AGENDA
EAST GOSHEN TOWNSHIP
CONSERVANCY BOARD MEETING
1580 Paoli Pike, 2nd Floor
November 18, 2026

1. CALL TO ORDER/PLEDGE OF ALLEGIANCE/MOMENT OF SILENCE

2. APPROVAL OF MINUTES
    a. October 14, 2026 meeting

3. CHAIRMAN'S REPORT

4. NEW BUSINESS

    a. Tree City Application
    b. Chimney Swift Tower – PA Game Commission Grant
    c. 2026 Accomplishments/Goals and 2027 Goals
    d. 713 Jamestown Way Landscape Restoration/Township Landowner Agreement

5. OLD BUSINESS
    a. Workshop/Event Interest Survey follow up
    b. Newsletter Ideas
        - December 14th due date
    c. Bird Walks and Bluebird Box Network News
    d. Tree for Mark Miller

6. SUBDIVISION/LAND DEVELOPMENT REVIEW
    a. 971 Cornwallis Drive
    b. 1352 Morstein Road

7. VARIANCES/CONDITIONAL USES – None

8. LIAISON REPORTS

9. BOARD MEMBER CONCERNS

10. PUBLIC COMMENT

11. ADJOURNMENT

DRAFT
EAST GOSHEN TOWNSHIP
CONSERVANCY BOARD MEETING
October 14, 2026

The East Goshen Township Conservancy Board held a regularly scheduled meeting on Wednesday, October 14, 2026 at 7:00 p.m. at the Township Building. Members in attendance are indicated in **BOLD**:

Walter Wujcik – Chairman
Jackie Ahlborn
Julieta Calmon
Erich Meyer
Sandra Snyder
Susan Vanasse

Others present were:r
Ann Duffield, Township Supervisor
Larry Massaro, Township Supervisor
Ashley Nowak, Office Administrator
Eunice Alexander, Goshen Tree Tenders
Peg Friese, Goshen Tree Tenders
Mary Krueger, Chairman of ESAC
Robert Murray, ESAC Member
Danni Scott, CRC
Ella Bauer, West Chester East Environmental Club
Emily Thompson, West Chester East Environmental Club

Call to Order
Walter called the meeting to order at 7:00 p.m.

Pledge of Allegiance & Moment of Silence
Walter led those present in the Pledge of Allegiance and then asked for a moment of silence to remember our First Responders and military overseas.

Approval of Minutes
The minutes of the September 9, 2026 meeting were approved.

Chairman's Report –
The agenda will be changed so Subdivision/Land Development can be first. Walter mentioned that East Goshen received Bird Town recognition.

Subdivision/Land Development Review

a. 971 Cornwallis Drive – Justin Tyler of Cornerstone reported that the trees to be removed are on the plan. An Arborist went through them to check which ones had to go. Walter asked about the water retention basins. Justin answered that the water would not be held in the basins. A note from Kelly Krause states that the house has been demolished.

b. 1409 Manley Rd, 3 lot subdivision – Architect John Tandra reviewed the landscape plan. Sandy explained that the tree types and sizes need to be shown. John spoke about the bamboo. John explained that they have to have 8 trees along the road. They are retaining 2 and planting 6 new trees.

New Business –

a. CRC Applebrook Planting – Jackie reported that they planted about 40 trees and lots of people and kids came. In Clocktower 5 trees were planted and she feels the shade will help to get rid of the invasives.

b. November meeting – Wednesday November 11 is a holiday so the township will be closed. The Board decided to have the meeting on Wednesday November 18th.

c. Bioblitz/Nature Challenge Recap and Tree Planting –Peg showed the results of this Nature Challenge which was 1500 items were identified. 35 people from East Goshen participated. She went to Marydel pond and found it was great, a lot of people, some fishing. She showed a picture of a boy holding a big catfish he caught. She tested the water in the creeks for insects which indicate the quality of the water. Go to East Goshen Nature Challenge to see results. East Goshen received a cypress tree as a prize which will be planted near the playground in East Goshen Park.

d. Newsletter Ideas – It was announced that the township will have an enews letter.

e. Blue Bird Boxes – Ashley spoke with Kevin Miller about the new plans for these boxes. He needs the plan.

Old Business

1. Workshop/Event Interest Survey – Interest was high on workshops.

2. Invasives Management/ Clock Tower – Jackie reported that the trees were planted.

3. Tree for Mark Miller – Areas were discussed with the thought to put a tree near his parking spot.

Variances/Conditional Uses – None

Liaison Reports –

1. Board of Supervisors –They are working on the budget for 2027..

Correspondence - None

Board Member Concerns –

a. Julieta spoke about the Hershey Mill pond maintenance. She had a copy of the draft plan for the area around the pond from Simone Collins. Maintenance is not being done.

b. Susan is being invited to all of the PA Bird Town events. There is a film available.

Public Comment. –

Adjournment

There being no further business, Sandy moved to adjourn the meeting. Julieta seconded the motion. The meeting was adjourned at 8:30 p.m. The next meeting will be Wednesday, November 18, 2026 at 7:00 pm.

Respectfully submitted,

Ruth Kiefer, Recording Secretary

ARM Group LLC
Engineers and Scientists

To: **John Anderson, P.E.**

From: **Michael E. Lane, CPSS**

Subject: **971 Cornwallis Drive**
Aquatic Resource Investigation
East Goshen Township, Chester County, PA
ARM Project 25012055.00

Date: **December 2, 2025**
REVISED August 4, 2026

Introduction

The purpose of this memorandum is to describe the findings of an aquatic resource (i.e. streams and wetlands) investigation, conducted by ARM Group LLC's Professional Soil Scientist for the 971 Cornwallis Drive property located in East Goshen Township, Chester County, PA. The investigation is necessary because streams and wetlands are protected by regulations at the state and federal levels and unavoidable impacts upon these aquatic resources may require a permit. The memorandum contains supporting documentation such as project mapping, qualifications of the individual conducting the aquatic resources investigation, photographs, and data forms.

The property is located at the terminus of Cornwallis Drive, north of Paoli Pike and west of North Chester Road (Route 352) (**Subject Property Location Map, Figure 1**). The estimated center of the approximate 7.4-acre property (area of investigation [AOI]) is at Latitude 40.00221° and Longitude -75.55567°. The resources illustrated on the **Boundary/Location and Topographic Survey Plan** (**Sheet 1**) represent those resources identified within the AOI during the field investigation.

Methodology

The AOI was examined for wetlands and other surface waters by ARM's Certified Professional Soil Scientist, CPSS, Michael E. Lane on November 4, 2025 and November 10, 2025.

Approximately 0.7 inches of rain fell on November 8 and November 9 preceding the November 10 field investigation. Precipitation during 2025 has been about 95 percent of normal. Chester County was experiencing moderate drought according to the U.S. Drought Monitor.

The wetland investigation entailed a combination of reviewing existing information and conducting an on-site investigation. Existing information was obtained from various sources of data including, but not limited to, USDA soil mapping, National Wetland Inventory (NWI) mapping, USGS topographic mapping, and site-specific topographic mapping supplied by Cornerstone Consulting.

Wetland resources were identified and delineated in accordance the 1987 United States Army Corps of Engineers Corps of Engineers *Wetland Delineation Manual* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (April 2012)*. Vegetation, soil, and hydrology data were recorded for the wetland and upland habitats at representative data points in the AOI.

The boundaries of aquatic resources, if observed, within the AOI were delineated for wetlands (pink WETLAND DELINEATION flagging tape) and streams (white flagging tape) and surveyed by Cornerstone Consulting. The locations of representative data points were also surveyed by Cornerstone Consulting. Delineated wetlands and representative data points were assigned a numeric code for identification purposes and incorporated onto the **Boundary/Location and Topographic Survey Plan** (**Sheet 1**), which also shows the locations of data points and the location and orientation of representative photographs taken to document site conditions within the AOI.

The wetland indicator status of each plant species was assigned according to the *National Wetland Plant List, version 3.6* (U.S. Army Corps of Engineers 2022). Under normal conditions, hydrophytic vegetation was determined to be present where more than 50 percent of the dominant species in all vegetation stratums were classified as facultative, FAC (equally likely to occur in wetlands as they are in non-wetlands and are adapted for moderate exposure to either condition); facultative wetland, FACW (most often occur in wetlands conditions, but sometimes occur in uplands); or obligate, OBL (almost always occur in wetlands). Wetland and waters were classified according to the *Classification of Wetlands and Deepwater Habitats of the United States* (Federal Geographic Data Committee, 2013).

Background Review

An unnamed tributary (UNT) to Ridley Creek is mapped on the western end of the AOI along with a palustrine forested wetland (**National Wetland Inventory Map, Figure 2**). Cokesbury silt loam and Hatboro silt loam are mapped within the AOI. These soil types are known to have significant hydric components (**Web Soil Survey Map, Figure 3**). The site is gently sloping to the north and west toward the UNT on the property and another unnamed tributary to the north.

On-site Investigation

The aquatic resource identification and delineation was completed on November 4 and November 10, 2025. The AOI is predominantly deciduous woodland with a meadow in the northeast corner and a vacant house and driveway in the southeast corner. A raised, paved driveway is located along the eastern property line and stormwater inlets to the east of the driveway capture surface

water runoff and divert it to the north and off-site. A sanitary sewer force line is located along the southern boundary of the AOI. An excavated ditch is located along the northern property line at the edge of the AOI and south of an off-site stream. The ditch is approximately three to four feet deep, was dry at the time of the investigation, and appears to have been excavated many years ago. Leaf litter has accumulated in the ditch and it does not appear to be actively receiving groundwater inputs or surface water flows. The off-site stream to the north is deeply cut and also appears to have been dredged or excavated many years ago. The combination of extensive upgradient land development and the construction of the raised driveway and diversion of surface water have contributed to a significant change in hydrology.

In July 2026, following the ARM on-site investigation, East Goshen Township provided copies of prior wetland investigations conducted for adjoining public projects, including installation of a sanitary sewer force line along the southern boundary of the AOI around 2012 and construction of an emergency access driveway along the eastern boundary of the AOI around 2018.

The 2012 plans for the sanitary sewer installation identify wetlands along the southern property line beginning approximately 40 feet west of the terminus of Cornwallis Drive and running along the southern property line to the tributary stream. During the on-site investigation in November 2025 and during a subsequent site visit on July 29, 2026, ARM did not observe any evidence of wetlands along the southern property line. Vegetation was consistent with that identified in the wooded area of the property. It is the opinion of the ARM soil scientist that installation of the sanitary force line, including bedding of the pipe in stone has resulted in significant changes in hydrology. The installation of the force line resulted in changes in local grades and provided subsurface drainage that carries groundwater from the area of the former wetlands to the downgradient stream.

The 2018 delineation report for the emergency access driveway identified wetlands in the vicinity of the driveway project, including portions of the AOI, as delineated by Pennoni, East Goshen Township engineer. Following the 2018 delineation, the Township constructed a raised emergency access drive along the eastern boundary of the AOI. It is the opinion of the ARM soil scientist that construction of the driveway resulted in significant changes in hydrology. The final surface elevation of the driveway is elevated above the original ground surface, resulting in a surface water diversion berm that directs water away from the AOI and toward the off-site stream to the north. The Township public works department reported that after the driveway was installed, the upgradient side of the driveway became a pond. They installed an inlet along the upgradient side of the driveway to disperse water runoff from the upgradient property at 961 Cornwallis Drive and pipe it directly to the stream, bypassing the AOI.

The change in hydrology is evident when comparing wetland data forms completed by Pennoni in 2018 and ARM in 2025. Pennoni data point, WL3-wet1, and ARM data point, DP-1, were collected in approximately the same location. Both data points identified hydric soil indicator F3, depleted matrix and both identified hydrophytic vegetation. However, a comparison of the herbaceous plant species indicates a change in the vegetation over time, with Pennoni identifying jack-in-the-pulpit as the dominant herbaceous species in 2018 and ARM identifying Japanese stiltgrass in 2025. ARM also observed sensitive fern, red maple, multiflora rose, Japanese honeysuckle, greenbrier, tulip poplar, and shagbark hickory. Pennoni did not identify a water

table to a depth of 20 inches but did note saturation at 8 inches. ARM did not identify saturation or a water table to a depth of 24 inches.

Wetlands and Streams

One stream and two wetlands were identified within the AOI during the field investigation. The UNT to Ridley Creek is a perennial stream with an unconsolidated rock bed. Wetland A is a palustrine forested wetland comprising a concave seep along the west side of the UNT. Wetland B is a small concave wetland near the southwestern property corner. The wetland information is summarized in terms of classification, size and connectivity in **Table 1** below.

Table 1 Aquatic Resources Summary

Wetland/Stream Name	Classification	Size (ac) Within the AOI	Isolated	Open-ended
Wetland A	PFO1A	0.08	No	Yes
Wetland B	PFO1A	0.003	No	No
UNT to Ridley Creek	R5UBH	0.13	No	Yes

Uplands

The AOI was predominantly deciduous woodland with an open meadow in the northeastern corner. As discussed above, hydric soils are mapped across the AOI. Field observations generally confirm the presence of hydric soils. Vegetation comprises a mix of facultative upland (FACU), facultative (FAC), and facultative wetland (FACW) species. Within the upland portions of the AOI, obligate (OBL) species were not identified.

Herbaceous vegetation was primarily FAC Japanese stiltgrass (*Microstegium vimineum*). Some FACW sensitive fern (*Onoclea sensibilis*) was observed in the meadow area. However, saturated soil was not observed to a depth of 24 inches, and no indicators of wetland hydrology were noted in this area. The dominant woodland tree species were FAC red maple (*Acer rubrum*), FACU beech (*Fagus grandifolia*), and FACU tulip poplar (*Lirodendron tulipifera*).

Bog Turtle Habitat Assessment

ARM completed a Phase I Bog Turtle Habitat Survey Data Form. The form and assessment were completed on November 10, 2025. Weather conditions were seasonable and the last rainfall occurred less than 24 hours prior to the investigation. Wetlands are limited to the west side of the UNT and comprise deciduous woodland with greater than 60 percent canopy cover. Mucky soils were not observed on any areas of the property. ARM observed ATV trails on the eastern and western sides of the UNT. These trails were not rutted or incised, indicating that surface soils are not saturated through much of the year. Observed water table was greater than 12 inches in the delineated wetlands. Based on visual observation of adjoining properties, it does not appear that suitable bog turtle habitat is present within 300 feet of the AOI. The completed Survey Data Form is attached.

Summary

This memorandum documents the findings of the field investigation conducted on November 4, and November 10, 2025 for the AOI associated with 971 Cornwallis Drive. Two wetlands and one stream were identified within the AOI. ARM did not observe suitable habitat for the bog turtle.

ARM reviewed prior delineations provided by the Township engineer related to completed public projects that have affected the hydrology of the AOI. A sanitary sewer force line was installed along the southern property line around 2013 and an emergency access driveway was constructed along the eastern property line around 2018. These projects, along with the over-excavation of the stream north of the AOI, have reduced significant sources of groundwater and surface water. Along with extensive development of upgradient properties, the observed hydric soil indicators are relict features and are not indicative of current conditions. It is the opinion of the ARM soil scientist that the extent of wetland vegetation that remains will continue to recede over time as the seed bank turns over and additional upland plants are able to thrive in the drier conditions.

Because the identified wetlands and watercourses are not isolated and because they flow indirectly into traditionally navigable waters, it is likely that the US Army Corps of Engineers and the Pennsylvania Department of Environmental Protection (DEP) will have jurisdiction over all filling and dredging activities within the identified aquatic resources. Any construction activities proposed within wetlands or other waters require prior notification to the Army Corps and DEP of use of the appropriate general permits or individual permits authorized under the current PA State Programmatic General Permit.

