



GOVE ENVIRONMENTAL SERVICES, INC.

Wetlands and Soil Mapping

ENVIRONMENTAL IMPACT ASSESSMENT

for a

3-LOT SUBDIVISION
AT TAX MAP 58, LOT 7-1
Poor Farm Road
Nottingham, New Hampshire

February 2020

Prepared for

Jeff Paradis
Nottingham, New Hampshire

GES Project # 2020027

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Ph (603) 778 0644 / Fax (603) 778 0654

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ENVIRONMENTAL IMPACT ASSESSMENT
FOR A
3-LOT RESIDENTIAL SUBDIVISION
POOR FARM ROAD
NOTTINGHAM, NEW HAMPSHIRE

INTRODUCTION

At the request of the Nottingham Planning Board, Gove Environmental Services, Inc. (GES) presents this Environmental Impact Assessment for the proposed 3-lot subdivision on Poor Farm Road in Nottingham, New Hampshire. The report includes an analysis of the following on site:

- Soils & Geology;
- Topography;
- Natural Communities and Vegetation;
- Habitat and Significant Wildlife Habitat; and
- Wetlands

as well as:

- Potential impacts to the above-listed features

Much of the information in this report is based on field data collection and analysis by GES. Additional information is based upon analysis of existing Geographic Information Systems (GIS) data available from the NH Office of State Planning, Inc., Nashua Regional Planning Commission and the UNH Complex Systems Research Center (GRANIT). Franklin Associates, LLC completed the survey and generated site plans for the proposed subdivision. Wetland delineation was performed by John Hayes, III.

GES did not conduct hydrologic, archaeological, historic site or traffic analysis. It should also be noted that predictions of environmental impacts were based on proposed conditions as provided in subdivision progress prints. Impacts may be subject to change if the subdivision configuration is amended.

LOCATION/PURPOSE AND SITE DESCRIPTION

The parcel is located in the central portion of Nottingham (Tax Map 58 Lot 7-1) and is approximately 20 +/- acres in size. Access for the site is from Poor Farm Road, located to the east of the site.

The purpose of the proposed project is for the subdivision of three new lots off of the total parcel. This will leave one lot with the existing house, Map 5 Lot 7-1. This lot was not included in this assessment.

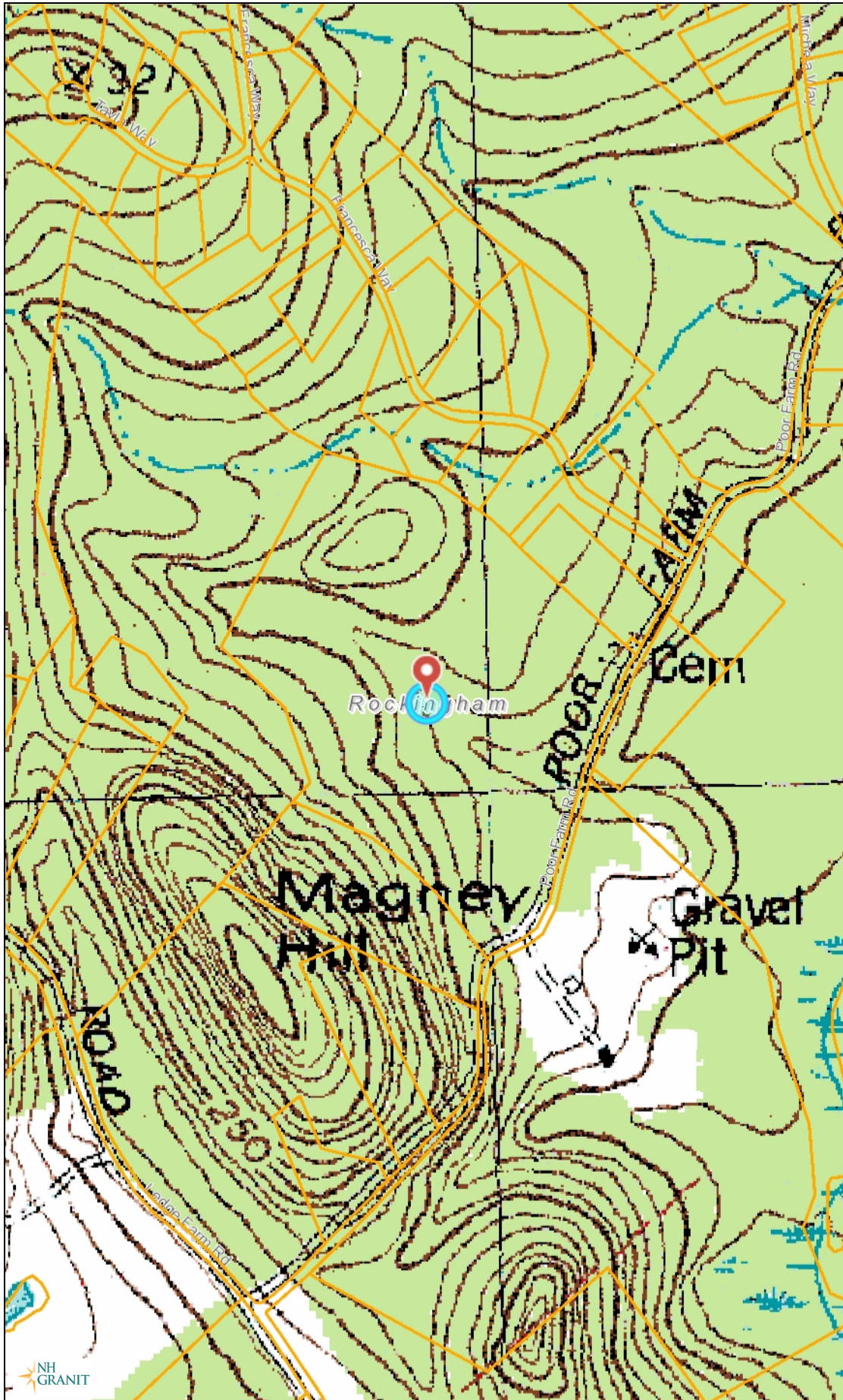
The subdivision is proposed for three single family homes. Lots 2 and 3 will have a shared driveway. By doing this, impacts to the buffer are reduced. Lot 1 will have a separate, single driveway for the lot. There are some buffer impacts for this driveway to pass along the northwestern property line. No wetland impacts are proposed for any of the driveways.

The subject parcel is comprised of open meadow recently logged and intact forested upland and wetlands. The site consists of gentle to steep sloping topography, with some small hills separated by small valleys and depressions. Several wetlands are on the property. Detailed descriptions of these cover types and natural communities are provided in the Natural Communities portion of this report.

The subject parcels are partially bound by residential homes along Francesca Way to the north and northeast, open land to the northwest and single family homes on large lots to the west and southwest.

1988 USGS LOCUS MAP
Scale 1:24,000

Map by NH GRANIT



Legend

- Polygons
- State
- County
- City/Town

Map Scale

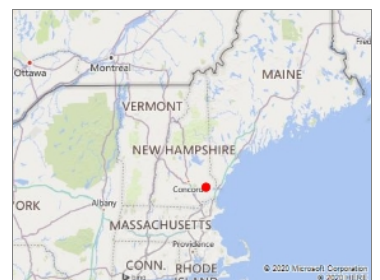
1: 6,494

© NH GRANIT, www.granit.unh.edu

Map Generated: 2/24/2020



Notes



SITE PLAN

TOWN OF NOTTINGHAM
PLANNING BOARD APPROVAL

DATE: _____

THE SUBDIVISION REGULATIONS OF THE TOWN OF NOTTINGHAM, AND NOTICE OF ACTION ARE A PART OF THIS PLAN, AND APPROVAL OF THE PLAN REQUIRES THE COMPLETION OF ALL THE REQUIREMENTS OF SAID SUBDIVISION REGULATIONS, EXCEPTING ONLY ANY RELAXATION OF REQUIREMENTS GRANTED IN WRITING BY THE BOARD.

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POOR FARM ROAD IS BELIEVED TO BE CLASS V PUBLIC WAY 3 RODES WIDE.

OWNER OF RECORD: JEFFREY & SUSAN PARADIS
BOOK 3281 PAGE 2447

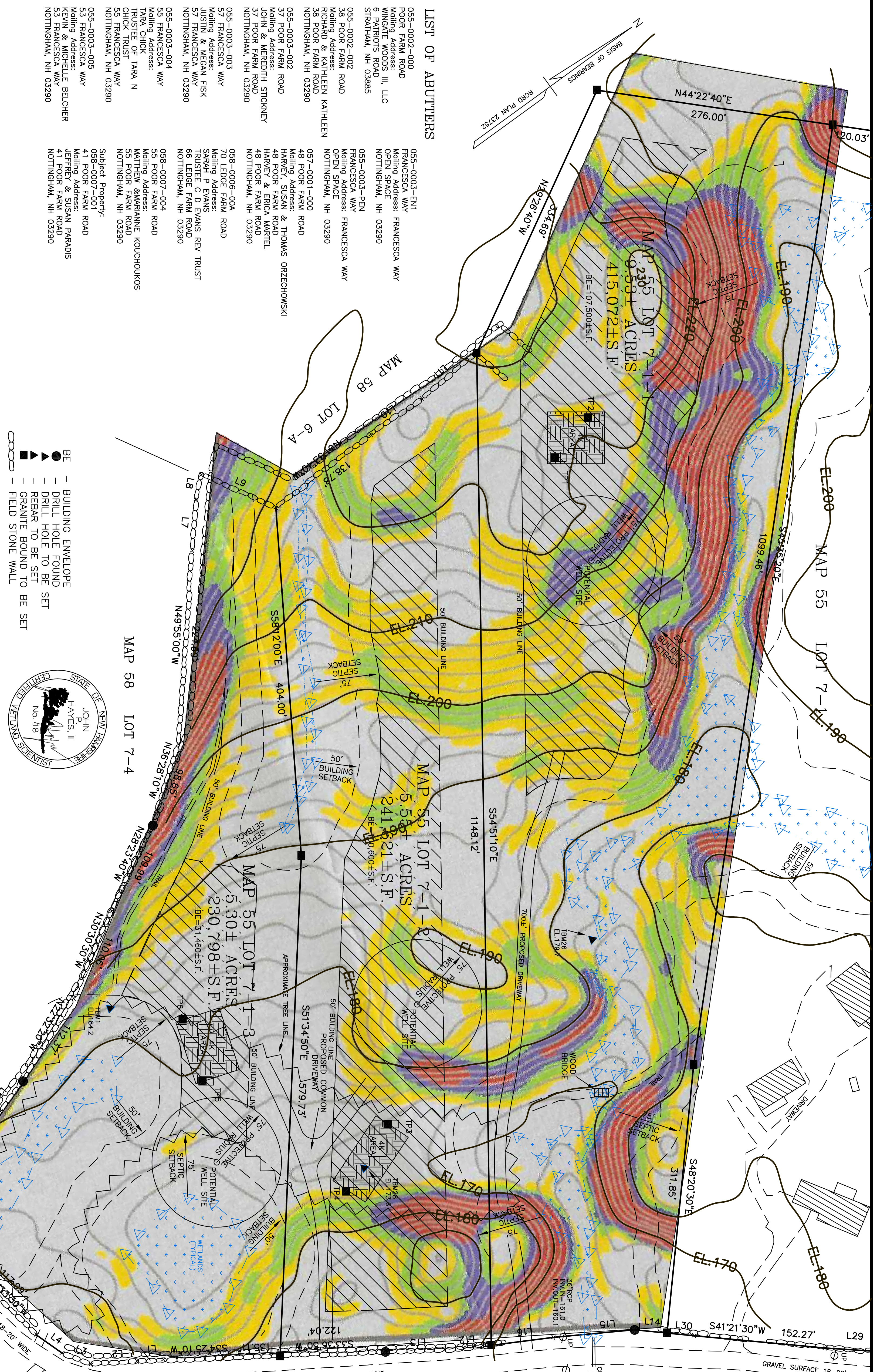
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SUBDIVISION PLAN

