

Treescape Plan for Bath, Maine



The Value of a Treescape Plan

Trees, shrubs and other plants make up what is known as the urban forest. These green assets provide tremendous value to our City. Clean air, clean water, cool shaded areas to rest and recreate, and sense of place are some of the benefits our City trees provide to Maine's Cool Little City.



Since its incorporation in 1847 Bath has grown and the homes built during its heyday have continually stood as a nod to the past. The landscapes of these old homes have also been well preserved over the years. The historic homes have landscape trees and shrubs planted by seafaring captains and others well over 200 years ago. The historic buildings and the mature trees found still standing, together, are part of what makes Bath so special and alluring to those who are visiting the City.

Bath boasts several grande State Champion trees. These sentinels of the City keep watch from year to year, decade to decade.

Over the years parks and other greenspaces have been actively utilized by the citizens of Bath. Oak Grove Cemetery was originally designed with a dual use as cemetery and park and is regularly enjoyed by walkers, joggers and photographers. Library Park and Waterfront Park each host thousands of visitors during the year who enjoy a walk through the shaded pathways of these two key downtown features whose trees contribute quietly and with terrific effect.

However, our trees struggle to find their place in an ever changing world. Our trees face changes in local weather patterns such as hotter, drier, growing seasons and the ever present specter of increased urban development. As our world changes, one thing remains a constant: we must work to preserve and expand our urban forest.

In order to be good stewards of our green assets, the Bath Treescape Plan has been developed. As Winston Churchill stated, "Failing to plan, is planning to fail." This plan will outline the many ways we plan to succeed in planting and caring for our trees and our urban forest.









Views from
Library Park.

This is one of Bath's most
frequented greenspaces.



Purpose:

The purpose of the Bath Treescape Plan is to...

-  Promote and protect the public health, safety and general welfare by providing for the regulation of the planting, protection, maintenance, and removal of trees, shrubs, and other plants on property of the City of Bath, including City-owned rights-of-way.
-  Expand the urban forest canopy throughout the City
-  Design and install aesthetically pleasing and functional greenspaces which add value to the City
-  Improve the visual appeal of the downtown area and other areas of commerce within the City
-  Build partnerships with various City Departments and community stakeholders to better communicate the value and our need for trees and greenspace in the City of Bath
-  Educate the community about the present and future benefits derived from, and the responsibilities of caring for, Bath's Community Forest

Context:

As per City of Bath Tree Ordinance 06/24/2009.

Section 6-102 Administration and Enforcement

It shall be the duty of the Director of Cemeteries, Parks and Recreation and/or his designee* to enforce and administer the provisions of this ordinance. Any person may appeal, in writing, any ruling or order issued by the Director of Cemeteries, Parks and Recreation and/or his designee by filing a notice of appeal with the City Manager within seven (7) days of date of the ruling or order.

**Forestry Division* is the designated agency of the municipality of Bath under whose jurisdiction the public trees fall. This is a Division of the Parks, Recreation, Forestry, and Cemeteries Department.

Section 6-103 Bath Community Forestry Committee

- A. Establishment: There is hereby established a Bath Community Forestry Committee.
- B. Duties: The Committee shall have the duty and responsibility to oversee the administration and implementation of this ordinance, the purposes and activities of the Bath Community Forestry Trust, the Bath Community Forestry Management Plan and such other activities as affect the Bath community forest.
- C. Ex Officio Members: The Director of Cemeteries, Parks and Recreation and the City Arborist serve the Committee as non-voting ex officio members.
- D. Compensation: All members of the Committee shall serve without compensation.

Section 6-104 Applicability

The terms and provisions of this ordinance shall apply to all public trees located on public property, including City rights-of-way.

Bath has 6,000 street-side trees, and 14,000 public trees. The City Arborist is the primary steward of Bath's community forest. He is responsible for care of public trees, i.e. corrective pruning, planting, removal, cabling & bracing, emergency assessment, insect and disease monitoring, inventorying.

Partnership in Community:

'To Preserve and Expand Bath's Urban Forest' is the call to action for the Bath Community Forestry Committee, BCFC.

The Bath Community Forestry Committee has existed since 1992 when it was founded by a handful of Bath citizens who saw a need for the care of the urban forest and City trees around Bath. Over the past 25 years, the BCFC has evolved from a tree care and watering organization to a full-fledged organization not only interested in the care of trees, but also the future of trees and forests in an unsettling time of global warming, numerous tree diseases, and invasive insects that are threatening the very livelihood of New England's tree species.

The BCFC works to address and implement current and future management goals set forth in this plan. The Committee is partnered with the Forestry Division of the Parks, Recreation, Forestry and Cemeteries Department to draft this plan as an integral component of City of Bath's comprehensive plan which strives to best serve the needs and interests of the citizens of the City through a vigorous and well maintained urban forest. The BCFC contributes in many ways to Bath's urban forest.

- a. Educate itself and the community about the present and future benefits derived from, and the responsibilities of caring for, Bath's Community Forest;
- b. Develop a green infrastructure inventory of all the public trees which includes, but is not limited to, such information as condition of present trees, potential value or liability of those existing trees, size, species diversity, and potential sites for planting trees;
- c. Secure funding, particularly long-range financial support, for the community forestry program; and
- d. Draft and present to the community a management plan which addresses the above concerns.

The BCFC contributes directly to the City as overseer of Druid Park, The Community Forestry Nursery Center, and Butler Head preserve. The Committee coordinates, manages, and helps fund volunteer work days, Butler Head trail maintenance, maintain records for Bath's Tree City USA status (21 years as of 2018) and the annual presentation of Community Landscape awards.



