

Charlotte Shade Tree Preservation Plan

Introduction

This Shade Tree Preservation Plan is created in response to the changes to the Vermont tree warden statutes. Specifically, The Town of Charlotte recognizes the amendments that became effective on Nov. 1, 2020. [Bill H.673](#) passed in the house and the senate as Act 171 in September of 2020 and was signed into law on Oct. 8, 2020. The bill amended [24 V.S.A. § 871](#), [24 V.S.A. chapter 67](#) and [19 V.S.A. chapter 9, § 901-904](#). As such, this document includes elements specific to a shade tree preservation plan and to a town tree policy which is intended to formalize the town's plan for the planting and maintenance of trees on town lands and right of ways.

Vermont statute 24 V.S.A. 2502 (c) stipulates that municipalities may (1) map locations or zones within the municipality where all trees in whole or in part within a public way or place shall be designated as shade trees; and (2) designate as a shade tree any tree in whole or in part within a public way, provided that the tree warden and legislative body of the municipality find that the tree is critical to the cultural, historical, or aesthetic character of the municipality. To that end, the Town of Charlotte defines Shade Trees as any tree located in whole or in part within the limits of a public way or public place. It also includes Memorial Trees and trees outside the public rights of way that are subject to voluntary Tree Agreements between the landowner and the town. It excludes the limited number of circumstances where a private dwelling is within the right of way. This reaffirms the traditional boundaries of tree warden authority in the town, which were assumed under the earlier state statutes governing the role of the tree warden and which were reinforced by the Town of Charlotte Roadside Vegetation Management Plan which was authorized by the Selectboard on May 14, 2019. This plan stipulates that, "Trees within the right of way are protected and under the jurisdiction of the Town Tree Warden."

Decisions by the tree warden may be appealed to the town Selectboard, and with sound justification, may be reversed by a majority vote by the Selectboard members.

Goals/Philosophy

- To formalize the Plan for planting and caring for trees within the public ways and places for the benefit of its residents and the environment;
- To develop a map and database of the trees in public ways and places of Charlotte with records of the current health and issues of our trees and information that may be used to making plans for tree maintenance or replacement;
- To identify the roles of the tree warden, the town agents, and the citizens in caring for the trees within the Shade Tree Preservation Plan jurisdiction;
- To share knowledge and the joy of planting and maintaining trees growing within the town and to encourage environmental stewardship;
- To protect the quality of the air, water and earth by maintaining tree coverage and tree health;
- To foster wildlife and natural ecosystems by providing tree habitat and corridors for movement;
- To enhance the beauty of the town landscapes;
- To provide social and economic benefits by creating gathering places, providing shade and protection from extreme weather and temperatures throughout the town's right of ways and public places.

- To provide a roadmap for budget development to ensure Charlotte's investment in the town's trees is protected through regular maintenance and long-term care.

Tree Benefits

Benefits of Trees: There are many benefits provided by trees in our town. While the following list is not comprehensive, it highlights some of the measurable and intangible value our trees provide including:

