SUBJECT:  CMPT-2016-0001, AT&T Short Hill

ELECTION DISTRICT:  Catoctin / Blue Ridge (all proposed work within Blue Ridge)

CRITICAL ACTION DATE:  Extended to February 9, 2017

STAFF CONTACTS:  Steve Barney, Project Manager, Dept. of Planning & Zoning
Ricky Barker, AICP, Director, Dept. of Planning & Zoning

APPLICANT:  Wayne Barker, Principal Project Manager, Parsons Environment & Infrastructure Group, Inc.

PURPOSE:  The purpose of this application is to consider a Commission Permit for a Utility Substation, Transmission in the AR-1 (Agricultural-Rural 1) zoning district. When considering the application, the Planning Commission is asked to determine whether the general location, character, and extent of the proposed use are in substantial accord with the Comprehensive Plan.

RECOMMENDATION:  Staff supports the Planning Commission’s approval of the Commission Permit for the following reasons:

1. The general location, character, and extent of the proposed transmission utility substation are in substantial accord with the Revised General Plan (Plan).

2. Plan policies support the expansion of existing non-agriculturally related commercial uses in the Rural Policy Area if the use is determined to be compatible in scale and intensity with the surrounding area, poses no serious threat to public health or safety and meets applicable performance standards.

3. The proposed transmission utility substation supports the objectives of the Strategic Land Use Plan for Telecommunication Facilities by providing modern, effective and efficient telecommunications infrastructure while mitigating impacts on the County’s residents, nearby land uses, and viewsheds.

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SUGGESTED MOTIONS:

1. I move that the Planning Commission approve CMPT-2016-0001, AT&T Short Hill, based on the Commission Permit Plat entitled “AT&T Expansion of Existing Telephone Transmission Utility Substation” prepared by Parsons, dated January 22, 2016, revised through March 29, 2016, with the Findings for Approval in the April 26, 2016 Planning Commission Public Hearing Staff Report and forward it to the Board of Supervisors for ratification.

OR

2. I move that the Planning Commission forward CMPT-2016-0001, AT&T Short Hill, to a work session for further discussion.

OR

3. I move that the Planning Commission deny CMPT-2016-0001, AT&T Short Hill, based on the following Findings for Denial:

____________________________________________________________________
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I. APPLICATION INFORMATION

<table>
<thead>
<tr>
<th>APPLICANT</th>
<th>REPRESENTATIVE</th>
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<tbody>
<tr>
<td>Parsons Environment &amp; Infrastructure Group, Inc.</td>
<td>Walsh Colucci Lubeley &amp; Walsh, PC</td>
</tr>
<tr>
<td>Wayne Barker, Principal Project Manager</td>
<td>Christine Gleckner, Land Use Planner</td>
</tr>
<tr>
<td>4701 Hedgemore Drive</td>
<td>1 East Market Street, Ste. 300</td>
</tr>
<tr>
<td>Charlotte, NC 28209</td>
<td>Leesburg, VA 20176</td>
</tr>
<tr>
<td>301-461-0676</td>
<td>571-209-5776</td>
</tr>
<tr>
<td><a href="mailto:wayne.barker@parsons.com">wayne.barker@parsons.com</a></td>
<td><a href="mailto:cgleckner@thelandlawyers.com">cgleckner@thelandlawyers.com</a></td>
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REQUEST
Parsons Environment & Infrastructure Group, Inc. of Charlotte, North Carolina, has submitted an application for Commission approval to expand an existing a transmission utility substation. This request would permit the construction of a 160,000 square foot communications building. The proposed use is listed as a Permitted use under Section 2-102 pursuant to Section 5-616, and requires a Commission Permit in accordance with Sections 5-616 and 6-1101.

