

# Vermont Wetlands Program Permit Application Database Form

Under Sections 8 and 9  
of the Vermont Wetland Rules



Application Submittal Instructions
<ul style="list-style-type: none"> <li>■ If submitting via US post, include a check in the correct fee amount made payable to the “<b>State of Vermont,</b>” and a CD for applications that contain large files (1 MB or greater).  <div style="margin-left: 40px;"> <b>Mail to:</b> Vermont Wetlands Program                      Watershed Management Division                      One National Life Drive, Main 2                      Montpelier, VT 05620-3522                 </div> </li>   <li>■ Applications can also be submitted via email to the following address: <a href="mailto:anr.wsmdwetlands@state.vt.us">anr.wsmdwetlands@state.vt.us</a> <ul style="list-style-type: none"> <li>■ If submitting via email, please mail a check in the correct fee amount, made payable to the “<b>State of Vermont,</b>” and a copy of the Vermont Wetlands Program Application Database Form (this page) to the address provided above. <b><i>It is not necessary to mail in a copy of the complete application.</i></b></li> </ul> </li> </ul>

<b>Applicant Name:</b>	<b>Application Preparer Name:</b>
<b>Town where project is located:</b>	<b>County:</b>
<b>Span#:</b>	<b>Vermont Wetlands Project (VWP)# if Known:</b>
<b>Project Location Description:</b> <i>911 street address or direction from nearest intersection</i>	
<b>Brief Project Summary:</b>	
<b>Application Type:</b> <input type="checkbox"/> Individual Permit (multiple wetlands) <input type="checkbox"/> After the Fact Permit <input type="checkbox"/> Wetland Determination <input type="checkbox"/> Individual Permit (single wetland) <input type="checkbox"/> General Permit Coverage Authorization <input type="checkbox"/> Permit Amendment: VWP Project # _____	
<b>Existing Land Use Type(s):</b> <i>(Check all that apply)</i> <input type="checkbox"/> Residential (single family) <input type="checkbox"/> Residential (subdivision) <input type="checkbox"/> Undeveloped <input type="checkbox"/> Agriculture <input type="checkbox"/> Transportation <input type="checkbox"/> Forestry <input type="checkbox"/> Parks/Rec/Trail <input type="checkbox"/> Institutional <input type="checkbox"/> Industrial/Commercial	
<b>Proposed Land Use Type(s):</b> <i>(Check all that apply)</i> <input type="checkbox"/> Residential (single family) <input type="checkbox"/> Residential (subdivision) <input type="checkbox"/> Undeveloped <input type="checkbox"/> Agriculture <input type="checkbox"/> Transportation <input type="checkbox"/> Forestry <input type="checkbox"/> Parks/Rec/Trail <input type="checkbox"/> Institutional <input type="checkbox"/> Industrial/Commercial	
<b>Proposed Impact Type(s):</b> <i>(Check all that apply)</i> <input type="checkbox"/> Buildings <input type="checkbox"/> Utilities <input type="checkbox"/> Parking <input type="checkbox"/> Septic/Well <input type="checkbox"/> Stormwater <input type="checkbox"/> Driveway <input type="checkbox"/> Park/Path <input type="checkbox"/> Agriculture <input type="checkbox"/> Pond <input type="checkbox"/> Lawn <input type="checkbox"/> Dry Hydrant <input type="checkbox"/> Beaver Dam Alteration <input type="checkbox"/> Silviculture <input type="checkbox"/> Road <input type="checkbox"/> Aesthetics <input type="checkbox"/> No Impact <input type="checkbox"/> Other: _____	
<b>Wetland and Buffer Impact Type:</b> <i>(Check all that apply)</i> <input type="checkbox"/> Dredge <input type="checkbox"/> Drain <input type="checkbox"/> Cut Vegetation <input type="checkbox"/> Stormwater <input type="checkbox"/> Trench/Fill <input type="checkbox"/> Other: _____	
<b>Wetland Delineation Date(s):</b>	

Wetland Improvements	Buffer Zone Improvements	Reason for Improvements
Restoration: s.f.	Restoration: s.f.	<input type="checkbox"/> Correction of Violation <input type="checkbox"/> To offset permit impacts <input type="checkbox"/> Voluntary
Creation: s.f.	Creation: s.f.	
Enhancement: s.f.	Enhancement: s.f.	
Conservation: s.f.	Conservation: s.f.	

Wetland Impact Fee Calculations: <i>Round to the nearest square foot. Fees will auto-calculate.</i>			
Total Wetland Impact <i>(minus linear clear, including ATF)</i>	square feet (s.f.)	Wetland Impact Fee: (\$0.75/sf)	\$
Total Wetland Clearing <i>(qualified linear projects only)</i>	square feet (s.f.)	Wetland Clearing Fee: (\$0.25/sf)	\$
After The Fact Wetland Impact <i>(to correct a violation)</i>	square feet (s.f.)	After the Fact Wetland Fee: (0.75/sf) <i>(Required for after the fact permit applications)</i>	\$
Total Buffer Zone Impacts and Calculations: <i>Round to the nearest square foot</i>			
Total Buffer Zone Impact	square feet (s.f.)	Buffer Impact Fee: (\$0.25/sf)	\$

Additional Fees	
	Agricultural Crop Conversion <i>Check here:</i> <i>(Flat fee of \$200.00)</i> \$
	Minimum Application Fee: (\$50.00) <i>Required when total impact fee is less than \$50.00</i> \$
	Administrative Fee: \$

<b>Make Checks Payable to: State of Vermont</b>	<b>Total Check Amount:</b>	\$
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**Vermont Individual Wetland  
Permit Application and  
Determination Petition**  
Under Sections 8 and 9  
of the Vermont Wetland Rules



<b>Applicant Information:</b> <i>If the applicant is someone other than the landowner, the landowner information must be included below</i>			
Applicant Name: _____			
Address: _____	City/Town: _____	State: _____	Zip: _____
Phone Number: _____	Email Address: _____		
<b>Applicant Certification:</b> By signing this application you are certifying that all of the information contained within is true, accurate, and complete to the best of your knowledge. Original signature is required.			
Applicant Signature: _____		Date: _____	

<b>Landowner Information:</b> <i>Landowner must sign the application. If landowner is different from the applicant this section must be filled out</i>			
<input type="checkbox"/> <b>Check this box if landowner is the same as the applicant</b>			
Landowner Name: _____			
Address: _____	City/Town: _____	State: _____	Zip: _____
Phone Number: _____	Email Address: _____		
Landowner Easement: <i>Attach copies of any easements, agreements, or other documents conveying permission, and agreement with the landowner stating who will be responsible for meeting the terms and conditions of the permit. List the attachment for this information in this section. Describe the nature of the agreement or easement in the space provided below:</i>			
<b>Landowner Certification:</b> By signing this application you are certifying that all the information contained within is true, accurate, and complete to the best of your knowledge. Original signature is required.			
Landowner Signature: _____		Date: _____	

<b>Application Preparer Information:</b> <i>Consultant, engineer, or other representative that is responsible for filling out the application, if other than the applicant or landowner.</i>			
Application Preparer Name: _____		Organization/Company: _____	
Address: _____	City/Town: _____	State: _____	Zip: _____
Phone Number: _____	Email Address: _____		
<b>Application Preparer Certification:</b> By signing this application you are certifying that all of the information contained within is true, accurate, and complete to the best of your knowledge. Original signature is required.			
Application Preparer Signature: _____		Date: _____	

*Handwritten signatures are also accepted*

**Vermont Individual Wetland  
Permit Application and  
Determination Petition**  
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of the Vermont Wetland Rules



