Water Quality Restoration Formula Grant
Winooski Basin - Sub-grant Application Form
FY24 - Round 2

The Central Vermont Regional Planning Commission, in its role as the Clean Water Service Provider for the Winooski Basin, is accepting applications for funding for non-regulatory, phosphorous reduction projects that improve water quality. Fiscal Year 2024 - Round 2 proposals are due by 4:00 PM on 13 December 2023. For more information, including submission details, see the Winooski Clean Water Service Provider webpage.

0. Project Eligibility

Please Review the following reference materials before completing your proposal:

- *FY23 Clean Water Initiative Program Funding Policy*
- *Act 76, Clean Water Service Provider Rule and Guidance & explanatory materials*

Is the portion of the project for which you seek funding both non-regulatory and voluntary? (i.e. not a required or compelled element of a regulatory permit or a legal settlement)? **(answer must be Yes to proceed)**	Yes
Does the project type meet the applicable definitions and minimum standards in the FY23 Clean Water Initiative Funding Policy? **(answer must be Yes to proceed)**	Yes

1. Applicant Information

Organization/Municipality Name: Caledonia County Natural Resources Conservation District
Primary Contact: Emily Finnegan
Title: District Manager
Mailing Address: 481 Summer St Ste 202 St. Johnsbury VT 05819
Phone Number: 802-424-3149
E-mail Address: emily.finnegan@vt.nacdnet.net

Has the proposing organization / municipality been pre-qualified to receive subcontracts / subgrants from the Central Vermont Regional Planning Commission serving in its capacity as the Winooski Basin Clean Water Service Provider?* * If you responded no to this question, please include Qualification Materials along with your funding proposal. See the Winooski Clean Water Service Provider webpage for more details.	No

2. Project Information

Project Title: Peacham Pond DFW Access - Stormwater Implementation
Watershed Projects Database ID*: 11708

* Projects without a Watershed Projects Database ID will be evaluated. However, prior to receiving funding, a project must be entered into the Watershed Projects Database. See pages 11-13 of the FY23 Clean Water Initiative Funding Policy.

Select the most representative project type (according to Appendix B Project Types Table of the 2023 CWIP Funding Policy) from the dropdown list below.*

Stormwater – Implementation

* If there is more than one project type associated with the proposal, enter additional project types in the Project Description section below.

Project Phase for which you are seeking funding: Implementation

Project GPS coordinates (e.g. 44.26278, -72.58054): 44.3336, -72.2653

Project Sub-basin: Winooski River Headwaters

3. Project Description

Describe the proposed project. Include the following: project history; the phosphorus reduction practices that will be developed, designed or implemented with the requested funds; ***details*** *of the project development activities, conceptual or final design plans and cost proposals (if available); and* ***references*** *to prior plans and studies that support the funding request. Propose a project schedule based on the milestones of the proposed project type. Assume an 8 January 2024 start date. (1000 words maximum)*

In 2021, CCNRCD was contacted by Martha Winston, the President of the Peacham Pond Association. She was very interested in starting a Lake Wise program on Peacham Pond. Through our Tactical Basin Planning agreement, CCNRCD did a few Lake Wise assessments as outreach. In the process of speaking with various landowners and with Martha, the Peacham Pond Department of Fish & Wildlife Access Area kept coming up as an area that needed to be addressed. Community members noticed that sediment was leaving the relatively steep gravel access area unimpeded and collecting at the edge of the pond, and deep rill erosion often developed at both edges of the access. Mike Wichrowski, the Land & Facilities Manager with the Vermont Department of Fish & Wildlife, confirmed that the department has tried a few basic stormwater practices at the access, but that none have really held up. The project area is greater than 5% slope, with about 0.13 acres of gravel and a narrow strip of vegetation along both edges.

CCNRCD contracted Fitzgerald Environmental to complete a 100% design process and engaged multiple stakeholders, including several interested members of the Peacham Pond Association and Mike Wichrowski from the Department of Fish & Wildlife. The Town of Peacham has also been kept in the loop via a designated Peacham Pond Association member. Planned practices were designed to accommodate heavy use of the access in both the summer and winter seasons. The access will be graded to drain to the north side, leaving the south side for parking. Stormwater will flow from the gravel access into a stone-lined swale on the north edge; stormwater that does not soak into the ground in the swale will travel over a stone-lined spillway to a grassed forebay. Stormwater that does not soak into the forebay will go over a stone-lined spillway at the the edge of the forebay and into a rain garden. These practices will treat 46% of the water quality volume and reduce phosphorus by 0.14 kg/year. This is the maximum water quality volume we were able to treat, given the site limitations.

The Vermont Department of Fish & Wildlife as well as the Peacham Pond community recognize this project site as a significant source of sediment and nutrients to the pond. The 2019 Peacham Town Plan also indicates that the wider Peacham community is invested in protecting and promoting water quality, and preserving the undeveloped lakeshore of Peacham Pond (https://peacham.org/wp-content/uploads/2019/07/Peacham-Town-Plan-2019-Final.pdf). This is one of the only public sites around Peacham Pond, a body of water that has a “stable” nutrient trend, but a shoreland condition rated as “fair.” Stormwater improvements here will be a valuable educational tool to inspire shoreland owners to seek out a Lake Wise assessment and implement lake-friendly landscaping and building practices. Stormwater projects are an important tool for our lakes and ponds that demonstrate negative water quality and shoreland trends but are also important to protect lakes and ponds with excellent water quality, particularly those located in headwater areas like Peacham Pond. The DEC Watershed Management Division Lakes and Ponds Program fully supports this project and believes that there will be a benefit to water quality in Peacham Pond and in downstream waters if this project is implemented. The construction is projected to cost approximately $25,000, and construction oversight is estimated at about $6,000. Emily Finnegan

4. Staff Capacity & Past Experience

A list of key staff and a (brief) description of their role in the project. If any of the staff listed here were not included in your organization's pre-qualification materials, please attach a one-page resume describing their qualifications to the project proposal.

Name	Project Role
Emily Finnegan	Project Manager

Provide three examples of relevant past work. Include the Watershed Projects Database ID (if applicable), key staff and their role(s) in the project, a brief description of the project (phase, type, partners, etc.) and contact information for project references. Projects listed here should demonstrate the experience of the specific staff anticipated to work under this proposal.

Example Project 1:

Watershed Projects Database ID (if applicable): 10922

Project staff & their project role(s):

Emily Finnegan - Project Manager

Project description (250 words max):

The Caledonia County NRCD sought funds to implement an erosion control project in the town of St.Johnsbury near the confluence of the Moose and Passumpsic Rivers. The project area included approximately 2.5 acres of gravel parking lot and roads adjacent to

Reference contact information:

Name: Steve Beauregard
Affiliation: Town of St. Johnsbury Public Works
Phone: 802-473-0046
Email: sbeauregard@stjvt.com

Example Project 2:

Watershed Projects Database ID (if applicable): 11086

Project staff & their project role(s):

Emily Finnegan - Project Manager

Project description (250 words max):

CCNRCD sought funds to develop a 100% design for a stormwater treatment and erosion control project at the Vermont Department of Fish & Wildlife Peacham Pond Access Area. The project area is greater than 5% slope, with about 0.12 acres of gravel and a narrow

Reference contact information:

Name: Mike Wichrowski

Affiliation: Vermont Department of Fish & Wildlife
Phone: 802-917-1347
Email: Mike.Wichrowski@vermont.gov

Example Project 3:

Watershed Projects Database ID (if applicable): 10113
Project staff & their project role(s):

Emily Finnegan - Project Manager

Project description (250 words max):

This project involved the construction of a municipal stormwater treatment project on private land in the town of Hardwick in the Upper Lamoille watershed. The intention of the project was to bring together two municipal stormwater systems through a single

Reference contact information:

Name: David Upson
Affiliation: Town of Hardwick Town Manager
Phone: 802-472-6120
Email: david.upson@hardwickvt.gov

5. Estimated annual total phosphorus load reduction (kg/yr)

Please review the Department of Environmental Conservation's Standard Operating Procedures (SOPs) for Tracking and Accounting of Phosphorous prior to completing this section.

For Developed Lands projects, estimate the annual phosphorous load reduction using the Department of Environmental Conservation's Stormwater Treatment Practice Calculator. Export the results from the calculator and include that information in the proposal package. For Natural Resource Restoration projects, estimate the annual phosphorous load reduction using the Department of Environmental Conservation's Interim Phosphorous Calculator Tool (v1.0). Save the results from the calculator and include them in the proposal package.

Enter the estimated annual total phosphorous load reduction (kg / yr):

0.14 kg/yr

If the proposed project consists of project identification / assessment or development-phase work, provide details regarding the types of projects you intend to investigate and the anticipated phosphorus reduction benefits you expect the project(s) might achieve.

N/A

6. Project Budget

Develop a detailed budget with a cost breakdown of all project and administrative expenses. The budget should be itemized by Task with anticipated costs for personnel, equipment, materials, subcontracted services and other costs as appropriate. Be sure to request sufficient funding to complete the required milestones and deliverables (including project reporting) for the type of project being proposed. See the FY23 Clean Water Initiative Program Funding Policy for more information on the milestones required for the project type you are proposing.

Notes:
Mileage: Use the FY24 federal rate ($0.655 / mile)
Indirect: If you have a negotiated indirect rate, please use that. Otherwise, you may charge up to 10% on all APPLICANT costs and 10% on the first $50,000 of SUBCONTRACTORS costs.

Funding request
Amount of funding requested: $33,900.65
State matching funds: $500
Non-State matching funds: $0
Total project budget: $34,400.65

Future costs
If this proposal seeks funds for Preliminary (30%) or Final (100%) Design-phase work, please estimate anticipated future costs for subsequent project phases. Do not include this amount in the "Funding request" section above.

Anticipated future funding: N/A

7. Co-benefits

a) **ENVIRONMENTAL JUSTICE:** points are awarded when a project is located in a Census Block Group where one or more Environmental Justice Focus Population demographic conditions exist. *This value is calculated by the Clean Water Service Provider based on the project location.*

b) **ECOLOGICAL BENEFITS:** points are awarded when a project reduces sediment and / or non-phosphorous nutrient loads to stressed, altered, impaired or priority waterways to which it is hydrologically connected. *This value is calculated by the Clean Water Service Provider based on the project location.*

c) **ECOSYSTEM SERVICES:** points are awarded when a project moderates natural phenomena through carbon sequestration and flood resilience. *This value is calculated by the Clean Water Service Provider based on the type of project being proposed.*

d) **COMMUNITY BUILDING:** points are awarded when a project involves the community in data collection and decision-making, enhances the working landscape and provides recreational benefits. Please answer the following:

- Are there proposed efforts to meaningfully involve community members in planning, project development, decision-making and implementation?

  Yes

  If you answered Yes to the previous question, please describe the effort to involve community members:

  The operation and maintenance of the proposed practices will be largely the responsibility of Peacham Pond Association members and the greeters they hire to

- Does the project involve data collection by community members (e.g. citizen science initiative)? No

  If you answered Yes to the previous question, please describe the effort to involve community members in data collection:

  N/A

- Is the project located on a parcel that is enrolled in the Use Value & Appraisal Program (aka the Current Use Program) (Contact the Clean Water Service Provider for assistance.)? No

- Does the project maintain / improve an existing recreational space?

  Yes

If you answered Yes to the previous question, please describe the maintenance or improvement of existing recreational space(s):

This DFW access has been a challenging location for many years now; in the absence of other practices, there have always been large water bars across the

- Will the project result in new / expanded recreational opportunities?

No

If you answered Yes to the previous question, please describe the effort to create new or expand existing recreational opportunities:

N/A

e) **EDUCATION:** An Education Co-Benefit is realized when a project includes aspects of public outreach designed to educate community members about the importance of phosphorus reduction and watershed health

- Will the project include an educational component? Yes

If you answered Yes to the previous question, please describe the educational component of the project below:

- Interpretive signage:

The VT Department of Fish & Wildlife will provide educational signage.

- Educational meetings / workshops:

8. Other Considerations

a) **DESIGN LIFE:** The design life of the proposed project is: 10 years

b) **LANDOWNER RELATIONS**

- PROPERTY OWNERSHIP: The project will be located on:

  publicly-owned property.

- LANDOWNER SUPPORT: Provide a list of landowner support letters below. Please submit any letters or email from the landowner indicating their support for the project and awareness of their required commitment. Note date of letter/email and sender below.

  Mike Wichrowski - VT Fish & Wildlife Lands & Facilities Administrator (dated 12/7/23) - landowner and operation & maintenance support

- OTHER: Include other information regarding landowner relations here.

  Site is owned by VT Fish & Wildlife and will be maintained by VT Fish & Wildlife

c) **OPERATIONS & MAINTENANCE**

- COST ESTIMATE: Provide a quantitative estimate of operation & maintenance costs on an annual basis where available. If not available, please provide a qualitative estimate. The anticipated annual operations & maintenance expenses for this project are:
  $1000 (likely overestimate - will not need excavator every year, mostly hand work)
- O & M AGREEMENT: There is a signed operations & maintenance agreement for this project: Yes

  If you answered Yes to the previous question, please include a copy of the signed O & M Agreement in the proposal package.

- OTHER: Include any other information regarding the operations & maintenance agreement for this project.

The signed operation and maintenance agreement included with this application is relatively generic given that the project has not been built yet; a more detailed operation and maintenance agreement with specific instructions will be secured during implementation.

d) **PERMITTING:** This project will require a permit: Yes

If you answered Yes to the previous question, please provide a list of the required permits, any issues anticipated in obtaining the permits and the status of the permit. If you have permit(s) for the project in hand, please include a copy of them in the proposal package.

We have consulted on site with the appropriate DEC Shoreland permitting specialis

e) **BARRIERS:** Describe any potential barriers to completing this project and how you plan to manage those challenges:

N/A

f) **HISTORIC SITE REVIEW:** Consult the Vermont Historic Sites spreadsheet and accompanying guidance in the State Historic Preservation Review section of the FY23 Clean Water Initiative Program Funding Policy to determine whether the proposed project will require Preliminary and Final Project Review by the Vermont Division of Historic Preservation. Include a copy of the completed Vermont Historic Preservation Project Review Form in the proposal package.