PARCELS/ACREAGE
Tax Map //7////////59/ (PIN# 477-38-7669)
approximately 15.3 acre portion of an approximately 176.38 acre parcel (138.61 acres assessed)

ACCEPTANCE DATE
February 9, 2016

LOCATION
On the west side of Short Hill Mountain, east of Neersville, on the east side of Harpers Ferry Road approximately 2.5 miles north of the intersection with Charles Town Pike (Route 9) and approximately 4,000 feet south of the intersection with Sagle Road (Rte 287).

ZONING ORDINANCE
Revised 1993 Zoning Ordinance

EXISTING ZONING
AR-1 (Agricultural – Rural 1)
Mountainside Development Overlay District (MDOD)

POLICY AREA
Rural Policy Area

PLANNED LAND USE
Rural economy use and limited residential development (1 dwelling unit /20 acres)

II. CONTEXT

Location/Site Access – The subject property is located on the west side of Short Hill Mountain, east of Neersville, on the east side of Harpers Ferry Road approximately 2.5 miles north of the intersection with Charles Town Pike (Route 9) and approximately 4,000 feet south of the intersection with Sagle Road (Rte 287). Site access is proposed via White Rock Road, a private road within the subject property with a 16’ paved width.

The property is located in both the Blue Ridge Election District and the Catoctin Election District, as shown in Figure 1. However, all proposed work will be within the Blue Ridge District. The property’s existing driveway entrance onto Harpers Ferry Road is the only part of the property located in the Catoctin District.
**Existing Conditions** – The subject property is approximately 176.15 acres in size and is occupied by an existing manned communications facility that has been in operation on the property since the early 1960s. The site is served by an existing parking area (see Figure 3) and private road. The existing underground facility occupies an approximately 15.3 acre area of disturbed ground (identified by the Loudoun County soils GIS layer as “made lands”) near the ridgeline of Short Hill Mountain. The overburden from the grading, excavation and construction of the facility, which included large amounts of rock, was pushed over the side of the mountain to create the subject site as well as the roadway leading to the site and the pad site for the proposed communications building (see Figure 2).

**Figure 1. Vicinity Map**
The property includes areas of moderately steep and very steep slopes which are subject to the development requirements of Section 5-1508 of the Revised 1993 Zoning Ordinance (Ordinance). However, County GIS records indicate that the 15.3 acre subject site is designated as “made lands” (soil type MDL as shown on Sheet 4 of the CMPT Plat). As the steep slopes within the area of proposed development are not naturally occurring, the site is not subject to the steep slope regulations of the Ordinance.

The property is also located in the Mountainside Development Overlay District (MDOD) and is therefore subject to the development standards of Section 4-1600 (see Figure 4). A small portion of the proposed area of clearing and grading is inside the MDOD (Sensitive subdistrict).

With the exception of the previously cleared and graded area at the top of the site, the property is forested (see Figures 5 and 7). Disturbed areas on the western and eastern slopes (i.e. downhill from the 15.3 acre subject site) are vegetated and a portion of this slope area is dominated by invasive tree species intermixed with native trees. Sheet 8 of the CMPT Plat includes a tree survey narrative and tree canopy map. The applicant has committed to a long-term plan (described below) to remove and replace the invasive trees, many of which are dead or in decline.
There is no floodplain in the vicinity of the proposed expansion, and the County’s Predictive Wetlands Model does not identify any wetlands on the property. Staff is not aware of any archaeological or historic features at the site.

**Surrounding Properties** – Surrounding properties are zoned AR-1 (Agricultural-Rural 1) and are occupied by existing agricultural and single-family detached residential uses. Several of the adjacent properties are undeveloped, wooded parcels, including two adjacent lots owned by AT&T that are located to the west of the subject parcel. Examples of potential uses that could develop in the AR-1 zoning district include agriculture, agricultural support services such as wineries and equestrian facilities, single-family residential uses, public and institutional uses such as religious assembly and utilities, and commercial uses such as country inns and camps.

