

Keene 9N Trail System and MTB Skills Park Concept Plan

This conceptual plan has been made for the
Keene Youth Commission
by
Peduzzi Trail Contracting LLC
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Intended Use

The goal of this project is to create a location in the town of Keene that accommodates numerous forms of non-motorized recreation with some features optimized for mountain biking. There should be little to no cost for the Town of Keene. The recreation focused working group for the 2021 Town of Keene Strategic Plan highlighted the need to provide a safe, positive and ecologically sound recreation experience for residents and visitors alike, citing bike paths and alternative trails as potential improvements to the town's recreation structure. The Essex County property on 9N between Keene and Upper Jay offers a rare opportunity to implement this vision through the development of a new multi-use trail system and mountain bike skills area currently sees very little use.

The new trail system will be designed and constructed to be ecologically sustainable, minimizing erosion and unnecessary impact. The trail system will be well signed and comprehensive with wider and more gradual trails near the entrance transitioning to more steep and rugged terrain farther into the trail system. This design serves as a filter for hikers, bikers and other users who will have to travel farther to reach intermediate and advanced terrain. Natural vistas and unique features on the property offer numerous locations for benches and resting areas, creating intermittent destinations for trail users.

To improve the trail experience for all users, some trails will be designated as single direction and mountain bike only. These bike specific trails will be located in areas of the property that are conducive to flowing, bike optimized trails and will not interfere with walking or other access to points of interest such as vistas or natural attractions.

Mountain biking is a growing recreational past time in our area that provides a healthy outlet for all ages and fosters a sense of community in the outdoor setting. Trail systems and adjoining skills parks with pumptracks are the backbone for recreation-based towns that encourage mountain biking. These family friendly venues can provide a meeting place for events, such as the Wilmington Mountain Bike Festival, an after-school hangout, and a place for bikers to practice skills such as balance, pumping and cornering.

Though there has been a long-standing interest in mountain biking in Keene, there are very few places where bikers are allowed to ride and no specific mountain bike destinations without traveling to Lake Placid or Wilmington. With ongoing and increasing interest from Keene students and residents (bike to school day, school owned mountain bikes) it is time to create an outlet for this type of recreation in Keene.

The skills area will take advantage of some of the open space near the parking area and pavilion and will offer natural and man-made features designed to hone skills and present challenges in a structured environment. An additional trail around the edge of the clearing will serve as a warm up loop for bikers and increase the amount of easy or beginner terrain available.

This skills area includes a pumptrack which is a series of rollers and banked turns (berms) designed to be "pumped" by the bike rider in order to maintain or even gain speed without pedaling. These user-friendly tracks can be used by riders of all ages and ability levels, allowing ample room for growth in physical fitness, balance and bike handling skills.

The existing logging roads on the property present an excellent opportunity for cross country and back country skiing. Clearing of raspberries and other low brush on select roads will create a winter specific trail network to increase the number of users who benefit from this effort. A separate winter map may be helpful to designate these trails.

All trails and skills features are to be designed and constructed to a reasonable standard within the trail industry by a trail building professional

Signage

The trail system will include a kiosk with applicable maps, rules and responsibilities for the trail system and the skills area. Additional signage at intersections and color coordinated trail markers will help users navigate the trail system.

Rules and user responsibilities should include:

- Use at your own risk
- Clean up after your dog
- Do not ride or hike in muddy conditions
- Do not use skills features when slippery or muddy conditions are present
- Ride within your ability level
- Start small and work your way up
- Make a plan before you go
- Respect other users (Bikers yield to hikers, give people space when riding, keep the area clean, positive encouragement)
- Report any issues to county staff

Maintenance

The maintenance of the skills area is the responsibility of the park operators or a designated party. They have the authority to monitor the premise, post warnings, implement improvement strategies and close the park if necessary. County staff or a designated group should perform a monthly examination of the area to make sure that all trails, features and structures are in working order. This inspection should identify mud, fallen branches in trail, large puddles, vandalism, etc. In the event that the trails, skills area or any single feature cannot be restored to their original condition, the trail or feature should be closed until addressed by a qualified trail/ skills park builder. Nearby municipalities have seen success in maintaining similar trail systems on town properties through Trail Stewardship Agreements with the Bark Eater Trails Alliance.

A professional trail/ skills park contractor should inspect the trails and skills area annually to ensure that more specific aspects are still within the reasonable standard. This could include shape of rollers, berms and transitions, loose soil in track, wooden features are tight, functional drainage, etc.

A comprehensive maintenance plan for the trail system and skills park will be developed and presented as part of the finished project.

