

This application is being reviewed concurrently with Rezoning #REZ2022-00015.

January 11, 2022

The attached packet is provided for review and comment from the following agencies:

Building Official (DS900)
County Archaeologist (DS940)
Crime Prevention Police (MA210)
Dominion Energy
Economic Development (MA286)
Fire Marshal's Office (DS920)
Historical Commission (DS940)
Land Development Case Manager (DS940)
Long Range Planning (DS940)
Planning Case Planner
Planning GIS Specialist - JBM (DS940)
Prince William Forest Park
Service Authority (SA317)
Transportation Department (DS990) VDOT
Fairfax (MA290)
Watershed Management (DS930)

RE: SUP2022-00016, POTOMAC TECHNOLOGY PARK
SPECIAL USE, SPECIAL USE PERMIT

MAGISTERIAL DISTRICT: 15 - Potomac

REQUEST: This is a request for a special use permit to allow a Data Center and a Substation outside of the Data Center Opportunity Zone Overlay District. This is being concurrently processed with a request to rezone ±51.667 acres from A-1, Agriculture, to O(M), Office Mid-Rise District to develop the property with office or data center uses.
****1ST SUBMISSION****

GPIN(s): 7991-04-7237

Your comments should:

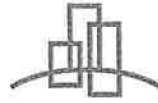
- 1) address the anticipated impacts of the proposal on the goals, policies and action strategies of the Comprehensive Plan;
- 2) address the anticipated impacts of the proposal on the services of your department;
- 3) address any site specific concerns which are materially relevant to the requested land use decision;
- 4) list minimum development standards which may conflict with the proposed development or require special consideration in the Planning Office's analysis of the proposal.

Your assigned Case Planner is **Christopher Perez**. Please use **eReview** to submit your comments. Reviewers without eReview access should submit their comments by email to jlozano@pwcgov.org.

Your comments should be directed to **Juana Lozano** and received no later than **February 11, 2022**. Your cooperation is appreciated.

The attached packet is provided for information only. No comment is necessary from the following:

SUPERVISOR - ANDREA O. BAILEY
COMMISSIONER - JUAN McPHAIL
BOARD CHAIRMAN - ANN B. WHEELER
COMMISSIONER AT LARGE - DON TAYLOR
ACTING PLANNING DIRECTOR - REBECCA HORNER
COUNTY ATTORNEY
COUNTY EXECUTIVE - CHRISTOPHER MARTINO
PLANNING COMMISSION CHAIRMAN - DON TAYLOR



WALSH COLUCCI
LUBELEY & WALSH PC

Marian Harders
(703) 680-4664 Ext. 5121
mharders@thelandlawyers.com

November 18, 2021

RECEIVED

2021 NOV 18 P 3:39

PLANNING OFFICE
PRINCE WILLIAM COUNTY

Via Hand Delivery

Stephen Gardner
Current Planning Manager
PWC Planning Office
5 County Complex Court
Prince William, VA 22192

Re: Special Use Permit, Potomac Technology Park
Special Use Permit Application Documents

Dear Mr. Gardner:

Enclosed please find a package containing the following items to be filed in connection with a Special Use Permit application (the "SUP") for property identified as GPIN 7991-04-7237 (the "Property"). The Property is located on the south side of Dumfries Road (Route 234) approximately 1,166 feet south east along Dumfries Road from the intersection of Bristow Road and Dumfries Road.

1. An original copy of the executed SUP Application signed by Plaza Realty Management, Inc.;
2. A fee calculation worksheet and one check made payable to Prince William County in the amount of \$7,550.81 which represents the SUP filing fee, and the concurrent processing fee;
3. Two (2) copies of the Deed conveying ownership interest in the Property to Plaza Realty Management, Inc.;
4. An original copy of the executed Interest Disclosure Affidavit signed by Plaza Realty Management, Inc.;
5. An original copy of the executed Adjacent Property Owners Affidavit signed by Plaza Realty Management, Inc.;
6. The names and mailing addresses of all property owners within 500 feet of the Property;
7. One (1) copy of the draft SUP Conditions, dated November 17, 2021;
8. One (1) copy of the Narrative Statement, dated November 17, 2021;
9. One (1) copy the Phase I Survey entitled "Phase I Cultural Resource Survey of the ±20.8 Hectare (±51.6-Acre) 148/54 Dumfries Road Project Area," prepared by Dutton + Associates, dated November, 2021;

ATTORNEYS AT LAW

703 680 4664 • WWW.THELANDLAWYERS.COM
4310 PRINCE WILLIAM PARKWAY • SUITE 300 • PRINCE WILLIAM, VA 22192
LOUDOUN 703 737 3633 • ARLINGTON 703 528 4700 • WINCHESTER 540 667 4912

10. One (1) copy of an Application for Deferral of Traffic Impact Analysis signed by George Phillips with Prince William County Department of Transportation, dated August 30, 2020 indicating that a TIA is not required to be submitted at this time;
11. One (1) full size copy and one reduction of the Environmental Constraints Analysis entitled "Potomac Technology Park," prepared by TNT Environmental, dated November 17, 2021;
12. Fifteen (15) full size copies and one reduction of the Special Use Permit Plan entitled "Potomac Technology Park," prepared by Land Design Consultants, Inc., dated November 17, 2021.

Once you have had an opportunity to review the application together with the supporting documents, please contact my office immediately if any additional information is required for acceptance. Thank you for your assistance in connection with this application.

Sincerely,

WALSH, COLUCCI, LUBELEY & WALSH, P.C.



Marian Harders

MBH

Enclosures: As stated

cc: Mark Walters (via email)
Frank Murphy (via email)
O'Kelly Russell (via email)
Brian Prater, Esq.

P1145217.DOCX

APPLICATION FOR A SPECIAL USE PERMIT
TO THE BOARD OF COUNTY SUPERVISORS OF PRINCE WILLIAM COUNTY, VIRGINIA

Case Name: Potomac Technology Park

The undersigned, being all of the owner(s), contract purchasers or the respective duly authorized agents thereof, do hereby petition for a special use permit to allow the following (state the purpose of the application):
Data center located outside the Data Center Opportunity Zone Overlay District with an electric substation.

GPIN	Zoning	Acres
7991-04-7237	O(M)	51.66754

Property Location: Describe the location of the property by distance, in feet or portion of a mile, and direction from an intersection of two (2) public roads or streets:
The Property is located on the south side of Dumfries Road (Route 234) approximately 1,166 feet south east along Dumfries Road from the intersection of Bristow Road and Dumfries Road.

The name(s), mailing address(es), and telephone number(s) of owner(s), authorized agent(s), contract purchaser/lessee, and engineer(s) as applicable are (attach additional pages if necessary):

Owner of Property*

Name: Plaza Realty Management, Inc.
c/o Mark Walters
Mailing Address: 1005 N. Glebe Road Ste 210
Arlington, VA 22201
Phone: 703-867-5897
Email: mwalters@cmicloan.com

Authorized Agent(s)*

Name: Brian Prater / Marian Harders
Walsh, Colucci, Lubeley & Walsh, P.C.
Mailing Address: 4310 Prince William Parkway, Ste. 300
Woodbridge, Virginia 22192
Phone: 703-680-4664
Email: bprater@thelandlawyers.com / mharders@thelandlawyers.com

Contract Purchaser/Lessee*

Name: _____
Mailing Address: _____
Phone: _____
Email: _____

Engineer*

Name: O'Kelly Russell / Jessica Bradshaw
Land Design Consultants
Mailing Address: 4585 Daisy Reid Ave, Suite 201
Woodbridge, VA 22192
Phone: _____
Email: orussell@ldc-va.com / jbradshaw@ldc-va.com

*Check the box next to the contact to which correspondence should be sent.