**Directions** - From Leesburg, take Route 7 west to Route 9 west. Turn right onto Harpers Ferry Road (Rte. 671). The subject property is on the right, approximately 2.5 miles north of the intersection with Route 9.

**Background** – The site is occupied by an existing manned, underground facility containing communications switching equipment. The original facility, constructed in the early 1960s, was approved in 1963 by the County through a Commission Permit as described below. Per the applicant, various revisions and upgrades to the equipment on the site have occurred over the past decade.

**Figure 5. Aerial Photo of Site**

CMPT-1962-2157 (also known as CMPT-1962-0003) – On March 26, 1963, the Planning Commission approved a Commission Permit for the establishment and operation of a communications facility with conditions of approval requiring the replanting of the mountainside area and painting of the buildings to mitigate the visual impact on the surrounding area.
SPEX-2004-0029 – On March 8, 2005, the Board of Supervisors approved a Special Exception for construction of a drip irrigation field to upgrade an existing onsite wastewater treatment system in sensitive and highly sensitive areas of the Mountainside Development Overlay District (MDOD).

As of March 28, 2016, one member of the public has provided comments about this application on LOLA. The comments, submitted by an adjacent property owner, addressed concerns regarding erosion, grading, and groundwater quality.

The applicant hosted a community meeting on March 14, 2016 at the Between the Hills Community Center to provide information about the proposed development to surrounding residents and property owners. Issues discussed included lighting, the visibility of the facility from nearby properties and roads, and traffic.

The application was initially submitted in the form of two special exception applications for the removal of non-conforming use status (SPEX-2015-0036) and expansion of an existing telecommunication facility (SPEX-2015-0037). However, Zoning Administration staff subsequently determined that the proposed land use met the Ordinance definition of "Utility Substation, Transmission", which is a permitted use in the AR-1 district. As such, the two special exception applications were determined to be unnecessary. Because the proposed 160,000 square foot facility was not included in the 1962 Commission Permit application, a new Commission Permit is required for the expansion of the existing use.

### III. PROPOSAL

**Commission Permit** – The Applicant is proposing a telephone transmission utility substation on a 15.3 acre portion of the approximately 176.38 acre parcel. The purpose of the request is to install modern data transmission and processing equipment to support the continued operations of the facility. The proposed expansion would entail the construction of a 160,000 square foot building primarily containing mechanical and electrical equipment (see Figure 6). The height of the facility will vary from approximately 18’ for the one-story portion of the building to 35’ for the two-story portion of the building.

Per the applicant, the proposed building will also include a small area for operation and maintenance staff in addition to ancillary features such as spare parts room, bathrooms, and a receiving area with a loading dock. The interior of the existing building will also be upgraded. Sixty employees will work at the facility in three shifts per day, seven days per week. No changes are proposed to the existing parking area and driveway, which would continue to serve the site.

Emergency standby generators using diesel fuel would be located on the property. The applicant has stated that as a result of the location of these generators, noise at the property line will be minimal if at all detectable.
The new building is proposed to be constructed directly above the existing underground facility on an area of made lands (or disturbed area) that was created from the grading, excavation and construction of the original facility. Per the applicant, the development would not entail substantial additional clearing and grading. Outside of the 15.3 acre subject site, the remainder of the property would remain as a wooded area.

According to the applicant’s Statement of Justification, the facility will be minimally visible from Harpers Ferry Road and Mountain Road and is designed to blend into its surroundings. Lighting will be kept to the minimum required for safety and security. The applicant proposes to screen the new facility with existing vegetation as well as newly planted trees and landscaping.

**IV. OUTSTANDING ISSUES**

There are no outstanding Staff issues. The application is ready for Planning Commission action.

The review process for Commission Permits is unique under the Virginia State Code. Rather than providing a recommendation of approval or disapproval, the Commission takes action to either approve or deny a CMPT application. Within sixty (60) days after the Commission has acted or failed to act, the Board of Supervisors (Board) may either ratify
or overrule the Commission’s decision by a vote of a majority of the membership thereof (Ordinance Section 6-1104).

