TOWN OF BRISTOL, RHODE ISLAND

PLANNING BOARD MEETING

*Amended Planning Board Meeting Agenda
Thursday, June 12, 2025 at 7:00 PM
Bristol Town Hall, 10 Court Street, Bristol, RI 02809

- A. Pledge of Allegiance
- B. Approval of Minutes April 10, 2025
- C. Old Business
 - **C1.** *Applicant has requested a continuance until July 10th, 2025 Planning Board Meeting.*

Preliminary Plan Phase review for Major Land

Development proposal: (continued from April 10,
2025) to construct a new Mt. Hope High School,
including new tennis courts and athletic fields, at
199 Chestnut Street and to demolish the existing high
school building. Owner: Town of Bristol / Applicant:
Bristol Warren Regional School District/Lisa Pecora,
Perkins Eastman, applicant representative. Zoned:
Public Institutional. Assessor's Plat 117 Lots 3-7.

Applicant has agreed that the public hearing on the Preliminary Plan shall remain open until receipt of the necessary permits from the RIDEM.

<u>C2.</u> <u>Housing Element Update</u>: Board to schedule public hearing on draft housing element for adoption. Board to make recommendation to Town Council on Affordable Housing Trust Fund Policy.

D. New Business

<u>Mt. Hope Community Forest</u>: Presentation of Draft Mt. Hope Community Forest Management Plan, as required by grant agencies. Board to review and provide any comments. Public comment welcome.

E. Adjournment

Date Posted: June 5, 2025

Posted By: mbw



Town of Bristol, Rhode Island

Department of Community Development

10 Court Street Bristol, RI 02809 <u>bristolri.gov</u> 401-253-7000

June 6, 2025

TO:

Planning Board

FROM:

Diane M. Williamson, Director

RE:

Draft Housing Element Update of the Comprehensive Plan

Recommendation to the Town Council on the Affordable Housing Trust

Fund Policy

The Consultant is completing the draft update to the Housing Element of the Comprehensive Plan. The Planning Board can now schedule a public hearing to approve this element. A Town Council public hearing and approval is also required and in the past these have been joint public hearings. Or the Planning Board can wait and do this with the full update that we will be working on shortly.

Regarding the Affordable Housing Trust Fund Policy, as you recall, the Consultant recommended an option -- that the Town hold payments received in an interest bearing account until there is a opportunity to partner on a public/private project that would result in more affordable units in Bristol than the trust funds could have levered along, suggesting repurposing existing buildings such as Almeida Apartments among others. I recommend that you forward this recommendation to the Town Council for their consideration in setting up the Trust Fund.



Memo

DATE: February 13, 2025

TO: Diane M. Williamson, AICP, CFM, Director of Community Development, Town of Bristol, RI

FROM: Camoin Associates

RE: Analysis of In-Lieu of Fees and an Affordable Housing Trust Fund

Introduction

In 2022, the Bristol Town Council approved plans to redevelop the Robin Rug mill into new housing. The plan included the developer of the project paying the Town of Bristol \$520,000 in in-lieu-of fees to opt out of 13 affordable apartments in exchange for zoning allowances.

Camoin Associates has been retained to analyze and recommend disbursement strategies of the in-lieu fund that would result in new affordable rentals in Bristol.

The process started with Camoin Associates providing fifteen affordable housing strategies for consideration. Town officials recommended five from that list that seemed best suited for Bristol. Camoin Associates presented those five strategies with case studies to the Bristol Planning Board for feedback. The strategy of incentivizing accessory dwelling unit (ADU) construction for affordable rents got the highest interest from the Planning Board.

Objective

This memo will provide a financial and economic analysis of the feasibility of applying funds in lieu of rent to incentivize ADUs for affordable rents, followed by a summary and recommendations.

Incentivizing Accessory Dwelling Units (ADUs) for Affordable Rents

An Accessory Dwelling Unit (ADU) is an apartment added to a single-family house either internally (such as with a suite of rooms), as an addition, or as an ancillary structure (such as a converted garage or in a "pool house" style). Historically, these units were made for family members, such as aging parents or adult children, priced out of the housing market.

Because ADUs piggyback on the main house's land, taxes, mortgage, and sometimes walls, and because many owners have a sympathetic relationship with the tenants, these units are frequently rented out affordably.

Estimating ADU Construction Costs

The basis of our financial feasibility calculations is predicated on the estimated construction costs of an ADU. While multiple ADU building "kits" are advertised online for low prices, we know of no successful kits permitted as occupied ADUs. Building officials suspect those economical kits may not meet building codes or lack essential attributes like adequate insulation or plumbing amenities.

Therefore, this analysis has applied custom-build costs to assess the feasibility of ADUs meeting housing needs. We have applied a construction cost of \$375 per square foot based on two private-sector sources in New England.

We acknowledge and encourage that any of the financial feasibility models depicted on the following pages may substitute different construction costs if attainable cheaper.

