



CELEBRATING OVER 35 YEARS OF SERVICE TO OUR CLIENTS

LIZABETH M. MACDONALD
JOHN J. RATIGAN
DENISE A. POULOS
ROBERT M. DEROSIER
CHRISTOPHER L. BOLDT
SHARON CUDDY SOMERS
DOUGLAS M. MANSFIELD
KATHERINE B. MILLER
CHRISTOPHER T. HILSON
HEIDI J. BARRETT-KITCHEN
JUSTIN L. PASAY
ERIC A. MAHER
BRENDAN A. O'DONNELL
ELAINA L. HOEPPNER
WILLIAM K. WARREN

RETIRED
MICHAEL J. DONAHUE
CHARLES F. TUCKER
ROBERT D. CIANDELLA
NICHOLAS R. AESCHLIJMAN

April 2, 2021

Andrew Koff, Chair
Exeter Conservation Commission
10 Front Street
Exeter, NH 03833

Re: Map 96, Lot 15 and Map 81, Lot 53
Tamarind Lane and Route 111
Conditional Use Permit Applications

Dear Chair Koff and Commission Members:

This office represents the applicants, Brian and Adela Griset (the "Grisets") with regard to their proposed single family open space condominium development on property identified as Town Tax Map 96, Lot 15, a 23.6-acre parcel which is the site of the Grisets' current home (the "Griset Parcel") (the "Development"). In addition to the Griset Parcel, the Development draws density from two adjacent parcels to include Town Tax Map 81-53, an unimproved 30.76 acre parcel located to the east of the Griset Parcel (the "Mendez Trust Parcel"), and Town Tax Map 81-57, a 9.38 acre parcel which is the site of the Brickyard Recreation Park which the Grisets previously conveyed to the Town of Exeter in exchange for the Grisets right to utilize the parcel for density purposes in this Development (the "Town Property").

Enclosed herewith, please find the following, with all requisite copies:

- Revised Conditional Use Permit, Shoreland Protection District
- Revised Conditional Use Permit, Wetlands Conservation Overlay District
- Existing Conditions Plan (**Enclosure 1**)
- Approved Yield Plan (**Enclosure 2**)
- Conservation Open-Space/Recreation Plan (**Enclosure 3**)

DONAHUE, TUCKER & CIANDELLA, PLLC
16 Acadia Lane, P.O. Box 630, Exeter, NH 03833
111 Maplewood Avenue, Suite D, Portsmouth, NH 03801
Towle House, Unit 2, 164 NH Route 25, Meredith, NH 03253
83 Clinton Street, Concord, NH 03301

- Wildlife Habitat Assessment, Gove Environmental Services, Inc. (**Enclosure 4**)
- Wetlands Conservation Overlay District Impact Area Plan (**Enclosure 5**)
- Shoreland Protection District Impact Area Plan (**Enclosure 6**)
- Phase I Environmental Site Assessment, Exeter Environmental Associates, LLC (**Enclosure 7**)¹

Below we provide an introduction and property description, discuss the project purpose and proposed impacts, and then analyze the applicable conditional use permit criteria under the Zoning Ordinance.

1) **Introduction and Property Description**

This filing follows our October 30, 2019 filing with the Commission which requested review of what was then, a conceptual residential development plan. That plan was identical to the plan before the Commission now with regard to the 16-units depicted in the upland area on the northwestern side of the Griset Parcel. In December of 2019, the conceptual plan received a favorable review from the Commission as well as a straw-vote unanimously indicating support of the Grisets' conveyance to the Town of the Mendez Trust Property via conservation easement. Since that time, the Applicants have been before the Planning Board vetting their Yield Plan, which was accepted in January of this year.

Collectively, the Griset Parcel, the Mendez Trust Parcel and the Town Property (the "Properties" or the "Property") constitute 63.83 total acres which contain 23.60 acres of uplands, 29.47 acres of poorly drained soils and 10.76 acres of very poorly drained soils, as depicted in Enclosure 1, the Existing Conditions Plan. There are four separate and distinct areas of developable uplands across the Properties which are isolated from one another and separated by wetland areas to include two vernal pools and a prime wetland. See Enclosure 1. The Properties' natural configuration makes development of the upland areas in a logical and environmentally sensitive way a challenge.

For example, a conventional subdivision of the Properties is depicted in Enclosure 2, which is the Yield Plan that was accepted by the Planning Board. The Planning Board found this conventional development, depicting 17 large lots across² the Properties with a new subdivision road, to be reasonably achievable, viable and feasible, by virtue of its acceptance of same. However, development of the Properties in accordance with this design would create 12,157 sf of direct wetland impact across three crossings, all for access. See Enclosure 2. A conventional

¹ We note that due to its size, we included only one (1) copy of the Phase I Environmental Study.

² The Applicants refer to 18 lots throughout this filing by virtue of their intention to draw a density bonus unit for the Development pursuant to Article 7.7.1.A of the Zoning Ordinance.

design would also cause Shoreland Protection District impacts and buffer impacts to the Wetlands Conservation Overlay District for the construction of Wild Apple Lane.

The true value of open space development is realized when contrasting the direct wetland impacts that would be caused by conventional subdivision of these Properties, depicted in Enclosure 2, with the direct wetland impacts which are actually proposed by the Grisets' Development. Succinctly, the Grisets' single family open space condominium proposal will only cause 2,960 sf of direct wetland impact which is less than one quarter of the 12,157 sf of direct wetland impact that would be caused by the conventional subdivision design depicted in Enclosure 2. This reality exemplifies the concept of avoidance and minimization which is at the root of the Town's Conditional Use Permit criteria and State regulations. From a wetland impact perspective, the value of the Grisets' current proposal cannot be overstated when contrasted against the alternatives for the Property.

2) Project Purpose

Brian Griset has provided environmental design and consultation services in New Hampshire for 37 years. His first open space project was in Raymond in 1985 and was one of the first in the State. In 1986, the New Hampshire State Department of Planning utilized his Raymond project as one of two projects studied for the purpose of providing guidance to other communities.

During that same timeframe, the Grisets have invested immense forethought into designing a proposal for the Property which facilitates the reasonable exercise of their individual property rights while simultaneously conserving and preserving forever a vast majority of the Property as a tribute to the beautiful, and environmentally and ecologically important land it is. The result is the Development proposal, which is depicted in Enclosure 3. Perhaps most important to note for the Conservation Commission is that after completion of the Development, of the original 63.83 acres across the three Properties, +/- 50 of them (+/- 78%) will have been permanently preserved, conserved and/or permanently protected against further development by the Grisets, to include the entirety of the Mendez Trust Property (30.76 acres) which the Grisets propose to convey to the Town in the form of a Conservation Easement, the Town Property previously conveyed by the Grisets to the Town (9.3 acres), and 9.4 acres to the south and east of the proposed Development, which the proposed homeowner's association will maintain as open space.

The Development, designed as an 18-unit single family open space development, maintains the present exterior parcel boundaries with a slight alteration of the common boundary between the Griset and Mendez parcels. This alteration increases the Mendez parcel to 31.61 acres which the Grisets intend to convey to the Town of Exeter for management and general

public passive recreational use. The remaining Grisnet Parcel will be subdivided into three parcels. First, 6.59 acres of the Grisnet Parcel will be subdivided to accommodate the Grisnets' current single-family residence. Second, a 1.67-acre lot will be subdivided adjacent to the Grisnets' homestead and be accessed via Cullen Way. The remaining 14.59 acres of the Grisnet Parcel will accommodate the Development. Of that 14.59 acres, 9.40 acres will be a preserved open space area to be maintained by the homeowner's association. A single annual mowing in September will be performed to preserve field and wildlife habitat and the removal of annual deadfall within the field area will be required. The homeowner's association will also have the authority to manage beaver and coyote populations. For the past three decades the Grisnets have managed the Property in this way to insure diverse and interconnected habits and a healthy deer population of between 11-15 annually.

3) Design Intent and Rationale

As noted above, the Properties consist of substantial wetlands isolating the substantial upland areas available for development. See Enclosure 1. Of the three upland areas most viable for development, all would require wetlands crossings totaling 12,156 sq. feet. A development approach contemplating utilization of all three upland areas would result in the fragmentation of the "green space" proposed in this Development. The largest of these three uplands was chosen for the development site. It has a minimum wetland crossing of 2,960 sq. ft. of which a large portion is a man-made detention pond. The corresponding building site is long and narrow but of sufficient width to contain all of the allowed units but two (the Grisnet homestead and additional subdivided lot accessed via Cullen Way).

The Planning Board has approved the Applicants' Yield Plan, in accordance with the Zoning Ordinance, which established the density as 18 units. See Enclosure 2. The proposed site plan positions those 18 units and the "green spaces" in what we believe is "the most efficient design and layout of the land", as required by the Town's land use Regulations. We note the following noteworthy aspects of the Development design:

- The Town will end up with 64% of the total combined acreage for General Public Recreation and Conservation purposes.
- Including the homeowner's association conserved 9.40 acres, this equates to 79% of the total acreage will be conserved and only 21% is used for the actual development, well exceeding any Town standards.
- Of just the Grisnet and Mendez Trust Parcels (54.36 acres), 75.4% is preserved as green/open space.
- The design consolidates all the "green space" into a single, contiguous area, a goal stated in the Zoning Ordinance and land use Regulations. The only exception being the small section of perimeter buffer adjacent to the home sites.
- All vernal pools, the entire prime wetland and over 50% of all upland will be preserved under Town controlled conservation management.

- Our “green space” is contiguous to the abutting green spaces of the Brickyard Park previously deeded to the Town at the north of the parcels, to the “green space” to the west behind Tamarind Lane and the Hillside Drive subdivision, to the protected wetlands areas of the Hennessey Property on the east and to the “green space” provided by the Linden Commons subdivision to the South. A primary goal for “greenspace” design stated in the Ordinance, Regulations, and the Planning Board approved Master Plan.
- This configuration, due to its central location, provides the nexus to connect and link all of the existing Conservation and Preservation land in the surrounding areas, which is an important goal of the Town. See Master Plan, pg. 24.
- The design fully protects the “supporting areas” of the ecological system for “High Ranking Wildlife Habit”, plan date 2015, surrounding the Little River as delineated and identified in the Master Plan approved Feb. 22, 2018 on Pg. 28.
- The plan fully protects these wildlife corridors as confirmed by our Consultants Jim Gove and Luke Hurley, of Gove Environmental. See Enclosure 4.
- The protected greenspace proposed consists of a diverse high-value ecosystem which includes marshes, emergent shrub, forests and meadow.
- The conventional Yield Plan accepted by the Board in January, contained no open space available to the General Public. See Enclosure 2.
- The Development’s flood plain impact is less than 378 cubic feet, and only due to access road impact which is offset and mitigated by the increased flood capacity achieved with the location of the two proposed drainage ponds. No other flood plain impact is proposed.

As a result of these considerations, the Development is “the most efficient design and layout of the land” because it limits development to the two upland areas depicted on the plan which require the least amount of relief, i.e., the two conventional subdivision lots located off Cullen Way and the 16 single-family condominium units as proposed on Wild Apple Lane.

4) Proposed Impacts

As detailed in the Conditional Use Permit Applications enclosed herewith, the Development proposes the following wetland and wetland buffer impacts:

- **Wetlands Conservation Overlay District**

The Development proposes 13,962 sf of total impact to include 2,960 sf of direct wetland impact, necessitated by construction of Wild Apple Lane which has been designed over an existing right-of-way and over an existing gravel road with previously disturbed soils and a manmade pond, and 11,002 sf of poorly drained soils buffer impact. Buffer impacts include: 1) 1,320 sf of structural impact to the 75’ parking and structure buffer to accommodate units 1, 11, 13, 15 and 16; 2) 1,736 sf of roadway impact to the 75’ parking and structure buffer, 3) 5,493 sf of roadway impact to the 40’ limited use buffer; and 4) 2,453 sf of disturbance within the 40’

limited use buffer to accommodate portions of two drainage ponds, all of which impacts are depicted on the plan included herewith as Enclosure 5. See Enclosure 5.

As described below, these impacts were avoided and minimized to the greatest extent practicable.

- **Shoreland Protection District**

The Development proposes 7,983 sf of impact within the Town's 150 foot Shoreland Protection District to accommodate the construction of Wild Apple Lane with associated utilities and drainage treatment structures, all to serve the proposed 16 unit single family open space condominium development, and as depicted on the plan included herewith as Enclosure 6. See Enclosure 6.

As described below, these impacts were avoided and minimized to the greatest extent practicable.

5) Conditional Use Permit Criteria Analysis

- **Wetlands Conservation Overlay District**

Pursuant to Article 9.6.1.A of the Zoning Ordinance, site development such as but not limited to the construction of roads, and other access ways, parking areas, utilities, structures, drainage systems, water impoundment and other site improvements are permitted by conditional use permit in the Wetlands Conservation Overlay District. See Zoning Ordinance, Article 9.6.1.A.1. Conditional uses must satisfy the criteria outlined in Article 9.6.1.B. The Grisets' proposal satisfies those conditions as follows:

Before addressing the individual criteria, we start by noting that both Jim Gove, a Wetland Scientist from Gove Environmental Services, Inc., in Exeter, has been working with the Grisets on this project. As you will note below, the Grisets quote analyses provided to them by Jim Gove for inclusion in this analysis. Jim Gove will be available at the Conservation Commission hearing to address these issues in person. Jim is quoted in the individual criteria below as they pertain to the direct wetland impacts. Jim provided the following analysis applicable to all eight (8) criteria, to address the Development's proposed Wetlands Conservation Overlay District buffer impacts (the "Buffer Impact Analysis"):

Where a direct impact is occurring, there is no option to not impact the buffer. So buffer impacts associated with the access road construction do not have an alternative design. This is true also for the storm water basin, as it is providing

treatment and detention prior to discharge to the wetland. There are areas within the Development that have no direct wetland impact but do encroach on the wetland buffers. The wetland directly adjacent the development has been maintained as an open, mowed wetland meadow. The areas of buffer encroachment are along the mowed fringe of the northern area of the wetland meadow. The upland has also been maintained as an open, mowed field. The functions of the wetland meadow are water quantity (storm water storage or flood flow alteration), water quality renovation (nutrient attenuation and sediment trapping), visual quality (a broad viewing vista), and wildlife (less water dependent and more general common species). Water quality and water quantity will not be impacted by the buffer encroachments. All developments now are required to control runoff, detain water from impervious surfaces, and remove sediments before discharge to wetlands. As part of the development plan, the wetland meadow will continue to be mowed yearly, thus maintaining the visual quality. Any development in the upland field, regardless of the number or size of the units, will impact the wildlife. All developments will change animal behavior, corridors they travel through, and hunting/nesting areas. Even if there were no buffer impacts from the development envelope, the wildlife would still be affected. In this case, due to the fact that the upland field is open and transitions down to an open wetland meadow, the visual impact of the development will change animal behavior, though the wetland meadow will continue to function as both a hunting area and a nesting area. Whether there is a slight encroachment into the buffers or not, the impact to wildlife is the same. The reason, however, why this is the least detrimental to the wetland buffer that is feasible rests with the surround environs. This Development has been located in uplands that are a continuation of development that has been occurring along Tamarind Lane and south of Route 111. It has purposely avoided fragmenting the wetlands by multiple development sites around the aquatic systems. In other words, the Development keeps intact a large, continuous wetland/upland ecosystem and avoids fragmentation by house here or house there. The current development design is the least impacting alternative that is feasible. While there will be impact to wildlife using the upland field and the wetland meadow fringe, the benefits to wildlife usage as a whole for the site far outweigh the relatively small impact of the encroachment in the buffers.

