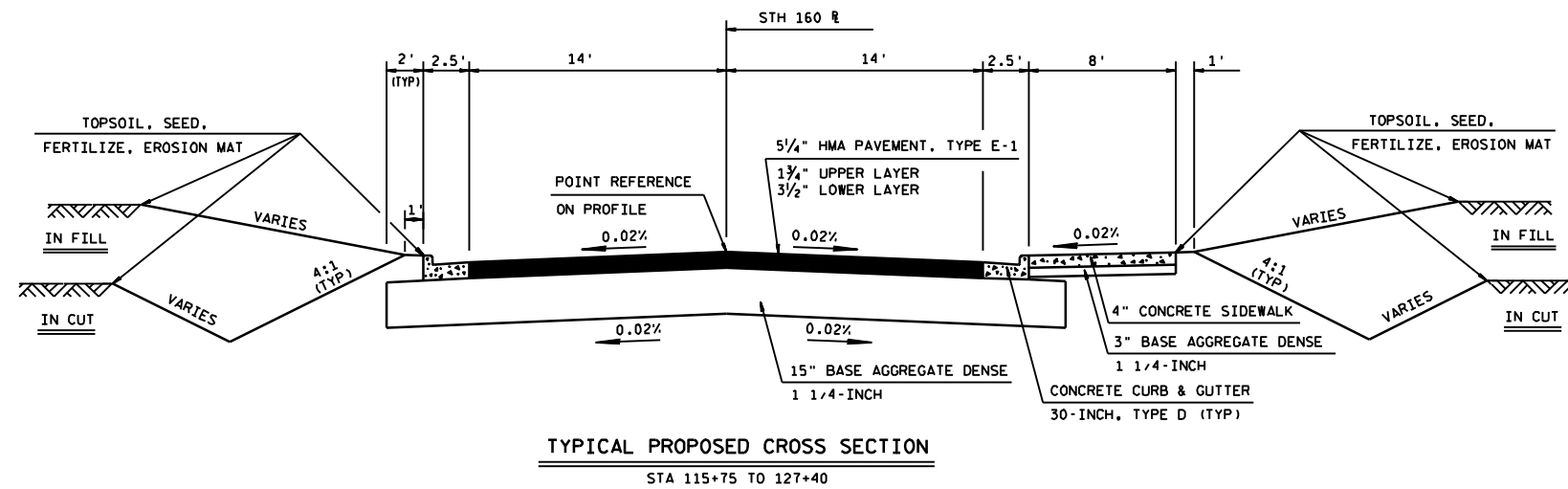
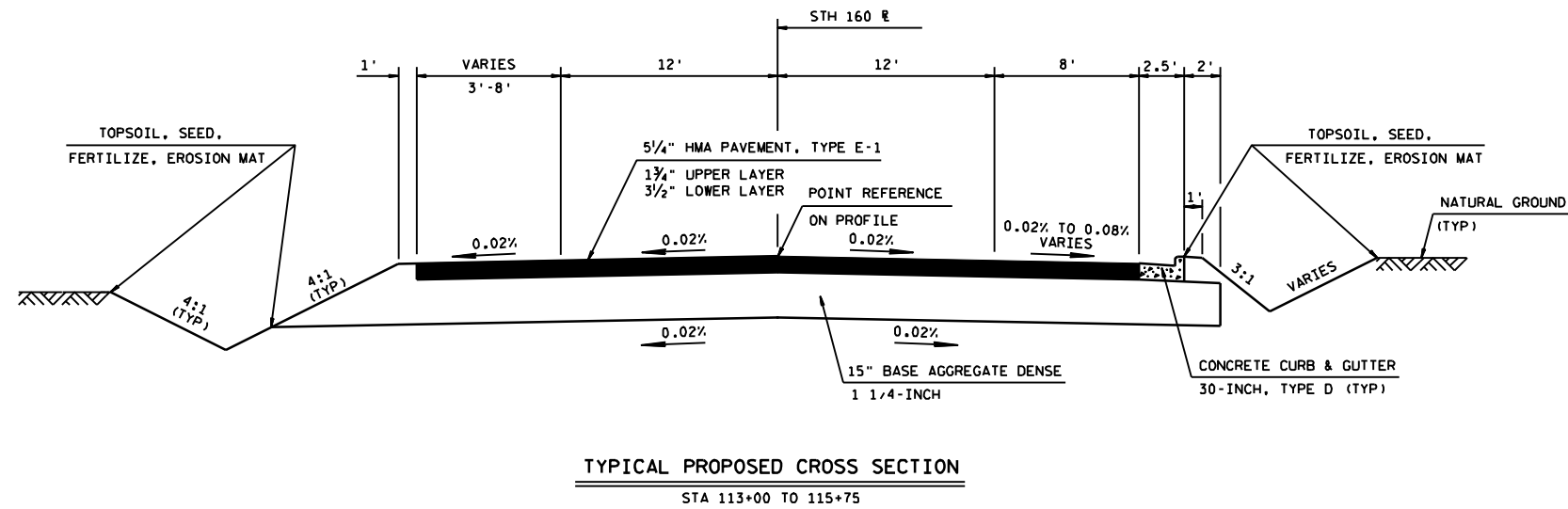


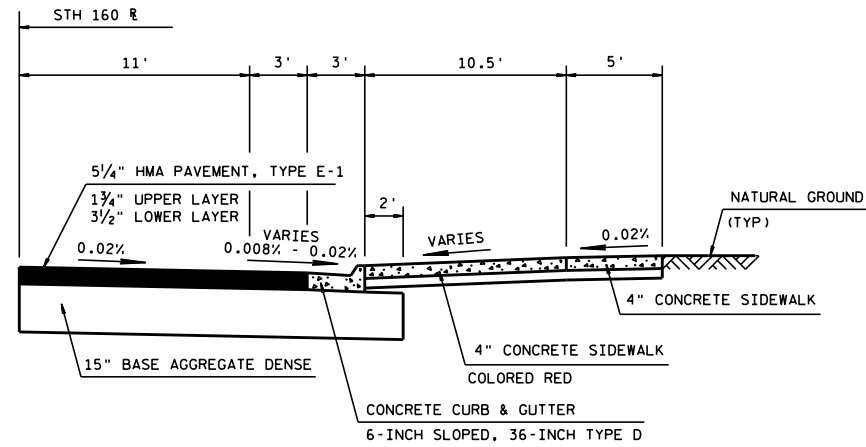
TYPICAL EXISTING CROSS SECTION FOR STH 160

STA 127+40-145+75



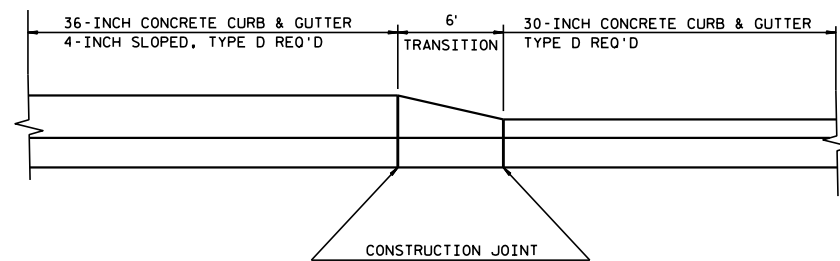
TYPICAL EXISTING CROSS SECTION FOR SIDE ROADS





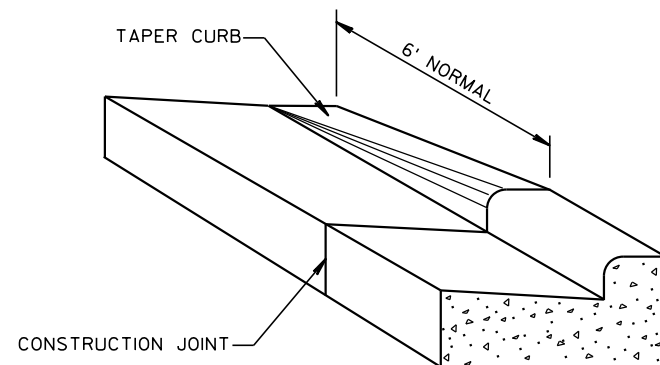
HALF TYPICAL SECTION AT BUMP OUTS

SECTION A-A



CONCRETE CURB & GUTTER TRANSITION DETAIL

SEE PLAN DETAIL SHEETS FOR LOCATIONS



CONCRETE CURB & GUTTER TERMINI DETAIL

NOTES

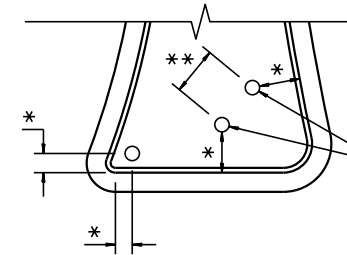
LOCATION POINTS A, B AND C FOR EACH BUMP OUT, ARE LISTED ON PAVEMENT DETAILS.

POINT A IS THE TANGENT POINT ON THE FLANGE LINE.

POINTS B & C ARE THE PI POINTS OF THE RADII OF THE FLANGE.

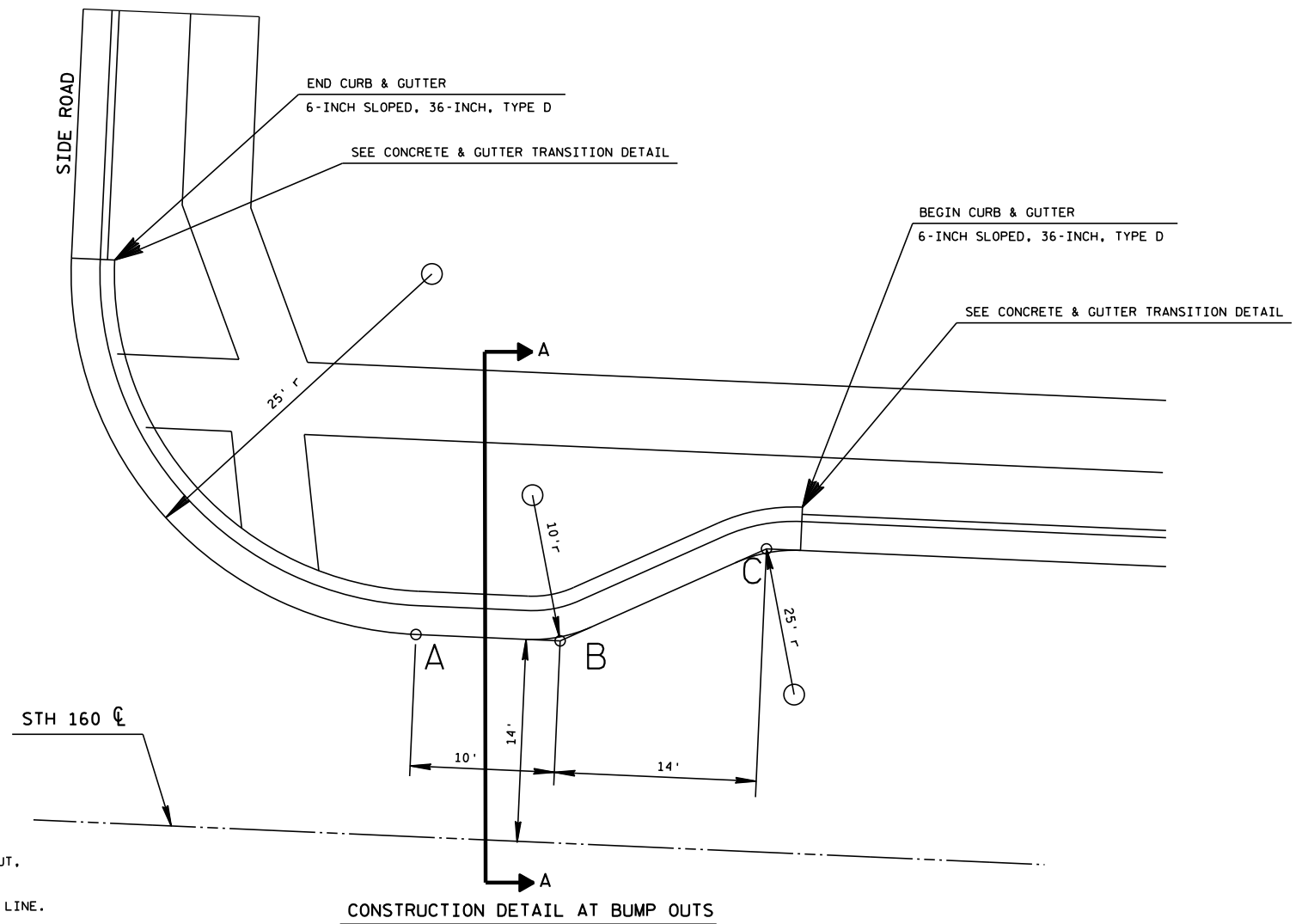
* DISTANCE TO BE LAID OUT IN THE FIELD BASED ON SIGN SIZE. TWO FOOT MINIMUM CLEARANCE BETWEEN THE EDGE OF SIGN AND THE FACE OF CURB.

** SEE A4-4 SIGN PLATE FOR POST SPACING REQUIREMENTS.

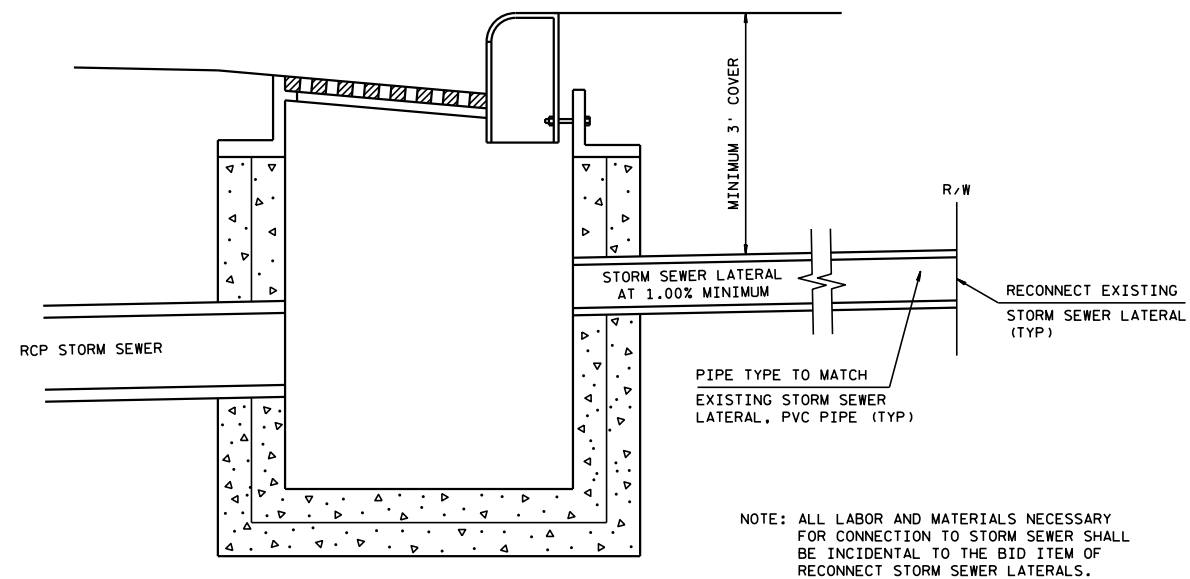


BOXOUT SIGN LOCATION DETAIL

NOTIFY THE REGIONAL TRAFFIC UNIT AT 920-492-5653 A MINIMUM OF TWO WEEK PRIOR TO THE NEED FOR SIGN PLACEMENT TO ALLOW FOR STAKING OF ANY PERMANENT SIGNING REQUIRED ON THE PROJECT.



CONSTRUCTION DETAIL AT BUMP OUTS



RECONNECT STORM SEWER LATERAL DETAIL

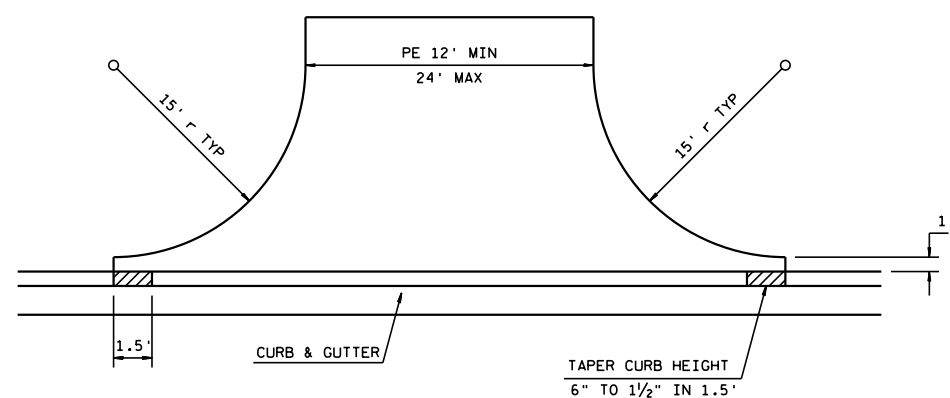
NOTE: NON-PAVED DRIVEWAYS SHALL CONSIST OF 6" OF BASE AGGREGATE DENSE AND PAVED ASPHALTIC PAVEMENT TO RIGHT OF WAY.

RESIDENTIAL ENTRANCE ASPHALTIC DRIVEWAYS SHALL CONSIST OF 6" BASE AGGREGATE DENSE AND 3" OF ASPHALTIC PAVEMENT.

COMMERCIAL ENTRANCE ASPHALTIC DRIVEWAYS SHALL CONSIST OF 12" BASE AGGREGATE DENSE AND 4" OF ASPHALTIC PAVEMENT.

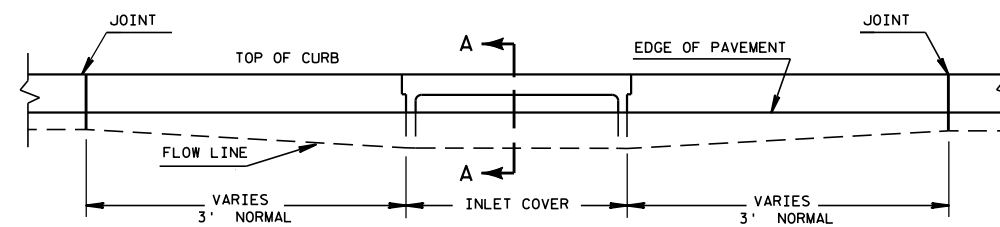
6" CONCRETE DRIVEWAY FOR RESIDENTIAL ENTRANCES.

① A LARGER PAVING RADIUS FOR PAVING IN HIGHER SPEED ZONE (> 40 MPH) CAN BE USED IF WARRANTED.

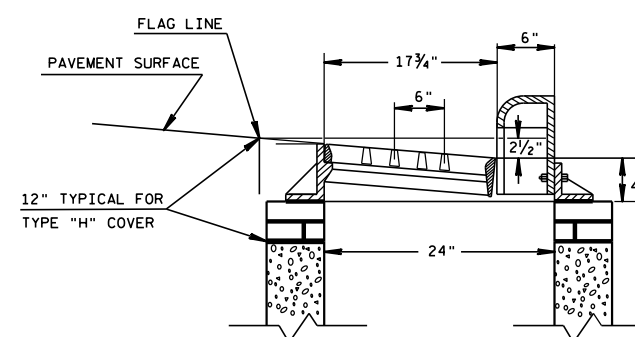
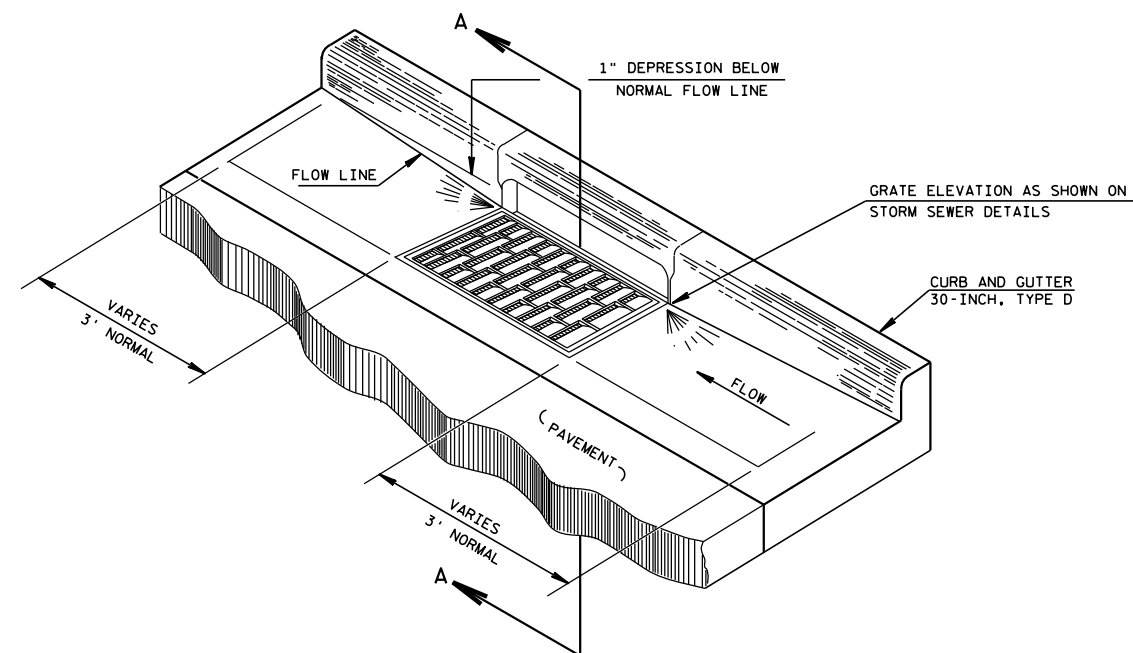


PRIVATE ENTRANCES

RURAL DRIVEWAYS WITH CURB & GUTTER



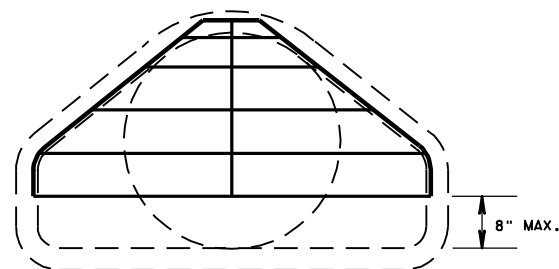
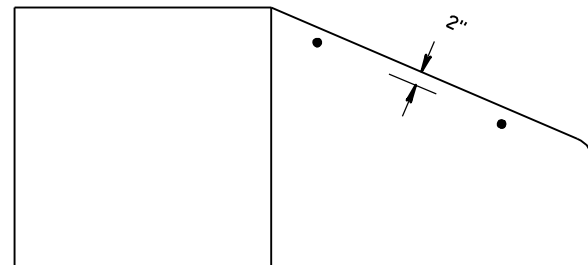
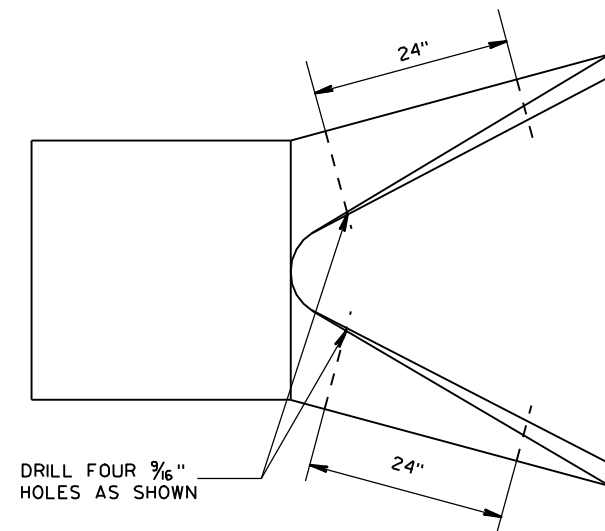
ELEVATION



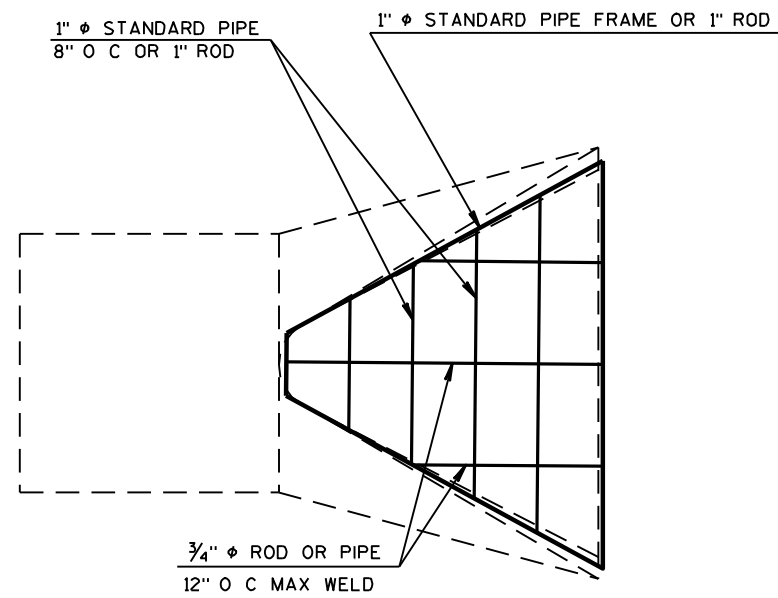
SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS

(TYPE 3-H INLET SHOWN)

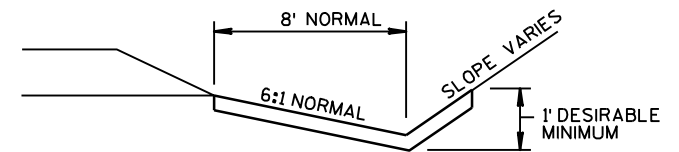
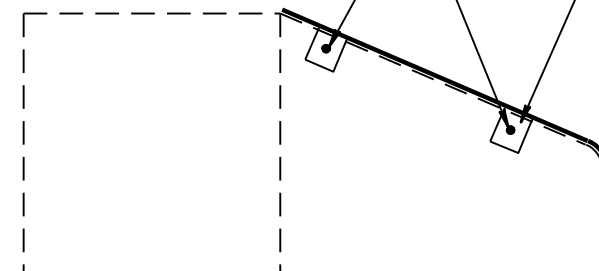


PIPE GRATE DETAIL

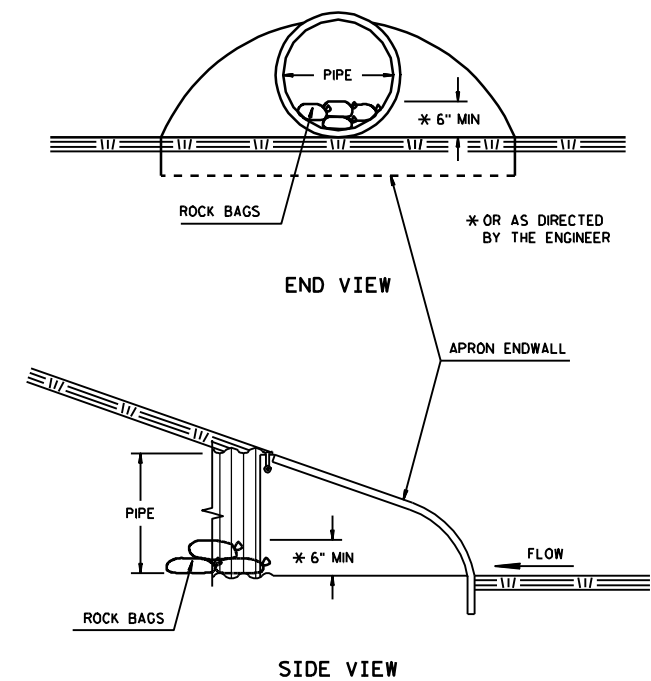


AT EACH PIPE

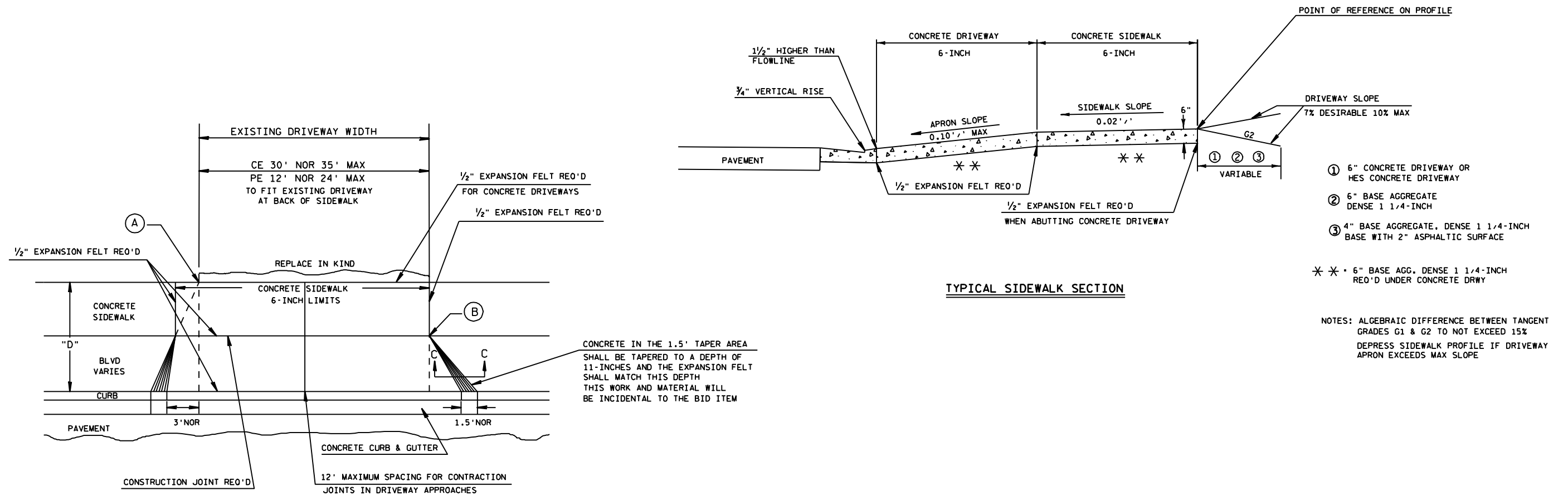
BOLT GRATE TO CONCRETE ENDWALL
WITH FOUR $\frac{3}{8}$ " X 6" MACHINE BOLTS
PLACE NUTS INSIDE



EROSION MAT DETAIL FOR DITCHES

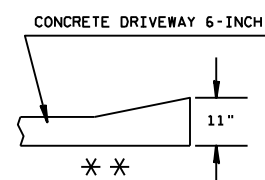


CULVERT PIPE CHECKS

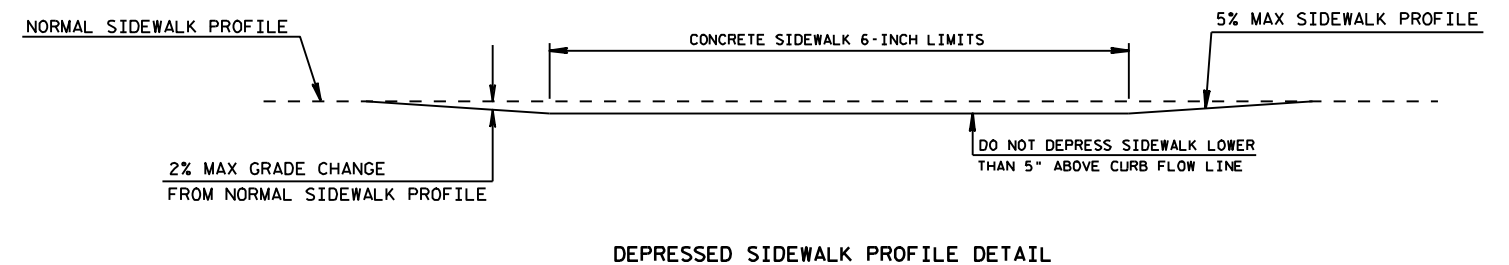


(A) WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF SIDEWALK

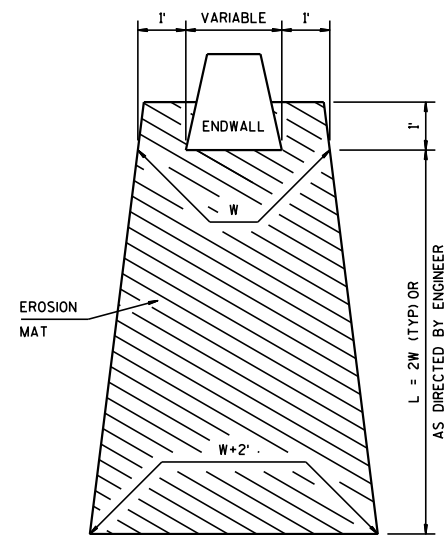
(B) WHEN "D" IS GREATER THAN 13', ALIGN TAPER WITH FRONT OF SIDEWALK



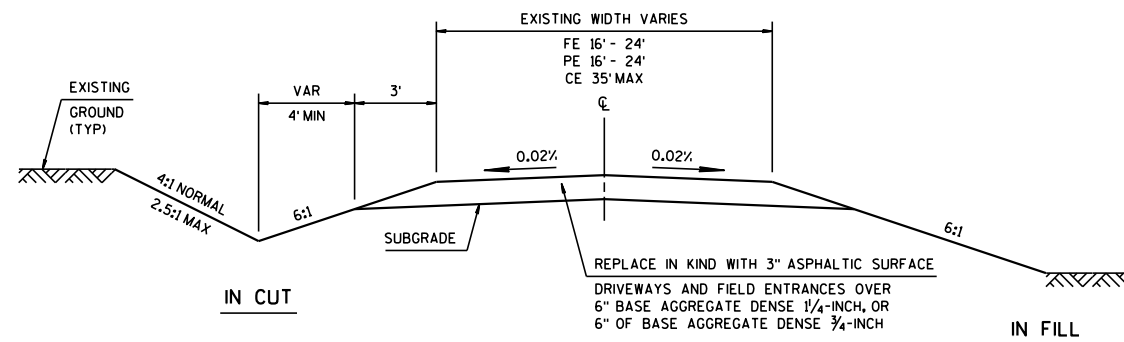
SECTION C-C



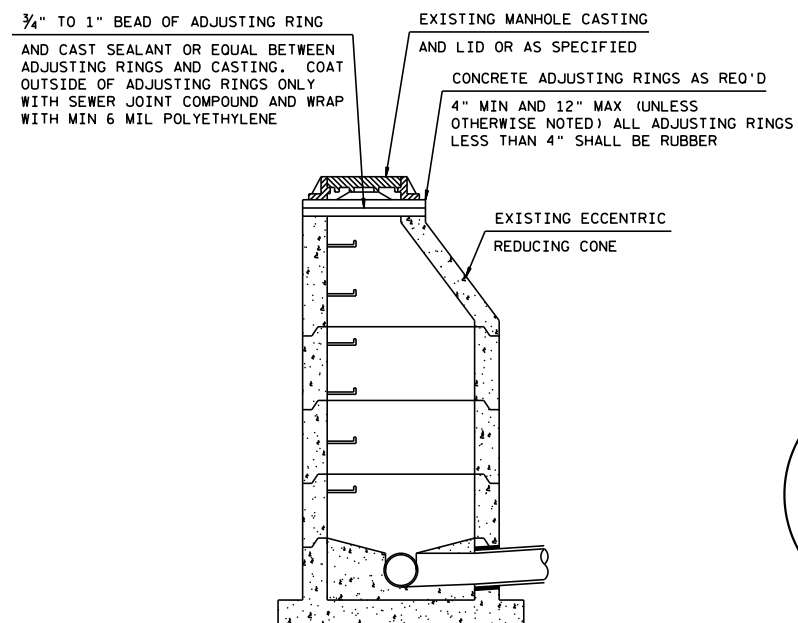
DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER



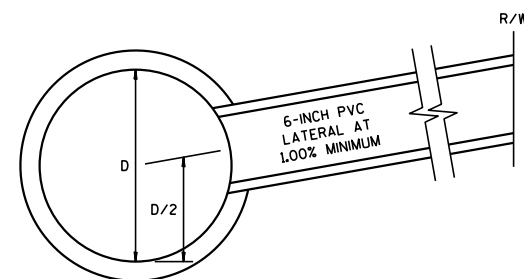
EROSION MAT TREATMENT AT CULVERTS



TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE



TYPICAL MANHOLE ADJUSTMENT DETAIL



RESIDENTIAL STORM SEWER LATERAL, PIPE CONNECTION DETAIL

NOTE: ALL MARKED POINTS AND RADIARE
REFERENCED TO THE FLANGE LINE

N

SAWCUT REQ'D

DRIVEWAY
(ASPHALTIC SURFACE)
(SEE RURAL DRIVEWAYS WITH
CURB & GUTTER DETAIL)

DRIVEWAY (ASPHALTIC
SURFACE)

TLE

EXISTING R/W

SLOPE INTERCEPT

PROPOSED R/W

113

114

115

116

117

118

STH 160

823.34

823.26

823.19

823.11

823.04

822.96

822.88

822.81

822.74

822.67

822.59

822.52

822.37

822.22

822.07

821.99

822.01

822.10

822.20

822.29

823.69

823.62

823.54

823.47

823.39

823.32

823.24

823.17

823.09

823.02

822.94

822.87

822.79

822.64

822.49

822.35

822.27

822.21

822.07

821.99

+7.28

821.98

+7.28

822.29

822.38

822.48

822.57

822.68

822.97

823.15

823.08

823.00

822.93

822.86

822.78

822.71

822.63

822.55

822.40

822.33

822.24

822.31

822.21

822.07

821.99

+4.02

19' RT

+54.02

14' RT

EXISTING R/W

INLET
(TO REMAIN)

SAWCUT REQ'D

BEGIN PROJECT
STA 113+00

115+62.74 STH 160 =
12+00 HIGHVIEW

STH 160

115+22
+44' RT

116+04
+44' RT

RAMP
TYPE 2

SLOPE INTERCEPT

TLE

SAWCUT REQ'D

CONSTRUCTION LIMITS
STA 10+85

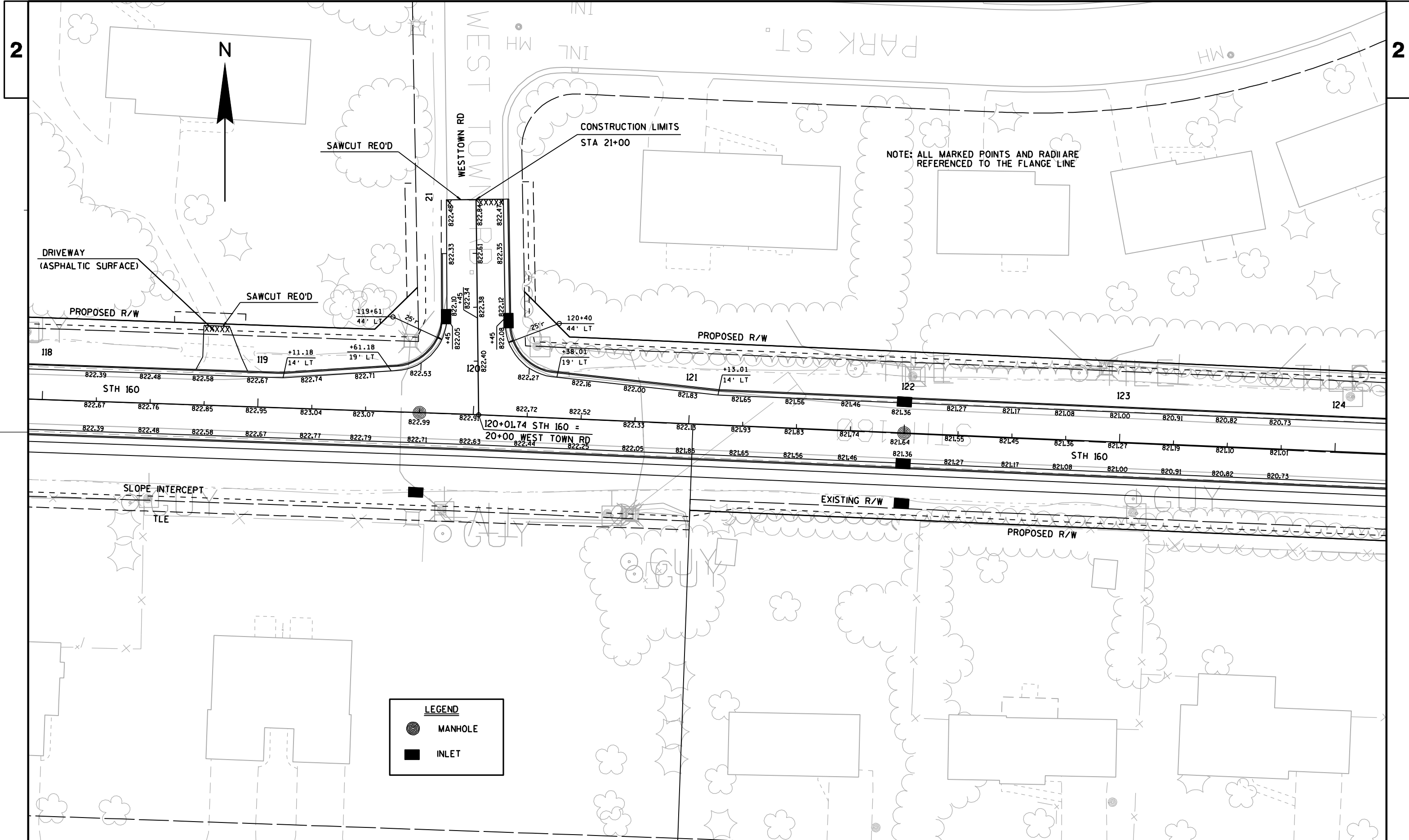
HIGHVIEW RD

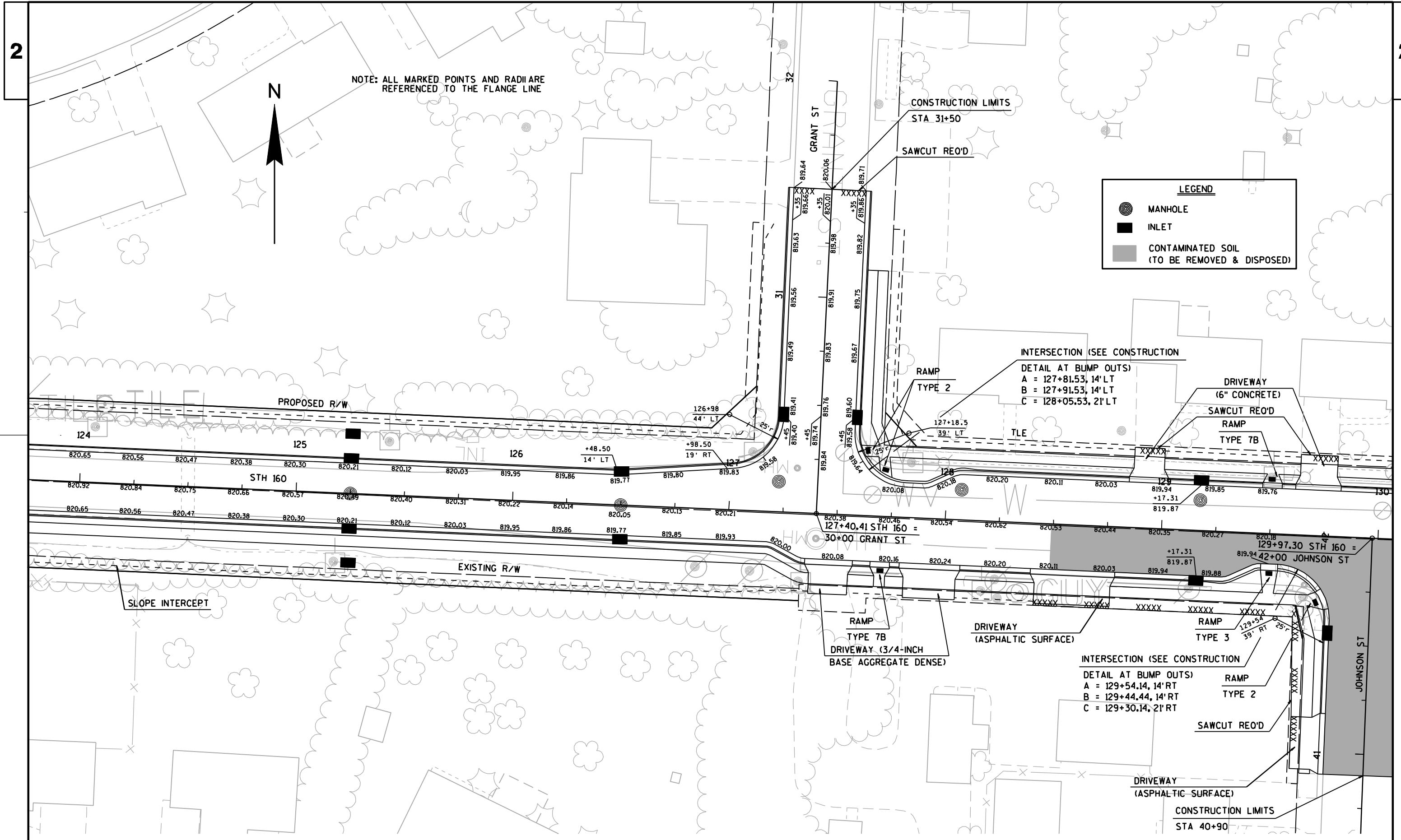
10

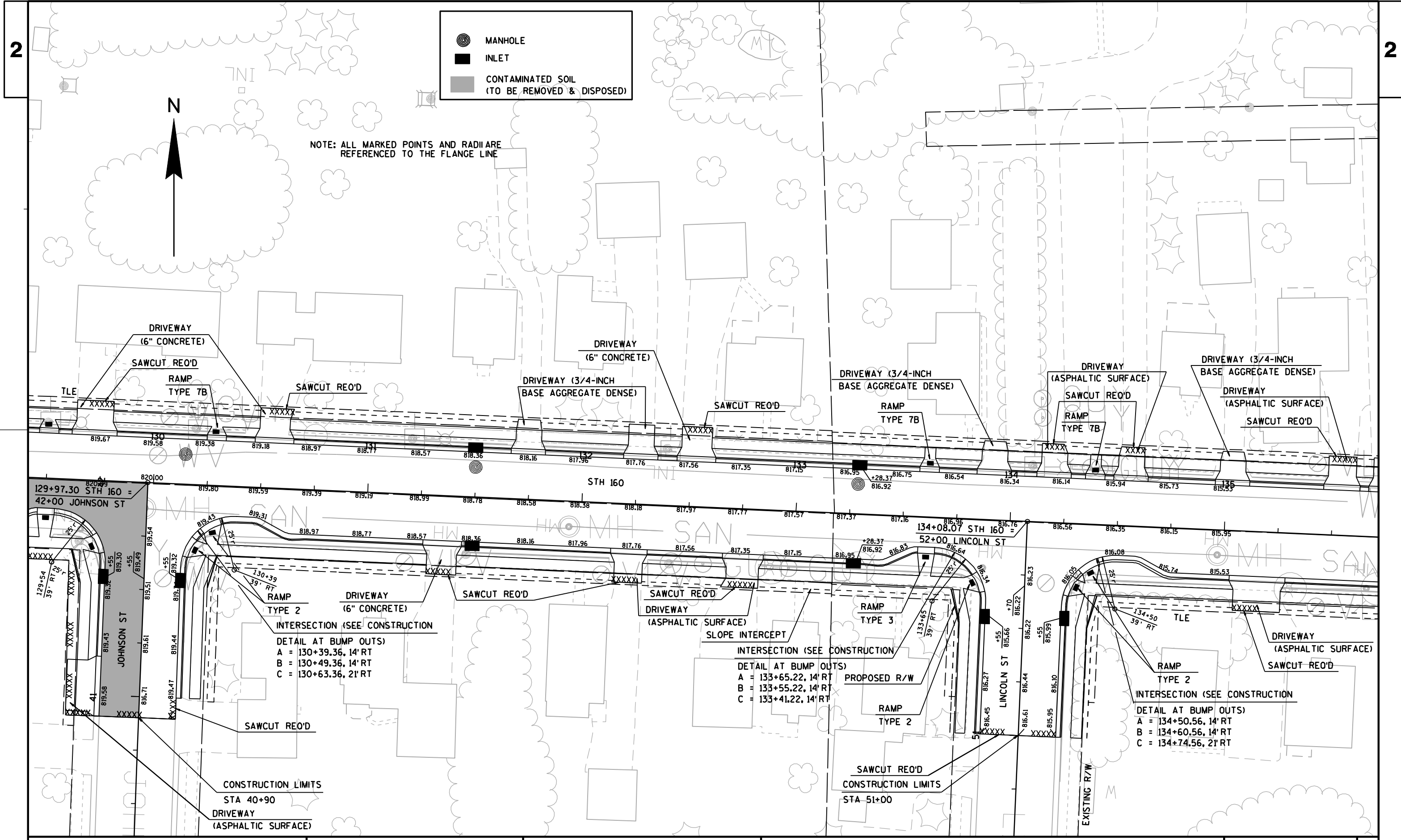
LEGEND

MANHOLE

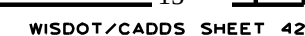
INLET





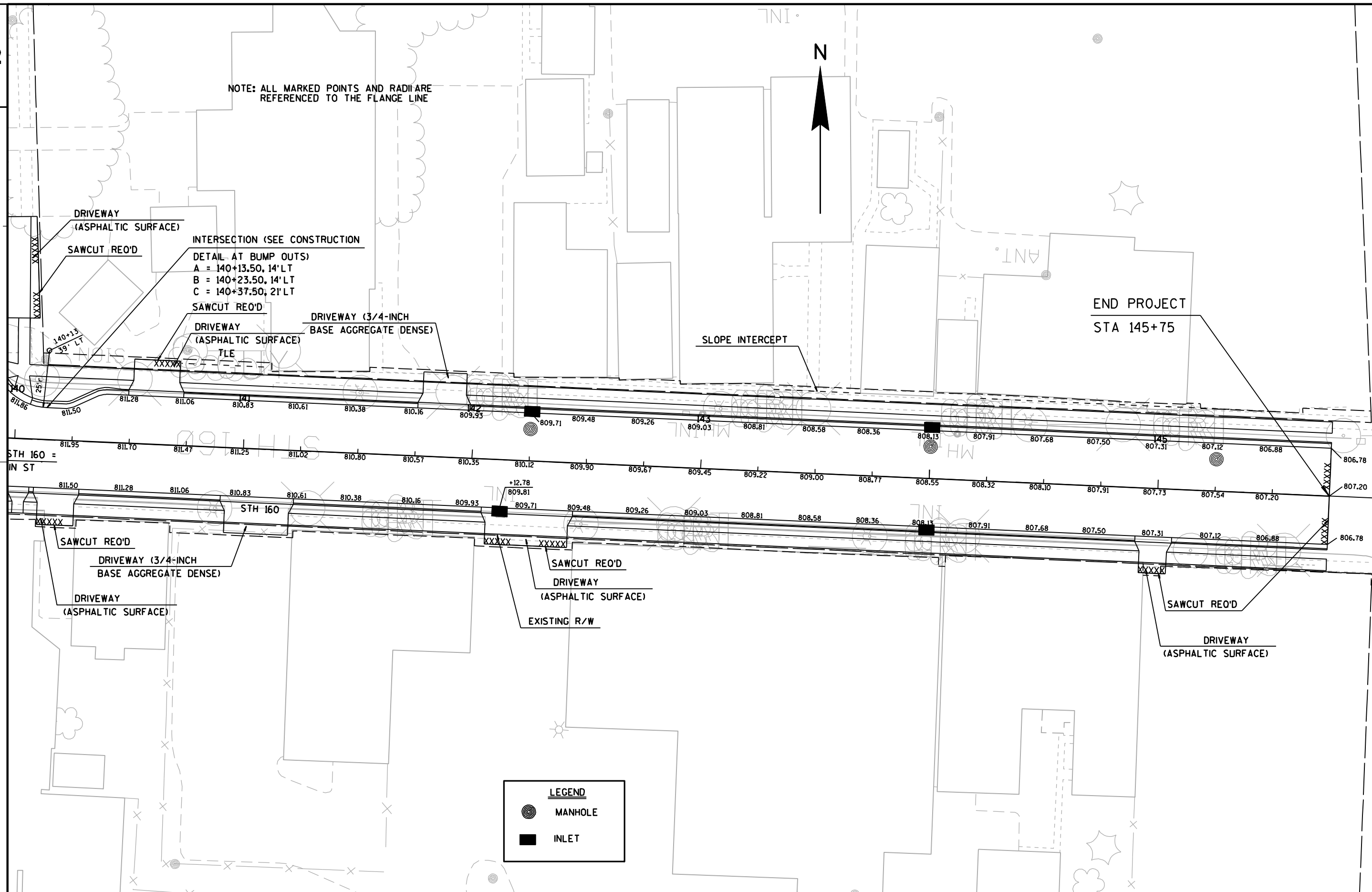


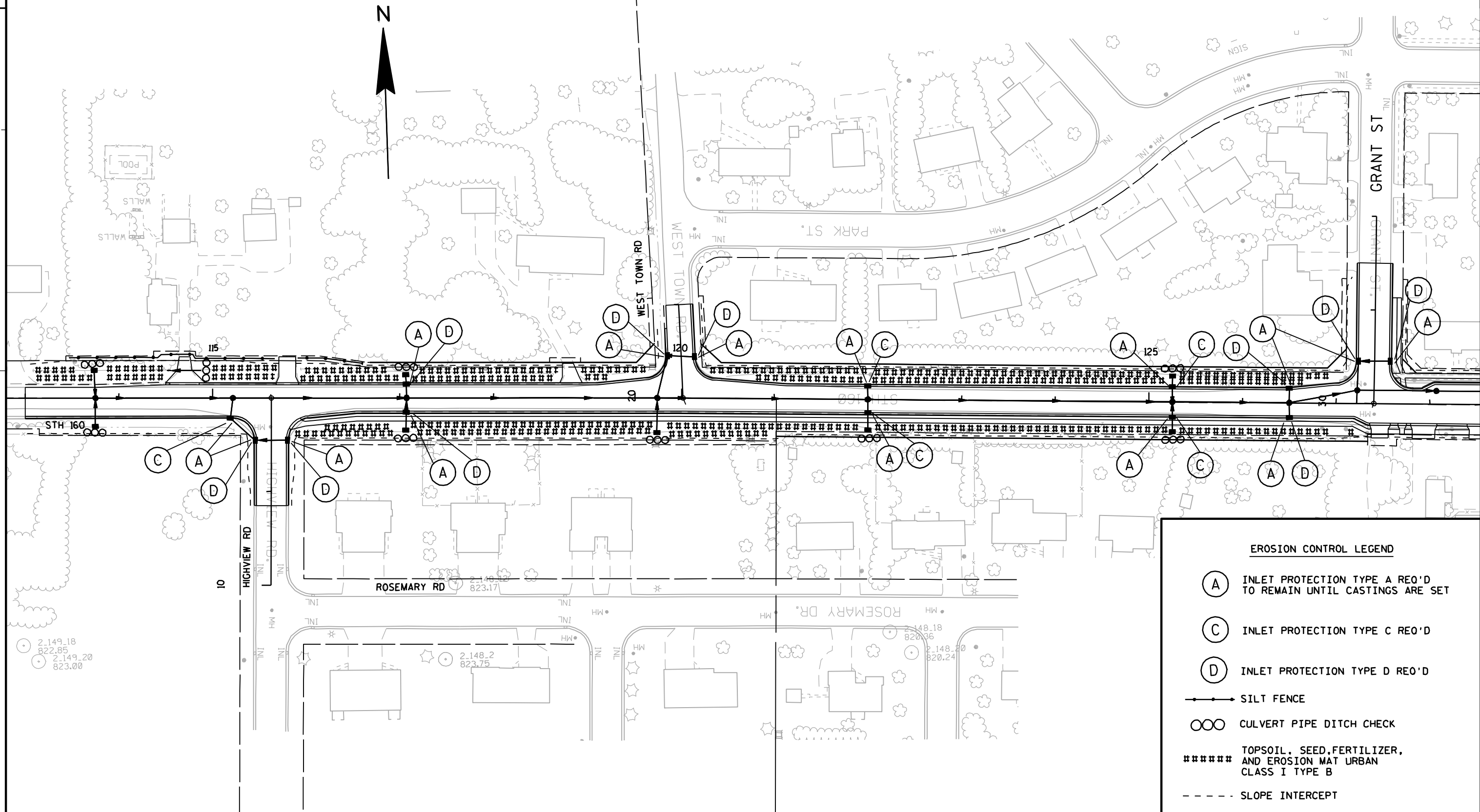
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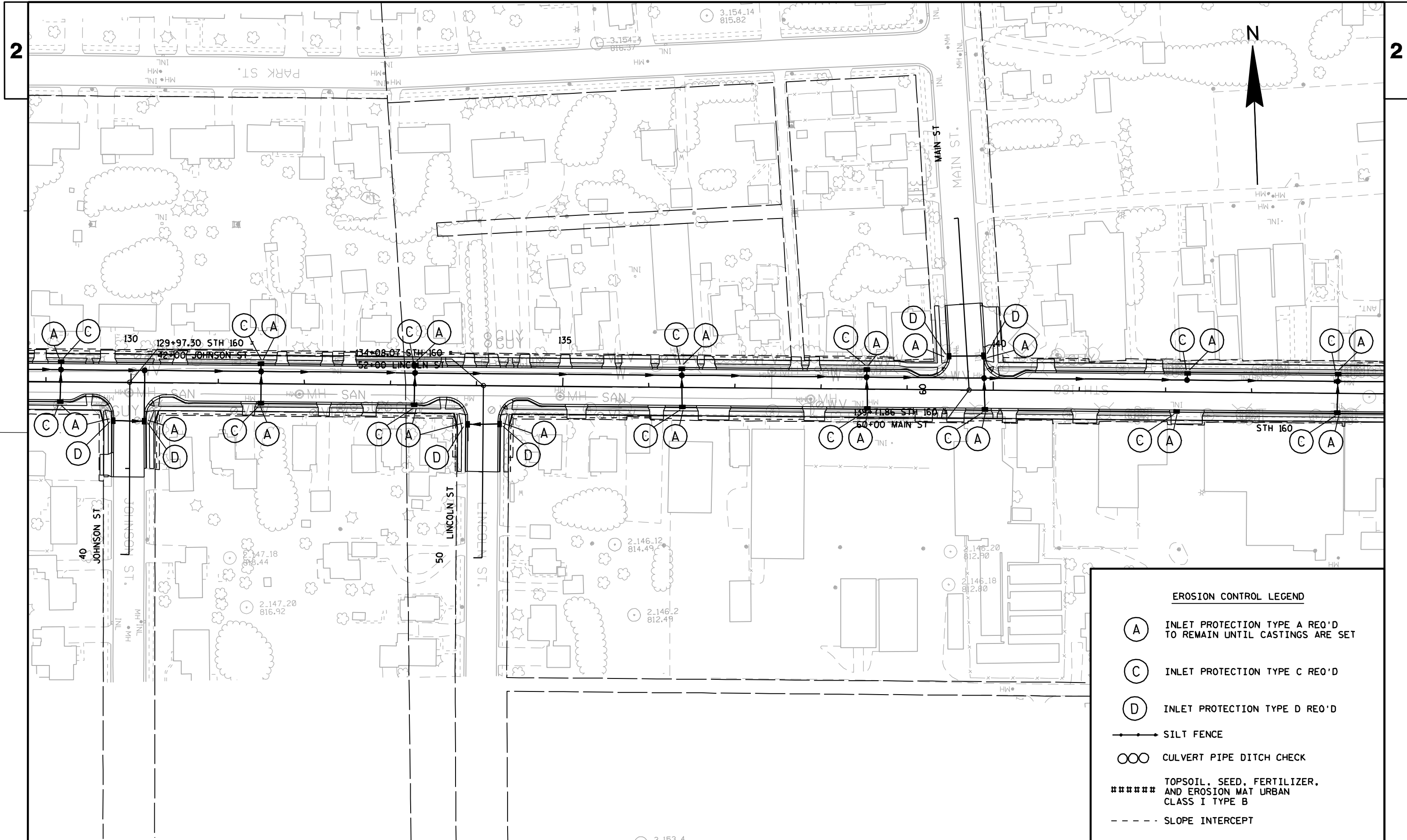


2

2

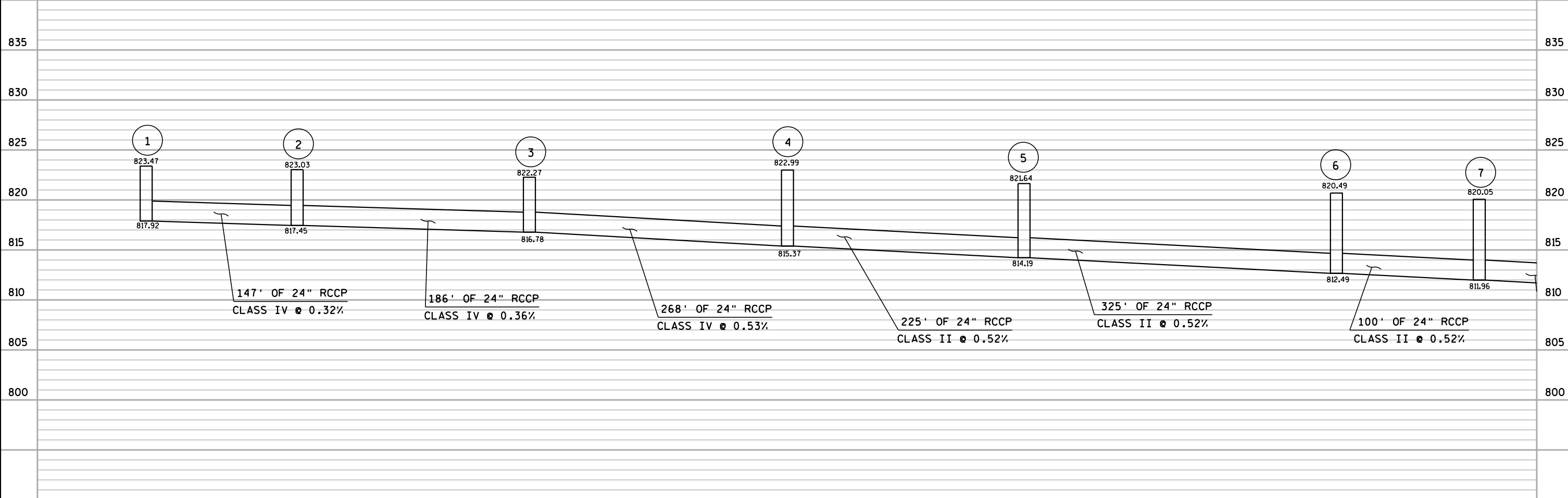
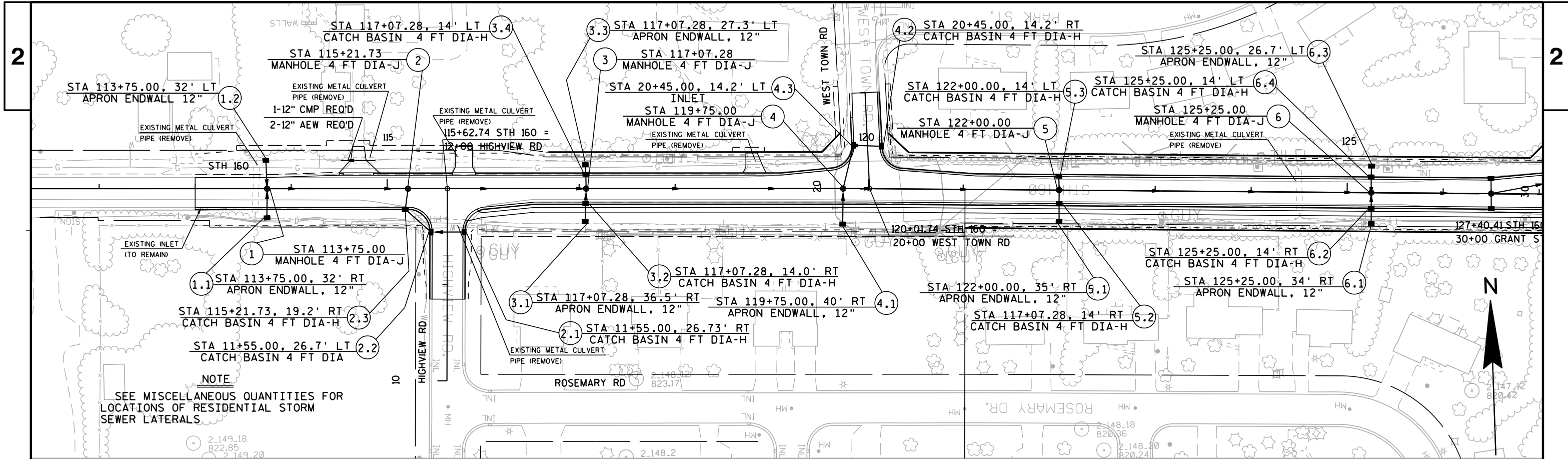


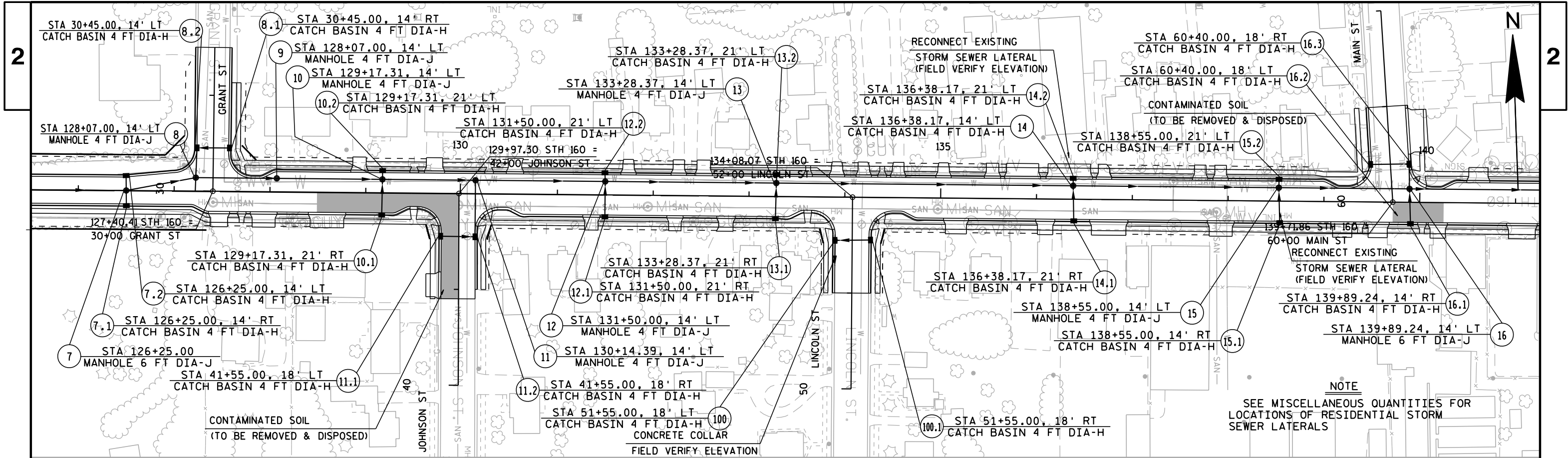




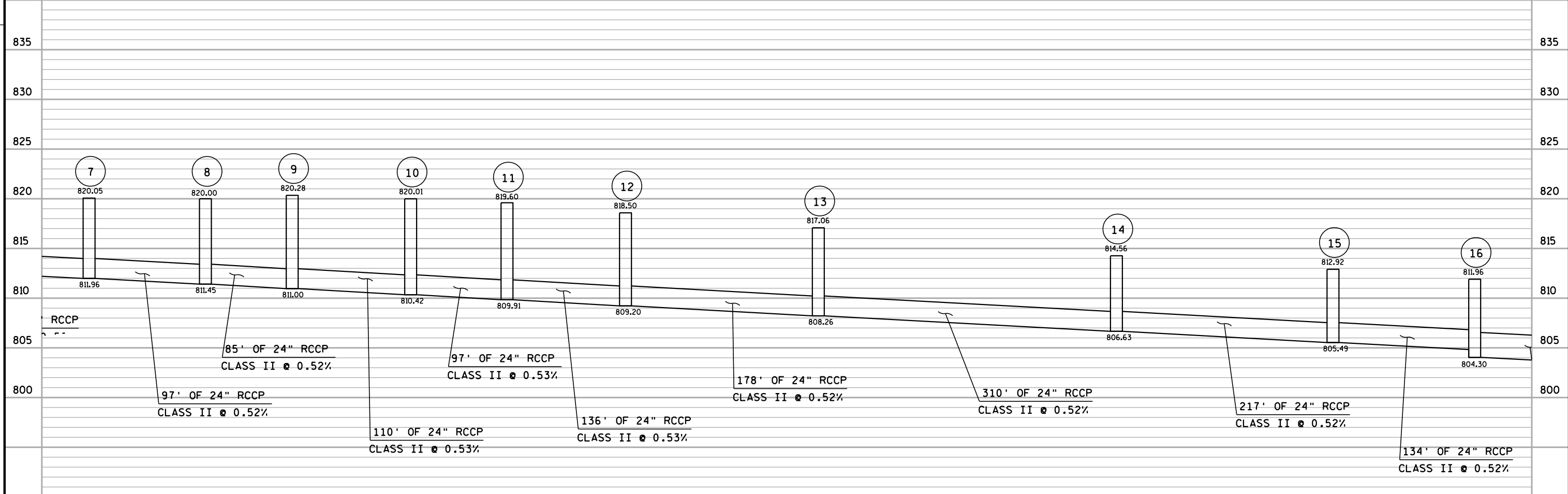
EROSION CONTROL LEGEND

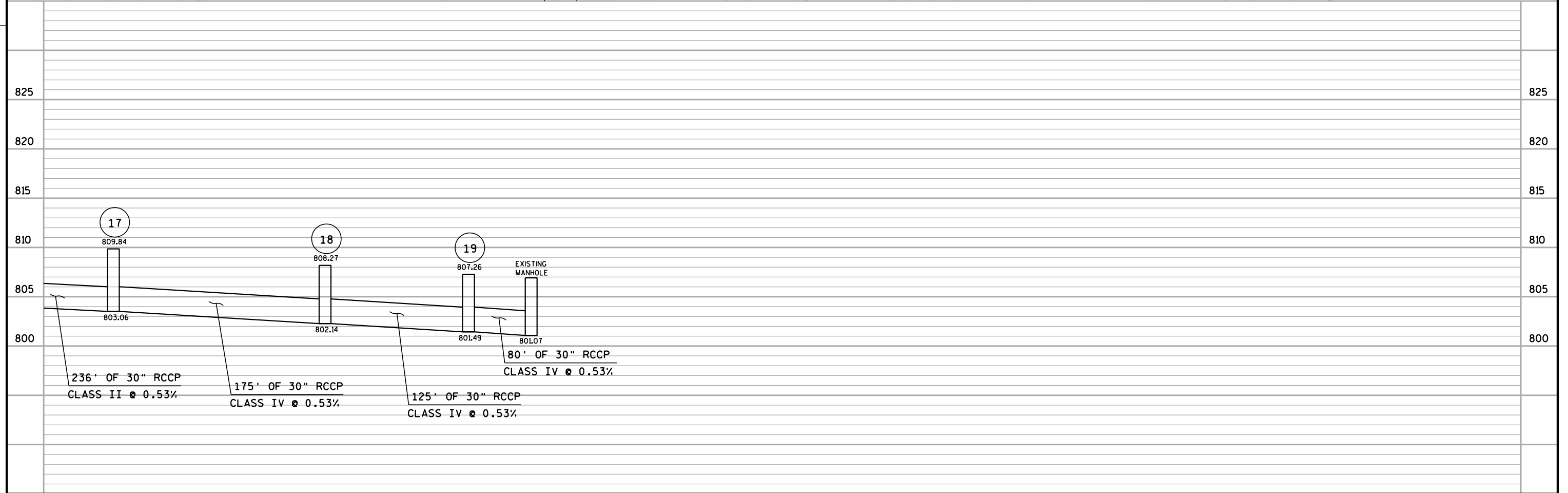
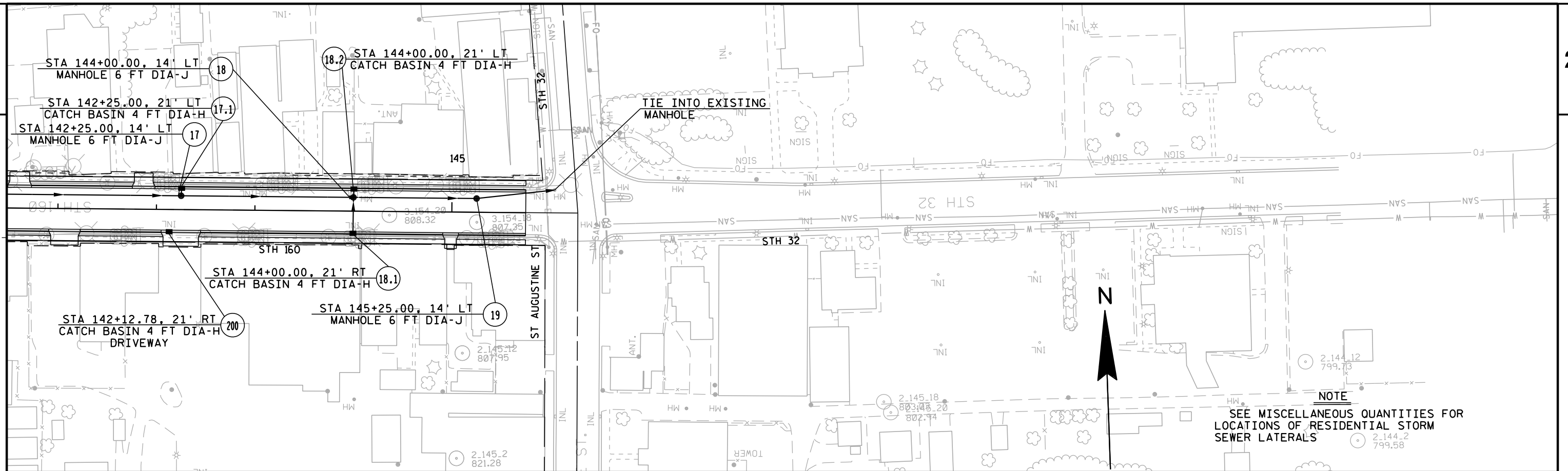
- (A) INLET PROTECTION TYPE A REQ'D TO REMAIN UNTIL CASTINGS ARE SET
- (C) INLET PROTECTION TYPE C REQ'D
- (D) INLET PROTECTION TYPE D REQ'D
- SILT FENCE
- CULVERT PIPE DITCH CHECK
- ***** TOPSOIL, SEED, FERTILIZER, AND EROSION MAT URBAN CLASS I TYPE B
- - - - SLOPE INTERCEPT

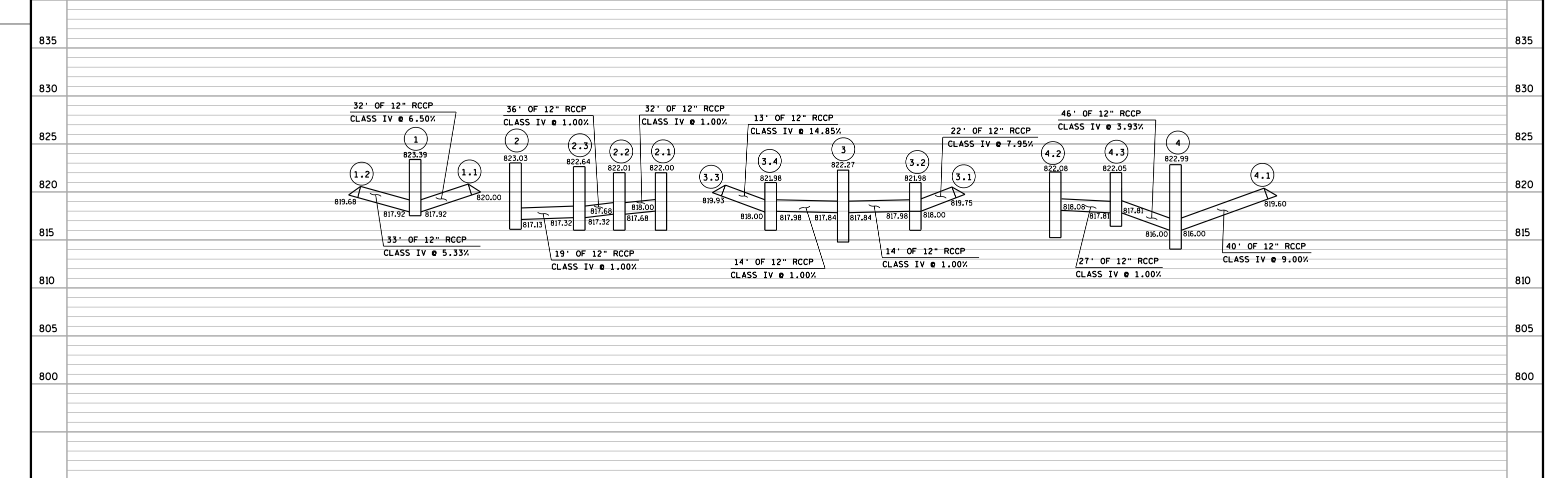
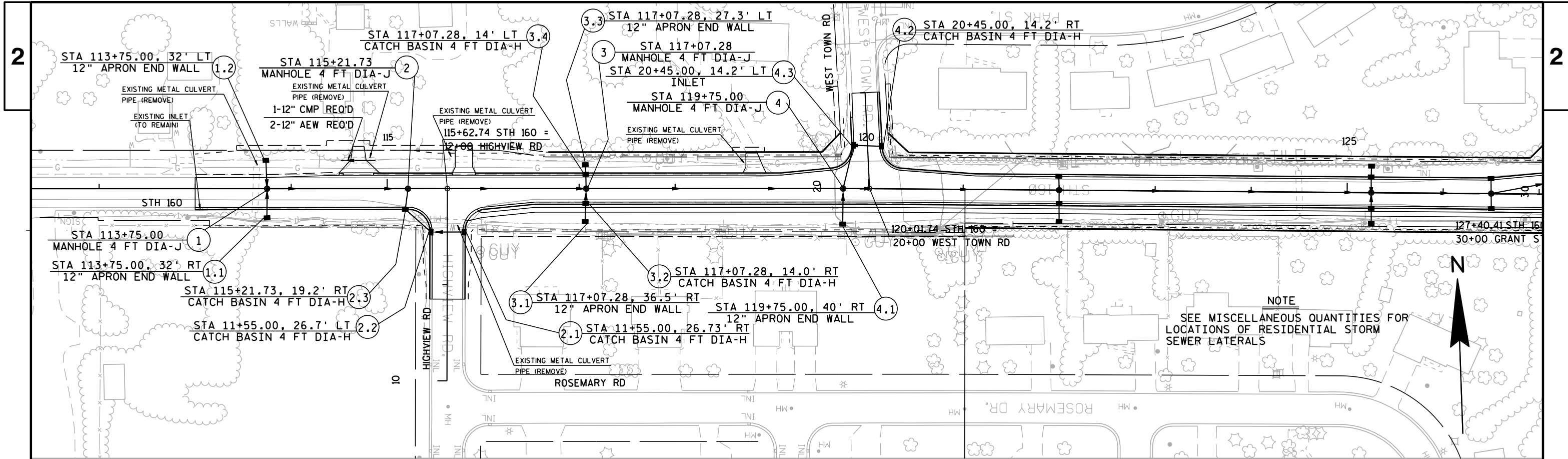


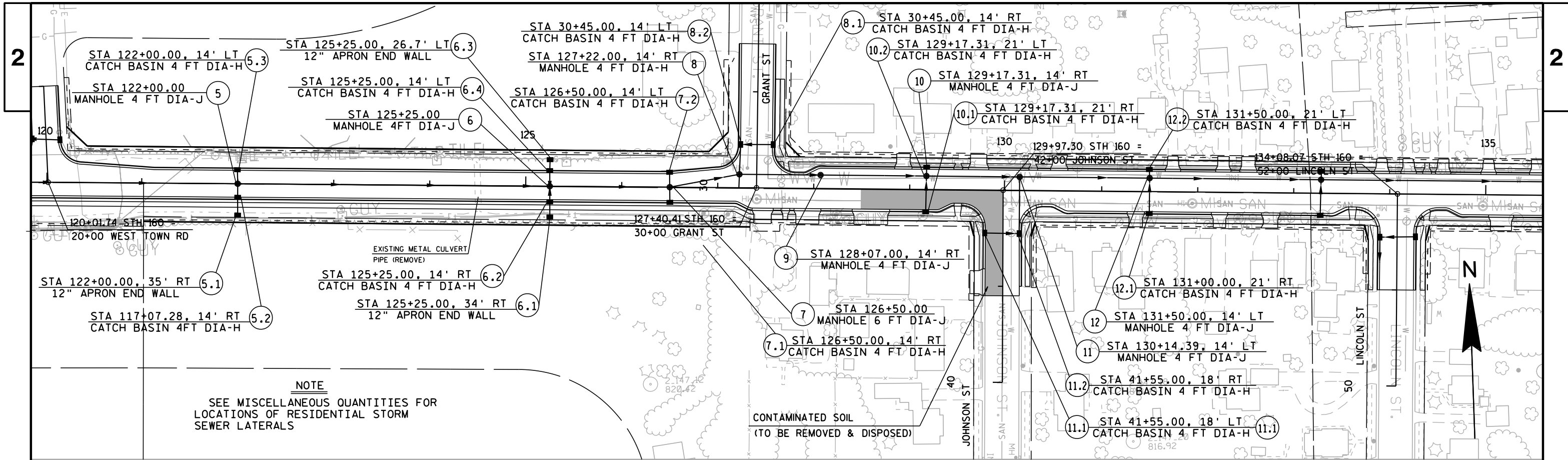


NOTE
SEE MISCELLANEOUS QUANTITIES FOR
LOCATIONS OF RESIDENTIAL STORM
SEWER LATERALS

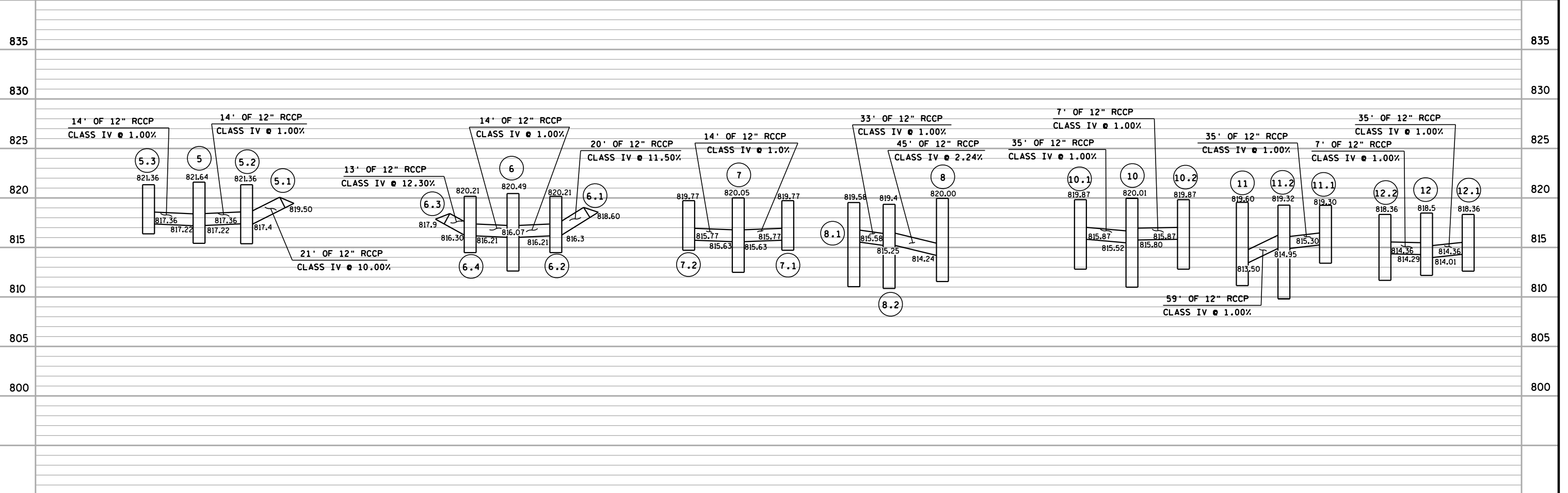


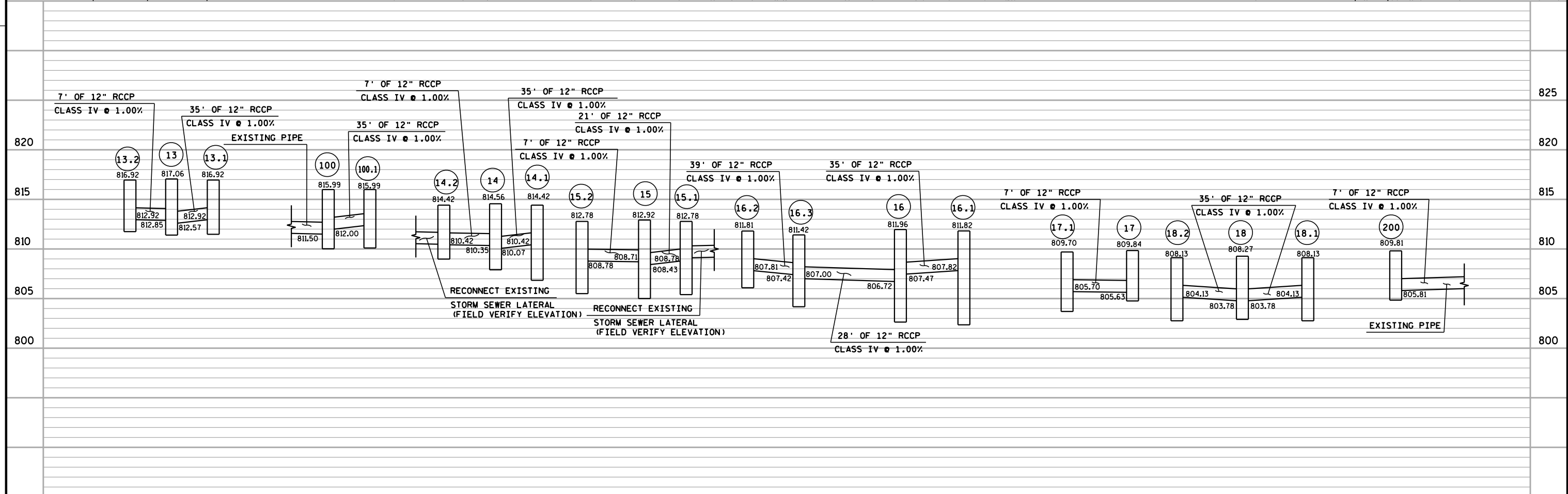
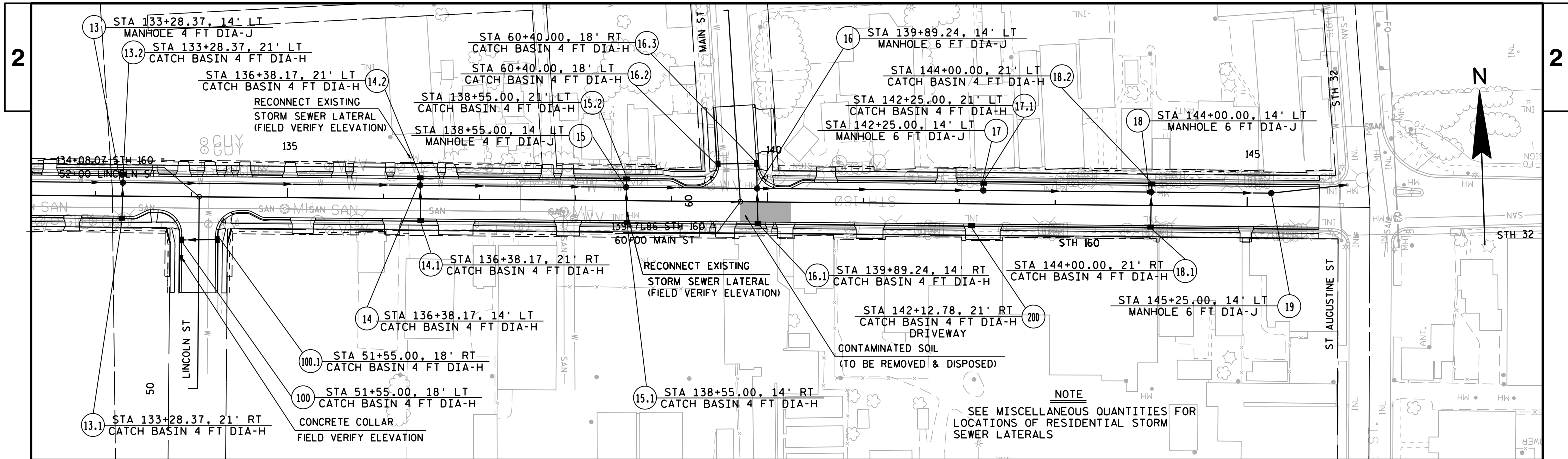






NOTE
SEE MISCELLANEOUS QUANTITIES FOR
LOCATIONS OF RESIDENTIAL STORM
SEWER LATERALS





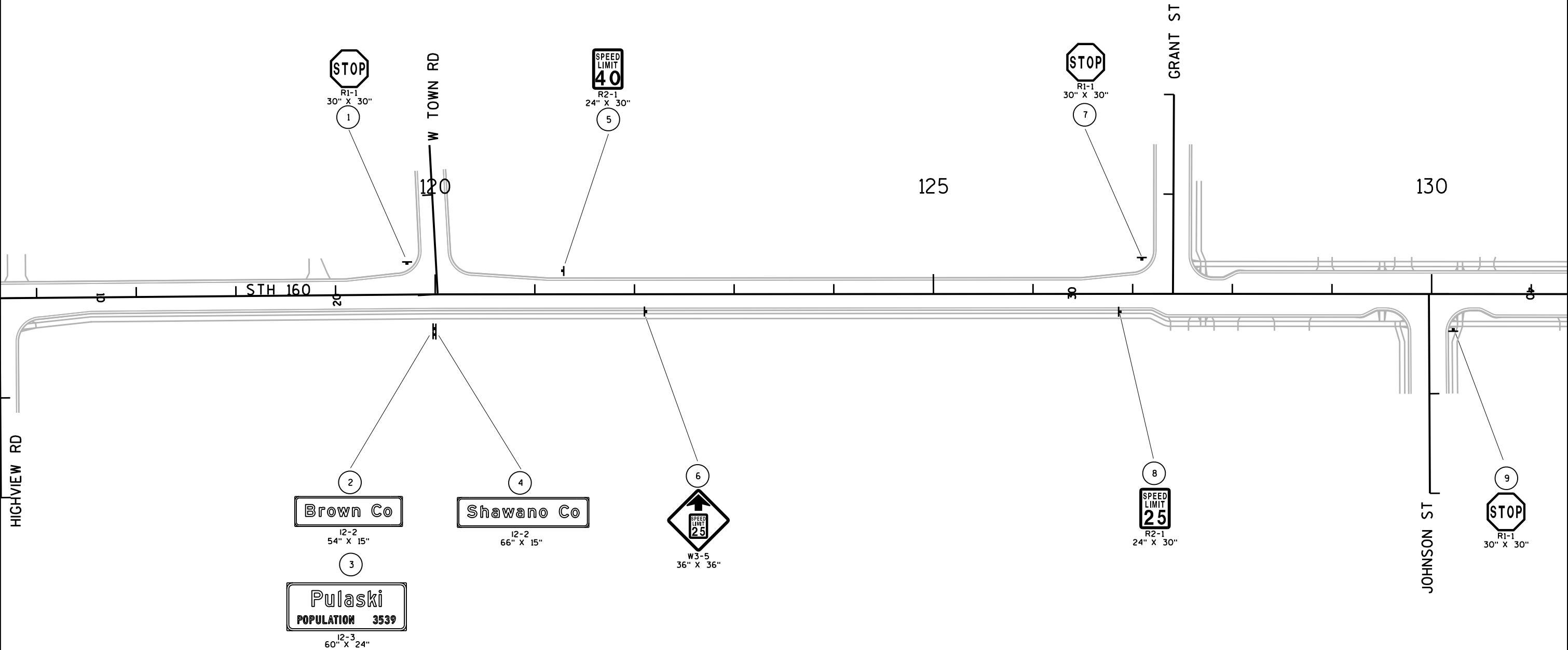
SIGNING NOTES

THE CONTRACTOR SHALL NOTIFY THE REGIONAL TRAFFIC UNIT, 920-492-5653, A MINIMUM OF TWO WEEKS PRIOR TO THE NEED FOR SIGN PLACEMENT TO ALLOW FOR STAKING OF ANY PERMANENT SIGNING REQUIRED ON THE PROJECT.

TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

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.



-  SIGN-PLACE NEW
-  SIGN-REMOVE AND REPLACE

PLAN SHEET PRODUCED
BY WISDOT-NE REGION

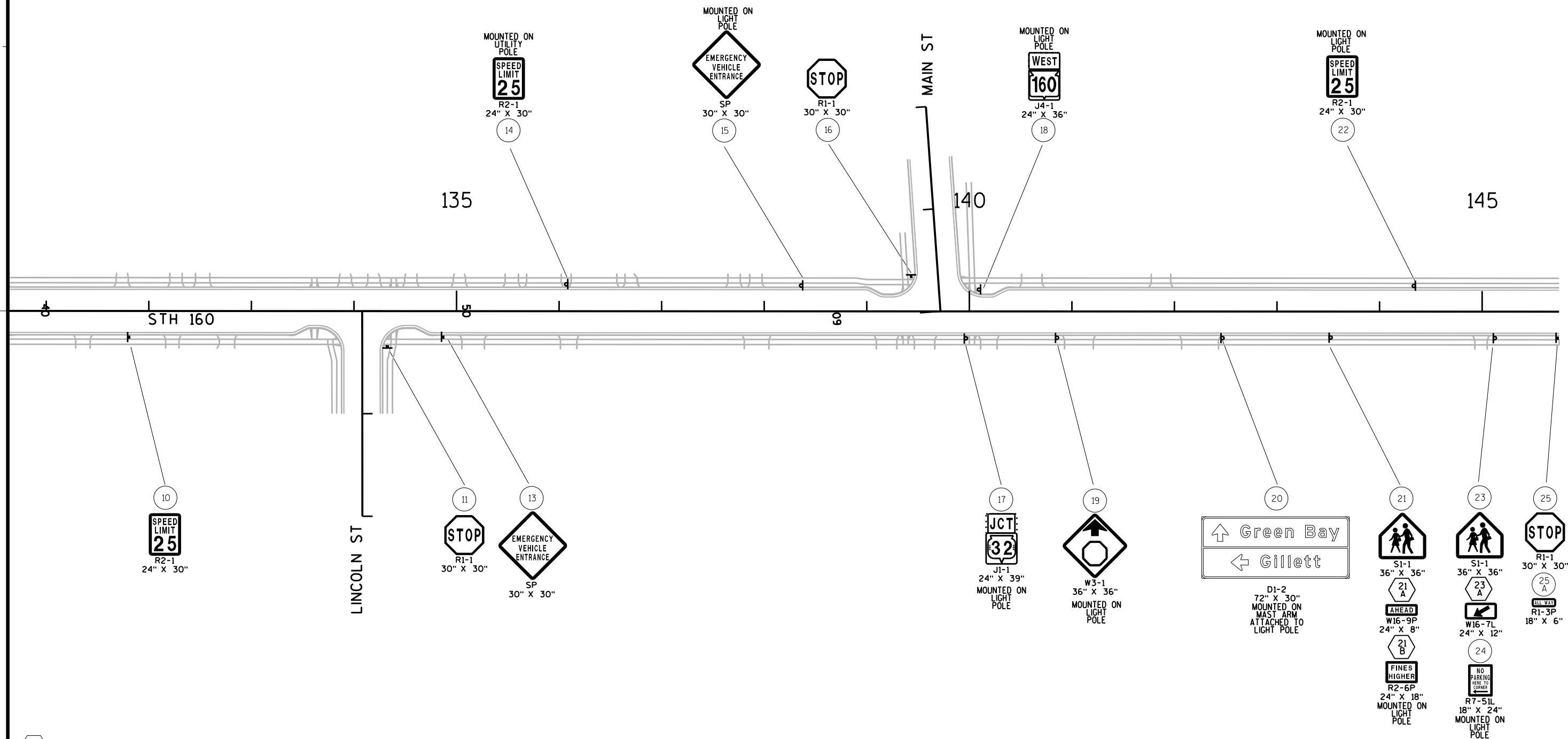
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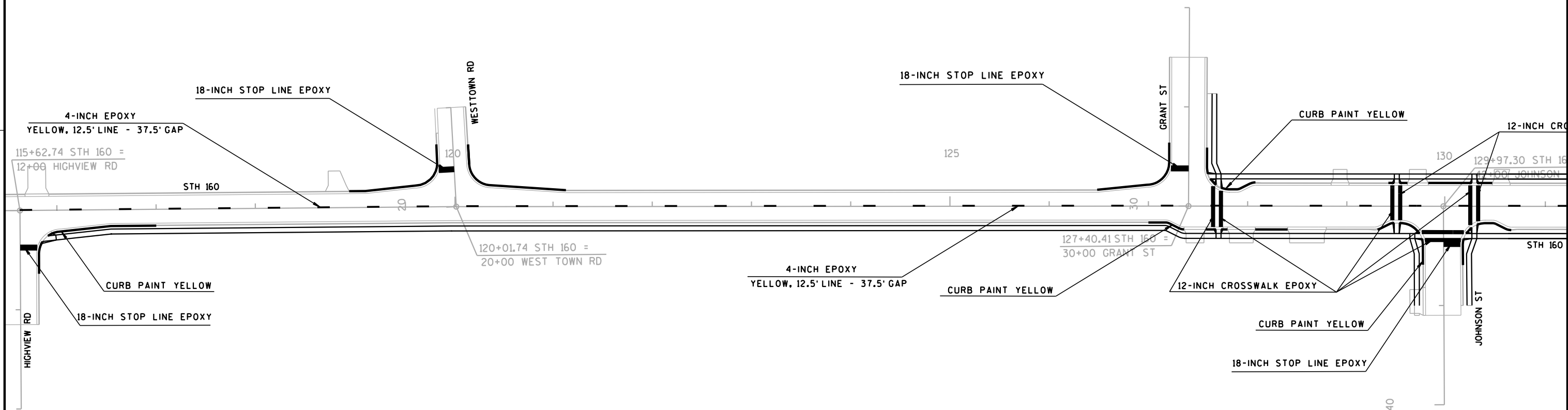
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○ SIGN-PLACE NEW
○ SIGN-REMOVE AND REPLACE

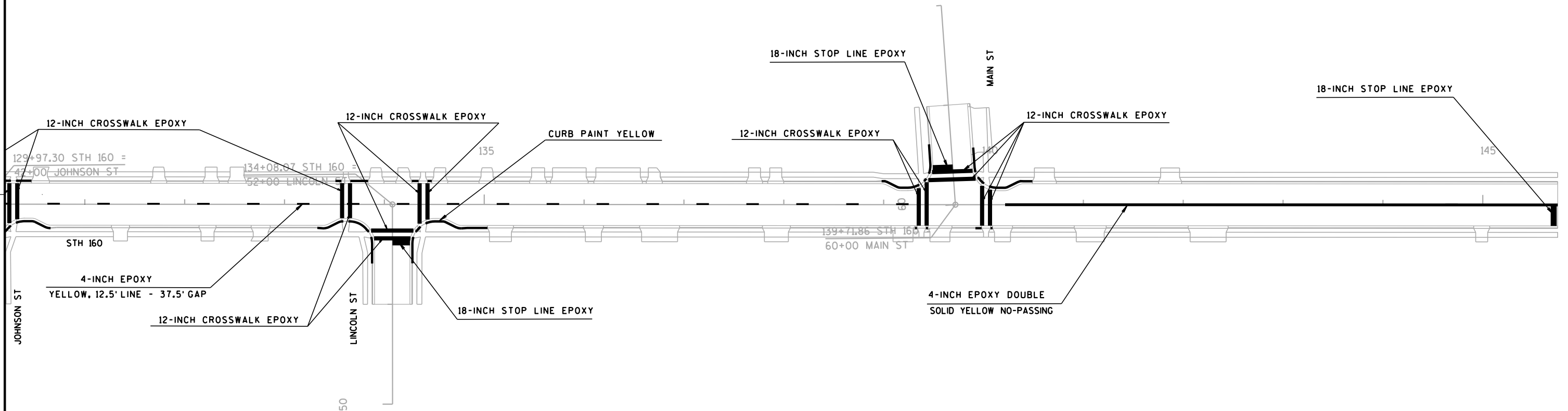
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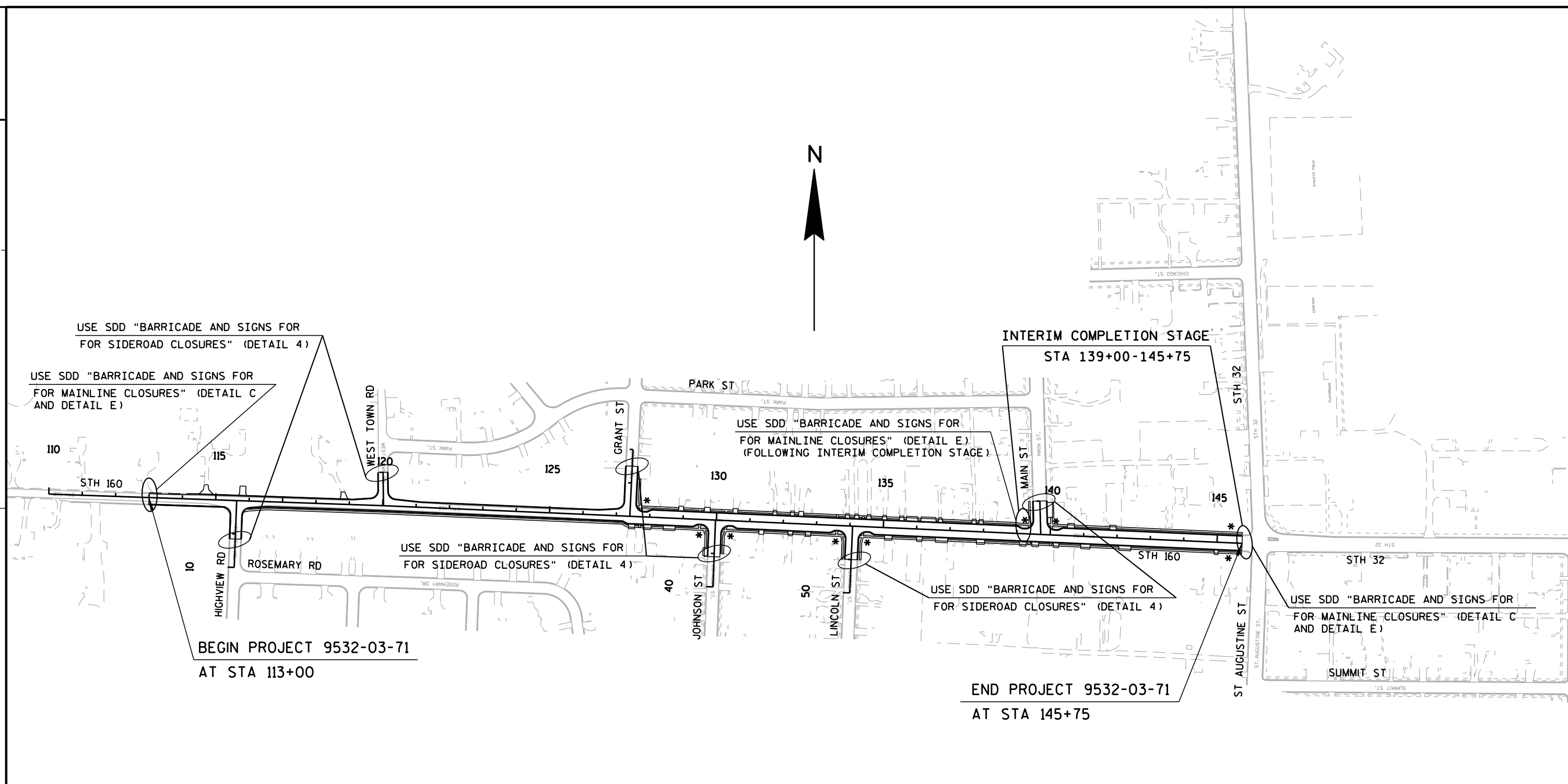
NOTE
PLACE CURB PAINT AT 10' ON BOTH SIDES AT
ALL HYDRANT LOCATIONS.