- ◈ The proposed project will require State Historic Preservation Review:

Historic Preservation Project Review Form was submitted on 12/6/23, awaiting response

9. Proposal Submission

Assemble the following materials in the order listed into a single PDF and submit to Brian Voigt (voigt@cvregion.com) with the Subject line: "Basin 8 Clean Water Service Provider Project Proposal – FY24, Round 2".

1. If your organization or municipality has not yet been pre-qualified as an eligible Basin 8 Clean Water Service Provider Clean Water Partner, please complete and submit a pre-qualification form along with your funding proposal.

2. Project proposal form (i.e. this document).

3. Include the following information in the order listed (please):
   a) Natural Resources Screening Form (see the FY23 Clean Water Initiative Program Funding Policy – Appendix A. Required for preliminary design, final design, or implementation phase projects.)
   b) Project Locator Map – applicants may use the Vermont Agency of Natural Resources Atlas to generate the Project Locator Map (Contact the Clean Water Service Provider for assistance.)
   c) Project Timeline – Propose a project schedule based on the milestones of the proposed project type. Assume an 8 January 2024 start date.
   d) Staff capacity – list key staff and their role(s) in the project. Attach one-page resumes for any staff listed in Section 4 of the Application Form who were not included in your pre-qualification materials.
   e) Completed DEC Interim Phosphorus Reduction Calculator Tool v1.0, or, for Developed Land Projects, report from DEC Stormwater Treatment Practice Calculator. (Contact the Clean Water Service Provider for assistance.)
   f) Detailed project budget with a cost breakdown of all project and administrative expenses. The project should be itemized by Task with anticipated costs for personnel, equipment, materials, subcontracted services and other costs as appropriate. Be sure to request sufficient funding to complete the required milestones and deliverables (including project reporting) for the type of project being proposed.
   g) Letter(s) of support from landowner(s) indicating their support for and awareness of the commitment required to advance / implement the project
   h) Signed Operations & Maintenance Agreement (if applicable)
   i) Permits – Attach approved project permits (if applicable).
   j) Historic Site Review - Use the spreadsheet and accompanying guidance in the State Historic Preservation Review section of the FY23 Clean Water Initiative Program Funding Policy to determine whether your clean water project will require Preliminary and Final Project Review by the Vermont Division of Historic Preservation. Attach a copy of the completed Vermont Historic Preservation Project Review Form.

APPENDIX A. CLEAN WATER INITIATIVE PROGRAM - PROJECT ELIGIBILITY SCREENING FORM

This fillable PDF form is designed to assist with project review by systematically walking through all eligibility criteria. It should be completed for all projects seeking funding for 30% + design or implementation work. It may be applied to projects seeking funding for assessment or development if helpful for determining their alignment with eligibility criteria 2, 3, 6, and 8.

Step 1: Conduct Eligibility Criteria #1 Screening: Project Purpose

Table 1A: Project Purpose	
From the drop-down list to the right, please select which of the four objectives of Vermont's Surface Water Management Strategy this project addresses. If multiple, please list below: Minimize anthropogenic nutrient and organic pollution; protect and restore aquatic and riparian habitats	Multiple

Step 2: Conduct Eligibility Criteria #2 Screening: Project Types and Standards

Table 2A: Project Types and Standards	
Please select the most representative project type from the drop-down list to the right.[1,2] If multiple BMPs are included in the project, please list below:	Stormwater - Implementation
Is the project type an eligible project type for the funding program you are applying to as listed in column B of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Does the project meet the project type definitions and minimum standards as provided in column C of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Will the project result in the standard performance measures, milestones, and deliverables as defined by project type in columns D-F of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Is the project listed as an ineligible project or activity in the CWIP Funding Policy? If Yes, please explain below how project meets the allowable exceptions within the CWIP Funding Policy. (Answer must be NO to proceed, unless reasonable justification is provided above)	Yes ○ No ○

Step 3: Conduct Eligibility Criteria #3 Screening: Watershed Projects Database

Verify project has been recorded in the Watershed Project Database (WPD). Each project must have a Watershed Project Database number specific to the proposed project phase (for example,

[1] Note that Road/Stormwater Gully project-types must not otherwise be considered intermittent or perennial streams by the DEC Rivers Program and therefore project proponent must show documentation of this determination in order to select this project type.

[2] One project may include multiple best management practices (BMPs) that cross "project types." For example, a single project may include both stormwater and lake shoreland BMPs. Proponents should use their best judgement in selecting the most representative project type for the purposes of eligibility screening and reporting.

a final design will have a different WPD-ID from a preliminary design even if for the same project). If the project, or the specific phase, is not yet in the Watershed Project Database, follow directions provided in the CWIP Funding Policy to secure a WPD-ID. Please see CWIP Funding Policy for more information on the WPD-ID.

Table 3A. WPD-ID	
Watershed Project Database ID number assigned	11708
Watershed Project Database Project Name	Peacham Pond DFW Access - Stormwater Implementation

Step 4: Conduct Eligibility Criteria #4 Screening: Natural Resource Impacts[3]

Agency of Natural Resources (ANR) permit screening for natural resource impacts includes 1) an initial desktop review to identify which ANR permitting programs should be contacted, 2) a review by the relevant ANR permitting staff, and 3) a response summary from the project proponent addressing any permitting staff concerns. [4]

1) **Table 4. Natural Resource Impacts** facilitates a high-level desktop review of the most likely ANR permits to apply to clean water projects. Project proponents should answer all the questions to identify likely permit needs. [5] Please note that "project site" may include both the active restoration location as well as any additional impact footprint related to staging, site access, or storage of waste or disposed materials.
2) If responses to the **Table 4. Natural Resource Impacts** desktop review trigger a permitting staff consultation, **Table 4** provides appropriate contact information.
    a. Proponents should send the identified permitting staff the following:
        i. The watersheds project database identification number (WPD-ID) (if available),
        ii. Project location (GPS coordinates)
        iii. Summary of proposed scope of work, and
        iv. Any other relevant information they request that will be utilized in their review.
    b. **Proponents should clarify they are seeking permitting staff input on potential permitting needs, permit-ability of proposed scope of work, and other design considerations but they are NOT seeking a formal permit determination.**
    c. Project proponents must attempt to communicate with the permitting staff and provide them with at least thirty days to review the project and provide a

[3] Easements and Riparian Buffer Plantings are excluded from this eligibility requirement/step.

[4] In cases where this screening may have already occurred in a prior project phase, project proponents may supply attachments or links to relevant permit needs assessment documents in place of completing Table 4.

[5] Entities selected for funding are expected to perform due diligence to ensure all applicable permits (including non-ANR state, local, and federal permits) are discovered and secured prior to implementation. The ANR Permit Navigator and an Environmental Compliance Division Community Assistance Specialist can help confirm ANR permitting needs for any projects once selected for funding.

response. Project proponents are encouraged to perform this screening during a project development phase as opposed to during a project solicitation round to allow for more time for feedback. Permitting feedback may be up to one year old.

3) Proponents should summarize permitting staff feedback and how the proposed scope of work will address this at the bottom of **Table 4**. Specifically, please include:
   a. Which permits or permit amendment are needed or might be needed? [6]
   b. What type might be needed? (e.g., a general or individual permit[7])?
   c. What concerns were voiced by permitting staff?
   d. How will the proposed scope of work address these concerns?[8]

Table 4A: Natural Resource Impacts		
I. Act 250 Permits		
1. Have any Act 250 (Vermont's Land Use and Development Control Law) Permits been issued in the project site's parcel location?[9]	**Yes** ◯	**No** ◯
If ***yes***, please provide the permit number and list any water resource issues or natural resource issues found[10]: **PermitNumber:** **ResourceIssues:** _____ If ***yes***, use the Water Quality Project Screening Tool to identify the appropriate regulatory contact for an Act 250 consultation. **Regulatory Point of Contact Name/Position:**		
II. Lake and Shoreland		
1. Is the project site located within 250 feet of the mean water	**Yes** ◯	**No** ◯

[6] Occasionally permit staff may indicate they need a field visit or to see more completed designs prior to making a permit need determination.

[7] Design phase projects that require an individual wetlands permit must have the permit in hand at the close of the final design phase. Implementation phase projects must have the individual permit in hand to be eligible for funding.

[8] Examples could include planned design changes or inviting permitting staff to stakeholder meetings.

[9] An Act 250 Permit is required for certain categories of development, such as subdivisions of 10 lots or more, commercial projects on more than one acre or ten acres (depending on whether the town has permanent zoning and subdivision regulations), and any development above the elevation of 2,500 feet. The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located on an Act 250 parcel. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

[10] Note that Act 250 permit amendments may require more extensive review of project impacts to natural resources including wildlife habitat, significant natural communities, and riparian zones. Please consult with the Act 250 District Coordinator regarding the nature and scope of that review and what bearing it may have on your project design.

level (shoreline) of a lake or pond? [11]	
If ***yes***, you might need either a Shoreland Protection Act Permit or a Lake Encroachment Permit. Use the Water Quality Project Screening Tool to find the Lakes and Ponds Program contact for your project's region. **Regulatory Point of Contact Name/Position:** In conversation with Laura Woods, DEC Lake and Shoreland Ecologist regarding DEC Shorelan	
III. Rivers, River Corridors, and Flood Hazard Areas	
1. Is there any portion of the project site located within 100' of a river corridor and/or mapped Federal Emergency Management Agency (FEMA) flood hazard area[12]? (e.g. a stormwater pond's pipe draining into a river corridor area)? Any permanent excavation/filling or construction within a flood hazard area or river corridor may trigger regulatory requirements through municipal bylaws or through state authorities.	Yes ○ No ○
If ***yes***, you will need to speak with a Floodplain Manager. Use the Water Quality Project Screening Tool to find the Floodplain Manager for your project's region. **Regulatory Point of Contact Name/Position:**	
2. Is any portion of the project site within a perennial river or stream channel? [13]	Yes ○ No ◉
If ***yes***, you will need to speak with a Stream Alteration Engineer. Use the Water Quality Project Screening Tool to find the Stream Alteration Engineer for your project's region. **Regulatory Point of Contact Name/Position:**	
IV. Wetland	

[11] The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Lakeshore permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

[12] FEMA mapped Flood Hazard Areas are not available statewide on the ANR Natural Resources Atlas. For projects located in Grand Isle, Franklin, Lamoille, Addison, Essex, Orleans, Caledonia, and Orange Counties, maps are available via the FEMA Flood Map Service Center: https://msc.fema.gov/portal/home. ANR Floodplain Managers are available to provide technical assistance if needed.

[13] Stream Alteration Permits regulate all activities that take place within perennial river and stream channels. Examples of regulated activities include streambank stabilization, dam removal, road improvements that encroach on streams, and bridge/culvert construction or repair. The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Stream Alteration permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

1. Does the Wetland Screening Tool[14] provide a result of wetlands likely, very likely, or present at the project site?	Yes ○ No ◉
2. Does your project site involve land that is in or near an area that has any of the following characteristics: o Water is present – ponds, streams, springs, seeps, water filled depressions, soggy ground under foot, trees with shallow roots or water marks? o Wetland plants, such as cattails, ferns, sphagnum moss, willows, red maple, trees with roots growing along the ground surface, swollen trunk bases, or flat root bases when tipped over? o Wetland Soils – soil is dark over gray, gray/blue/green? Is there presence of rusty/red/dark streaks? Soil smells like rotten eggs, feels greasy, mushy or wet? Water fills holes within a few minutes of digging? (See Landowners Guide to Wetlands for additional information on identifying wetlands onsite.)	Yes ○ No ◉ Not Sure ○
If you answered ***yes*** or ***not sure*** to either of the above questions, you will need to contact your District Wetlands Ecologist using the Wetland Inquiry Form. The District Wetlands Ecologist can help determine the approximate locations of wetlands and whether you need to hire a Wetland Consultant to conduct a wetland delineation. Alternatively, if you answered ***yes*** or ***not sure*** to either of the above questions, you can simply budget for a Wetland Consultant in the proposed scope of work. Any activity within a Class I or II wetland or wetland buffer zone (minimum of 100 feet and 50 feet respectively) which is not exempt or considered an "allowed use" under the Vermont Wetland Rules requires a permit. All permits must go through review and public notice process, which takes at minimum 6 weeks for a General Permit and 5 months for an Individual Permit. **Regulatory Point of Contact Name/Position:**	
1. Is your project a Wetland Restoration project type?	Yes ○ No ◉
If you answered yes, under the Vermont Wetland Rules you will need an "allowed use" determination from the DEC Wetlands Program. Contact your District Wetlands Ecologist using the Wetland Inquiry Form. **Regulatory Point of Contact Name/Position:**	
V. Fish and Wildlife	
State law protects endangered and threatened species. No person may take or possess such species without a Threatened & Endangered Species Takings permit. 1. **Does your project involve cutting down trees larger than 5 inches in diameter in any of the following towns?** Addison, Arlington, Benson, Brandon, Bridport, Bristol, Charlotte, Cornwall, Danby, Dorset, Fair Haven, Ferrisburgh, Hinesburg, Manchester, Middlebury, Monkton, New Haven, Orwell, Panton, Pawlet, Pittsford, Rupert, Salisbury, Sandgate, Shoreham, Starksboro, St. George, Sudbury, Sunderland, Vergennes, Waltham, West Haven, Weybridge, Whiting	Yes ○ No ◉

[14] To view the Wetland Screening Tool introduction video, see https://youtu.be/6lv5en0AB1o

2. Is the project site within 1 mile of a mapped[15] Significant Natural Community or Rare, Threatened, or Endangered Species?	Yes ◉ No ○
If *yes* to either of the above questions, connect with the VT Fish and Wildlife department (everett.marshall@vermont.gov 802-371-7333) to discuss your project and any necessary permitting. **Regulatory Point of Contact Name/Position:** Everett Marhsall - please see attached correspondence fr	
VI. Stormwater	
1. Will the project disturb more than an acre of land during construction, add or redevelop impervious surface, create new development or otherwise require a Stormwater permit?	Yes ○ No ◉
If *yes*, forward to the appropriate Stormwater specialist to ensure necessary permitting. Use the Water Quality Project Screening Tool to find the Stormwater specialist for your project's region. **Regulatory Point of Contact Name/Position:**	
VII. Solid Waste	
2. Will you be creating any debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry, and mortar) with your project that you intend to bury on site? [16]	Yes ○ No ◉
If yes, connect with the Waste Management & Prevention Division (dennis.fekert@vermont.gov 802-522-0195) to discuss your project and any necessary permitting. **Regulatory Point of Contact Name/Position:**	
Provide below or attach a narrative summary of Table 4 findings. Please include: a. Which permits or permit amendment are needed or might be needed? b. What type might be needed? (e.g. a general or individual permit)? c. What concerns were voiced by permitting staff? d. How will the proposed scope of work address these concerns? A Shoreland Permit will be required. As part of the plans, a small area of vegetation within 250 feet of the mean water level of Peacham Pond will be cleared. To offset this clearing, a small group of shrubs will be planted along the shoreline.	
Is the project, as proposed, reasonably considered permit-able by all applicable	Yes ◉ No ○

[15] Find both of these layers on the ANR Atlas under Atlas Layers/Fish and Wildlife. Use the Measurement tool to 1) Plot Coordinates for your project 2) select the coordinates from the left panel 3) select the Radius Tool 4) click on your project location 5) Indicate 1 mile distance 6) look for overlap with either of these mapped layers.