Horsechestnut Tree
Aesculus hippocastanum 'Fort McNair'
5 Barque St
Planted by BCFC May 2000
Post 'Ice Storm of 1998'



Other Community Partners/Stake Holders:

Main Street Bath: Main Street Bath, Inc. (MSB) is a non-profit corporation, guided by a Board of Directors comprised of representatives of the downtown business community, the City government and community leaders.

Kennebec Estuary Land Trust (KELT): A land trust with a mission to “*Conserve, restore and instill appreciation of the land and water resources of the Kennebec Estuary to benefit today’s communities and future generations.*”

City of Bath: Bath was set off and incorporated as a town on February 17, 1781. It was named by the postmaster, Dummer Sewell, after Bath in Somerset, England. Planning and Development

Bath Iron Works (BIW): "Bath Built Is Best Built" BIW has been in business in the Bath area since 1884.

Patten Free Library: The Patten Free Library is a public library in Bath, Maine. It also serves the communities of Arrowsic, Georgetown, West Bath, and Woolwich. It was founded in 1847 and the modern library building was built in 1889.

Bath Garden Club: Sharing a passion for nature's beauty, we connect people, plants and programs to create inspiration. We work with many local organizations to create beautiful spaces throughout the community of Bath, Maine.

Hyde School: In 1966 Joe Gauld, a seasoned educator in traditional private schools, founded Hyde School after realizing that the *singular focus on achievement in American education* wouldn’t necessarily lead all students to reach their fullest potential... Gauld worked with other students embodying the effort, grit, honesty and work ethic necessary for success...

Regional School Unit (RSU) 1:

RSU 1 serves the communities of Bath, West Bath, Arrowsic, Phippsburg and Woolwich.

The Value of City Trees

Trees are a true City asset. Like any City owned asset trees require some maintenance, some care, but the rate of return is terrific.

“Investing in trees increases property values, bolsters businesses and community-level gross domestic product and provides energy cost savings. A Forest Service study conducted in five U.S. cities found that every dollar invested in the management of urban trees, like those invested through the UCF program, yields annual benefits of \$1.37 to \$3.09.”¹

The Forest Service also puts its findings in percentage terms, stating that healthy, mature trees add an average of 10-12% to a property’s value.

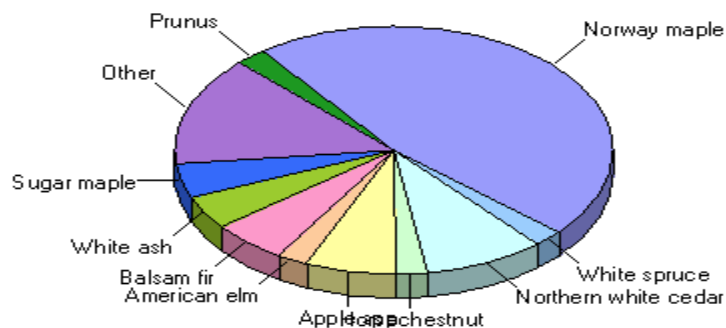
In 2013 Manomet was hired to perform an I-Tree Eco Analysis for Downtown and Suburban Areas of Bath. 48 Field plots were sited throughout the City. In this study the total area of sampled plots were 0.274 mi², 12.5% of the total developed area of the City. Values were generated using US Forest Service i-Tree software.

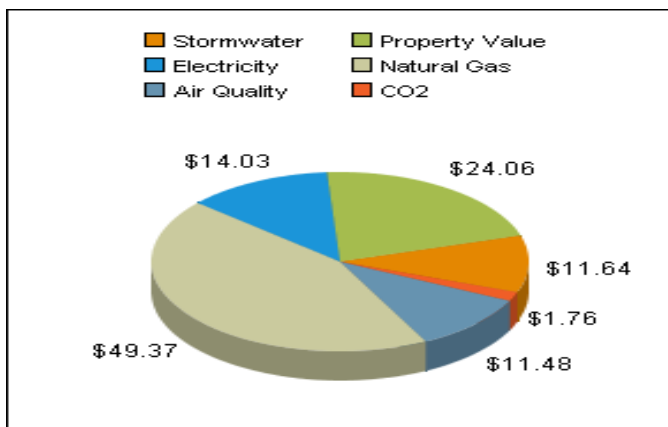
¹ URBAN & COMMUNITY FORESTRY PROGRAM, US Forest Service

Summary of Tree Benefits

	Plots (0.27 mi ²)	Urban and Suburban Area (2.2 mi ²)
Number of Trees	1870	15015
Tree Cover %	37.2	
Trees Per Acre	18.8	
Pollution Removal (tons/year)	1	8
Pollution removal (Savings/year)	\$3,200.00	\$25,800.00
Carbon Storage (tons)	1290	10357.7
Carbon Storage (Savings/year)	\$92,000.00	\$738,700.00
Carbon Sequestration (tons/year)	26	208.8
Carbon Sequestration (Savings/year)	\$1,800.00	\$14,800.00
Oxygen production (tons/year)	39	313.1
Avoided runoff (ft ³ /yr)	12600	101167.9
Avoided runoff (Savings/year)	\$837.00	\$6,720.40
Structural values (\$\$'s)	\$4,500.00.00	\$36,500,000.00

Norway Maple is Bath's most common tree. It represents 46.7% of the forest.





