

Town of Cumberland

Trail Construction and Maintenance Standards

The following document applies to Town-owned properties and Town-owned easements on private properties, except that any previous agreements for the management of trails on Town-owned properties shall be honored. While similar standards are recommended for Town-marked trails on private property where the Town does not hold an easement, no cutting or other maintenance should be done without property owner agreement and permission. All new trail construction and/or maintenance on Town-owned properties must be done in conjunction with the Town's Recreational Trails Subcommittee and/or Lands and Conservation Commission. Construction or maintenance on Town-owned properties which are covered by an easement must also be coordinated with the holder of the easement and follow the terms of that easement.

INTRODUCTION

Cumberland's trails have been developed to be enjoyable and safe for residents and visitors. They are designed, constructed, and maintained for specific uses and also to minimize the impact on the natural resources of the surrounding area while taking advantage of scenic, educational, and cultural opportunities. Basic principles considered are:

- Trails should be in visually pleasing corridors and incorporate as many scenic points of interest, as possible.
- Trails should provide a variety of ecological, vegetative, and geographic features.
- Trails should avoid crossing wetlands or unstable ecological habitats, when possible.
- Trails should provide connections to other trails, recreation facilities, parks, neighborhoods, communities, etc.
- Any new trails should incorporate existing trails, when possible.
- Trails should be designed to require minimum maintenance.
- Trails should avoid close proximity to homes, when possible.
- Trails should reflect the mood and atmosphere of the area it traverses.
- Town-marked trails on private property must have landowner support.

TRAIL USES

Cumberland's trails are used for a variety of outdoor recreational activities. These activities include:

- Hiking/Walking
- Dog walking
- Biking
- Running
- Snowshoeing
- Cross country skiing
- Horseback riding
- Snowmobiling

TYPES OF TRAILS

Cumberland has numerous trails throughout the town, many of which originated from old logging trails. Cumberland's trails include trails on Town-owned property, trails on private property for which the Town holds an easement, and trails across private property. In general, the Town-owned trails and easements can be categorized as follows:

- Urban Trails – The Town's sidewalks and paved pathways.
- Semi-rural Trails – High-use trails that have been "hardened" to allow for multiple types of uses. These trails are typically constructed of gravel and are at least 5 ft wide. Examples: Town Forest, Twin Brook (Tuttle Road side).
- Rural Trails – Somewhat lower-use trails that are generally in more rural parts of the Town. Typically, these trails are intended to be narrower, wind their way through somewhat remote forested areas, may be uneven and "rooty" in places, and have a trail surface tread width of about 2 feet. Examples: Rines Forest, Knight's Pond, Greely Woods, Twin Brook (Greely Road side)
- Snowmobile Trails – Snowmobile trails are generally located on rural trails which have been specifically designated for snowmobiles and are typically at least 8 ft wide.
- Handicap-Accessible Trails – These trails have been specifically designed to be wheelchair accessible. While Urban and Semi-rural trails may be capable of accommodating wheelchairs, handicap-accessible trails are specifically designed for wheelchair use. Example: Twin Brook (Handicap Trail).

Where appropriate, the Recreational Trails Subcommittee of the Lands and Conservation Commission posts trail markers on Town-owned land and easements and includes these trails on maps. With permission, the Subcommittee can also place trail markers on and map privately-owned trails that link to the trails on Town-owned properties and easements.

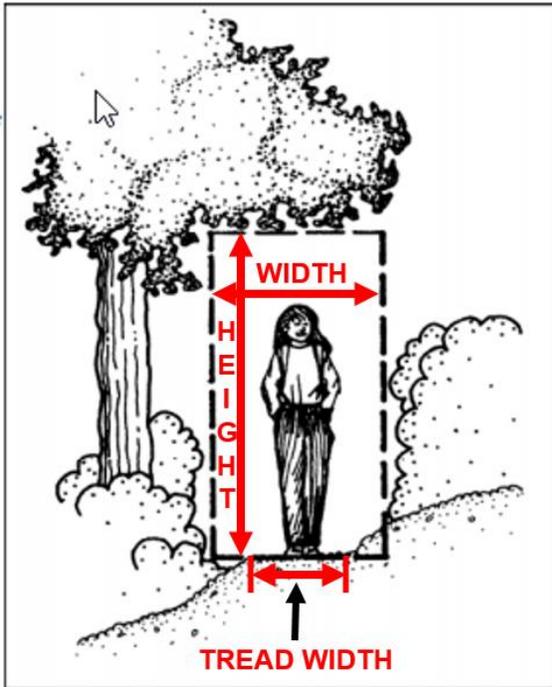
TRAIL MAINTENANCE ASSIGNMENTS

Cumberland's trails are maintained by the Public Works Department and by volunteers. For Town-owned properties and easements, the following apply:

- Urban Trails – Maintained by the Public Works Department
- Semi-rural Trails – Maintained mainly by the Public Works Department with assistance from volunteers when needed.
- Rural Trails – Maintained mainly by volunteers with assistance from the Public Works Department, when needed. Volunteers are organized primarily through the Recreational Trails Subcommittee and/or easement holders. All new trail construction or maintenance in Town-owned property must be approved by a representative of the Recreational Trails Subcommittee.
- Snowmobile Trails – Maintained by the Moonlight Snow Skimmers and the Recreational Trails Subcommittee with assistance from the Public Works Department when needed.
- Handicap-Accessible Trails – Maintained mainly by the Public Works Department, with assistance from volunteers when needed.

