

From:
Koduvayur G Narayana and Radha Narayana

March 8, 2024

Subject: Notice of Intent to perform exploratory work

To:
Van Lancker, Chairperson Ashland Conservation Commission 101 Main Street
Ashland, MA 01721

Re: Notice of Intent for Exploratory work, at 0 Prospect Street, Ashland, Massachusetts,

Dear Chairperson Van Lancker, and Commissioners,

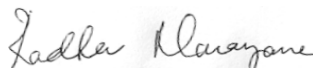
Greetings

We as owners of the property at 0 Prospect Street, respectfully submit two copies of a Notice of Intent to perform exploratory work in the resource areas. With this NOI, we seek the permit with necessary waivers / variances for an exploratory test pits and deep test bores for soil data collection. This will help us design and submit comprehensive plans of developing the parcel for a residential use. Please advertise this matter for public hearing at your next regularly scheduled meeting of the Conservation Commission. A check made payable to the Town of Ashland, in the amount of \$110.00 is enclosed to cover the Wetlands Protection Act (WPA) filing fee and a check for \$67.50 is enclosed with this submission to cover the Town of Ashland's local wetland bylaw fee. A check made payable to the Commonwealth of Massachusetts for \$42.50 was sent to the DEP Lock Box to cover the state WPA filing fee. A copy of this Notice of Intent has also been submitted to the Department of Environmental Protection's Northeast Regional Office. Further, all abutters within, 100 feet of the project site have been notified by certified mail. A copy of the abutter notification letter, the affidavit of service, and a list of abutters is attached with this NOI.

We look forward to presenting the project at the next regularly scheduled Conservation Commission meeting.
Very truly yours,



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Radha Narayana Phone: 508 380 9314, Email Radha 1605@gmail.com



Email: Radha1605@gmail.com
17 Half Crown Circle, Ashland MA 01721

cc: DEP Northeast Regional Office, 150 Presidential Way, Woburn, MA 01801

Koduvayur G & Radha Narayana,
Applicants
checks to Town of Ashland - \$110.00 and \$67.50

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Introduction

This Notice of Intent for exploratory work is prepared and submitted, as per the Massachusetts Wetlands Protection Act (WPA)¹, and the Town of Ashland's Wetland Protection Bylaw.² We are evaluating the potential to access the upland and construct in the future a residential structure for us to live in and use it as our retirement home. This site is currently undeveloped, consisting of forested uplands and an isolated wetland. To assist in evaluating access to the upland portion of the parcel and to aid in designing the development plan of the site, we need to conduct certain necessary exploratory tests.

Brief Statement about the Limited Scope of this Notice Of Intent

This Notice of Intent is for us to carry out an exploratory test boring for soil data and test pits for high ground water table information. This site does need more care in navigating through all the challenges it presents based on the existing site conditions. In general, this exploratory activity is an exempt activity in most cases, where as in our situation we are dealing with areas (25 ft NDZ per Ashland By law) in the vicinity of a certified vernal pool,³ requires a filing of the Notice of Intent. Note the Vernal pool is considered as an outstanding resource water per 314 CMR 4.04(3).and our work area is only in the upland are outside the pool and outside the associated wetland. Our work area will not touch or cross the delineated boundary of the pool and its associated wetland.

Our overall plan for the **future** is to:

1. House/Cabins & Deck⁴ stilts in the area between the onsite 25 NDZ and the onsite 100 ft. buffer zone⁵.
2. Build a 10 ft. wide 100% pervious gravel driveway⁶ and this 265 ft. long 100% pervious gravel driveway will traverse through part of the onsite 25 ft. NDZ along the edge of eastern lot line for about 195 ft. and about 70 ft. in the 100 ft. buffer zone. An appropriate NOI filing will be submitted as and when the final design is completed based on the data collected from the current limited scope NOI
3. Drill a well for water and two wells, for geothermal energy resource. As an alternate, we are also considering horizontal loop for geothermal source based on the cost for the geothermal wells.
4. Install a sewer line with at most two sewer manholes along the 100% pervious gravel driveway and connect it to the town sewer by gravity or otherwise⁸.
5. Clear trees in areas outside of all three 100 ft. Buffer zones as needed to create a temporary stockpile area, and to clear the area surrounding the wells and the underground sewer lines.
6. Compensate, the partially filled vernal pool, and the filled small wetland area by replicating it at the periphery of the existing vernal pool prior to start of the construction of the 100% pervious gravel driveway.
7. We will plant trees or bushes in other parts of the onsite 25 ft. NDZ, to compensate those trees that were cut to get an access path in the 25 ft. NDZ along the eastern part of the lot line for the drill vehicle to reach the upland area.