[16] If your project will result in the transfer and disposal of debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry and mortar), you do not need a permit from this office as long as you hire a licensed solid waste hauler and bring the material to a certified facility.

ANR permitting programs? (Answer must be Yes to continue)	

Step 5: Conduct Eligibility Criteria #5-8 Screenings

Table 5A. Eligibility Criteria 5-8	
Landowner and Operation and Maintenance Responsible Party Support. Project identifies and demonstrates commitment from a qualified and willing operation and maintenance responsible party. Project demonstrates landowner support for the proposed project phase. (Answer must be YES to proceed)	Yes ◉ No ○
Budget. Project budget includes ineligible expenses. (Answer must be NO to proceed)	Yes ○ No ◉
Leveraging. Proposed leveraging meets required leveraging levels (if applicable), meets the definition of leveraging, and comes from eligible sources (Answer must be YES or N/A to proceed)	Yes ○ No ○ N/A ◉
Funding Program Specific Eligibility. Project meets additional funding program eligibility requirements*. Please list applicable funding program below: (Answer must be YES to proceed) *If Water Quality Restoration Formula Grant, complete Step 6 below	Yes ◉ No ○

Step 6: Screening Projects on Agricultural Lands (Water Quality Restoration Formula Grants Only)

For Water Quality Restoration Formula Grant projects, please complete the following information as part of your Funding Program Specific Eligibility Screening (Criteria 8). Please note this must be completed for all projects located on agricultural lands regardless of project type. See CWIP Project Types Table for eligible project types.

Table 6A. Screening Projects on Agricultural Lands	
1. Is the proposed project located on a jurisdictional farm operation[17]? Complete a preliminary review to	○ **Yes** - Proceed to next question below.

[17] Jurisdictional farm operations are required to meet Vermont's Required Agricultural Practices (RAPs).

determine if it is a jurisdictional farm operation, and any case that requires consultation with AAFM will occur via the farm determination process. Please note this form must be submitted by the farm operation/landowner seeking the determination.	◉ **No**[18] - There is no additional requirements related to agricultural review for these projects.
2. Is the proposed project an agricultural project? Examples of agricultural projects include but are not limited to Production Area Practices – (e.g. Waste Storage Facilities, Heavy Use Area, Diversion) Fence, Livestock Exclusion, Filter Strip, Cover Crop, Reduced Tillage, Manure Injection, Rotational Grazing. Please note this is not an exhaustive list of all agricultural practices.	○ **Yes** - Agricultural Projects on jurisdictional farms are not an eligible project type. You can provide a referral to an applicable state or federal agricultural assistance program, or a local organization. ○ **No** - The natural resource, innovative, or other project type will require an agricultural project review and approval from the Vermont Agency of Agriculture, Food and Markets (VAAFM) to ensure a consistent approach on farms statewide that follows rules, regulations, and laws in place. Please follow Steps 1 & 2 below. **Step 1** - Please submit a detailed description of the project, project site, project details, landowner, farm operation, and any other relevant information to VAAFM at AGR.WaterQuality@Vermont.gov . **Step 2** - Once you complete this Agricultural Project Review, please allow 30 days for a response. Once that response has been received, please include a summary of the response in the next section.

Agricultural Project Review Status & Summary:	
Check as Applicable	**Status**
☐	Submitted/ Pending
☐	Approved
☐	Denied

[18] Note CWIP's Agricultural Pollution Prevention project type eligibility is limited to land where owner or operator is not a jurisdictional farm (i.e., not required to meet the Required Agricultural Practices (RAPs)). As such, projects that meet the definition of the Agricultural Pollution Prevention project type in the Appendix B. Project Types Table are not subject to review by VAAFM.

Please include a summary of the response here:

Please note that it is expected that all projects with the status "submitted/pending" will be "approved" prior to a project approval for funding.

RE: Two proposed water quality design projects near mapped RTE/significant natural communities

Marshall, Everett <Everett.Marshall@vermont.gov>

Fri 10/21/2022 2:29 PM

To: Emily Finnegan - Conservation District, St. Johnsbury, VT <Emily.Finnegan@vt.nacdnet.net>

Hi Emily, Sorry for the slow reply. I don't see any issues with regards to RTE species and significant natural communities with either project.

VERMONT

Everett Marshall (he/him)
Information Mgr./Natural Heritage Coord.
Vermont Fish and Wildlife Dept.
Vermont Agency of Natural Resources
Davis 2, 1 National Life Dr | Montpelier, VT 05620-3901
802-371-7333 (cell)
http://anr.vermont.gov/

From: Emily Finnegan - Conservation District, St. Johnsbury, VT <Emily.Finnegan@vt.nacdnet.net>
Sent: Tuesday, October 18, 2022 2:42 PM
To: Marshall, Everett <Everett.Marshall@vermont.gov>
Subject: Two proposed water quality design projects near mapped RTE/significant natural communities

Hi Everett,

I plan to submit applications for funding for water quality project design this Friday, 10/21. It appears that both project sites are within 1 mile of a significant natural community and/or RTE species.

The Peacham Pond project is a stormwater rehab of the Fish and Wildlife access - currently the wide gravel ramp drains into the pond without really any treatment; some water bars have been tried over the years but nothing has held up well.

The four project locations on Joe's Pond are all on private property and came up during a Lake Wise assessment. The projects will likely involve lakeshore plantings, a path re-design, and potentially one shoreline stabilization project.

I know this is a tight turnaround, and if you don't get to this that's totally fine! But if you get the chance, do you mind providing some feedback on whether these types of projects would require a permit given the proximity to RTE species and/or significant natural communities? If you need more information on the projects, happy to provide additional details!

Thank you so much, I really appreciate it!

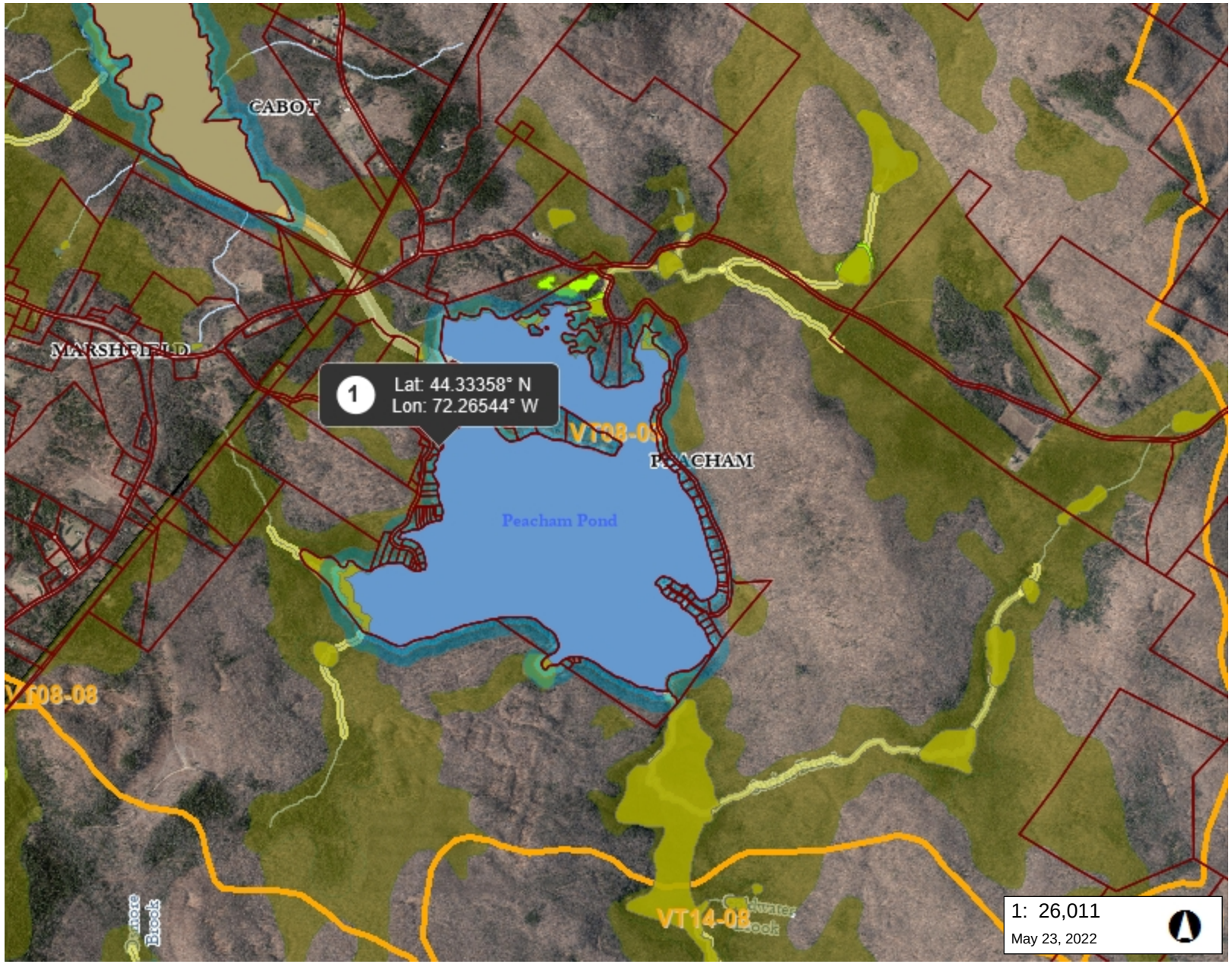
Best,
Emily

Emily Finnegan, District Manager

Natural Resources Atlas

Vermont Agency of Natural Resources

vermont.gov



LEGEND

- Shoreland 100' Setback
- Shoreland 250' Setback
- Wetland - VSWI
  - Class 1 Wetland
  - Class 2 Wetland
  - Buffer
- Wetlands Advisory Layer
- River Main Stem Waterbodies
- WBID Watersheds
- Flood Hazard Areas (Only FEM
  - AE (1-percent annual chance floodp
  - A (1-percent annual chance floodpl
  - AO (1-percent annual chance zone feet)
  - 0.2-percent annual chance flood ha
- River Corridors (Aug 27, 2019)
- .5 - 2 sqmi.
- .25-.5 sqmi.
- Soils - Hydric
- Parcels (standardized)
- ACT250 Permits
- Waterbody
- Stream/River
  - Stream
  - Intermittent Stream
- Town Boundary

NOTES

Map created using ANR's Natural Resources Atlas

1,321.0 0 660.00 1,321.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 2168 Ft. 1cm = 260 Meters

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Water Quality Restoration Formula Grant

Winooski Basin – Sub-Grant Application Form

FY24 – Round 2

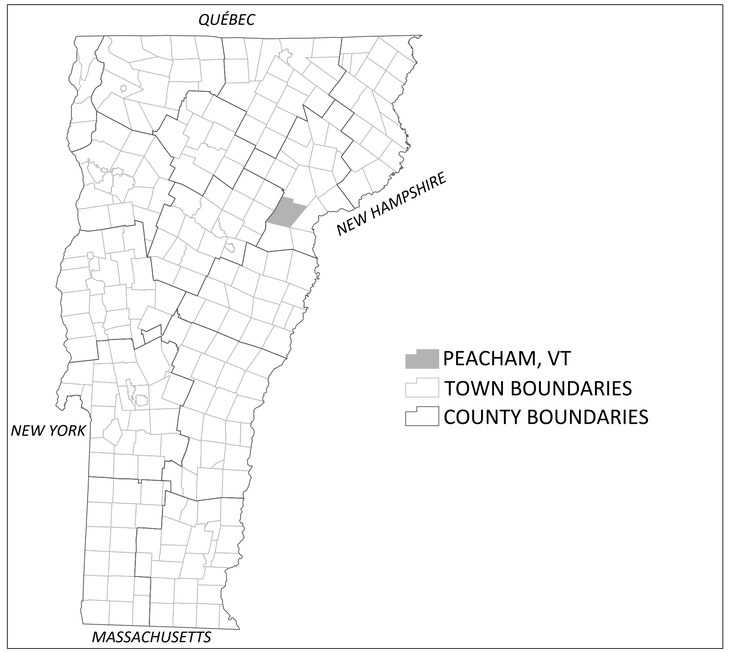
Project Timeline

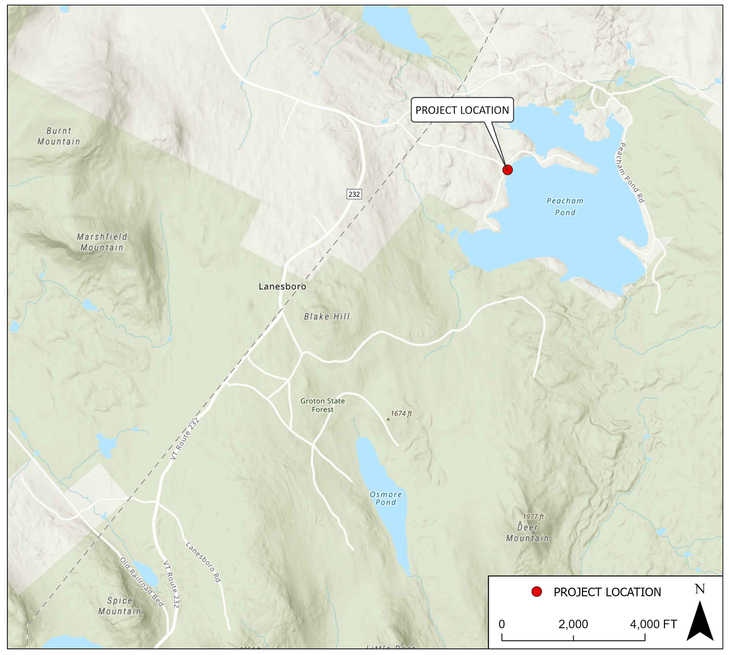
Task Number	Task Description	Estimated Completion Date
1	Signed sub-contract with engineering firm providing construction oversight	January 2024
2	Required permits secured; operation & maintenance and access easement signed	January 2024
3	Bid solicitations issue, pre-bid site visit if deemed necessary by the project team, contractor selected and subcontract signed	March 2024
4	Pre-construction meeting	August 2024
5	Construction	September – October 2024
6	Outreach and reporting	January 31, 2024

Staff Capacity

Key Staff: Emily Finnegan, CCNRCD District Manager

Emily will act as the project manager. Emily will manage the bid process and work with the engineers to select a qualified construction contractor. The construction agreement will be between CCNRCD and the selected contractor. Emily will also schedule the pre-construction meeting, manage correspondence among all project stakeholders throughout the project, prepare media postings, document project progress, and provide overall grant administration, metrics, and reporting.





