Vermont Wetland Section
Wetland Application Database Form
(AFFIX TO THE FRONT OF THE APPLICATION)

Applicant Name: Laura R. Beckwith	**Representative Name: Christian C. Heins**
Town where project is located: Dorset	**County: Bennington**

Project Location Description: South of Barn at 2534 Dorset West Road, Dorset VT
911 Street Address or direction from nearest intersection

Project Summary:Construct driveway for single family house on approved lot.

Permit Type Requested (check all that apply)

☐ Vermont General Permit Coverage ☐ Wetland Determination ☒ Vermont Wetland Permit

Impact Calculations: Total up proposed impacts from wetland tables listed below

Total Wetland Impact	2520square feet (s.f.)	Total Buffer Zone Impact	2900square feet (s.f.)
Total Wetland Clearing (qualified linear projects only)	square feet (s.f.)	Total Buffer Zone Clearing (qualified linear projects only)	square feet (s.f.)

Permit Fees: Make check payable to - *State of Vermont*

Wetland Impact Fee: ($0.75/sf)	$1,890.00	Administrative Fee:	$240
Buffer Impact Fee: ($0.25/sf)	$725.00	Total Check Amount:	$2,855.00
Clearing Fee: ($0.25/sf)	$		

Existing Land Use Type: (check all that apply)
☐ Forestry ☐ Residential (Subdivision) ☐ Industrial/ commercial
☐ Agriculture ☐ Transportation ☐ Parks/Rec/Trail ☐ Residential (Single Family) ☐ Institutional ☒ Undeveloped

Proposed Land Use Type: (check all that apply)
☐ Forestry ☐ Residential (Subdivision) ☐ Industrial/ commercial
☐ Agriculture ☐ Transportation ☐ Parks/Rec/Trail ☒ Residential (Single Family) ☐ Institutional ☐ No Change

Proposed Impact Type: (check all that apply)
☐ Buildings ☐ Utilities ☐ Parking ☐ Septic/Well ☐ Stormwater
☒ Driveway ☐ Road ☐ Parks/Path ☐ Agriculture ☐ Pond ☐ Lawn
☐ Dry Hydrant ☐ Beaver dam alteration ☐ Silviculture ☐ Aesthetics ☐ Other ☐ No Impact

Wetland 1: Subject Wetland (Label using Wetland ID from application if applicable, use supplemental sheets if more than one wetland is being impacted) Location: **Dorset West Road**

Wetland Type: **POW/PSS/PFO** WL Size Class : **<1 acre**

Proposed Alterations

Wetland Alteration:		**Buffer Zone Alteration:**		**Wetland Alteration Type** (check all that apply)	
Wetland Fill:	2520s.f.			☐Dredge	☐Drain
Temporary:	s.f.	Temporary:	s.f	☐Cut Vegetation	☐Stormwater
Permanent: :	s.f.	Permanent: :	2900 s.f	☒Trench/Fill	☐Other

Mitigation

Avoidance and Minimization (s.f. of wetland NOT impacted): Wetland: s.f. Buffer Zone s.f.

Wetland Mitigation: (s.f. Gained)				**Buffer Zone Mitigation (s.f. Gained):**			
Restoration	1750s.f.	Enhancement	s.f.	Restoration	960 s.f.	Enhancement	s.f
Creation	s.f.	Conservation	s.f..	Creation	s.f	Conservation	s.f

Reason for Mitigation: ☐ Correction of Violation ☒ Mitigation to offset permit impacts ☐ Voluntary

Restoration	1750s.f.	Enhancement	s.f.	Restoration	980 s.f.	Enhancement	s.f
Creation	s.f.	Conservation	s.f.	Creation	s.f	Conservation	s.f

Reason for Mitigation: ☐ Correction of Violation ☒ Mitigation to offset permit impacts ☐ Voluntary

All Applications Should be Mailed To:

Vermont Wetlands Program
Watershed Management Division
One National Life Drive, Main 2
Montpelier, VT 05620-3522

Staff To Complete		
Wetland Project Number:		
Wetland Project Name:	**DEC ID#:**	
Date Application Received:		
Request for Information Date:	**Information Received Date:**	
Request for Information Date:	**Information Received Date:**	
Date Application Complete:	**Distribution Complete Date:**	
Notice Begin Date:	**Notice End Date:**	
Final Action Date:	**Public Meeting Date:**	
Check#	**Check Amount**	**Date Check Received**
Check#	**Check Amount**	**Date Check Received**

Vermont Wetland Permit Application/Determination Petition

QUESTION	INSTRUCTIONS AND APPLICANT ANSWER	STAFF NOTE
1. Applicant	If the applicant is someone other than the landowner, the landowner information must also be included below.	
1.1. Applicant Name	Laura R. Beckwith	
1.2. Applicant Address	P O Box 262 Dorset, Vermont 05251	
1.3. Applicant Phone Number	802-777-3537	
1.4. Applicant Email	laurabeckwith@josiahallen.com	
1.5. Applicant Signature (original signature required)	By signing this application you are certifying that all the information contained within is true, accurate, and complete to the best of your knowledge. x Laura R Beckwith Date: 12/1/15	
2. Representative	Consultant, engineer, or other representative that is responsible for filling out this application, if other than the applicant or landowner	
2.1. Representative Name	Christian C. Heins	
2.2. Representative Address	P O Box 1323 Manchester Center, VT 05255	
2.3. Representative Phone Number	802-375-6970	
2.4. Applicant Email	woodserv1@myfairpoint.net	
2.5. Representative Signature (original signature required)	By signing this application you are certifying that all the information contained within is true, accurate, and complete to the best of your knowledge. x Christian C. Heins Date: 12/1/2015	
3. Landowner	Landowner must sign the application. Use this space if landowner is different from the applicant	
3.1. Landowner Name	same	
3.2. Landowner Address		
3.3. Landowner Phone Number		
3.4. Landowner Email		
3.5. Landowner Easement	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. See deed Bk 113, pg. 131, shedule A for right of way description. Laura Beckwith will be responsible for meeting the terms and conditions of the permit.	
3.6. Landowner Signature (original signature required)	By signing this application you are certifying that all the information contained within is true, accurate, and complete to the best of your knowledge. x Laura R Beckwith Date: 12/1/15	
4. Location of Wetland and Project	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 geographic features.	