We now turn to the individual conditional use permit criteria.

1. That the proposed use is permitted in the underlying Zoning District;

The proposed use, a single-family open space condominium development is permitted in

the R-1 and this project has express authority to derive density from the Mendez Trust Parcel and the Town Property pursuant to a variance granted by the Town's Zoning Board of Adjustment on January 21, 2020.

2. No alternative design which does not impact a wetland or wetland buffer or which has less detrimental impact on the wetland or wetland buffer is feasible.

Collectively, the Properties consist of substantial wetlands isolating the substantial upland areas available for development. Of the three most viable uplands for development, all would require wetland crossings totaling 12,156 sq. feet and would result in the fragmentation of the "green space" proposed. The largest of these three uplands was chosen for the Development site. It requires a minimum wetland crossing of 2,960 sf of which a large portion is a man-made detention pond for the proposed access road. This proposed access has the least impact on wetlands and wetland buffers as it utilizes the existing gravel roadway and a manmade pond.

Put another way, the very conservative density yield of the underlying 63.83 acre parcel, inclusive of 23.60 acres of uplands amongst four isolated areas, is 18 units. The Applicants could propose a conventional subdivision design for the Property, but as described above, that would yield four times the amount of direct wetland impact and substantially similar Shoreland Protection District and Wetlands Conservation Overlay District buffer impacts as that which is proposed by the Development. In truth, though there are myriad different configurations and options, many of which the Grisets have explored, any development configuration oriented toward gaining access to the disparate upland areas on the Property will yield a more significant wetland and buffer impact than what is proposed.

As designed, the Development utilizes an existing right-of-way to traverse an existing gravel road with soils which have already been disturbed. The individual units on the western side of Wild Apple Lane have been sited as far west as they can be. All proposed impacts are localized to the edge of the wetland system. Individual units have been oriented in strict conformity with the regulations. Also, as indicated in Enclosure 4, Gove Environmental Services, Inc.'s Wildlife Habitat Assessment, the Development proposes to use best methods for erosion control around the perimeter of the work areas and the Development "will not disturb many of the active corridors on site and travel will be possible through the site." See Enclosure 4, at pg. 27. Moreover, "[t]he proposed conveyance to the Town of the entire 30.76 acres of Tax Map 81, Lot 53, as well as the intended preservation of the open meadow adjacent to the uplands/development area by the HOA, will provide a habitat block that will preserve the wildlife corridors in perpetuity." Id. In other words, the resulting impact of the Development will also have the least amount of impact from a wildlife habitat perspective.

Finally, the vast majority of the total impacts to the Wetlands Conservation Overlay District (12,694 sf, or 91%) relate to creation of Wild Apple Lane and the creation of two drainage ponds to serve the Development. See Enclosure 5. Only 1,320 sf of impact, to the edge

of the 75' parking and structure buffer, will be caused by individual units. This number represents approximately 9% of total Wetland Conservation Overlay District impacts. When considering the alternatives to this approach, which would include impacting considerably more wetlands and wetland buffers in an effort to reach the isolated, but substantial, areas of uplands on the Property, the Grisets' approach is the one that avoids and minimizes impacts to the greatest extent practicable. Every other alternative design would impact the wetlands and wetland buffers more. Accordingly, no other design is feasible, and this criterion is satisfied.

See also Jim Gove Buffer Impact Analysis, above.

- 3. A wetland scientist has provided an impact evaluation that includes the “functions and values” of the wetland(s), an assessment of the potential project-related impacts and concluded to the extent feasible, the proposed impact is not detrimental to the value of the wetland(s) or the greater hydrologic system.**

Jim Gove provides the following statement in response to this criteria within the context of direct wetland impacts:

Response: There are two direct wetland areas that are being impacted by the road access. The first is a man-made pond. This pond provides storm water storage, nutrient trapping, and wildlife habitat in the form of a fish population. This pond does not act as a vernal pool due to the documented fish present in the form of minnows and sunfish. 1280 SF of the pond is proposed to be filled. This represents a very small portion of the overall volume of the pond. As long as erosion controls are properly maintained during the construction activity, the fish population should remain intact. The outfalls from the pond to the southern wetland will be maintained by culverts. So the functions of storm water storage, nutrient trapping and wildlife habitat will remain after the access road is constructed. The second area is a forested wetland that lies to the south of existing path. While this is part of a much larger wetland with numerous functions and values, as has been addressed in the overall wetland assessment, the 1680 SF of impact occurs on the edge of the wetland system. This edge has already been impacted in the past by the construction of the existing path. The widening of the path to accommodate the new access road will have virtually no impact to the functions and values of this large wetland system.

See also Jim Gove Buffer Impact Analysis, above.

Luke Hurley's Wildlife Assessment (Enclosure 4) also indicates and confirms that the most sensitive wetlands on the Property to include the two vernal pools and the prime wetland will be preserved and maintained permanently. See Enclosure 4.

4. That the design, construction and maintenance of the proposed use will, to the extent feasible, minimize detrimental impact to the wetland or wetland buffer.

With regard to the direct wetland impacts, Jim Gove relays that:

The design and construction of the access road uses an existing path. The design is to widen the path to construct a reasonable access road for the development. This is the best access that avoids and minimizes the impacts to the wetlands on the site. Any other access that is available for construction of an access road to the development would result in much larger wetland and wetland buffer impacts.

See also Jim Gove Buffer Impact Analysis, above.

Beyond this, to limit road impacts and to preserve a line of white swamp oak close to the entrance of the Development from Tamarind Lane, the design incorporates "large block" retaining walls. To minimize actual wetland impacts, the plan utilizes narrowly limited structural buffer encroachments for portions of homes or decks. Further, approximately 91% of all impacts to the Wetlands Conservation Overlay District, and 88% of all buffer impacts, are related to providing access to the site via Wild Apple Lane and an existing right-of-way, and facilitating the construction of two drainage ponds. Only 9% of the total impacts (12% of total buffer impacts) are proposed to be caused by structures, which impacts are far less than what would be caused by development of the other three upland areas of the Property. These impacts are also located on the edge of low value wetland areas in close proximity to previously disturbed soils.

5. That the proposed use will not create a hazard to individual or public health, safety and welfare due to the loss of wetland, the contamination of groundwater, or other reasons.

Jim Gove notes that with regard to the 2,960 sf of direct wetland impact:

Response: The proposed use is for an access road to the development site. Such roads are common and do not create a hazard to health, safety or welfare. This will not cause a significant loss of wetland function or value, will not cause

contamination of groundwater and will not be detrimental to the wildlife using the site.

See also Jim Gove Buffer Impact Analysis, above.

Beyond this and as noted above, the Development will preserve the functions and values of the manmade pond, will utilize best-method erosion controls through construction, is incorporating "large block" retaining walls to construct Wild Apple Lane and protect the wetlands to the greatest extent possible, and is minimizing structural impacts to the buffer as described above. Also, the roadway impacts correspond to an existing path and previously disturbed soils and are located on the edge of the wetland system. See also Enclosures 4.

It also goes without saying that the public health, safety, and welfare benefits greatly from the approximately 50 acres of the underlying 63.83-acre tract being permanently preserved and/or conserved, to include a prime wetland and two vernal pools.

- 6. The applicant may propose an increase in wetland buffers elsewhere on the site that surround a wetland of equal or greater size, and of equal or greater function value than the impacted wetland.**

The Grisets are proposing to convey to the Town the entirety of the Mendez Trust Property for permanent conservation. This property includes a prime wetland and two vernal pools of higher function and value than those impacted by the Development. See Enclosures 1, 4. The locations of the proposed wetlands and wetland buffer impacts are those wetlands with the lowest value which were created by prior manipulations of the soils. See also Jim Gove Buffer Impact Analysis, above.

- 7. In cases where the proposed use is temporary or where construction activity disturbs areas adjacent to the immediate use, the applicant has included a restoration proposal revegetating any disturbed area within the buffer with the goal to restore the site as nearly as possible to its original grade and condition following construction.**

All soil disturbance that is temporary or adjacent to the immediate development will be restored as nearly as possible to original condition and suitable grade. Stumps are to be ground and debris cleared in that area. The temporary wetland disturbance areas will then be overseeded with NE Semi-shade grass and forb mix (specifically formulated for re-vegetating wetland areas) and NE Semi-shade grass and forb mix for temporary buffer impacts.

- 8. That all required permits shall be obtained from the New Hampshire Department of Environmental Services Water Supply and Pollution Control Division under NH**

RSA §485-A:17, the New Hampshire Wetlands Board under NH RSA §483-A, and the United States Army Corps of Engineers under Section 404 of the Clean Water Act.

The Applicant anticipates and welcomes a condition of Planning Board approval that it obtain all required state, local and federal approvals.

- **Shoreland Protection Overlay District**

Within the context of the applicable Exeter River Shoreland Protection District, the District's boundaries are defined in relevant part as "the area of land within 150 feet horizontal distance of the seasonal high water level of all perennial brooks and streams within the Exeter River Watershed and all other perennial brooks and streams." Zoning Ordinance, Article 9.3.3.A.2. "Perennial Brooks, Streams, and Creeks" are defined in the Ordinance as "[b]rooks, streams and creeks that appear on U.S. Geological Survey quadrangle maps revised . . . covering the Town of Exeter." Zoning Ordinance, Article 9.3.2.F. To be clear, Scamen Brook is a perennial brook identified on the USGS Maps.

However, pursuant to Article 9.3.4.G.1.c of the Zoning Ordinance, describing conditional uses within the District, "transmission lines, access ways, including driveways and parking lots or roadways, paved or unpaved, within 150 feet of the Exeter River, Squamscott River or their major tributaries, **or within 100 feet of perennial brooks, streams and creeks located within the Exeter Shoreland Protection District**" (emphasis added), may be permitted with a Conditional Use Permit if all the criteria outlined in Article 9.3.4.G.2 of the Zoning Ordinance are true.

We note that the Grisets have depicted a 150-foot Shoreland Protection district line on the relevant plan in an abundance of caution. See Enclosure 6. A plain language interpretation of the Town's Zoning Ordinance, however, reveals that under the circumstances, the line could reasonably be located on the plan 100 feet from the resource because Scamen Brook is not the Exeter River, the Squamscott River, or a major tributary of either. Rather, it is a perennial brook. As a result and in fact, the proposed impacts to the Exeter Shoreland Protection District caused by the Development are significantly less than what is depicted on the application and corresponding plan.

Regardless, the Grisets seek a Shoreland Protection District Conditional Use Permit to construct an access road to an isolate but substantial upland location on the Property which is outside the Shoreland Protection District. This roadway will utilize the location of a preexisting right-of-way, gravel road and man-made retention pond to mitigate environmental impacts, as described above. Specifically, the Grisets propose to construct a 20' wide private road and 4'

sidewalk utilizing large block retaining walls to reduce impacts. Only the entrance and portion of the first 200' of Wild Apple Lane are within the Shoreland Protection District. No other site improvements are proposed within the Shoreland District. 7,983 sf of permanent impact and 4,112 sf of impervious surface within the 150-foot Shoreland Protection District, is proposed.

The criteria of Article 9.3.4.G.2 of the Zoning Ordinance are satisfied as follows and as supplemented by statements from Jim Gove, Wetland Scientist.

a. The proposed use will not detrimentally affect the surface water quality of the adjacent river or tributary, or otherwise result in unhealthful conditions.

The Development will cause no detrimental effects to surface waters or the adjacent Scamen Brook. All drainage and runoff are directed to a drainage treatment system outside the Shoreland Protection District, which discharge point is a minimum of an additional 100' from the District. Further, Jim Gove provides the following analysis in this context:

Response: The access road has a forested buffer to Scamen Brook. The access road is at the upland/wetland boundary of the wetland system that contains Scamen Brook. The runoff from the access road is treated in a wetland pond. For these reasons, the access road will not detrimentally affect the water quality of Scamen Brook.

b. The proposed use will discharge no waste water on site other than that normally discharged by domestic waste water disposal systems and will not involve an on-site storage or disposal of hazardous or toxic wastes as here defined.

The Development will be serviced by Town sewer. No prohibited uses are proposed in this Development and snow treatment is accomplished outside the Shoreland Protection District.

c. The proposed use will not result in undue damage to spawning grounds and other wildlife habitat.

As the Wildlife Habit Report from Gove Environmental Services, Inc. concludes, the project will employ best-method erosion controls and there are no adverse impacts from the project to wildlife. See Enclosure 4. Moreover, Jim Gove provides the following analysis in this context:

Response: The man-made pond does not function as a vernal pool. With proper erosion controls, the fish population in the pond will be maintained. So the impacts to the pond will not damage spawning grounds in the pond. The forested

wetland to the south of the existing path, where the access road will be impacted by filling, does not have vernal pool activity as it does not have areas of long term ponding and thus do not act as vernal pools. The access road will not result in undue damage to spawning areas or other wildlife habitat.

- d. The proposed use complies with the use regulation identified in Article 9.3.4 Exeter Shoreland Protection District Ordinance – Use Regulations and all other applicable sections of this article.**

The proposed access road and related infrastructure and utility service are permitted as conditional uses under Section 9.3.4.G.1.c. No other uses are proposed.

- e. The design and construction of the proposed use will be consistent with the intent of the purposes set forth in Article 9.3.1 Exeter Shoreland Protection District Ordinance - Authority and Purpose.**

The design and construction of the proposed access road is consistent with the intent of the Shoreland Protection District Ordinance because all effort has been taken to avoid and minimize impacts and such impacts are limited to providing access to a developable upland area. Furthermore, this proposed Open Space Development project will place into conservation and preservation an additional 42 acres of protected greenspace which will protect 2,400 feet of the Scamen Brook in perpetuity.

6) Conclusion

We respectfully submit that on the information provided, the Grisets satisfy the criteria required to obtain the requested Conditional Use Permits and we request a favorable recommendation from the Commission for approval by the Planning Board.

