



# PLYMOUTH TOWNSHIP COUNCIL

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## WORKSHOP MEETING

(In preparation for the meeting of August 11, 2025)

**Monday, August 4, 2025**

**Plymouth Township Building**

**6:00PM**

## AGENDA

**1. CALL TO ORDER AND PLEDGE OF ALLEGIANCE**

**2. PUBLIC COMMENT**

**3. ANNOUNCEMENTS**

- A. Council will meet in an Executive Session at the conclusion of the meeting to discuss collective bargaining, public safety, and potential litigation matters.

**4. PRESENTATION ITEMS (Workshop Only)**

- A. 300 Lee Drive – Zoning Hearing appeal/application
- B. BET - Proposed Conshohocken Ridge Mixed Use Development at Ridge Pike and Colwell Lane

**5. DISCUSSION ITEMS (Workshop Only)**

- A. None.

**6. ACTION ITEMS**

- A. Motion to Appoint John Tse to the Environmental Advisory Board to fill an unexpired term
- B. Motion to Approve the meeting minutes for July 7, 2025, Council Workshop and July 14, 2025, Business Meeting
- C. Motion to Approve the departmental reports and schedule of bills for July 2025.
- D. Motion to Approve the Promotion of David Phillips to the Rank of Sergeant
- E. Motion to Approve the Promotion of Rocco Wack to the Rank of Lieutenant
- F. Motion to Approve the Promotion of John Fullerton to the Rank of Sergeant
- G. Motion to Approve swearing-in of Probationary Patrol Officer: Eric Gainor
- H. Motion to Approve Escrow Release: Black Horse Woods subdivision
- I. Motion to Approve changing meeting times for Council Regular meetings to 6PM for the remainder of 2025
- J. Motion to Approve advertisement for Zoning Map Amendment application: 521, 523, 525 Plymouth Road

**7. DEPARTMENTAL UPDATES (Workshop Only)**



# PLYMOUTH TOWNSHIP COUNCIL

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## **8. INFORMATION ITEMS**

- A.** Citizens Board Vacancy Announcements
- B.** Zoning Hearings
- C.** Parks and Recreation
  - i. Upcoming Events
- D.** Connaughtown Update

## **9. AUDIENCE PARTICIPATION**

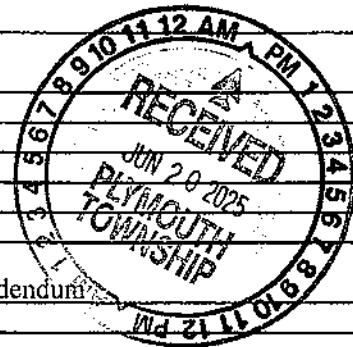
## **10. ADJOURNMENT**

**APPLICATION/APPEAL TO THE ZONING HEARING BOARD**

PLYMOUTH TOWNSHIP  
700 BELVOIR ROAD  
PLYMOUTH MEETING, PA 19462

DATE: June 19, 2025

- (1) Applicant/Appellant's Name and Address: EVB Gravers Road, LLC  
601 Gravers Road, Plymouth Meeting, PA 19462 PHONE NO.: \_\_\_\_\_
- (2) Owner's Name and Address: Same as Applicant  
\_\_\_\_\_  
PHONE NO.: \_\_\_\_\_
- (3) Lessee's Name and Address: \_\_\_\_\_  
(If Applicable)
- (4) Location of Premises: 300 Lee Drive, Plymouth Meeting, PA
- (5) Dimensions of Lot: Irregular - Approximately 3.065 acres
- (6) Present Zoning Classification of Premises: LI - Limited Industrial
- (7) The improvements thereon are: Unimproved Vacant Lot  
\_\_\_\_\_  
and the present use of the land and/or building is Vacant  
\_\_\_\_\_
- (8) If this is an application for a **SPECIAL EXCEPTION** check here ☐ and state the specific sections of the PLYMOUTH TOWNSHIP ZONING ORDINANCE upon which the applicant relies:  
\_\_\_\_\_  
\_\_\_\_\_
- (9) If this is an appeal from a decision of the BUILDING INSPECTOR/ZONING OFFICER seeking a VARIANCE from the terms of the PLYMOUTH TOWNSHIP ZONING ORDINANCE check here ☒ and state the specific sections of the ORDINANCE as to which the VARIANCE is being sought:  
Section 1400
- (10) The (SPECIAL EXCEPTION) (VARIANCE) requested is as follows:  
See Attached Addendum  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- (11) Describe what is proposed of real estate in question: See Attached Addendum  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- (12) There must be attached hereto a plot plan, accurately drawn to scale, of the real estate in question, indicating the location and dimensions of the tract and improvements erected thereon as well as those proposed to be erected. **ALL PLANS MUST BE FOLDED OR THE APPLICATION WILL NOT BE ACCEPTED.**



(OVER)

- (13) There must be paid herewith for a single-family dwelling and/or any structure appurtenant or accessory thereto a nonrefundable-filing fee of TWO HUNDRED DOLLARS (\$200.00) and for all other structures a nonrefundable filing fee of ONE THOUSAND DOLLARS (\$1,000.00). PLEASE MAKE CHECK PAYABLE TO "PLYMOUTH TOWNSHIP".

STATE OF PENNSYLVANIA:  
SS  
COUNTY OF MONTGOMERY:

Kevin E. Bowe being duly sworn/affirmed according to law, deposes and says that he is the applicant above named and that the facts set forth in the foregoing application/appeal and all documents or exhibits submitted therewith, are true and correct to the best of his knowledge, information and belief.

Commonwealth of Pennsylvania  
APPLICANT/APPELLANT County of Montgomery

Commonwealth of Pennsylvania - Notary Seal  
Kimberly Zera, Notary Public  
Montgomery County  
My commission expires May 5, 2026  
Commission number 1185103  
Member, Pennsylvania Association of Notaries

SWORN :  
AFFIRMED AND SUBSCRIBED TO :  
BEFORE ME THIS 18 DAY OF June 25  
By Kevin E. Bowe

[Signature]  
(OWNER'S SIGNATURE - IF APPLICABLE)

#### SPECIAL INSTRUCTIONS

FOR RESIDENTIAL APPLICATIONS - ORIGINAL AND FIFTEEN (15) COPIES OF THE APPLICATION AND ALL SUPPORTING PAPERS, OR FOR COMMERCIAL, INDUSTRIAL, MULTI-FAMILY APPLICATIONS - ORIGINAL AND TWENTY-FOUR (24) COPIES OF THE APPLICATION AND ALL SUPPORTING PAPERS SHALL BE FILED WITH THE ZONING OFFICER, ZONING OFFICE, PLYMOUTH TOWNSHIP, 700 BELVOIR ROAD, PLYMOUTH MEETING, PA 19462. ONLY THE ORIGINAL APPLICATION/APEAL NEED BE VERIFIED BY AFFIDAVIT.

#### IMPORTANT NOTICE

YOUR APPLICATION WILL BE SCHEDULED FOR A HEARING AT THE NEXT REGULARLY SCHEDULED MEETING OF THE PLYMOUTH TOWNSHIP ZONING HEARING BOARD. YOU MUST BE PREPARED TO PRESENT YOUR ENTIRE CASE AT THIS MEETING. ANY APPLICATION FOR CONTINUANCE OF THE HEARING MUST BE IN WRITING, AND YOU MUST GIVE THE REASONS FOR THE REQUEST. THE APPLICATION FOR CONTINUANCE MUST BE RECEIVED BY THE ZONING OFFICER NO LATER THAN 3:00 P.M. ON THE THURSDAY BEFORE THE ZONING HEARING. NO APPLICATIONS FOR CONTINUANCE WILL BE ACCEPTED AFTER THAT DEADLINE UNLESS THE APPLICANT APPEARS BEFORE THE ZONING HEARING BOARD TO APPLY FOR A CONTINUANCE. MORE THAN ONE REQUEST FOR A CONTINUANCE ON ANY APPLICATION MUST BE MADE IN PERSON, AND SUCH REQUESTS WILL NOT NORMALLY BE GRANTED UNLESS THERE ARE SPECIAL CIRCUMSTANCES.

#### DO NOT WRITE BELOW THIS LINE

#### CERTIFICATION OF ADVERTISEMENT

The above application/appeal was advertised in \_\_\_\_\_  
On the following dates: \_\_\_\_\_

(Newspaper)

DATE POSTED ON PREMISES

ZONING OFFICER



Craig R. Lewis, Esquire  
Kaplin Stewart Meloff Reiter & Stein, PC  
Union Meeting Corporate Center  
910 Harvest Drive  
Post Office Box 3037  
Blue Bell, PA 19422  
(610) 941-2584  
[rlewis@kaplaw.com](mailto:rlewis@kaplaw.com)

Attorneys for Applicant

**BEFORE THE ZONING HEARING BOARD OF  
PLYMOUTH TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA**

*In the Matter of:*

EVB Gravers Road, LLC  
300 Lee Drive, Plymouth Meeting, PA

Tax Parcel No. 49-00-04509-01-4

**ADDENDUM TO ZONING HEARING BOARD APPLICATION**

EVB Gravers Road, LLC, by and through their attorney Craig R. Lewis, Esquire, hereby files this addendum to their Application to the Plymouth Township Zoning Hearing Board appealing the June 4, 2025 determination of the Plymouth Township Zoning Officer or, in the alternative seeking a variance from Section 1400 of the Plymouth Township Zoning Ordinance to permit a "lay-down" yard for outdoor storage of inventory, materials and equipment in the LI-Limited Industrial Zoning District, and in support thereof states as follows:

1. **Name and Address of Owner/Applicant.** In accordance with a deed dated August 27, 2024, EVB Gravers Road, LLC ("Owner"), having a mailing address of 601 S. Gravers Road, Plymouth Meeting, PA, 19462, is the owner of the property that is subject of this Application. A copy of the Deed is attached hereto as **Exhibit "A"**

2. **Description of the Property.** The property that is the subject of this application is identified as 300 Lee Drive, Plymouth Meeting, PA ("Property"). As detailed on an existing conditions Plan prepared by Eustace Engineering, Inc. dated April 11, 2025 ("Existing

Conditions Plan”) a copy of which is attached hereto as **Exhibit “B”**,<sup>1</sup> the Property is an approximately 3.065 acre (+/-) parcel of land more specifically identified as TMP #49-00-04509-01-4 (“**Property**”). Property is undeveloped and is also referred to a Plymouth Meeting Park – Lot 2. Plymouth Meeting Park (“**PMP**”) is a nine (9) lot industrial park located adjacent to the Pennsylvania Turnpike and Gallagher Road. Lots within PMP are improved with various commercial and light industrial buildings including hotels, a self-storage facility and a 144,236 s.f. office/warehouse facility. All but one of the PMP lots front on the private loop-road identified as Lee Drive. EVB is the owner of the adjacent PMP Lot 1 which is uses in conjunction with its towing and recovery business.

3. **Zoning Classification**. The Property is located in LI - Limited Industrial District. Pursuant to the Plymouth Township Code (“**Code**”), permitted uses within the Limited Industrial District are governed by Section 1400 of the Code.

4. **Proposed Use**. On or about April 11, 2025 EVB submitted an application for a grading permit (“**Application**”) to permit the Property to be used as a contractor’s lay-down lot (“**Proposed Use**”). The Application was supported by plans prepared by Eustace Engineering previously defined as the Grading Permit Plans. A copy of sheet 3 of the Grading Permit Plans, entitled “Site Plan” is attached hereto as **Exhibit “C”**. As detailed on the Site Plan, EVB proposes to clear and level the Property to create an approximately 75,350 s.f. gravel lay-down yard. For security purposes, the Lay-down yard will be enclosed with a 6-foot high chain link fence. Access to the lay-down yard is proposed by way of two driveways from Lee Drive. In conjunction with the lay-down yard EVB will construct necessary retaining walls, install

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<sup>1</sup> The Existing Conditions Plan is sheet 2 of 16 from plans prepared by Eustace Engineering entitled ““Site Improvements Plan – 300 Lee Drive”, dated April 11, 2025 consisting of sixteen (16) sheets (collectively hereinafter the “**Grading Permit Plans**”)

required landscaping and buffering and construct stormwater management facilities; all of which are detailed on the Site Plan. EVB does not propose to construct any building on the Property at this time.

5. **Applicable Regulations and Zoning Determination.** Use of property in the LI-Limited Industrial District is governed by Section 1400 of the Zoning Ordinance. Section 1400 permits a wide array of commercial and industrial uses, including but not limited to the following:

- Fabrication of products from previously prepared materials, including, but not limited to, bone, cloth or textiles, cork, flooring, fur, feathers, hair, horn, glass, paper, sheet rubber, shell or wood;
- Manufacturing or processing of beverages, confections, cream, all food products (exclusive of fish packing or as otherwise excepted herein) ceramics, clothing, plastics, electrical appliances, furniture, hardware, tools, patterns, dies, scientific instruments, jewelry, time pieces, optical goods, musical instruments, toys, cosmetics (exclusive of soap), tobacco products, and pharmaceuticals. For the purposes of this article, trash transfer stations shall not be considered manufacturing or processing;
- Wholesale trade, including, but not limited to, the storage and sale of lumber, plumbing supplies, electrical supplies, building materials and supplies, except retail sales and services;
- Food service or catering; provided, that no food is served to customers on-site;
- Printing of paper, plastic and metal;
- Public utility facilities;
- Research, development and testing of new products, laboratories;
- Warehousing and distributing, excluding storage for personal household use; laundering, cleaning and dyeing; sale of ice, coal, fuel oil, monuments; metal smithing; extrusion of small materials; welding, body repair; plating; cold storage plant; and frozen food locker;
- Hotel; and
- Self-storage Facility.

During review of the Application, the Plymouth Township Engineer requested clarification of the Proposed Use of the Property. By email correspondence dated May 22, 2025, counsel for EVB stated that the Proposed Use is as follows:

The proposed use for the Property is pretty simple, a contractors lay-down yard. Storage of materials and equipment. My reading is that this is a specifically permitted use in the LI-District. As noted on the attached, permitted uses specifically provide that not only may a building be constructed and occupied, but that "a lot may be used or occupied" for, among other things, "Wholesale Trade, including but not limited to "the storage and sale of lumber, plumbing supplies, building materials and supplies, except retail sales and services" as well as "warehousing and distributing". This will not be a junk-yard.

By e-mail correspondence dated June 4, 2025, the Plymouth Township Zoning Officer concluded as follows:

Our team did come to a conclusion that the Ordinance's definition of "wholesale trade" requires some aspect of the sale of merchandise, which isn't happening here. This means that your argument that this is permitted under 1400(C) won't apply. The other argument, that this is permitted under 1400(H), also doesn't work, as it requires "warehousing and distributing" of materials. This isn't really "warehousing" since its just storage outside and not within a building, and even if it was, there's no distribution taking place, so it still wouldn't qualify under this use.

The Zoning Officer's June 4, 2025 email correspondence concludes that the Proposed Use is not a permitted use of the Property ("**Zoning Determination**") and constitutes a zoning determination in accordance with the Municipalities Planning Code.

6. **Appeal and Alternative Request for Relief.** EVB hereby appeals the Zoning Determination.

Section 1400 specifically provides as follows:

A building or combination of buildings may be erected, altered or used and a lot may be used or occupied for any of the following purposes or a combination of the following purposes.

The plain language of the Zoning Ordinance prescribes that a “lot” may be used for any and all of the specifically stated permitted uses. The Zoning Ordinance does not require that any of the permitted uses be conducted within a building. The Zoning Determination would require that all of the permitted uses set forth in Section 1400 be principally conducted within a building; a conclusion directly at odds with the plain language of the Zoning Ordinance that permits “a lot may be used or occupied for any of the following purposes or combination of the following purposes.”

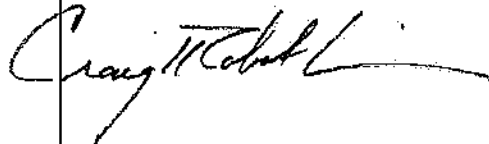
In accordance with Section 603.1 of the Municipalities Planning Code (“MPC”), any ambiguity in a zoning ordinance must be resolved in favor of the landowner. Zoning Ordinances are to be construed expansively, affording the landowner the broadest possible use and enjoyment of its land. broadly to give the landowner the greatest use of their property. See, *e.g.* Kleinman v. Lower Merion Twp. Zoning Hearing Bd., 916 A.2d 726, 729 (Pa. Commw. Ct. 2006). In this case, although the language of the Zoning Ordinance appears to clearly permit a “lot” to be used for any and all of the permitted uses, the Zoning Determination creates an ambiguity by concluding that none of the permitted uses may be conducted on the Property unless they are associated with a building. Further, the terms “warehousing” and “distributing” are not defined by the Zoning Ordinance. As such, there is inherent ambiguity or doubt as to what these terms mean when the Zoning Ordinance clearly prescribes that these activities may be conducted on a “lot”. Therefore, the Zoning Determination is in error as it imposes the most restrictive reading of the Zoning Ordinance and the most confiscatory application of the regulation. Therefore, the Zoning Determination is violative of the mandate of Section 603.1 of the MPC. Wherefore, EVB requests that the Zoning Hearing Board reverse the Zoning Determination and conclude that the Proposed Use is a specifically permitted use of the Property.

Alternatively, EVB requests a variance from Section 1400 to permit the Proposed Use.

7. **Standards and Criteria.** As will be demonstrated further by the evidence and testimony presented during the hearing in this matter, the Property is uniquely situated. Applicants' request for relief from the Zoning Ordinance will not detract from the appropriate use and enjoyment of adjacent properties, nor cause injury to the public health, safety and/or welfare. Indeed, as will be demonstrated by evidence and testimony at the hearing in this matter, the Proposed Use is consistent with the use of numerous other properties in the immediate vicinity.

**WHEREFORE,** Applicant requests that the Zoning Hearing Board reverse the Zoning Determination, or in the alternative grant the requested variance from the Plymouth Township Zoning Ordinance and such other relief as is necessary to permit the use of the Inventory Storage as described above.

Respectfully Submitted,



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**CRAIG R. LEWIS, ESQUIRE**  
Attorney for Applicant

Date: June 19, 2025

# **EXHIBIT "A"**

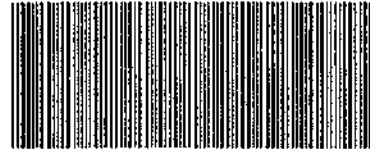
Deed



RECORDER OF DEEDS  
MONTGOMERY COUNTY  
*Jeanne Sorg*

One Montgomery Plaza  
Swede and Airy Streets ~ Suite 303  
P.O. Box 311 ~ Norristown, PA 19404  
Office: (610) 278-3289 ~ Fax: (610) 278-3869

DEED BK 6375, 00708  
INSTRUMENT # 1  
RECORDED DATE: 2024 10:50:59 AM



6341685-0019-

MONTGOMERY COUNTY ROD

OFFICIAL RECORDING COVER PAGE

Page 1 of 4

Document Type: Deed  
Document Date: 08/27/2024  
Reference Info:

Transaction #: 6978596 - 1 Doc(s)  
Document Page Count: 3  
Operator Id: epilgren

RETURN TO: (Simplifile)  
Germantown Title Company  
502 W Germantown Pike, Suite 200  
East Norriton, PA 19403  
(610) 631-1540

PAID BY:  
GERMANTOWN TITLE COMPANY

\* PROPERTY DATA:

Parcel ID #: 49-00-04509-01-4  
Address: 300 LEE DR

PA  
Municipality: Plymouth Township (100%)  
School District: Colonial

\* ASSOCIATED DOCUMENT(S):

CONSIDERATION/SECURED AMT: \$1,600,000.00  
TAXABLE AMOUNT: \$1,600,000.00

FEES / TAXES:

Recording Fee: Deed \$86.75  
State RTT \$16,000.00  
Plymouth Township RTT \$8,000.00  
Colonial School District RTT \$8,000.00

Total: \$32,086.75

DEED BK 6375 PG 00705 to 00708  
Recorded Date: 08/30/2024 10:50:59 AM

I hereby CERTIFY that this document is  
recorded in the Recorder of Deeds Office in  
Montgomery County, Pennsylvania.



Jeanne Sorg  
Recorder of Deeds

Rev1 2016-01-29

**PLEASE DO NOT DETACH**

THIS PAGE IS NOW PART OF THIS LEGAL DOCUMENT

NOTE: If document data differs from cover sheet, document data always supersedes.

\*COVER PAGE DOES NOT INCLUDE ALL DATA, PLEASE SEE INDEX AND DOCUMENT FOR ANY ADDITIONAL INFORMATION

Digitally signed 06/16/2025 by montgomery.county.rod@govos.com

**Certified and Digitally Signed**

Validation may require Adobe 'Windows Integration'

eCertified copy of recorded # 2024045831 (page 1 of 4)  
Montgomery County Recorder of Deeds





**Prepared By:**

Germantown Title Company  
502 W. Germantown Pike, Suite 200  
East Norriton, PA 19403  
File No.: GEN-50652-PS

**Return To:**

Germantown Title Company  
502 W. Germantown Pike, Suite 200  
East Norriton, PA 19403

**Parcel No(s):** 49-00-04509-01-4**Address:** 300 Lee Drive  
Township of Plymouth**Consideration:** \$1,600,000.00

MONTGOMERY COUNTY COMMISSIONERS REGISTRY  
49-00-04509-01-4 PLYMOUTH TOWNSHIP  
300 LEE DR  
PLYMOUTH HOSPITALITY LLC  
B 036 L 2 U 020 2308 08/30/2024

\$15.00  
JU

**SPECIAL WARRANTY DEED**

THIS INDENTURE Made this 27<sup>th</sup> day of August, 2024 between **Plymouth Hospitality LLC, a Pennsylvania limited liability company**, (hereinafter referred to as "Grantor"), and **EVb Graves Road, LLC, a Pennsylvania limited liability company**, (hereinafter referred to as "Grantee").

**WITNESSETH:** That the said Grantor in consideration of One Million Six Hundred Thousand And No/100 Dollars (\$1,600,000.00) to them now paid by the said Grantee, at or before the sealing or delivering hereof, the receipt and sufficiency of which are hereby acknowledged, do grant, bargain, sell, alien, enfeoff, release, convey, and confirm unto the said Grantee, their heirs, successors and assigns;

ALL THAT CERTAIN lot or piece of ground, with the buildings and improvements thereon erected, situate in the Township of Plymouth, County of Montgomery and Commonwealth of Pennsylvania, as shown on plans entitled "Plymouth Meeting Park - Planned Community Declaration Plat for PMP Planned Community Association" as prepared for Fox Rothschild LLP by Joseph M. Estock, PE, PLS, dated April 21, 2023, last revised July 25, 2023 and recorded at the Office of the Montgomery County Recorder of Deeds in Norristown, Pennsylvania, as follows, to wit:

BEGINNING at a concrete monument on the Northwestern side of Lee Drive (60 feet wide); thence from said beginning point, leaving said side of Lee Drive and extending along lands of Lot No. 1, along the arc of a circle curving to the left having a radius of 86.41 feet, the arc distance of 157.42 feet to an iron pin, a point of tangency; thence continuing along the same, North 31 degrees 25 minutes 46 seconds West, 278.06 feet to an iron pin, a point along lands now or formerly of Pennsylvania Turnpike Commission; thence extending along lands of the same, North 72 degrees 56 minutes 52 seconds East, 401.92 feet to an iron pin, a corner of Unit 2 (aka Lot No. 3); thence extending along the same, South 31 degrees 25 minutes 46 seconds East, 285.94 feet to a concrete monument along the aforesaid side of Lee Drive; thence extending along the same, South 58 degrees 34 minutes 14 seconds West, 382.24 feet to a concrete monument, a point of curvature; thence continuing along the same, along the arc of a circle curving to the right having a radius of 170.00 feet, the arc distance of 42.66 feet to a concrete monument, a point of tangency; thence continuing along the same, South 72 degrees 56 minutes 52 seconds West, 75.10 feet to a concrete monument, being the first mentioned point and place of beginning.

BEING Unit (1)- Lot 2 as shown in Declaration recorded in Deed Book 6355 Page 2047.



BEING Parcel No. 49-00-04509-01-4

Being the same premises which Plymouth Park DFC, LLC, a Pennsylvania limited liability company by Deed dated 5-2-2018 and recorded 5-9-2018 in Montgomery County in Deed Book 6089 page 1009 conveyed unto Plymouth Hospitality LLC, a Pennsylvania limited liability company, erroneously cited as a Delaware limited liability company, in fee.

**UNDER AND SUBJECT TO**, nevertheless, all conveyances, exceptions, restrictions and conditions, which are contained in prior deeds or other instruments of record in Montgomery County, Pennsylvania, all visible easements; municipal zoning ordinances; building codes; laws, ordinances or governmental regulations relating to sewage disposal; and all laws, ordinances and regulations relating to subdivisions.

**THIS DOCUMENT MAY (DOES) NOT SELL, CONVEY, TRANSFER, INCLUDE OR INSURE THE TITLE TO THE COAL AND RIGHT OF SUPPORT UNDERNEATH THE SURFACE LAND DESCRIBED OR REFERRED TO HEREIN, AND THE OWNER OR OWNERS OF SUCH COAL MAY HAVE (HAVE) THE COMPLETE LEGAL RIGHT TO REMOVE ALL OF SUCH COAL AND, IN THAT CONNECTION, DAMAGE MAY RESULT TO THE SURFACE OF THE LAND AND ANY HOUSE, BUILDING OR OTHER STRUCTURE ON OR IN SUCH LAND. THE INCLUSION OF THIS NOTICE DOES NOT ENLARGE, RESTRICT OR MODIFY ANY LEGAL RIGHTS OR ESTATES OTHERWISE CREATED, TRANSFERRED, EXCEPTED OR RESERVED BY THIS INSTRUMENT. [This statement inserted pursuant to Act No. 431 of the Commonwealth of Pennsylvania of 1957 P.L. 984. The foregoing statement in and of itself shall not be construed to be an exception or reservation of the coal under the within described premises.]**

**TOGETHER** with all and singular, the said property, improvements, ways, streets, passages, waters, watercourses, rights, liberties, privileges, hereditaments, interests and appurtenances whatsoever thereunto belonging, or in anywise appertaining, and the reversions and remainders, rents, issues and profits thereof and all the estate, right, title, property, claim and demand whatsoever of the said Grantor, in law, equity or otherwise howsoever, of, in and to the same and every part thereof, with appurtenances;

**TO HAVE AND TO HOLD** the said messuages or tenement and tract of land, hereditaments and premises hereby granted and released, or mentioned and intended so to be, with the appurtenances, unto the said Grantee, their heirs and assigns, to and for the only proper use and behoof of the Grantee, their heirs and assigns forever.

