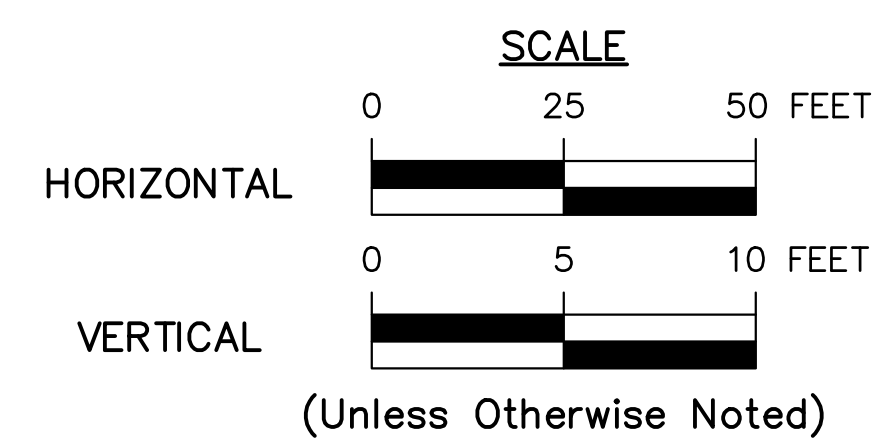


DISTRICT	COUNTY	TOWNSHIP	BOROUGH	ROUTE	SECTION	TOTAL SHEETS
6-0	MONTGOMERY	HATFIELD	-	SR 1004	-	10

ECMS NO.118356

HATFIELD TOWNSHIP
DRAWINGS
FOR
SCOPING FIELD VIEW
FOR
LIBERTY BELL SHARED USE PATH
BETWEEN
SR 1004 W. ORVILLA ROAD
IN MONTGOMERY COUNTY
FROM SEG 0060 OFFSET 0000 TO SEG 0060 OFFSET 0595
AND
W. VINE STREET (TWP)



	RECOMMENDED DATE: _____ _____ DISTRICT EXECUTIVE
	APPROVED DATE: _____ _____ ENTER TITLE

PRELIMINARY

TABULATION OF PROPERTY OWNERS

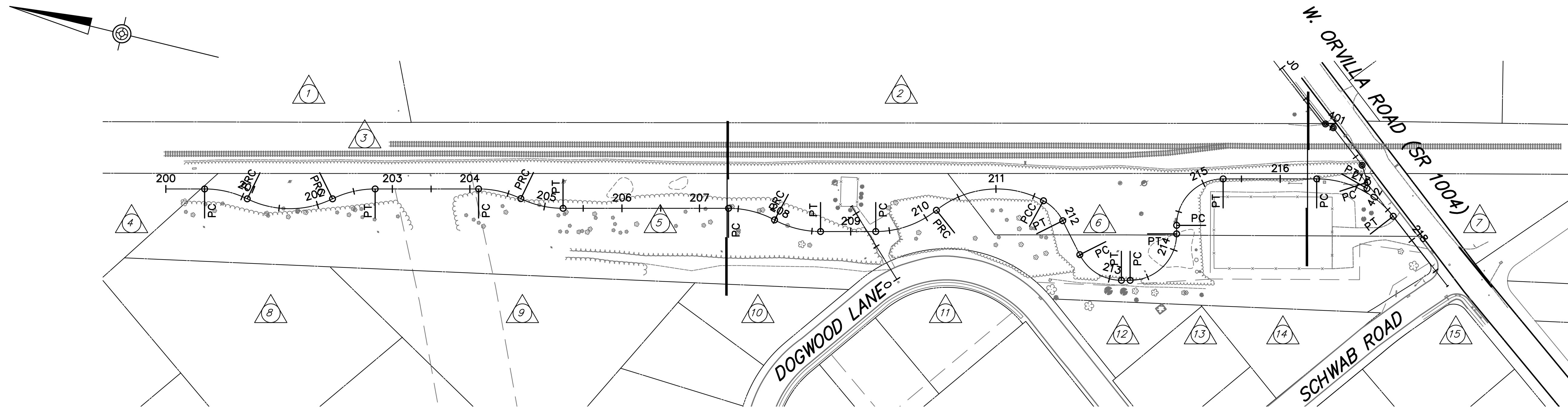
PARCEL NO	OWNER	PARCEL NO	OWNER
①	MONTGOMERY SQUARE COMMUNITY ASSOCIATION	⑨	HATFIELD TOWNSHIP
②	TARRINGTON VILLAGE COMMUNITY ASSOCIATION	⑩	VASNA YORN & PROM YORN
③	SEPTA	⑪	DOUGLAS P. & JOAN M. GUEST
④	DIDDEN GEORGE GREENHOUSES INC	⑫	HANS F. MILLONIG
⑤	PENN POWER & LIGHT CO EU SERVICES CORP	⑬	JOHN E. & MARGARET S. DELZOTTO
⑥	PENN POWER & LIGHT CO EU SERVICES CORP	⑭	CHRISTOPHER RONALD & SONIA DEBORAH BANCROFT
⑦	LEVAR E. & LUCILLE V. BROOKS	⑮	AI Q. ZHONG & VAN C. TRUONG
⑧	HATFIELD TOWNSHIP		

INDEX MAP

DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	MONTGOMERY	1004	-	2 OF 10	
HATFIELD TOWNSHIP					
REVISION NUMBER	REVISIONS			DATE	BY

SHEET INDEX BLOCK

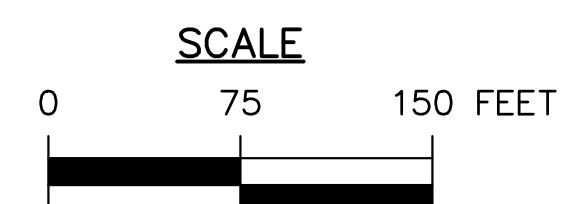
DESCRIPTION	SHEET
TITLE SHEET	1
INDEX MAP	2
GENERAL NOTES AND LOCATION MAP	3
TYPICAL SECTIONS	4
CONSTRUCTION PLANS	5-7
PROFILE	8-10



INDEX MAP

LEGEND

- ⊕ PLAN
- ⊞ PROFILE
- ⊘ PARCEL IDENTIFICATION NUMBER
- ⊘ PARCEL IDENTIFICATION NUMBER - NO TAKE
- SHEET BREAK



PUBLIC UTILITIES

PENNSYLVANIA ONE CALL SYSTEM, INC.
SERIAL NUMBER:

TEXAS EASTERN TRANSMISSION CORP
560 POTTSTOWN PIKE
CHESTER SPRINGS, PA 19425
484-356-6557
ATTN: ANDREW HAYES
ANDREW.HAYES@ENBRIDGE.COM

HATFIELD TOWNSHIP MUNICIPAL AUTHORITY
3200 ADVANCE LANE
COLMAR, PA 18915
215-822-9300
ATTN: DOUG FRANKS
DFRANKS@HTMASEWER.COM

NORTH PENN WATER AUTHORITY
300 FORTY FOOT ROAD
LANSDALE, PA 19446
ATTN: STEVE FRETZ
SFRETZ@NPWA.ORG

PPL ELECTRIC UTILITIES CORPORATION
503 NEW MARKET STREET
WILKES BARRE, PA 18702
610-782-5813
ATTN: RANDY MESSLEHNER
RMESSELEHNER@PPLWEB.COM

PECO ENERGY - GAS
300 FRONT STREET
CONSHOHOCKEN, PA 19428
ATTN: MIKE GABRIEL
MIKE.GABRIEL@PECO-ENERGY.COM

VERIZON PENNSYLVANIA LLC
1050 VIRGINIA DRIVE
FORT WASHINGTON, PA 19034
215-789-7719
ATTN: SCOTT FREY
SCOTT.FREY@VERIZON.COM

TABULATION OF OVERALL AND CONSTRUCTION LENGTH

LOCATION	STATION TO STATION	OVERALL LENGTH		CONSTRUCTION LENGTH	
		FEET	MILES	FEET	MILES
SR 1004 SEC. LBT	STA 200+00.00 TO STA 218+75.00	1875.00	0.355	-	-
	STA 200+45.22 TO STA 218+53.06	-	-	1808	0.342
	STA 400+88.62 TO STA 402+00.00	-	-	111	0.021
TOTAL				1919	0.363

GENERAL NOTES

THE LEGAL RIGHT OF WAY ON SR 1004, FORMERLY LR 46047, IS 33 FEET BASED ON ROAD DOCKET NO 5 1/2 PAGE 406 CONFIRMED MAY 15, 1822, RECORDED IN NORRISTOWN PENNSYLVANIA AT THE MONTGOMERY COUNTY COURTHOUSE.

