

COLLINGTON LANDSCAPE MASTER PLAN

August 4, 2019

Update: August 11, 2021

Plan Summary

The compelling landscape of Collington sets it apart from other senior living communities in the metropolitan area. Collington's 125 acre campus contributes to the region's environmental sustainability, and to our community's wellbeing and our residents' physical and mental health.

Recognizing the importance of the landscape to both residents and Collington's future marketability, the Grounds Committee prepared its initial Landscape Master Plan in summer 2019. It is believed to be the first such comprehensive effort in Collington's history to document, preserve, and enhance its 125-acre campus.

This landscape plan was completed just as the Collington Master Plan process began. Collington management and Kendal Corporation determined that rehabilitation of the Creighton Health Center could not be funded without the construction of a significant number of independent living units. This landscape plan update calls for monitoring Collington's master planning process and assessing potential effects that could occur both during and after construction. The landscape plan will also consider the critical need to rectify long-deferred maintenance issues that also may threaten the community's marketability.

Considerations

A wide range of concerns is helping to inform the planning process. Key points include:

- *The campus location within the Chesapeake Bay Watershed, and Collington's designation as both a Certified Wildlife Habitat and a Level 1 Arboretum;*
- *Collington's commitment to accepted environmental principles and mitigating the adverse effects of climate change, such as incorporating low-maintenance/drought-resistant standards, promoting use of native species and eliminating invasives; and reducing and eliminating vehicle emissions, pesticides, and herbicides.*

Goals

The Landscape Master Plan endeavors to foster an environment that promotes:

- **Outdoor experiences:** *Provide welcoming, enriching, stimulating, comfortable, healthful, safe, sustainable, and inspiring outdoor experiences for all residents, staff, and visitors;*
- **Environmental preservation:** *Preserve Collington's abundant plant and wildlife and highlight its rich variety of milieus;*
- **Accessibility:** *Offer a range of settings and choices for older adults of diverse abilities and interests as well as for staff, visitors, and pets;*

- **Sustainability:** *Develop and support a campus that is multi-functional, ecologically sustainable, efficiently maintained, and secure; and that is responsive to the larger ecosystem; and*
- **Model of Landscape Design:** *Serve as a model of landscape design for Collington and other life plan communities, with its implications for overall health, wellness, socialization, enjoyment, and sustainability.*

Action Plan

The above considerations and goals are intended to provide a framework for an action plan. It will be developed and implemented in cooperation with Resident Association committees and subcommittees, Collington management, and relevant public and private agencies and specialists. The Landscape Master Plan recognizes that despite probable high costs, major issues must be addressed. Actions include:

- *Monitoring the Collington Master Planning process and progress before, during, and after construction;*
- *Setting priorities, based on multiple criteria, such as, critical need, importance for the environment, marketing advantage, and comparative expense;*
- *Preparing a campus-wide Zoning Map and determining appropriate uses and policies for each;*
- *Developing a comprehensive plan for woodlands cleanup, revitalization, and maintenance;*
- *Preparing a plan for upgrading and improving accessibility of paved and unpaved trails;*
- *Addressing existing, and potentially new, serious soil erosion and drainage environmental and life-safety issues;*
- *Formulating a pruning and replacement policy and developing a comprehensive planting plan;*
- *Developing an equitable system for improvement and maintenance of the exterior environments of all resident open spaces;*
- *Developing a consistent approach to hardscape, considering issues of accessibility, life-safety, and recreation;*
- *Establishing procedures to further collaboration among the Grounds Committee and its subcommittees with other resident committees and subcommittees;*
- *Increasing campus-wide focus on such activities as composting, carbon sequestration, and recycling;*
- *Preparing a campus-wide preventive landscape maintenance management plan that is both realistic and efficient;*
- *Establishing an evaluation process for measuring and reporting on goal achievement.*

Focus Areas

The landscape plan provides an opportunity to foster broadening the scope of Collington’s outdoor “experience” and to recommend both expanded and new possibilities, such as preserving our 19th-century burying ground and developing a multi-purpose commons at a greatly underutilized, but central and large campus space: the area extending from the Main Building Community Center to Collington Lake.

Introduction

Importance of the Landscape: People decide to come to Collington for a number of reasons. For many of them, the low-density, plant-filled landscape is an important deciding factor. Collington's large, ecologically diverse property, with its many sizable trees and variety of shrubs and flowers, is a major marketing advantage. The landscape sets Collington apart from other senior living communities in the Washington, DC metropolitan area.

The recent cleanup of Collington Lake by Prince George's County demonstrates how Collington's landscape shares an important and continuing responsibility in the sustainability of the larger region. The experience of living through Covid-19 also has confirmed both the critical need for, and extraordinary advantage of, Collington's outdoor spaces, walkways, and trails in sustaining our community's physical and mental health.

The Context: Collington's initial Landscape Master Plan was prepared in summer 2019. This resident-driven activity is believed to be the first such comprehensive effort in Collington's history to document, preserve, and enhance its 125-acre campus.

The initial Landscape Master Plan was completed just as the Collington Master Plan process began. As of August, 2021, the Collington Master Plan Committee is beginning its Schematic Design Phase, but many of the impacts of that plan on the Collington campus remain unknown. Clearly, rehabilitation of the Creighton Health Center remains the priority. Both Collington management and Kendal Corporation have determined that this rehabilitation cannot be funded without the construction of new independent living units in order to generate additional income from entrance and monthly fees and to qualify for the necessary loans. These new units would impact the campus.

Next Steps: The Landscape Master Plan update calls for an appraisal of potential effects that will occur both during construction and after completion. These will be incorporated into the landscape plan as Collington Master Plan process moves forward. The plan will also consider the critical need to rectify deferred maintenance issues that threaten the community's marketability.