And the said Grantor, for their heirs, successors, executors, administrators and assigns covenant, grant and agree to and with the said Grantee, their heirs, successors and assigns, that the said Grantor, have not done, committed, or knowingly or willingly suffered to be done or committed, any act, matter, or thing whatsoever whereby the Premises hereby granted or any party thereof, is, are, shall, or may be impeached, charged, or encumbered, in title, charge, estate or otherwise howsoever and the Grantor shall and will **SPECIALY WARRANT** and defend the Premises hereby conveyed.

**REMAINDER OF PAGE INTENTIONALLY LEFT BLANK; SIGNATURE PAGE TO FOLLOW**



IN WITNESS WHEREOF, the said Grantor have hereunto set their hands and seals the day and year first above written.

Attest:

Plymouth Hospitality LLC, a Pennsylvania limited liability company

By: [Signature]  
Hemal Shah, Authorized Member

Commonwealth of Pennsylvania

County of Cumberland

AND NOW, this 27 day of August 2024 before me, the undersigned Notary Public, appeared **Hemal Shah**, who acknowledged himself to be the **Authorized Member of Plymouth Hospitality LLC**, a limited liability company, and he, as such, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the limited liability company, by himself as Authorized Member.

Witness my hand and official seal, this the 27<sup>th</sup> day of August, 2024.

Christopher A. Gow  
Notary Public  
My Commission Expires: 9/4/2026

(SEAL)

Commonwealth of Pennsylvania - Notary Seal  
CHRISTOPHER A GOW - Notary Public  
Cumberland County  
My Commission Expires September 4, 2026  
Commission Number 1285457

#### Certificate of Residence

I, Dana Santangelo Barth-Wagner, do hereby certify that the precise residence and the complete post office address of the within named grantee is:

1606 Butler Pike, Conshohocken, PA 19428

[Signature]  
Dana Santangelo Barth-Wagner



# **EXHIBIT “B”**

Existing Conditions Plan



Craig R. Lewis  
Direct Dial: (610) 941-2584  
Direct Fax: (610) 684-2021  
Email: rlewis@kaplaw.com  
www.kaplaw.com

June 20, 2025

**HAND DELIVERY AND EMAIL (JROWE@PLYMOUTH-TOWNSHIP.ORG)**

Joel Rowe, Zoning Officer  
Plymouth Township  
700 Belvoir Road  
Plymouth Meeting, PA 19462

**RE: Zoning Hearing Board Application of EVB Gravers Road, LLC**  
**300 Lee Drive, Plymouth Meeting, PA**  
**Our Reference No. 18843-1**

Dear Joel:

My firm represents EVB Gravers Road, LLC ("**Applicant**"), the owner of the property located at 300 Lee Drive, Plymouth Meeting, PA, 19462, further identified as TMP #49-00-04509-01-4 (the "**Property**"). Enclosed is an application to the Plymouth Township Zoning Hearing Board appealing the June 4, 2025 Zoning Determination or, in the alternative, seeking a variance to allow the Property to be used as a contractor "lay-down" lot for storage of materials and equipment (collectively herein, the "**Application**").

In support of the Application, I have enclosed the following:

1. 25 copies of an executed<sup>1</sup> and notarized Plymouth Township Form Application as well as narrative/addendum to the Application attaching the following exhibits:
  - A. Deed to the Property;
  - B. Existing Conditions Plan (15 full-sized copies and 10 – 11"x17" copies);
  - C. Site Plan (15 full-sized copies and 10 – 11"x17" copies); and
2. A check in the amount of \$1,000.00 representing the required application fee.

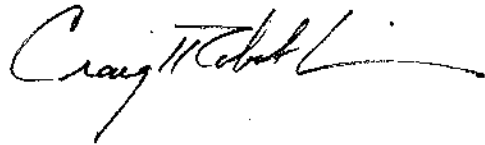
Also enclosed is an additional copy of the Application. Please have this additional copy time-stamped and returned to me with my messenger as proof of filing.

<sup>1</sup> The executed original Application will be delivered under separate cover.  
Kaplin Stewart  
Union Meeting Corporate Center  
910 Harvest Drive, P.O. Box 3037  
Blue Bell, PA 19422-0765  
610-260-6000 tel

Joel Rowe, Zoning Officer  
June 20, 2025  
Page 2

If you have any questions or require any further information, please contact me at your earliest convenience.

Best regards,

A handwritten signature in black ink, appearing to read "Craig Robert Lewis". The signature is fluid and cursive, with a long horizontal stroke at the end.

Craig Robert Lewis

Enclosures

cc (via e-mail): Kevin Bowe and Andrew Sabia, EVB Towing  
Martin J. Eustace, Eustace Engineering

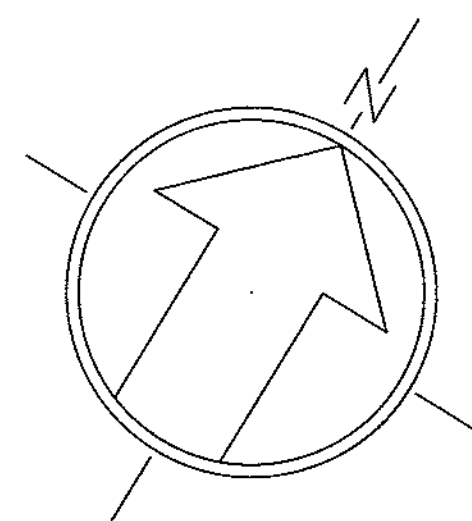
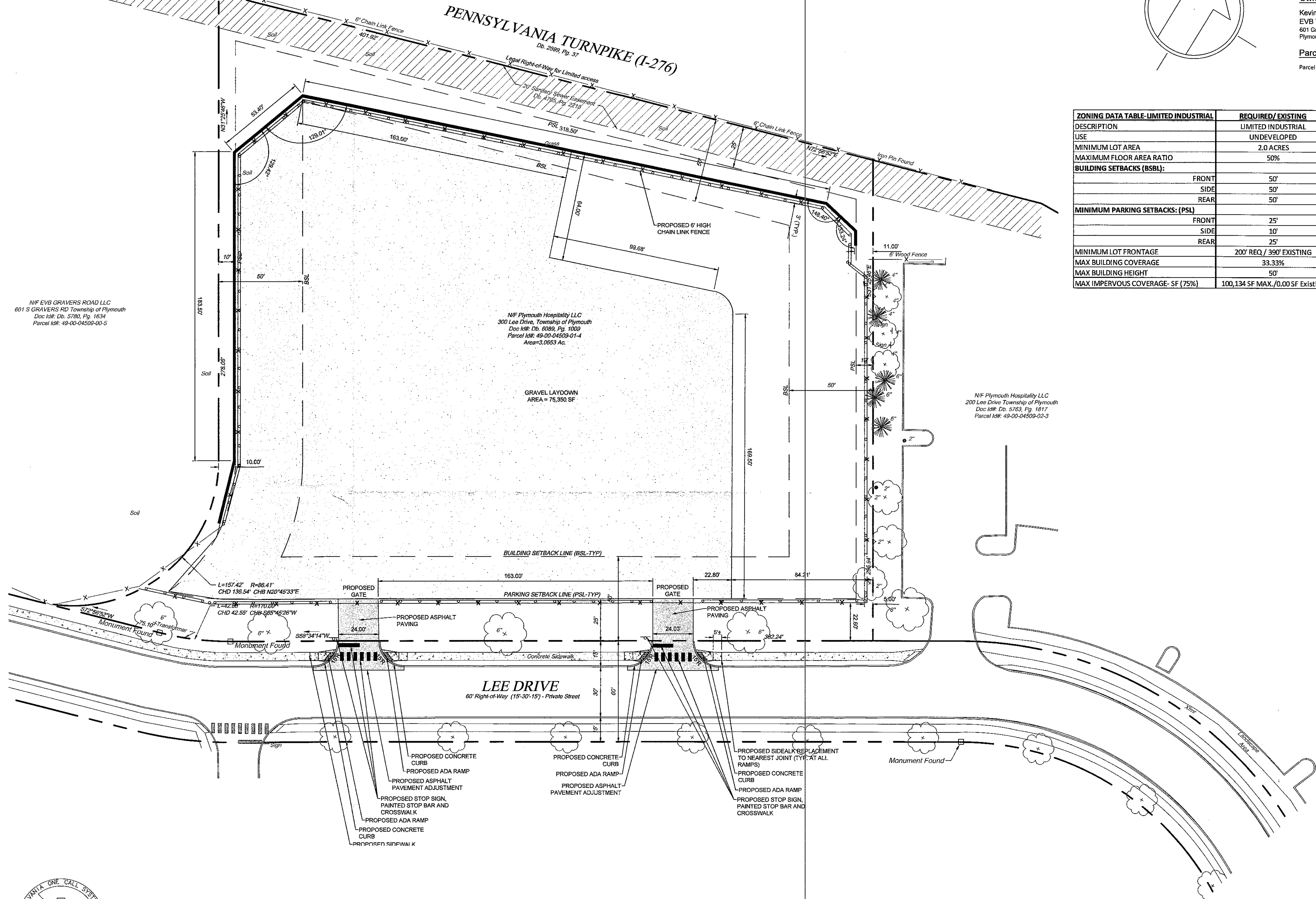
X:\PROJECTS\2400 - 2469\2444\01 - 300 Lee Drive Plymouth Meeting Pa\AutoCAD\Drawings\Land Development\02 d-and development.dwg April 7, 2025



Serial Number: 20242211911

#### Act 287

ALL PARTIES UTILIZING THIS PLAN AND THE INFORMATION CONTAINED THEREON ARE CAUTIONED TO COMPLY WITH THE REQUIREMENTS OF THE PENNSYLVANIA ACT 287 AS AMENDED BY PENNSYLVANIA ACT 199, OF 2024 ENTITLED "UNDERGROUND UTILITY LINE PROTECTION LAW". ALL EXISTING UNDERGROUND UTILITIES ARE TO BE CONSIDERED APPROXIMATE ONLY AND ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR AND THE APPROPRIATE UTILITY COMPANY PRIOR TO THE COMMENCEMENT OF THE SITE WORK, IN ACCORDANCE WITH ACT 287.



#### Site Data:

Address: 300 LEE DRIVE  
PLYMOUTH MEETING, PA 19462

Zoned: LIMITED INDUSTRIAL DISTRICT

Lot Area: 3.0653 ACRES

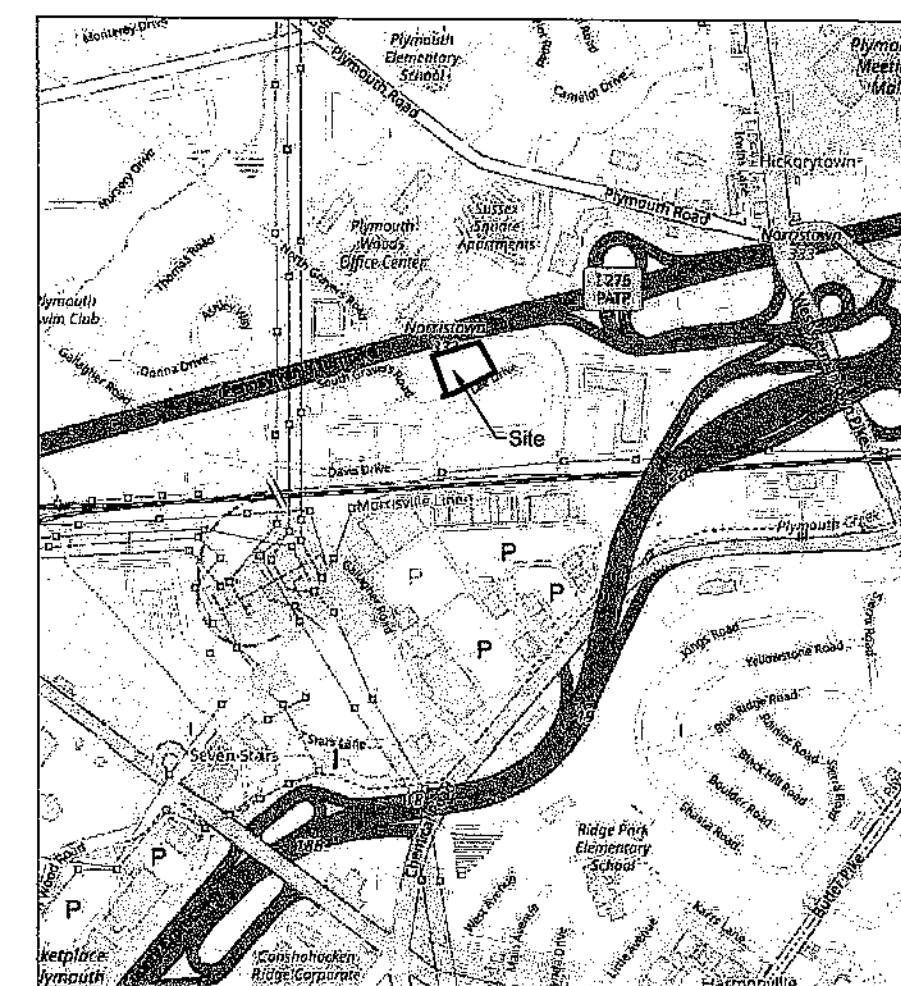
#### Owner/Applicant:

Kevin E. Bowe  
EVB Towing  
601 Gravers Lane  
Plymouth Meeting, PA 19462

#### Parcel Information:

Parcel ID: 49-00-04509-01-4

ZONING DATA TABLE-LIMITED INDUSTRIAL	REQUIRED/ EXISTING	PROVIDED/ PROPOSED
DESCRIPTION	LIMITED INDUSTRIAL	LIMITED INDUSTRIAL
USE	UNDEVELOPED	EXTERIOR STORAGE
MINIMUM LOT AREA	2.0 ACRES	3.065 ACRES
MAXIMUM FLOOR AREA RATIO	50%	N/A
BUILDING SETBACKS (BSBL):		
FRONT	50'	N/A
SIDE	50'	N/A
REAR	50'	N/A
MINIMUM PARKING SETBACKS: (PSL)		
FRONT	25'	25'
SIDE	10'	10'
REAR	25'	25'
MINIMUM LOT FRONTAGE	200' REQ / 390' EXISTING	NO CHANGE
MAX BUILDING COVERAGE	33.33%	N/A
MAX BUILDING HEIGHT	50'	N/A
MAX IMPERVIOUS COVERAGE- SF (75%)	100,134 SF MAX / 0.00 SF Existing	75,400 SF (56.47%)



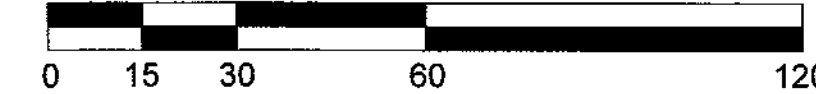
Location Map

Scale: 1" = 1000'

#### Legend

- BSL - (TYP.) Property Line / Right-of-Way
- BSBL - (TYP.) Building Setback Line
- PSL - (TYP.) Parking Setback Line
- Udlb Existing Soil Line
- UusB Existing Edge of Pavement
- Existing Concrete
- Existing Asphalt Paving
- 6" Existing Sanitary Sewer Line
- 10" Existing Water Line
- 8" Existing Gas Line
- 1" Existing Phone Line
- 12" Existing Storm Line
- chw Existing Overhead Wire
- X Existing Fence
- 16' Existing Minor Contour
- 15' Existing Major Contour
- Existing Tree Line
- 6" Existing Tree w/ Caliper
- FH Existing Fire Hydrant
- UP Existing Utility Pole
- Existing Sign
- WV Existing Water Valve
- LP Existing Light Standard
- Existing Inlet
- MH Existing Manhole
- Proposed 6' Chain Link Fence
- Proposed Guidedrail
- Proposed Asphalt
- Proposed Gravel
- Proposed Curb
- Proposed Concrete

#### GRAPHIC SCALE



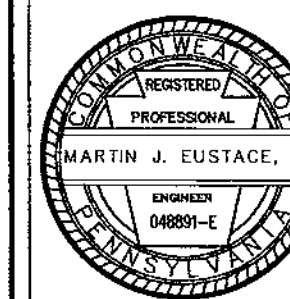
DRAWING SCALE: 1" = 30'

SHEET 2 OF 13

#### Site Plan

### Plymouth Meeting Park-Lot 2

300 LEE DRIVE, PLYMOUTH MEETING, PA 19462



**EUSTACE**  
ENGINEERS LANDSCAPE ARCHITECTS SURVEYORS  
8377 Easton Road  
Building B - 2nd Floor  
Willow Grove, PA 19090  
Tel: (215) 348-8757  
Fax: (215) 348-8759  
www.eustaceeng.com  
Martin J. Eustace, III, P.E.  
PA Lic. PE048891E

DRAWN BY MJU  
CHECKED BY MJE  
DATE 04-11-2025  
DRAWING No. D 2444-01 02





# live. work. play.

## *in Plymouth Township*

Plymouth Crossing is a proposed live, work, and play community at the Conshohocken Ridge Corporate Center that will include new upscale apartment living, retail and grocery – all conveniently located within the property's existing footprint. The plan offers the township a viable strategy for repurposing vacant commercial properties as seen in the 55% vacancy rate at the Conshohocken Ridge Corporate Center.

By providing well-located housing with nearby conveniences, the development appeals to both upwardly mobile young professionals and seniors seeking a more compact, accessible living environment. Since the transformed site will fall within the existing commercial footprint, there will be minimal impact to traffic and local resources.

For more information visit [PlymouthCrossing.com](http://PlymouthCrossing.com)



# Everything You Need, *Just A Few Steps Away*

## Transforms Vacant Office Space

The Conshohocken Ridge Corporate Center has a 55% vacancy rate. That's almost 100,000 square-feet of unused space that used to be leased by businesses from all industries. The proposed plan presents a chance to revitalize a commercial space that was heavily affected by the COVID-19 pandemic.

## Supports Local Businesses

The mixed-use setting will support nearby businesses by boosting foot traffic and making it more attractive to recruit and retain employees.

## Generates Economic Growth

The proposed plan will generate almost \$620,000 in net tax revenue annually for the Colonial School District and Plymouth Township – that's almost 10 times more than what's currently generated from the site with minimal impact to the school district and township.

## Conveniently Located

The enhanced I-476 ramp will support the walkable community by improving traffic flow and accommodating the anticipated increase in vehicle activity to and from the surrounding area.

## Trusted Development Team

BET Investments specializes in suburban mixed-use developments that incorporate apartments and retail space, achieving success for local townships and residents across Montgomery County.



**SCAN OR VISIT**  
[PlymouthCrossing.com](https://PlymouthCrossing.com)

For more information visit [PlymouthCrossing.com](https://PlymouthCrossing.com)





**INTERSTATE 476**  
(A.K.A. S.R. 0476 - MID COUNTY EXPRESSWAY - RAMP "A")  
(VARIABLE WIDTH R.O.W.)

## WEST RIDGE PIKE

(A.K.A. RIDGE PIKE - L.R. 1010)

(VARIABLE WIDTH R.O.W.)

(ASPHALT ROADWAY)

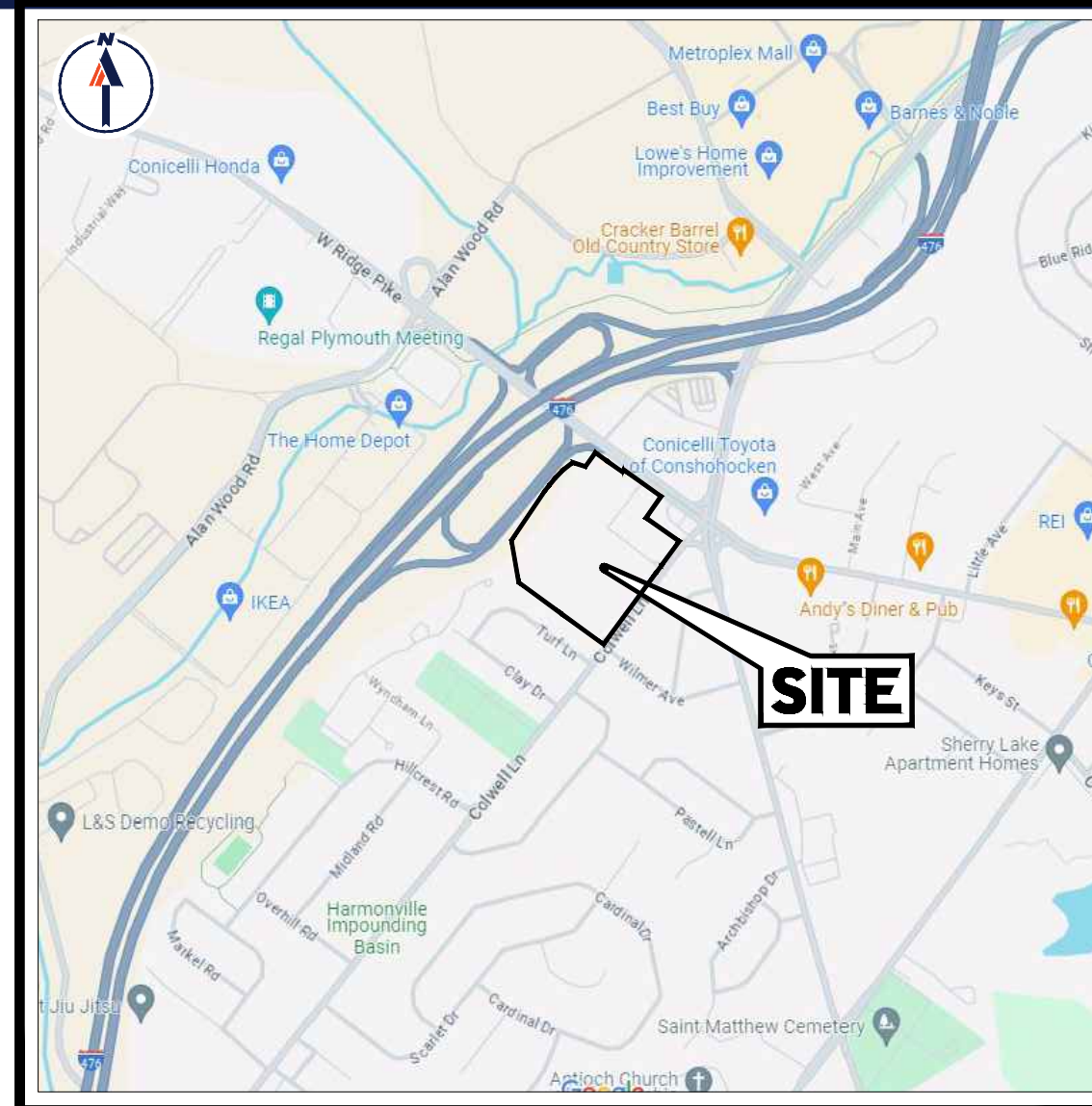
(PUBLIC ROADWAY)

NO WAY TRAFFIC

### CONCEPT PLAN NOTES

(Rev. 1/2020)

- THIS CONCEPT WAS PREPARED STRICTLY AND SOLELY BASED UPON INFORMATION IDENTIFIED IN THE PLAN REFERENCES.
- THE CONCEPT DEPICTED HEREIN IDENTIFIES A DESIGN CONCEPT RESULTING SOLELY FROM LAYOUT PREFERENCES AND GUIDANCE DICTATED AND IDENTIFIED SOLELY BY THE CLIENT. THE FEASIBILITY WITH RESPECT TO OBTAINING LOCAL, COUNTY, STATE, AND OTHER APPLICABLE APPROVALS IS NOT WARRANTED, AND CAN ONLY BE ASSESSED AFTER FURTHER EXAMINATION AND VERIFICATION OF APPLICABLE REQUIREMENTS AND AFTER THE PROCUREMENT OF ALL NECESSARY JURISDICTIONAL APPROVALS.
- THIS CONCEPTUAL PLAN IS PREPARED FOR CONCEPTUAL PRESENTATION PURPOSES, ONLY, AND IS NOT INTENDED TO AND SHOULD NOT BE UTILIZED AS A ZONING OR CONSTRUCTION DOCUMENT.
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- IT IS STRONGLY RECOMMENDED THAT A ZONING CONFORMANCE ANALYSIS BE PERFORMED TO DETERMINE AND EVALUATE IF THERE ARE ANY RESTRICTIONS AND/OR ZONING ISSUES, CONCERNS OR RESTRICTIONS THAT MAY OR COULD IMPACT THE FEASIBILITY OF THIS PROJECT, AS THE OWNER HAS DESCRIBED IT.



### LOCATION MAP

NOT TO SCALE  
SOURCE: GOOGLE MAP

### AREA CALCULATIONS

TOTAL TRACT AREA: (3 PARCELS)	16.126 Ac.
EXISTING BUILDING COVERAGE:	TOTAL BUILDING AREA: 130,083 SF COVERAGE: 18.52%
EXISTING IMPERVIOUS COVERAGE:	76.83% (12.389 Ac.)
PROPOSED BUILDING COVERAGE:	EXISTING REMAINING BUILDING: 74,055 SF PROPOSED BUILDING: 85,045 SF TOTAL BUILDING AREA: 159,100 SF COVERAGE: 22.65%
PROPOSED IMPERVIOUS COVERAGE:	78.61% (12.677 Ac.)