THE TOWNSHIP RIGHT OF WAY ON SCHWAB ROAD, IS VARIABLE FROM 41.5 FEET TO 60 FEET BASED ON DEED BOOK 4682 PAGE 1580, RECORDED ON APRIL 16, 1982, AND DEED BOOK 4768 PAGE 1819 RECORDED ON JUNE 7, 1985, IN NORRISTOWN PENNSYLVANIA AT THE MONTGOMERY COUNTY COURTHOUSE.

THE TOWNSHIP RIGHT OF WAY ON DOGWOOD LANE, IS VARIABLE FROM 40 FEET TO 50 FEET BASED ON DEED BOOK 4682 PAGE 1588, RECORDED ON APRIL 16, 1982, AND DEED BOOK 4816 PAGE 44 RECORDED ON OCTOBER 10, 1986, IN NORRISTOWN PENNSYLVANIA AT THE MONTGOMERY COUNTY COURTHOUSE.

SR 1004 WAS FORMERLY KNOWN AS LR 46047.

THE HORIZONTAL CONTROL FOR THIS PROJECT IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM NAD83 (2011) SOUTH ZONE.

THE VERTICAL CONTROL FOR THIS PROJECT IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

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

THE COMBINED SCALE FACTOR IS 0.99995426.

ALL PROPERTIES ARE PLOTTED FROM DEEDS OF RECORD, RECORDED SUBDIVISION OR LOT PLANS, OR FROM FIELD SURVEY. PROPERTY LINES WERE SURVEYED ONLY WHEN DETERMINED NECESSARY BY THE PROFESSIONAL LAND SURVEYOR RESPONSIBLE FOR THE PROJECT. PROPERTY LINES NOT ESTABLISHED BY FIELD SURVEY WERE PLOTTED BASED ON EXISTING TOPOGRAPHICAL FEATURES AND LIMITED FIELD DATA.

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

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.

THREE WORKING DAYS PRIOR TO EXCAVATION, THE CONTRACTOR MUST CONTACT THE PA ONE CALL SYSTEM, INC. PHONE 1-800-242-1776, SERIAL NUMBERS 20213340985 & 20213370949 FOR EXCAVATION.

MCMAHON ASSOCIATES DOES NOT GUARANTEE THE ACCURACY OF THE LOCATIONS OF EXISTING SUBSURFACE UTILITY STRUCTURES SHOWN ON THE PLANS, NOR DOES MCMAHON ASSOCIATES GUARANTEE THAT ALL SUBSURFACE STRUCTURES ARE SHOWN.

ALL UTILITY FACILITIES WILL BE ADJUSTED OR ALTERED WHERE REQUIRED BY THEIR RESPECTIVE OWNERS.

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	1004	-	3 OF 10

HATFIELD TOWNSHIP

REVISION NUMBER	REVISIONS	DATE	BY

GENERAL NOTES CONT.

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

RC-45M (24 SHEETS)	FEBRUARY 19, 2021
RC-46M (34 SHEETS)	FEBRUARY 19, 2021
RC-67M (14 SHEETS)	FEBRUARY 19, 2021
RC-70M (3 SHEETS)	FEBRUARY 8, 2019

THE HALF CIRCLED NUMBER INDICATES A SCALED DIMENSION.

+56
49'

INDICATES MONUMENTED DIMENSION.

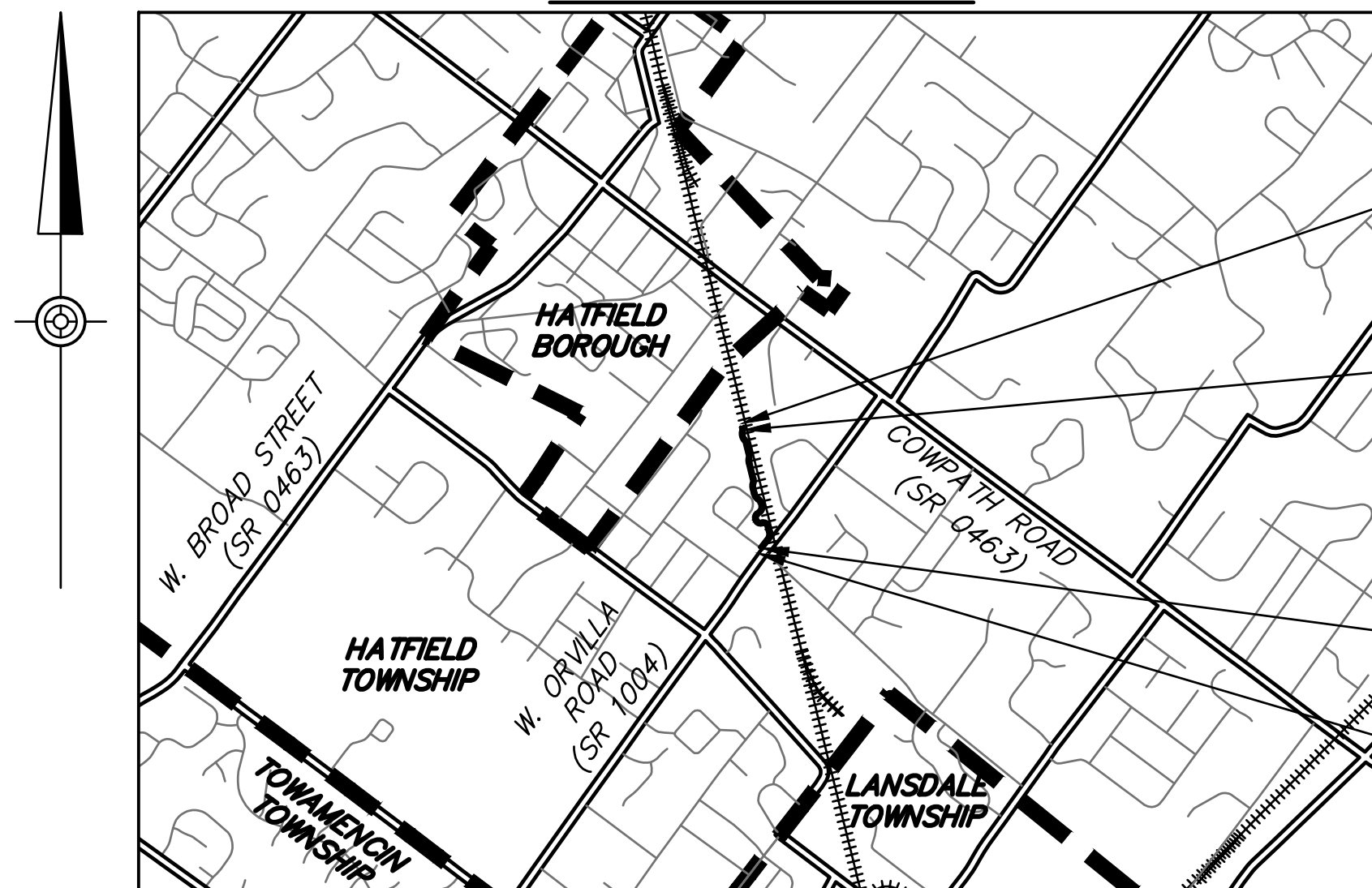
+20.92
49.00'

D.C. - DEPRESSED CURB

R/W - RIGHT-OF-WAY

RESERVES THE RIGHT TO ELIMINATE ANY OR ALL OF THIS WORK. DO NOT PERFORM WORK EXCEPT THAT WHICH IS WITHIN THE HIGHWAY RIGHT-OF-WAY UNTIL SO ORDERED IN WRITING BY THE ENGINEER.

