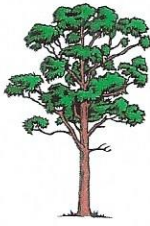


EXHIBIT 1



Joseph R. Theroux

~ Certified Forester/ Soil Scientist ~
Phone 860-428-7992~ Fax 860-376-6842
426 Shetucket Tpke, Voluntown, CT. 06384
Forestry Services ~ Environmental Impact Assessments
Wetland Delineations and Permitting ~ E&S/Site Monitoring
Wetland function and value assessments

2/23/2024

Kristen Clarke P.E.
English Harbour Capital Partners LLC
20 Risingwood Drive
Bow, NH. 03304

Re: Wetland delineation, 91 Boston Post Road, East Lyme, CT.

Dear Kristen,

At your request I have delineated the inland wetlands and watercourse on the above referenced property.

These wetlands have been delineated in accordance with the standards of the National Cooperative Soil Survey and the definitions of wetlands as found in the Connecticut Statutes, Chapter 440, Sections 22A-38.

Fluorescent pink flags with a corresponding location number delineate the boundary between the upland soils and the inland wetlands/watercourses that were found.

Flag numbers WF-1 through WF-43 and WF-1-1 through WF-6-1 delineate the eastern high water mark of Latimer Brook, its associated floodplain soils, the high water mark of the pond, and palustrine scrub-shrub wetlands.

Flag numbers WF-1A through WF-14A delineate a small emergent wetland that has developed in a depression in the topography in the western portion of the property.

These delineated wetland soils are characterized by organic "A" horizons, shallow redoximorphic features and low chroma colors within 20 inches of the soil surface.

In conclusion, if you have any questions concerning the delineation or this report, please feel free to contact me.

Thank you,

Joseph R. Theroux

Joseph R. Theroux
Certified Soil Scientist
Member SSSSNE, NSCSS, SSSA.

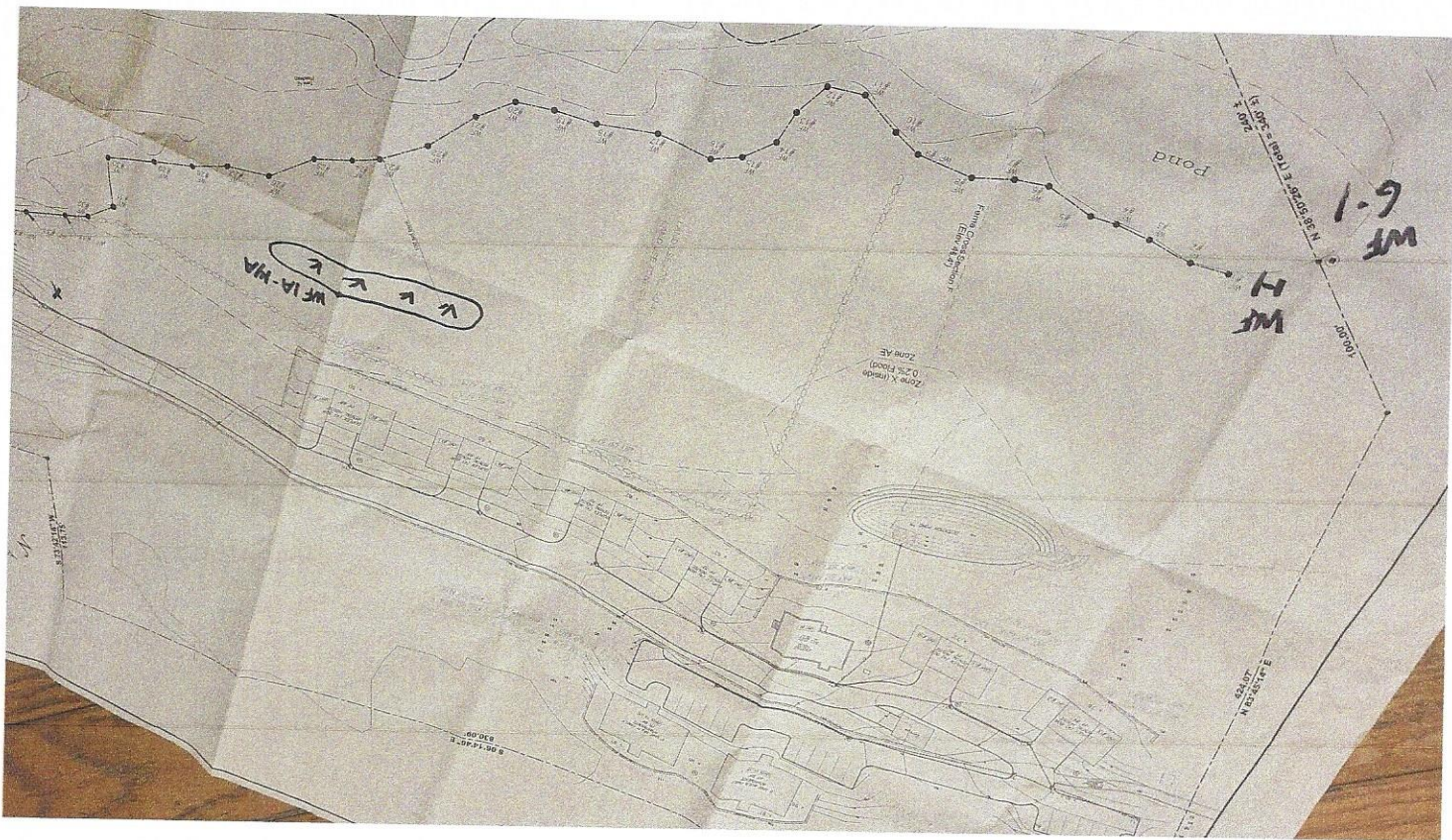
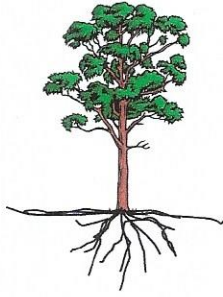