Andrew Koff, Chair
Exeter Conservation Commission
April 2, 2021
Page 15

We respectfully request that this matter be placed on the agenda for the Commission's April hearing date. In the meantime, if you have any questions or need further information do not hesitate to contact me.

Very truly yours,
DONAHUE, TUCKER & CIANDELLA, PLLC

A handwritten signature in black ink, appearing to be 'Justin L. Pasay', written in a cursive style.

Justin L. Pasay
JLP/sac
Enclosures

cc: Brian and Adela Griset
Beals Associates
Gove Environmental Services, Inc.

Town of Exeter



**Planning Board Application
for
Conditional Use Permit:
Wetlands Conservation Overlay
District**

March 2020

**Town of Exeter
Planning Board Application
Conditional Use Permit: Wetland Conservation Overlay District**

Detailed Proposal including intent, project description, and use of property: (Use additional sheet as needed)

Construction of a private road & associated utilities/drainage treatment structures to serve 16 proposed condominium dwelling units (single family detached). The proposal includes 1,320 s.f. of building proposed within the 75 building setback, 1,736 s.f. of road within the 75' parking and pavement setback, 5,493 s.f. of road within the 40' no-disturb setback, and 2,453 s.f. of disturbance within the 40' no-disturb setback for drainage pond construction.

Wetland Conservation Overlay District Impact (in square footage):

Temporary Impact	Wetland: (SQ FT.)	Buffer: (SQ FT.)
	<input type="checkbox"/> Prime Wetlands _____	<input type="checkbox"/> Prime Wetlands _____
	<input type="checkbox"/> Exemplary Wetlands _____	<input type="checkbox"/> Exemplary Wetlands _____
	<input type="checkbox"/> Vernal Pools (>200SF) _____	<input type="checkbox"/> Vernal Pools (>200SF) _____
	<input type="checkbox"/> VPD _____	<input type="checkbox"/> VPD _____
	<input type="checkbox"/> PD _____	<input checked="" type="checkbox"/> PD <u>8,749 s.f.</u>
	<input type="checkbox"/> Inland Stream _____	<input type="checkbox"/> Inland Stream _____
Permanent Impact	Wetland:	Buffer:
	<input type="checkbox"/> Prime Wetlands _____	<input type="checkbox"/> Prime Wetlands _____
	<input type="checkbox"/> Exemplary Wetlands _____	<input type="checkbox"/> Exemplary Wetlands _____
	<input type="checkbox"/> Vernal Pools (>200SF) _____	<input type="checkbox"/> Vernal Pools (>200SF) _____
	<input type="checkbox"/> VPD _____	<input type="checkbox"/> VPD _____
	<input checked="" type="checkbox"/> PD <u>2,960 s.f.</u>	<input checked="" type="checkbox"/> PD <u>11,002 s.f.</u>
	<input type="checkbox"/> Inland Stream _____	<input type="checkbox"/> Inland Stream _____

List any variances/special exceptions granted by Zoning Board of Adjustment including dates:

ON JANUARY 21, 2020 THE EXETER ZBA GRANTED A SPECIAL EXCEPTION TO PER ARTICLE 4, SECTION 4.2 SCHEDULE I: PERMITTED USES AND ARTICLE 5, SECTION 5.2 TO PERMIT RESIDENTIAL USE OF A 30.76-ACRE PARCEL LOCATED WITHIN THE NP-NEIGHBORHOOD PROFESSIONAL ZONING DISTRICT FOR THE SOLE PURPOSE OF CALCULATING DENSITY OF A PROPOSED OPEN SPACE DEVELOPMENT.

ON JANUARY 21, 2020 THE EXETER ZBA GRANTED A VARIANCE FROM ARTICLE 4, SECTION 4.3 SCHEDULE II: DENSITY AND DIMENSIONAL REGULATIONS - RESIDENTIAL AND ARTICLE 7. OPEN SPACE DEVELOPMENT TO PERMIT A SINGLE-FAMILY OPEN SPACE DEVELOPMENT IN THE R-1, LOW DENSITY RESIDENTIAL ZONING DISTRICT WHICH DRAWS DENSITY FROM CONTIGUOUS UNIMPROVED PROPERTY IN THE NP-NEIGHBORHOOD PROFESSIONAL ZONING DISTRICT.

Describe how the proposal meets conditions in **Article 9.1.6.B** of the Zoning Ordinance (attached for reference):
See attached.

9.1.6. B: Conditions: Prior to issuance of a conditional use permit, the Planning Board shall conclude and make a part of the record, compliance with the following criteria:

1. That the proposed use is permitted in the underlying zoning district;
2. No alternative design which does not impact a wetland or wetland buffer or which has less detrimental impact on the wetland or wetland buffer is feasible;
3. A wetland scientist has provided an impact evaluation that includes the "functions and values" of the wetland(s), an assessment of the potential project-related impacts and concluded to the extent feasible, the proposed impact is not detrimental to the value and function of the wetland(s) or the greater hydrologic system.
4. That the design, construction and maintenance of the proposed use will, to the extent feasible, minimize detrimental impact on the wetland or wetland buffer;
5. That the proposed use will not create a hazard to individual or public health, safety and welfare due to the loss of wetland, the contamination of groundwater, or other reasons;
6. The applicant may propose an increase in wetland buffers elsewhere on the site that surround a wetland of equal or greater size, and of equal or greater functional value than the impacted wetland
7. In cases where the proposed use is temporary or where construction activity disturbs areas adjacent to the immediate use, the applicant has included a restoration proposal revegetating any disturbed area within the buffer with the goal to restore the site as nearly as possible to its original grade and condition following construction.
8. That all required permits shall be obtained from the New Hampshire Department of Environmental Services Water Supply and Pollution Control Division under NH RSA §485-A: 17, the New Hampshire Wetlands Board under NH RSA §483-A, and the United States Army Corps of Engineers under Section 404 of the Clean Water Act.;

See attached.

Town of Exeter



**Planning Board Application
for
Conditional Use Permit:
Shoreland Protection District**

February 2017



Town of Exeter Planning Board Application

Conditional Use Permit: Shoreland Protection District In accordance with Zoning Ordinance Article: 9.3

SUBMITTAL REQUIREMENTS:

(see Conservation Commission and Planning Board meeting dates and submission deadlines)

1. One (1) electronic copy of full application, including plans (color copy if available)
2. Fifteen (15) copies of the Application
3. Fifteen (15) 11"x17" and three (3) full sized copies of the plan which must include:

Existing Conditions

- a. Property Boundaries
- b. Edge of Shoreland and associated Buffer (Shoreland Protection District - SPD)
- c. Structures, roads/access ways, parking, drainage systems, utilities, wells and wastewater disposal systems and other site improvements

Proposed Conditions

- a. Edge of Shoreland and Shoreland Buffers and distances to the following:
 - i. Edge of Disturbance
 - ii. Structures, roads/access ways, parking, drainage systems, utilities, wells and wastewater disposal systems and other site improvements
- b. Name and phone number of all individuals whose professional seal appears on the plan
4. If applicant and/or agent is not the owner, a letter of authorization must accompany this application
5. Supporting documents i.e. Letters from the Department of Environmental Services, Standard Dredge and Fill Application and Photos of the property
6. A Town of Exeter Assessors list of names and mailing addresses of all abutters

Required Fees:

Planning Board Fee: **\$50.00** Abutter Fee: **\$10.00** Recording Fee (if applicable): **\$25.00**

The Planning Office must receive the completed application, plans and fees on the day indicated on the Planning Board Schedule of Deadlines and Public Hearings.

APPLICANT	Name: Brian Grisett
	Address: 26 Cullen Way, Exeter, NH
	Email Address: grisettandsons@comcast.net
	Phone: 603-686-1139
PROPOSAL	Address: Tamarind Lane
	Tax Map # 96 Lot# 15 Zoning District: R1
	Owner of Record: Adela Grisett
Person/Business performing work outlined in proposal	Name: Applicant
	Address:
	Phone:
Professional that delineated wetlands	Name: Gove Environmental Services, Inc.
	Address: 8 Continental Drive, Bld 2, Unit H, Exeter, NH
	Phone: 603-778-0644

**Town of Exeter
 Planning Board Application
 Conditional Use Permit: Shoreland Protection District**

Detailed Proposal including intent, project description, and use of property: (Use additional sheet as needed)
 Construction of a private road & associated utilities/drainage treatment structures to serve 16 proposed condominium dwelling units (single family detached).

Shoreland Protection District Impact (in square footage):

Water Body	Scamen Brook	
Temporary Impact	<input type="checkbox"/> 300 Foot SPD _____ <input type="checkbox"/> 150 foot SPD _____ <input type="checkbox"/> SPD Building Setback _____ <input type="checkbox"/> 75 Vegetative Buffer _____	
Permanent Impact	<input type="checkbox"/> 300 Foot SPD <u>N/A</u> <input checked="" type="checkbox"/> 150 foot SPD <u>7,983 s.f</u> <input type="checkbox"/> SPD Building Setback _____ <input type="checkbox"/> 75 Vegetative Buffer _____	
Impervious Lot Coverage	SF of Lot within District <u>391,410</u> SF of Impervious within District <u>4,112</u> % of Impervious within District <u>1.05</u>	

List any variances/special exceptions granted by Zoning Board of Adjustment including dates:

ON JANUARY 21, 2020 THE EXETER ZBA GRANTED A SPECIAL EXCEPTION TO PER ARTICLE 4, SECTION 4.2 SCHEDULE I; PERMITTED USES AND ARTICLE 5, SECTION 5.2 TO PERMIT RESIDENTIAL USE OF A 30.76-ACRE PARCEL LOCATED WITHIN THE NP-NEIGHBORHOOD PROFESSIONAL ZONING DISTRICT FOR THE SOLE PURPOSE OF CALCULATING DENSITY OF A PROPOSED OPEN SPACE DEVELOPMENT. ON JANUARY 21, 2020 THE EXETER ZBA GRANTED A VARIANCE FROM ARTICLE 4, SECTION 4.3 SCHEDULE II: DENSITY AND DIMENSIONAL REGULATIONS - RESIDENTIAL AND ARTICLE 7. OPEN SPACE DEVELOPMENT TO PERMIT A SINGLE-FAMILY OPEN SPACE DEVELOPMENT IN THE R-1, LOW DENSITY RESIDENTIAL ZONING DISTRICT WHICH DRAWS DENSITY FROM CONTIGUOUS UNIMPROVED PROPERTY IN THE NP-NEIGHBORHOOD PROFESSIONAL ZONING DISTRICT.

Describe how your proposal meets the conditions of Article 9.3.4.G.2 of the Zoning Ordinance (attached for reference): See attached.

Conditional Use Permit Criteria
Shoreland Protection District

9.3.4 G Conditional Uses:

2. The Planning Board may grant a Conditional Use Permit for those uses listed above only after written findings of fact are made which have been reviewed by technical experts from the Rockingham Conservation District, if required by the Planning Board, at the cost of the developer, provided that all of the following are true:

- a. The proposed use will not detrimentally affect the surface water quality of the adjacent river or tributary, or otherwise result in unhealthful conditions.
- b. The proposed use will discharge no waste water on site other than that normally discharged by domestic waste water disposal systems and will not involve on-site storage or disposal of hazardous or toxic wastes as herein defined.
- c. The proposed use will not result in undue damage to spawning grounds and other wildlife habitat.
- d. The proposed use complies with the use regulations identified in Article 9.3.4 Exeter Shoreland Protection District Ordinance – Use Regulations and all other applicable sections of this article.
- e. The design and construction of the proposed use will be consistent with the intent of the purposes set forth in Article 9.3.1 Exeter Shoreland Protection District Ordinance – Authority and Purpose.

**ABUTTERS LIST
FOR
NH- 1154.1 BRIAN GRISET- EXETER, NH
DATE March 9, 2021**

SUBJECT PARCEL

TAX MAP/LOT

96-15

OWNER OF RECORD

ADELA GRISET
26 CULLEN WAY
EXETER, NH 03833

81-57

TOWN OF EXETER
10 FRONT ST.
EXETER, NH 03833

81-53

MENDEZ REV. REAL ESTATE TR.
BRET L. NEEPER TRUSTEE
26 CULLEN WAY
EXETER, NH 03833

ABUTTERS

TAX MAP/LOT

96-16

OWNER OF RECORD

ROBERT F. O'NEILL
DEBRA A. O'NEILL
28 CULLEN WAY
EXETER, NH 03833

96-17

ALYSON M. WOOD
CHRISTOPHER B. WOOD
35 CULLEN WAY
EXETER, NH 03833

96-14

ROBERT W. CARDEIRO
DAWN J. CARDEIRO
24 CULLEN WAY
EXETER, NH 03833

96-9

PATRICK J. & ANNE FLAHERTY
8 TAMARIND LANE
EXETER, NH 03833

96-11

DAVID HADDEN
12 TAMARIND LN.
EXETER, NH 03833

96-13

LISA ROSEBERRY TRUST
LISA K. ROSEBERRY, TRUSTEE
22 CULLEN WAY
EXETER, NH 03833

**ABUTTERS LIST
FOR
NH- 1154.1 BRIAN GRISET- EXETER, NH
DATE March 9, 2021**

81-78	WILLIAM L. SHEEHAN DEBORAH L. SHEEHAN 1 COLONIAL WAY EXETER, NH 03833
74-81	JUDITH L. FRAUMENI REV. TR. JUDITH FRAUMENI TRUSTEE 7 GLEN DR. LYNNFIELD, MA 01940
81-54 Unit 13	BRICKYARD BUSINESS CONDO ASSOC. -MC 16 KINGSTON RD. #13 EXETER, NH 03833
Unit 4	DANIEL W. JONES REV. TRUST PO BOX 526 EXETER, NH 03833
Unit 1 & 3	SUNSET PROPERTIES LLC 16 KINGSTON RD.-UNIT 3 EXETER, NH 03833
Unit 2	4 PINES LLC 14 SHERMAN AVE. BRENTWOOD, NH 03833
Unit 5	NIBROC REALTY LLC. 16 KINGSTON RD. UNIT 11 EXETER, NH 03833
Unit 6	WE CORK ENTERPRISE INC. 16 KINGSTON RD. - 6 EXETER, NH 03833
81-55 Unit 13	BRICKYARD BUSINESS CONDO ASSOC. 16 KINGSTON RD. #13 EXETER, NH 03833
Unit 10	NOC REALTY LLC. PO BOX 754 KINGSTON, NH 03848
Unit 9	NIBROC REALTY LLC. 16 KINGSTON RD. - 11 EXETER, NH 03833
Unit 7 & 8	JOHN C. BERNIER TRUST 16 KINGSTON RD. - 7 EXETER, NH 03833

