

MCPB Item No.

Date: 12-17-2015

Potomac Electric Power Company Darnestown substation: CU-16-04

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Completed: 12-3-2015

Description

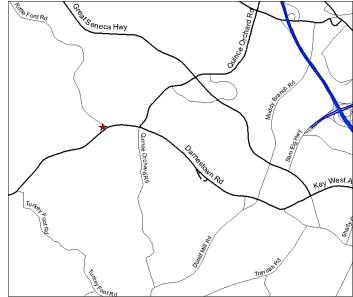
Potomac Electric Power Company (PEPCO) Darnestown Substation: CU-16-04

Request for a Conditional Use approval of a Public Utility Structure, located at 16010 Riffle Ford Road in Gaithersburg, 2.645 acres, identified as Lot-1, Evangelical Formosan Church of Washington, northwest corner of the intersection of Darnestown Road and Riffle Ford Road, RE-1 Zone, Potomac Subregion Master Plan Area.

Staff Recommendation: Approval with conditions

Application Filed: September 11, 2015 **OZAH Public Hearing**: January 7, 2016 **Planning Board Hearing**: December 17, 2015

Applicant: PEPCO



Summary

- With the recommended conditions, the subject use conforms to all applicable requirements and regulations for approval of public utility Conditional Use (Section 59.3.6.7-E Public Utility) of Montgomery County Zoning Ordinance and the applicable development standards under the RE-1 Zone (Section 59.4.4.6.b)
- The subject use is consistent with the recommendations of the 2002 Potomac Subregion Master Plan and compatible with the character of the surrounding area.
- Approval of the requested Conditional Use will not inflict discernable adverse impact on the immediate neighborhood.
- There are no notable traffic, circulation, noise or environmental issues associated with the application provided that the recommended conditions are satisfied.
- The application is in compliance with the Montgomery County Environmental Guidelines; a revision of the previously approved Forest Conservation Plan has been administratively approved by Staff.

SECTION I: STAFF RECOMMENDATION AND CONDITIONS OF APPROVALS

Staff Recommends Approval of CU-15-04 subject to the following conditions:

- 1. The Landscape Plan must be revised to reflect enhancement of the wooded area at the corner of Riffle Ford and Darnestown Roads by removing all weedy vegetative overgrowth throughout the area and installing appropriate shrubs and groundcovers.
- 2. The Applicant must file for an amendment to Preliminary Plan No. 120020180 after the publication of the Hearing Examiner's decision on the Conditional Use Application.
- 3. The Applicant must provide documentary evidence to the Hearing Examiner showing that cumulative noise levels from the transformers, HVAC equipment, emergency generator(s) and any other activities are evaluated using the Noise Ordinance's night-time noise standard (55 dBA at the nearest property line) unless such noise-generating operation(s) are explicitly prohibited from operating during nighttime ("quiet") hours (9 PM to 7 AM weekdays, and 9 PM to 9 AM weekends and holidays).
- 4. No identification sign shall be placed on the property.

SECTION II: PROJECT DESCRIPTION

A. Background

The subject property is located at located at 16010 Riffle Ford Road at the northwest corner of the intersection of Darnestown Road and Riffle Ford Road in Gaithersburg. The property consists of approximately 2.65 acres of land identified as Lot-1, Evangelical Formosan Church of Washington. The property is zoned Residential Estate-1 (RE-1) and is located in the Potomac Subregion Master Plan Area.



The property was the subject of a Preliminary Plan of subdivision (Preliminary Plan No. 120020180) that was approved in 2002 for a construction of 24,000 square-foot church, with a 300-seat sanctuary and a 75-space surface parking lot. Documents on the property kept with the Land Records of Montgomery County contain a recorded plat with required right-of-way (r-o-w) dedication for the two adjacent roads. The previously approved house of worship was never constructed and the property is currently vacant. The current Applicant is proposing to develop the property with a 22,000 square foot unmanned electrical distribution electric power substation.

B. Site Description

Currently, the subject property is unimproved and is generally covered with grass and existing trees concentrated at the northeast and southeast corners. There are no streams, wetlands, steep slopes, 100-year floodplains or highly erodible soils on or adjacent to the property. The property's high point is at the corner near the intersection of Riffle Ford and Darnestown Roads and gently slopes to the west at approximately a six percent grade.

There are two existing driveway aprons along the property's frontage on Riffle Road that may have been constructed prior to the platting of the property. These driveway aprons are not extended to the interior of the property.

C. Neighborhood Description

For the purposes of this Application, staff defines the surrounding neighborhood as single-family residential uses on estate lots with some institutional, commercial and agricultural uses located within a 2,000 feet radius.

Smokey Glenn Farm

The Shops of Potomac Valley

Quince Orchard HS

Orchard HS

Figure 2: Neighborhood

Quince Orchard High School is located approximately one half mile to the east of the property at the intersection of Darnestown Road and Quince Orchard Road. The Shops at Potomac Valley, and Quince Orchard Market Place are also located at this intersection. The shopping areas contain a mix of retail shops, service retail, restaurants, large surface parking lots, filling stations, and drive through banks in the NR Zone. Fairhaven United Methodist Church is less than a quarter of a mile to the west of the property in the RE-1 Zone, and Smokey Glen Farm is approximately three quarters of a mile to the north in the RE-2C Zone.

The subject property is surrounded by three RE-1 zoned residential properties to the northwest and west, Riffle Ford Road to the northeast and east and Darnestown Road to the south. An existing, 250-foot wide PEPCO right-of-way passes through the neighborhood 270 feet west of the subject property. Farther south and east beyond Darnestown and Riffle Ford Roads are residential developments in the R-200 Zone. The subject property, along with the adjoining properties, is located within the Ancient Oak North Subdivision, which was initially split between the Potomac Subregion Master Plan area and the Gaithersburg and Vicinity Master Plan area and placed in two different zones (RC and R-200). The 2002 Potomac Subregion Master Plan united the two areas, placing all of the properties within the Potomac Subregion Master Plan Area with the RE-1 Zone.

The Ancient Oak subdivision is a mix of one and two story traditional, colonial, split-level, and rancher style single-family detached homes with facades constructed of mostly brick and siding.

D. Zoning and Land Use History

The property was placed in the R-R Zone when the zone was enacted and mapped in the 1954 Regional District Zoning. The 1958 County—Wide Comprehensive Zoning confirmed the R-R zoning of the Property (The R-R Zone was renamed R-200 in 1973). The 2002 Potomac Regional Master Plan recommended a change of Zoning from R-200 to RE-1 for the subject property and the subsequent Sectional Map Amendment confirmed the RE-1 Zone.

E. Proposed Use

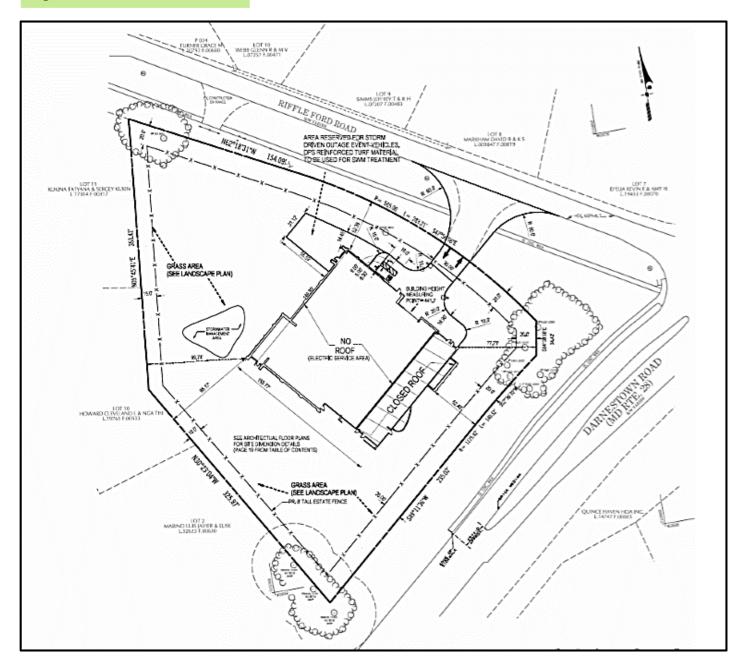
The Applicant, PEPCO, seeks approval of a Conditional Use to allow a construction of a new unmanned electric distribution substation. The proposed structure will have a total gross floor area of 22,000 square feet (SF) of which, approximately 18,300 SF of gross floor area will be of framed open roof area and the remaining 3,700 SF will be of roofed enclosed gross floor area. The structure will have a height of 48 feet.