Dollar Value of a Tree

A 16 inch diameter Norway maple provides overall benefits of \$112 every year.

If this tree is cared for and grows to 21 inches, it will provide \$148 in annual benefits.

One species of tree may not appear to provide much in savings. However, the data indicates there are 701 Norway Maple trees in the 16" size class. Combined these trees provide benefits to the City of **\$78,512.00**.

Street Trees

Street trees tend to be planted in the least hospitable sites where conditions for survival are unfavorable when compared to the forest environment in which trees thrive. Many times street trees exist alone, in 'tree pits' with a limited soil volume in which to expand their roots, surrounded by pavement, concrete, or brick. Water can be at a premium and the heat reflected off of buildings, the road, or even parked cars can be extreme. So, how long can we expect a street tree to live before succumbs to such growing conditions?

One study suggests rather than looking at the age of the tree look at the half-life of the total number of trees planted in a given year. According to Lara Roman, Research Ecologist with the USDA...

"Half-life is "the time by which half of the planted trees can be expected to die," she explains in the same journal article. "With the typical street tree mortality rates of 3.5-5.1%... the population half-life is 13-20 years. In other words, for every 100 street trees that get planted, only 50 will make it to 13-20 years. These field data on urban tree mortality suggest that as the number of trees originally planted die over time, community foresters have to keep replacing trees, year after year, to have any chance of increasing population counts and canopy cover." Predictions about half-life could then be used as guides to manage planting and replacement cycles." ²

Looking at the urban forest through the lens of its 'half-life' it becomes quite clear how necessary planting and maintaining street trees is. The conditions they are planted into provide their own challenges and the benefits each street tree gives back to the City far outweighs the challenges presented in keeping a well stocked urban forest.

² Roman, LA and Scatena, FN. 2011. Street tree survival rates: Meta-analysis of previous studies and application to a field survey in Philadelphia, PA, USA. *Urban Forestry & Urban Greening* 10: 269-274.

Right Tree Right Place:

Our street trees have many challenges to overcome. Aside from the conditions listed earlier on in this plan, our sidewalk trees, especially, must hold up to being bumped by passers-by, ever growing snow banks, and de-icing salts. The space for them to grow can be limited, in the sun all day and dry, or shaded and damp. Trees must be chosen carefully so as best to plant the right tree in the right space.

Not only must a tree be able to survive in a given site it must also be able to fit in the space. Tree selection must take into account tree specie's mature size. In general terms street trees may be chosen based on the sizing of small, medium, or large.

Small Tree: Mature size of 30 feet or less. Minimum spacing of 20' and 10' from a building.
No less than 36 square feet unrestricted soil surface open to air and water
No Less than 36 cubic yards of soil volume or 4'x6'x18": 24" depth when possible
Flowering Dogwood/Cornelian Cherry/Hornbeam/Parrotia/Tree Lilac/Filbert

Medium Tree: Mature size of 30-45 feet. Minimum spacing of 30' and 15' from a building.
No less than 48 square feet unrestricted soil surface open to air and water
No less than 48 cubic yards of soil volume or 4'x8'x18": 24" depth when possible
Nyssa/Gingko/Magnolia/Catalpa/Red Maple/Yellowwood/Blue Spruce

Large Tree: Mature size 45 feet or more. Minimum spacing of 40' and 20' from a building.
No less than 60 square feet unrestricted soil surface open to air and water
No less than 60 cubic yards or 4'x10'x18": 24" depth when possible
Sycamore/Linden/Tulip Poplar/Walnut/Cottonwood/Norway Spruce

Native vs. Non-Native vs. Invasive

The goal of installing the right tree for the right space may include trees which are not Native to the woods of Maine. While it is important to use Native plant material, it may not always be practical. Building in the flexibility to use non-Native trees can best achieve the goal of expanding our Urban forest.

Many of the non-Native tree species available in the nursery trade are Native to regions of the world with similar climates to that of Bath. Many plants may even be of the same genus, such as the genus Acer which is the genus of Maple trees. Many new species, cultivars, and varieties are being produced with characteristics which make them a suitable choice over a Native species. Both Native and non-Native trees can positively contribute to the urban forest.

As we saw previously Bath's urban forest is made up of 46% Norway Maple. While this tree is a strong component in our urban forest it is also considered an invasive, non-Native, tree species. Invasive trees are a detriment to the natural forest as their seeds may find their way from yards to our undeveloped forest edge through wind and animal dispersal. Once established in the Native forest these invasive species tend to push out our Native trees. Many invasive trees can so dramatically change the overall make-up of our Native forest that wildlife may be negatively impacted as their habitat changes.

The State of Maine Forest Service maintains a list of invasive woody plants. Plantings on City property must exclude any woody plants found on the Maine invasive species list.

Pest/Disease Concerns

As of this edition, 2019, Bath has a heavy infestation of both Browntail moth and Winter moth. Browntail moth caterpillars produce toxic hairs which may cause skin rashes and in some cases respiratory ailments. At this time it is not recommended to plant host species of Browntail moth. Such species are...

All species of Oak

Members of the Rosaceae Family

Apples, Cherries, Hawthorn, Pears, Amelanchier, Korean Mountain Ash









To a lesser extent Shagbark Hickory, Elm and Zelkova

Due to a high incidence of the foliar disease complex of 'needlecast' it is recommended to avoid planting White, Red, and Blue Spruce trees.

Emerald Ash Borer (EAB) was recently discovered in the northern Maine town of Madawaska, Portland, and in a handful of towns along the New Hampshire border in York County. No Ash trees will be planted on City property in the foreseeable future.