Size and Location

The trail system has the potential to include up to 7 miles of hiking and biking trails. The majority of the property lends itself to moderate grade traverses and switchback with mellow terrain near the bottom and more tight and steep terrain at higher elevations. Ideal difficulty ratios: %20 easy, %60 intermediate, %20 advanced.

The skills area including pumptrack and skills features will be located in the NE corner of the clearing and occupy approximately 14,000 square feet (120' x 120').

The warm up trail near the parking area should start near the pavilion and weave along the tree line in a clockwise direction. A small starting platform, rollers and banked turns should be included in this trail to help define its corridor and increase the fun factor. The approximate length of this trail is 750'.

Phases (Optional)

These phases show one option for dividing the construction process into smaller pieces. Multiple phases could take place in a single year or be spread out through multiple seasons.

Phase 1

A total of 3 miles of trail on the lower portion of the property allowing multi-use access numerous potential bench sites and the lower vista.

- 1 mile easy multi- use
- 1.5 mile intermediate multi- use
- .5 mile intermediate mountain bike only
- Kiosk with information and maps

Phase 2

A total of 2 miles of trail, creating access to the upper half of the property and the highest vista. Also begins development near the skill area site and parking lot with the easy perimeter trail.

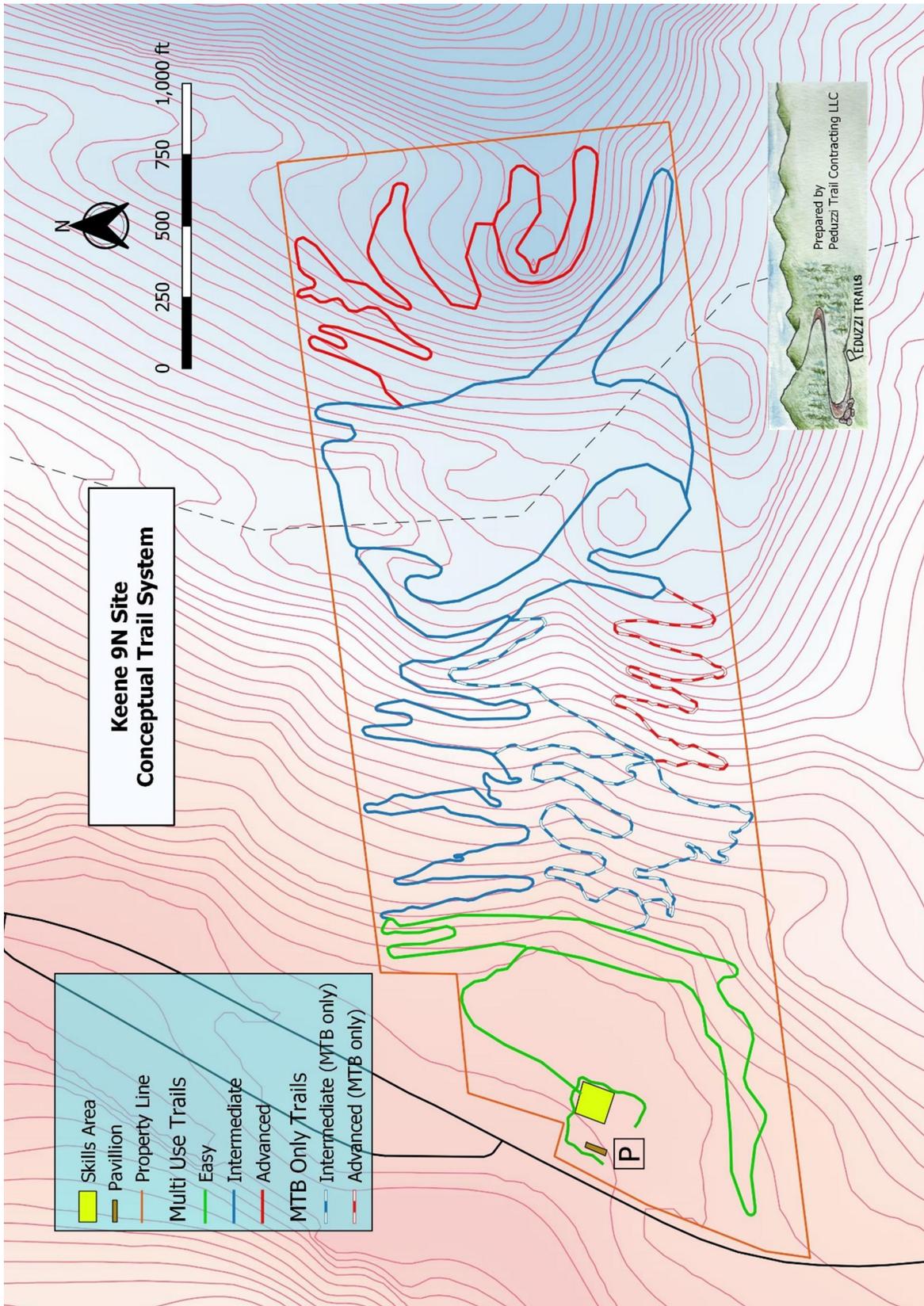
- Warm up/ perimeter trail
- .7 miles intermediate multi- use
- 1.1 miles advanced multi – use
- Bike maintenance station
- Kiosk updates