EXHIBIT 2



JOSEPH R. THEROUX

~ CERTIFIED FORESTER/ SOIL SCIENTIST ~
PHONE 860-428-7992 ~ FAX 860-376-6842
426 SHETUCKET TURNPIKE, VOLUNTOWN, CT. 06384
FORESTRY SERVICES ~ WETLAND IMPACT ASSESSMENTS
WETLAND DELINEATIONS AND PERMITTING ~ E&S/SITE MONITORING
WETLAND FUNCTION & VALUE ASSESSMENTS

2/28/2024

Kristen Clarke P.E.
English Harbour Capital Partners LLC
20 Risingwood Drive
Bow, NH. 03304

Attn: Kristen Clarke

Re: Wetland function & value and impact assessment report for the proposed multi-family housing development for the property located at 91 Boston Post Road, East Lyme, Connecticut.

Dear Ms. Clarke,

At your request, I have reviewed the conceptual site plan by May Engineering LLC and I inspected the above referenced property for the purposes of assessing the wetland functions and values and potential impacts to the inland wetlands and watercourses in proximity to the proposed development.

The wetland delineation and function and value assessment was conducted on February 23, 2024.

Existing Conditions

The property totals 11.36 acres in size and is located at 91 Boston Post Road in East Lyme, CT. It is situated on the north side of Boston Post Road, (Route 1).

The majority of the property is comprised of forested and field uplands with nearly level to steep sloping topography.

Upland Review Areas

The 300-foot upland review areas adjacent to the inland wetlands and watercourses are vegetated in the overstory with mixed hardwoods in the sawtimber and polewood size classes. Species observed included: white pine, red cedar, red & sugar maple, black birch, hickory, scarlet, white, and black oak, and black cherry.

The diversely vegetated understories are primarily comprised of polewood and saplings in these species as well as shrub species such as ironwood, winged euonymus, multiflora rose, Japanese barberry, and winterberry. Vine species included grape vines, poison ivy and round leaf green briar.

Herbaceous vegetation observed included numerous fern species, black raspberry, and Canada mayflower.

The open field areas which lay fallow are vegetated with white pines, multiflora rose, Japanese barberry, black raspberry and several species of grasses.

Invasives noted on the property included Japanese barberry, Japanese honeysuckle, bittersweet, winged euonymus and multiflora rose.

Wetlands

The Latimer Brook palustrine forested wetland complex lies along the western portion of the parcel and is oriented north-south.

Latimer Brook flows to the south and is bordered on its east and west sides by a palustrine forested/scrub-shrub wetlands. A small pond, (approx. one third of an acre), lies to the east of the Brook.

The seasonally high water tables in these wetlands break out and create shallow ponded areas in the numerous depressions in the topography adjacent to the Brook.

The majority of the forested/scrub-shrub wetlands are vegetated with red maple, scarlet oak, and elm in the overstory, and in the understory saplings and typical wetland shrub species such as highbush blueberry, arrowwood, sweet pepperbush, multiflora rose, Japanese barberry, speckled alder, winterberry and spicebush. Other species included grape vines, greenbrier, poison ivy and Japanese honeysuckle.

