

**EAST GOSHEN TOWNSHIP  
PLANNING COMMISSION  
Meeting Agenda  
Wednesday, January 4, 2023  
7:00 PM**

- A. Call to Order / Pledge of Allegiance and Moment of Silence
- B. Chairman will ask if anyone is going to record the meeting
- C. Review of Tracking Log / Determine need for Workshop Meeting
  - 1. Planning Commission Goals for 2023**
- D. Public Comment on Non-Agenda Items
- E. Approval of Minutes
  - 1. November 2, 2022**
  - 2. December 7, 2022, Meeting was canceled. (No minutes)**
- F. Subdivision and Land Development Applications
  - 1. 301 Reservoir Road Residential Subdivision (Presentation)**
    - a. The Township staff has received a sketch plan for residential subdivision.
    - b. The sketch plan was accepted by the Township on November 17, 2022.
    - c. The Township Staff Application Acceptance Memo is attached.
  - 2. 14 Reservoir Road Residential Subdivision – Update – No Action Required.**
    - a. Applicant will not be attending meeting as they are currently working on review letters and a concern with the County 247 Planning Module. See attached email.
    - b. The Township Fire Marshals reviewed the subdivision plans, and the memo is attached.
    - c. The Township Municipal Authority reviewed and approved sewer connection at their November 14, 2022, meeting.
    - d. The Township Conservancy Board has reviewed the plans and requested more information.
    - e. Chester County Planning Commission is in the process of reviewing the plans.
- G. Conditional Uses and Variances
  - 1. Miller Property Residential Subdivision (Continued Until January)**
    - a. The Conditional Use Hearing before the Board of Supervisors was continued until January 17, 2023, at 7pm.
- H. Ordinance Amendments
  - 1. Noise Ordinance Standards in Zoning Ordinance was approved at the Board of Supervisors meeting on November 15, 2022.**
- I. Old Business
  - 1. Applebrook Golf Club Turf Maintenance Area – Update – No Action Required**
    - a. A letter to grant a continuance of the time limit was granted until February 28, 2023. The letter was dated 12,21,2022 and is attached.
    - b. Township Engineer has reviewed a 2<sup>nd</sup> submission of the Preliminary/Final Land Development Plans provided by the applicant. The review letter and plans are attached.
    - c. A draft copy of the pipeline study is attached for your review.
    - d. A letter to grant a continuance of the 90-day time limit was granted allowing for an additional 90 days from the date of the letter. Letter was dated 10-6-2022 the new deadline date is 1-4-2022.
    - e. The Township and Applebrook continue to work on the legal issues.
  - 2. The Malvern Institute – Update – No Action Required**
    - a. Preliminary Approval was granted by the Board of Supervisors on July 5, 2022.
    - b. The representative for Malvern Institute was contacted but did not have an update at that time.
- J. New Business
- K. Liaison Reports
- L. Correspondence
- M. Announcements

**EAST GOSHEN TOWNSHIP  
PLANNING COMMISSION  
Meeting Agenda  
Wednesday, January 4, 2023  
7:00 PM**

**Bold Items indicate new information to review or discuss.**

**Date: January 4, 2023**

**East Goshen Township Planning Commission.**

**Report on 2022 goals and proposed 2023 goals - January 31, 2023**

**Planning Commission significant accomplishments for 2022:**

- The Malvern Institute Preliminary Land Development application recommendation made to BOS
- Reviewed 14 Broad St Zoning appeal and Zoning Variance
- Reviewed and provided comment on Paoli Pike Trail Alternate Route
- Reviewed Applebrook Golf Club Land Development application
- Reviewed 1010 Hershey Mill Road Open Space Sketch Plan Conditional Use Application
- Reviewed Noise Ordinance Standards in Zoning Ordinance and provided Recommendation to BOS.

**Planning Commission Goals for 2022:**

- Complete review of the following pending applications:
  - Applebrook Golf Club Maintenance Facility expansion.
  - 1010 Hershey Mill Open Space development application.
  - 301 Reservoir Rd Subdivision and Land Development Application.
  - 14 Reservoir Rd Subdivision Application.
  - The Malvern Institute Land Development Application
- Review the Pipeline Awareness Study for:
  - 1010 Hershey Mill Drive
  - Applebrook Golf Club Maintenance Facility expansion.
- The Planning Commission has completed and submitted to the BOS a Traditional Neighborhood Development (TND) Overlay Ordinance for the Paoli Pike Corridor (Comp Plan Objective 6.2). The Planning Commission shall support implementation of this TND Ordinance when approved
- Continue the review of existing Township Zoning Ordinances for possible revision and updates.

**Draft**  
**EAST GOSHEN TOWNSHIP**  
**PLANNING COMMISSION MEETING**  
**November 2, 2022**

The East Goshen Township Planning Commission held their regular monthly meeting on Wednesday November 2, 2022 in the Township Building.

Members present are highlighted:

**Chair – Ernest Harkness**

**Vice Chair – John Stipe**

**Dan Daley**

**Edward Decker**

Michael Koza

Mark Levy

**Michael Pagnanelli**

Also present was:

**Duane Brady, Zoning Officer**

**Derek Davis, Township Manager**

Nathan Cline, Township Engineer

David Shuey, Township Supervisor

**Michael Lynch, Township Supervisor**

**John Hertzog, Township Supervisor**

**COMMON ACRONYMS:**

*BOS – Board of Supervisors*

*BC – Brandywine Conservancy*

*CB – Conservancy Board*

*CCPC – Chester Co Planning Commission*

*CPTF – Comprehensive Plan Task Force*

*CVS – Community Visioning Session*

*SWM – Storm Water Management*

*ZHB – Zoning Hearing Board*

**FORMAL MEETING – 7 p.m.**

1. Ernest called the meeting to order at 7:00 pm. He led the Pledge of Allegiance and asked for a moment of silence to remember our troops and first responders.
2. Ernest asked if anyone would be recording the meeting and if there were any public comments about non-agenda items. There was no response.
3. The tracking log was checked and no need for a workshop meeting.
4. The minutes of the October 5, 2022 meeting were approved as amended.

**SUBDIVISION AND LAND DEVELOPMENT APPLICATIONS**

1. 14 Reservoir Road Residential Subdivision (Presentation) – Jeff Glosson, owner of the property was present. He reviewed the plan to subdivide the property. He met with Pennoni regarding Nathan Cline's October 21<sup>st</sup> letter. Storm water management and drainage were discussed. Ernest mentioned that he might have to do a pipeline study under our new ordinance. Mr. Glosson verified that he is not with 660 feet of the pipeline so he won't have to do that study. Dan asked if he is going to sell or develop the new subdivided property. Mr. Glosson has not decided on this yet. Dan verified with Mr. Glosson that there will be an agreement about the shared driveway. Mr. Glosson commented that there is an easement for the utility lines at the rear of the property. He will show these on the next plan. Dan discussed the waterline easement. Mr. Glosson mentioned that they are on a private well for water and not connected to Aqua. Mr. Glosson will be back with a revised plan in December.

**CONDITIONAL USES AND VARIANCES**



1 1. Miller Property Residential Subdivision for 1010 Hershey Mill Road. Those present for the owner  
2 were Lou Colagreco, Attorney; Michael Hartman, Project Manager; and TR Moser, Moser Construction  
3 Management. Dan commented about the 2 flag lots for the existing historic house and the barn. They  
4 may have to do an historic impact study. Duane mentioned that he just received the historic study and he  
5 has to review it. Mr. Hartman spoke about the site walk meeting to look at possible easement for a trail.  
6 Duane pointed out the red dotted line and the black dotted line on the plan. The black line is on the  
7 Township easement. Mr. Moser commented that this easement was originally discussed for a future  
8 sewer tie in with the neighboring development. Dan mentioned the hazardous pipeline. Mr. Hartman is  
9 working with Mr. Cline. There will be no impact on it. Mr. Moser mentioned that they will have the  
10 report for the Conditional Use plan. Duane spoke about the site visit and mentioned that gas would come  
11 in from Hershey Mill Rd. Mr. Hartman described the proposed landscaping referring to the northern  
12 boundary. A detailed landscaping plan will be provided. Mr. Moser mentioned that there is a detailed  
13 written history of the property dating back to the Revolutionary war.  
14  
15

16 Public Comments:

17 1. Alison Oshop, 1334 Jackson Lane – If the proposed trail is not going to be done, she requests that  
18 references to it be removed from the plan. Their cul-de-sac is private and there are young children so she  
19 is concerned about safety. If there was a trail in the future, who would maintain and control it?

20 2. Natalie McMaris, 1331 Jackson Ln. - She is Alison's neighbor and has a young child. She is  
21 concerned about safety. She asked that they listen to the residents and remove the proposed trail. She  
22 mentioned the Township survey about trails and only 600 people out of 18,000 responded. She suggested  
23 they take a survey of the Goshen Downs residents. Duane encouraged the residents to attend the Board of  
24 Supervisors meeting on November 15<sup>th</sup>.

25 3. Lillian Fedor, 1013 Hershey Mill Road – She asked about the historic house. She wants the existing  
26 driveway removed. She mentioned that flood waters come onto her property. Mr. Moser commented that  
27 they are working to incorporate the historic property into the subdivision. Mr. Hartman mentioned that  
28 the plan for stormwater management would be to remove the bridge and allow the floodwater to go down  
29 Hershey Mill Rd.

30 4. Michael Lynch, 1226 Upton Circle – With the developer removing the bridge, he feels it would  
31 improve the flood water conditions. Regarding the Open Space Survey, there are 8,000 households in the  
32 township, 600 is a good substantial response. As a property owner, he understands his neighbors'  
33 concerns. He likes connectivity of pathways and the ability to walk from one development to another. He  
34 would like to see the developer provide an easement in concert with the utility easement for use in the  
35 future. He is not suggesting that a path be planned through the stormwater basin. Be sure that the owners  
36 of the new homes know about the easement. If a fence is put up, one small space should be provided so  
37 someone could walk through if they want to. He feels the people buying the new homes will be glad to be  
38 a part of our community. He feels this should be included on the plan for the future. He is not sure why  
39 the red line is there. Current neighbors don't want the red line easement so he feels it should be removed.  
40 He has no interest in it when there is the Township easement (black line) for the basin.

41 He mentioned a few items in Mr. Cline's review letter:

42 Page 1 #2 – Houses should be separated by 30 feet.

43 Page 2 #4 – Roll curb. What kind of roll curb will be used? Mr. Moser commented that they  
44 haven't decided yet but Belgian block could be used.

45 Page 3 #6 – The Conservancy Board, Park and Recreation Commission and Historical  
46 Commission should be given the opportunity to see the property. He knows there are invasives there now  
47 but feels supplemental plantings will be good. He asked about the number of members on the historical  
48 Commission. Derek mentioned that he met with Ted Roberts. Out of the 5 positions there are only 2  
49 active members. Duane commented that this would be part of the Land Development process. He could  
50 include the two members in the review. Dan asked about the elevation in Goshen Downs for future sewer  
51 connection. Mike explained how it could be installed and flow in Goshen Downs. Mr. Hartman  
52 explained how they are looking at connecting into the sewer on Hershey Mill Road. Mike spoke about

1 open space options and possible recreation areas. Duane commented that all of the boards will review the  
2 plan as part of Land Development.

3  
4 Dan made the following motion: Mr. Chairman I move that we recommend that the Board of Supervisors  
5 approve the 1010 Hershey Mill Road – Miller property, Open Space Sketch Plan conditional Use  
6 Application with the following conditions:

- 7
- 8 1. Township Engineer second submission letter dated October 27, 2022, all unresolved and
- 9 comment items be answered to the Townships satisfaction.
- 10 2. Pipeline study be completed and provided at the hearing with the Board of Supervisors.
- 11 3. Township Engineer second submission letter dated October 27, 2022, new comments # 23 is not
- 12 recommended.
- 13 4. Proposed trail improvements be removed from the Conditional Use plan application. Applicant
- 14 to provide a trail easement on lots 6 and/or 7 for future connection to the Township property to
- 15 the Goshen Downs Development.
- 16 5. The applicant shall provide a sewer easement for a future connection to Goshen Downs in a
- 17 location as deemed acceptable to the Township Sewer Engineer.
- 18

19 John seconded the motion. The motion passed with one no vote.

## 20 21 22 **ORDINANCE AMENDMENTS**

23 1. Noise Ordinance Standards in Zoning Ordinance (Recommend/Possible approval) – Duane mentioned  
24 that this has been discussed with the Township Solicitor and Board of Supervisors. He explained that  
25 they are taking items in the ordinance regarding noise and will put them into a separate, stand  
26 alone ordinance. The review letter from the Chester County Planning Commission was provided  
27 for review. Duane listed some of the major items:

28 A limit on the ability to request noise waivers to four (4) per year

29 Making sure noise waivers are requested at least fourteen (14) days prior to the event.

30 Adding “toxic chemicals” as a nuisance/health hazard.

31 Tweaking times of day for certain noise-related activity in residential neighborhoods as  
32 well as a slight change in decimal levels.

33 If law enforcement comes after noise has started, they can enforce the ordinance. Ed had some  
34 concerns about the 7 pm cutoff. It is too restrictive in the summer. Mike P. noted the list of  
35 noise definitions.

36 Dan moved to recommend that the Board of Supervisors approve changes and accept the changes  
37 to Chapter 156 Noise and Chapter 240 Zoning. Also, that the New Chapter 156 Noise and  
38 Nuisances be approved as provided and written.

39  
40 Public:

41 Bill Guyer, 1560 Tanglewood Dr – Mr. Guyer commented on the Chester County Planning Commission  
42 letter. He feels the decimal limits on weekends should be changed to 55 all day. An audiologist  
43 reviewed this and questioned the raising of the limit by 5. There should be a permit for the band stage.  
44 The waiver currently gives approval with no limits.

45  
46 John seconded the motion. The motion passed with one no vote.

1 **OLD BUSINESS**

2 **1. Applebrook Golf Club Turf Maintenance Area – Update -No Action Required.** Duane provided the  
3 following update:

4 A letter to grant a continuance of the 90-day time limit was granted allowing for an additional 90  
5 days from the date of the letter. The letter was dated 10/6/22 and the new deadline date is 1/4/23.

6 The Township Staff received update plans for Applebrook on 10/5/22. These are revised  
7 Preliminary/Final Plans based on Township Engineer review letter and comments.

8 The Township and Applebrook continue to work on the legal issues.

9 **2. The Malvern Institute – Update - Preliminary approval was granted by the Board of Supervisors on**  
10 **July 5, 2022.**

11  
12 **NEW BUSINESS - None**

13  
14  
15 **LIAISON REPORTS - None**

16  
17  
18 **CORRESPONDENCE - None**

19  
20  
21 **ADJOURNMENT**

22 There being no further business, Ed Decker made a motion to adjourn the meeting. Dan Daley seconded  
23 the motion. The meeting was adjourned at 9:00 pm. The next regular meeting will be held on  
24 Wednesday, December 7, 2022 at 7:00 pm.

25  
26  
27 Respectfully submitted,

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29  
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31  
32 

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*Ruth Kiefer, Recording Secretary*  
33

East Goshen Township Planning Commission  
Application Tracking Log

July 6, 2022 PC Meeting

Application Name	Application (CU, LD, ZO, SD, SE, C)	Type (Sk, P, F)	Date Filed	Start Date	Date to Township Engineer	Date to CCPC	Date to Abutting Prop. / ABC's	Extension	PC NLT Action Date	BOS NLT Action Date	Hearing Date	Drop Dead date	Comments
Paoli Pike Trail ALT Route	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**Bold = New Application or PC action required**

301 Reservoir Road	SD	Sk	11/17/2022	11/17/2022									
14 Reservoir Road	SD	P	9/28/2022	9/28/2022	10-12-2022	10/19/2022						1/3/2023	
1010 Hershey Mill Road, Miller	CU	S	8/30/2022	8/30/2022	8/2/2022	NA							
Applebrook Golf Club	LD	P	7/27/2022	7/27/2022	8/17/2022	8/29/2022						11/9/2022	

**Completed in 2022**

The Malvern Institute	LD	P	6/28/2021	7/1/2021	6/30/2021	6/29/2021	8/13/2021	<b>(5) 7/31/2022</b>	2/2/2022	2/15/2022	NA	2/28/2022	PC Made rec to BOS for Prelim. App on June 1
14 Broad St.	V	P	3/28/2022	3/28/2022	NA	NA	3/30/2022		5/4/2022	5/6/2022	5/19/2022	5/27/2021	P
EWT 537 Special Study	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	A
Applebrook Golf Club	LD	P	7/27/2022	7/27/2022	8/17/2022	8/29/2022						11/9/2022	

**Completed in 2021**

Small Wireless Facilities	ZO	F	NA	NA	NA	NA	NA	NA	NA	NA	12/7/2021	NA	AD
Imperial Marble, 1311 WCP	V	Sk	10/25/2021	10/25/2021	NA	NA	10/28/2021		11/3/2021	11/16/2021	12/14/2021	12/24/2021	A
14 Reservoir Rd. / Glosen	V	Sk	5/25/2021	5/25/2021	NA	NA	5/27/2021		6/2/2021	7/6/2021	7/15/2021	7/23/2021	A
ESKE Development LLC	V	S	4/20/2021	4/20/2021	4/27/2021	NA	4/27/2021		5/5/2021	5/11/2021	5/26/2021	6/18/2021	A
Albert and Lynn Greto	V	S	4/26/2021	4/26/2021	NA	NA	4/29/2021		5/5/2021	6/1/2021	6/8/2021	6/25/2021	D
1365 Enterprise Drive	V	Sk	4/1/2021	4/1/2021	NA	NA	4/1/2021		5/5/2021	5/18/2021	TBD	5/31/2021	A
198 Oneida Ln	V	Sk	1/26/2021	1/27/2021	NA	NA	1/28/2021		2/3/2021	1/16/2021	2/25/2021	3/26/2021	A
Pipeline HMS / Consultation Zone Or	ZO / S	DRAFT	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	AD

**KEY**

- A - Approved
- AD - Adopted
- D - Denied
- P - Pending

# Memorandum

**East Goshen Township**  
**1580 Paoli Pike**  
**West Chester, PA 19380**

**Voice:** 610-692-7171  
**Fax:** 610-692-8950  
**E-mail:** [dbrady@eastgoshen.org](mailto:dbrady@eastgoshen.org)

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**Date:** 12-1-2022  
**To:** Planning Commission  
**From:** Duane J. Brady Sr., Zoning Officer  
**Re:** 301 Reservoir Road Residential / Sketch Plan

Dear Commissioners,

The Township staff has received a Sketch Plan application for 301 Reservoir Road. The proposal is to develop the property into 5 single family residential lots. The application has been reviewed for completeness and was accepted by Township Staff on 11-17, 2022.

## **Background Information:**

- Existing single-family residential lot on 6.8 acres with multiple structures.
- Property may be listed on the Historic Register for the Township.
- The proposed plan is to create 5 building lots with two lots being used for the existing house and one for the existing barn.
- The proposal is to do a straightforward zoning by-right planning process.

## **Zoning Information:**

- ❖ The property is in the R-2 Low Density Residential District (240-9)
- ❖ Single family detached dwellings are a use permitted by right.
- ❖ The minimum lot area is 1 acre.
- ❖ The front yard is 45 feet, the side yard is 20 feet, and the rear yard is 50 feet.
- ❖ The minimum building height is 30 feet (3 stories).
- ❖ Total impervious cover is 35%.
- ❖ Total building cover is 25%.
- ❖ The zoning also, notes that design and landscaping controls in 240-27D shall apply to residential development in this district.
- ❖ The property is just outside of the flood hazard area and has two small sections in the flood hazard area.
- ❖ The property does contain both precautionary steep slopes (15% to 25%) and prohibitive steep slopes (over 25%).



EAST GOSHEN TOWNSHIP  
CHESTER COUNTY, PA

SUBDIVISION AND / OR LAND DEVELOPMENT APPLICATION

Date Filed: 11/9/2022

Application for (Circle one):

☐ Subdivision ☐ Land Development ☒ Subdivision & Land Development  
X SKETCH PLAN SUBMISSION

A. Application is hereby made by the undersigned for approval of a Subdivision and or Land Development Plan, more particularly described below.

1. Applicant's name: Equitable Owner: Planebrook Partners, LLC, Attn: Scott Risbon

Address: 2298 Horseshoe Pike, Honey Brook, PA 19344 Phone: 610 637 1975

Fax: n/a Email: scottrisson@earthcareinc.org

2. Name and address of present owner (if other than 1. above)

Name: Estate of Rudolph F. Papa (Executrix: Cindy Brillman)

Address: 301 Reservoir Road, West Chester, PA 19380 Phone: 610 299 3060

Fax: n/a Email: cgbrehab@aol.com

3. Location of plan: 301 Reservoir Road, West Chester, PA

4. Proposed name of plan: Sketch Plan for 301 Reservoir Road

5. County Tax Parcel No.: 5304P 0129 0000 Zoning District: R-2

6. Area of proposed plan (ac.): 6.8 +/- acres Number of lots: 5 Proposed

7. Area of open space (ac.): n/a

8. Type of structures to be constructed: Single-Family Dwellings

9. What provisions are to be made for water supply and sanitary sewer? The site  
currently utilizes public water & sewer, public water & sewer are proposed

10. Linear feet of road to be constructed: 550 lf

11. Name of Engineer: Commonwealth Engineers, Inc., Attn: Michael Cowen, EIT

Phone Number: 610 518 9003 Fax: n/a

Email address: mcowen@cei-1.com

**EAST GOSHEN TOWNSHIP, CHESTER COUNTY PA  
SUBDIVISION AND/OR LAND DEVELOPMENT APPLICATION**

12. Name of Land Planner: n/a

Phone Number: \_\_\_\_\_ Fax: \_\_\_\_\_

Email address: \_\_\_\_\_

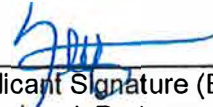
- B. I/We agree to reimburse the Township of East Goshen for such fees and expenses the Township may incur for the services of an Engineer(s) in investigations, tests, and review in relation to the Subdivision Plan.
- C. I/We agree to post financial security for the Improvements depicted on the Subdivision and or land Development Plan pursuant to the Subdivision and Land Development Ordinance.
- D. I/We agree to reimburse the Township of East Goshen for all inspection fees at the actual cost to Township.

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**NOTICE**

The Township requires an Occupancy Permit before any building can be occupied; no Occupancy Permit will be issued until final inspection and approved by the Zoning Officer and Building Inspector.

\_\_\_\_\_  
Owner Signature

  
\_\_\_\_\_  
Applicant Signature (Equitable Owner)  
Planebrook Partners, LLC  
Scott Risbon, Managing Partner

---

**Administrative Use**

Fees received from applicant \$\_\_\_\_\_ basic fee, plus \$\_\_\_\_\_ per lot

For \_\_\_\_\_ lots = \$\_\_\_\_\_

Application and plan received by: \_\_\_\_\_ Date: \_\_\_\_\_  
(Signature)

Application accepted as complete on: \_\_\_\_\_  
(Date)



**EAST GOSHEN TOWNSHIP, CHESTER COUNTY PA  
SUBDIVISION AND/OR LAND DEVELOPMENT APPLICATION**

**SUBDIVISION AND/OR LAND DEVELOPMENT CHECKLIST**

This checklist outlines the steps and items needed to insure completeness of the application and to insure the application follows the process and conforms to the timeframe outlined by the State of Pennsylvania and East Goshen Township. This checklist is broken into two parts, the Application Process and the Review Process. The application process must be completed in its entirety prior to the advancement into the Review Process.

**\* Review the formal Planning Commission review procedure on page five.**

**Application for (Circle all appropriate):**    ☐ Subdivision ☐ Land Development

**Applicant Information:**

Name of Applicant: Planebrook Partners, LLC, Attn: Scott Risbon

Address: 2298 Horseshoe Pike, Honey Brook, PA 19344

Telephone Number: 610 637 1975                      Fax: n/a

Email Address: scottrison@earthcareinc.org

Property Address: 301 Reservoir Road, West Chester, PA 19380

**Property Information:**

Owner's Name: Estate of Rudolph F. Papa    (Executrix: Cindy Brillman)

Address: 301 Reservoir Road, West Chester, PA 19380

Tax Parcel Number: 5304P 0129 0000    Zoning District: R-2    Acreage: 6.8 +/-

Description of proposed subdivision and or land Development:

Proposed subdivision into five (5) lots. One lot to contain the existing single-family dwelling, which shall remain. One lot to contain the existing barn, which shall remain. An additional three (3) lots each to contain a single-family dwelling.

