

COUNTY OF ALBEMARLE
Department of Community Development
401 McIntire Road, North Wing
Charlottesville, Virginia 22902-4596

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MEMORANDUM

TO: Architectural Review Board
FROM: Margaret Maliszewski
RE: **ARB-2020-31: Rappahannock Electric Cooperative**
DATE: October 27, 2020

On May 11, 2020, the Architectural Review Board (ARB) reviewed the Rappahannock Electric Cooperative (REC) proposal to add a 115 kilovolt transmission line above the circuits on the utility poles that currently stand in the 1.6-mile-long corridor along the west side of Rt. 29 north of Dickerson Rd., in an advisory capacity to the Planning Commission and Board of Supervisors. By a vote of 3 to 1, the ARB forwarded a recommendation of no objection on the proposal, subject to conditions. See Attachment A for the staff report prepared for the May 11 review and Attachment B for the ARB action letter with recommended conditions from that review.

REC's representative subsequently contacted staff and ARB members to state that the recommended conditions are unworkable and has asked for a second opportunity to present their proposal to the ARB with a goal of revising the recommended conditions of approval. For this second review, REC has provided a cover letter, additional information on Integrated Vegetation Management (IVM), and recommended language for an alternate ARB action. See Attachments C-E for this information.

Since the May 11, 2020 ARB meeting, REC has completed its regular maintenance of the existing utility corridor, utilizing IVM. Some photos of that completed work are provided as Attachment F. The objectives of the draft IVM Plan indicate that, in the future, more low-growing native trees and shrubs would be allowed to remain below the electrical lines. If the ARB generally supports the IVM approach, the ARB may choose to forward a revised recommendation of "no objection" to the proposal with the condition that the IVM plan include proactive management to promote 1) native Virginia meadows, low growing shrub landscapes, and native species pollinators in the existing and proposed utility easement areas by suppressing forest succession, and 2) lower growing trees, grasses, wildflowers, and other vegetation that is compatible with safety needs and regulations and that is visually pleasing when viewed from the Entrance Corridor.

Attachments A – F (below)

ARCHITECTURAL REVIEW BOARD STAFF REPORT

Project #/Name	ARB-2020-31: Rappahannock Electric Cooperative System Enhancement Project
Review Type	Advisory Review for a Special Use Permit
Parcel Identification	TMP 02100-00-00-012D0, -01200, -01500, -015G0, -016C0, -01600, -017C0, -017A0, -01900, -007A0, -007C0, -00700, -006A0, -006B0, -006D0, -006E2, -006I1, -006H0
Location	Beginning at 5045 Dickerson Road, running along the west side of Rt. 29, north to the Green County line
Zoned	Rural Areas (RA), Entrance Corridor (EC)
Owner/Applicant	Rappahannock Electric Corp. / Williams Mullen (Valerie Long)
Magisterial District	Rio
Proposal	To add a 115 kilovolt transmission line above the circuits on the utility poles standing in the 1.6-mile-long corridor adjacent to the southbound lanes of Route 29.
Context	The power line runs along the west side of the corridor, through Rural Areas zoned parcels that contain a mix of wooded, residential and commercially developed properties.
Visibility	The existing poles and lines are readily visible from the Entrance Corridor. The proposed tree cutting and trimming will open up the view of the poles and lines. The taller poles will be visible from greater distances. The expanded area of tree cutting and the taller poles will result in increased visual impact.
ARB Meeting Date	May 11, 2020
Staff Contact	Margaret Maliszewski

PROJECT HISTORY

The ARB has not reviewed any applications associated with this power line. The existing poles were installed in 2009 to carry by-right distribution lines. They were designed to accommodate the proposed upgrade to higher-voltage transmission lines, which requires a Special Use Permit.

PROJECT SUMMARY

- Add pole toppers to each existing pole. (See Fig. 1 for an example of a completed project constructed in Greene County.)
 - Toppers average 35' in height
 - Existing poles average 50' in height
- Install higher voltage 115kV line.
- Increase existing 40' easement to 75' with an additional 17.5' in the VDOT right-of-way and an additional 17.5' on private property.
- No earth disturbance or grading is proposed. No additional poles are proposed.
- Tree removal and removal of limbs overhanging into the area of the easement are proposed to allow for maintenance/repairs and to keep trees from touching the lines. Stumps and roots will be left in place.
 - The applicant's narrative states that, with sunlight increased in the cleared area, seeds already in the ground will be supported and this will grow, over time, into a native Virginia meadow and low-growing shrub landscape.
 - The narrative also states that REC will promote native species pollinator gardens in the additional 17.5 feet of right-of-way, but no specific design has been proposed.
- The project narrative states that REC will work with individual property owners regarding landscaping preferences for their properties that do not interfere with powerline operation/maintenance, but there is no formal proposal for new landscaping.

