

PLAN PREPARATION  
 DESIGNER: HNTB CORPORATION

DISTRICT	COUNTY	TOWNSHIP	BOROUGH	ROUTE	SECTION	TOTAL SHEETS
6-0	MONTGOMERY	SPRINGFIELD		2018	SIP	29
		WHITEMARSH		4002	SIP	

ECMS NO. 114944

ALSO INCLUDED:  
 TRAFFIC CONTROL PLAN 5 SHEETS  
 SIGNING AND PAVEMENT MARKING PLAN 55 SHEETS  
 TRAFFIC SIGNAL PLAN 17 SHEETS  
 SYSTEM PERMIT PLAN 2 SHEETS

# COMMONWEALTH OF PENNSYLVANIA



## DEPARTMENT OF TRANSPORTATION

### DRAWINGS FOR CONSTRUCTION

OF

STATE ROUTE 4002 SECTION SIP  
 IN MONTGOMERY COUNTY

FROM STA. 16+50.00 TO STA. 17+60.00 LENGTH 60.00 FT. 0.011 MI.  
 FROM SEG. 0011 OFFSET 0110 TO SEG. 0011 OFFSET 0000  
 FROM SEG. 0010 OFFSET 0110 TO SEG. 0010 OFFSET 0000

AND

STATE ROUTE 2018 SECTION SIP  
 IN MONTGOMERY COUNTY

FROM STA. 17+60.00 TO STA. 120+76.00 LENGTH 10,266.00 FT. 1.944 MI.  
 FROM SEG. 0010 OFFSET 0000 TO SEG. 0050 OFFSET 0840  
 FROM SEG. 0011 OFFSET 0000 TO SEG. 0050 OFFSET 0840  
 TOTAL LENGTH 10,326.00 FT. 1.955 MI.

SCALE



**DESIGN DESIGNATION - SR 2018 (BETHLEHEM PIKE)**  
 ROADWAY FUNCTIONAL CLASSIFICATION - URBAN MINOR ARTERIAL  
 ROADWAY TYPOLOGY - COMMUNITY ARTERIAL (SUBURBAN CENTER)  
 DESIGN SPEED - 35 MPH  
 PAVEMENT WIDTH - 3 TO 4 - 11' LANES  
 SHOULDER WIDTH - 0' TO 8'  
 MEDIAN WIDTH - 0' TO 12'

**TRAFFIC DATA**

CURRENT ADT - 13,763 (2024)  
 DESIGN YEAR ADT - 14,526 (2044)  
 DHV - 1,307 (2044)  
 D - 54  
 T - 3

**DESIGN DESIGNATION - SR 4002 (STENTON AVENUE)**  
 ROADWAY FUNCTIONAL CLASSIFICATION - URBAN MINOR ARTERIAL  
 ROADWAY TYPOLOGY - COMMUNITY ARTERIAL (SUBURBAN CORRIDOR)  
 DESIGN SPEED - 40 MPH  
 PAVEMENT WIDTH - 4 TO 5 - 11' LANES  
 SHOULDER WIDTH - 0' TO 4'  
 MEDIAN WIDTH - 4' TO 14'

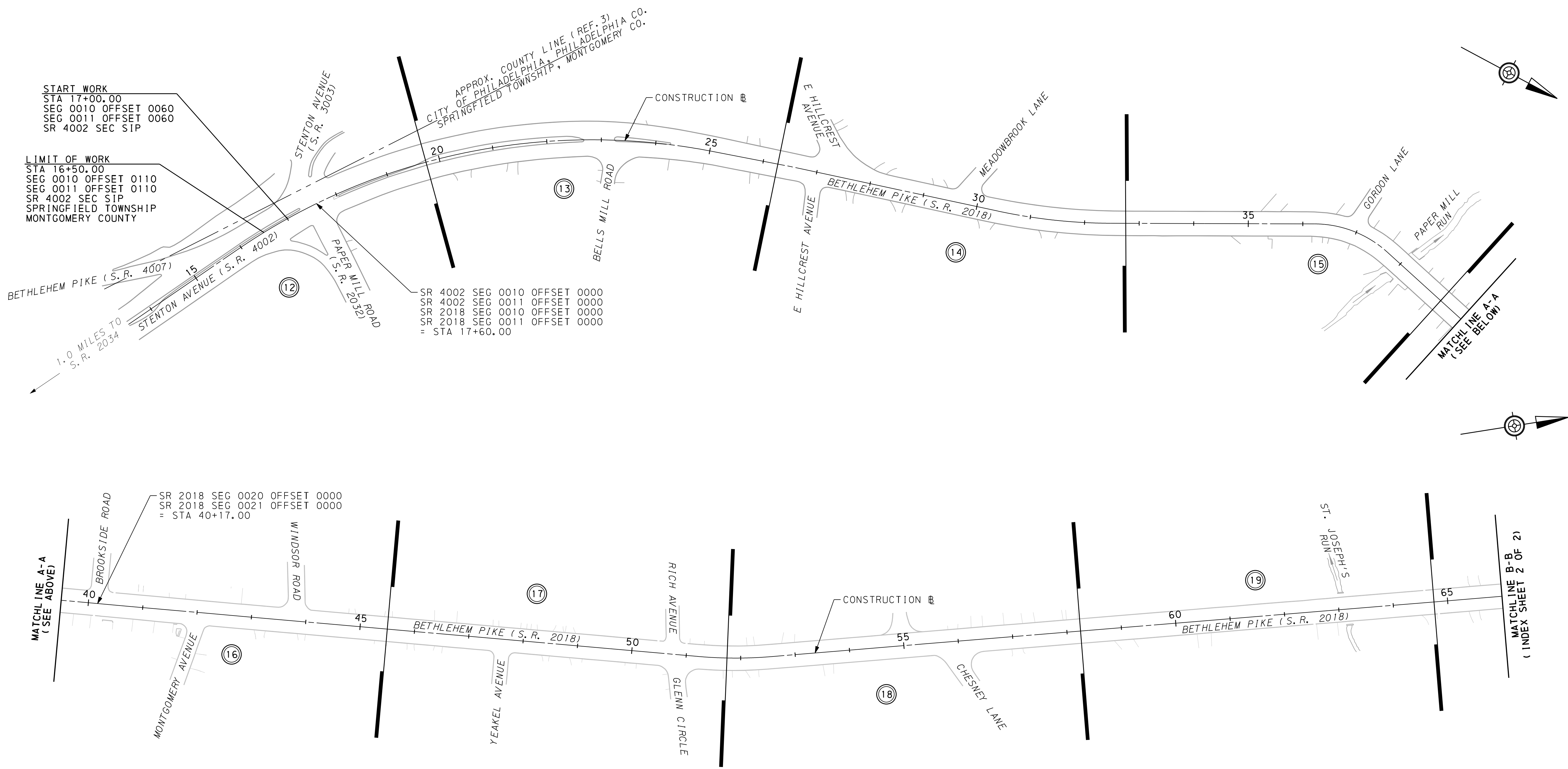
**TRAFFIC DATA**

CURRENT ADT - 20,251 (2024)  
 DESIGN YEAR ADT - 20,454 (2044)  
 DHV - 1,841 (2044)  
 D - 59  
 T - 4

PREPARED BY: HNTB CORPORATION 1650 ARCH ST, SUITE 1700 PHILADELPHIA, PA 19103    BRIAN A. WILLIAMS, PE PROFESSIONAL ENGINEER	RECOMMENDED DATE: _____ Louis R. Belmonte, P.E. <small>Digitally signed by Louis R. Belmonte, P.E. Date: 2023.04.13 14:37:49 -0400</small> DISTRICT EXECUTIVE
	RECOMMENDED DATE: APR 14 2023  DEPUTY SECRETARY
	APPROVED DATE: APR 14 2023  ACTING SECRETARY OF TRANSPORTATION (ON BEHALF OF THE GOVERNOR AS WELL AS THE SECRETARY)
DATE: 4/04/2023	

SHEET INDEX	
DESCRIPTION	SHEET
TITLE SHEET	1
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CONSTRUCTION DETAILS	5-6
TYPICAL SECTIONS	7
SUMMARY AND TABULATION SHEETS	8-11
PLAN SHEETS	12-29

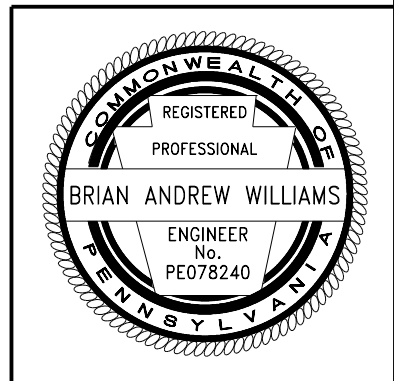
DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	MONTGOMERY	2018	SIP	2 OF 29	
CITY OF PHILADELPHIA AND SPRINGFIELD TOWNSHIP					
REVISION NUMBER	REVISIONS			DATE	BY



**LEGEND**  
 ○ - PLAN  
 — - SHEET BREAK

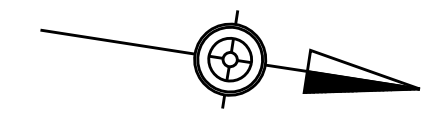
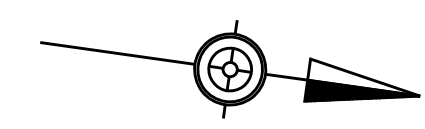
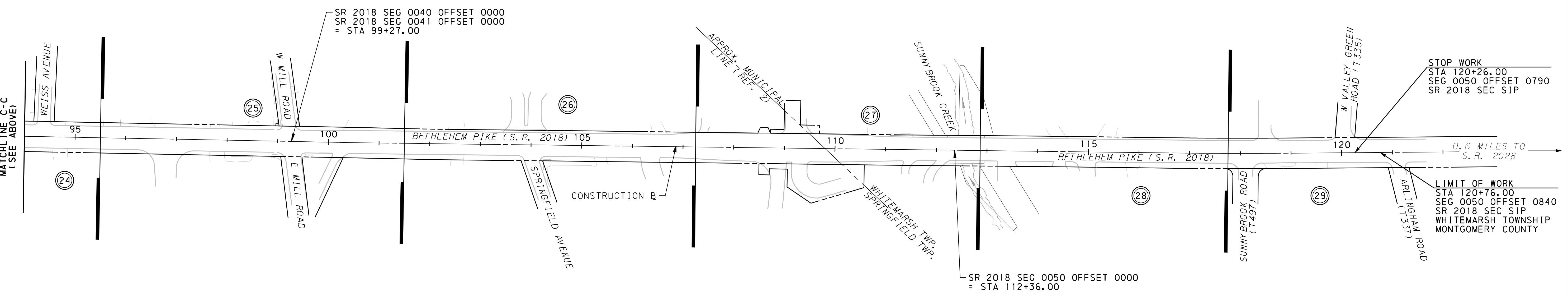
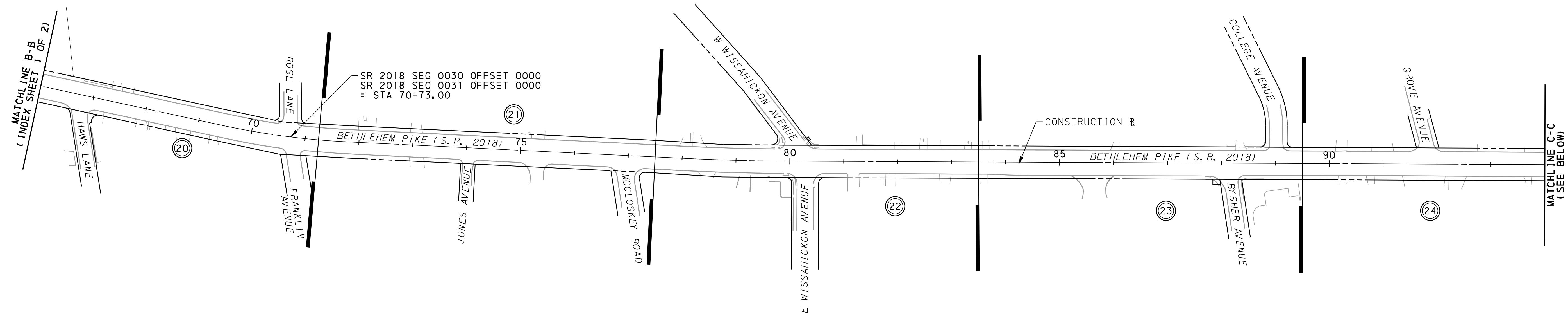
SCALE  
 0 100 200 FEET

INDEX MAP



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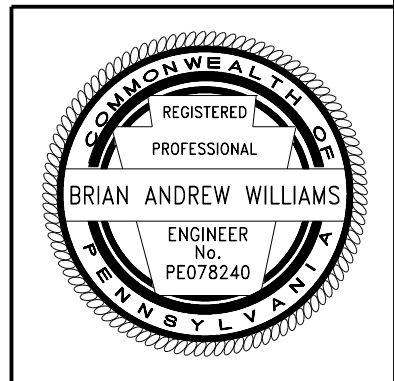
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	3 OF 29
SPRINGFIELD TOWNSHIP AND WHITEMARSH TOWNSHIP				
REVISION NUMBER	REVISIONS			DATE BY



**LEGEND**  
 - PLAN  
 - SHEET BREAK

**SCALE**  
0 100 200 FEET

**INDEX MAP**



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**LIST OF PUBLIC UTILITIES**

LINESTYLE	UTILITY	ADDRESS	PHONE
— W —	AQUA PENNSYLVANIA, INC	762 W. LANCASTER AVENUE BRYN MAWR, PA 19010 MR. STEVE PIZZI	610-525-1402
— E — — G —	PECO ENERGY COMPANY	400 PARK AVENUE WARMINSTER, PA 18974 MR. PETE DETTLING	215-956-3270
— S —	TOWNSHIP OF SPRINGFIELD	1510 PAPER MILL ROAD WYNDMOOR, PA 19038 MR. MICHAEL TAYLOR	215-836-7600
— S —	TOWNSHIP OF WHITEMARSH	616 GERMANTOWN PIKE, LAFAYETTE HILL, PA 19444 MR. CHARLES L. GUTTENPLAN	610-825-3535 EXT. 2625
— FO — — OVH —	VERIZON PENNSYLVANIA, INC	1800 SHEREE BLVD, SUITE 1400, EXTON, PA 19341 MR. BRIAN M MAGEE	610-280-2154

THE PA ONE CALL NOTIFICATIONS PERFORMED DURING PROJECT DEVELOPMENT ARE AS FOLLOWS:

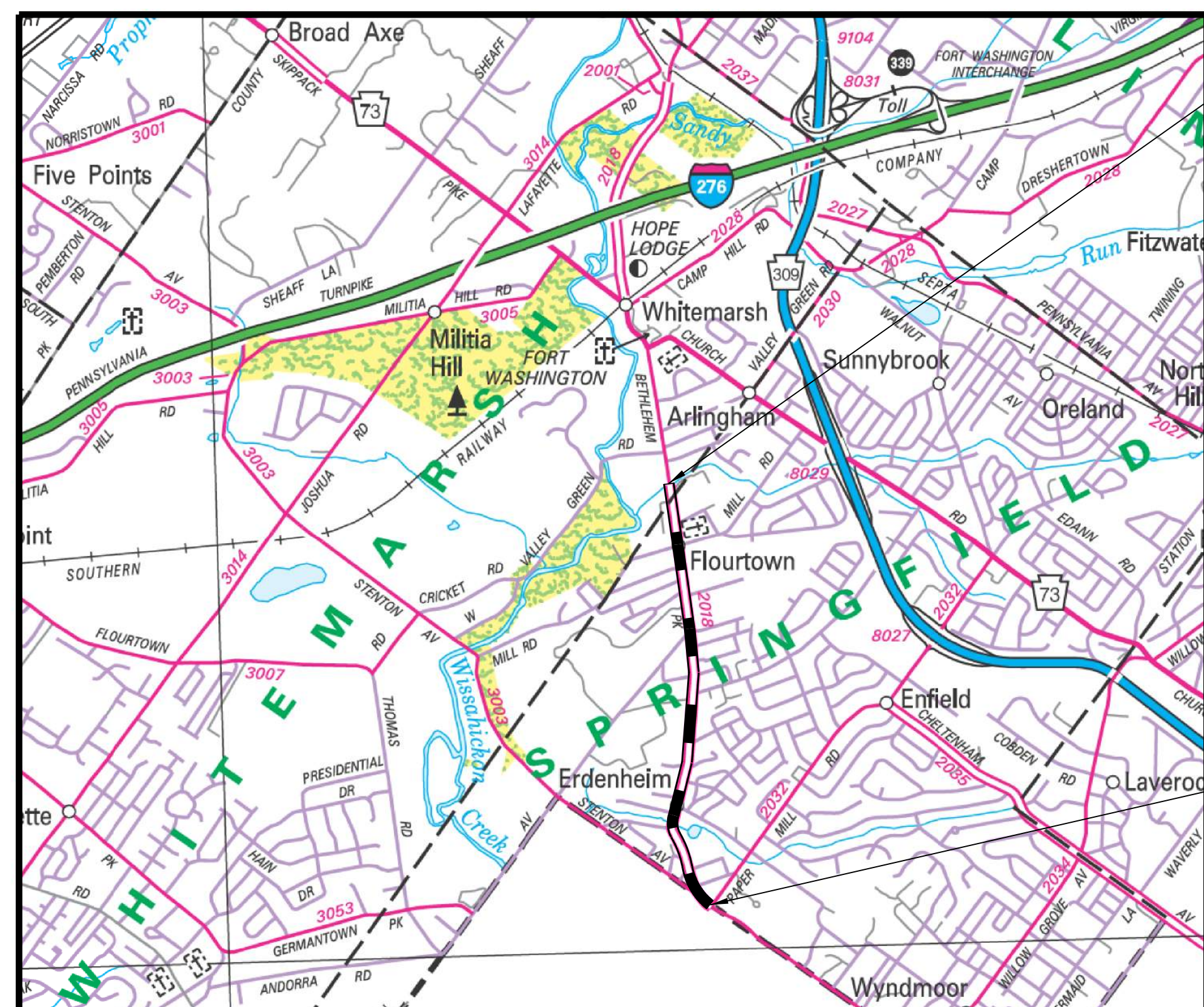
PRELIMINARY DESIGN SERIAL NO. 20220462161 ON 02/15/2022 FOR WHITEMARSH TOWNSHIP  
 PRELIMINARY DESIGN SERIAL NO. 20220462162 ON 02/15/2022 FOR SPRINGFIELD TOWNSHIP  
 PRELIMINARY DESIGN SERIAL NO. 20220462163 ON 02/15/2022 FOR CITY OF PHILADELPHIA

FINAL DESIGN SERIAL NO. \_\_\_\_\_ ON \_\_\_\_\_ FOR WHITEMARSH TOWNSHIP  
 FINAL DESIGN SERIAL NO. \_\_\_\_\_ ON \_\_\_\_\_ FOR SPRINGFIELD TOWNSHIP  
 FINAL DESIGN SERIAL NO. \_\_\_\_\_ ON \_\_\_\_\_ FOR CITY OF PHILADELPHIA

EXISTING UTILITIES ARE SHOWN ON THE PLANS IN ACCORDANCE WITH THE BEST INFORMATION AVAILABLE AND ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE CORRECTNESS AND COMPLETENESS OF THIS INFORMATION IS NOT GUARANTEED.

THE CONTRACTOR IS TO VERIFY THE INFORMATION AND TAKE ALL PRECAUTIONS TO FULLY PROTECT THE UTILITY AND SERVICE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY ALL OVERHEAD LINES. NOTIFY THE UTILITY COMPANY AND COMPLY WITH THE UTILITY COMPANY'S SAFETY CLEARANCE REQUIREMENTS WHEN WORKING IN THE AREA OF THEIR FACILITIES.



**LOCATION MAP**

SCALE



**LEGEND**

- PROJECT
- LIMITED ACCESS HIGHWAY
- STATE HIGHWAY
- MUNICIPAL ROAD
- POLITICAL BOUNDARY

**SUMMARY OF PROJECT COORDINATES**

BASED ON STATE PLANE COORDINATE SYSTEM - US SURVEY FEET  
 COMBINED SCALE FACTOR: 1.000025958

ROUTE	STATION	POINT	COORDINATES		BEARING
			NORTH	EAST	
			CONSTRUCTION @	10+00.00	
	15+91.58	PC	284328.8376	2678719.5656	
	20+72.74	PI	284550.5479	2678292.5266	
	25+03.00	PT	285010.3079	2678150.6165	N 17° 09' 12 " W
	26+51.37	PI	285152.0765	2678106.8580	
	30+39.66	PC	285525.3573	2677999.9583	N 15° 58' 50 " W
	31+44.25	PI	285625.9079	2677971.1627	
	32+48.08	PT	285718.3240	2677922.1842	N 27° 55' 21 " W
	35+36.46	PI	285973.1281	2677787.1435	
	36+20.95	PC	286047.7427	2677747.4947	N 27° 59' 07 " W
	36+97.97	PI	286115.7546	2677711.3543	
	37+67.99	PT	286190.4400	2677730.1652	N 14° 08' 13 " E
	40+59.92	PI	286476.5263	2677801.4657	
	51+20.52	PC	287502.6286	2678058.0497	N 14° 00' 00 " E
	51+89.02	PI	287569.0936	2678074.6213	
	52+57.19	PT	287637.4082	2678079.6524	N 04° 12' 43 " E
	55+36.02	PI	287915.4830	2678100.1316	
	64+83.88	PI	288860.7156	2678170.6527	N 04° 16' 00 " E
	68+08.99	PI	289184.9646	2678194.3596	N 04° 10' 54 " E
	69+41.36	PC	289316.9706	2678204.2149	N 04° 16' 11 " E
	70+60.57	PI	289435.8441	2678213.0897	
	71+79.23	PT	289554.5588	2678202.2969	N 05° 11' 41 " W
	76+86.21	PI	290059.4542	2678156.3947	
	78+14.77	PC	290187.4792	2678144.6825	N 05° 13' 38 " W
	79+02.15	PI	290274.4988	2678136.7216	
	79+89.51	PT	290361.0876	2678124.9681	N 07° 43' 48 " W
	100+64.49	PI	292417.2140	2677845.8712	
	116+78.81	PC	294015.3759	2677618.0386	N 08° 06' 48 " W
	117+82.08	PI	294117.6112	2677603.4640	
	118+85.34	PT	294219.5238	2677586.7812	N 09° 17' 48 " W
	122+32.37	POE	294561.9949	2677530.7196	

NOTE: FOUR (4) PLACE COORDINATES ARE USED FOR COMPUTATIONAL PURPOSES ONLY AND DO NOT IMPLY PRECISION BEYOND TWO (2) PLACES.