**APPLICATION FOR SPECIAL USE PERMIT (cont.)
SIGNATURE PAGE**

I have read this application, understand its intent, and freely consent to its filing. Furthermore, I have the power to authorize and hereby grant permission to Prince William County officials and other authorized government agents on official business to enter the property as necessary to process this application.

Signed this 18 day of October, 2021.

**Plaza Realty Management, Inc.
a Virginia Corporation**

By: 

Name: Mark W. Walters

Title: President

(If anyone other than owner is signing, power of attorney must be attached.)

PROPOSED CONDITIONS

Owner/Applicant: Plaza Realty Management, Inc.

Special Use Permit: SUP #PLN2022-XXXXX, Potomac Technology Park

Prince William County GPIN: 7991-04-7237

Special Use Permit Area: +/- 51.66 acres (the "Property")

Zoning: O(M), Office Mid-Rise District

Magisterial District: Potomac

Date: November 17, 2021

The following conditions are intended to offset the impacts of the proposal and to render the application consistent with the applicable chapters of the Comprehensive Plan and the surrounding areas. If the conditions of this Special Use Permit ("SUP") or the Special Use Permit Plan are in conflict with the approved proffers, Zoning Ordinance and/or the Design and Construction Standards Manual (the "DCSM") at the time of final site plan review or approval, the more restrictive standards shall apply, except as specifically allowed by this SUP.

The Applicant shall file a site plan within three (3) years of approval of this SUP by the Board of County Supervisors and shall have up to five (5) years from the date of final site plan approval to commence the proposed use. Issuance of an occupancy permit for the new use on the Property constitutes commencement of the use. Issuance of an occupancy permit for any data center structure shall vest the Applicant's right to thereafter construct the remaining structures/uses beyond the three (3) and five (5) year time requirements, as referenced in this paragraph.

1. Site Development: The Property shall be developed in conformance with the special use permit plan entitled "Potomac Technology Park Special Use Permit Plan," prepared by Land Design Consultants, Inc., dated November 17, 2021 (the "SUP Plan").
2. Use Limitations:
 - a. Permitted Uses: The use approved with this SUP shall be limited to data centers. Approval of this SUP does not prohibit any other permitted uses on the Property or preclude the Applicant from developing the Property (or a portion thereof) with permitted uses in combination with data center uses.
 - b. Phasing: Buildings may be constructed, and uses commenced, in one or multiple phases.
3. Community Design:
 - a. Data Center Architecture: the following conditions shall apply to all buildings used for data center uses, except for public facilities (such as electric substation or sanitary sewer pumps):
 - i. Architecture: The data center use shall be designed in accordance with the data center design standards and design guidelines set forth in Section 32-509.02.4.(A) – (F) of the Zoning Ordinance.

- ii. Rooftop Mechanical Equipment: Roof top mechanical equipment shall be screened from public rights-of-way. Ground level mechanical equipment not screened by a principal building or existing vegetation shall be screened by a visually solid fence, screen wall or panel, or other visually solid screen that shall be constructed of materials compatible with those used in the exterior construction of the principal building. Notwithstanding the requirements of this section, ground level mechanical equipment located in a manner found to have no adverse impact on adjacent roads and adjacent properties, as determined by the Planning Director, shall not be required to be screened.

- b. Fencing: Fencing of portions of the Property is permitted. Data center uses may have black steel or other metal security fencing no higher than eight (8) feet unless otherwise approved by the Planning Director or its designee. Chain-link fencing or barbed wire fencing are prohibited within thirty (30') feet of public street frontages. This fence allowance does not relieve a property owner from complying with all fire and access code requirements. The Planning Director may allow for alternative compliance with this requirement, provided the Applicant demonstrates that the fencing visibility is reduced, through the use of landscaping and other methods to reduce visibility.

- c. Landscaping: The Applicant shall provide landscaping in general conformance with the SUP Plan. All new plantings shall be indigenous, drought resistant, and species native to Virginia.

- d. Parking Lot Lighting: All freestanding parking lot lights shall have a maximum height of thirty feet (30') and shall have fixtures which direct light downward and inward. In addition, all building-mounted lighting, if any, shall be directed or shielded in such a manner to prevent glare from projecting onto adjacent properties or public rights of way.

- e. Signage: All signage shall be in conformance with the Zoning Ordinance. In addition, the following shall apply to signage and advertisements onsite:
 - i. Directional signage may be provided as needed.

 - ii. Unless not required by the Zoning Ordinance, sign permits are required for all signs. Color, scaled renderings of all signage shall be submitted as part of the sign permit approval process.

 - iii. All facade signage shall be coordinated on a section-by-section basis in color, size and materials.

 - iv. Facade signage may be oriented toward Dumfries Road.

- v. Applicant shall have the right to incorporate project or owner/tenant identification signs into the entrance features/walls.

4. Environment:

- a. Stormwater Management: Stormwater management may be provided on-site, as shown generally on the SUP Plan, or off-site. Final design and location of stormwater management facilities shall be determined at the time of final site plan. All stormwater management practices shall adhere to all applicable State and local laws, ordinances, and regulations.

5. Maintenance of the Property

- a. Graffiti Removal: The Applicant agrees to remove any graffiti from the Property. Graffiti shall be deemed any inscription or marking on walls, buildings or structures not permitted by the sign regulations in Section 32-250.21 *et seq.* of the Zoning Ordinance. Any graffiti is to be reported to the Prince William County Police Department before removal.
- b. Site Maintenance: The Applicant shall remove litter, trash and debris from the site as necessary.

6. Transportation:

- a. Site Access: Access to the Property shall be provided in the general location shown on the SUP Plan, subject to changes requested by the Applicant and approved by Virginia Department of Transportation and Prince William County Department of Transportation in connection with site plan review.

Potomac Technology Park

Rezoning and Special Use Permit Narrative Statement

Owner/Applicant: Plaza Realty Management, Inc.

GPIN: 7991-04-7237 (the "Property")

(51.667 Acres)

November 17, 2021

REQUEST

Rezone 51.667 acres from A-1, Agriculture to O(M), Office Mid-Rise District, and a Special Use Permit to allow Data Center outside the Data Center Opportunity Zone Overlay District (Sec. 32-402.33.3).

INTRODUCTION

Plaza Realty Management, Inc, is the owner of property located at 14854 Dumfries Road and identified as GPIN 7991-04-7237 (the "Property"). The owner is requesting to rezone approximately 51.667 acres from A-1, Agriculture to O(M), Office Mid-Rise District. The Property is located the south side of Dumfries Road (Route 234) approximately 1,166 feet south east along Dumfries Road from the intersection of Bristow Road and Dumfries Road. As shown on Figure 1 below, the Property abuts properties that are zoned A-1 Agriculture and a high voltage transmission line runs along the entire eastern property line. As discussed below, the majority of the Property is designated PFO, Public Facility/Office on the County's Long Range Plan, which identifies office and data center as primary uses within a PFO area. The Applicant is filing an accompanying Special Use Permit application to allow data centers outside the Data Center Opportunity Overlay District.