LOCATION MAP



LIMIT OF WORK

STA 200+00.00
SR 1004 SEC LBT
HATFIELD TOWNSHIP
MONTGOMERY COUNTY

START WORK

STA 200+45.22
SR 1004 SEC LBT

STOP WORK

STA 218+53.06
SR 1004 SEC LBT

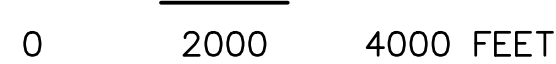
LIMIT OF WORK

STA 218+75.00
SR 1004 SEC LBT
HATFIELD TOWNSHIP
MONTGOMERY COUNTY

LEGEND

	LOCAL ROAD		TOWNSHIP BOUNDARY
	STATE ROUTE		RAILROAD
	PROJECT		WATERWAY

SCALE



NO DETOUR

PAVEMENT LEGEND

	SHARED-USE PATH
	CEMENT CONCRETE SIDEWALK
	DRIVEWAY REPLACEMENT

SUMMARY OF PROJECT COORDINATES

ROUTE	STATION	POINT	COORDINATES		BEARING
			NORTH	EAST	
SR 1004 SECTION LBT	200+00.00	PI (POB)	2653888.5387	351116.8329	S13°55'53"E
	200+50.00	PC	2653900.5767	351068.3036	
	201+06.95	PRC	2653901.4432	351011.8516	
	202+20.85	PRC	2653927.9268	350905.0870	
	202+77.80	PT	2653953.5439	350854.7745	S13°55'53"E
	204+11.24	PC	2653985.6715	350725.2570	
	204+67.62	PRC	2653986.6572	350669.3640	
	205+24.00	PT	2653987.6430	350613.4710	S13°55'53"E
	207+37.40	PC	2654039.0217	350406.3455	
	207+99.27	PRC	2654038.7572	350345.1089	
	208+61.14	PT	2654038.4927	350283.8722	S13°55'53"E
	209+32.33	PC	2654055.6345	350214.7679	
	210+16.85	PRC	2654101.1583	350145.4673	
	211+63.85	PCC	2654146.2635	350014.3364	
	212+00.18	PT	2654127.2706	349984.0086	S49°24'24"W
	212+49.30	PC	2654089.9731	349952.0482	
	213+15.63	PT	2654070.7793	349892.0419	S13°55'53"E
	213+26.87	PC	2654073.4862	349881.1293	
	214+21.12	PT	2654146.1669	349837.3398	N76°04'07"E
	214+32.12	PC	2654156.8433	349839.9881	
	215+26.37	PT	2654229.5240	349796.1986	S13°55'53"E
	216+47.07	PC	2654258.5850	349679.0433	
	217+60.83	PT	2654235.4796	349571.6290	S38°12'39"W
	218+75.00	PI (POE)	2654164.8591	349481.9210	