ASSESSOR'S MAP 58 LOT 7-1
LAND OF
41 POOR FARM ROAD, NOTTINGHAM NH

JEFFREY S & SUSAN L. PARADIS
SCALE:1"=60' ~ OCTOBER 18, 2019
SHEET 2 OF 2

REVISED 11-25-19 & 12-16-19 REVIEW COMMENTS



- LIST OF ABUTTERS**
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Mailing Address: WINGATE WOODS III, LLC
6 PATRIOTS ROAD
STRATFORD, NH 03885
 - 055-0002-002 POOR FARM ROAD
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NOTTINGHAM, NH 03290
 - 055-0003-003 POOR FARM ROAD
Mailing Address: FRANCISCA WAY
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Mailing Address: FRANCISCA WAY
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HARVEY, SUSAN & ROBERT
HANEY & ERICA MARTEL
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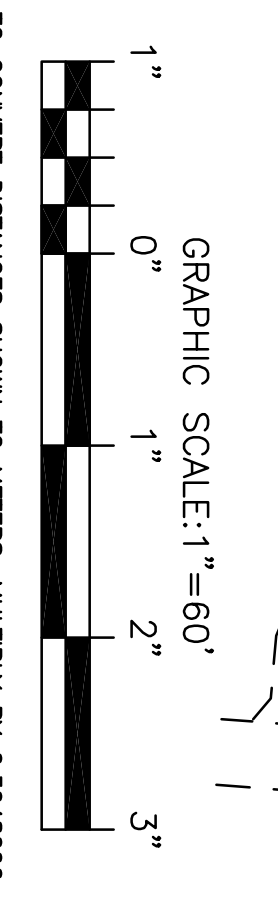
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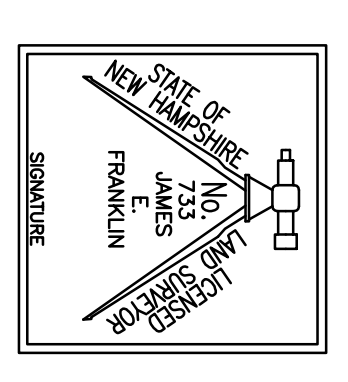
THE WETLANDS WERE IDENTIFIED BY JOHN P. HAYES III, OSS, CMS #18, 7 LIMESTONE WAY, NORTH HAMPTON, NH, 03862, 603-208-4396, IN JULY 2019 AND LOCATED BY CONVENTIONAL SURVEY IN AUGUST 2019. THE WETLANDS DELINEATION WAS CONDUCTED IN ACCORDANCE WITH THE 1987 ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL USING THE ROUTINE DETERMINATIONS METHOD AS REQUIRED BY THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES WETLANDS BUREAU AND THE US ARMY CORPS OF ENGINEERS.

THIS LAND IS ZONED RESIDENTIAL-AGRICULTURAL WITH THE FOLLOWING MINIMUM REQUIREMENTS: LOT SIZE-2 ACRES; FRONTAGE-200'; BUILDING SETBACK FROM ALL LOT LINES IS 50'; WETLANDS OVERLAY ZONE: SEPTIC SYSTEMS MINIMUM OF 75' TO ANY WETLANDS; BUILDINGS MINIMUM IS 50' TO POORLY DRAINED SOIL AND 75' TO VERY POORLY DRAINED SOIL. BUILDING ENVELOPE IS 200'X200' OR CONTIGUOUS AREA OF 30,000 S.F. EXCLUSIVE OF SETBACKS, WITH A MINIMUM WIDTH OF 50'

A PORTION OF THIS LAND IS WITHIN THE ACQUIFER PROTECTION OVERLAY ZONE
THIS LAND IS NOT WITHIN THE SPECIAL FLOOD HAZARD AREA (SFHA) ON COMMUNITY PANEL
NO.330137-0185-E.



TO CONVERT DISTANCES SHOWN TO METERS, MULTIPLY BY 0.3048006



FRANKLIN ASSOCIATES, LLC
LAND SURVEYORS & SEPTIC SYSTEM DESIGNERS
143 RAYMOND ROAD, UNIT 4
CAMBRIA, NH 03034
TEL. 603-483-3096

PHOTOLOG OF SITE

TOWN OF NOTTINGHAM
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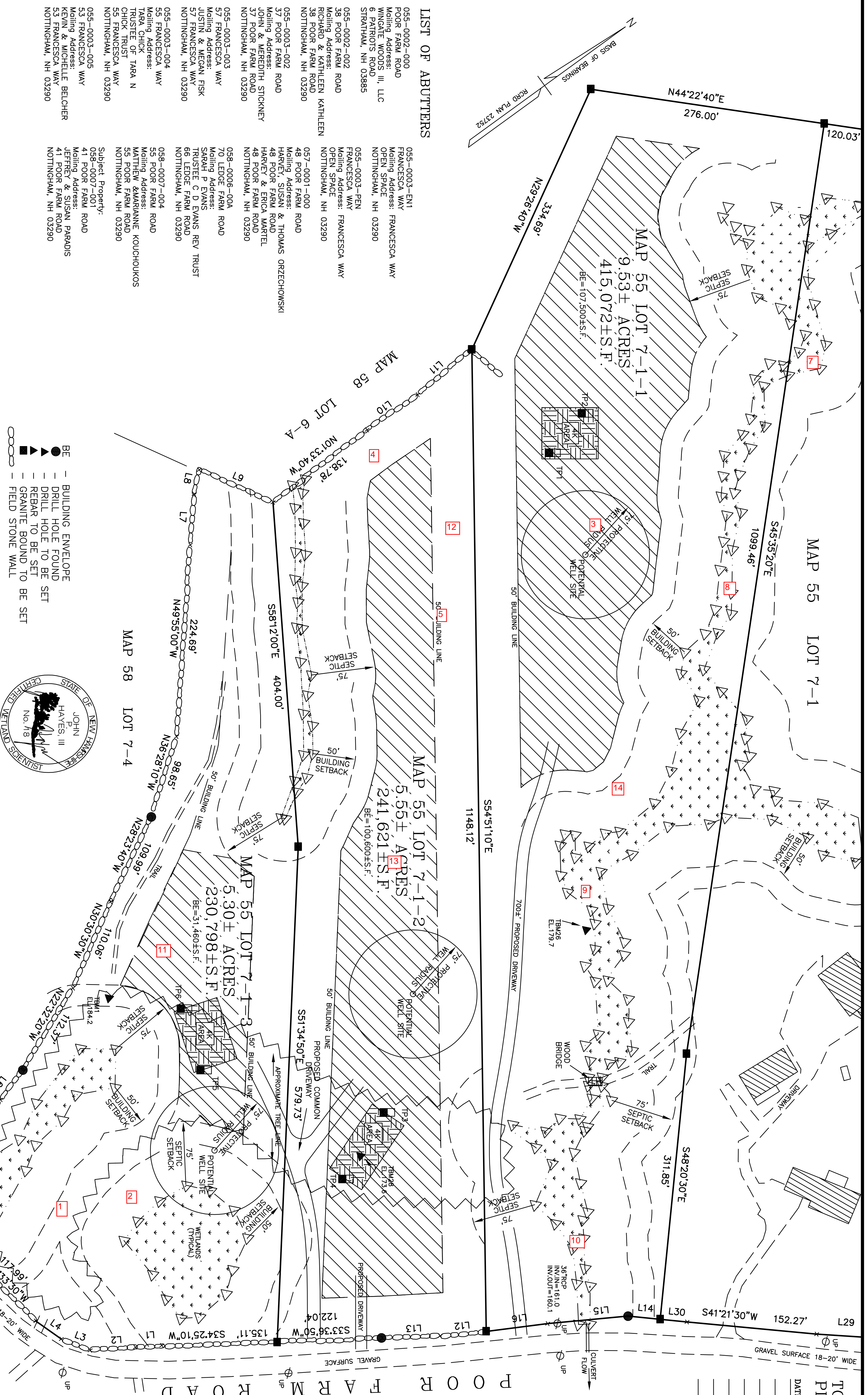
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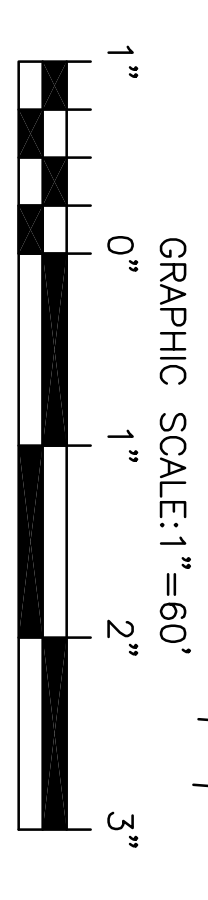
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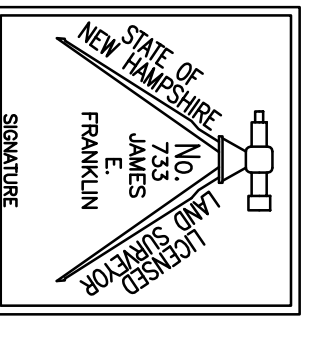
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1. Looking over open field area.