Site Considerations:

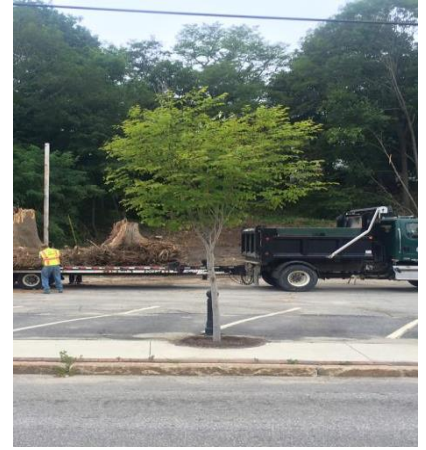
Prior to picking out the right tree we must consider the site. A number of trees will do best in various conditions. Questions to ask prior to choosing a tree are...

-  What is the duration of full sun on the site? All day? Half day? Not at all?
-  How large is the planting space in terms of soil volume?
-  Is the site seasonally wet/flooded?
-  Soil Drainage? PH? Texture?
-  Will the tree chosen out grow the space?
-  Do winter management activities impact the space?
-  Are there any overhead wires? Underground utilities?
-  Distance from curb-lines, sidewalk, street corners, driveways

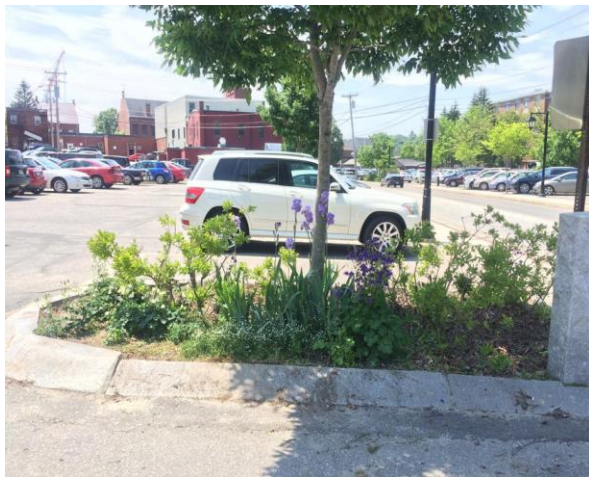
Typical Urban Tree Planting Sites:

Planting trees in the urban environment comes with a variety of planting sites.

Individual sidewalk tree pit: Sidewalk tree pits generally provide a low volume of soil, require extensive inter-department coordination to remove and re-plant trees as well as install new pits. Sized 4' x 6' x 24" and generally limited by the size of the sidewalk, individual sidewalk tree pits should be considered as a planting site for small to perhaps medium sized trees.



Combined Tree Pits: Combined tree pits may offer an opportunity to plant multiple small or medium sized trees or a single medium tree with other types of plants if the space allows the tree to grow to its full mature size.



Grouped Plantings: Grouped plantings take advantage of locations within the City where small groups of trees, shrubs and other plants may be combined. Often times these spaces add value to the City acting as mini greenspaces within an otherwise built-up area. Generally, grouped plantings do not offer space for foot traffic, benches, or other amenities found in a typical park setting. Viaduct plantings are a good example.



Parks as Greenspaces: Parks as greenspaces offer opportunities to plant and grow to maturity large trees. These areas provide space to walk, sit or otherwise recreate within the City.

Library Park from Front St

Druid Park at Five Corners



Waterfront Park



Additional Planting Considerations:

Distance from Curb, Sidewalk, Street Corner, Driveway and Building on Public Property

The distance trees may be planted from curbs or curb-lines, sidewalks, street corners, driveways, buildings and sidewalks shall be in accordance with the species sizes. No trees may be planted closer to any curb, sidewalk, driveway, building or street corner than the following:

Species Size	Distance to Curb or Sidewalk	Distance to Driveway or Building	Distance to Street Corner
Small Tree	2 ft.	10 ft	20 ft.
Medium Tree	3 ft.	10 ft.	20 ft.
Large Tree	4 ft.	10 ft.	20 ft.

Utilities and Hydrants

No public tree shall be planted within ten feet (10') of any hydrant or any underground utilities. Only small trees may be planted under or within 10 feet (10') of any overhead utility wire.



Alternate Plants:

The right tree in the right place is most important when adding trees into the urban environment. While definitions of a forest vary in wording, a commonly assigned definition to forest is a large area of the environment covered with trees of various sizes and ages along with understory woody shrubs, perennial and annual plants. Our Urban forest must reflect the general makeup of the forest around us.

Not every open space requires a tree to be considered greenspace. In many instances a tree may not be the right plant for the site. Terrific opportunities exist to plant woody shrubs, perennials, and annuals in such spaces. Woody shrubs provide all the same benefits as trees and occupy a much smaller space.