The first source for our construction cost estimates comes from homebuilder Jonah Richard in Vermont. On November 17, 2024, Richard published that among five recently completed ADU additions, a mix of standalone construction and property retrofits, the prices varied between \$250,000 and \$350,000. For our study, we will use the middle of that range, \$300,000, to estimate costs.

Similarly, the ADU-specialty homebuilder Backyard ADUs, operating in Maine, New Hampshire, and Massachusetts, priced its 810-square-foot model in late 2024 between \$276,000 and \$306,000. This reinforces our \$300,000 pricing estimate.

Calculating Monthly Payments

The first step to identifying whether ADUs could support affordable rents in Bristol is calculating a monthly payment from financing construction.

Key Components:

- **Construction Costs.** Based on a review of the construction of similar structures in New England, the estimated "all-in" cost for a new 800-square-foot, free-standing backyard ADU is **\$300,000**.
- Downpayment. If financed by a 30-year mortgage, a borrower might need to put down 20%, or \$60,000. The monthly recapture rate of that downpayment (at no return) over 30 years is \$167 per month.
- Loan Payment. At a mortgage rate of 7%, the monthly payment to leverage \$240,000 is \$1,597.
- **Total Monthly Payment.** The monthly recapture needed to break even on the construction loan plus the downpayment is \$1,764.

Calculating Additional Monthly Costs

In addition to monthly construction loan payments, an owner will incur several other expenses when adding an ADU to their property. The new construction will trigger increased tax assessment value, need to be insured on the homeowner's policy, and absorb some utility costs when occupied (at a minimum, sewer and water fees).

For modeling purposes, we estimate additional taxes to be **\$1,000** per year, increased insurance to be an additional **\$1,000** per year, and monthly sewer and water fees to be about **\$100** per month. When broken down to a monthly payment of \$266, we round up to **\$275** to be conservative.

When the \$275 in additional monthly expenses are added to the monthly construction costs, the cost to own a new ADU is \$2,039 per month in the first year.

Note: The owner of an ADU rental unit will also pay income taxes on rent, but asset depreciation, interest deductions, and business expense deductions on annual tax filings may cancel out most of the taxes on new income.

Examining Bristol Rental Rates

The next task is to examine Bristol's rent prices to see if they can cover the cost of constructing a new ADU.

For this task, we will look at three metrics for determining median rent in the town.

- 1. The first is Fair Market Rent, as calculated by the US Department of Housing & Urban Development (HUD). HUD publishes "Fair Market Rent" for every market in the US (to protect taxpayers from price gouging on housing vouchers).
 - Fair Market Rent is for "standard-condition" rentals that recently turned over and accounts for all utility costs. It is in the fortieth percentile of rents; that is, it is fourth out of ten (4:10) among the most expensive rents in town (tenth being the most expensive). For 2025, HUD calculates the Fair Market Rent for a one-bedroom apartment in Bristol to be **\$1,319**.
- 2. Our second source, the American Community Survey (ACS), places Bristol's median rent at \$1,276 from the 5-year average between 2018-2022. In 2024 dollars, that is **\$1,376**.
- 3. If you multiplied HUD's Fair Market Rent for Bristol by one and a quarter (1.25) to approximate the fiftieth percentile of rents (or fifth most expensive rent out of ten), rent would be **\$1,649** per month.

None of these estimated rental rates will cover the cost of the ADU.

Examining Affordable ADUs

In this section, we examine the financial feasibility of three models designed to promote the construction of affordable rental units as accessory dwelling units (ADUs). Each model investigates the use of an affordable housing trust fund. All models assume that the Town will impose a 30-year covenant on each ADU, which will set a limit on rent to ensure it remains affordable for every assisted unit.

Model #1: Downpayment Assistance

This model examines how housing trust fund dollars could defray the cost of a loan downpayment, which would reduce the monthly expense of a new-construction ADU.

If the Town of Bristol were to dispense its affordable housing trust fund with 13 grants of \$40,000 to defray the cost of a construction loan downpayment, it would reduce the monthly downpayment recapture rate to \$56. This, plus the mortgage payment, amounts to \$1,653 – a few dollars over one-and-a-quarter (1.25) times HUD's Fair Market Rent. When adding \$275 of additional owner's expenses, it puts the costs of an ADU out of reach of median rents.

DOWNPAYMENT REDUCTION GRANT	
20% Downpayment on \$300K Loan	\$ 60,000
Downpayment Reduction Grant	\$ (40,000)
Owner's Downpayment to Recapture	\$ 20,000
Monthly Downpayment Recapture	\$ 56

AFTER-GRANT COST RECAPTURE							
Downpayment Recapture	\$	56					
Monthly Loan Payment	\$	1,597					
Additional Monthly Costs	\$	275					
Total Monthly Costs	\$	1,928					
1.25x HUD Fair Market Rent	\$	1,649					
Monthly Loss Year 1	\$	279					
Annual Loss Year 1	\$	3,348					

Model #2: Interest Rate Reductions

An alternative approach for dispensing the affordable housing trust fund would be to use it to purchase "points" to buy down the interest rate for owners taking out a mortgage to build an ADU. If interest rates were at 7% and the Town of Bristol paid for four points, that could lower the mortgage interest rate to 6% and cost the Town a \$9,600 grant for each \$240,000 loan. If the Town took this approach, the fund could buy points on over 54 loans. (It is worth noting that there may not be 54 applicants to the program in the first few years.)