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

EARTHWORK SUMMARY ENTIRE PROJECT

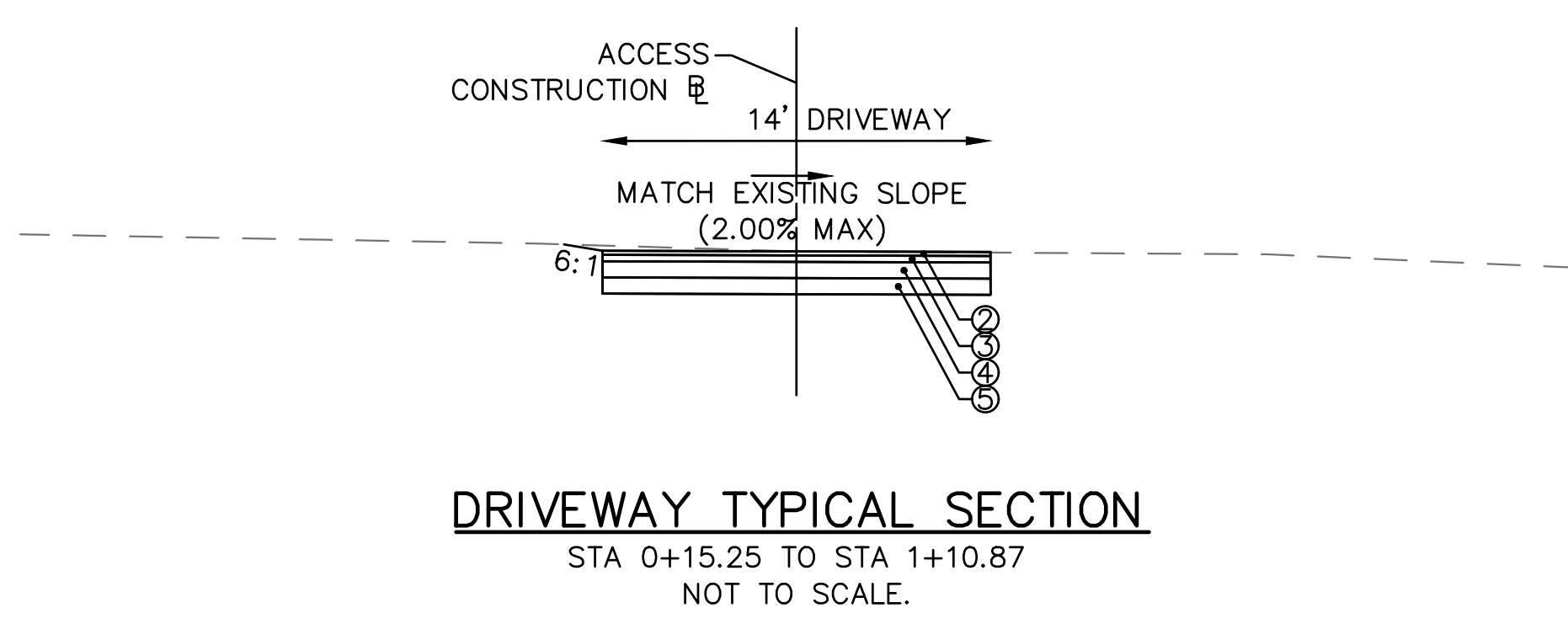
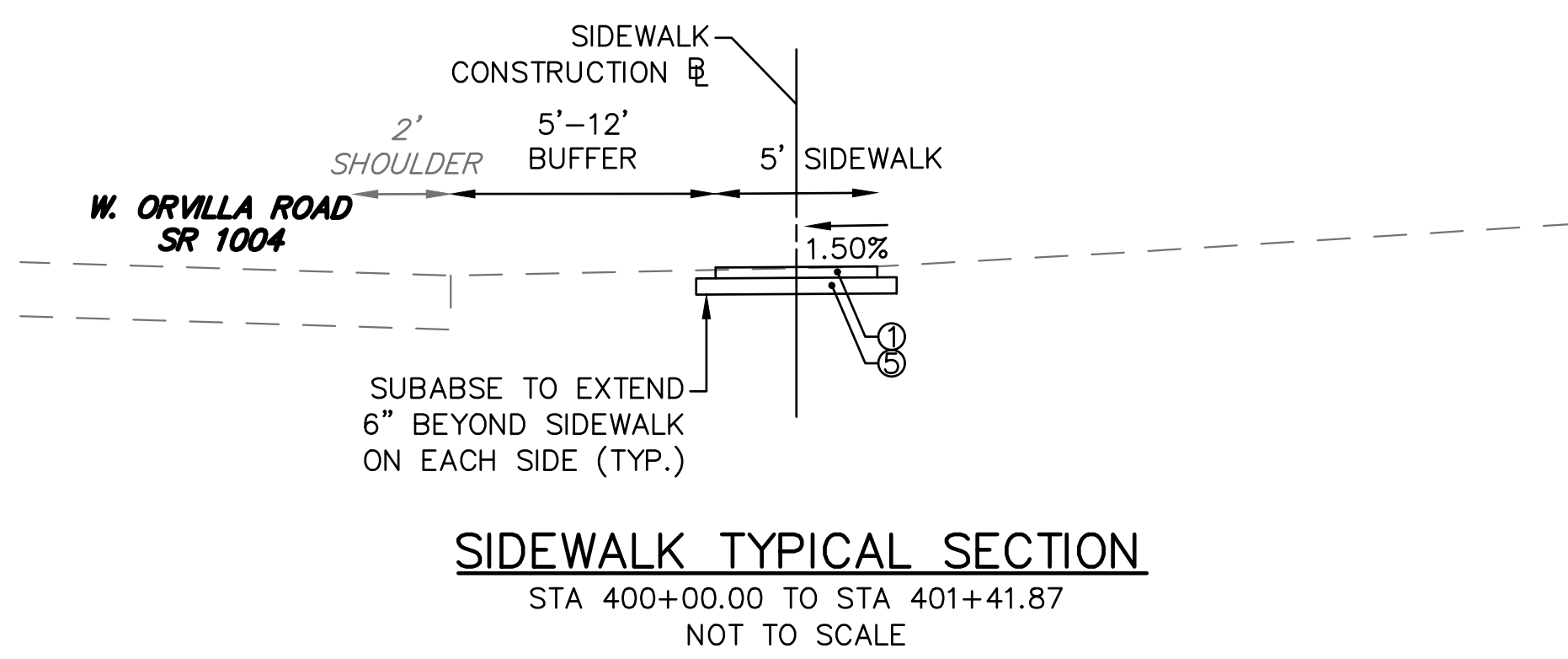
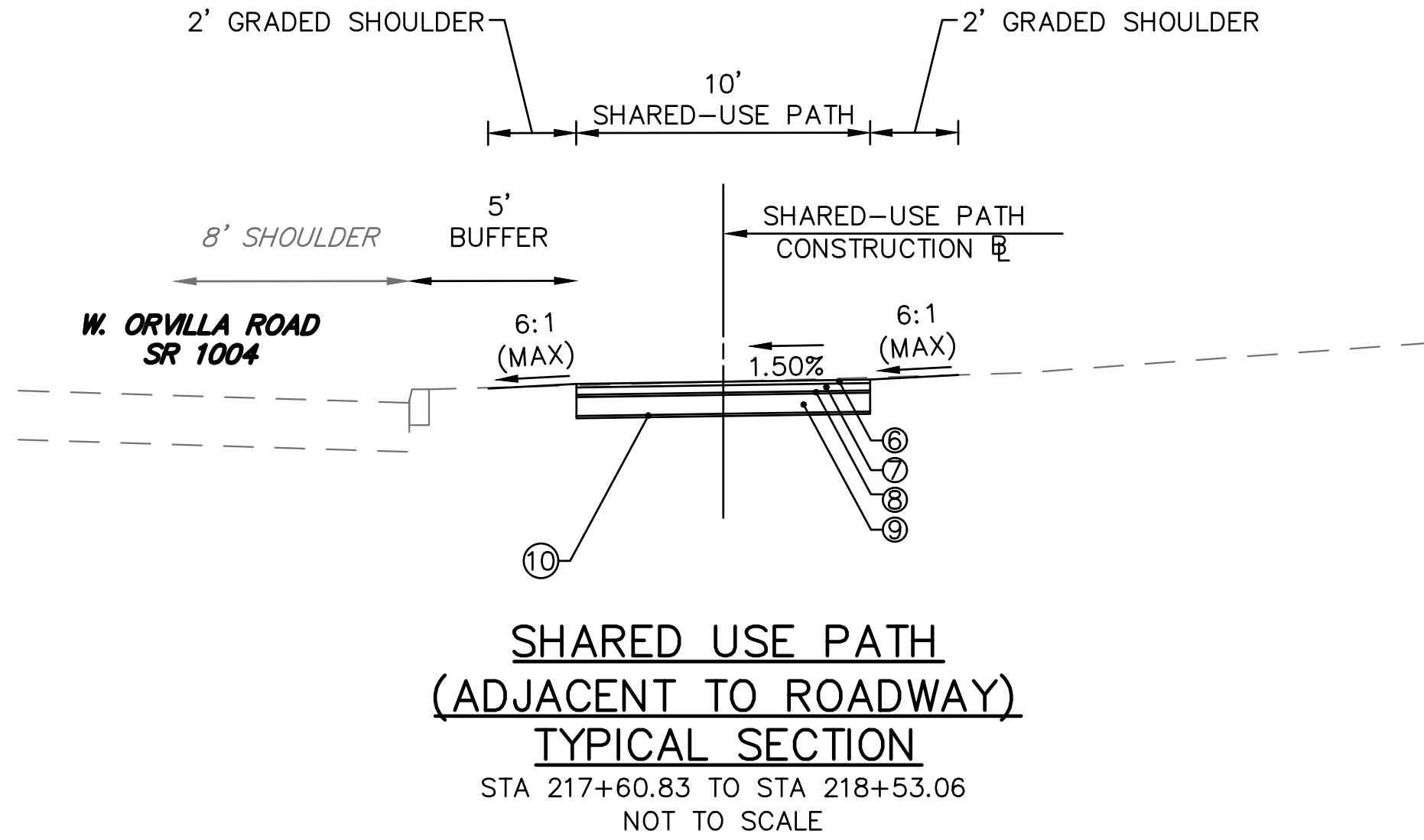
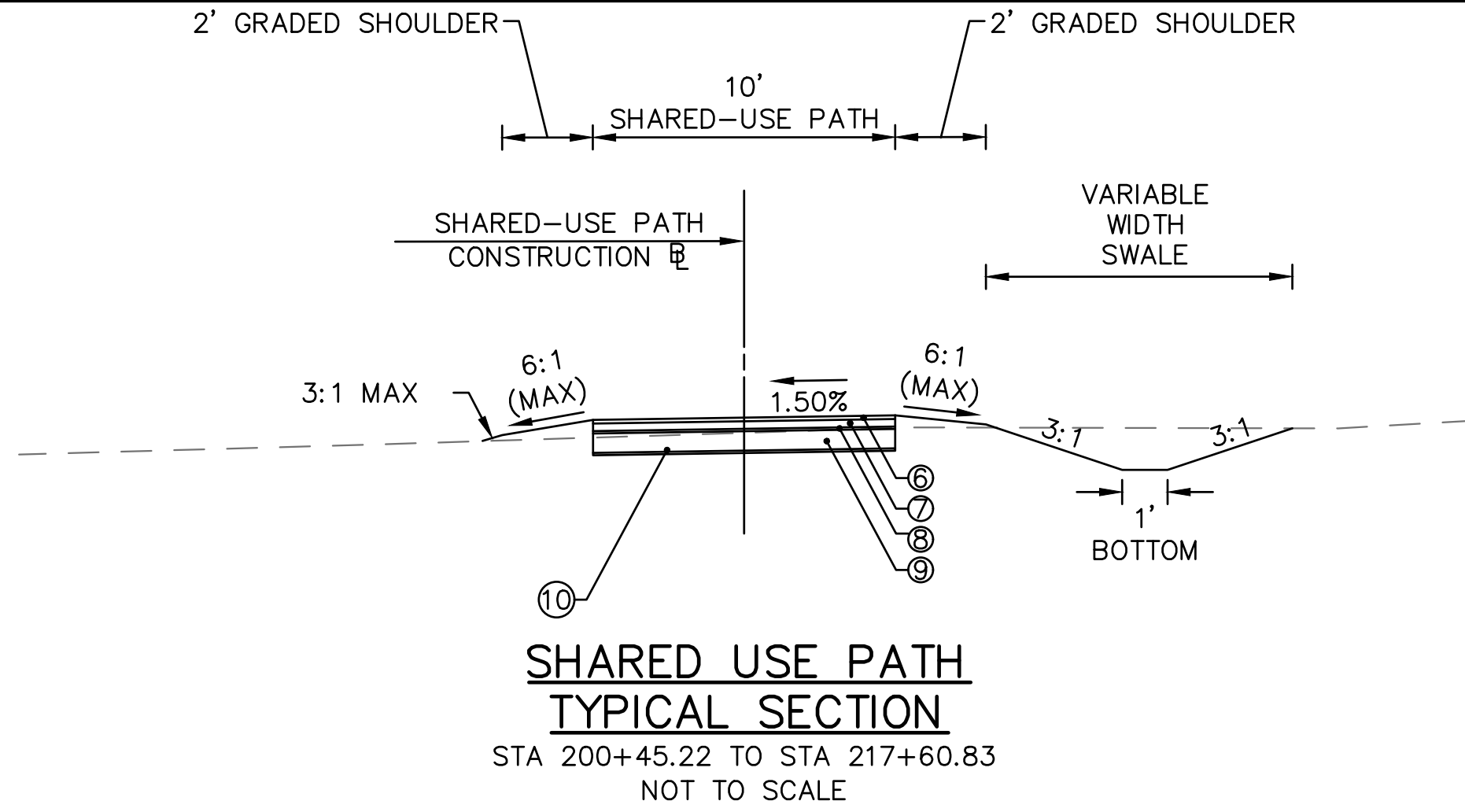
THE INFORMATION ON ESTIMATED AMOUNTS OF EARTHWORK HAS BEEN USED IN THE PRELIMINARY ESTIMATE. DO NOT USE AS A WAIVER OF ANY PROVISIONS OF THE SPECIFICATIONS AND CONTRACTS.

