

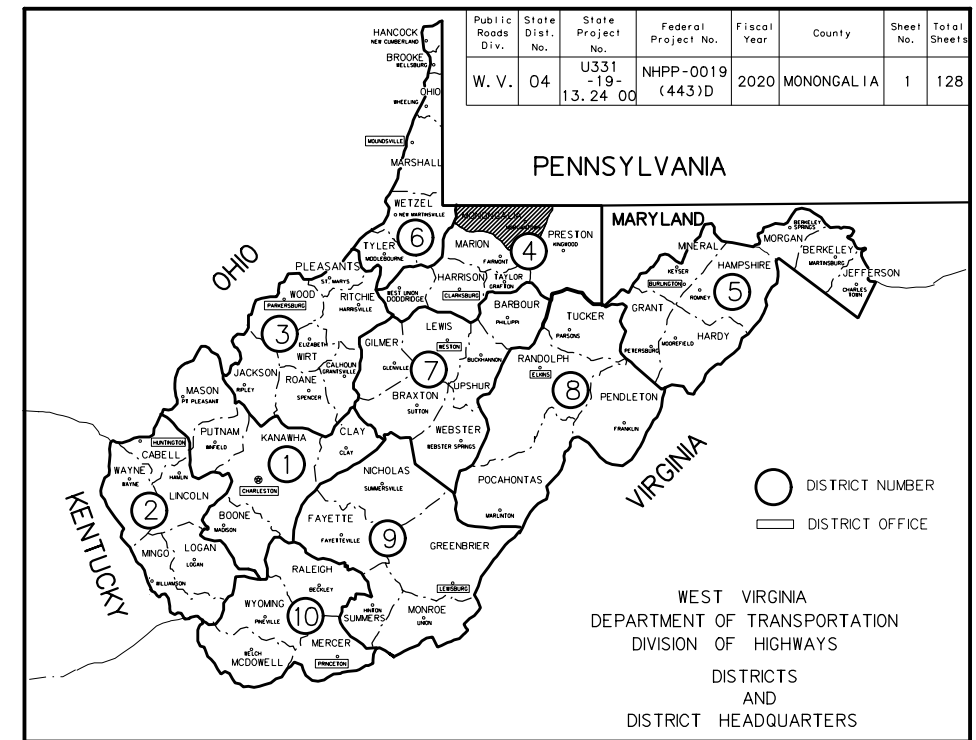
# WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANS FOR CONSTRUCTION

## OF STATE HIGHWAY

FEDERAL PROJECT NO. NHPP-0019(443)D  
STATE PROJECT NO. U331-19-13.24 00  
U.S. ROUTE NO. 19  
THIRD, FOURTH & FIFTH WARD DISTRICT  
MONONGALIA COUNTY

# BEECHURST AVENUE AT 6TH STREET

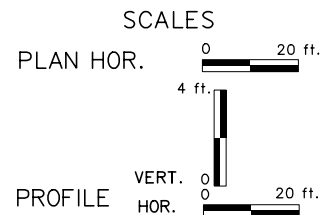
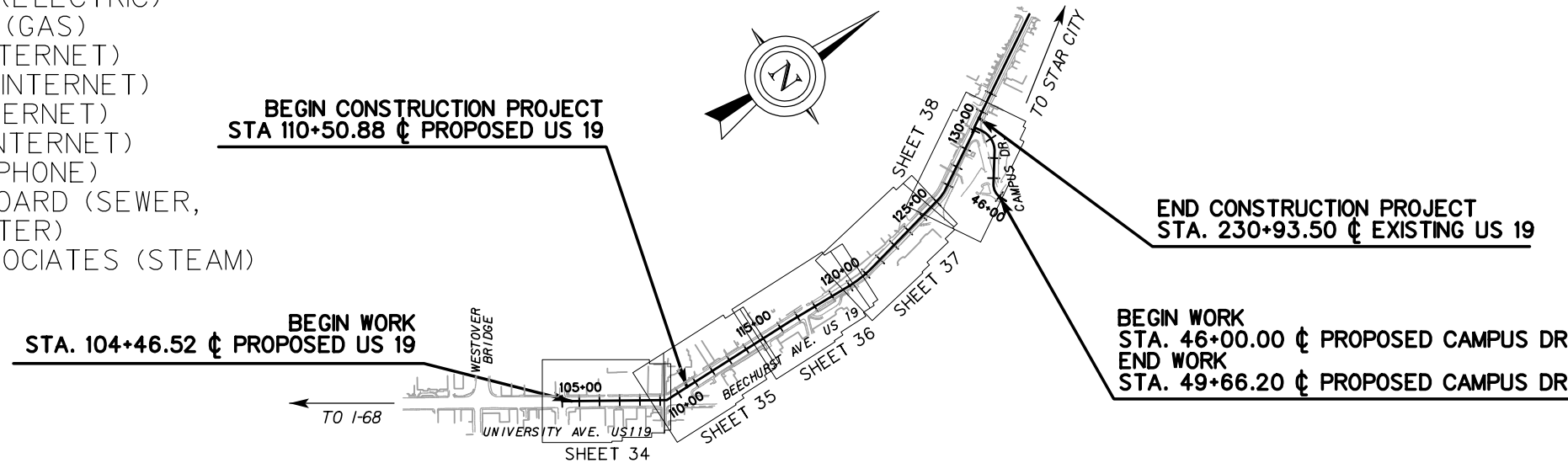
Station	Station	f.t.	mile(s)
ROADWAY 104+46.52	to 230+93.50	= 2,646.98	= 0.501
Total Project Length		= 2,646.98	= 0.501



TYPE OF CONSTRUCTION  
FINAL FIELD REVIEW PLANS

### UTILITIES

- COMCAST (CABLE)
- FIRSTENERGY CORP. (ELECTRIC)
- DOMINION HOPE (GAS)
- CITYNET, LLC (INTERNET)
- LUMOS NETWORKS (INTERNET)
- WINDSTREAM (INTERNET)
- ZAYO BANDWIDTH (INTERNET)
- FRONTIER (TELEPHONE)
- MORGANTOWN UTILITY BOARD (SEWER, STORM, & WATER)
- MORGANTOWN ENERGY ASSOCIATES (STEAM)



DESIGN DESIGNATION	DESCRIPTION
A . D . T (2018 -) 23,000 VPD	-----
A . D . T (2038 -) 26,500 VPD	-----
D . H . V (K+XX)	-----
D . . . . . XX / XX	-----
T . (DHV) . . . . . XX	-----
V . . . . . 25 mph	-----

CONVENTIONAL SIGNS	DESCRIPTION
-----	STATE LINE
-----	COUNTY LINE
-----	CORPORATION LINE
-----	PROPOSED R/W & EASEMENT LINE
-----	EXISTING R/W LINE
-----	PROPERTY LINE
-----	EXISTING FENCE
-----	PROPOSED FENCE
-----	EDGE OF STREAM
-----	PROPOSED GUARD RAIL
-----	EXISTING GUARD RAIL
-----	RAILROAD
-----	GAS LINE
-----	WATER LINE
-----	TELEPHONE LINE
-----	ELECTRIC LINE
●	TELEPHONE POLE
■	POWER POLE
■	COMBINED POWER AND TELEPHONE POLE
○	TREE
○	SHRUB
○	RIGHT OF WAY MARKER

NO.	DESCRIPTION
1	TITLE SHEET
2-4	TYPICAL SECTIONS
5-7	SUMMARY OF ESTIMATED QUANTITIES
8-11	QUANTITY TABLES
12	GENERAL NOTES
13	SURVEY REFERENCE POINTS
14	GEOMETRIC LAYOUT
15-16	INTERSECTION DETAILS
17-33	TEMPORARY TRAFFIC CONTROL PLANS
34-39	PLAN SHEETS
40-45	PROFILE SHEETS
46-48	DRAINAGE DETAIL SHEETS
49-53	UTILITY RELOCATION PLANS
54-63	EROSION AND SEDIMENT CONTROL PLANS
64-65	TRAFFIC SKETCH PLANS
66-75	SIGNING AND PAVEMENT MARKING PLANS
76-82	TRAFFIC SIGNAL PLANS
83-85	OWNERSHIP INDEX AND UTILITY INDEX
86-91	PROPERTY MAPS
92-128	CROSS SECTIONS

LAYOUT SCALE

REVISION NUMBER	SHEET NUMBER	REVISIONS	DATE	BY

PLANS PREPARED BY  
**Stantec** STANTEC CONSULTING SERVICES INC.  
FAIRMONT, WV CHARLESTON, WV

PROJECT ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

RECOMMENDED \_\_\_\_\_ PROJECT MANAGER \_\_\_\_\_

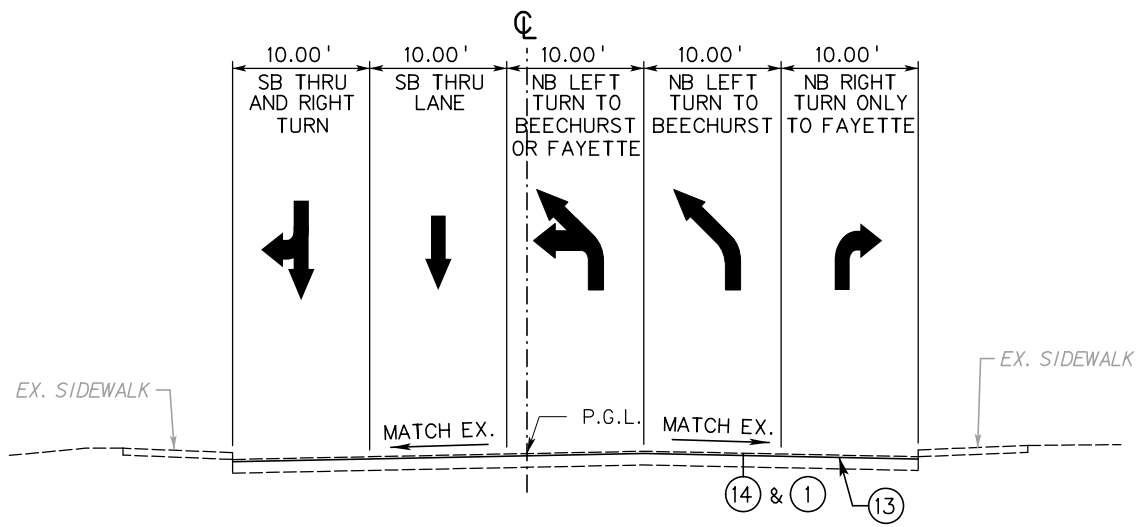
RECOMMENDED FOR APPROVAL \_\_\_\_\_ STATE HIGHWAY ENGINEER \_\_\_\_\_

APPROVED \_\_\_\_\_ COMMISSIONER OF HIGHWAYS \_\_\_\_\_

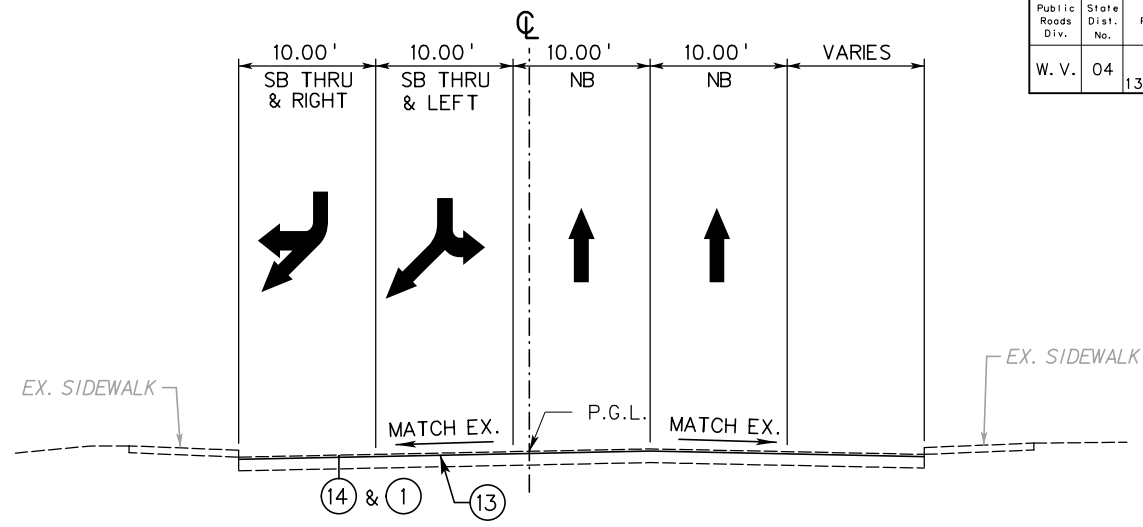
I HEREBY CERTIFY THAT THIS IS A CORRECT COPY OF THE PLANS OF PROJECT U331-19-13.24.00, NHPP-0019.(443)D

EXECUTIVE SECRETARY \_\_\_\_\_  
DAY OF \_\_\_\_\_, 20\_\_\_\_\_

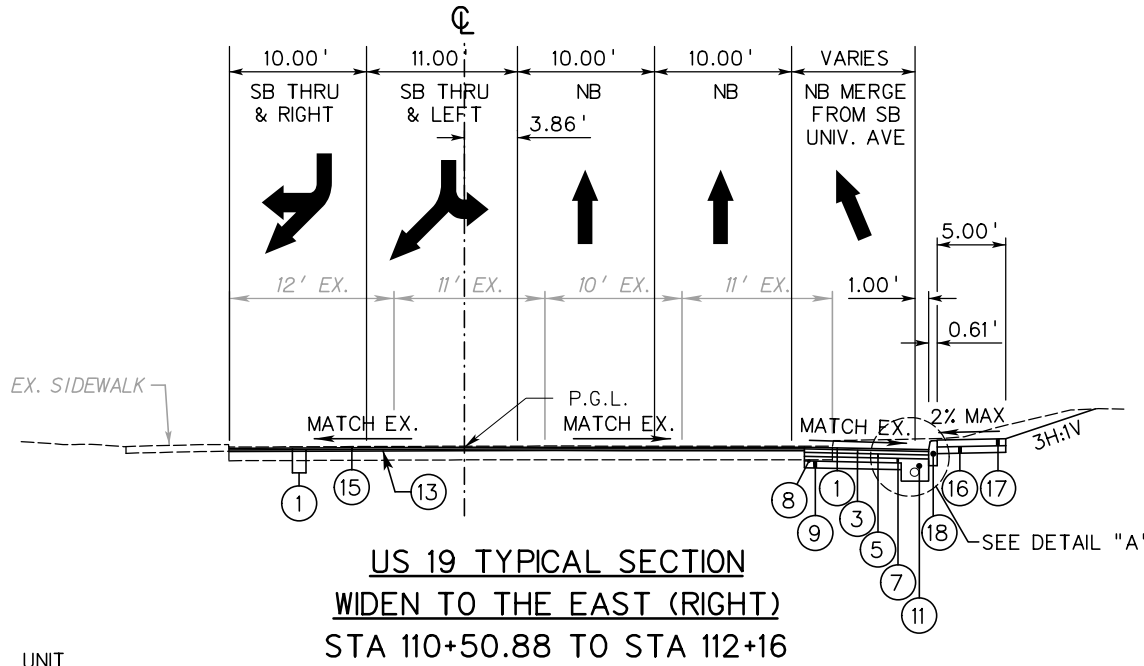
Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	2	128



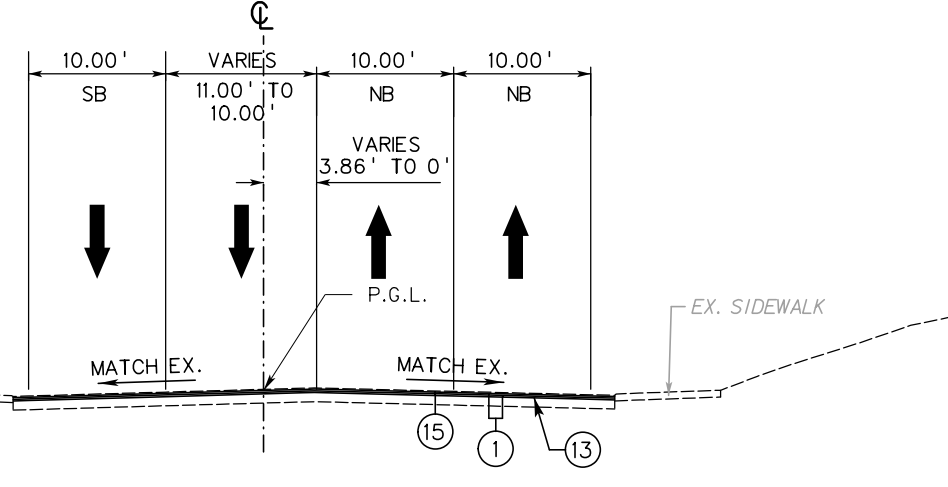
**US 19 (UNIVERSITY AVE) TYPICAL SECTION  
RESURFACING AND RESTRIPING  
STA 104+46.52 TO STA 109+00**



**US 19 (UNIVERSITY & BEECHURST INTERSEC) TYPICAL SECTION  
RESURFACING AND RESTRIPING  
STA 109+00 TO STA 110+50.88**



**US 19 TYPICAL SECTION  
WIDEN TO THE EAST (RIGHT)  
STA 110+50.88 TO STA 112+16**



**US 19 TYPICAL SECTION  
RESURFACING AND RESTRIPING  
STA 112+16 TO STA 117+80**

ITEM*	LEGEND DESCRIPTION	DEPTH	UNIT
①	402001-045 SUPERPAVE ASPHALT SKID PVT, SG, TY 12.5	1.5"	TN
②	402001-045 SUPERPAVE ASPHALT SKID PVT, SG, TY 12.5	1.75"	TN
③	401001-040 SUPERPAVE ASPHALT BASE COURSE, SG, TY 19	3"	TN
④	401001-040 SUPERPAVE ASPHALT BASE COURSE, SG, TY 19	2.25"	TN
⑤	401001-042 SUPERPAVE ASPHALT BASE COURSE, SG, TY 25	3.5"	TN
⑥	401001-042 SUPERPAVE ASPHALT BASE COURSE, SG, TY 25	3"	TN
⑦	311006-001 OPEN GRADED FREE DRAINING BASE COURSE	4"	CY
⑧	207034-000 FABRIC FOR SEPARATION	—	SY
⑨	207002-000 SUBGRADE	6"	CY
⑩	307001-000 AGGREGATE BASE COURSE, CLASS 1	4"	CY
⑪	606029-001 FREE DRAINING BASE TRENCH	—	LF
⑫	606030-001 OUTLET PIPE, 6 INCH	—	LF
⑬	408002-001 ASPHALT MATERIAL	—	GA
⑭	415005-001 STANDARD MILLING	1.5"	SY
⑮	415005-001 STANDARD MILLING	4"	SY
⑯	609002-001 BED COURSE MATERIAL	4"	CY
⑰	609001-001 CONCRETE SIDEWALK	4"	SY
⑱	610001-001 PLAIN CONCRETE CURBING, TYPE I	—	LF
⑲	610001-004 PLAIN CONCRETE CURBING, TYPE IV	—	LF

SCALE : NONE

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

DESIGNED	ALT	DATE	09/2020
DRAWN	LNR	DATE	09/2020
CHECKED	JDV	DATE	09/2020
CHECKED			

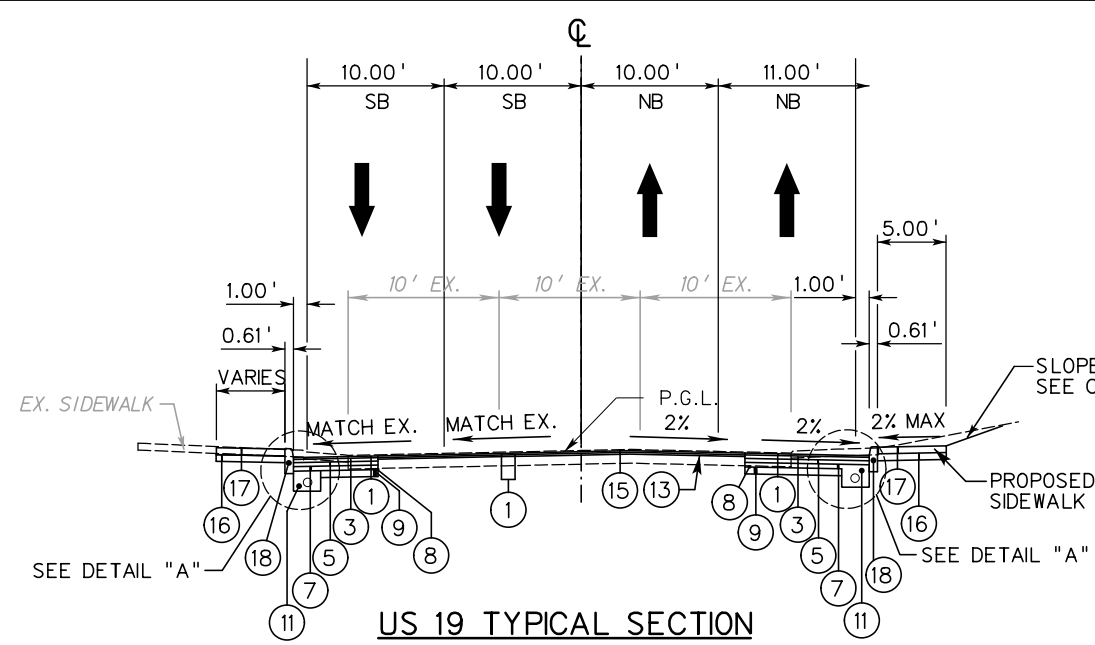


THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

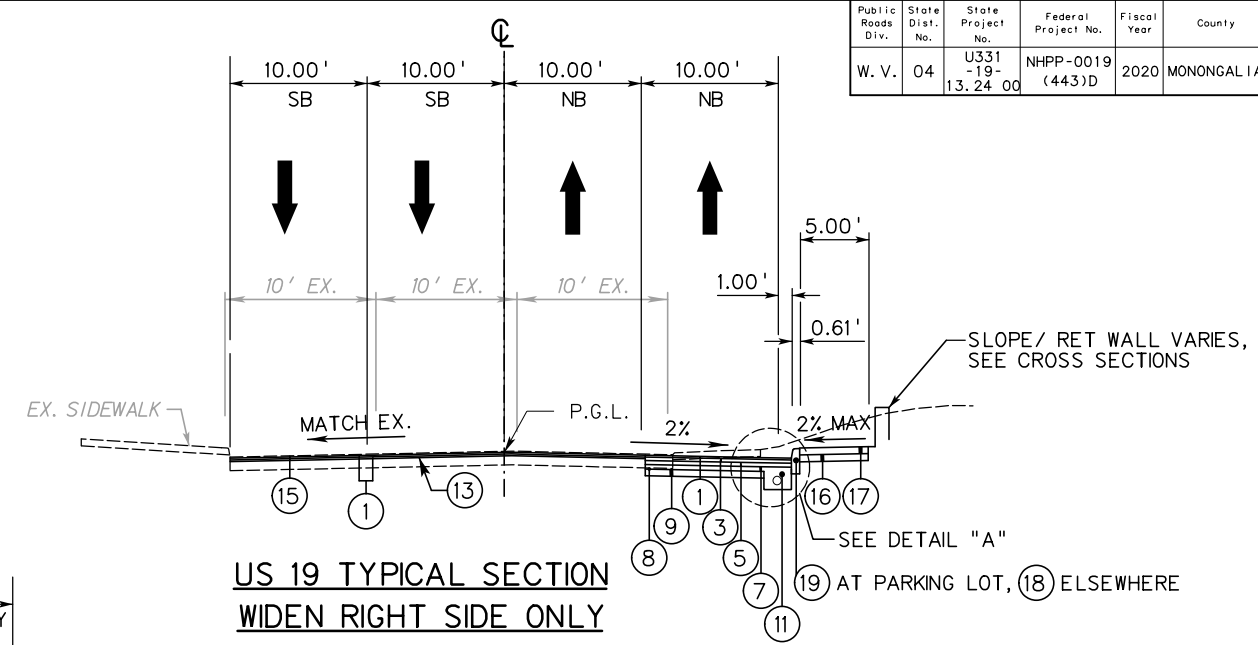
**TYPICAL SECTIONS**

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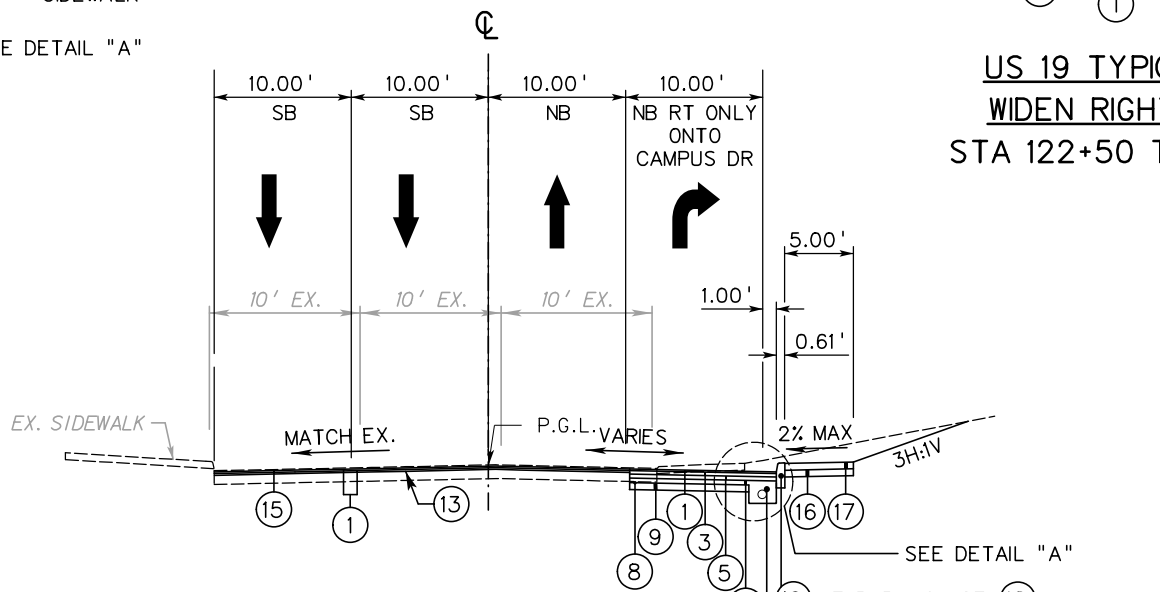
Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	3	128



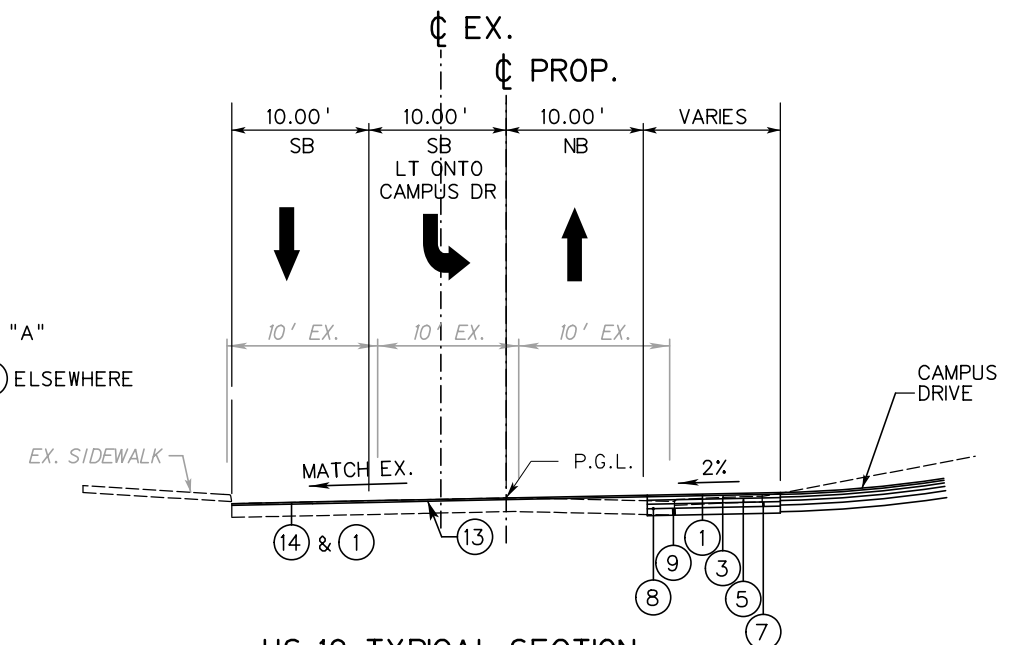
**US 19 TYPICAL SECTION**  
**WIDEN BOTH SIDES**  
 STA 117+80 TO STA 122+50



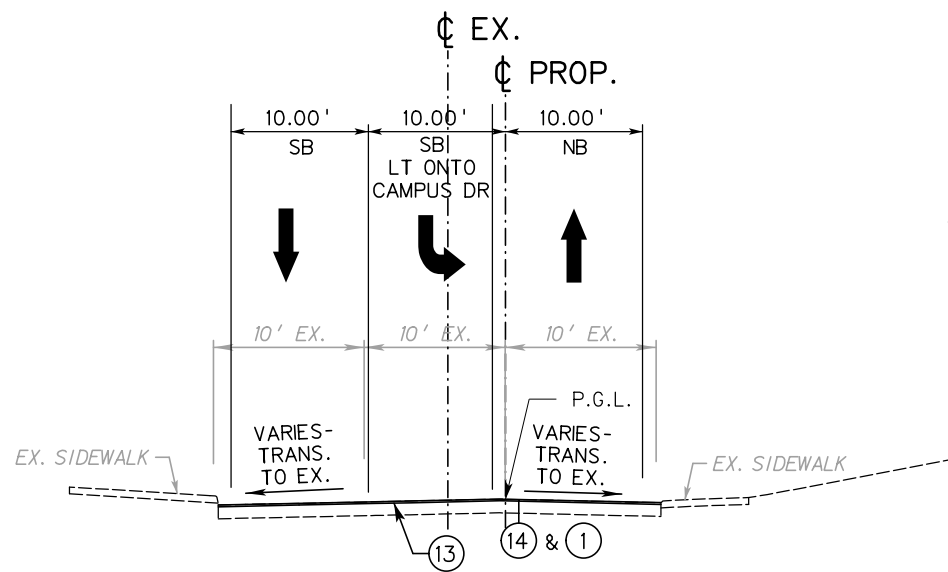
**US 19 TYPICAL SECTION**  
**WIDEN RIGHT SIDE ONLY**  
 STA 122+50 TO STA 128+60



**US 19 TYPICAL SECTION**  
**WIDEN RIGHT SIDE ONLY**  
 STA 128+60 TO STA 129+50.75



**US 19 TYPICAL SECTION**  
**WIDEN RIGHT SIDE ONLY**  
 STA 129+50.75 TO STA 230+50



**US 19 TYPICAL SECTION**  
**RESURFACING AND RESTRIPING**  
 STA 230+50 TO STA 230+93.50

SCALE : NONE

ITEM*	DESCRIPTION	DEPTH	UNIT
①	402001-045 SUPERPAVE ASPHALT SKID PVT, SG, TY 12.5	1.5"	TN
②	402001-045 SUPERPAVE ASPHALT SKID PVT, SG, TY 12.5	1.75"	TN
③	401001-040 SUPERPAVE ASPHALT BASE COURSE, SG, TY 19	3"	TN
④	401001-040 SUPERPAVE ASPHALT BASE COURSE, SG, TY 19	2.25"	TN
⑤	401001-042 SUPERPAVE ASPHALT BASE COURSE, SG, TY 25	3.5"	TN
⑥	401001-042 SUPERPAVE ASPHALT BASE COURSE, SG, TY 25	3"	TN
⑦	311006-001 OPEN GRADED FREE DRAINING BASE COURSE	4"	CY
⑧	207034-000 FABRIC FOR SEPARATION	—	SY
⑨	207002-000 SUBGRADE	6"	CY
⑩	307001-000 AGGREGATE BASE COURSE, CLASS 1	4"	CY
⑪	606029-001 FREE DRAINING BASE TRENCH	—	LF
⑫	606030-001 OUTLET PIPE, 6 INCH	—	LF
⑬	408002-001 ASPHALT MATERIAL	—	GA
⑭	415005-001 STANDARD MILLING	1.5"	SY
⑮	415005-001 STANDARD MILLING	4"	SY
⑯	609002-001 BED COURSE MATERIAL	4"	CY
⑰	609001-001 CONCRETE SIDEWALK	4"	SY
⑱	610001-001 PLAIN CONCRETE CURBING, TYPE I	—	LF
⑲	610001-004 PLAIN CONCRETE CURBING, TYPE IV	—	LF

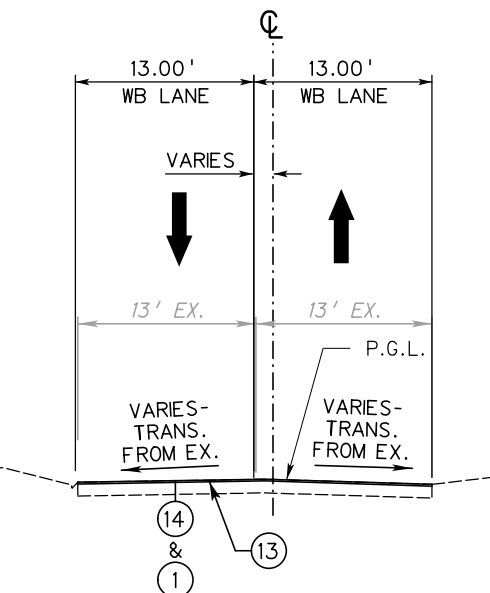
DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



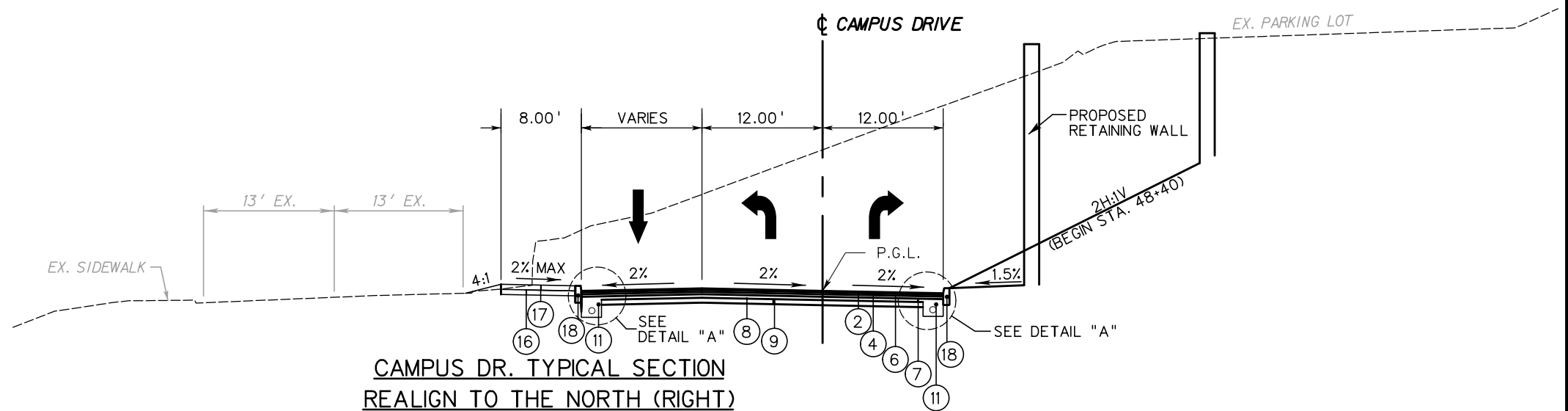
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

**TYPICAL SECTIONS**

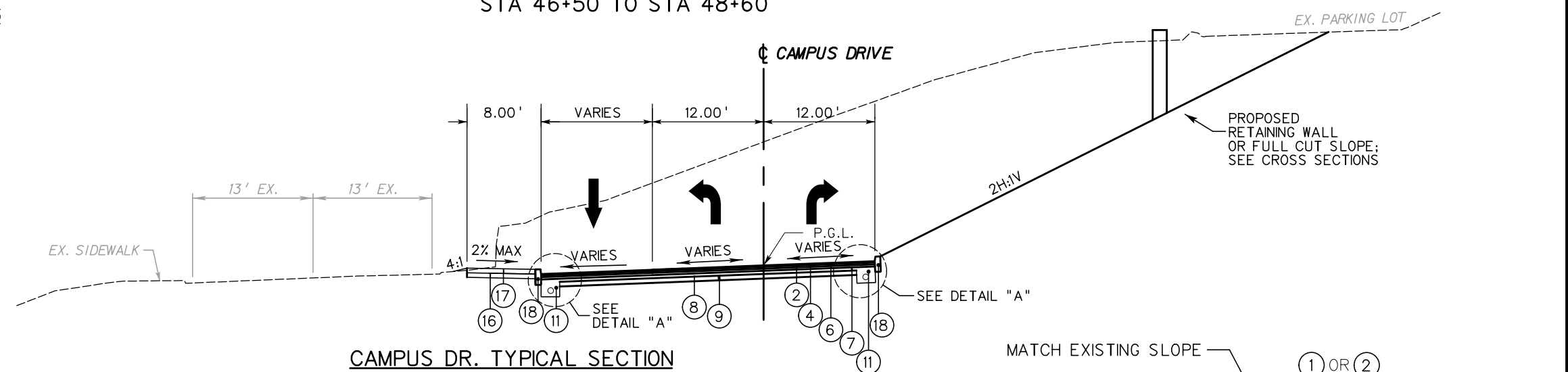
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



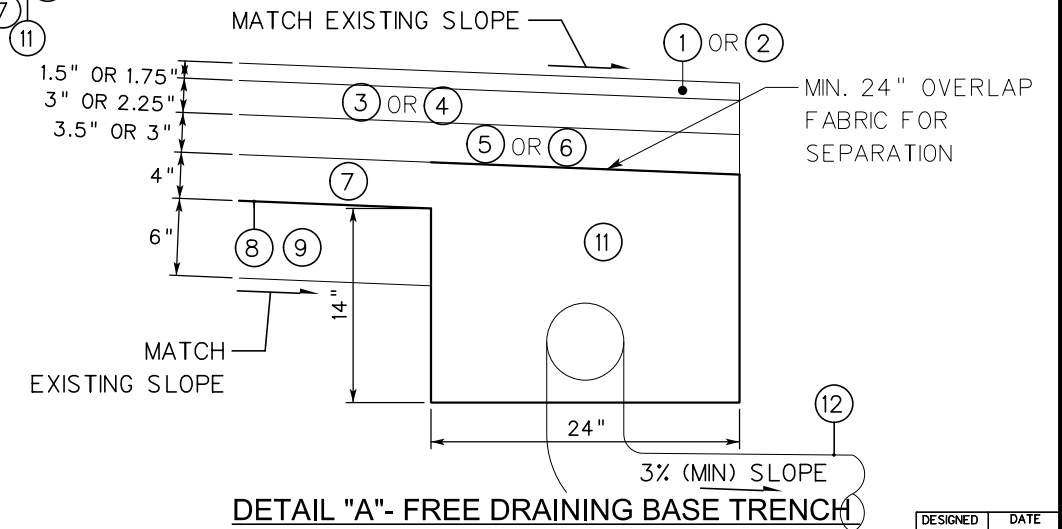
**CAMPUS DR. TYPICAL SECTION  
RESURFACING AND RESTRIPING  
STA 46+00 TO STA 46+50**



**CAMPUS DR. TYPICAL SECTION  
REALIGN TO THE NORTH (RIGHT)  
STA 46+50 TO STA 48+60**

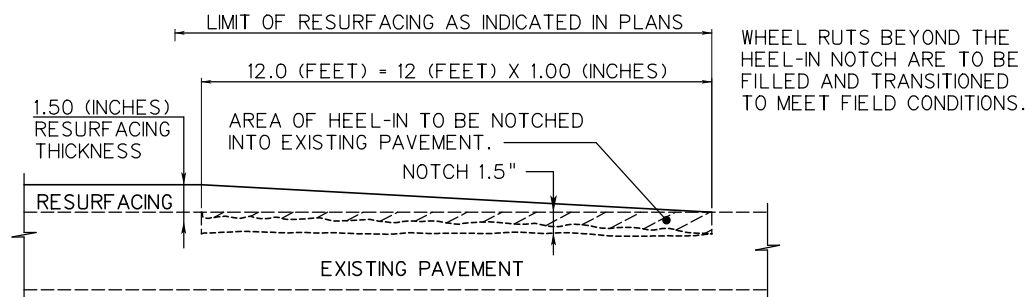


**CAMPUS DR. TYPICAL SECTION  
REALIGN TO THE NORTH (RIGHT)  
STA 48+60 TO STA 49+66.20**



**DETAIL "A" - FREE DRAINING BASE TRENCH**

ITEM*	LEGEND DESCRIPTION	DEPTH	UNIT
①	402001-045 SUPERPAVE ASPHALT SKID PVT, SG, TY 12.5	1.5"	TN
②	402001-045 SUPERPAVE ASPHALT SKID PVT, SG, TY 12.5	1.75"	TN
③	401001-040 SUPERPAVE ASPHALT BASE COURSE, SG, TY 19	3"	TN
④	401001-040 SUPERPAVE ASPHALT BASE COURSE, SG, TY 19	2.25"	TN
⑤	401001-042 SUPERPAVE ASPHALT BASE COURSE, SG, TY 25	3.5"	TN
⑥	401001-042 SUPERPAVE ASPHALT BASE COURSE, SG, TY 25	3"	TN
⑦	311006-001 OPEN GRADED FREE DRAINING BASE COURSE	4"	CY
⑧	207034-000 FABRIC FOR SEPARATION	—	SY
⑨	207002-000 SUBGRADE	6"	CY
⑩	307001-000 AGGREGATE BASE COURSE, CLASS 1	4"	CY
⑪	606029-001 FREE DRAINING BASE TRENCH	—	LF
⑫	606030-001 OUTLET PIPE, 6 INCH	—	LF
⑬	408002-001 ASPHALT MATERIAL	—	GA
⑭	415005-001 STANDARD MILLING	1.5"	SY
⑮	415005-001 STANDARD MILLING	4"	SY
⑯	609002-001 BED COURSE MATERIAL	4"	CY
⑰	609001-001 CONCRETE SIDEWALK	4"	SY
⑱	610001-001 PLAIN CONCRETE CURBING, TYPE I	—	LF
⑲	610001-004 PLAIN CONCRETE CURBING, TYPE IV	—	LF



**RE-SURFACING HEEL-IN DETAIL**

PAYMENT FOR HEEL-IN TO BE INCLUDED IN VARIOUS PAY ITEMS OF THIS PROJECT.

THIS DETAIL TO BE USED AT THE FOLLOWING LOCATIONS:

- STA. 104+46.52 TO STA. 104+58.52
- STA. 230+81.50 TO STA. 230+93.50
- STA. 46+00.00 TO STA. 46+12.00

SCALE : NONE

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**TYPICAL SECTIONS**

DESIGNED	DATE
ALT	09/2020
DRAWN	DATE
LNR	09/2020
CHECKED	DATE
JDV	09/2020
CHECKED	DATE

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**SUMMARY OF QUANTITIES**

ITEM NUMBER	DESCRIPTION	UNIT	TOTAL
US 19 - ROADWAY			
201001-000	CLEARING AND GRUBBING	AC	-
203001-000	DISMANTLING STRUCTURE	LS	
204001-000	MOBILIZATION	LS	
207001-001	UNCLASSIFIED EXCAVATION	CY	
207002-000	SUBGRADE	CY	
207034-000	FABRIC FOR SEPARATION	SY	
311006-001	OPEN GRADED FREE DRAINING BASE COURSE	CY	
408002-001	ASPHALT MATERIAL	GA	
415005-001	STANDARD MILLING	SY	
605001-001	TYPE A MANHOLE	EA	
605006-001	TYPE D INLET	EA	
605008-001	TYPE F INLET	EA	
605053-001	CONCRETE INLET CAP	EA	
606029-001	FREE DRAINING BASE TRENCH	LF	
606030-001	OUTLET PIPE, 6 INCH	LF	
609001-001	CONCRETE SIDEWALK	SY	
609002-001	BED COURSE MATERIAL	CY	
609005-001	CURB RAMP	EA	
609006-001	DETECTABLE WARNING SURFACE	EA	
610001-001	PLAIN CONCRETE CURBING, TYPE I	LF	
610001-004	PLAIN CONCRETE CURBING, TYPE IV	LF	
636008-002	TEMPORARY PAVEMENT MARKING - PAINT 6 IN	LF	
636009-001	TEMPORARY PAVEMENT MARKINGS - TAPE	LF	
636011-001	TRAFFIC CONTROL DEVICE	UNIT	
636012-010	PROJECT TRAFFIC CONTROL DEVICE CLEANING	EA	
636013-001	INDIVIDUAL TRAFFIC CONTROL DEVICE CLEANING	EA	
636021-001	ELECTRIC ARROW	DAY	
636025-001	WARNING LIGHTS, TYPE B	DAY	
639001-001	CONSTRUCTION LAYOUT STAKE	LS	
640003-001	BUILDING EQUIPMENT	LS	
640006-001	SMALL FIELD OFFICE	MO	
642004-001	SEED MIXTURE, TEMPORARY	LB	
642005-001	MULCH, STRAW OR HAY	TON	
642006-001	FERTILIZER	TON	

**SUMMARY OF QUANTITIES**

ITEM NUMBER	DESCRIPTION	UNIT	TOTAL
US 19 - ROADWAY (CONTINUED)			
642010-001	AGRICULTURAL LIMESTONE	TON	
642012-001	SILT FENCE	LF	
642031-001	DITCH CHECK	EA	
642040-001	INLET PROTECTION	EA	
645001-001	PRIMARY REINFORCEMENT, 2400 LB/FT	SY	
652001-001	AGRICULTURAL LIMESTONE	TON	
652002-001	FERTILIZER, 10-20-10	TON	
652002-002	FERTILIZER, UREA FORMALDEHYDE	TON	
652003-001	SEED MIXTURE, B, C-1, OR C-2	LB	
652004-001	STRAW OR HAY MULCH	TON	
657006-001	S4X7.7, A-572 SUPPORT, GALVANIZED	LF	
657008-001	2.00 LB CHANNEL POST	LF	
657010-001	3.00 LB CHANNEL POST	LF	
657017-001	CLASS B CONCRETE FOOTING, REINFORCED, ROADSIDE	CY	
657018-001	SUPPORT OR BRACKET REMOVAL	EA	
661001-001	0.080 IN FLAT SHEET SIGN	SF	
661002-001	EXTRUDED PANEL SIGN	SF	
663001-026	EDGE LINE, TYPE II - 6 IN	LF	
663002-026	LANE LINE, TYPE II - 6 IN	LF	
663002-063	LANE LINE, TYPE II - 8 IN	LF	
663002-040	CENTERLINE, TYPE II - 6 IN	LF	
663004-011	CHANNELIZING LINE, TYPE V - 8 IN	LF	
663005-011	STOP LINE, TYPE V - 24 IN	LF	
663006-010	CROSSWALK LINE, TYPE V- 12 IN X 6 FT	LF	
663007-010	STRIPE, TYPE V - 12 IN ,YELLOW	LF	
663007-010	STRIPE, TYPE V - 12 IN ,WHITE	LF	
663010-010	ONE DIRECTION LANE ASSIGNMENT ARROW, TY V	EA	
663010-011	MULTI DIRECTIONAL LANE ASSIGNMENT ARROW, TY V	EA	

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**SUMMARY OF QUANTITIES**

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	6	128

SUMMARY OF QUANTITIES			
ITEM NUMBER	DESCRIPTION	UNIT	TOTAL
US 19 - ROADWAY (CONTINUED)			
663010-013	LANE DROP ARROW, TY V	EA	
663011-010	LANE LETTER, TYPE V	EA	
699000-001	ON THE JOB TRAINING	HR	

SUMMARY OF QUANTITIES				
ITEM NUMBER	ALT.	DESCRIPTION	UNIT	TOTAL
US 19 - ROADWAY ALTERNATES				
401001-040	AA1	SUPERPAVE ASPHALT BASE COURSE, SG, TY 19	TN	
401001-041	AA2	SUPERPAVE ASPHALT BASE COURSE, S, TY 19	TN	
401001-042	BB1	SUPERPAVE ASPHALT BASE COURSE, SG, TY 25	TN	
401001-043	BB2	SUPERPAVE ASPHALT BASE COURSE, S, TY 25	TN	
402001-045	CC1	SUPERPAVE ASPHALT SKID PVT, SG, TY 12.5	TN	
402001-046	CC2	SUPERPAVE ASPHALT SKID PVT, S, TY 12.5	TN	
604037-012	DD1	15 INCH REINFORCED CONCRETE PIPE, CLASS XX	LF	
604050-112	DD2	18 INCH HIGH DENSITY POLYETHYLENE PIPE, PROFILE WALL, IN TYPE F TRENCH	LF	
604037-016	EE1	18 INCH REINFORCED CONCRETE PIPE, CLASS XX	LF	
604050-116	EE2	18 INCH HIGH DENSITY POLYETHYLENE PIPE, PROFILE WALL, IN TYPE F TRENCH	LF	

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## SUMMARY OF QUANTITIES

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SUMMARY OF QUANTITIES			
ITEM NUMBER	DESCRIPTION	UNIT	TOTAL
RETAINING WALL 1			

SUMMARY OF QUANTITIES			
ITEM NUMBER	DESCRIPTION	UNIT	TOTAL
RETAINING WALL 3			

SUMMARY OF QUANTITIES			
ITEM NUMBER	DESCRIPTION	UNIT	TOTAL
RETAINING WALL 2			

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## SUMMARY OF QUANTITIES



## GRADING SUMMARY

LOCATION		TOTAL UNCLASS. EXCAV. ITEM 207001 C.Y.	UNSUIT. EXCAV. C.Y.	USABLE EXCAV. C.Y.	SHRINK OR SWELL C.Y.	ADJUST. EXCAV. C.Y.	EMBANKMENT			EXCESS(+) OR BORROW(-) C.Y.	UNCLASS. EMBANKMENT ITEM 211001 C.Y.	ROCK BORROW EXCAV. ITEM 211002 C.Y.	REMARKS
							UNCLASS. EMBANK. C.Y.	SELECT EMBANK. C.Y.	TOTAL EMBANK. C.Y.				
STATION	STATION												
BEECHURST AVE													
110+50.88	112+20	187	0	187	1.1	206	0	0	0	187	0	0	
117+80	230+93.50	1889	0	1889	1.1	2077	0	0	0	1889	0	0	
CAMPUS DRIVE													
46+00	49+66.20	4864	0	4864	1.1	5350	10	0	10	4854	0	0	
PROJECT TOTALS		6940	0	6940	-	7633	10	0	10	6930	0	0	

BORROW COMPUTATIONS	
SELECT EMBANKMENT REQUIRED (FROM TABLE "GRADING SUMMARY") - 0	UNCLASS. EMBANKMENT REQUIRED (FROM TABLE "GRADING SUMMARY") - 10
SELECT EMBANKMENT AVAILABLE (FROM TABLE "PROBABLE SOURCE OF SELECT EMBANKMENT") - 0	ADJUSTED EXCAVATION (FROM TABLE "GRADING SUMMARY")-S.E. AVAILABLE (FROM TABLE "PROBABLE SOURCE OF S.E.") - 7633
SELECT EMBANKMENT NEEDED - 0	EMBANKMENT NEEDED - 0
ROCK BORROW EXCAVATION REQUIRED TO MEET S.E. REQUIREMENTS WITH 15% SWELL : ITEM 211002-000, ROCK BORROW EXCAVATION - S.E. NEEDED 1-0.15 - 0	EXCAVATION REQUIRED TO MEET EMBANK. REQUIREMENTS WITH 10% SHRINK: ITEM 211001, UNCLASSIFIED BORROW EXCAVATION - EMBANK. NEEDED 1-0.10 - 0

NOTE: UNSUITABLE MATERIAL IS COMPRISED OF TOPSOIL, PAVEMENT, SOD, TRASH, ORGANIC SUBSTANCES, MUCK, AND ANY OTHER MATERIAL THAT CANNOT BE COMPACTED TO A STABLE AND DURABLE CONDITION.

## RIGHT-OF-WAY MARKERS

638002-001

STATION	LOCATION		STATION	LOCATION	
	LEFT	RIGHT		LEFT	RIGHT
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
TOTAL		-	-	-	-

## CLEARING & GRUBBING / SEEDING & MULCHING

LOCATION		ITEM 201001-000 CLEARING AND GRUBBING		SEEDING AND MULCHING		ITEM 652001-001 AGRICULTURAL LIMESTONE		ITEM 652002-001 FERTILIZER 10-20-10		ITEM 652002-002 UREA FORMALDEHYDE FERTILIZER		ITEM 652003-001 SEED MIXTURE B, C-1, OR C-2		ITEM 652004-001 STRAW OR HAY MULCH		REMARKS	
		S. F. *	ACRES*			S. F. **	ACRES**	TON	TON	TON	LB.	TON	TON	TON			
STATION	STATION																
US 19																	
104+00.00	106+20.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CAMPUS DRIVE																	
9+99.53	14+97.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTALS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

\* LIMITS NOTED FOR CLEARING AND GRUBBING ARE TO THE CONSTRUCTION LIMITS.  
 \*\* LIMITS OF SEEDING AND MULCHING ARE FROM THE EDGE OF PAVEMENT TO THE CONSTRUCTION LIMITS.

## TEMPORARY POLLUTION CONTROL

LOCATION		SEEDING AND MULCHING (INFORMATION ONLY)		ITEM 642031-001 DITCH CHECKS		ITEM 642004-001 TEMPORARY SEED		ITEM 642005-001 STRAW OR HAY MULCH		ITEM 642006-001 FERTILIZER		ITEM 642010-001 AGRICULTURAL LIMESTONE		ITEM 642012-001 SILT FENCE		REMARKS	
				EA.	LB.	TON	TON	TON	TON	L. F.							
STATION	STATION	S. F.	ACRES														
US 19																	
104+00.00	106+20.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CAMPUS DRIVE																	
9+99.53	14+97.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTALS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

# QUANTITY TABLES

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

PAVING QUANTITIES													
LOCATION		LENGTH	ITEM 402001 -045 SUPERPAVE ASPHALT SKD PVT TY 12.5 TON	ITEM 402001 -046 SUPERPAVE ASPHALT SKD PVT TY 12.5 TON	ITEM 401001 -040 SUPERPAVE ASPHALT BASE CRSE TY 19 TON	ITEM 401001 -041 SUPERPAVE ASPHALT BASE CRSE TY 19 TON	ITEM 401001 -042 SUPERPAVE ASPHALT BASE CRSE TY 25 TON	ITEM 401001 -043 SUPERPAVE ASPHALT BASE CRSE TY 25 TON	ITEM 311006 -001 OPEN GRADED FREE DRAINAGE BASE COURSE C. Y.	ITEM 207002 -000 SUBGRADE C. Y.	ITEM 207034 -000 FABRIC FOR SEPARATION S. Y.	ITEM 408002 -001 ASPHALT MATERIAL S. Y.	REMARKS
STATION	STATION		STONE/ GRAVEL	SLAG	STONE/ GRAVEL	SLAG	STONE/ GRAVEL	SLAG					
Beechurst Ave.													
xxx+xx	xxx+xx	-	-	-	-	-	-	-	-	-	-	-	--
xxx+xx	xxx+xx												
xxx+xx	xxx+xx												
xxx+xx	xxx+xx												
xxx+xx	xxx+xx												
xxx+xx	xxx+xx												
Campus Drive													
xxx+xx	xxx+xx												
xxx+xx	xxx+xx												
WVU Parking Area 27													
		TOTALS											

PAVEMENT REMOVAL				
LOCATION		LENGTH	ITEM 415005 -001 STANDARD MILLING S. Y.	REMARKS
STATION	STATION			
-	-	-	-	
		TOTALS		

PAVEMENT MARKINGS									
LOCATION		ITEM 663001 -026 EDGE LINE TYPE I - 6 N L. F.	ITEM 663002 -026 LANE LINE TYPE I - 6 N L. F.	ITEM 663002 -063 LANE LINE TYPE I - 8 N L. F.	ITEM 663002 -040 CENTERLINE TYPE I - 6 N L. F.	ITEM 663004 -011 CHANNELIZING LINE, TYPE V - 8 N L. F.	ITEM 663005 -011 STOP LINE TYPE V - 24 N L. F.	ITEM 663006 -010 CROSSWALK LINE TYPE V 12 N X 6 FT L. F.	REMARKS
STATION	STATION								
xxx+xx	xxx+xx	-	-	-	-	-	-	-	--
		TOTALS							

FREE DRAINING BASE TRENCH				
LOCATION		LENGTH		REMARKS
STATION	STATION	LEFT	RIGHT	
*****	*****	-		
		-		
		-		
		TOTAL		

DESIGNED ALT	DATE 09/2020
DRAWN LNR	DATE 09/2020
CHECKED JDV	DATE 09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

### QUANTITY TABLES

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

## BUILDING DEMOLITION ASBESTOS ABATMENT AND ABANDONMENT

LOCATION		TYPE OF IMPROVEMENT	BUILDING DEMOLITION NUMBER	SEPTIC ABANDONMENT NUMBER	WATER WELL ABANDONMENT NUMBER	ASBESTOS ABANDONMENT NUMBER	OTHER	REMARKS
STATION	OFFSET							
110+07	37	DECORATION WALL					STR 11-3/1	DEMO ONLY THE WINGWALL
TOTAL								

### CONCRETE CURBING

LOCATION		OFFSET	ITEM 601001-001 PLAN CONCRETE CURBING, TYPE I L.F.	ITEM 601001-004 PLAN CONCRETE CURBING, TYPE IV L.F.	REMARKS
STATION	STATION				
XXX+XX	XXX+XX	-	-	-	
TOTALS					

### CURB RAMP

LOCATION		ITEM 609005-001 CURB RAMP EA	ITEM 415005-001 DETECTABLE WARNING SURFACE EA	REMARKS
STATION	OFFSET			
*****	-	-	-	
TOTAL				

### CONCRETE SIDEWALK & BED COURSE MATERIAL

LOCATION		OFFSET	LENGTH FT	WIDTH FT	ITEM 609001-001 CONCRETE SIDEWALK S. Y.	ITEM 609002-001 BED COURSE MATERIAL C. Y.	REMARKS
STATION	STATION						
XXX+XX	XXX+XX	-	-	-	-	-	
TOTALS							

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## QUANTITY TABLES

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

# DRAINAGE SUMMARY

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	11	128

LOCATION		OFFSET	DIAMETER (INCH)	ID NUMBER	604037-012 15 IN REINFORCED CONCRETE PIPE CLASS XX DD1		604050-112 15 IN HIGH DENSITY POLYETHYLENE PIPE PROFILE, IN TYPE F TRENCH DD2		604037-016 18 IN REINFORCED CONCRETE PIPE CLASS XX EE1		604050-116 18 IN HIGH DENSITY POLYETHYLENE PIPE PROFILE, IN TYPE F TRENCH EE2		INLET				MANHOLE				PIPE CULVERT WINGWALL (EACH)		601002-001 CLASS B CONC.		* REINF. STEEL	REMARKS	
STATION	STATION				L.F.		L.F.		L.F.		L.F.		NUMBER		NUMBER		NUMBER		NUMBER		LEFT	RIGHT	C.Y.	LB			
					CLASS	CLASS	CLASS	CLASS	CLASS	CLASS	TYPE	TYPE	TYPE	TYPE	TYPE	TYPE											
XXX+XX	XXX+XX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS																											

\* PROVIDED FOR INFORMATION ONLY.

DESIGNED	ALT	DATE
DRAWN	LNR	09/2020
CHECKED	JDV	09/2020
CHECKED		



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## QUANTITY TABLES

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	12	128

## GOVERNING SPECIFICATIONS

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, STANDARD SPECIFICATIONS, ROADS AND BRIDGES, ADOPTED 2017, AS AMENDED BY THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS SUPPLEMENTAL SPECIFICATIONS, DATED JANUARY 1, 2020, THE CONTRACT DOCUMENTS AND THE CONTRACT PLANS ARE THE GOVERNING PROVISIONS APPLICABLE TO THIS PROJECT.

## STANDARD DETAILS

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, STANDARD DETAILS BOOK, VOLUME 1, DATED MAY, 2016 WITH REVISIONS DATED MARCH 19, 2018, & VOLUME 11, DATED JANUARY 2019, AND VOLUME 111, DATED JANUARY 1, 1999 AS AMENDED BY ADDENDUM 1, 2, 3 AND ERRATA SHALL APPLY TO THIS PROJECT. REVISED STANDARD DRAWINGS LISTED IN THE TABLE ON THIS SHEET WITH THEIR CORRESPONDING DATE SUPERSEDE THE AFOREMENTIONED STANDARD DETAILS. STANDARD DETAILS DRAWINGS CAN BE FOUND AT: <http://www.transportation.wv.gov/highways/engineering/pages/details.aspx>.

REVISED STANDARD DRAWINGS LIST	
DRAWING	REVISION DATE
GR 1	11/13/2012
GR 2	12/18/2017
GR 11-B	11/2/2015
GR 11-C	

## EROSION & SEDIMENT CONTROL

DETAILS NOT SHOWN IN THE PLANS SHALL BE IN ACCORDANCE WITH THE WEST VIRGINIA DIVISION OF HIGHWAYS EROSION AND SEDIMENT CONTROL MANUAL, DATED MARCH 1, 2003 AS AMENDED BY ADDENDUM 1 DATED SEPTEMBER 1, 2004. IN THE EVENT THAT TEMPORARY EROSION AND POLLUTION MEASURES ARE ORDERED BY THE ENGINEER DUE TO THE CONTRACTORS NEGLIGENCE, CARELESSNESS OR FAILURE TO INSTALL PERMANENT CONTROLS AS PART OF THE WORK AS SCHEDULED, AND ARE ORDERED BY THE ENGINEER, SUCH WORK SHALL BE PERFORMED BY THE CONTRACTOR AT HIS OWN EXPENSE.

THE FIRST ORDER OF WORK FOR THE CONTRACTOR IS TO INSTALL SEDIMENT CONTROL STRUCTURES, SILT FENCE, HAY/STRAW BALES, ETC. TO ESTABLISH EROSION CONTROL AT THE EARLIEST POSSIBLE DATE. INITIAL CLEARING AND GRUBBING IS TO ONLY BE WHAT IS NECESSARY IN ORDER TO ACCOMPLISH THESE OPERATIONS.

IN ADDITION, THE CONTRACTOR IS TO NAME AN INDIVIDUAL TO REVIEW THE EROSION CONTROL FEATURES AT A MINIMUM OF ONCE A WEEK DURING PERIODS OF HEAVY PRECIPITATION AND/OR ACTIVE CONSTRUCTION AND ONCE A MONTH DURING WINTER SHUTDOWN TO ASSESS THE SUCCESS OF THE EROSION CONTROL STRUCTURES, REVEGETATION EFFORTS, AND SEE THAT THE REPLACEMENT, CLEANING, AND/OR INSTALLATION OF ADDITIONAL FEATURES IF NECESSARY ARE CARRIED OUT.

IN ADDITION TO THE ENVIRONMENTAL MONITOR, PERIODIC INSPECTIONS WILL BE CONDUCTED BY REPRESENTATIVES OF THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, DIVISION OF WATER AND WASTE MANAGEMENT TO ENSURE THAT THE REQUIREMENTS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT ARE BEING FULFILLED, REPRESENTATIVES OF THE OTHER RESOURCE AGENCIES MAY CONDUCT PERIODIC INSPECTIONS THROUGH THE LIFE OF THE CONTRACT.

THE CONTRACTOR SHALL SUBMIT A TEMPORARY AND PERMANENT EROSION CONTROL PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.

ALL SEDIMENT TRAPS OUTSIDE OF THE PROPOSED ROADWAY TEMPLATE ARE TO BE CLEANED AND LEFT IN PLACE (UNLESS OTHERWISE NOTED) UPON PROJECT COMPLETION.

## EXISTING UTILITIES

ALL EXISTING UTILITIES IN THE PROJECT AREA WERE LOCATED AND SHOWN ON THE PLANS USING THE BEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS SHOWN ON THE PLANS ARE BASED ON FIELD SURVEYS AND UTILITY VERIFICATION BY THE UTILITY COMPANIES IDENTIFIED ON THE TITLE SHEET. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING THE FINAL EXACT LOCATION OF ALL EXISTING UTILITIES. ALL COSTS ASSOCIATED WITH ANY DISRUPTION OF SERVICES RESULTING FROM THE CONTRACTOR'S ACTIVITIES WILL BE SOLELY THE CONTRACTOR'S RESPONSIBILITY.

## BENCHMARKS

THE CONTRACTOR SHALL ATTEMPT TO HOLD BENCHMARK LOCATIONS THROUGHOUT THE LIFE OF THE PROJECT. IN THE EVENT THAT A BENCHMARK IS DISTURBED, THE CONTRACTOR, AS DIRECTED BY THE PROJECT ENGINEER, WILL RELOCATE OR REESTABLISH THE BENCHMARK. NO ADDITIONAL PAYMENT OR COMPENSATION WILL BE MADE FOR THIS WORK.

## GEOTECHNICAL INFORMATION

GEOTECHNICAL INFORMATION AND THE GEOTECHNICAL REPORT ARE PROVIDED WITH THESE PLANS AND SHALL BE CONSIDERED AS A PART OF THE CONTRACT DOCUMENTS.

THE INFORMATION PRESENTED IS BASED IN PART ON SMALL DIAMETER TEST BORINGS AND SHOULD BE CONSIDERED APPROXIMATE. SHOULD DIFFERING CONDITIONS BE ENCOUNTERED, THE CONTRACTOR SHALL CONTACT THE ENGINEER AT THE EARLIEST OPPORTUNITY FOR RE-EVALUATION PRIOR TO PROCEEDING WITH WORK ON THAT PORTION OF THE PROJECT.

## VERIFICATION OF DIMENSIONS

THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL PLAN AND ELEVATION DIMENSIONS PRIOR TO ORDERING MATERIALS FOR THE CONSTRUCTION OF VARIOUS BID ITEMS ON THIS PROJECT.

## VERIFICATION OF CROSS-SECTIONS

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXISTING GROUNDLINE, AS SHOWN ON THE CROSS-SECTIONS, PRIOR TO THE START OF ANY CONSTRUCTION.

## DENSITY

COMPACTION TESTING OF THE SUPERPAVE ASPHALT BASE COURSE, TYPE 25 SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 401 OF THE STANDARD SPECIFICATIONS.

## FUNDING IDENTIFICATION SOURCE SIGNS

FUNDING IDENTIFICATION SOURCE SIGNS SHALL BE FURNISHED BY THE CONTRACTOR AND SHALL BE LOCATED IN THE FIELD AT THE DISCRETION OF THE PROJECT ENGINEER. THE COST OF FURNISHING, ERECTING, MAINTAINING, AND REMOVAL OF THE FUNDING IDENTIFICATION SOURCE SIGNS SHALL BE INCIDENTAL TO THE COST OF THE CONSTRUCTION PROJECT.

## WATER QUALITY

THE CONTRACTOR WILL BE RESPONSIBLE FOR WATER QUALITY THROUGHOUT THE DURATION OF CONSTRUCTION. THE PROJECT ENGINEER WILL WORK CLOSELY WITH THE PROJECT SUPERVISOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE FOLLOWING.

1. DEVELOPING AND IMPLEMENTING AN EFFECTIVE EROSION CONTROL PLAN.
2. DIRECTING THE CONSTRUCTION, OPERATION, AND DISMANTLING OF TEMPORARY EROSION AND SEDIMENT CONTROL FEATURES.
3. IMPLEMENTING REMEDIAL ACTION REQUIRED TO REPAIR FAILING EROSION AND SEDIMENT CONTROL FEATURES.
4. IMPLEMENTING SHORT TERM WINTER SHUTDOWN PROCEDURES, IF NECESSARY.
5. WILL SHAPE EARTHWORK PRIOR TO THE SUSPENSION OF GRADING OPERATIONS EACH DAY IN A MANNER THAT WILL PERMIT STORM RUNOFF WITH A MINIMAL AMOUNT OF EROSION.
6. EROSION CONTROL FEATURES INSTALLED BY THE CONTRACTOR WILL BE OPERATED AND MAINTAINED IN AN ACCEPTABLE CONDITION.
7. WHEN ANY EROSION OR SEDIMENT CONTROL FEATURE HAS REACHED HALF ITS CAPACITY, THE DEVICE IS TO BE CLEANED OUT AND RESTORED TO ITS ORIGINAL CONDITION.

THE CONTRACTOR WILL BE REQUIRED TO PREPARE A SPILL PREVENTION, CONTROL, AND COUNTERMEASURES (SPCC) PLAN THAT ITEMIZES SPECIFIC MEASURES THAT WILL BE IMPLEMENTED TO PREVENT AND CLEAN UP CHEMICAL AND PETROLEUM PRODUCT SPILLS THAT MAY OCCUR DURING ALL PHASES OF PROJECT CONSTRUCTION. FUEL STORAGE AND REFUELING ACTIVITIES, EQUIPMENT MAINTENANCE ACTIVITIES, AND EQUIPMENT WASHING WILL BE KEPT AT LEAST 500 FEET AWAY FROM ANY PERENNIAL OR INTERMITTENT WATERCOURSE OR WETLAND.

## PIPE, INLET, AND HEADWALL

ALL EXISTING FEATURES THAT ARE TO BE REMOVED DURING CONSTRUCTION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE REMOVED FROM THE PROJECT SITE. ALL VOIDS CREATED BY SUCH REMOVAL SHALL BE FILLED WITH MATERIAL AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL AND FILLING OF VOIDS SHALL BE INCLUDED IN THE LUMP SUM BID ITEM FOR 201001-000, CLEARING AND GRUBBING.

## DRAINAGE

THE CONTRACTOR SHALL MAINTAIN WORKING STORM DRAINAGE SYSTEMS THROUGHOUT THE WORK AREAS AT ALL TIMES DURING CONSTRUCTION. THE WORKING SYSTEM MAY CONSIST OF THE EXISTING STORM DRAINAGE SYSTEM, THE PROPOSED STORM DRAINAGE SYSTEM, OR A COMBINATION THEREOF. NO ADDITIONAL PAYMENT OR COMPENSATION WILL BE MADE FOR THIS WORK.

ALL DRAINAGE INLET/OUTLET STRUCTURES SHALL BE FIELD ADJUSTED AS REQUIRED TO MATCH THE EXISTING GROUND AS DIRECTED BY THE ENGINEER, UNLESS OTHERWISE NOTED.

ALL EXISTING DRAINAGE STRUCTURES, SHALL BE FIELD VERIFIED BY THE CONTRACTOR.

## WORKING HOURS / NOISE RESTRICTIONS

THE CONTRACTOR SHALL BE PROHIBITED FROM WORKING WITHIN 600 FT OF ANY RESIDENCE BETWEEN THE HOURS OF 10:00PM AND 6:00 AM. ALL CONSTRUCTION EQUIPMENT POWERED BY AN INTERNAL COMBUSTION ENGINE SHALL BE EQUIPPED WITH A PROPERLY MAINTAINED MUFFLER.

THE DIVISION RESERVES THE RIGHT TO PLACE LIMITS ON THE CONTRACTORS WORKING HOURS ON AREAS OF THE PROJECT, IF THE DIVISION DETERMINES THAT A SUFFICIENT NUMBER OF COMPLAINTS REGARDING CONSTRUCTION NOISE ARE RECEIVED.

## FERTILIZER, SEEDING, AND MULCHING

ALL DISTURBED SOIL AREAS ARE TO BE SEEDED, MULCHED AND FERTILIZED. SEEDING, MULCHING, AND FERTILIZER WILL BE AS SPECIFIED IN SECTION 652 OF THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, STANDARD SPECIFICATIONS, UNLESS NOTED OTHERWISE AND PER THE DIRECTION OF SECTION 652 OF SAID STANDARD SPECIFICATIONS.

## EXISTING SIGNS

ALL EXISTING SIGNS DISTURBED DURING CONSTRUCTION, EXCEPT FOR THE HISTORICAL MARKERS, SHALL BE DISPOSED AND THE NEW SIGNS ERECTED PER THE CONSTRUCTION PLANS, UNLESS NOTED ON THE PLANS.

THE HISTORICAL MARKERS SHALL BE REMOVED, STORED AND RESET DURING THE APPROPRIATE CONSTRUCTION PHASE.

THE COST FOR THIS OPERATION SHALL BE INCLUDED IN ITEM 201001-000, "CLEARING AND GRUBBING".

## WASTE AND BORROW SITES

WASTE AND BORROW SITES WILL BE NECESSARY FOR THIS PROJECT. NO WASTE OR BORROW SITE WILL BE PERMITTED WITHIN ANY FLOODPLAIN, WETLANDS, HISTORICAL, OR HIGHLY SENSITIVE CULTURAL RESOURCES.

## NOTICE TO CONTRACTORS

IT IS ANTICIPATED THAT OTHER CONTRACTORS WILL BE WORKING IN THIS AREA, THEREFORE IT IS IMPERATIVE THAT CONTRACTORS BE IN STRICT COORDINATION AND AGREEMENT IN REFERENCE TO LANE CLOSURES, WORKING PLANS, AND STORAGE AREAS. THIS PLAN SHALL BE PRESENTED TO THE ENGINEER IN WRITING FOR APPROVAL.

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



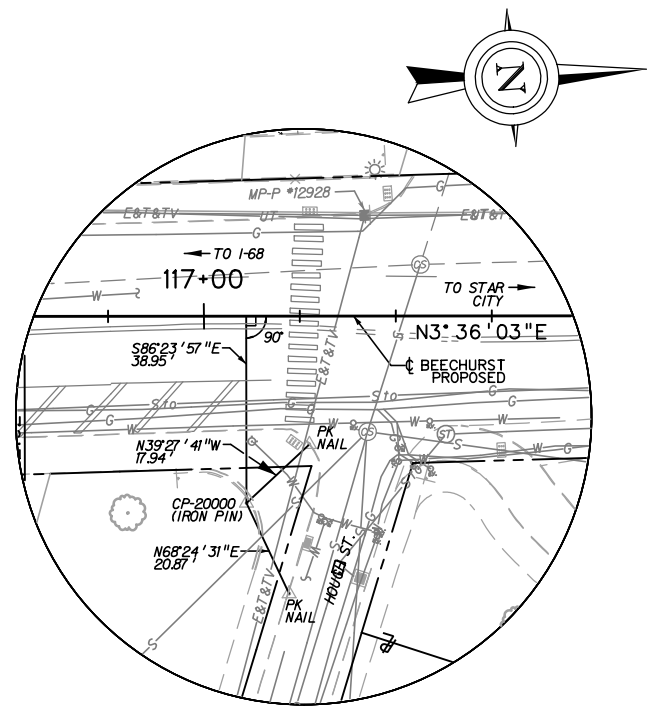
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## GENERAL NOTES

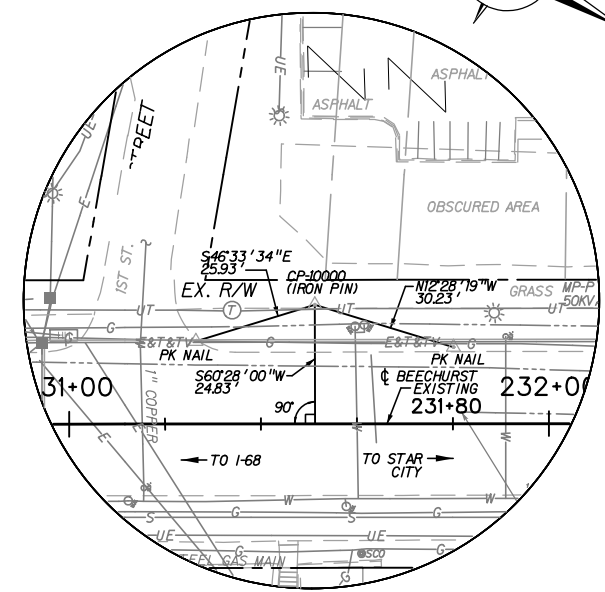
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



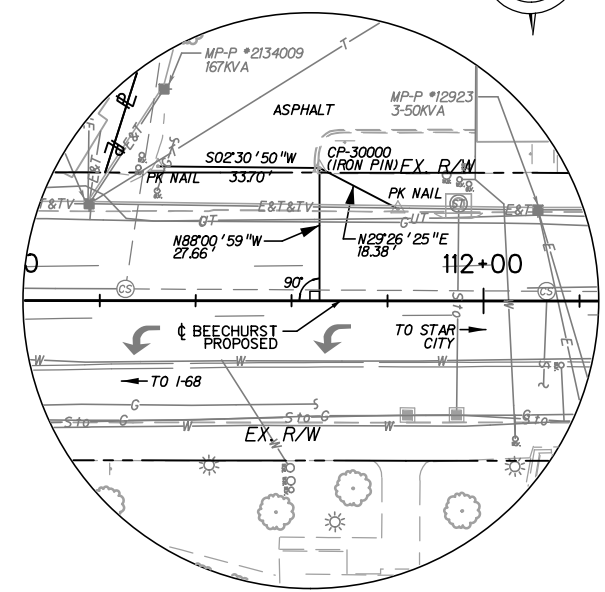
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CONTROL POINT CP-20000  
 STA. 117+08.83 - 38.95' RT  
 N 413338.97  
 E 1839954.95  
 ELEV. 862.95'



CONTROL POINT CP-10000  
 STA. 231+51.24 - 24.83' LT  
 N 414692.30  
 E 1839548.85  
 ELEV. 862.13'



CONTROL POINT CP-30000  
 STA. 111+65.80 - 27.66' LT  
 N 412799.75  
 E 1839867.94  
 ELEV. 858.73'

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

**SURVEY REFERENCE POINTS**

DESIGNED	ALT	DATE
LNR	JDV	09/2020
CHECKED	JDV	09/2020
CHECKED		

\\svr1\pdp\pdp\resurpnt\_000.rpt

**PROPOSED US 19**

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
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**BEGIN WORK STA. 104+46.52**  $\zeta$  PROPOSED US 19

**NO-CURVE P.I. #1**

PI = STA. 109+32.76  
 $\Delta$  = 31° 49' 21.10" (LT)

**CURVE #1 DATA**

PI = STA. 116+48.51  
 $\Delta$  = 1° 37' 02.50" (RT)  
 D = 5° 43' 46.48"  
 T = 14.12  
 L = 28.23  
 R = 1000.00  
 E = 0.10

**CURVE #2 DATA**

PI = STA. 120+67.37  
 $\Delta$  = 14° 53' 30.87" (LT)  
 D = 9° 49' 39.90"  
 T = 76.19  
 L = 151.53  
 R = 583.00  
 E = 4.96

**CURVE #3 DATA**

PI = STA. 126+46.02  
 $\Delta$  = 18° 14' 32.00" (LT)  
 D = 28° 30' 19.31"  
 T = 32.27  
 L = 64.00  
 R = 201.00  
 E = 2.57

COORDINATES		
LOCATION	NORTHING	EASTING
US 19		
POB 104+15.00	412135.67	1839599.45
BEGIN WORK 104+46.52	412161.86	1839616.98
NO-CURVE P.I. #1 109+32.76	412565.89	1839887.52
BEGIN CONSTR. PROJECT 110+50.88	412683.94	1839891.61
PC#1 116+34.40	413267.11	1839911.80
PI#1 116+48.51	413281.22	1839912.29
PT#1 116+62.62	413295.30	1839913.18
PC#2 119+91.18	413623.21	1839933.81
PI#2 120+67.37	413699.25	1839938.6
PT#2 121+42.71	413773.97	1839923.68
PC#3 126+13.75	414235.90	1839831.46
PI#3 126+46.02	414267.54	1839825.14
PT#3 126+77.74	414295.62	1839809.23
POE 130+14.65/ $\zeta$ PROP CAMPUS DR	414588.75	1839643.16

CONTROL POINTS			
NO.	ELEV.	DESCRIPTION	LOCATION
CP-10000	862.13	IRON PIN	24.83' LT STA. 231+51.24 $\zeta$ EX. US 19
CP-20000	862.95	IRON PIN	38.95' RT STA. 117+08.83 $\zeta$ PROP. US 19
CP-30000	858.73	IRON PIN	27.66' LT STA. 111+65.80 $\zeta$ PROP. US 19

**EXISTING US 19**

COORDINATES		
LOCATION	NORTHING	EASTING
US 19		
POB 230+14.65/ $\zeta$ PROP CAMPUS DR	414585.71	1839637.78
END CONSTR. PROJECT 230+93.50	414654.30	1839598.91

**BEGIN CONSTRUCTION PROJECT STA 110+50.88**  $\zeta$  PROPOSED US 19

**PROPOSED CAMPUS DRIVE**

**CURVE #4 DATA**  
 PI = STA. 46+35.53  
 $\Delta$  = 58° 52' 34.01" (RT)  
 D = 76° 23' 39.74"  
 T = 42.33'  
 L = 77.07'  
 R = 75.00'  
 E = 11.12'

**CURVE #5 DATA**  
 PI = STA. 49+02.94  
 $\Delta$  = 65° 42' 33.70" (LT)  
 D = 52° 05' 13.46"  
 T = 71.04'  
 L = 126.15'  
 R = 110.00'  
 E = 20.94'

COORDINATES		
LOCATION	NORTHING	EASTING
CAMPUS DRIVE		
POB 45+60.00	414508.22	1840027.74
PC#4 45+93.20	414495.41	1839997.11
BEGIN WORK 46+00.00	414493.07	1839990.73
PI#4 46+35.53	414479.08	1839958.06
PT#4 46+70.27	414504.06	1839923.89
PC#5 48+31.90	414599.47	1839793.42
PI#5 49+02.94	414641.40	1839736.08
PT#5 49+58.06	414606.38	1839674.27
END WORK 49+66.20	414602.36	1839667.18
49+93.82 ( $\zeta$ PROP. US 19)	414588.75	1839643.16
POE 50+00.00/ $\zeta$ EX. US 19	414585.71	1839637.78

**BEGIN WORK STA. 46+00.00**  $\zeta$  PROPOSED CAMPUS DR

**STA 130+14.65**  $\zeta$  PROPOSED US 19 -  
**STA 49+93.82**  $\zeta$  PROPOSED CAMPUS DR

**STA 50+00.00**  $\zeta$  PROPOSED CAMPUS DR -  
**STA 230+14.65**  $\zeta$  EXISTING US 19

**END CONSTRUCTION PROJECT STA. 230+93.50**  $\zeta$  EXISTING US 19

**END WORK STA. 49+66.20**  $\zeta$  PROPOSED CAMPUS DR

09/10/2020



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

**GEOMETRIC LAYOUT**

SCALE : 0 100 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

DESIGNED	DATE
ALT	09/2020
DRAWN	LNR
CHECKED	JDV
CHECKED	

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Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24-00	NHPP-0019(443)D	2020	MONONGALIA	15	128



110+00

← TO I-68

☿ PROPOSED U.S. 19

111+00

STA. 110+50.88 ☿ PROPOSED US 19  
BEGIN CONSTRUCTION PROJECT

TO STAR CITY →

BEECHURST AVENUE  
ASPHALT

EX. R/W

R=16

11.63'

858.70

859.74

10'

861.12

10'

862.49

10'

863.31

UNIVERSITY AVENUE  
ASPHALT



DESIGNED	ALT	DATE
		09/2020
DRAWN	LNR	DATE
		09/2020
CHECKED	JDV	DATE
		09/2020
CHECKED		

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**INTERSECTION DETAIL**  
**BEECHURST AVE & UNIVERSITY AVE**

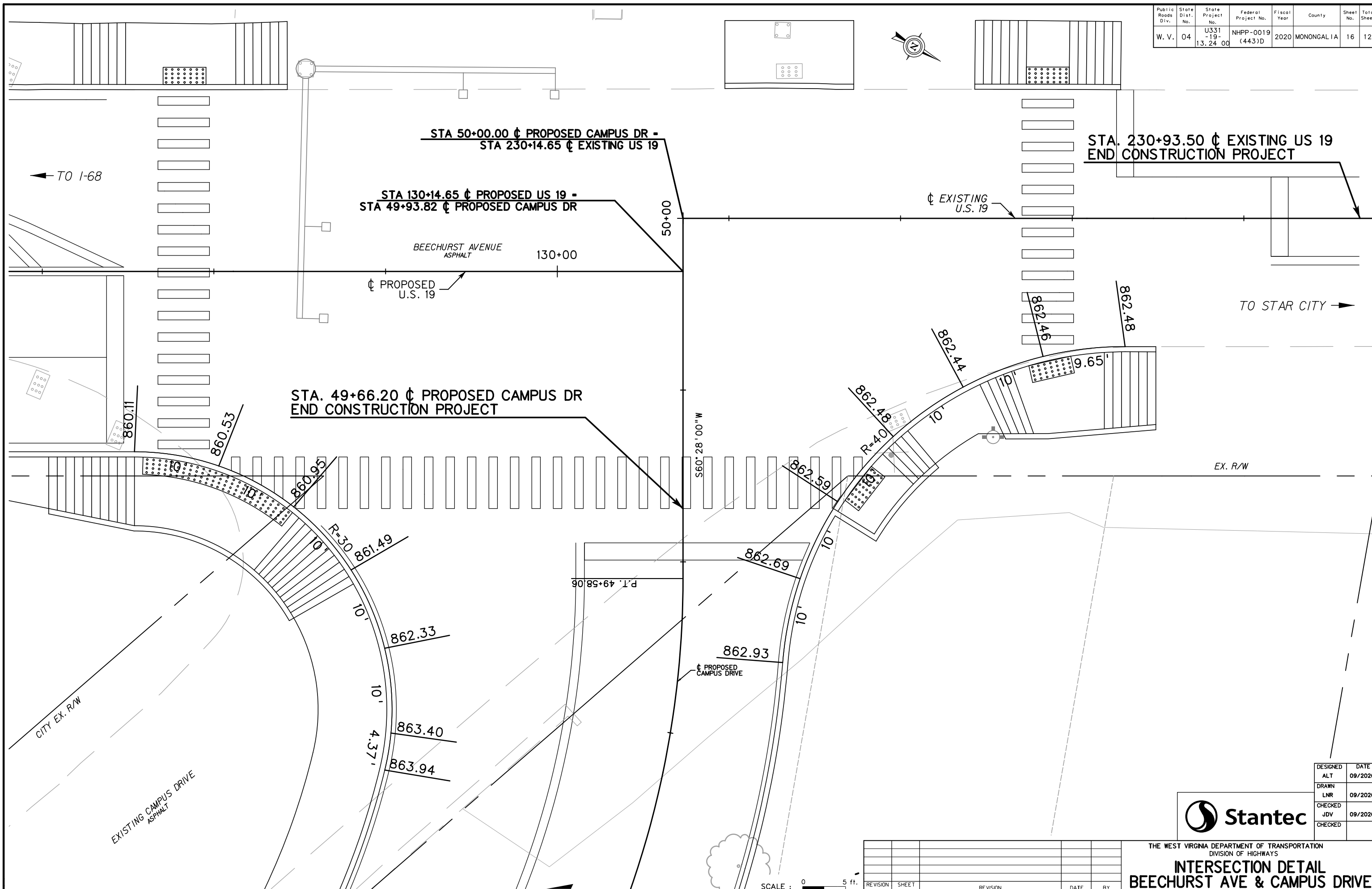
SCALE : 0 5 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331 -19- 13.24.00	NHPP-0019 (443)D	2020	MONONGALIA	16	128



STA 50+00.00  $\dot{C}$  PROPOSED CAMPUS DR -  
STA 230+14.65  $\dot{C}$  EXISTING US 19

STA. 230+93.50  $\dot{C}$  EXISTING US 19  
END CONSTRUCTION PROJECT

STA 130+14.65  $\dot{C}$  PROPOSED US 19 -  
STA 49+93.82  $\dot{C}$  PROPOSED CAMPUS DR

STA. 49+66.20  $\dot{C}$  PROPOSED CAMPUS DR  
END CONSTRUCTION PROJECT

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**INTERSECTION DETAIL**  
**BEECHURST AVE & CAMPUS DRIVE**

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

SCALE : 0 5 ft.

# TEMPORARY TRAFFIC CONTROL STRATEGIES

1. TEMPORARY TRAFFIC CONTROL
  - A. TEMPORARY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH SECTION 636 OF THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, STANDARD SPECIFICATIONS, ROADS AND BRIDGES, ADOPTED 2017, AS AMENDED BY THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 1, 2019, THE CONTRACT DOCUMENTS, THE CONTRACT PLANS AND THE MANUAL ON TEMPORARY TRAFFIC CONTROL FOR STREETS AND HIGHWAYS, 2006 EDITION, AND THE TRAFFIC CONTROL FOR INDIVIDUAL SEGMENTS AS DESCRIBED IN THE PLANS. CASES A15 AND B2 SHALL BE USED FOR THIS PROJECT.
  - B. ACCESS TO ALL HOUSES AND BUSINESSES SHALL BE MAINTAINED AT ALL TIMES.
  - C. THE CONTRACTOR SHALL MAINTAIN WORKING STORM DRAINAGE SYSTEMS THROUGH THE WORK AREA AT ALL TIMES DURING CONSTRUCTION. THE WORKING SYSTEM MAY CONSIST OF THE EXISTING STORM DRAINAGE SYSTEM, THE PROPOSED STORM DRAINAGE SYSTEM, OR A COMBINATION THEREOF.
  - D. THE CONTRACTOR SHALL BE PROHIBITED FROM WORKING WITHIN 600 FT OF ANY RESIDENCE BETWEEN THE HOURS OF 10:00 PM AND 6:00AM.
  - E. THE CONTRACTOR MUST MAINTAIN TRAFFIC WITH NO MORE THAN ONE AND ONE-HALF INCH DIFFERENCE IN ELEVATION BETWEEN THE EXISTING PAVEMENT US 19 AND THE PROPOSED US 19 PAVEMENT OR BETWEEN ADJACENT TRAVEL LANES.
2. TRAFFIC CONTROL NOTES
  - A. LOCATION OF ALL TRAFFIC CONTROL DEVICES SHOWN ON THE MAINTENANCE OF TRAFFIC PLAN ARE APPROXIMATE. FINAL LOCATION OF THE TRAFFIC CONTROL DEVICES ARE TO BE ESTABLISHED BY THE ENGINEER IN THE FIELD.
  - B. REFLECTIVE SHEETING ON TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE OF NEW CONDITION AT THE BEGINNING OF THE PROJECT LIFE. NIGHT VISIBILITY AND LEGIBILITY SHALL BE MAINTAINED.
  - C. FLAGGER: IF FLAGGERS ARE NECESSARY, THE STOP SIGNS SHALL BE COVERED USING A HEAVY-DUTY BLACK OVERLAY (PLASTIC OR BURLAP TYPE). FLAGGER STATIONS SHALL BE VISIBLE TO ONCOMING TRAFFIC AT ALL TIMES. FLAGGERS SHALL BE AT THEIR STATIONS PRIOR TO SUNRISE AND SHALL REMAIN AT THEIR RESPECTIVE STATIONS UNTIL DARK. AT THE COMPLETION OF DAYTIME CONSTRUCTION OPERATIONS, THE TEMPORARY SIGNS AND BARRICADES SHALL BE UNCOVERED, AND WILL SERVE TO DIRECT MOTORISTS THROUGH THE CONSTRUCTION ZONE.
  - D. EXISTING SIGNS AND DELINEATORS: ANY SUCH EXISTING FACILITIES RELOCATED, REMOVED, OR DAMAGED BY THE CONTRACTOR SHALL BE REPLACED TO ITS ORIGINAL CONDITION BY THE CONTRACTOR AT HIS EXPENSE AS PART OF ITEM 636011-001, UNLESS REPLACED BY FINAL SIGNS.
3. WINTER SHUTDOWN
 

THE PROJECT AREA AND ATTENDANT ROADWAY (TRAVEL LANES AND SHOULDERS, ETC) SHALL BE LEFT IN A "SQUARED OFF" / EASILY TRANSFERABLE, SAFE CONDITION THAT IS COORDINATED AND APPROVED BY THE ENGINEER. SUCH WILL INCLUDE, BUT IS NOT LIMITED TO, PAVEMENT MARKINGS (TEMPORARY PAVEMENT MARKINGS), SIGNING, ETC. AS NOTED ON THE PLANS AND AS APPROPRIATE. TRAFFIC CONTROL DEVICES THAT ARE NOT NEEDED OR DESIRED SHALL BE EITHER REMOVED OR COVERED AND ALL SUCH SHALL BE CONSIDERED INCIDENTAL TO ITEM 636011-001, TRAFFIC CONTROL DEVICE.
4. TEMPORARY PAVEMENT MARKING NOTES
 

TEMPORARY PAINT SHALL BE PLACED ON US 19 AT PROJECT COMPLETION. THE CONTRACTOR SHALL APPLY PERMANENT PAVEMENT MARKINGS 30 DAYS AFTER THE FINAL PAVING.
5. PERMANENT PAVEMENT MARKING NOTES
 

STATION LIMITS AND QUANTITIES FOR PERMANENT PAVEMENT MARKINGS ARE SHOWN ON THE "SIGNING AND PAVEMENT MARKING PLAN"
6. TYPE 'B' WARNING LIGHTS
 

TYPE 'B' WARNING LIGHTS SHALL BE PROVIDED WITH EACH "ROAD WORK AHEAD" SIGN. THE COST FOR TYPE 'B' WARNING LIGHTS SHALL BE PAID FOR AS PART OF ITEM 636025-001.
7. WHEN COVERING EXISTING SIGNS, THE CONTRACTOR HAS THE OPTIONS OF USING:
  - A. HEAVY DUTY BLACK OVERLAY (PLASTIC OR BURLAP TYPE)
  - B. THIN WOOD OVERLAY (E.G. PLYWOOD)
  - C. TAKING SIGNS DOWN AND REINSTALLING WHEN APPROPRIATE
  - D. ANY DAMAGES CAUSED BY ABOVE NAMED SHALL BE REPAIRED REPLACED TO ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE
  - E. ALL ABOVE OPERATIONS SHALL BE BID INCIDENTAL TO ITEM 636011-001.
8. NOTICE TO CONTRACTORS
 

IT IS ANTICIPATED THAT OTHER CONTRACTORS WILL BE WORKING IN THIS AREA, THEREFORE IT IS IMPERATIVE THAT CONTRACTORS BE IN STRICT COORDINATION AND AGREEMENT IN REFERENCE TO LANE CLOSURES, WORKING PLANS, AND STORAGE AREAS. THIS PLAN SHALL BE PRESENTED TO THE ENGINEER IN WRITING FOR APPROVAL.

# TEMPORARY TRAFFIC CONTROL PLAN

TEMPORARY TRAFFIC CONTROL SUMMARY OF QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	
		UNIT	TOTAL
636002-001	AGGREGATE FOR MAINTAINING TRAFFIC, STONE OR GRAVEL	TON	
636002-002	AGGREGATE FOR MAINTAINING TRAFFIC, SLAG	TON	
636003-001	BITUMINOUS MATERIAL FOR DUST PALLATIVE	GAL.	
636004-001	CALCIUM CHLORIDE FOR DUST PALLATIVE	TON	
636005-001	TEMPORARY STRUCTURES FOR MAINTAINING TRAFFIC	L. S.	-
636006-001	PILOT TRUCK AND DRIVER	DAY	
636007-001	ERADICATION OF PAVEMENT MARKING	L. F.	-
636008-002	TEMPORARY PAVEMENT MARKING - PAINT 6 IN	L. F.	10,621
636009-002	TEMPORARY PAVEMENT MARKING - TAPE 6 IN, TYPE VII B	L. F.	
636010-001	TEMPORARY RAISED PAVEMENT MARKERS - TYPE	EACH	
636011-001	TRAFFIC CONTROL DEVICE	UNIT	-
636012-010	PROJECT TRAFFIC CONTROL DEVICE CLEANING	EACH	-
636013-001	INDIVIDUAL TRAFFIC CONTROL DEVICE CLEANING	EACH	-
636014-001	FLAGGER	HR.	-
636014-002	TRAFFIC DIRECTOR	HR.	-
636015-001	TEMPORARY GUARDRAIL CHANNELIZATION DEVICE	L. F.	
636016-001	REMOVE AND RESET TEMP. GUARDRAIL CHANNELIZATION DEVICE	L. F.	
636017-004	TEMPORARY BARRIER, TL-2, III	L. F.	
636017-002	DOH FURNISHED TEMPORARY CONCRETE BARRIER	L. F.	
636018-003	REMOVE AND RESET TEMPORARY BARRIER	L. F.	
636018-002	REMOVE AND RESET DOH FURNISHED TEMP. CONCRETE BARRIER	L. F.	
636019-001	TEMPORARY GUARDRAIL BARRIER	L. F.	-
636020-001	REMOVE AND RESET TEMPORARY GUARDRAIL BARRIER	L. F.	
636021-001	ELECTRIC ARROW	DAY	
636022-001	CHANGEABLE MESSAGE SIGN	DAY	
636023-001	TEMPORARY TRAFFIC SIGNAL, 01	MONTH	-
636023-001	TEMPORARY TRAFFIC SIGNAL, 02	MONTH	-
636024-001	TEMPORARY PIPE FOR MAINTAINING TRAFFIC	L. F.	
636025-001	(A) WARNING LIGHTS	DAY	
636025-001	(B) WARNING LIGHTS	DAY	-
636025-001	(C) WARNING LIGHTS	DAY	
636026-001	TEMPORARY LIGHTING, 01	L. S.	
636026-001	TEMPORARY LIGHTING, 02	L. S.	
636028-001	SHADOW VEHICLE	DAY	
636060-001	TEMPORARY IMPACT ATTENUATING DEVICE	EACH	
636060-002	REMOVE AND RESET ATTENUATOR DEVICE	EACH	
663005-011	STOP LINE, TYPE V - 24 IN	L. F.	-
664006-010	GLARE BARRIER, TYPE V	L. F.	

TEMPORARY TRAFFIC CONTROL DEVICE QUANTITIES				
DEVICE	DESCRIPTION	VALUE IN UNITS	QUANTITY	TOTAL UNITS
* 1	SIGNS ON PORTABLE MOUNTS AND BARRICADES. (TOTAL SIGN AREA 16 S.F. OR GREATER.)	170		
* 2	SIGNS ON PORTABLE MOUNTS AND BARRICADES. (TOTAL SIGN AREA LESS THAN 16 S.F.)	80	24	-
* 3	SIGNS ON PERMANENT POSTS. (TOTAL SIGN AREA 16 S.F. OR GREATER.)	180		
* 4	SIGNS ON PERMANENT POSTS. (TOTAL SIGN AREA LESS THAN 16 S.F.)	90	-	-
** 5	BARRICADES - TYPE I	35		
** 6	BARRICADES - TYPE II	60		
** 7	BARRICADES - TYPE III	90	-	-
** 8	DRUMS	60	90	-
9	CONES	5		
10	VERTICAL PANELS OR GROUND MOUNTED DELINEATORS.	10		
11	BARRIERS OR GUARDRAIL MOUNTED (TO BE BID INCIDENTAL TO THE COST OF THE BARRIER OR GUARDRAIL.)	0		
12	TEMPORARY OVERLAYS AND TEMPORARY OVERSIZE SIGNS	300		
13	CHANNELIZER CONES	40		
* - ORANGE SIGN SHEETING TO BE REFLECTIVE FLOURESCENT ORANGE, TYPE ASTM-VI (ROLL-UP SIGNS) OR TYPE ASTM-IX OR ASTM-XI (RIGID SIGNS)				
** - BARRICADES AND DRUM SHEETING TO BE 6", TYPE ASTM-IV				
			TOTAL	-

# PHASED CONSTRUCTION

- TEMPORARY TRAFFIC CONTROL PHASING
- PHASE 1A
1. INSTALL CASE B2 SIGNING FOR BEECHURST AVE SECTION AND ERADICATE EXISTING PAVEMENT MARKINGS AS NECESSARY.
  2. CLOSE NORTHBOUND (RIGHT) LANE OF BEECHURST AVE AND SHIFT TRAFFIC TO THE SOUTHBOUND (LEFT) LANE.
  3. CONSTRUCT FULL DEPTH LANE WIDENING, SIDEWALKS, DRAINAGE IMPROVEMENTS, AND RETAINING WALLS ALONG BEECHURST AVE.
  4. CONSTRUCT RELOCATED CAMPUS DRIVE WHICH INCLUDES SIDEWALKS, DRAINAGE IMPROVEMENTS, RETAINING WALLS AND NEW TRAFFIC SIGNAL.
  5. MILL EXISTING PAVEMENT ON BEECHURST AVE.
- PHASE 1B
1. INSTALL CASE B2 SIGNING TO INCLUDE UNIVERSITY AVE SECTION AND ERADICATE EXISTING PAVEMENT MARKINGS AS NECESSARY.
  2. MILL EXISTING PAVEMENT ON UNIVERSITY AVE.
  3. APPLY FINAL PAVEMENT LAYERS ON UNIVERSITY AVE, BEECHURST AVE AND RELOCATED CAMPUS DRIVE.
- PHASE 2A
1. INSTALL CASE B2 SIGNING FOR BEECHURST AVE SECTION AND ERADICATE EXISTING PAVEMENT MARKINGS AS NECESSARY.
  2. CLOSE SOUTHBOUND (LEFT) LANE OF BEECHURST AVE AND SHIFT TRAFFIC TO THE NORTHBOUND (RIGHT) LANE.
  3. CONSTRUCT DRAINAGE IMPROVEMENTS ALONG BEECHURST AVE.
  4. DEMO EXISTING CAMPUS DRIVE ROADWAY AND SIDEWALK.
  5. MILL EXISTING PAVEMENT ON BEECHURST AVE.
- PHASE 2B
1. INSTALL CASE B2 SIGNING TO INCLUDE UNIVERSITY AVE SECTION AND ERADICATE EXISTING PAVEMENT MARKINGS AS NECESSARY.
  2. MILL EXISTING PAVEMENT ON UNIVERSITY AVE.
  3. APPLY FINAL PAVEMENT LAYERS ON UNIVERSITY AVE AND BEECHURST AVE.