ANALYSIS This table lists the text of the Entrance Corridor Design Guidelines, issues identified by staff resulting from an analysis of the proposal based on the guidelines, and staff's resulting recommendations to the Architectural Review Board.

REF	GUIDELINE	ISSUE	RECOMMENDATION
	<i>Purpose</i>		
1	The goal of the regulation of the design of development within the designated Entrance Corridors is to insure that new development within the corridors reflects the traditional architecture of the area. Therefore, it is the purpose of ARB review and of these Guidelines, that proposed development within the designated Entrance Corridors reflect elements of design characteristic of the significant historical landmarks, buildings, and structures of the Charlottesville and Albemarle area, and to promote orderly and attractive development within these corridors. Applicants should note that replication of historic structures is neither required nor desired.	Power poles and power lines do not reflect the traditional architecture of the area and, as proposed, the expansion includes no active steps toward promoting orderly and attractive development. Orderly and attractive development could be promoted by adding landscaping in areas currently devoid of planting and in areas that will be exposed to view by removal of vegetation in the proposed corridor expansion.	See landscape recommendations, below.
2	Visitors to the significant historical sites in the Charlottesville and Albemarle area experience these sites as ensembles of buildings, land, and vegetation. In order to accomplish the integration of buildings, land, and vegetation		

	characteristic of these sites, the Guidelines require attention to four primary factors: compatibility with significant historic sites in the area; the character of the Entrance Corridor; site development and layout; and landscaping.		
3-5, 9-16	Compatibility with significant historic sites; Structure design	No buildings are proposed.	None.
	Accessory structures and equipment		
17	Accessory structures and equipment should be integrated into the overall plan of development and shall, to the extent possible, be compatible with the building designs used on the site.	The above-ground utility already exists. Establishing a new power line in a new location is not practical and would have greater impacts on natural resources in the Rural Areas. The existing power line has a negative visual impact along the EC. Increasing the height of the poles and lines, expanding the easements, and cutting and limbing trees will increase the negative visual impact by increasing the size of the intrusion and increasing visibility from distances. The impact will also be increased by the elimination of some vegetation standing between the poles and the street that currently provides screening. (These trees are located within the proposed additional easement needed for the new power lines.) In other areas, existing wooded area that positively contributes to the character of the corridor will be reduced.	See landscape recommendations, below.
18	The following should be located to eliminate visibility from the Entrance Corridor street. If, after appropriate siting, these features will still have a negative visual impact on the Entrance Corridor street, screening should be provided to eliminate visibility. a. Loading areas, b. Service areas, c. Refuse areas, d. Storage areas, e. Mechanical equipment, f. Above-ground utilities, and g. Chain link fence, barbed wire, razor wire, and similar security fencing devices.		
19	Screening devices should be compatible with the design of the buildings and surrounding natural vegetation and may consist of: a. Walls, b. Plantings, and c. Fencing.	There are clear limitations associated with screening utility lines and no screening devices are proposed. Given the size, height, and character of the poles and lines, traditional screening methods are not practical. However, negative visual impacts could be mitigated with the addition of landscaping in areas that currently lack vegetation or would have reduced vegetation after the proposed cutting and limbing. Planting in an informal arrangement of mixed shade and ornamental trees would be compatible with the surrounding vegetation. (See “Landscaping” for	