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

* INCLUDES ALL BORROW ITEMS
** PART OF LUMP SUM STRUCTURE ITEM

TYPICAL SECTIONS

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	1004	-	4 OF 10
HATFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

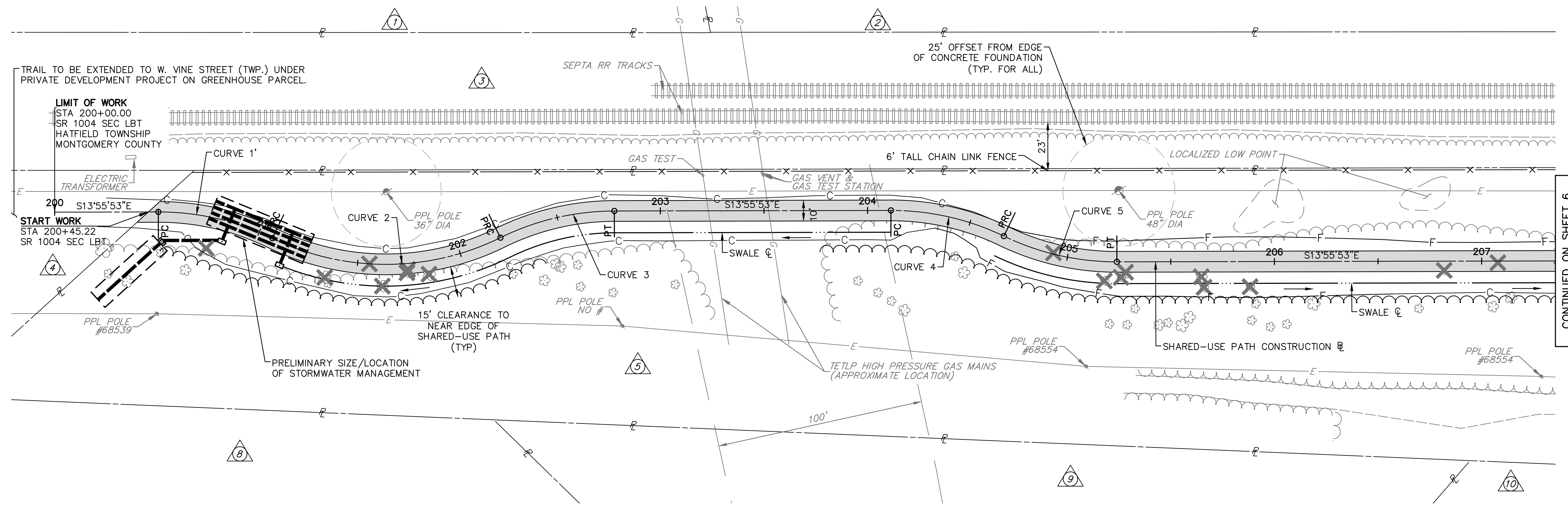
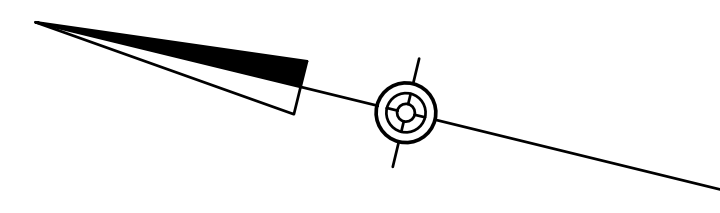


- ① CEMENT CONCRETE SIDEWALK, 4" DEPTH
- ② SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 3 TO < 10 MILLION ESALS, 9.5 MM MIX, 1.5" DEPTH, SRL-L
- ③ SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 3 TO < 10 MILLION ESALS, 19.0 MM MIX, 2.5" DEPTH
- ④ SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 3 TO < 10 MILLION ESALS, 25.0 MM MIX, 6" DEPTH
- ⑤ SUBBASE 6" DEPTH (NO. 2A)
- ⑥ PERVIOUS 9.5MM WEARING COURSE, 1.5" DEPTH
- ⑦ PERVIOUS 19.0MM BINDER COURSE, 2.5" DEPTH
- ⑧ NO. 57 COARSE AGGREGATE, 1" DEPTH
- ⑨ NO. 3 COARSE AGGREGATE, 8" DEPTH
- ⑩ TYPE A FINE AGGREGATE (2" DEPTH, REFER TO POST CONSTRUCTION STORMWATER MANAGEMENT PLAN)

CONSTRUCTION PLAN

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	1004	-	5 OF 10
HATFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS			DATE

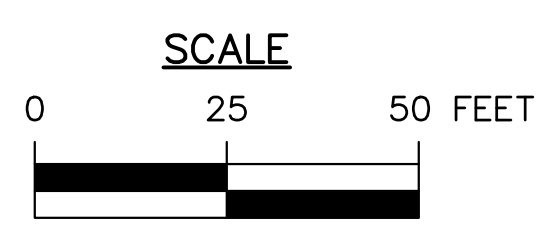
CURVE 1	CURVE 2	CURVE 3	CURVE 4	CURVE 5
PI STA 200+78.98	PI STA 201+68.20	PI STA 202+49.83	PI STA 204+39.92	PI STA 204+96.30
Δ = 026°06'14"	Δ = 052°12'28"	Δ = 026°06'14"	Δ = 025°50'31"	Δ = 025°50'31"
D = 045°50'12"	D = 045°50'12"	D = 045°50'12"	D = 045°50'12"	D = 045°50'12"
T = 28.98'	T = 61.25'	T = 28.98'	T = 28.68'	T = 28.68'
L = 56.95'	L = 113.90'	L = 56.95'	L = 56.38'	L = 56.38'
R = 125.00'	R = 125.00'	R = 125.00'	R = 125.00'	R = 125.00'
E = 3.31'	E = 14.20'	E = 3.31'	E = 3.25'	E = 3.25'
PC STA 200+50.00	PRC STA 201+06.95	PC STA 202+20.85	PC STA 204+11.24	PC STA 204+67.62
PRC STA 201+06.95	PRC STA 202+20.85	PT STA 202+77.80	PRC STA 204.67.62	PT STA 205+24.00



CONTINUED ON SHEET 6

LEGEND

	SHARED-USE PATH
	CEMENT CONCRETE SIDEWALK
	DRIVEWAY PAVING
	TREE REMOVAL
	—C— APPROXIMATE CUT LINE
	—F— APPROXIMATE FILL LINE



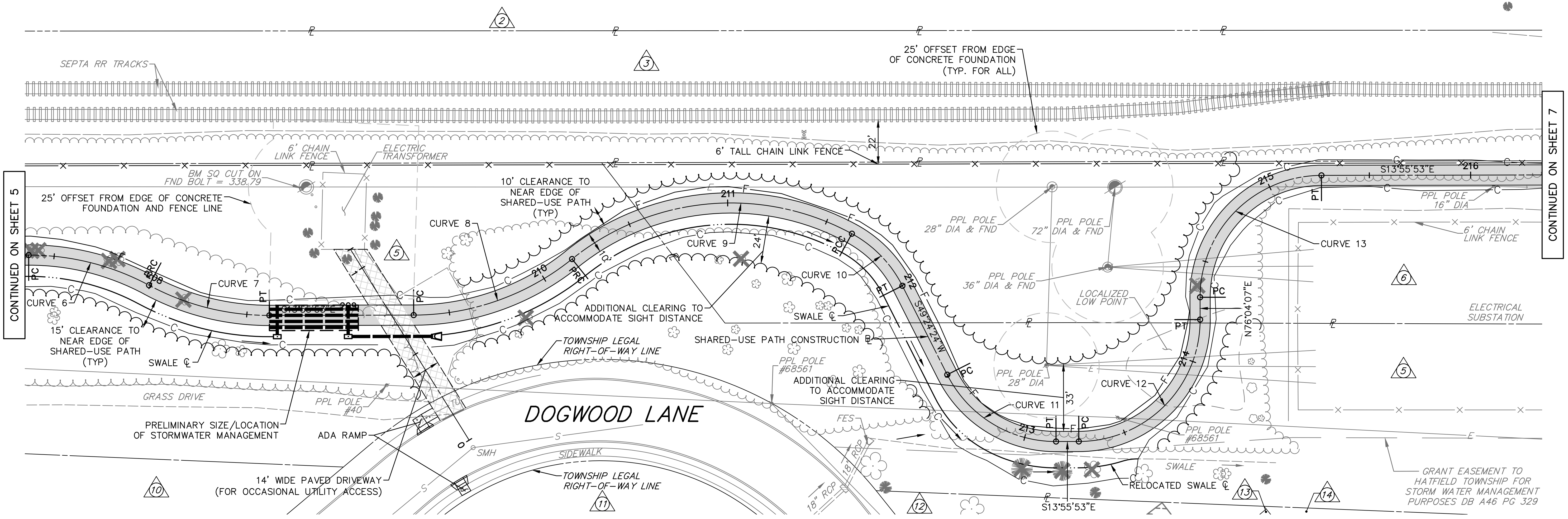
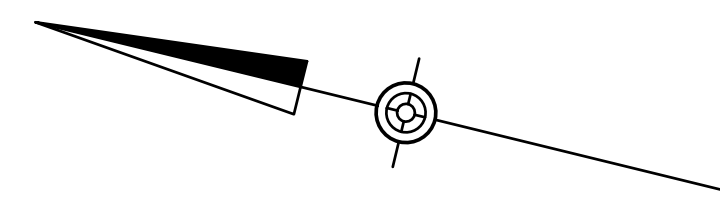
SURVEY BOOK NO. 202106