The Applicant's justification statement indicates that the proposed structure will have three incoming transmission lines feeding three transformers and four transformer bays, three of which will be operational at the end of construction. Space will be provided for a fourth transformer bay and associated equipment to be installed by PEPCO if needed in the future. The structure will also contain a battery room, fire protection room, and a restroom.

The proposed substation will be accessed from Riffle Ford Road via a single driveway. The driveway apron closest to the intersection of Riffle Road and Darnestown Roads will be modified and upgraded to meet the needs of the proposed use. The driveway apron will be widened to 150 feet, then narrowing to 30 feet wide in the interior of the subject property. The Conditional Use site plan provides for two parking spaces (one van accessible space) in the front yard which will be accessed directly from the driveway. The Applicant's statement identifies the types of maintenance vehicles visiting the site to include box trucks, pick-up trucks, passenger vehicles and SUVs.

The Applicant's statement further indicates that the unmanned substation will be operated year around. The property will be monitored remotely by security cameras and access to the building will be controlled by a key card security system. Employees will visit the site twice a month for routine maintenance of electrical infrastructure as well as groundskeeping and landscaping. Unscheduled maintenance visits by employees may be required in the event of equipment malfunctions or tripped alarms.

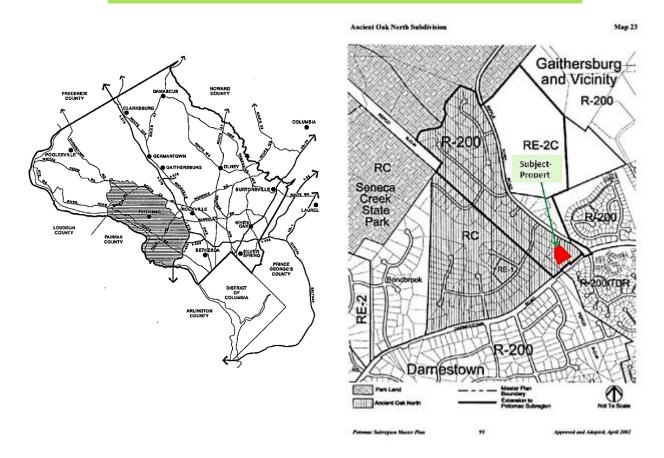
Figure 3: Conditional Use Site



SECTION III: ANALYSIS AND FINDINGS

A. Master Plan

Figure 4: Potomac Region Master Plan Area/Existing Zoning (2002)



The property is within the 2002 Potomac Subregion Master Plan area. It is specifically located in the area that the Master Plan identifies as the Darnestown Planning area, which includes the westernmost portion of the Subregion and is located in the semi-rural lower reach of the Seneca Creek Valley (page 94). For the Darnestown Planning Area, the Master Plan recommendations are designed to preserve, protect and enhance Darnestown's unique residential and community character and to review major undeveloped sites for their potential to contribute to park land and open space. Master Plan recommendations for development patterns and density are designed to provide a transition between the suburban areas to the east and the prime agriculture area to the west (page 94).

B. Development Standards

Table 1

Development Standards AR Zone		
RE-1-Zone	Required 59-4.4.6.BF	Proposed
Minimum Lot Area	40,000 SF	115,217 SF
Minimum Lot width:		
at street line	25ft	437 ft
at building line	125 ft	375 ft
Maximum Building Coverage	15 percent	3 percent
Minimum Building Setback		
Principal Building:		
• front	50 ft	52 ft
 side street 	50 ft	52 ft
• side	17 ft	99 ft
rear yard	35 ft	95 ft
Maximum Building Height	50 ft	48 <u>f</u> t
Minimum Parking	0	2

C. Transportation

The subject property is located at the northwest corner of Darnestown and Riffle Ford Roads. There are two full movement vehicle driveway access points for the subject property both located on Riffle Ford Road. The Applicant is proposing to close the driveway access that is located the furthest away from Darnestown Road. Given the very low volume of vehicles that will enter the site, approximately 1-2 visits per month, and that these visits will likely occur during the non AM or PM peak period, the site access location does not appear to problematic in terms of blocking any turning movements where vehicle spillback would affect the intersections of Darnestown Road/Riffle Ford Road or Hallman Court/Riffle Ford Road. On-site surface parking will be provided. There are sidewalks on along the frontages of the site on Riffle Ford and Darnestown Roads, so pedestrian movement is safely accommodated around the property.

The closest transit service is Ride-On Route 76, which operates every 30 minutes Monday through Friday from the Shady Grove Metrorail Station to the intersection of Darnestown Road/Quince Orchard Road. The route extends to the Willard Road/Wootton Avenue intersection in Poolesville during the AM and PM peak periods only. There is a bus stop adjacent to the property located on Darnestown Road, but this is only operational during when the route extends to Poolesville. When the route terminates at Darnestown Road/Quince Orchard Road, the closest bus stop is

located a half mile to the east on Darnestown Road. Given the proposed use and the need for service machinery, it is highly unlikely that a technician or other employee entering the property will do so via public transit.

The 2002 Potomac Subregion Master Plan contains the following recommendations for nearby roadway facilities:

 Darnestown Road (MD 28): A major highway (M-22) with two travel lanes (one lane in each direction) with a right-of-way of 120 feet.

The 2005 Countywide Bikeways Functional Master Plan contains the following recommendations for nearby roadway facilities:

- Riffle Ford Road: Bike lanes (BL-34) from Darnestown Road to Germantown Road.
- Darnestown Road: Dual bikeway (DB-16) with a shared use path and bike lanes from Seneca Road to Quince Orchard Road.

The proposed substation will be unmanned and only require routine inspections or service once or twice a month. Thus, the intersection congestion levels would not be increased during the weekday morning (6:30 to 9:30 a.m.) and evening (4:00 to 7:00 p.m.) peak periods.

The property is located in the North Potomac Policy Area, which is inadequate under both the roadway and transit test. However, since the proposed use will generate three or fewer vehicle trips, it is exempt from making a TPAR payment. The proposed access to the property is adequate to serve the traffic generated by the development.

D. Parking

There is no parking requirement for an Electric Power Substation. The Applicant proposes two parking spaces, one of which is a van accessible handicap space. The parking spaces will sufficiently accommodate the parking needs of the proposed unmanned substation.

E. Landscaping

Division 6.5.3.C.7 (page 6-32) requires that landscape screening be provided when a Conditional Use abuts property in a Residential Zone that is vacant or improved with an agricultural or residential use.

The proposed landscaping with an emphasis on native species is adequate, safe, and efficient. The Landscape Plan achieves the stated objectives in the Zoning Ordinance while providing an attractive appearance throughout the year. It provides screening and buffering between the project and adjacent roads and property. The property is adequately screened and buffered through the use of perimeter landscaping along Riffle Ford and Darnestown Roads with periodic viewsheds onto the property along these roadways for security purposes. The landscaping also is used to screen the 8-foot high security fence surrounding the site. The project site is also screened and buffered along the western property boundary from the adjacent residential

community as required in Division 6.5 of the Montgomery County Zoning Ordinance. The Applicant will substantially meet the tree canopy coverage requirement as well.