PEACHAM POND BOAT LAUNCH
ONION POINT ROAD,
PEACHAM, VERMONT

DRAFT FINAL PLANS
12/11/2023

THIS PACKAGE INCLUDES PLANS FOR RE-GRADING AND CONSTRUCTION OF GREEN STORMWATER INFRASTRUCTURE TO THE PEACHAM POND FISH AND WILDLIFE ACCESS TO IMPROVE WATER QUALITY. THESE PLANS INCLUDE DETAILS FOR THE INSTALLATION OF A RAIN GARDEN, FOREBAY, AND STONE-LINED DITCHES.

DRAWING INDEX

NO.	NAME	TITLE
1	EX-1	SITE PLAN - EXISTING CONDITIONS
2	PR-1	SITE PLAN - PROPOSED CONDITIONS
3	PR-2	SITE PLAN - PROPOSED CONDITIONS - SHORELAND
4	DT-1	SITE PLAN - PROFILES
5	DT-2	SITE PLAN - CONSTRUCTION DETAILS
6	N-1	CONSTRUCTION NOTES

EXISTING CONDITIONS AND SOURCE NOTES

1. GEOGRAPHIC DATA AND PLANS ARE REFERENCED TO THE VERMONT STATE PLANE IN US SURVEY FEET (NAVD83). ELEVATIONS ARE BASED ON NAVD88.
2. PARCEL BOUNDARY DATA SHOWN ON THE PLANS ARE FROM VCGI.

PREPARED BY:

Fitzgerald Environmental Associates, LLC

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Colchester, VT 05446
Telephone: 802.876.7778
www.fitzgeraldenvironmental.com

PREPARED FOR:

Caledonia County
Natural Resources Conservation District

481 Summer Street, Suite 202
St. Johnsbury, VT 05819
Telephone: 802.424.3149
https://caledoniadistrict.org

SPUR ROAD

ONION POINT

PORTABLE RESTROOM

FLAGPOLE

SIGN

WELL

WELL

N/F PENDLETON

N/F WHITE

N/F LITTLEFIELD

N/F GILMAN

APPROXIMATE DRAINAGE AREA TO BOAT LAUNCH EXTENDS OFF SHEET

EXTENT OF TOPOGRAPHIC DATA COLLECTED BY FEA

EXISTING SWALES ALONG BOTH SIDES

EXISTING WATERBARS IN ROADWAY

UTILITY POLE

ANCHOR

SIGN

SIGN

SIGN

SHED

CONCRETE PAD

OBSERVED WATER ELEVATION: 1,401.82 FT

PEACHAM POND

1417 1418 1419 1420 1416 1415 1414 1413 1412 1411 1410 1409 1408 1407 1406 1405 1404 1403

EXISTING CONDITIONS AND SOURCE NOTES:

1. CONTOURS GENERATED FROM 2014 LiDAR DIGITAL ELEVATION MODEL (0.7-METER) AND ADDITIONAL TOPOGRAPHIC DATA COLLECTED BY FEA WITH TRIMBLE CM GPS AND TOTAL STATION ON 05/08/2023.
2. GEOGRAPHIC DATA AND PLANS ARE REFERENCED TO THE VERMONT STATE PLANE IN US SURVEY FEET (NAVD83). ELEVATIONS ARE BASED ON NAVD88.
3. PARCEL DATA PROVIDED BY VCGI - BOUNDARIES WERE NOT VERIFIED IN THE FIELD.
4. THIS MAP IS NOT A BOUNDARY SURVEY AND SHALL NOT BE USED OR CONSTRUED FOR SUCH PURPOSES.

LEGEND

EXISTING

- BUILDINGS/STRUCTURES
- GRAVEL
- FENCE
- 5-FOOT CONTOURS
- 1-FOOT CONTOURS
- SWALE/WATERBAR
- BOULDERS
- CONCRETE BOAT RAMP
- TREES
- OBSERVED WATER SURFACE
- PARCEL BOUNDARIES
- VEGETATED SHORELINE AREA

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SIGNATURE

REVISIONS

#	DESCRIPTION	DATE

10 0 5 10

1" = 10'

N

DRAFT FINAL PLANS

SITE PLAN - EXISTING CONDITIONS

CALEDONIA COUNTY NATURAL RESOURCES CONSERVATION DISTRICT

PEACHAM POND FISH & WILDLIFE ACCESS

PEACHAM, VT

NOT FOR CONSTRUCTION

DRAWN	CHECKED
FCP	JMD

SCALE: 1" = 10'

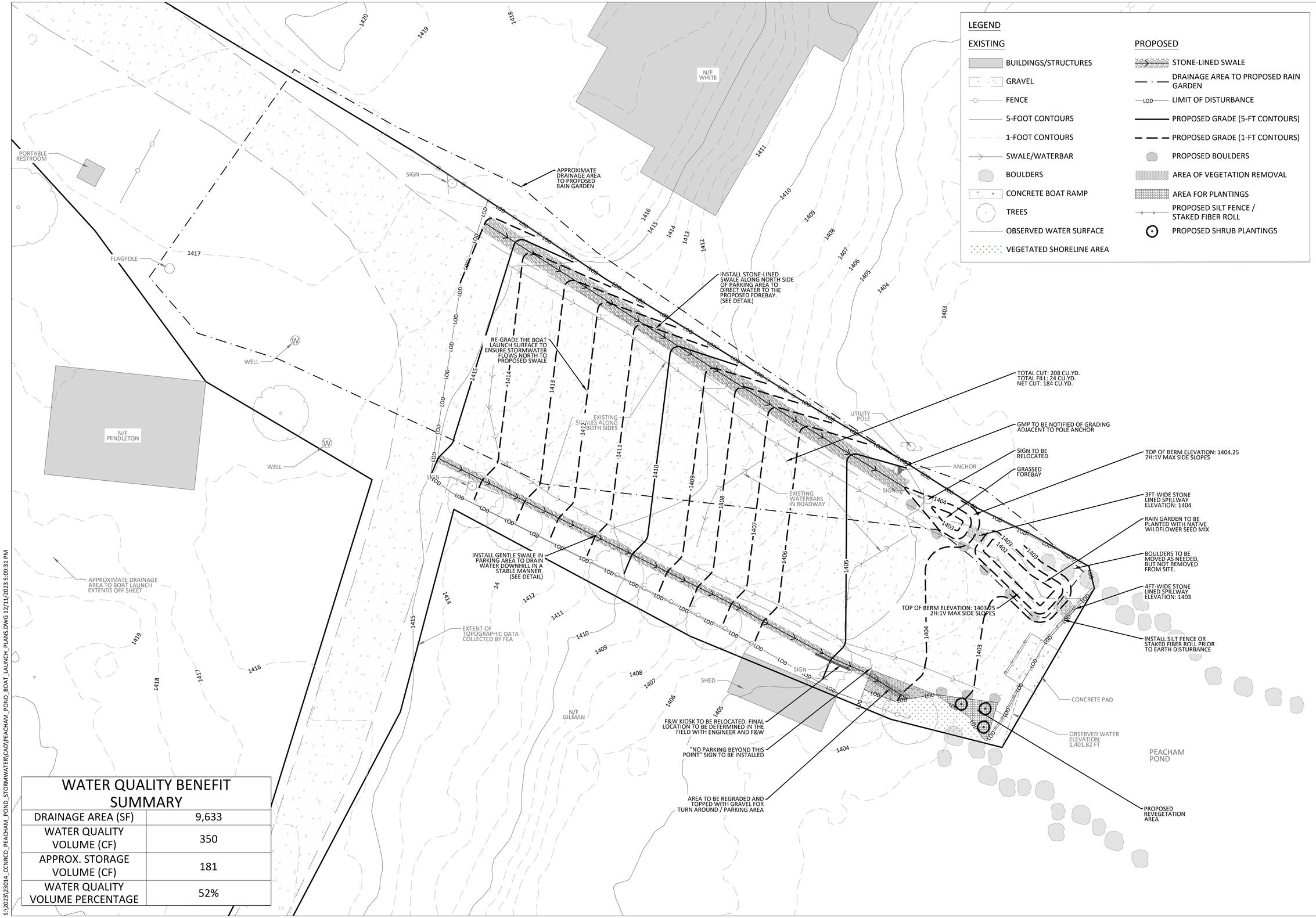
DATE: 2023-12-11

PROJECT NO.: 23014

SHEET NO.: 1 OF 6

SHEET NAME: **EX-1**

S:\2023\23014_CCNRCD_PEACHAM_POND_STORMWATER\CAD\PEACHAM_POND_BOAT_LAUNCH_PLANS.DWG 12/11/2023 5:09:26 PM



WATER QUALITY BENEFIT SUMMARY	
DRAINAGE AREA (SF)	9,633
WATER QUALITY VOLUME (CF)	350
APPROX. STORAGE VOLUME (CF)	181
WATER QUALITY VOLUME PERCENTAGE	52%

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REVISIONS

#	DESCRIPTION	DATE

10 0 5 10
1" = 10'

N

SITE PLAN - PROPOSED CONDITIONS
CALEDONIA COUNTY NATURAL RESOURCES CONSERVATION DISTRICT
PEACHAM POND FISH & WILDLIFE ACCESS
PEACHAM, VT
NOT FOR CONSTRUCTION
DRAFT FINAL PLANS

DRAWN	CHECKED
FCP	JMD

SCALE: 1" = 10'
DATE: 2023-12-11
PROJECT NO.: 23014
SHEET NO.: 2 OF 6
SHEET NAME: **PR-1**

S:\2023\23014_CCNRCD_PEACHAM_POND_STORMWATER\CAD\PEACHAM_POND_BOAT_LAUNCH_PLANS.DWG 12/11/2023 5:09:31 PM

LEGEND

EXISTING

- BUILDINGS/STRUCTURES
- GRAVEL
- FENCE
- 5-FOOT CONTOURS
- 1-FOOT CONTOURS
- SWALE/WATERBAR
- BOULDERS
- CONCRETE BOAT RAMP
- TREES
- OBSERVED WATER SURFACE
- VEGETATED SHORELINE AREA

PROPOSED

- STONE-LINED SWALE
- DRAINAGE AREA TO PROPOSED RAIN GARDEN
- LOD — LIMIT OF DISTURBANCE
- PROPOSED GRADE (5-FT CONTOURS)
- PROPOSED GRADE (1-FT CONTOURS)
- PROPOSED BOULDERS
- AREA OF VEGETATION REMOVAL
- AREA FOR PLANTINGS
- PROPOSED SILT FENCE / STAKED FIBER ROLL
- PROPOSED SHRUB PLANTINGS

GMP TO BE NOTIFIED OF GRADING ADJACENT TO POLE ANCHOR

SIGN TO BE RELOCATED

GRASSED FOREBAY

TOP OF BERM ELEVATION: 1404.25
2H:1V MAX SIDE SLOPES

3FT-WIDE STONE LINED SPILLWAY ELEVATION: 1404

RAIN GARDEN TO BE PLANTED WITH NATIVE WILDFLOWER SEED MIX

TOP OF BERM ELEVATION: 1403.25
2H:1V MAX SIDE SLOPES

4FT-WIDE STONE LINED SPILLWAY ELEVATION: 1403

INSTALL SILT FENCE OR STAKED FIBER ROLL PRIOR TO EARTH DISTURBANCE

ON SITE BOULDERS TO BE PLACED TO DEMARCATE RAIN GARDEN. CONTRACTOR TO COORDINATE WITH ENGINEER AND F&W ON EXACT PLACEMENT.

CONCRETE PAD

OBSERVED WATER ELEVATION: 1,401.82 FT

SIGN

SHED

F&W KIOSK TO BE RELOCATED. FINAL LOCATION TO BE DETERMINED IN THE FIELD WITH ENGINEER AND F&W

"NO PARKING BEYOND THIS POINT" SIGN TO BE INSTALLED

REMOVE SHRUBS AND BOULDERS (60 SQ. FT. OF VEGETATION REMOVAL)

DISCHARGE GENTLE SWALE INTO EXISTING VEGETATED AREA

MAINTAIN EXISTING VEGETATION

RE-VEGETATE 60 SQ. FT. WITH 3 SHRUBS

RED OSIER DOGWOOD (TYP.)