**SUMMARY OF BENCHMARK COORDINATES**

BASED ON STATE PLANE COORDINATE SYSTEM - US SURVEY FEET

ROUTE	POINT	DESCRIPTION	COORDINATES		ELEVATION	STATION	OFFSET
			NORTH	EAST			
CONSTRUCTION @	BM 504	MAG NAIL	284530.1005	2678498.5327	271.737	18+93.99	38.57' RT
	BM 506	MAG NAIL	285426.4199	2678057.9833	211.235	29+28.57	28.54' RT
	BM 509	MAG NAIL	286505.9443	2677782.7363	161.154	40+86.84	26.02' LT
	BM 512	MAG NAIL	287698.0312	2678109.6438	206.585	53+19.85	25.46' RT
	BM 514	MAG NAIL	288753.6335	2678188.8512	182.522	63+78.45	26.12' RT
	BM 517	MAG NAIL	289693.9829	2678163.0863	212.959	73+21.63	26.43' LT
	BM 520	MAG NAIL	290513.2566	2678130.7075	187.198	81+39.52	26.15' RT
	BM 543	MAG NAIL	291398.7804	2677876.0460	183.442	90+32.88	28.25' RT
	BM 524	MAG NAIL	292401.3769	2677735.1302	168.000	100+44.74	27.77' RT
	BM 527	MAG NAIL	293388.2146	2677614.3770	149.355	110+41.40	27.41' RT
	BM 530	MAG NAIL	294180.1198	2678012.6230	157.243	118+42.08	20.96' RT

NOTE: FOUR (4) PLACE COORDINATES ARE USED FOR COMPUTATIONAL PURPOSES ONLY AND DO NOT IMPLY PRECISION BEYOND TWO (2) PLACES.

**GENERAL NOTES**

THE LEGAL RIGHT-OF-WAY ON SR 2018 AND SR 4002, FORMERLY LR 153, IS BASED ON DRAWINGS FOR CONSTRUCTION AND CONDEMNATION OF RIGHT-OF-WAY, LR 153 SEC 9 IN MONTGOMERY COUNTY FROM STA 20+00.00 TO STA 121+00.00, DATED 1933.

THE LEGAL RIGHT-OF-WAY ON SR 2018, FORMERLY LR 153, IS BASED ON DRAWINGS FOR CONSTRUCTION BY THE STATE HIGHWAY AND BRIDGE AUTHORITY AND CONDEMNATION OF RIGHT-OF-WAY, LR 153 SEC 19 IN MONTGOMERY COUNTY FROM STA 27+00.00 TO STA 121+00.00, RECORDED MARCH 1, 1960.

THE LEGAL RIGHT-OF-WAY ON SR 2018 AND SR 4002, FORMERLY LR 153, IS BASED ON DRAWINGS DESIGNATING FUTURE LOCATION AND WIDTH AND AUTHORIZING CONDEMNATION OF RIGHT-OF-WAY, LR 153 SEC 24 R/W FROM STA 16+50.00 TO STA 27+00.00; & LR 67049 SEC 2 R/W FROM STA 16+50.00 TO STA 27+00.00, IN PHILADELPHIA AND MONTGOMERY COUNTIES, RECORDED MAY 6, 1966.

**EARTHWORK SUMMARY ENTIRE PROJECT**

THE INFORMATION ON ESTIMATED AMOUNTS OF EARTHWORK HAS BEEN USED IN THE PRELIMINARY ESTIMATE. DO NOT USE AS A WAIVER OF ANY PROVISIONS OF THE SPECIFICATIONS AND CONTRACTS.

CLASS 1	CLASS 1A	CLASS 1B	CLASS 2	CLASS 3	CLASS 4	CUBIC YARDS OF EXCAVATION			
						CUBIC YARDS OF COMPLETED EMBANKMENT *	CUBIC YARDS OF BORROW EXCAVATION	CUBIC YARDS OF SELECT BORROW	CUBIC YARDS OF WASTE
139	-	-	-	-	-	4	-	4	139

\* INCLUDES ALL BORROW ITEMS

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	4 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

**GENERAL NOTES (CONTINUED)**

THE HORIZONTAL CONTROL NETWORK IS REFERENCED TO THE PENNSYLVANIA STATE PLANE ZONE SOUTH COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).

THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION DOES NOT GUARANTEE THE ACCURACY OF THE LOCATION OF THE EXISTING SUBSURFACE UTILITY STRUCTURES SHOWN ON THE PLANS. NEITHER DOES THE DEPARTMENT GUARANTEE THAT ALL SUBSURFACE STRUCTURES ARE SHOWN.

THIS IS A FEDERAL-AID PROJECT AND AS SUCH IS SUBJECT TO INSPECTION BY REPRESENTATIVES OF THE FEDERAL HIGHWAY ADMINISTRATION AND THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION.

DO NOT INTERFERE WITH THE OPERATION OF ANY FIRE HYDRANT, FIRE CALL BOX OR POLICE CALL BOX.

COMBINED SCALE FACTOR = 1.000025958

ALL CURVE DATA IS BASED ON THE ARC DEFINITION UNLESS OTHERWISE NOTED.

ALL DATA PERTAINING TO EXISTING DRAINAGE FACILITIES, SUCH AS TYPE, VERTICAL LOCATION, AND HORIZONTAL LOCATION, IS APPROXIMATE AND IS TO BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY UTILIZATION FOR EROSION AND SEDIMENTATION CONTROL FOR MANAGING STORMWATER RUNOFF DURING CONSTRUCTION.

THREE TO TEN WORKING DAYS PRIOR TO EXCAVATION BASED ON THE COMPLEXITY OF THE PROJECT, THE CONTRACTOR MUST CONTACT THE PA ONE CALL SYSTEM, INC., PHONE 1-800-242-1776, SERIAL NO. \_\_\_\_\_ FOR WHITEMARSH TOWNSHIP, SERIAL NO. \_\_\_\_\_ FOR SPRINGFIELD TOWNSHIP, SERIAL NO. \_\_\_\_\_ FOR CITY OF PHILADELPHIA. ADDITIONAL INFORMATION IS AVAILABLE AT [HTTPS://WWW.PA1CALL.ORG/PA811/PUBLIC/](https://www.pa1call.org/pa811/public/).

THE CONTRACTOR IS REQUIRED TO NOTIFY THE DEPARTMENT AND SUBMIT AN ALLEGED VIOLATION REPORT (AVR) TO THE PA PUBLIC UTILITY COMMISSION THROUGH THE PA ONE CALL SYSTEM, WWW.PA1CALL.ORG, WITHIN TEN (10) BUSINESS DAYS AFTER A UTILITY LINE IS STRUCK, DAMAGED, OR PREVIOUS DAMAGE IS DISCOVERED AS REQUIRED BY PENNSYLVANIA'S UNDERGROUND UTILITY LINE PROTECTION LAW ACT 50 (P.L. 852, NO. 287 AMENDED OCT. 30, 2017).

SLOPE EASEMENT. AN EASEMENT FOR THE SUPPORT AND PROTECTION OF THE HIGHWAY, INCLUDING THE RIGHT TO CONSTRUCT, INSPECT, MAINTAIN, REPAIR, RECONSTRUCT AND ALTER DRAINAGE FACILITIES AND THE CONTOUR OF THE LAND. THE EASEMENT SHALL NOT PREVENT THE PROPERTY OWNER FROM MAKING ANY LEGAL USE OF THE AREA WHICH IS NOT DETRIMENTAL TO THE NECESSARY SUPPORT AND PROTECTION OF THE HIGHWAY RIGHT-OF-WAY AND THE SAFETY OF THE TRAVELING PUBLIC.

CHANNEL EASEMENT. AN EASEMENT FOR THE CONSTRUCTION, INSPECTION, MAINTENANCE, REPAIR, RECONSTRUCTION AND ALTERATION OF THE COURSE OF THE CHANNEL. THE EASEMENT SHALL NOT PREVENT THE PROPERTY OWNER FROM MAKING ANY LEGAL USE OF THE AREA WHICH IS NOT DETRIMENTAL TO THE NECESSARY FLOW OF WATER.

THERE ARE NO NAVIGABLE STREAMS ON THIS PROJECT.

DETAILS, OTHER THAN THOSE INDICATED, ARE ON THE FOLLOWING STANDARD DRAWINGS:

RC-10M	JUN 01, 2010	TC-8600	JUN 13, 2013
RC-13M	JUN 01, 2010	TC-8602	JUN 13, 2013
RC-20M	NOV 01, 2022	TC-8604	AUG 17, 2021
RC-21M	JUN 01, 2010	TC-8700C	JUN 13, 2013
RC-25M	FEB 27, 2023	TC-8702B	JUN 13, 2013
RC-28M	NOV 01, 2022	TC-8800	DEC 12, 2011
RC-64M	FEB 19, 2021		
RC-67M	FEB 19, 2021		
RC-72M	FEB 08, 2019		

**TABULATION OF OVERALL LENGTH**

SR 4002	STA 16+50.00 TO 17+60.00 =	110.00 FT = 0.021 MI
SR 2018	STA 17+60.00 TO 120+76.00 =	10,316.00 FT = 1.954 MI
	TOTAL:	10,426.00 FT = 1.975 MI

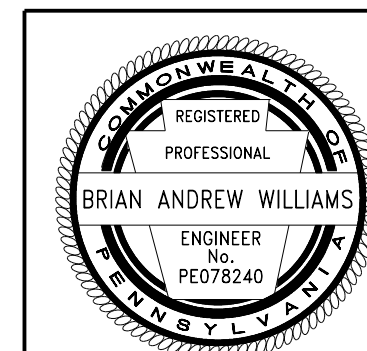
**TABULATION OF CONSTRUCTION LENGTH**

SR 4002	STA 17+00.00 TO 17+60.00 =	60.00 FT = 0.011 MI
SR 2018	STA 17+60.00 TO 120+26.00 =	10,266.00 FT = 1.944 MI
	TOTAL:	10,326.00 FT = 1.955 MI

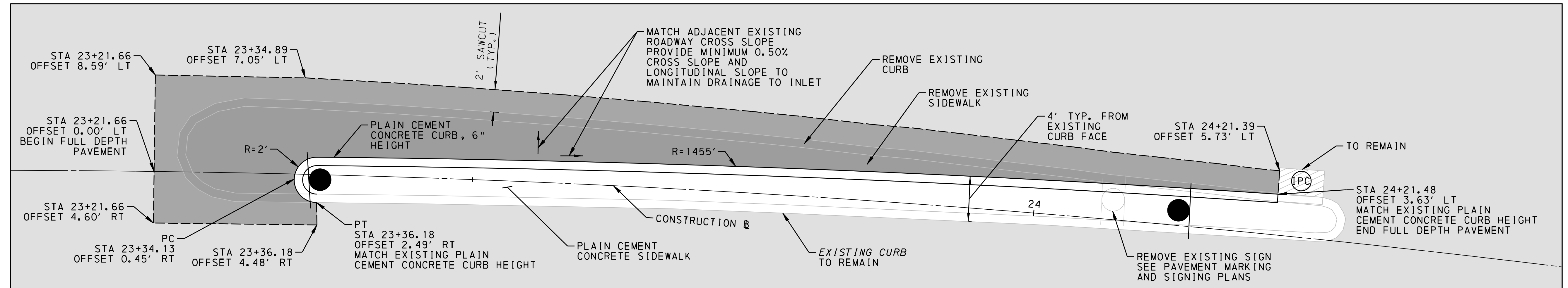
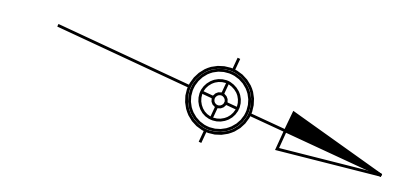
**EQUALITIES**

SR 4002 SEG 0010 OFFSET 0000 = STA 17+60.00  
 SR 4002 SEG 0011 OFFSET 0000 = STA 17+60.00  
 SR 2018 SEG 0010 OFFSET 0000 = STA 17+60.00  
 SR 2018 SEG 0011 OFFSET 0000 = STA 17+60.00  
 SR 2018 SEG 0020 OFFSET 0000 = STA 40+17.00  
 SR 2018 SEG 0021 OFFSET 0000 = STA 40+17.00  
 SR 2018 SEG 0030 OFFSET 0000 = STA 70+73.00  
 SR 2018 SEG 0031 OFFSET 0000 = STA 70+73.00  
 SR 2018 SEG 0040 OFFSET 0000 = STA 99+27.00  
 SR 2018 SEG 0041 OFFSET 0000 = STA 99+27.00  
 SR 2018 SEG 0050 OFFSET 0000 = STA 112+36.00

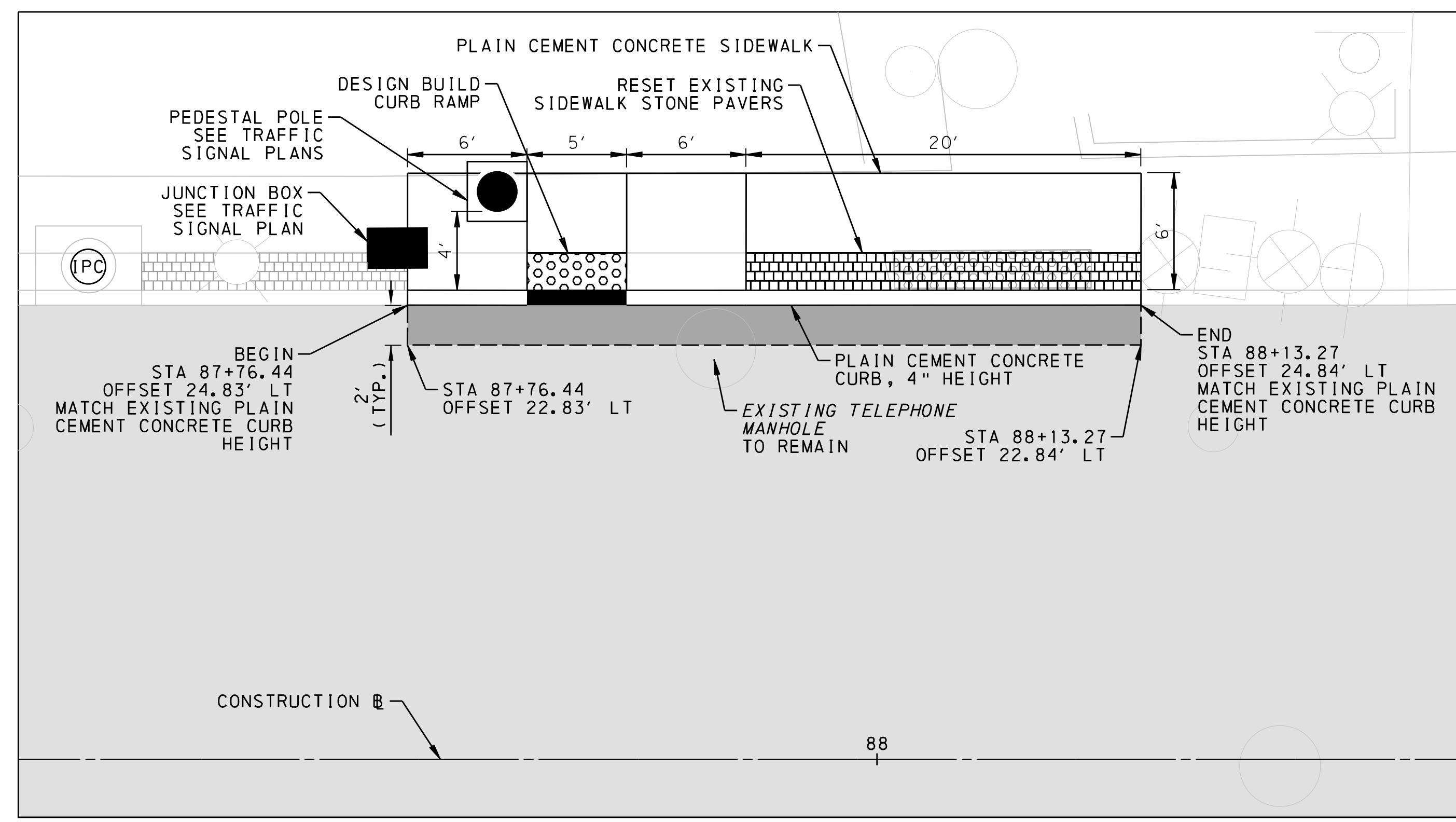
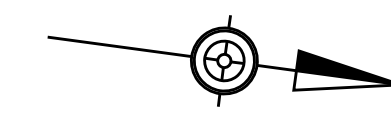
**GENERAL NOTES**



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	5 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



DETAIL 1  
SCALE



DETAIL 2  
SCALE

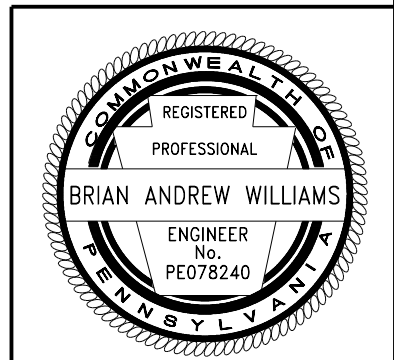


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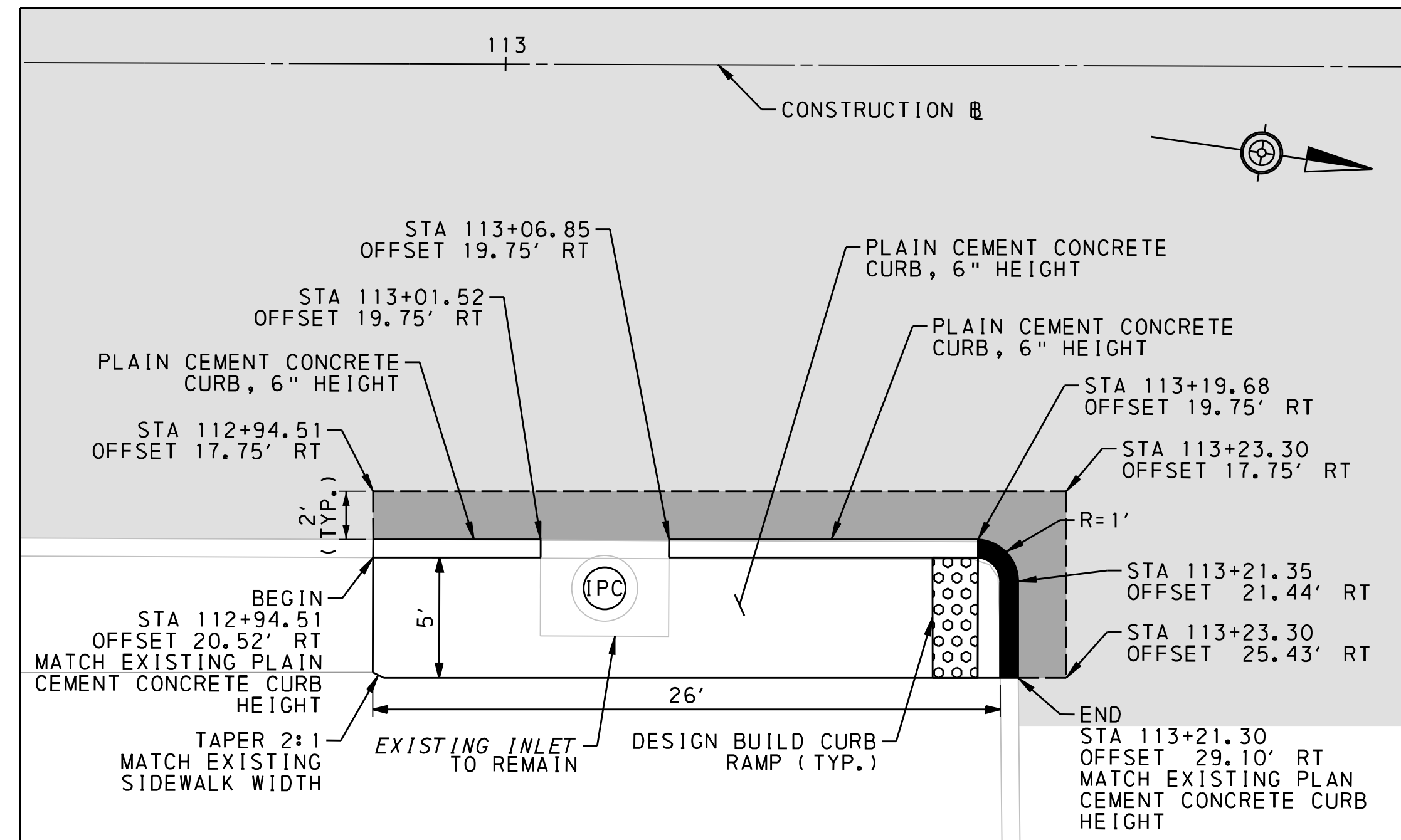
- MILL AND OVERLAY
- FULL DEPTH PAVEMENT
- TREE TRIMMING
- TOPSOIL, GRASS SEEDING, AND MULCHING
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- INLET FILTER BAG
- DEPRESSED CURB
- MAST ARM
- TRAFFIC SIGNAL C-POST
- TRAFFIC SIGNAL D-POST