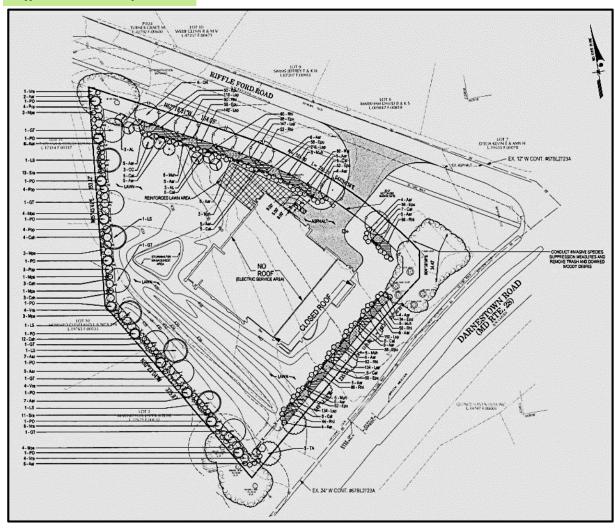


Figure 5: Landscape Plan

F Lighting

Pursuant to **Division 6.4.4.E**, outdoor lighting for a Conditional Use must be directed, shielded or screened to ensure that the illumination is 0.1 foot-candles or less at any lot line that abuts a lot with a detached house building type, not located in a Commercial/Residential or employment zone.

The lighting plan adequately and efficiently provides a safe vehicular and pedestrian environment. The proposed lighting will not cause glare on adjoining properties, nor will it exceed the 0.1 foot-candle standard at the side and rear property lines. A photometric study was submitted with the Application to show that this requirement has been satisfied. In response to staff's comments, the Applicant has revised the lighting plan (Submitted November

23, 2015) to reflect that the lumen grid is extended out further in the driveway and to show where the lumens reaches zero along the drive.

G. Signage

There will be no free standing sign identifying the proposed use on the property.

H. Environment

Consistency with Environmental Guidelines

The site is a 2.65 acre vacant lot covered in a growth of typical meadow grasses and weedy vegetation with no significant environmental features. The site contains no wetlands, streams, seeps, erodible soils, steep slopes, forests or other significant environmental features.

Forest Conservation

The Application meets the requirements of Chapter 22A of the Montgomery County Forest Conservation Law. A Final Forest Conservation Plan was approved on July 7, 2004 and amended on September 9, 2011. A second Amended Final Forest Conservation Plan has been submitted by the Applicant to show the proposed use on the plan drawings and will be reviewed administratively by Technical Staff.

H. Community Concerns

At the time of the Technical Staff report publication, no communication has been received from the community either in support or in opposition of the proposed use.

The Applicant indicated that presentations were made on the proposed Conditional Use application to members of the community on a number of occasions during the past seven months. The Applicant's development team met with the Darnestown Civic Association Board of directors, and concerned adjacent property owners on May 28, 2015. The session included discussions, questions and answers on various issues and concerns of the community including the design and operation of the proposed substation. Subsequent meetings were held on September 17, 2015 and November 10, 2015. Based on input from these meetings, several steps have been taken to ensure that a significant landscaping buffer will be provided. Questions about health concerns were addressed and discussed (see Attachment C-1, community meeting summaries submitted by the Applicant).

SECTION IV COMPLIANCE WITH THE NECESSARY FINDINGS IN SECTION 59.7.3.1.E AND SPECIFIC CONDITIONAL USE REQUIREMENTS IN SECTION 59-3

Section 59.7.1.E. Necessary Findings

1. Section 59.7.3.1.E.1 states that, to approve a Conditional Use application, the Hearing Examiner must find that the proposed development satisfies the following requirements of Sections 59.7.1.E.a through g.

a. Satisfies any applicable previous approval on the subject site or, if not, that the previous approval must be amended;

There is no previous Conditional Use approval associated with the subject property. The proposed development generally satisfies the applicable conditions of Preliminary Plan No. 120020180 that the Planning Board approved on April 23, 2002 (Attachment C-4). However, upon the publication of the Hearing Examiner's decision, the approved Preliminary Plan will need to be revised to amend conditions that are related to the use associated with the approved Conditional Use Application.

b. Satisfies the requirements of the zone under Division 59-3, the use standards (Division 4), and applicable general requirements under Article 59-6.

With Technical Staff's recommended conditions of approval, the proposal satisfies the specific Conditional Use standards and requirements of Section 59.3.6.7-E Public Utility Structure. As shown on the development standards Table-1 in Section III of this report, the Application meets the requirements of the RE-1 Zone per Section 59.4.4.6.B and the applicable parking requirements of Article 6.

Section 59.3.6.7.E. Public Utility Structure

1. Defined

Public Utility Structure means a utility structure other than transmission lines or pipelines. Public Utility Structure includes structures for the occupancy, use, support, or housing of switching equipment, regulators, stationary transformers, and other such devices for supplying electric service or other public utilities.

The proposed public utility structure meets the definition of the use as described by this section. The proposed structure will have three incoming transmission lines feeding three transformers and four transformer bays.

2. Use Standards

a. Where a Public Utility Structure is allowed as a limited use, and the subject lot abuts or confronts a property zoned Agricultural, Rural Residential, or Residential Detached that is vacant or improved with an agricultural or residential use, site plan approval is required under Section <u>7.3.4</u>.

The proposed public utility structure is allowed as a Conditional Use in the RE-1 Zone in which it is located.

b. Where a Public Utility Structure is allowed as a Conditional Use, it may be permitted by the Hearing Examiner under Section <u>7.3.1</u>, Conditional Use, and the following standards:

i. The proposed structure at the location selected is necessary for public convenience and service.

The unmanned substation is needed to accommodate higher electrical demand brought about by increased residential development and future growth in the area. The Applicant indicated that that Pepco's two existing substations, Hunting Hill and Quince Orchard, currently serving the area are forecasted to exceed their capacity by 2017. The Applicant further stated that other nearby stations are either operating near capacity or constrained by the capability to extend new distribution circuits as necessary to alleviate predicted overloads.

The proposed substation is designed to meet existing demand and to serve new residents. It would provide needed relief to existing substations, substantially reducing potential failure of equipment and service outages in the area. The subject property is also in close proximity to an existing PEPCO right-of-way which passes through the area 270 feet west of the property. The Applicant maintains that the close proximity to the power line substantially reduces the need to add new poles along the roadway. Moreover, proximity to an existing power lines minimizes disruption to the community during construction of the proposed substation and facilitates faster service restoration time in the event of a storm that damages the lines feeding the station.

ii. The proposed structure at the location selected will not endanger the health and safety of workers and residents in the community and will not substantially impair or prove detrimental to neighboring properties.

The proposed structure is compatible with the surrounding area in its scale, bulk, height, and architectural features. It does not endanger the health and safety of workers and residents in the community and will not substantially impair or prove detrimental to neighboring properties .The substation will be unmanned, it will be enclosed within a barn-inspired structure, the structure will be placed away from abutting homes.

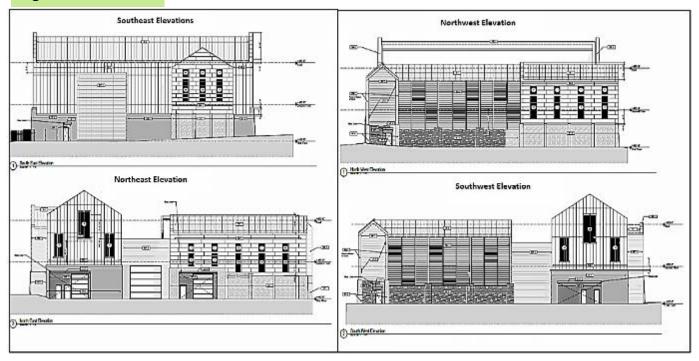
The proposed landscape plan provides for extensive screening, in the form of landscaping that includes a combination of shade and ornamental trees and shrubs, on all sides of the property including its frontages on Riffle Ford and Darnestown Roads. An eight—foot-tall aluminum estate perimeter fence is also incorporated with the landscaping and screening of the property. The fence, which will be placed behind the trees and eventually will be covered from views looking into the property as the trees and shrubs mature, will provide an added safety and secure element without affecting esthetic appearance of the property.

Access to the site and into the structure will be restricted. Directional lighting and surveillance cameras will be included for added security.

iii. A Public Utility Structure allowed in any Rural Residential or Residential zone, must, whenever practicable, have the exterior appearance of a residential building and must have suitable landscaping, screen planting and fencing, wherever deemed necessary by the Hearing Examiner.