	The property is 170 feet east of Dorset West Road with access by 20' wide right of way through the lands of Peter and Lorraine Kelly at 2534 Dorset West Road.		
5. Site Visit Date and Attendees	Date of visit with District Wetlands Ecologist	List people present for site visits including Ecologist, landowner, and representatives.	
	May 1, 2015	Rebecca Chalmers, ANR and Christian Heins	
6. Wetland Classification	The wetland is a Class II wetland because (Choose one): The wetland meets the presumption of significance		
7. Description of Entire Wetland or Wetland Complex	Answer the following questions regarding the entire wetland or wetland complex. A wetland complex is generally defined as two or more wetland types that are contiguous and interrelated. Specific questions about the wetland in the project area will follow.		
7.1. Size of Wetland Complex in Acres	Can be obtained from the Environmental Interest Locator Map for mapped wetlands Based on field survey the Wetland is 0.7 acres in size.		
7.2. Natural Community Types Present	List all wetland types in the wetland or wetland complex and their abundance or relative abundance. For example: 50 acres of softwood forested swamp; or 30% scrub swamp, 70% emergent wetland The Wetland is 74% Scrub/Shrub, 2% open water (man made pond) and 23% managed wet Meadow (lawn).		
7.3. Landscape Position	Where is the wetland located on the landscape? Examples: bottom of a basin, edge of a stream, shore of a lake, etc. The Wetland is on a valley terrace in level terrain.		
7.4. Wetland Hydrology	Describe the main source of wetland hydrology for the wetland complex. List any river, streams, lakes and ponds. The sustaining hydrology for this Wetland is a spring seep fed by a mountain aquifer. In addition, a drainage culvert under Dorset West Road discharges stormwater in the south west corner of the Wetland. Include answers to the following where appropriate:		
7.4.1. Direction of flow	For example: stream flows from north to south through the wetland complex. Flow through the wetland is west to east toward the valley bottom.		
7.4.2. Influence of hydrology on wetland complex	For example: The river provides flood water to the wetland in the spring. The water feeding the spring seep percolates into coarse grained soils along the Wetlands's perimeter.		
7.4.3. Relation to the project area	Distance between the project area and any nearby surface waters. A man made pond of 1000 sq. ft. in size lies within the Wetland. The nearest significant stream is the West Branch of the Battenkill more than 1400 feet to the east.		
7.4.4. Hydroperiod	Discuss frequency and duration of flooding, ponding, and/or soil saturation. My observation of this Wetland finds that the hydroperiod peaks during spring run off and snow melt. During periods of low rainfall the saturated area shrinks in size by approximately one half. This explains the presence of upland plants within the mapped wetland.		
7.5. Surrounding Landuse of the Wetland Complex	For example: rural residential and forested; agricultural and undeveloped, This Wetland is encircled by low density residential development. Buildings and lawns occupy the buffer on the north and south. Dorset West Road is within the buffer to the west and the permitted building site, the subject of this application, is to the east.		
7.6. Relation to Other Nearby Wetlands	Provide any information on wetlands or wetland complexes that are close enough to contribute to the overall function of the wetland in question. The Subject Wetland is very small and largely spring fed with no stream inlet or outlet. As a result there is no hydrologic or vegetative connection to the Dorset Marsh Wetland Complex. Using the Natural Resources Atlas measurement tool, the Dorset Marsh is 440 feet from the project Wetland. Mowed fields and Bond Lane separate the two.		

7.7. Pre-project Cumulative Impacts to the Wetland	Identify any cumulative ongoing impacts outside of the project that may influence the wetland. Examples include but are not limited to wetland encroachments off the subject property, land management in or surrounding the wetland, or development that influences hydrology or water quality. Approximately 25% of the Wetland has been managed in the past by the Kelly's and their predicessors. An excavated pond covers 1000 sq. ft. (3%) and turf grasses cover 22%. The managed area has no apparent impact to the remaining natural wetland area although the stormwater water treatment benefits may be deminished in the managed area. The Town of Dorset maintains Dorset West Road, it's drainage structures and roadside ditches. Sand and salt application in the road right of way adds to sedimentation and chemical effects to vegetation. The periodic cleaning of sediment from culvert outlets and roadside ditches is a temporary disturbance in the Buffer necessary to maintain the fuction of the road drainage structures.	
8. Description of Subject Wetland	Subject Wetland is defined as the area of wetland in the project area, 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 larger wetland or wetland complex that could be directly or indirectly impacted by the project, as defined by hydrology, vegetation and/or physical characteristics.	
8.1. Context of Subject Wetland	Describe where the subject wetland is in the context of the larger wetland or wetland complex described above. The subject wetland is at least 440 feet west of the Dorset Marsh and approximately 15 feet higher in elevation than the Marsh.	
8.2. Wetland Landuse	For example: mowed lawn; old field; naturally vegetated. Describe any previous and ongoing disturbance in the subject wetland. Man made Pond - 3%, Managed lawn - 22%, Natural Scrub/Shrub - 74%	
8.3. Wetland Vegetation	List dominant wetland community type and associated dominant plant species. Dominant community type is Shrub/Scrub. Dominant plant species include; Cornus stolonifera and Onoclea sensibilis.	
8.4. Wetland Soils	Use USDA NRCS information where possible and use the ACOE Delineation Manual soil description Wetland soils are mapped incorrectly as Georgia Loam.	
8.5. Wetland Hydrology	Use descriptions from the ACOE Delineation Manual. The data point showed High Water Table (A2) at 4 inches and Saturation (A3) at 2 inches depth.	
8.6. Buffer Zone	Describe the buffer zone of the subject wetland including:	
8.6.1. General landuse	For example: mowed road shoulder; forested; old field; paved road and residential lawns etc. Describe any previous and ongoing disturbance in the buffer zone. Buffer zone on north and south sides of wetland are mowed lawn. Buffer on the west is Dorset West Road and the buffer to the east is adjacent to the home site approved by The Town of Dorset and the Water/Wastewater Division of ANR in 1998	
8.6.2. Buffer vegetation	List community type and dominant plant species Managed areas are predominently mixed turf grasses. The buffer adjacent to the east border of the wetland is dense with Fraxinus americana, Lonicera tatarica and Prunus serotina.	
8.6.3. Buffer soils	Use USDA NRCS information where possible, and the ACOE Delineation Manual soil description Buffer soils are Geogia sandy loam	