ATTACHMENT A

Figures and Maps

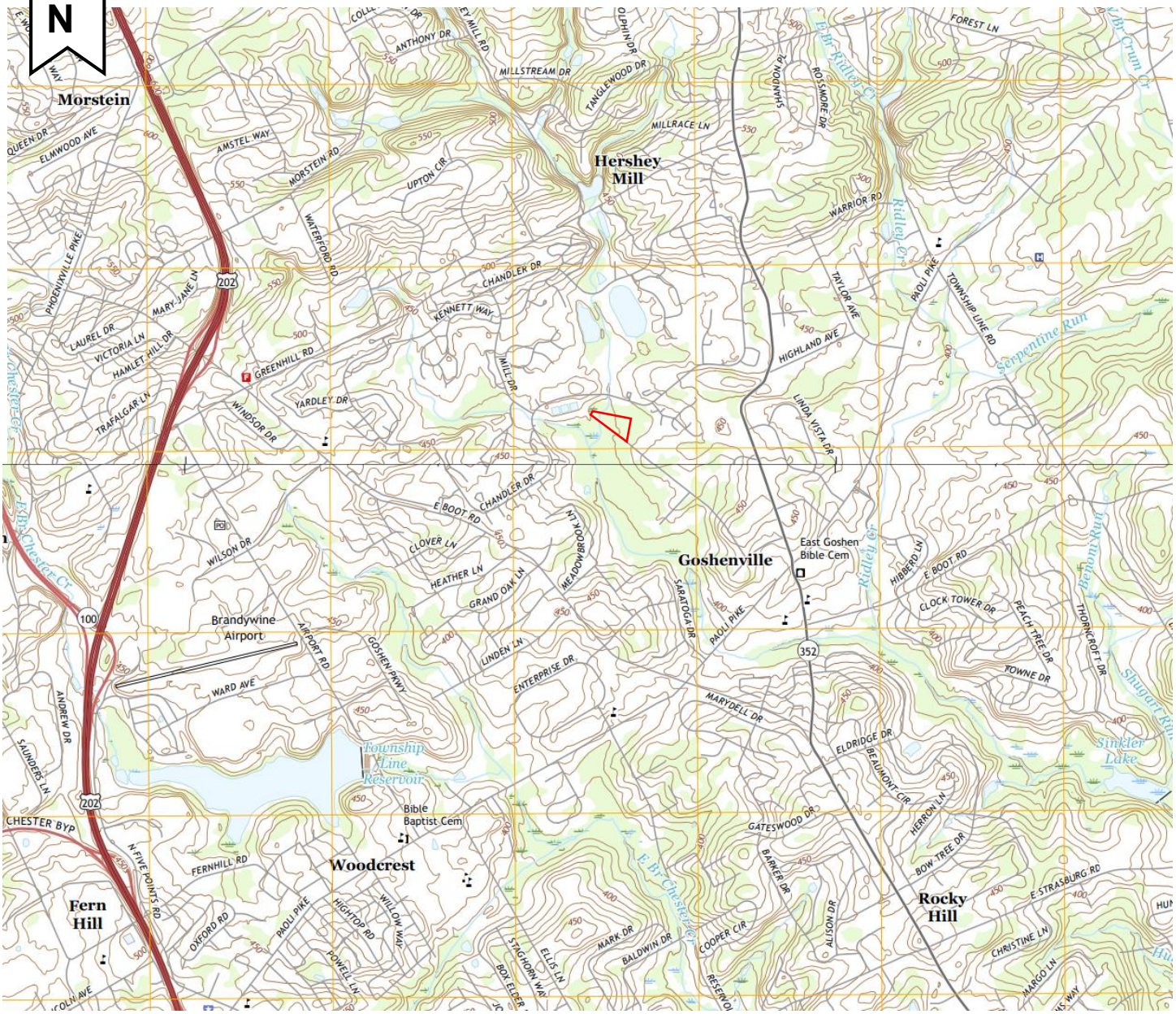


Figure 1. Site Location Map
Source: USGS Topographic Quadrangle Map - West Chester/Malvern (PA)

= *Approximate Parcel Boundary*

Property Maps and Site Plans
ARM Project No. 25012055.00

971 CORNWALLIS DRIVE
EAST GOSHEN TOWNSHIP
CHESTER COUNTY, PA

ARM Group LLC
Engineers and Scientists



Figure 2. National Wetland Inventory Map
Source: US Fish and Wildlife Service

= *Approximate Parcel Boundary*

Property Maps and Site Plans
ARM Project No. 25012055.00

971 CORNWALLIS DRIVE
EAST GOSHEN TOWNSHIP
CHESTER COUNTY, PA

ARM Group LLC
Engineers and Scientists

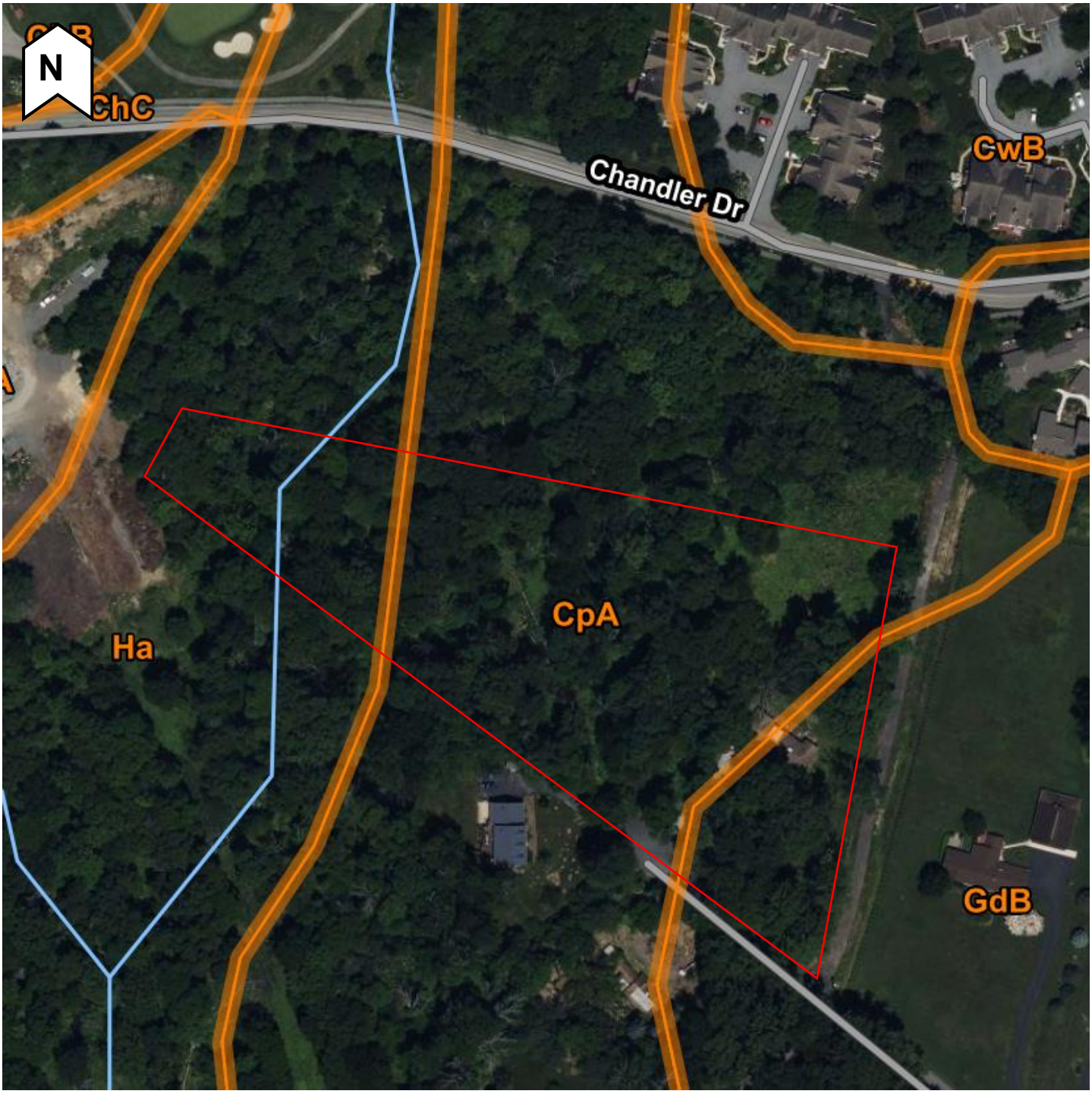


Figure 3. Web Soil Survey Map
Source: USDA

= *Approximate Parcel Boundary*

Property Maps and Site Plans
ARM Project No. 25012055.00

971 CORNWALLIS DRIVE
EAST GOSHEN TOWNSHIP
CHESTER COUNTY, PA

ARM Group LLC
Engineers and Scientists

PHOTOGRAPH LOCATION/DIRECTION
1 ARM GROUP LLC WETLAND DELINEATION

LEGEND & ABBREVIATIONS

- PROPERTY BOUNDARY
- ADJOINER BOUNDARY
- RIGHT OF WAY LINE
- BUILDING SETBACK LINE
- 95 EXISTING CONTOUR
- x 95 EXISTING SPOT ELEVATION
- EXISTING TREELINE
- EXISTING FENCE
- OH EXISTING OVERHEAD WIRE
- G APPROXIMATE UNDERGROUND GAS LINE
- W APPROXIMATE UNDERGROUND WATER LINE
- C APPROXIMATE UNDERGROUND TELCO LINE
- E APPROXIMATE UNDERGROUND ELECTRIC LINE
- S APPROXIMATE UNDERGROUND SANITARY LINE
- APPROXIMATE UNDERGROUND DRAINAGE LINE
- EXISTING CURB
- EXISTING DEPRESSED CURB (DC)
- EXISTING SIGN
- EXISTING UTILITY POLE (UP)
- C – T CONDUIT – TRANSFORMER
- L – M – BX LIGHT – METER – BOX
- GUY WIRE
- LSA LANDSCAPE AREA
- LAMP POST
- WLF WETLAND FLAG
- STORM MANHOLE
- SANITARY MANHOLE
- COMMUNICATION MANHOLE
- ELECTRIC MANHOLE
- WATER MANHOLE
- UNKNOWN MANHOLE
- TANK LID
- STORM INLET
- GM GAS METER
- WM WATER METER
- TBX TRAFFIC SIGNAL BOX
- E ELECTRIC VAULT
- GV GAS VALVE
- WV WATER VALVE
- CO CLEAN OUT
- MW MONITORING WELL
- CONCRETE MONUMENT FOUND
- IRON PIN FOUND
- IRON PIPE FOUND
- NAIL FOUND
- STONE FOUND
- BENCHMARK
- (SP) STATE PLANE
- (D) DEED
- EVERGREEN TREE
- DECIDUOUS TREE

PENNSYLVANIA
ONE CALL SYSTEM, INC.

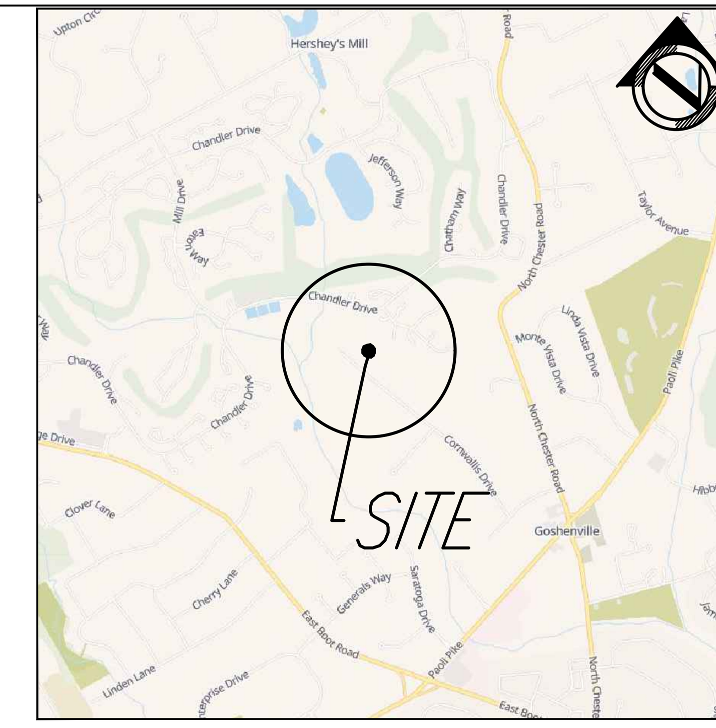
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 - 1078

PENNSYLVANIA ONE CALL SYSTEM, INC. 1-800-242-1776 CALL 8-1-1 BEFORE YOU DIG!

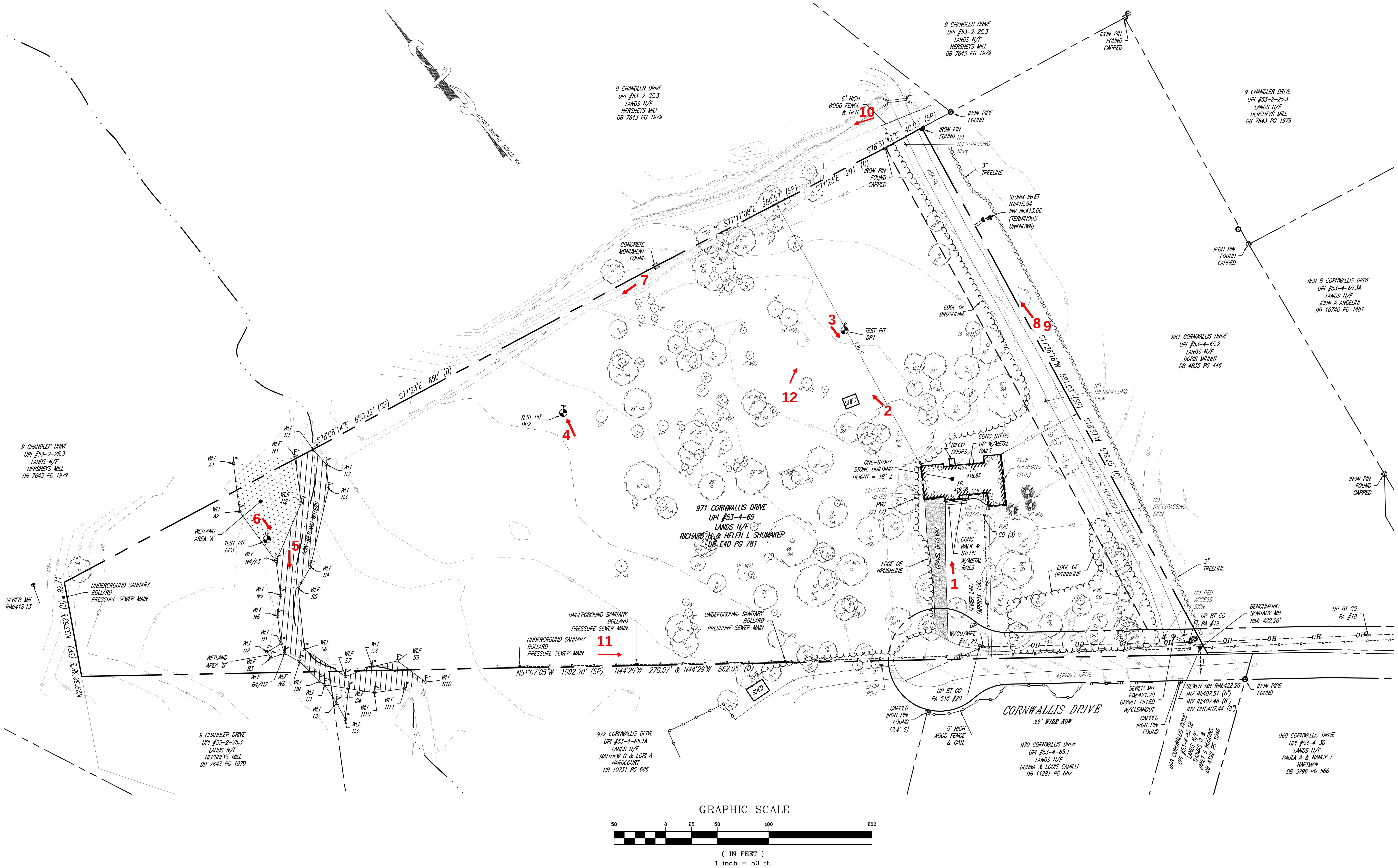
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776

NON-MEMBERS MUST BE CONTACTED DIRECTLY
PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

SERIAL NUMBER: 20252602159



LOCATION MAP 1" = 2000' ±



NOTES:

1. PROPERTY KNOWN AS PARCEL UPI #53-4-65; 971 CORNWALLIS DRIVE, WEST CHESTER TOWNSHIP, CHESTER COUNTY, COMMONWEALTH OF PENNSYLVANIA.

2. GROSS AREA OF PARCEL IS: 323,688.3 SQUARE FEET OR 7.4309 ACRES.
NET AREA OF PARCEL IS: 314,556.4 SQUARE FEET OR 7.2212 ACRES.

3. PROPERTY OWNER: RICHARD H & HELEN L SHUMAKER

4. REPRESENTATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE AND DO NOT PURPORT TO BE AS-BUILT LOCATIONS. ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD ARE SHOWN. ALL LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, AND THE MAPS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY AND ARE NOT GUARANTEED. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES.

5. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CORNERSTONE CONSULTING ENGINEERS AND DESIGN SERVICES, INC., AND OTHER REFERENCE MATERIAL AS LISTED HEREON. SURVEY & TOPOGRAPHIC INFORMATION SHOWN HEREON DERIVED FROM A FIELD SURVEY PERFORMED BY CORNERSTONE CONSULTING LATEST DATE: SEPTEMBER 26, 2025.

6. COPYRIGHT @ 2025. CORNERSTONE CONSULTING ENGINEERS AND DESIGN SERVICES, INC. ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED BY PHOTOCOPYING, RECORDING OR BY ANY OTHER MEANS, OR STORED, PROCESSED, OR TRANSMITTED IN OR BY ANY COMPUTER OR OTHER SYSTEMS WITHOUT THE PRIOR WRITTEN PERMISSION OF THE SURVEYOR. COPIES OF THIS PLAN WITHOUT A RAISED OR COLORED SEAL ARE NOT VALID.

7. THIS PLAN IS VALID ONLY WHEN SIGNED AND SEALED WITH A RAISED OR COLORED SEAL AND WAS PREPARED IN ACCORDANCE WITH THE MINIMUM STANDARD OF ACCURACY OF THE STATE IN WHICH THE PROJECT IS LOCATED. THE WORD "CERTIFY" OR "CERTIFICATE" AS SHOWN AND USED HEREON MEANS AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THE FACTS OF THIS PLAN AND REFERENCED SURVEY AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EXPRESSED OR IMPLIED.

