UPPER UWCHLAN TOWNSHIP
PLANNING COMMISSION
AGENDA
April 13, 2023

6:00 p.m. Work Session
7:00 p.m. Meeting

LOCATION
Upper Uwchlan Township Building, 140 Pottstown Pike, Chester Springs PA 19425

I. 6:00 PM Work Session
Continue discussion of residential zoning district uses
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II. 7:00 PM Meeting Call to Order

III. 301 Park Road / P.J. Reilly Headquarters – Revised Preliminary Land Development Plan
Review consultants' comments of the revised Plan, dated March 1, 2023

III. 100 Greenridge Road Preliminary Land Development Plan
Brief presentation of the Plan for 64 single-family homes.
Accept for consultants' review.

IV. Approval of Minutes: March 9, 2023 Meeting

V. Meeting Updates ~ Reports
A. Environmental Advisory Council (EAC)
B. Historical Commission (HC)
C. Active Transportation Plan (ATP)

VI. Next Meeting Date: May 11, 2023 7:00 p.m.

VII. Open Session

VIII. Adjournment

Category	R-1 Zoning District
Purpose	to support the preservation of critical natural resources, such as streams, floodplains, wet soils, variable groundwater yield areas, and conditionally suitable for on-lot sewage disposal systems; to encourage continued agricultural, open space and conservation uses; to provide for continued low density residential development that is compatible with established use patterns; and to encourage and promote phased development throughout the Township by permitting low density residential uses in the R-1 District until other areas of the Township more accessible to adequate services and transportation are fully developed in medium and high density residential uses. The R-1 District establishes maximum density standards which provide for low density residential uses and promote the conservation of surface water and groundwater supplies, soils for on-lot sewage disposal systems, and the control of soil erosion and flooding.
By-Right	A. Single-family detached dwelling and group home. B. Agriculture
Conditional Use	(1) Nursery, excluding retail sales and landscaping business, provided that they are situated no less than 100 feet from an adjoining property line or public right-of-way. (2) Educational or religious use. (3) Recreation uses, provided that no commercial activity or use such as amusement park, driving ranges, pitch and putt or miniature golf course, or similar use customarily carried on as a business, shall be permitted (see § 200-68). (4) Bed-and-breakfast [see § 200-62B(5)]. (5) (Reserved) (6) Adaptive reuse for historic preservation where indicated as a use subject to approval by the Board of Supervisors as a conditional use in accordance with § 200-72.1.
Accessory Use	(1) Customary residential accessory uses. (2) Customary agricultural accessory uses. (3) Private swimming pools
Special Exception	(1) Municipal or public uses; governmental or public utility building or uses. (2) Cemetery. (3) Kennels. (4) Home occupations
Other	Adaptive reuse for historic preservation where indicated as a use by right in accordance with § 200-72.1.

Category	R-2 Zoning District
Purpose	to provide for low to moderate density residential development in areas of the Township which are not generally characterized by steep slopes or floodplains, but which nevertheless contain soils conditional for on-lot sewage disposal systems and variable groundwater yields; to encourage continued agricultural, open space and conservation uses in the R-2 District while also permitting low to moderate density residential development compatible with established use patterns; and to encourage and promote phased development throughout the Township by permitting low to moderate density residential uses in the R-2 District until other areas of the Township more accessible to adequate services and transportation are fully developed in medium and high density residential uses. The R-2 District establishes maximum density standards which provide the conservation of surface water and groundwater supplies, soils for on-lot sewage disposal systems, and the control of soil erosion and flooding.
By-Right	Any use permitted by right in the R-1 District.
Conditional Use	(1) Educational or religious use. (2) Cemetery. (3) Adaptive reuse for historic preservation where indicated as a use subject to approval by the Board of Supervisors as a conditional use in accordance with § 200-72.1.
Accessory Use	Any accessory use permitted in the R-1 District.
Special Exception	None
Other	Adaptive reuse for historic preservation where indicated as a use by right in accordance with § 200-72.1.

Category	R-3 Zoning District
Purpose	to encourage medium to high density residential development which is compatible with established use patterns; located in areas of the Township which contain environmental features generally suitable for such development; and accessible to transportation systems and community facilities appropriate for such development. The R-3 District is designed: (1) To provide a transition between areas of low and high density residential; and (2) To supply additional flexibility and opportunity for accommodating multifamily units at a lower density than permitted in other zoning districts of the Township.
By-Right	In addition to those uses permitted by right in the R-1 District, the following uses shall by permitted: (1) Single-family semidetached dwelling (twin). (2) Two-family detached dwelling (duplex).
Conditional Use	(1) Multifamily dwellings. (2) Mobile home park. (3) Nursing or convalescent home (see § 200-66). (4) Cemetery. (5) Municipal or public uses; governmental or public utility building or use. (6) Adaptive reuse for historic preservation where indicated as a use subject to approval by the Board of Supervisors as a conditional use in accordance with § 200-72.1.
Accessory Use	Any accessory use permitted in the R-1 District.
Special Exception	None
Other	Adaptive reuse for historic preservation where indicated as a use by right in accordance with § 200-72.1.

Category	R-4 Zoning District
Purpose	to provide the opportunity for high density residential development to occur in areas which are compatible with established use patterns; located in areas of the Township which contain environmental features generally suitable for such development; and accessible to transportation systems and community facilities appropriate for such development. The R-4 District is designed to provide the opportunity for accommodating multifamily units at a density consistent with the character of the Township.
By-Right	Any use permitted by right in the R-3 District.
Conditional Use	(1) Multifamily dwellings. (2) Adaptive reuse for historic preservation where indicated as a use subject to approval by the Board of Supervisors as a conditional use in accordance with § 200-72.1.
Accessory Use	Any accessory use permitted in the R-1 District.
Special Exception	
Other	Adaptive reuse for historic preservation where indicated as a use by right in accordance with § 200-72.1.

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

April 7, 2023

File No. 22-11010 VIA E-MAIL ONLY

Mr. Tony Scheivert
Upper Uwchlan Township Manager
140 Pottstown Pike
Chester Springs, PA 19425

Reference: 301 Park Road – P.J. Reilly Contracting, Inc.
Proposed Headquarters Building
Preliminary Land Development Application – 2nd Review
Upper Uwchlan Township, Chester County, PA

Dear Tony:

Gilmore & Associates, Inc. (G&A) is in receipt of the following documents:

- Letter to G&A from Wilkinson & Associates, Inc. responding to December 2, 2022 review comments, dated March 1, 2023.
- Plan set consisting of nineteen (19) sheets titled "Proposed Headquarters Building 301 Park Road" prepared by Wilkinson & Associates, Inc., dated November 1, 2022 and revised March 1, 2023.
- Stormwater Management Report titled "Proposed Headquarters Building 301 Park Road" prepared by Wilkinson & Associates, Inc., dated November 1, 2022 and revised March 1, 2023.
- Drainage Area Plans consisting of three (3) sheets, prepared by Wilkinson & Associates, Inc., dated November 1, 2022 and revised March 1, 2023.
- Letter from Aqua to Wilkinson Apex Engineering Group dated January 30, 2023 confirming water service.

G&A, along with the other Township Consultants, have completed our second review of the above referenced land development application for compliance with the applicable sections of the Township's Zoning, Subdivision and Land Development,

and Stormwater Management Ordinance, and wish to submit the following comments for your consideration.

Please note that comments with a **(V), (RW)** or **(W)** require relief from the Township Ordinances. A **(V)** denotes a variance is required, a **(RW)** denotes a requested waiver, and a **(W)** denotes a waiver that has not been requested but we feel may be necessary to construct the project as proposed. Comments in *italics* are from our previous review letter, and comments in **bold text** require resolution by the applicant. Previous comments which have been satisfactorily addressed are not repeated herein.

I. OVERVIEW

The site is approximately 3.15 acres in size and contains an existing one-story dwelling as well as part of an above-ground stormwater detention basin associated with the adjacent parcel. The property is located within the LI (Limited Industrial) Zoning District.

The Applicant is proposing to construct a one-story, 8,400 SF office building and garage as well as paved access drives and parking areas. Three (3) underground stormwater basins and one (1) above ground basin will be constructed to manage the post construction runoff.

II. ZONING ORDINANCE REVIEW

1. *Section 200-45 – Show the front lot line / street line on the plans; Park Road has an ultimate right-of-way of 50-feet*.

   The Right of Way along Park Road needs to be clarified. There is an Ultimate Right of Way shown as well as a line labeled “Pa-DOT Required Right of Way per DB 9926 PG 1799”. There is also additional line work which appears to be right-of-way, but it is not clear. This should all be clarified.

2. **(V)** *Section 200-45 – A portion of the proposed building is shown within the required rear yard setback, which will require a variance. The Applicant has noted on Sheet 4 they will be seeking this relief.*

3. Section 200-45.F – Add the accessory buildings/structures restriction to the Zoning table on Sheet 4: No accessory building or structure shall be located within the front yard, nor within 30 feet of any side or rear lot line. The plans show the Diesel Fuel Concrete Containment Boxes within 30 feet of the rear yard. These should be relocated to comply with this section.

4. **(V)** *Section 200-73.A(3) – In any industrial district, no parking, loading or service area shall be located within 25 feet of the ultimate right-of-way line.* ***Show the ultimate right-of-way of Park Road as well as this setback.***

   The setback has not been shown on the plans. The response letter states that a variance may be required from this section as the parking along the road is within 25 feet of the ultimate right-of-way line; they are awaiting confirmation if the parking count is sufficient. Based on our review, a variance will be required. See parking space requirements comment herein (Section 200-73.H).

5. *Section 200-73.H – Provide the parking calculation.*

   The parking calculation has been provided. **However, the number of required spaces for "Office Space" appears to have been computed incorrectly. For this use, 5 spaces / 1,000 SF is required. If 3,900 SF is proposed for this use, 19.5 (20) spaces would be required bring the required total for the site to 31 spaces. Only 28 spaces are currently proposed.**

6. **(V)** *Section 200-80.A(5) – No storage shall be permitted within the front yard of any lot. It should be confirmed this requirement is being met.*

   The Applicant has noted on Sheet 4 that they will be seeking a variance from this requirement.

7. *Section 200-80.B - Show the proposed garbage storage area on the plans in accordance with this section.*

   A dumpster area has been shown. **Please provide a construction detail for the proposed enclosure.**

8. *Section 200-80.C – Clarify whether any fuel or other explosive materials are intended to be stored on the site.*

   The plans show two (2) "Diesel Fuel Concrete Containment Boxes." Sheet 4 notes "No fuel or other explosive materials will be stored on site." Clarify the purpose of the Diesel Fuel Concrete Containment Boxes.

9. Section 200-80.C(1) – Outdoor storage facilities for fuel, including aboveground storage tanks, raw materials, and products, shall be enclosed with an approved safety fence compatible with the architectural and landscaping style employed on the lot. All fencing shall be erected in accordance with Sections 200-77 and 200-88 of this chapter, and with Chapter 162, Subdivision and Land Development. These items shall be addressed as part of the building permit process.

III. SUBDIVISION & LAND DEVELOPMENT ORDINANCE REVIEW

1. *Section 162-9.B.(2)(b)[10] – The locations and dimensions of all existing streets, sewers and sewage systems, water mains and feeder lines, fire hydrants, gas, electric, and oil transmission lines, watercourses, sources of water supply, easements, and other significant features within the property, or such driveways, intersections and utilities within 100 feet of any part of the property proposed to be developed or subdivided should be shown on the plan.*

   Features within 100 feet of the site shall be shown on the plans. Providing an aerial photograph of the property in the plan set should satisfactorily address this requirement.

2. **Section 162-9.B.(2)(c)[10] – Show the locations of right-of-way monuments.**

3. **(W)** *Section 162-41.B – Sidewalks shall be required in any subdivision or land development where it is desirable, in the opinion of the Board, to continue sidewalks that are existing in adjacent developments, or to provide access to community facilities (schools, shopping areas, recreational areas, etc.), or to ensure the safety of pedestrians in unusual or peculiar conditions with respect to prospective traffic. The applicant shall discuss whether sidewalks are required.*

The Applicant's Engineer in her response letter stated the Planning Commission agreed that sidewalks would not be necessary along the frontage of the property or leading to other adjacent developments. While the Planning Commission may be in support of the waiver, it is our understanding and indicated in the Planning Commission meeting minutes that the application is to seek a waiver from installing sidewalks**. Therefore, if the intention is to not install sidewalks, a waiver should be sought.**

4. *Section 162-47.A(1) – Permanent stone or concrete monuments shall be accurately placed at the intersection of all lines forming angles and at changes in directions of lines in the boundary (perimeter) of the property being subdivided. Please revise the plans to show monuments along the perimeter boundary instead of pins. Iron pins may be utilized elsewhere.*

The existing monument symbol is missing in the Legend, which should be revised. Monuments appear to be proposed where existing iron pins were found; this should be verified.

5. *Sections 162-49 – Although the plans indicate the site will be serviced by public water, we note that the plans do not show any water service connection. This should be provided.*

The proposed water service is shown. **The proposed water service line is under Basin B, which shall be revised.**

6. Section 162-58.C(3)(a) – All outdoor lighting, whether or not required by this chapter, on private, residential, commercial, industrial, recreational or institutional property shall be aimed, located, designed, fitted and maintained so as not to present a hazard to drivers or pedestrians by impairing their ability to safely traverse and so as not to create a nuisance

by projecting or reflecting objectionable light onto a neighboring use or property." There appears to be significant light spill onto Park Road in the vicinity of Heather Hill Drive (providing access to residential uses) as well as onto adjacent parcel 3203 00690400 (to the east). Only one of the proposed light fixtures (B4) appears to be equipped with a house-side shield.

7. Section 162-58.D(1)(a) – A site plan showing: all structures, parking spaces, building entrances, traffic areas (both vehicular and pedestrian), and vegetation that might interfere with lighting…". It is noted that proposed landscaping is shown on the lighting plan and appears that there will be multiple conflicts between proposed lighting locations and proposed canopy/shade trees. In the proximity shown, the twenty-foot-high luminaires would be within the tree canopy as they mature. Locations shall be coordinated, and adequate separation provided.

8. Section 162-58.C(4) – Poles supporting lighting fixtures for the illumination of parking areas and located directly behind parking spaces shall be placed a minimum of five feet outside paved area, or on concrete pedestals at least 30 inches high above the pavement, or suitably protected from potential vehicular impact by other approved means." It appears that several light fixtures are proposed on or directly adjacent to retaining wall structures with fencing and very little separation between paved vehicular areas. There do not appear to be any details provided that depict how the installation of these lights will be accomplished/coordinated with the retaining wall and fencing. Additional information shall be provided to depict constructability and protection from adjacent vehicular areas.

III. STORMWATER MANAGEMENT ORDINANCE REVIEW

1. The Applicant is proposing four infiltration basins to control post-development runoff, three subsurface and one above-ground.

2. Section 152-306.J(3) – The infiltration facility shall completely drain the retention (infiltration) volume within three days (72 hours) from the end of the design storm. Provide calculations showing same.

Basin dewatering time was provided for Basin A only. **Please explain the "0 hour" Time to Dewater ("above Water Quality Orifice"). Also, please provide the dewatering calculations for all proposed basins.**

3. **(RW)** *Section 152-306.K(3) – Setbacks from property lines and rights-of-way are to be consistent with accessory structures in the Zoning Ordinance for the applicable zoning district. Per Section 200-45.F, no accessory building or structure shall be located within the front yard, nor within 30 feet of any side or rear lot line. Basins A, B and C are in the front yard setback, and Basin D is in the rear yard setback.*

A waiver is being requested to permit the infiltration basins in the setback and is listed on Sheet 4 ("Waiver Requests"). **We have no objection to the granting of this waiver; however, the applicant shall discuss this request with the Planning Commission.**

4. **Section 156-306.P – Where sediment transport in the stormwater runoff is anticipated to reach the infiltration system, appropriate permanent measures to prevent or collect sediment shall be installed prior to discharge to the infiltration system. Provide "Snout" devices or equivalent in upstream inlets draining to infiltration beds. Provide O&M steps as well.**

5. *Section 152-309.E – Runoff curve numbers (CN) for both predevelopment and proposed (post-construction) conditions to be used in the Soil Cover Complex Method shall be obtained from Table B-1 in Appendix B of this chapter.*

For the purposes of determining compliance with this chapter, compacted soils or stone surfaces used for vehicle parking and movement shall be considered impervious. **Please revise the CN value for the gravel storage area accordingly.**

6. *Section 152-402.A(2) – A listing of all regulatory approvals required for the proposed project and the status of the review and approval process for each shall be included in the PCSM plan. Final approval or adequacy letters must be submitted to the municipality prior to (or as a condition of) the municipality's issuing final approval of the SWM site plan. Proof of*

application and approval shall be provided for the NPDES Permit and the Erosion and sediment control plan letter of adequacy.

7. *Sections 152-402.B(18)(a) , (c), 152-402.F(3) and 152-704.A – Identify the person or entity responsible for BMPs after construction and provide easements.*

The Applicant's Engineer indicated in her response letter a blanket easement has been provided for Township inspection. This could not be located. Please clarify its location.

8. *Section 152-402.F(2) and 152-703.A – An O&M agreement shall be provided.*

9. *Section 152-402.G – A letter of adequacy from the Conservation District must be submitted to the municipality prior to (or as a condition of) the municipality's final approval.*

10. *Section 152-502 – For regulated activities involving one acre or more of earth disturbance, the applicant shall provide to the municipality final as-built plans (signed and sealed by a qualified licensed professional) of all BMPs, conveyances, other stormwater facilities, and related improvements shown in the final approved SWM site plan.*

11. ***Section 152-705.B to D – The statements in these sections shall be added as notes to the PCSM Plans.***

12. *The applicant shall determine an adequate tailwater elevation to use in the calculations.*

The Applicant's Engineer indicated in her response letter tailwater has been added to all basins including the existing basin. However, we are unable to verify this. Please clarify.

IV. GENERAL COMMENTS

1. *All uses as listed on the Application shall be listed on the Record Plan. Add the notation "Record Plan Sheet ___ of ___" on all sheets to be recorded.*

Sheets 4 and 8 have the notation added. **However, Sheet 8 will be recorded with O&M agreement; verify this sheet is intended to be a record plan.**

2. ***On Sheet 2, clarify the "Stone drive (construction entrance)" label; no driveway outline is shown.***

3. *Clarify the pipes from building to ST-18 and from ST-12 (i.e., source).*

   The Applicant's Engineer indicated in her response letter these are roof drain collection pipes. **Please verify whether there are only two (2) down spout connections, or if there is a roof drain collection piping proposed.**

4. *Add top and bottom of wall elevations.*

   Verify the TW 498.50 elevation near Basin D, TW 501.00 near rear building corner, TW 497.00 near ST-17, and the TW as they appear incorrect.

5. *Clarify how the retaining wall construction area will be protected from water when the basin is activated during a storm.*

   The Applicant's Engineer indicated in her response letter this has been addressed in the construction sequence. Please clarify where as we were unable to locate.

6. *Pipes and inlets near a retaining wall shall be considered in the design of the walls.*

7. *Clarify the "C" line type and verify that it and underground electric are acceptable under/through Basin B, as currently shown on the plans.*

   The cable, electric and water service line are under underground Basin B, which should be revised. The Applicant's Engineer indicated in her response letter that a cross section has been provided to show the crossing of the line over the UG basin. Please clarify where this is located.

8. *Clarify how the retaining wall be constructed adjacent to the infiltration basins, as the infiltration basin areas are to be protected from compaction and will be surrounded by geotextile material.*

   The Applicant's Engineer indicated in her response letter the product used for the retaining wall will not require geotextile fabric nor excessive compaction. **At a minimum, prior to preliminary plan approval, a preliminary structural design should be provided to confirm the walls can be constructed without adversely affecting the basins.**

9. *It seems construction easements will be required to construct the proposed retaining walls along the southern property line. These should be provided.*

   Temporary construction easements are now shown on Sheets 16 and 17. **Executed easement agreements shall be provided to the Township prior to Final Plan Approval. In addition, these easements should be delineated on the "Site Layout Plan".**

10. **A waiver request letter shall be provided indicating all requested waivers as well a justification for each request.**

11. **Written verification shall be provided from the owner of the large basin indicating his support for the proposed modifications.**

12. **The site location map (USGS Quad) is not legible on the sheets which it appears. Please improve clarity.**

IV. TOWNSHIP TRAFFIC CONSULTANT MCMAHON ASSOCIATES, INC.

Based on our review, we offer the following comments for the Township's consideration.

1. SALDO Section 162-9.H(1) – Based on the supplemental information provided by the applicant, the proposed building will feature 4,000 square feet of office space and the remaining portion of the building will be garage space. In addition, the applicant indicates the site will have 11 employees

regularly on site, and contractors employed by the company will arrive and depart during off-peak hours. Based on this information, the site will generate 71 daily trips, and 11 trips during the weekday morning and weekday afternoon peak hours, and as such, the Township's threshold of 200 daily trips or 20 peak hour trips for completion of a traffic study is not met.

2. SALDO Sections 162-27.1.F(1) and 162-27.1.F(2) 162-27.1 – This project is located within the LI zoning district, and is subject to the Township's access management standards. The development proposes two driveways to the site when only one driveway is permitted, unless it is demonstrated additional access is necessary to accommodate traffic to and from the site in a safe and efficient manner. According to the applicant's response letter, trucks are not able to access and circulate within the site with only one driveway, and therefore, two driveways are necessary for this use.

3. Section 162-27.1.K(1) – The following comments related to the truck turning template plan (sheet 5):

   a. Provide the dimensions of the largest truck expected to access the site.

   b. As previously requested, truck turning templates for the Township's largest emergency service vehicle should also be provided.

   c. As currently shown, the on-site circulation of the truck will traverse in close proximity to the proposed building. If feasible, the applicant's engineer should modify the internal site layout to provide additional space for the trucks to navigate within the site in the vicinity of the building.

   d. The driveway radii necessary to accommodate the truck will result in very wide driveway openings along Park Road. We recommend modifying the driveway edges and corner radii to give the appearance of narrower driveways. This can be accomplished using a flush pavement treatment (such as stamped asphalt or pavers) that can be traversed by trucks. Giving the appearance of narrower driveways will be more compatible with the area, and it

will provide better alignment of the eastern driveway opposite Heather Hill Drive.

e. The truck templates do not show any trucks entering or exiting to/from the west along Park Road. Please confirm the proposed truck routes, and a note to the plan to memorialize the proposed truck routes.

4. SALDO Section 162-28.A – The plans have been revised to show a 25-foot half-width "ultimate right-of-way" along Park Road. The plans should also show the existing legal right-of-way along Park Road. If the "ultimate right-of-way" currently shown on the plan is greater than the legal right-of-way, the line currently labeled as "ultimate right-of-way" should be labeled "Required Right-of-Way (To Be Deeded To Upper Uwchlan Township)". If the "ultimate right-of-way" currently shown on the plan is less than the legal right-of-way, the line currently labeled as "ultimate right-of-way" should be removed from the plan. Furthermore, the applicant's engineer should verify that the proposed retaining wall and guiderail along the western driveway radius is located outside the legal right-of-way if the existing legal right-of-way is more than the right-of-way currently shown on the plan.

5. SALDO Section 162-28.A – The plans should be revised to show the location of the guiderail on the south side of Park Road in the vicinity of the western site driveway in order to determine whether the guiderail must be adjusted to accommodate the western driveway curb radius.

6. ZO Section 200-73.H The parking tabulation on sheet 4 indicates that the proposed 3,900 square feet of office space will require 15 parking spaces. However, since the Township's parking supply requirement for office space is five parking spaces per 1,000 square feet, the parking requirement for the office space would be 20 parking spaces (3.9 X 5 = 20 parking spaces), and as such, additional parking spaces will be required. In addition, the applicant's response to comment 1 indicates the office square-footage will be 4,000 square feet, and the parking tabulation should be updated to show the total square-footage of the office space.

7. The Planning Commission should determine whether a pedestrian connection to the existing path on the opposite side of Park Road should

be required as part of this development. If a pedestrian connection is required, we recommend the appropriate pedestrian accommodations (ADA compliant curb ramps, pedestrian warning signs, and crosswalk markings) be provided at the crossing.

8. ZO Section 200-75.H(3) –The plans have been revised to show sight lines for traffic existing both proposed driveways; however, these line should be labeled with the available sight distances . In addition, the plans should also label and dimension the available sight distances for left-turn vehicles entering both driveways looking ahead and behind. In addition, the plans should include a PennDOT-style sight distance note which states the required sight distances, as follows:

   "All sight distance obstructions (including but not limited to embankments and vegetation) shall be removed by the permittee to provide a minimum of XXX sight distance to the left and XXX sight distance to the right for a driver exiting the proposed driveways onto the through highway. The driver must be considered to be positioned ten feet from the near edge of the closest highway through travel lane (from the curbline if curbing is present) at an eye height of three feet six inches (3' 6") above the pavement surface located in the center of the closest highway travel lane designated for use by approaching traffic. This sight distance shall be maintained by the permittee."

9. Chapter 79-8.C – The proposed redevelopment is located in the Township's Act 209 Transportation Service Area, and as such, this development is subject to the Townships Transportation Impact Fee of $2,334 per weekday afternoon peak hour trip. Based on the Institute of Transportation Engineers Publication Trip Generation Manual, 11th Edition (Land Use Code 71, General Office), the proposed 4,000 square feet of office space will generate 11 new trips during the weekday afternoon peak hour. As such, the Transportation Impact Fee for the proposed development will be **$25,674**.

   Upon resubmission, the applicant's engineer should compose a response letter that describes how each comment has been addressed and where any plan and/or report revisions are located. Additional comments regarding the traffic improvements and/or land development plans may follow upon receipt of future submissions.

V. TOWNSHIP LAND PLANNER BRANDYWINE CONSERVANCY

The applicant's response letter dated March 1, 2023 addresses and resolves most of the original comments provided by the Brandywine Conservancy in December of 2022. In consultation with the Township, it has been determined that the property is not classified as an historic resource within the Township and is not listed on its Historic Resource Inventory. The original comment regarding this item in not applicable.

Landscape Plan

The Applicant's revised submission included a landscape plan for the proposed development. The following are new observations based upon this newly submitted Plan sheet.

1. The Applicants Landscape Compliance Chart shows a lesser number of required deciduous, evergreen, and shrub material as required by SALDO. While recognizing the constraints of the property, the Conservancy suggests the Applicant work with the Township to identify opportunities to increase the number of trees and shrubs planted at the site. While not required under the provisions of the SALDO, consideration may be given to seeking alternative Township owned sites where the required planting could be installed to provide environmental and community benefits to residents and the Township.

2. The twenty-seven shrubs located on the plan have been placed in a linear fashion along the edge of the driveway. The Conservancy suggests that a more "natural" configuration, staggering, and grouping of planting be considered in this area while also meeting the requirements of the ordinance. This may also provide opportunities to increase the number of shrubs planted at the site. In addition, the plan does not clearly identify where specific shrub species be planted. Suggest noting the specific species on the plan drawing.

3. The required tree replacement caliper for four (4) of the listed tree replacements is 4-4.5", yet the table of planting material simply shows a minimum of 3.5" caliper. The Conservancy suggests the Applicant make

clear in its table of plant material which four (4) trees will meet the replacement requirement of the 9", 10", and 11" trees that are to be removed.

4. Trees to be removed from the site should be noted on the plan.

5. The text associated with the tree protection and root pruning details on the sheet is difficult to read and should be improved for clarity.

6. While a planting guide for shrubs is provided, no tree planting guide is provided. The Conservancy suggest one be added.

7. The planting material table lists five (5) evergreen trees (Pinus strobus), yet the plan includes six (6) evergreen trees. This discrepancy should be corrected.

8. The plan identifies two (2) pin oaks directly under the overhead utility line toward the eastern end of the property. The Conservancy suggests the Applicant ensure the mature height of these trees will not interfere with the overhead utility line and require unnecessary maintenance and significant pruning in the future, potentially undermining the integrity, appearance, and longevity of the tree. Alternatively, consider altering the location of these trees to not interfere with the overhead utility line. As a minor note, the orientation of the notation referring to the overhead utility line (OH) is oriented incorrectly (it reads HO, rather than OH). I suspect this may be a result of the direction the line was digitized originally.

9. The proposed features legend should include symbology for the plant material.

10. Subject to review and approval by the Township, Upper Uwchlan's SALDO allows for existing plant material to be credited toward the planting requirement provision. If the Applicant intends to utilize this provision in their calculations, the location and number of credits sought should be noted on the plan and the tables and charts modified accordingly.

VI. TOWNSHIP SEWER CONSULTANT COMMENTS ARRO CONSULTING, INC.

We offer the following comments for your consideration at this time:

1. The site is currently a single-family dwelling. Plans proposed the demolition of the existing single-family home and the construction of a one-story office building with associated garage bays. Based on discussions with the applicant's engineer, the building is to be occupied by 11 full-time employees and includes associated restrooms, a small kitchen break room and a shop sink in the garage area. We estimate the anticipated sewer usage to be 225 gallons per day (GPD) or one equivalent dwelling unit (EDU). The required capacity will need to be purchased by the applicant. We recommend the Township reserve the right to review water usage in the future and require the purchase of additional sanitary sewer capacity if warranted. The proposed capacity shall be noted on the plans.

2. The appropriate sewage facilities planning modules (SFPM) approval by the Pennsylvania Department of Environmental Protection is required prior to plan approval.

3. The 6-inch sewer lateral pipe material shall be PVC SDR-35. The lateral connection into the existing manhole shall be core drilled and include a watertight seal. The profile shall be revised accordingly.

4. The proposed sewer lateral vent and cleanout are proposed within a paved area. The Service Line Clean-out and Vent detail (7000SD18) should be replaced With Service Line Clean-out and Vent in Paved Areas(7000SD19).

5. A detail of the appropriately-sized oil and water separator shall be provided for the proposed shop sink on the plans.

6. The necessary financial security shall be posted with the Township, which shall be in a form and amount acceptable to the Township.

If you have any questions, please do not hesitate to contact me.

Sincerely,

David N. Leh

David N. Leh, P.E.
Vice President
Gilmore & Associates, Inc.

cc: Upper Uwchlan Township Planning Commission Members
Upper Uwchlan Township Board of Supervisors
Gwen Jonik – Township Secretary
Rhys Lloyd – Director of Code Enforcement
Anthony Campbell – Zoning Officer
Kristin Camp, Esq. – Buckley, Brion, McGuire, & Morris LLP
Rob Daniels, Brandywine Conservancy
Christopher J. Williams, P.E., McMahon Associates, Inc.
G. Mathew Brown, P.E., ARRO Consulting, Inc.
David Schlott, P.E., ARRO Consulting, Inc.
Phil Reilly, P.J. Reilly Contracting
Monica R. Sweeney, P.E., Wilkinson & Associates, Inc.

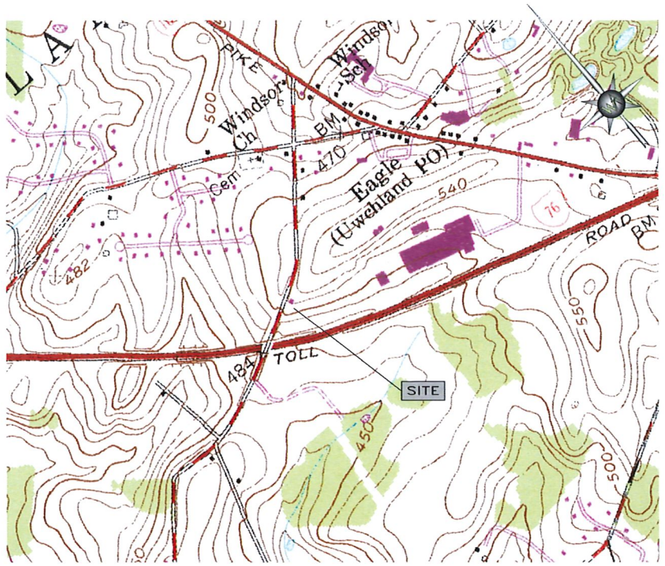
PRELIMINARY LAND DEVELOPMENT PLANS

PREPARED FOR

P.J.REILLY CONTRACTING CO., INC.