Since the initial landscape plan, progress has been made in a number of the plan's action areas, and these are being incorporated into this update. This includes the work of the Grounds Committee and its subcommittees as well as interrelated efforts of a number of other resident committees and subcommittees. It also suggests areas where these groups' activities may overlap and how they may collaborate more efficiently and effectively.

The Grounds Committee views its landscape planning efforts as part of the larger framework of Collington's strategic planning goal of stewardship of its people and resources both on campus and in the broader community. In cooperation with relevant Collington resident committees and subcommittees, Collington staff, and outside stakeholders, the Grounds Committee has prepared

this evolving, campus-wide Landscape Master Plan covering the entire 125-acre campus. This document includes:

- Current Setting;
- Considerations;
- Goals;
- Focus Areas;
- Action Plan Outline; and
- Actions and Activities, including a record of recent progress.

The Landscape Master Plan provides an opportunity to foster broadening the scope of Collington’s outdoor “experience” and to recommend both expanded and new possibilities. A special section on “focus areas” suggests some of these, such as preserving our 19th-century burying ground and developing a multi-purpose commons at a greatly underutilized, but central and large campus space: the area extending from the Main Building Community Center to Collington Lake.

The ongoing work described in this update is intended to lead to the development of a wide-ranging action plan.

Current Setting

Collington’s existing 125-acre campus offers a variety of outdoor experiences:

- Approximately 54 acres of woodlands that are outside our perimeter road and the wooded berms that are inside our perimeter road existed at the time of Collington’s founding;
- More than 3 miles of trails, both paved and unpaved, in wooded and open areas, and with a variety of terrain;
- 1.1 miles of covered walkways among the cottage clusters;
- Open grass courtyards at the center of each cluster, with a variety of landscaping, and open grass areas behind each cluster, also with a variety of landscaping; and open spaces adjacent to the villas and apartments;
- Common sitting areas at the villas and cottage clusters;
- Individual, in-ground gardens at villas, cottages, and apartments, and apartment balconies;
- Hilltop community garden with individual plots, and accessible raised beds adjacent to the Greenhouse;
- A variety of gardens and water features: a formal central courtyard in the Main Building’s Community Center, a memory-care enclosed garden in the Creighton [Health] Center, a 7-acre retention pond, Collington Lake, with a covered pavilion and dock, and a small retention

pond. Both the Lake and pond are under the oversight of Prince George's County Department of the Environment; and

- Collington's recognition as a Certified Wildlife Habitat by the National Wildlife Federation; and designation as an Arboretum, Level 1, by the ArbNet Arboretum Accreditation Program.

Considerations

Both internal and external factors affect the milieu in which the landscape planning effort is taking place. A wide range of considerations will help define the parameters that will guide the planning process. As a first step in this process, the Grounds Committee recognizes the importance of:

- Collington's location within the Chesapeake Bay Watershed. The campus is an integral part of the watershed's ecosystem. The Chesapeake Bay estuary, a body of water where fresh and salt water mix, is the largest of more than 100 estuaries in the United States and third largest in the world. According to the National Wildlife Federation, "Unfortunately, the Chesapeake Bay faces serious problems due to human activities."
- Collington's important designation as both a Certified Wildlife Habitat and a Level 1 Arboretum;
- The community's role in supporting its natural resources, including Collington Lake and the small retention pond; being sensitive to the wetlands, particularly the area below the dam; enhancing tree cover and growth, with emphasis on native species and ecologically responsible removal of invasives; supporting appropriate species of local and migratory wildlife; and, generally, contributing toward recovery of the Bay;
- Collington's commitment to environmental principles. Incorporating low-maintenance/drought-resistant standards for improving water quality, reducing vehicle emissions, reducing the need for chemical pesticides and herbicides, and adopting landscape values and principles advocated by environmental public agencies and not-for-profit organizations [See Appendix A., Organizational Resources. To come.];
- Collington's 125-acre campus as a major marketable feature, with its perimeter woodlands in addition to the attraction of the cottage and village clusters positioned within ample landscaped and natural settings;
- Recognizing that both new construction and deferred maintenance concerns are of critical importance;
- The vital role Collington's trees play in mitigating the adverse effects of climate change;
- Collington's landscape in benefitting resident wellbeing: The walkways and trails, combined with natural beauty, encourage outdoor exercise, with the concomitant benefit of exposure to vitamin D synthesis from sunlight. Walking around Collington also promotes social interaction, as residents meet and talk with each other;

- The strong and positive relationships between Collington’s natural and built environments;
- Recent research pointing to significant physical and mental health benefits of access to the natural environment;
- The contribution Collington’s campus makes to the environmental health and attraction of Prince George’s County, particularly given the rapid rate of residential development and concomitant diminished forest acreage in the Collington vicinity;
- The community’s strong commitment to inclusiveness, particularly, the aim to be a hospitable environment to meet a variety of resident choices and needs, and its implications for campus-wide planning;
- The considerable significance to, and involvement by, residents in Collington’s outdoors appearance;
- Enhancing special existing and new common areas, the Focus Areas, that can expand resident experience and potentially increase Collington’s marketability;
- Recognizing the consequences of existing and escalating conservation conditions:
 - The forest outside the perimeter road is not regenerating with appropriate species. Invasive vines and non-native plants, as well as deer browsing the undergrowth, are preventing the growth of small trees to replace the aging stock.
 - Within the clusters and around apartments and villas, there are many aging trees and some unhealthy trees and shrubs. Several species of pines are dying, and there is minimal regrowth. In addition, some plantings were inappropriate for their locations.
 - Serious soil erosion and drainage issues exist in both developed and woodland areas. This includes cluster drainage issues, including walkway and common area flooding, between drainpipes connected to the cottage roof downspouts, soil erosion of bare ground particularly under large Cherry trees, and damage to grass caused by the drip line from walkway roofs;
- Paying attention to prevalent life-safety issues such as poor drainage, uneven walking surfaces, and accessibility, including freezing conditions in winter;
- Eliminating use of pesticides and herbicides because of their effects on humans, flora, and fauna on campus, and the effects of chemicals use on the Lake and immediate environs. The cost of potential increase in work hours required may be offset by achieving other cost reductions;
- Recognizing legal constraints for new development and the need to monitor adherence to them. In June 2021, the engineering consultants, MHG, reported on the legal limits of areas not suitable for construction:
 - A 100’ offset around the campus boundaries;
 - A surprisingly large flood plain area
 - Slopes too steep for building; and