9. **Wetland Determination**	If the application involves a wetland determination please answer the following. **If not, skip to Section 10.**	
9.1. Reason for Petition	Please choose one from the dropdown menu: Add a Section 4.6 presumed wetland to the VSWI map	

9.2.	Previous Decisions	Please list all determinations and decisions, if any, issued by the Secretary, Panel or former Water Resources Board, pertaining to the wetland or buffer at issue:	
9.3.	Narrative	Please provide any narrative to support the petition for a wetland determination here. This section is not required for petitions to add a Section 4.6 presumed wetland to the VSWI map, but is required for all other petitions.	

If the application is only for a Wetland Determination only, skip to Section 13

10. Project Description		
10.1. Overall Project	Description of the project. For example: six-lot residential subdivision; expansion of an existing commercial building, access drive to a single family residence. Access drive and underground utilities for one single family home on lot permitted for development in 1998.	
10.2. Project Purpose	For example: To construct a residential subdivision, upgrade existing road to improve access, extend a trail system To gain access to an upland approved building site via the mutually agreed right of way presented in this application.	
10.3. Acres Owned by Applicant	Acreage of subject property. 1.5	
10.4. Acres Involved in the Project	Acreage of area involved in the project. 0.12	
11. Project Details	Provide details regarding specific impacts to the wetland and buffer zone	
11.1. Specific Impacts to Wetland and Buffer Zone	List portions of the project that will specifically impact the wetland or buffer zone. The proposed driveway and underground utilities will travel through the wetland and buffer zone as shown on the Wetland Impact Plan sheet S-1. The construction will include removal of mineral soil and placement of base gravel over filter fabric.Utility conduits will be burried at the edge of the fill	
11.2. Dimension Details	Square footage of buildings, dimension of roads including fill footprint. The proposed driveway will be 12 feet in width on a gravel base 15 feet wide. Total driveway length in the buffer is 135 ft. Total length in Wetland is 160 ft. The fill volume is 170 cu. yd. in the Wetland and 150 cu. yd. in the Buffer.	
11.3. Bridges and Culverts	Culvert circumference, length, placement and shapes, or bridge details. Three 12 inch diameter 20 foot long ADS culverts will be placed as shown on sheet S-1. they will serve to equalize the water levels on either side of the driveway.	
11.4. Construction Sequence	Describe any details pertaining to the worked planned in the wetland and buffer in terms of sequence or phasing that is relevant Construction will begin with of the layout of the southerly limits of construction and placement of barrier fencing at the work area. Mineral soil will be removed and the road base fill will be placed on filter fabric. The filter fabric will be folded over the top of the base fill and covered with 6-8 inches of crushed gravel as a working surface. The filter fabric "envelope" will serve to confine the limits of disturbed area. The vegetation restoration area north of the driveway will be completed after the road base has been constructed but before the placement of the final application of crushed gravel.	
11.5. Stormwater Design	List any stormwater permits obtained or applied for. Describe any stormwater and/or erosion controls proposed to prevent discharges to the wetland and buffer zone.	

	The road consruction and site development for one single family home will not require a stormwater permit. All construction will follow the specific provisions of the Low Risk Site Handbook for Erosion Protection and Sediment Control.
11.6. Permanent Demarcation of Limits of Impact	Describe any plantings, fencing, signage, or other memorialization that provides permanent on-the-ground boundaries for the limits of disturbance for ongoing uses. At the easterly limits of the Wetland Buffer a post and rail fence 150 feet in length will define the edge. Along the north side of the proposed drive native vegetation will be restored in 1750 sq. ft. of Wetland and 980 sq. ft. of Buffer
12. Wetland and Buffer Zone Impacts	
12.1. Wetland Impacts	Summarize the square footage of impact in the appropriate category. If more than one wetland is impacted, provide that information and use the supplemental wetland sheets. **Totals** Wetland Fill: 2520 s.f. Temporary Wetland Impact: s.f. Other Permanent Wetland Impact: s.f.
	Describe in detail the proposed impact. The impact consists of placing buried conduit and gravel for a driveway to serve a single residential lot. All disturbance will take place within a 20 foot wide right of way across the lands of Peter & Loraine Kelly. 95% of the Wetland fill (2384 sq. ft.) is currently managed as lawn. South of the existing barn, 120 sq. ft. of Natural Wetland will be filled to allow the driveway to pass the building. Restoration of native vegetation in 1750 sq. ft. of managed Wetland will offset this impact.
12.2. Buffer Zone Impacts	Summarize the square footage of impact in the appropriate category. If more than one wetland is impacted, provide that information and use the supplemental wetland sheets. **Totals** Temporary Buffer Impact: s.f. Permanent Buffer Impact: 2900 s.f.
	Describe in detail the proposed impact. Placement of gravel for the driveway and utility conduit will connect Dorset West Road with the House site approved by the town of Dorset and Vermont ANR in 1998.
12.3. Cumulative Impacts	List any potential cumulative or ongoing, direct and indirect impacts on the functions of the wetland that could result from the proposed project. The deposition of sand from winter maintenance is the only likely ongoing project impact.
12.4. Avoidance and Minimization	Please refer to Section 9.5b of the rules on Mitigation Sequencing for this section.
12.4.1. Avoidance	Can the proposed activity be practicably located outside the wetland/buffer zone, or on another site owned or controlled by the applicant or reasonably available to satisfy the basic project purpose? If not, indicate why. This answer should include any examination of alternatives that you have explored including using other properties, requesting easements, and altering the project design.