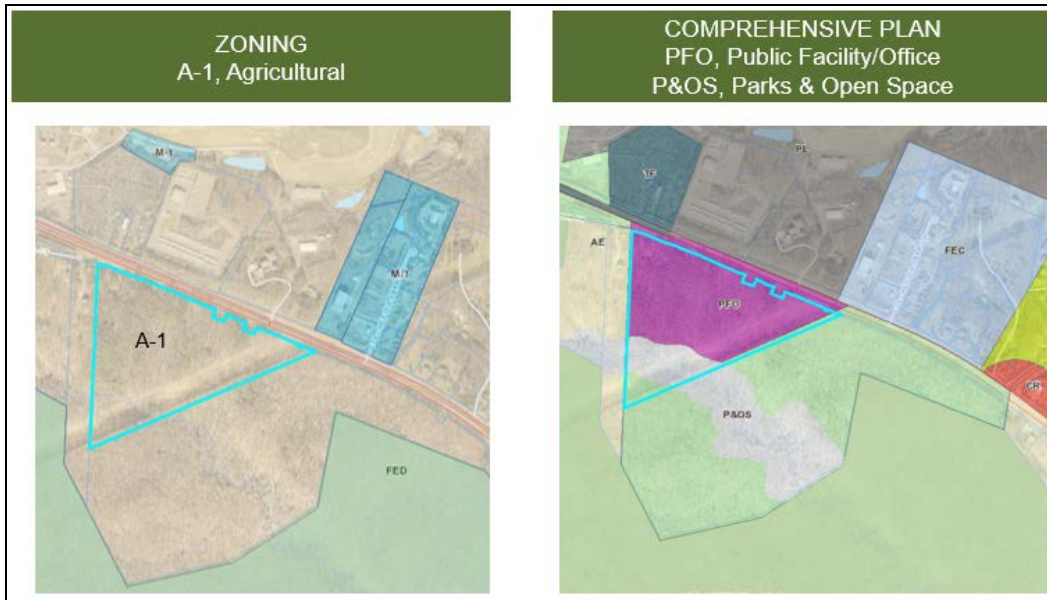


Figure 1

LAND USE

As shown in Figure 1, the Property is designated as PFO, Public Facility/Office, P&OS, Parks and Open Space, and Environmental Resource (ER), as part of the Independent Hill Small Area Plan, adopted by the Prince William Board of County Supervisors on March 13, 2021.

The Applicant is requesting to rezone the Property to the O(M), Office Mid-Rise District, with the intent to develop the Property with office/or data center uses, both of which are compatible in the PFO area. That portion of the Property consisting of land designated as ER and P&OS will remain undeveloped and preserved as open space.

Dumfries Road (Route 234) is currently a 4-lane divided highway and comprehensively planned to add additional lanes. As a result, the area is a commercial corridor connecting Route 1 and Interstate 95 to the commercial areas of mid-County and Independent Hill. On the other side of Route 234 is the County bus facility, a junk yard, and the County Landfill and, therefore, the proposed data center and/or office uses are a compatible use with the surrounding areas.

COMMUNITY DESIGN

Development of the Property will be consistent and in harmony with development in this area of the County. The architectural details for future development are proffered and the proposed Special Use Permit Conditions require any future data center use to comply with the Data Center Opportunity Zone Overlay design Guidelines. The Applicant is also proffering certain landscape buffers and landscape areas that will aid in screening the uses against abutting residential properties as well as Dumfries Road (Route 234).

CULTURAL RESOURCES

A Phase I Cultural Resource Survey, entitled “Phase I Cultural Resource Survey of the 20.8 Hectare (±51.6 Acre) 14854 Dumfries Road Project,” prepared by Dutton + Associates, dated November 2021 is provided with this application, which provides the following recommendations:

Architectural survey resulted in one newly surveyed architectural resource older than 50 years of age. This is the small Copin/Davis Family Cemetery which appears to date from the mid- to late nineteenth century. Cemeteries are typically excluded from consideration for NRHP eligibility, and this example does not embody distinctive characteristics or possess significant or unique architectural or design features and limited research revealed no known significant historical associations. At this time the cemetery is considered **not eligible** for listing in the NRHP on an individual basis or as part of a historic district. A separate cemetery delineation survey is proposed for the cemetery and will be reported as an addendum to this report when completed.

Pedestrian survey resulted in the identification of a concrete marker located in the northwestern portion of the project area. No inscriptions were present in the marker; however, its style suggests that it is possibly a twentieth century property boundary marker. Given the isolated nature of the marker and its modern material and construction, it is D+A’s recommendation that **no further archaeological consideration is warranted for the marker.**

Systematic subsurface archaeological testing resulted in two positive shovel tests and the recovery of three artifacts. Given the isolated nature of the finds and their lack of information potential, it is D+A's recommendation that the artifacts be treated as isolated finds and that **no additional archaeological survey is warranted.**

FIRE AND RESCUE

Based on the location of the site, the Property is expected to be served by Coles District Volunteer Fire Department, Station 6, which is within the 4-minute response time. Based on the anticipated nature of the development, there will be minimal impact on existing fire and rescue services. However, the Applicant has proffered \$0.61 per square foot of gross floor area to be used for fire and rescue purposes.

SCHOOLS

The proposed Rezoning and Special Use Permit will have no impact on schools.

PARKS AND OPEN SPACE

The proposed Rezoning and Special Use Permit will have no impact on parks and open space. The Applicant proposes approximately 15 acres of landscaping and open space or twenty-nine (29%) percent of the Property, which exceeds the minimum O(M) requirements of twenty (20%) percent.

POLICE/CPTED

Based on the Prince William County's GIS Public Safety Police Facilities map, it appears that the Property will be served by the Central District Station. This rezoning and special use permit will have no significant impact upon established level of service standards for police. The Applicant does not anticipate an increase in the Police levels of service based on the proposed rezoning and special use permit applications. The Applicant can address the CPTED strategies and techniques, in connection with site plan review, when further engineering and design have been completed.

WATER AND SEWER

The Property will be served by public water and sewer.

ENVIRONMENT

Please see the Environmental Constraints Analysis (ECA), prepared by TNT Environmental, dated November 17, 2021, for more information regarding the environmental features of the site. As noted on the ECA, perennial streams and Resource Protection areas (RPAs) were identified on the Property. Perennial Flow Determination (PFD) and Preservation Area Site Assessment (PASA) were approved by Prince William County as plan numbers ASP2022-00014 and ASP2022-00015 respectively.

HOUSING

The proposed Rezoning and Special Use Permit will have no impact on housing.

TRANSPORTATION

The site will be accessed via a single right-in/right-out entrance on Dumfries Road, as shown on the General Development Plan and Special Use Permit Plan. A Traffic Impact Analysis (TIA) Deferral was signed by George Phillips, dated August 30, 2021. As noted in the “Potomac Technology Park Justification for TIA Deferral” submitted to Mr. Phillips, a TIA is not required due to the following reasons:

- The anticipated trip generation is below the 1,200 new weekday daily trips.
- The access to the site will be provided by single right in/right out (RIRO) with a full-length right turn bay and taper which will be used by only 0.6 - 1.3 vehicles every minute during the peak hours, therefore it will have a minimum impact on the mainline traffic with the proposed eastbound right turn lane at the right in/right out (RIRO) of the site.
- The eastbound left and U turning movement would operate with minimal anticipated queuing and can accommodate the additional vehicles in the available storage.

LIBRARIES

The proposed Rezoning and Special Use Permit will have no impact on the library element of the Comprehensive Plan.

ECONOMIC DEVELOPMENT

The proposed rezoning contemplates appropriate infill office development in an area of the County that currently accommodates heavy and light industrial uses. Business(es) associated with the future development of the Property will generate needed jobs for those employed in industrial sectors. Tax revenues produced by the use of this property, including BPOL tax, real estate taxes and sales taxes, will result in a positive economic benefit to the County.

WAIVERS/MODIFICATIONS

There are no waivers or modifications requested with the Rezoning or Special Use Permit applications.