VERMONT DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION  
**WATERSHED  
MANAGEMENT DIVISION**  
WETLANDS PROGRAM

<b>Applicant Information:</b> <i>If the applicant is someone other than the landowner, the landowner information must be included below</i>			
Applicant Name: Beanstalk Vacation Rentals, LLC C/O Glenn Bean			
Address: 5 Eagle Way	City/Town: Londonderry	State: NH	Zip: 03053
Phone Number: 617-699-0980	Email Address: glennbean@comcast.net		
<b>Applicant Certification:</b> By signing this application you are certifying that all of the information contained within is true, accurate, and complete to the best of your knowledge. Original signature is required.			
Applicant Signature: <u><i>Glenn Bean</i></u>			Date: <u>5/31/2016</u>

<b>Landowner Information:</b> <i>Landowner must sign the application. If landowner is different from the applicant this section must be filled out</i>			
<input type="checkbox"/> Check this box if landowner is the same as the applicant			
Landowner Name: Beanstalk Vacation Rentals, LLC			
Address: PO Box 387	City/Town: East Burke	State: VT	Zip: 05832
Phone Number: 617-699-0980	Email Address: glennbean@comcast.net		
Landowner Easement: <i>Attach copies of any easements, agreements, or other documents conveying permission, and agreement with the landowner stating who will be responsible for meeting the terms and conditions of the permit. List the attachment for this information in this section. Describe the nature of the agreement or easement in the space provided below:</i>			
<b>Landowner Certification:</b> By signing this application you are certifying that all the information contained within is true, accurate, and complete to the best of your knowledge. Original signature is required.			
Landowner Signature: <u><i>Glenn Bean</i></u>			Date: <u>5/31/2016</u>

<b>Application Preparer Information:</b> <i>Consultant, engineer, or other representative that is responsible for filling out the application, if other than the applicant or landowner.</i>			
Application Preparer Name: Nathan P. Sicard, P.E.		Organization/Company: Ruaqles Engineering Services, Inc.	
Address: 5480 Memorial Drive	City/Town: St. Johnsbury	State: VT	Zip: 05819
Phone Number: 802-748-5898	Email Address: nate.res@myfairpoint.net		
<b>Application Preparer Certification:</b> By signing this application you are certifying that all of the information contained within is true, accurate, and complete to the best of your knowledge. Original signature is required.			
Application Preparer Signature: <u><i>Nathan Sicard</i></u>		Digitally signed by Nathan Sicard Date: 2016.05.31 09:08:56 -04'00'	Date: _____

*Handwritten signatures are also accepted*

<p><b>1. Location of wetland and project:</b>  <i>Location description should include the road the wetland is located on, the compass direction of the wetland in relation to the road, 911 street address if available, and any other distinguishing features.</i></p>

<p><b>2. Site visit date(s) and attendees:</b>  <i>A site visit is <b>required</b> before the application can be called complete</i></p>	
<p><b>2.1 Date of Visit(s) with State District Wetland Ecologist</b></p>	<p><b>2.2. List of people present for site visit(s) including Ecologist, landowner, and representatives.</b></p>

<p><b>3. Wetland Classification:</b>  <i>For multiple wetlands fill out the multiple wetlands table for sections 1 and 3 through 1</i></p>
<p><b>3.1. The wetland is a Class II wetland because :</b></p>
<p><b>3.2. Section 4.6 Presumption</b>  <i>If the wetland meets the Section 4.6 Presumption, it does so primarily because:</i></p>

<p><b>4. Description of the Entire Wetland:</b>  <i>Answer the following questions regarding the entire wetland, which includes all wetland areas connected to the wetland proposed for impact. Answers may be estimates based on desktop review when the wetland extends past the investigation area (parcel boundary). Specific questions about the wetland in the project area will follow. For multiple wetlands , fill out the multiple wetlands table.</i></p>
<p><b>4.1. Size of Complex in Acres:</b>  <i>The size of the complex can be obtained from the Wetland Inventory Map for mapped wetlands, or best estimation based on review of aerial photography or site visit. This is not the size of the of the delineated wetland on the subject property unless the entirety of the wetland is represented in the delineation.</i></p>
<p><b>4.2. Vegetation Cover Types Present:</b>  <i>List all wetland types in the wetland or wetland complex and their percent cover.  <b>For example:</b> 50 acres of softwood forested swamp; or 30% scrub swamp, 70% emergent wetland</i></p>
<p><b>4.3. Landscape Position:</b>  <i>Where is the wetland located on the landscape?  <b>For example:</b> Bottom of a basin, edge of a stream, shore of a lake, etc.</i></p>
<p><b>4.4. Hydrology:</b>  <i>Describe the main source of water for the entire wetland. List any river, stream, lakes, or ponds</i></p>
<p><b>4.4.1. Direction of Flow:</b>  <i><b>For example:</b> Stream flows from north to south through the wetland complex, or the wetland drains generally to the southwest.</i></p>
<p><b>4.4.2. Influence of Hydrology on the Entire Wetland:</b>  <i><b>For example:</b> The river provides floodwater to the wetland in the spring.</i></p>
<p><b>4.4.3. Relation of Entire Wetland to the Project Area:</b>  <i>The distance between the project area and any nearby surface waters</i></p>

<p><b>4.4.4. Entire Wetland Hydroperiod:</b>  <i>Discuss the frequency and duration of flooding, ponding, and/or soil saturation</i></p>
<p><b>4.5. Surrounding Landuse of the Entire Wetland:</b>  <i>For example: Rural residential and forested; Agricultural and undeveloped</i></p>
<p><b>4.6. Relation of the Entire Wetland to Other Nearby Wetlands:</b>  <i>Provide any information on wetlands or wetland complexes that are close enough to contribute to the overall function of the wetland in question.</i></p>
<p><b>4.7. Pre-project Cumulative Impacts to the Entire Wetland:</b>  <i>Identify any cumulative ongoing impacts outside of the proposed project that may influence the wetland. <b>Examples include but are not limited to:</b> Wetland encroachments on and off the subject property, land use management in or surrounding the wetland, or development that influences hydrology or water quality. List any past Vermont Wetland Permits or CUD's related to this property.</i></p>
<p><b>5. Description of Subject Wetland and Buffer:</b>  <i>Subject wetland is defined as the area of wetland in the project vicinity, but not limited to the portion of the wetland to be directly impacted by the project. For the purposes of this application, the subject wetland should encompass any portion of the wetland that could either be directly or indirectly impacted by the project, as defined by chemical, physical, or biological characteristics. This may include the entire wetland area, or wetland area off property. For multiple wetlands, fill out the multiple wetlands table.</i></p>
<p><b>5.1. Context of Subject Wetland:</b>  <i>Describe where the subject wetland is in the context of the entire wetland described in section 4 above. <b>For example:</b> Upslope, narrow eastern "finger", 400 ft. from open water portion.</i></p>
<p><b>5.2. Subject Wetland Land Use:</b>  <i><b>For example:</b> Mowed lawn, old field, naturally vegetated. Describe any previous and ongoing disturbance in the subject wetland.</i></p>
<p><b>5.3. Subject Wetland Vegetation:</b>  <i>List dominant wetland vegetation cover type and associated dominant plant species.</i></p>
<p><b>5.4. Subject Wetland Soils:</b>  <i>Use the USDA NRCS information where possible and use the ACOE Delineation Manual soil description</i></p>
<p><b>5.5. Subject Wetland Hydrology:</b>  <i>Use the description from the ACOE Delineation Manual</i></p>