## TTCP-1

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	

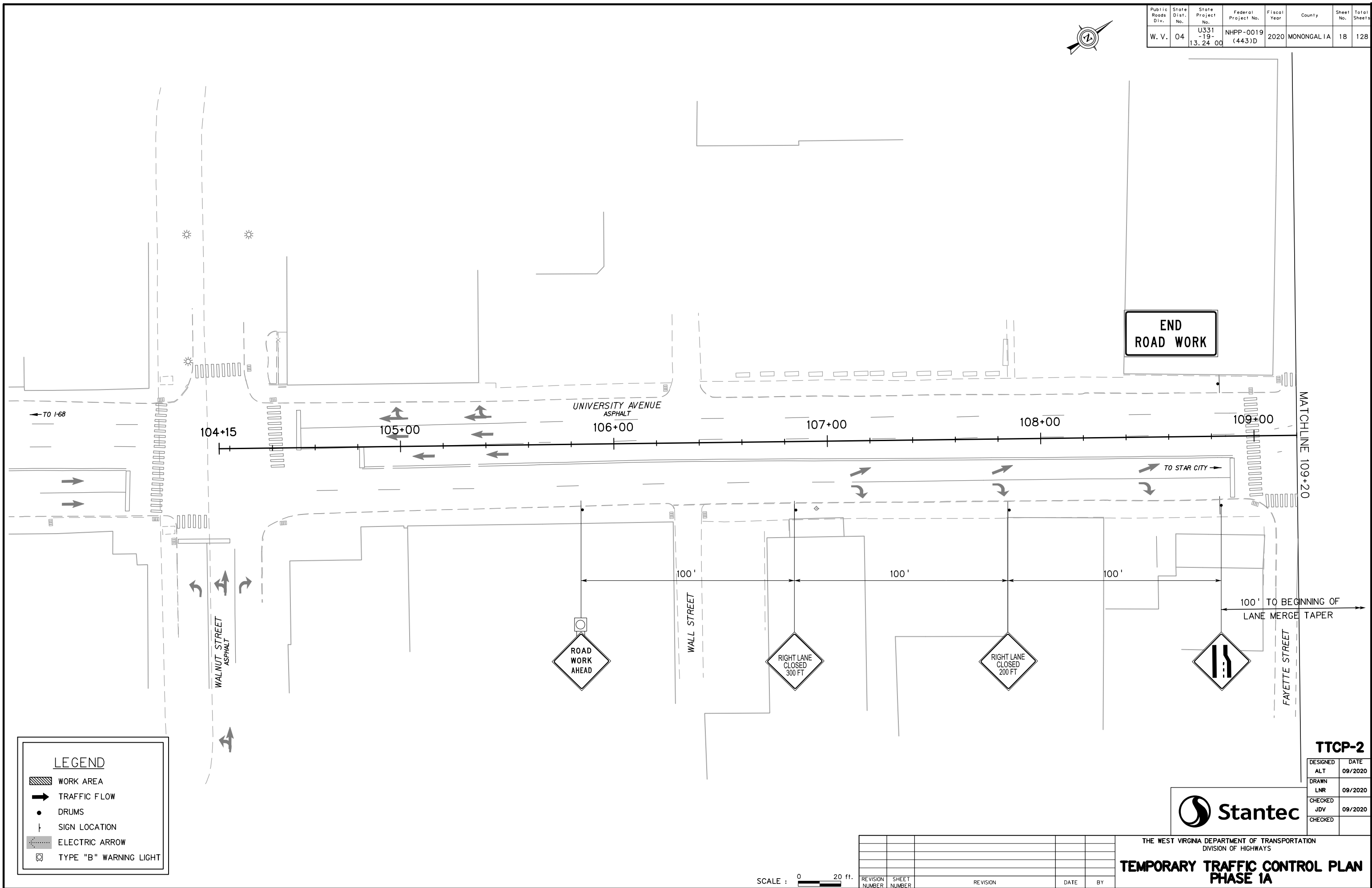


THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

### TEMPORARY TRAFFIC CONTROL PLAN NOTES

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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**END ROAD WORK**

LEGEND	
	WORK AREA
	TRAFFIC FLOW
	DRUMS
	SIGN LOCATION
	ELECTRIC ARROW
	TYPE "B" WARNING LIGHT

MATCHLINE 109+20

100' TO BEGINNING OF LANE MERGE TAPER

<b>TTCP-2</b>	
DESIGNED ALT	DATE 09/2020
DRAWN LNR	DATE 09/2020
CHECKED JDV	DATE 09/2020
CHECKED	

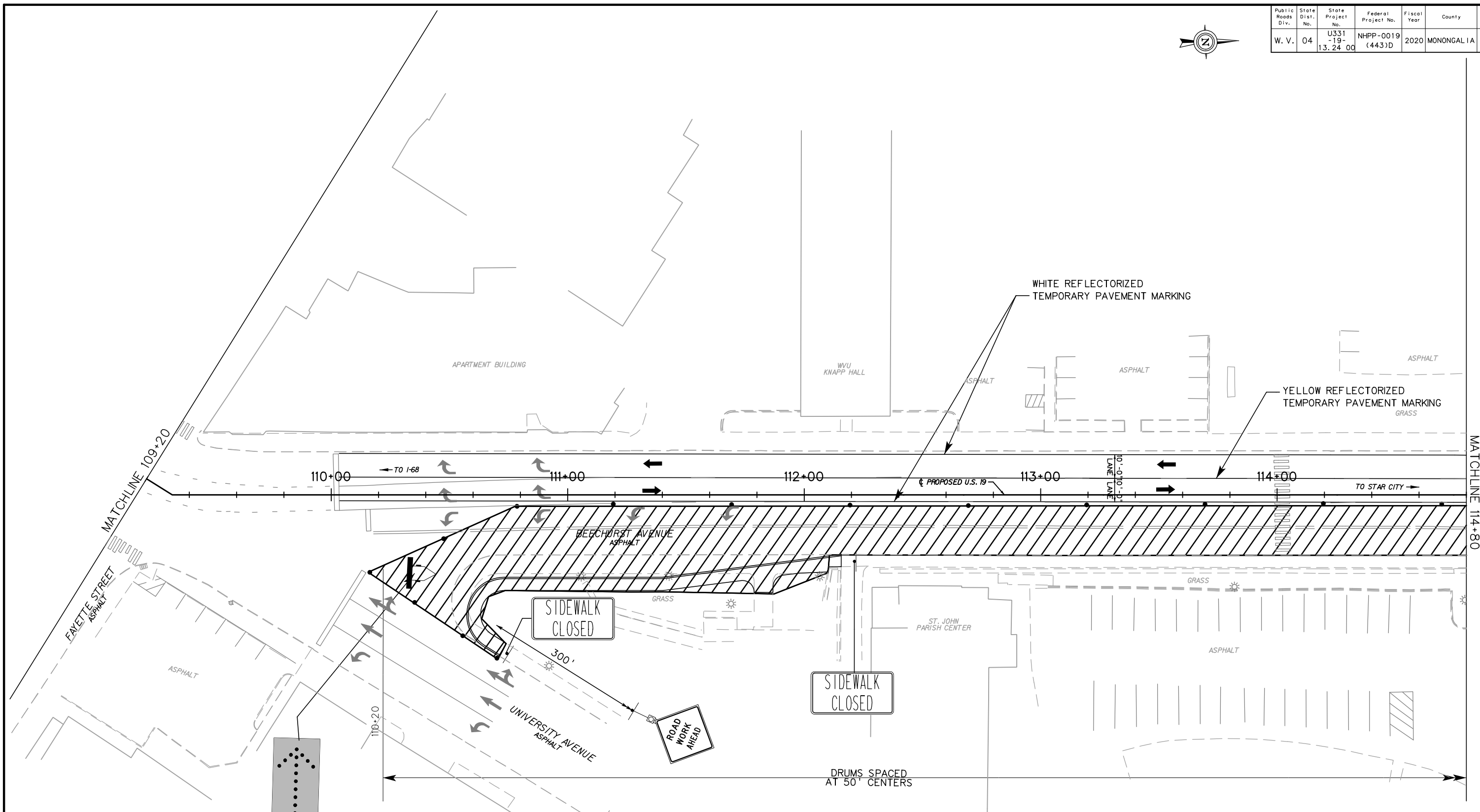


THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TEMPORARY TRAFFIC CONTROL PLAN  
PHASE 1A**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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LEGEND	
	WORK AREA
	TRAFFIC FLOW
	DRUMS
	SIGN LOCATION
	ELECTRIC ARROW
	TYPE "B" WARNING LIGHT

**TTCP-3**

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



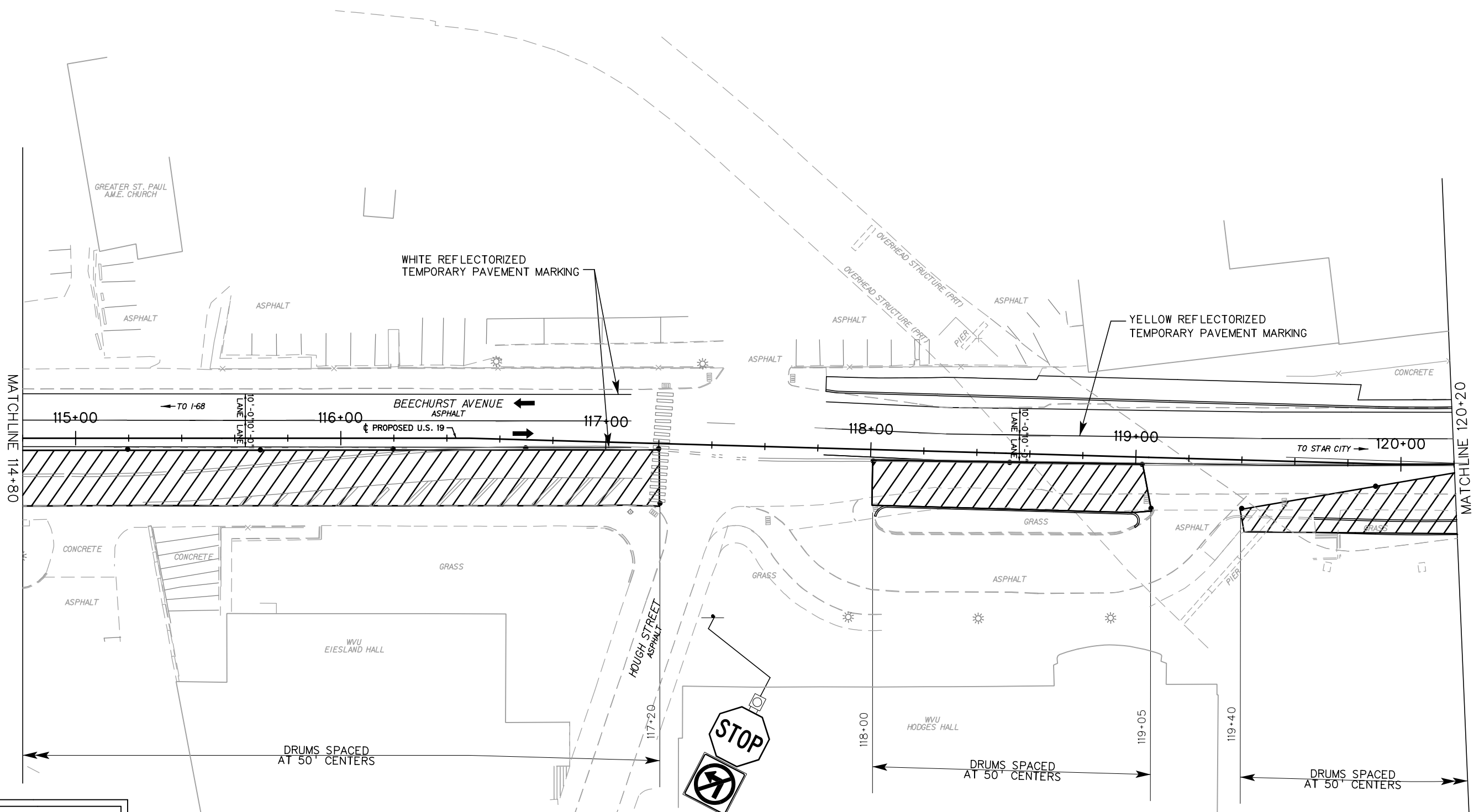
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**TEMPORARY TRAFFIC CONTROL PLAN  
PHASE 1A**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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LEGEND	
	WORK AREA
	TRAFFIC FLOW
	DRUMS
	SIGN LOCATION
	ELECTRIC ARROW
	TYPE "B" WARNING LIGHT

**TTCP-4**

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



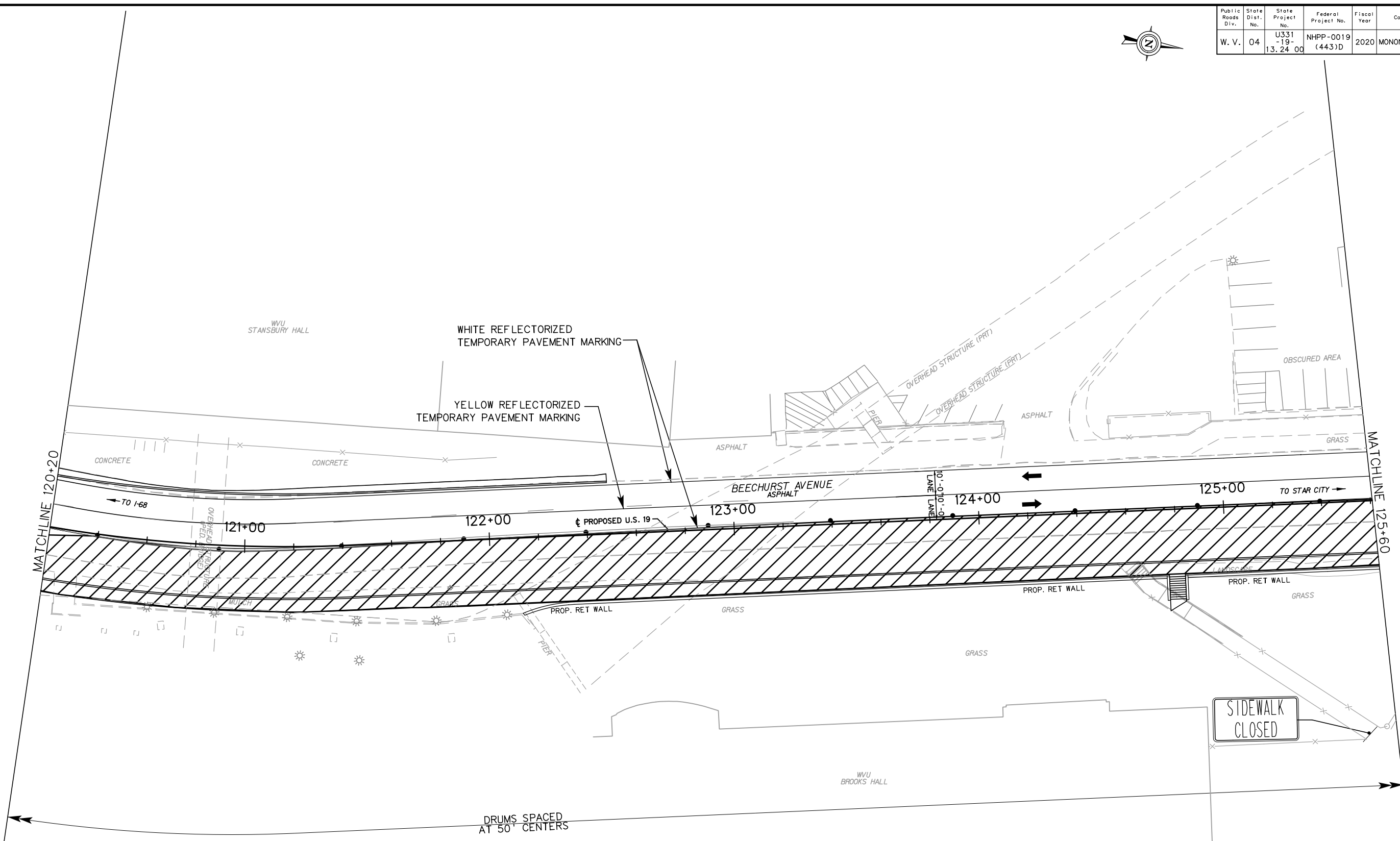
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TEMPORARY TRAFFIC CONTROL PLAN  
PHASE 1A**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



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LEGEND	
	WORK AREA
	TRAFFIC FLOW
	DRUMS
	SIGN LOCATION
	ELECTRIC ARROW
	TYPE "B" WARNING LIGHT

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



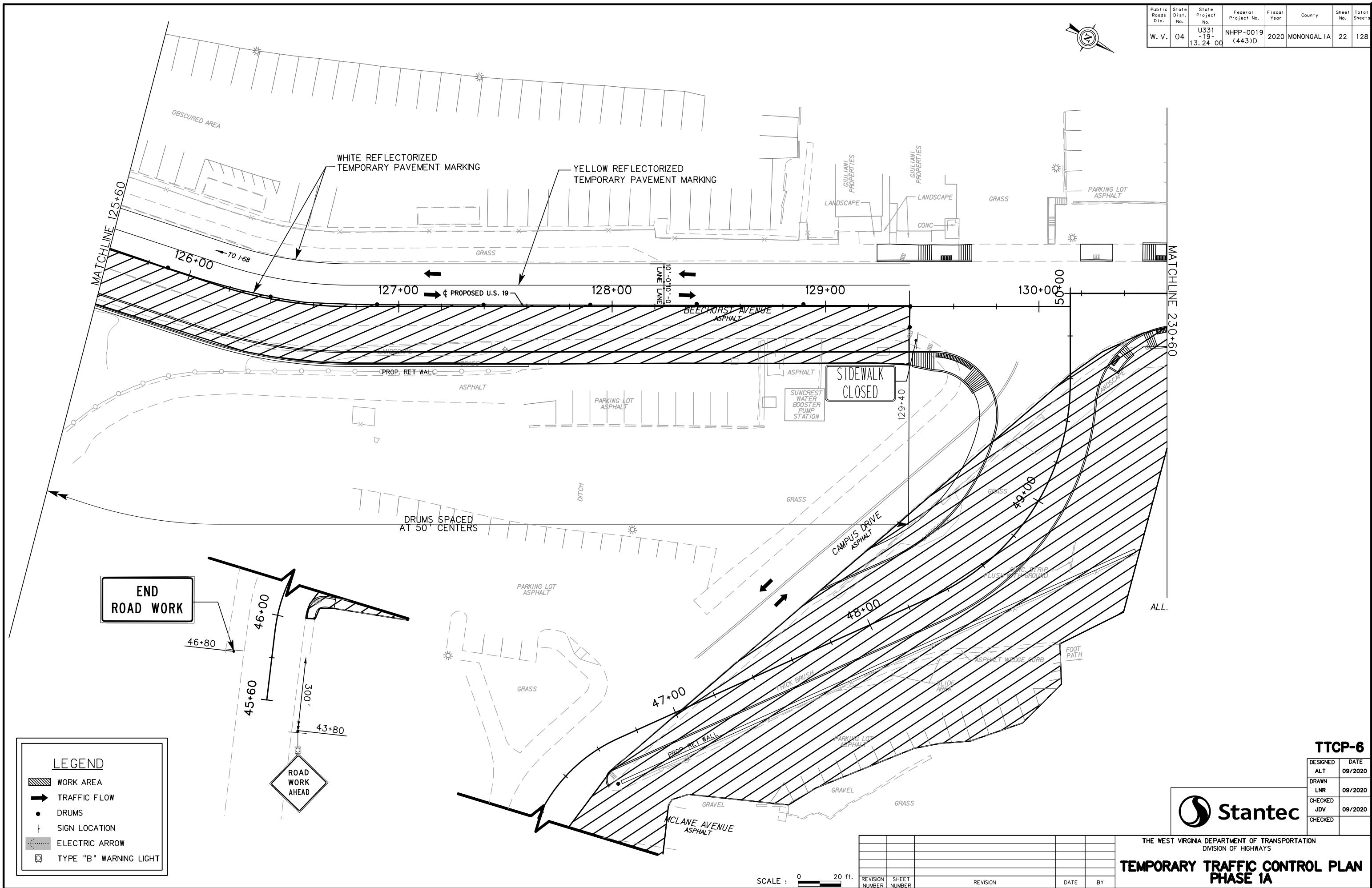
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TEMPORARY TRAFFIC CONTROL PLAN  
PHASE 1A**

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	

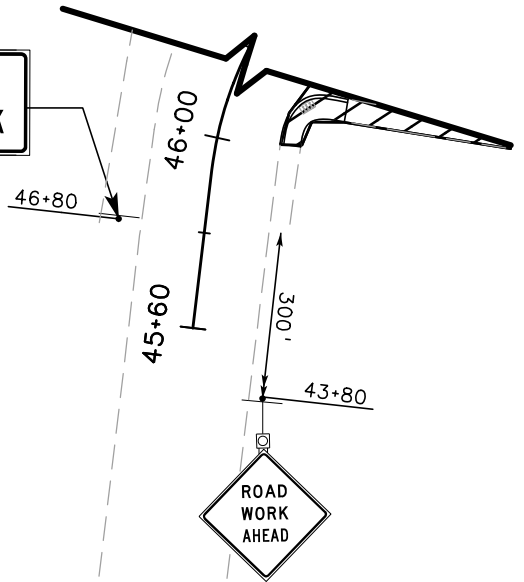
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Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	22	128



**END ROAD WORK**



**LEGEND**

- WORK AREA
- TRAFFIC FLOW
- DRUMS
- SIGN LOCATION
- ELECTRIC ARROW
- TYPE "B" WARNING LIGHT

**TTCP-6**

DESIGNED	ALT	DATE
DRAWN	LNR	09/2020
CHECKED	JDV	09/2020
CHECKED		



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TEMPORARY TRAFFIC CONTROL PLAN  
PHASE 1A**

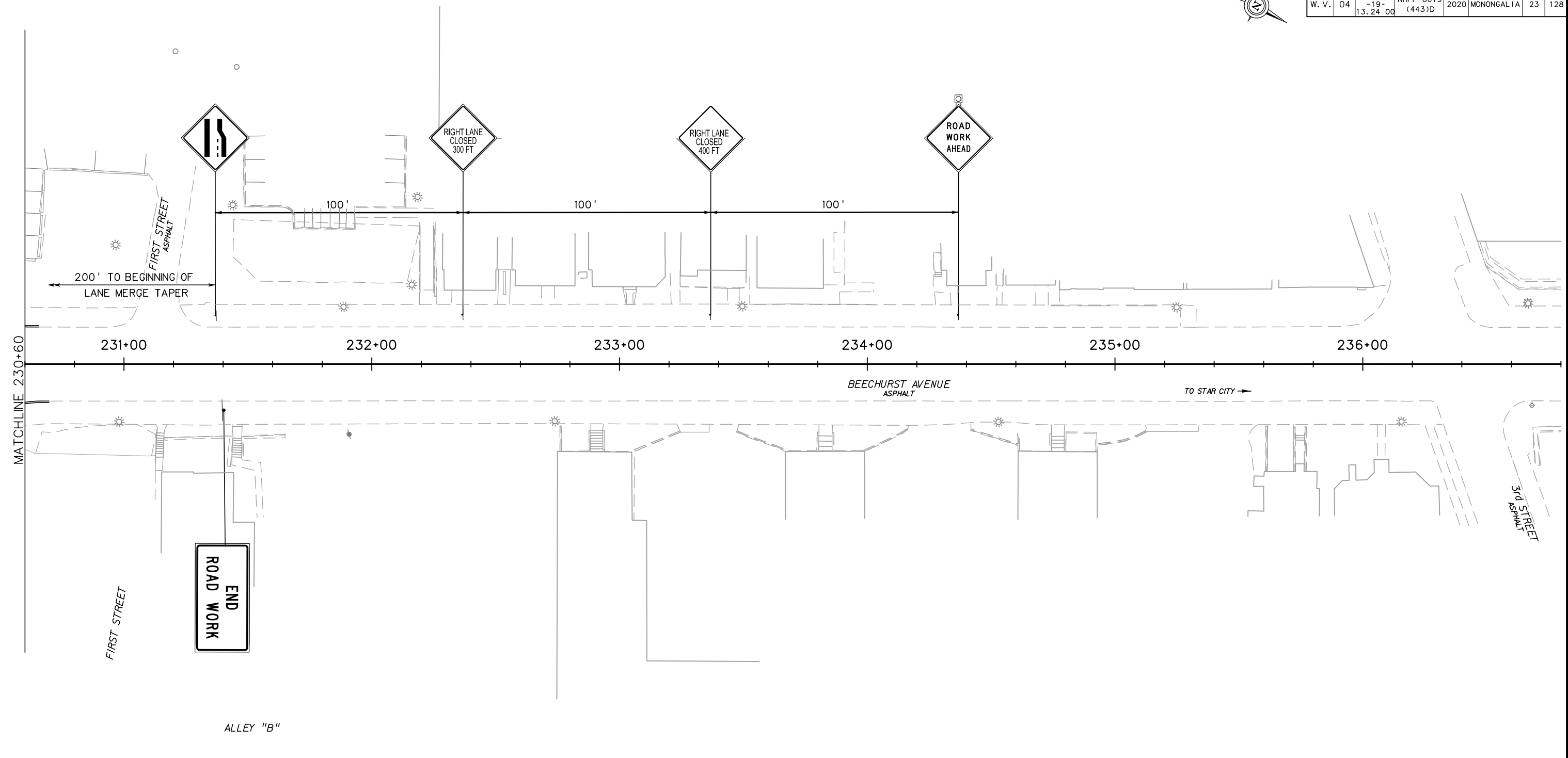
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REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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3041623003.PLAN 8

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
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LEGEND	
	WORK AREA
	TRAFFIC FLOW
	DRUMS
	SIGN LOCATION
	ELECTRIC ARROW
	TYPE "B" WARNING LIGHT

**TTCP-7**

DESIGNED	ALT	DATE	09/2020
DRAWN	LNR	DATE	09/2020
CHECKED	JDV	DATE	09/2020
CHECKED			



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TEMPORARY TRAFFIC CONTROL PLAN  
PHASE 1A**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	24	128



LEGEND	
	WORK AREA
	TRAFFIC FLOW
	DRUMS
	SIGN LOCATION
	ELECTRIC ARROW
	TYPE "B" WARNING LIGHT

**TTCP-8**

DESIGNED	ALT	DATE
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DRAWN	LNR	DATE
		09/2020
CHECKED	JDV	DATE
		09/2020
CHECKED		

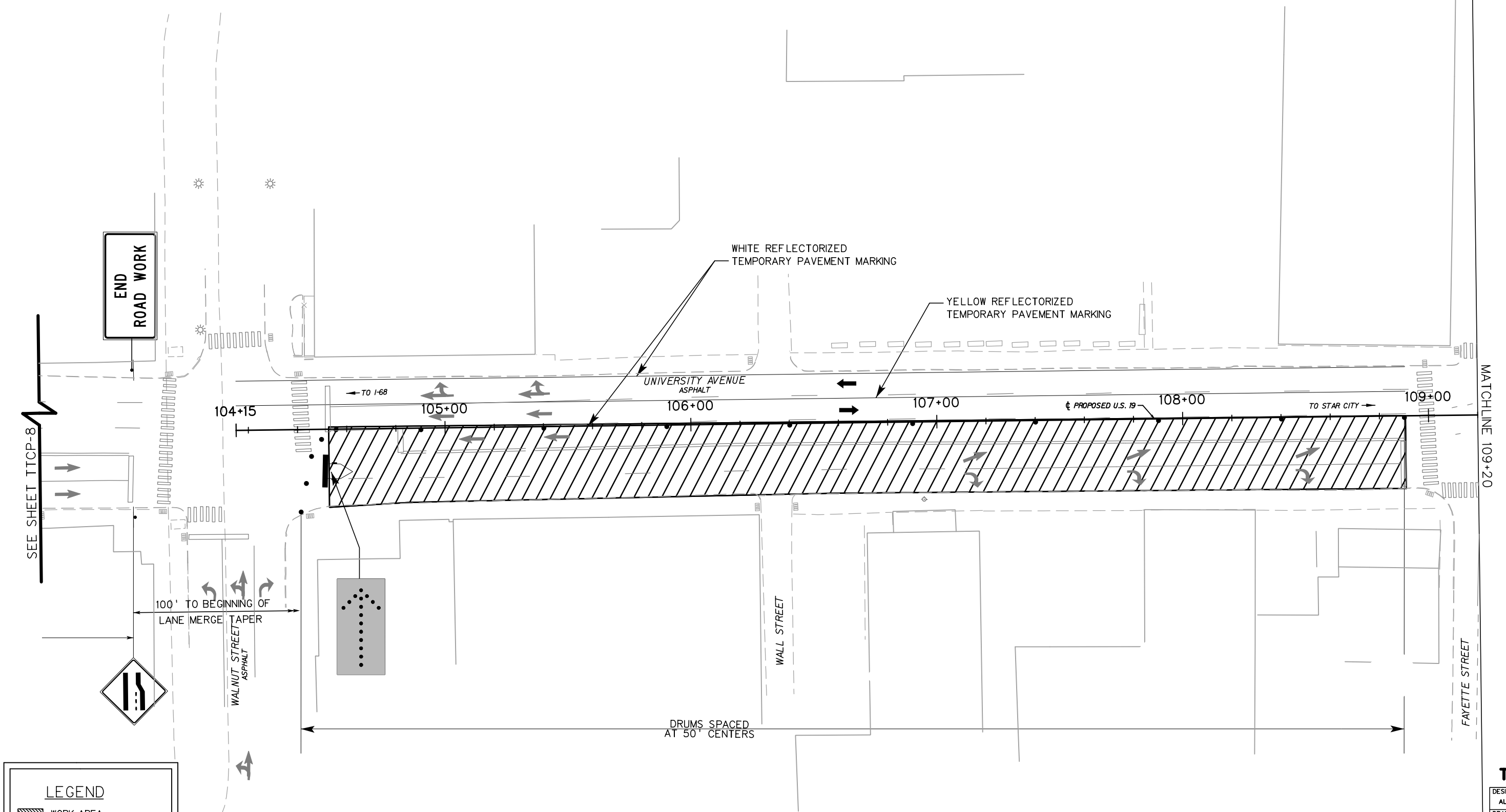


THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TEMPORARY TRAFFIC CONTROL PLAN  
PHASE 1B**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
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LEGEND	
	WORK AREA
	TRAFFIC FLOW
	DRUMS
	SIGN LOCATION
	ELECTRIC ARROW
	TYPE "B" WARNING LIGHT

MATCHLINE 109+20

<b>TTCP-9</b>	
DESIGNED ALT	DATE 09/2020
DRAWN LNR	DATE 09/2020
CHECKED JDV	DATE 09/2020
CHECKED	

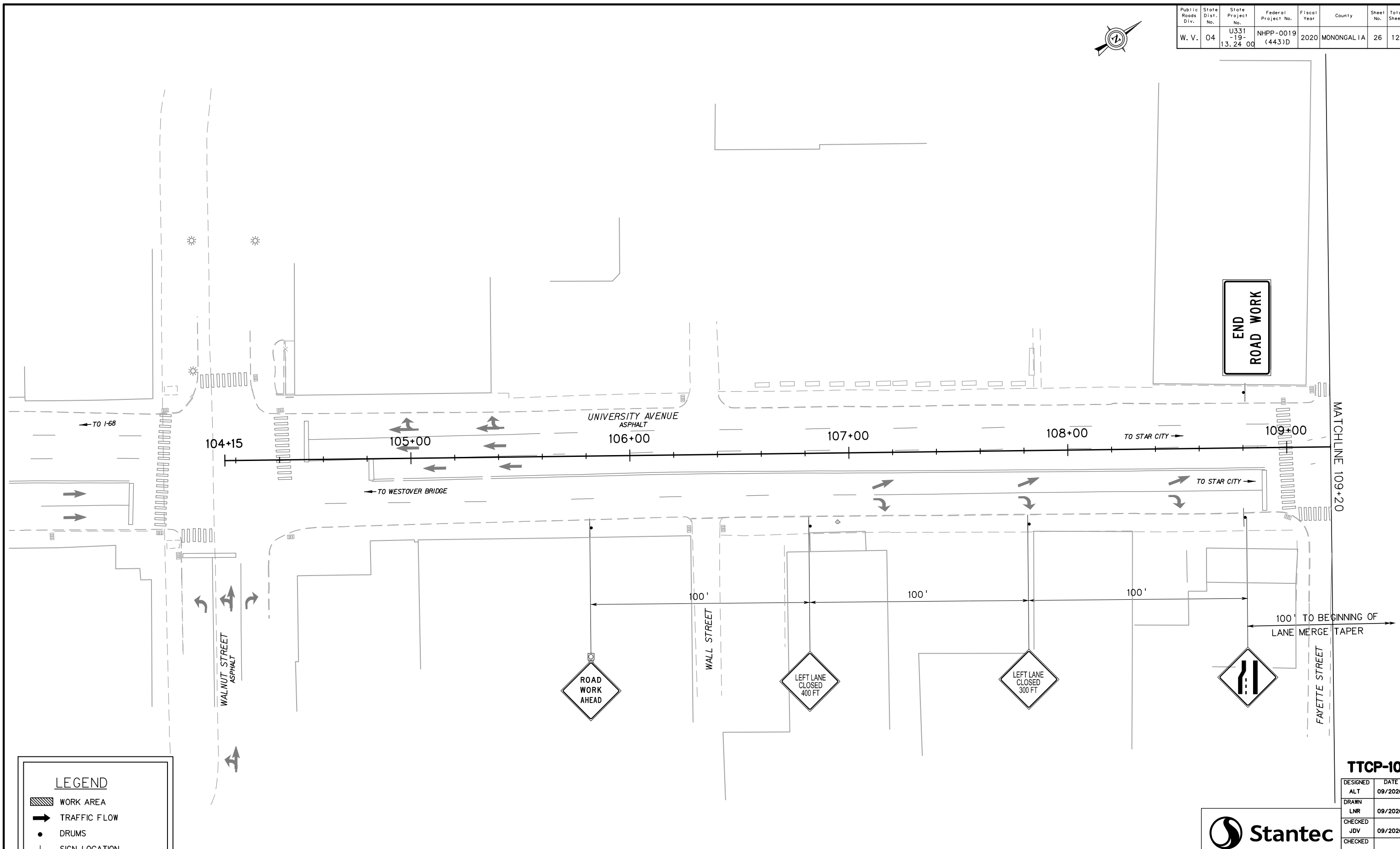


THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TEMPORARY TRAFFIC CONTROL PLAN  
PHASE 1B**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019 (443)D	2020	MONONGALIA	26	128



LEGEND	
	WORK AREA
	TRAFFIC FLOW
	DRUMS
	SIGN LOCATION
	ELECTRIC ARROW
	TYPE "B" WARNING LIGHT

<b>TTCP-10</b>	
DESIGNED ALT	DATE 09/2020
DRAWN LNR	DATE 09/2020
CHECKED JDV	DATE 09/2020
CHECKED	



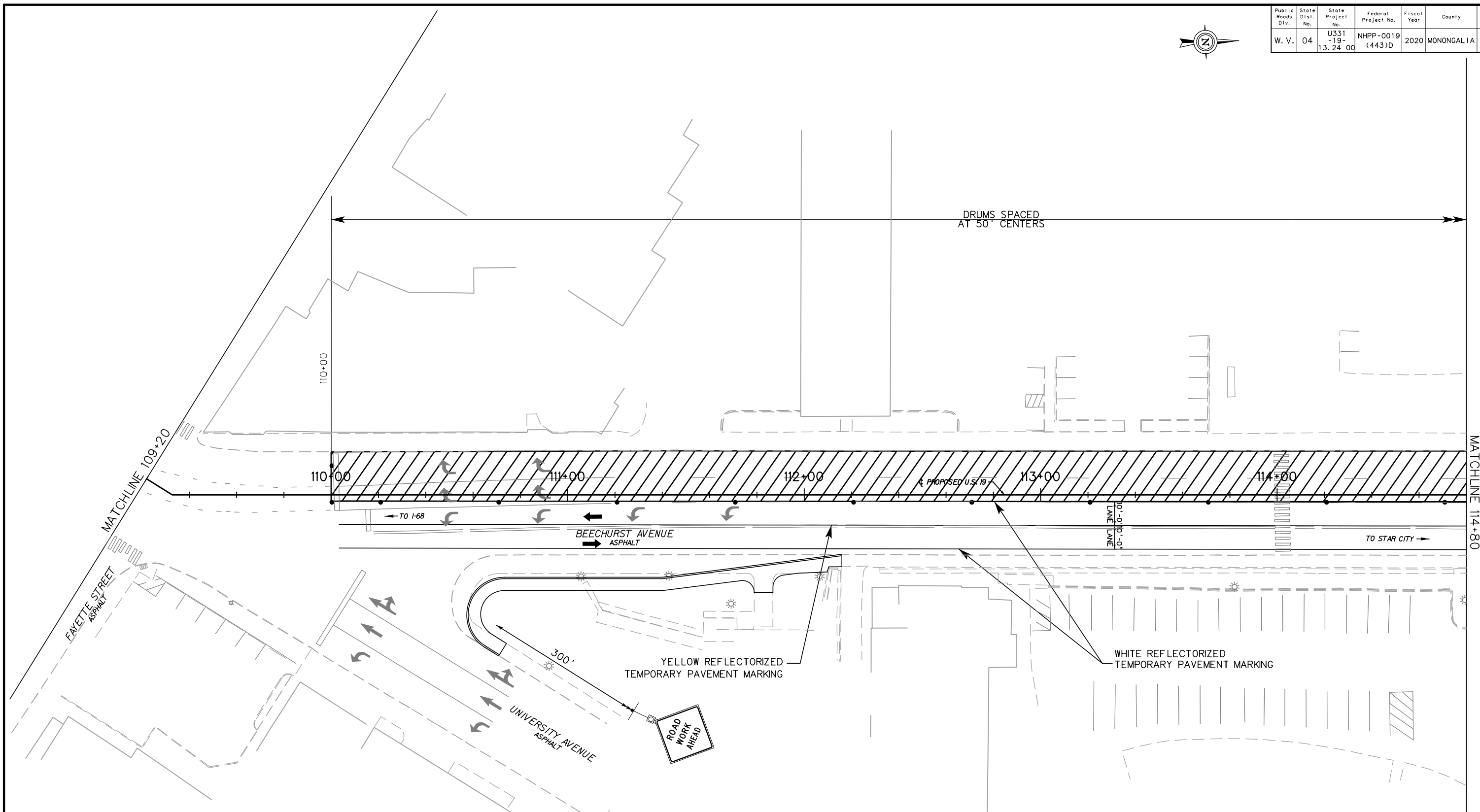
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TEMPORARY TRAFFIC CONTROL PLAN  
PHASE 2A**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019 (443)D	2020	MONONGALIA	27	128



LEGEND	
	WORK AREA
	TRAFFIC FLOW
	DRUMS
	SIGN LOCATION
	ELECTRIC ARROW
	TYPE "B" WARNING LIGHT

TTCP-11

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	

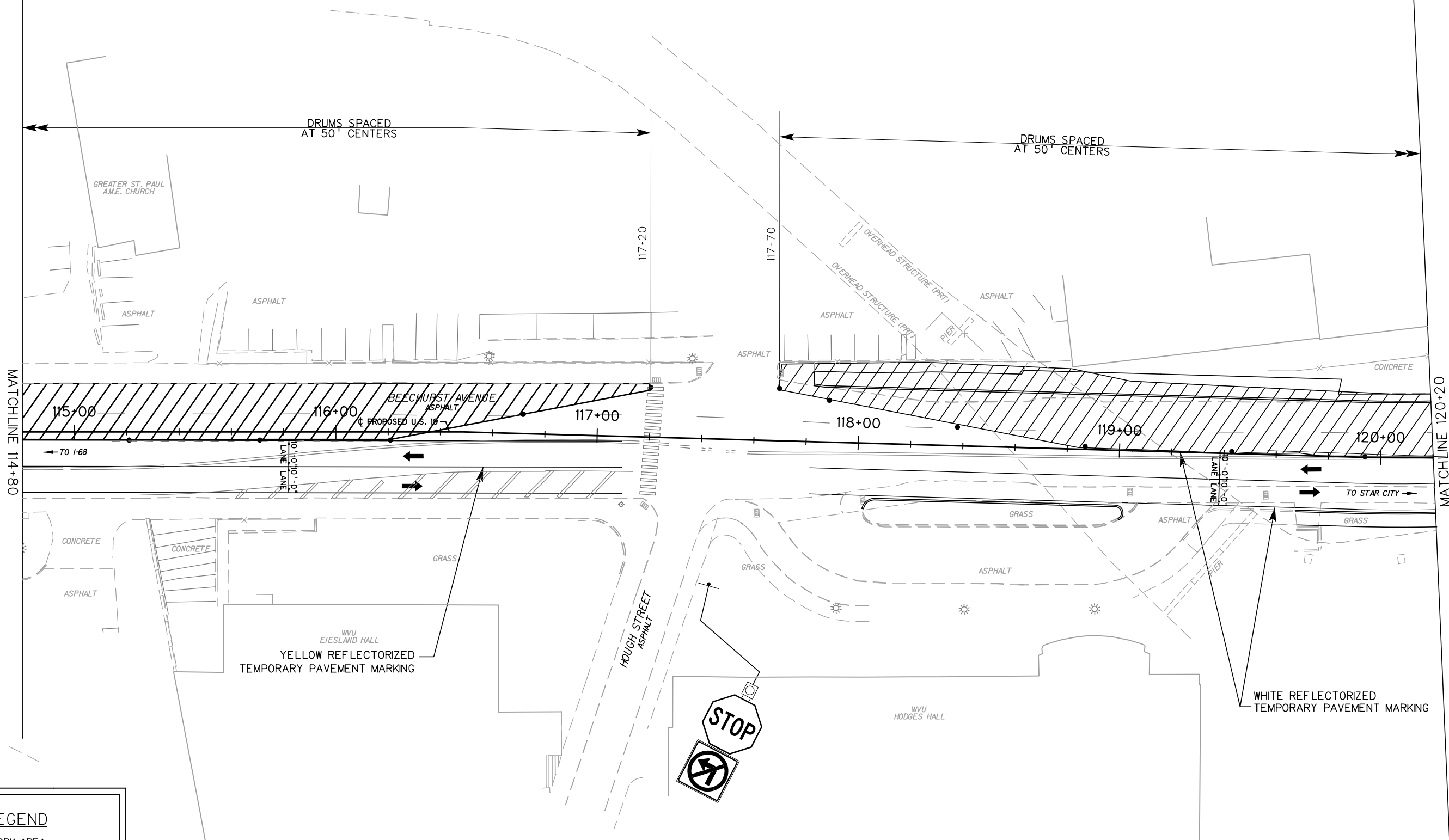


THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TEMPORARY TRAFFIC CONTROL PLAN  
PHASE 2A**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	28	128



LEGEND	
	WORK AREA
	TRAFFIC FLOW
	DRUMS
	SIGN LOCATION
	ELECTRIC ARROW
	TYPE "B" WARNING LIGHT

<b>TTCP-12</b>	
DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TEMPORARY TRAFFIC CONTROL PLAN  
PHASE 2A**

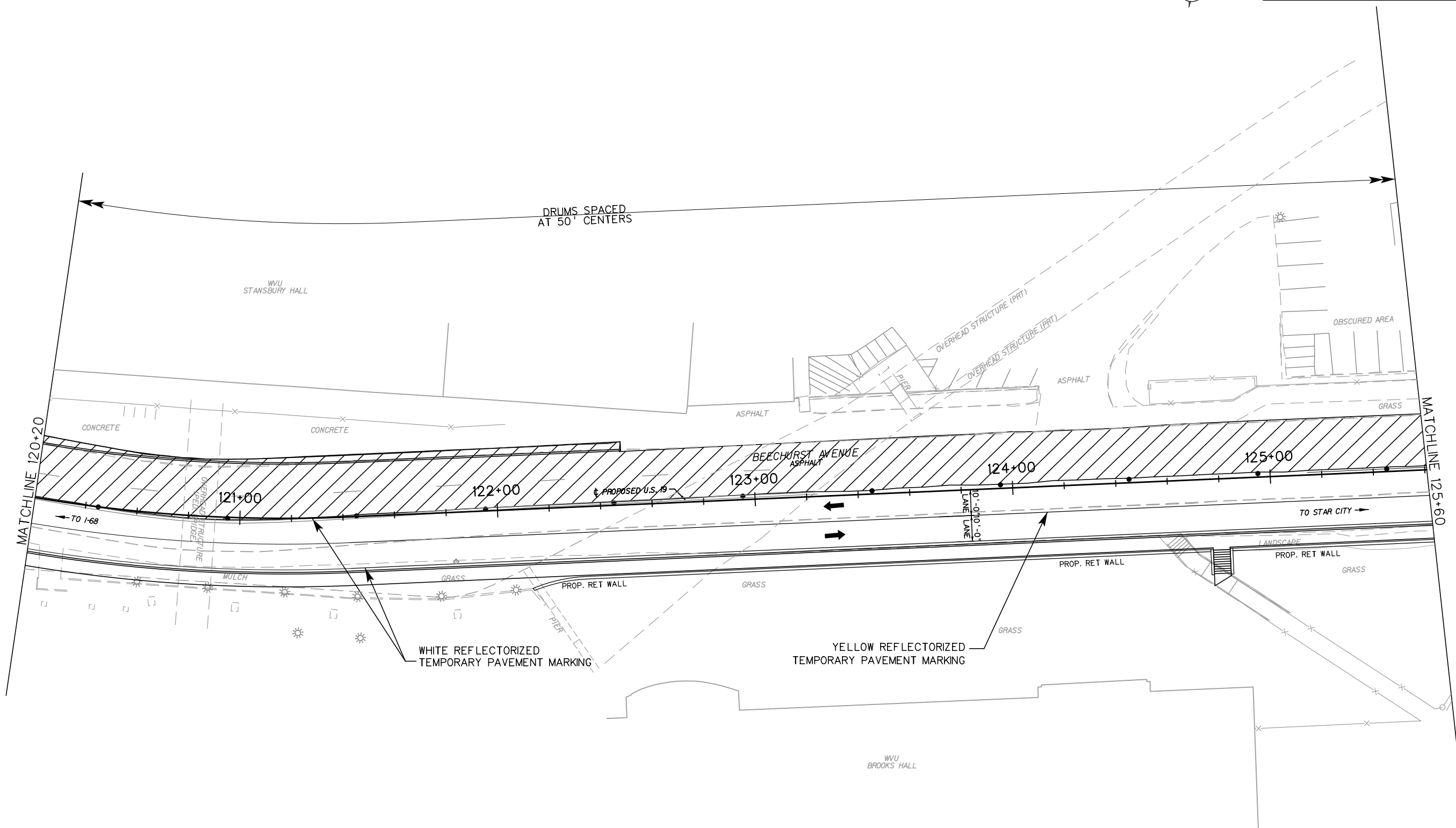
SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	29	128



LEGEND	
	WORK AREA
	TRAFFIC FLOW
	DRUMS
	SIGN LOCATION
	ELECTRIC ARROW
	TYPE "B" WARNING LIGHT

TTCP-13

DESIGNED	ALT	DATE
		09/2020
DRAWN	LNR	DATE
		09/2020
CHECKED	JDV	DATE
		09/2020
CHECKED		

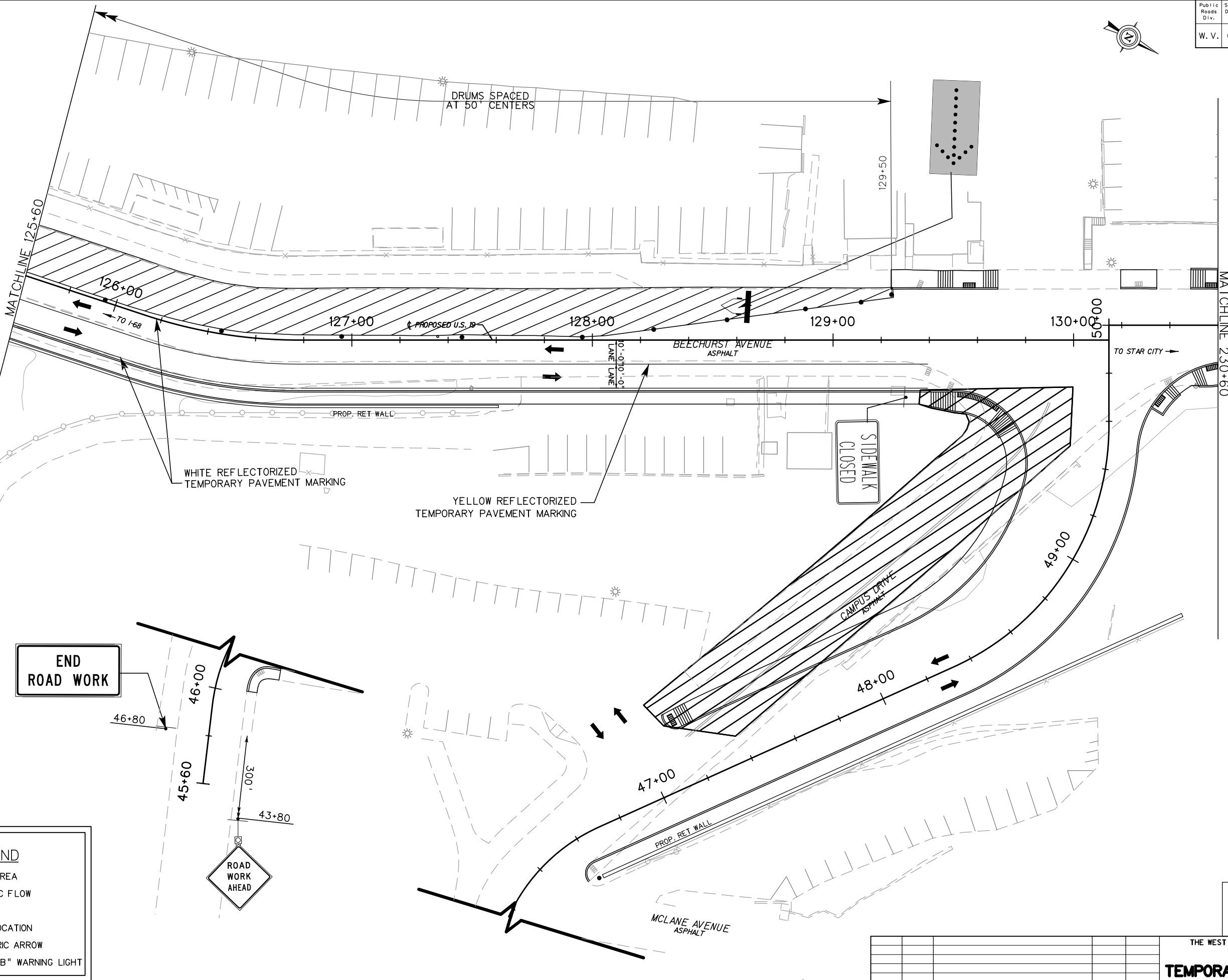


THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TEMPORARY TRAFFIC CONTROL PLAN  
PHASE 2A**

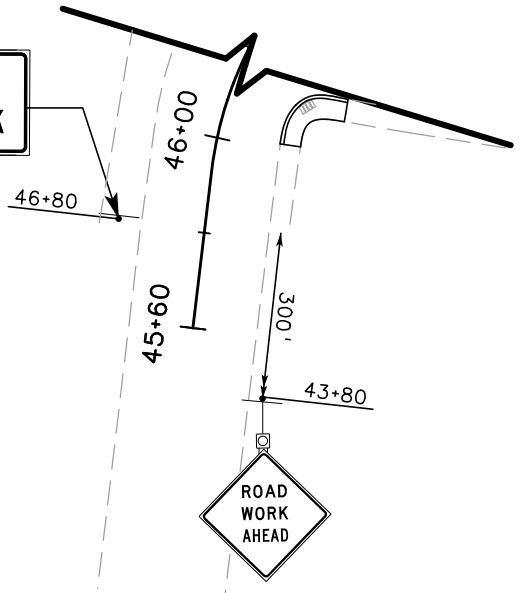
SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	30	128



**END ROAD WORK**



LEGEND	
	WORK AREA
	TRAFFIC FLOW
	DRUMS
	SIGN LOCATION
	ELECTRIC ARROW
	TYPE "B" WARNING LIGHT

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

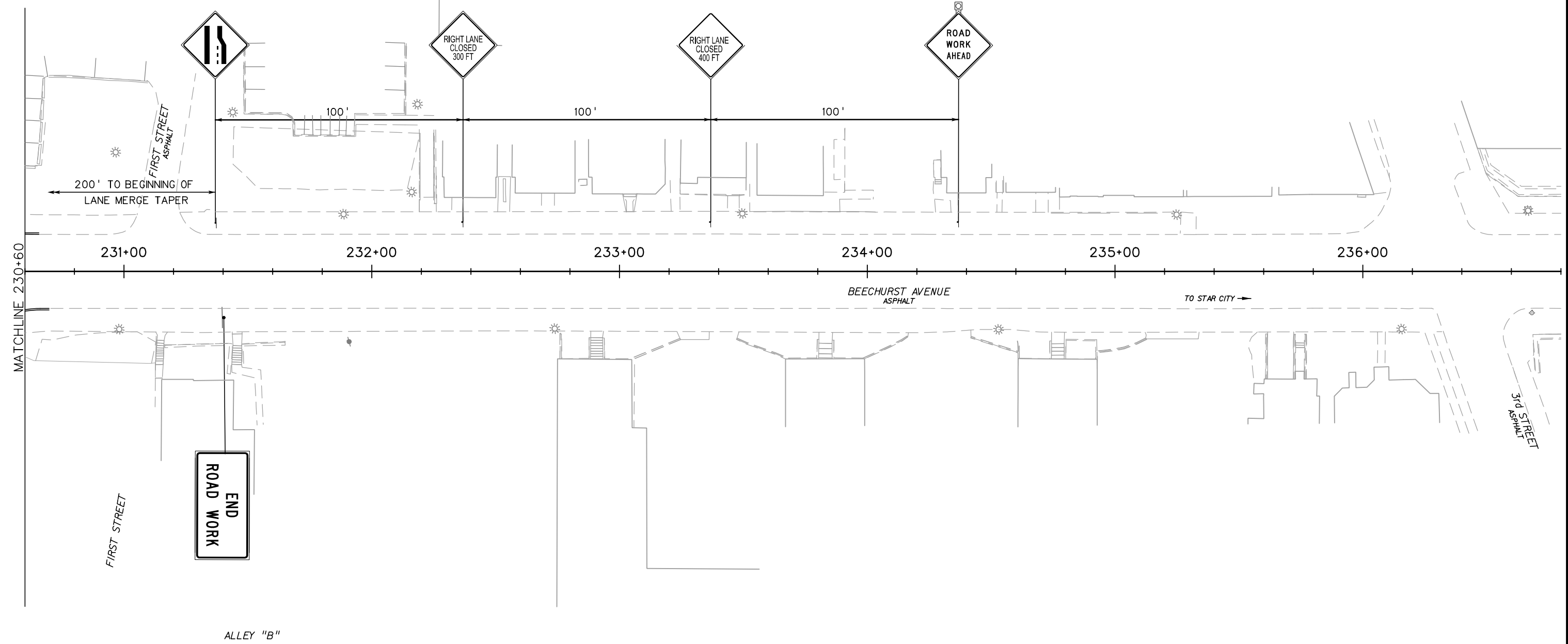


THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TEMPORARY TRAFFIC CONTROL PLAN  
PHASE 2A**

<b>TTCP-14</b>	
DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	

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Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	31	128



LEGEND	
	WORK AREA
	TRAFFIC FLOW
	DRUMS
	SIGN LOCATION
	ELECTRIC ARROW
	TYPE "B" WARNING LIGHT

**TTCP-15**

DESIGNED	ALT	DATE	09/2020
DRAWN	LNR	DATE	09/2020
CHECKED	JDV	DATE	09/2020
CHECKED			

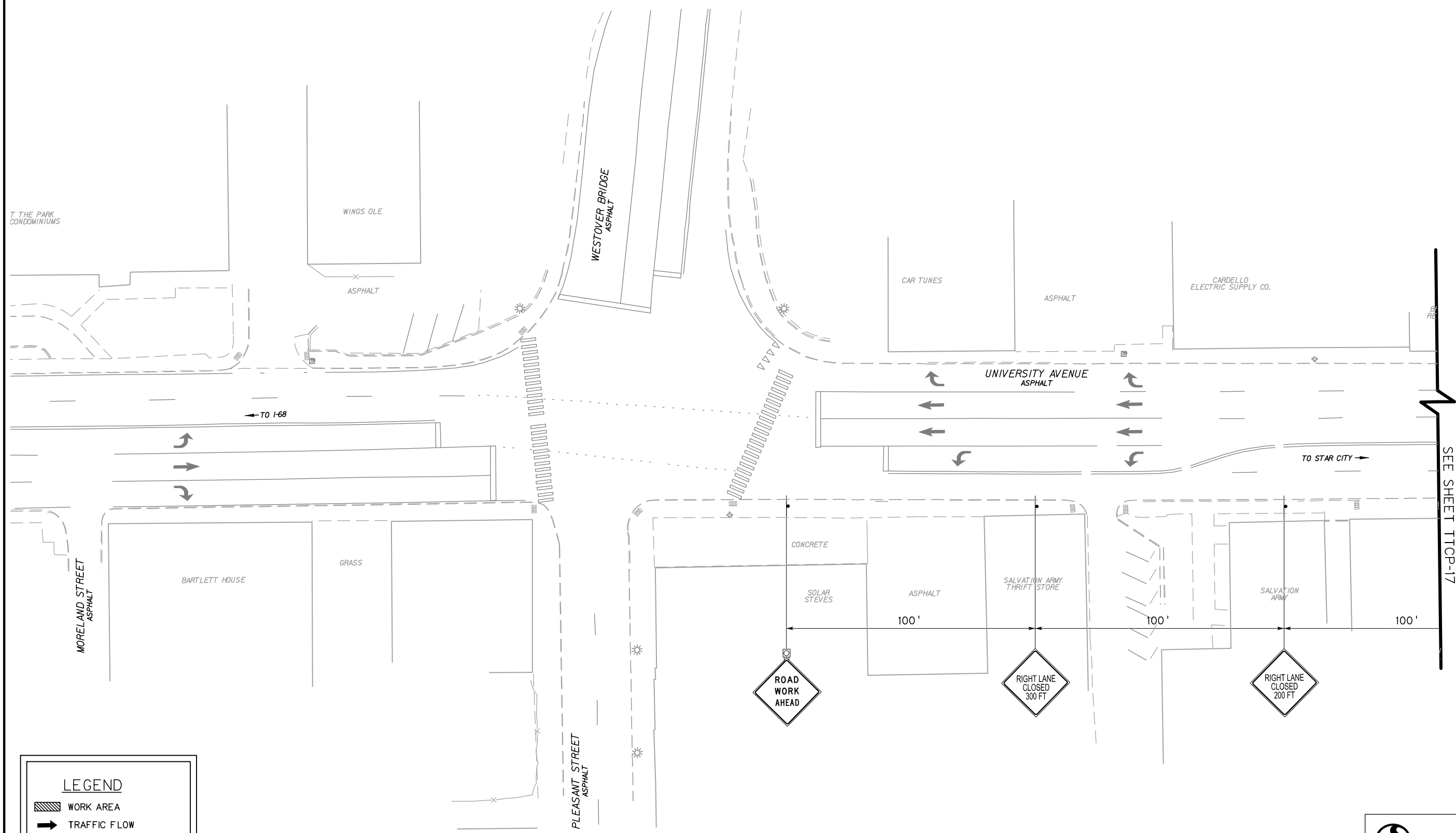


THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TEMPORARY TRAFFIC CONTROL PLAN  
PHASE 2A**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	32	128



LEGEND	
	WORK AREA
	TRAFFIC FLOW
	DRUMS
	SIGN LOCATION
	ELECTRIC ARROW
	TYPE "B" WARNING LIGHT

**TTCP-16**

DESIGNED	ALT	DATE	09/2020
DRAWN	LNR	DATE	09/2020
CHECKED	JDV	DATE	09/2020
CHECKED			

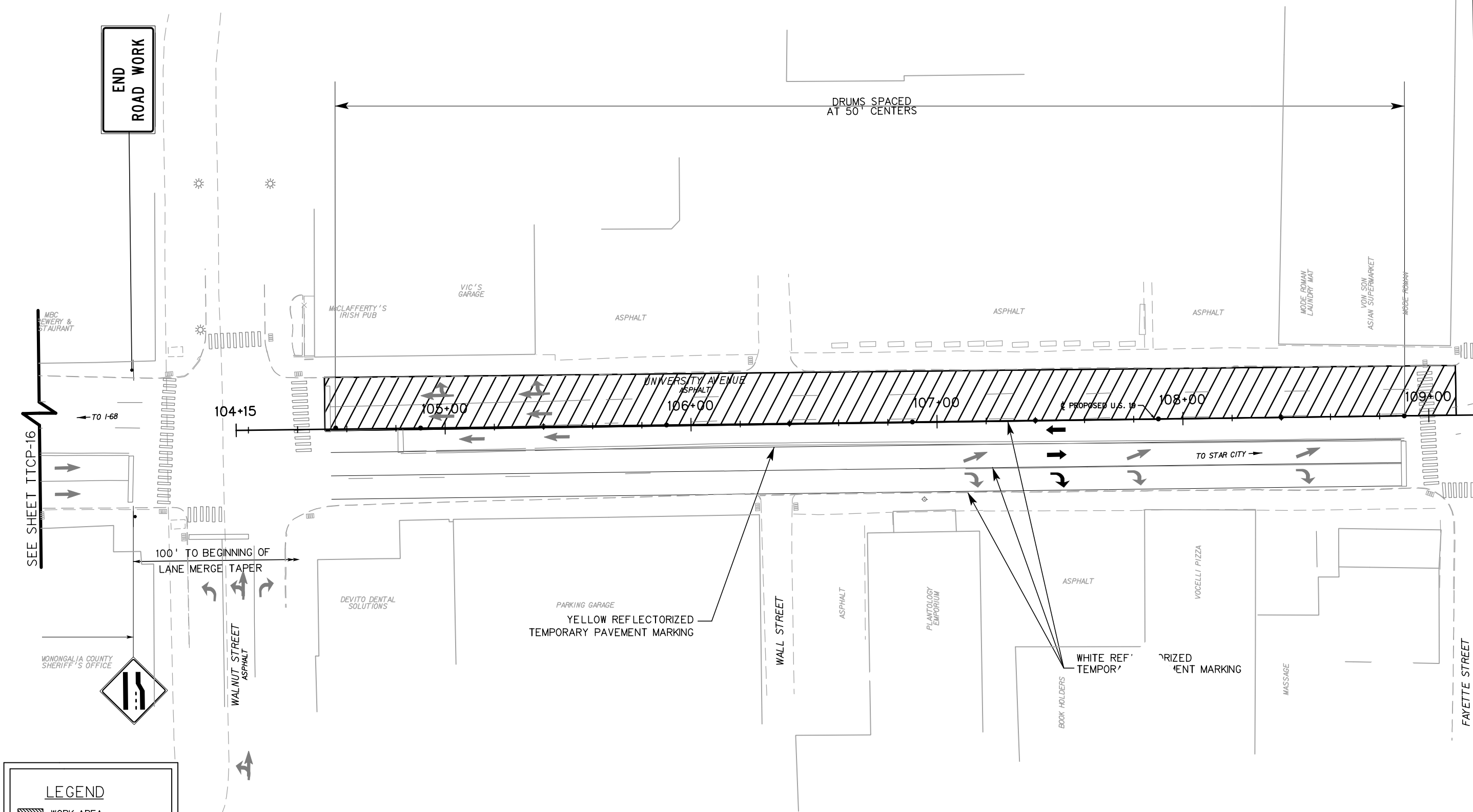


THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TEMPORARY TRAFFIC CONTROL PLAN  
PHASE 2B**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	33	128



LEGEND	
	WORK AREA
	TRAFFIC FLOW
	DRUMS
	SIGN LOCATION
	ELECTRIC ARROW
	TYPE "B" WARNING LIGHT

MATCHLINE 109+20

<b>TTCP-17</b>	
DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TEMPORARY TRAFFIC CONTROL PLAN  
PHASE 2B**

SCALE : 0 20 ft.

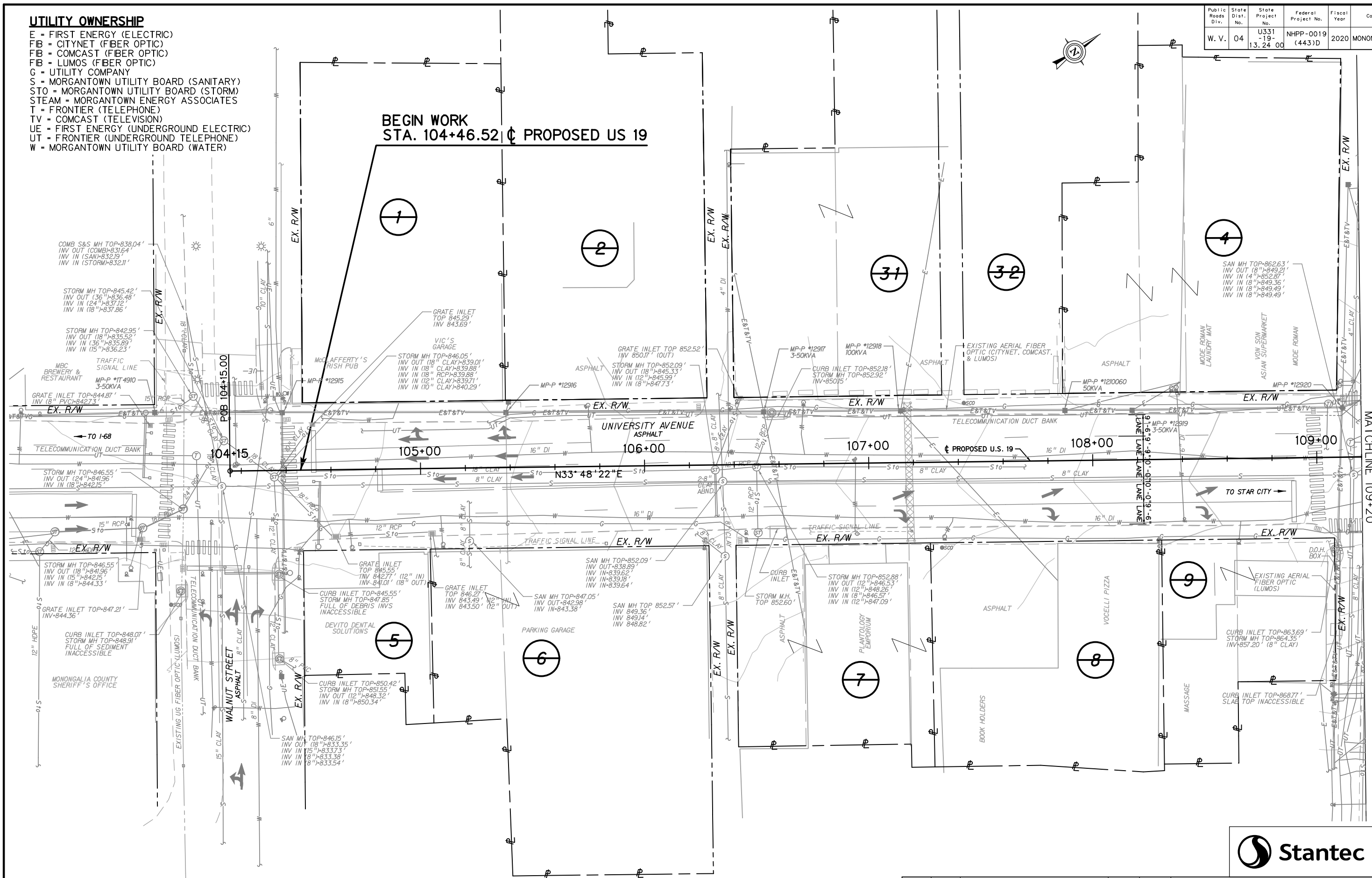
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

Public Roads Div.	State No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	34	128

**UTILITY OWNERSHIP**

- E - FIRST ENERGY (ELECTRIC)
- FIB - CITYNET (FIBER OPTIC)
- FIB - COMCAST (FIBER OPTIC)
- FIB - LUMOS (FIBER OPTIC)
- G - UTILITY COMPANY
- S - MORGANTOWN UTILITY BOARD (SANITARY)
- STO - MORGANTOWN UTILITY BOARD (STORM)
- STEAM - MORGANTOWN ENERGY ASSOCIATES
- T - FRONTIER (TELEPHONE)
- TV - COMCAST (TELEVISION)
- UE - FIRST ENERGY (UNDERGROUND ELECTRIC)
- UT - FRONTIER (UNDERGROUND TELEPHONE)
- W - MORGANTOWN UTILITY BOARD (WATER)

**BEGIN WORK STA. 104+46.52 @ PROPOSED US 19**



MATCHLINE 109+20

DESIGNED	ALT	DATE
LNR	JDV	09/2020
CHECKED	JDV	09/2020
CHECKED		



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**US 19 CONSTR PLAN SHEET**  
**BEGIN TO STA 109+20**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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Public Roads Div.	State No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	35	128

**UTILITY OWNERSHIP**

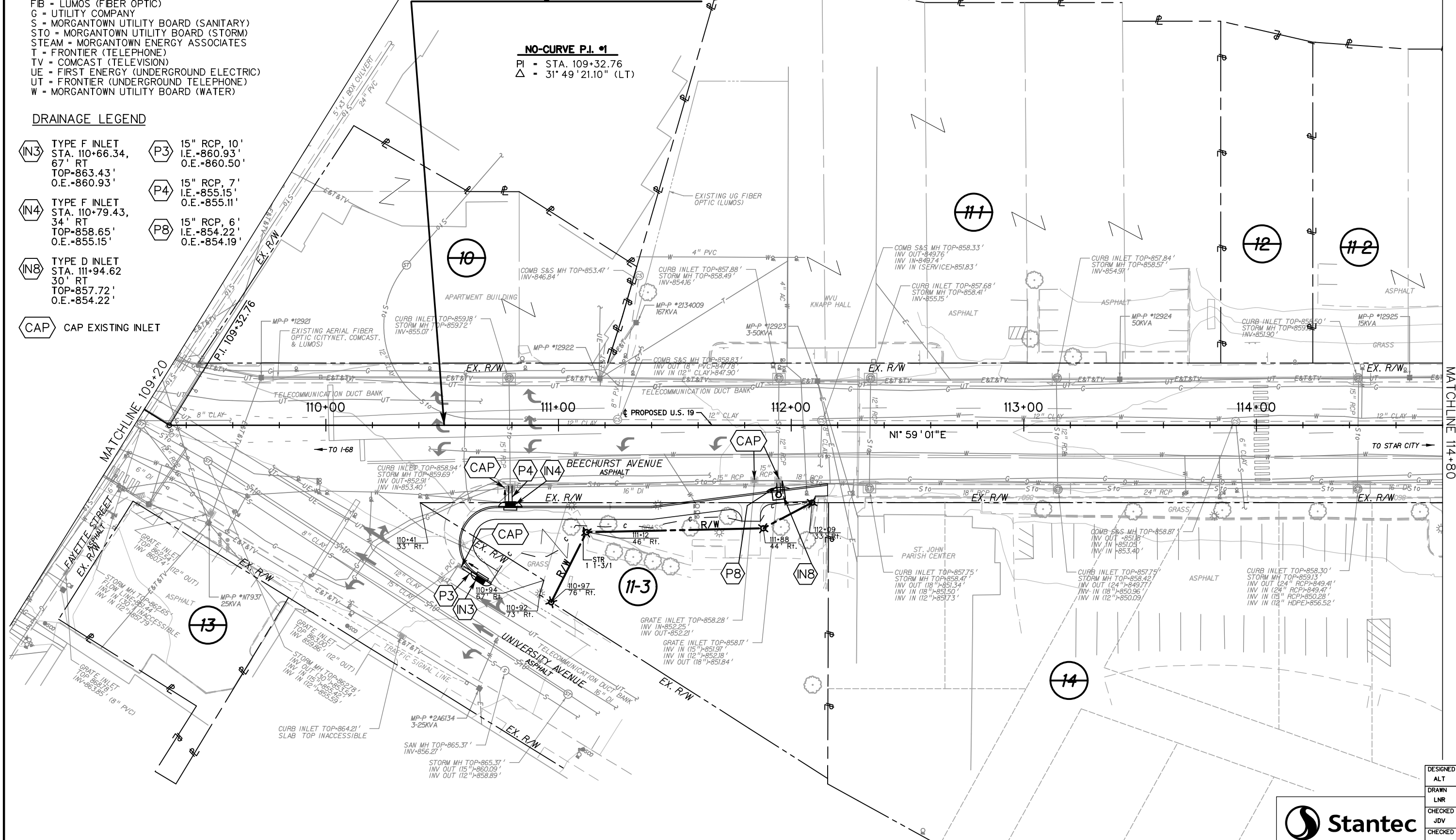
- E - FIRST ENERGY (ELECTRIC)
- FIB - CITYNET (FIBER OPTIC)
- FIB - COMCAST (FIBER OPTIC)
- FIB - LUMOS (FIBER OPTIC)
- G - UTILITY COMPANY
- S - MORGANTOWN UTILITY BOARD (SANITARY)
- STO - MORGANTOWN UTILITY BOARD (STORM)
- STEAM - MORGANTOWN ENERGY ASSOCIATES
- T - FRONTIER (TELEPHONE)
- TV - COMCAST (TELEVISION)
- UE - FIRST ENERGY (UNDERGROUND ELECTRIC)
- UT - FRONTIER (UNDERGROUND TELEPHONE)
- W - MORGANTOWN UTILITY BOARD (WATER)

**DRAINAGE LEGEND**

- IN3** TYPE F INLET  
STA. 110+66.34,  
67' RT  
TOP-863.43'  
O.E.-860.93'
- IN4** TYPE F INLET  
STA. 110+79.43,  
34' RT  
TOP-858.65'  
O.E.-855.15'
- IN8** TYPE D INLET  
STA. 111+94.62  
30' RT  
TOP-857.72'  
O.E.-854.22'
- CAP** CAP EXISTING INLET
- P3** 15" RCP, 10'  
I.E.-860.93'  
O.E.-860.50'
- P4** 15" RCP, 7'  
I.E.-855.15'  
O.E.-855.11'
- P8** 15" RCP, 6'  
I.E.-854.22'  
O.E.-854.19'

**BEGIN CONSTRUCTION PROJECT  
STA 110+50.88 ¢ PROPOSED US 19**

**NO-CURVE P.I. #1**  
PI = STA. 109+32.76  
Δ = 31° 49' 21.10" (LT)



MATCHLINE 114+80

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**US 19 CONSTR PLAN SHEET  
STA. 109+20 TO 114+80**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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**UTILITY OWNERSHIP**

- E - FIRST ENERGY (ELECTRIC)
- FIB = CITYNET (FIBER OPTIC)
- FIB = COMCAST (FIBER OPTIC)
- FIB = LUMOS (FIBER OPTIC)
- G - UTILITY COMPANY
- S - MORGANTOWN UTILITY BOARD (SANITARY)
- STO - MORGANTOWN UTILITY BOARD (STORM)
- STEAM - MORGANTOWN ENERGY ASSOCIATES
- T - FRONTIER (TELEPHONE)
- TV - COMCAST (TELEVISION)
- UE - FIRST ENERGY (UNDERGROUND ELECTRIC)
- UT - FRONTIER (UNDERGROUND TELEPHONE)
- W - MORGANTOWN UTILITY BOARD (WATER)

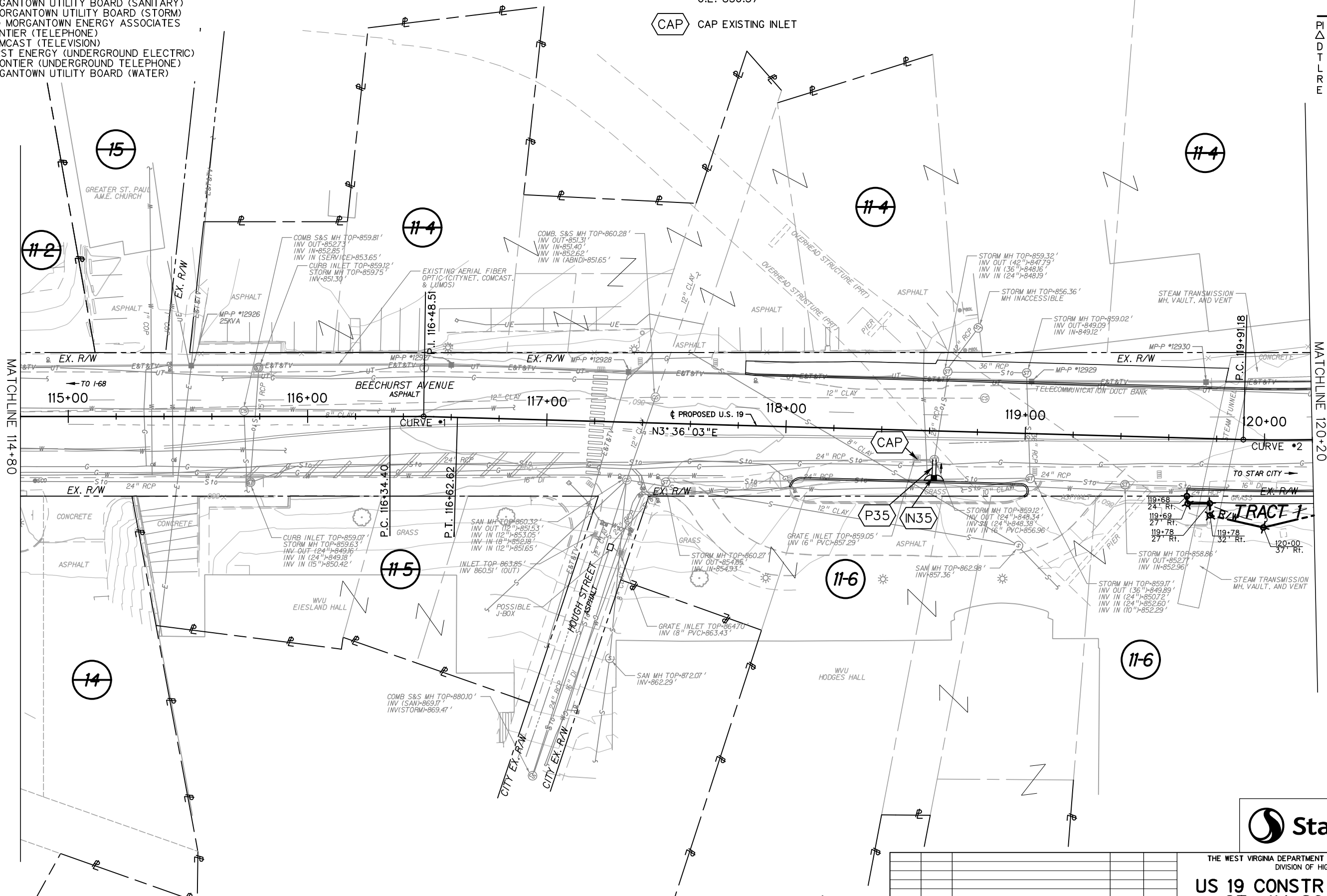
**DRAINAGE LEGEND**

- IN35 TYPE F INLET  
STA. 118+62.36, 19.75' RT  
TOP-858.85'  
O.E.-856.37'
- P35 15" RCP, 8'  
I.E.-856.37'  
O.E.-856.33'
- CAP CAP EXISTING INLET

Public Roads Div.	State No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	36	128

**CURVE#2 DATA**

- PI = STA. 120+67.37
- Δ = 14° 53' 30.87" (LT)
- D = 9° 49' 39.90"
- T = 76.19
- L = 151.53
- R = 583.00
- E = 4.96



MATCHLINE 114+80

MATCHLINE 120+20

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**US 19 CONSTR PLAN SHEET**  
**STA 114+80 TO 120+20**

DESIGNED	DATE
ALT	09/2020
DRAWN	LNR
CHECKED	JDV
CHECKED	

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Public Roads Div.	State No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	37	128



**UTILITY OWNERSHIP**

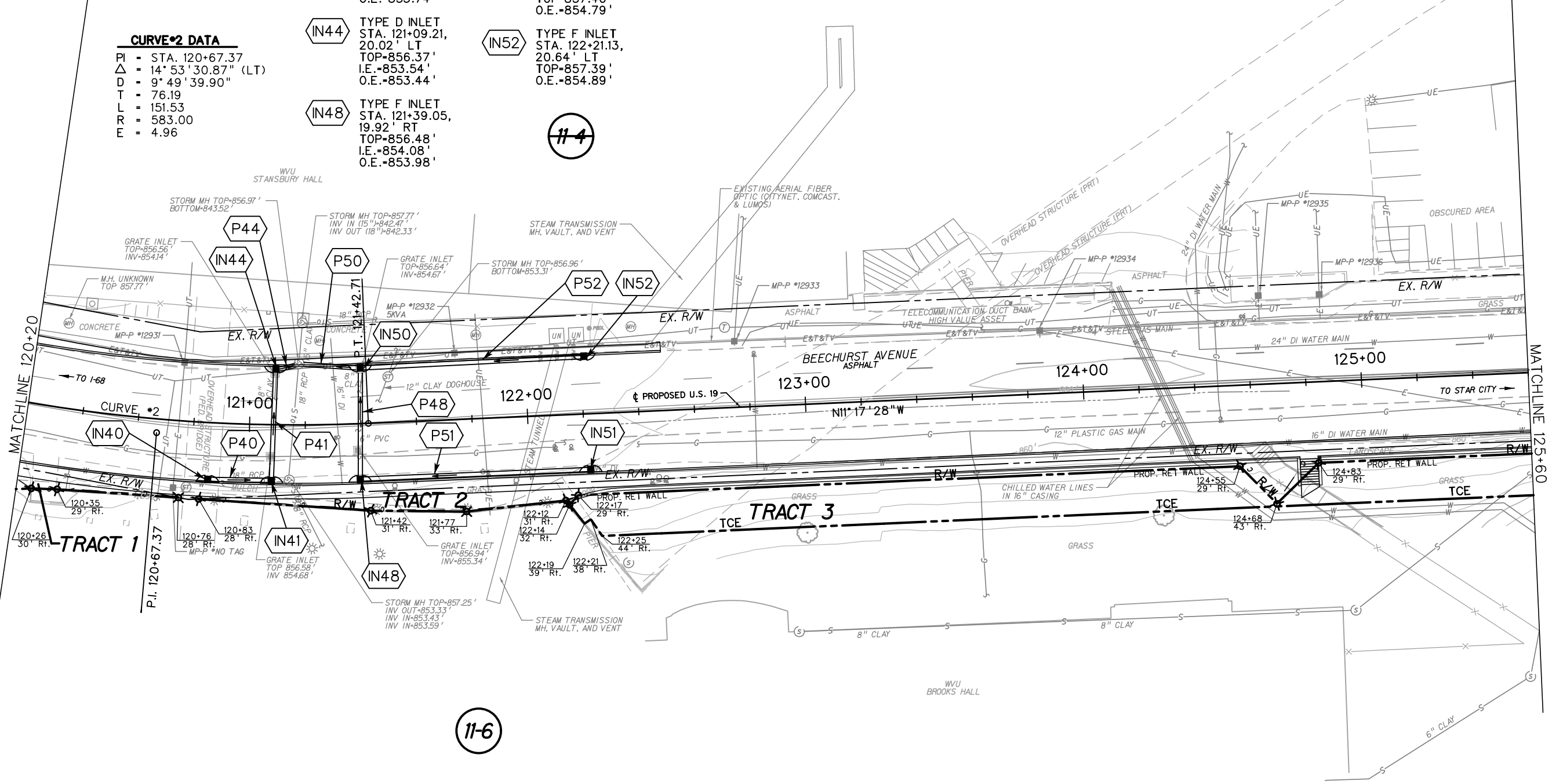
- E - FIRST ENERGY (ELECTRIC)
- FIB - CITYNET (FIBER OPTIC)
- FIB - COMCAST (FIBER OPTIC)
- FIB - LUMOS (FIBER OPTIC)
- G - UTILITY COMPANY
- S - MORGANTOWN UTILITY BOARD (SANITARY)
- STO - MORGANTOWN UTILITY BOARD (STORM)
- STEAM - MORGANTOWN ENERGY ASSOCIATES
- T - FRONTIER (TELEPHONE)
- TV - COMCAST (TELEVISION)
- UE - FIRST ENERGY (UNDERGROUND ELECTRIC)
- UT - FRONTIER (UNDERGROUND TELEPHONE)
- W - MORGANTOWN UTILITY BOARD (WATER)

**DRAINAGE LEGEND**

- |   |   |   |   |   |
|---|---|---|---|---|
| <b>IN40</b> TYPE F INLET<br>STA. 120+86.01,<br>20.36' RT<br>TOP=856.46'<br>O.E.=853.96'                 | <b>IN50</b> TYPE F INLET<br>STA. 121+40.56,<br>20.03' LT<br>TOP=856.47'<br>I.E.=853.97'<br>I.E.=853.78'<br>O.E.=853.68' | <b>P40</b> 15" RCP, 23'<br>I.E.=853.96'<br>O.E.=853.84' | <b>P48</b> 18" RCP, 40'<br>I.E.=853.98'<br>O.E.=853.78' | <b>P52</b> 15" RCP, 81'<br>I.E.=854.89'<br>O.E.=853.97' |
| <b>IN41</b> TYPE F INLET<br>STA. 121+08.17,<br>20.05' RT<br>TOP=856.37'<br>I.E.=853.84'<br>O.E.=853.74' | <b>IN51</b> TYPE F INLET<br>STA. 122+21.83,<br>19.97' RT<br>TOP=857.40'<br>O.E.=854.79'                                 | <b>P41</b> 18" RCP, 40'<br>I.E.=853.74'<br>O.E.=853.54' | <b>P50</b> 18" RCP, 22'<br>I.E.=853.68'<br>O.E.=853.57' | <b>P51</b> 15" RCP, 83'<br>I.E.=854.79'<br>O.E.=854.08' |
| <b>IN44</b> TYPE D INLET<br>STA. 121+09.21,<br>20.02' LT<br>TOP=856.37'<br>I.E.=853.54'<br>O.E.=853.44' | <b>IN52</b> TYPE F INLET<br>STA. 122+21.13,<br>20.64' LT<br>TOP=857.39'<br>O.E.=854.89'                                 |   |   |   |
| <b>IN48</b> TYPE F INLET<br>STA. 121+39.05,<br>19.92' RT<br>TOP=856.48'<br>I.E.=854.08'<br>O.E.=853.98' |   |   |   |   |

**CURVE#2 DATA**

- PI = STA. 120+67.37
- Δ = 14° 53' 30.87" (LT)
- D = 9° 49' 39.90"
- T = 76.19
- L = 151.53
- R = 583.00
- E = 4.96



11-6

DESIGNED	ALT	DATE
DRAWN	LNR	09/2020
CHECKED	JDV	09/2020
CHECKED		



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

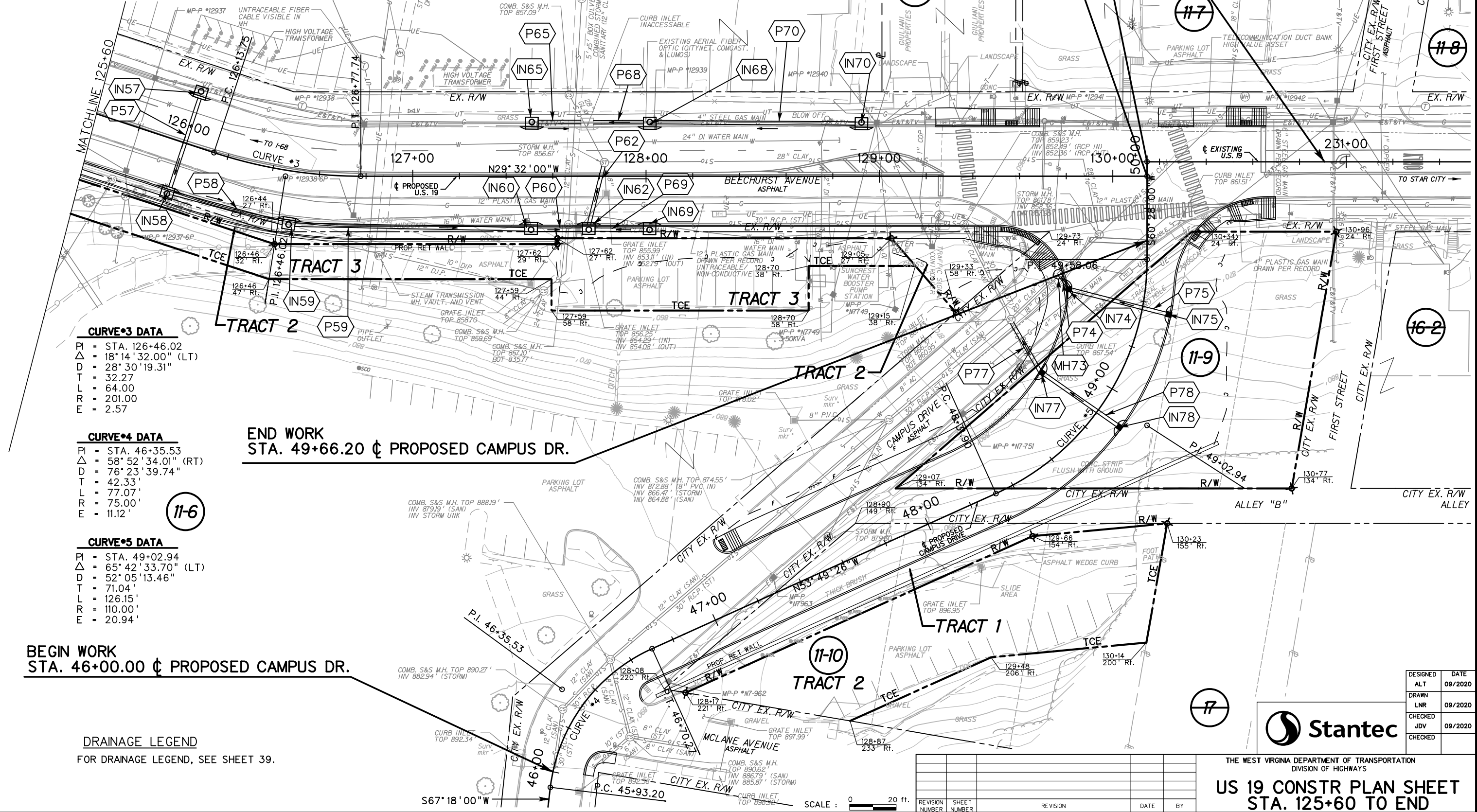
**US 19 CONSTR PLAN SHEET  
STA 120+20 TO 125+60**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

**UTILITY OWNERSHIP**

- E - FIRST ENERGY (ELECTRIC)
- FIB - CITYNET (FIBER OPTIC)
- FIB - COMCAST (FIBER OPTIC)
- FIB - LUMOS (FIBER OPTIC)
- G - UTILITY COMPANY
- S - MORGANTOWN UTILITY BOARD (SANITARY)
- STO - MORGANTOWN UTILITY BOARD (STORM)
- STEAM - MORGANTOWN ENERGY ASSOCIATES
- T - FRONTIER (TELEPHONE)
- TV - COMCAST (TELEVISION)
- UE - FIRST ENERGY (UNDERGROUND ELECTRIC)
- UT - FRONTIER (UNDERGROUND TELEPHONE)
- W - MORGANTOWN UTILITY BOARD (WATER)



**CURVE#3 DATA**

- PI = STA. 126+46.02
- Δ = 18° 14' 32.00" (LT)
- D = 28° 30' 19.31"
- T = 32.27
- L = 64.00
- R = 201.00
- E = 2.57

**CURVE#4 DATA**

- PI = STA. 46+35.53
- Δ = 58° 52' 34.01" (RT)
- D = 76° 23' 39.74"
- T = 42.33'
- L = 77.07'
- R = 75.00'
- E = 11.12'

**CURVE#5 DATA**

- PI = STA. 49+02.94
- Δ = 65° 42' 33.70" (LT)
- D = 52° 05' 13.46"
- T = 71.04'
- L = 126.15'
- R = 110.00'
- E = 20.94'

**BEGIN WORK**  
STA. 46+00.00  $\pm$  PROPOSED CAMPUS DR.

**END WORK**  
STA. 49+66.20  $\pm$  PROPOSED CAMPUS DR.

**DRAINAGE LEGEND**

FOR DRAINAGE LEGEND, SEE SHEET 39.

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**US 19 CONSTR PLAN SHEET**  
STA. 125+60 TO END

DESIGNED	DATE
ALT	09/2020
DRAWN	LNR
CHECKED	JDV
CHECKED	

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	39	128

DRAINAGE LEGEND (SEE SHEET 38 FOR LOCATIONS)

- |      |   |
|------|---|
| IN57 | TYPE D INLET<br>STA. 125+99.62,<br>23.02' LT<br>TOP=858.15'<br>O.E.=855.65' |
|------|---|

P57	15" RCP, 46' I.E.=855.65' O.E.=855.40'
-----	--
  
- |      |   |
|------|---|
| IN58 | TYPE D INLET<br>STA. 126+00.12,<br>23.03' RT<br>TOP=858.00'<br>I.E.=855.40'<br>O.E.=855.30' |
|------|---|

P58	15" RCP, 54' I.E.=855.30' O.E.=855.00'
-----	--
  
- |      |   |
|------|---|
| IN59 | TYPE D INLET<br>STA. 126+49.88,<br>22.91' RT<br>TOP=857.52'<br>I.E.=855.00'<br>O.E.=854.90' |
|------|---|

P59	15" RCP, 104' I.E.=854.90' O.E.=853.85'
-----	---
  
- |      |   |
|------|---|
| IN60 | TYPE D INLET<br>STA. 127+50.69,<br>22.90' RT<br>TOP=856.35'<br>I.E.=853.85'<br>O.E.=853.75' |
|------|---|

P60	15" RCP, 25' I.E.=853.75' O.E.=852.71'
-----	--
  
- |      |  |
|------|--|
| IN62 | TYPE D INLET<br>STA. 127+75.43<br>22.89' RT<br>TOP=856.21'<br>I.E.=852.71'<br>I.E.=852.71'<br>O.E.=852.61' |
|------|--|

P62	18" RCP, 30' I.E.=852.61' O.E.=851.31'
-----	--
  
- |      |  |
|------|--|
| IN65 | TYPE D INLET<br>STA. 127+51.05<br>23.21' LT<br>TOP=856.21'<br>O.E.=853.71' |
|------|--|

P65	15" RCP, 24' I.E.=853.71' O.E.=853.45'
-----	--
  
- |      |   |
|------|---|
| IN68 | TYPE D INLET<br>STA. 128+01.56,<br>23.17' LT<br>TOP=856.19'<br>I.E.=853.69'<br>O.E.=853.59' |
|------|---|

P68	15" RCP, 27' I.E.=853.59' O.E.=853.45'
-----	--
  
- |      |   |
|------|---|
| IN69 | TYPE D INLET<br>STA. 128+01.47,<br>22.99' RT<br>TOP=856.24'<br>O.E.=853.74' |
|------|---|

P69	15" RCP, 26' I.E.=853.74' O.E.=852.71'
-----	--
  
- |      |   |
|------|---|
| IN70 | TYPE D INLET<br>STA. 128+92.28,<br>23.03' LT<br>TOP=857.44'<br>O.E.=854.94' |
|------|---|

P70	15" RCP, 91' I.E.=854.94' O.E.=853.69'
-----	--
  
- |      |   |
|------|---|
| IN74 | TYPE F INLET<br>STA. 129+81.21,<br>48.44' RT<br>TOP=862.75'<br>I.E.=860.25'<br>O.E.=860.15' |
|------|---|

P74	15" RCP, 8' I.E.=860.15' O.E.=860.05'
-----	---

MH73	TYPE A MANHOLE I.E.=860.05' BOT. (EX. PIPE O.E.)=859.20'
------	--
  
- |      |   |
|------|---|
| IN75 | TYPE F INLET<br>STA. 130+23.89,<br>59.24' RT<br>TOP=863.50'<br>O.E.=861.00' |
|------|---|

P75	15" RCP, 44' I.E.=861.00' O.E.=860.25'
-----	--
  
- |      |   |
|------|---|
| IN77 | TYPE F INLET<br>STA. 129+69.67,<br>84.26' RT<br>TOP=867.50'<br>I.E.=864.60'<br>O.E.=864.50' |
|------|---|

P77	15" RCP, 26' I.E.=864.50' O.E.=863.87'
-----	--
  
- |      |   |
|------|---|
| IN78 | TYPE F INLET<br>STA. 130+02.76<br>107.50' RT<br>TOP=867.30'<br>O.E.=864.80' |
|------|---|

P78	15" RCP, 40' I.E.=864.80' O.E.=864.60'
-----	--

SCALE : 0 20 ft.