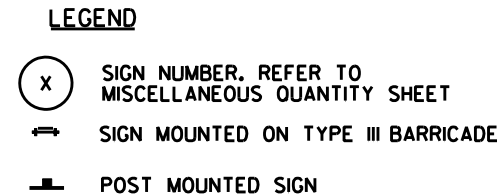
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NOTE
PLACE CURB PAINT AT 10' ON BOTH SIDES AT
ALL HYDRANT LOCATIONS.

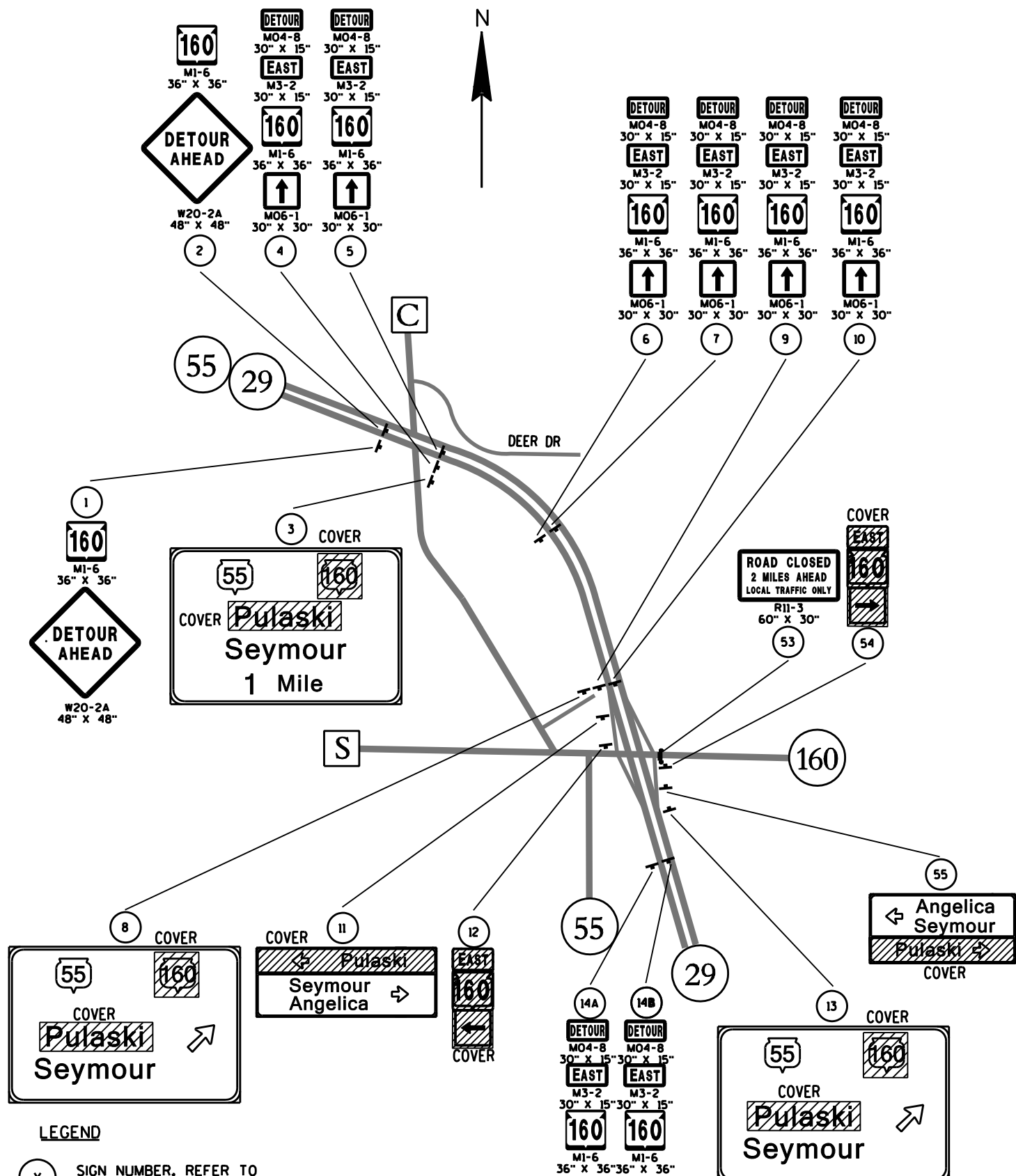




NOTE:
* USE DETAIL SDD 15 D 30-1(SIDEWALK CLOSURE) WHENEVER SIDEWALK USE IS IMPEDED.



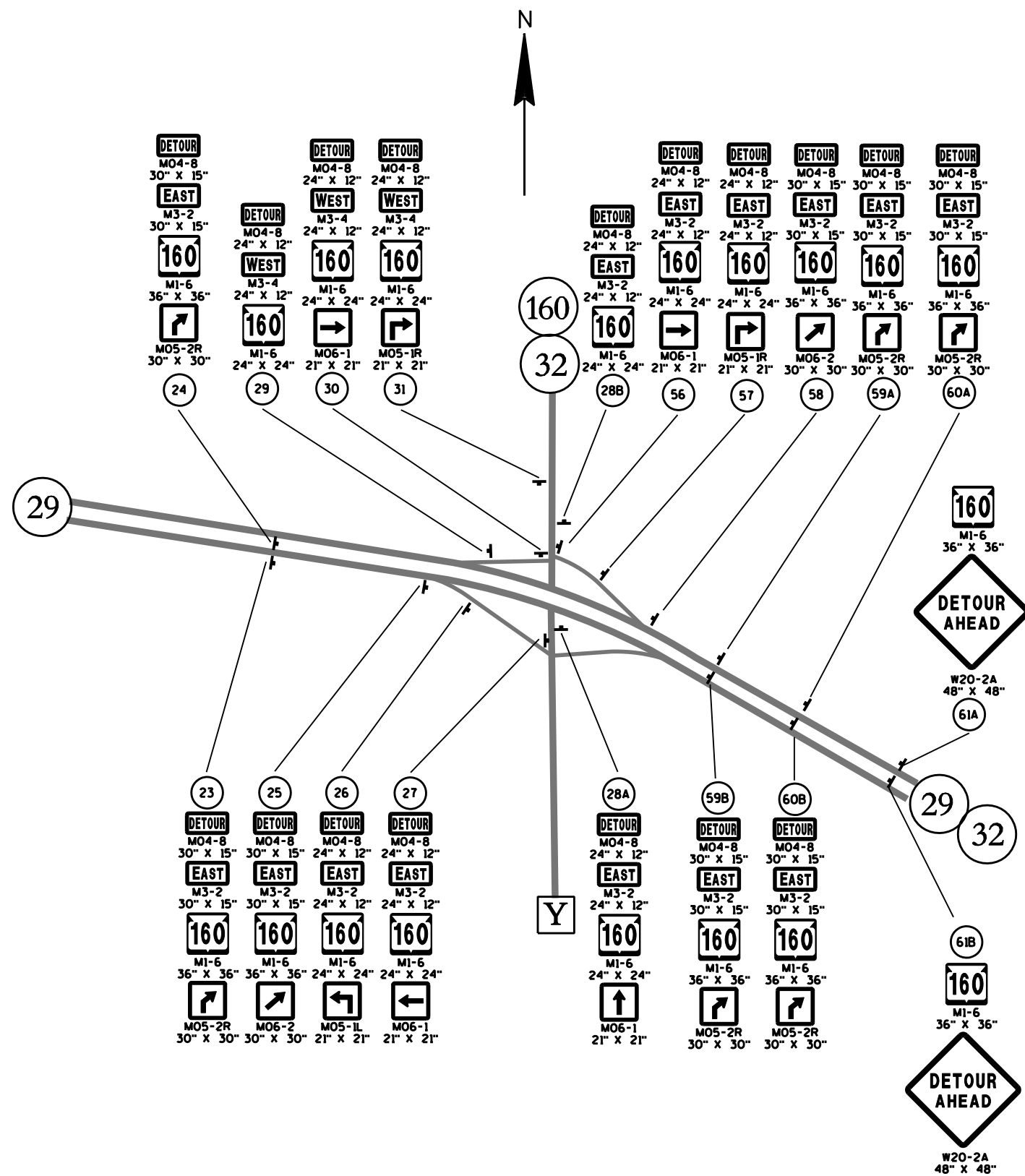
PROJECT NO: 9532-03-71	HWY: STH 160	COUNTY: BROWN	DETOUR SIGNING DETAIL	SHEET 30	E
FILE NAME : \$\$...designfile...\$\$		PLOT DATE : \$\$...plottingdate...\$ PLOT BY : \$\$...plotuser...\$ PLOT NAME :		PLOT SCALE : \$\$.....plotscale.....\$ WISDOT/CADDs SHEET 42	



DETAIL 1

LEGEND

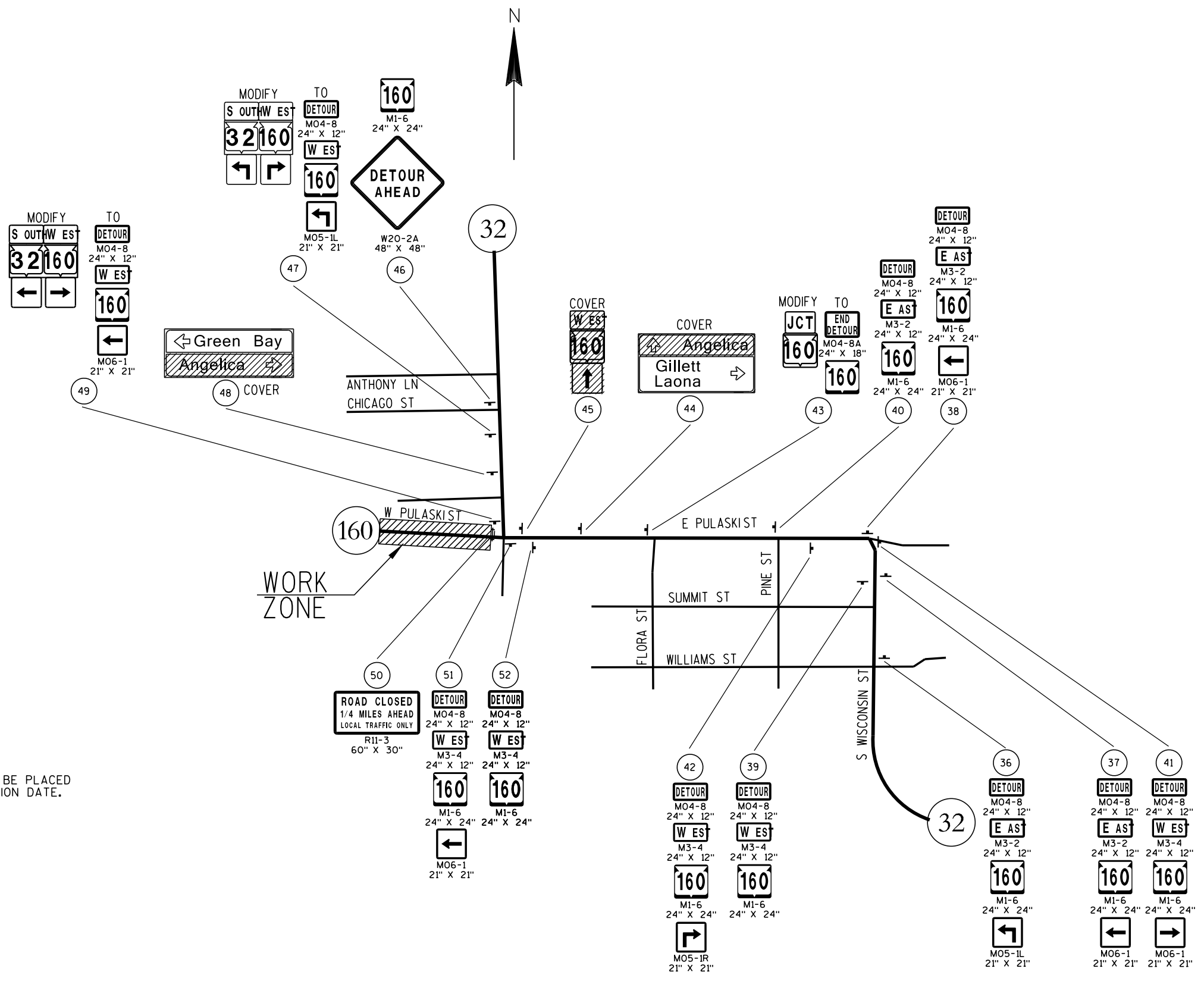
- (X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET
- SIGN MOUNTED ON TYPE III BARRICADE
- POST MOUNTED SIGN



DETAIL 2

SHEET 2 OF 3

PLAN SHEET PRODUCED
BY WISDOT-NE REGION



NOTE
SIGN NUMBER 50 SHALL BE PLACED
AFTER INTERIM COMPLETION DATE.

- LEGEND
- (X) SIGN NUMBER, REFER TO MISCELLANEOUS QUANTITY SHEET
 - ⇄ SIGN MOUNTED ON TYPE III BARRICADE
 - POST MOUNTED SIGN

DETAIL 3

SHEET 3 OF 3
PLAN SHEET PRODUCED
BY WISDOT-NE REGION

3

DATE 15JAN13		E S T I M A T E O F Q U A N T I T I E S			
LINE		9532-03-71			
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	201.0105	CLEARING	STA	2.000	2.000
0020	201.0120	CLEARING	ID	85.000	85.000
0030	201.0205	GRUBBING	STA	2.000	2.000
0040	201.0220	GRUBBING	ID	85.000	85.000
0050	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	6.000	6.000
0060	204.0100	REMOVING PAVEMENT	SY	600.000	600.000
0070	204.0110	REMOVING ASPHALTIC SURFACE	SY	620.000	620.000
0080	204.0150	REMOVING CURB & GUTTER	LF	1,100.000	1,100.000
0090	204.0155	REMOVING CONCRETE SIDEWALK	SY	5,500.000	5,500.000
0100	204.0170	REMOVING FENCE	LF	185.000	185.000
0110	204.0195	REMOVING CONCRETE BASES	EACH	16.000	16.000
0120	204.0210	REMOVING MANHOLES	EACH	7.000	7.000
0130	204.0220	REMOVING INLETS	EACH	13.000	13.000
0140	204.0245	REMOVING STORM SEWER (SIZE) 01. 12-15	LF	114.000	114.000
0150	204.0245	REMOVING STORM SEWER (SIZE) 01. 18-21	LF	100.000	100.000
0160	204.0245	REMOVING STORM SEWER (SIZE) 01. 24-30-INCH	LF	2,886.000	2,886.000
0170	205.0100	EXCAVATION COMMON	CY	9,305.000	9,305.000
0180	205.0501.S	EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL	TON	1,120.000	1,120.000
0190	213.0100	FINISHING ROADWAY (PROJECT) 01. 9532-03-71	EACH	1.000	1.000
0200	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	55.000	55.000
0210	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	20,100.000	20,100.000
0220	311.0110	BREAKER RUN	TON	3,100.000	3,100.000
0230	405.0100	COLORING CONCRETE RED	CY	147.000	147.000
0240	416.0160	CONCRETE DRIVEWAY 6-INCH	SY	420.000	420.000
0250	440.4410.S	INCENTIVE IRI RIDE	DOL	2,900.000	2,900.000
0260	455.0115	ASPHALTIC MATERIAL PG64-22	TON	170.000	170.000
0270	455.0122	ASPHALTIC MATERIAL PG64-34	TON	82.000	82.000
0280	455.0605	TACK COAT	GAL	390.000	390.000
0290	460.1101	HMA PAVEMENT TYPE E-1	TON	4,580.000	4,580.000
0300	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	2,860.000	2,860.000
0310	460.4110.S	REHEATING HMA LONGITUDINAL JOINTS	LF	14,350.000	14,350.000
0320	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	62.000	62.000
0330	520.8000	CONCRETE COLLARS FOR PIPE	EACH	2.000	2.000
0340	521.0112	CULVERT PIPE CORRUGATED STEEL 12-INCH	LF	30.000	30.000
0350	521.1012	APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH	EACH	2.000	2.000
0360	522.1012	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH	EACH	8.000	8.000
0370	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	6,680.000	6,680.000
0380	601.0557	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	LF	485.000	485.000
0390	602.0405	CONCRETE SIDEWALK 4-INCH	SF	40,650.000	40,650.000
0400	602.0415	CONCRETE SIDEWALK 6-INCH	SF	3,570.000	3,570.000
0410	602.0510	CURB RAMP DETECTABLE WARNING FIELD WHITE	SF	176.000	176.000
0420	608.0324	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	2,014.000	2,014.000
0430	608.0412	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH	LF	1,034.000	1,034.000
0440	608.0418	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH	LF	28.000	28.000
0450	608.0424	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH	LF	600.000	600.000

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DATE 15JAN13		E S T I M A T E O F Q U A N T I T I E S			
LINE				9532-03-71	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0460	608.0430	STORM SEWER PIPE REINFORCED CONCRETE	LF	615.000	615.000
		CLASS IV 30-INCH			
0470	611.0530	MANHOLE COVERS TYPE J	EACH	19.000	19.000
0480	611.0624	INLET COVERS TYPE H	EACH	35.000	35.000
0490	611.1004	CATCH BASINS 4-FT DIAMETER	EACH	36.000	36.000
0500	611.2004	MANHOLES 4-FT DIAMETER	EACH	14.000	14.000
0510	611.2006	MANHOLES 6-FT DIAMETER	EACH	5.000	5.000
0520	611.9800.S	PIPE GRATES	EACH	8.000	8.000
0530	612.0902.S	INSULATION BOARD POLYSTYRENE (INCH) 01.2-INCH	SY	96.000	96.000
0540	616.0700.S	FENCE SAFETY	LF	3,350.000	3,350.000
0550	619.1000	MOBILIZATION	EACH	1.000	1.000
0560	621.0100	LANDMARK REFERENCE MONUMENTS	EACH	8.000	8.000
0570	623.0200	DUST CONTROL SURFACE TREATMENT	SY	35,900.000	35,900.000
0580	625.0105	TOPSOIL	CY	10,200.000	10,200.000
0590	627.0200	MULCHING	SY	2,220.000	2,220.000
0600	628.1504	SILT FENCE	LF	600.000	600.000
0610	628.1520	SILT FENCE MAINTENANCE	LF	1,000.000	1,000.000
0620	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	4.000	4.000
0630	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	3.000	3.000
0640	628.2008	EROSION MAT URBAN CLASS I TYPE B	SY	7,980.000	7,980.000
0650	628.7005	INLET PROTECTION TYPE A	EACH	36.000	36.000
0660	628.7015	INLET PROTECTION TYPE C	EACH	22.000	22.000
0670	628.7020	INLET PROTECTION TYPE D	EACH	14.000	14.000
0680	628.7504	TEMPORARY DITCH CHECKS	LF	48.000	48.000
0690	628.7555	CULVERT PIPE CHECKS	EACH	45.000	45.000
0700	628.7560	TRACKING PADS	EACH	3.000	3.000
0710	629.0210	FERTILIZER TYPE B	CWT	6.430	6.430
0720	630.0130	SEEDING MIXTURE NO. 30	LB	144.000	144.000
0730	630.0140	SEEDING MIXTURE NO. 40	LB	40.000	40.000
0740	633.5200	MARKERS CULVERT END	EACH	8.000	8.000
0750	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	15.000	15.000
0760	637.0202	SIGNS REFLECTIVE TYPE II	SF	161.000	161.000
0770	638.2602	REMOVING SIGNS TYPE II	EACH	30.000	30.000
0780	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	13.000	13.000
0790	642.5401	FIELD OFFICE TYPE D	EACH	1.000	1.000
0800	643.0100	TRAFFIC CONTROL (PROJECT) 01. 9532-03-71	EACH	1.000	1.000
0810	643.0300	TRAFFIC CONTROL DRUMS	DAY	7,500.000	7,500.000
0820	643.0410	TRAFFIC CONTROL BARRICADES TYPE II	DAY	280.000	280.000
0830	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	3,900.000	3,900.000
0840	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	7,800.000	7,800.000
0850	643.0900	TRAFFIC CONTROL SIGNS	DAY	4,640.000	4,640.000
0860	643.0910	TRAFFIC CONTROL COVERING SIGNS TYPE I	EACH	3.000	3.000
0870	643.0920	TRAFFIC CONTROL COVERING SIGNS TYPE II	EACH	10.000	10.000
0880	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	14.000	14.000
0890	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. 9532-03-71	EACH	1.000	1.000
0900	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	29,700.000	29,700.000
0910	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	1,713.000	1,713.000
0920	647.0453	PAVEMENT MARKING CURB PAINT	LF	1,340.000	1,340.000
0930	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	126.000	126.000
0940	647.0776	PAVEMENT MARKING CROSSWALK EPOXY 12-INCH	LF	772.000	772.000
0950	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	63.000	63.000

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DATE 15JAN13		E S T I M A T E O F Q U A N T I T I E S			
LINE					9532-03-71
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0960	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	3,825.000	3,825.000
0970	650.5000	CONSTRUCTION STAKING BASE	LF	3,825.000	3,825.000
0980	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	7,165.000	7,165.000
0990	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	1.000	1.000
1000	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 9532-03-71	LS	1.000	1.000
1010	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	1,440.000	1,440.000
1020	690.0150	SAWING ASPHALT	LF	1,110.000	1,110.000
1030	690.0250	SAWING CONCRETE	LF	975.000	975.000
1040	999.1500.S	CRACK AND DAMAGE SURVEY	LS	1.000	1.000
1050	SPV.0060	SPECIAL 01. RECONNECT EXISTING STORM SEWER LATER	EACH	2.000	2.000
1060	SPV.0060	SPECIAL 02. UTILITY LINE OPENING	EACH	8.000	8.000
1070	SPV.0060	SPECIAL 03. ADJUSTING WATER SERVICE CURB STOP	EACH	33.000	33.000
1080	SPV.0060	SPECIAL 04. ADJUSTING WATER VALVE BOX	EACH	18.000	18.000
1090	SPV.0060	SPECIAL 05. ADJUSTING SANITARY MANHOLE COVER	EACH	9.000	9.000
1100	SPV.0060	SPECIAL 06. INLET COVER TYPE H DRIVEWAY	EACH	1.000	1.000
1110	SPV.0075	SPECIAL 01. STREET SWEEPING	HRS	50.000	50.000
1120	SPV.0090	SPECIAL 01. RESIDENTIAL STORM SEWER LATERALS	LF	1,000.000	1,000.000
1130	SPV.0105	SPECIAL 01. REMOVE EXISTING LIGHTING SYSTEM	LS	1.000	1.000
1140	SPV.0105	SPECIAL 01. SEISMOGRAPH URBAN	LS	1.000	1.000

3

ALL ITEMS ARE CATEGORY 0010

CLEARING AND GRUBBING

STATION			LOCATION	201.0105 CLEARING STA	201.0120 CLEARING ID	201.0205 GRUBBING STA	201.0220 GRUBBING ID
120+25	LT		STH 160	1	-	1	-
127+00	LT		STH 160	1	-	1	-
141+70	RT		STH 160	-	10	-	10
142+14	LT		STH 160	-	14	-	14
143+00	RT		STH 160	-	7	-	7
143+30	LT		STH 160	-	13	-	13
144+06	RT		STH 160	-	9	-	9
144+21	LT		STH 160	-	9	-	9
145+14	LT		STH 160	-	13	-	13
145+43	RT		STH 160	-	10	-	10
TOTALS				2	85	2	85

REMOVING SMALL PIPE CULVERTS

STATION	TO	STATION	LOCATION	203.0100 EACH	SIZE	PIPE LENGTH	TYPE	REMARKS
113+63	-	113+64	STH 160 Mainline	1	24	49'	CSCP	
114+54	-	114+88	STH 160 LT	1	12	34'	CSCP	DRIVEWAY
115+23	-	116+01	STH 160 RT	1	24	78'	CSCP	HIGHVIEW RD.
115+66	-	115+94	STH 160 LT	1	12	28'	CSCP	DRIVEWAY
118+64	-	118+97	STH 160 LT	1	12	33'	CSCP	DRIVEWAY
124+50	-	124+51	STH 160 Mainline	1	24	45'	CSCP	
TOTAL				6				

3

ALL ITEMS ARE CATEGORY 0010

PAVEMENT REMOVAL SUMMARY

				204.0100 REMOVING PAVEMENT	204.0110 REMOVING ASPHALTIC SURFACE	
STATION	TO	STATION	LOCATION	SY	SY	REMARKS
113+00	-	115+63	STH 160 MAINLINE	678	-	BEGIN PROJECT TO HIGHVIEW RD.
115+63	-	120+02	STH 160 MAINLINE	1131	-	HIGHVIEW RD. TO WEST TOWN RD.
120+02	-	127+40	STH 160 MAINLINE	2165	-	WEST TOWN ROAD TO GRANT ST.
127+40	-	129+97	STH 160 MAINLINE	1431	-	GRANT ST. TO JOHNSON ST.
129+97	-	134+08	STH 160 MAINLINE	2300	-	JOHNSON ST. TO LINCOLN ST.
134+08	-	139+72	STH 160 MAINLINE	3161	-	LINCOLN ST. TO MAIN ST.
139+72	-	145+75	STH 160 MAINLINE	3367	-	MAIN ST. TO END PROJECT
144+70			LT	-	65	DRIVEWAY
115+80			LT	-	-	DRIVEWAY
118+83			LT	-	42	DRIVEWAY
127+47			RT	-	-	DRIVEWAY
127+93			RT	-	-	DRIVEWAY
128+42	-	129+68	RT	50	104	DRIVEWAY
128+93			LT	20	-	DRIVEWAY
129+72			LT	26	-	DRIVEWAY
130+56			LT	24	-	DRIVEWAY
131+36			RT	18	-	DRIVEWAY
131+74			LT	9	-	DRIVEWAY
132+23			RT	12	6	DRIVEWAY
132+26			LT	9	-	DRIVEWAY
132+52			LT	21	-	DRIVEWAY
132+76			RT	11	8	DRIVEWAY
133+92			LT	9	-	DRIVEWAY
134+19			LT	10	5	DRIVEWAY
134+55			LT	10	6	DRIVEWAY
135+03			LT	12	-	DRIVEWAY
135+16			RT	17	14	DRIVEWAY
135+54			LT	11	7	DRIVEWAY
135+67	-	136+64	LT	63	48	DRIVEWAY
136+09			RT	18	9	DRIVEWAY
136+76			RT	45	42	DRIVEWAY
136+70			LT	10	4	DRIVEWAY
137+71			LT	20	-	DRIVEWAY
137+93			RT	16	16	DRIVEWAY
137+92			LT	11	-	DRIVEWAY
139+19			RT	15	21	DRIVEWAY
139+56			RT	18	9	DRIVEWAY
60+74			RT	-	100	DRIVEWAY, LOCATED ON MAIN ST.
140+19			RT	14	7	DRIVEWAY
140+61			LT	16	26	DRIVEWAY
141+07			RT	24	-	DRIVEWAY
141+87			LT	24	-	DRIVEWAY
142+25			RT	31	16	DRIVEWAY
144+99			RT	9	6	DRIVEWAY
40+96			LT	-	40	DRIVEWAY, LOCATED ON JOHNSON ST.
138+05	-	139+04	RT	-	17	DRIVEWAY
TOTALS				600	620	

REMOVING CURB & GUTTER

STATION	TO	STATION		LOCATION	204.0150 LF
113+00	-	113+13	RT	STH 160	13
10+45	-	11+15	LT	HIGHVIEW RD.	70
10+45	-	11+15	RT	HIGHVIEW RD.	70
20+21	-	20+48	LT	WEST TOWN RD.	44
20+17	-	21+00	RT	WEST TOWN RD.	100
30+22	-	31+50	LT	GRANT ST.	138
30+22	-	31+50	RT	GRANT ST.	137
40+23	-	41+10	LT	JOHNSON ST.	96
40+23	-	41+00	RT	JOHNSON ST.	84
50+23	-	51+00	LT	LINCOLN ST.	88
50+23	-	51+00	RT	LINCOLN ST.	85
60+26	-	61+00	LT	MAIN ST.	85
60+20	-	61+00	RT	MAIN ST.	90
TOTAL					1100

REMOVING CONCRETE SIDEWALK

STATION	TO	STATION		LOCATION	204.0155 SY	REMARKS
30+33	-	31+33	RT	GRANT ST.	44	
127+66	-	129+60	LT	STH 160	137	
40+27	-	41+10	LT	JOHNSON ST.	77	
40+27	-	41+10	RT	JOHNSON ST.	40	
129+80	-	134+14	LT	STH 160	160	
129+80	-	134+14	RT	STH 160	194	
50+32	-	51+00	LT	LINCOLN ST.	44	
50+32	-	51+00	RT	LINCOLN ST.	41	
134+24	-	139+44	LT	STH 160	237	
134+24	-	139+44	RT	STH 160	225	
60+35	-	61+00	LT	MAIN ST.	40	
139+66	-	145+75	LT	STH 160	460	
139+66	-	145+75	RT	STH 160	321	
139+66	-	145+75	RT	STH 160	1693	BRICK PAVERS
141+12	-	145+75	LT	STH 160	1788	BRICK PAVERS
TOTAL					5500	

3

ALL ITEMS ARE CATEGORY 0010

REMOVING FENCE

STATION TO STATION				LOCATION	204.0170 LF
117+25	-	118+60	LT	STH 160	135
132+50	-	133+00	RT	STH 160	50
TOTAL					185

REMOVING MANHOLES AND INLETS

STATION	LOCATION	204.0210 MANHOLES EACH	204.0220 INLETS EACH
125+80	LT	-	1
129+60	RT	-	1
129+68	RT	1	-
131+47	RT	1	-
132+37	LT	-	1
133+72	RT	-	1
133+88	RT	1	-
135+67	RT	-	1
138+43	RT	-	1
138+45	LT	-	1
138+53	RT	1	-
139+47	LT	-	1
139+88	RT	-	1
139+90	LT	1	-
142+14	RT	-	1
142+93	LT	-	1
143+00	LT	1	-
143+99	LT	-	1
144+01	RT	-	1
144+12	LT	1	-
		7	13

REMOVING CONCRETE BASES

STATION	OFFSET	204.0195 CONCRETE BASES EACH	REMARKS
128+78	31' RT	1	
129+63	31' RT	3	SW CORNER OF STH 160 & JOHNSON
137+44	27' RT	1	LIGHT POLE BASE
138+36	27' LT	1	LIGHT POLE BASE
139+43	27' RT	1	LIGHT POLE BASE
140+10	28' LT	1	LIGHT POLE BASE
140+12	35' LT	1	LIGHT POLE BASE
140+87	27' RT	1	LIGHT POLE BASE
141+50	27' LT	1	LIGHT POLE BASE
142+48	27' RT	1	LIGHT POLE BASE
143+07	27' LT	1	LIGHT POLE BASE
143+74	26' RT	1	LIGHT POLE BASE
144+42	27' LT	1	LIGHT POLE BASE
145+15	26' RT	1	LIGHT POLE BASE
TOTALS		16	

REMOVING STORM SEWER PIPE SUMMARY

STATION TO	STATION	LOCATION	204.0245.01 24-30 INCH LF	204.0245.02 18-21 INCH LF	204.0245.03 12-15 INCH LF	REMARKS
125+83	-	145+75	LF	1992	-	TRUNKLINE
129+67	-	133+88	RT	431	-	TRUNKLINE
135+72	-	138+54	RT	290	-	TRUNKLINE
144+00	-	145+75	RT	173	-	TRUNKLINE
129+60	-	129+67	RT	-	7	LATERAL TO INLET
133+74	-	133+88	RT	-	20	LATERAL TO INLET
		133+88	RT	-	4	LATERAL
		135+72	RT	-	4	LATERAL
		136+30	LT	-	11	LATERAL TO MANHOLE
138+44	-	138+54	RT	-	10	LATERAL TO INLET
		138+54	RT	-	7	LATERAL
		138+54	LT & RT	50	-	LATERAL BETWEEN TRUNKLINES
139+27	-	139+47	LT	-	28	LATERAL TO INLET
		139+90	LT	-	20	LATERAL TO INLET
		142+13	RT	-	3	LATERAL FROM INLET
		144+00	LT & RT	-	50	LATERAL BETWEEN TRUNKLINES
TOTALS			2886	100	114	

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ALL ITEMS ARE CATEGORY 0010

Division	From / To Station	Location	Common Excavation (1)	(item # 205.0100)	Salvaged / Unusable Pavement Material (3)	Available Material (4)	Unexpanded Fill	Expanded Fill (5)	Mass Ordinate + / - (6)	Waste	Comment:
			Cut (2)	EBS Excavation				Factor 1.25			
1	113+00 - 145+75	STH 160	11,759	0	3,825	7,933	382	477	7,456	7,456	
Division 1 Subtotal			11,759	0	3,825	7,933	382	477	7,456		
2		HIGHVIEW	231	0	0	232	0	0	231	231	
		WEST TOWN	141	0	0	141	5	7	134	134	
		GRANT	413	0	0	413	0	0	413	413	
		JOHNSON	176	0	0	176	0	0	176	176	
		LINCOLN	179	0	0	179	0	1	178	178	
		MAIN	231	0	0	231	0	0	231	231	
Division 2 Subtotal			1,371	0	0	1,371	6	7	1,364	8,819	
Grand Total			13,130.00	0.00	3,825	9,305	387.83	484.79	8,819.49	8,819.49	
Total Common Exc				9,305							

- 1) Common Excavation is the difference of the Cut and Salvaged/Unusable Pavement Material Excavation columns. Item number 205.0100
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 3) Salvaged/Unusable Pavement Material includes concrete pavement paid for under Removing Pavement Bid Item
- 4) Available Material = Cut - Salvaged/Unusuable Pavement Material
- 5) Expanded Fill. Factor = 1.25
- 6) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

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ALL ITEMS ARE CATEGORY 0010

EXCAVATION, HAULING AND DISPOSAL OF PETROLEUM
CONTAMINATED SOIL

STATION	TO	STATION	LOCATION	205.0501.S TONS*
128+50	-	129+75 RT	STH 160	546
40+90	-	42+00 LT	JOHNSON	357
139+75	-	140+25 RT	STH 160	217
TOTAL				1120

*QUANTITY APPROXIMATE
*QUANTITY ASSUMES EXCAVATION TO 3 FEET BELOW EXISTING PAVEMENT
FROM CENTERLINE OF ROADWAY TO CONSTRUCTION LIMITS
*QUANTITY TO BE VERIFIED AFTER EXCAVATION

HMA SUMMARY

STATION TO STATION			LOCATION	455.0115	455.0122	455.0605	460.1101
				ASPHALTIC MATERIAL		TACK COAT	HMA PAVEMENT TYPE E-1
				PG64-22 TON	PG64-34 TON		
113+00	-	115+63	STH 160 MAINLINE	11	5	24	282
115+63	-	120+02	STH 160 MAINLINE	15	7	35	419
120+02	-	127+40	STH 160 MAINLINE	24	12	58	699
127+40	-	129+97	STH 160 MAINLINE	13	6	29	343
129+97	-	134+08	STH 160 MAINLINE	20	10	46	559
134+08	-	139+72	STH 160 MAINLINE	28	14	65	772
139+72	-	145+75	STH 160 MAINLINE	30	15	70	834
10+19	-	11+15	Highview Rd.	4	2	10	111
20+14	-	21+00	West Town Rd.	4	2	10	106
30+19	-	31+50	Grant St.	6	3	13	151
40+21	-	41+00	Johnson St.	5	2	10	97
50+21	-	51+00	Lincoln St.	5	2	10	97
60+21	-	61+00	Main St.	5	2	10	110
TOTALS				170	82	390	4580

BASE AGGREGATE DENSE AND BREAKER RUN

STATION TO STATION				LOCATION	305.0110	305.0120	311.0110	REMARKS
					BASE AGGREGATE DENSE		BREAKER	
					3/4-INCH TON	1 1/4-INCH TON	RUN TON	
113+00	-	115+63	LT & RT	STH 160 MAINLINE	-	1238	-	BEGIN PROJECT TO HIGHVIEW RD.
115+63	-	120+02	LT & RT	STH 160 MAINLINE	-	1968	-	HIGHVIEW RD. TO WEST TOWN RD.
120+02	-	127+40	LT & RT	STH 160 MAINLINE	-	3268	-	WEST TOWN ROAD TO GRANT ST.
127+40	-	129+97	LT & RT	STH 160 MAINLINE	-	1469	-	GRANT ST. TO JOHNSON ST.
129+97	-	134+08	LT & RT	STH 160 MAINLINE	-	2369	-	JOHNSON ST. TO LINCOLN ST.
134+08	-	139+72	LT & RT	STH 160 MAINLINE	-	3266	-	LINCOLN ST. TO MAIN ST.
139+72	-	145+75	LT & RT	STH 160 MAINLINE	-	3537	-	MAIN ST. TO END PROJECT
10+25	-	11+15	LT & RT	HIGHVIEW RD.	-	401	-	
20+25	-	21+00	LT & RT	WEST TOWN RD.	-	189	-	
30+25	-	31+50	LT & RT	GRANT ST.	-	365	-	
40+23	-	41+00	LT & RT	JOHNSON ST.	-	237	-	
50+23	-	51+00	LT & RT	LINCOLN ST.	-	238	-	
60+23	-	61+00	LT & RT	MAIN ST.	-	256	-	
113+00	-	114+50	LT	STH 160 SHOULDER	10	58	-	
20+75	-	21+00	LT	WEST TOWN RD. SHOULDER	2	6	-	
113+00	-	145+75	LT & RT	DRIVEWAYS	43	443	-	SEE DRIVEWAY SUMMARY FOR DETAILS
113+00	-	145+75	LT & RT	SIDEWALK		791		3" BASE FOR SIDEWALKS
				PROJECT	-	-	3100	UNDISTRIBUTED
TOTALS					55	20100	3100	

REHEATING LONGITUDINAL JOINTS

STATION	TO	STATION	LOCATION	460.4110.S LF	COMMENTS
113+00	-	145+75 CL	STH 160	3275	LOWER LAYER
113+00	-	145+75 CL	STH 160	3275	UPPER LAYER
127+50	-	145+75 RT	STH 160	1825	LOWER LAYER
127+50	-	145+75 RT	STH 160	1825	UPPER LAYER
127+50	-	145+75 LT	STH 160	1825	LOWER LAYER
127+50	-	145+75 LT	STH 160	1825	UPPER LAYER
113+00	-	115+50 RT	STH 160	250	LOWER LAYER
113+00	-	115+50 RT	STH 160	250	UPPER LAYER
TOTAL				14350	

FINISHING ROADWAY (9532-03-71)

STATION	TO	STATION	LOCATION	213.0100 EACH	REMARKS
113+00	-	145+75	PROJECT	1	
TOTAL				1	

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ALL ITEMS ARE CATEGORY 0010

DRIVEWAY SUMMARY

STATION TO STATION LOCATION	305.0110 **	305.0120 **	416.0160	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	REMARKS
	BASE AGGREGATE DENSE		CONCRETE DRIVEWAY		
	3/4-INCH TON	1 1/4-INCH TON	6-INCH SY	TON	
114+70 LT	-	19	-	7	
115+80 LT	-	22	-	8	PREVIOUSLY GRAVEL
118+83 LT	-	13	-	5	
127+47 RT	9	6	9	-	
127+93 RT	13	8	12	-	
128+42 - 129+68 RT	-	32	16	7	ASPHALT PATCH BEHIND SIDEWALK
128+93 LT	-	7	14	-	
129+72 LT	-	9	17	-	
130+56 LT	-	8	15	-	
131+36 RT	-	7	14	-	
131+74 LT	2	4	6	-	
132+23 RT	-	7	7	1	ASPHALT PATCH BEHIND SIDEWALK
132+26 LT	3	4	6	-	
132+52 LT	-	7	15	-	
132+76 RT	-	8	8	1	ASPHALT PATCH BEHIND SIDEWALK
133+92 LT	2	4	6	-	
134+19 LT	-	6	6	1	ASPHALT PATCH BEHIND SIDEWALK
134+55 LT	-	6	6	1	ASPHALT PATCH BEHIND SIDEWALK
135+03 LT	2	4	6	-	
135+16 RT	-	11	11	1	ASPHALT PATCH BEHIND SIDEWALK
135+54 LT	-	7	7	1	ASPHALT PATCH BEHIND SIDEWALK
135+67 - 136+64 LT	-	42	37	5	ASPHALT PATCH BEHIND SIDEWALK
136+09 RT	-	8	8	1	ASPHALT PATCH BEHIND SIDEWALK
136+76 RT	-	24	17	4	ASPHALT PATCH BEHIND SIDEWALK
136+70 LT	-	6	6	1	ASPHALT PATCH BEHIND SIDEWALK
137+71 LT	3	4	6	-	
137+93 RT	-	12	12	1	ASPHALT PATCH BEHIND SIDEWALK
137+92 LT	3	4	6	-	
139+19 RT	-	10	10	1	ASPHALT PATCH BEHIND SIDEWALK
139+56 RT	-	10	10	1	ASPHALT PATCH BEHIND SIDEWALK
60+74 RT	-	31	53	2	ASPHALT PATCH BEHIND SIDEWALK
140+19 RT	-	8	8	1	ASPHALT PATCH BEHIND SIDEWALK
140+61 LT	-	15	10	3	ASPHALT PATCH BEHIND SIDEWALK
141+07 RT	5	10	13	-	
141+87 LT	1	7	9	-	
142+25 RT	-	18	17	2	ASPHALT PATCH BEHIND SIDEWALK
144+99 RT	-	6	6	1	ASPHALT PATCH BEHIND SIDEWALK
40+96 LT	-	20	12	4	ASPHALT PATCH BEHIND SIDEWALK
138+05 - 139+04 RT	-	6	-	2	ASPHALT PATCH BEHIND SIDEWALK
TOTALS	43	443	420	62	

** SHOWN ELSEWERE ON PLAN

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CULVERT PIPE SUMMARY

STATION	LOCATION	521.0112 CULVERT PIPE CORRUGATED STEEL 12-INCH	521.1012 APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH	COMMENTS
		LF	EACH	
115+80 LF	STH 160	30	2	MINUMUM PIPE THICKNESS = .064"
		30	2	

ALL ITEMS ARE CATEGORY 0010

CONCRETE SIDEWALK SUMMARY

Station to Station				Location	405.0100 COLORING CONCRETE RED CY	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0415 CONCRETE SIDEWALK 6-INCH * SF	REMARKS
115+84	-	127+38	RT	STH 160	-	9213	-	BEGIN PROJECT
127+38	-	127+56	RT	STH 160	-	-	90	DRIVEWAY
127+56	-	127+82	RT	STH 160	1	223	-	
127+82	-	128+06	RT	STH 160	-	-	120	DRIVEWAY
128+06	-	128+42	RT	STH 160	2	321	-	
128+42	-	128+77	RT	STH 160	-	-	175	DRIVEWAY
128+77	-	127+76	RT	STH 160	6	1036	-	
130+17	-	131+29	RT	STH 160	7	1149	-	
131+29	-	131+43	RT	STH 160	-	-	70	DRIVEWAY
131+43	-	132+16	RT	STH 160	4	672	-	
132+16	-	132+29	RT	STH 160	-	-	65	DRIVEWAY
132+29	-	132+69	RT	STH 160	2	345	-	
132+69	-	132+84	RT	STH 160	-	-	75	DRIVEWAY
132+84	-	133+87	RT	STH 160	6	1108	-	
134+29	-	135+05	RT	STH 160	5	836	-	
135+05	-	135+27	RT	STH 160	-	-	110	DRIVEWAY
135+27	-	136+01	RT	STH 160	4	709	-	
136+01	-	136+17	RT	STH 160	-	-	80	DRIVEWAY
136+17	-	136+58	RT	STH 160	2	355	-	
136+58	-	136+94	RT	STH 160	-	-	180	DRIVEWAY
136+94	-	137+81	RT	STH 160	4	823	-	
137+81	-	138+05	RT	STH 160	-	-	120	DRIVEWAY
138+05	-	139+09	RT	STH 160	5	935	-	
139+09	-	139+29	RT	STH 160	-	-	100	DRIVEWAY
139+29	-	139+46	RT	STH 160	1	145	-	
139+46	-	139+66	RT	STH 160	-	-	100	DRIVEWAY
139+66	-	140+11	RT	STH 160	2	601	-	
140+11	-	140+27	RT	STH 160	-	-	80	DRIVEWAY
140+27	-	140+93	RT	STH 160	3	687	-	
140+93	-	141+21	RT	STH 160	-	-	140	DRIVEWAY
141+21	-	142+07	RT	STH 160	4	973	-	
142+07	-	142+43	RT	STH 160	-	-	180	DRIVEWAY
142+43	-	144+93	RT	STH 160	12	2635	-	
144+93	-	145+05	RT	STH 160	-	-	60	DRIVEWAY
145+05	-	145+75	RT	STH 160	3	694	-	END PROJECT
127+60	-	128+86	LT	STH 160	7	1311	-	BEGIN PROJECT
128+86	-	129+00	LT	STH 160	-	-	70	DRIVEWAY
129+00	-	129+63	LT	STH 160	3	558	-	
129+63	-	129+80	LT	STH 160	-	-	85	DRIVEWAY
129+80	-	130+49	LT	STH 160	3	609	-	
SUBTOTALS					85	25937	1900	

* ALSO IN DRIEWAY SUMMARY

Station to Station				Location	405.0100 COLORING CONCRETE RED CY	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0415 CONCRETE SIDEWALK 6-INCH * SF	REMARKS
130+49	-	130+63	LT	STH 160	-	-	70	DRIVEWAY
130+63	-	131+68	LT	STH 160	5	941	-	
131+68	-	131+80	LT	STH 160	-	-	60	DRIVEWAY
131+80	-	132+20	LT	STH 160	2	357	-	
132+20	-	132+32	LT	STH 160	-	-	60	DRIVEWAY
132+32	-	132+45	LT	STH 160	1	109	-	
132+45	-	132+59	LT	STH 160	-	-	70	DRIVEWAY
132+59	-	133+86	LT	STH 160	6	1154	-	
133+86	-	133+98	LT	STH 160	-	-	60	DRIVEWAY
133+98	-	134+13	LT	STH 160	1	135	-	
134+13	-	134+25	LT	STH 160	-	-	60	DRIVEWAY
134+25	-	134+49	LT	STH 160	1	207	-	
134+49	-	134+61	LT	STH 160	-	-	60	DRIVEWAY
134+61	-	134+97	LT	STH 160	2	310	-	
134+97	-	135+09	LT	STH 160	-	-	60	DRIVEWAY
135+09	-	135+47	LT	STH 160	2	340	-	
135+47	-	135+60	LT	STH 160	-	-	65	DRIVEWAY
135+60	-	135+68	LT	STH 160	1	64	-	
135+68	-	136+02	LT	STH 160	-	-	168	DRIVEWAY
136+02	-	136+12	LT	STH 160	1	80	-	
136+12	-	136+56	LT	STH 160	-	-	221	DRIVEWAY
136+56	-	136+64	LT	STH 160	1	64	-	
136+64	-	136+76	LT	STH 160	-	-	60	DRIVEWAY
136+76	-	137+65	LT	STH 160	4	809	-	
137+65	-	137+77	LT	STH 160	-	-	60	DRIVEWAY
137+77	-	137+86	LT	STH 160	1	75	-	
137+86	-	137+98	LT	STH 160	-	-	60	DRIVEWAY
137+98	-	139+46	LT	STH 160	8	1608	-	
139+92	-	140+51	LT	STH 160	4	681	-	
140+51	-	140+71	LT	STH 160	-	-	100	DRIVEWAY
140+71	-	141+77	LT	STH 160	5	1170	-	
141+77	-	141+96	LT	STH 160	-	-	95	DRIVEWAY
141+96	-	145+75	LT	STH 160	19	4528	-	END PROJECT
30+33	-	31+13	RT	GRANT ST.	-	390	-	
40+32	-	40+84	LT	JOHNSON ST.	-	257	-	
40+84	-	41+08	LT	JOHNSON ST.	-	-	120	DRIVEWAY
41+08	-	41+10	LT	JOHNSON ST.	-	10	-	
40+33	-	41+00	RT	JOHNSON ST.	-	335	-	
50+33	-	51+00	LT	LINCOLN ST.	-	321	-	
50+33	-	51+00	RT	LINCOLN ST.	-	339	-	
60+33	-	61+00	LT	MAIN ST.	-	327	-	
50+30	-	60+51	RT	MAIN ST.	-	101	-	
60+51	-	60+95	RT	MAIN ST.	-	-	221	DRIVEWAY
SUBTOTALS					62	14713	1670	
PROJECT TOTALS					147	40650	3570	

* ALSO IN DRIEWAY SUMMARY

ALL ITEMS ARE CATEGORY 0010

CONCRETE CURB & GUTTER SUMMARY

STATION TO STATION				LOCATION	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	REMARKS
113+00	-	115+22	RT	STH 160	222	-	BEGIN PROJECT
114+50	-	119+61	LT	STH 160	511	-	
10+21	-	11+15	LT	HIGHVIEW RD.	107	-	
10+21	-	11+15	RT	HIGHVIEW RD.	107	-	
116+04	-	129+54	RT	STH 160	1304	49	SEE BUMP OUT DETAIL FOR LIMITS
20+23	-	20+75	LT	WEST TOWN RD.	66	-	
20+19	-	21+00	RT	WEST TOWN RD.	93	-	
120+38	-	126+99	LT	STH 160	661	-	
30+21	-	31+50	LT	GRANT ST.	142	-	
30+16	-	31+50	RT	GRANT ST.	110	37	SEE BUMP OUT DETAIL FOR LIMITS
127+82	-	139+24	LT	STH 160	1078	68	SEE BUMP OUT DETAIL FOR LIMITS
40+16	-	41+10	LT	JOHNSON ST.	70	37	SEE BUMP OUT DETAIL FOR LIMITS
40+17	-	41+10	RT	JOHNSON ST.	61	36	SEE BUMP OUT DETAIL FOR LIMITS
130+39	-	133+65	RT	STH 160	260	68	SEE BUMP OUT DETAIL FOR LIMITS
50+17	-	51+00	LT	LINCOLN ST.	60	37	SEE BUMP OUT DETAIL FOR LIMITS
50+16	-	51+00	RT	LINCOLN ST.	60	37	SEE BUMP OUT DETAIL FOR LIMITS
134+51	-	145+75	RT	STH 160	1092	34	SEE BUMP OUT DETAIL FOR LIMITS
60+19	-	61+00	LT	MAIN ST.	72	23	SEE BUMP OUT DETAIL FOR LIMITS
60+13	-	61+00	RT	MAIN ST.	75	25	SEE BUMP OUT DETAIL FOR LIMITS
140+14	-	145+75	LT	STH 160	529	34	SEE BUMP OUT DETAIL FOR LIMITS
TOTALS					6680	485	

CURB RAMP DETECTABLE WARNING FIELD WHITE

STATION			LOCATION	602.0510 SF	CURB RAMP TYPE
11+70	RT		HIGHVIEW	8	2
30+30	RT		GRANT	8	2
127+70	RT		STH 160	8	7B
127+70	LT		STH 160	8	2
129+50	RT		STH 160	8	3
129+50	LT		STH 160	8	7B
41+70	RT		JOHNSON	8	2
41+70	LT		JOHNSON	8	2
130+27	RT		STH 160	8	2
130+27	LT		STH 160	8	7B
133+61	RT		STH 160	8	3
133+61	LT		STH 160	8	7B
51+70	RT		LINCOLN	8	2
51+70	LT		LINCOLN	8	2
134+38	RT		STH 160	8	2
134+38	LT		STH 160	8	7B
139+37	RT		STH 160	8	7B
139+27	LT		STH 160	8	2
60+29	RT		MAIN	8	2
60+29	LT		MAIN	8	2
140+02	RT		STH 160	8	7B
140+02	LT		STH 160	8	2
TOTAL				176	

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ALL ITEMS ARE CATEGORY 0010

STORM SEWER PIPE SUMMARY

TRUNKLINE

STRUCTURE FROM TO		INVERT ELEVATION (FEET) INLET DISCHARGE		608.0324	608.0424	608.0430
				REINFORCED CLASS III	CONCRETE CLASS IV	CULVERT PIPE CLASS IV
				24-INCH LF	24-INCH LF	30-INCH LF
1	2	817.92	817.45		147	-
2	3	817.45	816.78		186	-
3	4	816.78	815.37		268	-
4	5	815.37	814.19	225		-
5	6	814.19	812.49	325		-
6	7	812.49	811.96	100		-
7	8	811.96	811.45	97		-
8	9	811.45	811.01	85		-
9	10	811.01	810.43	110		-
10	11	810.43	809.92	97		-
11	12	809.92	809.21	136		-
12	13	809.21	808.27	178		-
13	14	808.27	806.64	310		-
14	15	806.64	805.50	217		-
15	16	805.50	804.80	134		-
16	17	804.30	803.06	-		236
17	18	803.06	802.14	-		175
18	19	802.14	801.49	-		125
19	exist	801.49	801.07			80
TOTALS				2014	600	615

INSULATION BOARD POLYSTYRENE, 2-INCH

LOCATION	612.0902.S SY
UNDISTRIBUTED	96

CONCRETE COLLARS FOR CULVERT PIPE

STATION	OFFSET	LOCATION	520.8000 EACH
51+55	LT	LINCOLN	1
142+12.78	RT	STH 160	1

2

CATCH BASIN LINES

STRUCTURE FROM TO		INVERT ELEVATION (FEET) INLET DISCHARGE		608.0412	608.0418
				REINFORCED CLASS IV	CONCRETE CLASS IV
				12-INCH LF	18-INCH LF
1.1	1	820.00	817.92	32	-
1.2	1	819.68	817.92	33	-
2.1	2.2	818.00	817.68	32	-
2.2	2.3	817.68	817.32	36	-
2.3	2	817.32	817.13	19	-
3.1	3.2	819.75	818.00	22	-
3.2	3	817.98	817.84	14	-
3.3	3.4	819.93	818.00	13	-
3.4	3	817.98	817.84	14	-
4.1	4	819.60	816.00	40	-
4.2	4.3	818.08	817.81	27	-
4.3	4	817.81	816.00	46	-
5.1	5.2	819.50	817.40	21	-
5.2	5	817.36	817.22	14	-
5.3	5	817.36	817.22	14	-
6.1	6.2	818.60	816.30	20	-
6.2	6	816.21	816.07	14	-
6.3	6.4	813.90	816.30	13	-
6.4	6	816.21	816.07	14	-
7.1	7	815.77	815.63	14	-
7.2	7	815.77	815.63	14	-
8.1	8.2	815.58	815.25	33	-
8.2	8	815.25	814.24	45	-
10.1	10	815.87	815.52	35	-
10.2	10	815.87	815.80	7	-
11.1	11.2	815.30	814.95	35	-
11.2	11	814.95	813.50	59	-
12.1	12	814.36	814.01	35	-
12.2	12	814.36	814.29	7	-
13.1	13	812.92	812.57	35	-
13.2	13	812.92	812.85	7	-
14.1	14	810.42	810.07	35	-
14.2	14	810.42	810.35	7	-
15.1	15	808.78	808.43	35	-
15.2	15	808.78	808.71	7	-
16.1	16	807.82	807.47	35	-
16.2	16.3	807.81	807.42	39	-
16.3	16	807.00	806.72	-	28
17.1	17	805.70	805.63	7	-
18.1	18	804.13	803.78	35	-
18.2	18	804.13	803.78	35	-
100	exist	811.50	EXIST	EXIST	-
100.1	100	812.00	811.65	35	-
200	exist	805.81	EXIST	EXIST	-
TOTALS				1034	28

3

3

ALL ITEMS ARE CATEGORY 0010
SHEET 1 OF 2

STORM SEWER STRUCTURE SUMMARY

No. STA OFFSET			STR TYPE RIM ELEV		INVERT ELEV	DEPTH (FEET)	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE EACH	611.2004	611.2006	611.1004	611.0530	SPV.006.06	611.0624	611.9800.S	628.7005	628.7015	628.7020
								MANHOLES	MANHOLES	CATCH BASIN	MANHOLE COVER	INLET COVERS	INLET COVERS	PIPE GRATES	INLET PROTECTION		
								4-FT DIA EACH	6-FT DIA EACH	4-FT DIA EACH	TYPE J EACH	TYPE H DRIVEWAY EACH	TYPE H EACH	EACH	TYPE A EACH	TYPE C EACH	TYPE D EACH
1	113+75.00	0.00'	MH	823.47	817.92	4.30	-	1	-	-	1	-	-	-	-	-	-
2	115+21.73	0.00'	MH	823.03	817.45	4.33	-	1	-	-	1	-	-	-	-	-	-
3	117+07.28	0.00'	MH	822.27	816.78	4.24	-	1	-	-	1	-	-	-	-	-	-
4	119+75.00	0.00'	MH	822.99	815.37	6.37	-	1	-	-	1	-	-	-	-	-	-
5	122+00.00	0.00'	MH	821.64	814.19	6.20	-	1	-	-	1	-	-	-	-	-	-
6	125+25.00	0.00'	MH	820.49	812.48	6.76	-	1	-	-	1	-	-	-	-	-	-
7	126+25.00	0.00'	MH	820.05	811.96	6.84	-	1	-	-	1	-	-	-	-	-	-
8	127+22.00	0.00'	MH	820.28	811.45	7.58	-	-	1	-	1	-	-	-	-	-	-
9	128+07.00	14.00' LT	MH	820.28	811.00	8.03	-	1	-	-	1	-	-	-	-	-	-
10	129+17.31	14.00' LT	MH	820.01	810.42	8.34	-	1	-	-	1	-	-	-	-	-	-
11	130+14.39	14.00' LT	MH	819.6	809.91	8.44	-	1	-	-	1	-	-	-	-	-	-
12	131+50.00	14.00' LT	MH	818.5	809.20	8.05	-	1	-	-	1	-	-	-	-	-	-
13	133+28.37	14.00' LT	MH	817.06	808.26	7.55	-	1	-	-	1	-	-	-	-	-	-
14	136+38.17	14.00' LT	MH	814.56	806.63	6.68	-	1	-	-	1	-	-	-	-	-	-
15	138+55.00	14.00' LT	MH	812.92	805.49	6.18	-	1	-	-	1	-	-	-	-	-	-
16	139+89.24	14.00' LT	MH	811.96	804.30	6.41	-	-	1	-	1	-	-	-	-	-	-
17	142+25.00	14.00' LT	MH	809.84	803.06	5.53	-	-	1	-	1	-	-	-	-	-	-
18	144+00.00	14.00' LT	MH	808.27	802.14	4.88	-	-	1	-	1	-	-	-	-	-	-
19	145+25.00	14.00' LT	MH	807.26	801.48	4.53	-	-	1	-	1	-	-	-	-	-	-
1.1	113+75.00	32.00' RT	AEW	-	820.00	-	1	-	-	-	-	-	-	1	-	-	-
1.2	113+75.00	32.50' LT	AEW	-	819.68	-	1	-	-	-	-	-	-	1	-	-	-
2.1	11+55.00	16.36' RT	CB	822	818.00	5.17	-	-	-	1	-	-	1	-	1	1	-
2.2	11+55.00	15.85' LT	CB	822.01	817.68	5.50	-	-	-	1	-	-	1	-	1	1	-
2.3	115+21.73	19.20' RT	CB	822.64	817.32	6.49	-	-	-	1	-	-	1	-	1	1	-
3.1	117+07.28	36.50' RT	AEW	-	819.75		1	-	-	-	-	-	-	1	-	-	-
3.2	117+07.28	14.00' RT	CB	821.98	817.98	5.17	-	-	-	1	-	-	1	-	1	-	1
3.3	117+07.28	27.30' LT	AEW	-	819.93		1	-	-	-	-	-	-	1	-	-	-
3.4	117+07.28	14.00' LT	CB	821.98	817.98	5.17	-	-	-	1	-	-	1	-	1	-	1
4.1	119+75.00	40.00' RT	AEW	-	819.60		1	-	-	-	-	-	-	1	-	-	-
4.2	20+45.00	12.85' RT	CB	822.08	818.08	5.17	-	-	-	1	-	-	1	-	1	-	1
4.3	20+45.00	14.23' LT	CB	822.05	817.81	5.41	-	-	-	1	-	-	1	-	1	-	1
5.1	122+00.00	35.00' RT	AEW	-	819.50		1	-	-	-	-	-	-	1	-	-	-
5.2	122+00.00	14.00' RT	CB	821.36	817.36	5.17	-	-	-	1	-	-	1	-	1	1	-
5.3	122+00.00	14.00' LT	CB	821.36	817.36	3.17	-	-	-	1	-	-	1	-	1	1	-
SUBTOTALS							6	14	5	9	19	0	9	6	9	5	4

- NOTES:
- TOP COVER ELEVATION FOR INLETS AND CATCH BASINS IN CURBLINE IS FLANGE ELEVATION.
 - OFFSETS TO MANHOLES ARE GIVEN TO CENTER OF STRUCTURE, CATCHBASINS TO FLANGE OF CURB
 - DEPTHS OF MH STRUCTURES ARE MEASURED FROM LOWEST PIPE INVERT ELEVATION TO THE TOP OF MASONRY. (RIM ELEV. - 9" CASTING - 6" ADJUSTMENT - LOWEST INVERT ELEVATION)
DEPTHS OF CB STRUCTURES ARE MEASURED FROM THE BOTTOM OF THE SUMP TO THE TOP OF THE MASONRY. (RIM ELEVATION - 6" CASTING - 4" ADJUSTMENT - LOWEST INVERT + 2' SUMP)

MH = MANHOLE
AEW = APRON ENDWALL
CB = CATCH BASIN

3

ALL ITEMS ARE CATEGORY 0010
SHEET 2 OF 2

STORM SEWER STRUCTURE SUMMARY

No.	STA	OFFSET	RT	STR TYPE	RIM ELEV	INVERT ELEV	DEPTH (FEET)	522.1012	611.2004	611.2006	611.1004	611.0530	SPV.006.06	611.0624	611.9800.S	628.7005	628.7015	628.7020
								APRON ENDWALLS FOR CULVERT PIPE	MANHOLES	MANHOLES	CATCH BASIN	MANHOLE COVER	INLET COVERS	INLET COVERS	PIPE GRATES	INLET PROTECTION		
								REINFORCED CONCRETE EACH	4-FT DIA EACH	6-FT DIA EACH	4-FT DIA EACH	TYPE J EACH	TYPE H DRIVEWAY EACH	TYPE H EACH	EACH	TYPE A EACH	TYPE C EACH	TYPE D EACH
6.1	125+25.00	34.00'	RT	AEW	-	818.60	-	1	-	-	-	-	-	-	1	-	-	
6.2	125+25.00	14.00'	RT	CB	820.21	816.21	5.167	-	-	-	1	-	-	1	-	1	1	
6.3	125+25.00	27.60'	LT	AEW	817.90	817.90	1.167	-	-	-	1	-	-	1	-	1	1	
6.4	125+25.00	14.00'	LT	CB	-	816.21	-	1	-	-	-	-	-	-	1	-	-	
7.1	126+25.00	14.00'	RT	CB	819.77	815.77	5.167	-	-	-	1	-	-	1	-	1	-	1
7.2	126+25.00	14.00'	LT	CB	819.77	815.77	5.167	-	-	-	1	-	-	1	-	1	-	1
8.1	30+45.00	15.93'	RT	CB	819.58	815.58	5.167	-	-	-	1	-	-	1	-	1	-	1
8.2	30+45.00	17.17'	LT	CB	819.40	815.25	5.317	-	-	-	1	-	-	1	-	1	-	1
10.1	129+17.31	21.00'	RT	CB	819.87	815.87	5.167	-	-	-	1	-	-	1	-	1	1	
10.2	129+17.31	21.00'	LT	CB	819.87	815.87	5.167	-	-	-	1	-	-	1	-	1	1	
11.1	41+55.00	18.38'	LT	CB	819.30	815.30	5.167	-	-	-	1	-	-	1	-	1	-	1
11.2	41+55.00	16.87'	RT	CB	819.32	814.95	5.537	-	-	-	1	-	-	1	-	1	-	1
12.1	131+50.00	21.00'	RT	CB	818.36	814.36	5.167	-	-	-	1	-	-	1	-	1	1	
12.2	131+50.00	21.00'	LT	CB	818.36	814.36	5.167	-	-	-	1	-	-	1	-	1	1	
13.1	133+28.37	21.00'	RT	CB	816.92	812.92	5.167	-	-	-	1	-	-	1	-	1	1	
13.2	133+28.37	21.00'	LT	CB	816.92	812.92	5.167	-	-	-	1	-	-	1	-	1	1	
14.1	136+38.17	21.00'	RT	CB	814.42	810.42	5.167	-	-	-	1	-	-	1	-	1	1	
14.2	136+38.17	21.00'	LT	CB	814.42	810.42	5.167	-	-	-	1	-	-	1	-	1	1	
15.1	138+55.00	21.00'	RT	CB	812.78	808.78	5.167	-	-	-	1	-	-	1	-	1	1	
15.2	138+55.00	21.00'	LT	CB	812.78	808.78	5.167	-	-	-	1	-	-	1	-	1	1	
16.1	139+89.24	21.00'	RT	CB	811.82	807.82	5.167	-	-	-	1	-	-	1	-	1	1	
16.2	60+40.00	19.75'	LT	CB	811.81	807.81	5.167	-	-	-	1	-	-	1	-	1	-	1
16.3	60+40.00	19.32'	RT	CB	811.42	807.00	5.587	-	-	-	1	-	-	1	-	1	-	1
17.1	142+25.00	21.00'	LT	CB	809.70	805.70	5.167	-	-	-	1	-	-	1	-	1	1	
18.1	144+00.00	21.00'	RT	CB	808.13	804.13	5.167	-	-	-	1	-	-	1	-	1	1	
18.2	144+00.00	21.00'	LT	CB	808.13	804.13	5.167	-	-	-	1	-	-	1	-	1	1	
100	51+55.00	17.88'	LT	CB	815.99	811.50	5.657	-	-	-	1	-	-	1	-	1	-	1
100.1	51+55.00	17.47'	RT	CB	815.99	812.00	5.157	-	-	-	1	-	-	1	-	1	-	1
200	142+12.78	21.00'	RT	CB	809.81	805.81	5.167	-	-	-	1	-	1	-	-	1	1	

SUBTOTALS	2	0	0	27	0	1	26	2	27	17	10
PROJECT TOTALS	8	14	5	36	19	1	35	8	36	22	14

NOTES:

1. TOP COVER ELEVATION FOR INLETS AND CATCH BASINS IN CURBLINE IS FLANGE ELEVATION.
2. OFFSETS TO MANHOLES ARE GIVEN TO CENTER OF STRUCTURE, CATCHBASINS TO FLANGE OF CURB
3. DEPTHS OF MH STRUCTURES ARE MEASURED FROM LOWEST PIPE INVERT ELEVATION TO THE TOP OF MASONRY. (RIM ELEV. - 9" CASTING - 6" ADJUSTMENT - LOWEST INVERT ELEVATION)
DEPTHS OF CB STRUCTURES ARE MEASURED FROM THE BOTTOM OF THE SUMP TO THE TOP OF THE MASONRY. (RIM ELEVATION - 6" CASTING - 4" ADJUSTMENT - LOWEST INVERT + 2' SUMP)

MH = MANHOLE
AEW = APRON ENDWALL
CB = CATCH BASIN

ALL ITEMS ARE CATEGORY 0010

FENCE SAFETY

STATION TO STATION				LOCATION	616.0700.S LF
130+25	-	145+75	RT	STH 160	1550
127+75	-	145+75	LT	STH 160	1800
TOTAL					3350

MOBILIZATION

STATION TO STATION				LOCATION	619.1000 EACH
113+00	-	145+75		PROJECT	1
TOTAL					1

DUST CONTROL

	623.0200 DUST CONTROL SURFACE TREATMENT
LOCATION	SY
UNDISTRIBUTED	35900

SILT FENCE

STATION TO STATION				LOCATION	628.1504 LF	628.1520 MAINTENANCE LF
113+00	-	117+00	LT	STH 160	400	800
SUBTOTALS					400	800
UNDISTRIBUTED AMOUNT					200	200
PROJECT TOTALS					600	1000

MOBILIZATIONS EMERGENCY EROSION CONTROL

STATION TO STATION				LOCATION	628.1910 EACH
113+00	-	145+75		PROJECT	3
TOTAL					3

MOBILIZATIONS EROSION CONTROL

STATION TO STATION				LOCATION	628.1905 EACH
113+00	-	145+75		PROJECT	4
TOTAL					4

LANDSCAPING SUMMARY

STATION TO STATION				LOCATION	625.0105 TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEED MIXTURE NO. 30 LB	630.0140 SEED MIXTURE NO. 40 LB
113+00	-	115+44	RT	STH 160	471	-	0.40	8	-
115+82	-	128+30	RT	STH 160	2557	-	1.71	46	-
130+31	-	133+76	RT	STH 160	160	160	0.10	-	3
134+40	-	140+93	RT	STH 160	185	185	0.12	-	3
113+00	-	119+84	LT	STH 160	1742	-	1.10	31	-
120+16	-	127+21	LT	STH 160	1612	-	1.10	29	-
127+71	-	139+04	LT	STH 160	513	513	0.32	-	9
140+05	-	145+75	LT	STH 160	114	114	0.07	-	2
10+42	-	11+15	LT & RT	Highview Rd.	241	241	0.15	-	4
20+43	-	21+08	LT & RT	West Town Rd.	205	205	0.13	-	4
30+38	-	31+33	LT & RT	Grant St.	225	225	0.14	-	4
40+38	-	41+01	RT	Johnson St.	44	44	0.03	-	1
50+38	-	50+83	LT & RT	Lincoln St.	51	51	0.03	-	1
60+34	-	61+00	LT & RT	Main St.	40	40	0.03	-	1
SUBTOTALS					8160	1778	5.43	115	32
UNDISTRIBUTED AMOUNT					2040	442	1	29	8
PROJECT TOTALS					10200	2220	6.43	144	40

3

ALL ITEMS ARE CATEGORY 0010

EROSION MAT URBAN CLASS I TYPE B

STATION	TO	STATION	LOCATION	628.2008 SY
113+00	-	115+44 RT	STH 160	471
115+82	-	128+30 RT	STH 160	2557
113+00	-	119+84 LT	STH 160	1744
120+16	-	127+21 LT	STH 160	1612
SUBTOTAL				6385
UNDISTRIBUTED				1595
TOTAL				7980

FIELD OFFICE TYPE D

LOCATION	642.5001 EACH	REMARKS
PROJECT	1	
TOTAL	1	

TRACKING PADS

STATION	TO	STATION	LOCATION	628.756 EACH
113+00	-	145+75	PROJECT	3
TOTAL				3

TEMPORARY DITCH CHECKS

STATION	TO	STATION	LOCATION	628.7504 LF
126+00		LT	STH 160	12
SUBTOTAL				12
UNDISTRIBUTED AMOUNT				36
PROJECT TOTAL				48

CULVERT PIPE DITCH CHECKS

STATION	TO	STATION	628.7555 EACH	REMARKS
113+75		LT	5	AEW
114+25		RT	5	AEW
115+80		LT	5	CP
117+00		LT	5	AEW
117+00		RT	5	AEW
119+75		RT	5	AEW
125+25		LT	5	AEW
122+00		RT	5	AEW
125+25		RT	5	AEW
TOTAL			45	

MARKERS CULVERT ENDS

STATION	TO	STATION	633.5200 EACH	REMARKS
113+75		LT	1	AEW
114+25		RT	1	AEW
117+00		LT	1	AEW
117+00		RT	1	AEW
119+75		RT	1	AEW
125+25		LT	1	AEW
122+00		RT	1	AEW
125+25		RT	1	AEW
TOTAL			8	

3

ALL ITEMS ARE CATEGORY 0010

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.0202 SIGNS REFLECTIVE TYPE II SF	634.0614 POSTS WOOD 4x6x14 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1	W. TOWN RD	R1-1	30" X 30"	5.18	1	1	1	
2	AT W. TOWN RD	I2-2	54" X 15"	5.63	2	1	2	SEE SIGN DETAIL
3	"	I2-3	60" X 24"	10.00	---	1	---	MOUNT BELOW SIGN #2, SEE SIGN DETAIL
4	"	I2-2	66" X 15"	6.88	2	1	---	MOUNT ON BACK OF SIGN #2, SEE SIGN DETAIL
5	E. OF W. TOWN RD	R2-1	24" X 30"	5.00	1	1	1	40 MPH
6	"	W3-5	36" X 36"	9.00	1	1	1	25 MPH
7	GRANT ST	R1-1	30" X 30"	5.18	1	1	1	
8	W. OF GRANT ST	R2-1	24" X 30"	5.00	1	1	1	25 MPH
9	JOHNSON ST	R1-1	30" X 30"	6.25	1	1	1	
10	W. OF LINCOLN ST	R2-1	24" X 30"	5.00	1	1	1	25 MPH
11	LINCOLN ST	R1-1	30" X 30"	5.18	1	1	1	
12	VACANT							
13	E. OF LINCOLN ST	SP	30" X 30"	6.25	1	1	1	SEE PLAN SHEET
14	"	R2-1	24" X 30"	5.00	---	1	---	25 MPH, MOUNT ON UTILITY POLE
15	W. OF MAIN ST	SP	30" X 30"	6.25	---	1	---	SEE PLAN SHEET, MOUNT ON LIGHT POLE
16	MAIN ST	R1-1	30" X 30"	5.18	1	1	1	
17	E. OF MAIN ST	J1-1	24" X 39"	6.50	---	2	---	STH 32, SEE PLAN SHEET, MOUNT ON LIGHT POLE
18	"	J4-1	24" X 36"	6.00	---	2	---	STH 160, SEE PLAN SHEET, MOUNT ON LIGHT POLE
19	"	W3-1	36" X 36"	9.00	---	1	---	MOUNT ON LIGHT POLE
20	"	D1-2	72" X 30"	15.00	---	1	---	MOUNT ON MAST ARM, SEE SIGN DETAIL
21	"	S1-1	36" X 36"	6.75	---	1	---	MOUNT ON LIGHT POLE
21A	"	W16-9P	24" X 8"	1.33	---	1	---	MOUNT BELOW SIGN #21
21B	"	R2-6P	24" X 18"	3.00	---	1	---	MOUNT BELOW SIGN #21A
22	"	R2-1	24" X 30"	5.00	---	1	---	25 MPH, MOUNT ON LIGHT POLE
23	"	S1-1	36" X 36"	6.75	---	1	---	MOUNT ON LIGHT POLE
23A	"	W16-7L	24" X 12"	2.00	---	1	---	MOUNT BELOW SIGN #23
24	"	R7-51L	18" X 24"	3.00	---	1	---	MOUNT BELOW SIGN #23A
25	"	R1-1	30" X 30"	5.18	1	1	1	MOUNT ON LIGHT POLE
25A	"	R1-3P	18" X 6"	0.75	---	1	---	MOUNT BELOW SIGN #25
TOTALS				161.23	15	30	13	

ALL ITEMS ARE CATEGORY 0010

TRAFFIC CONTROL (9532-03-71)

STATION	TO	STATION	LOCATION	643.0100 EACH
113+00	-	145+75	PROJECT	1
TOTAL				1

TRAFFIC CONTROL DETOUR (9532-03-71)

STATION	TO	STATION	LOCATION	643.2000 EACH	REMARKS
113+00	-	145+75	PROJECT	1	
TOTAL				1	

TRAFFIC CONTROL SUMMARY

LOCATION	APPROX. SERVICE PERIOD DAYS	643.0300 DRUMS		643.0410 BARRICADES TYPE II		643.0420 BARRICADES TYPE III		WARNING LIGHTS 643.0705 TYPE A		643.0900 TRAFFIC CONTROL SIGNS		643.1050 TRAFFIC CONTROL PORTABLE CHANGEABLE MESSAGE		REMARKS
		NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	
113+00 (WEST PROJECT LIMITS)	150	-	-	-	-	6	900	12	1800	6	900	1	7	SDD BARRICADE AND SIGNS FOR MAINLINE CLOSURES Detail C
145+75 (EAST PROJECT LIMITS)	150	-	-	-	-	6	900	12	1800	6	900	1	7	SDD BARRICADE AND SIGNS FOR MAINLINE CLOSURES Detail E
HIGHVIEW ROAD	150	-	-	-	-	2	300	4	600	3	450	-	-	SDD BARRICADE AND SIGNS FOR SIDEROAD CLOSURES Detail 4
WEST TOWN ROAD	150	-	-	-	-	2	300	4	600	3	450	-	-	SDD BARRICADE AND SIGNS FOR SIDEROAD CLOSURES Detail 4
GRANT STREET	150	-	-	-	-	2	300	4	600	3	450	-	-	SDD BARRICADE AND SIGNS FOR SIDEROAD CLOSURES Detail 4
JOHNSON STREET	150	-	-	-	-	2	300	4	600	3	450	-	-	SDD BARRICADE AND SIGNS FOR SIDEROAD CLOSURES Detail 4
LINCOLN STREET	150	-	-	-	-	2	300	4	600	3	450	-	-	SDD BARRICADE AND SIGNS FOR SIDEROAD CLOSURES Detail 4
MAIN STREET	150	-	-	-	-	2	300	4	600	3	450	-	-	SDD BARRICADE AND SIGNS FOR SIDEROAD CLOSURES Detail 4
SIDEWALK CLOSURES	35	-	-	8	280	-	-	-	-	4	140	-	-	SSD SIDEWALK CLOSURE; 7 DAYS PER BLOCK; 5 BLOCKS
DETOUR SIGNING	150					2	300	4	600					
PROJECT	150	50	7500	-	-	-	-	-	-	-	-	-	-	UNDISTRIBUTED
PROJECT TOTALS		50	7500	8	280	26	3900	52	7800	34	4640	2	14	

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ALL ITEMS ARE CATEGORY 0010
SHEET 1 OF 5

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 150 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420 BARRICADES TYPE III ** DAYS	643.0705 WARNING LIGHTS TYPE A ** DAYS	643.0910 COVERING SIGNS TYPE 1 **** EACH	643.0920 COVERING SIGNS TYPE II **** EACH	REMARKS
1	1000'W OF SIGN # 3	M 1-6	36"x36"	1	150	150					160
	"	W 20-2-A	48"x48"	1	150	150					
2	ACROSS FROM SIGN # 1 (MEDIAN SIDE)	M 1-6	36"x36"	1	150	150					160
	"	W 20-2-A	48"x48"	1	150	150					
3	TYPE 1 (55-160, PULASKI-SEYMOUR, 1 MILE)								1		160-PULASKI
4	LT OF SIGN # 3	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
	"	MO 6-1	30"x30"	1	150	150					AHEAD
5	ACROSS FROM SIGN # 4 (MEDIAN SIDE)	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
	"	MO 6-1	30"x30"	1	150	150					AHEAD
6	1/2 MILE E OF SIGN # 4	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
	"	MO 6-1	30"x30"	1	150	150					AHEAD
7	ACROSS FROM SIGN # 6 (MEDIAN SIDE)	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
	"	MO 6-1	30"x30"	1	150	150					AHEAD
8	TYPE 1 (55-160, PULASKI-SEYMOUR, TILT RIGHT)								1		160-PULASKI
9	LT OF SIGN # 8	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
	"	MO 6-1	30"x30"	1	150	150					AHEAD
10	ACROSS FROM SIGN # 9 (MEDIAN SIDE)	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
	"	MO 6-1	30"x30"	1	150	150					AHEAD
11	D1-3 (LT-PULASKI; SEYMOUR-ANGELICA RT)				150					1	LT-PULASKI
12	J3-1 (E-160-LT)									1	E-160-LT
13	TYPE 1 (55-160, PULASKI-SEYMOUR, TILT RIGHT)									1	160-PULASKI
14A	LT OF J4-1 (E-29) SIGN	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
14B	ACROSS FROM SIGN # 14A (MEDIAN SIDE)	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
15	TYPE 1 (55-160, PULASKI-SEYMOUR, 1 MILE)								1		160-PULASKI
16A	1000' E OF SIGN # 15	MO 4-8-A	30"X24"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
16B	ACROSS FROM SIGN # 16A (MEDIAN SIDE)	MO 4-8-A	30"X24"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
17A	200' E OF REDWOOD DR INTERSECTION ON STH 29	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
17B	ACROSS FROM SIGN # 17A (MEDIAN SIDE)	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160

SUBTOTAL

44

6,600

0

0

3

3

** QUANTITIES PAID FOR IN TRAFFIC CONTROL SUMMARY TABLE
**** ALL SIGNS TO BE COVERED/UNCOVERED ONCE DURING PROJECT

PROJECT NO: 9532-03-00

HWY: STH 160

COUNTY: BROWN

MISCELLANEOUS QUANTITIES

SHEET: 51

E

FILE NAME : _____

PLOT DATE : _____

PLOT BY : _____

PLOT NAME : _____

PLOT SCALE : 1:1

3

3

ALL ITEMS ARE CATEGORY 0010
SHEET 2 OF 5

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS											
SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 150 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420 BARRICADES TYPE III ** DAYS	643.0705 WARNING LIGHTS TYPE A ** DAYS	643.0910 COVERING SIGNS TYPE 1 **** EACH	643.0920 COVERING SIGNS TYPE II **** EACH	REMARKS
18A	200' W OF REDWOOD DR INTERSECTION ON STH 29	MO 4-8	30"X15"	1	150	150					
	"	M 3-4	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
18B	ACROSS FROM SIGN # 18A (MEDIAN SIDE)	MO 4-8	30"X15"	1	150	150					
	"	M 3-4	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
19A	200' E OF HOFA PARK RD INTERSECTION ON STH 29	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
19B	ACROSS FROM SIGN # 19A (MEDIAN SIDE)	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
20A	200' W OF HOFA PARK RD INTERSECTION ON STH 29	MO 4-8	30"X15"	1	150	150					
	"	M 3-4	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
20B	ACROSS FROM SIGN # 20A (MEDIAN SIDE)	MO 4-8	30"X15"	1	150	150					
	"	M 3-4	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
21A	200' E OF STH 156 INTERSECTION ON STH 29	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
21B	ACROSS FROM SIGN # 21A (MEDIAN SIDE)	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
22A	200' W OF STH 156 INTERSECTION ON STH 29	MO 4-8	30"X15"	1	150	150					
	"	M 3-4	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
22B	ACROSS FROM SIGN # 22A (MEDIAN SIDE)	MO 4-8	30"X15"	1	150	150					
	"	M 3-4	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
23	LT OF SIS SIGN (GAS & FOOD)	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
	"	MO 5-2-R	30"x30"	1	150	150					
24	ACROSS FROM SIGN # 23 (MEDIAN SIDE)	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
	"	MO 5-2-R	30"x30"	1	150	150					
25	LT OF TYPE 1 (32 NORTH-Y, PULASKI-GILLET, TILT RT)	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
	"	MO 6-2	30"x30"	1	150	150					RIGHT
26	150' W OF STOP AHEAD SIGN	MO 4-8	24"x12"	1	150	150					
	"	M 3-2	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
	"	MO 5-1-L	21"x21"	1	150	150					
27	LT OF J3-2 (N-32-LT; S-Y-RT)	MO 4-8	24"x12"	1	150	150					
	"	M 3-2	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
	"	MO 6-1	21"x21"	1	150	150					LEFT

** QUANTITIES PAID FOR IN TRAFFIC CONTROL SUMMARY TABLE
**** ALL SIGNS TO BE COVERED/UNCOVERED ONCE DURING PROJECT

SUBTOTAL

50

7,500

0

0

0

0

PROJECT NO: 9532-03-00

HWY: STH 160

COUNTY: BROWN

MISCELLANEOUS QUANTITIES

SHEET: 52

E

FILE NAME : _____

PLOT DATE : _____

PLOT BY : _____

PLOT NAME : _____

PLOT SCALE : 1:1

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ALL ITEMS ARE CATEGORY 0010

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS

SHEET 3 OF 5

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 150 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420 BARRICADES TYPE III ** DAYS	643.0705 WARNING LIGHTS TYPE A ** DAYS	643.0910 COVERING SIGNS TYPE 1 **** EACH	643.0920 COVERING SIGNS TYPE II **** EACH	REMARKS
28A	RT OF J2-2 (W-29-AH RT; N-32-AH)	MO 4-8	24"x12"	1	150	150					
	"	M 3-2	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
	"	MO 6-1	21"x21"	1	150	150					AHEAD
28B	200' N OF NE RAMP TERMINAL ON STH 32	MO 4-8	24"x12"	1	150	150					
	"	M 3-2	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
29	250' W OF STH 32 INTERSECTION ON NW RAMP	MO 4-8	24"x12"	1	150	150					
	"	M 3-4	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
30	RT OF J3-2 (W-29-LT; T0-156-LT)	MO 4-8	24"x12"	1	150	150					
	"	M 3-4	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
	"	MO 6-1	21"x21"	1	150	150					RIGHT
31	RT OF J1-2 (JCT 29; JCT Y)	MO 4-8	24"x12"	1	150	150					
	"	M 3-4	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
	"	MO 5-1-R	21"x21"	1	150	150					
32	200' S OF QUARRY RD INTERSECTION ON STH 32	MO 4-8	24"x12"	1	150	150					
	"	M 3-4	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
33	200' N OF QUARRY RD INTERSECTION ON STH 32	MO 4-8	24"x12"	1	150	150					
	"	M 3-2	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
34	LT OF J4-1 (S-32) SIGN	MO 4-8	24"x12"	1	150	150					
	"	M 3-4	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
35	200' N OF CTH B INTERSECTION ON STH 32	MO 4-8	24"x12"	1	150	150					
	"	M 3-2	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
36	200' S OF STOP AHEAD SIGN	MO 4-8	24"x12"	1	150	150					
	"	M 3-2	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
	"	MO 5-1-L	21"x21"	1	150	150					
37	ABOVE J13-1 (32-AH LT)	MO 4-8	24"x12"	1	150	150					
	"	M 3-2	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
	"	MO 6-1	21"x21"	1	150	150					LEFT
38	ABOVE J13-1 (32-LT)	MO 4-8	24"x12"	1	150	150					
	"	M 3-2	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
	"	MO 6-1	21"x21"	1	150	150					LEFT
39	250' S OF PULASKI ST ST ON WISCONSIN ST	MO 4-8	24"x12"	1	150	150					
	"	M 3-4	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160

SUBTOTAL

45

6,750

0

0

0

0

** QUANTITIES PAID FOR IN TRAFFIC CONTROL SUMMARY TABLE
**** ALL SIGNS TO BE COVERED/UNCOVERED ONCE DURING PROJECT

PROJECT NO: 9532-03-00

HWY: STH 160

COUNTY: BROWN

MISCELLANEOUS QUANTITIES

SHEET: 53

E

FILE NAME :

PLOT DATE :

PLOT BY :

PLOT NAME :

PLOT SCALE : 1:1

ALL ITEMS ARE CATEGORY 0010

SHEET 4 OF 5

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 150 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420 BARRICADES TYPE III ** DAYS	643.0705 WARNING LIGHTS TYPE A ** DAYS	643.0910 COVERING SIGNS TYPE 1 **** EACH	643.0920 COVERING SIGNS TYPE II **** EACH	REMARKS
40	LT OF M 1-6 (32)	MO 4-8	24"x12"	1	150	150					
	"	M 3-2	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
41	LT OF J3-1 (S-32-RT)	MO 4-8	24"x12"	1	150	150					
	"	M 3-4	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
	"	MO 6-1	21"x21"	1	150	150					RIGHT
42	100' E OF J2-1 (S-32-AH RT)	MO 4-8	24"x12"	1	150	150					
	"	M 3-4	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
	"	MO 5-1-R	21"x21"	1	150	150					
43	MODIFY J1-1 (JCT 160)	MO 4-8-A	24"x18"	1	150	150					
	"	M 1-6	EXISTING								
44	D1-3 (AH-ANGELICA; GILLET- LAONA-RT)									1	AH-ANGELICA
45	J3-1 (W-160-AH)									1	W-160-AH
46	100' N OF CHICAGO ST INTERSECTION ON STH 32	M 1-6	24"x24"	1	150	150					16
	"	W20-2-A	48"x48"	1	150	150					
47	MODIFY J2-2 (S-32-AH LT; W-160-AH RT)	MO 4-8	24"12"	1	150	150					
	"	M 3-4	EXISTING								
	"	M 1-6	EXISTING								
	"	MO 5-1-L	21"x21"	1	150	150					
48	D1-2 (LT-GREEN BAY; ANGELICA-LT)									1	ANGELICA-LT
49	MODIFY J2-2 (S-32-LT; W-160-RT)	MO 4-8	24"12"	1	150	150					
	"	M 3-4	EXISTING								
	"	M 1-6	EXISTING								
	"	MO 6-1	21"x21"	1	150	150					LEFT
50	NW QUAD OF STH 160 & STH 32	R 11-3	60"x30	1	150	150	150	300			1/4 MILE
51	SE QUAD OF STH 160 & STH 32	MO 4-8	24"x12"	1	150	150					
	"	M 3-4	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
	"	MO 6-1	21"x21"	1	150	150					LEFT
52	150' E OFSTH 160 INTERSECTION ON STH 32	MO 4-8	24"x12"	1	150	150					
	"	M 3-4	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
53	NE QUAD OF NE RAMP & STH 160 INTERSECTION	R 11-3	60"x30	1	150	150	150	300			2 MILE
54	J3-1 (E-160-RT)									1	E-160-RT
55	D1-3 (LT-ANGELICA & SEYMOUR; PULASKI-RT)									1	PULASKI-RT
56	LT OF J2-2 (S-Y-LT; N-32-RT)	MO 4-8	24"x12"	1	150	150					
	"	M 3-2	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
	"	MO 6-1	21"x21"	1	150	150					RIGHT
57	200' W OF STOP AHEAD SIGN	MO 4-8	24"x12"	1	150	150					
	"	M 3-2	24"x12"	1	150	150					
	"	M 1-6	24"x24"	1	150	150					160
	"	MO 5-1-R	21"x21"	1	150	150					

SUBTOTAL 35 5,250 300 600 0 5

** QUANTITIES PAID FOR IN TRAFFIC CONTROL SUMMARY TABLE
**** ALL SIGNS TO BE COVERED/UNCOVERED ONCE DURING PROJECT

ALL ITEMS ARE CATEGORY 0010

SHEET 5 OF 5

3

3

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 150 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420 BARRICADES TYPE III ** DAYS	643.0705 WARNING LIGHTS TYPE A ** DAYS	643.0910 COVERING SIGNS TYPE 1 **** EACH	643.0920 COVERING SIGNS TYPE II **** EACH	REMARKS
58	LT OF TYPE 1 (32/Y, PULASKI-GILLETT, TILT RT)	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
	"	MO 6-2	30"x30"	1	150	150					RIGHT
59A	LT OF SIS SIGN (GAS & FOOD) - EXIT 249 WB	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
	"	MO 5-2-R	30"x30"	1	150	150					
59B	ACROSS FROM SIGN # 59A (MEDIAN SIDE)	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
	"	MO 5-2-R	30"x30"	1	150	150					
60A	1000' E OF SIGN # 59A ON WB STH 29	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
	"	MO 5-2-R	30"x30"	1	150	150					
60B	ACROSS FROM SIGN # 60A (MEDIAN SIDE)	MO 4-8	30"X15"	1	150	150					
	"	M 3-2	30"X15"	1	150	150					
	"	M 1-6	36"x36"	1	150	150					160
	"	MO 5-2-R	30"x30"	1	150	150					
61A	1000'W OF SIGN # 60A ON WB STH 29	M 1-6	36"x36"	1	150	150					160
	"	W 20-2-A	48"x48"	1	150	150					
61B	ACROSS FROM SIGN # 61A (MEDIAN SIDE)	M 1-6	36"x36"	1	150	150					160
	"	W 20-2-A	48"x48"	1	150	150					
	UNDISTRIBUTED									2	
SUBTOTAL				24		3,600	0	0	0	2	
TOTAL				198		29,700	300**	600**	3	10	

** QUANTITIES PAID FOR IN TRAFFIC CONTROL SUMMARY TABLE
**** ALL SIGNS TO BE COVERED/UNCOVERED ONCE DURING PROJECT

ALL ITEMS ARE CATEGORY 0010

PAVEMENT MARKING QUANTITIES

STATION TO STATION	LOCATION	646.0106 EPOXY 4-INCH (YELLOW) LF	647.0453 CURB PAINT (YELLOW) LF	647.0566 STOP LINE EPOXY 18-INCH (WHITE) LF	647.0776 CROSSWALK EPOXY 12-INCH (WHITE) LF
115+63 - 145+75	STH 160	1713		21	
11+36 - 11+68 RT	HIGHVIEW		33		
11+60	HIGHVIEW			17	
115+37	HIGHVIEW		110		
118+94 - 119+61 LT	STH 160		72		
20+36	WEST TOWN			16	
20+23 - 20+63 LT	WEST TOWN		50		
20+19 - 20+61 RT	WEST TOWN		54		
120+38 - 121+13 LT	STH 160		75		
126+48 - 126+98 LT	STH 160		50		
127+68	STH 160				41
127+73	STH 160				36
127+00 - 127+36 RT	STH 160		37		
127+58 - 127+68 RT	STH 160		10		
127+73 - 127+80 RT	STH 160		7		
30+37	GRANT			18	
30+21 - 30+63 LT	GRANT		55		
30+21 - 30+27 RT	GRANT		8		
30+32 - 30+59 RT	GRANT		26		
126+98 - 128+07 LT	STH 160		36		
128+07 - 128+40 RT	STH 160		33		
129+47	STH 160				35
129+52	STH 160				35
129+30 - 129+47 RT	STH 160		18		
129+52 - 129+73 RT	STH 160		24		
129+41 - 129+47 LT	STH 160		6		
129+52 - 129+61 LT	STH 160		8		
129+82 - 130+26 LT	STH 160		44		
130+31 - 130+46 LT	STH 160		15		
130+20 - 130+26 RT	STH 160		8		
130+32 - 130+65 RT	STH 160		36		
SUBTOTALS		1713	815	72	147

PAVEMENT MARKING QUANTITIES

STATION TO STATION	LOCATION	646.0106 EPOXY 4-INCH (YELLOW) LF	647.0453 CURB PAINT (YELLOW) LF	647.0566 STOP LINE EPOXY 18-INCH (WHITE) LF	647.0776 CROSSWALK EPOXY 12-INCH (WHITE) LF
130+26	STH 160				40
130+31	STH 160				36
41+41 - 41+67 LT	JOHNSON		26		
41+40 - 41+67 RT	JOHNSON		27		
41+67	JOHNSON			17	36
41+72	JOHNSON				42
133+22 - 133+59 RT	STH 160		27		
133+64 - 133+84 RT	STH 160		24		
133+59	STH 160				35
133+64	STH 160				35
51+41 - 51+67 LT	LINCOLN		27		
51+41 - 51+67 RT	LINCOLN		27		
51+67	LINCOLN			17	39
51+72	LINCOLN				42
134+31 - 134+35 RT	STH 160		7		
134+35	STH 160				42
134+41	STH 160				40
134+41 - 135+03 RT	STH 160		64		
133+51 133+59 LT	STH 160		6		
133+64 133+74 LT	STH 160		10		
134+29 134+35 LT	STH 160		6		
134+41 134+45 LT	STH 160		4		
138+98 - 139+35 LT	STH 160		40		
139+35	STH 160				37
139+40 - 139+42 LT	STH 160		3		
139+40	STH 160				44
60+32 - 60+62 LT	MAIN		30		
60+30 - 60+55 RT	MAIN		25		
60+31	MAIN			20	40
60+26	MAIN				47
139+94 - 140+00 LT	STH 160		9		
140+00	STH 160				35
140+05	STH 160				35
140+05 - 140+49 LT	STH 160		46		
139+29 - 139+35 RT	STH 160		6		
139+40 - 139+42 RT	STH 160		2		
139+94 - 140+00 RT	STH 160		6		
140+05 - 140+08 RT	STH 160		3		
UNDISTIBUTED	HYDRANT LOCATIONS		100		
SUBTOTALS		0	525	54	625
TOTALS		1713	1340	126	772

3

ALL ITEMS ARE CATEGORY 0010

CONSTRUCTION STAKING SUMMARY

STATION TO STATION				LOCATION	650.4000 STORM SEWER SYSTEM *** EACH	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 **** CURB GUTTER & CURB & GUTTER LF	650.6000 PIPE CULVERTS EACH	650.9910 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKES LF
113+00	-	114+50	LT & RT	STH 160	-	150	150	-	-	-	150
114+50	-	115+63	LT & RT	STH 160	-	113	113	-	-	-	113
115+63	-	120+02	LT & RT	STH 160	-	439	439	-	1	-	439
120+02	-	127+40	LT & RT	STH 160	-	738	738	-	-	-	738
127+40	-	129+97	LT & RT	STH 160	-	257	257	-	-	-	
129+97	-	134+08	LT & RT	STH 160	-	411	411	-	-	-	
134+08	-	139+72	LT & RT	STH 160	-	564	564	-	-	-	
139+72	-	145+75	LT & RT	STH 160	-	603	603	-	-	-	
113+00	-	145+75	RT	STH 160	-	-	-	-	-	-	
114+50	-	145+75	LT	STH 160	-	-	-	-	-	-	
10+19	-	11+15	LT & RT	HIGHVIEW RD.	-	96	96	-	-	-	
20+14	-	21+00	LT & RT	WEST TOWN RD.	-	86	86	-	-	-	
30+19	-	31+50	LT & RT	GRANT ST.	-	131	131	-	-	-	
40+21	-	41+00	LT & RT	JOHNSON ST.	-	79	79	-	-	-	
50+21	-	51+00	LT & RT	LINCOLN ST.	-	79	79	-	-	-	
60+21	-	61+00	LT & RT	MAIN ST.	-	79	79	-	-	-	
PROJECT TOTALS					63	3825	3825	7165	1	1	1440

*** SEE STORM SEWER QUANTITIES FOR STATION AND OFFSETS
**** SEE CURB AND GUTTER SUMMARY FOR DETAILS

LANDMARK REFERENCE MONUMENTS

STATION TO STATION	LOCATION	621.01 EACH
113+00 - 145+75	PROJECT	8
TOTAL		8

3

ALL ITEMS ARE CATEGORY 0010
UNLESS NOTED

SAWING PAVEMENT SUMMARY

STATION TO STATION			LOCATION	609.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	REMARKS
113+00	LT & RT		STH 160	-	34	BEGIN PROJECT
10+85	LT & RT		Highview Rd.	37	-	CONSTRUCTION LIMITS
118+83	LT		STH 160	12	-	DRIVEWAY
21+00	LT & RT		West Town Rd.	29	-	CONSTRUCTION LIMITS
31+50	LT & RT		Grant St.	38	-	CONSTRUCTION LIMITS
128+42	-	129+68	RT	STH 160	121	DRIVEWAY
128+93	LT		STH 160	-	16	DRIVEWAY
129+72	LT		STH 160	-	17	DRIVEWAY
40+96	LT		Johnson St.	71	-	PARKING LOT BEHIND SIDEWALK
41+00	LT & RT		Johnson St.	47	-	CONSTRUCTION LIMITS
130+56	LT		STH 160	-	16	DRIVEWAY
131+36	RT		STH 160	-	14	DRIVEWAY
132+23	RT		STH 160	13	-	DRIVEWAY
132+52	LT		STH 160	17	14	DRIVEWAY
132+76	RT		STH 160	17	-	DRIVEWAY
51+00	LT & RT		Lincoln St.	59	-	CONSTRUCTION LIMITS
134+19	LT		STH 160	10	-	DRIVEWAY
134+55	LT		STH 160	11	-	DRIVEWAY
135+16	RT		STH 160	22	-	DRIVEWAY
135+54	LT		STH 160	13	-	DRIVEWAY
135+67	-	136+64	LT	STH 160	96	PARKING LOT BEHIND SIDEWALK
136+09	RT		STH 160	16	-	DRIVEWAY
136+70	LT		STH 160	9	-	DRIVEWAY
136+76	RT		STH 160	67	-	PARKING LOT BEHIND SIDEWALK
137+93	RT		STH 160	24	-	DRIVEWAY
138+05	-	139+04	RT	STH 160	104	PARKING LOT BEHIND SIDEWALK
139+19	RT		STH 160	37	-	DRIVEWAY
139+56	RT		STH 160	20	-	DRIVEWAY
60+74	RT		STH 160	50	-	DRIVEWAY
61+00	LT & RT		Main St.	44	-	CONSTRUCTION LIMITS
140+19	RT		STH 160	16	-	DRIVEWAY
140+61	LT		STH 160	50	-	DRIVEWAY
142+25	RT		STH 160	36	-	DRIVEWAY
144+70	LT		STH 160	12	-	DRIVEWAY
144+99	RT		STH 160	12	-	DRIVEWAY
145+75	LT & RT		STH 160	-	65	END PROJECT
139+00	-	145+00	LT	STH 160	-	CUT SIDEWALK 1' FROM BUILDING FACE
139+50	-	145+75	RT	STH 160	-	CUT SIDEWALK 1' FROM BUILDING FACE
TOTALS				1110	975	

3

ALL ITEMS ARE CATEGORY 0010
UNLESS NOTED

CRACK AND DAMAGE SURVEY

STATION	TO	STATION	LOCATION	999.1500.S LS
127+50	-	145+75	PROJECT	1
TOTAL				1

UTILITY LINE OPENING

STATION*	SPV.0060.02 EACH
113+75	1
117+07	1
119+65	1
120+75	1
121+75	1
127+22	1
UNDISTRIBUTED	2
TOTAL	8

*STATIONING IS APPROXIMATE

STREET SWEEPING

STATION	TO	STATION	LOCATION	SPV.0075.01 HRS
113+00	-	145+75	PROJECT	50
TOTAL				50

RECONNECT EXISTING STORM SEWER LATERAL

STATION	LOCATION	SPV.0060.01 EACH
136+30	LT	1
138+55	RT	1
TOTAL		2

SEISMOGRAPH URBAN

STATION	TO	STATION	LOCATION	SPV.0105.01 LS
127+50	-	145+75	PROJECT	1
TOTAL				1

REMOVE EXISTING LIGHTING SYSTEM

STATION	TO	STATION	LOCATION	SPV.0105.02 LS
127+50	-	145+75	PROJECT	1
TOTAL				1

RESIDENTIAL STORM SEWER LATERALS

STATION* LOCATION*		SPV.0090.01	
		LF	LF
		CATEGORY 0010	CATEGORY 0020
121+00	LT	30	
134+83	LT	19	-
135+84	LT	19	-
136+84	LT	19	-
137+22	LT	19	-
141+10	LT	19	-
141+60	LT	19	-
141+73	LT	19	-
142+73	LT	19	-
143+42	LT	19	-
127+35	RT	-	47
128+24	RT	-	47
128+60	LT	-	19
129+51	LT	-	19
130+41	LT	-	19
130+87	RT	-	47
131+21	LT	-	19
132+32	RT	-	47
132+41	LT	-	19
134+14	LT	-	19
135+14	LT	-	19
135+19	RT	-	47
135+83	RT	-	47
136+19	RT	-	47
136+83	RT	-	47
137+15	LT	-	19
137+65	LT	-	19
140+70	RT	-	47
UNDISTRIBUTED		49	156
SUBTOTALS		250	750
TOTAL		1000	

*LOCATIONS ARE APPROXIMATE

3

ALL ITEMS ARE CATEGORY 0010
UNLESS NOTED

ADJUSTING WATER SERVICE CURB STOP

STATION OFFSET LOCATION			SPV.0006.03 EA
			CATEGORY 0020
20+50	LT	WEST TOWN	1
127+75	RT	STH 160	1
128+15	LT	STH 160	1
128+15	RT	STH 160	1
128+50	LT	STH 160	1
128+85	RT	STH 160	1
130+00	LT	STH 160	1
130+70	RT	STH 160	1
131+00	LT	STH 160	1
131+25	RT	STH 160	1
131+75	LT	STH 160	1
132+00	LT	STH 160	1
132+00	RT	STH 160	1
132+75	RT	STH 160	1
133+00	LT	STH 160	1
133+25	RT	STH 160	1
133+75	LT	STH 160	1
134+00	LT	STH 160	1
134+00	RT	STH 160	1
135+30	LT	STH 160	1
135+40	RT	STH 160	1
135+83	RT	STH 160	1
136+20	LT	STH 160	1
136+55	RT	STH 160	1
137+00	LT	STH 160	1
137+00	RT	STH 160	1
137+50	LT	STH 160	1
137+50	RT	STH 160	1
138+20	RT	STH 160	1
138+75	LT	STH 160	1
139+00	RT	STH 160	1
UNDISTRIBUTED		STH 160	2
SUBTOTALS			33
TOTAL			33

ADJUSTING WATER VALVE BOX

STATION OFFSET LOCATION			SPV.0006.04 EA
			CATEGORY 0020
20+50	LT	WEST TOWN	1
120+00	CL	STH 160	1
127+40	CL	STH 160	1
127+50	LT	STH 160	1
30+45	RT	GRANT	1
127+85	LT	STH 160	1
41+55	RT	JOHNSON	1
130+35	LT	STH 160	1
135+20	LT	STH 160	1
136+75	RT	STH 160	3
139+60	LT	STH 160	1
139+60	CL	STH 160	1
143+25	LT	STH 160	1
145+75	CL	STH 160	1
UNDISTRIBUTED		STH 160	2
SUBTOTALS			18
TOTAL			18

ADJUSTING SANITARY MANHOLES

STATION OFFSET LOCATION			SPV.0006.05 EA
			CATEGORY 0020
127+50	RT	STH 160	1
129+90	RT	STH 160	1
132+00	RT	STH 160	1
135+00	RT	STH 160	1
136+60	RT	STH 160	1
139+70	RT	STH 160	1
41+55	RT	JOHNSON	1
UNDISTRIBUTED		STH 160	2
SUBTOTALS			9
TOTAL			9

STATIONING FOR UTILITY ADJUSTMENTS IS APPROXIMATE. FIELD VERIFY

TRANSPORTATION PROJECT PLAT NO: 9532-03-21 - 4.01

PART OF THE SE 1/4-SW1/4 OF SECTION 36, T.26N., R.18E., AND PART OF LOTS 1, 2, 3, AND 4, SURREY TRAILS, LOCATED IN THE FRACTIONAL NE1/4-NW1/4, SECTION 1, T.25N., R.18E., VILLAGE OF PULASKI, SHAWANO COUNTY, WISCONSIN.