- **Beautification:** healthy trees, of all ages, and especially mature trees enhance the beauty of the town landscape.
- **Carbon sequestration:** Enhancing air quality via photosynthesis that removes carbon from the air and stores it in the tree – including in the trunk and underground in the roots
- **Air quality:** Removing particulates and other pollution from the air by lowering the temperature of emissions from car exhausts and volatile chemical interactions. Absorbing toxic gases through leaf stomata and capturing air particulates within their leaf or needle structure where it can then be directed to the ground via rain, wind, or leaf fall.
- **Temperature moderation:** Creation of shade that saves energy for nearby structures and provides cooling shade for rivers, streams and lakes.
- **Windbreaks:** A windbreak is a planting usually made up of one or more rows of trees or shrubs planted in such a manner as to provide shelter from the wind and to protect soil from erosion. They are commonly planted in hedgerows (a hedge of wild shrubs and trees, typically bordering a road or field) around the edges of fields on farms. In Charlotte windbreaks may be used to inhibit snow drift on certain sections of town roads.
- **Water protection:** Buffering streams, rivers and lakes from runoff, filtering silt and other pollutants before they enter water bodies. Trees also absorb significant quantities of water helping to keep lowlands and wetlands from overflowing and drowning other plants within an ecosystem. Roadside trees help channel excess storm water and pollutants away from sensitive water bodies and protect against soil erosion. Runoff of oil, phosphorus, nitrogen, heavy metals and salts can be tempered by trees that absorb pollutants before they drain into a water body.
- **Economic benefits:** Trees can enhance property values. They reduce energy costs and lessen the impact of air and water pollution therefore reducing potential costs of cleanup. There can be reduction in health care costs as a result of cleaner air and water. Shaded paved roads may require less maintenance than roads exposed to extreme temperatures. Scenic landscapes can contribute to the promotion of tourism and commerce within the town.
- **Social and psychological benefits:** Well-maintained individual trees and vistas which include woodlands or forests foster a sense of community pride. Trees often provide a restorative setting for contemplation and calm. There are health benefits from walking near or among in parks and forests. Trees contribute to the prevention of heat stroke and dehydration. Improvements in mood and recovery times have been attributed to the presence of trees in the landscape.
- **Community Value:** Trees in the landscape can provide safety buffers between cars and pedestrians and they can reduce roadway glare. Trees can promote community by creating welcoming spaces where people can gather and enjoy each other's company outside.
- **Wildlife:** Trees provide food and habitat in which wildlife can thrive and create corridors for large and small wildlife to move through the landscape and for plant communities to spread.

Role of the Tree Warden

The Charlotte Tree Warden shall have responsibility for the planting and maintenance of shade trees within Charlotte. When necessary or desirable, the tree warden may authorize the removal of shade trees. With some exceptions described elsewhere in this plan, removal or pruning of shade trees shall require permission of the tree warden. Per the state tree warden statutes, a shade tree is defined as a shade or ornamental tree located in whole or in part within the limits of a public way or public place, provided that the tree was planted by the municipality or is designated as a shade tree in a municipal shade tree preservation plan. For the purpose of this Plan “shade tree” is designated to mean any tree located in whole or in part within the limits of a public way or public places, including, but not limited to those planted by the municipality. “Public ways” are public rights-of-way (ROW) on public roads as recorded in town records. The jurisdiction of the tree warden excludes state owned ROWs along state highways or elsewhere. The jurisdiction of the tree warden also excludes utility company ROWs except where utility company ROWs and town ROWs overlap. Where there is overlap between town and utility ROW the tree warden shall have jurisdiction but that jurisdiction shall not preempt existing utility company rights and responsibilities. “Public places” are town owned lands such as town parks, the public cemeteries, land on which the town buildings are located, and town owned forest blocks. It does not include school property or private lands unencumbered by town easements.

The tree warden should communicate with the utility company periodically to discuss any plans for pruning or tree removal in the utility company ROW. Although the jurisdiction for that work falls to the utility, the tree warden will consult on plans for the upcoming year and methods used to prevent mutilation or damage to the trees in the ROWs.

The tree warden will collaborate with state and local officials as appropriate to plant and care for Shade Trees. The tree warden will also be available to consult with the Zoning Administrator, the Development Review Board, and other town boards and committees as requested. The tree warden, with the support of the Rutter Fund Working Group (see below), will maintain records of income and expenditures and should develop an annual work plan, budget and annual report to ensure the town’s investment in trees is protected and maintained in a sustainable, and predictable manner.

The tree warden may make recommendations to the Planning board, the Development Review board and the Select board regarding guidelines or regulations for protection of trees during construction, location of equipment and supplies to reduce potential injury to trees and remediation of sites after work is completed. Coordination with the State Shoreland Protection review should also be undertaken to minimize tree removal in sensitive areas.

There are many town trees located under and around power lines that utility companies maintain. The tree warden should establish communications with the utilities and encourage a regular exchange of information regarding the utility company’s program of tree pruning and tree removals in the utility company’s ROWs with the objective of moderating or mitigating unnecessary damage to woody vegetation when appropriate.