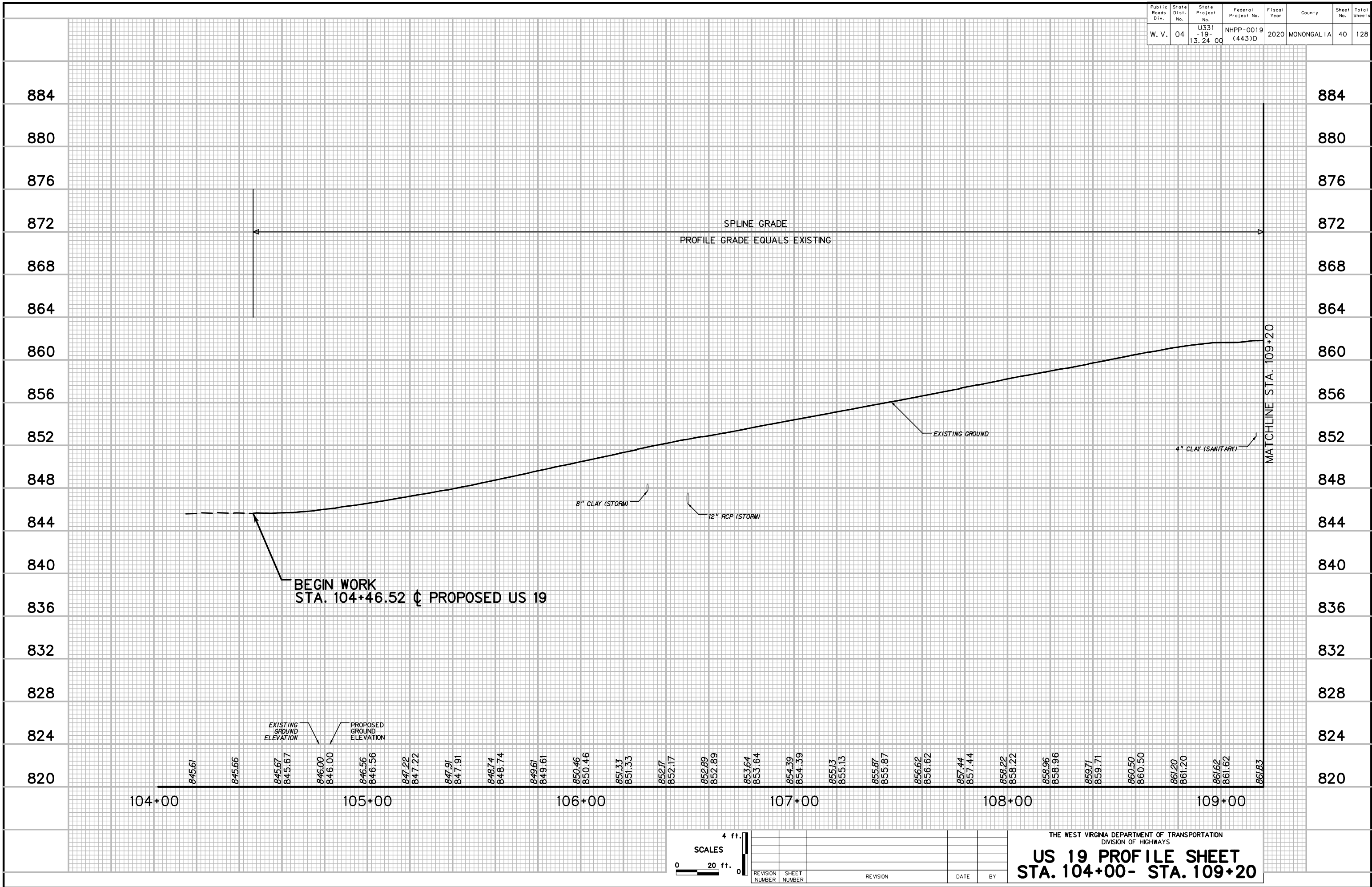
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**US 19 CONSTR PLAN SHEET  
DRAINAGE LEGEND**

DESIGNED	DATE
ALT	09/2020
DRAWN	DATE
LNR	09/2020
CHECKED	DATE
JDV	09/2020
CHECKED	

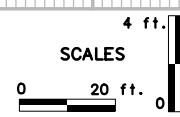
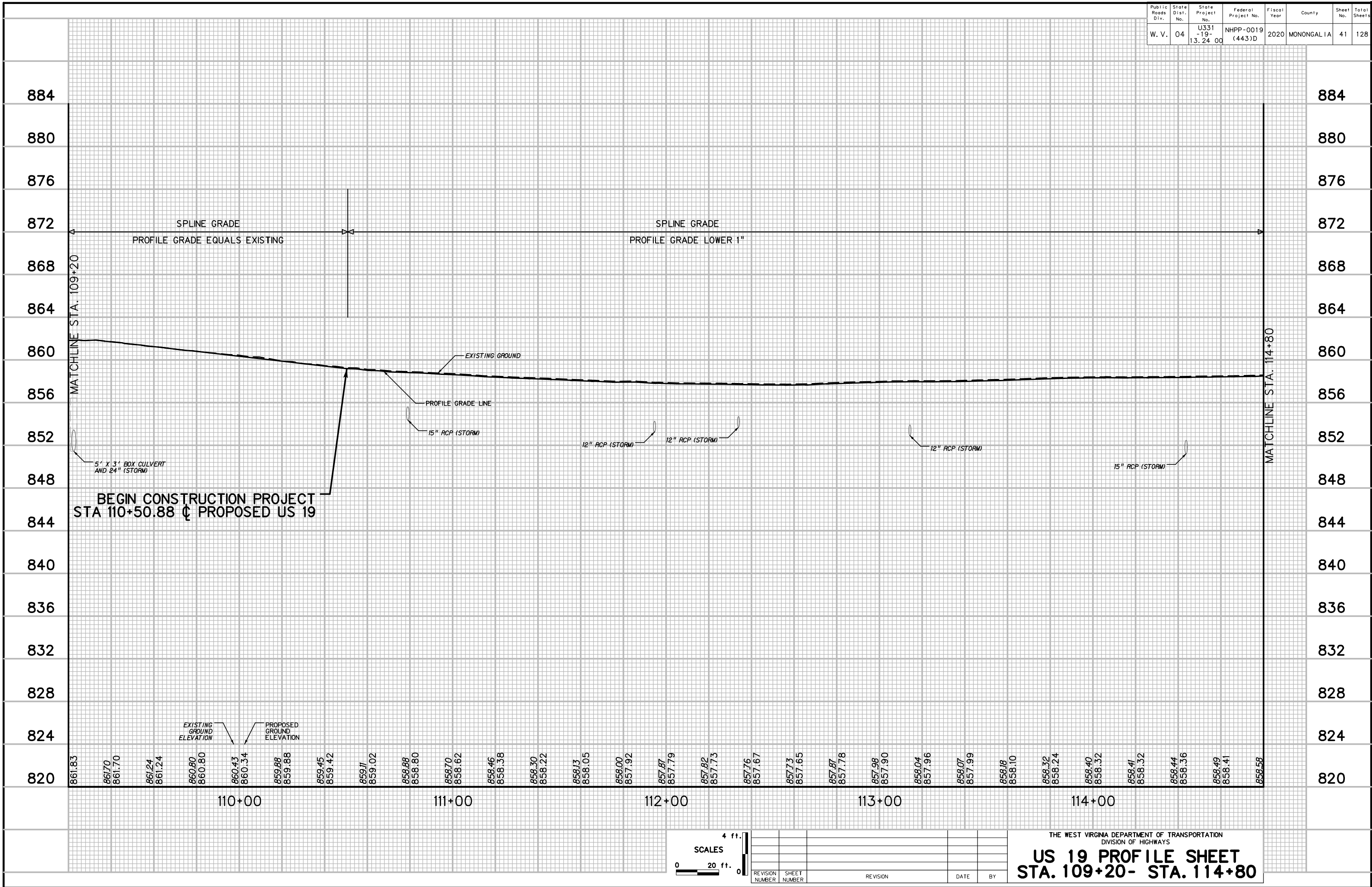
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Station	Existing Ground Elevation	Proposed Ground Elevation
104+00	845.61	
	845.66	
	845.67	
	845.67	
105+00	846.00	846.00
	846.56	846.56
	846.56	846.56
	847.22	847.22
	847.22	847.22
	847.91	847.91
	847.91	847.91
	848.74	848.74
	848.74	848.74
	849.61	849.61
	849.61	849.61
106+00	850.46	850.46
	850.46	850.46
	851.33	851.33
	851.33	851.33
	852.17	852.17
	852.17	852.17
	852.89	852.89
	852.89	852.89
	853.64	853.64
	853.64	853.64
107+00	854.39	854.39
	854.39	854.39
	855.13	855.13
	855.13	855.13
	855.87	855.87
	855.87	855.87
	856.62	856.62
	856.62	856.62
	857.44	857.44
	857.44	857.44
108+00	858.22	858.22
	858.22	858.22
	858.96	858.96
	858.96	858.96
	859.71	859.71
	859.71	859.71
	860.50	860.50
	860.50	860.50
109+00	861.20	861.20
	861.20	861.20
	861.62	861.62
	861.62	861.62
109+20	861.83	861.83

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

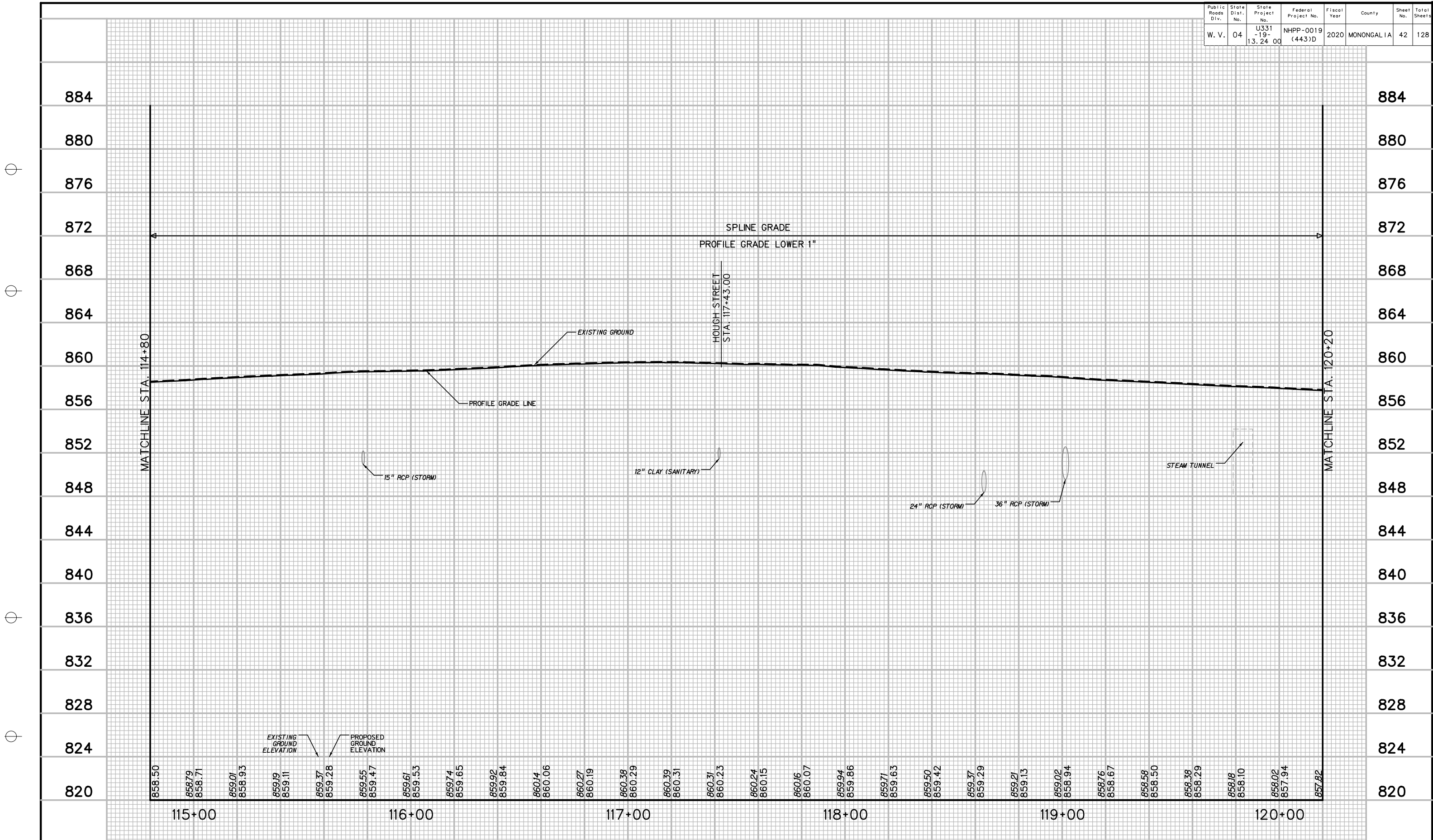
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**US 19 PROFILE SHEET**  
**STA. 104+00- STA. 109+20**



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**US 19 PROFILE SHEET**  
**STA. 109+20- STA. 114+80**



Station	Existing Ground Elevation	Proposed Ground Elevation
114+80	858.50	858.50
115+00	858.79	858.71
115+10	859.01	858.93
115+20	859.19	859.11
115+30	859.37	859.28
115+40	859.55	859.47
115+50	859.61	859.53
115+60	859.74	859.65
115+70	859.92	859.84
115+80	860.14	860.06
115+90	860.27	860.19
116+00	860.38	860.29
116+10	860.39	860.31
116+20	860.31	860.23
116+30	860.24	860.15
116+40	860.16	860.07
116+50	859.94	859.86
116+60	859.71	859.63
116+70	859.50	859.42
116+80	859.37	859.29
116+90	859.21	859.13
117+00	859.02	858.94
117+10	858.76	858.67
117+20	858.58	858.50
117+30	858.38	858.29
117+40	858.18	858.10
117+50	858.02	857.94
117+60	857.82	857.74
117+70	857.64	857.56
117+80	857.46	857.38
117+90	857.28	857.20
118+00	857.10	857.02
118+10	856.92	856.84
118+20	856.74	856.66
118+30	856.56	856.48
118+40	856.38	856.30
118+50	856.20	856.12
118+60	856.02	855.94
118+70	855.84	855.76
118+80	855.66	855.58
118+90	855.48	855.40
119+00	855.30	855.22
119+10	855.12	855.04
119+20	854.94	854.86
119+30	854.76	854.68
119+40	854.58	854.50
119+50	854.40	854.32
119+60	854.22	854.14
119+70	854.04	853.96
119+80	853.86	853.78
119+90	853.68	853.60
120+00	853.50	853.42
120+20	853.32	853.24

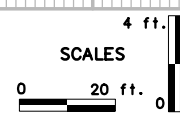
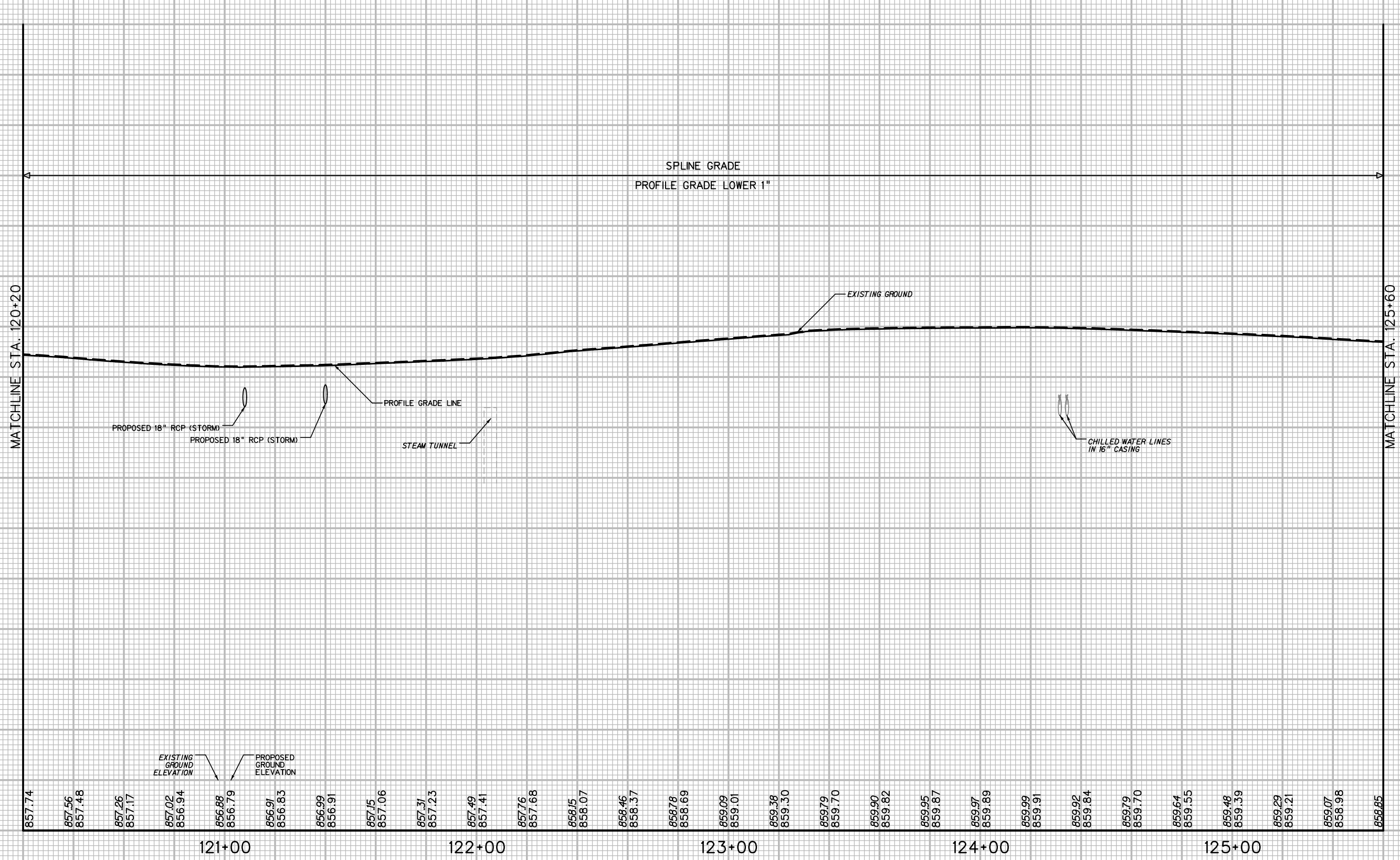
4 ft. SCALES

0 20 ft. 0

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**US 19 PROFILE SHEET**  
**STA. 114+80- STA. 120+20**

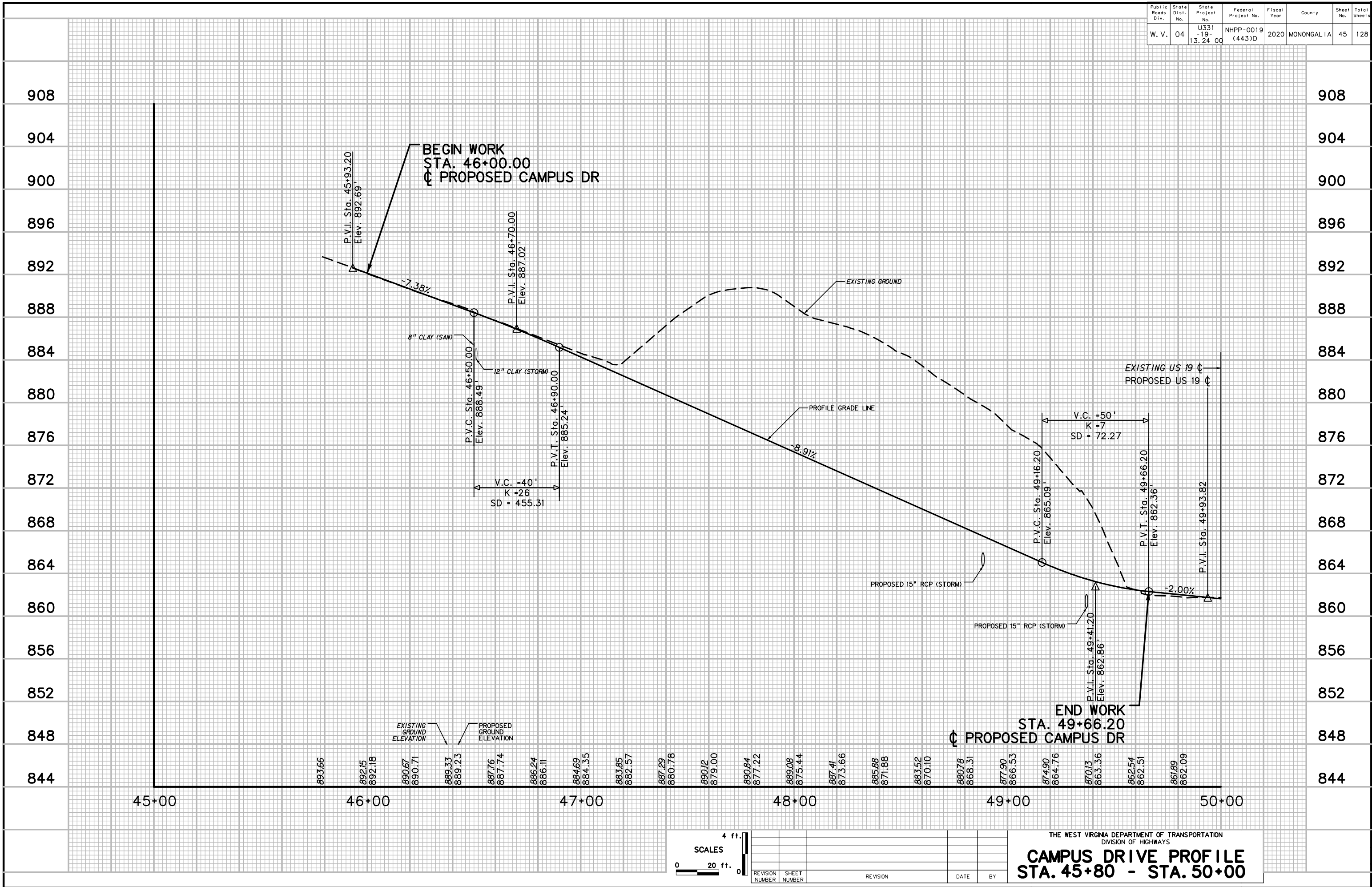


REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

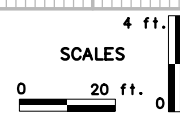
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**US 19 PROFILE SHEET**  
**STA. 120+20- STA. 125+60**







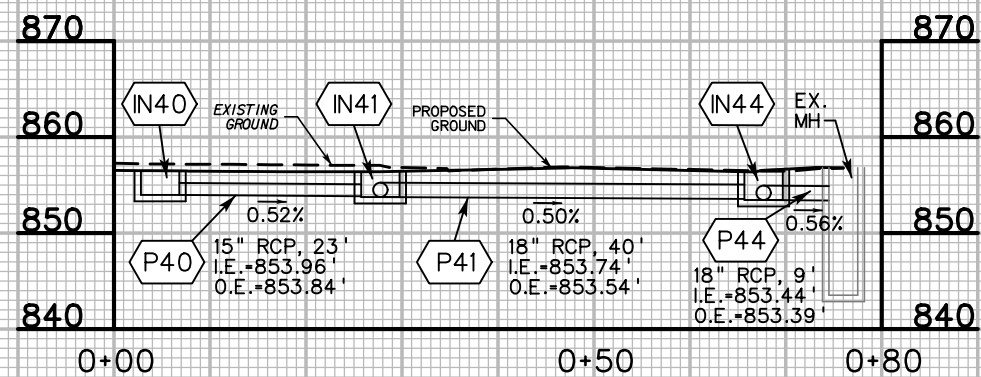
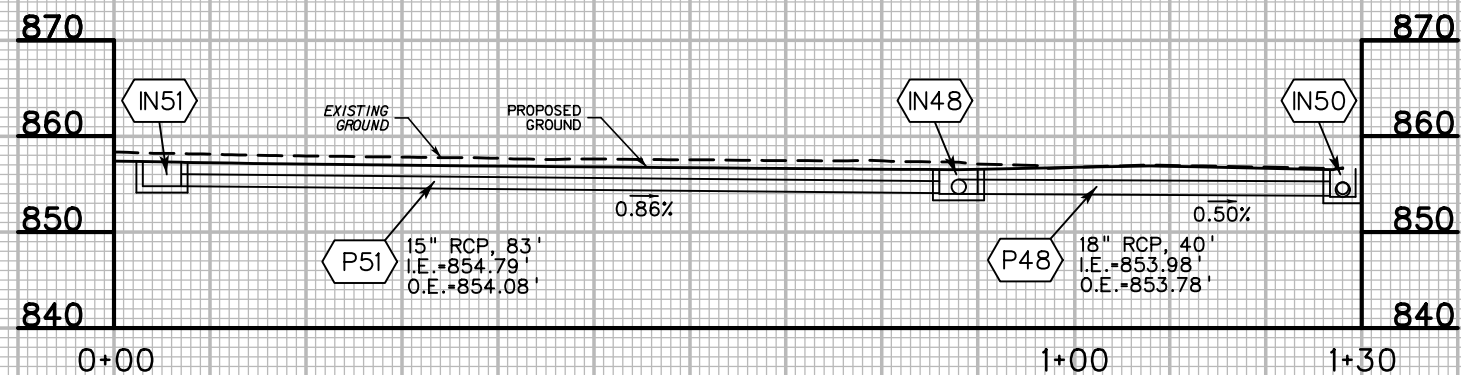
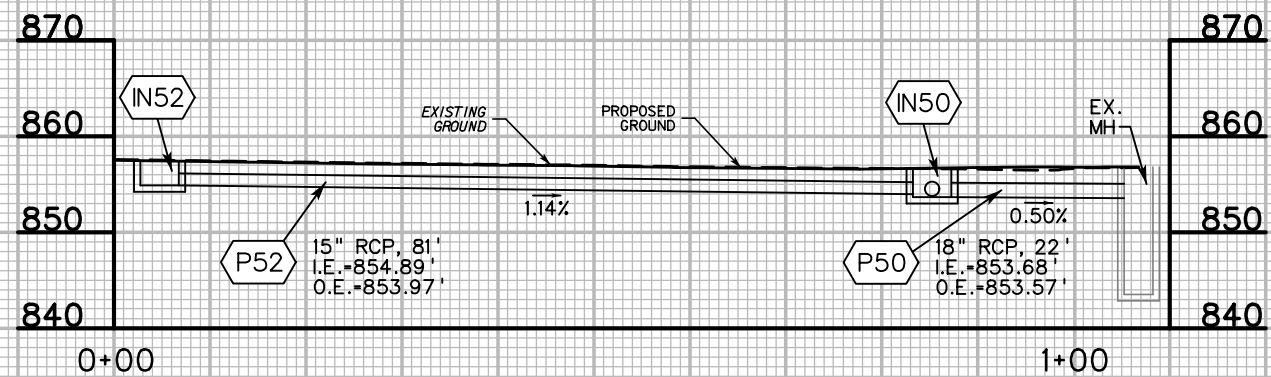
Station	Existing Ground Elevation	Proposed Ground Elevation
45+80	893.66	
45+90	892.15	
46+00	892.18	
46+10	890.67	
46+20	890.71	
46+30	889.33	
46+40	889.23	
46+50	887.76	
46+60	887.74	
46+70	886.24	
46+80	886.11	
46+90	884.69	
47+00	884.35	
47+10	883.85	
47+20	882.57	
47+30	887.29	
47+40	880.78	
47+50	890.12	
47+60	879.00	
47+70	890.84	
47+80	877.22	
47+90	889.08	
48+00	875.44	
48+10	887.41	
48+20	873.66	
48+30	885.88	
48+40	871.88	
48+50	883.52	
48+60	870.10	
48+70	880.78	
48+80	868.31	
48+90	877.90	
49+00	866.53	
49+10	874.90	
49+20	864.76	
49+30	870.13	
49+40	863.36	
49+50	862.54	
49+60	862.51	
49+70	861.89	
49+80	862.09	



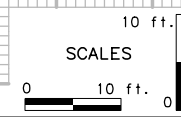
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**CAMPUS DRIVE PROFILE**  
STA. 45+80 - STA. 50+00



NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.

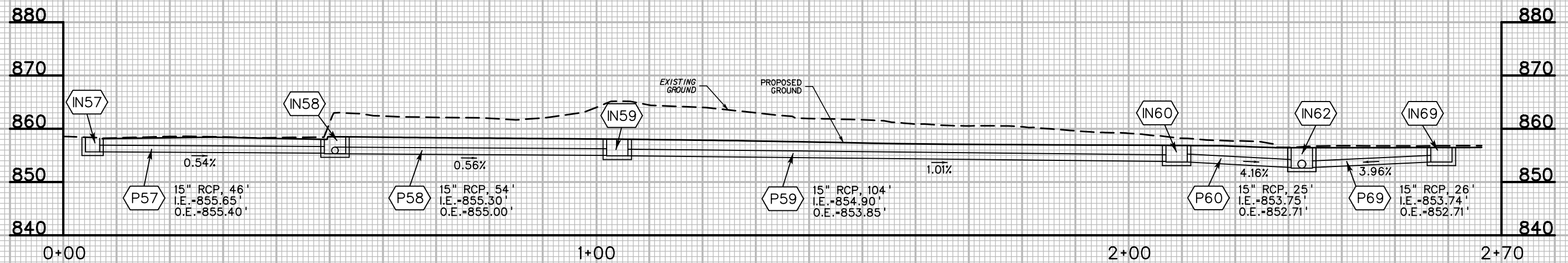
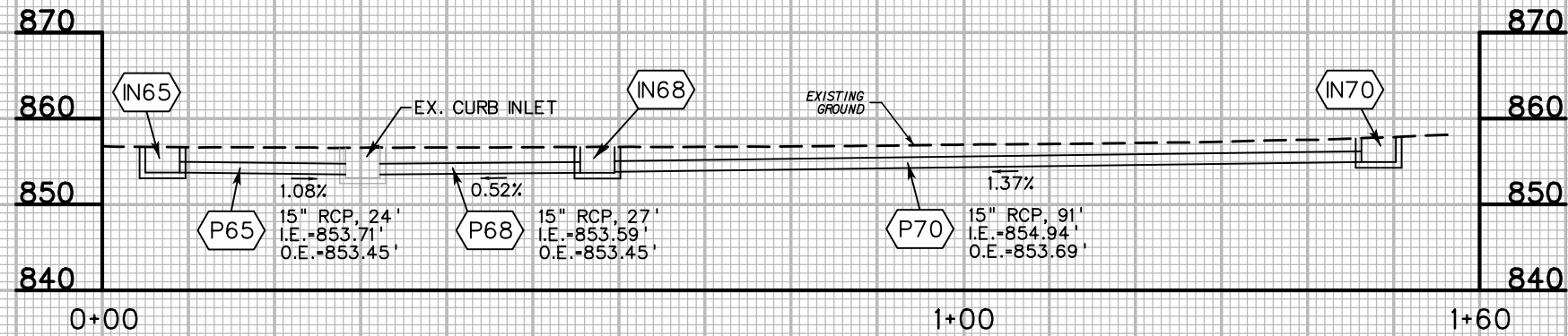
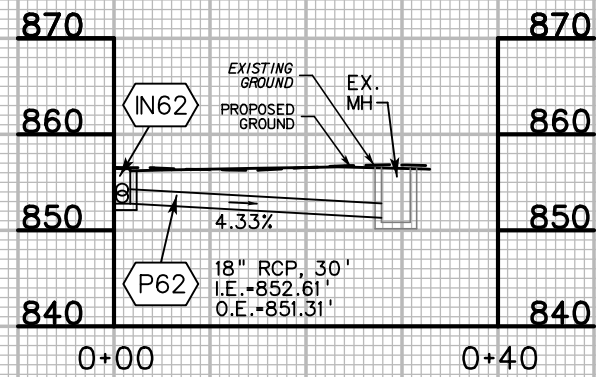


REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

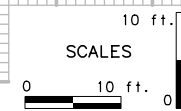
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**DRAINAGE PROFILES**  
**PIPES P40 THRU P52**

ORIGINAL SURVEY BOOK NO. \_\_\_\_\_  
 SURVEY PLOTTED \_\_\_\_\_  
 TEMPLATE AREAS CHECKED \_\_\_\_\_  
 BY \_\_\_\_\_ DATE \_\_\_\_\_  
 FINAL SURVEY BOOK NO. \_\_\_\_\_  
 SURVEY PLOTTED \_\_\_\_\_  
 TEMPLATE AREAS CHECKED \_\_\_\_\_  
 BY \_\_\_\_\_ DATE \_\_\_\_\_

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NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**DRAINAGE PROFILES  
PIPES P57 THRU P70**

DATE: / / BY: / /

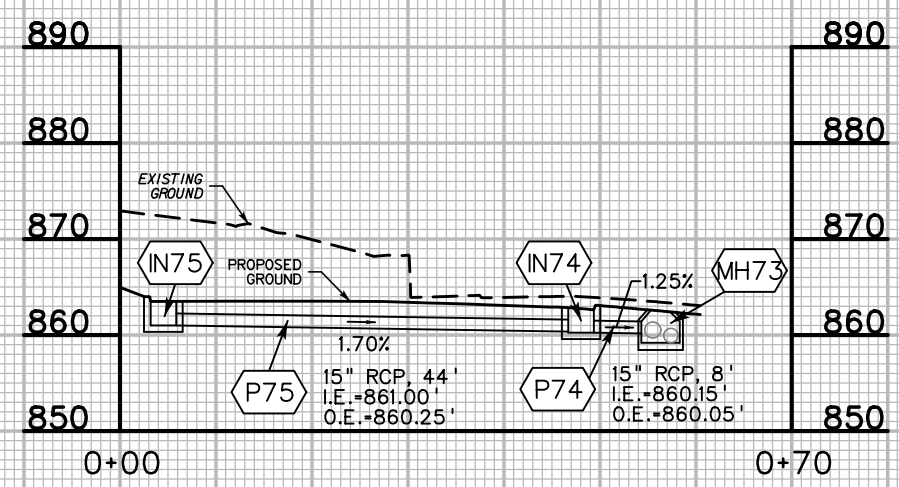
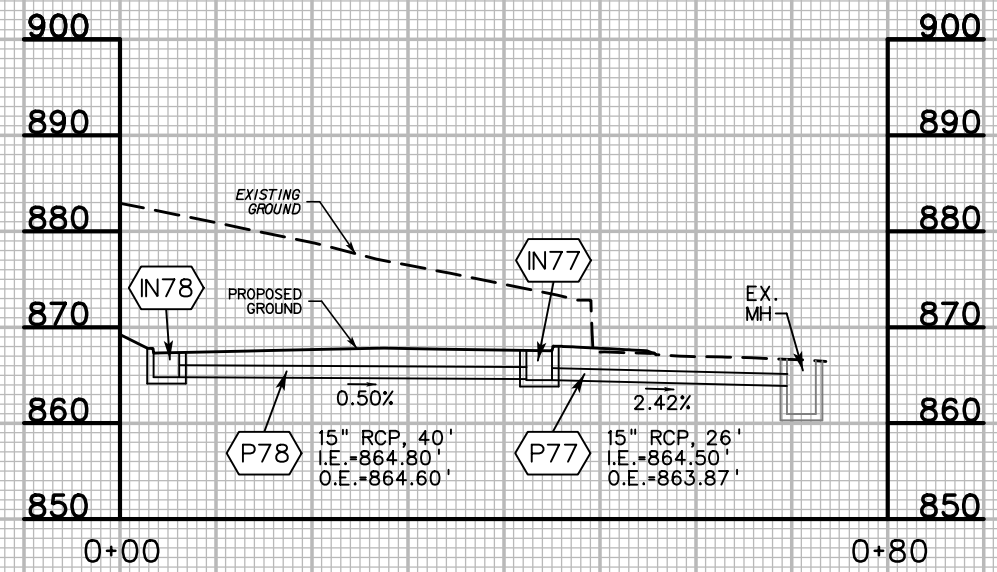
FINAL SURVEY PLOTTED: / /

NO. AREAS CHECKED: / /

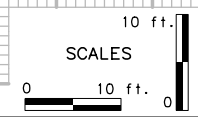
ORIGINAL SURVEY BOOK NO. AREAS CHECKED: / /

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ORIGINAL SURVEY BOOK NO.	DATE	BY	FINAL SURVEY BOOK NO.	DATE	BY
SURVEY PLOTTED			SURVEY PLOTTED		
TEMP. PLATE			TEMP. PLATE		
AREAS CHECKED			AREAS CHECKED		



NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**DRAINAGE PROFILES  
PIPES P74 THRU P78**

Public Roads Div.	State No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	49	128

**UTILITY OWNERSHIP**

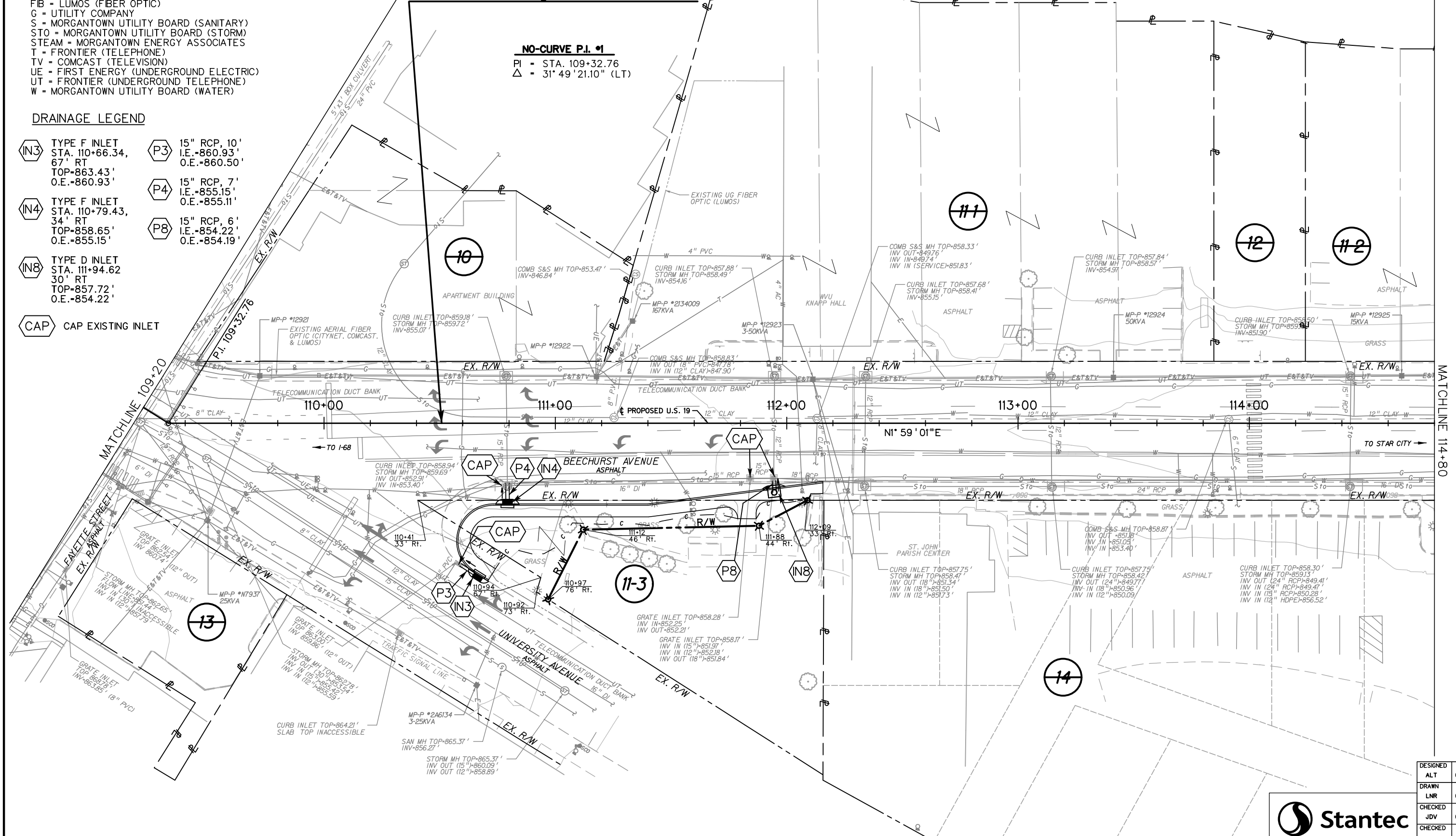
- E - FIRST ENERGY (ELECTRIC)
- FIB - CITYNET (FIBER OPTIC)
- FIB - COMCAST (FIBER OPTIC)
- FIB - LUMOS (FIBER OPTIC)
- G - UTILITY COMPANY
- S - MORGANTOWN UTILITY BOARD (SANITARY)
- STO - MORGANTOWN UTILITY BOARD (STORM)
- STEAM - MORGANTOWN ENERGY ASSOCIATES
- T - FRONTIER (TELEPHONE)
- TV - COMCAST (TELEVISION)
- UE - FIRST ENERGY (UNDERGROUND ELECTRIC)
- UT - FRONTIER (UNDERGROUND TELEPHONE)
- W - MORGANTOWN UTILITY BOARD (WATER)

**DRAINAGE LEGEND**

- IN3** TYPE F INLET  
STA. 110+66.34,  
67' RT  
TOP-863.43'  
O.E.-860.93'
- IN4** TYPE F INLET  
STA. 110+79.43,  
34' RT  
TOP-858.65'  
O.E.-855.15'
- IN8** TYPE D INLET  
STA. 111+94.62  
30' RT  
TOP-857.72'  
O.E.-854.22'
- CAP** CAP EXISTING INLET
- P3** 15" RCP, 10'  
I.E.-860.93'  
O.E.-860.50'
- P4** 15" RCP, 7'  
I.E.-855.15'  
O.E.-855.11'
- P8** 15" RCP, 6'  
I.E.-854.22'  
O.E.-854.19'

**BEGIN CONSTRUCTION PROJECT  
STA 110+50.88 ± PROPOSED US 19**

**NO-CURVE P.I. #1**  
PI - STA. 109+32.76  
Δ - 31° 49' 21.10" (LT)



MATCHLINE 114+80

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**US 19  
UTILITY RELOCATION PLAN**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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**UTILITY OWNERSHIP**

- E - FIRST ENERGY (ELECTRIC)
- FIB - CITYNET (FIBER OPTIC)
- FIB - COMCAST (FIBER OPTIC)
- FIB - LUMOS (FIBER OPTIC)
- G - UTILITY COMPANY
- S - MORGANTOWN UTILITY BOARD (SANITARY)
- STO - MORGANTOWN UTILITY BOARD (STORM)
- STEAM - MORGANTOWN ENERGY ASSOCIATES
- T - FRONTIER (TELEPHONE)
- TV - COMCAST (TELEVISION)
- UE - FIRST ENERGY (UNDERGROUND ELECTRIC)
- UT - FRONTIER (UNDERGROUND TELEPHONE)
- W - MORGANTOWN UTILITY BOARD (WATER)

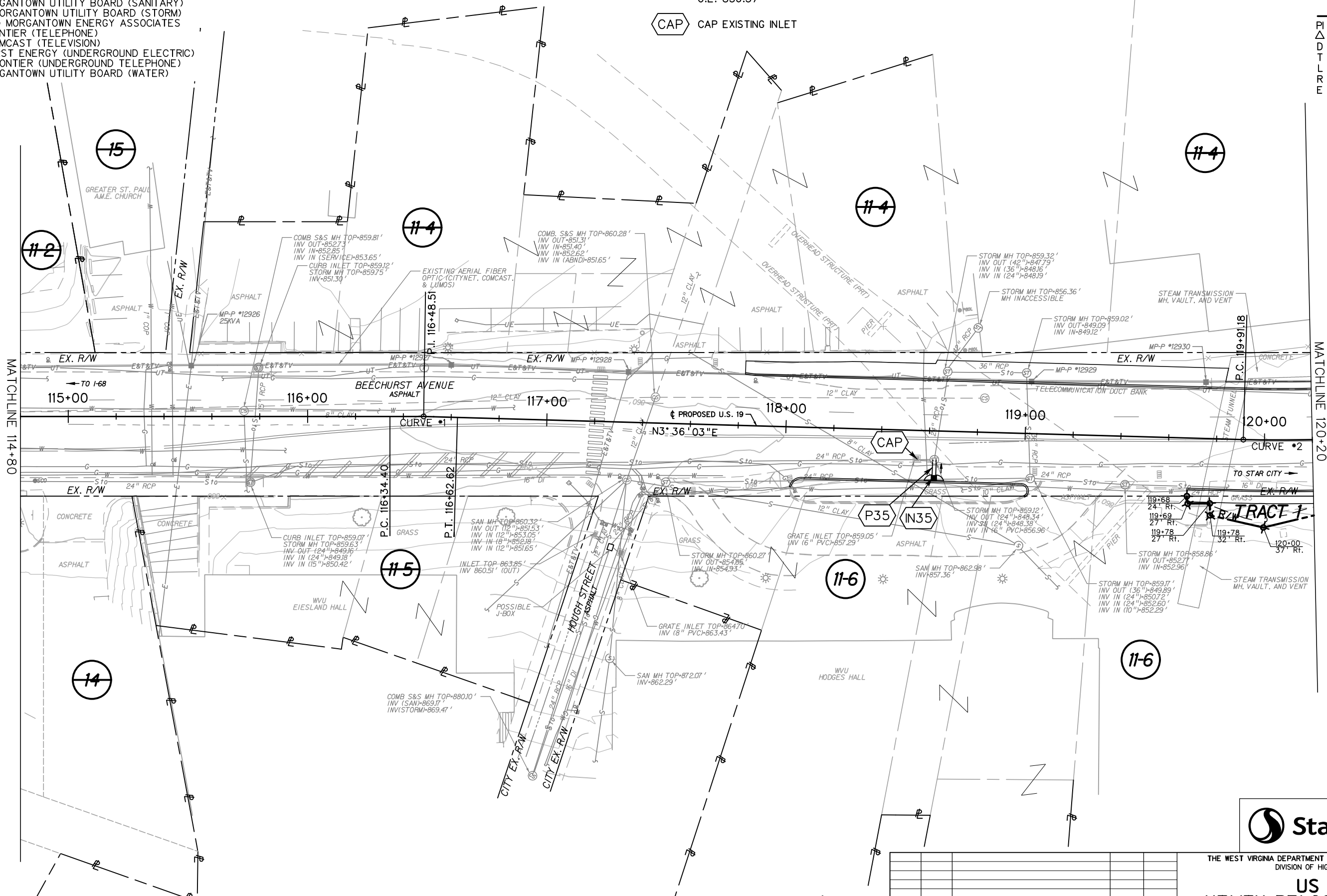
**DRAINAGE LEGEND**

- IN35** TYPE F INLET  
STA. 118+62.36, 19.75' RT  
TOP-858.85'  
O.E.-856.37'
- P35** 15" RCP, 8'  
I.E.-856.37'  
O.E.-856.33'
- CAP** CAP EXISTING INLET

Public Roads Div.	State No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	50	128

**CURVE #2 DATA**

- PI = STA. 120+67.37
- Δ = 14° 53' 30.87" (LT)
- D = 9° 49' 39.90"
- T = 76.19
- L = 151.53
- R = 583.00
- E = 4.96



MATCHLINE 114+80

MATCHLINE 120+20

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**US 19  
UTILITY RELOCATION PLAN**

DESIGNED	DATE
ALT	09/2020
DRAWN	LNR
CHECKED	JDV
CHECKED	

9/24/2020 3:49:23 PM

**UTILITY OWNERSHIP**

E = FIRST ENERGY (ELECTRIC)  
 FIB = CITYNET (FIBER OPTIC)  
 FIB = COMCAST (FIBER OPTIC)  
 FIB = LUMOS (FIBER OPTIC)  
 G = UTILITY COMPANY  
 S = MORGANTOWN UTILITY BOARD (SANITARY)  
 STO = MORGANTOWN UTILITY BOARD (STORM)  
 STEAM = MORGANTOWN ENERGY ASSOCIATES  
 T = FRONTIER (TELEPHONE)  
 TV = COMCAST (TELEVISION)  
 UE = FIRST ENERGY (UNDERGROUND ELECTRIC)  
 UT = FRONTIER (UNDERGROUND TELEPHONE)  
 W = MORGANTOWN UTILITY BOARD (WATER)

**DRAINAGE LEGEND**

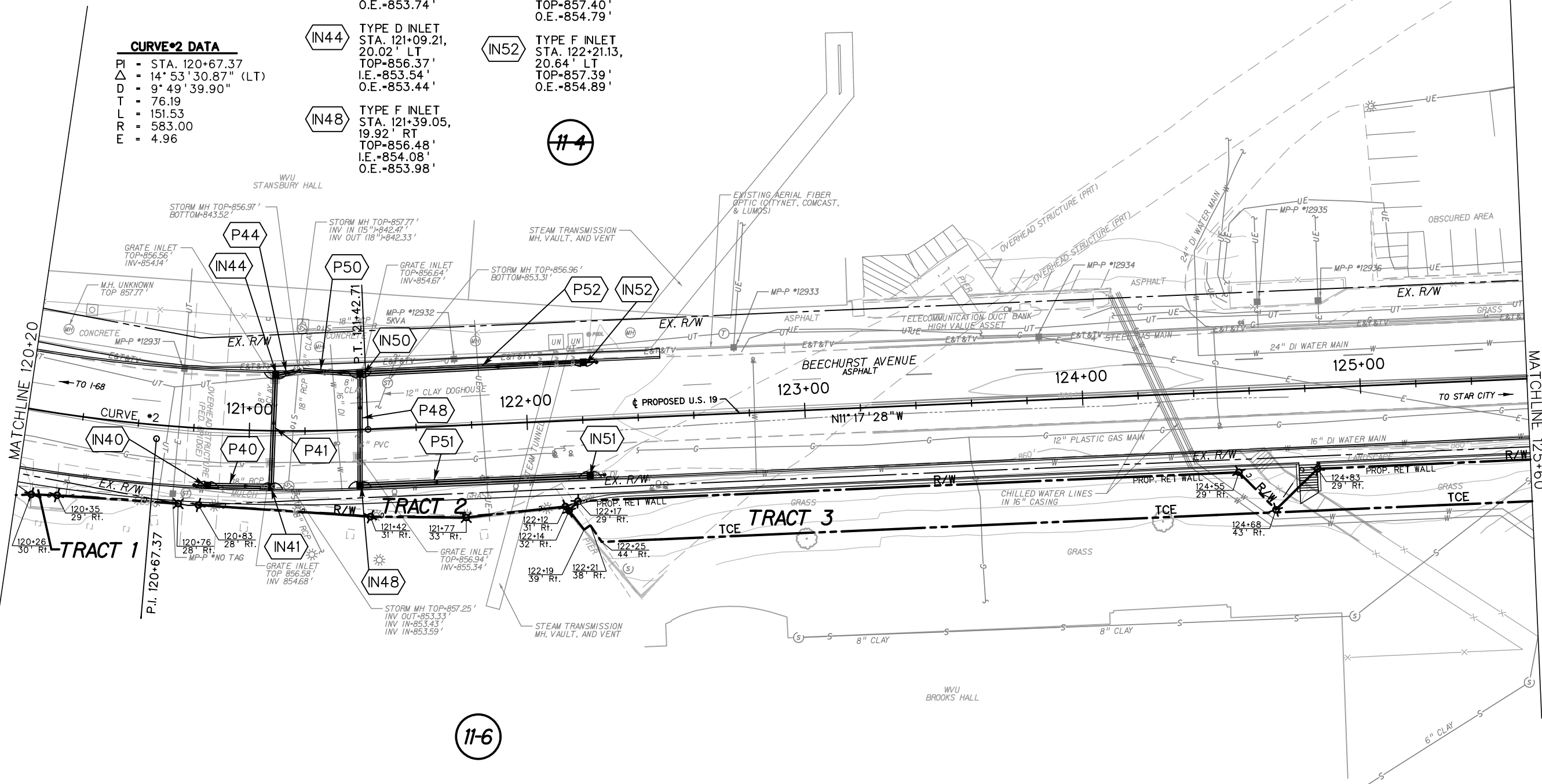
- |   |   |   |   |   |
|---|---|---|---|---|
| <b>IN40</b> TYPE F INLET<br>STA. 120+86.01,<br>20.36' RT<br>TOP=856.46'<br>O.E.=853.96'                 | <b>IN50</b> TYPE F INLET<br>STA. 121+40.56,<br>20.03' LT<br>TOP=856.47'<br>I.E.=853.97'<br>I.E.=853.78'<br>O.E.=853.68' | <b>P40</b> 15" RCP, 23'<br>I.E.=853.96'<br>O.E.=853.84' | <b>P48</b> 18" RCP, 40'<br>I.E.=853.98'<br>O.E.=853.78' | <b>P52</b> 15" RCP, 81'<br>I.E.=854.89'<br>O.E.=853.97' |
| <b>IN41</b> TYPE F INLET<br>STA. 121+08.17,<br>20.05' RT<br>TOP=856.37'<br>I.E.=853.84'<br>O.E.=853.74' | <b>IN51</b> TYPE F INLET<br>STA. 122+21.83,<br>19.97' RT<br>TOP=857.40'<br>O.E.=854.79'                                 | <b>P41</b> 18" RCP, 40'<br>I.E.=853.74'<br>O.E.=853.54' | <b>P50</b> 18" RCP, 22'<br>I.E.=853.68'<br>O.E.=853.57' | <b>P51</b> 15" RCP, 83'<br>I.E.=854.79'<br>O.E.=854.08' |
| <b>IN44</b> TYPE D INLET<br>STA. 121+09.21,<br>20.02' LT<br>TOP=856.37'<br>I.E.=853.54'<br>O.E.=853.44' | <b>IN52</b> TYPE F INLET<br>STA. 122+21.13,<br>20.64' LT<br>TOP=857.39'<br>O.E.=854.89'                                 |   |   |   |
| <b>IN48</b> TYPE F INLET<br>STA. 121+39.05,<br>19.92' RT<br>TOP=856.48'<br>I.E.=854.08'<br>O.E.=853.98' |   |   |   |   |

**CURVE#2 DATA**

PI = STA. 120+67.37  
 Δ = 14° 53' 30.87" (LT)  
 D = 9° 49' 39.90"  
 T = 76.19  
 L = 151.53  
 R = 583.00  
 E = 4.96



Public Roads Div.	State No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	51	128



11-6

DESIGNED	ALT	DATE
		09/2020
DRAWN	LNR	09/2020
CHECKED	JDV	09/2020
CHECKED		



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

**US 19  
 UTILITY RELOCATION PLAN**

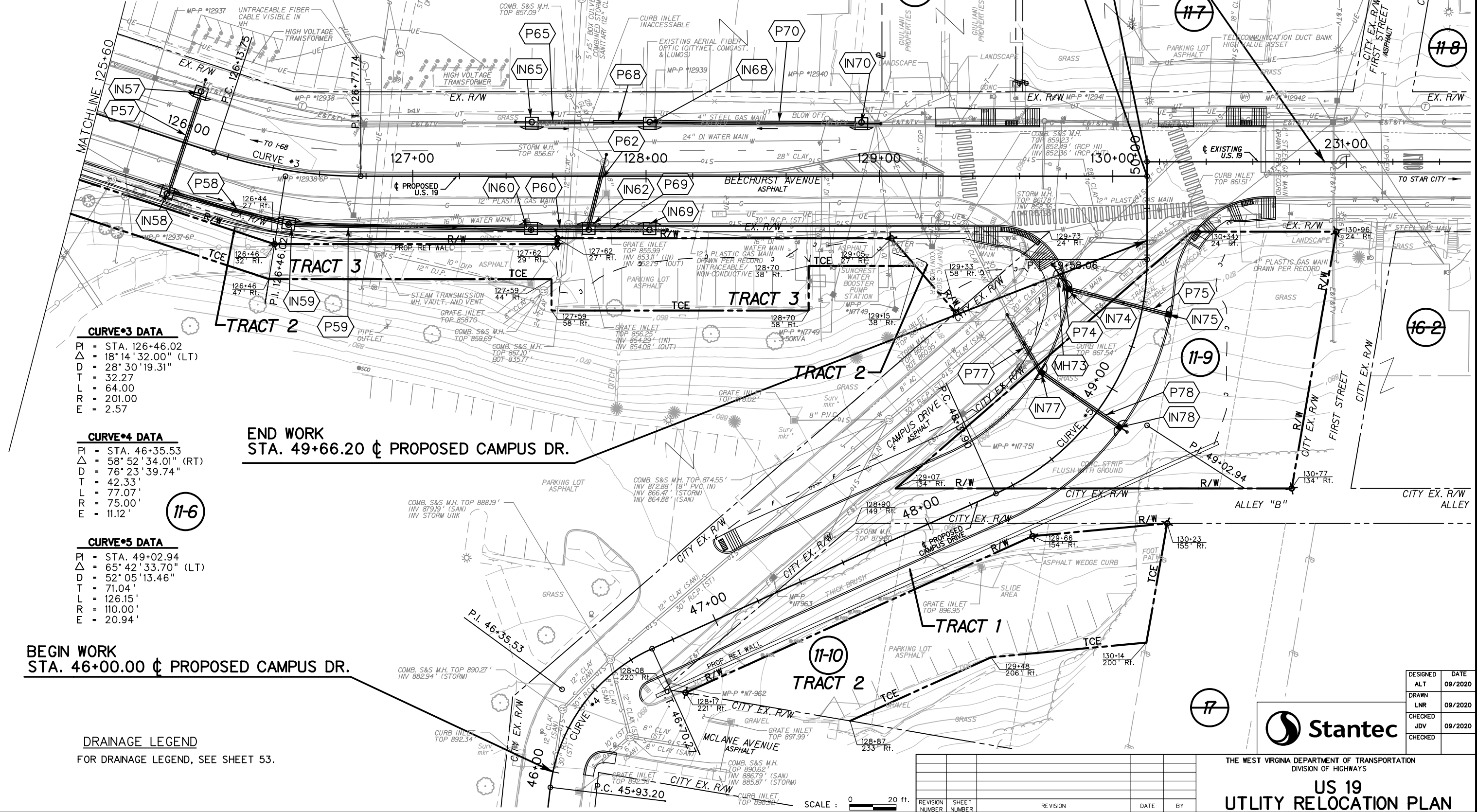
SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



**UTILITY OWNERSHIP**

- E - FIRST ENERGY (ELECTRIC)
- FIB - CITYNET (FIBER OPTIC)
- FIB - COMCAST (FIBER OPTIC)
- FIB - LUMOS (FIBER OPTIC)
- G - UTILITY COMPANY
- S - MORGANTOWN UTILITY BOARD (SANITARY)
- STO - MORGANTOWN UTILITY BOARD (STORM)
- STEAM - MORGANTOWN ENERGY ASSOCIATES
- T - FRONTIER (TELEPHONE)
- TV - COMCAST (TELEVISION)
- UE - FIRST ENERGY (UNDERGROUND ELECTRIC)
- UT - FRONTIER (UNDERGROUND TELEPHONE)
- W - MORGANTOWN UTILITY BOARD (WATER)



**CURVE#3 DATA**

- PI = STA. 126+46.02
- Δ = 18° 14' 32.00" (LT)
- D = 28° 30' 19.31"
- T = 32.27
- L = 64.00
- R = 201.00
- E = 2.57

**CURVE#4 DATA**

- PI = STA. 46+35.53
- Δ = 58° 52' 34.01" (RT)
- D = 76° 23' 39.74"
- T = 42.33'
- L = 77.07'
- R = 75.00'
- E = 11.12'

**CURVE#5 DATA**

- PI = STA. 49+02.94
- Δ = 65° 42' 33.70" (LT)
- D = 52° 05' 13.46"
- T = 71.04'
- L = 126.15'
- R = 110.00'
- E = 20.94'

**BEGIN WORK**  
STA. 46+00.00  $\pm$  PROPOSED CAMPUS DR.

**END WORK**  
STA. 49+66.20  $\pm$  PROPOSED CAMPUS DR.

STA 50+00.00  $\pm$  PROPOSED CAMPUS DR -  
STA 230+14.65  $\pm$  EXISTING US 19

STA 130+14.65  $\pm$  PROPOSED US 19 -  
STA 49+93.82  $\pm$  PROPOSED CAMPUS DR

**END CONSTRUCTION PROJECT**  
STA. 230+93.50  $\pm$  EXISTING US 19

**DRAINAGE LEGEND**  
FOR DRAINAGE LEGEND, SEE SHEET 53.

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**US 19**  
**UTILITY RELOCATION PLAN**



DESIGNED	DATE
ALT	09/2020
DRAWN	09/2020
CHECKED	09/2020
JDV	09/2020
CHECKED	



Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	53	128

DRAINAGE LEGEND (SEE SHEET 52 FOR LOCATIONS)

- IN57 TYPE D INLET  
STA. 125+99.62,  
23.02' LT  
TOP=858.15'  
O.E.=855.65'
- IN58 TYPE D INLET  
STA. 126+00.12,  
23.03' RT  
TOP=858.00'  
I.E.=855.40'  
O.E.=855.30'
- IN59 TYPE D INLET  
STA. 126+49.88,  
22.91' RT  
TOP=857.52'  
I.E.=855.00'  
O.E.=854.90'
- IN60 TYPE D INLET  
STA. 127+50.69,  
22.90' RT  
TOP=856.35'  
I.E.=853.85'  
O.E.=853.75'
- IN62 TYPE D INLET  
STA. 127+75.43  
22.89' RT  
TOP=856.21'  
I.E.=852.71'  
I.E.=852.71'  
O.E.=852.61'
- IN65 TYPE D INLET  
STA. 127+51.05  
23.21' LT  
TOP=856.21'  
O.E.=853.71'
- IN68 TYPE D INLET  
STA. 128+01.56,  
23.17' LT  
TOP=856.19'  
I.E.=853.69'  
O.E.=853.59'
- IN69 TYPE D INLET  
STA. 128+01.47,  
22.99' RT  
TOP=856.24'  
O.E.=853.74'
- IN70 TYPE D INLET  
STA. 128+92.28,  
23.03' LT  
TOP=857.44'  
O.E.=854.94'
- IN74 TYPE F INLET  
STA. 129+81.21,  
48.44' RT  
TOP=862.75'  
I.E.=860.25'  
O.E.=860.15'
- IN75 TYPE F INLET  
STA. 130+23.89,  
59.24' RT  
TOP=863.50'  
O.E.=861.00'
- IN77 TYPE F INLET  
STA. 129+69.67,  
84.26' RT  
TOP=867.50'  
I.E.=864.60'  
O.E.=864.50'
- IN78 TYPE F INLET  
STA. 130+02.76  
107.50' RT  
TOP=867.30'  
O.E.=864.80'
- P57 15" RCP, 46'  
I.E.=855.65'  
O.E.=855.40'
- P58 15" RCP, 54'  
I.E.=855.30'  
O.E.=855.00'
- P59 15" RCP, 104'  
I.E.=854.90'  
O.E.=853.85'
- P60 15" RCP, 25'  
I.E.=853.75'  
O.E.=852.71'
- P62 18" RCP, 30'  
I.E.=852.61'  
O.E.=851.31'
- P65 15" RCP, 24'  
I.E.=853.71'  
O.E.=853.45'
- P68 15" RCP, 27'  
I.E.=853.59'  
O.E.=853.45'
- P69 15" RCP, 26'  
I.E.=853.74'  
O.E.=852.71'
- P70 15" RCP, 91'  
I.E.=854.94'  
O.E.=853.69'
- P74 15" RCP, 8'  
I.E.=860.15'  
O.E.=860.05'
- P75 15" RCP, 44'  
I.E.=861.00'  
O.E.=860.25'
- P77 15" RCP, 26'  
I.E.=864.50'  
O.E.=863.87'
- P78 15" RCP, 40'  
I.E.=864.80'  
O.E.=864.60'
- MH73 TYPE A MANHOLE  
I.E.=860.05'  
BOT. (EX. PIPE O.E.)=859.20'

DESIGNED	DATE
ALT	09/2020
DRAWN	DATE
LNR	09/2020
CHECKED	DATE
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**US 19  
UTLITY RELOCATION PLAN**

SCALE : 0 20 ft.

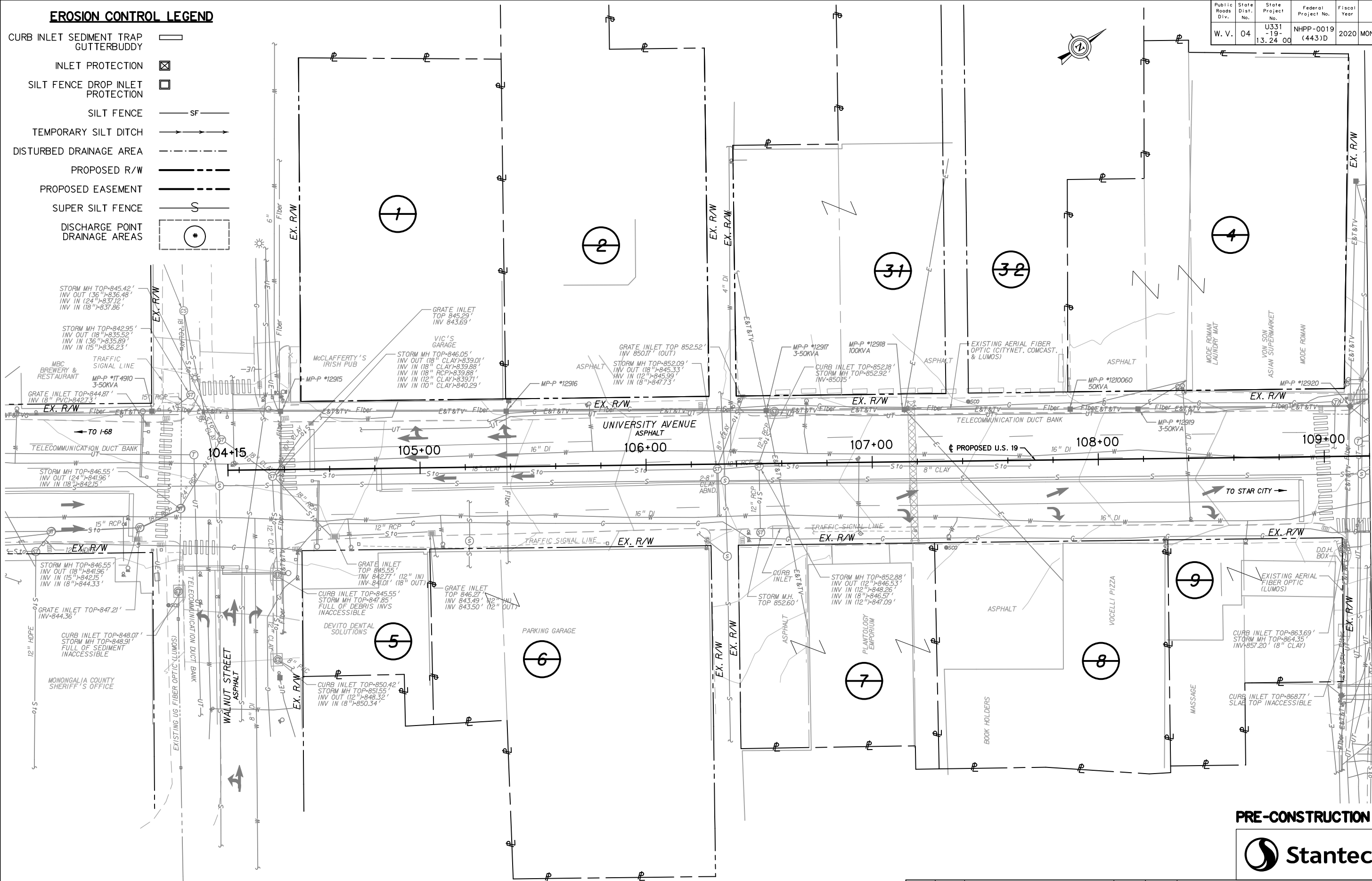
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	54	128

### EROSION CONTROL LEGEND

- CURB INLET SEDIMENT TRAP GUTTERBUDDY
- INLET PROTECTION
- SILT FENCE DROP INLET PROTECTION
- SILT FENCE
- TEMPORARY SILT DITCH
- DISTURBED DRAINAGE AREA
- PROPOSED R/W
- PROPOSED EASEMENT
- SUPER SILT FENCE
- DISCHARGE POINT DRAINAGE AREAS



MATCHLINE 109+20

**PRE-CONSTRUCTION**



DESIGNED	ALT	DATE	09/2020
DRAWN	LNR	DATE	09/2020
CHECKED	JDV	DATE	09/2020
CHECKED			

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## US 19 E&S CONTROLS BEGIN TO STA 109+20

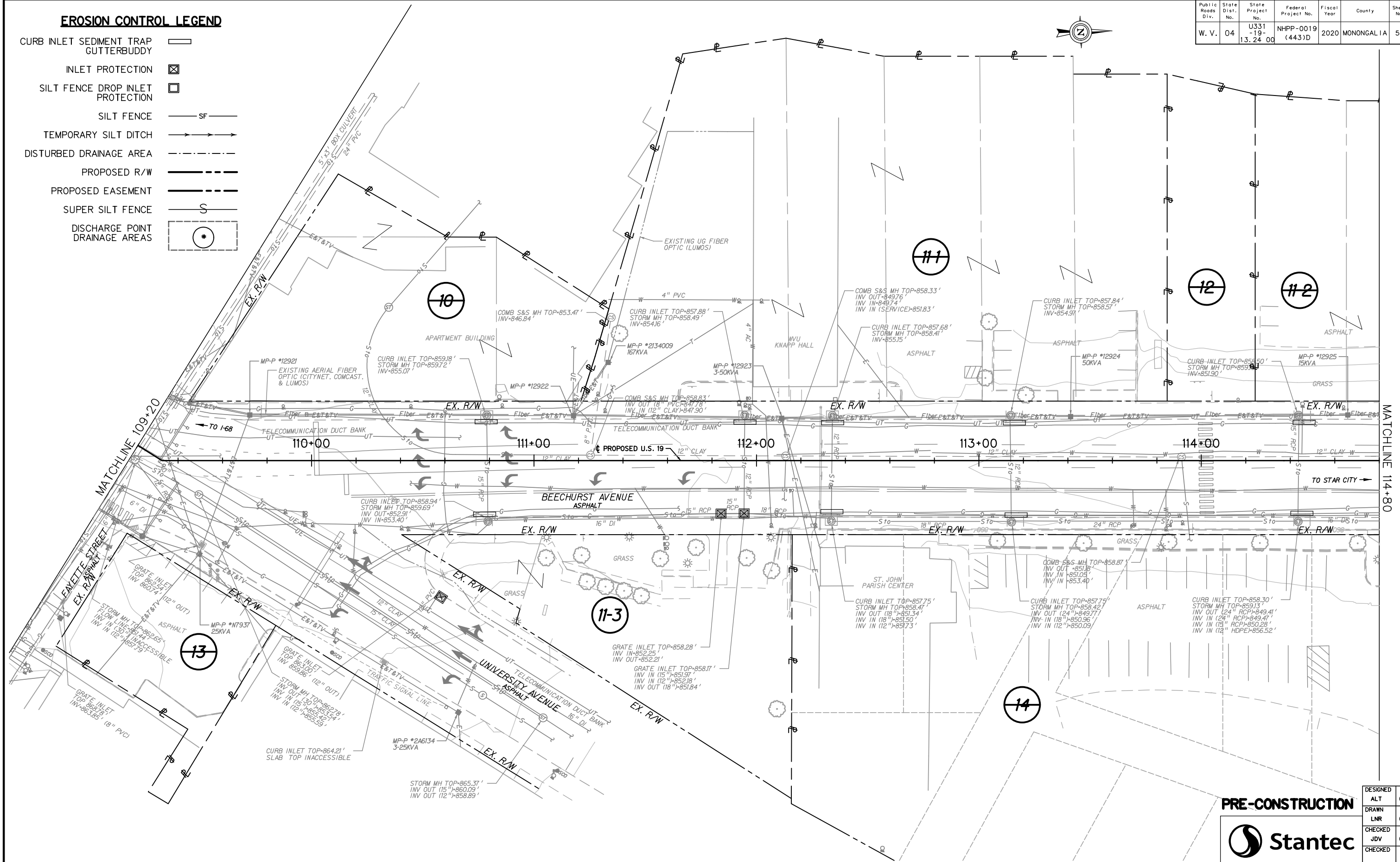
SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

Public Roads Div.	State No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	55	128

**EROSION CONTROL LEGEND**

- CURB INLET SEDIMENT TRAP GUTTERBUDDY
- INLET PROTECTION
- SILT FENCE DROP INLET PROTECTION
- SILT FENCE
- TEMPORARY SILT DITCH
- DISTURBED DRAINAGE AREA
- PROPOSED R/W
- PROPOSED EASEMENT
- SUPER SILT FENCE
- DISCHARGE POINT DRAINAGE AREAS



**PRE-CONSTRUCTION**



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**US 19 E&S CONTROLS  
STA. 109+20 TO 114+80**

DESIGNED	ALT	DATE
DRAWN	LNR	09/2020
CHECKED	JDV	09/2020
CHECKED		

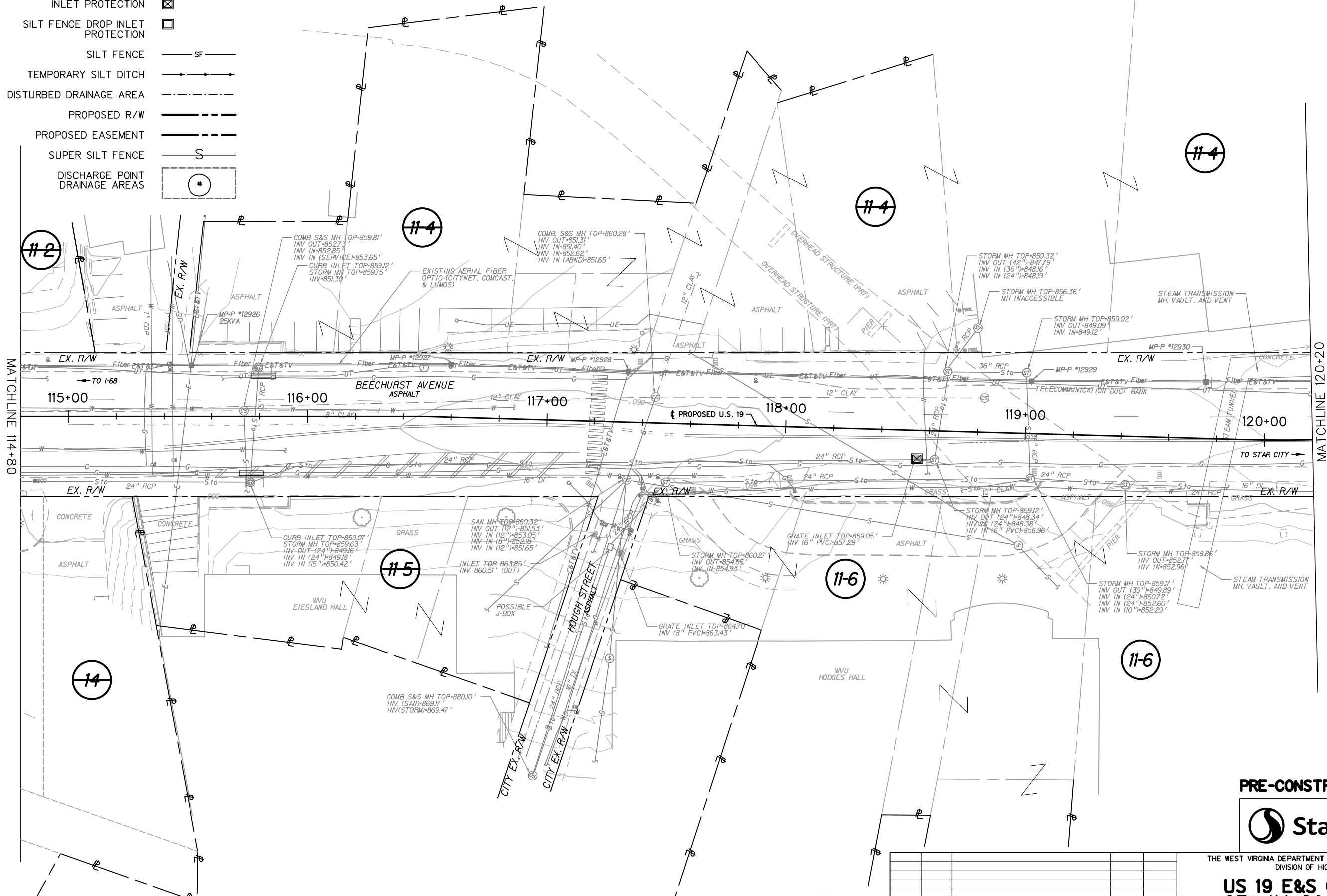
SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	56	128

**EROSION CONTROL LEGEND**

- CURB INLET SEDIMENT TRAP GUTTERBUDDY
- INLET PROTECTION
- SILT FENCE DROP INLET PROTECTION
- SILT FENCE
- TEMPORARY SILT DITCH
- DISTURBED DRAINAGE AREA
- PROPOSED R/W
- PROPOSED EASEMENT
- SUPER SILT FENCE
- DISCHARGE POINT DRAINAGE AREAS



MATCHLINE 114+80

MATCHLINE 120+20

**PRE-CONSTRUCTION**



DESIGNED	ALT	DATE
DRAWN	LNR	09/2020
CHECKED	JDV	09/2020
CHECKED		

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

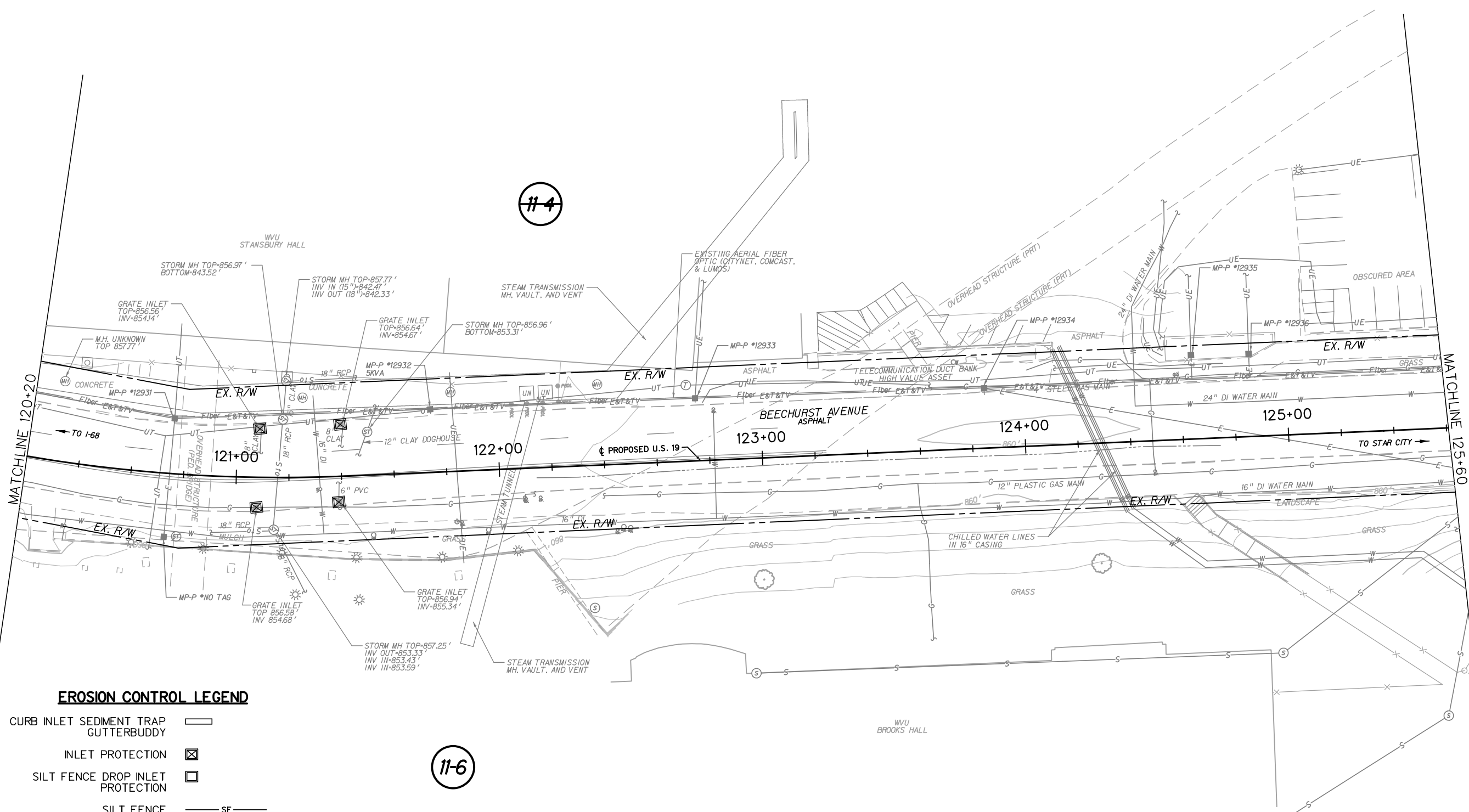
**US 19 E&S CONTROLS  
STA 114+80 TO 120+20**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	57	128



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**EROSION CONTROL LEGEND**

- CURB INLET SEDIMENT TRAP GUTTERBUDDY
- INLET PROTECTION
- SILT FENCE DROP INLET PROTECTION
- SILT FENCE
- TEMPORARY SILT DITCH
- DISTURBED DRAINAGE AREA
- PROPOSED R/W
- PROPOSED EASEMENT
- SUPER SILT FENCE
- DISCHARGE POINT DRAINAGE AREAS

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

**PRE-CONSTRUCTION**

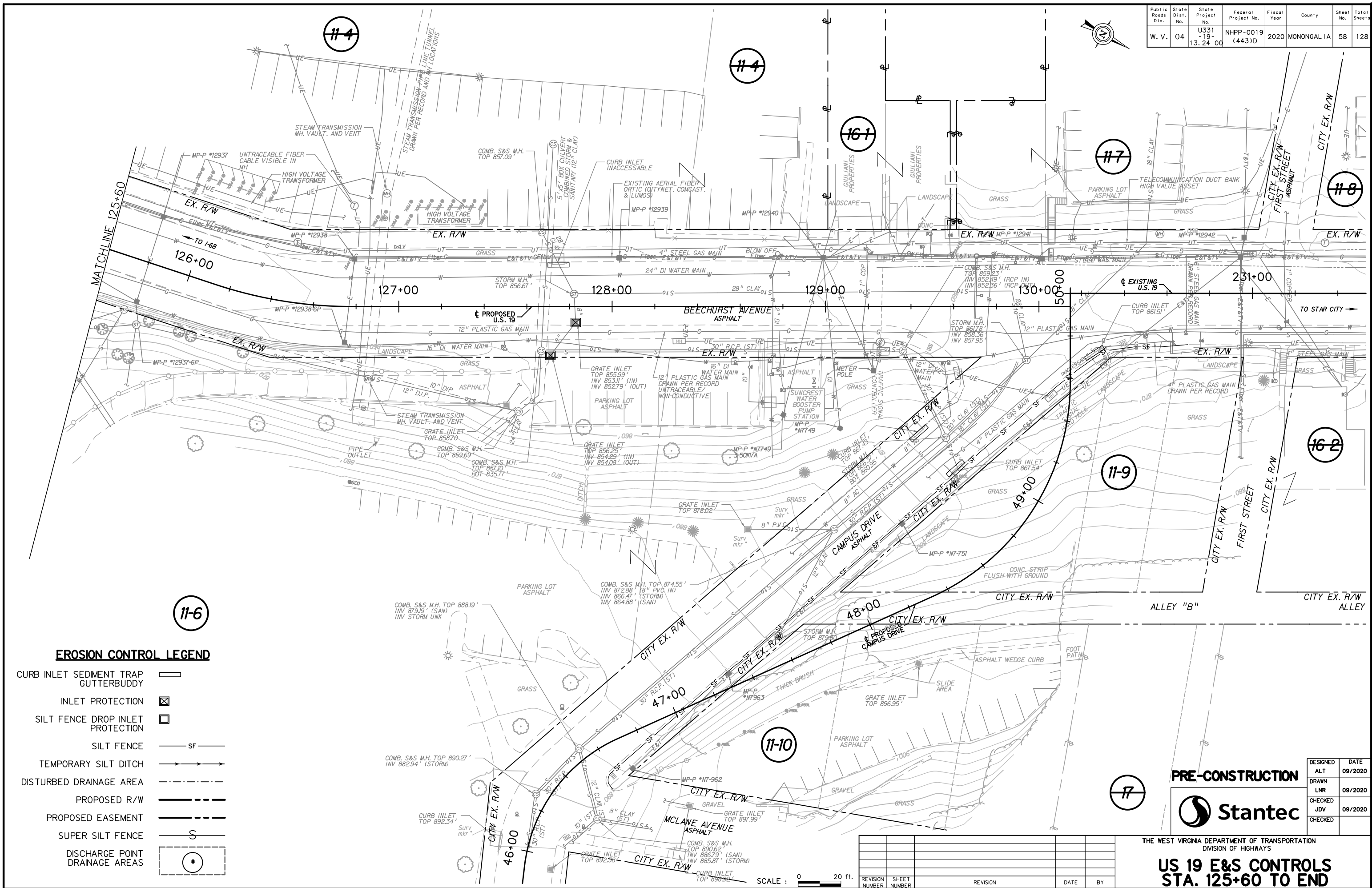


DESIGNED	DATE
ALT	09/2020
DRAWN	LNR
CHECKED	JDV
CHECKED	

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**US 19 E&S CONTROLS  
STA 120+20 TO 125+60**

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	58	128



**EROSION CONTROL LEGEND**

- CURB INLET SEDIMENT TRAP GUTTERBUDDY
- INLET PROTECTION
- SILT FENCE DROP INLET PROTECTION
- SILT FENCE
- TEMPORARY SILT DITCH
- DISTURBED DRAINAGE AREA
- PROPOSED R/W
- PROPOSED EASEMENT
- SUPER SILT FENCE
- DISCHARGE POINT DRAINAGE AREAS

**PRE-CONSTRUCTION**



DESIGNED	ALT	DATE
DRAWN	LNR	09/2020
CHECKED	JDV	09/2020
CHECKED		

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**US 19 E&S CONTROLS  
STA. 125+60 TO END**

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

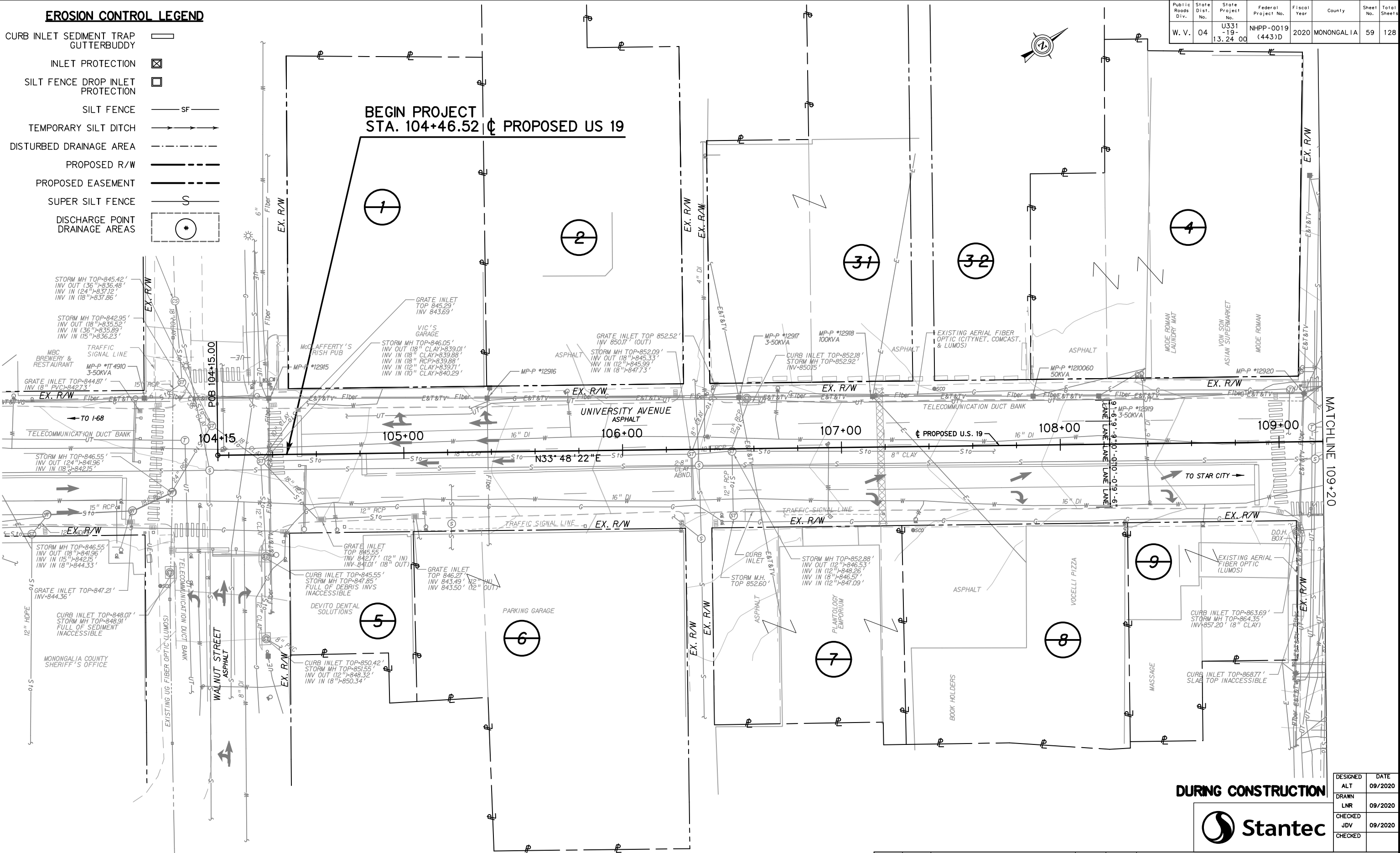
SCALE : 0 20 ft.

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	59	128

**EROSION CONTROL LEGEND**

- CURB INLET SEDIMENT TRAP GUTTERBUDDY
- INLET PROTECTION
- SILT FENCE DROP INLET PROTECTION
- SILT FENCE
- TEMPORARY SILT DITCH
- DISTURBED DRAINAGE AREA
- PROPOSED R/W
- PROPOSED EASEMENT
- SUPER SILT FENCE
- DISCHARGE POINT DRAINAGE AREAS

BEGIN PROJECT STA. 104+46.52  $\zeta$  PROPOSED US 19



MATCHLINE 109+20

**DURING CONSTRUCTION**



DESIGNED	ALT	DATE	09/2020
DRAWN	LNR	DATE	09/2020
CHECKED	JDV	DATE	09/2020
CHECKED			

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**US 19 E&S CONTROLS  
BEGIN TO STA 109+20**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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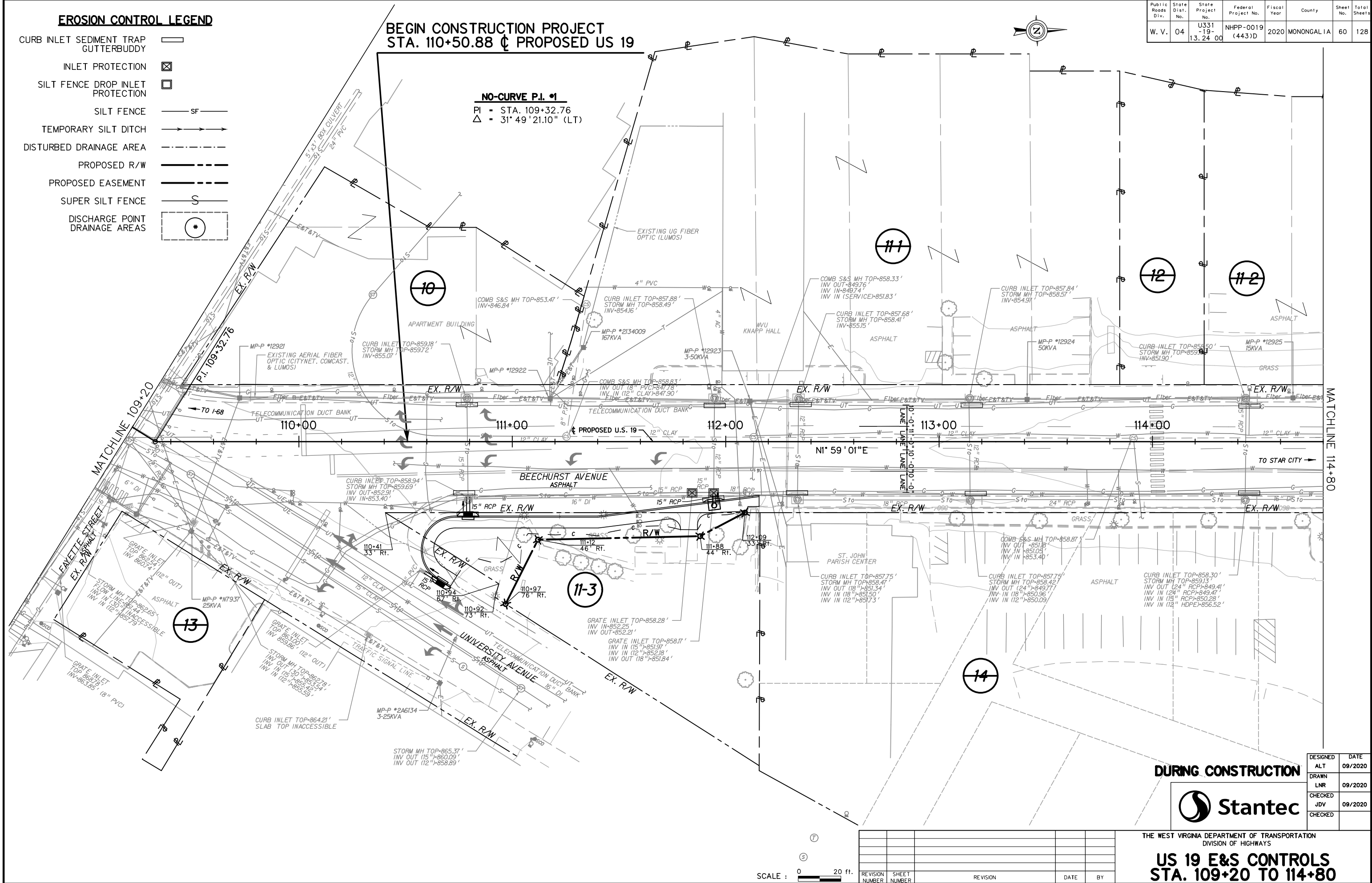
Public Roads Div.	State No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019 (443)D	2020	MONONGALIA	60	128

**EROSION CONTROL LEGEND**

- CURB INLET SEDIMENT TRAP GUTTERBUDDY
- INLET PROTECTION
- SILT FENCE DROP INLET PROTECTION
- SILT FENCE
- TEMPORARY SILT DITCH
- DISTURBED DRAINAGE AREA
- PROPOSED R/W
- PROPOSED EASEMENT
- SUPER SILT FENCE
- DISCHARGE POINT DRAINAGE AREAS

**BEGIN CONSTRUCTION PROJECT  
STA. 110+50.88 @ PROPOSED US 19**

**NO-CURVE P.I. #1**  
 PI = STA. 109+32.76  
 Δ = 31° 49' 21.10" (LT)



**DURING CONSTRUCTION**



DESIGNED	DATE
ALT	09/2020
DRAWN	LNR
CHECKED	JDV
CHECKED	

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**US 19 E&S CONTROLS  
STA. 109+20 TO 114+80**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



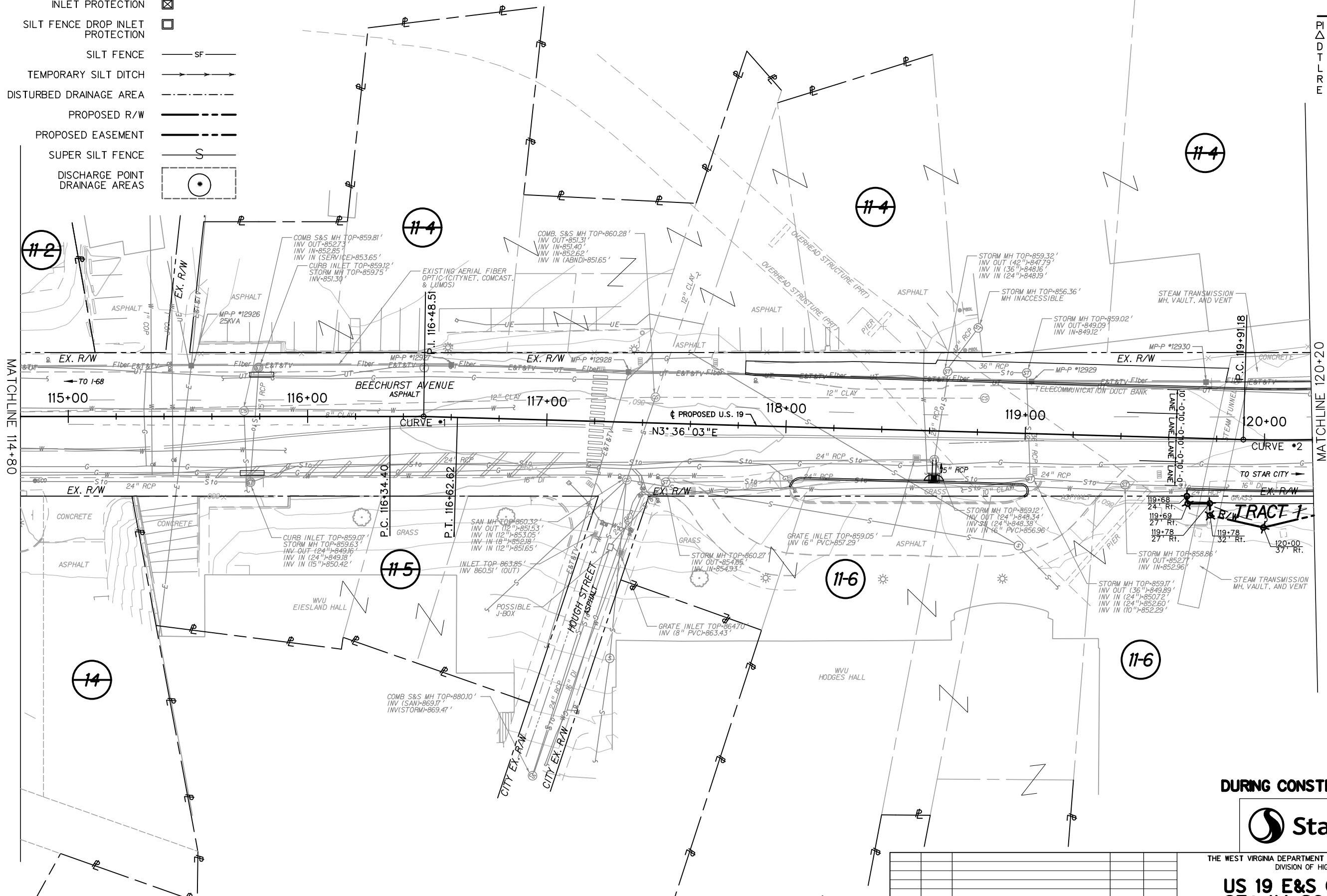
Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	61	128

**EROSION CONTROL LEGEND**

- CURB INLET SEDIMENT TRAP GUTTERBUDDY
- INLET PROTECTION
- SILT FENCE DROP INLET PROTECTION
- SILT FENCE
- TEMPORARY SILT DITCH
- DISTURBED DRAINAGE AREA
- PROPOSED R/W
- PROPOSED EASEMENT
- SUPER SILT FENCE
- DISCHARGE POINT DRAINAGE AREAS

**CURVE #2 DATA**

- PI = STA. 120+67.37
- Δ = 14° 53' 30.87" (LT)
- D = 9° 49' 39.90"
- T = 76.19
- L = 151.53
- R = 583.00
- E = 4.96



MATCHLINE 114+80

MATCHLINE 120+20

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

**DURING CONSTRUCTION**



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**US 19 E&S CONTROLS  
STA 114+80 TO 120+20**

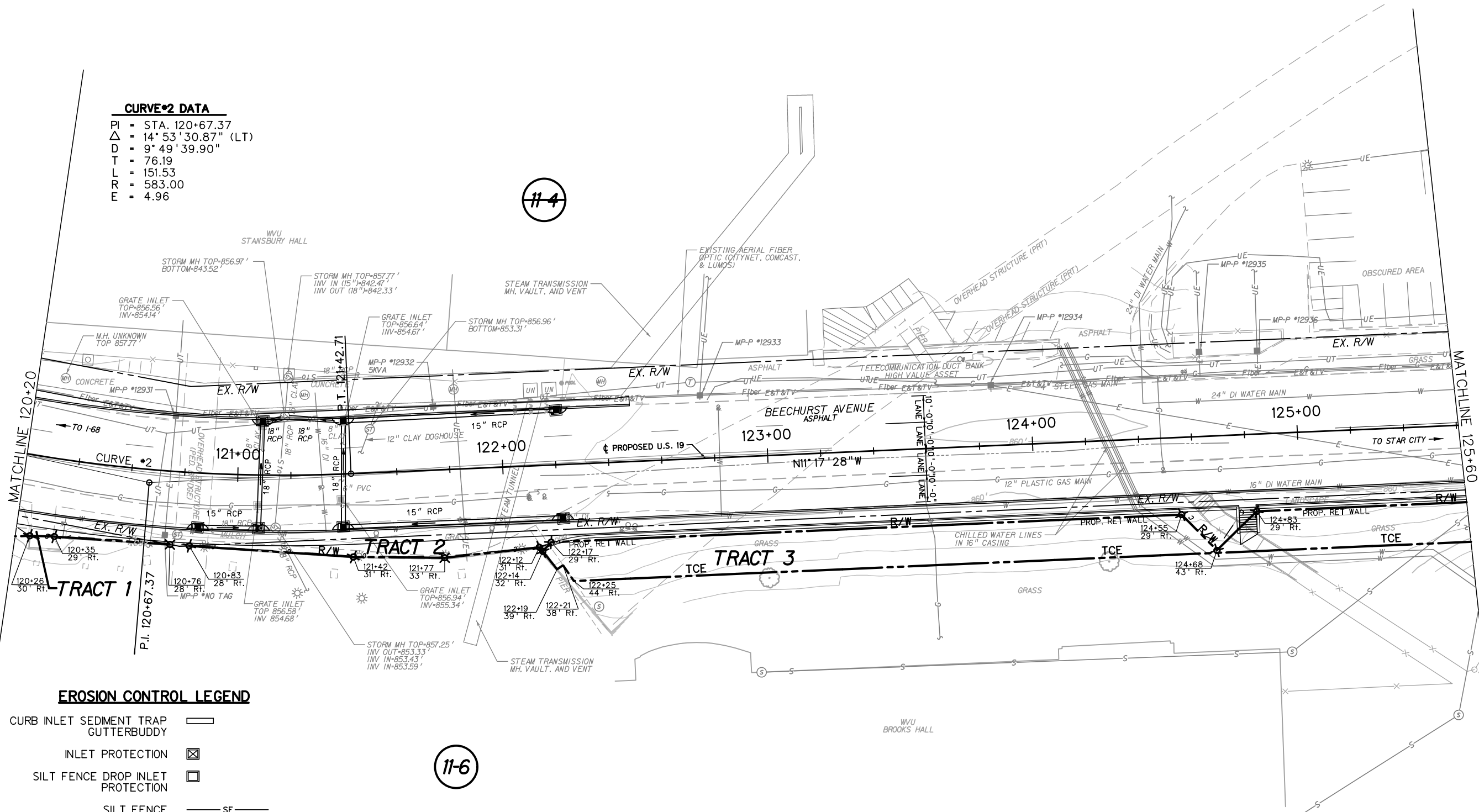
DESIGNED	DATE
ALT	09/2020
DRAWN	09/2020
CHECKED	09/2020
JDV	09/2020
CHECKED	

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Public Roads Div.	State No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	62	128



**CURVE #2 DATA**  
 PI = STA. 120+67.37  
 Δ = 14° 53' 30.87" (LT)  
 D = 9° 49' 39.90"  
 T = 76.19  
 L = 151.53  
 R = 583.00  
 E = 4.96



**EROSION CONTROL LEGEND**

- CURB INLET SEDIMENT TRAP GUTTERBUDDY
- INLET PROTECTION
- SILT FENCE DROP INLET PROTECTION
- SILT FENCE
- TEMPORARY SILT DITCH
- DISTURBED DRAINAGE AREA
- PROPOSED R/W
- PROPOSED EASEMENT
- SUPER SILT FENCE
- DISCHARGE POINT DRAINAGE AREAS

11-6

**DURING CONSTRUCTION**



DESIGNED	ALT	DATE
		09/2020
DRAWN	LNR	DATE
		09/2020
CHECKED	JDV	DATE
		09/2020
CHECKED		

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

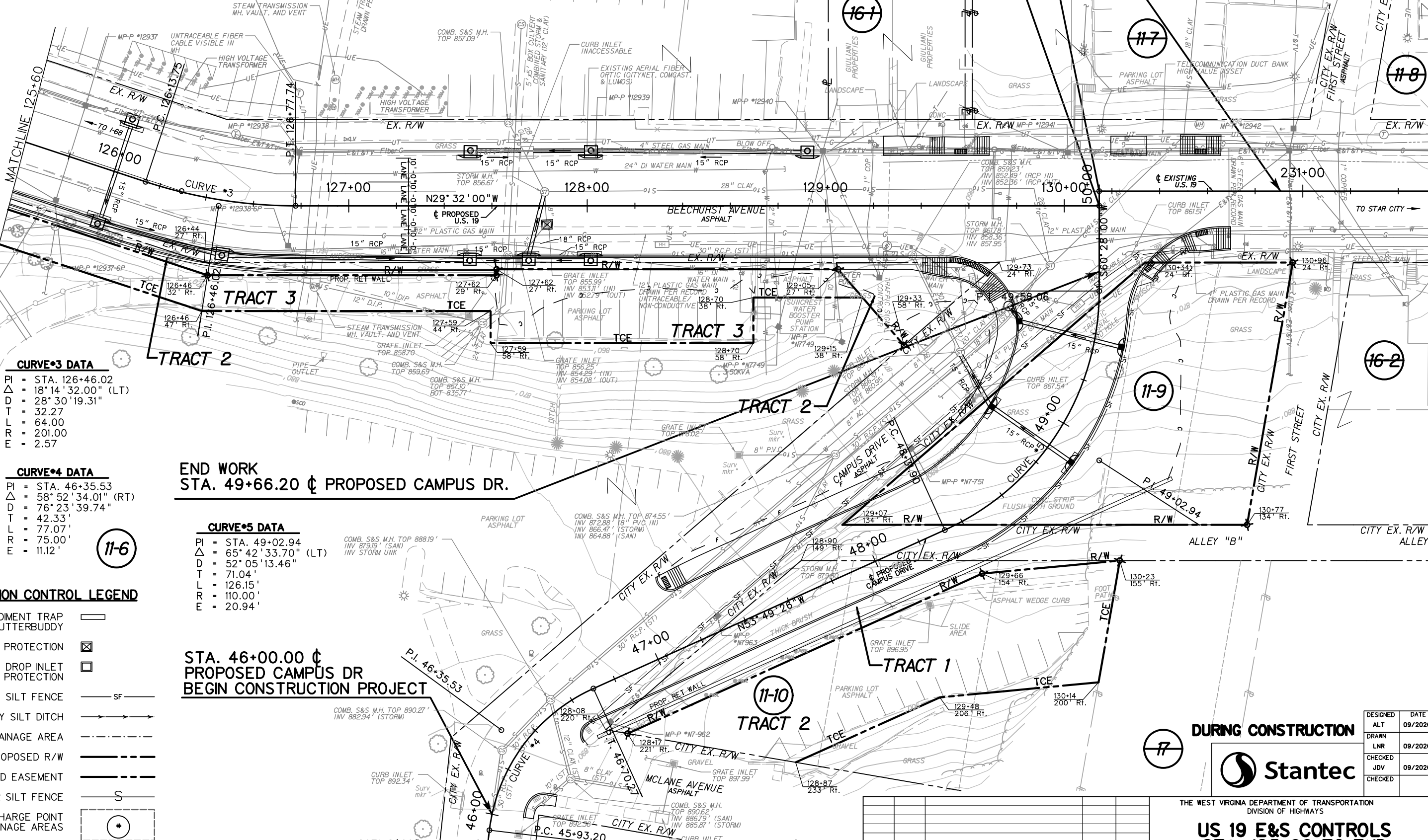
**US 19 E&S CONTROLS  
 STA 120+20 TO 125+60**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

END CONSTRUCTION PROJECT  
STA. 230+93.50  $\pm$  EXISTING US 19

STA 50+00.00  $\pm$  PROPOSED CAMPUS DR -  
STA 230+14.65  $\pm$  EXISTING US 19  
STA 130+14.65  $\pm$  PROPOSED US 19 -  
STA 49+93.82  $\pm$  PROPOSED CAMPUS DR



**CURVE\*3 DATA**  
 PI = STA. 126+46.02  
 $\Delta$  = 18° 14' 32.00" (LT)  
 D = 28° 30' 19.31"  
 T = 32.27  
 L = 64.00  
 R = 201.00  
 E = 2.57

**CURVE\*4 DATA**  
 PI = STA. 46+35.53  
 $\Delta$  = 58° 52' 34.01" (RT)  
 D = 76° 23' 39.74"  
 T = 42.33'  
 L = 77.07'  
 R = 75.00'  
 E = 11.12'

END WORK  
STA. 49+66.20  $\pm$  PROPOSED CAMPUS DR.