ATTENTION ALL CONTRACTORS:  
LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 887 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.  
WWW.PA.CALL.CORP  
800.555.5555

### FOR CONCEPT PURPOSES ONLY

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: PAA240108.00-1A  
DRAWN BY: LGU  
CHECKED BY: GJH  
DATE: 09/09/2024  
CAD ID: P-CTA-PROP

PROJECT:

### CONCEPT PLANS

FOR

BT PLYMOUTH, LLC

PROPOSED MIXED USE DEVELOPMENT

625 RIDGE PIKE  
PLYMOUTH TOWNSHIP  
MONTGOMERY COUNTY  
COMMONWEALTH OF PENNSYLVANIA

**BOHLER**

1600 MANOR DRIVE, SUITE 200  
CHALFONT, PA 18914  
Phone: (215) 996-9100  
Fax: (215) 996-9102  
www.BohlerEngineering.com

**G.J. HARTMAN**

PROFESSIONAL ENGINEER  
PENNSYLVANIA LICENSE No. PE076453  
NEW JERSEY LICENSE No. 24GE05345200

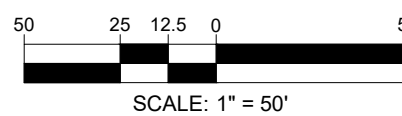
SHEET TITLE:

### CONCEPT PLAN

SHEET NUMBER:

**C-001**

REVISION 1 - 03/28/2025



SCALE: 1" = 50'



INTERSTATE 476  
(A.K.A. S.R. 0476 - MID COUNTY EXPRESSWAY - RAMP "A")  
(VARIABLE WIDTH R.O.W.)

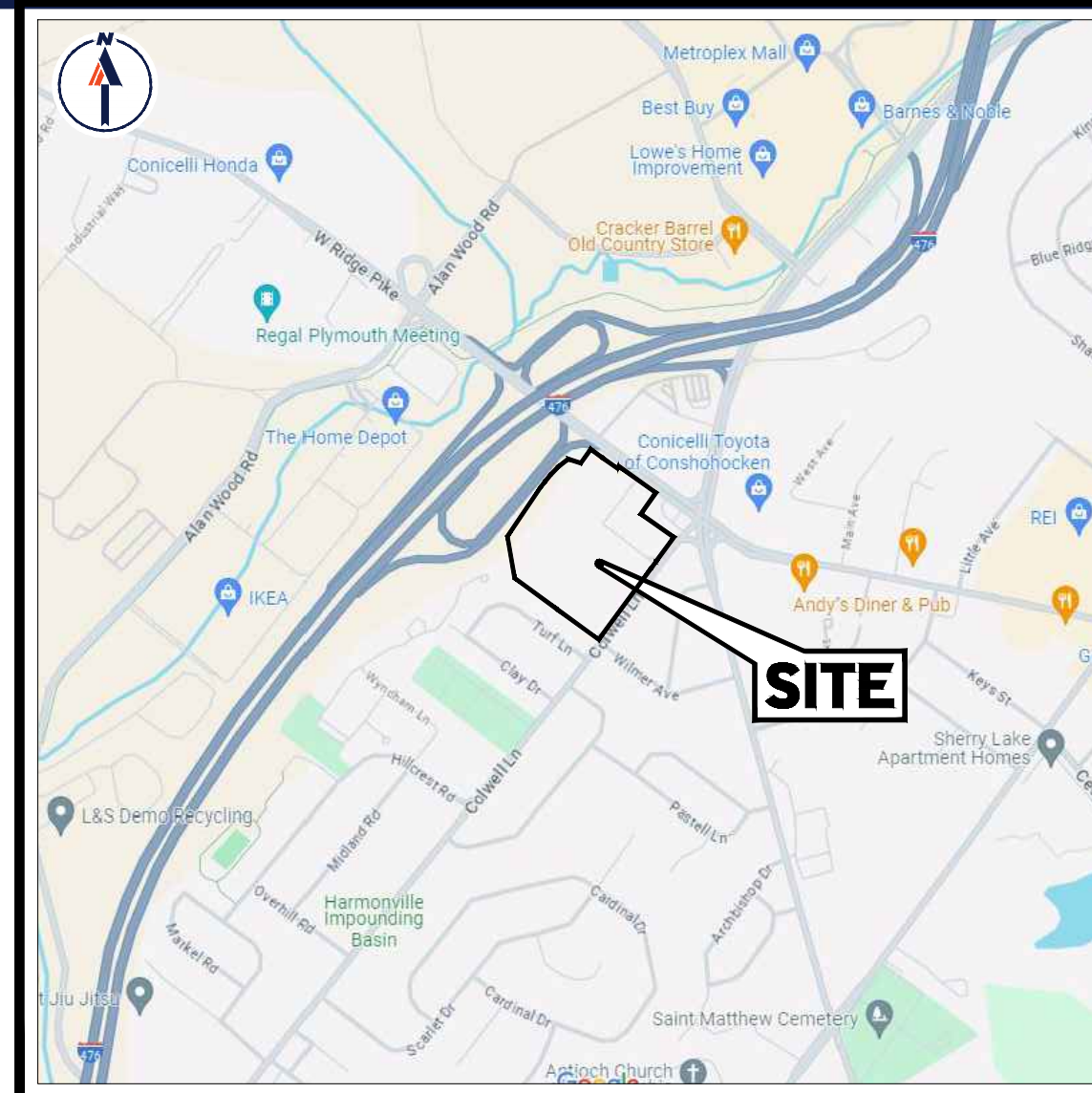


WEST RIDGE PIKE  
(A.K.A. RIDGE PIKE - L.R. 1010)  
(VARIABLE WIDTH R.O.W.)  
(ASPHALT ROADWAY)  
(PUBLIC ROADWAY)  
(TWO WAY TRAFFIC)

CONCEPT PLAN NOTES

(Rev. 1/2020)

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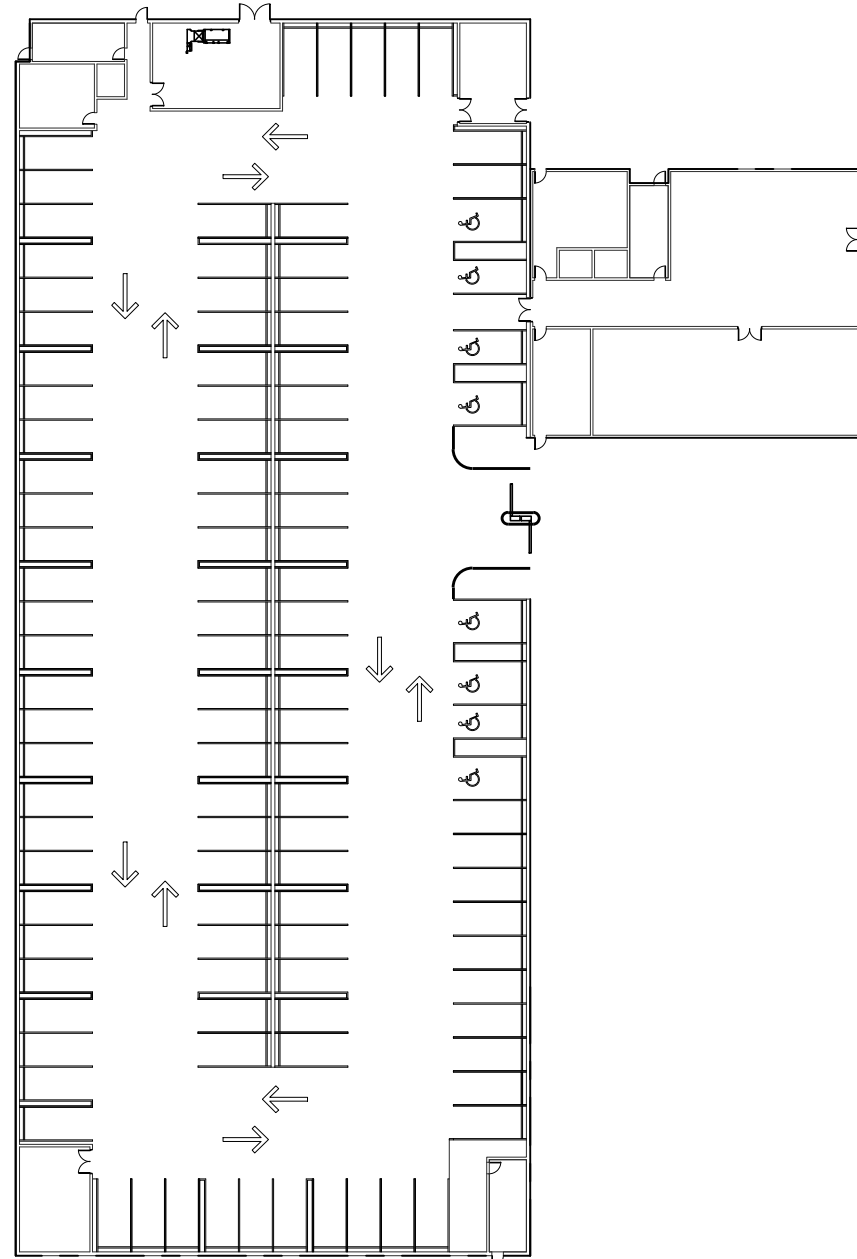
LOCATION MAP

NOT TO SCALE  
SOURCE: GOOGLE MAP

AREA CALCULATIONS

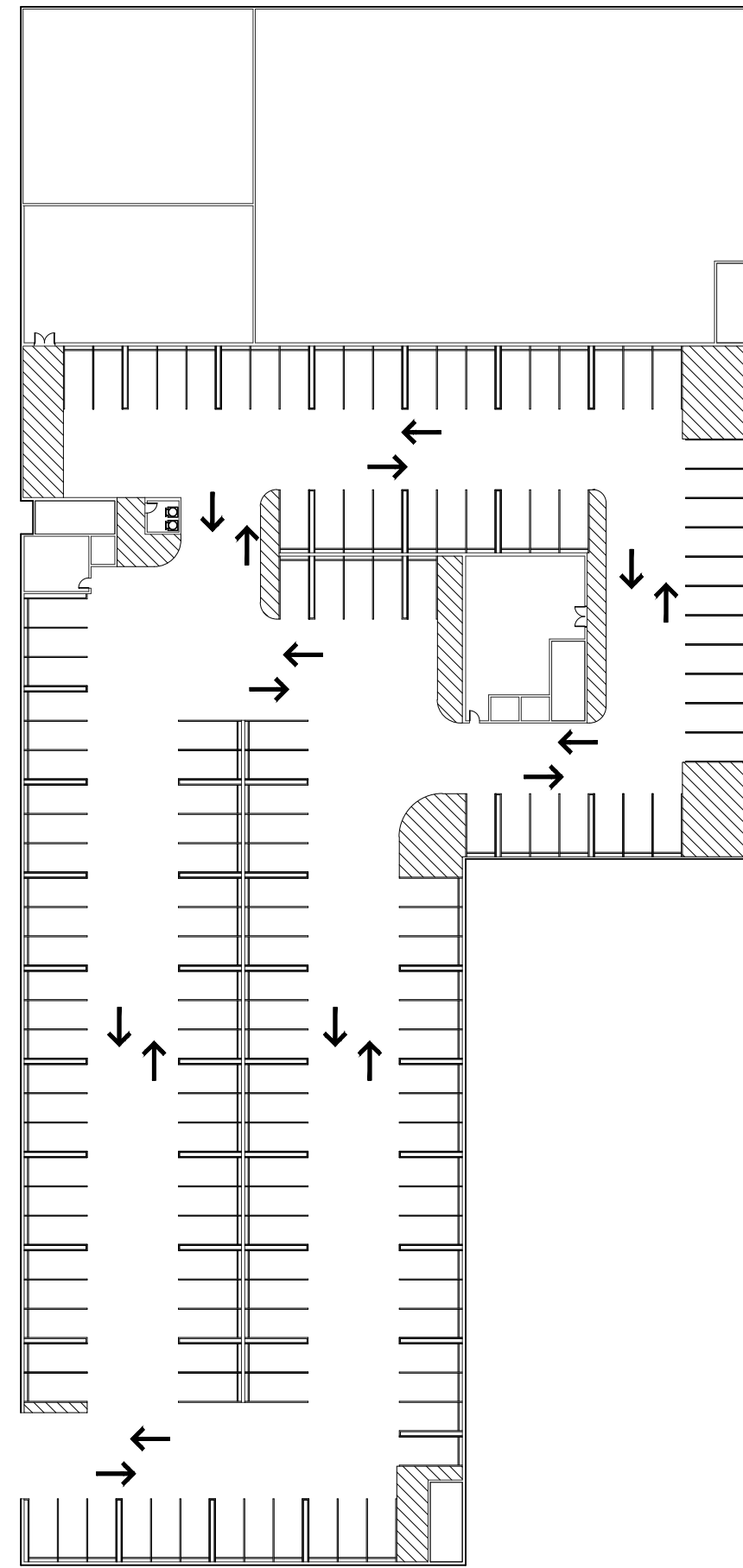
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EXISTING BUILDING COVERAGE:	TOTAL BUILDING AREA: 130,083 SF COVERAGE: 18.52%
EXISTING IMPERVIOUS COVERAGE:	76.83% (12,389 Ac.)
PROPOSED BUILDING COVERAGE:	EXISTING REMAINING BUILDINGS: 99,405 SF PROPOSED BUILDING: 23,600 SF TOTAL BUILDING AREA: 123,005 SF COVERAGE: 17.51%
PROPOSED IMPERVIOUS COVERAGE:	78.61% (12,677 Ac.)

COLWELL LANE  
(VARIABLE WIDTH R.O.W.)  
(ASPHALT ROADWAY)  
(PUBLIC ROADWAY)  
(TWO WAY TRAFFIC)



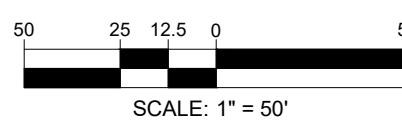
1ST FLOOR PARKING GARAGE

SCALE: 1" = 50'



2ND FLOOR PARKING GARAGE

SCALE: 1" = 50'



SCALE: 1" = 50'

**BOHLER**  
SITE CIVIL AND CONSULTING ENGINEERING  
PROGRAM MANAGEMENT  
LANDSCAPE ARCHITECTURE  
SUSTAINABLE DESIGN  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	06/19/2025	PER CLIENT COMMENT	CRS TK



FOR CONCEPT PURPOSES ONLY

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PA240108.00-1A
DRAWN BY:	CRS
CHECKED BY:	TK
DATE:	06/11/2025
CAD ID:	P-EXHA-REND

PROJECT:

CONCEPT PLANS

FOR

BT PLYMOUTH, LLC

PROPOSED MIXED USE DEVELOPMENT

625 RIDGE PIKE  
PLYMOUTH TOWNSHIP  
MONTGOMERY COUNTY  
COMMONWEALTH OF PENNSYLVANIA

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**G.J. HARTMAN**

PROFESSIONAL ENGINEER  
PENNSYLVANIA LICENSE No. PE076453  
NEW JERSEY LICENSE No. 24GE05345200

SHEET TITLE:

RENDERING EXHIBIT

SHEET NUMBER:

C-001

REVISION 1 - 06/19/2025



**FISCAL IMPACT ANALYSIS**  
**Conshohocken Ridge Development**  
**Plymouth Township, Montgomery County**

*March 23, 2024*

Prepared for:  
BET Investments

Prepared by:  
David C. Babbitt, AICP  
David C. Babbitt & Associates, LLC  
P.O. Box 922  
Frazer, PA 19355-0922  
610-651-5717  
[www.babbittplanning.com](http://www.babbittplanning.com)  
[david@babbittplanning.com](mailto:david@babbittplanning.com)

# Fiscal Impact Analysis

## Conshohocken Ridge Development

### Plymouth Township, Montgomery County

March 23, 2024

This report examines the annual fiscal impact to Plymouth Township and the Colonial School District (CSD) of the Conshohocken Ridge Development proposed by BET Investments. The report examines the fiscal impact to the Township and School District during any given year after the completion of the proposed project and full occupancy, based on 2024 levels of revenue, expenditures, and taxation.

The proposed development consists of the following elements:

- 120 one bedroom apartments, to be rented for an average of \$2,000 per month.
- 81 two bedroom apartments, to be rented for an average of \$3,000 per month.
- 18,641 square feet of retail commercial development, on the ground floor of the proposed apartment building.
- 261 structured parking spaces. The remaining parking is proposed to be surface parking.

The proposed development scenario of 201 rental apartments, 18,641 square feet of retail commercial development, and 261 structured parking spaces will be measured against the impacts of the existing vacant 50,190 square foot office building with an assessed value of \$2,714,918.

At buildout and full occupancy, the proposed apartment development is projected to generate \$26,935,179 of assessed value, which represents 1.5 percent of the total assessed value of all properties in the Township, and 0.6 percent of the total assessed value of all properties in the School District. At full occupancy, the proposed development is projected to house 305 persons, including 13 school age children (ages 5-17) of whom 12 are projected to attend public (CSD) schools, and 93 workers.

The table below shows the annual net fiscal impact (revenue minus expenditures) to the Township and School District of each element of the proposed development and the existing vacant office building. Below the table are sections on demographics, assessments, Township expenditures and revenue, and School District expenditures and revenue. At the end of this report are the spreadsheets for the Township and School District impact, which show the major expenditure and revenue categories for each entity. All cell addresses in the text refer to these spreadsheets.

Proposed Dwelling Type/ Use	Number of Units/ SF/ Spaces	Annual Net Township Impact	Annual Net School District Impact	Annual Net Combined Impact	Annual Net Combined Impact per Unit/ 1K SF / Space
1 BR Rental Apartment	120	\$75,001	\$269,821	<b>\$344,822</b>	\$2,874
2 BR Rental Apartment	81	\$65,601	\$151,134	<b>\$216,735</b>	\$2,676
Retail Commercial	18,641	\$6,675	\$56,159	<b>\$62,834</b>	\$3,371
Structured Parking	261	\$6,940	\$57,322	<b>\$64,261</b>	\$246
<b>Total Proposed</b>	<b>201</b>	<b>\$154,217</b>	<b>\$534,437</b>	<b>\$688,653</b>	
Existing Vacant Office	50,190	\$243	\$68,074	<b>\$68,317</b>	\$1,361
<b>Difference</b>		<b>\$153,974</b>	<b>\$466,362</b>	<b>\$620,336</b>	

The annual net fiscal impact of the proposed apartments is projected to be favorable for the Township and School District, creating annual net surpluses for each entity. **The annual net combined fiscal impact for the proposed Conshohocken Ridge Development is projected to total positive (or surplus) \$688,653.** The annual combined revenue is projected to exceed the annual combined expenditures by 268.9 percent.

By contrast, the annual net fiscal impact of the existing vacant office building is projected to be approximately break even for the Township and moderately favorable to the School District. The annual net combined fiscal impact of the existing office building is projected to be positive (or surplus) \$68,317 per year. The difference between the annual net combined impacts of the proposed development and the existing vacant office building is projected to be \$620,336. In other words, the annual combined surplus of the proposed development is projected to be approximately 10 times that of the existing office building.

There are three important reasons for the positive annual net fiscal impacts projected for the proposed development:

- First, the proposed development is comprised of smaller apartment units, which house fewer persons and far fewer school age children than single family detached dwellings, the predominant dwelling type in the Township. The lower number of persons and school age children result in lower expenditures for the Township and School District, which lead to annual surpluses for each entity.
- Second, the proposed apartments are proposed to be high end and will generate higher revenue in the real estate tax and earned income tax categories than many of the existing apartments in the Township.
- Third, the proposed retail commercial development and structured parking add very low Township expenditures and no School District expenditures at all, but generate considerable revenue to both entities.

The combination of lower expenditures and higher revenue results in annual surpluses to the Township and School District from the proposed development.

## Demographics

The number of persons per unit is projected to be 1.36 for all one bedroom apartments and 1.75 for all two bedroom apartments (cells E6-E7). These demographic multipliers are from *Residential Demographic Multipliers – Estimates of the Occupants of New Housing*, by Robert W. Burchell, David Listokin, and William Dolphin of the Rutgers University Center for Urban Policy Research (CUPR), published in June, 2006. These multipliers are based on the U.S. Bureau of the Census 2000 Public Use Microdata Sample, and are specific to each dwelling type, size, rent and state. The Rutgers CUPR (the group that developed the fiscal impact analysis methodology) examined housing built between 1990 and 2000 specifically in Pennsylvania, and determined the demographic multipliers for a variety of dwelling types (detached, attached, multifamily, etc.), size (in number of bedrooms), and value or monthly rent. The multipliers in this analysis are for the highest rent level for each dwelling type. The number of persons projected to reside in the proposed development is determined by multiplying the number of units (totaling 201, cells B6-B8) by the number of persons per unit for each dwelling type. The number of persons projected to reside in the proposed development at buildout and full occupancy totals 305 (cells F6-F8).

The number of workers per thousand square feet at the proposed retail commercial development is projected to be 5.00 (cell E8). This figure is based on *Who Lives in New Jersey Housing? New Jersey Demographic Multipliers*, by the CUPR, published in November, 2006. In addition to the residential demographic multipliers specific to New Jersey (which were not used in this analysis – see above for the

source of the Pennsylvania multipliers used in this analysis), this CUPR document also includes nonresidential multipliers from nationwide studies. The figure of 5.00 per thousand square feet reflects the smaller retail entities in the proposed development. Larger stores (including “big box” stores) tend to have fewer workers per thousand square feet. The number of workers projected to work in the proposed retail commercial development is determined by multiplying the number of square feet (18,641, cell B8) by the number of workers per thousand square feet (5.00, cell E8). The number of workers projected to work in the proposed retail commercial development at buildout and full occupancy totals 93 (cell F8). Please note that these figures represent the number of full time equivalent positions, not the number of employees. Given part time positions and turnover within positions, the number of employees for each use is likely to be higher. No workers are projected for the proposed structured parking, and the existing vacant office building has 0 workers (cells F9 and F11).

The prospective workers at the proposed retail commercial development are projected to be engaged in the following positions, shown in the table below with their respective average annual salaries.

Position	% of Workers	Average Annual Salary
Retail Sales Workers	90%	\$34,650
First Line Supervisors of Retail Sales Workers	10%	\$53,070
<b>TOTALS</b>	<b>100%</b>	<b>\$36,492</b>

The source of the average annual salaries is the *Pennsylvania Metropolitan Area Employment and Wage Estimates*, prepared by the Bureau of Labor Statistics, U. S. Department of Labor, in May, 2022 (the most recent data available). The weighted average annual salary of all positions is projected to be \$36,492 (cell I37).

The number of school age children per unit is projected to be 0.05 for all one bedroom apartments and 0.09 for all two bedroom apartments (cells E48-E49 of the School District spreadsheet). These demographic multipliers are also for the highest rent level for each dwelling type, and are from the Rutgers CUPR study for Pennsylvania. The number of public school students is determined by multiplying the number of units (totaling 201, cells B48-B49) by the number of school age children per unit in each category, and by 87.0 percent (cell D78), which is the percentage of school age children in Plymouth Township attending public schools, according to the 2022 American Community Survey, a function of the U.S. Census Bureau, which reported 2,217 public school students out of 2,549 school age children. The remaining school age children are projected to attend private school or be schooled at home. The number of public school students projected to reside in the proposed development at buildout and full occupancy totals 12 (cells F48-F49).

No school age children or public school students are projected to be generated by the proposed retail commercial development or structured parking, or the existing vacant office development (cells F50-F53).

### Assessments

The projected assessed value of the proposed rental apartments is based on nine comparable apartment complexes constructed since 2014, as shown in the table below with data from the County Board of Assessment database. The first is in Whitemarsh Township, the second is in Plymouth Township, and the remainder are in Upper Merion Township.

Name	Address	Built	Assessment	Units	per Unit
Court at Spring Mill	1101-1151 Hector Street	2014	\$46,221,840	385	\$120,057
Parc Plymouth Meeting	134 Plymouth Road	2015	\$38,137,200	398	\$95,822
Indigo 301	301 Village Drive	2016	\$41,491,240	363	\$114,301
The Hanover Apartments	300 Village Drive	2017	\$38,436,220	339	\$113,381
Canvas Valley Forge	101 Bryce Lane	2017	\$26,673,640	231	\$115,470
AVE Apartments	555 S. Goddard Blvd.	2018	\$31,185,220	273	\$114,232
Hanover Apartments II	625 S. Goddard Blvd.	2018	\$38,927,960	339	\$114,832
The Smith at Valley Forge	580 S. Goddard Blvd.	2018	\$36,216,700	320	\$113,177
Building 1000	751 Vandenburg Road	2018	\$34,665,730	314	\$110,400
<b>TOTALS</b>			<b>\$331,955,750</b>	<b>2,962</b>	<b>\$112,071</b>

The average assessment of these 2,962 units is \$112,071. The proposed one bedroom units are projected to average \$109,071 (cell C6), which is the average assessment minus \$3,000. The proposed two bedroom units are projected to average \$115,071 (cell C7), which is the average assessment plus \$3,000. The assessed value of the proposed development is determined by multiplying the number of units (totaling 201, cells B6-B8) by the assessed value for each dwelling type (cells C6-C7). The assessed value of the proposed apartments is projected to total \$22,409,369 (cells D6-D8).

The projected assessed value of the proposed retail commercial development is based on four comparable developments constructed since 2008, as shown in the table below with data from the County Board of Assessment database. All are in Plymouth Township, on Ridge Pike and Germantown Pike.