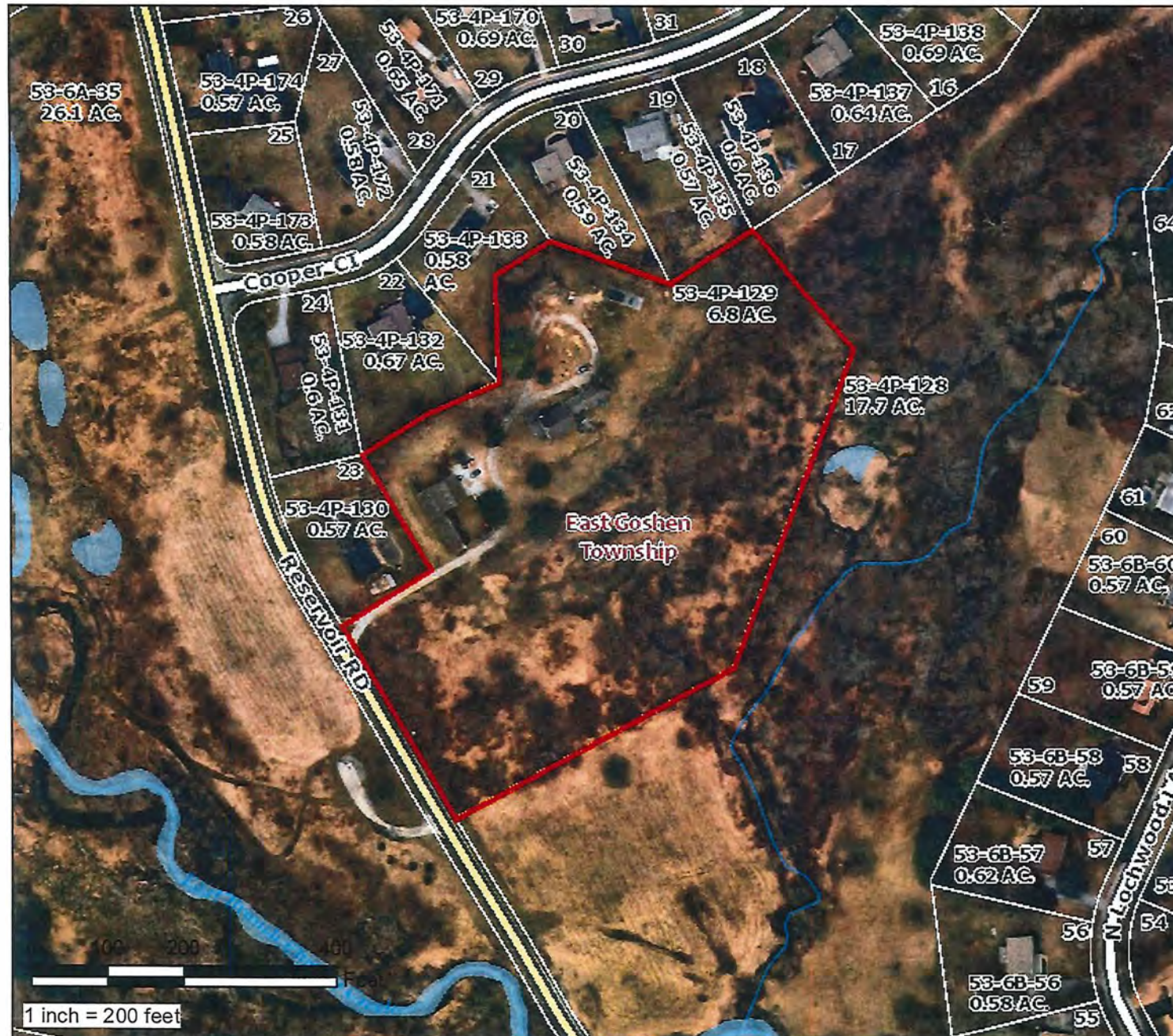
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# Plot plan



## COUNTY OF CHESTER PENNSYLVANIA



Find Address Information

PARID : 5304P01290000  
 UPI: 53-4P-129  
 Owner1: PAPA RUDOLPH F  
 Owner2:  
 Mail Address 1: 301 RESERVOIR RD  
 Mail Address 2: WEST CHESTER PA  
 Mail Address 3:  
 ZIP Code: 19380  
 Deed Book: 5088  
 Deed Page: 873  
 Deed Recorded Date: 10/16/2001  
 Legal Desc 1: ES OF RESERVOIR RD  
 Legal Desc 2: 6.8 AC DWG & BLD GS  
 Acres: 6.8  
 LUC: R-20  
 Lot Assessment: 46920  
 Property Assessment: 119280  
 Total Assessment: 166200  
 Assessment Date: 12/15/2021 7:48:09 AM  
 Property Address: 301 RESERVOIR RD  
 Municipality: EAST GOSHEN  
 School District: West Chester Area

Map Created:  
 Tuesday, November 1, 2022

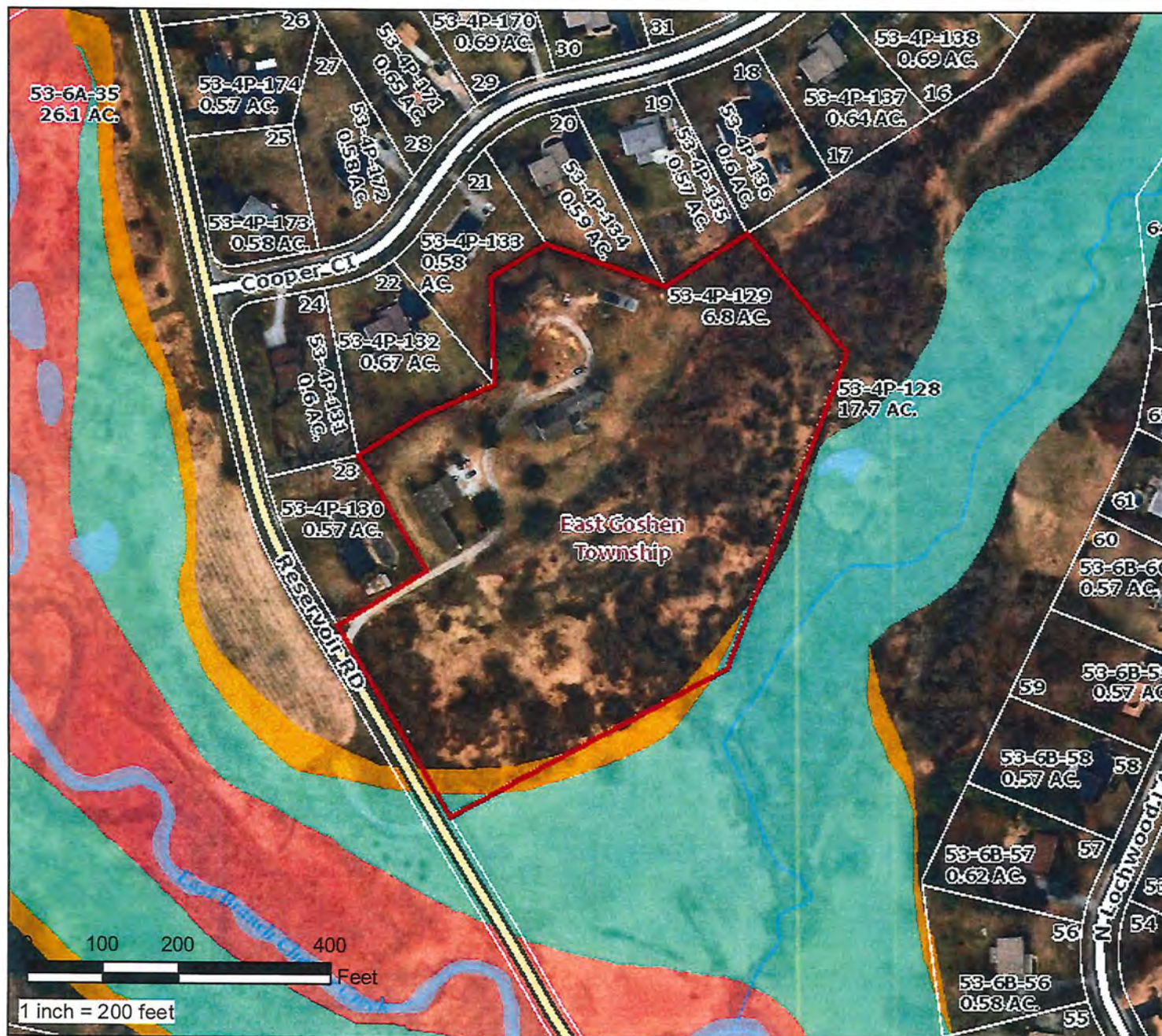
County of Chester



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# Plot plan



## COUNTY OF CHESTER PENNSYLVANIA



### Find Address Information

PARID : 5304P01290000  
 UPI: 53-4P-129  
 Owner1: PAPA RUDOLPH F  
 Owner2:  
 Mail Address 1: 301 RESERVOIR RD  
 Mail Address 2: WEST CHESTER PA  
 Mail Address 3:  
 ZIP Code: 19380  
 Deed Book: 5088  
 Deed Page: 873  
 Deed Recorded Date: 10/16/2001  
 Legal Desc 1: ES OF RESERVOIR RD  
 Legal Desc 2: 6.8 A CDWG & BLD GS  
 Acres: 6.8  
 LUC: R-20  
 Lot Assessment: 46920  
 Property Assessment: 119280  
 Total Assessment: 166200  
 Assessment Date: 12/15/2021 7:48:09 AM  
 Property Address: 301 RESERVOIR RD  
 Municipality: EAST GOSHEN  
 School District: West Chester Area

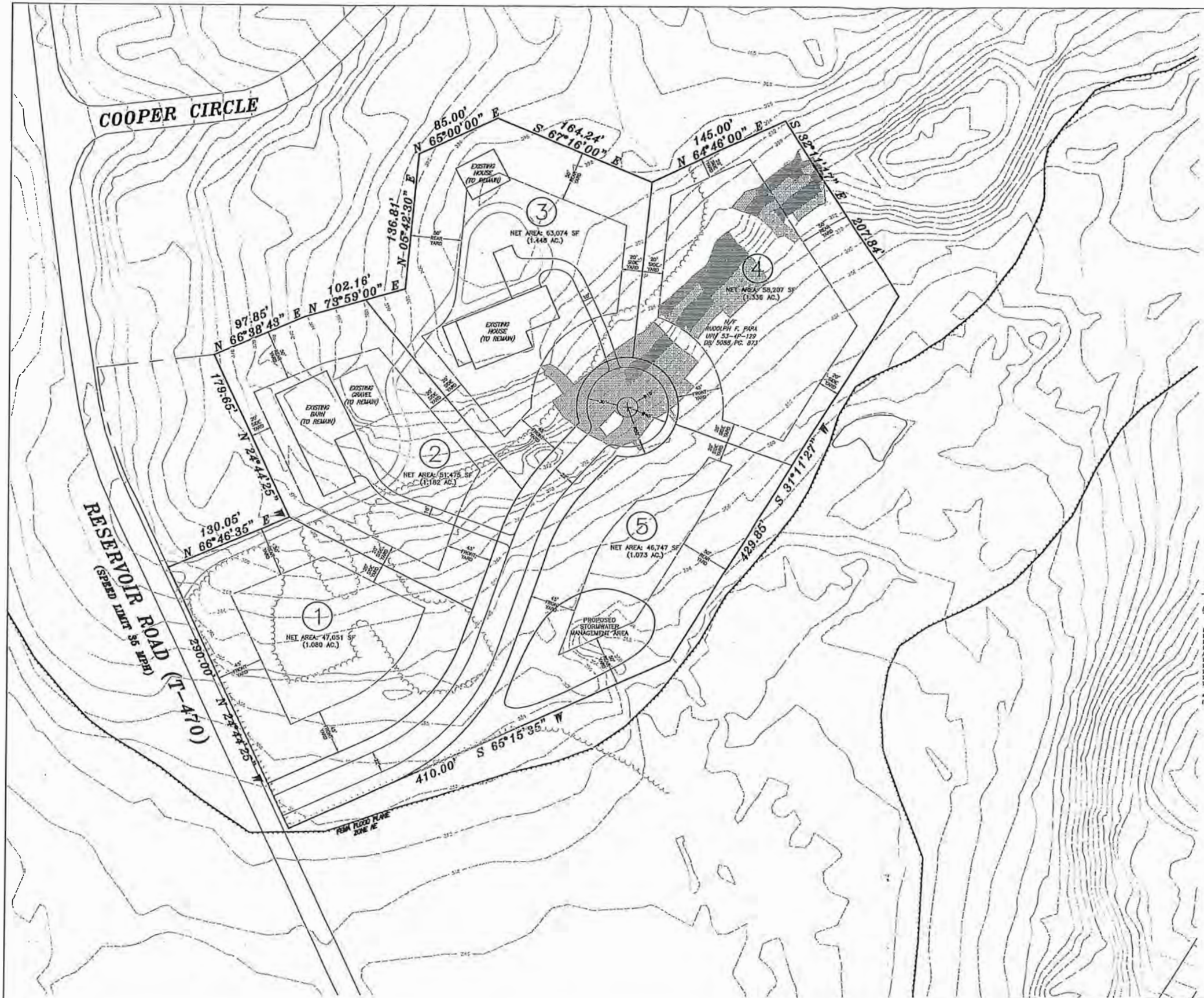
Map Created:  
 Tuesday, November 1, 2022

County of Chester

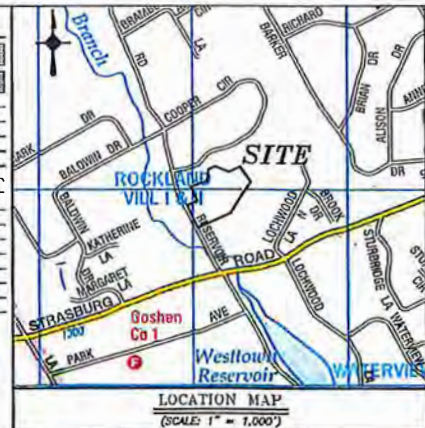


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- LEGEND:**
- PRECAUTIONARY STEEP SLOPES (15% TO 25%)
  - PROBATIVE STEEP SLOPES (OVER 25%)
  - EXISTING INTERMEDIATE CONTOUR
  - EXISTING INDEX CONTOUR
  - EXISTING WETLANDS LINE
  - EXISTING 100-YEAR FLOODPLAIN
  - STREAM LINE
  - WOODS / TREE LINE
  - SHRUB / HEAVY VEGETATION LINE
  - EXISTING SANITARY SEWER LINE
  - EXISTING STORM SEWER LINE
  - EXISTING WATER LINE
  - EXISTING RIGHT-OF-WAY LINE
  - EXISTING EDGE-OF-PAVING
  - EXISTING GROUNDWATER
  - EXISTING DRAINAGE
  - EXISTING SOIL LINE



- GENERAL NOTES:**
- OWNER: RUDOLPH F. PAPA, 301 RESERVOIR ROAD, WEST CHESTER, PA 19380-6223, UPI: 5304P01290000, TAX PARCEL # 53-4P-129, DEED REFERENCE: BOOK 5088, PAGE 873. APPLICANT/EQUIVALENT OWNER: PLANEBOOK PARTNERS, LLC, 2218 HORSESHOE PIKE, HONEY BROOK, PA 19344, PHONE: 610-637-1975.
  - TOTAL TRACT AREA: 6.879 AC (GROSS AREA), 4.000 AC (NET LOT AREA). NUMBER OF PROPOSED LOTS: 5. PROPOSED USE: RESIDENTIAL.
  - BOUNDARY FROM DEED PLOT AND TOPOGRAPHY TAKEN FROM PENNSYLVANIA SPATIAL DATA ACCESS (SDA) WEB SITE.
  - A PORTION OF THE SITE IS LOCATED WITHIN A ZONE AS FEM A FLOOD PLAIN PER FEM A FLOOD PLAIN MAP 42029C02150 EFFECTIVE SEPTEMBER 28, 2017.
  - SOIL CLASSIFICATION FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) NATURAL RESOURCE CONSERVATION SERVICE (NRCS) WEB SOIL SURVEY ON JULY 06, 2017.
  - TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF, THERE ARE NO PROPOSED WELLS WITHIN 100 FT OF ANY PROPOSED OR EXISTING SYSTEM, NOR ARE THERE ANY PROPOSED SEPTIC SYSTEMS WITHIN 100 FT OF ANY PROPOSED OR EXISTING WELLS.
  - CONCRETE MONUMENTS SHOWN AS THIS "M" SHALL BE PLACED WHERE INDICATED. IRON PINS SHOWN AS THIS "P" SHALL BE PLACED WHERE INDICATED.
  - THE DEVELOPER SHALL CONFORM TO OR CAUSE CONFORMANCE WITH ALL OF THE APPLICABLE REQUIREMENTS OF THIS PLAN AND OF THE EAST BRANDTOWN TOWNSHIP ZONING ORDINANCE AND SUBDIVISION AND LAND DEVELOPMENT ORDINANCE, AS WELL AS OTHER APPLICABLE LOCAL, STATE AND FEDERAL LAWS, STATUTES, REGULATIONS AND ORDINANCES.
  - THE CONTRACTOR SHALL NOTIFY UNDERGROUND UTILITY USERS AT LEAST THREE DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION IN ACCORDANCE WITH ACTS 287, 172 AND 38 (AND ALL OTHER APPLICABLE AMENDMENTS), AS WELL AS CONFORM TO ALL APPLICABLE REGULATIONS OF S&D ACTS.

**ZONING - R-2 RESIDENTIAL DISTRICT**

DESCRIPTION	REQUIRED	EXISTING UPI 53-4P-129	PROPOSED LOT 1	PROPOSED LOT 2	PROPOSED LOT 3	PROPOSED LOT 4	PROPOSED LOT 5
MINIMUM LOT AREA (NET OF ROW)	1.0 AC	6.879 AC	1.000 AC	1.182 AC	1.448 AC	1.338 AC	1.073 AC
MINIMUM LOT WIDTH AT BUILDING LINE	150 FT (MIN)	150 FT (MIN)	249 FT	150 FT	172 FT	172 FT	338 FT
MINIMUM LOT WIDTH AT STREET LINE	60 FT (MIN)	60 FT (MIN)	219 FT	130 FT	181 FT	90 FT	183 FT
MINIMUM FRONT YARD	45 FT (MIN)	45 FT (MIN)	45 FT (MIN)	45 FT (MIN)	45 FT (MIN)	45 FT (MIN)	45 FT (MIN)
AVERAGE FRONT YARD*	60 FT (MIN)	60 FT (MIN)	60 FT (MIN)	60 FT (MIN)	60 FT (MIN)	60 FT (MIN)	60 FT (MIN)
MINIMUM SIDE YARD	20 FT (MIN)	20 FT (MIN)	20 FT (MIN)	20 FT (MIN)	20 FT (MIN)	20 FT (MIN)	20 FT (MIN)
MINIMUM REAR YARD	50 FT (MIN)	50 FT (MIN)	50 FT (MIN)	50 FT (MIN)	50 FT (MIN)	50 FT (MIN)	50 FT (MIN)
MAXIMUM BUILDING COVERAGE	25% (MAX)	25% (MAX)	25% (MAX)	25% (MAX)	25% (MAX)	25% (MAX)	25% (MAX)
MAXIMUM IMPERVIOUS COVERAGE	35% (MAX)	35% (MAX)	35% (MAX)	35% (MAX)	35% (MAX)	35% (MAX)	35% (MAX)
MAXIMUM BUILDING HEIGHT	3(STORIES) 30 FT (MAX)	3(STORIES) 30 FT (MAX)	3(STORIES) 30 FT (MAX)	3(STORIES) 30 FT (MAX)	3(STORIES) 30 FT (MAX)	3(STORIES) 30 FT (MAX)	3(STORIES) 30 FT (MAX)

\* TO OBTAIN MORE FLEXIBILITY IN PLACING BUILDINGS IN ALL RESIDENTIAL SUBDIVISIONS OF TWO OR MORE LOTS, AN AVERAGE BUILDING SETBACK LINE OF 60 FEET AND A MINIMUM BUILDING SETBACK OF 45 FEET SHALL BE REQUIRED.

**PENNSYLVANIA ONE CALL**  
FOR ANY AND ALL UTILITIES, CALL 800-488-7243  
FOR ANY AND ALL UTILITIES, CALL 800-488-7243  
FOR ANY AND ALL UTILITIES, CALL 800-488-7243

**UNDERGROUND UTILITY USERS**  
EAST GOSHEN TOWNSHIP  
1000 CHERRY AVE  
DOWNTOWN, PA 19330  
810-637-1975

**CONSULTING ENGINEER**  
COMMONWEALTH ENGINEERS, INC.  
114 EAST LANCASTER AVENUE, SECOND FLOOR  
DOWNTOWN, PA 19330  
TELEPHONE: (610) 518-8004  
FAX: (610) 518-8004  
COMMONCE@COM-1.COM

**DESIGNER**  
COMMONWEALTH ENGINEERS, INC.  
114 EAST LANCASTER AVENUE, SECOND FLOOR  
DOWNTOWN, PA 19330  
TELEPHONE: (610) 518-8004  
FAX: (610) 518-8004  
COMMONCE@COM-1.COM

**DATE**  
NOVEMBER 9, 2022

**SCALE**  
AS SHOWN

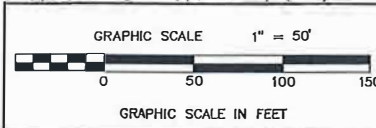
**SURVEY**  
CEI

**DRAWN**  
MDC

**CHECKED**  
WK

**DRAWING NO.**  
202040-(C)

**SHEET**  
1



REV.	DATE	DESCRIPTION
1	NOV 9, 2022	ISSUED FOR PERMIT

**SKETCH PLAN FOR 301 RESERVOIR ROAD**

EAST GOSHEN TOWNSHIP

CHESTER COUNTY, PA

**COMMONWEALTH ENGINEERS, INC.**  
114 EAST LANCASTER AVENUE, SECOND FLOOR  
DOWNTOWN, PA 19330  
TELEPHONE: (610) 518-8004  
FAX: (610) 518-8004  
COMMONCE@COM-1.COM

**DATE:** NOVEMBER 9, 2022  
**SCALE:** AS SHOWN  
**SURVEY:** CEI  
**DRAWN:** MDC  
**CHECKED:** WK  
**DRAWING NO.:** 202040-(C)

**SHEET:** 1







# Memorandum

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**East Goshen Township**  
**1580 Paoli Pike**  
**West Chester, PA 19380**  
Voice: 610-692-7171  
Fax: 610-692-8950  
E-mail: [dbrady@eastgosheh.org](mailto:dbrady@eastgosheh.org)

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Date: 11-17-2022  
To: Planning Commission  
From: Duane J. Brady Sr., East Goshen Township Deputy Fire Marshal  
Re: 14 Reservoir Road SD / Residential Lot

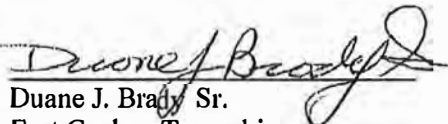
Dear Board Commissioner,

The Township Deputy Fire Marshal has reviewed the Subdivision Plans dated September 14, 2022, for the creation of a new single-family lot and has the following recommendations and comments:

All code information was taken from the International Fire Code 2018 Edition (IFC).

1. Driveway (Fire access road) shall be a minimum of 20 feet as note on plans and required pre the IFC 2018 section 503.2. Recommend keeping the driveway a minimum of 20 feet wide.
2. Driveway (Fire access road) surface shall be designed and maintained to support the imposed loads of fire apparatus pre IFC 2018 section 503.2.3 Surface. The concern is the stormwater basin installed under the driveway. Plan show basin #2 and #3 could be affected by the apparatus weight. Recommend having information provided from the applicant's engineer that the driveway with the basin install will carry a minimum of 75,000 pounds.
3. Driveway (Fire access road) shall require an approved area for apparatus turning around when the access road is more than 150 feet pre IFC 2018 section 503.2.5 Dead ends. The access road will be roughly 500 feet with an offset from front to rear. Recommend the applicant install an area for apparatus to turn around to the satisfaction of the Fire Marshal and the First Due Fire Chief.
4. Fire Hydrant location to new single-family dwelling is not shown on plans. The IFC 2018 pre section 507.5.1 Where required Exceptions: 1. requires a fire hydrant within 600 feet of a Group R-3 Occupancy. Recommend the fire hydrant location be placed on the plan and note the distance from the hydrant to the new single-family dwelling.
5. Driveway (Fire access road) will be the minimum required for apparatus. Recommend placing a note on the plan that NO PARKING is permitted in the driveway.

Thank you,  
Carmen Battavio  
Carmen Battavio  
East Goshen Township  
Fire Marshall

  
Duane J. Brady Sr.  
East Goshen Township  
Deputy Fire Marshal

December 21, 2022

**Via Electronic Mail Only: bchristman@lambmcerlane.com**

William R. Christman III, Esquire  
Lamb McErlane PC  
24 E. Market Street, PO Box 565  
West Chester, PA 19381

**Re: Revised Preliminary/Final Plan  
Applebrook Golf Club – Turf Maintenance Area  
East Goshen Township, Chester County, PA**

Dear Bill,

My client hereby grants a continuance of the time limit provided for in Section 508 of the Municipalities Planning Code, within which the Board of Supervisors must act on the land development plan & application of Applebrook Associates for the Turf Management Golf Course Accessory Buildings' expansion project. The extension granted herewith is through February 28, 2023. A decision by the Board rendered by February 28, 2023 shall be timely under the forgoing Section 508.

Very truly yours,



Brian L. Nagle

/cfg

cc: Duane Brady, Director of Code Enforcement/Zoning Officer  
[via Electronic Mail Only: dbrady@eastgoshen.org]  
Ronald C. Nagle, Esquire [via Electronic Mail Only: rnagle@macelree.com]  
Applebrook Associates [via Electronic Mail Only]



October 6, 2022

**Via Electronic Mail Only: bchristman@lambmcerlane.com**

William R. Christman III, Esquire  
Lamb McErlane PC  
24 E. Market Street, PO Box 565  
West Chester, PA 19381

**Re: Revised Preliminary/Final Plan  
Applebrook Golf Club – Turf Maintenance Area  
East Goshen Township, Chester County, PA**

Dear Bill,

My client hereby grants a continuance of the 90 day time limit provided for in Section 508 of the Municipalities Planning Code, within which the Board of Supervisors must act on the land development plan & application of Applebrook Associates for the Turf Management Golf Course Accessory Buildings' expansion project. The extension granted herewith is for an additional 90 days from the date of this letter. A decision by the Board rendered within 90 days of the date of this letter shall be timely under the forgoing Section 508.

Very truly yours,



Brian L. Nagle

/cfg

cc: Duane Brady, Director of Code Enforcement/Zoning Officer  
[via Electronic Mail Only: dbrady@eastgoshen.org]  
Ronald C. Nagle, Esquire [via Electronic Mail Only: rnagle@macelree.com]  
Mary Kay Gaver, Esquire [via Electronic Mail Only: mkgaver@macelree.com]

October 27, 2022

EGOST 00136

Duane Brady, Zoning Officer  
East Goshen Township  
1580 Paoli Pike  
West Chester, PA 19380

RE: **Applebrook Golf Club Turf Maintenance Area  
Preliminary/Final Land Development – 2<sup>nd</sup> Submission**

Dear Duane:

As requested, we have reviewed the following information, prepared by Chester Valley Engineers, Inc., in connection with the referenced project:

- *"Land Development Plans for Applebrook Golf Club Turf Maintenance Area"* (15 sheets), dated July 26, 2022, last revised October 5, 2022;
- *"Post-Construction Stormwater Management Report"* dated July 26, 2022, last revised October 5, 2022;
- Application and supplemental information; and
- Response letter dated October 5, 2022.

The applicant, Applebrook Associates, propose to modify maintenance facility by constructing two (2) new maintenance and storage buildings, new storage bins, and associated parking and stormwater management on UPI #53-4-89.1 (93.1 acres). This parcel is owned by the Township, the existing maintenance facility is located within an access and maintenance easement; 2,614 square feet of additional easement area is proposed. Future building expansions are also indicated. The site is located directly south of the intersection of Paoli Pike (SR 2014) and Hibberd Lane, within the I-2 Planned Business, Research, and Limited Industrial District. The lot is by served by on-site water and public sanitary sewer.

The applicant has requested the following waivers:

1. From §205-01 – To permit the submission of a combined preliminary/final plan;
2. From §205-37.C(7) – To permit 12-inch diameter stormwater pipes;
3. From §205-39 – Requiring a traffic study, as no new traffic will be created;
4. From §205-40 – Requiring a water supply study, as no new water supply will be generated; and
5. From §205-38.10.A(1) – Requiring a Historical Resources Impact Assessment.

We offer the following comments (*new comments in bold/italics*):

#### **ZONING**

1. For the purpose of this review, we considered the buildings as accessory uses to the golf course; however, they are on separate properties. We recommend that the Zoning Officer/Township Solicitor should review the same; note (§340-30.1(C)(1)(g)) and our additional comment below (No. 11).

***Pending. The applicant is awaiting a determination by the Township Zoning Officer and/or Solicitor.***

2. Per §240-20.B, a perimeter building setback is required due to its proximity to Paoli Pike. However, §240-20.F(1) & §240-20.F(2)(c) indicate the perimeter building setback requirement is not applicable for a planned golf course development. It is unclear if the proposed work is considered a planned golf course development and thus not required. We recommend that the Zoning Officer/Township Solicitor should review further.

***Pending. The applicant is awaiting a determination by the Township Zoning Officer and/or Solicitor.***

3. Per §240-20.F(3)(c), a front yard setback of 50 feet is required. There appear to be areas where this setback from Hibbard Lane is not met; however, it is unclear if this requirement applies to Hibbard Lane. We recommend that the Zoning Officer/Township Solicitor review further.