- Stormwater easements emptying into the retention pond.
- Closely monitoring the Collington Master Planning process and progress before, during, and after construction;
- Monitoring changes in the plan on an ongoing basis. By the end of June 2021, 15 potential zones suitable for construction had been reduced to 9, and what had been estimated as 38 new units needed to offset costs of Creighton repositioning had grown to a potential 44, due to recent construction-cost escalation;
- Ensuring that approved policy guidelines are adhered to. At its June 11, 2021, meeting, the Master Plan Committee agreed to:
 - “Make decisions that would:
 - Attract new residents
 - Minimize disruption to the community and its culture
 - Minimize construction costs (e.g., concentrating construction sites to as few sites as possible)
 - Save as much as possible of our trees, berms, green space, etc.
 - Minimize our harm to the environment in view of climate change.”
- Identifying modest to potentially critical impacts of proposed development that could alter both the natural- and human-built environments, for example, potential effects of new construction on the existing, significant paved and unpaved trail system, and consequential impact on Collington’s very marketable attraction as a walkable campus;
- Acknowledging the essential function of the existing cottage covered walkways and considering how proposed new units would become an integral part of that system;
- Preserving and protecting the existing tree canopy, including the implications of climate change, as opposed to new, small trees, and the pleasant, rolling topography of the berms, as opposed to the possible leveling areas for new construction;
- Recognizing that Collington’s open spaces constituted a key design element when the campus was laid out originally, and that such proposals as planting a clump of trees in an open area as part of a mitigation plan could contribute to obliterating that element, for example, planting large trees in the open area outside the main Dining Room and Ivy Lounge that would obliterate views of Collington Lake; and
- The importance of resident inter-committee, subcommittee, and staff collaboration, including the Grounds Committee and its subcommittees: Weed Warriors, Planting, Arboretum, and Birds , and the Building, Climate Action, Garden, Flower, Courtyard, Health, Fitness, Low-Vision, Social Support, Accessibility, Parkinson’s, Care Giving, Outreach, Hospitality, Dining committees and subcommittees, and the Health Services Alliance, Master Plan Committee.

Goals

The Landscape Master Plan endeavors to foster an environment that promotes:

- **Outdoor experiences:** Provide welcoming, enriching, stimulating, comfortable, healthful, safe, sustainable, and inspiring outdoor experiences for all residents, staff, and visitors;
- **Environmental preservation:** Preserve Collington’s abundant plant and wildlife and highlight its rich variety of milieus;
- **Accessibility:** Offer a range of settings and choices for older adults of diverse abilities and interests as well as for staff, visitors, and pets;
- **Sustainability:** Develop and support a campus that is multi-functional, ecologically sustainable, efficiently maintained, and secure; and that is responsive to the larger ecosystem; and
- **Model of Landscape Design:** Serve as a model of landscape design for Collington and other life plan communities, with its implications for overall health, wellness, socialization, enjoyment, and sustainability.

Focus Areas

Collington’s eclectic campus makes it ideal to emphasize its range of natural and designed environments. The Landscape Master Plan provides the opportunity to focus on distinctive enhancements to both existing and new areas that can further enrich the Collington “experience.”

The Clocktower Courtyard

The Collington Courtyard is the centerpiece of the campus’s Main Building Community Center. By 2015, the courtyard had fallen well short of meeting its original design intent as the center of the Collington community. In 2016, a group of residents began focusing on the Courtyard and sketched out a plan for its rejuvenation. Through a \$9,400 grant from the Collington Foundation, the Grounds Committee oversaw basic improvements, including drainage, cleaning, lighting, clearing, and initial planting.

In 2018, the Collington Residents Association appointed an Ad Hoc Courtyard Committee to continue the improvement process. Through a second foundation grant of \$17,895, the committee continued the planting program, added attractive planters and plants to add color and interest, and supplied new, sturdy dining tables and chairs and seat cushions, replacing the previous unsafe chairs.

The Courtyard has become the major focus of outdoor campus-wide activity as a comfortable space for dining, meetings, partying, and casual conversation, by residents, staff, and visitors. The committee, now a Grounds subcommittee, is continuing the process of transforming the Courtyard, enhancing its utility, and improving its function as an inspirational space for both using and viewing

throughout the year. The easy visual and physical access from all four interior sides is considered fundamental to its success.

Continuing areas of concern include drainage and paving issues. The impact of changes to Dining Room access and reduced size of the courtyard proposed in the Collington Master Plan should be monitored. Consideration should be given to expanding use of the Courtyard as an ideal site for social events, fundraising benefits, music programs, dining, meetings, and its potential for rentals.

Green Spaces: *The Commons / The Green / A Contemplative Place*

Collington enjoys three central sizable and accessible lawn spaces, each of which needs greater attention. Each is currently underutilized but could add welcoming, varied dimensions to the Collington experience. The significance of the outdoors during Covid-19 underscores Collington's need to provide even more functional open areas, particular seating areas.

❖ *The Commons*

A key focus of the Landscape Master Plan is to revive the area between the Main Building Community Center and Collington Lake as a multi-purpose outdoor environment. When Collington was first developed, this space, particularly the area that became the Lakeview section of the Dining Room, was a campus focal point. After Lakeview was constructed, the area's use, as well as visual connection to the Lake, declined.