Name	Address	Built	Building Assessment	SF	per SF
McDonald's	213 Ridge Pike	2008	\$546,170	3,921	\$139.29
Key Bank	101 Ridge Pike	2008	\$424,250	3,327	\$127.52
Wawa	1300 E. Ridge Pike	2017	\$593,650	5,084	\$116.77
Mission BBQ/Vision Works	615 W. Germantown Pike	2017	\$699,200	6,505	\$107.49
<b>TOTALS</b>			<b>\$2,263,270</b>	<b>18,837</b>	<b>\$120.15</b>

The assessed value (for the buildings only) of these four existing developments averages \$120.15 per square foot (cell C8). This figure is applied to the number of square feet of proposed retail commercial development (18,641, cell B8). The assessed value of the proposed retail commercial development is determined by multiplying the number of square feet (18,641, cell B8) by the assessed value per square foot (\$120.15, cell C8). The assessed value of the proposed retail commercial development is projected to total \$2,239,721 (cell D8).

The projected assessed value of the proposed structured parking is based on two comparable structured parking garages constructed since 2008, as shown in the table below with data from the County Board of Assessment database. Both garages are in Norristown Borough, and the assessed value reflects the buildings only, and excludes the land value.



Name	Address	Built	Bldg. Assmnt.	Spaces	per Space
SEPTA Transportation Center	40 E. Lafayette Street	2008	\$4,329,570	500	\$8,659
Cherry Street Garage	101 W. Main Street	2008	\$4,280,490	483	\$8,862
<b>TOTALS</b>			<b>\$8,610,060</b>	<b>983</b>	<b>\$8,759</b>

The assessed value (for the buildings only) of these two existing structured parking garages averages \$8,759 per space (cell C9). The assessed value of the proposed structured parking is determined by multiplying the number of spaces (261, cell B9) by the assessed value per space (\$8,759, cell C9). The assessed value of the proposed structured parking is projected to total \$2,286,089 (cell D9).

The assessed value of the entire proposed development is projected to total \$26,935,179 (cells D6-D10). This projected assessed value represents 1.5 percent of the total assessed value of all properties in the Township (\$1,811,825,953, according to the Montgomery County Board of Assessment *Land Use Classification Report* of January 4, 2024), and 0.6 percent of the total assessed value of all properties in the School District (\$4,426,842,852, according to the 2023-2024 CSD budget).

The assessed value of the existing vacant office development is \$2,714,918 (cell D11), which translates to \$54.09 per square foot (cell C11). The difference in assessed value between the proposed development and the existing vacant office building is \$24,220,261 (cell D12).

Please note that the actual assessments will be applied by the Montgomery County Board of Assessment only after the proposed development is constructed and inspected.

### Annual Township Expenditures

Annual Township expenditures are determined in two ways. The residential expenditures are determined using the per capita multiplier method, by multiplying the projected number of residents in the proposed development (totaling 305, cells F6-F7) by the existing Township per capita operating expenditures of \$254.29 (cell D41). The per capita operating expenditures are determined by estimating the proportion of existing Township operating expenditures applied to existing Township residential development, and dividing by the existing Township population. The nonresidential expenditures are determined using the proportional valuation method, based on the assessed value of the existing vacant office building.

The Township's adopted 2024 budget includes the following eleven funds, shown in the table below with their respective expenditures:

Fund	Budgeted Expenditure
General Fund	\$25,349,695
Health and Welfare Fund	\$4,953,135
Sewer Fund	\$8,436,532
Community Center Fund	\$2,339,390
Capital Reserve Fund	\$6,760,000
GPCC Capital Fund	\$2,251,400
Act 209 Area 1 Fund	\$0
Act 209 Area 2 Fund	\$0

Fund	Budgeted Expenditure
Stormwater Outfall Fund	\$0
Recreation Impact Fee Fund	\$220,000
Highway Aid Fund	\$531,000
<b>Total</b>	<b>\$50,841,152</b>

The total Township budgeted expenditures in 2024 are \$50,841,152. However, this analysis focuses on annual operating expenditures only, and therefore includes only the following three operating funds, totaling \$30,833,830 (cell D36) and shown in the table below with their respective sums in the 2024 budget:

Fund	Budgeted Expenditure
General Fund	\$25,349,695
Health and Welfare Fund	\$4,953,135
Highway Aid Fund	\$531,000
<b>Total</b>	<b>\$30,833,830</b>

The other funds are excluded from this analysis, for the following reasons. The Sewer Fund and Community Center Fund are proprietary funds, using fees (such as sewer rents and connection fees, and community center program revenue) to fund operations. The Capital Reserve Fund and GPCC Capital Fund use revenue from grants, transfers from the General Fund, and forwarded fund balances from previous years to fund capital expenditures such as building improvements, not operating expenditures. The Act 209 Funds are capital funds to distribute transportation impact fees, and the Stormwater Outfall Fund has no expenditures for 2024.

Four categories of funds are subtracted from the total expenditures of \$30,833,830 (cell D36) in order to find a more accurate measure of the average annual expenditures for the proposed development and existing vacant office building. The first category is pass-through funds, which are excluded because the proposed development will have no net impact on these funds, since revenue always equals expenditures. Pass-through funds that are excluded are as follows, shown here with their respective sums in the Township's 2024 budget:

Pass-Through Fund	Fund	Budgeted Amount
Liquor License	General Fund	\$9,000
State Firemen Relief	General Fund	\$195,009
State Act 101 Recycling Grant	General Fund	\$85,000
State Grant	General Fund	\$15,000
State Public Utility Grant	General Fund	\$21,500
State Pension Aid	General Fund	\$792,609
Recycling Miscellaneous Revenue	General Fund	\$2,000
Reimbursable Services	General Fund	\$449,000
Recreation Fees	General Fund	\$289,600

Pass-Through Fund	Fund	Budgeted Amount
Contributions Retiree	Health and Welfare Fund	\$25,000
Contributions Police	Health and Welfare Fund	\$57,000
Contributions COBRA	Health and Welfare Fund	\$15,000
Contributions Active Employees	Health and Welfare Fund	\$105,000
<b>Total</b>		<b>\$2,060,718</b>

The excluded pass-through funds total \$2,060,718. Please note that just as the expenditures for the above pass-through funds are not included in the per capita expenditure calculations of this section, the revenue from these sources is also not included in the revenue analysis, below.

Another pass-through category is charges related to the processing and administration of proposed subdivisions and land developments in the Township, shown in the table below with their respective sums in the Township's 2024 budget, all in the General Fund.

Development Related Expenditures	Budgeted Amount
Electrical Permits	\$190,000
Sign Permits	\$36,000
Demolition Permits	\$5,000
Grading Permits	\$1,500
Improvement Permits	\$570,000
Mechanical Permits	\$150,000
Plumbing Permits - Master PLB	\$15,000
Plumbing Permits	\$85,000
Street-Road Permits	\$7,500
Zoning Hearing Applications	\$20,000
<b>Total</b>	<b>\$1,080,000</b>

Such charges for services and departmental earnings are excluded because they are in essence one-time pass-through funds for specific functions normally associated with new development. For example, the Township is budgeted to receive \$570,000 in improvement permit fees, which will be expended on the building inspections and the administration of those permits while a development is under construction, not on other functions associated with the time after a development is completed. Once a development is completed, the revenue and expenditures for such permits and application fees decreases significantly, but not completely.

The development related expenditures total \$1,080,000. Only 90 percent of the development related funds (or \$972,000) is excluded from the expenditure analysis, in acknowledgment that there will still be some expenditures on buildings once they are complete, for building additions, inspections for violations, ongoing permits, etc. Please note that in the revenue analysis, below, only 10 percent of the revenue from development related funds (or \$108,000) is included in the category of miscellaneous revenue.

The third category of excluded funds includes expenditures for solid waste disposal and road maintenance, based on the assumption that the Township will not incur any solid waste expenditures and no new

Township roads will be created as part of the proposed development or the existing vacant office building. Solid waste disposal is to be handled privately for all uses. All the roads surrounding the site have existed for years, and since the Township has been expending funds to maintain those roads under its jurisdiction (*i.e.*, local roads, excluding county and PennDOT roads) for that time, such expenditures are not likely to rise with the proposed development. Further, the Township will not expend funds on leaf collection or composting with the proposed development or the existing vacant office building. The sanitation and road maintenance expenditures total \$2,666,210 and are shown in the table below with their respective sums in the 2024 budget.

Excluded Expenditures	Fund	Budgeted Amount
Sanitation	General Fund	\$1,374,860
Road & Bridge Maintenance	General Fund	\$97,000
Storm Sewer Maintenance	General Fund	\$33,000
Street Signs & Markings	General Fund	\$1,850
Street Cleaning	General Fund	\$5,750
Snow & Ice Removal	General Fund	\$5,500
Street Lights	General Fund	\$290,000
Branch Pickup & Chipping	General Fund	\$12,000
Leaf Collection	General Fund	\$40,000
Composting	General Fund	\$47,000
½ of Maintenance & Repair Vehicles	General Fund	\$65,500
½ of Maint. & Repair PW Equipment	General Fund	\$162,750
All Highway Aid Fund Expenditures	Highway Aid Fund	\$531,000
<b>Total</b>		<b>\$2,666,210</b>

Please note that the excluded road maintenance expenditures do not include the other funds budgeted for public works in the General Fund. These expenditures are included in this analysis. Also, please note that the reason why the \$476,775 in state liquid fuels grants to the Highway Aid Fund are not excluded as pass-through funds, above, is because \$531,000 is excluded as road maintenance expenditures.

The final category of excluded funds is interfund transfers, for two reasons. The interfund transfers between two funds that are both included in this analysis are excluded in order to avoid double counting the same money as expenditures in both funds. Such interfund transfers include \$4,191,500 from the General Fund to the Health and Welfare Fund, which are both operating funds included in this analysis. The transfer of \$268,466 from the Sewer Fund to the General Fund is excluded, representing reimbursement to the Township for the administrative costs of operating the Sewer Fund, an excluded proprietary fund. And the General Fund transfers to the GPCC Capital and Capital Reserve Funds are for capital and not operating expenditures. The interfund transfers total \$14,631,415 and are shown in the table below with their respective sums in the 2024 budget.

Source Fund	Destination Fund	Budgeted Amount
General Fund	Health and Welfare Fund	\$4,748,135
General Fund	Sewer Operating Fund	\$1,583,280

Source Fund	Destination Fund	Budgeted Amount
General Fund	Comm. Ctr. Operating Fund	\$800,000
General Fund	GPCC Capital Fund	\$2,250,000
General Fund	Capital Reserve Fund	\$2,250,000
General Fund	Capital Projects Fund	\$3,000,000
<b>TOTAL</b>		<b>\$14,631,415</b>

Please note that the transfer of funds between the General Fund and the Sewer Fund is \$2,000,000 minus the \$416,720 transfer between the Sewer Fund and the General Fund. The net transfer is \$1,583,280, shown in the table above.

The excluded funds, including pass-through funds, excluded development related funds, sanitation and road maintenance expenditures, and interfund transfers, total \$20,330,343 (cell D37). The 2024 Township operating expenditures minus the pass-through funds, development related expenditures, sanitation and road maintenance expenditures and excluded interfund transfers total \$10,503,487 (cell D38).

Then, the Township expenditures associated with existing nonresidential development are subtracted from the net operating expenditures using the “proportional valuation method” of *The New Practitioner's Guide to Fiscal Impact Analysis*. First, a portion of the total Township expenditures is assigned to existing nonresidential development, based on the average value of property. According to the Montgomery County Board of Assessment *Land Use Classification Report* as of January 4, 2024 (the most recent available), the total assessed value of the 6,469 properties in Plymouth Township was \$1,811,825,953, yielding an average assessed value of \$280,078. Of those properties, 657 are nonresidential (commercial, industrial, institutional, utility, etc., whether taxable or exempt), with a total assessed value of \$825,776,376 (representing 45.6 percent of the Township total), and an average assessed value of \$1,256,889. The proportion of average nonresidential assessed value to average Township assessed value (residential and nonresidential combined) is 4.49, which is then used to determine the refinement coefficient of 1.21 from a graph in the *New Practitioner's Guide to Fiscal Impact Analysis*, also by Robert W. Burchell, David Listokin, and William Dolphin of the Rutgers University Center for Urban Policy Research (1985). The refinement coefficient is based on empirical research by the Rutgers University CUPR, and is necessary to adjust the costs of existing nonresidential development in communities without extensive nonresidential development of very high average assessed value, such as Plymouth Township. By comparison, in communities where the ratio between the average nonresidential assessment and the average overall assessment is above 6, an economy of scale reduces the nonresidential expenditures on a per square foot basis, and the refinement coefficient is below 1.00.

The proportion of Township assessed value in nonresidential uses (45.6 percent) is then multiplied by the refinement coefficient of 1.21, and by the 2024 net Township operating expenditures (\$10,503,487, cell D38). The result of this calculation is that \$5,792,484 of the net Township operating expenditures (representing 55.1 percent) is attributable to existing nonresidential development (cell D39). This sum is subtracted from the net Township operating expenditures (\$10,503,487, cell D38), and the remainder (\$4,711,003 in expenditures attributable to existing residential development) is divided by the estimated number of Township residents in 2024, which is 18,526 (cell D40). The 2024 estimated population is derived by taking the 2022 U.S. Census Bureau American Community Survey estimate of 18,391 and adding two years worth of the average annual increase between the 2020 decennial Census and 2022 (135 during those two years, or 67.5 per year, or 135 between 2022 and 2024) to reach the 2024 estimate of 18,526. The 2024 Township per capita operating expenditures attributable to existing residential development are \$254.29 (cell D41).

The 2024 Township per capita operating expenditures of \$254.29 (cell D41) are then applied to the projected number of residents of the proposed development at buildout and full occupancy (totaling 305, cells F6-F7) to find the annual projected Township operating expenditures for the proposed residential development of \$77,546 (cells G6-G7). The annual Township operating expenditure per unit is projected to be \$346 for the one bedroom apartments and \$445 for the two bedroom apartments (cells H6-H7).

The annual Township expenditures associated with the proposed retail commercial development are also determined using the proportional valuation method. The proposed retail commercial development has a projected assessed value of \$2,239,721 (cell D8) which is 0.3 percent of the assessed value of all 657 existing nonresidential properties in the Township (which is \$825,776,376). The ratio of the assessed value of the proposed retail commercial development (\$2,239,721) to the average assessed value of all existing nonresidential properties in the Township (\$1,256,889) is 1.78 which is used to determine a refinement coefficient of 0.92 from a different line on the same graph in the *Guide*. Then, the proportion of retail commercial assessed value to existing overall nonresidential assessed value (0.3 percent) is multiplied by the refinement coefficient of 0.92 and by the 2024 Township operating expenditures attributable to existing nonresidential development (\$5,792,484, cell D39). The result of this calculation is that the proposed retail commercial development is projected to generate \$14,454 in annual Township expenditures (cell G8), or \$775 per 1,000 square feet of development (cell H11).

No annual Township expenditures are projected from the proposed structured parking (cell G9). Instead, all Township expenditures are associated with the primary uses the structured parking is intended to serve (*i.e.*, the residential and retail commercial development). The total annual Township expenditures from the proposed development are projected to be \$92,000 (cells G6-G10).

The annual Township expenditures associated with the existing vacant office development are also determined using the proportional valuation method. The existing office development has an assessed value of \$2,714,918 (cell D11) which is 0.3 percent of the assessed value of all 657 existing nonresidential properties in the Township (which is \$825,776,376). The ratio of the assessed value of the existing office development (\$2,714,918) to the average assessed value of all existing nonresidential properties in the Township (\$1,256,889) is 2.16 which is used to determine a refinement coefficient of 0.84 from the incremental nonresidential assessment line on the same graph in the *Guide*. Then, the proportion of office building assessed value to existing overall nonresidential assessed value (0.3 percent) is multiplied by the refinement coefficient of 0.84 and by the 2024 Township operating expenditures attributable to existing nonresidential development (\$5,792,484, cell D39). This product is then reduced by 50 percent to reflect the fact that the existing office building is vacant. The Township will still expend funds on police protection, fire protection, code enforcement, etc., but the expenditures will be reduced significantly. The result of this calculation is that the existing vacant office building is projected to generate \$7,998 in annual Township expenditures (cell G11), or \$159 per 1,000 square feet of development (cell H11). The difference in annual Township expenditures between the proposed development and the existing vacant office building is projected to be \$84,002 (cell G12).

## **Annual Township Revenue**

### Real Estate Tax (cells B17-B23)

The annual real estate tax revenue is determined by applying the Township's 2024 combined real estate tax millage totaling 2.792 (cell I36) to the projected assessed value of the proposed development (totaling \$26,935,179, cells D6-D10) and existing vacant office building (\$2,714,918, cell D11). The 2024 millage rate includes the General Fund (1.957 mills) and the Fire Services Tax (0.835 mills), totaling 2.792 mills. The annual real estate tax revenue is projected to total \$75,203 for the proposed development and \$7,580 for the existing vacant office building, for a difference of \$67,623.

Earned Income Tax (cells C17-C23)

The annual earned income tax revenue is determined in two ways. The earned income tax revenue from the future residents of the proposed apartments is determined by applying the Township's tax rate of 0.5 percent to the projected household income of the residents. Household income is calculated by multiplying the monthly rent for each dwelling type by twelve months and dividing by 25 percent, which is the industry standard for the maximum percentage of household income used for rent for prospective tenants of a multifamily development. The monthly rent, total annual housing cost, and minimum annual household income for each proposed apartment type are shown in the table below.

Proposed Dwelling Type	Monthly Rent	Total Annual Housing Cost	Minimum Annual Household Income
1BR Rental Apartment	\$2,000	\$24,000	\$96,000
2 BR Rental Apartment	\$3,000	\$36,000	\$144,000

The minimum annual household income for each dwelling type is then multiplied by the number of units (totaling 201, cells B6-B7) and by the Township's earned income tax rate of 0.5 percent. Please note that these are the minimum levels of annual income necessary to cover the projected rents of the apartments. Most households will have higher income levels and will use a lower percentage of their household incomes towards their rents, which will result in significantly higher earned income tax revenue to the Township (and School District). The earned income tax revenue from the prospective residents of the proposed apartments is projected to total \$115,920 (cells C17-C18).

The earned income tax revenue from the prospective workers at the proposed retail commercial development is determined by multiplying the projected number of workers (93, cell F8) by the average annual worker salary of \$36,492 (cell I37; see the demographic section, above, for the source of this figure) by the Township tax rate for nonresident workers of 1.0 percent. This figure is then reduced by 90 percent to reflect the likelihood that most workers will live in municipalities that charge the earned income tax. Plymouth Township is projected to retain only 10 percent of the earned income tax revenue it collects from the nonresident workers, and the remaining 90 percent is forwarded to the municipalities where these nonresident workers live. The annual earned income tax revenue from the 93 workers at the proposed retail commercial development is projected to total \$3,401 (cell C19). No earned income tax revenue is projected from the proposed structured parking.

The earned income tax revenue is projected to total \$119,321 for the proposed development and \$0 for the existing vacant office development, for a difference of \$119,321.

Mercantile and Business Privilege Taxes (cells D17-D23)

The mercantile and business privilege tax revenue is determined in two ways. The revenue for the proposed apartments is determined by dividing the annual gross rent from all units (totaling \$5,796,000 and assuming full occupancy) by 1,000 and applying the Township's tax rate of 1.5 mills. The revenue for the proposed retail commercial development is determined by multiplying the square feet of development (18,641, cell B8) by the very conservative figure of \$200 per square foot of annual sales, dividing by 1,000 and applying the tax rate of 1.5 mills. The revenue for the existing office building is \$0, based on the building vacancy. The annual mercantile and business privilege tax revenue is projected to total \$14,286 for the proposed development and \$0 for the existing vacant office building, for a difference of \$14,286.

Liquid Fuels Revenue and Local Services Tax (cells E17-E23)

The annual liquid fuels revenue is determined by multiplying the projected number of residents of the proposed apartments (totaling 305, cells F6-F7) by the 2024 per capita revenue from PennDOT of \$17.9662 (cell I38), according to the current Department of Transportation Bureau of Municipal Services *Municipal Liquid Fuels Allocations Report* (dated January 30, 2024). The annual liquid fuels revenue is projected to total \$5,479. The proposed retail commercial development, structured parking, and existing vacant office building are projected to generate no per capita liquid fuels revenue, and neither scenario is projected to generate any per mile liquid fuels revenue, since no new Township roads are proposed.

The annual local services tax revenue is determined by applying the Township's tax rate of \$52 per worker to the number of workers at the proposed retail commercial development (totaling 93), resulting in \$4,847. No annual local services tax revenue is projected from the proposed structured parking and existing vacant office building (cells E20 and E22). The annual liquid fuels and local services tax revenue is projected to total \$10,741 for the proposed development and \$0 for the existing vacant office building, for a difference of \$10,741.

Franchise Fee & Miscellaneous Revenue (cells F17-F23)

The annual cable TV franchise fee and miscellaneous revenue is determined by adding 10 percent of the \$1,080,000 for development related funds (or \$108,000; see expenditure analysis, above), and the Township's 2024 budgeted cable television franchise fee revenue of \$315,000, for a total of \$423,000. This sum is divided by the current number of housing units in the Township (estimated at 8,044, cell I39), and that average per unit revenue (\$52.59, cell I40) is then multiplied by the number of units in the proposed apartment development (totaling 201, cells B6-B7) as well as to the number of square feet of proposed retail commercial development (18,641, cell B8) divided by 2,000. In other words, each 2,000 square feet of retail commercial development is projected to generate the same franchise fee and miscellaneous revenue as one home in the Township. In addition, the proposed apartments will generate \$45 per unit per year in rental housing inspection fee revenue (cell I41). The proposed structured parking and existing vacant office building are projected to generate no franchise fee or miscellaneous revenue. The annual franchise fee and miscellaneous revenue is projected to total \$20,105 for the proposed development and \$0 for the existing vacant office building, for a difference of \$20,105.

Interest Earnings (cells G17-G23)

The annual interest earnings are determined by dividing the projected assessed value of the proposed development (totaling \$26,935,179, cells D6-D10) and the existing vacant office building (\$2,714,918, cell D11) by the total Township taxable assessment of \$1,660,921,533 (from the January, 2024 Montgomery County Board of Assessment *Land Use Classification Report*, representing the total Township assessed value minus the assessment of all institutional, utility and government owned properties), and multiplying that quotient by the sum the Township budgeted for interest earnings in the three operating funds in 2024, totaling \$404,500 and shown in the table below.

Fund	Interest Earnings
General Fund	\$400,000
Health & Welfare Fund	\$3,000
Highway Aid Fund	\$1,500
<b>TOTAL</b>	<b>\$404,500</b>



The annual interest earnings are projected to total \$6,560 for the proposed development and \$661 for the existing vacant office building, for a difference of \$5,899.

#### Total Township Revenue (cells H17-H23)

The annual Township revenue from all sources is projected to total \$246,217 from the proposed development and \$8,241 from the existing vacant office building, for a difference of \$237,975. Annual revenue per unit is projected to be \$971 for the one bedroom apartments, \$1,255 for the two bedroom apartments, \$1,133 per 1,000 square feet of retail commercial development, \$27 per structured parking space, and \$164 per 1,000 square feet of existing office development (cells I17-I22).

#### **Annual Net Township Revenue** (cells B27-B33)

After subtracting the expenditures from the revenue, the annual net impact to the Township is projected to total positive (or surplus) \$154,217 for the proposed development and positive \$243 for the existing vacant office building, for a difference of \$153,974. Annual net revenue per unit is projected to be positive \$625 for the one bedroom apartments, positive \$810 for the two bedroom apartments, positive \$358 per 1,000 square feet of retail commercial development, positive \$27 per structured parking space, and positive \$5 per 1,000 square feet of existing office development (cells C27-C32).

Annual revenue is projected to exceed annual expenditures by 180.7 percent for the one bedroom apartments, 182.0 percent for the two bedroom apartments 46.2 percent for the retail commercial development, 167.6 percent overall, and 3.0 percent for the existing vacant office building (cells D27-D32).

Again, please note that these are annual revenue and expenditure figures after buildout, and do not include the one-time revenue sources during development, such as traffic impact fees, park and recreation fees in lieu of open space, and permits.

#### **Annual School District Expenditures**

The number of units (totaling 201, cells B48-B49 of the School District spreadsheet), square feet of retail commercial development (18,641, cell B50), structured parking spaces (261, cell B51), and square feet of existing office development (50,190, cell B53), the average assessed value per unit, per 1,000 square feet of nonresidential development and per structured parking space (cells C48-C53), and the projected assessed value (totaling \$26,935,179 for the proposed development and \$2,714,918 for the existing vacant office building, cells D48-D54) are determined using the same method as was used for the Township impact, above. As noted in the demographic section, above, the number of public school (CSD) students at buildout and full occupancy is projected to total 12 for the proposed development and 0 for the existing vacant office building (cells F48-F54).

The Colonial School District General Fund budgeted expenditures total \$151,153,201 for the 2023-2024 year (cell D79). The following pass-through funds are subtracted from this total:

Pass-Through Fund	Budgeted Amount
Public Utility Realty Taxes	\$100,000
Revenue from Intermediary Sources	\$1,000,000
Rentals	\$500,000

Pass-Through Fund	Budgeted Amount
Tuition from Patrons	\$1,587,500
<b>TOTAL</b>	<b>\$3,187,500</b>

In addition, the budgetary reserve of \$500,000 is subtracted, representing funds not projected to be expended during the school year. The pass-through funds and budgetary reserve total \$3,687,500 (cell D80), with the remaining net School District expenditures totaling \$147,465,701 (cell D81). This figure is then divided by the 2023-2024 District-wide enrollment of 5,400 students (cell I78, from the CSD web site) to find the 2023-2024 CSD net expenditure of \$27,308 per student (cell I79).