***Pending. The applicant is awaiting a determination by the Township Zoning Officer and/or Solicitor.***

4. New structures shall incorporate a complete visual screen for all rooftop structures (except roof-mounted solar panels), including but not limited to, heat pumps, cooling towers and other mechanical equipment. All rooftop structures (except roof-mounted solar panels) shall be screened from view by a single piece of the building structure which is aesthetically compatible in design, materials and color with the building facade, and which is at least equal in height to the highest rooftop structure. (§240-20.H(1))

***Resolved. No mechanical equipment is being proposed on the roof tops at this time.***

5. All outdoor storage facilities for fuel, raw materials and products stored outdoors shall be enclosed by a fence of a type, construction and size as shall be adequate to protect and conceal the facilities from any adjacent properties. Fencing shall not only encompass the question of safety, but also of screening, and the screening shall preferably be evergreens. All national Occupational Safety and Health Administration (OSHA) regulations shall be met (§240-24.E(2)).

***Resolved. Additional fencing has been added to the southern portion of the lot (Sheet 4). A fence detail has been added to the plans (Sheet 6).***

6. Buffer yards are required to be provided as part of any new or expanded development of a principal commercial use, principal industrial use, townhouse development or apartment development along any lot line that would be contiguous to lot(s) within a residential district. Also, any outside industrial storage area visible from a lot in a residential district shall be separated by a buffer yard from such lot. (§240-27.C(2)). It is unclear if this section is applicable.

***Pending. The applicant is awaiting a determination by the Township Zoning Officer and/or Solicitor.***

7. Landscaped plant screening shall be provided in each buffer yard. This screening shall be composed of mostly evergreen shrubs and trees arranged to form both a low-level and a high-level screen (§240-27.C(3(a))). Supplemental landscaping to the existing vegetation is provided in some areas; as this site is adjacent to the Township Park, we recommend that the Conservancy Board review further.

***Pending. The applicant is awaiting a review by the Conservancy Board.***

8. All outdoor storage or truck loading areas shall be completely screened from view from any adjacent public street right-of-way and any residential district which is contiguous to or across the street from the storage or loading areas (§240-27.C(4(a))). Supplemental landscaping to the existing vegetation is

provided in some areas; as this site is adjacent to the Township Park, we recommend that the Conservancy Board review further.

***Pending. The applicant has added additional landscaping to screen the buildings from Paoli Pike (Sheet 14); awaiting a review by the Conservancy Board.***

9. The parking, loading, ingress and egress areas shall be provided with sufficient lighting for security purposes (§240-27.C(7(a))). A lighting plan was not provided.

***Outstanding. The applicant has noted a lighting plan will be provided in the future.***

10. If the applicant is proposing restrictions, easements and/or covenants for the development, they shall be submitted to the Township for review prior to approval of the final development plans (§240-27.F). If our understanding modifications to existing documents are pending.

***Pending. The applicant is awaiting a determination by the Township Zoning Officer and/or Solicitor.***

11. Note maintenance buildings for storage and maintenance of equipment directly related to the golf course use may be located off site on property contiguous to the golf course, provided that there is direct access to and from the accessory buildings to the golf course over a private street or driveway serving the golf course and a subdivision plan of the off-site property is approved by the Board of Supervisors. (§340-30.1(C)(1)(g)) No further action is required, but it may be appropriate to include this as a note on the plans.

***Resolved. An access note has been added to Sheet 2.***

#### **SUBDIVISION AND LAND DEVELOPMENT**

12. Soil types should be added to the plans. (§205-27.B(10)).

***Resolved. A note regarding the soil types is located on Sheet 2, General Note 8.***

13. The plans shall clearly indicate the property is owned by East Goshen Township and Applebrook Golf Course has an easement for this portion of the property. (§205-33.B(33)) Further, it is unclear if the Township should be a co-applicant and/or signature blocks provided.

***Pending. The applicant has noted on Sheet 1 that East Goshen Township is the owner of the property. Signature blocks will be signed and executed after a determination has been made by the Township Solicitor regarding which signature blocks are required.***

14. Location and elevation of the bench mark to which contour elevations refer (§205-30.B(8)).

***Resolved. The information has been added to General Note 5 on Sheet 2.***

15. A certification of ownership shall be signed and notarized by the owner(s) of the property. (§205-33.B(17)).

***Pending. The applicant has indicated that this will be executed at the time of the final plan.***

16. The applicant shall provide the Township with either of the following as appropriate prior to recordation of the final plan: A copy of the letter from the Department of Environmental Protection approving the Act 537 planning module for the project, a copy of the letter from the Department of Environmental Protection approving the exemption from the requirement to prepare the Act 537 planning module, or a copy of the letter from the Department of Environmental Protection approving the Form B waiver for the project (§205-33.B(22)).

***Pending. A request for planning exemption has been forwarded to the PADEP.***

17. Such private deed restrictions and/or a statement of any restrictions previously imposed in accordance with §205-33.C(2).

***Pending. The applicant is awaiting a determination by the Township Zoning Officer and/or Solicitor.***

#### **STORMWATER MANAGEMENT**

18. The site plan includes a vehicle fueling station which is considered a stormwater hotspot, in addition to a wash station and materials storage. Please include appropriate pretreatment for the proposed infiltration BMP. (§195-15.N(2))

***Resolved. The applicant has indicated inlet filters as pretreatment.***

19. The disturbed area appears to be greater than one (1) acre; therefore, an NPDES permit is required. Please include the Township and our office in all correspondence and/or meetings with the Conservation District. (§195-17.A(1)(b)) As the Township owns the property, they may be required to be the applicant or co-applicant.

***Pending. The applicant has acknowledged this requirement.***

20. Per recent discussions with the design engineer, they indicated that the stormwater management design is being revised due to soils testing results and a pending revision to one of the buildings. We will review the stormwater management when the revised plans are submitted.

***Pending. The applicant has revised the stormwater management design; see additional comments below.***

#### **GENERAL**

21. The plans appear to show an easement or right-of-way from Paoli Pike along the southern portion of site. The proposed administration/maintenance/equipment storage building extends into this area.

***Pending. The easement is in discussion with the Township Solicitor.***

22. The plan should clarify Hibberd Lane is a private road.

***Resolved. Hibberd Lane has been noted as a private road.***

23. Please indicate the existing well location.

***Resolved. The existing well has been located on the plans.***

24. Please indicate the existing sanitary sewer connection.

***Resolved. The approximate location of the existing sanitary line appears on the plans.***

25. An existing septic tank is indicated; please clarify if this is to be removed.

***Resolved. The object has been correctly identified as a manhole which contains the existing sanitary pump.***

26. The plan is subject to Fire Marshall/Emergency Management review.

***Acknowledged.***

***We off the following additional comments regarding Stormwater:***

- 27. It is unclear whether the design meets the requirements of §195-19 – Water quality and runoff volume. The predeveloped 2-year volume appears to be 6,670 CF (W.S. 4, p. 76) while the post-developed 2-year volume appears to be 6,932 CF (Link 9L, p. 27) The applicant should clarify the runoff volumes.***
- 28. The design appears to meet the volume requirements of §195-20 - Infiltration.***
- 29. The infiltration BMP does not appear to have the required 2-foot separation to a limiting zone. The bottom of stone is 392.50' while the bottom of the test pit (limiting zone) appears to be 319.0'. (§195-20.J(1))***
- 30. Where roof drains are designed to discharge to infiltration practices, they shall have appropriate measures to prevent clogging by unwanted debris (for example, silt, leaves and vegetation). Such measures shall include but are not limited to leaf traps, gutter guards and cleanouts. (§195-20.O)***
- 31. The design appears to meet the requirements of §195-22 - Stormwater peak rate control.***
- 32. The applicant has requested a waiver from the requirements of §205-37.C(7) to permit 12-inch diameter stormwater pipes. (§195-25) We have no technical objection to this waiver request.***
- 33. The statement and signature block required by §195-27.A(3) & (5) should be relocated from the Utility Plan to the PCSM plan to be recorded.***
- 34. The predeveloped Time of Concentration (Tc) is the same as the post developed Tc. The predeveloped Tc should be greater than the post-developed. A complete delineation of the flow paths used for calculating the time of concentration for the predevelopment and postconstruction conditions shall be included on the drainage area plans. (§195-27.B(14))***
- 35. The applicant has offered a blanket easement to the Township for access to the stormwater management BMP's (§195-39)***

## **INTRODUCTION**

This Pipeline Awareness Study has been prepared in accordance with the requirements of Section 205-40.1 of the East Goshen Township Subdivision Regulations. This report is being submitted with the Land Development application for the Turf Maintenance Area for Applebrook Golf Club and is based on the information shown on the development plans for this submission.

## **BACKGROUND**

The Applebrook Golf Club is proposing to expand the current Turf Maintenance Facility on their easement on the Township parkland in accordance with Section 240-30.1, Planned Golf Course development of the Township Zoning Ordinance.

Currently, the site includes the maintenance and storage areas for the equipment required to maintain the adjacent golf course as well as a separate storage building that contains materials needed for the golf course maintenance. These buildings were existing on the site at the time that Applebrook Golf course obtained the use of the easement area and the Club has been working with what they had.

The Golf Club is proposing to remove a portion of the existing buildings and construct a new facility that would house new equipment maintenance and storage areas for the equipment needed to maintain the adjacent golf course. In addition, this expansion would include administrative offices and a breakroom for employees. Also, as part of the application, the existing storage building would be expanded.

A Texas Eastern Pipeline right-of-way crosses the Township Park land further south along Paoli Pike. A portion of the Applebrook Turf Maintenance area easement falls within the 660 foot distance from the centerline of the closest pipe. This report has been prepared per the requirements in Section 205-40.1.A(1).

## **SITE DESCRIPTION**

The property is located on the eastern side of Paoli Pike at the intersection with Hibbard Lane. Hibbard Lane is a private road.

The site is within a Township park. The easement area is approximately 1.3 acres in size. The ground slopes from Paoli Pike down towards Hibbard Lane and ultimately the Ridley Creek, on the opposite side of Hibbard Lane from the project site. While the area of the proposed land development includes mature trees and other screening vegetation, there is little vegetation within the existing maintenance yard; the yard area is primarily buildings, paving, gravel and lawn areas. There is a privacy fence running along the Hibbard Road frontage.

As noted in the background section, the buildings currently on the site were former barns



and animal shelters from prior uses. These building are now used to store and maintain the Golf Club's maintenance equipment. There are no defined parking areas within the current maintenance yard; workers park off site. There are also no fire hydrants in the area since there is no public water. The closest hydrant is near the intersection of Hibbard Lane and Grist Mill Lane, approximately 950 feet away from the site.

The uses surrounding the property include the Township park on the eastern and southern sides, the Chester County Chamber of Business and Industry building to the west and single-family residential properties across Paoli Pike to the north.

### **PIPELINE INFORMATION**

The easement is approximately 65 feet in width. According to Texas Eastern representatives:

- There are two pipes in the easement.
- Each pipe is 20" in diameter.
- The pipelines transport natural gas.

### **ASSESSMENT OF POTENTIAL IMPACTS**

The area of the proposed land development is presently used as the maintenance area for the Golf Club, so the proposed project is not introducing any new uses to the site. In addition, there will not be a significant number of employees on the site for the majority of the day. The employees will meet at the Maintenance area, pick up their equipment and then leave to perform maintenance operations on the golf course. On a regular basis, there may only be three or four employees at the facility during the day. At the end of the day, the employees return the equipment to the maintenance area and leave the property. There are no employees at the site overnight.

The buildings will be used to store equipment and materials necessary for the maintenance of the golf course.

### **MITIGATION MEASURES**

Due to the small area involved with the current proposal and the limited number of employees that will be at the facility on a regular basis during the day, mitigation measures involving the building construction are not necessary for this application.

The Club will prepare an Evacuation Plan which will be shared with all employees of the Turf Management facility.



83 Chestnut Road  
P.O. Box 447  
Paoli, PA 19301  
610-644-4623  
610-889-3143 Fax  
www.chesterv.com

October 5, 2022

Duane Brady, Zoning Officer  
East Goshen Township  
1580 Paoli Pike  
West Chester, PA. 19380

Re: **Revised Preliminary/Final Plan**  
Applebrook Golf Club – Turf Maintenance Area  
East Goshen Township, Chester County, PA  
CVE Project No. 20558-0015

Dear Mr. Brady,

We have received the review letter from Pennoni Associates, Township Engineer, dated September 1, 2022. Based on the comments contained in this review letter, we have made the following revisions to the plans. Comments are shown in italicized text and the responses are shown in bold text.

## ZONING

1. *For the purpose of the review, we considered the buildings as accessory uses to the golf course; however, on separate properties. We recommend that the Zoning Officer/Township Solicitor should review the same; note (§340-30.1©(1)(g)) and our additional comment below (No. 11).*

**No revisions pending a determination from the Township Zoning Officer and/or Solicitor.**

2. *Per §240-20.B, a perimeter building setback is required due to its proximity to Paoli Pike. However, §240-20.F(1) & §240-20.F(2)© indicate a perimeter building setback requirements is not applicable for a planned golf course development. It is unclear if the proposed work is considered a planned golf course development and thus not required. We recommend that the Zoning Officer/Township Solicitor should review further.*

**No revisions pending a determination from the Township Zoning Officer and/or Solicitor.**

3. *Per §240-20.F(3)(c), a front yard setback of 50 feet is required. There appear to be areas where this setback from Hibbard Lane is not met; however, it is unclear if this requirement applies to Hibbard Lane. We recommend that the Zoning Officer/Township Solicitor review further.*

**No revisions pending a determination from the Township Zoning Officer and/or Solicitor.**

4. *New structures shall incorporate a complete visual screen for all rooftop structures (except roof mounted solar panels), including but not limited to, heat pumps, cooling towers and other mechanical equipment. All rooftop structures (except roof-mounted solar panels) shall be screened from view by a single piece of the building structure which is aesthetically compatible*

*in design, materials and color with the building facade, and which is at least equal in height to the highest rooftop structure. (§240-20.H(1))*

**No mechanical equipment is planned for the roof tops at this time.**

5. *All outdoor storage facilities for fuel, raw materials and products stored outdoors shall be enclosed by a fence of a type, construction and size as shall be adequate to protect and conceal the facilities from any adjacent properties. Fencing shall not only encompass the question of safety, but also of screening, and the screening shall preferably be evergreens. All national Occupational Safety and Health Administration (OSHA) regulations shall be met (§240-24.E(2)).*

**A screening fence exists around a portion of the site. This fence will be extended to screen the entire yard area that will not be screened by the buildings. A detail of the fence has been added to the plans.**

6. *Buffer yards are required to be provided as part of any new or expanded development of a principal commercial use, principal industrial use, townhouse development or apartment development along any lot line that would be contiguous to lot(s) within a residential district. Also, any outside industrial storage area visible from a lot in a residential district shall be separated by a buffer yard from such lot. (§240-27.C(2)). It is unclear if this section is applicable.*

**No revisions pending a determination from the Township Zoning Officer.**

7. *Landscaped plant screening shall be provided in each buffer yard. This screening shall be composed of mostly evergreen shrubs and trees arranged to form both a low-level and a high-level screen (§240-27.C(3(a))). Supplemental landscaping to the existing vegetation is provided in some areas; as this site is adjacent to the Township Park, we recommend that the Conservancy Board review further.*

**No revisions pending Conservancy Board review.**

8. *All outdoor storage or truck loading areas shall be completely screened from view from any adjacent public street right-of-way and any residential district which is contiguous to or across the street from the storage or loading areas (§240-27.C(4(a))). Supplemental landscaping to the existing vegetation is provided in some areas; as this site is adjacent to the Township Park, we recommend that the Conservancy Board review further.*

**The only residential properties adjacent to the development or across Paoli Pike. Buffering has been proposed along the Paoli Pike frontage. In addition, the design of the maintenance area has the buildings screening the outdoor activities within the yard.**

9. *The parking, loading, ingress and egress areas shall be provided with sufficient lighting for security purposes (§240-27.C(7(a))). A lighting plan was not provided.*

**A Lighting Plan will be provided in the future.**

10. *If the applicant is proposing restrictions, easements and/or covenants for the development, they shall be submitted to the Township for review prior to approval of the final development plans (§240-27.F). If our understanding modifications to existing documents are pending.*

**No revisions pending a determination from the Township Solicitor.**

11. *Note maintenance buildings for storage and maintenance of equipment directly related to the golf course use may be located off site on property contiguous to the golf course, provided that there is direct access to and from the accessory buildings to the golf course over a private street or driveway serving the golf course and a subdivision plan of the off-site property is approved by the Board of Supervisors. (§340-30.1(C)(1)(g)) No further action is required, but it may be appropriate to include this as a note on the plans.*

**A note has been added to Sheet 2.**

#### **SUBDIVISION AND LAND DEVELOPMENT**

12. *Soil types should be added to the plans. (§205-27.B(10)).*

**Please see Note #8 on Sheet 2.**

13. *The plans shall clearly indicate the property is owned by East Goshen Township and Applebrook Golf Course has an easement for this portion of the property. (§205-33.B(33)) Further, it is unclear if the Township should be a co-applicant and/or signature blocks provided.*

**East Goshen Township has been noted as the property owner on Sheet 1. The appropriate signature blocks will be signed and executed once a determination has been made by the Township Solicitor regarding which signature blocks are required.**

14. *Location and elevation of the bench mark to which contour elevations refer (§205-30.B(8)).*

**Please see Note #5 on Sheet 2.**

15. *A certification of ownership shall be signed and notarized by the owner(s) of the property. (§205-33.B(17)).*

**This will be executed at the time of final plan approval (see comment #13 above).**

16. *The applicant shall provide the Township with either of the following as appropriate prior to recordation of the final plan: A copy of the letter from the Department of Environmental Protection approving the Act 537 planning module for the project, a copy of the letter from the Department of Environmental Protection approving the exemption from the requirement to prepare the Act 537 planning module, or a copy of the letter from the Department of Environmental Protection approving the Form B waiver for the project (§205-33.B(22)).*

**A request for Planning exemption has been forwarded to PADEP. The final determination of DEP will be forwarded to the Township.**



17. *Such private deed restrictions and/or a statement of any restrictions previously imposed in accordance with §205-33.C(2).*

**No revisions pending a determination from the Township Solicitor.**

## **STORMWATER MANAGEMENT**

18. *The site plan includes a vehicle fueling station which is considered a stormwater hotspot, in addition to a wash station and materials storage. Please include appropriate pretreatment for the proposed infiltration BMP. (§195-15.N(2)).*

**Inlet filters have been added to the revised plans.**

19. *The disturbed area appears to be greater than one (1) acre; therefore, an NPDES permit is required. Please include the Township and our office in all correspondence and/or meetings with the Conservation District. (§195-17.A(1)(b)) As the Township owns the property, they may be required to be the applicant or co-applicant.*

**Acknowledged. An NPDES Permit will be submitted to the Chester County Conservation District as required. We will copy the Township on all correspondence.**

20. *Per recent discussions with the design engineer, they indicated that the stormwater management design is being revised due to soils testing results and a pending revision to one of the buildings. We will review the stormwater management when the revised plans are submitted.*

**No action**

## **GENERAL**

21. *The plans appear to an easement or right-of-way from Paoli Pike along the southern portion of site. The proposed administration/maintenance/equipment storage building extends into this area.*

**The legal issues associated with this easement are being reviewed with the Club's attorney and the Township Solicitor. The easement followed the former driveway into the site; the physical driveway has since been removed. The need for the easement no longer exists, so we may be able to extinguish it.**

22. *The plan should clarify Hibberd Lane is a private road.*

**Hibberd Lane has been noted to be a private road.**

23. *Please indicate the existing well location.*

**The existing well has been added to the plans.**

24. *Please indicate the existing sanitary sewer connection.*

**The approximate location of the existing sewer line has been added to the plans.**

25. *An existing septic tank is indicated; please clarify if this is to be removed.*

**The text identifying the existing manhole as a septic tank has been removed. The manhole contains the existing grinder pump; there is no septic tank**

26. *The plan is subject to Fire Marshall/Emergency Management review.*

**No action pending Fire Marshal review.**

These revisions should address the concerns raised by the Township Engineer in his review letter. We are also in the process of preparing a Pipeline Awareness Study as required and noted by the Planning Commission at our last meeting. This report will be submitted at a future date.

Enclosed are 10 sets of the revised plans, 10 copies of the revised Landscape Plan and 3 copies of the revised Stormwater Management Report. A link to electronic copies of the enclosed information will be provided in a separate email. Please let me know if you have any questions or need additional information.

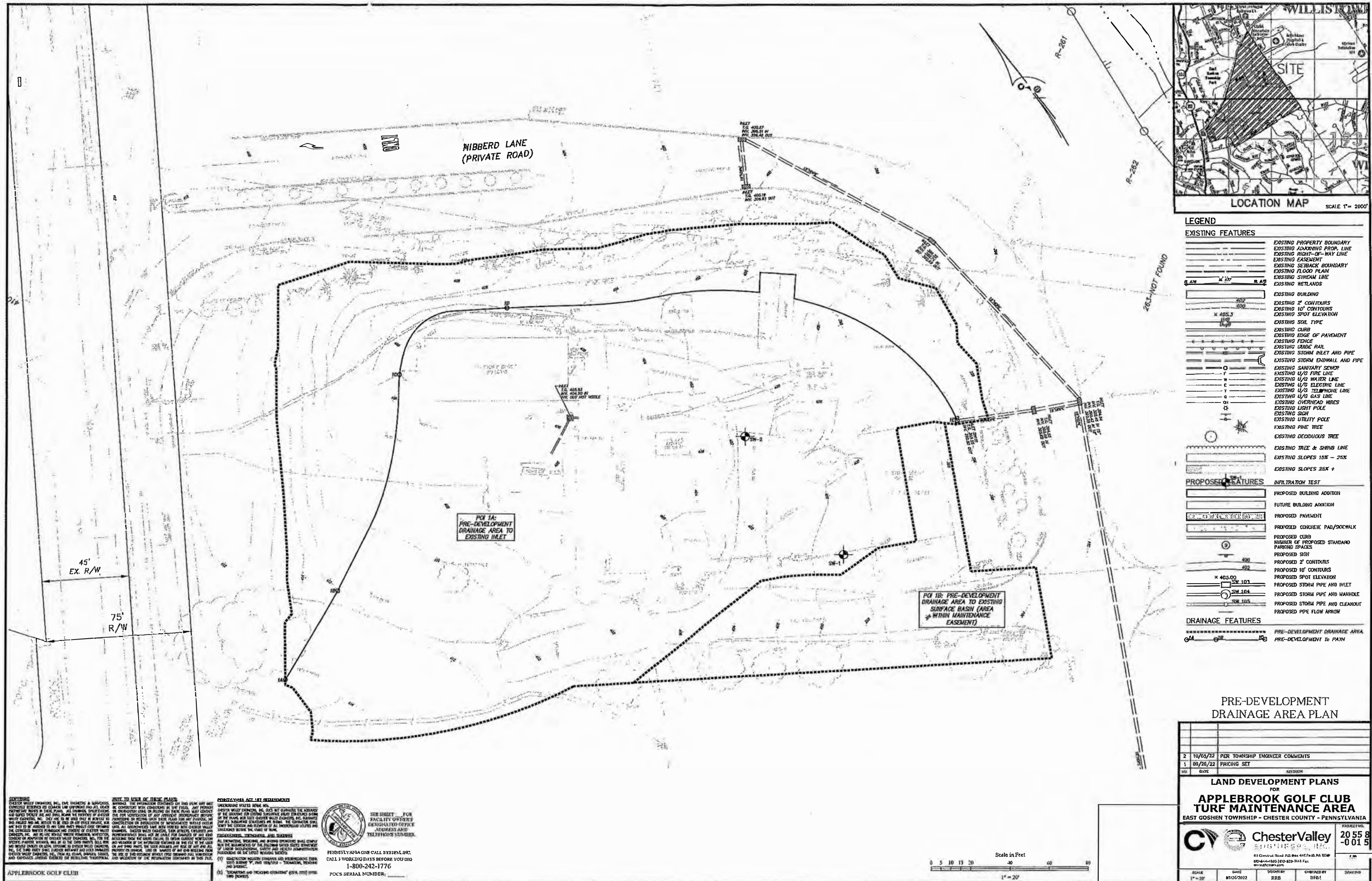
Very truly yours.

**Chester Valley Engineers, Inc.**

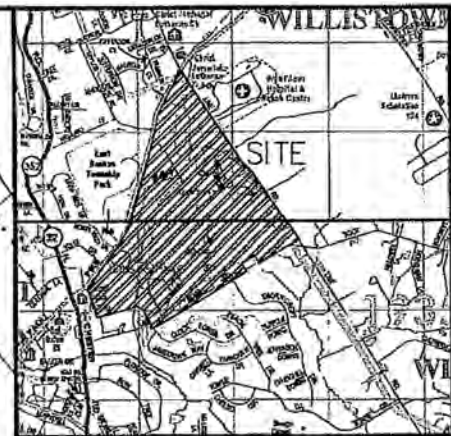


Brett H. MacKay, RLA, AICP, LEED-AP  
Senior Associate

cc: Nate Kline, P.E., Pennoni Associates  
Jared Viarengo, Applebrook  
Brian Nagel, Esq.