Herbaceous vegetation included cattails, reeds, sensitive, royal, lady & cinnamon ferns, sedges, rushes, skunk cabbage, jack- in- the- pulpit, jewelweed, various mosses and miscellaneous grasses.

Wildlife tracks/sign found or directly observed in and adjacent to the wetland/watercourse included mammals and bird species such as: white tailed deer, eastern coyote, red fox, raccoon, beaver, red tailed hawk, American crow, red winged blackbird, and numerous songbird species.

No amphibians were directly observed due to the time of year, although undoubtedly, this wetland complex serves as habitat to numerous reptile and amphibian species.

Fish species found in Latimer Brook according to various fish surveys in 2021 by both CT. D.E.E.P and private organizations included Anadromous species such as Alewife, Blueback herring and American shad, and Diadromous species such as Brook, Rainbow and Brown Trout, American eel, Chain pickerel, Bluegill sunfish, Common carp, and Large and Smallmouth bass.

Due to the time of year, no fish were observed in the pond however it undoubtedly serves as habitat to numerous warm water fish species.

The CT. D.E.E.P reviewed the Natural Diversity Database, and according to their records the Northern long eared bat, Wood turtle and smooth green snake are present in the area. These species are either listed as State and Federally endangered or State Special Concern.

A small wetland pocket was also located at the base of the steep slopes in the southern portion of the property. Technically it would be classified as an emergent wetland.

This wetland has formed in a shallow depressed area in the topography from the persistent wetness associated with the seasonally high water tables and surface runoff.

This wetland due to its small size and characteristics is somewhat limited in wetland functions and values.

Wetland Functions and Values

The forested/scrub-shrub wetlands and Latimer Brook, were inspected to determine wetland functions and values utilizing the Army Corps. Of Engineers methodology as outlined in "The Highway Methodology Workbook Supplement". This methodology recognizes eight categories of wetland functions and six categories of wetland values.

The 8 wetland functions include: groundwater recharge/discharge, floodflow alteration/storage, fish/shellfish habitat, sediment/toxicant/pathogen retention, nutrient removal/retention/transformation, production export, sediment/shoreline stabilization and wildlife habitat.

The 6 wetland values include: recreational value, educational/scientific value, uniqueness/heritage value, visual quality/aesthetics, threatened/endangered species habitat and marine fish & shellfish habitat.

Palustrine forested/scrub-shrub wetlands & Latimer Brook functions:

The following is a list of the wetland *functions* exhibited by these wetlands and watercourses and their rationale/qualifiers:

Ground water recharge/discharge: The wetlands are associated with intermittent/perennial watercourses; signs of groundwater recharge and discharge are present and the quality of the water associated with the wetlands and Brook is high.

Fish habitat: Latimer Brook fish surveys have documented numerous anadromous and diadromous fish species present. This is a primary function of this wetland.

Sediment/toxicant retention: Mineral, fine grained and organic soils are present in the wetlands, the wetland edge is broad and intermittently anerobic. (The lack of oxygen allows for the transformation and binding of toxicants). The wetlands are associated with

intermittent watercourses, and no indicators of erosive forces or high water velocities are present in the wetlands.

Nutrient removal/retention: The wetlands are large relative to the size of its watershed, (their size allows for some storage/retention capacity), an overall potential for nutrient removal and retention exists in the wetlands, and the wetlands are saturated for most of the season creating anerobic conditions. The slowly drained mineral and organic soils which are present in these anerobic conditions harbor nitrogen fixing bacteria which provide the opportunity for nutrient attenuation. The dense herbaceous vegetation utilizes nitrogen, phosphorus and potassium and water moves slowly through the wetlands which increases the available period of time for removal and retention.

Production export: Wildlife food sources grow within the wetlands which provide food for wildlife and humans. Detritus development is present creating fertile organic soils. There is evidence of wildlife use in the wetlands and high vegetation density is present providing food and cover for wildlife. The wetlands contain flowering plants that are used by nectar gathering insects, and indications of export are present such as deer browse.

Sediment & shoreline stabilization: Roots from herbaceous grasses and plants, shrub species and trees found in these wetlands bind and stabilize soils which helps prevent erosion from stream flows along edges of watercourses & wetlands.

Wildlife habitat: The water quality associated with the wetlands and watercourses is high because the wetland is not fragmented or polluted by development. The wetland is contiguous with other wetland systems creating an overall larger wetland habitat area. This also allows wildlife overland access to other wetlands without intrusive development encroachments. Wildlife food sources are present throughout the wetlands. The dominant wetland class includes a wooded swamp which provides a diversity of habitat and cover. Numerous animal signs such as tracks and scat were observed. Wildlife habitat is the primary function of these wetlands.