**ABUTTERS LIST
FOR
NH- 1154.1 BRIAN GRISET- EXETER, NH
DATE March 9, 2021**

Unit 12	BONNER LANDSCAPING LLC. 14 IRONWOOD DR. EPPING, NH 03042
Unit 11	NIBROC REALTY LLC, 83 EXTER RD. KINGSTON, NH 03848
81-52	BRICKYARD BUSINESS CONDO ASSOC. 16 KINGSTON RD. EXETER, NH 03833
81-58	NATHANIEL HENRY FULLER NICOLE FULLER 2 GREYBIRD FARM CIR. EXETER, NH 03833
81-60	RACHEL HENRY JEFF HENRY 6 GREYBIRD FARM CIR. EXETER, NH 03833
81-61	STEPHEN E. LEAVITT SARAH N. LEAVITT 8 GREYBIRD FARM CIR. EXETER, NH 03833
81-59	CHARLES E. POTTLE MARYANN POTTLE 4 GREYBIRD FARM CIR. EXETER, NH 03833
81-62	CRAIG E. LAWRY 7 GREYBIRD FARM CIR. EXETER, NH 03833
81-50	OWEN G. BARIL BARBARA E. MICHAUD PO BOX 975 EXETER, NH 03833
81-51	KINGSTON ROAD 12, LLC 12 KINGSTON RD. UNIT D EXETER, NH 03290

**ABUTTERS LIST
FOR
NH- 1154.1 BRIAN GRISET- EXETER, NH
DATE March 9, 2021**

81-49	JOHN F. HENNESSEY MURRAY FAMILY REV. TR. CHRISTINE H. HENDERSON REV. LIV. TR. 12 PENDEXTER RD. MADBURY, NH 03823
73-47	BOSTON AND MAINE RAILROAD 1700 IRON HORSE PARK NORTH BILLERICA, MA 01862
95-64	EXETER RIVER MHP COOPERATIVE INC. C/O HODGES 201 LOUDON RD. CONCORD, NH 03301
96-10	EDWARD LIPTAK ANN ELIZABETH BENNETT 74 TOOLE TRAIL PEMBROKE, MA 02359
96-29	THOMAS & LINDA SMITH 7 TAMARIND LANE Lot #22 EXETER, NH 03833
96-28	MARCELO MENDOZA 9 TAMARIND LANE EXETER, NH 03833
96-8	JONATHAN & COLENE ELLIOTT 6 TAMARIND LN EXETER, NH 03833
96-30	JASON & PATRICIA CONWAY 5 TAMARIND LANE EXETER, NH 03833
81-79	TOWN OF EXETER 10 FRONT ST. EXETER, NH 03833
96-31	ROBERT & REBECCA LIETZ 3 TAMARIND LN. EXETER, NH 03833

**ABUTTERS LIST
FOR
NH- 1154.1 BRIAN GRISET- EXETER, NH
DATE March 9, 2021**

81-63	STEVEN J. MACHALA 5 GREYBIRD FARM CIR. EXETER, NH 03833
81-64	JOSHUA P. HAGAN 3 GREYBIRD FARM CIR. EXETER, NH 03833
81-68	WHITNEY T. WELLER 4 TAMARIND LN. EXETER, NH 03833
81-56	GRANITE STATE GAS -UNITIL 6 LIBERTY LN. WEST HAMPTON, NH 03842
81-66	ROBERT SIMON 38 KINGSTON RD. EXETER, NH 03833

PROFESSIONALS

ENGINEERING FIRM

BEALS ASSOCIATES, PLLC.
70 PORTSMOUTH AVE. 3RD FLOOR
STRATHAM, NH 03885

SOIL SCIENTIST

GOVE ENVIRONMENTAL
8 CONTINENTAL DR. BLDG. 2 UNIT H
EXETER, NH 03833

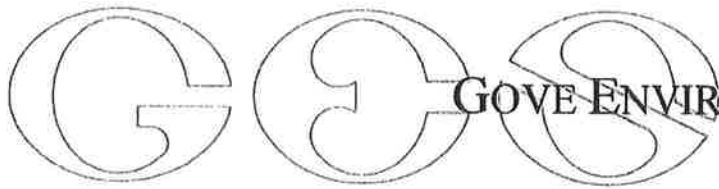
SURVEYOR

DAVID VINCENT
PO BOX 1622
DOVER, NH 03820

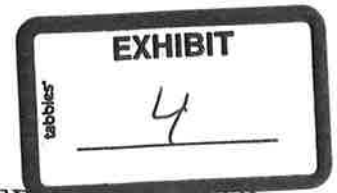
DEVELOPER

BRIAN GRISET
26 CULLEN WAY
EXETER, NH 03833

Please see additional
plan attachments under
“Supporting Documents”
posted for this meeting



GOVE ENVIRONMENTAL SERVICES, INC.
Wetlands and Soil Mapping



WILDLIFE HABITAT ASSESSMENT

for a

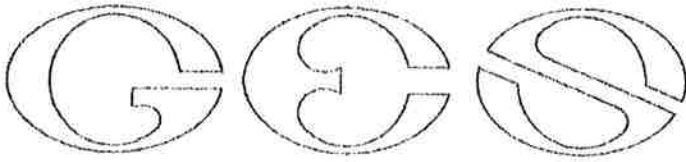
**Residential Development
Tamarind Lane
Exeter, New Hampshire**

for

**Brian Griset
Cullen Way
Exeter, NH
March 2021**

8 Continental Dr Bldg 2 Unit H, Exeter, NH 03833-7526
Ph (603) 778 0644 / Fax (603) 778 0654

www.gesinc.biz
info@gesinc.biz



Index:

Part 1: Findings and Summary

Part 2: NHB21-1021 Datacheck Results Letter, Figures, Site Photographs

Part 3: Detailed Evaluation

Proposed Project

Project Site and Surrounding Land Use Description

Threatened and Endangered Species and Wildlife Habitat Evaluation

Potential Impacts and proposed Conservation Measures

Part 4: Appendices

Aerial Photo

USGS Topo Map

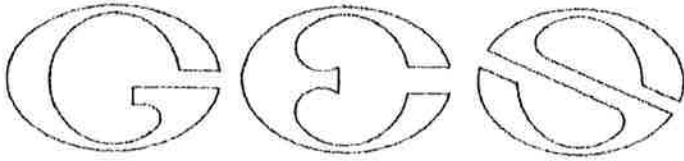
WAP Habitat Cover Map

WAP Highest Ranked Wildlife Habitat Map

Conservation Parcels Map

NRCS Soils

NHB21-1021



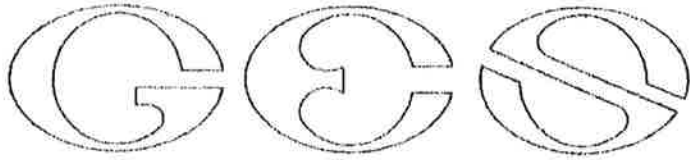
PART 1: SUMMARY AND FINDINGS

Wildlife Biologist: Luke Hurley	NHB21-1021
Gove Environmental Services, Inc.	Residential Development
8 Continental Drive, Exeter, NH 03833	Tamarind Lane, Exeter
lhurley@gesinc.biz	Brian Grisct
603-770-5114	AOT Application

PROPOSED PROJECT:

The proposed project is an 18-unit, single family open space development. This will preserve 41 acres of the total 64 +/- acre site. This will maintain 65% of the entire area as open space. Proposed utilities will be underground and municipal water and sewer will serve the project. Two vernal pools are on the property.

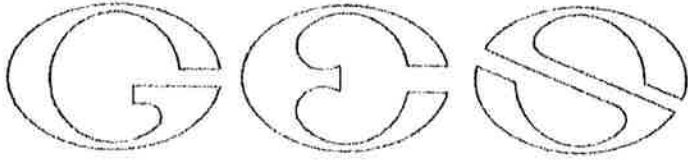
<p>PHASE I Threatened and Endangered Wildlife and Habitat Assessment Findings:</p> <p>Check one</p> <p><input type="checkbox"/> No threatened and endangered wildlife and habitat present, no threatened or endangered wildlife, habitat, or wildlife corridors likely to be impacted by project activities.</p> <p><input type="checkbox"/> Threatened and endangered wildlife and habitat present; HOWEVER, NO threatened or endangered wildlife, habitat, or wildlife corridors likely to be impacted by project activities. No conservation measures are proposed.</p> <p><input checked="" type="checkbox"/> Threatened and endangered wildlife and habitat present or wildlife corridors present. Proposed actions have the potential for impacts. Conservation measures incorporated into the proposed project or project design.</p>



THREATENED AND ENDANGERED WILDLIFE AND HABITAT:
NHB21-1021 Did not identify any TE species on site or in the vicinity.

Based on the various cover types of Appalachian oak forest, grassland and forested and scrub shrub swamps, the following could potentially be on site based on field work and desk top analysis.

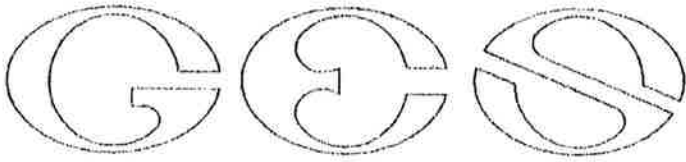
American kestrel, SC, SGCN
Black-billed cuckoo, SGCN
Blue-winged warbler, SC, SGCN
Brown thrasher, SGCN
Field sparrow, SGCN
Prairie warbler, SGCN
American woodcock SGCN
Big Brown Bat SC, SGCN
Silver-haired bat SC, SGCN
Tri-colored bat SE, SGCN
Eastern red bat SC, SGCN
Hoary bat SGCN
Little brown myotis SE, SGCN
Blue-Spotted/Jefferson Salamander SC, SGCN
Eastern Box turtle SE, SGCN
Eastern towhee SGCN
Eastern whip-poor-will SGCN
Purple finch SGCN
Ruffed grouse SGCN
American bumblebee SGCN
Rusty Patched bumblebee FE, SE, SGCN
Yellow-banded bumble bee SGCN
Yellow bumble bee SGCN
Wood turtle SC, SGCN
Blanding's turtle SE, SGCN
Bobolink, SGCN
Eastern meadowlark, ST, SGCN
Monarch butterfly, SC
Northern black racer, ST, SGCN
Wood thrush, SGCN
Veery, SGCN
Common gallinule, SC, SGCN
Spotted turtle, SGCN
Eastern ribbon snake, SGCN
Least bittern, SC, SGCN
Marsh wren, SGCN
Pied-billed grebe, ST, SGCN
Smooth green snake, SC, SGCN
Sora, SC, SGCN



PROPOSED CONSERVATION MEASURES:

The open space development will preserve 41 acres of the total 64 +/- acre site. This will maintain 65% of the entire area as open space.

Ideal methods for erosion control around the perimeter of the work areas is mulch berms. These are natural and often readily available for development sites. These are easy to install and do not need to be removed once the project is complete. The use of mulch berms does not act as a barrier to wildlife as they are able to easily walk over the berms with no issues. The use of welded plastic or 'biodegradable plastic' netting or thread in erosion control matting should be avoided. There are numerous documented cases of snakes and other wildlife being trapped and killed in erosion control matting with synthetic netting and thread. The use of erosion control berm, white Filtrexx Degradable Woven Silt Sock, or several 'wildlife friendly' options such as woven organic material (e.g. coco or jute matting such as North American Green SC150BN or equivalent) are readily available.



PART 1: SUMMARY AND FINDINGS

NHB21-1021
Residential Development
Tamarind Lane, Exeter
Brian Griset
AOT Application

Printed name, date and signature of Individual that conducted the Phase I Threatened and Endangered Wildlife and Habitat Assessment. Note: By signing this document, the qualified wildlife biologist (Env. Wq. 1503.19(h)) is assuming responsibility for the wildlife assessment. Credentials need to be included in Part 4: Appendices.

Luke Hurley
Name – printed

March 23, 2021
Date

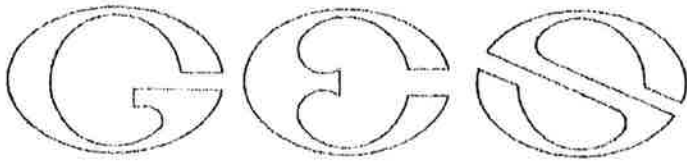
Signature

Check Applicable Requested Action

- Request for NHFG Concurrence with Findings in compliance with Env. Wq. 1503.19(h)(1)a
- Request for NHFG Concurrence with Findings and Proposed Conservation Measures in compliance with Env. Wq. 1503.19(h)(1)b*
- Requests further coordination with NHFG to discuss proposed conservation measures and/or, potential focused survey needs (Phase II) *

*New Hampshire Fish and Game’s review and recommendations are based on the information provided in this assessment. Changes to project scope may affect NHFG and/or NHDES determination on potential impacts and whether conservation measures and project design modifications proposed are still applicable or sufficient.

Other:



PART 2: NHB21-1021 Datacheck Results Letter, Figures, Site Photographs

Include in order presented below:

NHB21-1021 Datacheck Results Letter

Aerial Figure

Topographic Figure

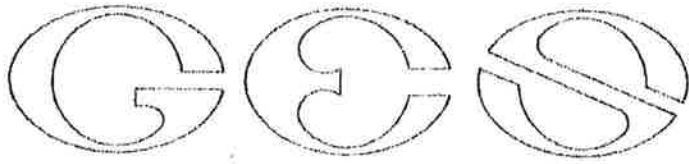
NH Wildlife Action Plan - Land Cover Figure

NH Wildlife Action Plan - Habitat Rankings and Conservation Parcels Figure

Conservation Parcels

NRCS Soils

Site photographs with photograph location plan



*Wildlife Habitat Assessment for, Tamarind Lane, Exeter
March 23, 2021*

NHB21-1021

New Hampshire Natural Heritage Bureau
NHB DataCheck Results Letter

To: Brenden Walden
8 Continental Dr, Building 2, Unit H
Exeter, NH 03833

From: NH Natural Heritage Bureau

Date: 3/26/2021 (This letter is valid through 3/26/2022)

Re: Review by NH Natural Heritage Bureau of request dated 3/26/2021

Permit Types: Alteration of Terrain Permit
Wetland Standard Dredge & Fill - Minor
Wetland Standard Dredge & Fill - Minimum

NHB ID: NHB21-1021

Applicant: Brenden Walden

Location: Exeter
Tax Map: 96, Tax Lot: 15
Address: Tamarind Lane

Proj. Description: The applicant is proposing open space cluster subdivision on site with access from Tamarind Lane that will require direct wetland impacts to a forested wetland and a perennial pond on site. Those impacts combined are less than 3,000 sf.

