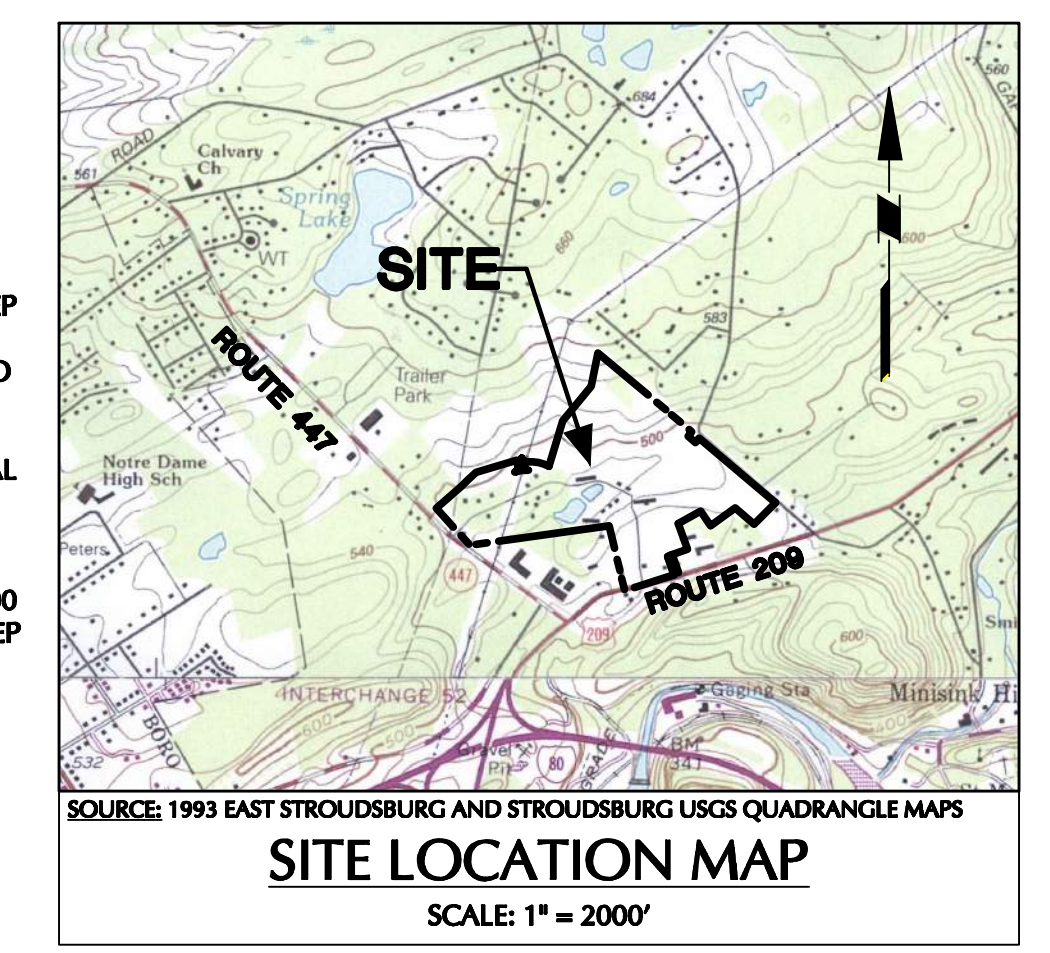


INSET "A"