4/27/2023  
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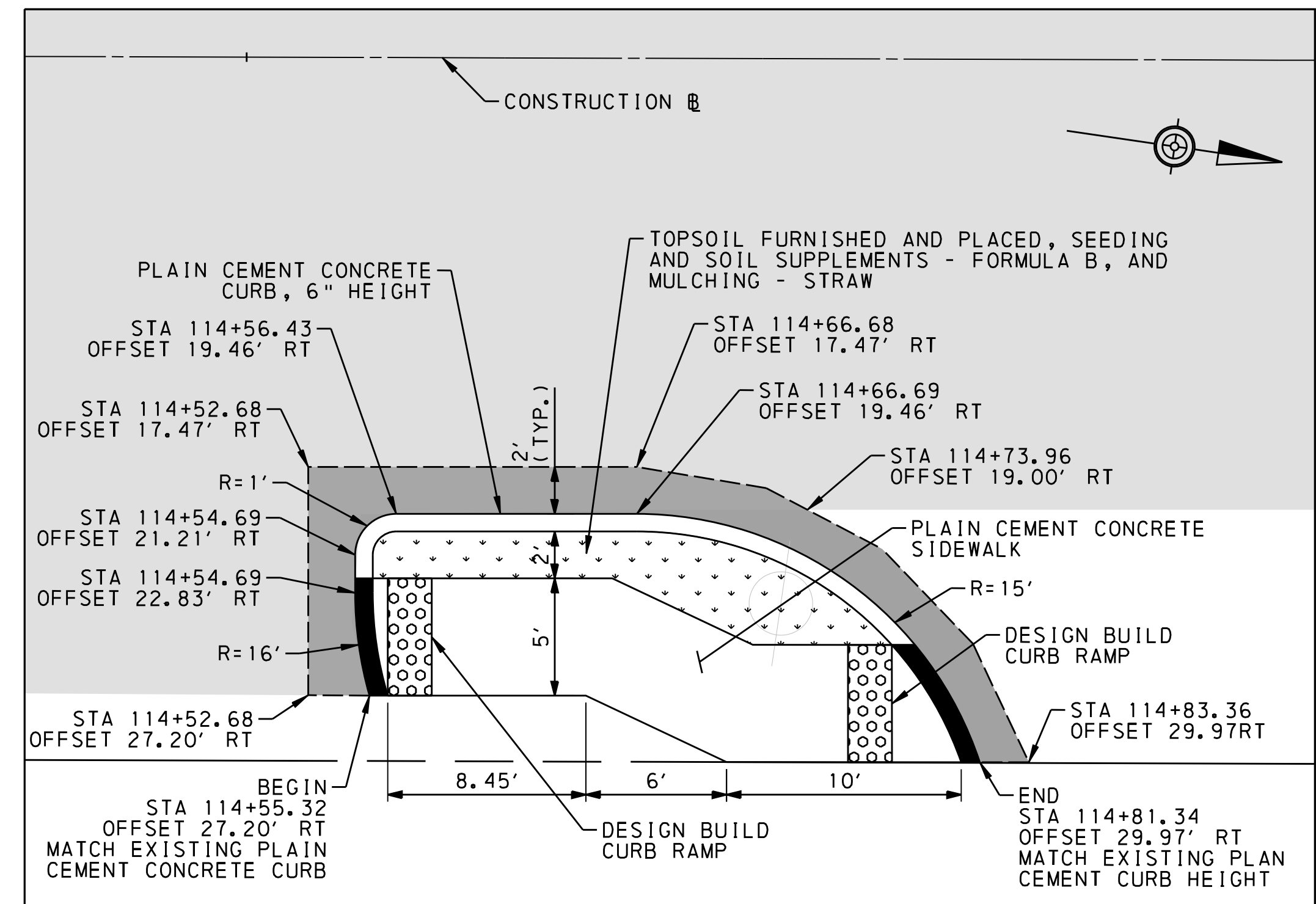
CONSTRUCTION DETAILS



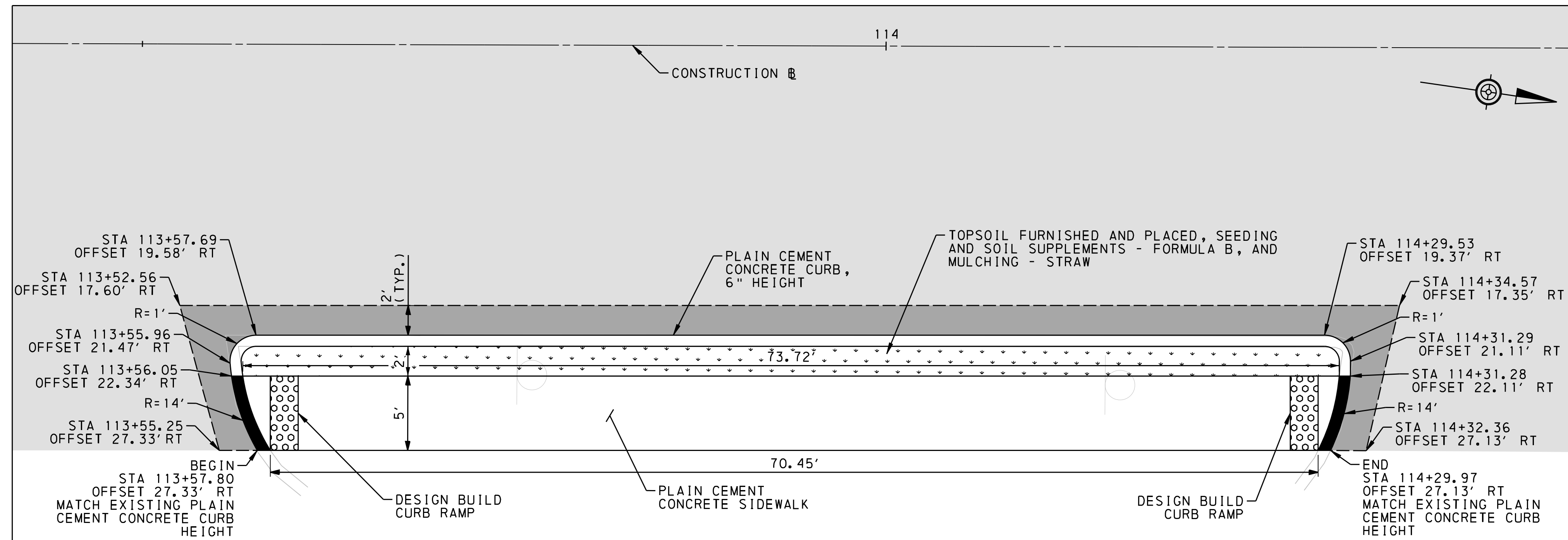
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	6 OF 29
SPRINGFIELD TOWNSHIP AND WHITEMARSH TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



**DETAIL 3**  
SCALE  
0 5 10 FEET



**DETAIL 4**  
SCALE  
0 5 10 FEET



**DETAIL 5**  
SCALE  
0 5 10 FEET

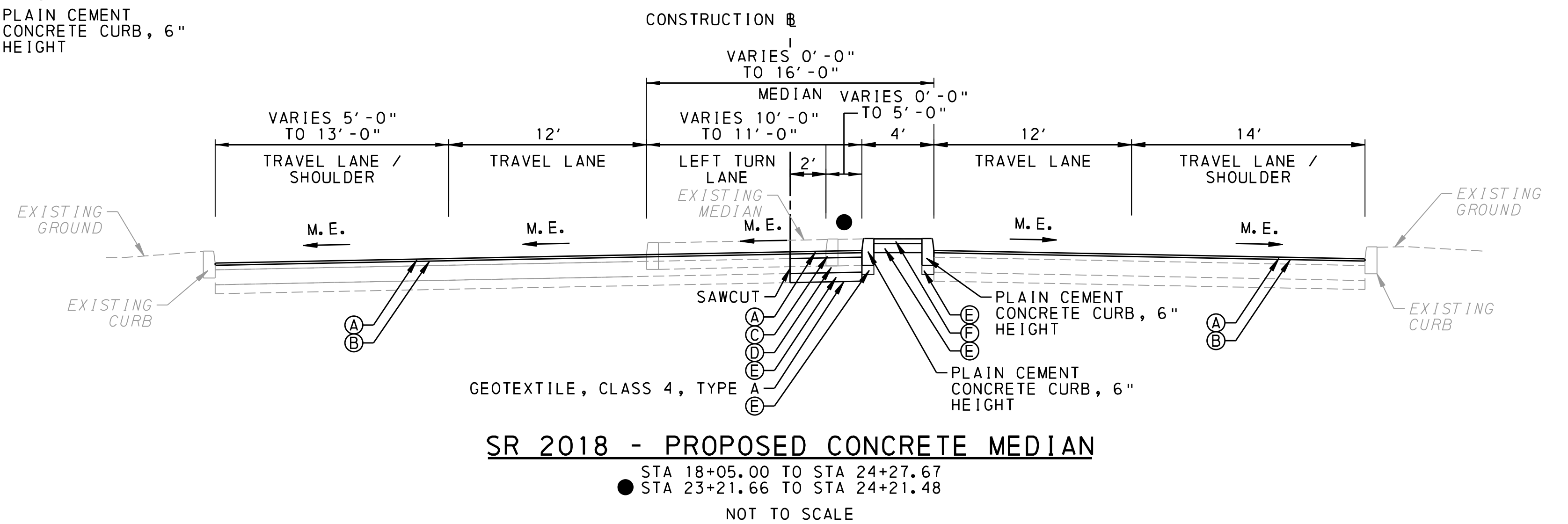
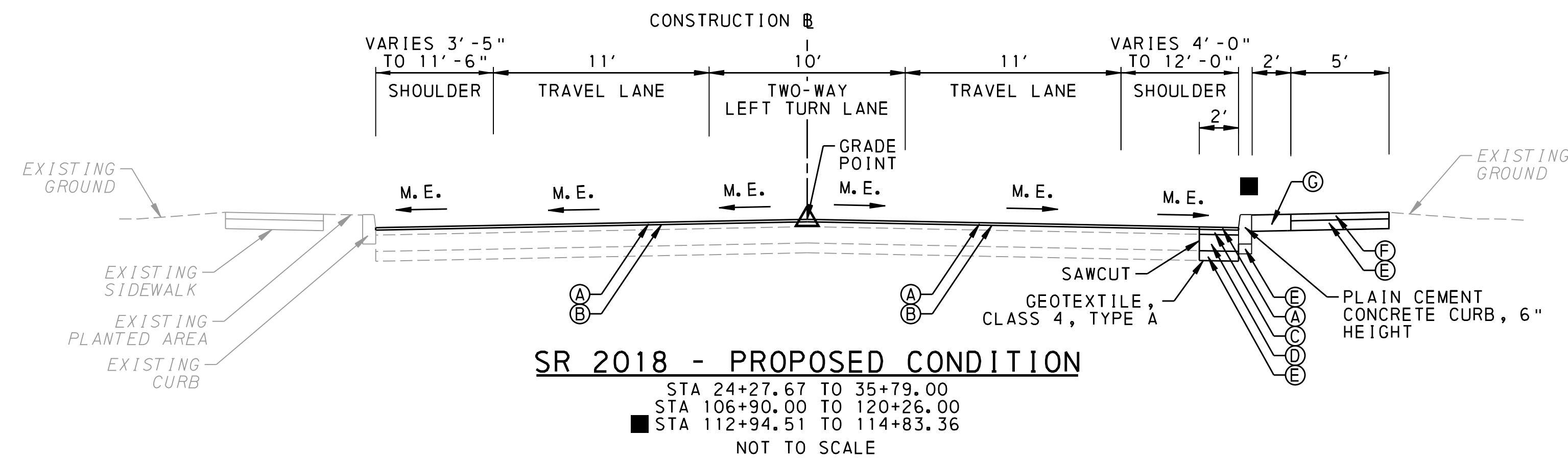
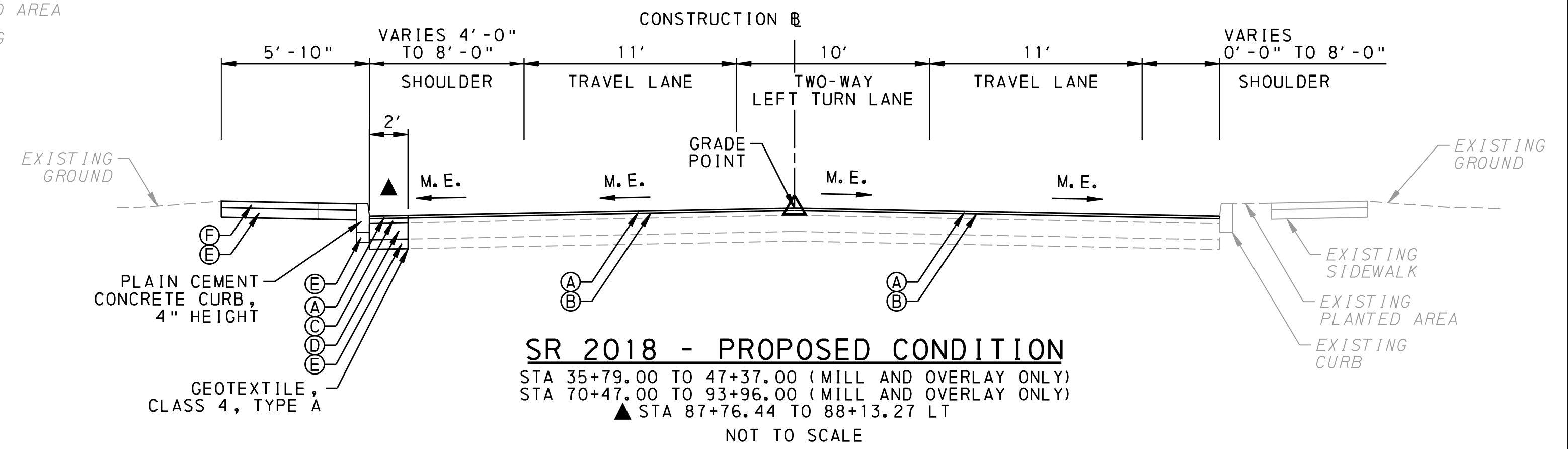
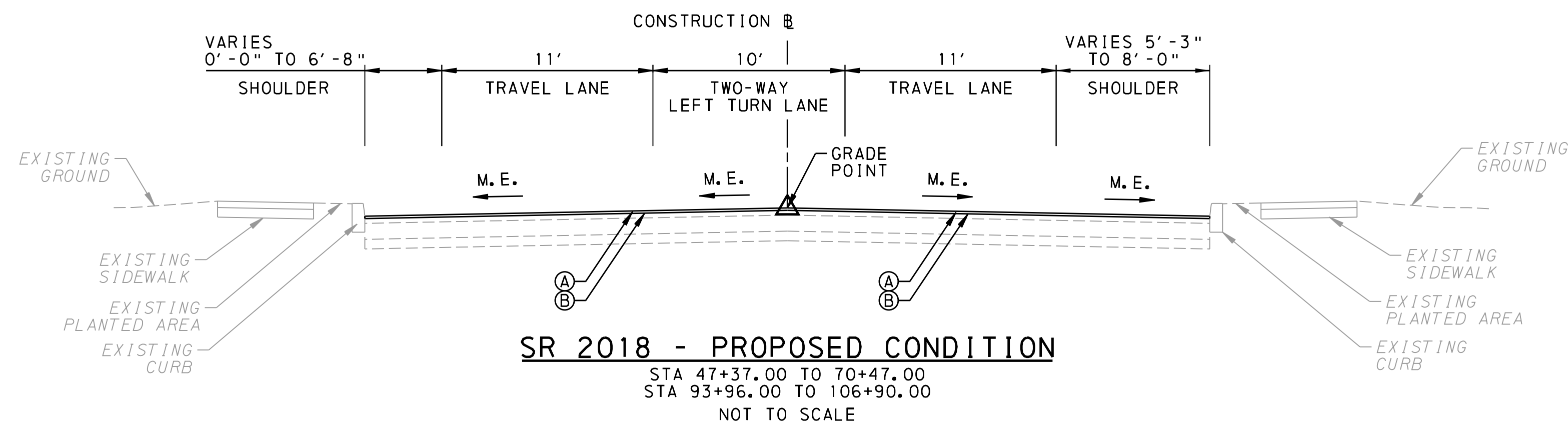
- LEGEND**
- MILL AND OVERLAY
  - FULL DEPTH PAVEMENT
  - TREE TRIMMING
  - TOPSOIL, GRASS SEEDING, AND MULCHING
  - DETECTABLE WARNING SURFACE (DWS)
  - SAWCUT
  - INLET FILTER BAG
  - DEPRESSED CURB
  - MAST ARM
  - TRAFFIC SIGNAL C-POST
  - TRAFFIC SIGNAL D-POST

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**CONSTRUCTION DETAILS**



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	7 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



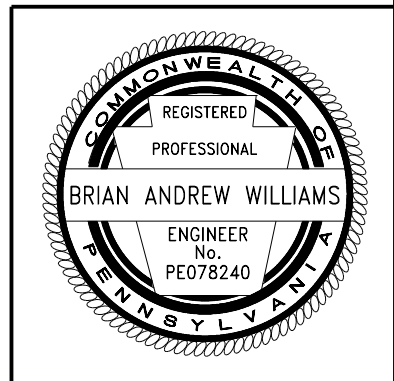
**LEGEND**

- (A) SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO <3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H
- (B) MILLING OF ASPHALT PAVEMENT SURFACE, 1 1/2" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR
- (C) SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO <3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH
- (D) PLAIN CEMENT CONCRETE BASE COURSE, 10" DEPTH
- (E) SUBBASE 6" DEPTH (NO.2A)
- (F) PLAIN CEMENT CONCRETE SIDEWALK
- (G) TOPSOIL FURNISHED AND PLACED, SEEDING AND SOIL SUPPLEMENTS - FORMULA B, AND MULCHING - STRAW

M. E. MATCH EXISTING  
 PCCC,4" PLAIN CEMENT CONCRETE CURB, 4" HEIGHT  
 PCCC,6" PLAIN CEMENT CONCRETE CURB, 6" HEIGHT

**NOTE:**  
 1. ASPHALT TACK COAT TO BE INSTALLED BETWEEN ALL PAVEMENT COURSES.

**TYPICAL SECTIONS**



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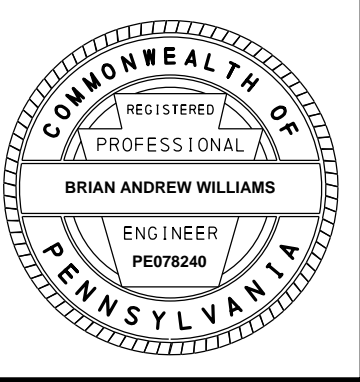
TCP = TRAFFIC CONTROL PLAN  
TSP = TRAFFIC SIGNAL PLAN  
SPM = SIGNING AND PAVEMENT MARKING PLAN

# SUMMARY

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				06	MONTGOMERY	2018	SIP	8 OF 29
SPRINGFIELD TOWNSHIP AND WHITEMARSH TOWNSHIP								