The proposed building is compatible with the surrounding area in terms of its scale, bulk, height, and architectural features. The exterior of the proposed structure is designed to appear as a barn style residence recognizing the Darnestown community's agricultural heritage. The substation is broken into three different masses that allow the structure to appear as a barn that has been expanded over time.

Figure 6: Elevations



The Applicant's land use report provides the following design and architectural specifications relative to compatibility of the proposed development with that of existing developments in the surrounding area:

"...The architectural style was selected to pay homage to the agricultural history of the area and reflect similar local building typology. The Structure's utilization of diverse materials and colors,

roof styles, cladding panels, a stone openings and a silo inspired metal clad projection provide horizontal and vertical articulation as well as facades that complement the neighborhood character. The Structure's architectural embellishments designed to mimic the organic growth of a barn expanding over time provides and accentuates the Structure's roof lines, which blend with the multi-tiered roofs of the abutting homes and surrounding neighborhood."

"...Different roof pitches, materials, colors and heights, coupled with details like stone bases, paneling, louvered openings, gabled roofs, wood-grain cladding and silo inspired metal clad projection will ensure that the building is architecturally compatible with the other buildings in the surrounding community."



Figure 7: Proposed Substation-Bird's Eye View (illustrative)

The proposed landscaping includes a rain garden located on the southern portion of the property. As part of the landscaping, the Applicant will also install an eight-foot tall aluminum estate fence around the perimeter to ensure safety and security.

iv. The Hearing Examiner may waive the height limits of the applicable zone where, in the opinion of the Hearing Examiner, adjacent residential uses will not be adversely affected by the increased height.

The proposed use does not exceed the maximum height requirement and does not require a waiver of the height limits of the zone. With the

proposed 48-foot of maximum height, the structure will be within the maximum 50 foot of height allowed in the RE-1 Zone.

v. An applicant for a Public Utility Structure may file a Conditional Use application if the applicant states in writing under oath that a bona fide effort has been made to obtain a contractual interest in the Subject Property for a valid consideration without success, and that there is an intent to continue negotiations to obtain the required interest or in the alternative to file condemnation proceedings should the Conditional Use be approved.

The Applicant owns the subject property.

c. Substantially conforms to the recommendations of the applicable Master Plan.

The property is located within the 2002 Potomac Subregion Master Plan area. The Master Plan provides guidelines for design and review of Special Exception (Conditional Use) uses including:

- Examination of compatibility
- Strategic location, landscaping and screening of parking to minimize commercial appearance.
- Enhanced screening and buffering of uses as viewed from abutting residential areas and major roadways.

The landscaping consists of a significant number of plant materials; substantial setbacks, decorative fencing, building orientation and architectural will provide adequate screening and buffering of the facility and the two-space parking lot from adjoining properties and roads.

The Applicant's land use report provides the following description regarding the proposed landscaping, which staff found to address the Master Plan's recommendation and guidelines with regard to screening, buffering and appearance.

The landscaping along the property line abutting the residential lots are tiered to include flowering shrubs in the foreground, mid-size shrubs in the mid-ground, and large shrubs in the background. The mid- and background shrubs are a combination of evergreen and deciduous shrubs. The shrubs are clustered with evergreen trees separating the clusters. Behind the shrubs is an 8 foot tall metal estate style fence, and behind it is an alternating row of shade trees. This buffer is designed to be a visual and physical screen as well as aesthetically pleasing to avoid appearing institutional or static.

Staff recommends that the Applicant enhance the appearance of the property's northeast corner at the intersection of Riffle Ford and Darnestown Roads by removing all weedy

vegetative overgrowth throughout the area and enhancing the area with the installation of appropriate shrubs and groundcovers in a manner that is similar to the illustrative rendered drawing (see Figure 8 below).



Figure 8-Northeast Corner (Illustrative)

d. Is harmonious with and will not alter the character of the surrounding neighborhood in a manner inconsistent with the plan.

With the recommended conditions, the proposed use will be in harmony with the general character of the neighborhood. The Conditional Use Site and Landscape Plans provide for extensive landscaping in excess of code requirements, adequate setbacks meeting code requirements, substantial green space that will remain partially in open space and sufficient building setbacks. There is extensive buffering, in the form of landscaping, and fencing, between the nearest residential properties, the two adjacent roads and the proposed use.

Due to the nature of the use, as an unmanned substation with a bi-monthly visit by no more than two employees, it is unlikely that the proposed use will generate a level of traffic or noise that will adversely affect the residential neighborhood.

Figure 9: Renderings (illustrative)



e. Will not, when evaluated in conjunction with existing and approved Conditional Uses in any neighboring Residential Detached zone, increase the number, intensity or scope of Conditional Uses sufficiently to affect the area adversely or alter the predominately residential nature of the area; a Conditional Use application that conforms with the recommendations of a Master Plan does not alter the nature of the area.

There are few Conditional Use uses within the boundaries of the neighborhood that have been approved through the years:

- CBA-2740 Approved in 1969, automobile filling station (CBA-2740) located at 12301 Darnestown Road about half a mile south of the Subject Property within the NR zone.
- CBA-719A Approved in 2002 for Smokey Glen Farm, a 91.38-acre group picnic, catering and recreational facility about 1.5 miles north of the facility.
- S-2070 Approved in 1993 or a wholesale/retail nursery, greenhouse, & garden center.
- S-1415 Approved in 1987 for a Child Day Care Facility for up to 20 children may have been modified later). Located 12829 Darnestown Road, located about 0.3 feet west of the property.

With the exception of the filling station, which is located in the NR zone and within the neighborhood shopping center, the remaining uses are generally low traffic generating uses that have been in the area for decades. The proposed use will not add a level of traffic that would exasperate existing conditions. When evaluated in conjunction with existing and approved Conditional Uses in any neighboring residential detached zone, will not increase the number, intensity or scope of Conditional Uses sufficiently to affect the area adversely.

- f. Will be served by adequate public services and facilities, including schools, police and fire protection, water, sanitary sewer, public roads, storm drainage and other public facilities. If an approved adequate public facilities test is currently valid and the impact of the Conditional Use is equal or less than what was approved, a new adequate public facilities test is not required. If an adequate public facilities test is required and:
 - If a preliminary subdivision plan is not filed concurrently or required subsequently, the Hearing Examiner must find that the proposed development will be served by adequate public facilities, including schools, police and fire protection, water, sanitary sewer, public roads, or storm drainage; or

The Application is not subject to approval of a Preliminary Plan because the Application is a recorded lot already approved for a church with 75 parking spaces. However, because the Preliminary Plan is limited to the construction of a church, the conditions and restrictions of the approved Preliminary Plan will

need to be revised to accommodate the proposed Conditional Use. Technical Staff, however, has made the Adequate Public Facilities findings as part of this Application and believes that the revisions to the previously approved Preliminary Plan will be minimal, focusing on use-specific conditions of approval that could be reviewed and presented to the Planning Board as a consent agenda item.

(a) Water and Sewer Service

The property which is shown as water category W-1 and sewer category S-1, currently, is not being served by Washington Suburban Sanitary Commission (WSSC); however, both services are located adjacent to the site. As noted, the substation will also contain a battery room, fire protection room, and a restroom and will need to connect to public water and sewer.

(b) Transportation

Local Area Transportation Review (LATR)

A traffic study was not needed for the subject Conditional Use case to satisfy Local Area Transportation Review because the proposed unmanned electric distribution substation would not add any peak-hour vehicular trips from this existing land use. The proposed facility will be unmanned and only require routine inspections or service visits once or twice a month. Thus, the intersection congestion levels would not be increased during the weekday morning (6:30 to 9:30 a.m.) and evening (4:00 to 7:00 p.m.) peak periods.

<u>Transportation Policy Area Review (TPAR)</u>

The property is located in the North Potomac Policy Area, which is inadequate under both the roadway and transit test. However, since the proposed use will generate three or fewer vehicle trips, the Applicant is exempt making a TPAR payment.