In order to accomplish the above (1 to 7) we need to perform certain necessary *exploratory tests* (See Plan A) to design and bring the full-fledged plans to the conservation commission and to other town departments. Our limited goal with this Notice of Intent filing is to seek permission,

- *To dig test pits to evaluate the high ground water table in the region close to the eastern edge of the lot line and just*

¹ M.G.L. Chapter 131, Section 40,

² Chapter 280

³ See Exhibits 2A,2B, [Note 1 - 314 CMR 4.06 (1) d 10: Vernal Pools. No point source discharge shall be allowed to a vernal pool certified by the Massachusetts Division of Fisheries and Wildlife; and no discharge of dredged or fill material shall be allowed to a vernal pool certified by the Massachusetts Division of Fisheries and Wildlife, unless a variance is granted under 314 CMR 9.08. Note 2- 314 CMR 4.06 (2) **Wetlands:** Wetlands bordering Class A Outstanding Resource Waters are designated Class A Outstanding Resource Waters. **Vernal pools are designated Class B Outstanding Resource Waters.** All wetlands bordering other Class B, SB or SA Outstanding Resource Waters are **designated as Outstanding Resource Waters to the boundary of the defined area.** All other wetlands are designated Class B, High Quality Waters for inland waters and Class SA, HighQuality Waters for coastal and marine waters.

⁴ See Exhibit 5 for a conceptual site development plan

⁵ No sense in using stilts in the upland area outside all three 100 ft. buffer zones, as most of this area is already at high elevation

⁶ This requires partial filling of the vernal pool (about 2.3 % or 270 sq. ft. out of 11944 sq. ft. of the vernal pool

⁷ 310 CMR 10.57 (4) a 2: (under general performance standards): Except for work which would adversely affect vernal pool habitat, a project or projects on a single lot, for which Notice(s) of Intent is filed on or after November 1, 1987, that (cumulatively) alter(s) up to 10% or 5,000 square feet (whichever is less) of land in this resource area found to be significant to the protection of wildlife habitat, **shall not be deemed to impair its capacity to provide important wildlife habitat functions.** Additional alterations beyond the above threshold, or altering vernal pool habitat, may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures contained in 310 CMR 10.60.

⁸ High ground water table may requires us to use forced main using Horizontal Directional Drilling.

outside the delineated vernal pool boundary. Most of this area is within the onsite 25 ft. NDZ and we request the commission to grant the appropriate waivers and variances to accomplish digging the test pits in the 25 ft. NDZ.

- To drill the deep test bores and take soil samples to evaluate its bearing capacity. Most of this area is between onsite 25 ft. NDZ and the onsite 100 ft. buffer zone and we request the commission to grant the appropriate waivers and variances to accomplish drilling the test bores and take soil sample.
- To cut the trees (see Plan B) within the onsite 25 ft. NDZ. This will aid us to make a temporary path to access the onsite 100 ft. buffer zone by the boring machine. We request the commission to grant the appropriate waivers and variances to cut trees at 10 locations as shown on the Exhibit 6 identified with blue rectangles.

Existing Site Conditions

The proposed project is located at 0 Prospect Street in Ashland, Massachusetts (Exhibit 1 - Site Locus Map). This land parcel of 46,247 sq. ft., is listed in the Ashland Assessor's Database as Parcel ID #0140290003400000. The subject parcel is located approximately 255 feet west of the Holliston town line and it is bounded by residential properties (See Exhibit 8) to the east, west, and south, and an undeveloped forested parcel of land to the north. *This parcel is a buildable lot⁹ and it does meet all the current setback requirements (see Exhibit 1A).* The site consists of both a forested upland and wetland. The wetland is isolated and lies towards the front of the parcel. The topography at the site varies from about 197 ft. to 205 ft, the ground elevations in the upland varies very gradually.

