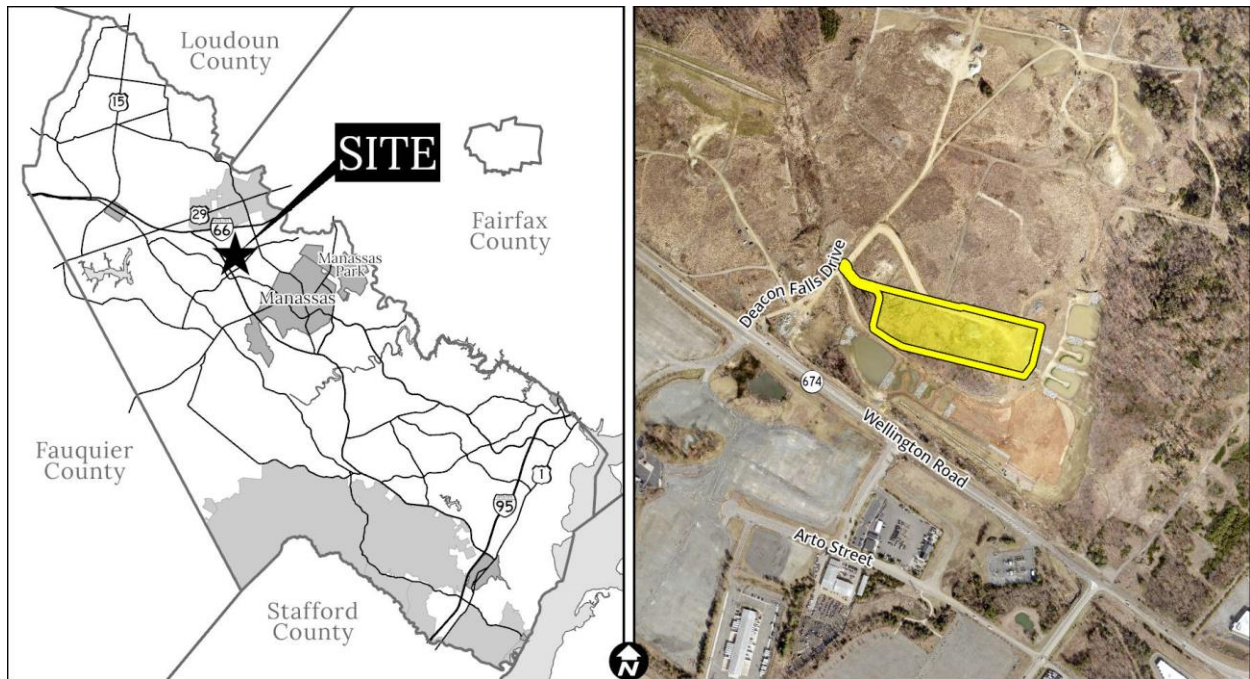




STAFF REPORT

PC Meeting Date:	December 11, 2024
Agenda Title:	Public Facility Review # PFR2025-00002, NOVEC Trident Substation
District Impact:	Brentsville Magisterial District
Requested Action:	Approval of Public Facility Review PFR2025-00002, NOVEC Trident Substation
Department:	Planning Office
Staff Lead:	Ahmad Behzad AICP, Senior Planner



EXECUTIVE SUMMARY

NOVEC requests a determination of consistency with the Comprehensive Plan to construct an electric utility distribution substation, known as the "Trident Substation," on GPIN 7497-41-7199, located at 5945 Wellington Road, Gainesville, VA 20155. The proposed facility will occupy a 6.97-acre portion of the 58.5382-acre parcel.

Staff recommends the Planning Commission approve Public Facility Review # PFR2025-00002, NOVEC Trident Substation, finding it substantially in accord with the adopted Comprehensive Plan.