FOR PROFILE, SEE SHEETS 8

CONSTRUCTION PLAN

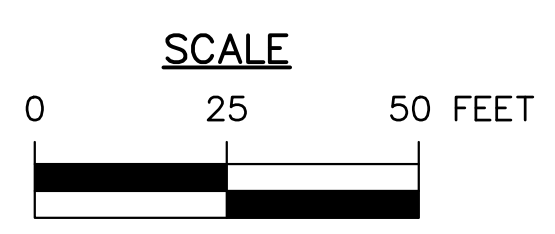
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	1004	-	6 OF 10
HATFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

CURVE 6	CURVE 7	CURVE 8	CURVE 9	CURVE 10	CURVE 11	CURVE 12	CURVE 13
PI STA 207+68.98	PI STA 208+30.85	PI STA 209+76.28	PI STA 211+00.18	PI STA 211+82.59	PI STA 212+86.31	PI STA 213+86.87	PI STA 214+92.12
$\Delta = 028^{\circ}21'27''$	$\Delta = 028^{\circ}21'27''$	$\Delta = 038^{\circ}44'22''$	$\Delta = 067^{\circ}22'41''$	$\Delta = 034^{\circ}41'57''$	$\Delta = 063^{\circ}20'17''$	$\Delta = 090^{\circ}00'00''$	$\Delta = 090^{\circ}00'00''$
D = 045'50'12"	D = 045'50'12"	D = 045'50'12"	D = 045'50'12"	D = 095'29'35"	D = 095'29'35"	D = 095'29'35"	D = 095'29'35"
T = 31.58'	T = 31.58'	T = 43.95'	T = 83.33'	T = 18.74'	T = 37.01'	T = 60.00'	T = 60.00'
L = 61.87'	L = 61.87'	L = 84.52'	L = 147.00'	L = 36.34'	L = 66.33'	L = 94.25'	L = 94.25'
R = 125.00'	R = 125.00'	R = 125.00'	R = 125.00'	R = 60.00'	R = 60.00'	R = 60.00'	R = 60.00'
E = 3.93'	E = 3.93'	E = 7.50'	E = 25.23'	E = 2.86'	E = 10.50'	E = 24.85'	E = 24.85'
PC STA 207+37.40	PRC STA 207+99.27	PC STA 209+32.33	PRC STA 210+16.85	PCC STA 211+63.85	PC 212+26.87	PC 213+26.87	PC 214+32.12
PT STA 207+99.27	PT STA 208+61.14	PRC STA 210+16.85	PCC STA 211+63.85	PT 212+00.18	PT 213+15.63	PT 214+21.12	PT 215+26.37



LEGEND

	SHARED-USE PATH
	CEMENT CONCRETE SIDEWALK
	DRIVEWAY PAVING
	TREE REMOVAL
	APPROXIMATE CUT LINE
	APPROXIMATE FILL LINE



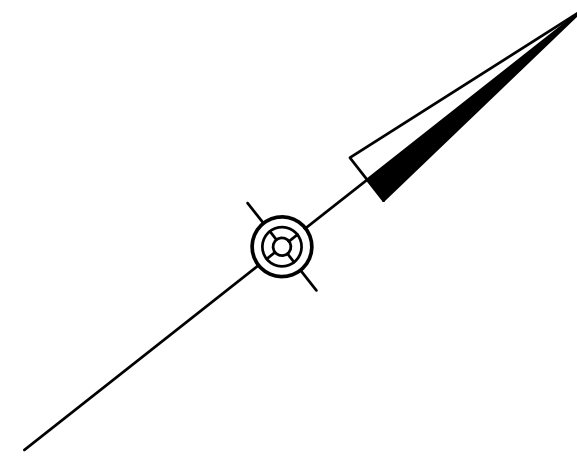
SURVEY BOOK NO. 202106
 FOR PROFILE, SEE SHEETS 9

CONTINUED ON SHEET 5

CONTINUED ON SHEET 7

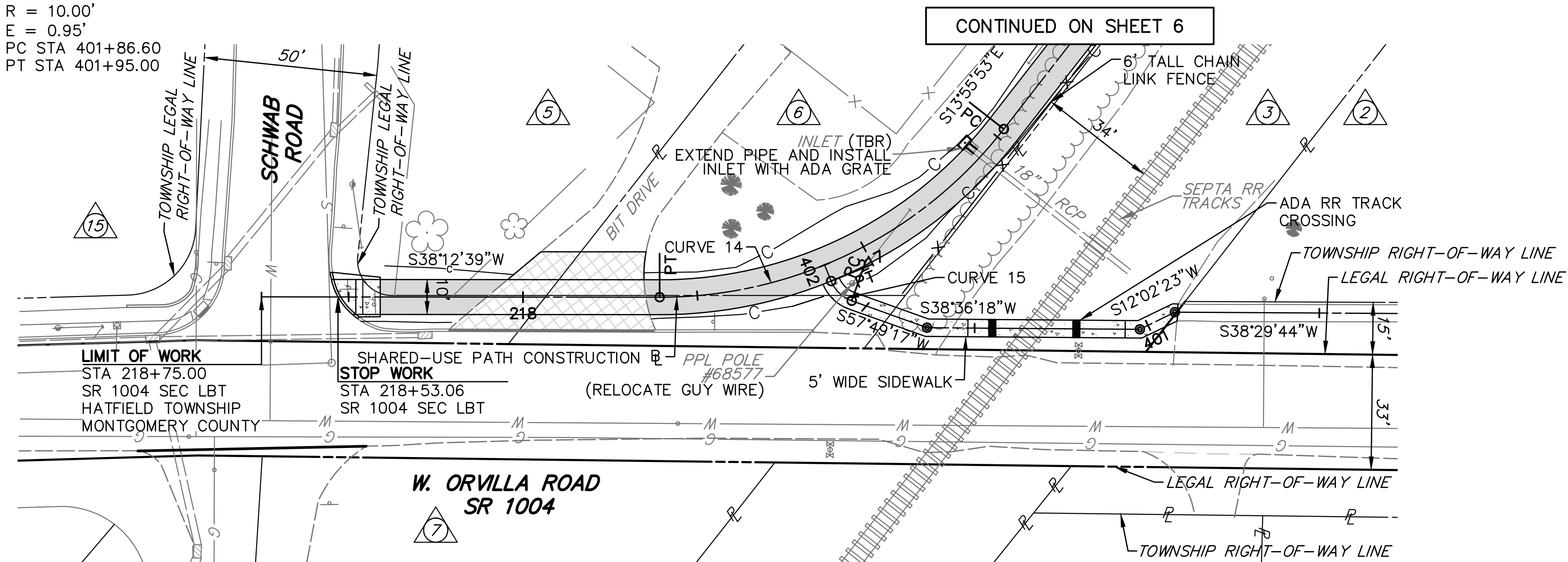
CONSTRUCTION PLAN

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	1004	-	7 OF 10
HATFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