Application for Deferral of Traffic Impact Analysis (TIA)

To be completed with assistance from PWC Transportation Department
www.pwcgov.org/Transportation or 703.792.6825

To be completed by applicant:

Applicant Name: Plaza Realty Management, Inc Phone: _____

Proposed Use: Data Center

Address: 14854 Dumfries Road, Manassas, VA-22203 (GPIN 7991-13-1559) Lot Size: 51.67-ac to be rezoned

Select One: Rezoning Special Use Permit Other: And Special Use Permit

To be completed by applicant:				To be completed by PWC Transportation Department:				
Tract/Use	Area	Zoning	Land Use	ITE Code	(ITE Latest Edition Trip Rate)	Trips - 24 Hours	Trips - AM Peak	Trips - PM Peak
Proposed (Rezoning)	1,160.00	Prop. O(M)	Data Center	160	0.11	1148	145	122
					ITE Rate	ITE	ITE Eq	ITE Eq
Total						1148	145	122
1200 Daily Trips or 100 Peak Hour Trips						Yes		
						No	X	X

*

FOR OFFICE USE ONLY

- A TIA (three copies and two information disks) is required to be submitted with the application. The consultant preparing the analysis must meet with the PWC Department of Transportation and VDOT to discuss the scope and requirements of the analysis before beginning the analysis. Additionally, at the scoping session, VDOT will determine whether a 527 review is required, as well as the applicable fee.
- A TIA is not required to be submitted at this time. The traffic generated by the proposed development does not appear to exceed the thresholds established in §602.01 of the Prince William County Design and Construction Standards Manual (DCSM). However, a TIA may be required later in the rezoning/special use permit process or during the site plan review process if subsequent details warrant a TIA. The applicant should also be aware that a 527 review may be required by VDOT and may want to contact VDOT to verify whether a 527 review will be warranted.

A TIA has been waived by the Director for the following reasons: _____

Reviewed by (print name): George Phillips Date: 8/30/2021

Additional Notes: The applicant has provided traffic data which documents the need for a right turn lane into the proposed RI/RO entrance (500 feet plus 100' taper) and that the eastbound left and U turning movement will operate with adequate storage and minimal queuing. A TIA is not needed at this time.

Phillips, George

From: Kayla Ord <kayla.ord@goroveslade.com>
Sent: Wednesday, August 25, 2021 12:44 PM
To: Phillips, George
Cc: Chad A. Baird; Scullin, Elizabeth D.
Subject: TIA Deferral for Potomac Technology Park
Attachments: Potomac Technology Park - TIA Deferral Form.pdf; Potomac Technology Park - Deferral Justification 25AUGUST2021.pdf

This email is from an EXTERNAL source. Use caution when replying or clicking embedded links.

Hi George,

Per a previous conversation with Elizabeth, we are submitting a TIA deferral and turn lane assessment for Potomac Technology Park (located at 14854 Dumfries Road, Manassas). The site parcel can be identified with the following GPIN: 7991-13-1559. The proposed application would add an approximately 1,160,000 SF data center which would be accessed via a RIRO on Dumfries Road. Based on ITE's Trip Generation Manual (10th Edition) the proposed development would generate trips within the daily threshold limit for a TIA Deferral as shown in the attached documents. In addition to the TIA deferral form, we have also attached a document that provides turn lane assessment and left-turn lane capacity per Elizabeth's request.

Please let us know if you have any questions or comments.

Thanks,
Kayla

Kayla Ord, PE
Project Manager

GOROVE SLADE
Transportation Planners and Engineers
T 703.787.9595 x106 / D 703.657.0270
3914 Centreville Road / Suite 330 / Chantilly, VA 20151
kord@goroveslade.com / www.goroveslade.com

Please consider the environment before printing this email. Thank you.

TECHNICAL MEMORANDUM

To: George Phillips Prince William County
 CC: Josh Marshall Land Design Consultants
 From: Shashwat Anant Gorove Slade Associates
 Kayla Ord, PE
 Chad Baird
 Date: August 25, 2021
 Subject: Potomac Technology Park - Justification for TIA Deferral

Introduction and Summary

The purpose of this memorandum is to provide justification for a Prince William County (PWC) Traffic Impact Analysis (TIA) deferral for the proposed Data Center. The development site is situated along the southern frontage of Dumfries Road (Route 234), south of the intersection with Prince William County Facilities. The site is located on a portion of the parent parcel, which is identified as GPIN # 7991-13-1559. The proposed footprint of the development is approximately 1,160 KSF. Access to the site is provided by a single right in/right out (RIRO) entrance along Dumfries Road (Route 234). For the purposes of this assessment, the development was assumed to be in operation by 2025.

The trip generation presented herein illustrates that the proposed development of the Potomac Technology Park generates more trips than the PWC TIA deferral thresholds of 100 net new peak hour trips but less than 1,200 new weekday daily trips. Based on discussion with County staff, a TIA deferral is requested for this development. The TIA deferral includes a turn lane assessment at the site and left-turn lane capacity analysis in the vicinity of the proposed right in/right out (RIRO) in order to justify the deferral for the higher trips than the threshold during the Peak Hours.

ITE Trip Generation

In order to calculate the number of trips generated by the development, the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th edition, publication was utilized to determine the total number of trips going into and out of the subject study site during the weekday morning (AM), weekday afternoon (PM) and weekday daily generated trips. The projected trip generation for the proposed development is depicted in **Table 1**.

Table 1: Site Trip Generation (Peak Hour of the Adjacent Street; ITE 10th Ed.)

Land Use	ITE Code	Size	Weekday						
			AM Peak Hour			PM Peak Hour			Daily Total
			In	Out	Total	In	Out	Total	
Data Center	160	1,160 kSF of GFA	80	65	145	37	85	122	1,148
Total			80	65	145	37	85	122	1,148

As depicted in Table 1, the site is anticipated to generate approximately 145 trips during the AM peak hour, 122 trips during the PM peak hour, and 1,148 daily trips during a typical weekday. As such, a TIA deferral is requested as part of the Application as the development would be less than 1,200 new weekday daily trips. Therefore, a TIA deferral is requested based on the justifications provided in the subsequent sections. The assignment of the site generated trips is illustrated in **Figure 1**.

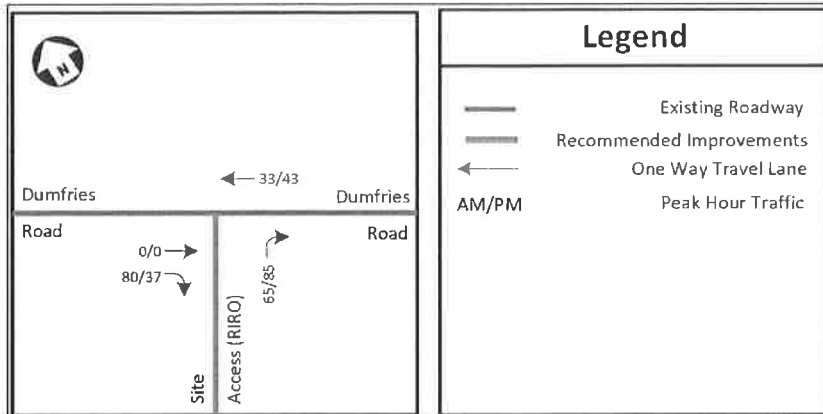


Figure 1: Site Generated Volumes

Site Access

Access to the site will be provided through a right in/right out (RIRO) along Dumfries Road (Route 234), which will contain a full-length right turn bay (600' total - 400' storage bay with a 200' taper).

A conceptual plan is illustrated in Figure 2.