	As directed by the email from Zapata Courage on May 15, 2015, Laura Beckwith contacted all of her adjoining landowners to explore alternative routes having less or no impact. To the north and east, Michael Saracini (50 Bond LN) denied access via fax on 6/30/15. Peter Kelly via email of 6/28/15 replied, "You have requested access to your building lot located behind my home at 2534 Dorset West Road, by building a driveway crossing my back yard from Bond Lane. After careful consideration, I must deny your request, under any circumstances, as such driveway would destroy the privacy of my back yard and pool area." Bordering the lot on the south, Connie Ferguson sent a post card denying access across their property on 10/28/15. Having exhausted these options our designer focused on Minimization.	
12.4.2. Minimization	If the proposed activity cannot practicably be located outside the wetland/buffer zone, have all practicable measures have been taken to avoid adverse impacts on protected functions? Please include any information on on-site alternatives that have been examined; minimizing the size and scope of the project to avoid impacts; or relocating portions of the project to avoid impacts This drivewayaccess received approval from the ACOE and a waiver of Water Quality Certification in 2002. ACOE Permit # 200202557. Due to economic conditions the drive was not constructed. The approved in this case is our STUDY #1. Labeled on the plan as KELLY EASEMENT it runs directly through the middle of the Natural Wetland. Related impact is 2700 sq. ft. Natural Wetland and 1925sq. ft. of Buffer. Knowing that this route was poorly conceived we looked to the 20 foot wide right of way which was granted to Laura by deed in 1998 by Kristin Alexandre, Kelly's predeccesor. This route, STUDY #2 on the plan, proved to be somewhat improved with nearly half of the wetland impact in Managed Wetland. Total impact for Study 2 is; 1800sq. ft. Natural Wetland, 1395sq. ft. Managed Wetland, 1680 sq. ft. Buffer. Seeing the benefit to locating the majority of the impact in the managed wetland, where wetland values are already significantly diminished, this designer created STUDY #3 seeking to minimize impact on Natural Wetland and provide opportunity for offsetting restoration efforts. This was done at risk of the fact that any newly proposed route would have to be acceptable to the Kelly's. Study 3 has 2520 sq. ft. of total wetland impact. This includes 120 sq. ft. fill in Natural Wetland, just south of the existing barn and 2400 sq. ft. of Managed Wetland impact crossing the lawn to the upland building site. Buffer impact totals 2900 sq. ft. We strongly believe that Study 3 creates the least impact possible in gaining access to the approved building area. I flagged the southerly limits of the Impact Area in the field and found that within the 120 sq. ft. of Natural Wetland to be filled are; 5 Cornus stolonifera, 8 Fraxinus pennsylvanica and 2 invasive Euonymus atropurpureus with a ground cover of Onoclea sensibilis. This is the total extent of native wetland plant disturbance for the entire project.	
12.4.3. Mitigation	If avoidance of adverse effects on protected functions cannot be practically achieved, has the proposed activity has been planned to minimize adverse impacts on the protected functions and a plan has been developed for the prompt restoration of any adverse impacts on protected functions? Include any information on best management practices to be used for the project both for the initial construction and ongoing use. Also include any proposed restoration of temporary impacts, previously disturbed wetland or buffer zones or proposed conservation that are being used to offset the proposed impacts. As a part of persenting Study 3 to the Kelly's for consideration, I included the Natural Vegetation Restoration area to the plan. It functions to screen the Kelly home from the drive and to return over 2700 sq. ft. to native cover types. Of this area 1750 sq. ft. is Managed Wetland to be restored to Natural Wetland. This mitigation will offset 120 sq. ft. of Natural Wetland fill. Buffer area restoration will cover 980 sq. ft. Plan S-2 is a detailed plant list and placement diagram. Several existing trees are incorporated into a plan which restores the shrub and herbaceous plant regime.	

12.4.4. Compensation	Please refer to Section 9.5c of the rules for compensation, which is appropriate when the project will result in an undue adverse impact. If compensation is proposed please include a summary here.
13. Supporting materials	Where appropriate list the accompanying material by title, author, date and last revision date. Submit these documents and plans with the application.
13.1. Location map	Provide a project location map that is 8 ½" x 11" and reproducible in black and white. An Environmental Interest Locator Map is appropriate using the USGS topography map base layer, roads, and VSWI wetlands at minimum. The location map is attached.
13.2. Site Plans	List by title, author, date and last revision date. Plans should include wetland delineation and buffer zones, limits of disturbance, erosion controls, building envelopes and permanent memorialization. S-1 Wetland Impact Plan Lands of Laura R. Beckwith Dorset West Road Dorset, Vermont, Dated 11/25/2015, by: Woodland Services, Inc. Drawn by: Christian C. Heins
13.3. ACOE Delineation Forms	List by author, location, and date. Required only for Individual Permits. Wetland Determination Data Form Laura Beckwith property, Dorset West Road, 4/30/2015, by: Christian C. Heins
13.4. Other Supporting Documents	Provide any other documentation that supports the application. List photographs; easements; agreements; may include a GIS-compatible wetland submittal for determinations; etc. S-2 Natural Vegetation Restoration, dated 11/25/2015 by; Woodland Services Inc. Drawn by: Christian C. Heins.
13.5. List of Abutters (Neighbors with land adjoining wetland or buffer zone)	Attach list of names and mailing addresses or submit as word mailing document. Peter & Loraine Kelly, 1 Old Farm LN, Old Greenwich CT 06970 Robert B. & Cornelia Ferguson, P O Box 155 Dorset, VT 05251
13.5.1. Newspaper Notification	If choosing the option to fulfill the notice requirement with a newspaper notice, list the newspaper to be used here. A list of names and addresses for immediately adjacent landowners (500 foot radius) of the project area is required for the List of Abutters. ***NOTE: The applicant will be billed directly by the newspaper you list here. Use of newspaper notification may extend the notice period, depending on when the notice posts in the newspaper.**

14. Check Which Functions are Present in the Subject Wetland and in the Wetland Complex.

Wetland Function Summary: (if more than one wetland use supplemental wetland sheets)

Functions & Values	Subject Wetland	Wetland Complex	Functions & Values	Subject Wetland	Wetland Complex
Flood/Storm Storage	☒	☐	RTE Species	☐	☐
Surface & Groundwater Protection	☒	☐	Education & Research	☐	☐
Fish Habitat	☐	☐	Recreation/ Economic	☐	☐
Wildlife Habitat	☒	☐	Open Space/ Aesthetics	☐	☐
Exemplary Natural Community	☐	☐	Erosion Control	☐	☐