**CURVE\*5 DATA**  
 PI = STA. 49+02.94  
 $\Delta$  = 65° 42' 33.70" (LT)  
 D = 52° 05' 13.46"  
 T = 71.04'  
 L = 126.15'  
 R = 110.00'  
 E = 20.94'

**EROSION CONTROL LEGEND**

- CURB INLET SEDIMENT TRAP GUTTERBUDDY
- INLET PROTECTION
- SILT FENCE DROP INLET PROTECTION
- SILT FENCE
- TEMPORARY SILT DITCH
- DISTURBED DRAINAGE AREA
- PROPOSED R/W
- PROPOSED EASEMENT
- SUPER SILT FENCE
- DISCHARGE POINT DRAINAGE AREAS

STA. 46+00.00  $\pm$  PROPOSED CAMPUS DR  
BEGIN CONSTRUCTION PROJECT

DURING CONSTRUCTION



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

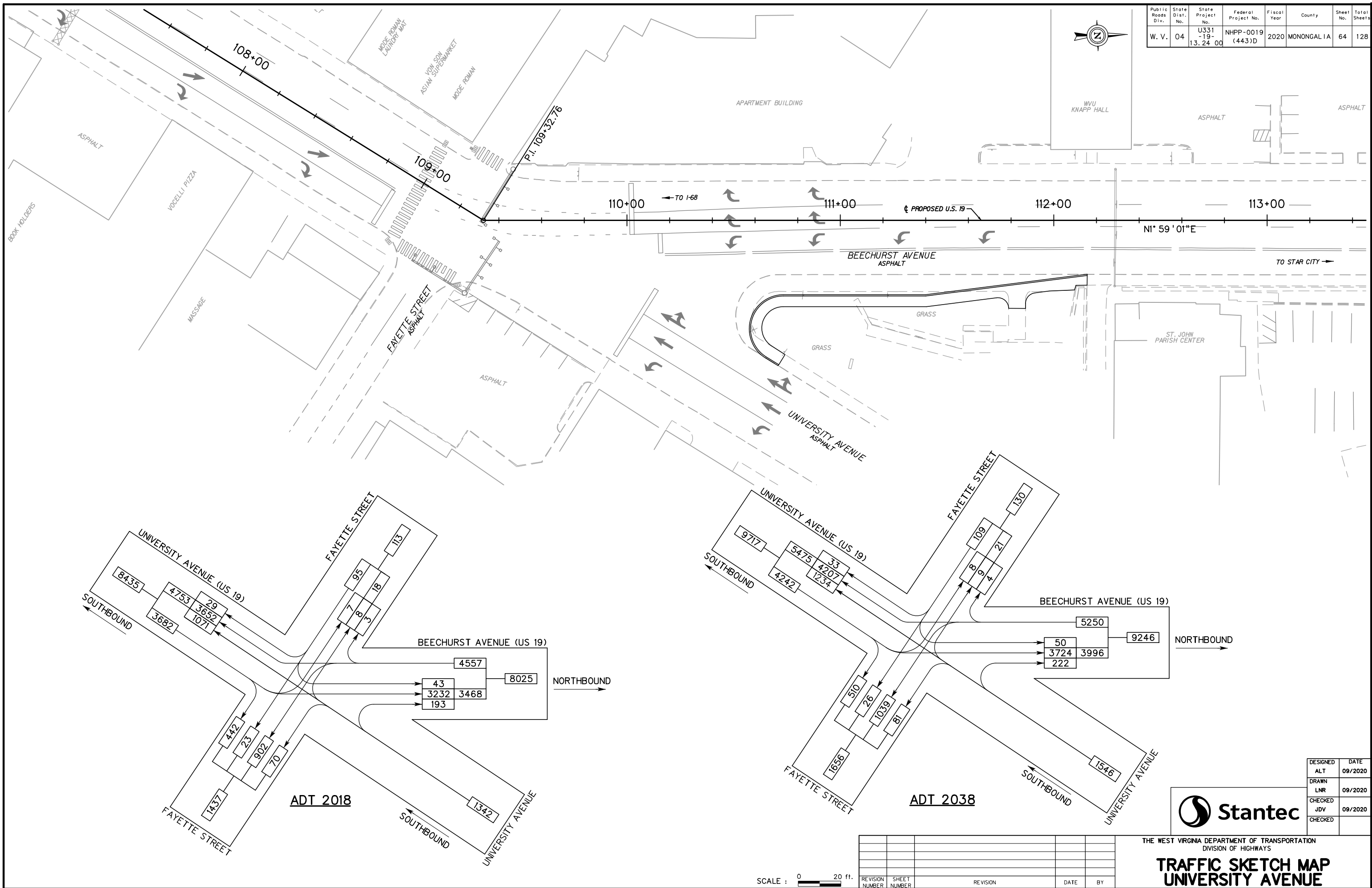
**US 19 E&S CONTROLS  
STA. 125+60 TO END**

DESIGNED	ALT	DATE
DRAWN	LNR	09/2020
CHECKED	JDV	09/2020
CHECKED		

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

SCALE : 0 20 ft.

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	64	128



DESIGNED	ALT	DATE
LNR		09/2020
CHECKED	JDV	09/2020
CHECKED		



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

### TRAFFIC SKETCH MAP UNIVERSITY AVENUE

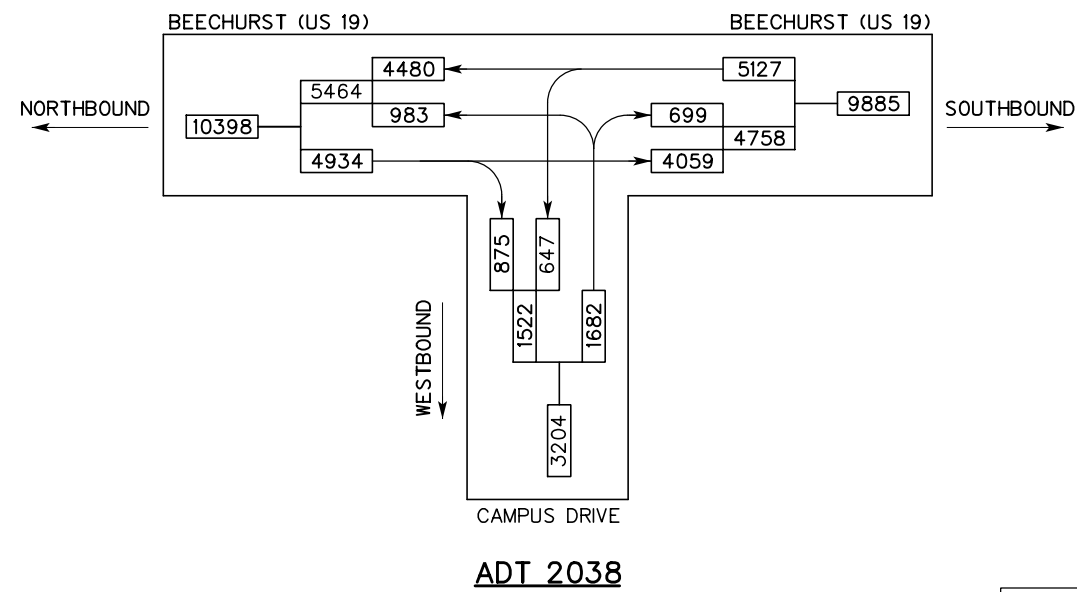
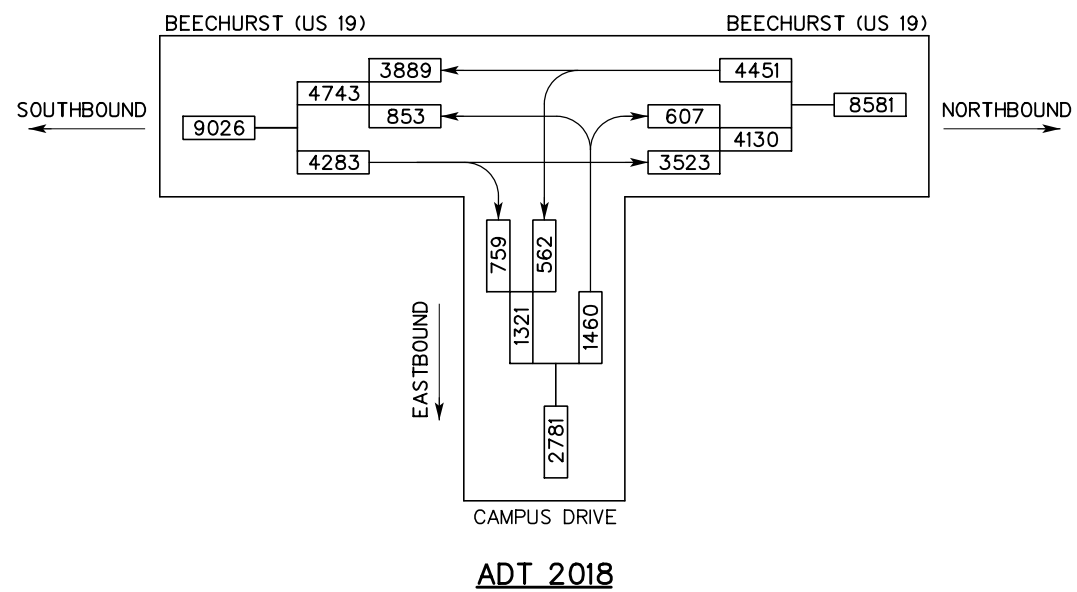
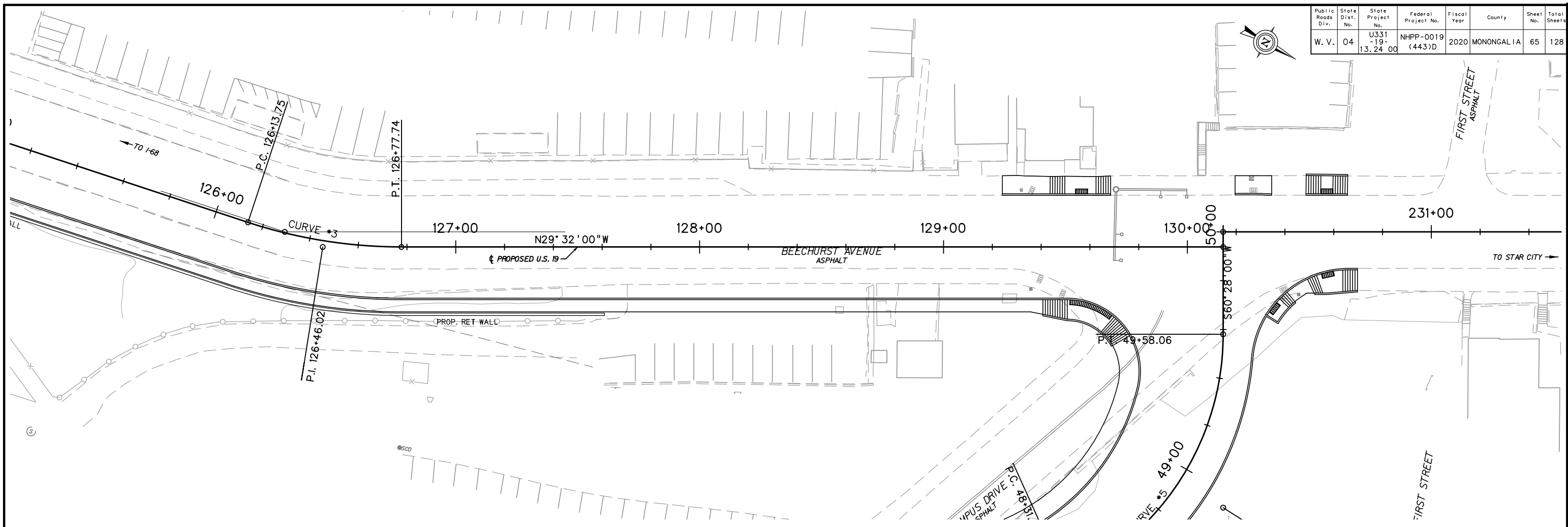
SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	65	128



DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**TRAFFIC SKETCH MAP  
CAMPUS DRIVE**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24-00	NHPP-0019 (443)D	2020	MONONGALIA	66	128

# SIGNING NOTES

## GOVERNING SPECIFICATIONS

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, STANDARD SPECIFICATIONS, ROADS AND BRIDGES, ADOPTED 2017, AS AMENDED BY THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS SUPPLEMENTAL SPECIFICATIONS, DATED JANUARY 1, 2020, THE CONTRACT DOCUMENTS AND THE CONTRACT PLANS ARE THE GOVERNING PROVISIONS APPLICABLE TO THIS PROJECT.

## SHOP DRAWINGS SUBMISSION

THE CONTRACTOR SHALL SUBMIT SIGN FABRICATION SHOP DRAWINGS IN EITHER ONE OF TWO WAYS; A SINGLE SUBMISSION OF ALL FLAT SHEET SIGNS AND A SINGLE SUBMISSION OF ALL EXTRUDED PANEL SIGNS, OR A SINGLE COMBINED SUBMISSION OF ALL SIGN FABRICATION DETAILS. ADDITIONALLY, THE CONTRACTOR SHALL SUBMIT ALL BREAKAWAY SIGN SUPPORT SHOP DRAWINGS IN ONE SUBMISSION.

SEGMENTED OR PARTIAL SHOP DRAWING SUBMISSIONS FOR SIGNS OR BREAKAWAYS WILL NOT BE ACCEPTED.

## EXISTING UTILITIES

THE CONTRACTOR MUST NOTIFY ALL APPLICABLE UTILITIES PRIOR TO ANY EXCAVATION FOR EXACT LOCATION OF THEIR UNDERGROUND FACILITIES. EXTREME CAUTION SHALL BE USED IN THESE AREAS ESPECIALLY IN EXCAVATING FOR FOUNDATIONS AND THE JACKING OF CONDUIT. IF NECESSARY THE CONTRACTOR SHALL HAND DIG TO LOCATE LINES OR SHALL OPEN CUT IN AREAS OF POSSIBLE CONFLICT. THOSE AREAS SHALL BE DETERMINED BY THE PROJECT ENGINEER. CONTACT "MSS UTILITY" PRIOR TO ANY EXCAVATING.

ALL COSTS ASSOCIATED WITH ANY DISRUPTION OF SERVICES RESULTING FROM THE CONTRACTOR'S ACTIVITIES WILL BE SOLELY THE CONTRACTOR'S RESPONSIBILITY.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND VERIFY ALL EXISTING UTILITIES INCLUDING WVDOH OWNED CONDUITS TO AVOID ANY CONFLICT OR DAMAGES DURING CONSTRUCTION. THIS WORK SHALL BE BID INCIDENTAL TO VARIOUS PROJECT ITEMS.

## CONSTRUCTION LAYOUT STAKES

CONSTRUCTION LAYOUT STAKES FOR SIGNING WILL BE INCIDENTAL TO THE CONTRACT AMOUNT BID AND INCLUDED IN THE VARIOUS SIGNING ITEMS.

## CORNERS

CORNERS OF ALL SHEET ALUMINUM SIGNS SHALL BE ROUNDED; HOWEVER, CORNERS OF ALUMINUM SIGN FACES (EXTRUDED OR OVERLAYS) SHALL NOT BE ROUNDED. FABRICATED SIGNS WITH DIRECT APPLIED COPY (BLUE, GREEN OR BROWN BACKGROUND) SHALL HAVE A 1/2 INCH CORNER RADIUS ON THE ALUMINUM BLANK.

## BOLT TIGHTENING

A CALIBRATED DEVICE ACCEPTABLE TO THE ENGINEER SHALL BE PROVIDED BY THE CONTRACTOR TO INSURE THE STIPULATED TORQUE AND/OR TENSION THAT IS SET FORTH BY THE PLANS.

## REFLECTIVE SHEETING

BACKGROUND MATERIAL (WHITE, GREEN, BLUE, BROWN, AND RED) FOR SIGNS IN THIS PROJECT SHALL BE REFLECTIVE SHEETING, TYPE ASTM III OR TYPE ASTM IV. TYPE ASTM IX OR TYPE ASTM XI FLUORESCENT YELLOW SHEETING SHALL BE USED ON ALL STANDARD WARNING SIGNS INSTALLED IN THIS PROJECT. IN ADDITION, EITHER TYPE ASTM IX OR TYPE ASTM XI FLUORESCENT YELLOW SHEETING SHALL BE USED ON ALL YELLOW EXTRUDED PANELS.

ALL DEMOUNTABLE WHITE LEGEND AND BORDER, AND DEMOUNTABLE SHIELDS FOR GUIDE SIGNS SHALL BE EITHER TYPE ASTM IX OR TYPE ASTM XI SHEETING. ALL SHEETING USED IN THIS PROJECT MUST HAVE SUCCESSFULLY COMPLETED 3 YEARS IN THE AASHTO/NTPEP OUTDOOR REFLECTIVE SHEETING PERFORMANCE TESTING PROGRAM.

TYPE ASTM XI SHEETING APPROVED BY THE WVDOH SHALL BE ALLOWED AS AN EQUAL SUBSTITUTE TO TYPE ASTM IX SHEETING ON ALL SIGNS, DELINEATORS, OR REFLECTIVE SUPPORT STRIPS INDICATED HEREIN REQUIRING TYPE ASTM IX.

## DEMOUNTABLE COPY

DEMOUNTABLE COPY AND BORDERS SHALL NOT BE POSITIONED ON ANY SIGN FACE BY MEANS OF TAPE OR GLUE. ALL DEMOUNTABLE COPY AND BORDERS SHALL BE ATTACHED TO THE SIGN FACE USING APPROVED RIVETS ONLY.

RIVETS USED FOR ATTACHING BLACK DEMOUNTABLE COPY AND BORDERS SHALL BE BLACK AND RIVETS USED FOR ATTACHING WHITE DEMOUNTABLE COPY AND BORDERS SHALL BE SILVER.

DEMOUNTABLE COPY USED IN THIS PROJECT SHALL BE FABRICATED FROM 0.080 INCH THICK ALUMINUM SHEETS CONFORMING TO ASTM B 209 ALLOY 6061-T6 OR 5052-H38 MEETING THE REQUIREMENTS OF SECTION 661.

## SIGN FABRICATION

ALL SIGNS SHALL BE FABRICATED IN ACCORDANCE WITH THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS "SIGN FABRICATION MANUAL", "DESIGN GUIDE FOR SIGNING", "STANDARD SPECIFICATIONS ROADS AND BRIDGES", LATEST EDITIONS.

## SIGN PUNCHING

SIGNS 60" OR MORE IN HEIGHT SHALL HAVE THREE RIBS. THE THIRD RB SHALL BE MOUNTED ALONG THE HORIZONTAL CENTERLINE. A THIRD SET OF HOLES SHALL BE PUNCHED ON THESE SIGNS ALONG THE HORIZONTAL CENTERLINE AND IN LINE WITH THE OTHER SET OF HOLES.

WHERE NOTED IN THE CONTRACT PLANS, SIGNS SHALL BE PUNCHED IN ACCORDANCE WITH THE DETAILS INCLUDED IN THE CONTRACT PLANS.

## IDENTIFICATION CODES AND DECALS

AN IDENTIFICATION CODE SHALL BE PLACED ON ALL SIGNS WITH SCREENED MESSAGES THAT ARE MANUFACTURED FOR THE DIVISION OF HIGHWAYS. THE CODE SHALL CONSIST OF THE LETTERS "WVDH" WITH AN ABBREVIATED FORM OF MONTH AND YEAR OF FABRICATION DIRECTLY BELOW. IT SHALL ALSO INCLUDE AN ABBREVIATED NAME OF THE SHEETING MANUFACTURER AND THE INK MANUFACTURER.

EXAMPLE: WVDH 3M  
8/97 A

EACH LINE OF LETTERS OR NUMERALS SHALL BE 1/4 INCH HIGH, NO GREATER THAN 1 INCH IN LENGTH AND OF THE SAME COLOR AS THAT BEING SCREENED. THE CODE SHALL BE PLACED ON THE LOWER RIGHT HAND EDGE OF THE SIGN. IF THE SIGN HAS BOTH BORDER AND MARGIN, THE CODE SHALL BE WITHIN THE BORDER, BUT MAY EXTEND INTO THE MARGIN AND/OR SIGN AREA. IF THE SIGN HAS BORDER ONLY, THE CODE SHALL BE WITHIN THE BORDER, BUT MAY EXTEND INTO THE SIGN AREA. A SIGN IDENTIFICATION DECAL SHALL BE APPLIED TO THE LOWER RIGHT HAND CORNER (FACING BACK OF SIGN) OF ALL FLAT SHEET SIGNS STATING THE MONTH AND YEAR OF INSTALLATION. EXTRUDED PANEL SIGNS AND FABRICATED FLAT SHEET SIGNS WITH DIRECT APPLIED COPY SHALL HAVE TWO SEPARATE DECALS APPLIED TO THE LOWER RIGHT HAND CORNER (FACING BACK OF SIGN), ONE STATING THE MONTH AND YEAR OF INSTALLATION AND THE OTHER STATING THE MANUFACTURER OF THE SHEETING. SEE CONTRACT PLANS FOR DECAL DETAILS.

## HARDWARE

ON ALL FLAT SHEET SIGNS THE MOUNTING HARDWARE SHALL BE OF A VANDAL-RESISTANT DESIGN. THE FABRICATOR SHALL SUPPLY FIVE (5) PIECES OF MATERIAL TO THE DIVISION OF HIGHWAYS FOR TESTING PRIOR TO THE MANUFACTURER OF SIGNS. THE DIVISION OF HIGHWAYS ALSO RESERVES THE RIGHT TO RANDOM TEST THIS MATERIAL AFTER SHIPMENT TO THE PROJECT.

BOLT: 5/16"X3"X18. BOLT HEAD TO BE ROUND, DOME WITH ONE-WAY SLOT. BOLT SHALL HAVE A 2 INCH MINIMUM THREAD AND BE MANUFACTURED OF STEEL IN ACCORDANCE WITH ASTM A-307.

NUT: CONE SHAPED WITH HEX SHAPED DRIVE HEAD DESIGNED TO SHEAR OFF AT A PREDETERMINED TORQUE OF NO LESS THAN 4FT/LBS AND NOT GREATER THAN 8FT/LBS WHEN USING MATERIALS, CONTROLS, SOILS AND TESTING MP NO. 661.20.00. THE NUT SHALL BE MANUFACTURED OF STEEL IN ACCORDANCE WITH ASTM A-563. GRADE A.

COATING ON BOTH NUT AND BOLT SHALL BE IN ACCORDANCE WITH ASTM B-766, CLASS B, TYPE 2 (CADMIUM DICHROMATE). THREAD FIT ON NUT AND BOLT SHALL ALLOW WORKERS TO ASSEMBLE HARDWARE WITH THEIR FINGERS BEFORE TIGHTENING.

## SIGN MOUNTING AND EXTRUDED RIBS

EACH FLAT SHEET SIGN ATTACHED TO BREAKAWAY SUPPORTS SHALL HAVE TWO EXTRUDED RIBS PER STANDARD DETAIL TP-A REGARDLESS OF SIGN SIZE, SHAPE, OR NUMBER OF SIGNS IN THE SIGN ASSEMBLY.

EXCEPT FOR D16 SERIES SIGNS (UP TO 48" IN WIDTH AND 9"-15" HEIGHTS) ANY SIGN IN THIS PROJECT THAT IS 36" OR MORE IN WIDTH AND WHICH IS MOUNTED TO A LIGHT POLE OR MOUNTED TO AN OVERHEAD SIGN STRUCTURE UPRIGHT SHALL HAVE EXTRUDED RIBS. THE NUMBER OF RIBS PER SIGN SHALL BE AS FOLLOWS:

SIGNS WITH 6"-18" HEIGHTS - 1 RIB  
SIGNS WITH 24"-42" HEIGHTS - 2 RIBS  
SIGNS WITH 42" AND GREATER HEIGHTS - 3 RIBS

## POST REMOVAL ITEM 657018-001

POST REMOVAL FOR GROUND MOUNTED SIGNS ON EXISTING W OR S SHAPE SUPPORTS SHALL INCLUDE THE CUTTING OFF OF THE EXISTING STUB(S) TO A MINIMUM OF 6" BELOW GROUND AND THE RESTORATION OF THE GROUND SURFACE TO ITS ORIGINAL CONDITION.

IN ADDITION THIS ITEM SHALL INCLUDE THE REMOVAL AND DISPOSAL OF SIGNS AND SIGN SUPPORT ATTACHMENTS AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER REGARDLESS OF WHETHER THE SIGN TO BE REMOVED IS MOUNTED ON A POST WHICH IS TO REMAIN OR BE REMOVED, OR IF THE SIGN IS MOUNTED ON OTHER MEANS OF SUPPORT SUCH AS A LIGHT POLE, POWER POLE, ETC.

COSTS FOR REMOVING EXISTING SIGNS, VERTICAL ZEE BRACKETS, SIGN LIGHTING SUPPORT ARMS AND ASSOCIATED HARDWARE FROM AN EXISTING OVERHEAD SIGN STRUCTURE THAT IS TO REMAIN SHALL ALSO BE BID INCIDENTAL TO ITEM 657018-001.

## REFLECTIVE SIGN SUPPORT STRIPS

REFLECTIVE SIGN SUPPORT STRIPS SHALL BE AS SHOWN ON THE CONTRACT PLANS. NORMAL INSERT SIZE SHALL BE 3"X72", ALTHOUGH SHORTER LENGTHS MAY BE CONSIDERED FOR USE WITH DELINEATION.

REFLECTIVE SIGN SUPPORT STRIPS MOUNTED IN NEW OR EXISTING U-CHANNELS SHALL BE BID AS ITEM 661001-001 (2 SQUARE FEET PER STRIP). FOR SIGN SUPPORTS WITH REFLECTIVE STRIPS SEE CONTRACT PLANS.

## SIGN LOCATIONS

ALL SIGN LOCATIONS (EXISTING OR PROPOSED) ARE APPROXIMATE. WHERE EXISTING SIGNS AND U-CHANNEL SUPPORTS ARE SHOWN TO BE REMOVED AND NEW ERRECTED AT THE SAME LOCATION, THE NEW SIGN SHALL BE LOCATED AS CLOSE AS POSSIBLE TO THE ORIGINAL LOCATION.

WHERE EXISTING BREAKAWAY SUPPORTS ARE SHOWN TO BE REMOVED AND NEW BREAKAWAY SUPPORTS INSTALLED AT THE SAME LOCATION, THE NEW BREAKAWAY SUPPORTS MAY BE LOCATED UP TO 10 FEET UP STATION OR DOWN STATION FROM THE EXISTING SO AS NOT TO CONFLICT WITH EXISTING FOUNDATIONS.

## BRUSH CUTTING

BRUSH OR OTHER VEGETATION WHICH BLOCKS THE VISIBILITY OF A SIGN INSTALLED IN THIS PROJECT SHALL BE CUT AND REMOVED FROM THE RIGHT OF WAY. THERE SHALL BE NO SEPARATE PAYMENT FOR THIS WORK AND ALL COSTS SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 661002-001. THE AMOUNT TO BE REMOVED SHALL BE DETERMINED BY STANDING ON THE RIGHT EDGE OF PAVEMENT AT A MINIMUM DISTANCE OF 500 FEET IN ADVANCE OF THE SIGN.

## HORIZONTAL OFFSET FROM EDGE OF PAVEMENT

ALL SIGNS SHALL BE MOUNTED IN ACCORDANCE WITH STANDARD DETAIL TP3-1. ALL SIGNS SHALL BE A MINIMUM OF 6 FEET FROM EDGE OF PAVED SHOULDER WHEN NO GUARDRAIL IS PRESENT. WHERE GUARDRAIL IS PRESENT SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE BACK OF THE GUARDRAIL POST.

WHERE POSSIBLE NEW SIGN SUPPORTS SHALL NOT BE PLACED WITHIN DITCH BOTTOMS AND LOCATIONS SHALL BE REVISED AS DIRECTED BY THE ENGINEER.

## BREAKAWAY SUPPORT FOUNDATIONS

THE USE OF ROUND CONCRETE FORMS (SONOTUBE) ON ALL NEW BREAKAWAY SUPPORT FOUNDATIONS IN SLOPES THAT ARE 4:1 OR GREATER IS REQUIRED IN THIS PROJECT.

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DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## SIGNING & PAVEMENT MARKING GENERAL NOTES

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



# SIGNING NOTES (CONTINUED)

## MOUNTING HEIGHTS

THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR CHECKING ALL CROSS SECTIONS AT APPROVED SIGN LOCATIONS IN ORDER TO DETERMINE FINAL SUPPORT LENGTHS. THE SUPPORTS SHALL NOT BE FABRICATED OR INSTALLED UNTIL SUCH TIME AS THE ABOVE MEASUREMENTS PROVE ACCEPTABLE TO THE ENGINEER.

THE FOLLOWING SIGN MOUNTING HEIGHT GUIDELINES SHALL BE FOLLOWED WHEN DETERMINING THE SUPPORT LENGTHS:

TYPICALLY, ALL SIGNS SHALL BE MOUNTED SUCH THAT THE BOTTOM OF THE LOWEST SIGN ON THE ASSEMBLY IS 7 FEET MIN AND 8 FEET MAX ABOVE THE ELEVATION OF THE ROADWAY EDGE LINE. EXCEPTIONS NOTED BELOW ARE ALLOWED ONLY WHERE THE ASSEMBLY IS NOT INSTALLED ALONG A DESIGNATED PEDESTRIAN WALKWAY, SUCH AS A SIDEWALK, AND IS NOT INSTALLED ADJACENT TO A TRAVEL LANE WHERE ROADSIDE PARKING IS PREVALENT.

ASSEMBLIES WHICH INCLUDE STANDARD SECONDARY PLAQUES ASSOCIATED WITH STANDARD REGULATORY AND WARNING SIGNS MAY BE INSTALLED SUCH THAT THE BOTTOM OF THE LOWEST SIGN IS 6 FEET MIN ABOVE THE ELEVATION OF THE ROADWAY EDGE LINE. THE CONTRACTOR SHALL NOT BE PERMITTED TO LOWER THE MOUNTING HEIGHT OF THE PRIMARY SIGN BELOW 7 FEET. EXAMPLES INCLUDE, BUT ARE NOT LIMITED TO, R1-1 SIGNS WITH R6-3 PLAQUES, R4-7 SIGNS WITH XR-9 PLAQUES, AND W1-2 SIGNS WITH W13-1 PLAQUES. NOTE: THIS EXCEPTION SHALL NOT BE ALLOWED FOR ASSEMBLIES INSTALLED ON SLIP BASE TYPE SIGN SUPPORTS.

GUIDE SIGNS WITH SECONDARY SUPPLEMENTAL PLAQUES MAY BE INSTALLED SUCH THAT THE BOTTOM OF THE SUPPLEMENTAL PLAQUE(S) IS 5 FEET MIN ABOVE THE ELEVATION OF THE ROADWAY EDGE LINE. NOTE: THE CONTRACTOR SHALL NOT BE PERMITTED TO LOWER THE MOUNTING HEIGHT OF THE PRIMARY SIGN BELOW 7 FEET. AN EXAMPLE WOULD BE A STANDARD DIRECTIONAL GUIDE SIGN WITH A D9-2 PLAQUE. WHERE SLIP BASE TYPE SIGN SUPPORTS ARE USED, THE SUPPLEMENTAL PLAQUE(S) SHALL BE MOUNTED BELOW THE SUPPORT SAW CUTS. EACH PLAQUE MAY BE MOUNTED TO ONE SUPPORT LEG ONLY. THE LEGS SHALL NOT BE CONNECTED BELOW THE SAW CUT BY ANY SIGN BRACING.

DEVIATIONS FROM THE ABOVE GUIDELINES SHALL BE APPLIED WHERE ASSEMBLIES ARE INSTALLED ON BACKSLOPES ALONG CUT SECTIONS OF ROADWAY. WHERE THE ASSEMBLY SUPPORTS ARE INSTALLED ON BACKSLOPES THAT ARE AT A HIGHER ELEVATION THAN THE ROADWAY EDGE LINE, THE MINIMUM MOUNTING HEIGHTS DESCRIBED ABOVE SHALL APPLY TO THE MOUNTING HEIGHT ABOVE THE GROUND SURFACE AT THE SHORTEST SUPPORT. EXCEPTIONS TO THIS MAY BE APPLIED WHERE THE NEAR EDGE OF THE ASSEMBLY IS LOCATED BEHIND A NONMOUNTABLE CURB, BEHIND GUARDRAIL OR OTHER LONGITUDINAL NON-GATING BARRIER, OR WHERE THE SPEED LIMIT OF THE FACILITY IS 35 MPH OR LESS. IN THESE CASES, THE MOUNTING HEIGHT OF THE SIGNING ABOVE THE EDGE LINE OF THE ROADWAY AS SPECIFIED ABOVE SHALL DICTATE THE SUPPORT LENGTHS.

IN ADDITION, IF ALL OR A PORTION OF THE ASSEMBLY IS LOCATED A SUFFICIENT DISTANCE BEYOND THE TOE OF THE BACKSLOPE, THE MOUNTING HEIGHT ABOVE THE EDGE LINE MAY ALSO BE APPLIED TO THOSE PORTIONS OF THE ASSEMBLY. HOWEVER, ANY PORTIONS OF THE ASSEMBLY NOT LOCATED A SUFFICIENT DISTANCE BEYOND THE TOE OF THE BACKSLOPE SHALL MEET THE ABOVE GROUND LEVEL MOUNTING HEIGHT REQUIREMENTS. THE REQUIRED DISTANCE BEYOND THE TOE OF THE BACKSLOPE SHALL BE BASED ON THE SLOPE OF THE BACKSLOPE, THE POSTED SPEED LIMIT OF THE FACILITY, AND SHALL BE AS FOLLOWS:

- 40 MPH: ALL BACKSLOPES - 15 FEET
- 45-50 MPH: 1V:3H AND STEEPER - 15 FEET  
1V:4H-5H - 19 FEET  
1V:6H AND FLATTER - 21 FEET
- 60 MPH: 1V:2H AND STEEPER - 15 FEET  
1V:3H - 21 FEET  
1V:4H-5H - 25 FEET  
1V:6H AND FLATTER - 27 FEET
- 65-70 MPH: 1V:2H AND STEEPER - 15 FEET  
1V:3H - 23 FEET  
1V:4H-5H - 28 FEET  
1V:6H AND FLATTER - 29 FEET

NOTE THESE DISTANCES SHALL BE MULTIPLIED BY A FACTOR OF 1.5 WHEN THE SIGN ASSEMBLY IS LOCATED ALONG THE OUTSIDE OF A HORIZONTAL CURVE. IN ADDITION, THE LATERAL PLACEMENT OF ALL SIGN ASSEMBLIES SHALL BE IN COMPLIANCE WITH STANDARD DETAIL TP3-1. IN NO CASE SHALL ANY ASSEMBLY BE INSTALLED SUCH THE BOTTOM OF ANY SIGN IS LESS THAN 3 FEET ABOVE THE GROUND LEVEL.

## INSTALLATION OF REUSABLE SIGN

THIS ITEM SHALL ALSO COVER THE COST OF FABRICATION OF ANY FLAT SHEET STANDARD SIGN WHICH IS DESIGNATED IN THE CONTRACT TO BE REINSTALLED BUT IS FOUND TO BE MISSING OR DAMAGED DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE PROJECT INSPECTOR/ENGINEER OF ANY SUCH SIGN AND THE INSPECTOR/ENGINEER SHALL VERIFY THAT THE SIGN NEEDS TO BE FABRICATED AND THEN THE INSPECTOR/ENGINEER SHALL NOTIFY MOHAMMED KHAN OF TRAFFIC ENGINEERING DIVISION AT 304-558-9450. THE SIGN WILL THEN BE INCLUDED IN THE PROJECT SHOP DRAWINGS.

## HISTORICAL MARKER

CONTRACTOR SHALL CONTACT WVDOH DISTRICT 6 SIGN SHOP FOR REMOVAL OF HISTORICAL MARKER. THE WVDOH WILL BE RESPONSIBLE FOR REMOVAL OF THE MARKER PRIOR TO CONSTRUCTION, STORAGE OF THE MARKER DURING CONSTRUCTION AND RESETTING OF THE MARKER ONCE THE PROJECT IS COMPLETED.

## ROADSIDE ASSEMBLY UPGRADE CONSTRUCTION SEQUENCE

THE PROJECT MAY INCLUDE MULTIPLE INSTANCES WHERE EXISTING ROADSIDE (NON-OVERHEAD) ASSEMBLIES (SIGNS AND SUPPORTS) ARE TO BE REMOVED AND REPLACED WITH A NEW ASSEMBLY WITHIN A CLOSE PROXIMITY OF THE EXISTING. IN THESE CASES, THE CONTRACTOR SHALL ADHERE TO THE FOLLOWING REQUIREMENTS IN REGARD TO SEQUENCE OF CONSTRUCTION:

ON THE SAME DAY THAT THE SPECIFIED SIGNS ARE INSTALLED ON THE NEW ASSEMBLY, THE CONTRACTOR SHALL DISASSEMBLE THE ASSEMBLY TO BE REMOVED AND SHALL REMOVE THE ASSEMBLY FROM THE RIGHT OF WAY OR LAY THE ASSEMBLY DOWN ON THE GROUND WITH THE SIGNS BEING FACE DOWN. IF THE CONTRACTOR ELECTS NOT TO REMOVE THE ASSEMBLY COMPONENTS FROM THE RIGHT OF WAY ON THE SAME DAY, THEY SHALL BE LAID DOWN IN A LOCATION PROTECTED FROM IMPACT BY ERRANT VEHICLES (I.E. PROPERLY PLACED BEHIND A RIGID BARRIER OR NON-MOUNTABLE BARRIER CURB, OUTSIDE OF THE CLEAR ZONE, OR IN AN OTHERWISE INACCESSIBLE LOCATION SUCH AS ON A BENCH).

WITH THE EXCEPTION OF SUPPORT STUBS CAST IN CONCRETE, ALL ASSEMBLIES TO BE REMOVED SHALL BE REMOVED FROM THE RIGHT OF WAY WITHIN FOURTEEN (14) CALENDAR DAYS AFTER INSTALLATION OF THE SPECIFIED SIGNS ON THE NEW ASSEMBLY. THE REMOVAL OF SUPPORT STUBS CAST IN CONCRETE MAY BE PERFORMED AT ANY TIME OF THE CONTRACTOR'S CHOOSING PRIOR TO THE SPECIFIED COMPLETION DATE OF THE PROJECT.

IN CASES WHERE THE SUPPORT(S) FOR THE NEW ASSEMBLY ARE INSTALLED IN FRONT OF THE ASSEMBLY TO BE REMOVED, THE CONTRACTOR SHALL INSTALL THE SIGNS SPECIFIED FOR THE NEW ASSEMBLY WITHIN THREE (3) CALENDAR DAYS AFTER INSTALLATION OF THE NEW SUPPORT(S).

THIS TIME REQUIREMENT SHALL BE CALCULATED FROM THE DATE THE SUPPORT UPRIGHTS ARE INSTALLED AND NOT FROM THE DATE OF INSTALLATION OF THE SUPPORT STUB(S). IF THE CONTRACTOR IS IN NON-COMPLIANCE WITH ANY OF THE ABOVE REQUIREMENTS, A \$500 PER CALENDAR DAY PENALTY MAY BE ASSESSED AGAINST THE CONTRACTOR BY THE ENGINEER. THIS PENALTY IS NOT INTENDED TO BE ASSESSED PER ASSEMBLY, SUPPORT, AND/OR PER SIGN. NO EXTENSIONS SHALL BE APPLIED TO THE TIME FRAMES SPECIFIED ABOVE DUE TO WEATHER, HOLIDAYS, OR WEEKENDS.

# PAVEMENT MARKINGS

1. ALL 6" SOLID WHITE OR SOLID YELLOW EDGE LINES, LANE LINE, AND CENTERLINES SHALL BE TYPE II PAVEMENT MARKING MATERIAL.
2. EDGE LINES SHALL BE CENTERED 6" FROM EDGE OF DRIVING LANE.
3. ALL MARKINGS SHALL BE CONTINUOUS AND CONSISTENT WITH EXISTING MARKINGS WHERE THEY JOIN.
4. NO MARKINGS SHALL BE PLACED ON EXPANSION JOINTS ON STRUCTURES OR ON LONGITUDINAL CONSTRUCTION JOINTS UNLESS DIRECTED BY THE ENGINEER.

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24-00	NHPP-0019 (443)D	2020	MONONGALIA	67	128

## ESTIMATE OF QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	
		UNIT	TOTAL
657006-001	S4X7.7, A-572 SUPPORT, GALVANIZED	LF	-
657008-001	2.00 LB CHANNEL POST	LF	-
657010-001	3.00 LB CHANNEL POST	LF	-
657017-001	CLASS B CONCRETE FOOTING, REINFORCED, ROADSIDE	CY	-
657018-001	POST REMOVAL	EA	-
661001-001	0.080 IN FLAT SHEET SIGN	SF	-
661002-001	EXTRUDED PANEL SIGN	SF	-
663001-026	EDGE LINE, TYPE II - 6 IN	LF	4870
663002-026	LANE LINE, TYPE II - 6 IN	LF	1175
663002-063	LANE LINE, TYPE II - 8 IN	LF	155
663002-040	CENTERLINE, TYPE II - 6 IN	LF	5550
663004-011	CHANNELIZING LINE, TYPE V - 8 IN	LF	1380
663005-011	STOP LINE, TYPE V - 24 IN	LF	170
663006-010	CROSSWALK LINE, TYPE V - 12 IN X 6 FT	LF	775
663007-010	STRIPE, TYPE V - 12 IN ,YELLOW	LF	40
663007-010	STRIPE, TYPE V - 12 IN ,WHITE	LF	300
663010-010	ONE DIRECTION LANE ASSIGNMENT ARROW, TY V	EA	27
663010-011	MULTI DIRECTIONAL LANE ASSIGNMENT ARROW, TY V	EA	5
663010-013	LANE DROP ARROW, TY V	EA	1
663011-010	LANE LETTER, TYPE V	EA	8

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DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## SIGNING & PAVEMENT MARKING GENERAL NOTES

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

ASSEMBLY NUMBER	SIGN NUMBER	PROPOSED LOCATION	EXISTING LOCATION	LAYOUT SHT NO.	FAB DETAIL SHT NO.	SIGN DISPOSITION	SIGNS					SUPPORTS & FOUNDATIONS								REMARKS				
							WIDTH (FEET)	HEIGHT (FEET)	FLAT SHEET		EXTRUDED PANEL	INSTALL REUSED SIGN	U-CHANNEL				A-572, GRADE 50				FOOTER		CLASS B CONC. REINF. ROADSIDE (CY)	
									0.080" (SF)	0.100" (SF)			2.00 (*/FT)	3.00 (*/FT)	4.00 BB (*/FT)	6.00 BB (*/FT)	REMOVE POST	REUSE EX. SUP	S4X7.7 (LF)		W6X12 (LF)	W8X18 (LF)		W10X22 (LF)
1	M3-3 M1-4 M6-2R M3-2 M1-6 M6-2R	STA. 109+77 LT 21.8'	STA. 109+77 LT 21.8'	S-5		NEW NEW NEW NEW NEW NEW	2.00 2.00 1.75 2.00 2.00 1.75	1.00 2.00 1.25 1.00 2.00 1.25	2.00 4.00 2.19 2.00 4.00 2.19			14.50										NEW SIGNS ON NEW SUPPORT		
2	D3-1 D3-1	STA. 110+63 RT 51.3'	STA. 110+59 RT 51.2'	S-5		R&S R&S	1.00 1.00	0.50 0.50																
3	SPECIAL	STA. 110+83 RT 41.3'	STA. 110+83 RT 35.0'	S-5		R&S	3.00	2.50																
4	W11-2	STA. 111+22.3 RT 41.3'	STA. 111+22.3 RT 35.1'	S-5		R&S	2.50	2.50																
5	W11-2 M6-2R	STA. 113+96 RT 30.3'	STA. 113+96 RT 30.3'	S-5		NEW NEW	2.50 1.75	2.50 1.25	6.25 2.19			14.50											NEW SIGNS ON NEW SUPPORT	
6	W11-2 M6-2R	STA. 114+05 LT 29.3'	STA. 114+05 LT 29.3'	S-5		NEW NEW	2.50 1.75	2.50 1.25	6.25 2.19			14.50											NEW SIGNS ON NEW SUPPORT	
7	W11-2	STA. 116+95 RT 33.8'	STA. 116+95 RT 33.8'	S-6		NEW	2.50	2.50	6.25			14.50											NEW SIGN ON NEW SUPPORT	
8	W11-2 M6-2R	STA. 117+34 LT 21.1'	STA. 117+34 LT 21.1'	S-6		NEW NEW	2.50 1.75	2.50 1.25	6.25 2.19			14.50											NEW SIGNS ON NEW SUPPORT	
9	R6-2L	STA. 117+46 RT 33.9'	STA. 117+46 RT 33.9'	S-6		NEW	1.00	1.50	1.50			14.50											NEW SIGN ON NEW SUPPORT	
10	W11-2	STA. 118+51 RT 26.7'	STA. 118+51 RT 26.7'	S-6		NEW	2.50	2.50	6.25			14.50											NEW SIGN ON NEW SUPPORT	
11	W12-2	STA. 119+77 RT 28.8'	STA. 119+77 LT 23.3'	S-6		NEW	1.50	1.50	2.25			14.50											NEW SIGN ON NEW SUPPORT	
12	W12-2	STA. 122+93 LT 22.8'	STA. 122+93 LT 22.8'	S-7		NEW	1.50	1.50	2.25			14.50											NEW SIGN ON NEW SUPPORT	
13	SPECIAL	STA. 124+60 RT 38.4'	STA. 124+57 RT 27.2'	S-7		R&S	4.08	3.08																
14	SPECIAL	STA. 128+21 RT 217.3'	STA. 128+21 RT 217.3'	S-8		R&S	2.00	2.00																
15	SPECIAL SPECIAL SPECIAL	STA. 128+56 RT 121.2'	STA. 128+56 RT 121.2'	S-8		R&S R&S R&S	2.00 2.00 1.00	1.50 1.50 1.50																
16	D3-1 D3-1	STA. 230+50 RT 28.7'	STA. 230+39 RT 27.6'	S-8		NEW NEW	1.00 1.00	0.50 0.50	0.50 0.50			14.50											NEW SIGNS ON NEW SUPPORT	
SUB-TOTAL							71.52					9												

**SIGN DISPOSITION**

R&D - REMOVE AND DISCARD  
R&S - REMOVE AND SAVE (REUSE)  
NEW - NEW SIGN & NEW SUPPORT

NOTES:  
SUPPORT LENGTHS INCLUDE STUBS WHERE REQUIRED.

**S-3**

DESIGNED ALT	DATE 09/2020
DRAWN LNR	09/2020
CHECKED JDV	09/2020
CHECKED	



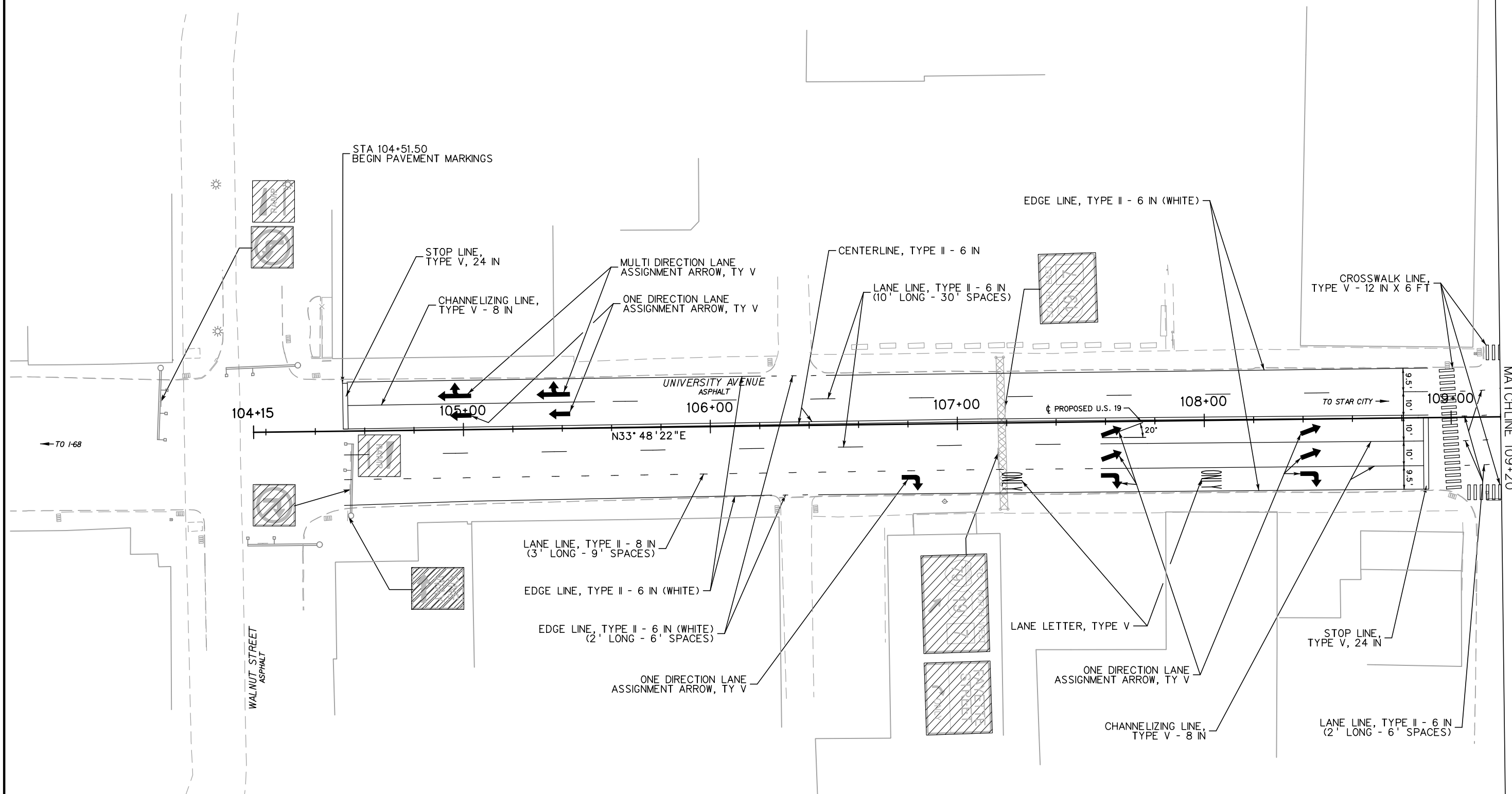
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**SIGNING PLAN**

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	69	128



**LEGEND**

	EXISTING SIGN TO REMAIN (STR)
	REMOVE AND SAVE (REUSE)
	NEW SUPPORTS
	EXISTING SUPPORTS
	EXISTING SUPPORTS TO BE REMOVED OR DISCARDED
	ASSEMBLY NUMBER

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



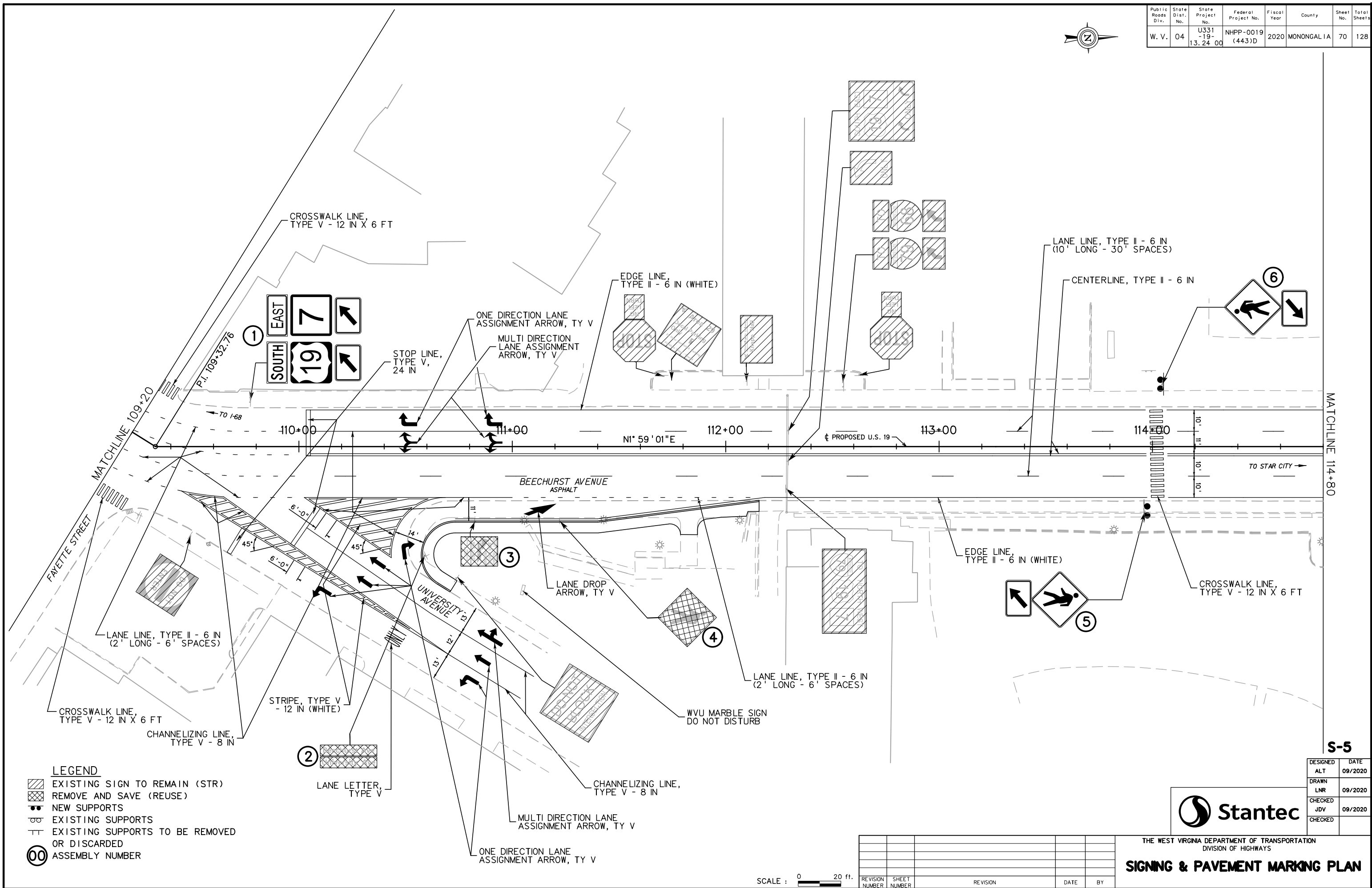
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**SIGNING & PAVEMENT MARKING PLAN**

DESIGNED	ALT	DATE	09/2020
DRAWN	LNR	DATE	09/2020
CHECKED	JDV	DATE	09/2020
CHECKED			

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Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	70	128



- LEGEND**
- EXISTING SIGN TO REMAIN (STR)
  - REMOVE AND SAVE (REUSE)
  - NEW SUPPORTS
  - EXISTING SUPPORTS
  - EXISTING SUPPORTS TO BE REMOVED OR DISCARDED
  - ASSEMBLY NUMBER

DESIGNED	DATE
ALT	09/2020
DRAWN	DATE
LNR	09/2020
CHECKED	DATE
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**SIGNING & PAVEMENT MARKING PLAN**

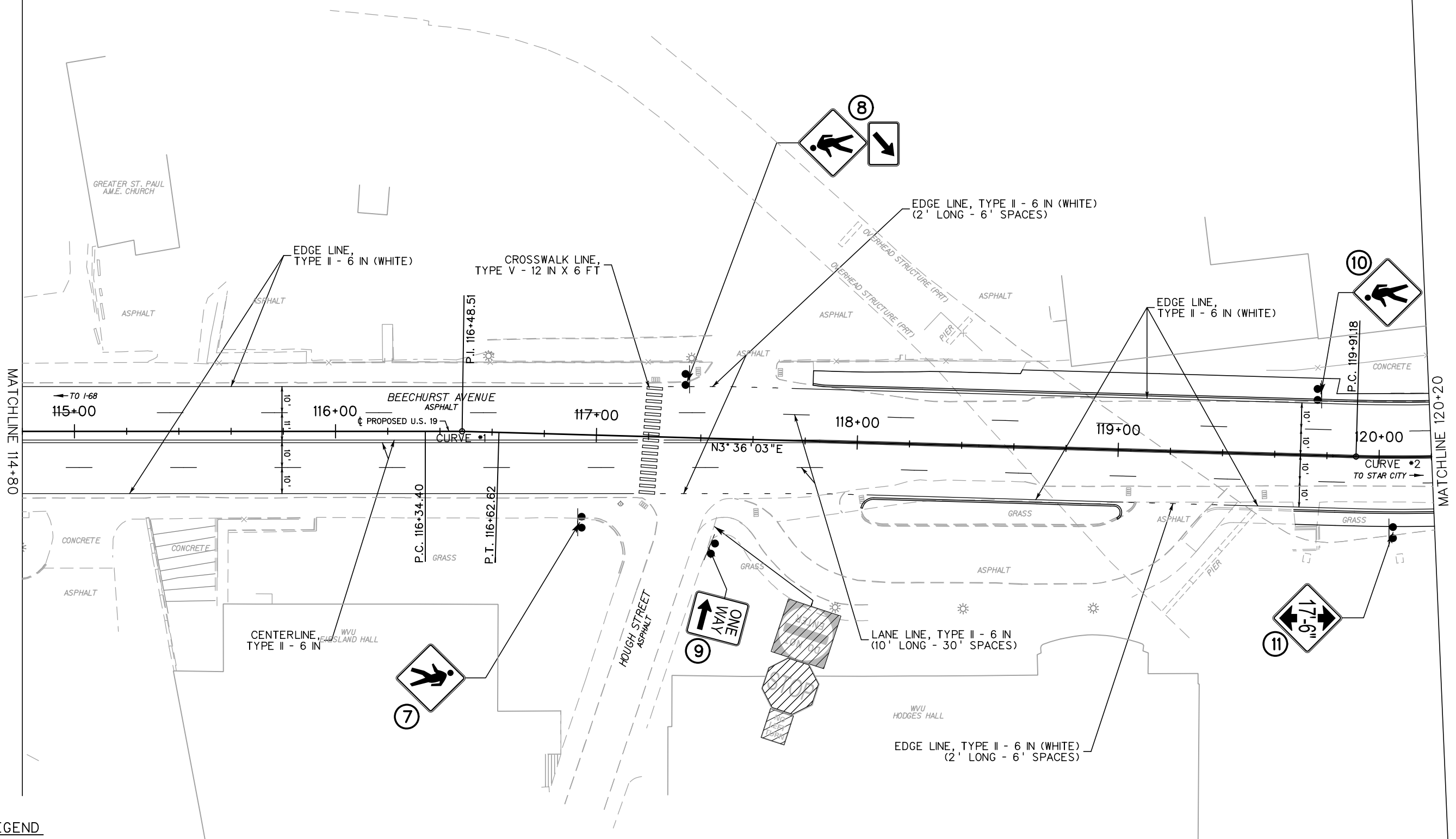
SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	71	128



- LEGEND**
- EXISTING SIGN TO REMAIN (STR)
  - REMOVE AND SAVE (REUSE)
  - NEW SUPPORTS
  - EXISTING SUPPORTS
  - EXISTING SUPPORTS TO BE REMOVED OR DISCARDED
  - ASSEMBLY NUMBER

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



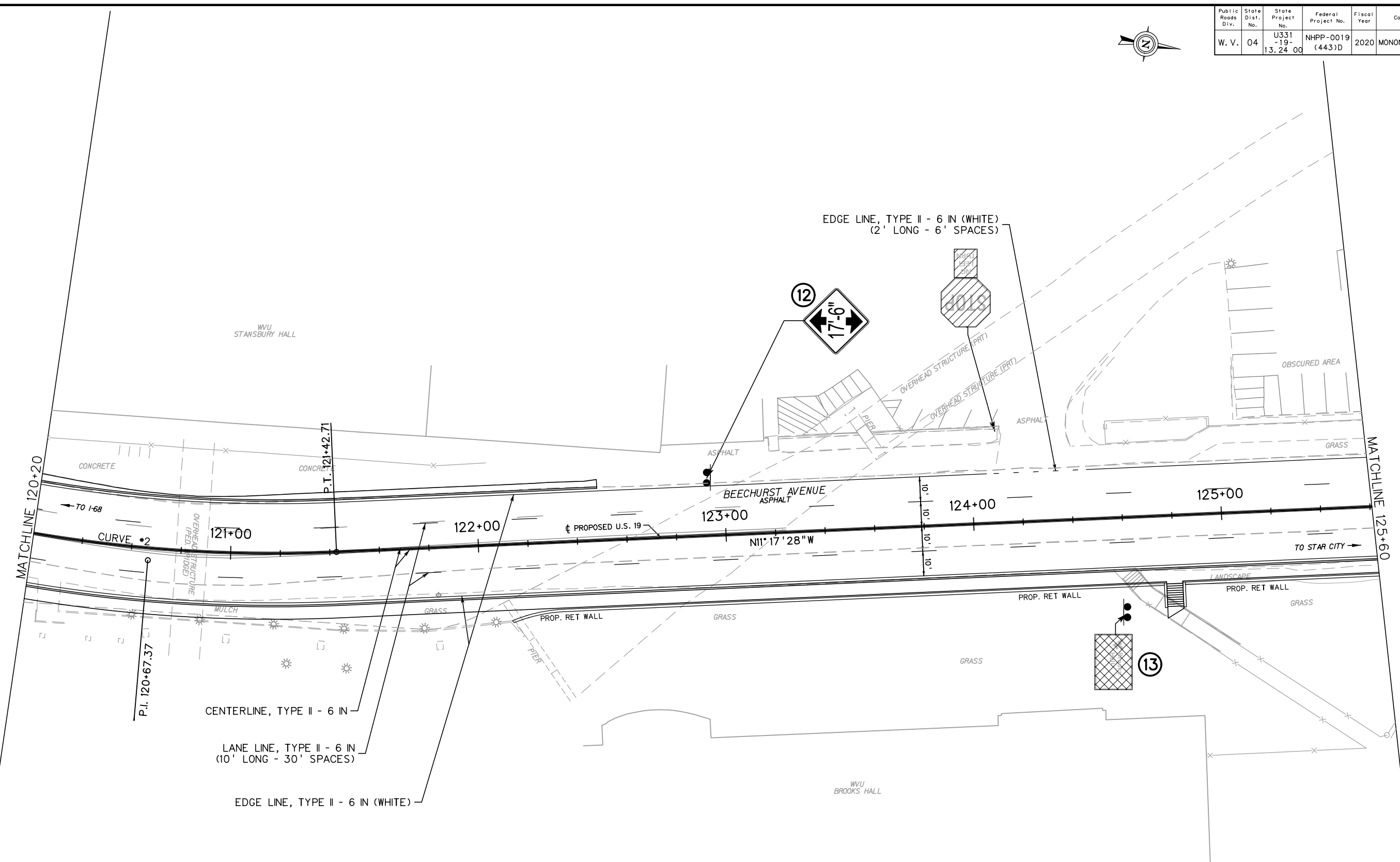
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**SIGNING & PAVEMENT MARKING PLAN**

DESIGNED	DATE
ALT	09/2020
DRAWN	LNR
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CHECKED	

S-6

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Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019 (443)D	2020	MONONGALIA	72	128



- LEGEND**
- EXISTING SIGN TO REMAIN (STR)
  - REMOVE AND SAVE (REUSE)
  - NEW SUPPORTS
  - EXISTING SUPPORTS
  - EXISTING SUPPORTS TO BE REMOVED OR DISCARDED
  - ASSEMBLY NUMBER

**S-7**

DESIGNED	ALT	DATE
		09/2020
DRAWN	LNR	DATE
		09/2020
CHECKED	JDV	DATE
		09/2020
CHECKED		

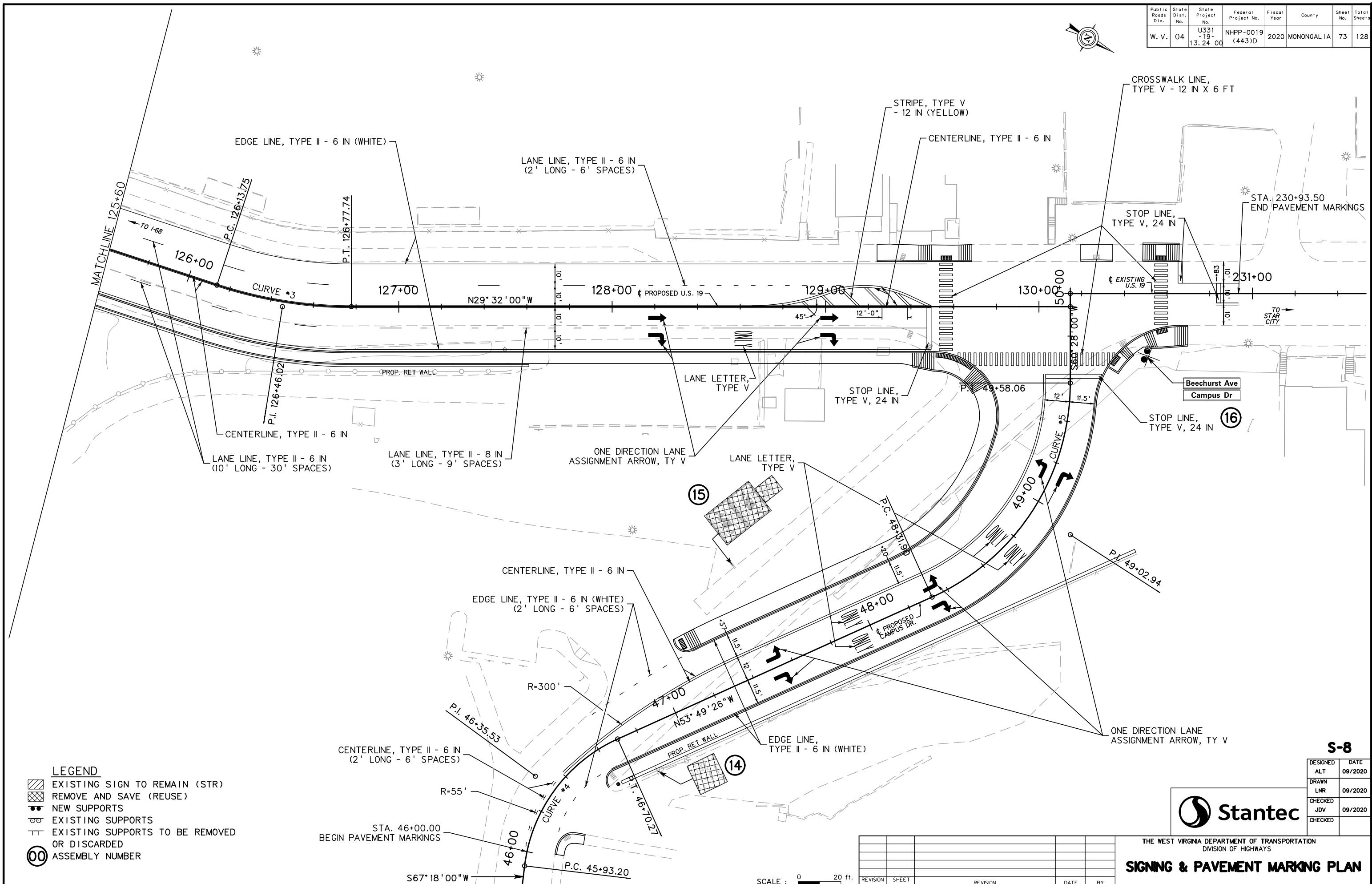


THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**SIGNING & PAVEMENT MARKING PLAN**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	73	128



- LEGEND**
- EXISTING SIGN TO REMAIN (STR)
  - REMOVE AND SAVE (REUSE)
  - NEW SUPPORTS
  - EXISTING SUPPORTS
  - EXISTING SUPPORTS TO BE REMOVED OR DISCARDED
  - ASSEMBLY NUMBER

**S-8**

DESIGNED	ALT	DATE
		09/2020
DRAWN	LNR	09/2020
CHECKED	JDV	09/2020
CHECKED		

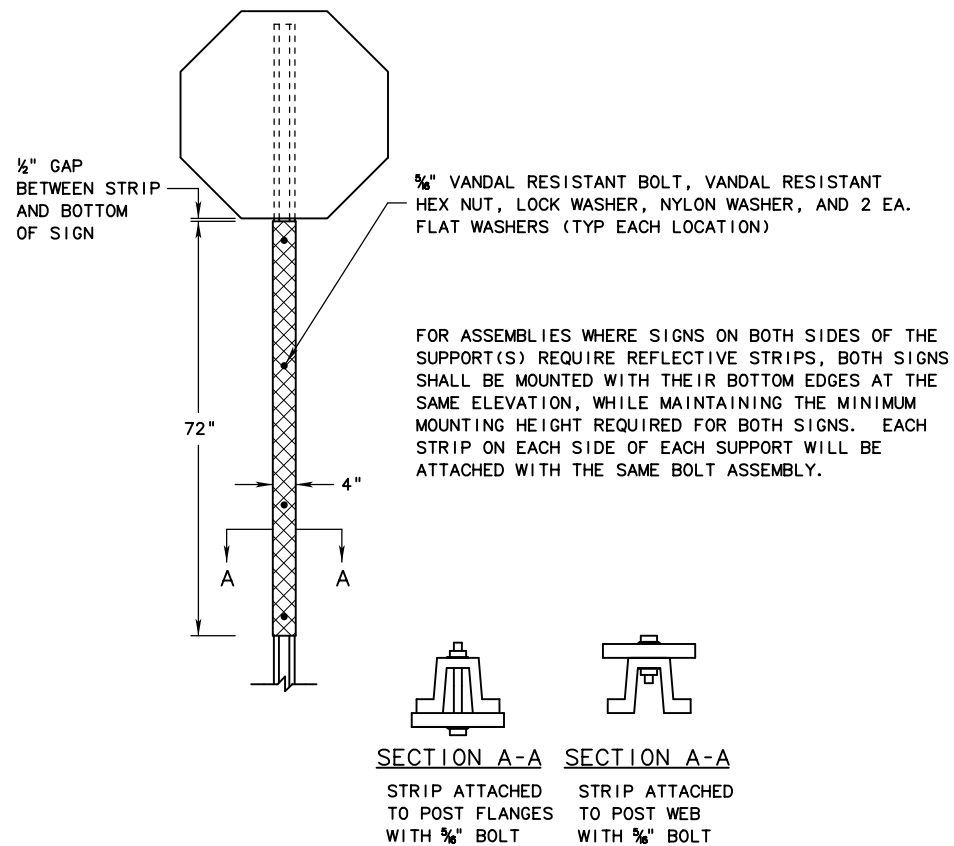


THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**SIGNING & PAVEMENT MARKING PLAN**

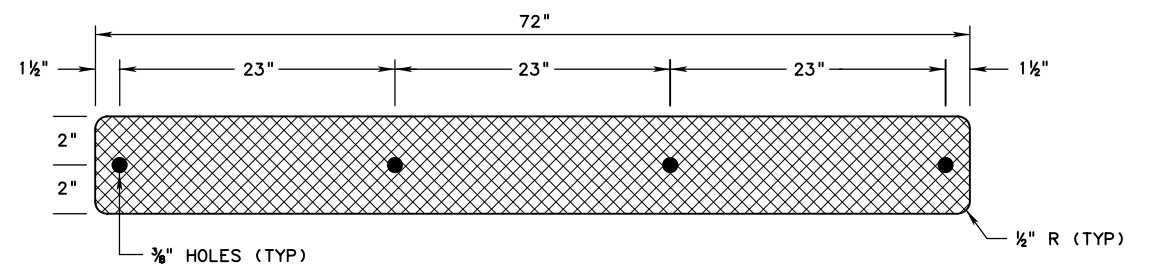
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

SCALE : 0 20 ft.

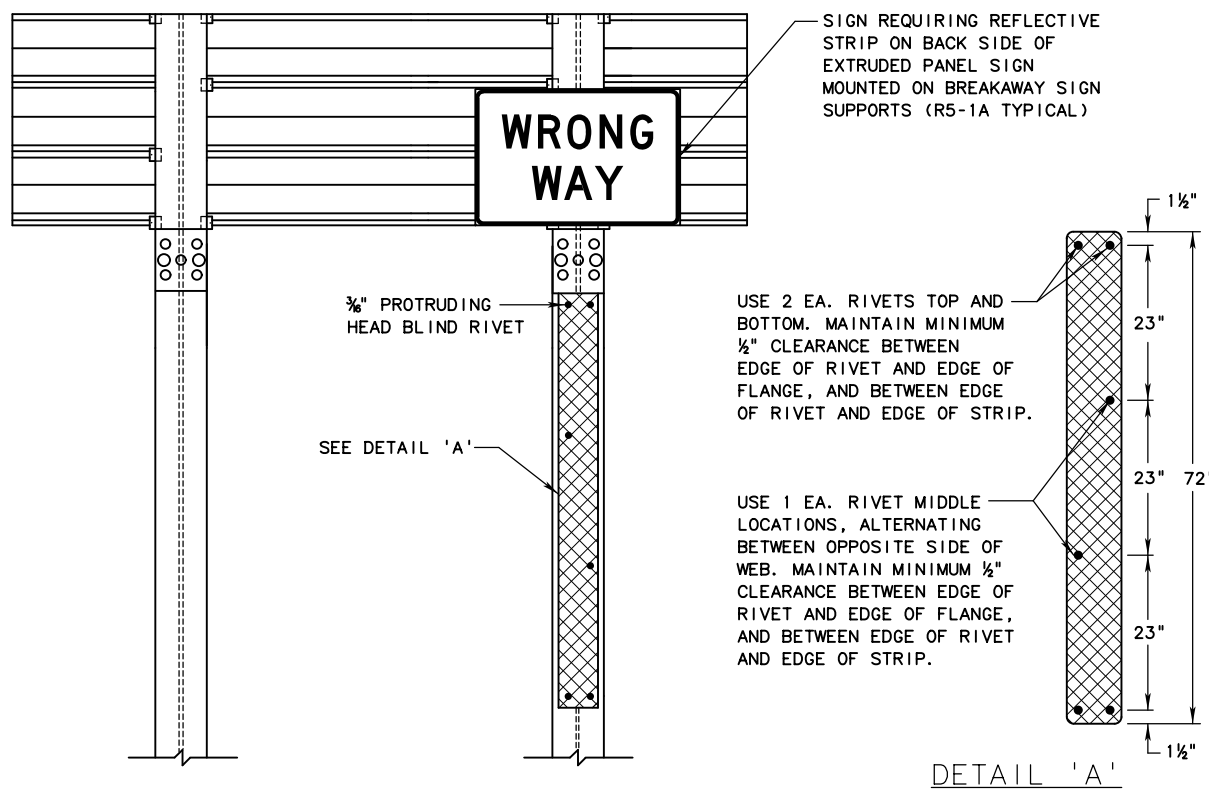
Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	74	128



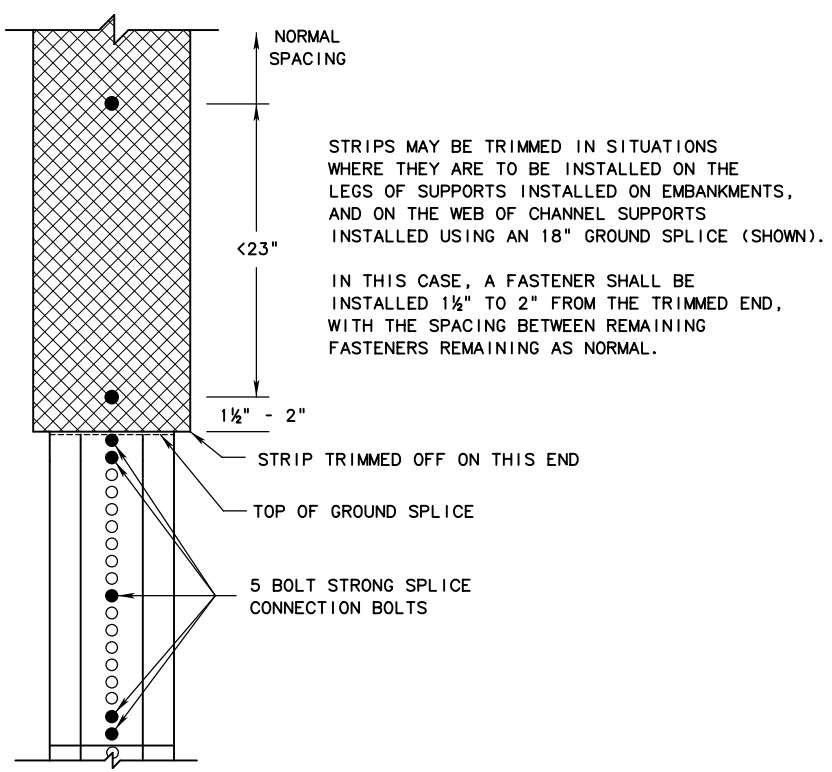
**U-CHANNEL OR PRE-PUNCHED SQUARE TUBE INSTALLATION**



**STANDARD NON-PROPRIETARY REFLECTIVE SIGN SUPPORT STRIP**



**BREAKAWAY SUPPORT OR NON-PERFORATED SQUARE TUBE INSTALLATION**



**TRIMMING REFLECTIVE STRIPS**

**NOTES:**  
STANDARD NON-PROPRIETARY REFLECTIVE POST STRIPS SHALL BE MANUFACTURED AS SHOWN. THE SUBSTRATE FOR THE STRIPS SHALL BE 0.080 INCH ALUMINUM MEETING THE MATERIAL REQUIREMENTS OF SECTION 661 OF THE SPECIFICATIONS. THE SHEETING USED ON THE STRIPS SHALL BE PRISMATIC TYPE ASTM-III RED OR WHITE, OR TYPE ASTM-IX FLUORESCENT YELLOW/GREEN OR FLUORESCENT YELLOW, OR TYPE ASTM-XI FLUORESCENT YELLOW/GREEN OR FLUORESCENT YELLOW, BASED ON THE PRIMARY COLOR OF THE SIGN THAT IS SUPPLEMENTED BY THE STRIP. STRIPS MAY OR MAY NOT BE MANUFACTURED WITH HOLES PRE-PUNCHED.

MATERIAL REQUIREMENTS FOR THE HARDWARE SPECIFIED FOR USE WITH THE NON-PROPRIETARY REFLECTIVE POST STRIP SHOWN SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

THE CONTRACTOR MAY ALTERNATIVELY USE PROPRIETARY REFLECTIVE INSERTS AND/OR STRIPS SHOWN ON THE DOH APPROVED PRODUCTS LIST (APL). THESE PRODUCTS SHALL BE ATTACHED AS RECOMMENDED BY THE MANUFACTURER USING HARDWARE PROVIDED BY THE MANUFACTURER.

REFLECTIVE POST STRIPS SHALL BE REQUIRED TO BE INSTALLED ON ALL SIGN ASSEMBLIES INDICATED SPECIFICALLY, BY ASSEMBLY NUMBER, IN THE PROJECT PLANS. TYPICAL ASSEMBLIES REQUIRING REFLECTIVE POST STRIPS ARE AS FOLLOWS:

- RED STRIPS**  
R1-1 SIGNS ON EXIT RAMP DIVERGING FROM ROADWAYS THAT MEET THE FOLLOWING CRITERIA:
- o MULTIPLE THROUGH LANES IN EACH DIRECTION, AND
  - o POSTED SPEED LIMIT OF 50 MPH OR GREATER

ALL R1-1 SIGNS AT INTERSECTIONS WHERE ONE OF THE INTERSECTING ROADWAYS HAS MULTIPLE THROUGH LANES IN EACH DIRECTION AND A NORMAL POSTED SPEED LIMIT OF 50 MPH OR GREATER.

ALL R1-2, ALL R5-1 AND ALL R5-1A SIGNS.

**WHITE STRIPS**  
ALL R4-7 AND R4-8 SIGNS

**FLUORESCENT YELLOW/GREEN STRIPS**  
ALL S SERIES (SCHOOL) SIGNS MANUFACTURED USING EITHER TYPE ASTM IX FLUORESCENT YELLOW/GREEN REFLECTIVE SHEETING OR TYPE ASTM XI FLUORESCENT YELLOW/GREEN REFLECTIVE SHEETING.

ADDITIONAL REFLECTIVE POST STRIPS MAY ALSO BE REQUIRED UNDER SPECIAL CIRCUMSTANCES AS DETERMINED BY THE PROJECT DESIGNER OR ENGINEER. THE COLOR STRIPS TO BE UTILIZED IN THESE CASES WILL BE SPECIFIED IN THE PROJECT PLANS OR NOTES.

**S-9**

DESIGNED	ALT	DATE	09/2020
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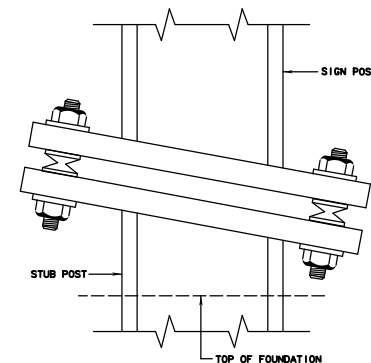


THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

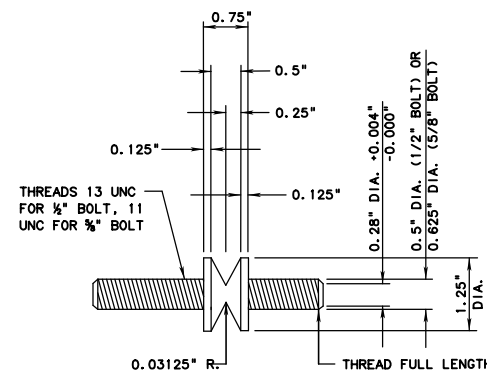
**SIGN DETAILS**

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24-00	NHPP-0019 (443)D	2020	MONONGALIA	75	128



TYPICAL S4X7.7 ASSEMBLY WITH  
OMNI-DIRECTIONAL BOLTS



OMNI-DIRECTIONAL BOLT

**ASSEMBLES: 1 & 9**

**NOTES:**

OMNI-DIRECTIONAL BREAKAWAY BOLTS SHALL BE UTILIZED ON ASSEMBLIES INDICATED IN THE PROJECT PLANS. THE DIMENSIONS AND MATERIAL PROPERTIES OF THE BOLTS, NUTS, AND WASHERS SHALL BE AS PROVIDED BY DENT BREAKAWAY INDUSTRIES INC. OF KIRKLAND, NM. ALL OMNI-DIRECTIONAL BREAKAWAY BOLT ASSEMBLIES SHALL BE PROVIDED BY DENT BREAKAWAY INDUSTRIES INC., OR A TRAFFIC ENGINEERING APPROVED EQUAL.

THE USE OF AN OMNI-DIRECTIONAL BREAKAWAY BOLT ASSEMBLY SHALL NOT REQUIRE ANY MODIFICATIONS OF THE BREAKAWAY SIGN SUPPORT BASE PLATE OR STUB PLATE AS DETAILED ON TE1-3A, WITH THE EXCEPTION OF THE KEEPER PLATES WHICH MAY BE OMITTED.

EACH BOLT ASSEMBLY SHALL INCLUDE THE BOLT ITSELF, AND 2 HEX NUTS AND 2 FLAT WASHERS TO BE INSTALLED ON THE OUTSIDES OF THE CONNECTION. NO WASHERS ARE REQUIRED BETWEEN THE BASE PLATES. THE KEEPER PLATE TYPICALLY INSTALLED BETWEEN THE BASE PLATES MAY BE OMITTED.

THE FOLLOWING PROCEDURE SHALL BE FOLLOWED WHEN INSTALLING THE BOLTS:

1. INSTALL THE BOLTS AND LOWER NUTS AND WASHERS TO THE STUB POST. IF IT IS REQUIRED TO HOLD THE BOLTS FROM ROTATING WHILE TIGHTENING THE BOTTOM NUTS, IT IS CRITICAL THAT THE BOLT BE HELD BELOW THE NECKED DOWN PORTION OF THE BOLT. HOLDING THE BOLT ABOVE THIS POINT MAY CAUSE PREMATURE CRACKING AND FAILURE.
2. LOWER THE UPPER SIGN SUPPORT BASE PLATE ONTO THE BOLTS. ALL BOLTS MUST BE IN PLACE BEFORE FINAL TIGHTENING.
3. INSTALL UPPER WASHERS AND NUTS, AND TIGHTEN. TIGHTEN THE NUTS EVENLY IN A DIAGONAL PATTERN. THE NUTS SHALL BE TIGHTENED SUFFICIENTLY TO PREVENT THEM FROM WORKING LOOSE DUE TO VIBRATIONS. THE MAXIMUM TORQUE ALLOWANCE, AS SPECIFIED ON STANDARD DETAIL TE1-3A, SHALL NOT BE REQUIRED.

**S-10**

DESIGNED	DATE
ALT	09/2020
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LNR	09/2020
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JDV	09/2020
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THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**SIGN DETAILS**

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

# SIGNAL ESTIMATE OF QUANTITIES

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	76	128

## SUMMARY OF QUANTITIES

ALT.	ITEM NO.	DESCRIPTION	QUANTITY	
			UNIT	TOTAL
	657018-001	SUPPORT OR BRACKET REMOVAL	EA	1
	660001-001	SIGNAL CONTROLLER 01	LS	1
	660002-030	TRAFFIC DETECTOR RADD, 01	LS	1
	660003-001	SIGNAL SECTION,G-16	EA	6
	660003-006	SIGNAL SECTION,V-12	EA	6
	660004-25	SIGNAL SUPPORT,A1	EA	3
	660004-50	SIGNAL SUPPORT,E1	EA	3
	660005-010	JUNCTION BOX TYPE H (10"x10")	EA	3
	660005-010	JUNCTION BOX TYPE H (18"x18")	EA	1
	660006-001	SIGNAL INTERCONNECT	LS	1
	660007-001	MISCELLANEOUS SIGNAL 01	LS	1
	660010-001	PRIORITY CONTROL SYSTEMDETECTOR D3	EA	3
	660010-010	PRIORITY CONTROL SYSTEMEMITTER,OE	EA	2
	636014-001	MISCELLANEOUS RADIO INSTALLATION 01	LS	1
	662002-001	GALVANIZED STEEL CONDUIT, 01	LS	1
	662007-001	LUMINAIRE,LED	EA	1
	662014-001	INCIDENTAL ELECTRICAL WORK	LS	1

### SIGNAL SYSTEM COMPLETION NOTE

INSTALLATION OF THIS SIGNAL SYSTEM SHALL ONLY BE CONSIDERED SUBSTANTIALLY COMPLETE WHEN ALL PRESCRIBED SIGNAL SYSTEM FUNCTIONS AND ROADWAY DETECTION SYSTEMS ARE FULLY OPERATIONAL AND ALL PRESCRIBED COMPONENTS ARE DELIVERED TO THE TRAFFIC ENGINEERING SIGNAL AND LIGHTING STORAGE YARD AND INFORMATION REQUIRED ON SHEET 3 NOTE 1A SUBMITTED TO WVDOT TRAFFIC ENGINEERING CHRIS WILLIAMS @ CHRIS.K.WILLIAMS@WV.GOV..

### SPECIAL SIGNAL CONTROLLER REQUIREMENTS:

IN ADDITION TO REQUIREMENTS IN THE STANDARD SPECIFICATIONS, THE CONTROLLER UNIT MUST FEATURE A "MENU DRIVEN FORMAT" AND SHALL BE FULLY SYSTEMS READY FOR USE WITH CELLULAR ROUTER.

ALL TRAFFIC CONTROL CABINETS TO MEET OUR CURRENT TS-2 STANDARDS.

ALSO THE TS-2 CABINET SHALL INCLUDE ISOLATION RELAY PANELS TO DRIVE THE COM LITES FOR ALL PRIORITY CONTROL DEVICES.

### STOP BAR RADAR PRESENCE DETECTION SYSTEM (RPD) & RADAR ADVANCE DIGITAL DETECTION SYSTEM (RADD)

A RADAR PRESENCE DETECTION SYSTEM (RPD) AND RADAR ADVANCE DIGITAL DETECTION SYSTEM (RADD) IS TO BE INSTALLED FOR THESE TWO (2) INTERSECTIONS IN THIS PROJECT AS DESCRIBED IN THESE PLANS. THESE SHALL BE BID PER INTERSECTION [660002-030, TRAFFIC DETECTOR RADD, ( \* ) ]

THE RADAR PRESENCE DETECTION SYSTEM (RPD) SHALL BE NON-INTRUSIVE AND EQUIVALENT TO THE WAVETRONIX SMARTSENSOR MATRIX, SMARTMICRO UMRR (MULTI-LANE STOP BAR DETECTION) OR AN APPROVED EQUAL AS DEEMED APPROPRIATE BY THE TRAFFIC ENGINEERING DIVISION.

THE RADAR ADVANCE DIGITAL DETECTION SYSTEM (RADD) SHALL BE NON-INTRUSIVE AND EQUIVALENT TO THE 'WAVETRONIX SMARTSENSOR ADVANCE, SMARTMICRO UMRR (COMBINED STOP BAR/ADVANCED DETECTION & LONG RANGE ADVANCE DETECTION) OR AN APPROVED EQUAL AS DEEMED APPROPRIATE BY THE TRAFFIC ENGINEERING DIVISION.

THE CONTRACTOR IS TO SUPPLY A RADAR PRESENCE DETECTION SYSTEM (RPD) & RADAR ADVANCE DIGITAL DETECTION SYSTEM (RADD) AS PRESCRIBED TO MEET REQUIRED PHASING AND SIGNAL OPERATION AS SHOWN IN PLANS. THERE SHALL BE NO PAYMENT FOR ANY SYSTEM THAT REQUIRES ADDITIONAL HARDWARE OR MATERIAL NOT SHOWN IN PLANS.

THE DIVISION APPROVED PRODUCT LISTS (APLS) CAN BE FOUND AT [https://transportation.wv.gov/highways/mcst/Pages/APL\\_By\\_Number.aspx](https://transportation.wv.gov/highways/mcst/Pages/APL_By_Number.aspx)

SECTION 715.042.001.

### "AUDIBLE" PEDESTRIAN PUSH BUTTONS

"AUDIBLE" PEDESTRIAN PUSH BUTTONS (\*) SHALL BE PROVIDED FOR THIS PROJECT AND SHALL BE AS PROVIDED ON THE WVDOT "APS" APL. THESE SHALL INCORPORATE A PUSH BUTTON WITH VIBRATOR, AUDIBLE MESSAGE, AND RELIEF SYMBOLS.

THESE APS UNITS TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS AND SHALL BE OF ONE OF THE MANUFACTURER'S PROVIDED ON THE WVDOT "APS" APL LIST. THESE TO BE BID AS PART OF ITEM 660007-001(\*) - \* PER INTERSECTION.

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
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JDV	09/2020
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THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**SUMMARY OF QUANTITIES**  
**BEECHURST AVE AT CAMPUS DRIVE**  
**MONONGALIA COUNTY**

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	77	128

SIGNAL SHEET 2 OF 7

GOVERNING SPECIFICATIONS

1. THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, STANDARD SPECIFICATIONS, ROADS AND BRIDGES, ADOPTED 2017, AS AMENDED BY THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS SUPPLEMENTAL SPECIFICATIONS, DATED JANUARY 1, 2020, THE CONTRACT DOCUMENTS AND THE CONTRACT PLANS ARE THE GOVERNING PROVISIONS APPLICABLE TO THIS PROJECT.

STANDARD DETAILS

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, STANDARD DETAILS BOOK, VOLUME I, DATED MAY, 2016 & VOLUME II, DATED JANUARY 2019, SHALL APPLY TO THIS PROJECT. STANDARD DETAILS DRAWING CAN BE FOUND AT

<http://www.transportation.wv.gov/highways/engineering/Pages/publications.aspx>

1A. THE NATIONAL ELECTRICAL CODE, STANDARDS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS FOR ELECTRICAL WIRING AND APPARATUS SHALL APPLY TO THIS PROJECT.

SIGNAL SYSTEMS

2. INSTALLATION OF THIS SIGNAL SYSTEM SHALL ONLY BE CONSIDERED SUBSTANTIALLY COMPLETE WHEN ALL PRESCRIBED SIGNAL SYSTEM FUNCTIONS AND ROADWAY DETECTION SYSTEMS ARE FULLY OPERATIONAL AND ALL PRESCRIBED COMPONENTS ARE DELIVERED TO THE TRAFFIC ENGINEERING SIGNAL AND LIGHTING STORAGE YARD AND INFORMATION REQUIRED ON THIS SHEET NOTE 1A IS SUBMITTED TO WVDOH TRAFFIC ENGINEERING CHRIS WILLIAMS @ Chris.K.Williams@WV.GOV.

GENERAL NOTES

- 3. ASPHALT OR CONCRETE WHICH HAS BEEN DISTURBED OR REMOVED TO INSTALL POLES OR CONDUIT SHALL BE REPLACED IN ACCORDANCE WITH ITS ORIGINAL DESIGN THICKNESS, AT THE CONTRACTOR'S EXPENSE.
- 4. ALL AREAS ON THIS PROJECT WHICH HAVE BEEN SEEDED AND MULCHED BY OTHERS AND WHICH ARE DISTURBED BY THE CONTRACTOR IN PERFORMING THE WORK UNDER THIS CONTRACT SHALL BE RESTORED TO THEIR ORIGINAL CONDITION USING SEEDING AND MULCHING METHODS AND MATERIALS AS APPROVED BY THE ENGINEER. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THIS WORK.
- 5. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERE TO. ANY DAMAGE INCURRED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 6. THE CONTRACTOR SHALL COORDINATE HIS ACTIVITIES WITH THE FOLLOWING AGENCIES IN THE MORGANTOWN AREA:  
COMPANY \_\_\_\_\_ CONTACT NAME \_\_\_\_\_ TELEPHONE \_\_\_\_\_

- 7. COLOR CODING OF ELECTRICAL CONDUCTORS BY USE OF PHASE TAPE OR FIELD PAINT IS NOT ACCEPTABLE ON THIS PROJECT. CONDUCTORS MUST BE MANUFACTURER-COLORED, STRIPED OR RIGID-MARKED AS SPECIFIED.
- 8. ALL NEW METALLIC SIGNAL EQUIPMENT SUCH AS POLES CONDUIT AND CABINETS MUST BE DIRECTLY BONDED TOGETHER BY A SPECIAL RUN SINGLE-CONDUCTOR \* 8 AWG STRANDED COPPER WIRE. THE WIRE MUST BE INSULATED, COLOR CODED GREEN AND CONNECTED AT EACH BONDING POINT BY USE OF SCREW-TYPE COPPER OR BRONZE LUGS. IN ADDITION TO THIS BONDING, CONDUCTOR MUST BE CONNECTED TO ALL GROUND RODS IN THE SIGNAL SYSTEM AND TO THE EQUIPMENT GROUND BAR BUSS IN THE CONTROLLER CABINET.
- 9. TRAFFIC SIGNAL GROUND ROD CONNECTORS MUST BE ATTACHED AND SECURELY FASTENED BOTH AT FOUNDATION AND INSIDE POLE PRIOR TO ERECTION OF POLE. ENOUGH SLACK IN THE GROUNDING WIRE MUST BE ALLOWED FOR ERECTION OF POLE. BOTH CONNECTIONS MUST AGAIN BE CHECKED AFTER POLE IS INSTALLED.
- 10. EXCAVATIONS FOR TRAFFIC SIGNAL CONDUIT NOT UNDER ROADWAY OR SHOULDER AREAS, UNDER 12" IN WIDTH AND 30" IN DEPTH, MAY BE BACKFILLED IN LAYERS NOT EXCEEDING 4" AFTER COMPACTION. SPECIFIC DENSITY TESTS WILL NOT BE REQUIRED WHEN ACCEPTED COMPACTION TECHNIQUES ARE USED AND THE BACKFILLED EXCAVATION DENSITY IS COMPARABLE TO THAT OF THE SURROUNDING GROUND.
- 11. AC - (COMMON), LOGIC GROUND AND CHASSIS GROUND MUST BE ISOLATED IN THE CONTROLLER AND DETECTOR CIRCUITRY AS REQUIRED IN THE NEMA STANDARDS.

CONDUIT INSTALLATION NOTE

CONDUIT SHALL BE INSTALLED BY APPROVED JACKING OR DRILLING METHODS. PAVEMENT, BRICK OR EXISTING SIDEWALK SHALL NOT BE DISTURBED UNLESS APPROVED BY THE ENGINEER. IN THE EVENT THAT THE SIDEWALK HAS TO BE OPEN THE ENTIRE SECTION OF SIDEWALK MUST BE REPLACED, JOINT TO JOINT. UNLESS OTHERWISE DIRECTED BY PROJECT ENGINEER. BID THIS WORK AS PART OF ITEM 660007-001(\*) FOR INTERSECTION WORK.

13. THREADED COUPLINGS TO BE USED TO CONNECT METAL CONDUITS. SET SCREW COUPLINGS, SLIP JOINTS AND CONTINUOUS RUNNING THREADS ARE NOT ACCEPTABLE.