BACKGROUND

- A. Request: This is a Public Facility Review request to allow for the construction of an electric substation facility located at 5945 Wellington RD Gainesville, VA 20155 comprised of a NOVEC substation on this site called "Trident Substation".
- B. PFR Process: Sec. 32-201.11 of Prince William County Zoning Ordinance allows electric substations in any zoning district within the Data Center Opportunity Zone Overlay District, subject to a public facility review.
- C. Site Location: The approximate 6.97-acre PFR area is part of an approximate 59-acre site located to the north of Wellington Road. It is ± 0.5 miles east of the intersection of Wellington Road and University Blvd and ± 0.4 miles from the intersection of Piney Branch Ln and Wellington Road. The subject site is identified on County maps as GPIN 7497-41-7199 on ± 58.5382 acres.
- D. Comprehensive Plan: The site is designated I-4, Industrial (T-4), in the Comprehensive Plan.
- E. Zoning: The site is zoned M-1, Heavy Industrial and is located within the Data Center Opportunity Zone Overlay, and Airport Safety Overlay (in Approach Surface).
- F. Existing Conditions: This is the site of the brownfield for Atlantic Research Corporation. The site is currently under development for a data center. Extensive clearing and grading has already begun, including disturbance of the 2 existing perennial streams along the eastern and western sides of the site.

The Property is located to the north of Wellington Road. The abutting property to the north and east is zoned M-1, owned by Microsoft Corporation C/O Ryan LLC, occupying approximately 117.2885 acres. To the west and south of the site is a property zoned M-1, owned by AMAZON Data Services INC, occupying approximately 58.3 acres. To the south of the Property, on the other side of Wellington Road, is Jiffy Lube Live.

- G. Existing Zoning/Proffers: The proposed electric utility substation will be dedicated to the service of a data center that is proposed to be constructed on the balance of the parcel. The proposed Dominion Switching Station will, in turn, service the NOVEC substation.
- H. Surrounding Land Uses: The following table summarizes the area characteristics:

Direction	Land Use	Long Range Future Land Use Map Designation	Zoning
North	Vacant	I-4, Industrial T-4	M-1, Heavy Industrial
South	Vacant	I-4, Industrial T-4 and Environmental Resource Protection Overlay District	M-1, Heavy Industrial
East	Vacant	I-4, Industrial T-4 and Environmental Resource Protection Overlay District	M-1, Heavy Industrial
West	Vacant	I-4, Industrial T-4 and Environmental Resource Protection Overlay District	M-1, Heavy Industrial

STAFF RECOMMENDATION

Staff recommends that the Planning Commission approve Public Facility Review #PFR2025-00002, NOVEC Trident Substation, finding that the general location, character, and extent of the proposed substation are consistent with the provisions of the adopted Comprehensive Plan. Accordingly, staff supports approval of this proposal.

Comprehensive Plan Consistency Analysis

Long-Range Land Use: The proposed electric substation is located on a site designated as I-4, Industrial (T-4) in the Comprehensive Plan and within the Data Center Opportunity Zone Overlay and Airport Safety Overlay. The site's M-1 zoning district allows for light industrial uses, and the substation is a compatible facility within this zone. The Comprehensive Plan requires public facility review under Code of Virginia § 15.2-2232 to ensure that such facilities are consistent with local planning policies.

The following table summarizes the description of the I-4 designation for a more detailed description please visit land use chapter of the Comprehensive Plan:

Long Range Land Use Map Designation	Intended Uses and Densities
Industrial (I), T-4	Industrial (I), T-4 - will serve as areas with heavy industrial use and warehouses for e-commerce. Primary Uses: Manufacturing, industrial park, wholesale/distribution facilities, warehouses. Fleet & Equipment sales, Quarry/Mineral, Extraction, Data Center. Secondary Uses: Retail Uses. Minimum Open Space: 20% of Site. Mix of Uses: Residential: 0%, Non-Residential: 95-100%. Civic: 0-5% Implementing Zoning Districts: M-1, M/T, M-2.