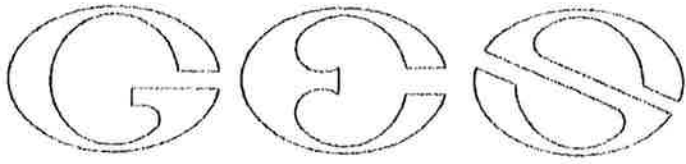
The NH Natural Heritage database has been checked for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government. We currently have no recorded occurrences for sensitive species near this project area.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

New Hampshire Natural Heritage Bureau
NHB DataCheck Results Letter

MAP OF PROJECT BOUNDARIES FOR: NHB21-1021

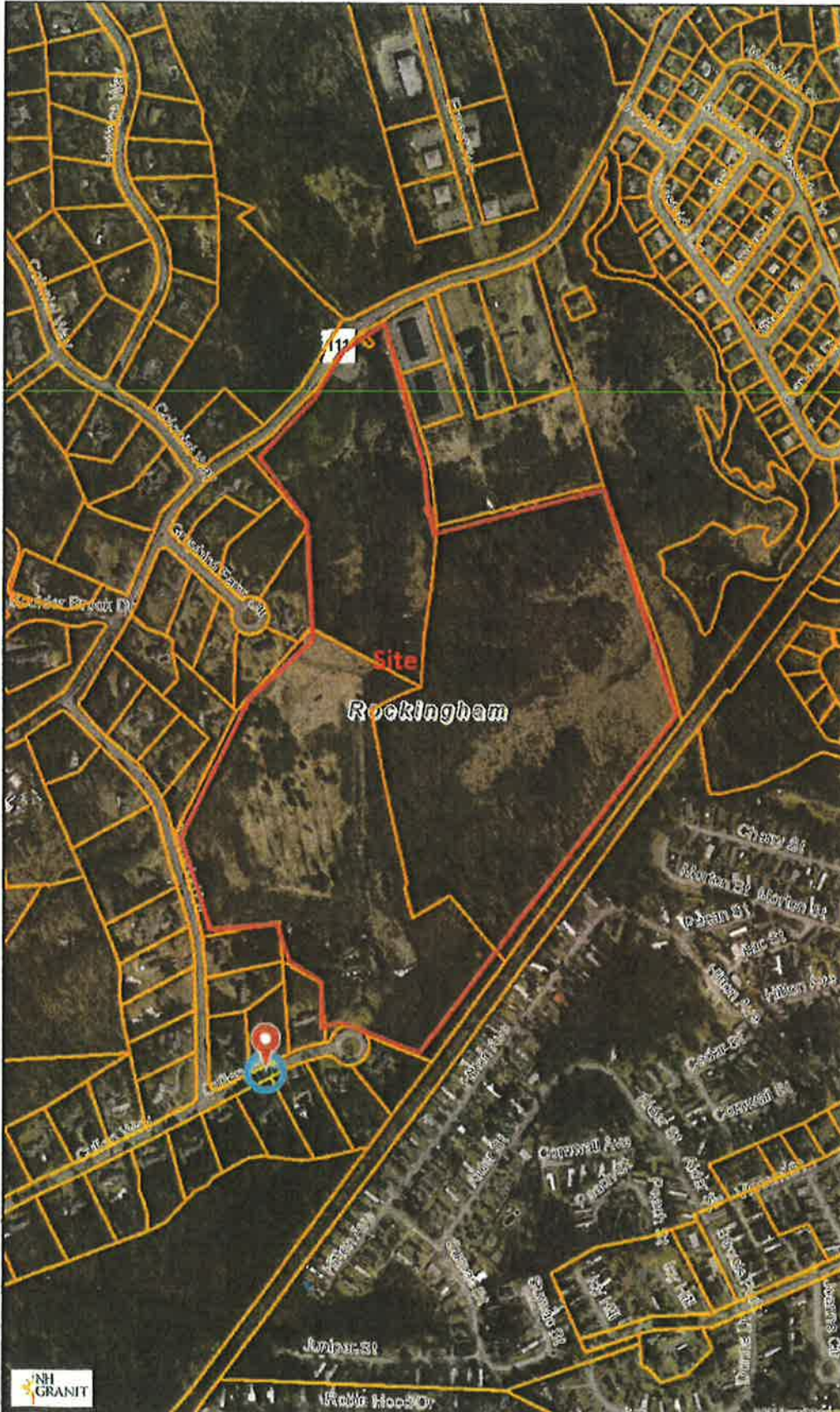








*Wildlife Habitat Assessment for, Tamarind Lane, Exeter
March 23, 2021*

Aerial Photo

Aerial



Legend

-  Polygons
-  State
-  County
-  City/Town

Map Scale

1: 6,494

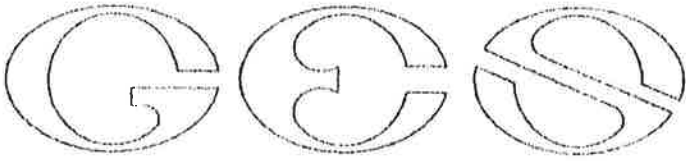
© NH GRANIT, www.granit.unh.edu

Map Generated: 3/22/2021



Notes

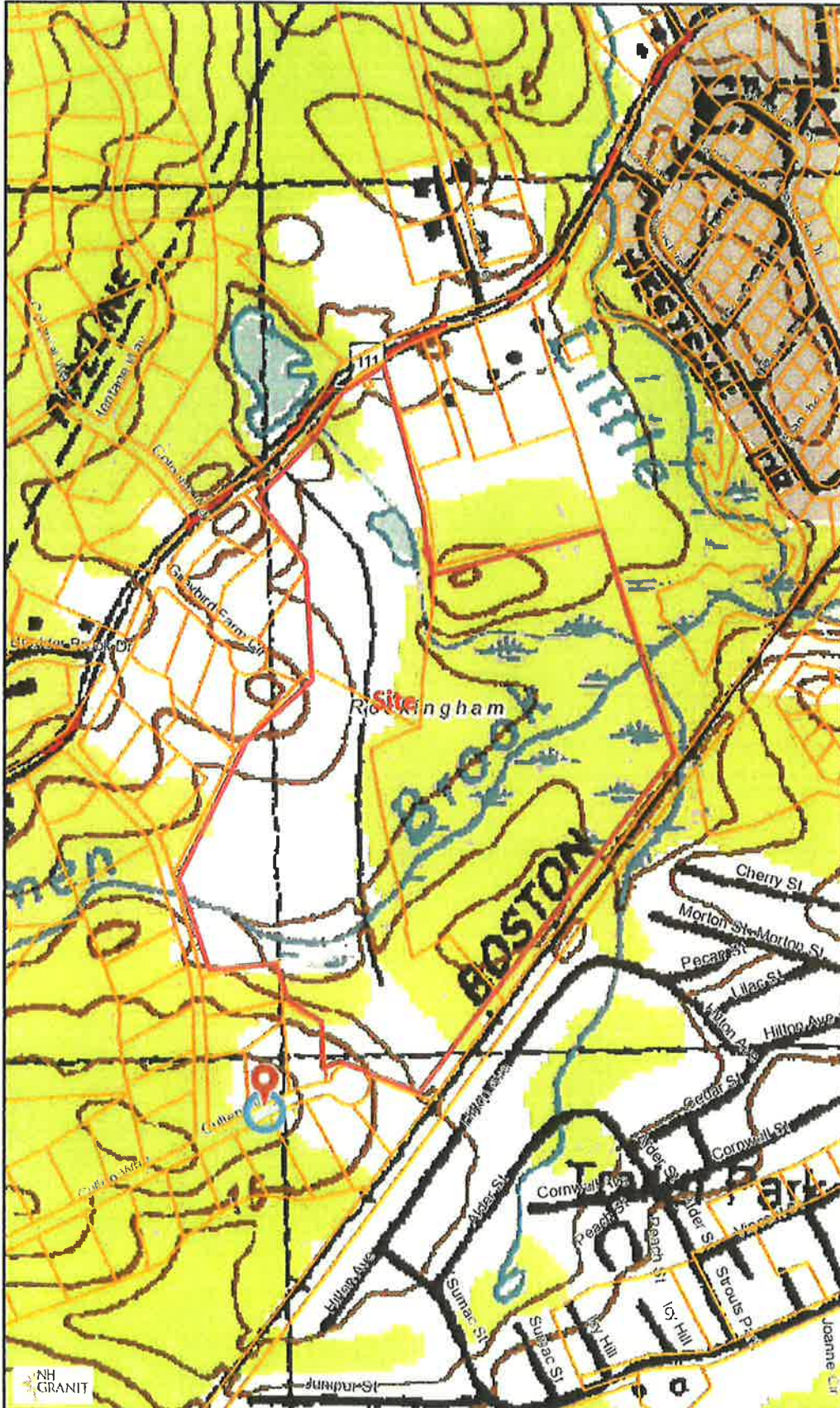




*Wildlife Habitat Assessment for, Tamarind Lane, Exeter
March 23, 2021*

USGS Topo Map

USGS



Legend

- Polygons
- State
- County
- City/Town

Map Scale

1: 6,494

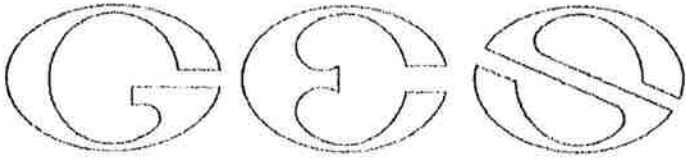
© NH GRANIT, www.granit.unh.edu

Map Generated: 3/22/2021



Notes





*Wildlife Habitat Assessment for, Tamarind Lane, Exeter
March 23, 2021*

**NH Wildlife Action Plan
Land Cover Figure**

WAP 2020: Wildlife Habitat Land Cover

Legend

- Polygons
 - State
 - County
 - City/Town
- WAP 2020: Wildlife Habitat I Cover
- Alpine
 - Appalachian oak-pine
 - Cliff and Talus slope
 - Coastal Island and Rocky coast
 - Developed Impervious
 - Developed or Barren land
 - Dune
 - Floodplain forest
 - Grassland
 - Hemlock-hardwood-pine
 - High-elevation spruce-fir
 - Lowland spruce-fir
 - Northern hardwood-conifer
 - Northern swamp
 - Open water
 - Peatland
 - Pine barren
 - Rocky ridge
 - Salt marsh
 - Sand/Gravel
 - Temperate swamp
 - Marsh and shrub wetland

Map Scale

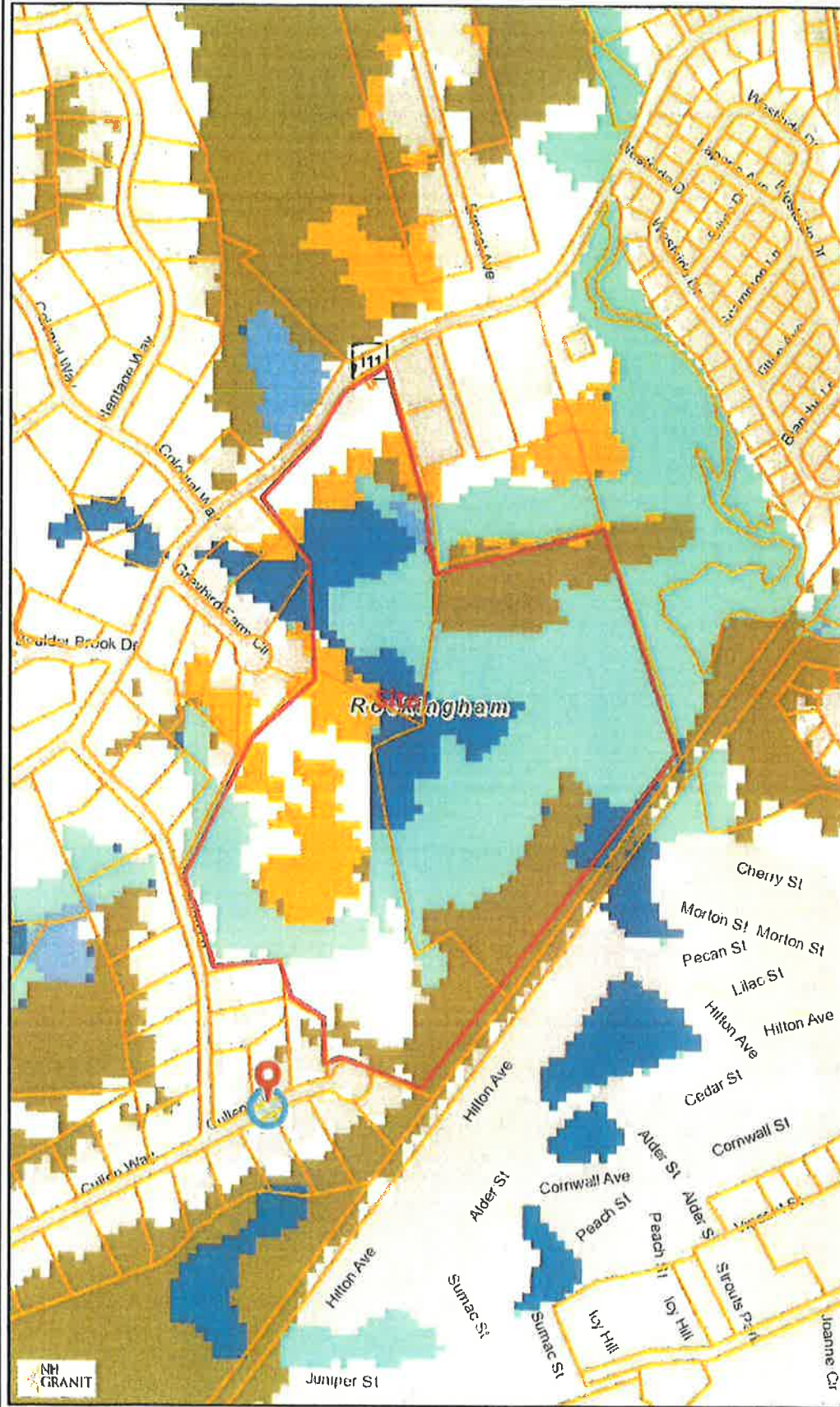
1: 6,494

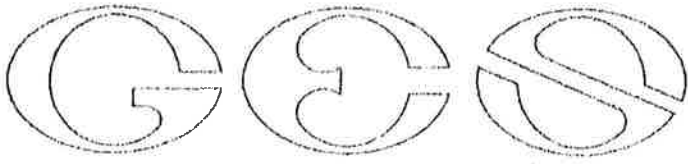


© NH GRANIT, www.granit.unh.edu

Map Generated: 3/22/2021

Notes





*Wildlife Habitat Assessment for, Tamarind Lane, Exeter
March 23, 2021*

**NH Wildlife Action Plan
Habitat Rankings**

WAP 2020: Highest Ranked Wildlife Habitat



Legend

-  Polygons
 -  State
 -  County
 -  City/Town
- WAP 2020: Highest Ranked Wildlife Habitat
-  1 Highest Ranked Habitat in NH
 -  2 Highest Ranked Habitat in Region
 -  3 Supporting Landscape