◆ - SEE SPECIAL PROVISIONS

QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	
	UNIT					UNIT					UNIT					UNIT				
	0201 0001 LS	CLEARING AND GRUBBING		NO TAB	3	0860 0002 EACH	INLET FILTER BAG FOR TYPE C INLET		11	390	0954 0013 LF	3 INCH CONDUIT		TSP	2	0960 0110 EACH	WHITE HOT THERMOPLASTIC LEGEND, "SCHOOL", 8' - 0"		SPM	
139	0203 0001 CY	CLASS 1 EXCAVATION		10		0901 0001 LS	MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION		TCP	60	0954 0151 LF	TRENCH AND BACKFILL, TYPE I		TSP	10	0960 0113 EACH	WHITE HOT THERMOPLASTIC LEGEND, "MPH", 8' - 0"		SPM	
521	0203 0006 LF	SAW CUTTING		10	2	0901 0450 EACH	3-LINE CHANGEABLE MESSAGE SIGN WITH TELECOMMUNICATIONS		TCP	230	0954 0152 LF	TRENCH AND BACKFILL, TYPE II		TSP	1	0960 0140 EACH	WHITE HOT THERMOPLASTIC PAVEMENT LEGEND, SLOW CURVE ARROW, LEFT (INCLUDES ARROW, THE WORD SLOW AND 2 TRANSVERSE BANDS)		SPM	
171	0212 0014 SY	GEOTEXTILE, CLASS 4, TYPE A		10	380	0910 4116 LF	AWG 8 UNDERGROUND CABLE, COPPER, 1 CONDUCTOR		TSP	105	0954 0153 LF	TRENCH AND BACKFILL, TYPE III		TSP	1	0960 0141 EACH	WHITE HOT THERMOPLASTIC PAVEMENT LEGEND, SLOW CURVE ARROW, RIGHT (INCLUDES ARROW, THE WORD SLOW AND 2 TRANSVERSE BANDS)		SPM	
171	0301 0006 SY	PLAIN CEMENT CONCRETE BASE COURSE, 10" DEPTH		10	1280	0931 0001 SF	POST MOUNTED SIGNS, TYPE B		SPM	1390	0954 0201 LF	SIGNAL CABLE, 14 AWG, 3 CONDUCTOR		TSP	2	0960 0143 EACH	WHITE HOT THERMOPLASTIC LEGEND, "SLOW", 8' - 0"		SPM	
337	0350 0106 SY	SUBBASE 6" DEPTH (NO. 2A)		10	414	0935 0001 SF	POST MOUNTED SIGNS, TYPE F		SPM , TSP	4260	0954 0202 LF	SIGNAL CABLE, 14 AWG, 5 CONDUCTOR		TSP	4	0960 0222 EACH	WHITE HOT THERMOPLASTIC LEGEND, "RIGHT ARROW", 12' - 0" X 3' - 0"		SPM	
52566	0413 0245 SY	SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H		10	2	4935 0411 EACH	SCHOOL ZONE SPEED LIMIT FLASHING WARNING SIGNS (TYPE II), CONFIRMATION LIGHT		TSP	980	0954 0203 LF	SIGNAL CABLE, 14 AWG, 7 CONDUCTOR		TSP	41	0960 0224 EACH	WHITE HOT THERMOPLASTIC LEGEND, "LEFT ARROW", 12' - 0" X 3' - 0"		SPM	
167	0413 6045 SY	SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH		10	241	0936 0200 SF	STRUCTURE MOUNTED FLAT SHEET ALUMINUM SIGNS		SPM , TSP	4	0954 0302 EACH	JUNCTION BOX, JB-27		TSP	3	0960 0233 EACH	WHITE HOT THERMOPLASTIC LEGEND, "LANE REDUCTION TRANSITION ARROW - LEFT T LANE", 18' - 0" X 5' - 6"		SPM	
52903	0460 0001 SY	ASPHALT TACK COAT		10	2	0936 0400 EACH	FLASHING WARNING SIGN		TSP	2	0954 0305 EACH	JUNCTION BOX, JB-30		TSP	10	0960 0303 EACH	WHITE HOT THERMOPLASTIC LEGEND, "3", 8' - 0"		SPM	
52395	0491 0012 SY	MILLING OF ASPHALT PAVEMENT SURFACE, 1 1/2" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR		10	6	0937 0200 EACH	BARRIER MOUNTED DELINEATOR, SIDE-MOUNT TYPE R, (Y/B)		SPM	4	0954 0402 EACH	ELECTRICAL SERVICE, TYPE B		TSP	10	0960 0305 EACH	WHITE HOT THERMOPLASTIC LEGEND, "5", 8' - 0"		SPM	
	0608 0001 LS	MOBILIZATION		NO TAB	2	0937 0207 EACH	BARRIER MOUNTED DELINEATOR, TOP AND SIDE-MOUNT TYPE R, (Y/B)		SPM	2	0954 0403 EACH	ELECTRICAL SERVICE, TYPE C		TSP	2	0960 0405 EACH	WHITE HOT THERMOPLASTIC LEGEND, "E", 8' - 0"		SPM	
	0609 0003 LS	INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES, TYPE B		NO TAB	4	0941 0001 EACH	RESET POST MOUNTED SIGNS, TYPE B		SPM	2	4954 0600 EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), LED INDICATOR LIGHT		TSP	2	0960 0414 EACH	WHITE HOT THERMOPLASTIC LEGEND, "N", 8' - 0"		SPM	
	0609 0009 LS	EQUIPMENT PACKAGE		NO TAB	13	0945 0001 EACH	RESET POST MOUNTED SIGNS, TYPE F		SPM	15	0955 3208 EACH	VEHICULAR SIGNAL HEAD, THREE 12" SECTIONS		TSP	2	0960 0415 EACH	WHITE HOT THERMOPLASTIC LEGEND, "O", 8' - 0"		SPM	
294	0630 0021 LF	PLAIN CEMENT CONCRETE CURB, 4" HEIGHT		10	2	0951 0220 EACH	TRAFFIC SIGNAL SUPPORT, 20' MAST ARM, POWDER COATED		TSP	5	0955 3209 EACH	VEHICULAR SIGNAL HEAD, FOUR 12" SECTIONS		TSP	2	0960 0426 EACH	WHITE HOT THERMOPLASTIC LEGEND, "Z", 8' - 0"		SPM	
103	0630 0031 LF	PLAIN CEMENT CONCRETE CURB, 6" HEIGHT		10	1	0951 0225 EACH	TRAFFIC SIGNAL SUPPORT, 25' MAST ARM, POWDER COATED		SPM	6	4955 3722 EACH	LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, TYPE A, STEADY COUNTDOWN		TSP	28	0966 0011 EACH	SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (Y/Y)		SPM	
186	0676 0001 SY	CEMENT CONCRETE SIDEWALK		10	1	0951 2225 EACH	TRAFFIC SIGNAL SUPPORT, 25' MAST ARM WITH LUMINAIRE ARM (30' MOUNTING HEIGHT), POWDER COATED		TSP	27	0955 5000 EACH	BACKPLATE RETROFIT		TSP	47	0971 0001 EACH	REMOVE POST MOUNTED SIGNS, TYPE B		SPM	
	0686 0020 LS	CONSTRUCTION SURVEYING, TYPE B		NO TAB	1	0951 2230 EACH	TRAFFIC SIGNAL SUPPORT, 30' MAST ARM WITH LUMINAIRE ARM (30' MOUNTING HEIGHT), POWDER COATED		TSP	6	0956 0500 EACH	PEDESTRIAN PUSH BUTTON		TSP	36	0975 0001 EACH	REMOVE POST MOUNTED SIGNS, TYPE F		SPM	
	0689 0003 LS	CPM SCHEDULE		NO TAB	1	0951 2245 EACH	TRAFFIC SIGNAL SUPPORT, 45' MAST ARM WITH LUMINAIRE ARM (30' MOUNTING HEIGHT), POWDER COATED		TSP	1	0958 0021 EACH	TEMPORARY TRAFFIC CONTROL SIGNALS ON FIXED SUPPORTS (3 APPROACHES)		TCP	6	9000 0001 SY	RESET EXISTING SIDEWALK STONE PAVERS		10	
EITHER 120	0695 0003 SF	DETECTABLE WARNING SURFACE, POLYMER CONCRETE	1	10	5	0951 4106 EACH	TRAFFIC SIGNAL SUPPORT, 14' PEDESTAL, POWDER COATED		TSP	17643	0960 0001 LF	4" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS		SPM	1	9000 0002 EACH	EMERGENCY PRE-EMPTION SYSTEM, TWO APPROACHES		TSP	
OR 120	0695 0004 SF	DETECTABLE WARNING SURFACE, POLYMER COMPOSITE	1	10	4	0951 4112 EACH	PEDESTRIAN STUB POLE, TYPE B, POWDER COATED		TSP	27493	0960 0002 LF	4" YELLOW HOT THERMOPLASTIC PAVEMENT MARKINGS		SPM	1	9000 0003 EACH	EMERGENCY PRE-EMPTION SYSTEM, THREE APPROACHES		TSP	
4	0802 0001 CY	TOPSOIL FURNISHED AND PLACED		11	2	4952 1030 EACH	NEMA TS-2; TYPE 1 CONTROLLER ASSEMBLY, TYPE 1 MOUNTING, SIEMENS CONTROLLER		TSP	2059	0960 0005 LF	6" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS		SPM	3	9000 0004 EACH	LED LUMINAIRE, ARM MOUNT, 250 WATT EQUIVALENT		TSP	
1	0804 0036 LB	SEEDING AND SOIL SUPPLEMENTS - FORMULA B RESIDENTIAL MIX		11	2	0952 1072 EACH	ADVANCED TRANSPORTATION CONTROLLER UNIT		TSP	6272	0960 0021 LF	24" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS		SPM						
1	0805 0022 TON	MULCHING - STRAW		11	4	4952 3002 EACH	CONTROLLER MODIFICATION, FLASHING YELLOW ARROW		TSP	756	0960 0022 LF	24" YELLOW HOT THERMOPLASTIC PAVEMENT MARKINGS		SPM						
598	0810 0026 LF	TREE TRIMMING TO A MAX HEIGHT OF 20'		10	380	0954 0012 LF	2 INCH CONDUIT		TSP	17	0960 0101 EACH	WHITE HOT THERMOPLASTIC LEGEND, "ONLY", 8' - 0"		SPM						





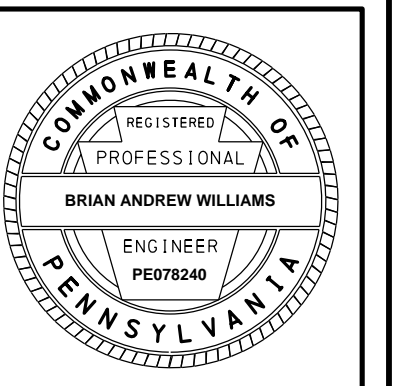
TCP = TRAFFIC CONTROL PLAN  
TSP = TRAFFIC SIGNAL PLAN  
SPM = SIGNING AND PAVEMENT MARKING PLAN

# SUMMARY

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				06	MONTGOMERY	2018	SIP	9 OF 29
SPRINGFIELD TOWNSHIP AND WHITEMARSH TOWNSHIP								

◆ - SEE SPECIAL PROVISIONS

QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET
	UNIT					UNIT					UNIT					UNIT			
6	9000 0006 EACH	DILEMMA ZONE RADAR DETECTION SYSTEM, TWO APPROACHES		TSP															
8	9000 0007 EACH	RESET OPTICAL PREEMPTION DETECTOR AND BEACON ASSEMBLY		TSP															
11	9000 0008 EACH	RESET VEHICULAR SIGNAL HEAD		TSP															
2	9000 0009 EACH	TRAFFIC SIGNAL FIBER TIPPING		TSP															
8	9000 0010 EACH	MANAGED NETWORK SWITCH (SIGNAL CABINET)		TSP															
2	9000 0011 EACH	FIBER OPTIC TERMINATION PANEL		TSP															
	9000 0012 LS	TRAFFIC SIGNAL CONTROL, UNIFIED COMMAND AND CONTROL SYSTEM SETUP		TSP															
1	9000 0013 EACH	VIDEO DETECTION SYSTEM, ONE CAMERA		TSP															
2	9000 0014 EACH	VIDEO DETECTION SYSTEM, TWO CAMERAS		TSP															
2	9000 0015 EACH	VIDEO DETECTION SYSTEM, THREE CAMERAS		TSP															
1	9000 0016 EACH	VIDEO DETECTION SYSTEM, FOUR CAMERAS		TSP															
10000	9000 0017 DOLLA	VALVE AND MANHOLE ADJUSTMENT FOR RESURFACING ROADWAY		10															
1	9000 1104 EACH	PROFESSIONAL SERVICES		10															
25	9000 1931 EACH	RETROREFLECTIVE STRIPE FOR POST MOUNTED SIGN, TYPE B, RED		SPM															
17	9000 2931 EACH	RETROREFLECTIVE STRIPE FOR POST MOUNTED SIGN, TYPE B, YELLOW		SPM															
3	9000 5002 EACH	PEDESTRIAN STUDY		10															
	9000 5100 LS	ELECTRONIC TICKETING SYSTEM		NO TAB															
15000	9309 0001 DOLLA	BASE REPAIR		10															
12	9694 6002 EACH	DESIGN OF CONCRETE CURB RAMPS, DISTRICT 6		10															

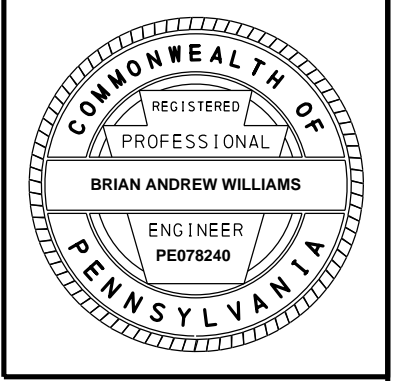


# TABULATION OF QUANTITIES

## ROADWAY

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				06	MONTGOMERY	2018	SIP	10 OF 29
SPRINGFIELD TOWNSHIP AND WHITEMARSH TOWNSHIP								

(+) SEE SUMMARY SHEET FOR COMPLETE ITEM NUMBERS

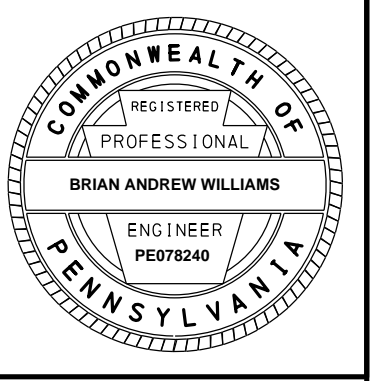


CLASS 1 EXCAVATION	SAW CUTTING	GEOTEXTILE, CLASS 4, TYPE A	PLAIN CEMENT CONCRETE BASE COURSE, 10" DEPTH	SUBBASE 6" DEPTH (NO. 2A)	SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H	SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH	ASPHALT TACK COAT	MILLING OF ASPHALT PAVEMENT SURFACE, 1 1/2" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR	PLAIN CEMENT CONCRETE CURB, 4" HEIGHT	PLAIN CEMENT CONCRETE CURB, 6" HEIGHT	CEMENT CONCRETE SIDEWALK	DETECTABLE WARNING SURFACE DESIGN NO. 1	TREE TRIMMING TO A MAX HEIGHT OF 20'	RESET EXISTING SIDEWALK STONE PAVERS	VALVE AND MANHOLE ADJUSTMENT FOR RESURFACING ROADWAY	PROFESSIONAL SERVICES	PEDESTRIAN STUDY	BASE REPAIR	DESIGN OF CONCRETE CURB RAMPS, DISTRICT 6	REMARKS	SIDE	STATIONS		
0203 0001 CY	0203 0006 LF	0212 0014 SY	0301 0006 SY	0350 0106 SY	0413 0245 SY	0413 0045 SY	0460 0001 SY	0491 0012 SY	0630 0021 LF	0630 0031 LF	0676 0001 SY	0695 (+) SF	0810 0026 LF	9000 0001 SY	9000 0017 DOLLA	9000 1104 EACH	9000 5002 EACH	9309 0001 DOLLA	9694 6002 EACH		ITEM NUMBER	UNIT		
																					ENTIRE PROJECT			
															1							AS DIRECTED	LT / RT	16+50.00 to 120+76.00
																						SR 2018 BETHLEHEM PIKE		
													180										RT	17+94.49 to 19+74.52
															10000							AS DIRECTED	LT / RT	18+05.00 to 120+26.00
					52395		52395	52395														MILL AND OVERLAY	LT / RT	18+05.00 to 120+26.00
10	50	19	19	19	19	19	57		34		23	20					1		2		PEDESTRIAN STUDY	LT / RT	22+74.44 to 23+71.85	
36	132	65	65	65	65	61	193														FULL DEPTH	LT / RT	23+21.66 to 24+25.13	
10				36						103	27										MEDIAN RECONSTRUCTION	LT / RT	23+26.86 to 24+26.90	
													52									LT	26+42.25 to 26+93.89	
													50									LT	27+57.24 to 28+07.06	
													50									LT	28+60.53 to 29+10.52	
													17									LT	29+40.84 to 29+57.95	
													88									LT	30+05.39 to 30+93.76	
10	50	19	19	19	19	19	57		34		23	20					1		2		PEDESTRIAN STUDY	LT / RT	47+35.91 to 47+89.01	
													67									LT	69+92.77 to 70+54.38	
													44									RT	74+66.58 to 75+10.37	
5	41	9	9	9	9	9	25														ADA FULL DEPTH	LT	87+76.43 to 88+13.27	
8				28					37		24	10		6					1		ADA SIDEWALK RECONSTRUCTION	LT	87+76.43 to 88+13.27	
													50									RT	97+15.64 to 97+65.71	
																		7500				AS DIRECTED BY THE REPRESENTATIVE	LT	97+50.00
																		7500				AS DIRECTED BY THE REPRESENTATIVE	RT	108+60.00
28				102					155		66	50							5		ADA SIDEWALK RECONSTRUCTION	RT	112+94.51 to 114+80.16	
22	198	40	40	40	40	40	119														ADA FULL DEPTH	RT	112+94.51 to 114+82.41	
10	50	19	19	19	19	19	57		34		23	20					1		2		PEDESTRIAN STUDY	LT / RT	117+77.92 to 118+41.51	
139	521	171	171	337	52566	167	52903	52395	294	103	186	120	598	6	10000	1	3	15000	12		TOTALS			

# TABULATION OF QUANTITIES

## EROSION AND SEDIMENT POLLUTION CONTROL

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				06	MONTGOMERY	2018	SIP	11 OF 29
SPRINGFIELD TOWNSHIP AND WHITEMARSH TOWNSHIP								

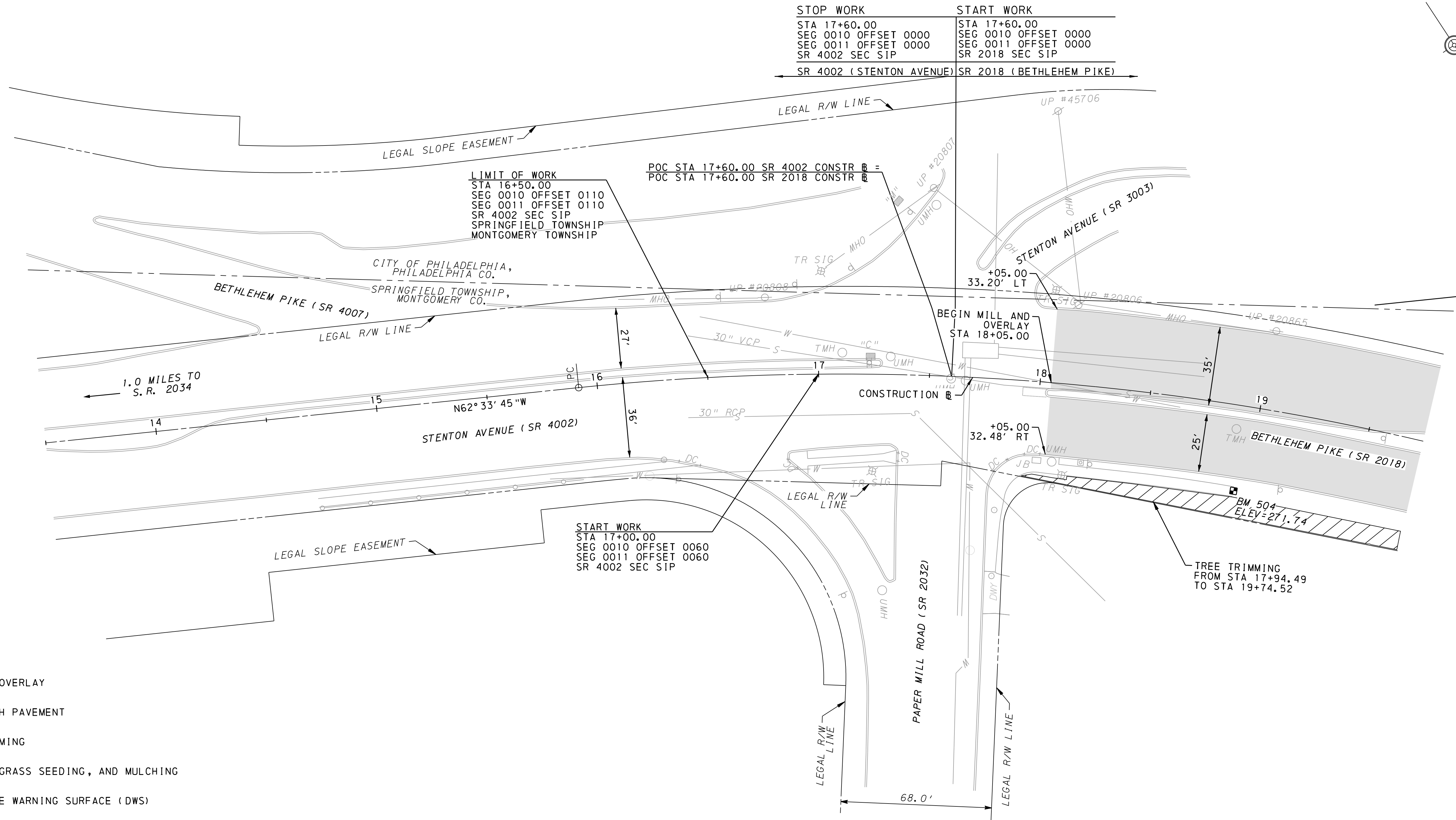


TOPSOIL FURNISHED AND PLACED		SEEDING AND SOIL SUPPLEMENTS - FORMULA B RESIDENTIAL MIX		MULCHING - STRAW		INLET FILTER BAG FOR TYPE C INLET																						REMARKS	SIDE	STATIONS
0802 0001 CY	0804 0036 LB	0805 0022 TON	0860 0002 EACH																	ITEM NUMBER	UNIT									
																				SR 2018 BETHLEHEM PIKE										
			1																			LT	24+20.27							
			1																			LT	87+63.00							
			1																			RT	113+04.31							
4	1	1																				RT	113+56.65 to 114+74.73							
																				TOTALS										
4	1	1	3																											