Primary Uses	Manufacturing Industrial Park, Wholesale/Distribution Facilities, Warehouses. Fleet & Equipment Sales, Quarry/Mineral Extraction, Data Center in T-4
Percent Mix of Uses if applicable	Residential: 0% Non-Residential: 95-100% Civic:5%
Density	Non-residential: T-4: 0.57-1.38 FAR,
Minimum Open Space	30% of the site
Target Building Height	T-4: 4-8 stories
Zoning Designations	M-2, M-1, M/T in T-4

Proposal's Strengths:

The proposal demonstrates strong alignment with several policies in the Comprehensive Plan's Electric Utility Services Plan chapter, notably:

1. Location Consistency (Policy EU-1): The substation is situated in an industrial area compatible with Policy EU-1, which encourages electric facilities to be sited in commercial or industrial zones. This M-1 zoned location helps avoid sensitive residential and environmental areas, adhering to Action Strategy EU-1.3's focus on unobtrusive service delivery within appropriate land uses.
2. Facility Collocation (Action Strategy EU-2.1): The plan to combine the NOVEC Substation with Dominion's Switching Station aligns with Action Strategy EU-2.1, which supports collocating facilities to reduce visual and community impacts. By consolidating infrastructure, the proposal minimizes the overall footprint of electric utilities, enhancing efficiency and community compatibility.
3. Screening and Buffering as Required (Action Strategy EU-2.3): The proposal includes a 15-foot Type A landscape buffer, with 75% of the plant material being evergreened to provide natural screening and buffering, in compliance with Action Strategy EU-2.3, which mandates measures to mitigate visual impacts on nearby properties. The design aligns with requirements to minimize visibility from public rights-of-way and nearby properties, specifically meeting the screening requirements outlined in Section 32-509.02 of the Prince William County Zoning Ordinance for the Data Center Opportunity Zone Overlay.

Consistency Recommendations

Staff recommends that this application is consistent with the relevant components of the Long-Range Land Use Plan.

Agency Comments

The following agencies have reviewed the proposal, with comments summarized below. Full individual comments are available in the case file at the Planning Office.

Agencies with Comments/Suggestions:

- PWC Fire Marshal's Office
 - Fire/Rescue Station 22 is the primary response resource.
 - The facility is outside the required 4-minute travel time for Basic Life Support and fire response but within the required 8-minute travel time for Advanced Life Support.
 - Station 22 responded to 3,264 incidents in FY23, with a capacity of 4,000 incidents per year.
- PWC Public Works – Environmental Services / Watershed Management
 - Staff recommends using native plant species for landscaped areas, selecting those adapted to local soil and weather conditions, per EN-Policy 5.4 and DES-Policy 9.2.
- PWC Transportation
 - The proposed substation is expected to generate minimal traffic, with four vehicle visits per month for maintenance. The Applicant must include a paved entrance apron at least 30 feet from Deacon Falls Drive and indicate the maintenance vehicle parking space on the plan. With these measures, there are no objections to approval.

Agencies without Comments/Suggestions

- PWC Water
- PWC Historical Commission
- PWC Police / Crime Prevention
- PWC Service Authority
- Virginia Department of Transportation (VDOT)

Community Input

Notice of the application has been transmitted to adjacent property owners within 500 feet of the proposed site. As of the date of this staff report, the Planning Office has not received any comments from the public on this proposal.

Other Jurisdiction Comments

The site is not located within the required jurisdiction notification area.