Viaduct Plantings



Planning and Development:

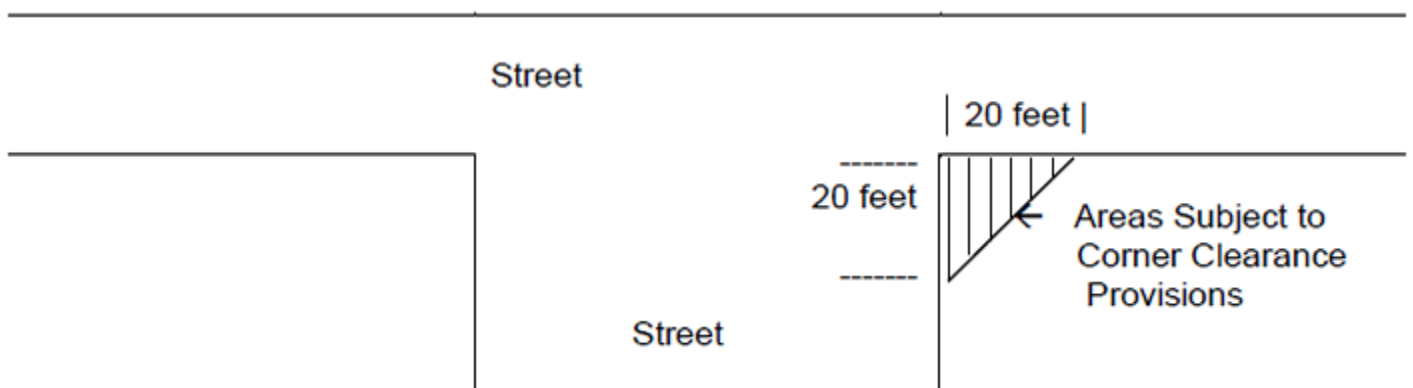
City of Bath maintains performance standards for planting or replanting of a property which must go through the site plan review process. These standards help to maintain a sense of place for the City, preserve or enhance the aesthetic appeal of a property undergoing some form of improvement and balance the safe use of that property for users and the general public.

In areas where trees are not feasible to install an account should be set up for developers to deposit funds into equal to the dollar value of trees a site may not reasonable accommodate due to space or other limiting factors. This fund would be accessible by BCFC and the City Arborist to plant trees in other areas of the City to help mitigate the effects of climate change and development within the City.

SECTION 10.04 CORNER CLEARANCES

This Section applies to existing as well as new or expanded uses.

On a corner lot in any district, no building or structure may be erected, and no fence, wall, hedge, or other planting other than shade trees may be erected, placed, or maintained above a height of 3 feet above the street surface within the three-sided area formed by the intersecting street lines and a line joining them at points that lie 20 feet distant from the point of intersection, measured at the edge of the street's pavement.



C. Parking Lot Landscaping

This Section applies to new or expanded non-residential and multi-family uses.

1. Islands and landscaped median strips are required to provide for clear traffic movement and to break up parking areas in any parking lot with more than 25 spaces. The median strip must have plantings of sufficient density and volume to provide a filtered screening effect. [amended August 6, 2003]
2. Parking lots with 5 or more spaces must be screened from any abutting residential use or residential zone and from the public streets. Screening may be accomplished by evergreen shrubs, fences, earthen berms, or a combination of these. The purpose of the screening is to soften the view of the parked vehicles, not necessarily to totally eliminate any view of the vehicles.

SECTION 10.29 LANDSCAPING AND SCREENING [entire Section amended May 26, 2010]

A. Applicability

This Section applies to new or expanded multi-family and non-residential uses.

During the process of site plan review trees and other plants can be added to a project to provide a positive result. Bath lacks large expanses of undeveloped land. Often projects going through the site plan review process are changing the use or function of an existing site to better suit a new use. Many older properties in Bath were constructed prior to the implementation of current land use codes related to trees and other plantings.

The change in use of a property in many cases presents an opportunity to bring older properties up to current code. In the areas along the Route 1 corridor the redevelopment of properties has a profound impact upon the aesthetic appeal of the City to those people traveling along the Route 1 corridor into and out of the Midcoast region of Maine.

Before



After



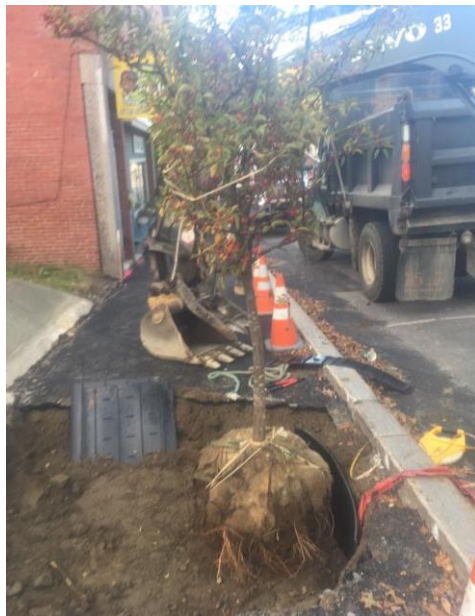
As development along this corridor moves forward it will remain important to incorporate trees, shrubs, and perennial plants into these landscapes.

Planting Site Preparations:

Preparation of the planting site is as important as choosing the right tree for the space. There are a number of actions to take prior to installing a new tree. Each site will have its own requirements but many common steps may be taken to prepare a site for planting.