I. Onsite Elevation information (See Exhibits 4 and 13)

1. Elevation within the deepest part of CVP, is at about 197 ft. and is part of a very narrow valley of about 2 ft. wide.
2. Elevation of most part of the land surface under the CVP is at an elevation of about 199 ft.
3. Elevation of the pool boundary is at about 200 ft.
4. Elevation at the northern parcel boundary in the upland area is around 204.5 ft.
5. Elevation at the highest point in the upland is 205 ft.
6. Elevation of upland along the eastern lot line adjacent to the vernal pool boundary is at about 201 ft.
7. Elevation of the Prospect Street is 201 ft.

II. Four abutters have used our site over many years and some of the areas used is within the onsite and offsite resource areas. Here is a brief list of some pre-existing used areas by the abutters.(See Exhibit 15)

- a. One abutter has trespassed and attempted to claim an adverse possession of about 1870 sq. ft. of our land in the northeast corner of the subject parcel (see Exhibit 1B). This abutter has disturbed the area within the offsite 100 ft. buffer zone at the northeast corner by erecting a fence on our property covering a sizable swath of our land. This abutter has been adding loam and mowing this fenced area (1870 sq. ft.) over the years since 1997 (based on this abutters adverse possession claim submitted to the land court). We did find some lawn grass cuttings dumped outside the fenced area in our land portion (still inside the offsite 100 ft. Buffer zone) along with other thrash over the years. The possible discharge from their sump pump and roof drain may have caused the soil to erode and has possibly uprooted a tree and disturbed the vegetation in other parts inside the offsite 100 ft. buffer zone. As of May 20023 the installed fence has been removed as per land court order with the dismissal of the adverse possession claim. Also some of the thrash has been cleaned up by this abutter.

⁹ Quoting from an email sent by the Town of Ashland, **Building Commissioner Mr. Douglass Scott** dated September 29, 2021 (Exhibit 1 A)

- The lot in question, "0" Prospect Street, was created in 1950, it has more than 50 ft. in frontage and is greater than 5000 sq. ft
- Zoning, was approved for the Town of Ashland in 1954. The lot is currently located in an RA zone.
- The lot is currently considered a "pre-existing non-conforming lot". Meaning that it was existing before zoning and does not meet today's zoning ordinance requirements.
- It has never been in common ownership with an abutting property, therefore the "merger doctrine" does not come into play here.
- **lot is considered a "buildable lot"**. The only caveat is that the location of any proposed structures built on the property must meet today's setback requirements. The house/structures will be conforming, but the lot will remain "non-conforming".