Wetland *functions* not present:

The forested/scrub-shrub wetlands and Latimer Brook did not exhibit the wetland function of floodflow alteration, due to the lack of significant flood storage capacity within the wetlands adjacent to the Brook, and the presence of the watercourse transporting potential flood flows with little or no detention or attenuation.

Palustrine forested wetlands & watercourse values

The following wetland *values* were exhibited by this wetland/watercourse:

Recreation: Fishing is available within Latimer Brook, hiking occurs or has potential to occur within the wetland, wetland is a valuable wildlife habitat, the watercourse/pond is unpolluted, high visual/aesthetic quality, access to water is available for boating, canoeing or fishing, the wetland/watercourse is within a short drive/walk from highly populated public and private areas.

Educational/scientific value: Little disturbance has occurred within the wetlands, potential educational site contains a diversity of wetland classes that are potentially accessible, potential educational site is undisturbed and natural, the wetland is considered to be a valuable wildlife habitat, the wetlands potentially contain state listed species of concern, and site is a short drive from local schools.

Endangered species habitat: Although the parcel is not shown within the shaded area on the current natural diversity database map indicating potential habitat, there are potential listed species of concern present including the Northern long eared bat, Smooth green snake and the Wood turtle.

Uniqueness/heritage value:

The quality of the water associated with the wetland/watercourse is high, opportunities for wildlife observations are available, wetland is within 50 yards of nearest perennial watercourse, three or more wetland classes are present, wetland has local significance because it has biological, geological or other features that are locally rare or unique.

Visual quality/aesthetics:

Multiple wetland classes, and diversity of vegetative species visible from primary viewing locations, wetland dominated by flowering plants or plants that turn vibrant colors in different seasons, visible land use contrasts with wetland, wetland views absent of trash, debris and signs of disturbance, and wetland is considered a valuable wildlife habitat.

Fish and shellfish habitat (Marine): CT. D.E.E.P. and private fish surveys indicate the presence of anadromous fish species such as the Blueback herring, American shad and Alewife.

Summary:

Overall, the wetland function and value assessment indicates that the wetlands exhibit seven significant wetland functions: groundwater recharge/discharge, sediment/toxicant retention, nutrient removal/retention, production export, sediment & shoreline stabilization and wildlife habitat.

All the values were exhibited, recreation, educational value, endangered species habitat value, uniqueness/heritage value, visual quality/aesthetics, fish/shellfish habitat (marine).

As previously mentioned, the small emergent wetland only exhibits the wetland function of wildlife habitat, due to the fact that it remains inundated for short periods of time and would serve as habitat to amphibians. It does not exhibit the characteristics of a vernal pool as it is too shallow and does not remain inundated for a hydroperiod to support obligate vernal pool species.

This wetland does not exhibit any wetland values due to its small size, location and characteristics.

Potential wetland impacts

The project plans and site were reviewed to assess the potential impacts to the wetlands and watercourses from the proposed development.

On this parcel, a multifamily housing development is proposed, consisting of 6 duplex, four bedroom buildings with separate septic systems, and 2 six unit multi-family apartment buildings with a common septic system for both buildings.

A parking area is proposed to serve the two apartment buildings, and the existing gravel driveway is proposed to be regraded, widened and paved.

The proposed stormwater system is comprised of a detention pond located in the northwest portion of the property in the field area, served by a series of deep sump catch basins located in the parking areas and along the northern portion of the access drive. A stormwater infiltration system is incorporated between the catch basins. A stormwater renovation swale and plunge pool with a level spreader is proposed near the access drive entrance to treat and attenuate stormwater from the downgradient southern portion of the driveway.

Stormwater from roofed areas will be diverted to rain gardens to collect and infiltrate runoff.

To construct these proposed features, no direct wetland disturbance is proposed.

The closest disturbance to wetlands associated with the project is the construction of the southernmost duplex unit's septic systems and the construction of the stormwater renovation swale/plunge pool along the southern portion of the driveway.

Direct wetland impacts:

No direct wetland impacts are proposed with the design of the project or will occur as a result of the construction of the buildings, septic systems, parking areas, driveway or stormwater treatment system. This is provided that the project clearing limits are held to, and the E&S measures are correctly implemented and maintained.

Potential indirect impacts:

The potential short-term impacts associated with the initial land clearing, stumping, top soil stripping and construction would include potential sediment discharges during significant storm events if the E&S measures breach adjacent to the southern duplex septic system areas and the stormwater renovation swale/plunge pool.

Regarding these potential impacts, I have the following recommendations:

1. It is my recommendation that the septic systems associated with the two southern duplex units be relocated further to the north to give some separation distance from the small emergent wetland pocket. This will allow for less disturbance in its upland review area as well.