Phase 3

This phase includes the pumptrack, skills area and an additional mile of bike specific trails.

- Pumptrack
- Skills area
- .5 miles intermediate mountain bike only
- .5 miles advanced mountain bike only
- Kiosk updates

Property Overview and Trail System

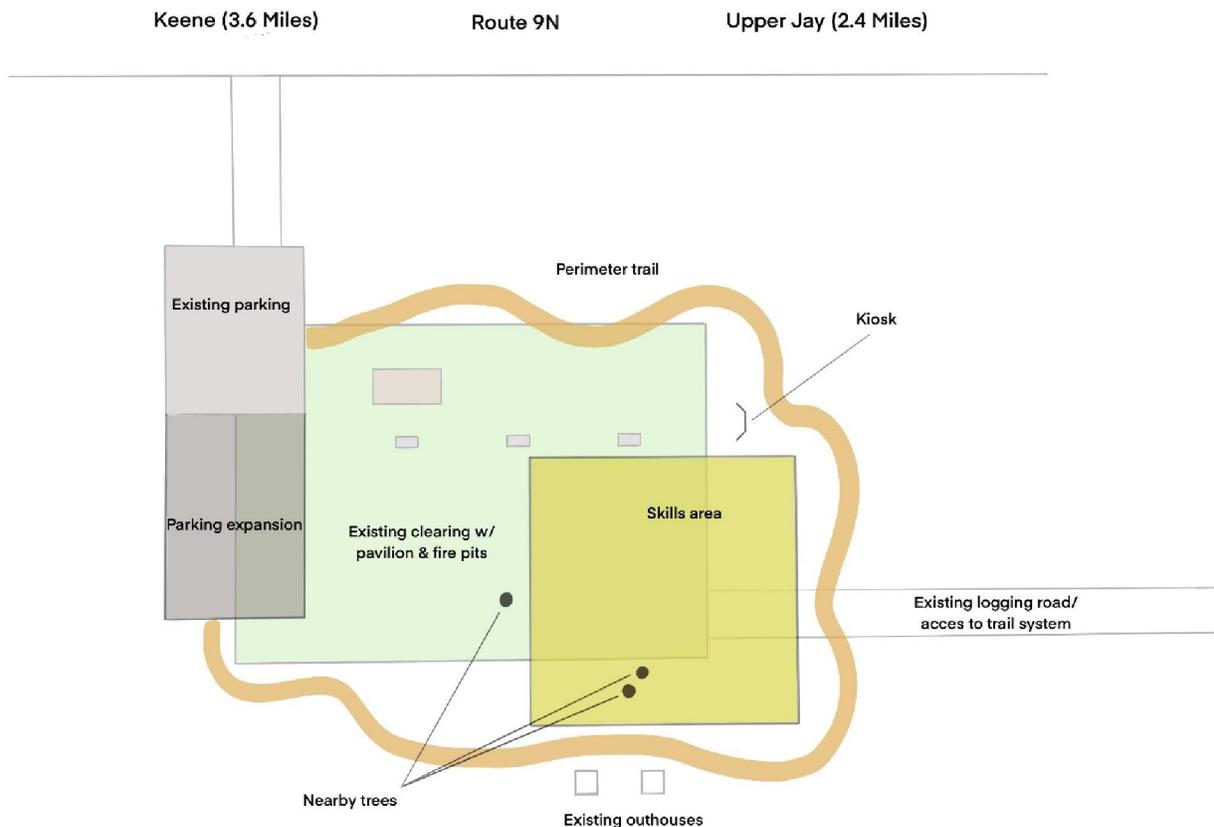


Parking, Skills Area, Pavillion

This map shows the conceptual trails and features in relation to the existing clearing and parking area. Also shown is the potential for expanding the parking lot if needed.

The skills area and perimeter trail should use the edge of the clearing as much as possible, allowing open space to remain in front of the pavilion. Some trees should be cut and used as features in the skills park (reducing cost of materials) while others should be left to provide shade.