The Commons has the potential to be a large, highly accessible, multi-use, and visually inspiring open space on campus. The area extends north-south, from the Dining Room to Collington Lake, and east-west, from the slope above the apartments to the Main Building west wing containing the Landing, classrooms, Security, and part of the Creighton Center. [A long-range proposal for a spa/pool facility in the west wing is not included in the current Collington Master Plan.]

The Commons project is intended to:

- Enable residents to engage, explore, and enjoy;
- Be inviting, functional, and comfortable;
- Effortlessly complement residents' daily routines;
- Provide a safe, minimal risk, accessible, secure, location;
- Assure caregivers – whether employees, aides, family, or friends – that it is close by and easily used in a variety of ways; and
- Expand opportunities for intergenerational activities.

Proposed features include:

- Flexible spaces that offer both sun and shade and promote a range of activities and uses, varying levels of activity based on physical and cognitive condition, spaces that encourage social interaction, as well as others that enable relaxing, quiet, calm, passive, and gentle pursuits, with durable and safe seating;

- Curved, level, wide ADA-accepted, “round trip” walkways leading from the Dining Room, Ivy Lounge, and hallway exits to the Lake with automatic doors as appropriate;
- Along the walks, several fixed seating areas adjacent to simple, low-growing hardy plantings, including shrubs – evergreen or plants with an interesting growing habit – and evergreen perennials and ground covers; including some low plants that encourage butterflies and birds and provide olfactory as well as visual interest;
- A patio outside the Dining Room and Ivy Lounge, perhaps including a small self-serve juice bar and/or a barbeque and some chairs and tables and a few shade sails, that can be used for exercise as well, with an adjacent area set aside for a movable bocce court usable by those who require playing from a paved surface;
- Unobstructed views of the Commons and the Lake from all public buildings and open spaces;
- Some movable seating to provide a variety of configurations including large gatherings;
- All hardscape with non-glare surfaces; and
- Landscape screening between the Commons and the apartments.

A Center for Health Systems & Design at Texas A & M University study [2010] found that many of the above features at senior living facilities increased usage dramatically. Empirical research also has shown that easy access significantly increases usage. Although not in the Grounds Committee purview, increased egress from the Main Building Community Center, the Ivy Lounge, Dining Room, and hallway, and installation of an elevator from the 3rd floor and the Creighton Center 4th floor to the southwest corner of The Commons, will provide more incentives for use by residents and employees.

❖ ***The Green***

The common sitting and lawn area along Broadway just north of Greenhouse, provides a peaceful vista for its surrounding neighbors, the many residents, employees, and visitors who enjoy the adjacent sitting area, as well as for the multitude of passersby. It is also used for exercise classes, meetings, and concerts.

At one point, the Collington Master Plan proposed relocating the pickle ball courts here; this fast and noisy activity is the antithesis to this pleasant, peaceful space. Focus should be on furthering and expanding the existing relaxing and festive activities, e.g., developing flexible constructs that enable a variety of easy-to-arrange configurations.

❖ ***A Contemplative Place***

Increased residential interest in creating a restful exterior space has led to the idea of designating a quiet location for contemplation such as a meditation space.

Collington Lake

Perhaps the campus's most beautiful and peaceful feature is the 7-acre Collington Lake. The importance of preserving and increasing the lake vistas and access from all of buildings, paths, and roads fronting on the lake cannot be minimized.

In 2017, Prince George's County Department of the Environment, which has oversight over the Lake, supervised the construction of a sediment- and pollutant-reducing forebay as well as the forebay's 2021 cleanup. Continued monitoring and protection of the Lake are important as a part of the Chesapeake Bay Watershed. Collington contracts the monitoring of the Lake's water quality and the maintenance of the aeration pumps. Because of relatively rapid buildup of sediment, dredging of at least the forebay will be required on a more frequent basis than initially projected. In addition, the potential for polluting elements due to construction washing into the lake should be considered.

The benefit in increasing residential use of the Lake is obvious. This would include developing activities that utilize the assorted watercraft there [kayak, row boats, skiff, canoes, and paddle boats], and developing a system for their safe use and maintenance.

The pavilion and dock need to be repaired and the surrounding area cleaned up; a well-designed boat storage system installed; existing boats repaired; and a system put in place to keep the paddle boats free of water and clean to maximize the Lake's usability. Shoreline vegetation around the Lake's perimeter, the dock, the dam, and on the forebay should be managed in consultation with the Prince George's County Department of the Environment.

Attention also should be paid to the seriously deteriorating small retention pond between the 5000s and 5100s.

Croquet Court Oval & Garden

In 2021, residents gave the deteriorating plantings around the croquet court a facelift by creating a perennial garden at its south end. This improvement to the space will require monitoring and maintenance, including assessment of the surrounding hedge.

The Stream Retreats

The woodlands adjacent to the culvert under the entrance road offer potential – and very different – enrichments to the campus. Unfortunately, its proximity to the main entrance road and the speeding cars, presents challenges.

- In spring 2021, the Weed Warriors discovered, and would be interested in restoring, what may have been an old meandering trail on the hill just to the south of the east side of the culvert and stream and leading to the south side of Collington Lake. It potentially would be easily accessible from the entrance road, and possibly link up with the trail leading to the dam and the east end of the Lake. Boundary/ownership/easement and safety questions, however, must first be answered.

- At the stream directly under the east side of the culvert is Collington’s only real “waterfall.” This area may have the potential to be a peaceful rest area adjacent to the existing trail north of the stream.

Burying Ground and Potential Archeological Sites

The Maryland-National Capital Park and Planning Commission, Prince George's County Planning Department Historic Preservation Section’s Historic Cemeteries Survey, 2006, includes the graves of the Waring Family, the occupants of this property, then called Heart’s Delight, during the 18th-19th centuries. Up the hill from the perimeter road are four Waring family gravestones. Given their increasingly deteriorating condition, these gravestones require stabilization and restoration by an accredited conservator.