- b. In the back yard of Another abutter, who has also trespassed and
 - 1. A large tree on our site has been cut and this is within the onsite 100 ft. buffer zone, this may need to be removed for us to create a temporary passage
 - 2. There are a row of bushes that have been planted which partly is in the onsite 25 ft. NDZ and majority of it is in the onsite 100 ft. buffer zone close to the eastern lot line.
 - 3. This abutter has installed a PVC drainpipe of about 3 inches in diameter to drain water directly from their basement sump pump into the wetland/vernal pool.
 - 4. This abutter has assured that this pipe no longer carries the sump pump drain. This PVC pipe is still buried, under the soil and is exposed into the wetlands/vernal pool.
 - 5. This abutter has been mowing the lawn portion to the east side of the line of bushes.
 - 6. This abutter has been amassing on the west side of the line of bushes materials such as cut tree trunks, tree branches, bush cuttings, dry leaves, grass clippings from lawn mowing activity next to the east side of the line of bushes. This heap of materials appears to have been piled, over several years. This piled up material is partly within the onsite 25 ft. NDZ and majority of it, is in the onsite 100 ft. buffer zone.
 - c. On areas of our parcel next to the third abutter, there are lumbers placed possibly to shore up the lawn from eroding (a good protection for the vernal pool and for their lawn) and this is within the 25 ft. NDZ along the eastern lot line. A slim part of this lawn is in our lot. There are other signs of disturbance such as a long metal pipe buried in the ground and used plant debris etc.
 - d. The fourth abutter had parked a small trailer (?) in the 25 ft. NDZ along the southwest corner of the lot with in the 25 ft. NDZ and that's no longer there now
- III. Since December 18, 2023, three emergency tree removal orders were secured from conservation commission to cut six tree trunks due to the recent storm event (December 2023) & to prevent possible hazard to the public and the neighboring property (see Plan B/ Exhibit 6 shown with a Green Polygon around those cut Trees).
- IV. A review of the current MassGIS data layer for the Massachusetts Natural Heritage Atlas (effective August 1, 2021) under the Natural Heritage and Endangered Species Program (NHESP) indicates that the subject parcel is not located within mapped Estimated Habitat of Rare Wildlife or Priority Habitat of Rare Species. (See Exhibit 2 and Exhibit 2 C – NHESP Maps). Note, the isolated wetland at the subject site is a certified vernal pool (CVP #4747) with the understanding that No rare or endangered species have been found in this CVP #4747 (see Exhibit 2A and 2B).
- V. A review of the Mass GIS for Area of Critical Environmental Concern, shows that subject site is not part of the ACEC location (See Exhibit 9)
- VI. According to the FEMA Flood Insurance information for Ashland (Community Panel Number 25017C0627F dated 07/07/2014), the subject property does not lie within the 100-year flood plain (Exhibit 3 – FEMA FIRM Map).
- VII. An Order of Resource Area Delineation, was issued by the Ashland Conservation Commission dated 8/4/2022. Exhibit 4 shows the approved delineated plan (MassDEP File #:095-0969),
- VIII. This exploratory activity is exempt from MESA filing based on 321 CMR 10.14.(14)¹⁰ and there are no rare or endangered species in this habitat (See Exhibit 2 A and 2 B)
- IX. The on-site wetland (vernal pool) is approximately 11,944 sq. ft. in area with no discernible inlet or outlet. The Massachusetts Wetlands Protection Act (M.G.L. Chapter 131, Section 40) under the Wetlands Protection Act (WPA) Regulations (310 CMR 10.00) defines the wetland resource as follows:

¹⁰ 321 CMR 10.14 (14) performance of customary land surveying activities, wetland resource area delineations, percolation tests, environmental assessments and investigations performed in accordance with M. G. L. c. 21E, and other customary preliminary site investigations or customary property due diligence activities, provided that vegetation clearing and soil alteration are avoided or **minimized to the maximum extent practicable**;

Isolated Land Subject to Flooding

According to 310 CMR 10.57 of the WPA, Isolated Land Subject to Flooding (ISLF) is an isolated depression or a closed basin without an inlet or an outlet. It is an area, which at least once a year confines standing water to a volume of at least ¼ acre-feet and to an average depth of at least six inches. Under the WPA, there is no wetland buffer zone associated with isolated wetlands.

However, under the Ashland Wetlands Protection Bylaw, a 100-foot buffer zone and a 25-foot No Disturbance Zone extends from the delineated isolated wetland boundary and hence we are required to submit this ***Notice of Intent filing for this exploratory work with limited scope.***

Request 1: Test Pit to collect data and prepare a storm water management report for the runoff from the future pervious gravel driveway

Our future, plan is to construct a permanent 10 ft., porous¹¹ gravel driveway (See Exhibit 12) using, **Truegrid paver system**¹² after we submit the full fledged plan for review and approval from the Ashland Conservation Commission this system has practically zero run off and it is 100% permeable.

- a. *Alternate¹³ access using a single span and multiple span bridge options were explored. These options were found to be more impactful to the resource area and also economically very expensive for a small development like ours for details see Exhibit 10. A third alternate option of shifting the access driveway by 5 ft. and utilize the 5 ft. driveway setback area for part of the access driveway was also explored but it required a waiver/variance from Zoning Board of Appeals and the ZBA denied the required waiver/variance see Exhibit 11.*
- We were given to understand that we are required to secure a storm water permit for the planned future development and as per Ashland by law 343-7.6.10.7

*“A sufficient **number of test pits** and test information shall be provided to demonstrate the reasonable accuracy of the groundwater elevation in areas where storm water runoff is proposed to be infiltrated into the ground. The applicant shall demonstrate that at least 2-feet of separation is present from the bottom of the infiltration device to the maximum groundwater elevation”*

¹¹ **Storm Water Friendly Driveways:Plastic Grid System:** Water quality, and Erosion prevention, Quicker snow melt and drainage, flexible site design and Durability Examples: <https://www.truegridpaver.com/> and <https://www.prestogeo.com/>