LOCATION MAP SCALE 1" = 2000'

SCALE 1"= 2000'

### LEGEND

### EXISTING FEATURES

- EXISTING PROPERTY BOUNDARY  
EXISTING ADJOINING PROP. LINE  
EXISTING RIGHT-OF-WAY LINE  
EXISTING EASEMENT  
EXISTING SETBACK BANDWIDTH  
EXISTING FLOOD PLAIN  
EXISTING STREAM LINE  
EXISTING WETLANDS
- EXISTING BUILDING  
EXISTING 2' CONTOURS  
EXISTING 10' CONTOURS  
EXISTING SPOT ELEVATION  
EXISTING SOIL TYPE  
EXISTING CURB  
EXISTING EDGE OF PAVEMENT  
EXISTING FENCE  
EXISTING GUIDE RAIL  
EXISTING STORM DRAIN AND PIPE  
EXISTING STORM ENDWALL AND PIPE  
EXISTING SANITARY SEWER  
EXISTING U/G FIRE LINE  
EXISTING U/G WATER LINE  
EXISTING U/G ELECTRIC LINE  
EXISTING U/G TELEPHONE LINE  
EXISTING U/G GAS LINE  
EXISTING OVERHEAD WIRES  
EXISTING LIGHT POLE  
EXISTING SIGN  
EXISTING UTILITY POLE  
EXISTING PINE TREE  
EXISTING DECIDUOUS TREE  
EXISTING TREE & SHRUB LINE  
EXISTING SLOPES 15% ~ 25%  
EXISTING SLOPES 25% +
- INFILTRATION TEST

## PROPOSED FEATURES

- 
- |  |  |
|--|--|
|  | PROPOSED BUILDING ADDITION                 |
|  | FUTURE BUILDING ADDITION                   |
|  | PROPOSED PAVEMENT                          |
|  | PROPOSED CONCRETE PAD/SIDEWALK             |
|  | PROPOSED CURB                              |
|  | NUMBER OF PROPOSED STANDARD PARKING SPACES |
|  | PROPOSED SIGN                              |
|  | PROPOSED 2' CONTOURS                       |
|  | PROPOSED 10' CONTOURS                      |
|  | PROPOSED SPOT ELEVATION                    |
|  | PROPOSED STORM PIPE AND INLET              |
|  | PROPOSED STORM PIPE AND MANHOLE            |
|  | PROPOSED STORM PIPE AND CLEANOUT           |
|  | PROPOSED PIPE FLOW ARROW                   |

### DRAINAGE FEATURES

- POST-DEVELOPMENT DRAINAGE AREA  
POST-DEVELOPMENT WET  
DRAINAGE AREA  
POST-DEVELOPMENT Tc PATH

## POST-DEVELOPMENT DRAINAGE AREA PLAN

2	10/05/22	PER TOWNSHIP ENGINEER COMMENTS
1	03/26/22	PRICING SET
NO.	DATE	REVISION

## LAND DEVELOPMENT PLANS

FOR  
**APPLEBROOK GOLF CLUB  
TURF MAINTENANCE AREA**

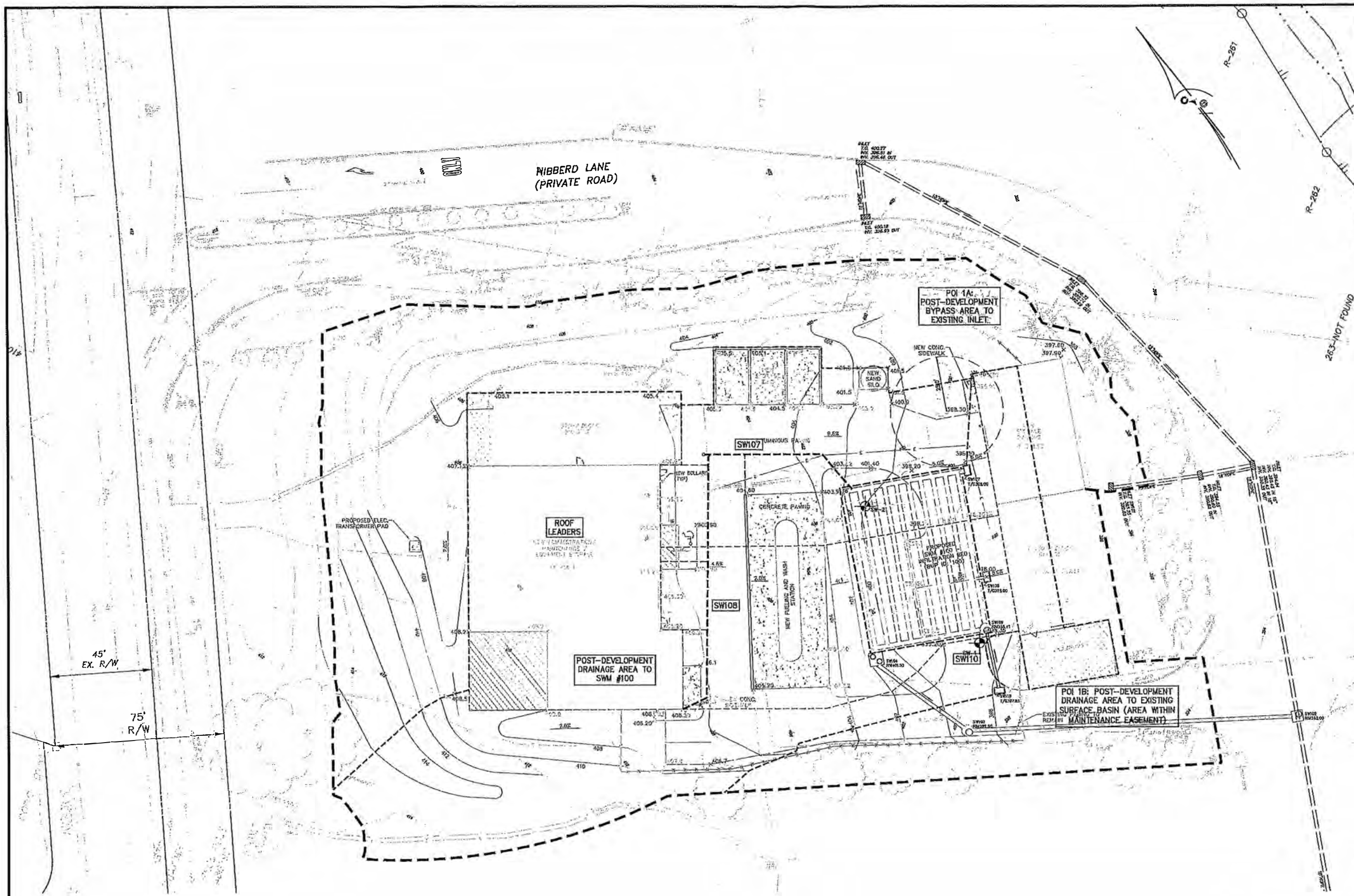
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA



20558  
-0015

85 Chestnut Street, 4th Floor, New York, NY 10038 (212) 512-1000 / (800) 851-4242 Fax www.fda.gov			FDA
SCALE 1" = 20"	DATE 07/26/2007	DRAWN BY RHS	CHECKED BY BHM
			DATE: 09

SHEET 2 OF

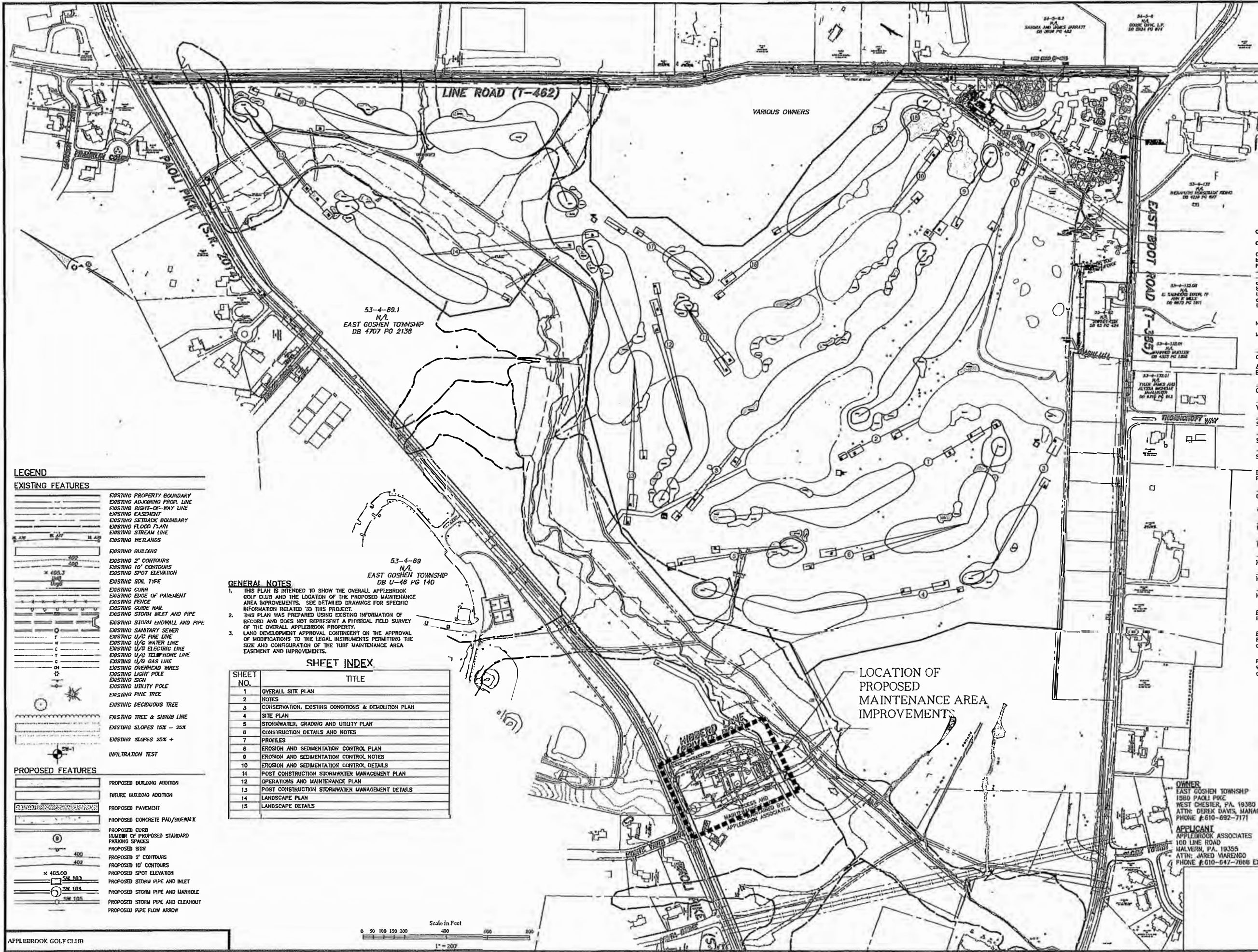
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SEE SHEET \_\_\_\_ P  
FACILITY OWNERS  
DESIGNATED OFF  
ADDRESS AND  
TELEPHONE NUM

PENNSYLVANIA ONE CALL SYSTEM, INC.  
CALL 3 WORKING DAYS BEFORE YOU  
1-800-242-1776  
POCS SERIAL NUMBER: \_\_\_\_\_

**APPLEBROOK GOLF CLUB**





**LEGEND**

**EXISTING FEATURES**

- EXISTING PROPERTY BOUNDARY
- EXISTING ADJOINING PROP. LINE
- EXISTING RIGHT-OF-WAY LINE
- EXISTING EASEMENT
- EXISTING SETBACK BOUNDARY
- EXISTING FLOOD PLAIN
- EXISTING STREAM LINE
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- EXISTING DECIDUOUS TREE
- EXISTING TREE & SHRUB LINE
- EXISTING SLOPES 15% - 25%
- EXISTING SLOPES 25% +
- INFILTRATION TEST

**PROPOSED FEATURES**

- PROPOSED BUILDING ADDITION
- FUTURE BUILDING ADDITION
- PROPOSED PAVEMENT
- PROPOSED CONCRETE PAD/SIDEWALK
- PROPOSED CURB
- NUMBER OF PROPOSED STANDARD PARKING SPACES
- PROPOSED SIGN
- PROPOSED 2' CONTOURS
- PROPOSED 10' CONTOURS
- PROPOSED SPOT ELEVATION
- PROPOSED STORM PIPE AND INLET
- PROPOSED STORM PIPE AND MANHOLE
- PROPOSED STORM PIPE AND CLEAFOUT
- PROPOSED PIPE FLOW ARROW

**GENERAL NOTES**

- THIS PLAN IS INTENDED TO SHOW THE OVERALL APPLEBROOK GOLF CLUB AND THE LOCATION OF THE PROPOSED MAINTENANCE AREA IMPROVEMENTS. SEE DETAIL DRAWINGS FOR SPECIFIC INFORMATION RELATED TO THIS PROJECT.
- THIS PLAN WAS PREPARED USING EXISTING INFORMATION OF RECORD AND DOES NOT REPRESENT A PHYSICAL FIELD SURVEY OF THE OVERALL APPLEBROOK PROPERTY.
- LAND DEVELOPMENT APPROVAL CONTINGENT ON THE APPROVAL OF MODIFICATIONS TO THE LEGAL INSTRUMENTS PERMITTING THE SIZE AND CONFIGURATION OF THE TURF MAINTENANCE AREA EASEMENT AND IMPROVEMENTS.

**SHEET INDEX**

SHEET NO.	TITLE
1	OVERALL SITE PLAN
2	NOTES
3	CONSERVATION, EXISTING CONDITIONS & DEMOLITION PLAN
4	SITE PLAN
5	STORMWATER, GRADING AND UTILITY PLAN
6	CONSTRUCTION DETAILS AND NOTES
7	PROFILES
8	EROSION AND SEDIMENTATION CONTROL PLAN
9	EROSION AND SEDIMENTATION CONTROL NOTES
10	EROSION AND SEDIMENTATION CONTROL DETAILS
11	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN
12	OPERATIONS AND MAINTENANCE PLAN
13	POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS
14	LANDSCAPE PLAN
15	LANDSCAPE DETAILS

COMMONWEALTH OF PENNSYLVANIA  
COUNTY OF CHESTER

On the \_\_\_\_ day of \_\_\_\_\_, A.D. 2022  
before me, the undersigned, a Notary Public of the Commonwealth of Pennsylvania, residing in \_\_\_\_\_, personally appeared \_\_\_\_\_ who acknowledged him/herself to be the \_\_\_\_\_ of \_\_\_\_\_ a Pennsylvania limited partnership, and that as such being authorized to do so, he/she executed the foregoing plan by signing that the said partnership is the owner of the designated land, that of necessary approval of the plan has been obtained and is endorsed thereon, and that the said partnership desires that the foregoing plan may be duly recorded.

Notary Public: \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_

Owner  
APPROVED BY EAST GOSHEN TOWNSHIP  
BOARD OF SUPERVISORS THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2022.

Chairman \_\_\_\_\_  
Vice Chairman \_\_\_\_\_  
Supervisor \_\_\_\_\_  
Supervisor \_\_\_\_\_  
Supervisor \_\_\_\_\_

REVIEWED BY EAST GOSHEN TOWNSHIP  
PLANNING COMMISSION THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2022.

Chairman \_\_\_\_\_  
Vice Chairman \_\_\_\_\_  
Member \_\_\_\_\_  
Member \_\_\_\_\_  
Member \_\_\_\_\_  
Member \_\_\_\_\_  
Member \_\_\_\_\_

REVIEWED BY EAST GOSHEN TOWNSHIP  
ENGINEER THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2022.

REVIEWED BY CHESTER COUNTY  
PLANNING COMMISSION THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2022.  
COPC FILE #:

RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF CHESTER COUNTY AT  
WEST CHESTER, PENNSYLVANIA IN PLAN BOOK \_\_\_\_\_, PAGE \_\_\_\_\_  
ON THE \_\_\_\_ DAY OF \_\_\_\_\_, 2022.

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN MADE UNDER MY  
IMMEDIATE SUPERVISION AND CONFORMS TO ALL ENGINEERING,  
ZONING, BUILDING AND OTHER APPLICABLE EAST GOSHEN  
TOWNSHIP ORDINANCES AND REGULATIONS.  
CERTIFIED THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2022.

**PRELIMINARY/FINAL  
OVERALL SITE PLAN**

2	10/04/22	PER TOWNSHIP ENGINEER COMMENTS
1	09/28/22	PRICING SET
NO.	DATE	REVISION

**LAND DEVELOPMENT PLANS  
FOR  
APPLEBROOK GOLF CLUB  
TURF MAINTENANCE AREA**  
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA

**ChesterValley ENGINEERS, INC.**  
82 Chestnut Road, P.O. Box 84, Pottsville, PA 17854  
(610) 423-1000 FAX (610) 423-1001  
www.chestervalley.com

OWNER  
EAST GOSHEN TOWNSHIP  
1950 PAOLI PIKE  
WEST CHESTER, PA 19380  
ATTN: DEREK DAVIS, MANAGER  
PHONE # 610-692-7171

APPLICANT  
APPLEBROOK ASSOCIATES  
100 LINE ROAD  
MALVERN, PA 19355  
ATTN: JARED MARENCO  
PHONE # 610-647-7668 EX10

PROJECT NO. 20558-0015

DATE	11-20-2021	DATE	07/26/2022	DATE	07/26/2022
DRAWN BY	SCB	CHECKED BY	SCB	DATE	07/26/2022

UTILITY NOTES

1. All storm sewer construction shall be in accordance with PennDOT Specifications, Form 408, as last revised, and with the current PennDOT Roadway Construction (RC) Standards.
2. All roadway materials must be obtained from a PennDOT approved source.
3. All storm sewers are measured centerline to centerline of the storm sewer structures.
4. All RCP pipe shall be Class III reinforced cement concrete pipe in accordance with PennDOT specifications, Form 408, Section 601.
5. All storm sewer inlets shall be precast and built in accordance with current Penn DOT standards, 10. All inlet boxes shall be "standard" PennDOT inlet boxes unless otherwise noted.
6. All PVC storm pipe shall be SDR 35 and meet the requirements of ASTM D3034 Specifications. Installation shall be in accordance with the manufacturer's specifications.
7. All High Density Polyethylene (HDPE) pipe shall be corrugated exterior / smooth interior pipe conforming to ASTM F-403.
8. All inlets shall be equipped with PennDOT Structural Steel, Bicycle Safe Grates in conformance with the latest PennDOT standards (Form 408).
9. All storm pipe shall be installed into the structure face of an junction structure with the walls of the pipe material clearing the walls of the structure. No connection of pipes through the corner of a structure shall be permitted unless the structure is specifically designed for such penetration.
10. Expanded structures (in place of standard structures) shall be provided where specified or in situations where the connecting pipe diameter does not allow for the use of a standard box.
11. Provide manhole steps in all drainage structures where the height exceeds 5 feet. Steps shall conform to PennDOT standards, Form 408, latest edition.
12. All underground stormwater control structures shall be installed in accordance with the product manufacturer's standard specifications and details. The contractor shall become familiar with these specifications and details whether included in the plan set or not.
13. Provide water quality (oil and grit) filters on all inlets that discharge surface runoff into an underground stormwater BMP.

LIST OF WAIVERS

- WAIVERS REQUESTED FROM ORDINANCE No. 205, THE EAST GOSHEN TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE
1. 205-01 PRELIMINARY AND FINAL SUBMISSION - TO PERMIT THE SUBMISSION OF A COMBINED PRELIMINARY / FINAL PLAN.
  2. 205-37.0.7 STORM SEWER SYSTEM - TO PERMIT 12" DIAMETER STORMWATER PIPES.
  3. 205-38 TRAFFIC IMPACT STUDY - AS THERE ARE NO NEW MEMBERS AND NO NEW EMPLOYEES ANTICIPATED FROM THIS PROJECT, THERE WILL BE NO ADDITIONAL TRAFFIC TO THE GOLF CLUB.
  4. 205-40 WATER SUPPLY STUDY - THE PROPOSED BUILDING WILL HAVE REPLACEMENT BATHROOM FACILITIES TO BE USED BY EMPLOYEES USING THE MAINTENANCE FACILITY. THERE WILL BE NO INCREASE IN THE NUMBER OF EMPLOYEES.
  5. 240-38.10.A.1 - HISTORICAL RESOURCE IMPACT STUDY - WAIVER FROM THE REQUIREMENT TO PREPARE AND SUBMIT AN HISTORICAL RESOURCES IMPACT ASSESSMENT (WAIVER BY THE BOARD OF SUPERVISORS IS PERMITTED BY THIS SECTION).

ACCESS NOTE


PER SECTION 240-30.1.G(1)(a) - MAINTENANCE BUILDINGS FOR STORAGE AND MAINTENANCE OF EQUIPMENT DIRECTLY RELATED TO THE GOLF COURSE USE MAY BE LOCATED OFF SITE ON PROPERTY CONTIGUOUS TO THE GOLF COURSE, PROVIDED THAT THERE IS DIRECT ACCESS TO AND FROM THE ACCESSORY BUILDINGS TO THE GOLF COURSE OVER A PRIVATE STREET OR DRIVEWAY SERVING THE GOLF COURSE AND A SUBDIVISION PLAN OF THE OFF-SITE PROPERTY IS APPROVED BY THE BOARD OF SUPERVISORS.

THE TURF MAINTENANCE AREA PRESENTLY HAS A PHYSICAL CONNECTION TO THE GOLF COURSE ACROSS HUBBARD LANE.

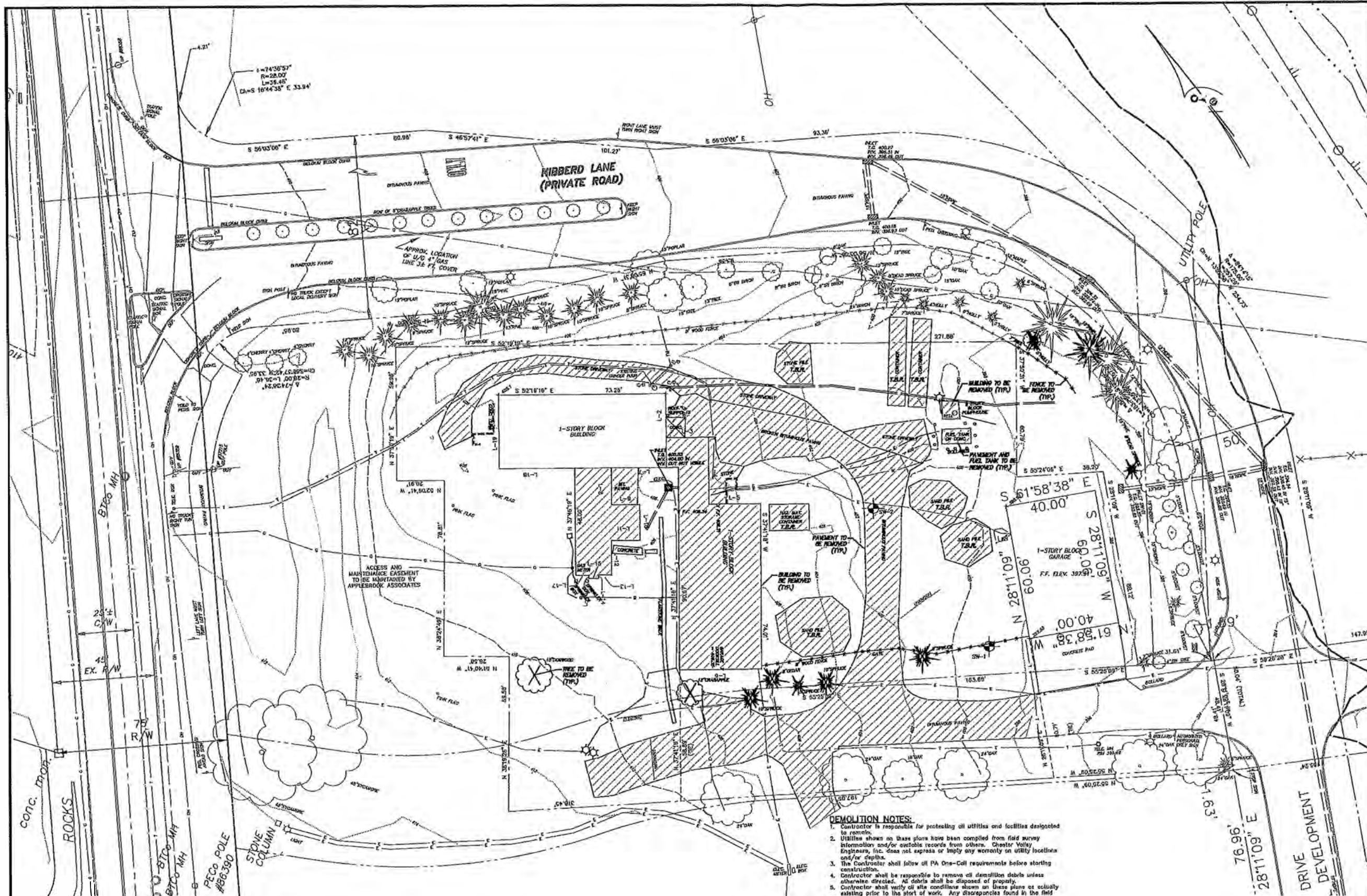
GENERAL NOTES

1. THIS PROJECT PROPOSES TO INSTALL A NEW TURF MAINTENANCE BUILDING AND RELATED SITE IMPROVEMENTS, REPLACING PORTIONS OF THE EXISTING FACILITIES ON THE SITE. THESE FACILITIES PROVIDE THE GROUND MAINTENANCE FOR THE APPLEBROOK GOLF CLUB. NO SIGNIFICANT CHANGES TO THE OPERATION OF THE FACILITY WILL RESULT FROM THE PROPOSED IMPROVEMENTS.
2. THIS PROPERTY BEING TWP No. 54-3-30.1.
3. EXISTING TURF MAINTENANCE AREA IS WITHIN AN EXISTING EASEMENT OVER THE TOWNSHIP PROPERTY.
4. BOUNDARY INFORMATION TAKEN FROM EXISTING PLANS OF RECORD.
5. FIELD TOPOGRAPHIC SURVEY PERFORMED BY CHESTER VALLEY ENGINEERS, INC., PAOLI, PA IN OCTOBER 2021. ELEVATIONS BASED ON N.G.M.D. 1929 DATUM. BENCHMARK IS PHD DISK ON SOUTHEAST CORNER OF BRIDGE OVER RIDLEY CREEK ON ROUTE 352, 300 +/- FEET SOUTH OF THE INTERSECTION WITH DODT ROAD. ELEVATION 395.59.
6. PROPOSED BUILDING TO BE SERVICED BY EXISTING PUBLIC SANITARY SEWER SERVICE CONNECTION AND ON-SITE WELL WATER.
7. THIS PROPERTY IS ZONED 1-2 PLANNED BUSINESS, RESEARCH AND LIMITED OFFICE DEVELOPMENT. THE EAST GOSHEN ZONING MAP, THIS DEVELOPMENT HAS BEEN PREPARED IN ACCORDANCE WITH THE PLANNED GOLF COURSE PROVISIONS, SECTION 240-30.1.
8. SOIL TYPE WITHIN THE PROJECT AREA - THE PROPERTY IS GLAUSTONE GRAVELLY LOAM (GRL), 3% TO 6% SLOPE ACCORDING TO THE WEB SOIL SURVEY PREPARED BY NATURAL RESOURCES CONSERVATION SERVICE OF THE USDA.
9. THE AREA OF THE PROPERTY FOR THIS PROJECT IS DESIGNATED AS AN AREA OF MINIMAL FLOOD HAZARD (ZONE "X") AS SHOWN ON FEMA PANEL 42000001000, EFFECTIVE 9/29/2017.
10. THERE WILL BE NO INCREASE IN MEMBERSHIP OR EMPLOYEES AS A RESULT OF THIS PROJECT.
11. NO NEW PARKING IS REQUIRED BY THE TOWNSHIP ZONING ORDINANCE. PARKING PROVIDED IS FOR THE BENEFIT OF VISITORS TO THE TURF MAINTENANCE FACILITY.
12. SINCE THERE WILL BE NO INCREASE IN MEMBERSHIP OR EMPLOYEES, THERE WILL BE NO ANTICIPATED INCREASE IN TRAFFIC TO THE SITE.
13. THE INCREASE IN IMPERVIOUS COVER IS LIMITED TO THE NEW BUILDINGS AND THE NEW PAVED AREAS.
14. STORMWATER RUNOFF FROM THE NEW IMPERVIOUS AREAS WILL BE CONTROLLED BY AN UNDERGROUND INFILTRATION STRUCTURE. AREAS SHOWN AS "FUTURE" ON THESE PLANS HAVE BEEN INCLUDED IN THE STORMWATER MANAGEMENT CALCULATIONS.
15. 35,762 SF. OF IMPERVIOUS SURFACES WERE APPROVED FOR THE TURF MAINTENANCE AREA AS PART OF THE ORIGINAL APPLEBROOK LAND DEVELOPMENT PLANS. THE RUNOFF CONTROL FROM THESE SURFACES WAS ACCOUNTED FOR IN THE ORIGINAL STORMWATER BASINS FOR THE PROJECT. THESE IMPROVEMENTS WERE NEVER CONSTRUCTED. THE CURRENT STORMWATER MANAGEMENT DESIGN HAS BEEN PREPARED ASSUMING THE AREA OF THE APPROVED BUT NOT CONSTRUCTED IMPERVIOUS SURFACES WILL CONTINUE TO BE CONTROLLED BY THE EXISTING BASINS.
16. AS THE PROPOSED AREA OF DISTURBANCE IS OVER ONE (1) ACRE, A PA DEP NOTES PERMIT AND COUNTY E&S APPROVAL WILL BE REQUIRED. NO ADDITIONAL STATE OR COUNTY APPROVALS OR PERMITS ARE REQUIRED.
17. THIS PROJECT IS LOCATED WITHIN THE RIDLEY CREEK WATERSHED. THE PA DEP DESIGNATION FOR THE STREAM IS HQ-TSE.
18. EXISTING GROUND COVER IN THE AREA OF THE PROPOSED IMPROVEMENTS CONSISTS OF BUILDINGS, PAVING AND LAWN.
19. THE PROPERTY OWNER WILL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL STORMWATER CONTROL STRUCTURES AND BMPs SHOWN ON THE PLAN.
20. THE TOWNSHIP SHALL HAVE THE RIGHT TO ENTER THE SITE FOR THE PURPOSE OF INSPECTION OF THE STORMWATER BMPs.
21. A BLANKET STORMWATER MANAGEMENT EASEMENT IS PROVIDED OVER AND ACROSS THE PROPERTY IN FAVOR OF EAST GOSHEN TOWNSHIP TO ALLOW THE TOWNSHIP AND ITS AGENTS AND DESIGNEES ACCESS TO THE PROPOSED STORMWATER MANAGEMENT FACILITIES. THE TOWNSHIP IS GRANTED THE RIGHT, BUT NOT THE DUTY, TO ACCESS AND CONDUCT PERIODIC INSPECTIONS AND TO UNDERTAKE OTHER ACTIONS THAT MAY BE NECESSARY TO ENFORCE THE REQUIREMENTS OF THE TOWNSHIP'S STORMWATER MANAGEMENT ORDINANCE OR OF ANY APPLICABLE O&M PLAN OR O&M AGREEMENT.