This per student expenditure is applied to the 12 students from the proposed development projected to attend public schools (cells F48-F52) to determine the projected annual School District expenditures of \$315,659 for the proposed development and \$0 for the existing vacant office building, for a difference of \$315,659 (cells G48-G54). No annual School District expenditures are projected from the proposed retail commercial development or structured parking, or the existing vacant office building. The annual School District expenditure per unit is projected to be \$1,188 for the one bedroom apartments and \$2,138 for the two bedroom apartments (cells H48-H49).

### **Annual School District Revenue**

#### Real Estate Tax (cells B59-B65)

The real estate tax revenue is determined using the same method as was used for the Township impact, above, except that the School District's 2023-2024 tax millage rate of 25.0200 (cell I80) is applied to the assessed value of the proposed development (totaling \$26,935,179, cells D48-D52) and existing vacant office building (\$2,714,918, cell D53). No School District homestead exemption is applied, because the proposed units are rentals, not owner occupied. The annual real estate tax revenue is projected to total \$673,918 for the proposed development and \$67,927 for the existing vacant office building, for a difference of \$605,991. Please note that this one revenue source is more than double the projected annual School District expenditures of \$315,659 for the proposed apartments (cells G48-G49).

#### Earned Income Tax (cells C59-C65)

The annual earned income tax revenue from the prospective residents of the apartments is determined using the same method as was used for the Township, above. The School District does not collect the earned income tax from nonresident workers. The annual earned income tax revenue is projected to total \$115,920 for the proposed development and \$0 for the existing vacant office building, for a difference of \$115,920.

#### State & Federal Revenue (cells D59-D65)

The state and federal revenue is determined by adding the School District's budgeted revenue of \$27,468,085 from the state and federal governments, and dividing by the 2023-2024 student enrollment of 5,400 (cell I78) for an annual per student revenue of \$5,087 (cell I81), and applying that per student revenue to the projected number of CSD students from the proposed apartments (totaling 12, cells F48-F49). The annual state and federal revenue is projected to total \$58,797 for the proposed development and \$0 for the existing vacant office building, for a difference of \$58,797.

Earnings on Investments (cells E59-E65)

The earnings on investments are determined by dividing the projected assessment of the proposed development (totaling \$26,935,179, cells D48-D52) and existing vacant office building (\$2,714,918, cell D53) by the total School District taxable assessment of \$4,426,842,852 (from the 2023-2024 CSD budget), and multiplying that quotient by the sum the School District budgeted for interest earnings in 2023-2024 (\$240,000). The annual earnings on investments are projected to total \$1,460 for the proposed development and \$147 for the existing vacant office building, for a difference of \$1,313.

Total School District Revenue (cells F59-F65)

The annual School District revenue from all sources at buildout and full occupancy is projected to total \$850,096 for the proposed development and \$68,074 for the existing vacant office building, for a difference of \$782,021. Annual School District revenue per unit is projected to be \$3,436 for the one bedroom apartments, \$4,004 for the two bedroom apartments, \$3,013 per 1,000 square feet of retail commercial development, \$220 per structured parking space, and \$1,356 per 1,000 square feet of existing vacant office development (cells G59-G64).

**Annual Net School District Revenue** (cells B69-B75)

After subtracting the expenditures from the revenue, the annual net impact to the School District is projected to total positive (or surplus) \$534,437 for the proposed development and positive \$68,074 for the existing vacant office building, for a difference of \$466,362. Annual net revenue per unit is projected to be positive \$2,294 for the one bedroom apartments, positive \$1,866 for the two bedroom apartments, positive \$3,013 per 1,000 square feet of retail commercial development, and positive \$1,356 per 1,000 square feet of existing vacant office development (cells C69-C74).

Annual revenue is projected to exceed annual expenditures by 189.3 percent for the one bedroom apartments, 87.3 percent for the two bedroom apartments and 169.3 percent overall (cells D69-D73). Since there are no projected School District expenditures from the proposed retail commercial development, structured parking, or existing vacant office building, all revenue from these uses becomes surplus.

	A	B	C	D	E	F	G	H	I
1	<b><u>ANALYSIS OF THE FISCAL IMPACT TO PLYMOUTH TOWNSHIP</u></b>								
2	<b>Of the Proposed Conshohocken Ridge Development</b>							March 23, 2024	
3									
4	Proposed Use/	Number of	Assessment	Total	Persons per Unit/	Total Residents/	Annual Township	Exp's per Unit /	
5	Scenario	Units / SF / Spaces	per Unit / SF	Assessed Value	Workers per 1K SF	Total Workers	Expenditures	1K SF / Space	
6	1 BR Apartments	120	\$109,071	\$13,088,579	1.36	163	\$41,500	\$346	
7	2 BR Apartments	81	\$115,071	\$9,320,791	1.75	142	\$36,046	\$445	
8	Retail Commercial	18,641	\$120.15	\$2,239,721	5.00	93	\$14,454	\$775	
9	Structured Parking	261	\$8,759	\$2,286,089		0	\$0	\$0	
10	Total Proposed	201 / 18,641 / 261		\$26,935,179		305 / 93	\$92,000		
11	Existing Vacant Office	50,190	\$54.09	\$2,714,918	0.00	0	\$7,998	\$159	
12	Difference			\$24,220,261			\$84,002		
13									
14		Annual Township Revenue							
15	Proposed Use/	Real Estate	Earned Income	Mercantile/Business	Liquid Fuels Revenue	Franchise Fee &	Interest	Total Annual	Rev. per Unit /
16	Scenario	Tax	Tax	Privilege Tax	Local Services Tax	Misc. Revenue	Earnings	Revenue	1K SF / Space
17	1 BR Apartments	\$36,543	\$57,600	\$4,320	\$3,140	\$11,710	\$3,188	\$116,501	\$971
18	2 BR Apartments	\$26,024	\$58,320	\$4,374	\$2,755	\$7,904	\$2,270	\$101,647	\$1,255
19	Retail Commercial	\$6,253	\$3,401	\$5,592	\$4,847	\$490	\$545	\$21,129	\$1,133
20	Structured Parking	\$6,383	\$0	\$0	\$0	\$0	\$557	\$6,940	\$27
21	Total Proposed	\$75,203	\$119,321	\$14,286	\$10,741	\$20,105	\$6,560	\$246,217	
22	Existing Vacant Office	\$7,580	\$0	\$0	\$0	\$0	\$661	\$8,241	\$164
23	Difference	\$67,623	\$119,321	\$14,286	\$10,741	\$20,105	\$5,899	\$237,975	
24									
25	Proposed Use/	Annual Net	Annual Net Township Rev.	Revenue >					
26	Scenario	Township Revenue	per Unit / 1K SF / Space	Expenditure					
27	1 BR Apartments	\$75,001	\$625	180.7%					
28	2 BR Apartments	\$65,601	\$810	182.0%					
29	Retail Commercial	\$6,675	\$358	46.2%					
30	Structured Parking	\$6,940	\$27	--					
31	Total Proposed	\$154,217		167.6%					
32	Existing Vacant Office	\$243	\$5	3.0%					
33	Difference	\$153,974							
34									
35	NOTES:								
36	2024 Township Operating Expenditures (3 funds)			\$30,833,830	2024 Township General Fund & Fire Tax Millage			2.792	
37	Minus 2024 Pass-Through and Excluded Expenditures			\$20,330,343	Average Annual Worker Salary (BLS, 2022)			\$36,492	
38	2024 Net Township Operating Expenditures			\$10,503,487	2024 PennDOT per Capita Subsidy			\$17.9662	
39	2024 Township Non-Residential Expenditures		55.1%	\$5,792,484	2024 Township Housing Unit Estimate			8,044	
40	2024 Estimated Township Population			18,526	Annual Miscellaneous Revenue per Unit			\$52.59	
41	2024 Township Expenditure per Capita			\$254.29	Annual Rental Housing Inspection Fee per Unit			\$45	

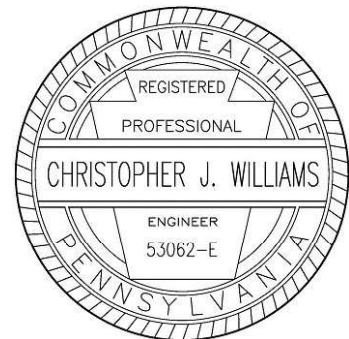
	A	B	C	D	E	F	G	H	I
43	<b>UPDATED ANALYSIS OF THE FISCAL IMPACT TO THE COLONIAL SCHOOL DISTRICT</b>								
44	<b>Of the Proposed Conshohocken Ridge Development</b>							March 23, 2024	
45									
46	Proposed Use/	Number of	Assessment	Total	School Age	CSD (Public	<b>Annual School Dist.</b>	Exp's per Unit /	
47	Scenario	Units / SF / Spaces	per Unit / SF	Assessment	Children per Unit	School) Students	<b>Expenditures</b>	1K SF / Space	
48	1 BR Apartments	120	\$109,071	\$13,088,579	0.05	5	<b>\$142,510</b>	\$1,188	
49	2 BR Apartments	81	\$115,071	\$9,320,791	0.09	6	<b>\$173,149</b>	\$2,138	
50	Retail Commercial	18,641	\$120	\$2,239,721	0.00	0	<b>\$0</b>	\$0	
51	Structured Parking	261	\$8,759	\$2,286,089	0.00	0	<b>\$0</b>	\$0	
52	<b>Total Proposed</b>	<b>201 / 18,641 / 261</b>		<b>\$26,935,179</b>		<b>11.56</b>	<b>\$315,659</b>		
53	Existing Vacant Office	50,190	\$54.09	\$2,714,918	0.00	0	<b>\$0</b>	\$0	
54	<b>Difference</b>			<b>\$24,220,261</b>		<b>12</b>	<b>\$315,659</b>		
55									
56		<b>Annual School District Revenue</b>							
57	Proposed Use/	Real Estate	Earned Income	State & Federal	Earnings on	<b>Total Annual</b>	Rev. per Unit /		
58	Scenario	Tax	Tax	Revenue	Investments	<b>Revenue</b>	1K SF / Space		
59	1 BR Apartments	\$327,476	\$57,600	\$26,545	\$710	<b>\$412,331</b>	\$3,436		
60	2 BR Apartments	\$233,206	\$58,320	\$32,252	\$505	<b>\$324,284</b>	\$4,004		
61	Retail Commercial	\$56,038	\$0	\$0	\$121	<b>\$56,159</b>	\$3,013		
62	Structured Parking	\$57,198	\$0	\$0	\$124	<b>\$57,322</b>	\$220		
63	<b>Total Proposed</b>	<b>\$673,918</b>	<b>\$115,920</b>	<b>\$58,797</b>	<b>\$1,460</b>	<b>\$850,096</b>			
64	Existing Vacant Office	\$67,927	\$0	\$0	\$147	<b>\$68,074</b>	\$1,356		
65	<b>Difference</b>	<b>\$605,991</b>	<b>\$115,920</b>	<b>\$58,797</b>	<b>\$1,313</b>	<b>\$782,021</b>			
66									
67	Proposed Use/	<b>Annual Net School</b>	Annual Net School Dist. Rev.	Revenue >					
68	Scenario	<b>District Revenue</b>	per Unit / 1K SF / Space	Expenditure					
69	1 BR Apartments	<b>\$269,821</b>	\$2,249	189.3%					
70	2 BR Apartments	<b>\$151,134</b>	\$1,866	87.3%					
71	Retail Commercial	<b>\$56,159</b>	\$3,013	--					
72	Structured Parking	<b>\$57,322</b>	\$220	--					
73	<b>Total Proposed</b>	<b>\$534,437</b>		<b>169.3%</b>					
74	Existing Vacant Office	<b>\$68,074</b>	\$1,356	--					
75	<b>Difference</b>	<b>\$466,362</b>							
76									
77	<b>NOTES:</b>								
78	Pct. of Township School Age Children in Public Schools (2022 ACS)	87.0%			2023-2024 CSD Student Enrollment		5,400		
79	2023-2024 CSD Total Expenditures	\$151,153,201			2023-2024 CSD Net Expenditure per Student		\$27,308		
80	Minus Pass-Through Expenditures & Budgetary Reserve	\$3,687,500			2023-2024 CSD Real Estate Tax Millage		25.0200		
81	2023-2024 CSD Net Expenditures	\$147,465,701			2023-2024 CSD State/Federal Revenue per Student		\$5,087		

## TRANSPORTATION IMPACT ASSESSMENT CONSHOHOCKEN RIDGE MIXED-USE REDEVELOPMENT Plymouth Township, Montgomery County, PA

Prepared by  
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Prepared for  
**BET Investments, Inc.**

June 25, 2025  
Bowman Project Number: 313923-01-001



A handwritten signature of Christopher J. Williams in black ink, written over a horizontal line.

Christopher J. Williams, PE  
PA PE License Number 53062-E



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<b>Appendix C:</b>	PennDOT TIRe Data
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## Executive Summary

BET Investments, Inc. proposes to redevelop the Conshohocken Ridge Corporate Center, which will include the removal of 55,000 square feet of office space to be replaced by 201 apartments, a 12,500 square foot supermarket, and 6,000 square feet of general retail space, and retention of 145,000 square feet of office space in order to create a true mixed-use development. The redevelopment is located within the Conshohocken Ridge Corporate Center, located on the southwest corner of Ridge Pike (SR 3056) and Colwell Lane in Plymouth Township, Montgomery County, PA (**Figure 1**). Access to the site is proposed via the existing right-in/right-out access to Ridge Pike (SR 3056) and the existing full-movement access to Colwell Lane. A site plan, prepared by Bohler Engineering and dated June 19, 2025 is shown in **Figure 2**.

The scope of this transportation impact assessment is based on scoping coordination with the Township's Traffic Engineer, as well as PennDOT's guidelines, per the Department's *Publication 282, Appendix A Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits*, dated September 2022, and the requirements of the Township Ordinance. All correspondence is provided in **Appendix A**.

The purpose of this transportation impact assessment is to evaluate the traffic impacts of the proposed redevelopment. The scope of this study includes an evaluation of the existing weekday morning, weekday afternoon, and Saturday midday peak hours, as well as the future 2030 build-out year both without and with the development at the following study intersections:

- Ridge Pike (SR 3056) and Colwell Lane / North Lane / Chemical Road (SR 3015)
- Ridge Pike (SR 3056) and Existing Right-In/Right-Out Access
- Colwell Lane and Existing Full-Movement Access

Based on trip generation data compiled for Multifamily Housing Mid-Rise (ITE Land Use Code 221), Supermarket (ITE Land Use Code 850), and Strip Retail Plaza <40k (ITE Land Use Code 822) contained in the Institute of Transportation Engineers (ITE) publication entitled, *Trip Generation Manual, 11<sup>th</sup> Edition*, the proposed redevelopment will generate a total of approximately 43 additional "new" trips during the weekday morning peak hour, 99 additional "new" trips during the weekday afternoon peak hour, and 199 additional "new" trips during the Saturday midday peak hour versus the existing office space if fully occupied.

Upon redevelopment, the site will operate as a true mixed-use development with residential, retail, and office uses. As a result, internalization of trips will occur whereby traffic associated with the office uses will also patronize the new retail uses, and similarly, the new residents of the apartments will also patronize the new retail uses, as well as the existing and future office uses. This mix of uses encourages the internalization of trips, which reduces the addition of site traffic to the surrounding roads and intersections.

The following on-site traffic improvements are recommended.

## Site Accesses

### Right-In/Right-Out Site Access and Ridge Pike (SR 3056)

- Install a Stop sign and All Traffic Must Turn Right sign on the egress approach.
- Upgrade the existing pedestrian facilities to provide ADA compliant curb ramps and a striped crosswalk to cross the access.

## Site Access and Colwell Lane

- Install a Stop sign on the egress approach.
- Provide a striped crosswalk to cross the access. Upgrade the crossing, as needed, to meet ADA standards.

The traffic analyses contained herein reveal that efficient access to and from the proposed redevelopment can be provided.

## Existing Transportation Settings and Conditions

The proposed redevelopment is located within the Conshohocken Ridge Corporate Center, located on the southwest corner of Ridge Pike (SR 3056) and Colwell Lane in Plymouth Township, Montgomery County, PA (**Figure 1**). The existing roads and intersections in the vicinity of the site, which comprise the study area roadway network, are described in this section.

### Roadway Characteristics

The study area roadway network and characteristics are summarized below in **Table 1**.

**Table 1. Existing Roadway Characteristics**

Roadway Name (Jurisdiction)	Average Daily Traffic Volumes (vehicles per day)	Roadway Classification		Travel Lanes (per direction)	Posted Speed Limit (mph)
		PennDOT Roadway Typologies <sup>(1)</sup>	PennDOT/ Township <sup>(2)</sup>		
Ridge Pike (SR 3056 – State)	23,239 <sup>(3)</sup>	Suburban Arterial	Urban – Principal Arterial	2 to 3	35
Colwell Lane (Local)	3,513 <sup>(3)</sup>	Suburban Collector	Urban – Major Collector	1	25
Chemical Road (SR 3015 – State )	21,652 <sup>(3)</sup>	Suburban Arterial	Urban – Minor Arterial	2	40
North Lane (SR 3015 – State )	8,287 <sup>(3)</sup>	Suburban Arterial	Urban – Minor Arterial	1	35

(1) Based on Exhibit 3.6.1 – Illustrated Roadway Typologies in the PennDOT *Publication 13, Design Manual Part 2*.

(2) Based on the roadway classifications provided on PennDOT's Traffic Information Repository (TIRe) website.

(3) Based on traffic data from PennDOT's Traffic Information Repository (TIRe) website.

The following key intersections in the vicinity of the site comprise the study area:

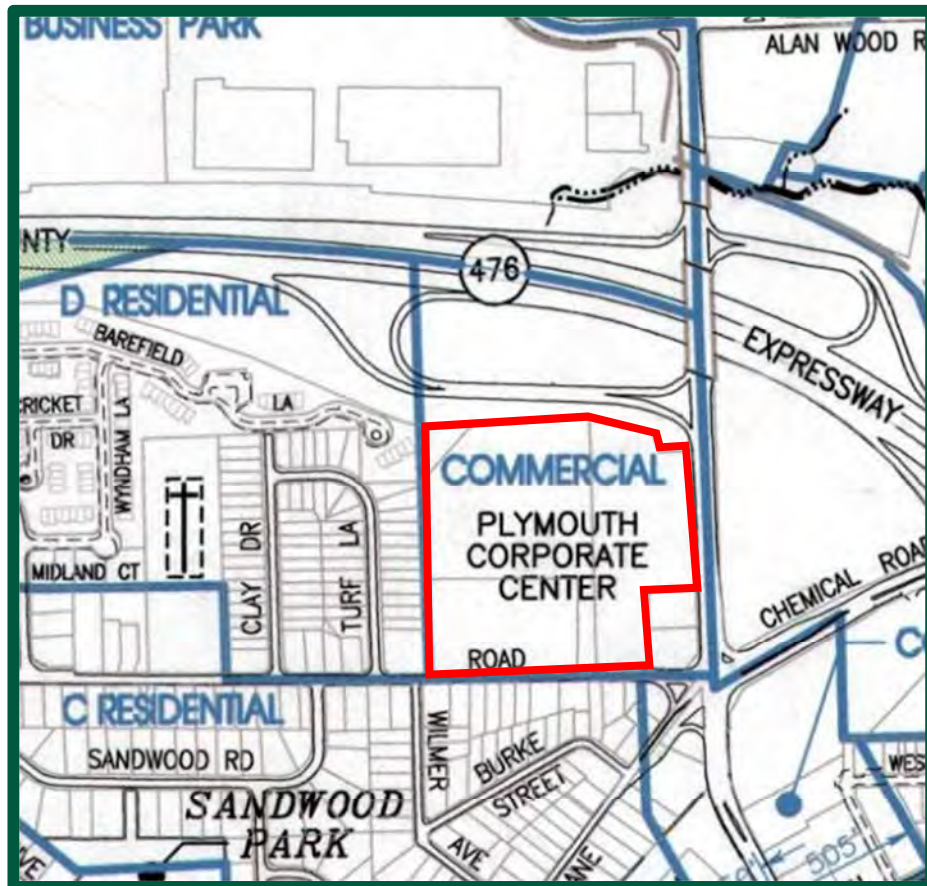
- Ridge Pike (SR 3056) and Colwell Lane / North Lane / Chemical Road (SR 3015)
- Ridge Pike (SR 3056) and Existing Right-In/Right-Out Access
- Colwell Lane and Existing Full-Movement Access

The study intersections were reviewed and agreed upon by Plymouth Township. The existing characteristics of the study intersections, including field sketches and signal permit plans are provided in **Appendix B**.



## Land Use Context

The proposed redevelopment is located in Plymouth Township, within the Commercial Zoning District as shown on the Plymouth Township Zoning Map below.



Source: Plymouth Township Zoning Map, approved August 17, 2022.

## Area Transit Services

SEPTA Bus Route 95 *Gulph Mills to Willow Grove Mall* runs along the Ridge Pike (SR 3056) site frontage with stops at the Ridge Pike (SR 3056) and Chemical Road / North Lane (SR 3015) / Colwell Lane intersection.

The Conshohocken and Spring Mill SEPTA Regional Rail Stations are both located within two miles of the site and both stations provide access to SEPTA's Manayunk-Norristown line.

## Pedestrian-Bicycle Facilities

Sidewalk is provided along the site frontages with Ridge Pike (SR 3056) and Colwell Lane.

Pedestrian curb ramps, push-buttons, and countdown timers are provided at the intersection of Ridge Pike (SR 3056) and Colwell Lane / North Lane / Chemical Road (SR 3015) to cross the north and west legs of the intersection.

---

## *Traffic Count Data*

Daily traffic counts were obtained from PennDOT's Traffic Information Repository (TIRe) website. The traffic count data is provided in **Appendix C**.

Turning movement traffic counts were conducted in March 2025 during the weekday morning (7:00 AM – 9:00 AM), weekday afternoon (4:00 PM – 6:00 PM), and Saturday midday (11:00 AM – 2:00 PM) peak periods. The results of these traffic counts are tabulated by 15-minute intervals in **Appendix D**. The four highest consecutive 15-minute peak intervals during these traffic count periods constitute the peak hours that are the basis of this traffic analysis.

The resultant peak hour traffic volumes are depicted in **Figure 3A** for the weekday morning, weekday afternoon, and Saturday midday peak hours. The traffic volumes in Figure 3A were then analyzed to determine the existing operating conditions, and the results of this analysis are shown in **Figure 3B**. Specific details regarding the analysis results and traffic operations are provided later in this report.

## Site Characteristics

This section presents the details regarding the proposed site, including the incremental increase in traffic volumes generated by the development during the peak hours and the distribution of site traffic to the study area roadways, as well as the proposed site access configuration, traffic control, and sight distance requirements.

### Trip Generation

Based on coordination with the applicant, the existing corporate center consists of 198,671 square feet of space, of which approximately 109,282 square feet (or 55 percent) is occupied. The trip generation rates for the existing office corporate center were developed based on traffic counts completed at the site accesses during the three peak hours. The existing corporate center trip generation volumes reflect the change in office trip generation characteristics since the COVID-19 pandemic. **Table 2A** presents the counted trip generation rate for the existing corporate center and the industry standard office trip generation rate based on data from the Institute of Transportation Engineers (ITE) publication, *Trip Generation Manual, 11<sup>th</sup> Edition*. **Table 2B** provides a comparison of the peak hour trip generation of the corporate center based on the site-specific counted rate and the ITE rates. As shown in Table 2B, the actual trip generation characteristics of the existing corporate center is approximately 35 percent lower than the estimates based on ITE data during the weekday commuter peak hours.

**Table 2A. Existing Corporate Center Trip Generation Methodology Comparison**

Land Use	Weekday Morning Peak Hour		Weekday Afternoon Peak Hour		Saturday Midday Peak Hour	
	Method	Enter/Exit	Method	Enter/Exit	Method	Enter/Exit
Existing Counted Office Trip Generation Rate <sup>(1)</sup>	$T = 1.06 (X)$	82%/18%	$T = 1.08 (X)$	26%/74%	$T = 0.51 (X)$	39%/61%
ITE General Office Trip Generation Rate <sup>(2)</sup>	$\ln(T) = 0.86$ $\ln(X) + 1.16$	88% / 12%	$\ln(T) = 0.83$ $\ln(X) + 1.29$	17% / 83%	$T = 0.53 (X)$	54% / 46%

X = Independent Variable (ksf) of 109.282 based on occupied square footage      T = Trips

(1) Based on turning movement traffic counts at the site accesses.

(2) Based on the ITE *Trip Generation Manual, 11<sup>th</sup> Edition* for Land Use Code 710.

**Table 2B. Existing Corporate Center Trip Generation Comparison**

Land Use	Weekday Morning Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
Existing Counted Office Trip Generation <sup>(1)</sup>	95	21	116	31	87	118	22	34	56
ITE General Office Trip Generation <sup>(1)</sup>	159	22	181	30	149	179	31	27	58
<b>CHANGE IN TOTAL TRIP GENERATION</b>	<b>-36 %</b>			<b>-34%</b>			<b>-3%</b>		

(1) Based on the trip generation methodology presented in Table 2A.



The traffic volumes generated by the proposed redevelopment were prepared based on trip generation data compiled from numerous studies contained in the ITE publication, *Trip Generation Manual, 11th Edition*, as well as based on the actual trip generation rate for the office uses within existing corporate center as presented in Table 2A. As part of the redevelopment, the existing corporate center of 198,671 square feet of space will be reduced to approximately 145,000 square feet of office space. **Tables 2C and 2D** present the anticipated vehicular trip generation for the proposed redevelopment.

Upon redevelopment, the site will operate as a true mixed-use development with residential, retail, and office uses. As a result, internalization of trips will occur whereby traffic associated with the office uses will also patronize the new retail uses, and similarly, the new residents of the apartments will also patronize the new retail uses, as well as the existing and future office uses. This mix of uses encourages the internalization of trips, which reduces the addition of site traffic to the surrounding roads and intersections. **Table 2E** presents the change in trip generation between the existing office development as fully occupied and the proposed redevelopment. The detailed trip generation information is provided in **Appendix E**.