Legal Issues

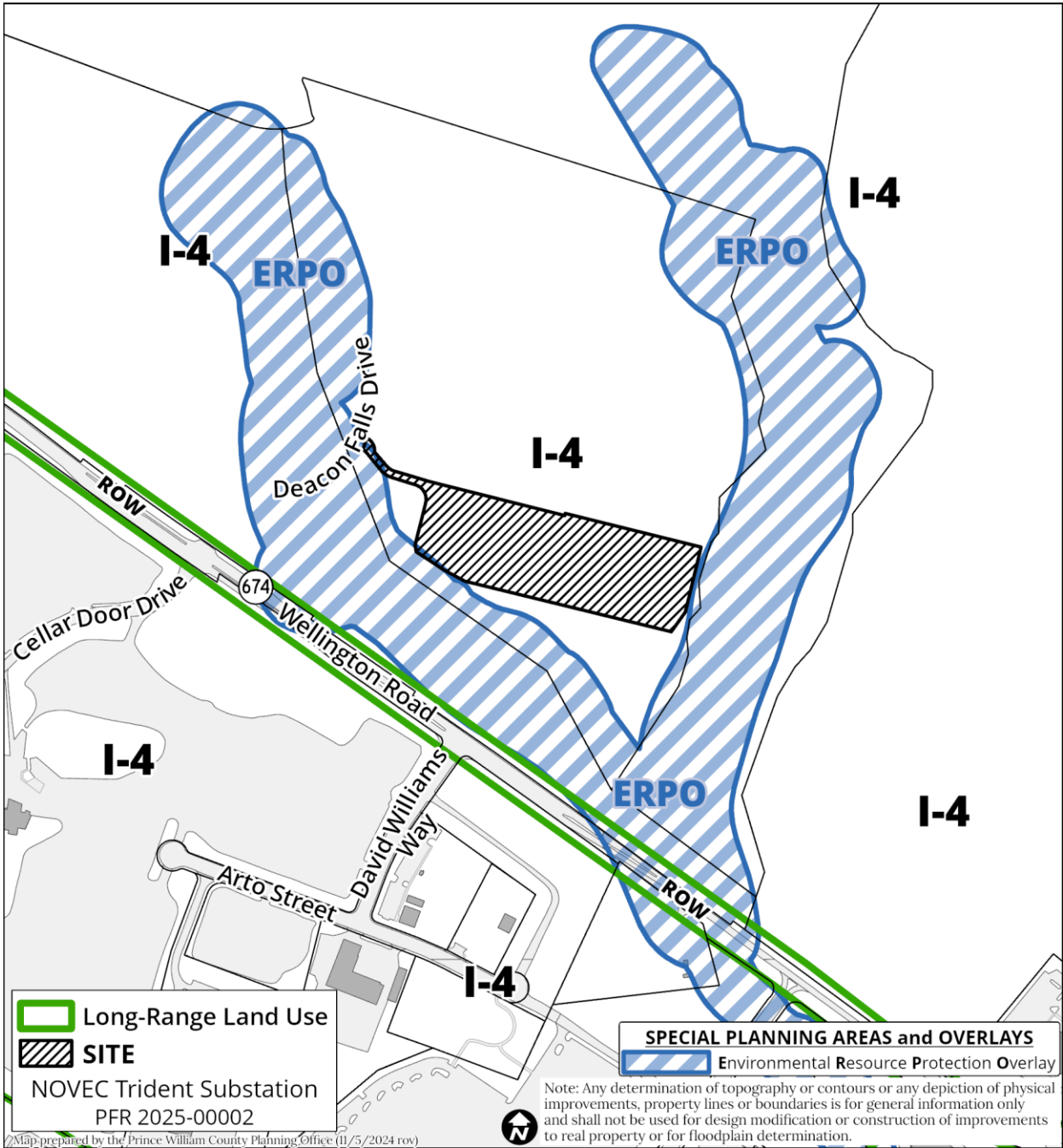
The electric substation could be constructed on the site with an approved PFR. Legal issues resulting from Planning Commission action are appropriately addressed by the County Attorney's Office.