<b>5.6. Buffer Zone:</b> <i>Describe the buffer zone of the subject wetland (50 foot envelope of land adjacent to wetland boundary).</i>
<b>5.6.1. Buffer Land Use:</b> <i><b>For example:</b> Mowed shoulder, forested, old field, paved road, and residential lawns, etc.                  Describe any previous and ongoing disturbance in the buffer zone.</i>
<b>5.6.2. Buffer Vegetation:</b> <i>List the vegetation cover type and dominant plant species.</i>
<b>5.6.3. Buffer Soils:</b> <i>Use USDA NRCS information where possible, and the ACOE Delineation Manual soil description.</i>

<b>6. Entire Wetland Function and Value Summary (as defined in the Vermont Wetland Rules Section 5):</b> <i>Check which functions are present in the entire wetland</i>	
<input type="checkbox"/> Flood/Storm Storage	<input type="checkbox"/> RTE Species
<input type="checkbox"/> Surface & Groundwater Protection	<input type="checkbox"/> Education & Research
<input type="checkbox"/> Fish Habitat	<input type="checkbox"/> Recreation/Economic
<input type="checkbox"/> Wildlife Habitat	<input type="checkbox"/> Open Space/Aesthetics
<input type="checkbox"/> Exemplary Natural Community	<input type="checkbox"/> Erosion Control

<p><b>Functions and Values:</b> <i>For each function and value:</i></p> <ol style="list-style-type: none"> <li>1. <i>Evaluate the entire wetland and check all that apply. Use Wetland Inventory Maps for offsite areas</i></li> <li>2. <i>Evaluate how the wetland in the project area contributes to the function.</i></li> <li>3. <i>Explain how the project will not result in adverse impacts to the function.</i></li> </ol> <p><i>Include any information on specific avoidance and minimization measures.</i></p> <p><i>If more than one wetland complex is involved, provide a function and value checklist for each wetland complex. In addition fill out the Multiple Wetlands Table.</i></p>
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<b>7. Water Storage for Flood Water and Storm Runoff</b>
<p><input type="checkbox"/> Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Constricted outlet or no outlet and an unconstructed inlet.</li> <li><input type="checkbox"/> Physical space for floodwater expansion and dense, persistent, emergent vegetation or dense woody vegetation that slows down flood waters or stormwater runoff during peak flows and facilitates water removal by evaporation and transpiration.</li> <li><input type="checkbox"/> If a stream is present, it's course is sinuous and there is sufficient woody vegetation to intercept surface flows in the portion of the wetland that floods.</li> <li><input type="checkbox"/> Physical evidence of seasonal flooding or ponding such as water stained leaves, water marks on trees, drift rows, debris deposits, or standing water.</li> <li><input type="checkbox"/> Hydrologic or hydraulic study indicates wetland attenuates flooding</li> </ul> <p><b>If any of the above boxes are checked, the wetland provides this function. Complete the following to determine if the wetland provides this function above or below a moderate level. If none of the following apply, the wetland provides this function at a moderate level.</b></p>

**Water Storage for Flood Water and Storm Runoff Continued...**

Check this box if any of the following conditions apply that may indicate the wetland provides this function at a **lower** level.

- Significant flood storage capacity upstream of the wetland, and the wetland in question provides this function at a negligible level in comparison to upstream storage (unless the upstream storage is temporary such as a beaver impoundment).
- Wetland is contiguous to a major lake or pond that provides storage benefits independently of the wetland.
- Wetland's storage capacity is created primarily by recent beaver dams or other temporary structures.
- Wetland is very small in size, not contiguous to a stream, and not part of a collection of small wetlands in the landscape that provide this function cumulatively.

Check this box if any of the following conditions apply that may indicate the wetland provides this function at a **higher** level.

- History of downstream flood damage to public or private property.
- Any of the following conditions present downstream of the wetland, but upstream of a major lake or pond, could be impacted by loss or reduction of the water storage function.
  - Developed public or private property
  - Stream banks susceptible to scouring and erosion
  - Important habitat for aquatic life
- The wetland is large in size and naturally vegetated.
- Any of the following conditions present downstream of the wetland, but upstream of a major lake or pond, could be impacted by a loss or reduction of the water storage function.
  - Developed public or private property.
  - Stream banks susceptible to scouring and erosion.
  - Important habitat for aquatic life.
- The wetland is large in size and naturally vegetated
- Any of the following conditions present upstream of the wetland may indicate a large volume of runoff may reach the wetland.
  - A large amount of impervious surface in urbanized areas.
  - Relatively impervious soils.
  - Steep slopes in the adjacent areas.

**7.1 Subject Wetland Contribution to Water Storage:**

*Explain how the subject wetland contributes to the function listed above*

**7.2 Statement of No Undue Adverse Impact to Water Storage for Flood Water and Storm Runoff:**

*Explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance, minimization, and compensation measures relevant to this function.*

**8. Surface and Ground Water Protection:**

- Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.
- Constricted or no outlets.
  - Low water velocity through dense, persistent vegetation.
  - Hydroperiod permanently flooded or saturated.
  - Wetlands in depositional environments with persistent vegetation wider than 20 feet.
  - Wetlands with persistent vegetation comprising a defined delta, island, bar or peninsula.
  - Presence of seeps or springs.
  - Wetland contains a high amount of microtopography that helps slow and filter surface water.
  - Position in the landscape indicates the wetland is a headwaters area.
  - Wetland is adjacent to surface waters.
  - Wetland recharges a drinking water source.
  - Water sampling indicates removal of pollutants or nutrients.
  - Water sampling indicates retention of sediments or organic matter.
  - Fine mineral soils and alkalinity not low.
  - The wetland provides an obvious filter between surface water or ground water and land uses that may contribute point or nonpoint sources of sediments, toxic substances or nutrients to the wetland, such as: steep erodible slopes; row crops; dumps; areas of pesticide, herbicide or fertilizer application; feed lots; parking lots or heavily traveled road; and septic systems.

**If any of the above boxes are checked, the wetland provides this function. Complete the following to determine if the wetland provides this function above or below a moderate level. If none of the following apply, the wetland provides this function at a moderate level.**

- Check this box if any of the following conditions apply that may indicate the wetland provides function at a **lower** level.
- Presence of dead forest or shrub areas in sufficient amounts to result in diminished nutrient uptake.
  - Presence of ditches or channels that confine water and restrict contact of water with vegetation.
  - Wetland is very small in size, not contiguous to a stream, and not part of a collection of small wetlands in the landscape that provide this function cumulatively.
  - Current use in the wetland results in disturbance that compromises this function.
- Check this box if any of the following conditions apply that may indicate the wetland provides function at a **higher** level.
- The wetland is adjacent to a well head or source protection area, and provides ground water recharge.
  - The wetland provides flows to Class A surface water. (Check ANR Atlas)
  - The wetland contributes to the protection or improvement of water quality of any impaired waters.
  - The wetland is large in size and naturally vegetated.

**8.1. Subject Wetland Contribution to Water Protection:**

*Explain how the subject wetland contributes to the function listed above.*

**8.2. Statement of No Undue Adverse Impact to Surface and Ground Water Protection:**

*Explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance, minimization, or compensation measures relevant to this function.*

**9. Fish Habitat:**

- Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.
  - Contains woody vegetation that overhangs the banks of a stream or river and provides any of the following: shading that controls summer water temperature; cover including refuges created by overhanging branches or undercut banks; source of terrestrial insects as fish food; or streambank stability.
  - Provides spawning, nursery, feeding or cover habitat for fish (documented or professionally judged). Common habitat includes deep marsh and shallow marsh associates with lakes and streams, and seasonally flooded wetlands associated with streams and rivers.
  - Documented or professionally judged spawning habitat for northern pike.
  - Provides cold spring discharge that lowers the temperature of receiving waters and creates summer habitat for salmonoid species.
  - The wetland is located along a tributary that does not support fish, but contributes to a larger body of water that does support fish. The tributary supports downstream fish by providing cooler water and food sources.