RELOCATION ORDER STH 160 SHAWANO COUNTY

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) AND 84.09, 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.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ. FT. REQUIRED			T.L.E. SQ. FT.
			NEW	EXISTING	TOTAL	
1	ANN L. MROCCZYNSKI	TLE	---	---	---	1,852
2	ALVIN S. WIELGUS	FEE & TLE	1,730	---	1,730	419
4	AL DORN, JR.	TLE	---	---	---	630
6	THOMAS F. DELSART	TLE	---	---	---	630
7	DAVID H. KARCZ, JR. AND GRETCHEN M. KARCZ	TLE	---	---	---	630
8	AL DORN CONSTRUCTION	TLE	---	---	---	580
200	WE ENERGIES (ELECTRIC)	RELEASE OF RIGHTS	---	---	---	---
201	NORTHEAST TELEPHONE CO. LLC	RELEASE OF RIGHTS	---	---	---	---
202	NET CABLE	RELEASE OF RIGHTS	---	---	---	---

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

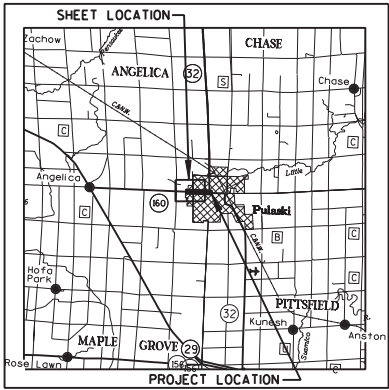
ROAD NAME	BASIS OF EXISTING R-O-W	WIDTH	YEAR
STH 160	PROJECT #2532 1 21	VARIES	1972
HIGHVIEW ROAD E1/2	SURREY TRAILS	35'	1996
HIGHVIEW ROAD W1/2	BY STATUTE	33'	---
WEST TOWN ROAD W1/2	EXISTING SURVEY	24.75'	---

(SHAWANO CO.) BROWN CO.
Y=234,891.99 Y=627,564.20
X=952,820.06 X=37,973.12
REBAR

PARCEL 2		
COURSE	BEARING	DISTANCE
7074-7176	N 88°00'45" W	305.21'
7176-7779	N 01°02'19" W	5.01'
7779-7835	S 88°00'45" E	285.03'
7835-7836	N 45°26'16" E	27.80'
7836-7074	S 01°02'19" E	25.22'

DOC# 681634
Slide 8-208
Recorded
June 04, 2012 AT 10:31AM
GW DILLIBURG
REGISTER OF DEEDS
SHAWANO COUNTY WI
Fee Amounts \$38.00

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 9532-03-21.01
AMENDMENT NO:



BROWN CO. (SHAWANO CO.)
Y=625,034.26 Y=232,342.96
X=35,400.01 X=950,265.78
SURVEY NAIL
93+77.75
0.50' LEFT

BROWN CO. (SHAWANO CO.)
Y=625,027.48 Y=232,337.62
X=35,594.23 X=950,460.05
NAIL
95+72.10
0.46' LEFT

STA. 93+00.00 STH 160

BROWN CO.
Y=625,036.459
X=35,322.283
(SHAWANO CO.)
Y=232,344.577
X=950,188.035

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, BROWN COUNTY ZONE, NAD83 (1991) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 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 FIELD SURVEY.

A **TEMPORARY LIMITED EASEMENT (TLE)** IS A RIGHT FOR CONSTRUCTION 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 NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT / DRIVEWAY CONNECTION	AP	RELEASE OF RIGHTS REMAINING	ROR	FOUND IRON PIPE / PIN	IF (UNLESS NOTED)
ACCESS RIGHTS	AR	RIGHT-OF-WAY	R/W	R/W MONUMENT	• (SET)
ACRES	AC.	SECTION	SEC.	R/W STANDARD	Δ (SET)
AND OTHERS	ET. AL.	STATION	STA.	SIGN	ISIGN
CENTERLINE	C/L	TEMPORARY LIMITED EASEMENT	TLE	SECTION CORNER MONUMENT	⊙
CERTIFIED SURVEY MAP	CSM	VOLUME	V.	SECTION CORNER SYMBOL	⊙
CORNER	COR.	CURVE DATA			⊙
DOCUMENT	DOC.				⊙
EASEMENT	EASE.	LONG CHORD	LCH	FEE (HATCH VARIES)	⊙
HIGHWAY EASEMENT	H.E.	LONG CHORD BEARING	LCB	TEMPORARY LIMITED EASEMENT	⊙
LAND CONTRACT	LC	RADIUS	R	PERMANENT LIMITED EASEMENT	⊙
MONUMENT	MON.	DEGREE OF CURVE	D	R/W BOUNDARY POINT	⊙
PAGE	P.	CENTRAL ANGLE OR DELTA	DELTA	PARCEL NUMBER	⊙
PERMANENT LIMITED EASEMENT	P.L.E.	LENGTH OF CURVE	L	SIGN NUMBER (OFF PREMISE)	⊙
PROPERTY LINE	PL	TANGENT	TAN	BUILDING	⊙
RECORDED AS (100')	(100')				
REFERENCE LINE	R/L				

CONVENTIONAL SYMBOLS

PROPOSED R/W LINE	---
EXISTING H.E. LINE	---
PROPERTY LINE	---
LOT & TIE LINES	---
SLOPE INTERCEPTS	---
CORPORATE LIMITS	---
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)	---
NO ACCESS (BY ACQUISITION)	---
NO ACCESS (BY STATUTORY AUTHORITY)	---
SECTION LINE	---
QUARTER LINE	---
SIXTEENTH LINE	---
EXISTING CENTERLINE	---
PROPOSED REFERENCE LINE	---
PARALLEL OFFSET	---

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	---
TELE/ELEC PEDESTAL	---
ELECTRIC TOWER	---



GRAEF

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920 / 592 9440
920 / 592 9445 fax

www.graef-usa.com

I, MICHAEL C. JENSEN, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WISCONSIN DEPT. OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 9532-03-21 - 4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

DATE: 5-23-2012 MICHAEL C. JENSEN
RLS S-1746, FOR GRAEF.

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

DATE 5-25-2012 *Norman H. Panselapp*

TRANSPORTATION PROJECT PLAT NO: 9532-03-21 - 4.02

PART OF LOTS 24, 25, 26, 27, 28, AND 29, BEHRENDT PARK ESTATES, LOCATED IN THE SW 1/4-SE1/4, SECTION 36, T.26 N., R.18 E., AND PART OF LOTS 3, 4, 5, 6, AND 7, PLAT OF MAX F. BEHRENDT, PART OF LOT 1, BLOCK 1, BEHRENDT PLAT, AND PART OF THE FRACTIONAL NW 1/4-NE 1/4, SECTION 1, T. 25 N., R. 18 E., VILLAGE OF PULASKI, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER STH 160 BROWN COUNTY

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 (1) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAY 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.

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, BROWN COUNTY ZONE, NAD83 (1993) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 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 OCCUPANCIAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION 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 NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

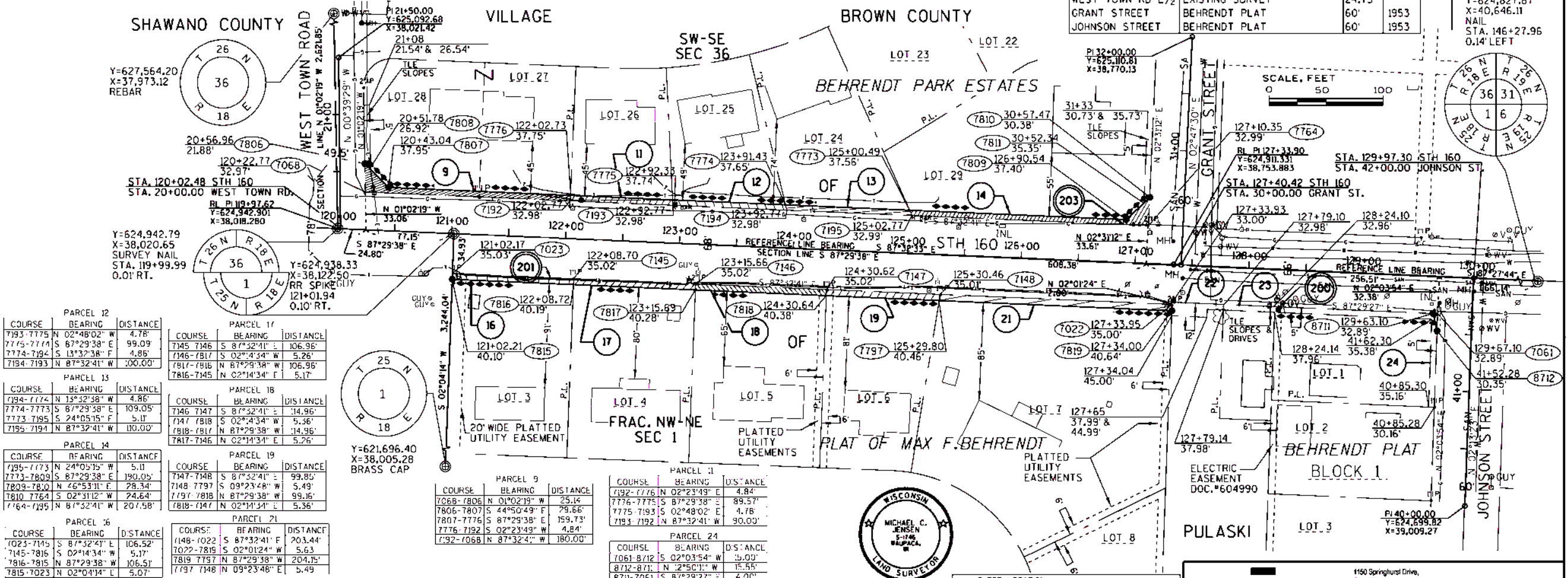
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SO. FT. REQUIRED	T.L.E. SO. FT.
9	TIMOTHY D. & BRENDA D. NEWDIGER	FEF & TLF	1,093	1,093
11	PAUL M. HORNICK	FEF	431	431
12	HEIDI CHRISTENSEN	FEF	469	469
13	LAUREL A. FISCHER	FEF	506	506
14	PATRICK S. & ROBIN C. LAURENCE	FEF & TLF	1,136	1,136
15	CRAIG S. & KATHLEEN M. BESSERT	FEF	545	545
17	SCOTT M. TURNER & SHELLY L. PAGE	FEF	558	558
18	LINDA BONDAR	FEF	611	611
19	LISA M. FRANCOIS	FEF	538	538
21	PETER F. GOLUBSKI	FEF	1,129	1,129
22	JEAN M. JENSEN	T.L.E.	---	443
23	PHYLLIS MROZYSKI	T.L.E.	---	225
24	MARK A. JEROVETZ AND LISA M. LANGLOIS	FEF & TLF	30	30
200	WE ENERGIES (ELECTRIC)	RELEASE OF RIGHTS	---	---
201	NORTHEAST TELEPHONE CO. LLC	RELEASE OF RIGHTS	---	---
203	WE ENERGIES (GAS)	RELEASE OF RIGHTS	---	---

NOTE: OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

ROAD NAME	BASIS OF EXISTING R-O-W	WIDTH	YEAR
STH 160 N/2	BEHRENDT PARK ESTATES	33'	1970
STH 160 S/2	PLAT OF MAX F. BEHRENDT	35'	1977
WEST TOWN RD E/2	EXISTING SURVEY	24.75'	---
GRANT STREET	BEHRENDT PLAT	60'	1953
JOHNSON STREET	BEHRENDT PLAT	60'	1953

2575636
CATHY WILKINSON LINDSAY
BROWN COUNTY RECORDER
GREEN BAY, WI
RECORDED ON
05/30/2012 2:19 PM
REC FEE: 25.00
EXEMPT #
PAGES: 1

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 9532-03-21 4.02
AMENDMENT NO:



COURSE	BEARING	DISTANCE
7193-7175	N 02°48'02" W	4.78'
7175-7111	S 87°29'38" E	99.09'
7174-7194	S 13°32'38" E	4.85'
7194-7193	N 87°32'41" W	100.00'

COURSE	BEARING	DISTANCE
7194-7174	N 13°32'38" W	4.86'
7174-7173	S 87°29'38" E	109.05'
7173-7195	S 24°05'15" E	5.11'
7195-7194	N 87°32'41" W	100.00'

COURSE	BEARING	DISTANCE
7195-7173	N 24°05'15" W	5.11'
7173-7809	S 87°29'38" E	180.00'
7809-7810	N 46°53'11" E	28.34'
7810-7764	S 02°31'12" W	24.64'
7764-7195	N 87°32'41" W	201.58'

COURSE	BEARING	DISTANCE
7023-7115	S 87°32'41" E	106.52'
7115-7816	S 02°14'34" W	5.17'
7816-7815	N 87°29'38" E	106.51'
7815-7023	N 02°04'14" E	5.07'

COURSE	BEARING	DISTANCE
7145-7146	S 87°32'41" E	106.96'
7146-7817	S 02°14'34" W	5.26'
7817-7816	N 87°29'38" E	106.96'
7816-7145	N 02°14'34" E	5.17'

COURSE	BEARING	DISTANCE
7146-7147	S 87°32'41" E	14.96'
7147-7818	S 02°14'34" W	5.36'
7818-7817	N 87°29'38" E	14.96'
7817-7146	N 02°14'34" E	5.26'

COURSE	BEARING	DISTANCE
7147-7148	S 87°32'41" E	99.85'
7148-7797	S 09°23'48" W	5.49'
7797-7818	N 87°29'38" E	99.16'
7818-7147	N 02°14'34" E	5.36'

COURSE	BEARING	DISTANCE
7148-7022	S 87°32'41" E	203.44'
7022-7819	S 02°01'24" W	5.63'
7819-7797	N 87°29'38" E	204.15'
7797-7148	N 09°23'48" E	5.49'

COURSE	BEARING	DISTANCE
7068-7806	N 01°02'19" W	25.14'
7806-7807	S 44°50'49" E	29.66'
7807-7776	S 87°29'38" E	159.73'
7776-7192	S 02°23'49" W	4.84'
7192-7068	N 87°32'41" W	180.00'

COURSE	BEARING	DISTANCE
7192-7176	N 02°23'49" E	4.84'
7176-7775	S 87°29'38" E	89.57'
7775-7193	S 02°48'02" E	4.78'
7193-7192	N 87°32'41" W	90.00'

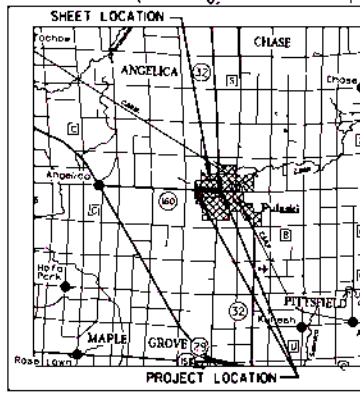
COURSE	BEARING	DISTANCE
7061-8112	S 02°03'54" W	15.00'
8112-8111	N 2°50'11" W	15.55'
8111-7061	S 87°29'38" E	4.00'

CONVENTIONAL ABBREVIATIONS	CONVENTIONAL ABBREVIATIONS
ACCESS POINT / DRIVEWAY CONNECTION	AP
ACCESS RIGHTS	AR
ACRES	AC.
AND OTHERS	ET AL.
CENTERLINE	C/L
CERTIFIED SURVEY MAP CORNER	CSM
DOCUMENT	DOC.
EASEMENT	EASE.
HIGHWAY EASEMENT	H.E.
LAND CONTRACT	LC
MONUMENT	MON.
PAGE	P.
PERMANENT LIMITED EASEMENT	P.L.E.
PROPERTY LINE	PL
RECORDED AS	(100)
REFERENCE LINE	R/L

CONVENTIONAL ABBREVIATIONS	CONVENTIONAL ABBREVIATIONS
RELEASE OF RIGHTS	ROR
REMAINING	RLM.
RIGHT-OF-WAY	R/W
SECTION	SEC.
STATION	STA.
TEMPORARY LIMITED EASEMENT	T.L.E.
VOLUME	V.

CONVENTIONAL ABBREVIATIONS	CONVENTIONAL ABBREVIATIONS
FOUND IRON PIPE / PIN	IRM.
R/W MONUMENT	R/M.
R/W STANDARD SIGN	R/S.
SECTION CORNER MONUMENT	SCM.
SECTION CORNER SYMBOL	SCS.
FEET (HATCH VARIES)	FEET
TEMPORARY LIMITED EASEMENT	T.L.E.
PERMANENT LIMITED EASEMENT	P.L.E.
R/W BOUNDARY POINT	R/B.
PARCEL NUMBER	P.N.
SIGN NUMBER (OFF PREMISE)	S.N.
BUILDING	B.

CONVENTIONAL UTILITY SYMBOLS	CONVENTIONAL UTILITY SYMBOLS
WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OTL
ELECTRIC	E
CABLE TELEVISION	CTV
FIBER OPTIC	FO
SANITARY SEWER	SS
STORM SEWER	SS
POWER POLE	PP
TELEPHONE POLE	TP
TELEPHONE POLE / DISTAL	TPD
ELECTRIC TOWER	ET



1150 Springhurst Drive,
Suite 201
Green Bay, WI 54304-5950
920 / 992 9440
920 / 992 9445 fax
www.graef-usa.com

I, MICHAEL C. JENSEN, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WISCONSIN DEPT. OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT NO: 9532-03-21 - 4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXISTING BOUNDARIES OF THE SURVEYED LAND.

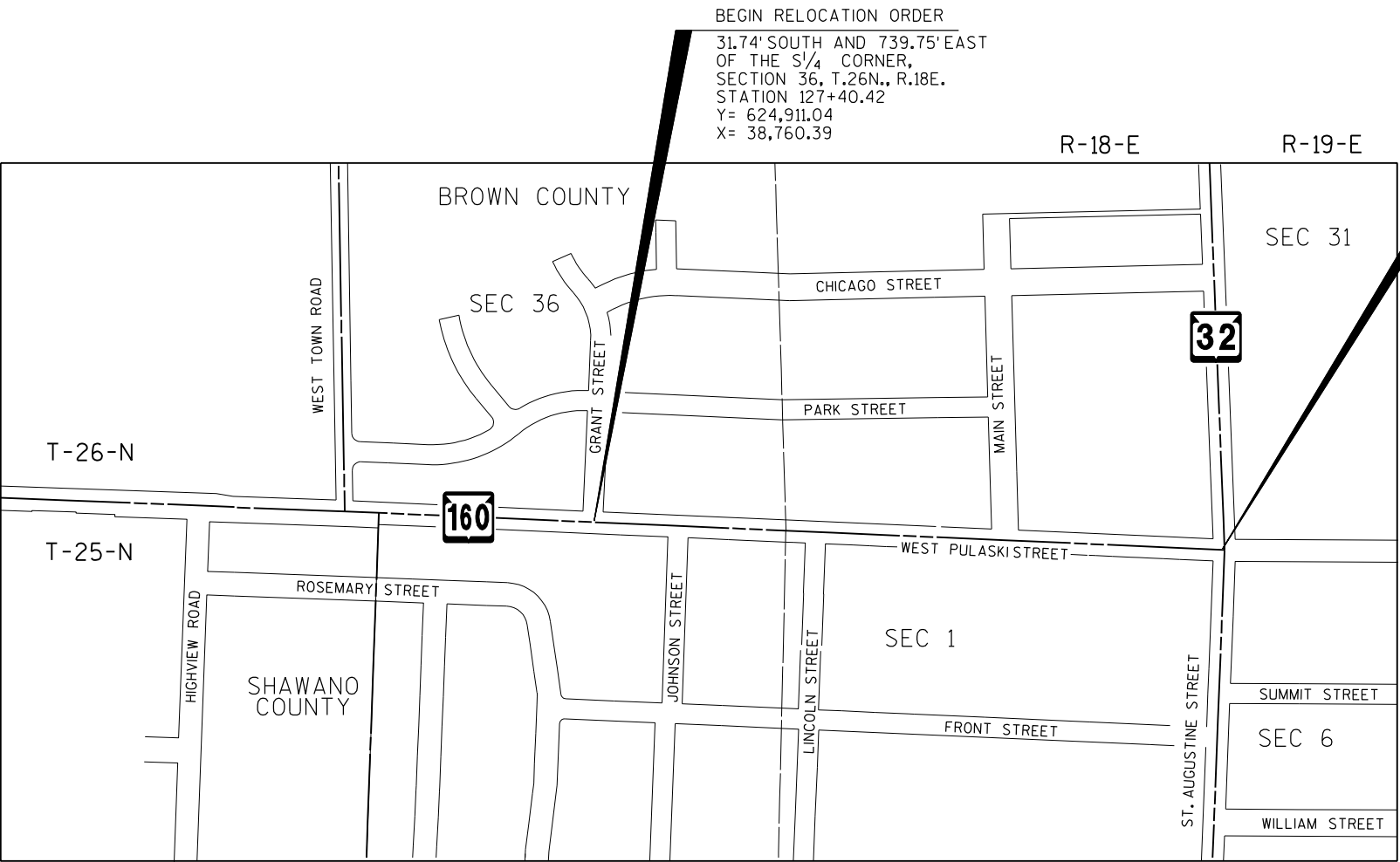
DATE: 5-23-2012 MICHAEL C. JENSEN
PLS S-1746 FOR GRAEF.

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

DATE: 5-25-2012 Norman H. Paveley

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
9532-03-22		
FEDERAL PROJECT NUMBER	4.01	6
PLAT OF RIGHT-OF-WAY REQUIRED FOR		
VILLAGE OF PULASKI		
HIGHVIEW ROAD - ST. AUGUSTINE STREET		
STH 160		
BROWN CO.		
CONSTRUCTION PROJECT NUMBER		

CONVENTIONAL ABBREVIATIONS	
ACCESS POINT/ DRIVEWAY CONNECTION	AP
ACCESS RIGHTS	AR
ACRES	AC.
AND OTHERS	ET.AL.
CENTERLINE	C/L
CERTIFIED SURVEY MAP	CSM
CORNER	COR.
DOCUMENT	DOC.
EASEMENT	EASE.
HIGHWAY EASEMENT	H.E.
LAND CONTRACT	LC
MONUMENT	MON.
PAGE	P.
PERMANENT LIMITED EASEMENT	PLE
PROPERTY LINE	PL
RECORDED AS	(100')
REFERENCE LINE	R/L
RELEASE OF RIGHTS	ROR
REMAINING	REM.
RIGHT-OF-WAY	R/W
SECTION	SEC.
STATION	STA.
TEMPORARY LIMITED EASEMENT	TLE
VOLUME	V.
CURVE DATA	
LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN
CONVENTIONAL SYMBOLS	
FOUND IRON PIPE/PIN	IF (1" UNLESS NOTED)
R/W MONUMENT	• (SET)
R/W STANDARD	Δ (SET)
SIGN	ISIGN
SECTION CORNER MONUMENT	•
SECTION CORNER SYMBOL	•
FEE (HATCH VARIES)	NO ACCESS (BY ACQUISITION)
TEMPORARY LIMITED EASEMENT	NO ACCESS (BY STATUTORY AUTHORITY)
PERMANENT LIMITED EASEMENT	SECTION LINE
R/W BOUNDARY POINT	QUARTER LINE
PARCEL NUMBER	SIXTEENTH LINE
UTILITY PARCEL NUMBER	EXISTING CENTERLINE
SIGN NUMBER (OFF PREMISE)	PROPOSED REFERENCE LINE
BUILDING	PARALLEL OFFSET
CONVENTIONAL UTILITY SYMBOLS	
WATER	W
GAS	G
TELEPHONE	T
OVERHEAD	OH
TRANSMISSION LINES	E
ELECTRIC	TV
CABLE TELEVISION	FO
FIBER OPTIC	SAN
SANITARY SEWER	SS
STORM SEWER	NON COMPENSABLE
POWER POLE	COMPENSABLE
TELEPHONE POLE	COMPENSABLE
TELEPHONE PEDESTAL	COMPENSABLE
ELECTRIC TOWER	COMPENSABLE



NOTES

COORDINATES AND BEARINGS ON THIS PLAT ARE ORIENTED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, BROWN COUNTY ZONE, NAD 83 (1991) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS 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.



LAYOUT
SCALE 0 0.05 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.357 MI.

ORIGINAL PLAT PREPARED BY

GRAEF

1150 Springhurst Drive,
Suite 201
Green Bay, WI 54304-5850
920 / 582 9440
920 / 582 9445 fax
www.graef-usa.com



5-23-2012
(Date)

Michael C. Jensen
(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED FOR THE DEPARTMENT

DATE: 5-23-2012

Norman H. Poretsky
(Signature)

4

4

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	SHEET NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQUARE FEET REQUIRED			T.L.E. SQ. FT.	H.E. SQ. FT.	PARCEL NUMBER
				NEW	EXISTING	TOTAL			
26	4.05	THOMAS J. KRAJCIK	FEE & TLE	112	---	112	995	---	26
27	4.05	NORBERT L. & LINDA L. SMANEY	TLE	---	---	---	375	---	27
28	4.05	LISA WEBER	TLE	---	---	---	449	---	28
29	4.05	MARGARET DUFEK	TLE	---	---	---	400	---	29
30	---	---	---	---	---	---	---	---	30
31	4.05	DAVID P. & KATHLEEN A. O'BRIEN	TLE	---	---	---	300	---	31
32	4.05	LAURA A. VANDERVENTER	TLE	---	---	---	300	---	32
33	4.05	SCOTT B. & LORI A. LAHA	TLE	---	---	---	375	---	33
34	4.05	ALFONSO E. & GERADINA DAGNINO	TLE	---	---	---	492	---	34
35	---	---	---	---	---	---	---	---	35
36	4.05	ROBERT C. BURKEL & MARILYN J. BEYER	TLE	---	---	---	251	---	36
37	4.05	JENNIFER A. HELLER	TLE	---	---	---	251	---	37
38	4.05	ROBERT C. & DELORIS C. BURKEL	TLE	---	---	---	251	---	38
39	4.05	N.E.W. PARA-MEDIC RESCUE, INC.	TLE	---	---	---	502	---	39
40	---	---	---	---	---	---	---	---	40
41	4.05	TODD J. STEPHAN	TLE	---	---	---	251	---	41
42	4.05	DANIEL & ANN CHARNIAK	FEE & TLE	30	---	30	586	---	42
43	4.05	DEBRA SMITH	TLE	---	---	---	300	---	43
44	4.05	TIMOTHY R. PORTER	TLE	---	---	---	427	---	44
45	---	---	---	---	---	---	---	---	45
46	4.05	RIPLEY PROPERTIES, LLC	TLE	---	---	---	427	---	46
47	4.05	DAVID BANASZYNSKI	FEE & TLE	30	---	30	494	---	47
48	4.05	CAROL A. PASOWICZ	FEE & TLE	30	---	30	604	---	48
49	4.05	DARREL J. HEUSER	TLE	---	---	---	250	---	49
50	---	---	---	---	---	---	---	---	50
51	4.05	JASON H. HUTTER	TLE	---	---	---	143	---	51
52	4.05	TERRY KLOSTERMAN	TLE	---	---	---	375	---	52
53	4.05	LAWRENCE D. WILKE	TLE	---	---	---	125	---	53
54	4.06	RUDY J. DELLEMAN	TLE	---	---	---	251	---	54
55	---	---	---	---	---	---	---	---	55
56	4.06	KEVIN & KEN CZARNIAK, KAREN CZARNIAK DAY	TLE	---	---	---	377	---	56
57	4.06	DAVID J. SZYMANSKI & TAMMY A. SWEARINGEN	TLE	---	---	---	168	---	57

REVISION DATE	DATE 5-23-2012	SCALE, FEET 	HWY: STH 160	STATE R/W PROJECT NUMBER 9532-03-22	PLAT SHEET 4.02	PS&E SHEET 64	E
			COUNTY: BROWN				

4

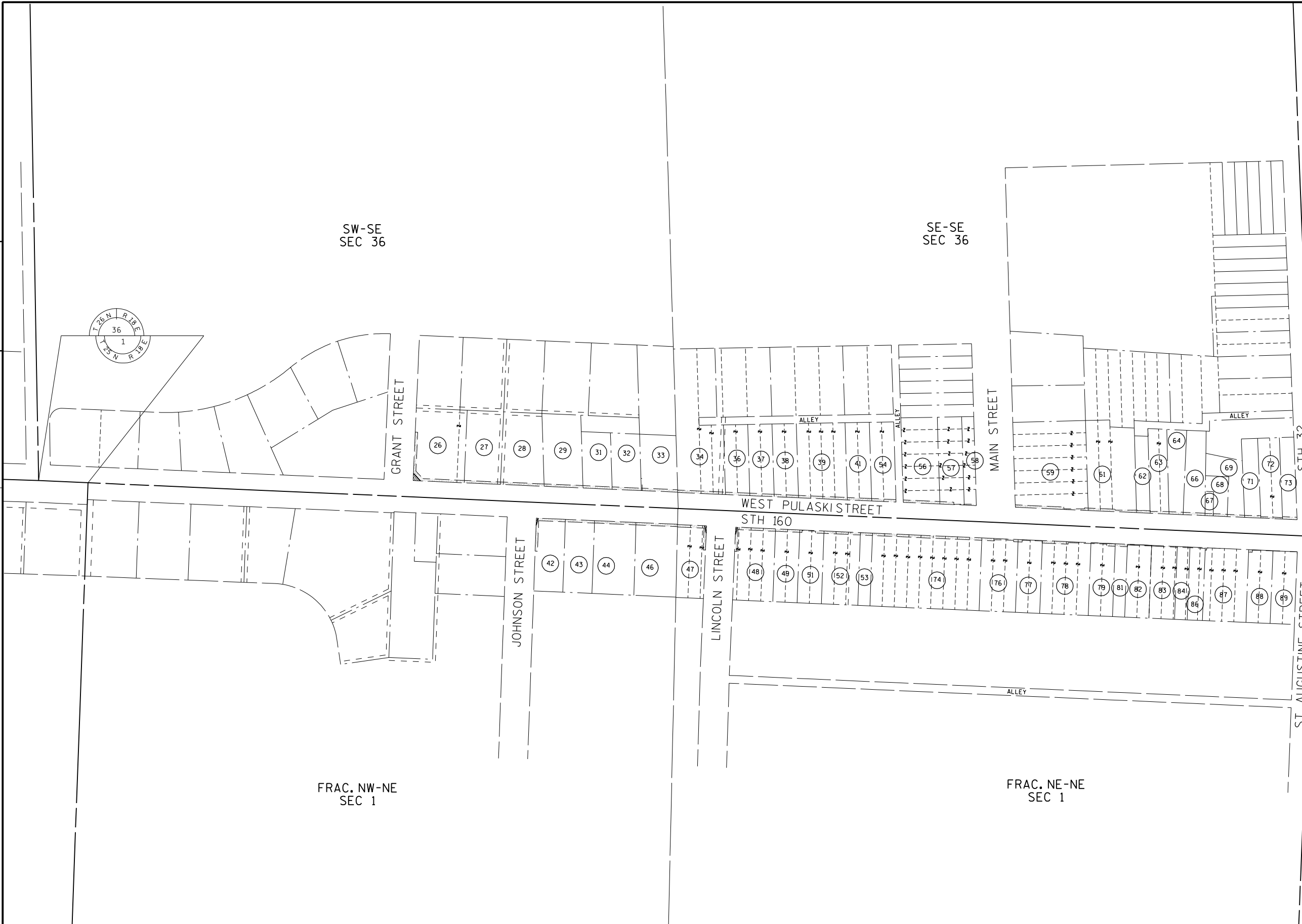
SCHEDULE OF LANDS & INTERESTS REQUIRED

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

4

PARCEL NUMBER	SHEET NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQUARE FEET REQUIRED			T.L.E. SQ. FT.	H.E. SQ. FT.	PARCEL NUMBER
				NEW	EXISTING	TOTAL			
58	4.06	DAVID BANASZYNSKI	TLE	---	---	---	60	---	58
59	4.06	ANTHONY HIERONIMCZAK	TLE	---	---	---	629	---	59
60	---	---	---	---	---	---	---	---	60
61	4.06	GREGG E. & NAVIDA C. MATUSZAK	TLE	---	---	---	460	---	61
62	4.06	THOMAS J. & GLORIA M. STERR	TLE	---	---	---	134	---	62
63	4.06	GREGORY & JANET VANASTEN	TLE	---	---	---	151	---	63
64	4.06	PULASKI AREA HISTORICAL SOCIETY, INC.	TLE	---	---	---	146	---	64
65	---	---	---	---	---	---	---	---	65
66	4.06	JOHN A. & LORI S. BERENDSEN	TLE	---	---	---	215	---	66
67	4.06	DONALD MARNOCHA & GERALD J. MARNOCHA	TLE	---	---	---	77	---	67
68	4.06	DOUGLAS D. & THERESA M. PRENTICE	TLE	---	---	---	128	---	68
69	4.06	ASK INVESTMENTS, LLC	TLE	---	---	---	151	---	69
70	---	---	---	---	---	---	---	---	70
71	4.06	KATHRYN R. LITTLE	TLE	---	---	---	137	---	71
72	4.06	BAYLAKE BANK	TLE	---	---	---	129	---	72
73	4.06	JEFFREY A. & MELISSA A. TAPPY	TLE	---	---	---	149	---	73
74	4.06	VILLAGE OF PULASKI	TLE	---	---	---	1,125	---	74
75	---	---	---	---	---	---	---	---	75
76	4.06	WERY'S FLOWERS-N-THINGS, LLC	TLE	---	---	---	270	---	76
77	4.06	DAVID & CARLENE CICHOCKI	TLE	---	---	---	91	---	77
78	4.06	MICHAEL R. BOETTCHER	TLE	---	---	---	354	---	78
79	4.06	LORILAND, LLC	TLE	---	---	---	143	---	79
80	---	---	---	---	---	---	---	---	80
81	4.06	VILLAGE OF PULASKI	TLE	---	---	---	125	---	81
82	4.06	LAWRENCE A. SMITH	TLE	---	---	---	73	---	82
83	4.06	COUNTRY PRIDE PROPERTIES, LLC	TLE	---	---	---	78	---	83
84	4.06	MANCI'S DISCOUNT LIQUOR, LLC	TLE	---	---	---	40	---	84
85	---	---	---	---	---	---	---	---	85
86	4.06	GARY & ROSEMARY GAJEWSKI	TLE	---	---	---	43	---	86
87	4.06	DAVID R. KUBIAK	TLE	---	---	---	19	---	87
88	4.06	JOE'S IN PULASKI, LLC	TLE	---	---	---	61	---	88
89	4.06	RICHARD T. KUEHN	TLE	---	---	---	15	---	89
200	4.05	WE ENERGIES (ELECTRIC)	RELEASE OF RIGHTS	---	---	---	---	---	200
201	4.05	NORTHEAST TELEPHONE CO., LLC	RELEASE OF RIGHTS	---	---	---	---	---	201
204	4.06	VILLAGE OF PULASKI SANITARY SEWER	RELEASE OF RIGHTS	---	---	---	---	---	204
205	4.06	VILLAGE OF PULASKI WATERMAIN	RELEASE OF RIGHTS	---	---	---	---	---	205

4



4

REVISION DATE	DATE 5-23-2012	NOT TO SCALE	HWY: STH 160	STATE R/W PROJECT NUMBER 9532-03-22	PLAT SHEET 4.04	E
			COUNTY: BROWN	CONSTRUCTION PROJECT NUMBER	PS&E SHEET 66	

GN

4

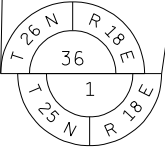
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ROAD NAME	BASIS OF EXISTING R-O-W	WIDTH	YEAR
STH 160	PLAT OF PULASKI	66'	1888
STH 160	BEHRENDT PLAT	66'	1953
GRANT STREET	BEHRENDT PLAT	60'	1953
JOHNSON STREET	BEHRENDT PLAT	60'	1953
LINCOLN STREET	W.18' LOT 47, LOT 48, E. 17' LOT 49	60'	-

BEGIN RELOCATION ORDER
STA. 127+40.42
Y= 624,911.04
X= 38,760.39

R/L P119+97.62
Y=624,942.901
X=38,018.280

Y=624,942.79
X=38,020.65
NAIL
STA 119+99.99
0.01' RIGHT



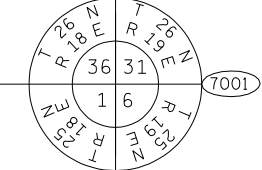
Y=624,938.33
X=38,122.50
RR SPIKE
STA 121+01.94
0.10' RIGHT

COURSE	BEARING	DISTANCE
7765-8717	N 02°31'12" E	15.00'
8717-8718	S 42°29'07" E	21.21'
8718-7765	N 87°29'27" W	15.00'

COURSE	BEARING	DISTANCE
7123-8720	S 87°29'27" E	4.00'
8720-8721	S 17°01'32" W	15.49'
8721-7123	N 02°03'54" E	15.00'

P140+00.00
Y=624,699.82
X=39,009.27

COURSE	BEARING	DISTANCE
7001-7234	N 87°29'38" W	1,309.96'
7234-7121	N 01°43'27" W	33.69'
7001-7473	N 87°29'38" W	1,310.74'
7473-7043	S 01°18'02" W	32.41'



Y=624,827.87
X=40,646.11
NAIL
STA. 146+27.96
0.14' LEFT

COURSE	BEARING	DISTANCE
7373-8725	S 02°29'24" W	15.00'
8725-8724	N 12°26'24" W	15.53'
8724-7373	S 87°29'14" E	4.00'

COURSE	BEARING	DISTANCE
7041-8728	S 87°29'14" E	4.00'
8728-8729	S 17°25'23" W	15.52'
8729-7041	N 02°29'24" E	15.00'

REVISION DATE	DATE 5-23-2012	SCALE, FEET 0 50 100	HWY: STH 160	STATE R/W PROJECT NUMBER 9532-03-22	PLAT SHEET 4.05
			COUNTY: BROWN	CONSTRUCTION PROJECT NUMBER	PS&E SHEET 67

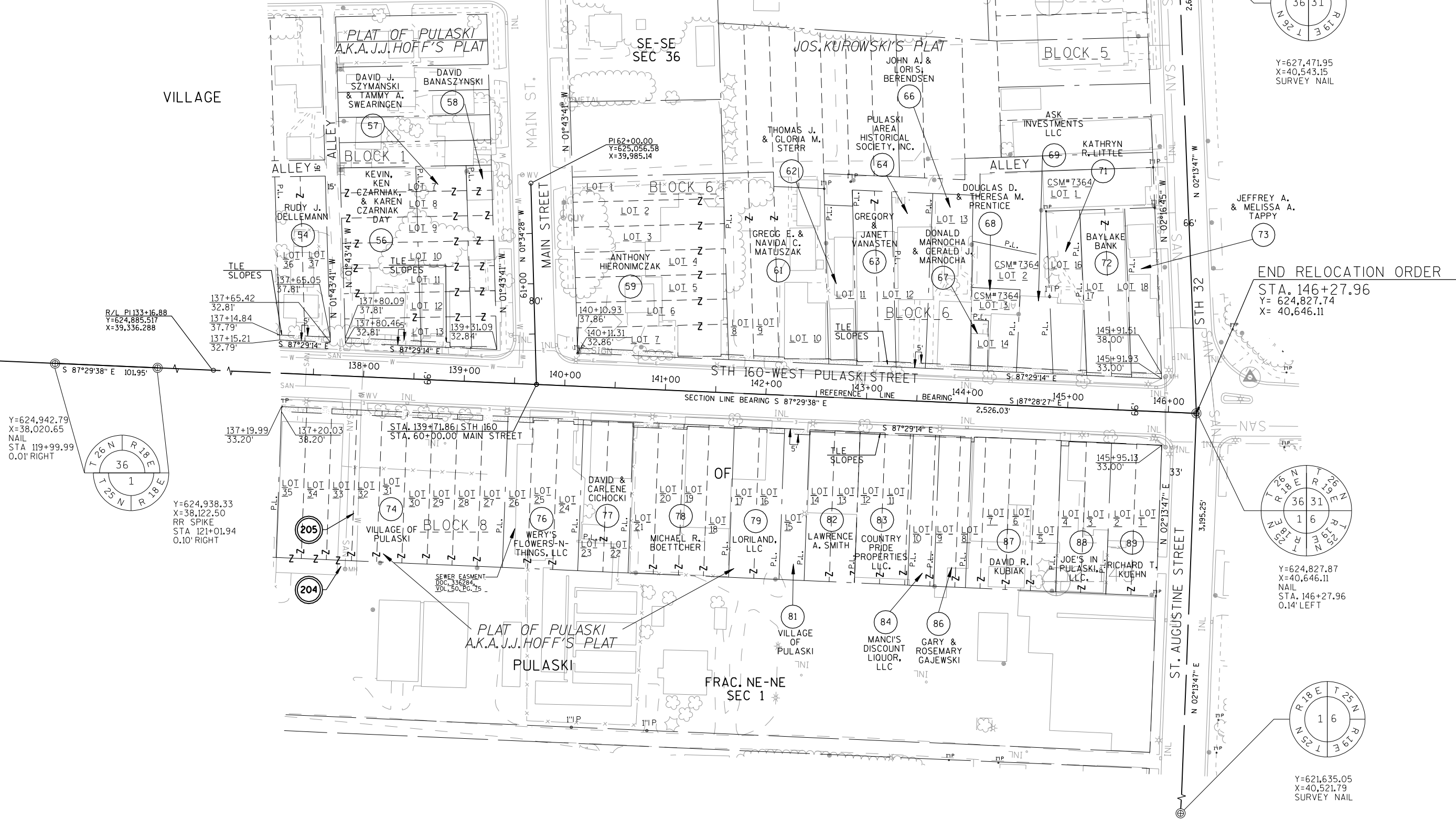
ROAD NAME	BASIS OF EXISTING R-O-W	WIDTH	YEAR
STH 160	PLAT OF PULASKI	66'	1888
MAIN STREET	PLAT OF PULASKI	80'	1888
STH 32-W 1/2	PLAT OF PULASKI	33'	1888
SAINT AUGUSTINE STREET- W1/2	PLAT OF PULASKI	33'	1888

GN

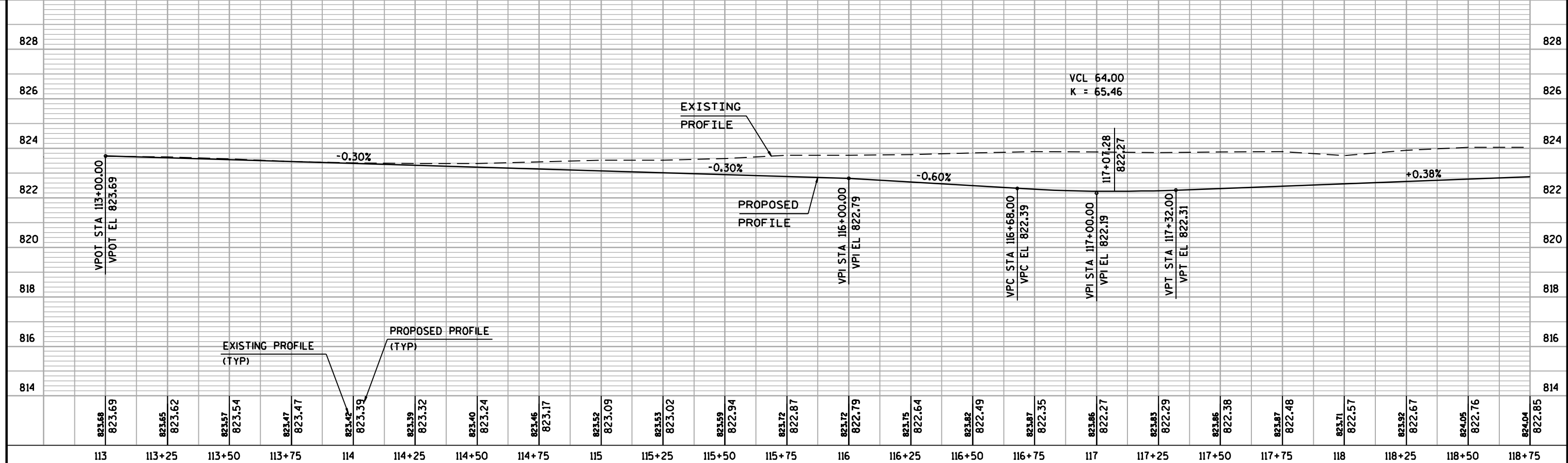
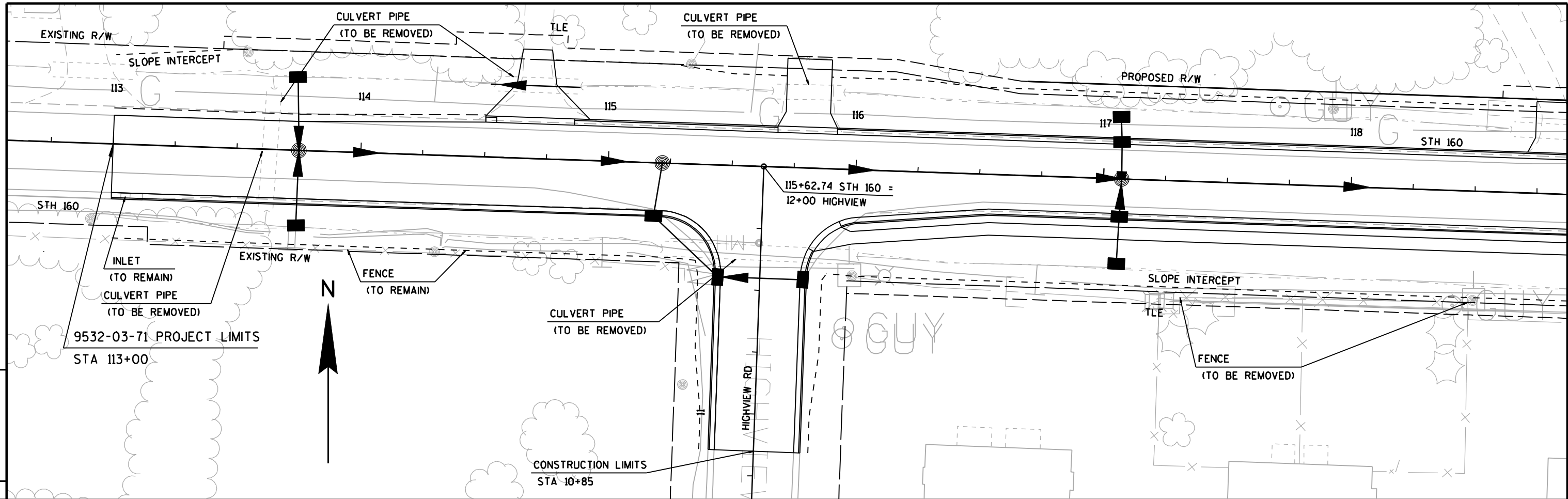


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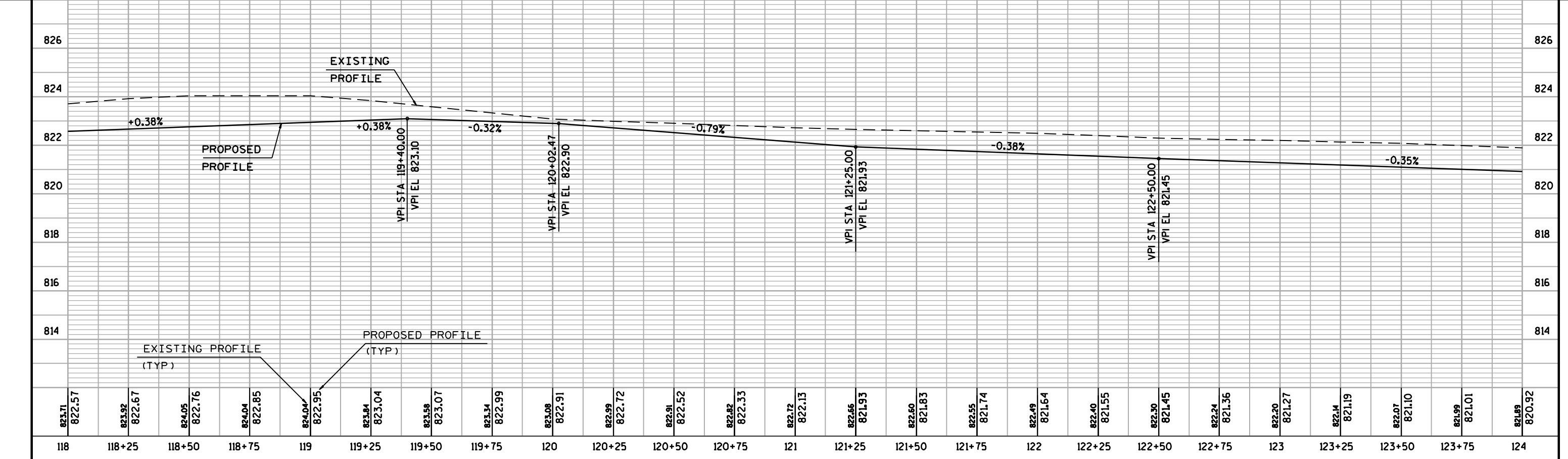
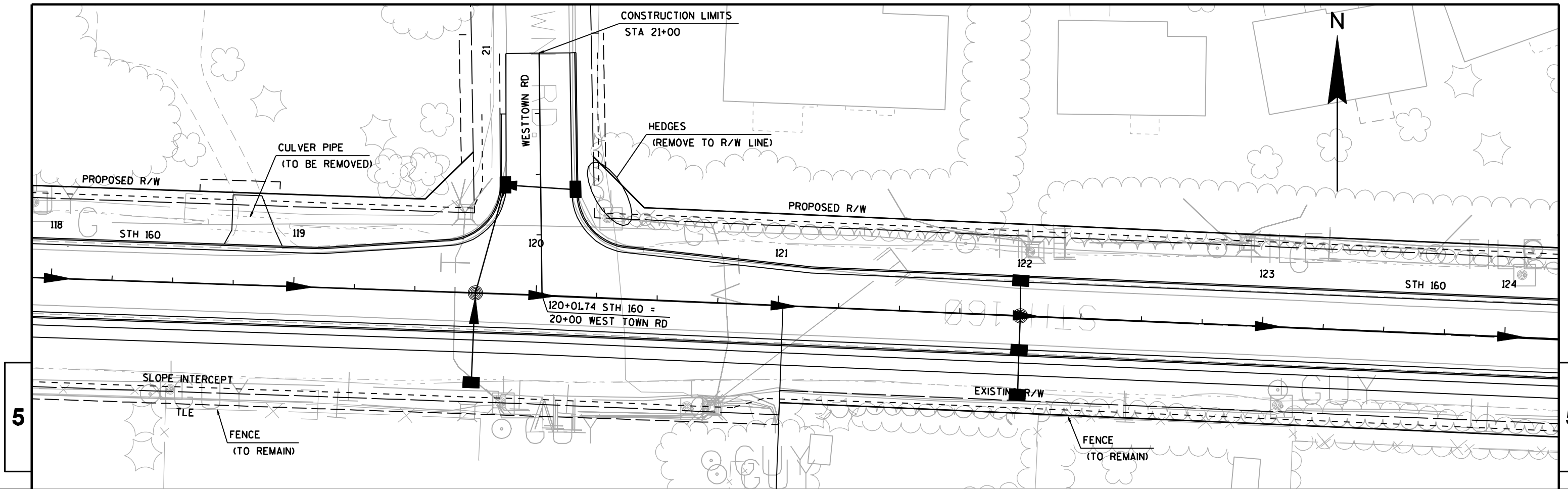
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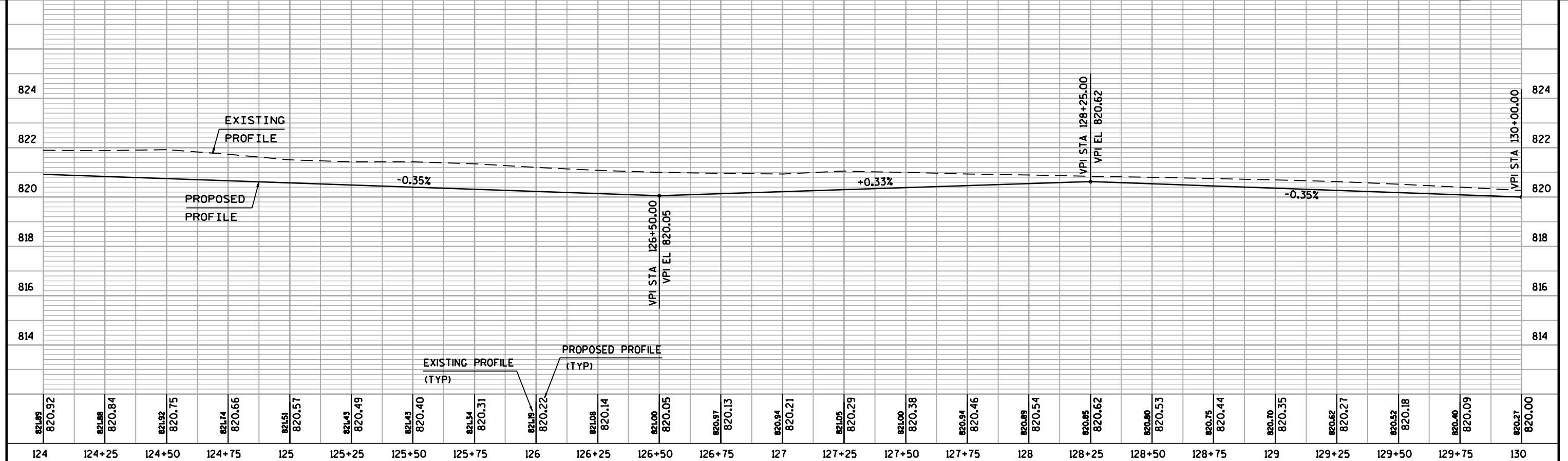
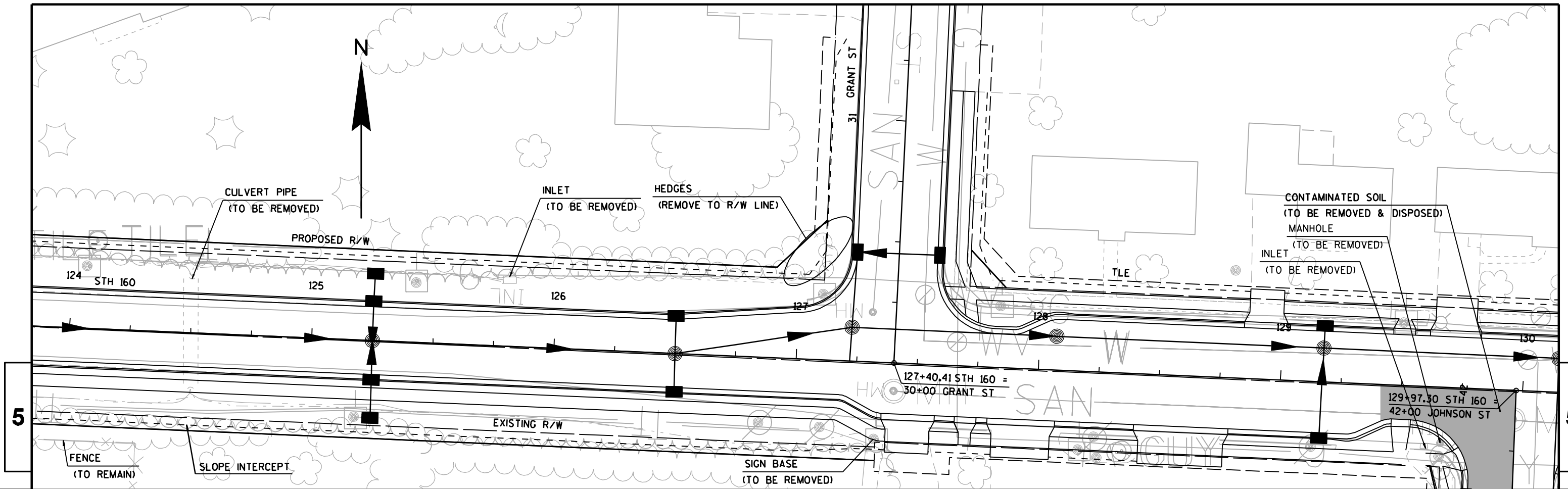


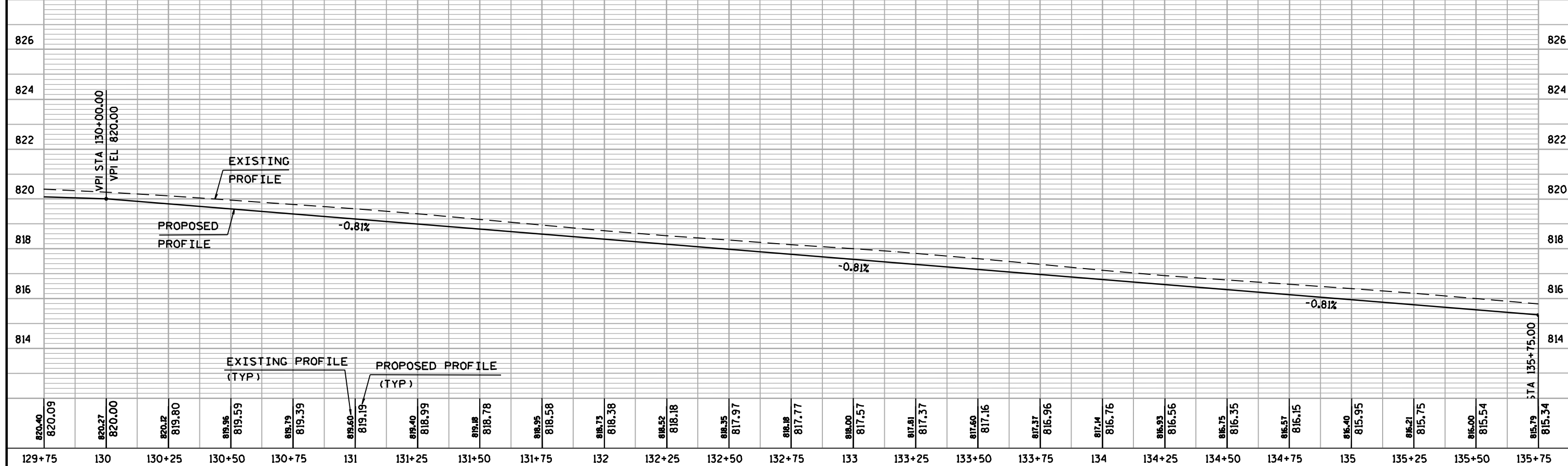
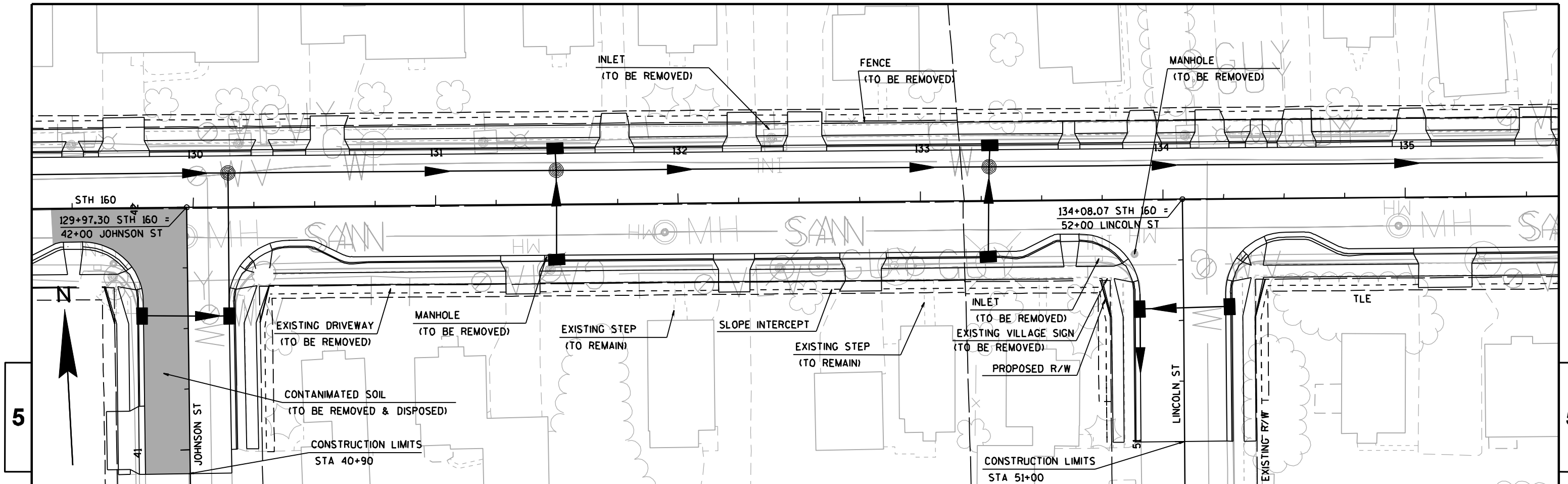
REVISION DATE	DATE 5-23-2012	SCALE, FEET 0 50 100	HWY: STH 160	STATE R/W PROJECT NUMBER 9532-03-22	PLAT SHEET 4.06
			COUNTY: BROWN	CONSTRUCTION PROJECT NUMBER	PS&E SHEET 68

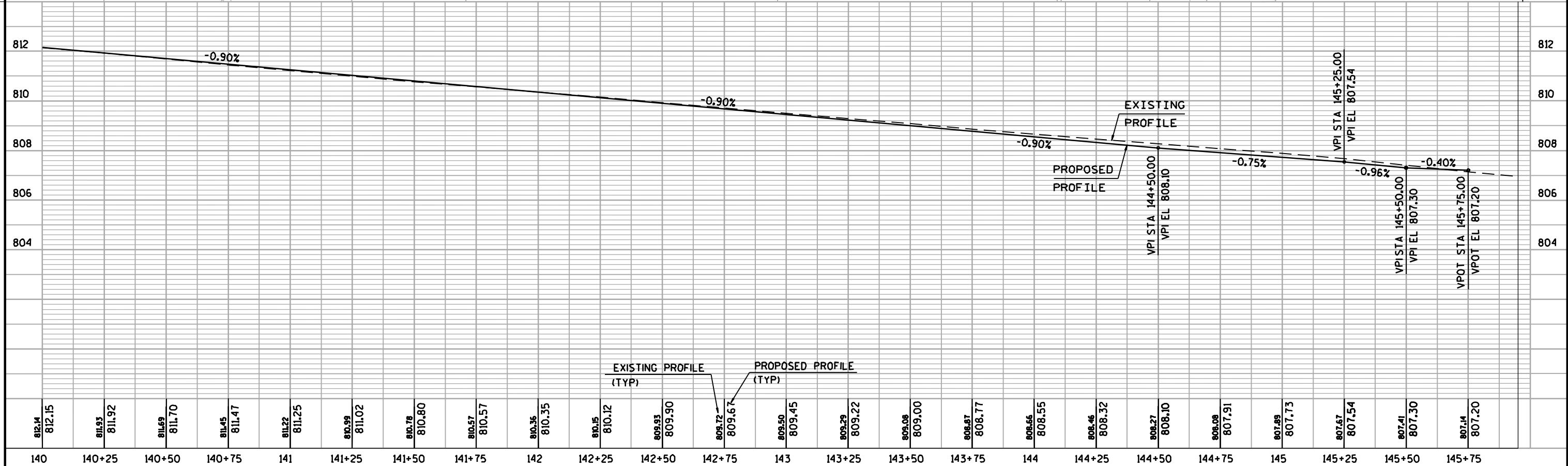
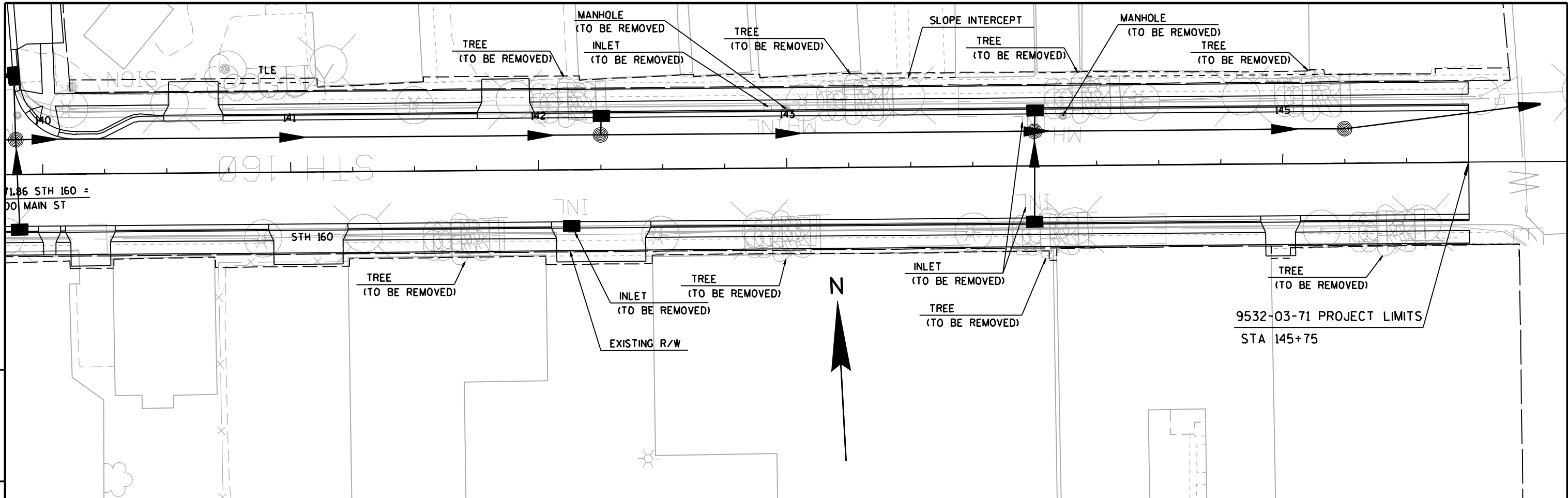


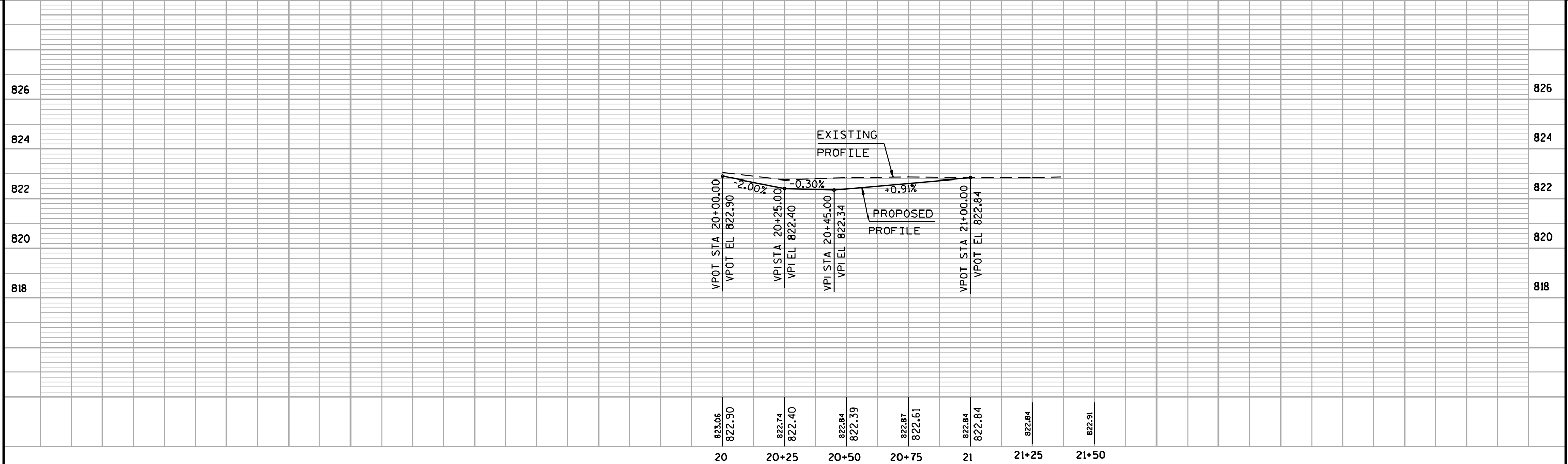
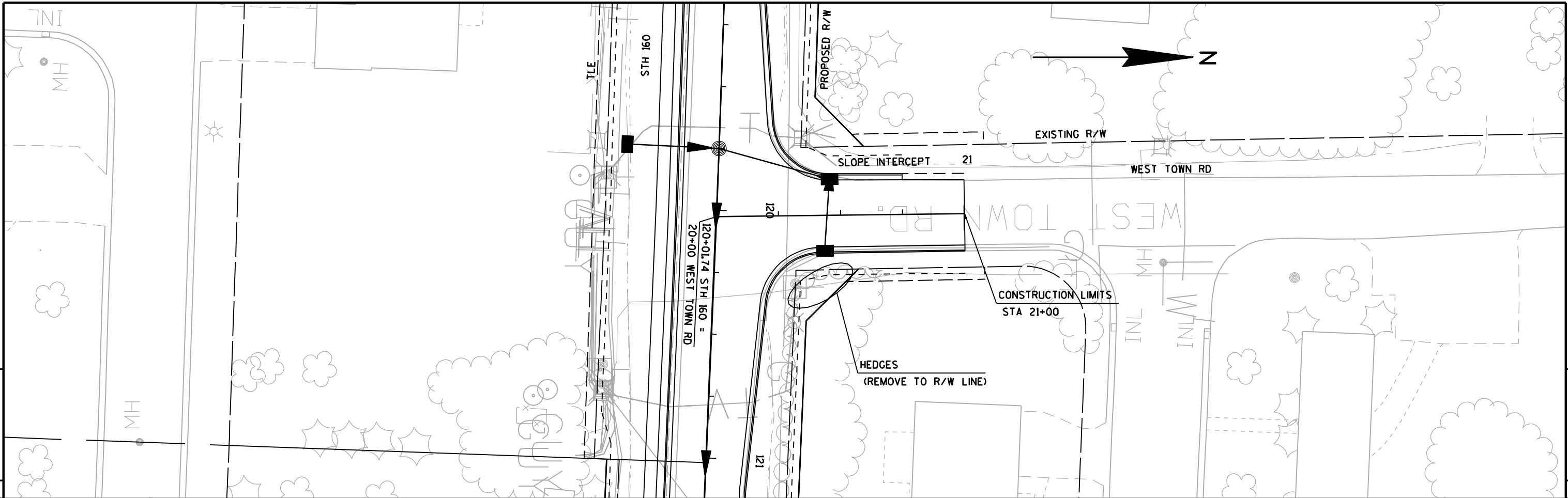
PROJECT NO: 9532-03-71	HWY: STH 160	COUNTY: BROWN	PLAN & PROFILE - STH 160	SHEET 69	E
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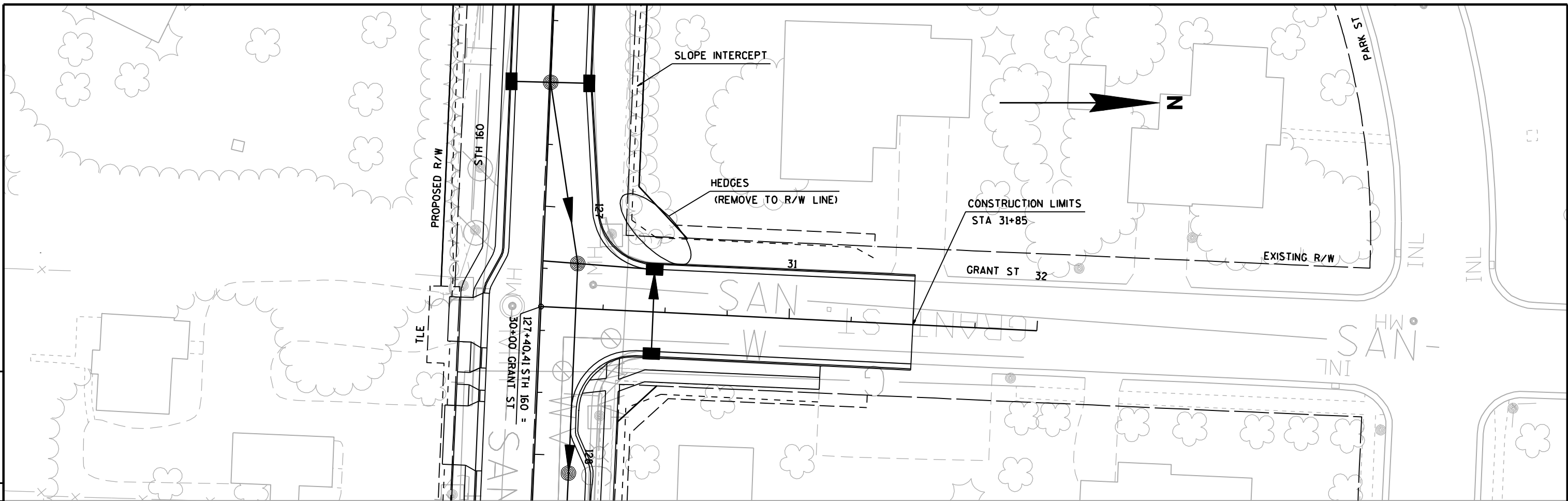




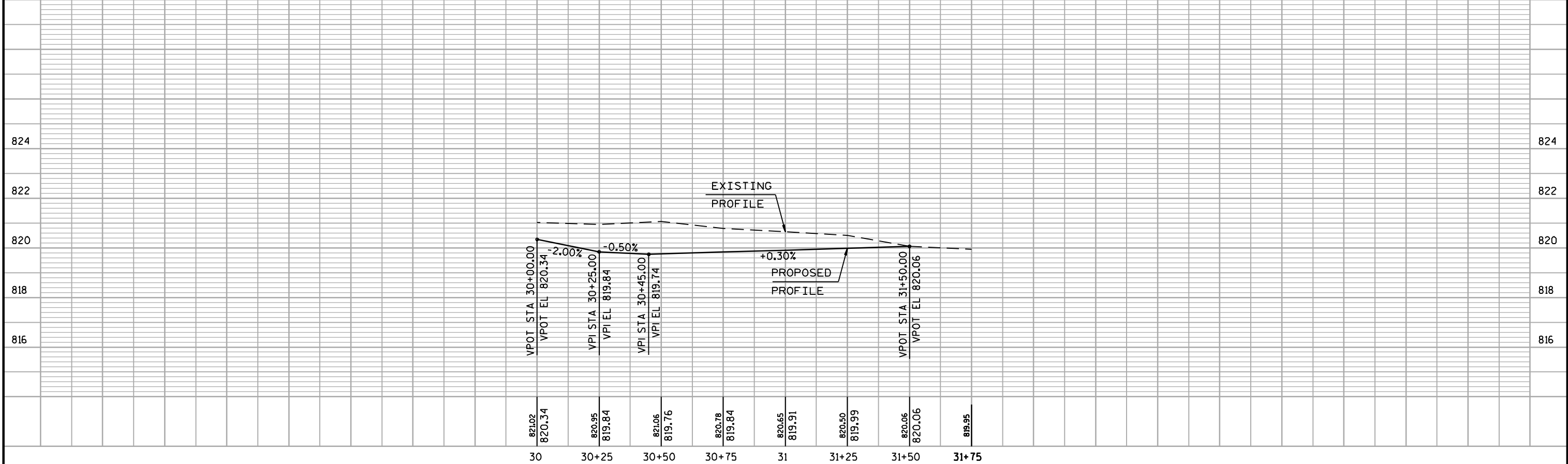




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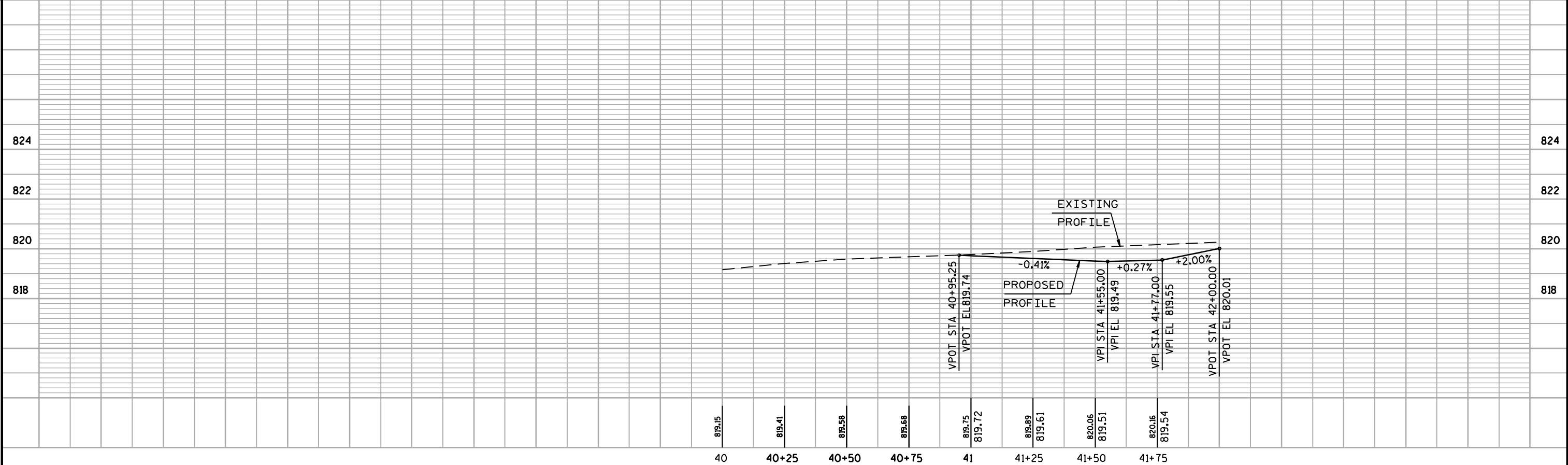
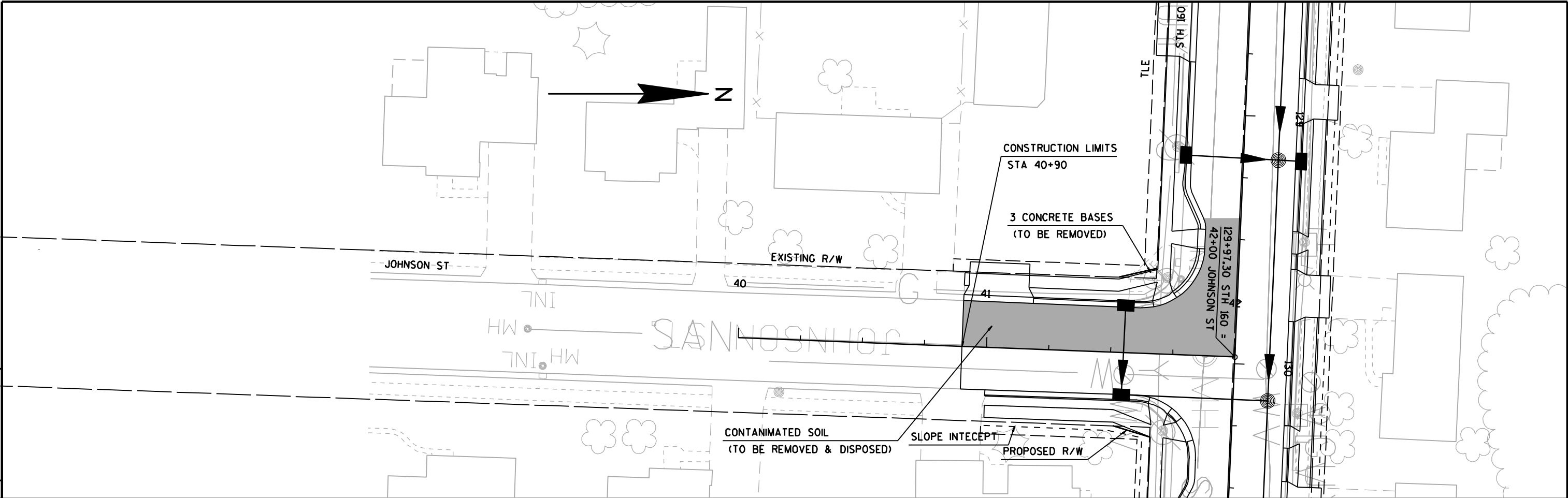


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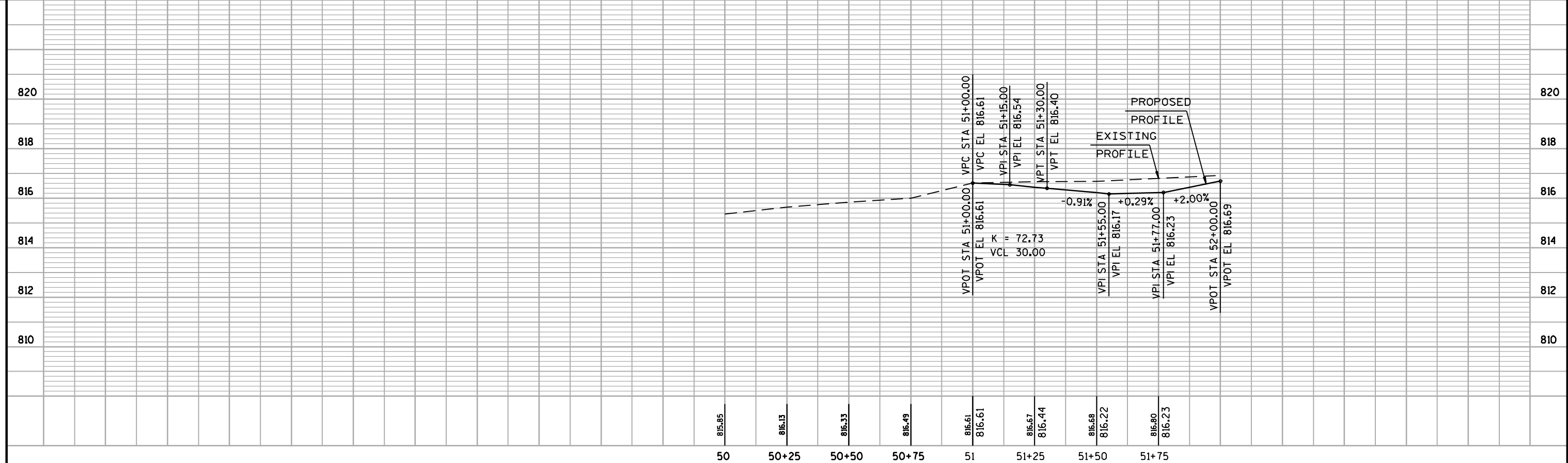
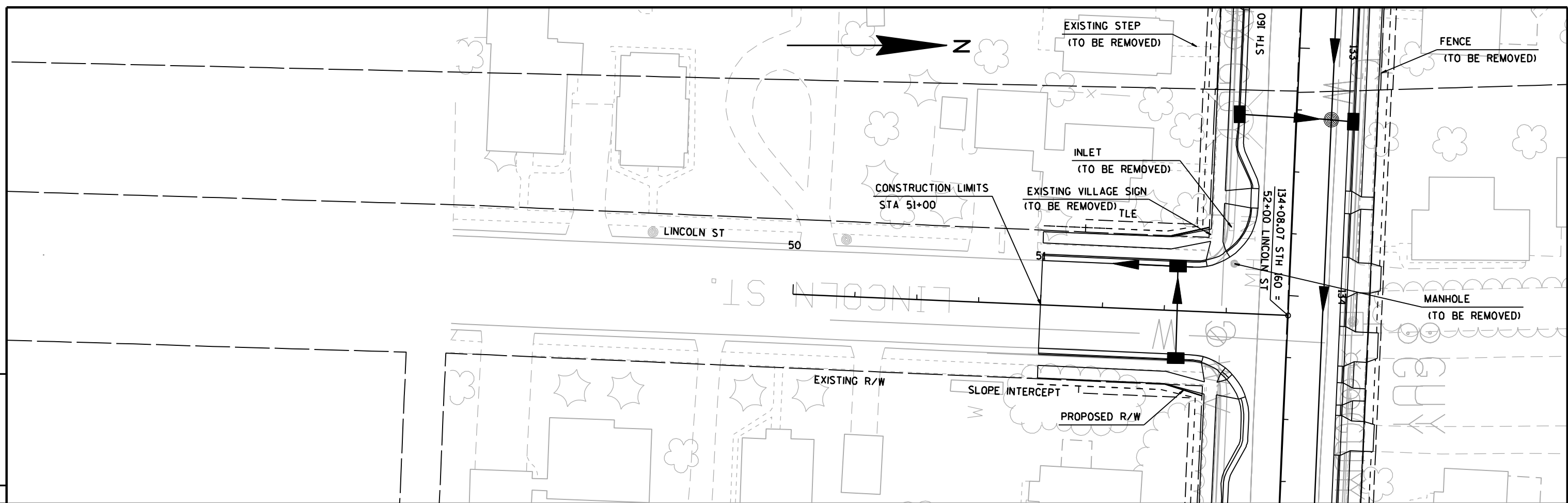
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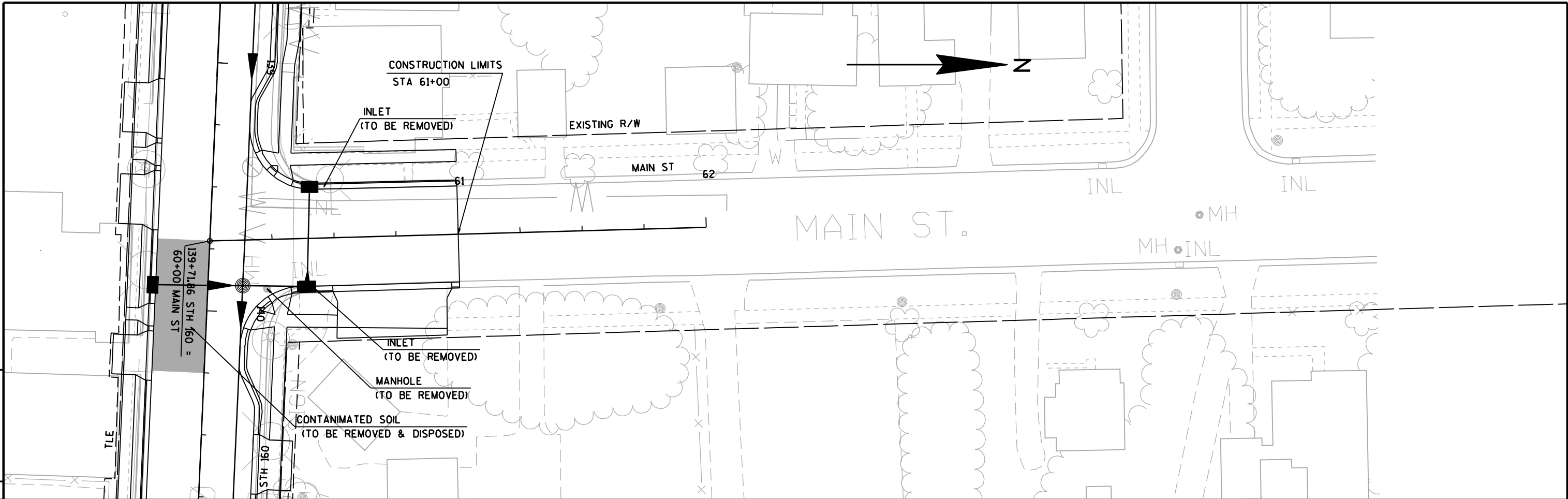


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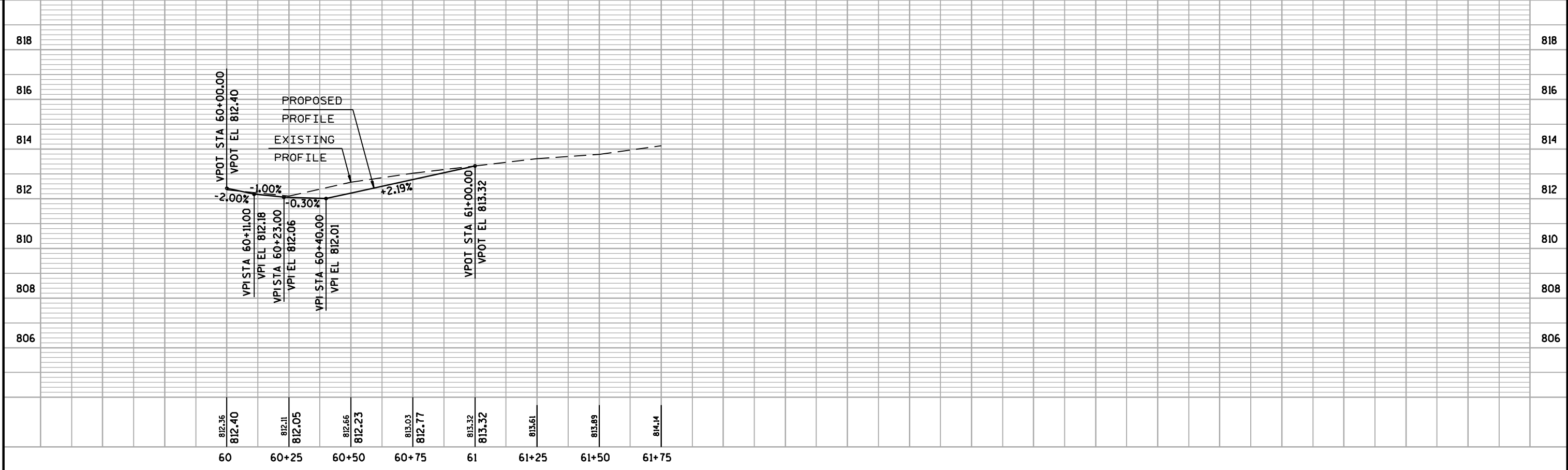
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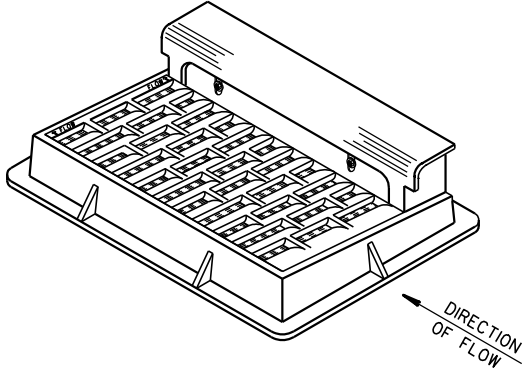
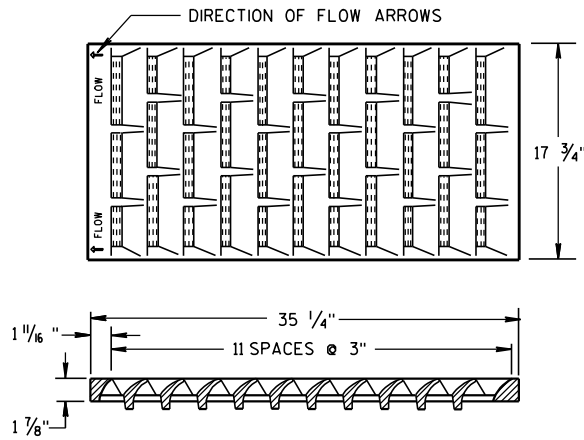
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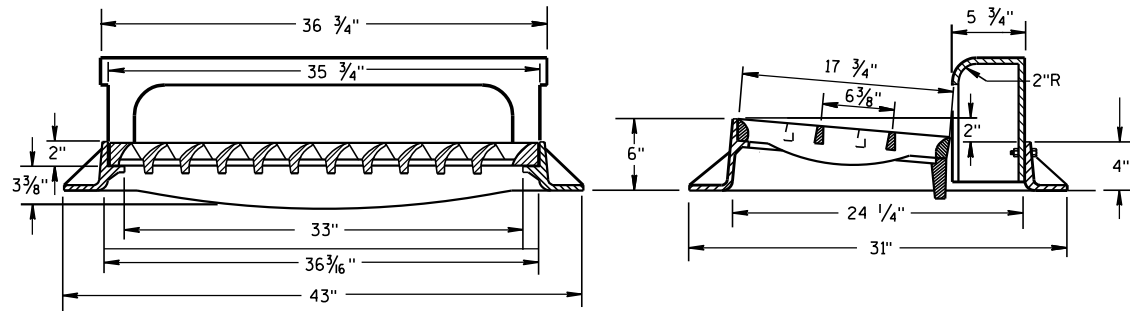
Standard Detail Drawing List

08A05-16A	INLET COVERS TYPE A, H, A-S, & H-S
08A05-18D	INLET COVER, TYPE BW, Z MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-01	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-14A	CURB RAMPS TYPES 1 AND 1-A
08D05-14B	CURB RAMPS TYPES 2 AND 3
08D05-14C	CURB RAMPS TYPE 4A
08D05-14D	CURB RAMPS TYPE 4B
08D05-14E	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
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
14A01-03	TREE PRESERVATION DETAILS
15A03-01	MARKER POSTS, FLEXIBLE, FOR CULVERT END
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-04A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-01	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C08-15A	PAVEMENT MARKING (MAINLINE)
15C08-15B	PAVEMENT MARKING (INTERSECTIONS)
15C08-15F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE
16A01-06	LANDMARK REFERENCE MONUMENTS AND COVERS

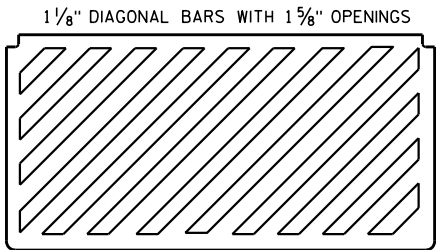
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"



TYPE "H"
(APPROXIMATE WEIGHT 422 LBS.)
FRAME..... 175 LBS.
GRATE..... 138 LBS.
CURB BOX..... 109 LBS.