That lower interest rate of 6% would reduce the monthly payment to \$1,439, and when combined with the owner's downpayment recapture, it brings the monthly repayment to \$1,606. When adding the additional owner's expenses of \$275, it increases the monthly costs to **\$1,881**. With 1.25x Fair Market at \$1,649, it still does not cover the costs.

INTEREST RATE REDUCTION GRANT						
Loan Payment at 7% Interest	\$	1,597				
Loan Payment at 6% Interest	\$	1,439				
Monthly Difference	\$	158				

Model #3: A Revolving Loan Fund

If the Town wanted to consider using the affordable housing trust fund as a revolving loan fund to construct new ADUs, the fund could simultaneously support **two \$240,000 loans**. With two 30-year loans in repayment, it would take **15 years** before enough principal was paid back to issue a new loan, and by that time, construction costs may have risen. In 15 years, the Town would have financed **three** affordable ADUs with its affordable housing trust fund.

A Note About Interest Rates

In the various models examined, the financing did not succeed due to the current high interest rates. However, in the next couple of years, interest rates may drop to around 5% in the free market. If this occurs, many of these Accessory Dwelling Units (ADUs) could be built without the need for loans or grant assistance.

Should interest rates fall to 5%, the Town might consider using affordable housing trust funds to provide down payment assistance for construction loans or to buy points on a private construction loan. This support would be offered in exchange for 30-year rent-cap covenants. However, if interest rates decrease and ADUs can be constructed without assistance, owners would not be prohibited from charging rents that may be unaffordable for the local workforce.

A Note About Construction Costs

Our current estimate for the cost of building a standalone ADU (Accessory Dwelling Unit) is approximately \$300,000. However, there are situations where the cost could be lower. For example, if the property owner chooses to handle the construction themselves, or if the property allows for a less expensive retrofit instead of a completely new build. It's important to note that we have not identified any instances of an ADU kit being successfully permitted. If construction costs were to decrease to around \$200,000 or even as low as \$150,000, it would significantly simplify the process of determining affordable rent.

Conclusion

Summary

In examining the financial feasibility of applying the negotiated in-lieu of fees toward the subsidy of new affordable rentals in the form of ADU construction grants or loans, we found that no subsidy model – either of loans or grants – could reduce costs enough to support affordable rents at this time. The barriers are interest rates that are slightly too high and new-build construction costs.

Recommendations

Given that the economics of borrowing and construction are not conducive to successful affordable housing subsidies for ADUs at this point in time, the Town of Bristol should hold off on expending its negotiated inlieu-of fees fund until a higher-impact opportunity arises. The Town of Bristol should convert its in-lieu-of fees into an affordable housing trust fund and put the money in an interest-bearing account.

It may be when lending and homebuilding costs are more amenable, the Town can then draw down the trust fund for subsidy programs that result in affordable housing. Another option is for the Town to use the trust funds to participate in a public-private partnership with a Low-Income Housing Tax Credit (LIHTC) developer and apply the trust funds to the capital stack (financing) of the project, where the net result will be more affordable units in Bristol than the trust funds could have leveraged alone. Repurposing existing buildings as Low-Income Housing Tax Credit projects is more feasible than raw construction in built-up towns like Bristol, and opportunities for a successful project may be found in the Almeida Apartments or former Guiteras School, among others.



Town of Bristol, Rhode Island

Department of Community Development

10 Court Street Bristol, RI 02809 <u>bristolri.gov</u> 401-253-7000

June 6, 2025

TO:

Planning Board

FROM:

Diane M. Williamson, Director

RE:

Mount Hope Community Forest

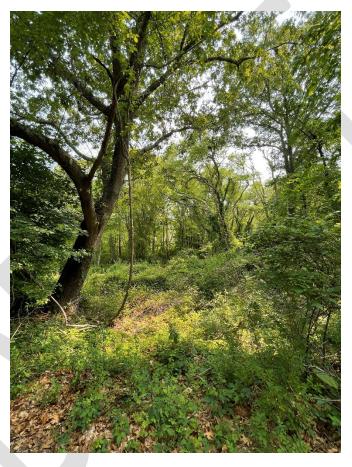
As you know, the Town has acquired 120 Acres of the Brown University property for preservation.

The US Forest Service was a partner in the project providing a grant to help the Town with the purchase. The US Forest Service requires a Community Forest Management Plan as a condition for the grant reimbursement. We have drafted a plan for your review and comments and area also seeking public input on the draft.