8. DATUM BASED UPON PENNSYLVANIA STATE PLANE SOUTH USING HORIZONTAL VALUES FROM NAD83 AND VERTICAL VALUES FROM NAVD88. BEARINGS AND DISTANCES SHOWN ARE BASED ON THE DESCRIPTION CONTAINED WITHIN THE DEED OF RECORD AS WELL AS STATE PLANE INFORMATION.

9. SITE BENCHMARK IS SANITARY MANHOLE, ELEVATION = 422.26'. TO ENSURE THAT THERE HAS BEEN NO ALTERATION OF THE SURVEY BENCHMARK SINCE THE TIME OF THE FIELD SURVEY, IT IS RECOMMENDED THAT THE BENCHMARK BE CONFIRMED IF USED FOR CONSTRUCTION OR ANOTHER SURVEY DOCUMENT. IT IS ALSO RECOMMENDED THAT ANY CONTRACTOR ESTABLISH THEIR OWN CONSTRUCTION BENCHMARK BASED ON THE SURVEY BENCHMARK AND VERIFIED WITH PROVIDED ELEVATIONS OF OTHER EXISTING IMPROVEMENTS.

10. THIS SURVEY WAS PREPARED WITH THE BENEFIT OF A TITLE COMMITMENT BY STEWART TITLE GUARANTY COMPANY; COMMITMENT NO. 25100MP FOR 971 CORNWALLIS DRIVE, WEST CHESTER PA 19380; DATED 08/20/2025.

11. SUBJECT TO ANY AND ALL EASEMENTS, RESTRICTIONS AND COVENANTS OF RECORD WHETHER SHOWN HEREON OR NOT.

12. THE RESEARCH FOR THIS PLAN IS LIMITED TO THE DEED(S) OF RECORD FOR THE SUBJECT AND ADJOINING PARCELS, AND ANY EASEMENTS, RIGHTS OF WAY, OR RESTRICTIONS THAT ARE CONTAINED WITHIN THE RECORDED DEEDS.

13. IT IS RECOMMENDED THAT AREAS INDICATED AS INACCESSIBLE, OR AREAS SHOWN ON THE PLAN HEREON THAT ARE NOT COMPLETE DUE TO BEING INACCESSIBLE, SHOULD BE REVIEWED BY THE CLIENT TO DETERMINE WHETHER OR NOT ADDITIONAL SURVEY WORK IS NECESSARY. REMOVAL OF THIS NOTE FROM THE SURVEY DOCUMENT WILL REQUIRE ADDITIONAL FIELD SURVEY.

14. THE PROPERTY OWNER AND/OR CLIENT SHALL PROVIDE WRITTEN COMMUNICATION TO THE UNDERSIGNED SHOULD THERE BE A DISPUTE REGARDING THE BOUNDARY AND/OR THE CONTENTS OF THIS SURVEY.

15. ANY POTENTIAL ENCROACHMENT SHOWN ON THIS PLAN ARE PROVIDED TO DEPICT THE PHYSICAL LOCATION OF ANY POTENTIALLY ENCROACHING STRUCTURE AND/OR IMPROVEMENT AND IS NOT A STATEMENT OR JUDGEMENT AS TO THE OWNERSHIP OF SAID ENCROACHMENT OR ANY PROPERTY THEREBY AFFECTED.

16. BY GRAPHICAL PLOTTING ONLY THIS PROPERTY IS LOCATED IN FEMA FLOOD MAP ZONE-OTHER AREAS/ZONE X, ZONE X: 0.2% CHANCE FLOOD, ZONE AE, AND REGULATORY FLOODWAY/FLOODPLAIN. (SEE MAP REFERENCE #2).

17. BOUNDARY RESOLUTION BASED ON FOUND EVIDENCE AND OTHER REFERENCE MATERIALS AS LISTED HEREON AVAILABLE AT THE TIME OF SURVEY. THE COURSES DESCRIBED HEREON WERE DETERMINED BY FOUND MONUMENTS, ADJOINERS AND RESULTING CALCULATIONS.

REFERENCES:

1. TAX MAPS AND AERIAL IMAGERY OF CHESTER COUNTY, COMMONWEALTH OF PENNSYLVANIA.

2. MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, CHESTER COUNTY, PENNSYLVANIA (ALL JURISDICTIONS)," PANEL 160 OF 380, MAP NUMBER 42029C0160G, EFFECTIVE SEPTEMBER 29, 2017.

3. PLAN ENTITLED IN PART "EMERGENCY ACCESS EASEMENT PLAN". PREPARED BY PENNONI ASSOCIATES INC., DATED 06-02-2017, BEING "971 CORNWALLIS DRIVE" ON SAID MAP. DEED BK 9779 PG 702.

4. PLAN ENTITLED IN PART "PLAN OF SUBDIVISION" BEING "972 & 970 CORNWALLIS DRIVE". PREPARED BY EDWARD B. WALSH & ASSOCIATES, INC., LAST DATED 04-18-1996. DEEED BK F61 PG 494.

Cornerstone
Consulting Engineers & Design Services, Inc.
1176 N. Irving Street . Allentown . PA 18109
Phone: 610-820-8200 . Fax: 610-820-3706
WWW.CORNERSTONENET.COM
Dallas, TX Leesburg, VA Orlando, FL Philadelphia, PA

REVISIONS

NO	BY	DESCRIPTION	DATE
1	JRK	ADDED WETLAND FLAGS AND SANITARY SEWER LABELS	11/11/2025

STEVEN J. ROMICH

PENNSYLVANIA PROFESSIONAL LAND SURVEYOR
PENNSYLVANIA LICENSE No. SU057592E

PROJECT LOCATION

971 CORNWALLIS DRIVE
UPI #53-4-65
EAST GOSHEN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF
PENNSYLVANIA, 19380

TITLE

BOUNDARY/LOCATION AND TOPOGRAPHIC SURVEY

PROJ. #	25-0626	DATE	10-24-2025
CAD ID.	SV00	DRN BY	LDK, BRS
SCALE	AS NOTED	CHK BY	SJR

SHEET 1 OF 1

ATTACHMENT B

Photograph Log

PHOTOGRAPH LOG
971 CORNWALLIS DRIVE



Photograph 1 Northeast toward the house at 971 Cornwallis Drive.



Photograph 2 North toward the shed and meadow at the rear of the house.



Photograph 3 South at data point 1 toward the shed and rear of the house.



Photograph 4 North at data point 2 in typical wooded area of the property.



Photograph 5 South (downstream) along the UNT to Ridley Creek.



Photograph 6 South toward data point 3 in Wetland A, west of the UNT.



Photograph 7 Dry excavated ditch along the northern property line.



Photograph 8 North along the east side of the raised driveway.



Photograph 9 July 2026 North along eastern side of the raised driveway toward the inlet installed to drain water directly to the off-site tributary stream.



Photograph 10 Over-excavated stream, off-site and north of the AOI, that receives runoff from the driveway inlet.



Photograph 11 July 2026 Southeast along the southern property line in the area of former wetlands along the force line right-of-way



Photograph 12 July 2026 Northeast toward the northeast property corner across the stiltgrass meadow.

ATTACHMENT C

Data Forms

DP1

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: 971 Cornwallis Dr City/County: Chester Co. Sampling Date: 11/4/25

Applicant/Owner: State: PA Sampling Point: DP1

Investigator(s): Michael Lane CPSS Section, Township, Range: East Goshen Twsp

Landform (hillslope, terrace, etc.): sideslope Local relief (concave, convex, none): linear Slope (%): 2

Subregion (LRR or MLRA): S 148 Lat: 40 00.134 Long: 75 33.290 Datum: WGS84

Soil Map Unit Name: CpA Cokesbury NWI classification: —

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation N, Soil Y, or Hydrology Y naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Facultative vegetation + hydric soil indicators
No hydrology indicators

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3) None
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): >24"

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Hydrology affected by historic activities including excavation of drainage ditches along the northern property line and installation of a raised driveway to the east w/ inlets that divert surface water around the subject property

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP1

Tree Stratum (Plot size: 30' irregular)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size: 15' irregular)			
1. Malus tortuga	10	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	10 = Total Cover		
50% of total cover: 5	20% of total cover: 2		
Herb Stratum (Plot size:)			
1. Microstegium vimineum	90	Y	FAC
2. Onoclea sensibilis sensitive fern	20	N	FACW
3. Persicaria Perfoliatum	5	N	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	115 = Total Cover		
50% of total cover: 58	20% of total cover: 23		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

FAC species are dominant. Surrounding vegetation include FACU species/FAC species multiflora rose, japanese honeysuckle, greenbrier, tulip poplar, shagbark hickory, red maple

SOIL Sampling Point: DP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR3/3	100	—	—	—	—	sil	mangan friable
6-12	10YR3/3	90	10YR4/6	10	C	M	sil	mangan friable
12-24	10YR4/2	50	7.5YR5/8	25	C	M	sicl	
			10YR6/2	25	D	M		
	No saturation to 24"							

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: —

Depth (inches): —

Hydric Soil Present? Yes X No ___

Remarks:

DP2

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: 971 Cornwallis Drive City/County: Chester Co Sampling Date: 11/4/25

Applicant/Owner: State: PA Sampling Point: DP2

Investigator(s): Michael Lane CPSS Section, Township, Range: East Goshen Twp

Landform (hillslope, terrace, etc.): sideslope Local relief (concave, convex, none): linear Slope (%): 2

Subregion (LRR or MLRA): S148 Lat: 40 00.151 Long: 75 33.344 Datum: WGS84

Soil Map Unit Name: CpA Conesbory NWI classification: /

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation N, Soil Y, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes _____	No X	

Remarks: Downgradient of DP1

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) None
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): >24

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

+/- 50' from excavated ditch

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP2

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	30	Y	FAC
2. Fagus grandifolia	20	Y	FACU
3. Liriodendron tulipifera	15	Y	FACU
4.			
5.			
6.			
7.			
	65 = Total Cover		
50% of total cover: 33	20% of total cover: 13		

Sapling/Shrub Stratum (Plot size: 15')			
1. Carpinus caroliniana	20	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	20 = Total Cover		
50% of total cover: 10	20% of total cover: 4		

Herb Stratum (Plot size: 5')			
1. Microstegium vimineum	60	Y	FAC
2. Rosa multiflora	15	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	75 = Total Cover		
50% of total cover: 38	20% of total cover: 15		

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: DP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR3/2	100					sil	~~silt loam~~ mucky, friable
8-20	2.5Y6/2	70	2.5Y5/4	10	C	M	sil	mmsbk, friable
			7.5YR5/6	20	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ✓

Depth (inches): ✓

Hydric Soil Present? Yes X No ___

Remarks:

DP3

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: 971 Cornwallis Drive City/County: Chester Co Sampling Date: 11/10/25

Applicant/Owner: State: PA Sampling Point: DP3

Investigator(s): Michael Lane CPSS Section, Township, Range: East Goshen Twp.

Landform (hillslope, terrace, etc.): stream terrace Local relief (concave, convex, none): concave Slope (%): 2

Subregion (LRR or MLRA): S148 Lat: 40 00.167 Long: 75 33.408 Datum: WGS84

Soil Map Unit Name: Ha Hatboro NWI classification: PFO1A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	Is the Sampled Area within a Wetland? Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:
west side of stream, concave terrace

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Sparsely Vegetated Concave Surface (B8)
- X Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): —
Water Table Present?	Yes X	No ____	Depth (inches): 14"
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 10"

Wetland Hydrology Present? Yes X No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP3

Tree Stratum (Plot size: 30' irregular)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	30	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	30 = Total Cover		
50% of total cover: 15	20% of total cover: 6		
Sapling/Shrub Stratum (Plot size: 15' irregular)			
1. Alnus glutinosa	5	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	5 = Total Cover		
50% of total cover: 2.5	20% of total cover: 1		
Herb Stratum (Plot size: 5')			
1. Symplocarpus foetidus	10	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	10 = Total Cover		
50% of total cover: 5	20% of total cover: 2		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No ___

Remarks: (Include photo numbers here or on a separate sheet.)

FACW and OBL species
Hydric soil
Shallow water table

SOIL Sampling Point: DP3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR4/2	90	7.5YR5/8	10	C	PL	silt	friable, moist
6-14	10YR6/2	75	5YR5/6	25	C	M	silt	friable, saturated at 10"
14-18	10YR6/2	75	5YR5/6	25	C	M	grav mic silt	water at 14"

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) (LRR N)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (MLRA 147, 148)
- ___ Thin Dark Surface (S9) (MLRA 147, 148)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ___ Umbric Surface (F13) (MLRA 136, 122)
- ___ Piedmont Floodplain Soils (F19) (MLRA 148)
- ___ Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (MLRA 147)
- ___ Coast Prairie Redox (A16) (MLRA 147, 148)
- ___ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ✓

Depth (inches): ✓

Hydric Soil Present? Yes X No ___

Remarks:

Phase 1 Bog Turtle Habitat Survey Data Form** for the **Northern Population Range
(Revised April 29, 2020) Please do not edit document.

Wetland ID: A / B
PNDI # (for PA):

General Info

Property/Project Name 971 Cornwallis Drive
Coordinates 40 00.167 75 33.408 **Project Type** Residential
Entity Requesting Phase 1 Survey Cornerstone Consulting
County/Township/Municipality Chester County / East Goshen Township
Lead Surveyor Michael E. Lane, CPSS **Affiliation** ARM Group LLC
Other Assistants Present —

Date/Condition

Date of Survey 11/10/25 **Time In** 730 **Time Out** 830 **Air Temp.** 50 F ° C°
Last Precipitation X < 24 hours __ 1-7 days __ > 1 week __ unknown **Drought conditions?** X Yes __ No __ Unknown Moderate
Drought Index*[1] (Circle): none D0 (D1) D2 D3 D4 **Wetland Photos Taken** X Yes __ No (Provide photo location map)
Notes (*e.g.*, details about drought, flood, abnormally dry, and/or snow/ice conditions, and any other seasonal conditions observed):

/

Wetland Info

Wetland Size 0.1 acres, if known **# Wetlands w/in Project Area[2]** 1
Estimate wetland size (acres) X ≤ 0.1 __ 0.1 - 0.5 __ 0.5 - 1 __ 1 - 2 __ 2 - 4 __ 5+ __ 10+
Estimate % Canopy Cover*[3] __ 0% __ ≤ 5 __ 6-20 __ 21-40 __ 41-60 X > 60
Hydrology and Soils (check all that apply): **use additional pages to further discuss pertinent general wetland information**
__ Springs/Seeps __ Springhouse __ Trib/Stream __ Pond __ Stormwater __ Iron Bacteria __ Watercress
__ Water Visible on Surface Evidence of Flooding __ Yes __ No If yes, (__ Seasonal Flooding[4] __ Routine Flooding[5])
__ Rivulets (_____inches deep) __ Subsurface Tunnel/Rivulets __ Tire Ruts (_____inches deep)
__ Small Puddles/Depressions (____ inches deep) __Saturated soils present? If yes, year-round? __ Likely __ Unlikely__ Unk
__ Yes X No Are there any signs of disturbance to *hydrology* (*e.g.*, drainage ditches, tile drainages, berms, culverts, fill material, ponds, roads, beaver activity)?
No such features on the west side of stream and associated with this wetland area.

Estimate time period (in years) of disturbance*: __ ≤ 5 __6-10 __11-20 __ > 20

/

For ditches that may be present, is there bog turtle habitat? If yes, describe:

/

[1] (*) Denotes reference to the **Supplemental Information** document that provides more details on this particular question.
[2] Each wetland must have a separate Phase 1 habitat assessment data form completed.
[3] Determine percent cover of abundant species for the wetland, not by wetland type. Abundant species are those that are most prominent in the wetland and have the highest percent of coverage compared to other species.
[4] Seasonal flooding in wetlands/streams can occur as a result of spring snow melt/heavy rain that increases water levels in these systems.
[5] Routine flooding refers to tidally-influenced wetland/stream systems or the occurrence of normal rain patterns throughout the year.

Wetland ID: A / B

__ Yes X No Are there any signs of disturbance to *vegetation* (*e.g.*, mowing, pasturing, burning)? If yes, describe:

Wetland Info

Rate (scale of 1-4) level of vegetation disturbance* (Circle): 1. Light to moderate grazing or mowing 2. No grazing, mowing, burning observed[6] 3. Moderate to high grazing or mowing 4. Mowing occurs during bog turtle active season

Soil types present*: Hatboro

How much suitable habitat is in this wetland? Estimate acreage or percentage: 0

Wetland Type	% of Total Wetland	% of Wetland Type w/Muck	Avg. Muck Depth	Max. Muck Depth
PEM Portion of Wetland:			in.	in.
PSS Portion of Wetland:			in.	in.
PFO Portion of Wetland:	100	0	/ in.	/ in.
POW/PUB Portion of Wetland:			in.	in.

Wetland Type/Vegetation

CIRCLE all vegetation* from list below that is dominant (≥ 20% for each wetland type listed above) and add other species you observe that are not listed in table in the "notes" space provided below or in the extra table cells.