TRAIL CONSTRUCTION AND MAINTENANCE STANDARDS

Trail construction standards are designed to enhance the trail experience and safety for trail users while limiting the impact to the environment. New trails should be designed to meet the recommended width, height, and tread-width standards. Older trails that far exceed the recommended standards should be maintained to meet the recommended standards. For example, although an old rural logging trail may be 20 ft wide, the trail should only be maintained to the recommended width, thus allowing natural vegetation to “fill in” much of the original logging trail. In cases where trails are more open to light, an occasional mowing or brush hogging of grass or brush may be needed to maintain a safe and open trail. In these cases, trail tread and width may be increased to allow for maintenance access or safety concerns.



The following table provides recommendations for trail width, tread width, height and surface type for the different categories of trails.

Standard	Urban	Semi-rural	Rural	Snowmobile	Accessible
Tread width	4-6 ft	8-10 ft	1.5-3 ft	6-10 ft	4 ft
Trail width	8-10 ft	12-14 ft	3-5 ft	6-10 ft	6 ft
Trail Height	8 ft*	8 ft*	8 ft*	8 ft*	8 ft*
Tread Surface	Concrete/ Asphalt	Sand/gravel aggregate or Natural	Natural, Sand/gravel aggregate where necessary	Natural, Sand/gravel aggregate where necessary	Concrete/ Asphalt

* Note that trail height recommendations do not apply when heavy snow loads weigh down branches.

A major challenge is keeping rural trails from expanding beyond the recommended width. This typically happens when soft areas of the trails become mucky (particularly in the spring) and bikers and pedestrians create ever-expanding alternative paths around the ever-expanding mucky areas. To reduce the spiderwebbing of trails through soft areas, a sand/gravel aggregate pathway should be used to stabilize and “harden” the original trail pathway. Note that this sand/gravel aggregate pathway should be limited to the recommended width for the trail, thus allowing natural vegetation to grow in any trampled or mucky areas surrounding the trail.



Example of stabilizing sand/gravel path used to harden soft area that had become mucky due to wet conditions and heavy use. The goal is to keep the width of the trail from expanding and allow the vegetation along the alternate path (to the left of the original path) to grow back to its natural state.

TRAIL STRUCTURES

The Town of Cumberland typically utilizes two types of trail structures – bridges and walkways. Bridges are primarily constructed to allow passage over streams while walkways allow passage through wetland areas. As a general guideline, bridges should be at least as wide as the required tread width for the trail, but no less than 4 ft wide. Walkways should be at least as wide as the required tread width, but no less than 2 ft wide. Walkways are typically no higher than a foot above the ground surface. Both bridges and walkways should be constructed with the treads perpendicular to the trail. Planking is not recommended as it is typically less stable, less effective, and difficult for bikers to ride across. Planking also presents a hazard for snowmobilers during the winter and is not permitted on snowmobile trails. Walkways are allowed on snowmobile trails as long as they are a minimum of 8 ft wide.

All trail bridges more than 4 feet above the ground or water surface must have a railing at least 42 inches in height (54 inches for bridges intended for bikers). Trail bridges (of any size) that do not have railings should have a curb along both sides of the of the treads. Walkways should generally be less than a foot above ground level and, therefore, do not need railings. However, small curbs may be used along either side of the tread to provide additional safety.



Example of walkway through wetland area.



Example of small bridge with curbing over stream.

TRAIL SIGNAGE

Signs along trails should be used to inform and direct users of the trails. Care should be taken to limit signage to only what is necessary. Signage may consist of trail markers, property ownership signs (Town versus Private), educational signs (i.e., flora or fauna identification or information), etc. The following are examples of signage used on Town-marked trails:

- Colored trail markers – Posted on town-owned trails and connecting private trails (with owner permission) to help users follow the trail. Trails on private property are marked only if permission is granted to show the trail on a public map.
- Roadside trail signs – Posted along public and private roads (with permission) to mark the entrance of a trail.
- Cumberland Trails (CT) sign – Posted on trails at or near the entrance to Town-owned property.
- Leaving Town-owned Property signs - Posted on trails to indicate users are leaving Town of Cumberland property and entering private property.
- Private property signs – May be placed on Town-marked private property (with permission) to encourage users to respect the owner’s property.
- IF&W Private Property signs – May be placed on Town-marked private property (with permission) to encourage users to respect the owner’s property.
- DACF- BPL Snowmobile signs – Posted on snowmobile trails by the Moonlite Sno-Skimmers Club.
- Restricted use signs – Posted near trail entrances to inform the public of trail use restrictions.



Examples of signs used on Cumberland’s trails.

TRAIL CLOSURES AND RESTRICTIONS

While the overall goal is to keep Town-owned trails open year-round for their intended uses, there may be times and/or situations that require closures or additional restrictions. For example, storm damage may require that trails be closed for a period of time until they are safe to use. Also, seasonal closures for specific uses may be necessary to prevent damage to the trails or surrounding environment. The Town Manager has the authority to close any Town-owned trails. The Chair of the Lands and Conservation Commission can request that the Town Manager close or restrict the use of any Town-owned trail.