When the tree warden becomes aware of impending pests or diseases that may infest town trees, it is important that preemptive action be considered for treating or removing the target trees. In consultation with the State or other knowledgeable professionals, a plan may be devised. If that plan

involves removal of trees, the tree warden may request the Selectboard to schedule a town hearing on the issue or other appropriate communication to residents to provide information and seek feedback. This process may include a budget request to deal with the issue.

The Town of Charlotte will certify the appointment of the tree warden and provide contact information to the Commission of Forests, Parks & Recreation as required by State statute (24 V.S.A. § 871). The tree warden Appointment Certification form currently resides on the Vermont Agency of Natural Resources, Department of Forests, Parks, and Recreation website.

The tree warden should seek the support of available state and federal resources for information, advice, grant funding, and materials. The Vermont Urban and Community Forestry program which operates as a collaboration between the Vermont Agency of Natural Resources, Department of Forests, Parks, and Recreation and The University of Vermont Extension program, is a particularly helpful resource.

The duties of the tree warden include enforcing all laws relating to shade trees and posting public notice of intent to cut or remove a shade tree or group of shade trees unless it is determined by the tree warden, or road commissioner to be a hazard tree (see definition of a “hazard tree” below).

If the position of tree warden is vacant, the Selectboard will collectively serve as tree warden as required by the current statutes. The Selectboard may designate a deputy tree warden, other town official or one of the members of the Selectboard to fill that role in a provisional manner.

Role of the Deputy Tree Warden

The selectboard may also appoint deputy tree wardens, and these deputies will have the same authority and duties as the tree warden and serve under the direction of the tree warden.

Role of the Rutter Tree Fund and the Town Tree Stewardship Team

The tree warden shall appoint a Town Tree Stewardship Team to support the tree warden program. Town Tree Stewardship Team should consist of approximately six members with suitable qualifications. Shade Tree Working Group member qualifications need not include professional backgrounds in tree work, but members should have a demonstrated, practical knowledge of trees, a passion for tree planting and maintenance, and a commitment to the beautification of Charlotte. The responsibilities of the Town Tree Stewardship Team shall be as follows:

- Supporting the tree warden program,
- With the tree warden, development of annual plans and annual reports,
- With the tree warden, development of annual budgets to be included in the town budget,
- Identifying planting sites and tree species for planting,
- Developing estimates for the costs of tree planting and tree maintenance projects,
- Mapping and inventory of trees
- Fund raising
- Tree planting and maintenance,
- Organization of volunteer groups for tree planting and maintenance,
- Public outreach,

- Communication with landowners and development of formal written agreements with landowners who accept town sponsored tree plantings or participate in town sponsored maintenance of Heritage Trees (see below).

The Rutter Tree Fund is the on-going repository for private donations in support of planting and maintenance of trees under this plan. Requests may be made to Selectboard for cost-share with the Rutter Tree Fund for tree planting and maintenance. The tree warden is the authorizing agent for disbursement of these funds.

Role of the Road Commissioner

The Vermont tree warden statutes stipulate that removals of shade trees protected under this plan, including when a hazard, must be authorized by the tree warden or a deputy tree warden. The Vermont highways statutes enables the road commissioner to remove trees, brush and vegetation from right of ways that obstruct views or cause damage to the highways. To coordinate the roles and responsibilities and recognize the Charlotte town policy (Town of Charlotte Roadside Vegetation Management Plan adopted 2018), the town road commissioner will be automatically granted the position of deputy tree warden upon his or her appointment as road commissioner and shall have the authority of a deputy tree warden operating under the direction of the tree warden. In this capacity the road commissioner is required to follow International Society of Arboriculture (ISA) standards when determining if a tree is considered a hazard. In most instances whether or not a tree poses a hazard to roads will be obvious, but when in doubt, the road commissioner is expected to consult with the tree warden.

Role of Other Town Entities

In certain places the tree warden will seek approval of town entities when planning the planting, removal, or maintenance of trees. Removal of hazard trees are an exception to this rule. The places covered by this rule and the entities whose approval shall be sought are as follows:

- Town Green: Selectboard
- Library: Head Librarian
- Senior Center: Director of the Senior Center
- Cemeteries: Chair of the Cemetery Commission
- Fire Department: Chief of the Fire Department
- Charlotte Park and Wildlife Area: Chair of the Park Oversight Committee
- Town Trails: Trails Committee Chair and private landowners
- Thompson's Point Common Areas (tree planting): Thompson's Point Association President

Although the Charlotte Central School property is outside the jurisdiction of the tree warden, the tree warden may seek agreement with the school principal to conduct tree work on school property. The tree warden may also seek a broader, long-term arrangement with the schoolboard to oversee tree care at the school.