Alder Spp. *Alnus* spp.	Common Reed *Phragmites australis*	Jewelweed *Impatiens capensis*	Rice Cutgrass *Leersia oryzoides*	Spicebush *Lindera benzoin*	Willow spp. *Salix* spp.
Alder-leaved Buckthorn *Rhamnus alnifolia*	Dogwood Spp. *Cornus* spp.	Mile-A-Minute *Persicaria perfoliata*	Rough-leaved Goldenrod *Solidago patula*	Spike-Rush *Eleocharis palustris*	Woolly-fruited Sedge *Carex lasiocarpa*
American Elm *Ulmus americana*	Duck Potato *Sagittaria latifolia*	Multiflora Rose *Rosa multiflora*	Sensitive Fern *Onoclea sensibilis*	Swamp Rose *Rosa palustris*	Woolly Bulrush or Woolgrass *Scirpus cyperinus*
Arrowhead *Sagittaria latifolia*	Eastern Red Cedar *Juniperus virginiana*	Poison Sumac *Toxicodendron vernix*	Shrubby Cinquefoil *Dasiphora fruticosa*	Sweetflag *Acorus calamus*	Yellow-Green Sedge *Cyperus esculentus*
Carpetgrass *Axonopus fissifolius*	Eastern Tamarack *Larix laricina*	Porcupine Sedge *Carex hystericina*	Skunk Cabbage *Symplocarpus foetidus*	Tearthumb Spp. *Polygonum* spp.	
Cattail *Typha* spp.	Grass-of-Parnassus *Parnassia glauca*	Purple Loosestrife *Lythrum salicaria*	Smooth Sawgrass *Cladium mariscoides*	. Tussock Sedge *Carex stricta*	
Cinnamon Fern *Osmundastrum cinnamomeum*	Inland sedge *Carex interior*	Red Maple *Acer rubrum*	Soft Rush or Common Rush *Juncus effusus*	Viburnum Spp. *Viburnum* spp.	
Common Boneset *Eupatorium perfoliatum*	Japanese Stiltgrass *Microstegium vimineum*	Reed Canary Grass *Phalaris arundinacea*	Sphagnum Moss *Sphagnum* spp.	White turtlehead *Chelone glabra*	

Notes on additional plant species (*e.g.*, sedge, rush, grass, shrub, tree species):

Persicaria/polygonum sp. - not dominant
Beech trees rooted immediately adjacent to wetland areas

[6] No grazing, mowing, or burning is given a "2" rank as this is considered more harmful to bog turtle wetlands than Rank 1 (light to moderate grazing or mowing). Light to moderate habitat management is beneficial to suppressing succession of native and non-native plant species.

Wetland ID: A/B

Landscape Info

Describe surrounding landscape (*e.g.*, wetlands, forest, subdivision, agricultural field, fallow field, etc.):

Forested land
ATV trails without ruts
Wetlands A/B are in low points adjacent to the stream.
No open areas on site

How much of this wetland is located **off-site** (*i.e.*, outside the property boundaries or right-of-way)?

__ None of it – the entire wetland is within the property boundaries
X Some of it – _____ Acres or _____% of the wetland appears to be located off-site
unknown

If part of this wetland continues off-site, how much of the **off-site portion** was surveyed (on foot)?

X None of it __ All of it __ Part of it (____ acres or ____% of the off-site portion)

Is there potential bog turtle habitat **within 300 feet***? __ Yes X No __ Unk Habitat **off-site**? __ Yes X No __ Unk

If yes, how did you conclude this?

Visual from property line and nearby roadways

Species

Were any bog turtles observed? __ Yes X No If yes, how many?_____
Other herps observed? __ Yes X No If yes, which ones?

*Note that you must be permitted by the state you are conducting the survey in to handle bog turtles.

*Report bog turtle observations to your local FWS Field Office and state wildlife office within 48 hrs.

Lead Surveyor Opinion

__ Yes X No __ Unsure The **hydrology** criterion for bog turtle habitat is met.
__ Yes X No __ Unsure The **soils** criterion for bog turtle habitat is met.
__ Yes X No __ Unsure The **vegetation** criterion for bog turtle habitat is met.
__ Yes X No __ Unsure This wetland **HAS** potential bog turtle habitat (fair to good quality).
__ Yes X No __ Unsure This wetland **HAS** potential bog turtle habitat (low to very low quality).
X This wetland does **NOT** have potential bog turtle habitat. __ **UNSURE** if suitable habitat is present.

Notes (How did you reach this opinion?):

No mucky soils, water table > 12 inches
Closed canopy, small wetland discontinuous from known habitat

Lead Surveyor – please sign below certifying to the best of your knowledge that all of the information provided herein is accurate and complete.

Print Name Michael E Lane **Signature** [signature]

Date 11/14/25

Contact Information ARM Group LLC, 515 S. Franklin St. West Chester, PA 19382
610-246-5984 mlane@armgroup.net

Important Please include all Phase 1 data forms in a final Phase 1 bog turtle habitat assessment report (see Attachment 3 in *Guidelines for Bog Turtle Surveys* for checklist) and submit to your local state wildlife agency and U.S. Fish and Wildlife Service Field Office (see Attachment 1 in *Guidelines for Bog Turtle Surveys*).

Phase 1 Bog Turtle Habitat Survey Data Form for the Northern Population Range Wetland ID: A / B

(Revised April 29, 2020)

Additional space for notes, color photos, or maps/sketch of wetland (or attach printed map with each wetland type carefully outlined; include all wetland types [PEM, PSS, PFO, POW/PUB], streams/ditches, north arrow, property/project borders, and areas of core bog turtle habitat. Include **color photos** for each wetland assessed and separate Phase 1 data forms for each when submitting to agencies, as well as any reptile and amphibian species you encounter, if possible.

See attached delineation report

ATTACHMENT D

Qualifications

ARM Group
Engineers and Scientists

Michael E. Lane, CPSS

SENIOR PROJECT SCIENTIST



SUMMARY OF QUALIFICATIONS

Mr. Lane's project experience includes wastewater, stormwater, and wetland investigations for land development projects, landfill monitoring and permitting, and groundwater and soil sampling for site characterization and remediation projects. He has provided testimony before Township boards and commissions and has presented expert testimony before the Pennsylvania Environmental Hearing Board. Mr. Lane has completed Phase I and Phase II environmental site assessments, environmental impact assessments, tree surveys, and habitat assessments for endangered and threatened species. He is experienced in the evaluation of the physical properties of soils to characterize sites for land application of wastewater and stormwater infiltration and for remapping of soils to comply with local ordinances. As a Certified Professional Soil Scientist, he is qualified to site and size alternate and experimental sewage disposal systems, such as drip irrigation and shallow limiting zone at-grade systems in Pennsylvania.

PROJECT EXPERIENCE

Senior Soil Scientist | Jellystone Park and Resort | Lancaster County, PA | 2014-2024: Mr. Lane conducted soil test pit investigations and hydraulic conductivity testing for the new wastewater treatment plant and spray irrigation disposal system for the campground. He assisted with hydrogeologic testing and reporting, prepared a detailed soil and hydrogeologic report to accompany the sewage planning module, and prepared the permit application for the 87,000 gallon per day system. Mr. Lane continues to work with Jellystone on the long-term monitoring of the disposal field.

Senior Soil Scientist | Mather Mill | Montgomery County, PA | 2023-present: Mr. Lane prepared the permit application package for permitting of a small flow treatment facility to serve Mather Mill, a pre-Revolutionary War mill along the Wissahickon Creek. The renovated mill building is in private ownership for long-term preservation.

Senior Soil Scientist | Heritage Building Group | Warwick Township | Chester County, PA | 2002-2004: Mr. Lane provided testimony before the Township planning commission, and provided expert testimony before the Environmental Hearing Board for the proposed on-site community wastewater disposal system.

Senior Soil Scientist | Artesian Water Company | Sussex County, DE | 2007-2008: Mr. Lane was responsible for preparation of a Site Investigation Report for a proposed spray irrigation wastewater disposal system to service 4,000 homes generating 7-million gallons of wastewater per day. He developed and implemented a site testing plan comprising soil sampling for nutrients, backhoe test pits, infiltration tests, and several hundred auger borings to create detailed soil mapping of 1,600 acres. The Site Investigation Report was approved by the Delaware Department of Natural Resources and Environmental Control.

Senior Soil Scientist | Natural Lands Trust | Chester County, PA | 2016-2019: Mr. Lane completed focused wetland delineations on the 1,500-acre Bryn Coed Farm for Natural Lands Trust and their planned trails and parking lots for trail access. In addition to the wetland delineation, Mr. Lane assisted with the Phase I bog turtle habitat survey for the project area.

EMPLOYEE HIGHLIGHTS

EDUCATION

Bachelor of Science in Environmental Resource Management
The Pennsylvania State University

CERTIFICATIONS AND TRAINING

SSSA Certified Professional Soil Scientist (#34591)

Certified Sewage Enforcement Officer, Pennsylvania (#02679)

OSHA 40-Hour Hazardous Materials Health and Safety Training

OSHA-Approved 8-Hour General Site Worker Refresher

First Aid/CPR with AED Training

PROFESSIONAL AFFILIATIONS

Pennsylvania Association of Professional Soil Scientists

Soil Science Society of America

Senior Soil Scientist | Atlantic Coast Pipeline | George Washington and Jefferson National Forest, VA and WV | 2015: Mr. Lane was a soil scientist team leader for Order 1 and Order 2 soil survey mapping of the planned pipeline route through National Forest land. Mr. Lane directed test pit excavations by a team of laborers, prepared horizon descriptions, conducted field testing, and collected soil samples for laboratory analysis. As part of a multi-scientist team, Mr. Lane's mapping was joined with that of other soil scientists to provide detailed soil information along the pipeline route.

Senior Soil Scientist | Smith Memorial Playhouse and Playground | Philadelphia, PA | 2008: Mr. Lane was responsible for site selection, test pit evaluations, percolation testing, system design, and permitting for the replacement onlot sewage disposal system for the 100-year-old children's playhouse and playground in Fairmount Park. Tree removal was minimized through the use of directional boring techniques and conveyors to place the system aggregate.

Senior Soil Scientist | M.O.T. Water Farm No. 1 and Lea Eara Farms | New Castle County, DE | 2011-present: Mr. Lane developed and implemented a soil sampling and vegetation sampling plan for two spray irrigation wastewater disposal sites. He is responsible for providing annual reporting for soil fertility and vegetation monitoring, including recommendations to optimize treatment and crop yield. The Lea Eara facility was decommissioned and final monitoring was conducted in 2019. Monitoring continues at the MOT facility, permitted to provide 166 acres of spray irrigation disposal for 1.3 million gallons per day of treated residential, commercial, and industrial sewage.

Senior Soil Scientist | Stokes Farm | Chester County, PA | 2020-2023: Mr. Lane provided a variety of environmental services for this proposed residential development. Mr. Lane completed the Phase I Environmental Site Assessment for the 65-acre property, identifying an underground gasoline tank and possible soil contamination from an historic orchard. He coordinated the removal of the UST and completed post-excavation soil sampling and the tank closure reporting, and he conducted soil sampling for assessment of arsenic, lead, and pesticides. Mr. Lane completed the wetland delineation of the property along Chester Creek and its tributary streams and assisted with assessments for threatened and endangered species.

Senior Soil Scientist | Action Manufacturing | Chester County, PA | 2013-present: Mr. Lane assisted with the design and permit applications for a RCRA Part B Permit for a Thermal Treatment Unit to treat hazardous munitions waste streams onsite. He assists with ongoing compliance activities at the site, including groundwater sampling, updated Phase I Environmental Site Assessments, and Preparedness, Prevention and Contingency (PPC) Plan and Spill Prevention, Control and Countermeasures (SPCC) Plans for the Atglen and Bristol facilities.

Senior Soil Scientist | Noznesky Junkyard, Superfund Site | Chester County, PA | 2015-2017: Mr. Lane conducted site-wide soil sampling and test pit investigation to identify remaining areas of concern. Assisted with obtaining release of cleanup liability through the Pennsylvania DEP's Land Recycling (Act 2) Program. Additional characterization and delineation were also conducted to get final cleanup approval from the USEPA under TSCA, so that the site development can be achieved. Remedial efforts include a combination of soil excavation, capping, and restriction of groundwater withdrawals.

EMPLOYEE HIGHLIGHTS

PUBLICATIONS AND PRESENTATIONS

Lane. Which Came First? The License or the Rules? Soil Science Licensing. *Soil Survey Horizons*, Spring 2010, v51 no1.

White, P., Ruble, C., and Lane, M. "The Effect of Changing Land Use on Nitrate Concentrations in Water Supply Wells in Southern Chester County" Environmental Monitoring and Assessment, March 2012.

Lane. "Repair Sites: System Selection" Presentation to the PA Association of Sewage Enforcement Officers, March 2013.

Lane. "Wetland Delineation, Jurisdiction, and Permitting" Presentation, February 2016.

Lane. "Soil Classification Systems" Presentation to Chester County Engineers, April 2017.

Senior Soil Scientist | Embreeville Center Redevelopment | Chester County, PA | 2019-2023: Mr. Lane conducted soil and stream sediment sampling and provided oversight for contaminated soil removal for the redevelopment of this former industrial and institutional property. He conducted site characterization investigations and sampling related to a dump site and worked with the Township's environmental consultant on cleanup of road tar drums.

Senior Soil Scientist | Doe Run Village Historic District | Chester County, PA | 2010-present: Mr. Lane has conducted soil testing and sewage system design for the owners of properties in this historic village. Most recently, he evaluated test pits, conducted percolation testing, and obtained sewage planning approval for the renovation of the historic "Blow Horn" mill building and community onlot sewage disposal system.

Senior Soil Scientist | Mobile Realty | Chester County, PA | 2018-2020: Mr. Lane conducted site-wide soil testing for proposed stormwater management facilities. Mr. Lane evaluated test pits and conducted double-ring infiltration testing for the redevelopment of this mobile home park community.

Senior Soil Scientist | Artesian Water Company | New Castle County, DE | 2008-2009: Mr. Lane prepared a Site Investigation Report for a proposed rapid infiltration basin (RIB) wastewater system capable of disposing of 1.5-million gallons of wastewater per day. He developed and implemented a site testing plan comprising soil borings, test pits, and infiltration tests on multiple disposal sites. He provided oversight during construction of four full-sized test RIBs. Preliminary dosing of the test RIBs confirmed the results of the investigation.

Senior Soil Scientist | Expert Report in Support of Litigation | Lycoming County, PA | 2014: On behalf of a pipeline construction company, Mr. Lane prepared an expert rebuttal report related to the construction of a 30-mile natural gas transmission pipeline and appurtenant facilities. He was retained by the construction company in support of their efforts to collect over $17 million in unpaid invoices. The pipeline owner alleged that errors in erosion and sedimentation control and obtaining environmental permits by the construction company and its subcontractors directly resulted in project delays and significant additional costs. Mr. Lane found that the wetland delineation and permitting was proper and was conducted in accordance with the industry standard. Detailed reviews of the plan drawings and daily precipitation records, along with a flyover site inspection, confirmed that the construction company conformed to accepted practices. The expert rebuttal report and real-time trial support resulted in a court victory for the construction company on all counts, with a total award in excess of $20 million.

Senior Soil Scientist | Linfield Industrial Park | Montgomery County, PA | 2022-2023: Mr. Lane conducted a Phase I Environmental Site Assessment for the Linfield Industrial Park property. The site was used for industrial purposes which included the manufacture, aging, and storage of whiskey from 1891 until 1980. From 1980 until 1986, the property use was repurposed for the packaging of anti-freeze, windshield washer fluid, and ammonia-based household cleaners. These products were manufactured off-site and transported to the property for packaging and subsequent shipping for off-site retail sales. The site has not been in active use since 1986 and the existing buildings are in various states of disrepair. In 2023, Mr. Lane assisted with the asbestos survey of 14 remaining warehouse buildings.

Senior Soil Scientist | Flagg Brass Residual Waste Landfill | Montgomery County, PA | 2009: Mr. Lane assisted with permit reissuance and compliance issues for a residual waste landfill. He coordinated landfill cap clearing and security repairs and upgrades. He prepared the permit application to cease discharge of landfill leachate to the public sewer system and provide for direct surface water discharge and he assisted with monitoring of groundwater and leachate.

Senior Soil Scientist | Kemblesville Wastewater | Franklin Township | Chester County, PA | 1998-2005: Mr. Lane was responsible for soils evaluations and permeability testing for a proposed drip irrigation sewage disposal system for combined sewage flows of 128,000 gallons per day. The detailed testing plan involved multiple sites and coordination with the PADEP soil scientist and the Township's wastewater engineer.

Senior Soil Scientist | Delaware Solid Waste Authority | Central and Southern Facilities, DE | 2010-present: Mr. Lane assists with the environmental monitoring programs for two municipal waste landfills operated by the Delaware Solid Waste Authority. These extensive monitoring programs include monthly leachate monitoring and landfill inspections, as well as quarterly monitoring of groundwater from more than 90 monitoring wells.

Senior Soil Scientist | Cloud Landfill | Chester County, PA | 2010-2020: Mr. Lane was responsible for wetland delineation for the beneficial reuse of a closed sanitary trench landfill located in southeastern Pennsylvania. He conducted an updated Phase I ESA for the landfill property in 2020.