2. Additional view of open field area.



3. Hemlock-birch covered hill side.



4. Stone wall on boundary.



5. Deer scrape/forage area.



6. Approximate wetland on southern property corner.



7. Intermittent stream.



8. Intermittent stream.



9. Intermittent stream.



10. Culvert at inlet under Poor Farm Road.



11. Gray squirrel tracks.



12. Coyote tracks.



13. Deer tracks and scat.



14. Small rodent tracks to and from rock pile.

DOCUMENTATION OF EXISTING CONDITIONS AND AREA RESOURCES

This section of the report contains information and analyses for a habitat assessment as requested by the Nottingham Planning Board. The following information was compiled from a combination of resources, including analysis of existing Geographic Information Systems (GIS) data available from the NH Office of State Planning, and the UNH Complex Systems Research Center (GRANIT)¹. Additional information is based upon interpretation of data collected by GES during field visits to the project site.

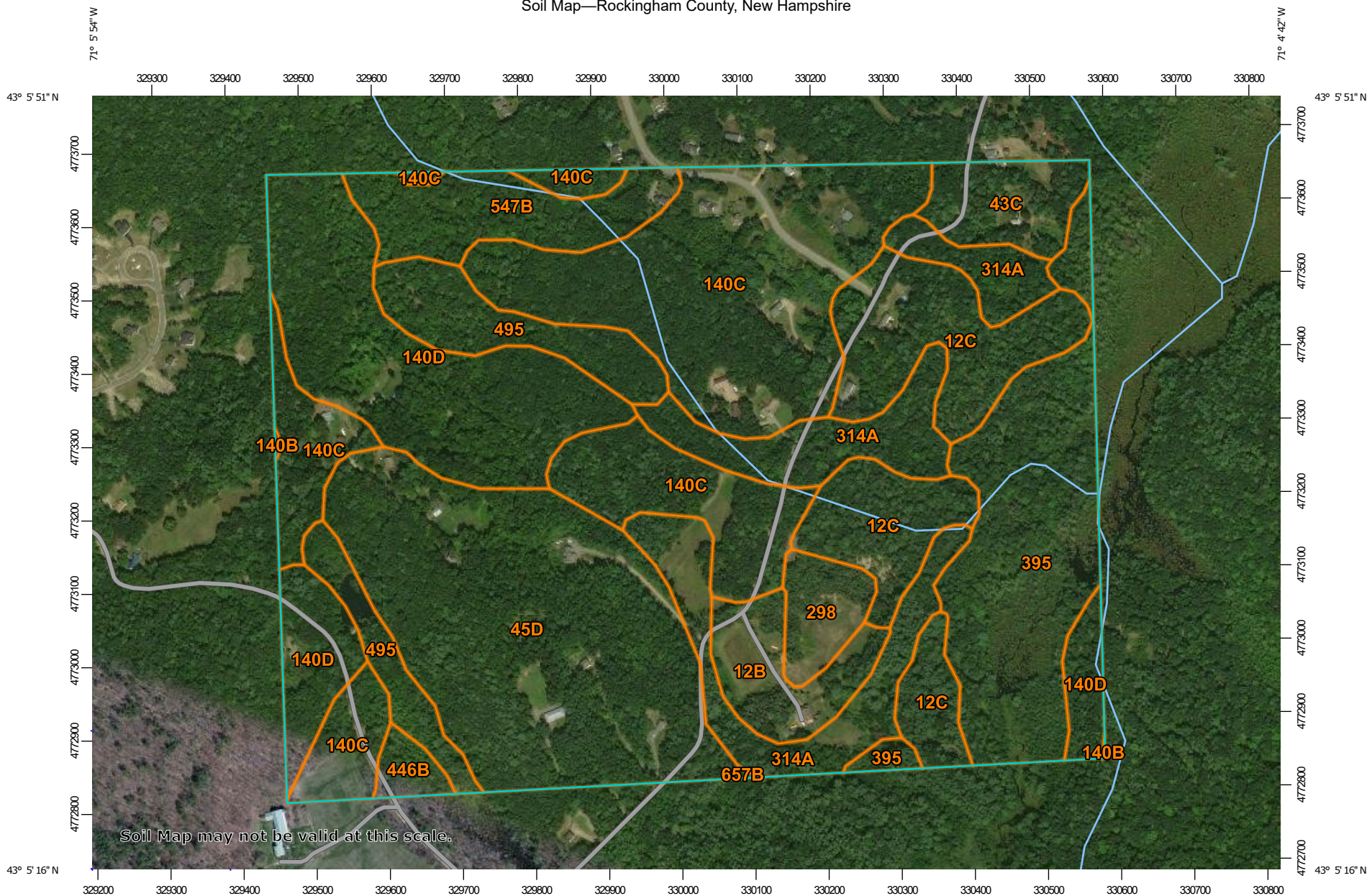
¹ <http://www.granit.sr.unh.edu/>

SOILS AND GEOLOGY

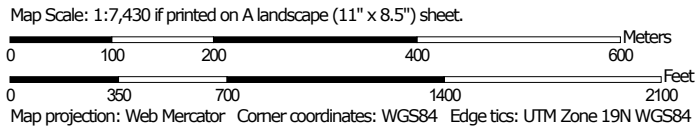
The NRCS Web Soil Survey Mapping shows this area predominantly as 140-Chatfield-Hollis-Canton Complex. This map unit is made up of three different soil types, occurring together so mixed that they cannot be separated out into individual map units. Chatfield is derived from loose till of loamy textures found in the upper margins of the site and often associated with ledge and or rock outcrops. Chatfield has a solum depth of 20-40 inches over bedrock. Hollis soils are similar in makeup of the Chatfield series with loamy textures over bedrock within 20 inches. Lastly, the Canton series contains loose till of sandy textures in the upper profile over loamy sand in the lower profile. Canton has solum depths of greater than 40 inches to ESHWT. This series is made up of glacial till parent material and will often have rocks and stones with in it. No ESHWT is typically encounter in this series within 40 inches of the surface. Beyond this several areas of rock outcrop and stone walls are present throughout the site, which is typical for this type of soil series. The wetland areas are made up of Walpole very fine sandy loam, very stony.

NRCS SOILS

Soil Map—Rockingham County, New Hampshire



Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

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 21, Sep 16, 2019

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

Date(s) aerial images were photographed: Apr 8, 2011—May 15, 2017

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
12B	Hinckley loamy sand, 3 to 8 percent slopes	6.7	2.9%
12C	Hinckley loamy sand, 8 to 15 percent slopes	23.3	10.0%
43C	Canton fine sandy loam, 8 to 15 percent slopes, very stony	5.9	2.5%
45D	Montauk fine sandy loam, 15 to 25 percent slopes, very stony	40.7	17.4%
140B	Chatfield-Hollis-Canton complex, 0 to 8 percent slopes, rocky	0.1	0.0%
140C	Chatfield-Hollis-Canton complex, 8 to 15 percent slopes, rocky	51.8	22.2%
140D	Chatfield-Hollis-Canton complex, 15 to 35 percent slopes, rocky	30.8	13.2%
298	Pits, sand and gravel	4.0	1.7%
314A	Pipestone sand, 0 to 5 percent slopes	21.5	9.2%
395	Swansea mucky peat, 0 to 2 percent slopes	25.0	10.7%
446B	Scituate-Newfields complex, 3 to 8 percent slopes	1.7	0.7%
495	Natchaug mucky peat, 0 to 2 percent slopes	11.8	5.1%
547B	Walpole very fine sandy loam, 3 to 8 percent slopes, very stony	9.7	4.2%
657B	Ridgebury fine sandy loam, 3 to 8 percent slopes, very stony	0.1	0.0%
Totals for Area of Interest		233.0	100.0%

TOPOGRAPHY

Portions of this section were completed utilizing information from the NRCS Soil Survey, topographic maps and fieldwork.

Slopes

The parcel is primarily characterized as a moderately sloping hill dropping from the northeast, northwest and southwest towards Poor Farm Road. The slopes are moderately sloping to very steep with areas from B (3–8%) to E (35%+) slope designations. These areas are primarily located in the western and eastern portion of the site. The lowest portion of the site is associated with a low-gradient forested/stream wetland system. Since the site has moderately to very steep slopes, it is recommended that a vegetated buffer, consisting of dense herbaceous vegetation, remain in place both during and after development along the wetland. It is also suggested that extensive efforts be taken during construction to insure that erosion and sediment are carefully controlled in accordance with NH Forestry Best Management Practices (BMP's). Sediment and erosion control guidelines should be followed as outlined in the (BMP) section of the Rockingham County Conservation District's *Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire*².

Low Areas

Wetland areas on the parcel coincide with the depressions between knolls as shown on the topographic plan, as well as other isolated low lying stream areas. The Town of Nottingham calls for a 75' buffer. This buffer will help minimize or eliminate impacts to wetland areas associated with this project.

Scenic Vistas

A viewshed is the area visible from a specific point-of-view. The parcel is comprised of heavily forested uplands remaining along the property lines and densely vegetated wetlands. Lines of sight are limited with few neighboring homes and as a result, no impacts to viewsheds will result from this project.