**Table 2C. Proposed New Development Trip Generation Methodology**

Land Use	Land Use Code	Weekday Morning Peak Hour		Weekday Afternoon Peak Hour		Saturday Midday Peak Hour	
		Method	Enter/Exit	Method	Enter/Exit	Method	Enter/Exit
Proposed Multifamily Housing (Mid-Rise) <sup>(1)</sup>	221	$T = 0.44(X) - 11.61$	23%/77%	$T = 0.39(X) + 0.34$	61%/39%	$\ln(T) = 1.00$ $\ln(X) - 0.91$	51%/49%
Proposed Supermarket <sup>(1)</sup>	850	$T = 2.86 (Y)$	59%/41%	$\ln(T) = 0.81$ $\ln(Y) + 2.92$	50%/50%	$\ln(T) = 0.74$ $\ln(Y) + 3.41$	50%/50%
Proposed Strip Retail Plaza (<40k) <sup>(1)</sup>	822	$\ln(T) = 0.66$ $\ln(Y) + 1.84$	60%/40%	$\ln(T) = 0.71$ $\ln(X) + 2.72$	50%/50%	$T = 6.57 (Y)$	51%/49%

X = Independent Variable (units) | Y = Independent Variable (ksf) | T = Trips

(1) Based on ITE *Trip Generation Manual, 11th Edition*.



**Table 2D. Proposed Redevelopment Vehicular Trip Generation**

Land Use	Trip Type	Weekday Morning Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
Apartments <sup>(1)</sup> (201 units)	Total	18	59	77	48	31	79	41	40	81
	-Internal	-0	-2	-2	-24	-11	-35	-15	-7	-22
	New	18	57	74	24	20	44	26	33	59
Supermarket <sup>(2)</sup> (12,500 sf)	Total	21	15	36	72	71	143	98	98	196
	-Internal	-6	-3	-9	-14	-18	-32	-9	-13	-22
	-Pass-by	-2	-2	-4	-14	-13	-27	-19	-18	-37
	New	13	10	23	44	40	84	80	78	158
General Retail <sup>(3)</sup> (6,000 sf)	Total	12	9	21	27	27	54	20	19	39
	-Internal	-3	-2	-5	-5	-7	-12	-2	-3	-5
	New	9	7	16	22	20	42	18	16	34
Office (145,000 sf) <sup>(4)</sup>	Total	126	28	154	41	115	156	29	45	74
	-Internal	-6	-8	-14	-3	-10	-13	-2	-5	-7
	New	120	20	140	38	105	143	27	40	67
<b>TOTAL</b>	Total	<b>177</b>	<b>111</b>	<b>288</b>	<b>188</b>	<b>244</b>	<b>432</b>	<b>188</b>	<b>202</b>	<b>390</b>
	-Internal	<b>-15</b>	<b>-15</b>	<b>-30</b>	<b>-46</b>	<b>-46</b>	<b>-92</b>	<b>-28</b>	<b>-28</b>	<b>-56</b>
	-Pass-by	<b>-2</b>	<b>-2</b>	<b>-4</b>	<b>-14</b>	<b>-13</b>	<b>-27</b>	<b>-17</b>	<b>-16</b>	<b>-33</b>
	New	<b>160</b>	<b>94</b>	<b>254</b>	<b>128</b>	<b>185</b>	<b>313</b>	<b>143</b>	<b>158</b>	<b>301</b>

(1) ITE Land Use Code 221 for Multifamily Housing (Mid-Rise).

(2) ITE Land Use Code 850 for Supermarket.

(3) ITE Land Use Code 822 for Strip Retail Plaza (<40 ksf)

(4) Based on the existing site counted trip generation rate (Table 2A).

**Table 2E. Vehicular Trip Generation Difference  
Existing Office versus Proposed Redevelopment**

Land Use	Trip Type	Weekday Morning Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
Existing Office Fully Occupied based on counted trip rates in Table 2A	Total	173	38	211	56	158	214	40	62	102
	-Internal	-0	-0	-0	-0	-0	-0	-0	-0	-0
	New	173	38	211	56	158	214	40	62	102
Proposed Mixed-Use Redevelopment from Table 2D	Total	177	111	288	188	244	432	188	202	390
	-Internal	-15	-15	-30	-46	-46	-92	-28	-28	-56
	-Pass-by	-2	-2	-4	-14	-13	-27	-17	-16	-33
	New	160	94	254	128	185	313	143	158	301
<b>TOTAL CHANGE</b>	<b>New Trips</b>	<b>-13</b>	<b>+56</b>	<b>+43</b>	<b>+72</b>	<b>+27</b>	<b>+99</b>	<b>+103</b>	<b>+96</b>	<b>+199</b>

## Trip Distribution and Assignment

Site-generated traffic will approach and depart the site via different routes depending on factors such as the existing traffic patterns, location of major roadways, and the location of the site accesses. The distribution percentages for the anticipated directions of approach and departure and traffic assignment percentages are illustrated in **Figures 4A and 4B**. Application of the percentages illustrated in Figures 4A and 4B to the new peak hour trips contained in Table 2D, provides an estimate of site traffic to be added to the study area. The site-generated traffic is also shown in **Figures 4C and 4D** for the weekday morning, weekday afternoon, and Saturday midday peak hours.

The existing office space of 198,671 square feet is assumed to be fully occupied in the future without the proposed redevelopment; however, in the future with the proposed redevelopment, the office space is reduced to approximately 145,000 square feet, and therefore, in the future there is a net loss of approximately 53,671 square feet of office space. The trips generated by the 53,671 square feet of reduced office space were removed from the study area. Figures illustrating the change in office traffic through the study area are provided in **Appendix E**.

**Figure 4E** illustrates the pass-by trip assignment for the entire site for the weekday morning, weekday afternoon, and Saturday midday peak hours.

## Site Access Configuration and Traffic Control

Access to the site is proposed to be maintained via one unsignalized right-in/right-out driveway located along Ridge Pike (SR 3056), to the west of Colwell Lane, and one unsignalized full-movement driveway located along Colwell Lane, south of Ridge Pike (SR 3056). The recommendations for the proposed access designs, including auxiliary turn lanes, traffic control, and geometric design, were based on industry accepted criteria and guidelines.

The need for left- and right-turn deceleration lanes was based on the current PennDOT guidelines in accordance with *Publication 46, Chapter 11 – Traffic Studies*. **Table 3** summarizes the results of the auxiliary turn lane warrants for the site access intersection along Colwell Lane. PennDOT's right-turn lane warrant analysis procedure is applicable to roads with one or two directional through lanes, and since Ridge Pike provides three directional through lanes, the right-turn lane analysis is not applicable. Also, it is worth noting that a right-turn deceleration lane does not exist at the Ridge Pike access today, and furthermore, right-turn deceleration lanes are generally not provided for accesses along the Ridge Pike corridor.

**Table 3. Turn Lane Warrant Summary**

Intersection	Auxiliary Lane Warrant	Warrant Satisfied? <sup>(1)</sup>	Required Lane Length <sup>(1)</sup>	Proposed Lane Length
Site Access and Colwell Lane	Northbound Left	No	Not Warranted	-
	Southbound Right	No	Not Warranted	-

(1) Based on PennDOT Publication 46, *Traffic Engineering Manual*, Chapter 11.16

While not warranted, there is an existing deceleration area along Colwell Lane to facilitate the right-turn entering movement into the site. The various warrant/guideline analysis worksheets are contained in **Appendix F**.

Additionally, the geometric design of the proposed site accesses were preliminarily evaluated based on guidelines contained in the *Pennsylvania Code, Chapter 441, Access to and Occupancy of Highways by Driveways and Local Roads*, as well as local PennDOT District policies.

Based on the results of this evaluation, the following access configurations and traffic controls are recommended, subject to the detailed engineering of the site accesses.

## Right-In/Right-Out Site Access and Ridge Pike (SR 3056)

- Install a Stop sign and All Traffic Must Turn Right sign on the egress approach.
- Upgrade the existing pedestrian facilities to provide ADA compliant curb ramps and a striped crosswalk to cross the access.

## Site Access and Colwell Lane

- Install a Stop sign on the egress approach.
- Provide a striped crosswalk to cross the access. Upgrade the crossing, as needed, to meet ADA standards.

## Sight Distance

Sight distance field measurements and an evaluation were performed at the existing access intersections along Ridge Pike (SR 3056) and Colwell Lane. Generally, the travel speed, roadway grades and profiles, and the number of travel lanes play a role in determining if safe sight distances are available for egress and ingress at the proposed accesses. The existing sight distances at the proposed access intersection were measured and compared to PennDOT's sight distance requirements. These sight distance requirements are contained in *Pennsylvania Code, Chapter 441, Access to and Occupancy of Highways by Driveways and Local Roads*.

**Table 4** summarizes the available sight distance measurements, as well as PennDOT's sight distance requirements at the existing access locations.

**Table 4. Sight Distance Evaluation**  
**Site Access and Colwell Lane**

Movement	Direction	Posted Speed (mph)	Approximate Grade	PennDOT Requirements (feet)		Available Sight Distance (feet)
				Desirable <sup>(1)</sup>	Minimum <sup>(2)</sup>	
Exiting	Looking Left	25	+3%	250	156	407
	Looking Right	25	-3%	195	170	404
Left turn	Looking Ahead	25	+3%	190	156	440
Entering	From the Rear	25	-3%	n/a	170	411

**Right-In/Right-Out Site Access and Ridge Pike (SR 3056)**

Movement	Direction	Posted Speed (mph)	Approximate Grade	PennDOT Requirements (feet)		Available Sight Distance (feet)
				Desirable <sup>(1)</sup>	Minimum <sup>(2)</sup>	
Exiting	Looking Left	35	-2%	300	275	424

(1) Based on the desirable sight distance requirements contained in the *Pennsylvania Code, Chapter 441, Access to and Occupancy of Highways by Driveways and Local Roads* and the posted speed limit.

(2) Based on the safe stopping sight distance requirements contained in the *Pennsylvania Code, Chapter 441, Access to and Occupancy of Highways by Driveways and Local Roads* and the posted speed limit.

As shown in Table 4, all of the existing available sight distances at the site access intersection meet PennDOT's desirable sight distance criteria. Proper landscaping must be maintained along the site frontage on Ridge Pike (SR 3056) and Colwell Lane for provision of sight distances according to the above table.



## Future Traffic Conditions

This section presents the 2030 future build-out year, both without and with the proposed development, which is anticipated to be completed and occupied by 2030. The future 2030 build-out year without-development traffic volumes were estimated by increasing the existing 2025 traffic volumes to account for regional growth, as described below. The incremental increase due to the anticipated trip generation for the site was then added, resulting in the future 2030 build-out year with-development traffic volumes.

### Regional Traffic Growth

To account for regional traffic growth, the existing traffic volumes were increased by an annual traffic growth rate of 0.17 percent per year compounded for five years to 2030, or 0.85 percent total to 2030. This growth rate is consistent with the traffic growth rate recommended by the PennDOT Bureau of Planning and Research *Growth Factors for August 2024 and July 2025* for similar, Urban Non-Interstate roadways in Montgomery County.

### Local Traffic Growth

Based upon coordination with Plymouth Township, the existing traffic volumes were also increased to include the traffic to be generated by nearby approved developments in the vicinity of the Conshohocken Ridge Corporate Center. Specifically, the following developments were included:

- **Conshohocken Ridge Corporate Center:** At the time of the traffic counts, approximately 55% or 109,282 square feet of the total 198,671 square feet is occupied. As there is nothing preventing the existing corporate center to be fully occupied again, the additional traffic assuming full occupancy of the corporate center is assumed for the future without-development conditions, but to reflect today's office market and the range of uses within the existing corporate center, the trip generation is based on the existing site trip generation rate, which is approximately 35 percent less than if based on the ITE trip generation rates for the weekday commuter peak hours.
- **Royal Farms:** This development consists of a 5,154 square foot convenience market with 16 fueling positions to be located on the southeast corner of Ridge Pike (SR 3056) and Alan Wood Road. Trips generated by this development is applied to the study area based on the *Traffic Impact Study Proposed Royal Farms (RF#476)* prepared by Horner & Canter Associates, dated September 7, 2022.
- **Genesis of Conshohocken:** This development consists of the expansion of the existing car dealership from 19,188 square feet to a total of 34,413 square feet. The additional trip generation based on the square footage increase is applied to the study area.

Information regarding the nearby approved developments, obtained from Plymouth Township, are provided in **Appendix G**.

### Planned Roadway Improvements

Montgomery County is currently designing and constructing significant improvements along the Ridge Pike corridor, which include full reconstruction of Ridge Pike between Norristown and Philadelphia. This project includes road widening in certain

areas, as well as reconfiguration of the I-476 and Ridge Pike interchange. Based on the *Traffic Signal Design Report Ridge Pike Sec MG 2* prepared by Pennoni and dated December 2021, there is expected to be an approximate eight percent decrease in peak hour traffic volumes along Ridge Pike in this area as a result of this planned project, as well as other planned regional transportation projects which are accounted for in the Pennoni report, including the planned PA Turnpike I-276 Interchange at Lafayette Street.

With the anticipated reduction in traffic along Ridge Pike in this area due to the planned regional transportation projects, traffic operations are anticipated to improve at the intersection of Ridge Pike (SR 3056) and Colwell Lane / North Lane / Chemical Road (SR 3015) beyond the results of this traffic study.

### **Future Traffic Conditions**

The total background growth and nearby approved development traffic volumes were then added to the existing 2025 traffic volumes, resulting in the future 2030 without-development peak hour traffic volumes. Next, the site generated traffic volumes, as shown in Figure 4C and 4D, were added to the future 2030 without-development traffic volumes, resulting in the future 2030 with-development traffic volumes.

The future 2030 peak hour traffic volumes without development are illustrated in **Figure 5A**, and the future 2030 with-development peak hour traffic volumes are illustrated in **Figure 5B** for the weekday morning, weekday afternoon, and Saturday midday peak hours. These traffic volumes were then analyzed to determine the future 2030 without and with development traffic operating conditions, and the results of this analysis are shown in **Figures 5C and 5D**.

Detailed traffic volume projection worksheets are provided in **Appendix H**.

## Capacity/Level-of-Service Results

The peak hour traffic volumes were analyzed to determine the existing and future traffic operating conditions, both without and with the proposed development, in accordance with the standard techniques contained in the current *Highway Capacity Manual (7<sup>th</sup> Edition)* for unsignalized intersections. The HCM 7<sup>th</sup> Edition Methodology within Synchro 12.2 (build 4, rev. 32) traffic analysis software was utilized in the traffic analyses for the unsignalized intersections. Synchro percentile methodology was utilized for the signalized intersection of Ridge Pike (SR 3056) and Colwell Lane / North Lane / Chemical Road (SR 3015) as the HCM does not support intersections with more than four approaches.

These standard capacity/level-of-service analysis techniques, which calculate total control delay, are described in **Appendix I** for both signalized and unsignalized intersections, as well as the correlation between average total control delay and the respective level-of-service (LOS) criteria for each intersection type.

According to PennDOT's Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permit Plans, the following procedures and assumptions were utilized:

- For signalized intersections, the Pennsylvania base saturation flow rate (Exhibit 10-9) and Pennsylvania traffic signal control calibration parameters (Exhibit 10-10) outlined in PennDOT's Publication 46, Traffic Engineering Manual, were used.
- For unsignalized intersections, the base critical headways at TWSC intersections (Exhibit 10-11) and base follow-up headways at TWSC intersections (Exhibit 10-12) outlined in PennDOT's Publication 46, Traffic Engineering Manual, were used.
- All traffic signal timings at signalized intersections were optimized in without-development conditions.
- If the evaluation of without-development to with-development conditions indicates that the overall intersection level-of-service has dropped, mitigation may be required if the increase in delay is greater than 10 seconds. If the overall intersection delay increase is less than or equal to 10 seconds, mitigation of the intersection is not required.

The existing traffic conditions, and the future 2030 build-out year traffic conditions, both without and with the proposed development, are summarized in **Figures 3B, 5C, and 5D**, while the detailed capacity/level-of-service analysis worksheets are provided in **Appendices J, K, and L**.

As illustrated in **Figures 3B, 5C, and 5D**, all study intersections will satisfy PennDOT's overall level-of-service criteria, and therefore mitigation improvements are not required. The site access intersections will operate at acceptable overall level-of-service A, and with all movements at acceptable level-of-service C or better during all three peak hours.

The intersection of Ridge Pike (SR 3056) and Colwell Lane / North Lane / Chemical Road (SR 3015) operates with delay and is considered deficient per §902(4)(F) of the Township Ordinance under existing and future conditions. Due to the skew and five legs at the intersection, the signal operates with dedicated phases for three of the five approaches, requiring a longer than typical 154 second cycle length, which inherently leads to inefficient operations and added delay. The intersection is currently built out and additional capacity improvements are not feasible. This is demonstrated by the ongoing Ridge Pike corridor project which involves a comprehensive reconstruction of the entire corridor, but which did not identify any capacity improvements at this intersection. However, several ongoing regional transportation projects, including the reconfiguration of the Ridge Pike and I-



476 interchange, as well as the PA Turnpike Lafayette Street interchange are anticipated to result in a regional redistribution of traffic and a net decrease in traffic volumes at this intersection, which will improve operations beyond the results reflected in this traffic study. The intersection is anticipated to operate at the same level-of-service between future without- and future with-development conditions.

**Table 5** below summarizes the overall levels of service for the study, and the detailed results of the level-of-service analysis are contained in the matrices provided in **Table 6**.

**Table 5. 2030 Future Overall Intersection Levels-of-Service**  
**Ridge Pike (SR 3056) and Colwell Lane / North Lane / Chemical Road (SR 3015)**

Intersection	Overall Level-of-Service (Delay in Seconds)		Delay Increase	Requires Mitigation <sup>(1)</sup>
	Without Development	With Development		
Weekday Morning Peak Hour	E (76.0)	E (79.4)	No LOS Drop	No
Weekday Afternoon Peak Hour	F (97.9)	F (104.8)	+6.9 seconds	No
Saturday Midday Peak Hour	E (64.5)	E (71.5)	No LOS Drop	No

(1) Based on the difference in delay from without-development to with-development conditions, in accordance with PennDOT's level of service requirements.

## Queuing Analysis

A queuing analysis was completed at the study intersections based on the HCM 7<sup>th</sup> Edition and Synchro percentile methodology, as described previously. Based on the queuing analysis, most vehicular queues are accommodated within the existing storages and intersection spacings with just a few exceptions. The matrices summarizing the results of the queuing analysis are provided in **Table 7**.

## Gap Study

A gap study was conducted along Colwell Lane at the existing site access in order to determine if there are adequate gaps in the Colwell Lane traffic stream to accommodate left-turn traffic exiting the existing access. **Table 8** provides a summary of the gap study. The gap study data is provided in **Appendix M**. As shown below, there are sufficient gaps to accommodate left-turns out of the site access during the peak hours evaluated.



**Table 8. Gap Study**

	Weekday Morning Peak Hour	Weekday Afternoon Peak Hour
	Left-Turn Exiting	Left-Turn Exiting
Measured Available Gaps	608	526
Peak Hour Traffic Volumes <sup>(1)</sup>	50	126
Sufficient Gaps?	Yes	Yes

(1) As shown in Figure 5B.

---

## Conclusion

BET Investments, Inc. proposes to redevelop the Conshohocken Ridge Corporate Center, which will include the removal of 55,000 square feet of office space to be replaced by 201 apartments, a 12,500 square foot supermarket, and 6,000 square feet of general retail space, and retention of 145,000 square feet of office space in order to create a true mixed-use development. The redevelopment is located on the southwest corner of Ridge Pike (SR 3056) and Colwell Lane in Plymouth Township, Montgomery County.

As a mixed-use project, the proposed redevelopment will achieve certain trip generation efficiencies, whereby internalization of trips will occur between the various land uses on the site. As a result, the proposed redevelopment does not generate as much traffic as each of the land uses individually, without interactions between the various land uses. The proposed redevelopment will generate a total of approximately 43 additional “new” trips during the weekday morning peak hour and 99 additional “new” trips during the weekday afternoon peak hour, which equates to approximately one to two vehicles per minute. The redevelopment traffic is more on a Saturday, since the existing corporate center generates very little traffic on the weekend, whereas a mixed-use development experiences more activity throughout the week and on the weekends, and most notably due to the residential, retail and supermarket land uses. Therefore, as expected, on a Saturday when compared to an office use, the proposed redevelopment generates 199 additional “new” trips during the Saturday midday peak hour.

The site access intersections will operate at acceptable overall level-of-service A, and with all movements at acceptable level-of-service C or better during all three peak hours.

The intersection of Ridge Pike (SR 3056) and Colwell Lane / North Lane / Chemical Road (SR 3015) operates with delay and under existing conditions, and this will not change in the future. Due to the skew and five legs at the intersection, the signal operates with dedicated phases for three of the five approaches, requiring a longer than typical 154 second cycle length which inherently leads to inefficient operations and added delay. The intersection is currently built-out and additional capacity improvements are not feasible. This is demonstrated by the ongoing Ridge Pike corridor project which involves a comprehensive reconstruction of the entire corridor, but which did not identify any capacity improvements at this intersection. However, several ongoing regional transportation projects, including the reconfiguration of the Ridge Pike and I-476 interchange, as well as the PA Turnpike Lafayette Street interchange are anticipated to result in a regional redistribution of traffic and a net decrease in traffic volumes at this intersection, which will improve operations beyond the results reflected in this traffic study. The intersection is anticipated to operate at the same level-of-service between future without- and future with-development conditions.

Table 6 - Level of Service Matrices

Ridge Pike (SR 3056) and Chemical Road / North Lane (SR 3015) / Colwell Lane

Time Period		Weekday Morning Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year		2025	2030 Build-Out Year		2025	2030 Build-Out Year		2025	2030 Build-Out Year	
Development Condition		Existing	w/o Dev	w/Dev	Existing	w/o Dev	w/Dev	Existing	w/o Dev	w/Dev
Ridge Pike (SR 3056)	Left	E 73.9	E 72.8	E 74.6	E 78.8	E 79.0	F 80.1	F 81.8	F 82.6	F 87.7
	Thru	D	D	D	D	D	E	D	D	D
	Thru/Right	41.2	42.4	43.3	51.5	54.8	55.9	38.8	40.5	43.0
Ridge Pike	Left	F 80.3	F 84.0	F 85.9	F 220.5	F 233.3	F 298.2	E 78.3	E 79.7	F 92.0
	Thru	D 45.0	D 42.0	D 47.1	D 44.1	D 43.4	D 46.0	D 43.7	D 45.6	D 46.6
	Right	D 39.9	D 36.6	D 40.3	D 54.0	D 51.6	E 56.1	E 69.4	E 72.3	E 74.9
Colwell Lane	Left	E	E	E	E	E	E	E	E	E
	Thru									
	Right	72.7	74.1	77.9	73.3	77.9	79.6	69.9	70.4	73.6
Chemical Road (SR 3015)	Left	E 62.2	E 62.9	E 63.5	E 76.1	E 78.1	E 78.3	E 68.6	E 69.5	E 71.7
	Left									
	Thru (North)	F 141.3	F 146.6	F 149.8	F 99.1	F 102.8	F 103.4	F 89.2	F 91.1	F 95.3
	Thru (Colwell)	F 80.9	F 101.4	F 94.3	F 80.9	F 85.8	F 94.0	E 71.0	E 73.9	F 82.0
	Right	B 15.2	C 20.9	C 27.7	B 12.0	B 12.2	B 12.7	C 22.5	C 33.4	D 54.0
North Lane (SR 3015)	Left	F 197.1	F 214.1	F 222.9	F 223.5	F 245.3	F 272.7	F 118.7	F 145.4	F 163.8
	Left									
	Thru	F 232.6	F 256.1	F 264.8	F 361.8	F 377.4	F 378.6	F 144.1	F 153.3	F 176.2
	Thru									
	Right	A 1.5	A 1.5	A 1.5	A 3.4	A 3.5	A 3.5	A 1.3	A 1.3	A 1.3
Overall		E 72.7	E 76.0	E 79.4	F 94.7	F 97.9	F 104.8	E 60.9	E 64.5	E 71.5

**Table 6 - Level of Service Matrices**  
**Ridge Pike (SR 3056) and Right-In/Right-Out Access**

Time Period		Weekday Morning Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year		2025	2030 Build-Out Year		2025	2030 Build-Out Year		2025	2030 Build-Out Year	
Development Condition		Existing	w/o Dev	w/Dev	Existing	w/o Dev	w/Dev	Existing	w/o Dev	w/Dev
Ridge Pike (SR 3056)	Thru									
	EB Thru	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	Thru/Right									
	WB Thru	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Site Access	NB Right	B 13.1	B 13.4	B 13.9	C 15.8	C 16.5	C 17.9	B 12.7	B 13.3	B 14.5
	Overall	A 0.0	A 0.1	A 0.2	A 0.1	A 0.2	A 0.4	A 0.0	A 0.1	A 0.4

(1) Movement operates at free-flow conditions.

**Table 6 - Level of Service Matrices**  
**Colwell Lane and Site Access**

Time Period		Weekday Morning Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year		2025	2030 Build-Out Year		2025	2030 Build-Out Year		2025	2030 Build-Out Year	
Development Condition		Existing	w/o Dev	w/Dev	Existing	w/o Dev	w/Dev	Existing	w/o Dev	w/Dev
Site Access	Left	B	B	B	B	B	C	B	B	B
	Right	10.8	11.4	12.6	12.4	14.3	15.9	10.2	10.7	12.6
Colwell Lane	Left	A	A	A	A	A	A	A	A	A
	Thru	8.9	9.1	9.1	9.0	9.1	9.3	9.3	9.4	9.7
	Thru									
	Right	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Overall		A	A	A	A	A	A	A	A	A
		0.4	0.7	1.6	1.7	3.2	3.6	0.7	1.2	2.6

(1) Movement operates at free-flow conditions.