The larger vicinity around this area is perhaps the only part of the campus that is relatively undisturbed from the Waring era, except for the radio towers. There is some evidence of remains of old structures that may have been part of the Waring property. Some preliminary work has also been done relating to enslaved persons who resided here. The Landscape Master Plan proposes to engage a county-sanctioned archeologist to determine potential areas for investigation and assure that any such property and possible unmarked graves identified remain protected until survey work is possible. All work would be conducted in accordance with the Secretary of the Interior’s Standards for Archeological Documentation and Maryland and Prince George’s County requirements. Given the age of these cultural properties, legal requirements will probably impact any work.

Action Plan Outline

The above Considerations, Goals, and Focus Areas are intended to provide a framework for an action plan. This plan will include operational policies and processes for shepherding the planning, implementation, and evaluation of all facets of the overall plan. It will be developed and implemented in cooperation with Resident Association committees and subcommittees, Collington management, and relevant public and private agencies and specialists.

The plan will determine a set of priorities based on multiple criteria, such as, critical need, importance for the environment, relative ease of accomplishment, marketing advantage, and comparative expense. It will consider that such factors as deferred maintenance are no longer acceptable strategies. The Landscape Master Plan recognizes that despite probable high costs, major issues must be addressed. As priorities are determined, estimated costs will be developed. This will include pursuing grant opportunities. It also should be noted that many of the following are designed to help achieve more than one of the overall goals.

The plan will include the following components:

- Setting priorities;

- Detailed strategies and tasks;
- Methodology for accomplishment of each element;
- Timeline;
- Responsibility/Personnel;
- Budget;
- Funding plan, including grant opportunities; and
- Ongoing evaluation procedure.

Action Areas and Activities/Recent Progress

As a next step, the Grounds Committee has begun to develop and implement existing projects and to propose new initiatives and maintenance programs for the various types and uses of specific areas of the Collington campus. This includes developing cooperative plans and activities with other resident committees and outside parties. Please note that Action Area bullets do not always match specific Activities directly.

Action Area	Activities/Recent Progress
<p><u>Collington Master Plan Review and Monitoring</u></p> <ul style="list-style-type: none"> • On an ongoing basis: <ul style="list-style-type: none"> ○ Assess potential effects of loss of woodlands and topographical features on the campus’ character. Ensure adherence to county guidelines, for example, any loss of woodlands, including berms, due to new construction needs to be mitigated. Weigh relative impacts of retaining mature species and natural woodlands versus planting young saplings; ○ Evaluate potential effects of loss of woodlands and hilly features on existing residences, taking into account that their siting was likely a major factor in their selection by residents; estimate effects of how important exterior vistas are in marketing proposed new units; determine the environmental footprint of proposed construction, e.g. application of green infrastructure techniques; possible use of permeable hardscape; ○ Make certain that any proposed scheme will have the least impact on both the natural environment and existing residences, and that 	<ul style="list-style-type: none"> • Ongoing: The Collington Master Plan Committee includes resident members.

<p>the larger ecosystem is not only least harmed, but in fact, bettered; recent real estate research has shown that good views and that high percentages of green space increase marketability;</p> <ul style="list-style-type: none">○ Specifically, make sure that any master planning activity does not harm the Chesapeake Bay Watershed, particularly given that, according to the National Wildlife Federation, “Chesapeake Bay faces serious problems due to human activities, including polluted stormwater runoff, over-fertilization and pollution from animal wastes, deforestation, wetland destruction from agricultural, urban, and suburban development, and sea level rise caused by global climate change”;○ Make sure that planning efforts recognize the importance of Colington’s abundance of mature trees. Trees filter out particulate matter and absorb harmful gases while producing oxygen: a single tree might absorb up to one ton of carbon dioxide over a 40-year life span. Trees also slow and filter rain water and protect watersheds; they reduce runoff, erosion, and the possibility of flooding: 100 hundred mature trees can capture up to 100,000 gallons of rainfall per year. Moreover, trees help with energy conservation costs: one mature tree has the same cooling power as 15 room-size air conditioners;○ Ensure that Collington develops a system for easy transportation from new as well as existing residences to campus buildings and outdoor activity areas, such as through electric vehicles, and address potential conflicts among pedestrians, scooters, golf carts, and other electric vehicles.○ Make certain that any paved, accessible walkways and woodland trails eliminated as a result of the construction, are relocated;○ Evaluate and correct effects of soil erosion and drainage issues as a result of loss of natural features and substantial new construction;	
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<ul style="list-style-type: none"> ○ Ensure that master planning efforts take into account the significant benefits of Collington’s natural environment to human physical and mental health, such as lowered heart rate and blood pressure, decreased medication use, improved concentration, reduced anxiety, stress, and depression; and improved concentration and cognitive function; plants also block noise, which contributes to stress in addition to being unpleasant: a well-placed tree can block noise by up to 40 percent, according to North Carolina State University study; ○ Focus on new open spaces, particularly those between the 5000s and behind the proposed 5200s. ○ Assess and monitor the Collington Master Plan construction phase, particularly given that construction sites are potential “hot-spots” for polluted runoff and considerable accumulation of construction-related trash; ○ Ensure that construction disturbance is held to a minimum, recognizing that Collington is a community, not a construction site; ○ Environmental Impact: In collaboration with the Climate Action Subcommittee, develop procedures for continuing to assess the environmental effects of completed construction, including new hardscape, on campus. 	
<p><u>Setting Priorities</u></p> <ul style="list-style-type: none"> ● Establish a set of priority actions, considering both critical needs and budget realities. 	<ul style="list-style-type: none"> ● 5/2019: Grounds Committee prepared a proposed set of Collington Landscape Master Plan Priority Actions. ● 10/2019: Grounds Committee detailed a set of Collington Landscape Master Plan Priority Actions – Environmental Considerations
<p><u>Campus-wide Zoning Map</u></p> <ul style="list-style-type: none"> ● On a scaled base map of the 125-acre campus delineate zones: woodland, wetland, floodplain, open meadow, residential, and special use: clock 	