		additional analysis.)	
20	Surface runoff structures and detention ponds should be designed to fit into the natural topography to avoid the need for screening. When visible from the Entrance Corridor street, these features must be fully integrated into the landscape. They should not have the appearance of engineered features.	No new stormwater features are proposed.	None.
21	The following note should be added to the site plan and the architectural plan: "Visibility of all mechanical equipment from the Entrance Corridor shall be eliminated."	Equipment is already visible. There are clear limitations associated with screening utility lines.	See landscape recommendations, below.
22-31	Lighting	No lighting is proposed.	None.
	Landscaping		
7	The requirements of the Guidelines regarding landscaping are intended to reflect the landscaping characteristic of many of the area's significant historic sites which is characterized by large shade trees and lawns. Landscaping should promote visual order within the Entrance Corridor and help to integrate buildings into the existing environment of the corridor.	There are a number of site conditions along the 1.6-mile corridor of the power line. These range from cleared residential (Fig. 2) and commercial (Fig. 3) properties, to wooded parcels with cleared frontage and open views of the power lines (Figs. 4a, 4b), to wooded area divided by the power lines with screening vegetation remaining along the street at varying densities (Figs. 5a-5d).	Provide an analysis of the entire project area and identify planting areas, either within the proposed easements or within additional easements, that will be used to meet the Entrance Corridor Design Guidelines. Existing plant material may be retained to meet this requirement where possible. Plantings should be proposed in areas where no planting currently exists, where screening will be removed, in areas exposed to view by the proposed clearing, and where trees will be removed once the proposed wider clear zones are in place.
8	Continuity within the Entrance Corridor should be obtained by planting different types of plant materials that share similar characteristics. Such common elements allow for more flexibility in the design of structures because common landscape features will help to harmonize the appearance of development as seen from the street upon which the Corridor is centered.	Visual order and continuity would be promoted, and negative impacts of the proposal could be mitigated, by planting an informal arrangement of mixed shade and ornamental trees along the corridor. The informal arrangement would be more consistent with the surrounding vegetation than the regularly spaced and alternating trees that is more typical of commercial sites in the ECs. However, to avoid the conflicts between large shade trees and overhead power lines, new trees would have to be planted a considerable distance from the new lines. REC's vegetation management brochure (Attachment A), which appears to be geared toward distribution lines (not transmission lines), suggests that large trees should be planted no closer than 65' from utility lines. That is considerably more than the 37.5'	
32	Landscaping along the frontage of Entrance Corridor streets should include the following: a. Large shade trees should be planted parallel to the Entrance Corridor Street. Such trees should be at least 3½ inches caliper (measured 6 inches above the ground) and should be of a plant species common to the area. Such trees should be located at least every 35 feet on center. b. Flowering ornamental trees of a species common to the area should be interspersed among the trees required by the preceding paragraph. The ornamental trees need not alternate one for one with the large shade trees. They may be planted among the large shade trees in a less regular spacing pattern. c. In situations where appropriate, a three or four board		

	<p>fence or low stone wall, typical of the area, should align the frontage of the Entrance Corridor street.</p> <p>d. An area of sufficient width to accommodate the foregoing plantings and fencing should be reserved parallel to the Entrance Corridor street, and exclusive of road right-of-way and utility easements.</p>	<p>that would be the new easement on both sides of the poles. The brochure indicates that medium and low trees can be planted much closer to utility poles. Though not proposed by REC, an additional increase in the proposed easement could provide for safe planting of trees on the west side of the utility corridor. Incorporating a mixture of medium to large shrubs and low trees would help harmonize appearances along the street and offset the negative visual impacts of the proposal along this important Entrance Corridor.</p>	
33	Landscaping along interior roads:	No interior roads are proposed.	None.
34	Landscaping along interior pedestrian ways:	No pedestrian ways are proposed.	None.
35	Landscaping of parking areas:	No parking areas are proposed.	None.
36	<p>Landscaping of buildings and other structures:</p> <p>a. Trees or other vegetation should be planted along the front of long buildings as necessary to soften the appearance of exterior walls. The spacing, size, and type of such trees or vegetation should be determined by the length, height, and blankness of such walls.</p> <p>b. Shrubs should be used to integrate the site, buildings, and other structures; dumpsters, accessory buildings and structures; “drive thru” windows; service areas; and signs. Shrubs should measure at least 24 inches in height.</p>	<p>No buildings are proposed. Shrubs could be added to the informal mix of shade and ornamental trees to broaden the diversity of the planting and to further balance the visual impact of the power poles and lines.</p>	See #32.
37	<p>Plant species: a. Plant species required should be as approved by the Staff based upon but not limited to the <i>Generic Landscape Plan Recommended Species List</i> and <i>Native Plants for Virginia Landscapes (Appendix D)</i>.</p>	No new plants are proposed.	None at this time.
38	<p>Plant health: The following note should be added to the landscape plan: “All site plantings of trees and shrubs shall be allowed to reach, and be maintained at, mature height; the topping of trees is prohibited. Shrubs and trees shall be pruned minimally and only to support the overall health of the plant.”</p>	No new plants are proposed.	None at this time.
	Site Development and layout; Development pattern		
6	Site development should be sensitive to the existing natural landscape and should contribute to the creation of an	This proposal does include tree removal, but no grading, no impact to river/stream valleys, and	Provide an analysis of the entire project area