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	12 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

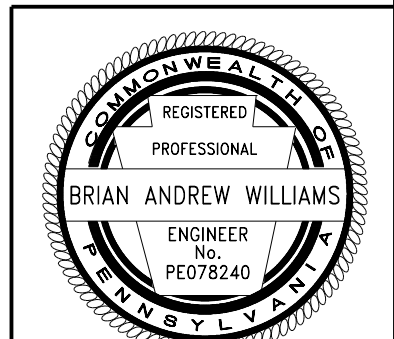
BM 504 ELEV 271.737  
 STA 18+93.99 38.57' RT  
 MAG NAIL SET

STOP WORK	START WORK
STA 17+60.00	STA 17+60.00
SEG 0010 OFFSET 0000	SEG 0010 OFFSET 0000
SEG 0011 OFFSET 0000	SEG 0011 OFFSET 0000
SR 4002 SEC SIP	SR 2018 SEC SIP



**LEGEND**

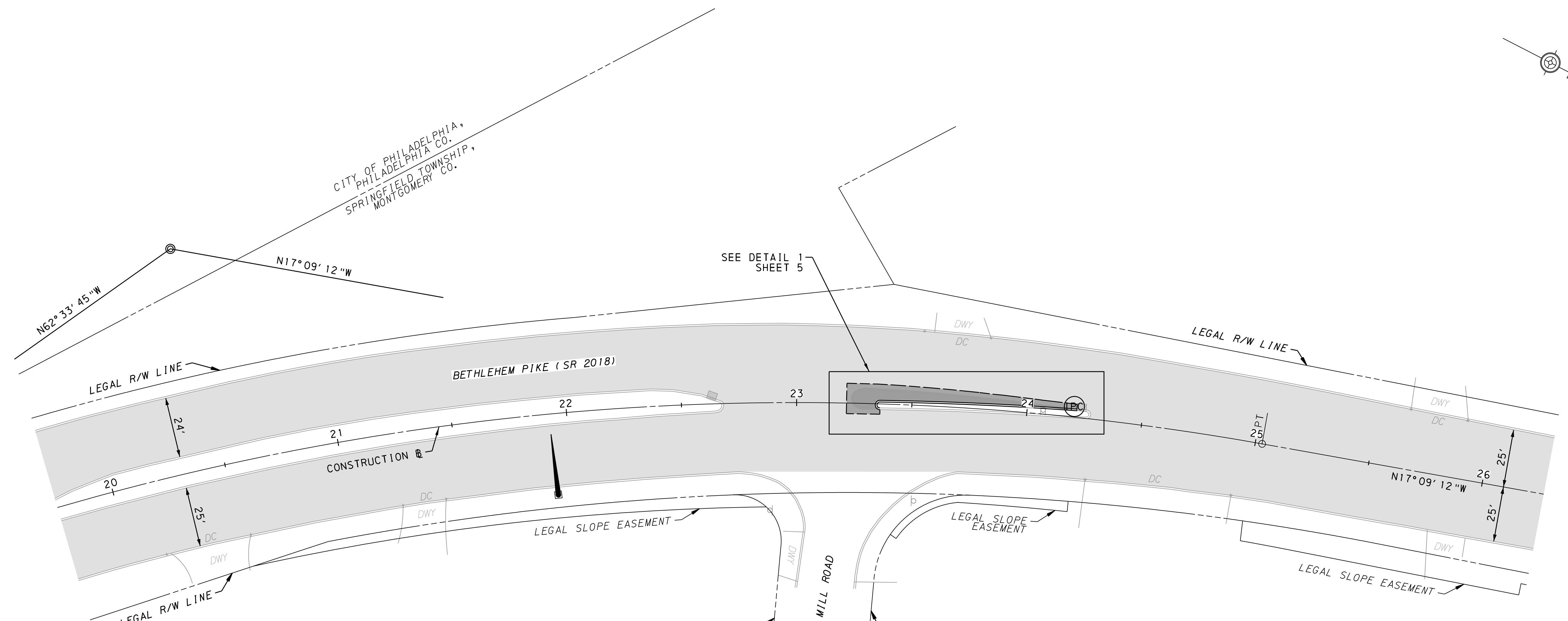
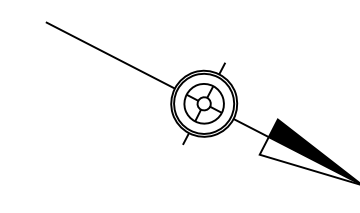
- MILL AND OVERLAY
- FULL DEPTH PAVEMENT
- TREE TRIMMING
- TOPSOIL, GRASS SEEDING, AND MULCHING
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- INLET FILTER BAG
- DEPRESSED CURB
- MAST ARM
- TRAFFIC SIGNAL C-POST
- TRAFFIC SIGNAL D-POST



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SEE SHEET 13 OF 29

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	13 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



SEE SHEET 12 OF 29

SEE SHEET 14 OF 29

CONSTRUCTION &  
CURVE DATA  
 PI STA 20+72.74  
 $\Delta = 45^\circ 24' 33''$  RT  
 $D = 4^\circ 58' 56''$   
 $T = 481.16'$   
 $L = 911.42'$   
 $R = 1150.00'$   
 $E = 96.60'$   
 SE = MATCH EXISTING  
 PC STA 15+91.58  
 PT STA 25+03.00

**LEGEND**

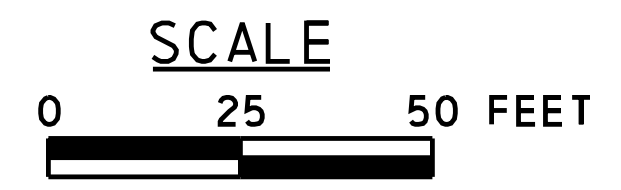
- MILL AND OVERLAY
- FULL DEPTH PAVEMENT
- TREE TRIMMING
- TOPSOIL, GRASS SEEDING, AND MULCHING
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- INLET FILTER BAG
- DEPRESSED CURB
- MAST ARM
- TRAFFIC SIGNAL C-POST
- TRAFFIC SIGNAL D-POST

LEGAL RIGHT-OF-WAY LINE FOR TOWNSHIP ROAD

BELLS MILL ROAD

41.5'

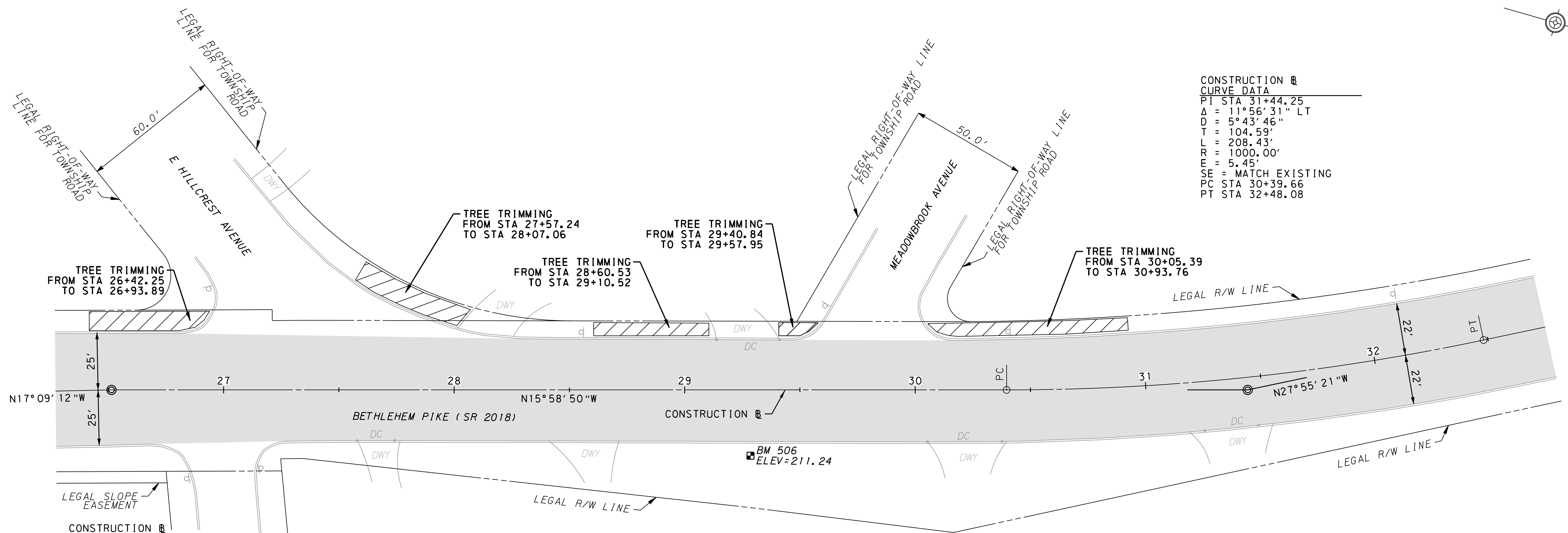
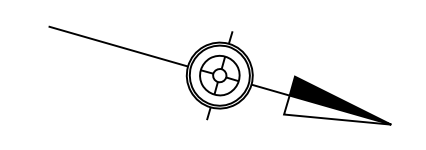
LEGAL RIGHT-OF-WAY LINE FOR TOWNSHIP ROAD



4/27/2023 11:28:09 - s-cv-p.lm02.dgn

BM 506 ELEV 211.235  
 STA 29+28.57 28.54' RT  
 MAG NAIL SET

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	14 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

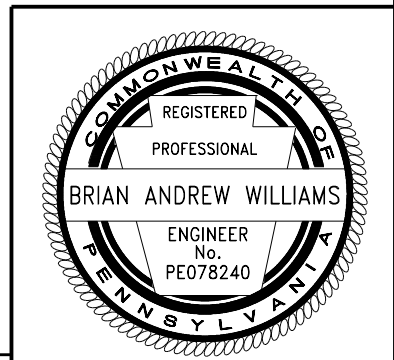
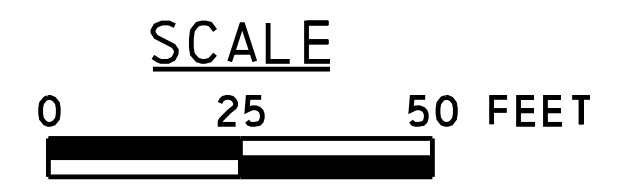


CONSTRUCTION B  
 CURVE DATA  
 PI STA 31+44.25  
 $\Delta = 11^\circ 56' 31''$  LT  
 $D = 5^\circ 43' 46''$   
 $T = 104.59'$   
 $L = 208.43'$   
 $R = 1000.00'$   
 $E = 5.45'$   
 SE = MATCH EXISTING  
 PC STA 30+39.66  
 PT STA 32+48.08

CONSTRUCTION B  
 CURVE DATA  
 PI STA 26+51.37  
 $\Delta = 1^\circ 10' 22''$  RT  
 NO CURVE

**LEGEND**

- MILL AND OVERLAY
- FULL DEPTH PAVEMENT
- TREE TRIMMING
- TOPSOIL, GRASS SEEDING, AND MULCHING
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- INLET FILTER BAG
- DEPRESSED CURB
- MAST ARM
- TRAFFIC SIGNAL C-POST
- TRAFFIC SIGNAL D-POST

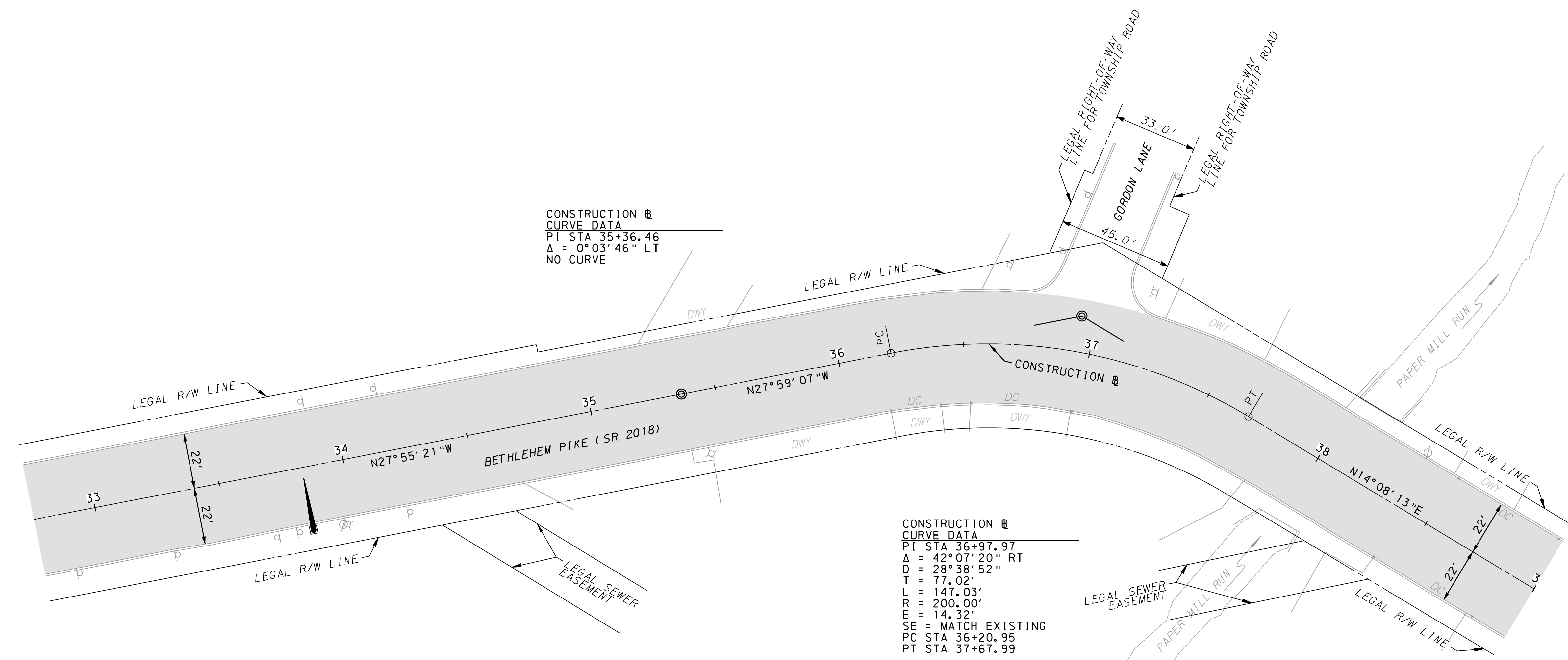
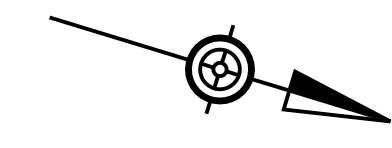


SEE SHEET 13 OF 29

SEE SHEET 15 OF 29

4/27/2023  
 FILENAME: T182909-8-cv-p.ln03.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	15 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



CONSTRUCTION   
 CURVE DATA  
 PI STA 35+36.46  
 $\Delta = 0^\circ 03' 46''$  LT  
 NO CURVE

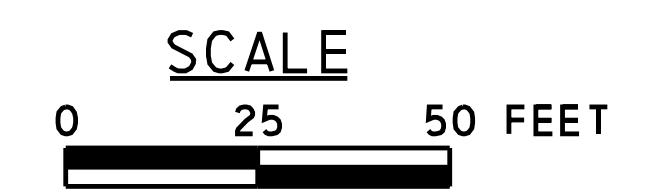
CONSTRUCTION   
 CURVE DATA  
 PI STA 36+97.97  
 $\Delta = 42^\circ 07' 20''$  RT  
 $D = 28^\circ 38' 52''$   
 $T = 77.02'$   
 $L = 147.03'$   
 $R = 200.00'$   
 $E = 14.32'$   
 SE = MATCH EXISTING  
 PC STA 36+20.95  
 PT STA 37+67.99

SEE SHEET 14 OF 29

SEE SHEET 16 OF 29

**LEGEND**

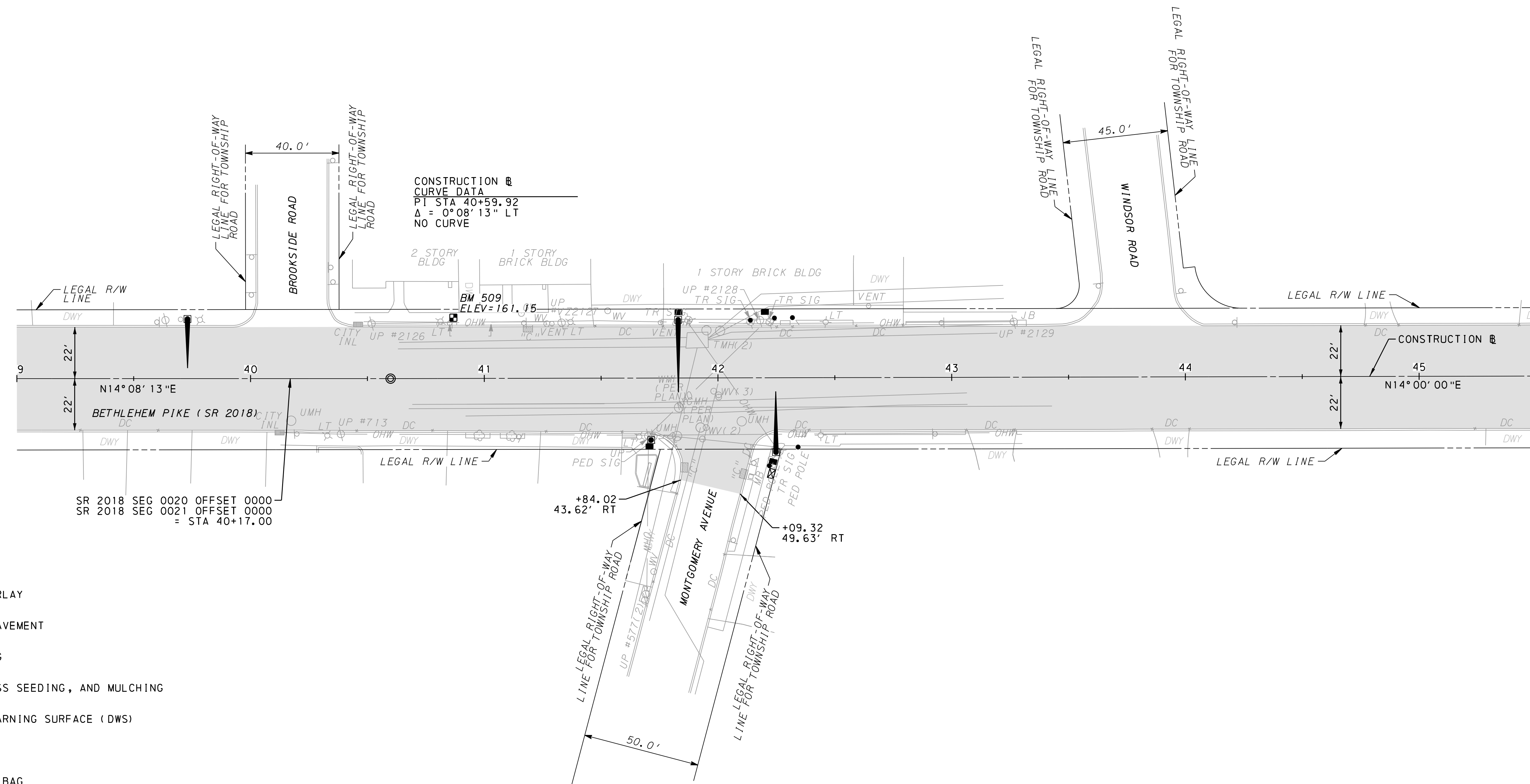
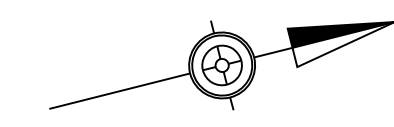
- MILL AND OVERLAY
- FULL DEPTH PAVEMENT
- TREE TRIMMING
- TOPSOIL, GRASS SEEDING, AND MULCHING
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- INLET FILTER BAG
- DEPRESSED CURB
- MAST ARM
- TRAFFIC SIGNAL C-POST
- TRAFFIC SIGNAL D-POST



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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	16 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

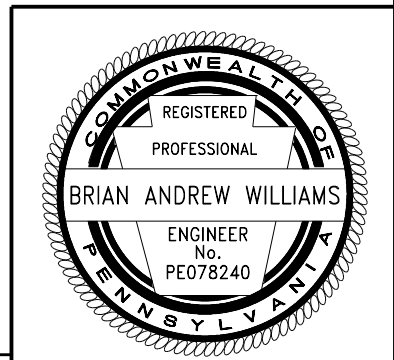
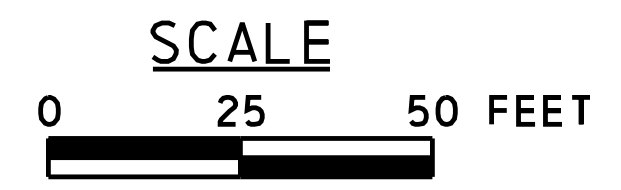
BM 509 ELEV 161.154  
 STA 40+86.84 26.02' LT  
 MAG NAIL SET