2. I would recommend that the stormwater renovation swale and plunge pool be moved to the north as far as reasonably possible into a more level position in the topography. This will avoid filling and grading on a steep slope directly adjacent to the Brook. This will allow more separation distance from the Brook, and the treated discharges will have a greater distance from the Brook to infiltrate in the well drained upland soils.

Depending upon the position of the last catch basin, the stormwater from the short remaining distance of the driveway could simply sheet flow and infiltrate into the uplands below the driveway. This modification should only be implemented if the project Engineer concurs.

3. I would recommend that the E&S measures in these areas be proposed as silt fencing backed by staked haybales in the areas where the clearing/disturbance is within 50 feet of the wetlands. I would also suggest that the E&S measures be inspected daily and after any significant rain events.
4. Concerning the CT. D.E.E.P. Natural Diversity Database Review, I would recommend that their recommendations on pages two and three of the report be strictly adhered to during the construction timeframe.

It is my opinion, provided that the E&S measures are correctly implemented and maintained throughout the project timeframe, the E&S inspections are conducted as proposed and no significant discharges of sediments reach the wetlands or watercourses, the disturbance associated with the construction adjacent to the wetlands will not significantly impact the wetlands or their existing functions or values due to encroachment, erosion or sedimentation.

Once the disturbed areas are re-vegetated and stabilized, the well- to moderately well-drained soils will allow for good infiltration of storm water runoff both during and after construction.

The quick and permanent establishment of vegetation in the disturbed areas is crucial to the prevention of post-construction erosion.

Wetland Hydrology

I see no direct or indirect impacts to the wetland/watercourse hydrology as a result of the proposed development. The storm water quality basin is adequately designed to attenuate, treat, infiltrate and discharge the treated stormwater. Discharges from the basin and plunge pool will have a good opportunity to infiltrate into the water table. (See stormwater Management Evaluation).

The impervious surfaces of the paved driveways, roof areas and pervious surface infiltration will be an input to the existing hydrology, through some minor overland flow, as ground water recharge or as direct discharge during significant storm events. It is my professional opinion that these inputs will augment and improve the existing hydrology of the wetlands

and watercourses. These added inputs will allow for increased seasonal inundation in depressed areas in the wetlands and will provide a better diversity in wildlife habitat as well.

Water Quality:

The only potential direct impact to water quality in the wetlands and watercourses would be due to the direct untreated discharge of stormwater.

The submitted stormwater drainage report states the stormwater detention and infiltration features will achieve the required 90% reduction in total suspended solids and pollutant reduction.

The overall distances of the paved areas, lawn areas and buildings from the wetlands, coupled with the well- drained upland soils allowing for good infiltration of surface flows will also improve overall water quality by reducing suspended sediments.

Potential nutrient loads from lawn fertilizers will be insignificant due to the overall distance of the lawns from the wetlands, the dense upland shrub and herbaceous vegetation will aid in nutrient uptake, (as well as the vegetation in the wetlands), and nitrogen fixing bacteria found in the anerobic wetland soils.

I see no significant impacts to the water quality in the wetlands and watercourses, provided that the proposed rain gardens and the stormwater treatment system are constructed properly, and are inspected and maintained. The discharge points do not directly discharge into any watercourses, or adjacent wetlands, (provided that the plunge pool is moved to the north). These limited discharges will enter uplands, and infiltrate in the well- drained soil types and/or travel as sheet flow eventually into the wetlands.

Water temperature impacts:

The proposed stormwater system is primarily designed to attenuate, hold and infiltrate stormwater into the water table. Discharges will only occur during significant storm events after the "first flush" of storm water is treated, and the discharge points do not directly discharge into any watercourses, or adjacent wetlands. The limited discharges will enter uplands, and infiltrate in the well- drained soil types.

For these reasons, I see no significant or adverse impacts to the existing water temperatures of the watercourses from the infiltration and discharge of stormwater from the site.

Adjacent Upland Wildlife Habitat Impacts:

The clearing of vegetation and development outside the 100-foot wetland setback depicted adjacent to the wetlands and watercourses will force wildlife into the vegetated corridor in and around the adjacent wetlands and watercourses, during and after the construction timeframe, and into other areas where the uplands are not disturbed.

The existing 100 foot and greater zones in and adjacent to the wetlands will serve as an adequate wildlife corridor and riparian zone.

Natural Diversity Database and State Species of Special Concern:

I have reviewed the letter from CT. D.E.E.P. dated 2/13/2024 regarding the review of the Natural Diversity Database.