	<p>organized development plan. This may be accomplished, to the extent practical, by preserving the trees and rolling terrain typical of the area; planting new trees along streets and pedestrian ways and choosing species that reflect native forest elements; insuring that any grading will blend into the surrounding topography thereby creating a continuous landscape; preserving, to the extent practical, existing significant river and stream valleys which may be located on the site and integrating these features into the design of surrounding development; and limiting the building mass and height to a scale that does not overpower the natural settings of the site, or the Entrance Corridor.</p>	<p>no buildings. No new planting is proposed. The narrative indicates that the proposed clearing will provide the opportunity for a native Virginia meadow and low-growing shrub landscape to develop naturally in the expanded easement area. However, unmanaged areas, especially along roadways, are likely to be colonized by non-native invasive species. Also, the narrative mentions native species pollinator gardens, but no designs have been provided or planting areas specified. It is highly unlikely that the noted landscapes will establish without detailed management plans.</p>	<p>identifying locations where the native Virginia meadow strategy and pollinator gardens will be implemented. Outline the steps that will be taken, beyond tree clearing and trimming, to establish and maintain the meadows, low growing shrub landscapes, and native species pollinator gardens.</p>
39	<p>The relationship of buildings and other structures to the Entrance Corridor street and to other development within the corridor should be as follows:</p> <ol style="list-style-type: none"> a. An organized pattern of roads, service lanes, bike paths, and pedestrian walks should guide the layout of the site. b. In general, buildings fronting the Entrance Corridor street should be parallel to the street. Building groupings should be arranged to parallel the Entrance Corridor street. c. Provisions should be made for connections to adjacent pedestrian and vehicular circulation systems. d. Open spaces should be tied into surrounding areas to provide continuity within the Entrance Corridor. e. If significant natural features exist on the site (including creek valleys, steep slopes, significant trees or rock outcroppings), to the extent practical, then such natural features should be reflected in the site layout. If the provisions of Section 32.5.2.n of the <i>Albemarle County Zoning Ordinance</i> apply, then improvements required by that section should be located so as to maximize the use of existing features in screening such improvements from Entrance Corridor streets. f. The placement of structures on the site should respect existing views and vistas on and around the site. 	<p>No travelways, buildings, or circulation systems are proposed. Trees exist in parts of the proposed easement area. No single specimen is known to be particularly significant, but as a whole, the wooded area contributes significantly to the character of the corridor. Increasing the height of the poles and lines, expanding the easements, cutting and limbing trees, and eliminating screening vegetation will change the view along the EC. This impact could be mitigated with the planting of new trees and shrubs.</p>	<p>See landscaping recommendations, above.</p>
40-44	<p>Site Grading</p>	<p>No grading is proposed.</p>	<p>None.</p>

SUMMARY OF RECOMMENDATIONS

Staff recommends the following as the primary points of discussion:

1. Increased visual impact resulting from the increased height of the power poles and lines, tree removal, and limbing
2. Proposed treatment of the expanded easement areas
3. Other opportunities to mitigate visual impacts: new landscaping, additional expanded easements, planting and maintenance plans

Staff recommends that the ARB forward the following recommendation on the Special Use Permit to the Planning Commission and Board of Supervisors:

The ARB recognizes the need for a reliable power supply and the limitations associated with screening utility lines, as well as the opportunity to offset the increased negative visual impacts of REC's enhancement project in one of the County's primary Entrance Corridors. The ARB has no objection to the proposed use with the condition that landscaping is provided as follows, to the satisfaction of the ARB:

1. Provide an analysis of the entire project area and identify planting areas, either within the proposed easements or within additional easements, that will be used to meet the Entrance Corridor Design Guidelines. Existing plant material may be retained to meet this requirement where possible. Plantings should be proposed in areas where no planting currently exists, where screening will be removed, in areas exposed to view by the proposed clearing, and where trees will be removed once the proposed wider clear zones are in place.
2. Provide an analysis of the entire project area identifying locations where the native Virginia meadow strategy and pollinator gardens will be implemented. Outline the steps that will be taken, beyond tree clearing and trimming, to establish and maintain the meadows, low growing shrub landscapes, and native species pollinator gardens.