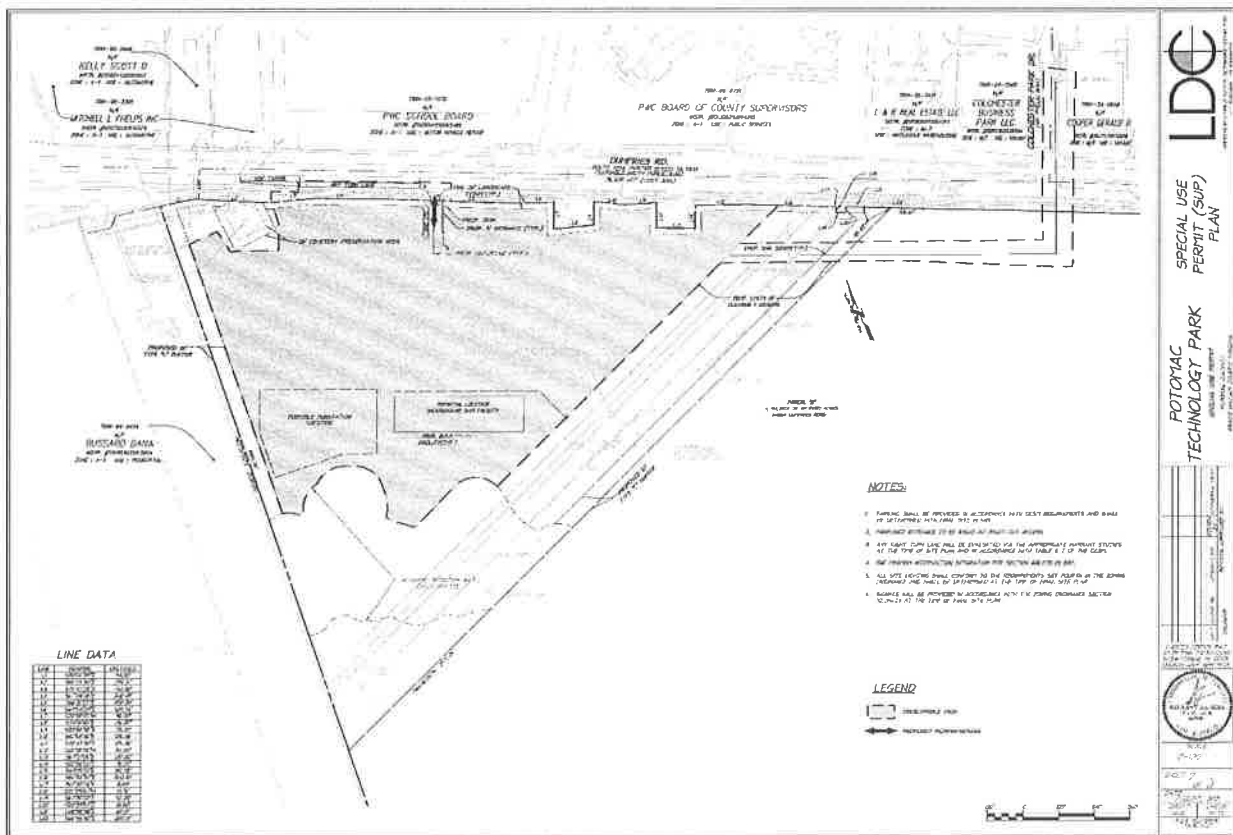


Figure 2: Conceptual Plan (for illustrative purposes only)

Turn Lane Assessment

Right turn lane warrants are based on the Virginia Department of Transportation's (VDOT) [Road Design Manual](#) (RDM) within Appendix F. In order to assess the turn lane warrants, the mainline volumes on Dumfries Road (Route 234) for the weekday morning (AM) and weekday afternoon (PM) peak hours were based on VDOT *Synchro* files containing the intersection of Dumfries Road (Route 234) and PWC County Utilities from the year 2017. The study intersections are shown in **Figure 3**.



Figure 3: Study Intersections

2025 Future Traffic Volumes

In order to project future traffic volumes at the study intersection, the existing traffic volumes were determined based on the abovementioned traffic volumes from VDOT's *Synchro files* for the year 2017 which were combined with an inherent growth of 2.0% (12.6 % from 2017 - 2025) per year along the mainline and proposed site's trip. The 2025 future with development traffic volumes are illustrated in **Figure 4**, and the proposed future lane configuration of the study intersection is illustrated in **Figure 5**.

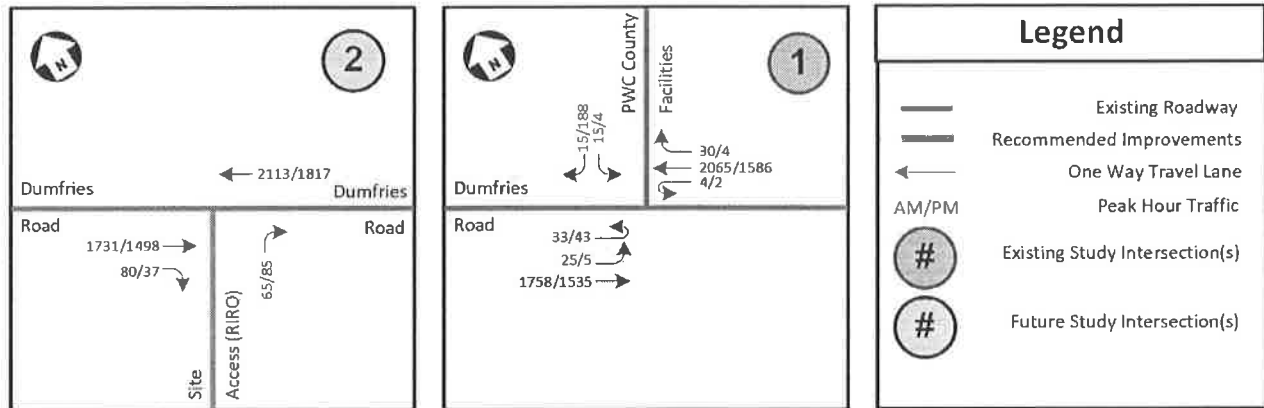


Figure 4: Future with Development Traffic Volumes

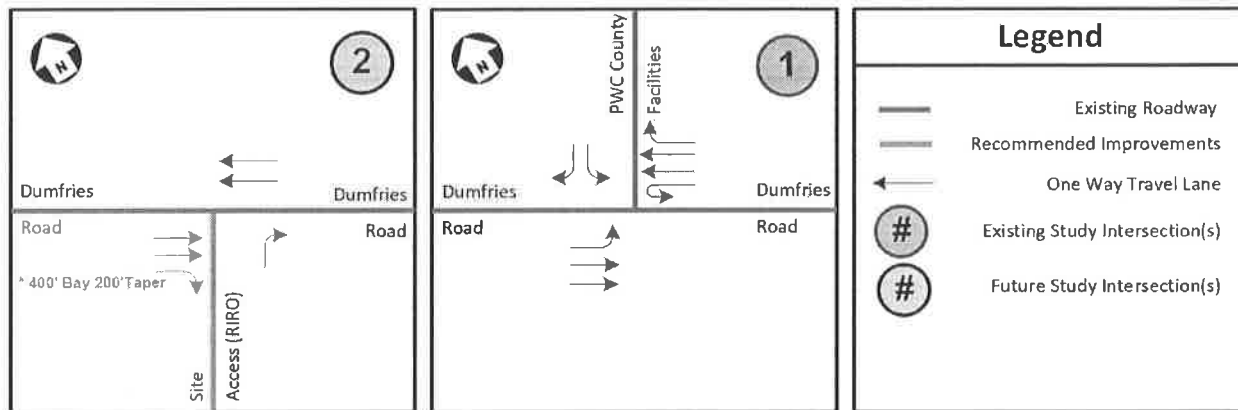


Figure 5: Proposed Future with Development Lane Configuration

Right Turn Lane Warrant Assessments

Warrants for right-turn storage lanes on four-lane highways at intersections are based on Figures 3-26 in Appendix F of VDOT’s RDM. This figure provides a graphical representation for determining the necessity of a right turn lane at a subject intersection by comparing the total volumes of a given approach with their respective right turn volumes. **Table 2** illustrates the RDM Appendix F Figure 3-26 with respect to the eastbound right turning movement at the Site Entrance.

Table 2: Right Turn Lane Warrant Assessment (Based on VDOT RDM Appendix F)

Study Scenario	Approach Volume	Right Turn Volume	Minimum Right Turn Taper Threshold	Minimum Right Turn Full Lane Threshold	Treatment
INT 2 - EBR - TF (AM)	1,811	80	10	40	Full-width Lane and Taper Required
INT 2 - EBR - TF (PM)	1,535	37	10	40	Taper Required

As illustrated, the site entrance would warrant a full-width right turn lane and taper. Based on Appendix F of VDOT’s RDM and given that Dumfries Road has a posted limit of 55 mph and a design speed of 60 mph, a 100-foot bay and 200-foot taper would be required at the right-in/right-out entrance.