SEE SHEET 15 OF 29

SEE SHEET 17 OF 29

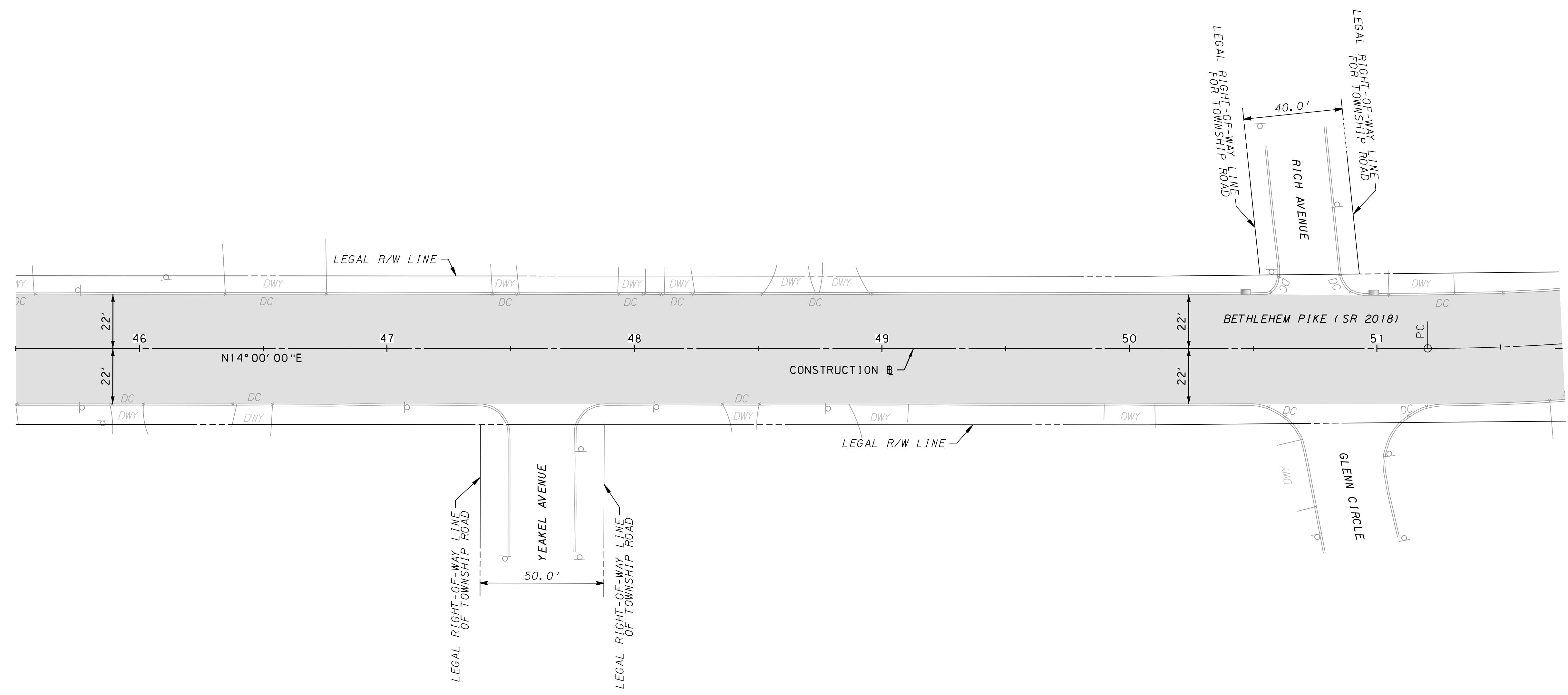
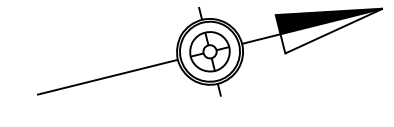
- LEGEND**
- MILL AND OVERLAY
  - FULL DEPTH PAVEMENT
  - TREE TRIMMING
  - TOPSOIL, GRASS SEEDING, AND MULCHING
  - DETECTABLE WARNING SURFACE (DWS)
  - SAWCUT
  - IPC INLET FILTER BAG
  - DEPRESSED CURB
  - MAST ARM
  - + TRAFFIC SIGNAL C-POST
  - TRAFFIC SIGNAL D-POST



4/27/2023 11:18:29 AM T:\182909-S-CV-P\1805.dgn



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	17 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

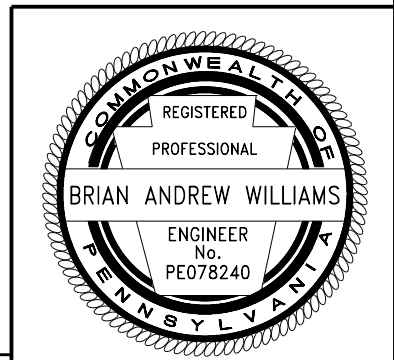


SEE SHEET 16 OF 29

SEE SHEET 18 OF 29

**LEGEND**

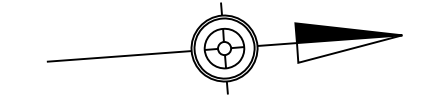
- MILL AND OVERLAY
- FULL DEPTH PAVEMENT
- TREE TRIMMING
- TOPSOIL, GRASS SEEDING, AND MULCHING
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- INLET FILTER BAG
- DEPRESSED CURB
- MAST ARM
- TRAFFIC SIGNAL C-POST
- TRAFFIC SIGNAL D-POST



4/27/2023  
FILENAME: T182909-S-CV-P.LIN06.dgn

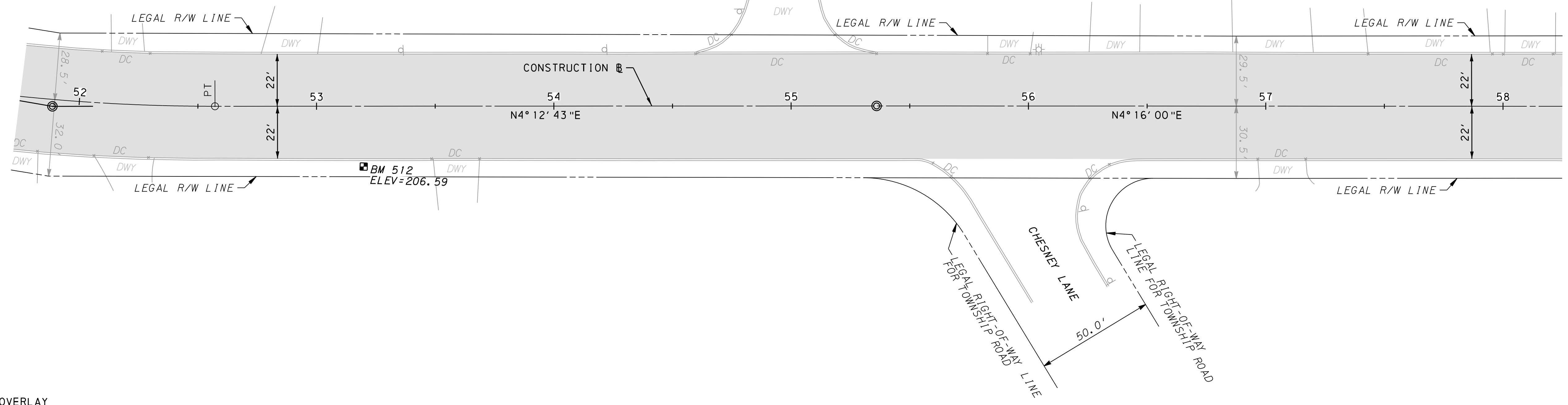
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	18 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

BM 512 ELEV 206.585  
 STA 53+19.85 25.46' RT  
 MAG NAIL SET



CONSTRUCTION @  
 CURVE DATA  
 PI STA 51+89.02  
 $\Delta = 9^\circ 47' 17''$  LT  
 $D = 7^\circ 09' 43''$   
 $T = 68.50'$   
 $L = 136.67'$   
 $R = 800.00'$   
 $E = 2.93'$   
 SE = MATCH EXISTING  
 PC STA 51+20.52  
 PT STA 52+57.19

CONSTRUCTION @  
 CURVE DATA  
 PI STA 55+36.02  
 $\Delta = 0^\circ 03' 17''$  RT  
 NO CURVE

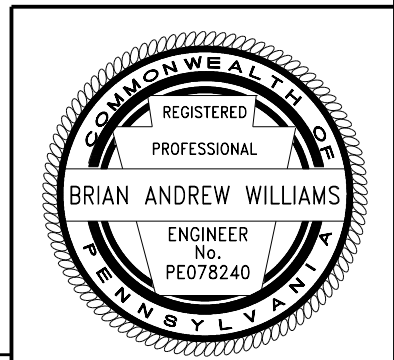
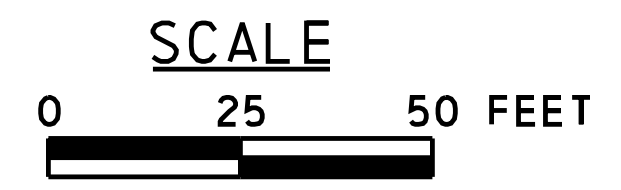


SEE SHEET 17 OF 29

SEE SHEET 19 OF 29

**LEGEND**

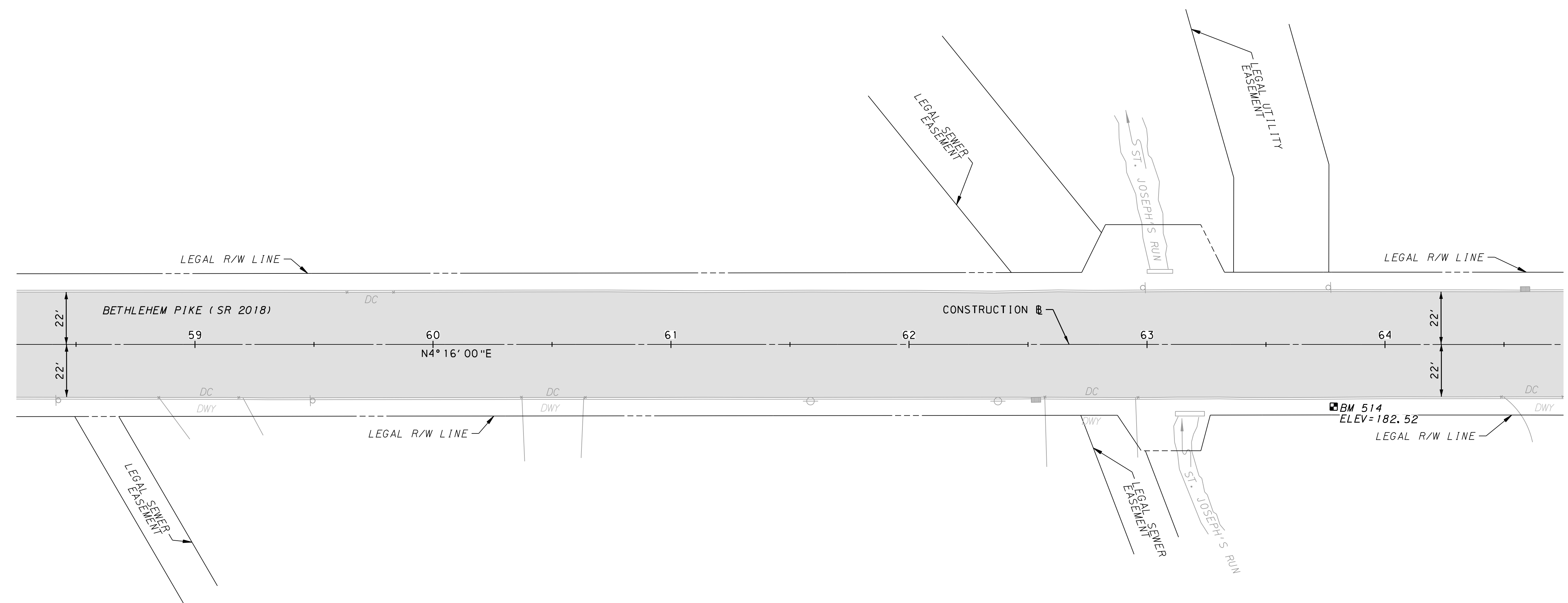
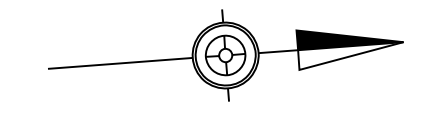
- MILL AND OVERLAY
- FULL DEPTH PAVEMENT
- TREE TRIMMING
- TOPSOIL, GRASS SEEDING, AND MULCHING
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- IPC INLET FILTER BAG
- DEPRESSED CURB
- MAST ARM
- + TRAFFIC SIGNAL C-POST
- TRAFFIC SIGNAL D-POST



4/27/2023  
 FILENAME: T182909-8-cv-p.mxd

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	19 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

BM 514 ELEV 182.522  
 STA 63+78.45 26.12' RT  
 MAG NAIL SET

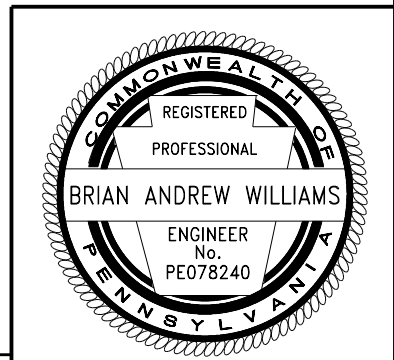


SEE SHEET 18 OF 29

SEE SHEET 20 OF 29

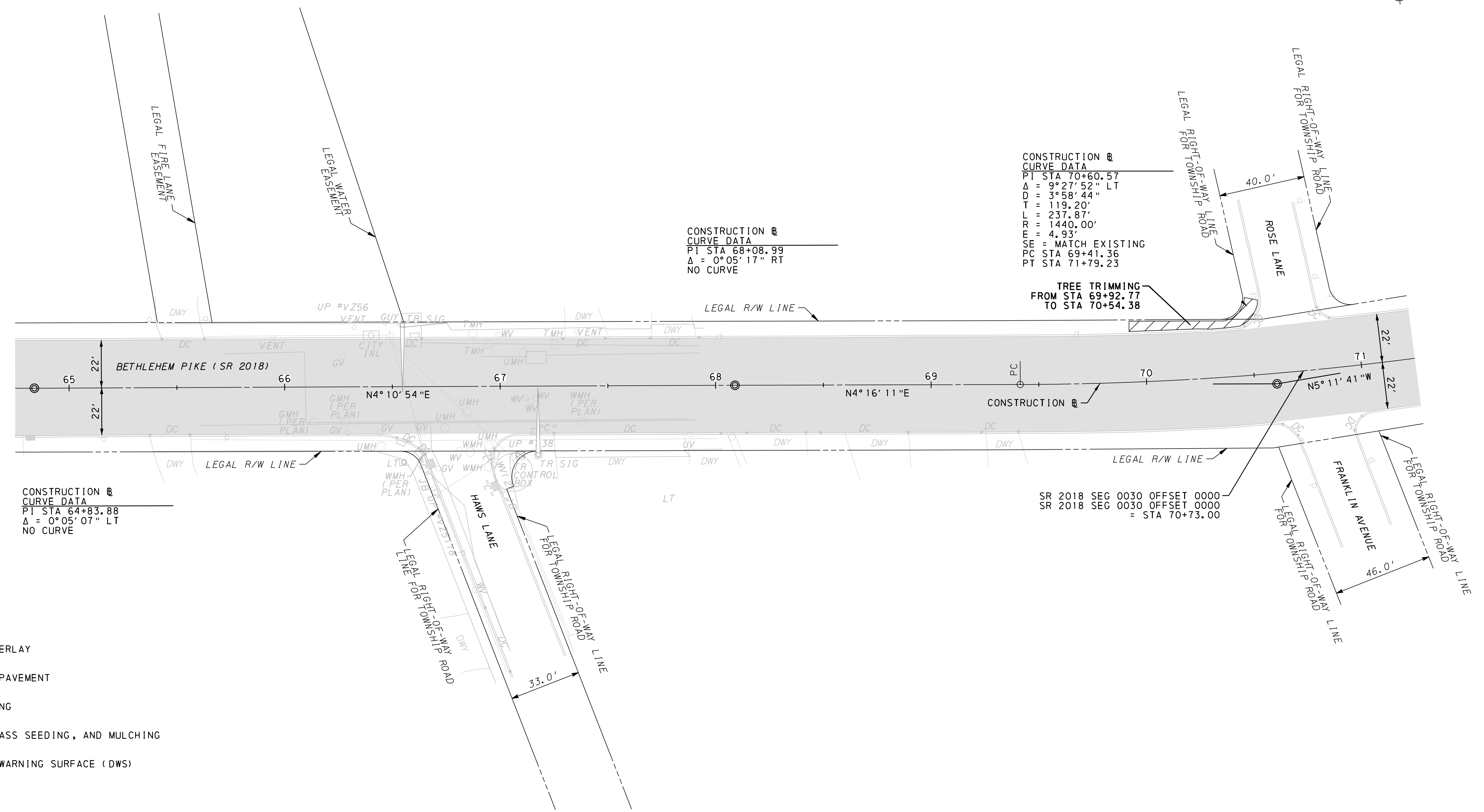
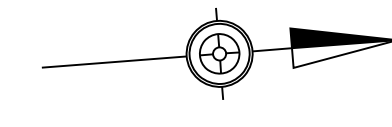
**LEGEND**

- MILL AND OVERLAY
- FULL DEPTH PAVEMENT
- TREE TRIMMING
- TOPSOIL, GRASS SEEDING, AND MULCHING
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- INLET FILTER BAG
- DEPRESSED CURB
- MAST ARM
- TRAFFIC SIGNAL C-POST
- TRAFFIC SIGNAL D-POST



4/27/2023  
 FILENAME: T182909-S-CV-P-1008.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	20 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



CONSTRUCTION @  
CURVE DATA  
PT STA 68+08.99  
 $\Delta = 0^\circ 05' 17''$  RT  
NO CURVE

CONSTRUCTION @  
CURVE DATA  
PT STA 70+60.57  
 $\Delta = 9^\circ 27' 52''$  LT  
 $D = 3^\circ 58' 44''$   
 $T = 119.20'$   
 $L = 237.87'$   
 $R = 1440.00'$   
 $E = 4.93'$   
SE = MATCH EXISTING  
PC STA 69+41.36  
PT STA 71+79.23

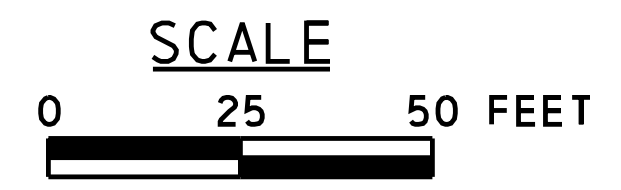
TREE TRIMMING  
FROM STA 69+92.77  
TO STA 70+54.38

CONSTRUCTION @  
CURVE DATA  
PT STA 64+83.88  
 $\Delta = 0^\circ 05' 07''$  LT  
NO CURVE

SR 2018 SEG 0030 OFFSET 0000  
SR 2018 SEG 0030 OFFSET 0000  
= STA 70+73.00

**LEGEND**

- MILL AND OVERLAY
- FULL DEPTH PAVEMENT
- TREE TRIMMING
- TOPSOIL, GRASS SEEDING, AND MULCHING
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- INLET FILTER BAG
- DEPRESSED CURB
- MAST ARM
- TRAFFIC SIGNAL C-POST
- TRAFFIC SIGNAL D-POST



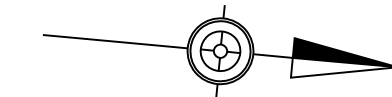
SEE SHEET 19 OF 29

SEE SHEET 21 OF 29

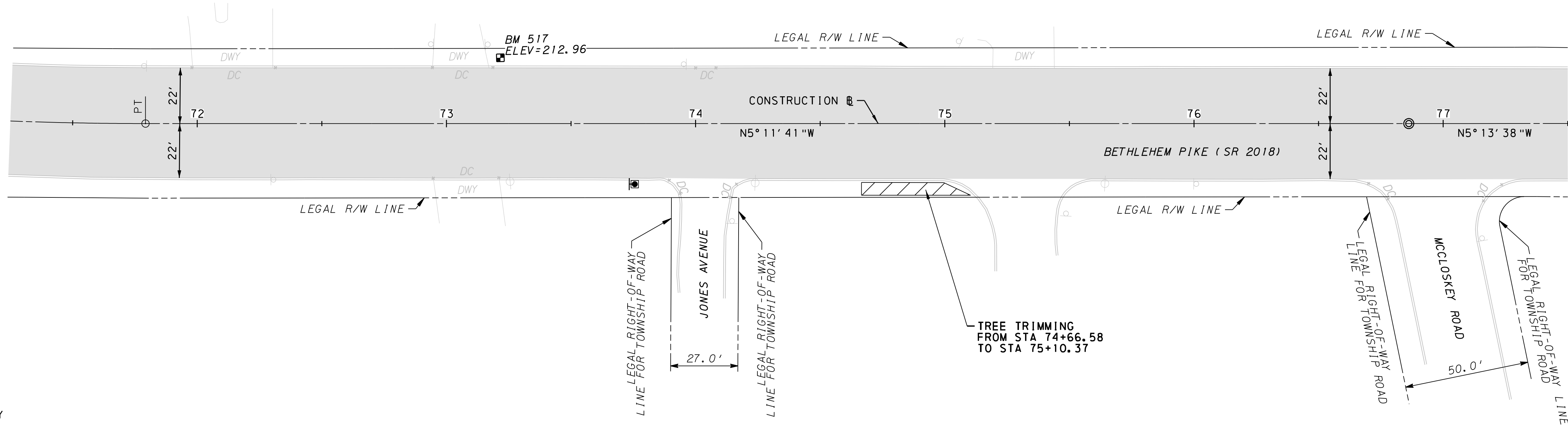
4/27/2023  
FILENAME: T182909-S-CV-P-IND9.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	21 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	