ATTACHMENTS

A: [REC's "Vegetation Management" brochure](#)

B: [Applicant's proposal](#)

TABLE A This report is based on the following submittal items:

Sheet #	Drawing Name	Drawing Date/Revision Date
1-7	Special Use Permit Plans: Title Sheet, Transmission Line Improvement Plan	2-18-20
	Project Narrative with Exhibits (SP)	2-18-20
	ARB Narrative – Supplement to SUP Narrative	2-18-20



Figure 1: View of completed power line upgrade in Greene County.



Figure 2: Google street view looking southwest showing the cleared frontage of a residential property in the corridor.



Figure 3: Google street view looking south showing the cleared frontage of a commercial property in the corridor.



Figure 4a: Photo looking south showing a representative frontage condition along the corridor with wooded, cleared ,frontage and open view of the power lines.



Figure 4b: Google street view looking north showing a representative frontage condition along the corridor with wooded area, cleared frontage, and an open view of the power lines.



Figure 5a: Photo looking north showing a representative frontage condition along the corridor with wooded area divided by the power lines and screening vegetation remaining along the street.



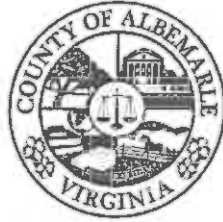
Figure 5b: Google street view looking south showing a representative frontage condition along the corridor with wooded area divided by the power lines and screening vegetation remaining along the street.



Figure 5c: Google street view looking north showing a representative frontage condition along the corridor with wooded area divided by the power lines and screening vegetation remaining along the street.



Figure 5d: Google street view looking south showing a representative frontage condition along the corridor with wooded area divided by the power lines and screening vegetation remaining along the street.



**COUNTY OF ALBEMARLE
Department of Community Development
401 McIntire Road, North Wing
Charlottesville, Virginia 22902**

Phone (434) 296-5832

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May 12, 2020

Valerie Long, Esquire
Williams Mullen
321 E. Main Street, Suite 400
Charlottesville, VA 22903

RE: ARB-2020-31: Rappahannock Electric Cooperative (TMP: 02100-00-00-012D0)

Dear Ms. Long,

The Albemarle County Architectural Review Board, at its meeting on Monday, May 11, 2020, completed an advisory review of the above-noted request to add a 115 kilovolt transmission line above the circuits on the utility poles standing in the 1.6-mile-long corridor adjacent to the southbound lanes of Route 29.

The Board by a vote of 3:1, forwarded the following recommendation to the Planning Commission:

The ARB expresses no objection to the special use permit, subject to the following conditions:

1. Provide an analysis of the entire project area and identify planting areas, either within the proposed easements or within additional easements, that will be used to meet the Entrance Corridor Design Guidelines. Existing plant material may be retained to meet this requirement where possible. Plantings should be proposed in areas where no planting currently exists, where screening will be removed, in areas exposed to view by the proposed clearing, and where trees will be removed once the proposed wider clear zones are in place.
2. Provide an analysis of the entire project area identifying locations where the native Virginia meadow strategy and pollinator gardens will be implemented. Outline the steps that will be taken, beyond tree clearing and trimming, to establish and maintain the meadows, low growing shrub landscapes, and native species pollinator gardens.

If you have any questions concerning any of the above, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Margaret Maliszewski".

Margaret Maliszewski
Chief of Planning/Resource Management
434-296-5832 x3276
mmaliszewski@albemarle.org

cc: Rappahannock Electric Cooperative
5045 Dickerson Road
Charlottesville, VA 22901

File

WILLIAMS MULLEN

Direct Dial: 434.951.5709
vlong@williamsmullen.com

October 16, 2020

VIA EMAIL: ARBMembers@albemarle.org

Albemarle County Architectural Review Board
Community Development
401 McIntire Road
Charlottesville, Virginia 22902

RE: Rappahannock Electric Cooperative (ARB 2020-31)

Dear Members of the Board:

Since my letter to you of July 24, 2020, I have had the opportunity to speak with each of you individually, and I would like to reiterate my appreciation for your time and guidance in connection with the Rappahannock Electric Cooperative application. I have also had several follow up meetings with Margaret and Scott Clark, who is the lead reviewer on the SUP application, about our interest in coming back before the Board to discuss the application again in an effort to collaborate with you on recommended conditions of approval that are workable for REC and the project. We appreciate the opportunity to continue this discussion with you on this important project for the community.