**9.1. Subject Wetland Contribution to Fish Habitat:**

*Explain how the subject wetland contributes to the function listed above.*

**9.2. Statement of No Undue Adverse Impact to Fish Habitat:**

*Explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance, minimization, or compensation measures relevant to this function.*

**10. Wildlife Habitat**

- Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.
- Provides resting, feeding staging or roosting habitat to support waterfowl migration, and feeding habitat for wading birds. Good habitats for these species include open water wetlands.
  - Habitat to support one or more breeding pairs or broods of waterfowl including all species of ducks, geese, and swans. Good habitats for these species include open water habitats adjacent shallow marsh, deep marsh, shrub wetland, forested wetland, or naturally vegetated buffer zone.
  - Provides a nest site, a buffer for a nest site or feeding habitat for wading birds including but not limited to: great blue heron, black-crowned night heron, green-backed heron, cattle egret, or snowy egret. Good habitats for these species include open water or deep marsh adjacent to forested wetlands, or standing dead trees.
  - Supports or has the habitat to support one or more breeding pairs of any migratory bird that requires wetland habitat for breeding, nesting, rearing of young, feeding, staging roosting, or migration, including: Virginia rail, common snipe, marsh wren, American bittern, northern water thrush, northern harrier, spruce grouse, Cerulean warbler, and common loon.
  - Supports winter habitat for white-tailed deer. Good habitats for this species include softwood swamps. Evidence of use includes browsing, bark stripping, worn trails, or pellet piles.
  - Provides important feeding habitat for black bear, bobcat, or moose based on an assessment of use. Good habitat for these types of species includes wetlands located in a forested mosaic.
  - Has the habitat to support muskrat, otter, or mink. Good habitats for these species include deep marshes, wetlands adjacent to bodies of water including lakes, ponds, rivers, and streams.
  - Supports an active beaver dam, one or more lodges, or evidence of use in two or more consecutive years by an adult beaver population.
  - Provides the following habitats that support the reproduction of uncommon Vermont amphibian species including:
    - Wood frog, Jefferson salamander, blue-spotted salamander, or spotted salamander. Breeding habitat for these species includes vernal pools and small ponds.
    - Northern dusky salamander and the spring salamander. Habitat for these species includes headwater seeps, springs, and streams.
    - The four-toed salamander, Fowler's toad, western or boreal chorus frog, or other amphibians, found in Vermont of similar significance.
  - Supports or has the habitat to support populations of Vermont amphibian species including, but not limited to, pickerel frog, northern leopard frog, mink frog, and others found in Vermont of similar significance. Good habitat for these types of species include large marsh systems with open water components.
  - Supports or has the habitat to support populations of uncommon Vermont reptile species including: wood turtle, northern map turtle, eastern musk turtle, spotted turtle, spiny softshell, eastern ribbonsnake, northern watersnake, and others found in Vermont of similar significance.
  - Supports or has the habitat to support significant populations of Vermont reptile species, including smooth greensnake, DeKay's brownsnake, or other more common wetland-associated species.
  - Meets four or more of the following conditions indicative of wildlife habitat diversity:
    - Three or more wetland vegetation classes (greater than 1/2 acre) present including but not

**Wildlife Habitat Continued...**

limited to: open water contiguous to, but not necessarily part of, the wetland, deep marsh, shallow marsh, shrub swamp, forested swamp, fen, or bog.

- The dominant vegetation class is one of the following types: deep marsh, shallow marsh, shrub swamp or, forested swamp.
- Located adjacent to a lake, pond, river or stream.
- Fifty percent or more of surrounding habitat type is one or more of the following: forest, agricultural land, old field or open land.
- Emergent or woody vegetation occupies 26 to 75 percent of wetland, the rest is open water.
- One of the following:
  - Hydrologically connected to other wetlands of different dominant classes or open water within 1 mile.
  - Hydrologically connected to other wetlands of same dominant class within 1/2 mile.
  - Within 1/4 mile of other wetlands of different dominant classes or open water, but not hydrologically connected.

Wetland or wetland complex is owned in whole or in part by state or federal government and managed for wildlife and habitat conservation.

Contains evidence that it is used by wetland dependent wildlife species

**If any of the above boxes are checked, the wetland provides this function. Complete the following to determine if the wetland provides this function above or below a moderate level. If none of the following apply, the wetland provides this function at a moderate level.**

Check box if any of the following conditions apply that may indicate the wetland provides this function at a **lower** level.

The wetland is small in size for its type and does not represent fugitive habitat in developed areas (vernal pools and seeps are generally small in size, so this does not apply).

The surrounding land use is densely developed enough to limit use by wildlife species (with the exception of wetlands with open water habitat). Can be negated by evidence of use.

The current use in the wetland results in frequent cutting, mowing or other disturbance.

The wetland hydrology and character is at a drier end of the scale and does not support wetland dependent species.

Check box if any of the following conditions apply that may indicate the wetland provides this function at a **higher** level.

The wetland is large in size and high in quality.

The habitat has the potential to support several species based on the assessment above.

Wetland is associated with an important wildlife corridor.

The wetland has been identified as a locally important wildlife habitat by an ANR Wildlife Biologist.

**10.1. Subject Wetland Contribution to Wildlife Habitat Functions:**

*Explain how the subject wetland contributes to the function listed above.*

**10.2. Statement of No Undue Adverse Impact to Wildlife Habitat:**

*Explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance, minimization, or compensation measures relevant to this function.*

**11. Exemplary Wetland Natural Community**

Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.

Wetlands that are identified as high quality examples of Vermont's natural community types recognized by the Natural Heritage Information Project of the Vermont Fish and Wildlife Department, including rare types such as dwarf shrub bogs, rich fens, alpine peatlands, red maple-black gum swamps and the more common types including deep bulrush marshes, cattail marshes, northern white cedar swamps, spruce-fir-tamarack swamps, and red maple-black ash seepage swamps are automatically significant for this function

**The wetland is also likely to be significant if any of the following conditions are met:**

Is an example of a wetland natural community type that has been identified and mapped by, or meets the ranking and mapping standards of, the Natural Heritage Information Project of the Vermont Fish and Wildlife Department.

Contains ecological features that contribute to Vermont's natural heritage, including, but not limited to:

- Deep peat accumulation reflecting a long history of wetland formation;
- Forested wetlands displaying very old trees and other old growth characteristics;
- A wetland natural community that is at the edge of the normal range for that type;
- A wetland mosaic containing examples of several to many wetland community types; or
- A large wetland complex containing examples of several wetland community types.

**List species or communities of concern:**

**11.1. Subject Wetland Proximity to Exemplary Natural Communities**

**11.2. Statement of No Undue Adverse Impact to Exemplary Wetland Natural Community:**

*Explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance, minimization, or compensation measures relevant to this function.*

**12. Rare, Threatened, and Endangered Species Habitat:**

Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.

Wetlands that contain one or more species on the federal or state threatened or endangered lists, as well as species that are rare in Vermont, are automatically significant for this function.

**The wetland is also likely to be significant if any of the following apply:**

There is credible documentation that the wetland provides important habitat for any species on the federal or state threatened or endangered species lists;

There is credible documentation that threatened or endangered species have been present in past 10 years;

There is credible documentation that the wetland provides important habitat for any species listed as rare in Vermont (S1 or S2 ranks), state historic (SH rank), or rare to uncommon globally (G1, G2, or G3 ranks) by the Natural Heritage Information Project of the Vermont Fish and Wildlife Department;

There is credible documentation that the wetland provides habitat for multiple uncommon species of plants or animals (S3 rank).