PRELIMINARY/FINAL  
NOTES

NO.	DATE	EXTENSION
1	09/26/22	PER TOWNSHIP ENGINEER COMMENTS
		PRICING SET
FOR <b>APPLEBROOK GOLF CLUB TURF MAINTENANCE AREA</b>		
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA		
 <b>Chester Valley</b>		PROJECT NO. <b>20558-0015</b>
81 Chestnut Road, P.O. Box 417, P.O. PA 20301 610-668-4623   610-667-3115 Fax www.chester-valley.com		
DATE	01/20/2022	RRB
AS NOTED		B104





# LEGEND

## EXISTING FEATURES

EXISTING PROPERTY BOUNDARY  
EXISTING ADJOINING PROP. LINE  
EXISTING RIGHT-OF-WAY LINE  
EXISTING EASEMENT  
EXISTING SETBACK BOUNDARY  
EXISTING FLOOD PLAIN  
EXISTING STREAM LINE  
EXISTING WETLANDS

EXISTING BUILDING  
EXISTING 2' CONTOURS  
EXISTING 10' CONTOURS  
EXISTING SPOT ELEVATION  
EXISTING SOIL TYPE  
EXISTING CURB  
EXISTING EDGE OF PAVEMENT  
EXISTING FENCE  
EXISTING CURB RAIL  
EXISTING STORM INLET AND PIPE  
EXISTING STORM ENDWALL AND PIPE  
EXISTING SANITARY SEWER  
EXISTING U/G FIRE LINE  
EXISTING U/G FIRE LINE  
EXISTING U/G ELECTRIC LINE  
EXISTING U/G TELEPHONE LINE  
EXISTING U/G GAS LINE  
EXISTING OVERHEAD WIRES  
EXISTING LIGHT POLE  
EXISTING SIGN  
EXISTING UTILITY POLE  
EXISTING PINE TREE  
EXISTING DECIDUOUS TREE  
EXISTING TREE & SHRUB LINE  
EXISTING SLOPES 15% - 25%  
EXISTING SLOPES 25% +

## DEMOLITION FEATURES

INFILTRATION TEST  
TO BE REMOVED  
EXISTING FEATURE TO BE REMOVED  
EXISTING FEATURE TO BE REMOVED  
EXISTING PAVEMENT / CONCRETE  
TO BE REMOVED

# PRELIMINARY/FINAL CONSERVATION, EXISTING CONDITIONS & DEMOLITION PLAN

2	10/05/22	PER TOWNSHIP ENGINEER COMMENTS
1	09/25/22	PRICING SET

**LAND DEVELOPMENT PLANS  
FOR  
APPLEBROOK GOLF CLUB  
TURF MAINTENANCE AREA**  
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA

 <b>ChesterValley</b> ENGINEERS, INC.				PROJECT # <b>2055-001</b>
61 Crumline Road, P.O. Box 447, Park, PA 15329 610-661-4631   610-663-7145 Fax <a href="http://www.chester.com">www.chester.com</a>				F.S.  
SCALE 1" = 20'	DATE 02/04/2012	DRAWN BY JRB	CHECKED BY DDM	DATA/PLT  

[illegible]

**STRENGTHENING ACT 167. PERMANENTLY  
IMPROVED STATE RURAL HIGH  
WAY DISTRICTS, INC. DOES NOT OWN  
OF THE LOCATION FOR THE STATE RURAL HIGH  
WAY DISTRICTS, INC. DOES NOT OWN THE  
LANDS AND BUILDINGS, STRUCTURES AND  
EQUIPMENT AND ELECTIONS OF ALL LANDS  
STRUCTURES BEFORE THE STATE OF WORK.**

**EXCAVATIONS, TRENCHING, AND SPACING  
ALL EXCAVATIONS, TRENCHING, AND SPACING  
WITH THE INSURANCE OF THE FOLLOWING UNITS  
OF LABOR OCCUPATIONAL SAFETY AND HEALTH  
PUBLICATIONS OF THE LATEST AMERICAN PEOPLE**

(1) STRENGTHENING ACT 167. PERMANENTLY

SEE SHEET \_\_\_\_\_ FOR  
FACILITY OWNER'S  
DESIGNATED OFFICE  
ADDRESS AND  
TELEPHONE NUMBER

8. Co the sen
9. Na ho
10. Th Co pla the
11. All ex

Contractor shall co-ordinate with the appropriate agencies for removal and/or abandonment of all utilities in the area of the proposed building. The contractor shall be responsible for removal or stabilization in accordance with the applicable regulatory agency's requirements. Demolition may occur until the necessary permits have been installed. See the Erosion Control Plan. The plan has been prepared to indicate the contractor shall become familiar with the project area on or well before the architectural plans are issued. The contractor shall be responsible for removal or adjustment of existing utilities in the area of new building construction. Existing underground utilities to remain shall be marked and protected.

appropriate utility provider regarding utility services to be removed. All work shall be in accordance with the respective utility agency's erosion control measures and Plans in this set.

Major facilities to be removed, including proposed improvements to this project, shall be determined to determine the full extent of the work to be removed. All work shall be adjusted to finish grades.

Scale in Feet  
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140 145 150 155 160 165 170 175 180 185 190 195 200 205 210 215 220 225 230 235 240 245 250 255 260 265 270 275 280 285 290 295 300 305 310 315 320 325 330 335 340 345 350 355 360 365 370 375 380 385 390 395 400 405 410 415 420 425 430 435 440 445 450 455 460 465 470 475 480 485 490 495 500 505 510 515 520 525 530 535 540 545 550 555 560 565 570 575 580 585 590 595 600 605 610 615 620 625 630 635 640 645 650 655 660 665 670 675 680 685 690 695 700 705 710 715 720 725 730 735 740 745 750 755 760 765 770 775 780 785 790 795 800 805 810 815 820 825 830 835 840 845 850 855 860 865 870 875 880 885 890 895 900 905 910 915 920 925 930 935 940 945 950 955 960 965 970 975 980 985 990 995 1000 1005 1010 1015 1020 1025 1030 1035 1040 1045 1050 1055 1060 1065 1070 1075 1080 1085 1090 1095 1100 1105 1110 1115 1120 1125 1130 1135 1140 1145 1150 1155 1160 1165 1170 1175 1180 1185 1190 1195 1200 1205 1210 1215 1220 1225 1230 1235 1240 1245 1250 1255 1260 1265 1270 1275 1280 1285 1290 1295 1300 1305 1310 1315 1320 1325 1330 1335 1340 1345 1350 1355 1360 1365 1370 1375 1380 1385 1390 1395 1400 1405 1410 1415 1420 1425 1430 1435 1440 1445 1450 1455 1460 1465 1470 1475 1480 1485 1490 1495 1500 1505 1510 1515 1520 1525 1530 1535 1540 1545 1550 1555 1560 1565 1570 1575 1580 1585 1590 1595 1600 1605 1610 1615 1620 1625 1630 1635 1640 1645 1650 1655 1660 1665 1670 1675 1680 1685 1690 1695 1700 1705 1710 1715 1720 1725 1730 1735 1740 1745 1750 1755 1760 1765 1770 1775 1780 1785 1790 1795 1800 1805 1810 1815 1820 1825 1830 1835 1840 1845 1850 1855 1860 1865 1870 1875 1880 1885 1890 1895 1900 1905 1910 1915 1920 1925 1930 1935 1940 1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015 2020 2025 2030 2035 2040 2045 2050 2055 2060 2065 2070 2075 2080 2085 2090 2095 2100 2105 2110 2115 2120 2125 2130 2135 2140 2145 2150 2155 2160 2165 2170 2175 2180 2185 2190 2195 2200 2205 2210 2215 2220 2225 2230 2235 2240 2245 2250 2255 2260 2265 2270 2275 2280 2285 2290 2295 2300 2305 2310 2315 2320 2325 2330 2335 2340 2345 2350 2355 2360 2365 2370 2375 2380 2385 2390 2395 2400 2405 2410 2415 2420 2425 2430 2435 2440 2445 2450 2455 2460 2465 2470 2475 2480 2485 2490 2495 2500 2505 2510 2515 2520 2525 2530 2535 2540 2545 2550 2555 2560 2565 2570 2575 2580 2585 2590 2595 2600 2605 2610 2615 2620 2625 2630 2635 2640 2645 2650 2655 2660 2665 2670 2675 2680 2685 2690 2695 2700 2705 2710 2715 2720 2725 2730 2735 2740 2745 2750 2755 2760 2765 2770 2775 2780 2785 2790 2795 2800 2805 2810 2815 2820 2825 2830 2835 2840 2845 2850 2855 2860 2865 2870 2875 2880 2885 2890 2895 2900 2905 2910 2915 2920 2925 2930 2935 2940 2945 2950 2955 2960 2965 2970 2975 2980 2985 2990 2995 3000 3005 3010 3015 3020 3025 3030 3035 3040 3045 3050 3055 3060 3065 3070 3075 3080 3085 3090 3095 3100 3105 3110 3115 3120 3125 3130 3135 3140 3145 3150 3155 3160 3165 3170 3175 3180 3185 3190 3195 3200 3205 3210 3215 3220 3225 3230 3235 3240 3245 3250 3255 3260 3265 3270 3275 3280 3285 3290 3295 3300 3305 3310 3315 3320 3325 3330 3335 3340 3345 3350 3355 3360 3365 3370 3375 3380 3385 3390 3395 3400 3405 3410 3415 3420 3425 3430 3435 3440 3445 3450 3455 3460 3465 3470 3475 3480 3485 3490 3495 3500 3505 3510 3515 3520 3525 3530 3535 3540 3545 3550 3555 3560 3565 3570 3575 3580 3585 3590 3595 3600 3605 3610 3615 3620 3625 3630 3635 3640 3645 3650 3655 3660 3665 3670 3675 3680 3685 3690 3695 3700 3705 3710 3715 3720 3725 3730 3735 3740 3745 3750 3755 3760 3765 3770 3775 3780 3785 3790 3795 3800 3805 3810 3815 3820 3825 3830 3835 3840 3845 3850 3855 3860 3865 3870 3875 3880 3885 3890 3895 3900 3905 3910 3915 3920 3925 3930 3935 3940 3945 3950 3955 3960 3965 3970 3975 3980 3985 3990 3995 4000 4005 4010 4015 4020 4025 4030 4035 4040 4045 4050 4055 4060 4065 4070 4075 4080 4085 4090 4095 4100 4105 4110 4115 4120 4125 4130 4135 4140 4145 4150 4155 4160 4165 4170 4175 4180 4185 4190 4195 4200 4205 4210 4215 4220 4225 4230 4235 4240 4245 4250 4255 4260 4265 4270 4275 4280 4285 4290 4295 4300 4305 431

Figure 1 is a line graph showing the percentage of total energy expenditure (TEE) for different activities over a 24-hour period. The Y-axis is 'Percentage of TEE' (0-100) and the X-axis is 'Time of Day' (0-24). The activities and their approximate percentages are:

Time of Day	Sleeping	Resting	Walking	Standing	Sitting	Eating
0	30	10	5	5	5	5
4	35	10	5	5	5	5
8	30	10	10	10	5	5
12	25	10	15	15	5	5
16	20	10	15	15	5	5
20	30	10	10	10	5	5
24	30	10	5	5	5	5



**APPLIED  
TURF MANAGEMENT**  
EAST GOSHEN, NY

**ChesterValley**  
ENGINEERS, INC.  
61 Chestnut Street, P.O. Box 447, Pott, PA 15081  
610-864-1632 | 610-423-3165 Fax

PROJECT #	2055-001
F.R.	

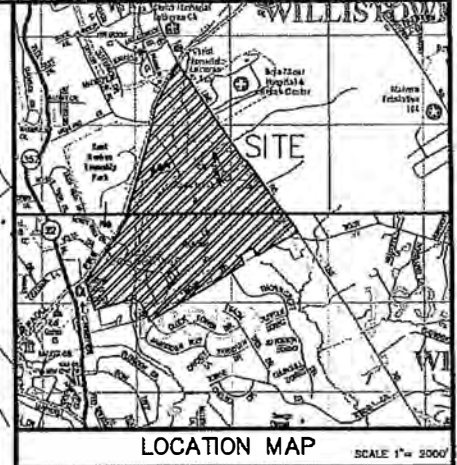
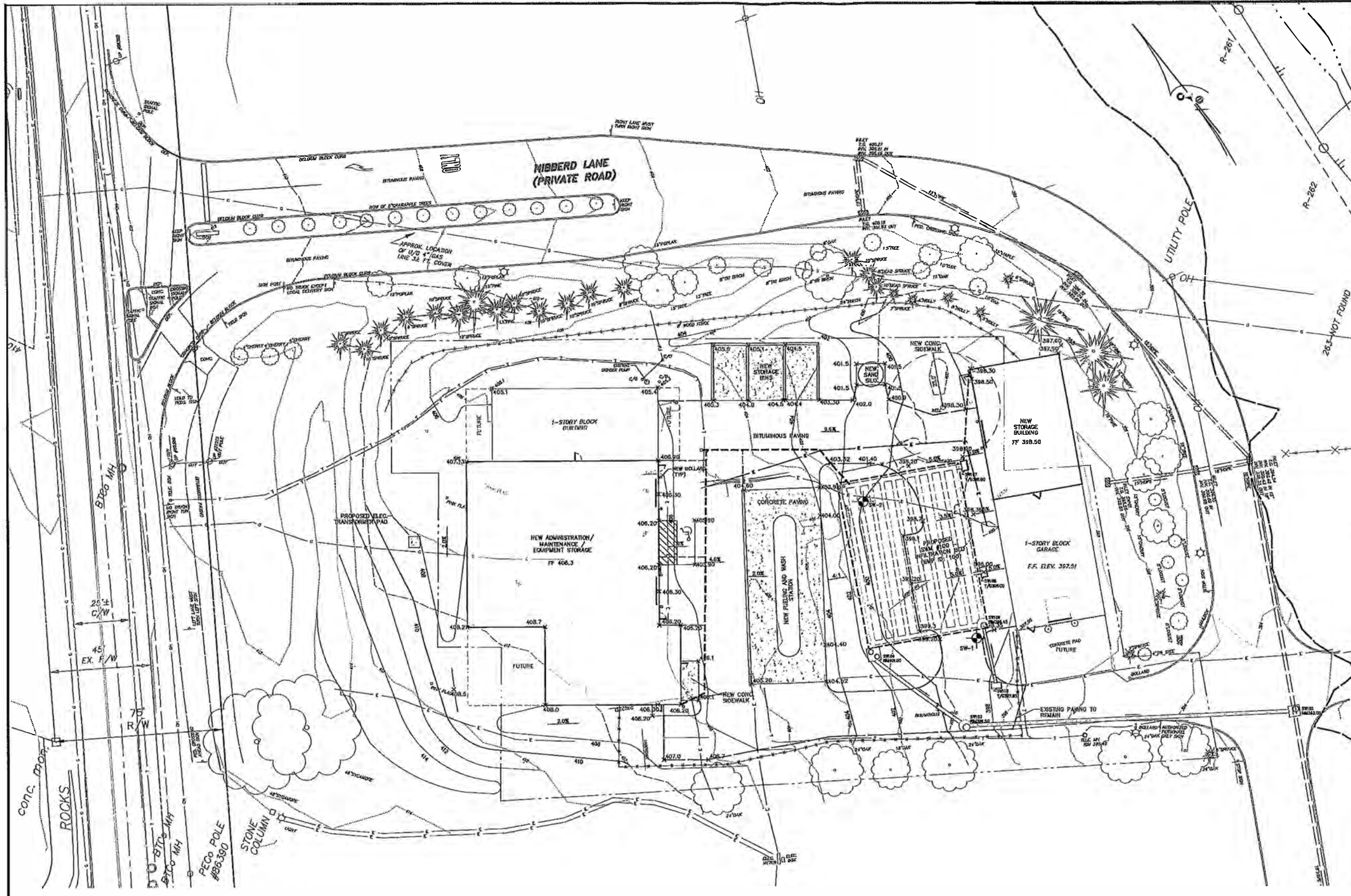
**APPLERSOOK GOLF CLUB**

SHEET 3 OF









- LEGEND**
- EXISTING FEATURES**
- EXISTING PROPERTY BOUNDARY
  - EXISTING ADJOINING PROP. LINE
  - EXISTING RIGHT-OF-WAY LINE
  - EXISTING EASEMENT
  - EXISTING SETBACK BOUNDARY
  - EXISTING FLOOD PLAN
  - EXISTING STREAM LINE
  - EXISTING WETLANDS
  - EXISTING BUILDING
  - EXISTING 2' CONTOURS
  - EXISTING 10' CONTOURS
  - EXISTING SPOT ELEVATION
  - EXISTING SOIL TYPE
  - EXISTING CURB
  - EXISTING EDGE OF PAVEMENT
  - EXISTING FENCE
  - EXISTING GUTTER RAIL
  - EXISTING STORM INLET AND PIPE
  - EXISTING STORM DRAINAGE AND PIPE
  - EXISTING SANITARY SEWER
  - EXISTING U/G FIRE LINE
  - EXISTING U/G WATER LINE
  - EXISTING U/G ELECTRIC LINE
  - EXISTING U/G GAS LINE
  - EXISTING OVERHEAD WIRES
  - EXISTING LIGHT POLE
  - EXISTING UTILITY POLE
  - EXISTING PINE TREE
  - EXISTING DECIDUOUS TREE
  - EXISTING TREE & SHRUB LINE
  - EXISTING SLOPES 15% - 25%
  - EXISTING SLOPES 25% +
  - INFILTRATION TEST
- PROPOSED FEATURES**
- PROPOSED BUILDING ADDITION
  - FUTURE BUILDING ADDITION
  - PROPOSED PAVEMENT
  - PROPOSED CONCRETE PAD/SIDEWALK
  - PROPOSED CURB
  - NUMBER OF PROPOSED STANDARD PARKING SPACES
  - PROPOSED SIGN
  - PROPOSED 2' CONTOURS
  - PROPOSED 10' CONTOURS
  - PROPOSED SPOT ELEVATION
  - PROPOSED STORM PIPE AND INLET
  - PROPOSED STORM PIPE AND MANHOLE
  - PROPOSED STORM PIPE AND CLEANOUT
  - PROPOSED PIPE FLOW ARROW

**PRELIMINARY/FINAL  
STORMWATER, GRADING  
AND UTILITY PLAN**

**CONTRACTOR**  
STORMWATER ENGINEERING, INC. 1000 N. 10TH STREET, SUITE 100, WILKES-BARRE, PA 18703  
TEL: 717-853-1111 FAX: 717-853-1112  
WWW.STORMWATERENGINEERING.COM

**HOW TO USE THESE PLANS**  
THESE PLANS ARE PRELIMINARY AND NOT TO BE USED FOR CONSTRUCTION. THE INFORMATION CONTAINED HEREIN IS FOR INFORMATIONAL PURPOSES ONLY. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR VERIFYING THE ACCURACY OF THE INFORMATION CONTAINED HEREIN. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR VERIFYING THE ACCURACY OF THE INFORMATION CONTAINED HEREIN.

**DESIGNER'S ACT 167 REQUIREMENTS**  
DESIGNER'S ACT 167 REQUIREMENTS: THE DESIGNER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR VERIFYING THE ACCURACY OF THE INFORMATION CONTAINED HEREIN. THE DESIGNER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR VERIFYING THE ACCURACY OF THE INFORMATION CONTAINED HEREIN.

**SEE SHEET 2 FOR UTILITY NOTES**

**REVISIONS TO THE APPROVED SWM SITE PLAN SHALL BE SUBMITTED TO AND APPROVED BY THE MUNICIPALITY AND THAT A REVISED EROSION AND SEDIMENT CONTROL PLAN SHALL BE SUBMITTED TO, AND APPROVED BY, THE CONSERVATION DISTRICT OR MUNICIPALITY (AS APPLICABLE) FOR A DETERMINATION OF ADEQUACY PRIOR TO CONSTRUCTION OF THE REVISED FEATURES.**

**I, NEAL J. CAMENS, P.E., ON THIS DATE, 06/26/2022, HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE THAT THE SWM SITE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE EAST GOSHEN TOWNSHIP STORMWATER MANAGEMENT ORDINANCE.**

**OWNER** \_\_\_\_\_ **DATE** \_\_\_\_\_ **NEAL J. CAMENS**

**APPLBROOK GOLF CLUB**

**SEE SHEET 2 FOR UTILITY NOTES**

**REVISIONS TO THE APPROVED SWM SITE PLAN SHALL BE SUBMITTED TO AND APPROVED BY THE MUNICIPALITY AND THAT A REVISED EROSION AND SEDIMENT CONTROL PLAN SHALL BE SUBMITTED TO, AND APPROVED BY, THE CONSERVATION DISTRICT OR MUNICIPALITY (AS APPLICABLE) FOR A DETERMINATION OF ADEQUACY PRIOR TO CONSTRUCTION OF THE REVISED FEATURES.**

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**OWNER** \_\_\_\_\_ **DATE** \_\_\_\_\_ **NEAL J. CAMENS**

**APPLBROOK GOLF CLUB**

**LAND DEVELOPMENT PLANS**  
FOR  
**APPLBROOK GOLF CLUB**  
**TURF MAINTENANCE AREA**  
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA

**ChesterValley** 20558-0015  
88 CHESTER VALLEY DRIVE, SUITE 100, PA 19380  
610-444-3333 FAX 610-444-3334  
WWW.CHESTERVALLEY.COM

**SCALE** 1" = 20' **DATE** 01/26/2022 **DRAWN BY** KRD **CHECKED BY** B101 **STATUS** FINISHED

**REVISIONS**

NO.	DATE	REVISION
2	10/05/22	PER TOWNSHIP ENGINEER COMMENTS
1	06/26/22	PRICING SET

**KEYNOTES**

1. THESE PLANS AND "TYPING SHEETS" (SWM 201) SHOWN HEREIN ARE THE PROPERTY OF STORMWATER ENGINEERING, INC. AND SHALL REMAIN THE PROPERTY OF STORMWATER ENGINEERING, INC. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR VERIFYING THE ACCURACY OF THE INFORMATION CONTAINED HEREIN.

2. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR VERIFYING THE ACCURACY OF THE INFORMATION CONTAINED HEREIN.

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5. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR VERIFYING THE ACCURACY OF THE INFORMATION CONTAINED HEREIN.

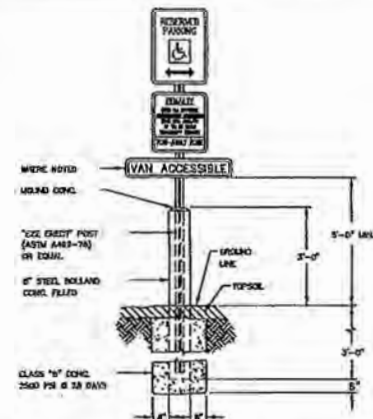
6. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR VERIFYING THE ACCURACY OF THE INFORMATION CONTAINED HEREIN.

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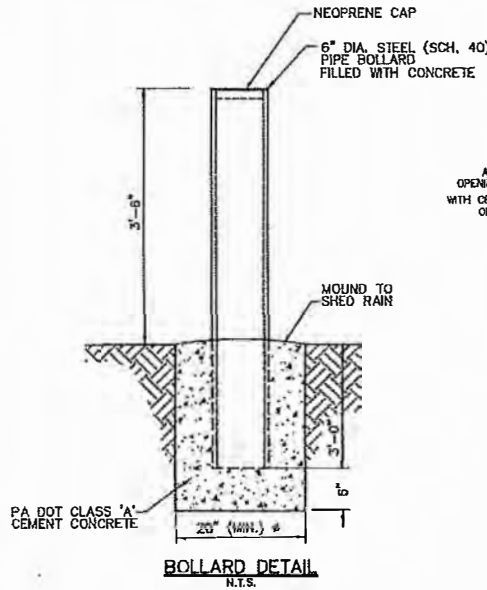
8. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR VERIFYING THE ACCURACY OF THE INFORMATION CONTAINED HEREIN.

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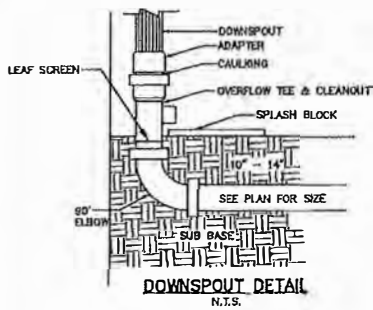
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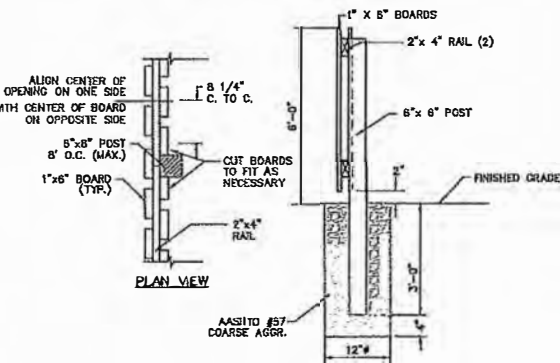
"RESERVED PARKING" SIGN (R7-8) WITH  
"VAN ACCESSIBLE" SIGN (R7-8P)  
N.T.S.



BOLLARD DETAIL  
N.T.S.

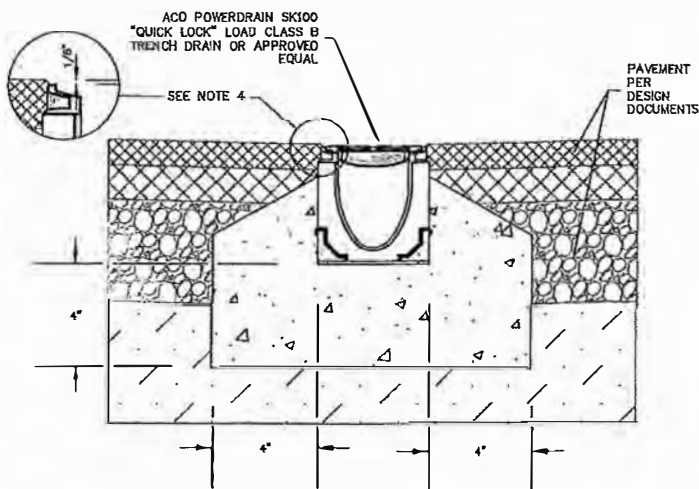


DOWNSPOUT DETAIL  
N.T.S.