Technical Staff supports the transportation elements of the Application and finds the proposed access to the property to be adequate to serve the traffic generated by the development.

(c) Other facilities

The Rockville Volunteer Fire Station is located at 12100 Darnestown Road, approximately 0.68 miles south of the property. The closest police station, Montgomery County Police Department is located at 45 W Watkins Mill Road in Gaithersburg approximately 4.5 miles north of the property. Due to the nature of the Conditional Use, it does not generate any school aged children and a school facilities review is not necessary.

ii If a preliminary plan of subdivision is filed concurrently or required subsequently, the Planning Board must find that the proposed development will be served by adequate public services and facilities, including schools, police and fire protection, water, sanitary sewer, public roads, and storm drainage;

Not applicable. A preliminary plan amendment will be required subsequent to an approval by the Hearing Examiner.

g. Will not cause undue harm to the neighborhood as a result of a non-inherent adverse effect alone or the combination of an inherent and a non-inherent adverse effect in any of the following categories:

The inherent, generic physical and operational characteristics associated with Public Utility Structure are (1) buildings, structures, to accommodate the electronic and mechanical structure; (2) lighting (3) adequate parking areas accommodate employee (6) noise associated with, transformers, HVAC and other mechanical equipment.

Many of the characteristics of the Conditional Use are inherent. The proposed scale of existing buildings, the number of access points, the internal vehicular circulation system, onsite parking areas, occasional loading and unloading of supplies and equipment needed for maintenance of the facility are operational characteristics typically associated with unmanned public utility structures.

i. The use, peaceful enjoyment, economic value or development potential of abutting and confronting properties or the general neighborhood;

The proposed one-story facility has been designed to blend with the adjoining residential communities and address screening and buffering concerns due to the nature of the use. The proposed building incorporates architectural features and materials that match the character of the surrounding structures and identifies with the area's agricultural nature of recent past with its influence still perceptible in many of the structures in the area. Substantial landscaping that meet and exceed landscaping and screening requirements provides screening of the proposed use from the views of the adjoining neighbors and the two adjacent roads. The proposed lighting will not cause glare on adjoining properties.

The stormwater management concept plan proposes to meet required stormwater management goals through the use of landscape infiltration and an alternative surface. The Application has received a concept approval from the

Department of Permitting Services Water Resource Section (see attached DPS letter of 24, 2015-Attachment C-2).



Figure 10: Landscape (Illustrative)

ii. Traffic, noise, odors, dust, illumination or lack of parking; or

Based on the traffic statement and staff analysis, the vehicular movements on the road will not cause undue harm to the neighborhood. The lighting plan adequately and efficiently provides safe vehicular and pedestrian environment. The proposed lighting will not cause glare on adjoining properties, nor will it exceed the 0.1 foot-candle standard at the side and rear property lines. A photometric study indicates that the proposed lighting satisfies requirements. Technical Staff, however, recommends that the lumen grid be extended out further in the driveway and for the plan to show where the lumens hit zero along the drive.

The Applicant has indicated that the Propose Use will meet all applicable County noise regulations. To ensure that noise levels related to activities of the substation are kept to the minimal, Technical Staff recommends cumulative noise levels from the transformers, HVAC equipment, emergency generator(s) and any other activities must be evaluated using the Noise Ordinance's night-time noise standard (55 dBA at the nearest property line) unless such noise-generating operation(s) are explicitly prohibited from operating during nighttime ("quiet") hours (9 PM to 7 AM weekdays, and 9 PM to 9 AM weekends and holidays).

There is no odor or dust associated with the operation of the project or the equipment within the building.

iii. The health, safety or welfare of neighboring residents, visitors or employees.

The intersection congestion level in the area will not be affected by the establishment of the proposed use at the subject location. The facility will be unmanned and will only require routine inspections or service once or twice a month. Thus, the intersection congestion levels would not be increased during the weekday morning and evening peak periods. The proposed access to the property is adequate to serve the traffic generated by the development.

The use will be adequately screened and buffered from the views of neighboring properties, with minimal lighting and glare, and no significant traffic impact

Upon request by Technical Staff the Applicant has provided a summary of information (Attachment C-3) concerning Electronic Magnetic Field (EMF) and the nature of the EMF that is associated with unmanned substations. The information was also shared with the community at the time of the outreach meetings to explain and reassure that there will be no adverse effects of public health, safety or welfare caused by EMF from the substation

The lighting concept as depicted on the Photometric Study Plan is appropriate for the proposed use at the subject location. The Conditional Use application will not cause objectionable noise.

With the recommended conditions of approval, the inherent and non-inherent impacts associated with the proposed uses do not rise to a level sufficient to warrant a denial of the Application.

Any structure to be constructed, reconstructed, or altered under a conditional us in a Residential Detached Zone must be compatible with the character of the residential neighborhood.

See findings under Section 59.3.6.7.E.2.b.ii and iii above.

SECTION V. CONCLUSION

The proposed Conditional Use satisfies all applicable requirements for approval of a Conditional Use as specified in the 2014 Montgomery County Zoning Ordinance. The proposed use is consistent with the recommendations of the 2002 Potomac Subregion Master Plan. There is no unacceptable traffic, circulation, noise or environmental impacts associated with the Application provided that the recommended conditions are satisfied.

Based on the foregoing analysis, Staff recommends **Approval** of Conditional Use CU-16-04, subject to the conditions found on Page 2 of this report.

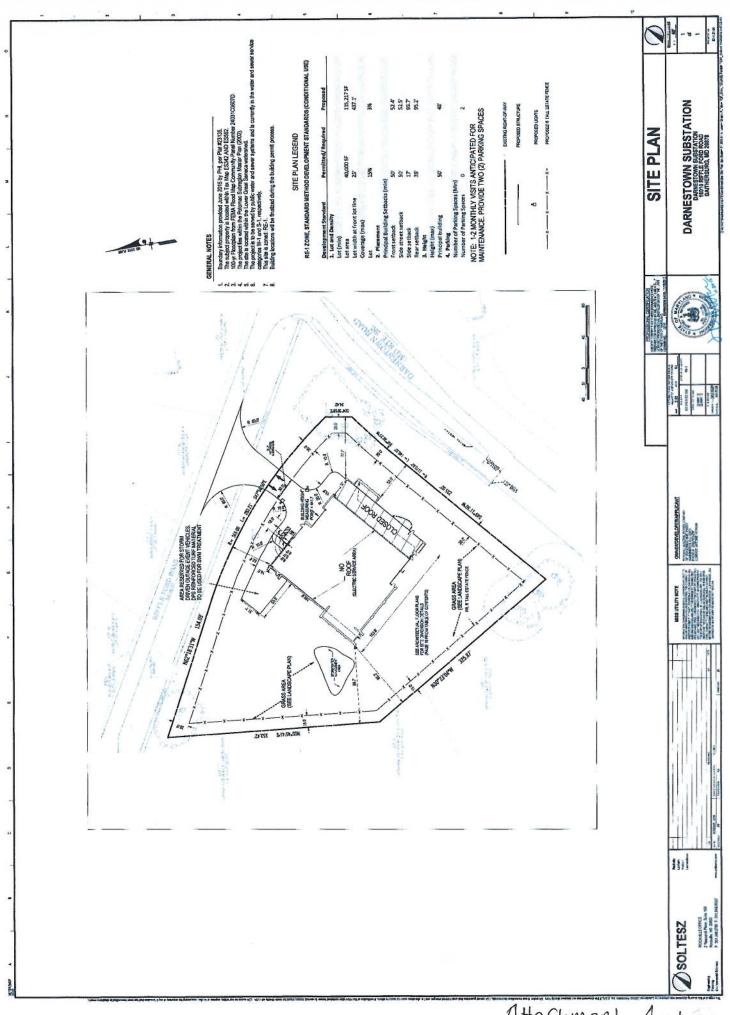
ATTACHMENTS

- A. Plans and drawings
- B. Rendered pictures and drawings
- C. Supplemental information