**List name of species and ranking:**

**12.1. Subject Wetland Contribution to RTE Habitat:**

*Explain how the subject wetland contributes to the function listed above.*

**12.2 Statement of No Undue Adverse Impact to Rare, Threatened, or Endangered Species Habitat:**

*Explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance, minimization, or compensation measures relevant to this function.*

**13. Education and Research in Natural Sciences:**

- Function is present and likely to be significant: Any of the following characteristics indicate the wetland provides this function.
  - Owned by or leased to a public entity dedicated to education or research.
  - History of use for education or research.
  - Has one or more characteristics making it valuable for education or research.

**13.1. Subject Wetland Education and Research Potential:**

*Explain how the subject wetland contributes to the function listed above.*

**13.2 Statement of No Undue Adverse Impact to Education and Research in Natural Sciences:**

*Explain how the proposed project will not result in any undue, adverse impact to this value. Include any avoidance, minimization, or compensation measures relevant to this value.*

**14. Recreational Value and Economic Benefits:**

- Function is present and likely to be significant: Any of the following characteristics indicate the wetland provides this function.
  - Used for, or contributes to, recreational activities.
  - Provides economic benefits.
  - Provides important habitat for fish or wildlife which can be fished, hunted or trapped under applicable state law.
  - Used for harvesting of wild foods.

**Comments:**

**14.1. Subject Wetland Recreational and Economic Value:**

*Explain how the subject wetland contributes to the value listed above.*

**14.2. Statement of No Undue Adverse Impact to Recreational Value and Economic Benefits:**

*Explain how the proposed project will not result in any undue, adverse impact to this value. Include any avoidance, minimization, or compensation measures relevant to this value.*

**15. Open Space and Aesthetics:**

Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.

- Can be readily observed by the public; and
  - Possesses special or unique aesthetic qualities; or
  - Has prominence as a distinct feature in the surrounding landscape;
- Has been identified as important open space in a municipal, regional or state plan.

**Comments:**

**15.1. Subject Wetland Aesthetic Value:**

*Explain how the subject wetland contributes to the value listed above.*

**15.2. Statement of No Undue Adverse Impact to Open Space and Aesthetics:**

*Explain how the proposed project will not result in any undue, adverse impact to this value. Include any avoidance, minimization, or compensation measures relevant to this value.*

**16. Erosion Control Through Binding and Stabilizing**

Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.

- Erosive forces such as wave or current energy are present and any of the following are present as well:
  - Dense, persistent vegetation along a shoreline or stream bank that reduces an adjacent erosive force.
  - Good interspersion of persistent emergent vegetation and water along course of water flow.
  - Studies show that wetlands of similar size, vegetation type, and hydrology are important for erosion control.

**What type of erosive forces are present?**

- Lake fetch and waves
- High current velocities:
- Water level influenced by upstream impoundment

**Erosion Control Through Binding and Stabilization Continued...**

**If any of the above boxes are checked, the wetland provides this function. Complete the following to determine if the wetland provides this function above or below a moderate level. If none of the following apply, the wetland provides this function at a moderate level.**

- Check box if any of the following conditions apply that may indicate the wetland provides this function at a **lower** level.
  - The stream is artificially channelized and/or lacks vegetation that contributes to controlling the erosive force.
- Check box if any of the following conditions apply that may indicate the wetland provides this function at a **higher** level.
  - The stream contains high sinuosity.
  - Has been identified through fluvial geomorphic assessment to be important in maintaining the natural condition of the stream or river corridor.

**16.1. Subject Wetland Contribution to Erosion Control:**

*Explain how the subject wetland contributes to the function listed above.*

**16.2. Statement of No Undue Adverse Impact to Erosion Control:**

*Explain how the proposed project will not result in any undue, adverse impact to this function. include any avoidance, minimization, or compensation measures relevant to this function.*

**17. Project Description:**

**17.1. Overall Project Purpose:**

*Description of the basic project and why it is needed. Partial projects with no clear purpose will not be accepted.*

**For example:** six-lot residential subdivision; expansion of an existing commercial building, building a single family residence.

**17.2. Description of Project Component Impacting Wetland or Buffer:**

*Explain in general terms which portions of the project will impact wetlands or buffer zones.*

**For example:** Cross the wetland with a driveway to construct a residential subdivision, upgrade existing road through buffer to improve access, extend a trail system.

<p><b>17.3. Acreage of Parcel(s) or Easements(s):</b>  <i>Acreage of subject property.</i></p>
<p><b>17.4. Acreage of Project Area:</b>  <i>Acreage of area involved in the project.</i></p>

<p><b>18. Project Details:</b>  <i>Provide details regarding specific impacts to the wetland and buffer zone.</i></p> <p><b><i>For multiple wetlands fill out the multiple wetland table.</i></b></p>
---

<p><b>18.1. Specific Impacts to Wetland and Buffer Zone Dimensions:</b>  <i>List portions of the project that will specifically impact the wetland or buffer zone and their dimensions.</i>  <b><i>For example:</i></b> <i>driveway crossing with 16' wide fill; installation of buried sewer force main with 5' trench including fill footprint; addition of Stormwater outfall which directs flow to northern portion of wetland</i></p>
--

<p><b>18.2. Bridges and Culverts:</b>  <i>Culvert circumference, length, placement and shapes, or bridge details. List any stream alteration permits that are required or obtained where perennial streams or rivers are involved.</i></p>
--

<p><b>18.3. Construction Sequence:</b>  <i>Describe any details pertaining to the work planned in the wetland and buffer in terms of sequence or phasing that is relevant. Describe the construction limits of disturbance, how those will be marked, and check to ensure these are shown on the site plans as well.</i></p>
--

<p><b>18.4. Stormwater Design**</b>  <i>List any stormwater permits obtained or applied for. Describe stormwater and/or erosion controls proposed. <b>** Erosion prevention is <u>required</u> in order to prevent sediment from entering the wetland.</b></i></p>
--

<p><b>18.5. Permanent Demarcation of Limit of Impacts**</b>  <i>Describe any boulders, fencing, signage, or other memorialization that provides permanent on-the-ground boundaries for the limits of disturbance for ongoing uses. <b>**Permanent demarcations are <u>required</u> for projects with ongoing activities in or near wetlands or buffer zones such as houses, yards, woody clearing or parking areas, and needs to be depicted on the site plans.</b></i></p>
---

<p><b>18.5. Permanent Demarcation of Limit of Impacts**</b>  <i>Describe any boulders, fencing, signage, or other memorialization that provides permanent on-the-ground boundaries for the limits of disturbance for ongoing uses. <b>**Permanent demarcations are <u>required</u> for projects with ongoing activities in or near wetlands or buffer zones such as houses, yards, woody clearing or parking areas, and needs to be depicted on the site plans.</b></i></p>
---

**19. Wetland and Buffer Zone Impacts:**

*For multiple wetlands provide narrative overview for each section below, and fill out the Multiple Wetland Tables*

**19.1. Wetland Impacts:**

*Summarize the square footage of impact in the appropriate category. Add After-the-Fact impacts here too. **Round to the nearest square foot***

Permanent Wetland Fill	s.f.
Temporary Wetland Impact	s.f.
Other Permanent Wetland Impact <i><b>(this number includes clearing of woody vegetation, dredging, and does not include fill)</b></i>	s.f.
Total Wetland Impact:	s.f.

*Describe in detail the proposed impact to wetlands*

**For example:** Fill for road crossing, temporary impacts for trench and fill related to utility installation.

**General narrative required here even for projects with multiple wetlands and impacts**

**19.2. Buffer Zone Impacts:**

*Summarize the square footage of impact in the appropriate category.*

Temporary Buffer Impact	s.f.
Permanent Buffer Impact	s.f.
Total Buffer Impact:	s.f.