15. Coverage under Vermont General Wetland Permit	**If applying for an Individual Vermont Wetland Permit or Determination, please proceed to number 16 and answer the remaining application questions.**

	If applying for Coverage under the Vermont General Wetland Permit, please complete question 15.1 prior to submitting application.	
15.1. VWP Vermont General Permit eligibility checklist	If applying for coverage under the Vermont General Wetland Permit, please verify the following to complete the application: ☐ The activity qualifies as an eligible activity for coverage under the Vermont General Wetland Permit ☐ The proposed project will meet the conditions applicable to the proposed project in the Vermont Wetland General Permit ☐ The activity does not qualify as an Allowed Use under Section 6 of the Vermont Wetland Rules. ☐ The activity will not result in an undue adverse impact on protected wetland functions and values, nor does it need additional conditions to protect functions and values. ☐ All impacts have been avoided and minimized to the greatest extent possible. ☐ The wetland complex is not significant for Function 5.5 Exemplary Wetland Natural Community or 5.6 Rare, Threatened and Endangered Species Habitat. ☐ The activity is not located in or adjacent to a vernal pool, fen, or bog. ☐ The wetland is not at or above 2,500' in elevation (headwaters wetland). ☐ The project is not located in a Class I wetland or associated buffer zone. ☐ The activity is not an as-built project that constitutes a violation of the Vermont Wetland Rules.	
Stop here if applying for Coverage under the Vermont General Wetland Permit		

Complete the following Functions and Values checklist if applying for an Individual Wetland Permit and/or a Wetland Determination		
Functions and Values	For each Function and Value, first evaluate the entire wetland or **wetland complex** and check all that apply. Secondly, evaluate how the wetland in the project area contributes to that function. Thirdly explain how the project will not result in adverse impacts to this function. Include any information on specific avoidance and minimization measures. If more than one wetland complex is involved, use the Supplemental Wetland Forms.	
16. Storage for Flood Water and Storm Runoff	☒ Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function. ☒ Constricted outlet or no outlet and an unconstricted inlet. ☒ 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.

☐ If a stream is present, its course is sinuous and there is sufficient woody vegetation to intercept surface flows in the portion of the wetland that floods.

☒ Physical evidence of seasonal flooding or ponding such as water stained leaves, water marks on trees, drift rows, debris deposits, or standing water.

☐ Hydrologic or hydraulic study indicates wetland attenuates flooding.

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.

☐ 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 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 a loss or reduction of the water storage function.

☐ 1. Developed public or private property.

☐ 2. Stream banks susceptible to scouring and erosion.

☐ 3. 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.

☐ 1. A large amount of impervious surface in urbanized areas.

	☐ 2. Relatively impervious soils. ☐ 3. Steep slopes in the adjacent areas.	
16.1. Subject Wetland	Please explain how the subject wetland contributes to the function listed above A culvert under Dorset West Road discharges to the south west corner of the wetland. This stormwater contributes to the hydrology and sediment load.	
16.2. Statement of no undue adverse impact	Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function. By following the northerly edge of the managed wetland the destruction of native vegetation will be largely avoided. The ability of the Wetland to store stormwater will be unaffected.	
17. 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 box if any of the following conditions apply that may indicate the wetland provides this 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 box if any of the following conditions apply that may indicate the wetland provides this 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 waters. ☐ The wetland contributes to the protection or improvement of water quality of any impaired waters. ☐ The wetland is large in size and naturally vegetated.	
17.1. Subject Wetland	Please explain how the subject wetland contributes to the function listed above The Wetland filters stormwater discharged from the pipe under Dorset West Road.	
17.2. Statement of no undue adverse impact	Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function. The fill in 120 sq. ft. of Natural Wetland adjacent to Dorset West Road will have no measurable effect on the function of surface and groundwater protection. The restoration of 1750 sq. ft. of Managed Wetland will more than replace any lost function.	
18. 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.	
18.1. Subject Wetland	Please explain how the subject wetland contributes to the function listed above	
18.2. Statement of no undue adverse impact	Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function.	
19. 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 these species include softwood swamps. Evidence of use includes deer 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:

☐ 1. Wood Frog, Jefferson Salamander, Blue-spotted Salamander, or Spotted Salamander. Breeding habitat for these species includes vernal pools and small ponds.

☐ 2. Northern Dusky Salamander and the Spring Salamander. Habitat for these species includes headwater seeps, springs, and streams.

☐ 3. 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 significant 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 includes 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:

☐ 1. Three or more wetland vegetation classes (greater than 1/2 acre) present including but not limited to: open water contiguous to, but not necessarily part of, the wetland, deep marsh, shallow marsh, shrub swamp, forested swamp, fen, or bog;

☐ 2. The dominant vegetation class is one of the following types: deep marsh, shallow marsh, shrub swamp or, forested swamp;

☐ 3. Located adjacent to a lake, pond, river or stream;

☐ 4. Fifty percent or more of surrounding habitat type is one or more of the following: forest, agricultural land, old field or open land;

	☐ 5. Emergent or woody vegetation occupies 26 to 75 percent of wetland, the rest is open water; ☐ 6. One of the following: ☐ i. hydrologically connected to other wetlands of different dominant classes or open water within 1 mile; ☐ ii. hydrologically connected to other wetlands of same dominant class within 1/2 mile; ☒ iii. 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; and ☐ 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 complex 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.	
19.1. Subject Wetland	Please explain how the subject wetland contributes to the function listed above	

	The Wetland is too small to provide significant habitat on its own. Surrounded by residential use, the .7 acre space provides refuge to animals traveling toward larger Wetlands in the valley floor or mountain woodlands.	
19.2. Statement of no undue adverse impact	Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function. The driveway will not detur animals from using the Wetland as before. A post and rail fence or stone wall at the buffer limits will insure that the buffer limits are respected.	
20. 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:	
20.1. Subject Wetland	Please explain how the subject wetland contributes to the function listed above	
20.2. Statement of no undue adverse impact	Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function. This function is not present in this Wetland.	