14. ALL NEW POLE BASES SHALL BE PROVIDED WITH VARIMT SCREENS AS SHOWN ON TERS-41. THERE SHALL NOT BE ANY GAP BETWEEN CONNECTIONS OF VARIMT SCREEN.

TRAFFIC CONTROLLERS/DETECTORS

SIGNAL POWER SERVICE

- 1. BEFORE BIDDING CONTRACTOR TO CONTACT POWER COMPANY TO DETERMINE ANY FEES ASSOCIATED WITH THE POWER FOR THIS SIGNAL RENOVATION.  
CONTRACTOR SHALL INSTALL A NEW POWER SERVICE (METER, MAIN DISCONNECT), AS SHOWN IN THESE PLANS.  
CONTRACTOR IS RESPONSIBLE FOR ALL FEES ASSESSED BY THE POWER COMPANY.  
CONTRACTOR SHALL CONTACT ----- POWER CO. AT LEAST 3 WEEKS PRIOR TO NEED FOR "APPLICATION FOR SERVICE" (telephone \*).  
BID AS PART OF ITEM 660007-001(01). EXISTING NEARBY METER NO. \*

WORK REQUEST \*

I/S NO.	EX. METER NO.	WORK REQUEST NO.
13		

- 1A. THE CONTRACTOR SHALL SUPPLY THE WVDOH TRAFFIC ENGINEERING DIVISION IN WRITING THE FOLLOWING INFORMATION PRIOR TO FINALIZING PROJECT:
  - (I) POWER SERVICE METER NUMBER
  - (II) CABINET & CONTROLLER SERIAL NUMBERS
  - (III) CONFLICT MONITOR/MALFUNCTIONING MONITOR UNIT SERIAL NUMBER
  - (IV) PRIORITY CONTROL SYSTEM SERIAL NUMBER
  - (V) VEHICLE DETECTION (RPD) SERIAL NUMBERS

FOR THE NEW/RENOVATED SIGNAL AT EACH INTERSECTION INVOLVED IN THIS PROJECT. EMAIL INFORMATION TO CHRIS WILLIAMS (CHRIS.K.WILLIAMS@WV.GOV)

- 1B. THE EXISTING SIGNAL CABINET AND ALL ITS INTERNAL PARTS AND SOFTWARE SHALL BE RETURNED TO THE WVDOH AT THE TRAFFIC ENGINEERING SIGNAL AND LIGHTING STORAGE YARD (WVDOH TRAFFIC SIGNAL AND LIGHTING STORAGE YARD, 2266 PENNSYLVANIA AVE, CHARLESTON, WV 25302 CONTACT: JOSH HEMSWORTH, 304-414-7339) 3 DAYS BEFORE DELIVERY). THE TRAFFIC SIGNAL CONTROLLER SHALL BE PACKAGED SECURELY IN THE CABINET SO IT SHALL NOT BE DISLODGED FROM THE SHELF WHILE SHIPPING. DAMAGED ITEMS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. EACH OF THE FOLLOWING COMPONENTS SHALL BE LABELED WITH THE PROJECT NUMBER, THE INTERSECTION, AND SERIAL NUMBER:
  - A) CABINET
  - B) CONFLICT MONITOR/MALFUNCTIONING MONITOR UNIT
  - C) CONTROLLER
  - D) PRIORITY CONTROL SYSTEM (PCS)
  - E) SIGNAL HEADS
  - F) PEDESTRIAN HEADS
  - G) PEDESTRIAN PUSH BUTTONS
  - H) VIDEO ARMS
  - I) VIDEO CAMERAS

ALL CABINETS AND EQUIPMENT SHALL BE RETURNED IN THE SAME CONDITION AS IT WAS WHEN TAKEN FROM THE POLE AND INTERSECTION WITHIN 5 DAYS OF REMOVAL. ALL EQUIPMENT IS PRESUMED TO BE WORKING UNLESS OTHERWISE NOTED BY THE PROJECT ENGINEER. THE PROJECT ENGINEER SHALL INSPECT AND NOTE ANY DAMAGES AND TAKE THE SERIAL NUMBER OF THE ITEMS DESCRIBED ABOVE PRIOR TO SHIPPING.

ALL WORKING SIGNAL LED MODULES, PEDESTRIAN LED MODULES, PEDESTRIAN SIGNAL HOUSINGS, PEDESTRIAN PUSH BUTTONS, VIDEO CAMERAS/ RADAR DETECTION (INCLUDING ALL DETECTION COMPONENTS) SHALL BE RETURNED. A WORKING LED MODULE IS CONSIDERED TO BE ONE WITHOUT ANY BURNOUT LIGHTS.  
THE NEW CONTROLLER MUST PROVIDE A TRUE MENU FORMAT FOR DATA ENTRY AND OPERATIONAL MONITORING. ALL CONTROLLER PARAMETERS INCLUDING OVERLAPS MUST BE KEYBOARD PROGRAMMABLE. AS A MINIMUM, A LIGHTED FORTY (40) COLUMN BY FOUR (4) LINE LIQUID CRYSTAL DATA DISPLAY SCREEN MUST BE PROVIDED ON THE FRONT OF THE CONTROLLER. THE DISPLAY MUST BE EASILY VISIBLE IN BOTH FULL DAYLIGHT AND AT NIGHT. BACK LIGHTING THE DISPLAY IS REQUIRED.

- 2A. ALSO THE TS-2 CABINET SHALL INCLUDE ISOLATION RELAY PANELS TO DRIVE THE COM LITES FOR ALL PRIORITY CONTROL DEVICES.
- 2B. THE WVDOH NOW REQUIRES ALL TRAFFIC CONTROL CABINETS TO MEET OUR CURRENT TS-2 STANDARDS.
- 2C. THE CABINET AND ALL COMPONENTS CONTAINED WITHIN THE CABINET SHALL BE NEW AND NOT REUSED OR REFURBISHED.
- 2D. ALL NEW CONDULETS FROM CONTROLLER CABINET TO SIGNAL POLE SHALL BE 3". CONTROLLER CABINETS TO BE MOUNTED 3' ABOVE GROUND IN POSITION SHOWN ON PLANS UNLESS OTHERWISE NOTED ON PLANS.
- 3. RADAR SENSOR PROCESSING UNIT RACKS  
RADAR SENSOR UNIT RACKS TO BE CARD-RACK TYPE AND INSTALLED WITHIN THE CONTROLLER CABINET. THE RADAR SENSOR RACKS MUST HAVE A MINIMUM OF EIGHT (8) POSITIONS AND BE WIRED FOR 2 CHANNEL CONTACT CLOSURE CARD, WITH POSITIONS 7 AND 8 WIRED FOR PRIORITY VEHICLE PRE-EMPT CONTROL SYSTEMS. RACK MOUNTED POWER SUPPLY MUST ALSO BE FURNISHED WITH THESE UNITS AS WELL AS ALL ISOLATION COMPONENTS AS RECOMMENDED OR FURNISHED AS A STANDARD BY THE EQUIPMENT MANUFACTURER. BID RACKS AS PART OF ITEM 660001-001(+), + PER INTERSECTION.
- 4. SIGNAL HEAD CONDUCTOR CABLE  
ALL SIGNAL HEAD CONDUCTOR CABLE SHALL BE MSA BLACK PE, 20-1, 7-CONDUCTOR, 16 AWG STRANDED COPPER CABLE RATED AT 600V. THIS CONDUCTOR CABLE SHALL BE RED, ORANGE, GREEN, BLACK, WHITE, AND TWO (2) DIFFERING COLORS. IN ACCORDANCE WITH MSA SPEC COLOR CODE.
- 5. ALL TRAFFIC SIGNAL SERVICE ENTRANCE CABLE(S), FROM THE SERVICE METER TO THE WVDOH TRAFFIC SIGNAL CABINET, SHALL BE A TYPE TC, CONTROL CABINET-THHN. THIS CABLING SHALL BE RATED AT 600 VOLTS AND SHALL CONSIST OF COPPER CONDUCTORS. CONDUCTORS SHALL BE PVC/NYLON INSULATED. THE CABLING WILL HAVE AN OVERALL PVC JACKET THAT IS HEAT, MOISTURE AND SUNLIGHT RESISTANT.

ISOLATION RELAY NOTE

EACH VEHICLE DETECTOR THAT IS NOT LOCATED IN THE CONTROLLER OR MASTER CABINET, MUST BE PROVIDED WITH ISOLATION RELAYS. IN ADDITION, ALL PEDESTRIAN PUSH BUTTONS (WHEN APPLICABLE) MUST BE PROVIDED WITH ISOLATIONS RELAYS. THE RELAYS ARE TO PROTECT THE CONTROL EQUIPMENT FROM INDUCED VOLTAGES AND OTHER EXTERNAL INTERFERENCE. THE ISOLATION RELAYS MUST BE LOCATED IN THE CONTROLLER (OR MASTER) CABINET. THE 24 VOLT CONTROLLER DETECTION AND LOGIC COMMON CIRCUITS ARE NOT TO RUN EXTERNAL TO THE CONTROLLER OR MASTER CABINETS. THE 24 VOLT INTERNAL POWER SUPPLY FROM THE CONTROLLER UNIT CAN NOT BE USED IN THE EXTERNAL ISOLATION SYSTEM.

POLES

- 1. POLE LOCATIONS ON THE PLAN SHEETS MAY BE ALTERED ONLY WITH THE APPROVAL OF THE WEST VIRGINIA DIVISION OF HIGHWAYS, TRAFFIC ENGINEERING DIVISION. ALL POLE RELOCATIONS MUST BE DOCUMENTED.
- 2. ALL NEW POLE LOCATION DIMENSIONS ARE TO THE CENTER OF THE POLE FOUNDATION
- 3. POLE FOUNDATION SIZES SHALL BE IN ACCORDANCE WITH WEST VIRGINIA DIVISION OF HIGHWAYS STANDARD TERS-30 AND TERS-40
- 4. ALL POLE COUPLINGS SHALL BE 3" WITH A WEATHERHEAD.
- 5. ALL NEW TYPE AI SIGNAL POLES (\*), AII SIGNAL POLES (\*), CI SIGNAL POLES (\*), AND CII SIGNAL POLES (\*) IN THIS PROJECT AND THEIR ANCHOR BOLTS (\*) ARE TO BE SUPPLIED BY THE CONTRACTOR.
- 6. ALL CONCRETE FOUNDATIONS SHALL BE SUBJECT TO SECTION 601 OF THE WVDOH STANDARD SPECIFICATIONS ADOPTED 2017 AND SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 1, 2018. TRAFFIC SIGNAL POLE FOUNDATIONS SHALL CURE FOR A MINIMUM OF SEVEN (7) DAYS OR 3000 PSI STRENGTH PRIOR TO INSTALLING THE POLE.
- 7. NEW SIGNAL POLE FOUNDATIONS SHALL BE EXTENDED OUT OF THE GROUND TO BE FLUSH WITH SIDEWALK ELEVATION, UNLESS OTHERWISE NOTED IN THE PLANS. ANCHOR BOLT COVERS SHALL NOT BE INSTALLED.
- 8. ALL EXISTING HOLES (NOT TO BE REUSED) IN SIGNAL POLES/OVERHEAD SIGN STRUCTURES TO REMAIN ARE TO BE PROPERLY PLUGGED WITH A THREADED GALVANIZED PLUG. PLUGS TO MATCH RESPECTIVE POLE.

SIGNAL HEADS

- 1. SIGNAL HEADS AT I/S \*1 SHALL HAVE CUTAWAY VISORS, SIGNAL HEADS (\*1 - \*6) SHALL HAVE NON-METALLIC BODIES, DOORS, AND VISORS.
- 2A. BACKPLATES SHALL BE LOUVERED AND BLACK AND SHALL HAVE A RETROREFLECTIVE 1" BORDER WITH A 1" MARGIN. THIS BORDER SHALL COMPRISE OF TYPE IX, FLUORESCENT YELLOW, PRESSURE SENSITIVE RETROREFLECTIVE SHEETING AND PLACED ON PERMETER FACE OF ALL BACKPLATES.
- B. ALL NEW VEHICULAR SIGNAL SECTIONS SHALL UTILIZE LIGHT EMITTING DIODE (L.E.D) SIGNAL MODULES AT 120 VAC. ALL UNITS SHALL NOT UTILIZE MORE THAN 22 WATTS POWER CONSUMPTION.
- C. ALL NEW L.E.D. TRAFFIC SIGNAL MODULES SHALL BE BID INCIDENTAL TO ITEM 660003-001(G-16) AND 660003-006(V-12).
- D. ALL TRAFFIC SIGNAL MODULES SHALL CONFORM TO THE WVDOH SPECIFICATION CONCERNING L.E.D. SIGNAL MODULES.
- E. SEE THE WVDOH "APPROVED PRODUCTS LIST" (APL) FOR APPROVED L.E.D. MANUFACTURERS.
- 3. VERTICAL CLEARANCE OF 17' (+OR-3") TO BE MAINTAINED TO THE BOTTOM OF ALL MAST ARM MOUNTED SIGNAL HEADS.
- 4. ALL MODULES SHALL CONFORM TO THE ITE VTCSH-L.E.D. CIRCULAR SIGNAL SUPPLEMENT, THE ITE VTCSH PART 3, AND THE ITE PTC3-2 REQUIREMENTS. FROM THE DATE OF INSTALLATION ALL UNITS MUST COME WITH A STANDARD 5 YEAR WARRANTY.
- 5. ALL NEW SIGNAL HEAD ATTACHMENT CLAMPS SHALL BE MADE OF STEEL.

SIGNAL EQUIPMENT REMOVAL

DESIGNATED SIGNAL POLES SHALL BE REMOVED BY THE CONTRACTOR AND BECOME HIS PROPERTY TO DISPOSE OF PROPERLY UNLESS OTHERWISE STATED ON THE PLANS.  
POLES DESIGNATED FOR REMOVAL (WHERE FOUNDATIONS ARE NOT BEING REUSED) SHALL HAVE THEIR FOUNDATIONS REMOVED A MINIMUM OF 12" BELOW GROUND. THESE AREAS SHALL BE REPLACED WITH MATERIAL TO MATCH THE EXISTING SURROUNDING MATERIAL. BID AS PART OF ITEM 660007-001(+), +- PER INTERSECTION.  
CONTRACTOR SHALL PROVIDE NEW VARIMT SCREENS AND HAND HOLE COVERS WHERE MISSING FROM EXISTING POLES TO BE REUSED. CONTRACTOR SHALL CHIP OUT GROUT AT EXISTING POLES TO BE REUSED AND INSTALL VARIMT SCREENS. BID AS PART OF ITEM 660007-001 (+), +-PER INTERSECTION.  
ABANDON ALL UNUSED EXISTING JUNCTION BOXES AND CONDUITS IN PLACE UNLESS CONFLICTING WITH PROPOSED SIGNAL WORK OR NOTED ON PLANS.

UTILITY NOTE

THE CONTRACTOR MUST NOTIFY ALL APPLICABLE UTILITIES PRIOR TO ANY EXCAVATION FOR EXACT LOCATION OF THEIR UNDERGROUND FACILITIES. EXTREME CAUTION SHALL BE USED IN THESE AREAS ESPECIALLY IN EXCAVATING FOR FOUNDATIONS AND THE JACKING OF CONDUIT. IF NECESSARY THE CONTRACTOR SHALL HAND DIG TO LOCATE LINES OR SHALL OPEN CUT IN AREAS OF POSSIBLE CONFLICT. THESE AREAS TO BE DETERMINED BY THE PROJECT ENGINEER. CONTACT "MISS UTILITY" & SEWER/WATER UTILITY COMPANIES PRIOR TO ANY EXCAVATING. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL WVDOH OWNED UTILITIES INCLUDING ANY SIGNAL AND LIGHTING CONDUITS WITHIN THE PROJECT AREA.

DESIGNED	DATE
ALT	09/2020
DRAWN	DATE
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CHECKED	DATE
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**SIGNAL GENERAL NOTES (1 OF 2)**  
**BEECHURST AVE AT CAMPUS DRIVE**  
**MONONGALIA COUNTY**

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
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SIGNAL SHEET 3 OF 7

1A. PEDESTRIAN CONTROL SIGNAL HEADS (TYPE G-16)  
 - (COUNTDOWN TYPE LED PED MODULES - SEE 'APL' LIST)  
 THESE SPECIFICATIONS COVER SYMBOLIC PEDESTRIAN SIGNAL ASSEMBLIES TO BE ILLUMINATED BY LED LAMPS MOUNTED BEHIND A SINGLE LENS, WITH ONLY ONE SYMBOL DISPLAYED PER PEDESTRIAN INTERVAL. EACH SYMBOL (HAND and WALKING PERSON) SHALL BE A MINIMUM OF 11" HIGH AND MEET THE LATEST REVISION OF ITS STANDARDS. THE MESSAGE BEARING SURFACE OF THE LENS SHALL BE A MINIMUM OF 18" X 17". ALL OTHER REQUIREMENTS OF THE CURRENT WEST VIRGINIA STANDARD SPECIFICATIONS FOR PEDESTRIAN CONTROL SIGNAL HEADS NOT SPECIFICALLY ADDRESSED HEREIN, WHERE APPLICABLE, SHALL BE INCLUDED AS PART OF THIS STANDARD. SYMBOLIC DISPLAY IS TO BE A HORIZONTAL, HAND/WALKING PERSON. BID AS ITEM 660003-001 ONE SECTION PER HEAD ASSEMBLY. THESE PEDESTRIAN HEADS SHALL BE BLACK IN COLOR.

RPM - MOUNTING BRACKET ON "NUMBER" SIDE OF HEAD  
 LPM - MOUNTING BRACKET ON "SYMBOL" SIDE OF HEAD  
 TPM - TOP POLE MOUNT

B. GENERAL DESIGN REQUIREMENTS (TYPE G-16)  
 THE NORMAL SIZE OF THE SIGNAL LENS SHALL BE 16".

C. HOUSING  
 THE HOUSING SHALL BE DIE CAST ALUMINUM WITH DROP DOWN LENS DOOR. TOP AND BOTTOM MUST BE PROVIDED WITH CLOSABLE OPENING OR KNOCKOUT FOR STANDARD 1.5 INCH PIPE BRACKETS WITH INTERLOCK SURFACE. SIDE-OF-POLE HINGE MOUNTED BRACKET SHALL BE PROVIDED WITH INTERNAL SCREW TERMINAL UNLESS OTHERWISE SPECIFIED. SIDE-OF-POLE MOUNT INSTALLATIONS MUST BE ATTACHED WITH TOP SCREWS AND HINGE BRACKETS AS SHOWN ON THE PLAN, BANDING AND PIPE MOUNTING BRACKETS ARE NOT TO BE USED, UNLESS CALLED FOR ON THE PLANS. POLE MOUNTING ADJUSTMENTS MUST BE PROVIDED FOR THE BRACKETS BOTH HORIZONTALLY AND VERTICALLY.

D. SUN VISOR  
 A SLANTING GRID PATTERN LENS VISOR TO DEFEAT THE EFFECT OF SUN GLARE AND AS PROTECTION AGAINST PHYSICAL DAMAGE SHALL BE ATTACHED IN FRONT OF THE PEDESTRIAN DISPLAY. THE GRID MUST BE MADE OF 0.030 INCH THICK BLACK IMPREGNATED POLYCARBONATE PLASTIC AND HAVE AN ON-END THICKNESS OF 1.5 INCHES. THE LENS MUST BE READILY REMOVABLE WITHOUT THE USE OF A SPECIAL TOOL.

E. LAMPS  
 TYPE G-16 PEDESTRIAN HEAD LAMPS MUST BE LED.

LUMINAIRE WORK ON SIGNAL POLE

- THE NEW LUMNAIRES (\*) AND LUMNAIRE ARMS (\*) TRUSS/CLAMP-ON TYPE SHALL BE SUPPLIED BY THE CONTRACTOR. THESE LUMNAIRES SHALL HAVE AN INTEGRAL PHOTOCELL.
- LUMNAIRE WIRING SHALL BE SUNLIGHT-RESISTANT, THREE CONDUCTOR #12 INSA CABLE AND SHALL RUN CONTINUOUSLY WITH NO SPLICING OR IN-LINE FUSING. LUMNAIRE WIRING SHALL BE TAGGED AT ALL ACCESS POINTS.
- LUMNAIRES (\*) SHALL BE BID AS ITEM 662007-00(L)ED. ALL OTHER ROADWAY LUMINAIRE WORK AND MATERIAL SHALL BE BID AS ITEM 662014-001.

TYPE OF LED LUMINAIRE

ALL NEW ROADWAY LUMNAIRES ON THIS PROJECT SHALL BE CLASSIFIED AS AN AMERICAN ELECTRIC LIGHTING (AEL) AUTOBAHN SERIES ATB2 WITH AN LED LAMP ELECTRONIC DRIVER THAT HAS A LIFE OF 100,000 HOURS AT 25 C, L70 POLYESTER POWDER-COATED ALUMINUM HOUSING, FOUR-BOLT ARM MOUNT, ALL ELECTRICAL COMPONENTS WARRANTED FOR 5 YEARS. CATALOG NUMBER - ATB2 40BLEDE10 LED MVOLT R3 5K GI PCELL (W/INTEGRAL PHOTOCELL) OR A WVD0H APPROVED EQUAL.

THE SYSTEMS SHOWN SHALL BE 120 / 240 VOLT, 3 WIRE WITH GROUND, SINGLE PHASE, 60 HZ.

EXISTING STREET SIGNS

- CONTRACTOR SHALL REMOVE EXISTING STREET SIGNS. CONTRACTOR SHALL REATTACH SIGNS TO NEW POLES WITH NEW MOUNTING HARDWARE. THIS WORK SHALL BE BID INCIDENTAL TO 660007-001 (\*) \* PER INTERSECTION

PAVEMENT GAPS

- WHERE EXISTING ROADWAY PAVEMENT IS DAMAGED OR WHERE PROPOSED MODIFICATION CAUSES A GAP BETWEEN THE ROADWAY AND CURB RAMP OR CURB, CONTRACTOR SHALL PLACE WEARING COURSE ASPHALT TO BE FLUSH WITH EXISTING ASPHALT. ASPHALT TO BE COMPACTED WITH MECHANICAL TAMPER. BID INCIDENTAL TO ITEM 609005-001 CURB RAMP, TYPE (\*). \* TYPE AS INDICATED ON PLANS

CONDUIT POST

3" CONDUIT POSTS TO BE ON LEVEL GROUND, NOT ON RAMP SLOPE. BUTTON SHALL BE ACCESSIBLE FROM SIDEWALK. BUTTONS SHALL BE 10' OR LESS FROM DETECTABLE WARNING SURFACE. USE THREADED COUPLINGS TO ATTACH 3" CONDUIT POST.

SIGNAL WORK DESCRIPTION  
1/S NO. 1 (BEECHURST AVE. & CAMPUS DR.)

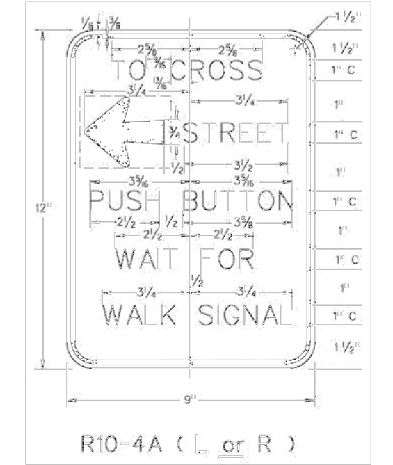
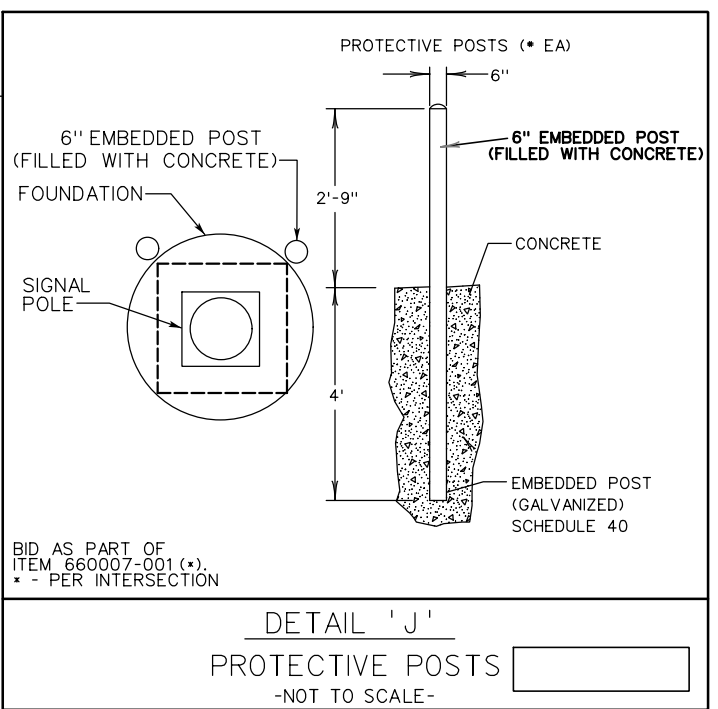
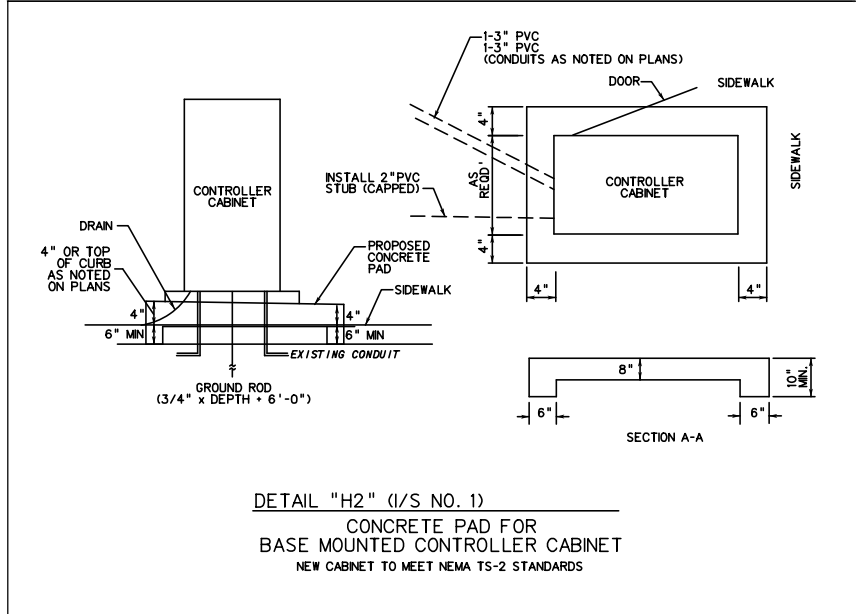
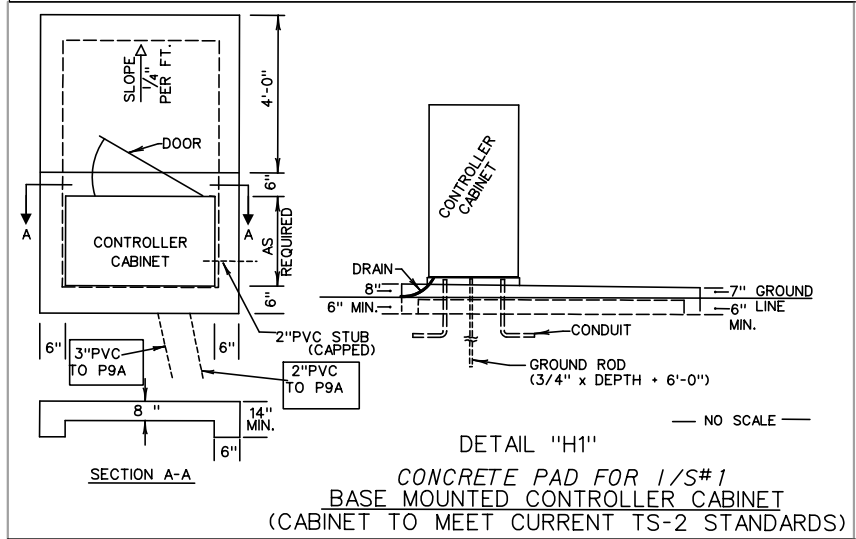
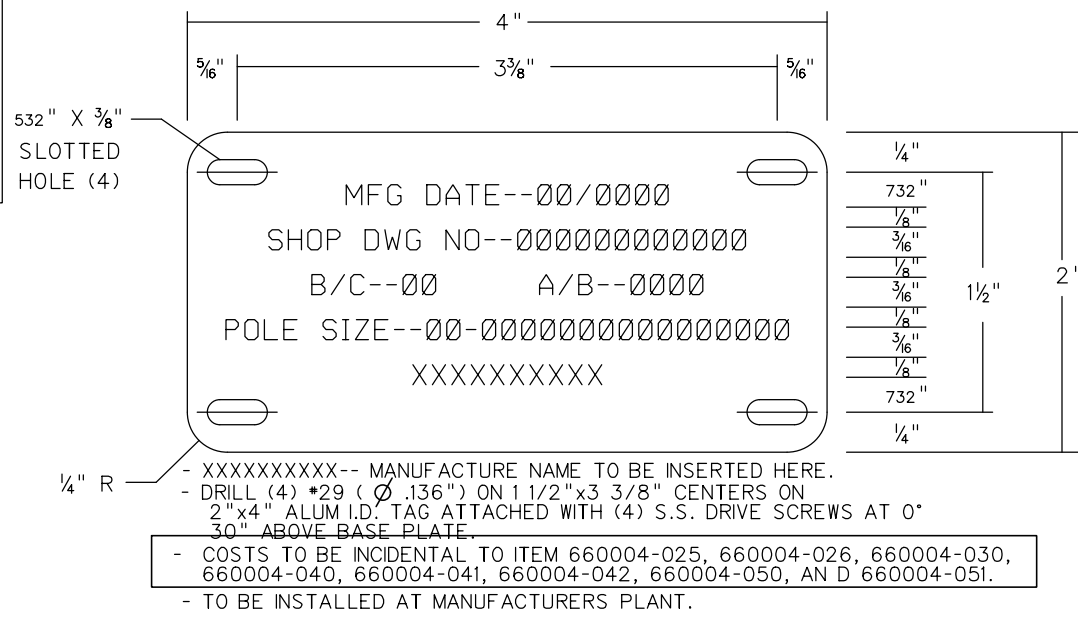
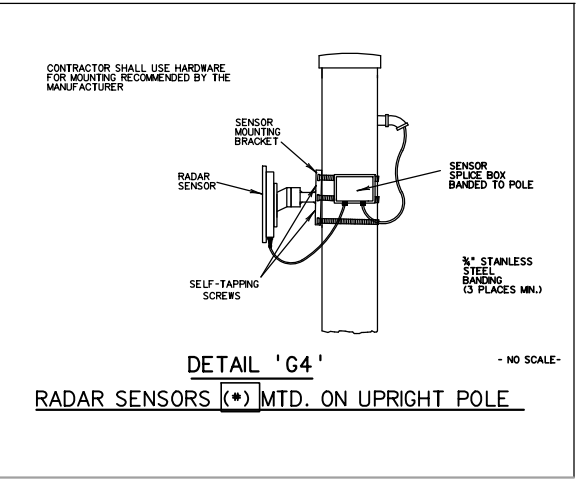
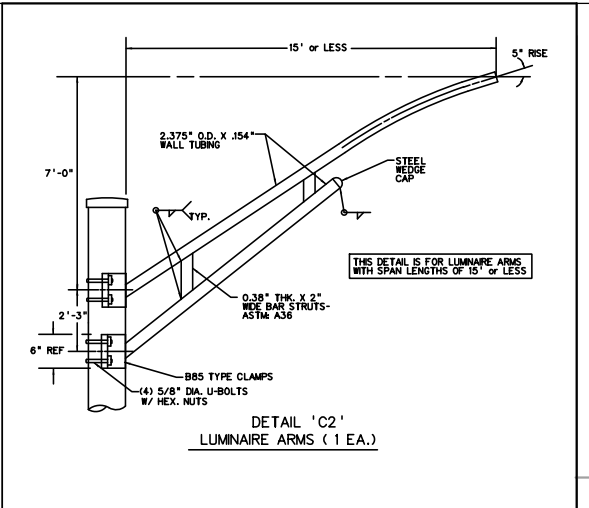
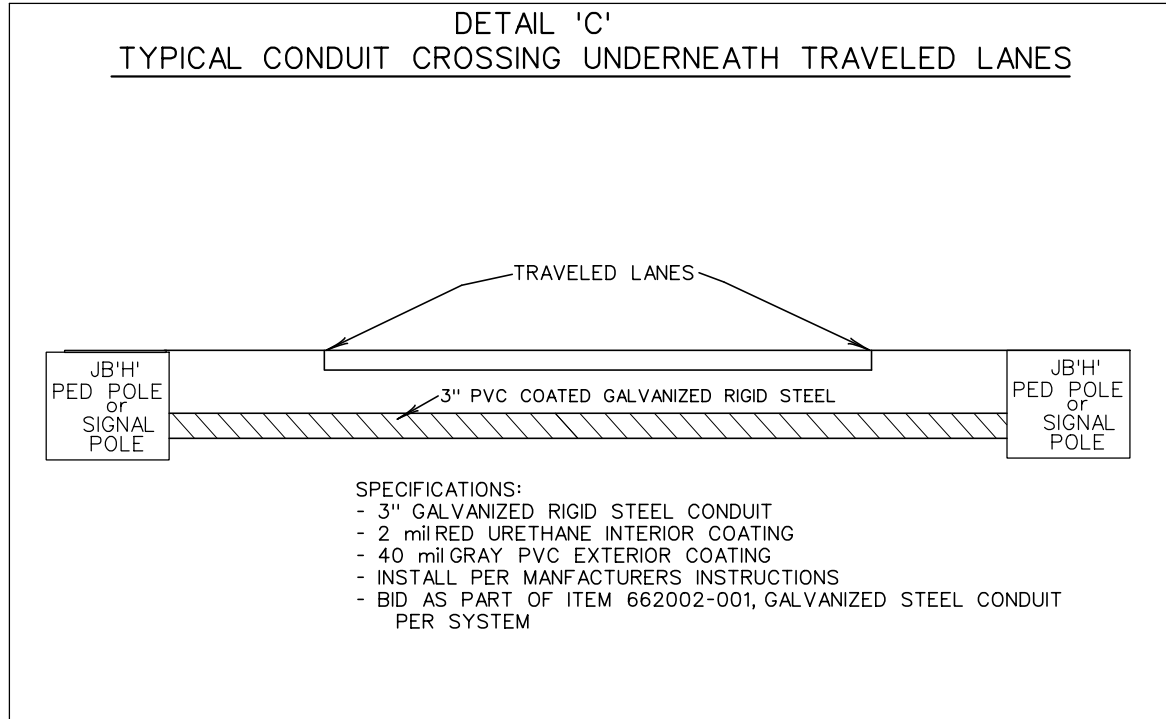
- THIS IS AN EXISTING SIGNAL TO BE REVISED AS FOLLOWS:
- ALL PRESCRIBED SIGNAL COMPONENTS NOT MENTIONED IN NOTE #1B ON SIGNAL SHEET #2 ARE TO BE REMOVED AND BECOME THE CONTRACTOR'S PROPERTY TO DISPOSE OF PROPERLY.
- EX. SIGNAL POLES P1-P5 ARE TO BE REMOVED AND BECOME THE CONTRACTOR'S PROPERTY TO DISPOSE OF PROPERLY. BID ALL SIGNAL REMOVAL AT 1/S #1 AS PART OF ITEM 660007-001(01).
- INSTALL (3) NEW TYPE A1 POLES ON NEW FOUNDATIONS. INSTALL (3) NEW TYPE E1 POLES ON NEW FOUNDATIONS.
- INSTALL NEW 1/S CONTROLLER, TS-2 CABINET (POLE MOUNTED SIZE) - (BASE MTD. ON NEW CONC. PAD)
- REUSE EX. POWER SERVICE (METER, MAIN DISCONNECT)
- NEW SIGNAL HEADS (PAINTED BLACK) AND SIGNAL HEAD CONDUCTOR CABLE TO BE PROPERLY INSTALLED AS SHOWN ON PLAN SHEET.
- INSTALL NEW STOP BAR RADAR PRESENCE SENSOR DETECTOR SYSTEM (RPD) TO BE INSTALLED AS SHOWN ON PLANS.
- A NEW SPREAD SPECTRUM RADIO INTERCONNECT SYSTEM TO BE INSTALLED AS SHOWN IN THESE PLANS AND SPECIFICATIONS. ONE YAGI ANTENNA CABLE TO BE INSTALLED TO A NEW RADIO TRANSCEIVER IN CONTROLLER CABINET NEAR SIGNAL POLE P3A.
- PRIORITY CONTROL SYSTEM (D3) SHALL BE INSTALLED AS SHOWN IN THE PLANS AND AS DETAILED IN PLANS AND SPECIFICATIONS.
- INSTALL NEW AUBBLE PPB (6) & SIGNS AS SHOWN ON PLAN SHEET.
- INSTALL PROPOSED CONDUIT AS SHOWN.
- INSTALL (4) NEW JUNCTION BOXES TYPE "H" AS SHOWN ON PLANS.

DESIGNED	DATE
ALT	09/2020
DRAWN	DATE
LNR	09/2020
CHECKED	DATE
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**SIGNAL GENERAL NOTES (2 OF 2)**  
**BEECHURST AVE AT CAMPUS DRIVE**  
**MONONGALIA COUNTY**

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



PEDESTRIAN SIGN NOTE (1/S \*\*) - SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS 2009 EDITION SECTION 2B.52

R10-4A (L or R) SIGNS SHALL BE 9" X 12".

THEY SHALL BE 0.080 FLAT SHEET ALUMINUM.

THE SIGNS SHALL BE INSTALLED AS INDICATED ON THE INDIVIDUAL INTERSECTION SHEETS. SEE ABOVE FOR DETAILS. BID THIS WORK AND MATERIAL AS PART OF ITEM 660007-001(\*). SEE TES-31 FOR PEDESTRIAN PUSHBUTTON AND SIGN MOUNTING POSITION.

(\* - INTERSECTION NUMBER)

ARROWS ON PEDESTRIAN SIGNS SHALL POINT TO THEIR ASSOCIATED CROSSWALK. PEDESTRIAN SIGNS SHALL BE APPROVED BY THE ENGINEER/INSPECTOR PRIOR TO INSTALLATION.

DESIGNED	ALT	DATE
DRAWN	LNR	09/2020
CHECKED	JDV	09/2020
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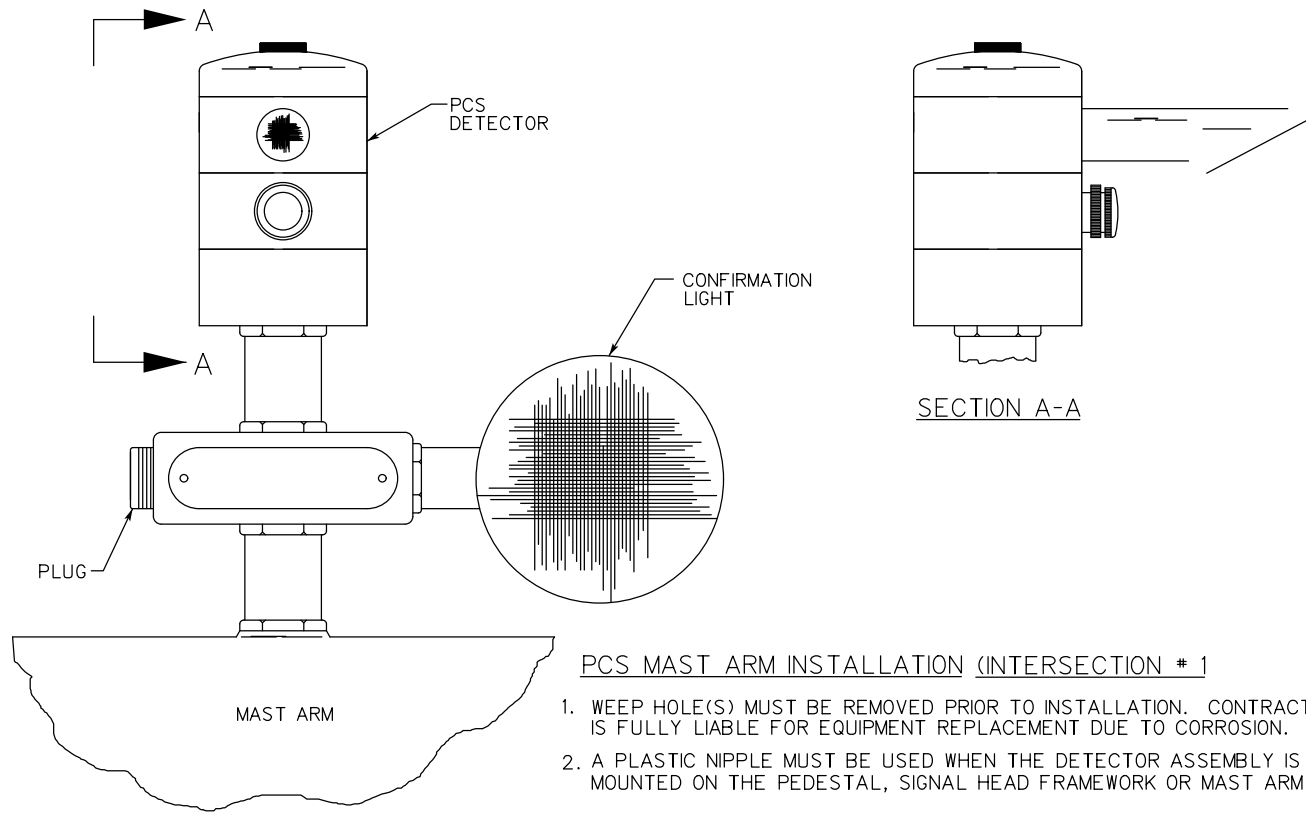


THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**SIGNAL DETAIL SHEET**  
**BEECHURST AVE AT CAMPUS DRIVE**  
**MONONGALIA COUNTY**

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
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SIGNAL SHEET 5 OF 7



**PCS MAST ARM INSTALLATION (INTERSECTION # 1)**

1. WEEP HOLE(S) MUST BE REMOVED PRIOR TO INSTALLATION. CONTRACTOR IS FULLY LIABLE FOR EQUIPMENT REPLACEMENT DUE TO CORROSION.
2. A PLASTIC NIPPLE MUST BE USED WHEN THE DETECTOR ASSEMBLY IS MOUNTED ON THE PEDESTAL, SIGNAL HEAD FRAMEWORK OR MAST ARM.

PCS DETAIL  
NOT TO SCALE

**PRIORITY CONTROL SYSTEM (PCS)**  
 BID AS ITEM 660010-001 AND 660010-010

THE PRIORITY CONTROL SYSTEM SHALL PROVIDE ADVANCE SIGNAL CONTROL PER INTERSECTION APPROACH AS SHOWN ON THE PLAN SHEETS. THE SYSTEM CONSISTS OF AN EMITTER, (1 EA), DETECTORS WITH CONFIRMATION LIGHT, (2), CARD RACK MOUNTED SIGNAL INTERFACE UNITS, (2 EA), AND NECESSARY WIRING. THIS ALSO INCLUDES MOUNTING HARDWARE AND OTHER HARDWARE ITEMS TO COMPLETE THE SYSTEM.

THE EMITTER IS MOUNTED ON THE PRIORITY VEHICLE AND TRANSMITS A SHAPED, OPTICAL PATTERN OF CODED LIGHT TO A DETECTOR AT THE PRIORITIZED INTERSECTION APPROACH. THE INTERFACE UNIT WILL THEN INPUT A CALL TO THE CONTROLLER FOR A PROGRAMMED PREEMPTION ROUTINE. THE TRANSMIT/RECEIVE DISTANCE FOR EACH INTERSECTION APPROACH MUST BE USER PROGRAMMABLE AND WILL BE THE RESPONSIBILITY OF THE DIVISION OF HIGHWAYS TO BE DETERMINED AND SET. A MEANS FOR ADJUSTMENT OF THE TRANSMIT/RECEIVE DISTANCE PER APPROACH MUST BE PROVIDED WITH THE SYSTEM. PCS UNITS WILL BE PAID FOR AS ITEMS 660010-001 - "PRIORITY CONTROL SYSTEM DETECTORS."

\* D1, D2, D3, D4  
 CODE REPRESENTS THE NUMBER OF DETECTORS TO BE INSTALLED.  
 BID PER INTERSECTION

ALSO SEE INDIVIDUAL INTERSECTION SHEETS FOR INTERSECTION QUANTITIES AND SPECIFICATIONS FOR FURTHER DETAILS. EXACT LOCATION AND AIM OF PCS DETECTOR TO BE FIELD DETERMINED BY THE PROJECT ENGINEER.

THESE PCS DETECTORS TO BE PLACED ON THE SAME FREQUENCY AS THE EXISTING CITY OF MORGANTOWN PCS SYSTEM. (MORGANTOWN FIRE DEPT. FIRE CHIEF, MARK CARAVASOS - 304-284-7481)

SEE 'APL' LIST FOR APPROVED PRIORITY CONTROL SYSTEMS FOR THIS PROJECT.

CONTRACTOR IS RESPONSIBLE FOR DEMONSTRATING USE OF PCS SYSTEM TO THE MORGANTOWN FIRE DEPARTMENT PERSONNEL.

1.  
1.

DESIGNED	ALT	DATE	09/2020
DRAWN	LNR	DATE	09/2020
CHECKED	JDV	DATE	09/2020
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THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**PCS NOTES AND DETAILS**  
**BEECHURST AVE AT CAMPUS DRIVE**  
**MONONGALIA COUNTY**

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

CELLULAR INTERCONNECT NOTES

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
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SIGNAL SHEET 6 OF 7

GENERAL NOTES

- TELEMETRY CELLULAR COMMUNICATION SHALL BE UTILIZED FOR CONNECTIVITY TO ALL INTERSECTIONS. THE TELEMETRY CONNECTION SHALL BE GIVEN A HIGH PRIORITY. THE TELEMETRY CELLULAR COMMUNICATION IS A CELLULAR WIRELESS ROUTER WITH SIM CARD THAT UTILIZES THE AT&T FIRSTNET WIRELESS NETWORK. THE CONTRACTOR SHALL CONTACT THE SIGNAL ENGINEER (DANIEL ELLARS AT 304-414-7332) AT LEAST ONE (1) MONTH PRIOR TO NEW CONTROLLER INSTALLATION TO COMMISSION CONNECTIVITY WITH AT&T FIRSTNET.
- CELLULAR WIRELESS ROUTER SPECIFICATIONS [ ITEM 660060-001 ( \* ) MISCELLANEOUS RADIO INSTALLATION \* PER INTERSECTION ]:
  - CARRIER APPROVAL: AT&T FIRSTNET
  - SUPPORT TECHNOLOGY: 4G LTE
  - COMPLY WITH IEEE 802.11
  - PROVIDE SIM INTERFACE
  - PROVIDE STATIC IP ADDRESS
  - HOST INTERFACES:
    - UP TO THREE (3) 10/ 100 BASE-T RJ45 ETHERNET PORTS
    - RS-232 SERIAL PORT ON DB-9 CONNECTOR
    - USB 2.0 CLIENT MICRO-B CONNECTOR
    - THREE (3) SMA ANTENNA CONNECTORS (PRIMARY, SECONDARY/ DIVERSITY, GPS)
    - ACTIVE GPS ANTENNA
  - ETHERNET CONNECTIONS: DNS, DNS PROXY, DHCP SERVER, IP PASSTHROUGH, VLAN, HOST INTERFACE WATCHDOG, PPPoE
  - MANAGEMENT INTERFACE: PROVIDE WEB-BASED USER INTERFACE WITH OVER-THE-AIR SOFTWARE AND RADIO MODULE FIRMWARE UPDATES
  - PROVIDE IP64 RATED INGRESS PROTECTION
  - PROVIDE IEC60950 CERTIFICATION BODIES SCHEME (CB SCHEME) UL60950
  - PROVIDE ENVIRONMENTAL : RoHS, REACH, WEEE
  - PROVIDE 5-YEAR MANUFACTURER'S WARRANTY
  - REFERENCE: WVDOH APPROVED PRODUCTS LIST (APL) UNDER MSC.: AT&T FIRSTNET-COMPATIBLE WIRELESS ROUTERS, FOUND AT: [HTTPS://TRANSPORTATION.WV.GOV/HIGHWAYS/MCST/PAGES/APL\\_BY\\_NUMBER.ASPX](https://TRANSPORTATION.WV.GOV/HIGHWAYS/MCST/PAGES/APL_BY_NUMBER.ASPX)
- ETHERNET SWITCH SPECIFICATIONS (PER EACH):
  - PROVIDE MANAGED ETHERNET SWITCH. BID AS PART OF ITEM 660060-004
  - NETWORK INTERFACE: 10/ 100 BASE-TX
  - ENCLOSURE: IP31 GRADE ALUMINUM METAL CASE, DROP-WATERPROOF/DUSTPROOF
  - LED INDICATORS: POWER, ALARM, 10MBPS LINK/ ACTIVITY, 100 MBPS LINK/ ACTIVITY
  - TECHNOLOGY: STANDARDS: IEEE 802.3 10 BASE-T, IEEE 802.3u 100 BASE-TX
  - ETHERNET CONNECTORS: RJ45
  - NUMBER OF PORTS: 5
- TELEMETRY CELLULAR ANTENNA  
THIS ITEM INCLUDES TELEMETRY CELLULAR COMMUNICATION WITH CELLULAR WIRELESS ROUTER, AND 1 ANTENNA FOR EACH INTERSECTION AS SHOWN IN THE PLANS. ANTENNA SHALL BE LOW-PROFILE AND VANDAL-RESISTANT. CELLULAR ANTENNA AND ITS CABLE TO BE BID AS PART OF ITEM 660060-003, PER EACH

INTERCONNECT BID ITEM NOTES:

ITEM 660060-001 ( \* ) PER INTERSECTION, MISCELLANEOUS RADIO INSTALLATION ALL OTHER MATERIAL AND LABOR REQUIRED FOR THE PROPER INSTALLATION OF THE ETHERNET WIRELESS COMMUNICATION SYSTEM TO BE INCLUDED IN THIS BID ITEM. THIS INCLUDES CAT6 CABLE, LIGHTNING PROTECTION, POWER INSTALLATIONS, ETC.

TELEMETRY CELLULAR INSTALLATION:

- INSTALL TELEMETRY CELLULAR COMMUNICATIONS WITH CELLULAR WIRELESS ROUTER AT LOCATIONS AS INDICATED.
- INSTALL EXTERNAL ANTENNA ON THE TOP OF EACH CABINET (1 TOTAL).
- INSTALL A MAXIMUM OF 1 METER (3.3 L.F.) LOW LOSS COAXIAL CABLE BETWEEN THE CELLULAR WIRELESS ROUTER AND EXTERNAL ANTENNA, AS INDICATED.

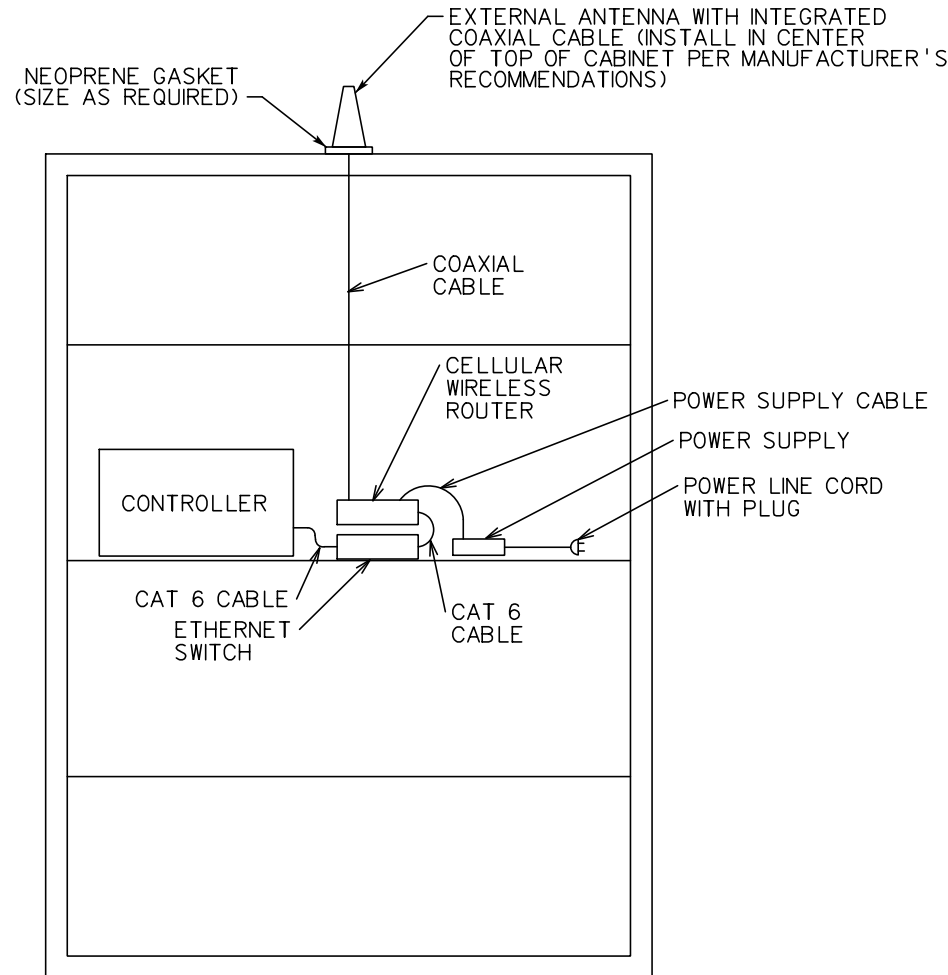
CAT6 CABLE NOTES:

- INSTALL ONE (1) OUTDOOR CAT6 CABLE FROM ETHERNET SWITCH TO THE SIGNAL CONTROLLER AT EACH INTERSECTION. EACH CABLE SHALL BE 6 LF IN LENGTH. NEATLY SECURED EXCESS CABLE TO AVOID KINKS.
- INSTALL ONE (1) OUTDOOR CAT6 CABLE FROM ETHERNET SWITCH TO THE CELLULAR WIRELESS ROUTER AT EACH INTERSECTION. EACH CABLE SHALL BE 6 LF IN LENGTH. NEATLY SECURED EXCESS CABLE TO AVOID KINKS.
- NO CAT6 SPLICES SHALL BE PERMITTED ALONG CABLE LENGTH.
- CRIMP CAT6 CONNECTORS WITH AMP TOOL USING THE EXACT RJ-45 MODEL FOR OUTDOOR CAT6 CABLE BEING USED.
- TEST ALL CAT6 CABLING WITH CONNECTORS TO 10/100/1000 SPECIFICATIONS. CONTRACTOR SHALL PROVIDE A SUMMARY REPORT OF TESTING TO WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, TRAFFIC ENGINEERING DIVISION.

COMMUNICATION PERFORMANCE:

THE CONTRACTOR SHALL TEST THE COMPLETED INSTALLATION TO VERIFY THE RECEIVED SIGNAL STRENGTH INDICATION (RSSI). THE RSSI SHALL BE A VALUE BETWEEN ZERO (0) AND -60. IF THE VALUE IS NOT WITHIN THIS RANGE, THEN THE CONTRACTOR SHALL MAKE ANTENNA ADJUSTMENTS AND/OR REPLACEMENT UNTIL THE RSSI IS WITHIN THIS RANGE.

CONTROLLER CABINET DETAIL



-FOR CLARITY, NOT ALL CABINET COMPONENTS ARE SHOWN-  
-CELLULAR WIRELESS ROUTER MAY REST ON TOP OF ETHERNET SWITCH OR THE TWO DEVICES CAN SIT SIDE-BY-SIDE IF SPACE PERMITS

THE CONTRACTOR SHALL CONTACT THE SIGNAL ENGINEER (DANIEL ELLARS AT 304-414-7332) AT LEAST ONE (1) MONTH PRIOR TO NEW CONTROLLER INSTALLATION TO COMMISSION CONNECTIVITY WITH AT&T FIRSTNET.

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	

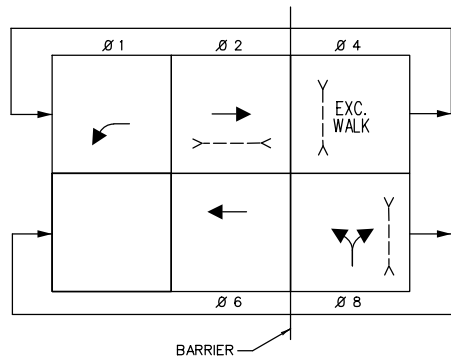


THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CELLULAR INTERCONNECT NOTES**  
**BEECHURST AVE AT CAMPUS DRIVE**  
**MONONGALIA COUNTY**

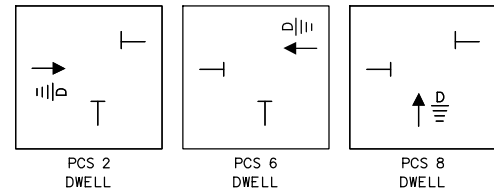
SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

### PHASING



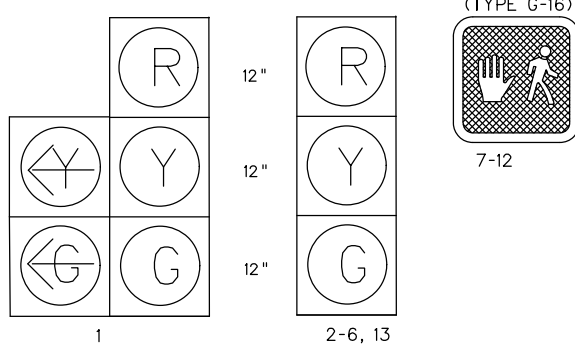
### 1/S#1 PCS SEE SPECIAL PROVISION & PLAN NOTE •



### NOTES:

- EXISTING CABINET TO BE REMOVED AND RETURNED TO WVDOH PER GENERAL NOTES
- ALL EXISTING POLES TO BE REMOVED AND DISPOSED OF PER GENERAL NOTES
- EXISTING JUNCTION BOXES AND CONDUIT MAY BE ABANDONED IN PLACE UNLESS IN CONFLICT WITH NEW SIGNAL AND ROADWAY CONSTRUCTION
- FOUNDATION OF POLES LOCATED IN SIDEWALK SHALL BE INSTALLED FLUSH WITH THE SIDEWALK SURFACE
- THE EXISTING POWER SERVICE IS TO REMAIN AND USED FOR THE NEW CONTROLLER CABINET. INSTALL NEW CONDUIT TO EXISTING METER AND DISCONNECT.
- NEW CONDUIT BETWEEN JUNCTION BOXES SHALL BE INSTALLED AT A DEPTH SIMILAR TO CONDUIT UNDER BEECHURST AVE TO ALLOW FOR FUTURE RELOCATION OF FIRST STREET.
- EXISTING LUMINAIRE POLE TO BE REMOVED TO AVOID CONFLICT WITH MAST ARM AND SIGNAL INDICATIONS. REMOVE BASE A MINIMUM OF 12 INCHES BELOW EXISTING GROUND AND CAP ALL EXISTING CONDUITS. REMOVE ALL WIRE FROM ADJACENT POLE IN CIRCUIT LEADING TO REMOVED POLE. TO BE BID AS PART OF ITEM NUMBER 662014-001.

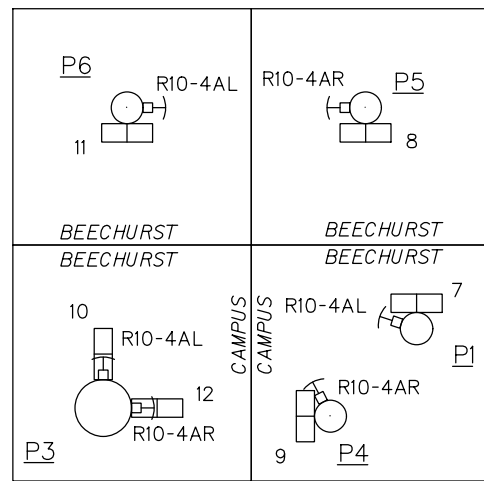
### SIGNAL HEADS



### FLASH SEQUENCE

HEAD NO.	FLASH
1-4, 13	Y
5-6	R
7-12	DARK

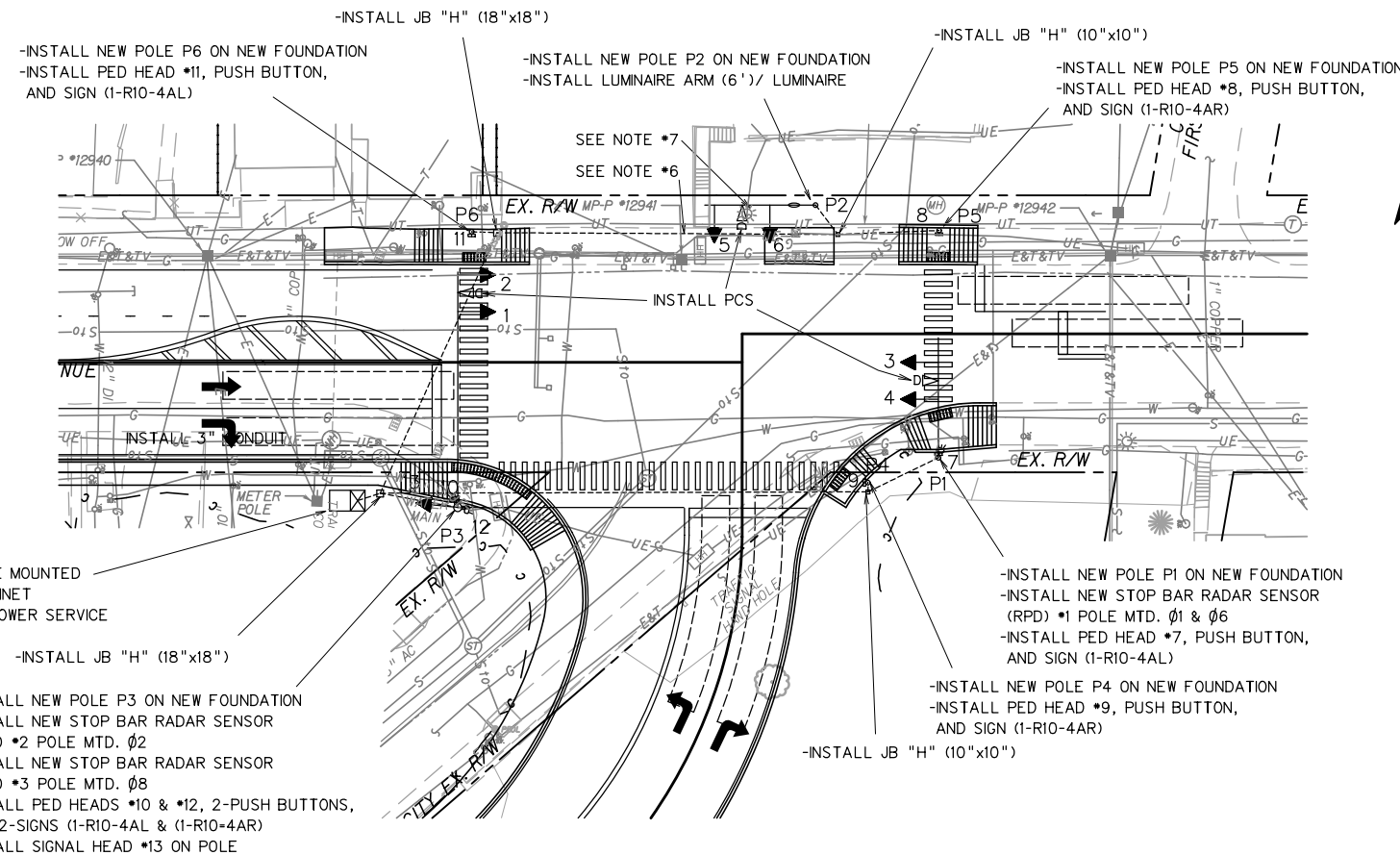
### PUSH BUTTON & SIGN LOCATIONS



### POLE CHART

POLE OR POLE NO.	TYPE	UPRIGHT POLE			LOCATION	MAST ARM					LUMINAIRE							
		POLE MOUNTED SIGNAL ATTACHMENT	HEIGHT	O. D.		WALL GA.	ARM DESIGNATION	ARM ORIENTATION	DIM. "L"	DIM. "M"	DIM. "N"	DIM. "O"	WALL GA.	O.D.	SPREAD	LUM. MTG. HEIGHT	ANGLE 'G	
																		"K"
P1	A1	10'	PED	20'	12"	3	18'	NEW ON NEW FOUNDATION	A	180°	26'	20.6'	12.6'	3	10"			
P2	A1			26'	12"	3	18'	NEW ON NEW FOUNDATION	A	180°	24'	21.9'	9.9'	3	10"	6'	30'	180°
P3	A1	14'	3'-10"	20'	21"	0.5	18'	NEW ON NEW FOUNDATION	A	135°	51'	50.4'	12.4'	3	16.25"			
		10'	PED				18'		B	225°	49'	47.6'	39.6'	3	14"			
P4	E1			10'														
P5	E1			10'														
P6	E1			10'														

- NEW SIGNAL POLE A1 (3) AND ANCHOR BOLTS (3) TO BE SUPPLIED BY THE CONTRACTOR
- DIMENSION "K" IS TO THE BOTTOM OF SIGNAL OR PEDESTRIAN HEAD
- POLE P3 TO BE DESIGNED AS DUAL ARM MAST ARM POLE FOR FUTURE PURPOSES. CONTRACTOR SHALL DELIVER ARM "B" TO WVDOH SIGNAL YARD IN CHARLESTON.



### 1 / S # 1

### LEGEND

- CONTROLLER
- SIGNAL POLE (PROPOSED)
- SIGNAL POLE (EXISTING)
- JUNCTION BOX (TYPE H) (PROPOSED)
- JUNCTION BOX (TYPE H) (PROPOSED)
- CONDUIT (PROPOSED)
- CONDUIT (EXISTING)
- TRAFFIC SIGNAL HEAD
- PEDESTRIAN HEAD
- UTILITY POLE
- DETECTION ZONE
- LUMINAIRE
- PCS
- PRIORITY CONTROL SYSTEM
- PCS DETECTOR
- PCS EMITTER
- RADAR DETECTION

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNK	09/2020
CHECKED	
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TRAFFIC SIGNAL PLAN SHEET**  
**BEECHURST AVE AT CAMPUS DRIVE**  
**MONONGALIA COUNTY**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

PARCEL NO.	PLAN SHEET NO.	TITLEHOLDER	RECORDED		TRACT NO.	AREA - Sq. Ft. (Unless noted otherwise)					TOTAL TAKEN	PARCEL TOTAL	REMARKS	R/W DEED RECORD		
			DEED BOOK	PAGE NO.		C/A	NON-C/A	EASEMENT		REMAINING				DEED BOOK	PAGE NO.	
								TYPE	AREA	LEFT						RIGHT
1	34	VIC'S GARAGE, INC	825	227							0	13,619(c)	NO TAKE			
2	34	SOLOMON, VIC'S GARAGE, INC. GARY, VICTOR, & CYNTHIA	W137	698							0	17,217(c)	NO TAKE			
3-1	34	WOODFORD OIL COMPANY	1061	492							0	15,556(c)	NO TAKE			
3-2	34	WOODFORD OIL COMPANY	1061	492							0	16,079(c)	NO TAKE			
4	34	MODE ROMAN LTD CO.	1286	479							0	16,615(c)	NO TAKE			
5	34	CAROLYN DEVITO	1364	712							0	10,250(c)	NO TAKE			
6	34	CITY OF MORGANTOWN	773 747	20 620							0	15,825(c)	NO TAKE			
7	34	GRANDEOTTO, INC.	784	424							0	0.181 Ac.	NO TAKE			
8	34	BONANZA LAND COMPANY, LLC	1465	633							0	10,380(c)	NO TAKE			
9	34	1390 UNIVERSITY, LLC	1441	734							0	6,116(c)	NO TAKE			
10	35	KTA PROPERTIES, LLC	1462	392							0	0.28 Ac.	NO TAKE			
11-1	35	WEST VIRGINIA UNIVERSITY BOARD OF GOVERNORS	1233	165							0	37,340(c)	NO TAKE			
11-2	35	WEST VIRGINIA UNIVERSITY BOARD OF GOVERNORS	1338	135							0	10,187	NO TAKE			
11-3	35	WEST VIRGINIA UNIVERSITY BOARD OF GOVERNORS	1347	360			2,464		8,174	8,174	2,464	10,638(c)				
11-4	36-38	WEST VIRGINIA UNIVERSITY BOARD OF GOVERNORS	1305 1233	35 165							0	3.85 Ac. (c)	NO TAKE			
11-5	36	WEST VIRGINIA UNIVERSITY BOARD OF GOVERNORS	1233	165							0	11,789(c)	NO TAKE			
11-6	36-38	WEST VIRGINIA UNIVERSITY BOARD OF GOVERNORS	1233 1276	165 285	1 2 3		702 0.02 Ac. 5,227 0.12 Ac.		655,149 15.04 Ac.	655,149 15.04 Ac.	5,929 0.14 Ac.	661,078(c) 15.18 Ac. (c)	ONE PROPERTY IS PART OF A LARGER PARCEL CONTAINING 20 AC AS DESCRIBED IN DB5-144.			
11-7	38	WEST VIRGINIA UNIVERSITY BOARD OF GOVERNORS	1423 1441	306 208							0	14,226(c)	NO TAKE			
11-8	38	WEST VIRGINIA UNIVERSITY BOARD OF GOVERNORS	1425	45							0	8,433(c)	NO TAKE			
11-9	38	WEST VIRGINIA UNIVERSITY BOARD OF GOVERNORS	1260	321			12,738		0	0	0	12,738	12,738(c)	TOTAL TAKE		
11-10	38	WEST VIRGINIA UNIVERSITY BOARD OF GOVERNORS	1260	321	1 2		3,710		11,682	11,682		15,392(c)				
12	35	STEPHEN A. CALLEN ET AL	W160	608							0	5,641(c)	NO TAKE			
13	35	F & P REALTY CO.	844	543							0	5,107(c)	NO TAKE			
14	35	RT. REV. JOHN J SWINT	222	391							0	59,482(c) 1.37 Ac. (c)	NO TAKE			
15	36	A M E CHURCH	8	501							0	6,591(c)	NO TAKE			

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	83	128

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**OWNERSHIP AND UTILITY INDEX**  
SHEET 1 of 3

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

PARCEL NO.	PLAN SHEET NO.	TITLEHOLDER	RECORDED		TRACT NO.	AREA - Sq. Ft. (Unless noted otherwise)						REMARKS	R/W DEED RECORD			
			DEED BOOK	PAGE NO.		C/A	NON-C/A	EASEMENT		REMAINING			TOTAL TAKEN	PARCEL TOTAL	DEED BOOK	PAGE NO.
								TYPE	AREA	LEFT	RIGHT					
16-1	38	GIULIANI PROPERTIES, LLC	1300	527								0	4,713(c)	NO TAKE		
			1233	599												
16-2	38	GIULIANI PROPERTIES, LLC	1233	599								0	5,452	NO TAKE		
17	38	FRIEND ENTERPRISES, INC	1062	534								0	6,988(c)	NO TAKE		

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	84	128

### UTILITY INDEX

STATION	SHEET	DESCRIPTION	DISPOSITION
DOMINION HOPE (GAS) ⊕ US 19 110+52 TO 110+79	35	UNDERGROUND GAS: TWO GAS LINES RUNNING PARALLEL WITH EACH OTHER. APPEARS HORIZONTALLY CLOSE TO EACHOTHER (IE IN SAME TRENCH). UNKNOWN SIZE/MATERIAL. - RUNS PARALLEL WITH BEECHURST AVE. - INSIDE R/W. 20 - 30 (FT) TO RIGHT OF BEECHURST AVE. CENTERLINE.	
117+96 TO 130+76	35-38	UNDERGROUND GAS: GAS SERVICE LINE AND METER AT STA 128+80 R; METER APPROXIMATELY 40' FROM ROAD CL. 4" MAIN AND SERIES OF VALVES AT STA 130+67 R APPROXIMATELY 18' TO 23' FROM CL. SERVICE LINE/TEE LINE AT STA 123+60 WITHIN PROPOSED WIDENING LIMITS AND PROPOSED RETAINING WALL. - RUNS PARALLEL TO BEECHURST - INSIDE OF R/W. 12 - 40 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
CL CAMPUS DRIVE 49+10 TO 49+76	38	UNDERGROUND GAS - CROSSES CAMPUS DR. DIAGONALLY - INSIDE R/W. 31 (FT) LEFT AND 15 (FT) RIGHT OF CAMPUS DRIVE CENTERLINE.	
MUB / WVDH (STORM) ⊕ US 19 110+56 TO 110+60	35	STORM SEWER: EXISTING GRATE INLET TO BE COVERED. NEW INLET TO BE INSTALLED ALONG PROPOSED CURB LINE AND TIED INTO EXISTING STORM SEWER. - GRATE INLET PARALLEL TO EXISTING CURB LINE ON WEST SIDE OF UNIVERSITY AVE. 12" OUTLET PIPE EXITING TO SE ACROSS UNIVERSITY AVE. 55 - 58 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
110+79 TO 110+79	35	STORM SEWER: CURB INLET AT STA 110+79 (RIGHT SIDE) TO BE COVERED. NEW CURB INLET TO BE INSTALLED ALONG PROPOSED CURB LINE AND TIED INTO COVERED CURB INLET WITH NEW STORM LINE. - RUNS PARALLEL WITH BEECHURST - INSIDE R/W. 21 - 23 (FT) RIGHT OF BEECHURST AVE. CENTERLINE	
111+84 TO 111+84	35	STORM SEWER: GRATE INLET AT STA 111+84 (RIGHT SIDE) TO BE COVERED. NEW GRATE INLET TO BE INSTALLED ALONG PROPOSED CURB LINE AND TIED INTO COVERED CURB INLET WITH NEW STORM LINE. - RUNS PARALLEL WITH BEECHURST - INSIDE R/W. 21 - 23 (FT) RIGHT OF BEECHURST AVE. CENTERLINE	
111+94 TO 111+94	35	STORM SEWER: CURB INLET AT STA 111+94 (RIGHT SIDE) TO BE COVERED. NEW GRATE INLET TO BE INSTALLED ALONG PROPOSED CURB LINE AND TIED INTO COVERED CURB INLET WITH NEW STORM LINE. - RUNS PARALLEL WITH BEECHURST - INSIDE R/W. 21 - 23 (FT) RIGHT OF BEECHURST AVE. CENTERLINE	
118+00 TO 119+85	36	STORM SEWER: TWO MANHOLES REQUIRE TOP RAISE/LOWER (STA 119+02 AND STA 119+42). 24" STORM LINE POSSIBLY IMPACTED BASED ON EXISTING DEPTH AND PROPOSED PAVEMENT SECTION. - RUNS PARALLEL TO BEECHURST - INSIDE OF R/W. 12 - 25 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
118+55 TO 118+55	36	STORM SEWER: GRATE INLET AT STA 118+55 (RIGHT) TO BE COVERED. NEW GRATE INLET TO BE INSTALLED ALONG PROPOSED CURB LINE AND TIED INTO COVERED CURB INLET WITH NEW STORM LINE. - RUNS PARALLEL TO BEECHURST - INSIDE OF R/W. 12 (FT) RIGHT OF BEECHURST AVE. CENTERLINE	
121+08 TO 121+08	37	STORM SEWER: TWO GRATE INLETS ON EACH EXISTING CURB LINE. REQUIRES EXISTING INLETS TO BE COVERED. NEW INLETS INSTALLED ON PROPOSED CURB LINE WITH STORM PIPE TIED INTO EXISTING STORM SEWER. UNKNOWN STORM PIPE SIZE AND ORIENTATION. - INSIDE R/W. 12 (FT) RIGHT AND 19 (FT) LEFT OF BEECHURST AVE. CENTERLINE.	
121+16 TO 121+16	37	STORM SEWER: EXISTING SANITARY SEWER MANHOLES ARE LOCATED ON PROPOSED CURB LINE. REQUIRES RELOCATION OF MANHOLES. 18" STORM LINE TO BE RELOCATED AND LOWERED BASED ON PROPOSED GRADE. - CROSSES BEECHURST - INSIDE R/W. 12 - 30 (FT) RIGHT OF BEECHURST AVE. CENTERLINE. 20 - 25 (FT) LEFT OF BEECHURST AVE. CENTERLINE.	
121+39 TO 121+39	37	STORM SEWER: EXISTING GRATE INLET LOCATED ON EXISTING CURB LINE. REQUIRES COVERING, INSTALLATION OF NEW INLET ALONG PROPOSED CURB LINE, AND TIE INTO EXISTING STORM LINE. - INSIDE R/W. 10 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
125+84 TO 126+63	38	STORM SEWER: ONE EXISTING MANHOLE LOCATED WITHIN PROPOSED RETAINING WALL LIMITS. EXISTING STORM LINE LIES WITHIN ROAD WIDENING AND THROUGH PROPOSED RETAINING WALL. UNKNOWN DEPTH OF STORM MANHOLE AND ASSOCIATED STORM LINE. - RUNS PARALLEL WITH BEECHURST - INSIDE R/W. 20 - 28 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
127+69 TO 129+35	38	STORM SEWER: 30" RCP STORM POSSIBLY TO BE RELOCATED BASED ON EXISTING DEPTH AND PROPOSED PAVEMENT SECTION. - RUNS DIAGONALLY AND CROSS BEECHURST - INSIDE R/W. 20 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
127+71 TO 127+83	38	STORM SEWER: GRATE INLET TO BE COVERED. NEW GRATE INLET TO BE INSTALLED ALONG PROPOSED CURB LINE AND TIED INTO COVERED CURB INLET WITH NEW STORM LINE. - RUNS DIAGONALLY AND CROSS BEECHURST - INSIDE R/W. 25 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
127+83 TO 127+83	38	STORM SEWER: GRATE INLET TO BE COVERED. NEW GRATE INLET TO BE INSTALLED ALONG PROPOSED CURB LINE AND TIED INTO COVERED CURB INLET WITH NEW STORM LINE. - RUNS DIAGONALLY AND CROSS BEECHURST - INSIDE R/W. 6 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
⊕ CAMPUS DRIVE 48+90 TO 48+90	38	STORM SEWER: EXISTING CURB INLET REQUIRES COVERING AND NEW INSTALLATION OF CURB INLET ALONG PROPOSED CURB LINE THAT**S TIED INTO EXISTING STORM SEWER. - INSIDE R/W. 27 (FT) LEFT OF CAMPUS DRIVE CENTERLINE.	
49+00 TO 49+00	38	STORM SEWER: EXISTING CURB INLET REQUIRES COVERING AND NEW INSTALLATION OF CURB INLET ALONG PROPOSED CURB LINE THAT**S TIED INTO EXISTING STORM SEWER. - INSIDE R/W. 55 (FT) LEFT OF CAMPUS DRIVE CENTERLINE.	
49+71 TO 49+71	38	STORM SEWER: EXISTING CURB INLET REQUIRES COVERING AND NEW INSTALLATION OF CURB INLET ALONG PROPOSED CURB LINE THAT**S TIED INTO EXISTING STORM SEWER. - INSIDE R/W. 13 (FT) RIGHT OF CAMPUS DRIVE CENTERLINE.	
49+32 TO 49+86	38	COMBINED STORM & SANITARY SEWER: ONE MANHOLE REQUIRES GRADE ADJUSTMENT. CLAY LINES ARE SHOWN WITHIN CUT AND WIDENING FOOTPRINT. POSSIBLE RELOCATION BASED ON EXISTING DEPTH AND PROPOSED PAVEMENT SECTION. - RUNS DIAGONALLY AND CROSSES CAMPUS DR. - INSIDE R/W. 3 - 33 (FT) LEFT OF CAMPUS DRIVE CENTERLINE.	

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**OWNERSHIP AND UTILITY INDEX**  
SHEET 2 of 3

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



# UTILITY INDEX

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	85	128

STATION	SHEET	DESCRIPTION	DISPOSITION
<b>MUB (WATER)</b>			
⊕ US 19			
110+58 TO 112+16	35	WATERLINE: DEPENDS ON BURRIED DEPTH OF WATERLINE - RUNS PARALLEL WITH BEECHURST AVE. - INSIDE R/W. 21 - 24 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
111+60 TO 111+60	35	WATER METER / VALVE: RQUIRES LOWERING OF RIM/TOP TO MEET FINISHED GRADE. POSSIBLE RELOCATION OUTSIDE OF PROPOSED SIDEWALK LIMITS. CONNECTED WATERLINE NOT SHOWN ON BASEMAP. - INSIDE R/W. 30 - 35 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
112+07 TO 112+07	35	WATERLINE / VALVE: VALVE REQUIRES RAISE/LOWER DEPENDING ON PROPOSED GRADE. POSSIBLE IMPACT ON WATERLINE DEPENDING ON BURRIED DEPTH. - WATERLINE RUNS PERPENDICULAR TO BEECHURST - INSIDE R/W. 20 - 25 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
118+01 TO 130+76	36-38	WATERLINE / VALVE: HYDRANTS AND VALVES AT STA 121+83 R AND STA 127+50 R ARE LOCATED IN PROPOSED ROAD WIDENING FOOTPRINT. REQUIRES RELOCATION. MULTIPLE METERS AND VALVES REQUIRE RAISE/LOWER DEPENDING ON GRADE CHANGE. - RUNS PARALLEL TO BEECHURST - INSIDE OF R/W. 20 - 25 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
118+30 TO 118+54	36	SANITARY SEWER: 8" CLAY LINE POSSIBLY IMPACTED BASED ON EXISTING DEPTH AND PROPOSEED PAVEMENT SECTION. - CROSSES BEECHURST AT 45 DEG. ANGLE (APPROX.). 12 - 27 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
125+71 TO 126+75	38	COMBINED STORM & SANITARY SEWER: ONE EXISTING MANHOLE LOCATED WITHIN PROPOSED SIDEWALK. S&S LINES WITHIN LIMITS OF ROAD WIDENING AND THROUGH PROPOSED RETAINING WALL. UNKNOW DEPTH OF MANHOLE AND S&S LINES. - RUNS PARALLEL WITH BEECHURST - INSIDE R/W. 20 - 28 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
127+66 TO 129+46	38	COMBINED STORM & SANITARY SEWER: TWO EXISTING MANHOLES BOTH LOCATED ON PROPOSED CURBING REQUIRES RELOCATION. - RUNS PARALLEL WITH BEECHURST - INSIDE R/W. 21 - 39 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
⊕ CAMPUS DRIVE			
47+57 TO 47+87	38	COMBINED STORM & SANITARY SEWER: EXISTING MANHOLE REQUIRES GRADE ADJUSTMENT WITHIN PROPOSED ROADWAY. 12" CLAY LINE POSSIBLY REQUIRES RELOCATION BASED ON EXISTING DEPTH AND PROPOSED PAVEMENT SECTION. - CROSSES CAMPUS DR. DIAGONALLY - INSIDE R/W. 7 - 29 (FT) LEFT OF CAMPUS DRIVE CENTERLINE.	
<b>WVU (STEAM, STREET LIGHTS)</b>			
⊕ US 19			
111+06 TO 111+06	35	STREET LIGHT / LAMPOST: REQUIRES RELOCATION. CURRENTLY LOCATED WITHIN LIMITS OF PROPOSED ROAD WIDENING. - INSIDE R/W. 30 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
111+43 TO 111+43	35	STREET LIGHT / LAMPOST: REQUIRES RELOCATION. CURRENTLY LOCATED WITHIN LIMITS OF PROPOSED ROAD WIDENING. - INSIDE R/W. 30 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
120+63 TO 120+63	37	STREET LIGHT / LAMPOST: CURRENTLY LOCATED WITHIN LIMITS OF PROPOSED CUT JUST OUTSIDE OF PROPOSED SIDEWALK. - INSIDE R/W. 27 (FT) LEFT OF BEECHURST AVE. CENTERLINE.	
120+89 TO 120+89	37	STREET LIGHT / LAMPOST: CURRENTLY LOCATED WITHIN LIMITS OF PROPOSED CUT JUST OUTSIDE OF PROPOSED SIDEWALK. - LOCATED INSIDE R/W. 28 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
121+18 TO 121+18	37	STREET LIGHT / LAMPOST: CURRENTLY LOCATED WITHIN LIMITS OF PROPOSED CUT JUST OUTSIDE OF PROPOSED SIDEWALK. - INSIDE R/W. 30 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
121+44 TO 121+44	37	STREET LIGHT / LAMPOST: CURRENTLY LOCATED WITHIN LIMITS OF PROPOSED CUT JUST OUTSIDE OF PROPOSED SIDEWALK. - INSIDE R/W. 31 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
121+77 TO 121+77	37	STREET LIGHT / LAMPOST: CURRENTLY LOCATED WITHIN LIMITS OF PROPOSED CUT JUST OUTSIDE OF PROPOSED SIDEWALK. - INSIDE R/W. 32 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
122+06 TO 122+06	37	STREET LIGHT / LAMPOST: CURRENTLY LOCATED WITHIN LIMITS OF PROPOSED CUT JUST OUTSIDE OF PROPOSED SIDEWALK. - INSIDE R/W. 31 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
126+86 TO 126+86	38	STEAM TRANSMISSION LINE - CROSSES BEECHURST - INSIDE R/W. 8 - 28 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
<b>FRONTIER (TEL)</b>			
⊕ US 19			
117+87 TO 120+40	36-37	UNDERGROUND TELEPHONE - RUNS PARALLEL WITH BEECHURST - INSIDE OF R/W	
120+70 TO 120+70	37	UNDERGROUND TELEPHONE - CROSSES BEECHURST - INSIDE R/W. 12- 28 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
120+90 TO 121+70	37	UNDERGROUND TELEPHONE - PARALLEL WITH BEECHURST - INSIDE R/W. 12-28 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
<b>MON POWER (ELECTRIC)</b>			
⊕ US 19			
119+02 TO 119+02	36	OVER HEAD ELECTRIC: MON POWER UTILITY POLE MP-P *12929 IS SHOWN WITHIN PROPOSED ROAD WIDENING LIMITS. REQUIRES RELOCATION. - OVERHEAD UTILITIES RUN PARALLEL WITH BEECHURST - INSIDE OF R/W. 22 (FT) LEFT OF BEECHURST AVE. CENTERLINE.	
120+75 TO 120+75	37	OVER HEAD ELECTRIC: MON POWER POLE MP-P *12931 (LEFT SIDE) AND UNNUMBERED POLE (RIGHT SIDE) ARE LOCATED WITHIN THE ROAD WIDENING LIMITS. REQUIRES RELOCATION. - CROSSES BEECHURST - INSIDE R/W. 21 (FT) LEFT AND 24 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
125+80 TO 378+00	37	OVER HEAD ELECTRIC: MP-P *12937-6P LIES WITHIN PROPOSED WIDENING LIMITS ON RIGHT SIDE AND REQUIRES RELOCATION. MP-P *12937, LOCATED ON LEFT SIDE, LIES ONTOP OF PROPOSED CURB LINE; POSSIBLE RELOCATION DEPENDING ON CURB CONSTRUCTION. - CROSSES BEECHURST - INSIDE R/W. 19 (FT) RIGHT AND 22 (FT) LEFT OF BEECHURST AVE. CENTERLINE.	
126+78 TO 126+78	38	OVER HEAD ELECTRIC: MP-P *12938-6P LIES WITHIN PROPOSED WIDENING LIMITS ON RIGHT SIDE AND REQUIRES RELOCATION. MP-P *12938, LOCATED ON LEFT SIDE, LIES ONTOP OF PROPOSED CURB LINE; POSSIBLE RELOCATION DEPENDING ON CURB CONSTRUCTION. - CROSSES BEECHURST - INSIDE R/W. 17 (FT) RIGHT AND 22 (FT) LEFT OF BEECHURST AVE. CENTERLINE.	
126+84 TO 126+84	38	UNDERGROUND ELECTRIC: UNDERGROUND ELECTRIC CROSSES PERPENDICULAR TO BEECHURST WITHIN ROAD WIDENING LIMITS AND PROPOSED RETAINING WALL. - CROSSES BEECHURST - INSIDE R/W. 8 - 28 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	
⊕ CAMPUS DRIVE			
47+30 TO 47+30	38	OVER HEAD ELECTRIC: EXISTING UTILITY POLE REQUIRES RELOCATION. LIES WITHIN PROPOSED ROADWAY FOOTPRINT. - INSIDE R/W. 6 (FT) LEFT OF CAMPUS DRIVE CENTERLINE.	
<b>WVDOH (TRAFFIC SIGNALS)</b>			
⊕ US 19			
128+29 TO 130+46	38	UNDERGROUND ELECTRIC / TRAFFIC SIGNAL: THREE EXISTING TRAFFIC SIGNAL HAND HOLE VAULTS, ONE MANHOLE, ONE TRAFFIC SIGNAL CONTROL BOX AND ONE METER POLE WHICH SERVES CONTROL BOX ALONG RUN OF UE. THE HH VAULTS AND MH REQUIRE EXTENSION RINGS BASED ON GRADE CHANGE. THE SIGNAL CONTROL BOX REQUIRES RELOCATION AS IT IS PAD MOUNTED AND LIES ON TOP OF PROPOSED CURB LINE. THE METER POLE REQUIRES RELOCATION AS IT IS EXTENTS OF PROPOSED CUT. - RUNS PARALLEL WITH BEECHURST - INSIDE R/W. 16 - 44 (FT) RIGHT OF BEECHURST AVE. CENTERLINE.	

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	

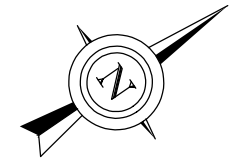


THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**OWNERSHIP AND UTILITY INDEX**  
SHEET 3 of 3

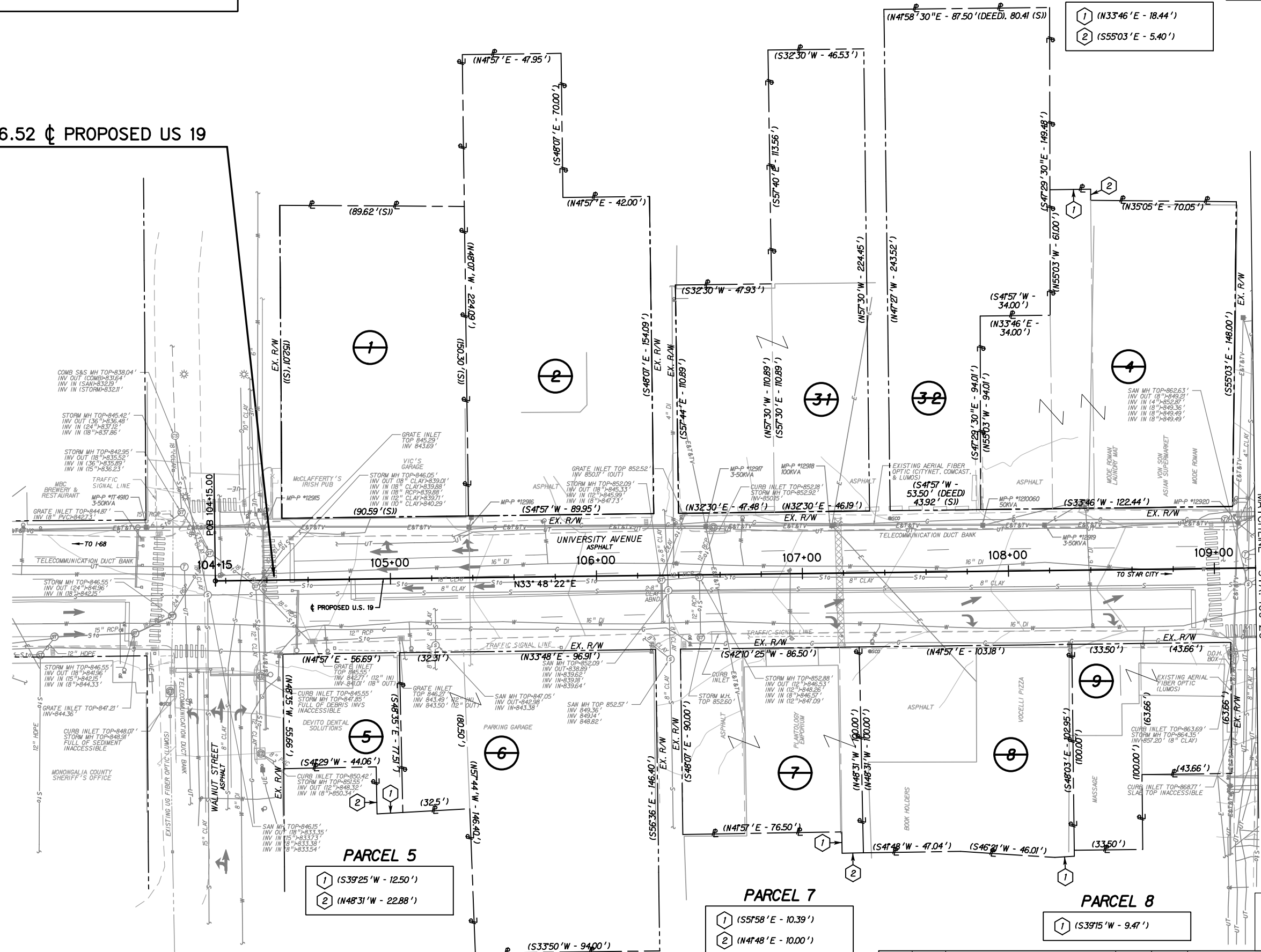
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

EXISTING RIGHT-OF-WAY ACQUIRED FROM STATE PROJECT NUMBER U331-119-11.27 00, DATED 2017.

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	86	128



BEGIN WORK STA. 104+46.52  $\nabla$  PROPOSED US 19



PARCEL 4

- 1 (N33°46' E - 18.44')
- 2 (S55°03' E - 5.40')

PARCEL 5

- 1 (S39°25' W - 12.50')
- 2 (N48°31' W - 22.88')

PARCEL 7

- 1 (S57°58' E - 10.39')
- 2 (N47°48' E - 10.00')

PARCEL 8

- 1 (S39°15' W - 9.47')

MATCHLINE - STA. 109+20

SCALE : 0 25 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



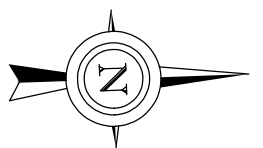
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

PROPERTY MAP

DESIGNED	DATE
ALT	09/2020
DRAWN	LNR
CHECKED	JDV
CHECKED	

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Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	87	128



**PARCEL 10**

1 (N4°06'38"E - 21.90')

2 (S69°51'E - 22.33')

3 (S68°25'E - 21.00')

**PARCEL 11-1**

1 (N68°25'00"W 21.00')

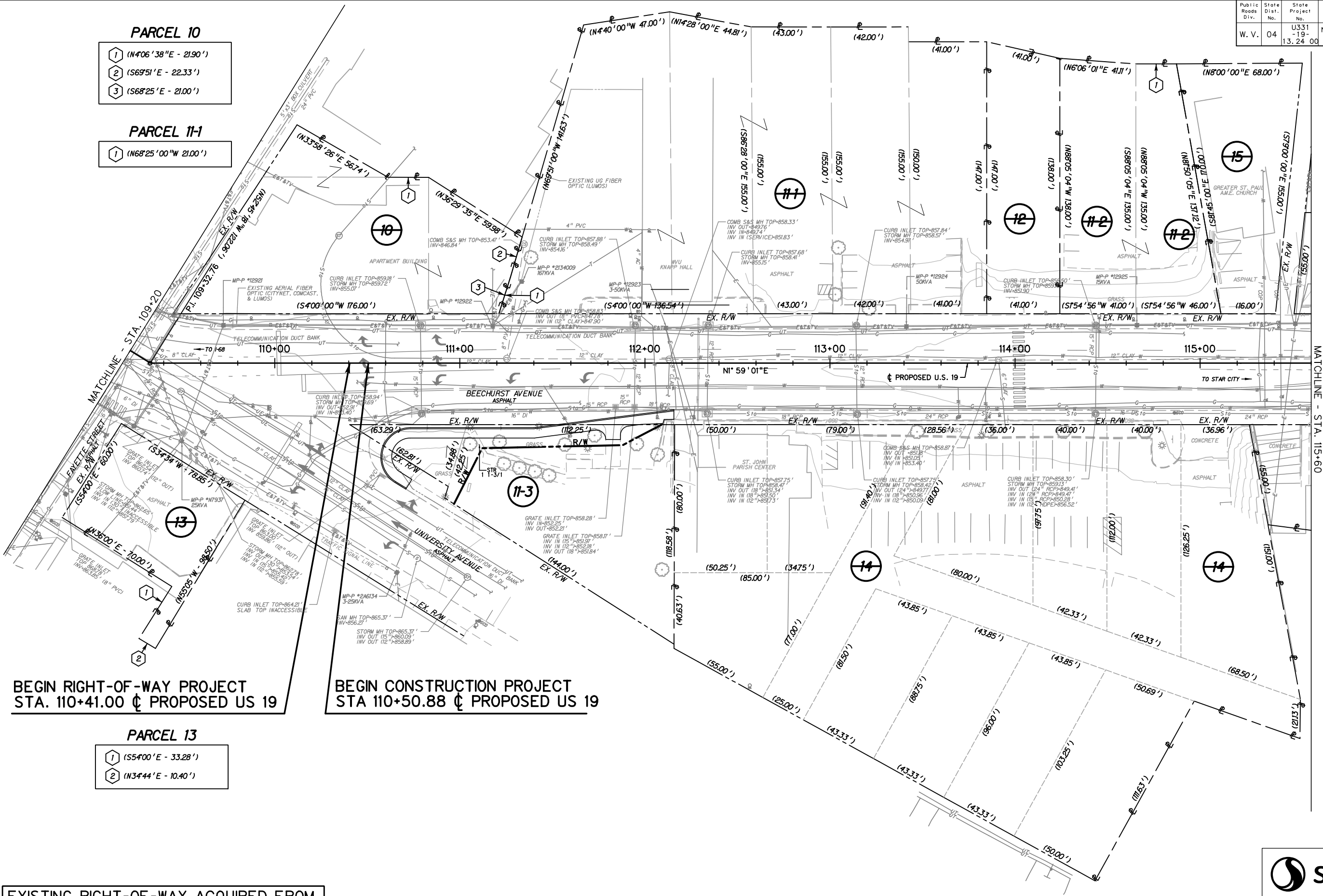
**PARCEL 11-2**

1 (N75°56'E 22.00')

**PARCEL 13**

1 (S54°00'E - 33.28')

2 (N34°44'E - 10.40')



BEGIN RIGHT-OF-WAY PROJECT  
STA. 110+41.00  $\frac{1}{2}$  PROPOSED US 19

BEGIN CONSTRUCTION PROJECT  
STA 110+50.88  $\frac{1}{2}$  PROPOSED US 19

EXISTING RIGHT-OF-WAY ACQUIRED FROM  
STATE PROJECT NUMBER F 131(12),  
DATED 1956.

SCALE : 0 25 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

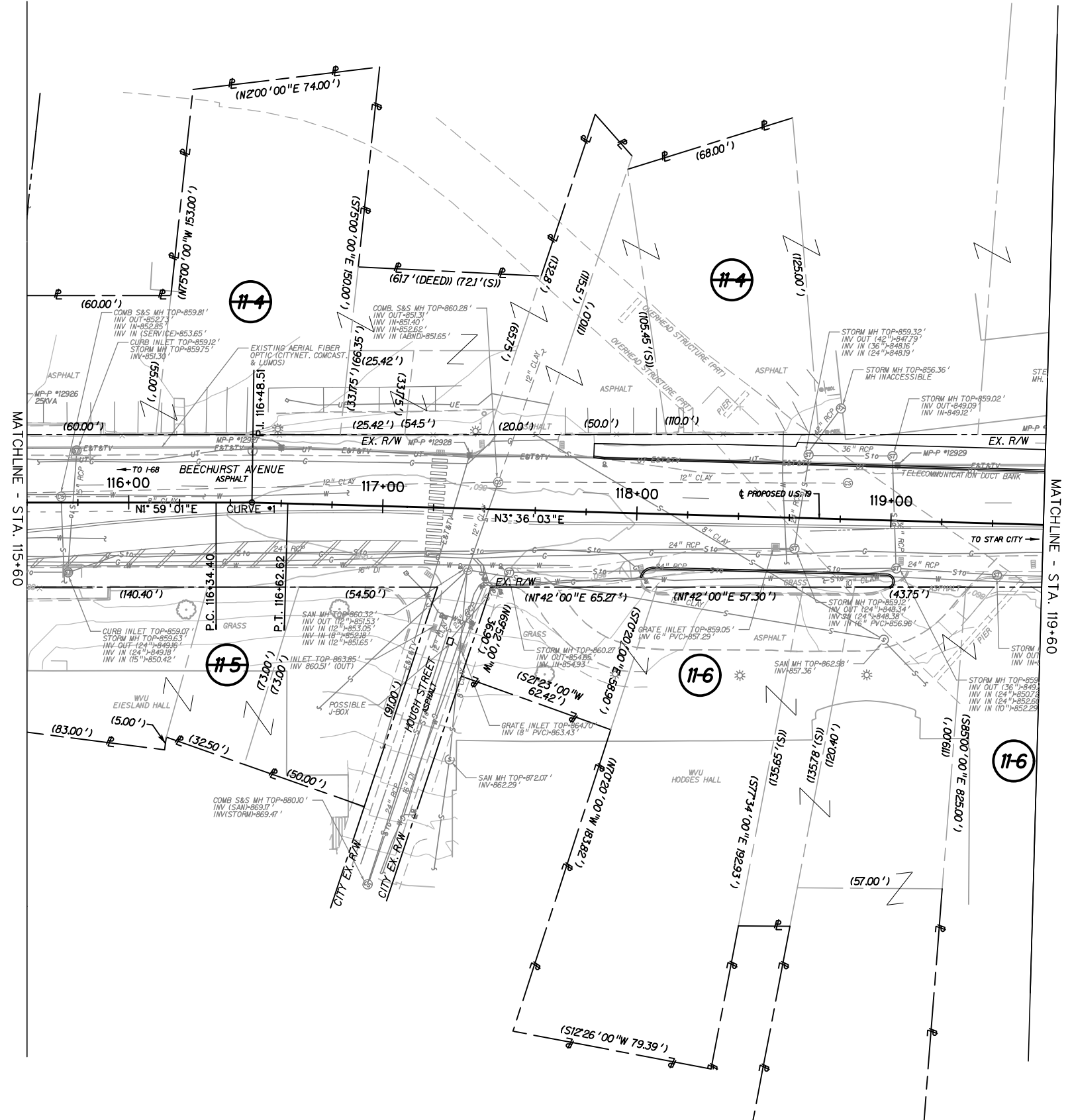
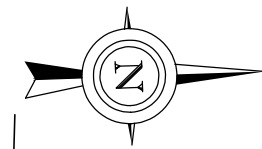
**PROPERTY MAP**

DESIGNED	DATE
ALT	09/2020
DRAWN	LNR
CHECKED	JDV
CHECKED	09/2020

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EXISTING RIGHT-OF-WAY ACQUIRED FROM STATE PROJECT NUMBER F 131(12), DATED 1956.