Map Scale

1: 12,988

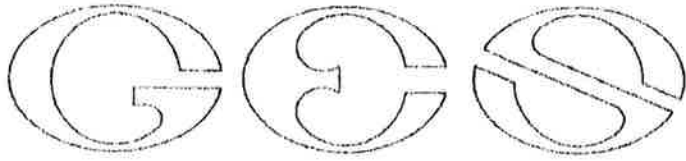


© NH GRANIT, www.granit.unh.edu

Map Generated: 3/22/2021

Notes





*Wildlife Habitat Assessment for, Tamarind Lane, Exeter
March 23, 2021*

Conservation Parcels

Conservation Lands



Legend

- Polygons
- State
- County
- City/Town
- Conservation and Public Land

Map Scale

1: 12,988

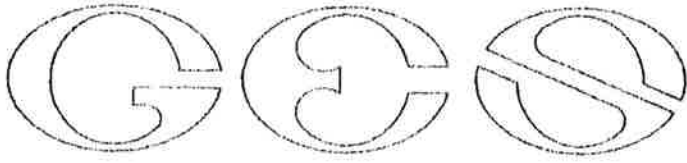
© NH GRANIT, www.granit.unh.edu

Map Generated: 3/24/2021



Notes





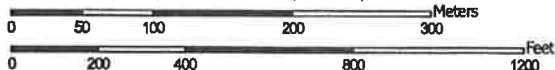
*Wildlife Habitat Assessment for, Tamarind Lane, Exeter
March 23, 2021*

NRCS Soils

Soil Map—Rockingham County, New Hampshire



Map Scale: 1:4,960 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 19N WGS84











































Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

3/22/2021
Page 1 of 3

MAP LEGEND

 Area of Interest (AOI)	 Spoil Area
 Area of Interest (AOI)	 Stony Spot
 Soil Map Unit Polygons	 Very Stony Spot
 Soil Map Unit Lines	 Wet Spot
 Soil Map Unit Points	 Other
 Special Point Features	 Special Line Features
 Blowout	 Streams and Canals
 Borrow Pit	 Transportation
 Clay Spot	 Rails
 Closed Depression	 Interstate Highways
 Gravel Pit	 US Routes
 Gravelly Spot	 Major Roads
 Landfill	 Local Roads
 Lava Flow	 Background
 Marsh or swamp	 Aerial Photography
 Mine or Quarry	
 Miscellaneous Water	
 Perennial Water	
 Rock Outcrop	
 Saline Spot	
 Sandy Spot	
 Severely Eroded Spot	
 Sinkhole	
 Slide or Slip	
 Sodic Spot	

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more 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: Rockingham County, New Hampshire
 Survey Area Data: Version 22, May 29, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 30, 2011—Apr 8, 2011

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
32B	Boxford silt loam, 3 to 8 percent slopes	4.2	6.5%
33A	Scitico silt loam, 0 to 5 percent slopes	40.9	64.6%
38B	Eldridge fine sandy loam, 3 to 8 percent slopes	4.9	7.7%
97	Freelown and Natchaug mucky peats, ponded, 0 to 2 percent slopes	2.5	4.0%
134	Maybld silt loam	6.0	9.5%
298	Plts, sand and gravel	4.5	7.1%
299	Udorthents, smoothed	0.4	0.6%
Totals for Area of Interest		63.4	100.0%

Aerial



Legend

-  Polygons
-  State
-  County
-  City/Town

Map Scale

1:6,494

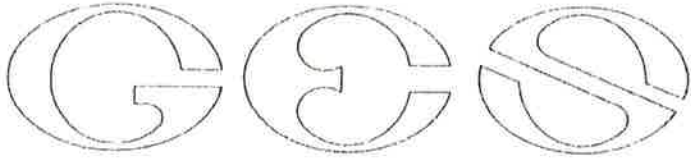


© NH GRANIT, www.granit.unh.edu

Map Generated: 3/22/2021

Notes

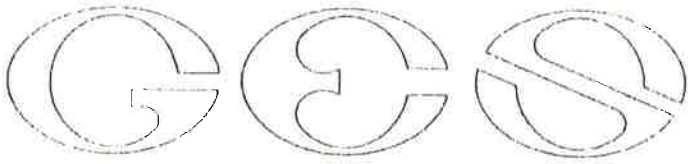




1. Looking down stream system within larger wetland complex.



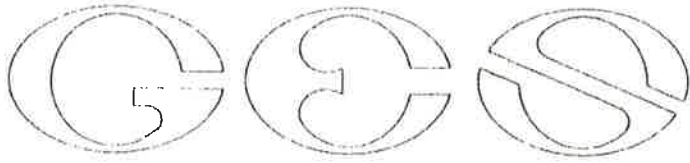
2. View of adjacent open understory of wetland.



3. Opposite view.



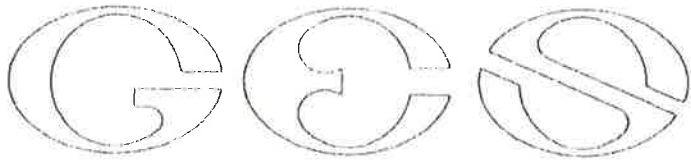
4. View of additional shrub wetland on site.



5. View of wooded upland area.



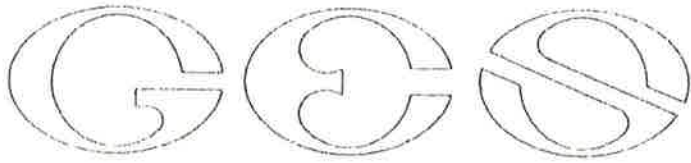
6. View of thick shrub and vine cover.



7. View of Driveway in and adjacent to the site.



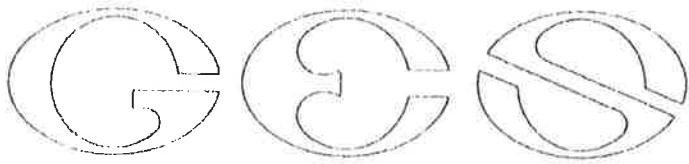
8. View towards old farm pond.



9. Opposite view.



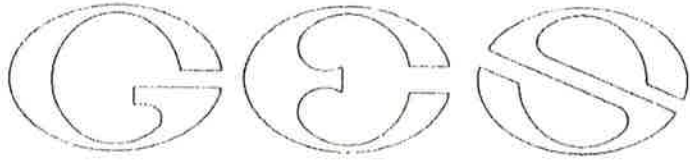
10. View along old farm crossing along wetland edge.



11. Open understory wooded area.



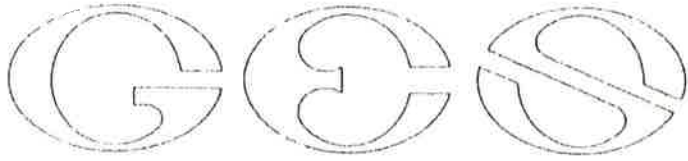
12. Open field area.



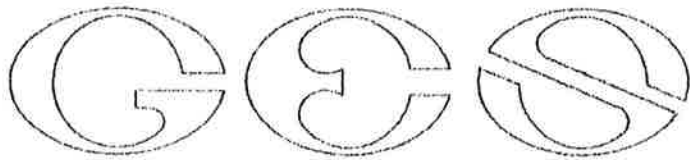
13. View looking over brook.



14. View of shrub wetland area.



15. Additional view.



PROPOSED PROJECT:

The proposed project is for an 18-unit, single family Open Space development, maintains the present exterior parcel boundaries with a slight alteration of the common boundary between the Grisnet and Mendez parcels. This alteration increases the Mendez parcel to 31.61 acres which is intended to be attached to the current Brickyard Park (9.38 acres) and dedicated to additional open space preservation and deeded to the Town of Exeter for management and general public passive recreational use.

Proposed restrictions, allowances and uses of the property are as follows. Use limited to only conservation, preservation, passive recreation, and restricted development for a Town water supply. Hunting limited annually to four veterans during hunting season. Names to be drawn by lottery when vacancies occur. Coyote and beaver control.

The remaining Grisnet parcel will be subdivided into three parcels. (96-15) which is the applicants current residence with 6.59 acres, (96-15-17) a new conventional single-family lot with 1.67 acres and the 14.59-acre Open Space Condominium development which includes the HOA protected 9.40 acre preserved Open Space area and sixteen home sites (96-15-1 thru 16).

The proposed Fox Meadows HOA will be responsible for maintaining the 9.40 acre Preserved "Common Area" which encompasses the lower field, portions of Scamen Brook and wetlands. A single annual mowing in September to preserve field and wild bird habitat plus removal of annual deadfall within the field area is one stewardship responsibility. The second is the authority to control and manage both coyote and beaver populations.

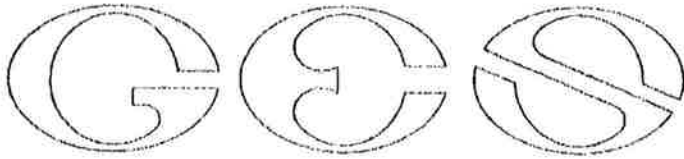
The project is proposing 2,960 sf of wetland impacts through two separate impact areas: 1-1,680 sf and 2-1,280. This is for access into the site and will be incorporating the old farm road to minimize impacts.

PROJECT SITE AND SURROUNDING LAND USE DESCRIPTION:

The site consists of three parcels; 23.60-acre Grisnet (96-15), 30.76-acre Mendez Real Estate Trust (81-53) and 9.38-acre Town of Exeter Brickyard Park Recreational and Open Space area previously deeded to the Town of Exeter by the applicant in 1992. The site consists of approximately 64 acres of woodland, wetland, open fields, and one pond. A significant area of the site is part of the Scamen Brook drainage area and is part of a larger forested and scrub shrub wetland system, making up a considerable portion of the site. This large system begins in the northern portion of the parcel, adjacent to Route 111 and flows to the south and then the east where it drains into Scamen Brook, which flows from the southwest to the east off site. The site is surrounded by residential development. It is abutted by Route 111 to the north, the railway to the east, Cullen Way to the south, and Tamarind Lane to the west.

FIELD ANALYSIS

The site was visited on October 12, 2019 for the Town of Exeter and March 23, 2021 and potential for TE species and potential habitat, as well as overall site conditions were evaluated and documented. The field work was conducted over 10 hours total under sunny skies and 60



degrees (F). Field work was performed by slowly walking the parcel. Resources used: NH Wildlife Action Plan, Wildlife Action Plan – Community Maps (Habitat, Scoring, and SGCN by Town), NHHG Endangered and Threatened Wildlife of NH, Rare Animals, and Exemplary Natural Communities in New Hampshire Towns, Taking Action for Wildlife, NH GRANIT GIS clearinghouse, USDA Web Soil Survey.

Upland Cover Type

Grassland

A significant upland area on site is open field with a gentle slope. This open field is where development is proposed. The large field area is comprised of a variety of grasses, forbes, wildflowers, sedges, and rushes. This field is mowed seasonally every year. During the time of the assessment the field was mowed, and species identification was not possible. The large wet meadow on site (located to the west) which connects to a scrub shrub wetland is ideal habitat for large predatory birds such as hawks and is well suited for Neotropical migrant birds, and many grassland birds. This area dries out early in the summer and was considered part of the grassland habitat.

Appalachian-oak forest

The forested upland area is comprised of white pine, sugar maple, American beech, poplar, and mixed oak. Species in the canopy range in size from pole-size to mature trees.

The shrub layer includes low bush blueberry, buckthorn, witch hazel, as well as regenerating canopy species. Herbaceous species consists of wintergreen, maple leaf viburnum, partridgeberry, clubmoss, and bracken fern.

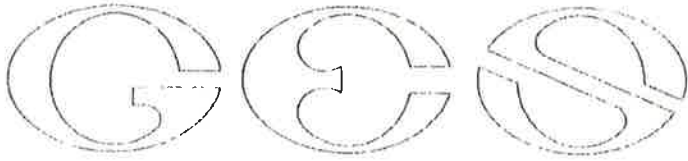
Wetland Cover type

There are two large wetland systems and one small, ponded area on site. A majority of the wetland systems on site are forested and scrub shrub. The large wetland system to the east consists of red maple, paper birch, and muscle wood in the tree layer, autumn olive, buckthorn, Japanese barberry, and sweet pepperbush in the shrub layer, and sensitive fern, lady fern, swamp dewberry, and mixed grasses and sedge in the herbaceous layer.

Another large portion of the wetland is a wet meadow. This field is also mowed every year in the fall to maintain habitat as well as several bryophytes, grasses, and cattail.

A prime wetland exists on the northeast portion of the 64 acres contained within a 30 plus acre section which is proposed to be deeded to the town for preservation and mitigation. This large system begins in the northern portion of the parcel, adjacent to Route 11 and flows to the south and then the east where it drains into Scamen Brook, which flows from the southwest to the east off site

A vernal pool evaluation was conducted in April 2019, two pools were identified. Vernal pool one is about 30x30 feet in dimension and has an average depth of about 2 feet. Forty wood frog egg masses were observed. Pool two is about 50x40 feet approximately 52 wood frog egg masses were observed. These vernal pools will be protected by at least a 100' buffer.



Pool #1

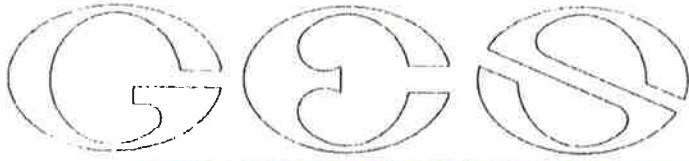
This pool is located within the “B” wetland line. It is in the southeast part of the site and abuts the railroad. The area containing the egg masses is approximately 30x30 feet and has a depth of about 2 feet. It has a light tree and shrub canopy with about 50% canopy cover. It is flagged in blue tape, numbered VP1-1 through VP1-5. Forty wood frog egg masses were found.

Pool #2

This pool is the “J” line delineated on the wetland map. It is an isolated pocket located in a depression on the top of a small hill. This is a previously disturbed areas that is an excavated basin. This pool is approximately 50x40 feet. It has about 30% canopy cover. Approximately 52 wood frog egg masses were found.



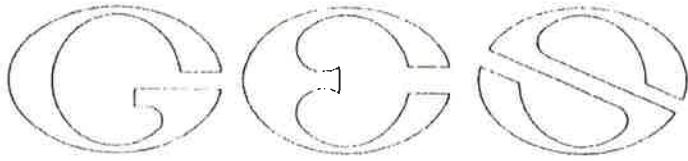
View of Pool 1.