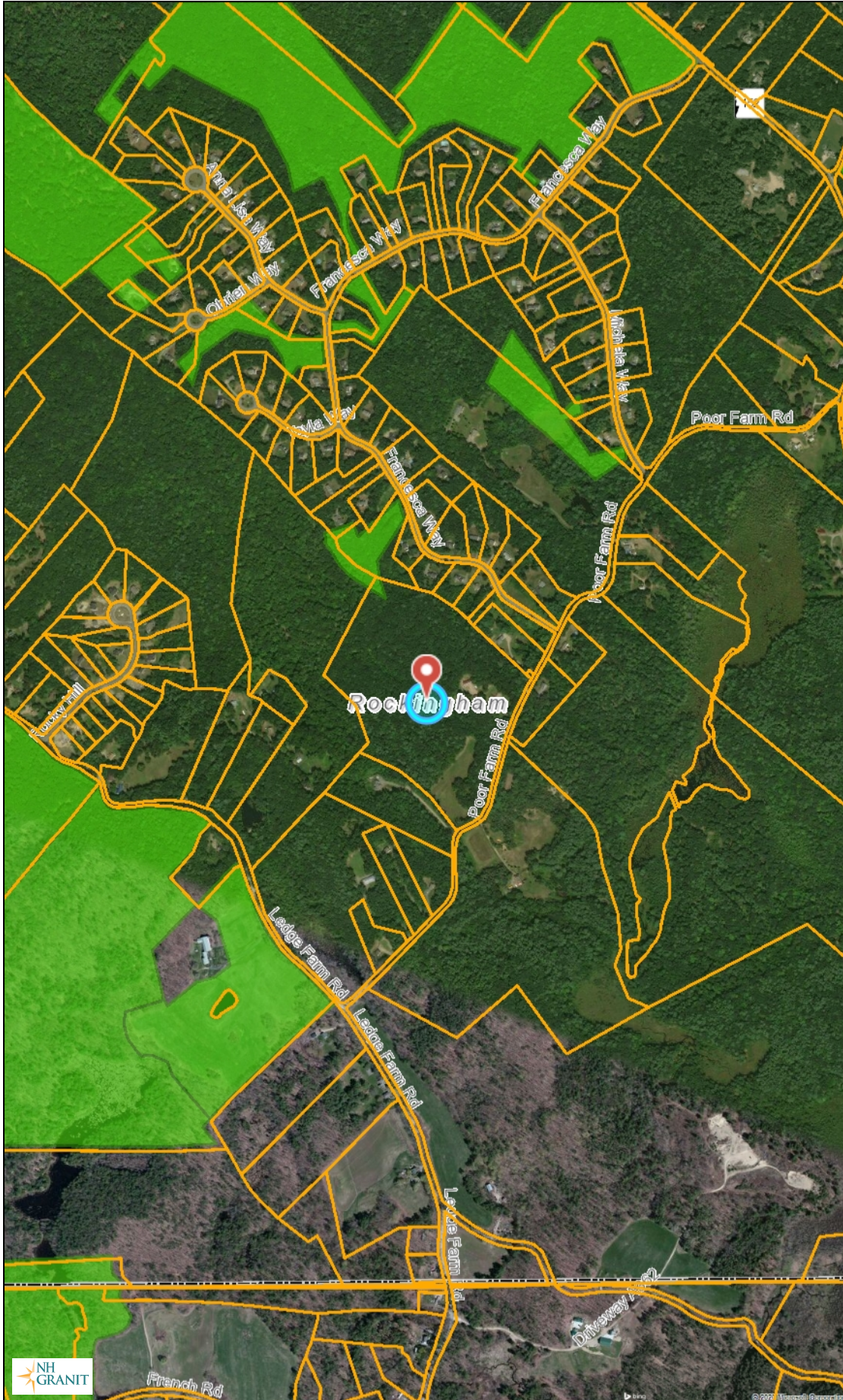
² Minnick, Edwin L., H. Tillman Marshall. 1992. *Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire*. Brentwood, H: Rockingham County Conservation District.

CONSERVATION LAND

Nottingham has several parcels of designated conservation land located throughout the town. One parcel is located adjacent to the site on the northern corner. This conservation parcel is predominantly forested with a mix of semi-mature red oak and white pine/Eastern hemlock forest. No disturbance associated with the proposed development will be closer than 400 feet to the conservation parcel. As a result, it is not anticipated that the conservation parcel will be significantly impacted by the proposed development. An aerial photograph depicting the subject parcel and nearby conserved properties is provided in the following pages.

TOWN OF NOTTINGHAM CONSERVATION LANDS MAP

Conservation Lands



Legend

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

Map Scale

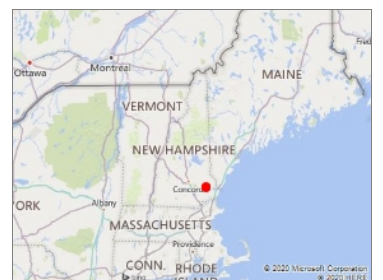
1: 12,988

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Map Generated: 2/24/2020



Notes



NATURAL COMMUNITIES

Natural community habitats were identified by GES through aerial photograph and field analysis. Analysis was guided by the *Natural Communities of New Hampshire: A Guide & Classification*³. Wetlands were identified using *A Classification of Wetland Natural Communities in New Hampshire*⁴, and Cowardin's *Classification of Deepwater Habitats of the United States*⁵ as guides.

Aerial photos were analyzed to obtain an understanding of the habitat components and their relationships to each other in the landscape. Analysis of the plant communities on the site is a critical element in understanding the habitat types and what species may be present. Both upland and wetland communities were documented for this study. Community types are shown on a Wildlife Habitat Land Map taken from NHF&G WAP database. Upon documentation of these resources, an assessment of the species present or likely to utilize the site was made. The NH F&G WAP maps show this area as a supporting landscape.

Upland Plant Community Analysis

Vegetative community types are mapped according to dominant plant species within each vegetative layer. The upland in the property area is composed of one dominant community type, *Red Oak-White Pine Forest*, and its variants. A brief description of the community type is provided below. Note that the site has been recently logged and field work was performed in February, 2020 with several inches of snow on the ground.

Red Oak-White Pine Forest

Field analysis revealed that a semi-mature red oak and white pine community type is the primary upland forested cover type on the property. Red Oak-White Pine-Eastern hemlock forest covers approximately 30% of the project area. This is a common cover type in southern New Hampshire and is often associated with sites having abundant solar exposure and moderately well to well drained soils.

The forest canopy of this site is primarily comprised of red oak ranging in size from 10-20" dbh (diameter at breast height). White pine ranging in size from 10-26" dbh is a secondary component of the tree stratum. Occasionally present species include white oak, black cherry, white ash and gray birch. The sapling stratum is primarily comprised of young red oak and white pine. Gray birch is more prominent in this layer and hemlock is present adjacent wetland areas in the eastern portion of the site. Although the scrub/shrub layer is sparse, representative species include regenerating red oak and white pine, huckleberry and regenerating hemlock. During field assessments associated with this report, the herbaceous layer was obscured by snow.

³ 2001. *Natural Resource Inventories: A Guide for New Hampshire Communities*. Durham, NH: University of New Hampshire Cooperative Extension.

⁴ Sperduto, Daniel D. 2000. *A Classification of Wetland Natural Communities in New Hampshire*. Concord, NH: NH Natural Heritage Inventory (DREDDivision of Forests & Land).

⁵ Cowardin, L.M., 1979. *Classification of Wetlands and Deepwater Habitats in the United States*. Washington, D.C.: U.S. Department of the Interior, Fish and Wildlife Service.

However, species consistent with this forest type include teaberry, partridgeberry, sarsaparilla, *Lycopodium* spp. and Virginia creeper.

Open Field







Due to existing snow cover full documentation of the field area was not possible. Based on aerial photo analysis, a portion of this site has been open field since 1992. Most likely used for either hay or straw.

CURRENT AND HISTORICAL LAND COVER MAPS

Nottingham Land Cover

Nottingham

Legend

-  41 Poor Farm Rd
-  Arbor Veterinary Services
-  Gooch's Log Home Hardware
-  Nottingham
-  Nottingham Community Church
-  Square Schoolhouse

41 Poor Farm Rd



Wetland Plant Community Analysis

Jurisdictional wetland boundaries on the project area were delineated in 2019 by John Hayes, using the standards of the US Army Corps of Engineers 1987 Wetlands Delineation Manual⁶. The wetland communities present on the site are typical for this area and are classified by their dominant cover type and hydrologic characteristics. There are two wetland types on the parcel: Red Maple Swamp and Red Maple Stream Side Swamp. The wetlands comprise approximately 5% of the parcel. Wetland Functional Analysis Forms were completed for each wetland and are included in this report.

Red Maple Swamp

The red maple swamp is a common wetland type and is located in areas with poorly or very poorly drained soils. The tree layer is dominated by red maple and green ash along with some regenerating red maple saplings. Upland areas immediately adjacent to this wetland type support red oak, white pine and hemlock. Highbush blueberry, speckled alder and winterberry dominate the shrub layer. *Sphagnum* mosses, sensitive fern and cinnamon fern dominate the herbaceous layer along with a variety of wetland grasses and sedges.

Red Maple Stream Side Swamp

One intermittent stream thread is present in the wetland system located in the eastern portion of the property (Wetland A in the Functions and Values Assessment). Vegetation within these areas is consistent with the Red Maple Swamp described above, however highbush blueberry and speckled alder are present in denser concentrations within these riparian areas.

⁶ Environmental Laboratory. 2009. "Corps of Engineers Wetlands Delineation Manual: Northcentral and Northeast Region." Technical Report ERDC/EL TR-09-19.

WETLANDS FUNCTIONS AND VALUES DATA SHEETS

ENVIRONMENTAL IMPACT ASSESSMENT AND MITIGATION REPORT
WETLAND FUNCTIONAL ANALYSIS FORM

WETLAND ID: Wetland A
DOMINANT CLASSIFICATION: PFO1E/R4SB1,2

WETLAND TYPE

- | | |
|--|---|
| <input type="checkbox"/> Bog | <input type="checkbox"/> Potential Vernal Pool |
| <input type="checkbox"/> Deciduous Wooded Swamp | <input type="checkbox"/> River |
| <input type="checkbox"/> Drainage Swale | <input type="checkbox"/> Salt Marsh |
| <input type="checkbox"/> Evergreen Wooded Swamp | <input type="checkbox"/> Sand Dune |
| <input type="checkbox"/> Freshwater Deep Marsh | <input type="checkbox"/> Scrub-Shrub Swamp |
| <input type="checkbox"/> Freshwater Shallow Marsh | <input checked="" type="checkbox"/> Seasonal Stream |
| <input checked="" type="checkbox"/> Mixed Wooded Swamp | <input type="checkbox"/> Tidal Marsh |
| <input type="checkbox"/> Perennial Stream | <input type="checkbox"/> Wet Meadow |
| <input type="checkbox"/> Pond/Lake | |

GROUNDWATER RECHARGE/DISCHARGE

- | | | |
|--|--|--|
| <input type="checkbox"/> Gravel or sands | <input type="checkbox"/> Marine/Lacustrine | <i>Function Present:</i> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <input checked="" type="checkbox"/> Till | | |

FLOODFLOW ALTERATION

- | | |
|--|--|
| <input type="checkbox"/> H <input checked="" type="checkbox"/> M <input type="checkbox"/> L Watershed position | <i>Function Present:</i> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> L <input type="checkbox"/> M <input checked="" type="checkbox"/> S Size relative to watershed | <input checked="" type="checkbox"/> Associated with water course |