*Describe in detail the proposed impact to buffer zones*

**For example:** Addition of fill along roadway embankment extending into buffer zone.

**General narrative required here even for projects with multiple wetlands and impacts.**

**19.3. Cumulative Impacts:**

*List any potential cumulative or ongoing, direct and indirect impacts on the functions of the wetland.*

**For example:** Increased noise from parking lot, vegetation management, inputs from stormwater pond outlet, reduction in flood storage volume from the addition of fill from the project.

**20. Mitigation Sequence:**

*Before you begin, please read all of Section 20 to respond most appropriately to specific questions. Questions specifically related to Section 9.5b of the Vermont Wetland Rules.*

**20.1. Avoidance of Wetland Impacts:**

**20.1.1. Can the activity be located on another site owned or controlled by the applicant, or reasonably available to satisfy the basic project purpose? If not, indicate why. Cite any alternative sites and explain why they were not chosen.**

**20.1.2. Can the proposed activity be practicably located outside the wetland/buffer zone? If not, indicate why. Explain the alternatives you have explored for avoiding the wetland and buffer onsite, And why they are not feasible.**

**20.2. Avoidance to the Impact to Functions and Values:**

**20.2.1. If the proposed activity cannot be practicably located outside the wetland/buffer zone, have all practicable measures been taken to avoid adverse impacts on protected functions?  Yes  No**

**20.2.2. What design alternatives were examined to avoid impacts to wetland function? *For example: Use of matting, relocation of footprint, etc.***

**20.2.3. What steps have been taken to minimize the size and scope of the project to avoid impacts to wetland functions and values? Include information on project size reduction and relocation.**

**20.2.4. Explain how the proposed project represents the least impact alternative design. Explain why other alternatives, which you described above, were not chosen.**

**20.3. Minimization and Restoration:**

**20.3.1. If avoidance of adverse effects on protected functions cannot be practically achieved, has the proposed activity been planned to minimize adverse impacts on the protected function?  Yes  No  N/A**

**20.3.2. What measures will be used during construction and on an ongoing basis to protect the wetland and buffer zone? *For example: Stormwater treatment, signs, fencing, etc.***

**Minimization and Restoration Continued...**

**20.3.3. Has a plan been developed for the prompt restoration of any adverse impacts on protected functions?**  Yes  No  N/A

**Restoration Narrative:**

*For example: Planting along the stream.*

**Quantification of Restoration:**

Wetland Area (sqft)	Buffer Area (sqft)	Functions/Value s Addressed

**20.4. Compensation:**

*Please refer to Section 9.5c of the Vermont Wetland Rules for compensation, which is required when the project will result in net adverse impact to wetland function. Not all functions are presumed to be compensable. **All projects requiring compensation need prior consultation with the Vermont Wetlands Program.***

*If compensation is proposed please include a summary here. Also list any supporting documents you may have attached to the application including In-Lieu-Fee proposal or detailed compensation plan.*

**21. Wetland Determination:**

*If the application involves a wetland determination please answer the following. For multiple wetlands provide narrative overview for each section below, and fill out the Multiple Wetland Tables.*

- Wetland is mapped or contiguous to the Vermont Significant Wetland Inventory Map
- Wetland is not mapped on or contiguous to the Vermont Significant Wetland Inventory Map

**21.1. Reason for Petition:**

*Please choose one from the dropdown menu.*

**21.2. Determination Narrative:**

*Please provide any narrative to support the petition for a wetland determination here, including previous decisions by the Secretary or Water Board.*



**23. Abutting Landowners**

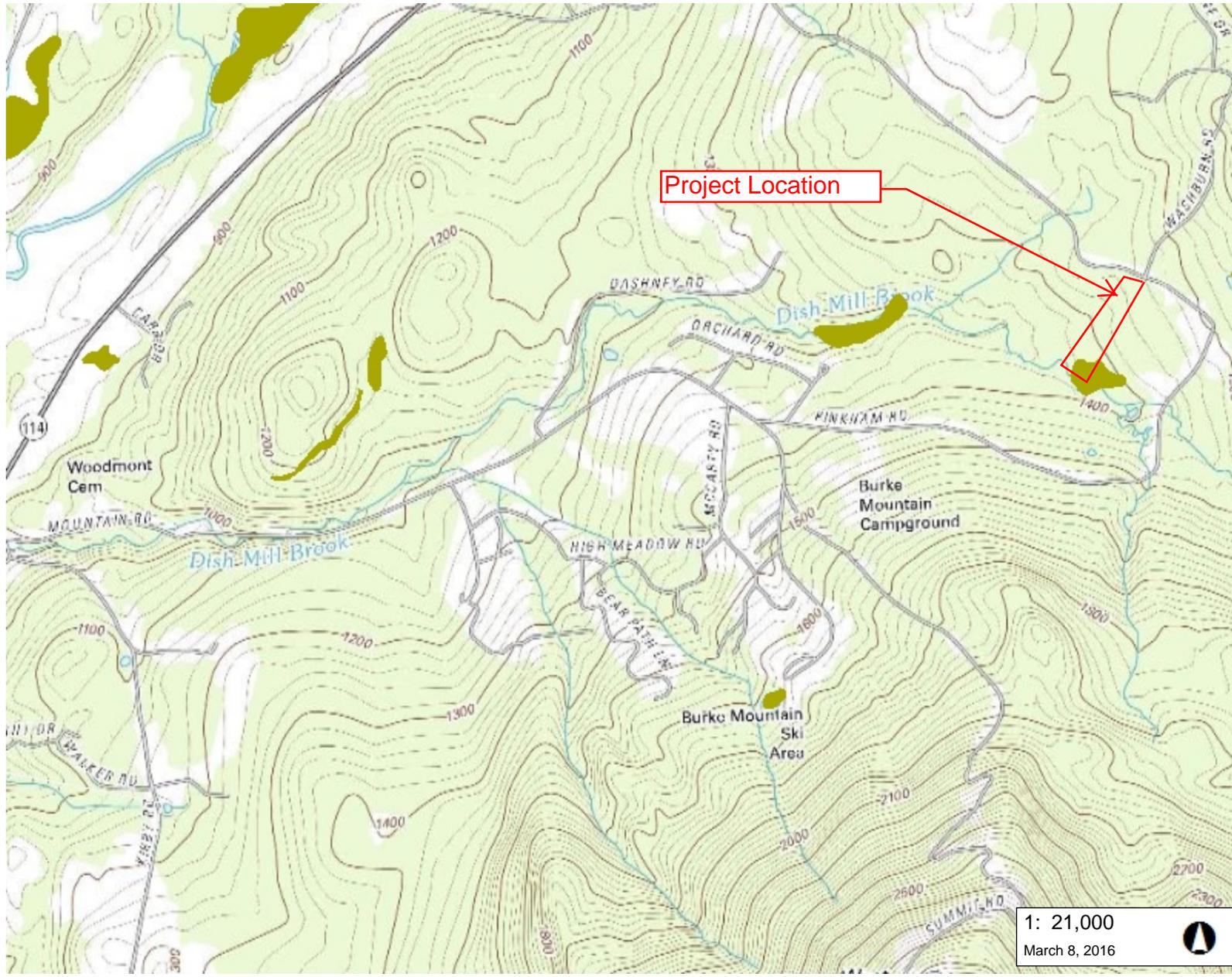
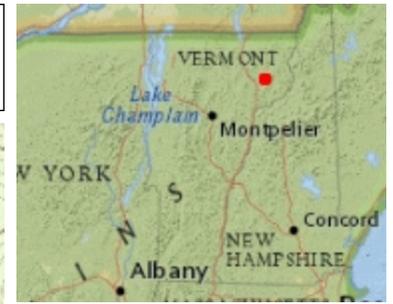
Please provide abutting landowner information so that all persons owning property within, or adjacent to, the affected wetland area of buffer zone can be notified during the public notice period. **Please use additional sheets if necessary.**