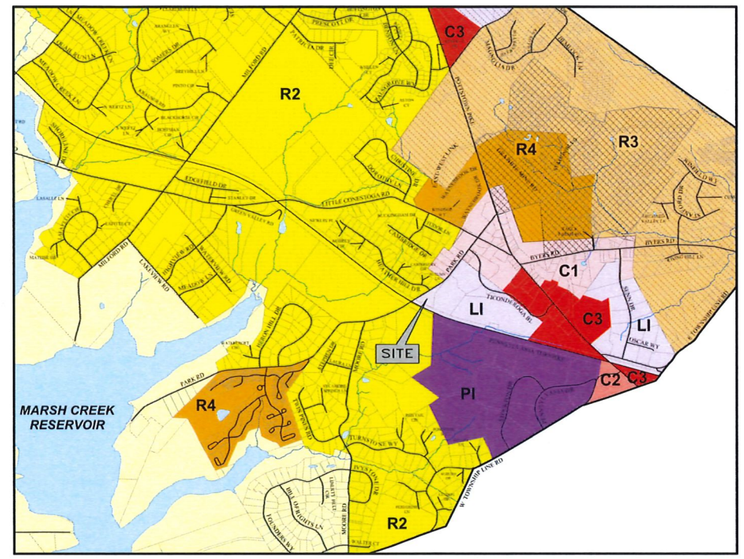
PROPOSED HEADQUARTERS BUILDING

301 PARK ROAD
UPPER UWCHLAN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF PENNSYLVANIA



SITE LOCATION MAP

1" = ±800'



ZONING MAP

NTS

SHEET INDEX

1. COVER SHEET
2. EXISTING CONDITIONS & DEMOLITION PLAN
3. SITE ANALYSIS & IMPACT PLAN
4. SITE LAYOUT PLAN
5. TRUCK TURNING PLAN
6. UTILITY PLAN
7. CONSTRUCTION DETAILS
8. GRADING & PCSM PLAN
9. PCSM NOTES AND DETAILS
10. PCSM NOTES AND DETAILS
11. IMPROVEMENT CONSTRUCTION PLAN
12. LANDSCAPE PLAN
13. LIGHTING PLAN
14. PROFILES
15. CONSERVATION PLAN
16. EROSION & SEDIMENT CONTROL PLAN
17. EROSION & SEDIMENT CONTROL NOTES & DETAILS
18. EROSION & SEDIMENT CONTROL NOTES & DETAILS

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

Coordinate your projects via Coordinate PA at www.paonecall.org

Pennsylvania One Call System Serial Number

REV	DATE	DESCRIPTION	BY
1	03/01/23	REVISIONS PER TWP REVIEW LETTER 12/2/22	MRS

MONICA R. SWEENEY — REGISTERED PROFESSIONAL ENGINEER — PE-076480 — COMMONWEALTH OF PENNSYLVANIA

PROJECT: PROPOSED HEADQUARTERS BUILDING

UPPER UWCHLAN TOWNSHIP CHESTER COUNTY PENNSYLVANIA

PREPARED FOR: P.J. REILLY CONTRACTING CO., INC. 557 W. UWCHLAN AVENUE, SUITE 220 EXTON, PA 19341

PLAN TITLE: PRELIMINARY LAND DEVELOPMENT PLAN

COVER

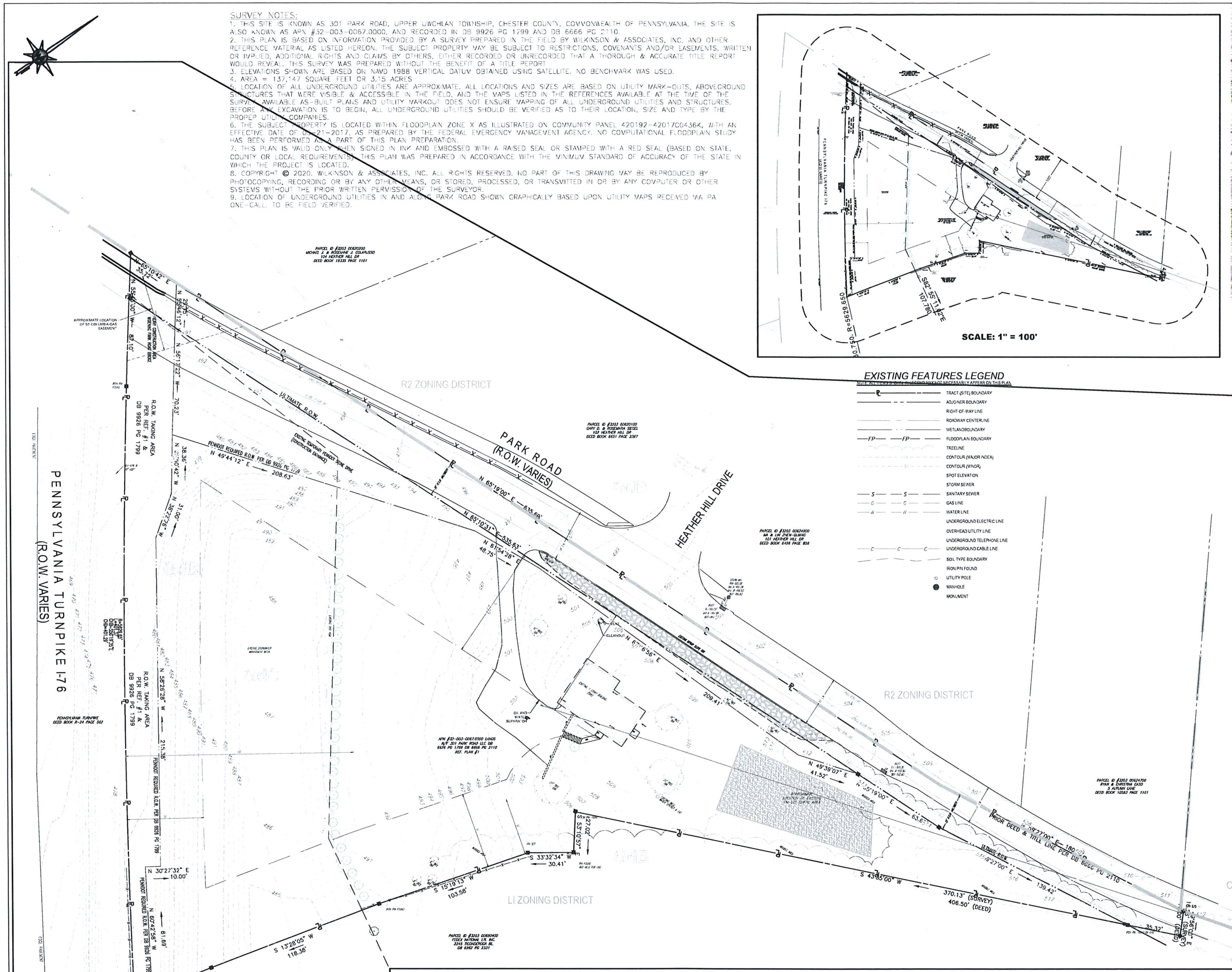
PREPARED BY: WILKINSON & ASSOCIATES, INC.

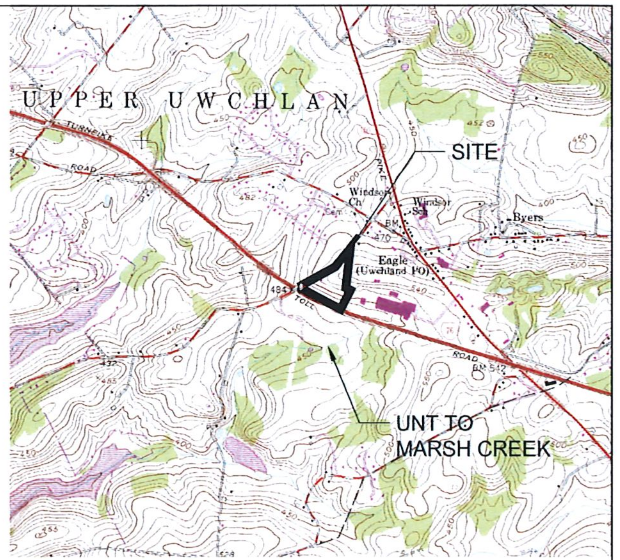
THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

DESIGNED VRS	PROJECT # 2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 1 OF 19
SCALE AS SHOWN	

SURVEY NOTES:

1. THIS SITE IS KNOWN AS 301 PARK ROAD, UPPER UWCHLAN TOWNSHIP, CHESTER COUNTY, COMMONWEALTH OF PENNSYLVANIA. THE SITE IS ALSO KNOWN AS APN #32-003-0067.0000, AND RECORDED IN DB 9926 PG 1799 AND DB 6666 PG 2110.
2. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY WILKINSON & ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON. THE SUBJECT PROPERTY MAY BE SUBJECT TO RESTRICTIONS, COVENANTS AND/OR EASEMENTS, WRITTEN OR IMPLIED, ADDITIONAL RIGHTS AND CLAIMS BY OTHERS, EITHER RECORDED OR UNRECORDED THAT A THOROUGH & ACCURATE TITLE REPORT WOULD REVEAL. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT
3. ELEVATIONS SHOWN ARE BASED ON NAVD 1988 VERTICAL DATUM OBTAINED USING SATELLITE. NO BENCHMARK WAS USED.
4. AREA = 137,147 SQUARE FEET OR 3.15 ACRES
5. LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE. ALL LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, ABOVEGROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILT PLANS AND UTILITY MARKOUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES.
6. THE SUBJECT PROPERTY IS LOCATED WITHIN FLOODPLAIN ZONE X AS ILLUSTRATED ON COMMUNITY PANEL 420192-42017C0436K, WITH AN EFFECTIVE DATE OF 09-21-2017, AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. NO COMPUTATIONAL FLOODPLAIN STUDY HAS BEEN PERFORMED AS A PART OF THIS PLAN PREPARATION.
7. THIS PLAN IS VALID ONLY WHEN SIGNED IN INK AND EMBOSSED WITH A RAISED SEAL OR STAMPED WITH A RED SEAL (BASED ON STATE, COUNTY OR LOCAL REQUIREMENTS). THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE MINIMUM STANDARD OF ACCURACY OF THE STATE IN WHICH THE PROJECT IS LOCATED.
8.
9. LOCATION OF UNDERGROUND UTILITIES IN AND ALONG PARK ROAD SHOWN GRAPHICALLY BASED UPON UTILITY MAPS RECEIVED VIA PA ONE-CALL. TO BE FIELD VERIFIED.





USGS QUADRANGLE: DOWNINGTOWN
SCALE = 1" = 2000'

EXISTING FEATURES LEGEND

NOTE: ALL ITEMS SHOWN IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- TRACT (SITE) BOUNDARY
- ADJOINER BOUNDARY
- RIGHT-OF-WAY LINE
- ROADWAY CENTERLINE
- WETLAND BOUNDARY
- —FP— FLOODPLAIN BOUNDARY
- TREELINE
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- SPOT ELEVATION
- STORM SEWER
- —S— SANITARY SEWER
- —G— GAS LINE
- —W— WATER LINE
- UNDERGROUND ELECTRIC LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND TELEPHONE LINE
- —C— UNDERGROUND CABLE LINE
- SOIL TYPE BOUNDARY
- IRON PIN FOUND
- ○ UTILITY POLE
- ● MANHOLE
- MONUMENT

DEMOLITION NOTES

1. LAND DEVELOPMENT APPROVAL WILL BE NEEDED PRIOR TO THE START OF ANY GRADING, EXCAVATION, REMOVAL OF TOPSOIL, REMOVAL OF TREES, OR REMOVAL OF ANY OTHER VEGETATIVE COVER.
2. IT SHALL BE THE DUTY OF EACH EXCAVATOR WHO INTENDS TO PERFORM EXCAVATION OR DEMOLITION WORK TO REQUEST THE LOCATION AND TYPE OF FACILITY OWNER LINES AT EACH WORK SITE BY NOTIFYING THE FACILITY OWNER THROUGH THE PA ONE CALL SYSTEM. NOTIFICATION SHALL BE NOT LESS THAN THREE (3) NOR MORE THAN TEN (10) BUSINESS DAYS IN ADVANCE OF BEGINNING EXCAVATION OR DEMOLITION WORK. NO WORK SHALL BEGIN EARLIER THAN THE LAWFUL START DATE WHICH SHALL BE ON OR AFTER THE THIRD BUSINESS DAY AFTER NOTIFICATION. THE LAWFUL START DATE SHALL EXCLUDE THE DATE UPON WHICH NOTIFICATION WAS RECEIVED BY THE ONE CALL SYSTEM AND NOTIFICATION RECEIVED ON A SATURDAY, SUNDAY OR HOLIDAY, WHICH SHALL BE PROCESSED ON THE FOLLOWING BUSINESS DAY. IN THE CASE OF A COMPLEX PROJECT, NOTIFICATION SHALL NOT BE LESS THAN TEN (10) BUSINESS DAYS IN ADVANCE OF THE BEGINNING OF EXCAVATION OR DEMOLITION WORK.
3. WHERE EXCAVATION OR DEMOLITION WORK IS PROPOSED ON PRIVATE PROPERTY AND THE POTENTIAL FOR UNDERGROUND UTILITIES EXISTS THAT WERE NOT MARKED AS A RESULT OF THE ONE CALL, THESE AREAS SHOULD BE INVESTIGATED BY THIRD PARTY UTILITY LOCATORS TO ENSURE DAMAGE OR DISRUPTION TO UTILITY LINES OR FACILITIES IS AVOIDED. THE RESPONSIBILITY TO INVESTIGATE THE AFOREMENTIONED AREAS SHALL BE BORNE BY EACH EXCAVATOR WHO INTENDS TO PERFORM EXCAVATION OR DEMOLITION WORK.
4. WHERE EXISTING IMPROVEMENTS ARE DESIGNATED TO BE REMOVED (TBR), THEY SHALL BE REMOVED, FILLED, AND/OR GRADED PER THE GRADING PLAN(S), OR RESTORED TO EXISTING GRADES WHERE NEW GRADING IS NOT BEING PROPOSED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOUNT FOR THE STRUCTURAL FILL NEEDED TO FILL THE VOID LEFT BY THE REMOVAL OF A STRUCTURE WITH FOUNDATION WALLS AND/OR FOOTERS, UNDERGROUND TANKS OR VAULTS, OR ANY OTHER STRUCTURE WHOSE REMOVAL RESULTS IN A NEED FOR FILL TO ACHIEVE PROPOSED GRADES.
5. ALL WASTE MATERIALS SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO WASTE MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
6. WHEREVER POSSIBLE, RECYCLING OF WASTE MATERIALS IS PREFERRED, RATHER THAN DISPOSAL.
7. ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS MUST BE FOLLOWED IN THE USE, HANDLING, AND DISPOSAL OF POTENTIALLY HAZARDOUS MATERIALS.
8. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR DEP FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

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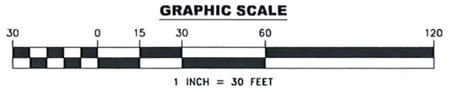
Pennsylvania One Call System Serial Number



GRAPHIC SCALE

1 INCH = 30 FEET

REV	DATE	DESCRIPTION	BY
1	03/01/23	REVISIONS PER TWP REVIEW LETTER 12/2/22	MRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
MONICA R. SWEENEY
ENGINEER
PE-079680

PROJECT:
PROPOSED HEADQUARTERS BUILDING
UPPER UWCHLAN TOWNSHIP CHESTER COUNTY
PENNSYLVANIA

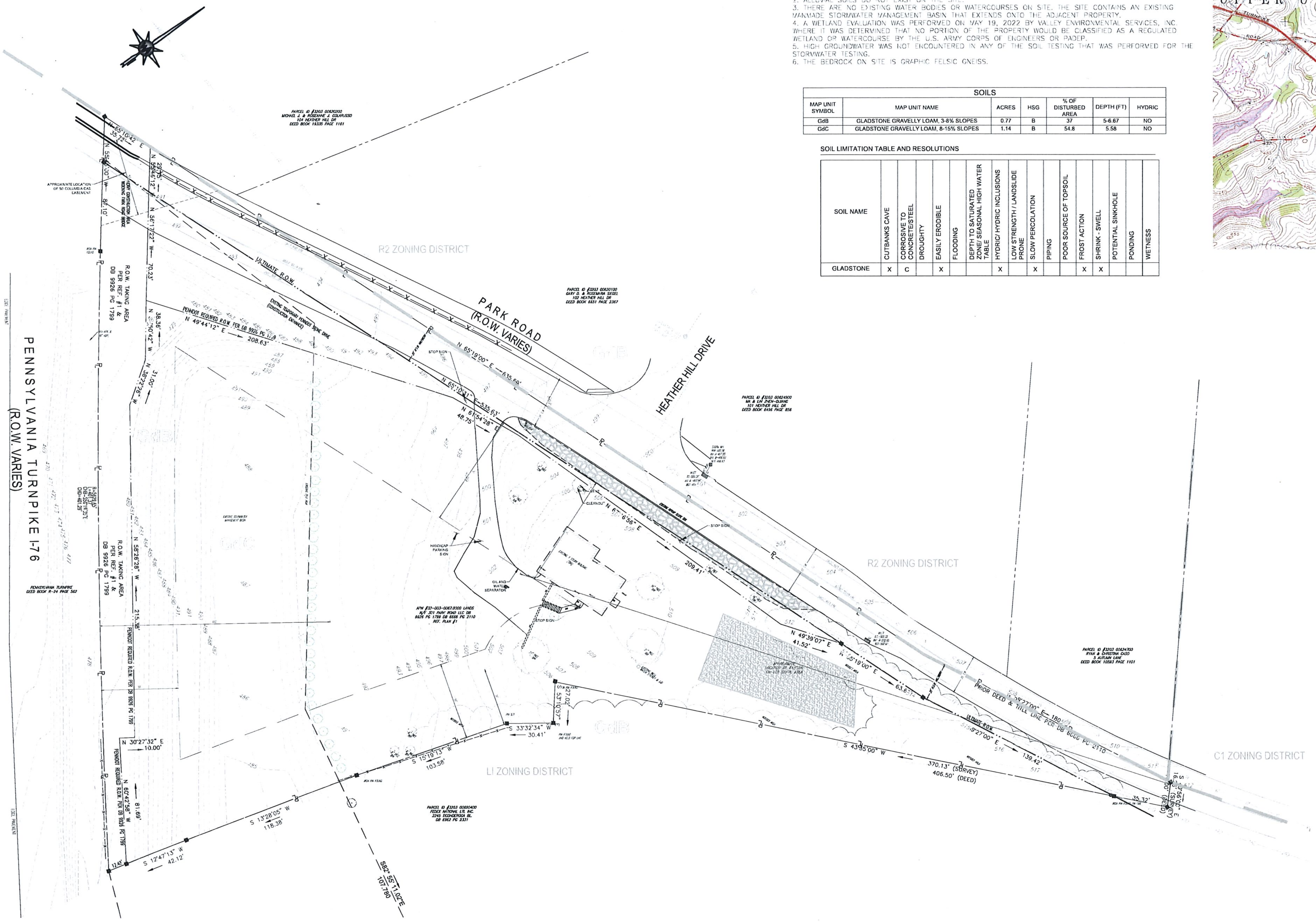
PREPARED FOR:
P.J. REILLY CONTRACTING CO., INC.
557 W. UWCHLAN AVENUE, SUITE 220
EXTON, PA 19341

PLAN TITLE:
PRELIMINARY LAND DEVELOPMENT PLAN

EXISTING FEATURES PLAN

PREPARED BY:
WILKINSON & ASSOCIATES, INC.
THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

DESIGNED MRS	PROJECT # 2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 2 OF 19
SCALE AS SHOWN	



NOTES:

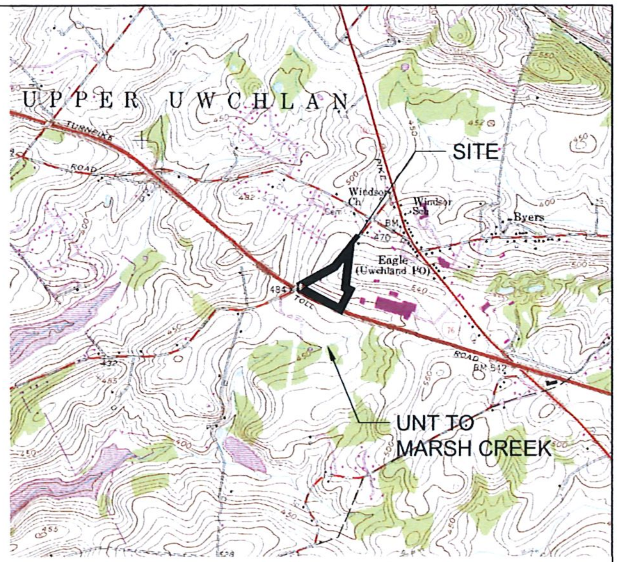
1. THE SUBJECT PROPERTY IS LOCATED WITHIN FLOODPLAIN ZONE X AS ILLUSTRATED ON COMMUNITY PANEL 420192-42017C0436K, WITH AN EFFECTIVE DATE OF 03-21-2017, AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. NO COMPUTATIONAL FLOODPLAIN STUDY HAS BEEN PERFORMED AS A PART OF THIS PLAN PREPARATION.
2. ALLUVIAL SOILS DO NOT EXIST ON THE SITE.
3. THERE ARE NO EXISTING WATER BODIES OR WATERCOURSES ON SITE. THE SITE CONTAINS AN EXISTING MANMADE STORMWATER MANAGEMENT BASIN THAT EXTENDS ONTO THE ADJACENT PROPERTY.
4. A WETLAND EVALUATION WAS PERFORMED ON MAY 19, 2022 BY VALLEY ENVIRONMENTAL SERVICES, INC. WHERE IT WAS DETERMINED THAT NO PORTION OF THE PROPERTY WOULD BE CLASSIFIED AS A REGULATED WETLAND OR WATERCOURSE BY THE U.S. ARMY CORPS OF ENGINEERS OR PADEP.
5. HIGH GROUNDWATER WAS NOT ENCOUNTERED IN ANY OF THE SOIL TESTING THAT WAS PERFORMED FOR THE STORMWATER TESTING.
6. THE BEDROCK ON SITE IS GRAPHIC FELSIC GNEISS.

SOILS

MAP UNIT SYMBOL	MAP UNIT NAME	ACRES	HSG	% OF DISTURBED AREA	DEPTH (FT)	HYDRIC
GdB	GLADSTONE GRAVELLY LOAM, 3-8% SLOPES	0.77	B	37	5-6.67	NO
GdC	GLADSTONE GRAVELLY LOAM, 8-15% SLOPES	1.14	B	54.8	5.58	NO

SOIL LIMITATION TABLE AND RESOLUTIONS

SOIL NAME	CUTBANKS CAVE	CORROSIVE TO CONCRETE/STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE/ SEASONAL HIGH WATER TABLE	HYDRIC/ HYDRIC INCLUSIONS	LOW STRENGTH / LANDSLIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK - SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
GLADSTONE	X	C		X			X		X			X	X			



USGS QUADRANGLE: DOWNINGTOWN
SCALE = 1" = 2000'

EXISTING FEATURES LEGEND

NOTE: ALL ITEMS SHOWN IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- TRACT (SITE) BOUNDARY
- ADJOINER BOUNDARY
- RIGHT-OF-WAY LINE
- ROADWAY CENTERLINE
- WETLANDBOUNDARY
- FP — FP — FLOODPLAIN BOUNDARY
- TREELINE
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- SPOT ELEVATION
- STORM SEWER
- S — S — SANITARY SEWER
- G — G — GAS LINE
- W — W — WATER LINE
- UNDERGROUND ELECTRIC LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND TELEPHONE LINE
- C — C — C — UNDERGROUND CABLE LINE
- SOIL TYPE BOUNDARY
- IRON PIN FOUND
- ○ UTILITY POLE
- ● MANHOLE
- MONUMENT

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Pennsylvania One Call System Serial Number

GRAPHIC SCALE

30 0 15 30 60 120

1 INCH = 30 FEET

REV	DATE	DESCRIPTION	BY
1	03/01/23	REVISIONS PER TWP REVIEW LETTER 12/2/22	MRS

MONICA R. SWEENEY
PE-079680

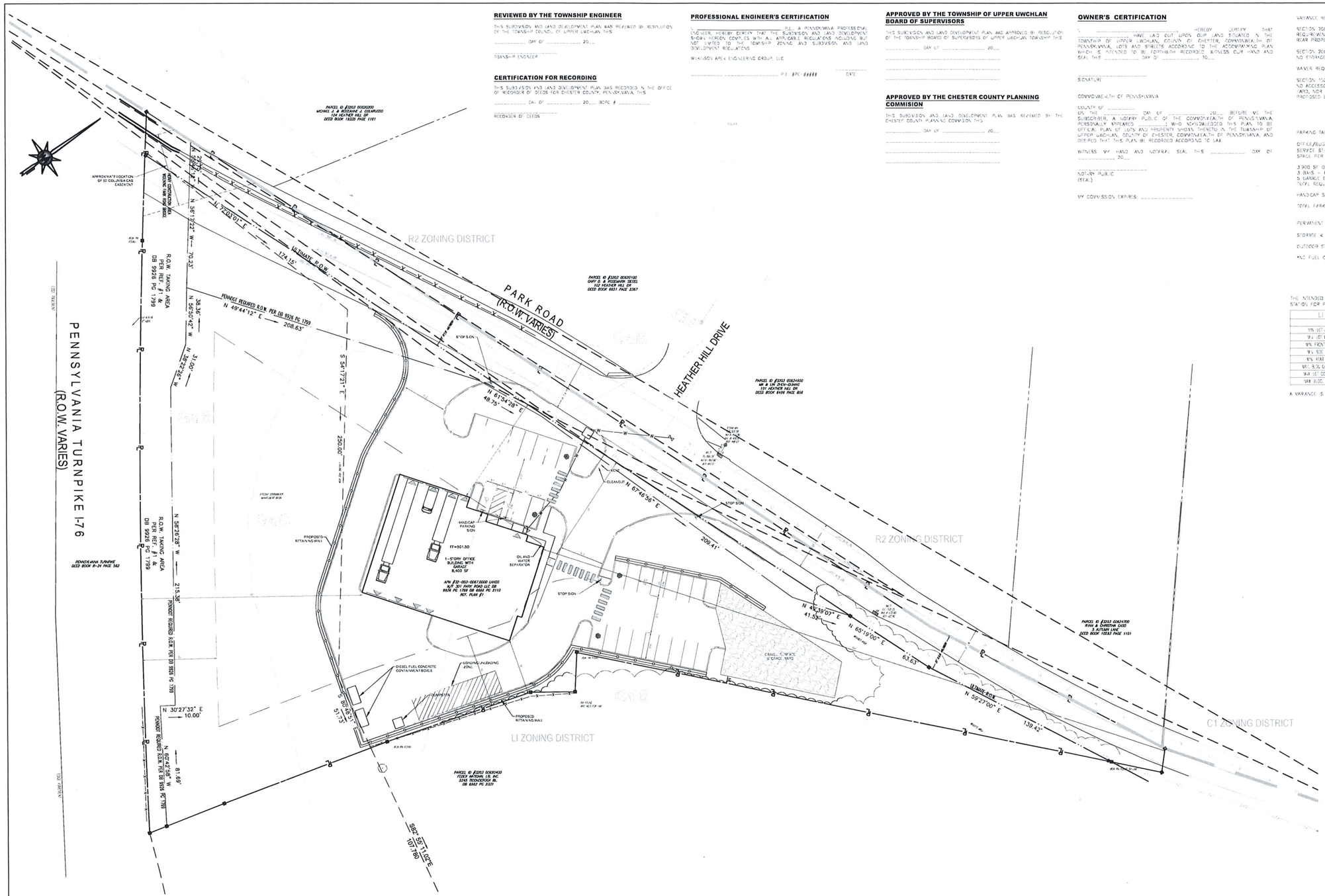
PROJECT:
PROPOSED HEADQUARTERS BUILDING
UPPER UWCHLAN TOWNSHIP CHESTER COUNTY
PENNSYLVANIA

PREPARED FOR:
P.J. REILLY CONTRACTING CO., INC.
557 W. UWCHLAN AVENUE, SUITE 220
EXTON, PA 19341

PLAN TITLE:
PRELIMINARY LAND DEVELOPMENT PLAN
SITE ANALYSIS AND IMPACT PLAN

PREPARED BY:
WILKINSON & ASSOCIATES, INC.
THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

DESIGNED: MRS
CHECKED (PM): MRS
DATE: 11/01/2022
SCALE: AS SHOWN
PROJECT #: 2021-231
DRAWING #: 3 OF 19



REVIEWED BY THE TOWNSHIP ENGINEER

THIS SUBDIVISION AND LAND DEVELOPMENT PLAN WAS REVIEWED BY RESOLUTION OF THE TOWNSHIP COUNCIL OF UPPER UWCHLAN THIS

_____ DAY OF _____, 20____.

_____
TOWNSHIP ENGINEER

CERTIFICATION FOR RECORDING

THIS SUBDIVISION AND LAND DEVELOPMENT PLAN WAS RECORDED IN THE OFFICE OF RECORDER OF DEEDS FOR CHESTER COUNTY, PENNSYLVANIA, THIS

_____ DAY OF _____, 20____. BOOK # _____

_____
RECORDER OF DEEDS

PROFESSIONAL ENGINEER'S CERTIFICATION

I, _____, P.E., A PENNSYLVANIA PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THE SUBDIVISION AND LAND DEVELOPMENT SHOWN HEREON COMPLIES WITH ALL APPLICABLE REGULATIONS, INCLUDING BUT NOT LIMITED TO THE TOWNSHIP ZONING AND SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.

WILKINSON APEX ENGINEERING GROUP, LLC

_____ P.E. #PE-_____ _____ DATE

APPROVED BY THE TOWNSHIP OF UPPER UWCHLAN BOARD OF SUPERVISORS

THIS SUBDIVISION AND LAND DEVELOPMENT PLAN WAS APPROVED BY RESOLUTION OF THE TOWNSHIP BOARD OF SUPERVISORS OF UPPER UWCHLAN TOWNSHIP THIS

_____ DAY OF _____, 20____.

_____
_____
_____
_____

APPROVED BY THE CHESTER COUNTY PLANNING COMMISION

THIS SUBDIVISION AND LAND DEVELOPMENT PLAN WAS REVIEWED BY THE CHESTER COUNTY PLANNING COMMISION THIS

_____ DAY OF _____, 20____.

_____
_____
_____
_____

OWNER'S CERTIFICATION

I, _____, _____, HEREBY CERTIFY THAT I HAVE LAID OUT UPON OUR LAND SITUATED IN THE TOWNSHIP OF UPPER UWCHLAN, COUNTY OF CHESTER, COMMONWEALTH OF PENNSYLVANIA, LOTS AND STREETS ACCORDING TO THE ACCOMPANYING PLAN WHICH IS INTENDED TO BE FORTHWITH RECORDED. WITNESS OUR HAND AND SEAL THIS _____ DAY OF _____, 20____.

_____
SIGNATURE

_____
COMMONWEALTH OF PENNSYLVANIA

COUNTY OF _____

ON THE _____ DAY OF _____, 20____, BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC OF THE COMMONWEALTH OF PENNSYLVANIA, PERSONALLY APPEARED _____, WHO ACKNOWLEDGED THIS PLAN TO BE OFFICIAL PLAN OF LOTS AND PROPERTY SHOWN THEREON IN THE TOWNSHIP OF UPPER UWCHLAN, COUNTY OF CHESTER, COMMONWEALTH OF PENNSYLVANIA, AND DEEMED THAT THIS PLAN BE RECORDED ACCORDING TO LAW.

WITNESS MY HAND AND NOTARIAL SEAL THIS _____ DAY OF _____, 20____.

_____
NOTARY PUBLIC
(SEAL)

MY COMMISSION EXPIRES _____

VARIANCE REQUESTS

SECTION 200-43(H): WE ARE SEEKING RELIEF FROM THE REAR YARD SETBACK REQUIREMENT OF 50 FEET. THE PROPOSED BUILDING WILL BE 37 FEET FROM THE REAR PROPERTY LINE.

SECTION 200-60A(5): WE ARE SEEKING RELIEF FROM THE REQUIREMENT THAT NO STORAGE SHALL BE PERMITTED WITHIN THE FRONT YARD OF ANY LOT.

WAIVER REQUESTS

SECTION 162-306.K(2): WE ARE SEEKING RELIEF FROM THE REQUIREMENT THAT NO ACCESSORY BUILDING OR STRUCTURE SHALL BE LOCATED IN THE FRONT YARD, NOR WITHIN 30 FEET OF THE SIDE OR REAR LOT LINES. ALL FOUR PROPOSED DMSAS ARE LOCATED WITHIN THE PROPERTY SETBACKS.

PARKING TABULATION:

OFFICE/BUSINESS SERVICES – 5 SPACES PER 1,000 SF OF GFA
SERVICE STATION/AUTO BODY REPAIR – 2 SPACES PER SERVICE BAY, PLUS 1 SPACE PER EMPLOYEE, PLUS 1 SPACE FOR EACH STORED VEHICLE

3,900 SF OF OFFICE SPACE = 15 SPACES
3 BAYS = 6 SPACES
5 GARAGE EMPLOYEES = 5 SPACES
TOTAL REQUIRED SPACES = 26

HANDICAP SPACES – 2 SPACES FOR TOTAL PARKING 26 TO 50 SPACES.

TOTAL PARKING PROVIDED = 28 SPACES

PERMANENT OUTDOOR STORAGE:

STORAGE < ½ BUILDING COVERAGE = 8,400 SF/2 = 4,200 SF

OUTDOOR STORAGE AREA = 3,570 SF

AND FUEL OR OTHER EXPLOSIVE MATERIALS WILL BE STORED ON SITE

THE INTENDED USE FOR THE SITE WILL BE BOTH OFFICE AND GARAGE/SERVICE STATION FOR P.J. REILLY CONTRACTING CO., INC.

LI LIMITED INDUSTRIAL ZONING DISTRICT

	REQUIRED	EXISTING	PROPOSED
MIN. LOT AREA	130,680 SF	137,167 SF	137,167 SF
MIN. LOT WIDTH	300 FT	308 FT	308 FT
MIN. FRONT YARD	75 FT	98 FT	98 FT
MIN. SIDE YARD	50 FT	205 FT	150 FT
MIN. REAR YARD	50 FT	48 FT	37 FT
MAX. BLDG. COVERAGE	40%	17.8%	8.7%
MAX. LOT COVERAGE	70%	41.7%	33.4%
MAX. BLDG. HEIGHT	35 FT	35 FT	35 FT

A VARIANCE IS BEING REQUESTED FOR THE MINIMUM REAR YARD SETBACK.