21. 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 creditable documentation that the wetland provides important habitat for any species on the federal or state threatened or endangered species lists; ☐ There is creditable documentation that threatened or endangered species have been present in past 10 years; ☐ There is creditable 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 creditable documentation that the wetland provides habitat for multiple uncommon species of plants or animals (S3 rank). List name of species and ranking:	
21.1. Subject Wetland	Please explain how the subject wetland contributes to the function listed above	
21.2. Statement of no adverse impact	Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function. This function is not present in this Wetland.	
22. 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.	
22.1. Subject Wetland	Please explain how the subject wetland contributes to the function listed above	
22.2. Statement of no undue adverse impact	Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function. The Subject Wetland is very small with little diversity. Superior educational and research opportunities exist in the community.	

23. 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:	
23.1. Subject Wetland	Please explain how the subject wetland contributes to the function listed above	
23.2. Statement of no undue adverse impact	Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function. This function is not present in the Subject Wetland.	
24. 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: The Subject Wetland is a common cover type separating manicured home sites along Dorset Hollow Road	
24.1. Subject Wetland	Please explain how the subject wetland contributes to the function listed above	
24.2. Statement of no undue adverse impact	Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function. This function is not significant.	
25. Erosion Control through Binding and Stabilizing the Soil	☐ 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.	

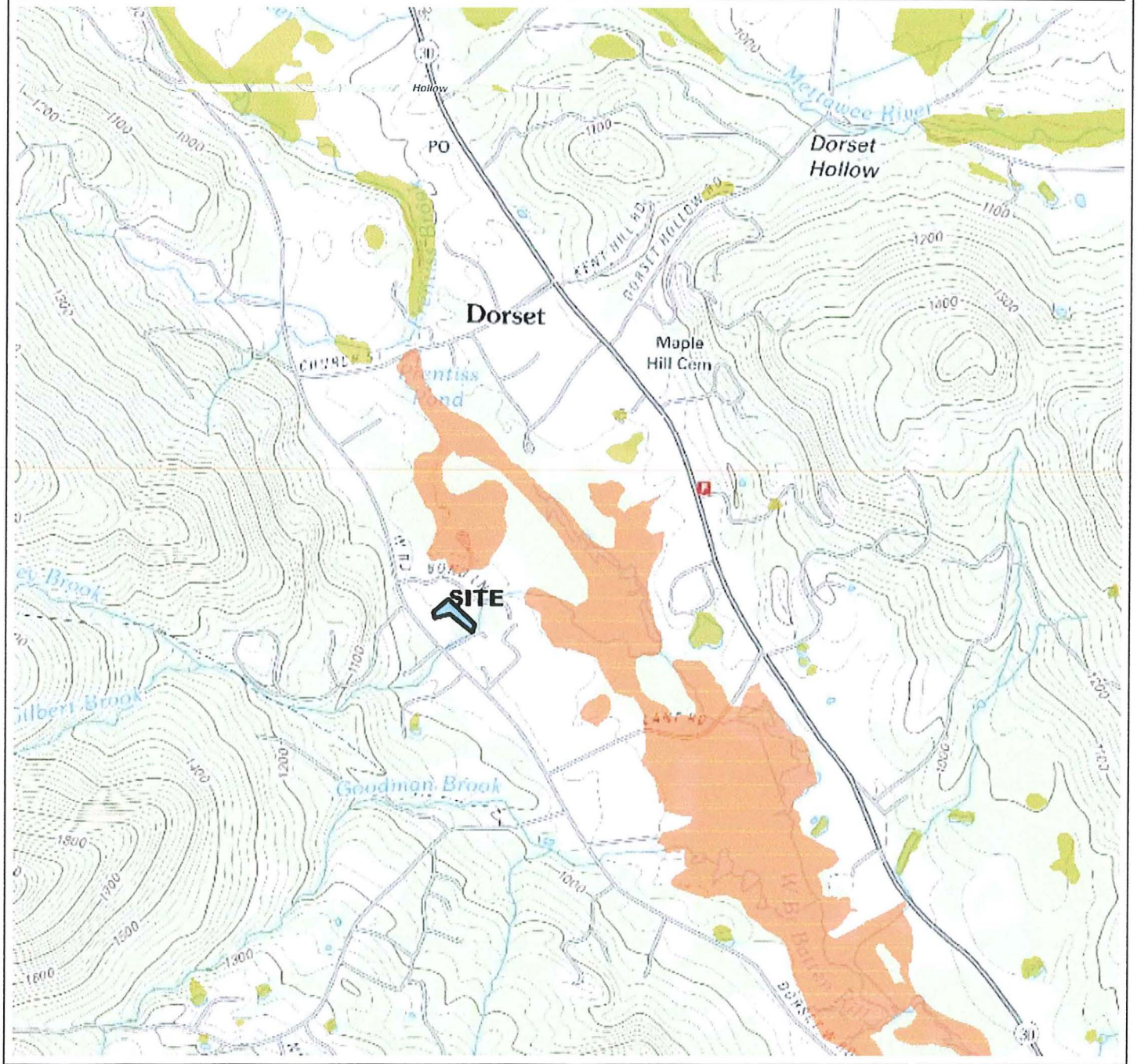
	☐ Studies show that wetlands of similar size, vegetation type, and hydrology are important for erosion control. What type of erosive forces are present: ☐ Lake fetch and waves ☐ High current velocities: ☐ Water level influenced by upstream impoundment If any of the above boxes are checked, the wetland 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.	
25.1. Subject Wetland	Please explain how the subject wetland contributes to the function listed above	
25.2. Statement of no undue adverse impact	Please explain how the proposed project will not result in any undue adverse impact to this function. Include any avoidance and minimization measures relevant to this function. This function is not present in this Wetland	

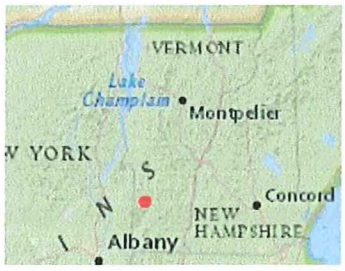
VERMONT

Laura R. Beckwith property

Vermont Agency of Natural Resources

vermont.gov





LEGEND

Wetlands - VSWI

- Class 1 Wetland
- Class 2 Wetland

Town Boundary

NOTES

Map created using ANR GIS mapping techology.