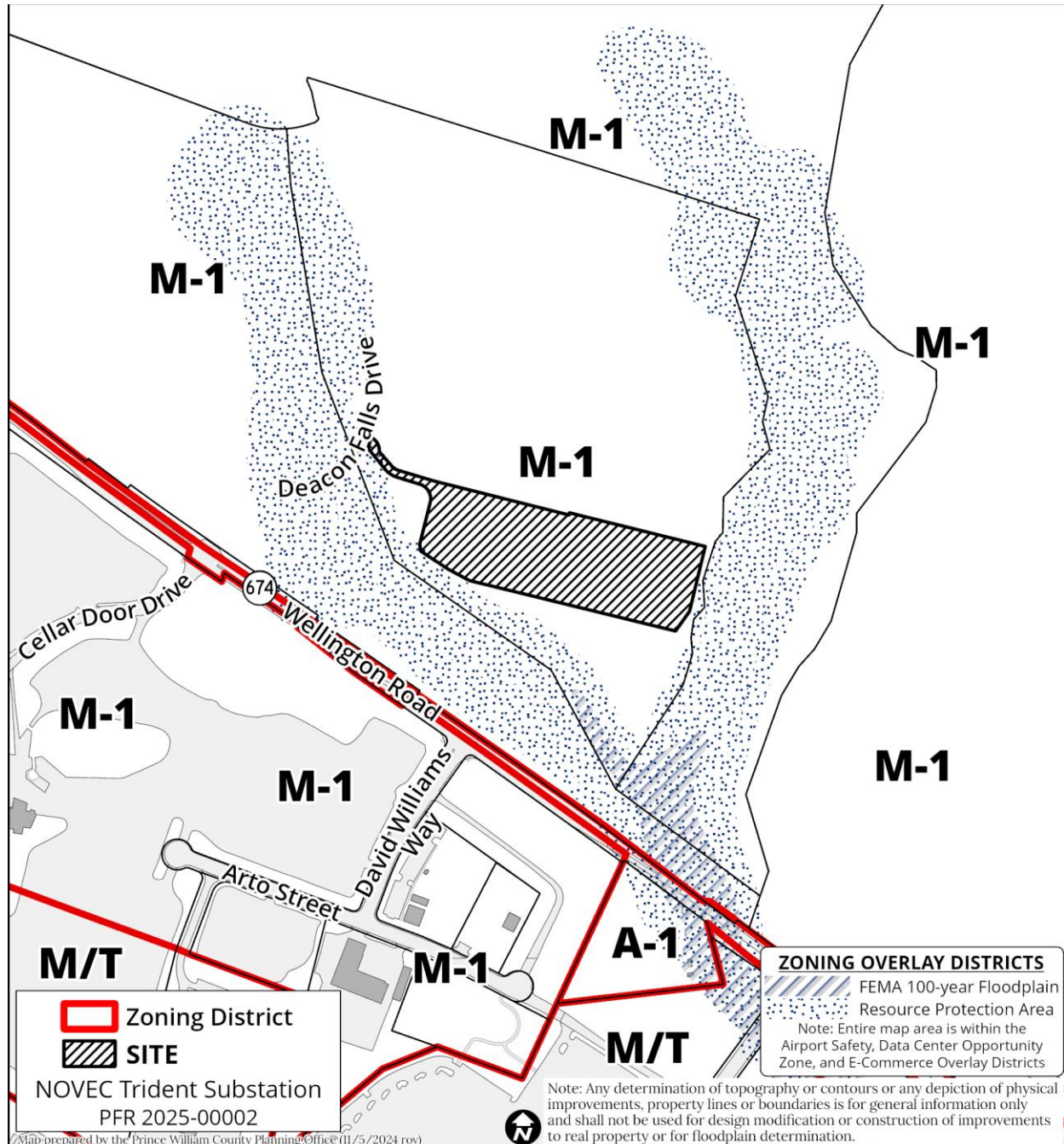
STAFF CONTACT INFORMATION

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abehzad@pwcgov.org