PEACHAM POND

1" = 4'

N

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REVISIONS

#	DESCRIPTION	DATE

SITE PLAN - PROPOSED CONDITIONS - SHORELAND

CALEDONIA COUNTY NATURAL RESOURCES CONSERVATION DISTRICT

PEACHAM POND FISH & WILDLIFE ACCESS

PEACHAM, VT

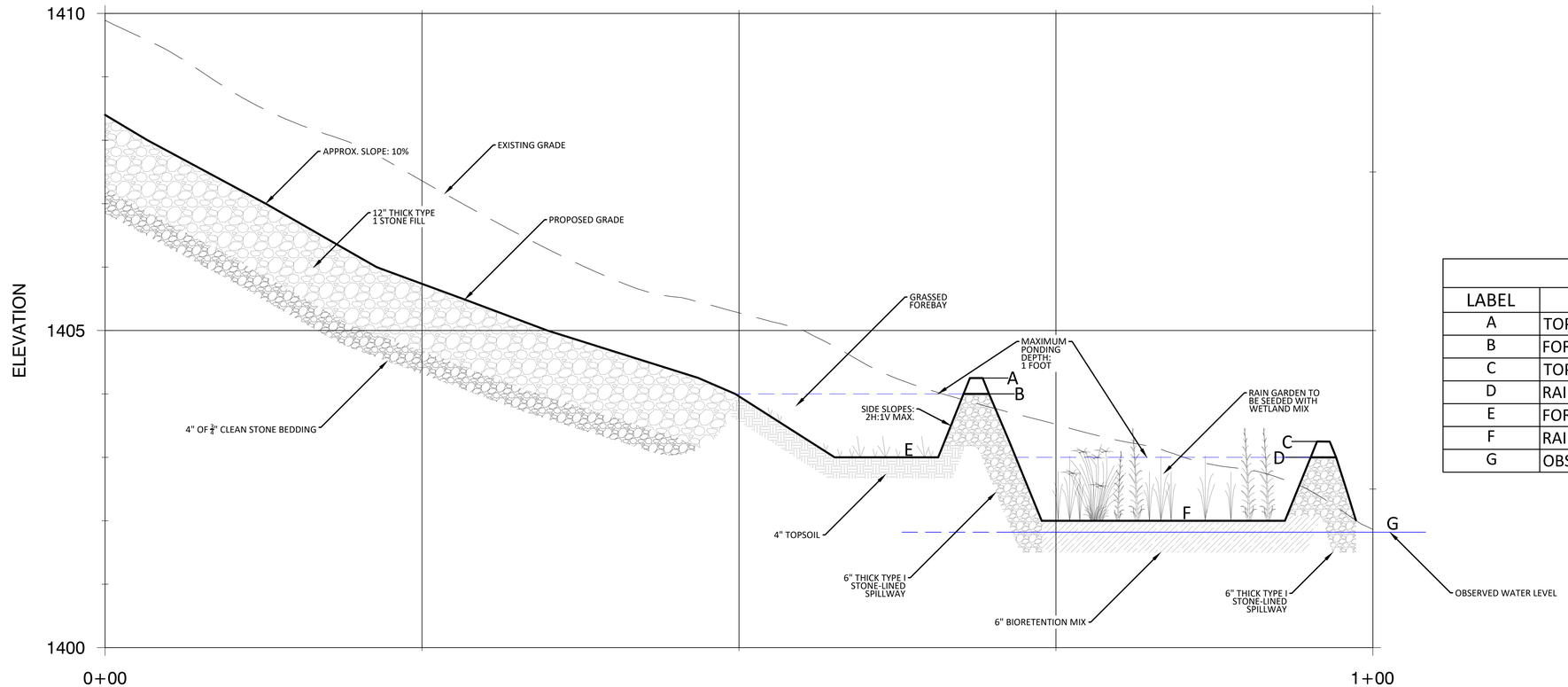
DRAFT FINAL PLANS

NOT FOR CONSTRUCTION

DRAWN: FCP	CHECKED: JMD
SCALE: 1" = 4'	
DATE: 2023-12-11	
PROJECT NO.: 23014	
SHEET NO.: 3 OF 6	
SHEET NAME: **PR-2**	

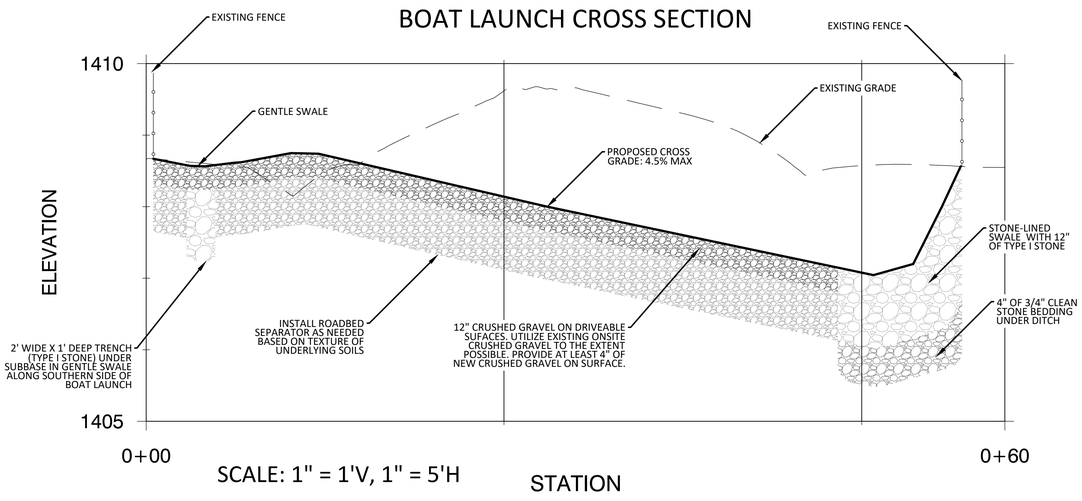
S:\2023\23014_CCNRCD_PEACHAM_POND_STORMWATER\CAD\PEACHAM_POND_BOAT_LAUNCH_PLANS.DWG 12/11/2023 5:09:35 PM

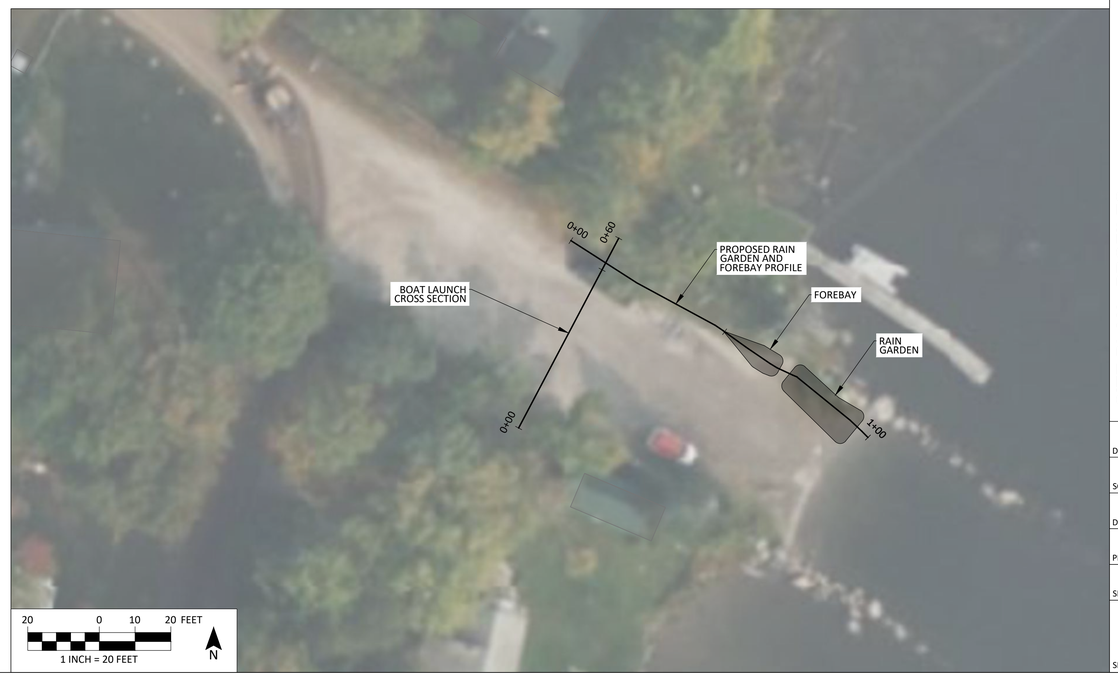
PROPOSED RAIN GARDEN AND FOREBAY PROFILE



KEY ELEVATIONS		
LABEL	DESCRIPTION	ELEVATION (FT)
A	TOP OF FOREBAY BERM	1404.25'
B	FOREBAY SPILLWAY	1404'
C	TOP OF RAIN GARDEN BERM	1403.25'
D	RAIN GARDEN SPILLWAY	1403'
E	FOREBAY BOTTOM	1403'
F	RAIN GARDEN BOTTOM	1402'
G	OBSERVED WATER LEVEL	1401.82'

BOAT LAUNCH CROSS SECTION





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SIGNATURE

REVISIONS

#	DESCRIPTION	DATE

DRAFT FINAL PLANS

SITE PLAN - PROFILES

CALEDONIA COUNTY NATURAL RESOURCES CONSERVATION DISTRICT

PEACHAM POND FISH & WILDLIFE ACCESS

PEACHAM, VT

NOT FOR CONSTRUCTION

DRAWN: FCP	CHECKED: JMD
SCALE: SEE PROFILES	
DATE: 2023-12-11	
PROJECT NO.: 23014	
SHEET NO.: 4 OF 6	
SHEET NAME: **DT-1**	

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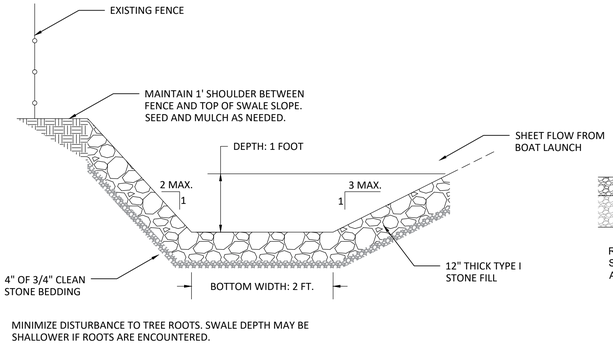
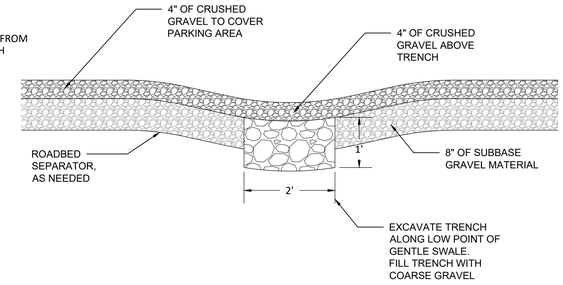


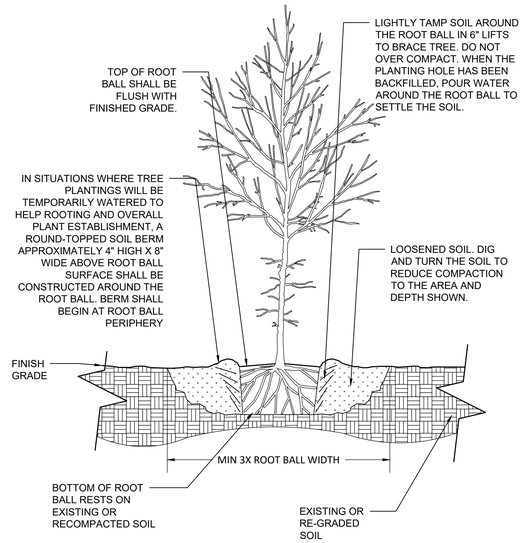
STONE LINED SWALE

N.T.S



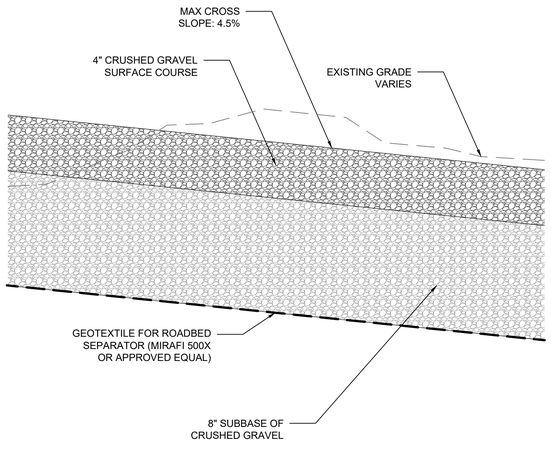
GENTLE SWALE IN PARKING AREA

N.T.S



PLANTINGS

N.T.S



NOTES:

- APPROPRIATE ONSITE GRAVEL FROM REGRADING OF THE ACCESS RAMP MAY BE UTILIZED FOR THE REQUIRED 8" OF SUBBASE GRAVEL.
- CRUSHED GRAVEL SURFACE COURSE SHALL BE NEW MATERIALS.
- ROADBED SEPARATOR SHALL BE INSTALLED, AS NEEDED, BASED ON THE TEXTURE OF THE UNDERLYING SOILS IN AREAS WHERE REQUIRED CUT DEPTH EXCEEDS EXISTING GRAVEL MATERIALS.