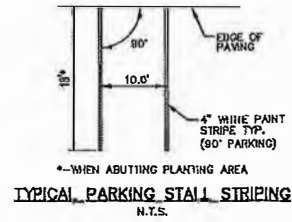
NOTE:  
- ALL WOOD TO BE CEDAR

BOARD ON BOARD FENCE DETAIL  
N.T.S.

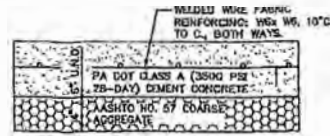


- NOTES:
1. EXPANSION AND CONTRACTION CONTROL JOINTS AND REINFORCEMENT ARE RECOMMENDED TO PROTECT CHANNEL AND CONCRETE SURROUND.
  2. MINIMUM CONCRETE STRENGTH - 4,000 PSI. CONCRETE SHOULD BE VIBRATED TO ELIMINATE AIR POCKETS.
  3. EXPANSION AND CONTRACTION CONTROL JOINTS AND REINFORCEMENT ARE RECOMMENDED TO PROTECT CHANNEL AND CONCRETE SURROUND.
  4. THE FINISHED LEVEL OF THE CONCRETE SURROUND MUST BE APPROX. 1/8" [3mm] ABOVE THE TOP OF THE CHANNEL EDGE.
  5. CONCRETE BASE THICKNESS SHOULD MATCH SLAB THICKNESS.
  6. REFER TO ACO'S LATEST INSTALLATION INSTRUCTIONS FOR FURTHER DETAILS.

TRENCH DRAIN DETAIL  
N.T.S.

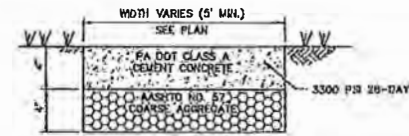


TYPICAL PARKING STALL STRIPING  
N.T.S.



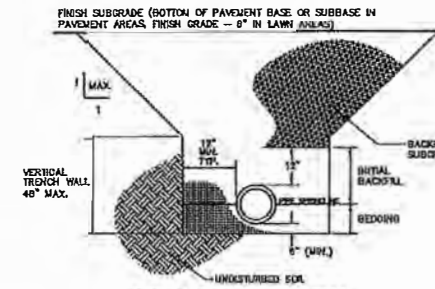
MATERIAL STORAGE PAD DETAIL  
N.T.S.

- NOTES:
1. WELDED WIRE FABRIC MAY BE PLACED W/ TRANSVERSE WIRES ABOVE OR BELOW LONGITUDINAL WIRES.
  2. FURNISH WELDED WIRE FABRIC PER PA DOT PUB 408, SEC. 705.3



- NOTES:
1. SIDEWALKS SHALL BE CONSTRUCTED IN 30 FT. SECTIONS EXCEPT FOR CLOSURES.
  2. SECTIONS SHALL BE SEPARATED BY 1/4" THICK EXPANSION JOINT MATERIAL TO BE INSTALLED BETWEEN SECTIONS AND AT ALL STRUCTURES.
  3. SIDEWALKS SHALL BE SCORED EVERY 4 FT.

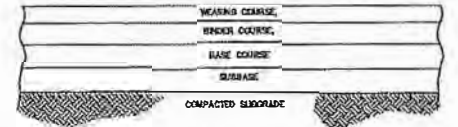
CONCRETE SIDEWALK DETAIL  
N.T.S.



TYPICAL PIPE TRENCH DETAIL  
N.T.S.

TRENCH REQUIREMENTS (SEE NOTES)				
PIPE TYPE	BEDDING	INITIAL BACKFILL	BACKFILL TO SUBGRADE	BENEATH BITUMINOUS PAVEMENT, CONCRETE SIDEWALK OR PAVEMENT (EXCEPT SEE NOTE 3)
ANY PIPE WITHIN PUBLIC ROW	ASHTO #1 COARSE AGGREGATE	PA DOT NO. 2A COARSE AGGREGATE	PA DOT NO. 2B COARSE AGGREGATE	PA DOT NO. 2B COARSE AGGREGATE
STORM (METAL)	ASHTO #1 COARSE AGGREGATE	SUITABLE MATERIAL	SUITABLE MATERIAL	SUITABLE MATERIAL
STORM (RCP)	ASHTO #1 COARSE AGGREGATE	PA DOT NO. 2A COARSE AGGREGATE	SUITABLE MATERIAL	SUITABLE MATERIAL
STORM (OTHER)	PA DOT NO. 2A COARSE AGGREGATE	PA DOT NO. 2A COARSE AGGREGATE	SUITABLE MATERIAL	SUITABLE MATERIAL
SEWERY	ASHTO #1 COARSE AGGREGATE	PA DOT NO. 2A COARSE AGGREGATE	SUITABLE MATERIAL	SUITABLE MATERIAL
WATER (CP)	NONE REQUIRED	PA DOT NO. 2A COARSE AGGREGATE	SUITABLE MATERIAL	SUITABLE MATERIAL
WATER (RUBING)	CONCRETE SAND, TYPE A, PA DOT, PUB. 408, § 705.1	CONCRETE SAND, TYPE A, PA DOT, PUB. 408, § 705.1	SUITABLE MATERIAL	SUITABLE MATERIAL
OTHER PIPE, CONDUIT	ASHTO #1 COARSE AGGREGATE	PA DOT NO. 2A COARSE AGGREGATE	SUITABLE MATERIAL	SUITABLE MATERIAL

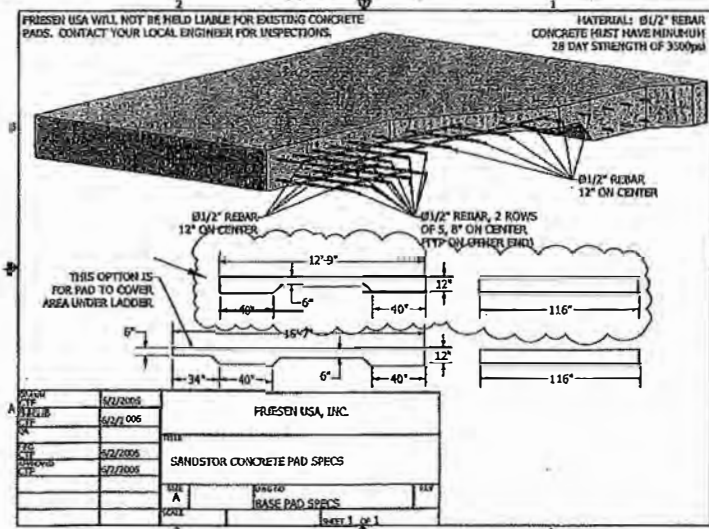
- NOTES:
1. ALTERNATIVELY, SHORE TRENCH WALLS PER OSHA OR OTHER APPLICABLE AGENCIES WITH JURISDICTION.
  2. SEE PROJECT SPECIFICATIONS FOR REQUIREMENTS FOR "SUITABLE MATERIAL". PA DOT #2 COARSE AGGREGATE MAY BE USED IN LIEU OF "SUITABLE MATERIAL" AT NO ADDITIONAL COST TO OWNER.
  3. FOR PIPE TRENCHES WITHIN EX. BITUMINOUS PAVEMENT TO REMAIN, USE PA DOT NO. 2A COARSE AGGREGATE TO BACKFILL TO SUBGRADE.



BITUMINOUS PAVEMENT SECTION  
N.T.S.

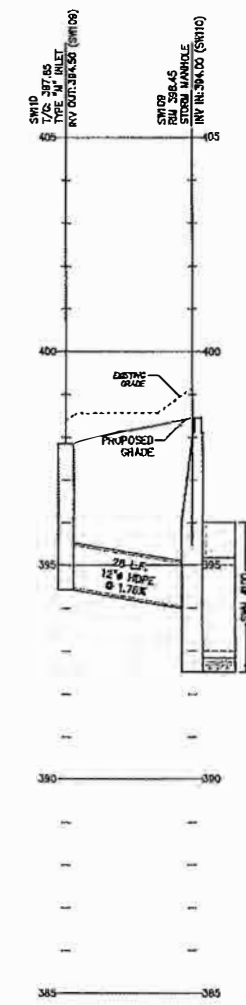
LOCATION		MEDIUM DUTY, ON-SITE PARKING AREAS & DRIVEWAYS	
DEPTH			
WEARING COURSE: SUPERPAVE ASPHALT MIXTURE DESIGN, WMA WEARING COURSE, PG 64-22, <0.3 MILLION ESALS, 9.5 MM MIX, SRL-L	1 1/2"		
BINDER: SUPERPAVE ASPHALT MIXTURE DESIGN, WMA BINDER COURSE, PG 64-22, <0.3 MILLION ESALS, 9.5 MM MIX, SRL-L	3"		
BASE: BITUMINOUS CONCRETE	NONE		
SUBBASE: Penn DOT 2A STONE BASE	10"		

- NOTE:
1. PAVEMENT SHOULD BE INSTALLED LATE IN CONSTRUCTION WHEN MOST HEAVY CONSTRUCTION TRAFFIC WILL NO LONGER COME ON-SITE. PRIOR TO PAVING, THE SITE SHOULD BE PROTECTED AGAIN, NEW SOFT AREAS TREATED IN ACCORDANCE WITH SOIL REMEDIATION NOTES ON SHEET 1, THE BASE LEVELED AND THICKENED AS REQUIRED, AND THE SITE PAVED AT THE END OF CONSTRUCTION.
  2. FOR PAVEMENT WHERE UNBURIED, EXTEND SUBBASE AND/OR BASE COURSE EIGHT INCHES BEYOND EACH REQUIRED EDGE OF THE BINDER AND SURFACE COURSES.
  3. FLEXIBLE (AGGREGATE) BASE SHOULD BE COMPACTED TO 100% OF THE MATERIAL'S MAXIMUM DRY DENSITY AS PER MODIFIED PROCTOR (ASTM D-1557).
  4. PAVEMENT MUST BE PLACED OVER WELL PREPARED SUBGRADE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR (ASTM D-698) DENSITY IN THE UPPER 2' BELOW SUBGRADE AND TO AT LEAST 95% OF THE STANDARD PROCTOR (ASTM D-698) MAXIMUM DRY DENSITY ELSEWHERE.
  5. SEALING MATERIAL FOR FILLING PAVEMENT JOINTS SHALL MEET THE REQUIREMENTS OF ASTM D3405 OR D1190. ALTERNATIVELY, LOW MODULUS MATERIALS SUCH AS SILICONE, HOT OR COLD-POURED RUBBERIZED ASPHALT OR WIRE RUBBER MEETING THE MANUFACTURER'S SPECIFICATIONS MAY BE USED.
  6. CAR TRAFFIC SHOULD NOT BE ALLOWED ON THE NEW PAVEMENT FOR AT LEAST 3-DAYS; SIMILARLY NO TRUCK TRAFFIC FOR 7-DAYS.
  7. WHERE THE EDGE OF THE TRAIL IS ABOVE THE SURROUNDING GRADE, BITUMINOUS PAVEMENT SHALL BE FEATHERED.

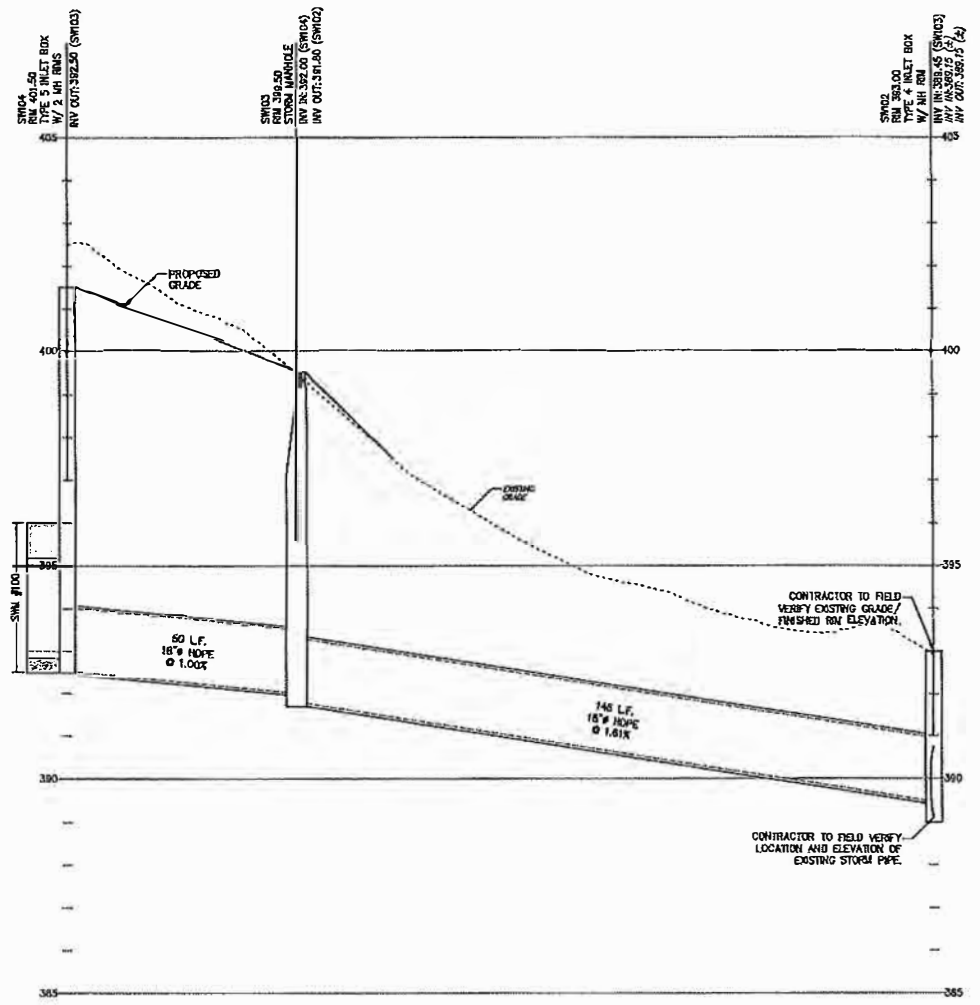


## PRELIMINARY/FINAL CONSTRUCTION DETAILS AND NOTES

10/05/22	PER TOWNSHIP ENGINEER COMMENTS
09/25/22	PRICING SET
NO.	DATE
KEYWORD	
LAND DEVELOPMENT PLANS	
FOR	
APPLEBROOK GOLF CLUB	
TURF MAINTENANCE AREA	
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA	
ChesterValley	
ENGINEERS, INC.	
20558-0015	
SCALE: AS NOTED	
DATE: 07/26/2022	
DRAWN BY: RJB	
CHECKED BY: BJA	
DESIGNED BY: BJA	
DRAWING	



STORMWATER PROFILE  
FROM SW110 TO SW109  
SCALE: 1"=20' HORIZ. 1"=2' VERT.



STORMWATER PROFILE  
FROM SW104 TO SW102  
SCALE: 1"=20' HORIZ. 1"=2' VERT.



PRELIMINARY/FINAL  
PROFILES

NO.	DATE	REVISION
2	10/05/22	PER TOWNSHIP ENGINEER COMMENTS
1	09/26/22	PRICING SET

LAND DEVELOPMENT PLANS  
FOR  
**APPLEBROOK GOLF CLUB  
TURF MAINTENANCE AREA**  
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA

**Chester Valley**  
ENGINEERS & ARCHITECTS  
81 Chestnut Road, P.O. Box 411, LEBANON, PA 17042  
(717) 271-1111  
www.chester-valley.com

PROJECT NO. **20558-0015**

SCALE	DATE	DRAWN BY	CHECKED BY	PLANNED BY
AS NOTED	07/26/2022	RUB	BHA	





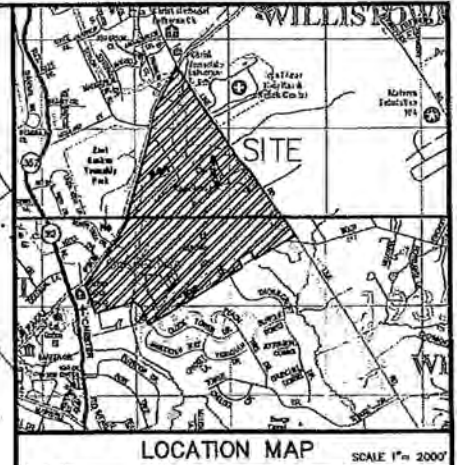
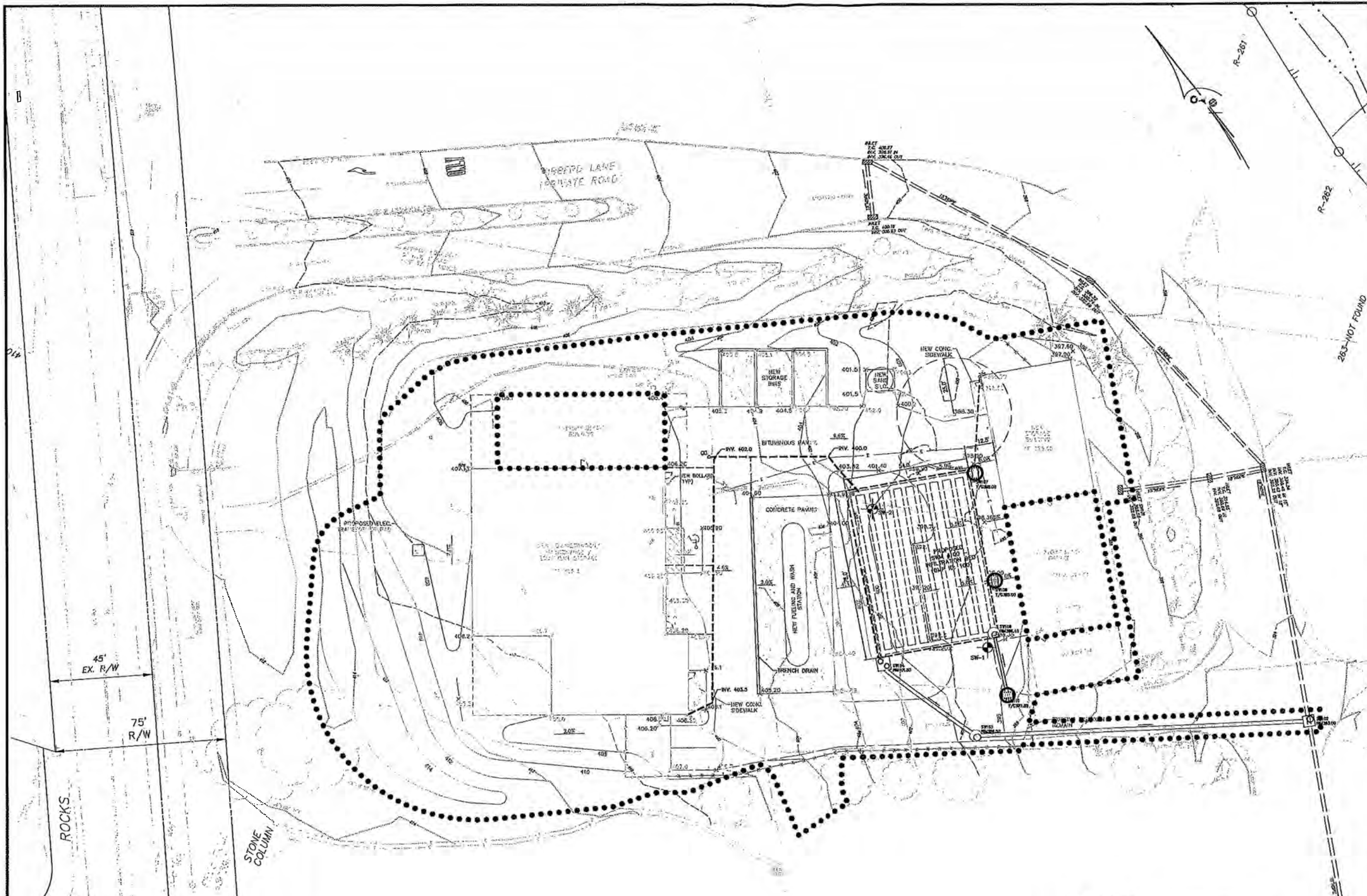












- LEGEND**
- EXISTING FEATURES**
- EXISTING PROPERTY BOUNDARY
  - EXISTING ADJOINING PROP. LINE
  - EXISTING RIGHT-OF-WAY LINE
  - EXISTING EASEMENT
  - EXISTING SETBACK BOUNDARY
  - EXISTING FLOOD PLAIN
  - EXISTING STREAM LINE
  - EXISTING WETLANDS
  - EXISTING BUILDING
  - EXISTING 2' CONTOURS
  - EXISTING 10' CONTOURS
  - EXISTING SPOT ELEVATION
  - EXISTING SOIL TYPE
  - EXISTING CURB
  - EXISTING EDGE OF PAVEMENT
  - EXISTING FENCE
  - EXISTING GUIDE RAIL
  - EXISTING STORM INLET AND PIPE
  - EXISTING STORM ENDWALL AND PIPE
  - EXISTING SANITARY SEWER
  - EXISTING U/G FIRE LINE
  - EXISTING U/G WATER LINE
  - EXISTING U/G ELECTRIC LINE
  - EXISTING U/G GAS LINE
  - EXISTING OVERHEAD WIRES
  - EXISTING LIGHT POLE
  - EXISTING SIGN
  - EXISTING UTILITY POLE
  - EXISTING PINE TREE
  - EXISTING DECIDUOUS TREE
  - EXISTING TREE & SHRUB LINE
  - EXISTING SLOPES 15% - 25%
  - EXISTING SLOPES 25% +
  - INFILTRATION TEST

- PROPOSED FEATURES**
- PROPOSED BUILDING ADDITION
  - FUTURE BUILDING ADDITION
  - PROPOSED PAVEMENT
  - PROPOSED CONCRETE PAD/SIDEWALK
  - PROPOSED CURB
  - NUMBER OF PROPOSED STANDARD PARKING SPACES
  - PROPOSED SIGN
  - PROPOSED 2' CONTOURS
  - PROPOSED 10' CONTOURS
  - PROPOSED SPOT ELEVATION
  - PROPOSED STORM PIPE AND INLET
  - PROPOSED STORM PIPE AND MANHOLE
  - PROPOSED STORM PIPE AND CLEANOUT
  - PROPOSED PIPE FLOW ARROW

**PRELIMINARY/FINAL  
POST-CONSTRUCTION  
STORMWATER  
MANAGEMENT PLAN**

NO.	DATE	REVISION
2	10/05/22	PER TOWNSHIP ENGINEER COMMENTS
1	09/26/22	PRICING SET
1	08/26/22	PRICING SET

**LAND DEVELOPMENT PLANS**  
FOR  
**APPLEBROOK GOLF CLUB  
TURF MAINTENANCE AREA**  
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA

**ChesterValley**  
ENGINEERS, INC.  
20558-0015

SCALE: 1" = 20'  
DATE: 07/26/2022  
DRAWN BY: RDB  
CHECKED BY: BHE  
DESIGNED BY: BHE

**NOTES TO USER OF THESE PLANS:**

1. THE INFORMATION CONTAINED ON THIS PLAN WAS PREPARED BY CHESTER VALLEY ENGINEERS, INC. (C.V.E.) FOR THE USE OF THE CLIENT. IT IS THE CLIENT'S RESPONSIBILITY TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. C.V.E. IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THE PLANS OR FOR ANY CONSEQUENCES ARISING FROM THE USE OF THESE PLANS.

2. THE PLANS ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND CONDITIONS OF CONTRACT. ANY CHANGES TO THE PLANS MUST BE APPROVED BY C.V.E. IN WRITING.

3. THE PLANS ARE NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF C.V.E.

4. THE PLANS ARE NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF C.V.E.

5. THE PLANS ARE NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF C.V.E.

6. THE PLANS ARE NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF C.V.E.

7. THE PLANS ARE NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF C.V.E.

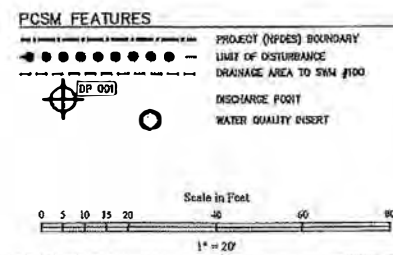
8. THE PLANS ARE NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF C.V.E.