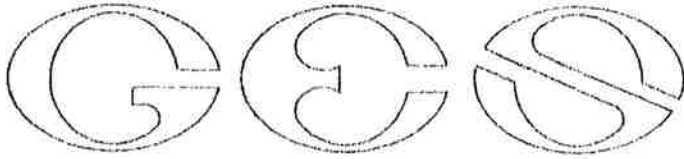
Wood Frog egg masses found in pool 1.



View of pool 2.



Wood Frog egg masses found in pool 2.



SOILS AND GEOLOGY

Soils on site are primarily, Scitico silt loam and Eldridge Sandy Loam, no significant ledge is on site. The site is generally flat and slopes from the east to the west, with ne knoll area in the central portion of the site.

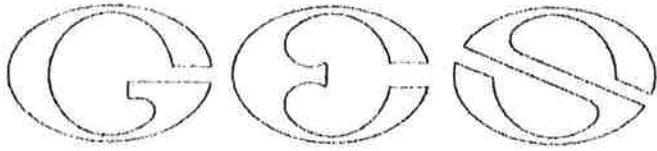
CONSERVATION LANDS

A portion of the parcel is already conservation land in the northern area. Additional Town Conservation lands are located to the west and east and will be connected through the open space area proposed through this project.

WILDLIFE TRAVEL CORRIDOR

Much of the site is used as a corridor and suitable habitat for present wildlife. The constraint is the geographic location of the parcel as an island surrounded by Route 111 to the north and dense residential neighborhoods on all remaining sides. The proposed development will not disturb many of the active corridors on site and travel will be possible through the site. Many of the species using the corridors proposed to be disturbed will continue to have easy access to many of the other existing corridors on site. Although active corridors will be disturbed it will not disrupt wildlife passage as a whole.

The proposed conveyance to the Town of the entire 31.61 acres of Tax Map 81, Lot 53, as well as the intended preservation of the open meadow adjacent to the uplands/development area by the HOA, will provide a habitat block that will preserve the wildlife corridors in perpetuity.



THREATENED AND ENDANGERED WILDLIFE AND HABITAT EVALUATION:
NHB21-1021

Based on the various cover types of Appalachian oak forest, grassland and forested and scrub shrub swamps, the following could potentially be on site-based n field work and desk top analysis. Over all the 65% open space on site should help to minimize any impacts t these species.

American kestrel, SC, SGCN

This species requires open habitats such as fields, meadows, pastures and parks with sparse trees or power lines to perch on. A portion of the site will remain as open field. No impact to this species is expected.

Black-billed cuckoo, SGCN

Black-billed Cuckoos use a different mix of habitats than most species considered early successional specialists. In addition to shrub- or sapling-dominated habitats (regrowing cuts, rights-of-way, old fields), cuckoos also nest in shrubby wetlands and open woodlands/forest edges with limited early- successional features (e.g., golf courses, woodlots, orchards, and fencerows) (Hughes 2001). Nests are built higher above the ground (1-2 meters, but as high as 13) than other shrubland species. As a large area of open space is being preserved. No impact to this species is expected.

Blue-winged warbler, SC, SGCN

Brown thrasher, SGCN

Field sparrow, SGCN

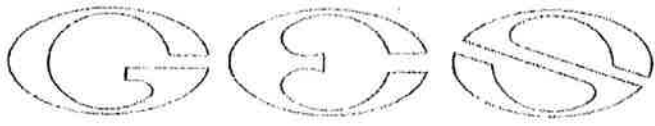
Prairie warbler, SGCN

Eastern towhee SGCN

Like all shrubland birds, these species occurs in habitats dominated by shrubs or young trees, sometimes interspersed with mature trees (e.g., pine barrens) or open bare or grassy areas. Typical examples in New Hampshire include regenerating timber harvests, power line rights-of-way, shrubby old fields and edges, and pine barrens. From a bird perspective, such habitats can be subdivided into those dominated by shrubs vs. dominated by saplings. The former – sometimes referred to as “scrub- shrub” – is more typical of abandoned old fields, utility rights-of-way, and open areas within pine barrens. Such habitats often persist for relatively long periods without the need for additional management. Saplings, on the other hand, are typical of areas subject to timber harvest, and rarely retain early successional characteristics beyond 15-20 years. These are also regularly referred to as “young forest.” The open space provided on site should minimize any impacts to these species.

American woodcock SCGN

Woodcock require four different habitat types. Clearings are used by males for courtship display. Moist, fertile soils with alder or dense second growth hardwood offer feeding areas. Young, second growth hardwood stands provide nesting and brood rearing habitat.



Large fields are needed as night roosting sites. It's important to have all four habitat elements in close proximity. A large mosaic of these required cover types will remain and minimize impacts to this species.

Big Brown Bat SC, SGCN

Silver-haired bat SC, SGCN

Tri-colored bat SE, SGCN

Eastern red bat SC, SGCN

Hoary bat SGCN

Little brown myotis SE, SGCN

Any of these bats could be expected to be within the mature forested area. As no significant cutting of large trees is proposed, no impacts are expected to these species.

Blue-Spotted/Jefferson Salamander SC, SGCN

These are most commonly in moist hardwood forests but also in wooded swamps, marshes, and bogs. Spends most of time underground burrowing under logs, rocks, and mats of moss and vegetation. No work is proposed to impact these pools and a buffer around the pools will minimize any impacts to these species.

Eastern Box turtle SE, SGCN

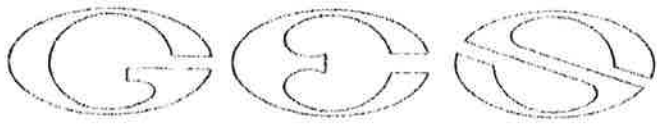
This turtle is found in terrestrial areas such as dry and moist woodlands, old fields, pastures, power-line corridors, and edges of marshes, bogs, and shallow streams. During hot weather, may rest in water or burrow under logs and moist vegetation. With the large area of open space being provided no impact is expected to this species.

Eastern whip-poor-will SGCN

Eastern Whip-poor-wills inhabit areas of dry soils and open understory, especially in pine and oak woodlands (Cink 2002). They prefer to forage in open areas, such as fields, clearings, regenerating clear cuts, recent burns, and power line rights-of-way (Wilson 2003, Hunt 2013). Dry soil, which contributes to the sparse understory that whip-poor-wills prefer, may also allow for better drainage of the leaf litter where the birds lay their eggs, although definitive data are lacking. In New Hampshire, whip-poor-will records during the Breeding Bird Atlas were all from areas below 1200' elevation (Foss 1994). During a study in the Piscataquog River watershed in 2003, whip-poor-will records were concentrated in the northeastern quarter of the watershed. A preliminary analysis of habitat at points where whip-poor-wills were detected suggests that birds were more likely to occur in areas identified by aerial photography as "dry pine forest," "gravel pit," or "disturbed" (Hunt 2006). The proposed open space should provide ample area of mixed habitat for this species.

Purple finch SGCN

The Purple Finch uses a wide range of forest types, including those of an anthropogenic nature such as orchards, conifer plantations, and suburban yards (Wootton 1996). Densities are probably highest in more northern forest types with significant conifer components. No impact is expected to this species from the development.



Ruffed grouse SGCN

The Ruffed Grouse uses deciduous and coniferous forests in both upland and wetland settings (DeGraaf et al. 1989). Ruffed Grouse are early successional forest specialists. Grouse require four different cover types for drumming, brood rearing, nesting, and wintering. In general, they inhabit brushy, mixed-age woodlands, early successional to mature hardwood and mixed forests, often with aspen and birch as a component. Optimal habitat for Ruffed Grouse include young (6 to 15-year-old), even-age deciduous stands typically supporting 20-25,000 woody stems/ha (Gullion 1984). These habitats are available to grouse for approximately one decade because stem densities decrease rapidly through natural thinning as succession proceeds (Dessecker and McAuley 2001). Although commonly identified as an "edge" species, Ruffed Grouse association with habitat edges largely reflects their use of various interspersed forest habitats at different times of the year and their use of marginal habitats where quality habitat is lacking. They typically avoid hard-contrast edges (Dessecker and McAuley 2001). Old orchards are an ideal fall habitat in New England (DeGraaf and Yamasaki 2001). Catkin-bearing trees are also an indicator of grouse habitat. They use logs or stone walls for drumming sites and dense cover for protection (Brooks and Birch 1988). Hens and broods prefer areas with a dense understory and fairly open herbaceous ground cover. Grouse nest and feed in hardwood stands and dust themselves in sunny openings. Ruffed Grouse use mature woodlands, especially coniferous forests, during winter. When snow is deep and soft, birds will roost in the snow. Otherwise they will roost on the ground or in trees. Approximately 65% of the entire property will be in open space. No impact is expected to result with the species.

American bumblebee SGCN

Rusty Patched bumblebee FE, SE, SGCN

Yellow-banded bumble bee SGCN

Yellow bumble bee SGCN

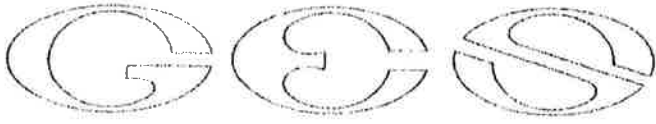
Any of these species could be expected to be on site based on the extent of flowering plants and shrubs. With the large area of open space provided, no impacts are expected. Bumble bees frequent meadows, crop fields, orchards, gardens, and other locations with flowering plants

Wood turtle SC, SGCN

These turtles are found in slow-moving streams and channels with sandy bottoms. Extensive use of terrestrial habitats during summer, including floodplains, meadows, woodlands, fields, as well as wetlands. The area of Scamen Brook will be well within the area of open space as well as terrestrial woodlands. No impact is expected.

Blanding's turtle SE, SGCN

Blanding's turtles are found in wetland habitats with permanent shallow water and emergent vegetation such as marshes, swamps, bogs, and ponds. Use vernal pools extensively in spring and while traveling through the landscape. May use slow rivers and streams as mechanisms for dispersal between wetlands. Extensive use of terrestrial habitats for nesting and travel among wetlands. As with the wood turtle, no impact is expected.



Bobolink, SGCN

Bobolinks breed in a variety of grassland habitats, although these generally contain a mix of tall grasses and scattered leafy forbs such as legumes or dandelions (Martin and Gavin 1995). A relatively dense litter layer is also important, a feature that is more prevalent in older fields (e.g., eight or more years since planting/reseeding, Bollinger, and Gavin 1992). Bobolinks, like many grassland birds, are area sensitive, and are more likely to occur at higher densities in fields over 30 hectares. However, unlike most grassland birds, they will successfully nest in fields as small as two hectares. The preservation of the open grass area on site within the wet meadow may provide some habitat for this species, as long as it is dry enough during the spring during nesting time.

Eastern meadowlark, ST, SGCN

Eastern Meadowlarks breed in a variety of grassland habitats, including natural grasslands, hayfields, pastures, abandoned grassy fields, and airports (Jaster et al. 2012). Occupied areas can have a wide range of vegetation, including long and/or short grasses, areas of bare ground, or small clumps of shrubs. Territories often contain prominent singing perches such as trees and fence posts. Meadowlarks preferentially breed in larger fields, usually over 5 hectares, although the minimum size varies geographically (Heckert 1994, Vickery et al. 1994). Similar to above, the preservation of the open grass area on site within the wet meadow may provide some habitat for this species, as long as it is dry enough during the spring during nesting time.

Monarch butterfly, SC

This species is found anywhere that there is nectar, but will only breed when the larval food source, milkweed, is nearby. No impact is expected to this species.

Northern black racer, ST, SGCN

This snake is found in a variety of habitats including dry brushy pastures, powerline corridors, rocky ledges, and woodlands. Have large home ranges and require large patches of suitable habitat. A large area of land will be set aside for this project, which may be suitable habitat for this species. No impact is expected.

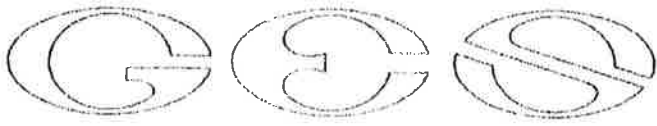
Wood thrush, SGCN

Veery, SGCN

Such sites include mid-successional forests, floodplains, swamps, and mature forests with dense shrub layers. These species should not be expected to be impacted with the large area of deep woods open space provided.

Common gallinule, SC, SGCN

Common Gallinules breed in a variety of freshwater wetlands, usually containing a dense mix of emergent (e.g., Typha, Sagittaria) and floating (e.g., Nymphaea) plants (Bannor and Kiviat 2002). They may also use altered or artificial wetlands such as sewage lagoons and farm ponds. As no work is being proposed in areas where this species might be found, no impact is expected.



Spotted turtle, SGCN

Found in wetlands with shallow, permanent water bodies and emergent vegetation. Marshes, vernal pools, wet meadows, swamps, ponds, and slow-moving streams and rivers all provide suitable habitats for spotted turtles. Terrestrial habitat used extensively while searching for suitable nesting sites, traveling among wetland habitats, and periods of inactivity during high temperatures. A large area of land and wetlands will be set aside for this project, which may be suitable habitat for this species. No impact is expected.

Eastern ribbon snake, SGCN

Found in and near aquatic habitats such as ponds, swamps, bogs, and stream edges. May be found in wet woodlands but seldom stray far from water. Uses brushy areas on the edges of water for concealment. A large area of land and wetlands will be set aside for this project, which may be suitable habitat for this species. No impact is expected.

Least bittern, SC, SGCN

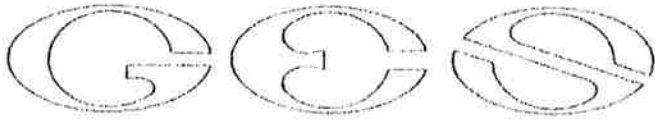
Least Bitterns live mostly in freshwater and brackish marshes with tall stands of cattails or other vegetation. As no work is proposed near their preferred habitat, no impact is expected.

Marsh wren, SGCN

These birds breed in a variety of freshwater wetlands, as well as brackish and salt marshes (Kroodsma and Verner 2014). Important habitat features in all cases are some form of tall emergent graminoid plants (e.g., Typha, Scirpus, Phragmites, Spartina). No work is proposed near marsh habitat or within the wet meadow area. No impact is expected to this species.