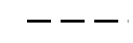
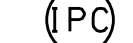

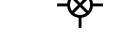

BM 517 ELEV 212.959  
 STA 73+21.63 26.43' LT  
 MAG NAIL SET



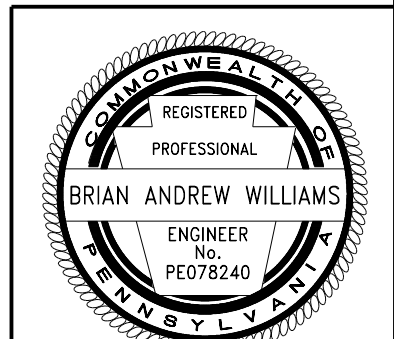
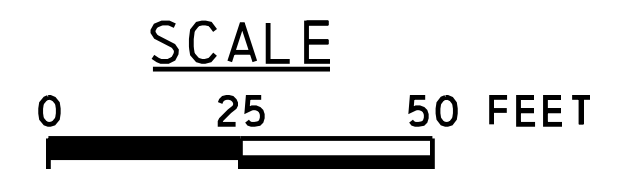
CONSTRUCTION #  
 CURVE DATA  
 PI STA 76+86.21  
 $\Delta = 0^\circ 01' 57''$  LT  
 NO CURVE



**LEGEND**

-  MILL AND OVERLAY
-  FULL DEPTH PAVEMENT
-  TREE TRIMMING
-  TOPSOIL, GRASS SEEDING, AND MULCHING
-  DETECTABLE WARNING SURFACE (DWS)
-  SAWCUT
-  INLET FILTER BAG
-  DEPRESSED CURB
-  MAST ARM
-  TRAFFIC SIGNAL C-POST
-  TRAFFIC SIGNAL D-POST

TREE TRIMMING  
 FROM STA 74+66.58  
 TO STA 75+10.37



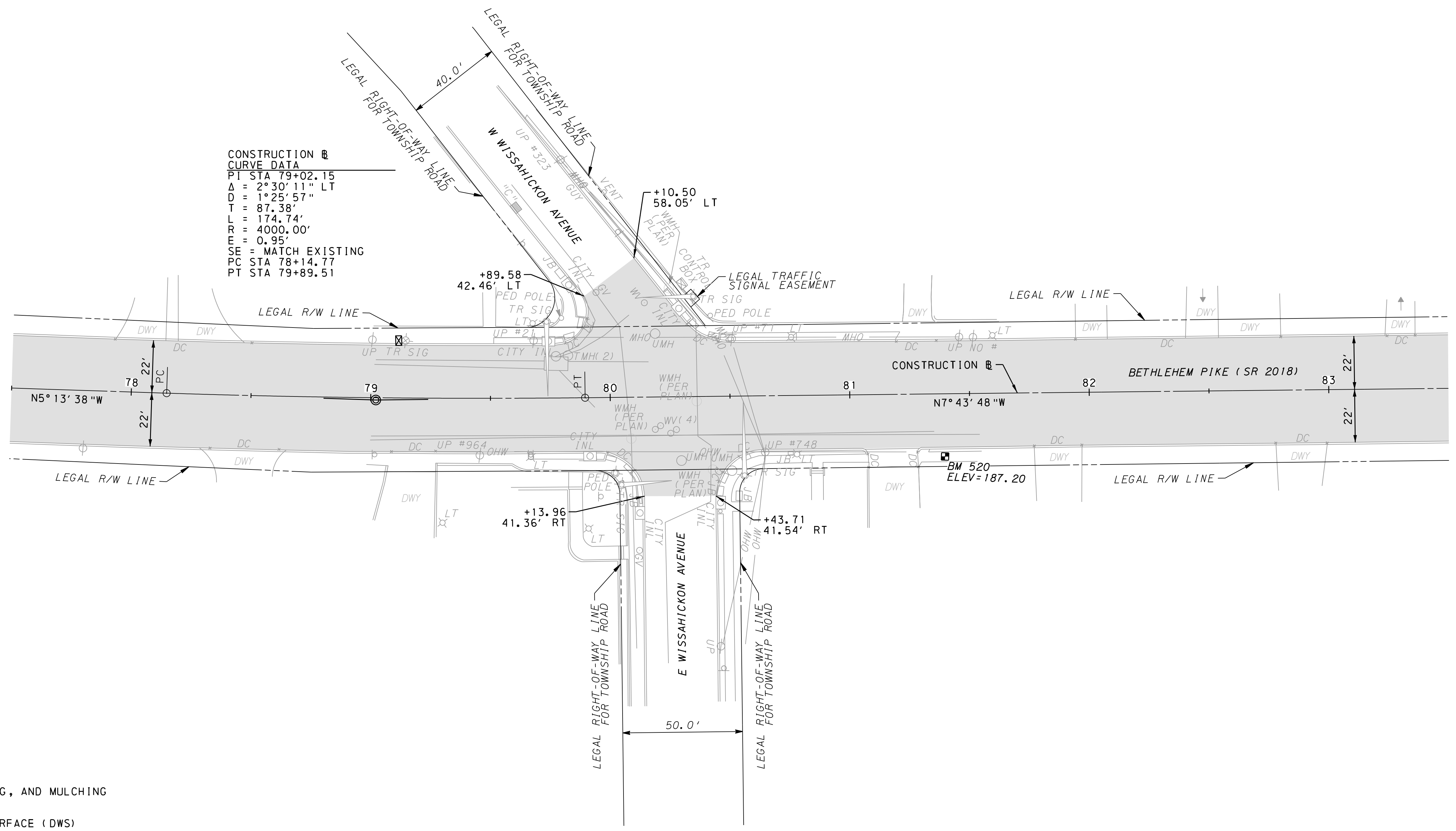
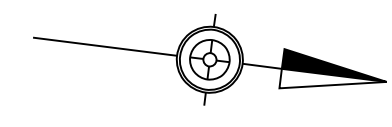
SEE SHEET 20 OF 29

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4/27/2023  
 FILENAME: T182909-s-cv-p.mn10.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	22 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

BM 520 ELEV 187.198  
 STA 81+39.52 26.15' RT  
 MAG NAIL SET



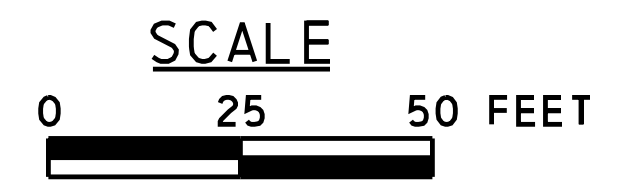
CONSTRUCTION @  
 CURVE DATA  
 PI STA 79+02.15  
 $\Delta = 2^\circ 30' 11''$  LT  
 $D = 125.57'$   
 $T = 87.38'$   
 $L = 174.74'$   
 $R = 4000.00'$   
 $E = 0.95'$   
 SE = MATCH EXISTING  
 PC STA 78+14.77  
 PT STA 79+89.51

SEE SHEET 21 OF 29

SEE SHEET 23 OF 29

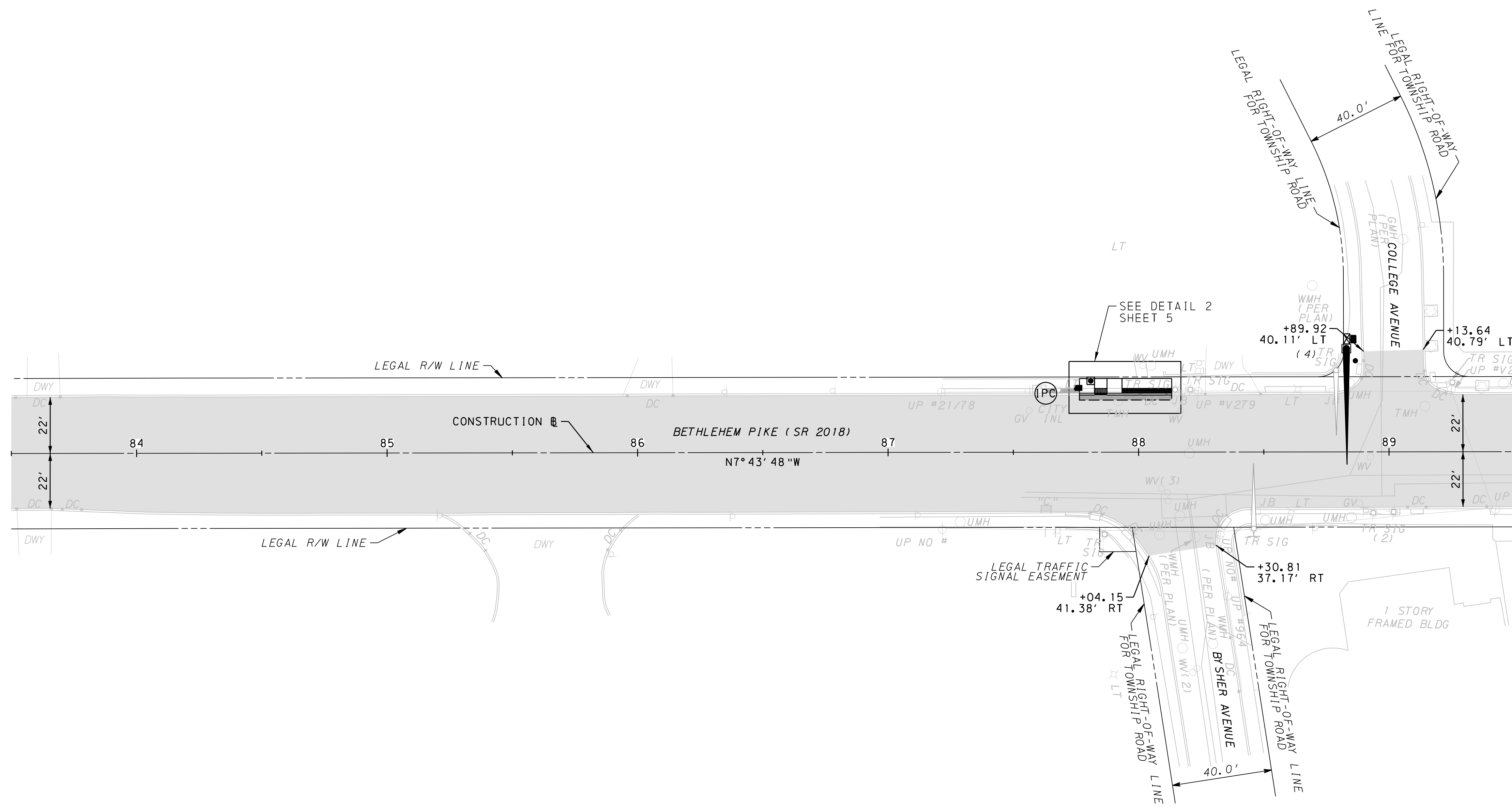
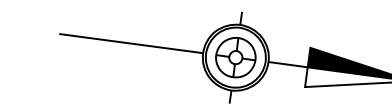
**LEGEND**

- MILL AND OVERLAY
- FULL DEPTH PAVEMENT
- TREE TRIMMING
- TOPSOIL, GRASS SEEDING, AND MULCHING
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- (PC) INLET FILTER BAG
- DEPRESSED CURB
- MAST ARM
- + TRAFFIC SIGNAL C-POST
- TRAFFIC SIGNAL D-POST



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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	23 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

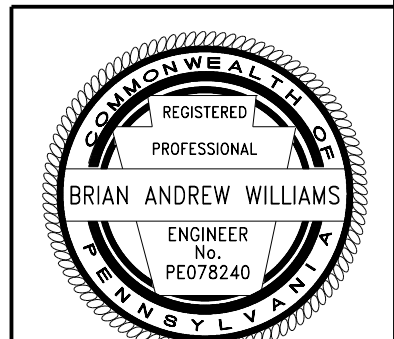
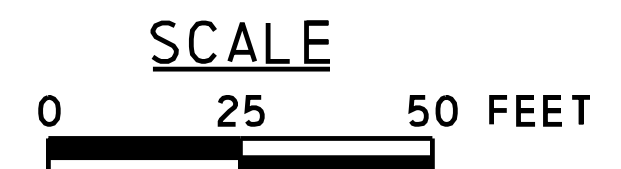


SEE SHEET 22 OF 29

SEE SHEET 24 OF 29

**LEGEND**

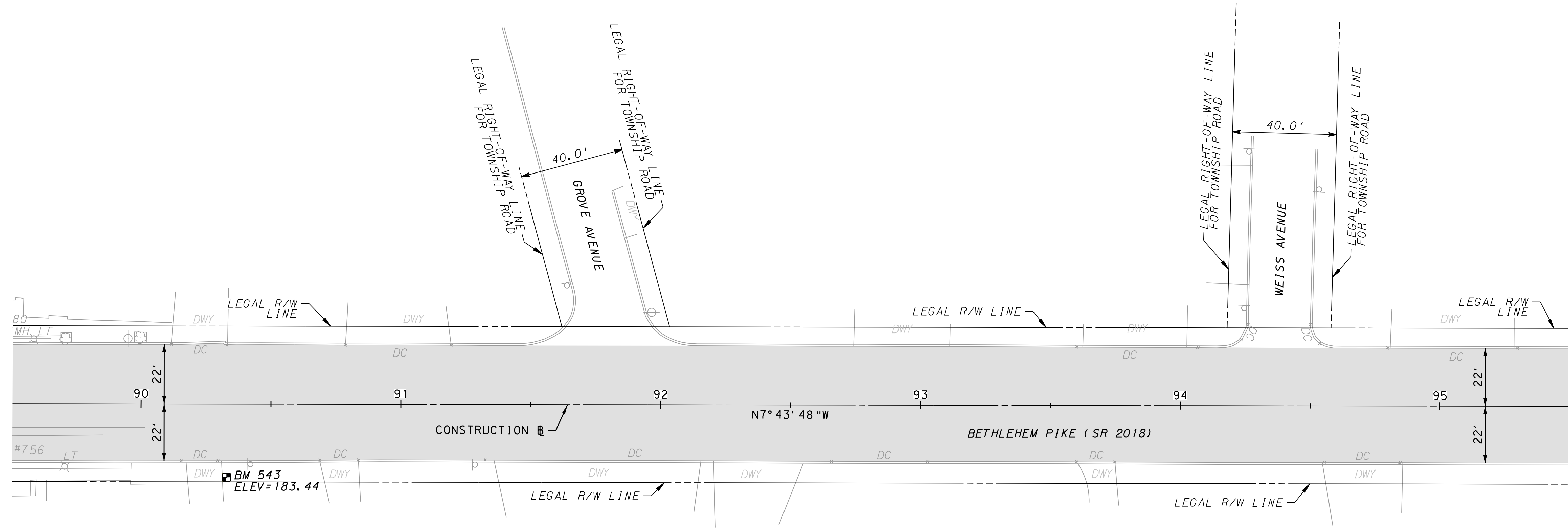
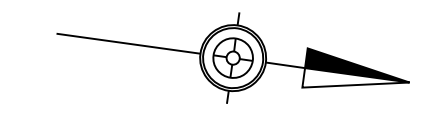
- MILL AND OVERLAY
- FULL DEPTH PAVEMENT
- TREE TRIMMING
- TOPSOIL, GRASS SEEDING, AND MULCHING
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- IPC INLET FILTER BAG
- DEPRESSED CURB
- MAST ARM
- + TRAFFIC SIGNAL C-POST
- TRAFFIC SIGNAL D-POST



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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	24 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

BM 543 ELEV 183.442  
 STA 90+32.88 28.25' RT  
 MAG NAIL SET

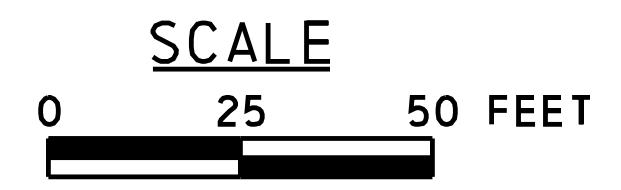


SEE SHEET 23 OF 29

SEE SHEET 25 OF 29

**LEGEND**

- MILL AND OVERLAY
- FULL DEPTH PAVEMENT
- TREE TRIMMING
- TOPSOIL, GRASS SEEDING, AND MULCHING
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- INLET FILTER BAG
- DEPRESSED CURB
- MAST ARM
- TRAFFIC SIGNAL C-POST
- TRAFFIC SIGNAL D-POST

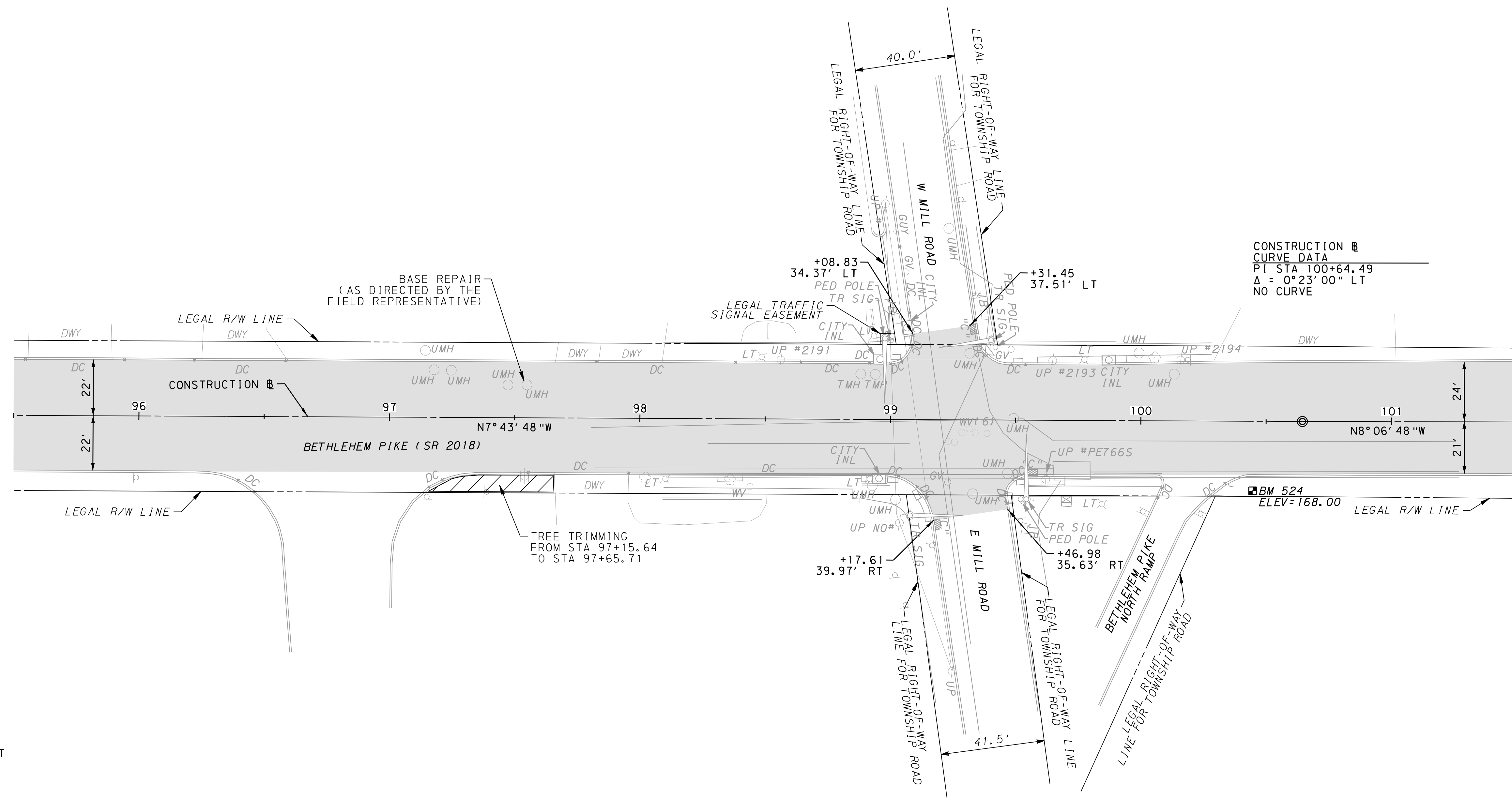
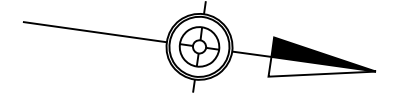


4/27/2023  
 FILENAME: T182909-S-CV-P.in13.dgn



BM 524 ELEV 168.000  
 STA 100+44.74 27.77' RT  
 MAG NAIL SET

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	25 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



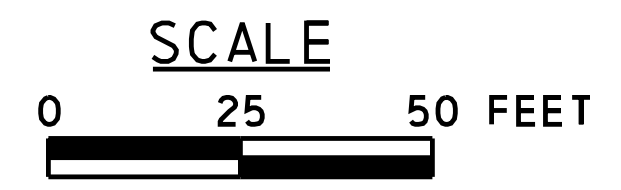
CONSTRUCTION B  
 CURVE DATA  
 PT STA 100+64.49  
 $\Delta = 0^\circ 23' 00''$  LT  
 NO CURVE