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	88	128



MATCHLINE - STA. 115+60

MATCHLINE - STA. 119+60

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	



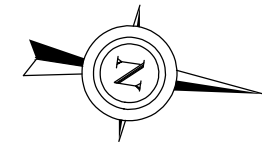
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPERTY MAP**

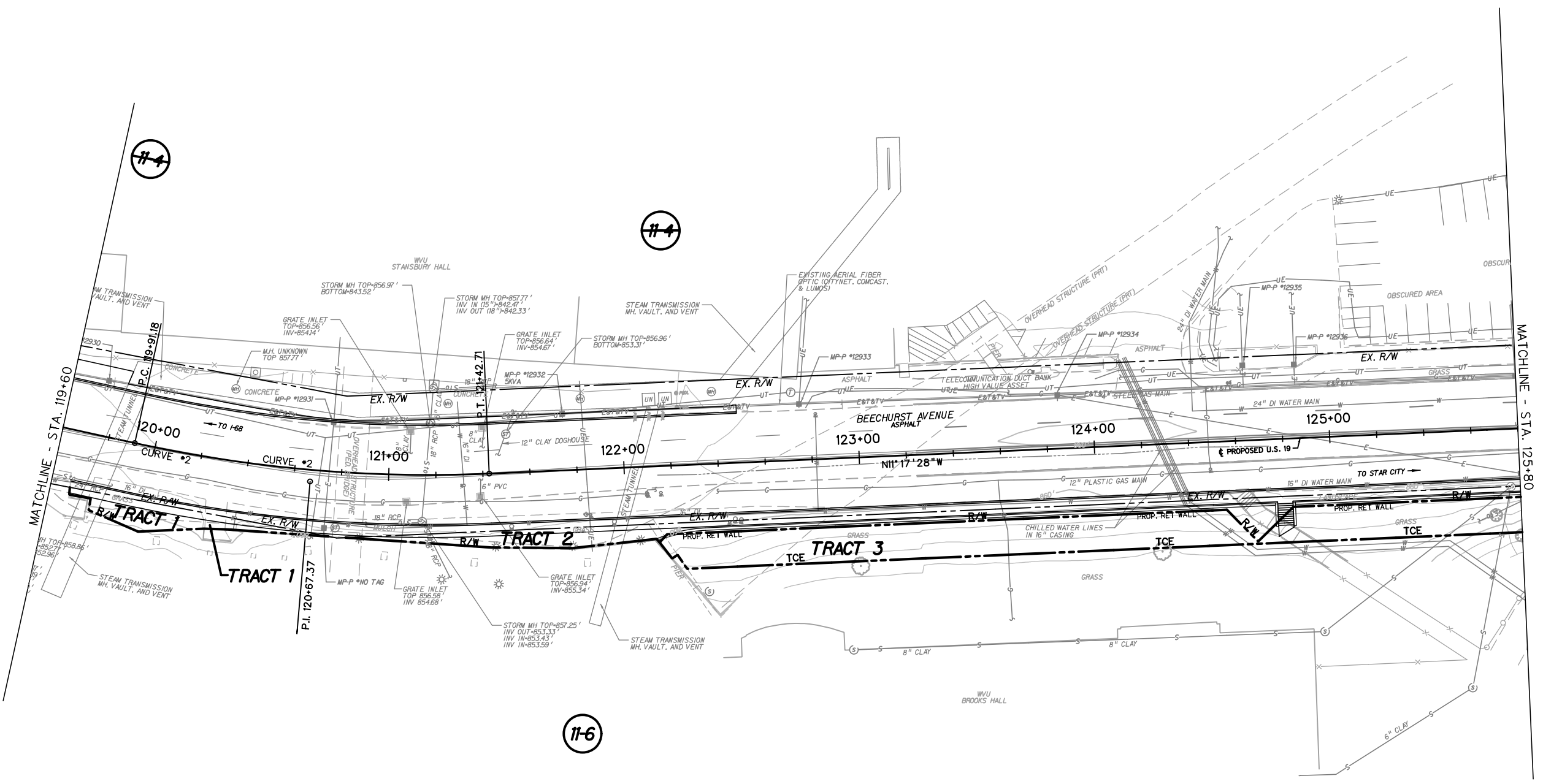
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REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

EXISTING RIGHT-OF-WAY ACQUIRED FROM STATE PROJECT NUMBER F 131(12), DATED 1956.



Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	89	128



MATCHLINE - STA. 119+60

MATCHLINE - STA. 125+80

DESIGNED	ALT	DATE
		09/2020
DRAWN	LNR	09/2020
CHECKED	JDV	09/2020
CHECKED		



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPERTY MAP**

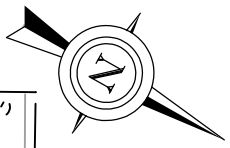
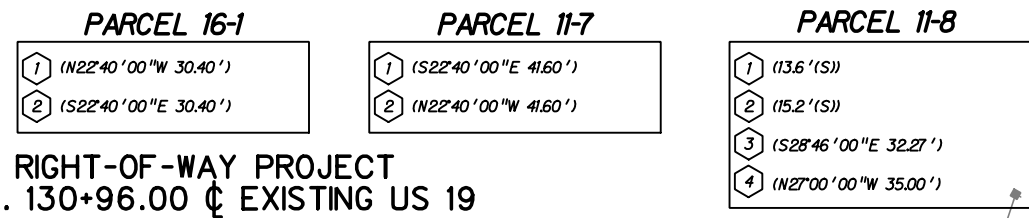
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REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

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EXISTING RIGHT-OF-WAY ACQUIRED FROM STATE PROJECT NUMBER F 131(12), DATED 1956.

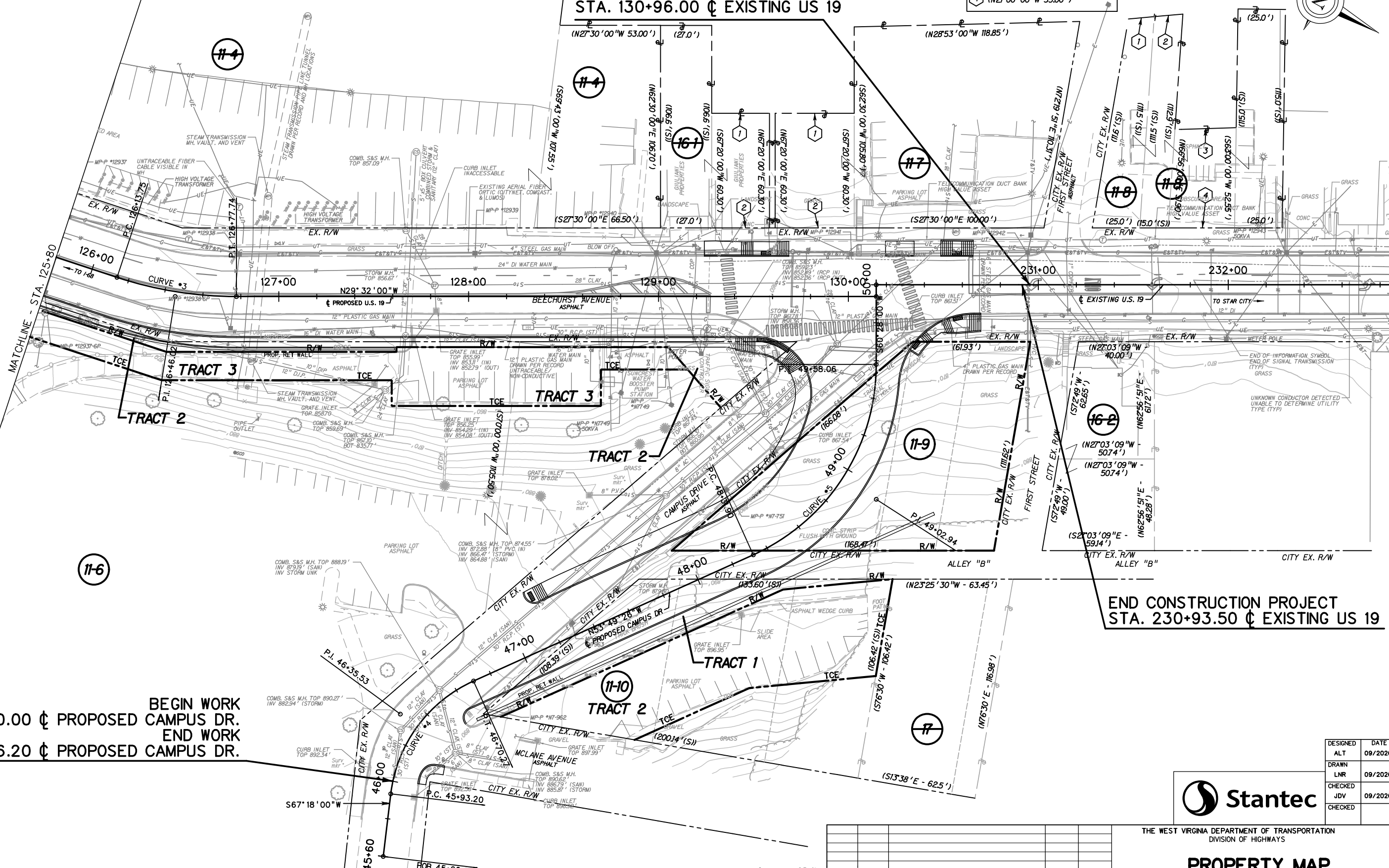
Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	90	128



END RIGHT-OF-WAY PROJECT STA. 130+96.00 @ EXISTING US 19

END CONSTRUCTION PROJECT STA. 230+93.50 @ EXISTING US 19

BEGIN WORK STA. 46+00.00 @ PROPOSED CAMPUS DR.  
END WORK STA. 49+66.20 @ PROPOSED CAMPUS DR.



SCALE : 0 25 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



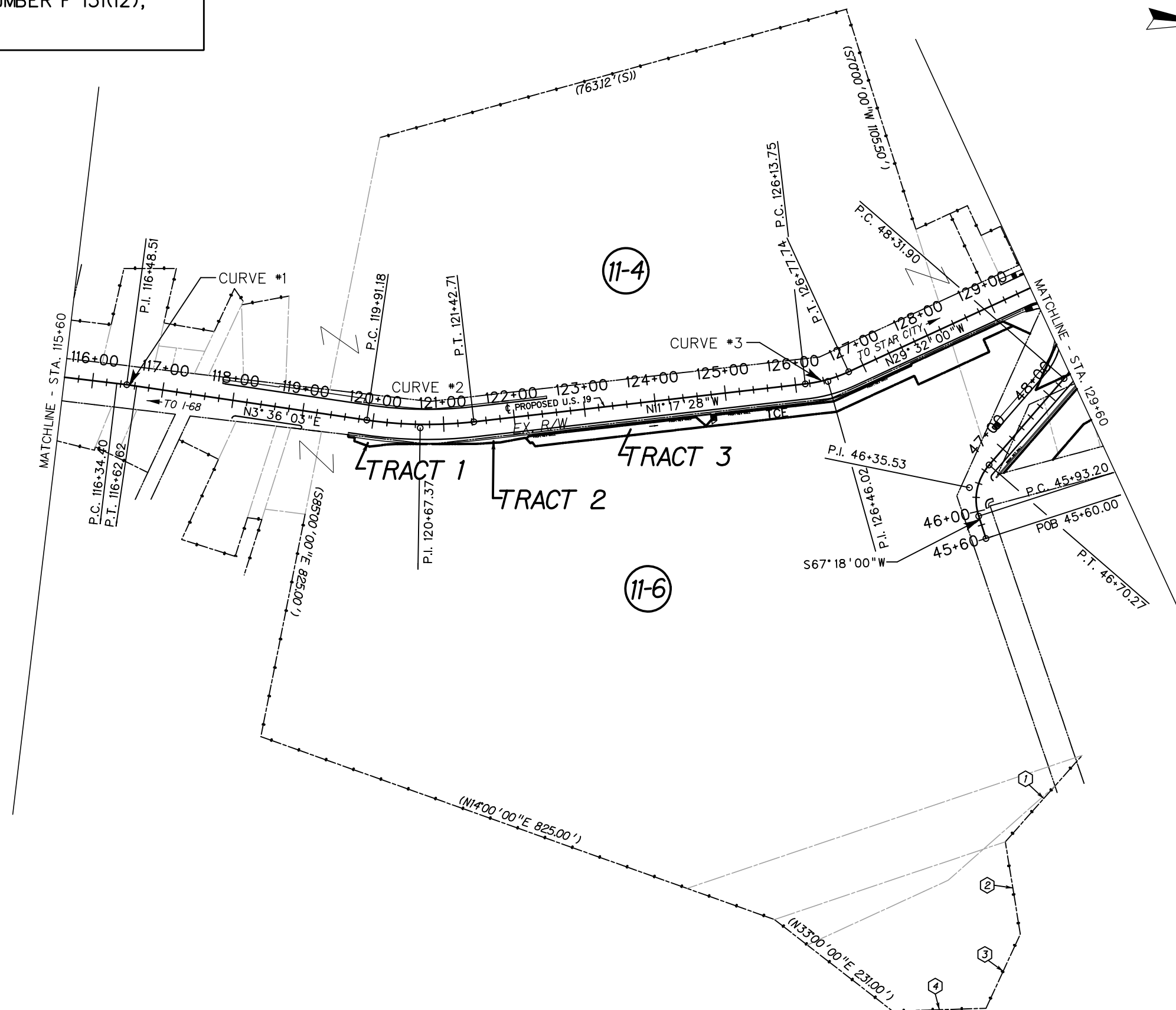
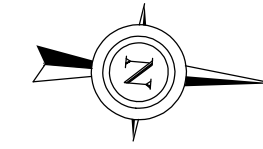
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

PROPERTY MAP

DESIGNED	DATE
ALT	09/2020
DRAWN	LNR
CHECKED	09/2020
JDV	09/2020
CHECKED	

EXISTING RIGHT-OF-WAY ACQUIRED FROM STATE PROJECT NUMBER F 131(12), DATED 1956.

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	91	128



- PARCEL 11-6**
- ① (N7°00'00"W 132.00')
  - ② (S76°00'00"W 132.00')
  - ③ (N7°00'00"W 115.50')
  - ④ (N6°30'00"W 132.00')

SCALE : 0 80 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPERTY MAP**

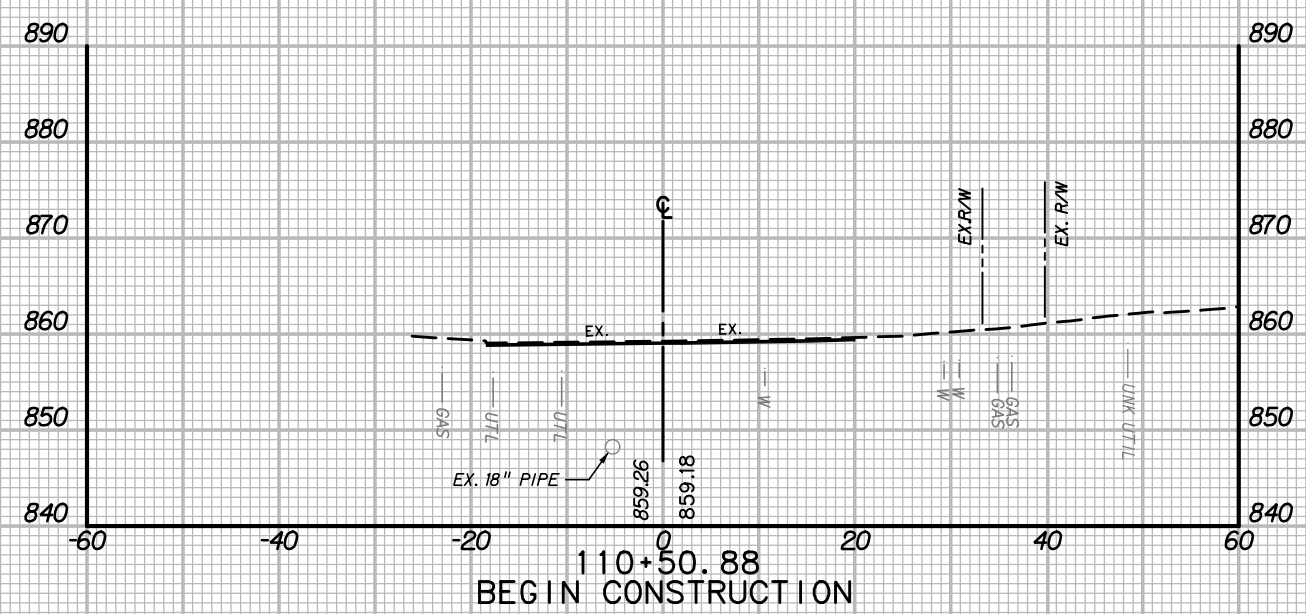
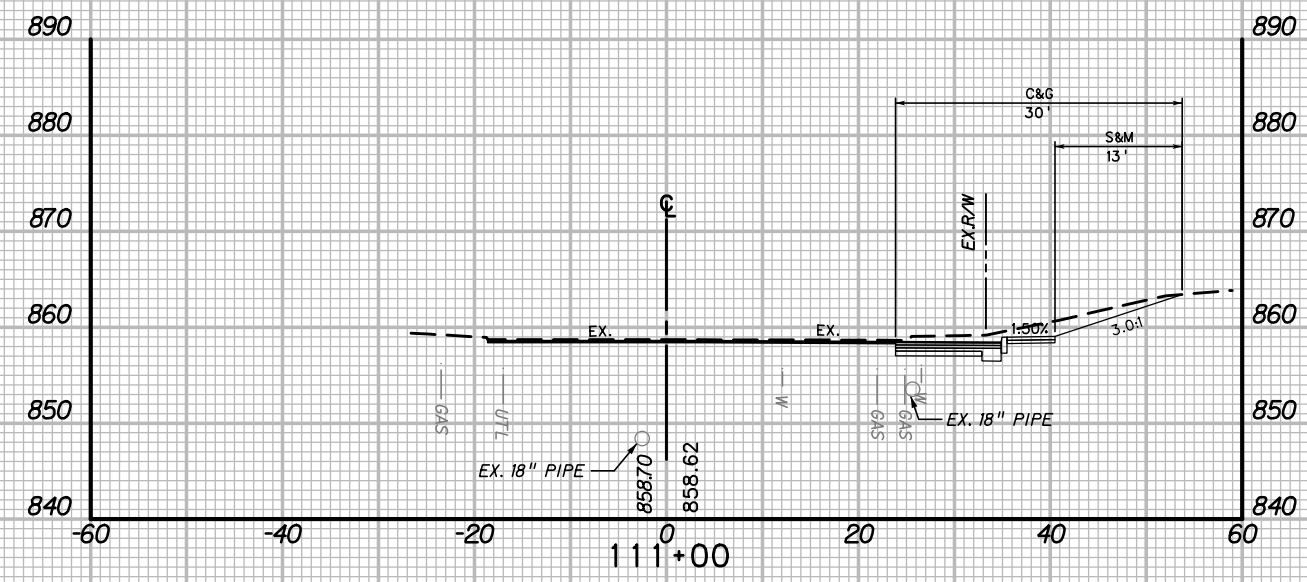
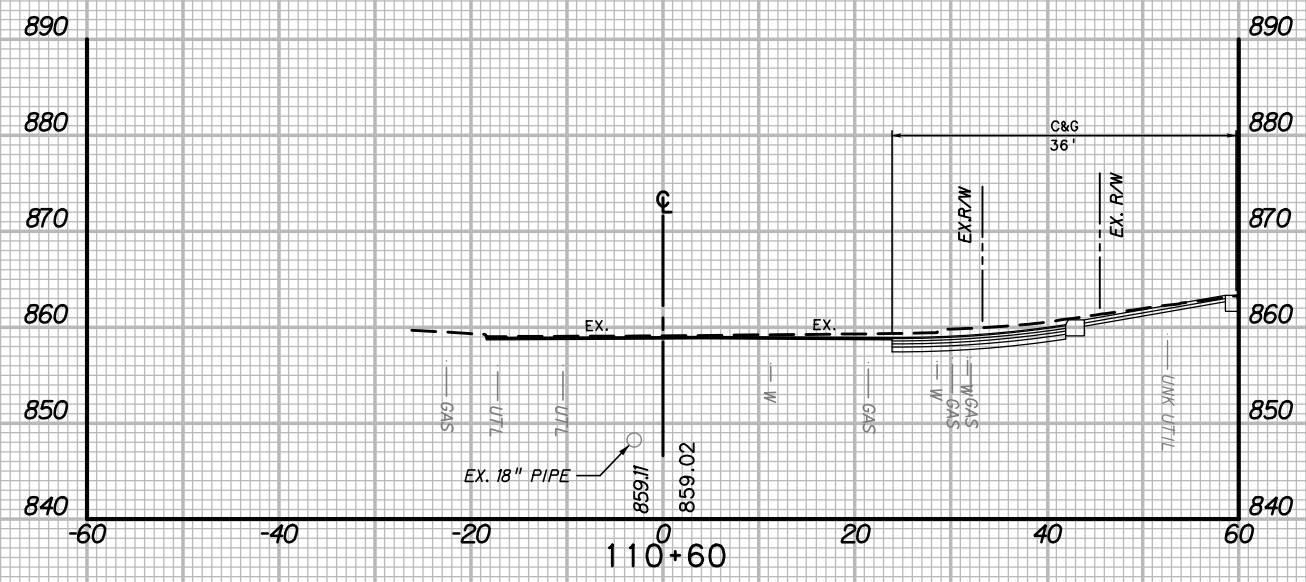
DESIGNED	DATE
ALT	09/2020
DRAWN	LNR
CHECKED	JDV
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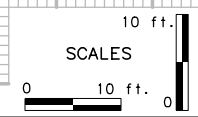
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLASS. (SF)	UNUSABLE (CY)	UNCLASS. (SF)	SELECT (CY)
11+20	20	3	160	20	500	33	29	0	0
11+00	20	13	260	30	600	46	0	0	0
110+80	20	13	130	30	660	43	0	0	0
110+60	9	0	0	36	162	36	0	0	0
110+50.88	0	0	0	0	0	9	0	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED	DATE	BY
FINAL SURVEY PLOTTED	DATE	BY
AREAS CHECKED	DATE	BY
NO.		



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

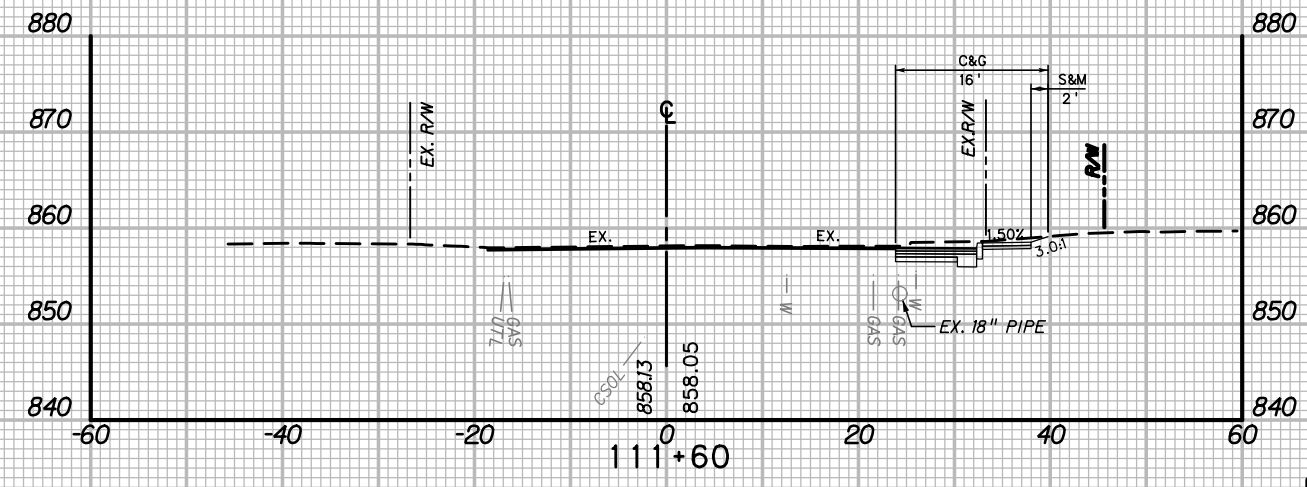
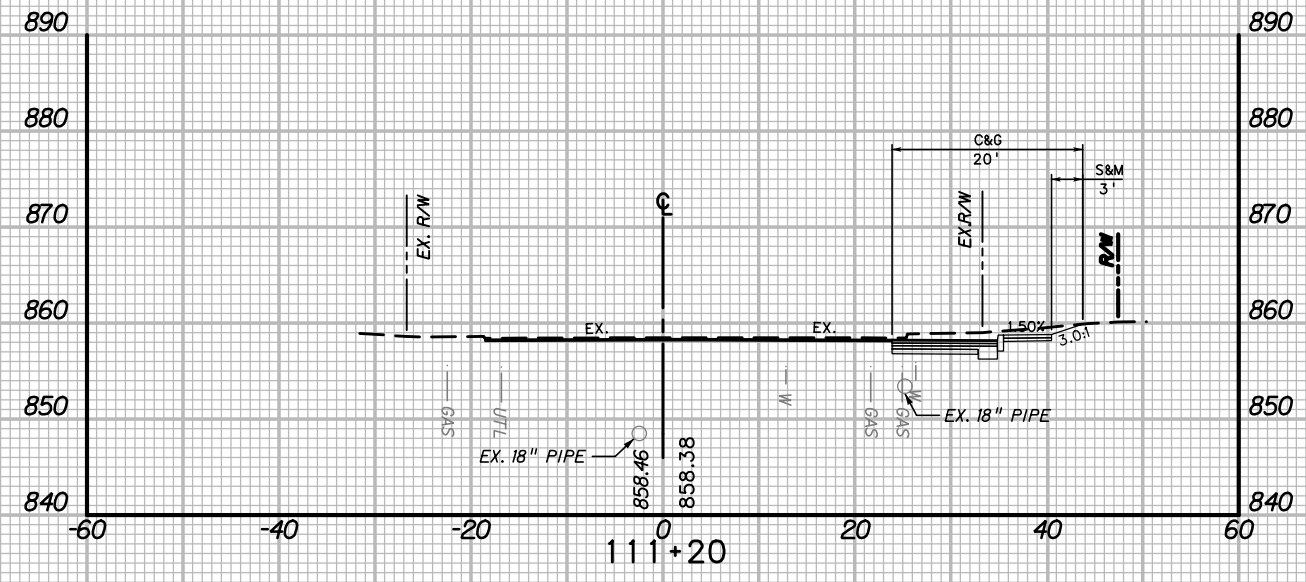
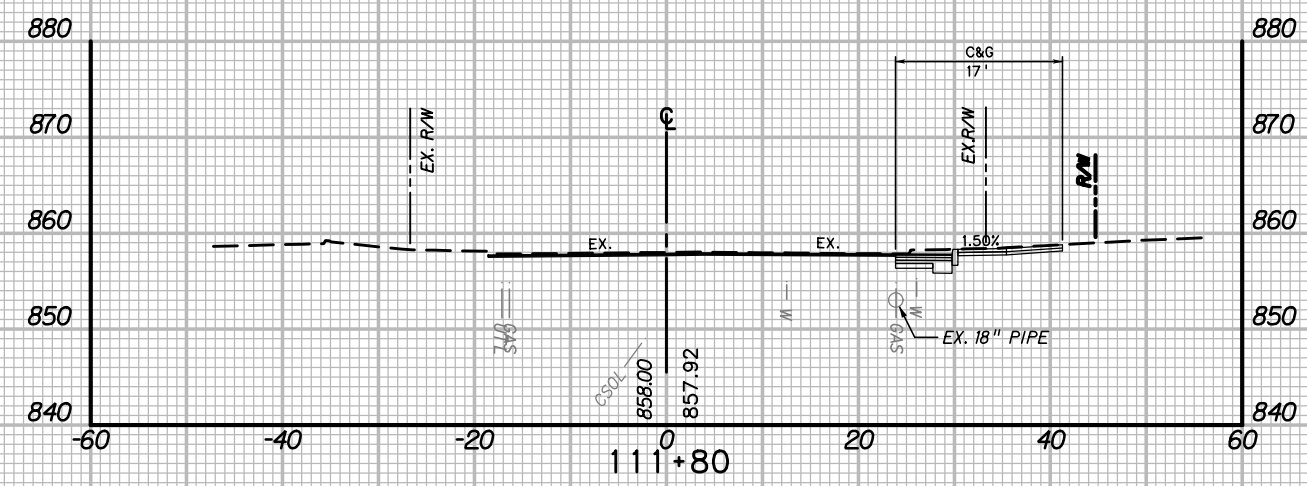
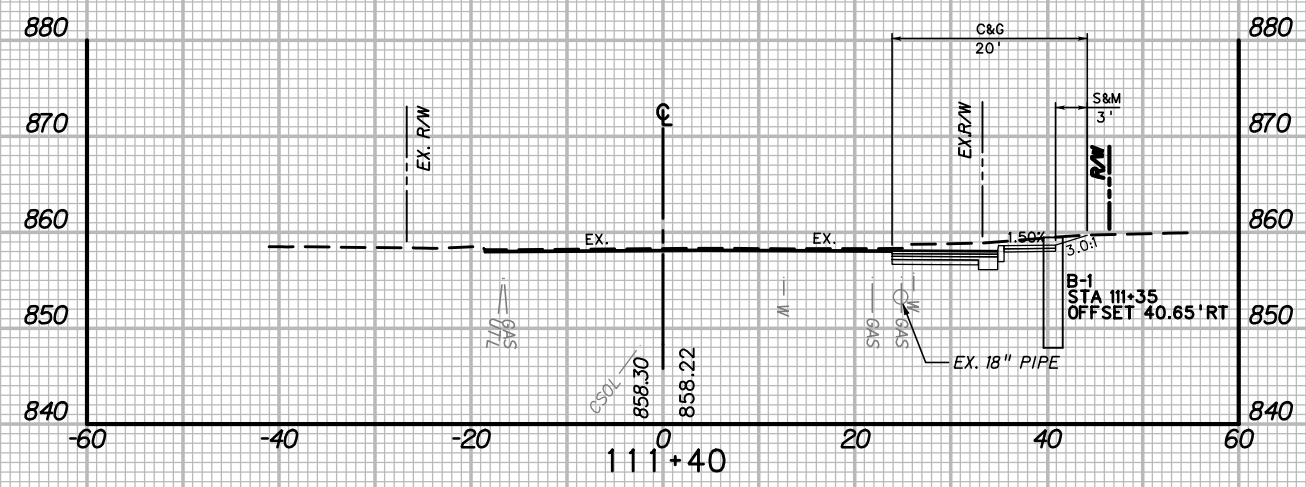
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 110+51 - STA. 111+00

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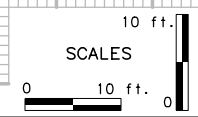
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		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
112+00	20	0	0	9	260	12	12	0	0
111+80	20	0	0	17	330	21	21	0	0
111+60	20	2	50	16	360	24	21	0	0
111+40	20	3	60	20	400	34	25	0	0
111+20	20	3	60	20	400	33	25	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED	DATE	BY
TEMPLATE	DATE	BY
BOOK	DATE	BY
AREAS CHECKED	DATE	BY
NO.	DATE	BY



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



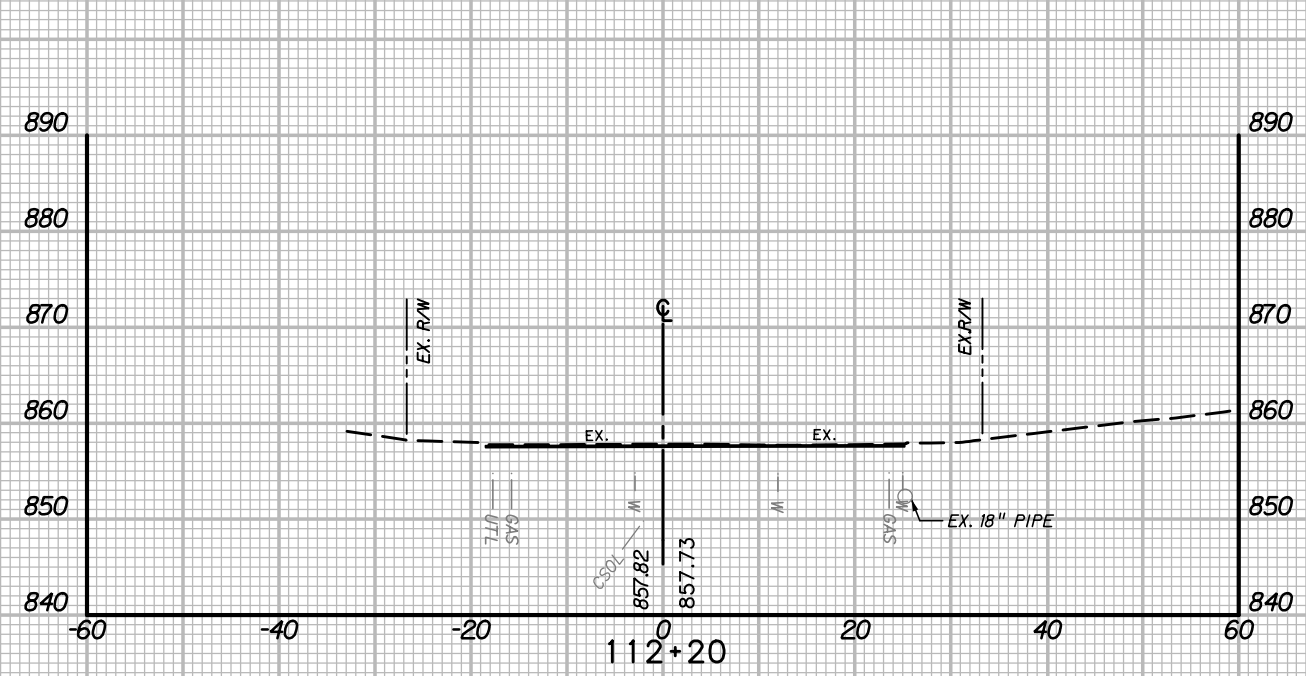
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 111+20 - STA. 111+80

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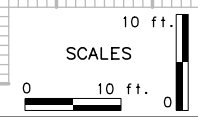
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
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112+60	20	0	0	0	0	0	0	0	0
112+40	20	0	0	0	0	0	0	0	0
112+20	20	0	0	0	0	4	0	0	0
112+00	20	0	0	9	12	0	0	0	0

ORIGINAL SURVEY PLOTTED	FINAL SURVEY PLOTTED	DATE	BY
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///	///	///	///
///	///	///	///
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US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



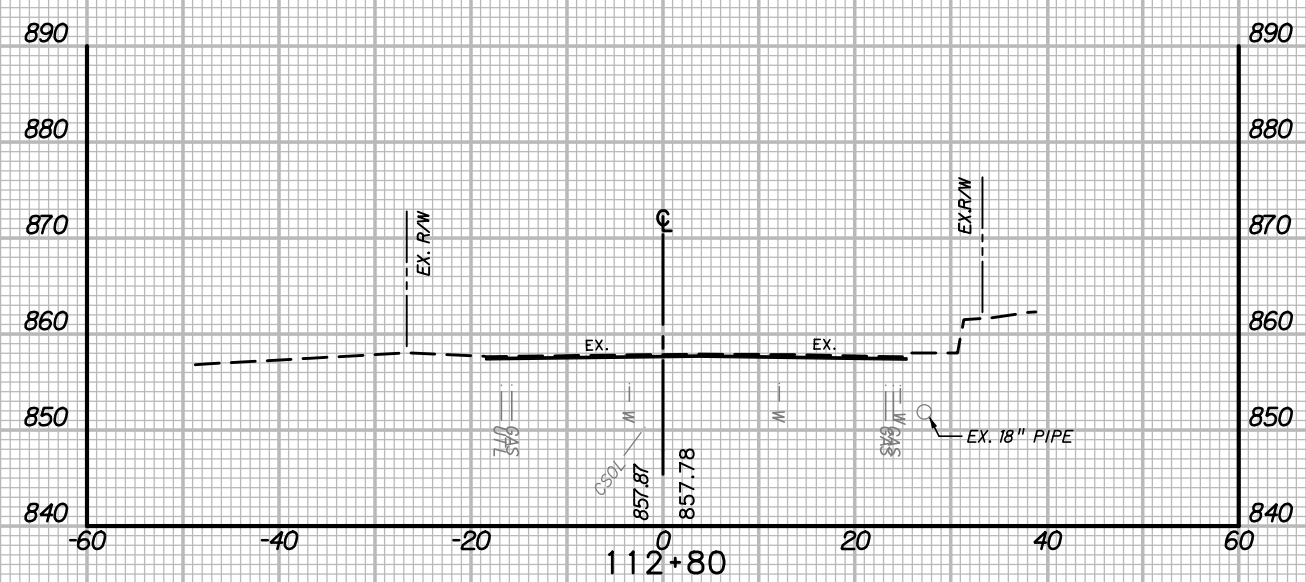
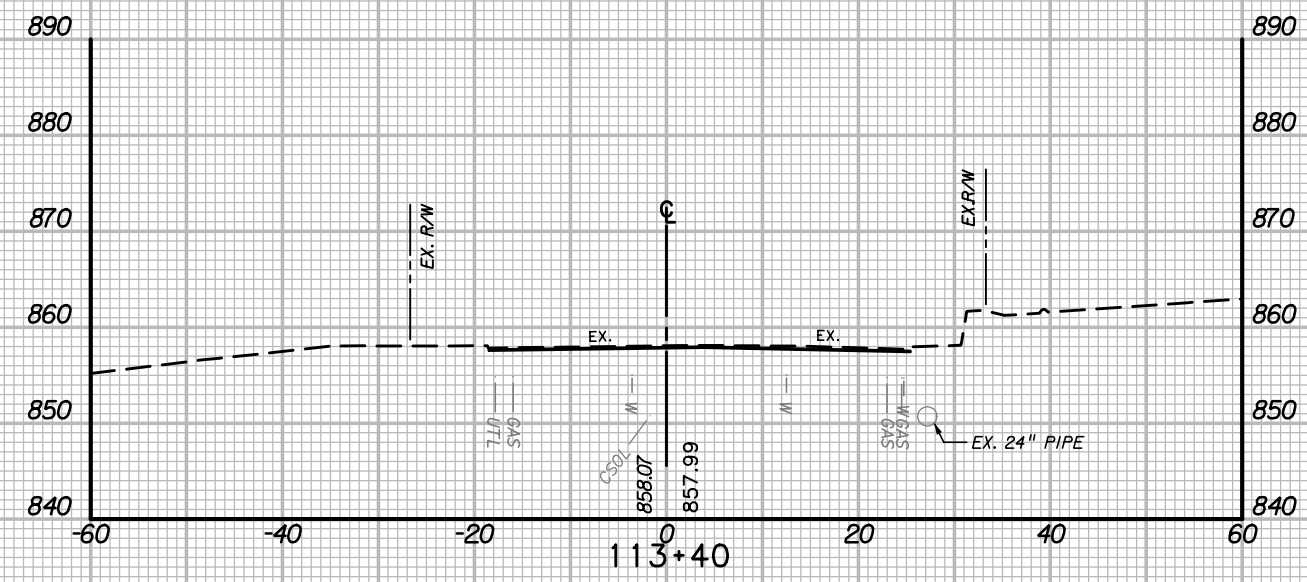
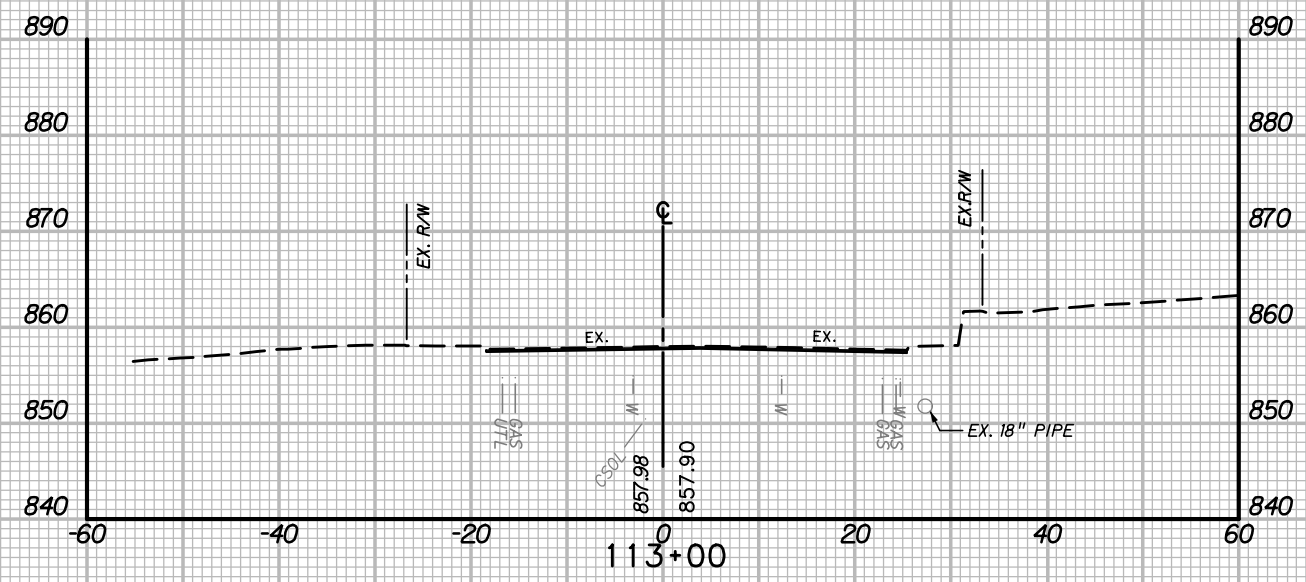
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 112+00 - STA. 112+60

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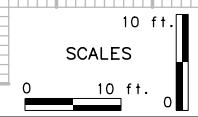
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
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113+40	20	0	0	0	0	0	0	0	0
113+20	20	0	0	0	0	0	0	0	0
113+00	20	0	0	0	0	0	0	0	0
112+80	20	0	0	0	0	0	0	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY	DATE	BY
SURVEY PLOTTED	///	///	///	///
FINAL SURVEY PLOTTED	///	///	///	///
AREAS CHECKED	///	///	///	///
NO.	///	///	///	///



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



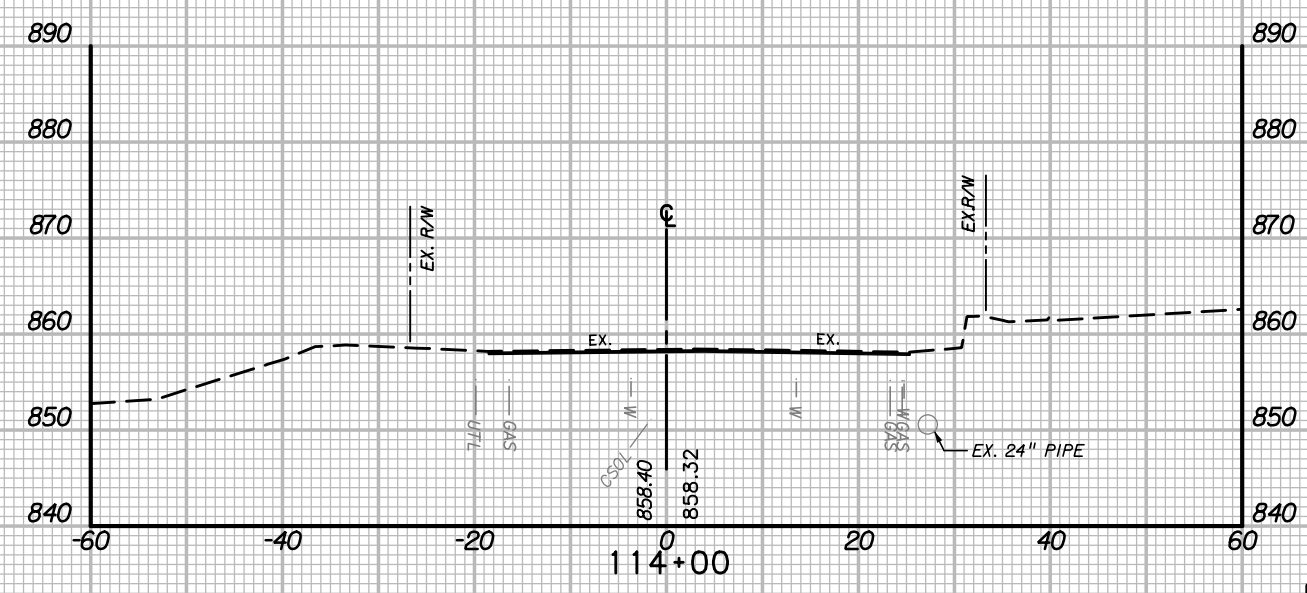
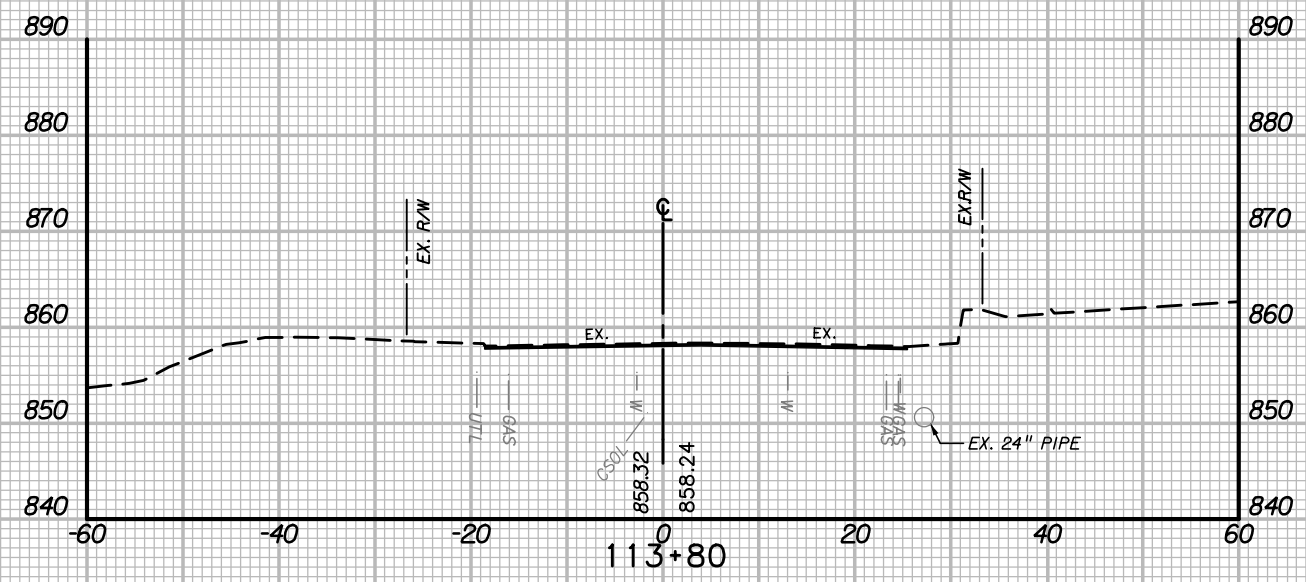
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 112+80 - STA. 113+40

9/24/2020 3:48:43 PM \\sfr\proj\_scs\Bachman1.spr

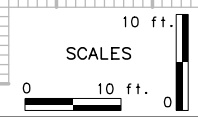
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	SELECT (CY)
114+40	20	0	0	0	0	0	0	0	0
114+20	20	0	0	0	0	0	0	0	0
114+00	20	0	0	0	0	0	0	0	0
113+80	20	0	0	0	0	0	0	0	0
113+60	20	0	0	0	0	0	0	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY	DATE	BY	DATE
SURVEY PLOTTED	///	///	///	///	///
TEMPLATE AREAS CHECKED	///	///	///	///	///
BOOK NO.	///	///	///	///	///
NO.	///	///	///	///	///



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.

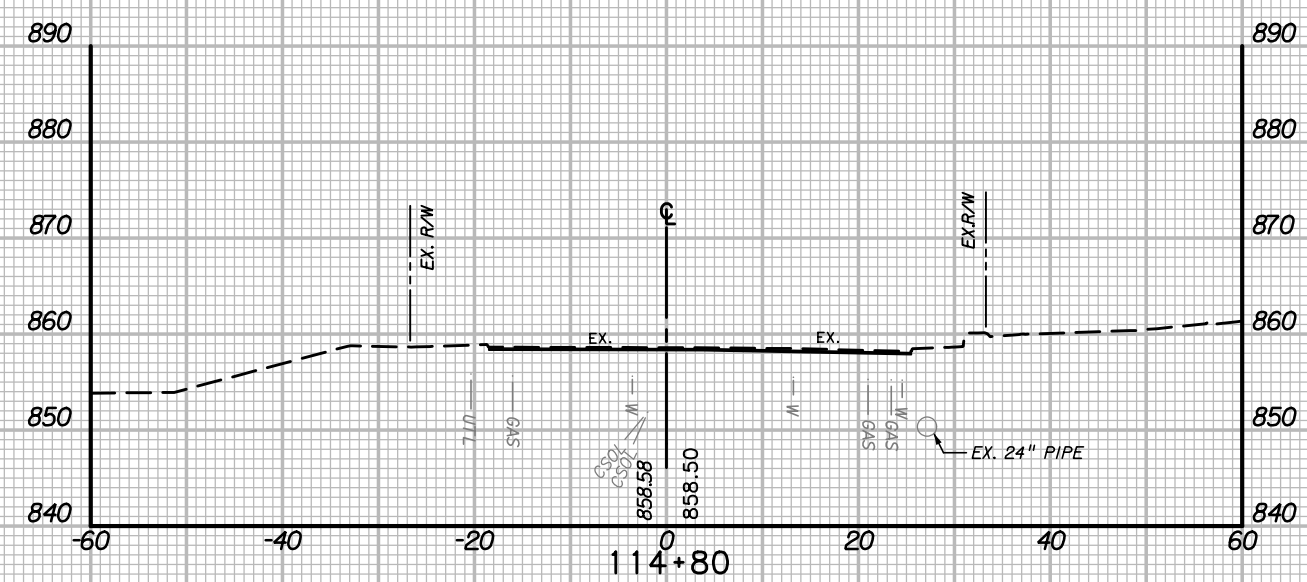
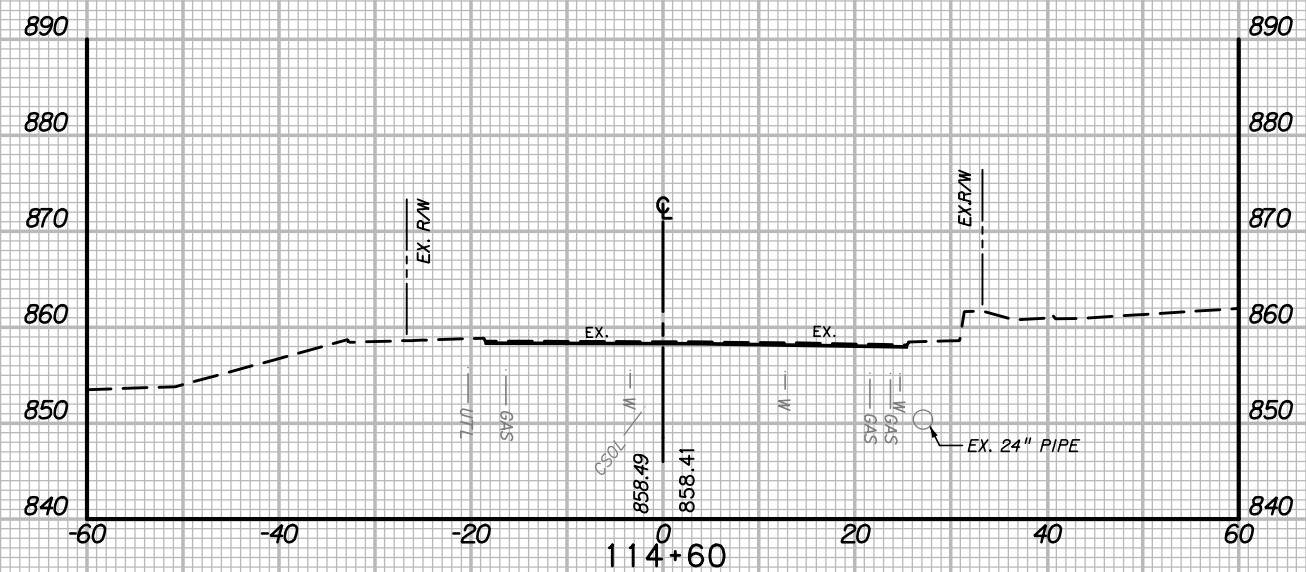


REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 113+60 - STA. 114+20

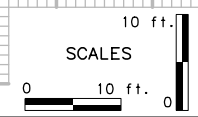
9/24/2020 3:48:44 PM \\s:\p\proj\sc\Brecther\159

STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLASS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	SELECT (CY)
115+20	20	0	0	0	0	0	0	0	0
115+00	20	0	0	0	0	0	0	0	0
114+80	20	0	0	0	0	0	0	0	0
114+60	20	0	0	0	0	0	0	0	0
114+40	20	0	0	0	0	0	0	0	0



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 114+40 - STA. 115+00

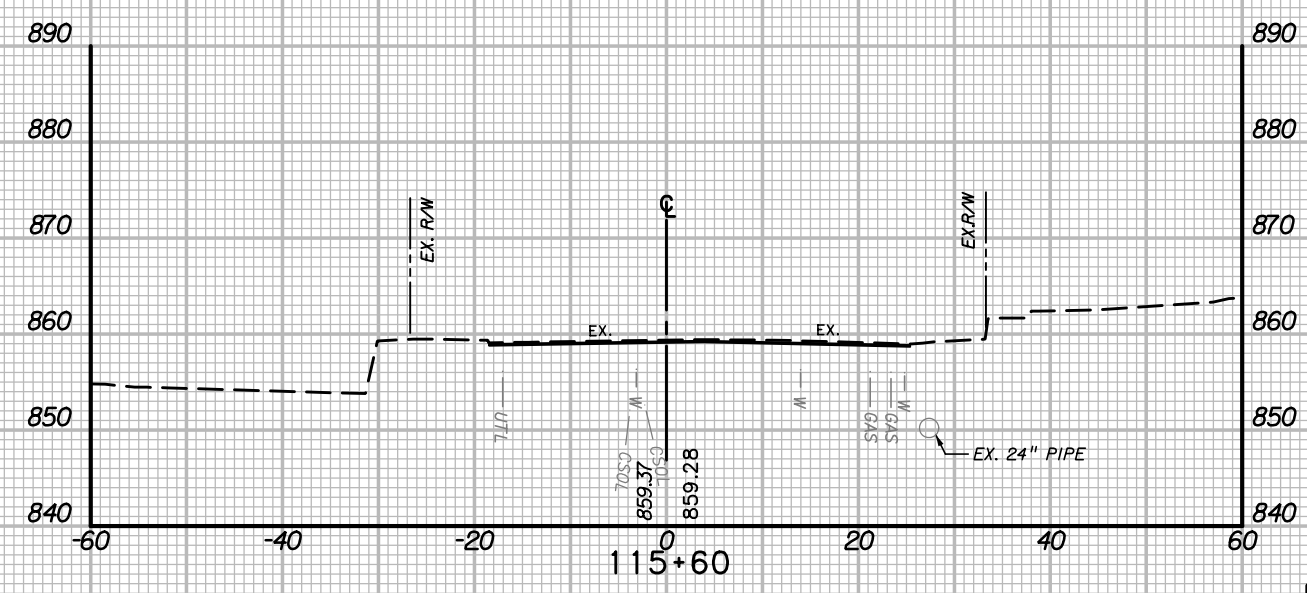
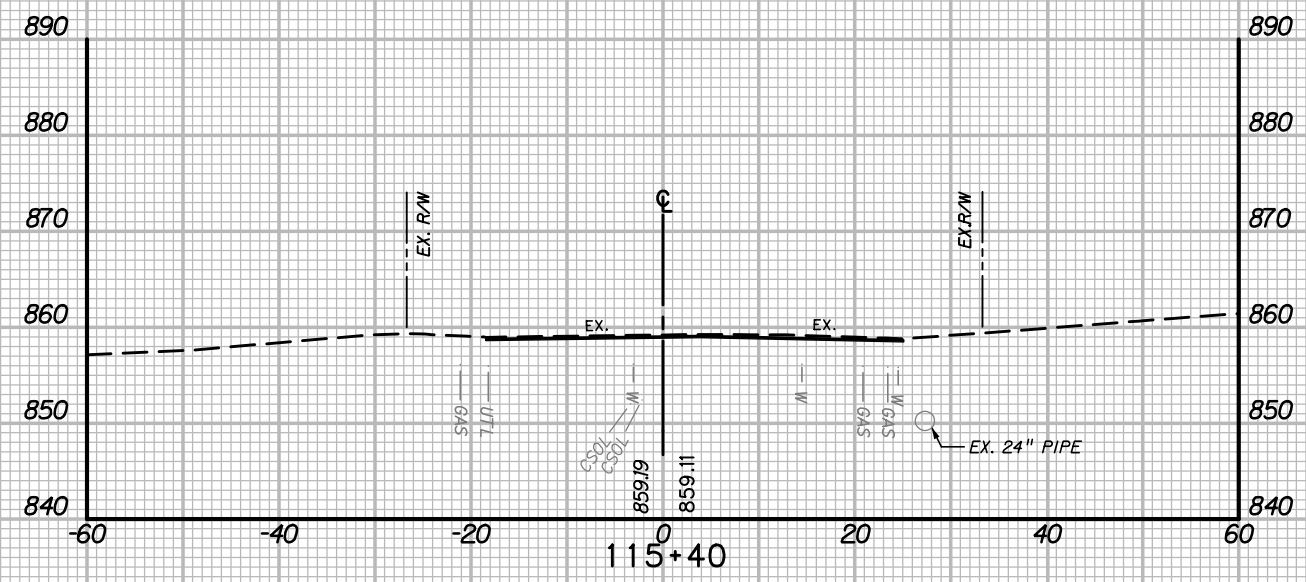
ORIGINAL SURVEY PLOTTED	FINAL SURVEY PLOTTED	BY	DATE
ORIGINAL SURVEY BOOK NO.	FINAL SURVEY BOOK NO.	BY	DATE
AREAS CHECKED	AREAS CHECKED	BY	DATE



9/24/2020 3:48:44 PM \\NFRR01\sc\_Brectner197

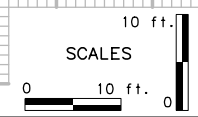
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION				EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)	SELECT (SF)	SELECT (CY)
116+00	20	0	0	0	0	0	0	0	0	0	0
115+80	20	0	0	0	0	0	0	0	0	0	0
115+60	20	0	0	0	0	0	0	0	0	0	0
115+40	20	0	0	0	0	0	0	0	0	0	0
115+20	20	0	0	0	0	0	0	0	0	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY	DATE	BY	DATE
SURVEY PLOTTED	///	///	///	///	///
TEMPLATE AREAS CHECKED	///	///	///	///	///
BOOK NO.	///	///	///	///	///
NO.	///	///	///	///	///



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



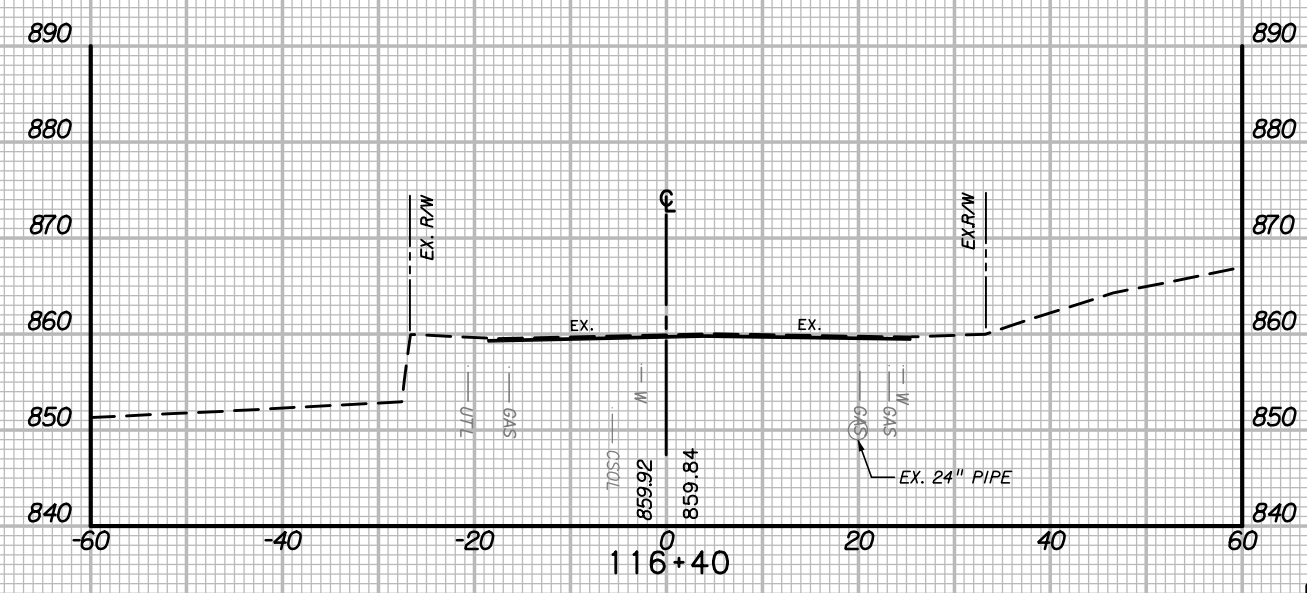
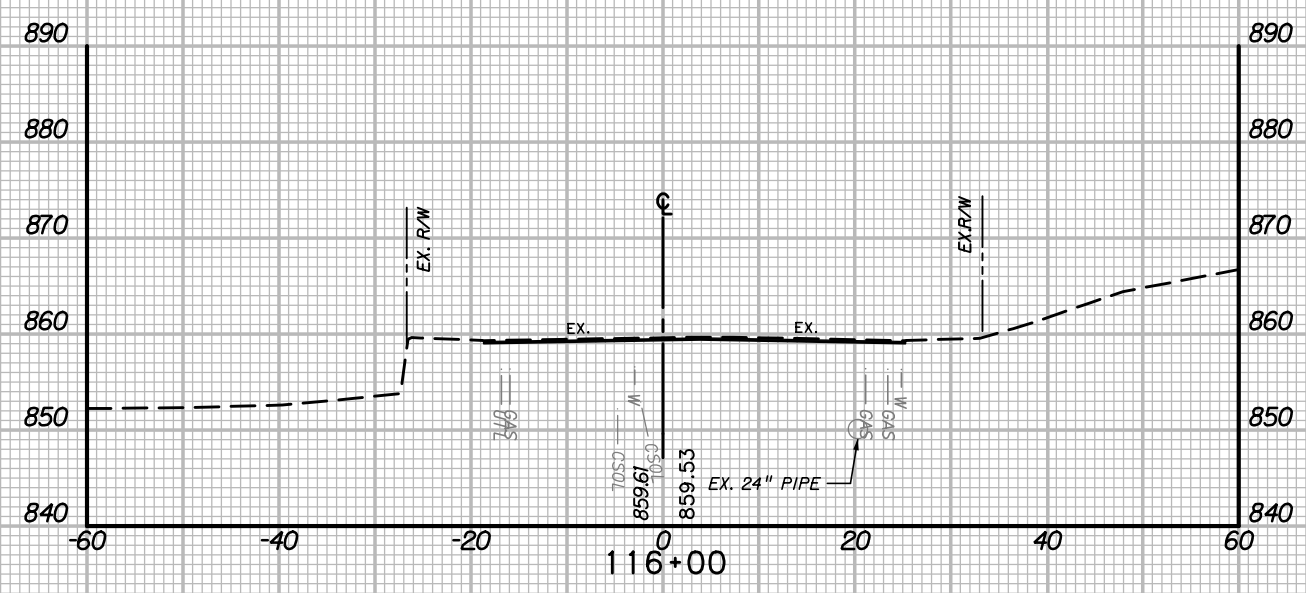
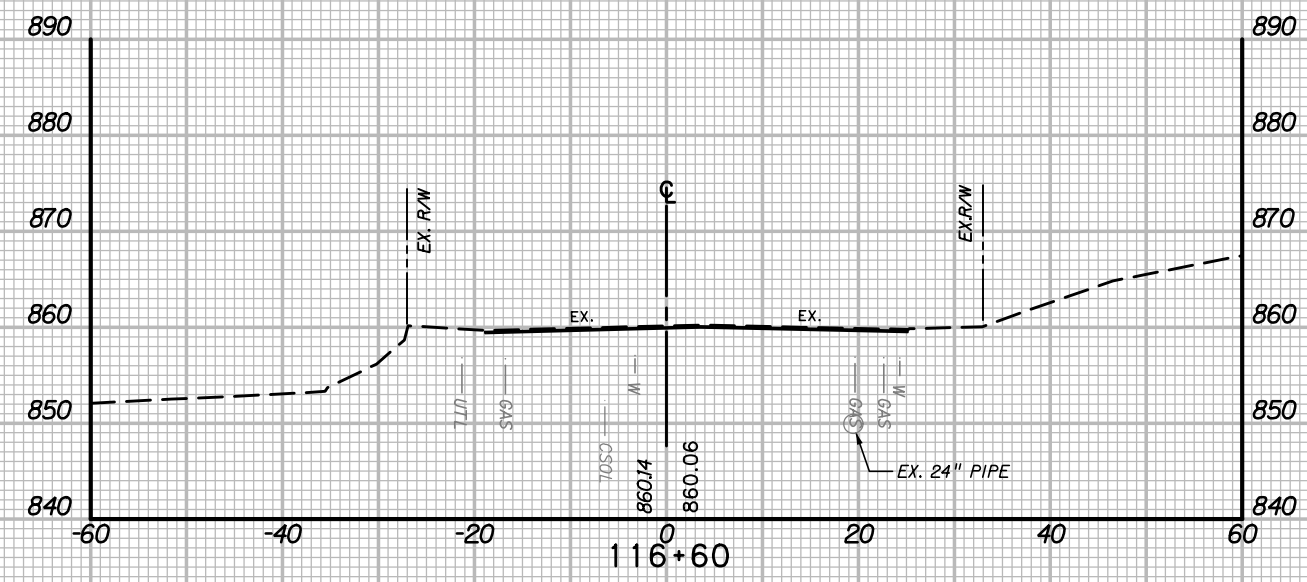
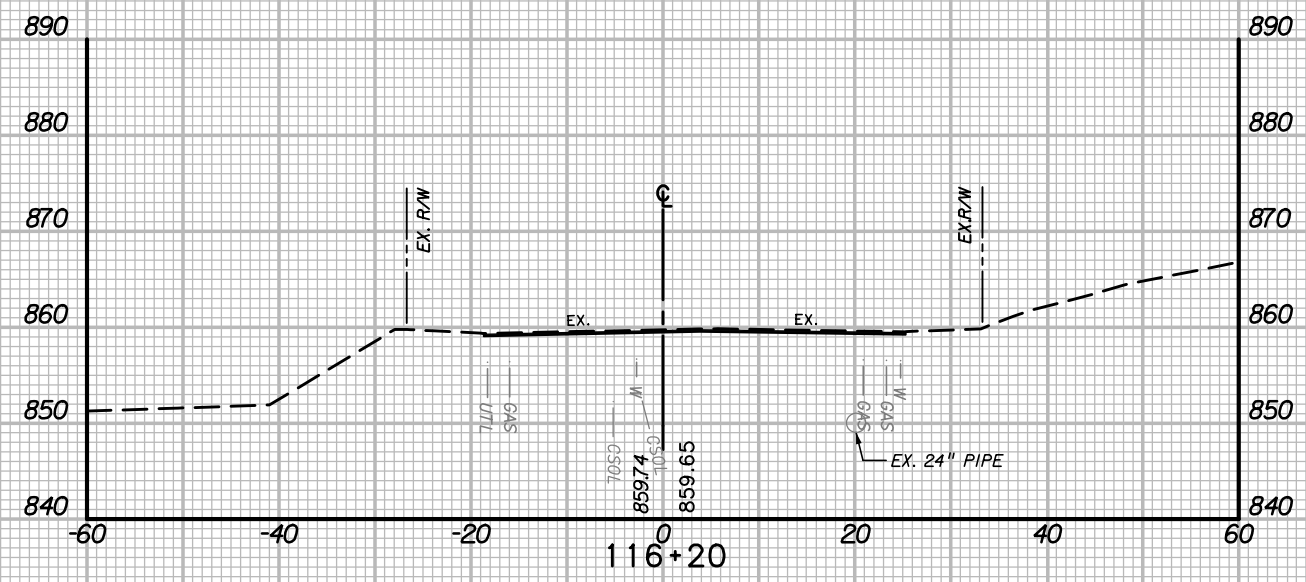
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 115+20 - STA. 115+80

9/24/2020 3:45:45 PM \\NFV\Fryc\Brecth197

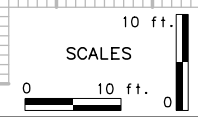
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	SELECT (CY)
116+80	20	0	0	0	0	0	0	0	0
116+60	20	0	0	0	0	0	0	0	0
116+40	20	0	0	0	0	0	0	0	0
116+20	20	0	0	0	0	0	0	0	0
116+00	20	0	0	0	0	0	0	0	0

ORIGINAL	DATE	BY	FINAL	DATE	BY
SURVEY	PLOTTED	SURVEY	PLOTTED	SURVEY	PLOTTED
BOOK	NO.	BOOK	NO.	BOOK	NO.
AREAS	CHECKED	AREAS	CHECKED	AREAS	CHECKED



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



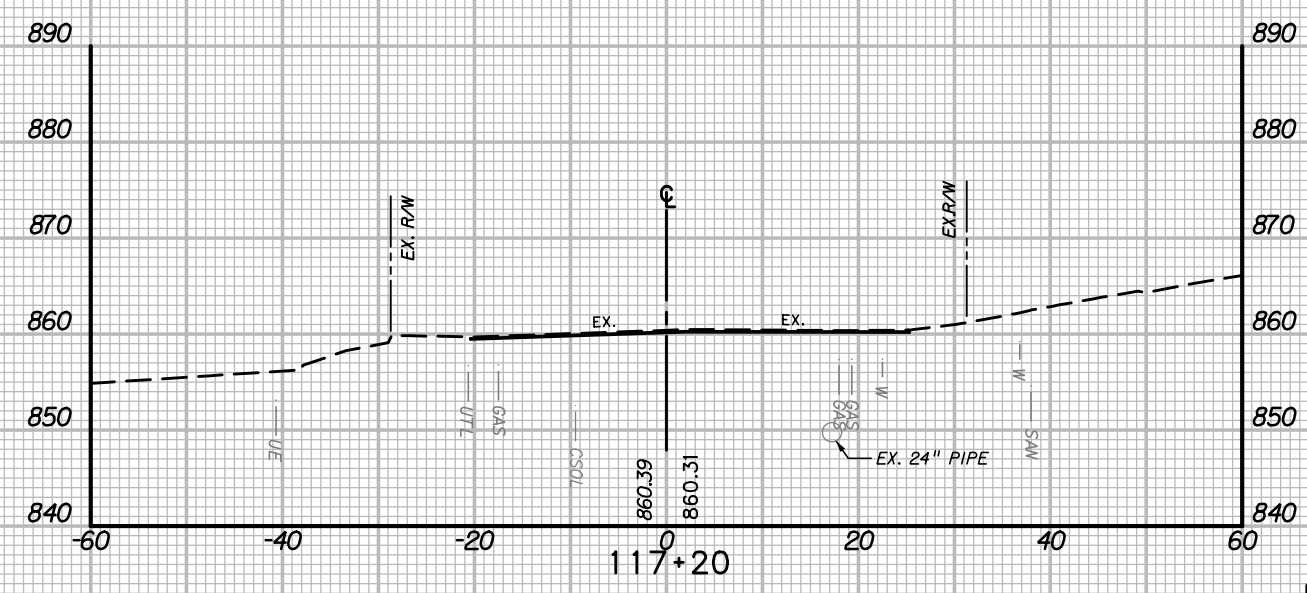
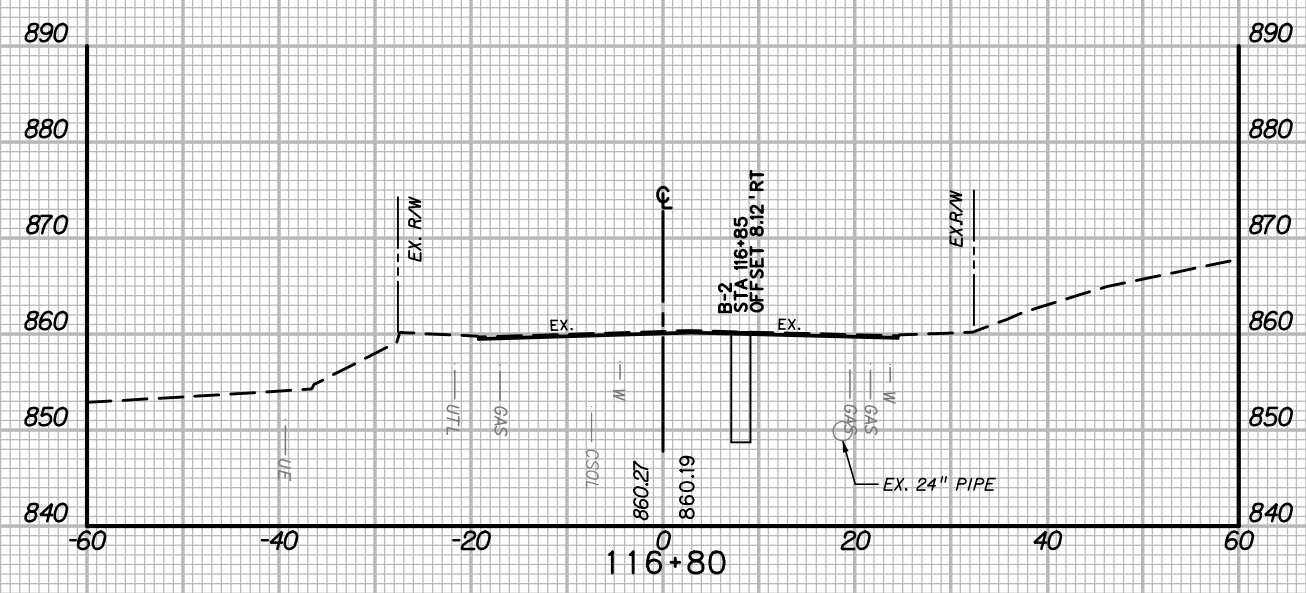
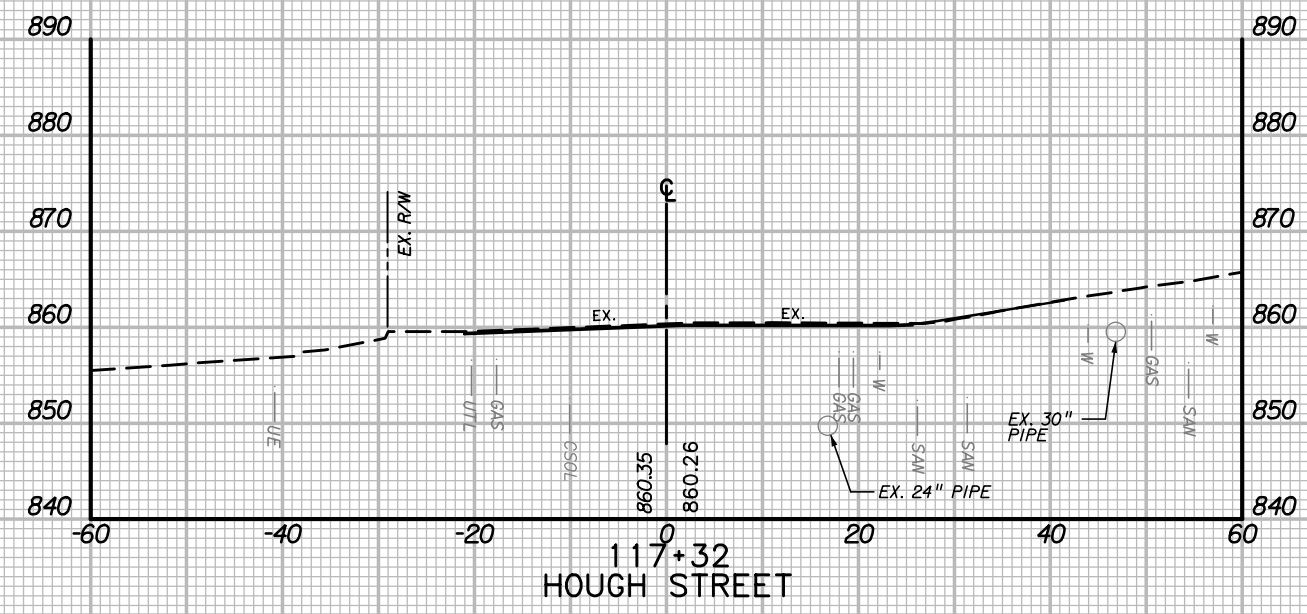
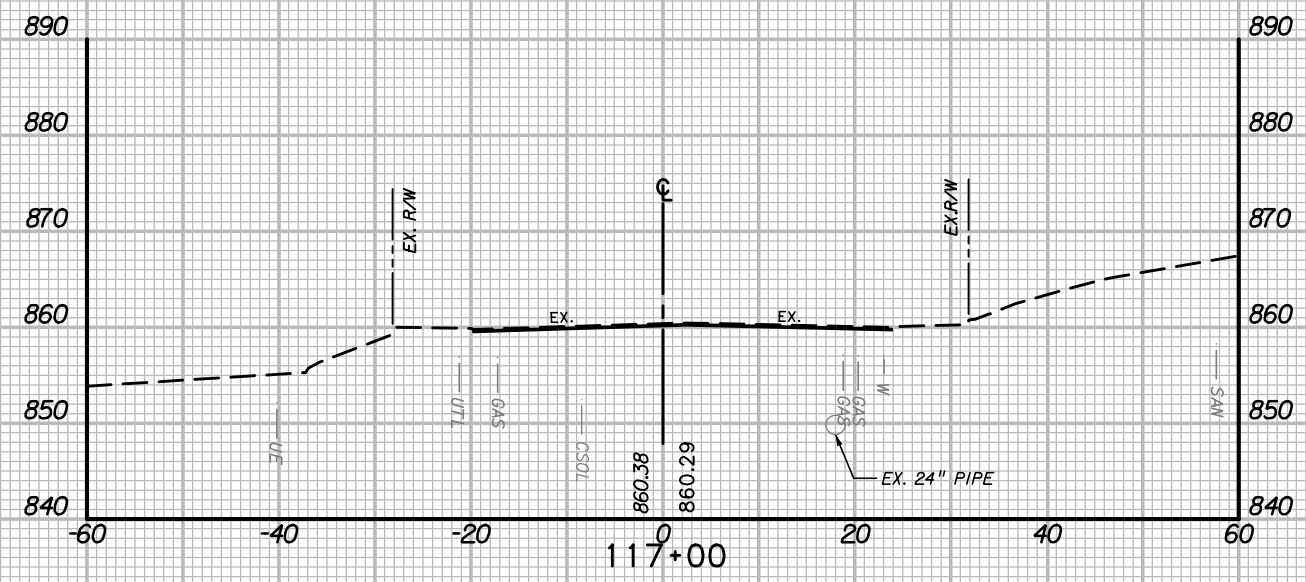
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 116+00 - STA. 116+60

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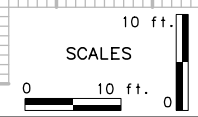
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION				EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)	SELECT (SF)	SELECT (CY)
		117+40	8	0	0	0	0	0	0	0	0
117+32	12	0	0	0	0	0	0	0	0	0	0
117+20	20	0	0	0	0	0	0	0	0	0	0
117+00	20	0	0	0	0	0	0	0	0	0	0
116+80	20	0	0	0	0	0	0	0	0	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY	DATE	BY
SURVEY PLOTTED	DATE	BY	DATE	BY
BOOK NO.	DATE	BY	DATE	BY
AREAS CHECKED	DATE	BY	DATE	BY
NO.	DATE	BY	DATE	BY



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



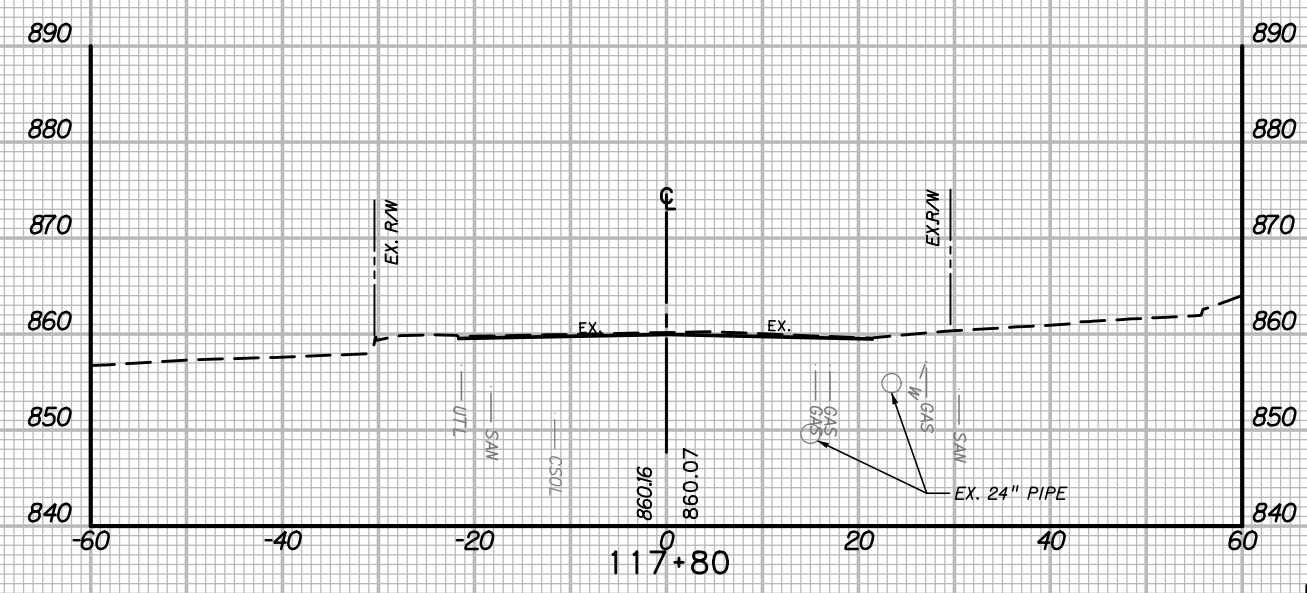
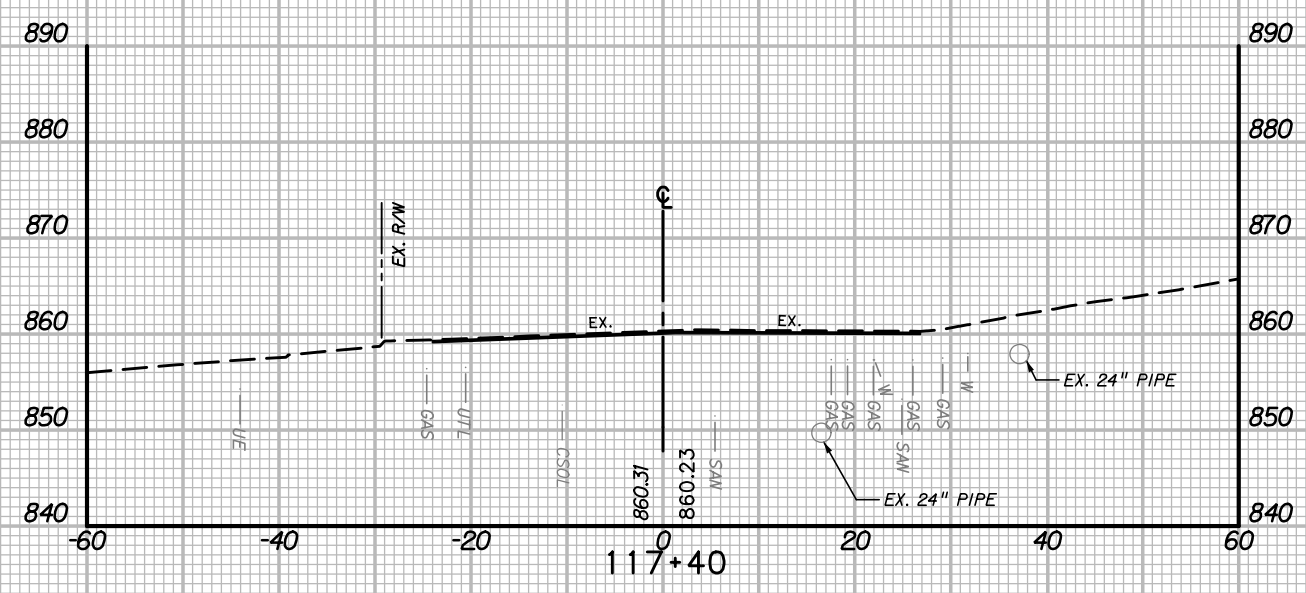
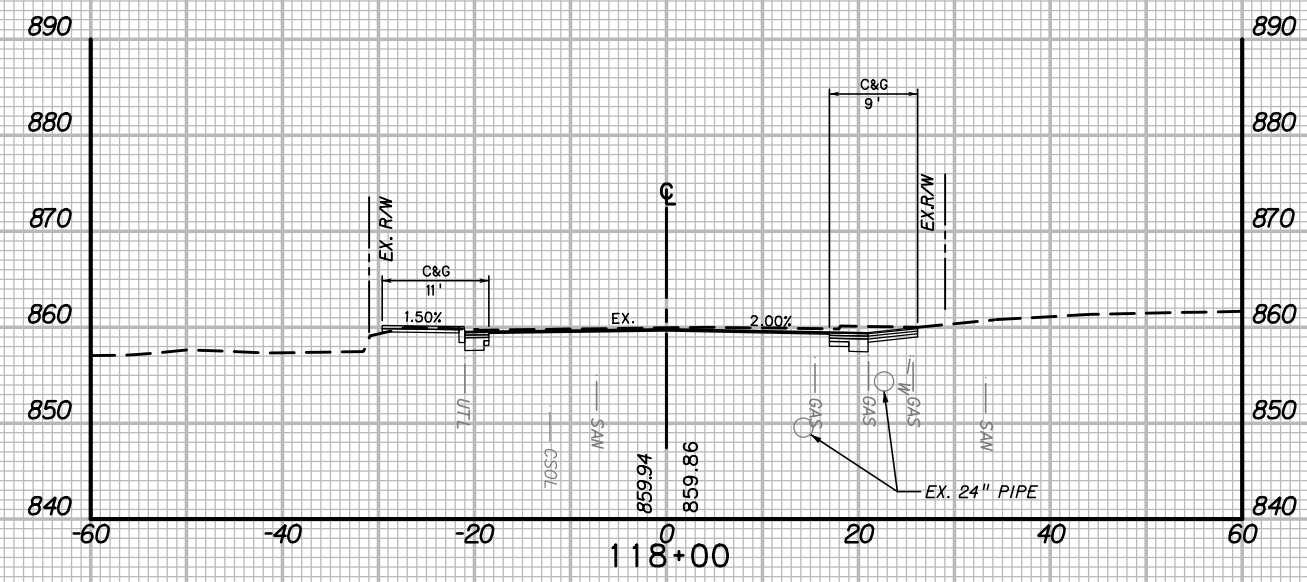
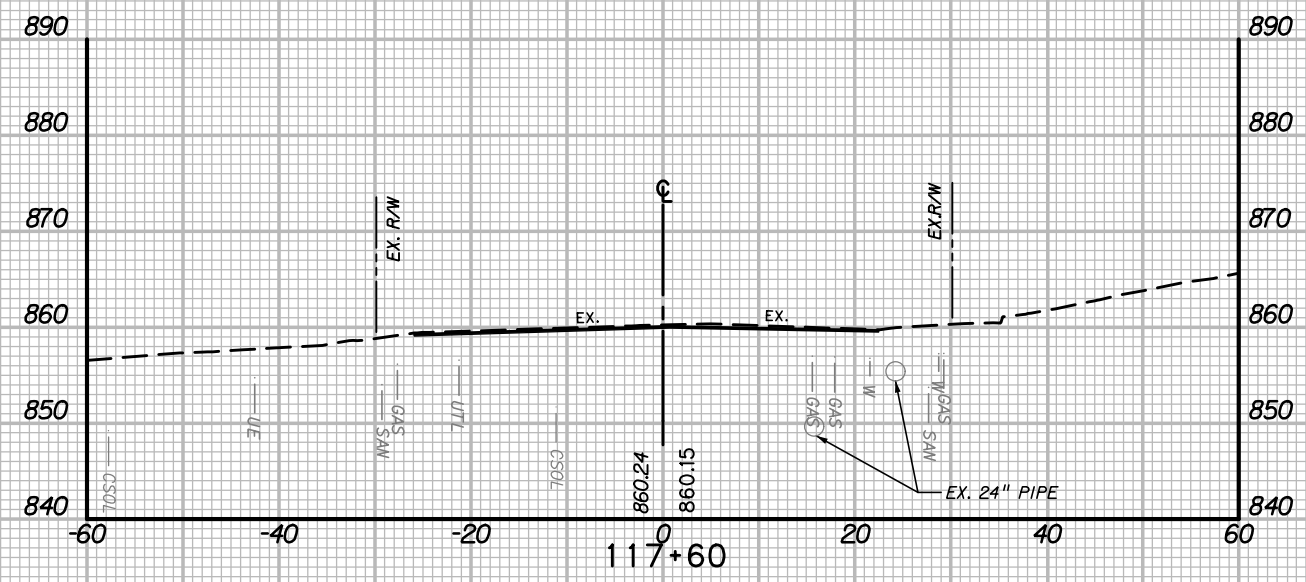
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 116+80 - STA. 117+32

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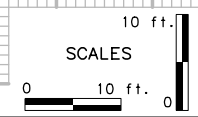


STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION				EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)	SELECT (SF)	SELECT (CY)
		118+20	0	0	21	33	0	0	0	0	0
118+00	20	0	0	410	21	0	0	0	0	0	0
117+80	20	0	0	200	9	0	0	0	0	0	0
117+60	20	0	0	0	0	0	0	0	0	0	0
117+40	20	0	0	0	0	0	0	0	0	0	0



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 117+40 - STA. 118+00

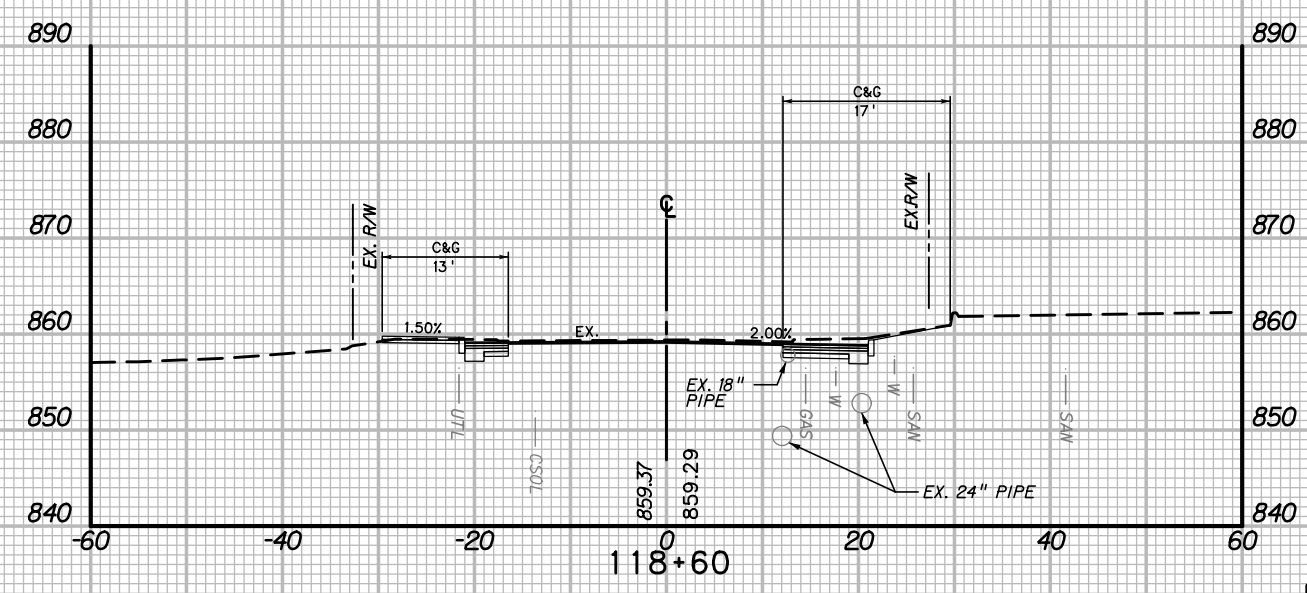
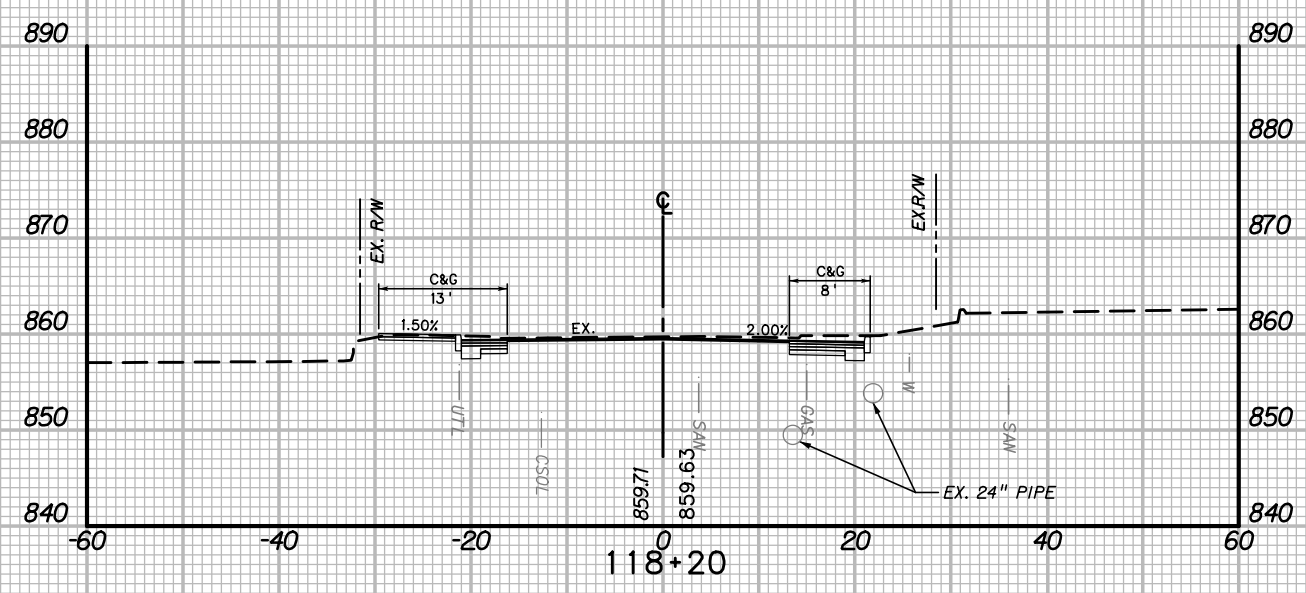
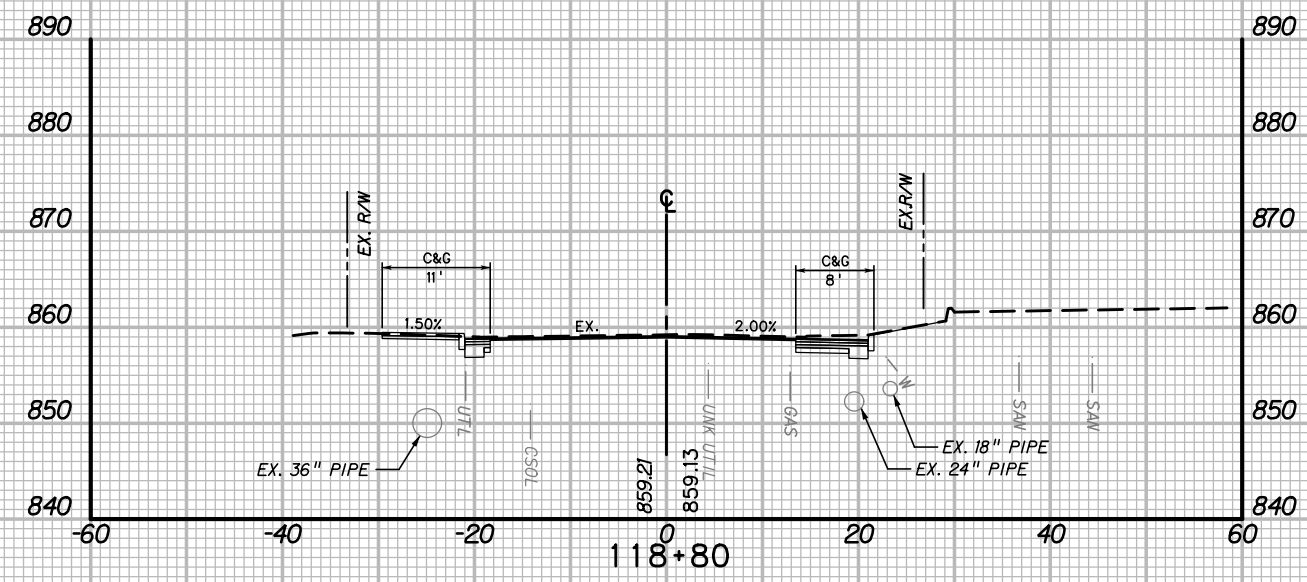
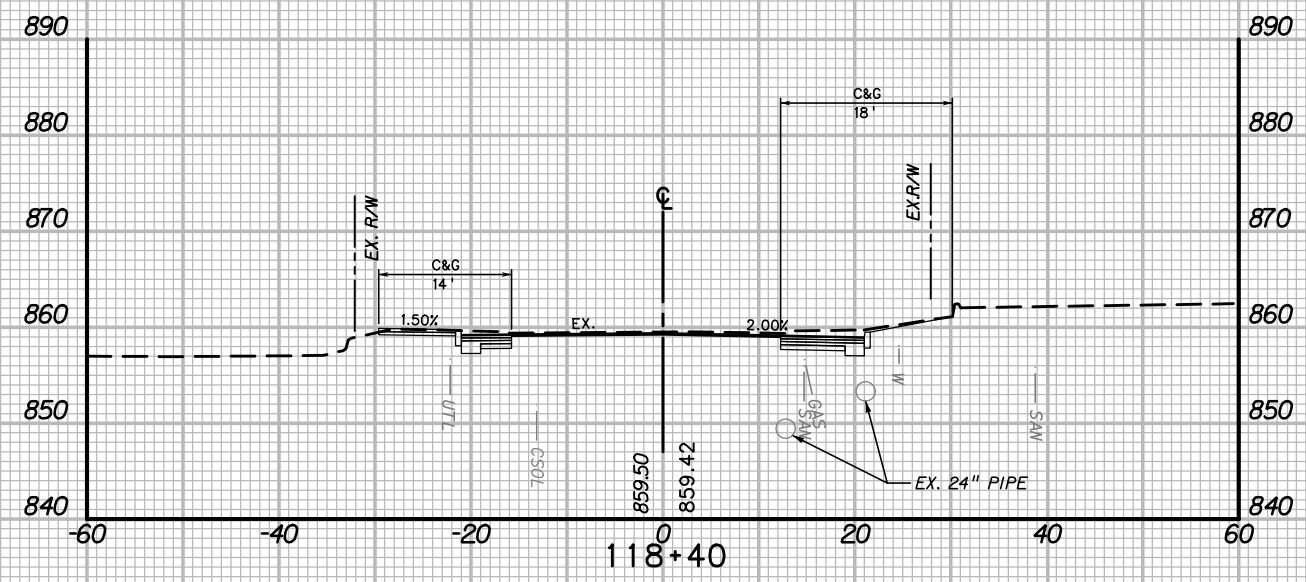
ORIGINAL SURVEY PLOTTED	DATE	BY	FINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED			SURVEY PLOTTED		
BOOK NO.			BOOK NO.		
AREAS CHECKED			AREAS CHECKED		



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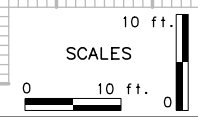
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLASS. (SF)	UNSUITABLE (CY)	UNCLASS. (SF)	SELECT (CY)
119+00	20	0	0	21	400	29	0	0	0
118+80	20	0	0	19	490	25	0	0	0
118+60	20	0	0	30	620	34	0	0	0
118+40	20	0	0	32	530	37	0	0	0
118+20	20	0	0	21	33	0	0	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED	DATE	BY
FINAL SURVEY PLOTTED	DATE	BY
AREAS CHECKED	DATE	BY
NO.		