This report indicated that there are State listed species, (Wood turtle, Northern long eared bat, and the Smooth green snake), that may be influenced by activities within the proposed project area.

I would recommend adhering to the recommendations listed on pages 2 and 3 regarding exclusionary practices and timing of the land clearing phases of the project.

I would also recommend the posting of the wetland boundaries or a 50,75, or 100-foot buffer zones, with permanent signage to help prevent future encroachments or cutting of vegetation. Signs are usually attached to trees, metal or pressure treated posts, at eye level, at an approximate spacing of 25 feet for good visibility.

In summary, I see no direct or adverse impacts to the existing wetlands, watercourses or their functions and values from the proposed project.

This is provided that the recommended erosion and sedimentation control features are implemented, maintained and monitored throughout the construction and post construction timeframe.

If you have any questions concerning the site assessment or this report, please feel free to contact me.

Sincerely,

Joseph R. Theroux

Joseph R. Theroux
Certified Forester and Soil Scientist
Member SSSSNE, SSSA

EXHIBIT 3



2/13/2024

Kristen Clarke
CLARKE
20 Risingwood Dr
Bow, NH 03304

Subject: Latimer Green

Filing #: 105247

NDDDB - New Determination Number: 202400186

Expiration Date: 2/13/2026

Location: 91 Boston Post Rd, East Lyme, CT

I have reviewed Natural Diversity Database (NDDDB) maps and files regarding this project. According to our records, there are State-listed species (RCSA Sec. 26-306) that may be influenced by activities within the proposed project area.

- **Northern long-eared bat (*Myotis septentrionalis*)- State and Federally Endangered**
- **Wood turtle (*Glyptemys insculpta*)- State Special Concern**
- **Smooth green snake (*Opheodrys vernalis*)- State Special Concern**

Northern long-eared bat (*Myotis septentrionalis*)- State and Federally Endangered

The Northern long-eared bat is one of the species most impacted by White Nose Syndrome. Populations in Connecticut have declined by over 90%, and it has been Federally listed as Endangered. During the summer northern long-eared bats roost singly or in maternal colonies underneath bark, in cavities or in crevices of both live trees and snags (dead trees). Males and non-reproductive females may also roost in cooler places, like caves and mines. Northern long-eared bats seem to be flexible in selecting roosts, choosing roost trees based on suitability to retain bark or provide cavities or crevices. This bat has also been found rarely roosting in structures, like barns and sheds. Northern long-eared bats spend winter hibernating in caves and mines, called hibernacula.

The presence of northern long-eared bat (*Myotis septentrionalis*), a federally endangered and state endangered species, may require consultation with the US Fish and Wildlife Service Ecological Field Office in order to be in compliance with the Federal Endangered Species Act if the proposed project requires federal permits or uses federal funds. For more information on federal requirements visit:

<http://www.fws.gov/midwest/endangered/mammals/nleb/>

Smooth green snake (*Opheodrys vernalis*)- State Special Concern

Smooth greensnakes favor moist, open habitats, such as old fields, meadows, pastures, fens, coastal

grasslands, and edges of wetlands. Occasionally, this snake may inhabit sparsely forested areas with scattered shrubs and trees, such as mountaintop balds. Rural, undisturbed locations appear to be preferred, but smooth greensnakes have been found in urban and suburban areas as well. Greensnakes can be found basking on rocks, logs, or other debris. Smooth greensnakes are insectivores; they feed on a variety of insects and spiders. Preserving pastures and fields will benefit this species.

Wood turtle (*Glyptemys insculpta*)- State Special Concern

Individuals of this species are riverine and riparian obligates, overwintering and mating in clear, cold, primarily sand-gravel and rock bottomed streams and foraging in riparian zones, fields and upland forests during the late spring and summer. They hibernate in the banks of the river in submerged tree roots between November 1 and March 31. Their summer habitat focuses within 90m (300ft of rivers) and they regularly travel 300m (0.2 mile) from rivers during this time. During summer they seek out early successional habitat: pastures, old fields, woodlands, powerline cuts and railroad beds bordering or adjacent to streams and rivers. Their habitat in Connecticut is already severely threatened by fragmentation of riverine, instream, riparian, and upland habitats, but is exacerbated by heavy adult mortality from machinery, cars, and collection. This is compounded by the species late maturity, low reproductive potential, and high nest and hatchling depredation rates.

Construction protection measures:

- Do not remove trees between April 15-October 31 to protect breeding bats.

Land disturbance activities need to consider local habitat features and apply fencing and/or time of year restrictions as appropriate. We recommend you consult with a herpetologist familiar with preferred habitats to assist you with proper techniques to ensure the best protection strategies are employed for your site and the scope of your project.