In addition, since our ARB meeting on May 11, 2020, REC has carried out its five year maintenance of the right-of-way along the project boundary. I visited the site just a few days later and took a number of photographs of the conditions along the right-of-way corridor to document the maintenance, and I understand that Margaret and Scott have visited the area as well. We will be prepared to share samples of our photographs at the next meeting, and discuss REC's plan to continue utilizing Integrated Vegetation Management ("IVM") along the corridor in both the existing and proposed expansion of the easement area. We think that the photographs we have of the pre-maintenance conditions and the post-maintenance conditions will enable us to more effectively describe how IVM will be implemented, and how it is an appropriate plan for maintaining this corridor while also allowing REC to carry out the project and meet its obligations to protect the community from electrical outages caused by inappropriately managed vegetation.

With that in mind, we have worked to identify ways that we might work with you to update the proposed conditions of approval to clarify that REC will implement IVM in the project area. REC has also begun the process of creating a corridor specific IVM plan, which I have enclosed. This draft IVM plan is in the early stages of development, and subject to further review and updates by REC and its team of certified utility corridor arborists, but it is our hope that it will provide a better explanation of how REC will utilize IVM to manage the vegetation along the Entrance Corridor and balance the objectives listed in the draft plan. We have also worked to update the proposed conditions to specifically refer to the plan, such that if the SUP is approved, implementation of the final plan would be a condition of approval of the SUP.

We look forward to discussing this project with the Board in more detail in the coming weeks. Should you have any questions or comments that we can address in advance of the meeting, please do not hesitate to contact me. Again, we appreciate the additional time and

July 24, 2020
Page 2

guidance that each of you and Margaret and Scott have provided in connection with this important project.

Thank you for your consideration.

Sincerely yours,

Valerie W. Long

Valerie W. Long

Attachments (2)

cc: Margaret Maliszewski, Chief of Planning - Resource Management
(MMaliszewski@albemarle.org)

Scott Clark, Senior Planner
(sclark@albemarle.org)

Lee Brock, Rappahannock Electric Cooperative
(lbrock@myrec.coop)

Rappahannock Electric Cooperative

Integrated Vegetation Management Plan to Accompany SUP 2020-00007

_____, 2020

This Integrated Vegetation Management Plan (this “IVM Plan”) is prepared by Rappahannock Electric Cooperative (“REC”) in connection with its proposed 115 kV transmission line in Albemarle County.

Background:

Unmanaged vegetation growing near power lines can damage electric facilities and cause problems with public safety, power supply, access, emergency service restoration, security, and lines of sight. It can also compromise compliance with environmental, legal, regulatory, and other requirements. Vegetation interference with power lines is one of the most common causes of electrical outages, as it can cause electric service interruptions when it contacts or comes sufficiently close to overhead high-voltage conductors to create an arc. Vegetation and conductors can come too close together when they are blown into one another by high wind or when lines stretch and sag due to high temperatures or heavy snow or ice buildup. Trees may also provide access for children and others to lines, potentially resulting in contacts that can cause serious injury or death.

In light of the effect that tree-power line conflicts can have on public safety and service reliability, utilities are required to control vegetation growing in proximity to electric facilities. Proper vegetation management along utility rights-of-way (“ROW”) is particularly essential for avoiding problems attributed to poorly managed vegetation and overgrowth

Integrated Vegetation Management (“IVM”) is a practice of promoting desirable, stable, low-growing plant communities that will resist invasion by tall growing tree species, through the use of appropriate, environmentally sound and cost-effective control methods. IVM strategies are both integrative and site-specific and can reduce the environmental impacts on land, water, habitat and wildlife, and reduce environmental and human health risks in a more effective, safe, and cost-effective manner.