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



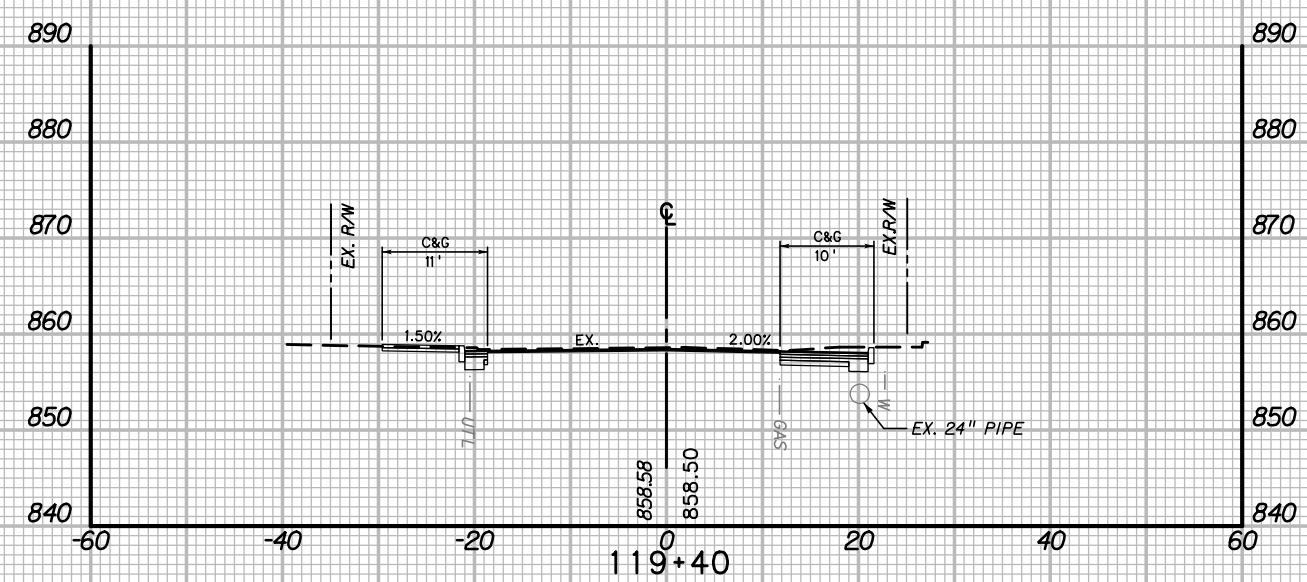
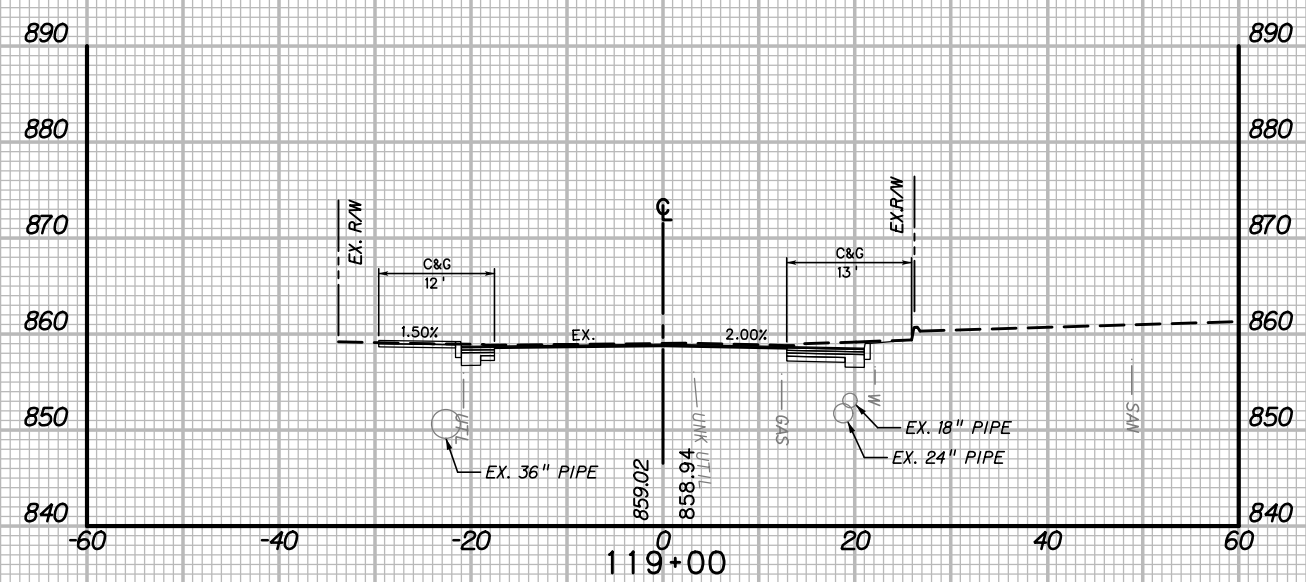
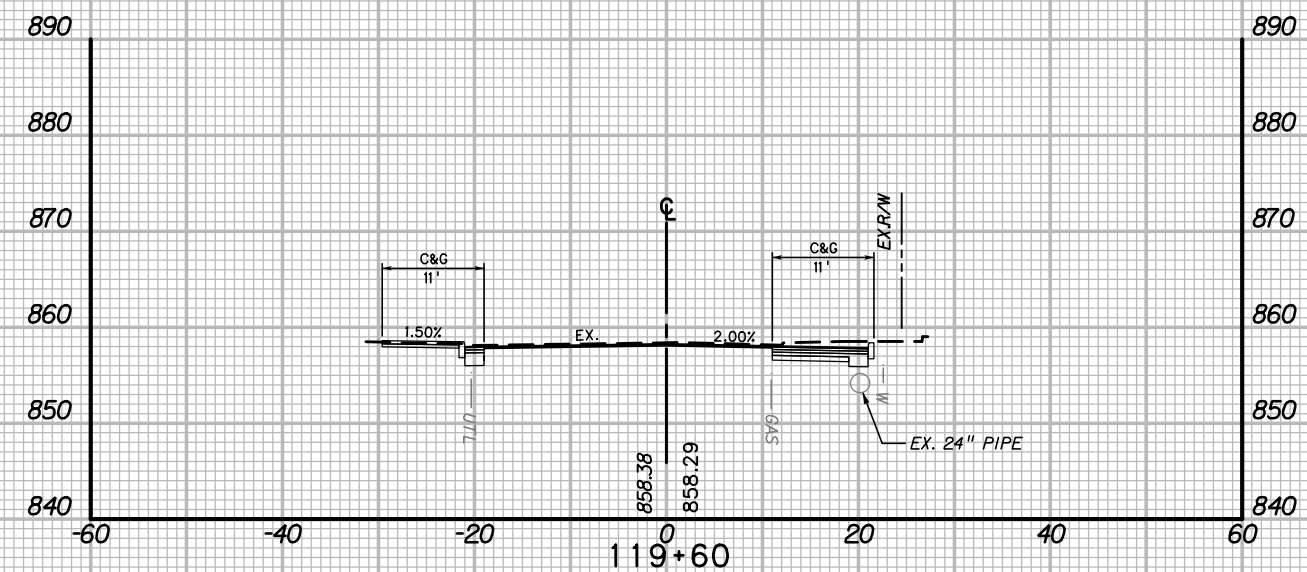
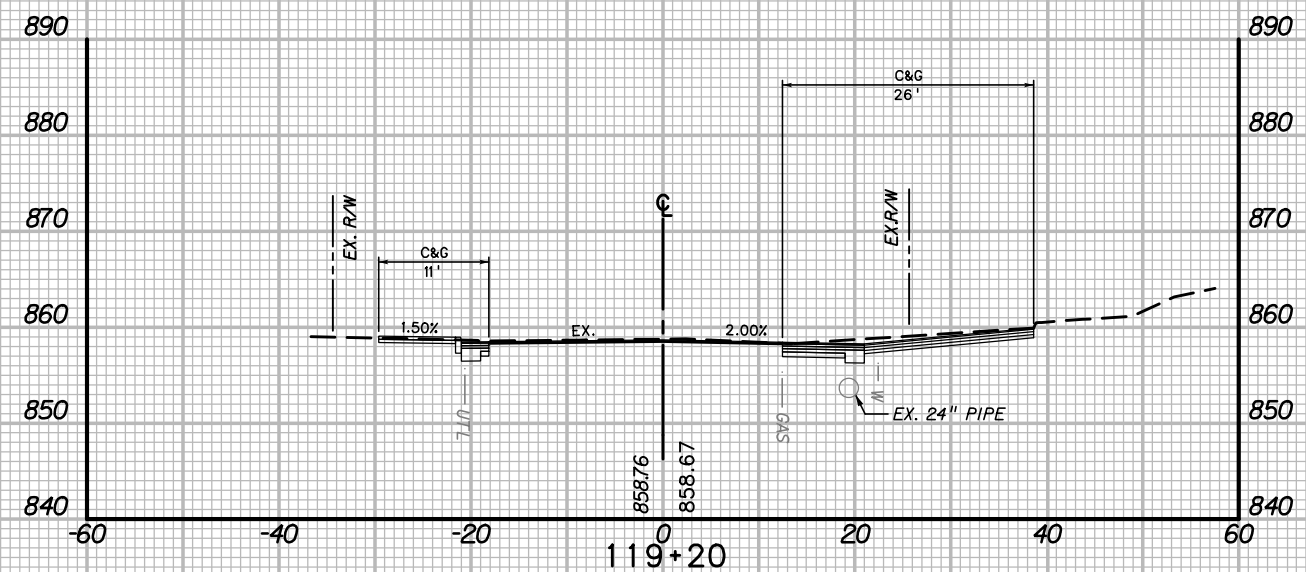
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 118+20 - STA. 118+80

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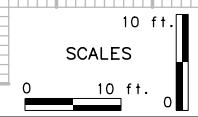
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
119+80	20	3	30	30	610	35	24	0	0
119+60	20	0	0	31	610	30	22	0	0
119+40	20	0	0	33	700	29	28	0	0
119+20	20	0	0	37	580	47	28	0	0
119+00	20	0	0	21	29	0	0	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED	DATE	BY
FINAL SURVEY PLOTTED	DATE	BY
NO. OF BOOKS		
NO. OF SHEETS		
AREAS CHECKED		



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

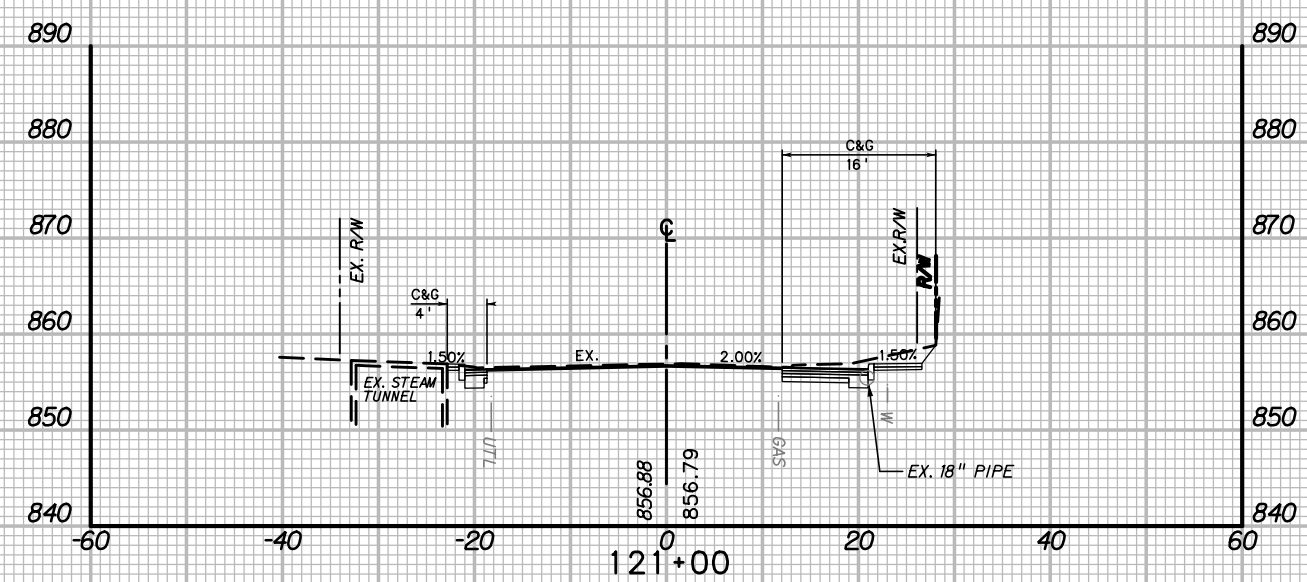
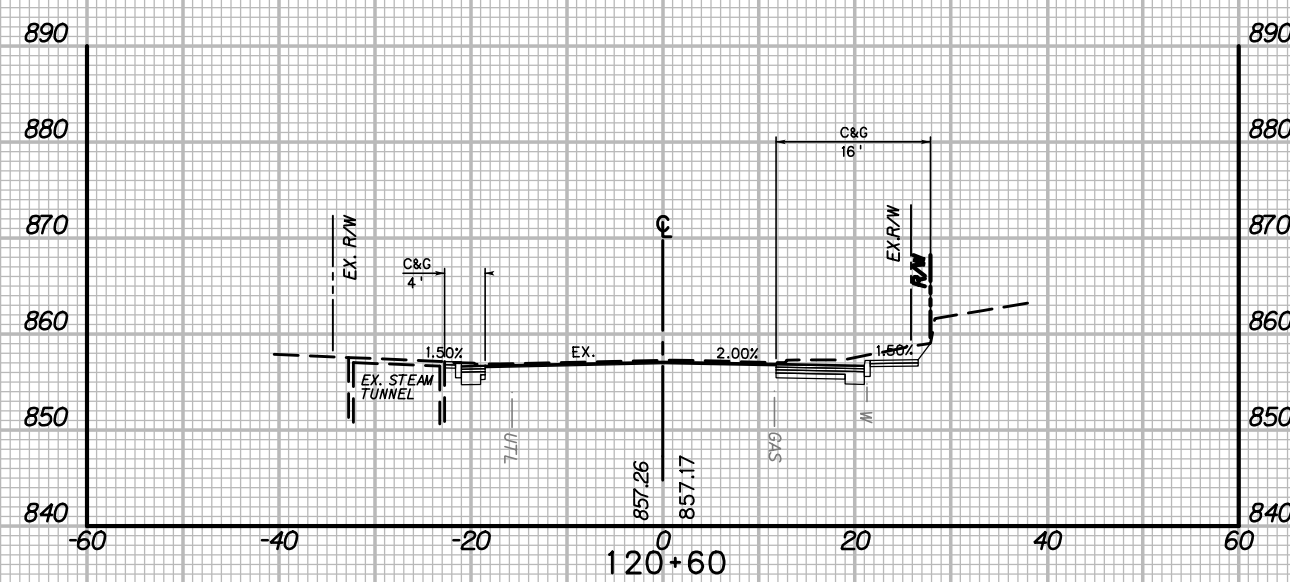
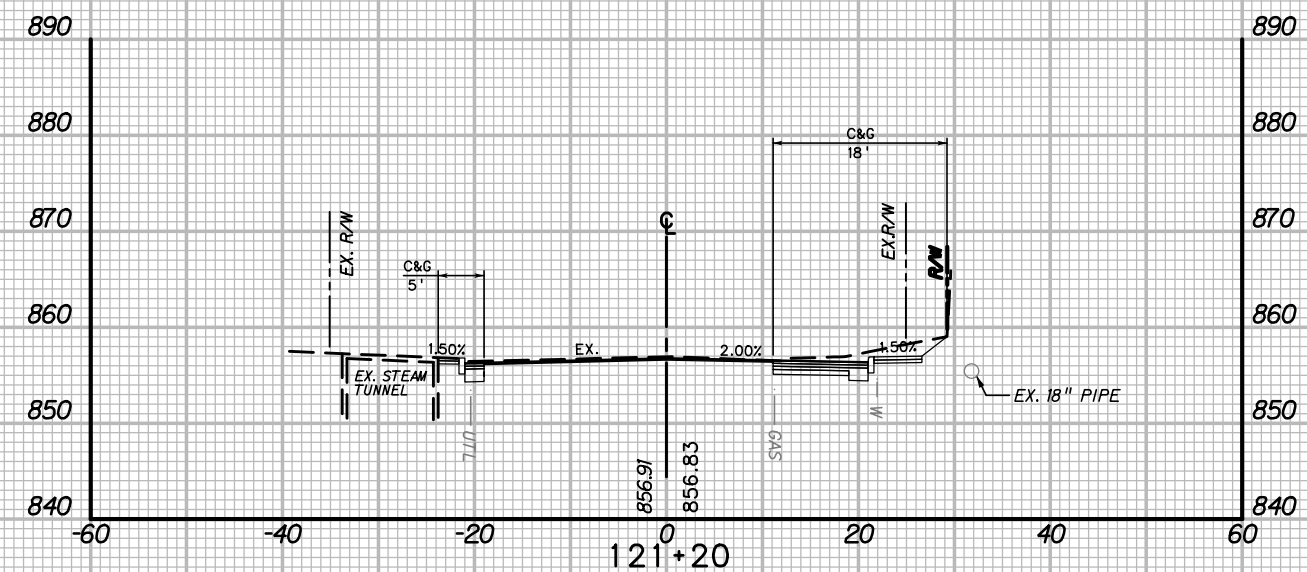
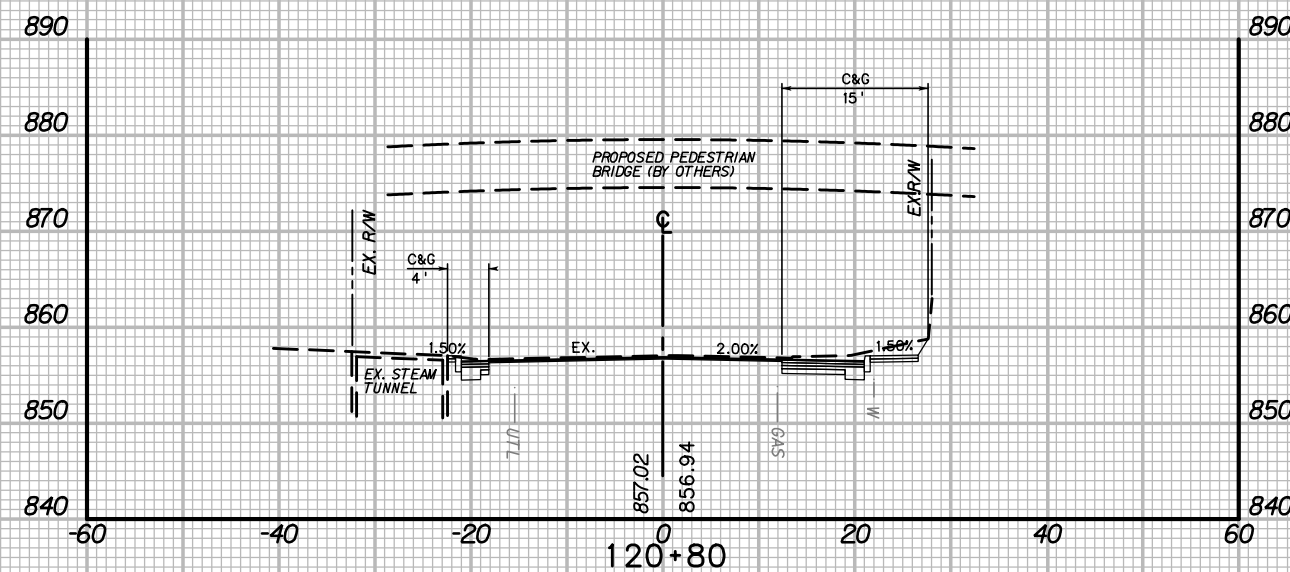
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 119+00 - STA. 119+60

9/24/2020 3:48:51 PM



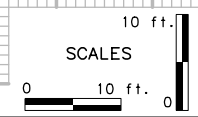
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
121+40	20	0	0	26	490	40	29	0	0
121+20	20	0	0	23	430	38	27	0	0
121+00	20	0	0	20	390	35	26	0	0
120+80	20	0	0	19	390	35	27	0	0
120+60	20	0	0	20	37	0	0	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED	DATE	BY
FINAL SURVEY PLOTTED	DATE	BY
AREAS CHECKED		



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.

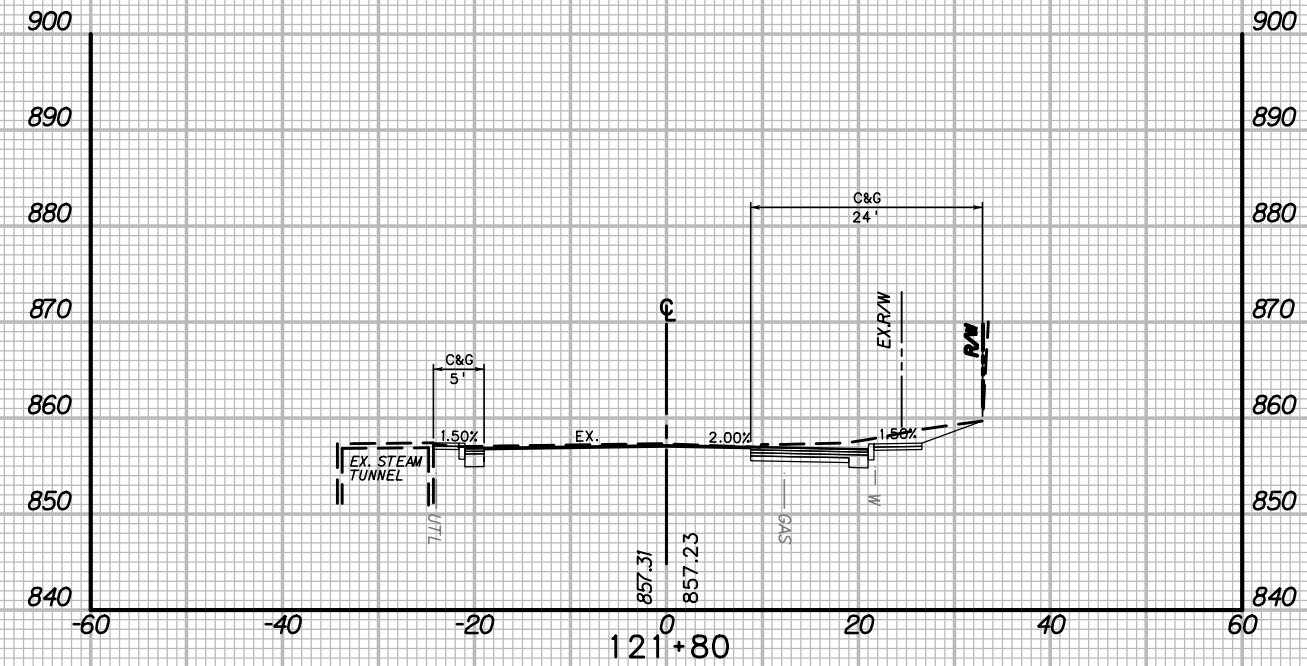
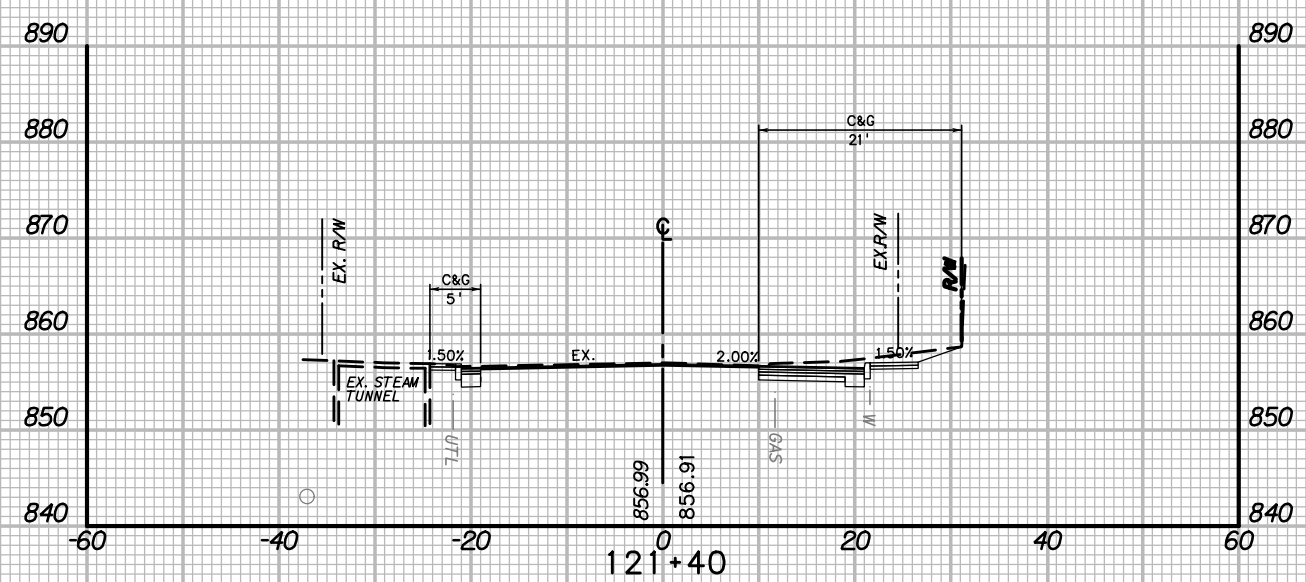
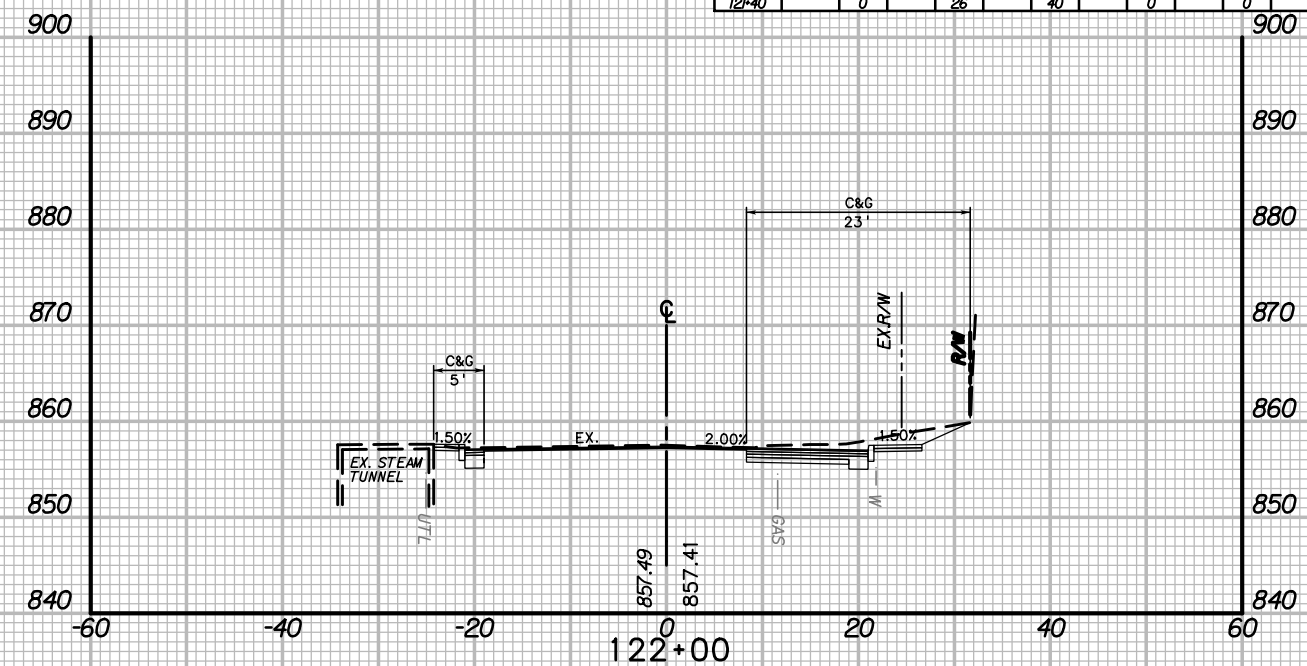


REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 120+60 - STA. 121+20

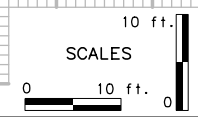
9/24/2020 3:49:51 PM

STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
122+20	9	36	45	0	0	0	0	0	0
122+00	20	90	640	34	0	0	0	0	0
121+80	0	28	46	0	0	0	0	0	0
121+60	20	0	570	33	0	0	0	0	0
121+40	0	29	44	0	0	0	0	0	0
121+20	20	0	570	32	0	0	0	0	0
121+00	0	28	42	0	0	0	0	0	0
120+80	20	0	540	30	0	0	0	0	0
120+60	0	26	40	0	0	0	0	0	0



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 121+40 - STA. 122+00

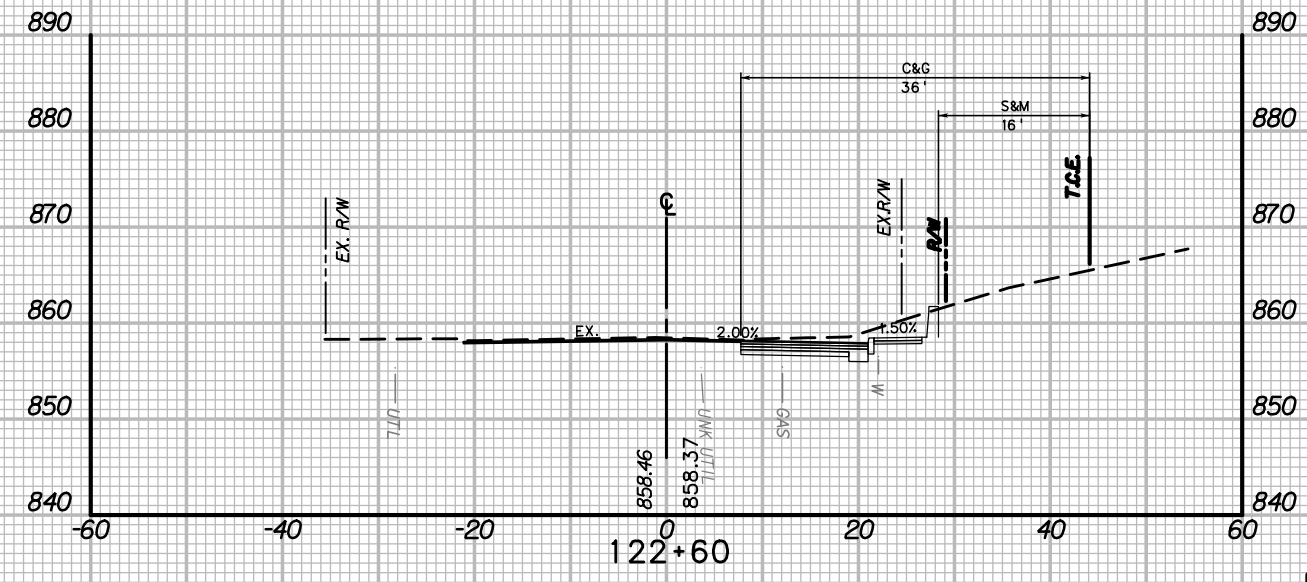
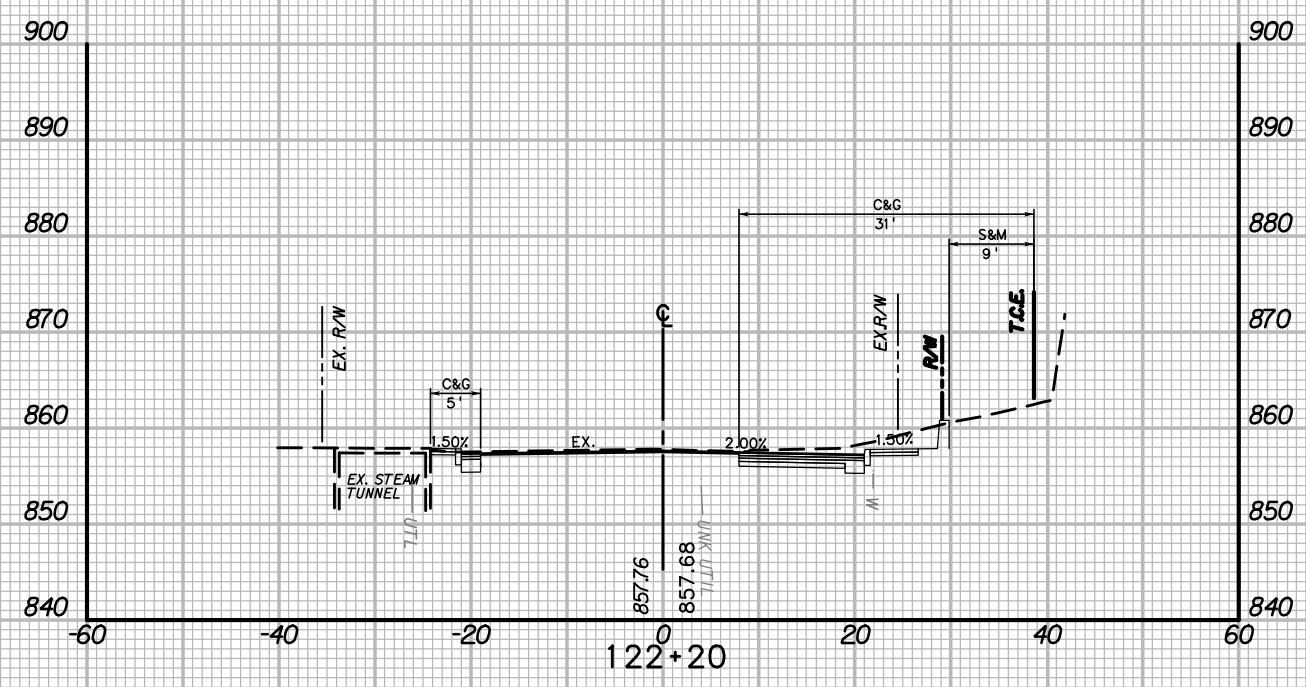
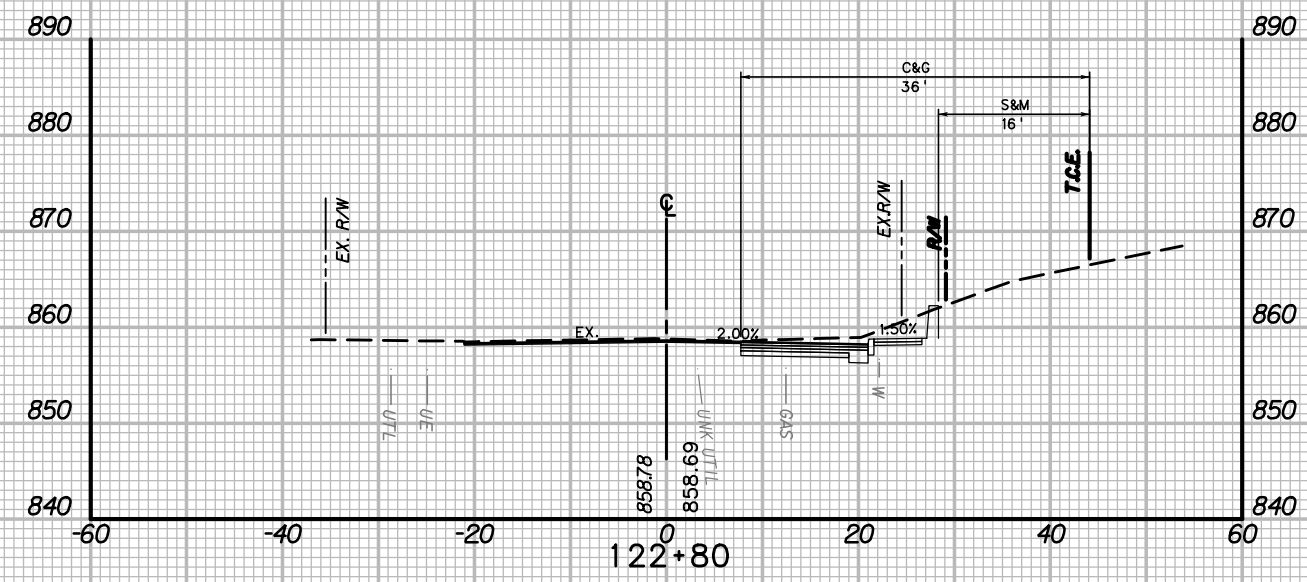
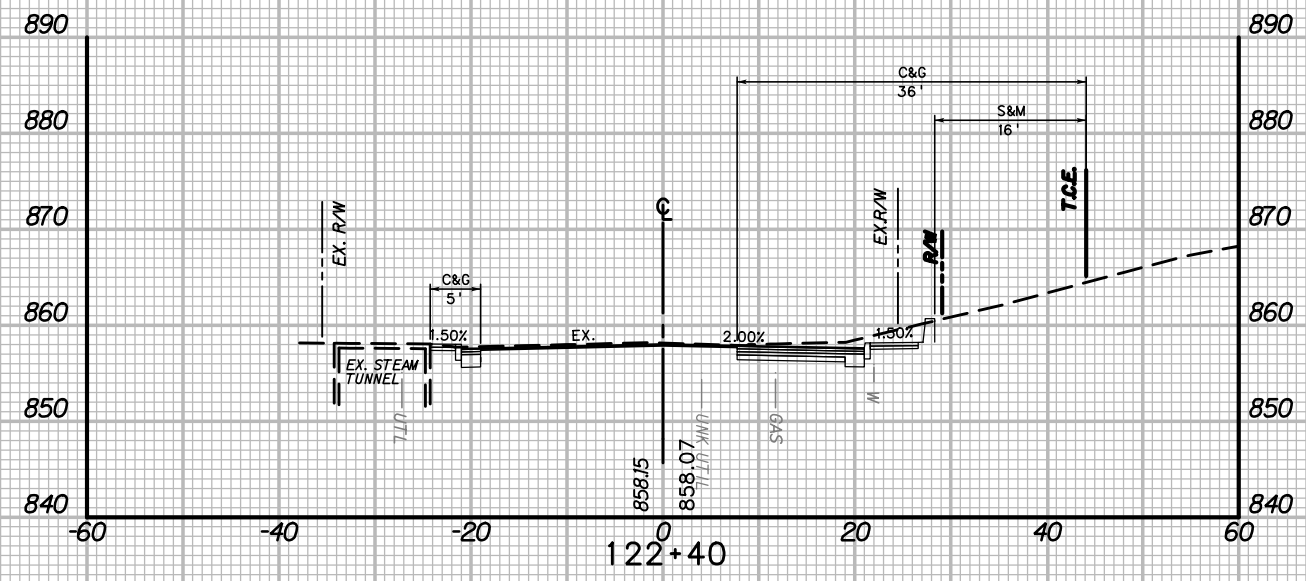
ORIGINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED		
FINAL SURVEY PLOTTED		
AREAS CHECKED		



9/24/2020 3:48:52 PM \\P:\proj\sc\Bachman\9

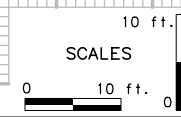
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
123+00	20	16	320	36	720	38	29	0	0
122+80	20	16	320	36	720	40	30	0	0
122+60	20	16	320	36	720	41	31	0	0
122+40	20	16	320	36	720	44	33	0	0
122+20	9	9	81	36	324	45	0	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED	DATE	BY
FINAL SURVEY PLOTTED	DATE	BY
AREAS CHECKED	NO.	



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



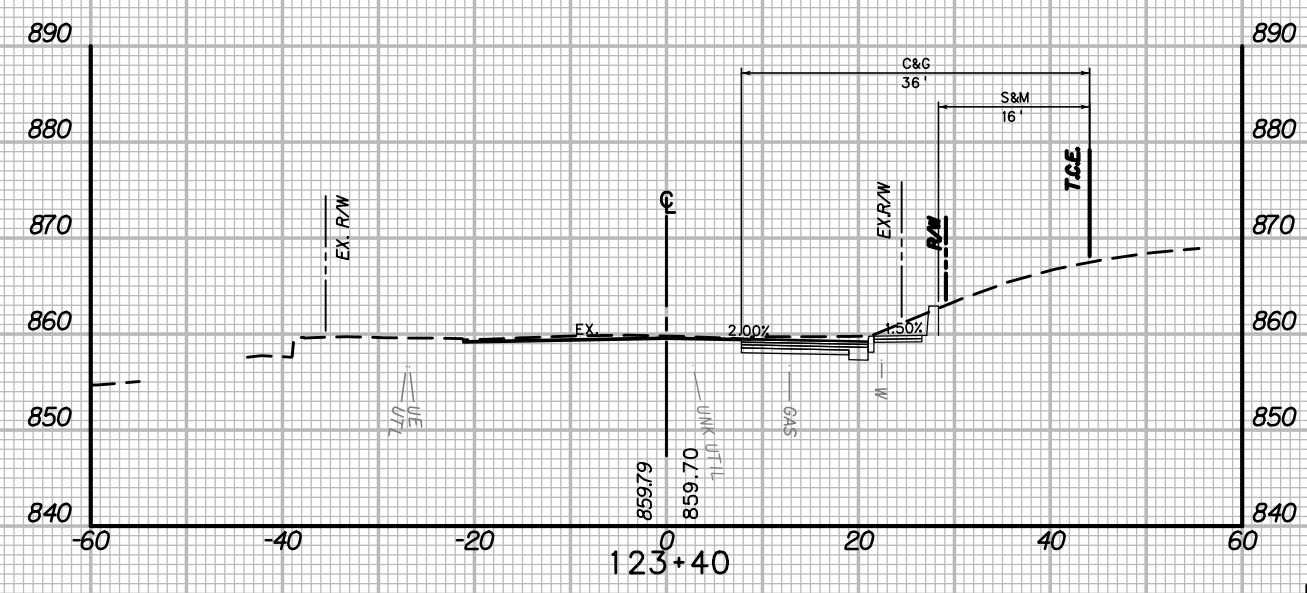
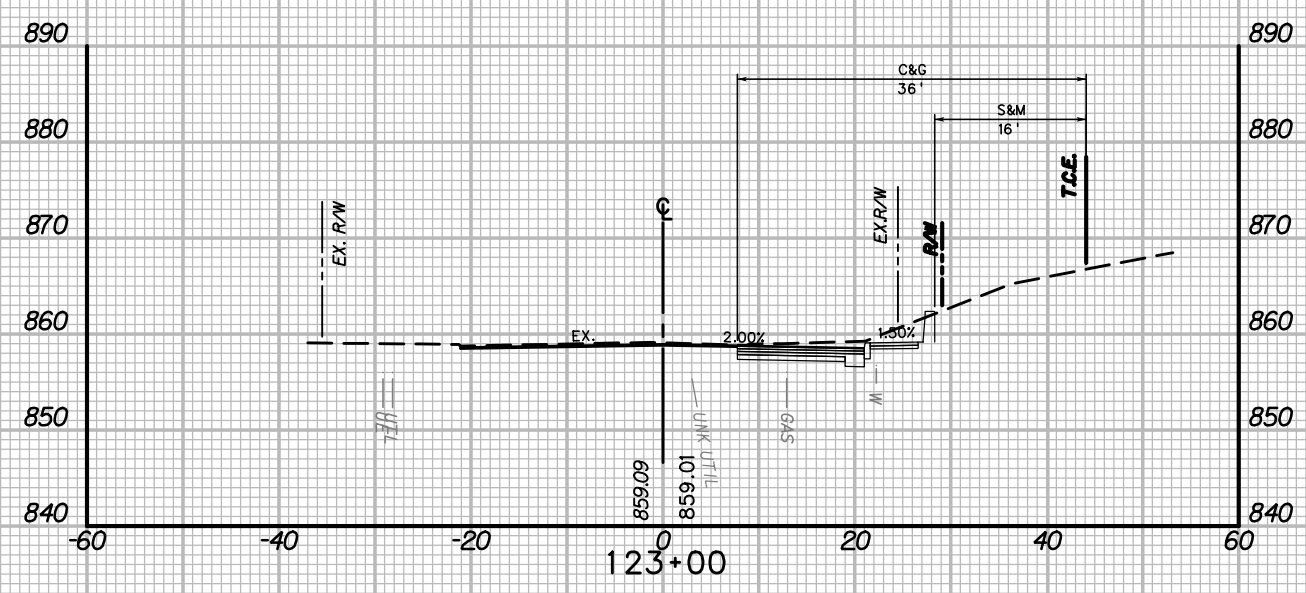
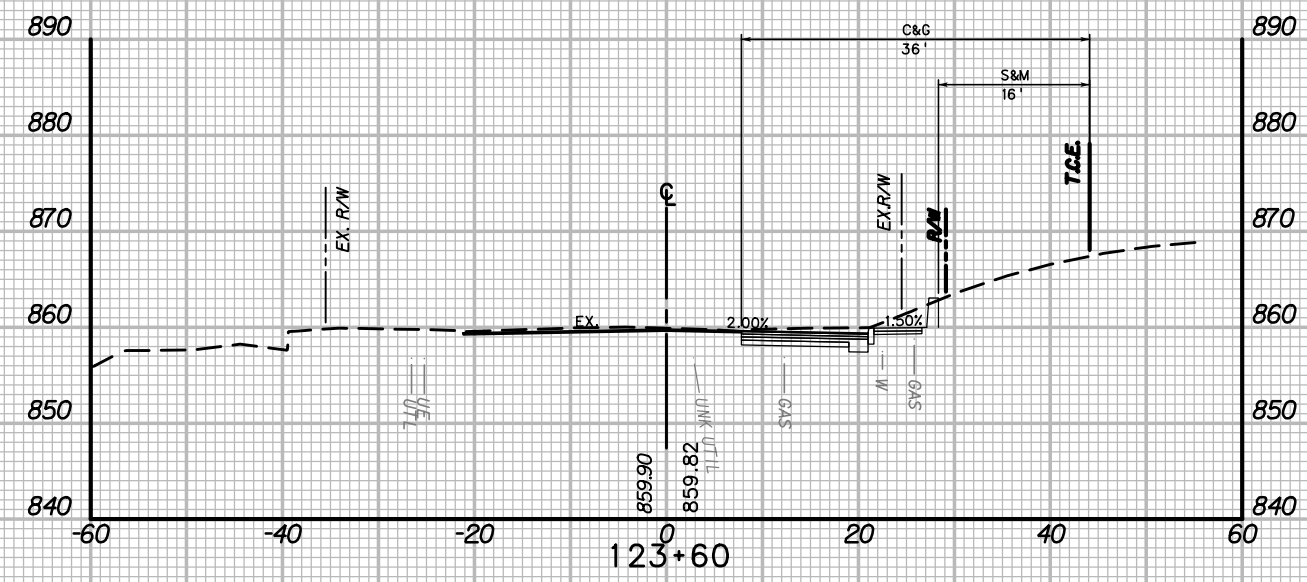
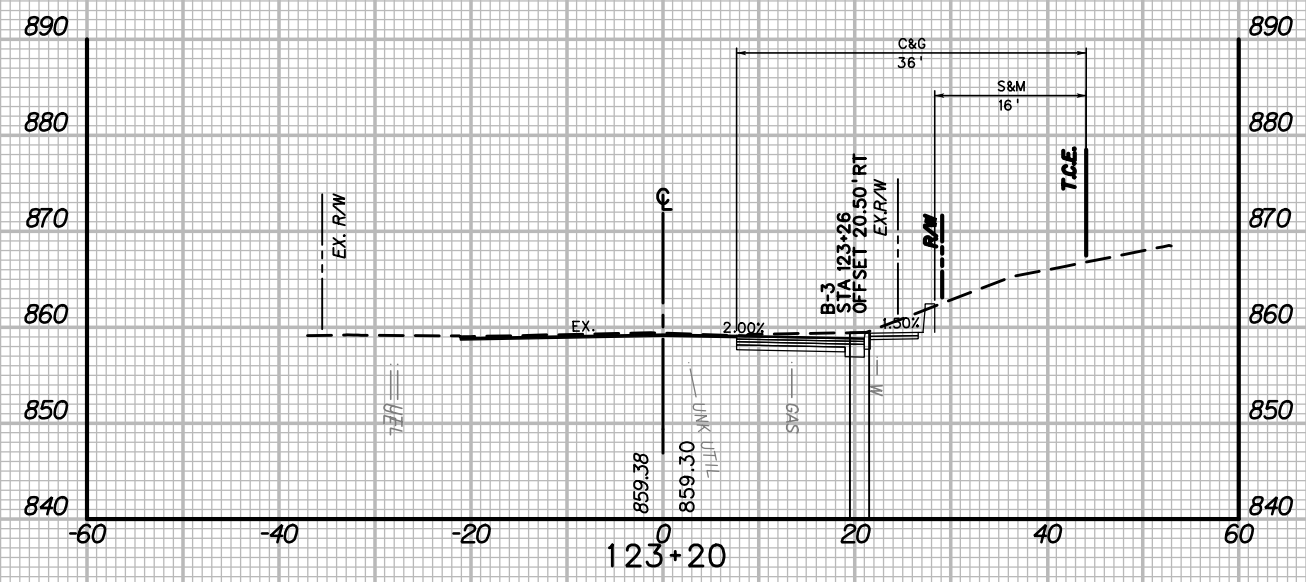
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 122+20 - STA. 122+80

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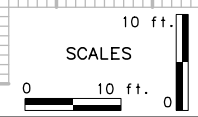
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION				EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)	SELECT (SF)	SELECT (CY)
		123+00	16	36	37	0	0	0	0	0	0
123+20	20	320	720	27	0	0	0	0	0	0	0
123+40	16	36	36	37	0	0	0	0	0	0	0
123+60	20	320	720	27	0	0	0	0	0	0	0
123+80	16	36	36	37	0	0	0	0	0	0	0
123+00	16	36	36	38	0	0	0	0	0	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED	DATE	BY
FINAL SURVEY PLOTTED	DATE	BY
BOOK NO.		
AREAS CHECKED		



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

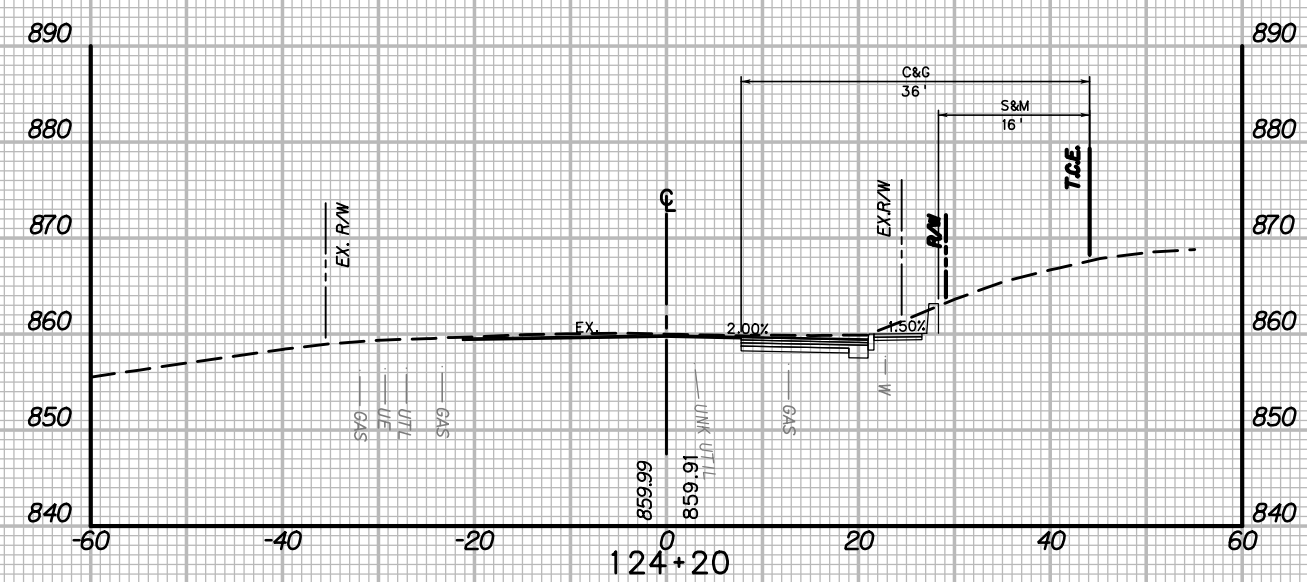
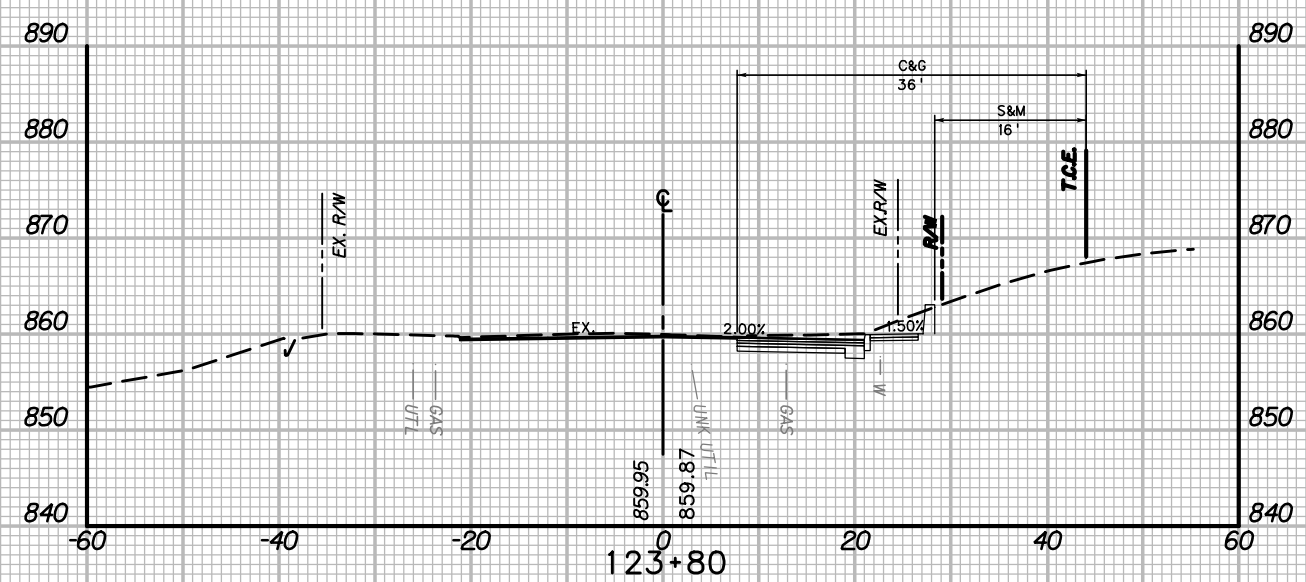
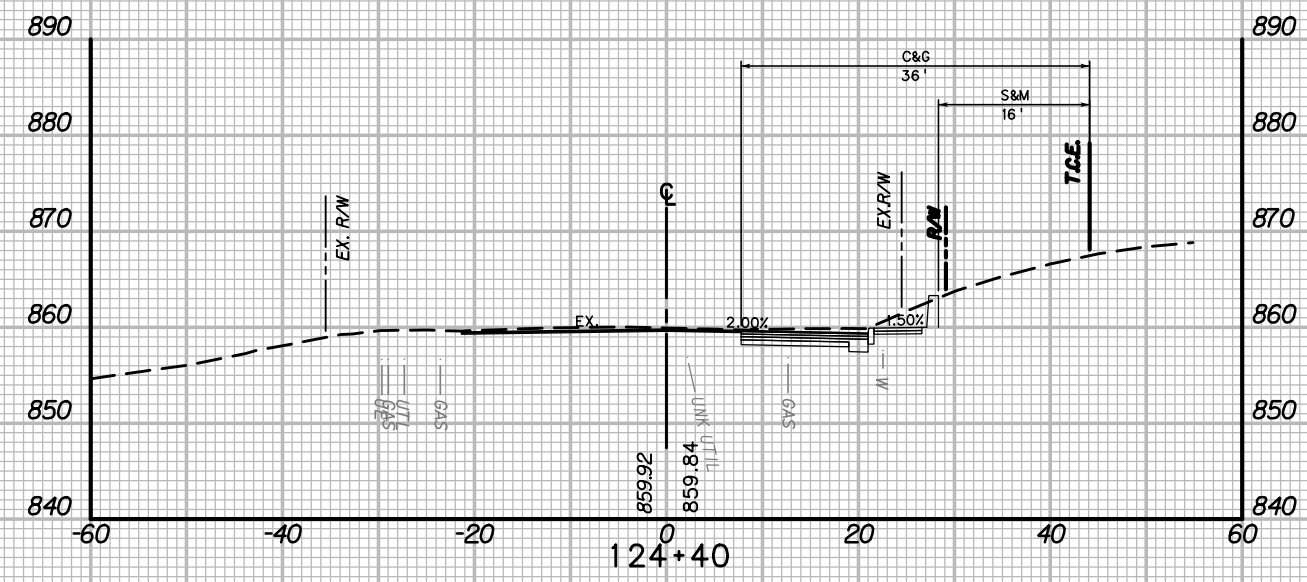
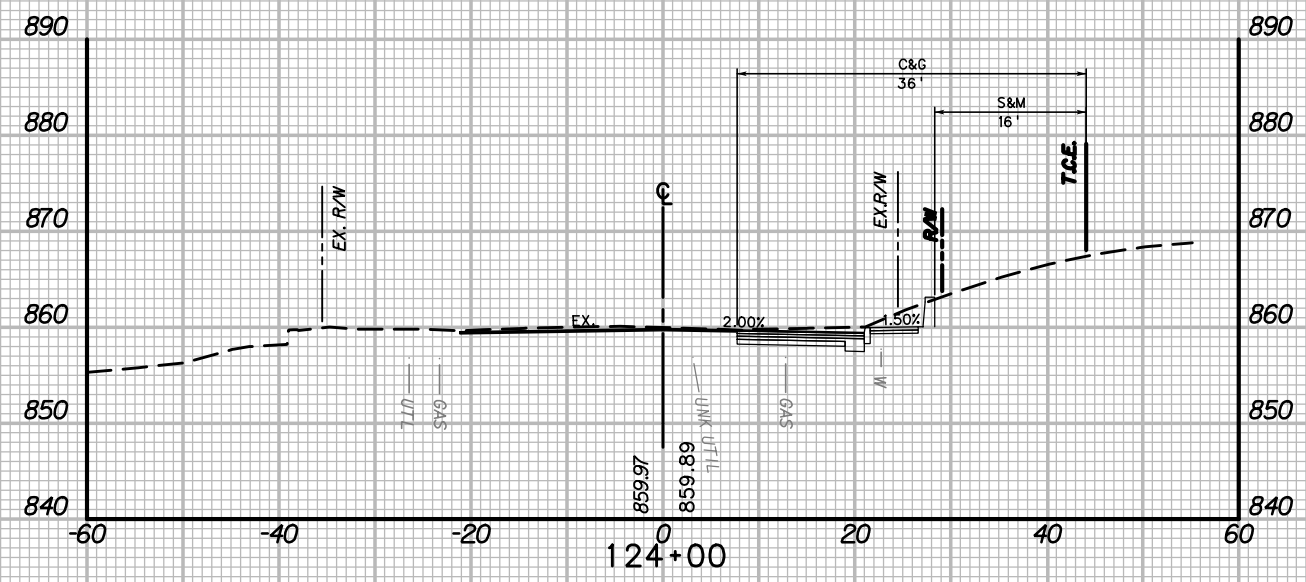
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 123+00 - STA. 123+60

9/24/2020 3:48:53 PM



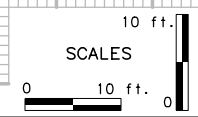
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION				EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)	SELECT (SF)	SELECT (CY)
124+60	20	14	300	36	720	38	28	0	0	0	0
124+40	20	16	320	36	720	37	27	0	0	0	0
124+20	20	16	320	36	720	35	27	0	0	0	0
124+00	20	16	320	36	720	37	27	0	0	0	0
123+80	20	16	320	36	720	37	27	0	0	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED	DATE	BY
FINAL SURVEY PLOTTED	DATE	BY
AREAS CHECKED		
NO.		



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



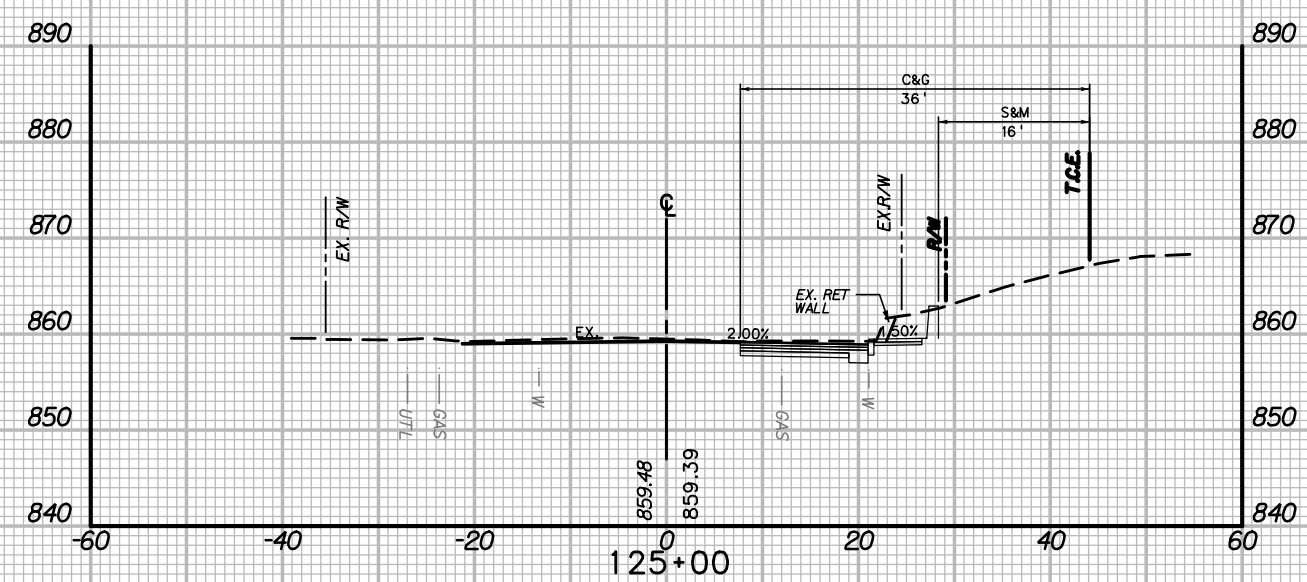
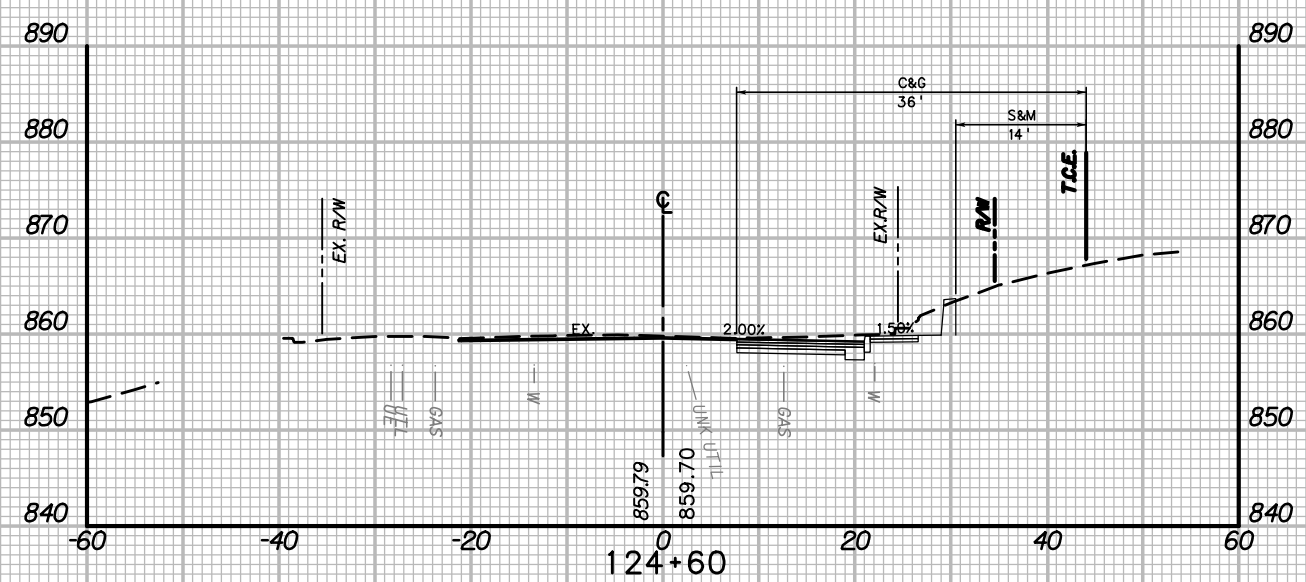
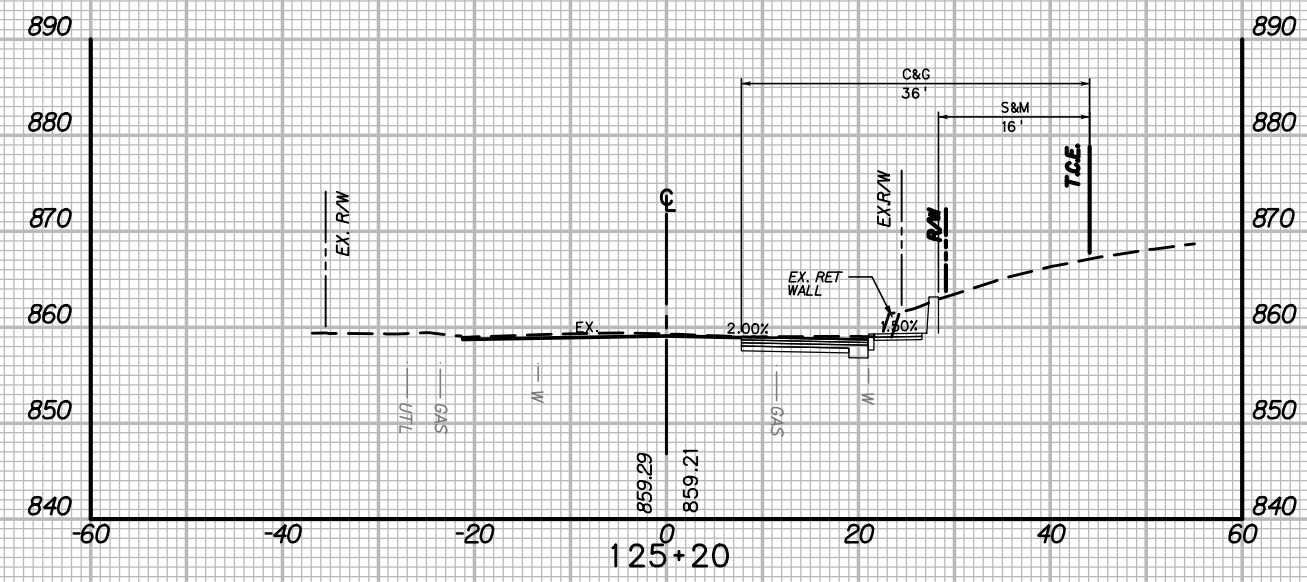
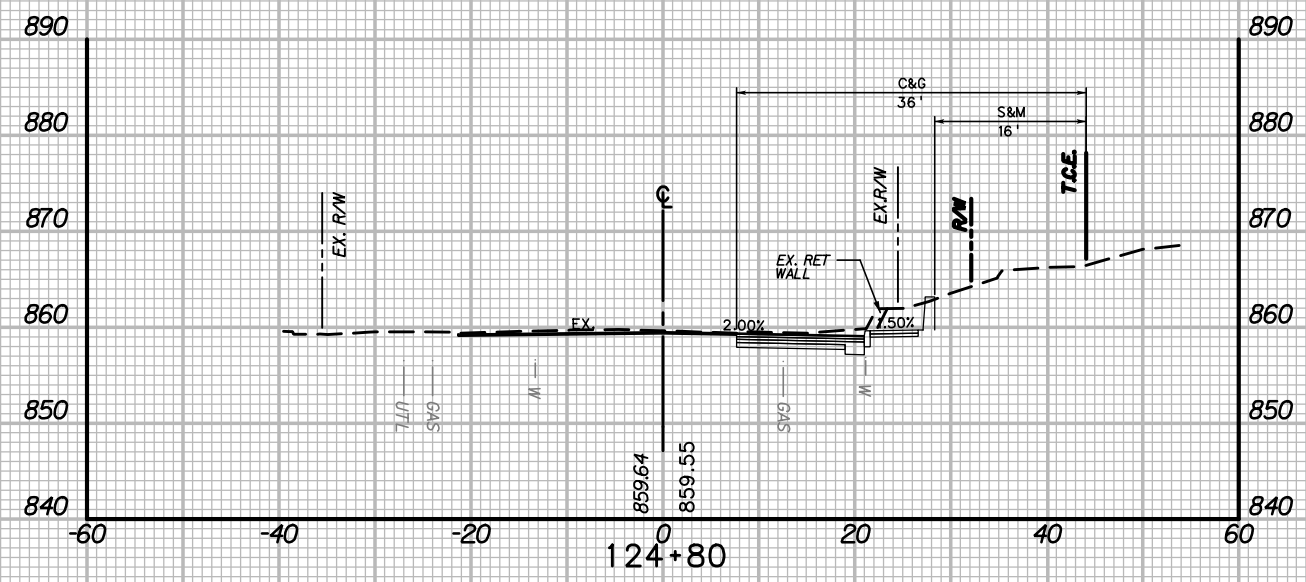
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 123+80 - STA. 124+40

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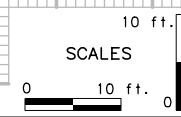
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
125+40	20	16	320	36	720	46	31	0	0
125+20	20	16	320	36	720	37	28	0	0
125+00	20	16	320	36	720	39	30	0	0
124+80	20	16	320	36	720	42	30	0	0
124+60	14	14	196	36	504	38	0	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED	DATE	BY
FINAL SURVEY PLOTTED	DATE	BY
AREAS CHECKED	NO.	
AREAS CHECKED	NO.	



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.

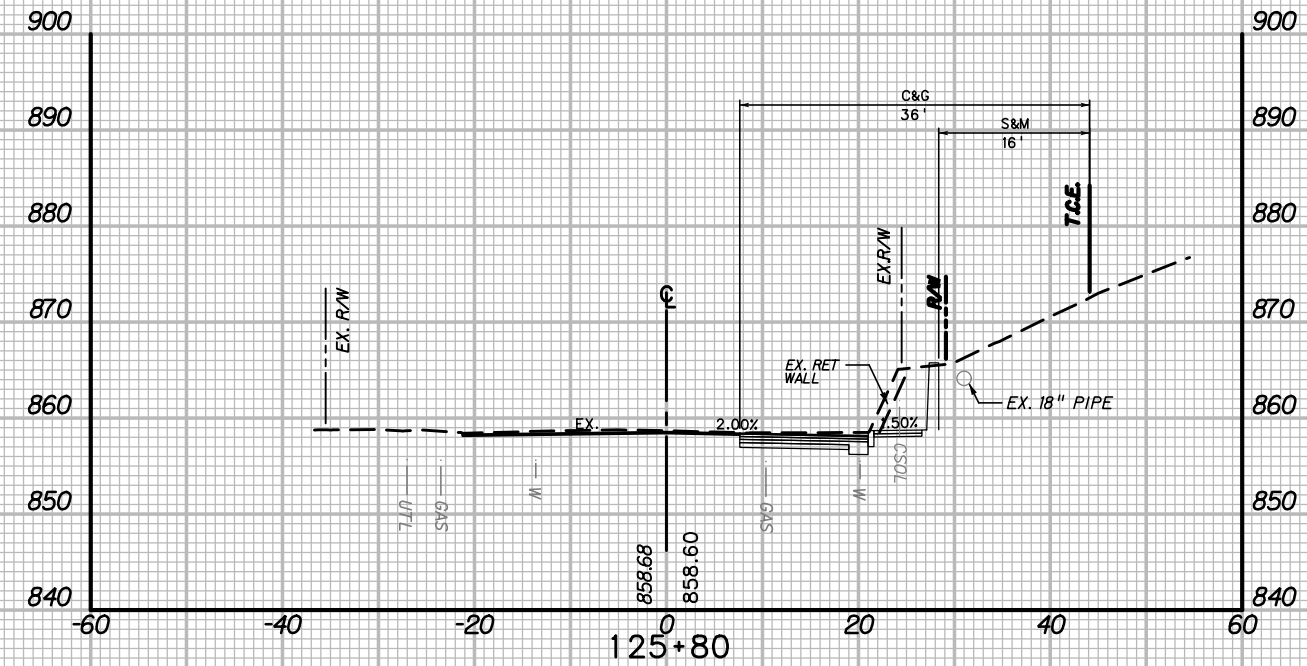
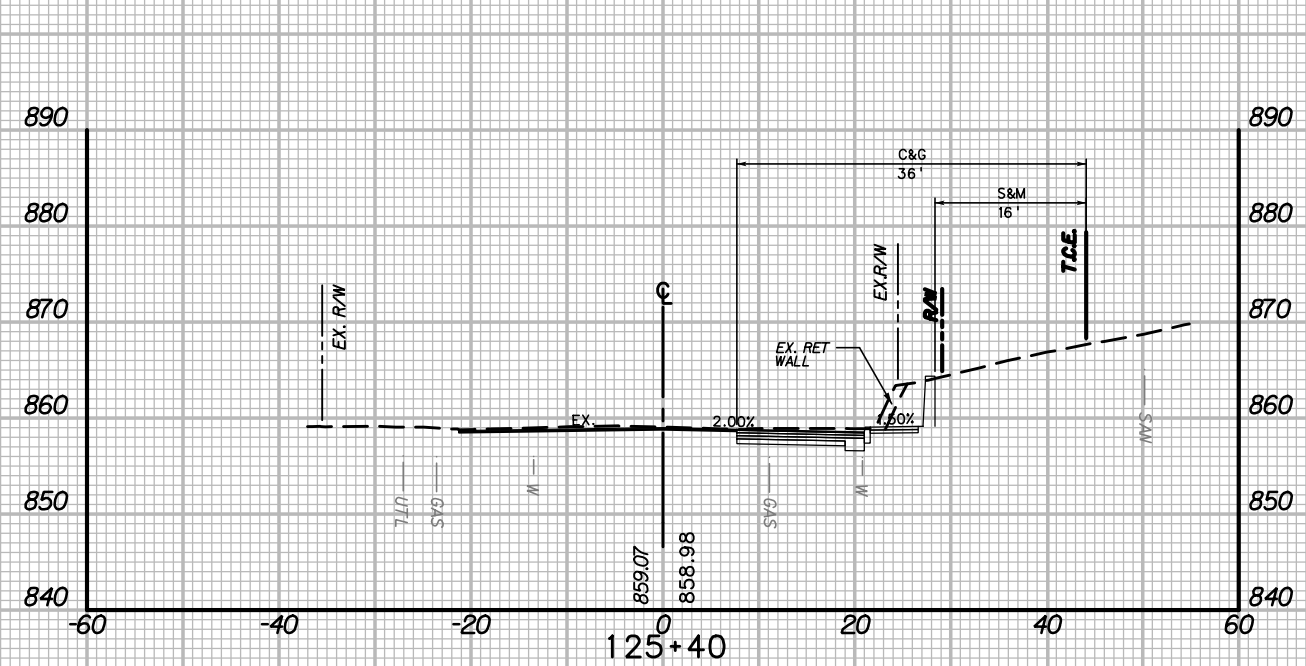
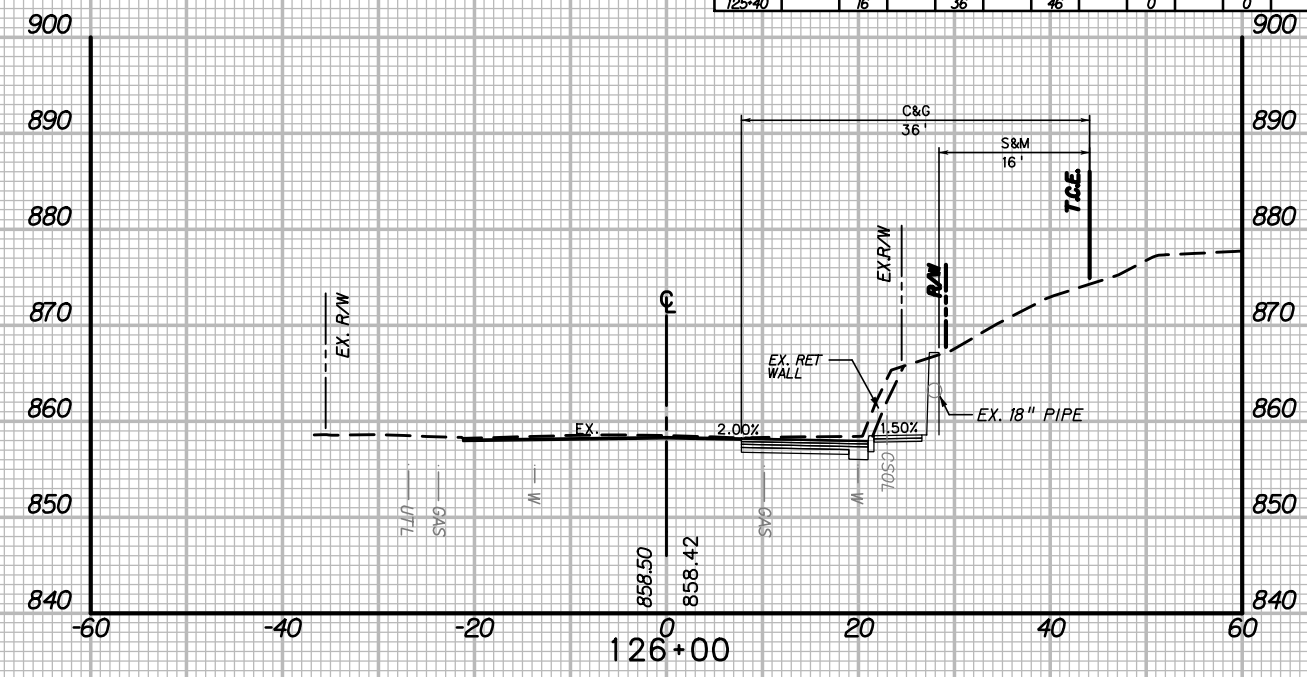
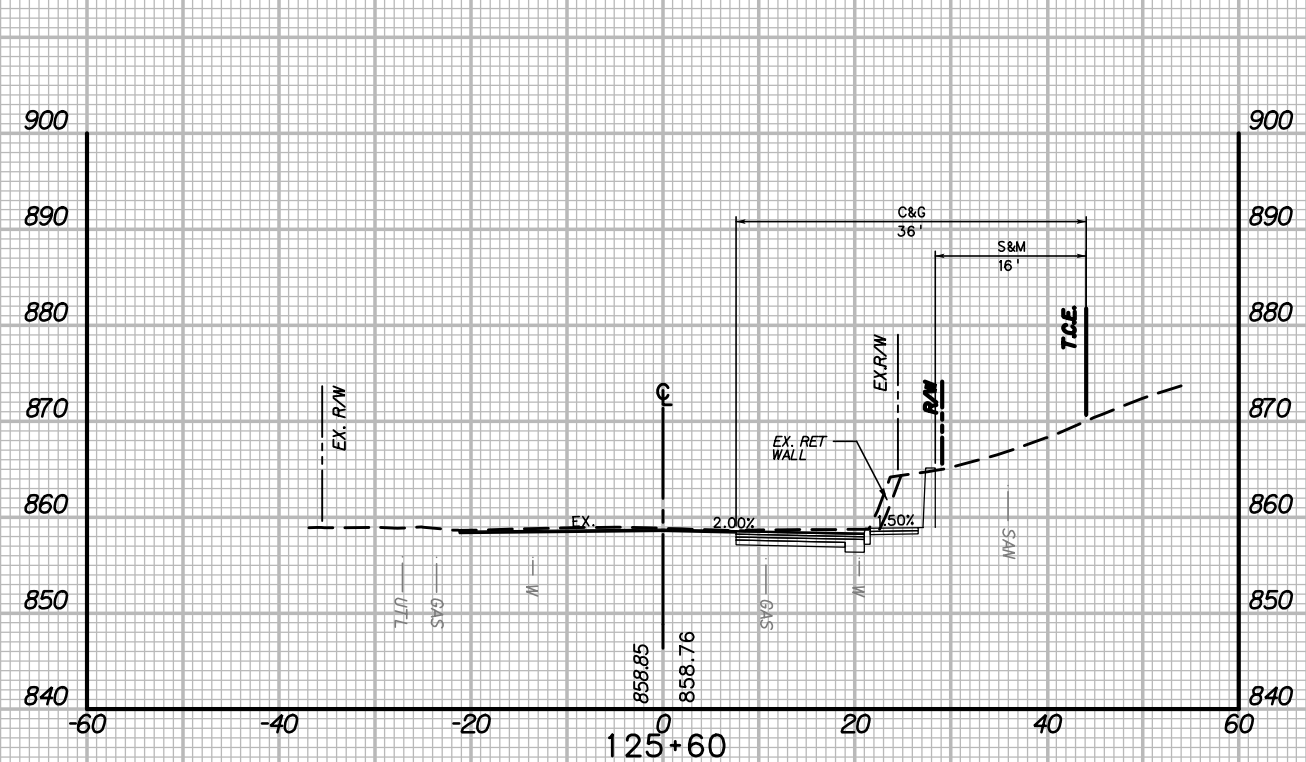


REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
 STA. 124+60 - STA. 125+20

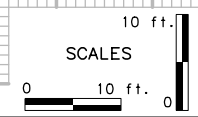
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STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
126+20	20	16	320	33	720	74	52	0	0
126+00	20	16	320	36	720	67	46	0	0
125+80	20	16	320	36	720	57	41	0	0
125+60	20	16	320	36	720	53	37	0	0
125+40	20	16	320	36	720	46	0	0	0



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

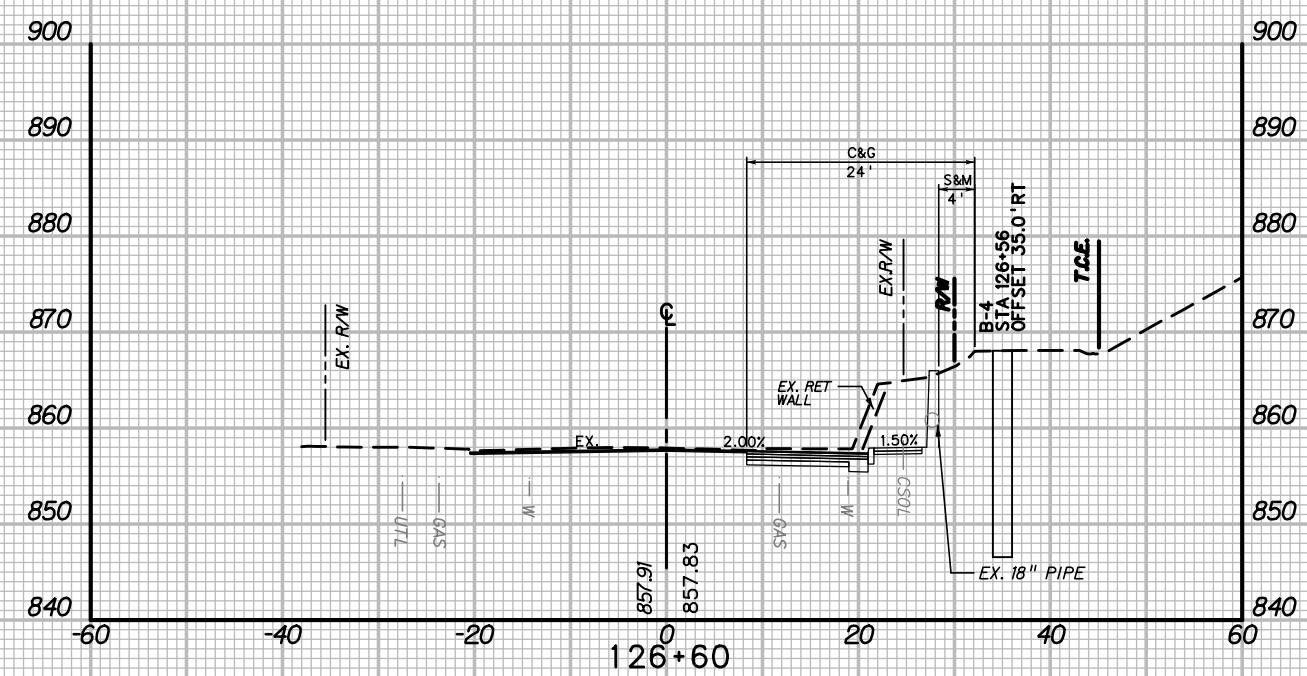
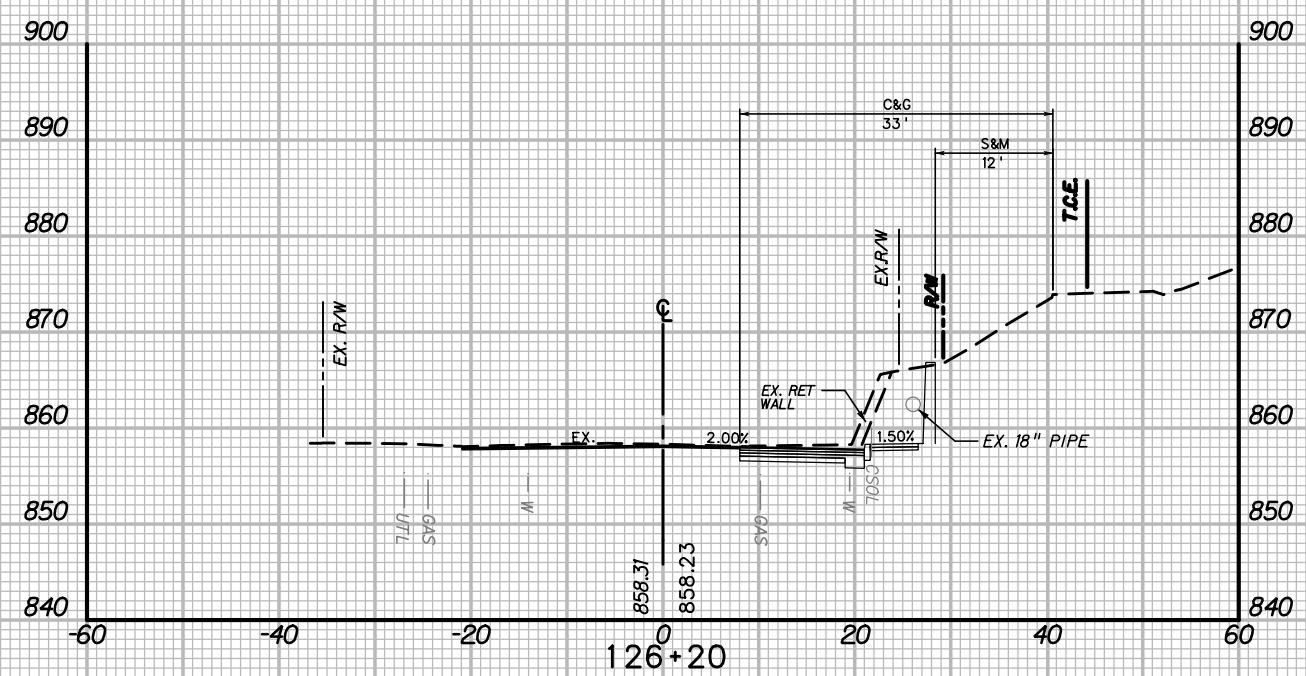
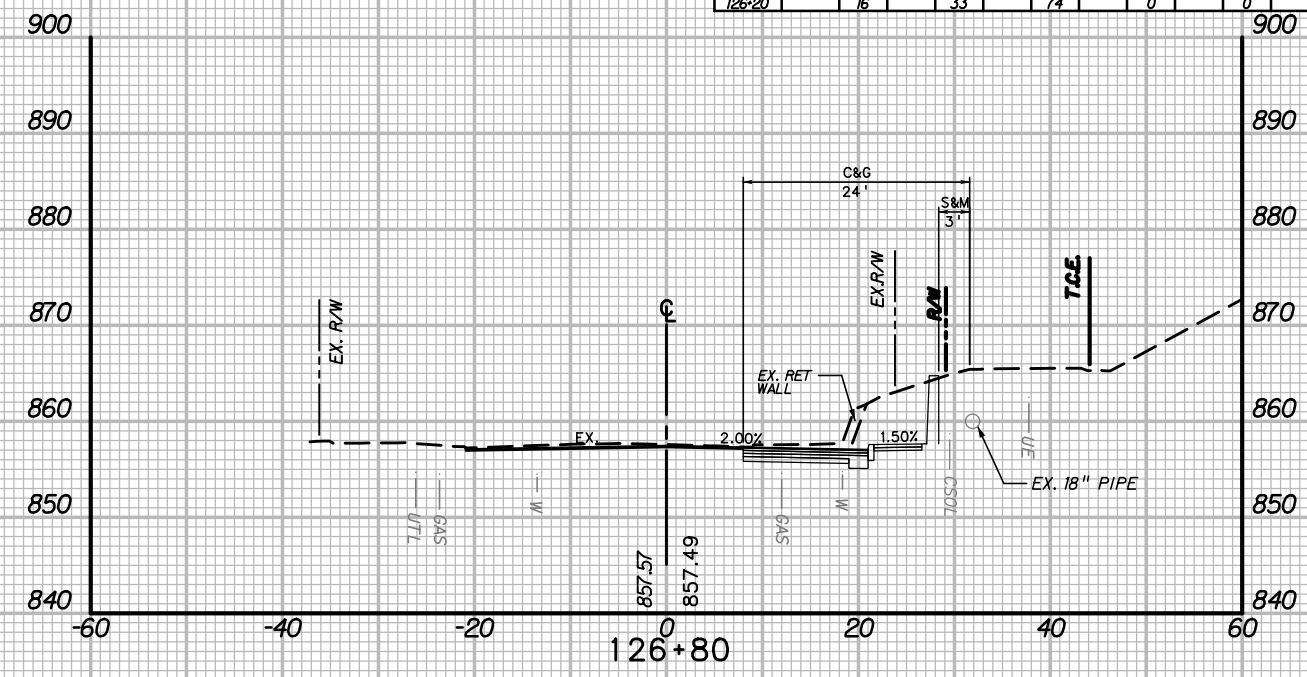
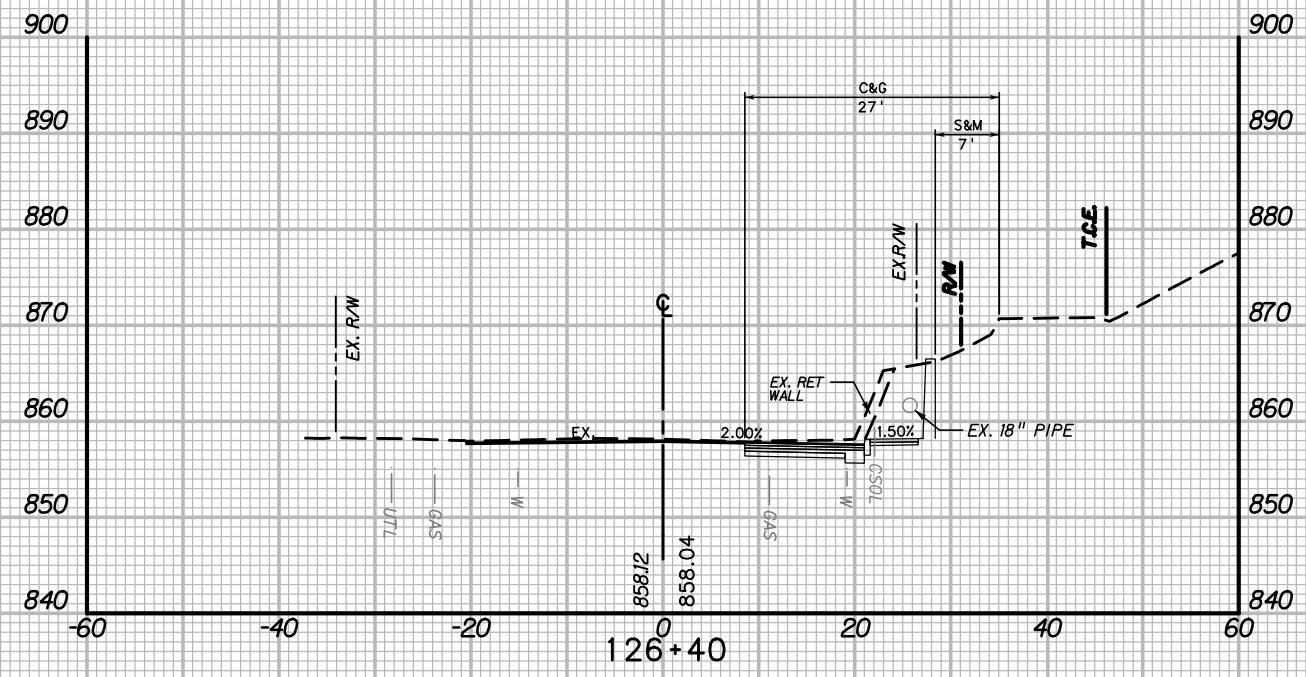
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 125+40 - STA. 126+00

ORIGINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED		
FINAL SURVEY PLOTTED		
AREAS CHECKED		



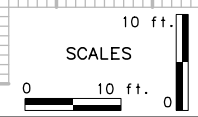
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STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
127+00	3	23	65	0	0	0	0	0	0
126+80	20	70	470	51	0	0	0	0	0
126+60	3	24	72	0	0	0	0	0	0
126+40	20	110	480	54	0	0	0	0	0
126+20	4	24	73	0	0	0	0	0	0
126+00	20	190	510	53	0	0	0	0	0
126-40	12	27	70	0	0	0	0	0	0
126-20	20	280	600	53	0	0	0	0	0
126-00	16	33	74	0	0	0	0	0	0



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

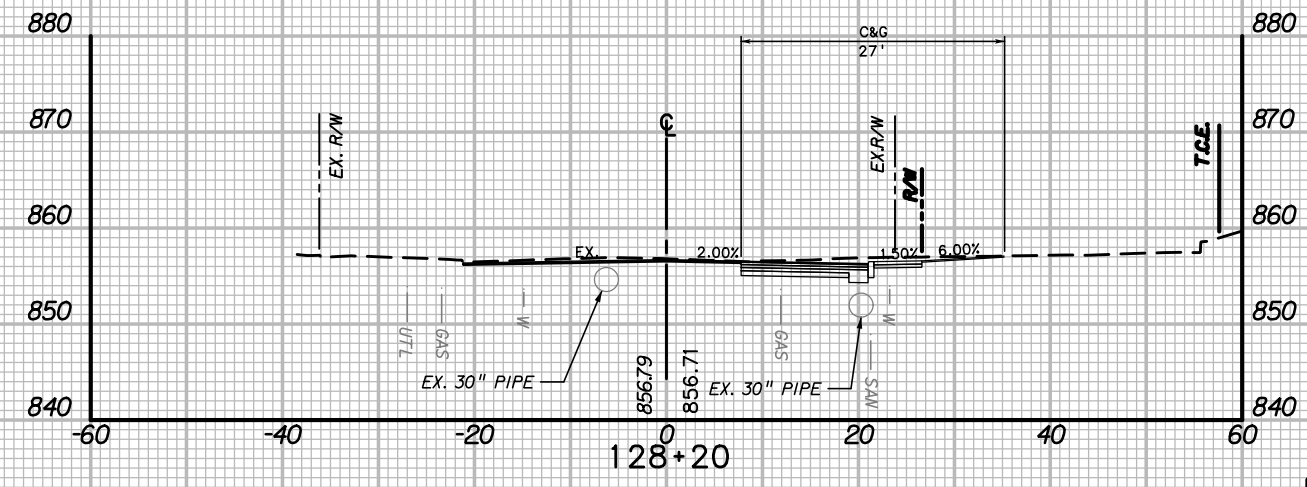
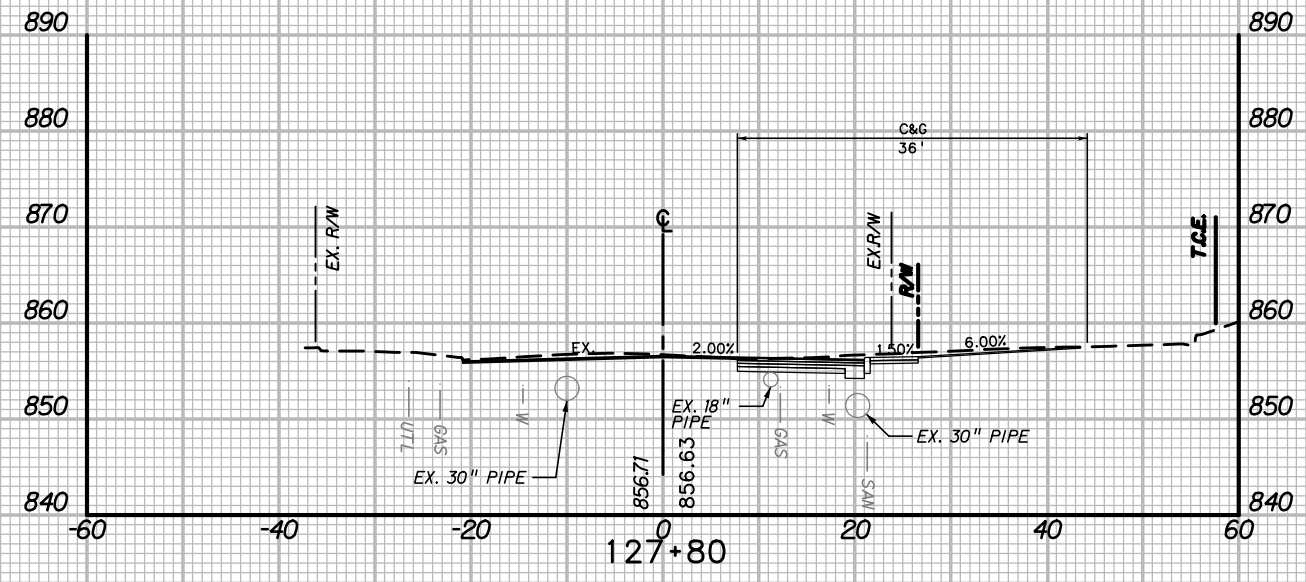
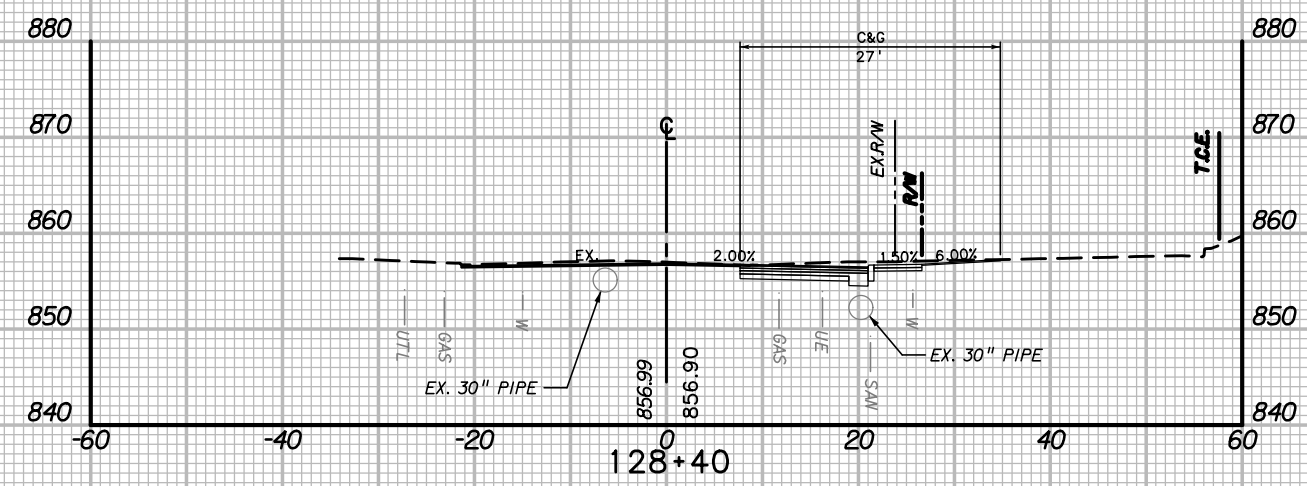
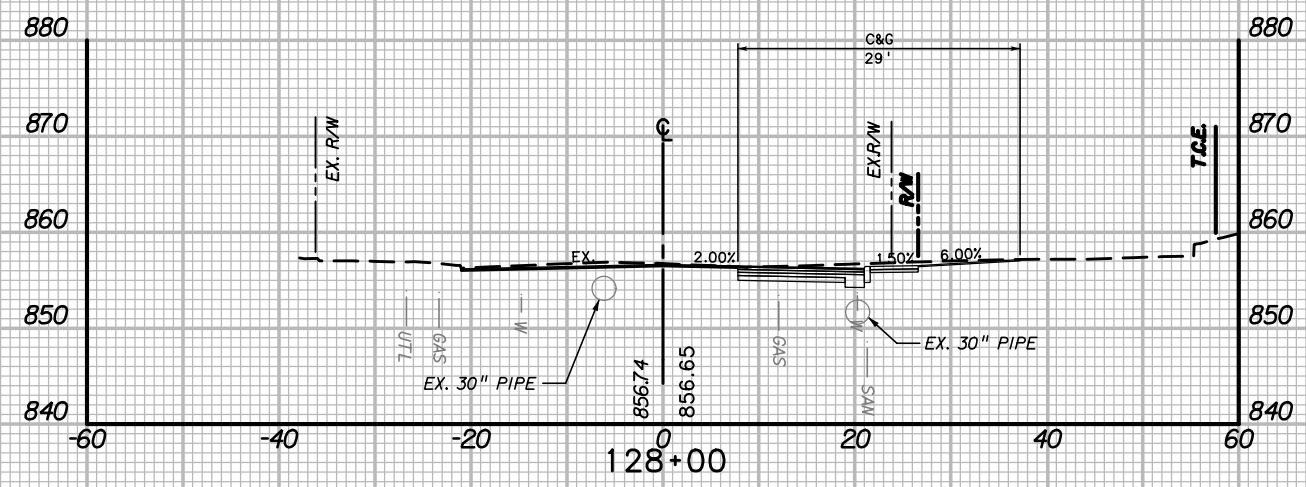
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 126+20 - STA. 126+80

ORIGINAL SURVEY PLOTTED	DATE	BY	FINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED			SURVEY PLOTTED		
BOOK NO.			BOOK NO.		
AREAS CHECKED			AREAS CHECKED		



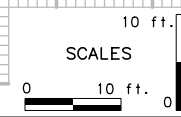
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
128+60	20	0	0	27	540	32	23	0	0
128+40	20	0	0	27	540	31	24	0	0
128+20	20	0	0	27	540	33	24	0	0
128+00	20	0	0	29	560	31	24	0	0
127+80	20	0	0	36	650	33	24	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED	DATE	BY
TEMPLATE	DATE	BY
BOOK	DATE	BY
AREAS CHECKED	DATE	BY
NO.	DATE	BY



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



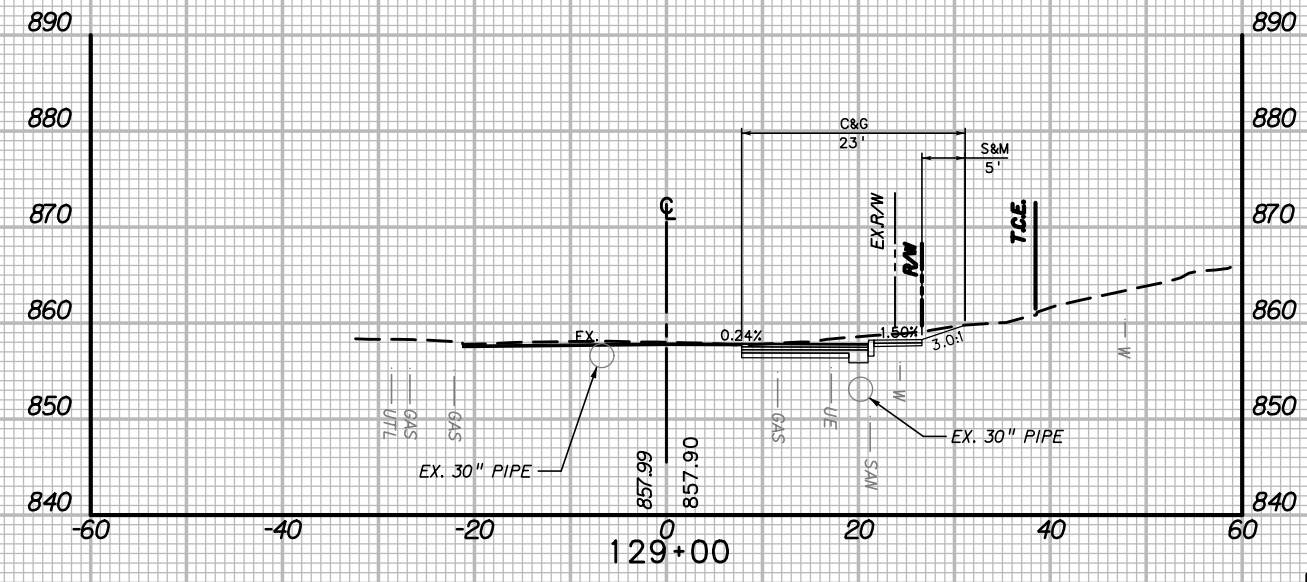
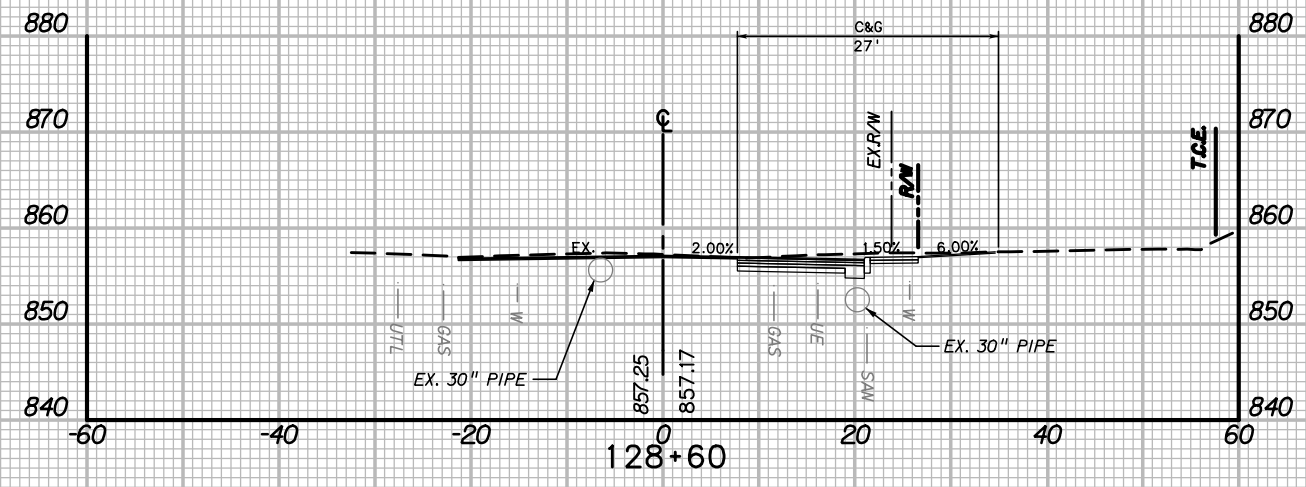
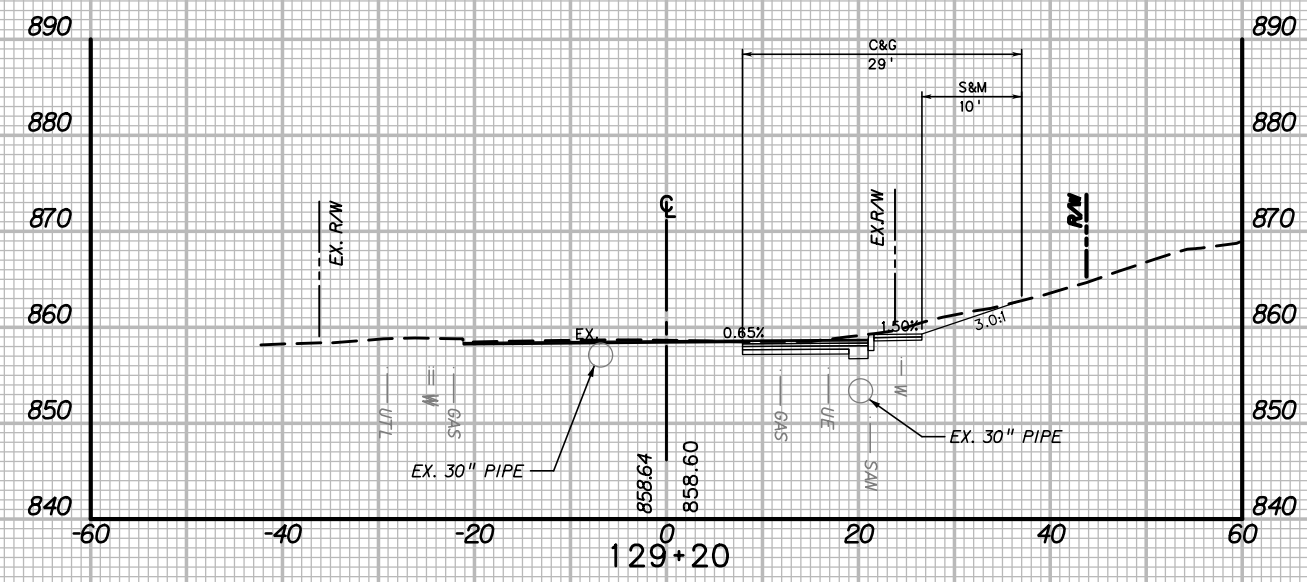
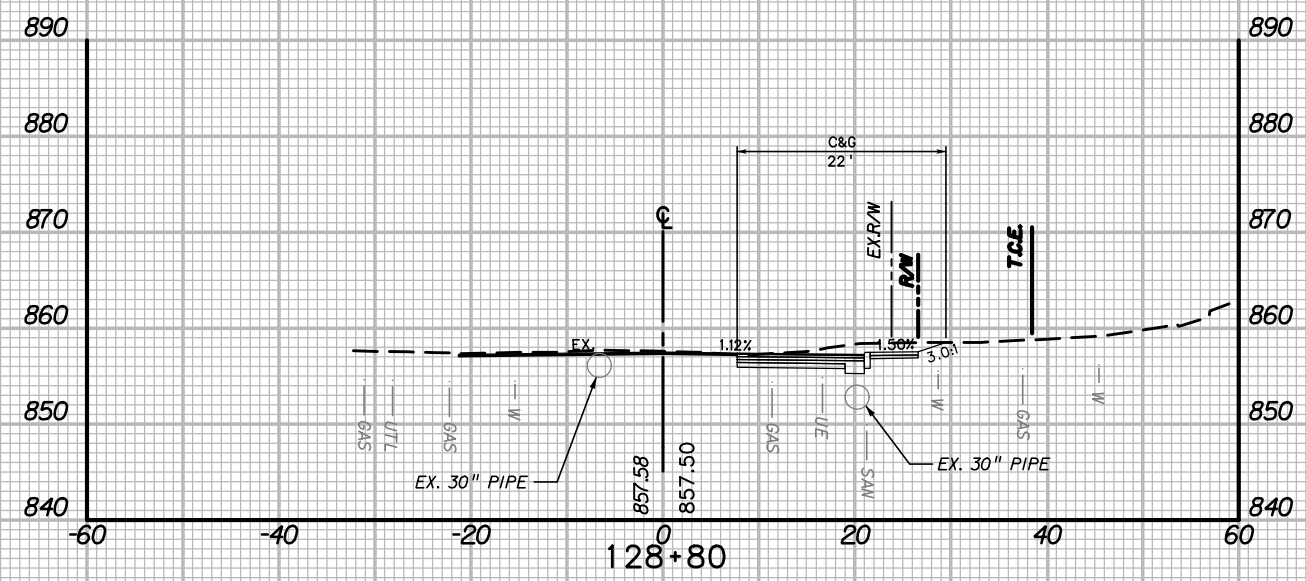
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 127+80 - STA. 128+40

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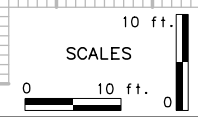
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
129+40	20.00	18	280	43	720	32	24	0	0
129+20	20	10	150	29	520	34	25	0	0
129+00	20	5	0	23	450	34	26	0	0
128+80	20	0	0	22	490	36	25	0	0
128+60	20	0	0	27	32	0	0	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED	DATE	BY
FINAL SURVEY PLOTTED	DATE	BY
AREAS CHECKED	DATE	BY
NO.	NO.	NO.