Senior Soil Scientist | Delaware Solid Waste Authority | Cherry Island and Pigeon Point Facilities, DE | 2010-present: Mr. Lane assists with the groundwater, surface water, stormwater, and leachate monitoring programs, including quarterly and annual reporting, for two municipal waste landfills operated by the Delaware Solid Waste Authority. These extensive monitoring programs include monthly leachate monitoring and landfill inspections, as well as quarterly monitoring of groundwater. Groundwater sampling includes the collection of groundwater samples for dissolved methane gas analysis from select monitoring wells using low-flow well purging techniques.

Senior Soil Scientist | Southeastern Chester County Refuse Authority (SECCRA) | Chester County, PA | 2002-present: Mr. Lane was responsible for detailed soils testing and water budget calculations for constructed wetland and stream recharge components of the stormwater management system for a permitted landfill expansion. He conducted detailed soils testing, spray irrigation design, and water quality permitting for land application of treated landfill leachate. He assists with quarterly groundwater surface water and leachate sampling events for compliance with PADEP solid waste regulations and SECCRA's solid waste permit.

Senior Soil Scientist | Elmwood Park Zoo | Montgomery County, PA | 2018: Mr. Lane conducted a test pit investigation of lands associated with a closed municipal landfill to assess suitability for infiltration of stormwater for a park expansion.

Senior Soil Scientist | Anson B. Nixon Park | Chester County, PA | 2016: Mr. Lane provided soils evaluation and reporting for stormwater facilities for proposed athletic field expansion over a closed sanitary landfill.

Qualified Professional Soil Science Consultant | Chester County Health Department | Chester County, PA | 2011-2021: On behalf of Chester County, Mr. Lane was responsible for examination of soils for suitability for onlot sewage disposal systems and submission of written reports for subdivisions of more than 10 lots, for multi-residential and commercial projects where sewage flows are greater than 4,000 gallons per day, and for morphological evaluations of soils as required by the PA DEP. He also provided technical resolution of soils evaluation disputes for all individual lots at the request of the Health Department.

Sewage Enforcement Officer | Delaware County, PA | 1995-1998: Mr. Lane was appointed primary Sewage Enforcement Officer for Edgmont Township and Chester Heights Borough, Delaware Count. In this regulatory role, he was responsible for reviewing planning modules, conducting test pit evaluations, observing percolation testing, and issuing on-lot sewage disposal system permits.

Senior Soil Scientist | Colonial Meadows | Franklin Township | Chester County, PA | 2002-2004: Mr. Lane completed soils evaluations and percolation testing for the siting of individual on-lot sewage disposal systems, and obtained planning approval for the 43-lot residential subdivision.

Senior Soil Scientist | Kennett Development Group | Kennett Township | Chester County, PA | 1999: Mr. Lane completed a wetland delineation, tree survey, soils testing for stormwater management, sewage facilities planning, and pump station design for a 500,000-square-foot office complex.

Senior Soil Scientist | Newlin Greene Residential Subdivision | Newlin Township | Chester County, PA | 2002: Mr. Lane was responsible for installation oversight for the package treatment plant and community subsurface sewage disposal system to serve the 48-lot subdivision.

Senior Soil Scientist | Great Valley Nature Center Camp | Wayne County, PA | 2004: Mr. Lane was responsible for soils testing, planning approval, and design for a community drip disposal system to treat 7,000 gallons per day of wastewater from the proposed year-round nature camp. He provided testimony before the Township Board of Supervisors regarding soil and drip disposal.

PENNSYLVANIA
ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 - 1078

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776

NON-MEMBERS MUST BE CONTACTED DIRECTLY
PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

SERIAL NUMBER: 20252602159

NOTES:

1. PROPERTY KNOWN AS PARCEL UPI #53-4-65; 971 CORNWALLIS DRIVE, WEST CHESTER TOWNSHIP, CHESTER COUNTY, COMMONWEALTH OF PENNSYLVANIA.
2. GROSS TITLE AREA OF PARCEL IS: 324,274 SQUARE FEET OR 7.444 ACRES.
   NET AREA OF PARCEL IS: 314,556.4 SQUARE FEET OR 7.2212 ACRES. AFTER ROW DEDICATION
3. PROPERTY OWNER: MP RENOVATIONS, LLC
4. REPRESENTATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE AND DO NOT PURPORT TO BE AS-BUILT LOCATIONS. ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD ARE SHOWN. ALL LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, AND THE MAPS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY AND ARE NOT GUARANTEED. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES.
5. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CORNERSTONE CONSULTING ENGINEERS AND DESIGN SERVICES, INC., AND OTHER REFERENCE MATERIAL AS LISTED HEREON. SURVEY & TOPOGRAPHIC INFORMATION SHOWN HEREON DERIVED FROM A FIELD SURVEY PERFORMED BY CORNERSTONE CONSULTING LATEST DATE: SEPTEMBER 26, 2025.
6. DATUM BASED UPON PENNSYLVANIA STATE PLANE SOUTH USING HORIZONTAL VALUES FROM NAD83 AND VERTICAL VALUES FROM NAVD88. BEARINGS AND DISTANCES SHOWN ARE BASED ON THE DESCRIPTION CONTAINED WITHIN THE DEED OF RECORD AS WELL AS STATE PLANE INFORMATION.
7. SITE BENCHMARK IS SANITARY MANHOLE, ELEVATION = 422.26'. TO ENSURE THAT THERE HAS BEEN NO ALTERATION OF THE SURVEY BENCHMARK SINCE THE TIME OF THE FIELD SURVEY, IT IS RECOMMENDED THAT THE BENCHMARK BE CONFIRMED IF USED FOR CONSTRUCTION OR ANOTHER SURVEY DOCUMENT. IT IS ALSO RECOMMENDED THAT ANY CONTRACTOR ESTABLISH THEIR OWN CONSTRUCTION BENCHMARK BASED ON THE SURVEY BENCHMARK AND VERIFIED WITH PROVIDED ELEVATIONS OF OTHER EXISTING IMPROVEMENTS.
8. THIS SURVEY WAS PREPARED WITH THE BENEFIT OF A TITLE COMMITMENT BY STEWART TITLE GUARANTY COMPANY; COMMITMENT NO. 25100MP FOR 971 CORNWALLIS DRIVE, WEST CHESTER PA 19380; DATED 08/20/2025.
9. SUBJECT TO ANY AND ALL EASEMENTS, RESTRICTIONS AND COVENANTS OF RECORD WHETHER SHOWN HEREON OR NOT.
10. THE RESEARCH FOR THIS PLAN IS LIMITED TO THE DEED(S) OF RECORD FOR THE SUBJECT AND ADJOINING PARCELS, AND ANY EASEMENTS, RIGHTS OF WAY, OR RESTRICTIONS THAT ARE CONTAINED WITHIN THE RECORDED DEEDS.
11. IT IS RECOMMENDED THAT AREAS INDICATED AS INACCESSIBLE, OR AREAS SHOWN ON THE PLAN HEREON THAT ARE NOT COMPLETE DUE TO BEING INACCESSIBLE, SHOULD BE REVIEWED BY THE CLIENT TO DETERMINE WHETHER OR NOT ADDITIONAL SURVEY WORK IS NECESSARY. REMOVAL OF THIS NOTE FROM THE SURVEY DOCUMENT WILL REQUIRE ADDITIONAL FIELD SURVEY.
12. THE PROPERTY OWNER AND/OR CLIENT SHALL PROVIDE WRITTEN COMMUNICATION TO THE UNDERSIGNED SHOULD THERE BE A DISPUTE REGARDING THE BOUNDARY AND/OR THE CONTENTS OF THIS SURVEY.
13. ANY POTENTIAL ENCROACHMENT SHOWN ON THIS PLAN ARE PROVIDED TO DEPICT THE PHYSICAL LOCATION OF ANY POTENTIALLY ENCROACHING STRUCTURE AND/OR IMPROVEMENT AND IS NOT A STATEMENT OR JUDGEMENT AS TO THE OWNERSHIP OF SAID ENCROACHMENT OR ANY PROPERTY THEREBY AFFECTED.
14. BY GRAPHICAL PLOTTING ONLY THIS PROPERTY IS LOCATED IN FEMA FLOOD MAP ZONE- OTHER AREAS/ZONE X, ZONE X: 0.2% CHANCE FLOOD, ZONE AE, AND REGULATORY FLOODWAY/FLOODPLAIN. (SEE MAP REFERENCE #2).
15. BOUNDARY RESOLUTION BASED ON FOUND EVIDENCE AND OTHER REFERENCE MATERIALS AS LISTED HEREON AVAILABLE AT THE TIME OF SURVEY. THE COURSES DESCRIBED HEREON WERE DETERMINED BY FOUND MONUMENTS, ADJOINERS AND RESULTING CALCULATIONS.
16. A WETLAND ANALYSIS WAS PERFORMED BY ARM GROUP, LLC ON 11/10/2025 AND FIELD LOCATED ON 11/11/2025.

REFERENCES:

1. TAX MAPS AND AERIAL IMAGERY OF CHESTER COUNTY, COMMONWEALTH OF PENNSYLVANIA.
2. MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, CHESTER COUNTY, PENNSYLVANIA (ALL JURISDICTIONS)," PANEL 160 OF 380, MAP NUMBER 42029C0160G, EFFECTIVE SEPTEMBER 29, 2017.
3. PLAN ENTITLED IN PART "EMERGENCY ACCESS EASEMENT PLAN". PREPARED BY PENNONI ASSOCIATES INC., DATED 06-02-2017, BEING "971 CORNWALLIS DRIVE" ON SAID MAP. DEED BK 9779 PG 702.
4. PLAN ENTITLED IN PART "PLAN OF SUBDIVISION" BEING "972 & 970 CORNWALLIS DRIVE". PREPARED BY EDWARD B. WALSH & ASSOCIATES, INC., LAST DATED 04-18-1996. DEEED BK F61 PG 494.

LEGEND & ABBREVIATIONS

- PROPERTY BOUNDARY
- ADJOINER BOUNDARY
- RIGHT OF WAY LINE
- EXISTING TREELINE
- EXISTING FENCE
- OH — EXISTING OVERHEAD WIRE
- EXISTING CURB
- EXISTING DEPRESSED CURB (DC)
- EXISTING SIGN
- EXISTING UTILITY POLE (UP)
- C – T — CONDUIT – TRANSFORMER
- L – M – BX — LIGHT – METER – BOX
- GUY WIRE
- LSA — LANDSCAPE AREA
- LAMP POST
- (D) — STORM MANHOLE
- (S) — SANITARY MANHOLE
- (C) — COMMUNICATION MANHOLE
- (E) — ELECTRIC MANHOLE
- (W) — WATER MANHOLE
- (U) — UNKNOWN MANHOLE
- TANK LID
- STORM INLET
- GM — GAS METER
- WM — WATER METER
- TBX — TRAFFIC SIGNAL BOX
- E — ELECTRIC VAULT
- GV — GAS VALVE
- WV — WATER VALVE
- CO — CLEAN OUT
- (D) — DEED
- (TBR) — TO BE REMOVED
- EXISTING TREES
- EXISTING TREES – TO BE REMOVED
- EXISTING ACCESS EASEMENT
- AREA OF DEDICATION
- FEMA ZONE X
- FEMA ZONE AE
- FLOODWAY

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

CLIENT DATA

McKENNA BUILDING GROUP

Cornerstone
Consulting Engineers & Design Services, Inc.
213 West Main Street . Lansdale . PA 19446
Phone: 215-362-2600 . Fax: 215-362-8400
WWW.CORNERSTONENET.COM
Dallas, TX Leesburg, VA Orlando, FL Philadelphia, PA

REVISIONS

NO	BY	DESCRIPTION	DATE
1	DJD	REVISED PER TWP. CONSULTANT COMMENTS	10/26/2026

PENNSYLVANIA
ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 - 1078

811

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776

J.P. PETERSON — COMMONWEALTH OF PENNSYLVANIA — PROFESSIONAL ENGINEER — JOHN P. PETERSON — ENGINEER — PE055536

PROJECT LOCATION

MP RENOVATIONS, LLC
PRESENTS
PRELIM / FINAL
SUBDIVISION PLANS
FOR
971 CORNWALLIS DRIVE
UPI #53-4-65
EAST GOSHEN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF
PENNSYLVANIA, 19380

TITLE

CONSERVATION AND DEMOLITION PLAN

PROJ. #	25-0626	DATE	4-24-26
CAD ID.	25-0626	DRN BY	GRW
SCALE	AS NOTED	CHK BY	SJR

SHEET 3 OF 18

REVISION 1

GENERAL NOTES

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY UTILITY "ONE-CALL" NUMBER 72 HOURS PRIOR TO ANY EXCAVATION ON THIS SITE. CONTRACTOR SHALL ALSO INDEPENDENTLY NOTIFY LOCAL WATER AND SEWER DEPARTMENTS TO MARK OUT THEIR UTILITIES.
2. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS BY ALL OF THE PERMITTING AUTHORITIES.
3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY.
4. CONTRACTOR TO INCLUDE ALL WORK NECESSARY TO INSTALL THE IMPROVEMENTS ON THESE PLANS, INCLUDING BUT NOT LIMITED TO: LABOR, MATERIALS, SAW CUT, MATERIAL REMOVAL AND DISPOSAL, QUALITY WORKMANSHIP OF IMPROVEMENTS AND REPAIRS, SCHEDULING, SAFETY COORDINATION AND MONITORING, CLEAN UP, TESTING, ONE CALL, SURVEY STAKEOUT, PERMITTING, PROJECT MANAGEMENT AND TRAFFIC CONTROLS.
5. THE PROPERTY SURVEY SHALL BE CONSIDERED A PART OF THESE PLANS.
6. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
7. SOLID WASTE TO BE DISPOSED OF BY CONTRACTOR IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. NO DEBRIS SHALL BE BURIED ON SITE WITHOUT THE EXPRESS AUTHORIZATION OF THE OWNER AND SUBJECT TO THE GOVERNING AGENCY APPROVAL. IN NO INSTANCE SHALL TRASH BE BURIED ON THE SITE.
8. CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION AND SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS, AS WELL AS ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.
9. THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OSHA 1970 GUIDELINES AND ALL RULES AND REGULATIONS THAT APPURTENANT.
10. NEITHER THE PROFESSIONAL ACTIVITIES OF CORNERSTONE CONSULTING, INC., NOR THE PRESENCE OF CORNERSTONE CONSULTING, INC., OR ITS EMPLOYEES AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE, SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOBSITE SAFETY.
11. ANY SHOP DRAWINGS PROVIDED TO THE ARCHITECT OR ENGINEER IS ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN CONCEPT AND THE INFORMATION SHOWN IN THE PLANS. THE CONSTRUCTION MEANS OR METHODS, COORDINATION OF THE WORK WITH OTHER TRADES OR CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
12. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED THEREON, WITHOUT FIRST OBTAINING PRIOR WRITTEN AUTHORIZATION FOR SUCH DEVIATIONS FROM THE OWNER AND ENGINEER, IT SHALL BE RESPONSIBLE FOR THE PAYMENT OF ALL COSTS TO CORRECT ANY WORK DONE, ALL FINES OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND IT SHALL INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ALL SUCH COSTS TO CONNECT ANY SUCH WORK AND FROM ALL SUCH FINES AND PENALTIES, COMPENSATION AND PUNITIVE DAMAGES AND COSTS OF ANY NATURE RESULTING THEREFROM.
13. THESE PLAN AND SPECIFICATION DOCUMENTS, AND ANY SUPPORTING DOCUMENTATION, ARE PREPARED SOLELY FOR THE USE BY THE PARTY WITH WHOM CORNERSTONE CONSULTING ENGINEERS & ARCHITECTURAL, INC (CCEA) HAS ENTERED INTO A CONTRACT AND THERE ARE NO REPRESENTATIONS OF ANY KIND MADE BY CCEA TO ANY PARTY WITH WHOM CCEA HAS NOT ENTERED INTO A CONTRACT.
14. ANY INFORMATION PROVIDED IN THE DESIGN DOCUMENTS RELATED TO SEQUENCING, PHASING, DESIGN TECHNIQUES SPECIFICATION OR DETAILING ARE PROVIDED FOR GENERAL GUIDANCE AS TO THE DESIRED END RESULT AND DESIGN INTENT AND IS NOT INTENDED TO REPLACE THE CONTRACTORS OBLIGATION IN: INVESTIGATING, THOROUGHLY UNDERSTANDING, APPROPRIATELY COORDINATING WITH THEIR SUB CONSULTANTS AND PROPERLY PRICING THE MEANS AND METHODS NECESSARY FOR PROPER AND SAFE COMPLETION OF THE PROJECT OR PHASE OF THE PROJECT.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A SECURE SITE.
16. CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ANY EASEMENTS OR AGREEMENTS ON ADJOINING PROPERTIES TO GAIN ACCESS TO THE SITE FOR DEMOLITION AND CONSTRUCTION AS MAY BE IDENTIFIED BY THE CONTRACTOR BASED ON THEIR MEANS AND METHODS.
17. THE CONTRACTOR SHALL PROVIDE THE INSPECTION ENTITY A MINIMUM OF TWO BUSINESS DAYS NOTICE FOR SCHEDULING INSPECTIONS. REQUESTS SHALL BE IN WRITING, OR IF COMPLETED WITH A PHONE CALL, THE CONTRACTOR SHALL PROVIDE WRITTEN RECORD OF THE REQUEST.
18. VEHICULAR ACCESS TO OTHER RESIDENCES ON CORNWALLIS DRIVE MUST BE MAINTAINED AT ALL TIMES.
19. AT NO TIMES ARE CONSTRUCTION VEHICLES TO BE PARKED ON CORNWALLIS DRIVE, WITH THE EXCEPTION OF SHORT-TERM DELIVERIES.
20. ANY ASPHALT DAMAGE SHALL BE REPAIRED/REPLACED AT THE DIRECTION OF THE TOWNSHIP.
21. REFER TO OTHER PLANS SHEETS FOR ADDITIONAL NOTES, DETAILS AND SPECIFICATIONS.
22. VEHICULAR ACCESS TO OTHER RESIDENCES ON CORNWALLIS DRIVE MUST BE MAINTAINED AT ALL TIMES.
23. AT NO TIMES ARE CONSTRUCTION VEHICLES TO BE PARKED ON CORNWALLIS DRIVE, WITH THE EXCEPTION OF SHORT TERM DELIVERIES.
24. ANY ASPHALT DAMAGE SHALL BE REPAIRED/REPLACED AT THE DIRECTION OF THE TOWNSHIP.