Pied-billed grebe, ST, SGCN

Pied-billed Grebes inhabit a range of wetlands, especially ponds or slow portions of streams with dense stands of emergent vegetation (Muller and Storer 1999). In the Northeast, they also appear to prefer areas with submerged aquatic beds (Gibbs et al. 1991). Nearby open water is needed for foraging and take-off prior to flight; sites in Maine averaged at least 34% open water (Gibbs et al. 1991). In Maine, most wetlands occupied by the species were those created by beavers (*Castor canadensis*) or by humans (Gibbs and Melvin 1992). Two additional features appear critical in nest site selection: water depth of at least 25 cm (10 in) and emergent stem densities of at least 10 cm² /m² (0.15 in² /ft²) in adjacent wetland patches (Muller and Storer 1999). Home range size is variable and may depend on habitat type and quality. In the prairie pothole region, home ranges average 1-3.5 ha (2.5-8.75 ac, Muller and Storer 1999). In Maine, however, grebes rarely breed in wetlands less than 5 ha (12 ac) in size (Gibbs et al. 1991, Gibbs and Melvin 1992), suggesting that home range needs may be larger in this part of the country. Alternatively, lower population densities in the Northeast may allow grebes to be more selective since available habitat is not saturated. All sites in New Hampshire where the species has occurred regularly contain open water and surrounding cattail (*Typha* sp.) marsh and may include ponds or small lakes (including beaver ponds), fens or slow streams, impoundments, sewage lagoons and other man-made wetlands, and backwaters



of larger lakes. With the exception of sewage ponds, most Pied-billed Grebe habitat includes some woody vegetation such as alder (*Alnus* sp.) or buttonbush (*Cephalanthus occidentalis*). No impact is expected to this species with the large area of wetlands to be protected.

Smooth green snake, SC, SGCN

This snake is found in upland grassy fields, pastures, meadows, blueberry barrens, and forest openings. Some work is proposed in the upland grassy area; however, the wet meadow area is to remain, which may minimize impacts to this species.

Sora, SC, SGCN

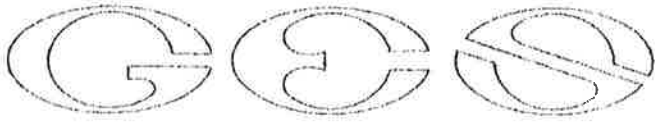
Soras breed in shallow or intermediate-depth freshwater wetlands with dominated by emergent vegetation such as cattails (*Typha*), sedges (*Carex*, *Cyperus*), bur-reeds (*Sparganium*) and bulrushes (*Scirpus*) (Melvin and Gibbs 2012). As no work is proposed near their preferred habitat, no impact is expected.

CONSERVATION MEASURES

The open space development will preserve 41 acres of the total 64 +/- acre site. This will maintain 65% of the entire area as open space.

Erosion Control

Ideal methods for erosion control around the perimeter of the work areas is mulch berms. These are natural and often readily available for development sites. These are easy to install and do not need to be removed once the project is complete. The use of mulch berms does not act as a barrier to wildlife as they are able to easily walk over the berms with no issues. The use of welded plastic or 'biodegradable plastic' netting or thread in erosion control matting should be avoided. There are numerous documented cases of snakes and other wildlife being trapped and killed in erosion control matting with synthetic netting and thread. The use of erosion control berm, white Filtrexx Degradable Woven Silt Sock, or several 'wildlife friendly' options such as woven organic material (e.g. coco or jute matting such as North American Green SC150BN or equivalent) are readily available.



*Wildlife Habitat Assessment for, Tamarind Lane, Exeter
March 23, 2021*

PART 4: Appendices
Resume of qualified wildlife biologist.



GOVE ENVIRONMENTAL SERVICES, INC.

LUKE D. HURLEY
CSS, CWS, CESWII,
Vice President

Senior Wetland Scientist, Soil Scientist, Ecologist, and Project Field Coordinator

EXPERIENCE

2001–Present Vice President *Gove Environmental Services, Inc., Exeter, NH*
2000–2001 Environmental/Wetland Scientist, *Acton Survey & Engineering, Acton, MA*
1999–2000 Staff Naturalist, *Massachusetts Audubon Society, Lincoln, MA*
1998–1999 Environmental Inorganic Chemist, *Severn Trent Laboratories, Billerica,*

MA

EDUCATION

B.S. in Environmental Biology, University of Massachusetts, 1996. Concentration in Ornithology, Field Ecology & Biology, Entomology, Invertebrate Zoology, Botany, Wetland Ecology and Limnology.

CERTIFICATIONS

Certified Wetland Scientist, State of New Hampshire (*No 232*)
Certified Soil Scientist, State of New Hampshire (*No. 095*)
Certified Erosion, Sediment, and Storm Water Inspector

PROFESSIONAL SOCIETIES

Association of Massachusetts Wetland Scientists (AMWS)
International Erosion Control Association (IECA)
Massachusetts Association of Conservation Commissions (MACC)
New Hampshire Association of Natural Resource Scientists (NHANRS)

PROFESSIONAL EXPERIENCE SYNOPSIS

Luke Hurley has worked in the field of wetland science and ecology since 1999. As a Senior Wetland and Soil Scientist and Ecologist and Project Manager at GES, he is responsible for over-seeing and implementing all phases of large-scale commercial retail and residential development including preliminary land evaluations, permitting and alternatives analysis under all aspects of local, state and federal regulations. Mr. Hurley is also responsible for coordinating and performing field wetland and soil analyses, delineating wetlands, wetland functions and values and project environmental impact assessments, vernal pool certification, wetland mitigation and restoration design and monitoring, wildlife habitat assessments, threatened and endangered species assessments, inventories and permitting documents. He specializes in permitting under the NH DES Wetlands Bureau and NH DES Shoreland Protection Act, as well as the US Army Corps of Engineers and US Environmental Protection Agency, ME DEP Natural Resource Protection, and Massachusetts Wetlands Protection Act, through Notice's of Intent, as well as additional wetland related permitting through Notice of Resource area Delineations (NRAD) and Abbreviated NRAD (ANRAD), Determination of Applicability and represents clients at hearings with local conservation

8 Continental Dr Unit H, Exeter, NH 03833-7507
Ph (603) 778 0644 / Fax (603) 778 0654
www.gesinc.biz
info@gesinc.biz

commissions and other state and federal agencies. Mr. Hurley has a Bachelor of Science Degree in Environmental Biology from the University of Massachusetts. He is certified as Wetland Scientist and Soil Scientist by the State of New Hampshire.

PROFESSIONAL SPECIALIZATION

New Hampshire Department of Environmental Services

- Dredge and Fill Applications
- Shoreland Protection Act
- Wildlife Habitat Assessments
- Threatened and Endangered Species Assessments

Massachusetts Wetlands Protection Act (MWPA) & Massachusetts Environmental Policy Act (MEPA) Permitting including:

- NOI (Notice of Intent)
- ANOI (Abbreviated Notice of Intent)
- NRAD (Notice of Resource Area Delineation)
- ANRAD (Abbreviated Notice of Resource Area Delineation)
- RDA (Request of the Determination of Applicability)
- Water Quality Certification
- Ecological Impact Assessments
- Critical Habitat Evaluation in Terrestrial Aquatic Ecosystems; Wildlife Ecology

Massachusetts Endangered Species Act (MESA) Regulations and Massachusetts Natural Heritage & Endangered Species Program including:

- Priority/Estimated Habitat Certification
- Vernal Pool Assessment and Certification
- Rare, Threatened & Endangered Species Inventories
- Natural Communities & Habitat Classification
- Qualified Biologist for Rare, Threatened and Endangered Species Collection

ME DEP Natural Resource Protection

- Ch 305 Permit by Rule
- Ch 310 Wetlands
- Ch 315 Assessing and Mitigating Impacts to Scenic and Aesthetic Uses
- Ch 335 Significant Wildlife Habitat

Wildlife Habitat Assessments and Threatened & Endangered Species Assessments

Threatened and endangered plant transplant projects for State: threatened sweet goldenrod and yellow star grass.

Extensive Wildlife Habitat Assessments, Environmental Impact Assessments and threatened and endangered species assessments, following protocols set forth by UNH Cooperative Extension and EPA EcoBox.

Typical protocols are based on: *Natural Resource Inventories: A Guide for New Hampshire Communities*. Durham, NH: University of New Hampshire Cooperative Extension. This method

is primarily focused on for overall habitat assessment with varying micro habitats to document the existing conditions, as well as directly observed and potential species using that habitat based on desk top analysis and field work.

- 1.0 Introduction; site location, proposed project, existing conditions, and surrounding area land use, i.e. residential, urban, agriculture
- 2.0 Water resources; wetlands, vernal pools, lakes/ponds, rivers/streams, aquifers, etc.
- 3.0 Wildlife and Habitats known and potential species, TE, NHB Habitats
- 4.0 NRCS and Site-Specific Soils
- 5.0 Slopes and Rock Outcrops
- 6.0 Scenic Resources
- 7.0 Historic and Cultural resources, i.e., stone walls, cellar holes, stone foundations, etc.
- 8.0 Conservation lands
- 9.0 Potential threats and conservation measures

Additional protocols are created for individual TE, species, i.e., spotted turtles, Blanding's turtles, wood turtles, hognose snake, black racer, NE Cottontail, woodcock, and vernal pool Assessments. These species-specific assessments focus on individual species and their habitats. These assessments focus on overall habitat, and whether the specific habitat is onsite to support the various needs, for nesting/denning, feeding, and breeding, rearing, and fledging of juveniles.

Protocol creation is like the outline through the EPA EcoBox ERA including:

1. Planning and problem formulation
2. Identifying stressors, most often physical through development
3. Identifying receptors of endangered species or critical habitat
4. Identifying potential ecological effects
5. Proposing minimization and/or mitigation of potential impacts

SAMPLE PROJECTS:

2001- Exeter, NH-Wildlife habitat assessment on 62 acres for a proposed commercial retail development. Included documentation of onsite existing conditions of forest habitat cover, existing species occurring on site and potential wildlife species occurring on site. Assessment for TE species was also performed.

2004- Windham, NH-Wildlife habitat assessment on 126 acres for a proposed development. Included documentation of onsite existing conditions of forest habitat cover, existing species occurring on site and potential wildlife species occurring on site. Assessment for TE species was also performed. Specific assessment for Eastern box turtle and Dry- Appalachian Oak-Hickory Forest State of NH Exemplary Community.

2005-Nashua, NH-Wildlife habitat assessment on 50 acres for a proposed commercial retail development. Included documentation of onsite existing conditions of forest habitat cover, existing species occurring on site and potential wildlife species occurring on site. Assessment for TE species was also performed. Specific assessment was done for the bald eagle.

2005-Hooksett, NH-Woodcock habitat assessment and species assessment and management plan for protected land as part of 24.5 acre proposed commercial project.

2006-Pelham, NH-Wildlife habitat assessment on 305 acres as part of a proposed residential subdivision. Documentation was made of existing conditions on site of habitat type and vegetation cover, as well as wildlife species occurring on site and those potentially occurring on site based on habitat type. Specific focus was on the presence of the State listed Blanding's and spotted turtle for occurrence and habitat.

2011-Salem, NH-Wildlife habitat assessment on 70 acres for a proposed residential development. Assessment and assessment were for habitat and cover type, as well as existing and potential wildlife species on site based on the cover type and specific focus was on the swamp white oak flood plain forest and State listed spotted turtle.

2011-Hudson, NH, -Wildlife Habitat and upland community analysis on 290 acres for the presence of dry-Appalachian oak hickory forest and the potential for the State listed New England Cottontail.

2012-North Hampton, NH-Wildlife habitat assessment on 55 acres for a proposed residential development. Assessment and assessment were for habitat and cover type, as well as existing and potential wildlife species on site based on the cover type.

2013-Epping, NH-Wildlife habitat assessment on 198 acres for a proposed development. Focus was on the existing conditions of the site through assessment and documentation of the upland and wetland habitat, as well as existing and potential wildlife species on site.

2013-Newmarket, NH-Wildlife habitat assessment on 105 acres for a proposed development. Focus was on the existing conditions of the site through assessment and documentation of the upland and wetland habitat, and cover type, as well as existing and potential wildlife species on site. Specific attention was paid to the presence of Low-gradient silty-sandy riverbank system and specific species Assessment of State listed Blanding's and spotted turtles.

2014- Newmarket, NH-Wildlife habitat assessment on 25 acres for a proposed development. Focus was on the existing conditions of the site through assessment and documentation of the upland and wetland habitat, and cover type, as well as existing and potential species on site.

2016-Exeter-NH-Wildlife habitat assessment on 62 acres for a proposed development. Focus was on the existing conditions of the site through assessment and documentation of the upland and wetland habitat, and cover type, as well as existing and potential wildlife species on site.

2018-Phillips Exeter Academy, NH-Wildlife habitat assessment on 15 acres for assessment of existing community types and existing and potential wildlife use as part of a management plan and wildlife habitat improvement project.

2018-Alpine habitat survey in Rangeley Maine on a 10 acre portion of alpine land to assess for Bicknell thrush and habitat and specific habitats of Alpine Cliff, Bilberry - Mountain-heath Alpine Snowbank, Cotton-grass - Heath Alpine Bog, Crowberry - Bilberry Summit Bald, Diapensia Alpine Ridge, Dwarf Heath - Graminoid Alpine Ridge, Heath - Lichen Subalpine Slope Bog, Mountain Alder - Bush-honeysuckle Subalpine Meadow, Spruce - Fir - Birch Krummholz

2019- Portsmouth, NH-Wildlife habitat assessment on 66 acres for a proposed development. Focus was on the existing conditions of the site through assessment and documentation of the upland and wetland habitat, and cover type, as well as existing and potential species on site.

2020- York, Maine-Wildlife habitat assessment on 85 acres for a proposed development. Focus was on the existing conditions of the site through assessment and documentation of the upland and wetland habitat, and cover type, as well as existing and potential species on site. Specific assessment was for Blanding's and spotted turtles.

2020-Nottingham, NH-Wildlife habitat assessment 20 acres for a proposed development. Focus was on the existing conditions of the site through assessment and documentation of the upland and wetland habitat, and cover type, as well as existing and potential species on site. Specific assessment was for Blanding's and spotted turtles, Jefferson/Blue Spotted Salamander Complex, and black racer.

SUMMARY OF WILDLIFE ASSESSMENTS:

Mr. Hurley has performed wildlife habitat assessments and threatened and endangered plant Assessments on thousands of acres of land throughout the states of NH, MA, and ME. Additional individual assessments for state listed threatened and endangered plants and habits throughout MA and northern New England. All assessments habitat assessments, or individual plant or animal species were at the request of MA Natural Heritage Program, Vermont Nongame and Natural Heritage Program, New Hampshire Fish and Game and NH Natural Heritage Bureau and various local land use boards as part of the project review and conducted per the above two protocols.

Please see additional
plan attachments under
“Supporting Documents”
posted for this meeting