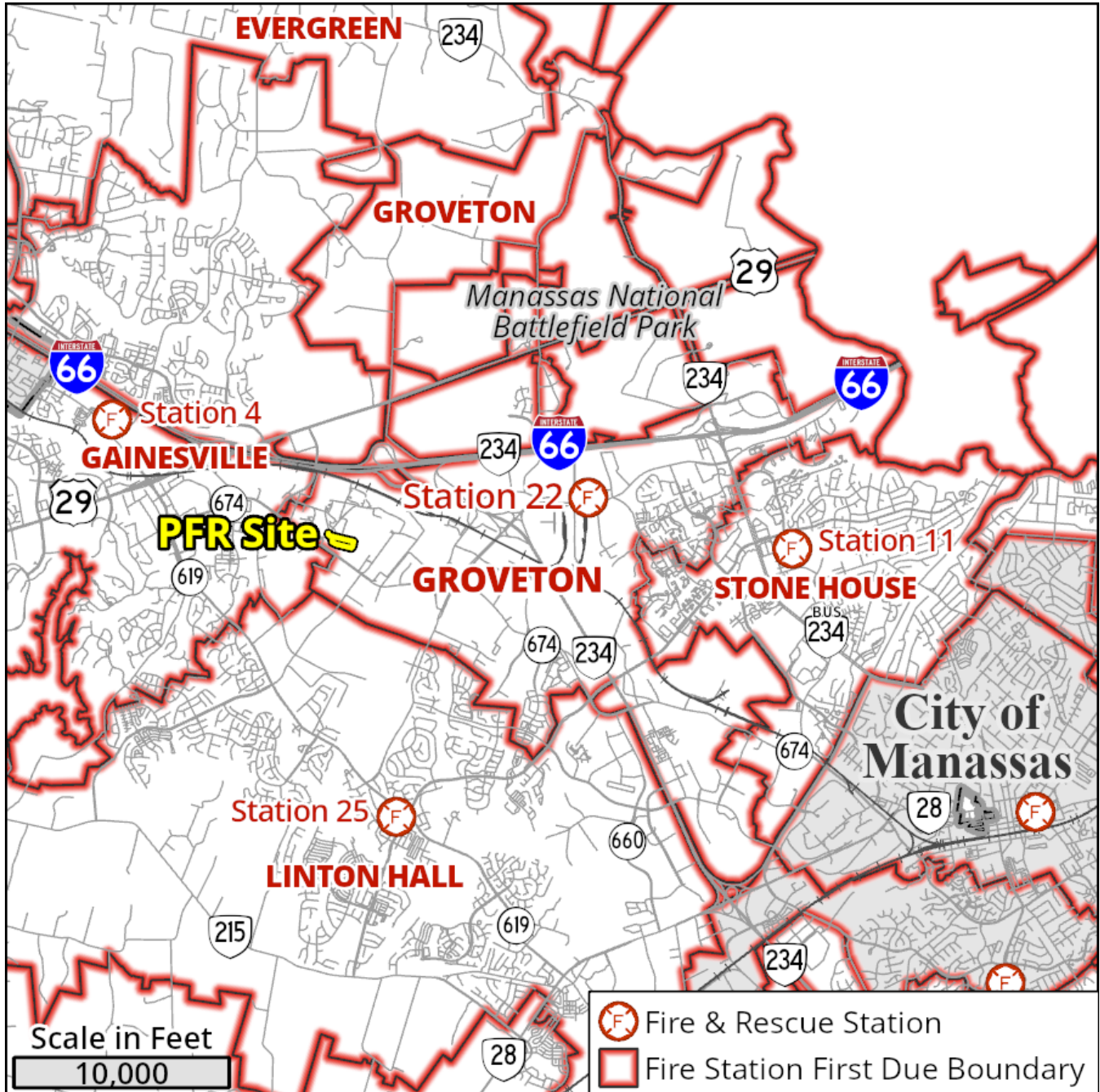
ATTACHMENTS

Long-Range Land Use & Zoning Maps
Police and Fire Response Maps
Final Submission Letter
PFR Plan