EXISTING FEATURES LEGEND

NOTE: ALL ITEMS SHOWN. IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- TRACT (SITE) BOUNDARY
- ADJOINER BOUNDARY
- R.O.W. OF WAY LINE
- ROADWAY CENTERLINE
- WETLANDS BOUNDARY
- FLOODPLAIN BOUNDARY
- TREELINE
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- SPOT ELEVATION
- STORM SEWER
- SANITARY SEWER
- GAS LINE
- WATER LINE
- UNDERGROUND ELECTRIC LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND CABLE LINE
- SOIL TYPE BOUNDARY
- IRON PIN FOUND
- UTILITY POLE
- MANHOLE
- MONUMENT

PROPOSED FEATURES LEGEND

NOTE: ALL ITEMS SHOWN. IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- LOT LINE
- RIGHT-OF-WAY LINE
- BUILDING SETBACK LINE
- ROADWAY CENTERLINE
- TREELINE (TO REMAIN)
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- 222.22 SPOT ELEVATION
- STORM SEWER
- SANITARY SEWER
- SANITARY SEWER LATERAL
- GAS LINE
- WATER LINE (8" PRESSURE CLASS P 350 D.I.C.)
- WATER LINE LATERAL
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND CABLE LINE
- CONCRETE MONUMENT/IRON PIN TO BE SET
- UTILITY POLE
- STORM SEWER MANHOLE
- SANITARY SEWER MANHOLE
- TYPE 'A' INLETS
- TYPE 'C' INLETS

NOTES

1. NO TOPSOIL SHALL BE DISPOSED OF, BY SALE OR OTHERWISE, OFF THE CONSTRUCTION SITE.

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

Coordinate your projects via Coordinate PA at www.paonecall.org

Pennsylvania One Call System Serial Number _____

RECORD PLAN SHEET 1 OF 2

GRAPHIC SCALE

30 0 15 30 60 120

1 INCH = 30 FEET

REV.	DATE	DESCRIPTION	BY
1	03/01/23	REVISIONS PER TWP REVIEW LETTER 12/22/22	MRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
MONICA R. SWEENEY
No. PE-075840
PENNSYLVANIA

PROJECT: PROPOSED HEADQUARTERS BUILDING
UPPER UWCHLAN TOWNSHIP CHESTER COUNTY PENNSYLVANIA

PREPARED FOR: P.J. REILLY CONTRACTING CO., INC.
557 W. UWCHLAN AVENUE, SUITE 220
EXTON, PA 19341

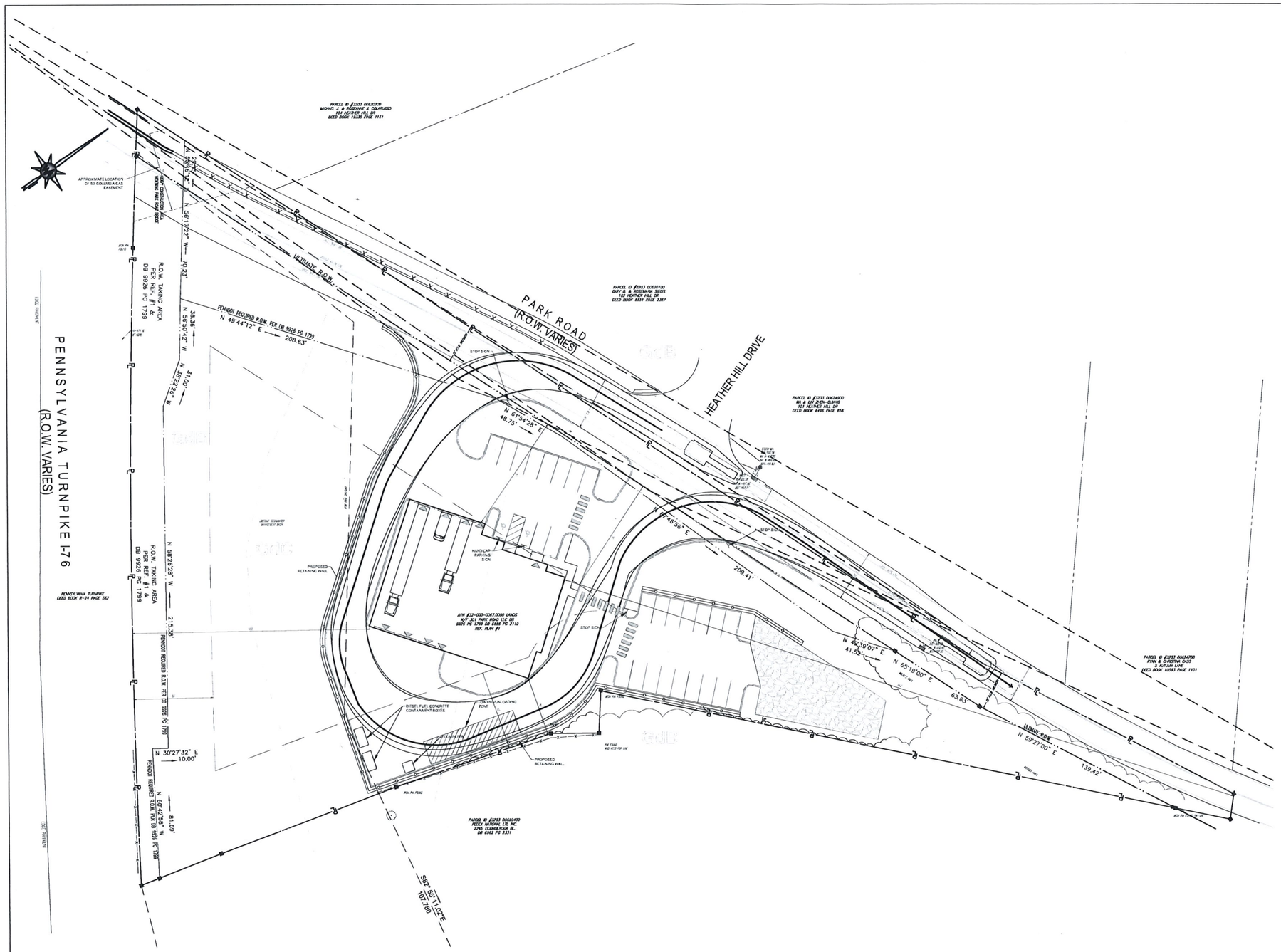
PLAN TITLE: **PRELIMINARY LAND DEVELOPMENT PLAN**

SITE LAYOUT PLAN

PREPARED BY:
WILKINSON & ASSOCIATES, INC.
THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

DESIGNED	PROJECT #
MRS	2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 4 OF 19
SCALE AS SHOWN	

P:\2021\2021CAD\2021231\1-Land-Dev\ 8X11_S-2021-231.DWG 1:1



EXISTING FEATURES LEGEND

NOTE: ALL ITEMS SHOWN IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- TRACT (SITE) BOUNDARY
- ADJOINER BOUNDARY
- RIGHT-OF-WAY LINE
- ROADWAY CENTERLINE
- WETLAND BOUNDARY
- FP — FLOODPLAIN BOUNDARY
- TREELINE
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- SPOT ELEVATION
- STORM SEWER
- S — SANITARY SEWER
- G — GAS LINE
- W — WATER LINE
- UNDERGROUND ELECTRIC LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND TELEPHONE LINE
- C — UNDERGROUND CABLE LINE
- SOIL TYPE BOUNDARY
- IRON PIN FOUND
- UTILITY POLE
- MANHOLE
- MONUMENT

PROPOSED FEATURES LEGEND

NOTE: ALL ITEMS SHOWN IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- LOT LINE
- RIGHT-OF-WAY LINE
- BUILDING SETBACK LINE
- ROADWAY CENTERLINE
- TREELINE (TO REMAIN)
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- 222.22 — SPOT ELEVATION
- STORM SEWER
- S — SANITARY SEWER
- S — SANITARY SEWER LATERAL
- G — GAS LINE
- W — WATER LINE (8" PRESSURE CLASS P 350 DCL)
- W — WATER LINE LATERAL
- E — UNDERGROUND ELECTRIC LINE
- T — UNDERGROUND TELEPHONE LINE
- OH — OVERHEAD UTILITY LINE
- C — UNDERGROUND CABLE LINE
- CONCRETE MONUMENT/IRON PIN TO BE SET
- UTILITY POLE
- STORM SEWER MANHOLE
- SANITARY SEWER MANHOLE
- INLETS
- TYPE 'M'
- TYPE 'C'

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

Coordinate your projects via Coordinate PA at www.paonecall.org.

Pennsylvania One Call System Serial Number

GRAPHIC SCALE

30 0 15 30 60 120

1 INCH = 30 FEET

NO.	DATE	DESCRIPTION	BY
1	03/01/23	REVISIONS PER TWP REVIEW LETTER 12/2/22	MRS

REGISTERED PROFESSIONAL ENGINEER MONICA R. SWEENEY PE-079685 COMMONWEALTH OF PENNSYLVANIA

PROJECT:
PROPOSED HEADQUARTERS BUILDING
UPPER UWCHLAN TOWNSHIP CHESTER COUNTY PENNSYLVANIA

PREPARED FOR:
P.J. REILLY CONTRACTING CO., INC.
557 W. UWCHLAN AVENUE, SUITE 220
EXTON, PA 19341

PLAN TITLE:
PRELIMINARY LAND DEVELOPMENT PLAN

TRUCK TURNING PLAN

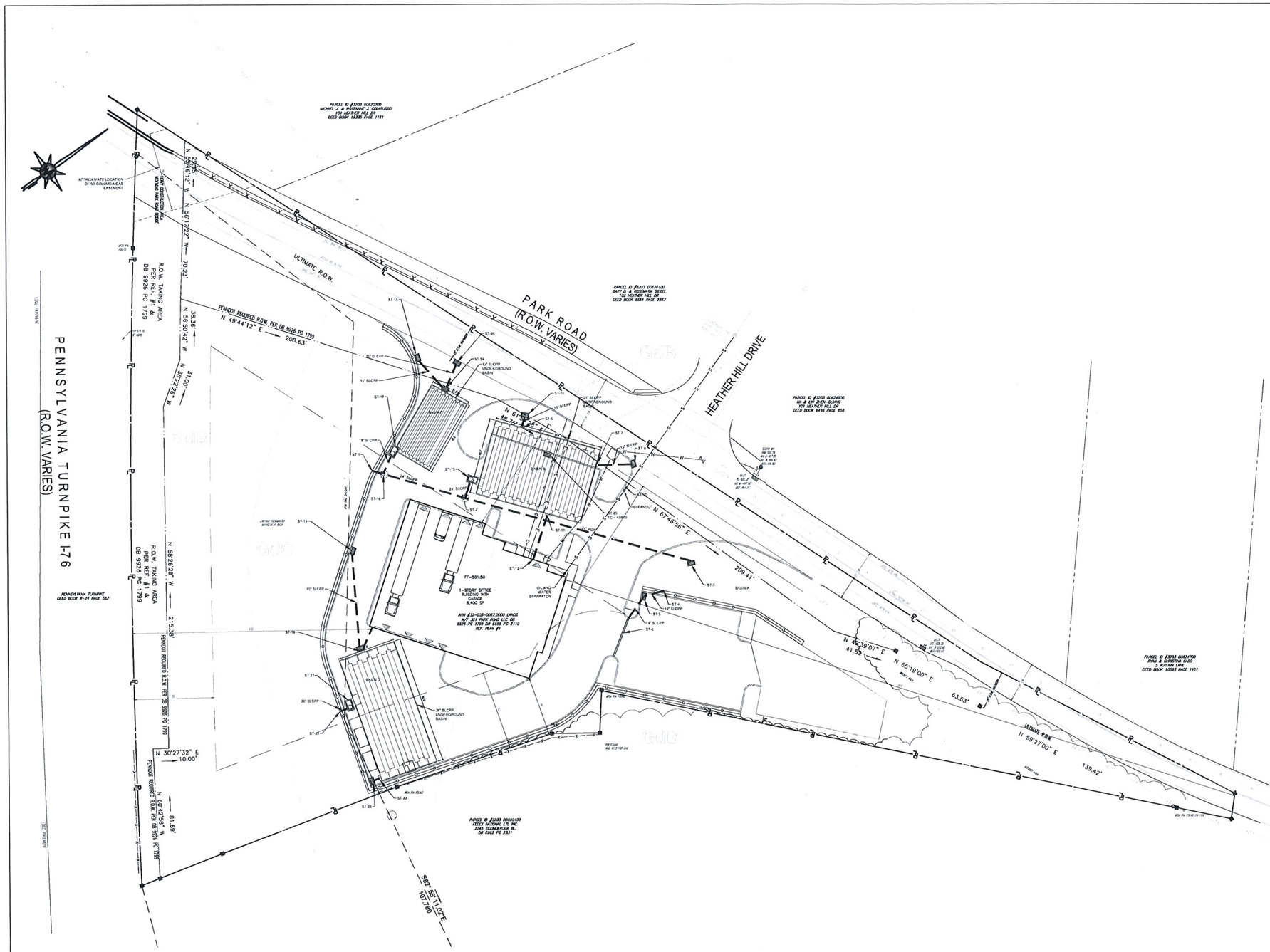
PREPARED BY:

WILKINSON & ASSOCIATES, INC.
THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

DESIGNED	PROJECT #
MRS	2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 5 OF 19
SCALE AS SHOWN	

UTILITY NOTES:

1. ALL SANITARY SEWER IMPROVEMENTS MUST BE PROVIDED AND INSTALLED IN ACCORDANCE WITH THE UPPER UWCHLAN TOWNSHIP MUNICIPAL AUTHORITY TECHNICAL SPECIFICATION FOR THE CONSTRUCTION OF SEWER MAINS AND APPURTENANCES TO BE CONNECTED TO THE PUBLIC SEWER SYSTEM.
2. WASTEWATER DISCHARGE SHALL BE IN COMPLIANCE WITH THE REGULATIONS FOR THE DISCHARGE OF NON-RESIDENTIAL WASTE INTO THE UPPER UWCHLAN TOWNSHIP MUNICIPAL AUTHORITY'S SEWERAGE SYSTEM, RESOLUTION #10-20-04-15, DATED OCTOBER 20, 2004. THE TOWNSHIP PERSONNEL AND/OR AGENTS SHALL BE HAVE ACCESS TO SITE FOR IMPLEMENTATION OF THIS RESOLUTION.
3. THE EXISTING ON-LOT SEPTIC SYSTEM SHALL BE DECOMMISSIONED IN ACCORDANCE WITH THE CHESTER COUNTY HEALTH DEPARTMENT REQUIREMENTS.



EXISTING FEATURES LEGEND

NOTE: ALL ITEMS SHOWN IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- TRACT (SITE) BOUNDARY
- ADJOINER BOUNDARY
- RIGHT-OF-WAY LINE
- ROADWAY CENTERLINE
- WETLAND BOUNDARY
- FLOODPLAIN BOUNDARY
- TREELINE
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- SPOT ELEVATION
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- SANITARY SEWER
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- OVERHEAD UTILITY LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND CABLE LINE
- SOIL TYPE BOUNDARY
- IRON PIN FOUND
- UTILITY POLE
- MANHOLE
- MONUMENT

PROPOSED FEATURES LEGEND

NOTE: ALL ITEMS SHOWN IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- LOT LINE
- RIGHT-OF-WAY LINE
- BUILDING SETBACK LINE
- ROADWAY CENTERLINE
- TREELINE (TO REMAIN)
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- SPOT ELEVATION (222.22)
- STORM SEWER
- SANITARY SEWER
- SANITARY SEWER LATERAL
- GAS LINE
- WATER LINE (8" PRESSURE CLASS P 350 D.I.C.L.)
- WATER LINE LATERAL
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND CABLE LINE
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- SANITARY SEWER MANHOLE
- INLETS (TYPE 'M', TYPE 'C')

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Pennsylvania One Call System Serial Number _____

GRAPHIC SCALE

30 0 15 30 60 120

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REV	DATE	DESCRIPTION	BY
1	03/01/23	REVISIONS PER TWP REVIEW LETTER 12/0/22	MRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MONICA R. SWEENEY ENGINEER PE-076680

PROJECT:
PROPOSED HEADQUARTERS BUILDING
UPPER UWCHLAN TOWNSHIP CHESTER COUNTY PENNSYLVANIA

PREPARED FOR:
P.J. REILLY CONTRACTING CO., INC.
557 W. UWCHLAN AVENUE, SUITE 220
EXTON, PA 19341

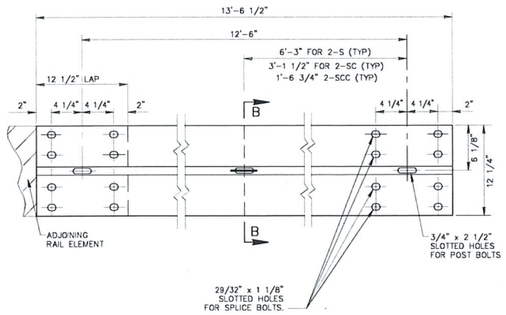
PLAN TITLE:
PRELIMINARY LAND DEVELOPMENT PLAN

UTILITY PLAN

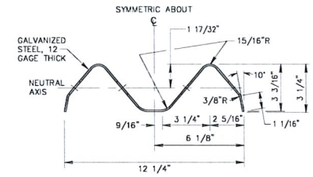
PREPARED BY:

WILKINSON & ASSOCIATES, INC.
THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

DESIGNED	PROJECT #
MRS	2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 6 OF 19
SCALE AS SHOWN	

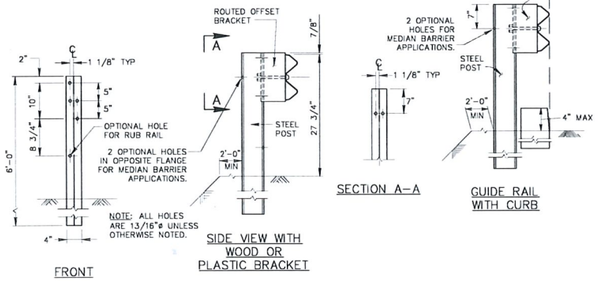


W-BEAM RAIL ELEMENT



RAIL ELEMENT

SECTION B-B

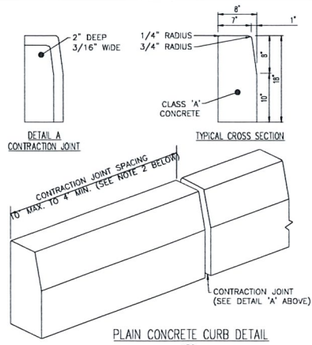


W6x8.5 or W6x9.0 POST DETAILS

GUIDE RAIL DETAIL

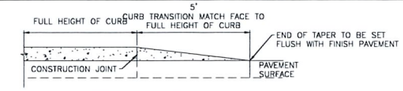
DETAIL NOTES:

1. MATERIALS AND CONSTRUCTION SHALL MEET THE REQUIREMENTS OF PUBLICATION 408, SECTION 630 FOR PLAIN CEMENT CONCRETE CURB. SECTION 640 FOR PLAIN CEMENT CONCRETE GUTTER AND SECTION 641 FOR PLAIN CEMENT CONCRETE CURB GUTTER.
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
3. PLACE 3/4 INCH REMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR CONFORM TO CROSS SECTIONAL AREA OF CURB.



PLAIN CONCRETE CURB DETAIL

N.T.S.

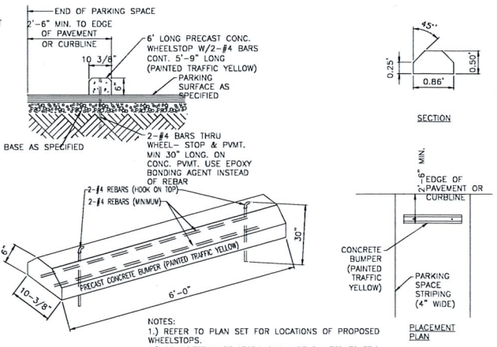


TAPERED CURB DETAIL

N.T.S.

DETECTABLE WARNING SURFACE (DWS) INSTALLATION INSTRUCTIONS

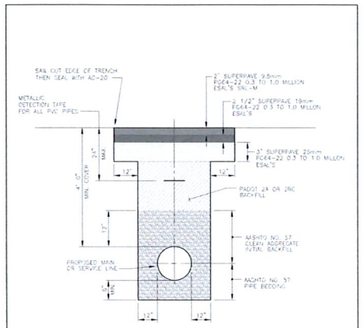
1. SAW CUT EXISTING CURB RAMP SURFACE WHERE THE DWS WILL BE PLACED.
2. REMOVE EXISTING CONCRETE FROM THIS AREA.
3. REPLACE AND COMPACT ANY DISTURBED AGGREGATE SUBBASE.
4. PLACE NEW CEMENT CONCRETE AND LEVEL TO A 4 INCH DEPTH SO THAT THE TOP OF THE CONCRETE IS LOWER THAN THE ADJOINING SIDEWALK, EQUIVALENT TO THE EMBEDDING DEPTH OF THE DWS MATERIAL.
5. LAY OUT AND PROPERLY FIT EACH UNIT PRIOR TO SETTING IN WET CONCRETE.
6. CUT UNITS AS NECESSARY ALONG PERIMETER OF DETECTABLE WARNING SURFACE.
7. PLACE UNITS ACROSS THE ENTIRE WIDTH OF THE CURB RAMP SURFACE AND/OR WHERE THE CURB IS FLUSH.
8. PRESS UNITS INTO FULL CONTACT WITH THE FRESH CONCRETE.
9. ADJUST HEIGHT OF EACH UNIT EDGE TO BE LEVEL WITH ADJACENT RAMP SURFACES.
10. ONLY TRUNCATED DOMES SHOULD BE ABOVE THE ADJACENT FINISHED CONCRETE.
11. FILL ANY SAW CUT GAPS WITH APPROVED JOINT SEALANT MATERIAL.



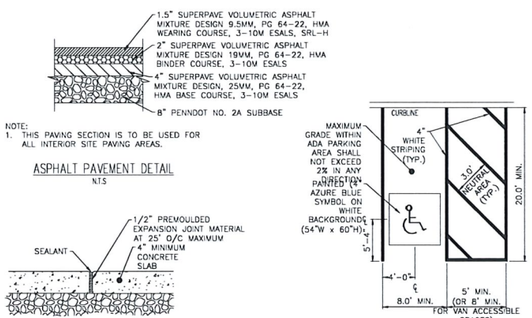
NOTES:
1.) REFER TO PLAN SET FOR LOCATIONS OF PROPOSED WHEELSTOPS.
2.) CONCRETE WHEELSTOPS SHALL BE PAINTED TRAFFIC YELLOW SO AS TO CONTRAST WITH PAVEMENT SURFACE. WHEELSTOPS MUST BE PERPETUALLY MAINTAINED AND REPAINTED BY PROPERTY OWNER OR PARTY RESPONSIBLE FOR SITE MAINTANCE.

CONCRETE WHEEL STOPS

NTS



REVISION	DATE		
4	2/21	Upper Uwchlan Township Municipal Authority STANDARD DETAIL - SEWER SYSTEM	ARRO Suite 200, 321 N. Furnace St. Birdsboro, PA 19508 Tel: 610.374.5202 Fax: 610.374.5267
3	1/13	TRENCH RESTORATION TOWNSHIP ROADS	DATE: FEBRUARY 2021
2	4/05		DETAIL: 70005027
1	11/04		



NOTE:
1. THIS PAVING SECTION IS TO BE USED FOR ALL INTERIOR SITE PAVING AREAS.

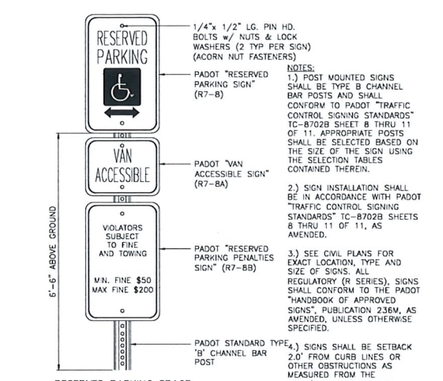
ASPHALT PAVEMENT DETAIL

N.T.S.

NOTES:
1.) CURB RAMPS MAY NOT EXTEND INTO ANY PORTION OF THE PARKING SPACE OR ASSOCIATED STRIPED ISLAND.
2.) CURB RAMPS, PAVEMENT MARKINGS, & APPLICABLE SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST A.D.A. ACCESSIBILITY GUIDELINES.

A.D.A. ACCESSIBLE PARKING SPACE STRIPING

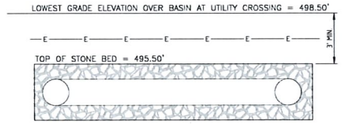
NTS



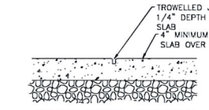
NOTES:
1.) POST MOUNTED SIGNS SHALL BE TYPE B CHANNEL BAR POSTS AND SHALL CONFORM TO PADOT "TRAFFIC CONTROL SIGNING STANDARDS" TC-8702B SHEET 8 THRU 11 OF 11. APPROPRIATE POSTS SHALL BE SELECTED BASED ON THE SIZE OF THE SIGN USING THE SELECTION TABLES CONTAINED THEREIN.
2.) SIGN INSTALLATION SHALL BE IN ACCORDANCE WITH PADOT "TRAFFIC CONTROL SIGNING STANDARDS" TC-8702B SHEETS 8 THRU 11 OF 11, AS AMENDED.
3.) SEE CIVIL PLANS FOR EXACT LOCATION, TYPE AND SIZE OF SIGNS. ALL REGULATORY (R SERIES), SIGNS SHALL CONFORM TO THE PADOT "HANDBOOK OF APPROVED SIGNS", PUBLICATION 236M, AS AMENDED, UNLESS OTHERWISE SPECIFIED.
4.) SIGNS SHALL BE SETBACK 2.0' FROM CURB LINES OR OTHER OBSTRUCTIONS AS MEASURED FROM THE FACE/EDGE OF THE SIGN.
5.) RESERVED PARKING SPACE SIGNS SHALL CONFORM TO DEPARTMENT OF JUSTICE "ADA STANDARDS FOR ACCESSIBLE DESIGN" AS AMENDED.
6.) ALL SIGNS SHALL BE INSTALLED WITH ACORN NUT FASTENERS.

RESERVED PARKING SPACE w/ PENALTIES & VAN ACCESSIBLE SIGNS

NTS

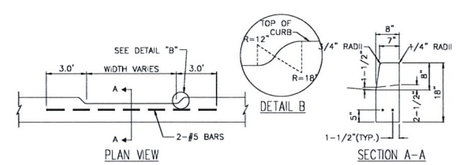


UTILITY CROSSING AT BASIN B



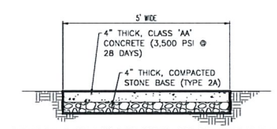
TYPICAL CONTROL JOINT DETAIL

N.T.S.



DEPRESSED CURB DETAIL

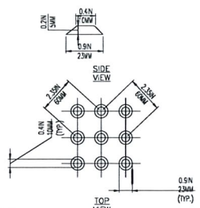
N.T.S.



1. EXPANSION JOINTS 1/2" WIDE PREMOULDED BIT. MATERIAL SHALL BE INSTALLED AT 30' INTERVALS. CONTRACTION JOINTS TO BE SPACED AT EQUAL INTERVALS, 5' MAXIMUM LENGTH.
2. WHERE SIDEWALK ABUTS CURB, BUILDINGS, WALLS OR OTHER PERMANENT STRUCTURES, A MOLDED EXPANSION JOINT 1" IN THICKNESS SHALL BE PLACED BETWEEN THE SIDEWALK AND THE OBJECT FOR THE LENGTH OF THE STRUCTURE.

CONCRETE SIDEWALK DETAIL

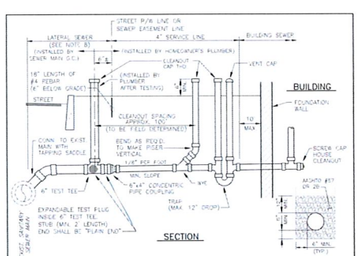
N.T.S.



NOTES:
1.) DETECTABLE WARNINGS SHALL BE A PRE-MANUFACTURED ARMOUR-TILE TACTILE SYSTEM OR APPROVED EQUIVALENT.
2.) CONTRACTOR TO COORDINATE SPECIFIC SYSTEM AND MATERIALS TO BE UTILIZED WITH THE ENGINEER TO ENSURE LOCAL, STATE AND A.D.A. COMPLIANCE PRIOR TO CONSTRUCTION.

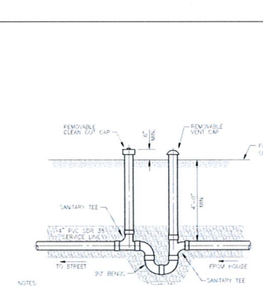
TRUNCATED DOME PATTERN FOR A.D.A. DETECTABLE WARNING SURFACES

NTS



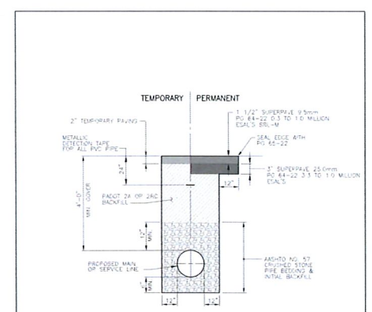
NOTES:
1. PROVIDE 6" OF AASHTO NO. 57 STONE BELOW PIPE AND 12" ABOVE PIPE (TYPICAL ENTIRE LENGTH OF LATERAL AND SERVICE LINE).
2. MINIMUM SLOPE = 1/8" PER FT.
3. MINIMUM DEPTH OF COVER = 4 FT.
4. PIPE MATERIALS:
LATERAL SEWER - PVC SDR 35 OR PVC CLASS 52 WHEN INSTALLED IN FILL MATERIAL.
SERVICE LINE - PVC SDR 35 OR SCH. 40
5. TO CONDUCT AIR TESTING OF SERVICE LINE, INSTALL EXPANDABLE PLUGS AT LOCATIONS SHOWN.
6. NO SEWER SERVICE LINE VENT CAPS SHALL BE INSTALLED WITHIN A 100-YR. FLOOD PLAIN OR WITHIN FLOOD PRONE AREAS.
7. NO VENT CAPS OR CLEANOUTS SHALL BE INSTALLED IN DRIVEWAYS OR OTHER PAVED AREAS, UNLESS SPECIFICALLY APPROVED BY LUTMA. VENTS AND CLEANOUTS LOCATED IN PAVED AREAS MUST BE PROVIDED WITH A FRAME AND COVER IN ACCORDANCE WITH VENT & CLEANOUTS IN PAVED AREAS DETAIL.
8. THE LATERAL SEWER SHALL BE INSTALLED TO THE EDGE OF THE SEWER EASEMENT FOR SEWERS LOCATED IN AN EASEMENT OR TO THE STREET RIGHT-OF-WAY AS A MINIMUM, OR TO SUCH POINT, AS REQUIRED, TO CLEAR STREET SIDEWALKS AND UNDERGROUND UTILITIES.
9. CLEANOUTS AND VENTS IN LAWN AREAS MUST BE 6" MINIMUM ABOVE GRADE.

REVISION	DATE		
6	2/21	Upper Uwchlan Township Municipal Authority STANDARD DETAIL - SEWER SYSTEM	ARRO Suite 200, 321 N. Furnace St. Birdsboro, PA 19508 Tel: 610.374.5202 Fax: 610.374.5267
5	9/15	LATERAL & SERVICE LINE	DATE: FEBRUARY 2021
4	10/14		DETAIL: 70005017
3	1/13		
2	4/05		
1	11/04		

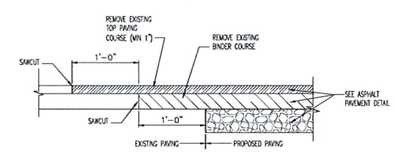


NOTES:
1. FOR CLEANOUTS LOCATED IN PAVED AREAS TO REMAIN ABOVE GRADE AT ALL TIMES DURING & AFTER INSTALLATION.
2. CLEANOUTS LOCATED IN PAVED AREAS MUST BE PROVIDED WITH FRAME AND COVER (SIMILAR TO CAPS SHOWN ON DETAIL P-005013)

REVISION	DATE		
4	2/21	Upper Uwchlan Township Municipal Authority STANDARD DETAIL - SEWER SYSTEM	ARRO Suite 200, 321 N. Furnace St. Birdsboro, PA 19508 Tel: 610.374.5202 Fax: 610.374.5267
3	1/13	SERVICE LINE CLEANOUT & VENT	DATE: FEBRUARY 2021
2	6/05		DETAIL: 70005018
1	11/04		

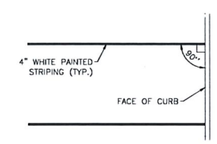


REVISION	DATE		
4	2/21	Upper Uwchlan Township Municipal Authority STANDARD DETAIL - SEWER SYSTEM	ARRO Suite 200, 321 N. Furnace St. Birdsboro, PA 19508 Tel: 610.374.5202 Fax: 610.374.5267
3	1/13	TRENCH RESTORATION PARKING AREAS & DRIVEWAYS	DATE: FEBRUARY 2021
2	6/05		DETAIL: 70005028
1	11/04		



PAVEMENT TIE-IN DETAIL

N.T.S



STRIPING DETAIL

N.T.S.