**SPECIAL GRATE FOR
TYPE "H" COVER**
(MEASURES 35 1/4" X 17 3/4" X 2")
(APPROXIMATE WEIGHT 172 LBS.)
GRATE..... 172 LBS.
(NOTED AS TYPE H-S ON DRAINAGE TABLE)

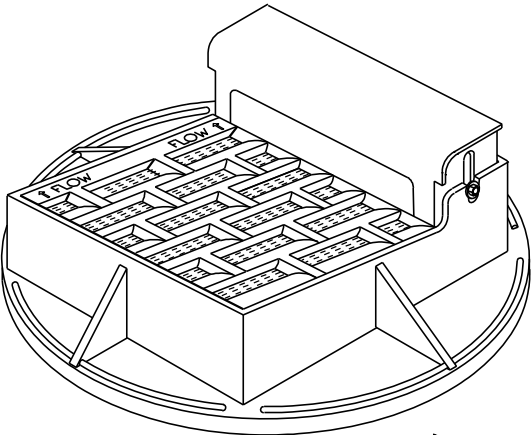
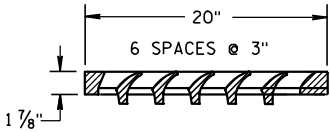
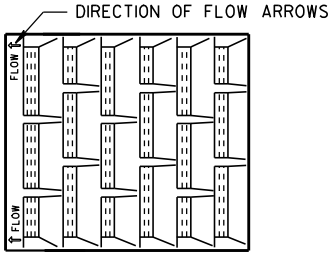
GENERAL NOTES

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.

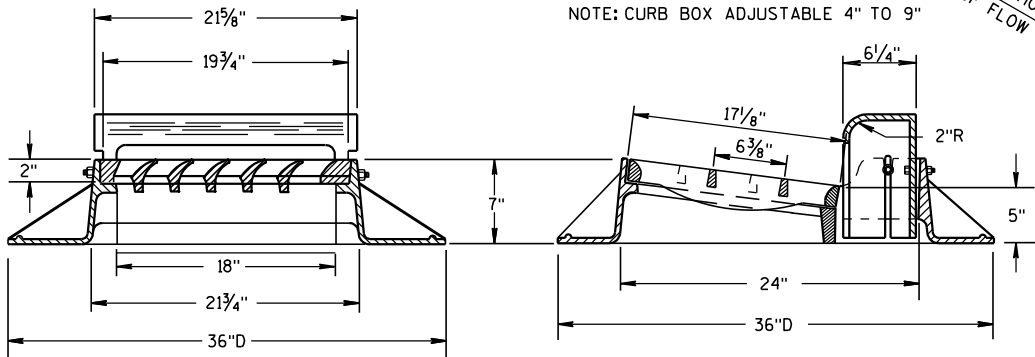
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.



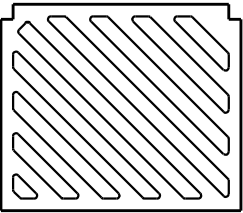
NOTE: CURB BOX ADJUSTABLE 4" TO 9"



TYPE "A"
(APPROXIMATE WEIGHT 325 LBS.)
FRAME..... 157 LBS.
GRATE..... 84 LBS.
CURB BOX..... 84 LBS.

NOTE:
GRATE IS REVERSIBLE.

1" DIAGONAL BARS
WITH 1 1/2" OPENINGS

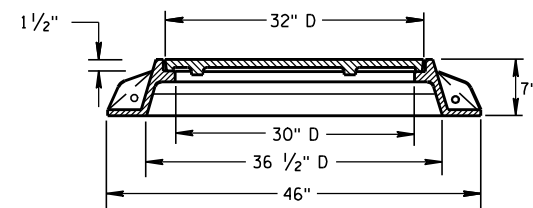
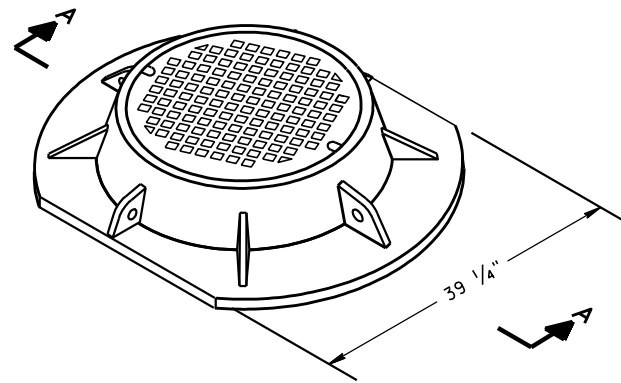


**SPECIAL GRATE FOR
TYPE "A" COVER**
(MEASURES 19 3/4" X 17" X 1 1/8")
GRATE..... 84 LBS.
(NOTED AS TYPE A-S ON DRAINAGE TABLE)

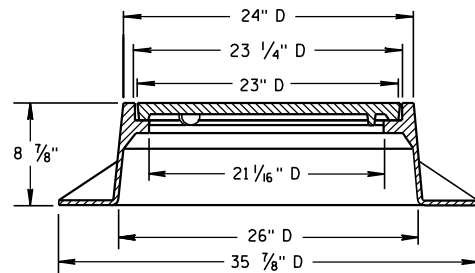
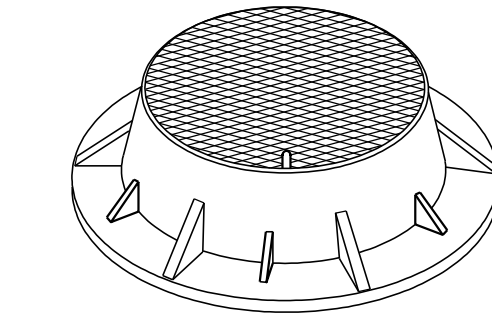
**INLET COVERS
TYPE A, H, A-S, & H-S**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

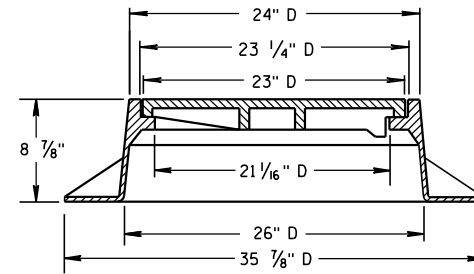
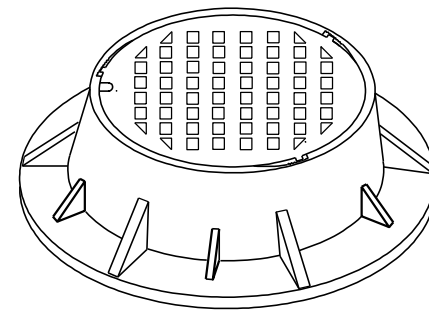
APPROVED
10/4/1999 /S/ Rory L. Rhinehart
DATE CHIEF ROADWAY DEVELOPER
FHWA



SECTION A-A
TYPE "K"
(APPROXIMATE WEIGHT 439 LBS.)
FRAME.....216 LBS.
LID.....223 LBS.



TYPE "J"
(APPROXIMATE WEIGHT 267 LBS.)
FRAME.....152 LBS.
LID.....115 LBS.



TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(APPROXIMATE WEIGHT 267 LBS.)
FRAME.....158 LBS.
LID.....109 LBS.
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

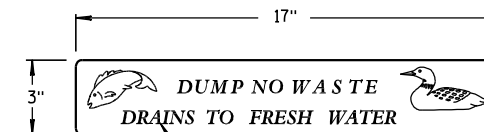
GENERAL NOTES

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

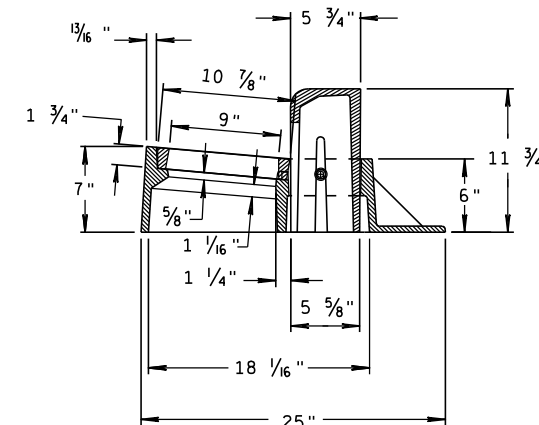
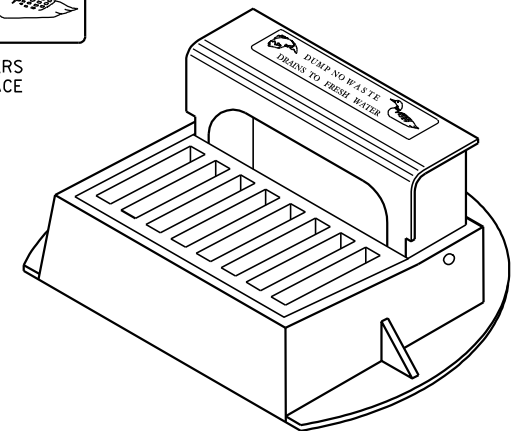
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

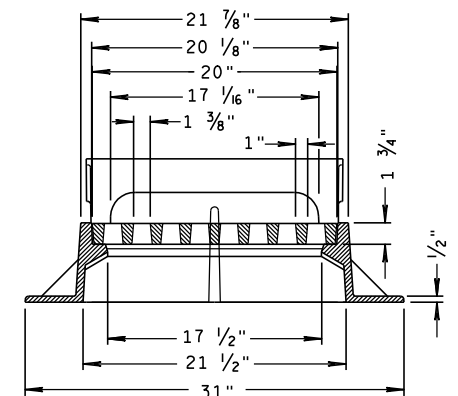
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.



LOGO DETAIL



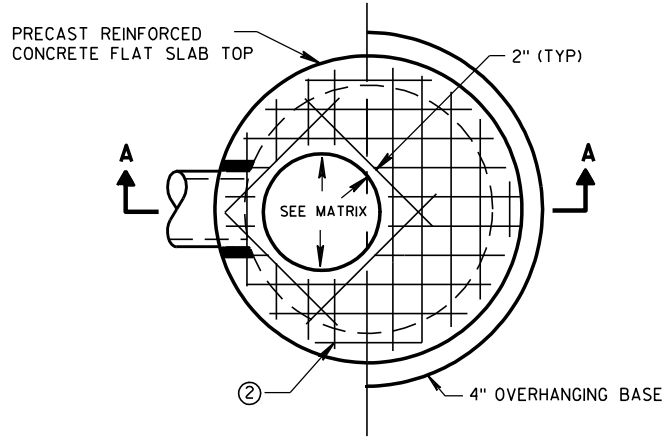
INLET COVER TYPE "Z"
(APPROXIMATE WEIGHT 344 LBS.)
FRAME.....206 LBS.
GRATE.....46 LBS.
CURB BOX.....92 LBS.



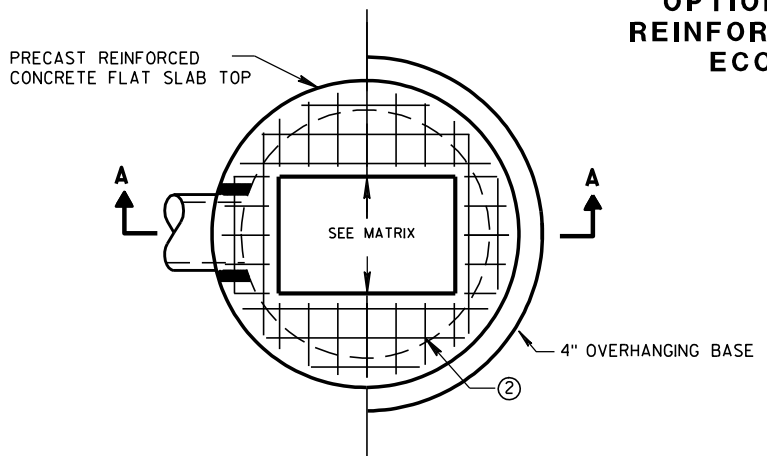
INLET COVERS, TYPE BW, Z
MANHOLE COVERS, TYPE
K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

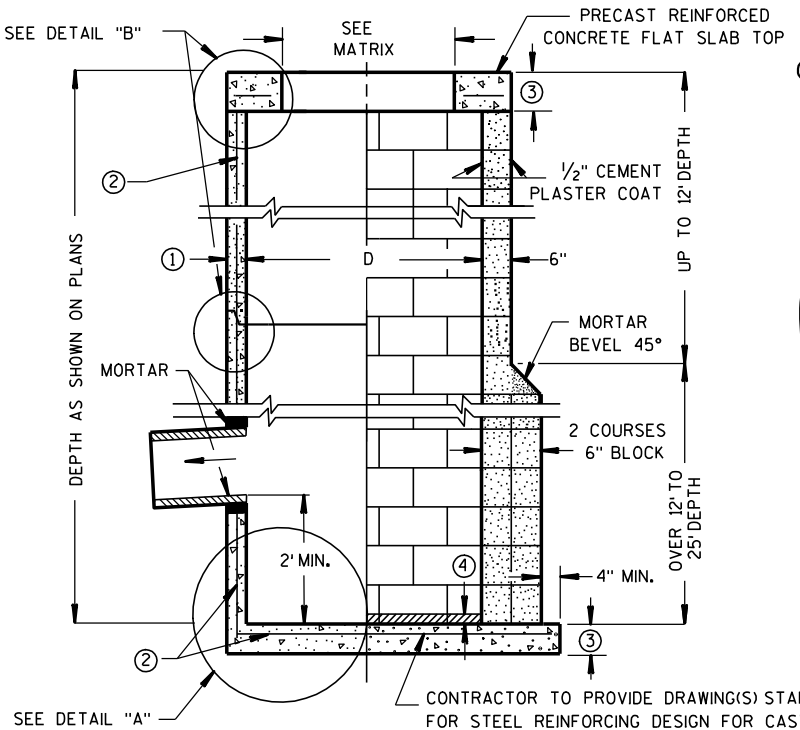
APPROVED
6/5/2012 DATE /S/ Jerry H. Zocco
FHWA ROADWAY STANDARDS 183 NT
ENGINEER



PLAN VIEW CIRCULAR OPENING

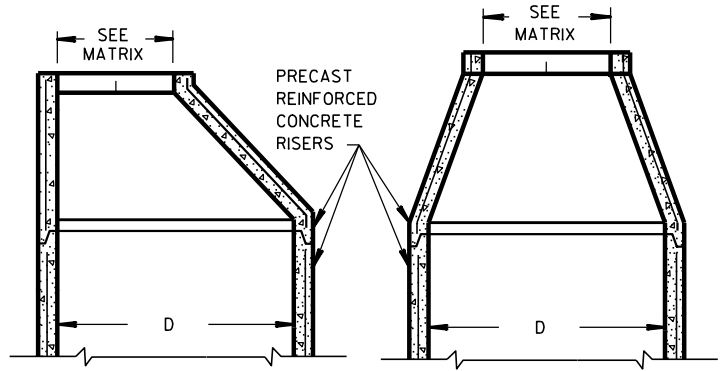


PLAN VIEW RECTANGULAR OPENING



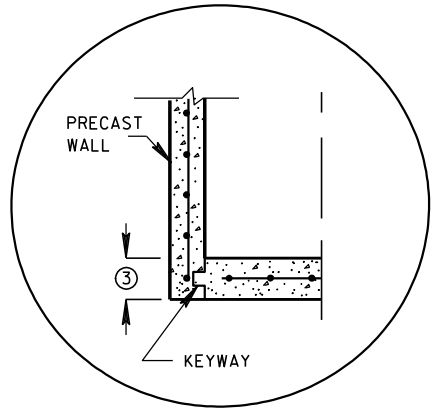
SECTION A-A

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

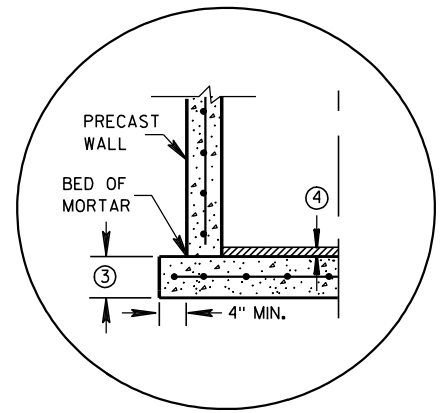


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

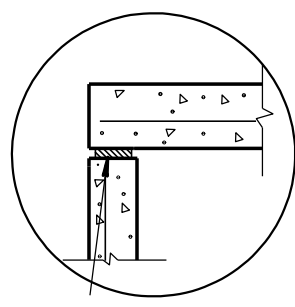


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

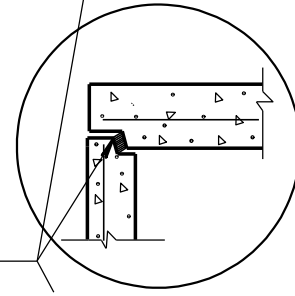


SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

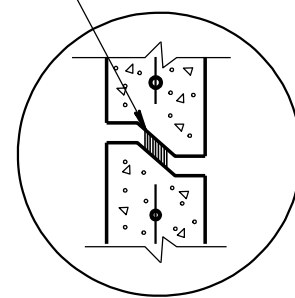
DETAIL "A"



TOP WITH PLAIN END JOINT

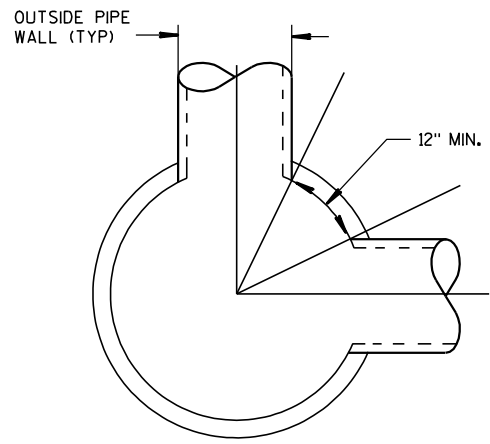


TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



DETAIL "C"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS. UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST 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 GRANULAR 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. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

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 1/2 INCH AND MEET THE REQUIREMENTS OF ASTM A615.

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

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

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

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

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

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPERATE 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
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT-6-FT	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

PIPE MATRIX

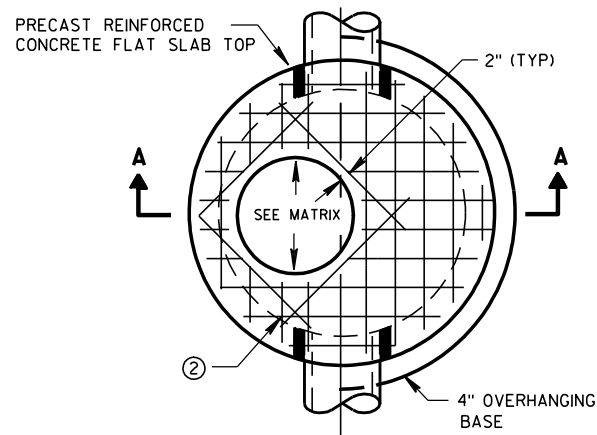
CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

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

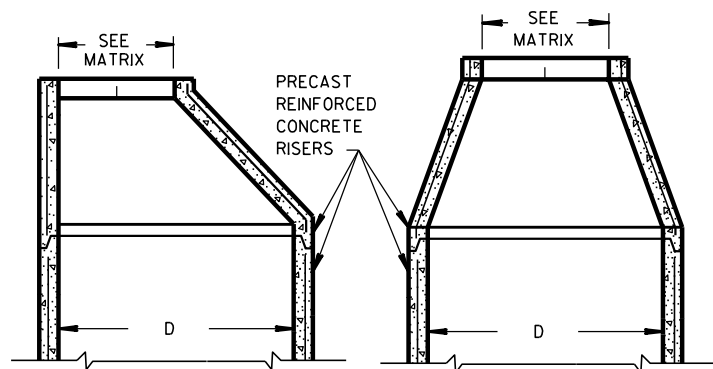
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 DATE /S/ Jerry H. Zopp ENGINEER
FHWA ROADWAY STANDARDS 84

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

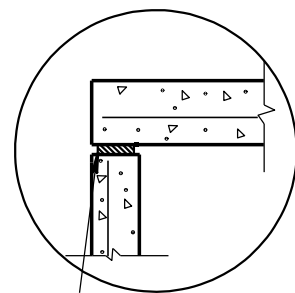


PLAN VIEW CIRCULAR OPENING

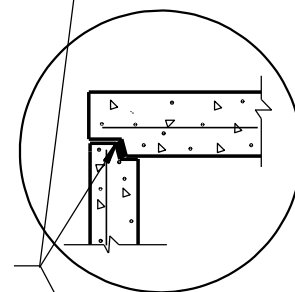


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

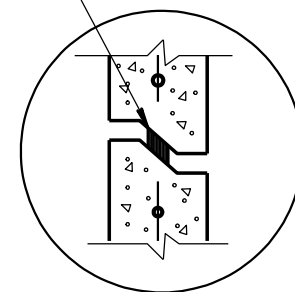
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



TOP WITH PLAIN END JOINT



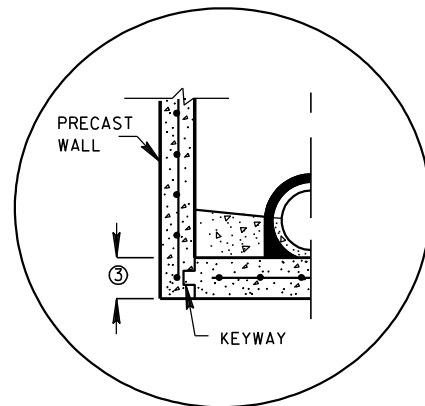
TOP WITH TONGUE AND GROOVE JOINT



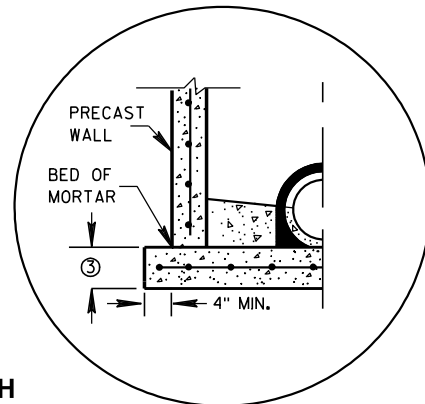
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

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

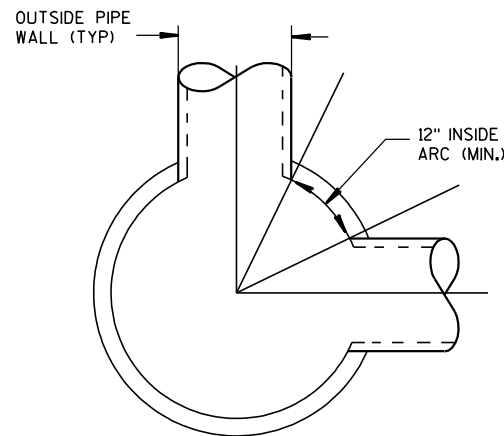


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

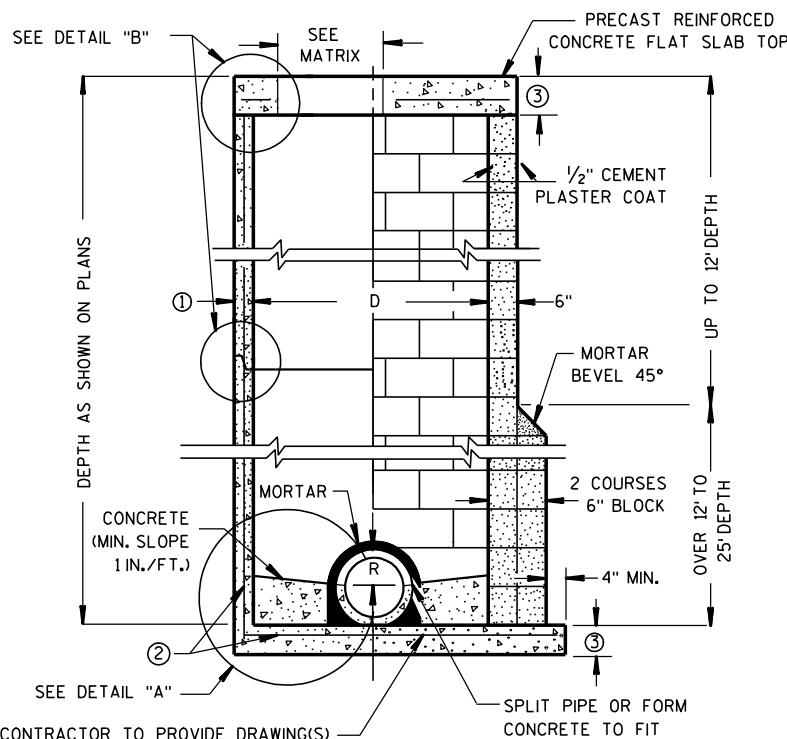


SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"



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

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

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

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS. UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST 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 GRANULAR 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. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

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 1/2" 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 PERMITTED 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 SEPERATE 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

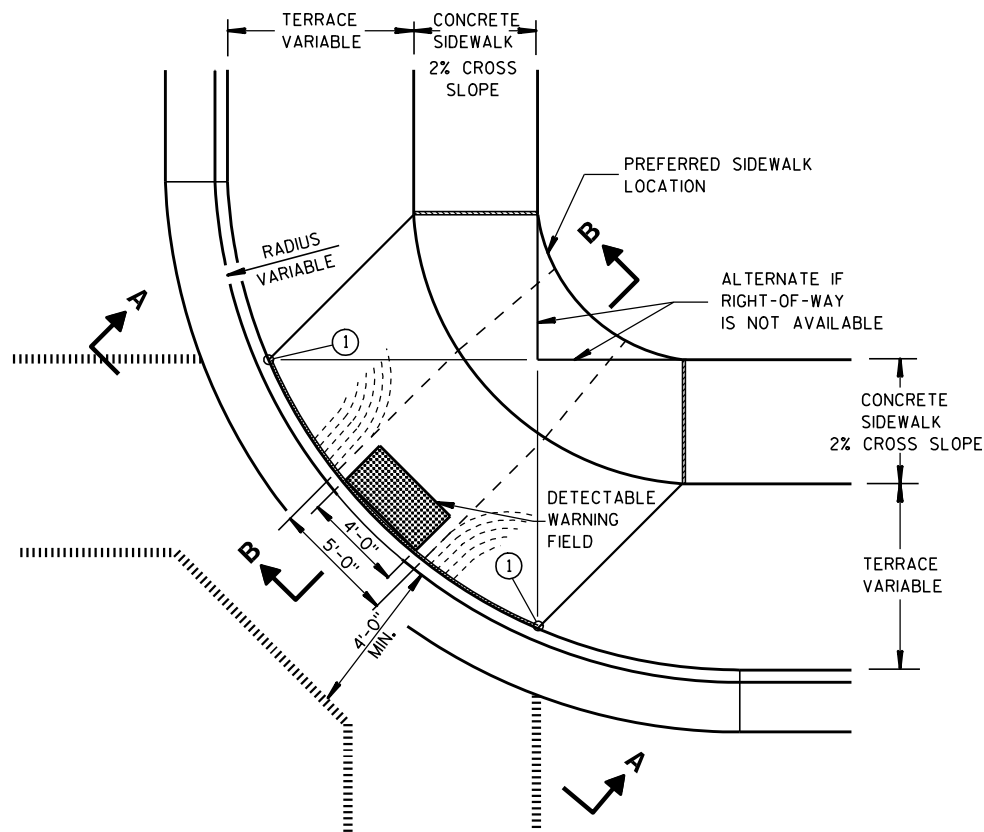
PIPE MATRIX

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

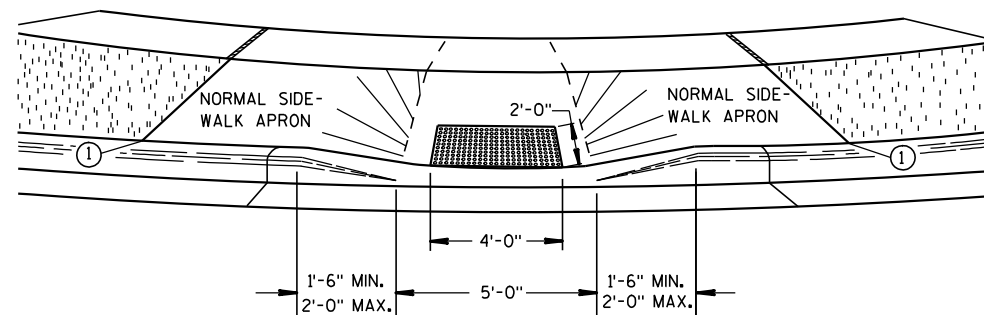
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

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DEPARTMENT OF TRANSPORTATION

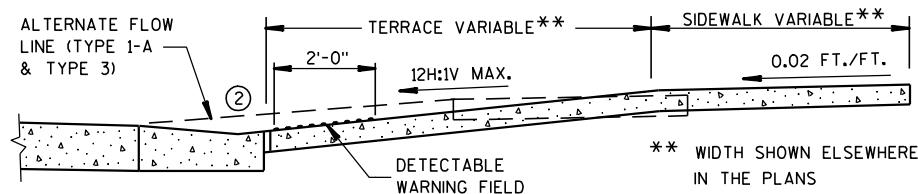
APPROVED
6/5/2012 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEPARTMENT
FHWA ENGINEER 85



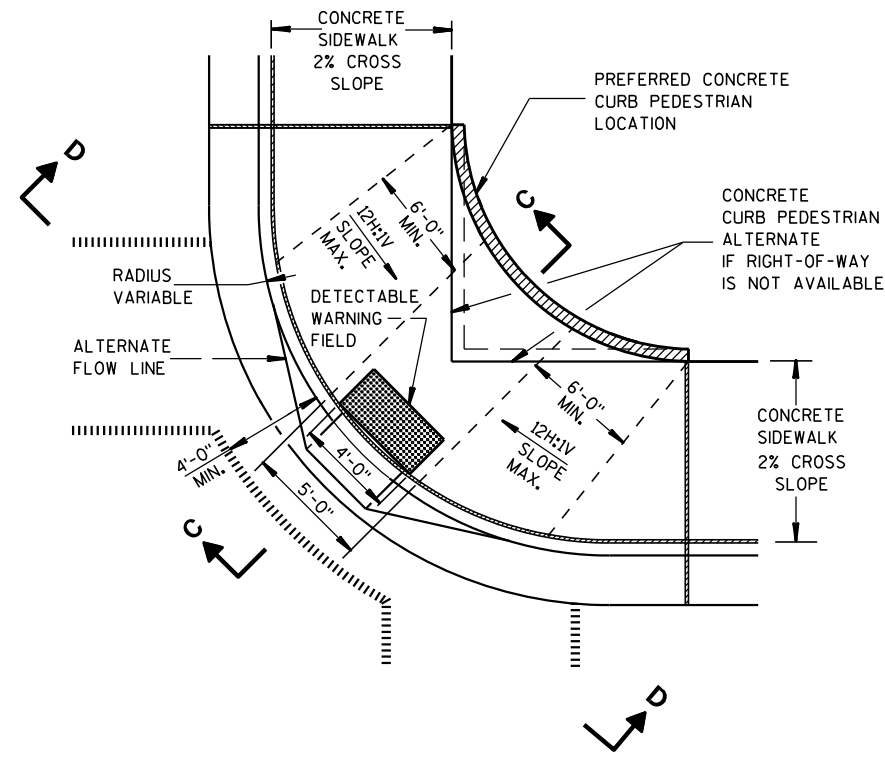
**PLAN VIEW
TYPE 1 RAMP**
(CENTER OF CORNER RADIUS)



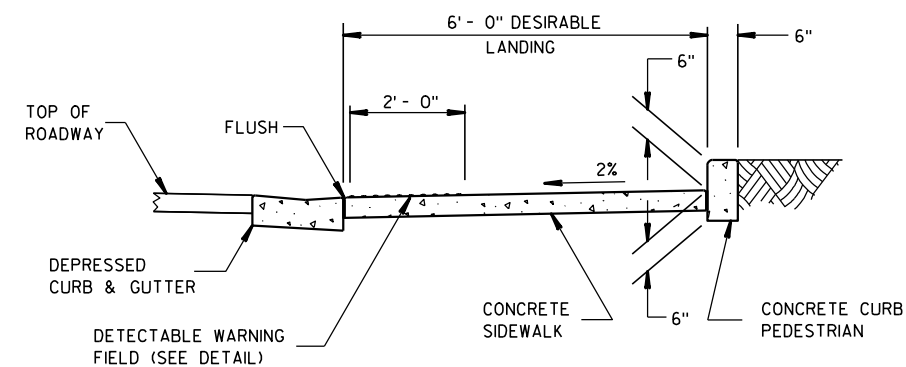
VIEW A-A



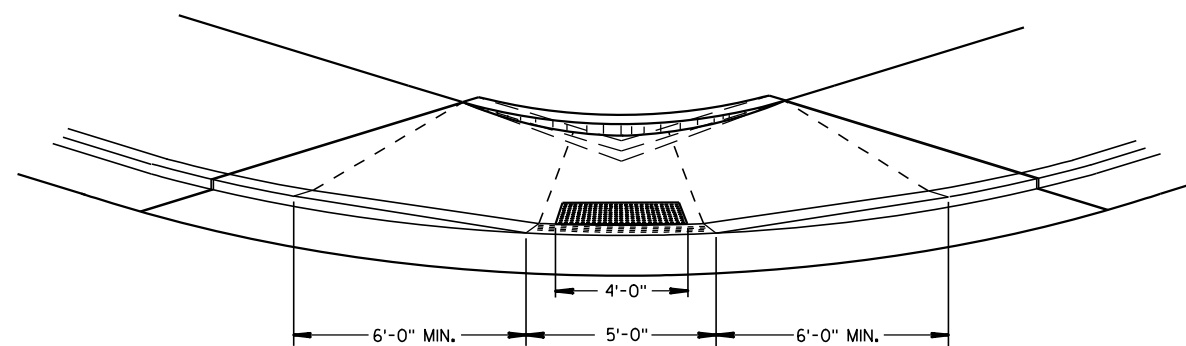
SECTION B-B



**PLAN VIEW
TYPE 1-A RAMP**
(NO TERRACE)



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.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. 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".

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

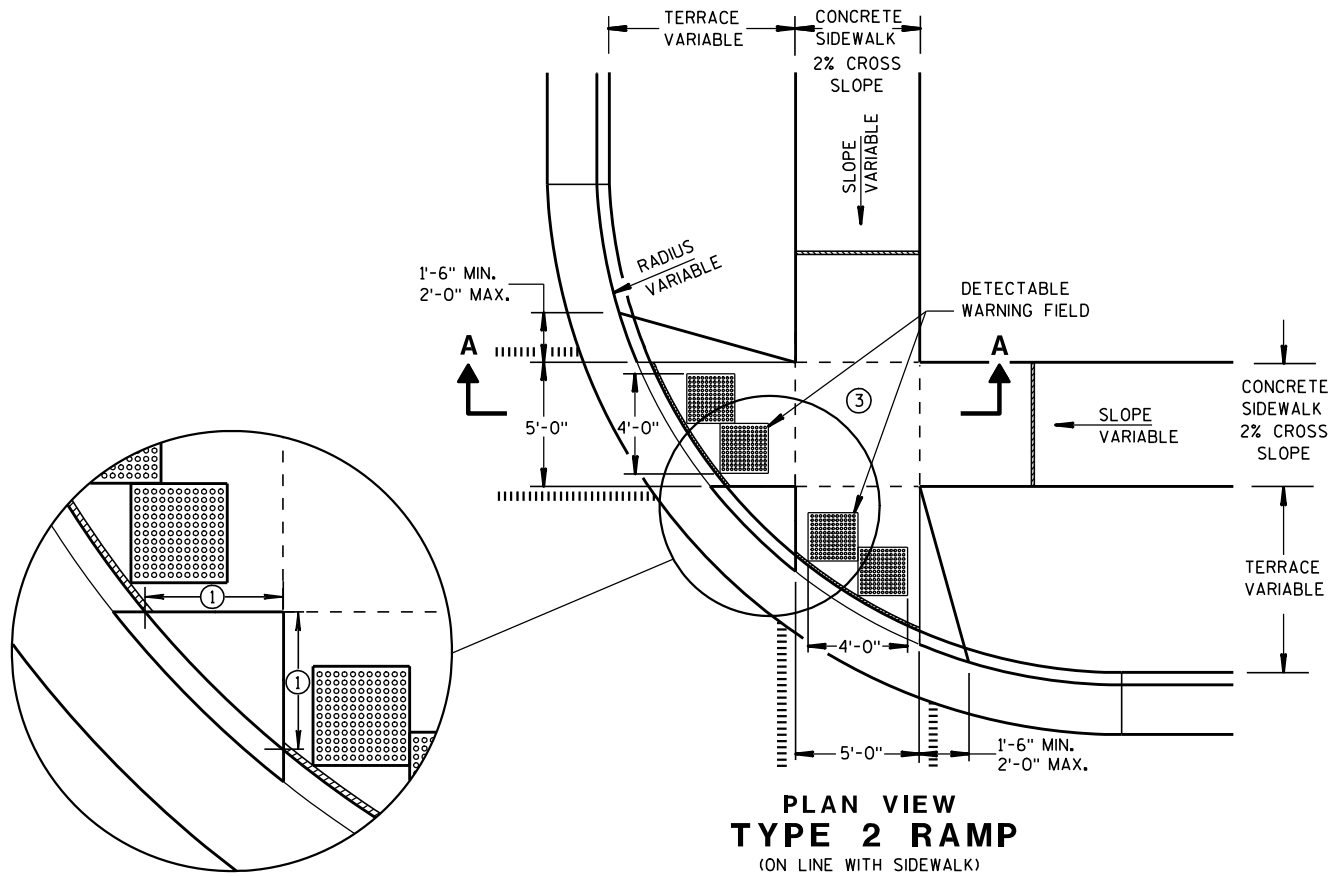
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

LEGEND

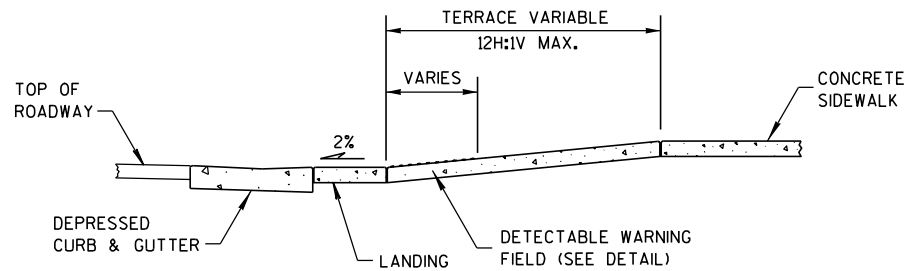
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

**CURB RAMPS
TYPES 1 AND 1-A**

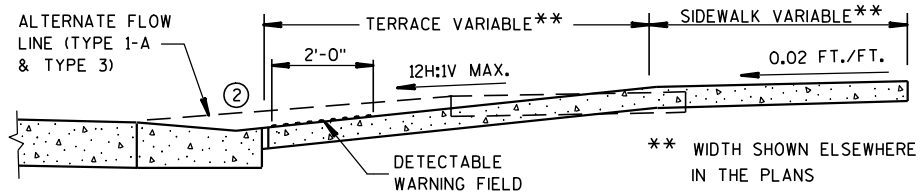
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

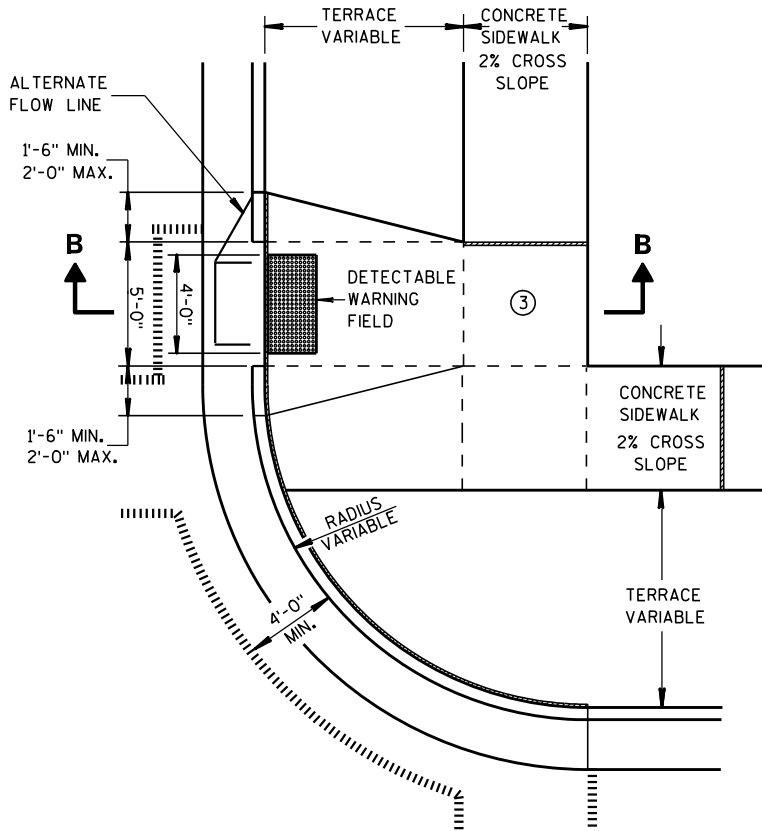
GENERAL NOTES

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

- ① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ PROVIDE LANDING AT TOP OF RAMP WITH NO MORE THAN 2% SLOPE IN ANY DIRECTION.

LEGEND

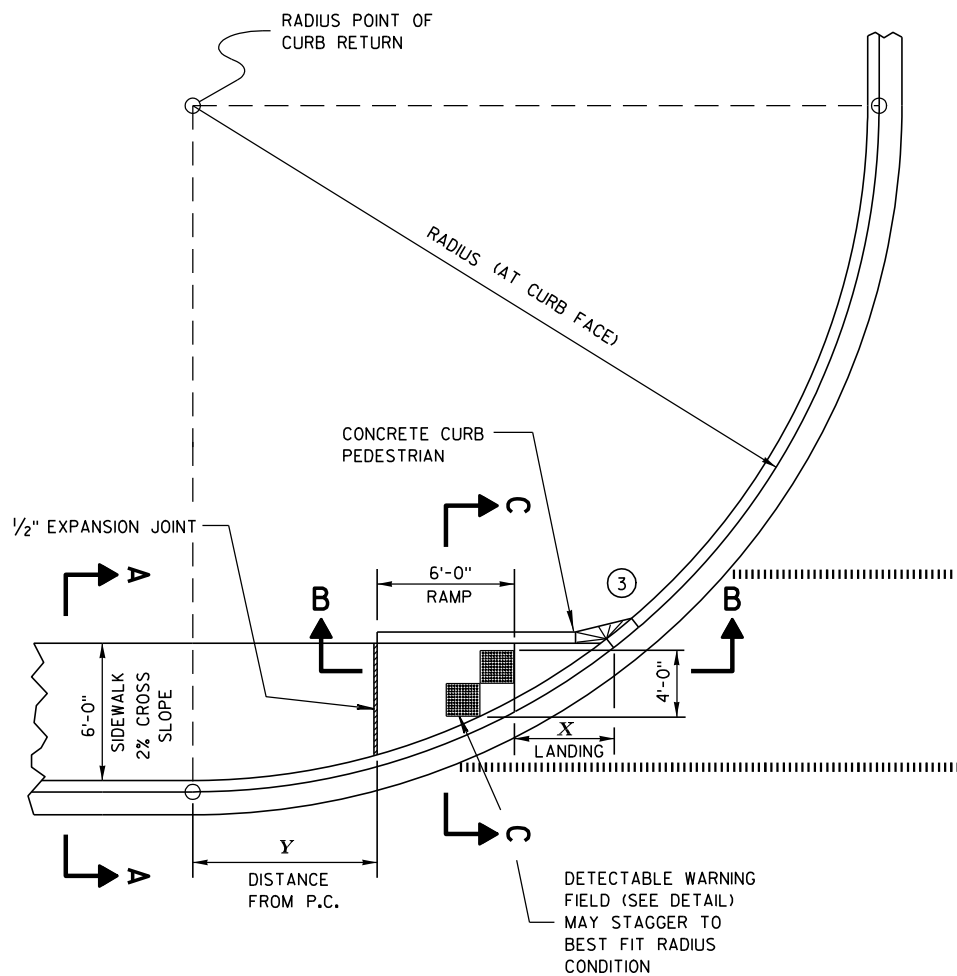
- ===== 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



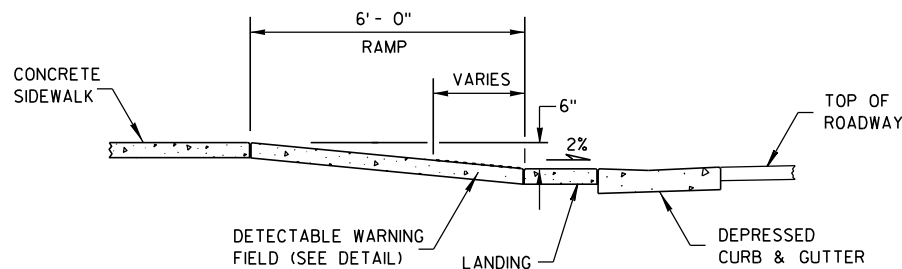
PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS
TYPES 2 AND 3

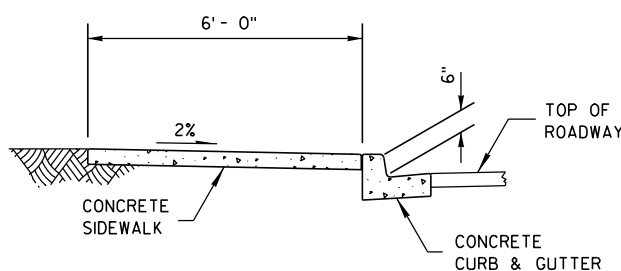
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DEPARTMENT OF TRANSPORTATION



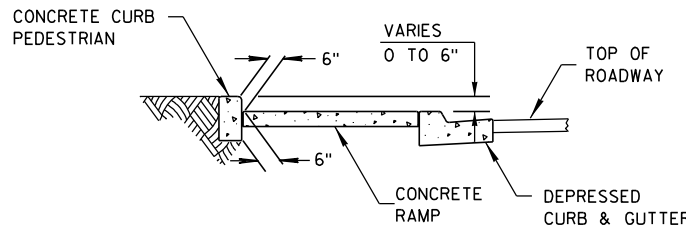
CURB RAMP TYPE 4A
PLAN VIEW



SECTION B-B



SECTION A-A



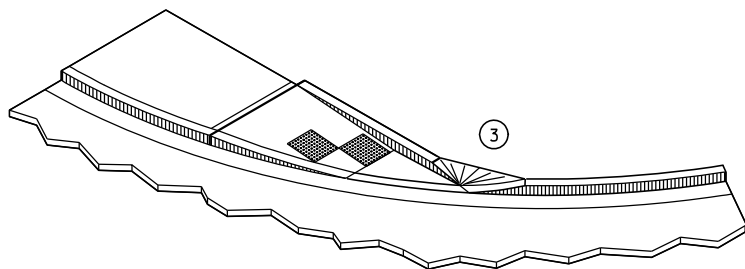
SECTION C-C

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-13/4"	2'-7 1/4"
30 FEET	7'-11 3/4"	4'-8 1/4"
40 FEET	9'-5 1/4"	6'-5"
50 FEET	10'-8 3/4"	7'-11 1/4"
60 FEET	11'-10 1/4"	9'-3 1/2"

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.
- SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

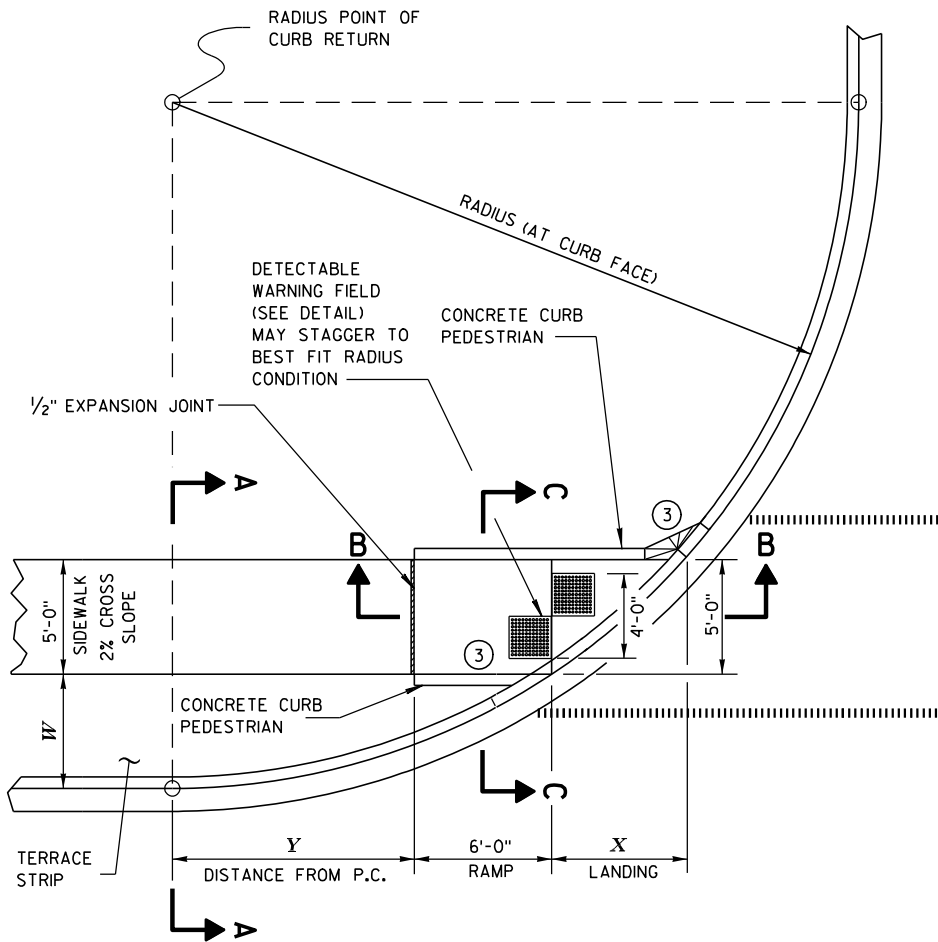


ISOMETRIC VIEW

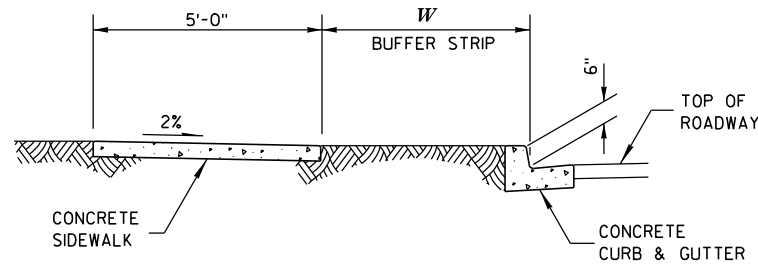
- LEGEND**
- 1/2" EXPANSION JOINT-SIDEWALK
 - CONTRACTION JOINT FIELD LOCATED
 - PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4A

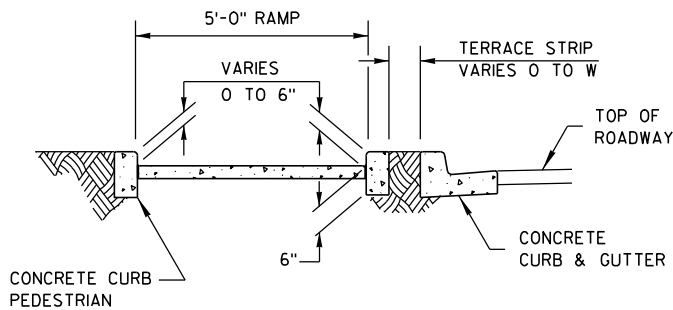
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



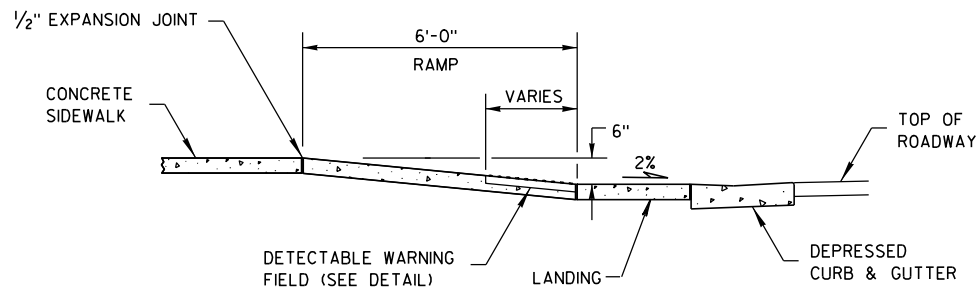
CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A



SECTION C-C



SECTION B-B

GENERAL NOTES

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

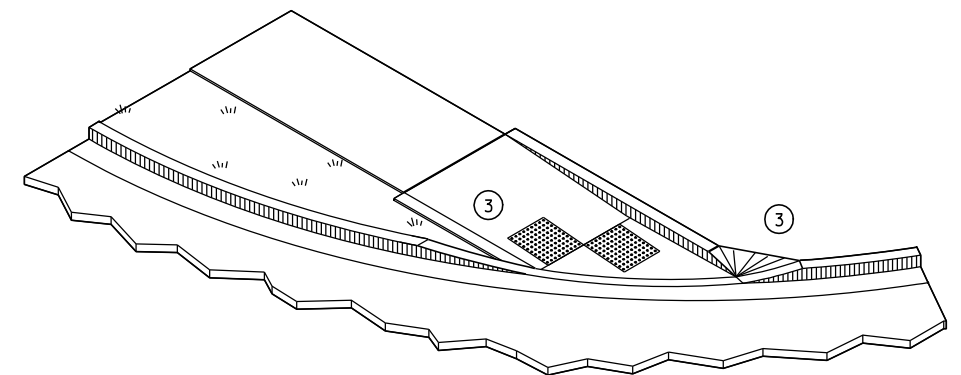
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS).
DO NOT MARK TRANSITION NOSE.

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'-5 1/2"	4'-6 1/2"	4'-8 1/2"	6'-0"	4'-1"	7'-2 3/4"	3'-7"	8'-3 1/2"	3'-1 1/2"	9'-2 1/2"
30 FEET	7'-3 3/4"	7'-1"	6'-5 1/2"	8'-11 1/2"	5'-9 1/4"	10'-7"	5'-2 1/2"	12'-0"	4'-8 3/4"	13'-3 1/4"
40 FEET	8'-9 1/2"	9'-2 1/2"	7'-10"	11'-5 1/4"	7'-1"	13'-4 1/2"	6'-5 3/4"	15'-3 1/4"	5'-11 1/2"	16'-7 1/4"
50 FEET	10'-3 1/4"	11'-3 1/4"	9'-1 1/4"	13'-7 1/4"	8'-2 1/2"	15'-9 1/2"	7'-6 1/2"	17'-9"	6'-11 3/4"	19'-6 1/4"
60 FEET	11'-2 1/2"	12'-8 3/4"	10'-3 1/4"	15'-6 1/2"	9'-2 1/4"	17'-11 3/4"	8'-5 3/4"	20'-1 3/4"	7'-10 1/2"	22'-1 1/2"
70 FEET	12'-2 3/4"	14'-3 1/4"	11'-1 1/4"	17'-4"	10'-1"	19'-11 3/4"	9'-3 3/4"	22'-4 1/4"	8'-8 1/4"	24'-6 1/4"
80 FEET	13'-2"	15'-8 1/2"	11'-10 1/2"	18'-11 3/4"	10'-10 3/4"	21'-10"	10'-1"	24'-4 3/4"	9'-5"	26'-8 3/4"
90 FEET	14'-1 1/2"	17'-1 1/2"	12'-8 1/4"	20'-6 1/2"	11'-7 3/4"	23'-7"	10'-9 3/4"	26'-3 3/4"	10'-1 1/4"	28'-9 1/2"
100 FEET	14'-10 1/2"	18'-3 3/4"	13'-5 1/2"	22'-0"	12'-4 1/4"	25'-2 3/4"	11'-5 3/4"	28'-1 1/2"	10'-9"	30'-9"

INTERMEDIATE RADII CAN BE INTERPOLATED



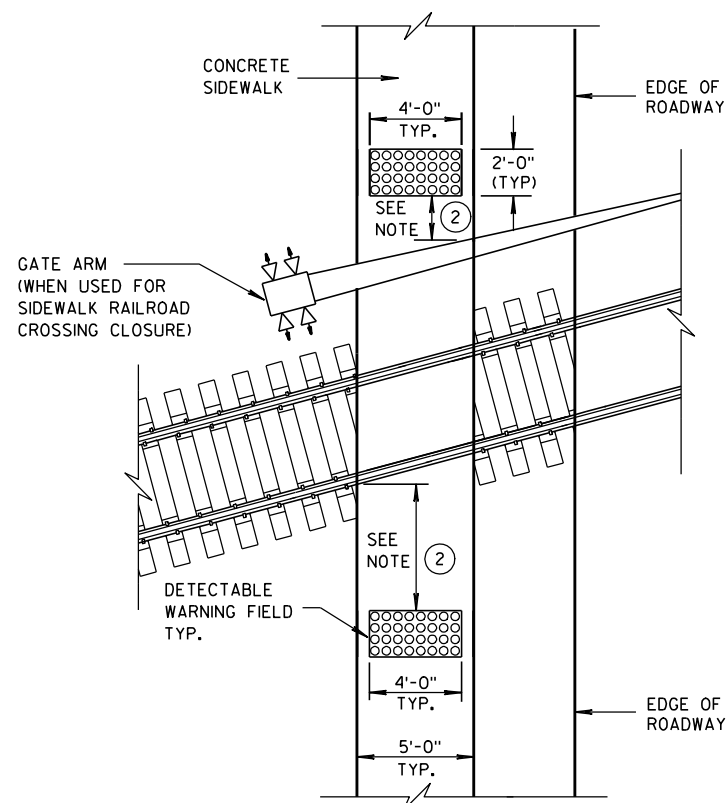
ISOMETRIC VIEW

LEGEND

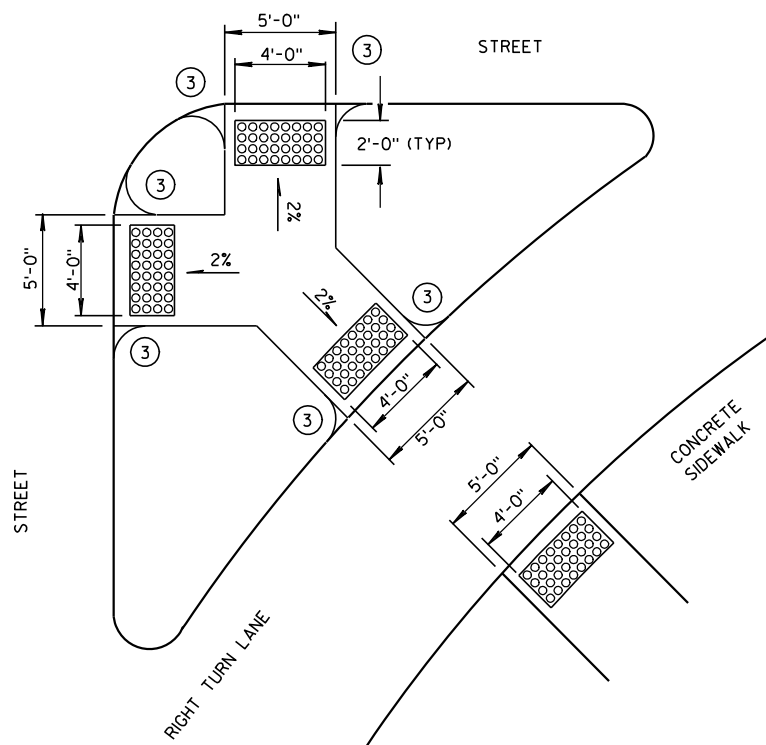
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4B

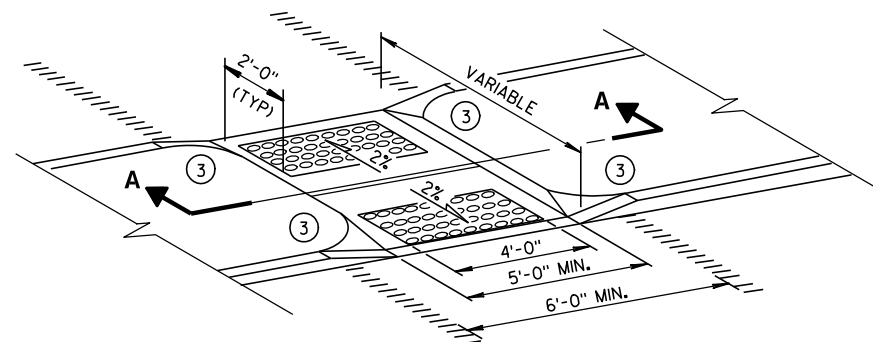
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



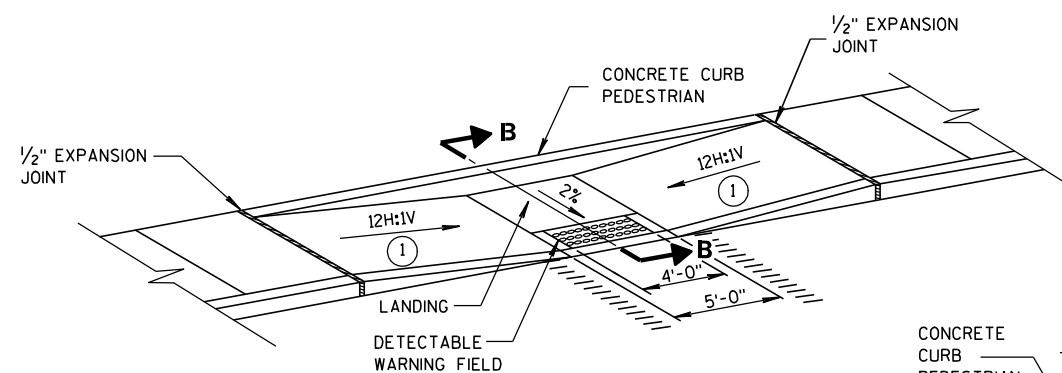
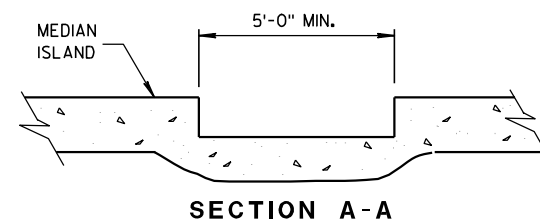
TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING



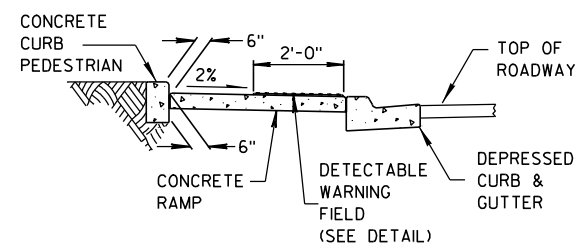
TYPE 6
DETECTABLE WARNING AT ISLANDS



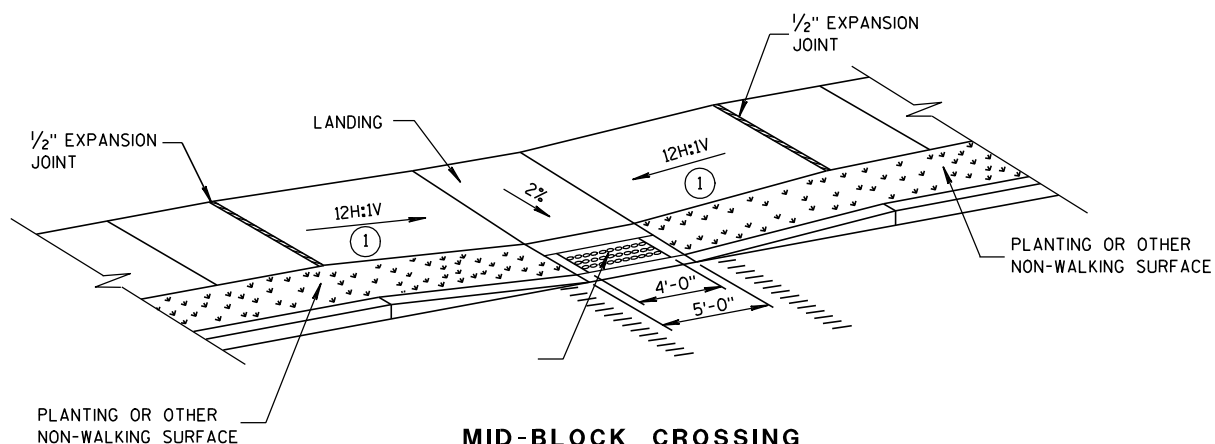
MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



MID-BLOCK CROSSING
TYPE 7B

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

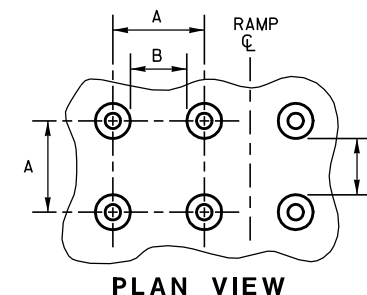
GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

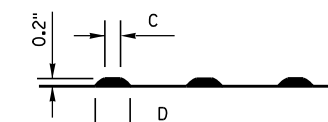
- 1 SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- 2 THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET $\pm$ 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. 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.
- 3 INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

LEGEND

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



PLAN VIEW



ELEVATION VIEW

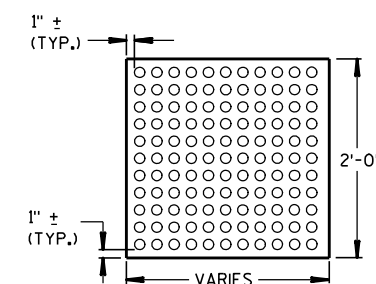
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

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

TRUNCATED DOMES

DETECTABLE WARNING

PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING
FIELD (TYPICAL)

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

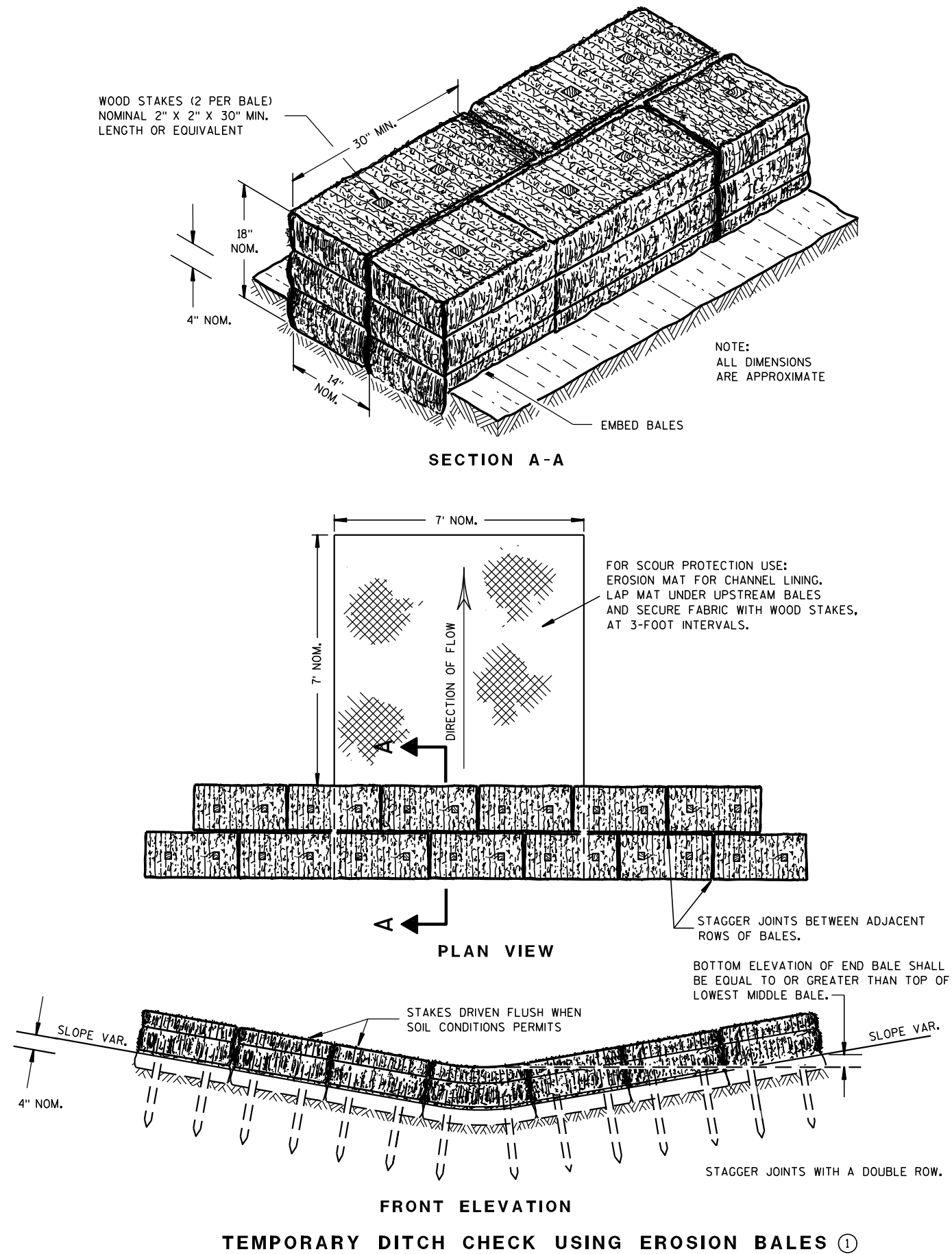
APPROVED

2-9-10
DATE

FHWA

/s/ Jerry H. Zogg

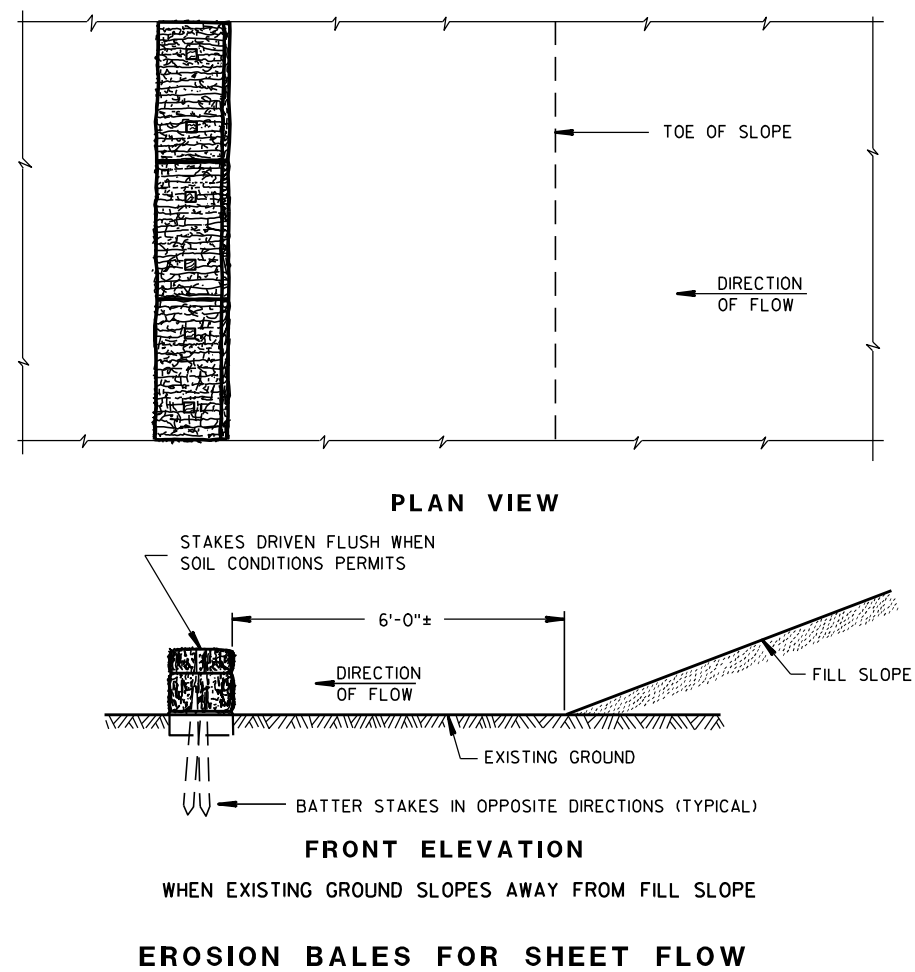
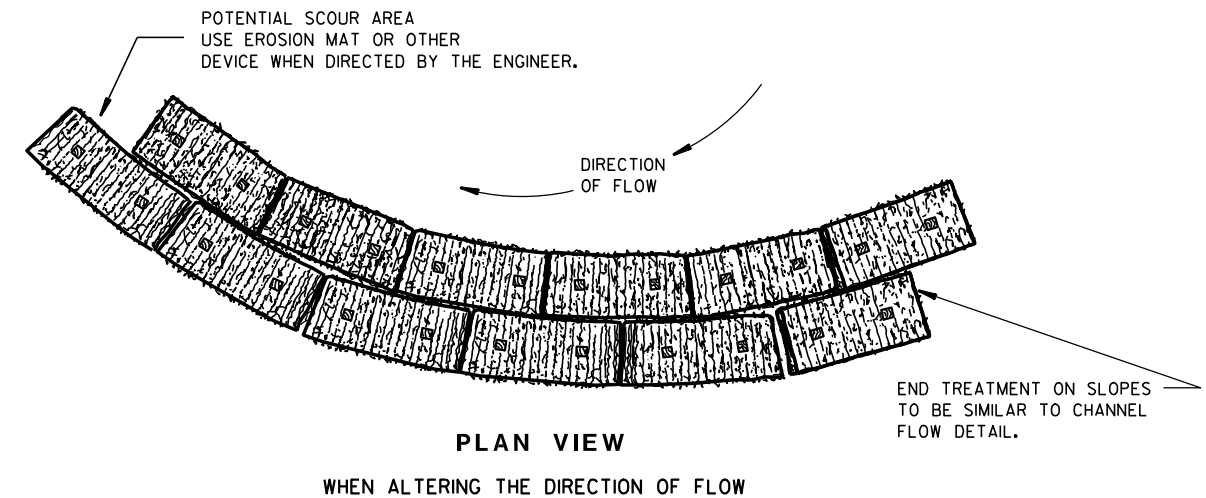
ROADWAY STANDARDS 91 ENT
ENGINEER



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.

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02
DATE/S/ Beth Connors
CHIEF ROADWAY DEVELOPER

ENGINEER

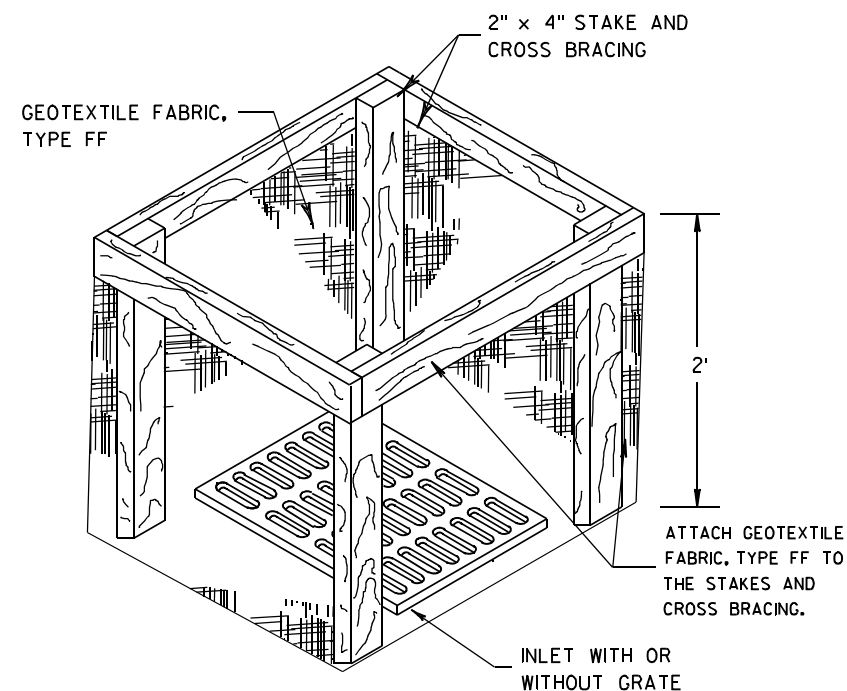
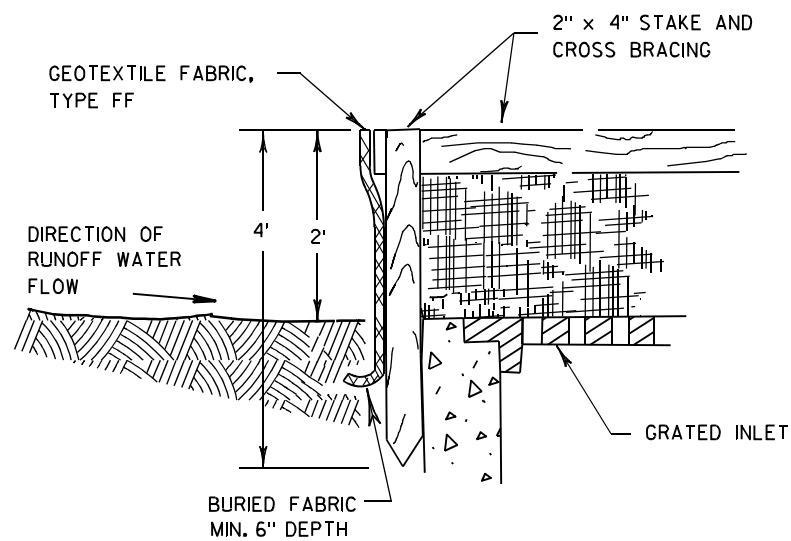
FHWA



- 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 1½" X 1½" 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.



SILT FENCE
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED <u>4-29-05</u> DATE <u>/s/ Beth Connolly</u> CHIEF ROADWAY DEVELOPMENT ENGINEER



INLET PROTECTION, TYPE A

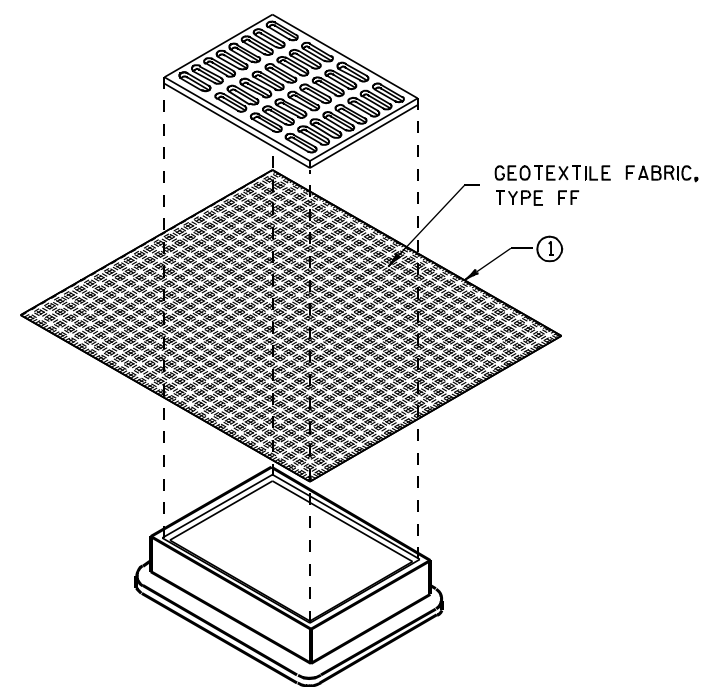
GENERAL NOTES

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.

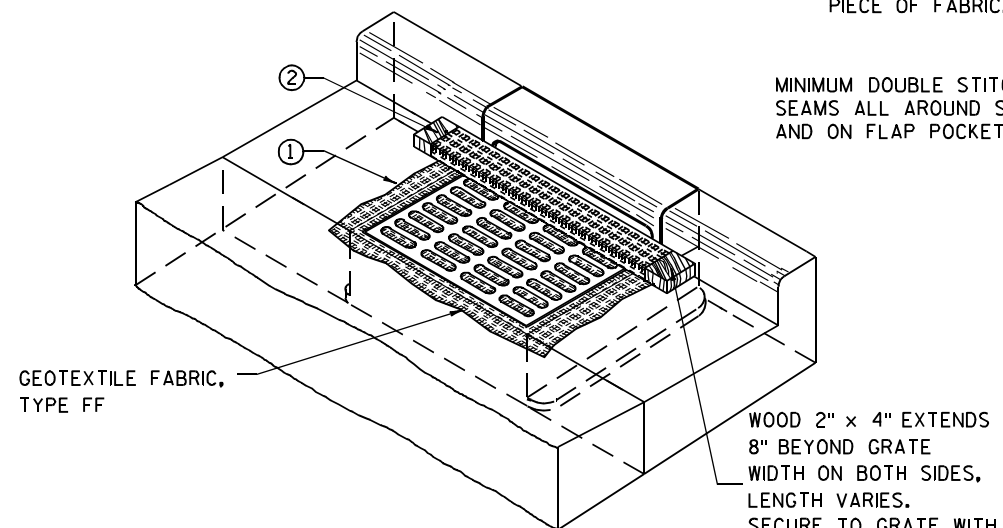
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

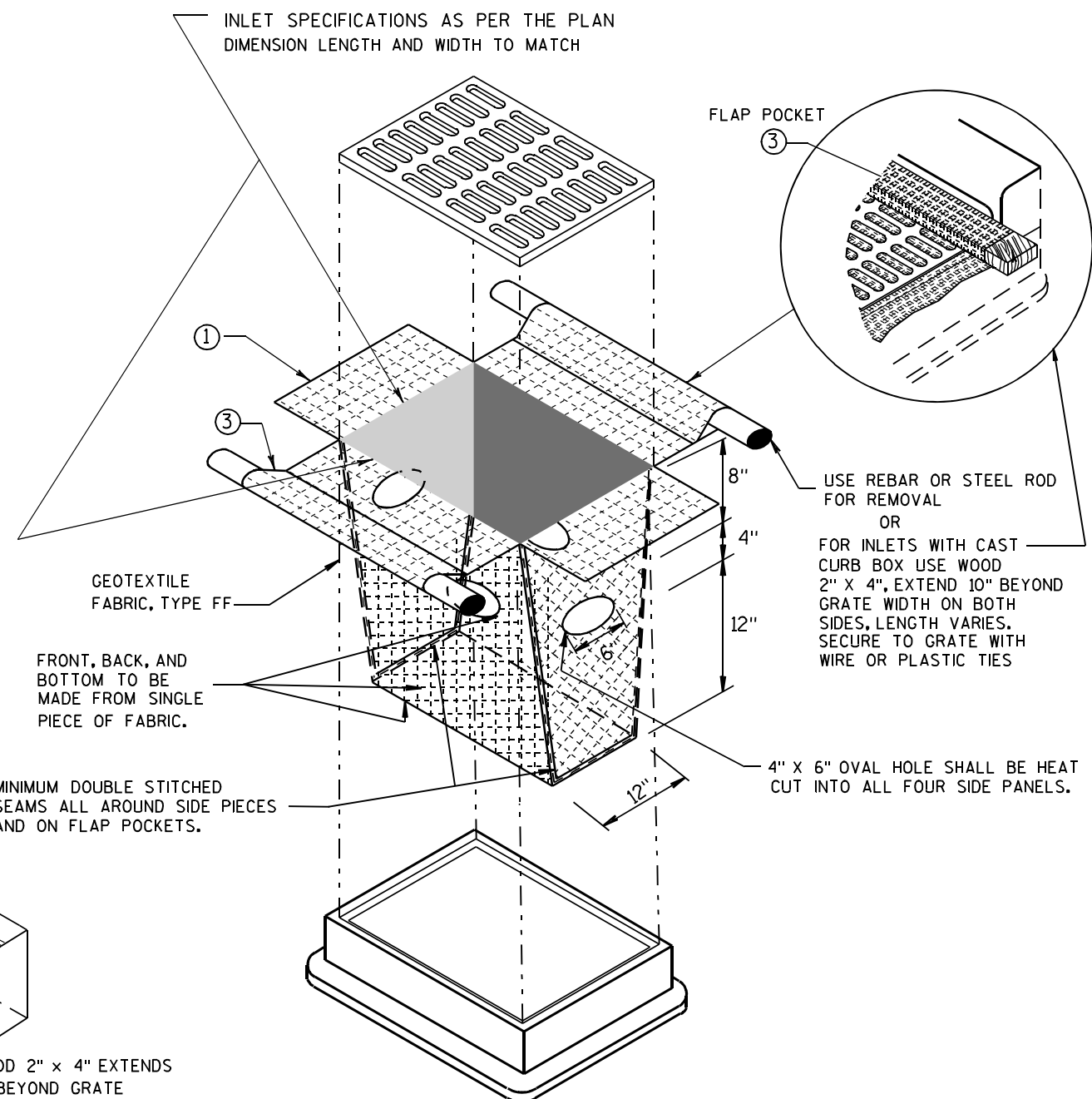
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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.