Please review and we will discuss at your June 12, 2025 meeting.

Thank you.

MOUNT HOPE COMMUNITY FOREST COMMUNITY FOREST PLAN BRISTOL, RHODE ISLAND Prepared for the US Forest Service



View of Mount Hope Community Forest

By the

Town of Bristol Department of Community Development Rhode Island June 2025

Introduction

This Community Forest Plan provides guidance for the management and use of the Mount Hope Community Forest. Developed with community input, this plan describes the objectives, benefits, mechanisms, and implementation plans to provide public access and use and to protect cultural and natural resources on the property for the long term.

The Mount Hope Community Forest, while owned by the Town of Bristol, is subject to deed easements held by the RI Department of Environmental Management (RIDEM) and the US Forest Service who provided grant funding to assist the Town in the acquisition. (RIDEM Easement recorded in Book 2280 Page 60 and US Forest Service Deed and Grant Requirements recorded in Book 2280 Page 47 of Land Evidence Records). In general, these easements prohibit development of the land and provide for perpetual public access and conservation restrictions. All future proposed uses must remain consistent with the property restrictions and the conservation goals.

These grant funders require that a "comprehensive management plan" be developed and updated from time to time.

The Bristol Planning Board reviewed this Community Forest Plan at their regular meeting of June 12, 2025 and written comments from the public were also solicited on the draft plan by a newspaper notice (copy attached) and a website posting on the Town of Bristol's website.

This plan is divided into eight sections in accordance with the Community Forest Plan requirements of the US Forest Service.

- 1. Description of all purchased tracts
- 2. Objectives and Strategies for the Community Forest
- 3. Description of Long-Term Use and Management of the Property
- 4. Community Benefits to be achieved from the establishment of the Community Forest
- 5. Ongoing activities that promote community involvement in the development and implementation of the Community Forest Plan
- 6. Plan for the utilization or demolition of existing structures and proposed needs for further improvements
- 7. A description of public access
- 8. Maps

Description of all Purchased Tracts

The Mount Hope Community Forest. consists of 120 acres of undeveloped open space within the Town of Bristol in Bristol County, Rhode Island. This land is primarily forest land with the exception of an approximate six (6) acre area of open field that has historically been used for agricultural purposes. The property is located in the Mount Hope Planning Area, as defined in Bristol's Comprehensive Community Plan at the southeasterly portion of Bristol. The community forest property consists of 14 individual parcels located along both the northerly and southerly sides of Tower Street.

This property consists of old growth forest, mature second growth trees, hayed field, and a forested maple swamp. Vegetation cover consists primarily of a mix of upland and wetland forest types. The westerly most portion of the land along both sides of Tower Street contains early- to mid-successional forest that is maturing from historic use as managed agricultural land. Much of this area consists of forested red maple swamp with native tree species consisting of red maple, yellow birch, ironwood, tupelo, sassafras, spicebush, and northern arrowwood. Upland portions of this westerly portion of the property consist of oak-maple forest containing red maple, red oak, white oak, scarlet oak, yellow birch, ironwood, sassafras, black locust, sycamore, black cherry, white pine, red pine, green briar, and northern arrowwood. The open field area was most recently hayed in 2024 and consists of native open meadow species including big bluestem, little bluestem, aster, goldenrod, and various grass and herbaceous plant species. Easterly and more northerly portions of the property rise in elevation and are dominated by forested uplands consisting of a more mature oak-hickory forest. Vegetation cover in this area contains red oak, white oak, scarlet oak, pignut hickory, shagbark hickory, yellow birch, red maple, beech, sassafras, sugar maple, northern arrowwood, highbush blueberry, swamp azalea, and sweet pepperbush.

The table below lists the tracts of land that were acquired to comprise the Mount Hope Community Forest.

County	Plat	Lot	Approximate	Land	Forest Type	Vegetation
	Мар	Number	Acreage	Use		Cover
Bristol	135	3	44.8	Vacant	200 year old	Wooded
					Oak Woods	
Bristol	144	1	6.5	Vacant	Mesic Forest	Wooded
Bristol	144	2	17.6	Vacant	Mesic	Farmland
					Forest/mature	and
					second	wooded
					growth trees	
Bristol	144	3	7.8	Vacant		Wooded
Bristol	144	4	11	Vacant	Forested	Wooded
					Maple Swamp	
Bristol	144	5	4	Vacant	Forested	Wooded
					Maple Swamp	
Bristol	144	8	1.5	Vacant	Forested	Wooded
		1			Maple Swamp	
Bristol	144	9	2	Vacant		Wooded
Bristol	144	10	3	Vacant		Wooded
Bristol	144	11	1	Vacant		Wooded
Bristol	144	12	2	Vacant		Wooded
Bristol	144	13	1	Vacant		Wooded
Bristol	144	14	5.8	Vacant		Wooded
Bristol	144	15	11	Vacant		Wooded

This property is located adjacent to the 125 acre Mount Hope Farm Trust property, which is listed on the National Register of Historic Places and contains colonial-era structures, actively managed agricultural attractions, and forest land extending to the shoreline of Mount Hope Bay. The 120 acres of Community Forest Property is also located adjacent to approximately 170 acres of additional land owned by the Pokanoket Tribe Land Trust. This additional land, which contains several educational and residential buildings, consists primarily of forested open space. These abutting tribal lands include the summit of Mount Hope, extensive amounts of natural shoreline along Mount Hope Bay, and contain many significant historic and culturally sites of importance to the Pokanoket/Wampanoag tribe of Native Americans.