Objectives

REC’s objectives in this IVM Plan are:

- Implement environmentally sound, cost-effective control of vegetative species that potentially conflict with REC’s electric facilities and infrastructure, while promoting compatible, early successional, sustainable plant communities which have myriad environmental, health, and social benefits.

- Prevent outages caused by vegetation. Execute a proactive approach to prevent and reduce exposure to tree-caused power outages that balance all other Objectives.
- Maintain access for its employees and contractors to safely carry out maintenance and repairs within the ROW, and minimize injuries due to slips, trips, and falls.
- Facilitate prompt and safe restoration of electric service during emergencies and outages
- Protect its infrastructure (including poles, wires, and transformers, among others).
- Proactively manage to promote native Virginia meadows, low growing shrub landscapes, and native species pollinators in the existing and proposed utility easement areas by suppressing forest succession.
- Promote lower growing trees, certain amounts of brush, grasses, wildflowers, and other compatible vegetation that is compatible with safety needs and regulations, and that is visually pleasing when viewed from the Entrance Corridor.

Site Evaluation:

After managing this portion of its territory for many years, REC is very familiar with the site characteristics and conditions, which vary along the 1.6-mile span of the project. Some areas are wooded, some are developed with private residences and associated lawns and accessory structures, others are developed with small businesses and associated improvements such as buildings and parking lots. One parcel includes a house of worship and areas that are wooded and others that are open.

There is a variety of Virginia upland mixed hardwoods, with excellent growing site conditions (excellent soil, drainage, and water). REC has assessed the height of its poles and lines, density of stems per acre, species, voltage, loading, and other site conditions.

Trees adjacent to the line will be pruned based on projected growth which varies dramatically depending on species. For example, a maple tree may grow six to ten feet per year on a favorable site, while a cedar tree may only grow six inches.

Trees within the right-of-way will be allowed to remain if they are low growing, compatible species such as redbuds, dogwoods, winterberry, serviceberry, etc. Trees that are incompatible, such as yellow-poplars, oaks, maples and other “timber-sized” species will be removed every five years. In addition, trees outside the right-of-way may be periodically assessed for health and vigor and selectively removed if they are found to be potentially dangerous.

Some of the areas that currently have a “tunnel” effect created by trees that hang partially over Rt. 29, will be more open and be more visually pleasing after the vista is created between the road and new tree canopy line.

Based on this site evaluation, REC has determined that a five-year maintenance cycle is appropriate, along with a mid-cycle hazard tree inspection. The mid-cycle inspection will assess whether any hazardous situations have developed since the maintenance was carried out, and provide an opportunity to conduct appropriate remedial action to correct those situations. REC has a fiduciary responsibility to its member owners to minimize expenses associated with maintenance cycles, but the site characteristics of the project area are such that there is the potential for hazards to develop in less than five years. The mid-cycle assessment is designed to reduce these hazard risks.

Action Thresholds

Action thresholds for this project area are as follows:

- Any plant species that has an ability to attain a height of 10 feet will be treated and/or removed at the time of the 5-year maintenance cycle.
 - This clearance height will be sufficient to prevent flashover between trees and conductors, considering the combined movement of vegetation and conductors in high wind and sagging of conductors due to elevated temperatures and icing.
- Trees and other vegetation that are a compatible species and that do not typically attain a height of 10 feet may be left in place and pruned if necessary.
- These guidelines will at all times be subject to the rights of, and shall not limit the rights of any person or entity other than REC, such as the owners of the subject parcels and any lessee, tenant, or easement holder other than REC or its successors, within the utility easement areas to carry . For any period of time during which such other persons or entities maintain their land by use of an alternative practice (such as mowing), Rappahannock Electric Cooperative's obligation to implement Integrated Vegetation Management shall be deemed satisfied with respect to any portion of the existing and proposed utility easement areas that is so maintained.
- Most dead or dying trees will be removed, and the wood will be left for the property owner, unless it is possible to leave a habitat tree that will not fall into a roadway or be a risk to the public.
- If any dead or dying tree is not adjacent to a roadway or it would not otherwise create a safety hazard, there shall be consideration for leaving all or a portion of the dead or dying tree in place as wildlife habitat for raptors and other nesting animals. Trees occasionally can be left at 10-12 feet to become hunting perches for raptors or cavity nesting birds, if they will not pose a safety threat.
- This requirement is subject to, and does not limit, the land use rights of any person or entity other than Rappahannock Electric Cooperative or its successors. Such other persons or entities include the owners and any lessee, tenant, or easement holder other than Rappahannock Electric Cooperative or its successors, of any underlying parcel(s)

of land within the existing and proposed utility easement areas, who may desire to manage the land using alternative methods (such as mowing), provided that such alternative methods are consistent with REC's easement rights.