- Land disturbance and excavation confined to the upland can be done without risk for impact to wood turtle if work is restricted to the dormant season (November 1- March 31).

To prevent herp access and entry into your upland work zone between April 1- October 31:

- Exclusionary practices will be required to prevent any turtle access into construction areas. These measures will need to be installed at the limits of disturbance as shown on the plans, or be specifically designated by a qualified herpetologist.
- Exclusionary fencing be at least 20 inches tall and must be secured to and remain in contact with the ground and be regularly maintained (at least bi-weekly and after major weather events) to secure any gaps or openings at ground level that may let animal pass through.
- Prior to construction, all turtles occurring within fencing work area will be relocated to suitable habitat outside disturbance area. This should be performed by a qualified professional familiar with habitat requirements and behavior of the species.
- The Contractor must search the work area each morning prior to any work being done.
- All construction personnel working within the turtle habitat must be apprised of the species description and the possible presence of a listed species.
- Any turtles encountered within the immediate work area shall be carefully moved to an adjacent area outside of the excluded area and fencing should be inspected to identify and remove access point. These animals are protected by law and no turtles should be relocated from the site.
- In areas where silt fence is used for exclusion, it shall be removed as soon as the area is stable to allow for reptile and amphibian passage to resume.
- Special precautions must be taken to avoid degradation of wetland habitats including any wet meadows and seasonal pools.

Your submission information indicates that your project does not require a state permit, license, registration, or authorization and does not utilize state funding or involve state agency action. Therefore, this NDDDB - New determination **MAY NOT** be utilized to fulfill the Endangered and Threatened Species requirements for state-issued permit applications, licenses, registration submissions, and authorizations. If, at a later date, it is determined that the project will require a state permit, license, registration, or authorization, or, your project now utilizes state funding or includes state agency action, you will need to re-submit a Request for Review and answer "Yes" to the appropriate question.

Please be aware of the following limitations and conditions:

Natural Diversity Database information includes all information regarding listed species available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey and cooperating units of DEEP, land owners, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as enhance existing data. Such new information is incorporated into the Database and accessed through the ezFile portal as it becomes available. New information may result in additional review, and new or modified restrictions or conditions may be necessary to remain in compliance with certain state permits.

- During your work listed species may be encountered on site. A report must be submitted by the observer to the Natural Diversity Database promptly and additional review and restrictions or conditions may be necessary to remain in compliance with certain state permits. Please fill out the [appropriate survey form](#) and follow the instructions for submittal.
- If your project involves preparing an Environmental Impact Assessment, this NDDDB consultation and determination should not be substituted for biological field surveys assessing on-site habitat and species presence.
- The NDDDB - New determination for the Latimer Green as described in the submitted information and summarized at the end of this document is valid until 2/13/2026. This determination applies only to the project as described in the submission and summarized at the end of this letter. Please re-submit an updated Request for Review if the project's scope of work and/or timeframe changes, including if work has not begun by 2/13/2026.

If you have further questions, please contact me at the following:

Shannon Kearney
CT DEEP Bureau of Natural Resources
Wildlife Division
Natural Diversity Database
79 Elm Street
Hartford, CT 06106-5127
(860) 424-3170
Shannon.Kearney@ct.gov

Please reference the Determination Number 202400186 when you e-mail or write. Thank you for consulting the Natural Diversity Data Base.

Shannon Kearney
Wildlife Division- Natural Diversity Data Base
79 Elm Street
Hartford, CT 06106-5127

(860) 424-3170

Shannon.Kearney@ct.gov

Application Details:

| | |
|--|---|
| Project involves federal funds or federal permit: | No |
| Project involves state funds, state agency action, or relates to CEPA request: | No |
| Project requires state permit, license, registration, or authorization: | No |
| DEEP enforcement action related to project: | |
| Project Type: | Building and Infrastructure Development (including stormwater discharge associate with construction) |
| Project Sub-type: | New Residential - subdivision |
| Project Name: | Latimer Green |
| Project Description: | |

EXHIBIT 4

May

Engineering, LLC

Civil Engineering, Site Planning, and Consulting

1297 RT 163 Oakdale, CT 06370 Cell: 860 884-9671 Email: mayengineering@sbcglobal.net

Stormwater Management Evaluation

February 26, 2024

Property Located at:

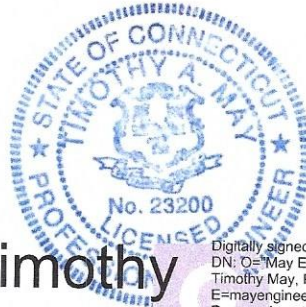
91 Boston Post Rd
EAST LYME CT

Prepared For:

English Harbor Capital Partners, LLC
c/o Paul Geraghty, Esq
38 Granite Street
New London, CT 06320

Prepared By:

Timothy A. May, P.E.
May Engineering, LLC
1297 Route 163
Oakdale, CT 06370



**Timothy
May, PE**

Digitally signed by Timothy May, PE
DN: O="May Engineering, LLC", CN="Timothy May, PE",
E=mayengineering@sbcglobal.net
Reason: I am the author of this document
Location: Office
Date: 2024-02-26 19:54:39
Foxit PhantomPDF Version: 9.7.5

May

Engineering, LLC

Civil Engineering, Site Planning, and Consulting

1297 RT 163 Oakdale, CT 06370 Cell: 860 884-9671 Email: mayengineering@sbcglobal.net

This stormwater management report is developed in support of a proposed multi-family housing development at 91 Boston Post Road, East Lyme CT. The proposed development is submitted for conceptual site plan approval for a 830g affordable housing application. The 2023 Connecticut Stormwater Quality Manual standards have been considered and evaluated for a preliminary plan review to demonstrate that stormwater design and devices can be effectively implemented.

SITE DESCRIPTION:

The site is an 11.36 acre parcel located on the north side of Boston Post Rd (CT Route 1) in the town of East Lyme, CT. The existing parcel is a developed single family residential parcel that has wooded areas with mature deciduous trees and large meadows with grassed areas situated along Latimer Brook. The parcel has slopes ranging from 3% to 14%. There are wetlands and water courses located on the western boundary of this property. The soil type is primarily a hydraulic soil group B and D consisting of Agawam, Hollis-Chatfield and Ninigret fine sandy loams. The soil types were evaluated for their permeability and have a moderate to high infiltration rate referencing the USDA Natural Resource Conservation Service Soil Survey (NRCSS) for this parcel.

The existing parcel has existing Directly Connected Impervious Areas (DCIA) that convey stormwater along the paved driveway and direct flows from the east side of the parcel, traveling southwest toward the property line along Latimer Brook. Existing stormwater discharges currently convey untreated stormwater runoff with no outlet controls or stormwater treatment devices to reduce suspended solids or pollutants.

The preliminary design proposal calls for 6 duplexes and renovation to the existing residential home unit, also the addition of two multi-family apartments with 6 units each. The existing shed and outbuildings are to be removed. The existing ~900 ft long paved/gravel driveway is proposed to be regraded, widened, and paved and catch basins with deep sumps will be installed. An additional 500 ft of paved driveway and parking will be added.

The proposed development will have approximately 2.5 acre of disturbance for the 11.36 acre parcel. Water quality volumes (WQV), Water Quality Flows (WQF) and pollutant reduction BMPs were evaluated. Implementation of stormwater infiltration and detention devices will achieve the required 90% reduction in total suspended solid (TSS) and pollutant reduction. The stormwater collection system proposed will also be designed to infiltrate storm water to reduce WQV and WQF. A stormwater detention pond has been preliminarily modeled and sized to ensure sufficient reduction of stormwater WQV.

DESIGN METHODOLOGY AND EVALUATION

The existing 11.36 acre site consists of ~1.3 acre of developed areas which contains 11,874 sf (0.3 acre) pavement and 2,600 sf roof-impervious areas. The site also contains ~4.5 acre grassed pasture areas. The proposed development will add ~1.3 acre developed area including 15,000 sf (0.34 acre) pavement and ~8,000 sf roof area. The remaining developed areas will be grassed lawns. All paved areas are designed to have a stormwater collection system with a stormwater infiltration system between each catch basin. The stormwater collection and infiltration system is modeled to have a capacity that will exceed WQV requirements. Stormwater from roofed areas will be placed in rain gardens sized to meet WQV. Stormwater WQF and WQV will be diverted to stormwater detention ponds sized to accommodate design storm events for peak runoff and conveyance to downstream stormwater devices. Stormwater detention ponds will also provide infiltration to recharge groundwater and to reduce peak runoff by draining down water levels over a 48 hour period. Infiltration rates for the soil taxonomy provided in the USDA NRCS for the site soils yield average infiltration rates that are adequate to develop infiltration strategies.

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SUMMARY

The proposed development at 91 Boston Post Rd. in East Lyme, CT in support of the conceptual site plan approval for an 830g Affordable Housing application has the stormwater design elements to adequately control and treat stormwater runoff. BMP's and design standards from the 2023 Connecticut Stormwater Quality Manual was consulted and incorporated into the proposed development and was used to evaluate stormwater mitigation and treatment device designs.