<p>tower, security, loading dock, woodshop/maintenance, and entrance corridor.</p> <ol style="list-style-type: none"> 1. Define distinctions of each zone within and outside the perimeter road as well as differences among the functional areas within, and policies specified for each; 2. Determine appropriate uses and types of planting within each zone; 3. List acceptable plants within each zone; 4. Identify current non-conforming uses within each zone, e.g. invasive, undesirable plants, or inappropriate activities; 5. List environmental problems within each zone e.g., flooding; 6. Determine required maintenance by zone. 	<ul style="list-style-type: none"> • 2020-2021: Grounds Committee is collecting existing maps, both hard copy and online. • Summer 2021: GIS mapping of Collington’s non-woodlands trees is underway.
<p><u>Woodlands Revitalization</u></p> <ul style="list-style-type: none"> • Develop a comprehensive plan for protecting and regenerating major areas, particularly narrow stretches close to adjacent residential developments, in accordance with the Maryland Department of Natural Resources Forest Service Forest Management Plan process. 	<ul style="list-style-type: none"> • Spring 2021: Grounds Committee developed a proposal, which was approved by Collington CEO; submitted to, and approved by, MD Dept. of Natural Resources Forest Service [DNR]; a survey to collect data on 54.25 acres tentatively scheduled for fall 2021; DNR will conduct a data analysis and prepare a Forest Stewardship Plan that addresses four areas of natural resource management: forestry, wildlife management, soil and water protection, and natural heritage and recreation. Cost: \$250, funded through the Grounds Committee. • Follow up on 2021 Maryland Tree Solutions Act, which authorizes planting of 5 million trees by 2031.
<p><u>Woodlands Cleanup</u></p> <ul style="list-style-type: none"> • Establish a regular schedule for removal of invasive plants, brush, and fallen trees from trail corridors; following standards, such as MD - National Capital Park & Planning Commission - Tree Removal Guidelines, as appropriate. 	<ul style="list-style-type: none"> • Ongoing weekly: Considerable work is being accomplished by Grounds Committee Weed Warriors Subcommittee. • 2021: To enhance views, the Weed Warriors cleared the area around the large Sycamore tree.

<p><u>Woodlands Maintenance</u></p> <ul style="list-style-type: none"> • Formulate and activate a maintenance program, including maintaining and enhancing views from the woodlands trail; maintaining the present condition of the connecting trail to Prince George’s County Regent Forest Community Park; and assessing any safety and/or security needs. 	<ul style="list-style-type: none"> • Spring 2021: Through Grounds Committee efforts, the county cleared a large fallen tree on the Regent Forest trail. • Residents cleared two smaller trees that had fallen across the trail. • Summer 2021: Weed Warriors representatives met with Christopher Garrett, Senior Park Ranger for the Maryland - National Capital Park and Planning Commission in Prince George's County. They obtained permission to join its “Samaritan” program to help them control invasive plants on county property. • Fall 2021: Weed Warriors to start work on wisteria invasion on county land.
<p><u>Woodlands Trails</u></p> <ul style="list-style-type: none"> • Prepare plan for upgrading woodland trails, including walking surfaces. • Improve trail accessibility, e.g. of the path from the lake leading up toward the second gatehouse, keeping the area within 8-12 feet of the path free of debris and mowed to the extent practicable. • Reestablish the former trail in the wetlands beyond the 5100s tying into the Lake dam, and consider installation of a boardwalk over sections that retain water. • Install a short bridge over the stormwater drainage wash out. • Update trail map, including identification of each path’s ease of use. 	<ul style="list-style-type: none"> • 8/2019: Grounds Committee Weed Warriors Subcommittee made a measured assessment of walking trails. • Ongoing: Weed Warriors continue to improve accessibility. • The Weed Warriors have marked an additional trail through the woodlands, leading from the large Sycamore below the 5000s to the white bridge. • 2021: Residents Association funded the replacement of badly deteriorated trail signs. This project is being planned.
<p><u>Trail Extension</u></p> <ul style="list-style-type: none"> • Work cooperatively with adjoining landowners to consider connecting contiguous woodland trails. • Add a short paved trail link from the employees’ parking lot opposite the road by the Arbor up to the paved trail that parallels the parking lot, and add a painted crosswalk on the parking lot. 	

<p><u>Soil Erosion and Drainage</u></p> <ul style="list-style-type: none"> • Address, measure, and prioritize existing serious soil erosion and drainage environmental, accessibility and life-safety issues, for each area of campus both within and outside the perimeter road, for example at the stormwater drainage wash out behind the 5100s, the wooded footpath behind the 5000s, and below the employee parking lot. • Assess cluster drainage issues, including walkway and common area flooding, between drainpipes connected to the cottage roof downspouts, gutter repair, soil erosion of bare ground particularly under large trees, grass damage caused by the drip line from walkway roof, and elimination of temporary black plastic piping; determine the reasonable amelioration of drainage and deterioration, e.g., consider installing rain gardens, bioswales, and other methods of retaining runoff on site. This work will now be coordinated with any new stormwater management required by the construction of new independent living units. • Consider installing rain gardens, bioswales, and other methods of retaining runoff on-site. 	<ul style="list-style-type: none"> • Summer 2021: Several swales built in cluster courtyards.
<p><u>Soil Erosion: Lakeshore</u></p> <ul style="list-style-type: none"> • Finalize a program to stabilize the land along the lakeshore, the banks above the Lake by the employee parking lot, and the perimeter/fire road between the Lake and the Creighton Center where water is believed to be contributing to mud on the lakeshore trail and silting of the Lake. 	
<p><u>Focus Areas</u></p> <ul style="list-style-type: none"> • Develop plans and programs for highlighting special “focus areas” for relaxation, quiet reflection, and large-scale activities, e.g. Main Building Courtyard, the Commons, the Burying Ground, and Collington Lake. 	<ul style="list-style-type: none"> • See special section, above.
<p><u>Donations Policy</u></p> <ul style="list-style-type: none"> • Develop a formal programmatic structure for donations to the Grounds Committee earmarked for improving the campus landscape. 	