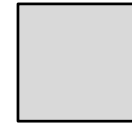

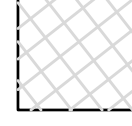


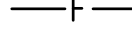
CURVE 14
 PI STA 217+08.23
 $\Delta = 052^{\circ}08'32''$
 $D = 045^{\circ}50'12''$
 $T = 61.16'$
 $L = 113.76'$
 $R = 125.00'$
 $E = 14.16'$
 PC STA 216+47.07
 PT STA 217+60.83

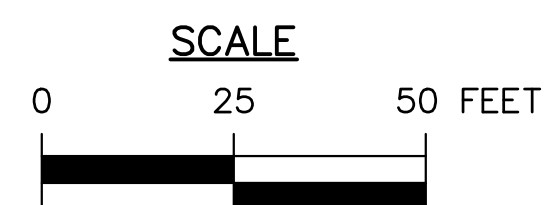
CURVE 15
 PI STA 401+91.07
 $\Delta = 048^{\circ}09'03''$
 $D = 572^{\circ}57'28''$
 $T = 4.47'$
 $L = 8.40'$
 $R = 10.00'$
 $E = 0.95'$
 PC STA 401+86.60
 PT STA 401+95.00



CONTINUED ON SHEET 6

LEGEND

-  SHARED-USE PATH
-  CEMENT CONCRETE SIDEWALK
-  DRIVEWAY PAVING
-  TREE REMOVAL
-  APPROXIMATE CUT LINE
-  APPROXIMATE FILL LINE



SURVEY BOOK NO. 202106

FOR PROFILE, SEE SHEETS 10

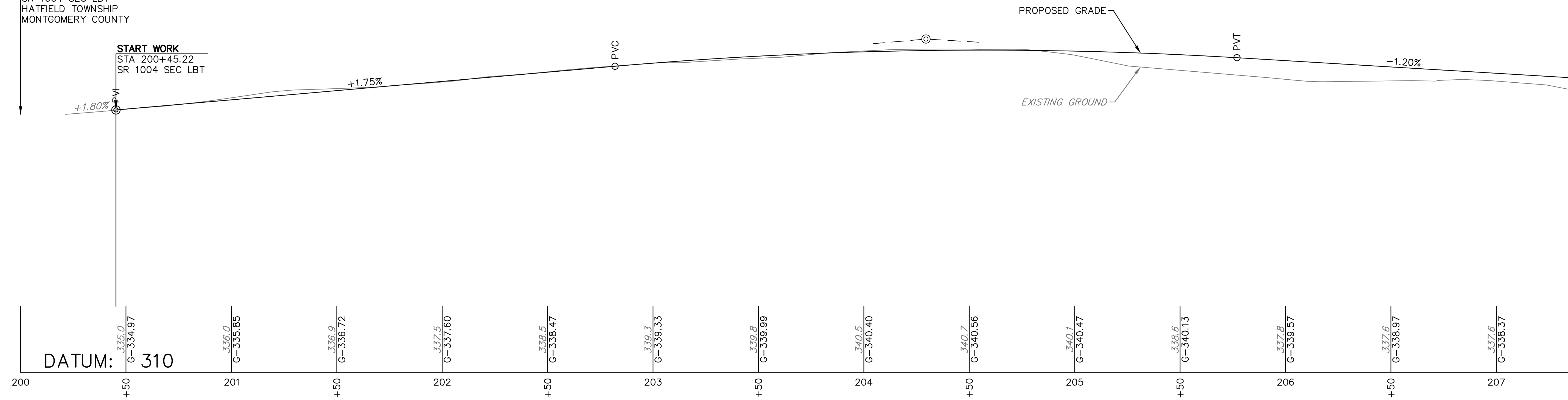
PROFILE

DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	MONTGOMERY	1004	-	8 OF 10	
HATFIELD TOWNSHIP					
REVISION NUMBER	REVISIONS			DATE	BY

PVI STA 204+29.45
 ELEV 341.61
 HIGH POINT STA 204+56.95
 HIGH POINT ELEV 340.56
 VC 295.00'
 MO -1.09'
 SSD 513.31'

LIMIT OF WORK
 STA 200+00.00
 SR 1004 SEC LBT
 HATFIELD TOWNSHIP
 MONTGOMERY COUNTY

START WORK
 STA 200+45.22
 SR 1004 SEC LBT

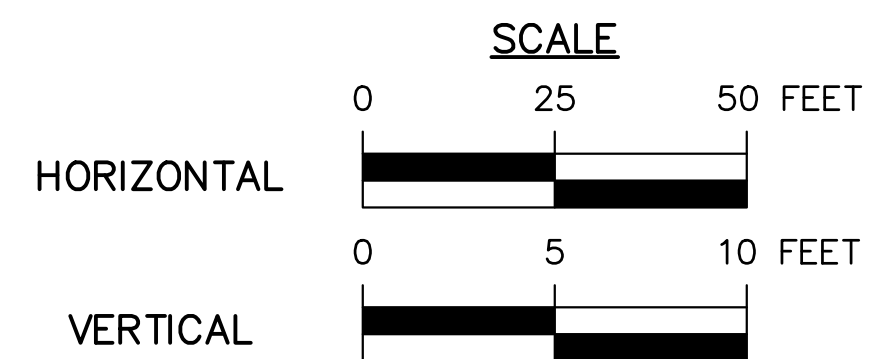


CONTINUED ON SHEET 9

SHARED-USE PATH PROFILE

NOTES

1. ALL PIPE INVERTS AND PIPE LENGTHS ARE CALCULATED FROM CENTER TO CENTER OF PROPOSED DRAINAGE STRUCTURES.
2. BASELINE OFFSETS FOR DRAINAGE STRUCTURES ARE MEASURED TO THE CENTER OF THE INLET GRATE OR MANHOLE COVER.
3. INSTALL ALL INLETS DESIGNATED AS (BS) WITH BICYCLE SAFE GRATES. INSTALL ALL INLETS DESIGNATED AS (SS) WITH STRUCTURAL STEEL GRATES. INSTALL ALL INLETS DESIGNATED AS (ADA) WITH ADA COMPLIANT GRATES.
4. ALL PROPOSED STORM PIPE DESIGNATED AS O.J. SHALL BE OPEN JOINT PIPE AND INSTALLED AS COMBINATION STORM SEWER AND UNDERDRAIN IN ACCORDANCE WITH PENNDOT PUBLICATION 408, SECTION 604 AND PUBLICATION 72M, RC-30M.



FOR PLAN, SEE SHEETS 5

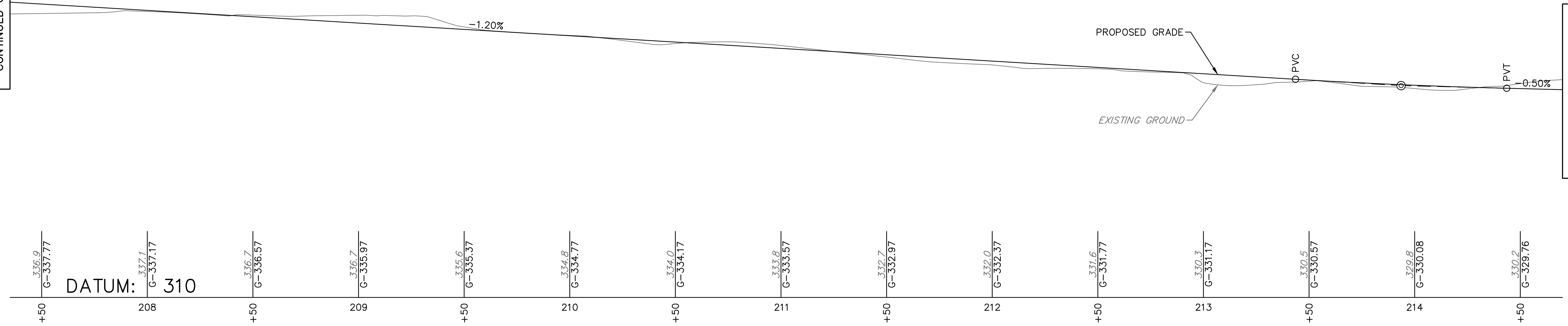
PROFILE

DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	MONTGOMERY	1004	-	9 OF 10	
HATFIELD TOWNSHIP					
REVISION NUMBER	REVISIONS			DATE	BY