GRAVEL ACCESS

N.T.S

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SIGNATURE

REVISIONS

#	DESCRIPTION	DATE

SITE PLAN - CONSTRUCTION DETAILS
CALEDONIA COUNTY NATURAL RESOURCES CONSERVATION DISTRICT
PEACHAM POND FISH & WILDLIFE ACCESS
PEACHAM, VT
NOT FOR CONSTRUCTION
DRAFT FINAL PLANS

FCP DRAWN	JMD CHECKED
SCALE	N.T.S
DATE	2023-12-11
PROJECT NO.	23014
SHEET NO.	5 OF 6
SHEET NAME	**DT-2**

GENERAL CONSTRUCTION NOTES

1. THESE PLANS DO NOT CONSTITUTE A SURVEY AND SHALL NOT BE USED FOR THE TRANSFER OF LOTS.
2. 1-FOOT CONTOURS SHOWN ON THE PLANS WERE GENERATED FROM A TOPOGRAPHIC SURVEY COMPLETED BY FITZGERALD ENVIRONMENTAL ASSOCIATES ON MAY 11, 2023 AND INTEGRATED WITH 2014 0.7-METER LiDAR ELEVATION DATA FOR CALEDONIA COUNTY. ACTUAL ELEVATIONS MAY VARY.
3. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE TECHNICAL SPECIFICATIONS FOR PROJECT.
4. IF A CONDITION OF THE TECHNICAL SPECIFICATIONS CANNOT BE MET, THE CONTRACTOR SHALL PROVIDE NOTIFICATION AND COORDINATE A MEETING WITH THE CLIENT/PROJECT CONSULTANT PRIOR TO CONSTRUCTION.
5. PRIOR TO ORDERING MATERIALS OR BREAKING GROUND, THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING ALL CONTRACT DOCUMENTS INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, DESIGN PLANS, TECHNICAL SPECIFICATIONS AND OTHER RELATED DOCUMENTS TO VERIFY AND COORDINATE DIMENSIONS, LAYOUTS, PLACEMENT, AND APPLICABILITY. THE CONTRACTOR SHALL CONDUCT FIELD CHECKS TO VERIFY THE ACCURACY OF DIMENSIONS, TOPOGRAPHY, AND EXISTING CONDITIONS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CLIENT/PROJECT CONSULTANT OF ANY DISCREPANCIES BETWEEN THE INFORMATION SHOWN ON THESE PLANS AND THE CONDITIONS EXISTING IN THE FIELD. IF THE CONTRACTOR FAILS TO REPORT ANY DISCREPANCIES DISCOVERED TO THE CLIENT/PROJECT CONSULTANT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ERRORS WHICH MIGHT HAVE BEEN AVOIDED THEREBY. THE CONTRACTOR SHALL SUBMIT THE LIST AND QUANTITY OF MATERIALS TO ORDER FOR REVIEW PRIOR TO ORDERING.
6. THE LOCATION OF UTILITIES SHOWN ON THESE PLANS ARE NOT BASED ON "DIG SAFE" MARKINGS AND DO NOT PURPORT TO CONSTITUTE OR REPRESENT ALL UTILITIES LOCATED UPON OR ADJACENT TO THE SURVEYED PREMISES. THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITY CONFLICTS. ALL DISCREPANCIES SHALL BE REPORTED TO THE CLIENT/PROJECT CONSULTANT.
7. THE CONTRACTOR SHALL REPAIR/RESTORE ALL DISTURBED AREAS (ON OR OFF THE SITE) AS A DIRECT OR INDIRECT RESULT OF THE CONSTRUCTION TO THEIR ORIGINAL CONDITION AT THE COMPLETION OF CONSTRUCTION.
8. IN ADDITION TO THE REQUIREMENTS SET IN THESE PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL COMPLETE THE WORK IN ACCORDANCE WITH ALL PERMIT CONDITIONS AND ANY LOCAL PUBLIC WORKS STANDARDS. THIS INCLUDES COMPLETING THE WORK IN ACCORDANCE TO SPECIFIC CONDITIONS OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SHORELAND PROTECTION PERMIT.
9. ANY DEWATERING NECESSARY FOR THE COMPLETION OF THE SITEWORK SHALL BE CONSIDERED AS PART OF THE CONTRACT AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

CONSTRUCTION SPECIFICATIONS

EQUIPMENT ACCESS AND LIMITS OF DISTURBANCE

1. IF NEEDED, INSTALL STABILIZED CONSTRUCTION ENTRANCE ALONG EDGES OF STATE HIGHWAY TO AVOID DAMAGE TO EDGE OF ROAD/SHOULDER.
2. INSTALL ORANGE BARRIER FENCE AND/OR SIGNAGE AROUND PROTECTED RESOURCES AT THE LIMITS OF DISTURBANCE PRIOR TO CONSTRUCTION.
3. SILT FENCE, STAKED FIBER ROLL, TURBIDITY CURTAIN OR OTHER APPROVED SEDIMENT CONTROL MEASURE SHALL BE INSTALLED ALONG THE WATERS EDGE PRIOR TO DISTURBANCE.
4. ADDITIONAL EROSION CONTROL MEASURES TO BE IMPLEMENTED AS NEEDED UNDER THE DIRECTION OF THE ENGINEER.
5. NO DISTURBANCE SHALL OCCUR BELOW THE OBSERVED WATER LEVEL / MEAN WATER LEVEL (1,401 FEET).
6. ALL AREAS EXPOSED DURING CONSTRUCTION SHALL BE PROTECTED IN ACCORDANCE WITH THE STANDARDS PUBLISHED IN THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION'S *LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL*

GENERAL EARTHWORK

1. MATERIALS
   - 1.1. TOP SOIL - ONSITE TOP SOIL MAY BE UTILIZED TO THE EXTENT AVAILABLE.
   - 1.2. BIORETENTION MIX - MIX SHALL CONSIST OF SAND OR LOAMY SAND BY USDA CLASSIFICATION (85-88% SAND, 8-12% SILT, AND 0-2% CLAY) AND 3-5% ORGANIC MATTER IN THE FORM OF COMPOST. 6" OF BIORETENTION MIX IS REQUIRED BELOW THE RAIN GARDEN FEATURE.
   - 1.3. EXCAVATED MATERIALS WILL BE TEMPORARILY STORED ON SITE, ALLOWED TO DRAIN AS NEEDED AND REUSED TO THE EXTENT POSSIBLE TO ESTABLISH A STABLE SUBBASE LAYER FOR THE CRUSHED STONE SURFACE COURSE TO BE INSTALLED ON.
   - 1.4. SWALES - LINE SWALES WITH TYPE I STONE. SWALES SHALL HAVE 1 FT OF TYPE I STONE UNDERLAIN BY 4 IN OF $\frac{3}{4}$ IN CLEAN STONE BEDDING.
   - 1.5. SPILLWAYS - SPILLWAYS FROM FOREBAY AND RAIN GARDEN SHALL BE LINED WITH 6" OF TYPE I STONE.
   - 1.6. SURFACE OF PARKING AREA AND BOAT LAUNCH SHALL INCLUDE AT LEAST 8" OF STABLE SUBBASE GRAVEL (ONSITE MATERIAL AS APPROPRIATE) WITH 4" OF NEW CRUSHED GRAVEL SURFACE COURSE. SUBBASE AND SURFACE COURSE SHALL BE APPROPRIATELY COMPACTED TO PROVIDE A STABLE, COMPACT, AND NON-EROSIVE SURFACE. A ROADBED SEPARATOR SHALL BE UTILIZED WHEN CUT OF EXISTING MATERIALS EXCEEDS GRAVEL DEPTHS AND NATIVE SOIL TEXTURES ARE NOT APPROPRIATE. ENGINEER SHALL DETERMINE THE NEED FOR FULL EXTENT OF ROADBED FABRIC. MIRAFI 500X SHALL BE USED, OR APPROVED EQUAL.
2. EXCAVATION AND GRADING
   - 2.1. EXCAVATION AND CONSTRUCTION ADJACENT TO THE LAKE SHALL OCCUR UNDER DRY OR NEARLY DRY CONDITIONS. WORK SHALL CEASE DURING STORM EVENTS THAT CREATE ELEVATED RUN OFF CONDITIONS TO PREVENT SEDIMENT DISCHARGE TO PEACHAM POND.
   - 2.2. THE CONTRACTOR SHALL PROTECT EXISTING STRUCTURES AND UTILITIES FROM DAMAGE AND EXCESSIVE SETTLEMENT DURING EXCAVATION, BACKFILLING, COMPACTION, AND DEWATERING ACTIVITIES. THE CONTRACTOR SHALL REPAIR ANY SUCH DAMAGE AT THEIR OWN EXPENSE.
   - 2.3. EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES SHALL BE INSTALLED PRIOR TO EARTH DISTURBANCE
3. TREES AND SHRUBS
   - 3.1. OVER EXCAVATE PLANTING HOLE AND AUGMENT NATIVE SOILS WITH COMPOST MATERIAL AND TOP SOIL (MINIMUM 1:1 RATIO OF COMPOST TO TOP SOIL)
   - 3.2. TREES AND SHRUBS SHALL BE HEALTHY, AVAILABLE LOCALLY, AND REASONABLY FREE OF DIE-BACK, ROT AND DISEASE. AT THE TIME OF PLANTING ALL PLANTS SHALL HAVE A ROOT SYSTEM, STEM AND BRANCH FORM THAT WILL NOT RESTRICT NORMAL GROWTH, STABILITY AND HEALTH FOR THE EXPECTED LIFE OF THE PLANT
   - 3.3. SPECIES SHALL BE NATIVE AND BE COMPATIBLE WITH PLANT COMMUNITIES KNOWN TO GROW IN AREAS WITH SIMILAR CLIMATE, SOILS, HYDROLOGY AND LANDSCAPE POSITIONS. UPLAND AREAS SHALL BE DOMINATED BY PLANTS WITH HYDROLOGY INDICATOR STATUS OF FAC - UPL AND WETLAND AREAS BY PLANTS WITH INDICATOR STATUS OF OBL - FAC
   - 3.4. THREE (3) RED OSIER DOGWOOD SHRUBS SHALL BE PLANTED. 2-3 FOOT PLANTS (1 GALLON CONTAINERS) SHALL BE ACQUIRED AND APPROPRIATELY SPACED TO FIT THE PROPOSED REVEGETATION AREA.
4. GRASS SEED
   - 4.1. SEED SHALL BE FURNISHED IN NEW, CLEAN, SEALED, AND PROPERLY LABELED CONTAINERS. SEED WHICH HAS BECOME WET, MOLDY OR OTHERWISE DAMAGED SHALL NOT BE ACCEPTABLE.
   - 4.2. UPLAND AREAS SHALL BE SEEDED WITH A CONSERVATION MIX APPROVED BY THE CLIENT/PROJECT CONSULTANT PRIOR TO USE.
   - 4.3. WET MEADOW & DETENTION BASIN MIX SHALL BE USED, OR APPROVED EQUAL.
5. MULCH AND EROSION CONTROL MATTING
   - 5.1. STRAW MULCH SHALL CONSIST OF MOWED, PROPERLY CURED GRASS AND LEGUMES REASONABLY FREE OF WEEDS, TWIGS, DEBRIS, OR OTHER OBJECTIONABLE MATERIAL. MULCH AT A RATE OF 2 TONS PER ACRE.
   - 5.2. IF EROSION CONTROL MATTING IS TO BE UTILIZED, AN APPROPRIATE EROSION CONTROL MATTING SHALL BE USED (E.G., NORTH AMERICAN GREEN S150BN OR EQUIVALENT WITH LOOSE-WEAVE NETTING, JUTE MATTING, ETC.).
6. STABILIZATION OF DISTURBED SOILS
   - 6.1. TEMPORARY STABILIZATION OF DISTURBED SOILS DURING THE PERIOD OF APRIL 15 TO OCTOBER 15 SHALL BE COMPLETED WITHIN 14 DAYS OF INITIAL DISTURBANCE. AFTER THE INITIAL DISTURBANCE PERIOD, TEMPORARY STABILIZATION SHALL BE PERFORMED ON A DAILY BASIS, EXCEPT IF WORK IS TO CONTINUE IN THE DISTURBED AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO FORECAST OF PRECIPITATION FOR THE NEXT 24 HOURS, OR IF THE WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION WITH A DEPTH OF 2 FEET OR GREATER.
   - 6.2. SEED AND STRAW MULCH DISTURBED AREAS IMMEDIATELY AFTER THE COMPLETION OF RE-GRADING AND WORK ACTIVITIES. PREPARE SEEDBED AND UTILIZE SOIL AMENDMENT AS NEEDED. TRACK MULCH IN AS NEEDED TO PREVENT REMOVAL BY WIND.

Fitzgerald Environmental Associates, LLC
164 Main Street, Suite 2
Colchester, VT 05446
Telephone: 802.876.7778
www.fitzgeraldenvironmental.com

SIGNATURE

REVISIONS

#	DESCRIPTION	DATE

SITE PLAN - CONSTRUCTION DETAILS
CALEDONIA COUNTY NATURAL RESOURCES CONSERVATION DISTRICT
PEACHAM POND FISH & WILDLIFE ACCESS
PEACHAM, VT
NOT FOR CONSTRUCTION
DRAFT FINAL PLANS

DRAWN	FCP
CHECKED	JMD
SCALE	N.T.S
DATE	2023-12-11
PROJECT NO.	23014
SHEET NO.	6 OF 6
SHEET NAME	**DT-2**

S:\2023\23014_CCNRCD_PEACHAM_POND_STORMWATER\CAD\PEACHAM_POND_BOAT_LAUNCH_PLANS.DWG 12/11/2023 5:09:49 PM

Stormwater Treatment Practice Calculator

The STP Calculator is a tool developed by the Department of Environmental Conservation (DEC) to estimate total phosphorus load reductions achieved by stormwater treatment practices (STPs). The user enters STP data into the tool and the tool calculates the estimated annual average total phosphorus load reduction. Calculations are based on the same methods DEC will use to track progress reducing phosphorus pollution loading into Lake Champlain and Lake Memphremagog. The tool can currently only be applied to estimate total phosphorus reductions in the Lake Champlain and Lake Memphremagog watersheds, as pollutant loading rates are currently unavailable outside these basins in Vermont. The calculator tool focuses on STPs treating runoff from developed lands, only, and should not be used for agricultural, forested, or other types of land use. The calculator may not be suited for complex STP systems or retrofit projects. The STP calculator should only be used for planning purposes to understand pollutant reduction potential for STPs. Data entered in the STP calculator will not be stored in a database. DEC retains the right to verify the data input and will provide final phosphorus load reduction crediting based on data reported to and stored in DEC's Watershed Projects Database.