SEDIMENT/TOXICANT/PATHOGEN RETENTION

- | | | |
|---|--|--|
| <input type="checkbox"/> Sediment/toxicants sources present upslope | <input type="checkbox"/> Associated w/ surface water | <i>Function Present:</i> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <input checked="" type="checkbox"/> Flat wetland topo | <input type="checkbox"/> Vegetation interspersion | |
| <input checked="" type="checkbox"/> Flood storage occurs | <input type="checkbox"/> Dense herbaceous | |

NUTRIENT REMOVAL/RETENTION/TRANSFORMATION

- | | |
|--|--|
| <i>Hydrologic regime</i> | <i>Function Present:</i> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <input type="checkbox"/> Open water | <input checked="" type="checkbox"/> Slow moving water |
| <input type="checkbox"/> Sediment trapping | <input checked="" type="checkbox"/> Organic soils |
| <input type="checkbox"/> Aquatic diversity abundance | |

PRODUCTION EXPORT

- | | |
|--|---|
| <input checked="" type="checkbox"/> Wildlife food sources | <i>Function Present:</i> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> H <input checked="" type="checkbox"/> M <input type="checkbox"/> L Vegetation Density | <input type="checkbox"/> H <input type="checkbox"/> M <input checked="" type="checkbox"/> L Diversity |
| <input type="checkbox"/> H <input checked="" type="checkbox"/> M <input type="checkbox"/> L Interspersion | <input type="checkbox"/> Aquatic plants |

SEDIMENT/ShORELINE STABILIZATION

- | | |
|---|--|
| <i>Association w/surface water:</i> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | <i>Function Present:</i> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <input checked="" type="checkbox"/> Bank or shoreline | <input type="checkbox"/> High flows |
| <input checked="" type="checkbox"/> Vegetated bank | <input type="checkbox"/> Channelized flow |

WILDLIFE HABITAT

- | | |
|---|--|
| <input checked="" type="checkbox"/> Wetland connections | <i>Function Present:</i> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Corridor | |
| <input checked="" type="checkbox"/> Islands | |
| <input type="checkbox"/> Aquatic habitat | |
| <input type="checkbox"/> Fish habitat | |

ENVIRONMENTAL IMPACT ASSESSMENT AND MITIGATION REPORT
WETLAND FUNCTIONAL ANALYSIS FORM

WETLAND ID: Wetland B
DOMINANT CLASSIFICATION: PFO1E

WETLAND TYPE

- | | |
|--|--|
| <input type="checkbox"/> Bog | <input type="checkbox"/> Potential Vernal Pool |
| <input type="checkbox"/> Deciduous Wooded Swamp | <input type="checkbox"/> River |
| <input type="checkbox"/> Drainage Swale | <input type="checkbox"/> Salt Marsh |
| <input type="checkbox"/> Evergreen Wooded Swamp | <input type="checkbox"/> Sand Dune |
| <input type="checkbox"/> Freshwater Deep Marsh | <input type="checkbox"/> Scrub-Shrub Swamp |
| <input type="checkbox"/> Freshwater Shallow Marsh | <input type="checkbox"/> Seasonal Stream |
| <input checked="" type="checkbox"/> Mixed Wooded Swamp | <input type="checkbox"/> Tidal Marsh |
| <input type="checkbox"/> Perennial Stream | <input type="checkbox"/> Wet Meadow |
| <input type="checkbox"/> Pond/Lake | |

GROUNDWATER RECHARGE/DISCHARGE

- | | |
|--|--|
| <input type="checkbox"/> Gravel or sands | <i>Function Present:</i> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <input checked="" type="checkbox"/> Till | <input type="checkbox"/> Marine/Lacustrine |

FLOODFLOW ALTERATION

- | | |
|--|--|
| <input type="checkbox"/> H <input type="checkbox"/> M <input checked="" type="checkbox"/> L Watershed position | <i>Function Present:</i> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <input type="checkbox"/> L <input type="checkbox"/> M <input checked="" type="checkbox"/> S Size relative to watershed | <input type="checkbox"/> Associated with water course |

SEDIMENT/TOXICANT/PATHOGEN RETENTION

- | | |
|---|--|
| <input type="checkbox"/> Sediment/toxicants sources present upslope | <i>Function Present:</i> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <input type="checkbox"/> Flat wetland topo | <input type="checkbox"/> Associated w/ surface water |
| <input type="checkbox"/> Flood storage occurs | <input type="checkbox"/> Vegetation interspersion |
| | <input type="checkbox"/> Dense herbaceous |

NUTRIENT REMOVAL/RETENTION/TRANSFORMATION

- | | |
|--|--|
| <i>Hydrologic regime</i> | <i>Function Present:</i> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <input type="checkbox"/> Open water | <input type="checkbox"/> Slow moving water |
| <input type="checkbox"/> Sediment trapping | <input type="checkbox"/> Organic soils |
| <input type="checkbox"/> Aquatic diversity abundance | |

PRODUCTION EXPORT

- | | |
|--|---|
| <input type="checkbox"/> Wildlife food sources | <i>Function Present:</i> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <input type="checkbox"/> H <input checked="" type="checkbox"/> M <input type="checkbox"/> L Vegetation Density | <input type="checkbox"/> H <input type="checkbox"/> M <input checked="" type="checkbox"/> L Diversity |
| <input type="checkbox"/> H <input checked="" type="checkbox"/> M <input type="checkbox"/> L Interspersion | <input type="checkbox"/> Aquatic plants |

SEDIMENT/SHORELINE STABILIZATION

- | | |
|---|--|
| <i>Association w/surface water:</i> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <i>Function Present:</i> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <input type="checkbox"/> Bank or shoreline | <input type="checkbox"/> High flows |
| <input type="checkbox"/> Vegetated bank | <input type="checkbox"/> Channelized flow |

WILDLIFE HABITAT

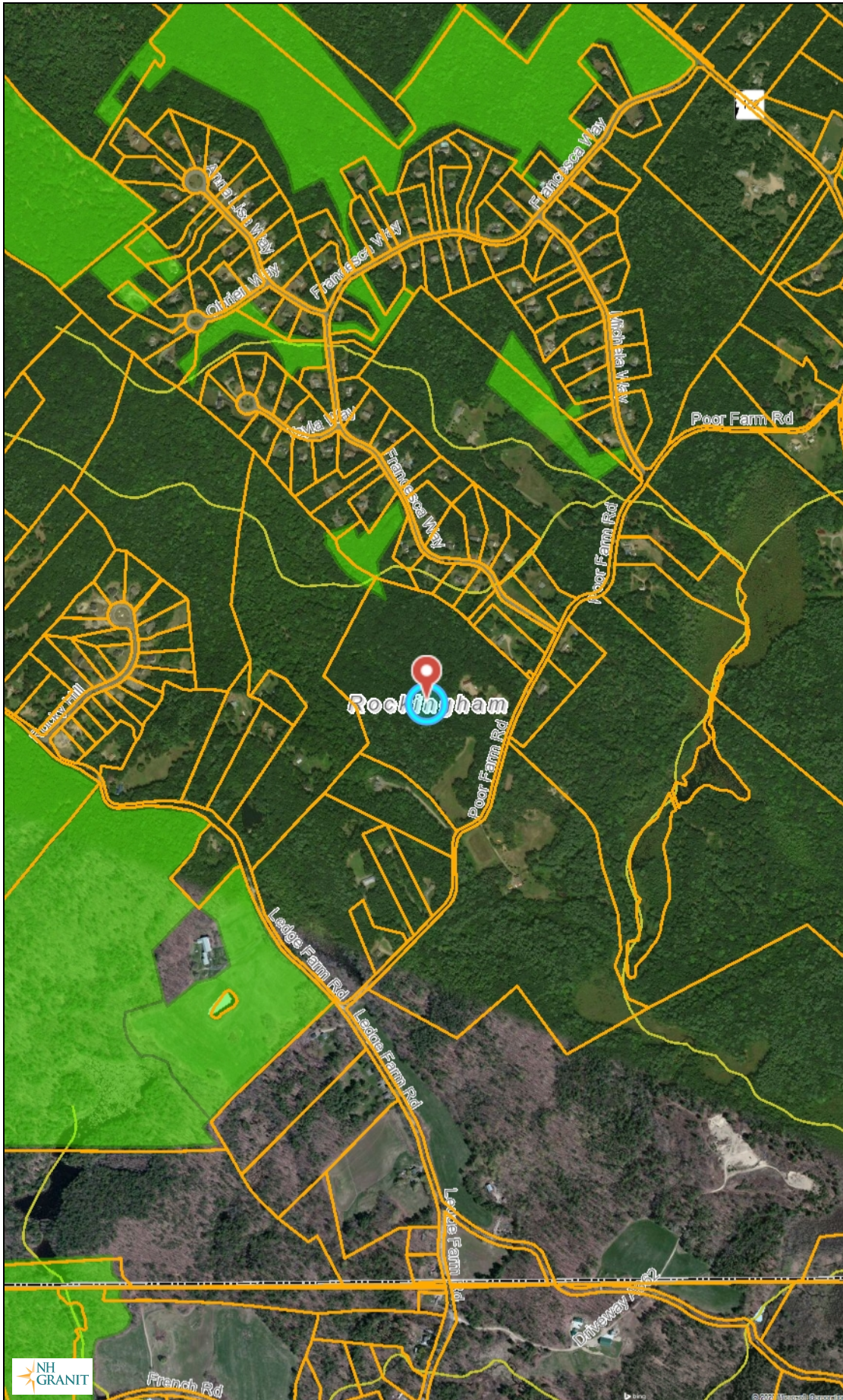
- | | |
|--|--|
| <input type="checkbox"/> Wetland connections | <i>Function Present:</i> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <input type="checkbox"/> Corridor | <input type="checkbox"/> Aquatic habitat |
| <input type="checkbox"/> Islands | <input type="checkbox"/> Fish habitat |

Aquatic Habitat Community Analysis

The Aquatic habitat on site is limited to the intermittent stream that flows through the site. As this stream is intermittent, based on USGS maps, it would provide seasonal habitat to aquatic insects and reptiles and amphibians. The remaining wetland areas, based on the topography do not appear to be vernal pools or hold water for consideration as aquatic habitat. This map is provided below.