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REV	DATE	DESCRIPTION	BY
1	03/01/23	REVISIONS PER TWP REVIEW LETTER 12/2/22	MRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER MONICA R. SWEENEY No. PE-079680

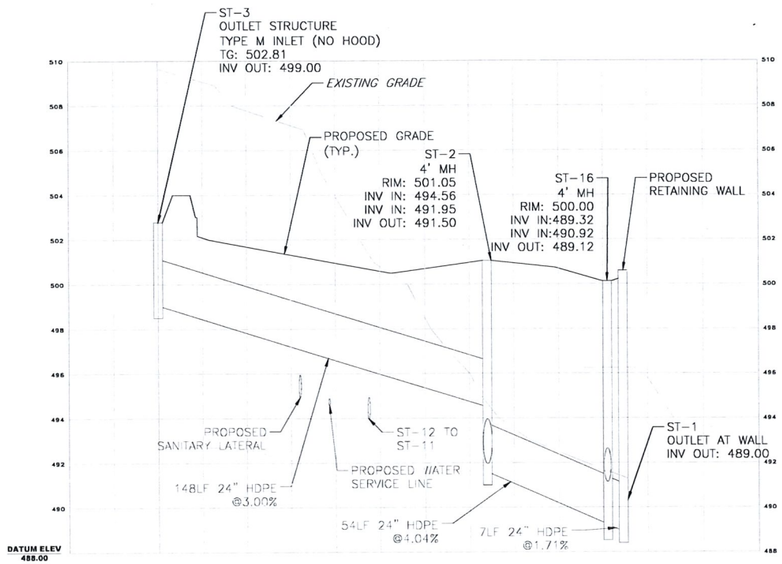
PROJECT:
PROPOSED HEADQUARTERS BUILDING
UPPER UWCHLAN TOWNSHIP CHESTER COUNTY PENNSYLVANIA

PREPARED FOR:
P.J. REILLY CONTRACTING CO., INC.
557 W. UWCHLAN AVENUE, SUITE 220
EXTON, PA 19341

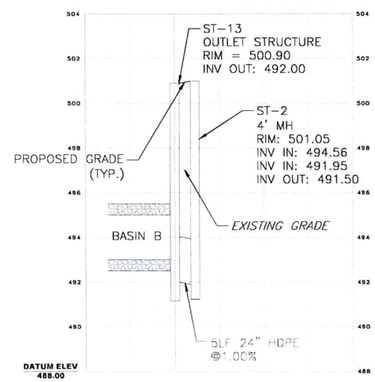
PLAN TITLE:
PRELIMINARY LAND DEVELOPMENT PLAN
DETAILS

PREPARED BY:
WILKINSON & ASSOCIATES, INC.
THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

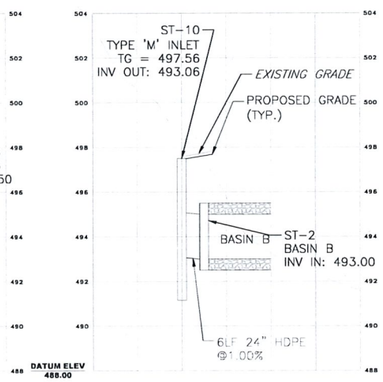
DESIGNED MRS	PROJECT # 2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 7 OF 19
SCALE AS SHOWN	



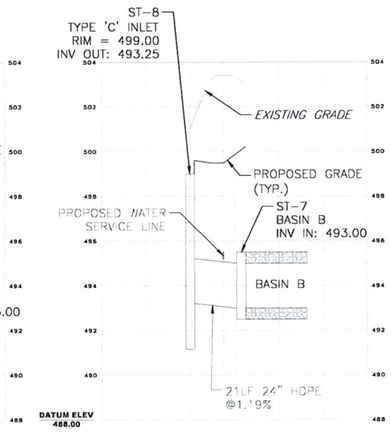
DRAINAGE PROFILE
ST-3 TO ST-1



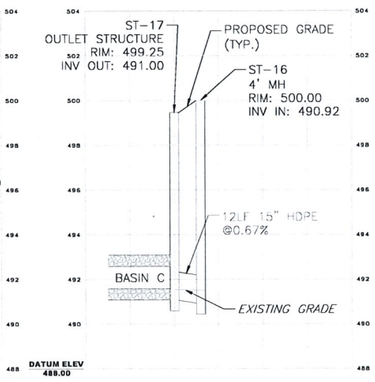
DRAINAGE PROFILE
ST-13 TO ST-2



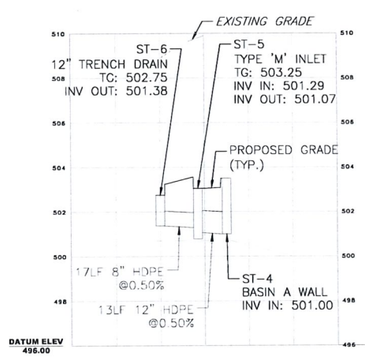
DRAINAGE PROFILE
ST-10 TO ST-9



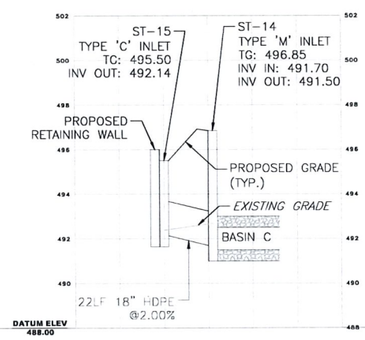
DRAINAGE PROFILE
ST-8 TO ST-7



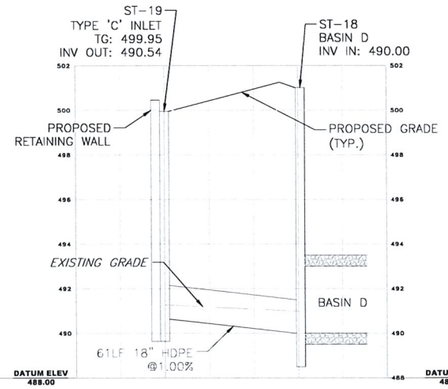
DRAINAGE PROFILE
ST-17 TO ST-16



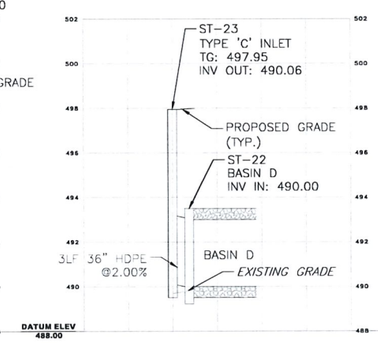
DRAINAGE PROFILE
ST-6 TO ST-4



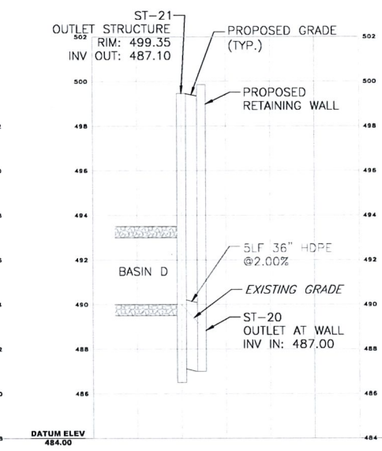
DRAINAGE PROFILE
ST-15 TO ST-14



DRAINAGE PROFILE
ST-19 TO ST-18



DRAINAGE PROFILE
ST-23 TO ST-22



DRAINAGE PROFILE
ST-21 TO ST-20

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

Coordinate your projects via Coordinate PA at www.paonecall.org.

Pennsylvania One Call System Serial Number

GRAPHIC SCALE

30 0 15 30 60 120

1 INCH = 30 FEET

REV	DATE	DESCRIPTION	BY
1	03/01/23	REVISIONS PER TWP REVIEW LETTER 12/2/22	MRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER MONICA R. SWEENEY PE-079680

PROJECT:
PROPOSED HEADQUARTERS BUILDING
UPPER UWCHLAN TOWNSHIP CHESTER COUNTY PENNSYLVANIA

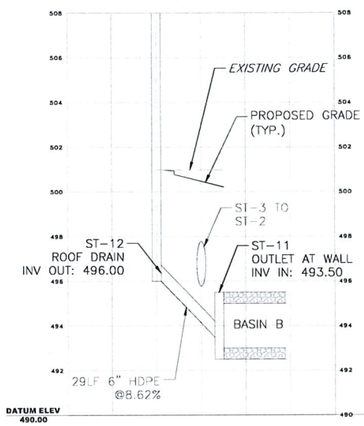
PREPARED FOR:
P.J. REILLY CONTRACTING CO., INC.
557 W. UWCHLAN AVENUE, SUITE 220
EXTON, PA 19341

PLAN TITLE:
PRELIMINARY LAND DEVELOPMENT PLAN

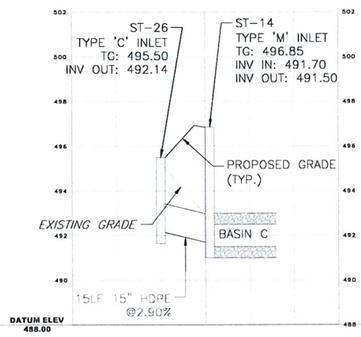
PROFILES

PREPARED BY:
WILKINSON & ASSOCIATES, INC.
THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

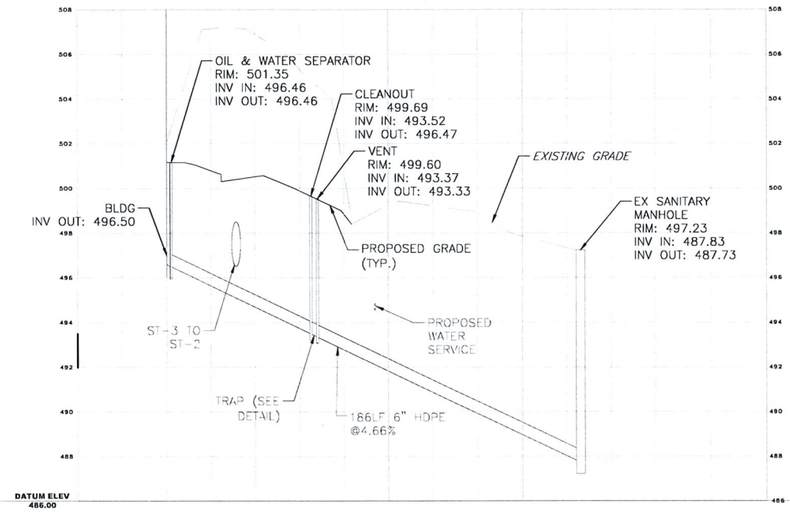
DESIGNED MRS	PROJECT # 2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 14 OF 19
SCALE AS SHOWN	



DRAINAGE PROFILE
ST-12 TO ST-11



DRAINAGE PROFILE
ST-26 TO ST-14



SANITARY LATERAL PROFILE

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

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Pennsylvania One Call System Serial Number

GRAPHIC SCALE

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REV.	DATE	DESCRIPTION	BY
1	03/01/23	REVISIONS PER TWP REVIEW LETTER 12/2/22	MRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER MONICA R. SWEENEY PE-079680

PROJECT:
PROPOSED HEADQUARTERS BUILDING
UPPER UWCHLAN TOWNSHIP CHESTER COUNTY PENNSYLVANIA

PREPARED FOR:
P.J. REILLY CONTRACTING CO., INC.
557 W. UWCHLAN AVENUE, SUITE 220
EXTON, PA 19341

PLAN TITLE:
PRELIMINARY LAND DEVELOPMENT PLAN

PROFILES

PREPARED BY:
WILKINSON & ASSOCIATES, INC.
THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

DESIGNED MRS	PROJECT # 2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 15 OF 19
SCALE AS SHOWN	

CHAPER 93 STREAM CLASSIFICATION

THE SITE DRAINS TO AN UNNAMED TRIBUTARY OF MARSH CREEK. THE STREAM CLASSIFICATION FOR MARSH CREEK IS HQ-TSF-MF WHICH IS FOR HIGH QUALITY, TROUT STOCKING, AND MIGRATORY FISHES.

NOTES:

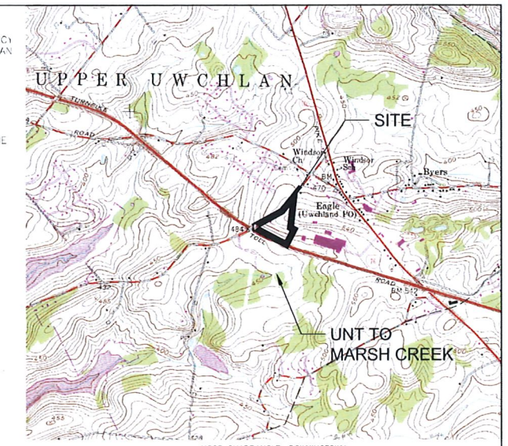
1. THE SUBJECT PROPERTY IS LOCATED WITHIN FLOODPLAIN ZONE X AS ILLUSTRATED ON COMMUNITY PANEL 420192-42017C0436K, WITH AN EFFECTIVE DATE OF 03-21-2017, AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. NO COMPUTATIONAL FLOODPLAIN STUDY HAS BEEN PERFORMED AS A PART OF THIS PLAN PREPARATION.
2. ALLUVIAL SOILS DO NOT EXIST ON THE SITE.
3. THERE ARE NO EXISTING WATER BODIES OR WATERCOURSES ON SITE. THE SITE CONTAINS AN EXISTING MANMADE STORMWATER MANAGEMENT BASIN THAT EXTENDS ONTO THE ADJACENT PROPERTY.
4. A WETLAND EVALUATION WAS PERFORMED ON MAY 19, 2022 BY VALLEY ENVIRONMENTAL SERVICES, INC. WHERE IT WAS DETERMINED THAT NO PORTION OF THE PROPERTY WOULD BE CLASSIFIED AS A REGULATED WETLAND OR WATERCOURSE BY THE U.S. ARMY CORPS OF ENGINEERS OR PADEP.
5. HIGH GROUNDWATER WAS NOT ENCOUNTERED IN ANY OF THE SOIL TESTING THAT WAS PERFORMED FOR THE STORMWATER TESTING.
6. THE BEDROCK ON SITE IS GRAPHIC FELSIC GNEISS.

SOILS

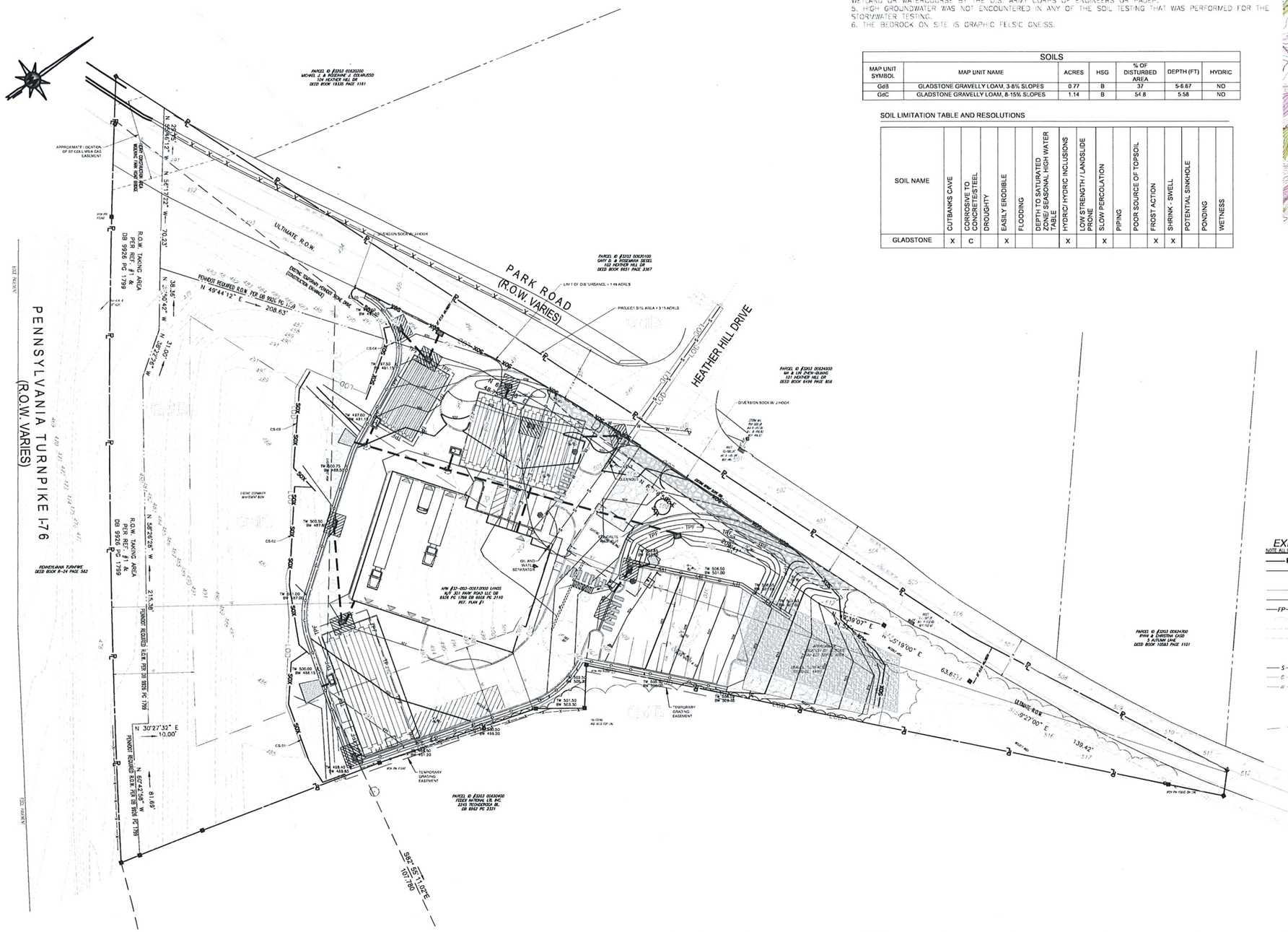
MAP UNIT SYMBOL	MAP UNIT NAME	ACRES	HSG	% OF DISTURBED AREA	DEPTH (FT)	HYDRIC
GdB	GLADSTONE GRAVELLY LOAM, 3-8% SLOPES	0.77	B	37	5-6.67	NO
GdC	GLADSTONE GRAVELLY LOAM, 8-15% SLOPES	1.14	B	54.8	5.58	NO

SOIL LIMITATION TABLE AND RESOLUTIONS

SOIL NAME	CUTBANKS CAVE	CORROSIVE TO CONCRETE/STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE	HYDRIC/ HYDRIC INCLUSIONS	LOW STRENGTH / LANDSLIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK - SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
GLADSTONE	X	C		X			X		X			X	X			



USGS QUADRANGLE: DOWNINGTOWN
SCALE = 1" = 2000'



EXISTING FEATURES LEGEND

NOTE: ALL ITEMS SHOWN IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- TRACT (SITE) BOUNDARY
- ADJOINER BOUNDARY
- RIGHT-OF-WAY LINE
- ROADWAY CENTERLINE
- WETLAND BOUNDARY
- FLOODPLAIN BOUNDARY
- TREELINE
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- SPOT ELEVATION
- STORM SEWER
- SANITARY SEWER
- GAS LINE
- WATER LINE
- UNDERGROUND ELECTRIC LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND TELEPHONE LINE
- SOIL TYPE BOUNDARY
- IRON PIN FOUND
- UTILITY POLE
- MANHOLE
- MONUMENT

PROPOSED FEATURES LEGEND

NOTE: ALL ITEMS SHOWN IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- LOT LINE
- RIGHT-OF-WAY LINE
- BUILDING SETBACK LINE
- ROADWAY CENTERLINE
- TREELINE (TO REMAIN)
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- SPOT ELEVATION
- STORM SEWER
- SANITARY SEWER
- SANITARY SEWER LATERAL
- GAS LINE
- WATER LINE (8" PRESSURE CLASS P 350 D.I.C.L.)
- WATER LINE LATERAL
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- OVERHEAD UTILITY LINE
- CONCRETE MONUMENT/IRON PIN TO BE SET
- UTILITY POLE
- STORM SEWER MANHOLE
- SANITARY SEWER MANHOLE
- INLETS (TYPE M, TYPE C)

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Pennsylvania One Call System Serial Number

GRAPHIC SCALE

30 0 15 30 60 120

1 INCH = 30 FEET

REV	DATE	DESCRIPTION	BY
1	03/01/23	REVISIONS PER TWP REVIEW LETTER 12/2/22	MRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MONICA R. SWEENEY PE-079680

PROJECT: PROPOSED HEADQUARTERS BUILDING

UPPER UWCHLAN TOWNSHIP CHESTER COUNTY PENNSYLVANIA

PREPARED FOR: P.J. REILLY CONTRACTING CO., INC. 557 W. UWCHLAN AVENUE, SUITE 220 EXTON, PA 19341

PLAN TITLE: **PRELIMINARY LAND DEVELOPMENT PLAN**

CONSERVATION PLAN

PREPARED BY:

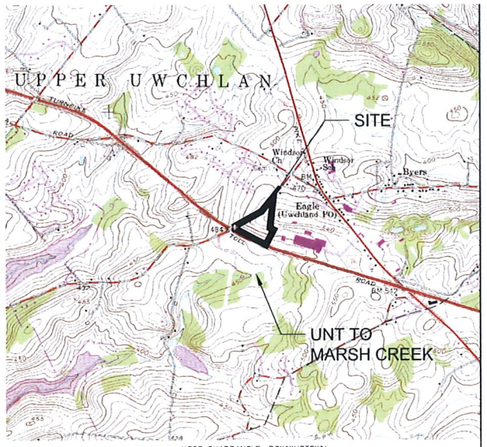
WILKINSON & ASSOCIATES, INC.

THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

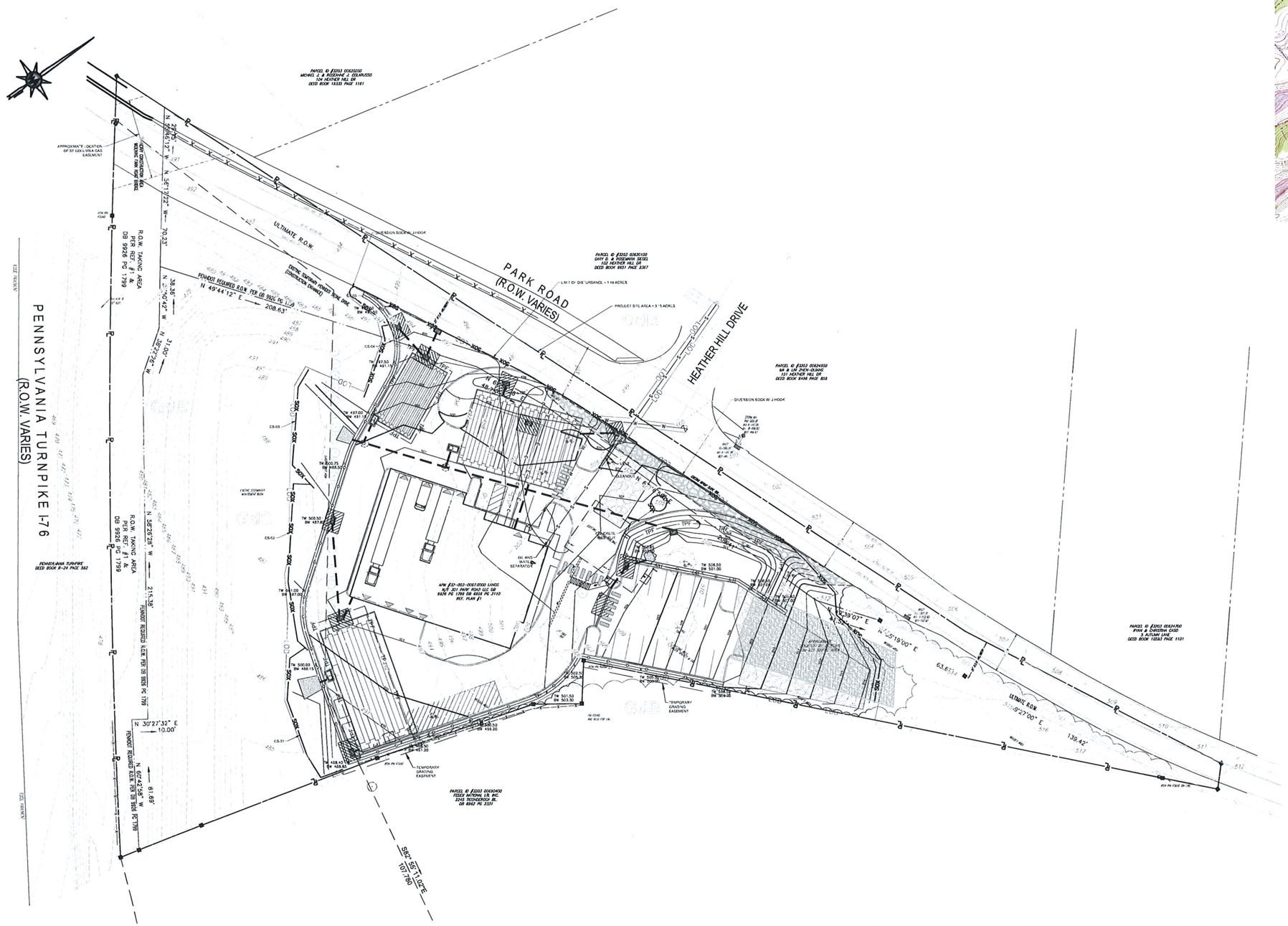
DESIGNED MRS	PROJECT # 2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 16 OF 19
SCALE AS SHOWN	

CHAPER 93 STREAM CLASSIFICATION

THE SITE DRAINS TO AN UNNAMED TRIBUTARY OF MARSH CREEK. THE STREAM CLASSIFICATION FOR MARSH CREEK IS HQ-TSF-MF WHICH IS FOR HIGH QUALITY, TROUT STOCKING, AND MIGRATORY FISHES



USGS QUADRANGLE: DOWNINGTOWN
SCALE = 1" = 2000'



EXISTING FEATURES LEGEND

NOTE: ALL ITEMS SHOWN IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- TRACT (SITE) BOUNDARY
- ADJOINER BOUNDARY
- RIGHT-OF-WAY LINE
- ROADWAY CENTERLINE
- WETLAND BOUNDARY
- FLOODPLAIN BOUNDARY
- TREELINE
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- SPOT ELEVATION
- STORM SEWER
- SANITARY SEWER
- GAS LINE
- WATER LINE
- UNDERGROUND ELECTRIC LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND CABLE LINE
- SOIL TYPE BOUNDARY
- IRON PIN FOUND
- UTILITY POLE
- MANHOLE
- MONUMENT

PROPOSED FEATURES LEGEND

NOTE: ALL ITEMS SHOWN IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- LOT LINE
- RIGHT-OF-WAY LINE
- BUILDING SETBACK LINE
- ROADWAY CENTERLINE
- TREELINE (TO REMAIN)
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- 222.22 SPOT ELEVATION
- STORM SEWER
- SANITARY SEWER
- SANITARY SEWER LATERAL
- GAS LINE
- WATER LINE (8" PRESSURE CLASS P 350 DICL)
- WATER LINE LATERAL
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND CABLE LINE
- CONCRETE MONUMENT/IRON PIN TO BE SET
- UTILITY POLE
- STORM SEWER MANHOLE
- SANITARY SEWER MANHOLE
- TYPE 'M' INLETS
- TYPE 'C' INLETS

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Pennsylvania One Call System Serial Number _____

GRAPHIC SCALE

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1 INCH = 30 FEET

REV	DATE	DESCRIPTION	BY
1	03/01/23	REVISIONS PER TWP REVIEW LETTER 12/2/22	MRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER MONICA R. SWEENEY PE-079680

PROJECT:
PROPOSED HEADQUARTERS BUILDING
UPPER UWCHLAN TOWNSHIP CHESTER COUNTY PENNSYLVANIA

PREPARED FOR:
P.J. REILLY CONTRACTING CO., INC.
557 W. UWCHLAN AVENUE, SUITE 220
EXTON, PA 19341

PLAN TITLE:
PRELIMINARY LAND DEVELOPMENT PLAN

EROSION & SEDIMENT CONTROL PLAN

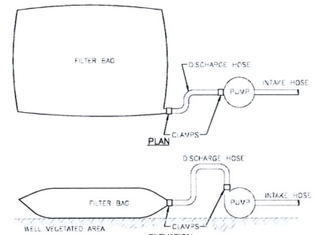
PREPARED BY:
WILKINSON & ASSOCIATES, INC.
THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

DESIGNED	PROJECT #
MRS	2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 17 OF 19
SCALE AS SHOWN	

NOTES:
1. POST SELECTION SHOULD BE BASED ON EXPECTED STRENGTH NEEDS AND THE LENGTH OF THE FENCE. WILL BE PLACED. FLEXIBLE FIBERGLASS ROD POSTS ARE RECOMMENDED FOR PARKS, ATHLETIC EVENTS AND CROWD CONTROL INSTALLATIONS. METAL T POSTS OR TREATED WOOD POSTS ARE TYPICALLY USED FOR CONSTRUCTION.
2. POSTS SHOULD BE DRIVEN INTO THE GROUND TO A DEPTH OF 1/3 OF THE HEIGHT OF THE POST. FOR EXAMPLE A 6' POST POST SHOULD BE AT LEAST 2 FEET IN THE GROUND.
3. SPACE POSTS EVERY 6 TO 8 FEET.
4. SECURE FENCING TO POSTS WITH NYLON CABLE TIES. AQUA STRIPS MAY ALSO BE USED TO PROVIDE ADDITIONAL SUPPORT AND PROTECTION BETWEEN TIES AND POSTS.

VISI PERIMETER FENCE DETAIL (WOODLAND PROTECTION)

NO SCALE



NOTES:
1. FILTER BAG CONSISTS OF NON-WOVEN GEOTEXTILE WHICH RETAINS ALL SEDIMENT PARTICLES LARGER THAN 150 MICRONS.
2. PLACE FILTER BAGS ON STABLE OR WELL VEGETATED AREAS WHICH ARE FLATTER THAN 5% AND WHICH ARE NOT ERODE WHEN SUBJECTED TO BAG DISCHARGES.
3. DUMP PUMP DISCHARGE HOSES SECURELY INTO FILTER BAGS.
4. USE PUMPING RATE TO 1/2 THE MANUFACTURER'S MAXIMUM PUMPING RATE.
5. WHEN SEDIMENT FILL 1/2 THE VOLUME OF A FILTER BAG, IMMEDIATELY REMOVE THAT BAG FROM SERVICE, PROPERLY DISPOSE OF SPENT BAG WITH OTHER SEDIMENTS.

SEDIMENT FILTER BAG FOR PUMPED WATER

NO SCALE

TABLE 4.1
COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS

MATERIAL TYPE	3 MIL HDPE	5 MIL HDPE	5 MIL HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMFPP)
MATERIAL CHARACTERISTICS	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE	BIO-DEGRADABLE	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE
SOCK DIAMETERS	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	3/8"
TENSILE STRENGTH		26 PSI	26 PSI	44 PSI	202 PSI
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS
TWO-PLY SYSTEMS					
INNER CONTAINMENT NETTING			HDPE BIAXIAL NET		
			CONTINUOUSLY WOUND		
			FUSION-WELDED JUNCTURES		
			3/4" X 3/4" MAX APERTURE SIZE		
OUTER FILTRATION MESH			COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER AND NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH)		
			3/16" MAX. APERTURE SIZE		
SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS.					

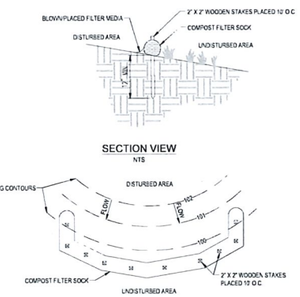
COMPOST SHOULD BE A WELL DECOMPOSED, WEED-FREE ORGANIC MATTER DERIVED FROM AGRICULTURE, FOOD, STUMP GRINDINGS, AND YARD OR WOOD/BARK ORGANIC MATTER SOURCES. THE COMPOST SHOULD BE AEROBICALLY COMPOSTED. THE COMPOST SHOULD POSSESS NO OBJECTIONABLE ODORS AND SHOULD BE REASONABLY FREE (<1% BY DRY WEIGHT) OF MAN-MADE FOREIGN MATTER. THE COMPOST PRODUCT SHOULD NOT RESEMBLE THE RAW MATERIAL FROM WHICH IT WAS DERIVED. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS ARE NOT ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.
THE PHYSICAL PARAMETERS OF THE COMPOST SHOULD COMPLY WITH THE STANDARDS IN TABLE 4.2. THE STANDARDS CONTAINED IN THE PENNDOT PUBLICATION 408 ARE AN ACCEPTABLE ALTERNATIVE.

TABLE 4.2
COMPOST STANDARDS

ORGANIC MATTER	80% – 100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5–8.0
MOISTURE CONTENT	35% – 55%
PARTICLE SIZE	98% PASS THROUGH 1" SCREEN
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM

FILTREXX® RUNOFF DIVERSION SOXX™ SECTIONS

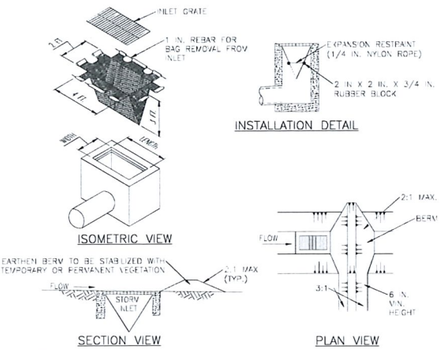
NO SCALE



NOTES
1. SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2.
2. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT (FIGURE 4.1). MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN ON FIGURE 4.2. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER
3. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS
4. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN
5. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION
6. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS. PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS
7. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

STANDARD CONSTRUCTION DETAIL #4-1
COMPOST FILTER SOCK

NO SCALE



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE. BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

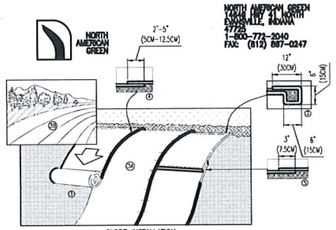
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4-16
FILTER BAG INLET PROTECTION - TYPE M INLET

NOT TO SCALE

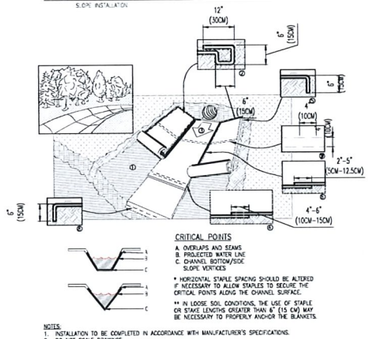


1. FASTEN SOD, WITH BLOCK, NO BLANKETS, NO LONG AND MEDIUM WITH DROP OF LIME, FERTILIZER, AND SEED NOTE: WHEN USING GULF-E SEED DO NOT SEED PREPARED AREA. DO A DO SEEDED NOT BE. BLOCKED WITH PAPER FOR SOD.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (150M) DEEP X 6" (150M) WIDE TRENCH WITH APPROXIMATELY 12" (300M) OF BLANKET ON GROUND BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A FOLD OF STAPLES (NO MORE APPROXIMATELY 12" (300M) APART IN THE BOTTOM OF THE TRENCH. WITH STAPLES. WHEN SEED IS COMPLETED SOD, AND THEN REMAINING 12" (300M) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. FOLDED BLANKET OVER COMPACTED SOIL WITH A FOLD OF STAPLES SPACED APPROXIMATELY 12" (300M) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (N) DOWN OR (S) DOWN SLOPE ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROXIMATELY 2" ACROSS THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES STAPLES IN APPROXIMATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE WITH LOOSE BUT SNUG FIT. STAPLES/STAPLE PATTERN GUIDE SHALL BE PLACED TWO-THIRDS OF THE DISTANCE INTO CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" TO 5" (50M - 125M) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE UNDERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) WITH THE EDGE OF THE SEAM STAKE ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED TWO (2) FEET (0.6 METER) WITH APPROXIMATELY 3" (7.5CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (300M) APART ACROSS ENTIRE BLANKET WIDTH.