**23.1. Abutting Land Owner Information:** Please list as first names first followed by last name

1. Name: Street/Road: City/State/Zip:	16. Name: Street/Road: City/State/Zip:
2. Name: Street/Road: City/State/Zip:	17. Name: Street/Road: City/State/Zip:
3. Name: Street/Road: City/State/Zip:	18. Name: Street/Road: City/State/Zip:
4. Name: Street/Road: City/State/Zip:	19. Name: Street/Road: City/State/Zip:
5. Name: Street/Road: City/State/Zip:	20. Name: Street/Road: City/State/Zip:
6. Name: Street/Road: City/State/Zip:	21. Name: Street/Road: City/State/Zip:
7. Name: Street/Road: City/State/Zip:	22. Name: Street/Road: City/State/Zip:
8. Name: Street/Road: City/State/Zip:	23. Name: Street/Road: City/State/Zip:
9. Name: Street/Road: City/State/Zip:	24. Name: Street/Road: City/State/Zip:
10. Name: Street/Road: City/State/Zip:	25. Name: Street/Road: City/State/Zip:
11. Name: Street/Road: City/State/Zip:	26. Name: Street/Road: City/State/Zip:
12. Name: Street/Road: City/State/Zip:	27. Name: Street/Road: City/State/Zip:
13. Name: Street/Road: City/State/Zip:	28. Name: Street/Road: City/State/Zip:
14. Name: Street/Road: City/State/Zip:	29. Name: Street/Road: City/State/Zip:
15. Name: Street/Road: City/State/Zip:	30. Name: Street/Road: City/State/Zip:

**24. Modified Distribution (Newspaper Notification):** In situations where there is an application within a large wetland or buffer zone that has a large number of landowners, applicants can choose to limit the distribution list with a supplemental newspaper notification. At a minimum the applicant must 1) provide notice to immediate abutters, 2) provide notice to all persons owning property containing the wetland or buffer within 500 ft. of the project area, and 3) shall have the VWP publish notice of the application in a local newspaper generally circulating in the area where the wetland is located. **\*\*The applicant will be billed directly by the newspaper listed. Use of newspaper notification may extend the notice period, depending on when the notice posts in the newspaper\*\***

Name of Newspaper(s)

**LEGEND**

- Wetlands - VSWI
  - Class 1 Wetland
  - Class 2 Wetland
- Town Boundary

1: 21,000  
March 8, 2016

**NOTES**

Map created using ANR's Natural Resources Atlas

3,500.0 0 1,750.00 3,500.0 Feet  
 WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere 1" = 1750 Ft. 1cm = 210 Meters  
 © Vermont Agency of Natural Resources THIS MAP IS NOT TO BE USED FOR NAVIGATION

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: Bearstalk Vacation Rentals, LLC City/County: Burke/Caledonia Sampling Date: 11/25/15  
 Applicant/Owner: Glenn Bean State: VT Sampling Point: T-1-U  
 Investigator(s): Brad Wheeler Section, Township, Range: \_\_\_\_\_

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Convex Slope (%): 5-8%

Subregion (LRR or MLRA): \_\_\_\_\_ Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_

Soil Map Unit Name: Cabat siltloam, 8-15% slopes, very stony NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)

Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_

Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	

Remarks: (Explain alternative procedures here or in a separate report.)

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>None</u>		<b>Secondary Indicators (minimum of two required)</b>
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes _____ No <input checked="" type="checkbox"/>
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Water Table Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> (includes capillary fringe)	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION** – Use scientific names of plants.

Sampling Point: T-1-U

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Balsam Fir - <i>Abies balsamea</i></u>	<u>80</u>	<u>Y</u>	<u>FAC</u>
2. <u>Red Maple - <i>Acer rubrum</i></u>	<u>40</u>	<u>Y</u>	<u>FAC</u>
3. <u>White Spruce - <i>Picea glauca</i></u>	<u>20</u>	<u>Y</u>	<u>FACU</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

Sapling/Shrub Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

Herb Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____

Woody Vine Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)  
 Total Number of Dominant Species Across All Strata: 3 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by:  
 OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_  
 FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_  
 FAC species \_\_\_\_\_ x 3 = \_\_\_\_\_  
 FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  
 UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_  
 Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B)  
 Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**  
 1 - Rapid Test for Hydrophytic Vegetation  
 2 - Dominance Test is >50%  
 3 - Prevalence Index is  $\leq 3.0^1$   
 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes X No \_\_\_\_\_

Remarks: (include photo numbers here or on a separate sheet.)  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SOIL

Sampling Point: T-1-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2"	7.5 YR 2/2						fsl	
2-16"	10YR 3/3						fsl	
16-20+"	5Y 4/3		10YR 5/6	2-20%	C	M	fsl	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): None

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: Beanstalk Vacation Rentals, LLC City/County: Burke/Caledonia Sampling Date: 11/25/15  
 Applicant/Owner: Glenn Bean State: VT Sampling Point: T-1-W  
 Investigator(s): Brad Wheeler Section, Township, Range: \_\_\_\_\_

Landform (hillslope, terrace, etc.): natural drainage Local relief (concave, convex, none): Concave Slope (%): 1-2%

Subregion (LRR or MLRA): \_\_\_\_\_ Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_

Soil Map Unit Name: Cabot silt loam, 0-8% slopes, very stony NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)

Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_

Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of two required)</b>	
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)	
		<input type="checkbox"/> FAC-Neutral Test (D5)	
<b>Field Observations:</b>			
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Water Table Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>2"</u>		
Saturation Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>0"</u>		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION – Use scientific names of plants.

Sampling Point: T-1-W

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Quaking Aspen - Populus tremuloides*</u>	<u>40</u>	<u>X</u>	<u>FACU</u>
2. <u>Red Maple - Acer rubrum</u>	<u>30</u>	<u>X</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Gold Thread - Coptis trifolia</u>	<u>25</u>	<u>X</u>	<u>FACW</u>
2. <u>Cinnamon Fern - Osmunda cinnamomea</u>	<u>40</u>	<u>X</u>	<u>FACW</u>
3. <u>Carex spp</u>	<u>40</u>	<u>X</u>	<u>FAC-OBL</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____

Remarks: (Include photo numbers here or on a separate sheet.)