In addition to the entities named above, the tree warden, or members of the Town Tree Stewardship Team acting on behalf of the tree warden program, will seek permission of landowners before planting

trees on private property whether within or outside of the ROW. Removal of hazard trees by either the tree warden or the deputy tree warden does not require landowner permission, but communication with landowners is desirable. Removal of non-hazard trees requires public notice. If the removal plan is challenged, then a public hearing is required. Subsequent to the public hearing the tree warden will render a decision. That decision may be modified or reversed by a majority vote of the Selectboard.

Tree Selection and Planting

Tree selection and planting locations will be determined by the Town Tree Stewardship Team working together with the tree warden. Tree selection will consider such key principles as diversity of species, age classes, and right tree for the location based on soils, proximity of utility wires, safe distance from roads, and sun and shade. Balled and burlapped trees will require removal of burlap and cage before planting.

Planting trees other than “replacement trees” should consider site assessment when developing the planting plan. Site selection should consider the following:

- Soil Type: trees should be selected based on the soil type for which they are best suited.
- Sun Exposure: Shade tolerant trees should be planted in shaded areas, and sun loving trees should be planted in exposed areas.
- Diversity of species: should be considered so that generally no one selection dominates a site location. A rule of thumb may be that no single species constitutes more than 15% of the total planted inventory however “natural communities” may form more dominant clusters.
- Climate Change Resilience: Species native to our ecoregion are preferred, taking into account which are expected to better withstand climate change and which are expected to decline because of it.
- Hardiness: for roadside plantings hardy trees that can withstand difficult roadside conditions are to be preferred.
- Growing Space: consideration should be made for the space required by fully mature trees so that planted trees do not impede roads, grow into utility wires, or occupy space too close to structures. No tree should be planted within 50 feet of any major intersection, or within 20 feet of a fire hydrant or driveway.
- DigSafe: should be called before planting in new tree locations where there may be buried cables.

The tree inventory data maps may be useful in locating and identifying potential planting sites for new or replacement trees. An overlay of identified sites and tree selections can be useful in the development of a planting plan and creation of annual work plans and budgets.

Planting of trees outside of town land may be considered as it has in the past with the goal of providing the benefits of shade trees, particularly along town trails and along roads where the planting within the ROW or under utilities is not practical and is better served by agreements with private landowners. In these instances, a written agreement should be executed that spells out the rights and obligations of the town and the landowner. See Appendix A for sample agreements.

Tree Maintenance

Tree maintenance will be performed by volunteers where practical. Certain tasks should be outsourced to contractors as the need arises based on discussions with the tree warden and town officials.

Maintenance will take many forms including:

- **Watering:** in the initial three-year period after planting regular watering can be critical to the survival and overall health of the tree as it establishes its root system. Watering by volunteers during the growing season is recommended weekly and may need to be augmented by a paid service. The tree program volunteers should monitor the health and growth during the initial three-year period. Notations to the town's tree inventory can help guide this process.
- **Staking and Cabling:** young trees may need staking for a period after they are planted. Depending on site conditions and tree stock, stakes may be employed in the first three years after planting but should be monitored and removed once the tree has established a solid, stable root system. Cabling limbs of mature trees to support weak branched or improve structural defects should be undertaken with the guidance of a qualified professional, preferably a licensed arborist.
- **Mulching and Mowing:** Mulching and mowing around trees should be considered in relation to the location and health of the tree. The main objective of mulching is to inhibit weed growth and weed competition around trees and to aid in water retention. Mulching can also help to prevent damage to the tree's root system and trunk from mechanical devices, such as mowers and weed trimmers. Mowing around trees should be done carefully to ensure no damage to the trunk or roots of the tree occurs. Staying outside of the tree's drip line with equipment is recommended.
- **Placement of mulch** should never be directly on the trunk and generally should extend from the base of the tree to the drip line. Materials such as newspaper and shredded leaves, bark and wood chips will break down and increase the soil while suppressing grass and weeds. Wood chips will take longer to break down and, therefore, will not require replacement as often. Mulching depth should be kept to under four inches to enable oxygen flow to roots. See Appendix B for further guidance
- **Pruning:** Pruning of trees should be done with the goal of improving the structure and health of the tree. Pruning after planting new trees should be kept to a minimum and done only to remove dead or broken roots and branches. As the tree matures, trees can be evaluated to improve the structure of a tree, allowing air to circulate, correcting weak or compromised branch unions and removing dead or diseased branches. Low branches that may impede the operation of lawnmowing equipment may be trimmed or removed providing it would not involve removal of more than a third of the tree canopy. Consultation with an arborist and supervision by appropriately trained persons is