1. Objectives of the Community Forest and Strategies to Implement them

The Town of Bristol will steward the Mount Hope Community Forest Property for its habitat, water quality protection, education, cultural and recreational attributes. The objective of

acquiring the Mount Hope Community Forest is preservation of the natural, cultural, and historic resources; and to allow public access for passive recreation.

The educational and recreational potential of this property is significant, and the Town intends to open the community forest portion of property to public access in the form of passive recreation, including walking trails, seasonal hunting opportunities, and educational endeavors. In addition, the property will be available to the public for cultural and scientific study and understanding.

Strategies to Implement the objectives are:

- a. Marking the boundary with signs at regular intervals and where trails leave the property;
- b. Assessing the property including wildlife vegetation, habitats, agriculture, invasive species, cultural resources, and history;
- c. Planning a trail system;
- d. Creation of a trail system with wayfinding signage.
- e. Creating a trail map;
- f. Posting a kiosk with a trail map and information about trail etiquette, rules and regulations at the trail head along Tower Street;
- g. Identify and secure funding as needed for trail creation and maintenance.
- h. A Forest Stewardship Plan will be created by either a certified Forester or the RI Department of Environmental Management.

2. Description of the long-term use and management of the property

The Town of Bristol has a well- established record of conserving and protecting land. This experience will prove beneficial in managing the Mount Hope Community Forest in perpetuity. The Town's Conservation Commission has very active members that are committed to the careful implementation of any actions and the Town has many volunteers that support and participate in the various Town projects.

The property will continue to be used as a passive recreation area. The Town of Bristol will manage the property. The Town will work with the Mount Hope Farm, an abutting property owner, for continued haying of the field on Plat 144, Lot 2 with a cooperative partnership agreement.

The Town intends to provide public access to the proposed Mount Hope Community Forest property for low impact passive recreation and educational uses. The Town typically limits public access to its open space parcels to daylight hours. Any sensitive environmental or cultural features that may be identified on the property will be protected by limiting or supervising visitation.

The Town will also explore a cooperative agreement with the RIDEM for expansion of the current seasonal (May to October) archery hunting agreement for deer hunting that the Town has in place on the abutting lots (Plat 144, Lots 6 and 7).

3. Community benefits to be achieved from the establishment of the community forest

The utilization of the property by residents and visitors allows them to experience first hand the benefits of Community Forests, building support for conservation efforts. Public support is essential for successful conservation of land in the future. It also supports local heritage tourism. Accessible, high quality recreational options also provide physical and mental health benefits for people.

5. Ongoing activities that promote community involvement in the development and implementation of the Community Forest Plan

- a. Spring clean- up days at the property annually;
- b. Conservation Commission monitoring of the property;
- c. Gather public input from guided walks on the property;
- d. Soliciting input from users on the property with a community survey
- e. A possible public visioning workshop.

6. Plans for utilization or demolition of existing structures and proposed needs for further improvements

The property is currently vacant – there are no existing structures. No proposed structures are needed at this time.

There are existing signs and fences from the previous private property owner that will be removed.

7. Planned Public Access

Public access will be enhanced by the creation of a series of pedestrian trails and paths for passive recreation on the wooded parcels. The trails will be designed and constructed to avoid sensitive areas, wildlife breeding/nesting sites, wetlands and other sensitive natural resources.

The Town envisions a series of trails that will encourage bird watching, historical education, and the simple appreciation of nature.

The Town will utilize volunteers and also seek grant funds to create the trail system.