DEMOLITION NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION OF STRUCTURES IN THE PROJECT AREA NEEDED TO INSTALL THE IMPROVEMENTS PRESENTED ON THE PLANS. THE CONTRACTOR SHALL REVIEW THE DEMOLITION SCOPE WITH THE TENANT AND/OR GENERAL CONTRACTOR PRIOR TO INITIATION OF SERVICES TO ENSURE THE SCOPE IS UNDERSTOOD.
2. THE CONTRACTOR SHALL ENSURE THAT ALL PERMITS, CLEARANCES, AND APPROVALS HAVE BEEN OBTAINED, AND THAT ALL INSPECTORS, SAFETY PRECAUTIONS, UTILITY DISCONNECTS HAVE BEEN COMPLETED BEFORE PROCEEDING WITH WORK.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY UTILITY "ONE-CALL" NUMBER 72 HOURS PRIOR TO ANY EXCAVATION ON THIS SITE. CONTRACTOR SHALL ALSO INDEPENDENTLY NOTIFY LOCAL WATER AND SEWER DEPARTMENTS TO MARK OUT THEIR UTILITIES.
4. CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING DEMOLITION ACTIVITIES AND SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS, AS WELL AS ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.
5. THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OSHA 1970 GUIDELINES AND ALL RULES AND REGULATIONS THAT APPURTENANT.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A SECURE SITE.
7. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF THE PUBLIC AT ALL TIMES.
8. CONTINUOUS ACCESS SHALL BE MAINTAINED TO SURROUNDING PROPERTIES AT ALL TIMES.
9. CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ANY EASEMENTS OR AGREEMENTS ON ADJOINING PROPERTIES TO GAIN ACCESS TO THE SITE FOR DEMOLITION AND CONSTRUCTION AS MAY BE IDENTIFIED BY THE CONTRACTOR BASED ON THEIR MEANS AND METHODS.
10. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL UTILITY DISCONNECTIONS.
11. CONTRACTOR SHALL REPAIR OR REPLACE AT THEIR OWN EXPENSE ANY EXISTING SITE AND BUILDING IMPROVEMENTS AND STRUCTURES TO BE REMAIN THAT ARE DAMAGED DURING CONSTRUCTION.
12. VEGETATIVE CLEARING SHALL BE RESTRICTED TO THE LIMIT OF DISTURBANCE. PRIOR TO INITIATION OF SERVICES, THE CLEARING CONTRACTOR SHALL CONFIRM WHETHER ANY TREES INSIDE THE LIMIT OF DISTURBANCE ARE TO REMAIN, AND IF SO, SHALL PROTECT THE TREES FROM DAMAGE TO THE CANOPY, TRUNK AND ROOTS.
13. ANY CLEARING ACTIVITIES THAT WILL CAUSE DISTURBANCE TO THE EARTH DUE TO VEHICLE TRACKING, GRUBBING ACTIVITIES, ETC. WILL BE REQUIRED TO INSTALL EROSION AND SEDIMENT CONTROLS PRIOR TO THE START OF ACTIVITIES.
14. IF CLEARING ACTIVITIES RESULT IN EARTH DISTURBANCE AND EARTHMOVING IS NOT SCHEDULED TO IMMEDIATELY BEGIN AFTER SUCH CLEARING ACTIVITIES HAVE CEASED, THE AREA SHALL BE SEEDED AND MULCHED.

GENERAL UTILITY NOTES

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY UTILITY "ONE-CALL" NUMBER 72 HOURS PRIOR TO ANY EXCAVATION ON THIS SITE. CONTRACTOR SHALL ALSO INDEPENDENTLY NOTIFY LOCAL WATER AND SEWER DEPARTMENTS TO MARK OUT THEIR UTILITIES.
2. LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION, SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING UTILITY CONNECTION LOCATION. WHERE CONFLICTS EXIST WITH THESE SITE PLANS, ENGINEER IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE SAME. SERVICE SIZES TO BE DETERMINED BY ARCHITECT.
4. ALL EXISTING CAPS, LIDS, RIMS, ETC. TO REMAIN SHALL BE RESET FLUSH WITH PROPOSED GRADE.
5. CONTRACTOR SHALL COORDINATE WITH ADJOINING PROPERTY OWNERS FOR ANY DISRUPTION OF SERVICE.
6. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SCHEDULE FOR INSTALLATION WITH THE RESPECTIVE UTILITY COMPANIES AND THE TENANT.
7. ALL EXISTING IMPROVEMENTS THAT ARE ALTERED OR DEMOLISHED SHALL BE REPLACED OR REPAIRED TO RESTORE THE AREA TO AT LEAST ITS ORIGINAL CONDITION.
8. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF UTILITIES SHALL MEET ALL APPLICABLE OSHA REQUIREMENTS.
9. UNDERGROUND UTILITY LINES SHALL BE INSTALLED, INSPECTED AND APPROVED PRIOR TO BACKFILLING.
10. THESE DRAWINGS TO NOT PURPORT TO SHOW ALL EXISTING UTILITIES. PLANS ARE BASED ON SURVEY OF VISIBLE FIELD EVIDENCE, ONE CALL AND ANY PLANS PROVIDED BY THE UTILITY COMPANY AND OWNER.
11. ALL RIM ELEVATIONS ARE APPROXIMATE AND THE CONTRACTOR SHALL ENSURE THAT THE LID OR GRATE ARE FLUSH WITH PAVEMENT OR CONCRETE GRADE.
12. SECURELY CLOSE ALL OPEN ENDS OF THE PIPE AND ANY FITTINGS WITH A WATERTIGHT PLUG WHEN WORK IS NOT IN PROGRESS.
13. THE DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MORE STRINGENT OF THE MANUFACTURERS SPECIFICATION OR THE MUNICIPAL AUTHORITY REQUIREMENT.
14. CONTRACTOR SHALL PROVIDE HYDROSTATIC AND LEAKAGE TESTING FOR WATER MAINS. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY ON WHETHER LATERAL AND SERVICE CONNECTIONS MUST BE TESTED AND WITNESSED BY THE RESPECTIVE UTILITY.
15. THE INTERIOR OF ALL PIPES SHALL BE CLEAN AND THE JOINT SURFACES SHALL BE WIPED CLEAN AND DRY AFTER THE PIPE HAS BEEN LOWERED INTO THE TRENCH.
16. AT LEAST THREE WEEKS PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL NOTIFY THE MUNICIPALITY AND UTILITY COMPANIES OF THE PENDING WORK AND PROVIDE THEM WITH A SCHEDULE, SUB-CONSULTANT NAMES AND CONTACT INFORMATION, AND SUPPLY THEM WITH SHOP DRAWINGS.
17. THE CONTRACTOR SHALL CONTACT THE MUNICIPALITY'S INSPECTION OFFICE TO ENSURE ALL REQUIRED INSPECTIONS ARE COORDINATED.
18. TREES SHALL NOT BE PLACED OVER UNDERGROUND UTILITIES
19. THE CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODE, UTILITY SERVICE COMPANIES, AND/OR ANY INSPECTOR. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO POSSESSION, UNLESS OTHERWISE WAIVED BY THE OWNER.
20. A MINIMUM HORIZONTAL DISTANCE OF 10-FEET SHALL BE MAINTAINED BETWEEN SANITARY SEWER AND WATER LINES OR OTHER SOURCES OF WATER CONTAMINATION. IN INSTANCES WHERE WATER AND SEWER LINES ARE APPROVED TO BE IN THE SAME TRENCH OR CROSS EACH OTHER, THE BOTTOM OF THE WATER LINE SHALL BE A MINIMUM EIGHTEEN INCHES ABOVE THE TOP OF THE SANITARY LINE (OR OTHER LINE). IN CASES WHERE THE SEPARATION IS NOT MET, CONCRETE ENCASEMENT MAY BE REQUIRED. THE CONTRACTOR SHALL COORDINATE ANY CROSSING WITH THE UTILITY COMPANIES PRIOR TO, AND DURING CONSTRUCTION TO DETERMINE WHETHER ADDITIONAL CONCRETE SUPPORTS ARE NEEDED.
21. IN INSTANCES WHERE A WATER AND SEWER LINE CROSS AND THE BOTTOM OF THE WATER LINE IS NOT 18-INCHES MINIMUM ABOVE SEWER LINE, THE WATER LINE OR SEWER LINE MUST BE ENCASED IN WATERTIGHT PIPE EXTENDING A MINIMUM OF 10-FEET, OR BY USE OF ANOTHER METHOD ACCEPTABLE TO BOTH UTILITY COMPANIES, IN EACH DIRECTION FROM THE CROSSING. THE WATER TIGHT PIPE SHALL ALSO BE WATER TIGHT AT THE ENDS. ANY JOINT IN THE ENCASEMENT IS TO BE MECHANICALLY RESTRAINED. IN INSTANCES WHERE THE WATERLINE MUST BE BELOW THE SANITARY SEWER, THE TOP OF THE WATERLINE SHALL BE A MINIMUM 18-INCHES FROM THE BOTTOM OF THE SANITARY PIPE, AND ENCASED IN THE MANNER DESCRIBED ABOVE.
22. THE CONTRACTOR MAY BE REQUIRED TO ENCASE WATER LINES WITH CROSSING OF OTHER TYPES OF PIPING IF UTILITY COMPANY FEELS THAT THERE IS A RISK OF CONTAMINATION.
23. ANY SEWER LATERAL WITH LESS THAN A 1/4 INCH PER FOOT SLOPE, MUST BE CHECKED WITH A TRANSIT DURING INSTALLATION.
24. EXISTING SEWER LATERALS FOR RE-USE SHALL BE PRESSURE TESTED AND TELEVISED IN THE PRESENCE OF A TOWNSHIP REPRESENTATIVE TO DETERMINE IT IS ACCEPTABLE FOR REUSE.
25. LOTS 1 & 3 GRAVITY SEWER LATERALS ARE THE RESPONSIBILITY OF THE RESPECTIVE PROPERTY OWNER UP TO THE CORNWALLIS DRIVE RIGHT-OF-WAY.
26. A SPARE GRINDER PUMP SHALL BE STORED ON THE PREMISES OF LOT 2 AT ALL TIMES.
27. THE LOW PRESSURE LINE LOCATED WITHIN THE CORNWALLIS DRIVERIGHT-OF-WAY WILL BE INSTALLED VIA HORIZONTAL DIRECTIONAL DRILLING.
28. MANUFACTURERS SHOP DRAWINGS FOR THE GRINDER PUMP SHALL BE PROVIDED TO THE TOWNSHIP. THESE SHALL INCLUDE DETAILED SPECIFICATIONS OF THE GRINDER PUMP AND INCLUDE DETAILS FOR THE ALARM SYSTEM.

GRADING NOTES

1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT REFERENCED IN THIS PLAN SET. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE SOILS REPORT. UNLESS A MORE STRINGENT REQUIREMENT IS SET FORTH IN A GEOTECHNICAL REPORT, ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER A.S.T.M. TEST D-1557. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 2% ABOVE NOR 3% BELOW OPTIMUM.
2. THE CONTRACTOR SHALL ENSURE THAT RUNOFF IN LANDSCAPE AND VEGETATED AREAS ARE DIRECTED AWAY FROM THE BUILDING AND TO A LOCATION WHERE THE RUNOFF CAN DRAIN. NO PONDING SHALL OCCUR.
3. AREAS OF BULK FILL SHALL BE INSTALLED AS RECOMMENDED IN THE GEOTECHNICAL REPORT. IN THE ABSENCE OF A GEOTECHNICAL REPORT, FILL AREAS SHALL BE INSTALLED IN ACCORDANCE WITH THE NOTE ABOVE. CONTRACTOR SHALL PROVIDE DENSITY TESTING FROM A CERTIFIED GEOTECHNICAL FIRM FOR ALL ROAD BASES, AREAS TO BE USED FOR THE FOUNDATION OF STRUCTURES, OR ANY AREAS OF FILL WHERE SETTLEMENT WILL RESULT IN DAMAGE TO SURFACE IMPROVEMENTS. CONTRACTOR IS TO INCLUDE IN THE BID AND CONTRACT THE COST FOR THE TESTING.
4. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO ENSURE 1% MIN. SLOPE AGAINST ALL ISLANDS GUTTERS, CURBS AND 2.0% ON ALL CONCRETE SURFACES, AND 2.0% MIN. ON ASPHALT, EXCEPT AS NOTED ON PLANS. ANY DISCREPANCIES THAT MAY EFFECT THE PUBLIC SAFETY OR PROJECT COST, MUST BE IDENTIFIED TO THE ENGINEER IN WRITING IMMEDIATELY. PROCEEDING WITH CONSTRUCTION WITH DESIGN DISCREPANCIES IS DONE SO AT THE CONTRACTOR'S OWN RISK.
5. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED TO 95% OPTIMUM DENSITY (AS DETERMINED BY MODIFIED PROCTOR METHOD).
6. IN CASE OF DISCREPANCIES BETWEEN PLANS, NOTIFY ENGINEER OF RECORD OF ANY CONFLICT.
7. ALL PAVEMENT SLOPES WITHIN HANDICAP PARKING AREAS, ACCESSIBLE ROUTES AND RAMPS SHALL MEET ADA REQUIREMENTS.
8. ALL EXISTING CAPS, LIDS, RIMS, ETC. TO REMAIN SHALL BE RESET FLUSH WITH PROPOSED GRADE.
9. SITE IS LOCATED OUTSIDE OF THE 100 YR. AND 500 YR. FLOOD ZONE.
10. THE CONTRACTOR SHALL ADHERE TO ALL TERMS AND CONDITIONS AS OUTLINED IN THE GENERAL NPDES PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES AS APPLICABLE.
11. ALL PAVING AND GRADING CONSTRUCTION ACTIVITIES SHALL MEET THE REQUIREMENTS OF THE MUNICIPALITY.
12. ALL GRADED SLOPES SHALL BE GRADED TO A SLOPE OF 3H:1V OR FLATTER UNLESS OTHERWISE NOTED ON THE PLANS. IN INSTANCES WHERE THE SLOPE IS STEEPER THAN 3H:1V, THE SLOPE SHALL BE STABILIZED IMMEDIATELY WITH SEED AND EROSION CONTROL MATTING INSTALLED TO THE MANUFACTURES RECOMMENDATIONS.
13. IF ANY EXISTING STRUCTURES, INCLUDING BUT NOT LIMITED TO SIDEWALK, PAVEMENT, UTILITIES, BUILDINGS, LANDSCAPING, WALLS, ETC THAT ARE TO REMAIN ARE DAMAGED DURING CONSTRUCTION, THE CONTRACTOR, AT THEIR EXPENSE, SHALL REPAIR OR REPLACE THE STRUCTURE TO RETURN IT THE EXISTING CONDITION OR BETTER.
14. AREAS TO REMAIN SHALL BE PROTECTED.
15. THE CONTRACTOR SHALL ENSURE THAT ALL PLANTING AREAS ARE NOT COMPACTED AND THAT THEY DO NOT CONTAIN MATERIALS THAT WILL BE AN IMPEDIMENT TO THE GROWTH OF ANY PROPOSED LANDSCAPING.
16. THE CONTRACTOR SHOULD NOTE THAT DEWATERING MAY BE REQUIRED DEPENDING ON THE SEASON IN WHICH CONSTRUCTION OCCURS.
17. PREPARATION OF A GEOTECHNICAL REPORT WAS NOT IN CCEA'S PROVIDED SCOPE TO THE CLIENT AND TO THE KNOWLEDGE OF CCEA A GEOTECHNICAL REPORT HAS NOT BEEN PROVIDED, THEREFORE IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ANY BEARING PRESSURES AND SOIL CONDITIONS PRIOR TO INSTALLATION OF ANY STRUCTURAL IMPROVEMENTS, OR COORDINATE WITH THE CLIENT TO OBTAIN FURTHER INFORMATION.