9. THE PLANS ARE NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF C.V.E.

10. THE PLANS ARE NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF C.V.E.

**SEE SHEET FOR FACILITY OWNERS DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.**

**PENNSYLVANIA ONE CALL SYSTEM, INC.**  
CALL 3 WORKING DAYS BEFORE YOU DIG  
1-800-242-1776  
POCS SERIAL NUMBER: \_\_\_\_\_



GENERAL NOTES:-

- STORMWATER MANAGEMENT DESIGN:  
REFER TO THE "POST-CONSTRUCTION STORMWATER MANAGEMENT REPORT", PREPARED BY CHESTER VALLEY ENGINEERS.
- MAINTENANCE NOTES:  
A. THE BMP'S LISTED BELOW WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER.
  - INFILTRATION BED
  - WATER QUALITY FILTER(S)
  - STORM SEWER AND ASSOCIATED STRUCTURES
- DESIGN CONSIDERATIONS:  
SUBSURFACE BED DESIGNED TO STORE AND MITIGATE POST-DEVELOPMENT RUNOFF TO RATES LESS THAN THOSE REQUIRED BY TOWNSHIP CODE. SUBSURFACE BED DESIGNED TO MITIGATE THE POST-DEVELOPMENT VOLUME INCREASE DUE TO DEVELOPMENT. WATER QUALITY FILTERS DESIGNED TO FILTER ALL SURFACE RUNOFF.
- THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN HAS BEEN DESIGNED TO MEET THE FOLLOWING GOALS AND GUIDELINES:
  - PRESERVE THE INTEGRITY OF STREAM CHANNELS AND MAINTAIN AND PROTECT THE PHYSICAL, BIOLOGICAL AND CHEMICAL QUALITIES OF RECEIVING STREAMS.
  - PREVENT AN INCREASE IN THE RATE OF STORMWATER RUNOFF.
  - MINIMIZE ANY INCREASE IN STORMWATER RUNOFF VOLUME.
  - MINIMIZE IMPERVIOUS AREAS.
  - MANAGE THE PROTECTION OF EXISTING DRAINAGE FEATURES AND EXISTING VEGETATION.
  - MINIMIZE LAND CLEARING AND GRADING.
  - MINIMIZE SOIL COMPACTION.
  - UTILIZE OTHER STRUCTURAL OR NONSTRUCTURAL BMP'S THAT PREVENT OR MINIMIZE CHANGES IN STORMWATER RUNOFF.
- THE RECEIVING WATER FOR THIS PROJECT IS RIDLEY CREEK. THE CHAPTER 93 CLASSIFICATION FOR THIS WATERSHED IS HIGH QUALITY-TROUT STOCKING FISHES (HQ-TSF).
- THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 26 PA. CODE 2601 ET SEQ., 2711 ET SEQ. AND 2871 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTE AT THIS SITE. CONSTRUCTION WASTES MUST BE RECYCLED TO THE EXTENT PRACTICABLE, AND DISPOSAL METHODS MUST COMPLY WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- THE PERMITTEE SHALL PROVIDE ENGINEERING CONSTRUCTION OVERSIGHT FOR THE PROPOSED STORMWATER BMP'S. A LICENSED PROFESSIONAL ENGINEER KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF STORMWATER BMP'S, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.
- AS-BUILT PLANS OF THE STORMWATER BMP'S SHALL BE PROVIDED WITHIN SIX MONTHS FOLLOWING THE COMPLETION OF EACH PHASE. THE AS-BUILT PLANS SHALL BE SIGNED AND SEALED BY A PA REGISTERED PROFESSIONAL ENGINEER.
- A NOTICE OF TERMINATION (NOT) WILL BE REQUIRED TO BE SUBMITTED FOLLOWING APPROVAL OF THE FINAL AS-BUILT PLANS. PRIOR TO ACCEPTING THE NOT, THE DEPARTMENT AND/OR CONSERVATION DISTRICT STAFF WILL PERFORM A FINAL INSPECTION TO ENSURE SITE STABILIZATION AND VERIFY ADEQUATE INSTALLATION AND FUNCTION OF STORMWATER BMP'S.
- PCSM REPORTING AND RECORDKEEPING. THE PCSM PLAN, INSPECTION REPORTS AND MONITORING RECORDS SHALL BE AVAILABLE FOR REVIEW AND INSPECTION BY THE DEPARTMENT OR THE CONSERVATION DISTRICT.
- FINAL CERTIFICATION. THE PERMITTEE SHALL INCLUDE WITH THE NOTICE OF TERMINATION "RECORD DRAWINGS" WITH A FINAL CERTIFICATION STATEMENT FROM A LICENSED PROFESSIONAL, WHICH READS AS FOLLOWS:  
"I (NAME) DO HEREBY CERTIFY PURSUANT TO THE PENALTIES OF 18 PA.C.S.A. § 4904 TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THE ACCOMPANYING RECORD DRAWINGS ACCURATELY REFLECT THE AS-BUILT CONDITIONS, ARE TRUE AND CORRECT, AND ARE IN CONFORMANCE WITH CHAPTER 102 OF THE RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE PROJECT SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PCSM PLAN, ALL APPROVED PLAN CHANGES AND ACCEPTED CONSTRUCTION PRACTICES."
- (1) THE PERMITTEE SHALL RETAIN A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN.  
(2) THE PERMITTEE SHALL PROVIDE A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN TO THE PERSON IDENTIFIED IN THIS SECTION AS BEING RESPONSIBLE FOR THE LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP'S.
- UPON PERMANENT STABILIZATION OF THE EARTH DISTURBANCE ACTIVITY UNDER § 102.22(A)(2) (RELATING TO PERMANENT STABILIZATION), AND INSTALLATION OF BMP'S IN ACCORDANCE WITH AN APPROVED PLAN PREPARED AND IMPLEMENTED IN ACCORDANCE WITH §§ 102.4 AND 102.8 (RELATING TO EROSION AND SEDIMENT CONTROL REQUIREMENTS), AND PCSM REQUIREMENTS), THE PERMITTEE OR CO-PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE DEPARTMENT OR CONSERVATION DISTRICT.  
THE NOTICE OF TERMINATION MUST INCLUDE:
  - THE FACILITY NAME, ADDRESS AND LOCATION.
  - THE OPERATOR NAME AND ADDRESS.
  - THE PERMIT NUMBER.
  - THE REASON FOR PERMIT TERMINATION.
  - IDENTIFICATION OF THE PERSONS WHO HAVE AGREED TO AND WILL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP'S IN ACCORDANCE WITH §102.6(b)(4) AND PROOF OF COMPLIANCE WITH § 102.6(b)(4)(2).

PRIOR TO ACCEPTING THE NOT, THE DEPARTMENT AND/OR CONSERVATION DISTRICT STAFF WILL PERFORM A FINAL INSPECTION AND APPROVE OR DENY THE NOTICE OF TERMINATION.

GENERAL CONSERVATION NOTES AND SPECIFICATIONS:

INTENT OF CONSERVATION PROGRAM: THE INTENT OF THIS PROGRAM IS TO PREVENT ACCELERATED EROSION OF THE EXPOSED SITE SOILS DURING THE CONSTRUCTION AND PERMANENT LIFE PERIODS OF THE DEVELOPMENT. THE PROGRAM REQUIRES RETENTION OF ALL SEDIMENTS ON THE CONSTRUCTION SITE TO MINIMIZE THE IMPACT OF DEVELOPMENT ON EXISTING STREAMS AND ADJACENT PROPERTY OWNERS. THESE OBJECTIVES WILL BE ACHIEVED BY MINIMIZING THE EXPOSURE TIME OF POTENTIALLY ERODIBLE SOILS TO RUNOFF AND INSTALLATION OF THE TEMPORARY CONSTRUCTION. THE INTENT OF THIS PROGRAM SHOULD BE UNDERSTOOD AND IMPLEMENTED THROUGHOUT THE ENTIRE DEVELOPMENT. THE VARIOUS CONSTRUCTION TRADES SHOULD BE APPRAISED OF THIS PROGRAM AND DIRECTED TO PREVENT UNWDE DISTURBANCE OF PREPARED AND PROTECTED SURFACES.

SURFACE STABILIZATION CRITERIA: ALL DISTURBED SOIL SURFACES, INCLUDING SOIL STOCKPILES, ARE SUBJECT TO EROSION AND SHALL BE STABILIZED EITHER TEMPORARILY OR PERMANENTLY, IMMEDIATELY DURING NON-GERMINATION PERIODS. MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. CRUSHED STONE ON PAVEMENT SUBGRADES IS CONSIDERED ADEQUATE PROTECTION. ALL DISTURBED ZONES AND VEGETATED REGIONS SHALL BE STABILIZED, PREFERABLY WITH A PERMANENT TREATMENT.

CRITICAL VEGETATION AREAS (CVA)

CRITICAL VEGETATION AREAS ARE TO BE GRADED, HYDROSEEDDED, AND MULCHED WITHIN 10 DAYS OF THE BEGINNING OF EXCAVATION. IN GENERAL, CRITICAL VEGETATION AREAS ARE DEFINED AS CUT SLOPES STEEPER THAN 3:1, ALL FILL SLOPES STEEPER THAN 4:1 AND IN ALL DRAINAGE SLOPES.

DISPOSAL AND RECYCLING

CONTRACTOR IS RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL DEMOLISHED OR UNUSED CONSTRUCTION MATERIALS. GARBAGE SHALL BE COLLECTED ON-SITE UNTIL RETRIEVED BY AN APPROVED DISPOSAL OR RECYCLING COMPANY. CONTRACTOR SHALL NOT INCORPORATE EXCESS MATERIALS.

- LIKELY WASTE TO BE GENERATED AT THIS SITE:
- UNUSED CONCRETE TO BE PLACED IN CONCRETE WASHOUT AREAS;
  - EXCESS SILT SOCK AND FENCING MATERIALS;
  - GENERAL RUBBISH AND DEBRIS

THERMAL IMPACT

STORMWATER RUNOFF FROM THE DRIVEWAY AND PARKING AREAS DRAIN TO A SUBSURFACE INFILTRATION BED AND UNDERGROUND STORM DRAIN PIPES. THEREFORE, THE INITIAL RUNOFF THAT IS MOST LIKELY TO WARMER IS SENT UNDERGROUND AND NOT DISCHARGED TO THE WATERCOURSE. FURTHER, THE REDUCTION OF IMPERVIOUS SURFACES LESSENS THE POTENTIAL OF THERMAL IMPACTS. WATER HAS TIME TO COOL PRIOR TO LEAVING THE SITE AND DRAINING TO THE WATER COURSE.

SPECIAL GEOLOGIC AND SOIL CONDITIONS

NO SPECIAL SOIL OR GEOLOGICAL ISSUES ARE KNOWN.

POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM) LONG-TERM OPERATIONS AND MAINTENANCE REQUIREMENTS

- UNTIL THE PERMITTEE OR CO-PERMITTEE HAS RECEIVED WRITTEN APPROVAL OF A NOTICE OF TERMINATION, THE PERMITTEE OR CO-PERMITTEE WILL REMAIN RESPONSIBLE FOR COMPLIANCE WITH THE PERMIT TERMS AND CONDITIONS INCLUDING LONG-TERM OPERATION AND MAINTENANCE OF ALL PCSM BMP'S ON THE PROJECT SITE AND IS RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE PROJECT SITE.
- THE PERMITTEE OR CO-PERMITTEE SHALL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMP'S UNLESS A DIFFERENT PERSON IS IDENTIFIED IN THE NOTICE OF TERMINATION AND HAS AGREED TO LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMP'S.
- FOR ANY PROPERTY CONTAINING A PCSM BMP, THE PERMITTEE OR CO-PERMITTEE SHALL RECORD AN INSTRUMENT WITH THE RECORDER OF DEEDS WHICH WILL ASSURE DISCLOSURE OF THE PCSM BMP AND THE RELATED OBLIGATIONS IN THE ORDINARY COURSE OF A TITLE SEARCH OF THE SUBJECT PROPERTY. THE RECORDED INSTRUMENT MUST IDENTIFY THE PCSM BMP, PROVIDE FOR NECESSARY ACCESS RELATED TO LONG-TERM OPERATION AND MAINTENANCE FOR PCSM BMP, AND PROVIDE NOTICE THAT THE RESPONSIBILITY FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP IS A COVENANT THAT RUNS WITH THE LAND THAT IS BINDING UPON AND ENFORCEABLE BY THE SUBSEQUENT GRANTEE, AND PROVIDE PROOF OF FILING WITH THE NOTICE OF TERMINATION UNDER § 102.7(b)(5) (RELATING TO PERMIT TERMINATION).
- THE PERSON RESPONSIBLE FOR PERFORMING LONG-TERM OPERATION AND MAINTENANCE MAY ENTER INTO AN AGREEMENT WITH ANOTHER PERSON INCLUDING A CONSERVATION DISTRICT, NONPROFIT ORGANIZATION, MUNICIPALITY, AUTHORITY, PRIVATE CORPORATION OR OTHER PERSON, TO TRANSFER THE RESPONSIBILITY FOR PCSM BMP'S OR TO PERFORM LONG-TERM OPERATION AND MAINTENANCE AND PROVIDE NOTICE THEREOF TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- A PERMITTEE OR CO-PERMITTEE THAT FAILS TO TRANSFER LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP OR OTHERWISE FAILS TO COMPLY WITH THIS REQUIREMENT SHALL REMAIN JOINTLY AND SEVERALLY RESPONSIBLE WITH THE LANDOWNER FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP'S LOCATED ON THE PROPERTY.
- IN THE EVENT THAT THE BMP IS NOT FUNCTIONING PROPERLY, THE PERSON RESPONSIBLE FOR PERFORMING LONG-TERM OPERATION AND MAINTENANCE SHALL BE REQUIRED TO REPAIR OR REPLACE THE BMP TO ENSURE FUNCTION AND OPERATION.
- THE PERMITTEE SHALL BE REQUIRED TO SUBMIT A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL BMP REPAIR AND MAINTENANCE ACTIVITIES TO THE TOWNSHIP, CONSERVATION DISTRICT, AND THE DEPARTMENT UPON REQUEST.

BMP FAILURE NOTES (PER PROTOCOL 2 OF THE BMP MANUAL)

THE TERM "FAILURE" FOR THE PROPOSED SUBSURFACE BED SHALL BE DEFINED AS:

- THE LOSS OF FUNCTIONALITY OF THE PROPOSED OUTLET STRUCTURE OR DISCHARGE PIPE
- THE LOSS OF STRUCTURAL INTEGRITY OF THE STONE AND PIPES
- THE ACCUMULATION OF SEDIMENT, TRASH OR DEBRIS IN PERIMETER DRAINAGE STRUCTURES
- STANDING WATER IS OBSERVED IN THE BASIN AFTER 72 HOURS

THE PERMITTEE SHALL MAKE THE NECESSARY REPAIRS TO THE OUTLET STRUCTURE, DISCHARGE PIPING, STONE, AND PERFORATED PIPE AS NEEDED. IF STANDING WATER IS OBSERVED AFTER 72 HOURS, CONSULT ENGINEER FOR REMEDIATION OF THE UNDERGROUND BED.

THE TERM "FAILURE" FOR THE PROPOSED WATER QUALITY INLETS (FILTER INSERTS) SHALL BE DEFINED AS:

- DISCOVER EVIDENCE OF DAMAGED FILTER MEDIA
- DISCOVER EVIDENCE OF THE FILTER MEDIA'S INABILITY TO SUPPORT ACCUMULATED SEDIMENT OR DEBRIS.

THE PERMITTEE SHALL REPAIR BMP FAILURE BY REPLACING THE FILTER MEDIA IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.

POST CONSTRUCTION STORMWATER MANAGEMENT REPORTING AND RECORD KEEPING

A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL BMP REPAIR AND MAINTENANCE ACTIVITIES MUST BE PROVIDED AS PART OF THE LONG-TERM OPERATION AND MAINTENANCE PROGRAM.

THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN, INSPECTION REPORTS, AND MONITORING RECORDS SHALL BE AVAILABLE FOR REVIEW AND INSPECTION BY THE DEPARTMENT OR THE CONSERVATION DISTRICT.

WATER QUALITY INLETS (FILTER INSERTS)

IT SHALL BE THE SOLE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN ALL WATER QUALITY INLETS ON SITE.

INSPECTION REQUIREMENTS

- WATER QUALITY INLET INSERTS SHOULD BE INSPECTED THREE TIMES PER YEAR.
  - DURING THE THREE ROUTINE INSPECTIONS, THE FILTER MEDIA SHALL BE CLEANED.
  - ONE REGULAR CHANGE AND DISPOSAL OF THE FILTER MEDIA SHALL OCCUR DURING THE CALENDAR YEAR AS WELL.

BMP FAILURE

- BMP FAILURE IS DEFINED AS DISCOVERING EVIDENCE OF TORN FILTER MEDIA OR FILTER MEDIA INABILITY TO SUPPORT ACCUMULATED SEDIMENT OR DEBRIS.
- REPAIR BMP FAILURE BY REPLACING THE FILTER MEDIA IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.

GENERAL MAINTENANCE NOTES

- WATER QUALITY INLET INSERTS SHALL BE CHECKED TO ENSURE THEY ARE SECURELY FASTENED DURING EACH INSPECTION.
- RECOMMENDED MAINTENANCE IS PERFORMED INCLUDING REMOVAL AND DISPOSAL OF THE FILTER MEDIA OR EXCESS MATERIAL BY PERSONNEL.

DISPOSAL

DISPOSAL OF REMOVED MATERIAL WILL DEPEND ON THE NATURE OF THE DRAINAGE AREA AND THE INTENT AND FUNCTION OF THE WATER QUALITY INSERT.

- MATERIAL REMOVED FROM WATER QUALITY INSERTS THAT SERVE "HOT SPOTS" SUCH AS FUELING STATIONS THAT RECEIVE A LARGE AMOUNT OF DEBRIS SHOULD BE HANDLED ACCORDING TO DEP REGULATIONS FOR THAT TYPE OF SOLID WASTE, SUCH AS A LANDFILL THAT IS APPROVED BY DEP TO ACCEPT SOLID WASTE. WATER QUALITY INSERTS THAT PRIMARILY CAATCH SEDIMENT AND DETRITUS FROM AREAS SUCH AS LAWNS MAY REUSE THE WASTE ON SITE.

CONSTRUCTION SEQUENCE

- REMOVE THE GRATE OF THE INSTALLED INLET AND SET IT TO THE SIDE.
- REMOVE DEBRIS AND LITTER FROM THE INLET.
- CLEAN OFF THE GRATE BEARING LEDGE.
- LOWER THE FILTER ASSEMBLY INTO THE INLET UNTIL THE ASSEMBLY'S SUPPORT FLANGES REST ON THE GRATE BEARING LEDGE.
- INSURE THAT THE FOUR FILTER MEDIUM CARTRIDGES ARE ATTACHED TO THE D-RINGS IN THE BOTTOM CORNERS OF THE FILTER ASSEMBLY.

CRITICAL STAGE OF CONSTRUCTION: CONTACT ENGINEER TO VERIFY INSTALLATION OF WATER QUALITY INSERTS

- REPLACE THE INLET GRATE.

SUBSURFACE INFILTRATION BED (SWM #100)

IT SHALL BE THE SOLE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM(S).

SPECIFICATIONS

- AGGREGATE: AGGREGATE FOR BEDS SHALL BE 3/8 INCH TO 3/4 INCH UNIFORMLY GRADED COARSE AGGREGATE, AASHTO NUMBER 57 PER TABLE 4. AASHTO SPECIFICATIONS, PART 1, EDITION 13, 100R (P. 47).
- NON-WOVEN GEOTEXTILE SHALL CONSIST OF NEEDLED NON-WOVEN POLYPROPYLENE FIBERS AND MEET THE FOLLOWING PROPERTIES:
  - GRAB TENSILE STRENGTH (ASTM-D4632): 120 LBS.
  - MULLER BURST STRENGTH (ASTM-D3788): 225 PSI.
  - FLOW RATE (ASTM-D4491): 95 GPM/FT<sup>2</sup>
  - IV RESISTANCE AFTER 500 HOURS (ASTM-D4355): 70%
  - HEAT-SET OR HEAT-CALCAREATED FABRICS ARE NOT PERMITTED. ACCEPTABLE TYPES INCLUDE MARFI 140N, AN1000 4547, AND GEOTEX 451.
- STORAGE PIPE: SHALL BE CONTINUOUSLY PERFORATED, SMOOTH INTERIOR, HIGH-DENSITY POLYETHYLENE (HDPE) PIPE SHALL MEET AASHTO M252, TYPE S OR AASHTO M284, TYPE S.

INSPECTION REQUIREMENTS

- ALL STORMWATER MANAGEMENT SYSTEMS SHALL BE INSPECTED ANNUALLY, OR AFTER EACH RAINFALL EVENT IN EXCESS OF TWO (2") INCHES (MAJOR STORM EVENT), FOR TRASH AND DEBRIS; ANY DISCOVERED TRASH OR DEBRIS SHALL BE REMOVED IMMEDIATELY.

GENERAL MAINTENANCE NOTES

- ACCESS FOR VIEWING OR VACUUMING IS PROVIDED THROUGH OBSERVATION PORTS AND STORM MANHOLE.
- REMOVE SEDIMENT/TRASH/DEBRIS FROM PERIMETER DRAINAGE STRUCTURES AND OUTLET STRUCTURE.
- THE OVERTOPPING VEGETATION OF SUBSURFACE INFILTRATION FEATURES SHOULD BE MAINTAINED IN GOOD CONDITION, AND ANY BARE SPOTS REVEGETATED AS SOON AS POSSIBLE.
- VEHICULAR ACCESS ON SUBSURFACE INFILTRATION AREAS SHOULD BE PROHIBITED IN UNPAVED AREAS, AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS. IF CONTINUAL ACCESS IS NEEDED, USE OF PERMEABLE, TURF REINFORCEMENT SHOULD BE CONSIDERED.
- CONTACT QUALIFIED ENGINEER IMMEDIATELY AFTER DISCOVERY OF SINKHOLE OCCURRENCE. SINKHOLE SHOULD BE PROMPTLY AND PROPERLY REPAIRED.

CONSTRUCTION SEQUENCE

- INSTALL AND MAINTAIN ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
- INSTALL CONSTRUCTION FENCING AROUND PERIMETER OF INFILTRATION AREA TO PREVENT CONSTRUCTION TRAFFIC FROM COMPACTING EXISTING SUBGRADE AREAS.
- INSTALL UPSTREAM AND DOWNSREAM CONTROL STRUCTURES, CLEANOUTS, STORAGE PIPE, AND ALL OTHER NECESSARY STORMWATER STRUCTURES.
- CRITICAL STAGE OF CONSTRUCTION: CONTACT ENGINEER PRIOR TO PLACEMENT OF GEOTEXTILE, GEOTEXTILE, STORAGE PIPES, AND BED. AGGREGATE SHOULD BE PLACED IMMEDIATELY AFTER APPROVAL OF SUB GRADE PREPARATION AND INSTALLATION OF STRUCTURES. GEOTEXTILE SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS.
- CLEAN-WASHED, UNIFORMLY GRADED AGGREGATE SHOULD BE PLACED IN THE BED IN MAXIMUM 6-INCH LIFTS. EACH LAYER SHOULD BE LIGHTLY COMPACTED, WITH CONSTRUCTION EQUIPMENT KEPT OFF THE BED BOTTOM.
- APPROVED SOIL MEDIA OR PAVEMENT BASE COURSE SHOULD BE PLACED OVER DETENTION BED IN MAXIMUM 6-INCH LIFTS. SEED AND STABILIZE AREA IF APPLICABLE.
- DO NOT REMOVE INLET PROTECTION OR OTHER EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

STORM SEWER

INSPECTION REQUIREMENTS:

- ALL STORM COLLECTION STRUCTURES SHALL BE INSPECTED ANNUALLY, OR AFTER EACH RAINFALL EVENT IN EXCESS OF TWO (2") INCHES (MAJOR STORM EVENT), FOR TRASH, DEBRIS OR EVIDENCE OF PIPE LEAKAGE OR SAGGING. REMOVE TRASH OR DEBRIS IMMEDIATELY; IMMEDIATELY REPAIR OR REPLACE LEAKING/SAGGING DRAINAGE FEATURES.

GENERAL MAINTENANCE NOTES:

- ACCESS CAN BE GAINED TO EACH COLLECTION STRUCTURE THROUGH THE REMOVABLE INLET GRATE OR MANHOLE LID. STEEL OR OTHER APPROVED RUNGS HAVE BEEN INSTALLED ON THE INSIDE OF EACH STRUCTURE OVER FOUR FEET DEEP FOR ANY NECESSARY ENTRY. GRATES AND LIDS SHALL BE REPLACED SECURELY IMMEDIATELY AFTER MAINTENANCE.
- CONTACT DESIGN ENGINEER IMMEDIATELY AFTER DISCOVERY OF SINKHOLE OCCURRENCE. SINKHOLE SHOULD BE PROMPTLY AND PROPERLY REPAIRED. IF SEDIMENT/TRASH/DEBRIS IS FOUND IN THE CONVEYANCE SYSTEM, THE SYSTEM SHALL BE JETTED AND VACUUMED TO REMOVE ALL SEDIMENT/TRASH/DEBRIS AND DISPOSED OF APPROPRIATELY.
- REFER TO WATER QUALITY INLET MAINTENANCE GUIDELINES FOR ADDITIONAL DETAIL IN CLEANING OF THOSE STRUCTURES WITH WATER QUALITY APPARATUS INSTALLED.

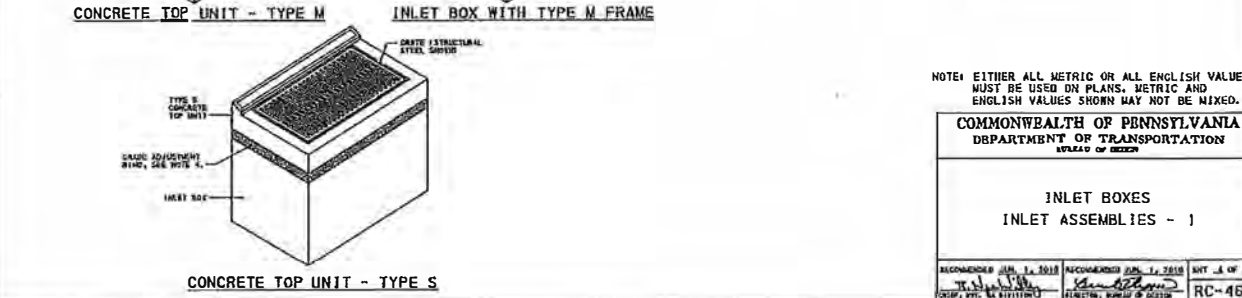
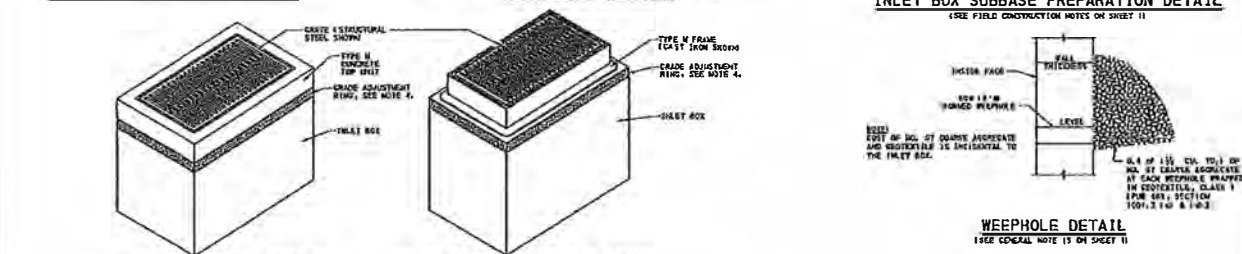
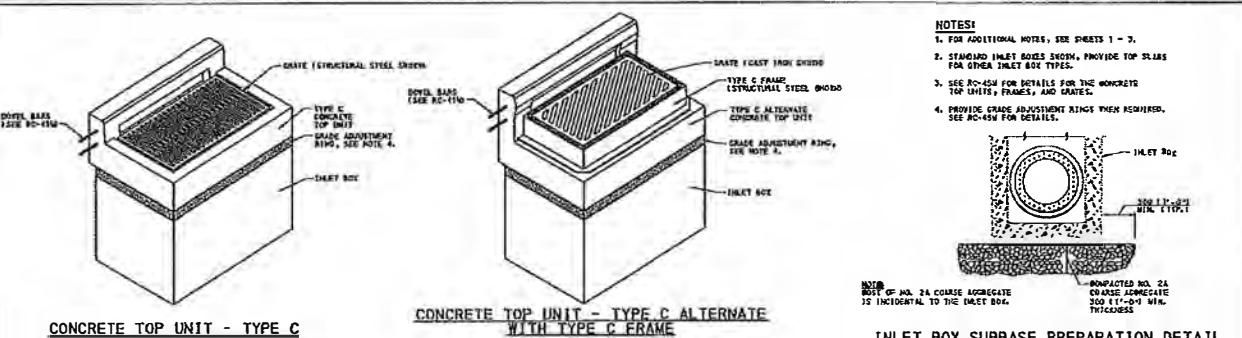
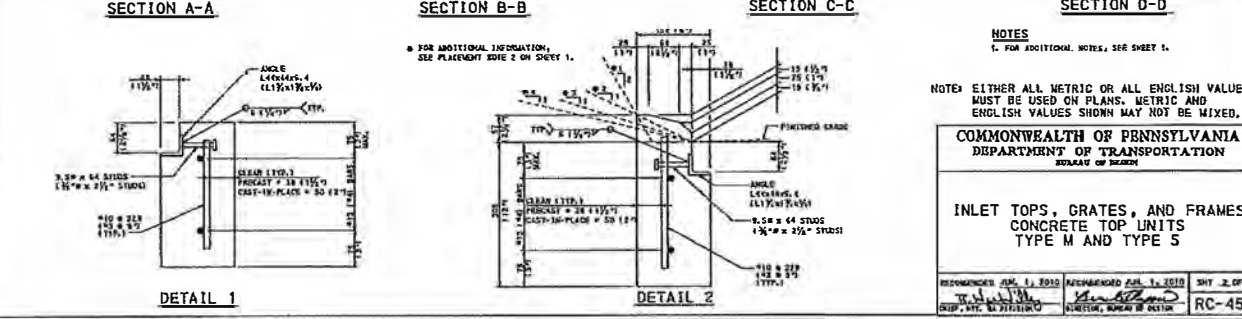
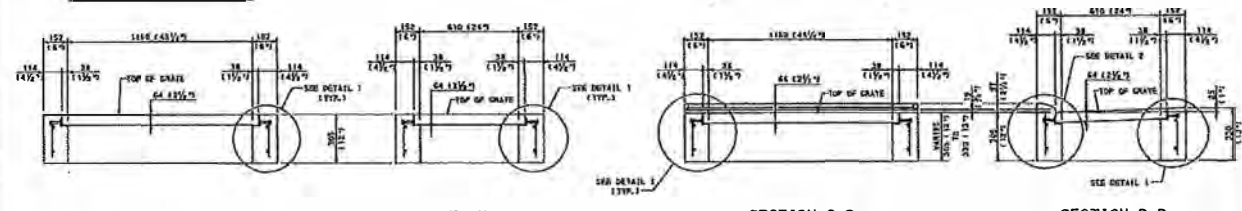
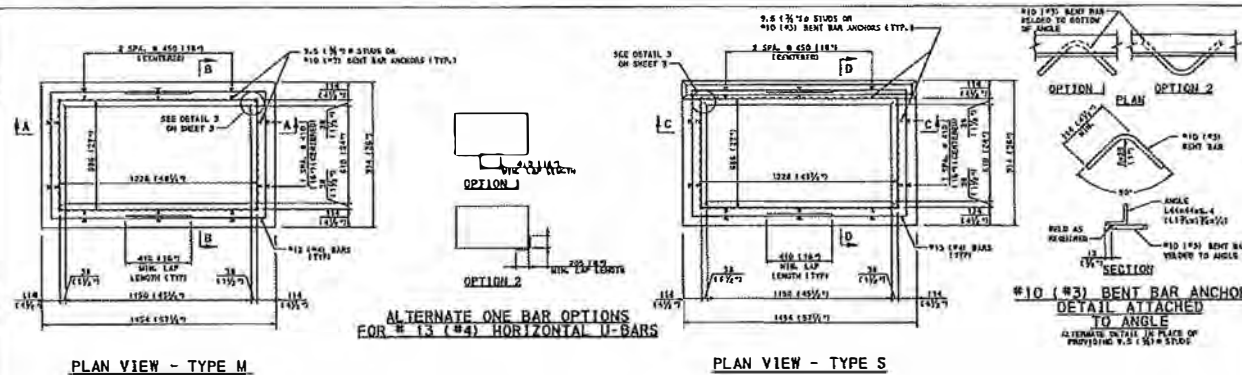
CRITICAL STAGES OF CONSTRUCTION

- EXCAVATION AND FINAL GRADING OF SWM #100.
- PLACEMENT OF GEOTEXTILE FABRIC, STONE AND DISTRIBUTION PIPE INSIDE SWM #100.
- INSTALLATION OF WATER QUALITY INLET FILTERS.
- FOLLOWING CONSTRUCTION, ENGINEER TO VERIFY THAT ALL PCSM BMP'S ARE INSTALLED, FUNCTIONING, AND HAVE NOT BEEN IMPACTED BY CONSTRUCTION ACTIVITIES.