- STEEP SLOPE NOTES:**
- EXISTING STEEP SLOPE AREAS SHOWN REFLECT THE ORDINANCE PROVISIONS REFERENCED FROM CHAPTER 22 - SUBDIVISION AND LAND DEVELOPMENT (SALDO) AND CHAPTER 27 - ZONING OF SMITHFIELD TOWNSHIP.
 - AS PER SECTIONS 27-305.4.K.1-2, THE FOLLOWING APPLIES TO STEEP SLOPE DISTURBANCE CALCULATIONS FOR MIXED USE DEVELOPMENTS: STEEP SLOPES THAT WERE MANMADE LESS THAN 50 YEARS PRIOR TO THE MIXED USE DEVELOPMENT PROVISIONS SHALL NOT APPLY TO SLOPE DISTURBANCE CALCULATIONS. DISTURBANCE OF STEEP SLOPES THAT OCCUR TO GRADE AND CONSTRUCT A NEW ROAD THAT CONNECTS TWO STATE ROADS SHALL NOT APPLY TO SLOPE DISTURBANCE CALCULATIONS. THE MAXIMUM PERCENTAGE DISTURBANCE OF STEEP SLOPES SHALL NOT APPLY TO COMMERCIAL LOTS WHERE EACH CONTIGUOUS STEEP SLOPE AREA CONSISTS OF 50 FEET OR LESS OF VERTICAL ELEVATION CHANGE. HOWEVER, MAXIMUM PERCENTAGE DISTURBANCE VALUES SHALL APPLY TO THE DEVELOPMENT OF AN OFFICE BUILDING, RESIDENTIAL USES AND THEIR RELATED PARKING, AND AREAS WHERE THE CONTIGUOUS STEEP SLOPE AREA INVOLVES MORE THAN 50 FEET OF ELEVATION CHANGE.
 - AS PER SECTION 22-1002.7.E.2, FOR STEEP SLOPE DISTURBANCE CALCULATIONS, CONTIGUOUS AREAS OF STEEP SLOPE THAT ARE LESS THAN 3,000 SF SHALL BE EXEMPT FROM STEEP SLOPE STANDARDS AND SHALL NOT BE USED IN THE CALCULATION OF THE TOTAL SQUARE FOOTAGE OF STEEP SLOPES OR THE PERCENTAGE OF DISTURBANCE OF STEEP SLOPES ON A LOT OR DEVELOPMENT TRACT.



SITE LOCATION MAP
SCALE: 1" = 2000'



SMITHFIELD GATEWAY
SOIL DESCRIPTIONS AND LIMITATIONS

SOIL	NAME (TYPE)	HYDROLOGICAL SOIL GROUP	POTENTIAL DEVELOPMENT ISSUES	DEPTH TO WATER TABLE	DEPTH TO BEDROCK	SUITABILITY OF SOIL TYPE
Ad	Alder mucky silt loam	C/D	Very limited for buildings and roads due to frost action and depth to saturation	About 0 inches	More than 60 inches	Very limited for buildings & roads
BaC	Bath channery silt loam, 8 to 15 percent slopes	C	Very limited for buildings and roads due to frost action, depth to saturation and shallow depth to lithic bedrock	About 24 to 36 inches	About 26 to 38 inches to fragipan	Very limited for buildings & roads
BaB	Berwyn-Rock outcrop complex, 0 to 8 percent slopes	D	Conventional limited for buildings and roads due to shallow depth to bedrock	More than 80 inches	About 12 to 20 inches to lithic bedrock	Somewhat limited for buildings & roads
BeC	Berwyn-Rock outcrop complex, 8 to 25 percent slopes	D	Very limited for buildings and roads due to steep slopes and depth to saturated zone and shallow depth to lithic bedrock	More than 80 inches	About 12 to 20 inches to lithic bedrock	Very limited for buildings & roads
BeF	Berwyn-Rock outcrop complex, 25 to 70 percent slopes	D	Very limited for buildings and roads due to very steep slopes and shallow depth to lithic bedrock	More than 80 inches	About 12 to 20 inches to lithic bedrock	Very limited for buildings & roads
Cv	Cut and fill land	-	Very limited for buildings due to uncharacterized fill materials, depth to saturation and depth to suitable materials	About 12 to 72 inches	More than 60 inches	Very limited for buildings & roads
MaB	Mardin channery silt loam, 2 to 8 percent slopes	D	Very limited for buildings due to frost action, depth to saturation and shallow depth to lithic bedrock	About 11 to 22 inches	About 14 to 26 inches to fragipan	Very limited for buildings & roads
MaC	Mardin channery silt loam, 8 to 15 percent slopes	D	Very limited for buildings due to frost action, depth to saturation, slopes, and shallow depth to lithic bedrock	About 13 to 24 inches	About 14 to 26 inches to fragipan	Very limited for buildings & roads
W	Water	-	Cannot be developed	0 inches	-	Cannot be developed