V. POLICY ANALYSIS

Commission Permit (CMPT) Criteria for Approval - Ordinance Section 6-1103(A) states that when considering a Commission Permit, “The Planning Commission shall review the application to determine if the feature for which approval is sought is substantially in accord with the adopted Comprehensive Plan.” Section 6-1101(A) further states, “No street or connection to an existing street, park or other public area, public building or public structure, public utility facility or public service corporation facility other than a railroad facility, whether publicly or privately owned, shall be constructed, established or authorized, unless and until the general location or approximate location, character and extent thereof has been submitted to and approved by the Planning Commission as being substantially in accord with the adopted Comprehensive Plan.”

A. LAND USE

Analysis – There are no outstanding land use issues. The general location of the proposed utility substation is in substantial accord with the land use policies of the Plan. The property is located within the Rural Policy Area and is planned for 1 dwelling unit per 20 acres. Plan policies support the expansion of existing non-agriculturally related commercial uses, such as the proposed communications facility, in the Rural Policy Area if the use is determined to be compatible in scale and intensity with the surrounding area, poses no serious threat to public health or safety and meets applicable performance standards.

B. COMPATIBILITY

Analysis – The proposed expansion of the existing AT&T facility will not change the existing use or function of the facility; however, the proposed construction of the communications building on the ridgeline of the Short Hill Mountain will have a visual impact on the surrounding area.

While the existing forest cover may partially screen some views of the proposed communications facility, the upper portions of the building will be visible from a number of properties located further downslope in the valleys, as well as from Harpers Ferry Road (Route 671) and Mountain Road (Route 690).

Staff initially requested that the applicant consider lowering the height of the building to reduce the potential visual impact of the development. However, per the applicant, the proposed building height (up to 35’) is the lowest feasible height based on site constraints and equipment requirements.

To address screening issues, the applicant proposes to supplement existing vegetation with newly planted trees and landscaping (see Sheet 7 of the CMPT Plat, “Proposed Landscape Plan”). Additionally, the applicant has committed to applying an irregular block
pattern of earth tone paint colors to the roof line to better blend with existing forest cover and the ridgeline of the mountain and to break up the building mass. Building Design Note 1 on Sheet 1 of the CMPT Plat identifies the color scheme for the building.

Photo simulations on Sheets 9-12 of the CMPT Plat show the projected visual impact of the facility as seen from Harpers Ferry Road (west face) and Mountain Road (east face).

Per the Exterior Lighting notes on Sheet 1 of the CMPT Plat, exterior lighting levels will be the minimum required for safety and security in order to reduce the visibility of lighting beyond the property line.

C. ENVIRONMENTAL AND HERITAGE RESOURCES

Analysis – The general location, character, and extent of the proposed electrical substation are in substantial accord with the environmental and heritage resource policies of the Plan. Staff has identified no outstanding environmental, archaeological, or historical resource issues with this Commission Permit application. The Land Use Pattern and Design Strategy Policies of the Rural Policy Area of the Plan call for the protection and enhancement of the County’s steep slopes, ridges, and mountains, and the CMPT Plat depicts a site layout that does not disturb naturally occurring steep slopes and minimizes impacts to mountainside areas. The stormwater management strategy for the proposed expansion will include Low-Impact Development (LID) methods. The CMPT plat identifies areas for reforestation and replacement of invasive tree species. The applicant has provided a letter from the Virginia Department of Historic Resources stating that the agency is unaware of any archaeological sites on the property.

1. Steep slopes
   The property includes areas of moderately steep and steep slopes which are subject to the development requirements of Section 5-1508 of the Ordinance. However, County GIS records indicate that the 15.3 acre subject site is designated as “made lands” (MDL). As the steep slopes within the limits of clearing and grading for the proposed development are not naturally occurring, the site is not subject to the steep slope regulations of the Ordinance.