Instructions can be found Here (https://anrweb.vt.gov/PubDocs/DEC/WSMD/CWIP/2018-07-20%20STP%20Calculator%20Instructions.pdf).

Please direct any questions to Claire.Madden@vermont.gov (mailto:claire.madden@vermont.gov) or 802-636-7536.

STP Calculator

Loading Information

Drainage Area 5 - Winooski River

Impervious Area 0.22 acres

Pervious Area 0.01 acres

STP Information

STP Type Rain Garden / Bioretention (no underdrains) (STPHelp.aspx)

Storage Volume 181 ft^3

Infiltration Rate 0.17 (Sandy Clay Loam, HSG - C) in/hr

Estimated Phosphorus Reduction

Compute

Load 0.25 kg/year

STP Capacity 0.23 in

Efficiency 54.59 %

Reduction 0.14 kg/year

To Report

Identification

WPD ID 11708

STP Name

Changes

- 11/30/2018 - Please note "Sand Filter w/ underdrain" efficiencies have been updated based on input from EPA.

Task Number	Task Title	Personnel	Fringe	Travel	Supplies	Professional Services	Indirect Costs	Amount of funding requested	Match	Total Budget
1	Signed sub-contract with engingeering firm providing construction oversight	$275.00				$6,000.00		$6,275.00		$6,275.00
2	Required permits secured; Operation & Maintenance and access easement signed	$550.00						$550.00		$550.00
3	Bid solicitations issued, pre-bid site visit if deemed necessary by project team, contractor selected and subcontract signed	$660.00		$30.13				$690.13		$690.13
4	Pre-construction meeting	$275.00		$30.13				$305.13		$305.13
5	Construction	$660.00		$90.39		$25,000.00		$25,750.39	$500.00	$26,250.39
6	Outreach and reporting	$330.00						$330.00		$330.00
	Total	**$2,750.00**	**$0.00**	**$150.65**	**$0.00**	**$31,000.00**	**$0.00**	**$33,900.65**	**$500.00**	**$34,400.65**
	Personnel calculated at hourly rate of $55/hr									
	Travel estimated at 46 miles per round trip									
	Match from VT Department of Fish & Wildlife for educational signage									

Fitzgerald Environmental Associates

Peacham Pond Boat Launch, Peacham, VT

Final Cost Opinion

12/11/2023

Description	Unit	Estimated Quantity	Unit Price	Cost
Mobilization/Demobilization	LS	1	$2,000.00	$2,000.00
Common Excavation (cut)	CY	183	$20.00	$3,660.00
Hauling	CY	100	$15.00	$1,500.00
Geotextile for Roadbed Separator	SY	856	$2.00	$1,712.00
Crushed Gravel	CY	90	$62.78	$5,650.20
Type I Stone for Ditches and Spillways	CY	27	$67.07	$1,810.89
3/4" Stone Subbase for Ditches	CY	17	$50.29	$854.93
Topsoil / Bioretention Mix	CY	10	$44.44	$444.40
Shrubs and Seed Mix	LS	1	$400.00	$400.00
Misc. Erosion Control/Site Restoration	LS	1	$2,000.00	$2,000.00
Laborer (seeding, fabric, restoration, etc.)	HR	16	$50.00	$800.00

Subtotal:	$20,832.42
Contingency (20%):	$4,166.48
Total:	**$25,000.00**

Fitzgerald Environmental Associates, LLC.

Applied Watershed Science & Ecology

December 12, 2023

Emily Finnegan, CCNRCD
481 Summer Street, Suite 202
St. Johnsbury, VT 05819

Re: Peacham Pond Fish & Wildlife Access in Peacham, VT
Construction Services Estimate

Dear Emily:

Fitzgerald Environmental Associates ("FEA") appreciates the opportunity to provide the Caledonia Country Natural Resources Conservation District ("CCNRCD") an estimate for construction services associated with the Peach Pond F&W Access stormwater improvements.

The services outlined below will provide CCNRCD adequate support to bring the 100% Design Plans (provided by FEA in previous scope of work) for the Peacham Pond Stormwater Improvements though implementation to project completion.

Scope of Services

Task 1 – Construction Services

- Prepare bid documents and support CCNRCD in sending documents and plans to contractors.
- Attend a pre-bid meeting with interesting contractors.
- Receive, review, and compare incoming bids.
- Assist CCNRCD in the contractor selection process.
- Attend a pre-construction meeting with the chosen contractor.
- Stake out project features with GPS, as needed.
- Provide construction oversight throughout the construction process, with 2-4 half day site visits.

Estimated Fee: $6,000

VERMONT

Fish & Wildlife Department
1 National Life Drive
Montpelier, Vermont 05620-3702
www.VtFishandWildlife.com

[phone] 802-241-3700
[fax] 802-828-1250
[tdd] 802-828-3345

Agency Of Natural Resources

December 7, 2023

RE: Peacham Pond Access Area Stormwater Design

Dear Emily,

As you know, the Access Area Program has been working with a variety of entities on stormwater designs for individual access areas around the state. The Peacham Pond boat ramp is one site that has some significant issues with depositing stormwater and silt directly into the pond. I am writing this letter to express the Department's support of the Caledonia County Natural Resource Conservation District's (NRCD) grant application for the design and construction of stormwater management work at the Department's access area.

NRCDS work will assist the Department and lake community in addressing erosion and water quality issues by improving stormwater infrastructure. The Department will assist with providing a portion of the funding for implementation of this project as well as educational signage for the boating public. This project will highlight the importance of improving the water quality through improved stormwater management. This partnership with the NRCD and the Department is critical to meeting Lake Champlain's TMDL requirements and improving water quality throughout the watershed.

Sincerely,

DocuSigned by:
Mike Wichrowski
6FE1498A028D4F1...

Mike Wichrowski
Fish & Wildlife Lands & Facilities Administrator

To: Winooski Basin Clean Water Service Provider

From: Peacham Pond Association, PO Box 101, Marshfield, VT 05658

Re: Water Quality Restoration Formula Grant: Winooski Basin

This is a letter of support for the block grant currently being submitted by Emily Finnegan, district manager of the Caledonia County Natural Resource Conservation District.

We believe the CWSP's goal of protecting and improving Vermont's water quality fits this proposed project perfectly. We have a Fish and Wildlife public access on Peacham Pond that is, and has been, a source of large amounts of sediment runoff. The Vermont Fish and Wildlife Department has done small fixes over the years, but none have remedied the problem for long. Our ramp is steep and is bordered on both sides by fenced private property. We have deep ditches along the ramp, that run sediment down into the pond and make parking for vehicles and trailers very difficult. We need a new and fully developed plan that can give long-term improvement for our erosion issues.

Like many lakes and ponds in Vermont, Peacham Pond is experiencing increasing levels of phosphorus. One significant way phosphorus enters a waterbody is through sediment runoff. We work on our roads and camp properties around the pond to keep runoff to a minimum. Having the public access improved could greatly reduce sediment runoff in that area.

Our association has strong support and participation on Peacham Pond. We currently have four water quality projects that operate every summer with volunteer and paid staff. We would fully support the operation and maintenance requirements that accompany this grant.

Thank you for your consideration,

Martha Winston
Peacham Pond Association - President

Caledonia County
Natural Resources Conservation District
481 Summer Street, Suite 202 St. Johnsbury, VT | 802-424-3149 | www.caledoniadistrict.org | emily.finnegan@vt.nacdnet.net

Preliminary Operation and Maintenance & Landowner Agreement
Department of Fish & Wildlife Peacham Pond Access Area Erosion Control Project
Peacham, VT

Purpose

The purpose of this agreement is to identify the responsible parties who will provide Operation and Maintenance on site at regular intervals once the project is installed and document landowner support for project installation.

Operation and Maintenance will be provided by:
Vermont Fish & Wildlife Department
Peacham Pond Association

This document acknowledges discussion of preliminary Operation and Maintenance guidelines. A more detailed Operation and Maintenance Agreement will be secured during the construction phase of the project.

This agreement also documents permission for installation of the project.

Signature:

Accepted by: Mike Wichorowski, Fish & Wildlife Lands & Facilities Administrator, Vermont Fish & Wildlife Department

DocuSigned by:
Mike Wichorowski
6FE1498A028D4F1...

12/7/2023

Signature and Date

Caledonia County
Natural Resources Conservation District
481 Summer Street, Suite 202 St. Johnsbury, VT | 802-424-3149 | www.caledoniadistrict.org | emily.finnegan@vt.nacdnet.net

Preliminary Operation and Maintenance Agreement
Department of Fish & Wildlife Peacham Pond Access Area Erosion Control Project
Peacham, VT

Purpose

The purpose of this agreement is to identify the responsible parties who will provide Operation and Maintenance on site at regular intervals once the project is installed.

Operation and Maintenance will be provided by:
Vermont Fish & Wildlife Department
Peacham Pond Association

This document acknowledges discussion of preliminary Operation and Maintenance guidelines. A more detailed Operation and Maintenance Agreement will be secured during the construction phase of the project.

Signature:

Accepted by: Martha Winston, President, Peacham Pond Association

Martha Winston - 12/10/23
_____
Signature and Date

Shoreland Protection Permit Application

Under Chapter 49A of Title 10, § 1441 et seq.

VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WATERSHED MANAGEMENT DIVISION
LAKES & PONDS PROGRAM

Application Number: *For Shoreland Permitting Use Only*	

Submission of this application constitutes notice that the person in Section A intends to create impervious surface and/or cleared area within the Protected Shoreland Area, and certifies that the project will comply with Chapter 49A of Title 10, § 1441 et seq. All information required on this form must be provided, and the requisite fees (Section I) must be submitted made payable to the State of Vermont, to be deemed complete. Refer to the Application Instructions for guidance in completing this application.

A. Parcel Information

1. Physical Address (911 Address): 2-420 Spur Road

2. Town - County: Peacham - Caledonia	3. Zip: 05046
4. SPAN (###-###-#####): 468-148-10657	The School Parcel Account Number can be obtained from your property tax bill or requested from your Town

5. Identify the coordinates for where the parcel is located. (decimal degrees, can be found on Google Maps)
Latitude: 44.3334807 Longitude: -72.2651745

6. Name of Lake/Pond: Peacham Pond - Peacham	7. Total Shore Frontage: 58.8 feet
8. Was the parcel of land created before July 1, 2014?	(●) Yes ( ) No
9. Are there wetlands associated with or adjacent to this parcel? Contact the Wetlands Program (802) 828-1115 or https://dec.vermont.gov/watershed/wetlands	( ) Yes (●) No

10a. Have you ever applied for a permit with the Agency of Natural Resources associated with this parcel? If so, please describe (e.g., Wetlands, Act 250, Wastewater, etc.).
No

10b. This project is receiving funding through the American Rescue Plan Act (ARPA) ☐ Yes

11a. Is this application for a Shoreland permit amendment? ( ) Yes (●) No ***If no, skip 11b. and 11c.***	11b. What is the original permit number of your approved Shoreland permit?	11c. Amendment type? ( ) Major ( ) Minor

12. What is the square footage of your parcel within 250 feet of mean water level (the Protected Shoreland Area)?	Sq. ft.* 9478
13. What is the square footage of all **existing impervious surfaces** within 250 feet of mean water level (e.g., all structures, decks, patios, paved and unpaved driveways, parking areas, etc.)?	Sq. ft.* 6957
14. What is the square footage of all **existing cleared area** within 250 feet of mean water level (cleared area includes all impervious surfaces plus maintained lawn and landscaped areas)?	Sq. ft.* 9277

Form Revised Sept 2023

*round to the nearest whole number

B. Project Description

1. Describe the proposed project. For this application to be considered administratively complete you must include:

a) site plans that show the dimensions of existing and proposed cleared area and impervious surface, and distances from mean water level. ***For amendments***, site plans that show proposed changes to the approved project that includes alterations to the approved cleared area and/or impervious surface footprints. Include the dimensions of approved and proposed cleared area and/or impervious surface, and distances from mean water level.

b) no fewer than three photos of the project area.

c) if your project includes shoreland stabilization measures that would otherwise not meet the applicable setback standard from mean water level, complete the shoreland stabilization measures addendum in addition to this form.

This project proposes to construct a stormwater rain garden and forebay on the north side of the Peacham Pond Boat Launch. The boat launch will be re-graded to direct more water to these stormwater infiltration features. With the limited space at the boat launch, this will require the removal of 60 sq. ft. of vegetated area on the south side of the boat launch to allow appropriate room for cars to turn around. A 60 sq. ft. gravel area along the shoreline will be re-vegetated to offset this removal of shoreland vegetation. The re-vegetated area is contiguous with existing vegetation that will be left undisturbed, and will be demarcated with boulders to prevent vehicles from driving through it.

2. For ***developed*** parcels, how far is the existing habitable structure from Mean Water Level (MWL) _____(feet) and how far will new cleared area or impervious surface be from MWL _____(feet)?

OR

For ***undeveloped*** parcels, how far will new cleared area or impervious surface be from MWL 19 (feet)?

3a. Identify the slope of the project area:	3b. Is the slope of the project area less than 20%? If yes, skip question 3c.
8.6 %	(●) Yes ( ) No

3c. If no above (3b), describe the measures taken to ensure the slope is stable, resulting in minimal erosion and impacts to water quality:

4a. What is the surface area of **new impervious surface** associated with this project or amendment?	4b. Identify the **total resulting impervious surface** after completion of the project and prior to implementation of best management practices:
60 square feet* *round to the nearest whole number	7,017 square feet **(Question A13 + Question B4a = total resulting impervious surface)**

4c. Is the total resulting impervious surface 20% or less of the parcel area within the Protected Shoreland Area? If you are not creating any new impervious surface, check N/A. If yes, skip Question 4d. ( ) Yes (●) No ( ) N/A

(Question B4b ÷ Question A12) x 100 = 74 **% impervious surface within the Protected Shoreland Area**

4d. If no above (4c), describe the best management practices used to manage, treat, and control erosion generated by stormwater runoff from the portion of the impervious surface that exceed 20%:

This project involves the installation of a stormwater rain garden that will treat previously-untreated stormwater for the boat launch. The new impervious area is on the opposite side of the boat launch from the proposed rain garden, but will drain via sheet flow through the existing vegetated area and the proposed re-vegetation area.