**Table 7 - 95th Percentile Queue Matrices**

**Ridge Pike (SR 3056) and Chemical Road / North Lane / Colwell Lane**

Time Period		Current Storage <sup>(1)</sup>	Future Storage <sup>(1)</sup>	Weekday Morning Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour			
Year				2025		2030 Build-Out Year	2025		2030 Build-Out Year	2025		2030 Build-Out Year	
Development Condition				Existing	w/o Dev	w/Dev	Existing	w/o Dev	w/Dev	Existing	w/o Dev	w/Dev	
Ridge Pike (SR 3056)	EB	Left	250*	250*	56	39	54	120	114	124	168	169	184
		Thru Thru/Right	2,100'	850'	271	291	297	497	527	538	267	302	317
Ridge Pike	WB	Left	295*	295*	138	158	165	485	495	566	142	149	222
		Thru	2,600'	2,600'	631	684	701	420	440	436	396	432	425
		Right	230*	230*	370	367	373	538	547	547	690	708	708
Colwell Lane	NEB	Left	200'	200'	169	179	205	168	206	217	132	145	181
		Thru Right	-	-									
Chemical Road	SB	Left Left	280' 290'	280' 290'	153	154	154	281	286	286	236	240	240
		Thru (North)	900'	900'	522	527	527	415	422	422	386	392	392
		Thru (Colwell)	900'	900'	290	375	342	273	296	331	212	226	275
		Right	265*	265*	117	161	217	90	92	96	209	317	410
	North Lane	NB	Left	220*	220*	362	373	380	391	406	431	267	308
Thru Thru			3,100'	3,100'	334	345	346	443	448	448	279	286	296
Right			205*	205*	0	0	0	0	0	0	0	0	0

(1) Distance to adjacent intersections shown in *italics*.

**Table 7 - 95th Percentile Queue Matrices**  
**Ridge Pike (SR 3056) and Right-In/Right-Out Access**

Time Period		Weekday Morning Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year		2025	2030 Build-Out Year		2025	2030 Build-Out Year		2025	2030 Build-Out Year	
Development Condition		Existing	w/o Dev	w/Dev	Existing	w/o Dev	w/Dev	Existing	w/o Dev	w/Dev
Ridge Pike (SR 3056)	Thru									
	EB Thru	-	-	-	-	-	-	-	-	-
	Thru/Right									
	WB Thru	-	-	-	-	-	-	-	-	-
Site Access	NB Right	0	25	25	25	25	25	0	25	25







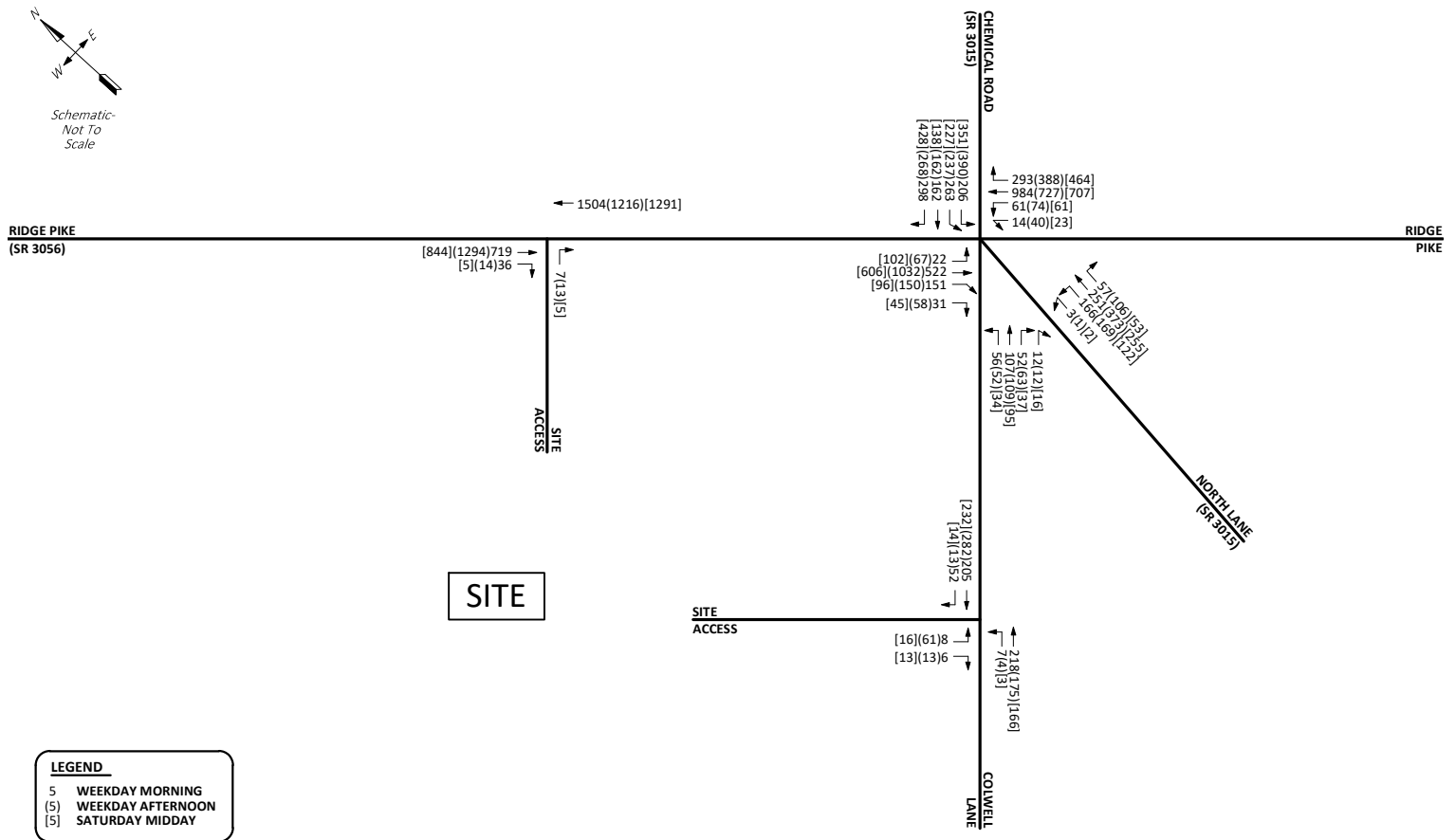
**FIGURE 1**  
Site Location Map  
**CONSHOHOCKEN RIDGE CORPORATE CENTER**  
PLYMOUTH TOWNSHIP, MONTGOMERY COUNTY, PA

**Bowman**



**FIGURE 2**  
 Site Plan  
**CONSHOHOCKEN RIDGE CORPORATE CENTER**  
 PLYMOUTH TOWNSHIP, MONTGOMERY COUNTY, PA





**FIGURE 3A**

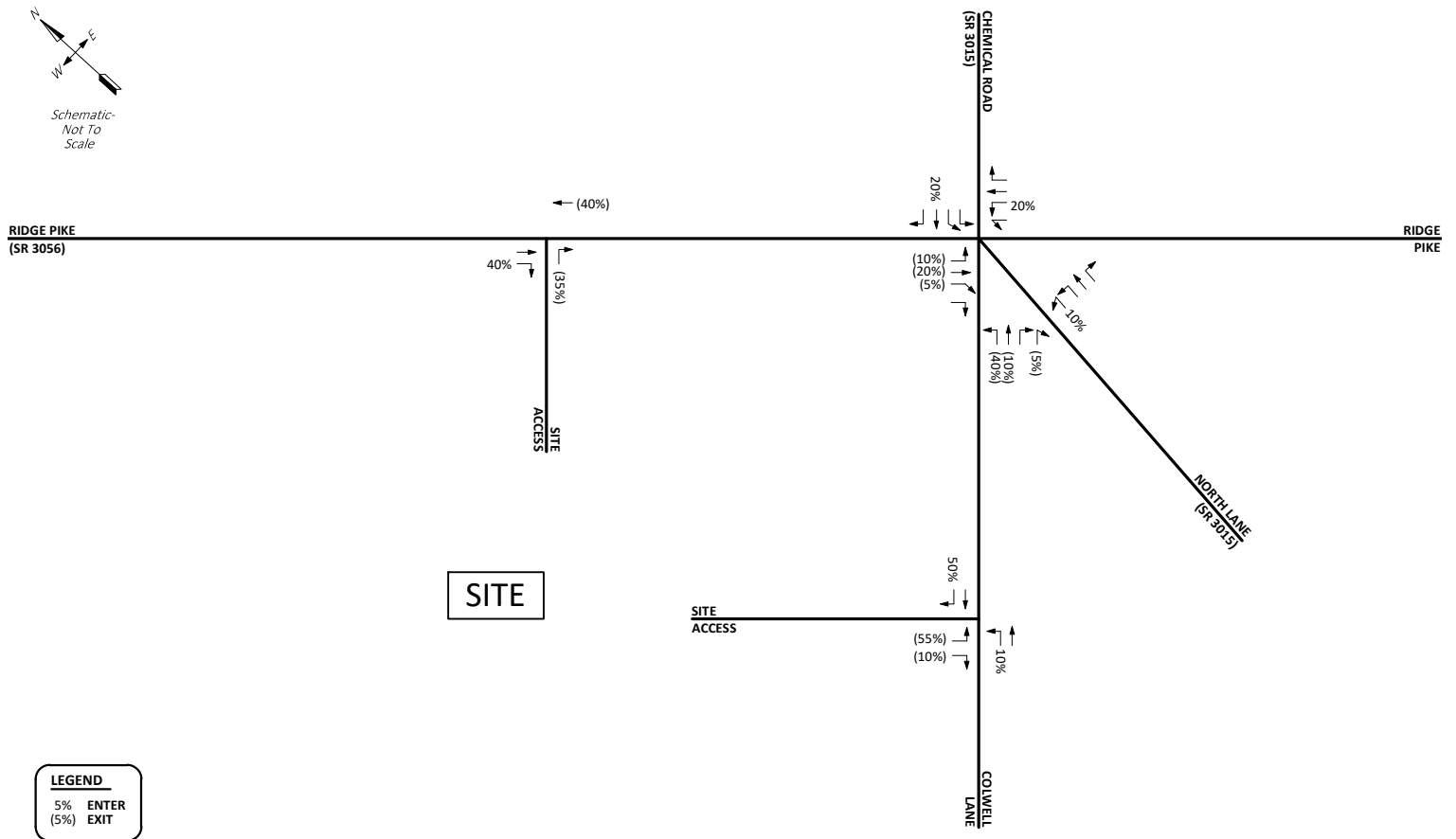
Existing Peak Hour Traffic Volumes

# CONSHOHOCKEN RIDGE CORPORATE CENTER

PLYMOUTH TOWNSHIP, MONTGOMERY COUNTY, PA

**Bowman**





**FIGURE 4A**

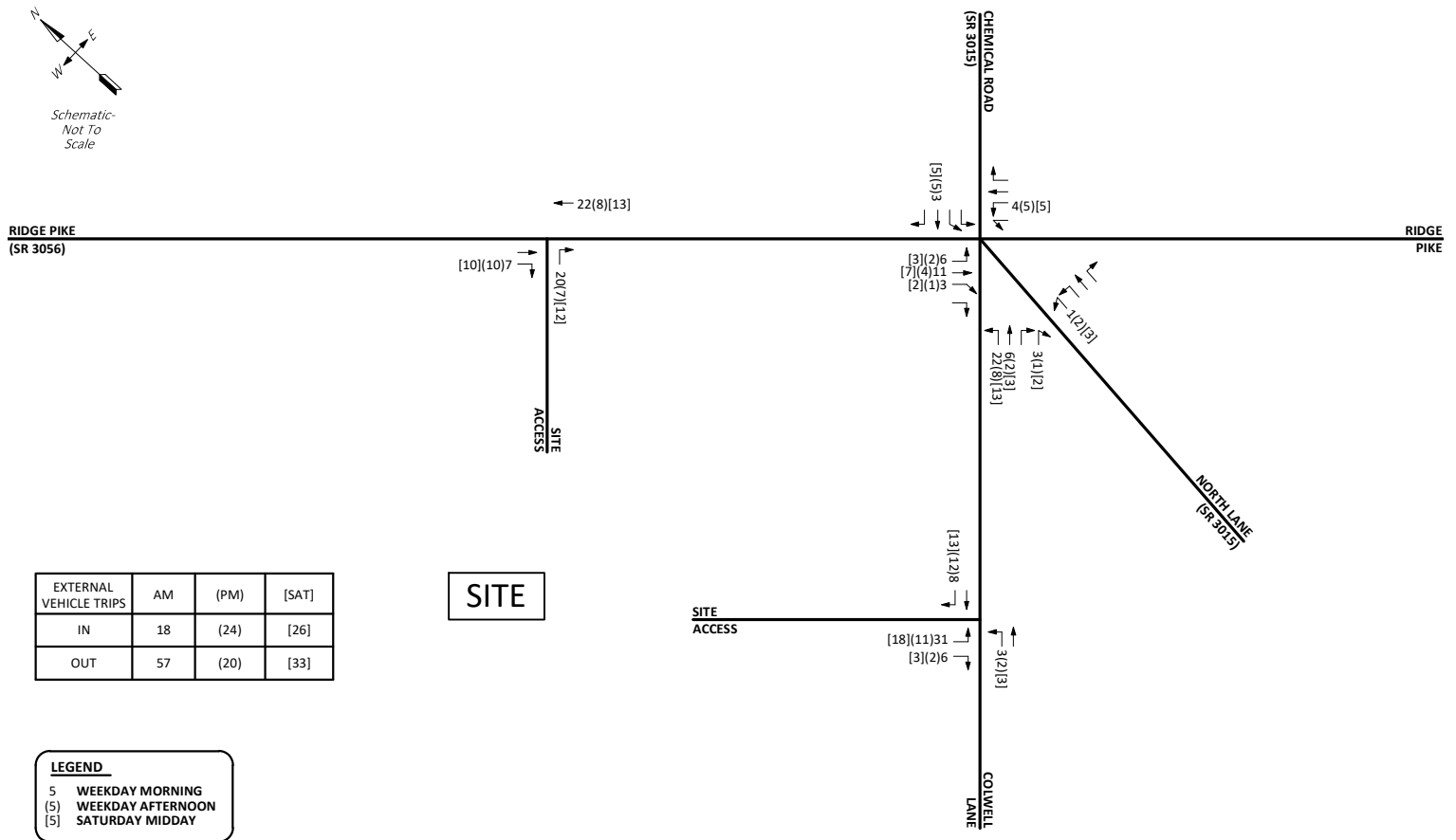
New Site Trip Distribution - Residential

# CONSHOHOCKEN RIDGE CORPORATE CENTER

PLYMOUTH TOWNSHIP, MONTGOMERY COUNTY, PA

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**FIGURE 4C**

New Site Trip Assignment - Residential

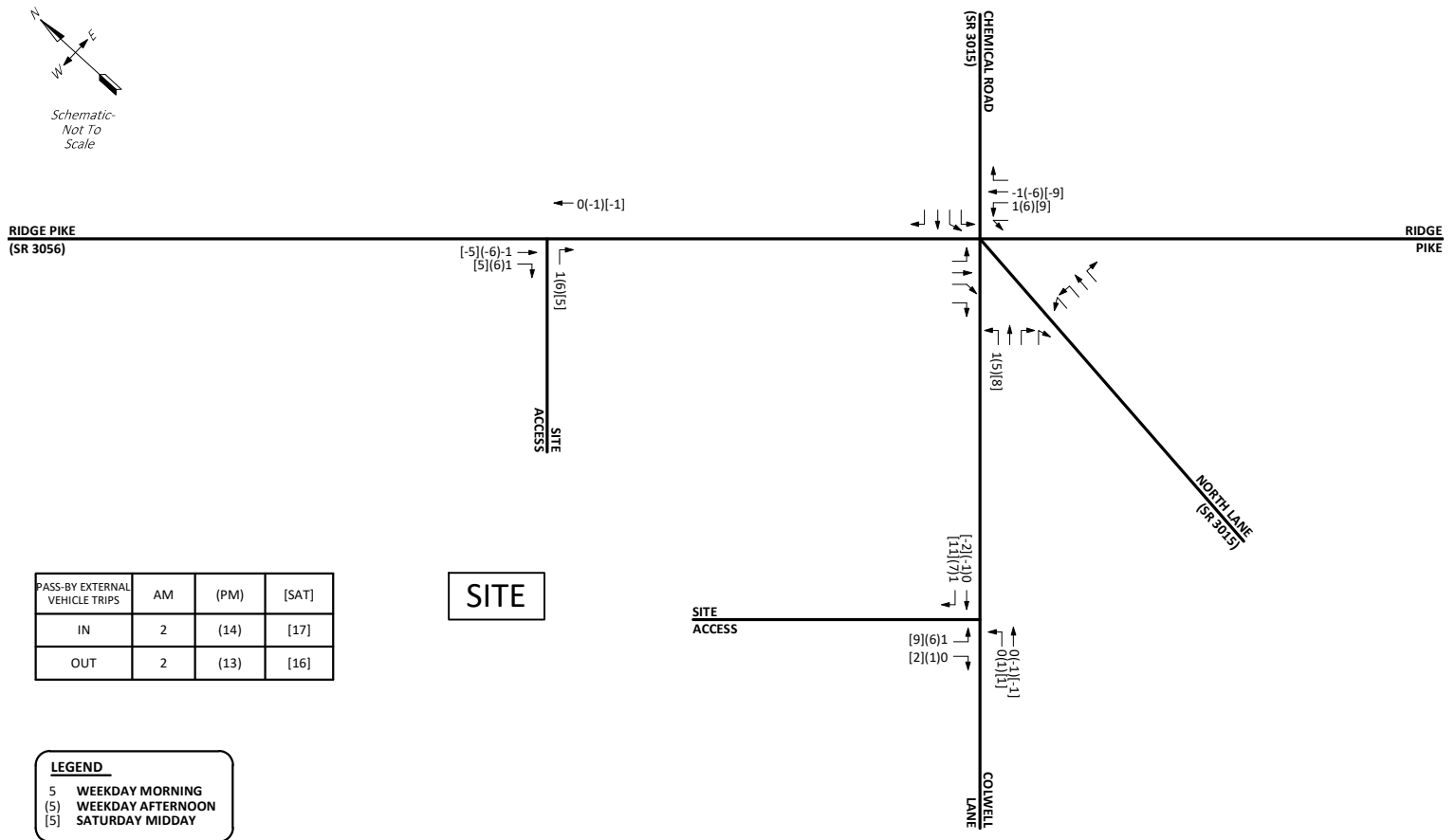
# CONSHOHOCKEN RIDGE CORPORATE CENTER

PLYMOUTH TOWNSHIP, MONTGOMERY COUNTY, PA

**Bowman**





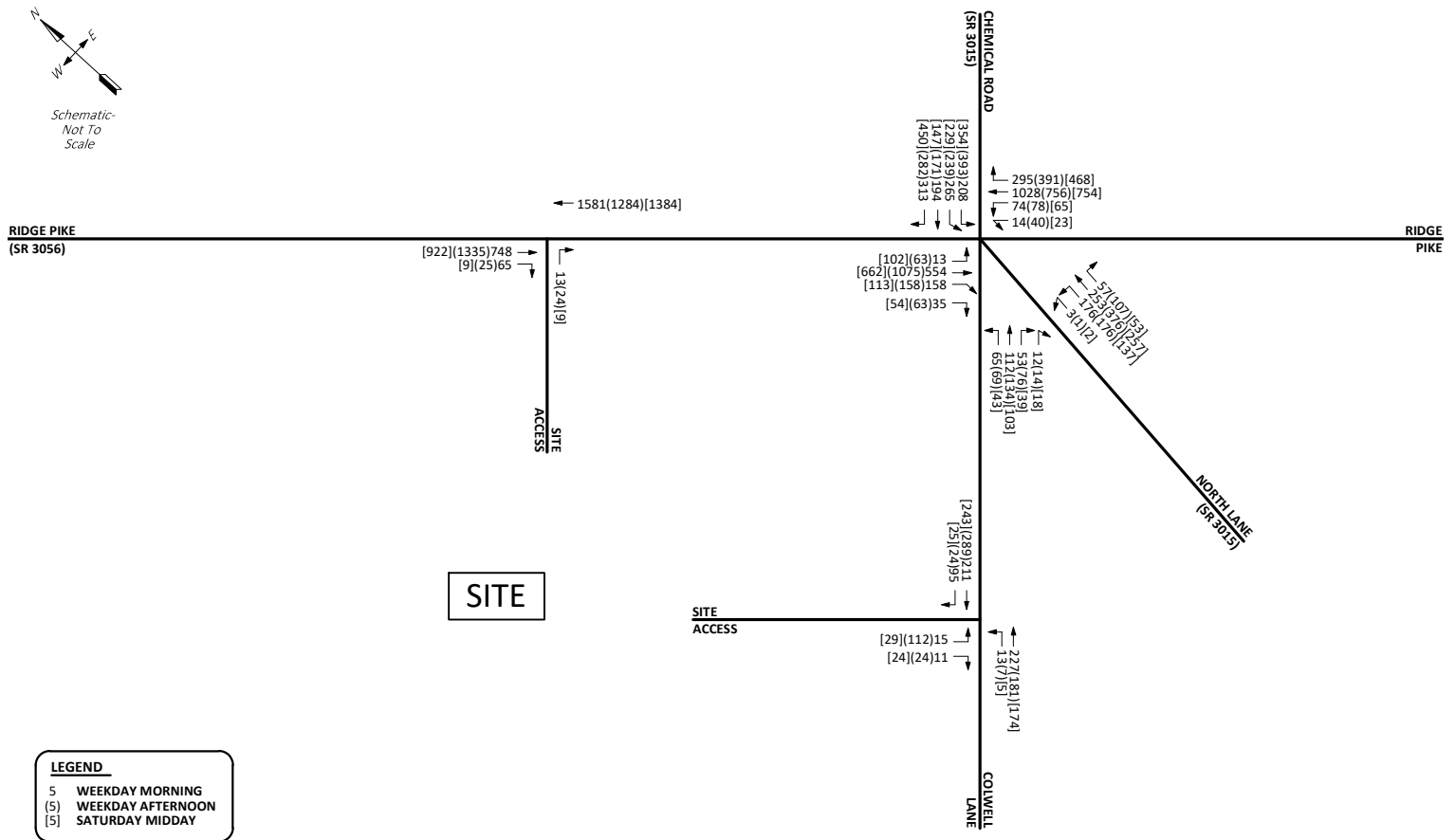


**FIGURE 4E**

Passby Site Trip Assignment - Retail

**CONSHOHOCKEN RIDGE CORPORATE CENTER**  
PLYMOUTH TOWNSHIP, MONTGOMERY COUNTY, PA

**Bowman**



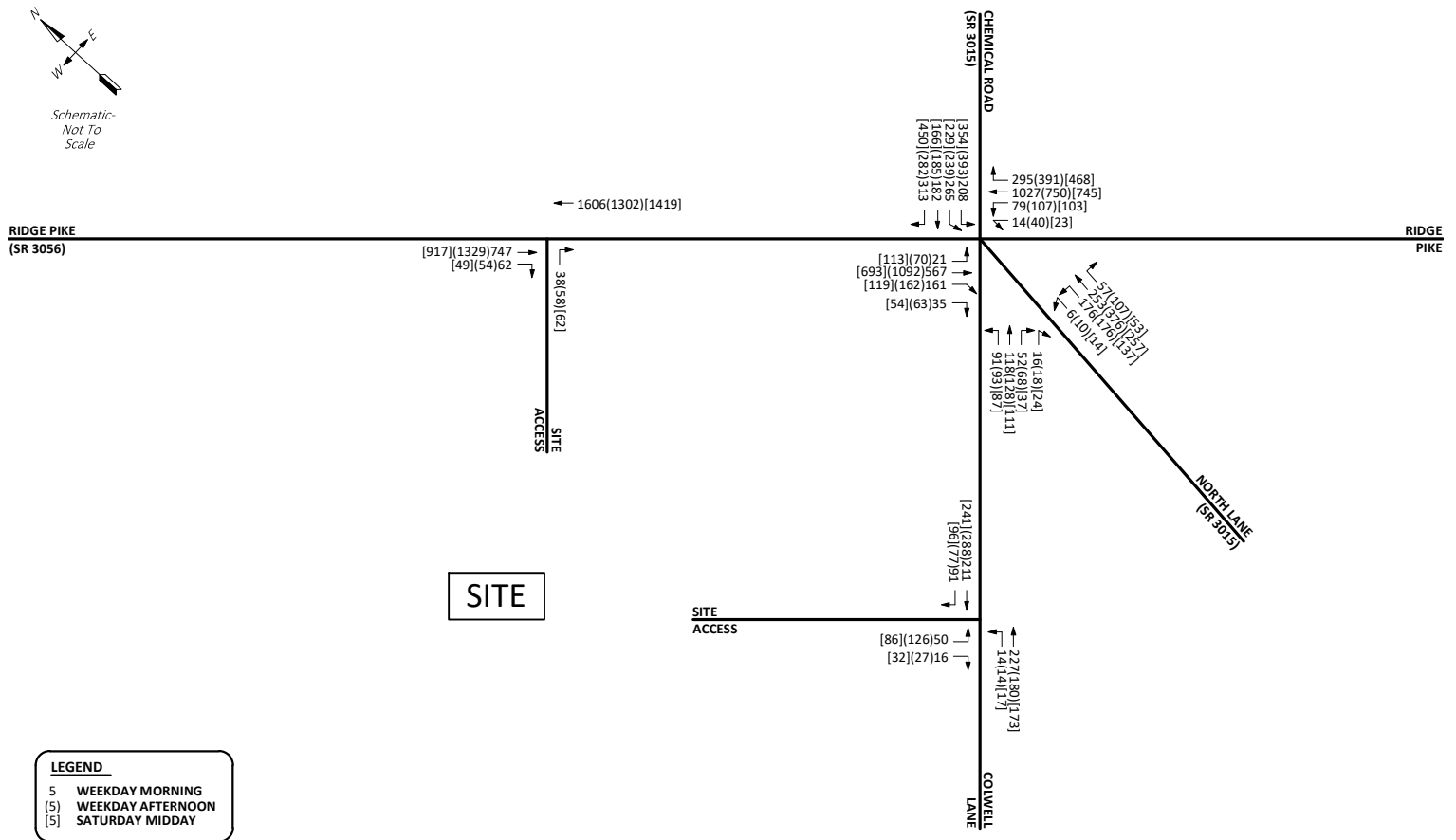
**FIGURE 5A**

2030 Peak Hour Traffic Volumes without Development

# CONSHOHOCKEN RIDGE CORPORATE CENTER

PLYMOUTH TOWNSHIP, MONTGOMERY COUNTY, PA

**Bowman**



**FIGURE 5B**  
 2030 Peak Hour Traffic Volumes with Development  
**CONSHOHOCKEN RIDGE CORPORATE CENTER**  
 PLYMOUTH TOWNSHIP, MONTGOMERY COUNTY, PA







# MEMO

PLYMOUTH TOWNSHIP



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**TO: Council & Matt West**

**FROM: Rick Carbo**

**DATE: July 31, 2025**

**SUBJECT: Tree Give away**

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Matt, I want to give you an update on EAB's Tree Give Away. This year's date will be Saturday September 27<sup>th</sup> from 9am until 12:30pm in the Municipal Building parking lot. There will be a planting demo at 10am for anyone that would like to attend. The EAB will advertise this event on their Facebook Page, The Community Center's Facebook Page and Flyers posted at the Community Center Front Desk. They have also developed several documents, which I have attached, including a Pledge for recipients and a Sign-Up Form. This is a first come first served event with 50 Trees available in several Species



## Community Canopy Project

Trees sourced from [TreeAuthority.net](https://www.treeauthority.net)  
Please contact  
[communitycanopyproject@gmail.com](mailto:communitycanopyproject@gmail.com) with any  
questions!