Per the PWC’s DCSM, an eastbound right turn lane at the intersection would need to be constructed with a 500-foot storage bay and with a 100-foot taper (total 600 foot); if a turn lane is not provided at this intersection or does not meet the minimum requirements by PWC, a turn lane waiver would need to be submitted as a separate document and would need to be approved by PWC.

Table 3: DCSM and VDOT Turn Lane Requirements

Location	VDOT Requirement			DCSM Requirement			Proposed			VDOT Req Met :			DCSM Req Met :		
	Storage	Taper	Total	Storage	Taper	Total	Storage	Taper	Total	Storage	Taper	Total	Storage	Taper	Total
Eastbound Right Turn	100	200	300	500	100	600	400	200	600	Yes	Yes	Yes	No	Yes	Yes

Based on current plans, the Applicant is proposing to a 400-foot storage bay (100 feet below PWC's DCSM requirements however meets the total length requirement) with a 200-foot taper (exceeds the PWC's DCSM requirements). The proposed turn lane exceeds VDOT's standard, and meets the County's total turn lane length requirement as shown in Table 3. Therefore, the proposed turn lane would satisfy both VDOT's and County total minimum requirement.

Queueing Analysis at Eastbound Left Turn Lane at Intersection Dumfries Road (Route 234) and PWC Facilities

Queueing analysis was performed for the 2025 Future Conditions with Development scenario for the eastbound left movement at the Dumfries Road and PWC Facilities signalized intersection during the AM and PM peak hours. *Synchro*, version 10, was used to analyze the study intersection with results based on the Highway Capacity Manual (HCM) methodology. The intersection peak hour factor utilized in the analysis was determined based on the existing traffic counts, with a minimum of 0.92 applied for all approaches. The heavy vehicle percentage (HV%) utilized was based on a default *Synchro* value of 2.0% per lane movement.

The results of the queueing analyses for future conditions are presented in Table 4 and the 95th percentile queue lengths determined from *Synchro* are expressed in feet.

Table 4: Future Conditions 2025 Queueing Analysis

No.	Intersection (Movement)	Effective Storage Length (ft.) [1]	AM Peak Hour	PM Peak Hour
			95th % Queue (ft.)	95th % Queue
			Synchro	Synchro
1	Dumfries Road and PWC Facilities Overall Intersection			
	Eastbound Approach Eastbound Left/U Turn	425	84	81

NOTES:

[1] Effective storage length is based on the storage length plus one-half of the taper length per TOSAM

Based on the queueing analysis of the 2025 Future Conditions with Development scenario, it is anticipated that the eastbound left-turning movement would operate with minimal anticipated queuing and can accommodate the additional vehicles in the available storage.

Conclusion

The purpose of this memorandum is to provide justification for a Prince William County (PWC) Traffic Impact Analysis (TIA) deferral for the proposed Potomac Technology Park development to be located near Prince William County Facilities, and adjacent to Prince William Forest Park. Based on the analysis herein, a TIA deferral is requested due to the following reasons:

- The anticipated trip generation is below the 1,200 new weekday daily trips
- The access to the site will be provided by single right in/right out (RIRO) with a full-length right turn bay and taper which will be used by only 0.6 - 1.3 vehicles every minute during the peak hours, therefore it will have a minimum impact on the mainline traffic with the proposed eastbound right turn lane at the right in/right out (RIRO) of the site.

-
- The eastbound left and U turning movement would operate with minimal anticipated queuing and can accommodate the additional vehicles in the available storage.

Technical Appendix

- VDOT RDM Turn Lane Assessment Worksheets



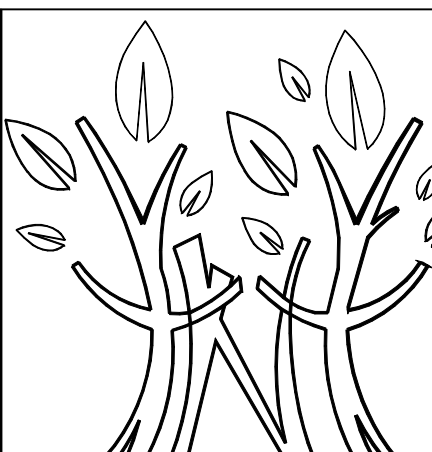
- LEGEND**
- PERENNIAL WATERS (R3)
 - INTERMITTENT WATERS (R4)
 - EPHEMERAL WATERS (R6)
 - PALUSTRINE FORESTED (PFO) WETLAND
 - PALUSTRINE SCRUB SHRUB (PSS) WETLAND
 - PALUSTRINE EMERGENT (PEM) WETLAND
 - APPROX. SPECIMEN TREE LOCATION
 - FAGUS GRANDIFOLIA - QUERCUS (ALBA, RUBRA) - LIRODENDRON TUPIFERA / ILEX OPACA / POLYCHICUM ACROSTICHODES FOREST
 - FAGUS GRANDIFOLIA - PINUS VIRGINIANA FOREST / ILEX OPACA / KALMIA LATIFOLIA FOREST
 - APPROX. 15-25% SLOPES
 - SOIL MAP UNIT BOUNDARY
 - REZONING PROPERTY BOUNDARY
 - PROPOSED LIMITS OF DISTURBANCE
 - RPA SITE SPECIFIC RESOURCE PROTECTION AREA (RPA)
 - VAD SITE SPECIFIC ENVIRONMENTAL RESOURCE (ER)
 - ER SITE SPECIFIC ENVIRONMENTAL RESOURCE (ER)