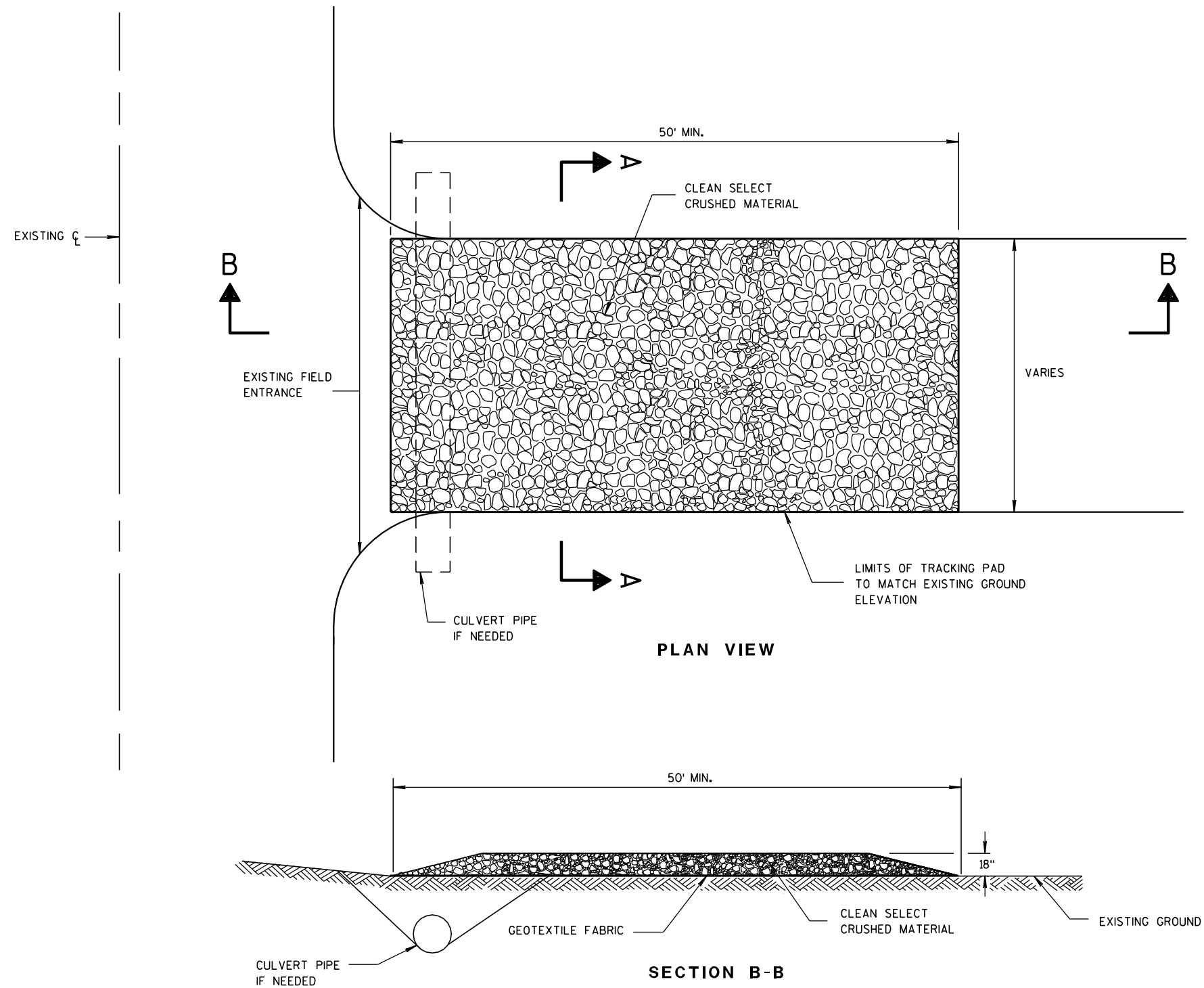
INLET PROTECTION, TYPE D

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

**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Connolly
DATE 94
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER



TRACKING PAD

GENERAL NOTES

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

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

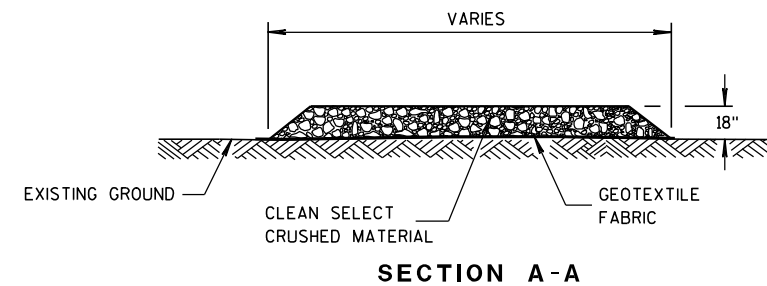
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/24/2011

DATE

/S/ Jerry H. Zonn

ROADWAY STANDARDS 95

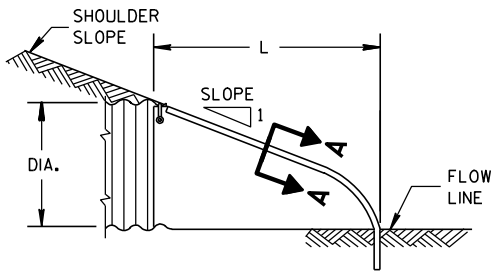
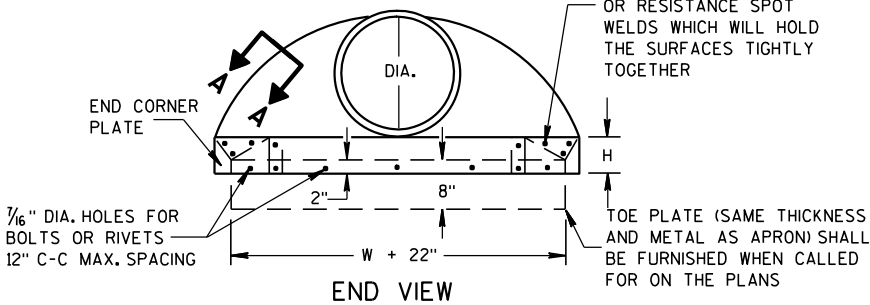
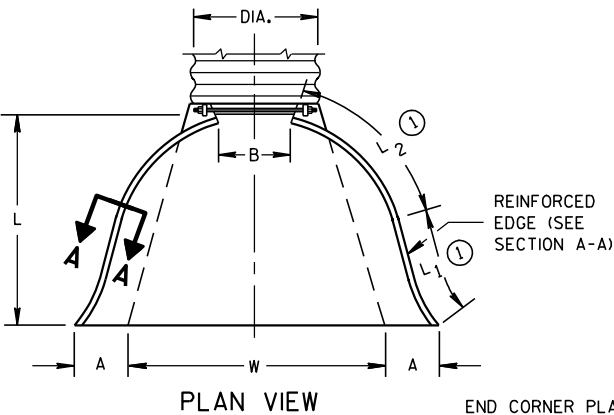
ENGINEER

ENT

FHWA

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

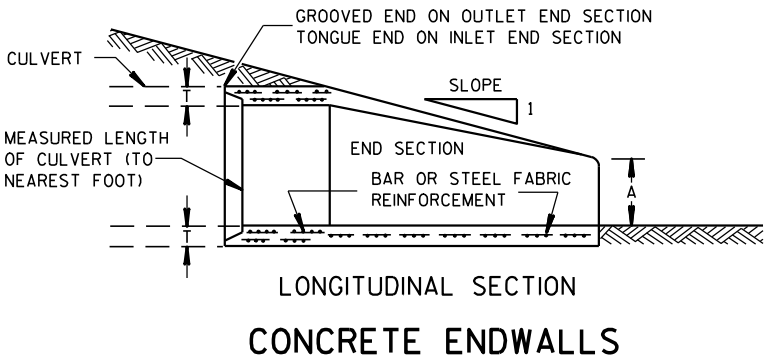
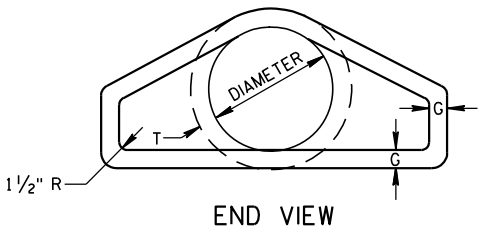
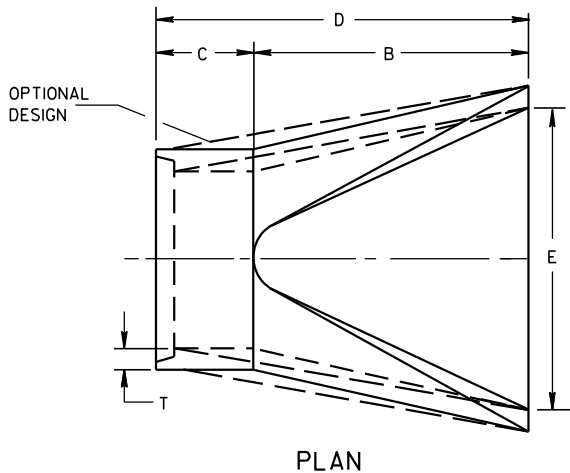
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



SIDE ELEVATION
METAL ENDWALLS

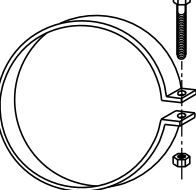
REINFORCED CONCRETE APRON ENDWALLS								
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE
	T	A	B	C	D	E	G	
12	2	4	24	48 ⁷ / ₈	72 ⁷ / ₈	24	2	3 to 1
15	2 ¹ / ₄	6	27	46	73	30	2 ¹ / ₄	3 to 1
18	2 ¹ / ₂	9	27	46	73	36	2 ¹ / ₂	3 to 1
21	2 ³ / ₄	9	36	37 ¹ / ₂	73 ¹ / ₂	42	2 ³ / ₄	3 to 1
24	3	9 ¹ / ₂	43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

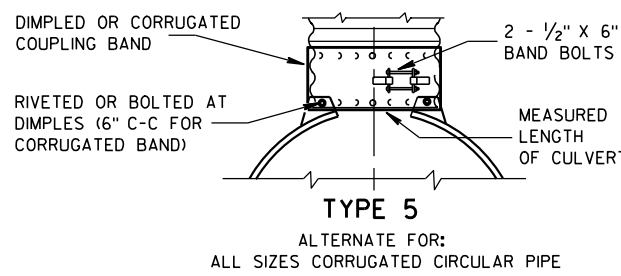
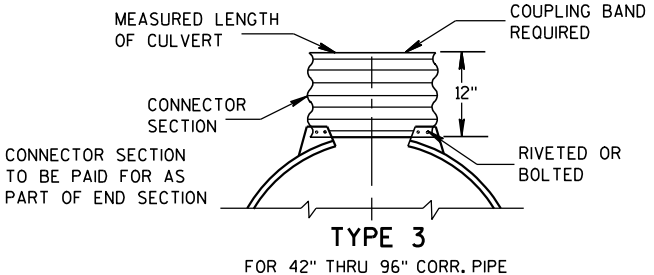
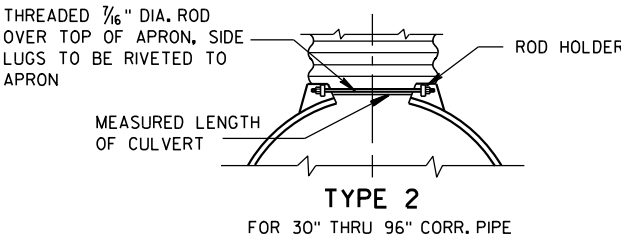
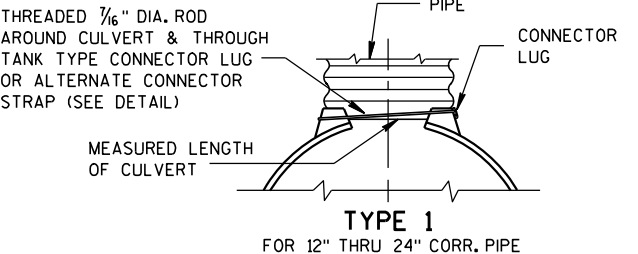


LONGITUDINAL SECTION
CONCRETE ENDWALLS

1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



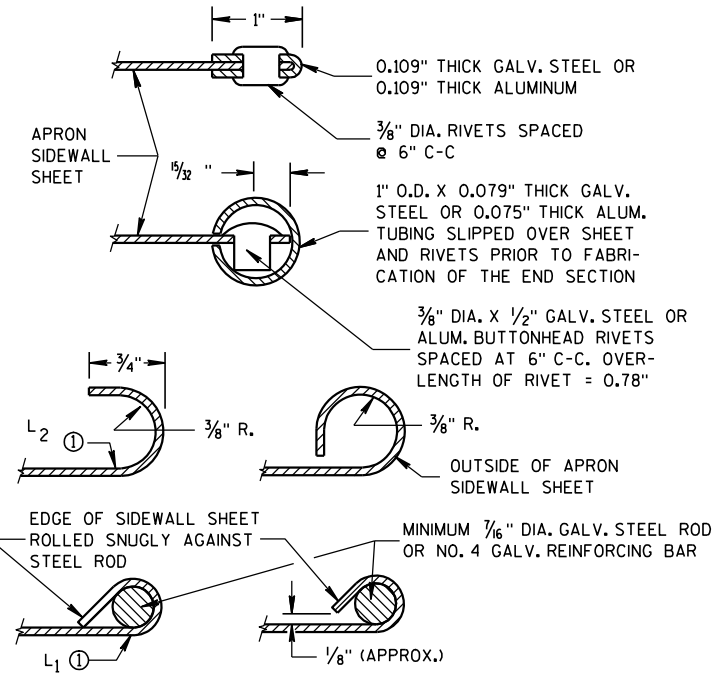
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

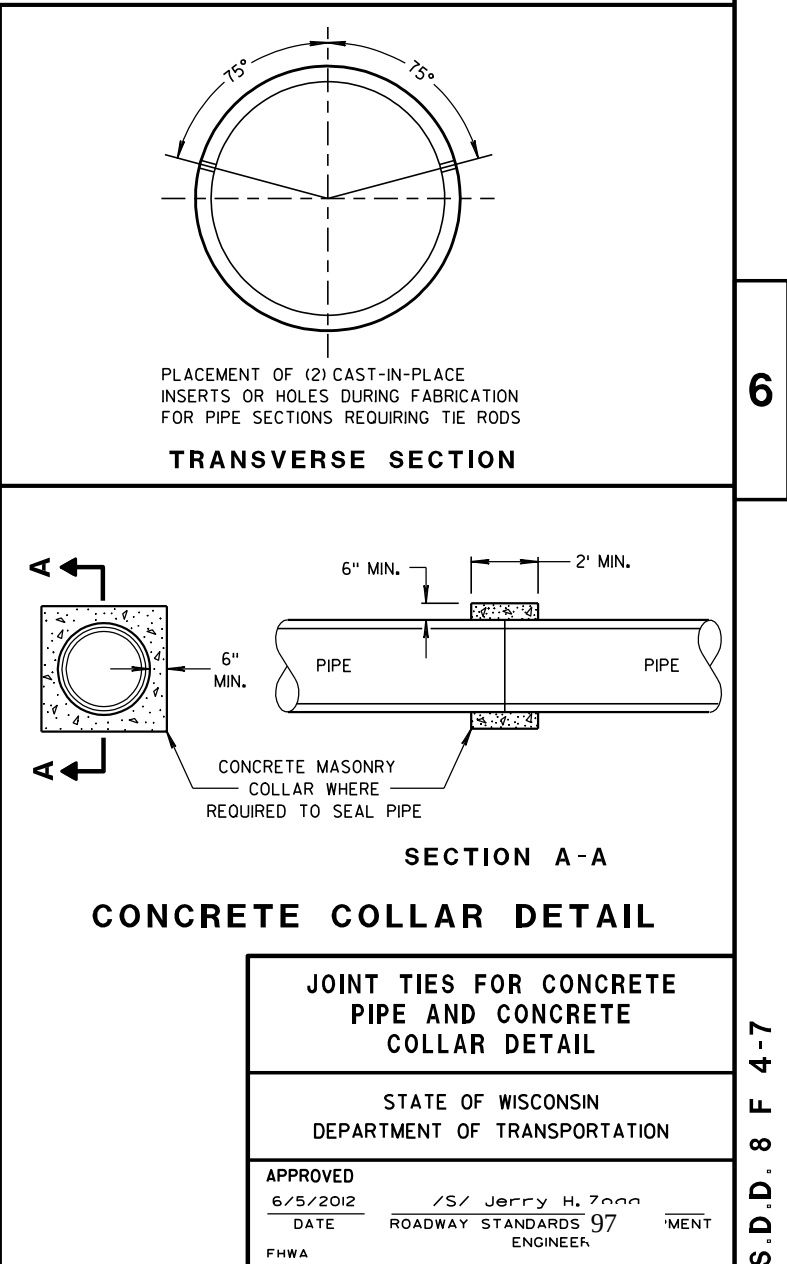
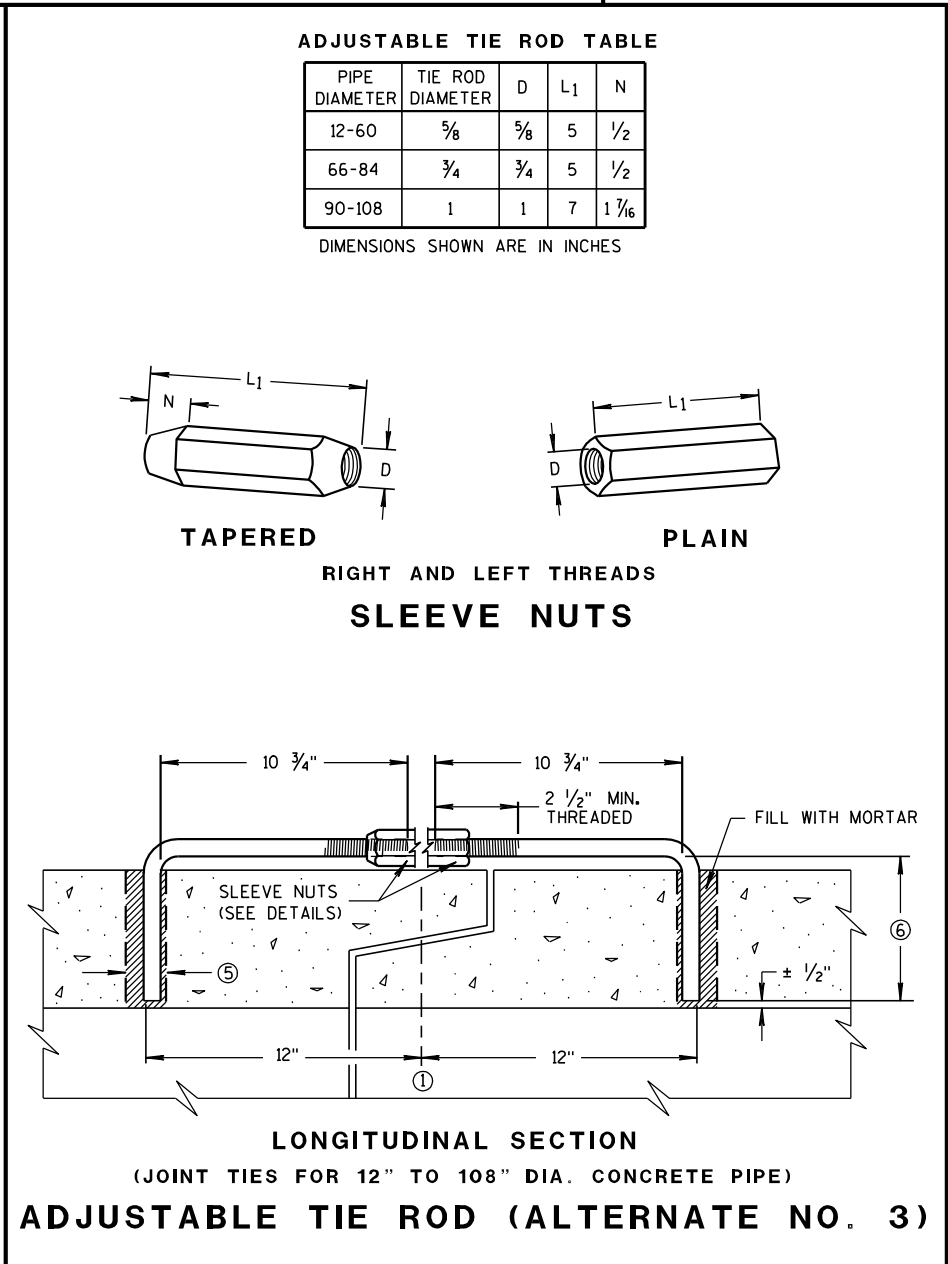
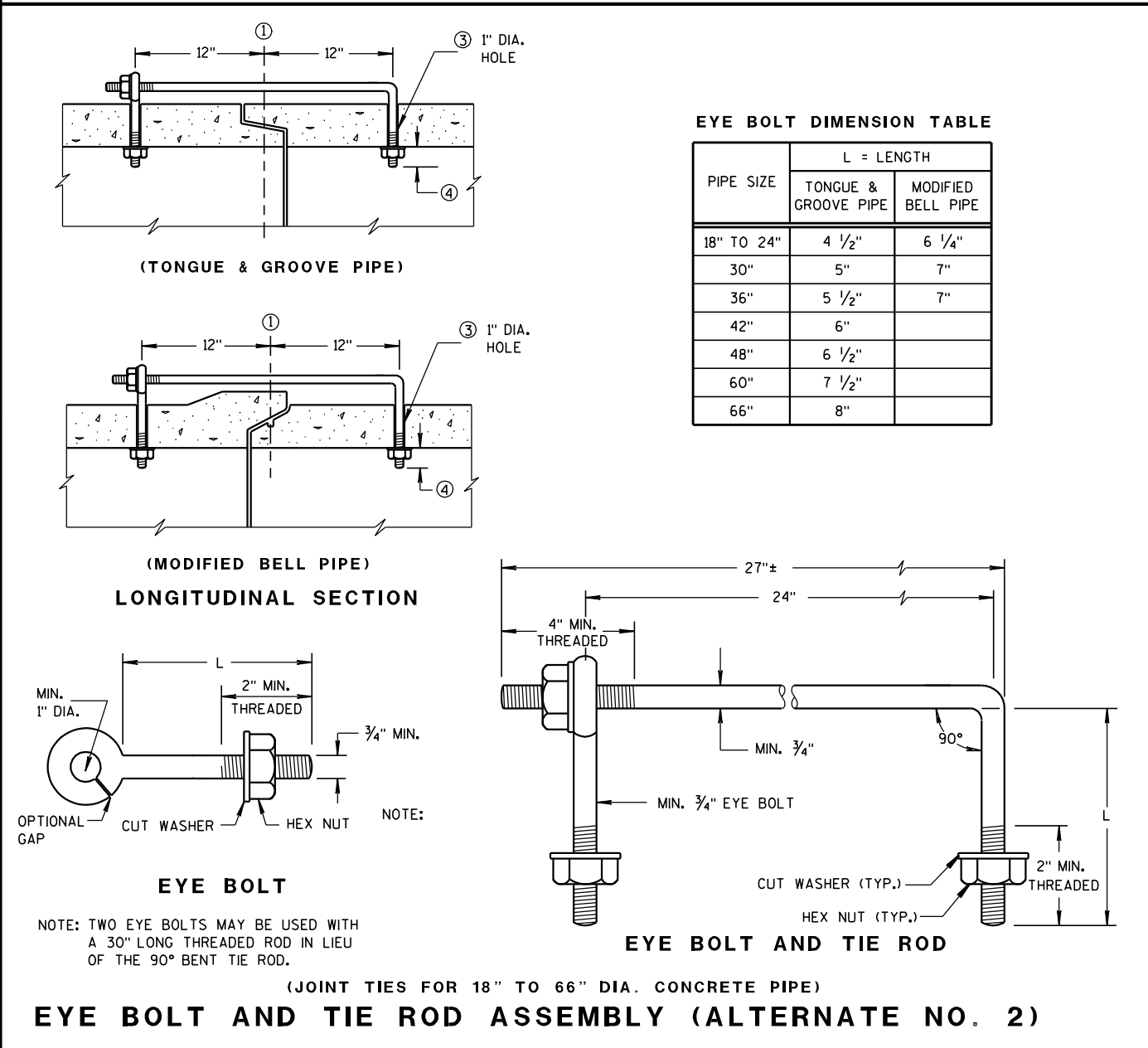
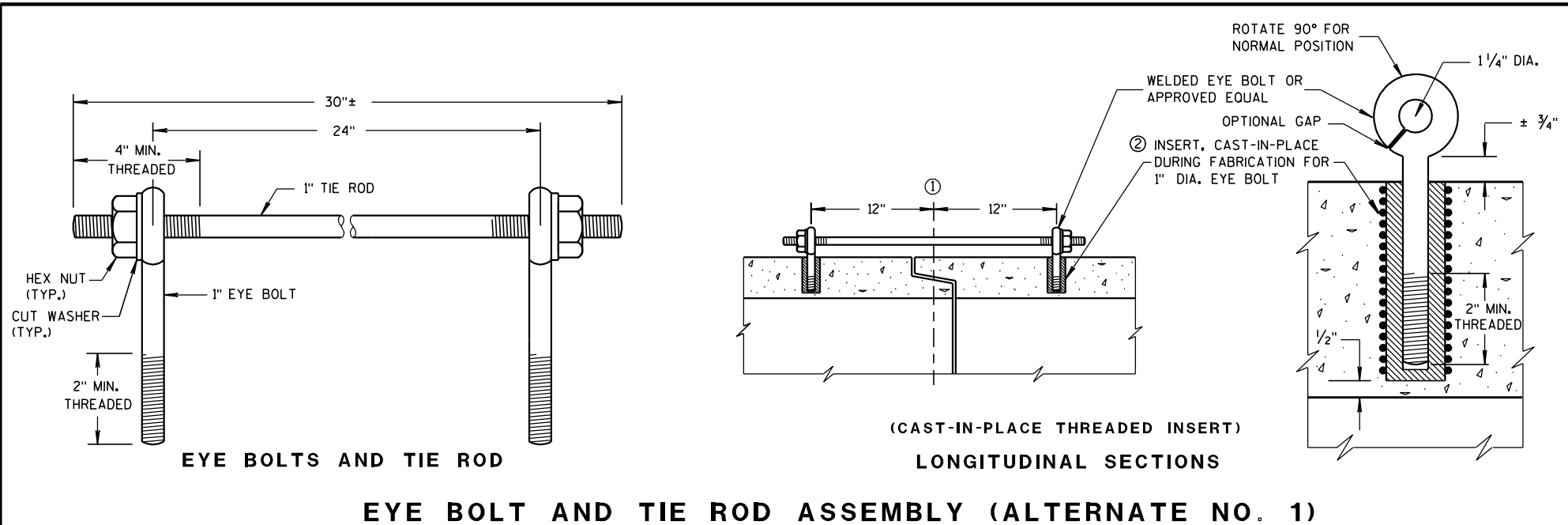
ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT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

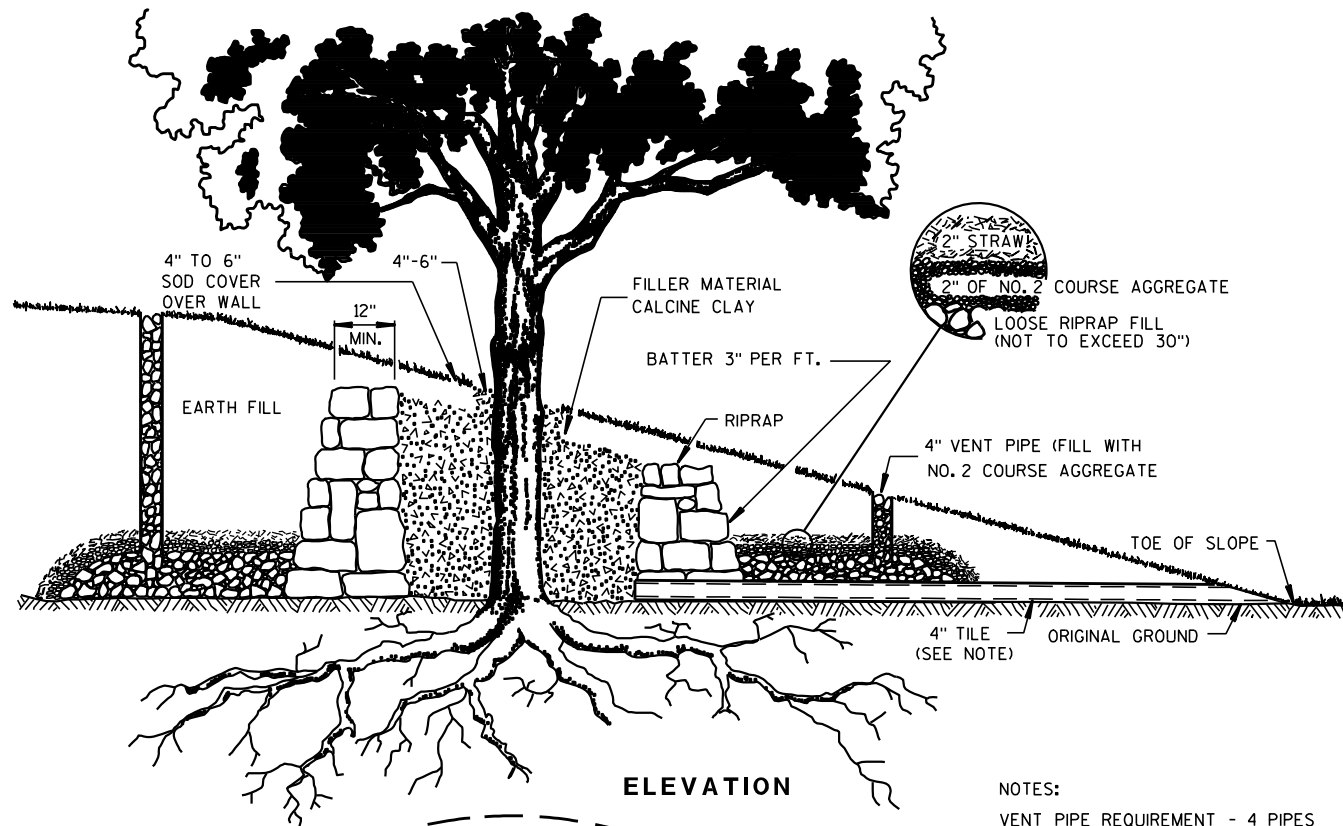
LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. 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. Rhinehart CHIEF ROADWAY DEVELOP 96	NEER	
FHWA			





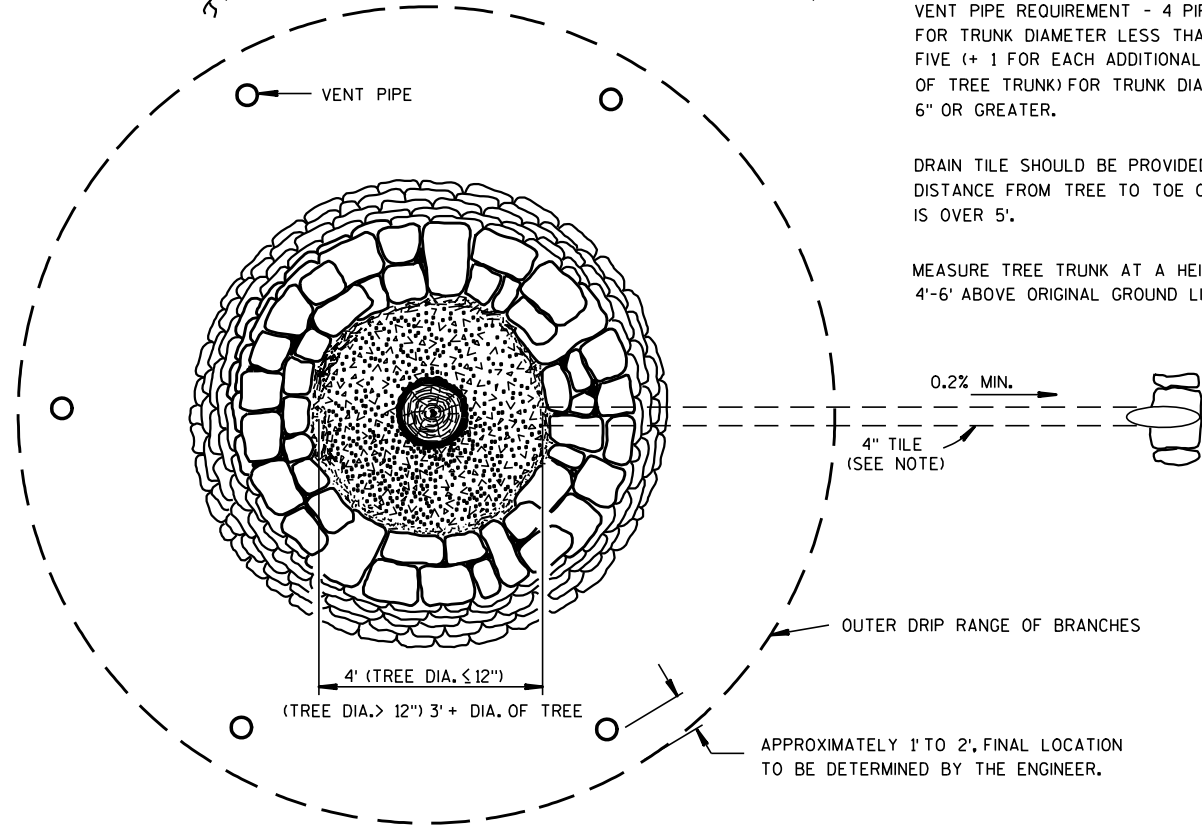
ELEVATION

NOTES:

VENT PIPE REQUIREMENT - 4 PIPES FOR TRUNK DIAMETER LESS THAN 6". FIVE (+ 1 FOR EACH ADDITIONAL 6" OF TREE TRUNK) FOR TRUNK DIAMETER 6" OR GREATER.

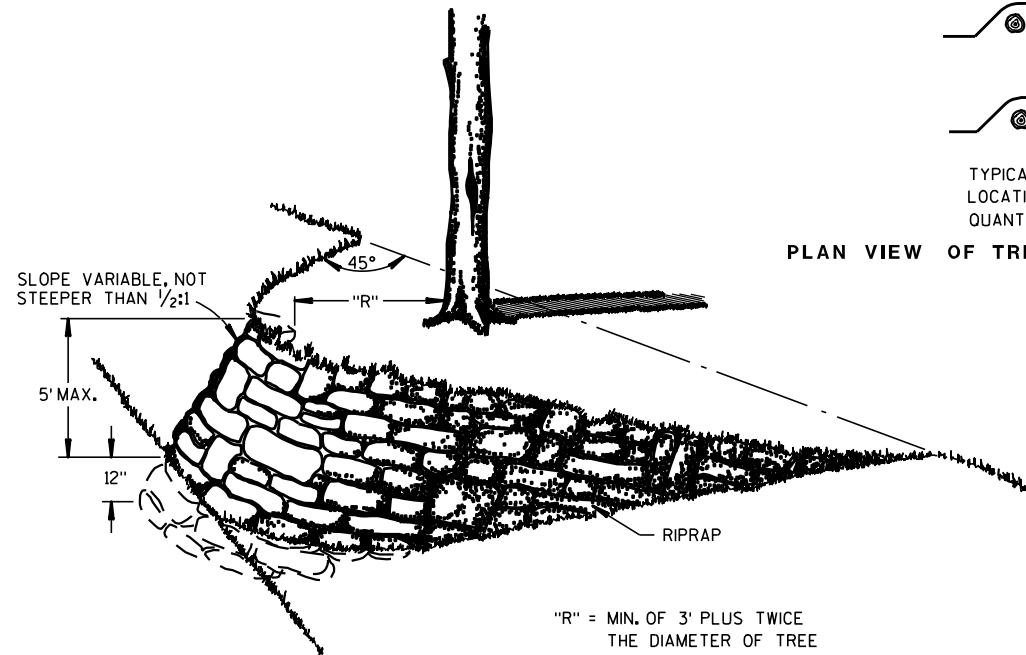
DRAIN TILE SHOULD BE PROVIDED IF DISTANCE FROM TREE TO TOE OF SLOPE IS OVER 5'.

MEASURE TREE TRUNK AT A HEIGHT 4'-6' ABOVE ORIGINAL GROUND LINE.



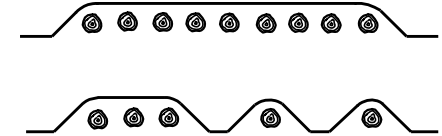
PLAN

FULL TREE WELL WITH RIPRAP WALL



DETAILS OF TREE ISLAND AND ROOT PROTECTION

PLAN VIEW OF TREE ISLANDS FOR ONE OR MORE TREES

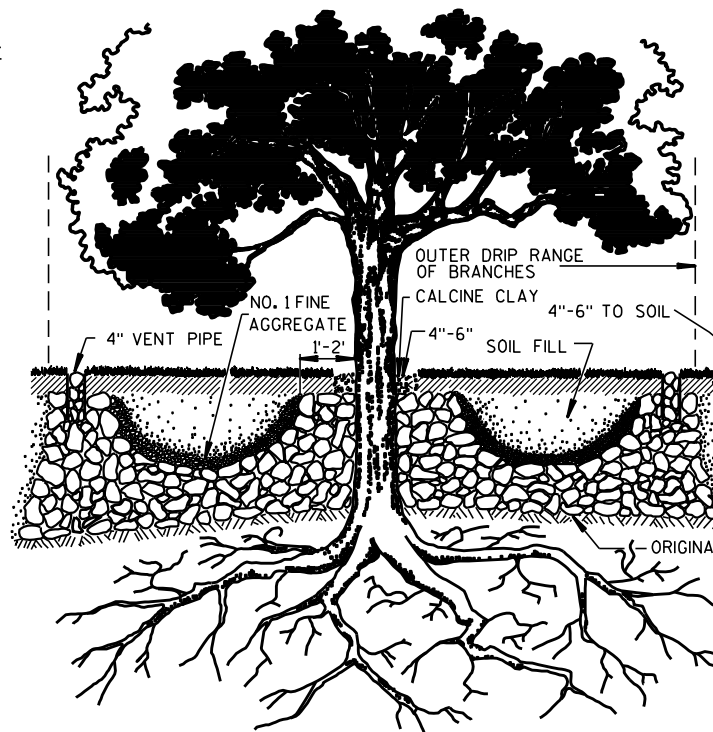


TYPICAL TREATMENTS OF ROOT PROTECTION. LOCATION SHOWN ON MISCELLANEOUS QUANTITIES SHEET.

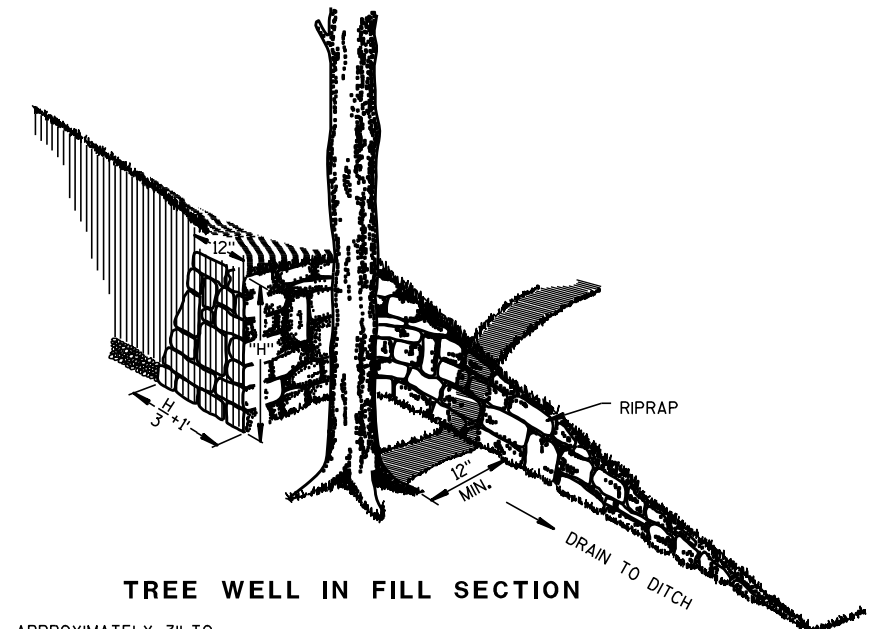
GENERAL NOTES

WALLS TO BE BUILT TO APPROXIMATE SHAPE AND DIMENSIONS SHOWN. STONE TO CONFORM TO SPECIFICATIONS FOR RIPRAP.

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



TREE WELL WITHOUT WALL



TREE WELL IN FILL SECTION

DETAILS FOR TREE WELLS

TREE PRESERVATION DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

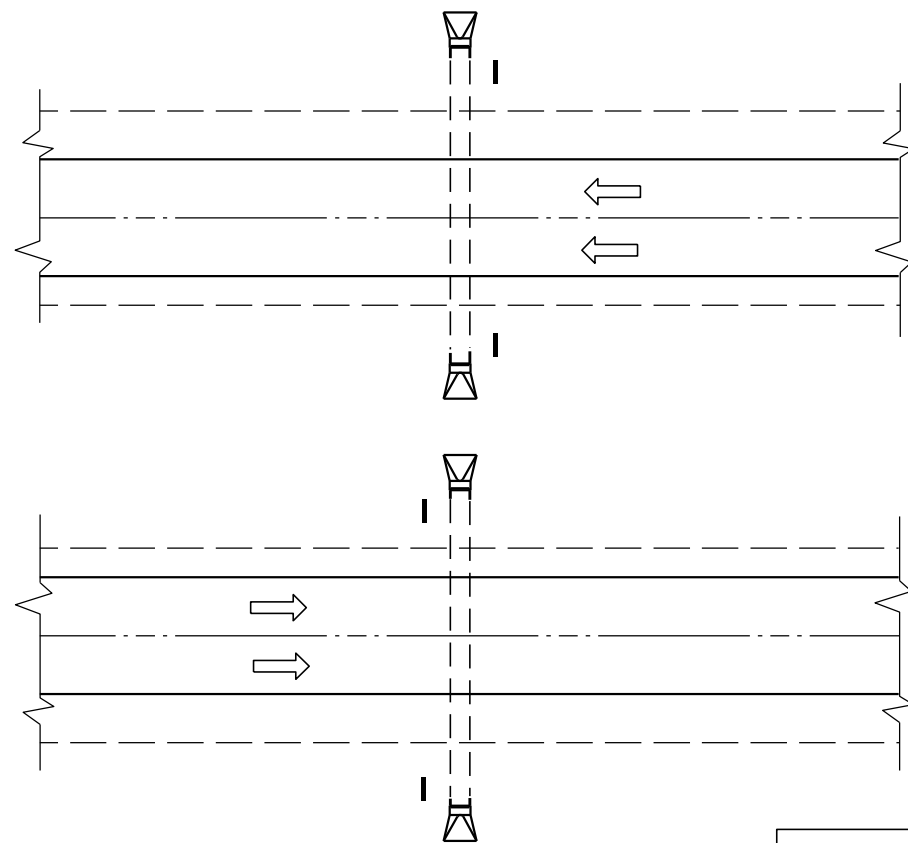
8/25/76

DATE

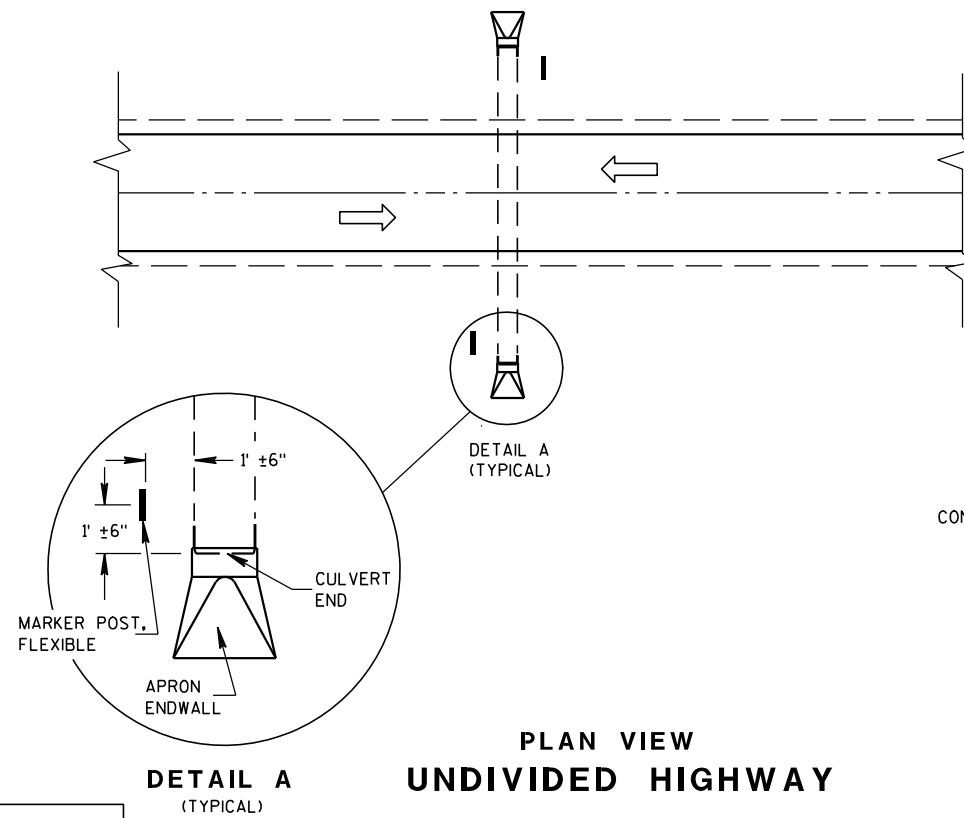
FHWA

/S/ D.L. Str---
STATE DESIGN ENGINEER 98

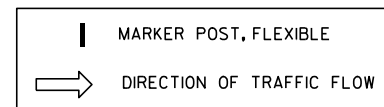
WYS



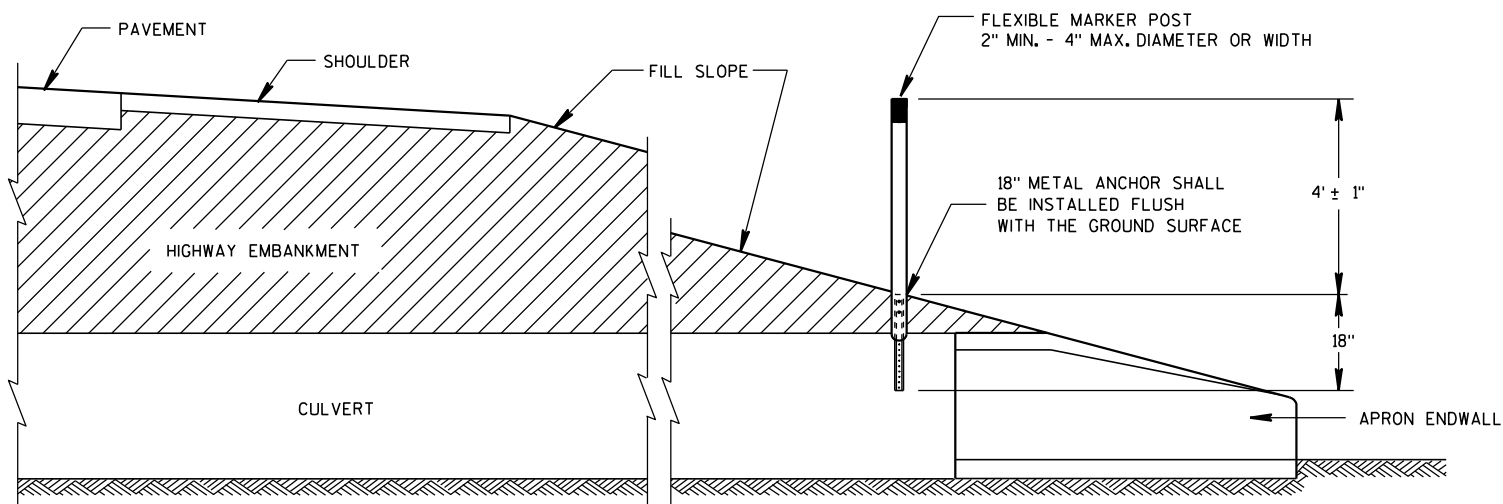
PLAN VIEW
DIVIDED HIGHWAY



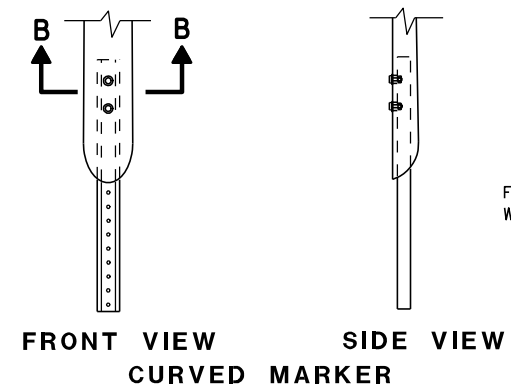
PLAN VIEW
UNDIVIDED HIGHWAY



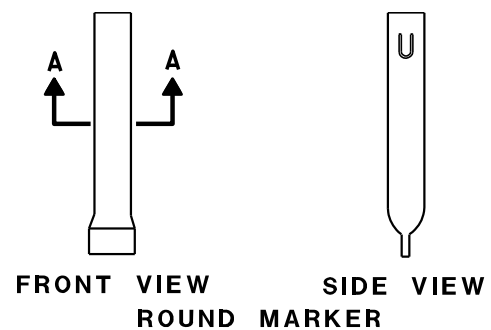
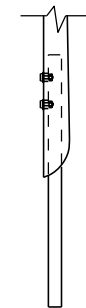
FLEXIBLE MARKER POST LOCATION



CROSS SECTION
FLEXIBLE MARKER POST



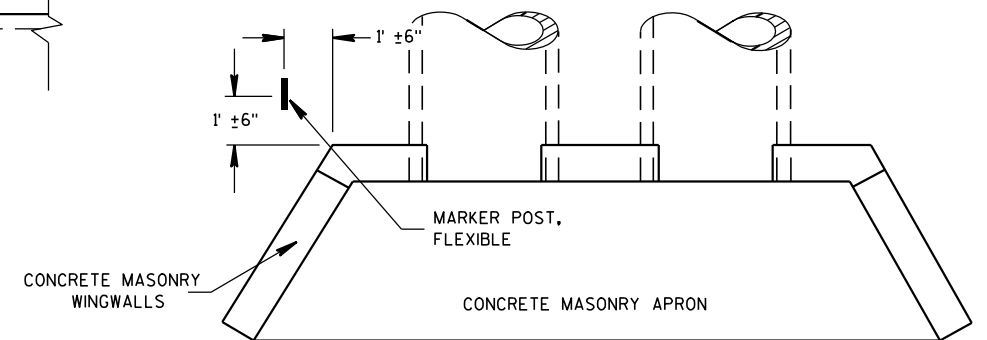
FRONT VIEW
CURVED MARKER



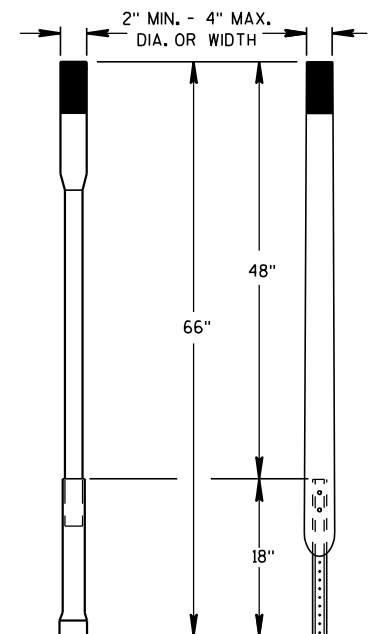
FRONT VIEW
ROUND MARKER

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



ALTERNATE 1 ALTERNATE 2
FLEXIBLE MARKER POST

MARKER POST, FLEXIBLE,
FOR CULVERT END

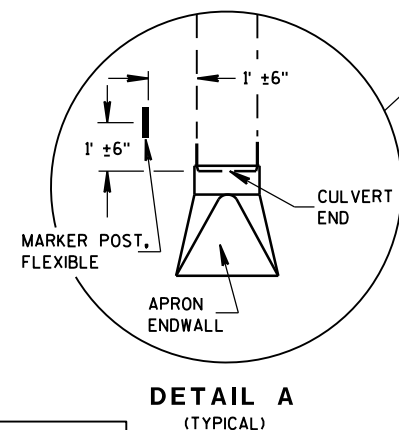
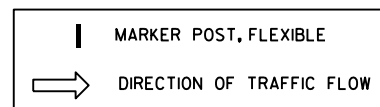
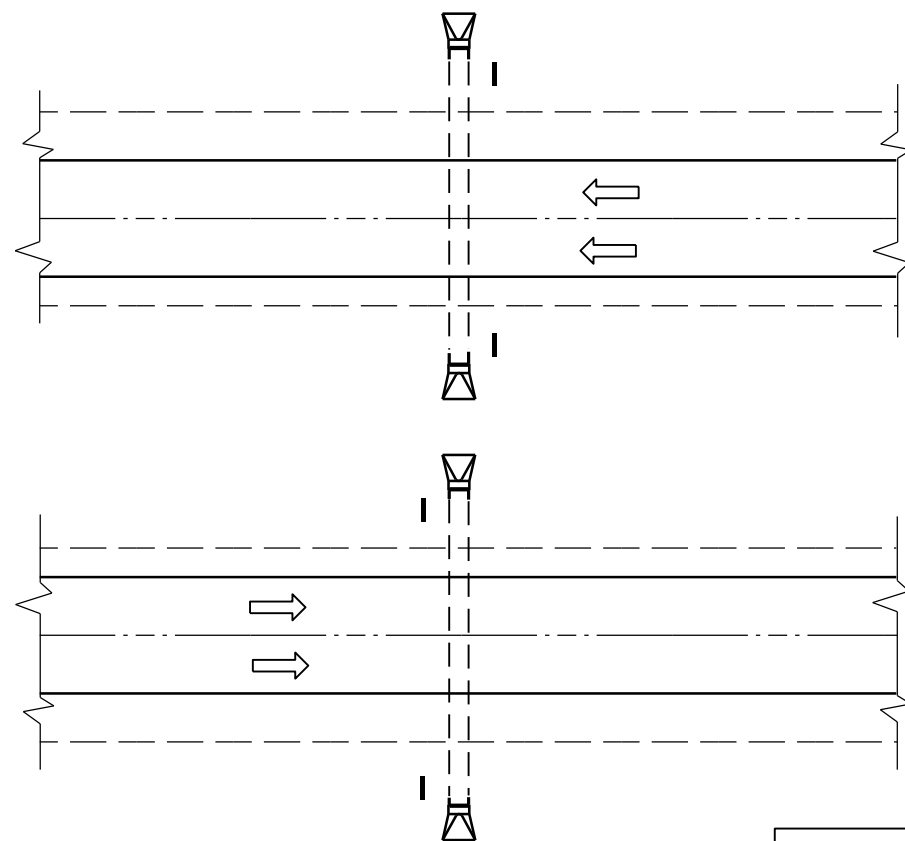
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/1/98 /S/ Rory L. Rhin...
DATE CHIEF ROADWAY DEVELOP 99 INEER

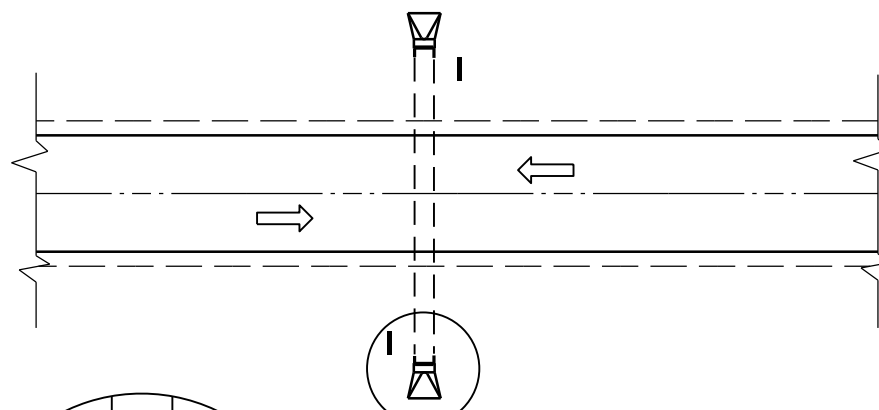
FHWA

PLAN VIEW
DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

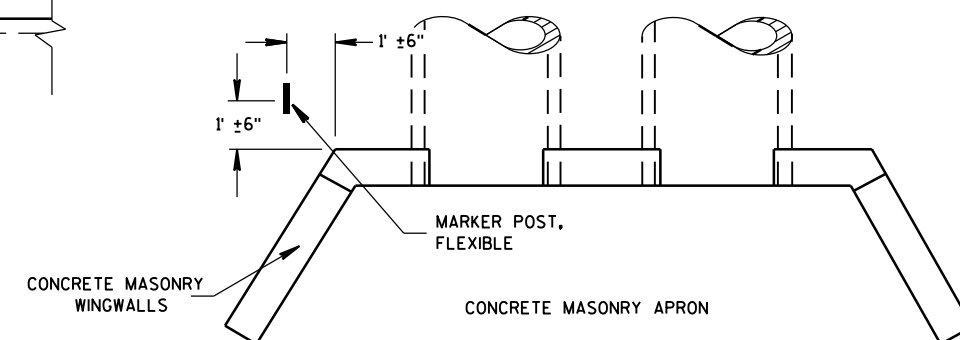
PLAN VIEW
UNDIVIDED HIGHWAY



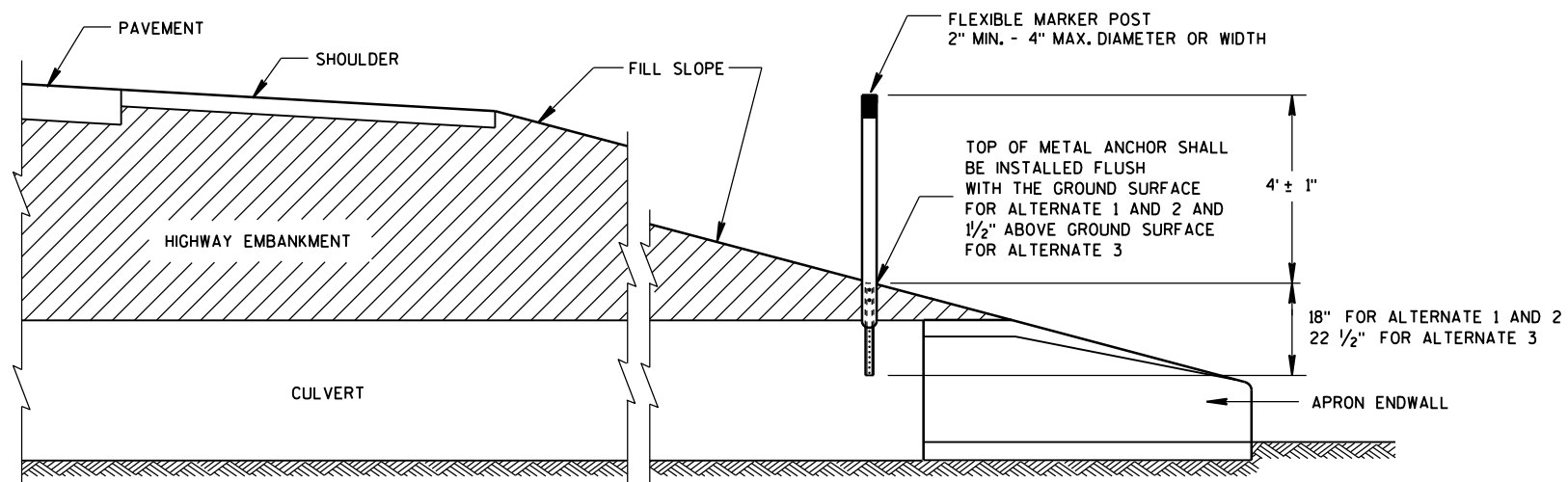
FLEXIBLE MARKER POST LOCATION

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.



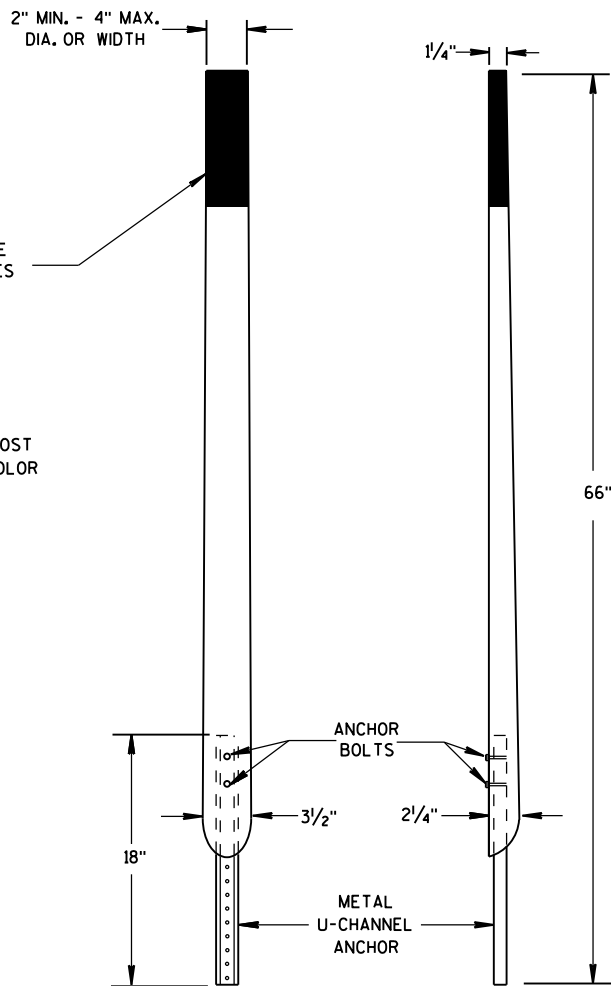
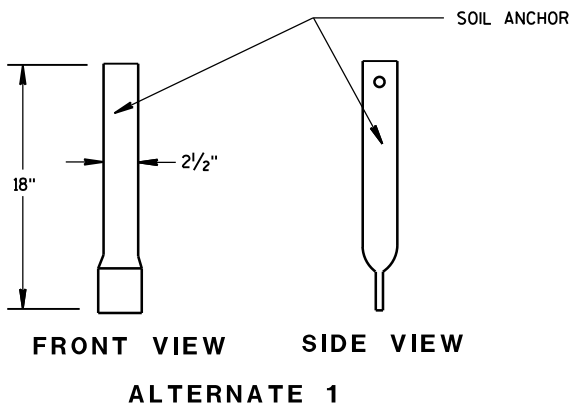
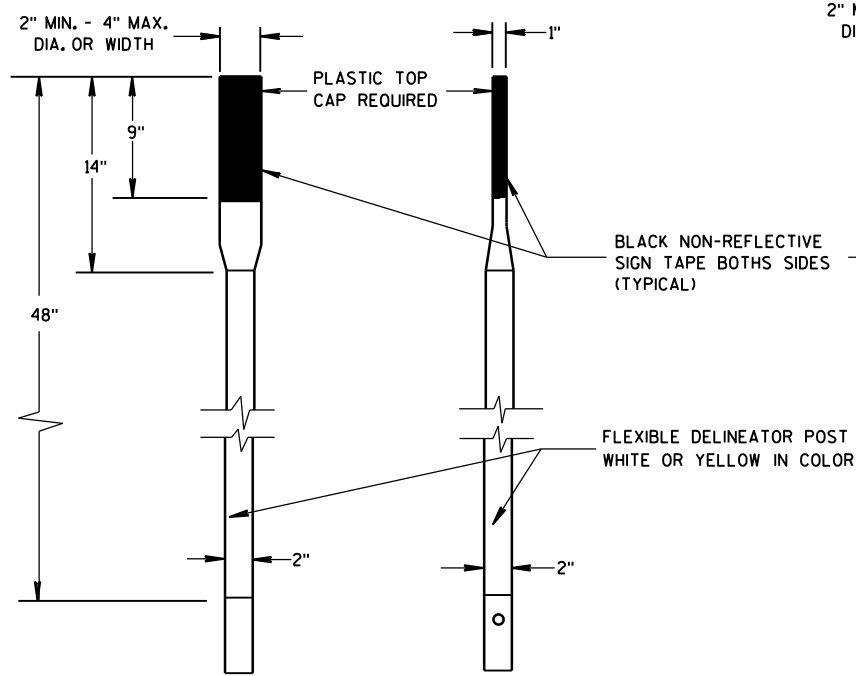
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



CROSS SECTION
FLEXIBLE MARKER POST

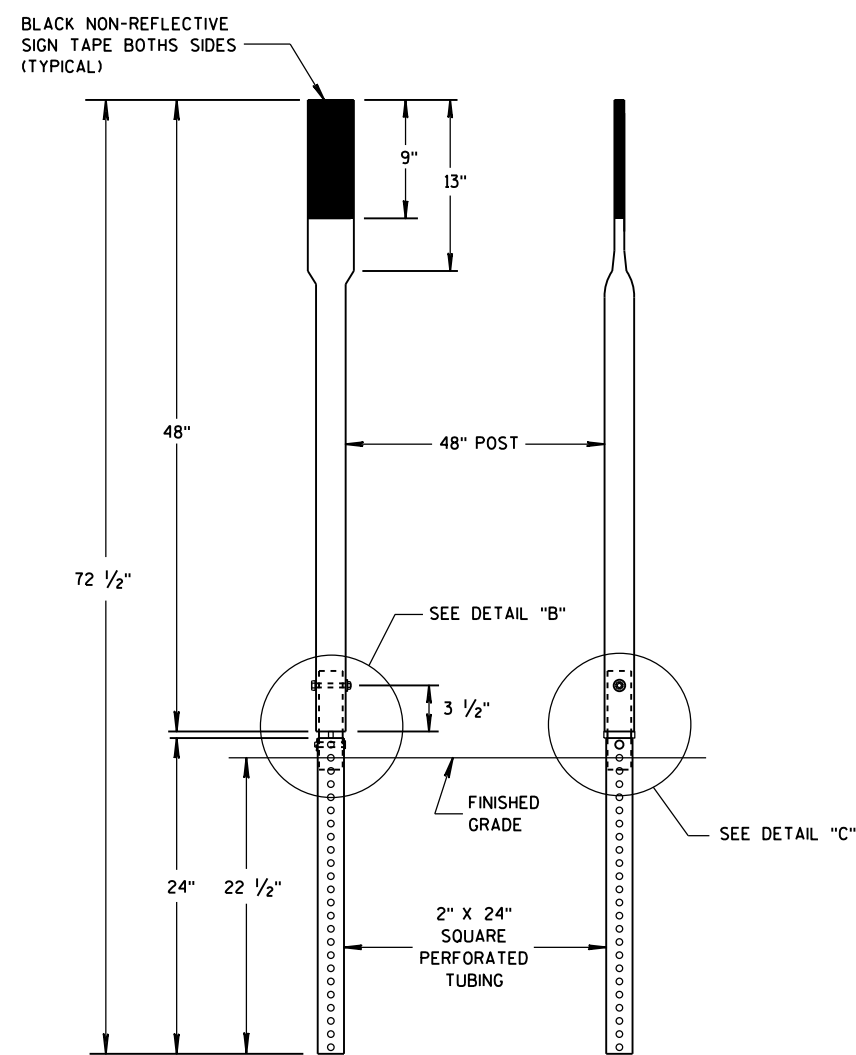
FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 100

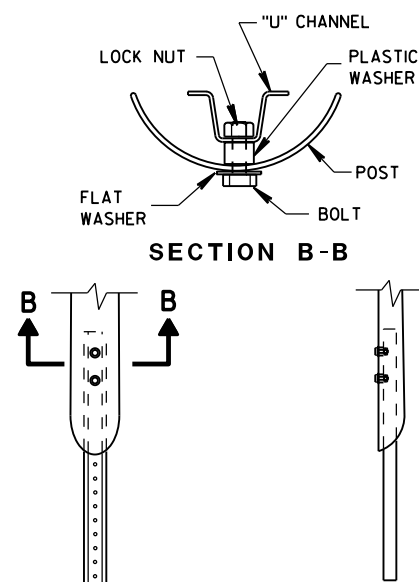
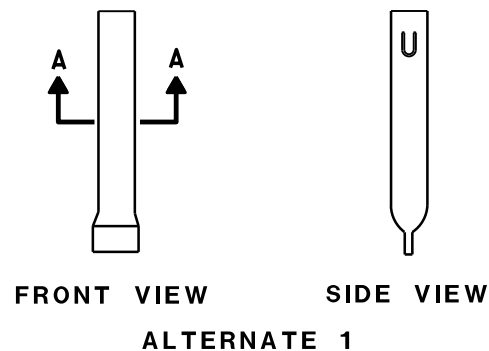
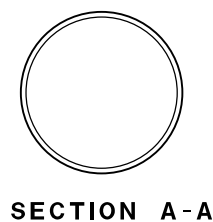
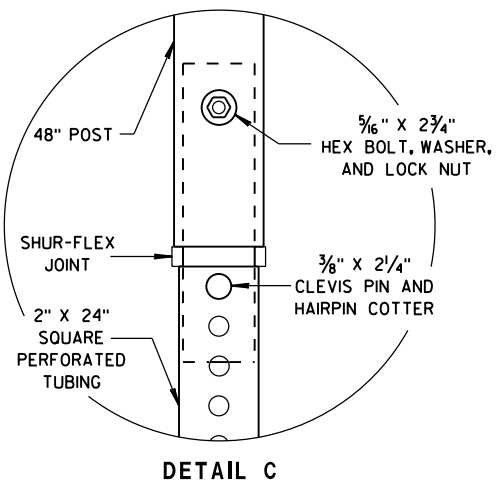
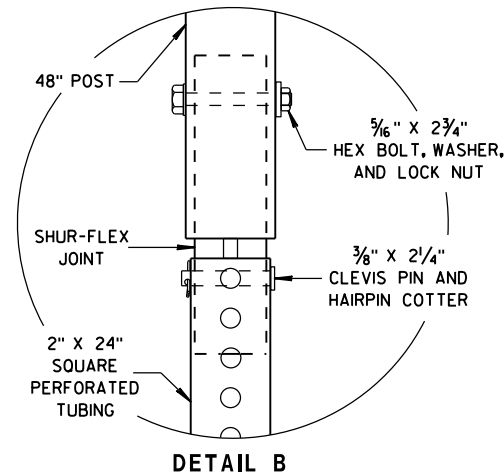
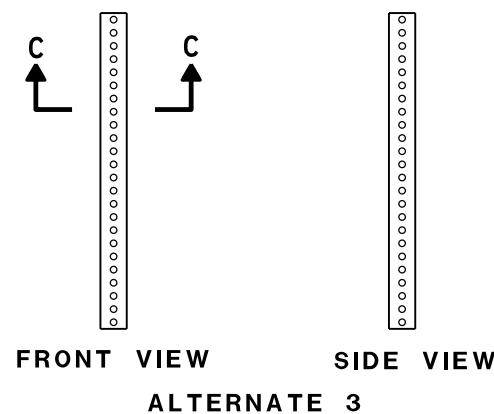
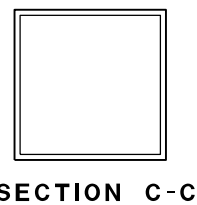


FRONT VIEW SIDE VIEW
ALTERNATE 2

FLEXIBLE MARKER POSTS



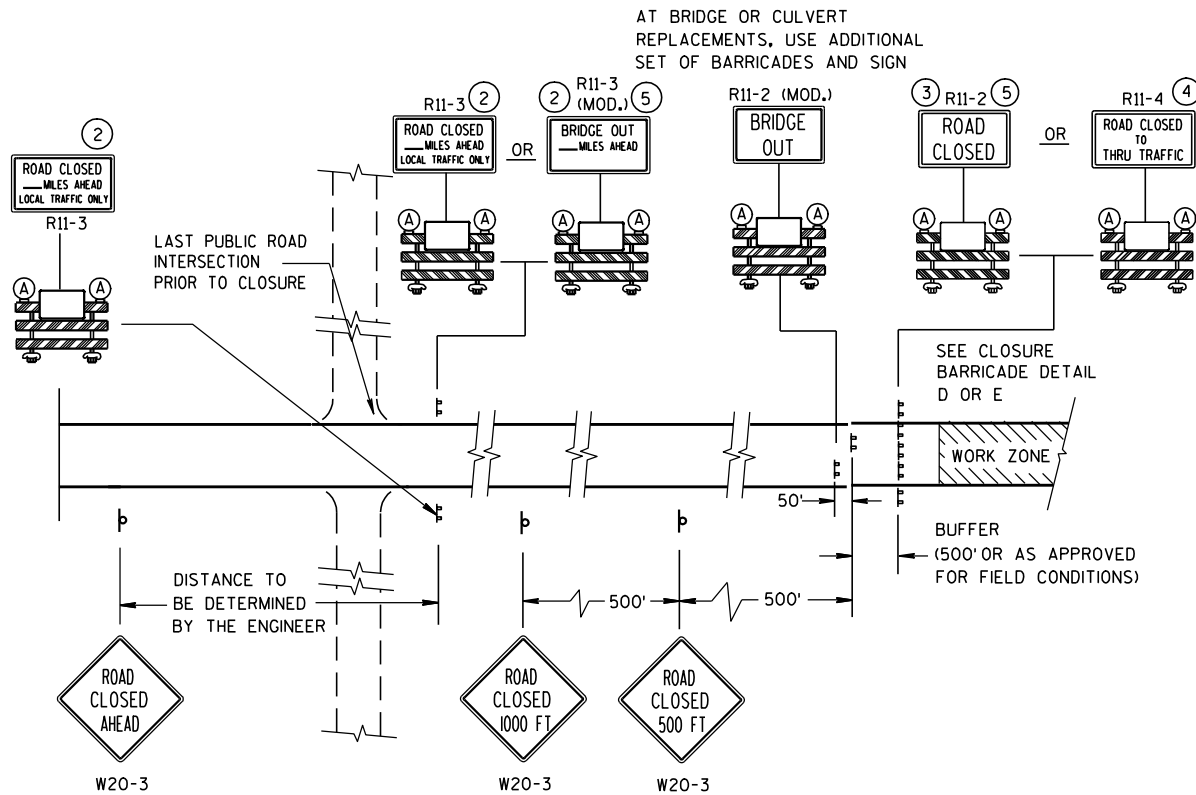
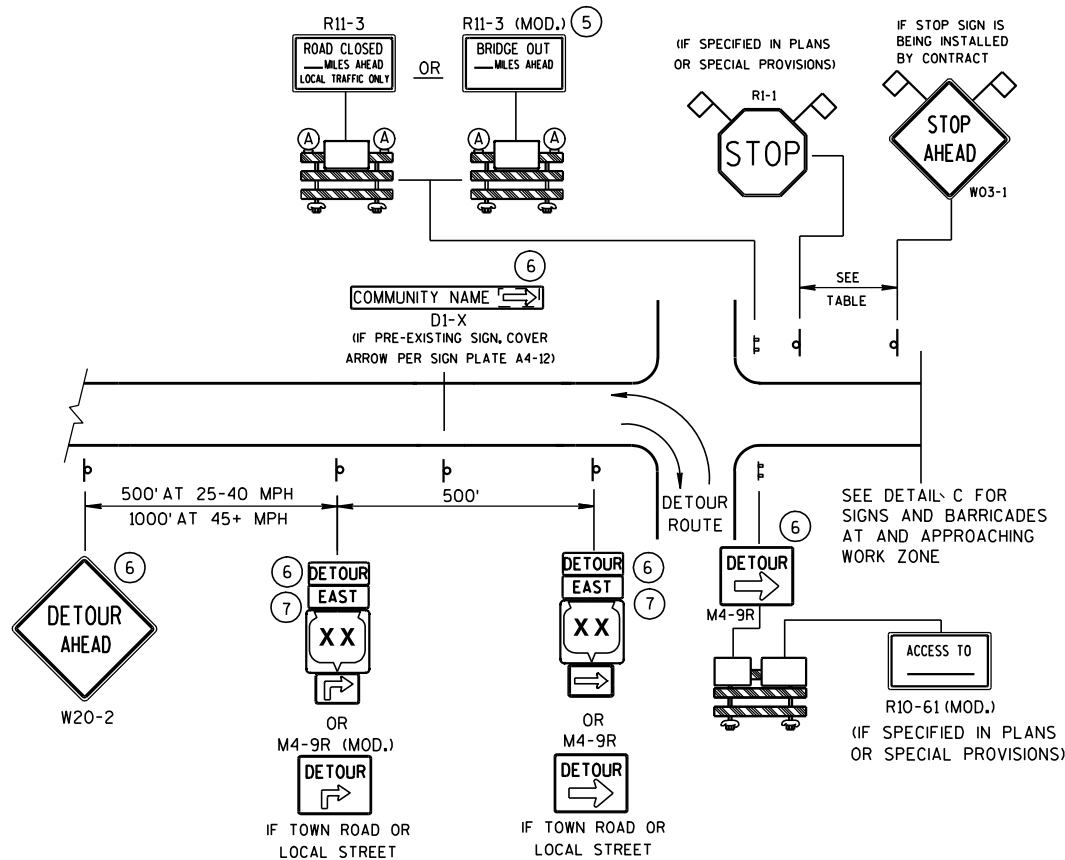
FRONT VIEW SIDE VIEW
ALTERNATE 3



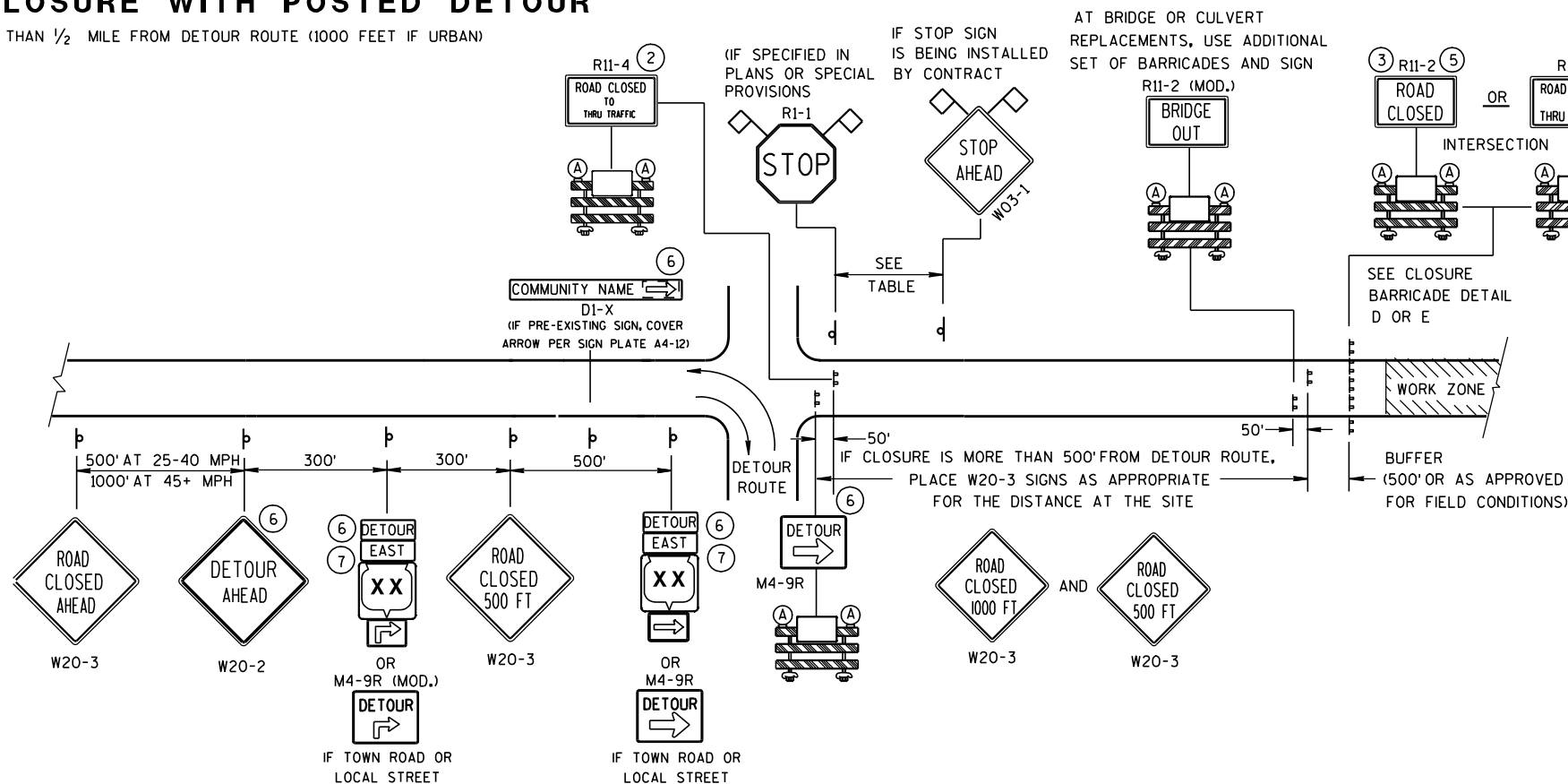
FRONT VIEW SIDE VIEW
ALTERNATE 2

FLEXIBLE MARKER POST ANCHORS

FLEXIBLE MARKER POST FOR CULVERT END		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED 10/1/2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER 101	IGN
FHWA		



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

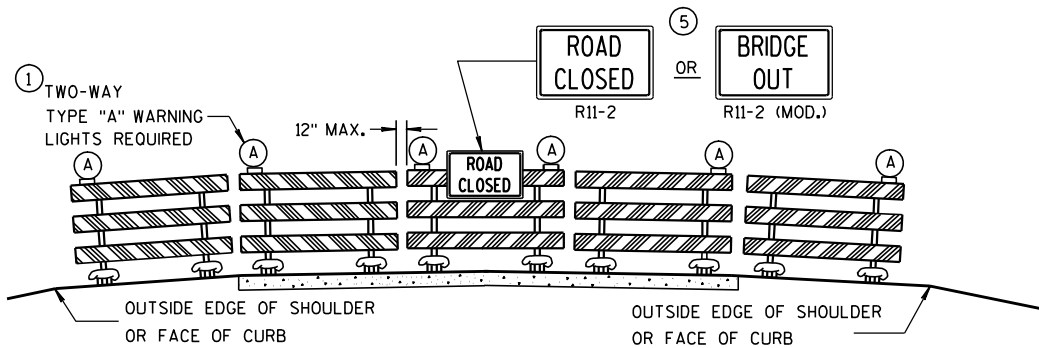
SEE SDD 15C2-4b
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

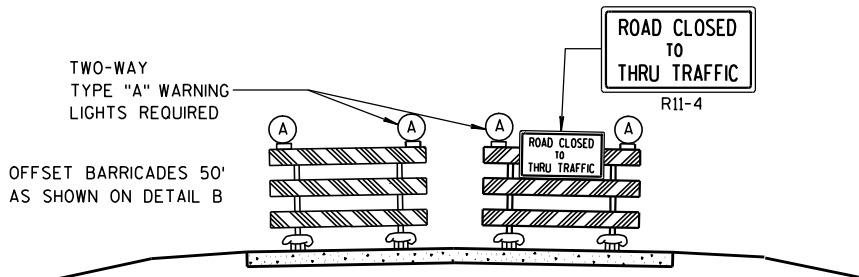
- POST MOUNTED SIGN
- TYPE III BARRICADES
- TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK ZONE
- DETOUR EAST M4-8 M3-X
- MI-4 OR MI-5A OR MI-6
- MO5-1 OR MO6-1
- FLAGS, 16" X 16" MIN., (ORANGE)

**BARRICADES AND SIGNS
FOR
MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-4a 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.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3, R11-4, R10-61 AND R1-1 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

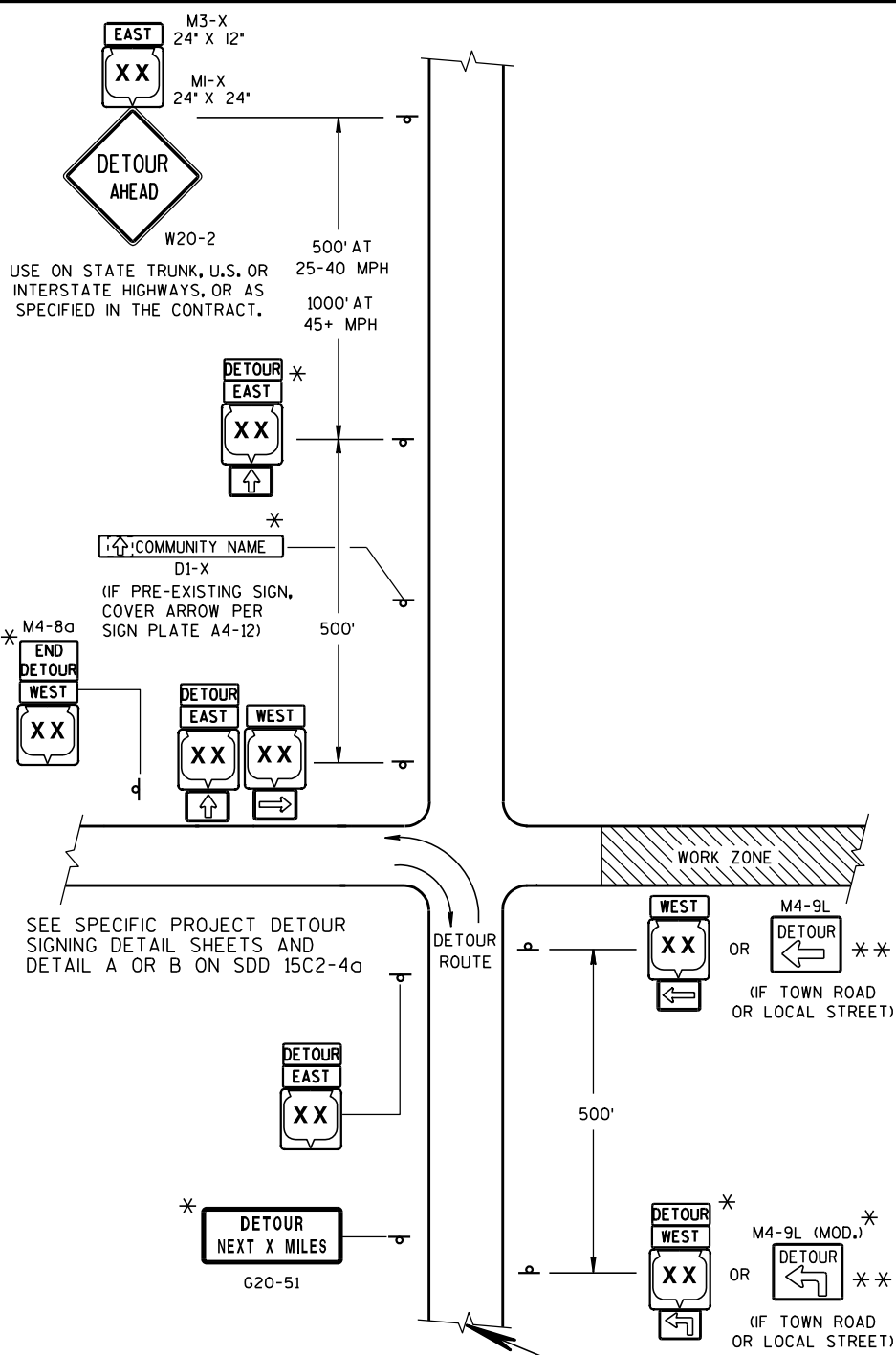
"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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 AND 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		
APPROVED		
9/16/03 DATE	/S/ Thomas N. N CHIEF SIGNS AND MAR	103 ENGINEER
FHWA		



LEGEND

POST MOUNTED SIGN

WORK ZONE

DETOUR EAST M4-8 M3-X

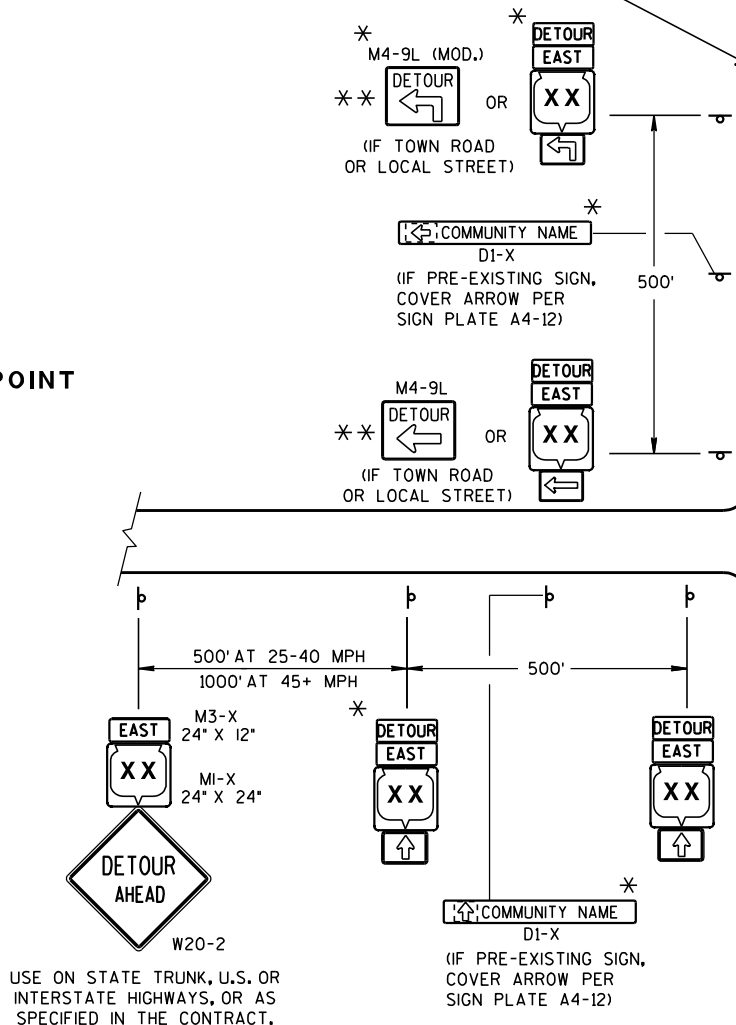
M1-4 OR COUNTY M1-5A OR M1-6

M05-1 OR M06-1 OR M06-1

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

MATCH POINT

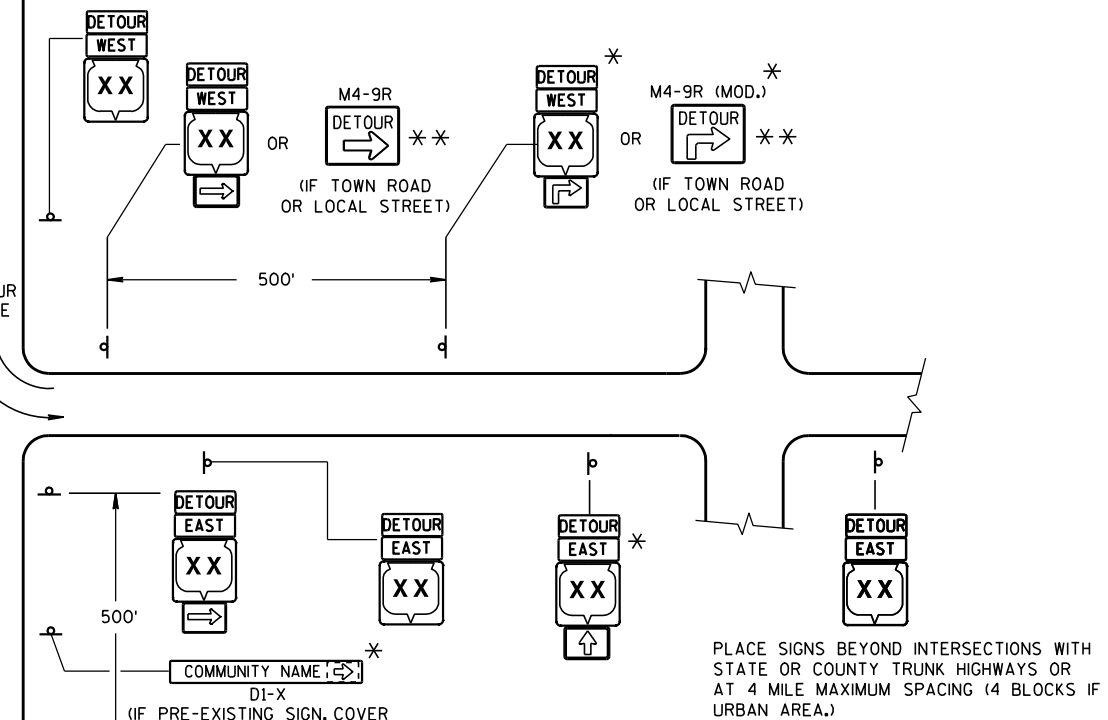
DETAIL F
DETOUR SIGNING



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 AND 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.)
 - 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.