- Resolutions to Limitations**
- For areas where steep slopes are a limitation, soil shall be stabilized w/ th specified erosion control matting and the slopes shall be tracked.
 - For areas where seasonal high water table is a limitation, ponded water shall be pumped through a "dirt bag" or to the sediment basin/trap.
 - For areas where shallow depth to bedrock is a limitation, contractor shall determine whether rock is ripplable. If rock is not ripplable, blasting will be required. All blasting shall meet all local, county, state and federal requirements.
 - For areas where topsoil is a limitation, topsoil shall be stripped and stockpiled in accordance with the details. The stockpile surface shall be maintained in accordance with the temporary stabilization notes.
 - For areas where embankments are a limitation, the existing road shall be closed prior to cutting embankments. No embankments that hold back water shall be removed.

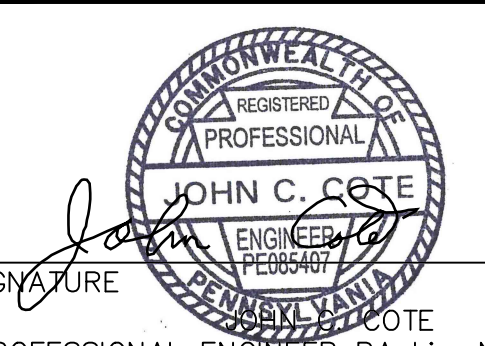
- GENERAL NOTES:**
- BOUNDARY AND TOPOGRAPHIC INFORMATION REFERENCED FROM SURVEY PREPARED BY FRANK J. SMITH JR. INC., MARSHALLS CREEK, PA.
 - ELEVATIONS BASED UPON 1988 NORTH AMERICA VERTICAL DATUM (NAVD 88).
 - AERIAL PHOTOGRAPHY REFERENCED FROM GOOGLE EARTH IMAGERY, DATED MAY 19, 2012.

STEEP SLOPE

	TOTAL AREA (ACRES)	DISTURBED AREA (ACRES)	DISTURBED AREA (%)
MODERATELY STEEP SLOPES (15% TO 25%)	3.25	0.09	2.68%
VERY STEEP SLOPES (25% OR GREATER)	0.43	0.02	5.58%

LEGEND

- WOODLANDS
- MODERATELY STEEP SLOPES (15% TO 25%)
- VERY STEEP SLOPES (25% OR GREATER)
- WATER BODY
- DISTURBED AREAS OF MODERATELY STEEP SLOPES (15% TO 25%)
- DISTURBED AREAS OF VERY STEEP SLOPES (25% OR GREATER)
- STREAM

Date	Description	No.
REVISIONS		
		
SIGNATURE: <i>John C. Corle</i>		DATE SIGNED: 2/24/2023
PROFESSIONAL ENGINEER PA Lic. No. PE085407		
LANGAN		
Langan Engineering and Environmental Services, Inc. 300 Kimball Drive Parsippany, NJ 07054 T: 973.560.4900 F: 973.560.4901 www.langan.com		
Project: SMITHFIELD GATEWAY PHASE 1A-2		
SMITHFIELD TOWNSHIP MONROE COUNTY PENNSYLVANIA		
Drawing Title: EXISTING RESOURCES AND SITE ANALYSIS PLAN		
Project No. 100501409	Drawing No. APPENDIX A	
Date: DECEMBER 07, 2022	WN101	
Drawn By: SM	1112	
Checked By: TH	Sheet 1 of 1	