ENVIRONMENTAL
CONSTRAINTS ANALYSIS

POTOMAC TECHNOLOGY
PARK

PRINCE WILLIAM COUNTY



4455 Brookfield Corporate Drive, Suite 100
Chantilly, VA 20151
PH: 703-466-5123 WWW.TNTENVIRONMENTALINC.COM

ENVIRONMENTAL

REVISIONS	COMMENTS
DATE	

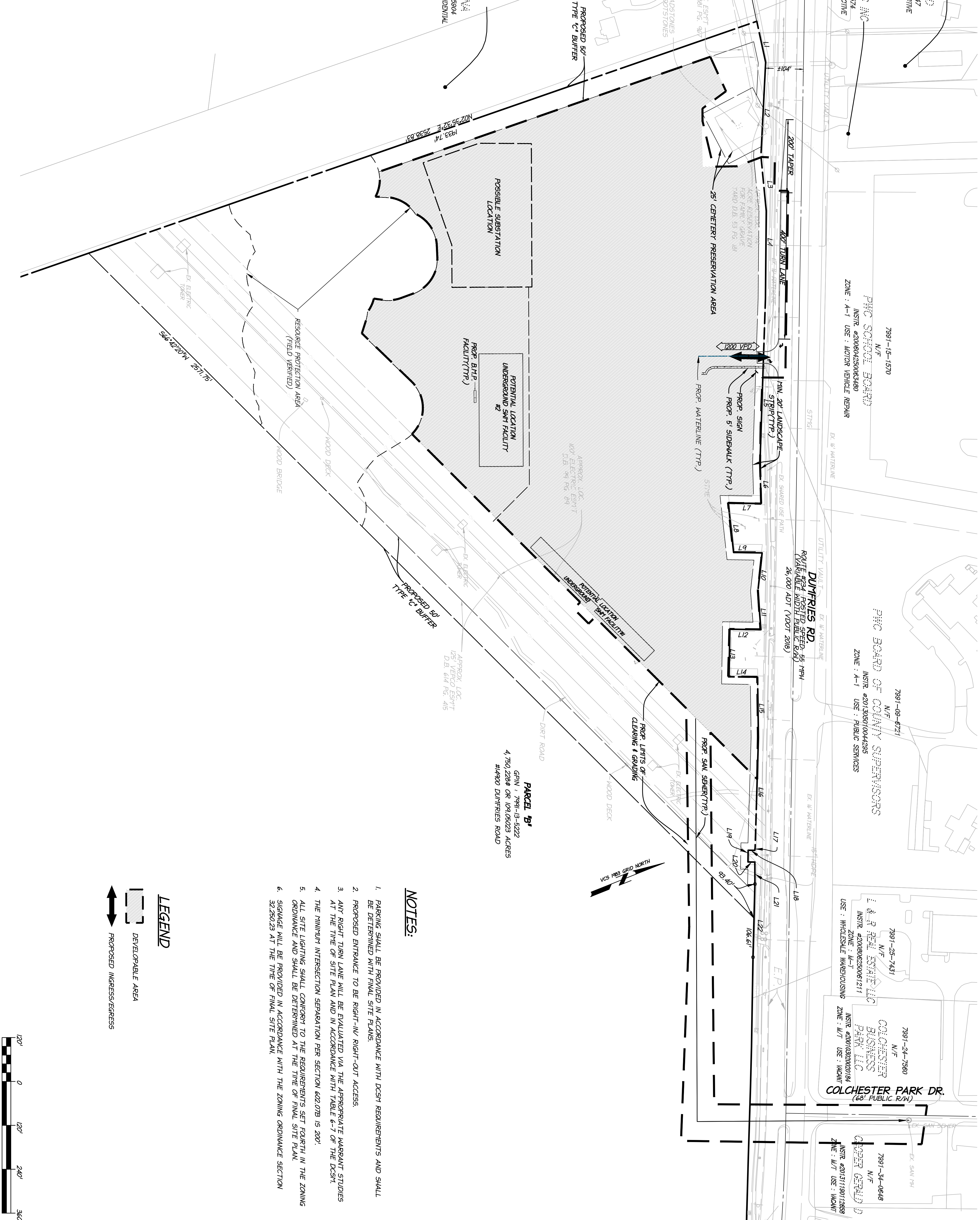
SHEET 1 OF 2

SCALE: 1" = 120'

PROJECT DATE:	11/17/21
DRAFT:	AMS
CHECK:	AMS
FILE NUMBER:	1980

LINE	BEARING	DISTANCE
L1	S80°28'34"E	114.80'
L2	S65°23'40"E	286.51'
L3	S73°47'25"E	150.40'
L4	S67°44'48"E	240.00'
L5	S66°27'27"E	480.04'
L6	S67°54'39"E	104.74'
L7	S27°38'55"W	40.00'
L8	S74°31'43"E	136.07'
L9	N27°38'55"E	78.00'
L10	S61°54'40"E	105.48'
L11	S72°47'30"E	130.00'
L12	S27°38'55"W	85.00'
L13	S67°21'05"E	130.00'
L14	N27°38'55"E	78.00'
L15	S64°05'13"E	165.08'
L16	S66°32'50"E	300.40'
L17	S61°20'24"E	8.04'
L18	S27°34'57"W	18.16'
L19	S67°20'09"E	32.00'
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L21	S68°28'48"E	60.01'
L22	S66°45'40"E	200.01'

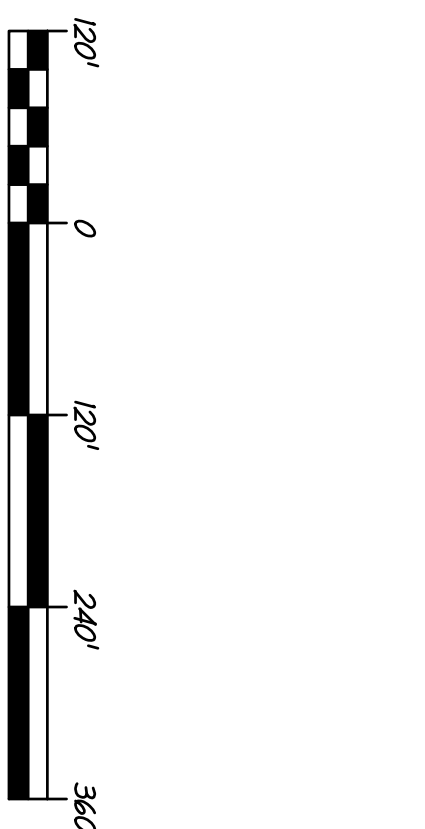
LINE DATA



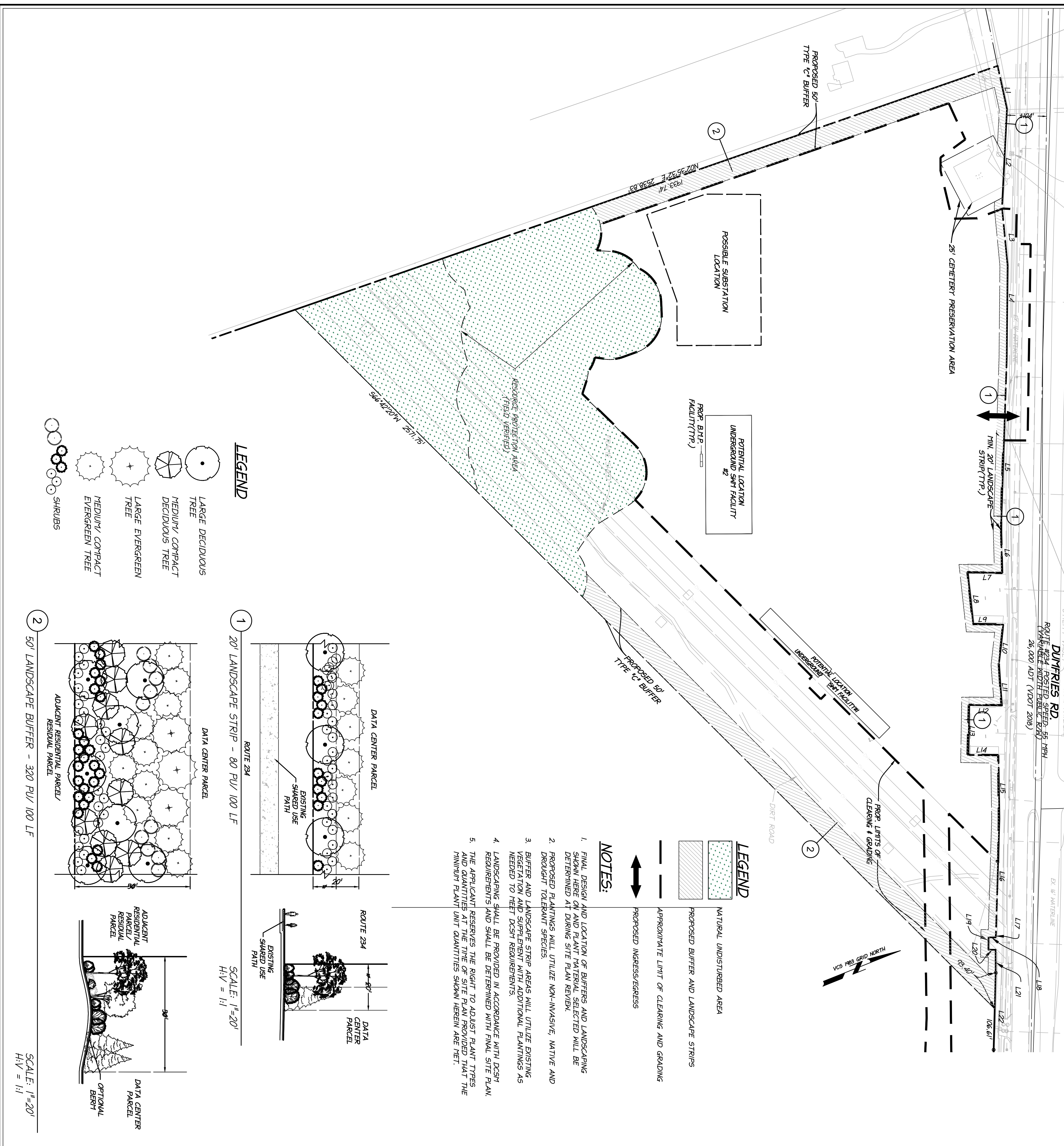
NOTES:

1. PARKING SHALL BE PROVIDED IN ACCORDANCE WITH DC94 REQUIREMENTS AND SHALL BE DETERMINED WITH FINAL SITE PLANS.
2. PROPOSED ENTRANCE TO BE RIGHT-IN/ RIGHT-OUT ACCESS.
3. ANY RIGHT TURN LANE WILL BE EVALUATED VIA THE APPROPRIATE MARGRANT STUDIES AT THE TIME OF SITE PLAN AND IN ACCORDANCE WITH TABLE 6-7 OF THE DC94.
4. THE MINIMUM INTERSECTION SEPARATION PER SECTION 602.07B IS 200'.
5. ALL SITE LIGHTING SHALL CONFORM TO THE REQUIREMENTS SET FORTH IN THE ZONING ORDINANCE AND SHALL BE DETERMINED AT THE TIME OF FINAL SITE PLAN.
6. SIGNAGE WILL BE PROVIDED IN ACCORDANCE WITH THE ZONING ORDINANCE SECTION 32.25023 AT THE TIME OF FINAL SITE PLAN.

LEGEND



<p>COMMONWEALTH OF VIRGINIA MARTINE MARSHALL LAND SURVEYOR No. 1053-B</p>	<p>POTOMAC TECHNOLOGY PARK</p> <p>SPECIAL USE PERMIT</p> <p>POTOMAC DISTRICT PRINCE WILLIAM COUNTY, VIRGINIA</p>	<p>SPECIAL USE PERMIT (SUP) PLAN</p>	<p>4885 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192 PH: 703-680-4585 FX: 703-680-4775</p>										
<p>I HEREBY CERTIFY THAT I AM A LICENSED LAND SURVEYOR IN THE COMMONWEALTH OF VIRGINIA AND THAT THE CHANGES HAVE BEEN MADE.</p>	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>DATE</th> <th>DESIGN NO.</th> <th>DESCRIPTION</th> <th>REVIEW BY</th> <th>APPROVED DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p>REVISION APPROVED BY:</p>	DATE	DESIGN NO.	DESCRIPTION	REVIEW BY	APPROVED DATE							
DATE	DESIGN NO.	DESCRIPTION	REVIEW BY	APPROVED DATE									
<p>SHEET 2 OF 3</p> <p>DATE: AUGUST, 2021</p> <p>DRAWN: CHECK: MTR</p> <p>FILE NUMBER: M75-2-0</p>	<p>SCALE: 1"=120'</p>												



<p>SCHEDULE A 50' LANDSCAPE BUFFER (WESTERN PROPERTY LINE)</p> <p>1) MINIMUM REQUIRED BUFFER AREA, TYPE C 2) MINIMUM WIDTH OF LANDSCAPE YARD, 50' 3) LINEAR FEET OF BUFFER STRIP REQUIRED ALONG PROPERTY LINE: 1,984 LF 4) PERCENTAGE OF REQUIRED BUFFER AREA OCCUPIED BY EXISTING WOODLAND: 100% 5) FENCE OR WALL OR BERM EMPLOYED IN BUFFER AREA NO. 6) TOTAL NUMBER OF PLANT UNITS REQUIRED IN BUFFER STRIP: (941' / 54' LF x 100%) x 320 PLANT/100 LF = 0 PU</p> <p>7) NUMBER OF LARGE DECIDUOUS TREES PROVIDED: 0 x 10 PU = 0 PU NUMBER OF LARGE EVERGREEN TREES PROVIDED: 0 x 10 PU = 0 PU NUMBER OF MEDIUM, SMALL OR COMPACT TREES PROVIDED: 0 x 5 PU = 0 PU NUMBER OF DECIDUOUS UNDERSTORY TREES PROVIDED: 0 x 2 PU = 0 PU NUMBER OF SHRUBS PROVIDED: 0 x 5 PU = 0 PU NUMBER OF PERENNIALS: 0 x 25 PU = 0 PU</p> <p>8) TOTAL NUMBER OF PLANT UNITS PROVIDED: 0 PU</p>	<p>SCHEDULE B NONRESIDENTIAL LANDSCAPED STRIP ALONG RIGHT-OF-WAY</p> <p>1) LINEAR FEET OF STREET FRONTAGE, NOT INCLUDING DRIVEWAY ENTRANCES: 2,298 LF 2) TOTAL NUMBER OF PLANT UNITS REQUIRED: (2,298 LF) x 80 PLANT/100 LF = 1,790 PU 3) NUMBER OF LARGE DECIDUOUS TREES PROVIDED: 67 x 10 PU = 670 PU NUMBER OF LARGE EVERGREEN TREES PROVIDED: 5 x 5 PU = 25 PU NUMBER OF MEDIUM, SMALL OR COMPACT TREES PROVIDED: 560 x 2 PU = 1,120 PU NUMBER OF DECIDUOUS UNDERSTORY TREES PROVIDED: 1 x 1 PU = 1 PU NUMBER OF SHRUBS PROVIDED: 1 x 25 PU = 25 PU NUMBER OF PERENNIALS: 0 PU</p> <p>4) TOTAL NUMBER OF PLANT UNITS PROVIDED: 1,790 PU</p>	<p>SCHEDULE C PARKING LOT INTERIOR PLANTING</p> <p>1) AREA OF PARKING: 62,002 SF 2) INTERIOR LANDSCAPED AREA REQUIRED: (62,002 SF) x 1.0% = 620 SF 3) NUMBER OF LARGE/MEDIUM TREES PROVIDED: 16 LDM/TREES 4) TOTAL NUMBER OF PLANT UNITS PROVIDED: 16 LDM/TREES</p>	<p>SCHEDULE D TREE COVER CALCULATIONS</p> <p>TREE COVER REQUIRED: 49,167 ACRES (22,290,498 SF) 1. GROSS SITE AREA: 49,167 ACRES (22,290,498 SF) 2. PERCENT OF TREE COVER REQUIRED: 10% 3. TOTAL AREA OF TREE COVER REQUIRED: 228,084 SF TREE COVER PROVIDED: 4. TREE COVER FROM LANDSCAPING: 16,600 SF 5. TREE COVER FROM PRESERVATION: 440,000 SF (120%) 6. TOTAL TREE COVER PROVIDED: 456,600 SF (120%)</p>
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POTOMAC TECHNOLOGY PARK

SPECIAL USE PERMIT

POTOMAC DISTRICT
PRINCE WILLIAM COUNTY, VIRGINIA

LANDSCAPE PLAN

4855 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192
PH: 703-680-4585 FX: 703-680-4775

1) HEREBY CERTIFY THAT I AM THE DESIGNER OF THIS PLAN AND I AM A LICENSED LANDSCAPE ARCHITECT IN THE STATE OF VIRGINIA. ANY CHANGES HAVE BEEN MADE.

DATE: AUGUST, 2021
DRAWN BY: JMT
CHECKED BY: JMT
FILE NUMBER: 17175-2-0

DATE	DESIGN NO.	DESCRIPTION	REVIEW BY	APPROVED DATE

REVISION APPROVED BY:

SCALE: 1"=120'

SHEET 3 OF 3

COMMUNITY OF POTOMAC
LANDSCAPE ARCHITECT
10000 WOODBRIDGE AVENUE
WOODBRIDGE, VA 22192