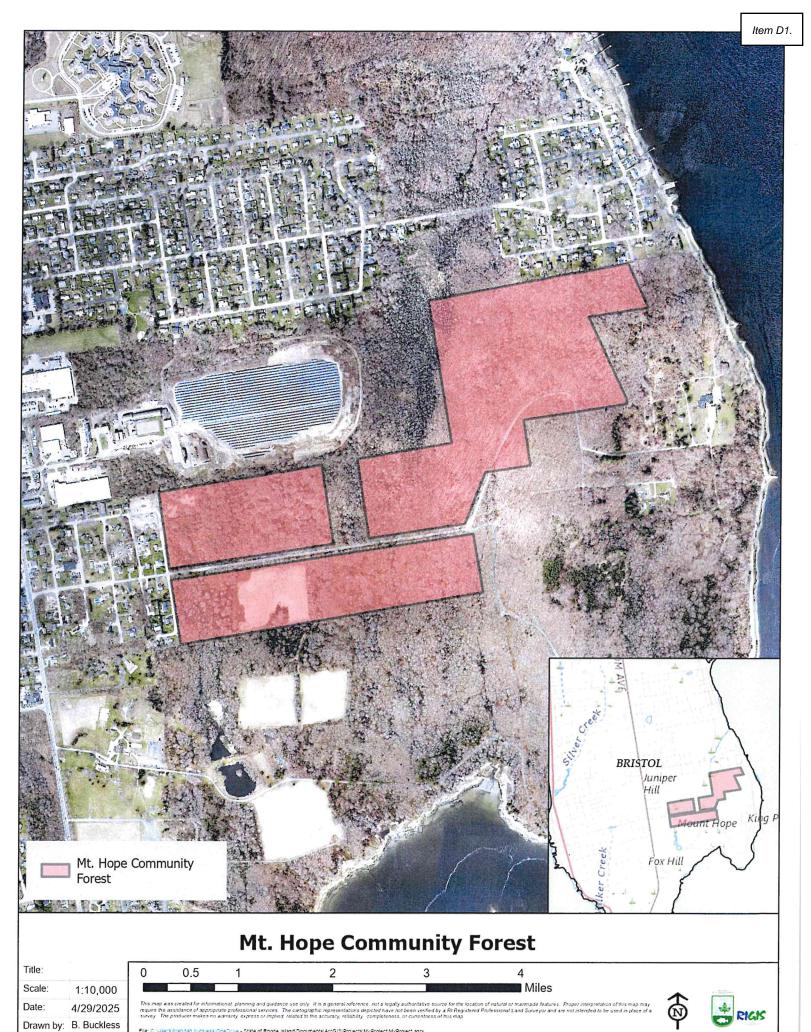
There is currently public parking along the north and south sides of Tower Street which is planned to be the primary access to the trails. There is also an access point over a paper road, "Babbitt Lane", from the neighborhood to the north off Clipper Way; however, this is expected to be move of a neighborhood access only for pedestrians.

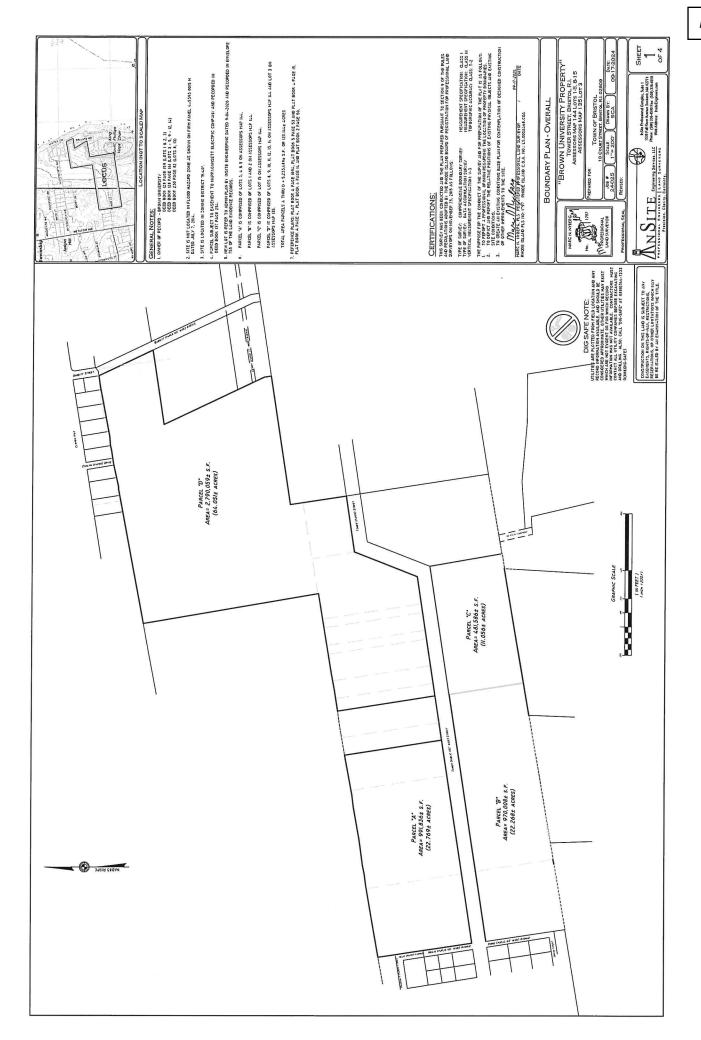
The Town staff and volunteers from the Conservation Commission will walk the property on a regular basis, including the boundaries at least once a year, to document any issues that need correction. It is also noted that some of the properties also have stone walls that will be monitored on a continuous basis to make sure they are properly protected and maintained.