### Plymouth Township 1st Annual Native Tree Giveaway 2025 Planting Information Sheet

Tree Authority Nursery exclusively uses air pruning bags to reduce circling / girdling roots and transplant shock. They grow their trees so the root flares are visible at soil level, and they structurally prune throughout when the tree is young. Generally, you will receive a high quality tree!

**Safety First:** Face shovels down on the ground when not in use. Wear gloves as there can be broken glass and sharp objects in the soil. If you're unsure about underground utilities, call 811 within 10 days of planting to confirm you are safe to dig in the proposed planting area. It's free of charge to homeowners.

#### Preparing Hole in Advance:

Dig a hole about 3 feet wide and 10 inches deep. If possible, separate the soil from the sod and place it on a tarp beside the hole to use for backfilling. Place caution cones in hole and nearby, as needed. **Please note:**

- Do not include the sod (grass, grass roots) in the hole when backfilling - use only the soil.
- Use the sod (root-side facing up) to create a berm around the perimeter of your hole to suppress grass and to help hold water around your tree's root zone. You don't want turf to compete with your tree.

#### Planting the tree:

- **Remove support stake:** If there is a bamboo or fiberglass stake bound to the tree's trunk, please carefully remove the bands attaching the stake to the tree. Pull the stake upward to dislodge it from the tree.
- **Remove tree from the pot:** Most of the air-pruned cloth pots should have a velcro strip on the side. Unzip the velcro, and do your best to carefully remove the tree's root ball from the pot. Sometimes, placing the tree on its side (avoiding branch damage / breakage) and pressing the side of the pot helps to loosen the soil. **Please reuse the air-pruned bag to grow veggies, or return the bag to our collection site** at the Plymouth Township Building [700 Belvoir Road], as it can be reused at the nursery.
- **Check roots:** Lay the tree on its side to massage the root ball with your hands to loosen the soil around the roots. Gently shake the tree to dislodge enough soil to check the root system and the root flare. Splay roots outward like the spokes of a wheel. There is no need to remove all of the soil as long as you can observe the root flare and splay any circling roots.
- **Plant the tree so that its root flare is just above ground.**
  - a. Trees/soil can settle, so tamp the very bottom of the hole before placing the tree in. **Do not stomp or otherwise strongly compact the soil around the roots.**
  - b. Place the tree in the hole.
    - i. **Plant so the root flare is above the ground, never buried.**  
Plant the tree slightly high, with the start of the top woody roots (aka "root flare") ~1 inch above the soil surface. All roots should be buried, but the trunk should remain above ground. As needed, adjust the depth and width of your pre-dug hole by adding soil back to the hole, or digging deeper and/or wider.
    - ii. Check that the tree is **vertical / standing straight up** from all angles.
    - iii. **Splay out the roots to encourage them to grow outward** like the spokes of a wheel, and not to circle the trunk, as those will eventually strangle the tree.



- iv. If some roots do not fit in the hole when splayed outward, **dig a trench for those roots outwards into the soil surrounding the hole.** Make a slit in the turf, and tuck the long roots between the slit, about 4 or 5 inches under.
- c. **Fill the hole with the excavated soil, breaking up any large clumps.** Do not use any fertilizers or soil additives. Ensure that the tree remains **vertical** from all directions, and that the **root flare remains above the soil level.** Add water regularly as you backfill with soil, but do not step on the soil to avoid compaction.
- **Water:** ~10-15 gallons (or as much as soil will absorb) at planting time. Sufficient water will help the tree establish competent roots.
- **Berm:** Use upside down sod to create a circular berm under the mulch ring to hold water.
- **Mulch:** Mulch trees using the 3x3x3 rule: 3" thick, 3" away from trunk (no mulch volcanoes!), and a 3ft wide radius at minimum. Mulch helps maintain soil moisture, modulates soil temperature, provides nutrients as it decomposes, suppresses weed growth, and protects from mower / string trimmer damage to the bark and the root flare! It is imperative to maintain a good mulch circle. We recommend straight arborist wood chips - no dyes, no chemical treatments, no artificial colors!
- **Protect from deer:** Place the provided sturdy welded wire fence around the tree and hold it in place with the two fiberglass stakes. When the tree has grown so that most of its foliage is above deer browse height (5'), you can replace the fencing with a bark guard to protect the trunk from buck rub. **We understand that fencing is not aesthetically pleasing, but without it, deer WILL destroy the tree!** Fencing, replaced by a bark guard when sufficiently large, is an **absolute necessity** for at least 3-4 years!



### Caring for your young tree:

1. **Water 5 gallons at a time, twice per week until the ground freezes.** The roots should develop over the winter. Begin watering again next spring once the tree begins to grow new leaves.
2. **Resume watering in the spring, continuing until the following fall.** You can stop watering regularly after the tree has been in the ground for two years. **Water during droughts and heat waves!! Water is essential to help establish effective root systems, and insufficient watering is the most common cause of death for young trees!**
3. Maintain your mulch circle by adding fresh wood chips **at least once per year**, making certain that the root flare remains above ground and mulch stays off the trunk. **Mulch serves as a natural fertilizer so additional fertilizer is not recommended.**



Plymouth Township's 1st Annual Native Tree Giveaway  
Saturday, September 27, 2025 9am - 12:30pm



TREE CARETAKER'S  
PLEDGE



*I hereby pledge to:*

- Care for my tree and do my best to ensure it thrives in its new home!
- Value my tree, even though it didn't cost me anything.
- Water my tree daily until I plant it in the ground.
- Carefully follow the [instructions provided](#) with my tree. I will pay special attention to:
  - choose an appropriate location for my tree species to optimize its health and survival,
  - follow proper planting techniques (root flare slightly above ground, root ball gently loosened),
  - install proper mulching (3x3x3 rule or wider, maintain a mulch ring, and AVOID mulch volcanoes)
  - install the provided deer protection fencing and keep in place until the tree is big enough to withstand deer pressure (usually at least 3 years).
- **Plant my tree on my property by November 1, 2025.**
- Submit a photo of my tree once it is planted on my property. Photos will be reviewed by Plymouth EAB and Community Canopy Project. Email your photo to [CommunityCanopyProject@gmail.com](mailto:CommunityCanopyProject@gmail.com) or submit [through this form](https://forms.gle/ewcWvxMX2vb4uEsB6) (<https://forms.gle/ewcWvxMX2vb4uEsB6>).
- Water my tree regularly during its first two growing seasons. We recommend 5 gallons at a time, twice per week during the growing season. More during droughts and heatwaves, and less during rainy periods.
- Monitor my tree for signs of distress or decline (drought stress, dead branches, etc), and email [CommunityCanopyProject@gmail.com](mailto:CommunityCanopyProject@gmail.com) with any concerns.
- Provide my tree with ongoing general maintenance.

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Tree's New Home Address

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Tree Species

---

Tree Caretaker's Signature

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Date

Plymouth Township's Environmental Advisory Board heartily thanks  
this Plymouth Tree Caretaker for helping to beautify  
our community one tree at a time!



## **Plymouth Township Native Tree Giveaway 2025 Species Information Sheet**



**This document provides basic information about each species available in the 2025 Fall giveaway. You can click the species names in the heading for more information. Please do some additional research about your desired species to make sure it is the appropriate tree for your landscape!**

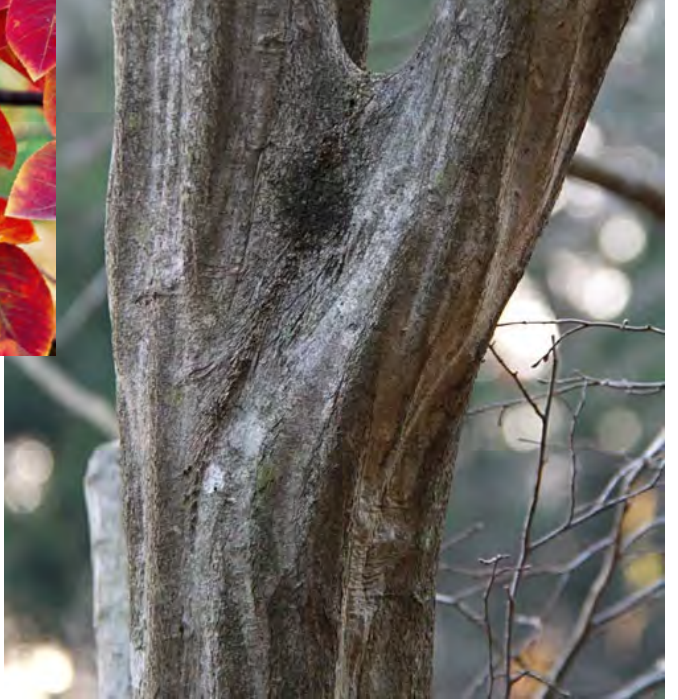
**Trees are sourced from Tree Authority Nursery in Bucks County. They will arrive in a 5 gallon air-pruned cloth pot, and are usually between 4-10 feet tall.**

**The tree giveaway is funded by Plymouth Township. It was organized by the [Plymouth Township Environmental Advisory Board](#), and [Community Canopy Project](#) (a local ecological restoration non-profit organization).**

### **Small tree options**

Small trees are ideal for smaller lots where space may be limited. These species typically range from 15-25 feet tall and wide at maturity, and usually put on a nice flowering display in the spring. These species are considered underwire compatible, and will not grow tall enough to reach PECO power lines. These trees also do not have an extensive root system, so they may be a potential option for garden beds closer to the house or foundation. Small trees are the most popular option, but we encourage you to plant a larger tree if you have the space, since they provide exponentially more environmental and ecological benefits over time.







## 1. Eastern Redbud (*Cercis canadensis*)

A native understory tree that produces bright pink flowers before it leafs out in early spring! The pink flowers are a favorite for early-emerging native bees, and once pollinated, will mature into pea-like pods on the tree. Flowers and young pods are edible.

The Eastern redbud is a host plant for ~24 species of butterflies and moths in our area. It is a short-lived species, usually lasting between 25-40 years, and usually requires a bit of structural pruning to prevent structural issues as the tree ages.

**Mature Height:** 20 to 30 feet

**Mature Spread:** 25 to 30 feet

**Preferred Sunlight:** Full sun, part shade, or shadier (won't flower as well in dense shade)

**Preferred Moisture:** Dry to moist

**Growth speed:** Moderate to fast





## 2. Flowering Dogwood (*Cornus florida* 'Jean's Appalachian Snow')

A native woodland understory tree that produces big, showy, white bracts in mid-spring. Pollinated flowers mature into bright red fruits that birds love. The cultivar 'Jean's Appalachian Snow' boasts increased tolerance to powdery mildew, a common pest of this species.

The flowering dogwood is a host plant for over 120 species of butterflies and moths in our area.

**Disclaimer:** **do not** plant this tree by itself in full sun. This tree prefers at least some shade throughout the day, and it does best when its roots are completely shaded and consistently moist. Consider planting on a woodland edge, in the shade of a mature tree, or on the side of your house where the building casts shade on the tree's roots. Please maintain a well-kept mulch ring around the tree.

**Mature Height:** 20 to 30 feet

**Mature Spread:** 20 to 30 feet

**Preferred Sunlight:** Part shade, or shadier (capable of flowering even under dense shade). Avoid full sun.

**Preferred Moisture:** average to moist

**Growth speed:** slow to moderate





### 3. Allegheny Serviceberry (*Amelanchier laevis*)

A small, multi-stemmed tree with showy white spring flowers that mature into delicious edible berries. Also known as Juneberry, the fruit ripens in early June and is highly sought after by birds. Serves as a host plant to 113 species of butterflies and moths in our area.

Does best in full sun with moist soils. If you desire to eat the fruit, you may want to avoid planting this tree if you have many eastern red-cedars (*Juniperus virginiana*) around because *Gymnosporangium* rust fungi often ruin most of the fruit.

**Mature Height:** 15–25 feet

**Mature Spread:** 15–25 feet

**Preferred Sunlight:** Full sun to partial shade

**Preferred Moisture:** Moist, well-drained soil

**Growth speed:** Moderate





#### 4. American Hornbeam (*Carpinus caroliniana*)

A small, slow-growing understory tree with smooth, muscular-looking bark. Inconspicuous flowers mature into small nutlets in papery bracts. Serves as a host plant to over 75 species of butterflies and moths.

Hornbeam does best in part shade, on woodland edges or under a mature tree's shade in moist soil conditions. It does well in floodplains near streams and in shady rain gardens, so long as the soil drains well afterwards. While the tree can grow in full sun, it struggles here if the soils aren't consistently moist.

**Mature Height:** 20–30 feet

**Mature Spread:** 20–30 feet

**Preferred Sunlight:** Partial to full shade

**Preferred Moisture:** Moist, well-drained soil

**Growth Speed:** Slow to moderate







### 5. American plum (*Prunus americana*)

A small, thicket-forming tree with fragrant and showy spring flowers and a delicious edible fruit that is eaten by people and by wildlife. One of the top host plants in our area, it supports over 450 species of butterflies and moths!

Ideal for food forests, woodland edges, privacy barriers, and property edges. In its preferred conditions, it will form a nice, spreading thicket with many stems which provide great habitat and shelter for birds and wildlife. Birds will also love to eat the large amount of caterpillars that the tree supports. **Disclaimer:** Avoid shady, stagnant, or wet areas.

**Mature Height:** 15–25 feet

**Mature Spread:** 15–25 feet

**Preferred Sunlight:** Full sun

**Preferred Moisture:** Average to dry, well-drained soil

**Growth Speed:** moderate





## Medium tree options

Medium trees are ideal for average-sized lots. These species typically range from 35-60 feet tall and wide at maturity, and usually provide some shade as they mature, which can help lower energy costs and keep your home cooler during the summer.

These species ***should not*** be planted under PECO power lines. These are great options for a front or back yard shade tree that won't eventually tower over or threaten your house. These species provide good ecological and environmental benefits.





### 1. River birch (*Betula nigra* 'Heritage')

A popular tree often used in landscaping for its striking exfoliating bark and tolerance to wet conditions. It produces inconspicuous flowers in spring and small, cone-like fruiting structures. It is one of the top wildlife trees in our area, and serves as a host plant to over 380 species of butterflies and moths. The cultivar 'Heritage' is noted for its extra showy exfoliating bark, and more heat tolerance.

This tree is ideal for moist-to-wet soils prone to flooding, streambanks, and rain gardens, but is also adaptable to average soils in your front or back yard. **Disclaimer:** Avoid super dry or compacted soils.

**Mature Height:** 40–60 feet

**Mature Spread:** 25–45 feet

**Preferred Sunlight:** Full sun

**Preferred Moisture:** Moist to wet, well-drained soil

**Growth Speed:** Moderate to fast





## 2. Black gum (*Nyssa sylvatica*)

A long-lived tree with brilliant fall color. Its small greenish-white flowers are a favorite for pollinators in the spring. The flowers mature into dark blue drupes (berries) which are favored by birds. In the fall, its glossy, bright red, orange, and yellow colors are hard to beat! It serves as a host plant to 36 species of butterflies and moths.

This tree is an ideal front or back yard tree in full sun. It typically exhibits a strong central trunk with smaller branches growing out at unique angles. Great for rain gardens, near streams, or even in flooded areas. **Disclaimer:** Avoid planting in alkaline / basic (greater than 7.0 pH) soils.

**Mature Height:** 30–50 feet

**Mature Spread:** 20–30 feet

**Preferred Sunlight:** Full sun to partial shade

**Preferred Moisture:** Average to wet, acidic soil

**Growth Speed:** Slow to moderate







### 3. Red Maple (*Acer rubrum*)

A highly adaptable, fast-growing maple with vibrant red fall foliage. It is one of the first native plants to bloom in very early spring, and displays bright red pom-pom-like flowers that mature into paired samaras (helicopter seeds). In the fall, its leaves turn a nice red or orange color before falling. It serves as a host plant to close to 300 species of butterflies and moths.

Red maple is a very adaptable tree and does well pretty much anywhere, as long as soils aren't too compacted or low in nutrients. It is the most commonly-used native landscaping tree in our area, and you'll often see it planted in front or back yards.

**Mature Height:** 40–70 feet

**Mature Spread:** 30–50 feet

**Preferred Sunlight:** Full sun to partial shade

**Preferred Moisture:** Moist, well-drained soil

**Growth Speed:** Moderate to fast





#### 4. Black Willow (*Salix nigra*)

A fast-growing, moisture-loving tree often found along waterways. It produces bright yellow flowers (catkins) in spring, which support early-season bees. Flowers mature into small capsules with cottony seeds. A top wildlife tree in our area, it serves as a host plant to over 380 species of butterflies and moths!

Best for streambanks, wet, swampy areas, pond margins, and consistently-moist rain gardens. This native tree puts on a nice display with its thin, drooping leaves. **Disclaimer:** Do not plant in average or dry soils. It may do well at first, but eventually will succumb to droughts. It **needs** consistent moisture.

**Mature Height:** 30–60 feet

**Mature Spread:** 30–60 feet

**Preferred Sunlight:** Full sun

**Preferred Moisture:** Wet to consistently moist soil

**Growth Speed:** Fast





## Large tree options

Large trees are ideal for bigger lots, or average-sized lots with lots of space. These species typically range in height from 60-100 feet tall and 50-60 feet wide at maturity. Remember, it will take **decades** to reach this height, so don't let that deter you from planting these. These trees tend to be the most ecologically and environmentally valuable species in our region, and form the keystone of many of our terrestrial ecosystems. Their importance cannot be understated - we need more big native trees around!

These trees provide lots of shade as they mature, which can help lower energy costs and keep your home cooler during the summer. These species ***should not*** be planted under PECO power lines. They are great options for a front or back yard shade tree when planted away from the house.





### 1. Swamp White Oak (*Quercus bicolor*)

A great shade tree that can live over 300 years! Native oaks like this one are the most important trees for wildlife in our area, and they serve as a host plant to over 500 species of butterflies and moths! It produces drooping male catkin flowers in the spring, which pollinate the female flowers that will mature into acorns in the fall. These acorns are very highly sought after by wildlife, and are edible for us after some processing.

It prefers moist-to-wet soils, but is adaptable to a range of conditions except for dry, upland sites. It tolerates occasional flooding. It is a type of white oak (*Quercus* section *Quercus*), and therefore is more tolerant of diseases and pests. The tops of the leaves are smooth and shiny, while the undersides are fuzzy and velveteen.

**Mature Height:** 60-80 feet

**Mature Spread:** 40-50 feet

**Preferred Sunlight:** Full sun

**Preferred Moisture:** Moist to wet soils, but adaptable to average

**Growth Speed:** Moderate





## 2. White Oak (*Quercus alba*)

A majestic, long-lived oak with strong wood and very high wildlife value. It can live up to 500 years! It produces drooping male catkin flowers in the spring, which pollinate the female flowers that will mature into acorns in the fall. These acorns are very highly sought after by wildlife, and are edible for us after some processing.

Native oaks like this one are the most important trees for wildlife in our area, and they serve as a host plant to over 500 species of butterflies and moths! The research of Dr. Doug Tallamy highlights white oak as perhaps the most important native tree in our region. Unfortunately, the white oak has declined drastically in abundance in the eastern US since European settlement.

Ideal in average-to-dry, acidic soils free of root disturbances like flooding. It is quite tolerant of drought once established, but it doesn't like standing water. **Disclaimer:** Don't plant near streams, ponds, or other bodies of water.

**Mature Height:** 50–85 feet

**Mature Spread:** 50–80 feet

**Preferred Sunlight:** Full sun

**Preferred Moisture:** Average to dry, well-drained, acidic soil

**Growth Speed:** Slow to moderate





### 3. American Elm (*Ulmus americana* 'Princeton')

A disease-resistant cultivar of the iconic American elm with a classic vase-shaped form. Small reddish-green flowers emerge in spring that mature into small, flat, circular samaras. It serves as a host plant to roughly 200 species of butterflies and moths.

A very quick-growing native shade tree that, once established, is capable of adding up to 5-6 feet of new growth per year while young! These trees tend to need a bit of structural pruning over their first 5-10 years to help them maintain a healthy, single-stemmed structure. The 'Princeton' cultivar was selected for very high tolerance of Dutch Elm Disease, which previously wiped out millions of elms.

**Mature Height:** 60–80 feet

**Mature Spread:** 40–60 feet

**Preferred Sunlight:** Full sun

**Preferred Moisture:** Moist, well-drained soil

**Growth Speed:** Fast



# The Benefits of Street Trees\*

## **Property values**

As the trees on a street mature, property values tend to increase. Homes with trees have been shown to sell for 3–15%\*\* more. Given the other benefits of trees—their beauty, health effects, flood mitigation, and ability to cool and refresh the air—trees offer a great return on this investment.

## **Traffic calming—and driver calming**

Trees are proven to slow average driving speeds. Trees also make a significant impact on the lives on drivers, even those just passing through an area.

## **Community identity**

Many neighborhoods, buildings, or developments are named for their trees. Common place names such as Oakridge, Elmvale, Maple Grove celebrate the effect of local trees on creating a sense of place. Trees support neighborhood engagement by making it easier and more relaxing to be outside.



## **Beauty**

Healthy trees are aesthetically pleasing. They create variations in color, texture, and height in the visual landscape.

## **Cooler air**

Trees lower the temperature in developed areas. They offer shade, large canopies like a parasol. They also release water vapor into the air, which is why the shade beneath a tree is often fresher than shade beneath a patio umbrella. In studies of “physiologically equivalent temperature,” or how cool we feel we are, trees can moderate temperatures between 9–27°F.

## **Cleaner air**

Trees help manage air quality by reducing particulate and absorbing gases. A large healthy tree can remove 3.5 lbs of pollutants in one year. A single tree can have 5 acres worth of surfaces when calculating all the leaves and branches.

## **Physical health**

Trees create walk appeal. Where space is beautiful and safe, people are more likely to be active, including walking or riding a bicycle. Trees encourage healthy lifestyles. “Active design,” including trees, is an environmental way to people moving and support their health outcomes. Increased activity may be why better heart health and longevity are correlated with green-space rich neighborhoods.

## **Mental health**

Several studies show that tree canopy creates lower rates of ‘psychological distress’. People are happier and less likely to depression when they’ve got connection to nature. This lower stress is evident in decreases in blood pressure and cortisol.



### **Ecology**

Trees also help promote regional biodiversity. Birds, butterflies, squirrels, chipmunks, and other local fauna require the habitat and sanctuary provided by trees.

### **Water management**

Much of a city's built environment is impermeable to water. Hardscape (concrete, stone, and asphalt) prevents groundwater replenishment and produces run-off. In light showers, leaves and branches capture or absorb water on their surfaces, where it can evaporate. Water that runs down branches, bark, and roots is channeled to soil and groundwater. Roots also help build the water holding capacity of soil. Roots also prevent soil erosion by binding it.

Trees use water in their life processes. Rather than simply returning water to the ground, a tree also returns moisture to the air in a process called transpiration. A mature oak tree can return 40,000 gallons of water to the atmosphere per year!



### **Adding oxygen and removing carbon dioxide**

Trees are our biggest tool in the struggle to lower atmospheric carbon dioxide and mitigate climate change. Research has shown that reforestation on non-food producing lands, both urban and rural, is a way to capture 200 billion pounds of carbon dioxide over the next 50–100 years.

\* Extracted (and edited) from “11 Benefits of Street Trees in Urban Spaces, Reasons for cities to invest in green infrastructure”, Reliance Foundry website (<https://www.reliance-foundry.com>).

\*\* Per Arbor Day Foundation

<b>Total Due</b>	<b>\$ 2,310.00</b>
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