<p><u>Collington Arboretum</u></p> <ul style="list-style-type: none"> • Promote and develop programs. • Identify and produce labels for a minimum of 25 trees, as required. • Develop “tree walks.” 	<ul style="list-style-type: none"> • Winter-Spring 2021: The Grounds Committee’s Planting Subcommittee developed a successful proposal for Collington to be recognized as an Arboretum. An Arboretum Board was established. • Residents have identified some 100 tree species. Thirty labels were ordered, arrived, attached to metal stakes, and are ready for installation. Funded through Resident Association 2021 budget. • Ongoing: Plans for activities in process, including those in collaboration with resident Outreach Committee.
<p><u>Planting Plan</u></p> <ul style="list-style-type: none"> • Formulate a congruent, simple landscape plan for both sides of the main road extending from the second gatehouse east to the Clocktower, including installing a screening landscape outside the Main Building loading dock and Woodshop/Maintenance Building. 	<ul style="list-style-type: none"> • Fall 2021: Loading dock planting scheduled.
<p><u>Planting: Tree and Shrub Replacement</u></p> <ul style="list-style-type: none"> • Formulate a tree and shrub pruning and replacement policy, including criteria for removal and replacement of diseased or dangerous trees, whether they are to be replaced, along with a listing of appropriate trees in suitable locations. 	<ul style="list-style-type: none"> • 2020: Grounds Planting Subcommittee planted 20 trees and shrubs in the woodlands and within perimeter road. • Fall 2021: Grounds Planting Subcommittee continuing to plant additional trees in the woodlands.
<p><u>Planting: Landscape screening</u></p> <ul style="list-style-type: none"> • Provide landscape screening from the apartments to the open area between the Dining Room and the Lake. 	<ul style="list-style-type: none"> • 2021: Planting scheduled for fall 2021.
<p><u>Resident Common Areas</u></p> <ul style="list-style-type: none"> • Develop an equitable system for improvement and maintenance of the exterior environments of cottage-cluster common areas and villa and apartment open spaces, including plantings, drainage, seating, and maintenance; and the 	<ul style="list-style-type: none"> • 6/2020: List of Tasks and Questions. • Spring 2021: 4100s residents planned, oversaw the installation of, and are maintaining a bed in its common area;

<p>development of new common area/s for the apartments.</p> <ol style="list-style-type: none"> 1. Suggest ways to involve each cluster community so they can articulate how they want their cluster to look and function. Address both the cluster common areas and the personal gardens in front of and behind individual cottages and villas. 2. Involve cottage, villa, and apartment residents in addressing the needs of their individual units' surrounding area. Work with residents to develop plans for the areas in front of and between cottage clusters. 3. Develop a plan for new common area/s for the apartments. 4. Consolidate this work into a comprehensive program for the entire campus. 	<p>cost: \$4,062, funded through Collington Foundation grant.</p> <ul style="list-style-type: none"> • Summer 2021: 3000s common sitting area upgrade funded through \$3,216 Collington Foundation grant. • Ongoing: residents working on plans for common sitting areas, e.g., 2000s. • Replace gazebo structure at 5100s common area.
<p><u>Unit Turnover Gardens</u></p> <ul style="list-style-type: none"> • Establish a standard and equitable design package for turned-over units, including size and content and a consistent procedure for removal of unwanted plants prior to marketing. 	
<p><u>Deer Management</u></p> <ul style="list-style-type: none"> • In collaboration with adjoining landowners, prepare and implement a thoughtful deer management policy, based on accepted scientific procedures, particularly in view of overpopulation potentially leading to serious disease and starvation. 	
<p><u>Second Gatehouse</u></p> <ul style="list-style-type: none"> • Analyze life-safety and aesthetic considerations regarding its future. 	
<p><u>Hardscape Policy</u></p> <ul style="list-style-type: none"> • Develop a consistent approach to hardscape, considering issues of accessibility, life-safety, and recreation; develop a plan for new paved walks and trails; and establish a priority schedule for repair of existing walks and walls, e.g. the low wall surrounding the second gatehouse. 	

<ul style="list-style-type: none"> • Paying attention to life-safety issues such as poor drainage, uneven walking surfaces, and accessibility, including in winter, eliminating freezing on hardscape of covered walkways, paved walks and paths, roads, and parking areas. Focus also on improved lighting that does not exacerbate light pollution. 	
<p><u>Hardscape Projects</u></p> <ul style="list-style-type: none"> • Complete the paved walk along the perimeter road from the 1000s driveway to the second gate house, including a connection to the short section of paved walk leading to the Village at Collington and continuing to the main gatehouse, access points to the Woodland Trail, as well as a connection to the walks leading to the Main Building, with particular attention to critical accessibility, life safety factors, and concomitant traffic calming. • Work to assure that the paved perimeter walk from the 1000s to the second gatehouse is accomplished as part of the Collington Master Plan. 	<ul style="list-style-type: none"> • 2020: A donation was offered for installation of a section of paved walk, but then diverted for the purchase of a new bus.
<p><u>Hardscape repair</u></p> <ul style="list-style-type: none"> • Assess and complete repairs on existing walkways. 	<ul style="list-style-type: none"> • 7/2019: Grounds Committee Weed Warriors Subcommittee: Prepared a measured assessment of paved trails accessible to motorized personal vehicles. • Spring 2021: Repaving completed behind the 2000s.
<p><u>Arbor Garden</u></p> <ul style="list-style-type: none"> • Continued improvements should follow current accepted guidelines that reduce intense sensory factors, such as those endorsed by NIH National Institute on Aging and Alzheimer’s Association: the importance of a simple; calming; reassuring; noise-, motion-, and clutter-free; accessible; and easy to maintain environment. 	<ul style="list-style-type: none"> • Spring - summer 2021: The garden in the memory care section of the Creighton Center was renovated. • Fall 2021: Discuss guidelines with Collington staff and aides.
<p><u>Landscape Maintenance</u></p> <ul style="list-style-type: none"> • Prepare a campus-wide preventive landscape maintenance management plan that is both realistic and efficient. 	