NOTES:
1. BLANKETS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. IN LOOSE SOIL CONDITIONS THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.
4. CONTRACTORS NOTE: FOR PRODUCT AND PURCHASING INFORMATION VISIT www.DeAngelis.com/info REFERENCE NUMBER 140-3013.

ROLLED EROSION CONTROL PRODUCT

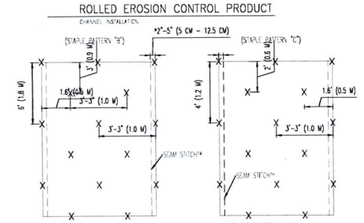
SLOPE INSTALLATION



NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. CONTRACTORS NOTE: FOR PRODUCT AND PURCHASING INFORMATION VISIT www.DeAngelis.com/info REFERENCE NUMBER 140-0014.

ROLLED EROSION CONTROL PRODUCT

CHANNEL INSTALLATION



1.15 STAPLES PER SQ. YD.
1.35 STAPLES PER SQ. M

FOR BLANKETS WITH THE NORTH AMERICAN GREEN DOT SYSTEM™ PLACE STAPLES/STAKES THROUGH EACH OF THE RED COLORED DOTS.

1.7 STAPLES PER SQ. YD.
2.0 STAPLES PER SQ. M

FOR BLANKETS WITH THE NORTH AMERICAN GREEN DOT SYSTEM™ PLACE STAPLES/STAKES THROUGH EACH OF THE GREEN COLORED DOTS.

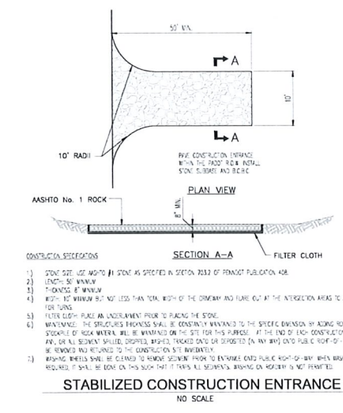
* LOCATION OF SEAM STITCH WILL VARY DEPENDING ON NORTH AMERICAN GREEN PRODUCT TYPE

NORTH AMERICAN GREEN
LINING AND STAPLE PATTERN

NO SCALE

EROSION CONTROL BLANKET DETAILS

NO SCALE



CONSTRUCTION SPECIFICATIONS
1) STONE SIZE - USE AASHTO #1 STONE AS SPECIFIED IN SECTION 2101 OF PENNDOT PUBLICATION 408.
2) LENGTH - 50' MINIMUM.
3) THICKNESS - 6" MINIMUM.
4) WIDTH - 10' MINIMUM BUT NOT LESS THAN FULL WIDTH OF THE DRIVEWAY AND FLARE OUT AT THE INTERSECTION AREAS TO ALLOW FOR TURNING.
5) FILTER CLOTH - PLACE AN UNDERLAYMENT PRIOR TO PLACING THE STONE.
6) MAINTENANCE - THE STRUCTURE'S THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIC DIMENSION BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL WILL BE MAINTAINED ON THE SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT SPILLED, DROPPED, WASHED, TRACKED ONTO OR DEPOSITED ON WAY WAY ONTO PUBLIC RIGHT-OF-WAY, MUST BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY.
7) WASHING WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEEL WASHING IS REQUIRED IF SMALL BE DONE ON THIS SITE THAT IT TAKES ALL SEDIMENTS. WASHING ON ADJACENT IS NOT PERMITTED.

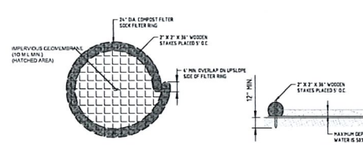
STABILIZED CONSTRUCTION ENTRANCE

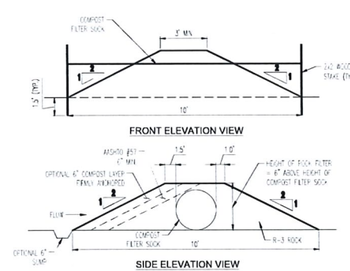
NO SCALE

NOTES
1. REMOVE SEDIMENT FROM THE UPSLOPE SIDE OF THE FILTERSOXX WHEN ACCUMULATION HAS REACHED 1/2 OF THE EFFECTIVE HEIGHT OF SOXX.
2. LOOSE FILTER MEDIA MAY BE BACKFILLED ON THE UPSLOPE SIDE OF THE SOXX TO ENHANCE PERFORMANCE.

FILTREXX® FILTERSOXX™ SECTION

NO SCALE





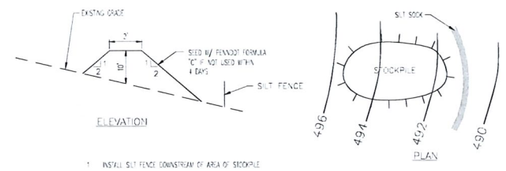
NOTES:
1. A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A COMPOST FILTER SOCK HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.
2. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

ROCK FILTER OUTLET DETAIL

NO SCALE

NOTES:
1. WASHOUT FACILITIES SHOULD NOT BE PLACED WITHIN 50 FEET OF STORM DRAINS, DITCHES OR SURFACE WATERS. THEY SHOULD BE IN A CONVENIENT LOCATION FOR THE TRUCKS, PREFERABLY NEAR THE PLACE WHERE THE CONCRETE IS BEING POURED, BUT FAR ENOUGH FROM OTHER VEHICULAR TRAFFIC TO MINIMIZE THE POTENTIAL FOR ACCIDENTAL DAMAGE OR SPILLS.
2. INSTALL ON GRADES LESS FOR DITCH PERFORMANCE.
3. SIZE FOR 7 GALLONS PER SQUARE FOOT OF STACKED SOCK (DOUBLE 24" DIA FOR SOCK SIZE IS 14 FT2 PER FOOT). CONFIGURATION FOR ADDED HEIGHT SEE STACKED SOCK STAKING DETAIL.
4. ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY.
5. ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY.
6. PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

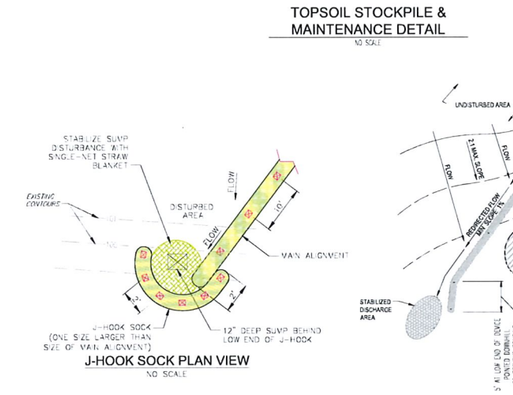
CONCRETE WASH AREA



1. INSTALL SILT FENCE DOWNSTREAM OF AREA OF STOCKPILE.
2. PLACE STOCKPILE IN AREAS SHOWN ON EROSION CONTROL PLAN WITHOUT BLOCKING NATURAL DRAINAGE PATTERNS.
3. FOLLOW DIMENSIONS SHOWN ABOVE. HEIGHT SHOULD NOT EXCEED 10 FT. SIDE SLOPES SHOULD NOT BE STEEPER THAN 2(H):1(V).
4. SEED WITH PENNDOT SEEDING FORMULA "C" IF MATERIAL IS NOT TO BE USED WITHIN 4 DAYS. FOLLOW "SEEDING, FERTILIZATION SCHEDULE & SPECIFICATIONS" AS ON THIS SHEET.

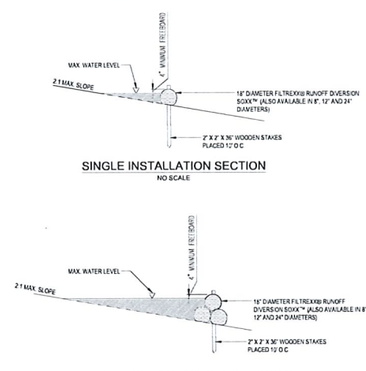
TOPSOIL STOCKPILE & MAINTENANCE DETAIL

NO SCALE



FILTREXX® RUNOFF DIVERSION SOXX™ PLAN

NO SCALE



NO SCALE

FILTREXX® RUNOFF DIVERSION SOXX™ SECTIONS

NO SCALE

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.
Coordinate your projects via Coordinate PA at www.paonecall.org.
Pennsylvania One Call System Serial Number

REV	DATE	DESCRIPTION	BY
1	03/01/23	REVISIONS PER TWP REVIEW LETTER 12/2/22	MRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MONICA R. SWEENEY PE-079680 ENGINEER

PROJECT: PROPOSED HEADQUARTERS BUILDING
UPPER UWCHLAN TOWNSHIP CHESTER COUNTY PENNSYLVANIA

PREPARED FOR: P.J. REILLY CONTRACTING CO., INC. 557 W. UWCHLAN AVENUE, SUITE 220 EXTON, PA 19341

PLAN TITLE: PRELIMINARY LAND DEVELOPMENT PLAN
EROSION & SEDIMENT CONTROL NOTES & DETAILS

PREPARED BY:
WILKINSON & ASSOCIATES, INC.
THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

DESIGNED MRS	PROJECT # 2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 18 OF 19
SCALE AS SHOWN	

Specifications

EPA:	1.01 ft² (0.09 m²)
Length:	33" (83.8 cm)
Width:	13" (33.0 cm)
Height H1:	7-1/2" (19.0 cm)
Height H2:	3-1/2"
Weight (max):	27 lbs (12.2 kg)

COLOR TEMPERATURE: 3000K
LAMP AND POLE COLOR: BLACK OR DARK BRONZE

LITHONIA DSX1 (OR APPROVED EQUAL)

(NOT TO SCALE)

LUMINAIRE SCHEDULE

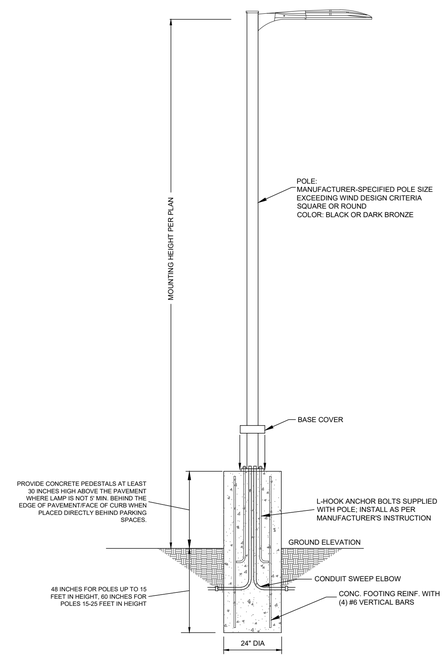
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
	A	2	Lithonia Lighting	DSX1 LED P1 30K T2M MVOLT	DSX1 LED P1 30K T2M MVOLT	1	6450	0.85	54
	B	1	Lithonia Lighting	DSX1 LED P1 30K T3M MVOLT HS	DSX1 LED P1 30K T3M MVOLT with houseside shield	1	5088	0.85	54
	C	1	Lithonia Lighting	DSX1 LED P3 30K T3M MVOLT	DSX1 LED P3 30K T3M MVOLT	1	11338	0.85	102
	D	1	Lithonia Lighting	DSX1 LED P1 30K T4M MVOLT	DSX1 LED P1 30K T4M MVOLT	1	6327	0.85	54
	E	3	Lithonia Lighting	DSX1 LED P3 30K T4M MVOLT	DSX1 LED P3 30K T4M MVOLT	1	11426	0.85	102
	F	1	Lithonia Lighting	DSX1 LED P7 30K TFTM MVOLT	DSX1 LED P7 30K TFTM MVOLT	1	19245	0.85	183
	G	2	Lithonia Lighting	DSX1 LED P5 30K T5M MVOLT MVOLT	DSX1 LED P5 30K T5M MVOLT	1	15256	0.85	138
	H	1	Lithonia Lighting	DSX1 LED P6 30K T5M	DSX1 LED P6 30K T5M MVOLT	1	18347	0.85	163

LUMINAIRE LOCATIONS

		Location						Aim		
No.	Label	X	Y	Z	Mounting Height	Orientation	Tilt	X	Y	Z
1	F	9824.74	7524.28	15.00	15.00	227.91	0.00	9823.89	7523.51	0.00
2	E	9865.42	7550.81	20.00	20.00	83.38	0.00	9866.56	7550.94	0.00
3	E	9966.20	7566.56	20.00	20.00	253.68	0.00	9965.10	7566.23	0.00
4	B	9979.59	7635.93	20.00	20.00	155.39	0.00	9980.16	7634.70	0.00
5	A	9734.26	7424.12	20.00	20.00	51.86	0.00	9735.16	7424.82	0.00
6	D	9860.45	7344.18	20.00	20.00	13.48	0.00	9860.72	7345.29	0.00
7	C	9901.76	7500.26	20.00	20.00	240.63	0.00	9900.61	7499.61	0.00
8	H	9739.06	7508.43	20.00	20.00	141.58	0.00	9739.77	7507.53	0.00
9	G	9861.68	7427.54	20.00	20.00	138.06	0.00	9862.44	7426.69	0.00
10	E	9783.18	7367.05	20.00	20.00	51.86	0.00	9784.08	7367.76	0.00
11	A	9696.93	7481.70	20.00	20.00	61.10	0.00	9697.93	7482.25	0.00
12	G	9807.62	7567.20	20.00	20.00	240.30	0.00	9806.63	7566.64	0.00

ILLUMINATION STATISTICS

Description	Avg	Max	Min	Max/Min	Avg/Min
CALC ZONE A - STREET	2.0 fc	5.4 fc	0.9 fc	6.0:1	2.2:1
CALC ZONE B - PARKING	3.3 fc	8.7 fc	1.5 fc	5.8:1	2.2:1
CALC ZONE C - PARKING	1.6 fc	4.1 fc	0.8 fc	5.1:1	2.0:1



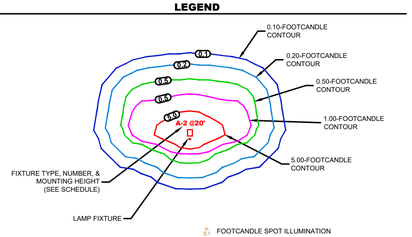
POLE MOUNTED LIGHT DETAIL

(NOT TO SCALE)

NOTES:

1. UNLESS OTHERWISE ALLOWED OR LIMITED BY THE TOWNSHIP (E.G., FOR SAFETY OR SECURITY OR ALL-NIGHT OPERATIONS), LIGHTING FOR COMMERCIAL, INDUSTRIAL, PUBLIC RECREATIONAL AND INSTITUTIONAL APPLICATIONS SHALL BE CONTROLLED BY AUTOMATIC SWITCHING DEVICES (SUCH AS TIME CLOCKS OR COMBINATION MOTION DETECTORS AND PHOTOCELLS) TO EXTINGUISH OUTDOOR LIGHTING FIXTURES DURING THE HOURS OF 11:00 P.M. AND DAWN, OR TO ONLY HAVE LIGHTING ON WHEN MOTION IS DETECTED, IN ORDER TO MITIGATE GLARE AND SKY-LIGHTING CONSEQUENCES. TIME CLOCKS SHALL HAVE ASTRONOMIC DIALS THAT TRACK DAYLIGHT HOURS SHIFTS, AND CAPACITOR OR BATTERY BACKUP TO PRESERVE CLOCK SETTINGS IN THE EVENT OF A POWER OUTAGE.
2. LIGHTING PROPOSED FOR USE AFTER 11:00 P.M., OR AFTER THE NORMAL HOURS OF OPERATION, FOR COMMERCIAL, INDUSTRIAL, OR INSTITUTIONAL APPLICATIONS SHALL BE REDUCED BY EXTINGUISHING 75% OF LUMINAIRES, OR DIMMING THEIR LIGHT OUTPUT BY 75% FROM THEN UNTIL DAWN UNLESS SUPPORTING A SPECIFIC PURPOSE AND APPROVED BY THE TOWNSHIP.
3. FOR NEW AND REPLACEMENT INSTALLATIONS, ELECTRICAL FEEDS FOR FIXTURES MOUNTED ON POLES SHALL BE RUN UNDERGROUND, NOT OVERHEAD.
4. POLES SUPPORTING LIGHTING FIXTURES FOR THE ILLUMINATION OF PARKING AREAS AND LOCATED DIRECTLY BEHIND PARKING SPACES SHALL BE PLACED A MINIMUM OF FIVE FEET OUTSIDE PAVED AREA, OR ON CONCRETE PEDESTALS AT LEAST 30 INCHES HIGH ABOVE THE PAVEMENT, OR SUITABLY PROTECTED FROM POTENTIAL VEHICULAR IMPACT BY OTHER APPROVED MEANS.
5. POST APPROVAL ALTERATIONS TO LIGHTING PLANS OR INTENDED SUBSTITUTIONS FOR APPROVED LIGHTING EQUIPMENT SHALL BE SUBMITTED TO THE TOWNSHIP FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
6. THE TOWNSHIP RESERVES THE RIGHT TO CONDUCT POST INSTALLATION NIGHTTIME INSPECTIONS TO VERIFY COMPLIANCE WITH THE COMMITMENTS MADE ON THE APPROVED LIGHTING PLAN, AND, IF APPROPRIATE, TO REQUIRE REMEDIAL ACTION AT NO EXPENSE TO THE TOWNSHIP.

LEGEND



GRAPHIC SCALE

30 0 15 30 60 120

1 INCH = 30 FEET

REV	DATE	DESCRIPTION	BY
1	03/01/23	REVISIONS PER TWP REVIEW LETTER 12/2/22	MRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MONICA R. SWEENEY ENGINEER PE-079680

PROJECT:
PROPOSED HEADQUARTERS BUILDING
UPPER UWCHLAN TOWNSHIP CHESTER COUNTY PENNSYLVANIA

PREPARED FOR:
P.J. REILLY CONTRACTING CO., INC.
557 W. UWCHLAN AVENUE, SUITE 220
EXTON, PA 19341

PLAN TITLE:
PRELIMINARY LAND DEVELOPMENT PLAN

LIGHTING PLAN

PREPARED BY:
WILKINSON & ASSOCIATES, INC.
THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

DESIGNED	PROJECT #
MRS	2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 13 OF 19
SCALE AS SHOWN	

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

Coordinate your projects via Coordinate PA at www.paonecall.org.

Pennsylvania One Call System Serial Number

OWNER'S SWM PLAN ACKNOWLEDGEMENT

I, _____, ON THIS DATE _____, ACKNOWLEDGE THAT ANY REVISION TO THE APPROVED SWM SITE PLAN MUST BE SUBMITTED TO AND APPROVED BY THE MUNICIPALITY, AND THAT A REVISED EROSION AND SEDIMENT CONTROL PLAN SHALL BE SUBMITTED TO, AND APPROVED BY, THE CONSERVATION DISTRICT FOR A DETERMINATION OF ADEQUACY PRIOR TO CONSTRUCTION OF THE REVISED FEATURES.

301 PARK ROAD LLC
PHILIP J. REILLY JR

PROFESSIONAL ENGINEER'S SWM PLAN CERTIFICATION

I, MONICA R. SWEENEY, P.E., ON THIS DATE _____, HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE THAT THE SWM SITE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE UPPER UWCHLAN TOWNSHIP ORDINANCE NO. 2013-05, STORMWATER MANAGEMENT ORDINANCE.

WILKINSON ARCHITENGINEERING GROUP
MONICA R. SWEENEY, PE 075963 CIVIL ENGINEER

POTENTIAL THERMAL IMPACTS TO SURFACE WATERS

POTENTIAL THERMAL IMPACTS TO SURFACE WATERS MAY RESULT FROM THE DIRECT EXPOSURE OF STORMWATER TO SURFACES WITH ELEVATED TEMPERATURES, SPECIFICALLY ASPHALT PAVEMENT AND DARKER COLORED ROOFTOPS.

IN ORDER TO MINIMIZE THE POTENTIAL FOR THERMAL IMPACTS TO SURFACE WATERS DURING CONSTRUCTION, CONSTRUCTION IS STAGED TO REMOVE EXISTING VEGETATION ONLY WHEN NECESSARY, TO CONSTRUCT IMPERVIOUS SURFACES LATER IN THE CONSTRUCTION PHASE TO REDUCE THE DURATION BETWEEN THE COMPLETION OF IMPERVIOUS SURFACES AND THE CONSTRUCTION OF PCSM BMPS THAT ARE DESIGNED TO MINIMIZE THERMAL IMPACTS, AND TO REQUIRE THE IMMEDIATE PERMANENT STABILIZATION OF DISTURBED AREAS THAT HAVE REACHED FINAL GRADE.

IN THE POST-CONSTRUCTION CONDITION, THE PROPOSED INFILTRATION BASINS REMOVE (INFILTRATE) THE NET CHANGE IN THE 2-YEAR/24-HOUR RUNOFF VOLUME, WHICH INCLUDES THE ENTIRETY OF THE PROPOSED IMPERVIOUS AREA, BECAUSE OF THE AFOREMENTIONED BMPS, POTENTIAL THERMAL IMPACTS TO SURFACE WATERS ARE MITIGATED TO THE EXTENT PRACTICABLE.

GRADING NOTES

1) AREAS TO BE FILLED SHOULD BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.

2) AREAS WHICH ARE TO BE TOPSOILED SHOULD BE SCARIFIED TO A DEPTH OF 3 TO 5 INCHES, OR 6 TO 12 INCHES ON COMPACTED SOILS, PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHOULD HAVE A MINIMUM OF 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OPTS OPTS SHOULD HAVE A MINIMUM OF 2 INCHES OF TOPSOIL. AREAS AFFECTED BY CONSTRUCTION OF DETENTION BASINS (BOTTOM OF BASIN, SIDE SLOPES, TOP OF BERM, ETC.) SHALL HAVE A MINIMUM OF 6 INCHES OF TOPSOIL PLACED.

3) ALL EARTHEN FILLS SHOULD BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, ROADWAYS, STRUCTURES AND CONDUITS, ETC. SHOULD BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.

4) ALL EARTHEN FILLS SHOULD BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.

5) FILL MATERIALS SHOULD BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.

6) FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHOULD NOT BE INCORPORATED INTO FILLS.

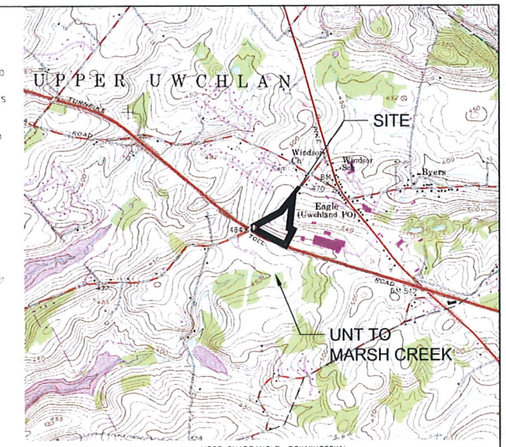
7) FILL SHOULD NOT BE PLACED ON SATURATED OR FROZEN SURFACES.

8) SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHOULD BE HANDLED IN ACCORDANCE WITH STANDARDS AND SPECIFICATIONS FOR SUBSURFACE DRAINS OR OTHER APPROVED METHODS.

9) ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCKS FILLS NEED NOT BE VEGETATED.

10) STOCKPILES, BORROW AREAS AND SPOIL AREAS SHOULD BE SHOWN ON THE PLAN MAPS AND SHOULD BE SUBJECT TO THE PROVISIONS OF THESE STANDARDS AS WELL AS THOSE OF THE APPROVED E&S PLAN. ALL APPROPRIATE PERMITS/AUTHORIZATION SHOULD BE OBTAINED PRIOR TO EARTH DISTURBANCE ACTIVITIES WITHIN THESE AREAS.

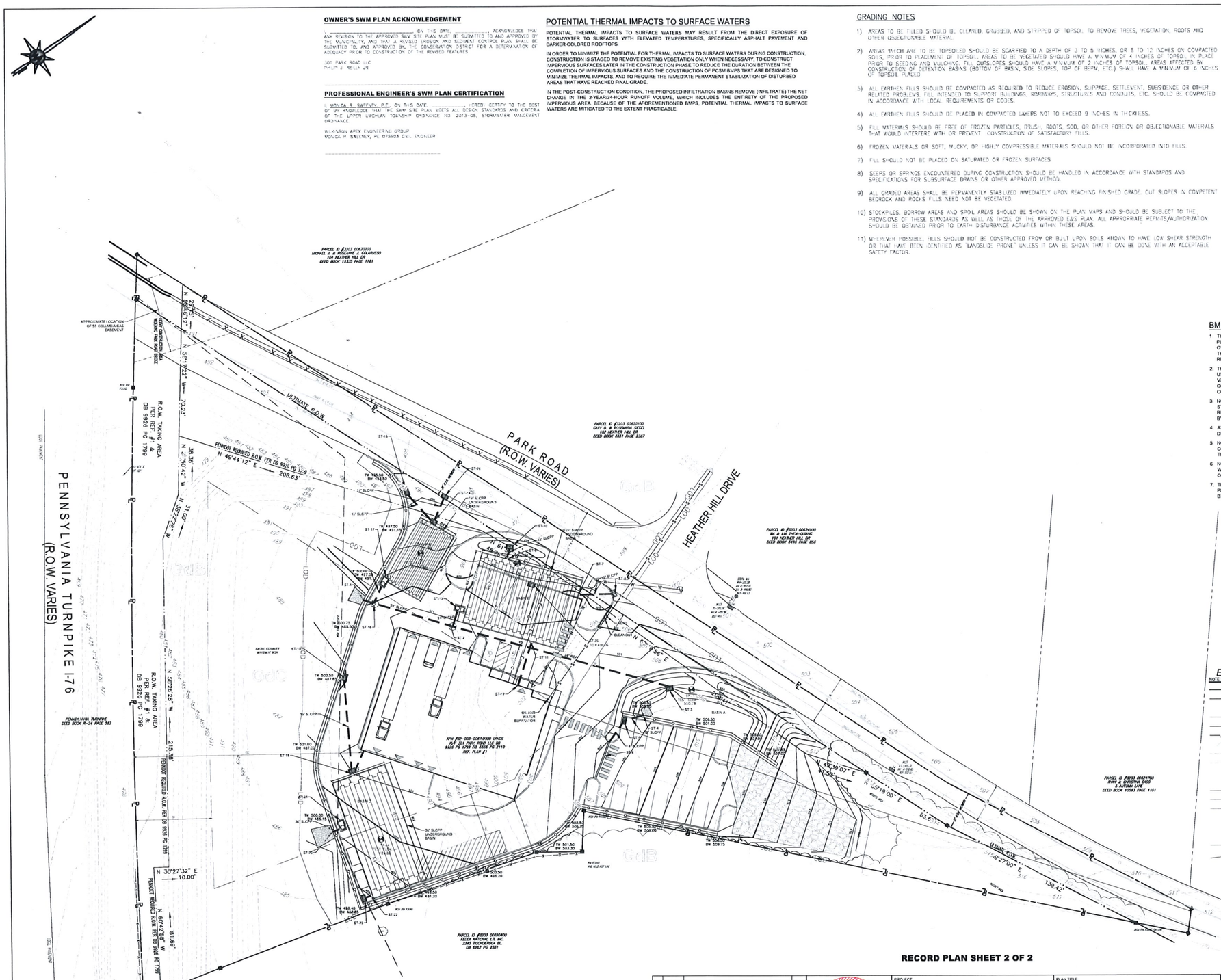
11) WHEREVER POSSIBLE, FILLS SHOULD NOT BE CONSTRUCTED FROM OR BUILT UPON SOILS KNOWN TO HAVE LOW SHEAR STRENGTH OR THAT HAVE BEEN IDENTIFIED AS "LANDSLIDE PRONE" UNLESS IT CAN BE SHOWN THAT IT CAN BE DONE WITH AN ACCEPTABLE SAFETY FACTOR.



USGS QUADRANGLE: DOWNINGTOWN
SCALE = 1" = 2000'

BMP NOTES

1. THE OWNER OF THE SUBJECT PROPERTY IS 301 PARK ROAD LLC. THE OWNER IS RESPONSIBLE FOR THE IMPLEMENTATION OF THE O&M PLAN FOR THE PROPOSED BMPS ON SITE. THE LARGE EXISTING BASIN THAT EXTENDS ONTO THE SITE IS NOT THE RESPONSIBILITY OF THE OWNER TO MAINTAIN AND THE ONLY MODIFICATIONS TO THE LARGE EXISTING BASIN THAT ARE ALLOWED BY THE OWNER ARE SHOWN ON THE PLAN HEREIN AS APPROVED BY THE OWNER OF THE BASIN. ANY FUTURE MODIFICAITONS TO THE LARGE EXISTING BASIN WILL REQUIRED APPROVAL BY THE OWNER OF THE BASIN.
2. THE LANDOWNER ACKNOWLEDGES THAT, PER THE PROVISIONS OF THE MUNICIPALITY'S STORMWATER MANAGEMENT ORDINANCE, IT IS UNLAWFUL TO MODIFY, REMOVE, FILL, LANDSCAPE, ALTER, OR IMPAIR THE EFFECTIVENESS OF, OR PLACE AN STRUCTURE, OTHER VEGETATION, YARD WASTE, BRUSH CUTTINGS, OR OTHER WATER OR DEBRIS INTO ANY PERMANENT STORMWATER MANAGEMENT BMP OR CONVEYANCE DESCRIBED IN THIS O&M PLAN OR TO ALLOW THE BMP OR CONVEYANCE TO EXIST IN A CONDITION WHICH DOES NOT CONFORM TO THIS O&M PLAN, WITHOUT WRITTEN APPROVAL FROM THE MUNICIPALITY.
3. NO BMP OR MAN-MADE CONVEYANCE MAY BE USED BY THE OWNER OR OTHERS FOR ANY PURPOSE OTHER THAN ITS INTENDED STORMWATER CONTROL FUNCTION, OF, IF APPROVED BY THE MUNICIPALITY, A STATEMENT OF SPECIFIC ALLOWABLE USES OF THE BMP (I.E., RECREATIONAL BENEFITS THAT MAY BE ASSOCIATED WITH CERTAIN BMPS OWNED BY A HOMEOWNER'S ASSOCIATION, OR ALLOWABLE USES BY AN INDIVIDUAL RESIDENTIAL LANDOWNER)
4. ANY DEFICIENCIES FOUND IN A BMP OR CONVEYANCE DURING INSPECTION BY THE OWNER SHALL BE REVEDIED WITHIN 90 DAYS OF DISCOVERY.
5. NO PERSON SHALL MODIFY, REMOVE, FILL, LANDSCAPE, ALTER, OR IMPAIR THE EFFECTIVENESS OF ANY STORMWATER BMPS, CONVEYANCES, FACILITIES, AREAS OR STRUCTURES UNLESS THE ACTIVITY IS PART OF AN APPROVED MAINTENANCE PROGRAM, WITHOUT THE WRITTEN APPROVAL OF THE MUNICIPALITY.
6. NO PERSON SHALL PLACE ANY STRUCTURE, FILL, LANDSCAPING, ADDITIONAL VEGETATION, YARD WASTE, BRUSH CUTTINGS, OR OTHER WASTE OR DEBRIS INTO A BMP OR CONVEYANCE, OR WITHIN A STORMWATER EASEMENT, THAT WOULD LIMIT OR ALTER THE FUNCTIONING OF THE STORMWATER BMP OR CONVEYANCE, WITHOUT THE WRITTEN APPROVAL OF THE MUNICIPALITY.
7. THE STORMWATER MANAGMENT FACILITIES MUST BE MAINTAINED BY THE PROPERTY OWNER ACCORDING TO UPPER UWCHLAN TOWNSHIP PERFORMANCE STANDARDS AND PA DEP MAINTENANCE AND OPERATIONS NOTES. THE STORMWATER MANAGEMENT FACILITIES THAT MUST BE MAINTAINED ARE THE SUBSURFACE INFILTRATION BASINS AND THE ABOVE GROUND INFILTRATION BASIN.