strongly encouraged when inexperienced volunteers undertake the task. See Appendix B for details on proper pruning techniques.

- Inspections for Determining Health and Growth: Care of the town trees under this plan is dependent on regular inspections and follow-up to determine the health and maintenance needs the tree covered by a tree warden inventory. It is suggested that the tree warden program include a routine review and updating of the condition of trees inventoried and creation of a plan and estimated budget for appropriate interventions. Requests may be made to Selectboard for cost-share with the Rutter Tree Fund for this maintenance. Given the number of trees involved, a four-year rotation around the Town's four quadrants may be most manageable. Each quadrant should be assessed for special needs such as pruning, damage and disease, soil remediation, etc. Areas that require mowing and mulching and new tree plantings can be dealt with outside of the quarterly assessment process.
- Mapping: As part of the inspection process, the State-maintained GIS Mapping tools can be used for inventorying the trees and shared with State personnel. The State's Urban and Community Forestry coordinator has been supportive of the town's efforts to track a variety of tree characteristics and has responded by incorporating suggestions for additional data fields and filters. A link to the State's mapping tools and instructions for use can be found in Appendix C.
- Trunk Protection: Immature trees are often subject to sun scald, rodent or deer browse and/or mechanical damage. During the early years of growth, the trees can be protected with plastic tree collars; often they are applied at the time of planting. These collars should be monitored and removed as the tree outgrows them since failure to remove the collar may have unintended consequences of choking the tree or promoting insect or disease damage.
- Fertilizing: Generally, fertilizing is not necessary and is not encouraged when planting trees that have been chosen for the soil characteristics of the site selected. However, specimen trees that have been planted on the town green or are exhibiting health issues related to missing nutrients in the soil may benefit from soil amendments. It is advisable to consult with an arborist to establish an appropriate remediation plan.
- Tree Removal in Public Places and Rights of Way: Tree removal may be required for the following purposes:
 - Hazard trees
 - Invasive trees
 - Sight lines
 - Thinning
 - Road cuts
 - Maintenance of public viewsheds

The road commissioner may recommend removal of trees in the ROW that interfere with sight lines or represent a safety issue for travelers. Hazard trees and branches causing imminent danger to persons or structures may require immediate remediation or removal. Diseased trees or trees under specific threats of disease or insect damage may require pre-emptive removal. Occasionally tree communities may require thinning to improve the health of selected trees. Removal of trees may be required to create road cuts for access to private lots. Permission for removals shall generally be granted, but will be subject to public notice and possible hearings. The tree warden may request modification of the location of road cuts to minimize impacts of tree removals. Tree removal on private property within the ROW may be allowed in some exceptional circumstances to enhance public view of landscapes such as mountains or lake. This would also be subject public notice and potentially public hearing. Shade Tree removals in town public ways and places requires authorization from the tree warden except for removals of hazard trees by the road commissioner as described above. See Appendix D for additional guidance.