Evaluation and Control Methods

REC will work to achieve the Objectives of this Plan using the following control methods:

Manual Control Methods. Manual methods are performed by maintenance workers with hand-carried tools, such as chain saws, hand saws, pruning shears, and other devices to control incompatible vegetation. These methods are selective and can be used where other methods are not appropriate.

- Manual methods will be used in any environmentally sensitive areas within the project area, such as stream banks and critical slopes.

Mechanical Control. Mechanical control methods are carried out using machines. REC will utilize mechanical controls where appropriate, such as bucket trucks with hydraulic saws combined with other mechanical pruning equipment.

- Mechanical methods will not be used in any environmentally sensitive areas within the project area, such as stream banks and critical slopes.

Trees adjacent to the line will be pruned based on projected growth which varies dramatically depending on species. For example, a maple tree may grow six to ten feet per year on a favorable site, while a cedar tree may only grow six inches.

Trees within the right-of-way will be allowed to remain if they are low growing, compatible species such as redbuds, dogwoods, winterberry, serviceberry, etc. Trees that are incompatible, such as yellow-poplars, oaks, maples and other "timber-sized" species will be removed every five years. In addition, trees outside the right-of-way may be periodically assessed for health and vigor and selectively removed if they are found to be potentially dangerous.

Some of the areas that currently have a "tunnel" effect created by trees that hang partially over Rt. 29, will be more open and be more visually pleasing after the vista is created between the road and new tree canopy line.

Implementation

Based on REC's assessment of the site and experience with the project area, it proposes a regular work schedule to achieve the Objectives of this Plan.

REC will implement this Plan on a regular 5-year maintenance schedule with a mid-year inspection cycle.

This schedule will include prompt monitoring and quality assessment as discussed in more detail below.

Monitoring and Quality Assurance

Following each 5-year maintenance cycle, REC will continue to implement an inspection and quality control process to ensure that the Implementation of this Plan is consistent with the stated Objectives.

- The entire length of the project area will be inspected on foot by an ISA certified arborist.
- The inspection will assess whether any remaining hazards exist and confirm that this Plan has been effectively implemented
- Monitoring may also be carried out by aerial assessment as well as foot patrols
- Any areas not in compliance with this Plan will be promptly addressed and corrected, typically Inspection of completed work.
- REC will utilize an electronic documentation system to confirm remedial actions comply with this Plan and are promptly carried out.

As new information becomes available and as site conditions and circumstances evolve, REC shall reassess this Plan as appropriate, and provide any updated plan to the Director of Community Development or his or her designee.

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The ARB expresses no objection to the special use permit, subject to the following conditions:

1. Rappahannock Electric Cooperative (“REC”) shall maintain the existing and proposed utility easement areas by implementing the Integrated Vegetation Management plan prepared by Cindy Musick, Director of Vegetation Management for REC dated _____, 2020, entitled “Integrated Vegetation Management Plan to Accompany SUP 2020-000007” (the “IVM Plan”), which IVM Plan is attached hereto.
2. This requirement is subject to, and does not limit, the land use rights of any person or entity other than Rappahannock Electric Cooperative or its successors. Such other persons or entities include the owners and any lessee, tenant, or easement holder other than Rappahannock Electric Cooperative or its successors, of any underlying parcel(s) of land within the existing and proposed utility easement areas. For any period of time during which such other persons or entities maintain their land by use of an alternative practice (such as mowing, or other development or modifications permitted or approved by Albemarle County), Rappahannock Electric Cooperative’s obligation to implement Integrated Vegetation Management shall be deemed satisfied with respect to any portion of the existing and proposed utility easement areas that is so maintained.
3. REC retains the right to remove or trim any tree, or portion thereof, within the existing and proposed utility easement areas, when it determines such action is necessary to protect public safety.



View north from 5046 N. Seminole Trail (currently closed convenience store)



View north from Frays Mills Road



View north from Frays Mill Road



View south from Frays Mill Road



View north from Dickerson Road