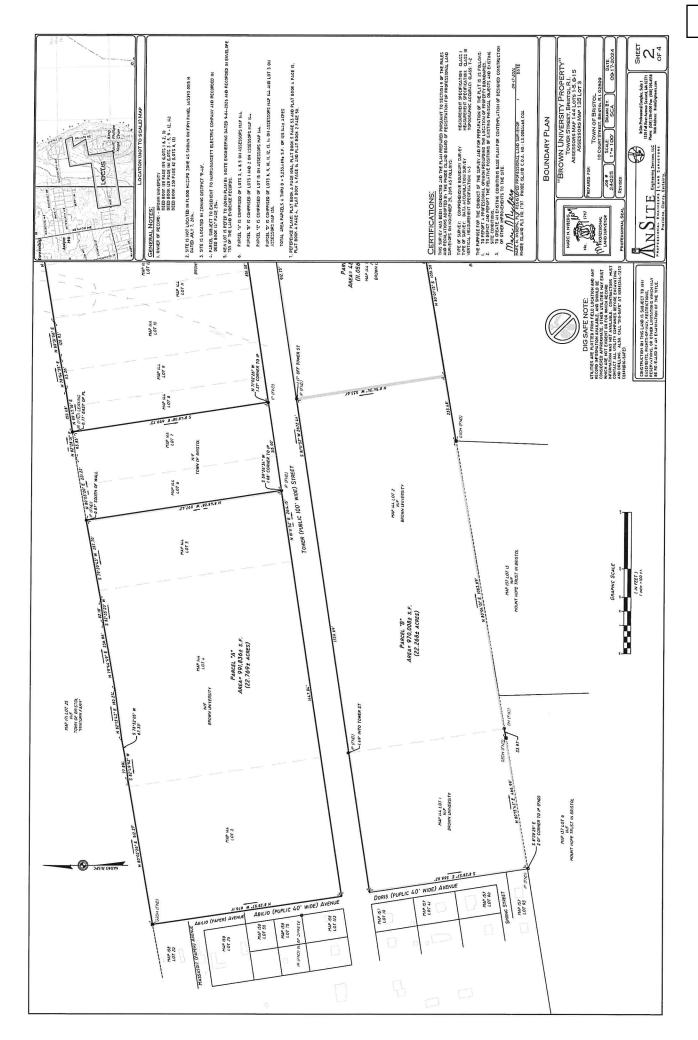
8. Maps

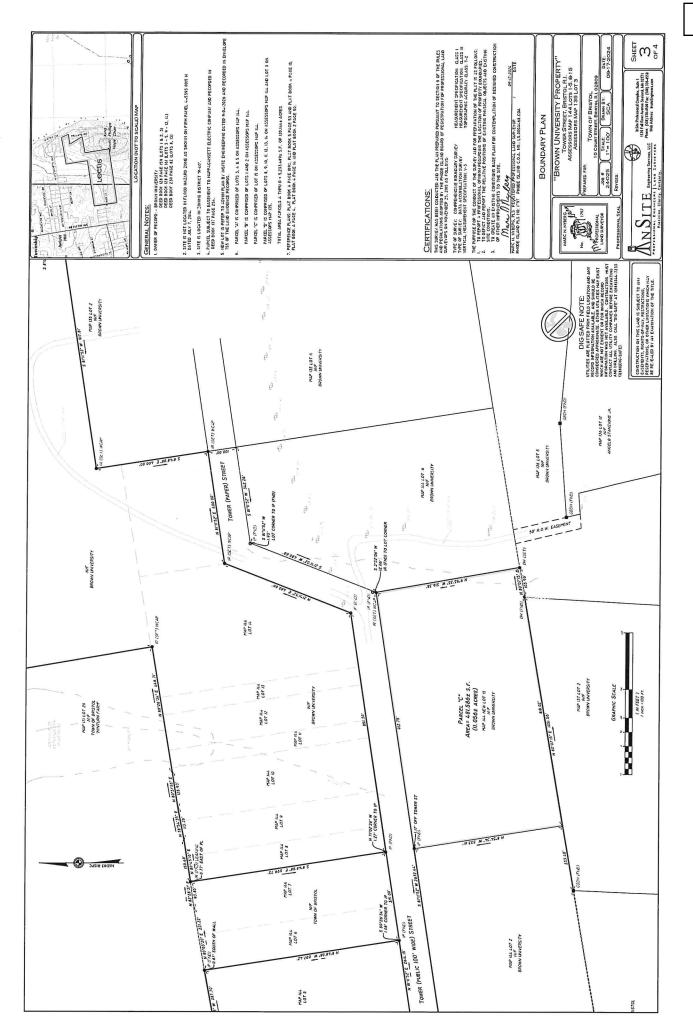
The following maps are provide as attachments to this plan:

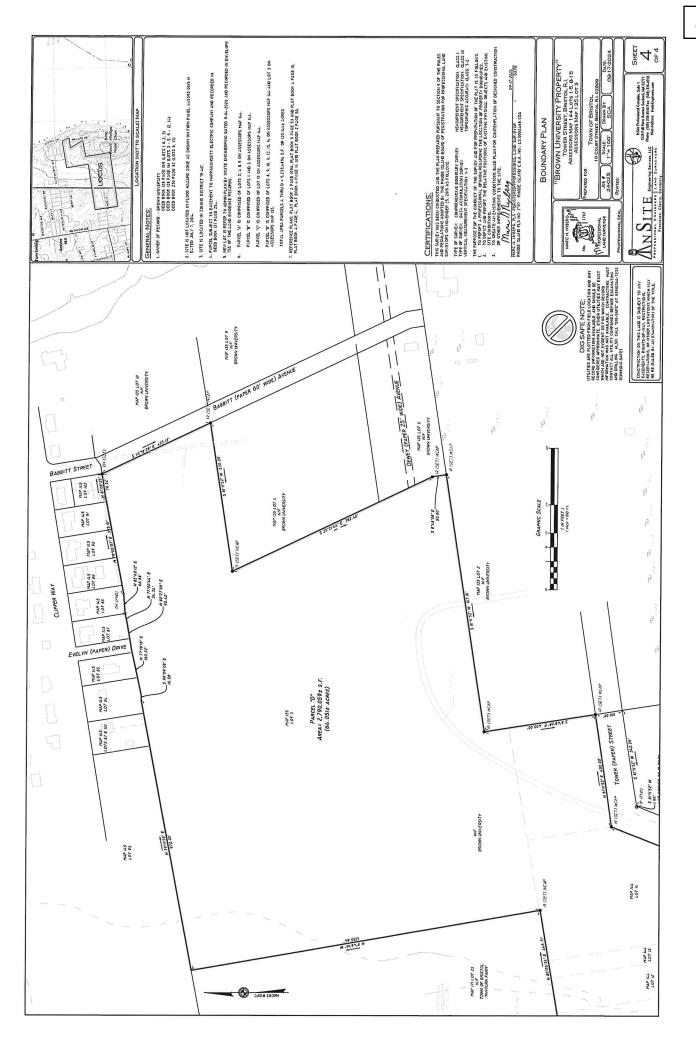
- a) General Location Property Map
- b) Survey of property
- c) Streams and Wetlands
- d) Topography
- e) Soil types













Mount Hope Community Forest

Town of Bristol, RI 1 inch = 1126 Feet



www.cai-tech.com

1126 2252 3378 June 2, 2025 MOUNT HOPE FARM DRIVEWAY

Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.



Mount Hope Community Forest

CAI Technologies Town of Bristol, RI

1 inch = 1126 Feet

Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.



Sodic Spot

B

Soil Map-State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties (Mount Hope Lands)

MAP LEGEND

Spoil Area	Stony Spot	Very Stony Spot	⟨⟨⟩	△ Other	Special Line Features	Water Features	Streams and Canals	Transportation	Interstate Highways	US Routes	Major Roads	Local Roads	Background	Aerial Photography									
Area of Interest (AOI)	Area of Interest (AOI)	Soils Soil Map Unit Polygons	Soil Map Unit Lines		cial Po	(o) Blowout		₩ Clay Spot	○ Closed Depression	Gravel Pit	Gravelly Spot	😂 Landfill	A Lava Flow	Marsh or swamp	Mine or Quarry	Miscellaneous Water	Perennial Water	Rock Outcrop	+ Saline Spot	🐈 Sandy Spot	Severely Eroded Spot	Sinkhole	Slide or Slip

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for map measurements. Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Soil Survey Area: State of Rhode Island: Bristol, Kent, Newport, Survey Area Data: Version 23, Sep 8, 2023 Providence, and Washington Counties

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Date(s) aerial images were photographed: Jun 14, 2022—Jul 1,

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI			
Вс	Birchwood sandy loam	20.2	15.1%			
CaD	Canton-Charlton-Rock outcrop complex, 15 to 35 percent slopes, very stony	0.8	0.6%			
CeC	Canton and Charlton fine sandy loams, 3 to 15 percent slopes, very rocky	16.8	12.6%			
ChB	Canton and Charlton fine sandy loams, 0 to 8 percent slopes, very stony	12.5	9.4%			
ChD	Canton and Charlton very stony fine sandy loams, 15 to 25 percent slopes	1.6	1.2%			
NP	Newport-Urban land complex	0.5	0.4%			
PmA	Pittstown silt loam, 0 to 3 percent slopes	2.0	1.5%			
PnB	Pittstown very stony silt loam, 0 to 8 percent slopes					
PsA	Poquonock loamy fine sand, 0 to 3 percent slopes	2.5	1.8%			
Rf	Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony	28.3	21.2%			
Se	Stissing silt loam	2.2	1.6%			
SuB	Sutton fine sandy loam, 0 to 8 percent slopes, very stony	17.8	13.3%			
WoB	Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony	1.0	0.8%			
Totals for Area of Interest		133.6	100.0%			