\* on hummocks

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)
Prevalence Index = B/A = _____	

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is ≤3.0<sup>1</sup>
  - 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
  - Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**

**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes X No \_\_\_\_\_



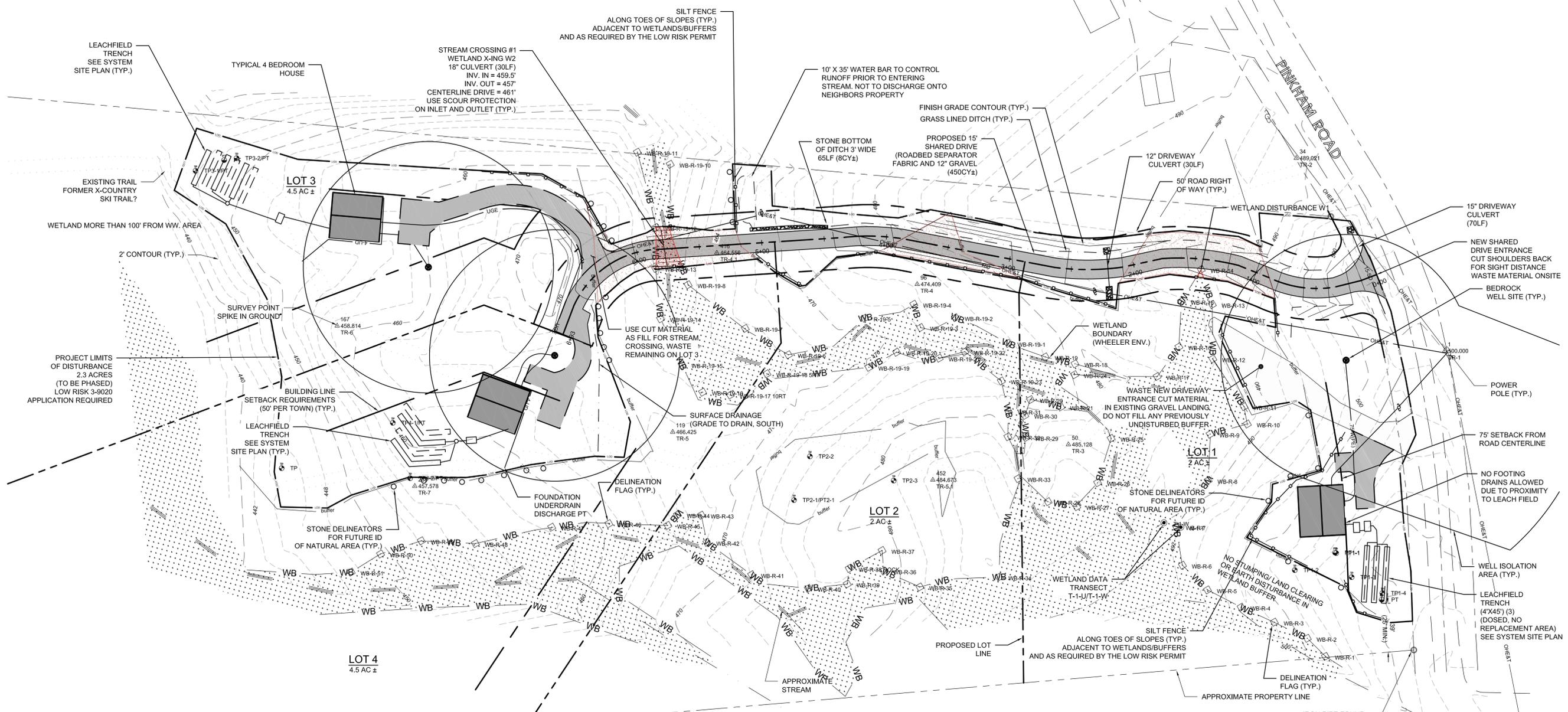


PREPARED FOR: **BLAIN, GLENN**  
 Address: PINKHAM RD, BURKE, VT

**4 LOT SUBDIVISION SITE PLAN FOR ENVIRONMENTAL PERMITTING**

**NOTES:**

1. THE PROPERTY LINES ARE BASED ON A SURVEY BY NORTHEAST SURVEY DATED JUNE 1976.
2. WETLAND BOUNDARIES ARE BASED ON A FIELD SURVEY BY BRAD WHEELER, WHEELER ENVIRONMENTAL SERVICES, INC. ON 11/25/2015.
3. THE SHARED DRIVE IS SHOWN WITH CULVERTS THAT DO NOT MEET TOWN ROAD STANDARDS, HOWEVER THEY ARE ADEQUATE FOR LOW VOLUME RUNOFF.
4. ANR WETLAND, EROSION CONTROL, WATER AND WASTEWATER PERMITS ARE REQUIRED FOR THIS PROJECT.



**WETLAND AND BUFFER DISTURBANCE TABLE (SQ. FT.)**

LOCATION	BUFFER	WETLAND
COMMON ROAD	B1-3620 B2-1750 B3-1500 B4-1825	W1-15 W2-525
LOT #1	B5-100	0
LOT #2	0	0
LOT #3	0	0
LOT #4	0	0
TOTAL	8,795 (0.202 AC)	540 (0.012 AC)

**STORMWATER IMPACTS**

LOCATION	IMPERVIOUS(SF)
1. COMMON ROAD	11,000
2. DRIVE #1	1,600
3. DRIVE #3	3,600
4. DRIVE #4	1,600
5. HOUSES (3)	4,500
TOTAL IMPERVIOUS	22,300 (0.512 AC)

**DATA TRANSECT (Wheeler Env.)**

T-1-1J  
 0'-2" 7.5 YR2/2 FSL  
 2'-16" 10YR3/3 FSL  
 16'-20" 5YR 4/3 FSL / 10YR 5/6 C2P  
 NO HERBS IDABLE  
 TREES: B.FIR (80%), W.SPRUCE (20%), R.MAPLE (40%)  
 5-8% SLOPE, NO GROUNDWATER SAT.

T-1-1W  
 0'-4" BLACK Oa  
 4'-20" 5YR 4/2 GLS, 7.5YR 4/6 C2P  
 GW-2", SAT. 0"  
 VEGETATION:  
 GOLD THREAD (25%), Q. ASPEN (UPLAND HUMMOCKS), 40%, R. MAPLE (HUMMOCKS) 30%  
 CINNAMON FERN, 40%, CAREX/SCIRPUS SP. (40%)  
 1-2% SLOPES

**LOT AND ZONING INFORMATION:**

ZONING (TOWN OF BURKE)  
 ZONING BYLAWS (ADOPTED 3/30/15)  
 DISTRICT: RESORT  
 EXISTING USE: UNDEVELOPED  
 MINIMUM LOT AREA AND DIMENSIONAL REQUIREMENTS  
 LOT AREA: 2.0AC  
 LOT FRONTAGE: 200'  
 FRONT YARD: 75' FROM CENTERLINE  
 SIDE YARD: 50'  
 REAR YARD: 100'

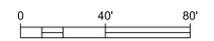
**PRELIMINARY IMPERVIOUS CALCULATIONS**  
 EXISTING AND PROPOSED ROOFTOP AND ROADS = 0.8 ACRES+/-.

THE INFORMATION PROVIDED HEREIN FOR A PERMIT APPLICATION DOES NOT DEFINE LEGAL RIGHTS OR MEET LEGAL REQUIREMENTS FOR A LAND SURVEY AS DESCRIBED IN 26 V.S.A. §2502(a), AND SHALL NOT BE USED IN LIEU OF A SURVEY AS THE BASIS OF ANY LAND TRANSFER OR ESTABLISHMENT OF ANY PROPERTY RIGHTS.

- NOTES:**
1. THE EXISTING LOT IS APPROXIMATELY 14 ACRES.
  2. THERE ARE APPROXIMATELY 3.2 ACRES OF WETLAND BUFFERS IN THE PROJECT AREA.
  3. THERE ARE APPROXIMATELY 2 ACRES OF WETLANDS.
  4. THE REMAINDER OF THE PROPERTY OUTSIDE OF THE PROJECT AREA IS CONSIDERED EITHER WETLAND OR WETLAND BUFFER.

EXCEEDING 1 ACRE OF IMPERVIOUS WOULD REQUIRE A STORMWATER 3-9015 PERMIT.

**PLAN**  
 SCALE: 1" = 40'



REVISIONS	
No.	Description
1	LOT 1/3/4 DEVELOPMENT PLANS - SHARED DRIVE
2	REDUCE BUFFER DIST./CONST. DETAILS
3	ADDED STONE MARKERS ON BUFFER LINES

Date	12/10/15
1/21/16	
3/28/16	

Designed: NPS  
 Drawn: NPS  
 Checked: -  
 DATE: 11/30/15