RECORD PLAN SHEET 2 OF 2

EXISTING FEATURES LEGEND

NOTE: ALL ITEMS SHOWN IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- TRACT (SITE) BOUNDARY
- ADJOINER BOUNDARY
- RIGHT-OF-WAY LINE
- ROADWAY CENTERLINE
- WETLAND BOUNDARY
- FLOODPLAIN BOUNDARY
- TREELINE
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- SPOT ELEVATION
- STORM SEWER
- SANITARY SEWER
- GAS LINE
- WATER LINE
- UNDERGROUND ELECTRIC LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND CABLE LINE
- SOIL TYPE BOUNDARY
- IRON PIN FOUND
- UTILITY POLE
- MANHOLE
- MONUMENT

PROPOSED FEATURES LEGEND

NOTE: ALL ITEMS SHOWN IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- LOT LINE
- RIGHT-OF-WAY LINE
- BUILDING SETBACK LINE
- ROADWAY CENTERLINE
- TREELINE (TO REMAIN)
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- SPOT ELEVATION
- STORM SEWER
- SANITARY SEWER
- SANITARY SEWER LATERAL
- GAS LINE
- WATER LINE (6" PRESSURE CLASS P 350 DCL)
- WATER LINE LATERAL
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND CABLE LINE
- CONCRETE MONUMENT/IRON PIN TO BE SET
- UTILITY POLE
- STORM SEWER MANHOLE
- SANITARY SEWER MANHOLE
- INLETS (TYPE M, TYPE C)

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

Coordinate your projects via Coordinate PA at www.paonecall.org.

Pennsylvania One Call System Serial Number _____

REV	DATE	DESCRIPTION	BY
1	03/01/23	REVISIONS PER TWP REVIEW LETTER 12/2/22	MRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MONICA R. SWEENEY ENGINEER PE-075963

PROJECT: PROPOSED HEADQUARTERS BUILDING
UPPER UWCHLAN TOWNSHIP CHESTER COUNTY PENNSYLVANIA

PREPARED FOR: P.J. REILLY CONTRACTING CO., INC.
557 W. UWCHLAN AVENUE, SUITE 220
EXTON, PA 19341

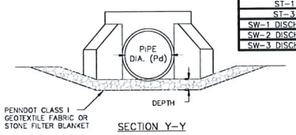
PLAN TITLE: PRELIMINARY LAND DEVELOPMENT PLAN

GRADING, DRAINAGE, & POSTCONSTRUCTION STORMWATER MANGEMENT PLAN

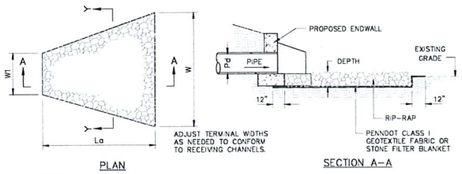
PREPARED BY:
WILKINSON & ASSOCIATES, INC.
THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

DESIGNED	PROJECT #
MRS	2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 8 OF 19
SCALE AS SHOWN	

STONE RIP RAP AREAS						
LOCATION	RIP-RAP	W1	La	W	MIN. DEPTH
ST-1	R-5	5'	8'	13'	24"
ST-3	R-5	5'	8'	13'	24"
SW-1 DISCHARGE	R-4	5'	8'	24'	18"
SW-2 DISCHARGE	R-5	5'	6	18'	24"
SW-3 DISCHARGE	R-5	5'	8'	24'	24"



SECTION Y-Y



PLAN

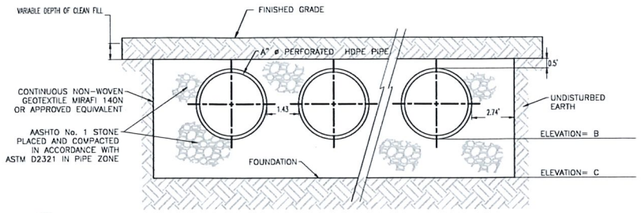
SECTION A-A

NOTES:
ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

ENERGY DISSIPATER AT PIPE ENDWALL

NOT TO SCALE



NOTES:

1. ALL REFERENCES TO CLASS I OR II MATERIAL ARE PER ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
2. ALL RETENTION AND DETENTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION AND THE MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES.
3. MEASURES SHOULD BE TAKEN TO PREVENT THE MIGRATION OF NATIVE FINES INTO THE BACK FILL MATERIAL, WHEN REQUIRED. SEE ASTM D2321.
4. GEOTEXTILE: THE PROPOSED SYSTEM SHALL BE SEPARATED FROM THE SURROUNDING SOIL AND OVERHEAD MATERIAL BY A GEOTEXTILE MATERIAL.
5. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
6. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I OR II. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm) CORRUGATED POLYETHYLENE PIPE (CPEP).
7. HAUNCHING AND INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I OR II IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
8. MINIMUM COVER: MINIMUM COVER OVER ALL RETENTION/DETENTION SYSTEMS IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 12" UP TO 36" DIAMETER PIPE AND 24" OF COVER FOR 42" - 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

BASIN	NUMBER OF BARRELS	A	B	C	SEEPAGE BED	
					LENGTH	WIDTH
B	11	24"	493.00	492.50	69	40
C	11	12"	491.50	491.00	48	25
D	6	36"	490.00	489.50	80	34

SUBSURFACE INFILTRATION BASIN

N.T.S.

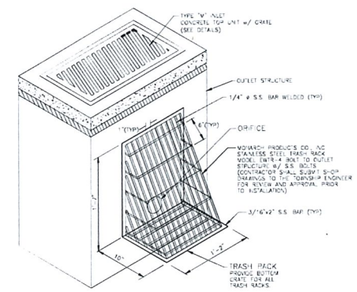
SUBSURFACE INFILTRATION BED

CONSTRUCTION SEQUENCE:

1. IF POSSIBLE, INSTALL INFILTRATION BASIN DURING LATER PHASES OF SITE CONSTRUCTION TO PREVENT SEDIMENTATION AND/OR DAMAGE FROM CONSTRUCTION ACTIVITY. AFTER INSTALLATION, PREVENT SEDIMENT-LADEN WATER FROM ENTERING INLETS AND PIPES.
2. INSTALL AND MAINTAIN ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
3. THE EXISTING SUBGRADE UNDER THE BED AREAS SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO GEOTEXTILE AND STONE BED PLACEMENT.
4. WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHOULD BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (OR EQUIVALENT) AND LIGHT TRACTOR. ALL FINE GRADING SHOULD BE DONE BY HAND. ALL BED BOTTOMS SHOULD BE AT LEVEL GRADE.
5. EARTHEN BERMS (IF USED) BETWEEN INFILTRATION BEDS SHOULD BE LEFT IN PLACE DURING EXCAVATION. THESE BERMS DO NOT REQUIRE COMPACTION IF PROVEN STABLE DURING CONSTRUCTION.
6. INSTALL UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES, CLEANOUTS, PERFORATED PIPING, AND ALL OTHER NECESSARY STORMWATER STRUCTURES.
7. GEOTEXTILE AND BED AGGREGATE SHOULD BE PLACED IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION AND INSTALLATION OF STRUCTURES. GEOTEXTILE SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. ADJACENT STRIPS OF GEOTEXTILE SHOULD OVERLAP A MINIMUM OF 18 INCHES. IT SHOULD ALSO BE SECURED AT LEAST 4 FEET OUTSIDE OF BED IN ORDER TO PREVENT ANY RUNOFF OR SEDIMENT FROM ENTERING THE STORAGE BED. THIS EDGE STRIP SHOULD REMAIN IN PLACE UNTIL ALL BARE SOILS CONTIGUOUS TO BEDS ARE STABILIZED AND VEGETATED. AS THE SITE IS FULLY STABILIZED, EXCESS GEOTEXTILE ALONG BED EDGES CAN BE CUT BACK TO THE EDGE OF THE BED.
8. CLEAN-WASHED, UNIFORMLY GRADED AGGREGATE SHOULD BE PLACED IN THE BED IN MAXIMUM 8-INCH LIFTS. EACH LAYER SHOULD BE LIGHTLY COMPACTED, WITH CONSTRUCTION EQUIPMENT KEPT OFF THE BED BOTTOM AS MUCH AS POSSIBLE.
9. APPROVED SOIL MEDIA SHOULD BE PLACED OVER INFILTRATION BED IN MAXIMUM 8-INCH LIFTS.
10. SEED AND STABILIZE TOPSOIL.
11. DO NOT REMOVE INLET PROTECTION OR OTHER EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

MAINTENANCE AND INSPECTION:

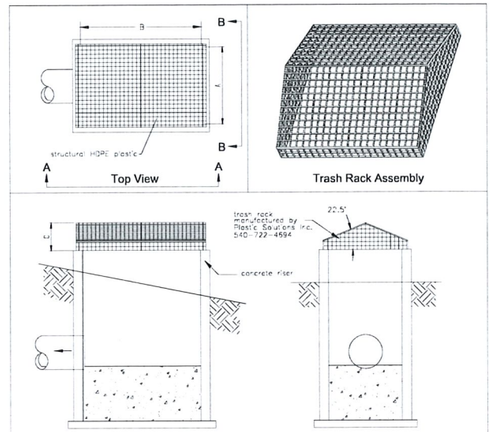
1. CATCH BASINS AND INLETS (UPGRADIENT OF BASIN) SHOULD BE INSPECTED AND CLEANED AT LEAST TWO TIMES PER YEAR AND AFTER RUNOFF EVENTS.
2. THE OVERLYING VEGETATION OF SUBSURFACE INFILTRATION FEATURES SHOULD BE MAINTAINED IN GOOD CONDITION, AND ANY BARE SPOTS REVEGETATED AS SOON AS POSSIBLE.
3. VEHICULAR ACCESS ON SUBSURFACE INFILTRATION AREAS SHOULD BE PROHIBITED, AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS. IF ACCESS IS NEEDED, USE OF PERMEABLE, TURF REINFORCEMENT SHOULD BE CONSIDERED.



NOTE: TRASH RACKS SHALL BE INSTALLED WHEN THE SEDIMENT BASIN IS CONVERTED TO A PERMANENT STORMWATER MANAGEMENT BASIN.

TRASH RACK DETAIL

NO SCALE



A	49 3/4	59 3/4	69 1/2	79 1/2	89 1/2	99 1/2	109 1/4	120 1/2
width code	10	12	14	16	18	20	22	24
C	18	20	22	24	26	28	30	32

B	49	54 1/2	59 3/4	65 1/4	70 1/2	76	82	87 1/4
length code	09	10	11	12	13	14	15	16

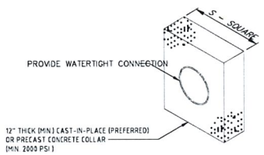
part code= PR + width code +length code (ex. PR1213)

numbers rounded to 1/4"

NOTE: CUSTOM SIZES AVAILABLE UPON REQUEST

PEAKED ROOF TRASH RACK

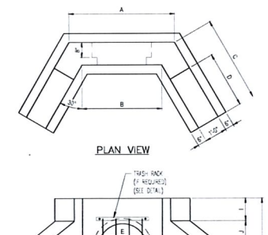
PLASTIC SOLUTIONS INC.
240 McGree Road
P.O. Box 4386
Winchester VA 22604
540-722-4694
www.plastic-solutions.com



BASIN NO.	PIPE SIZE (IN)	S (IN)	NO. OF COLLARS	DISTANCE FROM RISER TO 1st COLLAR (FT)	COLLAR SPACING (FT)
A	24	51	2	9	8

NOTES:
1. ALL COLLARS SHALL BE INSTALLED SO AS TO BE WATERTIGHT.
2. COLLAR SIZE AND SPACING SHALL BE AS INDICATED IN TABLE.

CONCRETE ANTI-SEEP COLLAR FOR PERM. BASINS



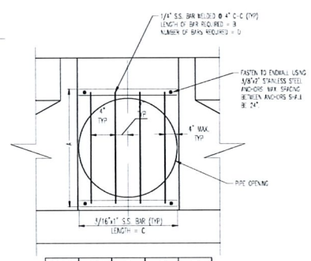
PRECAST HEADWALL DIMENSION GUIDE

PIPE DIA	A	B	C	D	E	F	G	H	I	J	K	L
12"	3'-2"	2'-0 1/4"	2'-10"	1'-11"	1'-0"	1'-7"	3 1/2"	3'-9"	1'-0"	10"	11"	6'-10 3/16"
15"	3'-2"	2'-0 1/4"	2'-10"	1'-11"	1'-3"	2'-0"	4 1/2"	3'-9"	1'-0"	10"	11"	6'-10 3/16"
18"	3'-2"	2'-0 1/4"	2'-10"	1'-11"	1'-6"	2'-4"	5"	3'-9"	1'-0"	10"	11"	6'-10 3/16"
21"	4'-6"	3'-4 1/2"	4'-3"	3'-4"	1'-9"	2'-6"	4 1/2"	4'-7"	1'-4"	11"	1'-4"	9'-7 11/16"
24"	4'-6"	3'-4 1/2"	4'-3"	3'-4"	2'-0"	2'-10"	5"	4'-7"	1'-4"	11"	1'-4"	9'-7 11/16"
27"	4'-6"	3'-4 1/2"	4'-3"	3'-4"	2'-3"	3'-0"	4 1/2"	4'-7"	1'-4"	11"	1'-4"	9'-7 11/16"
30"	5'-10"	4'-8"	4'-7"	4'-0"	2'-6"	3'-6"	6"	5'-9"	9"	2'-2"	1'-10"	11'-3 11/16"
36"	5'-10"	4'-8"	4'-7"	4'-0"	3'-0"	4'-2"	7"	5'-9"	9"	2'-2"	1'-10"	11'-3 11/16"
42"	5'-10"	4'-8"	5'-7"	5'-0"	3'-6"	4'-8"	7"	6'-5"	9"	2'-9"	1'-11"	12'-3 11/16"
48"	5'-10"	4'-8"	6'-7"	6'-0"	4'-0"	5'-4"	8"	6'-11"	9"	3'-3"	2'-0"	13'-3 11/16"

NOTES:
1. AS MANUFACTURED BY "MODAR" PRECAST CONCRETE PRODUCTS IN OTTSVILLE, PA OR EQUIVALENT.
2. CONCRETE STRENGTH = 4000 PSI MIN. @ 28 DAYS.
3. STRUCTURE CONFORMS TO ALL APPLICABLE PA DOT SPECS.

TYPE D-W HEADWALL/ENDWALL

NO SCALE



PIPE DIA	A	B	C	D
12"	16"	15"	12"	2
15"	19"	18"	15"	4
18"	22"	21"	18"	4
21"	25"	24"	21"	6
24"	28"	27"	24"	6
27"	31"	30"	27"	6
30"	34"	33"	30"	8
36"	40"	39"	36"	8
42"	46"	45"	42"	10
48"	52"	51"	48"	12

TYPE D-W ENDWALL TRASH RACK DETAIL

NO SCALE

SEQUENCE OF CONSTRUCTION:

AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES (INCLUDING CLEARING AND GRUBBING), THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, AND A REPRESENTATIVE FROM THE CHESTER COUNTY CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.

UPON INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMPS AND AT LEAST 3 DAYS PRIOR TO PROCEEDING WITH THE BULK EARTH DISTURBANCE ACTIVITIES, THE PERMITTEE OR CO-PERMITTEE SHALL PROVIDE NOTIFICATION TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT.

AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED BY THE CHESTER COUNTY CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION. EACH STEP OF THE SEQUENCE SHALL BE OCMPLETED BEFORE PROCEEDING TO THE NEXT STEP, EXCEPT WHERE NOTED.

ALL EARTHMOVING ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING STAGING OF EARTHMOVING ACTIVITIES.

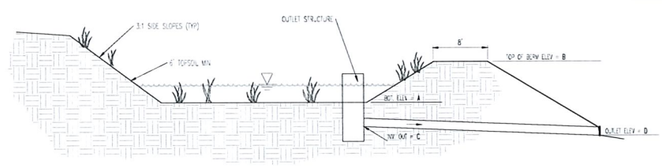
1. PRIOR TO DISTURBANCE ACTIVITIES, THE LIMITS OF CONSTRUCTION SHALL BE MARKED WITH CONSTRUCTION FENCE, SURVEY STAKES, POSTS AND ROPE, ETC.
2. INSTALL ALL TREE PROTECTION FENCE, COMPOST FILTER SOCK AND STABILIZED CONSTRUCTION ENTRANCE AS SHOWN. REMOVE ALL TREES AND OTHER ITEMS NOTED FOR REMOVAL. DISPOSE OF TREES/BRUSH AND CONSTRUCTION MATERIAL WASTE AT AN APPROVED DUMPSITE OR BY METHODS APPROVED BY THE TOWNSHIP AND COUNTY CONSERVATION DISTRICT. SCREENED TOPSOIL AND EXCAVATED MATERIAL SHALL BE PLACED IN A MANNER SUCH THAT HIGH WATER OR RUNOFF DOES NOT WASH IT AWAY. THE STOCKPILES SHOULD BE UNIFORMLY PLACED AND SHAPED WITH SIDE SLOPES ASSUMING A NATURAL ANGLE OF REPOSE. PLACE COMPOST FILTER SOCK AROUND THE DOWNHILL SIDE OF STOCKPILE. IMMEDIATELY STABILIZE STOCKPILES WITH RYE GRASS (PENNDOT FORMULA E) IF MATERIAL WILL NOT BE REUSED IMMEDIATELY.
3. PLACE CONSTRUCTION FENCE AROUND INFILTRATION BASINS.
4. STRIP TOPSOIL, EXCAVATE FOR AND ROUGH GRADE NEW ACCESS DRIVES AND PARKING LOTS.
5. INSTALL ALL NEW UTILITY SERVICE LINES (ELECTRIC, GAS, CABLE, TELEPHONE) TO A TERMINAL POINT AT A VALVE BOX OR TO WITHIN 10 FEET OF THE NEW BUILDING. BACKFILL ALL UTILITY TRENCHES PER THE DETAILS SHOWN ON THE PLANS OR PER SPECIFIC UTILITY COMPANY SPECIFICATIONS. RESTORE ROCK CONSTRUCTION ENTRANCES AT COMPLETION OF UTILITY INSTALLATION. DURING TRENCHING, NO LENGTH OF TRENCH SHALL BE LEFT OPEN AT THE END OF A WORKING DAY. WATER THAT ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE UTILITY PLACEMENT AND BACKFILLING BEGINS.
6. COMPACT SUBGRADE AND IMMEDIATELY INSTALL STONE SUBBASE OVER DRIVEWAY TO STABILIZE. BUILDING CONSTRUCTION MAY NOT BEGIN UNTIL THE DRIVEWAY IS STABILIZED WITH STONE BASE.
7. COMPACT AND DRESS THE ACCESS DRIVES AND PARKING LOTS. INSTALL BCBC PER PLANS AS REQUIRED.
8. STRIP TOPSOIL FOR THE BUILDING AREA. EXCAVATE FOR AND CONSTRUCT BUILDING FOUNDATION. BACKFILL WITH SUITABLE (AND SPECIFIED) MATERIAL AND COMPACT AS SOON AS BELOW GRADE PORTIONS OF WORK ARE COMPLETE. PROPER CARE AND PRECAUTION SHOULD BE EXERCISED TO PREVENT WATER/RAINFALL/RUNOFF FROM ENTERING THIS AREA.
9. EXTEND UTILITY SERVICE LINE INTO THE BUILDING AND STUB UP FOR LATER CONNECTION.
10. CONSTRUCTION OF THE BUILDING MAY BEGIN.
11. FINE GRADE, SEED AND MULCH DISTURBED AREAS TO STABILIZE. GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3" TO 5" PRIOR TO TOPSOIL PLACEMENT TO PERMIT BONDING OF THE TOPSOIL. TOPSOIL SHALL BE REPLACED AT A MINIMUM DEPTH OF 6 TO 8". SEE SOIL EROSION AND SEDIMENT POLLUTION CONTROL NOTES. CONTRACTOR SHALL CONDUCT SOIL TESTING FOR APPROPRIATE LIME AND FERTILIZER RATES.
12. CONSTRUCT INFILTRATION BASINS. NO STORMWATER SHALL BE DIRECTED TO THE FACILITIES UNTIL CONTRIBUTING AREAS ARE PERMANENTLY STABILIZED. PROTECT FACILITIES FROM SEDIMENT LADEN WATER USING COMPOST FILTER SOCK.
13. INSTALL ALL LANDSCAPING MATERIALS AS SHOWN ON PLANS.
14. CLEAN, SWEEP, AND TACK ALL PAVED AREAS AND INSTALL WEARING COURSE AS REQUIRED.
15. AS SOON AS SLOPES AND OTHER DISTURBED AREAS REACH FINAL GRADE, THEY MUST BE STABILIZED. CONTINUE STABILIZATION OF DISTURBED/EXPOSED AREAS, INCLUDING REPAIRS OF WASHOUTS, BY REGRADING AND PERMANENT SEEDING AS REQUIRED UNTIL THE SITE IS PERMANENTLY STABILIZED. NO MORE THAN 15,000 SF OF DISTURBED AREA SHALL REACH FINAL GRADE BEFORE INITIATING SEEDING AND MULCHING OPERATIONS. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMP'S AFTER EACH RUNOFF EVENT AND ON A DAILY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED. WATER PUMPED FROM WORK AREAS SHALL BE TREATED FOR SEDIMENT REMOVAL PRIOR TO DISCHARGING TO A SURFACE WATER.
16. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE SILT FROM THE COMPOST FILTER SOCKS AND TO CLEAN, REPAIR OR REPLACE ALL OTHER EROSION CONTROL DEVICES AFTER EACH RUNOFF EVENT, OR AS NEEDED TO MAINTAIN EFFICIENCY. ANY SILT THAT IS REMOVED FROM THE ASSORTED FACILITIES SHALL BE PLACED ON SITE, IN AN AREA NOT SUSCEPTIBLE TO EROSION, AND STABILIZED.
17. INFILTRATION FACILITIES SHALL BE INSPECTED AT THE END OF CONSTRUCTION FOR SEDIMENT ACCUMULATION AND FUNCTION. ANY SEDIMENT ACCUMULATION SHALL BE REMOVED AND IT SHALL BE VERIFIED THAT THE SYSTEM IS WORKING AS DESIGNED BEFORE SEDIMENT CONTROLS ARE REMOVED. NOTIFY THE DESIGN ENGINEER OF ANY OBSERVED ADVERSE CONDITIONS.
18. REMOVE ALL COMPOST FILTER SOCK, STONE FILTERS, STABILIZED CONSTRUCTION ENTRANCES, TREE PROTECTION, AND ALL OTHER TEMPORARY EROSION CONTROL DEVISES ONLY AFTER THE CONTRIBUTING DRAINAGE AREAS ARE COMPLETELY STABILIZED (70 PERCENT VEGETATIVE COVER) AND THE ASPHALT AREAS ARE STONED OR PAVED.

CRITICAL STAGES OF BMP IMPLEMENTATION

THE CRITICAL STAGES OF BMP IMPLEMENTATION ARE TO BE OBSERVED BY A LICENSED PROFESSIONAL DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE LICENSED PROFESSIONAL 3 DAYS BEFORE EXCAVATION OF EACH CRITICAL STAGE BMP BEGINS.

THE CRITICAL STAGES OF BMP IMPLEMENTATION INCLUDE THE FOLLOWING:

1. EXCAVATION OF SUBSURFACE INFILTRATION BASINS.
2. EXCAVATION OF ABOVE GROUND INFILTRATION BASIN.



INFILTRATION BASIN CONSTRUCTION SCHEDULE				
RAINGARDEN	A	B	C	D
BASIN #	501.00	504.00	438.00	474.56

INFILTRATION BASIN DETAIL (BMP 6.4.2)

N.T.S.

INFITLRATION BASIN

CONSTRUCTION SEQUENCE:

1) PROTECT INFILTRATION BASIN AREA FROM COMPACTION PRIOR TO INSTALLATION.
2) IF POSSIBLE, INSTALL INFILTRATION BASIN DURING LATER PHASES OF SITE CONSTRUCTION TO PREVENT SEDIMENTATION AND/OR DAMAGE FROM CONSTRUCTION ACTIVITY. AFTER INSTALLATION, PREVENT SEDIMENT-LADEN WATER FROM ENTERING INLETS AND PIPES.
3) INSTALL AND MAINTAIN PROPER EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION AS PER THE PENNSYLVANIA EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (MARCH 2000, OR LATEST EDITION).
4) IF NECESSARY, EXCAVATE INFILTRATION BASIN BOTTOM TO A UNIFORM, LEVEL UNCOMPACTED SUBGRADE FREE FROM ROCKS AND DEBRIS. DO NOT COMPACT SUBGRADE. TO THE GREATEST EXTENT POSSIBLE, EXCAVATION SHOULD BE PERFORMED WITH THE LIGHTEST PRACTICAL EQUIPMENT. EXCAVATION EQUIPMENT SHOULD BE PLACED OUTSIDE THE LIMITS OF THE INFILTRATION BASIN.
5) INSTALL OUTLET CONTROL STRUCTURES.
6) PLACE A MINIMUM OF 6 INCHES OF TOPSOIL, SEED AND STABILIZE TOPSOIL. (VEGETATE IF APPROPRIATE WITH NATIVE PLANTINGS.)
7) DO NOT REMOVE INLET PROTECTION OR OTHER EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

OPERATIONS AND MAINTENANCE:

AS WITH ALL INFILTRATION PRACTICES, INFILTRATION REQUIRE REGULAR AND EFFECTIVE MAINTENANCE TO ENSURE PROLONGED FUNCTIONING. THE FOLLOWING REPRESENT MINIMUM MAINTENANCE REQUIREMENT FOR INFILTRATION BASINS:

1) CATCH BASINS AND INLETS (UPGRADIENT OF INFILTRATION BASIN) SHOULD BE INSPECTED AND CLEANED AT LEAST TWO TIMES PER YEAR AND AFTER RUNOFF EVENTS.
2) THE VEGETATION ALONG THE SURFACE OF THE INFILTRATION BASIN SHOULD BE MAINTAINED IN GOOD CONDITION, AND ANY BARE SPOTS REVEGETATED AS SOON AS POSSIBLE.
3) VEHICLES SHOULD NOT BE PARKED OR DRIVEN ON AN INFILTRATION BASIN, AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS.
4) INSPECT THE BASIN AFTER RUNOFF EVENTS AND MAKE SURE THAT RUNOFF DRAINS DOWN WITHIN 72 HOURS.
5) ALSO INSPECT FOR ACCUMULATION OF SEDIMENT, DAMAGE TO OUTLET CONTROL STRUCTURES, EROSION CONTROL MEASURES, SIGNS OF WATER CONTAMINATION/SPILLS, AND SLOPE STABILITY IN THE BERVS.
6) MOW ONLY AS APPROPRIATE FOR VEGETATIVE COVER SPECIES.
7) REMOVE ACCUMULATED SEDIMENT FROM BASIN AS REQUIRED. RESTORE ORIGINAL CROSS SECTION AND INFILTRATION RATE. PROPERLY DISPOSE OF SEDIMENT.

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

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Pennsylvania One Call System Serial Number _____

REV	DATE	DESCRIPTION	BY
1	03/01/23	REVISIONS PER TWP REVIEW LETTER 12/2/22	MRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER MONICA R. SWEENEY PE-076860

PROJECT: PROPOSED HEADQUARTERS BUILDING
UPPER UWCHLAN TOWNSHIP CHESTER COUNTY PENNSYLVANIA

PREPARED FOR: P.J. REILLY CONTRACTING CO., INC.
557 W. UWCHLAN AVENUE, SUITE 220
EXTON, PA 19341

PLAN TITLE: PRELIMINARY LAND DEVELOPMENT PLAN
GRADING, DRAINAGE, & POSTCONSTRUCTION STORMWATER MANGEMENT NOTES & DETAILS

PREPARED BY: WILKINSON & ASSOCIATES, INC.
THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

DESIGNED	PROJECT #
MRS	2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 9 OF 19
SCALE AS SHOWN	

SOIL SEEDING, FERTILIZING AND MULCHING SPECIFICATIONS & SCHEDULE

A. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). SEEDING DEPTH SHALL BE FROM ¼" TO ½". SEEDING OPERATIONS SHALL BE ON CONTOUR.

B. ALL SLURRY APPLICATIONS OF HYDROSEEDING MUST BE APPLIED BEFORE NOVEMBER 15 AND SHALL BE APPLIED WITH A MULCH BINDER.

C. K-31 IS NOT ACCEPTABLE FOR USE WITH SEED MIX.

D. WHERE IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA BY OCTOBER 1, OR IF EARTH DISTURBANCE OCCURS BETWEEN OCTOBER 1 AND MARCH 5, THE DISTURBED AREA MUST BE TEMPORARILY MULCHED UNTIL MARCH 5.

E. WHERE IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA IMMEDIATELY AFTER FINAL EARTHMOVING HAS BEEN COMPLETED OR WHERE THE ACTIVITY CEASED FOR MORE THAN 20 DAYS, THE AREA MUST BE TEMPORARILY SEEDED WITH PENNDOT TYPE FORMULA "L" AND MULCHED.

F. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4" WITH DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHALL BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY FLAT AND UNIFORM SEEDBED IS PREPARED.

G. LIME – ADDING AGRICULTURAL GRADE LIMESTONE TO THE SOIL IS VITAL TO REVEGETATION EFFORTS. THE MAJORITY OF DISTURBED SITES ARE ACIDIC AND INFERTILE. A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY LIME AT THE FOLLOWING RATE:
LIME 4 TONS PER ACRE OR
190 LBS. PER 1,000 S.F.

H. FERTILIZER – COMMERCIAL TYPE 10 – 20 – 20 FERTILIZER WILL GREATLY INCREASE THE GROWTH RATE OF BOTH THE PLANT AND THE ROOTS. A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY FERTILIZER AT THE FOLLOWING RATE:
FERTILIZER 930 LBS. PER ACRE OR
25 LBS. PER 1,000 S.F.

I. SOILS HAVING A PH OF 4 OR LESS SHOULD BE MULCHED ONLY. LIQUID MULCH BINDERS SHOULD BE ONE OF THE FOLLOWING:
1. EMULSIFIED ASPHALT (SS-1, CSS-1, CVS-2, MS-2, RS-W CRS-1, CRS-2). APPLY ON FLAT SLOPES LESS THAN 8%, 0.04 GAL/SY OR 194 GAL/ACRE. ON SLOPES GREATER THE 8%, USE 0.075 GAL/SY OR 363 GAL/ACRE.
2. SYNTHETIC OR ORGANIC BINDERS; BINDERS SUCH AS CUROSOL, DCA-70, PETRO- SET AND TERRA – TRACK SHALL BE APPLIED AT RATE RECOMMENDED BY MANUFACTURERS TO ANCHOR MULCH MATERIALS.
3. MULCH ANCHORING SHALL BE DONE IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. LIQUID MULCH – BINDER SHALL BE APPLIED HEAVIER AT THE EDGES WHERE WIND CATCHES THE MULCH SUCH AS AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHALL BE UNIFORM IN APPEARANCE.

J. TEMPORARY SEED MIXTURE:
ANNUAL RYEGRASS IS A QUICK GERMINATING SPECIES OF GRASS, WHICH CAN BE SEEDED AT MOST ANY TIME. IF YOU PLAN TO LEAVE THE PROJECT DISTURBED AND INACTIVE FOR MORE THAN FOUR (4) DAYS, TEMPORARY SEEDING SHOULD BE APPLIED IMMEDIATELY. IF THE SITE IS TO REMAIN INACTIVE FOR SIX (6) MONTHS OR MORE, A PERMANENT SEED MIX IS NECESSARY.
ANNUAL RYEGRASS:
40 LBS. PER ACRE OR 1LB. PER 1,000 S.F.
PLANTING DATES: 4/1 – 5/31 AND 8/6 – 10/15

K. PERMANENT SEED MIXTURE:
ESTABLISHING A PERMANENT VEGETATIVE COVER IS THE FINAL STEP TO EFFECTIVE SOIL EROSION AND SEDIMENT POLLUTION CONTROL. IT IS RECOMMENDED THAT THE PENN STATE UNIVERSITY "AGRONOMY GUIDE" BE CONSULTED THE FOLLOWING MIXTURE WILL MEET THE REQUIREMENTS OF CHAPTER 102 – "EROSION CONTROL".

1. ANNUAL RYEGRASS IS TO BE SEEDED WITH ALL PERMANENT SEED MIXED AS A COVER/NURSE CROP. SEEDING RATE: 40 LBS. PER ACRE

A) TURF LAWN AND MOWED AREAS (SUNNY):
60% KENTUCKY BLUEGRASS
20% CHEWINGS FESCUE
20% PERENNIAL RYEGRASS
SEEDING RATE:
4LBS PER 1,000 S.F. OR 170 LBS./AC
PLANTING DATES: 4/1-5/31 AND 8/6 – 10/15

B) TURF LAWN AND MOWED AREAS (SHADE):
40% KENTUCKY BLUEGRASS
40% CHEWINGS FESCUE
20% PERENNIAL RYEGRASS
SEEDING RATE:
4LBS PER 1,000 S.F. OR 170 LBS./AC
PLANTING DATES: 3/1 – 8/31

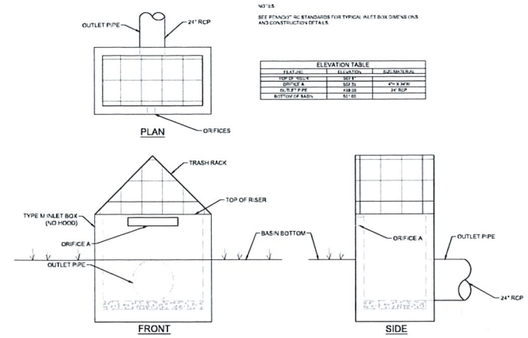
NOTES: ALL MIXTURES GIVEN ABOVE ARE FOR PLS (PURE LIVE SEED) 100%. TO CALCULATE PLS, THE PERCENTAGE OF PURE LIVE SEED IS MULTIPLIED BY THE PERCENTAGE OF GERMINATION, AND THE PRODUCT IS DIVIDED BY ONE HUNDRED (100). TO DETERMINE HOW MUCH SEED TO PLANT, DIVIDE THE PERCENTAGE INTO ONE HUNDRED (100). EXAMPLE: 100 DIVIDED BY 61 =1.63. THUS, EVERY POUND OF SEED MIXTURE CALLED FOR SHOULD THEN BE 1.63 LBS.