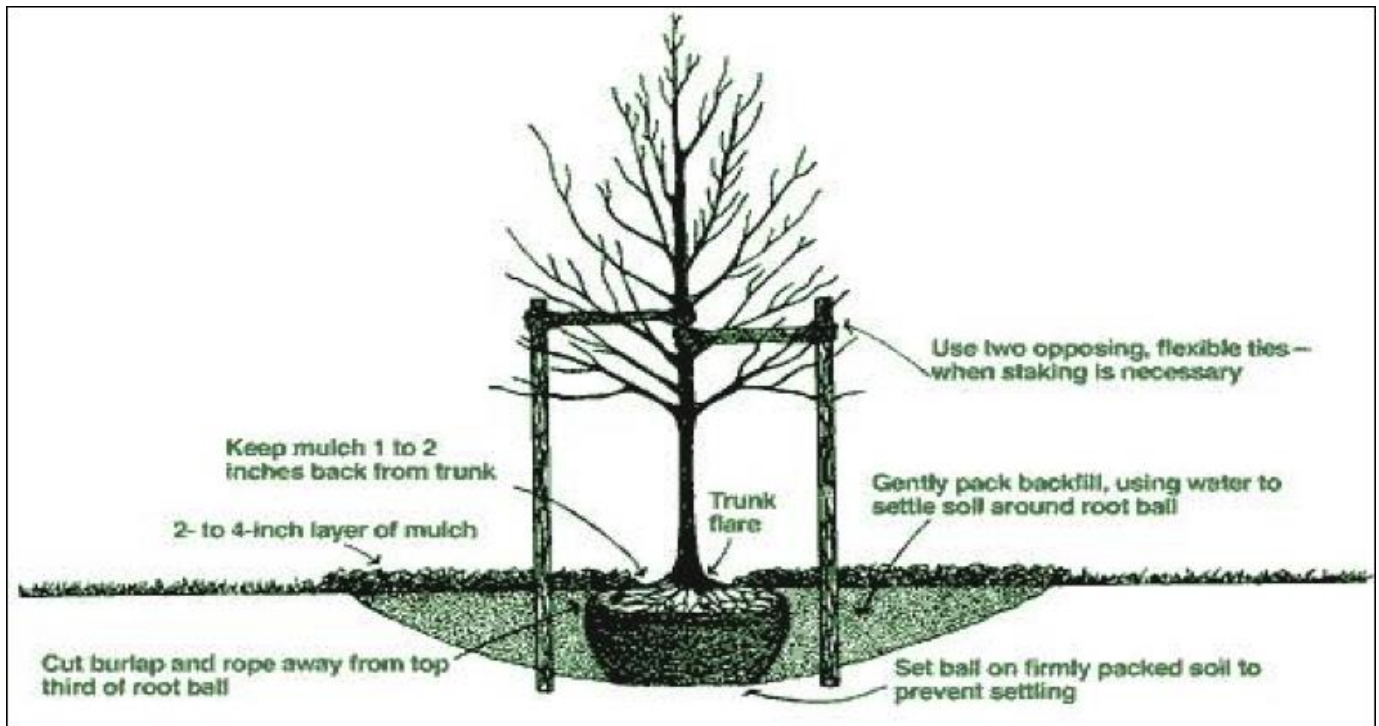
Steps to Replacing a Sidewalk Tree: Before you excavate call Dig Safe 811

1. Removal of the old tree's root system (as much as possible/practical)
2. Excavate entirety of tree pit if possible/practical
3. Add structural soil or other soil mix as required by the site leaving space for new tree's root ball
4. Place new tree into the pit
5. Determine that tree root flare is at or just above the height of the surrounding grade
6. Unwrap at least the upper 2/3 of wire cage and burlap/twine from root ball and discard
7. Back fill with chosen soil type
8. Water immediately. This will help fill any voids with soil and give the tree a good drink
9. Replace the grate if one is present.
10. Stake tree and Install and fill gator bag. Water tree once per week for 3 seasons.



General Planting Sketch:

Planting a new tree into a lawn or other undeveloped space is similar to planting in a sidewalk. Below is a diagram of typical tree planting in a lawn or other similar space.



Longwoodgardens.org

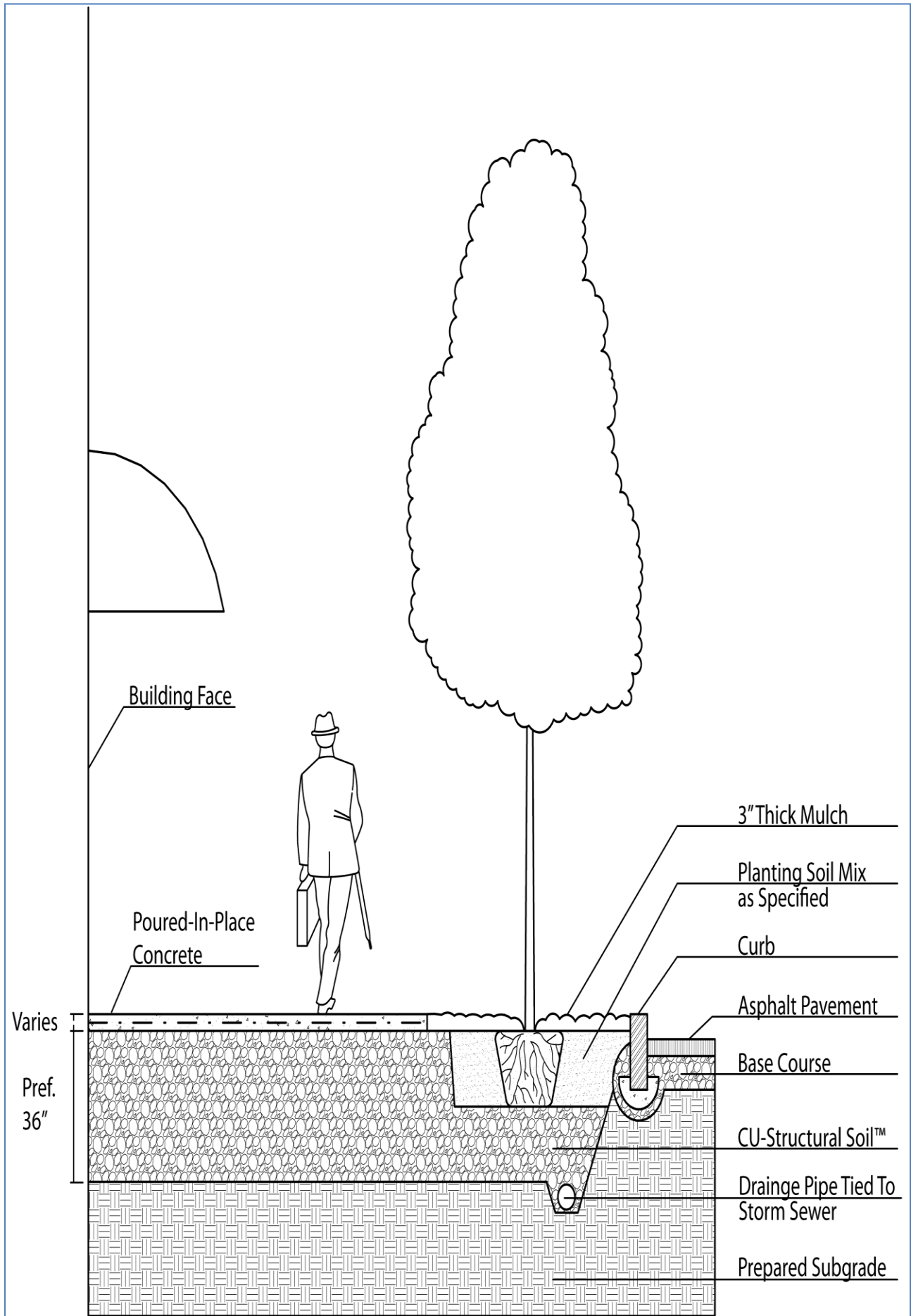
Structural Soils:

Structural Soil shall only be installed after the installation of all walls, curbs, footings, and utility work in the area has been completed. For site elements dependent on the Structural Soil for foundation support, postpone installation until immediately after the installation of the Structural Soil.

Base Ratio of Materials:

- 3.2 cubic yards of aggregate stone no smaller than $\frac{3}{4}$ " angular crushed stone
- 1 cubic yard of growing medium, clay loam

Install the first six inch (6") layer of Structural Soil over the prepared subgrade. Install succeeding layers in six inch (6") lifts and compact each lift. Compact all materials to not less than ninety five percent (95%) of peak dry density.



Permeable Pavement:

Permeable or porous pavement may be used in the form of concrete, asphalt or pavers. These layers are produced in such a manner that water is able to move down through the layer and into the root zone of trees in the built environment. The uses of these products can be on a large scale such as a parking lot or long stretch of sidewalk or in smaller projects to increase water availability to street tree roots.

Permeable Pavement



Porous pavement expands tree root access to water



Porous Pavers



City Tree Nursery:

In late summer of 2015 the BCFC acted upon plans to rehab the existing tree nursery site. Prior to the rehab the site had been used to store evergreen seedlings and small containerized deciduous trees used in promoting BCFC and Forestry activities within the City. The site was mostly overgrown and in an unusable state Spring 2015.

Existing conditions of nursery in Summer 2015



Work Day Rehab Summer 2015



During the Spring of 2016 the BCFC installed 100 seedlings and a drip irrigation system for watering. The irrigation system was purchased by the BCFC using grant funds from New England Grass Roots Environment Fund. The species chosen for the nursery are those which are not preferred by Browntail moth. Also, many of the species may be more resilient to changes in the local climate. The original planting list includes Sycamore, Basswood, Red Maple, Kentucky Coffee tree, Ginkgo, and Filbert.



Spring 2016



Summer 2020

The City Forestry Division has planted out 62 trees of the original 100 trees on both City owned and private property in an effort to replace trees removed due to the risk they pose or other considerations. Project Canopy and Bath residents have donated over 40 sapling sized trees to the nursery. The species donated range from Sugar Maple and Black Walnut to Ohio Buckeye and Pecan.

During the late Summer/Autumn of 2018 the BCFC undertook the construction of a Forestry Center building. The purpose of the building is to store Committee tools and provide a place to stage outreach/volunteer group activities.



In the next few years the BCFC plans to use the space to engage student groups from both the Bath Middle School and Morse high school. Workshops for the general public will also be conducted onsite. Tree pruning and invasive plant ID are two topics which garner a great deal of attention from the residents of Bath. The nursery site provides terrific opportunity to teach in a hands-on environment.

In time, the BCFC will incrementally develop an arboretum for folks to visit and admire various trees and shrubs in a walking path style venue. The proximity to the Whiskeag Trail and the McMann sports complex make this an ideal location for a short walk through the woods to admire native and unique tree/shrub species.

Target Planting Goals:

Recommended stocking percentages and canopy figures can be used in general terms. In general, a tree canopy cover of 40% or greater is a good mark to shoot for in any urban environment. This goal may be more important in the built-up areas of the City where pavement, buildings, or excess storm water run-off negatively impacts the citizen and visitors to the City. Trees and canopy cover work best in the areas where development has been created heat islands and large areas of impervious surfaces.

Most key planting sites within the City have had tree installations into those spaces over the years. The urban forest of Bath is one where many trees are being removed due mostly to age and condition and the risk the combination of those factors may present to the public. It is imperative for the City to replant trees which are lost over time.