- **Pest and Disease Prevention:** The tree warden or member of the Town Tree Stewardship Team should stay informed and updated on emerging pest or new disease that may threaten the health of town trees. Information is available through the Vermont Urban and Community Forestry Program webinars and newsletters are also a source for alerts for impending threats to the local tree population.
- **Pesticides or Other Disease Treatments:** Pesticides and herbicides should only be used in consultation with a licensed arborist or in accordance with State recommendations and regulations. Disease treatments that require licensed applicators can be considered in conjunction with an arborist or appropriate government official.
- **Invasive Plant Removal:** Invasive plants have become a significant threat to our forests and tree population because of their unchecked competition with native species and other negative environmental impacts. A program of regular invasive plant removal where practical should be undertaken in conjunction with the routine tree inspection and maintenance program. Most proactive and remedial programs rely heavily on volunteers to execute.
- **Vines:** Much of our existing tree stock, especially those trees that border roadways, has been invaded by vines. When left unrestrained, the vines such as wild grape grow up through the trees and can eventually choke and kill their host tree. Removal and treatment of vine roots is recommended and volunteers in conjunction with a licensed pesticide person should be part of routine tree maintenance. Encouraging property owners with the appropriate training to assist with controlling vines on trees in the ROWs will help alleviate the load left to volunteers and foster a partnership with the community

- Thinning: Occasionally, thinning a tree stand may be undertaken to promote the health of the residual stand. It may be advisable to consult with an arborist or forester before embarking on a tree thinning operation.

Community Outreach and Education

For a Shade Tree Preservation Plan to be successful, the community needs to understand the plan, the goals, the rationale and their role in implementation. There should be interaction with the town's planning board, the community at large, volunteers and schools. An annual update of initiatives and accomplishments should accompany the budget requests and the annual process can be used for setting and communicating goals and a work plan for the upcoming year. Additionally, residents should be encouraged to take an active role in the care of both their own trees and town trees. A Tree Owner's Manual can be found at Appendix B. School programs and participation in tree projects should be encouraged to foster tree stewardship. These may include activities such as Arbor Day celebrations, commemorative tree plantings, workshops and volunteer field projects.

Apportionment of Costs for Tree Warden Services

If the tree warden provides services to other municipal corporations, then the costs associated with those services, if any, shall be borne by the other municipal corporation.

Definitions

- Shade Tree: For the purpose of this Plan means any tree located in whole or in part within the limits of a public way or public place. This plan defines "in whole or in part" as any tree that has the trunk in the public way or public place. If the trunk is on the line between private property and the public right of way, then the tree will be considered to be a public Shade Tree if half or more of the trunk is within the right of way.
- Public Spaces: For the purpose of this Shade Tree Preservation Plan, means town owned lands such as the town green, town parks, the public cemeteries, and land on which the town buildings are located. It does not include school property, or private lands unencumbered by town easements.
- Public Ways: The "public ways" are the town rights of way (ROW). ROWs in Charlotte are recorded in the town records. They are generally three rods in total width. A rod is a unit of measure equaling 16.5 feet, so the typical width of the right-of-way is 49.5 feet. The boundaries of the ROWs, therefore, are usually just under 25 feet from the center line of roadways. There is some variation in the ROW width on different roads or sections of roads and the precise ROW are recorded in town records. Where the town records are not explicit, VSA Title 19 Section 702 rules apply. These state "the right-of-way for each highway and trail shall be three rods wide unless otherwise properly recorded."
- Hazard Tree: is any tree that is dead, extensively decayed, diseased or structurally weak, which, because of its location, presents an imminent hazard to the safety of persons, structures, utilities or vehicles and cannot be remedied by reasonable preservation and or preventative

procedures. The determination of a hazard tree is to be made by the tree warden or deputy tree wardens based on International Society of Arboriculture (ISA) standards.