GENERAL DRAINAGE NOTES

1. ALL INLETS SHALL BE INSTALLED SO THAT ANY TOP UNIT ADJUSTMENT WILL NOT RESULT IN MORE THAN 1-INCH OVERHANG IN ANY LOCATION ON THE PRECAST BOX.
2. ALL DRAINAGE INLETS SHALL BE PENNDOT PRECAST INLETS WITH A PENNDOT TOP UNIT AND BICYCLE SAFE GRATE UNLESS OTHERWISE SPECIFIED. INLETS GREATER THAN 5-FEET DEEP SHALL BE PROVIDED WITH INTEGRAL LADDER/STEPS.
3. ALL INLETS SHALL BE PARGED AND ANY PIPE TRIMMED TO BE FLUSH WITH THE INTERIOR WALL OF THE INLET.
4. IT SHALL BE THE CONTRACTORS' RESPONSIBILITY TO PROTECT STORM WATER INFILTRATION AREAS AND TO PROVIDE CONFIRMATION INFILTRATION TESTING BY A QUALIFIED GEOLOGIST OR ENGINEER, OR THEIR REPRESENTATIVE, TO THE DESIGN ENGINEER AND OWNER, AT A MINIMUM AFTER EXCAVATION.
5. ANY INLET WITH A WATER QUALITY HOOD/DEVICE SHALL BE PROVIDED WITH A SUMP MEETING THE MANUFACTURER'S RECOMMENDATIONS.
6. INLETS WITH SUMPS SHALL BE CLEANED OUT/VACUUMED PRIOR TO TURN OVER.
7. ALL PIPE COVER SHALL MEET MANUFACTURER'S RECOMMENDATION.
8. ANY CHANGES IN PIPE MATERIAL (PVC/HDPE) SHALL USE PROPER FITTINGS AND CONNECTIONS METHODS.

GENERAL LANDSCAPE NOTES

1. EXISTING TREES NEAR PROPOSED IMPROVEMENTS SHALL BE PROTECTED WITH TREE PROTECTION FENCE. REFER TO THE PLAN VIEW FOR THE GENERAL LOCATION.
2. PLANT MATERIAL SHALL BE FURNISHED AND INSTALLED AS INDICATED INCLUDING ALL LABOR, MATERIALS, PLANTS, EQUIPMENT, PLANT MATERIAL SHALL BE FURNISHED AND INSTALLED AS INDICATED
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT THE CORRECT GRADES AND ALIGNMENTS. ALL PLANTS SHALL BE SET PLUMB AND STRAIGHT. LANDSCAPING SHALL BE INSTALLED IN THE CENTER OF THE PIT.
4. PLANTS SHALL BE TYPICAL FOR THEIR SPECIES AND VARIETY, HAVE NORMAL GROWTH HABITS, WELL DEVELOPED BRANCHES, DENSELY FOLIATED, AND FREE FROM DEFECTS.
5. INSOFAR AS PRACTICAL, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE THE CONTRACTOR SHALL PROTECT THE LANDSCAPING AND ENSURE IT RECEIVES ADEQUATE WATERING. UNDER NO CIRCUMSTANCES SHALL LANDSCAPING REMAIN UNPLANTED FOR MORE THAN THREE (3) DAYS.
6. ALL PLANTS SHALL BE PLANTED IN TOPSOIL THAT IS THOROUGHLY WATERED AND TAMPED AS BACKFILLING PROGRESSES.
7. INSTALLATION OF PLANTS SHALL OCCUR WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE.
8. CONTRACTOR SHALL ENSURE THE PLANTS ARE WATERED AFTER INSTALLATION TO ENSURE THE INSTALLED PLANTINGS THRIVE. WATERING SHALL CONTINUE UNTIL SUCH TIME AS THE OWNER INDICATES.
9. ALL DISTURBED AREAS ARE TO BE FINE GRADED, RAKED, MULCHED AND SEEDED.

CLIENT DATA

McKENNA BUILDING GROUP

Cornerstone
Consulting Engineers & Design Services, Inc.
213 West Main Street . Lansdale . PA 19446
Phone: 215-362-2600 . Fax: 215-362-8400
WWW.CORNERSTONENET.COM
Dallas, TX Leesburg, VA Orlando, FL Philadelphia, PA

REVISIONS

NO	BY	DESCRIPTION	DATE
1	DBB	REVISED PER TWP. CONSULTANT COMMENTS	10/26/2026

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 - 1076

811

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776

J.P. PATTERSON
COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL
JOHN P. PATTERSON
ENGINEER
PE055536

PROJECT LOCATION

MP RENOVATIONS, LLC
PRESENTS
PRELIM / FINAL
SUBDIVISION PLANS
FOR
971 CORNWALLIS DRIVE
UPI #53-4-65
EAST GOSHEN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF
PENNSYLVANIA, 19380

TITLE

NOTES

PROJ. #	25-0626	DATE	4-24-26
CAD ID.	25-0626	DRN BY	GRW
SCALE	AS NOTED	CHK BY	SJR

SHEET 4 OF 18

REVISION 1

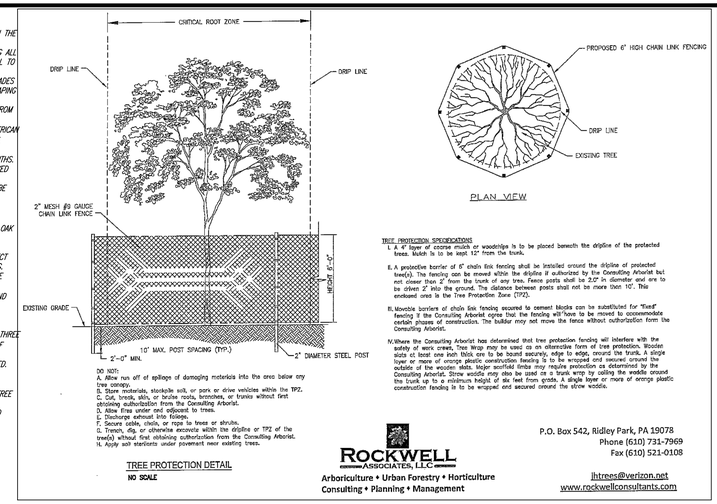
PLANT SCHEDULE TREE WHIPS

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONTAINER
TREE WHIPS					
	COW	27	Celtis occidentalis Common Hackberry	0.5"	B.R.
	MSW	33	Magnolia virginiana Sweetbay Magnolia	0.5"	B.R.
	NSW	31	Nyssa sylvatica Tupelo	0.5"	B.R.
	QBW	31	Quercus bicolor Swamp White Oak	0.5"	B.R.
	QPW	28	Quercus phellos Willow Oak	0.5"	B.R.



LANDSCAPE NOTES:

1. LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE VERIFIED AND MARKED IN THE FIELD, PRIOR TO ANY DIGGING OPERATIONS.
2. PLANT MATERIAL SHALL BE FURNISHED AND INSTALLED AS INDICATED INCLUDING ALL LABOR, MATERIALS, PLANTS, EQUIPMENT, AND CLEAN-UP WHICH ARE INCIDENTAL TO LANDSCAPE INSTALLATION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT THE CORRECT GRADES AND ALIGNMENTS. ALL PLANTS SHALL BE SET PLUMB AND STRAIGHT. LANDSCAPING SHALL BE INSTALLED IN THE CENTER OF THE PIT.
4. ANY NYLON ROPE USED IN BALLING THE TREE MUST BE CUT AND REMOVED FROM THE ROOT BALL.
5. ALL PLANTS SHALL CONFORM WITH THE MOST CURRENT VERSION OF THE "AMERICAN STANDARD FOR NURSERY STOCK" OF THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
6. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF EIGHTEEN MONTHS. ANY TREES, SHRUBS, HEDGES, OR GROUND COVER THAT DIE OR ARE DESTROYED SHALL BE REPLACED WITHIN SIX MONTHS.
7. CONTRACTOR SHALL REPAIR ANY SOIL OR SUBSURFACE DRAINAGE WHICH MAY BE DETRIMENTAL TO GROWTH OF THE PLANT MATERIAL.
8. ALL TREES SHALL BE PROVIDED WITH A 3" DEEP SAUCER, CONSISTING OF SHREDDED OAK BARK MULCH.
9. ALL SHRUB BEDS SHALL BE PROVIDED WITH A 3" DEEP LAYER OF SHREDDED OAK BARK MULCH.
10. INSOFAR AS PRACTICAL, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE THE CONTRACTOR PROTECT THE LANDSCAPING NOT PLANTED AND ENSURE IT RECEIVES ADEQUATE WATERING. UNDER NO CIRCUMSTANCES SHALL LANDSCAPING REMAIN UNPLANTED FOR MORE THAN THREE (3) DAYS.
11. ALL PLANTS SHALL BE PLANTED IN TOPSOIL THAT IS THOROUGHLY WATERED AND TAMPED AS BACKFILLING PROGRESSES.
12. INSTALLATION OF PLANTS SHALL OCCUR WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE.
13. ALL PLANTS SHALL BE THOROUGHLY WATERED BY THE CONTRACTOR AT LEAST THREE (3) TIMES (IN THE ABSENCE OF NATURAL RAINFALL), PRIOR TO ACCEPTANCE OF PLANTING BY THE OWNER.
14. ALL DISTURBED AREAS ARE TO BE FINE GRADED, RAKED, MULCHED AND SEEDED.
15. STRAW MULCH SHALL BE USED FOR GRASS SEED MIX, EXCEPT THAT SLOPES STEEPER THAN 3 TO 1 SHALL USE EROSION CONTROL BLANKETS/MATS.
16. EXISTING TREES NEAR PROPOSED IMPROVEMENTS SHALL BE PROTECTED WITH TREE PROTECTION FENCE. REFER TO THE PLAN VIEW FOR THE GENERAL LOCATION.
17. ALL TREES NEAR SIGNS, WALKWAYS AND ROADWAYS SHOULD BE LIMBED UP TO AVOID CONFLICT WITH PEDESTRIANS AND VEHICLES OR BLOCK SIGNAGE.
18. ALL INVASIVE VINES TO BE REMOVED FROM TREES AND SITE.



DO NOT:
A. Allow run off or spillage of damaging materials into the area below any tree canopy.
B. Store materials, stockpile soil, or park or drive vehicles within the TPZ.
C. Cut, break, skin, or bruise roots, branches, or trunks without first obtaining authorization from the Consulting Arborist.
D. Allow fires under and adjacent to trees.
E. Discharge exhaust into foliage.
F. Secure cable, chain, or rope to trees or shrubs.
G. Trench, dig, or otherwise excavate within the dripline or TPZ of the tree(s) without first obtaining authorization from the Consulting Arborist.
H. Apply soil sterilants under pavement near existing trees.

TREE PROTECTION DETAIL
NO SCALE

TREE PROTECTION SPECIFICATIONS

I. A 4" layer of chipped mulch or woodchips is to be placed beneath the dripline of the protected trees. Mulch is to be kept 12" from the trunk.

II. A protective barrier of 4' chain link fencing shall be installed around the dripline of protected tree(s). The fencing can be moved within the dripline if authorized by the Consulting Arborist but not closer than 2' from the trunk of any tree. Fence posts shall be 2.0" in diameter and are to be driven 2' into the ground. The distance between posts shall not be more than 10'. This enclosed area is the Tree Protection Zone (TPZ).

III. Monotie barriers of chain link fencing secured to cement blocks can be substituted for "fixed" fencing if the Consulting Arborist agree that the fencing will have to be moved to accommodate certain phases of construction. "The bulldozer may not move the fence without authorization from the Consulting Arborist.

IV. Where the Consulting Arborist has determined that tree protection fencing will interfere with the safety of work crews, Tree Wrap may be used as an alternative form of tree protection. Wooden slats at least one inch thick are to be bound securely, edge to edge, around the trunk. A single layer or more of orange plastic construction fencing is to be wrapped and secured around the outside of the wooden slats. Major scaffold limbs may require protection as determined by the Consulting Arborist. Straw wattles may also be used as a trunk wrap by coiling the wattle around the trunk up to a minimum height of six feet from grade. A single layer or more of orange plastic construction fencing is to be wrapped and secured around the straw wattle.

ROCKWELL ASSOCIATES, LLC
Arboriculture • Urban Forestry • Horticulture
Consulting • Planning • Management
P.O. Box 542, Ridley Park, PA 19078
Phone (610) 731-7969
Fax (610) 521-0108
lhtrees@verizon.net
www.rockwellconsultants.com

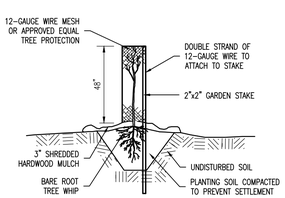
PLANT SCHEDULE LOT PLANTING

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONTAINER	REMARKS
DECIDIOUS TREES						
	AF	5	Acer rubrum 'Franksred' Red Sunset Maple	3" Cal.	B&B	Native
	BN	3	Betula nigra 'Heritage' Heritage River Birch	3" Cal.	B&B	Native
EVERGREEN TREES						
	IA	14	Ilex opaca American Holly	5' Ht.	B&B	Native
	JE	19	Juniperus virginiana Eastern Redcedar	5' Ht.	B&B	Native
DECIDUOUS SHRUBS						
	Cr	6	Clethra alnifolia 'Ruby Spice' Ruby Spice Summersweet	18" Ht.	Pot	Native
	Cs	6	Cornus stolonifera Red Twig Dogwood	24" ht.	Pot	Native
	Df	3	Dasiphora fruticosa Bush Cinquefoil	12"–18" Ht.	Pot	Native
	Iv	7	Itea virginica 'Sprich' Little Henry Sweetspire	12"–18" Ht.	Pot	Native
	Pl	9	Physocarpus opulifolius 'Little Devil' Little Devil Dwarf Ninebark	18"–24" Ht.	Pot	Native
	Va	1	Viburnum dentatum Viburnum	36" Ht	Pot	Native
3" EVERGREEN SHRUBS						
	Ls	12	Ilex glabra 'Shamrock' Shamrock Inkberry Holly	18"–24" Ht.	Pot	Native
GRASSES						
	Pc	14	Panicum virgatum 'Cheyenne Sky' Cheyenne Sky Prairie Winds Switch Grass	12"–18" Ht.	Pot	Native
	Sl	6	Schizachyrium scoparium Little Bluestem	1 gal.	Pot	Native
PERENNIALS						
	Em	8	Echinacea purpurea 'Magnus' Magnus Purple Coneflower	1 gal.	Pot	Native
	Rhi	5	Rudbeckia hirta Black-eyed Susan	1 gal.	Pot	Native

LEGEND & ABBREVIATIONS

- PROPERTY BOUNDARY
- ADJOINER BOUNDARY
- RIGHT OF WAY LINE
- EXISTING TREELINE
- EXISTING FENCE
- OH — EXISTING OVERHEAD WIRE
- EXISTING CURB
- EXISTING DEPRESSED CURB (DC)
- EXISTING SIGN
- EXISTING UTILITY POLE (UP)
- C – T — CONDUIT – TRANSFORMER
- L – M – BX — LIGHT – METER – BOX
- GUY WIRE
- LSA — LANDSCAPE AREA
- LAMP POST
- (D) — STORM MANHOLE
- (S) — SANITARY MANHOLE
- (C) — COMMUNICATION MANHOLE
- (E) — ELECTRIC MANHOLE
- (W) — WATER MANHOLE
- (U) — UNKNOWN MANHOLE
- TANK LID
- STORM INLET
- GM — GAS METER
- WM — WATER METER
- TSB — TRAFFIC SIGNAL BOX
- E — ELECTRIC VAULT
- GV — GAS VALVE
- WV — WATER VALVE
- CO — CLEAN OUT
- (D) — DEED
- (TBR) — TO BE REMOVED
- REFORESTATION AREA
- TP — TP — TP — TREE PROTECTION FENCE
- EXISTING DECIDIOUS TREE
- EXISTING EVERGREEN TREE

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.



TREE WHIP PLANTING & STAKING DETAIL
NOT TO SCALE

TREE MITIGATION:

INFORMATION IS FROM AN URBAN FOREST REVIEW ON DECEMBER 18, 2025 BY REGISTERED ARBORIST JOHN HOSBACH

11.1 PLANTING STRATEGY & METHODOLOGY

TO OFFSET REQUIRED REMOVALS AND REPAIR THE DEGRADED UNDERSTORY, MITIGATION WILL UTILIZE FORESTRY-GRADE TREE WHIPS. THIS APPROACH IS SPECIFIED TO MAXIMIZE ROOT ESTABLISHMENT, INCREASE LONG-TERM SURVIVAL RATES, AND ACHIEVE A COST-EFFECTIVE, HIGH-DENSITY WOODLAND STOCKING RATE.

- STOCK STANDARD: HEALTHY, NURSERY-PROPAGATED FORESTRY WHIPS.
- QUANTITY: A TOTAL OF 150 FORESTRY WHIPS SHALL BE ADDED TO ASSIST WITH RE-STOCKING THE DEGRADED STAND.
- PROTECTION: MANDATORY DEER BROWSE PROTECTION (SEE DETAIL) SHALL BE INSTALLED IMMEDIATELY UPON PLANTING TO ENSURE REGENERATION SURVIVAL AGAINST HEAVY LOCAL PRESSURE.