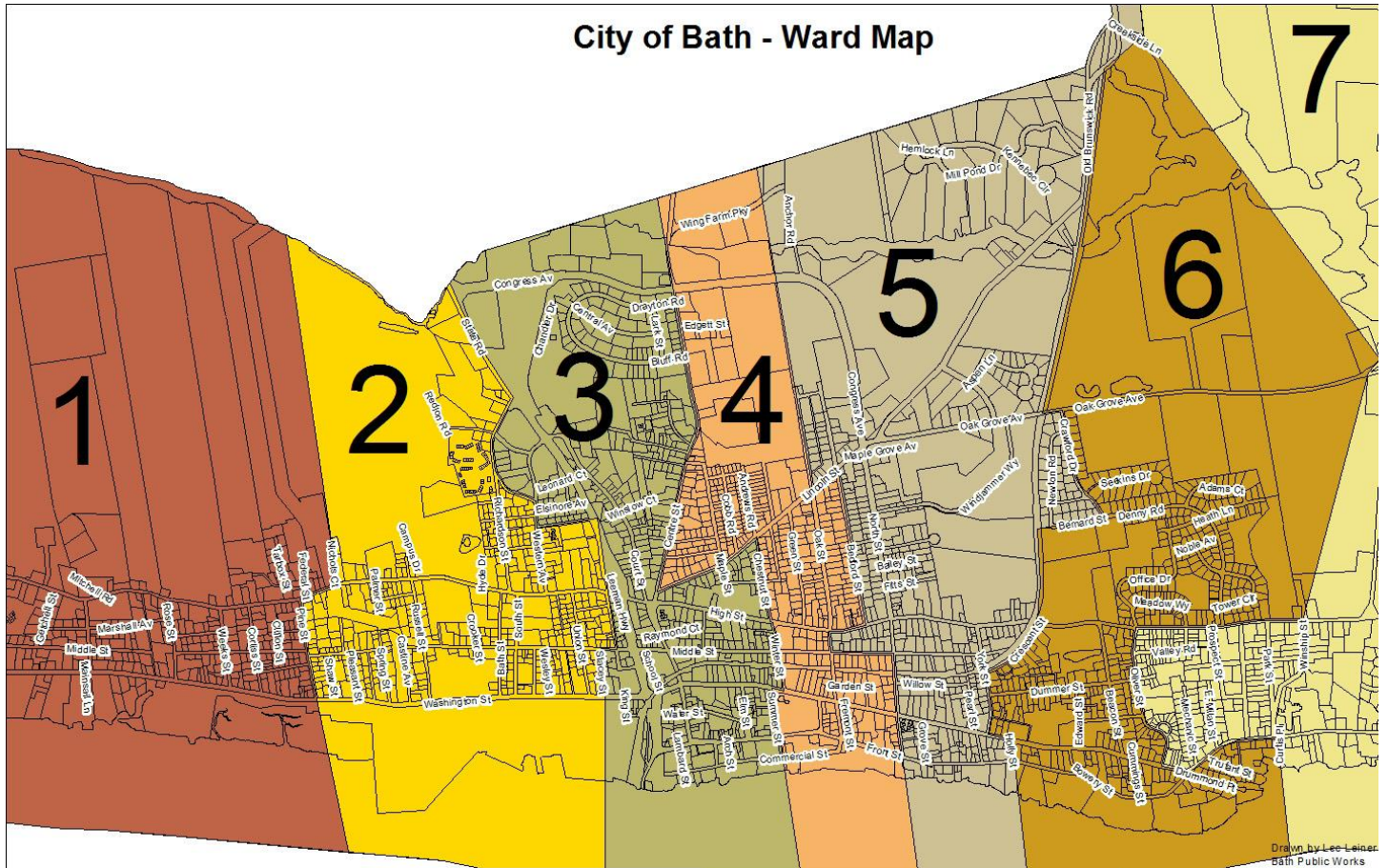
The removal of trees presents the biggest challenge. The City does employ a City Arborist supported by a single, seasonal staffer. It is beyond the scope of this two person crew to effectively prune and remove the thousands of trees within the City of Bath. Grant funding may help fund removal work efforts through the hiring of local tree service companies and utility companies, such as CMP, who regularly protect their assets from tree damage by pruning and removing problem trees from time to time. Invasive pests such as Emerald Ash Borer threaten to add to the mortality of City trees along with shifts in local weather patterns. As we saw in Maine during the Ice Storm of 1998 a single storm can cause damage ranging from the uprooting and snapping off of whole trees to significant branch breakage and loss.

Planting the right tree in the right space, structurally pruning young trees to address structural defects before they are a problem and removing trees prior to tree failure will be necessary steps to take in preserving and expanding Bath's urban forest. For the City to mitigate tree loss and build resiliency into the urban forest the planting and maintenance of trees must be considered an ongoing process.

Trees are the green assets of the City. Like any asset, trees provide a service to the City while requiring on-going maintenance. Not unlike the purchase and maintenance of recreation fields and equipment or acquisition of City buses whose repairs and fuel needs are quite integral to the service they provide, the trees of the urban forest require removal and replacement, upkeep such as pruning, and to be properly installed into an appropriate site to thrive. Serving the City as silent sentinels providing a shaded canopy in the heat of summer, as an air filter to remove dust and other particulates, as a sink to store carbon, or as a reservoir of sorts helping to deflect storm water runoff from our City's built infrastructure. The green assets of Bath's urban forest work on behalf of the City and do their best when properly maintained to function at their best.



City of Bath - Ward Map



Drawn by Lee Leitch
5th Public Works