<p><u>Personnel</u></p> <ul style="list-style-type: none"> • Hire appropriate personnel: horticulturist and assistant. 	<ul style="list-style-type: none"> • 2017: Full-time horticulturist hired. • 2020: Part-time assistant position approved; 2021: expansion to full-time approved.
<p><u>Collaboration</u></p> <ul style="list-style-type: none"> • Establish procedures for identifying and furthering areas of collaboration, overlap, and benefit among the Grounds Committee and its subcommittees with other resident committees and subcommittees, e.g., Buildings, its Climate Action subcommittee, Grounds, and the Health Services Committee Social Support Subcommittee. • Composting and Recycling: Increasing campus-wide focus on such activities as composting, carbon sequestration and recycling, through the collaboration of the Climate Action Subcommittee, Grounds Committee and subcommittees, the Garden Committee, and others. • Reducing cultivated annual beds; and reducing mowed areas and mowing grass high; • Reducing the need for watering; • Reducing vehicle emissions, such as: <ul style="list-style-type: none"> ○ eliminating gas-powered utility vehicles and hand-held equipment, and increasing use of electric vehicles and battery-powered tools, ○ considering safely employing wider use of golf carts, e.g., using them to shuttle residents who would usually drive to dinner; ○ lowering emission and noise pollution through such methods as traffic calming, e.g., reducing speed limit to 15mph [the original speed limit at Collington and the current limit in neighboring Village at Collington], and installation of gentle speed tables – as opposed to speed bumps throughout the entrance and perimeter roads and parking areas; 	<p>Examples:</p> <ul style="list-style-type: none"> • Climate Action: 2020-21: The Climate Action Subcommittee is participating in the newly-formed Senior Stewards Acting for the Environment, SSAFE, a resident-driven, Kendal-wide initiative to address the climate crisis. www.SeniorStewardsActingfortheEnvironment.org. • Climate Action: 2021: Climate Action Subcommittee is developing a Climate Action Sustainability Plan, with five foci: <ol style="list-style-type: none"> 1. Zero Waste Initiative – reduce, reuse, recycle 2. Energy Conservation and Alternative Power 3. Water Conservation 4. The Natural Environment 5. The Future of Transportation <p>In regard to the Sustainability Plan, the Grounds Committee will work with Climate Action primarily in four areas: reducing pesticide/herbicide use, reducing lawn areas, eliminating gas-powered equipment, and focusing on the importance of the woodlands. In depth analysis will be required in such areas as lawn reduction for both existing and newly developed landscape in concert with drainage remediation.</p> • Farmers Market: Annual growing season: The Garden Committee organizes a weekly market with resident-grown produce from the raised beds and Hilltop Garden. • Composting: 2018 and ongoing: Initial efforts begun through the Garden

	<p>Committee; as well as Recycling: potential for reuse of a variety of materials, e.g. clippings from Ruppert pruning and discarded building materials from renovated resident units.</p> <ul style="list-style-type: none"> • Wildlife protection: An interface among, Climate Action, Birdwatchers Group, and Grounds Committee: to terminate pesticide/herbicide spraying, and with the Grounds Bluebirds group to monitor and protect birds on campus, e.g., in spring 2021, promoting steps to take regarding the new, apparently neurological disease affecting some bird species locally. • Walkway pillar repair/replacement: In conjunction with the Building Committee, to develop a systematic approach to the repair and maintenance of severely deteriorating covered walkways, including structural work on the pillars. 2019. Building Committee oversaw test repairs in the 4100s. • Collington Arboretum Events: ongoing: In collaboration with the resident Outreach Committee, to develop programs for school groups and provide funding for transportation. • Repurposed wood chips: Instead of removing off site a thick layer of wood chips that had been laid on the hillside to enable heavy vehicles to access the Lake forebay during the Prince George’s County/Clean Water Partnership 2021 cleanup. These were transported to the Woodshop roadway and are available for a variety of uses by the Weed Warriors and others.
<p><u>Advocacy, Interaction, and Communication</u></p> <ul style="list-style-type: none"> • Develop constructive relationships with state and county elected officials, and administrators and specialists at government departments and not-for-profit organizations focusing on the environment. 	<ul style="list-style-type: none"> • Ongoing: Investigate potential eligibility for grants. Example: The Prince George’s County Stormwater Stewardship Grant Program funds on-the-ground restoration activities that improve neighborhoods,

	<p>improve water quality, and engage Prince George’s County residents in the restoration and protection of the local rivers and streams of Prince George’s County.</p> <p>Funding areas include water quality projects, up to \$150,000, and tree planting projects, up to \$100,000.</p>
<p><u>Evaluation</u></p> <ul style="list-style-type: none"> • Establish an evaluation process for measuring and reporting on goal achievement. 	

Appendices - to come

- A. Organizational Resources
- B. Collington Resident Expertise

**Please email any comments/suggestions, etc. to:
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