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



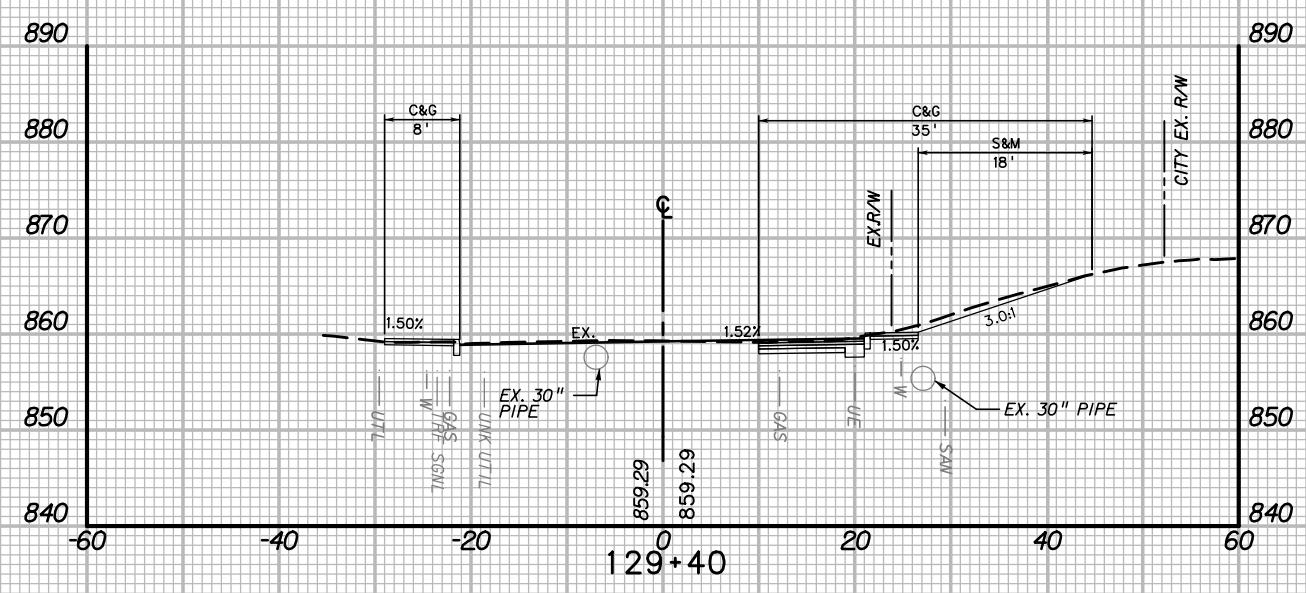
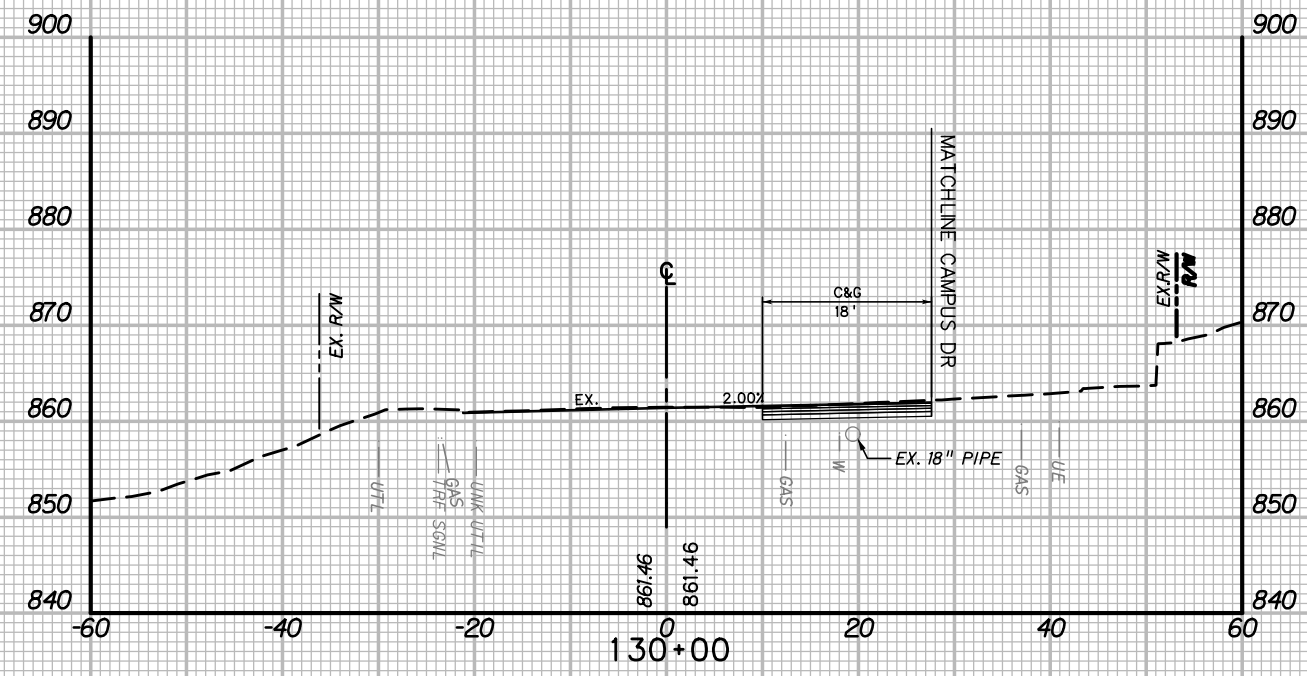
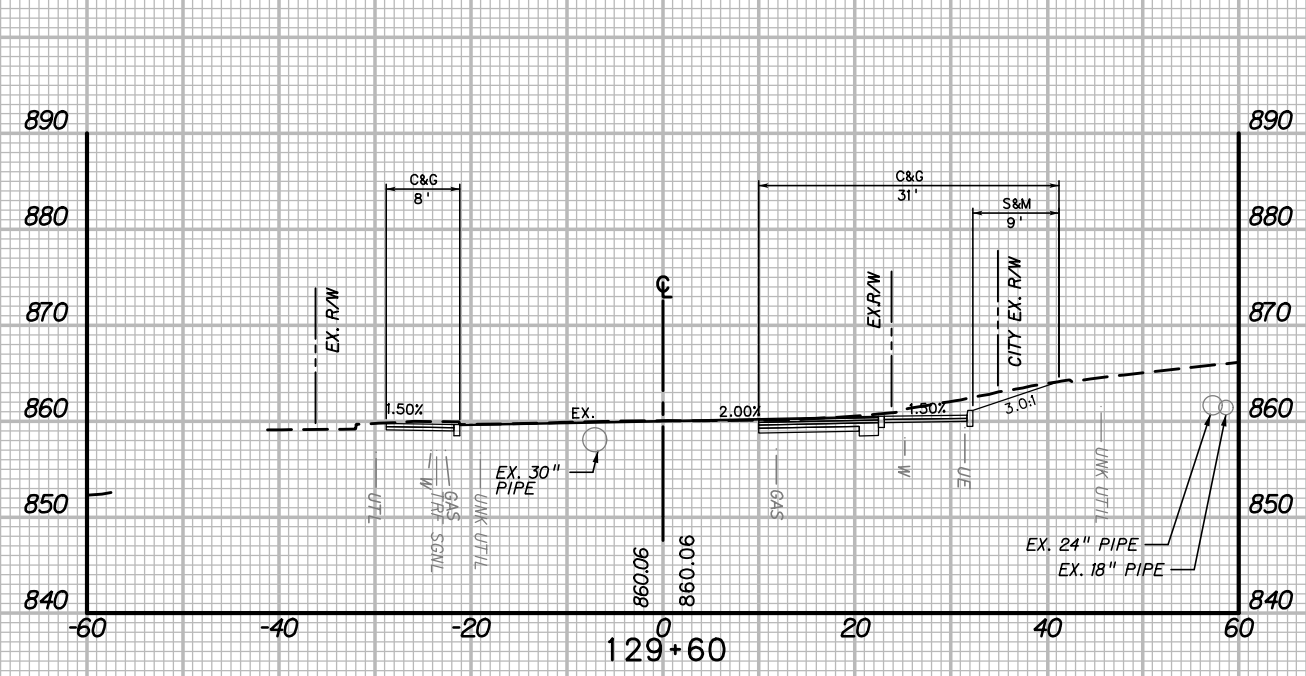
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 128+60 - STA. 129+20

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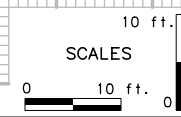
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
130+4.65	15	0	0	18	264	26	14	0	0
130+00	20	0	0	18	360	26	21	0	0
129+80	20	0	0	18	360	31	21	0	0
129+60	20	9	90	39	570	50	30	0	0
129+40	20	18	270	43	820	30	20	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED	DATE	BY
FINAL SURVEY PLOTTED	DATE	BY
AREAS CHECKED	NO.	



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

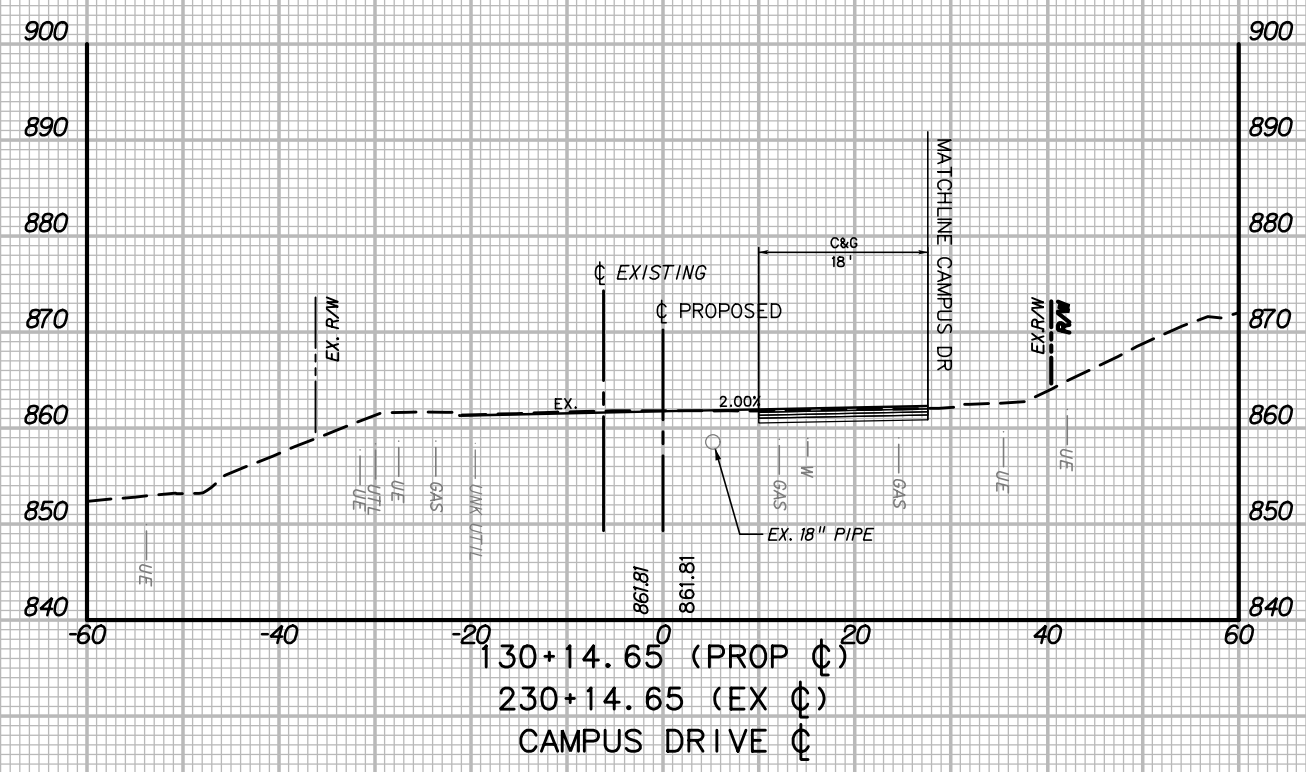
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 129+40 - STA. 130+00

9/24/2020 3:49:56 PM \\sfr\proj\_scs\Brecth1579

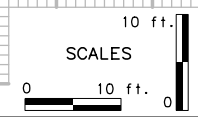


STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION				EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)	SELECT (SF)	SELECT (CY)
		230+20	5	0	0	26	118	23	0	0	0
230+14.65		0	0	18	118	26	0	0	0	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY	NO.	AREAS CHECKED
SURVEY PLOTTED	///	///	///	///
FINAL SURVEY PLOTTED	///	///	///	///
BOOK NO.	///	///	///	///
NO.	///	///	///	///



NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.

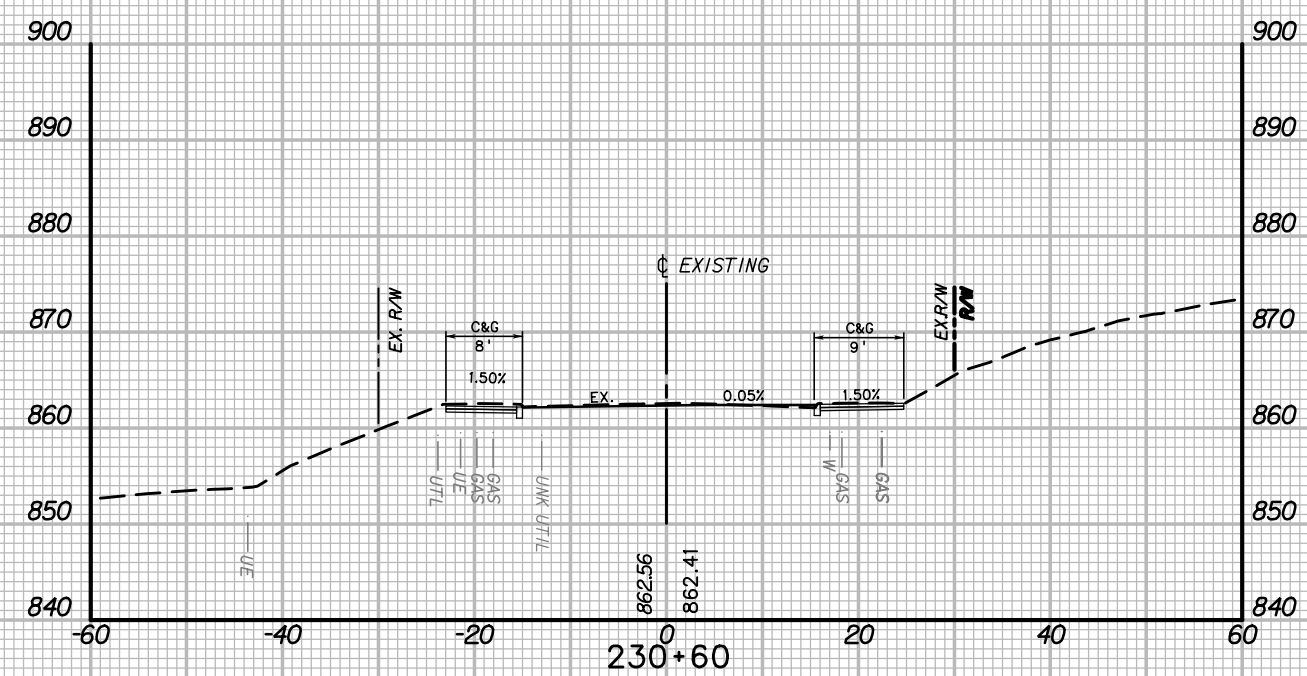
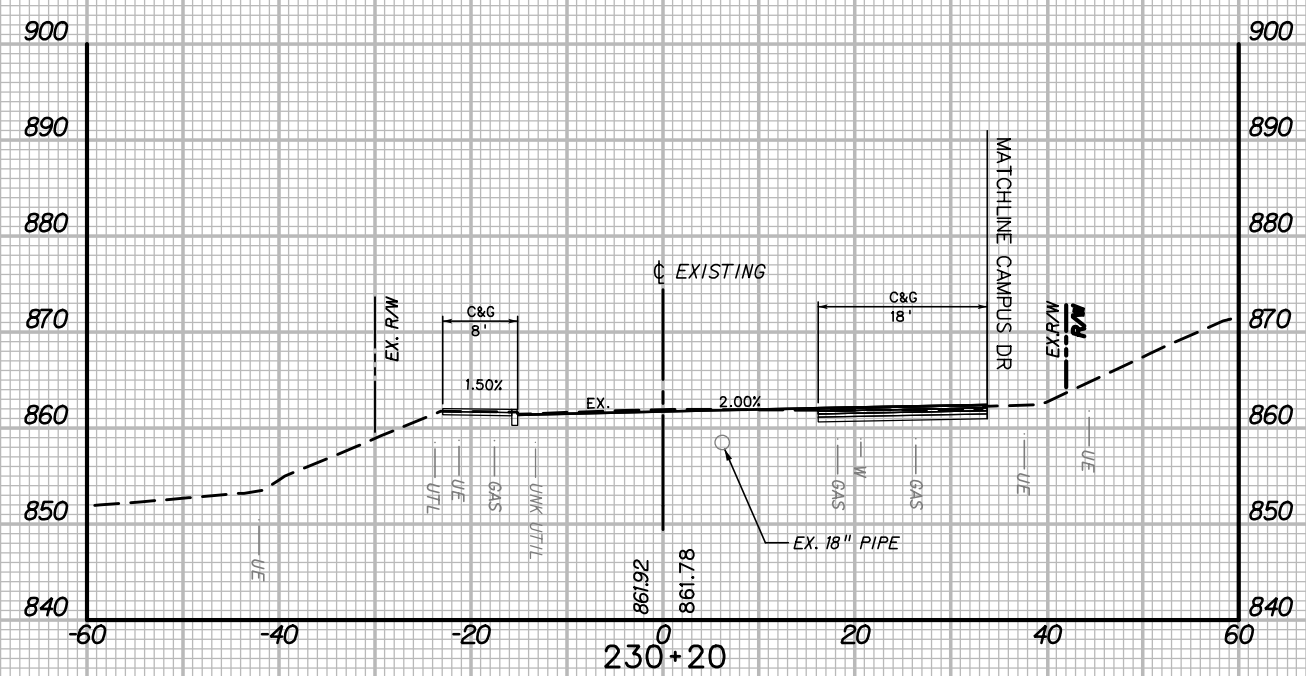
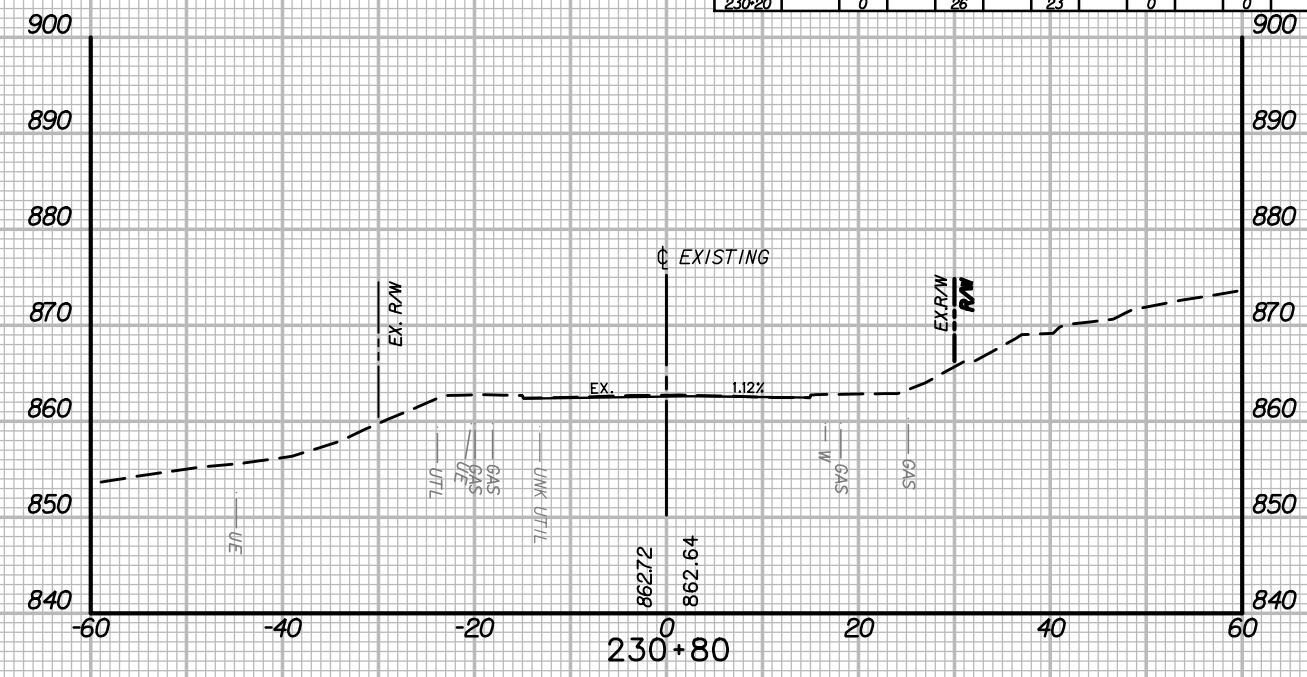
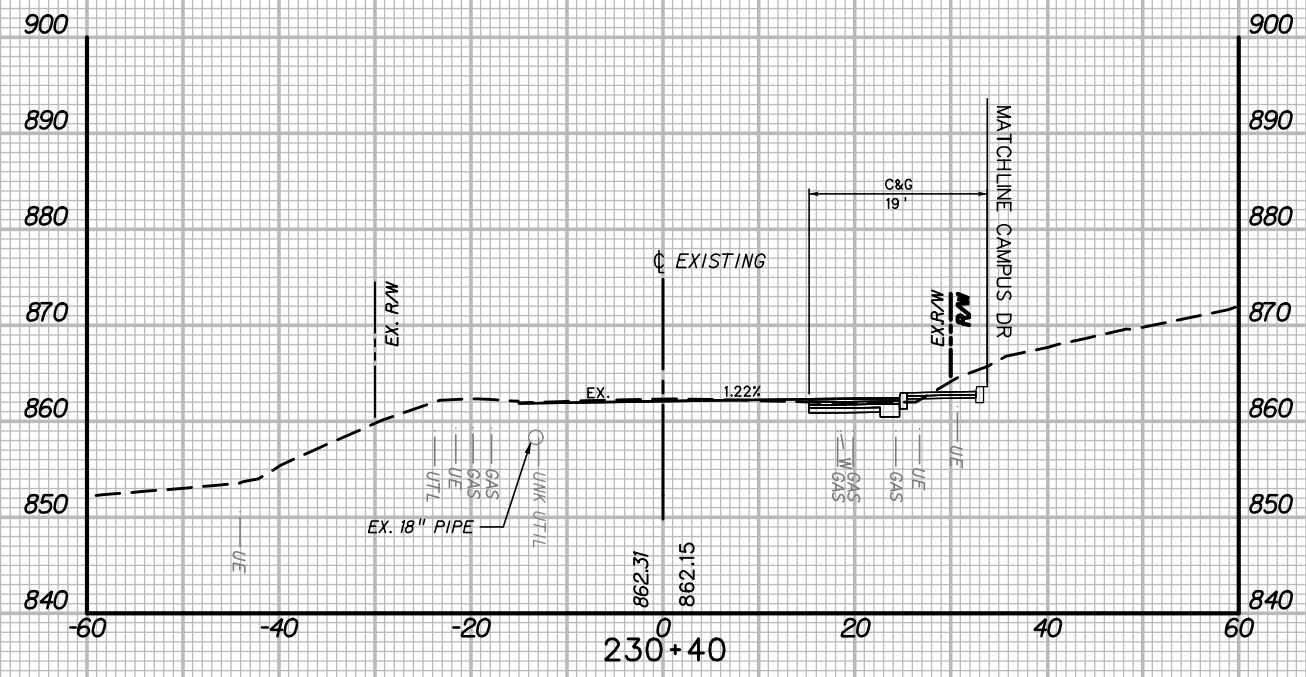


REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 130+15 - STA. 130+15

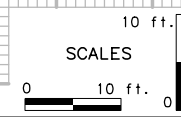
US 19

STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLASS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	SELECT (CY)
230+93.50	13.50	0	0	0	0	0	0	0	0
230+80	20	0	0	170	6	0	0	0	0
230+60	20	0	17	360	14	0	0	0	0
230+40	20	0	19	450	0	0	0	0	0
230+20	20	0	26	23	0	0	0	0	0



US 19

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 230+20 - STA. 230+80

DATE: / / BY: / /

FINAL SURVEY PLOTTED: / /

ORIGINAL SURVEY PLOTTED: / /

DATE: / / BY: / /

FINAL SURVEY PLOTTED: / /

ORIGINAL SURVEY PLOTTED: / /

AREAS CHECKED: / /

AREAS CHECKED: / /

AREAS CHECKED: / /

AREAS CHECKED: / /

NO. / /

NO. / /

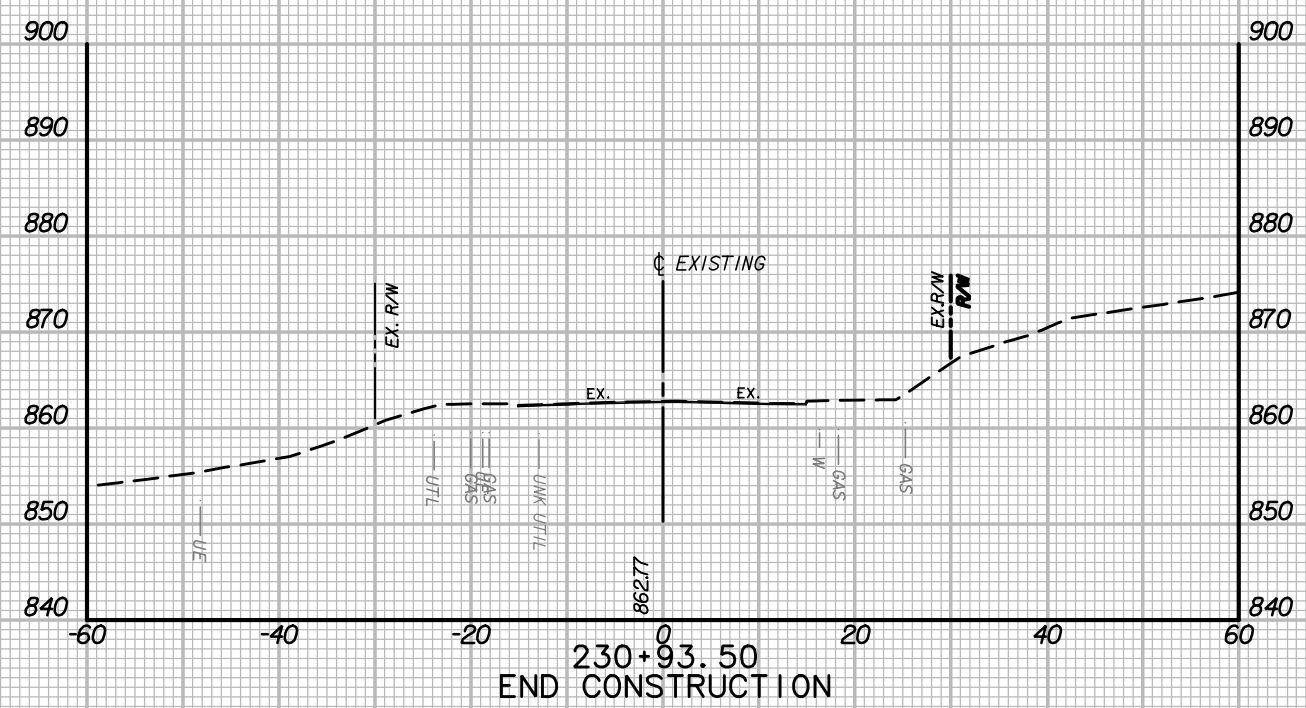
NO. / /

NO. / /

9/24/2020 3:46:56 PM

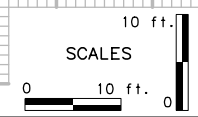
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION				EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	SELECT (CY)
		230+93.50	13.50	0	0	0	0	0	0	0	0
230+80		0	0	0	0	0	0	0	0	0	0

ORIGINAL SURVEY BOOK NO.	DATE	BY	FINAL SURVEY BOOK NO.	DATE	BY
SURVEY PLOTTED	SURVEY PLOTTED	SURVEY PLOTTED	SURVEY PLOTTED	SURVEY PLOTTED	SURVEY PLOTTED
AREAS CHECKED	AREAS CHECKED	AREAS CHECKED	AREAS CHECKED	AREAS CHECKED	AREAS CHECKED



US 19

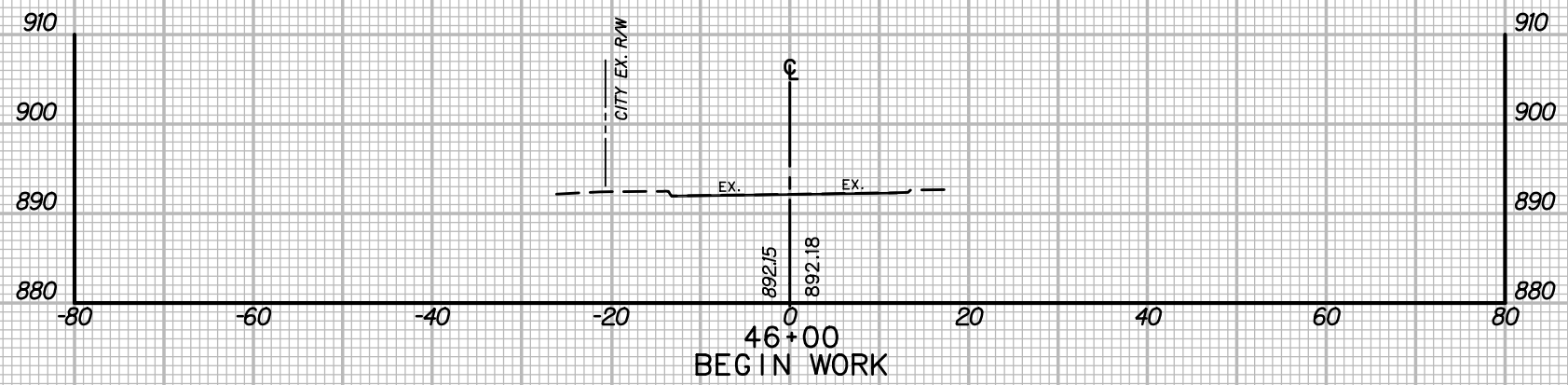
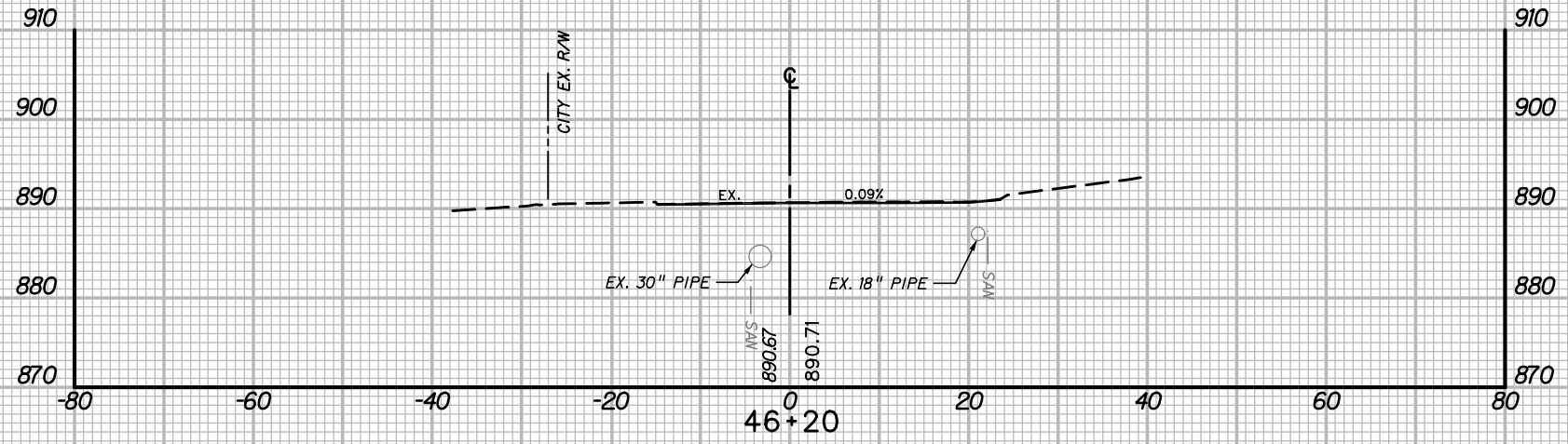
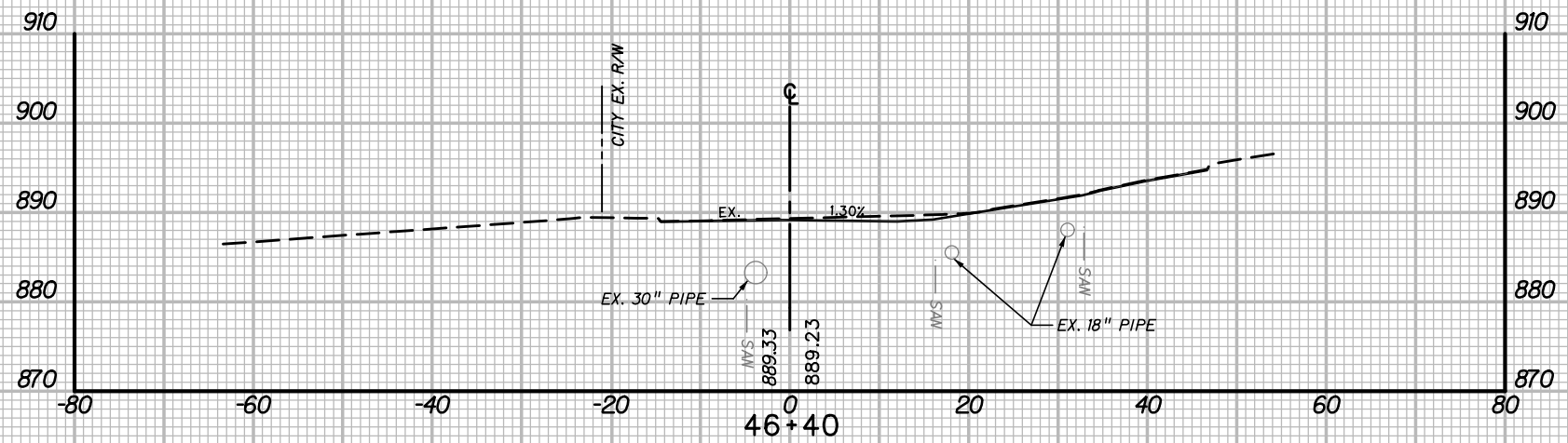
NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

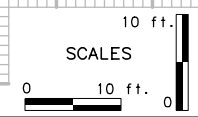
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 230+94 - STA. 230+94

STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION				EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)	SELECT (SF)	SELECT (CY)
		46+60	20	3	30	30	300	44	16	0	0
46+40	20	0	0	0	0	0	0	0	0	0	0
46+20	20	0	0	0	0	0	0	0	0	0	0
46+00	20	0	0	0	0	0	0	0	0	0	0



ORIGINAL SURVEY BOOK NO. \_\_\_\_\_  
 SURVEY PLOTTED \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
 BY \_\_\_\_\_ DATE \_\_\_\_\_  
 FINAL SURVEY BOOK NO. \_\_\_\_\_  
 SURVEY PLOTTED \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
 BY \_\_\_\_\_ DATE \_\_\_\_\_

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.

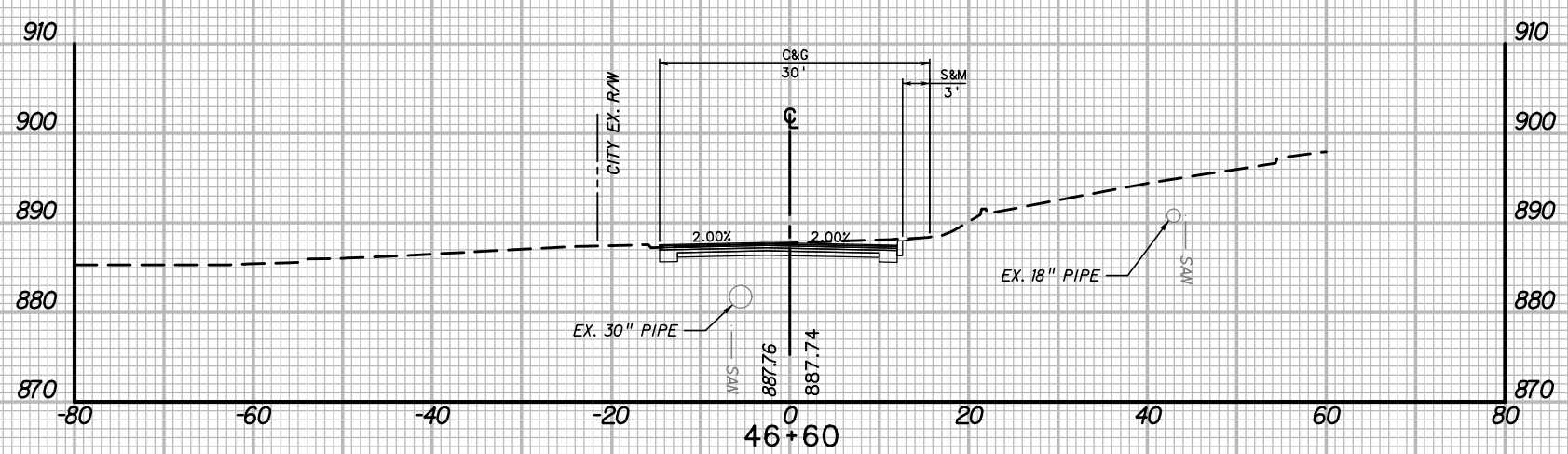
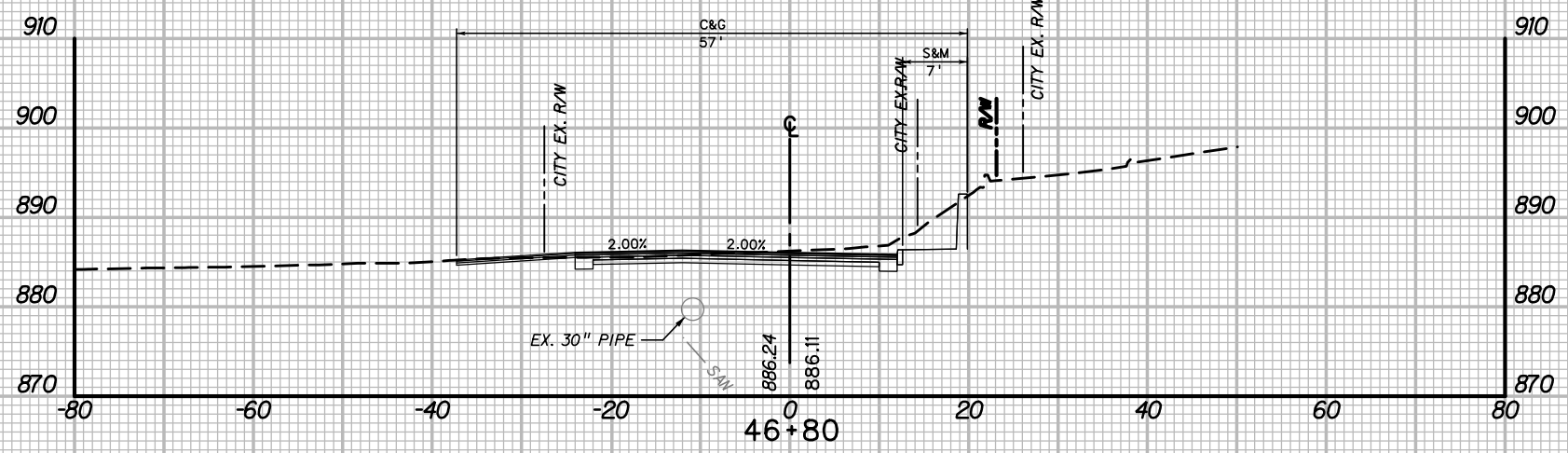
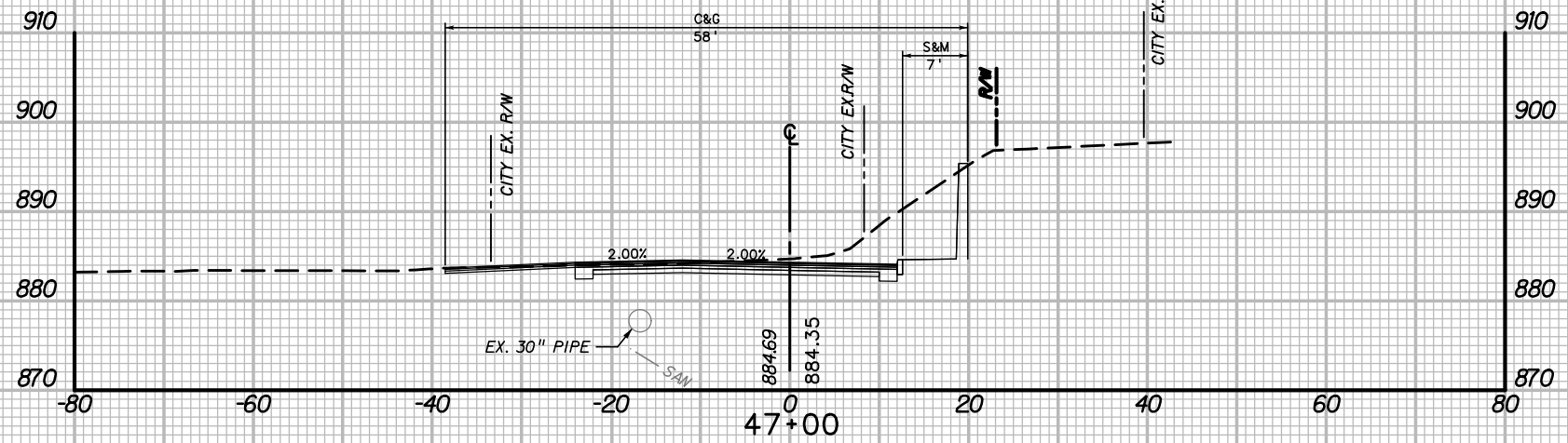


REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
**STA. 46+00 - STA. 46+40**

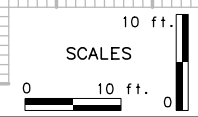
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 \\FRV01\sc\Bachman\p

STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
47+20	20	7	140	55	1130	208	127	0	0
47+00	20	7	140	58	1150	136	80	0	0
46+80	20	7	100	57	870	79	46	0	0
46+60	20	3	30	30	44	0	0	0	0



ORIGINAL SURVEY PLOTTED	DATE	BY	FINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED	///	///	SURVEY PLOTTED	///	///
TEMPLATE AREAS CHECKED	///	///	TEMPLATE AREAS CHECKED	///	///
BOOK NO.	///	///	BOOK NO.	///	///
AREAS CHECKED	///	///	AREAS CHECKED	///	///
NO.	///	///	NO.	///	///

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.

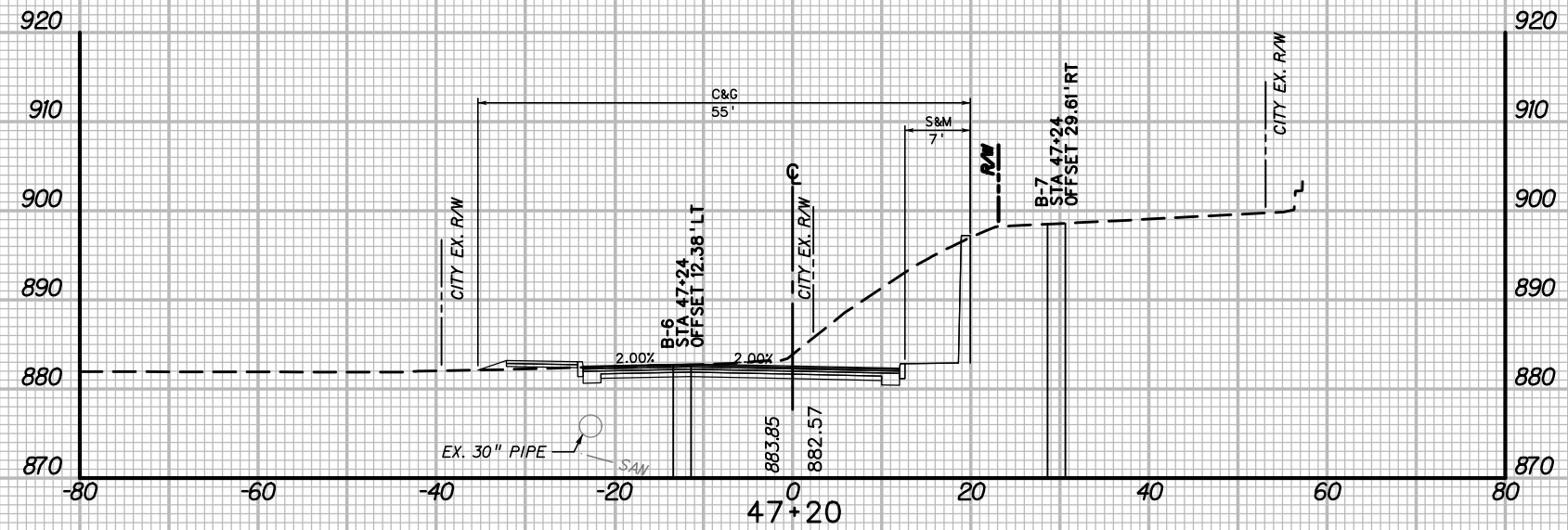
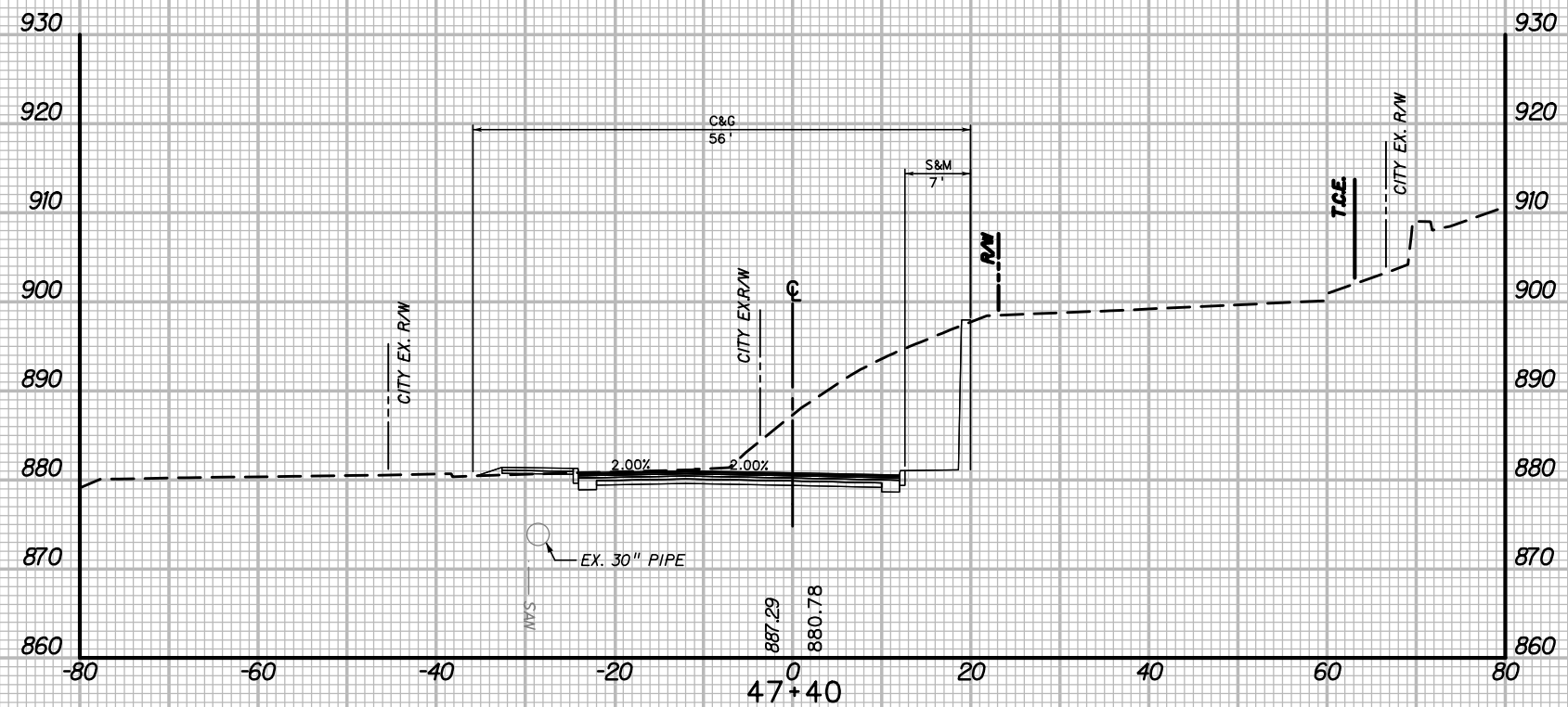


REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 46+60 - STA. 47+00

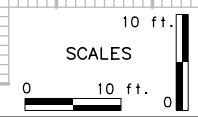
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STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
47+60	20	7	141	55	1121	420	273	0	0
47+40	20	7	140	56	1110	310	0	2	0
47+20	20	7	140	55	1110	208	0	3	0



**CAMPUS DRIVE**

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 47+20 - STA. 47+40

ORIGINAL SURVEY PLOTTED, SURVEY BOOK NO. \_\_\_\_\_, AREAS CHECKED \_\_\_\_\_

FINAL SURVEY PLOTTED, SURVEY BOOK NO. \_\_\_\_\_, AREAS CHECKED \_\_\_\_\_

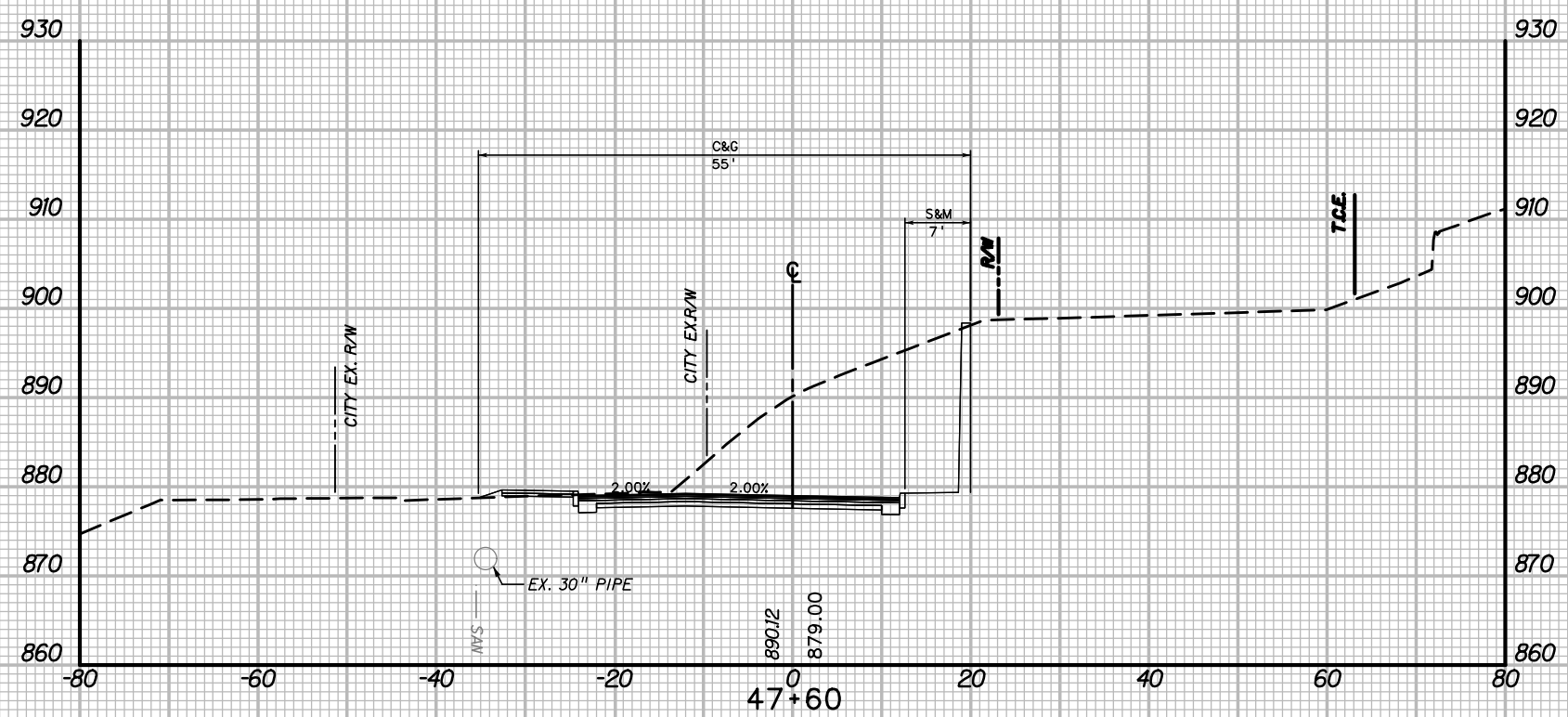
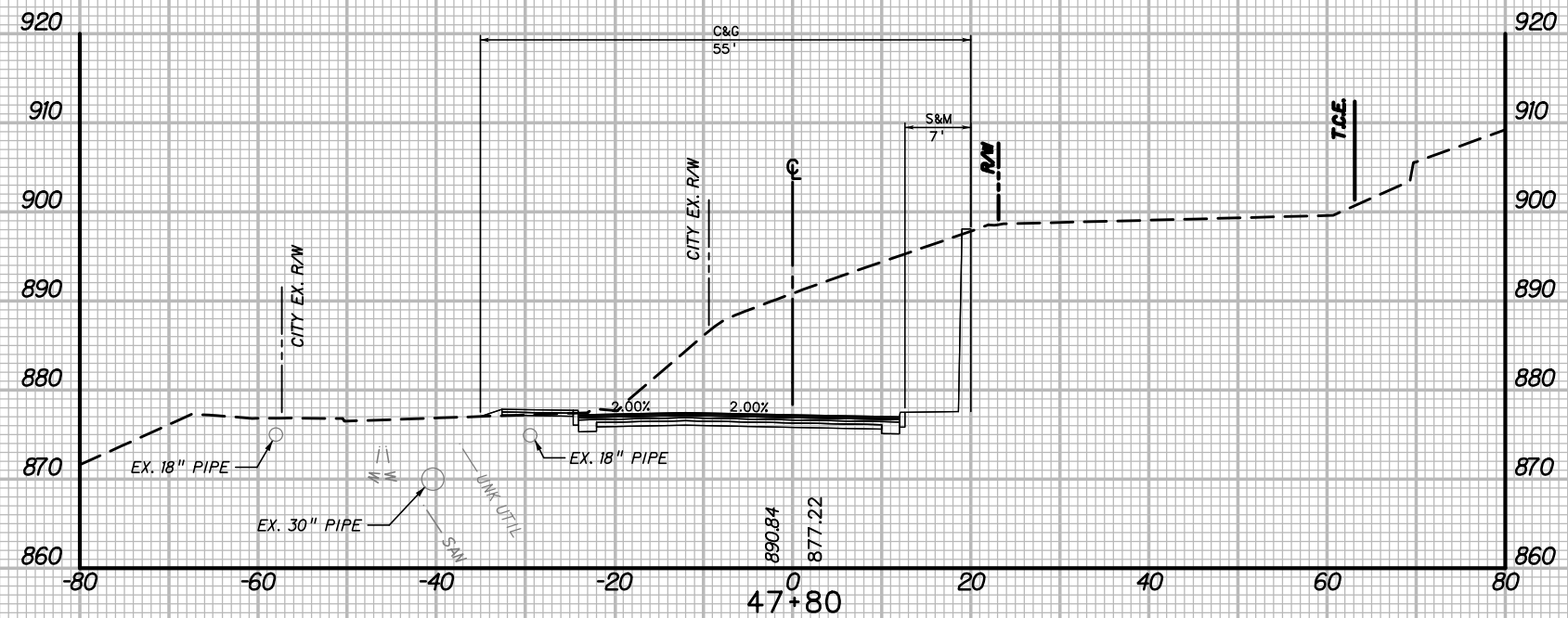
BY: \_\_\_\_\_ DATE: \_\_\_\_\_

BY: \_\_\_\_\_ DATE: \_\_\_\_\_

BY: \_\_\_\_\_ DATE: \_\_\_\_\_

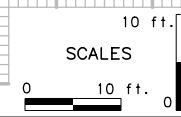
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STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
47+00	20	7	140	55	1100	586	415	2	1
47+80	20	7	139	55	1089	535	350	1	1
47+60	20	7	140	55	1100	586	415	2	1



ORIGINAL SURVEY PLOTTED, AREAS CHECKED, NO. \_\_\_\_\_  
 BY \_\_\_\_\_ DATE \_\_\_\_\_  
 FINAL SURVEY PLOTTED, AREAS CHECKED, NO. \_\_\_\_\_  
 BY \_\_\_\_\_ DATE \_\_\_\_\_

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.

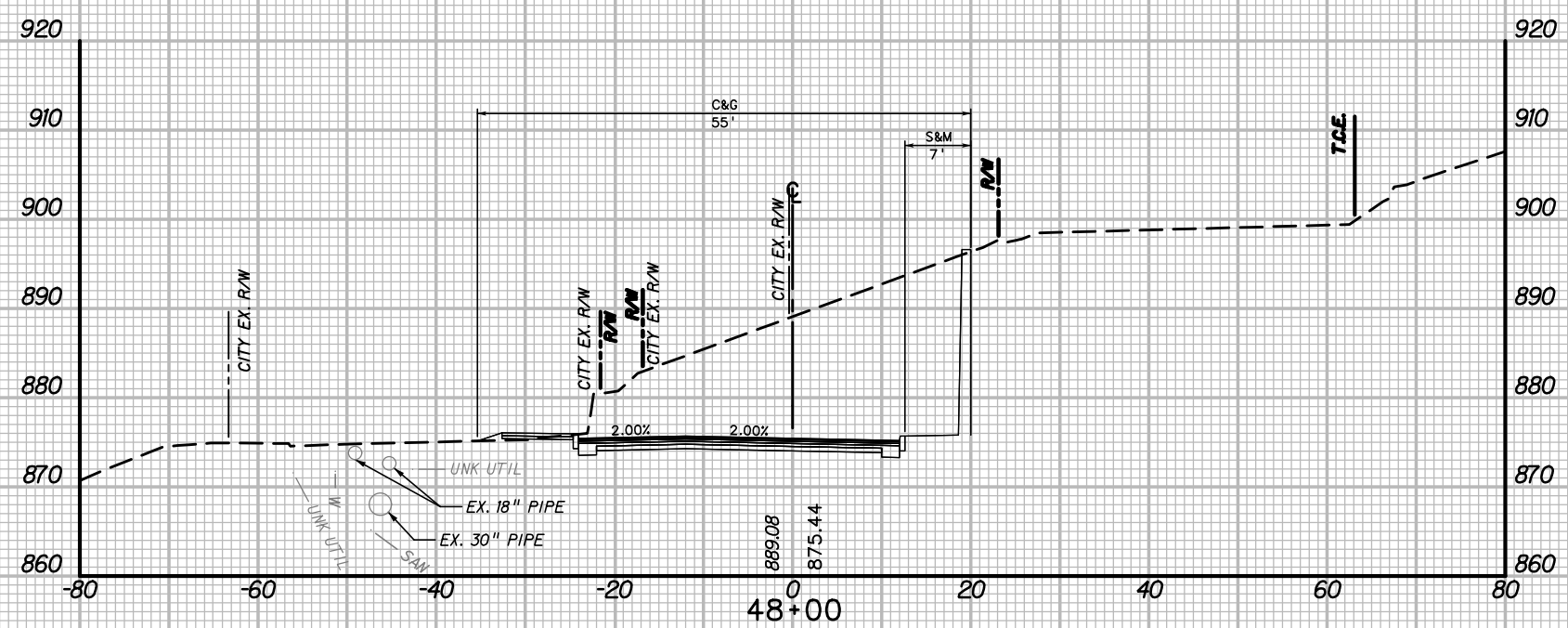
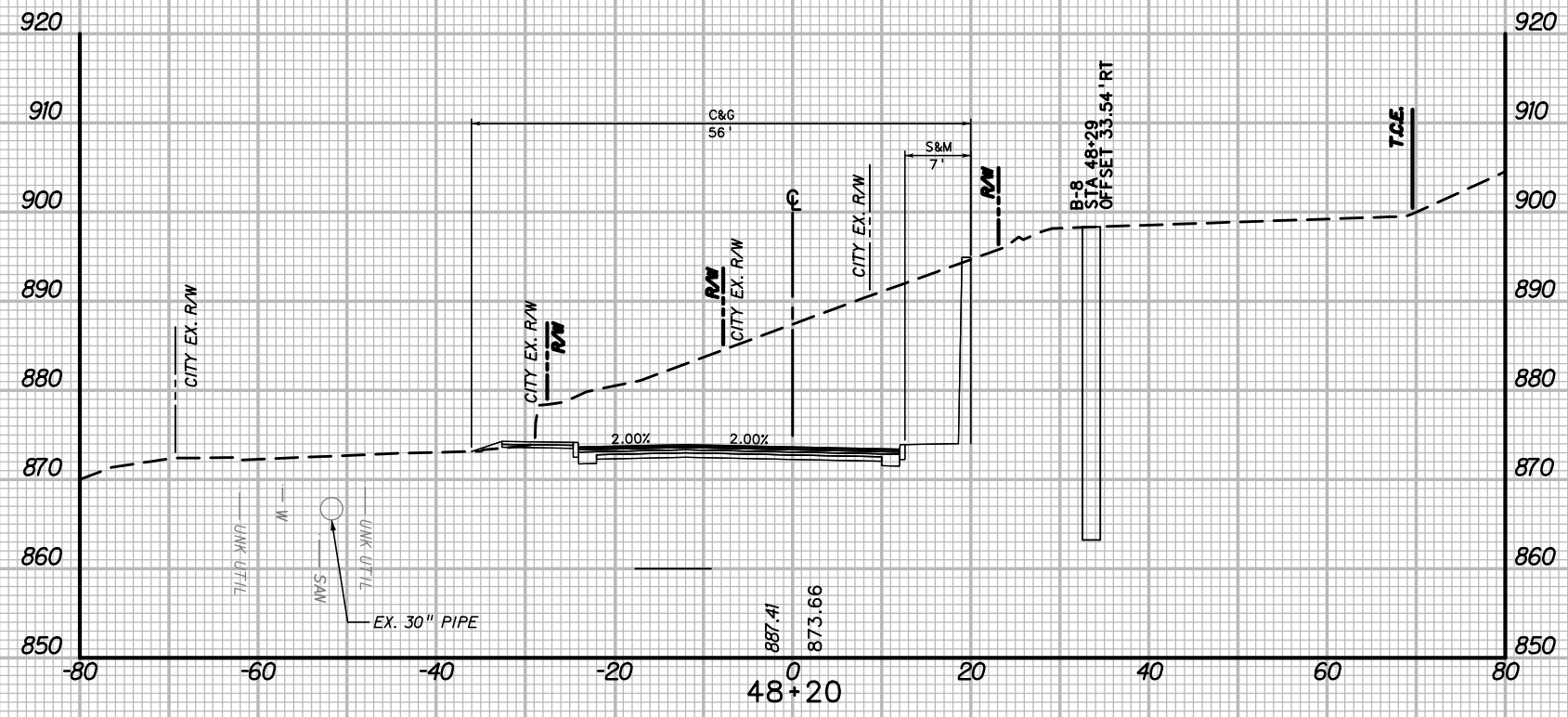


REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

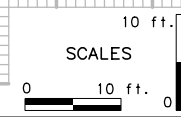
**CAMPUS DRIVE**  
 THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
**STA. 47+60 - STA. 47+80**

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STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
48+40	20	12	190	61	1170	626	464	0	0
48+20	7	7	56	56	627	627	0	1	0
48+00	20	7	140	55	1110	449	0	1	0



NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 48+00 - STA. 48+20

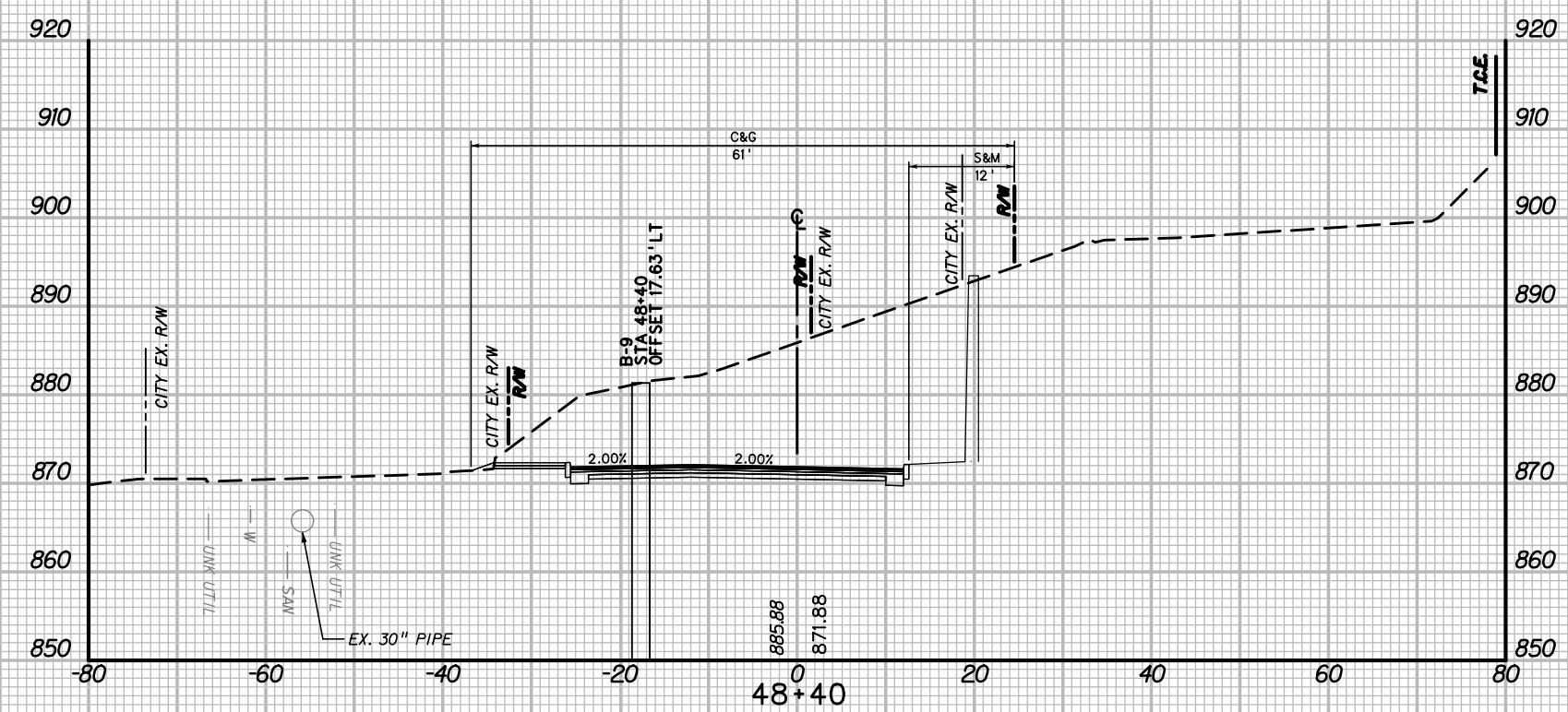
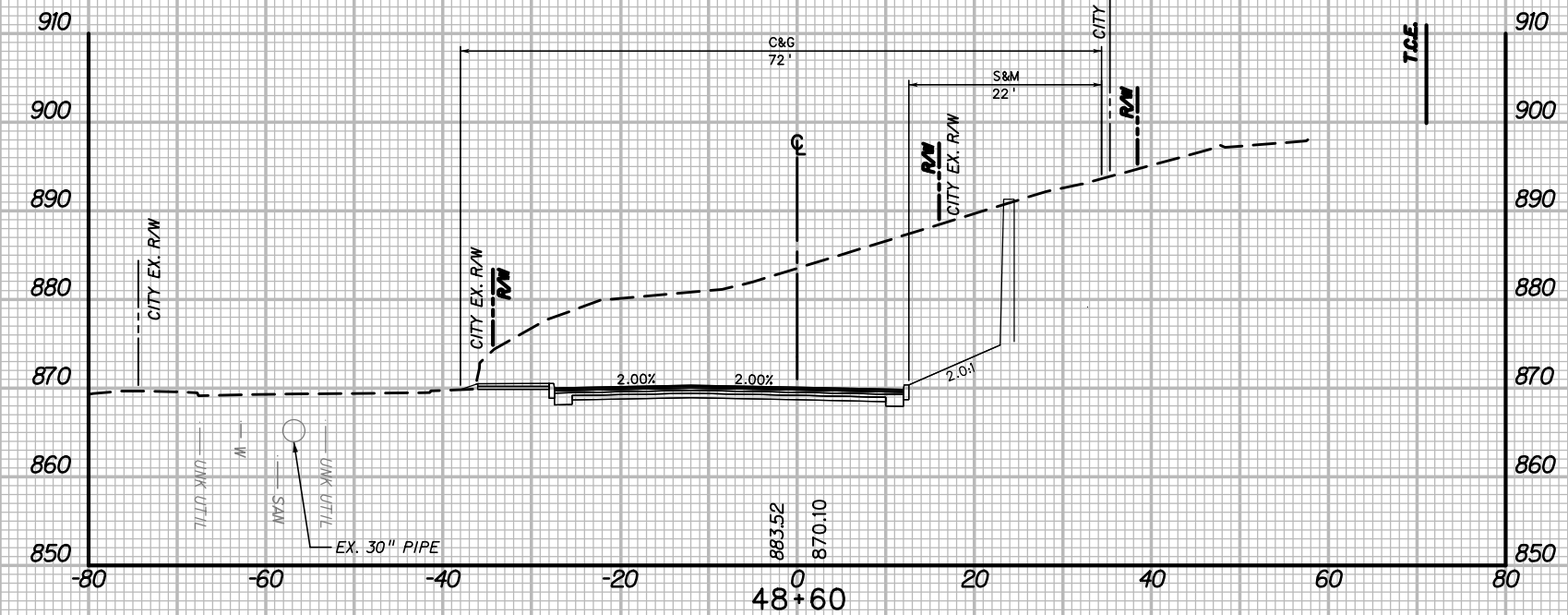
ORIGINAL SURVEY PLOTTED	DATE	BY	FINAL SURVEY PLOTTED	DATE	BY
SURVEY BOOK NO.					
AREAS CHECKED					
NO.					



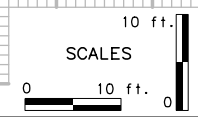
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STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
48+80	20	28	79	1510	524	0	1	0	0
48+60	20	22	72	1330	491	0	1	0	0
48+40	12	61	626						



NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

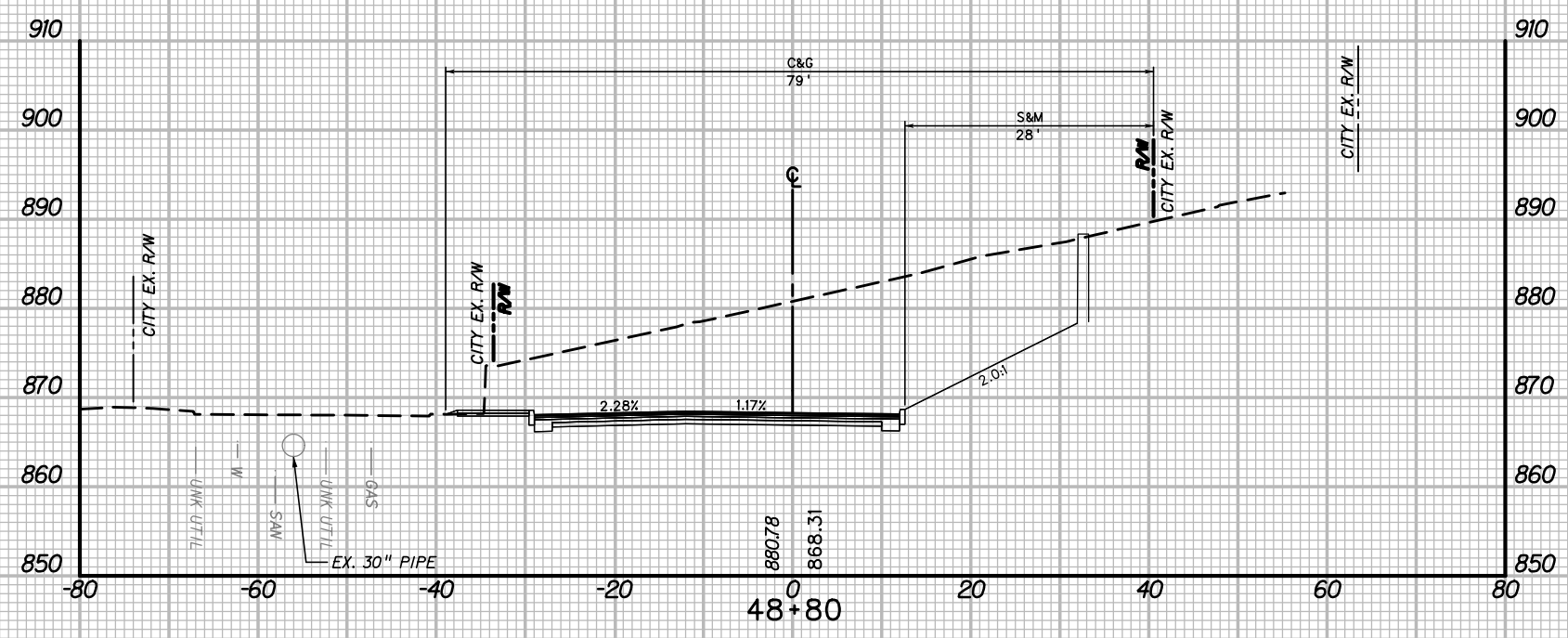
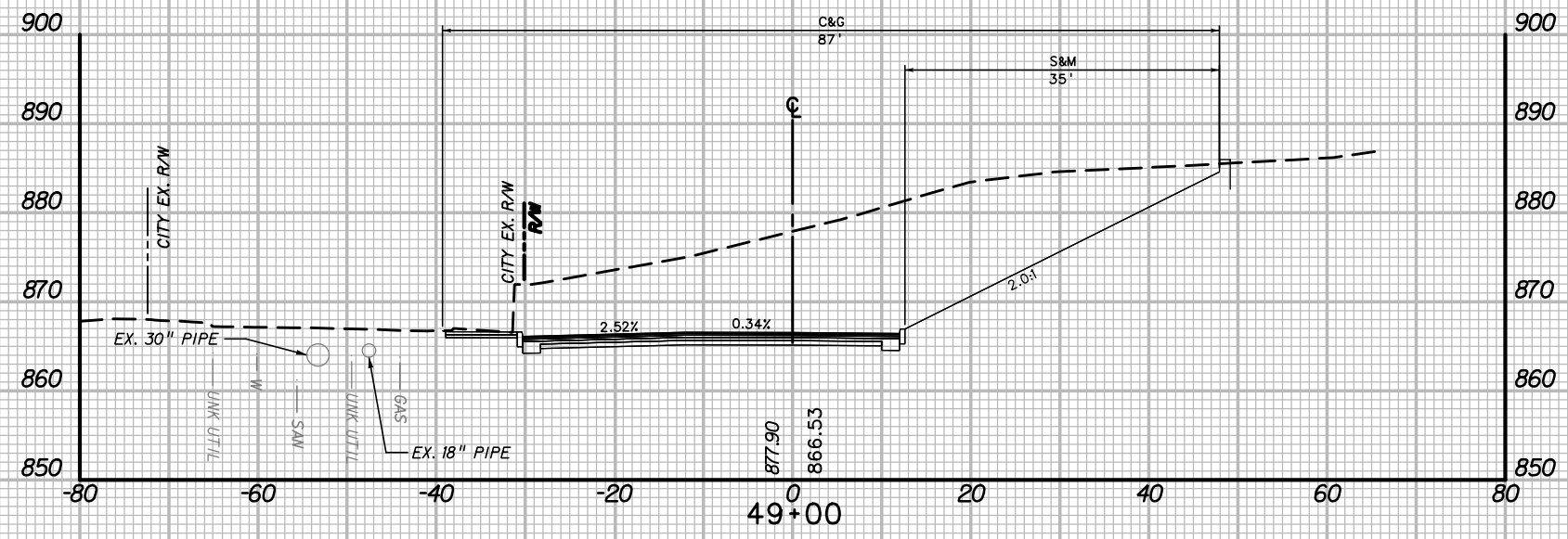
**CAMPUS DRIVE**

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**CROSS-SECTIONS**  
**STA. 48+40 - STA. 48+60**

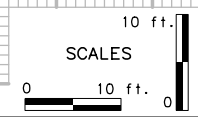
ORIGINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED		
FINAL SURVEY PLOTTED		
BOOK NO.		
AREAS CHECKED		
NO.		

STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
49+20	20	31	680	85	1720	617	493	0	0
49+00	20	35	630	87	1660	714	529	0	0
48+80	20	28	630	79	1660	714	529	1	0



**CAMPUS DRIVE**

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

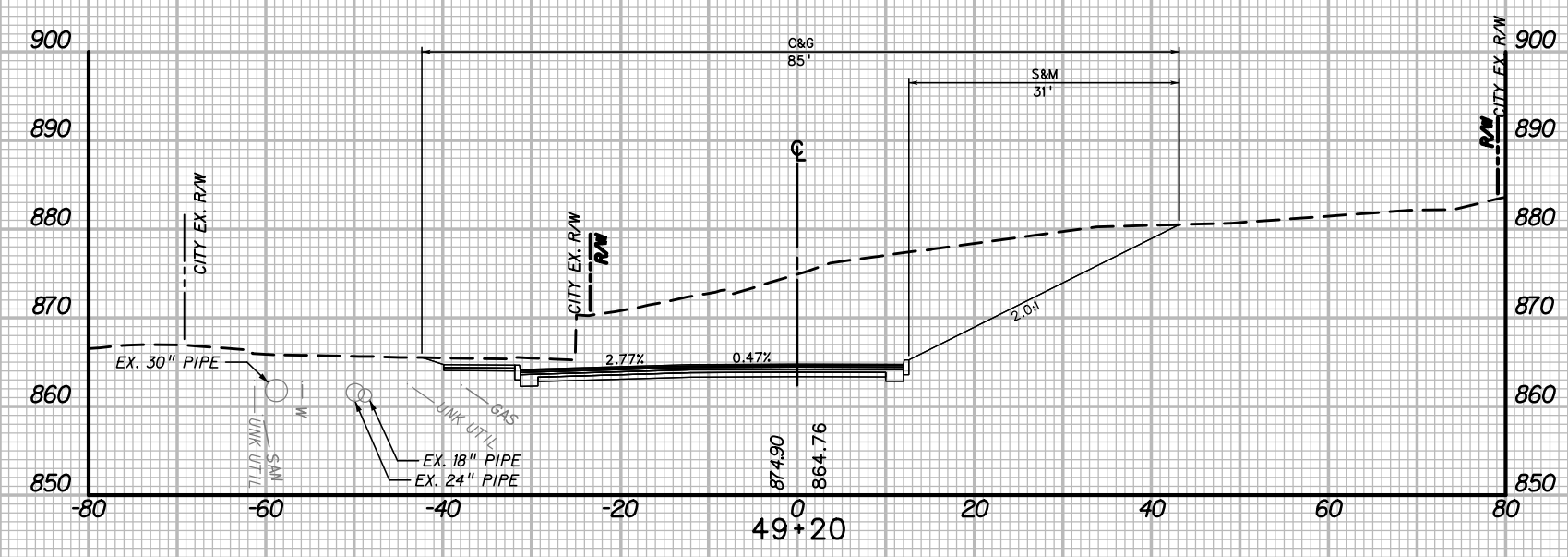
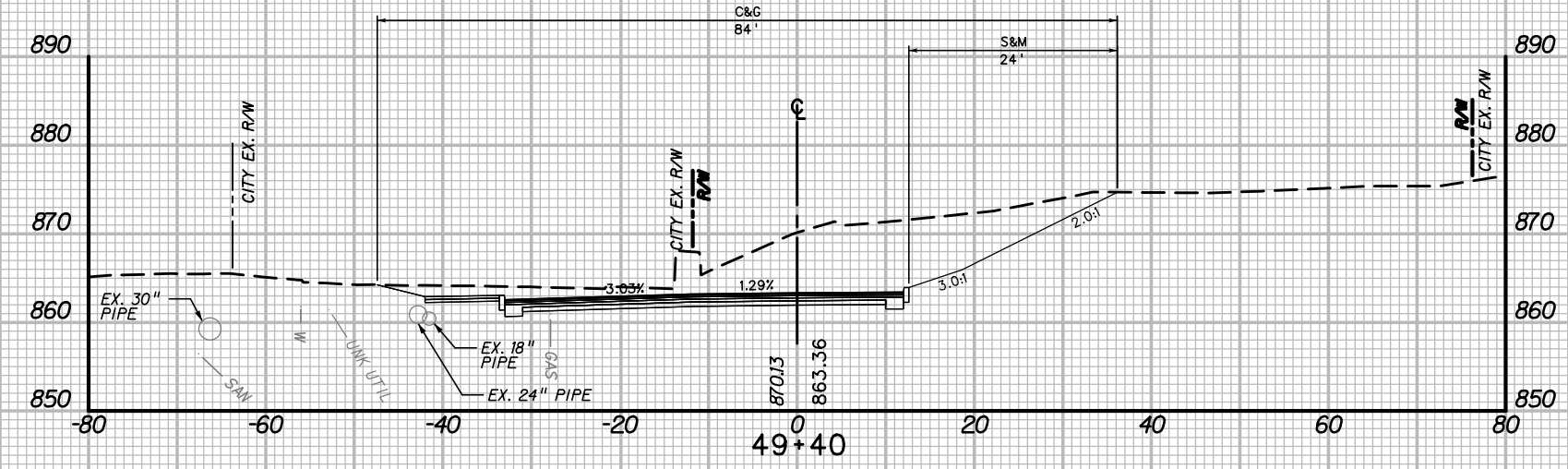
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
**STA. 48+80 - STA. 49+00**

ORIGINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED		
FINAL SURVEY PLOTTED		
AREAS CHECKED		
NO.		

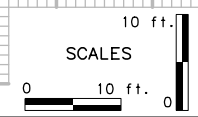
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STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
49+60	20	16	400	86	1700	183	203	0	0
49+40	20	24	550	84	1690	365	364	0	0
49+20	31	31	85	67	617	0	0	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY	FINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED	///	///	SURVEY PLOTTED	///	///
BOOK NO.	///	///	BOOK NO.	///	///
AREAS CHECKED	///	///	AREAS CHECKED	///	///
NO.	///	///	NO.	///	///



NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



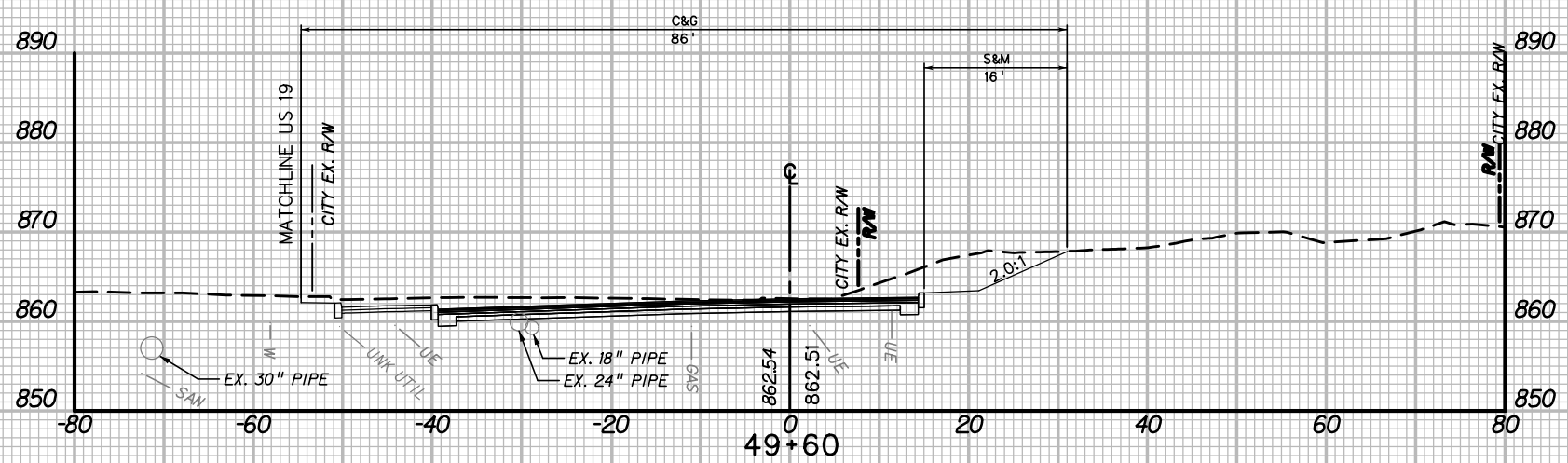
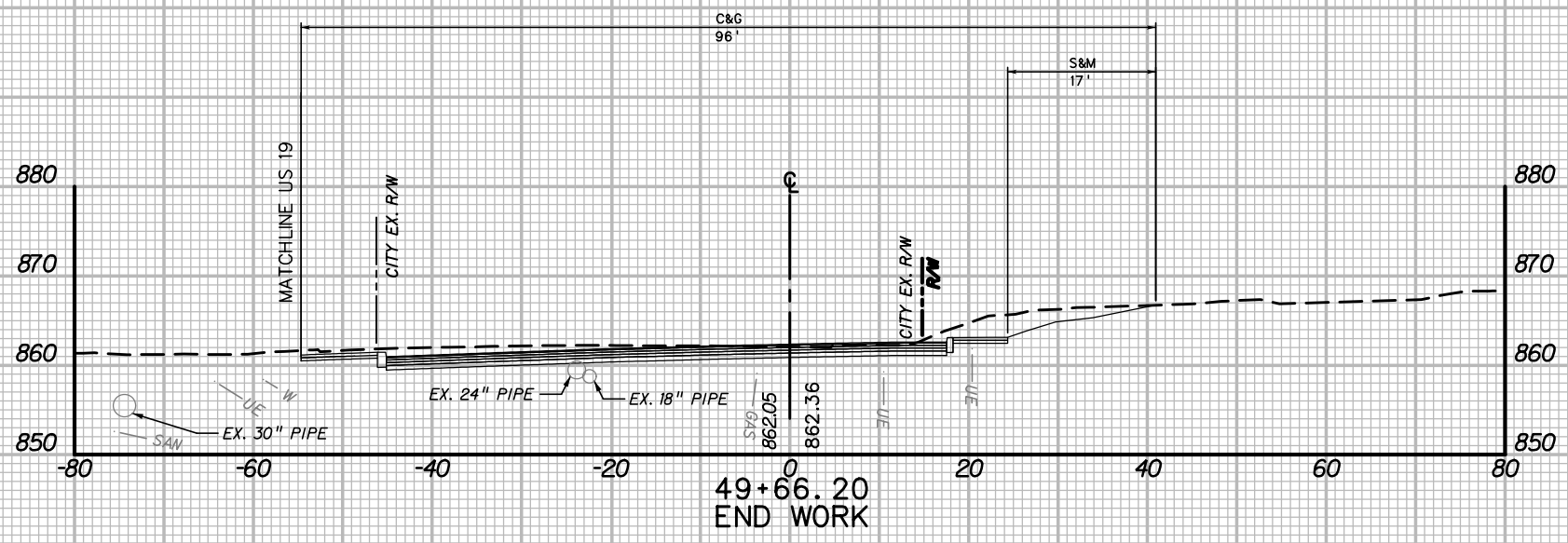
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 49+20 - STA. 49+40

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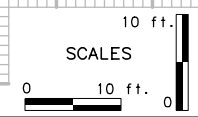
STATION	LENGTH (FT)	SEEDING & MULCHING		CLEARING & GRUBBING		EXCAVATION		EMBANKMENT	
		WIDTH (FT)	AREA (SF)	WIDTH (FT)	AREA (SF)	UNCLAS. (SF)	UNCLAS. (CY)	UNCLAS. (SF)	UNCLAS. (CY)
49+66.2	6	17	96	158	39	0	0	0	0
49+60	16	16	86	183	0	0	0	0	0

ORIGINAL SURVEY PLOTTED	DATE	BY
SURVEY PLOTTED		
FINAL SURVEY PLOTTED		
AREAS CHECKED		
NO.		



**CAMPUS DRIVE**

NOTE: ALL BURIED UTILITIES SHOWN AT APPROXIMATE DEPTH. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION.



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTIONS**  
STA. 49+60 - STA. 49+66

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