PVI STA 213+93.55
 ELEV 330.05
 LOW POINT STA 214+43.55
 LOW POINT ELEV 329.80
 VC 100.00'
 MO 0.09'
 HLSD -

CONTINUED ON SHEET 8

CONTINUED ON SHEET 10



SHARED-USE PATH PROFILE



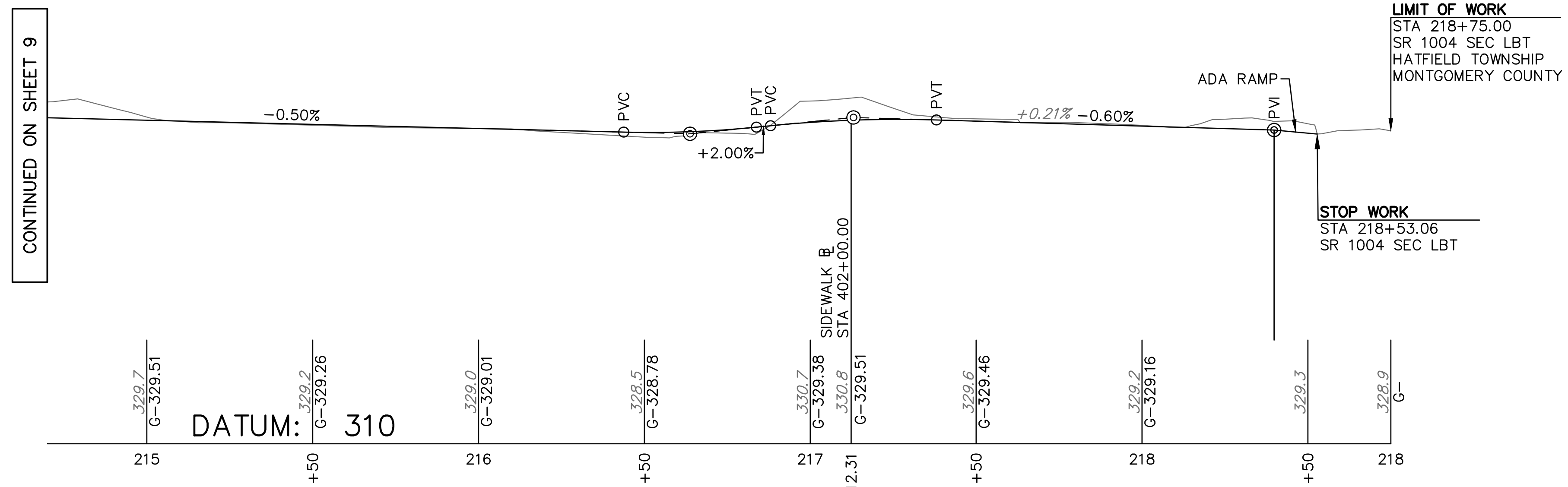
FOR PLAN, SEE SHEETS 6

PROFILE

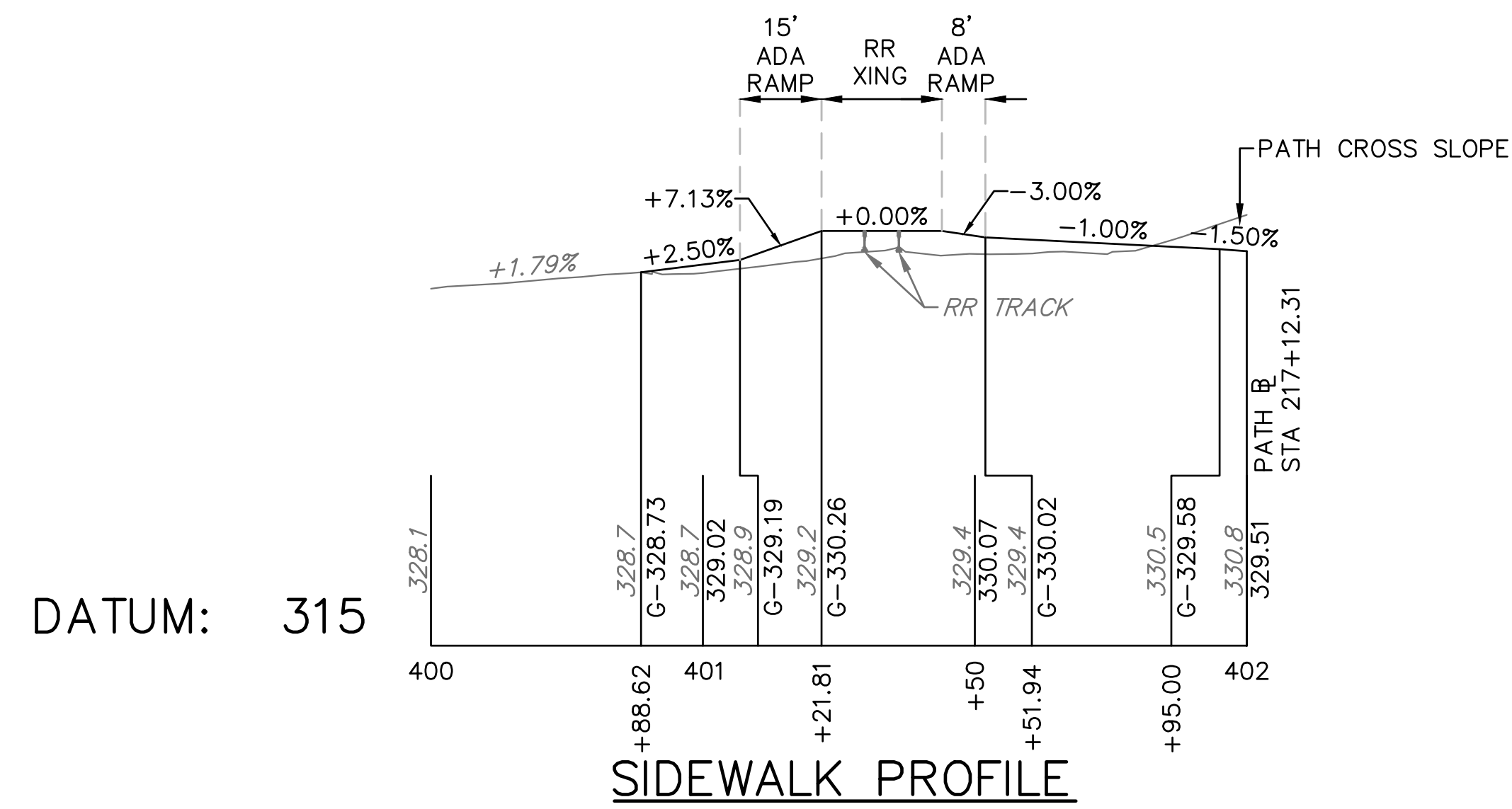
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	MONTGOMERY	1004	-	10 OF 10
HATFIELD TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

PVI STA 216+63.75
 ELEV 328.69
 LOW POINT STA 216+51.76
 LOW POINT ELEV 328.77
 VC 40.00'
 MO 0.12'
 HLSD 332.31'

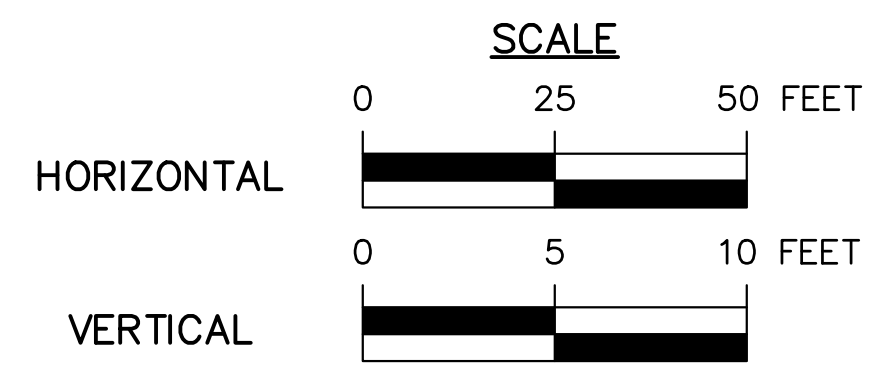
PVI STA 217+13.02
 ELEV 329.68
 HIGH POINT STA 217+26.51
 HIGH POINT ELEV 329.56
 VC 50.00'
 MO -0.16'
 SSD 440.90'



SHARED-USE PATH PROFILE



SIDEWALK PROFILE



FOR PLAN, SEE SHEETS 7