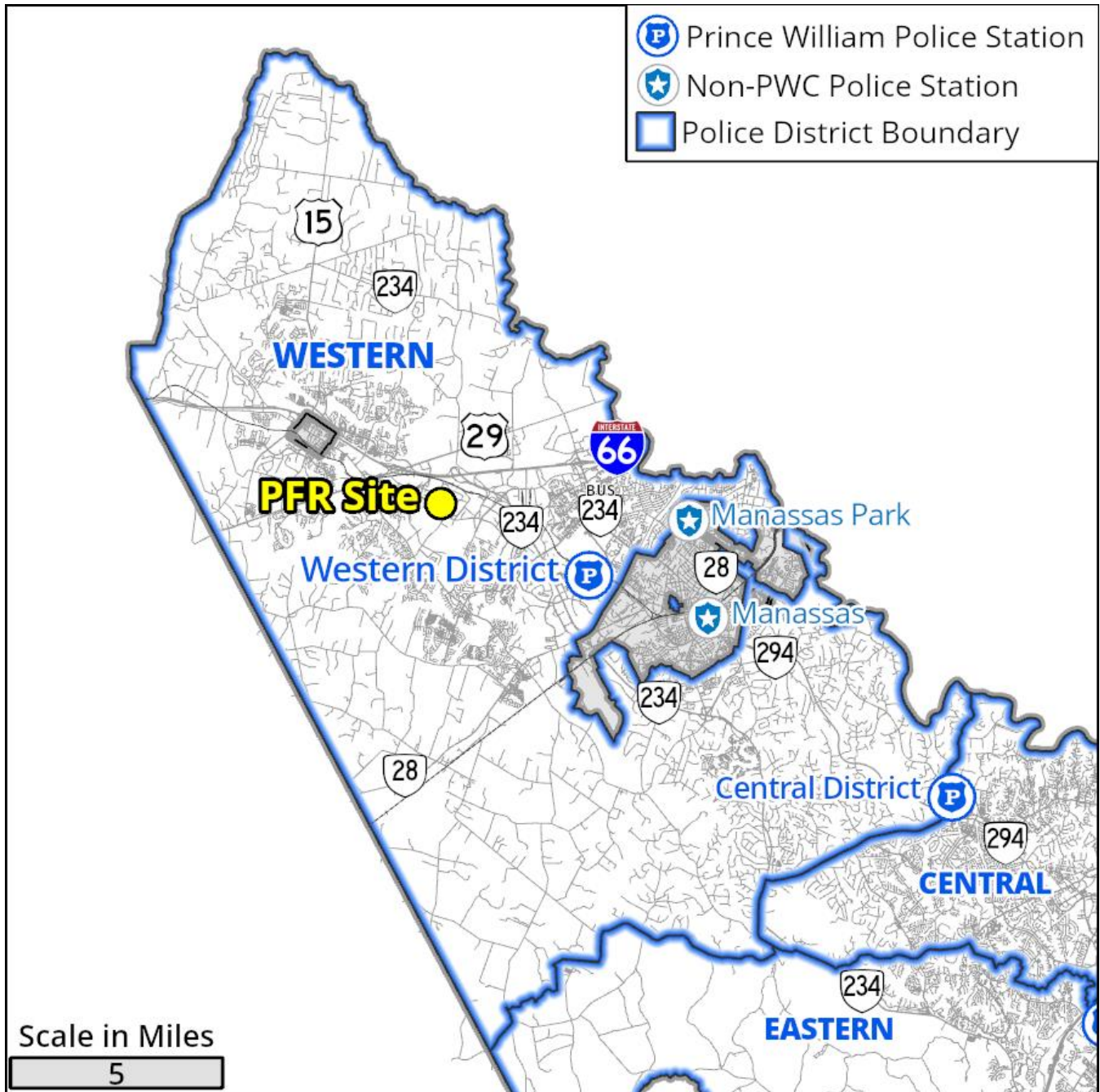




Fire Response Map



Police Response Map





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July 29, 2024

RE: Justification Letter for NOVEC – Trident Substation
PIN #: 7497-41-7199

NORTHERN VIRGINIA ELECTRIC COOPERATIVE
PUBLIC FACILITY REVIEW
WRITTEN NARRATIVE

Northern Virginia Electric Cooperative submits this public facility review request for an electric utility substation, called “Trident Substation”. The decision for the Planning Commission is whether the general or approximate location of the proposed use is substantially consistent with the Comprehensive Plan.