Aquatic Habitat MAP

Aquatic Habitat



Legend

- Polygons
- State
- County
- City/Town
- Conservation and Public Land
- WAP 2015: Rivers and Streams
 - Cold water
 - Large warm
 - Tidal
 - Warm/cool
- WAP 2015 Estuarine and Marine
 - Estuarine
 - Marine
- WAP 2015: Lakes and Ponds
 - Unclassified
 - Coldwater lake
 - Coldwater pond
 - Warm/cool lake
 - Warm/cool pond

Map Scale

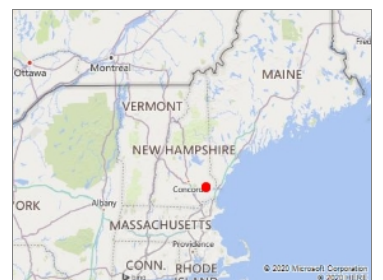
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Map Generated: 2/24/2020

Notes



WILDLIFE HABITAT ASSESSMENT

Significant Habitat Features are listed in the following section, as well as Habitat Limitations. The publication, “Identifying and Protecting New Hampshire’s Significant Wildlife Habitat,”⁷ published by the Nongame and Endangered Wildlife Program of the New Hampshire Fish and Game Department (2001), was used as a guide for identification of significant features. A list of potential significant wildlife habitat features is included in the appendices to this document.

The habitats examined within this parcel are a combination of open field, forested uplands, forested wetlands and intermittent streams. Seasonal sources of water exist for wildlife, as well as an abundant supply of hard and soft mast for wildlife food.

Rare, Threatened and Endangered Species

A New Hampshire Natural Heritage Bureau (NHB) search requested for the property is attached. This report did not show any known occurrences on the parcel, but in the vicinity. The following species were listed in the report:

Blanding’s Turtle

Jefferson/Blue Spotted Salamander Complex

Northern Black Racer

Spotted Turtle

Blanding’s turtle

Blanding’s turtles are found in wetland habitats with permanent shallow water and emergent vegetation such as marshes, swamps, bogs, and ponds. They will extensively use vernal pools in spring for feeding on egg masses and as additional foraging areas as they travel over upland areas. May use slow rivers and streams as mechanisms for dispersal between wetlands. Extensive use of terrestrial habitats for nesting and travel among wetlands. Large tracts of woodlands and wetlands occur in the area and not only on site. No impact to this species is expected.

Jefferson/Blue Spotted Salamander Complex

This does not refer to the individual species themselves as they are not listed as rare, threatened or endangered in NH, but refers to the vernal pools in which they lay eggs and the surrounding woodlands they use for foraging and winter hibernation. No vernal pools are on the site, so it is unlikely they are on the site.

Northern Black Racer

These are found in a variety of habitats including dry brushy pastures, powerline corridors, rocky ledges, and woodlands. They have large home ranges and require large patches of suitable habitat. Due to winter conditions, the nature of the field area was not able to be surveyed.

⁷ Kanter, John, Soumalam, Rebecca, Snyder, Ellen. 2001. *Identifying and Protecting New Hampshire’s Significant Wildlife Habitat: A Guide for Towns and Conservation Groups*. Concord, NH: Nongame and Endangered Wildlife Program of the NH Fish and Game Department, in cooperation with the Office of State Planning and UNH Cooperative Extension.

Spotted Turtle

Spotted turtles are 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. As this stream is intermittent, it is unlikely spotted turtles will be found on the site.

SIGNIFICANT WILDLIFE HABITAT FEATURES

This portion of the report details significant habitat features present either on or in the vicinity of the project area. Significant habitat features are listed below. Detailed discussions of each feature follow:

- Presence of hard mast (large diameter nut-bearing trees) and soft mast (fruit-bearing trees/shrubs);
- Stone walls as denning habitat for small rodents; and
- Parcel is adjacent to a wildlife travel corridor.

Mast Production Areas

Throughout portions of the property, hardwood tree species such as red oak and white oak produce abundant nut crops or “mast.” Mast is utilized by many species of birds and mammals ranging from blue jays to wild turkeys, and from chipmunks to bears. The relative abundance of mast producing species can directly influence the level of wildlife activity a forested stand can support.

In addition to the hard mast produced by canopy trees, smaller fruit-bearing trees and shrubs contribute directly to wildlife diets. On the parcel, these species include highbush blueberry, winterberry and wintergreen.

Stonewalls

Abandoned stonewalls run along the edges of the site. These cultural features often function as denning sites for many small and medium sized mammals as well as several reptile and amphibian species. Additionally, they serve as a reminder of the agricultural legacy of southern New Hampshire.

Wildlife Travel Corridor

The subject parcel lies within an area between Ledge Farm Road to the southwest and Francesca Way to the northeast and Poor Farm Road to the southeast. With a population of 4,962 and land area of 48.4 square miles, Nottingham has an abundance of open and undisturbed land. There is a potential for wildlife to travel through this parcel along the stream system. However, a much larger open tract of land lies to the west and south west of the parcel with lesser travel impediments. Given the existing buffer to the wetland stream system and proposed minimal clearing of the lots, it is unlikely that the project will generate significant impacts to species utilizing this as travel corridor.

Wildlife Known to Occur on Property

The species listed below were either directly observed on the property during fieldwork or their presence on the parcel was substantiated by direct evidence such as calls and sign. Due to the time of year many species of migrant birds have left, as well as many of the reptile and amphibian species have taken shelter for the upcoming winter.

Mammals

Eastern chipmunk (observed)	Eastern coyote (sign)
Red squirrel (call)	White-tailed deer (sign and tracks)

Birds

American crow (call)	Red-tailed hawk (observed)
Black-capped chickadee (call)	Northern flicker (call)
Blue Jay (call)	Tufted titmouse (observed)
Hairy woodpecker (observed)	Yellow-shafted flicker (call)
Northern flicker (call)	White-breasted nuthatch (call)

Several additional species could be expected on the property due to the location and cover types, but due to various criteria, i.e., season, time of day, etc., may not be documented during the field visit. Also, the fact that the parcel has been logged limits the amount of wildlife usage.

Transient species, such as larger mammals listed above, will travel through the parcel and surrounding area from one foraging site to another. Fox could also be expected to travel through the property, as well as weasel species using the stream system for travel and feeding. The buffers to the stream system should preserve this use.

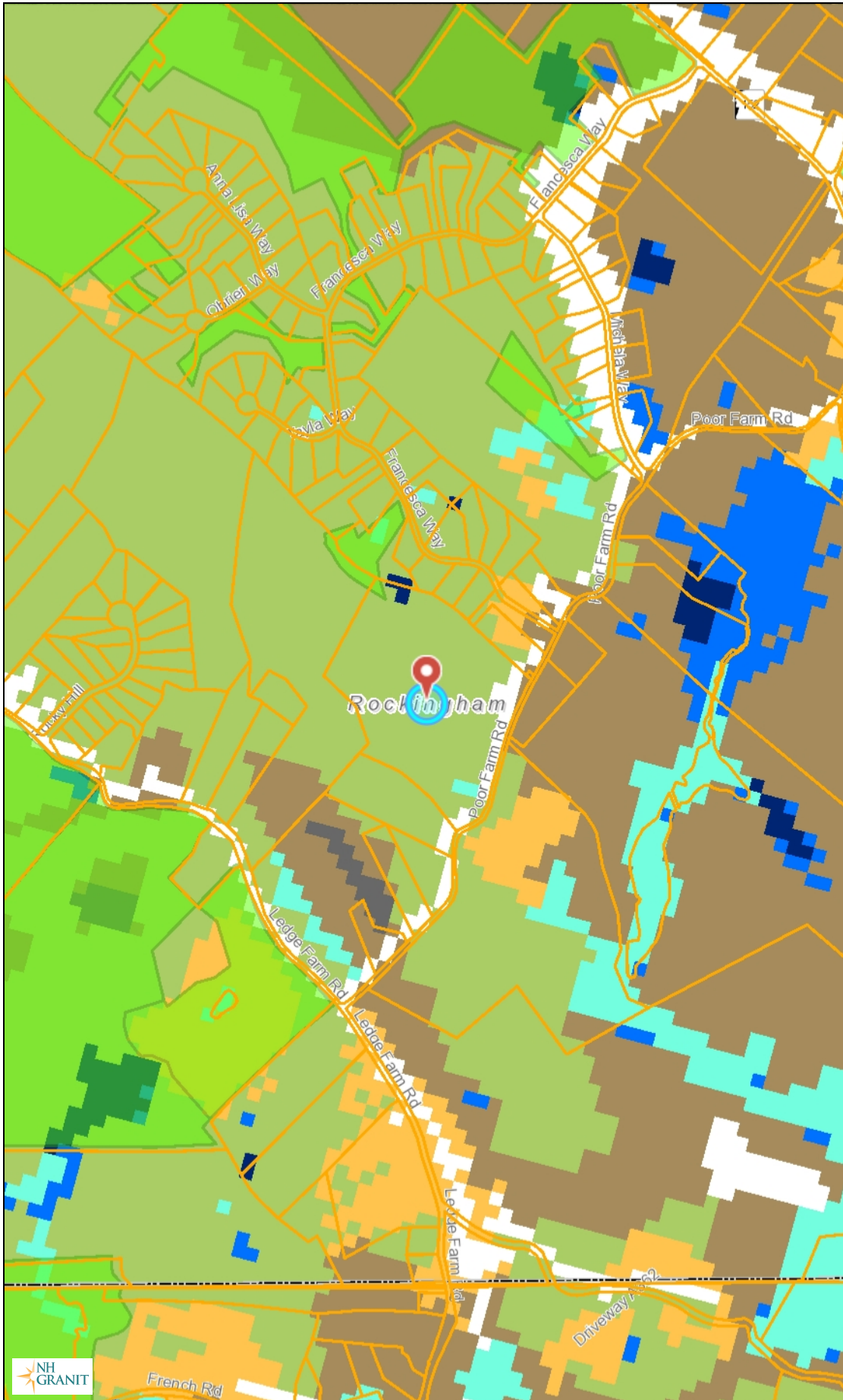
Birds of prey, besides red-tailed hawks which utilize open areas for hunting, may have used this area prior to logging, such as Cooper's, sharp shinned and broad winged hawks and barred owl, but prefer denser woodland areas for nesting and hunting.

Smaller species of birds, specifically those listed above will continue to use the area for nesting and foraging, as they are less impacted by disturbance. Deeper woodland birds, such as vireos, warblers and thrushes most likely were not using the parcel prior to logging, as they prefer deeper woods away from development and if present in the area are most likely in the north west of the property. Depending on the size and vegetation of the open area, some bird species, such as bobolink and meadow lark and sparrows may use it for nesting.

Reptiles and amphibians, such as snakes, frogs and toads may be temporarily displaced during construction, but have hundreds of acres surrounding the site to use. The buffers to the wetlands and stream system will maintain an area for water dependent species of frogs to utilize, as well as continued open wooded areas for woodland species of snakes, frogs and toads to forage and nest.