The existing logging road that leaves the clearing should be the main corridor to access the trail system on the rest of the property. This road provides a dry route around the wetlands immediately behind the clearing.

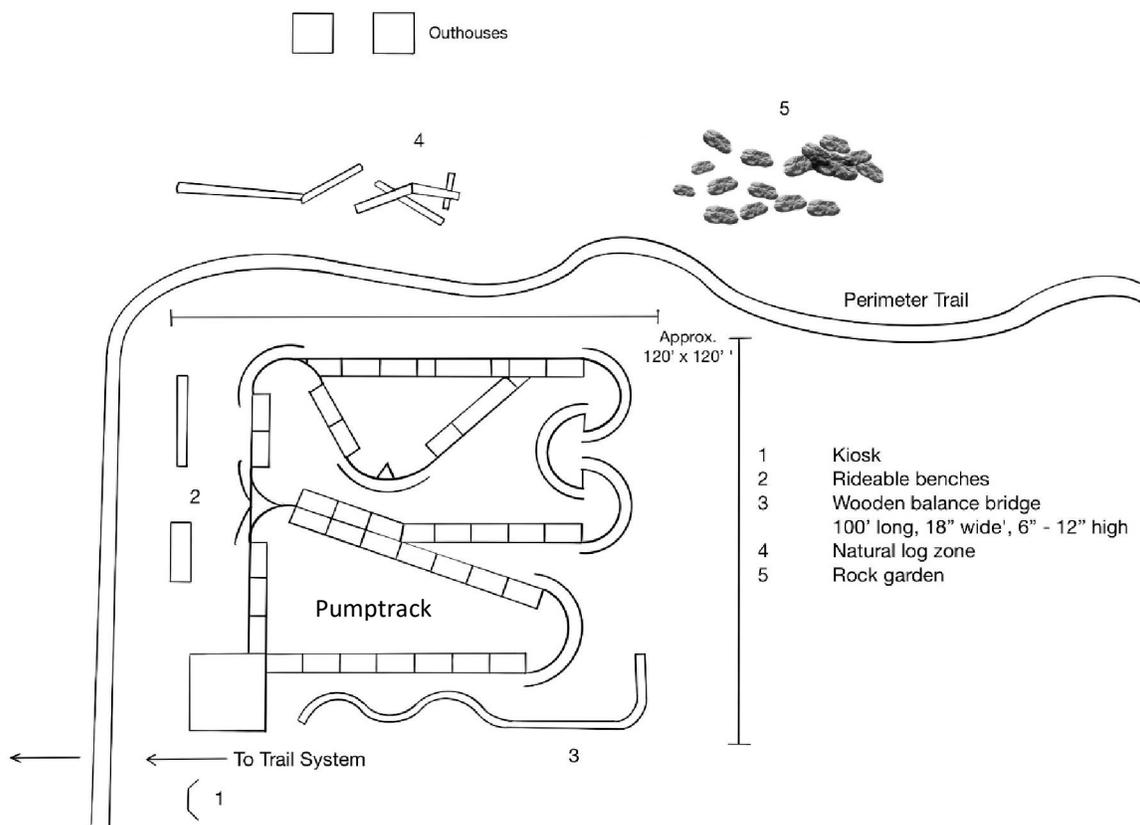


Skills Area Layout

This skills park includes a pumptrack and numerous individual features for riders to practice on. The pumptrack should either be constructed with a specific mixture of soil that will provide a firm and fast riding surface and be most resistant to erosion or be paved with asphalt. While an asphalt paved pumptrack is more expensive, it will need little to no maintenance and offers a more consistent riding surface.

The individual features can include (but not limited to) shaped piles of soil, bridge like features (2,3) and purposely placed natural materials (4, 5). More challenging features should offer a similar and easier option.

A kiosk (1) should be placed at the entrance to the trail system and near the skills area. This structure should be visible from the parking area. A bike maintenance station should be included near the kiosk.