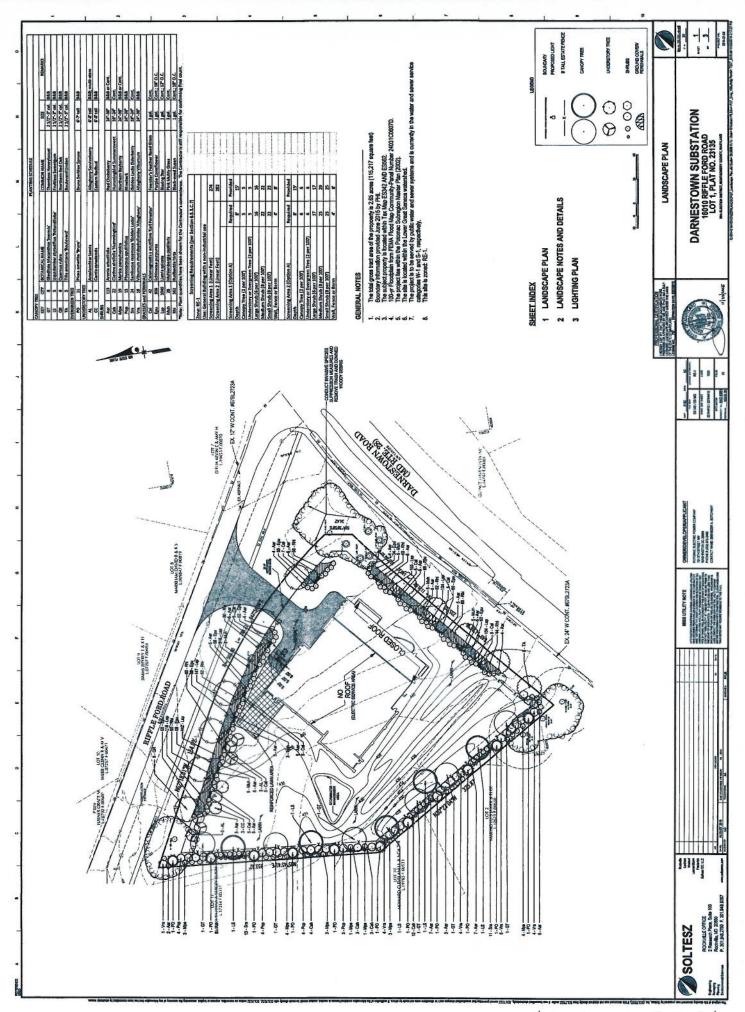
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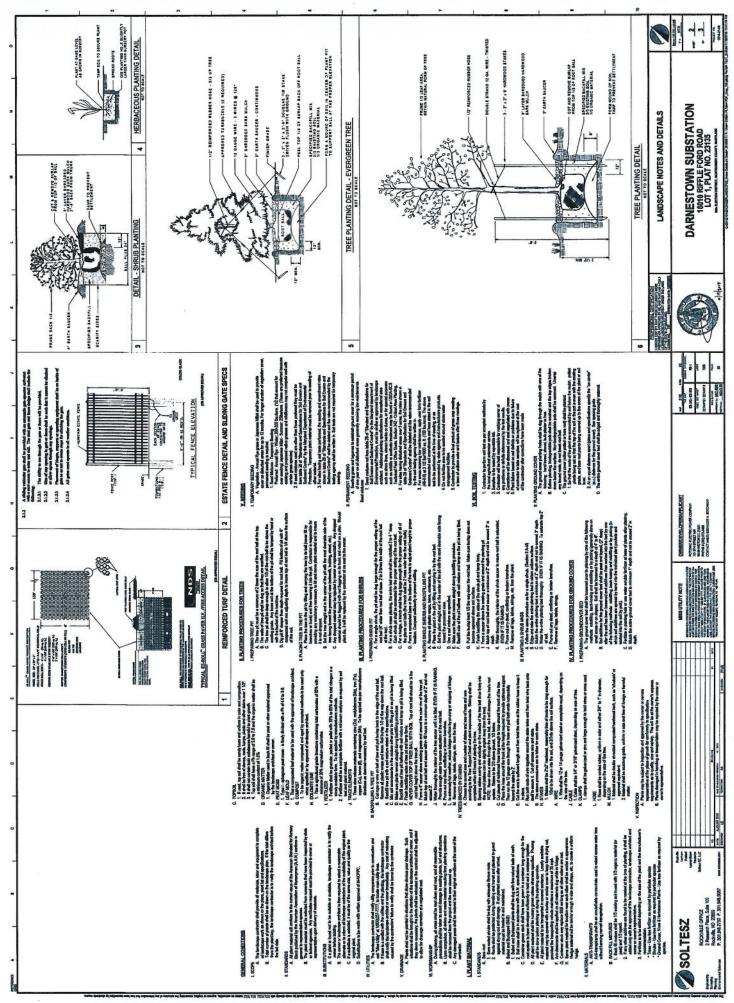
PLANS AND DRAWINGS