¹² **About TrueGrid Paver System:** Used for- Pathways and Bike Trails, Grass Pavements, Driveways in both Residential / Lite Commercial projects. **Permeability:** 100%, **Compressive Strength:** Over 6,200 psi with aggregate fill, **Load Capacity:** Exceeds H20/HS20 rating **Material:** Recycled High Density Polyethylene (100% post-consumer) **Color:** Black with UV Stabilizer **Temperature Range:** Dimensionally Stable for - 58° F to 194° F **ADA Compliant:** Yes, **Environmental Compatibility:** non-toxic, harmless to plants, animals, and microorganisms. Inert material, groundwater neutral.

- Millions of square feet of TRUEGRID, has been successfully used in the USA. Some of the examples are: **Google, Auto- Nation, Whole Foods Markets, NASCAR, the U.S. Military and others.** TRUEGRID is vetted, and trusted coast-to-coast in hundreds of commercial and industrial parking lots. For additional information click on the links below <https://www.truegridpaver.com/permeable-driveway-pavers/>
- <https://www.truegridpaver.com/resources/projects/> <https://www.truegridpaver.com/resources/case-studies/>
<https://www.truegridpaver.com/case-studies/flooded-residential-driveway-jacksonville-fl/>
- The Truegrid paver system is an environmentally friendly option (<https://www.truegridpaver.com/complete-guide-permeable-paving-systems%E2%82%AC%80%BB%BF/>)
- See list of projects that use the truegrid paver systems <https://www.truegridpaver.com/resources/projects/>

WORKS IN ALL CLIMATES AND SOILS
STORM WATER DETENTION

100% PERVIOUS COVER

1000+ INCHES/HOUR INFILTRATION RATE

0.5 - 0.05 RUNOFF COEFFICIENT

¹³ *The following two Alternate options were explored by using:*

- 1) *a 14 ft wide truss bridge single span and multiple span to cross the vernal pool was ruled out primarily as it is more impactful to the wetland resource area, needs extensive regrading, results in steep slopes and secondarily it is not an economically viable option for a small residential development such as ours (see Exhibit 10).*
- 2) *Third option was to utilize the 5 ft. driveway setback area for the driveway so as to minimize the impact on wetland resource area. This was rejected by the Ashland ZBA by denying the waiver for the 5 ft. driveway set back (see Exhibit 11).*

3)

- This requires us to dig test pits to design for a future 10 ft, pervious gravel driveway even though, in this pervious gravel driveway system we plan to use Truegrid paver system which is a 100% permeable material, which has practically zero runoff. ***If the commission deems that storm water permit is not required for the 100% permeable gravel access driveway we will not dig any test pits and if the commission deems fit to issue a waiver for storm water report for the 100% permeable gravel driveway, then kindly do so. If not,***
- We need permission from conservation commission to dig test pits to evaluate the high ground water table along the eastern edge of the lot line and just outside the delineated vernal pool boundary. Most of this area is within the onsite 25 ft. NDZ and we request the commission to grant the appropriate waivers and variances to accomplish the digging for the test pits.

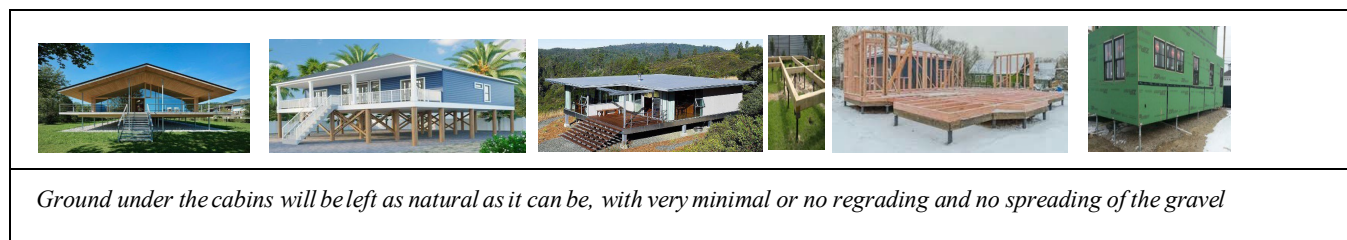
If permission is granted, then we will use additional StrawWtels surrounding each pit near the vernal pool so that there will be double layer of protection. We will use wood crates or tarp to temporarily store the dug soil (2 x2 x2 = 8 cft of soil). These erosion control barriers will be removed and disposed off as and when its purpose of use is completed. This is an NOI for Exploratory work and there is no permanent impact with in the resource area, 100 ft. buffer zone, outside the resource area and in the upland all work area is demarked by the line of straw wattles. Also If there are any additional erosion control actions to implemented during and post this activity please let us know.