L. MULCH – HAY OR STRAW
ALL AREAS THAT ARE SEEDED SHOULD BE MULCHED. MULCH IS A LOOSE LAYER THREE FOURTHS OF AN INCH TO ONE INCH (3/4" TO 1") DEEP OF CLEAN HAY OR STRAW. MULCH REDUCES SOIL EROSION, AIDS SEED GERMINATION, AND CONSERVES MOISTURE.

RECYCLING OR DISPOSAL OF WASTE MATERIALS

1. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1, AND 287.1 ET SEQ NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

   ANTICIPATED CONSTRUCTION WASTES. BUILDING MATERIALS AND OTHER CONSTRUCTION SITE WASTES, INCLUDING BUT NOT LIMITED TO EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY MEASURES SHOULD BE PLANNED AND IMPLEMENTED BY THE PERMITTEE OR CO-PERMITTE FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL.
2. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR DEP FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED
3. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED IN THESE NOTES IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS, GROUNDWATER SYSTEMS OR STORM SEWER SYSTEMS.
4. WHEREVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL
5. ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS MUST BE FOLLOWED IN THE USE, HANDLING, AND DISPOSAL OF POTENTIALLY HAZARDOUS MATERIALS.
6. UNDER NO CIRCUMSTANCES MAY EROSION CONTROL BMPS BE USED FOR TEMPORARY STORAGE OF DEMOLITION MATERIALS OR CONSTRUCTION WASTES.

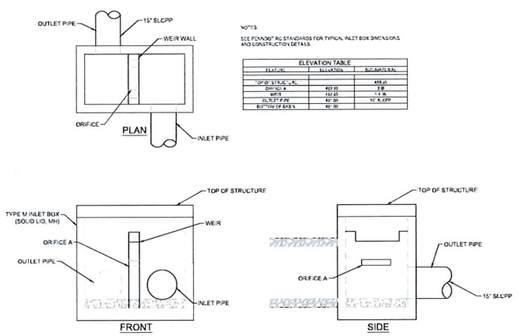


NOTES
SEE PENNDOT RC STANDARDS FOR TYPICAL INLET BOX DIMENSIONS AND CONSTRUCTION DETAILS

ELEVATION TABLE

FEATURE	ELEVATION	SIZE/MATERIAL
TOP OF STRUCTURE	502.0	
ORIFICE A	497.75	4"H X 6"W
OUTLET PIPE	498.00	24" RCP
BOTTOM OF BASIN	497.00	

OUTLET STRUCTURE DETAIL - BASIN A
NOT TO SCALE



NOTES
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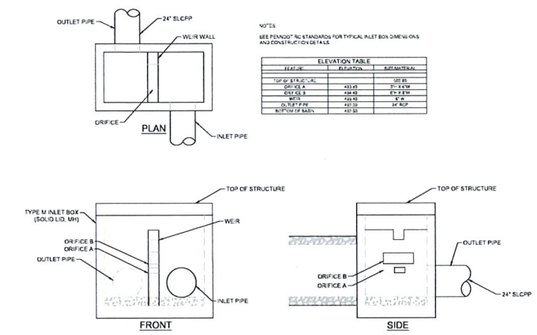
ELEVATION TABLE

FEATURE	ELEVATION	SIZE/MATERIAL
TOP OF STRUCTURE	498.00	
ORIFICE A	492.00	3"W
WEIR	493.00	1.5"H
OUTLET PIPE	492.00	15" SLCPP
BOTTOM OF BASIN	487.00	

OUTLET STRUCTURE DETAIL - BASIN C
NOT TO SCALE

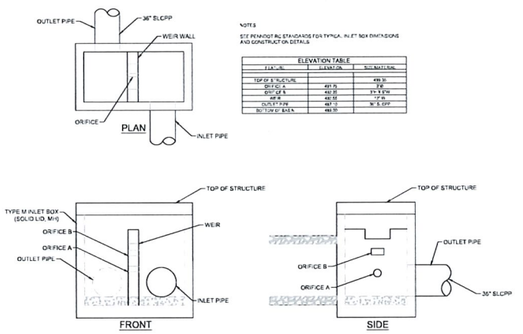


NOTES
SEE PENNDOT RC STANDARDS FOR TYPICAL INLET BOX DIMENSIONS AND CONSTRUCTION DETAILS

ELEVATION TABLE

FEATURE	ELEVATION	SIZE/MATERIAL
TOP OF STRUCTURE		500.00
ORIFICE A	493.45	3"H X 6"W
ORIFICE B	494.40	6"H X 6"W
WEIR	495.90	6"W
OUTLET PIPE	493.00	24" RCP
BOTTOM OF BASIN	492.00	

OUTLET STRUCTURE DETAIL - BASIN B
NOT TO SCALE

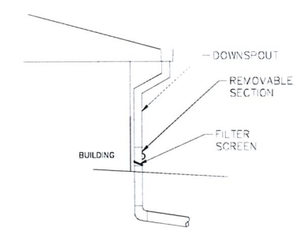


NOTES
SEE PENNDOT RC STANDARDS FOR TYPICAL INLET BOX DIMENSIONS AND CONSTRUCTION DETAILS

ELEVATION TABLE

FEATURE	ELEVATION	SIZE/MATERIAL
TOP OF STRUCTURE		498.00
ORIFICE B	491.75	9"W
ORIFICE A	492.25	3"H X 6"W
WEIR	493.50	12"W
OUTLET PIPE	491.00	36" SLCPP
BOTTOM OF BASIN	488.00	

OUTLET STRUCTURE DETAIL - BASIN D
NOT TO SCALE



ROOF DRAIN FILTER SCREEN DETAIL
NOT TO SCALE

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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER MONICA R. SWEENEY PE-079680

PROJECT:
PROPOSED HEADQUARTERS BUILDING
UPPER UWCHLAN TOWNSHIP CHESTER COUNTY PENNSYLVANIA

PREPARED FOR:
P.J. REILLY CONTRACTING CO., INC.
557 W. UWCHLAN AVENUE, SUITE 220
EXTON, PA 19341

PLAN TITLE:
PRELIMINARY LAND DEVELOPMENT PLAN
GRADING, DRAINAGE, & POSTCONSTRUCTION STORMWATER MANGEMENT NOTES & DETAILS

PREPARED BY:
WILKINSON & ASSOCIATES, INC.
THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
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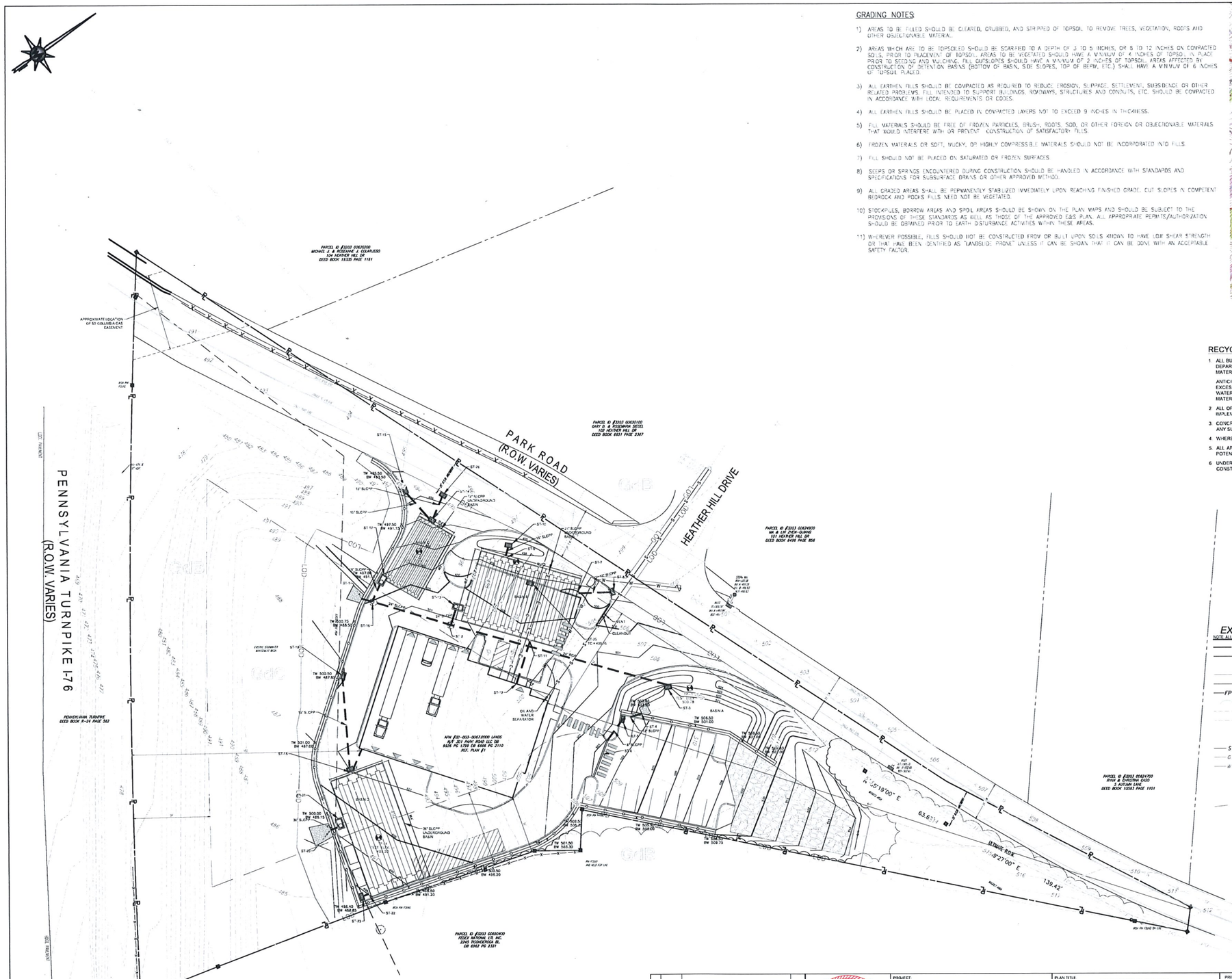
DESIGNED MRS	PROJECT # 2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 10 OF 19
SCALE AS SHOWN	



GRADING NOTES

1) AREAS TO BE FILLED SHOULD BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.

2) AREAS WHICH ARE TO BE TOPSOILED SHOULD BE SCARIFIED TO A DEPTH OF 3 TO 5 INCHES, OR 6 TO 12 INCHES ON COMPACTED SOILS, PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHOULD HAVE A MINIMUM OF 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHOULD HAVE A MINIMUM OF 2 INCHES OF TOPSOIL. AREAS AFFECTED BY CONSTRUCTION OF DETENTION BASINS (BOTTOM OF BASIN, SIDE SLOPES, TOP OF BERM, ETC.) SHALL HAVE A MINIMUM OF 6 INCHES OF TOPSOIL PLACED.

3) ALL EARTHEN FILLS SHOULD BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, ROADWAYS, STRUCTURES AND CONDUITS, ETC. SHOULD BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.

4) ALL EARTHEN FILLS SHOULD BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.

5) FILL MATERIALS SHOULD BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.

6) FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHOULD NOT BE INCORPORATED INTO FILLS.

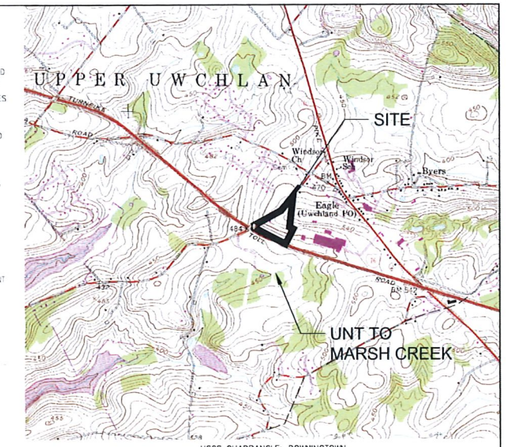
7) FILL SHOULD NOT BE PLACED ON SATURATED OR FROZEN SURFACES.

8) SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHOULD BE HANDLED IN ACCORDANCE WITH STANDARDS AND SPECIFICATIONS FOR SUBSURFACE DRAINS OR OTHER APPROVED METHOD.

9) ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED.

10) STOCKPILES, BORROW AREAS AND SPOIL AREAS SHOULD BE SHOWN ON THE PLAN MAPS AND SHOULD BE SUBJECT TO THE PROVISIONS OF THESE STANDARDS AS WELL AS THOSE OF THE APPROVED E&S PLAN. ALL APPROPRIATE PERMITS/AUTHORIZATION SHOULD BE OBTAINED PRIOR TO EARTH DISTURBANCE ACTIVITIES WITHIN THESE AREAS.

11) WHEREVER POSSIBLE, FILLS SHOULD NOT BE CONSTRUCTED FROM OR BUILT UPON SOILS KNOWN TO HAVE LOW SHEAR STRENGTH OR THAT HAVE BEEN IDENTIFIED AS "LANDSLIDE PRONE" UNLESS IT CAN BE SHOWN THAT IT CAN BE DONE WITH AN ACCEPTABLE SAFETY FACTOR.



USGS QUADRANGLE: DOWNINGTOWN
SCALE = 1" = 2000'

RECYCLING OR DISPOSAL OF WASTE MATERIALS

1. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

   ANTICIPATED CONSTRUCTION WASTES: BUILDING MATERIALS AND OTHER CONSTRUCTION SITE WASTES, INCLUDING BUT NOT LIMITED TO EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHOULD BE PLANNED AND IMPLEMENTED BY THE PERMITTEE OR CO-PERMITTE FOR HOUSEKEEPING MATERIALS MANAGEMENT, AND LITTER CONTROL.
2. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR DEP FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED
3. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED IN THESE NOTES. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS, GROUNDWATER SYSTEMS OR STORM SEWER SYSTEMS.
4. WHEREVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL.
5. ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS MUST BE FOLLOWED IN THE USE, HANDLING, AND DISPOSAL OF POTENTIALLY HAZARDOUS MATERIALS.
6. UNDER NO CIRCUMSTANCES MAY EROSION CONTROL BMPS BE USED FOR TEMPORARY STORAGE OF DEMOLITION MATERIALS OR CONSTRUCTION WASTES.

EXISTING FEATURES LEGEND

NOTE: ALL ITEMS SHOWN IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- TRACT (SITE) BOUNDARY
- ADJOINER BOUNDARY
- RIGHT-OF-WAY LINE
- ROADWAY CENTERLINE
- WETLAND BOUNDARY
- FLOODPLAIN BOUNDARY
- TREELINE
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- SPOT ELEVATION
- STORM SEWER
- SANITARY SEWER
- GAS LINE
- WATER LINE
- UNDERGROUND ELECTRIC LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND TELEPHONE LINE
- SOIL TYPE BOUNDARY
- IRON PIN FOUND
- UTILITY POLE
- MANHOLE
- MONUMENT

PROPOSED FEATURES LEGEND

NOTE: ALL ITEMS SHOWN IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- LOT LINE
- RIGHT-OF-WAY LINE
- BUILDING SETBACK LINE
- ROADWAY CENTERLINE
- TREELINE (TO REMAIN)
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- SPOT ELEVATION
- STORM SEWER
- SANITARY SEWER
- SANITARY SEWER LATERAL
- GAS LINE
- WATER LINE (6" PRESSURE CLASS P 350 DICL)
- WATER LINE LATERAL
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- OVERHEAD UTILITY LINE
- CONCRETE MONUMENT/IRON PIN TO BE SET
- UTILITY POLE
- STORM SEWER MANHOLE
- SANITARY SEWER MANHOLE
- INLETS (TYPE 'M', TYPE 'C')

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

Coordinate your projects via Coordinate PA at www.paonecall.org

Pennsylvania One Call System Serial Number

REV	DATE	DESCRIPTION	BY
1	03/01/23	REVISIONS PER TWP REVIEW LETTER 12/2/22	MRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER MONICA R. SWEENEY PE-076580

PROJECT: PROPOSED HEADQUARTERS BUILDING
UPPER UWCHLAN TOWNSHIP CHESTER COUNTY PENNSYLVANIA

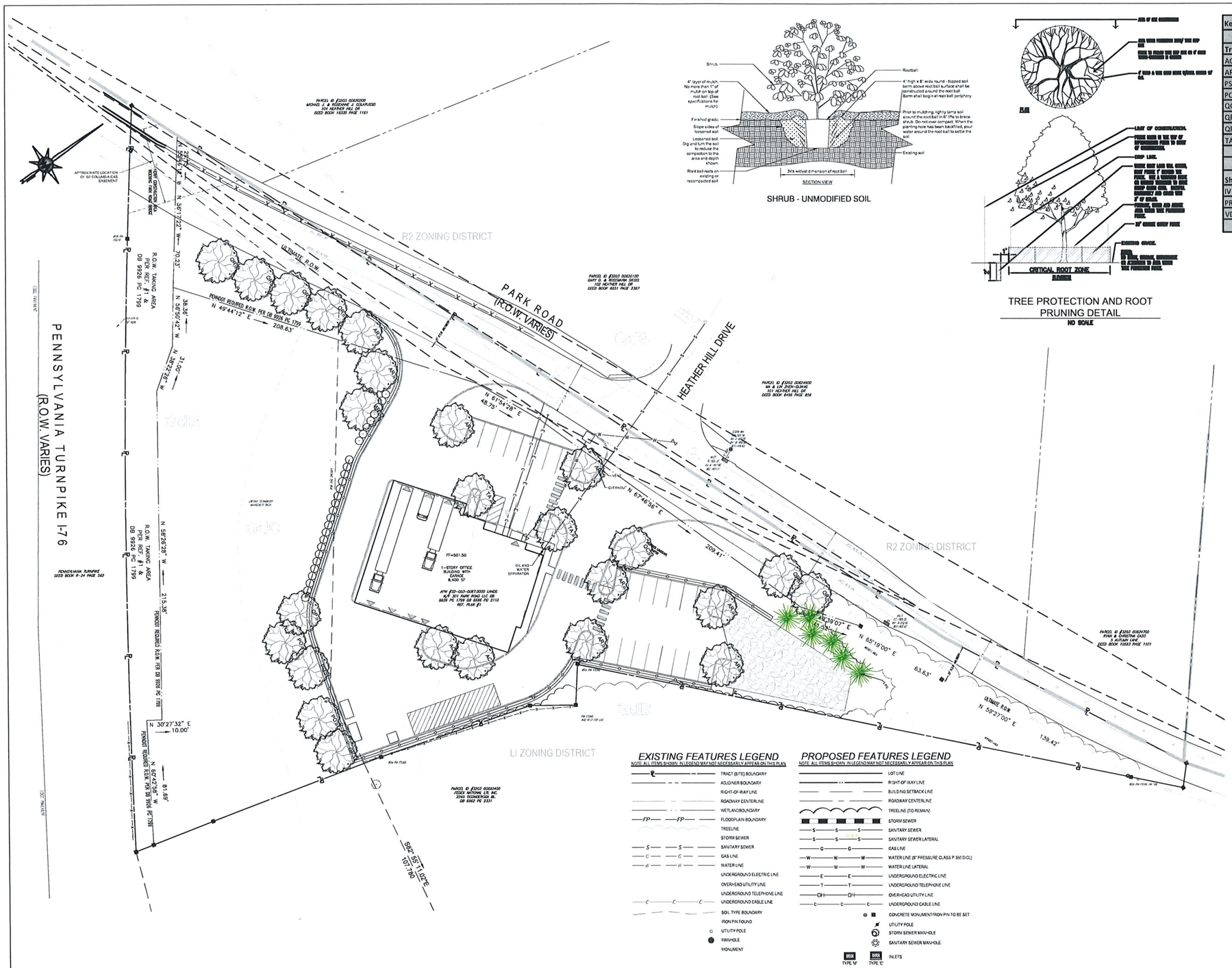
PREPARED FOR: P.J. REILLY CONTRACTING CO., INC.
557 W. UWCHLAN AVENUE, SUITE 220
EXTON, PA 19341

PLAN TITLE: **PRELIMINARY LAND DEVELOPMENT PLAN**

IMPROVEMENT CONSTRUCTION PLAN

PREPARED BY:
WILKINSON & ASSOCIATES, INC.
THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

DESIGNED	PROJECT #
MRS	2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 11 OF 19
SCALE AS SHOWN	



SHRUB - UNMODIFIED SOIL

TREE PROTECTION AND ROOT PRUNING DETAIL

NO SCALE

Key	Qty.	Species	Size	Root
Trees				
AC	2	Serviceberry (Amelanchier canadensis)	3.5" cal. Min	B&B
AR	9	Red Maple (Acer rubrum)	3.5" cal. Min	B&B
PS	5	White Pine (Pinus strobus)	3.5" cal. Min	B&B
PO	3	Platanus occidentalis (Sycamore)	3.5" cal. Min	B&B
QC	1	Scarlet Oak (Quercus coccinea)	3.5" cal. Min	B&B
QP	2	Pin Oak (Quercus palustris)	3.5" cal. Min	B&B
QR	4	Red Oak (Quercus rubra)	3.5" cal. Min.	B&B
TA	2	American Basswood (Tilia americana)	3.5" cal. Min	B&B
Shrubs				
IV	18	WInterberry (Ilex verticillata)	36" ht. min	As Available
PR	6	Black Cherry (Prunus serotina)	36" ht. min	As Available
VD	3	Arrowwood Viburnum (Viburbnum dentatum)	36" ht. min	As Available

LANDSCAPE COMPLIANCE CHART

IMPROVEMENT CRITERIA	DECIDUOUS	EVERGREEN	SHRUBS
PER 1,000 SF OF GROSS BUILDING AREA	18	9	72
PER 2,000 SF OF OFF STREET PARKING	28	14	53
PER 100 LF OF NEW/EXISTING ROAD FRONTAGE	20	10	50
PER 100 LF OF EXISTING TRACT BOUNDARY	13	26	104
TREE REPLACEMENTS TOTAL	11	-	-
TOTAL REQUIRED	90	59	279
TOTAL PROVIDED	23	5	27

TREE REPLACEMENT REQUIREMENTS

CALIPER OF TREES TO BE REMOVED	QUANTITY TO BE REMOVED	REPLACEMENT REQUIREMENT
6"	1	1 3-3.5"
8"	2	2 3-3.5"
9"	1	1 4-4.5"
10"	2	2 4-4.5"
12"	1	1 4-4.5"
13"	1	2 3-3.5"
18"	1	2 3-3.5"
24"	2	5 3-3.5"

BASIN INTERIOR SEED MIX - DISTURBED AREA ONLY

30.0% PANICUM CLANDESTINUM, TIOGA (DEERTONGUE, TIOGA)
29.5% CAREX VULPINOIDEA, PA ECOTYPE (FOX SEDGE, PA ECOTYPE)
20.0% ELYMUS VIRGINICUS, MADISON-NY ECOTYPE (VIRGINIA WILDRYE, MADISON-NY ECOTYPE)
7.0% CAREX LURIDA, PA ECOTYPE (LURID SEDGE, PA ECOTYPE)
7.0% CAREX SCOPARIA, PA ECOTYPE (BLUNT BROOM SEDGE, PA ECOTYPE)
3.0% VERBENA HASTATA, PA ECOTYPE (BLUE VERVAIN, PA ECOTYPE)
1.5% JUNCUS EFFUSUS (SOFT RUSH)
0.5% AGROSTIS PERENNANS, ALBANY PINE BUSH-NY ECOTYPE (AUTUMN BENTGRASS, ALBANY PINE BUSH-NY ECOTYPE)
0.5% ASCLEPIAS INCARNATA, PA ECOTYPE (SWAMP MILKWEED, PA ECOTYPE)
0.3% SCIRPUS CYPERINUS, PA ECOTYPE (WOOLGRASS, PA ECOTYPE)
0.2% HELENIUM AUTUMNALE, PA ECOTYPE (COMMON SNEEZEWEED, PA ECOTYPE)
0.1% ASTER NOVAE-ANGLIAE, PA ECOTYPE (NEW ENGLAND ASTER, PA ECOTYPE)
0.1% ASTER PUNICEUS, PA ECOTYPE (PURPLESTEM ASTER, PA ECOTYPE)
0.1% ASTER UMBELLATUS, PA ECOTYPE (FLAT TOPPED WHITE ASTER, PA ECOTYPE)
0.1% EUPATORIUM PERFOLIATUM, PA ECOTYPE (BONESET, PA ECOTYPE)
0.1% LOBELIA SIPHILITICA, PA ECOTYPE (GREAT BLUE LOBELIA, PA ECOTYPE)

SEEDING RATE: 20 LBS PER ACRE, OR 0.5-1 LB/1,000 SQ FT WITH A COVER CROP. FOR A COVER CROP USE ONE OF THE FOLLOWING: GRAIN RYE (1 SEP TO 30 APR; 30 LBS/ACRE), JAPANESE MILLET (1 MAY TO 31 AUG; 10 LBS/ACRE), OR BARNYARD GRASS (1 MAY TO 31 AUG; 10 LBS/ACRE).

LANDSCAPE NOTES:

1. ALL PLANT MATERIAL SHALL MEET THE HEIGHT, SPREAD AND/OR CALIPER FOR TREES AND SHRUBS LISTED IN THE TOWNSHIP'S RECOMMENDED PLANT LIST.
2. ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS OUTLINED IN THE TOWNSHIP'S SALDO AND THE DETAILS INCLUDED ON THESE PLANS.
3. THE DEVELOPER SHALL CONTACT THE TOWNSHIP IN WRITING TO REQUEST A FINAL INSPECTION FOR ACCEPTANCE AT THE END OF THE GUARANTY PERIOD.
4. STREET TREES SHALL HAVE ALL MAIN BRANCHES PRUNED TO A CLEARANCE HEIGHT OF EIGHT FEET ABOVE THE GROUND. STREET TREES SHALL HAVE A SINGLE, STRAIGHT TRUNK AND CENTRAL LEADER SHALL BE FREE OF DISEASE AND MECHANICAL DAMAGE.
5. PLANT MATERIAL SHALL CONFORM TO THE FOLLOWING PLANTING STANDARDS AND GUIDELINES AS FOLLOWS:
   - QUALITY: ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY, THEY SHALL HAVE NORMAL, WELL-DEVELOPED BRANCHES AND VIGOROUS FIBROUS ROOT SYSTEMS AND SHALL BE FREE
   - PRUNING: TREES SHALL BE PRUNED AFTER PLANTING OR BY THE NURSERYMAN AT THE TIME OF DIGGING TO REMOVE DEAD, DAMAGED OR CROSSING BRANCHES, AND TO PRESERVE THEIR NATURAL CHARACTER AND SHAPE. PRUNING SHALL BE RESTRICTED IN GENERAL TO THE SECONDARY BRANCHES AND SOFT AND SUCKER GROWTH AND SHALL BE CONDUCTED IN ACCORDANCE WITH RECOGNIZED HORTICULTURAL PRACTICES.
   - REMOVAL OF ALL PLANTING DEBRIS: REMOVAL OF ALL DEBRIS IS REQUIRED. THE PROPERTY MUST BE LEFT IN A NEAT AND ORDERLY CONDITION IN ACCORDANCE WITH GOOD AND ACCEPTED PLANTING PRACTICES.
   - GUARANTEE: (A) ALL PLANT MATERIAL SHALL BE GUARANTEED FOR 18 MONTHS FROM THE DAY OF FINAL APPROVAL OF THE LANDSCAPE INSTALLATION BY THE TOWNSHIP.. (B) ANY DEAD PLANT MATERIAL SHALL BE REPLACED AND INSTALLED ACCORDING TO THE APPROVED PLANTING PRACTICES.
6. SUBSTANTIAL CHANGES TO THE APPROVED LANDSCAPE PLANS MUST BE APPROVED BY THE TOWNSHIP THROUGH PLAN RESUBMISSION. IF SUBSTANTIAL CHANGES TO THE LANDSCAPING ARE MADE WITHOUT PRIOR APPROVAL FROM THE TOWNSHIP, THE CHANGES WILL BE REJECTED UPON INSPECTION.
7. IF A PLANT SPECIES OR OTHER SUBSTITUTION IS MADE WITHOUT RECEIVING PRIOR SUBSTITUTION REQUEST APPROVAL FROM THE TOWNSHIP, THE UNAPPROVED PLANTS MAY BE REJECTED UPON INSPECTION. ALL PLANT SUBSTITUTION REQUESTS SHOULD BE FORWARDED IN WRITING TO THE TOWNSHIP LANDSCAPE ARCHITECT FOR REVIEW.
8. MAINTENANCE OF THE VEGETATION SHOULD BE CONDUCTED ACCORDING TO THE FOLLOWING:
   - FIRST GROWING SEASON MAINTENANCE– WHENEVER CANOPY (OVERALL VEGETATION) REACHES A HEIGHT OF 18"-24", USE A MOWER OR STRING TRIMMER TO TRIM THE MEADOW TO A HEIGHT OF 8". THIS WILL REDUCE COMPETITION BY FAST-GROWING WEEDS FOR SUNLIGHT, WATER, AND NUTRIENTS NEEDED BY SLOWER GROWING, PERENNIAL NATIVES. MOWING SHOULD NOT BE DONE WITH A LAWN MOWER AS THE MOWER HEIGHT WILL BE TOO LOW AND NATIVE SEEDLINGS WILL BE KILLED. IF BIOENGINEERING OR CONTAINERIZED WOODY MATERIALS ARE USED ON THE SITE, MOWING SHOULD BE ABOVE THE NEW GROWTH OF THESE MATERIALS. MOWING SHOULD CEASE BY MID-SEPTEMBER. PROBLEM WEEDS SHOULD BE SPOT SPRAYED WITH AN APPROVED HERBICIDE OR HAND PULLED.
   - SECOND AND SUBSEQUENT GROWING SEASON MAINTENANCE – PRIOR TO NEW SPRING GROWTH REACHING A HEIGHT OF 2' (I.E., SHORTLY AFTER FORSYTHIA OR REDBUD BLOOMS), TRIM ANY MATERIAL STANDING FROM THE PREVIOUS YEAR CLOSE TO THE GROUND (APPROXIMATELY 2'). THIS WILL ALLOW THE SOIL TO WARM MORE QUICKLY WHICH WILL STIMULATE EMERGENCE AND GROWTH OF NATIVE SEEDLINGS. IT WILL ALSO REDUCE THE LIKELIHOOD OF THE MEADOW BEING INVADED BY SHRUBS. IF BIOENGINEERING OR CONTAINERIZED WOODY MATERIALS WERE USED ON THE SITE OR SHRUBS/TREES WERE PART OF THE MIX, THE SITE SHOULD NOT BE TRIMMED AFTER THE ESTABLISHMENT YEAR. PROBLEM WEEDS SHOULD BE SPOT SPRAYED OR HAND PULLED.
   - SPECIAL CIRCUMSTANCES SECOND GROWING SEASON – IF YOU NOTICE A HEAVY INFESTATION OF RAGWEED OR FOXTAIL IN THE SECOND GROWING SEASON, TRIM THE MEADOW TO A HEIGHT OF 8". IF BIOENGINEERING OR CONTAINERIZED WOODY MATERIALS WERE USED, TRIMMING SHOULD BE ABOVE OR AROUND NEW GROWTH OF THE PLANTS. TRIMMING SHOULD CEASE AFTER MID-SEPTEMBER.
   - GENERAL MAINTENANCE – IN ADDITION TO STRUCTURAL MAINTENANCE, SILTATION NEEDS TO BE REMOVED AS NEEDED. CLOSE MOWING OR EXTENSIVE CHEMICAL USE IS NOT CONDUCIVE TO WATER QUALITY IMPROVEMENT AND WILDLIFE HABITAT.

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

Coordinate your projects via Coordinate PA at www.paonecall.org.

Pennsylvania One Call System Serial Number

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- UNDERGROUND CABLE LINE
- SOIL TYPE BOUNDARY
- IRON PIN FOUND
- UTILITY POLE
- MANHOLE
- MONUMENT

PROPOSED FEATURES LEGEND

NOTE: ALL ITEMS SHOWN IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- LOT LINE
- RIGHT-OF-WAY LINE
- BUILDING SETBACK LINE
- ROADWAY CENTERLINE
- TREELINE (TO REMAIN)
- STORM SEWER
- SANITARY SEWER
- SANITARY SEWER LATERAL
- GAS LINE
- WATER LINE (8" PRESSURE CLASS P 350 D.I.C.)
- WATER LINE LATERAL
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND CABLE LINE
- CONCRETE MONUMENT/IRON PIN TO BE SET
- UTILITY POLE
- STORM SEWER MANHOLE
- SANITARY SEWER MANHOLE
- INLETS (TYPE 'M', TYPE 'C')

GRAPHIC SCALE

30 0 15 30 60 120

1 INCH = 30 FEET

REV	DATE	DESCRIPTION	BY
1	03/01/23	REVISIONS PER TWP REVIEW LETTER 12/2/22	MRS

REGISTERED PROFESSIONAL ENGINEER MONICA R. SWEENEY PE-079680 COMMONWEALTH OF PENNSYLVANIA

PROJECT:
PROPOSED HEADQUARTERS BUILDING
UPPER UWCHLAN TOWNSHIP CHESTER COUNTY PENNSYLVANIA

PREPARED FOR:
P.J. REILLY CONTRACTING CO., INC.
557 W. UWCHLAN AVENUE, SUITE 220
EXTON, PA 19341

PLAN TITLE:
PRELIMINARY LAND DEVELOPMENT PLAN

LANDSCAPE PLAN

PREPARED BY:
WILKINSON & ASSOCIATES, INC.
THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

DESIGNED MRS	PROJECT # 2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 12 OF 19
SCALE AS SHOWN	

EXISTING FEATURES LEGEND

NOTE: ALL ITEMS SHOWN IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- TRACT (SITE) BOUNDARY
- ADJOINER BOUNDARY
- RIGHT-OF-WAY LINE
- ROADWAY CENTERLINE
- WETLAND BOUNDARY
- FLOODPLAIN BOUNDARY
- TREELINE
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- SPOT ELEVATION
- STORM SEWER
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- WATER LINE
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- UTILITY POLE
- MANHOLE
- MONUMENT

PROPOSED FEATURES LEGEND

NOTE: ALL ITEMS SHOWN IN LEGEND MAY NOT NECESSARILY APPEAR ON THIS PLAN

- LOT LINE
- RIGHT-OF-WAY LINE
- BUILDING SETBACK LINE
- ROADWAY CENTERLINE
- TREELINE (TO REMAIN)
- CONTOUR (MAJOR INDEX)
- CONTOUR (MINOR)
- 222.22 SPOT ELEVATION
- STORM SEWER
- SANITARY SEWER
- SANITARY SEWER LATERAL
- GAS LINE
- WATER LINE (8" PRESSURE CLASS P 350 DCL)
- WATER LINE LATERAL
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND CABLE LINE
- CONCRETE MONUMENT/IRON PIN TO BE SET
- UTILITY POLE
- STORM SEWER MANHOLE
- SANITARY SEWER MANHOLE
- 999 TYPE 'M' / 999 TYPE 'C' INLETS

Dial 8-1-1 or 1-800-242-1776 not less than 3 business days nor more than 10 business days prior to the start of excavation.