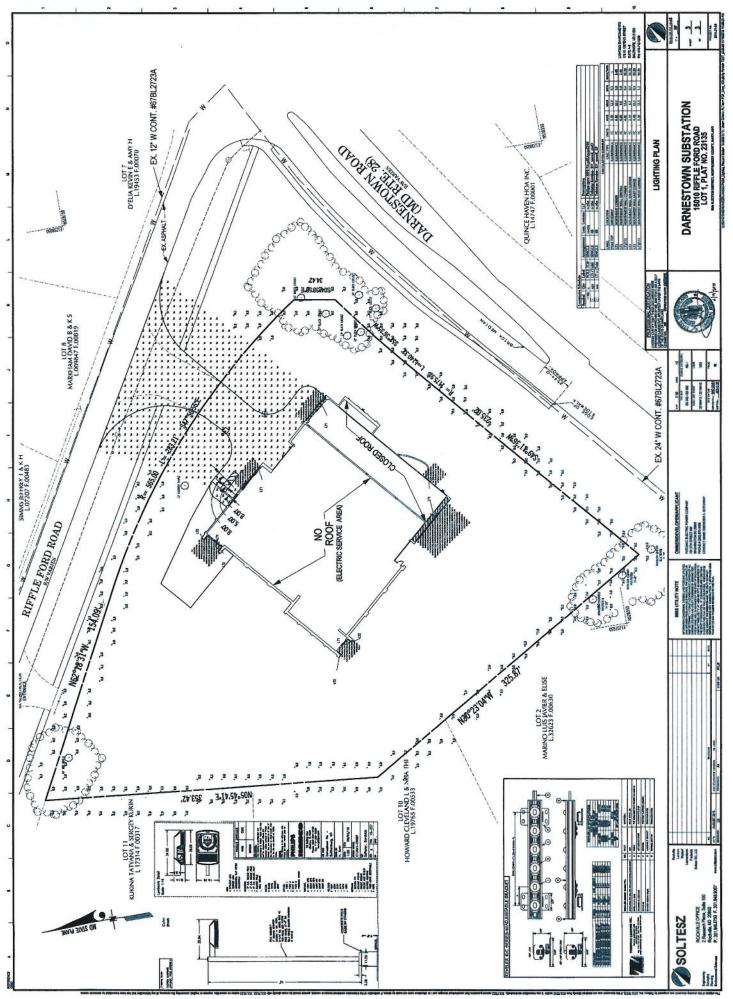
Attachment-A



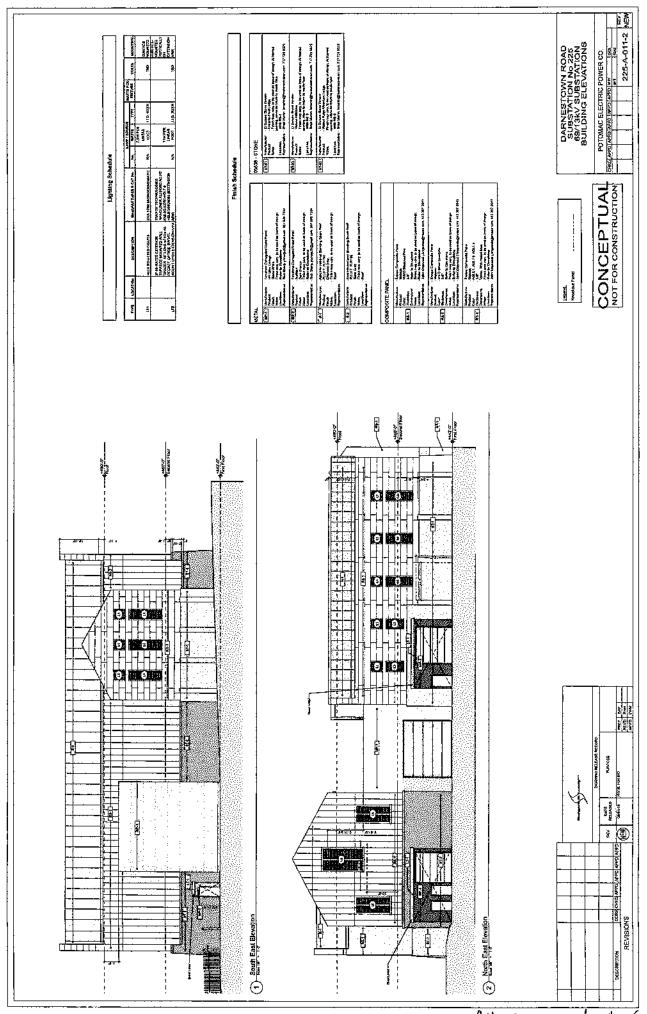
Attachment A-1



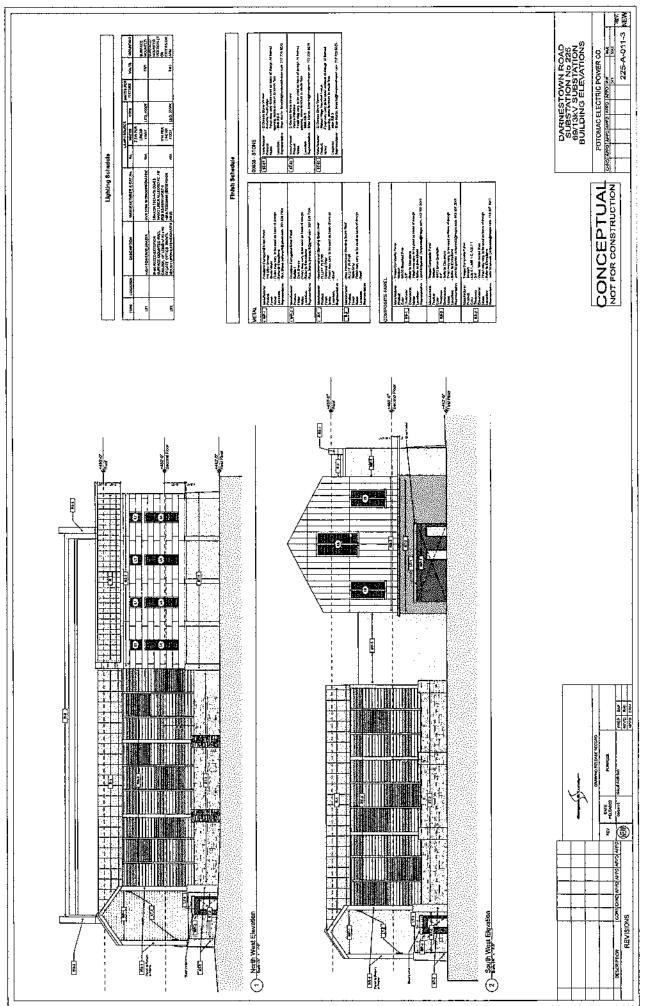




2Hachment A.3



Altachment A-4 (a)

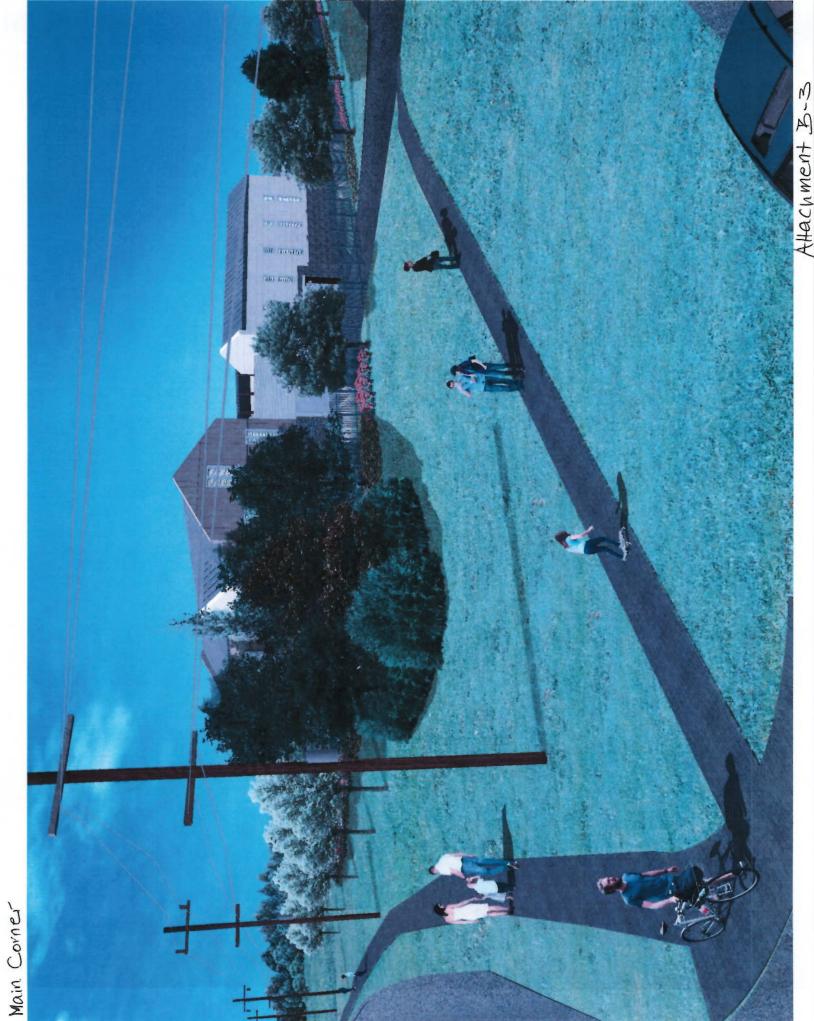


Alfachment A-4 (b)

Rendered Pictures and Drawings



Altachment B-1



Culdesac

Landscafe

Supplemental Information

PEPCO - DARNESTOWN SUBSTATION

SUMMARY OF COMMUNITY MEETINGS

On September 17th, 2015, representatives from Pepco, Linowes and Blocher LLP, Soltesz Engineering and CORE Architects attended a Darnestown Civic Association Town Meeting to give an update on the proposed Pepco Darnestown Substation.

Pepco gave a presentation on the need, benefits, scope, operations and area to be served by the new substation. Pepco demonstrated how the substation would be fed by utilizing existing and new overhead structures on an existing Pepco ROW just west of the Substation. Core discussed the architectural renderings of the proposed building and the efforts to create a building design and architecture that was compatible with the agricultural heritage of the Darnestown community. Soltesz discussed storm water management and the proposed landscaping of the property.

Linowes and Blocher discussed the conditional use process with the community and how they would be able to participate and be able to voice any concerns.

After the meeting, representatives from Pepco and their consultants answered questions concerning noise that would be emitted from the proposed substation, electric magnetic fields (EMFs), landscaping and the configuration of new poles within the area of RT. 28 and Riffle Ford Road. Pepco's Customer Advocate representative gave out her contact information for any additional questions and or information.

To date, one customer requested and received additional information on EMFs.

This was a follow up to a meeting held May 28th, 2015, with the Darnestown Civic Association Board of Directors, a few concerned property owners that are adjacent to the proposed substation location, Pepco representatives and Core. This meeting was suggested during earlier talks between Pepco and Fred Boyd of Montgomery County Planning.