5a. What is the surface area of **new cleared area** associated with this project or amendment? 60 square feet* *round to the nearest whole number	5b. Identify the **total resulting cleared area** after completion of the project and prior to implementation of best management practices: 9,337 square feet **(Question A14 + Question B5a = total resulting cleared area)**

5c. Is the total resulting cleared area 40% or less of the parcel area within the Protected Shoreland Area? If you are not creating any new cleared area, check N/A. If yes, skip Question 5d. ○ Yes ◉ No ○ N/A

(Question B5b ÷ Question A12) x 100 = 99 % cleared area within the Protected Shoreland Area

5d. If no above (5c), establishing vegetative cover (revegetation) equal to or greater in surface area than the proposed new cleared area is the only acceptable best management practice. Identify the surface area and location on the parcel of the proposed revegetation.

The re-vegetation area will be a 60 sq. ft. portion of gravel adjacent to the lake shore and the existing vegetation in the southeast corner of the boat launch. This area will be planted with shrubs and demarcated with boulders.

C. Landowner/Applicant Information and Certification

All landowners must sign the application. ***Submit additional pages if necessary.***

Name:			
Mailing Address:	City/Town:	State:	Zip:
Phone Number:	Email Address:		

Have you completed the voluntary Natural Shoreland Erosion Control Certification course? ○ Yes ○ No

If yes, please include the location and year you attended the course. Year and location:
A list of certified contractors is also available online.

Landowner/Applicant Certification:

As LANDOWNER/APPLICANT, I hereby certify that the statements presented on this application are true and accurate and recognize that by signing this application, I agree to complete all aspects of the project as authorized. I understand that failure to comply with the foregoing may result in violation of the Shoreland Protection Act, 10 V.S.A. Chapter 49A, and the Vermont Agency of Natural Resources may bring an enforcement action for violations of the Act pursuant to 10 V.S.A. chapter 201.

Landowner/Applicant Signature _____ Date: _____

D. Application Preparer Information and Certification (check box if same as Section C. ☐)

Name:			
Mailing Address: 164 Main Street, Suite 2	City/Town: Colchester	State: VT	Zip: 05446
Phone Number: 802-876-7778	Email Address: frank@fitzgeraldenvironmental.com		

Have you completed the voluntary Natural Shoreland Erosion Control Certification course? ○ Yes ◉ No

If yes, please include the location and year you attended the course. Year and location:
A list of certified contractors is also available online.

Application Preparer Certification:
As APPLICATION PREPARER, I hereby certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

☐ Check this box to request co-applicant status. By checking this box, you will be considered a co-permittee and are responsible for the conditions of the permit. Co-permittee status is required for any individual or entity other than the permittee that is creating new cleared area or new impervious surface.

Application Preparer Signature_____ Date: _____

E. Adjoining Property Owner Notification ***(Required action – the application will be incomplete without APO notification)***

I certify, by initialing to the left, that I have notified adjoining property owners of the proposed project using the letter template sent by U.S. Mail, as described in the Adjoining Property Owner Notification Guidance.

F. Additional Documentation ***(Please check to ensure you have completed the following)***

- ☐ All sections of the application are complete (or otherwise indicate "not applicable").
- ☐ Application includes site plans denoting existing and proposed cleared area and impervious surface.
- ☐ Project description includes dimensions and distances to mean water level.
- ☐ Application includes three photos of the project area.
- ☐ Shoreland stabilization measures addendum included if applicable.

G. Permit Application Fees (Administrative Processing + Application Review Fee)

Administrative Processing Fee: $125.00		**$125.00**
Application Review Fee: $0.50 per square ft. of **new impervious surface**	0.5 x 60 (from Question B4a) =	$ 30.00
Total Fee Due:		$ 155.00

Application submittal:

Please submit this form and payment using ANROnline: https://anronline.vermont.gov/?formtag=WSMD_Intake

Direct questions to: ANR.WSMDShoreland@vermont.gov. If unable to submit online mail the completed application form, all required supporting materials, and a check for the correct application fee to:

Vermont DEC - Watershed Management Division, Shoreland Program
1 National Life Drive, Davis 3
Montpelier, VT 05620-3522.

Make checks payable to: State of Vermont

Refund Policy

- If an application is modified, withdrawn or denied after technical review has commenced; all fees are retained.
- If an application is withdrawn prior to administrative review; all fees will be refunded.
- If an application is withdrawn after administrative review but prior to commencement of technical review, deemed administratively incomplete and returned to applicant, or determined that a permit is not required; administrative fees are retained and permit application review fees will be refunded.

VERMONT

Department of Environmental Conservation
Watershed Management Division
1 National Life Drive, Davis 3
Montpelier, Vermont 05620-3522
https://dec.vermont.gov/watershed

Agency of Natural Resources

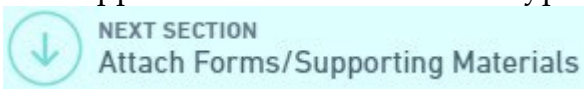
[phone] 802-828-1115

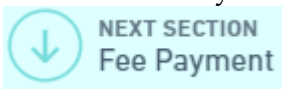
SUBMIT AND PAY ONLINE TO SPEED UP YOUR APPLICATION PROCESSING!

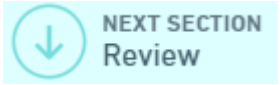
You can submit your application and pay fees online. To start, visit:
https://anronline.vermont.gov/?formtag=WSMD_Intake

1. Scroll to the bottom of the page and click the 

button.
2. Log in to an account, sign up for an account, or continue as a guest user.

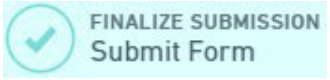
3. Fill out each field in the General Information Section.
   - Type the name of the contact person, phone, and email address.
   - Select the Watershed Management Division Program. *The program name is written at the top the application.*
   - Select 'Permit Application' as the submission type.
   - Click the 

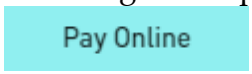
button at the bottom of the page.
4. Click "Choose File" and select your application, plans, maps, or compliance notifications.
   - Click the 

button at the bottom of the page.
5. Type the application fee amount.
   - Click the 

button at the bottom of the page.
6. Review your data.
   - Click the 

button at the bottom of the page.

   - Click the 

button at the bottom of the page.
7. Sign in or continue as a guest to pay the application fee.
   - Click the 

button.
8. Enter your credit/debit card or eCheck information.
   - Click the 

button at the bottom of the page. *Note: You must provide your email address in the billing information section if you want a receipt emailed.*
   - Your submission will now show the fee has been paid. You may print a confirmation/receipt from here if needed.

Fitzgerald Environmental Associates, LLC.

Applied Watershed Science & Ecology

Photo Log

Project: Peacham Pond Boat Launch – Shoreland Protection Permit Application

Date: December 11, 2023

Photo 1: Area with existing vegetation. Vegetation removal is proposed on the right side of the image next to the F&W kiosk. Revegetation is proposed in the gravel area on the left side of the image along the water line.

Photo 2: Close-up image of existing vegetation. Foreground vegetation will be preserved, background vegetation will be removed.

164 Main Street · Suite 2 · Colchester · Vermont · 05446
Tel. 802.876.7778 · www.fitzgeraldenvironmental.com

Photo 3: Existing vegetated area. Approximate revegetation area is proposed in the circled area.

Photo 4: Overview of the boat launch parcel.

Vermont Division for Historic Preservation

Project Review Form

DEC Clean Water Initiative Program

This form is to be used for both the Preliminary and Final Project Review for clean water projects funded by the Department of Environmental Conservation (DEC) Clean Water Initiative Program (CWIP). See applicable sections below.

Preliminary Project Review Section

To start the consultation process for CWIP-funded Clean Water Projects, please complete this form and submit it to the Vermont Division for Historic Preservation (VDHP) at ACCD.projectreview@vermont.gov with the information requested below. This Preliminary Project Review form once completed and signed by VDHP should be submitted as a project deliverable.

This is for non-exempt CWIP project types or conditionally exempt that have failed to meet the project qualifications. Exempt project types should NOT submit this form. Please refer to the CWIP Funding Policy for a listing of exempt and conditionally exempt project types. The CWIP Funding Policy can be found here: https://dec.vermont.gov/water-investment/cwi/grants

For questions on architectural resources, archaeology, and below-ground resources, please contact Scott Dillon at (802) 272-7358 or scott.dillon@vermont.gov.

1. **Contact information**:
   a. Contact name: Emily Finnegan
   b. Email address: emily.finnegan@vt.nacdnet.net
   c. Phone number: 802-424-3149
2. **WPD Project Title**: DFW Access Peacham Pond - Stormwater Final Design
3. **WPD – ID**: 11086
4. **Town Project is Located In:** Peacham
5. **Project site map**: Please attach a project site map. An annotated Google map or ANR Atlas map will suffice but professional design plans indicating location are also welcome. An example image is provided below. Site map should outline:
   a. Project Area of Potential Effects (APE)[1] with clearly marked GPS coordinates for project boundaries.

[1] The project APE or "area of potential effects" means the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The

b. Proposed ground disturbance locations. Note that stream bank regrading is considered ground disturbance.

6. **Project information**:

a. Select CWIP project type from drop down (if not listed, it's categorically exempt)

i. Stormwater - Final Engin

b. Please provide a short description of the project's proposed scope of work (CWIP Preliminary Design Report is acceptable instead)

This project will primarily consist of re-grading the existing slope to send water to a stone lined ditch, forebay, and rain garden on the north side of the access ramp. There will likely be a gentle gravel swale and parking area on the south side of the ramp

c. Are there other Agencies or funding partners involved?: Yes ◯ No ◯

i. **If yes**, which?

d. Does the project involves ground disturbance?: Yes ◯ No ◯

i. **If yes,** please describe type and extent of ground disturbance. Specifically,

1. Whether disturbance will be performed by hand or heavy machinery,
2. The estimated total acreage and maximum depth of disturbance, and

---

APE is influenced by the scale and nature of an undertaking and may be different from different kinds of effects caused by the undertaking [36 C.F.R. § 800.16(d)]. When determining a project's APE remember to consider/include extent of restoration footprint; new, upgraded or existing access or haul roads; staging, storage, and stockpile areas; disposal sites or waste areas; borrow areas and other source locations for fill material; and areas impacted by drainage diversions or mechanical tree clearing and similar landscape alterations.

3. The history of prior natural caused or man-made ground disturbance to the site (if known):

Yes, there will be ground disturbance. The ground disturbance will be performed by heavy machinery. The estimated total acreage of disturbance will be 0.2 acres, and maximum depth of disturbance will be 24 inches. This site has been used as a boat ramp for many years.

e. Will the project cause direct or indirect impact/alterations or disturbance to any building or structure more than 50 years old (including dams, culverts, and bridges) or to any federally-listed historic building or structure?

Yes ◯ No ◯ Unknown ◯

i. **If yes or unknown**, provide any known details on the buildings or structure(s), location/condition and extent of proposed impact or disturbance. Please include whether the resource is listed in the National Register of Historic Places if known:

f. Is the project APE located within, intersect with, or adjacent to/immediately abutting to a State- or National Register listed historic district, Designated Downtown, or Village Center?

Yes ◯ No ◯ Unknown ◯

Email this form and supporting materials to ACCD.ProjectReview@vermont.gov

Please copy scott.dillon@vermont.gov

TO BE COMPLETED BY VDHP:

◯ No Historic Properties/Sites Affected

◯ No Historic Resource Present; or

◯ No Effect on Historic Resource

Comments:

◯ No Adverse Effect

Comments:

◯ Historic Properties Affected

☐ Potential for Historic Architectural Properties to be affected - a Qualified Architectural Historian/Historian* will be required (*please see list of consultants)

☐ Determination of Eligibility required

Comments:

Everett Marhsall - please see attached correspondence from design phas

☐ Potential for Archaeological Historic Properties to be affected - a Qualified Archaeological Consultant* will be required (*please see list of consultants)

☐ Archaeological Resouce Assessment (ARA) required

☐ Phase 1 archeolgoical investigation required

Comments:

Vermont State Historic Preservation Office Preliminary Concurrence:

X: _____

Date:

Final Project Review Section

To complete Final Project Review, re-submit this VDHP Project Review Form with the following additional elements included. Note that this should be added to the VDHP-signed version of the Preliminary Review Form so VDHP can reference their prior guidance on this project. This Final Project Review Form, once completed and signed by VDHP, should be submitted as a CWIP project deliverable.

1. Please provide a short description of any changes to the project's proposed scope of work since the Preliminary Project Review was approved by VDHP:

2. Please attach:
    a. Final (100%) Design Plans
    b. Project narrative description of scope of work (CWIP Final Design Report will suffice)
    c. Any historical resource assessments, or determination of eligibility forms
    d. Any archaeological resource assessments, other archaeological reports, or end-of-field documents
    e. Any Treatment Plans

Email this form and supporting materials to ACCD.ProjectReview@vermont.gov
Please copy scott.dillon@vermont.gov

TO BE COMPLETED BY VDHP:

◯ No Historic Properties Affected
    ☐ No Historic Resource Present ; or
    ☐ No Effect on Historic Resource Comments:

◯ No Adverse Effect

◯ Adverse Effect
    ☐ Concur with Project Treatment Plan or other agreement docs executed

Comments:

Vermont State Historic Preservation Office Final Concurrence:

X: _____ Date:

Natural Resources Atlas

Vermont Agency of Natural Resources

vermont.gov

LEGEND

- Parcels (standardized)
- Roads
  - Interstate
  - US Highway; 1
  - State Highway
  - Town Highway (Class 1)
  - Town Highway (Class 2,3)
  - Town Highway (Class 4)
  - State Forest Trail
  - National Forest Trail
  - Legal Trail
  - Private Road/Driveway
  - Proposed Roads
- Town Boundary

NOTES

Map created using ANR's Natural Resources Atlas

74.0 0 37.00 74.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 122 Ft. 1cm = 15 Meters

THIS MAP IS NOT TO BE USED FOR NAVIGATION