- *Also, see next page for the storm water management of roof run off from the Cabin and the Garage and this will not interfere with the storm water management from the pervious gravel driveway.*

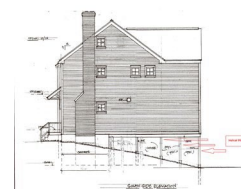
Request 2: Test Baring for Soil data for a future building location

We would like to minimize the length of the access driveway and hence we prefer to locate the cabin with in the onsite 100 ft. buffer zone¹⁴and outside the 25 ft. NDZ. This plan will have the cabin/house on stilts (see examples listed below). In addition, it does not make any sense to use the stilts if we have to locate the ADA friendly cabins/house outside of all three 100 ft. buffer zones and a /house on a slab would result in a narrow migration corridor available for the vernal pool habitats.

Using helical piles for stilts requires us to provide as much soil data as possible for the design engineers to understand the bearing capacity of the soil, The soil data acquisition needs drilling for multiple test bores within the onsite 100 ft. buffer zone, particularly within the area underneath the proposed deck.



- House at 1104 Highland Street, Holliston MA is currently under construction and has part of its structure (balcony, a living part of the house) is in the 50 ft. NDZ. This part of the structure is built using helical piles (DEP File #185-861)
- Using helical piles for stilts will help us to design the parcel, as a **Low Impact development site (LID)**¹⁵ Use of helical piles for stilts will not impede the migration corridor for the vernal pool habitats. This is a preferred choice by the performance standards in such resource areas as ours. Use of helical pile is an LID preferred choice.
- The use of helical piles will also eliminate the vast regrading of the ground under the cabin and most of the ground surface will be left in its pristine condition (**adds value for LID**).
- By harvesting rainwater and storing it in multiple cisterns of appropriate capacity, we can manage the roof run off from Cabin and the Garage. Stilts provide an air gap (minimum 3ft) under the cabin with ample room under the cabin to disperse the rain water from the roof drain stored in the cisterns. We will use a down facing ordinary multiple garden sprinklers under the Cabin to disperse the harvested rainwater in a controlled manner using gravity. (This is a Storm water friendly design that eliminates detention or retention ponds again this adds value for LID because it eliminates any regrading and avoids confusing the habitats from breeding in the manmade ponds)



¹⁴ No sense in using stilts in the upland area outside all three 100 ft. buffer zones, as most of this area is already at high elevation. This will be more impactful for the habitats migration path because of the concrete slab for the structure

¹⁵ **Low-Impact Development (LID):** An approach to environmentally friendly land use planning. It includes a suite of landscaping and site design techniques that attempt to maintain the natural, pre-developed ability of a site to manage rainfall. LID techniques capture water on site, filter it through vegetation, and let it soak into the ground where it can recharge the local water table rather than being lost as surface runoff. An important LID principle includes the idea that storm water is not merely a waste product to be disposed of, but is a resource. Also see 310CMR 10.04: Environmentally Sensitive Site Design means design that incorporates low impact development techniques to prevent the generation of storm water and non- point source pollution by reducing impervious surfaces, disconnecting storm water sheet flow paths and treating storm water at its source, maximizing open space, minimizing disturbance, protecting natural features and processes, and/or enhancing wildlife habitat. And Low Impact Development Techniques mean innovative storm water management systems that are modeled after natural hydrologic features. Low impact development techniques manage Rain fall at the source using uniformly distributed decentralized micro-scale controls. Low impact development techniques use small cost-effective landscape features located at the lot level.