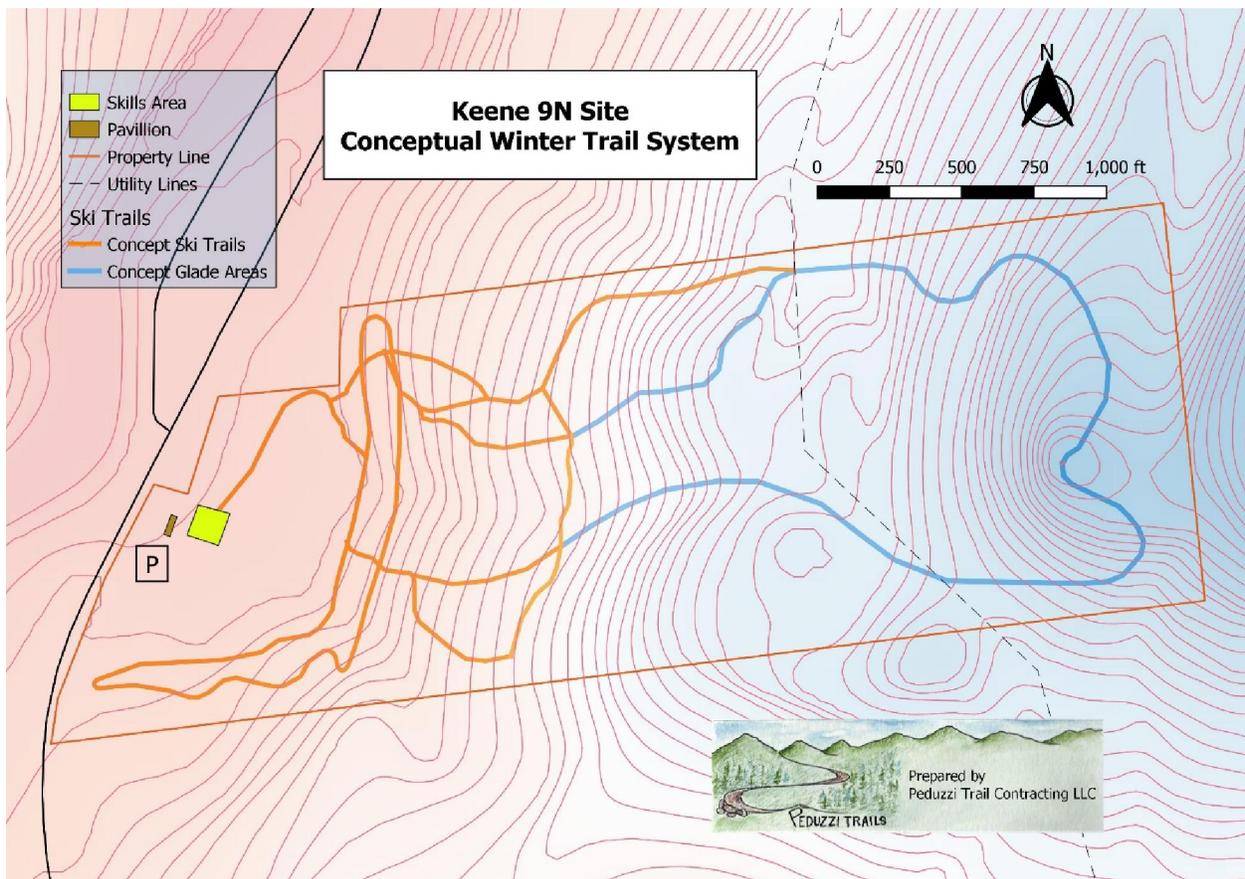
Winter Trail Map

While the multi-use trail will be appropriate for snowshoeing, many of the switchbacks needed to navigate the steeper terrain will not be suited for skiing. The existing network of logging roads provides a good foundation for ski specific trails. This map shows a conceptual winter trail system that will work in conjunction with the proposed multi-use trail system.

The relatively steep terrain is better suited for backcountry/ alpine touring/ splitboarding than it is for cross country skiing. This is a unique opportunity for skiers and splitboarders to practice and learn before heading out into the remote backcountry.

The orange ski trails use existing logging roads and select multi-use trails that would be appropriate for skiing. These trails would require minimal clearing to be opened and safe for skiing. The lower loop that is shared with the easy multi-use trail is appropriate for classic style cross country skiing. The trails that follow the logging roads straight up the hill are more appropriate for backcountry, alpine touring and splitboarding.

The blue line shows potential glade areas higher on the property. There are no logging roads in these areas but much of the forest is open hardwoods and conducive to glades skiing. Clearing of blowdown, saplings and select trees would be necessary to create the desired glade skiing experience.



Estimated Cost

These costs include labor, equipment and materials. Cost of signage, maintenance plan and landscaping materials (topsoil, grass seed) are also included.

Variables that will affect the cost include final design of the pumptrack, specific layout of trails, number and type of skills features, cost of building materials, paved vs dirt pumptrack, style and number of signs, kiosk design, etc.

Pumptrack - \$40,000 - \$120,00

Skills area - \$20,000 – \$40,000

Trail system - \$180,000 – \$250,000

5 - 10 year maintenance budget - \$10,000

Total estimated cost \$250,000 - \$420,000