WILDLIFE HABITAT LAND COVER MAP

Wildlife Habitat Land Cover



Legend

- Polygons
- State
- County
- City/Town
- Conservation and Public Land
- WAP 2015: Wildlife Habitat Land Cover**
 - Alpine
 - Appalachian oak-pine
 - Cliff and Talus
 - Coastal island
 - Dune
 - Floodplain forest
 - Grassland
 - Hemlock-hardwood-pine
 - High-elevation spruce-fir
 - Lowland spruce-fir
 - NLCD Developed or barren
 - Northern hardwood-conifer
 - Northern swamp
 - Open water
 - Peatland
 - Pine barren
 - Rocky ridge
 - Salt marsh
 - Temperate swamp
 - Wet meadow/shrub wetland

Map Scale

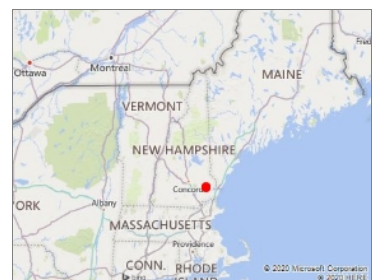
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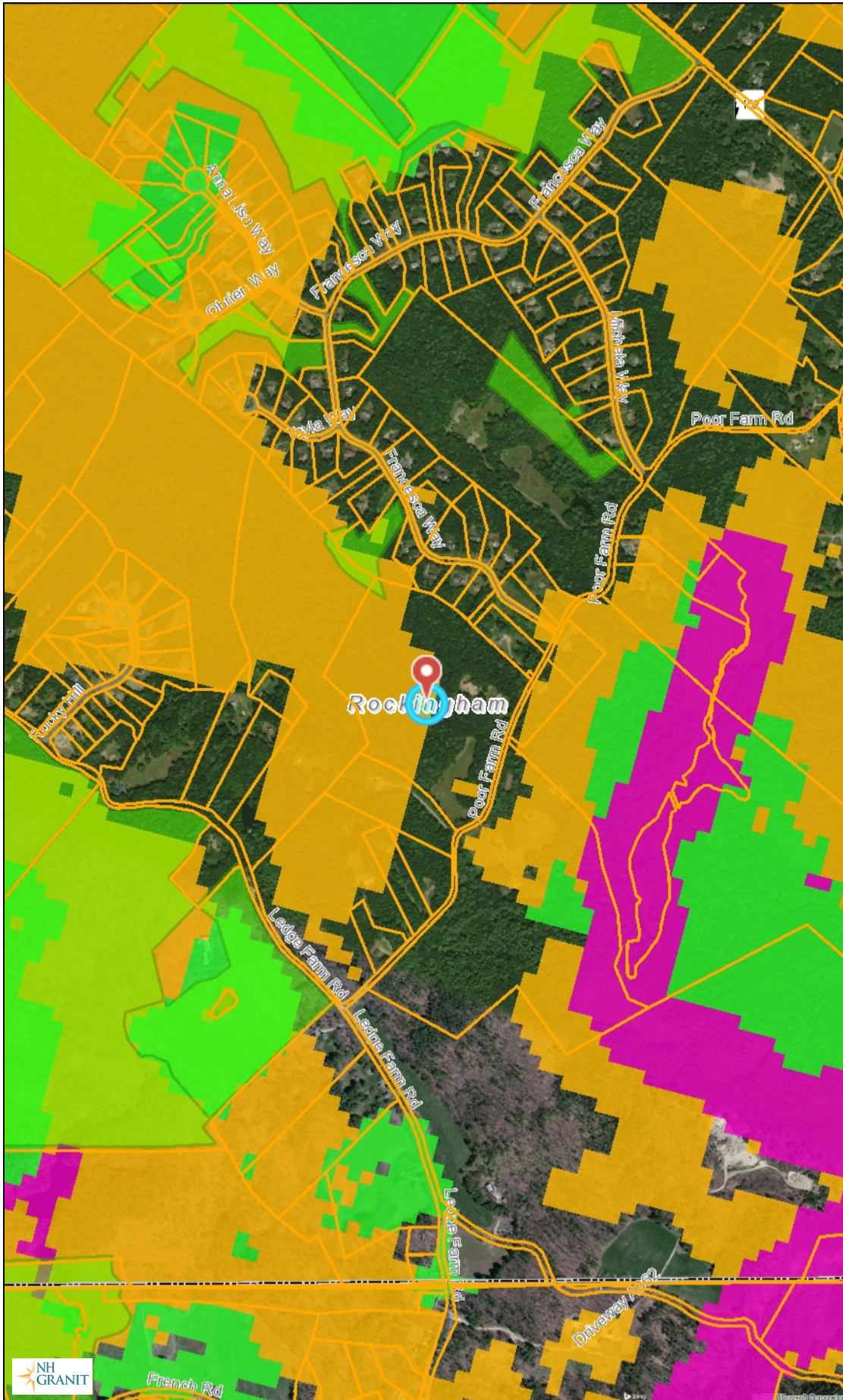
Map Generated: 2/24/2020

Notes



HIGHEST RANKED WILDLIFE HABITATS MAP

Highest Ranked Wildlife Habitats



Legend

- Polygons
- State
- County
- City/Town
- Conservation and Public Land
- WAP 2015: Highest Ranked Wildlife Habitat**
 - Not Top Ranked
 - Highest Ranked Habitat in NH
 - Highest Ranked Habitat in Region
 - Supporting Landscape

Map Scale

1: 12,988

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Map Generated: 2/24/2020



Notes



POTENTIAL IMPACTS TO WILDLIFE AND HABITAT

Habitat types found on this parcel are relatively common in the southern New Hampshire area. A summary and discussion of potential wildlife impacts as well as efforts to minimize and mitigate impacts follows below.

Summary of Potential Impacts

- Site clearing removes tree cavities and small mammal burrows;
- Potential for increased sedimentation and nitrification in open water wetlands;

Discussion of Potential Impacts

Removal of Field and Structural Habitat Features During Clearing

Clearing and grading associated with site development may decrease structural habitat features such as cavity trees, and denning sites associated with stone walls. It is likely that the habitat structure sufficient to maintain the avian, amphibian, reptile, and mammalian species that require these features, may remain in both the undisturbed areas retained in this project, as well as on the neighboring undeveloped and conservation parcel. Based on the relatively small area of the site cleared for the proposed three, single-family homes and the large area of woodlands adjacent to the site, significant impacts are not expected. Additionally, the existence of the field area south of Poor Farm Road, should act as continued open grass habitat.

Potential for Increased Sedimentation and Nitrification in Wetlands

In general, proposed development is concentrated in house and septic locations of the site, away from the forested wetland located to the east. However, existing grades create the potential for sediment discharges during construction. As a result, extensive efforts to minimize impacts associated with grading, drainage and erosion issues will be implemented during all stages of the construction process. Provided that BMP's are followed, increased sedimentation is not likely in this area. However, the developer may wish to incorporate language into the property deed limiting agricultural/yard fertilizer application to slow release natural based products.

CONCLUSIONS

The overall project has avoided direct impacts to jurisdictional wetland areas by designing the driveways in such a manner as to have no direct impacts on the wetlands on the property. Due to the cleared nature of the habitat throughout the parcel, it is unlikely that the development of this parcel will contribute to a decrease in overall habitat and wildlife use in the area. Additionally, the proposed three single-family homes should not be expected to have a significant impact on the overall area.

With these considerations in mind, the following are recommendations to minimize and mitigate the impacts of this project on surrounding wetland, water and wildlife resources:

Impact Minimization and Mitigation Recommendations

1. Retain large oaks where possible. Large oaks are high-yield, mast-producing trees and provide food for wildlife. These can be flagged on-site by a forester or natural resources professional.
2. Maintain stone walls where possible.
3. Maintain open fields where possible
4. Nottingham has a 75-foot buffer for wetlands. Different species require various buffer widths for survival, and unless a particular species is targeted, it is difficult to give a specific buffer width for all wildlife. Seventy five feet is generally accepted to provide food, cover and breeding habitat for common species.
5. A buffer is most effective if left in its natural vegetated state. Maintain open space and buffers as “No-cut, no-disturb” areas.
6. Silt fence creates a barrier to migrating amphibians, reptiles and small mammals. Near forested wetland complexes, and anywhere else practical, mulch berms or filter berms should be employed as opposed to silt fencing. Filter and mulch berms have the added advantage of being biodegradable (no removal cost) and they are easier for amphibians, reptiles and small animals to cross.⁸
7. Keep canopy clearing to a minimum. Clearing the forest canopy may elevate water temperatures in the stream.

⁸David Palmer, BarkTech Express (781) 581-0449.

Appendix A
Natural Heritage Inventory Request

CONFIDENTIAL – NH Dept. of Environmental Services review

Memo



NH NATURAL HERITAGE BUREAU
NHB DATACHECK RESULTS LETTER

To: James E Franklin, Franklin Associates, LLC
143 Raymond Road
Unit 4
Candia, NH 03034

From: Amy Lamb, NH Natural Heritage Bureau

Date: 12/30/2019 (valid for one year from this date)

Re: Review by NH Natural Heritage Bureau

NHB File ID: NHB19-4035 Town: Nottingham

Location: Tax Maps: map 58 lot 7-1

Description: to divide 30+- acres into 4 lots.

cc: Kim Tuttle

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results.

Comments: Contact the NH Fish & Game Department to address wildlife concerns.

Vertebrate species

	State ¹	Federal	Notes
Blanding's Turtle (<i>Emydoidea blandingii</i>)	E	--	Contact the NH Fish & Game Dept (see below).
Jefferson/Blue-spotted Salamander Complex (<i>Ambystoma pop. 3</i>)	--	--	Contact the NH Fish & Game Dept (see below).
Northern Black Racer (<i>Coluber constrictor constrictor</i>)	T	--	Contact the NH Fish & Game Dept (see below).
Spotted Turtle (<i>Clemmys guttata</i>)	T	--	Contact the NH Fish & Game Dept (see below).