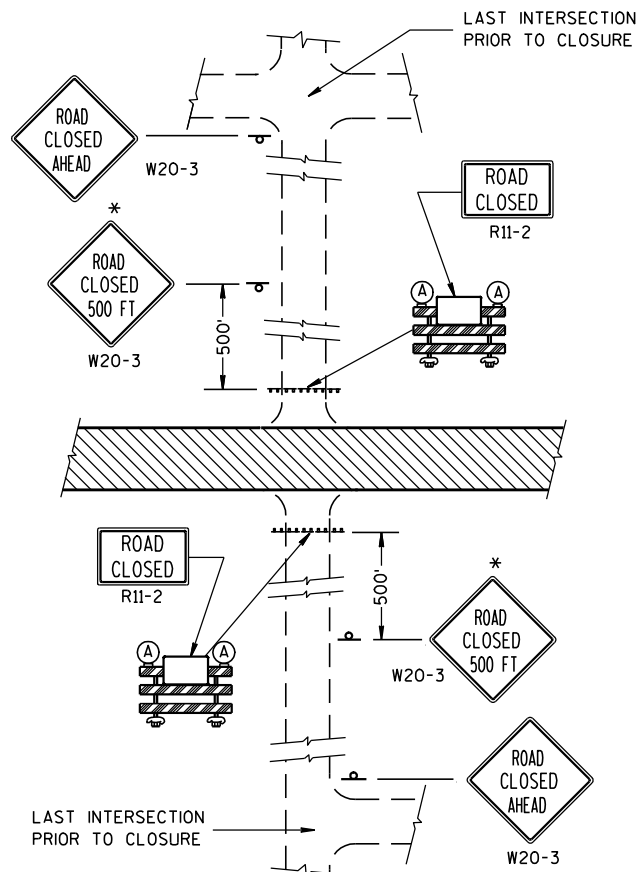
- * OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.
- ** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



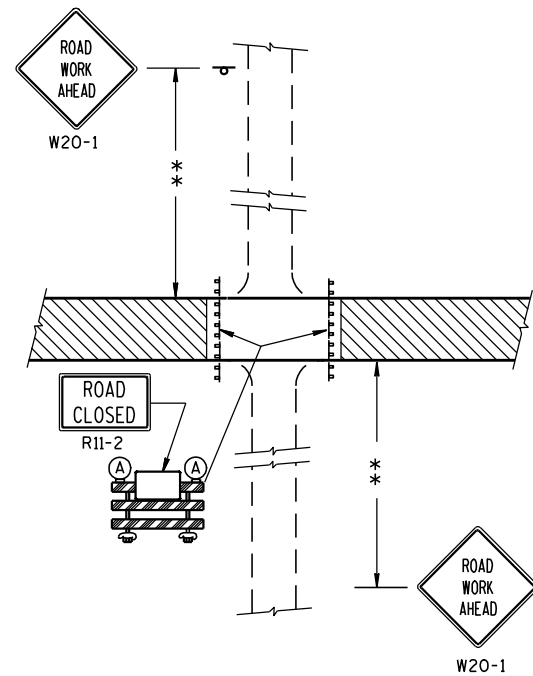
DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

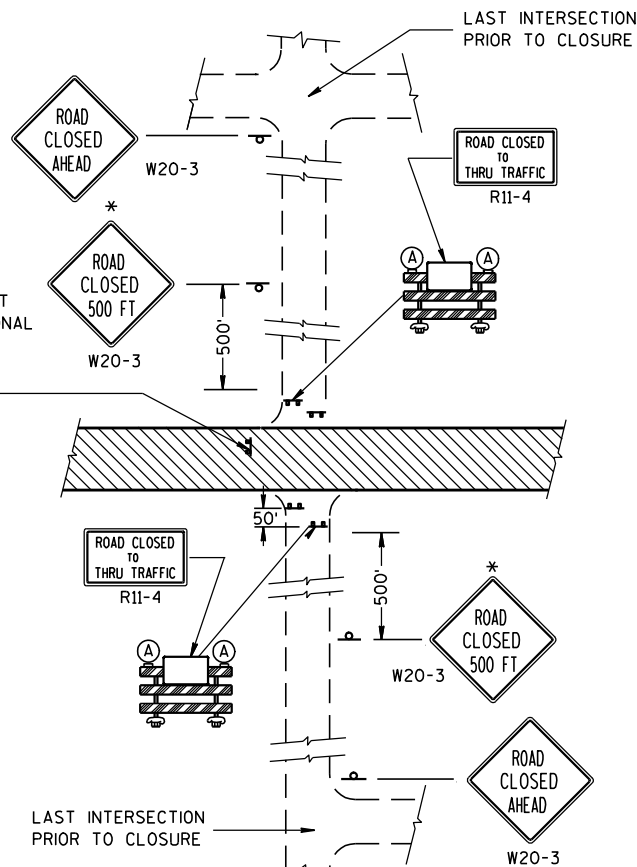
APPROVED
9-16-03 DATE /S/ Thomas N. N... CHIEF SIGNS AND MAR 104 INEER
FHWA



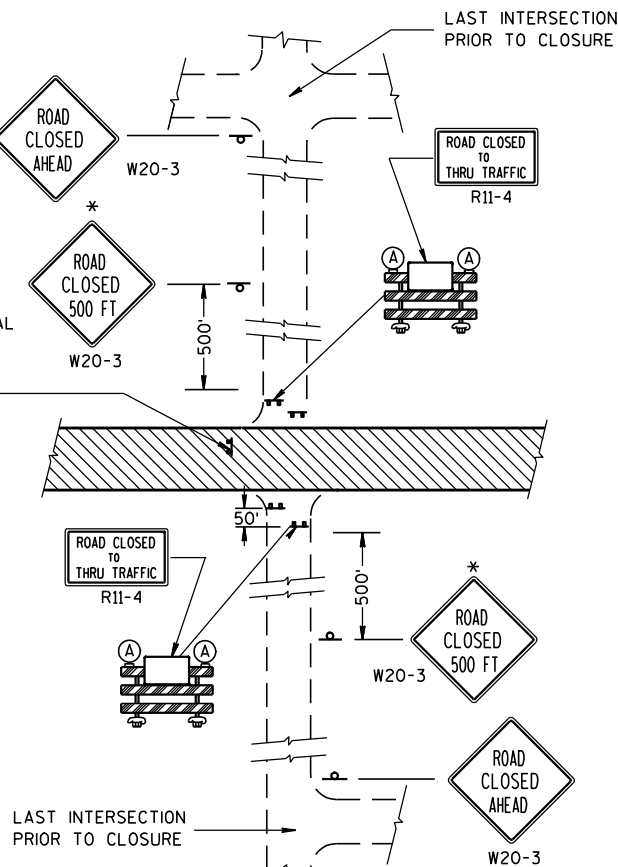
DETAIL 1
(NO ACCESS TO PROJECT)



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.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3 AND R11-4 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

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

⌋ POST MOUNTED WARNING SIGN

⌋ TYPE III BARRICADES

Ⓐ TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)

▨ WORK AREA

**BARRICADES AND SIGNS
FOR
SIDEROAD CLOSURES**

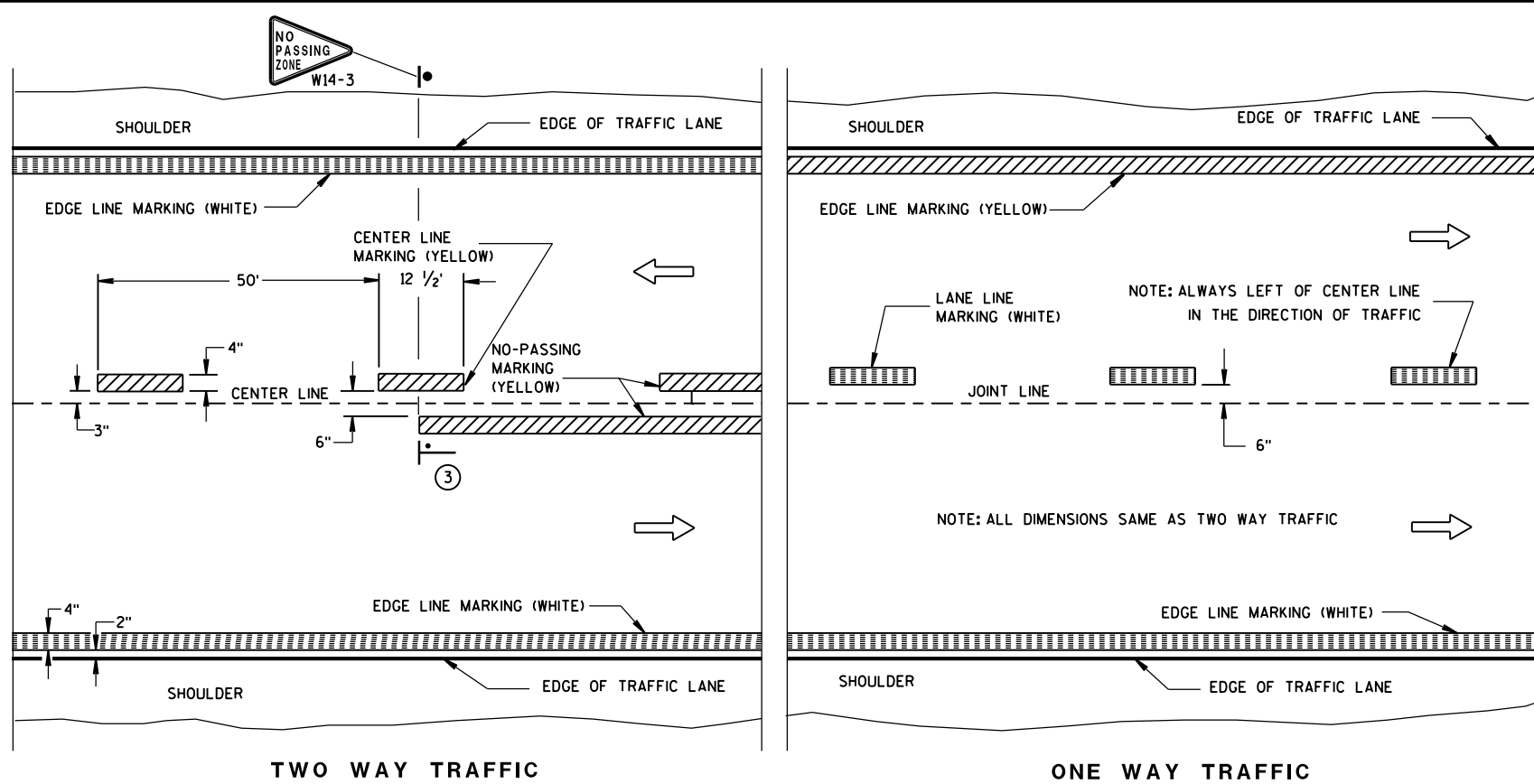
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

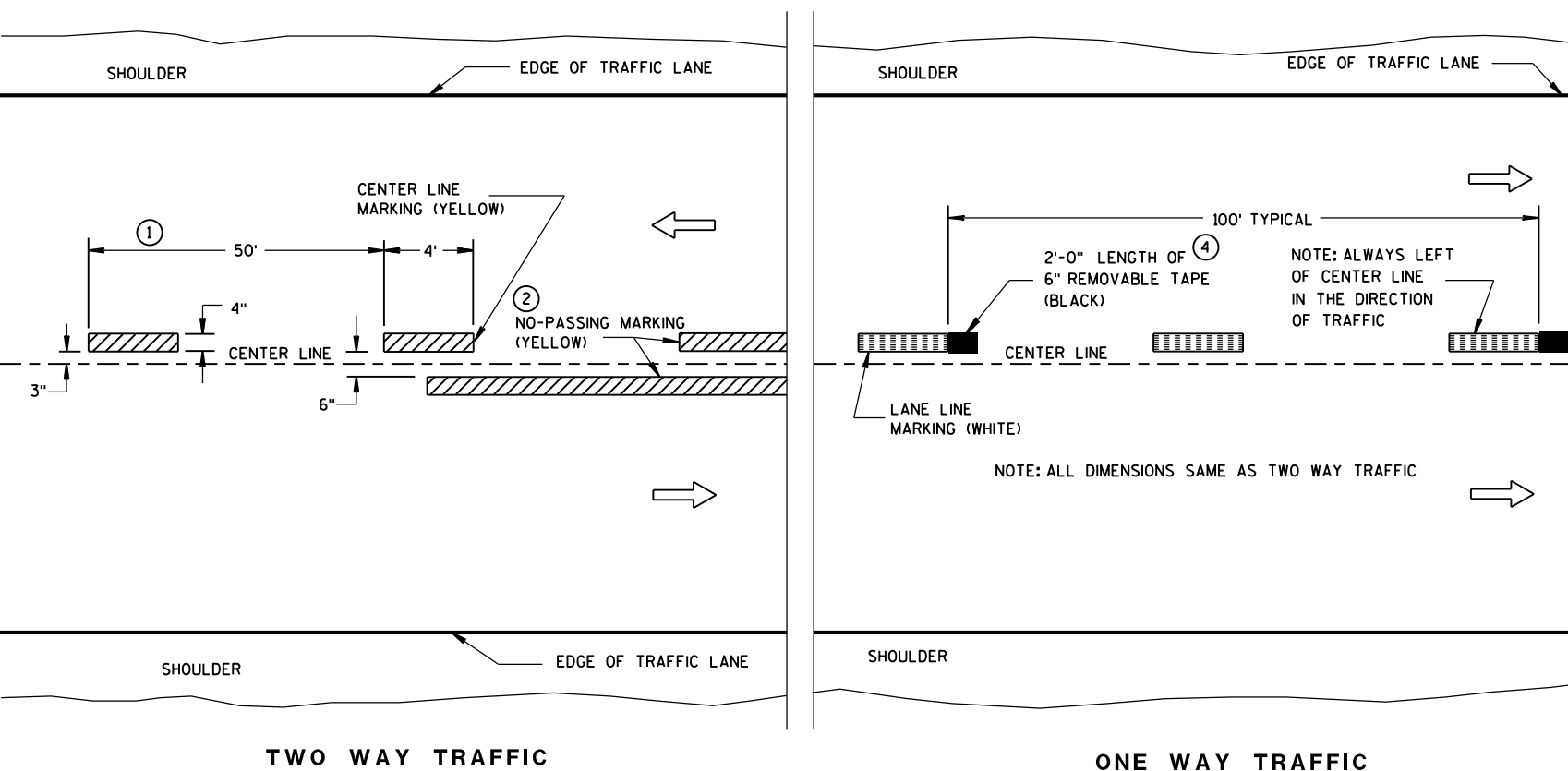
9-16-03
DATE

/S/ Thomas N. N...
CHIEF SIGNS AND MAR 105 INEER

FHWA



PERMANENT PAVEMENT MARKING



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

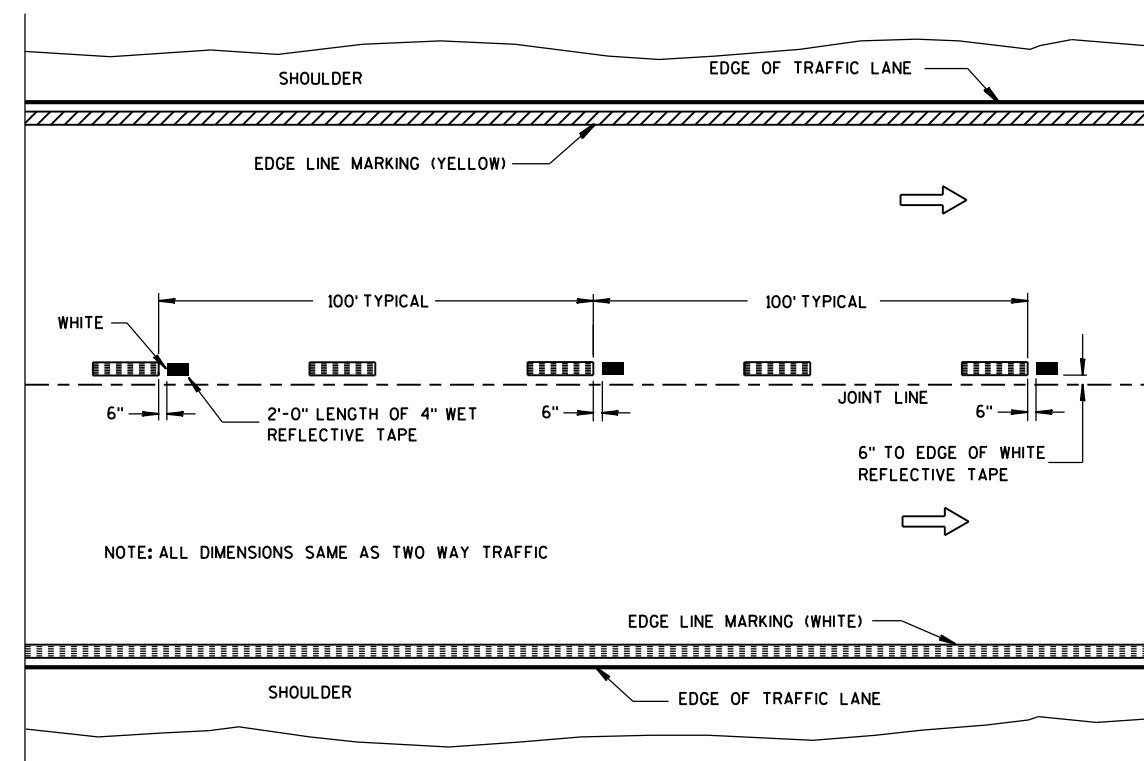
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

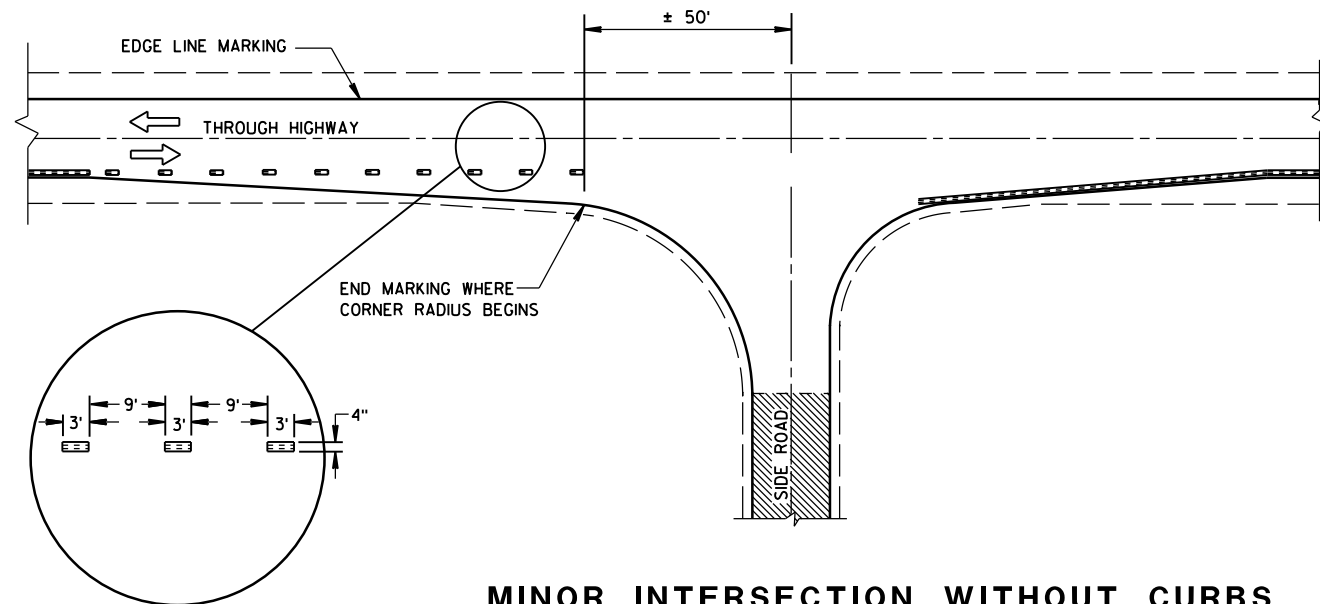


WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

- "T" MARKING
- POST MOUNTED SIGN

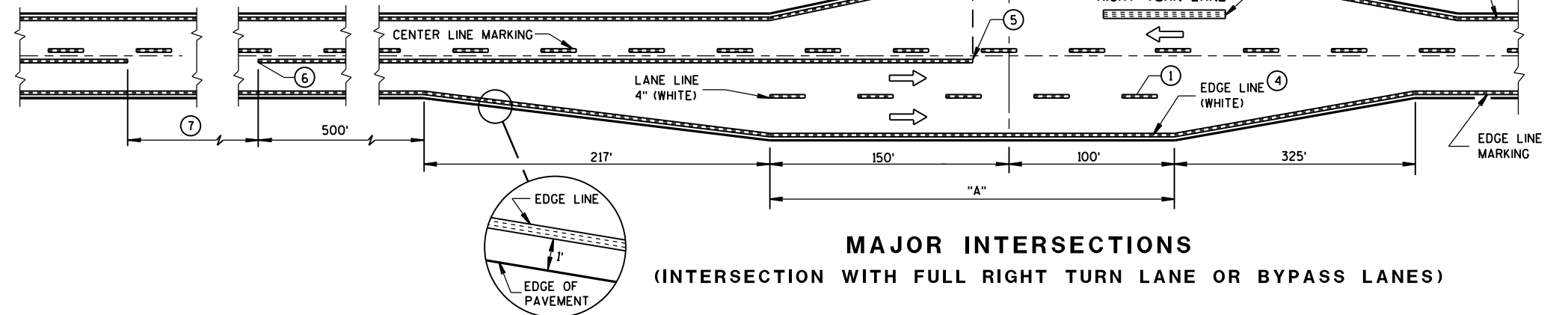
PAVEMENT MARKING (MAINLINE)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10-1-2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINE 106 SIGN
FHWA	



MINOR INTERSECTION WITHOUT CURBS

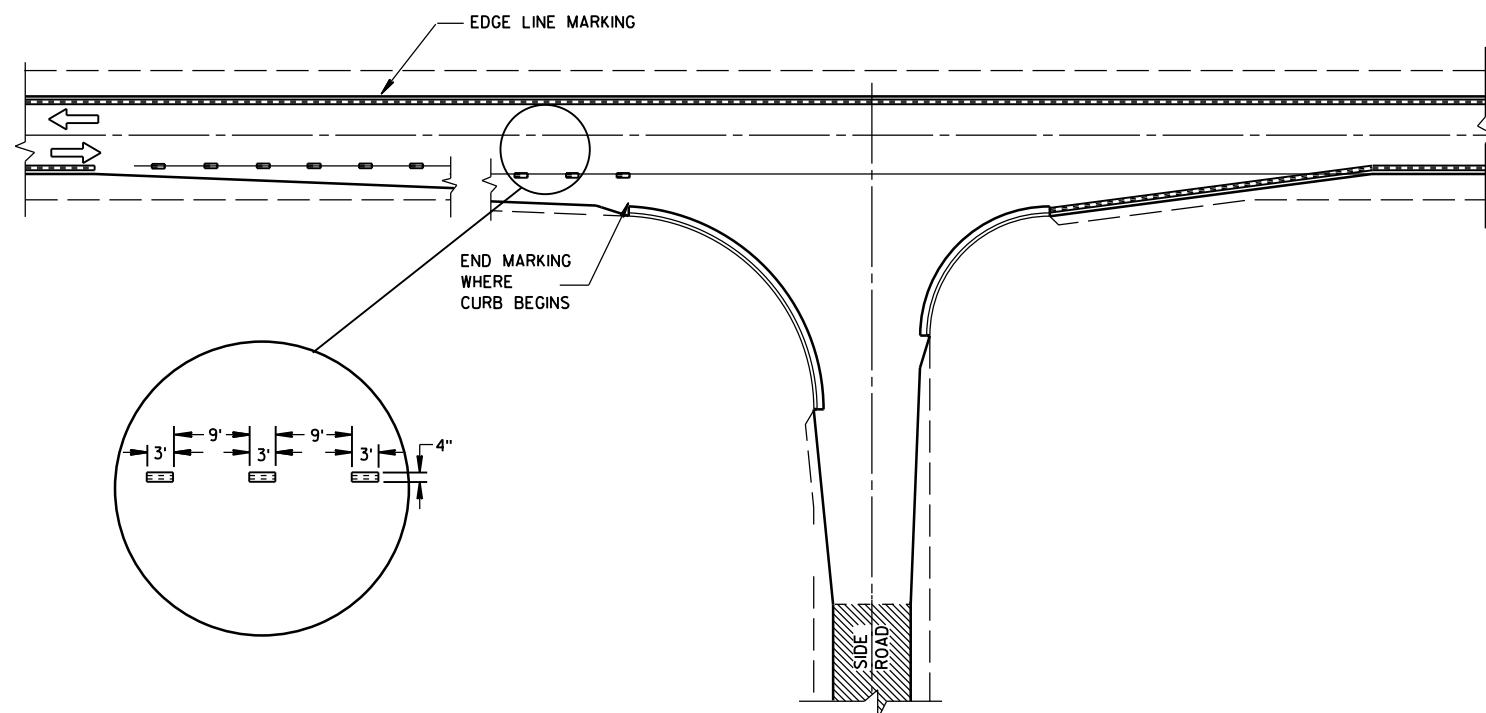
⑦

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

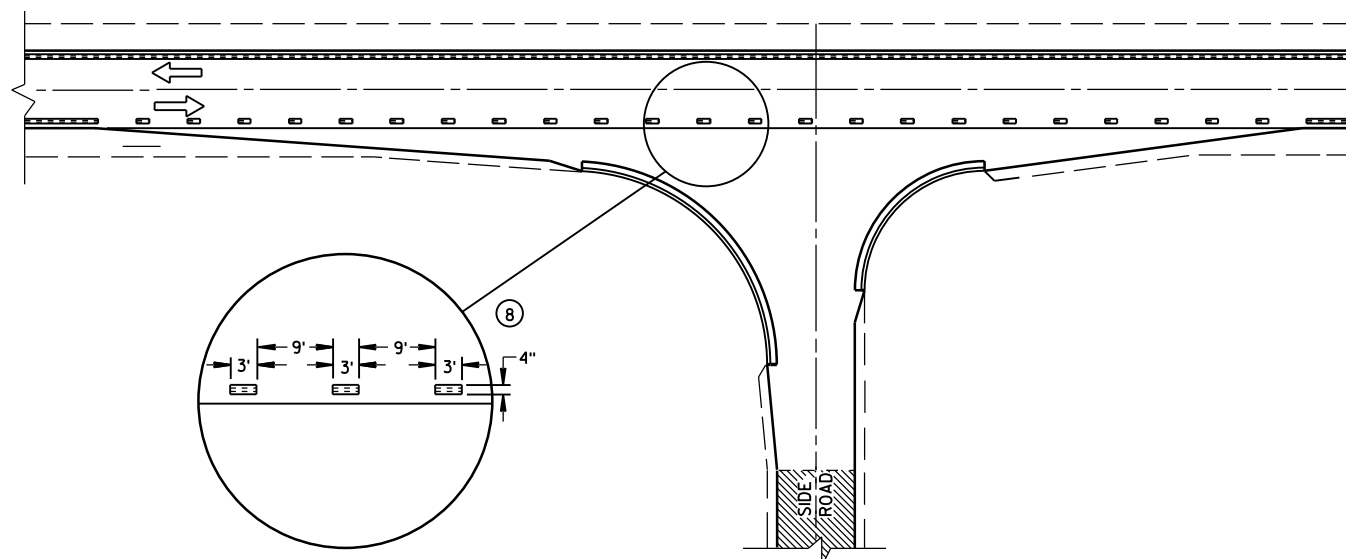


MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



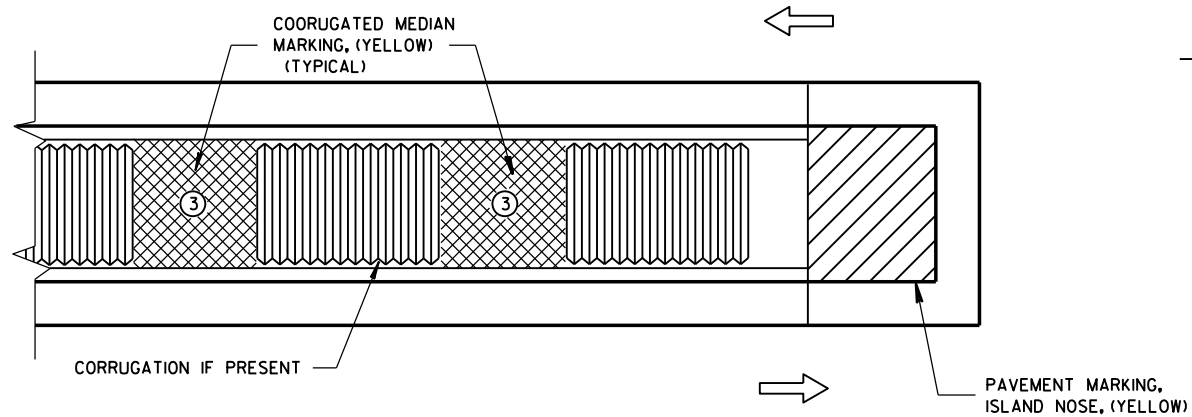
MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

GENERAL NOTES

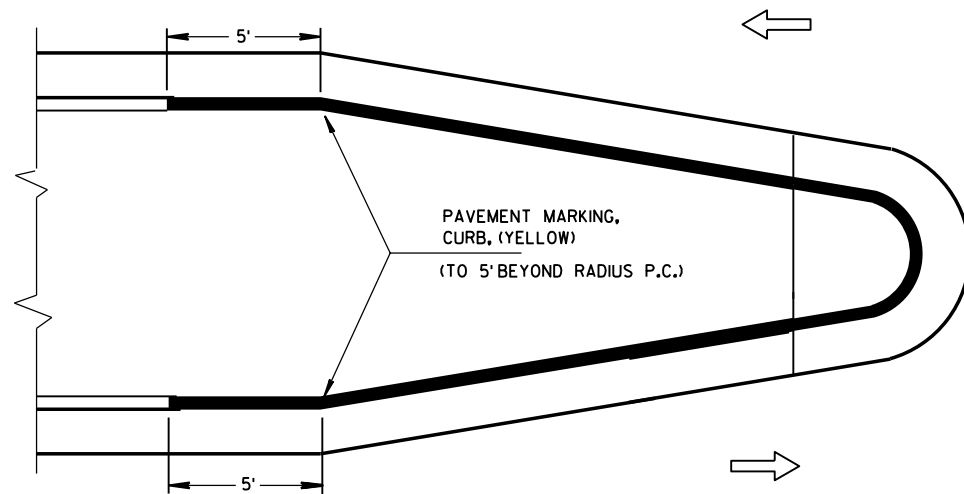
- EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
 - ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
 - ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
 - ④ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
 - ⑤ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
 - ⑥ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
 - ⑦ IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.
 - ⑧ 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(INTERSECTIONS)

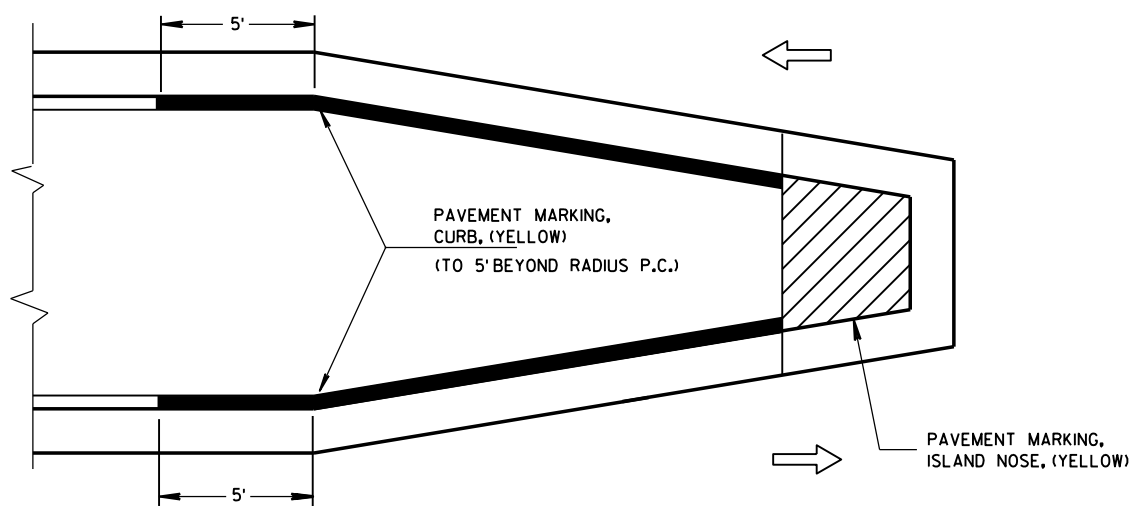
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 107



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

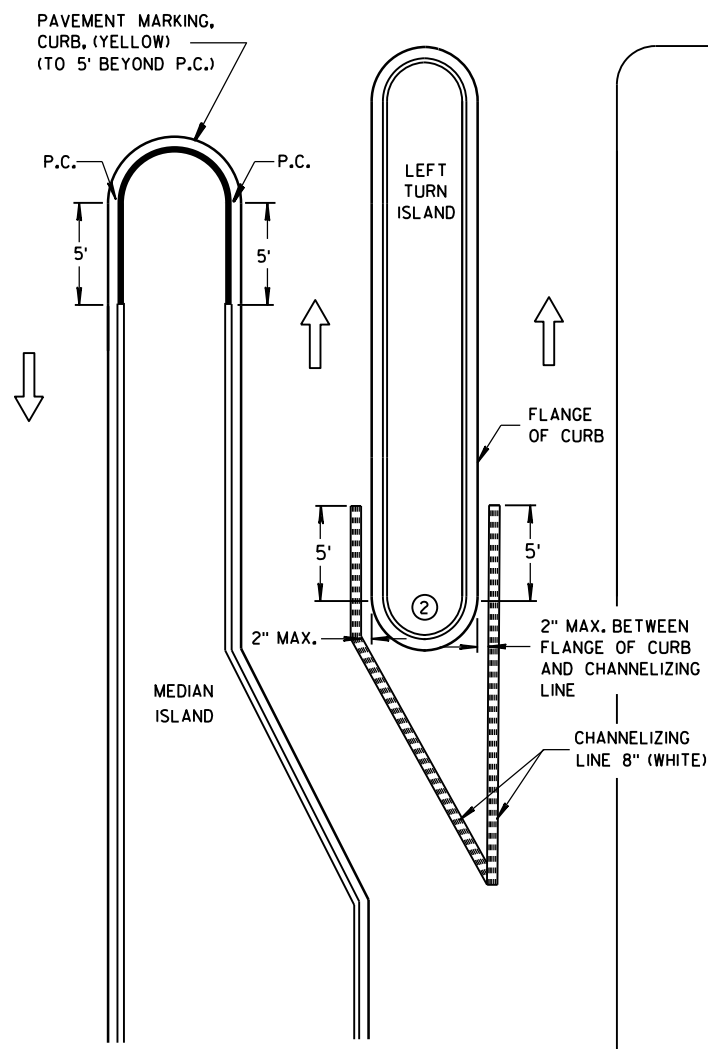


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

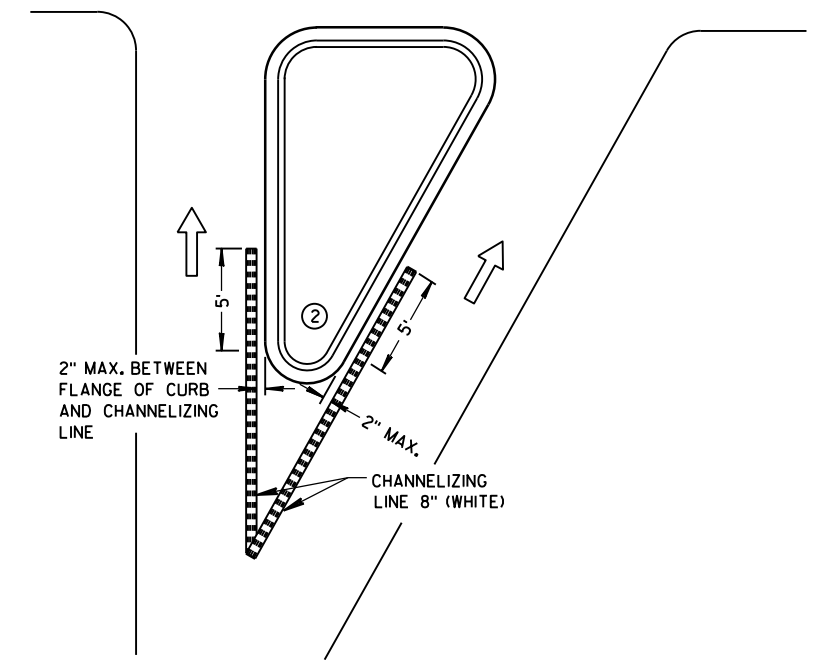
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

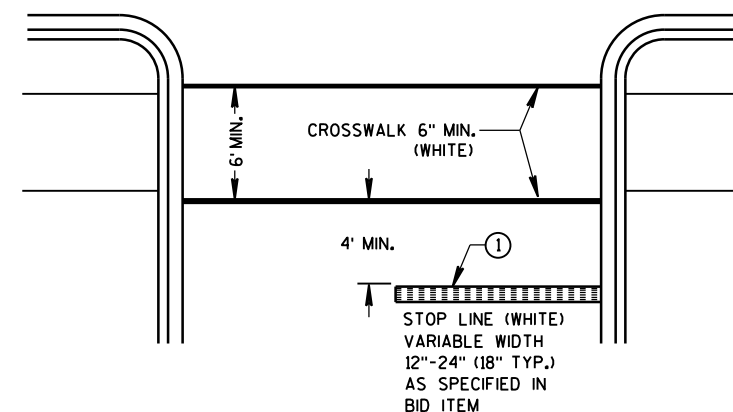
- ① STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- ② DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
- ③ WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

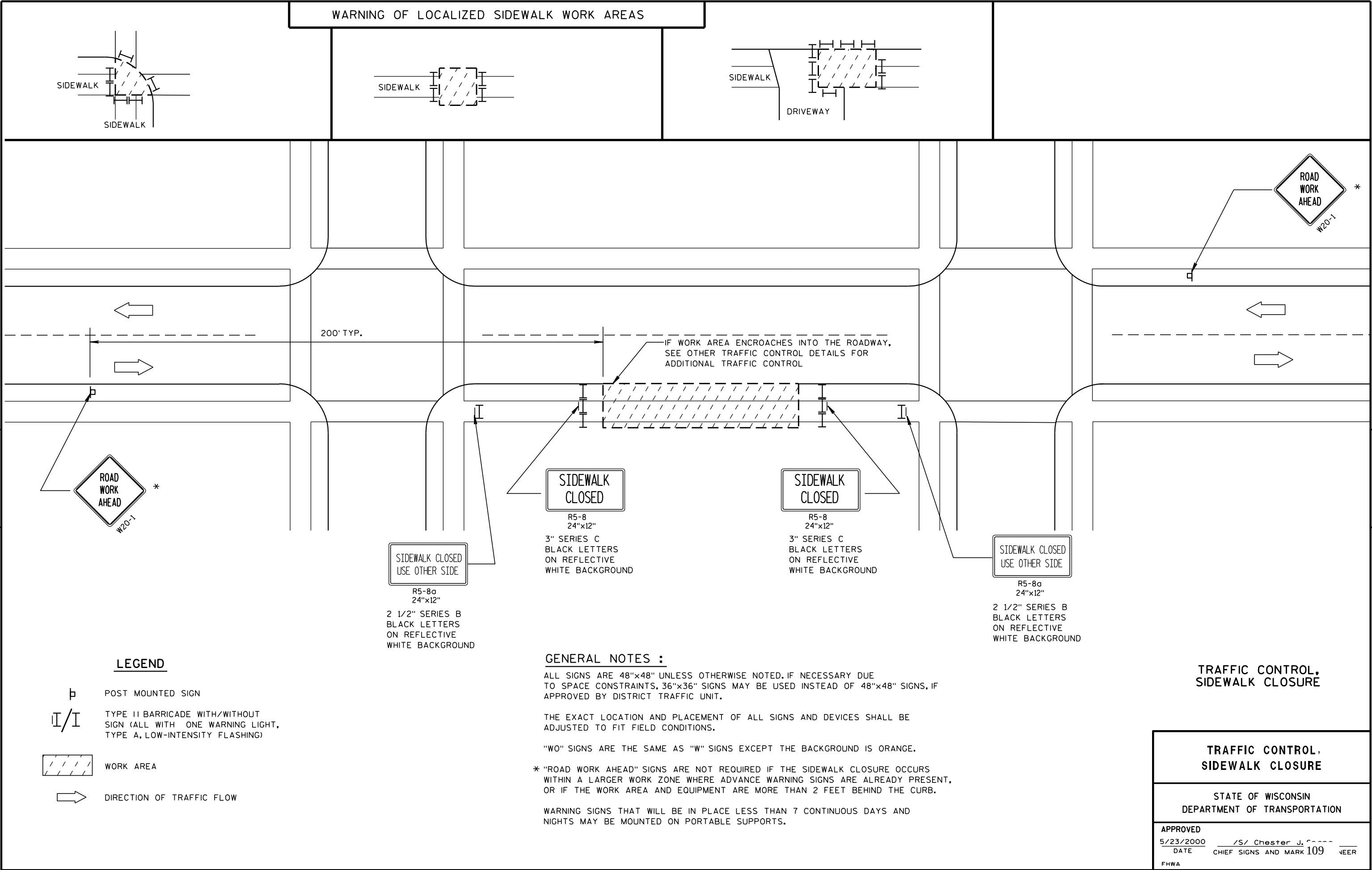
- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

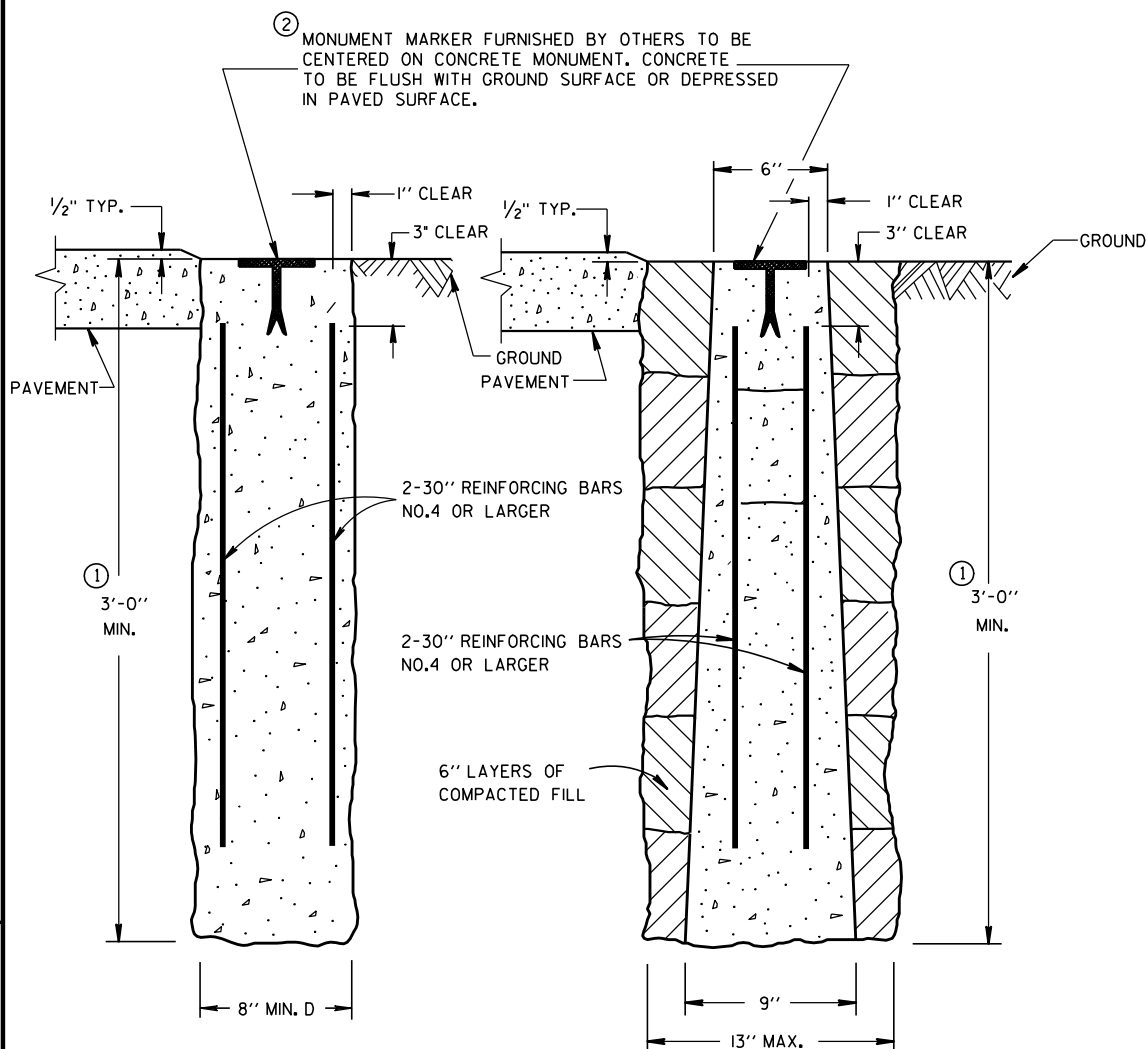


STOP LINE AND CROSSWALK

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 108



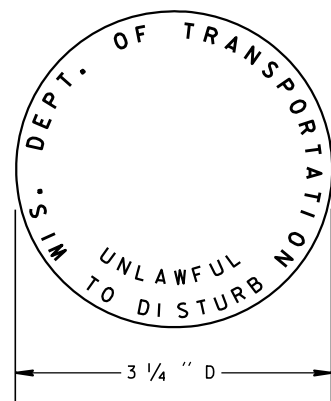


CAST-IN-PLACE

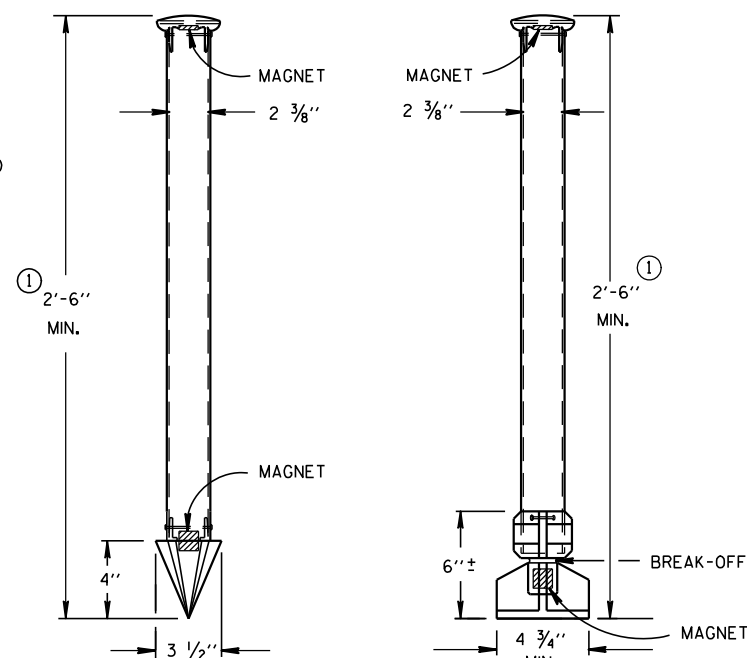
PRECAST

CONCRETE MONUMENTS

TYPE A



② WIS DOT MONUMENT MARKER LOGO
FOR TYPES "A", "C" & "D"



TYPE C

TYPE D

DRIVE-IN MONUMENT

BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

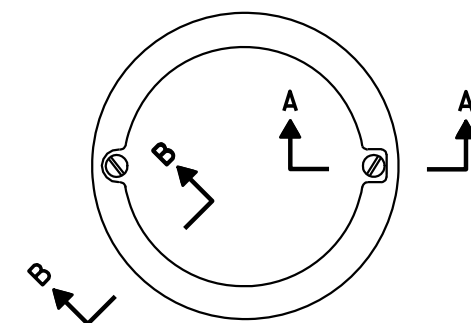
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

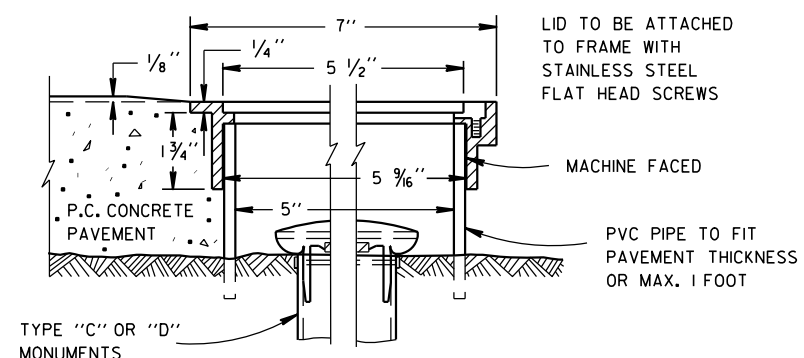
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



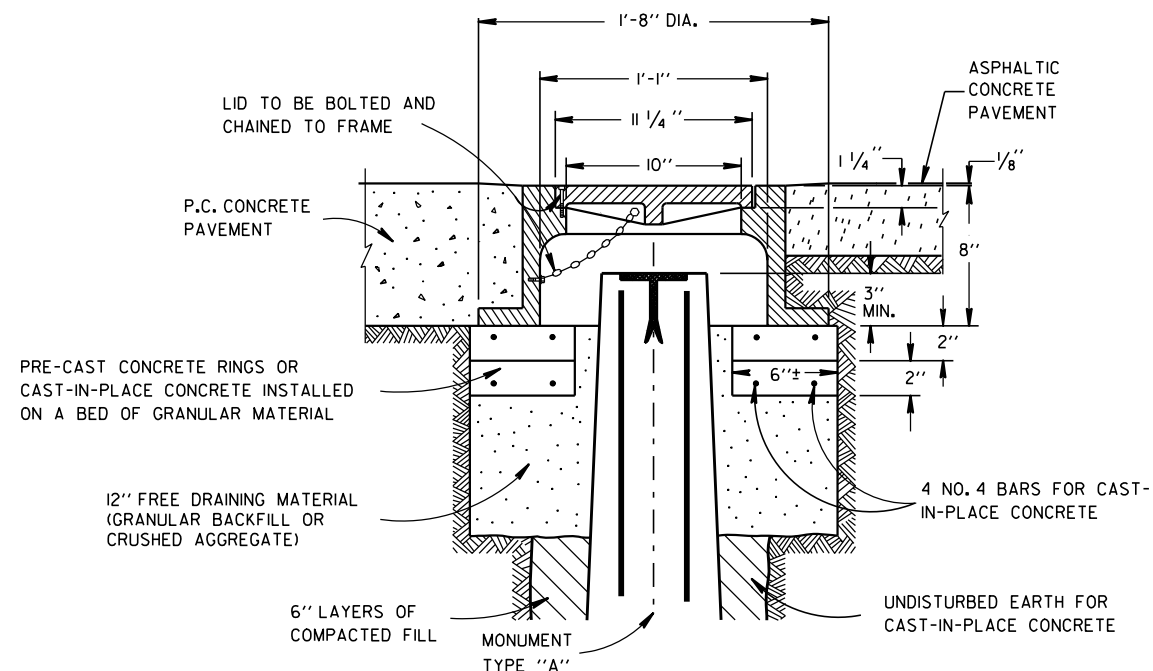
TOP VIEW



TYPE "C" OR "D" MONUMENTS

SECTION B-B SECTION A-A
ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)



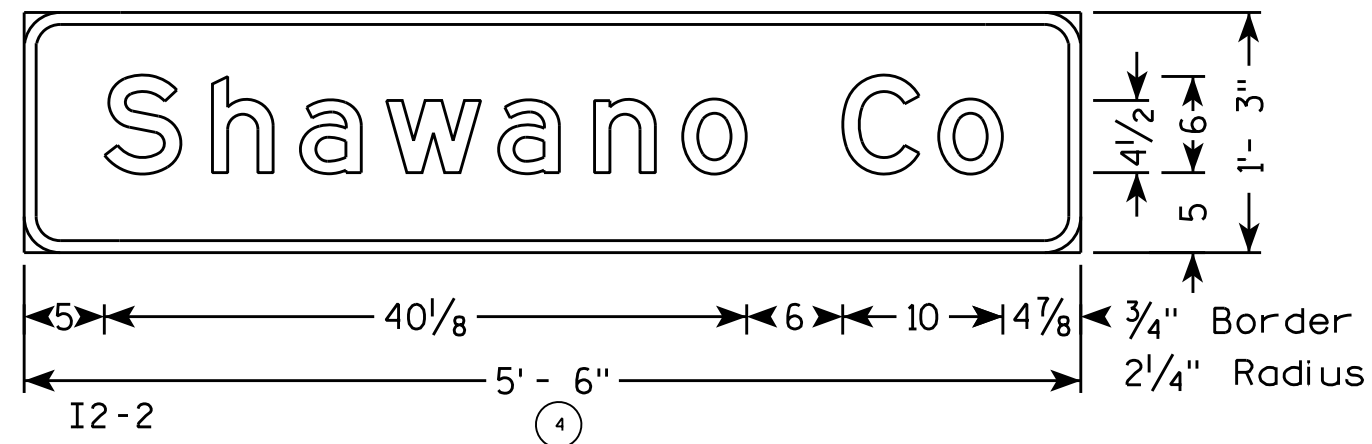
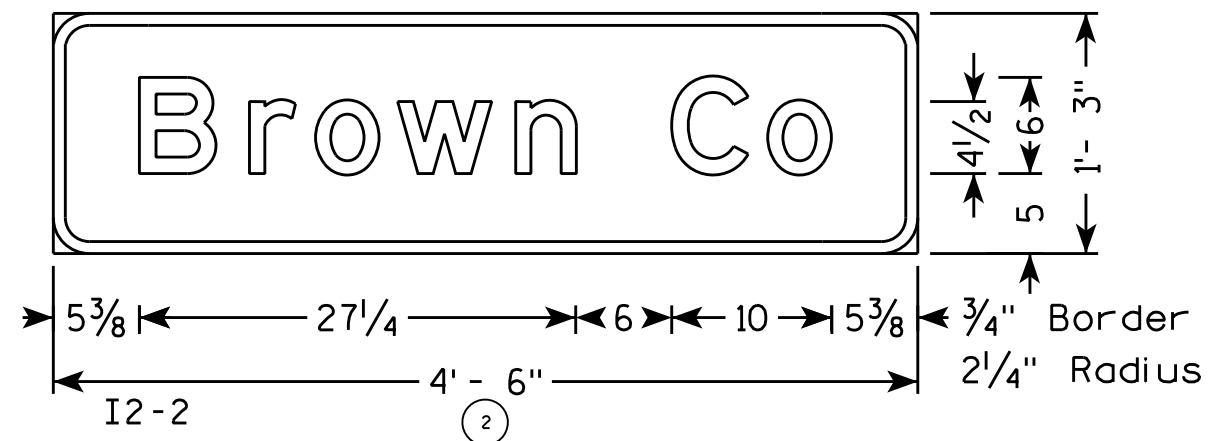
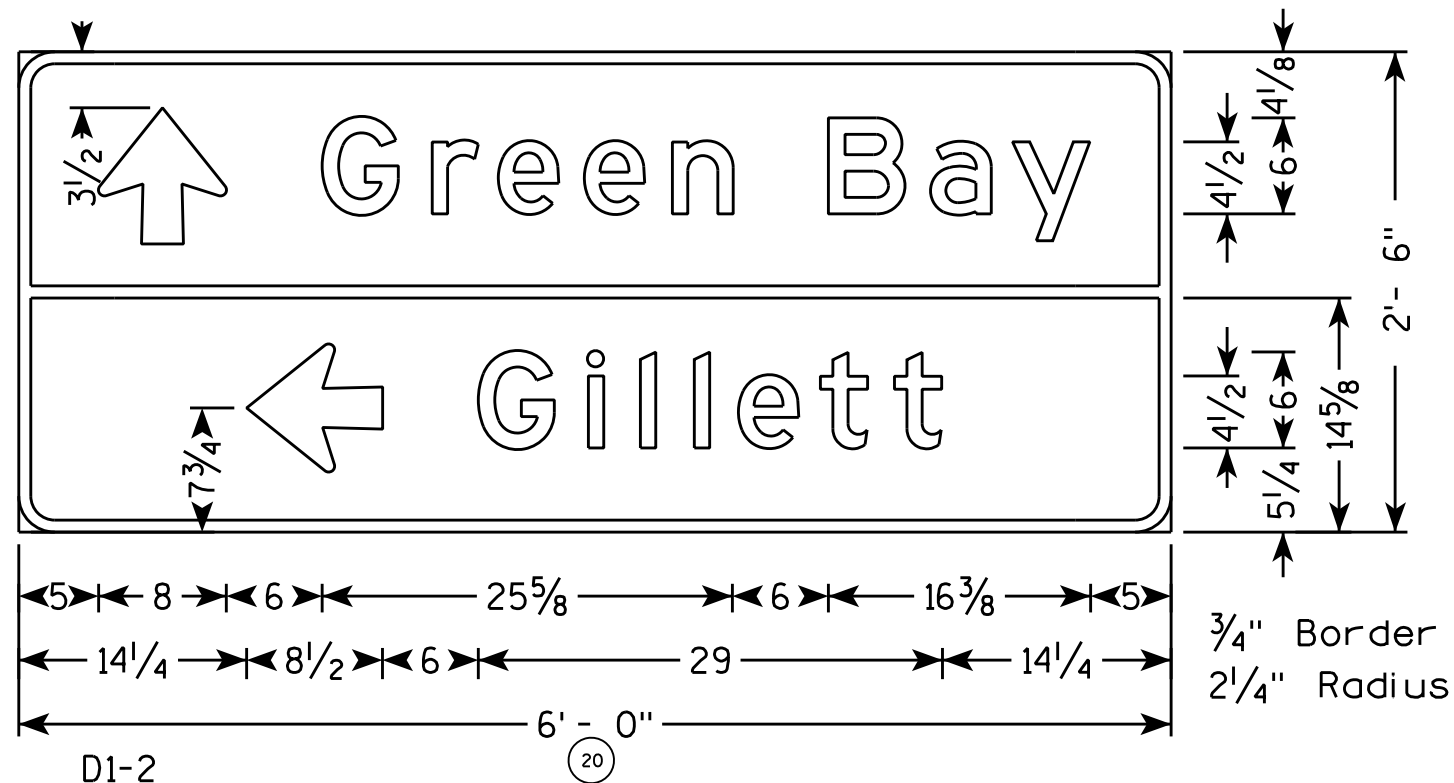
CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)

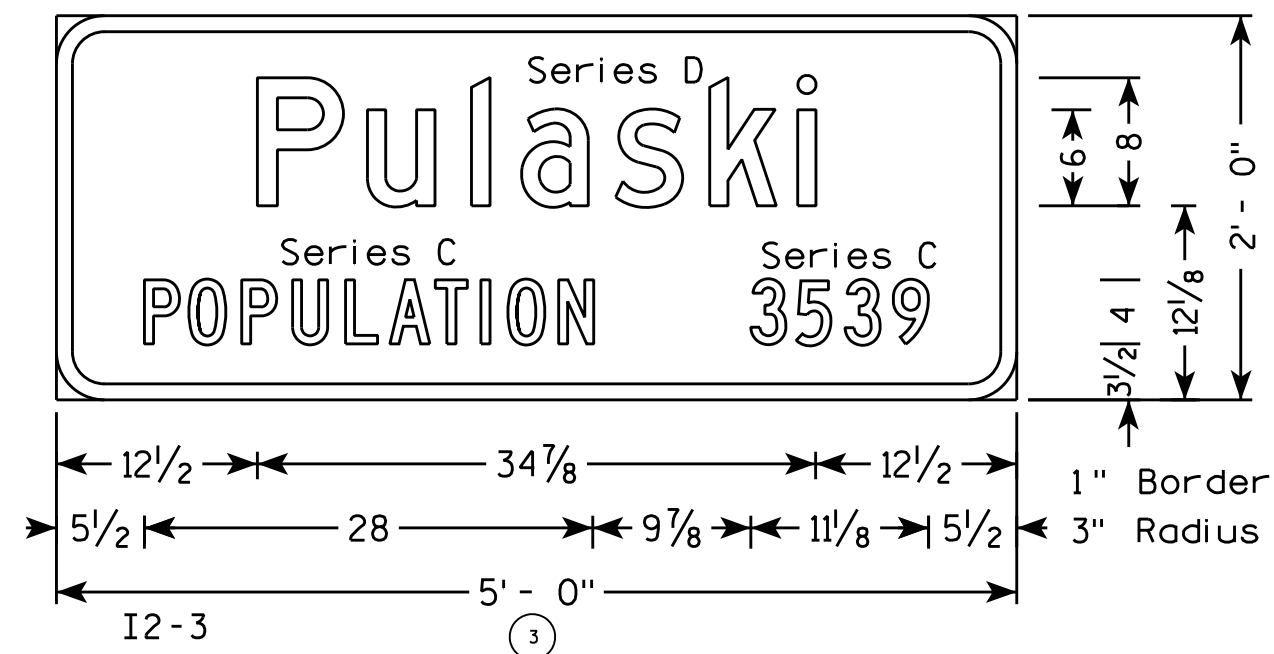
LANDMARK REFERENCE
MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/22/1999 /S/ Rory L. Rhin...
DATE CHIEF ROADWAY DEVELOP 110 NEER
FHWA

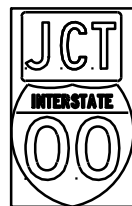


- NOTES**
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 2. Color:
Background - Green
Message - White
 3. Message Series - E except as noted

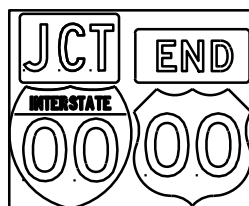


PLAN SHEET PRODUCED
BY WISDOT-NE REGION

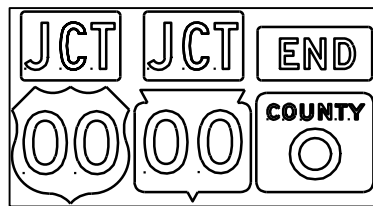
TYPICAL ASSEMBLIES



J1-1



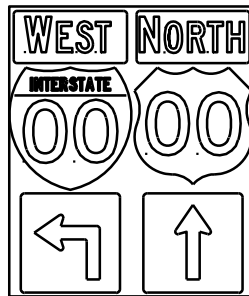
J1-2



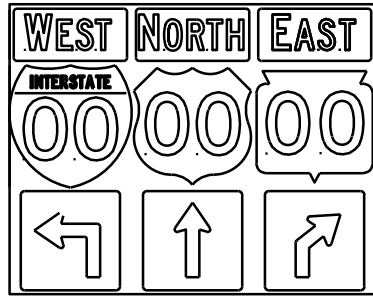
J1-3



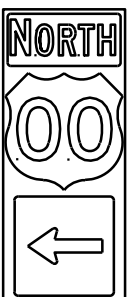
J2-1



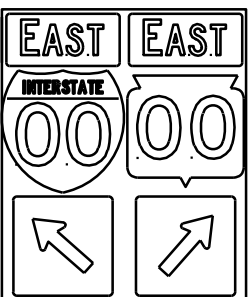
J2-2



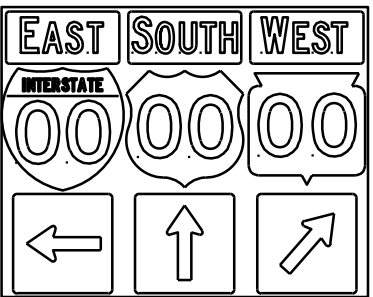
J2-3



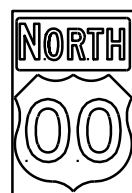
J3-1



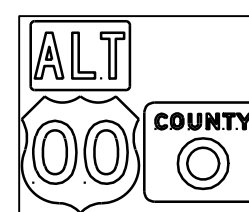
J3-2



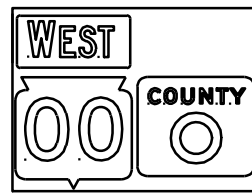
J3-3



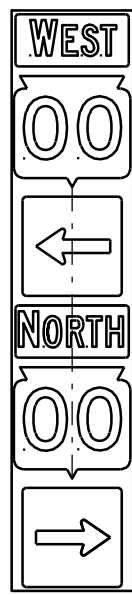
J4-1



J4-2

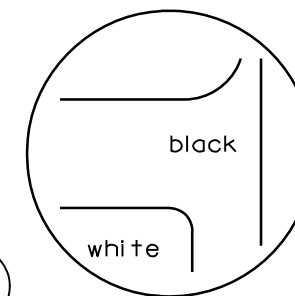
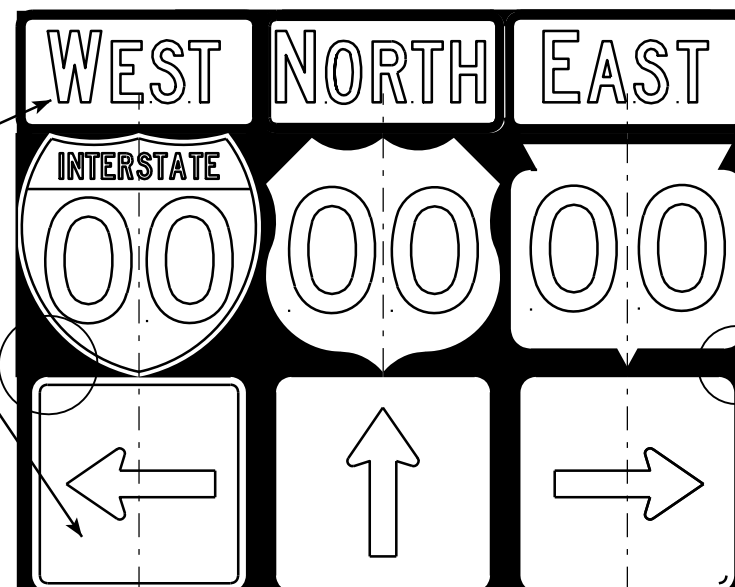
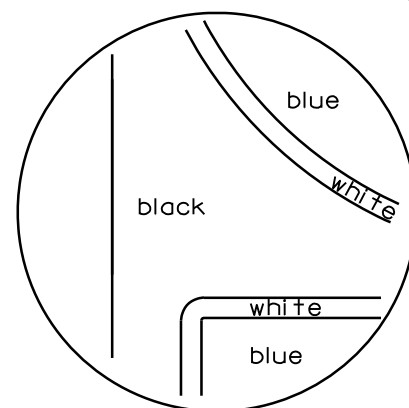


J4-2

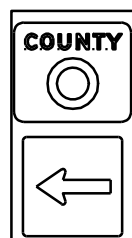


JV

[blue background with interstate]



[black background]



J13-1



J12-1



J32-1



J33-1



J23-1



J22-1

NOTES

- Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Black Non-reflective
Message - see Note 5
- Message Series - See Note 5
- Corners shall be square since base material is plywood.
- The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
- 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.
- 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.
- 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.
- Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (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.

ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
For State Traffic Engineer

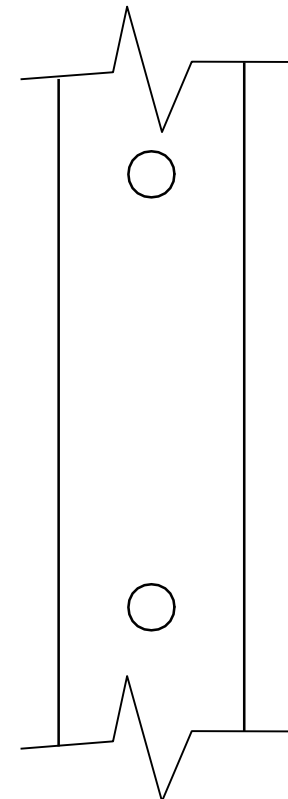
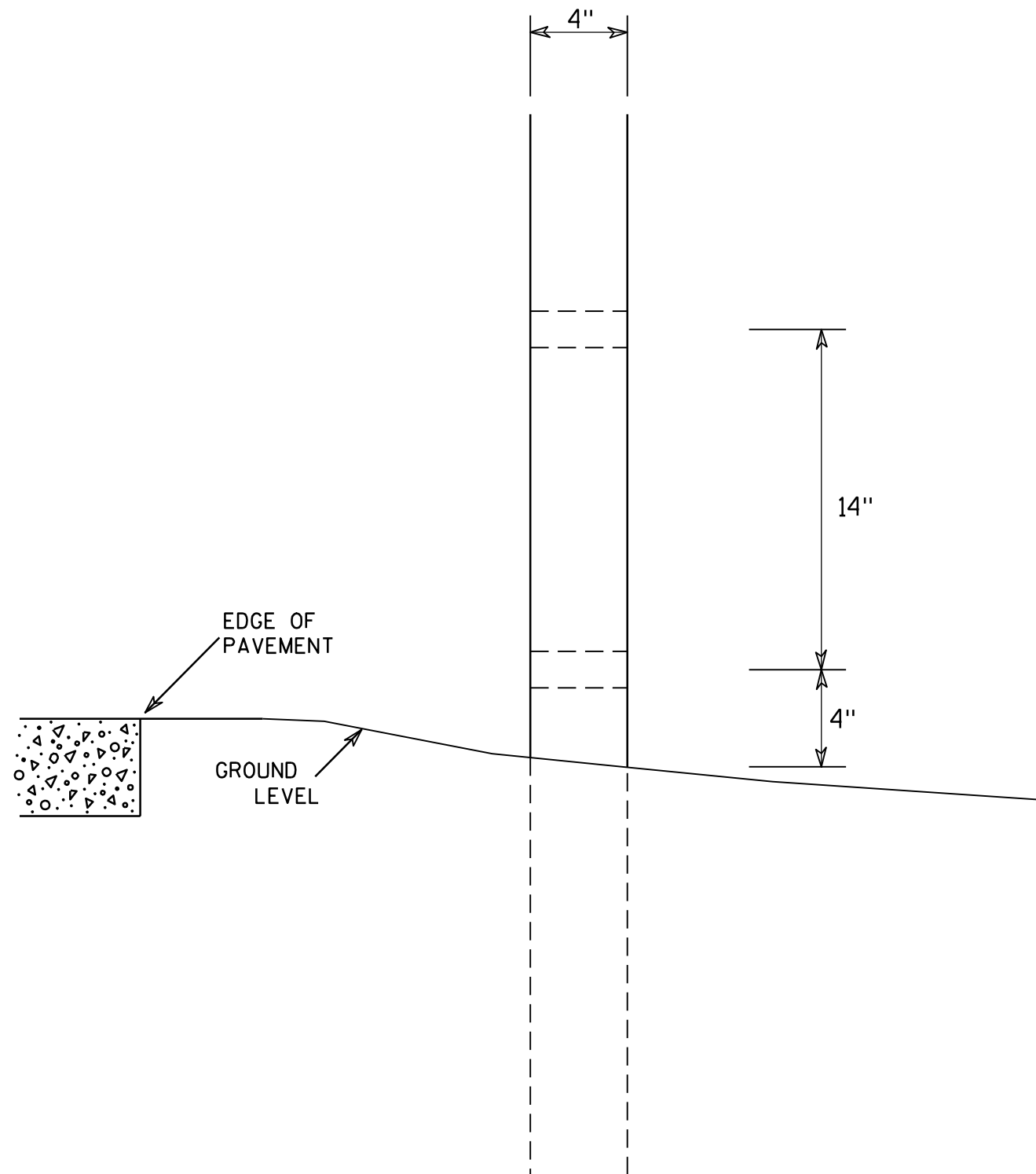
DATE 10/21/09

PLATE NO. A2-1S.6

PROJECT NO:

SHEET NO: 112

E



SIDE VIEW

GENERAL NOTES

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

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

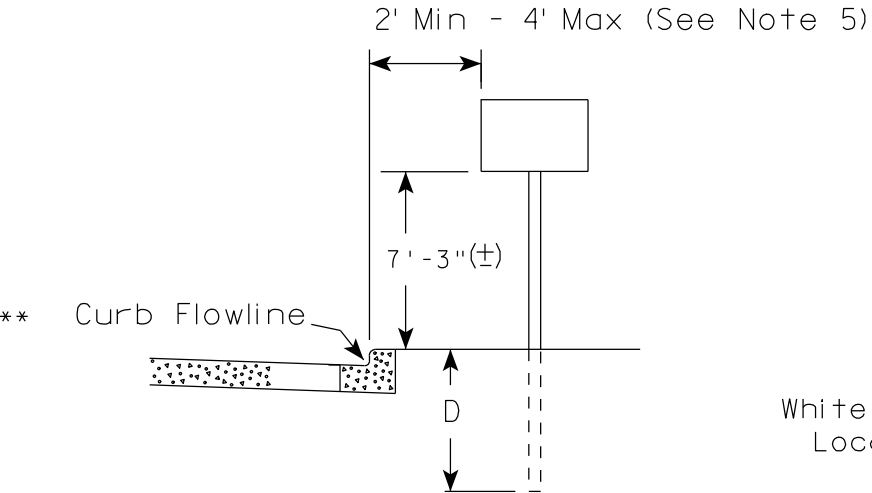
HWY:

COUNTY:

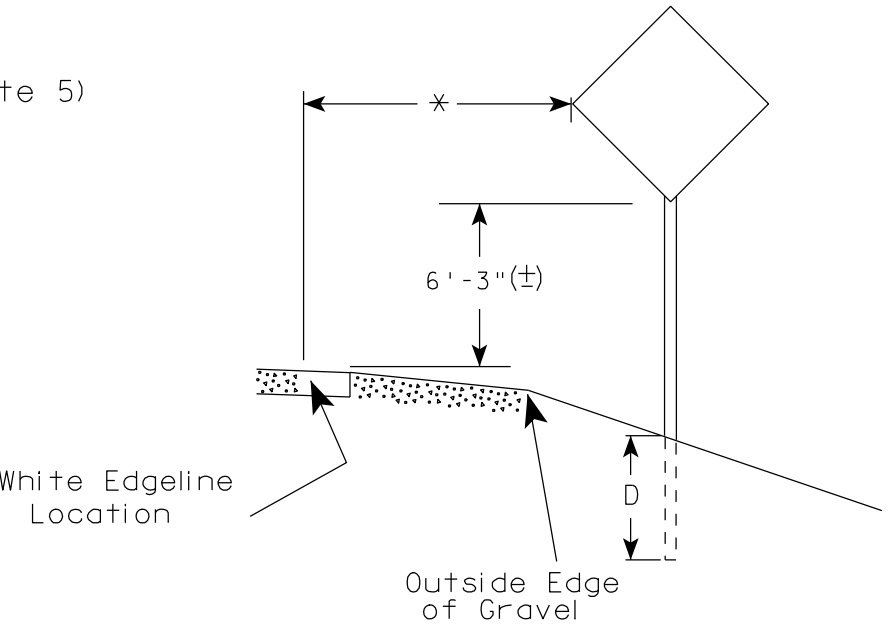
SHEET NO: 113

E

URBAN AREA

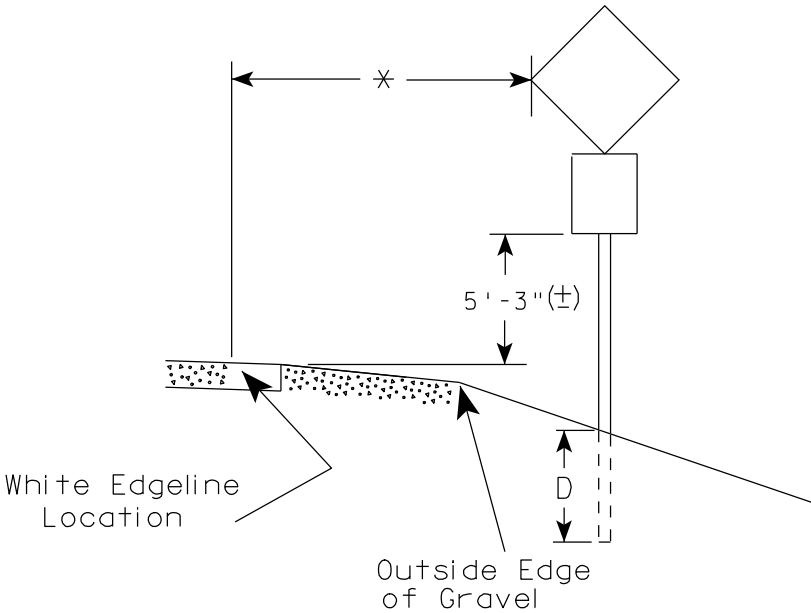
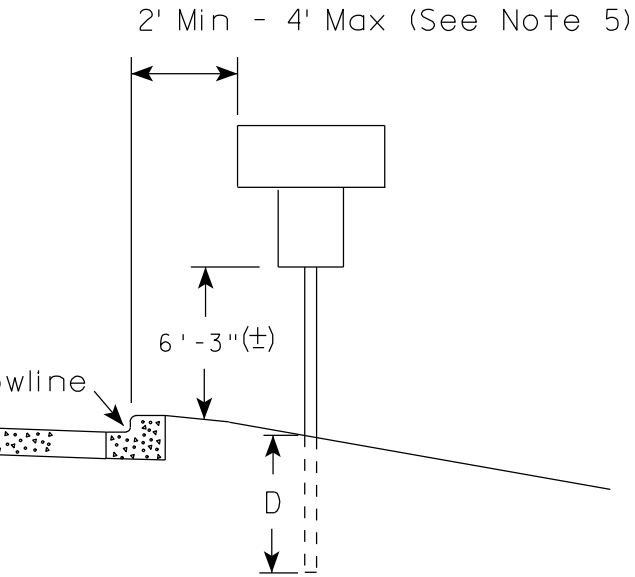


RURAL AREA (See Note 2)



GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. 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 (A4-5) 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 stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed 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), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) 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 9/21/2011 PLATE NO. A4-3.16

GENERAL NOTES

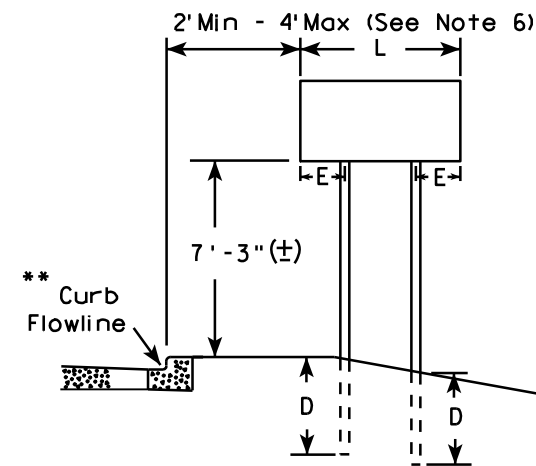
- For multiple post installations, individual post spacing shall be greater than 3'-6".
- See tables below for required number of posts.
- For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
- The (±) tolerance for mounting height is 3 inches.
- Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
- 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) & End of Road Markers (W5-56 & W5-56A) 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.

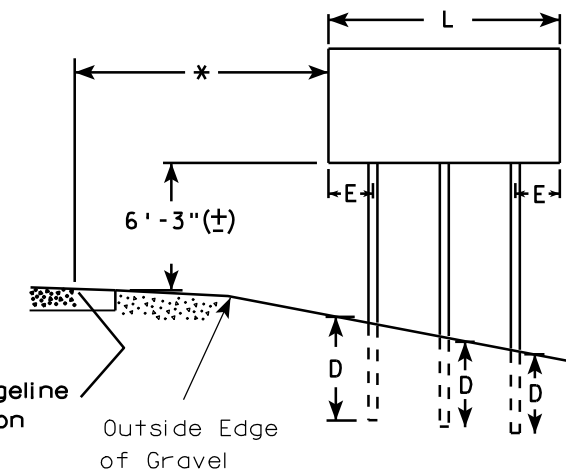
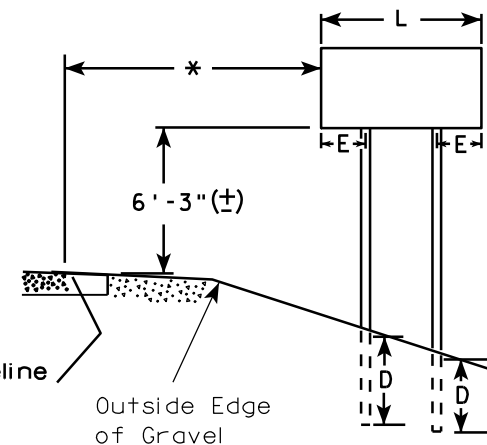
** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs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

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

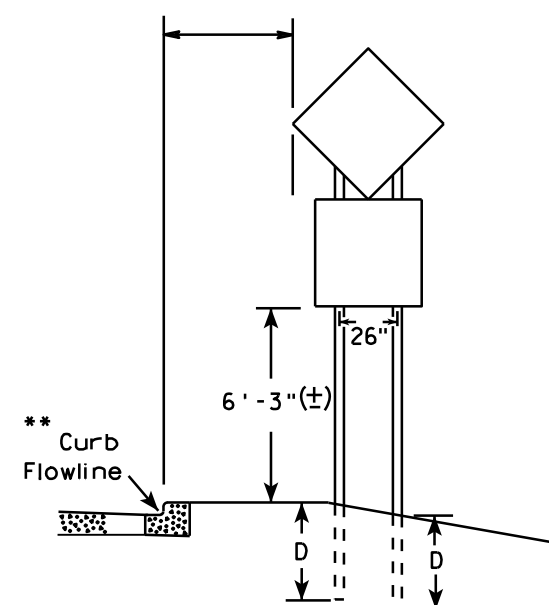
URBAN AREA



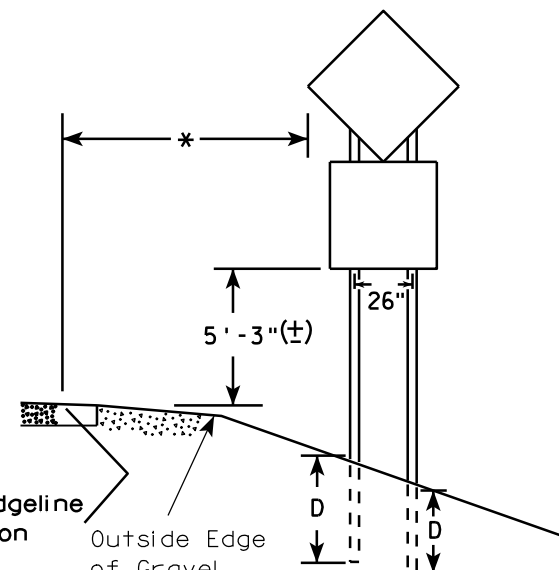
RURAL AREA (See Note 3)



2' Min - 4' Max (See Note 6)



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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 9/21/2011 PLATE NO. A4-4.11

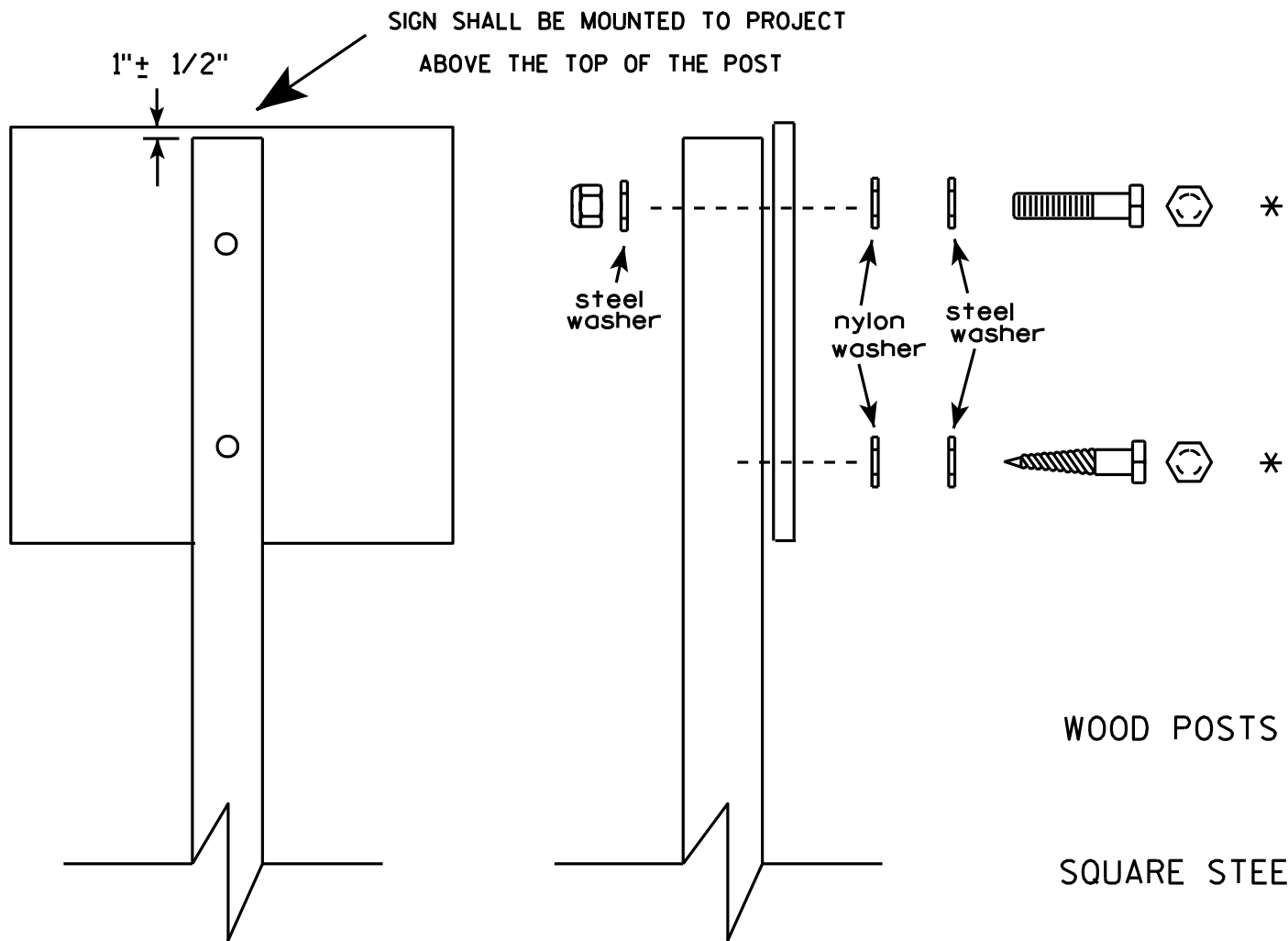
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 115

E

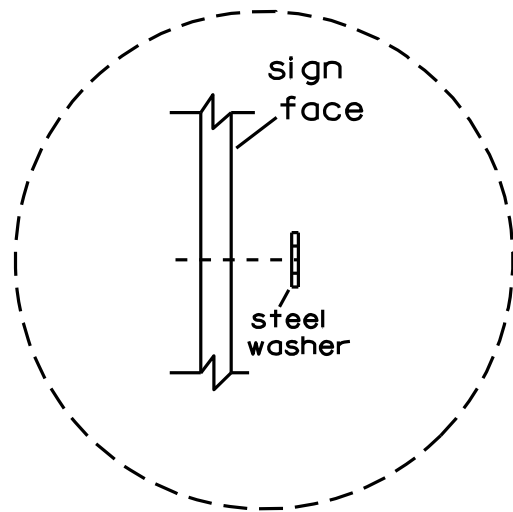


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

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

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

- WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
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 for all Type H signs.

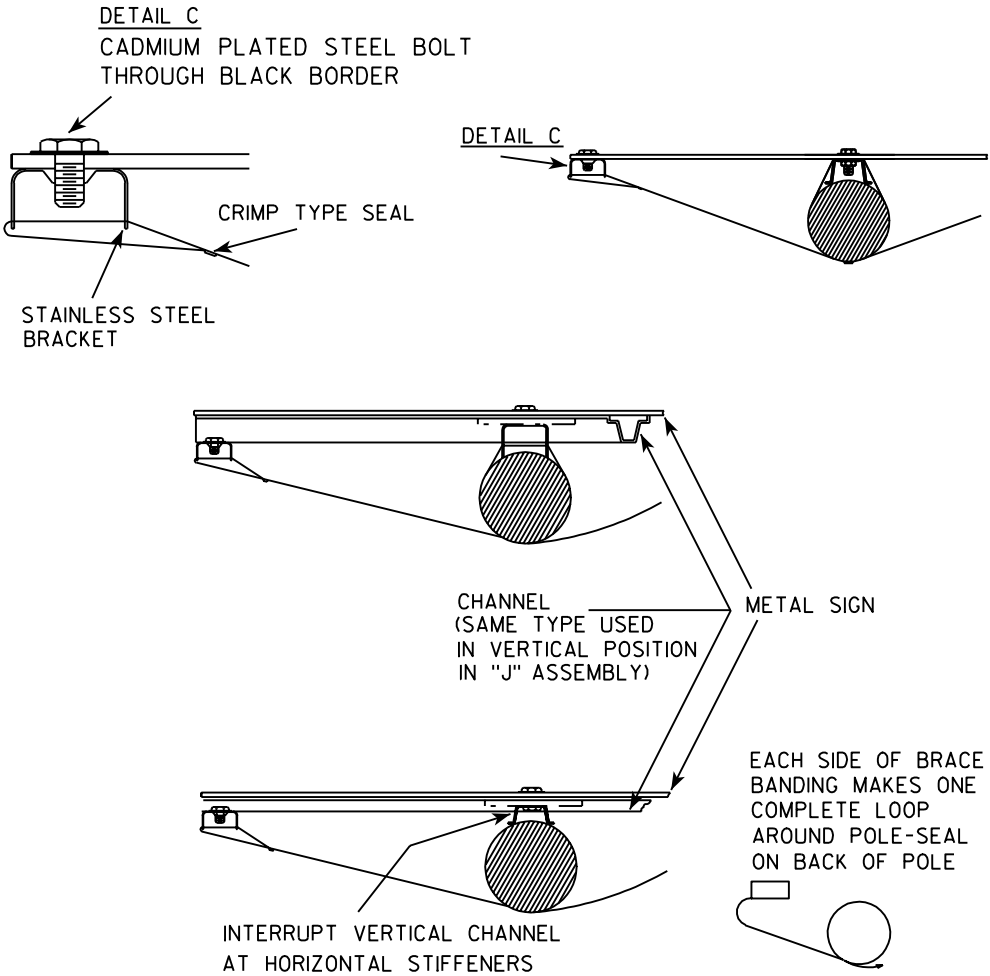


Washer Placement when Sign Has Other Than Type H or Type F Face

* 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	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/23/10	PLATE NO. A4-8.7

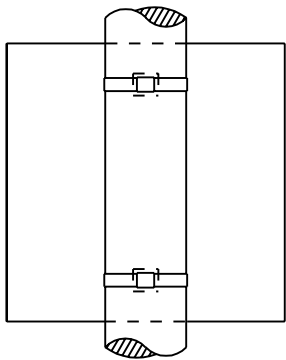
BRACE BANDING



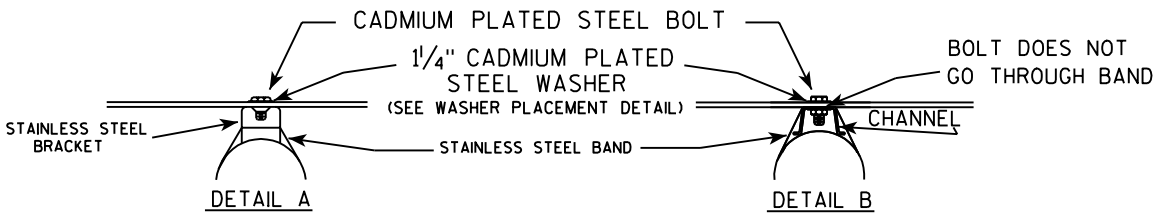
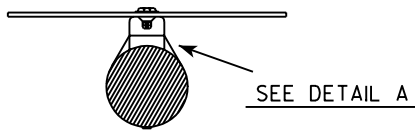
BRACE BANDING

BRACE BANDING SHALL BE TIGHTENED FIRMLY
BUT NOT SO TIGHT AS TO APPRECIABLY
CURVE FACE OF SIGN.

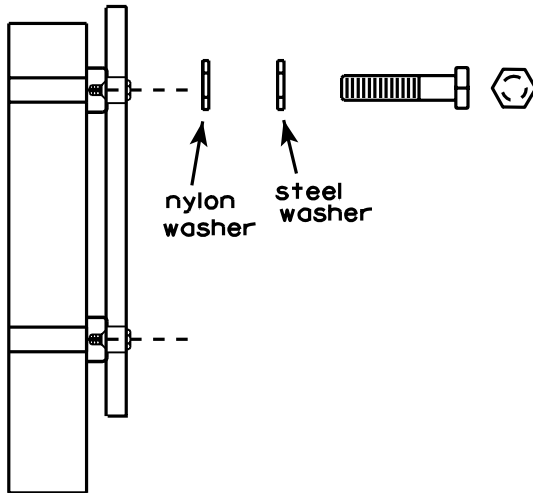
SINGLE SIGN



BRACKET BANDING



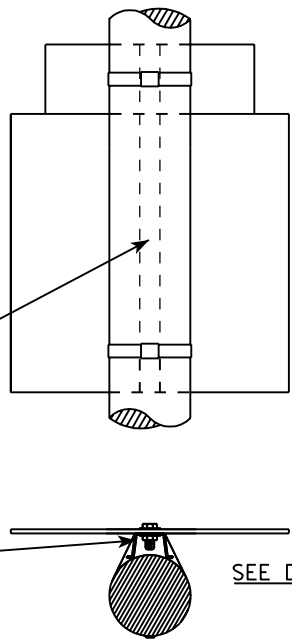
WASHER PLACEMENT



WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

"J" ASSEMBLY



SEE DETAIL B

GENERAL NOTES

1. Signs 4' or greater in width shall have one brace band installed at the center of the sign.
2. Signs 3' or greater in height shall have three bracket bands installed. Signs less than 3' in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 11/08/05 PLATE NO. A5-9.2

PROJECT NO:

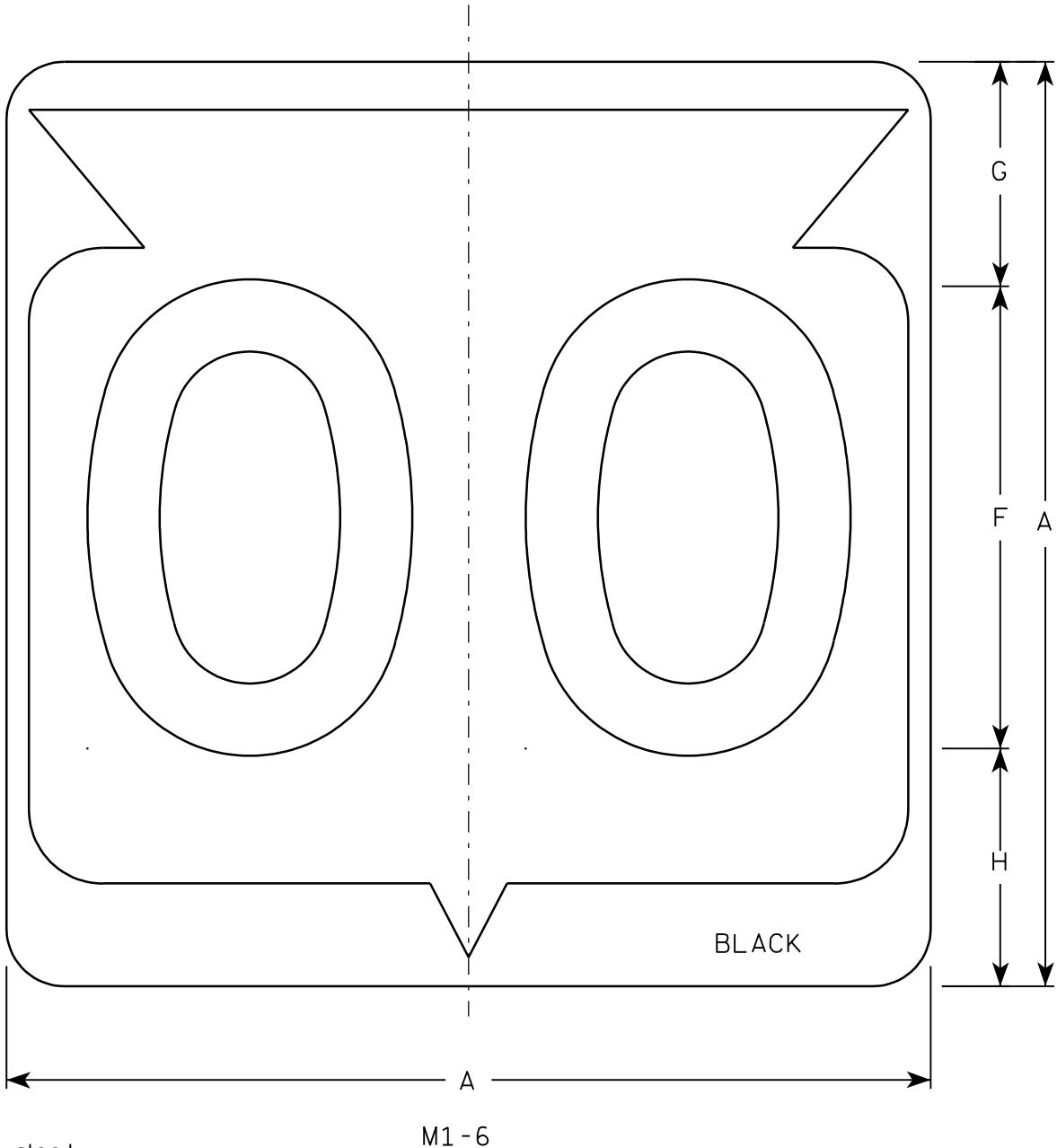
HWY:

COUNTY:

SHEET NO: 117

E

7



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 m ²
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

PROJECT NO:

HWY:

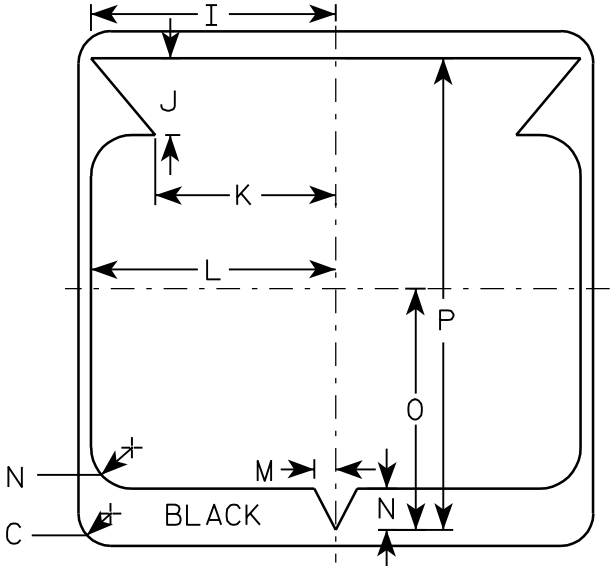
COUNTY:

SHEET NO: 118

E

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



STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

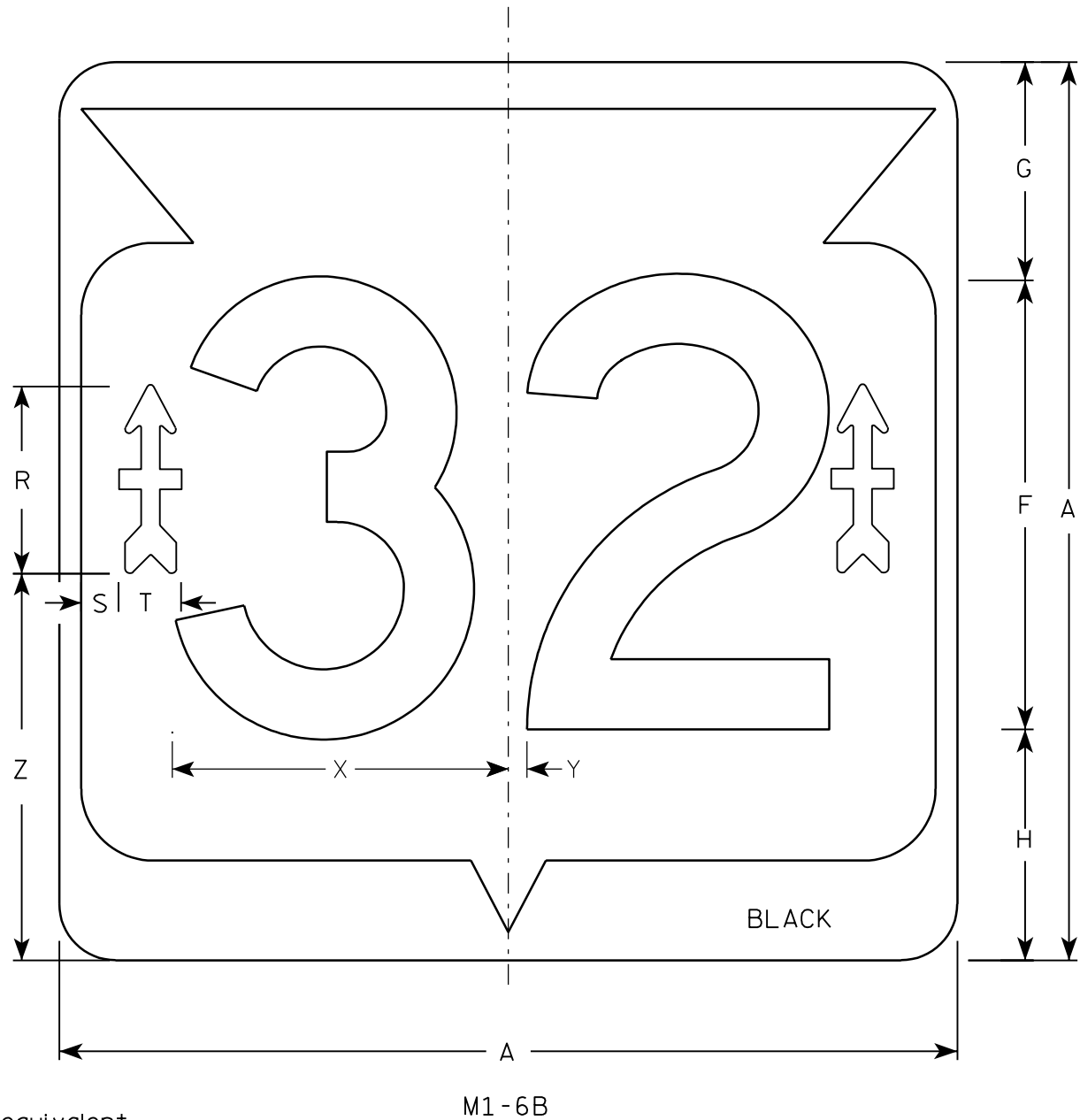
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/20/02

PLATE NO. M1-6.9



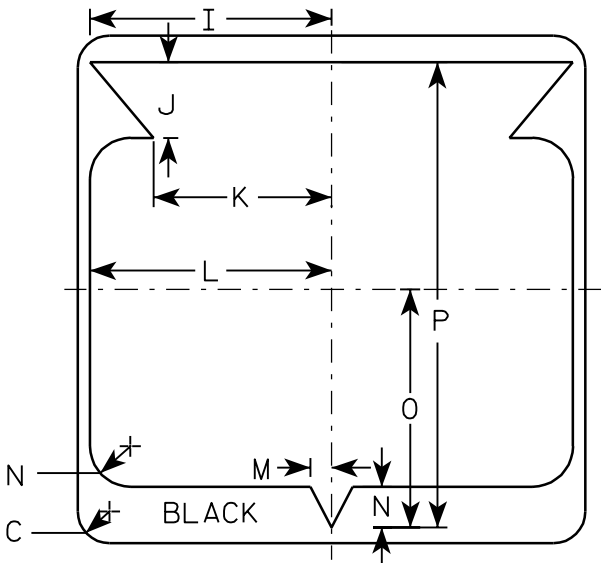
Metric equivalent
for this sign is:

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

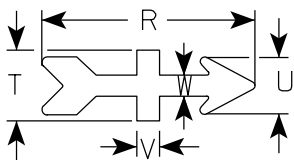
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8		5 1/8	3/4	1 7/8	1 1/2	5/8	5/8	9	1/2	10 1/2	4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33		7 1/2	1 1/2	2 1/2	2	7/8	3/4	13 1/2	3/4	15 1/2	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		7 1/2	1 1/2	2 1/2	2	7/8	3/4	13 1/2	3/4	15 1/2	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		7 1/2	1 1/2	2 1/2	2	7/8	3/4	13 1/2	3/4	15 1/2	9.0	.81

NOTES

1. Sign is Type II - Type H - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black
Message - Black
Arrow - Type H Reflective Red
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.