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Pennsylvania One Call System Serial Number

GRAPHIC SCALE

30 0 15 30 60 120

1 INCH = 30 FEET

REV.	DATE	DESCRIPTION	BY
1	03/01/23	REV:SIGNS PER TWP REVIEW LETTER 12/2/22	MRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER MONICA R. SWEENEY PE-079680

PROJECT:

PROPOSED HEADQUARTERS BUILDING

UPPER UWCHLAN TOWNSHIP CHESTER COUNTY PENNSYLVANIA

PREPARED FOR:

P.J. REILLY CONTRACTING CO., INC.
557 W. UWCHLAN AVENUE, SUITE 220
EXTON, PA 19341

PLAN TITLE:

PRELIMINARY LAND DEVELOPMENT PLAN

LIGHTING PLAN

PREPARED BY:

WILKINSON & ASSOCIATES, INC.

THE COMMONS AT VALLEY FORGE
1220 VALLEY FORGE ROAD
SUITE 22
PHOENIXVILLE, PA 19460
PHONE (610) 415-1220
FAX (610) 415-1224

DESIGNED	PROJECT #
MRS	2021-231
CHECKED (PM) MRS	
DATE 11/01/2022	DRAWING # 13 OF 19
SCALE AS SHOWN	

SUBDIVISION / LAND DEVELOPMENT APPLICATION

☑ Preliminary Submittal ☐ Final Submittal

The undersigned hereby applies for review of the Plan submitted herewith and described below:

1. Name of Subdivision / Development: 100 Greenridge Road Development
2. Plan Dated: March 31, 2023 County Deed Book/Page No. C65/236
3. Name of property owner(s): Bonnie & Richard Williams

   Address: 205 Exeter Road, Devon

   State/Zip: Pennsylvania/19333 Phone No.:

   Email:
4. Name of Applicant (If other than owner):

   Toll Mid-Atlantic LP Company, Inc.

   Address: 1140 Virginia Drive, Fort Washington

   State/Zip: Pennsylvania/19034 Phone No.: 215-938-8000

   Email: Mdowns@tollbrothers.com
5. Applicant's interest (if other than owner): Equitable Owner
6. Engineer, Architect, Surveyor, or Landscape Architect responsible for Plan.

   ESE Consultants, Inc./John Baionno, P.E.

   Address: 1140 Virginia Drive, Fort Washington

   State/Zip: Pennsylvania/19034 Phone No.: 215-293-5462

   Email: Baionno@eseconsultants.com
7. Total acreage: 65.95 acres Number of Lots: 2 existing
8. Acreage of adjoining land in same ownership: (If any) N/A
9. Describe Type of Development Planned: Subdivision and Land Development of Property to involve development of 64 detached single-family homes with associated open space and improvements.

10. This Application shall be accompanied by: the Application Fee as listed below, an aerial image of the property, and the quantity of plans/supporting information as detailed in the Township Code §162-8.B.(1)(b) and/or §162-8.C.(1)(d).
[One-half of the required plan submissions may be of a reduced size, i.e. 11 x 17]

11. List all subdivision and zoning standards or requirements which have not been met and for which a waiver or change is requested.
See enclosed addendum.

12. The Applicant or his/her agent shall enter into a Subdivision / Land Development Review Escrow Agreement (attached) and place into escrow with the Township at the time of application an amount estimated by the Township to cover all costs of engineering and professional planning reviews (not including County application fee), legal services and other professional services used by the Township in connection with the application.

Signature of Property Owner or Applicant: _____

By: Toll Mid-Atlantic LP Company, Inc.

Date: 4/4/2023

*Development subject to ACT 209 Impact Fee.

*Park & Recreation Fee per residence is levied. Contact Township Offices to determine amount.

SUBDIVISION / LAND DEVELOPMENT APPLICATION FEE

1-2 Lots $250

3-5 Lots $500
Plus $25 for each Lot over 3

Over 5 Lots $1000
Plus $50 for each Lot over 5

Form revised January 2015

100 Greenridge Road Development
Preliminary Subdivision and Land Development Plan Application
Applicant: Toll Mid-Atlantic LP Company, Inc.
April 5, 2023

The following waivers from the Upper Uwchlan Township Subdivision and Land Development Ordinance ("SALDO") and Stormwater Management Ordinance ("SMO") are requested in connection with the above referenced application:

- SMO § 152-308.A to permit post-construction stormwater management peak flow rates exceeding the required reduction limits listed in Table 308.1 for POI #2. The design will reduce the post-construction values to less than 75% of the pre-construction values, but it will not meet the stated reduction values for the two-year, five-year, and ten-year storm events. The majority of the existing ground cover in the drainage area has been maintained and the drainage area to this point of interest has been reduced by 77% from 7.4 AC to 1.7 AC.

- SMO § 152-311.G(9) to permit cover exceeding the 10' maximum cover requirements over drainage pipes. Due to the sloping nature of the site, and the amount of fill required, portions of the drainage network will require cover exceeding 10 feet.

- SMO § 152-311.H(1) to permit the maximum detention/retention basin water depth to be greater than two feet for the two-year and five feet for the one-hundred-year twenty-four-hour storm events due to the sloping nature of the site which limits basin sizes.

- SMO § 152-311.H(3) to permit an adequate alternative to the concrete monoslab pavers for the emergency spillway lining. The permanent erosion control matting proposed will allow grass to grow, while maintaining the structural integrity of the spillway.

- SALDO § 162-30.A to increase the maximum road centerline grade to 11% on Road A between stations 8+50 and 16+30, which is along a portion of the road without homes. The minor increase in road slope for this 780' section of the road will allow for better overall earthwork balance, and lessened road slope in front of Lots 4 – 7, and 58 – 64.

- SALDO § 162-39.E to provide Belgian block curb along all roads within the development instead of concrete curb. This request will allow for curb construction similar to other residential developments in the Township.

- SALDO § 162-46.B(1) to permit sanitary sewer disposal Lot 65 to have access to a public street via an easement over open space rather than frontage on a public street. Neither the open space nor Lot 65 are proposed to be development parcels.

- SALDO § 162-38.A(3) to permit private driveways within 50 feet of the nearest street right-of-way line. In an effort to limit disturbance to woodlands and slopes, lots widths and sizes have been reduced such that four lots will have driveways that are as close as 34' to the nearest right-of-way line. Traffic will be limited to just the development, and the nearby intersections will be stop sign controlled.

GRAPHIC SCALE 1 inch = 120 ft.

FEET 120 0 60 120 240

ESE CONSULTANTS

ENGINEERING ♦ PLANNING ♦ SURVEYING ♦ ENVIRONMENTAL

ESE Consultants, Inc.
1145 Virginia Drive | Fort Washington, PA 19034
T: 215-654-8000

REV.	DATE	DESCRIPTION	DRAWN

AERIAL PHOTOGRAPH PLAN

100 GREENRIDGE ROAD DEVELOPMENT

UPPER UWCHLAN TOWNSHIP, CHESTER COUNTY, PENNSYLVANIA

DATE: 03/31/2023	SCALE: 1"=120'
DESIGN: JHB	DRAWN: STAFF
JOB NO.: 8145	FILE NAME: 8145-03.8-AERIAL
REF. NO.: SD03.02	
SHEET NO.: 11 OF 49	

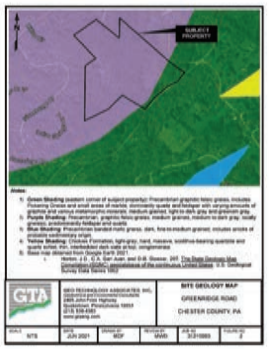
N:\PROJECTS\PENNSYLVANIA\8145-GREENRIDGE ROAD\ENGDEPT\DRAWINGS\SHEET DRAWINGS\8145-03.8-AERIAL.DWG-Eric Stengel-4/5/2023 4:20 PM

SITE DATA :

GROSS SITE AREA: 65.95 ACRES
TAX MAP PARCEL NO.: 32-001-0017.1, 32-001-0011
BASE ZONING DISTRICT: R2 – RESIDENTIAL DISTRICT
OVERLAY DISTRICT: F1 – FLEXIBLE DEVELOPMENT OVERLAY
PROPOSED USE: FLEXIBLE DEVELOPMENT OVERLAY OPTION; SINGLE-FAMILY, DETACHED LOTS
TOTAL NUMBER OF PROPOSED RESIDENTIAL LOTS: 64 BUILDING LOTS

NATURAL RESOURCE AREAS:

NATURAL RESOURCE:	AREA (ACRES)	DISTURBANCE (ACRES)
WOODLANDS & HEDGEROWS:	49.21 ACRES	19.06 ACRES
WETLANDS & WATERCOURSES:	0.30 ACRES	0.00 ACRES
FLOODPLAIN & FLOODPLAIN SOILS:	0.88 ACRES	0.00 ACRES
RIPARIAN BUFFER AREA:	1.62 ACRES	0.00 ACRES
PROHIBITIVE SLOPES AREA:	7.30 ACRES	0.85 ACRES
PRECAUTIONARY SLOPES AREA:	26.08 ACRES	8.06 ACRES



SOILS LEGEND

GENERATED FROM THE USDA-NRCS WEB SOIL SURVEY.
SOIL SURVEY AREA: CHESTER COUNTY, PA

CpA	COKESBURY SILT LOAM – HIGH WATER TABLE, HYDRIC
GdB	GLADSTONE GRAVELLY LOAM – 3 TO 8 PERCENT SLOPE
GdC	GLADSTONE GRAVELLY LOAM – 8 TO 15 PERCENT
GdD	GLADSTONE GRAVELLY LOAM – 15 TO 25 PERCENT
GeD	GLADSTONE-PARKER GRAVELLY LOAM – 15 TO 25 PERCENT

SITE IMPACT NOTES/RESOLUTIONS:

1. THE EXISTING HOME, GARAGE AND SUBSEQUENT STRUCTURES, ALONG WITH THE EXISTING POOL AND PATIO, WILL BE DEMOLISHED. A PORTION OF THE EXISTING DRIVEWAY WILL REMAIN AND BE UTILIZED AS PART OF A COMMUNITY TRAIL NETWORK.
2. THE APPLICANT IS SEEKING A ZONING VARIANCE TO DISTURB AREAS OF PROHIBITIVE SLOPES ON THE SITE IN ORDER TO SERVICE THE MAIN DEVELOPMENT PAD (ROAD A) FROM GREENRIDGE ROAD.
3. THE MAJORITY OF THE PROPOSED DEVELOPMENT IS LOCATED NEAR THE HIGH-POINT OF THE SITE, NEAR THE SHARED BOUNDARY WITH THE STONEHENGE DEVELOPMENT TO THE WEST. WHILE THE F1 DEVELOPMENT OVERLAY ORDINANCE ALLOWS FOR A 50' BUILDING SETBACK FROM THE TRACT PERIMETER, THE APPLICANT HAS PROPOSED A 50' LOT SETBACK THAT WILL ALLOW THE MAJORITY OF THE EXISTING VEGETATION LOCATED BETWEEN THE STONEHEDGE DEVELOPMENT AND THE PROPOSED DEVELOPMENT, TO REMAIN UNDISTURBED, WITH THE EXCEPTION OF A PROPOSED GRASS-PAVE EMERGENCY ACCESS.
4. THE PROPOSED DEVELOPMENT WILL REQUIRE DISTURBANCE OF MAN-MADE PROHIBITIVE & PRECAUTIONARY SLOPES, RESULTING FROM THE CONSTRUCTION OF THE EXISTING HOME & ACCESSORY USES. THESE AREAS HAVE BEEN IDENTIFIED ON THE PLAN.
5. WITH THE EXCEPTION OF THE NECESSARY CONSTRUCTION AND DISTURBANCE TO BUILD "ROAD A", THE PROPOSED DEVELOPMENT WILL HAVE MINIMAL IMPACT ON AREAS OF PRECAUTIONARY SLOPES. NO MAXIMUM OR MINIMUM DISTURBANCE IS IDENTIFIED IN THE ORDINANCE.
6. THE PROPOSED DEVELOPMENT WILL REQUIRE DISTURBANCE TO AREAS OF WOODLANDS ON SITE. THE ZONING ORDINANCE ALLOWS FOR DISTURBANCE OF EXISTING WOODLANDS ON SITE, UP TO 25%. SHOULD THE APPLICANT REQUIRE GREATER DISTURBANCE DURING LAND DEVELOPMENT, THE APPLICANT WILL PROVIDE FOR THE NECESSARY TREE REPLACEMENT AS REQUIRED PER CODE.
7. THE WETLANDS AND WATERS OF THE COMMONWEALTH SHOWN ON THESE PLANS, IN ADDITION TO THE RESPECTIVE RIPARIAN AND DEP STREAM BUFFERS SHALL REMAIN UNDISTURBED.
8. THE PROJECT SITE SHARES A COMMON BOUNDARY WITH PARCEL 32-1-15, WHICH HAS BEEN IDENTIFIED AS CLASS II HISTORIC RESOURCE. NO IMPACT FROM THE PROPOSED DEVELOPMENT IS ANTICIPATED AS RESTRICTED OPEN SPACE HAS BEEN PROPOSED BETWEEN THE AREA OF DEVELOPMENT AND THE COMMON BOUNDARY LINE.

LEGEND

- EXISTING STRUCTURE
- EXISTING DIRT/GRAVEL ROAD
- EXISTING EDGE OF PAVING
- EXISTING R.O.W.
- EXISTING BOUNDARY LINE
- 100 — MAJOR CONTOURS
- MINOR CONTOURS
- EXISTING SETBACK LINE
- + 100.0 — EXISTING SPOT ELEVATION
- EXISTING TREE LINE
- EXISTING VEGETATION LINE
- EXISTING DECIDUOUS TREE
- EXISTING SHRUB
- EXISTING SIGN
- EXISTING MAIL BOX
- EXISTING UTILITY POLE
- EXISTING INLET
- EXISTING MANHOLE
- SOILS LINE
- EXISTING STREAM
- EXISTING CONCRETE MONUMENT
- EXISTING GAS LINE
- EXISTING WATER LINE
- EXISTING STORM PIPE
- EXISTING WATER VALVES
- EXISTING HYDRANTS
- EXISTING STONE WALL
- FLOODPLAIN
- TOWNSHIP RIPARIAN BUFFER LINE
- PA DEP 150' STREAM BUFFER LINE
- WETLANDS LIMIT
- WATERS OF THE U.S.
- PRECAUTIONARY SLOPES
- PROHIBITIVE SLOPES
- SLOPES UNDER 15%
- TP-10 — TEST PIT NUMBER & LOCATION
- PROPOSED TREE LINE
- BUILDING SETBACK LINE
- PROPOSED CENTER LINE
- PROPOSED PROPERTY LINE
- PROPOSED R.O.W.
- PROPOSED CURB
- PROPOSED 4' WIDE SIDEWALK WITH ACCESS RAMP
- OUTBOUND LINE
- PROPOSED SPLIT RAIL FENCE
- PROPOSED EASEMENT
- 68 — PROPOSED LOT NUMBER
- LIMIT OF DISTURBANCE

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215-542-9590
ESE Consultants, Inc.
Corporate Office | 1 Bala Plaza East, Suite 501 | Bala Cynwyd, PA 19004

REV.	DATE	DESCRIPTION	DRAWN

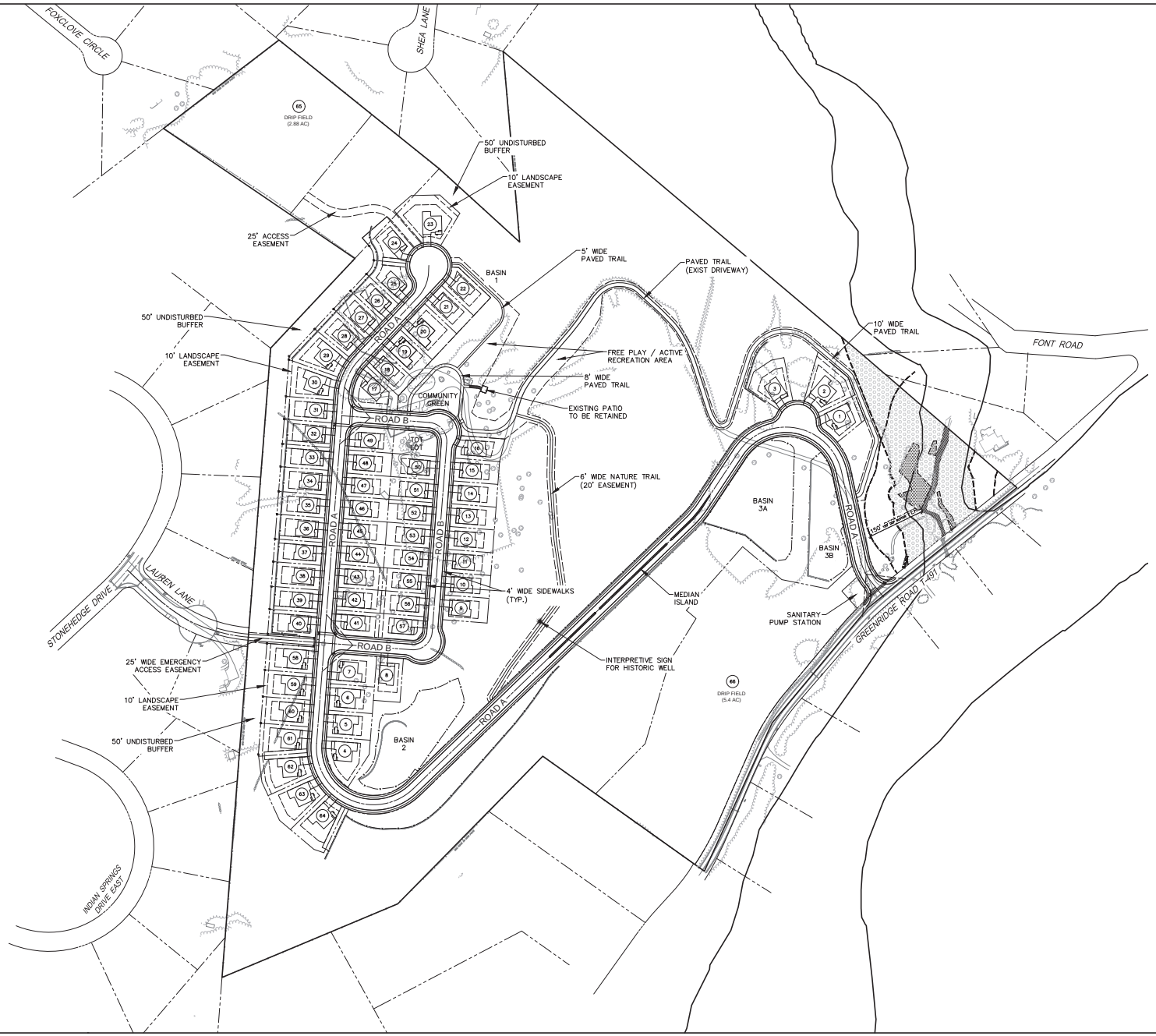
SITE ANALYSIS & CONSERVATION PLAN – PROPOSED

100 GREENRIDGE ROAD DEVELOPMENT

UPPER UWCHLAN TOWNSHIP, CHESTER COUNTY, PENNSYLVANIA

DATE: 03/31/2023	SCALE: 1"=120'
DESIGN: MRZ	DRAWN: STAFF
JOB NO.: 8145	FILE NAME: 8145-SD3-SITE IMPACT PROP
REF. NO.: SD03.04	
SHEET NO.: 13 OF 49	

N:\PROJECTS\PENNSYLVANIA\8145-GREENRIDGE ROAD\ENGDEPT\DRAWINGS\SHEET DRAWINGS\8145-03D-SITE IMPACT PROP.DWG-Eric Stengel-4/5/2023 4:48 PM



LEGEND

- EXISTING STRUCTURE
- EXISTING CONTOURS
- PROPOSED TREE LINE
- EXISTING TREE LINE
- WETLANDS LIMIT
- WATERS OF THE U.S.
- BUILDING SETBACK LINE
- PROPOSED CENTER LINE
- STREAM LINE
- PROPOSED PROPERTY LINE
- PROPOSED R.O.W.
- EXISTING CARTWAY
- PROPOSED CURB
- PROPOSED 4' WIDE SIDEWALK WITH ACCESS RAMP
- OUTBOUND LINE
- PROPOSED SPLIT RAIL FENCE
- PROPOSED EASEMENT
- 68 PROPOSED LOT NUMBER

FEET
120 0 60 120 240
GRAPHIC SCALE 1 inch = 120 ft.

N:\PROJECTS\PENNSYLVANIA\8145-GREENRIDGE ROAD\ENGDEPT\DRAWINGS\SHEET DRAWINGS\8145-04-OVERALL.DWG-Eric Stenger-4/5/2023 4:48 PM

ESE CONSULTANTS

REV.	DATE	DESCRIPTION	DRAWN

OVERALL SITE PLAN

100 GREENRIDGE ROAD DEVELOPMENT

UPPER UWCHLAN TOWNSHIP, CHESTER COUNTY, PENNSYLVANIA

DATE: 03/31/2023	SCALE: 1"=120'
DESIGN: MRZ	DRAWN: STAFF
JOB NO.: 8145	FILE NAME: 8145-04-OVERALL
REF. NO.: SD04.01	
SHEET NO.: 14 OF 49	

UPPER UWCHLAN TOWNSHIP
Planning Commission Meeting
March 9, 2023
6:00 p.m. Workshop,
7:00 p.m. Meeting
Minutes
Draft

LOCATION: Township Building Conference Room, 140 Pottstown Pike, Chester Springs PA 19425

6:00 p.m. Comprehensive Plan Workshop Attendees:

Sally Winterton, Planning Commission Chair;
Joe Stoyack, Planning Commission Vice-Chair;
Planning Commission Members: Chad Adams, David Colajezzi, Jim Dewees
Anthony Campbell, Township Zoning Officer
Gwen Jonik, Township Secretary

<u>6:00 p.m. Workshop</u>
Sally Winterton called the Workshop to order at 6:08 p.m.

Anthony Campbell summarized the Board of Supervisors' February discussion of the uses in the C-1 Village Commercial District:

1. That multi-use buildings – different by-right uses in the same building requires conditional use approval; multi-tenant buildings – same uses within the same building. The Board is going to remove the conditional use requirement for multi-use buildings.
2. A cultural 'studio' is smaller scale, where teaching and instruction takes place;
3. A cultural 'facility' is a larger building, such as a museum, theater, etc.
4. Fitness centers are only permitted in the LI District at this time. The Board would like to allow fitness centers as a cultural studio, a by-right use in the C-1 Village Commercial District.
5. Kristin Camp had brought up short-term rentals, such as VRBO, airbnbs in the residential districts. Mr. Campbell advises short-term rentals are similar to hotels, which are allowed in the LI or Commercial Districts, not residential districts. Short-term rentals aren't considered a Bed and Breakfast because with a Bed and Breakfast, the owners are to live there. Short-term is considered less than a 30-day stay. Greater than 30 days is considered long-term and Upper Uwchlan doesn't inspect rental properties.
6. The Board also considered expanding manufacturing uses in the LI and PI Planned Industrial/Office District.

The Planning Commission discussed uses in the R1 Residential District – 1 dwelling unit/2 acres. Anthony Campbell advised that he's received several calls recently from residents who want to open airbnbs in that district. In the Lyndell neighborhood, most houses and lots are small since Marsh Creek Lake was formed. They're existing non-conforming lots, which limits what can be done with the property, especially needing on-lot water and septic. In the R1 Districts, a second house or living quarters is not permitted; the group discussed limiting the size of accessory buildings – there is a 25' height limitation. Stormwater regulations come in to play with accessory buildings – if there's more than 1,000 SF of impervious surface, stormwater management measures are required. Mr. Campbell suggests that any requests for in-law quarters that are detached shouldn't be allowed in R1 or R2 without additional approvals, however they could be attached, as with a breezeway.

Also discussed was multi-family occupancy in one building. Mr. Campbell advised that it can't legally be prohibited, perhaps limited by the number of people per square feet; those living together who aren't related is considered a group home, which is permitted; a half-way house, if less than 10 people, is considered a single-family home.

Two-family dwellings are allowed in R2 (1 dwelling unit/acre); considered a duplex, horizontally or vertically separated with two separate families.

Joe Stoyack and Chad Adams questioned allowing "affordable housing", Section 8, senior housing (high rise). It can't be prohibited, and developers cannot be forced to build such housing.

In summary, Mr. Campbell would like to allow for in-law quarters attached or detached as accessory uses in the R1 and R2 Residential Districts.

The Workshop was adjourned at 6:56 p.m.

7:00 Meeting
Attendees:
Sally Winterton, Chair; Joe Stoyack, Vice-Chair; Chad Adams, David Colajezzi, Jim Dewees, and Jeff Smith;
Mary Lou Lowrie, P.E., Township Engineer
Gwen Jonik, Township Secretary
Dave Schlott, Jr., P.E., ARRO

Absent: Stephen Fean, Ravi Mayreddy

Sally Winterton called the meeting to order at 7:01 p.m. and entered an addition to the Agenda. There were 3 citizens in attendance.

Dave Schlott, P.E., with ARRO, the Township's wastewater consultant attended to acquire letters of support from the Planning Commission regarding the Municipal Authority seeking H2O grants via the Department of Community and Economic Development for 3 planned projects. The Authority has applied for funds to assist with the Milford Farms sewer expansion, 47 properties along Font Road from Milford Road to Black Horse Road, Carriage Drive and Surrey Lane; Meadow Creek expansion to 79 properties on Meadow Creek Lane; and converting the Eaglepointe Wastewater Treatment Facility (WWTF) from a treatment and stream discharge facility to pre-treatment only, then further treatment and disposal via the Route 100 WWTF in Phase 3. The DCED requires a letter of support from the Planning Commission. For every dollar paid by the Authority, DCED matches 2 dollars. These 3 projects were included in the updated Township-wide Act 537 Plan which was reviewed by the Authority, the Planning Commission and is currently under review by PaDEP.

Joe Stoyack moved, seconded by Jeff Smith, to provide the letters of support to submit with the grant applications. The motion carried unanimously and Sally Winterton signed the prepared letters.

301 Park Road – P.J. Reilly Headquarters Land Development Plan
Monica Sweeney, Wilkinson & Associates, reviewed her responses to the consultants' December 2022 comments. Revised plans, dated March 1, 2023, were submitted. Highlights of the revisions include:
The proposed lighting will not reach across Park Road – those residents won't be impacted by the lighting and the lighting will be off 11:00 p.m. till dawn; the light fixtures are 25' high from the grade and it was suggested she double check the lighting ordinance for compliance; also suggested was to shield the fixtures along the front of the property to keep glare off.

Landscaping. They'll seek a waiver from meeting the tree replacement requirements and landscaping requirements as they don't want to plant along the stormwater basin berm or the PennDOT easement

for the turnpike widening. They'll provide the screening around the storage area along the front and trees/shrubs around the parking area; they're providing a small portion of what's required due to the limited space but they are providing the appropriate screening.

Stormwater. The aboveground flow was discussed; the outlet structure is designed for a 100-year storm.

They'll seek several waivers: accessory building/structure in the front yard (152-306.K.3) and potentially about the landscaping. Perhaps the trees/shrubs could be a bigger size and/or placed near the bottom of the retention basin berm to help screen it.

Regarding the Historical Commission review, Gwen Jonik noted that the property was not on the historic resource inventory. This will be confirmed in writing.

Ms. Sweeney noted they'll seek 3 variances but they haven't yet applied to the Zoning Hearing Board.

No action was taken. The March 1, 2023 revised plans will be reviewed by the consultants.

<u>Eagleview Corporate Center Lot 1A Land Development Plan</u>
Neal Fisher, Hankin Group, presented the proposed Plan to develop a 60,000 SF flex building on 13.5 acres accessed from Arrowhead Drive cul-de-sac. There are some wetlands and Hickory Park is adjacent. Mr. Fisher was seeking support for the following requested waivers:

1. Preliminary and Final Land Development approval at the same.
2. Changing waiver request from 162-41.g which they will comply with, to 162-52 regarding taking topsoil off site.
3. 162-55.B re woodland disturbance; while they plan to plant a lot of trees they can't meet the requirements so they'll increase the caliper and height, maximizing the size of the plantings.
4. Landscaping waiver; same as above
5. Stormwater management ordinance adopted in December 2022 increased the wetland buffer from 25' to 75'; they'll ask for a waiver to encroach 50' into the 75' buffer. The site testing found that's the best area for the greatest infiltration and would discharge into the existing basin on the cul-de-sac and the second aboveground basin for the rest of the site. They'll convert the headwall spreader to a larger spreader to improve the discharge into the wetlands. It will hold back more water during a storm and release it at a slower rate.

Parking lot lighting was discussed; they'll need to show the lighting at the building doorways. There will be a monument sign at the entrance from Arrowhead Drive. No trail connection is shown as there's no trail on Arrowhead. May have a sidewalk or asphalt trail to Arrowhead and out to Stockton Drive. The trail in Hickory Park has been cleaned up since the pipeline work was done.

Jeff Smith moved, seconded by David Colajezzi, to recommend approval of the requested waivers, including the stormwater one with modifying the level spreader. The motion carried with five (5) in favor and one (1) opposed (Stoyack).

<u>Ordinance Amendments</u>
<u>Alternative Energy Systems</u>
Joe Stoyack's draft amendment with Solicitor Kristin Camp's comments was distributed. Alternative Energy Systems are Chapter 77 of the Township Codes. Mr. Stoyack explained the amendment will increase residents' access to alternative energy systems. Existing systems are grandfathered; this is for future development.
Discussion included that there shouldn't be deed restrictions or covenants prohibiting use except where the Township prohibits them, however Ms. Camp notes the Township doesn't have the authority to prohibit private covenants or deed restrictions; the Township prohibits wind and geothermal energy systems in the C1 Village District and the designated historical district – could the designated historical district be "as defined by the Historical Commission"?; the State currently has several energy related Bills in process and if passed, they'll override our regulations.

Joe Stoyack moved to recommend to the Board of Supervisors that they approve the Alternative Energy System amendments proposed in the December 9, 2022 draft with the following revisions:

1. strike the text in § 77-3 "and no deed restriction or covenant prohibiting use shall be implemented or enforceable, except where specifically prohibited in this section."
2. strike the text in § 77-3.B.(1) and § 77-3.C.(1) "and executed overlay areas."
3. in § 77-5.A. add the following text to the end of the first sentence "not including Electric Vehicle (EV) charging capacity."
4. In § 77-5.D. add the following text after the first sentence "Solar systems may be installed on the front yard facing roof."

Jeff Smith seconded, and the motion carried with five (5) in favor and one (1) opposed (Dewees).

Chapter 71 Uniform Construction Codes.
The building department has proposed the addition of a violations and penalty section to the Township Codes. The proposed violations and penalties are in accordance with the Second Class Township Code.
Jeff Smith moved, seconded by David Colajezzi, to recommend the Board of Supervisors approve the amendment to add a Violations and Penalties Section to Chapter 71 Uniform Construction Codes. The motion carried unanimously.

Approval of Minutes
Jim Dewees moved, seconded by Jeff Smith, to approve as presented the minutes of the Planning Commission's February 9, 2023 meeting. The motion carried unanimously.

Meeting Updates
Environmental Advisory Council (EAC). Jeff Smith noted Uwchlan Township has recently enacted an ordinance banning plastic bags and straws and our EAC is considering this as well; a green-cycling event will be planned soon; and Joe Stoyack noted he and Chair Neil Phillips are discussing crafting a presentation on environmental issues.

Historical Commission (HC). David Colajezzi noted the HC had a detailed discussion regarding a building addition for Eagle Animal Hospital, an historic structure, and they were leaning toward accepting their historic resource impact report; they discussed the Struble trail extension, and the Dorlan Mill miller's house being demolished; they're working on an historical resource protection program and an introductory narrative for the Comprehensive Plan.

Active Transportation Plan (ATP). Sally Winterton noted the committee hasn't met recently.
Joe Stoyack commented that with the standard growth projected at a 1.9% increase per year in traffic, plus 2 large warehouse facilities proposed in Uwchlan Township -- at the Turnpike interchange and along Lionville Station Road – we must keep these in mind when planning our growth in traffic. Jeff Smith noted Uwchlan Township has vehicle weight limits in their ordinances. We might want to consider this for our township-owned roads.

Adjournment
Jim Dewees moved to adjourn at 9:43 p.m. All were in favor.

Respectfully submitted,

Gwen A. Jonik
Planning Commission Secretary