2. Mountainside Areas
   The subject site is located on the ridgeline of Short Hill Mountain within the Mountainside Development Overlay District (MDOD). Mountainsides are highly sensitive to land disturbance and development, and uncontrolled land disturbance in these areas could contribute to the loss of prime viewsheds, the destruction of unique flora and fauna, and increased runoff to downstream rivers and streams (Revised General Plan, Chapter 5, Mountainside Areas, text). Plan policies call for minimizing negative environmental impacts and land disturbance in mountainside areas.

   The 15.3 acre subject site was previously cleared and graded, and the new development proposed within this area will not impact the mountainside. Only a
small portion of the proposed area of clearing and grading is inside the MDOD, as shown on Sheets 4 and 5 of the CMPT Plat.

3. Stormwater Management
The applicant has sought to minimize the land disturbing activities on the site by restricting the building footprint to a previously cleared and graded portion of the subject site. However, the proposed construction of the building and road network will create a larger area of impermeable surfaces which could influence stormwater runoff if not properly managed and controlled onsite. During the review process, staff recommended that the applicant commit to integrating Low-Impact Development (LID) practices into the stormwater management strategy. LID strategies are intended to minimize the volume of surface runoff and reduce pollutants in order to better protect the integrity and water quality of receiving streams and water bodies.

A note on Sheet 1 of the CMPT Plat addresses stormwater management and states that the development will incorporate LID methods such as a combination of infiltration, bioretention, and rainwater harvesting and will be coordinated with the Department of Building and Development during site plan review for the facility.

4. Reforestation
Areas of made land on the slopes surrounding the 15.3 acre subject site are dominated by invasive tree species intermixed with native trees. The applicant has committed to a long-term Invasive Plant Mitigation Plan to remove and replace the invasive trees, and has agreed that this plan will be reviewed and approved by the Urban Forester prior to approval of the first site plan for this facility (see Sheet 7 of the CMPT Plat). The applicant will replace invasive trees with native species, and will plant evergreens in higher percentage in locations where screening is a priority.

5. Noise
The proposed use is not listed in the Ordinance as a land use to which the noise standards of Section 5-652 apply. However, eight emergency standby 4.0 MW medium voltage diesel generators and eleven air coolers are depicted on Sheet 5 of the CMPT Plat. The applicant has added a note to Sheet 1 of the CMPT Plat stating that the application will comply with the noise standards in Section 5-1507 of the Ordinance.
D. TRANSPORTATION

**Analysis** – The general location, character, and extent of the proposed utility substation are in substantial accord with the transportation policies of the 2010 Countywide Transportation Plan (2010 CTP) and the Bicycle & Pedestrian Mobility Master Plan (2003 Bike & Ped Plan). No traffic study is required for a Commission Permit application. The proposed utility substation does not conflict with any existing or planned CTP roadways. The proposed use will add minimal trips to the public roadway network and will not generate the need for transportation improvements.

**White Rock Road** is an unpaved, variable-width private driveway located wholly within the subject property that travels in a north-south direction along the western edge of the site. The road is maintained by the property owner and provides access to the public road network via an unsignalized intersection with Harpers Ferry Road. The Applicant does not propose any change in access from the public roadway network or site entrance, which has already been constructed. Because White Rock Road is a private driveway, there is no posted speed limit along this road.

**Harpers Ferry Road (VA Route 671)** (segment from the Charles Town Pike (VA Route 9) to Jefferson Pike (US Route 340)) is currently a two-lane undivided (R2) major collector roadway that travels in a north-south direction west of the subject property. Harpers Ferry Road is constructed to its ultimate condition per the 2010 CTP. The posted speed limit in the vicinity of the site is 55 MPH. Per 2014 Virginia Department of Transportation (VDOT) estimates, Harpers Ferry Road carries approximately 2,400 vehicles per day in the vicinity of the site.