Land Use

The approximate 6.97 acre PFR area is part of an approximate 59-acre parcel zoned M-1, Heavy Industrial and located within the Data Center Opportunity Zone Overlay District. Section 32-201.11 of the Zoning Ordinance states that “Electric substations may be located in any zoning district, subject to the public facility review requirements of Code of Virginia, § 15.2232 of this chapter.” The proposed electric utility substation will be dedicated to service of a data center that is proposed to be constructed on the balance of the parcel. The proposed Dominion Switching Station will, in turn, service the NOVEC substation.

Community Design

The proposal will implement a 15’ Type A landscape buffer with 75% of the plant material to be evergreen plant material. It is to be noted that additional landscape plantings are to be provided per SUP2023-00006 and SPR2021-00045. Limits of clearing per the approved data center site plan SPR2022-00273 will also be honored, allowing the existing trees to continue to screen adjoining uses and the public traveling along the frontage of this lot in honor of: (1) DES Policy 9.2 that encourages indigenous plant materials in areas visible from public thoroughfare, (2) DES Policy 9.4 that encourages new development to preserve the character of the rural landscape with preserved open space occupying the setback area, and (3) DES Policy 12.1 that encourages the protection of natural woodlands. The substation will be accessed by a service road to be constructed as part of the data center development on the Property as shown on approved SPR2022-00273. It will have no impact on public rights-of-way or thoroughfares.



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Electric Utility Services

The discussion above about Community design demonstrates consistency with Policy EU-2 of the Electric Utility Services Plan that encourages the design of electric facilities to minimize negative impacts on existing and future communities, as well as Policy EU-1 that encourages location of electric utility facilities to provide maximum service levels as unobtrusively as possible. Action Strategy EU-2.3 is particularly served by the preservation of natural screening and buffering as it encourages the mitigation of the visual impact of electric facilities from adjacent residential development and roadway by providing appropriate screening and buffering. Being zoned M-1, along with the industrial zoned properties surrounding the subject parcel and along Wellington Road, the proposal honors Action Strategy Eu-1.3 that encourages the location of new electric facilities in areas of commercial or industrial land uses. In combining the NOVEC Substation and Switching Station operated by Dominion, the proposal honors Action Strategy EU-2.1 that encourages such collocation.

Cultural Resources

The County Archeologist noted that no Phase I Cultural Resources study is required with this application per the completed Cultural Resource Assessment CRP2025-00006 dated July 18, 2024. A copy of the Cultural Resources Assessment and Record Check for Pending Development Applications is included in this submission.

Environment

The substation site is outside existing RPA and wetland areas. Therefore, there are no environmental resources affected by the proposed substation.

Additionally, as part of SUP2023-00006, there was an Application for Deferral of Environmental Constraints Analysis which found that an Environmental Constraints analysis is not required. A copy of this Analysis has been provided with this PFR application.

Safe and Secure Community

The proposed substation will not have a negative impact on levels of service for Fire and Rescue, Criminal Justice, Police, Public Safety Resources. The site will be unoccupied and secured. The property would be served by the PWC Department of Fire & Rescue, Station # 4 and PWC Western District Police Station.

Parks, Open Space and Trails

The site will have no impact on levels of for Parks, Open Space and Trails.



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Potable Water

The site will not be occupied and will therefore have no impact on levels of service for potable water.

Sanitary Sewer

The site will not be occupied and therefore will have no impact on levels of service for sanitary sewer.

Community Education

The site will not be occupied and therefore will have an impact on levels of service for community education.

Mobility/Transportation

The site will generate only four trips per month and will therefore have no impact on transportation levels of service.