11.2 RECOMMENDED SPECIES MIX (NATIVE REFORESTATION)

IN COMPLIANCE WITH EAST GOSHEN TOWNSHIP NATIVE PLANTING GUIDELINES AND ARBORIST RECOMMENDATIONS, THE 150 WHIPS WILL CONSIST OF A DIVERSE MIX OF THE FOLLOWING CLIMATE-RESILIENT, NATIVE SPECIES:

- WILLOW OAK (QUERCUS PHELLOS)
- SWAMP WHITE OAK (QUERCUS BICOLOR)
- HACKBERRY (CELTIS OCCIDENTALIS)
- BLACK GUM / SOURGUM (NYSSA SYLVATICA)
- SWEETBAY MAGNOLIA (MAGNOLIA VIRGINIANA)

12.2 PRESERVED WOODLAND MITIGATION SCHEDULE (PHASED SUMMARY)

BECAUSE THE EXISTING FOREST SYSTEM HAS BEEN EVALUATED AS SEVERELY DEGRADED AND NON-REGENERATING, MITIGATION ACTIVITIES SHALL BE IMPLEMENTED IN STRUCTURED PHASES. THIS SCHEDULE ALLOWS NECESSARY FLEXIBILITY FOR WEATHER, SEASONAL SITE CONDITIONS, AND ADAPTIVE MANAGEMENT WHILE MAINTAINING CLEAR PERFORMANCE MILESTONES:

PHASE/TIMELINE	CORE MITIGATION ACTIVITY	PURPOSE & EXECUTION DETAILS
PHASE 1: SITE PREPARATION	SELECTIVE INVASIVE VINE CUTTING	CUT AND TREAT CLIMBING INVASIVE VINES (E.G., ORIENTAL BITTERSWEET, PORCELAIN BERRY, ENGLISH IVY) AT THE BASE TO REDUCE CROWN LOADING, PREVENT CANOPY SMOTHERING, AND SAVE EXISTING EXISTING MATURE TREES.
PHASE 2: SITE PREPARATION	TARGETED INVASIVE GROUNDCOVER CONTROL	MECHANICAL OR CHEMICAL CONTROL OF DENSE INVASIVE GROUND LAYERS (E.G., MULTIFLORA ROSE, BUSH HONEYSUCKLE, GARLIC MUSTARD) TO RESTORE SOIL ACCESS, MOISTURE INFILTRATION, AND LIGHT PENETRATION FOR NEW GROWTH.
PHASE 3: REFORESTATION	FORESTRY-GRADE WHIP PLANTING	INSTALLATION OF THE 150 DIVERSE NATIVE TREE WHIPS ACROSS INVASIVE-DOMINATED
PHASE 4: PROTECTION	DEER BROWSE PROTECTION	
PHASE 5: ONGOING CARE	ANNUAL MONITORING & MAINTENANCE	

13.0 CONCLUSIONS & FINDINGS SUMMARY

1. EXISTING CONDITIONS: THE EXISTING ON-SITE FOREST SYSTEM IS CURRENTLY SEVERELY DEGRADED, HEAVILY IMPACTED BY INVASIVE SPECIES, AND NON-REGENERATING.
2. JUSTIFICATION OF REMOVALS: TREE REMOVALS WITHIN THE DESIGNATED DISTURBANCE FOOTPRINT ARE NECESSARY, UNAVOIDABLE, AND ENVIRONMENTALLY JUSTIFIED GIVEN THE TARGETED PLAN FOR NET-ECOLOGICAL GAIN.
3. PRESERVATION VALUE: PRESERVATION OF REMAINING WOODLAND ACREAGE PROVIDES CLEAR, LONG-TERM ECOLOGICAL AND STORMWATER BENEFITS TO THE TOWNSHIP.
4. ENHANCEMENT OPPORTUNITY: INVASIVE-DOMINATED OPEN AREAS REPRESENT PRIME OPPORTUNITIES FOR ACTIVE RESTORATION RATHER THAN PASSIVE DECLINE.
5. MANDATORY ACTIVE MANAGEMENT: ACTIVE, SUSTAINED MANAGEMENT (RE-STOCKING WITH 150 WHIPS, VINE SUPPRESSION, AND INVASIVE CONTROL) IS STRICTLY REQUIRED TO ACHIEVE LONG-TERM FOREST RECOVERY AND SUSTAINABLE CANOPY SUCCESSION.

OPEN AREAS IDENTIFIED AS PRIME OPPORTUNITIES FOR ENHANCEMENT. INSTALLATION OF RIGID TREE SHELTERS/ TUBES OR FENCING AROUND ALL NEWLY PLANTED WHIPS TO PROTECT AGAINST HEAVY LOCAL DEER BROWSING. CONDUCT ANNUAL QUALITATIVE AND QUANTITATIVE MONITORING SWEEPS FOR A MINIMUM OF 2 TO 5 YEARS TO EVALUATE SURVIVAL, ADJUST INVASIVE MANAGEMENT, AND GUIDE FOLLOW-UP ADAPTIVE ACTIONS

EAST GOSHEN TOWNSHIP – LANDSCAPE COMPLIANCE CHART

ZONING DISTRICT: R-2, LOW DENSITY RESIDENTIAL DISTRICT

ZONING

§. TREE REPLACEMENT
TREES ON SITE ARE MOSTLY DEAD OR DECLINING, SELECTIVE CLEARING WILL BE DONE TO REMOVE THE DEAD TREES, DISEASED TREES AND INVASIVE SPECIES. ONLY 7% OF THE TREES ON SITE ARE VIABLE. 150 TREE WHIPS WILL BE PLACED ON SITE TO RESTORE THE FOREST. ACCORDING TO THE ARBORIST'S REPORT ON DECEMBER 18, 2025. THERE IS LESS THAN 20% TREE REMOVAL.

§.205-62 STREET TREE
STREET TREES ARE REQUIRED ON APPROXIMATELY 310 LINEAR FEET OF STREET FRONTAGE. STREET TREES ARE TO BE SPACED 40 FEET ON CENTER. 310 LF/ 40 LF = 8 STREET TREES REQUIRED
3 STREET TREES PROVIDED AND 5 EXISTING TREES ALONG ROAD = 8 STREET TREES

CLIENT DATA

McKENNA BUILDING GROUP

Cornerstone
Consulting Engineers & Design Services, Inc.
213 West Main Street . Lansdale . PA 19446
Phone: 215-362-2600 . Fax: 215-362-8400
WWW.CORNERSTONENET.COM
Dallas, TX Leesburg, VA Orlando, FL Philadelphia, PA

REVISIONS

NO	BY	DATE	DESCRIPTION
1	DBI	10/20/2026	REVISED PER TWP. CONSULTANT COMMENTS

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania 15122 - 1976
811
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776

JUSTIN M. ROLLER
COMMONWEALTH OF PENNSYLVANIA
NOTICE: THIS DRAWING AND THE DESIGN SHOWN AND DESCRIBED HEREIN ARE THE PROPERTY OF CORNERSTONE CONSULTING ENGINEERS & DESIGN SERVICES, INC. AND SHALL NOT BE USED IN WHOLE OR IN PART FOR ANY PURPOSE WITHOUT THE WRITTEN CONSENT OF CORNERSTONE CONSULTING ENGINEERS & DESIGN SERVICES, INC.

PROJECT LOCATION

MP RENOVATIONS, LLC
PRESENTS
PRELIM / FINAL
SUBDIVISION PLANS
FOR
971 CORNWALLIS DRIVE
UPI #53-4-65
EAST GOSHEN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF
PENNSYLVANIA, 19380

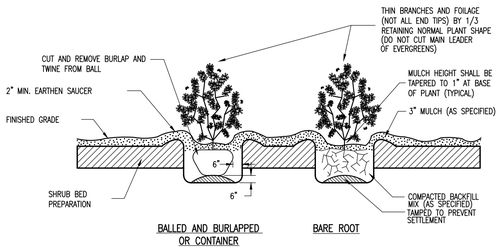
TITLE

LANDSCAPE PLAN

PROJ. #	25-0626	DATE	4-24-26
CAD ID.	25-0626	DRN BY	GRW
SCALE	AS NOTED	CHK BY	SJR

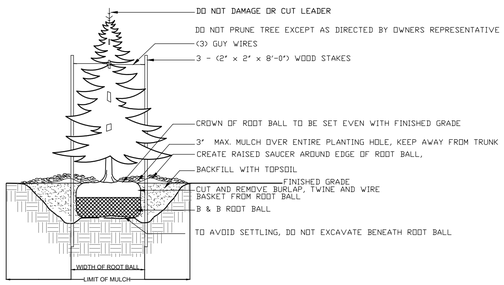
SHEET 6 OF 18

REVISION 1



SHRUB PLANTING AND SHRUB BED PREPARATION

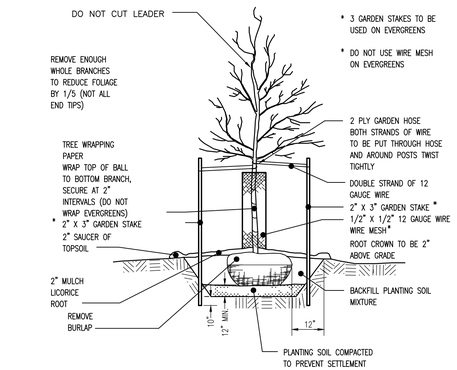
NOT TO SCALE



SPECIFICATIONS:
1. DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKE.
2. WATER THOROUGHLY AFTER INSTALLATION.
3. REMOVE STAKES TWO YEARS OR LESS AFTER INSTALLATION.

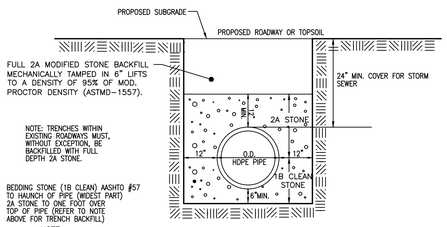
TYPICAL EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE



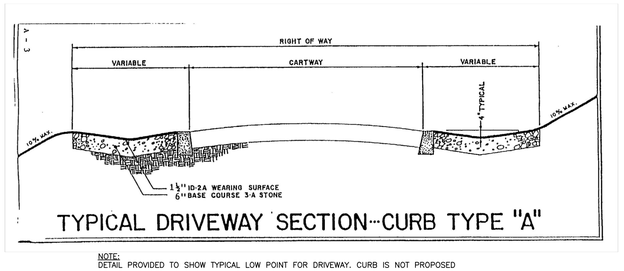
TREE PLANTING AND STAKING DETAIL

NOT TO SCALE



NOTE:
ALL UTILITY TRENCHES WITHIN EXISTING ROADWAYS, PROPOSED ROADWAYS, ALL RIGHT OF WAYS, EASEMENTS, PROPOSED DRIVEWAYS, APRONS AND SIDEWALKS MUST, WITHOUT EXCEPTION, BE BACKFILLED WITH FULL DEPTH 2A STONE AFTER TOP SCREENING.
ALL UTILITY TRENCHES MUST BE COMPACTED (MECHANICALLY TAMPED) IN 6" LIFTS.

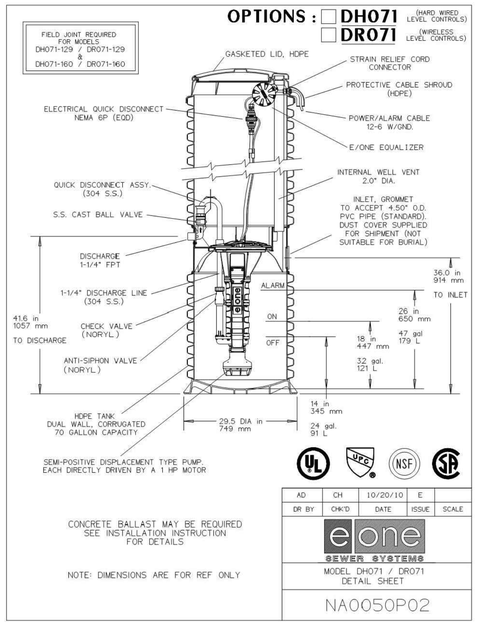
TYPICAL HDPE PIPE TRENCH DETAIL



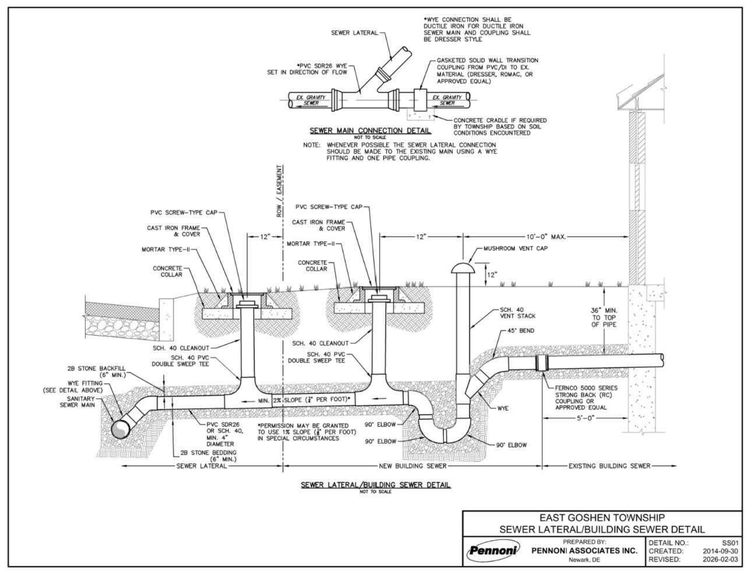
TYPICAL DRIVEWAY SECTION--CURB TYPE "A"

NOTE:
DETAIL PROVIDED TO SHOW TYPICAL LOW POINT FOR DRIVEWAY. CURB IS NOT PROPOSED

SUBDIVISION AND LAND DEVELOPMENT



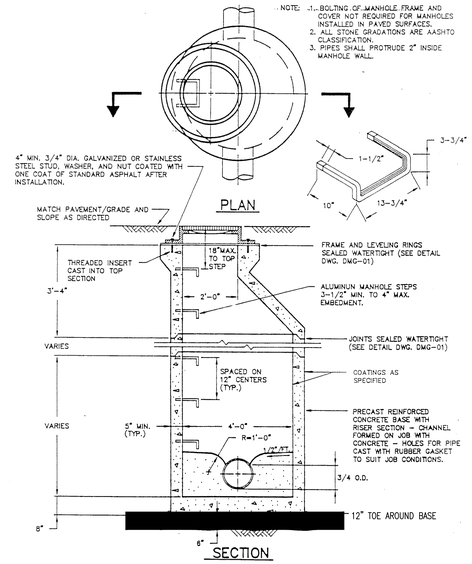
FOR USE ON LOT #2



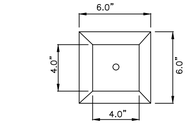
EAST GOSHEN TOWNSHIP
SEWER LATERAL/BUILDING SEWER DETAIL

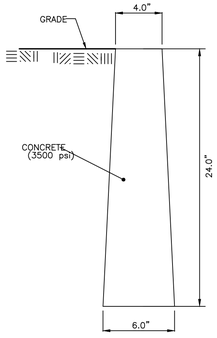
PREPARED BY: PENNONI ASSOCIATES INC. Newark, DE

DETAIL NO.: SS01
CREATED: 2014-09-30
REVISED: 2026-02-03

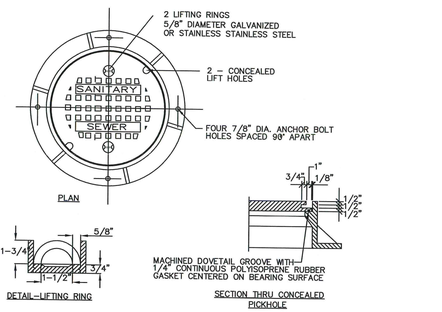


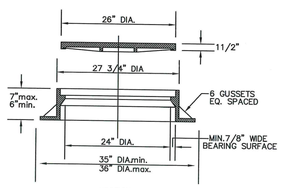
PRECAST CONCRETE MANHOLE W./ PRECAST CONCRETE BASE





CONCRETE MONUMENT (TYP.)





HEAVY DUTY CAST IRON MANHOLE FRAME AND SELF-SEALING COVER

CLIENT DATA

McKENNA BUILDING GROUP

Cornerstone
Consulting Engineers & Design Services, Inc.
213 West Main Street . Lansdale . PA 19446
Phone: 215-362-2600 . Fax: 215-362-8400
WWW.CORNERSTONENET.COM
Dallas, TX Leesburg, VA Orlando, FL Philadelphia, PA

NO.	BY	DESCRIPTION	DATE
1	DB	REVISED PER TWP. CONSULTANT COMMENTS	10/26/2026

REVISIONS

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 - 1076

811 PA ONE CALL

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776

J. BRYAN PETERSON — COMMONWEALTH OF PENNSYLVANIA — PROFESSIONAL ENGINEER — PE055536

PROJECT LOCATION

MP RENOVATIONS, LLC
PRESENTS
PRELIM / FINAL
SUBDIVISION PLANS
FOR
971 CORNWALLIS DRIVE
UPI #53-4-65
EAST GOSHEN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF
PENNSYLVANIA, 19380

TITLE

SITE DETAILS

PROJ. #	25-0626	DATE	4-24-26
CAD ID	25-0626	DRN BY	GRW
SCALE	AS NOTED	CHK BY	SJR

SHEET 7 OF 18

REVISION 1