32nd DIVISION ARROW
ACTUAL SIZE



STATE ROUTE MARKER "32"
M1-6B FOR ASSEMBLIES

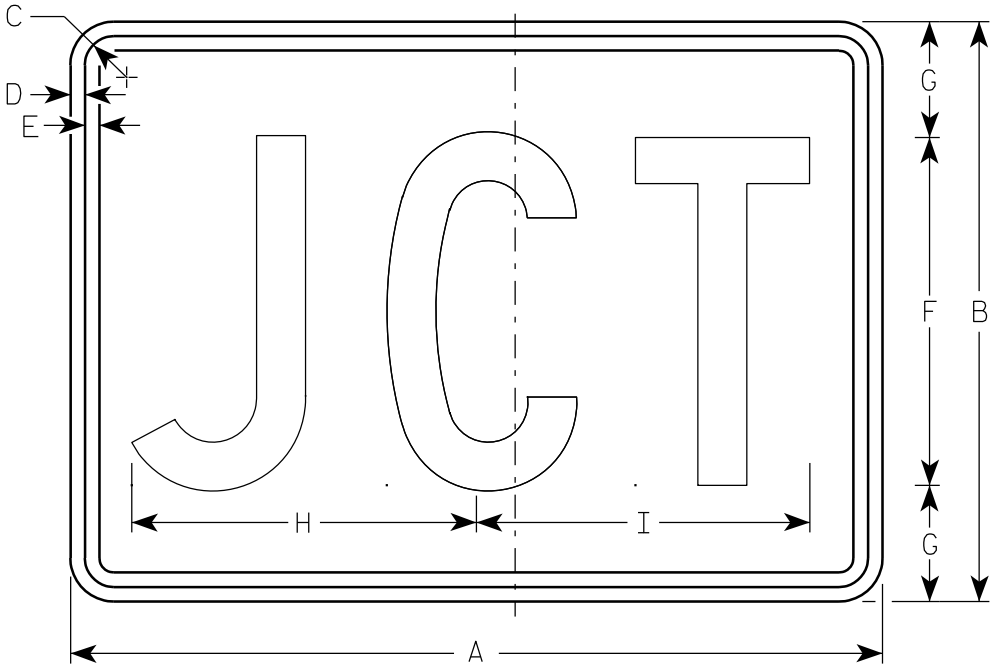
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

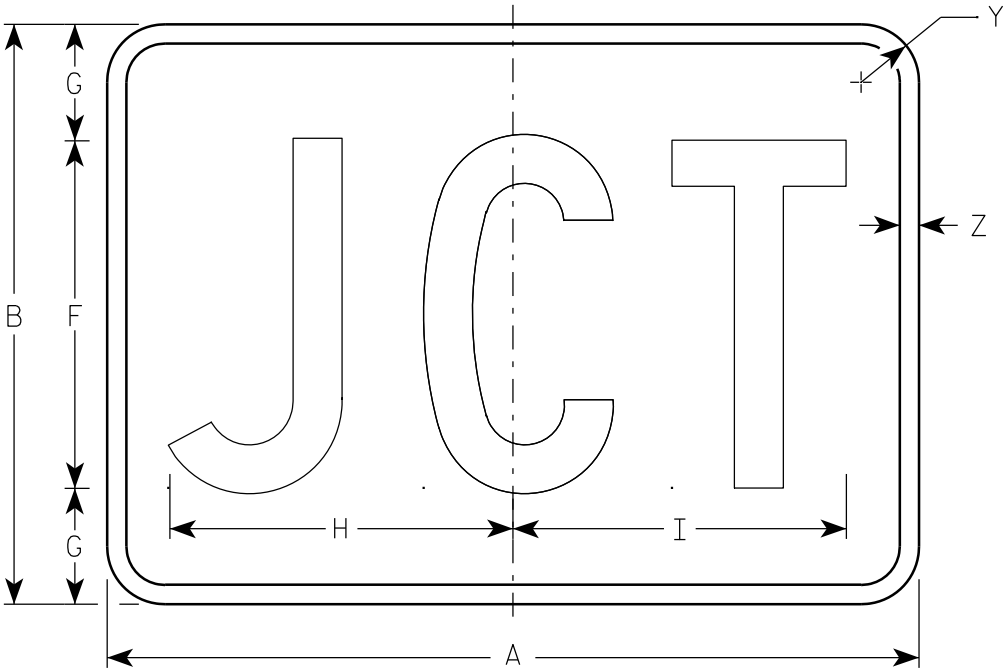
DATE 12/5/05 PLATE NO. M1-6B.2

NOTES

1. Sign is Type II - See Note 5 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
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. M2-1 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB2-1 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG2-1 Background - Green
Message - White - Type H Reflective
MK2-1 Background - Green
Message - White - Type H Reflective
MM2-1 Background - White - Type H Reflective
Message - Green
MN2-1 Background - Brown
Message - White - Type H Reflective
MR2-1 Background - Brown
Message - Yellow - Type H Reflective



M2-1
MK2-1
MM2-1
MR2-1



MB2-1
MG2-1
MN2-1

Metric equivalent
for this sign is:

SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 mm

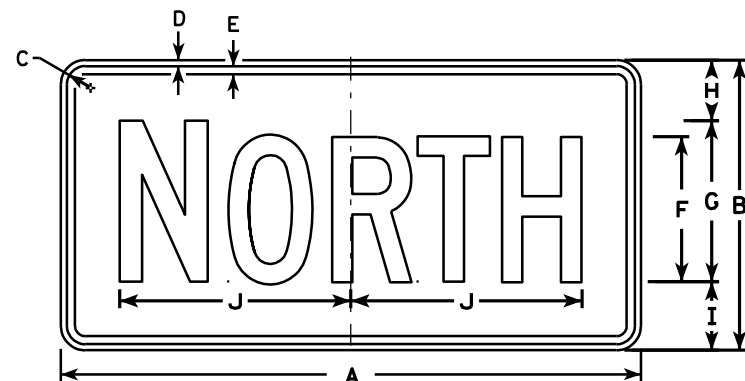
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20	0.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20

STANDARD SIGN
M2 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

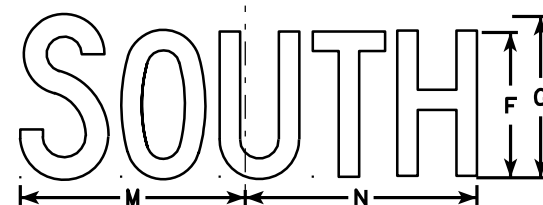
DATE 3/16/10 PLATE NO. M2-1.10



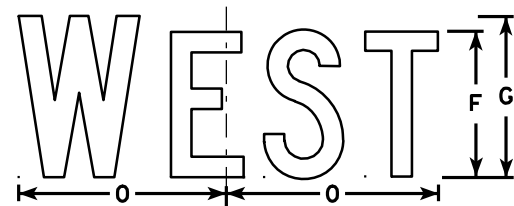
M3-1
MK3-1
M03-1



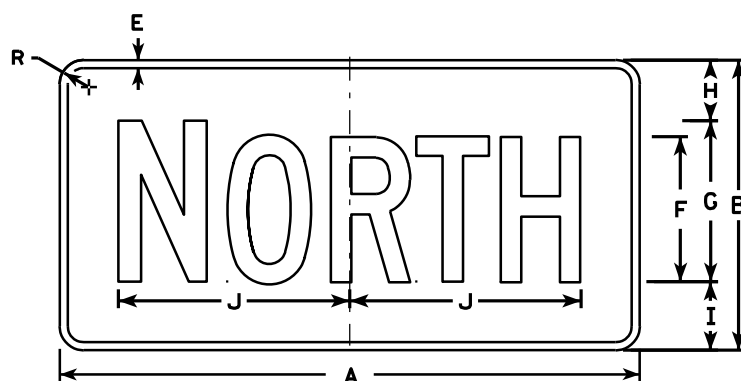
M3-2
MK3-2
M03-2



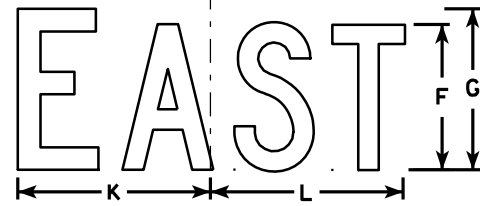
M3-3
MK3-3
M03-3



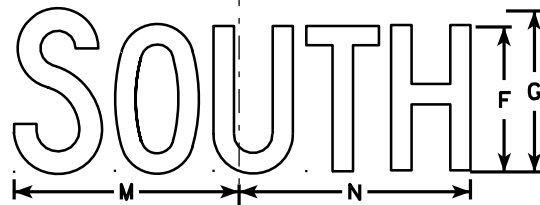
M3-4
MK3-4
M03-4



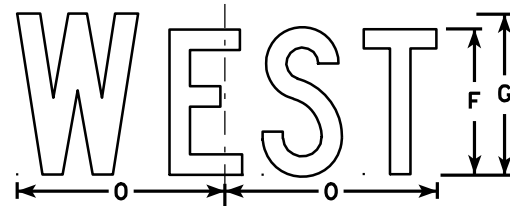
MB3-1
MG3-1
MM3-1
MN3-1



MB3-2
MG3-2
MM3-2
MN3-2



MB3-3
MG3-3
MM3-3
MN3-3



MB3-4
MG3-4
MM3-4
MN3-4

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 - Type H Reflective (Detour or temporary signs - Reflective)
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White - Type H Reflective (Detour or temporary signs - Reflective)
MG3-1 thru MG3-4 Background - Green
Message - White - Type H Reflective
MK3-1 thru MK3-4 Background - Green
Message - White - Type H Reflective
MM3-1 thru MM3-4 Background - White - Type H Reflective
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White - Type H Reflective
M03-1 thru M03-4 Background - Orange - Reflective
Message - Black
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

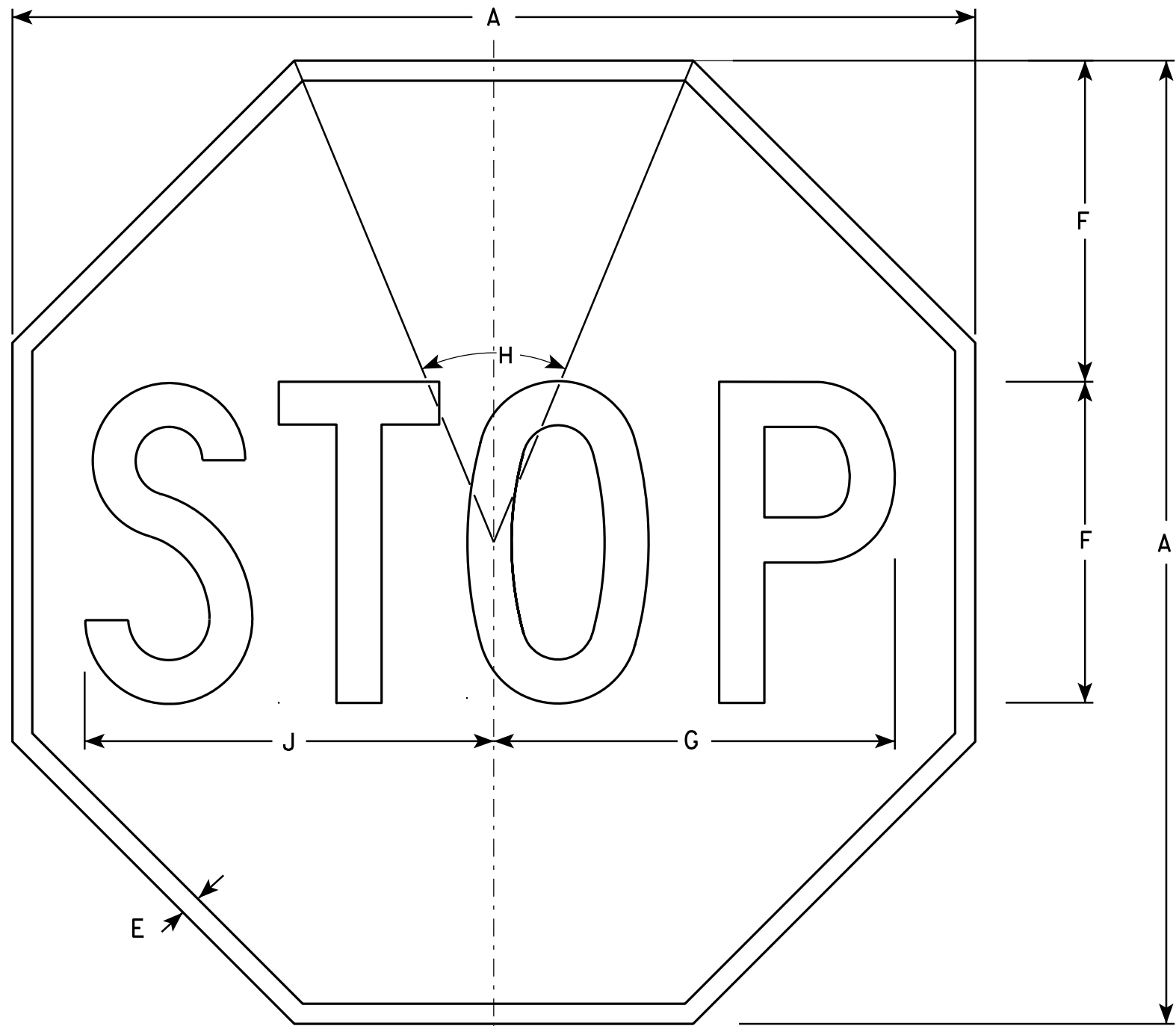
PROJECT NO: HWY: COUNTY: SHEET NO: 121 E

STANDARD SIGNS M3-1 thru M3-4 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M3-1.12



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

R1-1

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				3/8	8	10	45°		10 1/4																	3.31
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 12/03/10 PLATE NO. R1-1.12

PROJECT NO:

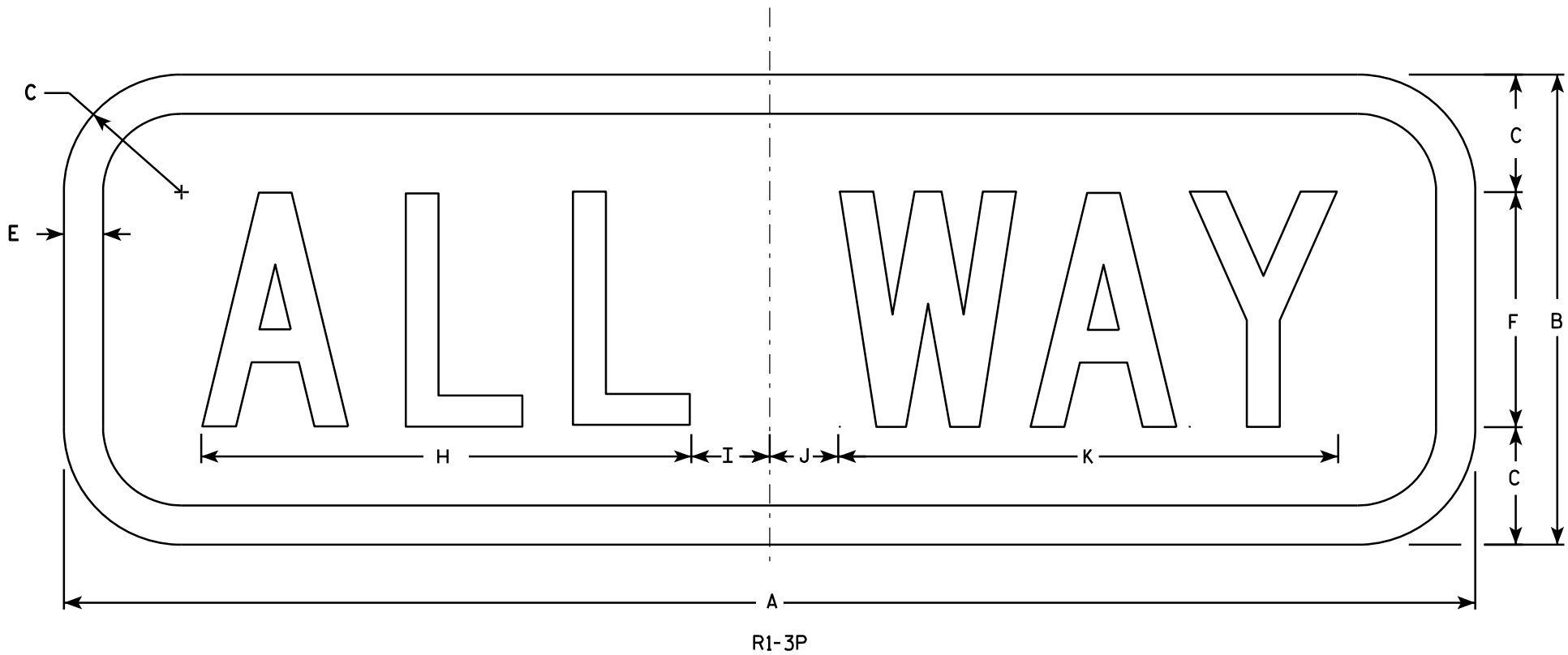
HWY:

COUNTY:

SHEET NO: 122

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. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



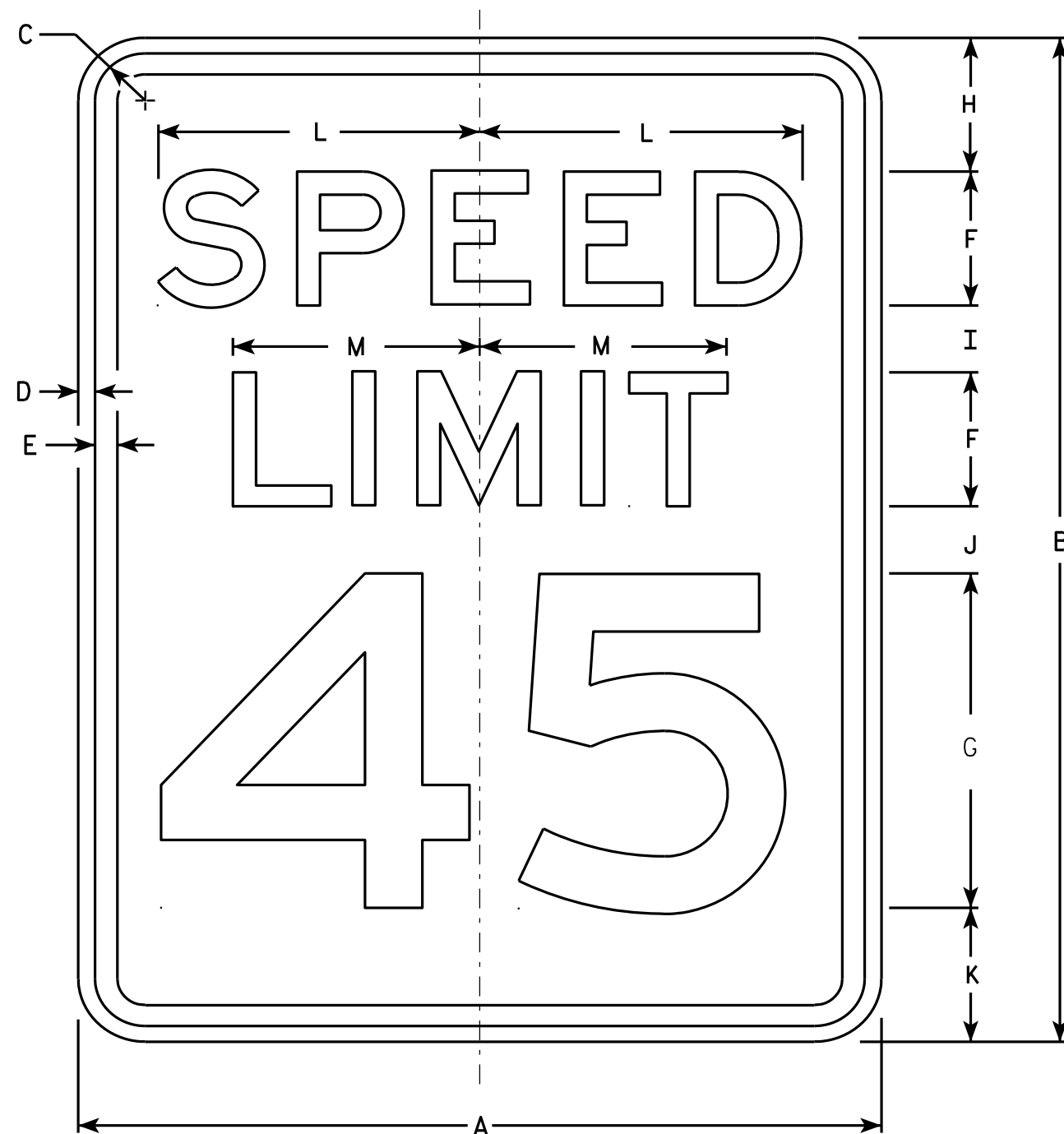
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																0.75
2S	18	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																1.5
2M	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
3	30	12	2 1/4		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5
4																											
5																											

STANDARD SIGN
R1-3P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/02/10 PLATE NO. R1-3P.1



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN R2-1

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: 124 E



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: 125

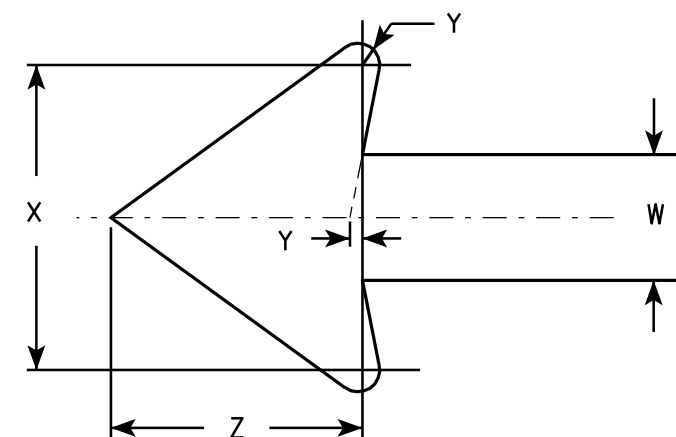
E



R7-51

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 - Red
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. R7-51D (double arrow)
R7-51R (right arrow)
R7-51L (left arrow)
6. Lines 1, 3 and 4 are Series C.
Line 2 is Series B.



ARROW DETAIL

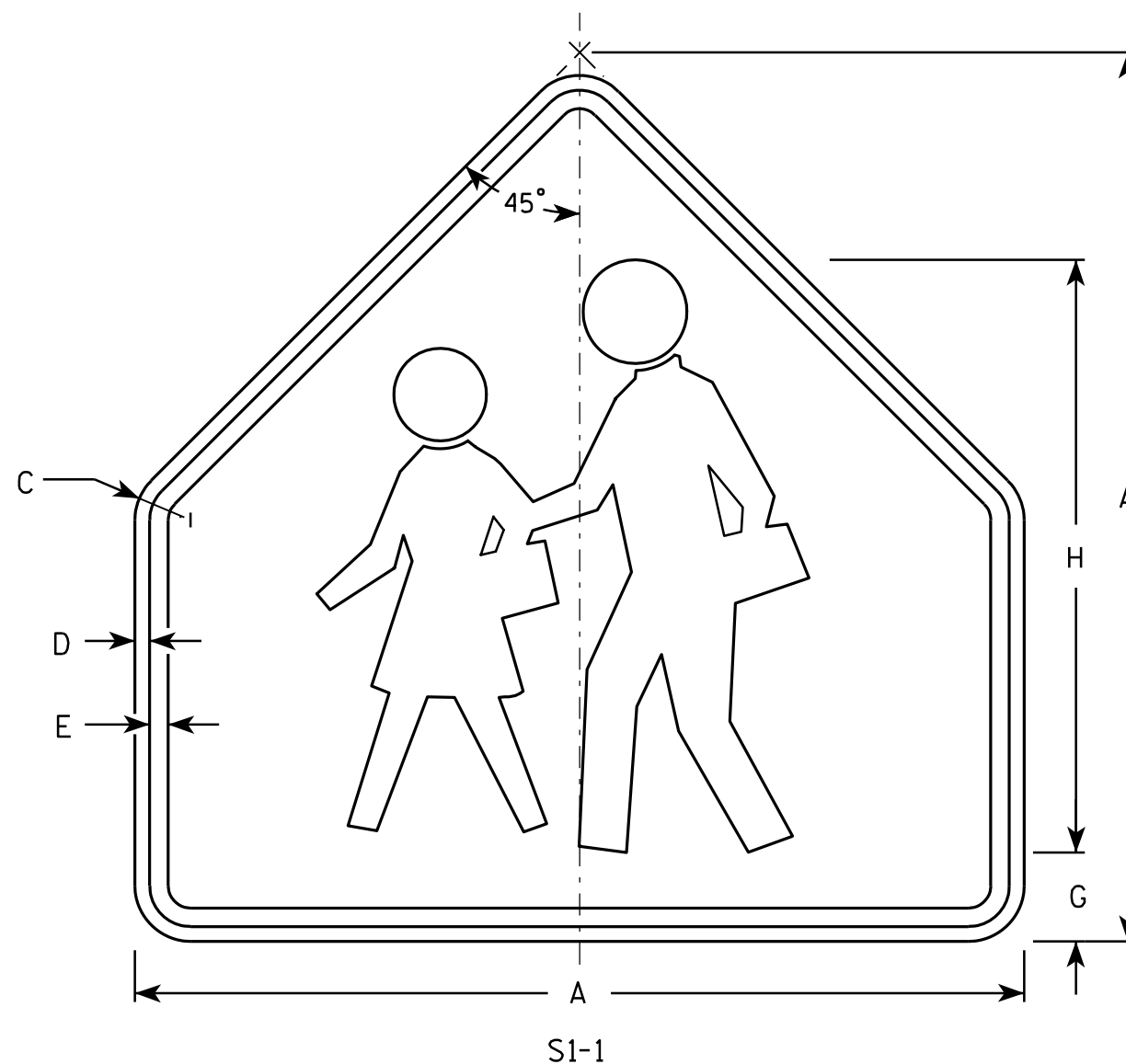
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	4 7/8	5/8	1 3/4	2 1/2	4 3/8	3 7/8	3/4	1 3/4	1/8	1 1/2	1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	5 3/4	1 1/8	1 1/2	3 1/8	5 1/2	5 7/8	1 1/8	2 5/8	1/4	2 1/4	3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 1/8	1 1/4	2	3 3/4	6 1/2	7 3/4	1 1/2	3 1/2	1/4	3	5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 1/8	1 1/4	2	3 3/4	6 1/2	7 3/4	1 1/2	3 1/2	1/4	3	5.0
4																											
5																											

STANDARD SIGN
R7-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-51.6



- 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-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.

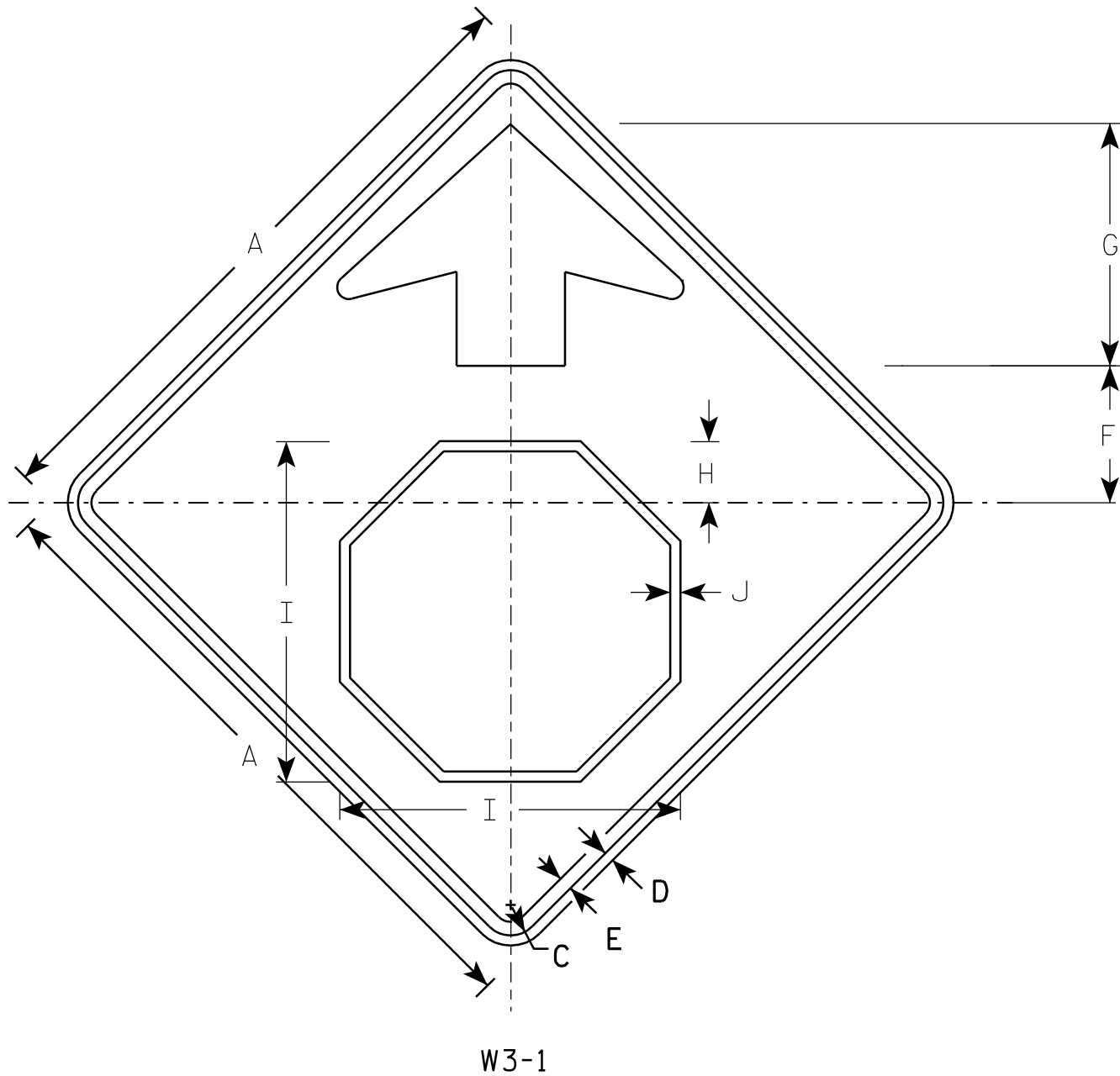
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

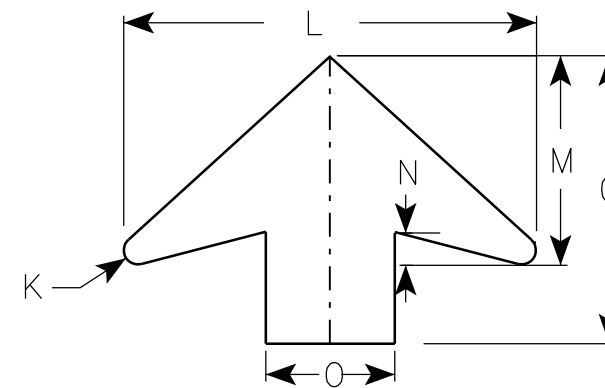
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO: HWY: COUNTY: SHEET NO: 127 E



NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - YELLOW
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	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	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
2M	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
3	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
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

PROJECT NO:

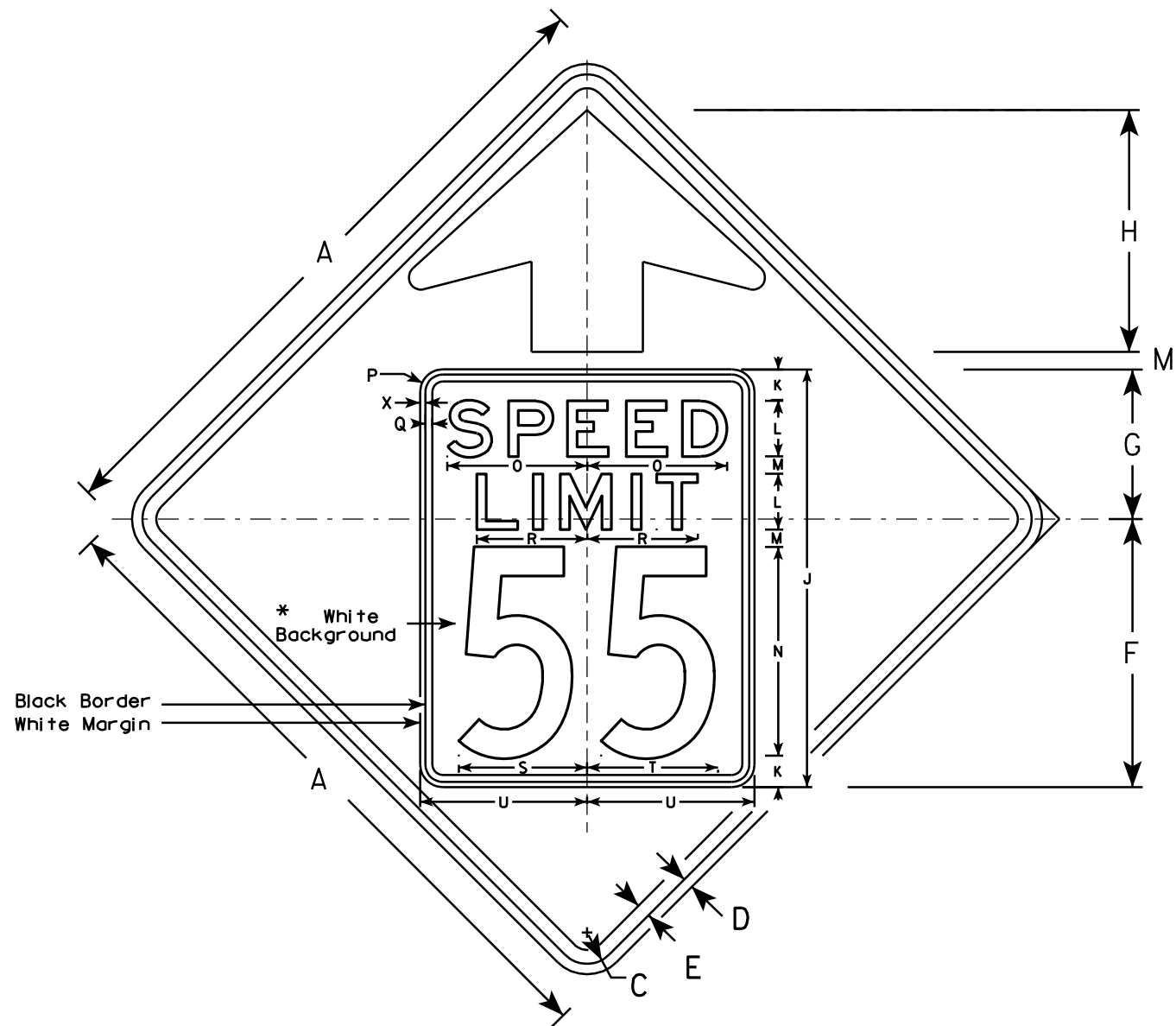
STANDARD SIGN
W3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/7/10 PLATE NO. W3-1.12

SHEET NO: 128

E

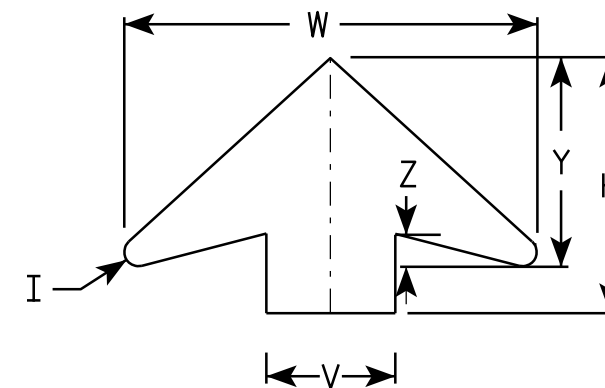


W3-5

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 - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White 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																											
2S	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
2M	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
3	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
4	48		2 1⁄4	3⁄4	1	19 1⁄4	10 3⁄4	17 3⁄8	7⁄8	30	2 1⁄4	4	1 1⁄4	15	10	1 5⁄8	1⁄2	8	9 1⁄4	9 3⁄8	12	8	25 5⁄8	3⁄8	13	2	16.0
5	48		2 1⁄4	3⁄4	1	19 1⁄4	10 3⁄4	17 3⁄8	7⁄8	30	2 1⁄4	4	1 1⁄4	15	10	1 5⁄8	1⁄2	8	9 1⁄4	9 3⁄8	12	8	25 5⁄8	3⁄8	13	2	16.0

STANDARD SIGN

W3-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

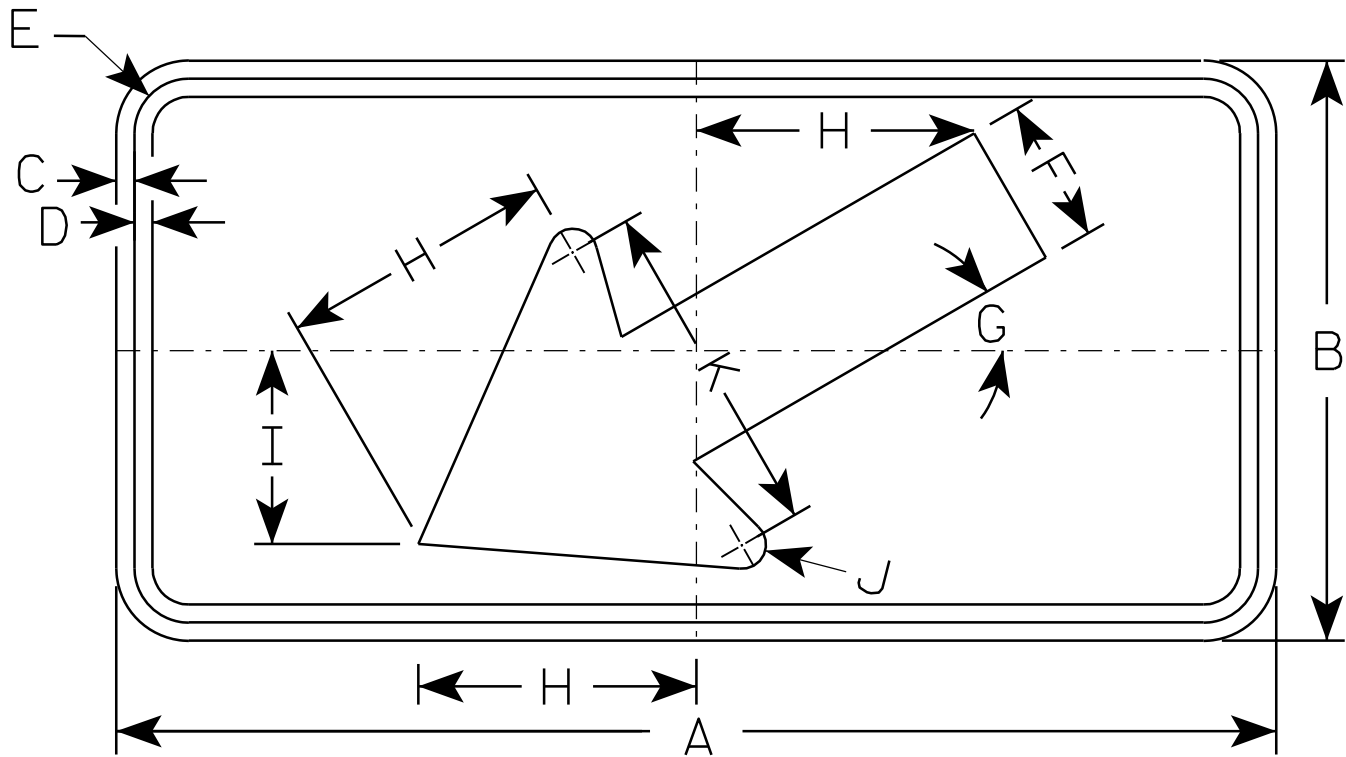
PROJECT NO:

SHEET NO: 129

E

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.
- 4. WF16-7R are the same as WF-16-7L except the arrow is reversed along the vertical centerline.



WF16-7L

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	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2S	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5																											

STANDARD SIGN
WF16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/21/10 PLATE NO. WF16-7.3

PROJECT NO:

HWY:

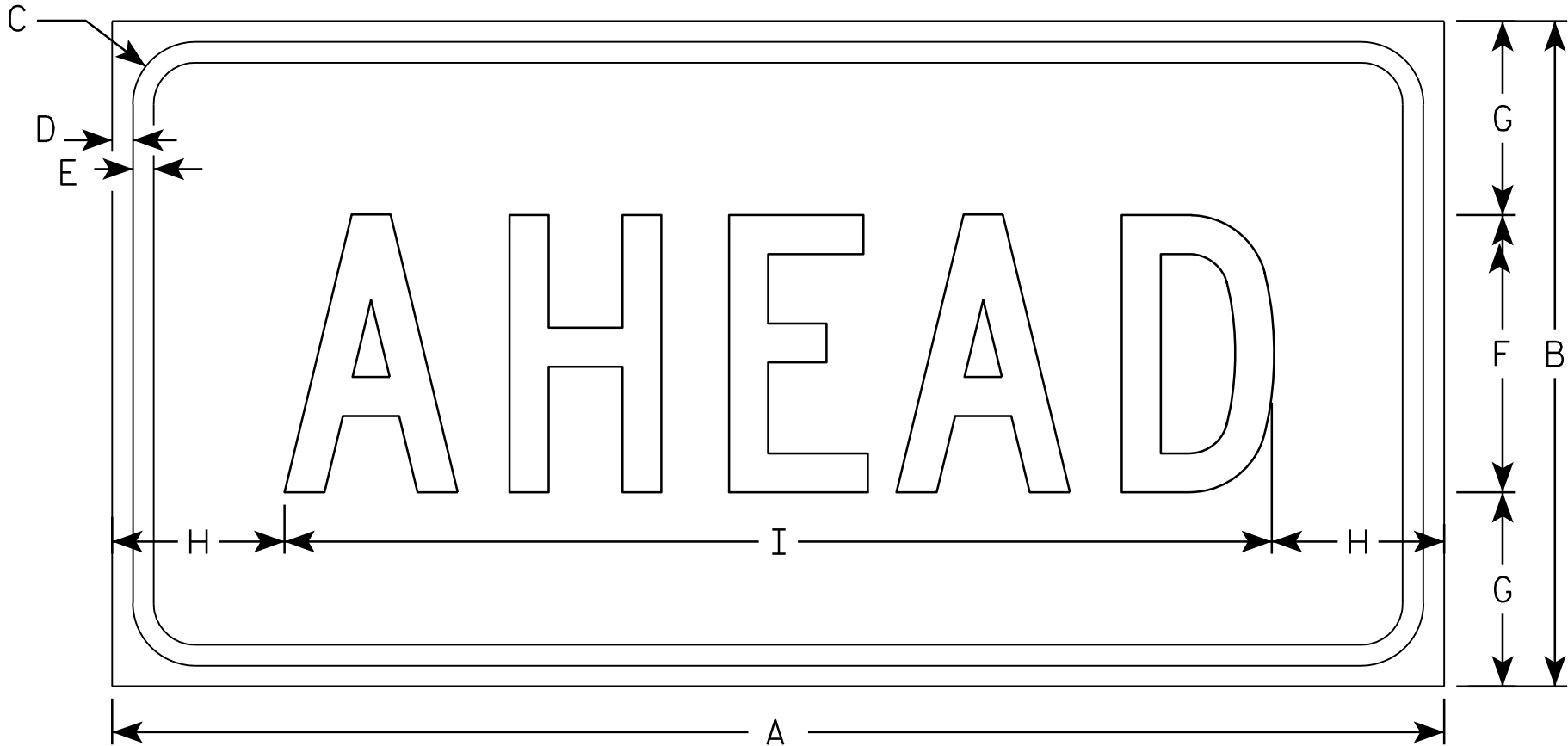
COUNTY:

SHEET NO: 130

E

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.



WF16-9P

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

WF16-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/29/2012 PLATE NO. WF16-9P.4

STATION	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)										Cumulative Vol (CY)										Mass Ordinate
			Cut	Salvaged / Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged / Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Expanded Marsh		Expanded EBS	Reduced Marsh		Reduced EBS				
																Backfill	Expanded Rock		Backfill	In Fill		In Fill			
																							1.00	1.25	
									Note 1	Note 2	Note 3					Note 1		Note 4	Note 5	Note 6	Note 7	Note 8			
113+00.00	11,300		58	23	0	0	0	0																	
113+25.00	11,325	25	80	23	3	0	0	0	64	22	1	0	0	0	64	2	0	0	0	0.00	0.00	40.77			
113+50.00	11,350	25	80	23	6	0	0	0	74	22	4	0	0	0	138	6	0	0	0	0.00	0.00	88.11			
113+75.00	11,375	25	85	24	6	0	0	0	76	22	5	0	0	0	214	13	0	0	0	0.00	0.00	135.79			
114+00.00	11,400	25	90	24	4	0	0	0	81	22	5	0	0	0	295	19	0	0	0	0.00	0.00	188.74			
114+25.00	11,425	25	94	24	2	0	0	0	85	22	3	0	0	0	379	22	0	0	0	0.00	0.00	247.95			
114+50.00	11,450	25	83	24	2	0	0	0	82	22	2	0	0	0	461	24	0	0	0	0.00	0.00	305.50			
114+70.10	11,470	20	104	24	1	0	0	0	70	18	1	0	0	0	531	26	0	0	0	0.00	0.00	356.20			
114+75.00	11,475	5	105	24	1	0	0	0	19	4	0	0	0	0	550	26	0	0	0	0.00	0.00	370.62			
115+00.00	11,500	25	90	24	2	0	0	0	90	22	1	0	0	0	640	27	0	0	0	0.00	0.00	437.19			
115+21.73	11,522	22	100	24	0	0	0	0	77	19	1	0	0	0	717	28	0	0	0	0.00	0.00	493.40			
115+25.00	11,525	3	104	24	0	0	0	0	12	3	0	0	0	0	729	28	0	0	0	0.00	0.00	502.81			
115+50.00	11,550	25	108	24	0	0	0	0	98	22	0	0	0	0	827	28	0	0	0	0.00	0.00	578.46			
115+62.77	11,563	13	115	24	0	0	0	0	53	11	0	0	0	0	879	28	0	0	0	0.00	0.00	619.67			
115+75.00	11,575	12	123	24	0	0	0	0	54	11	0	0	0	0	933	28	0	0	0	0.00	0.00	662.73			
115+80.00	11,580	5	126	24	0	0	0	0	23	4	0	0	0	0	956	28	0	0	0	0.00	0.00	681.38			
116+00.00	11,600	20	123	24	3	0	0	0	92	18	1	0	0	0	1,049	30	0	0	0	0.00	0.00	754.41			
116+25.00	11,625	25	120	24	8	0	0	0	113	22	5	0	0	0	1,161	36	0	0	0	0.00	0.00	838.12			
116+50.00	11,650	25	126	24	4	0	0	0	114	22	5	0	0	0	1,275	43	0	0	0	0.00	0.00	923.26			
116+75.00	11,675	25	136	24	2	0	0	0	122	22	3	0	0	0	1,397	47	0	0	0	0.00	0.00	1,019.40			
117+00.00	11,700	25	144	24	2	0	0	0	130	22	2	0	0	0	1,527	49	0	0	0	0.00	0.00	1,124.71			
117+07.28	11,707	7	143	24	2	0	0	0	39	6	0	0	0	0	1,565	49	0	0	0	0.00	0.00	1,156.35			
117+25.00	11,725	18	138	24	2	0	0	0	92	16	1	0	0	0	1,657	51	0	0	0	0.00	0.00	1,231.00			
117+50.00	11,750	25	133	24	3	0	0	0	125	22	2	0	0	0	1,783	54	0	0	0	0.00	0.00	1,331.20			
117+75.00	11,775	25	128	24	3	0	0	0	121	22	3	0	0	0	1,904	57	0	0	0	0.00	0.00	1,426.37			
118+00.00	11,800	25	124	24	2	0	0	0	116	22	2	0	0	0	2,020	60	0	0	0	0.00	0.00	1,517.82			
118+25.00	11,825	25	124	24	2	0	0	0	115	22	2	0	0	0	2,135	62	0	0	0	0.00	0.00	1,607.85			
118+50.00	11,850	25	107	23	9	0	0	0	107	22	5	0	0	0	2,242	69	0	0	0	0.00	0.00	1,686.35			
118+75.00	11,875	25	104	23	4	0	0	0	98	21	6	0	0	0	2,340	76	0	0	0	0.00	0.00	1,755.18			
118+82.81	11,883	8	56	23	5	0	0	0	23	7	1	0	0	0	2,363	78	0	0	0	0.00	0.00	1,770.17			
119+00.00	11,900	17	93	22	11	0	0	0	48	14	5	0	0	0	2,411	84	0	0	0	0.00	0.00	1,797.42			
119+25.00	11,925	25	85	22	14	0	0	0	83	20	11	0	0	0	2,493	98	0	0	0	0.00	0.00	1,845.19			
119+50.00	11,950	25	82	23	15	0	0	0	77	21	14	0	0	0	2,571	116	0	0	0	0.00	0.00	1,884.47			
119+75.00	11,975	25	86	24	16	0	0	0	78	22	15	0	0	0	2,648	134	0	0	0	0.00	0.00	1,922.34			
120+00.00	12,000	25	81	24	14	0	0	0	78	22	14	0	0	0	2,726	151	0	0	0	0.00	0.00	1,960.39			
120+02.48	12,002	2	82	24	14	0	0	0	7	2	1	0	0	0	2,734	153	0	0	0	0.00	0.00	1,964.08			
120+25.00	12,025	23	84	24	13	0	0	0	69	20	11	0	0	0	2,802	167	0	0	0	0.00	0.00	1,999.04			
120+50.00	12,050	25	80	24	15	0	0	0	76	22	13	0	0	0	2,878	183	0	0	0	0.00	0.00	2,036.48			
120+75.00	12,075	25	85	24	16	0	0	0	76	22	14	0	0	0	2,954	201	0	0	0	0.00	0.00	2,072.89			
121+00.00	12,100	25	82	24	15	0	0	0	78	22	14	0	0	0	3,032	219	0	0	0	0.00	0.00	2,110.10			
121+25.00	12,125	25	84	24	16	0	0	0	77	22	14	0	0	0	3,109	237	0	0	0	0.00	0.00	2,146.93			
121+50.00	12,150	25	86	24	15	0	0	0	79	22	14	0	0	0	3,188	255	0	0	0	0.00	0.00	2,185.71			
121+75.00	12,175	25	87	24	16	0	0	0	80	22	14	0	0	0	3,268	273	0	0	0	0.00	0.00	2,225.96			
122+00.00	12,200	25	89	24	16	0	0	0	82	22	15	0	0	0	3,350	291	0	0	0	0.00	0.00	2,266.73			
PROJECT NO: 9532-03-00				HWY: STH 160				COUNTY: BROWN				EARTHWORK										SHEET: 132		E	

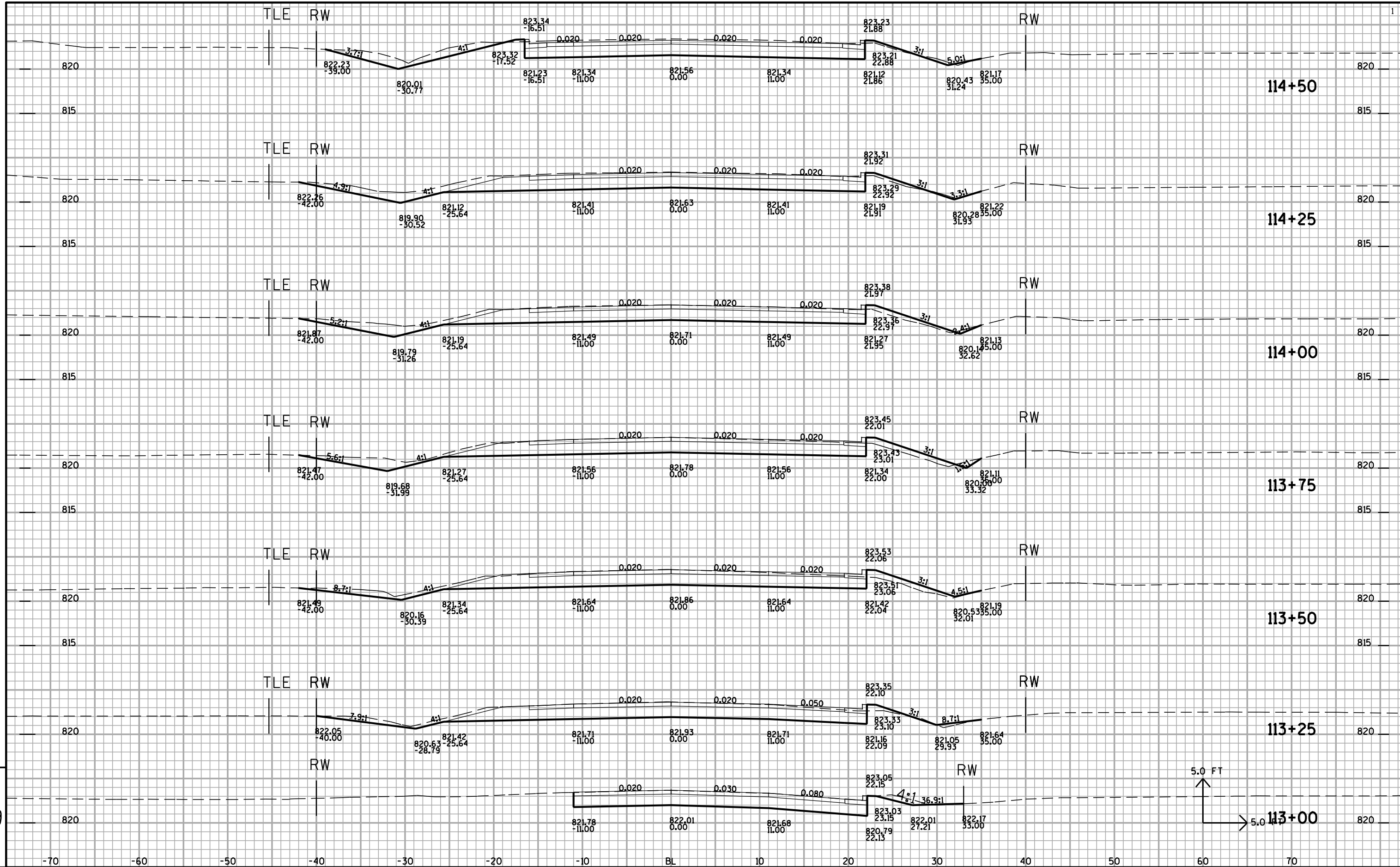
STATION	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)										Cumulative Vol (CY)										Mass Ordinate
			Cut	Salvaged / Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged / Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Expanded Marsh				Expanded EBS		Reduced Marsh		Reduced EBS		
															Cut 1.00	Expanded Fill 1.25	Backfill 1.50	Expanded Rock 1.10	Backfill 1.30	In Fill 0.60	In Fill 0.80				
									Note 1	Note 2	Note 3					Note 1		Note 4		Note 5	Note 6	Note 7	Note 8		
122+25.00	12,225	25	90	24	16	0	0	0	83	22	15	0	0	0	3,433	310	0	0	0	0.00	0.00	2,308.82			
122+50.00	12,250	25	91	24	15	0	0	0	84	22	14	0	0	0	3,517	328	0	0	0	0.00	0.00	2,352.62			
122+75.00	12,275	25	92	24	15	0	0	0	85	22	14	0	0	0	3,602	346	0	0	0	0.00	0.00	2,397.92			
123+00.00	12,300	25	101	24	9	0	0	0	90	22	11	0	0	0	3,691	360	0	0	0	0.00	0.00	2,451.20			
123+25.00	12,325	25	99	24	9	0	0	0	93	22	8	0	0	0	3,784	370	0	0	0	0.00	0.00	2,511.37			
123+50.00	12,350	25	99	24	10	0	0	0	92	22	9	0	0	0	3,876	381	0	0	0	0.00	0.00	2,569.94			
123+75.00	12,375	25	99	24	10	0	0	0	92	22	9	0	0	0	3,968	392	0	0	0	0.00	0.00	2,627.95			
124+00.00	12,400	25	102	24	10	0	0	0	93	22	9	0	0	0	4,061	404	0	0	0	0.00	0.00	2,687.35			
124+25.00	12,425	25	103	24	9	0	0	0	95	22	9	0	0	0	4,156	415	0	0	0	0.00	0.00	2,749.18			
124+50.00	12,450	25	102	23	12	0	0	0	95	22	10	0	0	0	4,251	427	0	0	0	0.00	0.00	2,810.31			
124+75.00	12,475	25	106	24	7	0	0	0	96	22	9	0	0	0	4,347	438	0	0	0	0.00	0.00	2,873.79			
125+00.00	12,500	25	105	24	7	0	0	0	97	22	6	0	0	0	4,444	445	0	0	0	0.00	0.00	2,941.38			
125+25.00	12,525	25	109	24	5	0	0	0	99	22	6	0	0	0	4,543	452	0	0	0	0.00	0.00	3,011.13			
125+50.00	12,550	25	111	24	3	0	0	0	102	22	4	0	0	0	4,645	457	0	0	0	0.00	0.00	3,085.60			
125+75.00	12,575	25	108	24	5	0	0	0	101	22	4	0	0	0	4,746	462	0	0	0	0.00	0.00	3,160.04			
126+00.00	12,600	25	117	24	1	0	0	0	104	22	3	0	0	0	4,850	465	0	0	0	0.00	0.00	3,238.33			
126+25.00	12,625	25	116	24	0	0	0	0	108	22	1	0	0	0	4,958	466	0	0	0	0.00	0.00	3,323.08			
126+50.00	12,650	25	116	24	0	0	0	0	108	22	0	0	0	0	5,066	467	0	0	0	0.00	0.00	3,408.25			
126+75.00	12,675	25	113	24	0	0	0	0	106	22	0	0	0	0	5,172	467	0	0	0	0.00	0.00	3,492.07			
127+00.00	12,700	25	105	24	0	0	0	0	101	22	0	0	0	0	5,273	467	0	0	0	0.00	0.00	3,570.99			
127+22.00	12,722	22	105	23	0	0	0	0	86	19	0	0	0	0	5,358	467	0	0	0	0.00	0.00	3,637.43			
127+25.00	12,725	3	107	23	0	0	0	0	12	3	0	0	0	0	5,370	467	0	0	0	0.00	0.00	3,646.66			
127+33.90	12,734	9	119	24	0	0	0	0	37	8	0	0	0	0	5,407	467	0	0	0	0.00	0.00	3,676.18			
127+40.41	12,740	7	120	23	0	0	0	0	29	6	0	0	0	0	5,436	467	0	0	0	0.00	0.00	3,699.31			
127+47.00	12,747	7	116	23	0	0	0	0	29	6	0	0	0	0	5,465	467	0	0	0	0.00	0.00	3,722.43			
127+50.00	12,750	3	114	23	0	0	0	0	13	3	0	0	0	0	5,478	467	0	0	0	0.00	0.00	3,732.60			
127+75.00	12,775	25	95	37	0	0	0	0	97	28	0	0	0	0	5,574	467	0	0	0	0.00	0.00	3,801.19			
127+93.68	12,794	19	87	35	1	0	0	0	63	25	0	0	0	0	5,638	467	0	0	0	0.00	0.00	3,838.73			
128+00.00	12,800	6	91	35	0	0	0	0	21	8	0	0	0	0	5,658	467	0	0	0	0.00	0.00	3,851.18			
128+07.00	12,807	7	96	36	0	0	0	0	24	9	0	0	0	0	5,683	467	0	0	0	0.00	0.00	3,866.07			
128+25.00	12,825	18	93	39	0	0	0	0	63	25	0	0	0	0	5,745	467	0	0	0	0.00	0.00	3,903.68			
128+50.00	12,850	25	97	39	0	0	0	0	88	36	0	0	0	0	5,833	467	0	0	0	0.00	0.00	3,954.99			
128+59.76	12,860	10	97	39	0	0	0	0	35	14	0	0	0	0	5,868	467	0	0	0	0.00	0.00	3,975.91			
128+75.00	12,875	15	96	37	0	0	0	0	55	21	0	0	0	0	5,922	467	0	0	0	0.00	0.00	4,009.04			
128+93.17	12,893	18	96	36	0	0	0	0	65	25	0	0	0	0	5,987	467	0	0	0	0.00	0.00	4,049.20			
129+00.00	12,900	7	96	36	0	0	0	0	24	9	0	0	0	0	6,011	467	0	0	0	0.00	0.00	4,064.35			
129+17.31	12,917	17	97	37	0	0	0	0	62	23	0	0	0	0	6,073	467	0	0	0	0.00	0.00	4,102.67			
129+25.00	12,925	8	97	37	0	0	0	0	28	10	0	0	0	0	6,101	467	0	0	0	0.00	0.00	4,119.71			
129+50.00	12,950	25	85	37	0	0	0	0	84	34	0	0	0	0	6,185	467	0	0	0	0.00	0.00	4,169.42			
129+71.54	12,972	22	103	40	0	0	0	0	75	31	0	0	0	0	6,260	468	0	0	0	0.00	0.00	4,213.74			
129+75.00	12,975	3	98	41	0	0	0	0	13	5	0	0	0	0	6,273	468	0	0	0	0.00	0.00	4,221.52			
129+97.30	12,997	22	99	45	0	0	0	0	82	35	0	0	0	0	6,355	468	0	0	0	0.00	0.00	4,268.09			
129+97.31	12,997	0	99	45	0	0	0	0	0	0	0	0	0	0	6,355	468	0	0	0	0.00	0.00	4,268.11			
130+00.00	13,000	3	99	44	0	0	0	0	10	4	0	0	0	0	6,365	468	0	0	0	0.00	0.00	4,273.56			
130+14.39	13,014	14	102	45	0	0	0	0	53	24	0	0	0	0	6,418	468	0	0	0	0.00	0.00	4,303.08			
130+25.00	13,025	11	104	44	0	0	0	0	40	18	0	0	0	0	6,459	468	0	0	0	0.00	0.00	4,325.82			
130+50.00	13,050	25	93	42	0	0	0	0	91	40	0	0	0	0	6,550	468	0	0	0	0.00	0.00	4,376.98			
130+55.54	13,056	6	101	43	0	0	0	0	20	9	0	0	0	0	6,570	468	0	0	0	0.00	0.00	4,388.17			
130+75.00	13,075	19	108	43	0	0	0	0	75	31	0	0	0	0	6,645	468	0	0	0	0.00	0.00	4,432.69			
131+00.00	13,100	25	106	40	0	0	0	0	99	38	0	0	0	0	6,745	468	0	0	0	0.00	0.00	4,493.57			
131+25.00	13,125	25	107	41	0	0	0	0	99	38	0	0	0	0	6,844	468	0	0	0	0.00	0.00	4,554.83			

STATION	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)										Cumulative Vol (CY)								Mass Ordinate
			Cut	Salvaged / Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged / Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Expanded Marsh		Expanded EBS		Reduced Marsh	Reduced EBS			
															1.00	1.25	1.50	1.10	1.30	in Fill	In Fill		
																			0.60	0.80			
									Note 1		Note 2		Note 3		Note 1		Note 4		Note 5		Note 6	Note 7	Note 8
131+35.70	13,136	11	106	40	0	0	0	0	42	16	0	0	0	0	6,886	468	0	0	0	0.00	0.00	4,580.90	
131+50.00	13,150	14	104	40	0	0	0	0	55	21	0	0	0	0	6,941	468	0	0	0	0.00	0.00	4,615.20	
131+74.00	13,174	24	102	38	0	0	0	0	91	35	0	0	0	0	7,032	468	0	0	0	0.00	0.00	4,671.89	
131+75.00	13,175	1	102	38	0	0	0	0	4	1	0	0	0	0	7,036	468	0	0	0	0.00	0.00	4,674.24	
132+00.00	13,200	25	100	40	0	0	0	0	94	36	0	0	0	0	7,130	468	0	0	0	0.00	0.00	4,731.72	
132+22.90	13,223	23	104	41	0	0	0	0	87	34	0	0	0	0	7,216	468	0	0	0	0.00	0.00	4,784.16	
132+25.00	13,225	2	104	41	0	0	0	0	8	3	0	0	0	0	7,224	468	0	0	0	0.00	0.00	4,789.06	
132+26.50	13,227	2	104	41	0	0	0	0	6	2	0	0	0	0	7,230	468	0	0	0	0.00	0.00	4,792.57	
132+50.00	13,250	24	103	40	0	0	0	0	90	35	0	0	0	0	7,321	468	0	0	0	0.00	0.00	4,847.67	
132+52.50	13,253	3	103	40	0	0	0	0	10	4	0	0	0	0	7,330	468	0	0	0	0.00	0.00	4,853.54	
132+75.00	13,275	23	101	37	0	0	0	0	85	32	0	0	0	0	7,415	468	0	0	0	0.00	0.00	4,906.38	
132+76.14	13,276	1	100	37	0	0	0	0	4	2	0	0	0	0	7,419	468	0	0	0	0.00	0.00	4,909.06	
133+00.00	13,300	24	101	36	0	0	0	0	89	32	0	0	0	0	7,508	468	0	0	0	0.00	0.00	4,965.46	
133+25.00	13,325	25	101	36	0	0	0	0	93	33	0	0	0	0	7,601	468	0	0	0	0.00	0.00	5,025.33	
133+28.37	13,328	3	101	36	0	0	0	0	13	4	0	0	0	0	7,614	468	0	0	0	0.00	0.00	5,033.49	
133+50.00	13,350	22	94	36	0	0	0	0	78	29	0	0	0	0	7,692	468	0	0	0	0.00	0.00	5,083.11	
133+75.00	13,375	25	95	37	0	0	0	0	88	34	0	0	0	0	7,780	468	0	0	0	0.00	0.00	5,137.05	
133+91.59	13,392	17	95	35	0	0	0	0	58	22	0	0	0	0	7,838	468	0	0	0	0.00	0.00	5,173.43	
134+00.00	13,400	8	96	36	0	0	0	0	30	11	0	0	0	0	7,868	468	0	0	0	0.00	0.00	5,192.13	
134+08.00	13,408	8	101	40	0	0	0	0	29	11	0	0	0	0	7,897	468	0	0	0	0.00	0.00	5,209.94	
134+08.04	13,408	0	101	40	0	0	0	0	0	0	0	0	0	0	7,897	468	0	0	0	0.00	0.00	5,210.03	
134+18.76	13,419	11	96	36	0	0	0	0	39	15	0	0	0	0	7,936	468	0	0	0	0.00	0.00	5,234.03	
134+25.00	13,425	6	89	31	0	0	0	0	21	8	0	0	0	0	7,958	468	0	0	0	0.00	0.00	5,247.59	
134+50.00	13,450	25	83	33	0	0	0	0	80	30	0	0	0	0	8,037	468	0	0	0	0.00	0.00	5,297.01	
134+55.42	13,455	5	87	34	0	0	0	0	17	7	0	0	0	0	8,054	468	0	0	0	0.00	0.00	5,307.34	
134+75.00	13,475	20	93	28	1	0	0	0	65	22	0	0	0	0	8,120	468	0	0	0	0.00	0.00	5,349.92	
135+00.00	13,500	25	97	30	0	0	0	0	88	27	0	0	0	0	8,208	469	0	0	0	0.00	0.00	5,410.81	
135+02.79	13,503	3	98	30	0	0	0	0	10	3	0	0	0	0	8,218	469	0	0	0	0.00	0.00	5,417.77	
135+16.23	13,516	13	97	31	0	0	0	0	48	15	0	0	0	0	8,266	469	0	0	0	0.00	0.00	5,451.06	
135+25.00	13,525	9	95	29	0	0	0	0	31	10	0	0	0	0	8,297	469	0	0	0	0.00	0.00	5,472.44	
135+50.00	13,550	25	92	29	0	0	0	0	87	27	0	0	0	0	8,384	469	0	0	0	0.00	0.00	5,532.07	
135+53.90	13,554	4	92	28	0	0	0	0	13	4	0	0	0	0	8,397	469	0	0	0	0.00	0.00	5,541.19	
135+75.00	13,575	21	92	29	0	0	0	0	72	22	0	0	0	0	8,469	470	0	0	0	0.00	0.00	5,590.46	
136+00.00	13,600	25	96	31	0	0	0	0	87	28	0	0	0	0	8,556	470	0	0	0	0.00	0.00	5,649.70	
136+09.33	13,609	9	92	29	0	0	0	0	32	10	0	0	0	0	8,589	470	0	0	0	0.00	0.00	5,671.78	
136+25.00	13,625	16	90	29	0	0	0	0	53	17	0	0	0	0	8,642	470	0	0	0	0.00	0.00	5,707.75	
136+38.17	13,638	13	89	29	0	0	0	0	44	14	0	0	0	0	8,685	470	0	0	0	0.00	0.00	5,737.34	
136+50.00	13,650	12	89	29	0	0	0	0	39	13	0	0	0	0	8,724	470	0	0	0	0.00	0.00	5,763.69	
136+70.29	13,670	20	91	31	0	0	0	0	68	22	0	0	0	0	8,792	470	0	0	0	0.00	0.00	5,809.11	
136+75.00	13,675	5	93	32	0	0	0	0	16	5	0	0	0	0	8,808	470	0	0	0	0.00	0.00	5,819.75	
137+00.00	13,700	25	90	31	0	0	0	0	85	29	0	0	0	0	8,893	471	0	0	0	0.00	0.00	5,875.28	
137+25.00	13,725	25	91	32	0	0	0	0	84	29	0	0	0	0	8,977	471	0	0	0	0.00	0.00	5,930.06	
137+50.00	13,750	25	94	35	0	0	0	0	86	31	0	0	0	0	9,063	471	0	0	0	0.00	0.00	5,984.81	
137+70.64	13,771	21	96	35	0	0	0	0	73	27	0	0	0	0	9,136	471	0	0	0	0.00	0.00	6,030.75	
137+75.00	13,775	4	94	33	0	0	0	0	15	5	0	0	0	0	9,151	471	0	0	0	0.00	0.00	6,040.65	
137+91.91	13,792	17	93	31	0	0	0	0	59	20	0	0	0	0	9,210	471	0	0	0	0.00	0.00	6,079.21	
137+92.60	13,793	1	93	31	0	0	0	0	2	1	0	0	0	0	9,212	471	0	0	0	0.00	0.00	6,080.79	
138+00.00	13,800	7	93	31	0	0	0																

STATION	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)										Cumulative Vol (CY)								Mass Ordinate		
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Expanded Marsh				Expanded EBS	Reduced Marsh	Reduced EBS				
															Cut	Expanded Fill	Backfill	Expanded Rock	Backfill	in Fill	In Fill				
																						1.00		1.25	1.50
															Note 1				Note 4		Note 5		Note 6	Note 7	Note 8
138+75.00	13,875	20	95	41	0	0	0	0	70	29	0	0	0	0	9,496	473	0	0	0	0.00	0.00	6,261.45			
139+00.00	13,900	25	89	41	0	0	0	0	85	38	0	0	0	0	9,581	473	0	0	0	0.00	0.00	6,308.36			
139+25.00	13,925	25	74	41	1	0	0	0	76	38	0	0	0	0	9,656	473	0	0	0	0.00	0.00	6,345.33			
139+26.38	13,926	1	73	41	2	0	0	0	4	2	0	0	0	0	9,660	473	0	0	0	0.00	0.00	6,346.94			
139+50.00	13,950	24	79	43	0	0	0	0	67	37	1	0	0	0	9,727	474	0	0	0	0.00	0.00	6,376.04			
139+56.38	13,956	6	81	44	0	0	0	0	19	10	0	0	0	0	9,746	474	0	0	0	0.00	0.00	6,384.63			
139+69.00	13,969	13	82	45	0	0	0	0	38	21	0	0	0	0	9,783	474	0	0	0	0.00	0.00	6,401.74			
139+71.86	13,972	3	82	44	0	0	0	0	9	5	0	0	0	0	9,792	474	0	0	0	0.00	0.00	6,405.65			
139+71.87	13,972	0	82	44	0	0	0	0	0	0	0	0	0	0	9,792	474	0	0	0	0.00	0.00	6,405.66			
139+75.00	13,975	3	82	43	0	0	0	0	9	5	0	0	0	0	9,802	474	0	0	0	0.00	0.00	6,410.06			
139+89.24	13,989	14	82	40	0	0	0	0	43	22	0	0	0	0	9,845	474	0	0	0	0.00	0.00	6,431.41			
140+00.00	14,000	11	79	41	1	0	0	0	32	16	0	0	0	0	9,877	474	0	0	0	0.00	0.00	6,447.34			
140+19.04	14,019	19	75	41	1	0	0	0	54	29	1	0	0	0	9,931	475	0	0	0	0.00	0.00	6,472.13			
140+25.00	14,025	6	76	40	1	0	0	0	17	9	0	0	0	0	9,948	475	0	0	0	0.00	0.00	6,479.50			
140+50.00	14,050	25	83	40	0	0	0	0	73	37	1	0	0	0	10,021	476	0	0	0	0.00	0.00	6,515.30			
140+60.94	14,061	11	83	38	0	0	0	0	34	16	0	0	0	0	10,055	476	0	0	0	0.00	0.00	6,533.23			
140+75.00	14,075	14	80	39	0	0	0	0	43	20	0	0	0	0	10,097	476	0	0	0	0.00	0.00	6,555.78			
141+00.00	14,100	25	81	40	0	0	0	0	75	36	0	0	0	0	10,172	476	0	0	0	0.00	0.00	6,593.91			
141+06.88	14,107	7	82	41	0	0	0	0	21	10	0	0	0	0	10,193	476	0	0	0	0.00	0.00	6,604.33			
141+25.00	14,125	18	83	42	0	0	0	0	55	28	0	0	0	0	10,248	477	0	0	0	0.00	0.00	6,631.64			
141+50.00	14,150	25	84	43	0	0	0	0	77	39	0	0	0	0	10,326	477	0	0	0	0.00	0.00	6,669.54			
141+75.00	14,175	25	85	42	0	0	0	0	78	39	0	0	0	0	10,404	477	0	0	0	0.00	0.00	6,708.23			
141+86.85	14,187	12	85	41	0	0	0	0	37	18	0	0	0	0	10,441	477	0	0	0	0.00	0.00	6,727.16			
142+00.00	14,200	13	86	42	0	0	0	0	42	20	0	0	0	0	10,483	477	0	0	0	0.00	0.00	6,748.57			
142+12.78	14,213	13	86	42	0	0	0	0	41	20	0	0	0	0	10,523	477	0	0	0	0.00	0.00	6,769.27			
142+25.00	14,225	12	85	42	0	0	0	0	39	19	0	0	0	0	10,562	477	0	0	0	0.00	0.00	6,789.04			
142+50.00	14,250	25	86	42	0	0	0	0	79	39	0	0	0	0	10,641	477	0	0	0	0.00	0.00	6,829.57			
142+75.00	14,275	25	87	42	0	0	0	0	80	39	0	0	0	0	10,721	477	0	0	0	0.00	0.00	6,870.78			
143+00.00	14,300	25	88	42	0	0	0	0	81	39	0	0	0	0	10,802	477	0	0	0	0.00	0.00	6,912.94			
143+25.00	14,325	25	92	45	0	0	0	0	83	40	0	0	0	0	10,885	477	0	0	0	0.00	0.00	6,955.90			
143+50.00	14,350	25	94	46	0	0	0	0	86	42	0	0	0	0	10,971	477	0	0	0	0.00	0.00	6,999.85			
143+75.00	14,375	25	94	45	0	0	0	0	87	42	0	0	0	0	11,058	477	0	0	0	0.00	0.00	7,044.73			
144+00.00	14,400	25	93	44	0	0	0	0	87	41	0	0	0	0	11,145	477	0	0	0	0.00	0.00	7,090.28			
144+25.00	14,425	25	95	44	0	0	0	0	87	41	0	0	0	0	11,232	477	0	0	0	0.00	0.00	7,136.45			
144+50.00	14,450	25	97	45	0	0	0	0	89	41	0	0	0	0	11,320	477	0	0	0	0.00	0.00	7,183.81			
144+75.00	14,475	25	96	45	0	0	0	0	89	41	0	0	0	0	11,410	477	0	0	0	0.00	0.00	7,231.82			
144+98.91	14,499	24	97	44	0	0	0	0	86	39	0	0	0	0	11,495	477	0	0	0	0.00	0.00	7,277.87			
145+00.00	14,500	1	97	44	0	0	0	0	4	2	0	0	0	0	11,499	477	0	0	0	0.00	0.00	7,279.98			
145+25.00	14,525	25	95	45	0	0	0	0	89	41	0	0	0	0	11,588	477	0	0	0	0.00	0.00	7,327.46			
145+50.00	14,550	25	95	46	0	0	0	0	88	42	0	0	0	0	11,676	477	0	0	0	0.00	0.00	7,373.38			
145+75.00	14,575	25	84	46	0	0	0	0	83	42	0	0	0	0	11,758	477	0	0	0	0.00	0.00	7,413.49			
									11,758	3,868	382	0	0	0											

PROJECT NO: 9532-03-00				HWY: STH 160				COUNTY: BROWN				EARTHWORK				SHEET: 135	
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STATION	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)										Cumulative Vol (CY)								Mass Ordinate	
			Cut	salvaged / Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	salvaged / Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh		Expanded EBS Backfill 1.30 Note 5	Reduced Marsh		Reduced EBS		
																	Backfill 1.50 Note 4	Expanded Rock 1.10		in Fill 0.60 Note 6	In Fill 0.80 Note 7			
41+00.00	4,100		59	0	0	0	0	0																
41+25.00	4,125	25	65	0	0	0	0	0	58	0	0	0	0	0	58	0	0	0	0	0.00	0.00	57.53		
41+50.00	4,150	25	57	0	0	0	0	0	56	0	0	0	0	0	114	0	0	0	0	0.00	0.00	113.89		
41+55.00	4,155	5	56	0	0	0	0	0	10	0	0	0	0	0	124	0	0	0	0	0.00	0.00	124.36		
41+75.00	4,175	20	68	0	0	0	0	0	46	0	0	0	0	0	171	0	0	0	0	0.00	0.00	170.49		
41+77.00	4,177	2	72	0	0	0	0	0	5		0	0	0	0	176	0	0	0	0	0.00	0.00	175.68		
									176	0	0	0	0	0										
STATION	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)										Cumulative Vol (CY)								Mass Ordinate	
			Cut	salvaged / Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	salvaged / Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh		Expanded EBS Backfill 1.30 Note 5	Reduced Marsh		Reduced EBS		
																	Backfill 1.50 Note 4	Expanded Rock 1.10		in Fill 0.60 Note 6	In Fill 0.80 Note 7			
51+00.00	5,100		64	0	0	0	0	0																
51+25.00	5,125	25	71	0	0	0	0	0	62	0	0	0	0	0	62	0	0	0	0	0.00	0.00	62.10		
51+50.00	5,150	25	62	0	0	0	0	0	61	0	0	0	0	0	124	1	0	0	0	0.00	0.00	123.14		
51+55.00	5,155	5	62	0	0	0	0	0	11	0	0	0	0	0	135	1	0	0	0	0.00	0.00	134.57		
51+70.00	5,170	15	64	0	0	0	0	0	35	0	0	0	0	0	170	1	0	0	0	0.00	0.00	169.57		
51+75.00	5,175	5	0	0	0	0	0	0	6	0	0	0	0	0	176	1	0	0	0	0.00	0.00	175.53		
51+77.00	5,177	2	75	0	0	0	0	0	3		0	0	0	0	179	1	0	0	0	0.00	0.00	178.29		
									179	0	0	0	0	0										
STATION	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)										Cumulative Vol (CY)								Mass Ordinate	
			Cut	salvaged / Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	salvaged / Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh		Expanded EBS Backfill 1.30 Note 5	Reduced Marsh		Reduced EBS		
																	Backfill 1.50 Note 4	Expanded Rock 1.10		in Fill 0.60 Note 6	In Fill 0.80 Note 7			
60+23.00	6,023		85	0	0	0	0	0																
60+25.00	6,025	2	80	0	0	0	0	0	6	0	0	0	0	0	6	0	0	0	0	0.00	0.00	6.09		
60+30.00	6,030	5	88	0	0	0	0	0	16	0	0	0	0	0	22	0	0	0	0	0.00	0.00	21.59		
60+40.00	6,040	10	86	0	0	0	0	0	32	0	0	0	0	0	54	0	0	0	0	0.00	0.00	53.75		
60+50.00	6,050	10	90	0	0	0	0	0	33	0	0	0	0	0	86	0	0	0	0	0.00	0.00	86.35		
60+75.00	6,075	25	78	0	0	0	0	0	78	0	0	0	0	0	164	0	0	0	0	0.00	0.00	164.33		
61+00.00	6,100	25	67	0	0	0	0	0	67		0	0	0	0	231	0	0	0	0	0.00	0.00	231.39		
									231	0	0	0	0	0										
PROJECT NO: 9532-03-00				HWY: STH 160				COUNTY: BROWN				EARTHWORK								SHEET: 137		E		



PROJECT NO: 9532-03-71

HWY: STH 160

COUNTY: BROWN

CROSS SECTIONS

SHEET NO: 138

E

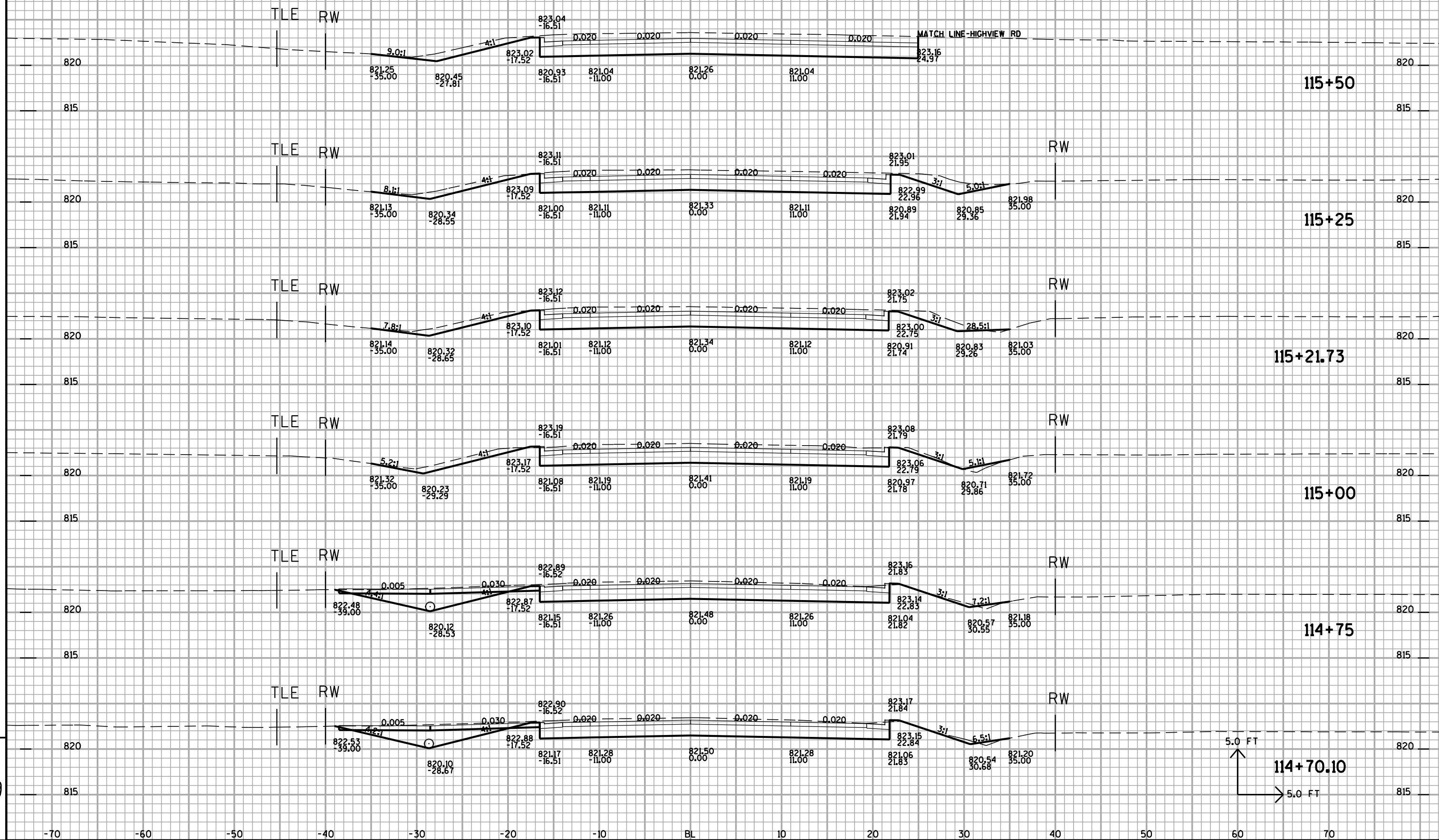
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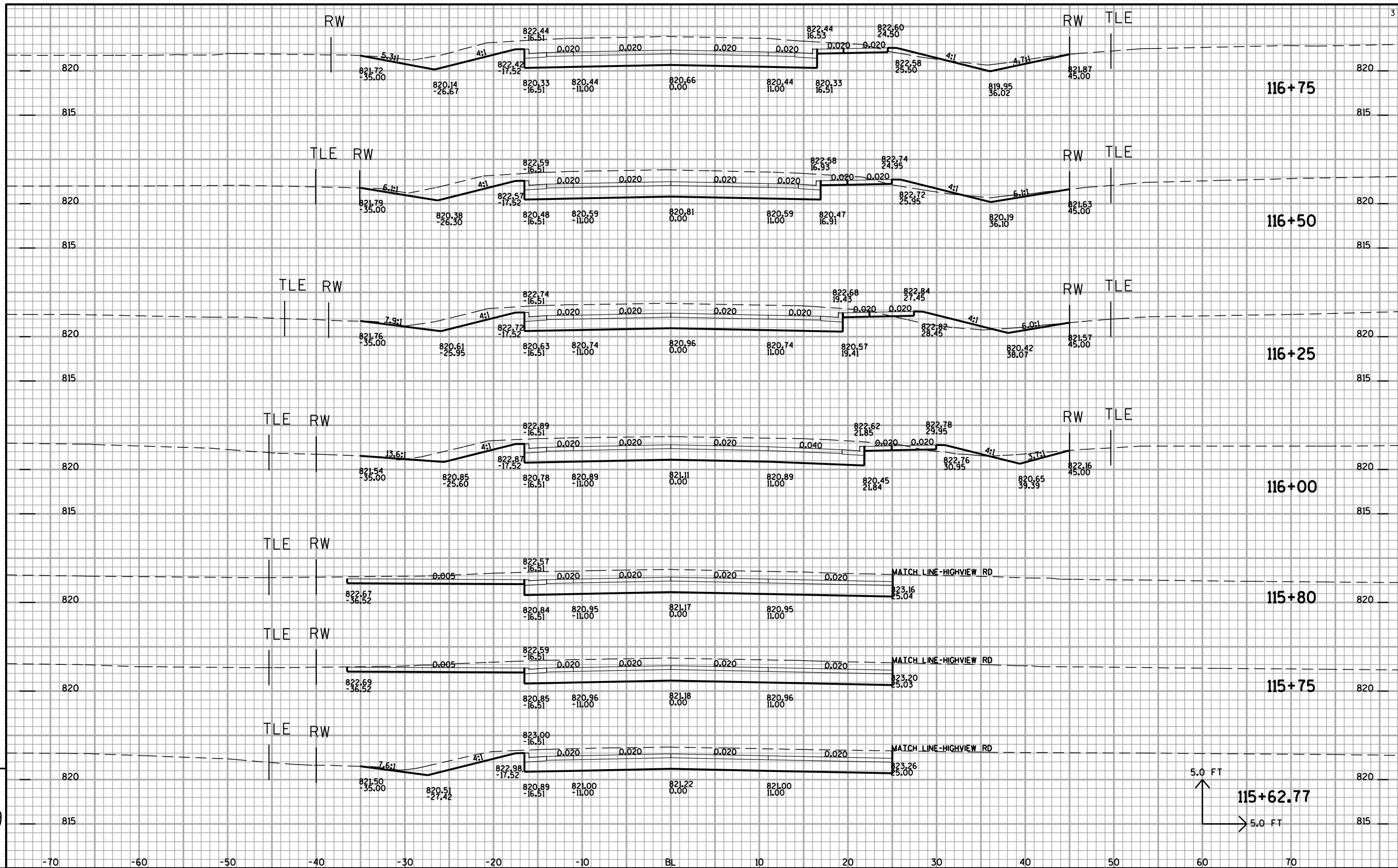
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PLOT BY : dotets

PLOT NAME :

PLOT SCALE : 2:1





PROJECT NO: 9532-03-71

HWY: STH 160

COUNTY: BROWN

CROSS SECTIONS

SHEET NO: 140

E

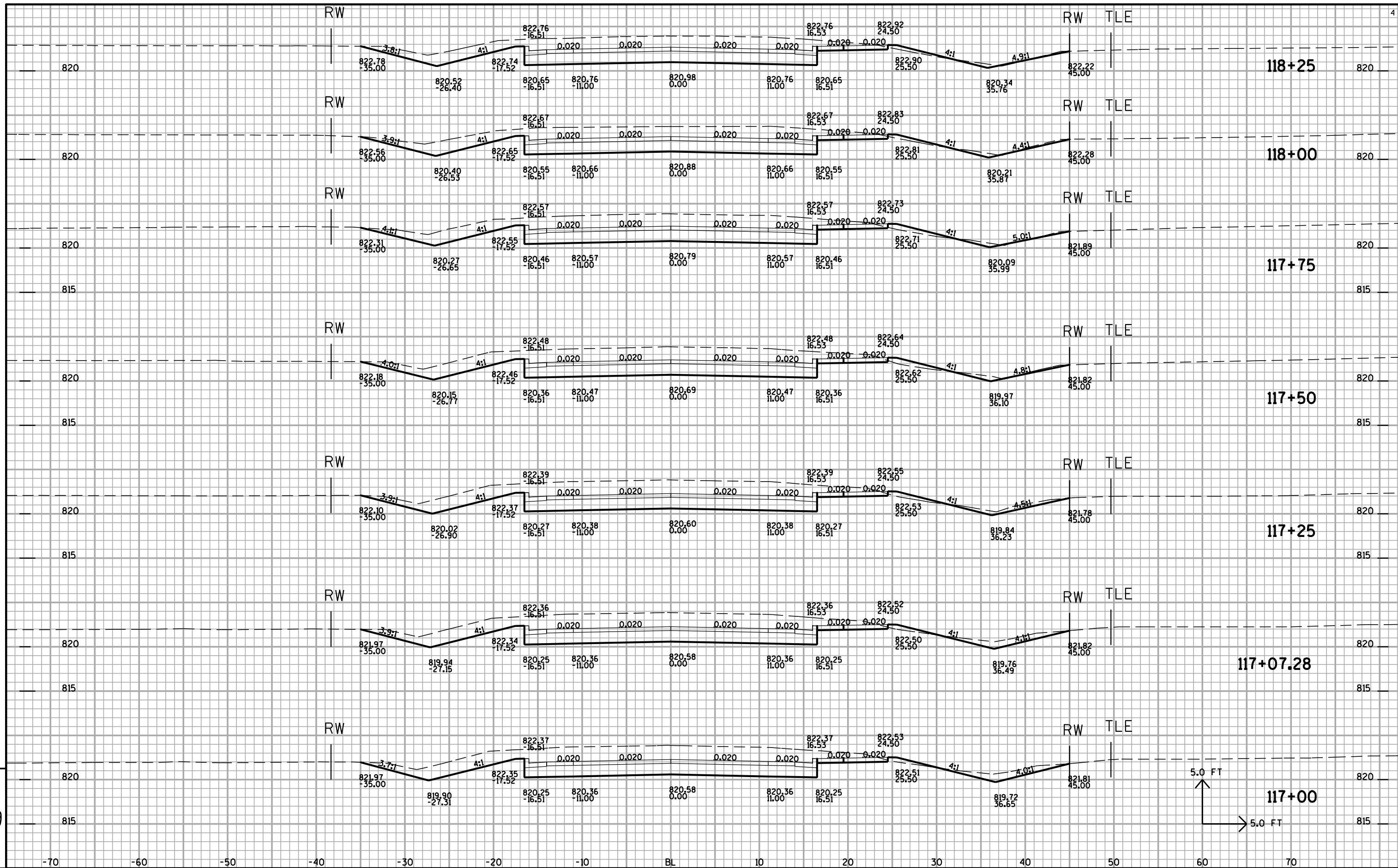
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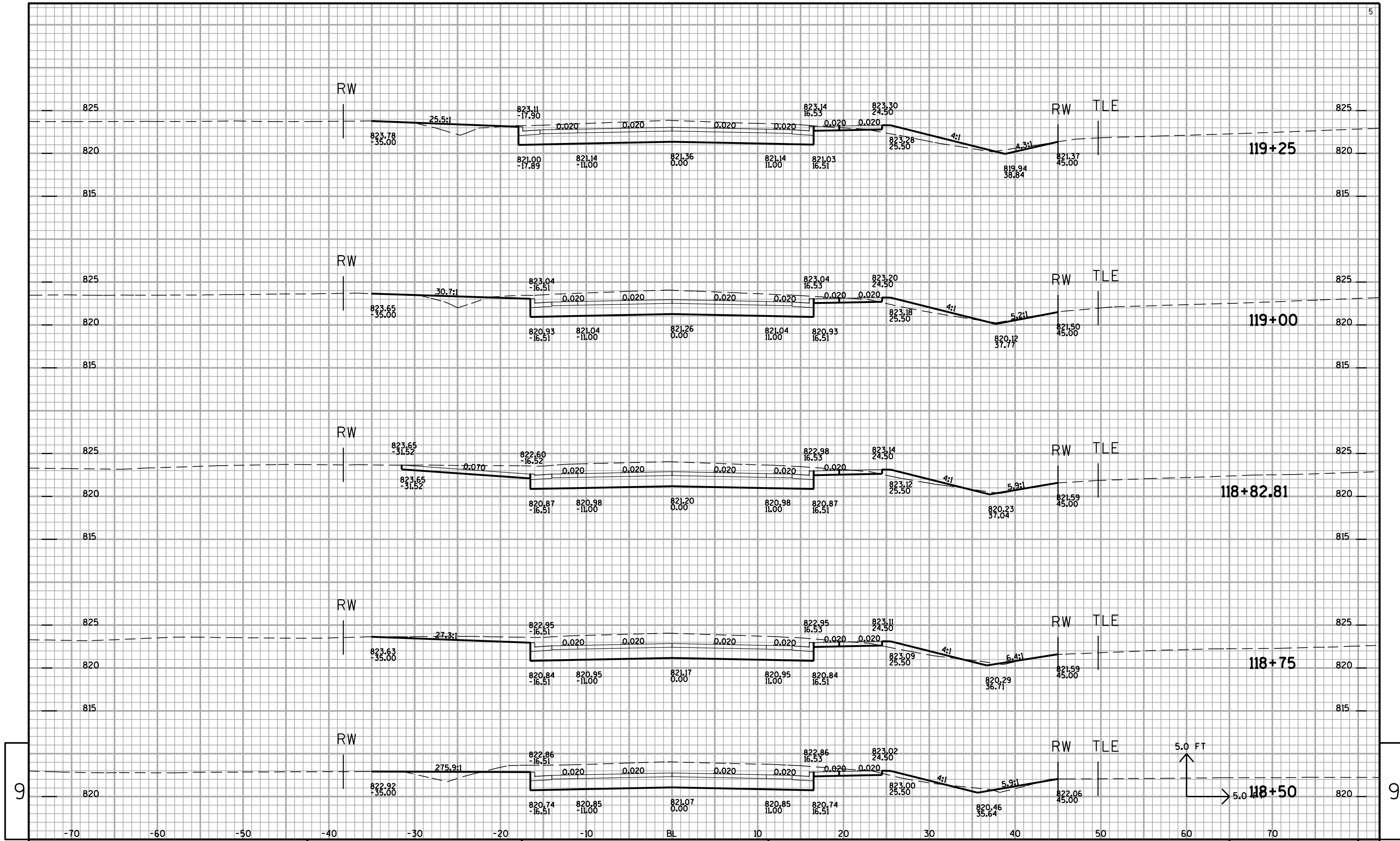
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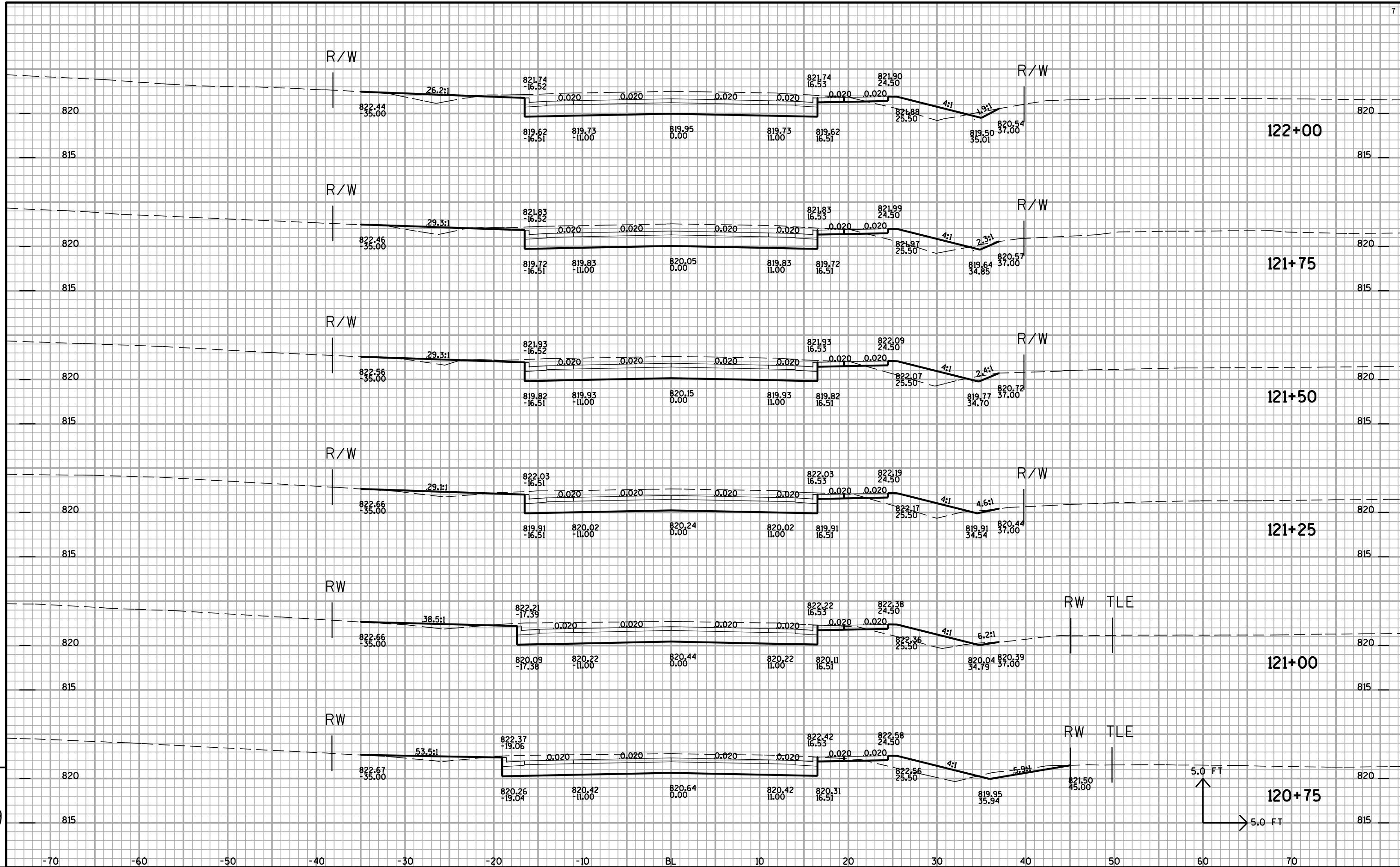
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PLOT NAME :

PLOT SCALE : 2:1







PROJECT NO: 9532-03-71

HWY: STH 160

COUNTY: BROWN

CROSS SECTIONS

SHEET NO: 144

E

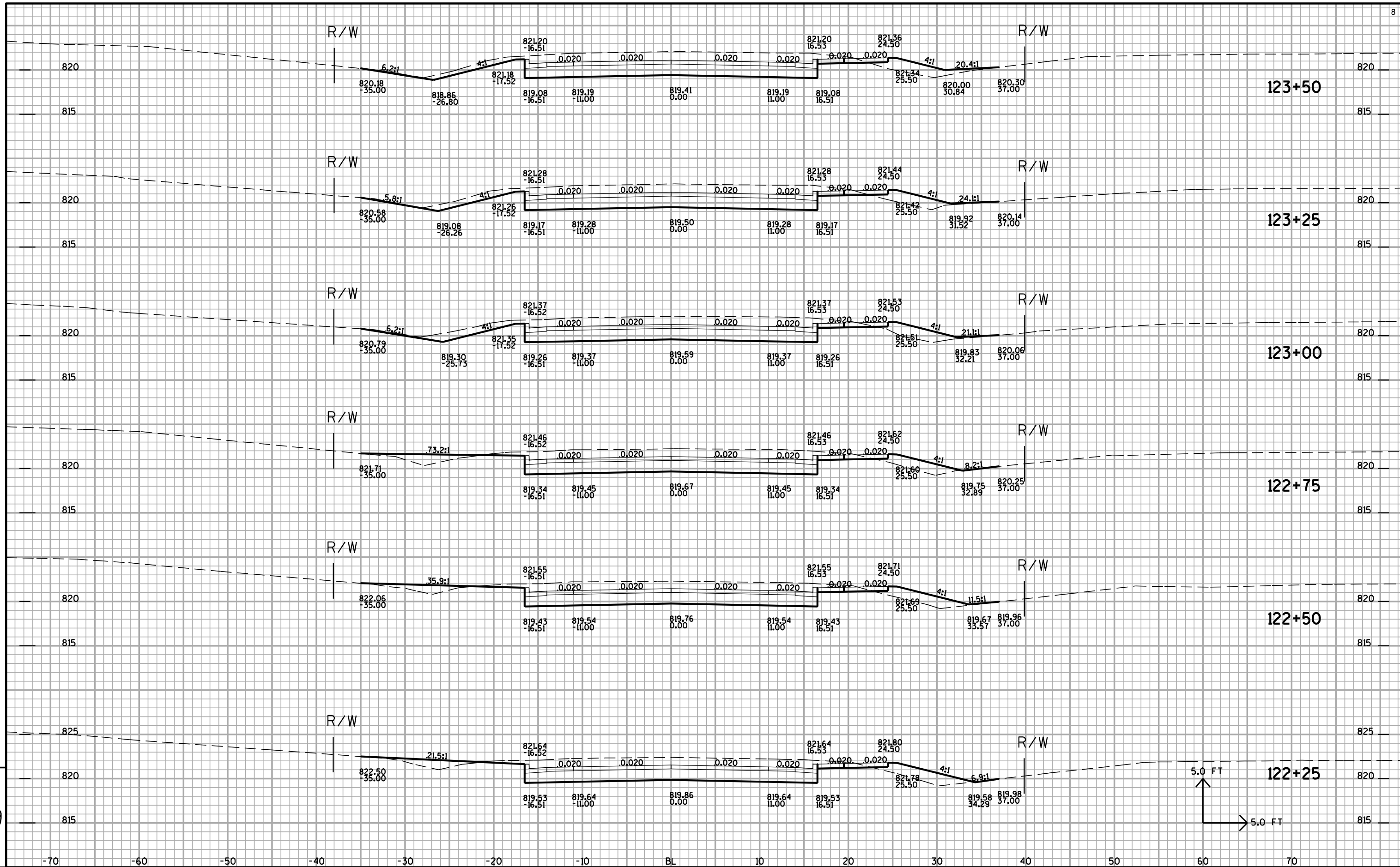
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PLOT DATE : 09-JAN-2013 13:22

PLOT BY : dotets

PLOT NAME :