1: 19,336

November 24, 2015

982.0 0 491.00 982.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere

1" = 1611 Ft. 1cm = 193 Meters

THIS MAP IS NOT TO BE USED FOR NAVIGATION

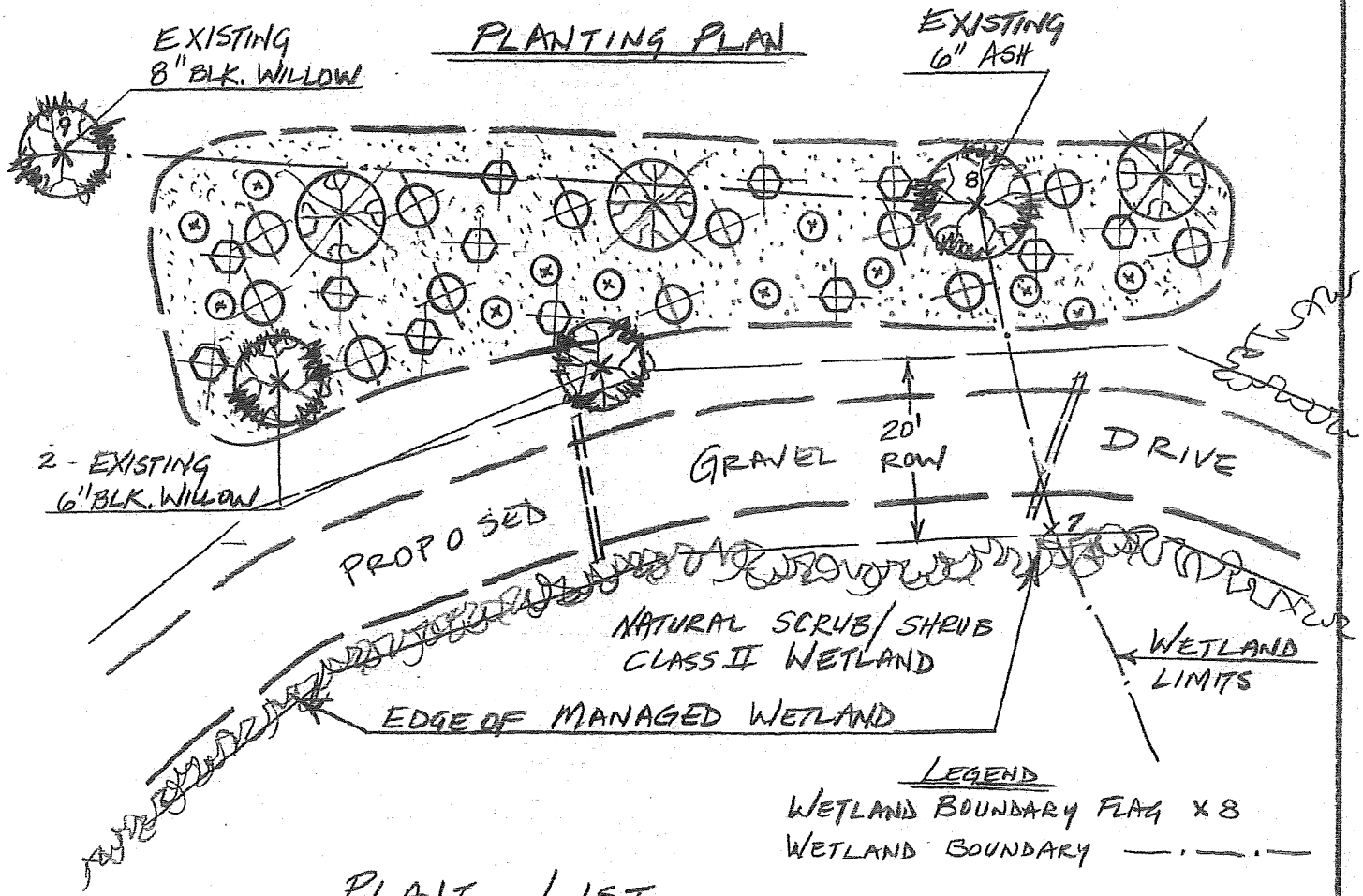
S-2

LAURA R. BECKWITH PROPERTY DORSET WEST ROAD

NATURAL VEGETATION RESTORATION

SCALE: 1" = 20' NOV. 28, 2015

PLANTING PLAN



PLANT LIST

Q	SPECIES	SIZE	SYMBOL
3	Acer rubrum (RED MAPLE)	2" CAL.	
12	Cornus stolonifera (RED-OSIER DOGWOOD)	2-3' HGT.	
12	Aronia prunifolia (PURPLE CHOKEBERRY)	2-3' HGT.	
12	Eupatoriadelphus maculatus (JOE-PIE-WEED)	4" POT	
2 LB	WET MEADOW & DETENTION BASIN SEED MIX FROM VERMONT WETLAND PLANT SUPPLY, ORWELL VT		
	EXISTING DECIDUOUS TREES		

PREPARED BY: C.C. HEINS
WOODLAND SERVICES, INC.
802-375-6970
Woodserv1@myfairpoint.net

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: DORSET WEST ROAD City/County: DORSET, BENNINGTON Sampling Date: 4/30/2015

Applicant/Owner: LAURA BECKWITH State: VT Sampling Point: D-1

Investigator(s): CHRISTIAN HEINS Section, Township, Range: _____

Landform (hillslope, terrace, etc.): LEVEL Local relief (concave, convex, none): CONVEX

Slope (%): 2% Lat: 43.24429 Long: 073.10427 Datum: WGS84

Soil Map Unit Name: GEORGIA NWI classification: N/A

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: _____

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

SAMPLE POINT BESIDE FOOT PATH IN WOODS

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____	
Water Table Present?	Yes _____	No X	Depth (inches): 20"+	
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____	**Wetland Hydrology Present?** Yes _____ No X

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

NONE

Remarks:

WETLAND DELINEATION FLAGS 1-12 BEGINNING AT WEST ROAD AT SW CORNER OF WETLAND

VEGETATION – Use scientific names of plants. LAURA BECKWITH Sampling Point: D-1

Tree Stratum (Plot size: 1/4C)	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus americana	70	Y	FACW
2. Prunus serotina	20	N	FACU
3. Populus tremuloides	10	N	FACU
4.			
5.			
6.			
7.			
	100	= Total Cover	

Sapling/Shrub Stratum (Plot size: 10'R)			
1. Fraxinus americana	80	Y	FACW
2. Lonicera tatarica	10	N	FACU
3. Euonymus atropurpureus	10	N	FACU
4.			
5.			
6.			
7.			
	100	= Total Cover	

Herb Stratum (Plot size: 10'R)			
1. Viola brittoniana	35	Y	FAC
2. Polystichum acrostichoides	10	N	FACU
3. Cystopteris fragilis	25	N	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	70	= Total Cover	

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		= Total Cover	

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:

- ___ Rapid Test for Hydrophytic Vegetation
- ✓ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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 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 ___ No X

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

SOIL LAURA BECKWITH Sampling Point: D-1

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/3	100		0			FSL	
8-14	10YR 4/6	100		0			LFS	
14-20	10YR 4/4	100		0			SL	WELL DRAINED

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]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[3]:

- ___ 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 (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): NONE

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: DORSET WEST ROAD City/County: DORSET/BENNINGTON Sampling Date: 4/30/2015

Applicant/Owner: LAURA BECKWITH State: VT Sampling Point: D-2

Investigator(s): CHRISTIAN C. HEINS Section, Township, Range:

Landform (hillslope, terrace, etc.): TERRACE Local relief (concave, convex, none): CONCAVE

Slope (%): 1% Lat: 43.24422 Long: 073.10447 Datum: 992

Soil Map Unit Name: GEORGIA LOAM NWI classification: NL

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes X No ____	

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

INDICATORS ARE CORNUS stolonifera AND Onoclea sensibilis

WETLAND IS SHRUB / SCRUB

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ✓ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): ____

Water Table Present? Yes ✓ No ____ Depth (inches): 4"

Saturation Present? (includes capillary fringe) Yes ✓ No ____ Depth (inches): 2"

Wetland Hydrology Present? Yes X No ____

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

NONE

Remarks:

VEGETATION – Use scientific names of plants. LAURA BECKWITH Sampling Point: D-2

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. none			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size:)			
1. Cornus stolonifera	70	Y	FACW
2. Alnus rugosa	20	N	FACW
3.			
4.			
5.			
6.			
7.			
	90 = Total Cover		

Herb Stratum (Plot size:)			
1. Onoclea sensibilis	60	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	60 = Total Cover		

Woody Vine Stratum (Plot size:)			
1. NONE			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 100 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 % (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:

- ___ Rapid Test for Hydrophytic Vegetation
- ✓ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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 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 LAURA BECKWITH Sampling Point: D-2

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	2.5Y 3/1	100					ORGANIC	SATURATED
3-8	2.5Y 3/2	100					SIL	SATURATED

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]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[3]:

- ___ 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 (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: SILT LAYER

Depth (inches): 3"

Hydric Soil Present? Yes ✓ No ___

Remarks:

SATURATED TO 2"

WETLAND IMPACT PLAN
LANDS OF
LAURA R. BECKWITH
WEST ROAD
DORSET VERMONT

Woodland Services

ENVIRONMENTAL PLANNING
SITE - TECHNOLOGY
FOREST MANAGEMENT

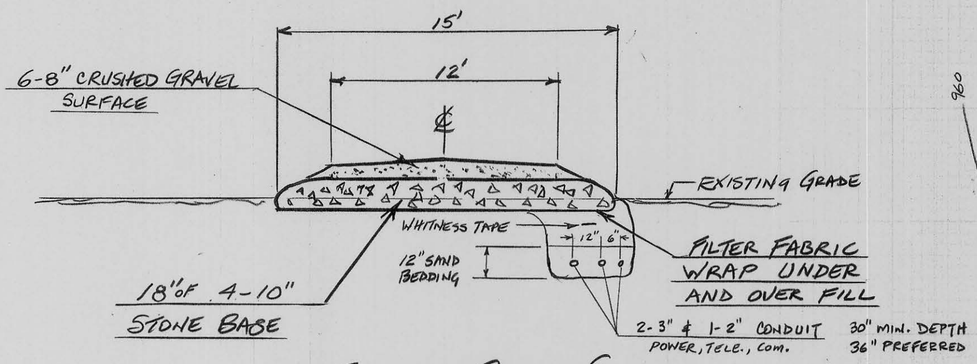
P.O. Box 1323
Manchester Center
Vermont 05255

802-375-6970

SURVEY CREW: CCH SBC
BASEMAP: DS
DRAWN BY: CCH

REVISIONS/ISSUES
11/25/2015
STUDY #3

DRAWING NO.
S-1



TYPICAL ROAD SECTION

NTS

1. REMOVE MINERAL SOIL, PLACE CONDUITS IN SAND FILL.
2. PLACE FILTER FABRIC & STONE ROAD FILL. WRAP FABRIC OVER BASE FILL.
3. GRADE SURFACE GRAVEL OVER ROAD BASE.

LEGEND

IRON PIPE FOUND	● IPF
STONE MARKER FOUND	■ MMF
WETLAND DATA POINT	D-1
WETLAND DELINEATION FLAG	---X-3---
SURVEY STATION	△2
UTILITY POLE	⌀ UP 1/40
POST & RAIL FENCE	—o—o—
EDGE OF NATURAL VEGETATION	~~~~~
PROPOSED 12" ADS CULVERT	═══
BURIED UTILITY CONDUITS	——---——

SITE PLAN

SCALE: 1 INCH = 30 FEET
CONTOUR INTERVAL: 1 FOOT
SCALE IN FEET

0 30 60 90 120 150

WETLAND IMPACT SUMMARY

NATURAL WETLAND	FILL	120	
MANAGED WETLAND	FILL	2400	
TOTAL WETLAND FILL		2520	SQ. FT.
BUFFER FILL AREA		2900	SQ. FT.

MITIGATION

NATURAL VEGETATION RESTORATION

WETLANDS	1750
BUFFER	980
TOTAL RESTORATION	2730 SQ FT.

21509