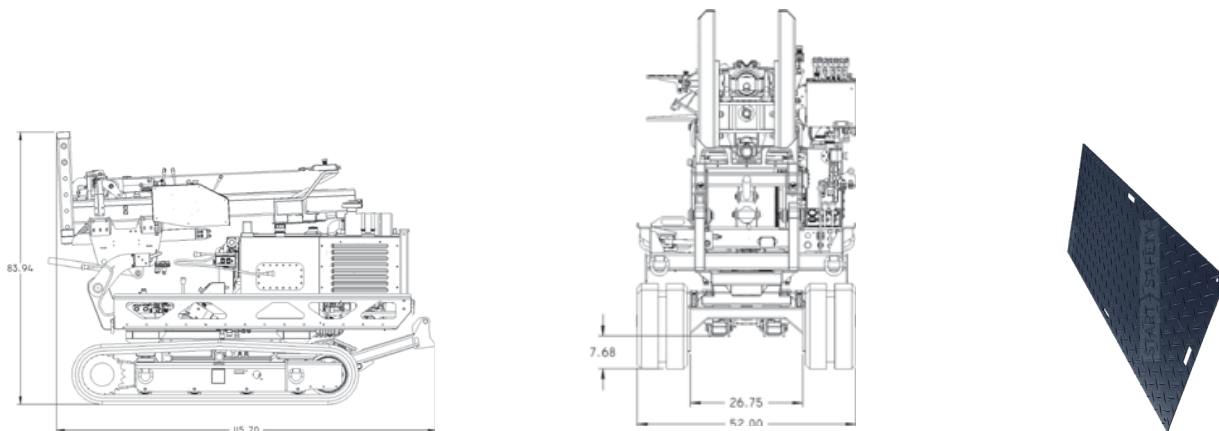
- In addition, the harvested excess rainwater will help us irrigate the garden during the summer months or we will drain it,

Through the sprinkler system in a controlled manner after the storm conditions subsides and /or prior to the onset of winter season ans this adds value for sustainable development

- We will leave the stumps, of most of the trees under the deck and the cabins that, needs to be removed, so that the stumps will still provide the needed temporary shelter for the migrating habitats. (Particularly in the area under the cabins) and any future growth on these stumps will be periodically trimmed as needed.
- Based on all of the above future plans for the site, we need permission to drill the deep test bores and take soil samples to evaluate its bearing capacity. Most of this area is between the onsite 25 ft. NDZ and onsite 100 ft. buffer zone and we request the commission to grant the appropriate waivers and variances to accomplish drilling the test bores and take soil sample.

If permission is granted, then we will use additional StrawWattels surrounding each bore hole so that there is another layer of erosion control/protection. These erosion control barriers will be removed and disposed off as and when its purpose of use is completed. We will be happy to accommodate any additional erosion control actions to be implemented during and/ or post this activity please let us know.

We plan to use a Geo-probe¹⁶6712 or similar drilling machine. The Geo-probe 6712 has a width of 52 inches (4 ft. and 4 inch) and it is on a track. We plan to use, rubber mat and if need be plywood board will be used where ever it warrants. Geo-probe 6712 has a Base Unit Weight of 5,900 lb. (2,676 kg.) and With Typical Options 6,480 lb. (2,939 kg.)



Request 3: Temporary Access to Upland for Test Boring requires Tree cutting along the eastern lot line

There is no easy access to the onsite 100 ft. buffer zone for a small drilling machine¹⁷ to reach the planned deep test bore locations and it is essential to cut about 9 trees along the eastern lot line. Exhibit 6 shows the trees (enclosed in blue rectangles) marked to remove and make room for the drilling vehicle to traverse and reach the upland.

- We need permission to cut the trees with in the onsite 25 ft. NDZ and onsite 100 ft. buffer zone to make a clear passage way for the boring machine to reach the upland area. We request the commission to grant the appropriate waivers and variances to cut the 10 trees, as shown on the Exhibit 6 identified by blue rectangles.

Tree cutting will not involve any heavy machinery like the modern tree cutting companies use, but a two man crew who are specially trained in tree removal using age old technique will be employed by a two man crew. This crew will use hand held chain saw and rope. If need be they will use a tarp to cover the area to catch any saw dust and other debris. Also kindly guide us with any additional erosion control measures to be implemented during and post this activity

¹⁶ <https://geoprobe.com/drilling-rigs/6712dt-drill-rig>

¹⁷ <https://geoprobe.com/drilling-rigs/6712dt-drill-rig>

Oder and description of the proposed work with this limited scope NOI

If the Commission grants the needed permission with the associated waivers. The following will be order of activity and its brief description.