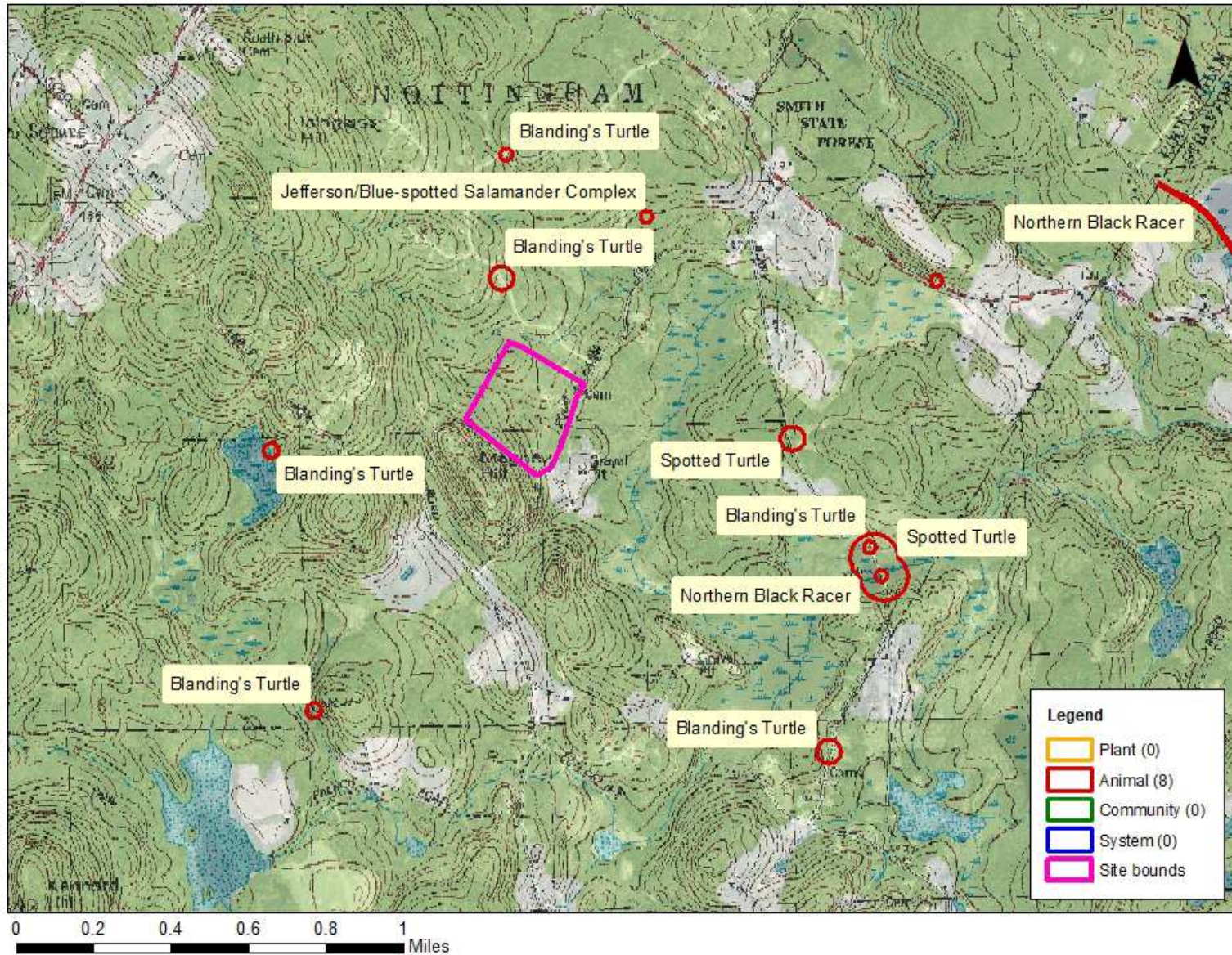
¹Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

Contact for all animal reviews: Kim Tuttle, NH F&G, (603) 271-6544.

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.

CONFIDENTIAL – NH Dept. of Environmental Services review

NHB19-4035



New Hampshire Natural Heritage Bureau - Animal Record

Blanding's Turtle (*Emydoidea blandingii*)

Legal Status

Federal: Not listed
State: Listed Endangered

Conservation Status

Global: Apparently secure but with cause for concern
State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank: --

Detailed Description: 2016: Area 14183: 1 adult female nesting on 6/18. Nest enclosure built. 12 hatchlings captured and released on 8/22.

General Area: 2016: Area 14183: Nesting along driveway shoulder on residential property. Wetlands in the surrounding landscape.

General Comments: --
Management: --
Comments:

Location

Survey Site Name: Lamprey River, Epping
Managed By:

County: Rockingham

Town(s): Epping

Size: 1.9 acres

Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2016: Area 14183: 44 Rollins Road, Epping.

Dates documented

First reported: 2016-06-18

Last reported: 2016-08-22

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Blanding's Turtle (*Emydoidea blandingii*)

Legal Status

Federal: Not listed
State: Listed Endangered

Conservation Status

Global: Apparently secure but with cause for concern
State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank: --

Detailed Description: 2011: Area 12907: 1 adult female observed, laying eggs. Approximately 9" long.
General Area: 2011: Area 12907: Forested area with nearby vernal pools, marsh, river, and pond, as well as houses.
General Comments: --
Management: --
Comments:

Location

Survey Site Name: Lamprey River, Epping
Managed By:

County: Rockingham
Town(s): Nottingham
Size: .4 acres Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2011: Area 12907: Francesca Way, Nottingham, approximately 0.25 miles south and west of intersection with Michela Way.

Dates documented

First reported: 2011-06-27 Last reported: 2011-06-27

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Blanding's Turtle (*Emydoidea blandingii*)

Legal Status

Federal: Not listed
 State: Listed Endangered

Conservation Status

Global: Apparently secure but with cause for concern
 State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
 Comments on Rank: --

Detailed Description: 2011: Area 13115: 1 adult observed.
 General Area: 2011: Area 13115: Residential yard.
 General Comments: --
 Management: --
 Comments:

Location

Survey Site Name: Lamprey River, Epping
 Managed By:

County: Rockingham
 Town(s): Nottingham
 Size: 1.9 acres Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2011: Area 13115: 45 Francesca Way, Nottingham.

Dates documented

First reported: 2011-05-31 Last reported: 2011-05-31

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Blanding's Turtle (*Emydoidea blandingii*)

Legal Status

Federal: Not listed
State: Listed Endangered

Conservation Status

Global: Apparently secure but with cause for concern
State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank: --

Detailed Description: 2013: 7 turtles observed: 3 male and 4 female.
General Area: --
General Comments: --
Management: --
Comments:

Location

Survey Site Name: Lamprey River, Epping
Managed By: NRCS_WRP_Sullos

County: Rockingham
Town(s): Nottingham
Size: 3.0 acres Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: --

Dates documented

First reported: 2013-07-01 Last reported: 2013-07-12

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Blanding's Turtle (*Emydoidea blandingii*)

Legal Status

Federal: Not listed
 State: Listed Endangered

Conservation Status

Global: Apparently secure but with cause for concern
 State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
 Comments on Rank: --

Detailed Description: 2014: Area 13952: 1 adult male observed.
 General Area: 2014: Area 13952: Wetland complex including stands of alder, buttonbush shrub swamp, aquatic beds.

General Comments: --
 Management: --
 Comments:

Location

Survey Site Name: Lamprey River, Epping
 Managed By:

County: Rockingham
 Town(s): Nottingham
 Size: .4 acres Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2014: Area 13952: Berry Road near crossing of Rollins Brook in Nottingham. (43.0882, -71.0715).

Dates documented

First reported: 2014-06-03 Last reported: 2014-06-03

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record
Jefferson/Blue-spotted Salamander Complex (*Ambystoma pop. 3*)

Legal Status

Federal: Not listed
State: Not listed

Conservation Status

Global: Not ranked (need more information)
State: Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank: --

Detailed Description: 2013: Area 13564: 1 adult observed, sex unknown.

General Area: 2013: Area 13564: Residential backyard, adjacent to mostly coniferous woodland and a large wetland area.

General Comments: --

Management: --

Comments:

Location

Survey Site Name: Isinglass Hill, east of
Managed By:

County: Rockingham

Town(s): Nottingham

Size: .4 acres

Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2013: Area 13564: 21 Michela Way, Nottingham.

Dates documented

First reported: 2013-08-12

Last reported: 2013-08-12

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Northern Black Racer (*Coluber constrictor constrictor*)

Legal Status

Federal: Not listed
 State: Listed Threatened

Conservation Status

Global: Demonstrably widespread, abundant, and secure
 State: Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
 Comments on Rank: --

Detailed Description: 2007: Area 11801: 1 adult, 2 young and 1 uncertain.1999: 1 adult seen, at least 3 feet long (Obs_id 1999.0275).

General Area: 2007: Area 11801: Dirt/gravel road bordered by small bushes crossing marsh.1999: Marsh (Obs_id 1999.0275).

General Comments: 1999: Last year (1999) this snake was seen crossing Gile Road. It moved rapidly across the road and into the marsh (Obs_id 1999.0275).

Management Comments: --

Location

Survey Site Name: Smith State Forest
 Managed By:

County: Rockingham
 Town(s): Nottingham
 Size: .9 acres

Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2007: Area 11801: Edge of Berry Road at Rollins Brook bridge.1999: Gile Rd. off Rte. 152 (Obs_id 1999.0275).

Dates documented

First reported: 1999
 Last reported: 2007-07-20

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Spotted Turtle (*Clemmys guttata*)

Legal Status

Federal: Not listed
 State: Listed Threatened

Conservation Status

Global: Demonstrably widespread, abundant, and secure
 State: Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Excellent quality, condition and landscape context ('A' on a scale of A-D).
 Comments on Rank: --

Detailed Description: 2019: Area 14360: 1 adult male observed.
2013: Area 13529: 1 adult observed, sex unknown.
2010: Area 11632M: 1 adult female observed.
2008: Area 11632M: 1 adult seen.
2004: Area 6651: 1 seen. Adult.

General Area: 2019: Area 14360: Large wetland on one side of the road and a small area of forest with hayfields behind on the other.
2013: Area 13529: Crossing road from a white pine dominated stand on the west side of the road to a small wetland on the east. The sighting is within 1/2 mile of Rawlins Brook.
2010: Area 11632M: Marsh adjacent to road.

General Comments: --
 Management: --
 Comments:

Location

Survey Site Name: Rollins Brook
 Managed By:

County: Rockingham
 Town(s): Nottingham
 Size: 14.3 acres Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2019: Area 14360: Route 152 (Stage Road), Nottingham, west of brick farm house at 16 Stage Road.
2013: Area 13529: Berry Road, Nottingham.
2010: Area 11632M: Crossing Berry Road from Rollins Brook Meadow near Nottingham and Epping Townlines.
2004: Rollins brook wetland complex. GPS 43°05' 12.24 N, 071°04' 10.34 W (Obs_id 2004.0119).

Dates documented

First reported: 2004-07-06 Last reported: 2019-05-21

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.