BASE REPAIR  
 (AS DIRECTED BY THE  
 FIELD REPRESENTATIVE)

TREE TRIMMING  
 FROM STA 97+15.64  
 TO STA 97+65.71

**LEGEND**

- MILL AND OVERLAY
- FULL DEPTH PAVEMENT
- TREE TRIMMING
- TOPSOIL, GRASS SEEDING, AND MULCHING
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- (PC) INLET FILTER BAG
- DEPRESSED CURB
- MAST ARM
- TRAFFIC SIGNAL C-POST
- TRAFFIC SIGNAL D-POST

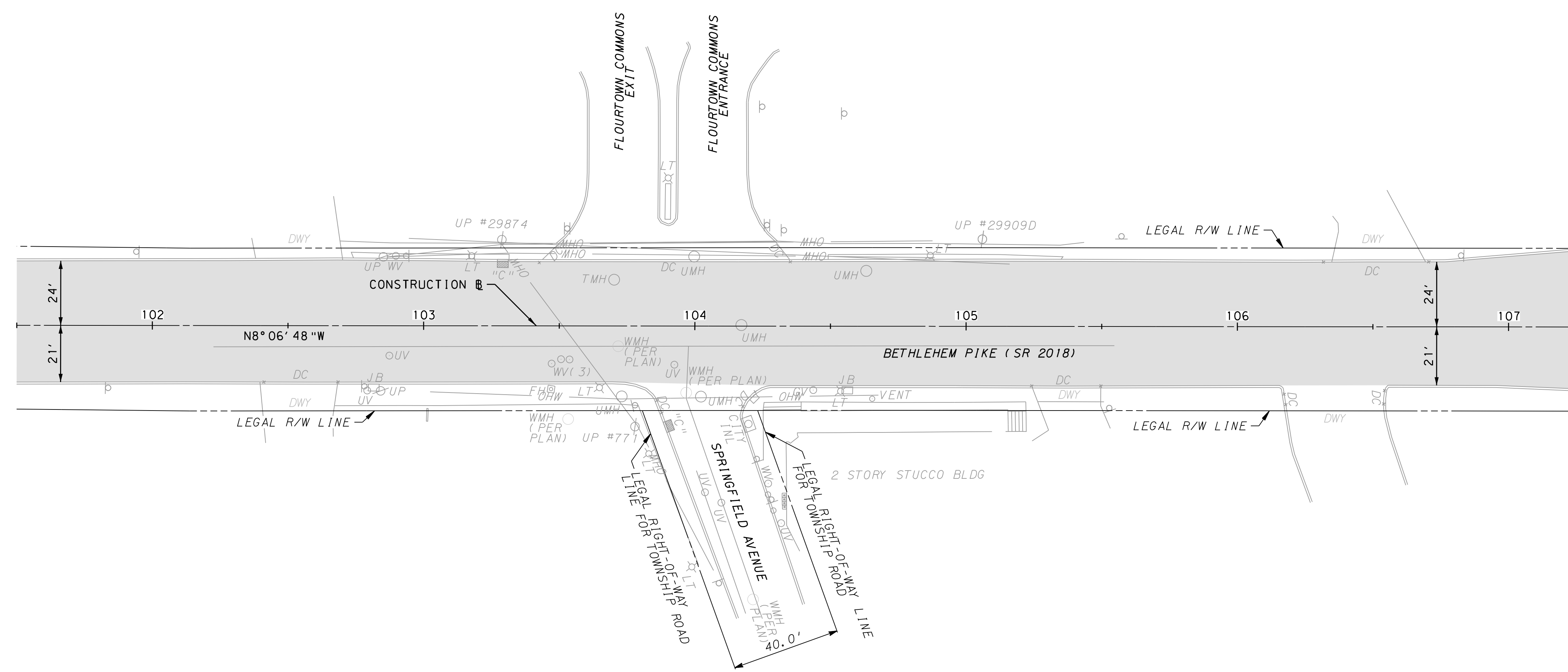
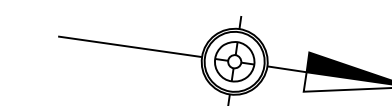


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4/27/2023  
 FILENAME: T182909-8-cv-p.in14.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	26 OF 29
SPRINGFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

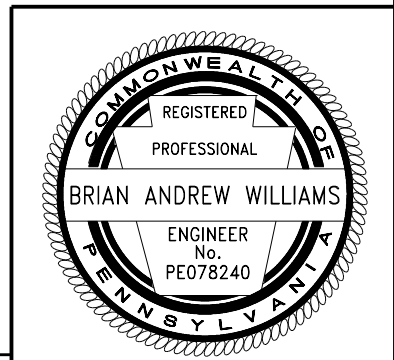
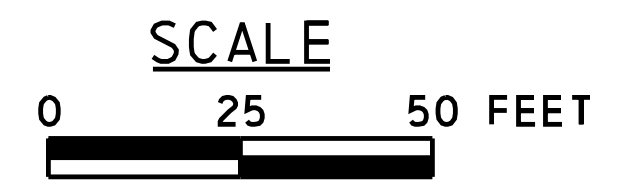


SEE SHEET 25 OF 29

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**LEGEND**

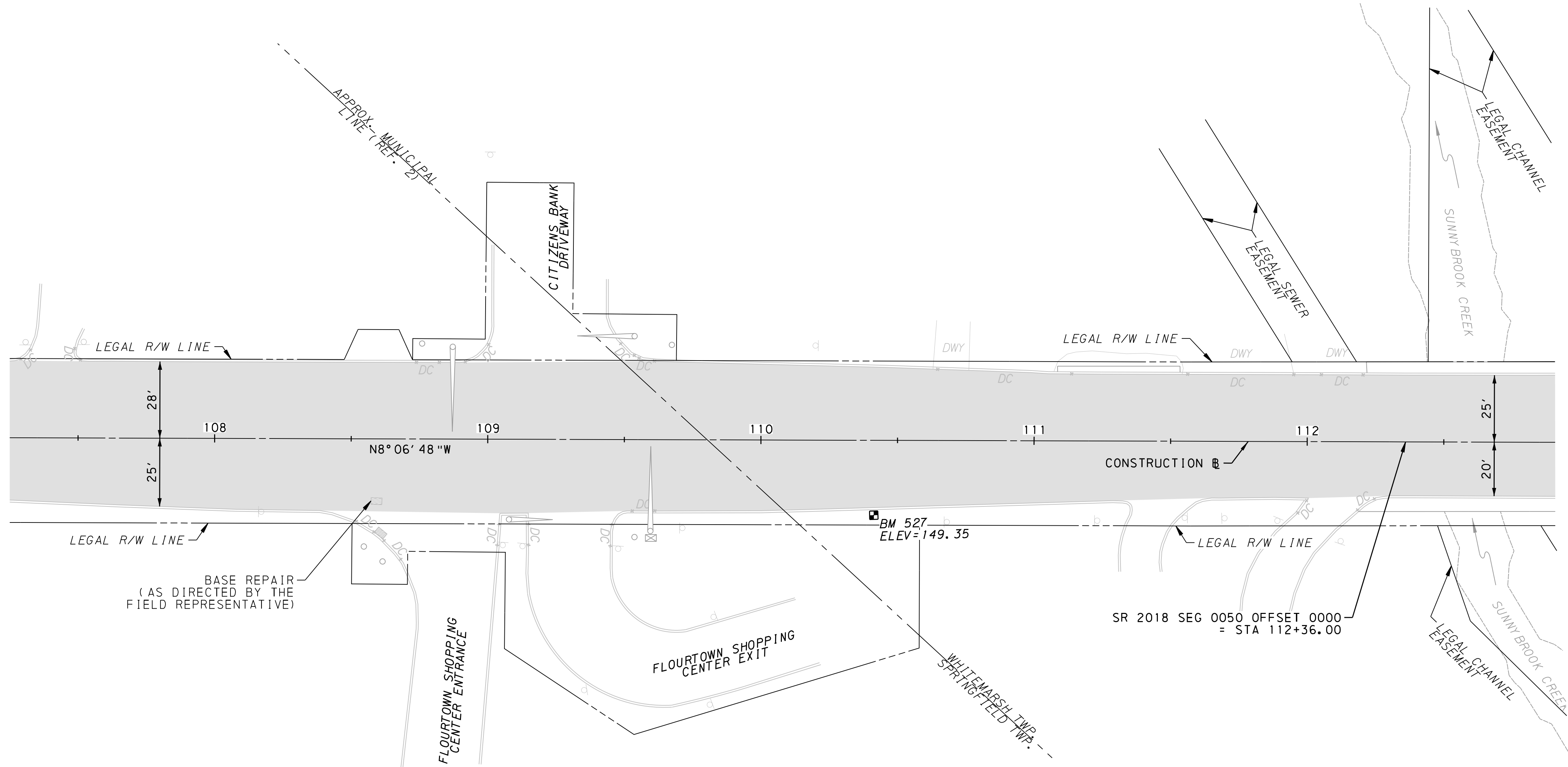
- MILL AND OVERLAY
- FULL DEPTH PAVEMENT
- TREE TRIMMING
- TOPSOIL, GRASS SEEDING, AND MULCHING
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- IPC INLET FILTER BAG
- DEPRESSED CURB
- MAST ARM
- TRAFFIC SIGNAL C-POST
- TRAFFIC SIGNAL D-POST



4/27/2023  
FILENAME: T182909-S-CV-P1.m15.dgn

BM 527 ELEV 149.355  
 STA 110+41.40 27.41' RT  
 MAG NAIL SET

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	27 OF 29
SPRINGFIELD TOWNSHIP AND WHITEMARSH TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

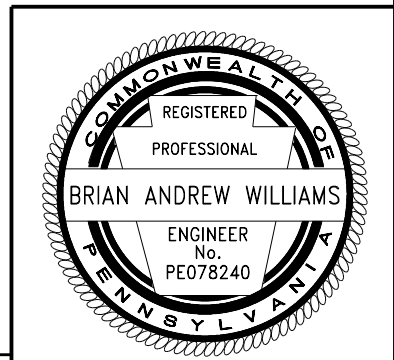


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SEE SHEET 28 OF 29

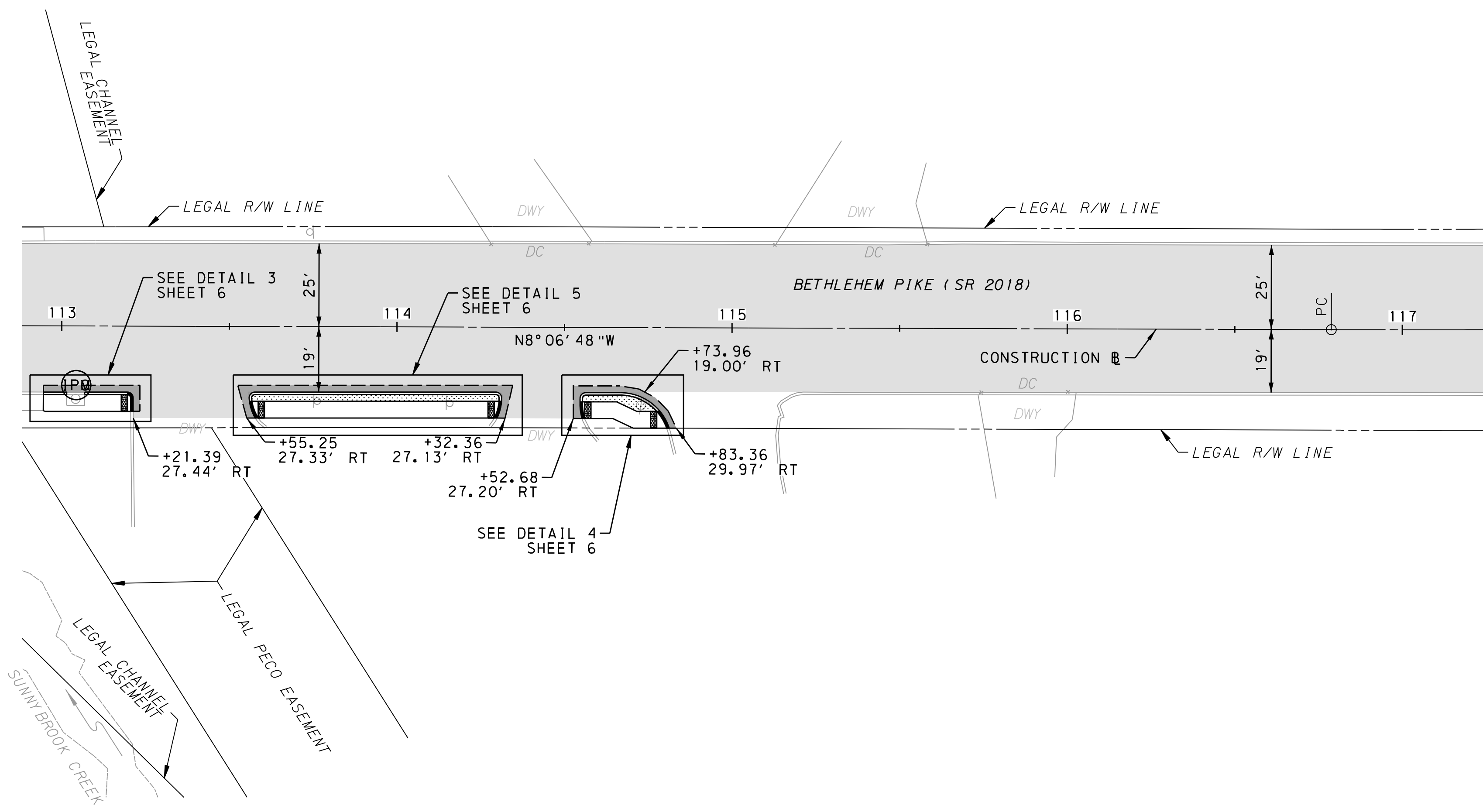
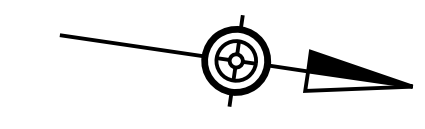
**LEGEND**

- MILL AND OVERLAY
- FULL DEPTH PAVEMENT
- TREE TRIMMING
- TOPSOIL, GRASS SEEDING, AND MULCHING
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- INLET FILTER BAG
- DEPRESSED CURB
- MAST ARM
- TRAFFIC SIGNAL C-POST
- TRAFFIC SIGNAL D-POST



4/27/2023  
 FILENAME: T182909-S-CV-P1.m16.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	28 OF 29
WHITEMARSH TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

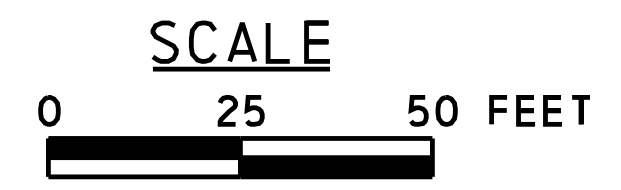


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SEE SHEET 29 OF 29

**LEGEND**

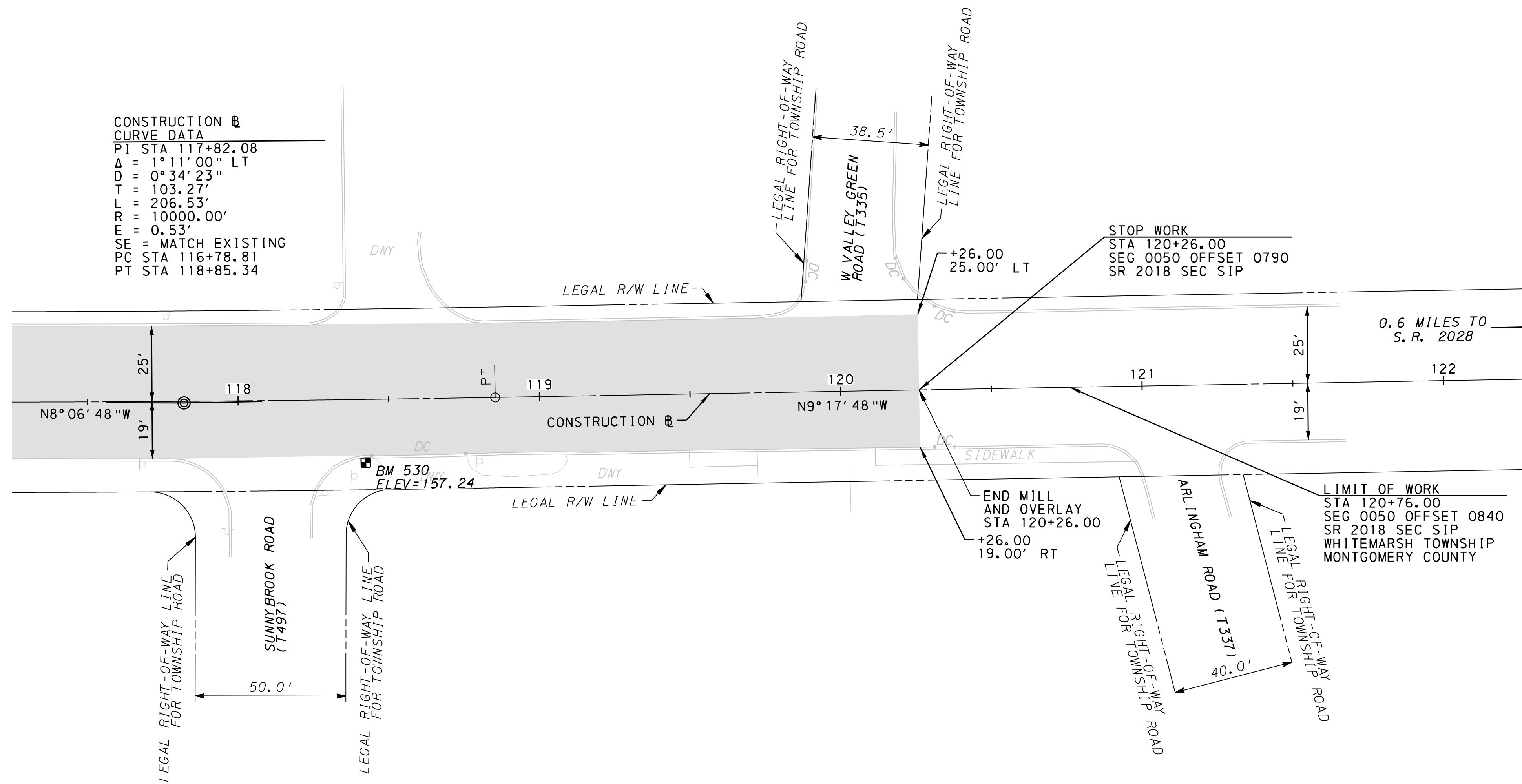
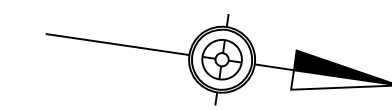
- MILL AND OVERLAY
- FULL DEPTH PAVEMENT
- TREE TRIMMING
- TOPSOIL, GRASS SEEDING, AND MULCHING
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- MAST ARM
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- TRAFFIC SIGNAL D-POST



4/27/2023 11:28:09 - s-cv-p.mn1.r.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	2018	SIP	29 OF 29
WHITEMARSH TOWNSHIP				
REVISION NUMBER	REVISIONS			DATE BY

BM 530 ELEV 157.243  
 STA 118+42.08 20.96' RT  
 MAG NAIL SET



CONSTRUCTION B  
 CURVE DATA  
 PI STA 117+82.08  
 $\Delta = 1^{\circ}11'00''$  LT  
 $D = 0^{\circ}34'23''$   
 $T = 103.27'$   
 $L = 206.53'$   
 $R = 10000.00'$   
 $E = 0.53'$   
 SE = MATCH EXISTING  
 PC STA 116+78.81  
 PT STA 118+85.34

STOP WORK  
 STA 120+26.00  
 SEG 0050 OFFSET 0790  
 SR 2018 SEC SIP

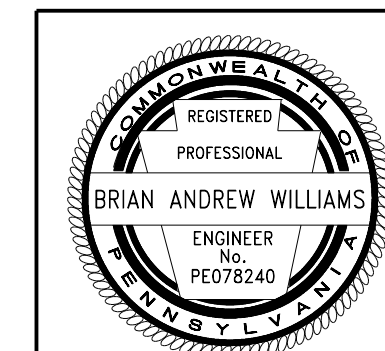
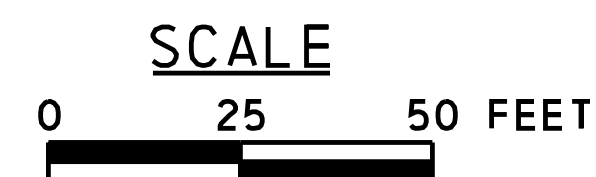
0.6 MILES TO  
 S. R. 2028

END MILL  
 AND OVERLAY  
 STA 120+26.00  
 +26.00  
 19.00' RT

LIMIT OF WORK  
 STA 120+76.00  
 SEG 0050 OFFSET 0840  
 SR 2018 SEC SIP  
 WHITEMARSH TOWNSHIP  
 MONTGOMERY COUNTY

**LEGEND**

- MILL AND OVERLAY
- FULL DEPTH PAVEMENT
- TREE TRIMMING
- TOPSOIL, GRASS SEEDING, AND MULCHING
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- TRAFFIC SIGNAL D-POST



SEE SHEET 28 OF 29

4/27/2023  
 FILENAME: T182909-S-CV-P1n18.dgn