1. First Team: With the hired help of a wetland scientist, we will Install straw wattles (show as Yellow line) along the eastern edge of the upland next to the vernal pool and create a 7 ft wide path in between two lines of the erosion control (vernal pool side and along the eastern lot line). This will create a cordoned path (shown as thick Green line, between the straw wattles). We will follow the manufactures installation guideline for the straw Wattles installation as listed in Exhibit 16. This narrow path in the upland next to the vernal pool will be used to drive the small drill rig and mini excavator. Where ever it warrants protection mats and/or wood boards will be used on the existing grade. This does not call for any regrading of the access path.
2. Second Team: Tree cutting crew will walk to the trees and cut them to the ground level and stack the cut wood on site location which is outside all three 100 ft. buffer zones. Cutting crew will use hand held chain saw and ropes. They will cut the tree stumps to the existing ground level.
3. Third Crew: The crew with soil boring machine will perform their task
 - a. They will use mats and boards as needed for their drilling machine on track to traverse along the narrow path next to the vernal pool and in the wide area of the individual test bore sites. They will limit their work area with the bounds of the strwwattels.
 - b. They will travel on the eastern edge of the lot along the lot line and they will not travel inside the vernal pool
 - c. They will keep at least 1 ft away from the Straw Wattels next to the vernal pool at all times
 - d. They will Add additional erosion control to each of the boring locations,
 - e. Drill the bore of 3 Inch diameter and take soil sample. At the end of each boring they will fill the bore hole with the soil that came up during the boring process
 - f. They will ensure that ground surface is safe enough for the habitats to migrate without getting trapped in the bore hole sites by properly grading by hand. Proper guideline will be provided to the crew.
 - g. They will use mats and boards as needed for their drilling machine on track
 - h. No work or travel path will cross the delineated wetland boundaries
4. Then crew performing the test pits will start their work
 - a. They bring a small exactor which is on track
 - b. Use mats and boards if it warrants
 - c. They will travel on the eastern edge of the lot along the lot line and they will not travel inside the vernal pool
 - d. They will keep at least 1 ft away from the Straw Wattels next to the vernal pool at all times
 - e. They will Add additional erosion control to each of the test pit locations, starting from the last test pit location (one located outside the onsite 100 ft. buffer zone next to property line of 14 Raymond way). Then move to the next test towards the street
 - f. They will place the wood craters or tarp next to each test pit location and use it to temporarily store the soil while they dig the test pit
 - g. Once the test is completed they fill the test pit with the same soil from the crate and grade it to the original grade. They will ensure that their grading work does create any depression in the ground which will trap the habitats while they migrate
 - h. No work or travel path will cross the delineated wetland boundaries

Summary

Our overall plan in the future is to develop the parcel of land that we own at 0 Prospect Street for our use as a residence to live in and spend our retirement life in this friendly community that we love and cherish. In order to start designing we need to carry the listed exploratory work. This exploratory work needs appropriate permission with the associated waivers and variances, from the Ashland Conservation Commission to carry out this preliminary activity. Please grant us the needed permission with the appropriate waivers and variances.

AFFIDAVIT OF SERVICE

We, Koduvayur G Narayana and Radha Narayana, hereby certify under the pains and penalties of perjury that by March 11, 2024, notification will be mailed to abutters in compliance with the second paragraph of Massachusetts General Laws Chapter 131, Section 30, and the DEP Guide to Abutter Notification dated April 8, 1994 in connection with the following matter:

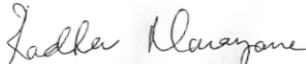
A Notice of Intent filed under the Massachusetts Wetlands Protection Act and the Town of Ashland Wetland Bylaw by us as owners of 0 Prospect Street, Ashland Ma 01721 has been filed with the Town of Ashland Conservation Commission on March 08, 2024 for property located at 0 Prospect Street in Ashland, Massachusetts.

The form of the notification, and a list of the abutters to whom it will be given and their addresses, are attached to this Affidavit of Service.



Date: March 08, 2024

K G Narayana Phone: 5088819586 Email: kgnarayana@aol.com



Radha Narayana, Email: Radha1605@gmail.com 17 Half Crown Circle, Ashland MA 01721