At the initial meeting, Pepco discussed the need and benefits of the project and fielded questions about the design and operations of the substation, and Core discussed their reasoning on how they developed the architectural look of the building to fit into the Darnestown community. Pepco agreed during that time to attend the September meeting to provide any new and or additional information.

On November 10th, 2015, representatives from Pepco and CORE Architects meet with members of the Willow Ridge Civic Association to give an update on the proposed Pepco Darnestown Substation. This community backs along Riffle Ford Road directly across the street from the proposed site.

Pepco gave a presentation on the need, benefits, scope, area to be served and demonstrated how the substation would be feed by utilizing existing and new overhead structures on an existing Pepco ROW just west of the Substation. Core discussed the architectural renderings of the proposed building and the proposed landscaping of the property.

Representatives from Pepco and their consultants answered questions concerning the minimal noise that would be emitted from the proposed substation, electric magnetic fields (EMFs), landscaping and the configuration of new poles within the area of RT. 28 and Riffle Ford Road, traffic management during proposed underground conduit construction and the overall construction schedule tentatively March 2016 – May 2017.

Pepco agreed to make available the evening's presentation. Pepco Customer Advocacy and Governmental Affairs representatives left contact information for any additional questions.



DEPARTMENT OF PERMITTING SERVICES

Isiah Leggett County Executive

Diane R. Schwartz Jones Director

September 24, 2015

Mr. Patrick Fitzgerald Soltesz 2 Research Place, Suite 100 Rockville, MD 20850

Re:

Stormwater Management CONCEPT Request

for Darnstown Station Preliminary Plan #: N/A SM File #: 278615

Tract Size/Zone: 2.65/RE-1 Total Concept Area: 2.19ac

Lots/Block: 1 Parcel(s): N/A

Watershed: Great Seneca Creek

Dear Mr. Fitgerald:

Based on a review by the Department of Permitting Services Review Staff, the stormwater management concept for the above mentioned site is acceptable. The stormwater management concept proposes to meet required stormwater management goals via the use of landscape infiltration and an alternative surface.

The following item(s)/condition(s) will need to be addressed during/prior to the detailed sediment control/stormwater management plan stage:

- 1. A detailed review of the stormwater management computations will occur at the time of detailed plan review.
- 2. An engineered sediment control plan must be submitted for this development.
- 3. All filtration media for manufactured best management practices, whether for new development or redevelopment, must consist of MDE approved material.
- 4. The proposed turf reinforcement area will be designed as an alternative surface.

This list may not be all-inclusive and may change based on available information at the time.

Payment of a stormwater management contribution in accordance with Section 2 of the Stormwater Management Regulation 4-90 is not required.

This letter must appear on the sediment control/stormwater management plan at its initial submittal. The concept approval is based on all stormwater management structures being located outside of the Public Utility Easement, the Public Improvement Easement, and the Public Right of Way unless specifically approved on the concept plan. Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to

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Mr. Patrick Fitzgerald September 24, 2015 Page 2 of 2

reevaluate the site for additional or amended stormwater management requirements. If there are subsequent additions or modifications to the development, a separate concept request shall be required.

If you have any questions regarding these actions, please feel free to contact Thomas Weadon at 240-777-6309.

Sincerely,

Mark C. Etherldge, Manager Water Resources Section

Division of Land Development Services

MCE: me TEW

cc: SM File # 278616

ESD Acres: 2.19ac

STRUCTURAL Acres: N/A
WAIVED Acres: N/A

SUBSTATION EMF

- Electric and/or magnetic fields (EMF) are created by the flow of electricity and occur near any
 device or wire on which electricity is moving. EMF therefore are a regular part of our daily
 experience and are found throughout our daily environments.
- The EMF from electric power substations are the same type of EMF that occur in our homes, at work and in schools, stores, restaurants and other public places. There is nothing unusual about these EMF.
- EMF from substation equipment falls off quickly with distance from the source. While specific levels
 will vary by location, EMF levels at the edge of substation properties often are in the same range as
 found in regular daily environments.
- Over the past 40 years, a large amount of scientific research has been conducted on EMF and health. Many hundreds of studies have been conducted by scientists around the world.
- This large body of scientific research has been reviewed by many leading public health agencies such as the U.S. National Institute of Environmental Health Sciences, the U.S. National Cancer Institute and the World Health Organization, among others.
- These agencies have concluded that exposure to electric power EMF has <u>not</u> been shown to cause or contribute to any adverse health effects in adults or children.
- The World Health Organization, which conducted the most recent major review of research on EMF and health, says that "despite extensive research, to date there is no evidence to conclude that exposure to low level electromagnetic fields is harmful to human health." www.who.int/pehemf/about/WhatisEMF/en/index1.html
- Electric power substations are an essential part of the system by which electricity is delivered to homes and businesses in the State of Maryland. Substations are found throughout the neighborhoods of the State of Maryland.
- While there are no federal or local exposure standards for substation EMF in the State of Maryland, the new Darnestown Substation will be designed and operated in accordance with the requirements of the National Electrical Safety Code and all other applicable standards



Date Mailed: April 23, 2002

Action: Approved Staff Recommendation Motion of Comm. Bryant, seconded by

Comm. Robinson with a vote of 5-0; Comms. Bryant, Holmes, Perdue, Robinson and Wellington voting

in favor

MONTGOMERY COUNTY PLANNING BOARD

OPINION

Preliminary Plan 1-02018

NAME OF PLAN: EVANGELICAL FORMOSAN CHURCH OF WASHINGTON

On 09/06/01, EVANGELICAL FORMOSAN CHURCH OF WASHINGTON submitted an application for the approval of a preliminary plan of subdivision of property in the R-200 zone. The application proposed to create 1 lot on 4.0 acres (23,800 square feet House of Worship) of land. The application was designated Preliminary Plan 1-02018. On 02/14/02, Preliminary Plan 1-02018 was brought before the Montgomery County Planning Board for a public hearing. At the public hearing, the Montgomery County Planning Board heard testimony and received evidence submitted in the record on the application. Based upon the testimony and evidence presented by staff and on the information on the Preliminary Subdivision Plan Application Form, attached hereto and made a part hereof, the Montgomery County Planning Board finds Preliminary Plan 1-02018 to be in accordance with the purposes and requirements of the Subdivision Regulations (Chapter 50, Montgomery County Code, as amended) and approves Preliminary Plan 1-02018.

Approval, Subject to the Following Conditions:

- (1) Limit approval under this preliminary plan to a house of worship with the following:
 - a. A 300-seat sanctuary
 - b. No weekday educational institute or child day-care facility on the site
- (2) Provide five-foot sidewalks on Riffle Ford Road along the frontage
- (3) A final landscape and lighting plan must be submitted as for review and approval by technical staff
- (4) All road rights-of-way shown on the approved preliminary plan shall be dedicated, by the applicant, to the full width mandated by the Gaithersburg Master Plan unless otherwise designated on the preliminary plan
- (5) Access and improvements as required to be approved by MCDPWT prior to recordation of plat(s)
- (6) Compliance with the conditions of MCDPS stormwater management approval
- (7) This preliminary plan will remain valid for thirty-seven (37) months from the date of mailing of the Planning Board opinion. Prior to this date, a final record plat must be recorded for all property delineated on the approved preliminary plan, or a request for an extension must be filed
- (8) The Adequate Public Facility (APF) review for the preliminary plan will remain valid for sixty-one (61) months from the date of mailing of the Planning Board opinion
- (9) Other necessary easements

Attachment C-4

Page 14 of 14 DRC 10/09/01

- 8. PEPCO/VERIZON/Washington Gas cleared 10 foot PUE parallel and contiguous to all public right-of-ways
- 9. DPS (Well & Septic) category acceptable
- 10. DRD (Site Plan Reviewer) Reconfigure parking and access (see sketch)
- 11. CBP no comments
- 12. Parks Department no comments
- 13. DEP Public water and sewer service is consistent with the existing W-1 and S-3 service area categories
- 14. MCFRS Standard Requirements (hand-out)