PLOT SCALE : 2:1



PROJECT NO: 9532-03-71

HWY: STH 160

COUNTY: BROWN

CROSS SECTIONS

SHEET NO: 145

E

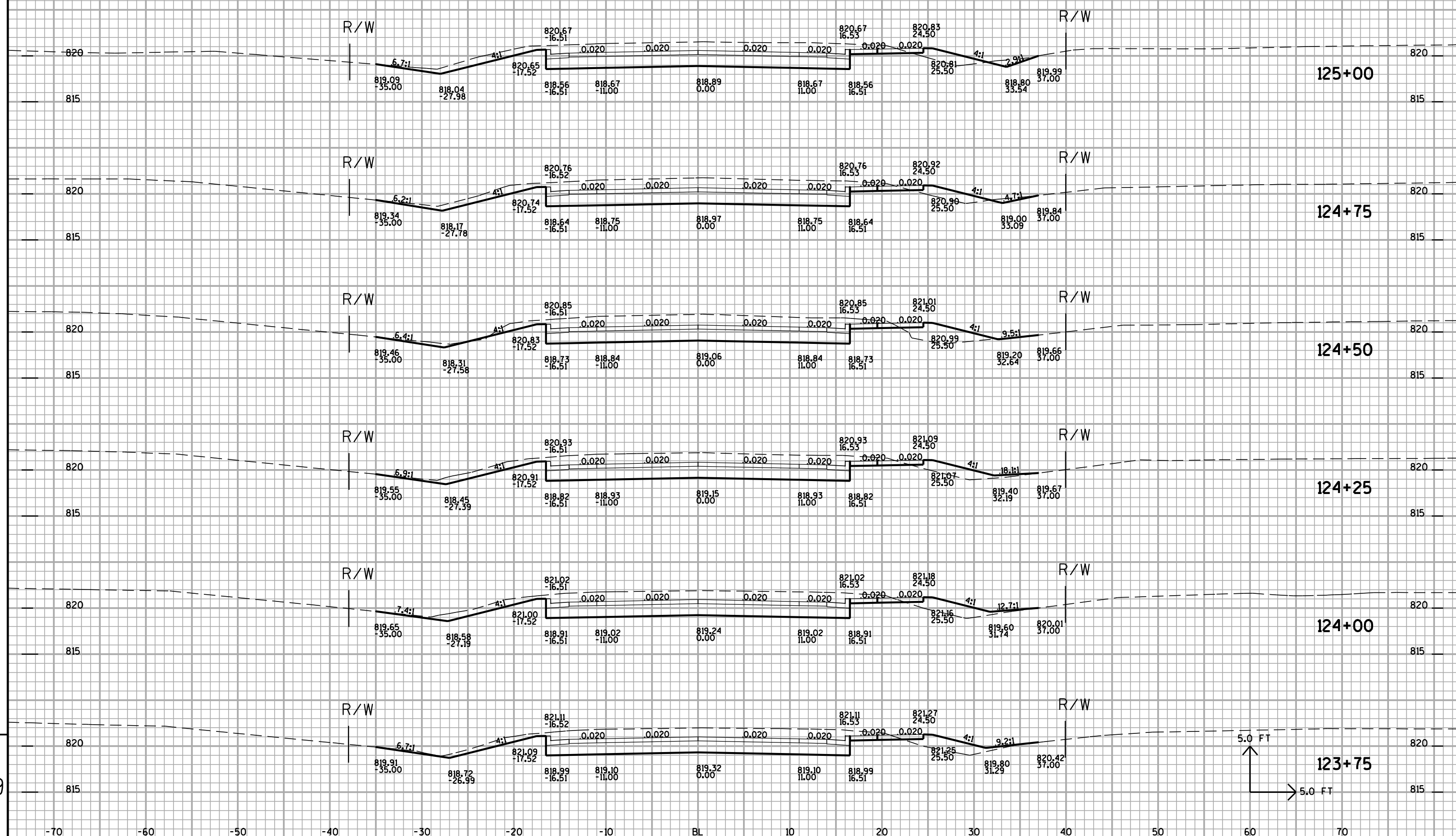
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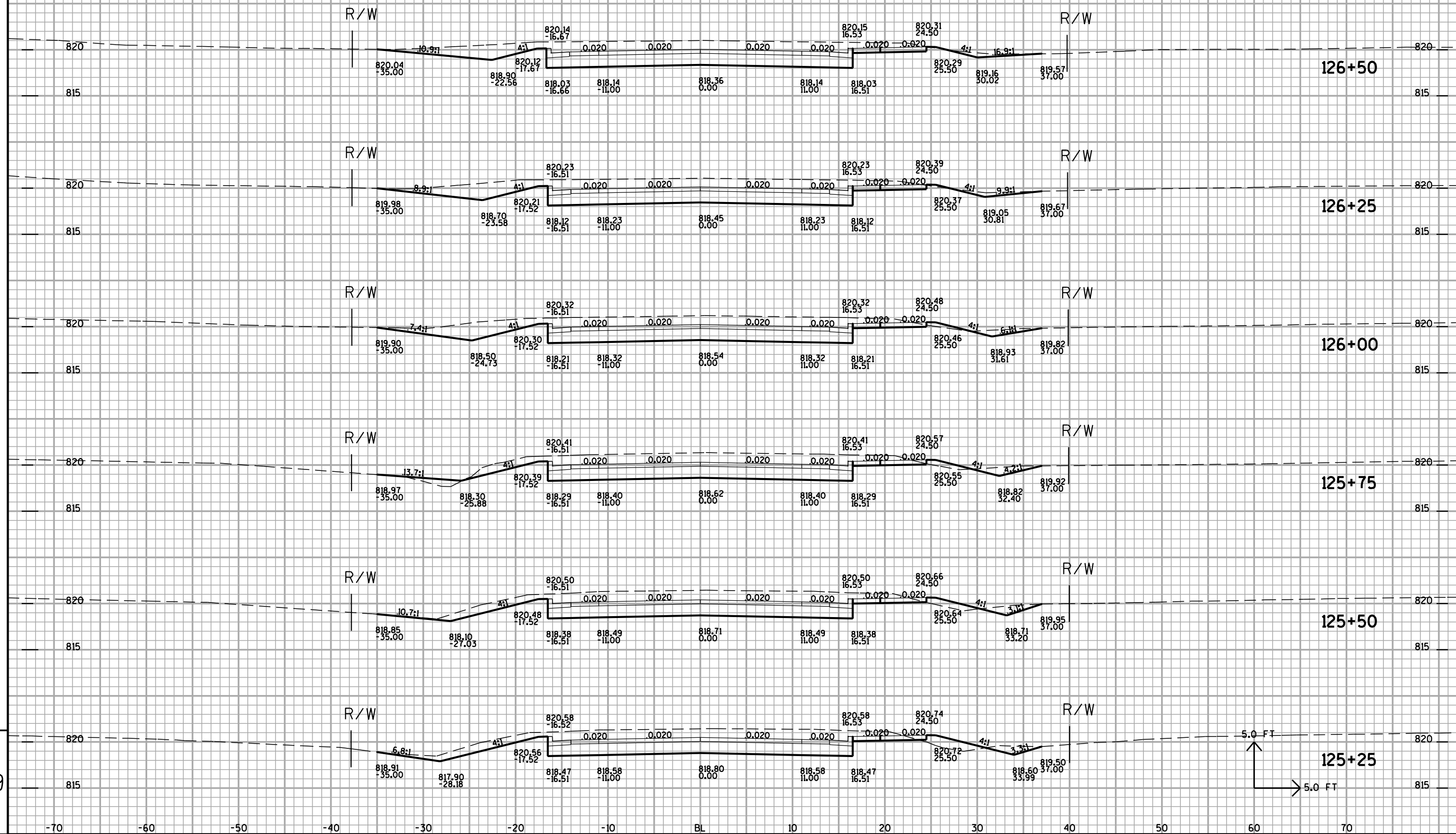
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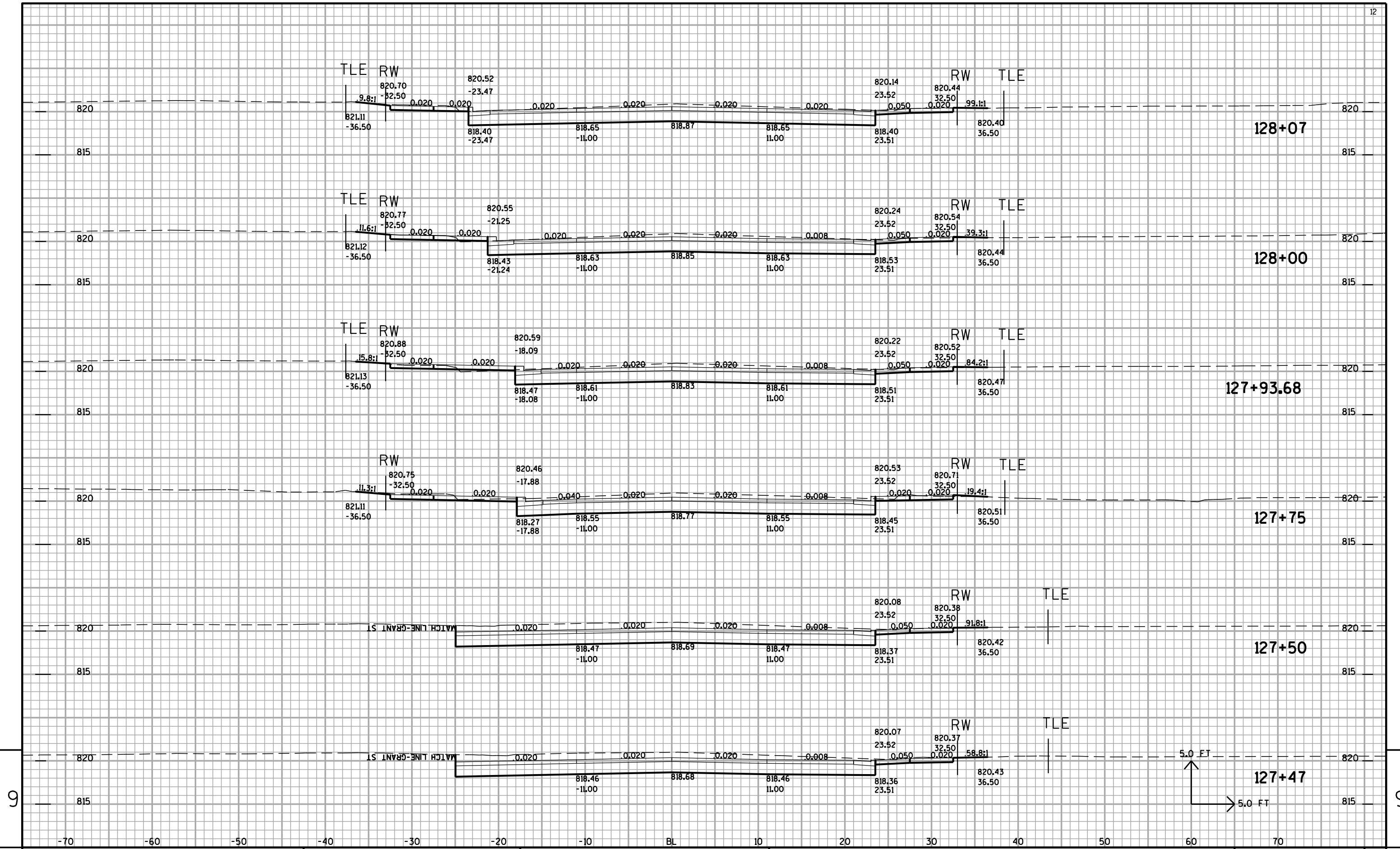
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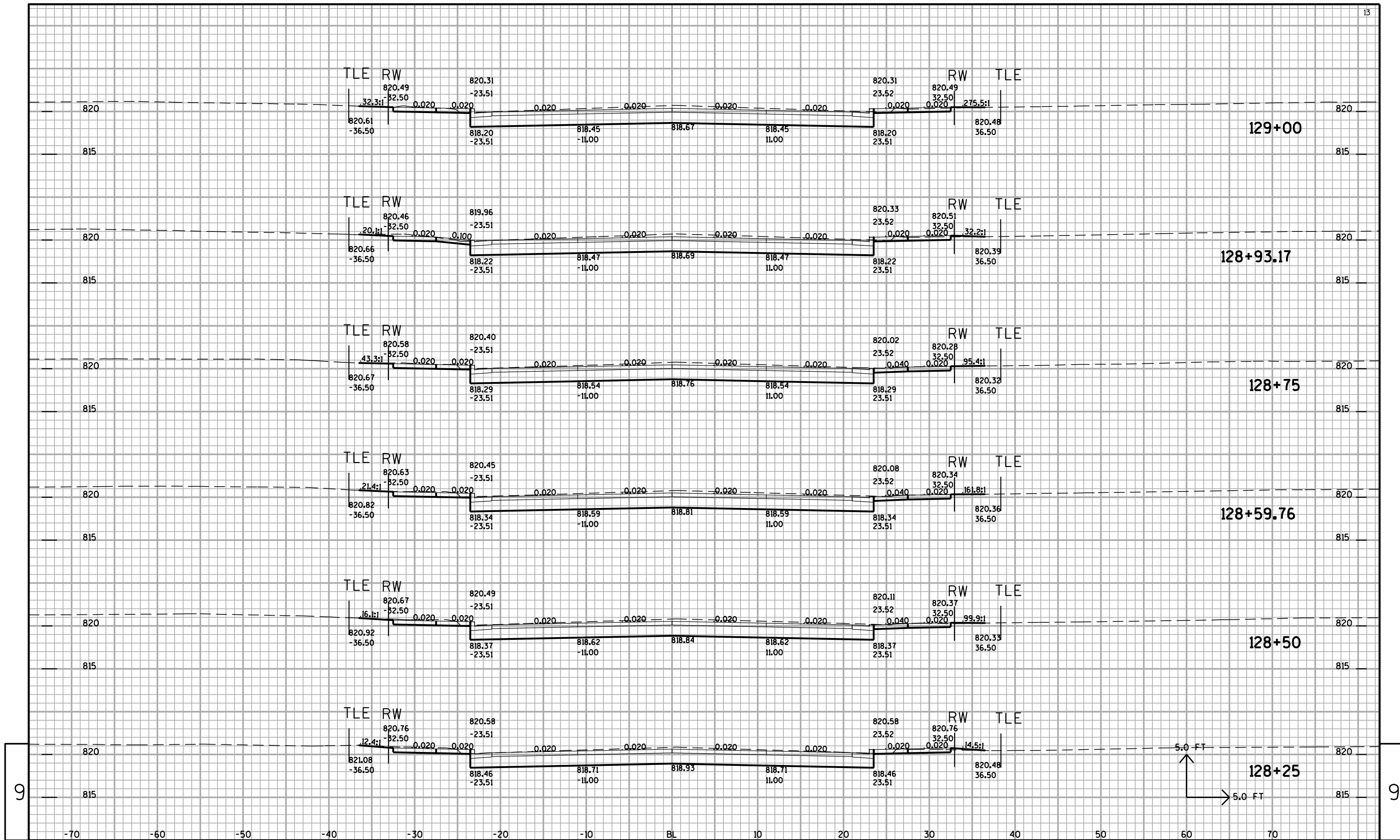


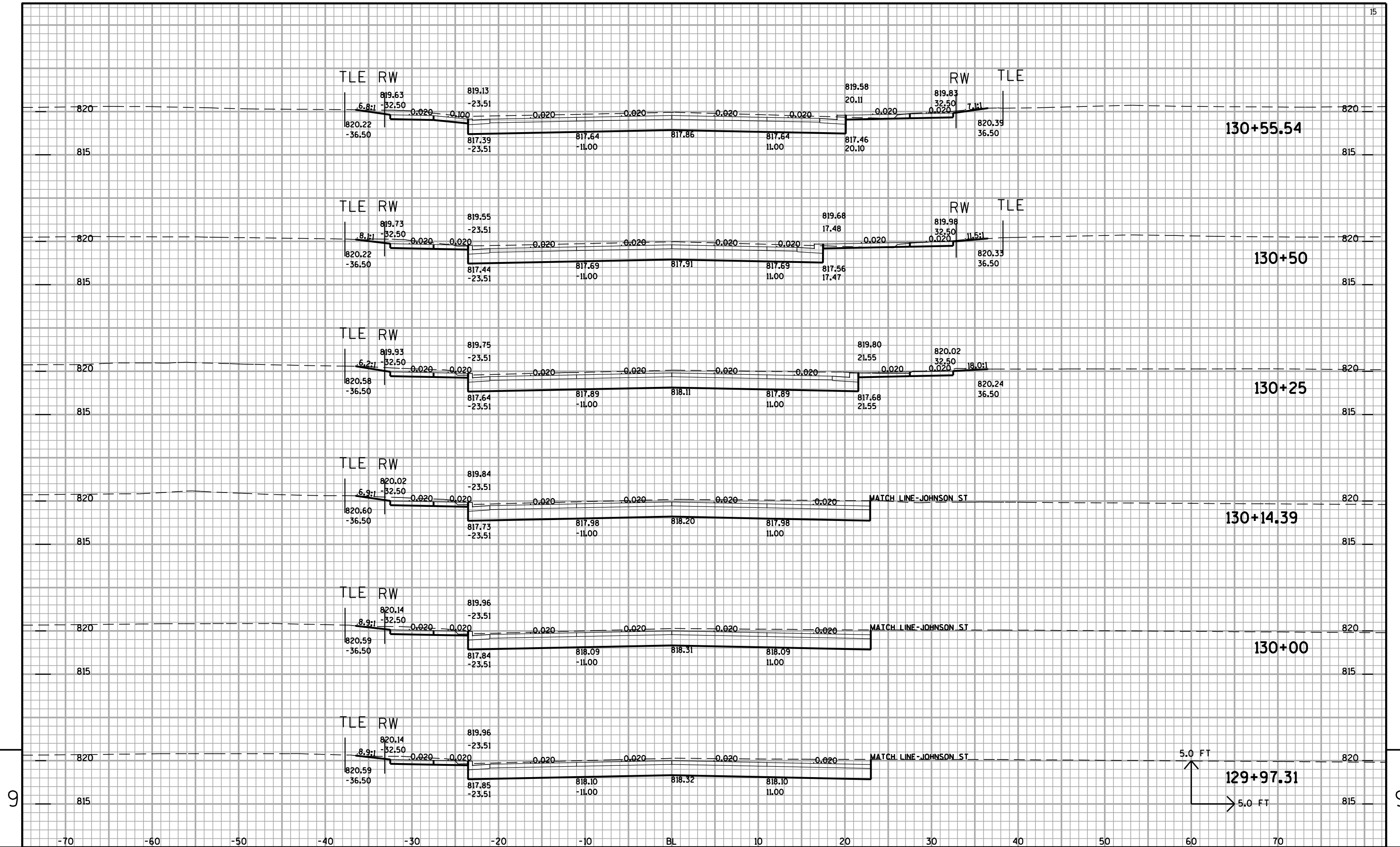


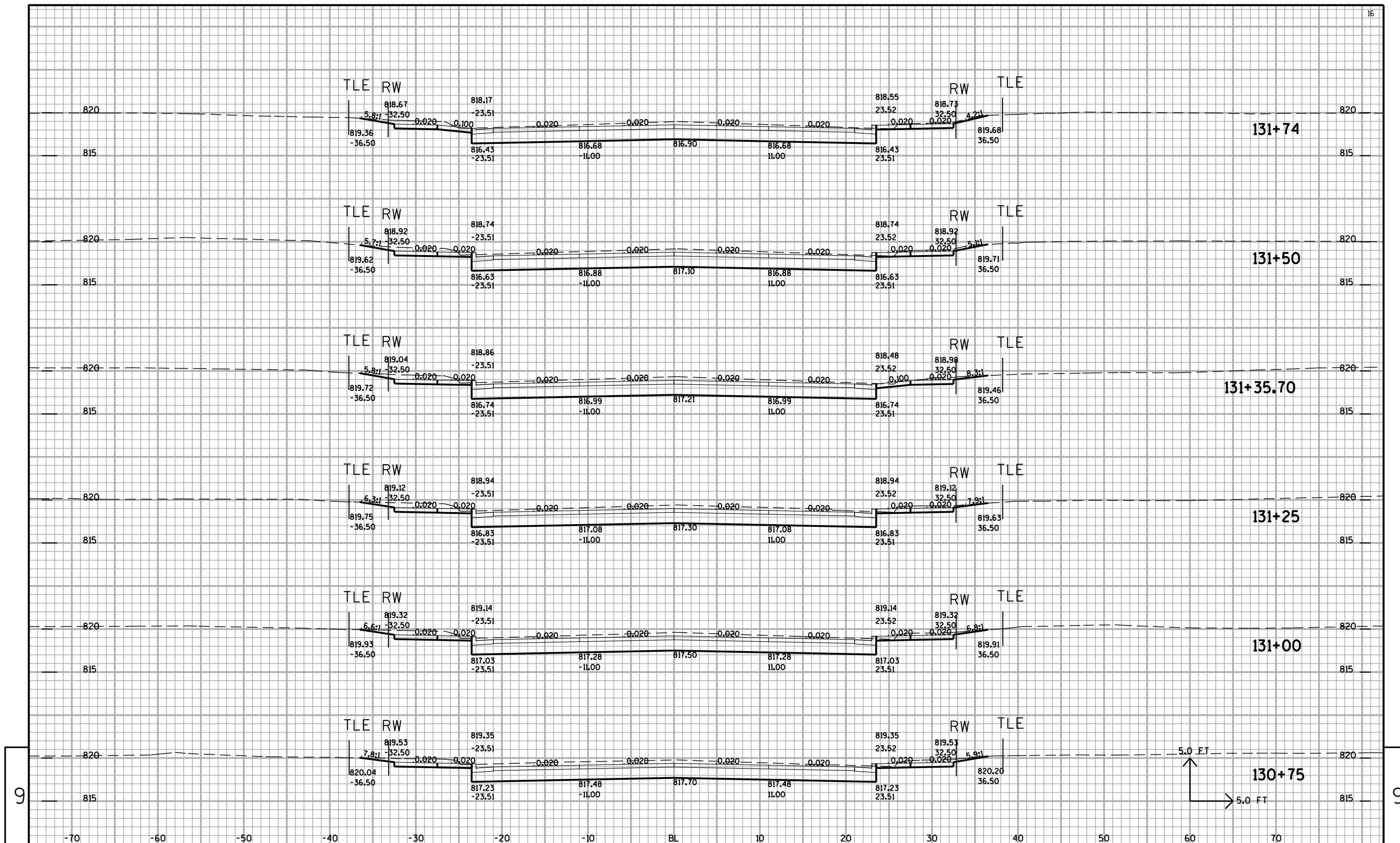


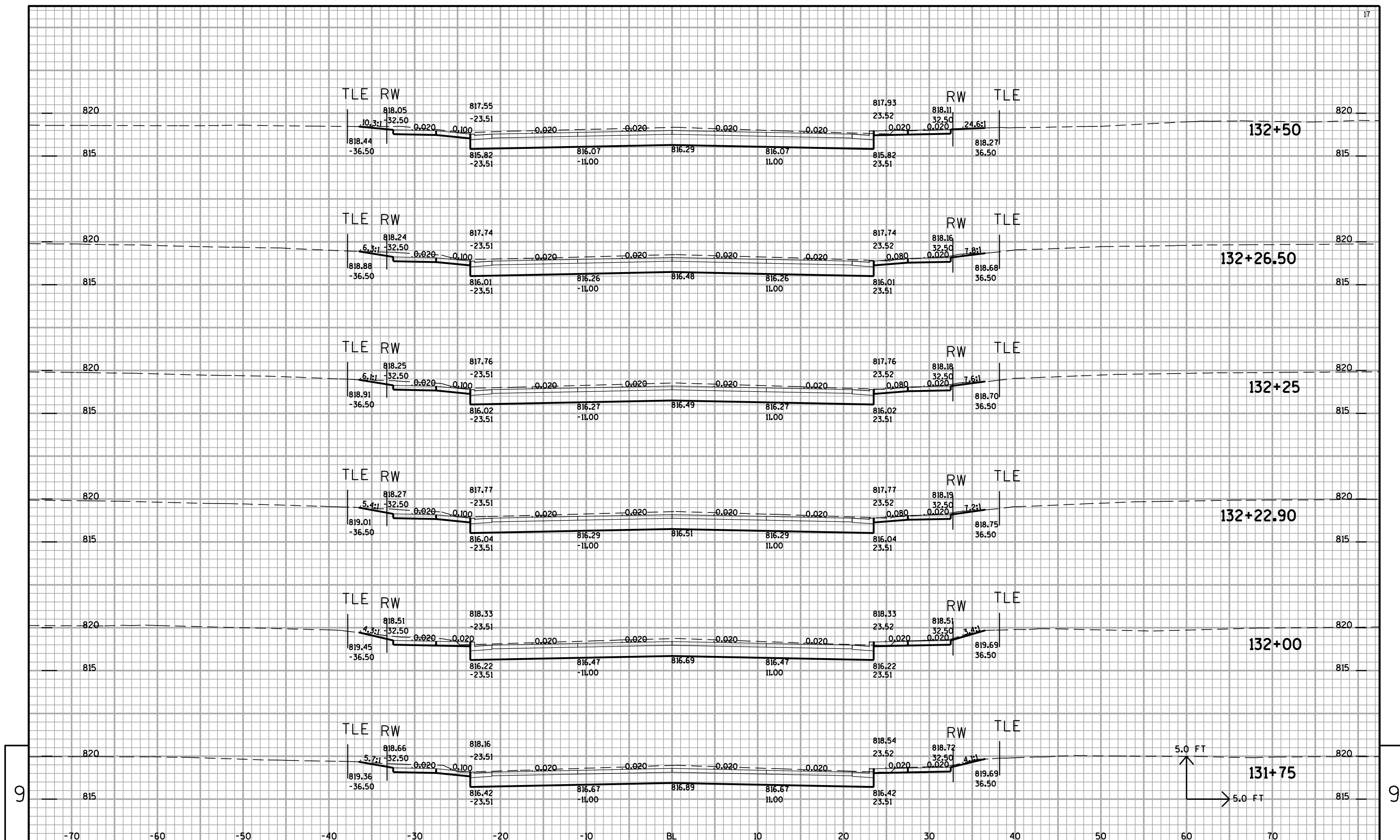
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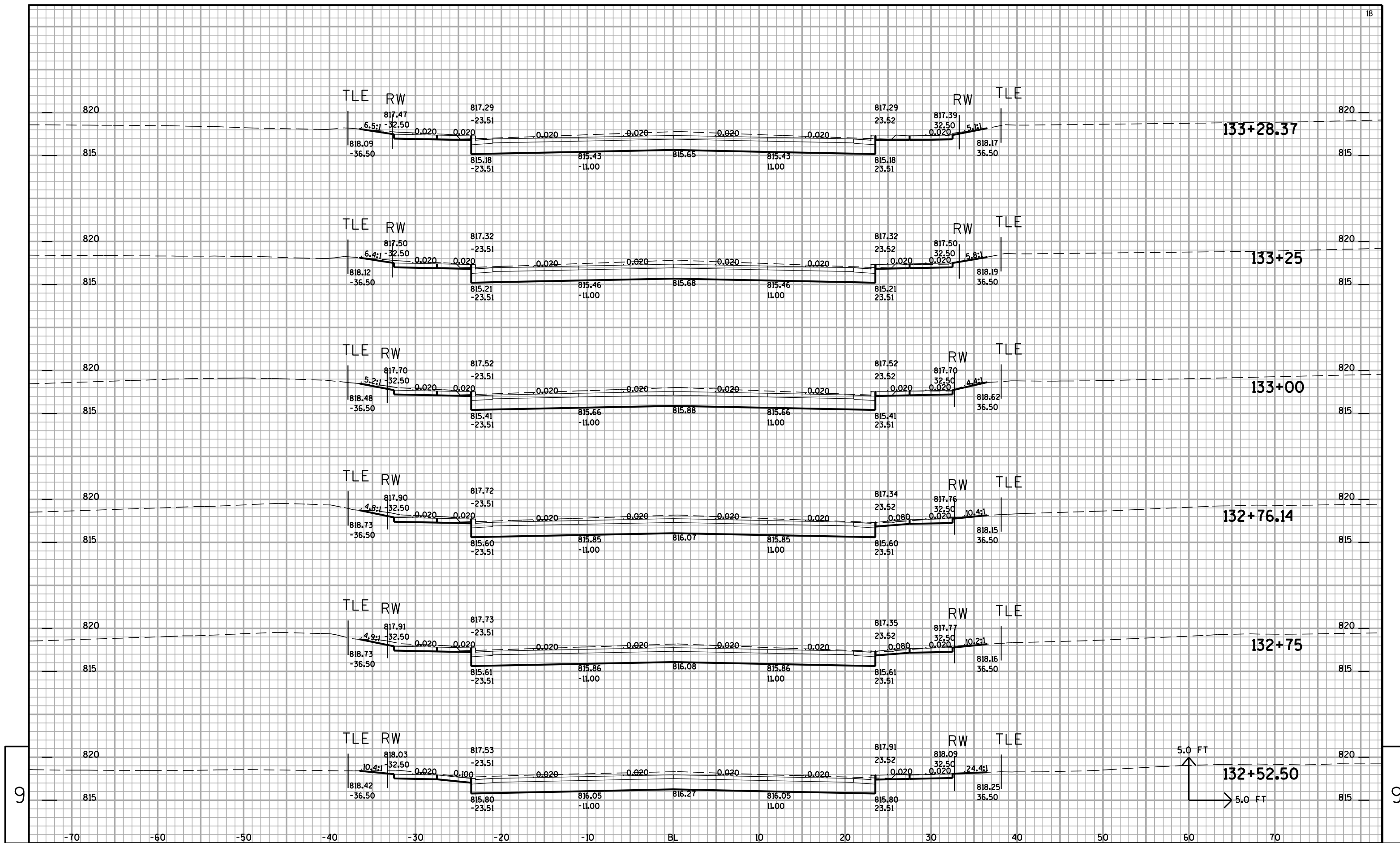
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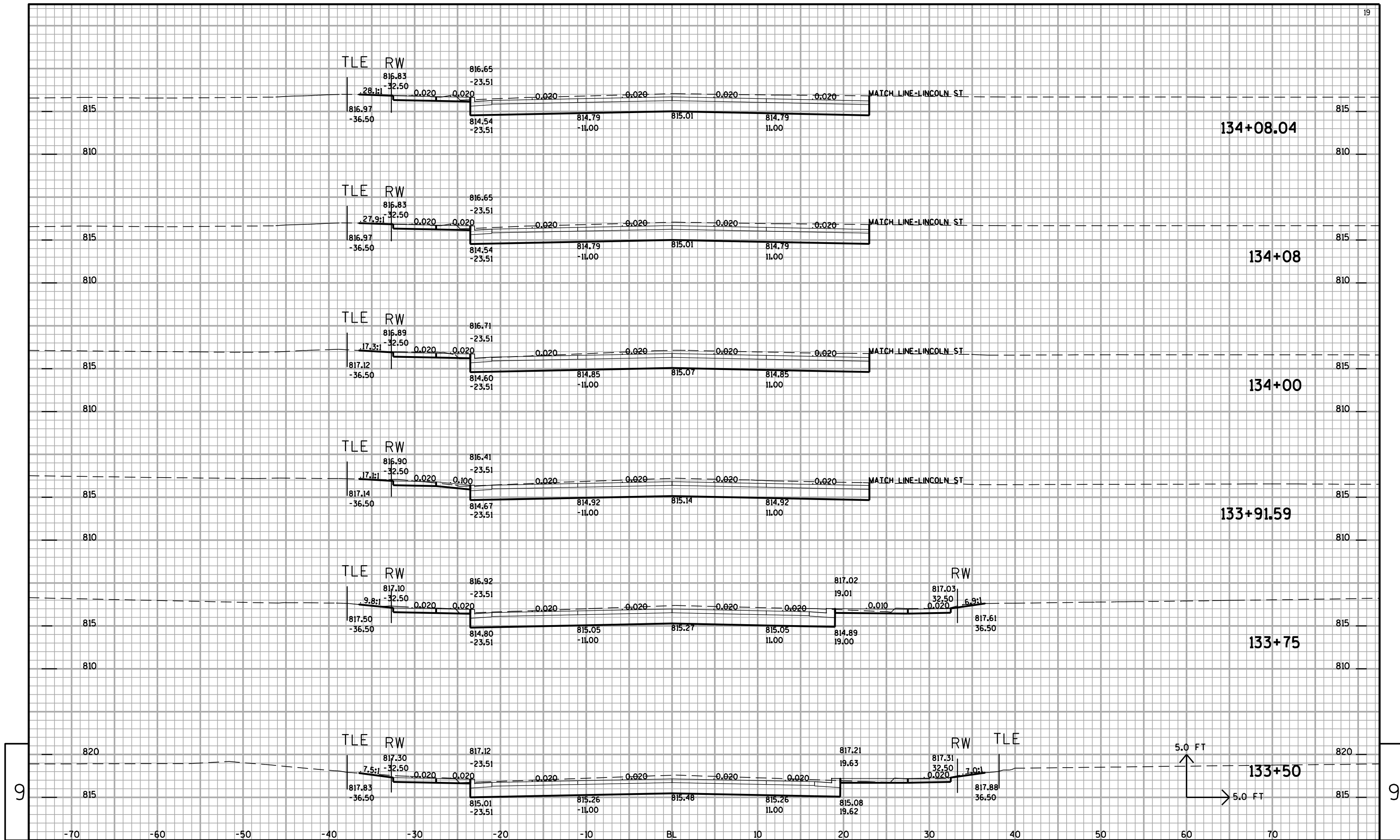


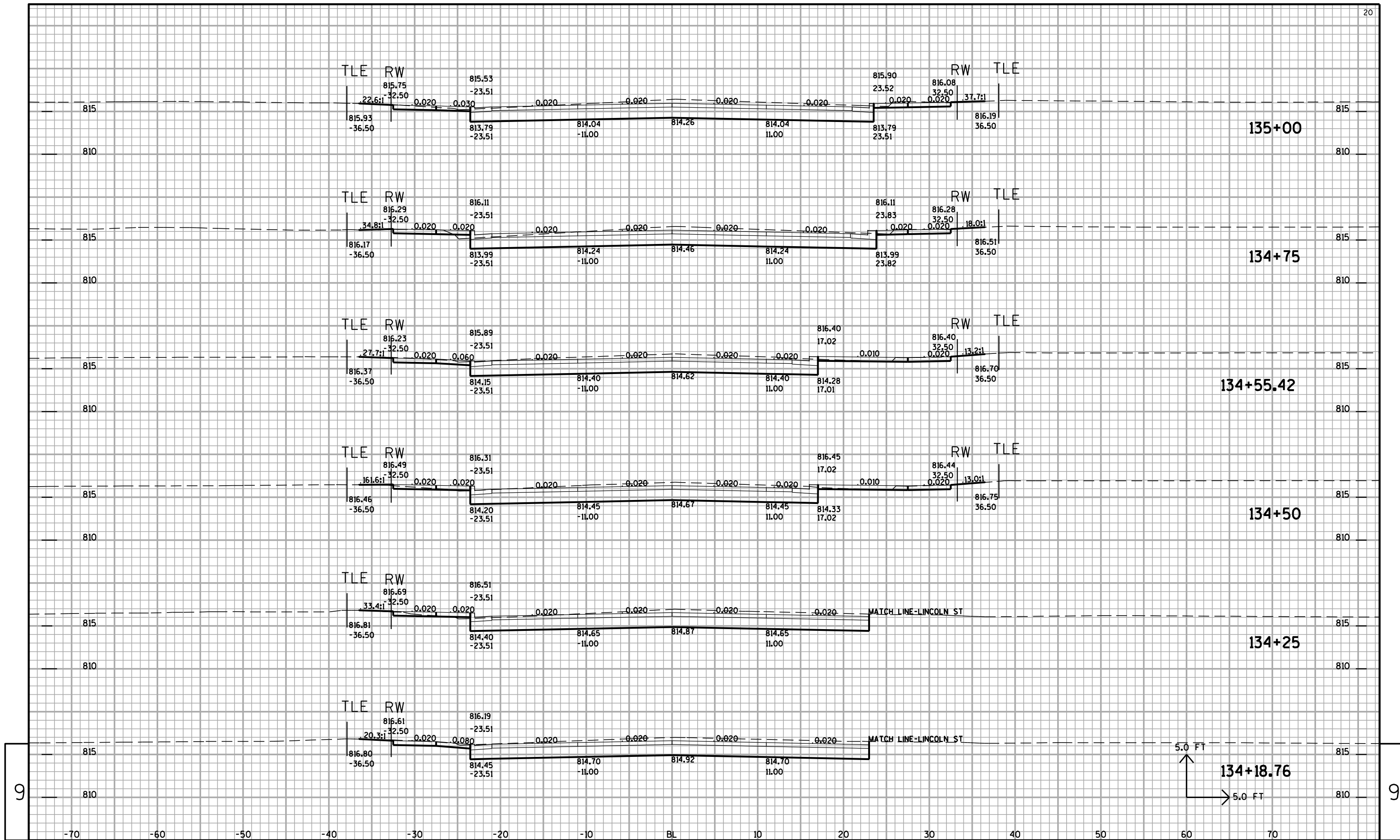


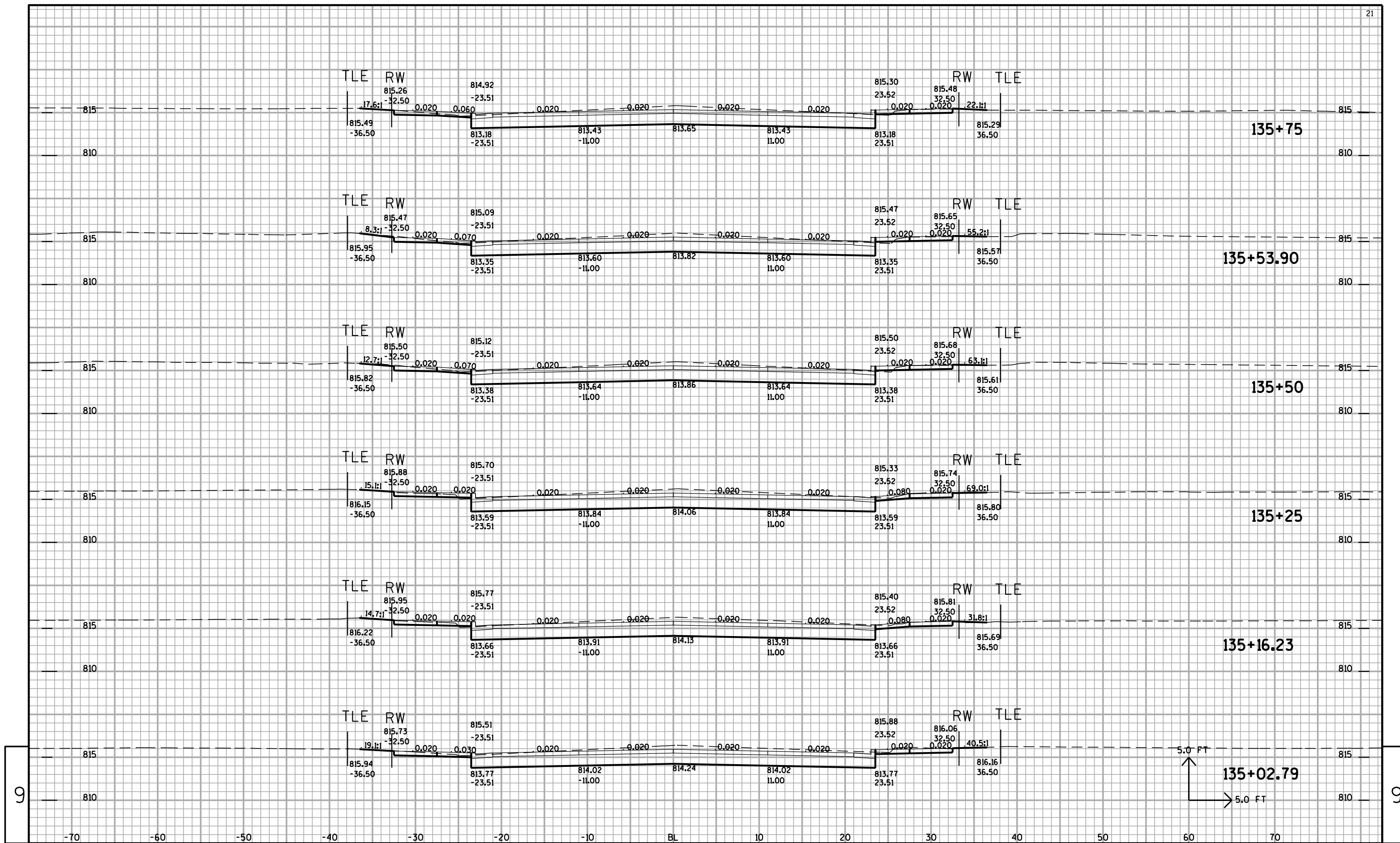


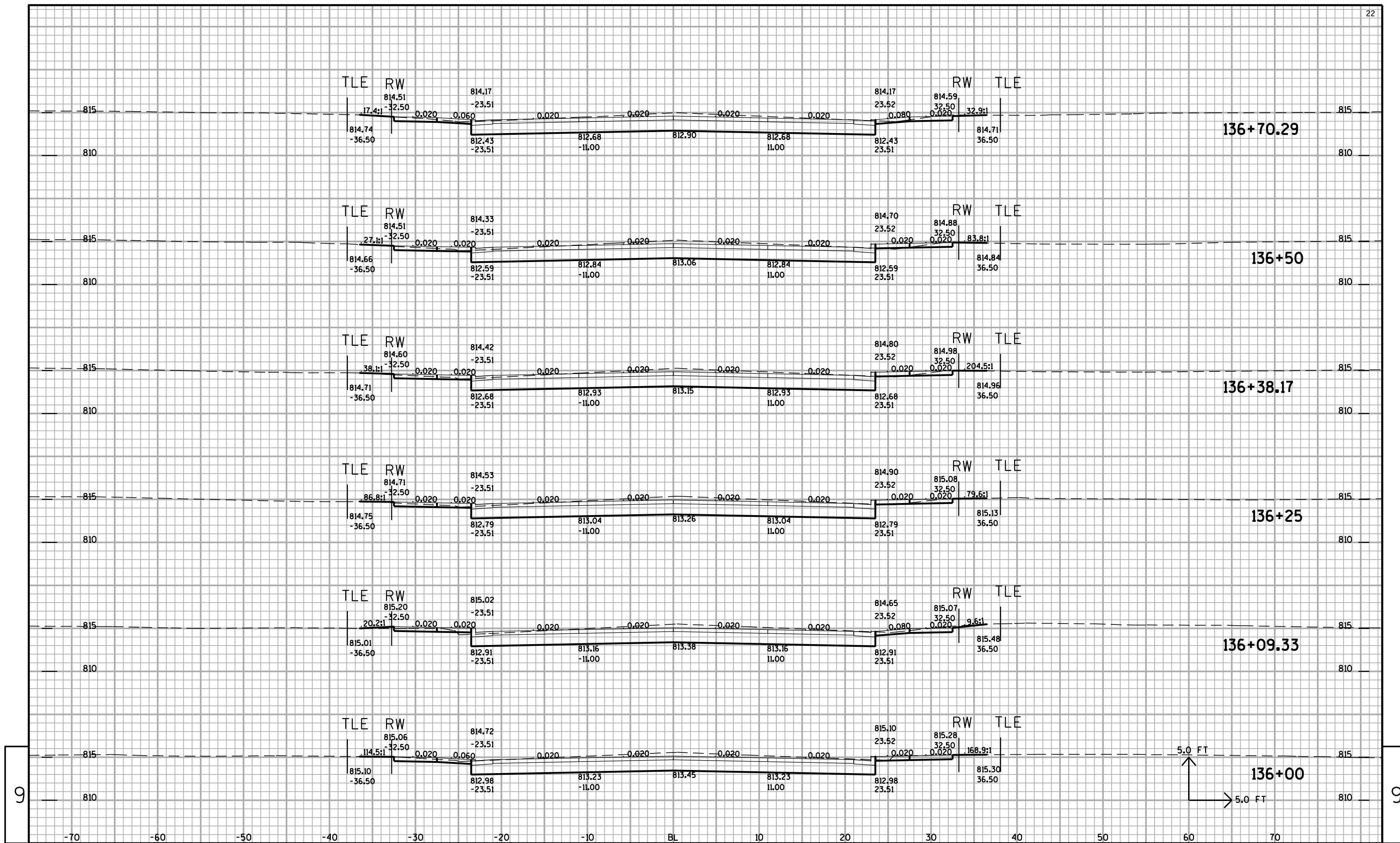


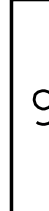






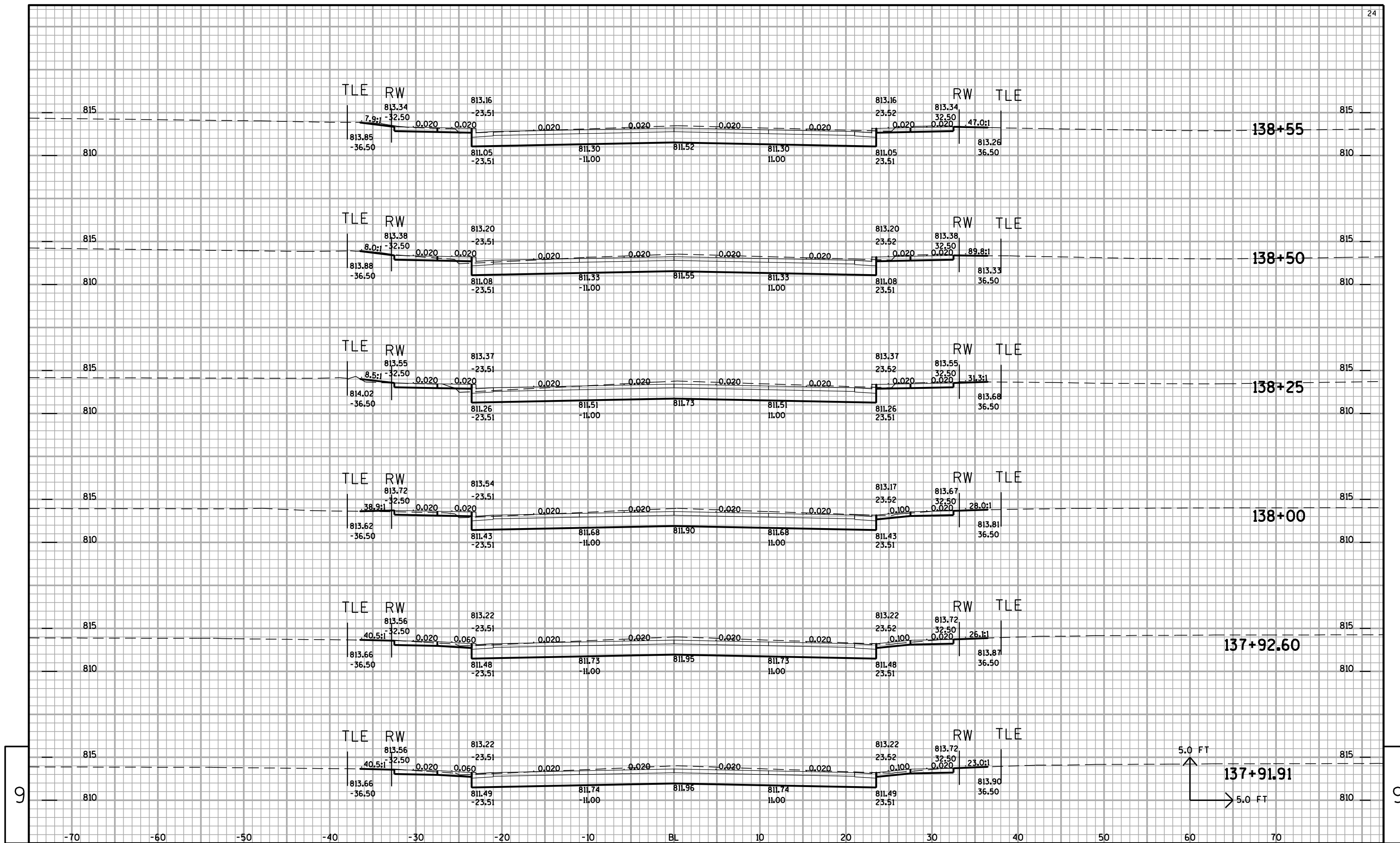


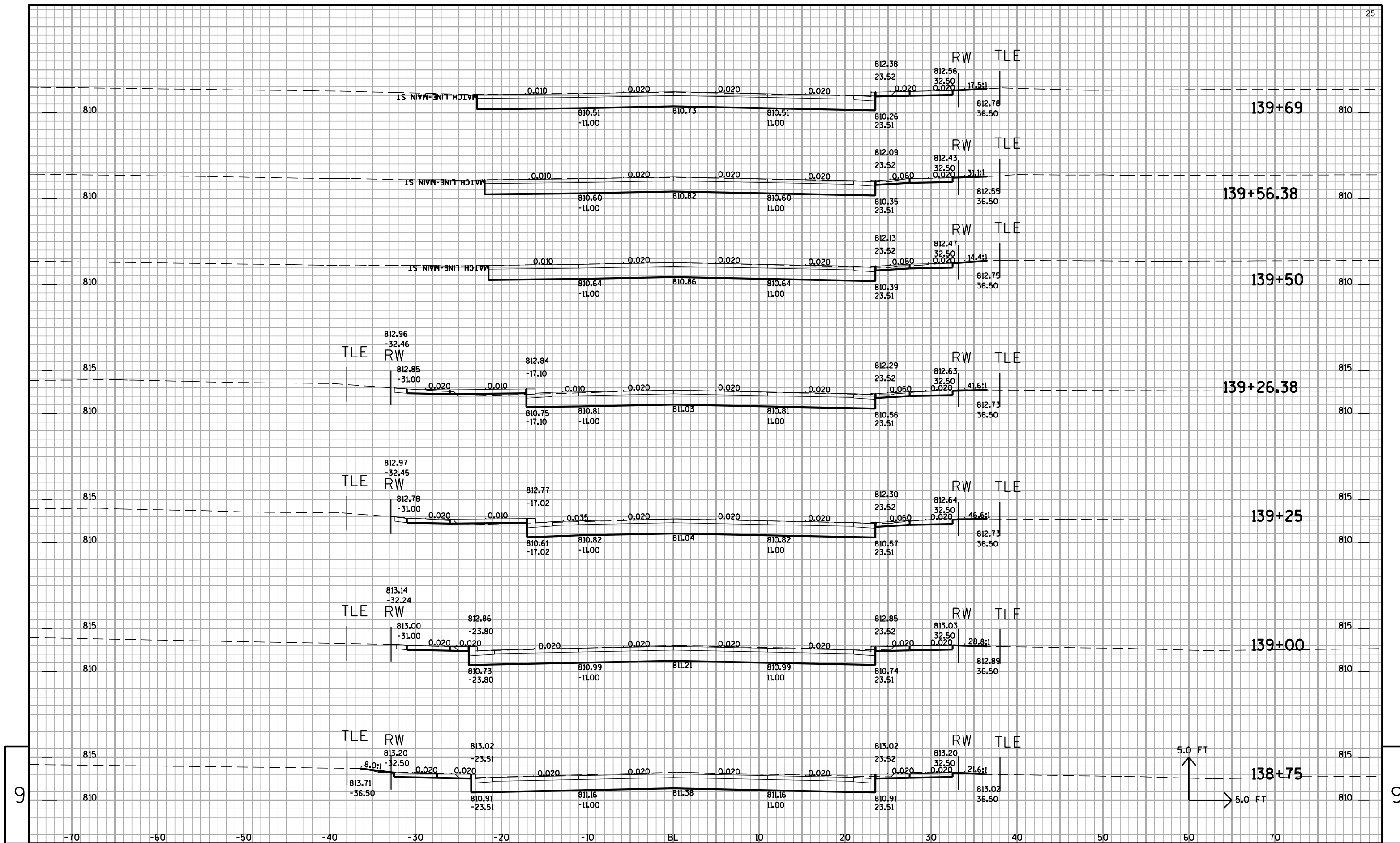


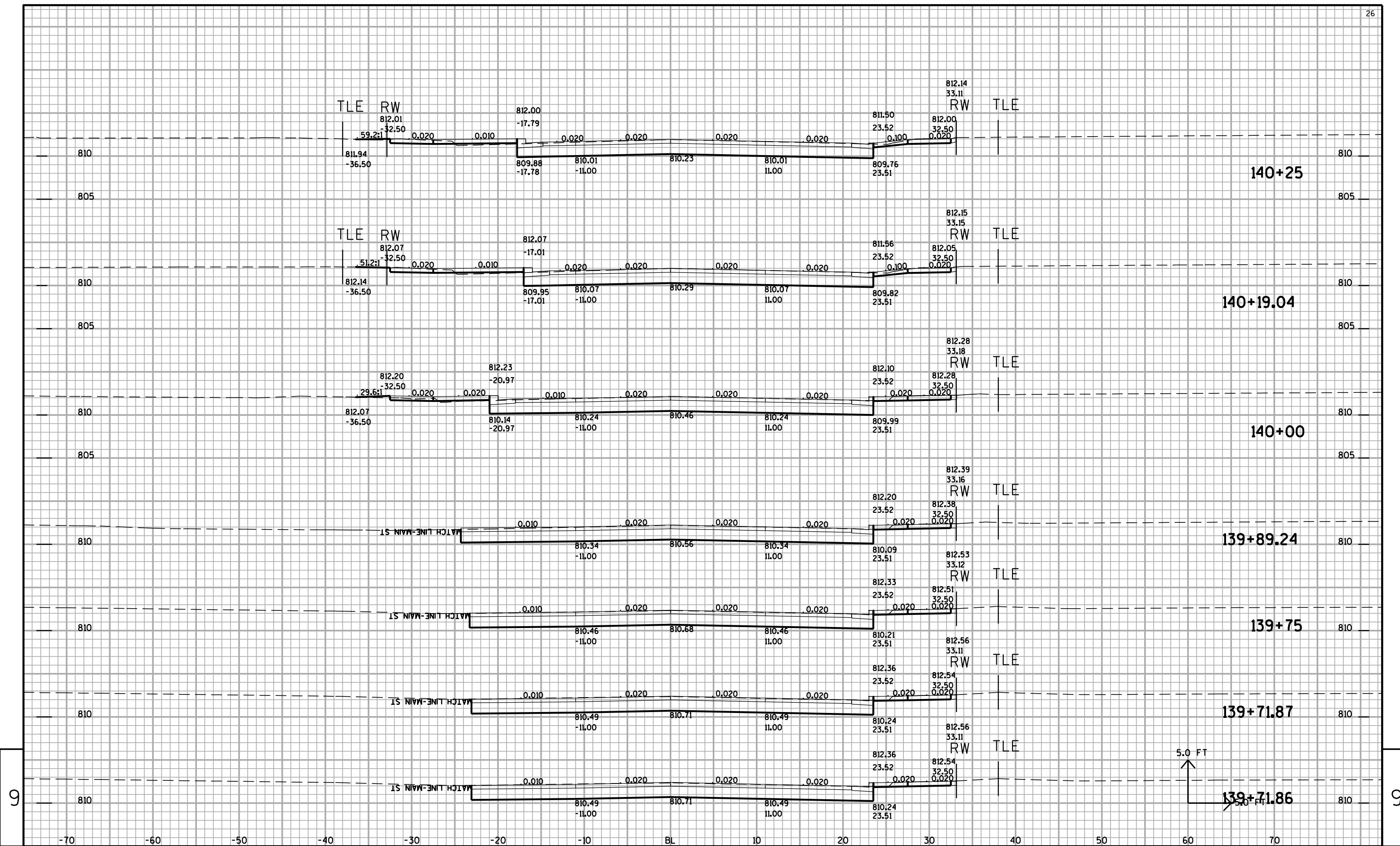


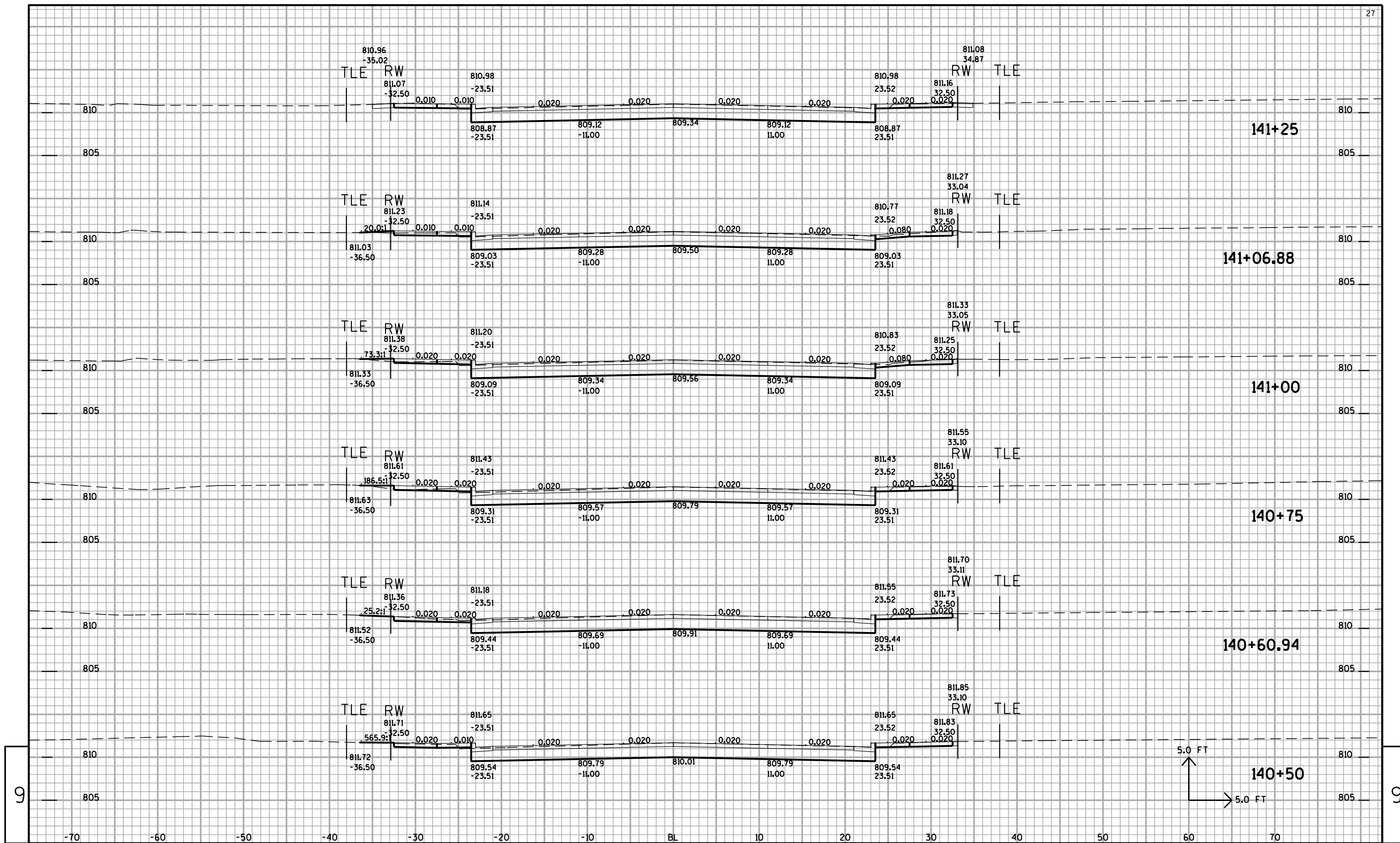
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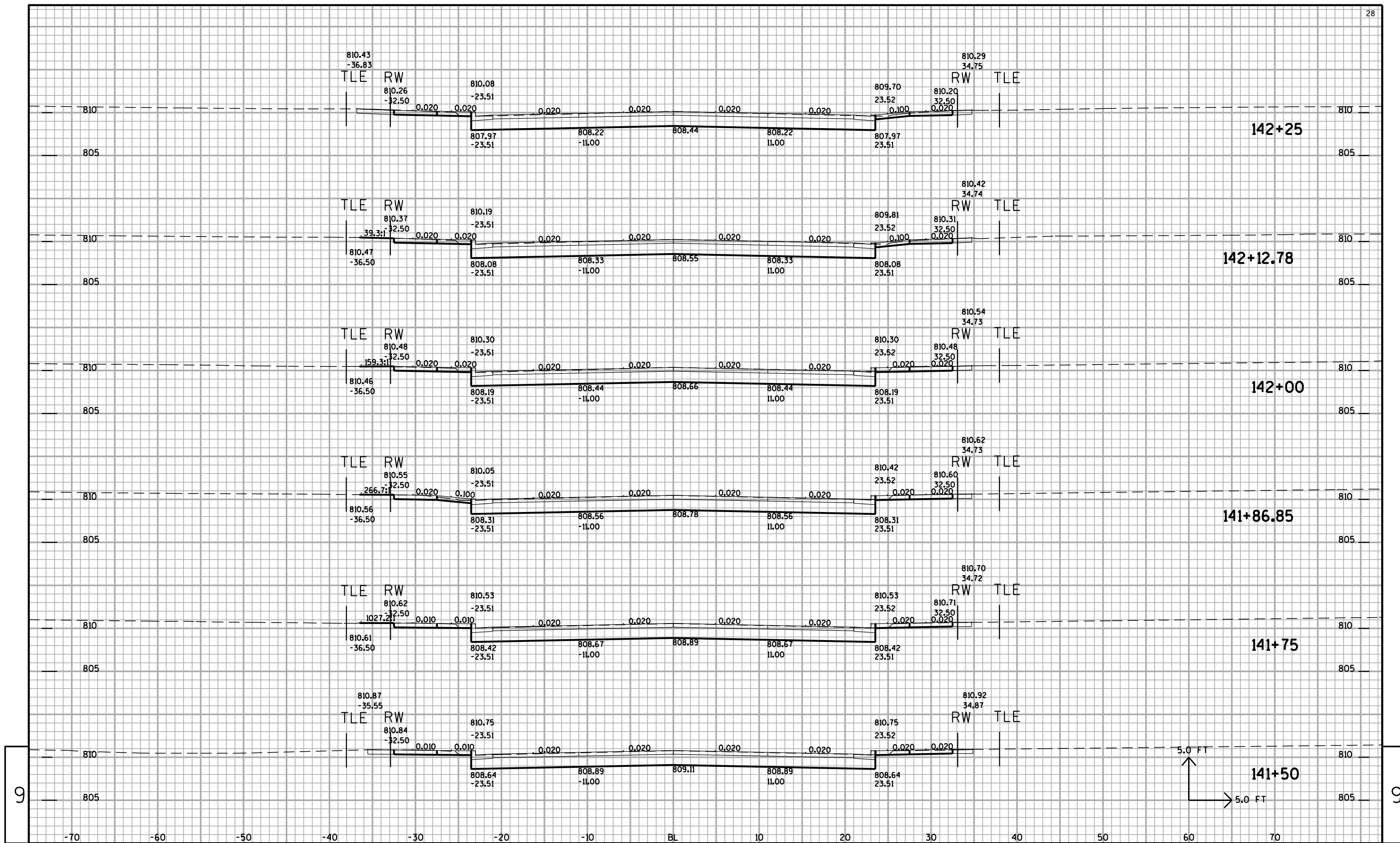
PLOT SCALE : 2:1

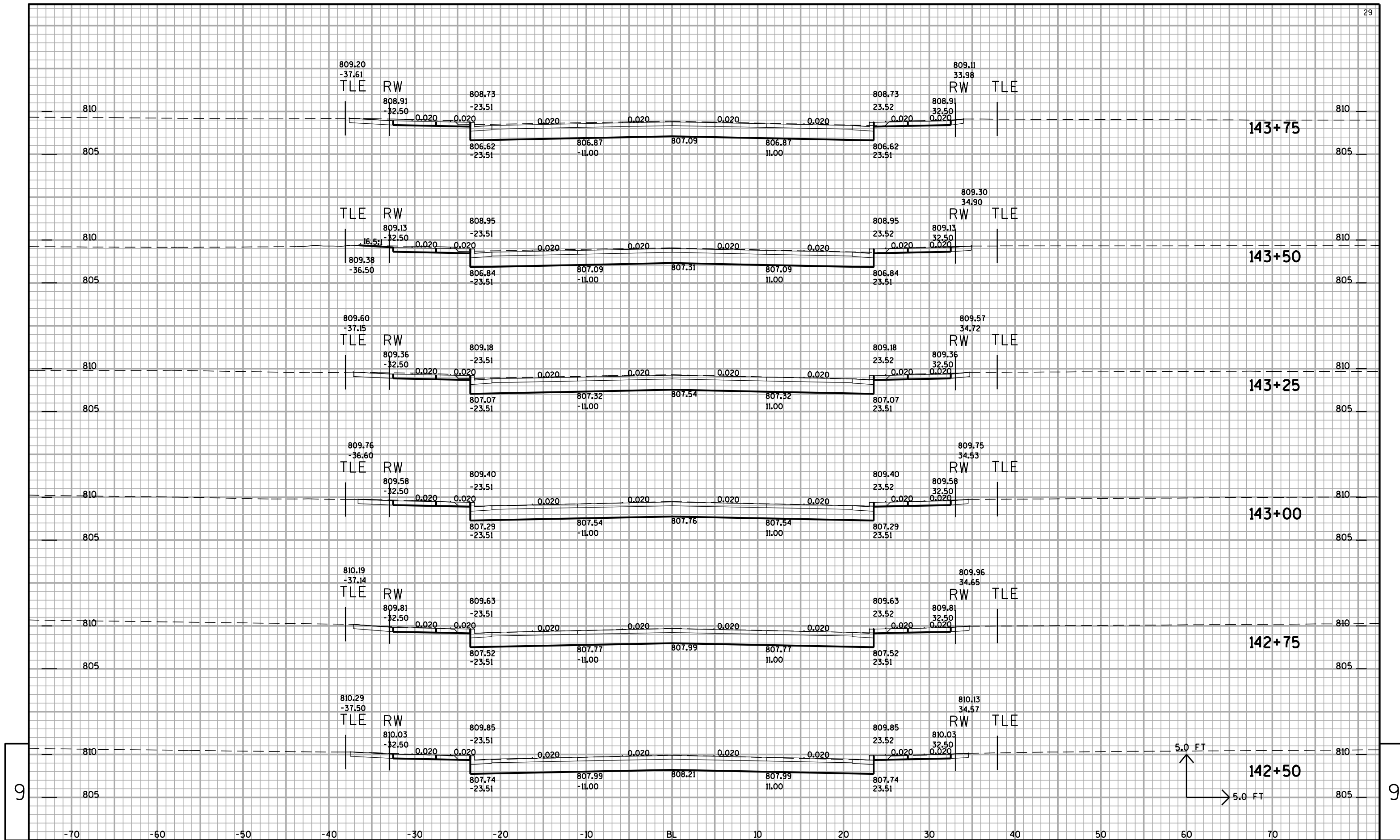


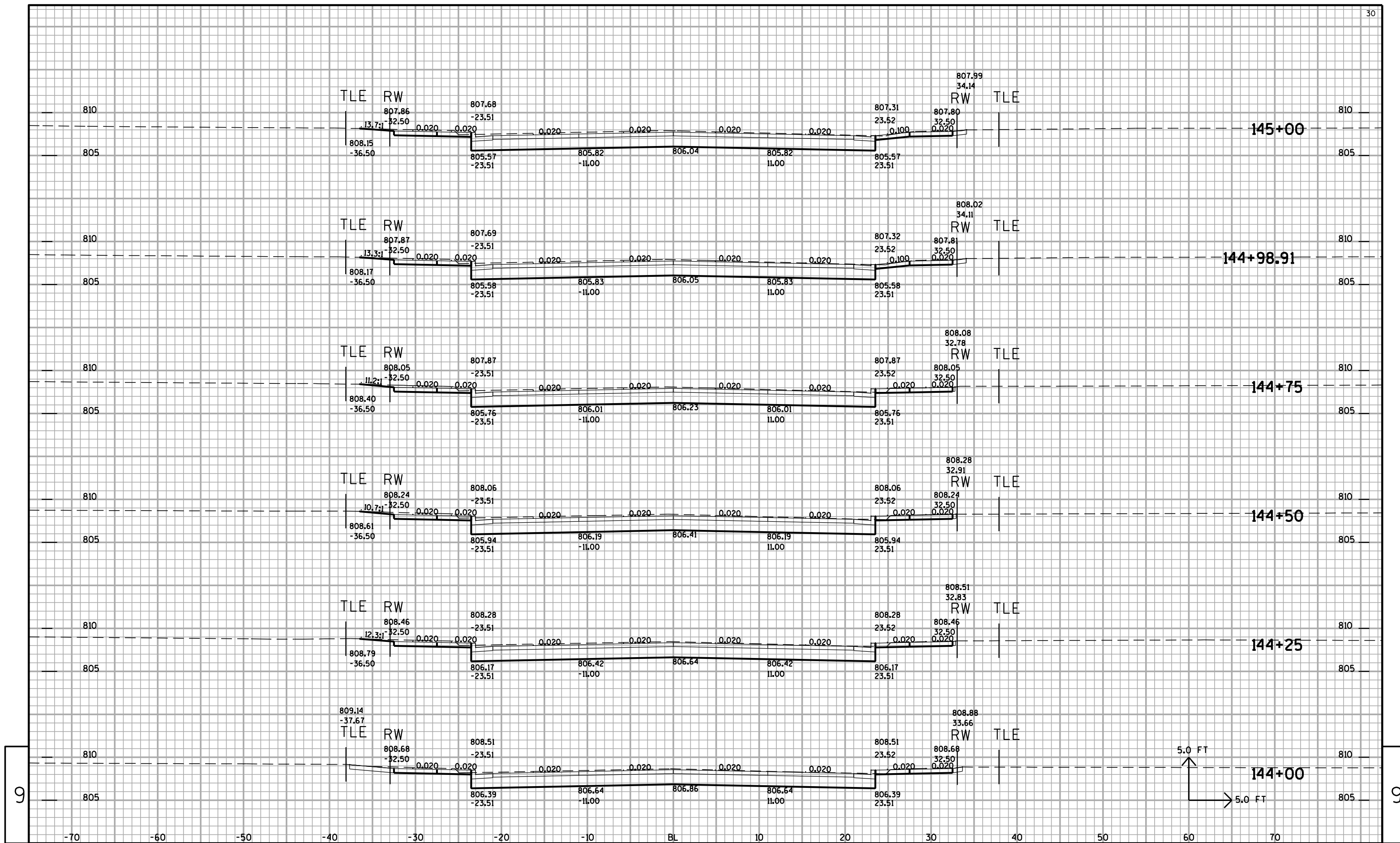


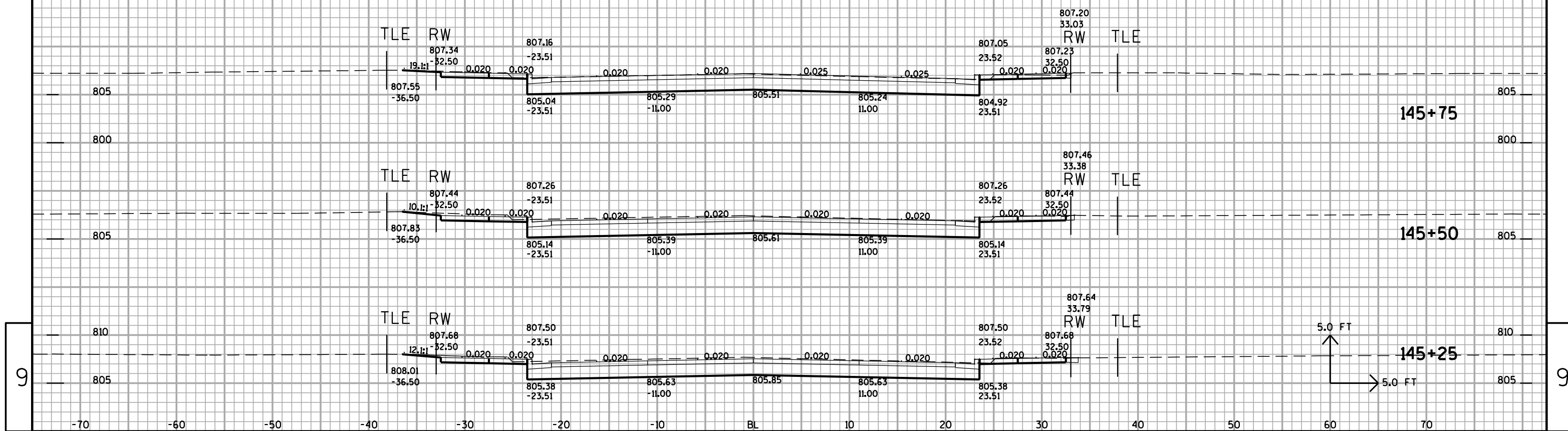


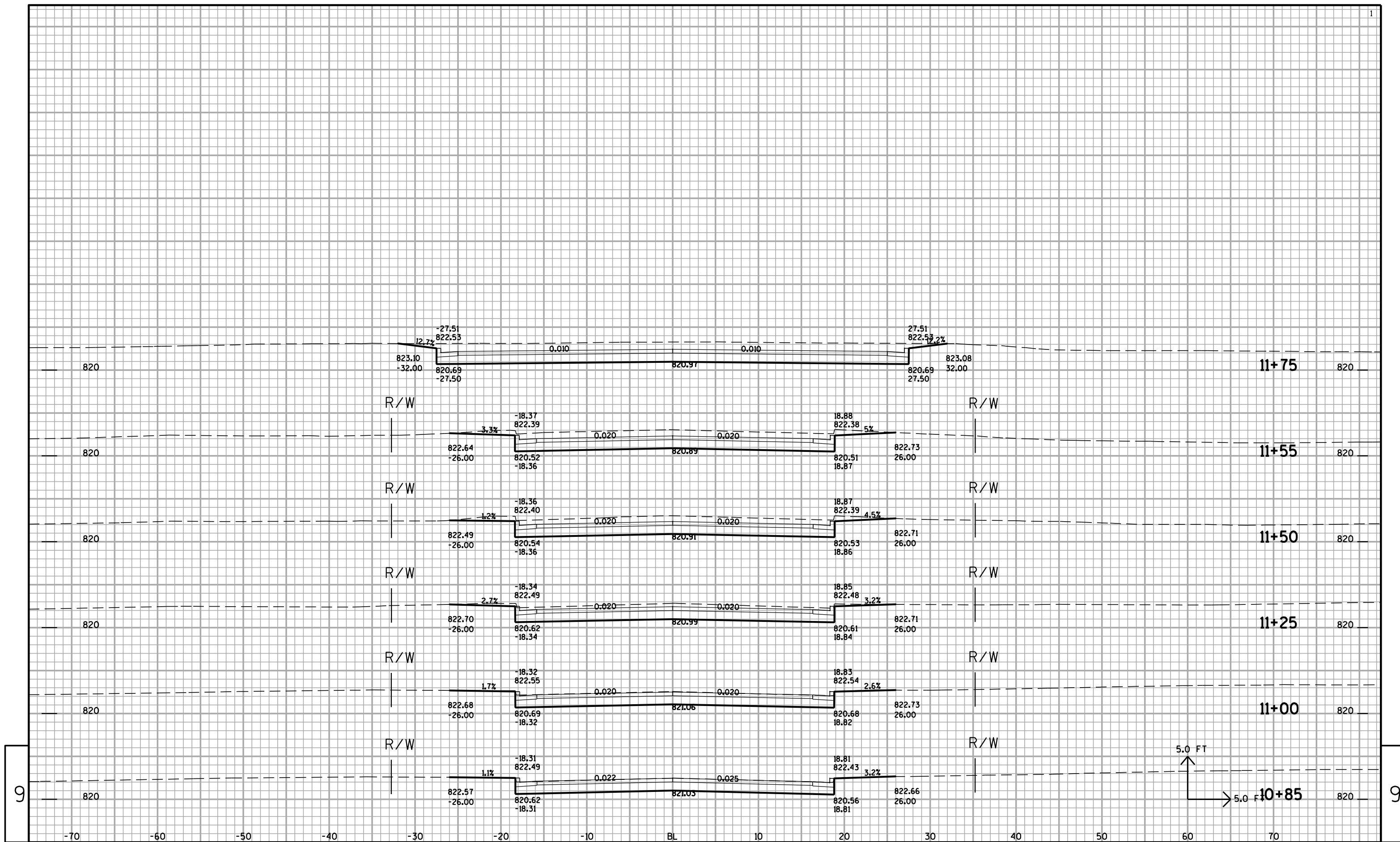


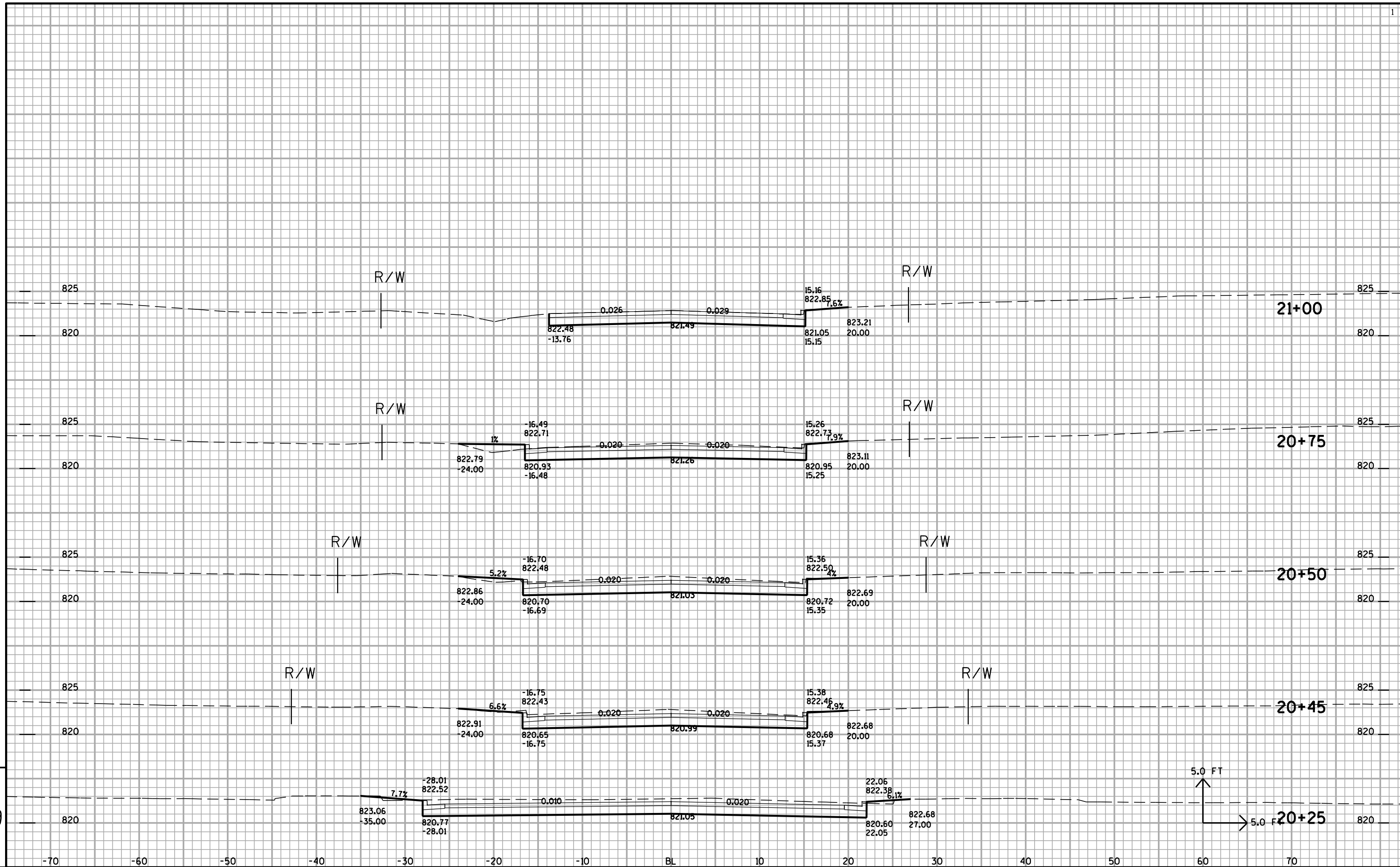


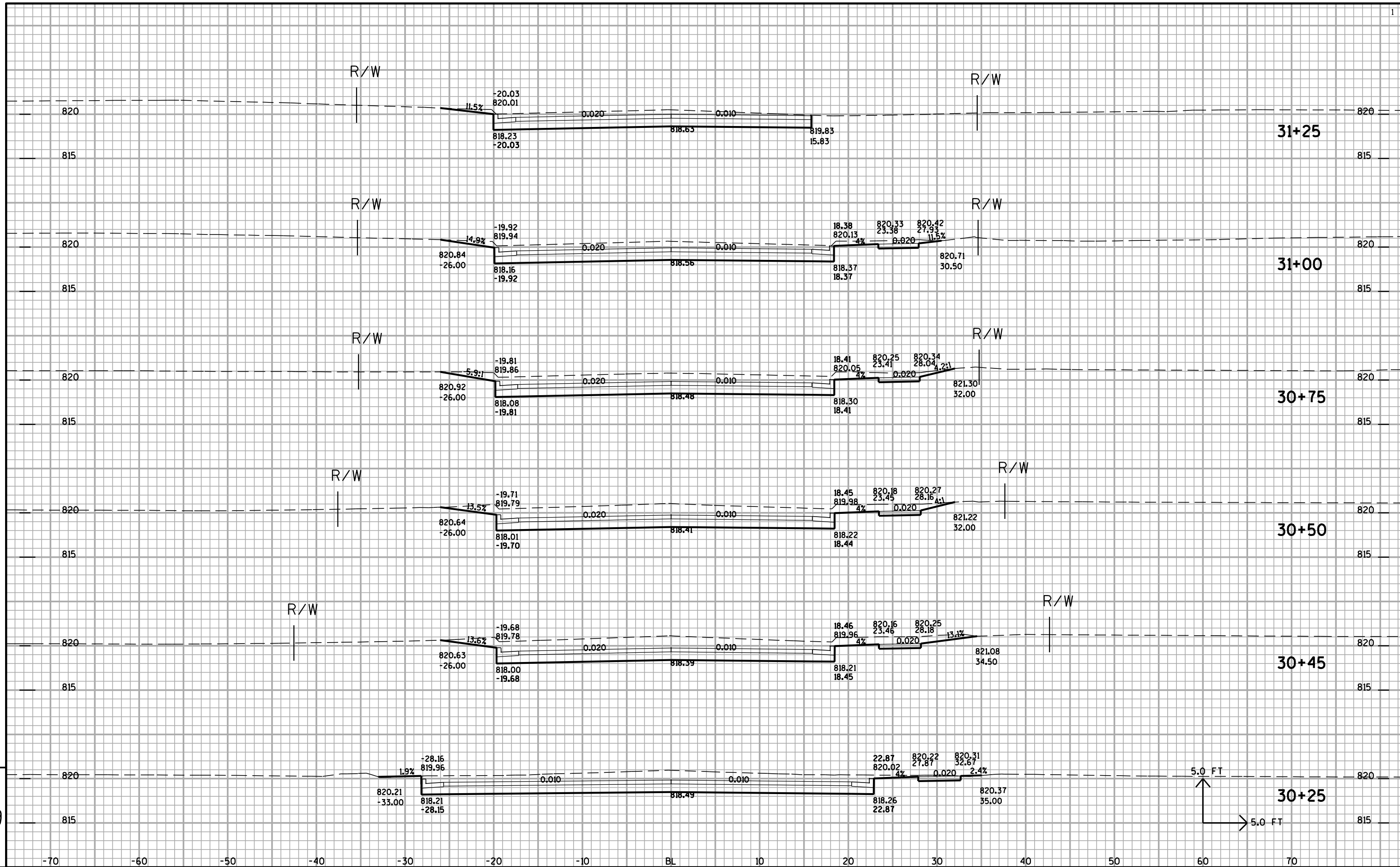




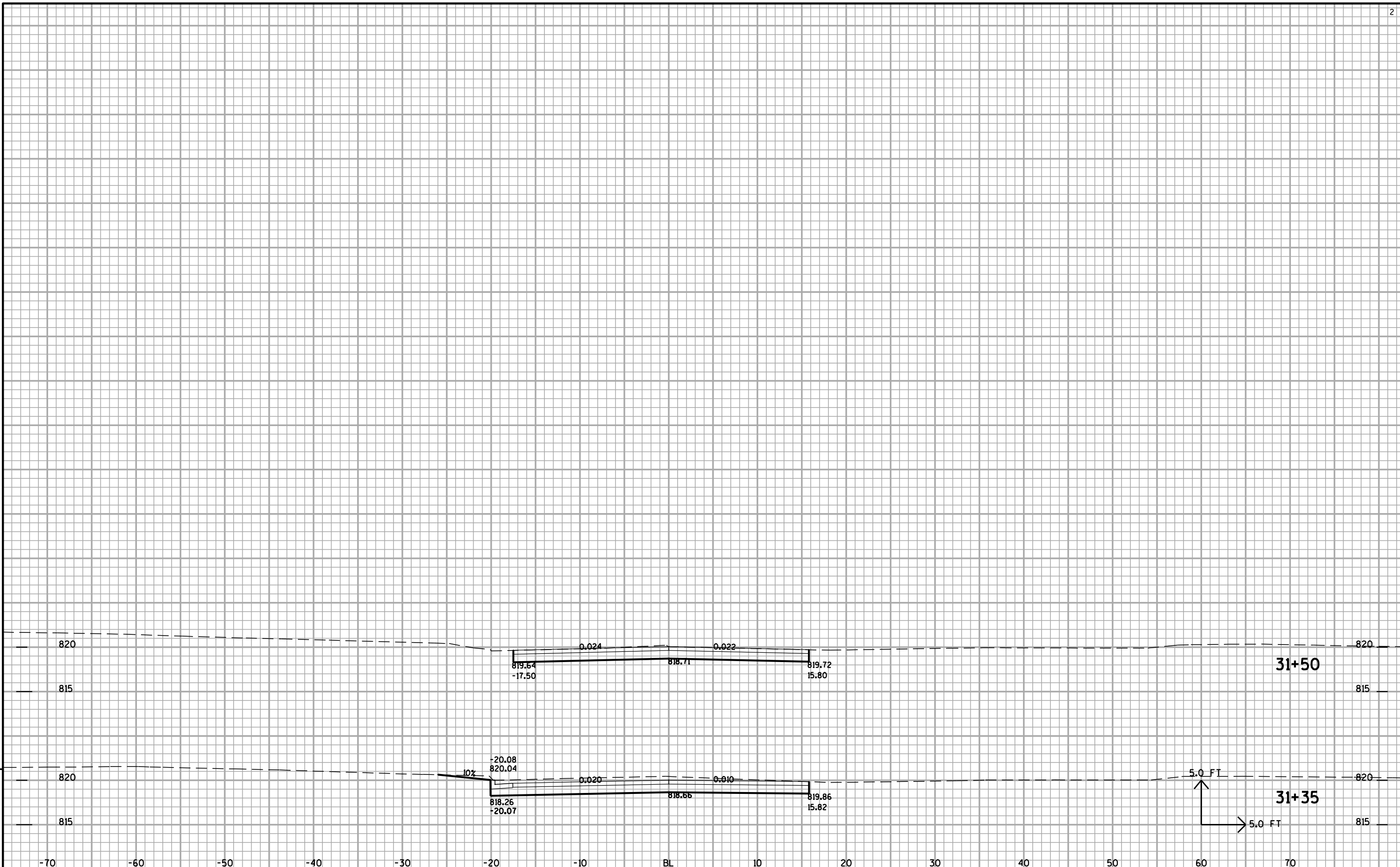




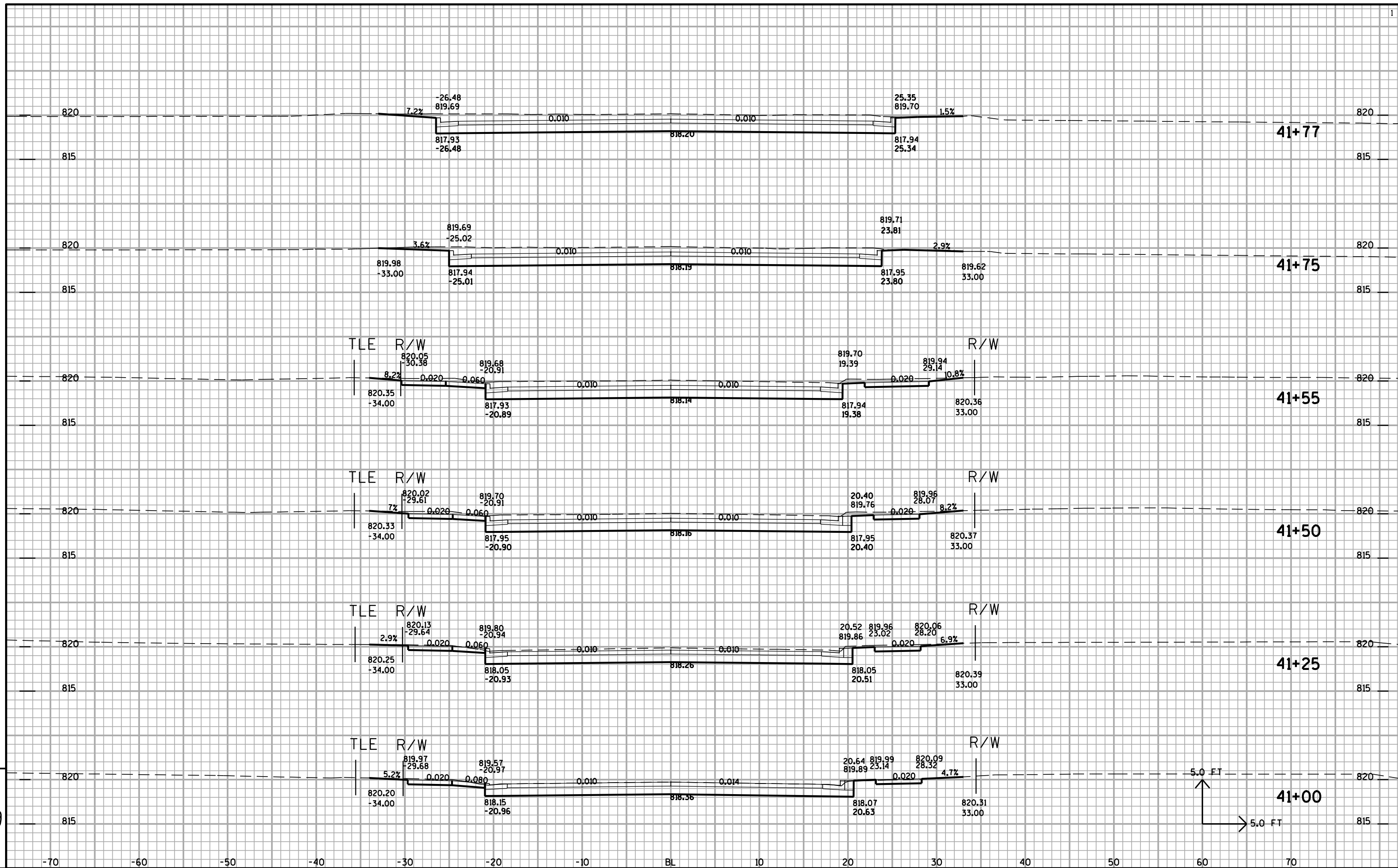




9



9



PROJECT NO: 9532-03-71

HWY: STH 160

COUNTY: BROWN

CROSS SECTIONS - JOHNSON

SHEET NO: 173

E

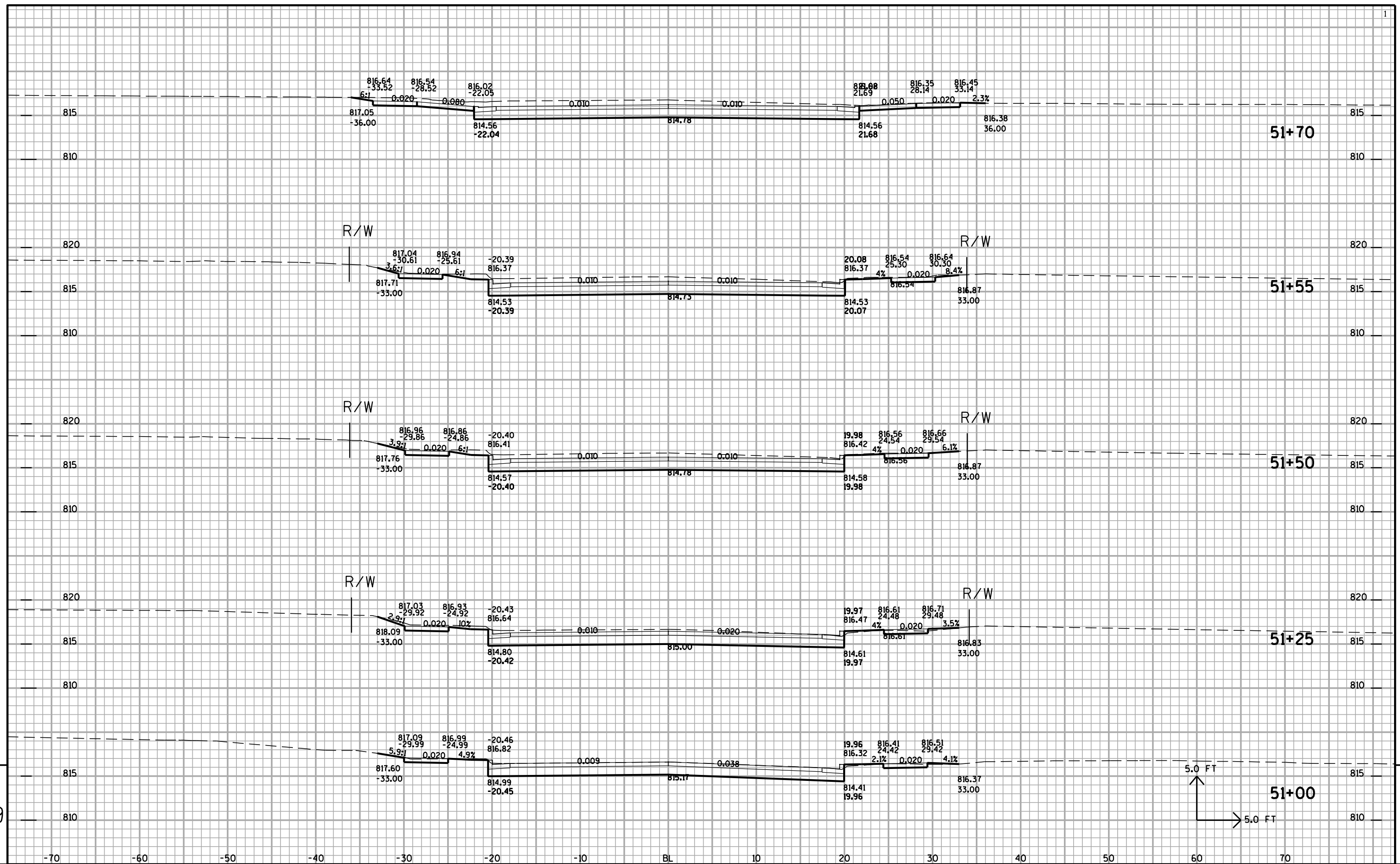
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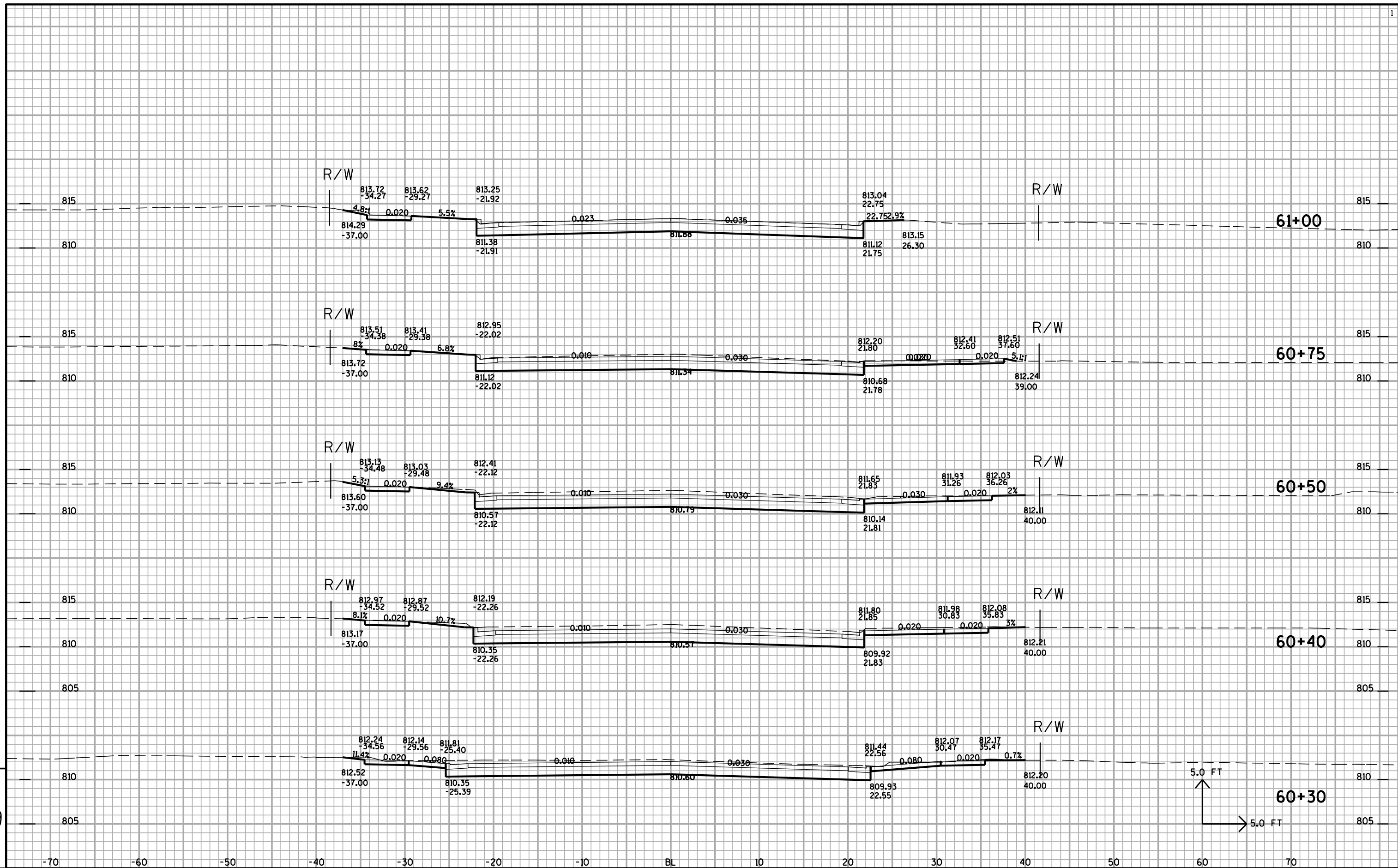
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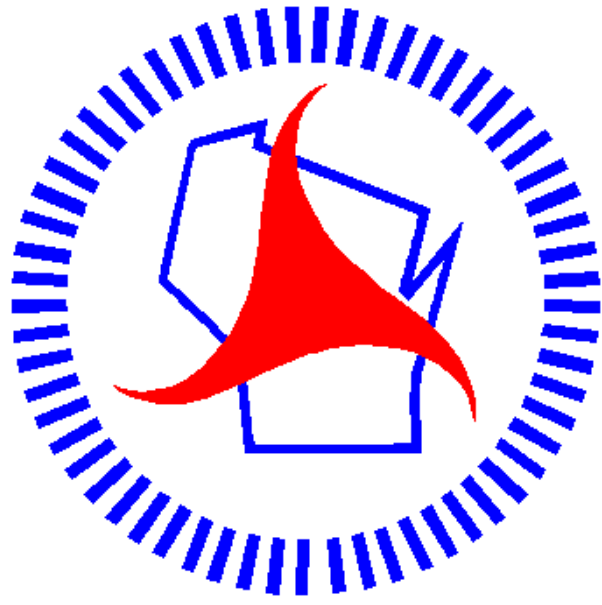
PLOT BY : dotets

PLOT NAME :

PLOT SCALE : 2:1







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