The 2003 Bike & Ped Plan categorizes this section of Harpers Ferry Road in the Rural Policy Area as a "Baseline Connecting Road" along which bicycle and pedestrian facilities are envisioned. However, Appendix 6 of the 2010 CTP also notes that sidewalks will typically not be provided along rural road sections such as this segment of Harpers Ferry Road. Currently, there are no bicycle and pedestrian facilities constructed on either side of Harpers Ferry Road in the vicinity of White Rock Road.

The Applicant does not propose any change in access from the public roadway network or the White Rock Road driveway entrance, which has already been constructed. However, the Applicant needs to ensure that the access to White Rock Road from Harpers Ferry Road is constructed to current VDOT commercial entrance standards.

E. PUBLIC UTILITIES/PUBLIC SAFETY

**Analysis** – There are no outstanding public utilities issues. The utility substation is a manned facility and requires the provision of water and sewer. Sixty employees will work at the facility (three shifts per day).
The following table below summarizes how this application addresses public utilities, fire and rescue services, fire and rescue contributions, and public safety.

<table>
<thead>
<tr>
<th>Table 1. Public Utilities and Public Safety.</th>
<th>Condition or Note</th>
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<tr>
<td>Water and Sewer – The property is currently served by an existing well and septic area. The existing well will continue to be the source of water for the site, and a proposed septic drainfield expansion area is shown on the CMPT Plat.</td>
<td>Not an issue.</td>
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<tr>
<td>Fire &amp; Rescue Service - The Loudoun Heights Fire and Rescue Station (#26) would serve the subject property with an approximate response time of six minutes.</td>
<td>Not an issue.</td>
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VI. ZONING ANALYSIS

Analysis – There are no outstanding zoning issues. The application is in general compliance with the requirements of the Ordinance for the AR-1 zoning district wherein a Utility Substation, Transmission is permitted by right, subject to the performance standards of Section 5-616 of the Ordinance. Section 5-616 requires that the substation be located on a lot of one acre in size or greater, that the substation receive Commission approval, and that the substation has a minimum Type 4 Buffer Yard. The proposed substation meets these criteria as the subject property is approximately 176.38 acres in size (138.61 acres assessed), this application is for Commission approval, and a minimum Type 4 Buffer (existing vegetation with supplemental plantings) will be provided around the site.

VII. FINDINGS FOR APPROVAL

1. The general location, character, and extent of the proposed expansion of the existing telephone transmission utility substation are in substantial accord with the Comprehensive Plan, specifically, the Rural Economy and Green Infrastructure policies of the Revised General Plan and will allow the continued use of an existing communications facility in operation for over fifty years.

2. The general location, character, and extent of the proposed expansion of the existing telephone transmission utility substation are in substantial accord with the Countywide Transportation Plan and the Bicycle & Pedestrian Mobility Master Plan, as the proposed development does not conflict with any existing or planned CTP roadways, will add minimal trips to the public roadway network and will not generate the need for transportation improvements.

3. The proposed expansion of the existing telephone transmission utility substation is in general compliance with the AR-1 (Agricultural-Rural 1) regulations of the Revised
1993 Zoning Ordinance. The layout shown on the CMPT Plat demonstrates that the proposed uses can comply with the Additional Regulations for Utility Substations set forth in Section 5-616 of the Ordinance.

4. The proposed expansion of the existing telephone transmission utility substation will provide modern, effective and efficient telecommunications infrastructure and enhance the overall communications network within the County, to the benefit of area residents, businesses, and governments. The proposed expansion would mitigate impacts on the County’s residents, nearby land uses, and viewsheds and would support the objectives of the Strategic Land Use Plan for Telecommunication Facilities.

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*This Staff Report with attachments (file name PCPH STAFF REPORT 04-26-16.PDF) can be viewed online on the Loudoun Online Land Applications System (LOLA) at [www.loudoun.gov](http://www.loudoun.gov). Paper copies are also available in the Department of Planning and Zoning.*