- **Hazard Limb:** is any part of a tree that is dead, extensively decayed, diseased or structurally weak, which, if it falls, would endanger persons, personal property or utilities. A Hazard Limb can generally be corrected by appropriate pruning and or other corrective maintenance according to current professional tree care standards.
- **Hamilton Champion Tree Roster:** This is a roster of the largest trees in the town of Charlotte. Trees are listed by species and size is measured by diameter at breast height (DBH). The roster is available via the town website and also via link on the Charlotte News website. It is named after the late Larry Hamilton, who was a highly regarded tree warden for Charlotte.
- **Heritage Tree:** Heritage Trees are trees on private property that are maintained through a collaboration between the town and private landowners. These are distinctive trees in public view that are deemed to have special value for the town landscape. Private landowners may request support for care of heritage trees in the form of funding, volunteer labor, and/or technical assistance. In return landowners commit to written agreements to refrain from felling or damaging the trees as long as the trees are alive and in reasonably good health. The agreements are registered in town records and transfer upon sale of the property to new owners. Heritage Trees will be mapped and recorded in an inventory managed by the tree warden.
- **ISA Standards:** The International Society of Arboriculture publishes tree maintenance standards that are recognized by most tree professionals and licensed arborists. These should be considered the rules for any arbor work undertaken by outside contractors. The latest version is attached to the appendix and should be referenced in contract work.
- **Memorial Trees:** Memorial Trees are those trees planted through the tree warden program in public ways or public spaces to commemorate specific persons or events. Memorial trees are generally sponsored by private individuals or groups through donations to the Rutter Tree Fund.
- **Mulch:** Mulch is organic materials that is placed around the base of the tree to inhibit weed competition, help protect the roots from drying, and to limit damage due to mechanical compaction or injury from lawnmowers or weed whackers.
- **DBH (Diameter at Breast Height):** This measurement is commonly used to determine the size of a tree. It is the diameter of the trunk of the tree measured in inches at a point 4.5 feet above ground line. This point of measurement is used for established and mature trees and is referred to as "DBH." All reference to diameter size shall be to the DBH.
- **Recreational Trail:** a public corridor that is not paved and that is used for hiking, walking, bicycling, cross-country skiing, snowmobiling, all-terrain vehicle riding, horseback riding, or other similar recreational activity.
- **Rod:** a unit of measure equaling 16.5 feet

- Stakeholder: Any individual or group that has an interest in the town's trees including town boards and committees, officials, and residents.
- Tree Warden: Vermont towns are required to designate a tree warden pursuant to 24 V.S.A. § 871
- Arborist: A licensed professional who possesses the technical competence through experience and related training to provide for or supervise the management of trees and other woody plants in the residential, commercial and public landscape.

Appendix A: Sample Tree Agreement
Town of Charlotte, Vermont
Agreement for Tree Planting

“Land owner” Name: _____

“Premises” Address:

The Land owner and Town of Charlotte (“Town” including agents and employees) agree to have tree(s) planted on the premises named above and share the cost with the Town portion coming from the Rutter Family Beautification Fund (“Fund”).

The Land owner and Town Agree as follows:

1. Land owner grants permission to the town to come onto the premises for the purpose of planting trees and monitoring them. The planted trees will be designated as “Shade Trees” as defined in the Charlotte Shade Tree Preservation Plan.
2. The town shall provide the trees and plant them within 50 feet of the road centerline on the Premises as mutually agreed with the Land owner. Staking and trunk protection may be provided temporarily by the Town as needed. The Town will assist the Land owner in providing adequate water to establish the trees for the first two years after planting. Watering tubs may be used to facilitate watering.
3. Land owner shall have the option of planting the tree independently and maintaining adequate water and care during the first two years after planting.
4. Land owner agrees to mulch and care for the tree to prevent damage (including damage from mowing and weed-wacking)
5. The Town shall include the trees in the Town’s shade tree inventory and monitor the health and growth of the tree from time to time.
6. Land owner will care for the tree over its life; the Town will have no liability to the Land owner or any persons on or proximate to the Premises for any injuries, losses , or damage claimed to result from the tree, its location or maintenance.
7. Should the Land owner fail to meet his/her obligations under this agreement, the Town may require the Land owner to reimburse the Town for the cost of the trees.
8. Rules governing Shade Trees apply to these trees and fines for improper pruning or removal without proper notice may be imposed.
9. Nothing in this Agreement shall reduce or impair the Town’s right to control and manage the Town’s right of way over the Premises .

Agreed,

Land owner

Date

Town of Charlotte Tree Warden

Date

Appendix B: Tree Owner's Manual (amended 2021)

Appendix C: Municipal Tree Inventory Instructional Guide

Appendix D: Vermont Urban and Forestry Tree Ordinances