PRELIMINARY/FINAL OPERATIONS AND MAINTENANCE PLAN

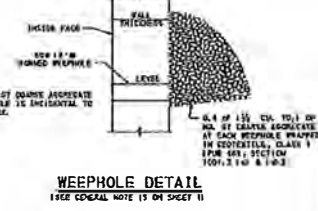
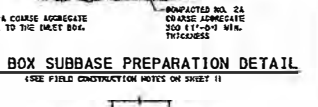
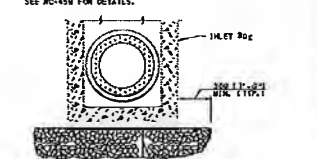
2 10/05/22		PER TOWNSHIP ENGINEER COMMENTS	
1 09/26/22		PRICING SET	
NO.	DATE	REVISION	
LAND DEVELOPMENT PLANS FOR APPLEBROOK GOLF CLUB TURF MAINTENANCE AREA			
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA			
		20558-0015	
13 Chester Road, P.O. Box 447, PA 19381		F.R.	
610-442-1821 (610-442-3111) Fax		www.cveinc.com	
SCALE	DATE	DRAWN BY	CHECKED BY
AS NOTED	01/26/2022	RJB	PHL





**NOTES:**

1. FOR ADDITIONAL NOTES, SEE SHEETS 1 - 3.
2. STANDARD INLET BOXES SHOWN, PROVIDE TOP SLABS FOR OTHER INLET BOX TYPES.
3. SEE RC-45M FOR DETAILS FOR THE WORKING TOP UNITS, FRAMES, AND GRATES.
4. PROVIDE GRADE ADJUSTMENT RINGS WHEN REQUIRED. SEE RC-45M FOR DETAILS.

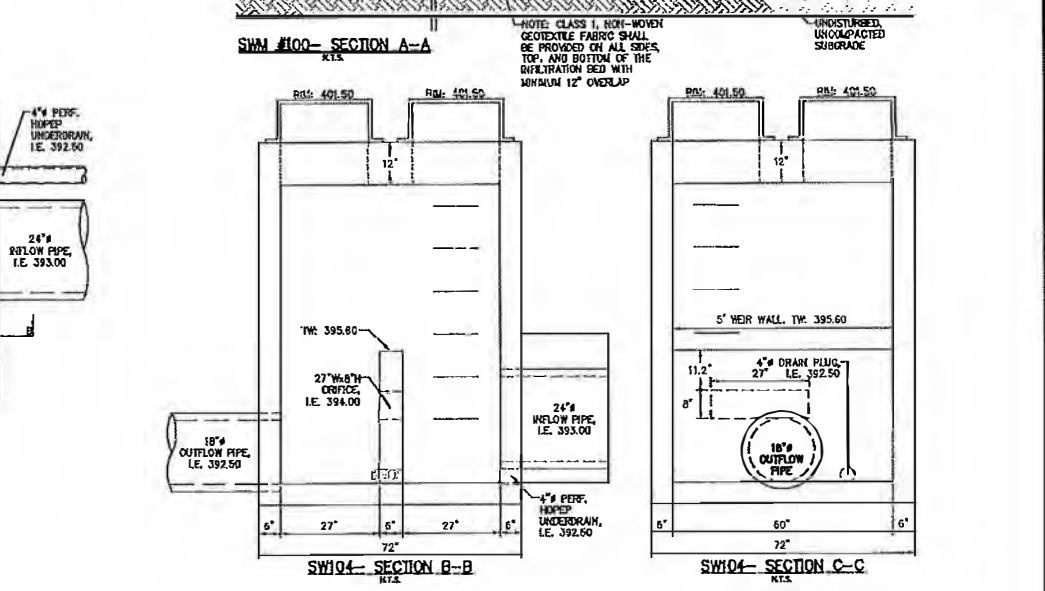
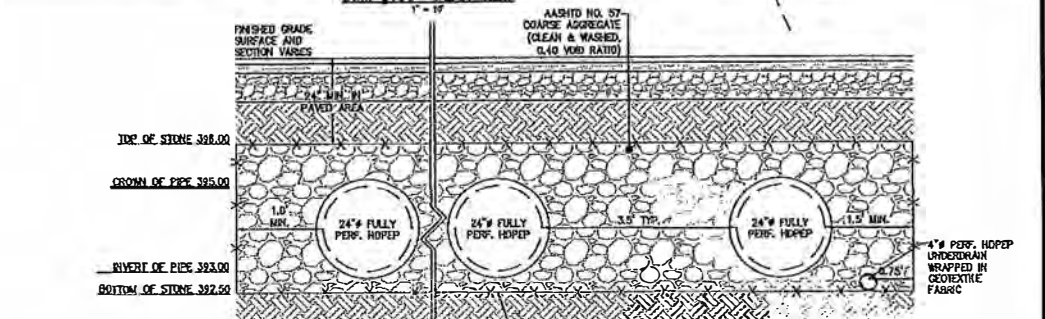
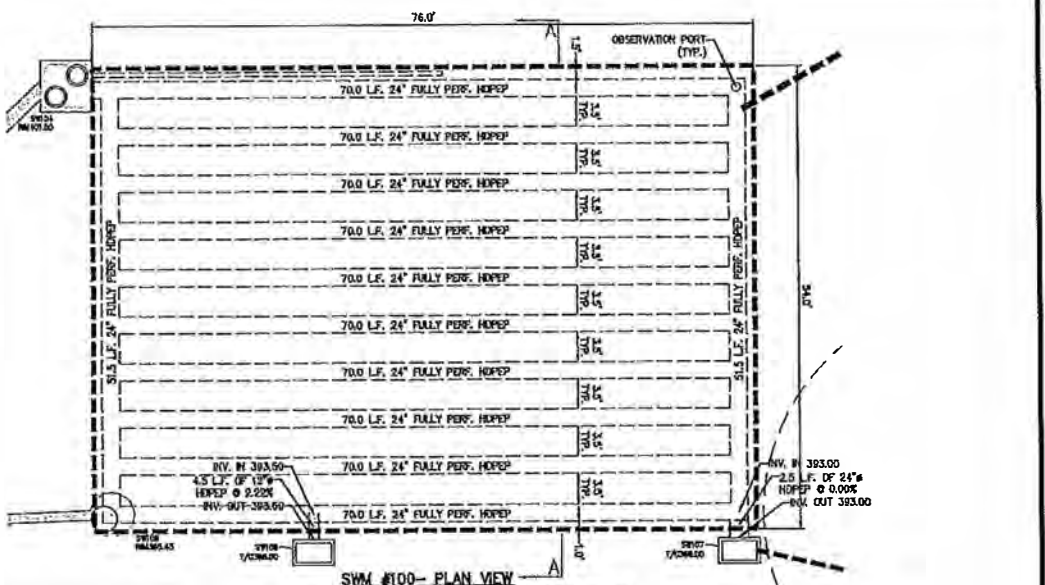
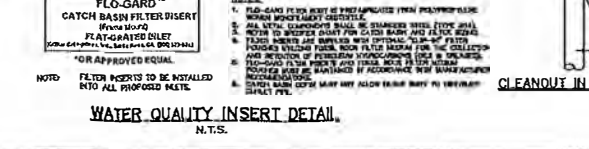
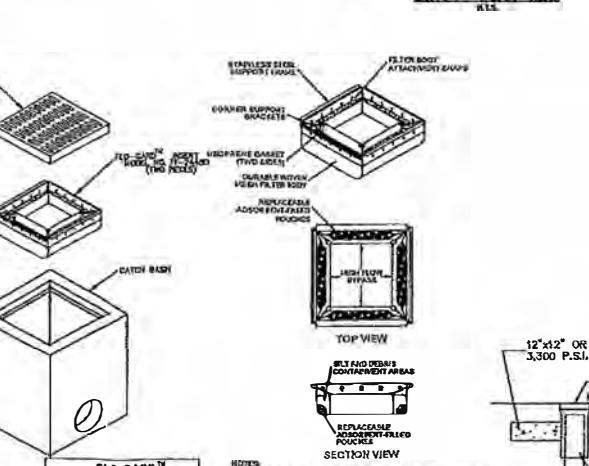
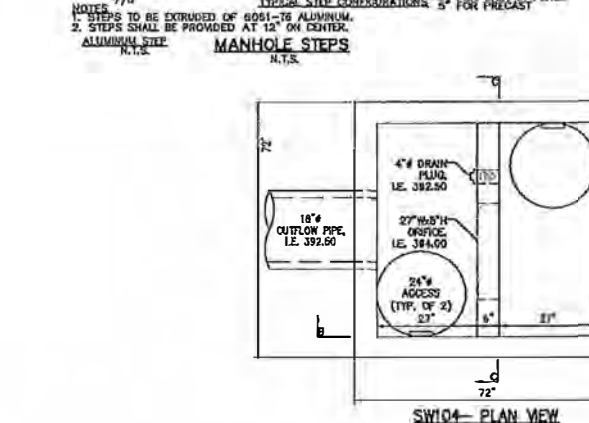
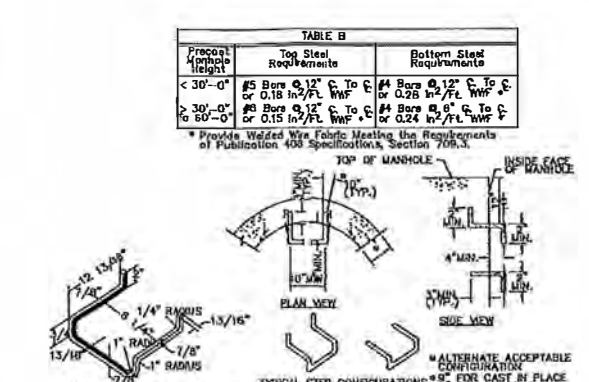
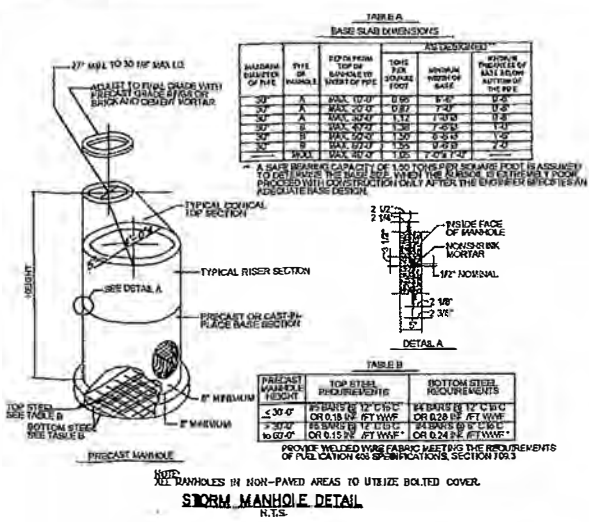


**NOTES:**

NOTE: EITHER ALL METRIC OR ALL ENGLISH VALUES MUST BE USED ON PLANS. METRIC AND ENGLISH VALUES SHOWN MAY NOT BE MIXED.

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF DESIGN

RECOMMENDED JAN. 1, 2018  
RC-45M  
RC-45M



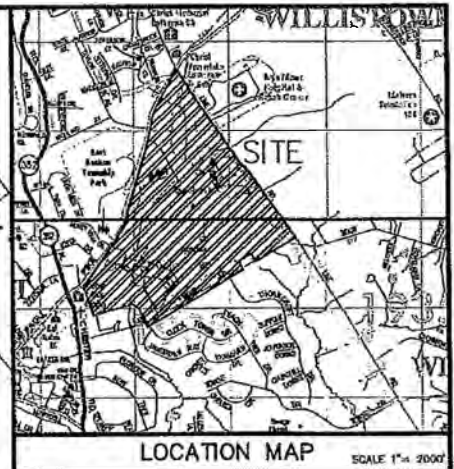
**PRELIMINARY/FINAL POST CONSTRUCTION STORMWATER DETAILS**

2	10/05/22	PER TOWNSHIP ENGINEER COMMENTS
1	09/28/22	PROJING SET
NO.	DATE	REVISION

**LAND DEVELOPMENT PLANS**  
FOR  
**APPLEBROOK GOLF CLUB TURF MAINTENANCE AREA**  
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA

**ChesterValley ENGINEERS, INC.**  
20558-0015


SCALE: AS NOTED  
DATE: 07/26/2022  
DESIGNED BY: [Name]  
CHECKED BY: [Name]  
DATE: 07/26/2022







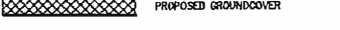
- # LEGEND
- ## EXISTING FEATURES
- EXISTING PROPERTY BOUNDARY  
EXISTING ADJACENT PROP. LINE  
EXISTING RIGHT-OF-WAY LINE  
EXISTING EASEMENT  
EXISTING SETBACK BOUNDARY  
EXISTING FLOOD PLAIN  
EXISTING STREAM LINE  
EXISTING WETLANDS
- EXISTING BUILDING  
EXISTING 2' CONTOURS  
EXISTING 10' CONTOURS  
EXISTING SPOT ELEVATION  
EXISTING SOIL TYPE  
EXISTING CURB  
EXISTING EDGE OF PAVEMENT  
EXISTING FENCE  
EXISTING GUIDE RAIL  
EXISTING STORM INLET AND PIPE  
EXISTING STORM ENDWALL AND PIPE  
EXISTING SANITARY SEWER  
EXISTING U/G FIRE LINE  
EXISTING U/G WATER LINE  
EXISTING U/G ELECTRIC LINE  
EXISTING U/G TELEPHONE LINE  
EXISTING U/G GAS LINE  
EXISTING OVERHEAD MAINS  
EXISTING LIGHT POLE  
EXISTING SIGN  
EXISTING UTILITY POLE  
EXISTING PINE TREE  
EXISTING DECIDUOUS TREE
- EXISTING TREE & SHRUB LINE  
EXISTING SLOPES 15% - 25%  
EXISTING SLOPES 25% +
- UTILIZATION TEST

- 
- PROPOSED FEATURES**
- PROPOSED BUILDING ADDITION
- FUTURE BUILDING ADDITION
- PROPOSED PAVEMENT
- PROPOSED CONCRETE PAD/SIDEWALK
- PROPOSED CURB
- PROPOSED STANDARD PARKING SPACES
- PROPOSED SIGN
- PROPOSED 2' CONTOURS
- PROPOSED 10' CONTOURS
- PROPOSED SPOT ELEVATION
- PROPOSED STORM PIPE AND INLET
- PROPOSED STORM PIPE AND MANHOLE
- PROPOSED STORM PIPE AND CLEANOUT

PRELIMINARY/FINAL  
LANDSCAPE PLAN

2	10/05/22	PER TOWNSHIP ENGINEER COMMENTS			
1	09/28/22	PRICING SET			
NO.	DATE	REVISION			
<b>LAND DEVELOPMENT PLANS</b>					
FOR					
<b>APPLEBROOK GOLF CLUB TURF MAINTENANCE AREA</b>					
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA					
			PROJECT NO. <b>20558-0015</b>		
			P.E.		
SCALE 1" = 20'			DATE 07/10/2022		
			DRAWN BY RUBB		
			CHECKED BY BYEM		
			DESCRIPTION DEMOLITION		

PLANTING SCHEDULE						
SYMBOL	BOTANICAL NAME	COMMON NAME	CELT	SIZE	ROOT	NOTES
<b>CANOPY TREES</b>						
QW	Quercus phellos	Willow Oak	2	2.5" - 3" Cal.	B & B	
<b>FLOWERING TREES</b>						
CF	Cornus florida	Flowering Dogwood	1	8"	B & B	
<b>EVERGREEN TREES</b>						
PA	Picea abies	Norway Spruce	8	1'	B & B	
IO	Ilex opaca	American Holly	3	8"	B & B	
<b>SHRUBS</b>						
CE	Cornus alternifolia	Red Twig Dogwood	6	36"	Can	
IG	Ilex glabra, Shameluck	Isabey Holly	9	36"	Can	
IM	Ilex mex. Blue Prince/Princess	Blue Prince / Princess Holly	4	36"	Can	
VR	Viburnum thyoides/purum	Leavedog Viburnum	9	36"	Can	

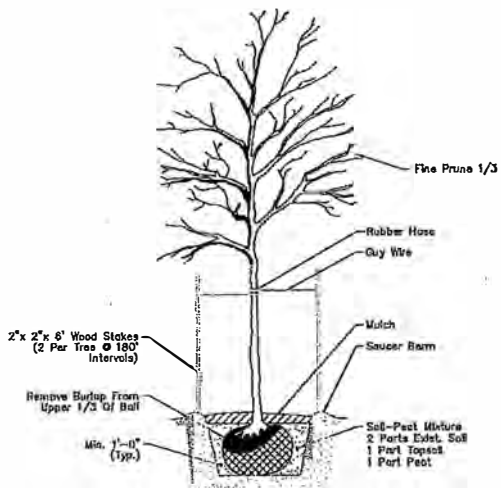
- # LANDSCAPING LEGEND
- 
- |   |                         |
|---|-------------------------|
|  | PROPOSED CANOPY TREE    |
|  | PROPOSED EVERGREEN TREE |
|  | PROPOSED SHRUB          |
|  | PROPOSED GROUNDCOVER    |
- Scale in Feet
- 
- 0 10 20 40 60 80
- 1" = 20'

[illegible]

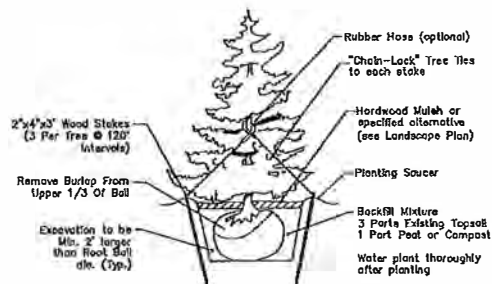


PLANTING NOTES

1. This Landscape Plan is intended to be used for landscaping purposes only.
2. Landscape contractor shall inspect the site and become familiar with the planting area prior to the installation of any plant material.
3. Plant material quantities listed for the convenience of the Contractor. Actual numbers of symbols shall take precedence over quantities listed in cases of conflict.
4. The Landscape Contractor is responsible for supplying all materials, supplies, equipment and labor required to install the landscaping shown on these plans.
5. All plant material subject to approval by the Owner or Owners representative prior to installation. Plant material shall be nursery grown locally, freshly dug, shall be free of disease and pests and shall be full and well shaped. Any material found to be unacceptable shall be replaced with acceptable material at no cost to the owner.
6. The Contractor shall advise the Landscape Architect and/or Owner in writing of any proposed substitutions for the plant material specified and these substitutions shall be subject to the approval by the Landscape Architect and/or Owner prior to installation.
7. Plant material and installation shall be in accordance with the American Standard for Nursery Stock of the American Association of Nurserymen (as last revised) and with the general planting specifications of the municipality.
8. All plant material shall be of the minimum size noted on the plans. Plant material shall be measured in accordance with the American Standard for Nursery Stock as last revised.
9. All areas to be landscaped, especially next to building areas, shall be excavated of all building material, debris and poor soils to a minimum depth of 12"-18" and backfilled with a good, medium textured planting soil. All lawn areas shall have a minimum of 4"-5" of topsoil spread prior to seeding or sodding as may be specified. Areas adjacent to curbs and walks shall be crowned a minimum of 4" higher than the top of curb or walk to allow for settling, however finished grade immediately adjacent to the curb or walk shall be sufficiently depressed to allow for the surface of any mulching or sod to be even with the top of curb or walk.
10. All borders between lawn areas and planting beds shall not have edging unless otherwise noted on the plans.
11. Compacted existing soils shall be remediated with soil additives or soil replacement prior to planting.
12. See Tree Planting Details for tree planting, staking and guying directions. See Shrub Planting Details for shrub planting directions. Tree shall be staked immediately after planting.
13. Remove all twine and wire from tree and shrub root balls. Remove all non-rot burlap and twine from all plant material prior to planting. Unlike all twine and/or burlap from the trunk of the plant material and drop down the root ball or remove from plant. Remove all plant containers prior to planting.
14. Prune all plant material after planting in accordance with the American Association of Nurserymen standards. Fine prune all plants to shape, but do not disfigure plant material. Prune all dead branches from plant material.
15. Limb deciduous, high canopy (shade) trees to 6' above grade.
16. All plantings shall be installed in the locations shown on the Landscape Plans. Minor adjustments for field conditions may be required. Significant adjustments needs to be approved by the Owner prior to planting.
17. Canopy trees to be placed a minimum of 30' from paved areas and walkways unless otherwise directed.
18. Contractor shall final grade all planting areas and berms as necessary prior to the installation of the plant material unless final grading is to be performed by others. Regardless, planting areas shall be fine raked smooth and even after the installation of the plant material and prior to mulching. No plant material shall be installed and no raking shall occur if the soils are saturated or muddy.
19. Trees and shrubs to be planted slightly higher (2" max.) than the grade that the plants were grown at the nursery (roughly the top of the root ball). Contractor is responsible for plant installation to the proper height.
20. Trees and shrubs shall not be planted over any underground utility, nor within any underground utility easement (minimum of 10' from the center of the pipe). Contractor shall verify location of all underground utilities prior to starting work.
21. Trees planted in lawn areas to be mulched with a ring a minimum of 2' wide with a minimum of 3" of mulch unless otherwise noted or required for tree protection. Shrub beds to be mulched to a minimum depth of 3".
22. Shrub groupings shown on the Landscape plans shall be planted as a single bed.
23. Mulch to be shredded hardwood bark. Prior to installation of the mulch, spread a pre-emergent herbicide.
24. Plant material shall be installed the same day as it is delivered to the site to the extent practical. Any plant material that is not planted the same day it arrives shall be protected from drying out by the Contractor until it can be planted.
25. Contractor shall thoroughly water all material planted at the end of each day.
26. Contractor shall apply anti-desiccant to plant material for late summer and fall plantings.
27. Upon completion of planting and mulching and at the end of each day, Contractor shall remove all excessive material and debris, broom sweep and wash the area clean.
28. Contractor shall guarantee all plant material for a period of 2 years from the date of acceptance by the Owner. All plant material that does not survive the guarantee period shall be replaced by the Contractor. Dead plants shall be replaced no later than the next planting season.
29. Contractor shall notify the Owner upon the completion of the guarantee period and schedule a final inspection of the plant material and lawn areas. At or before the final inspection, Contractor shall remove any remaining tree stakes and prune the plant material as needed unless otherwise directed by the Owner.
30. All areas disturbed by construction activities that are not shown to be planting beds on the Landscape Plans, shall be seeded as lawn areas per the seeding specifications on these plans.
31. Contractor shall provide all topsoil, fertilizers and other additives as required unless otherwise directed by the Owner. All materials used shall be as specified or better.
32. Contractor shall be responsible for the maintenance of the plant material until such time as the project is occupied by the Owner. Maintenance shall include, but is not limited to, watering, fertilizing, pruning, mowing and weeding.
33. Contractor shall provide the Owner with written instructions regarding the care of the plant material and any special circumstances.



TYPICAL DECIDUOUS TREE PLANTING  
N.T.S.




TYPICAL EVERGREEN TREE PLANTING  
N.T.S.



TYPICAL SHRUB PLANTING  
N.T.S.

PRELIMINARY/FINAL  
LANDSCAPE DETAILS

NO.	DATE	REVISION
2	10/05/22	PER TOWNSHIP ENGINEER COMMENTS
1	09/26/22	PRICING SET
LAND DEVELOPMENT PLANS FOR <b>APPLEBROOK GOLF CLUB TURF MAINTENANCE AREA</b> EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA		
 <b>ChesterValley</b> EDMUNDS, INC. 81 Chestnut Road #23 Box 441, PA 19380 610-664-0225 FAX 610-669-3543 www.maintenance.com		PROJECT NO. <b>20558 -0015</b> F.A.
SCALE AS NOTED	DATE 07/29/2022	DRAWN BY RUB
CHECKED BY RUB	DATE 07/29/2022	DRAWN BY RUB