

TOWN OF EXETER, NEW HAMPSHIRE

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 •FAX 772-4709 <u>www.exeternh.gov</u>

PUBLIC NOTICE EXETER CONSERVATION COMMISSION Monthly Meeting

The Exeter Conservation Commission will meet in the *Exeter Town Hall at 11 Front Street, Exeter on Tuesday, March 21st, 2017 at 7:00 P.M.

*note location change

Call to Order:

- 1. Introduction of Members Present
- 2. Public Comment

Action Items (50 min)

- 1. CKT Associations: preliminary review and comments on a proposal for the construction of an 'active adult community' and a 'multi-use' development on the property located at 183 Epping Road, Tax Map Parcels #47-8 and #47-9, respectively. The subject properties are located in the C-3 Epping Road
- 2. Highway Commercial and I-Industrial zoning district. Bunker Conservation Easement Request for Agricultural use (*Laura Barker*)
- 3. McDonnell Conservation Area Kiosk Eagle Candidate (Caleb Mahoney)
- 4. Jolly Rand or Morrrissette Scout Project Ideas Eagle Candidate (Daniel Stinson)
- 5. Comcast Cares Day: Oaklands Trail Improvements (Bob Kelly, Tom Jelinek, Harvey Gish, James Eiffe)
- 6. Summer Band at Raynes Farm May 7th (Ben Anderson)

7. Committee Reports (50 min)

- a. Property Management (20 min)
 - i. 52 Barns in 52 Weeks Barn Assessment Grant
 - ii. NRCS Forest Management Plan Update Elliott Mgmt Objectives
 - iii. Raynes Barn Sign
- b. Trails (10 min)
 - i. Agenda and 3/22 Meeting
- c. Outreach (20 min)
 - i. An Evening with the Singing Woodcock @ Raynes or Morrissette (David O'Hearn)
 - ii. PEA Climate Action Day April 26
 - iii. Spring Tree Program 5/2 (packing 4/29, 4/30)
 - iv. Morrissette Apple Tree Release 6/4 (David O'Hearn)
- 8. Approval of Minutes: February 14th, 2017, Meeting and Site Walk
- 9. Correspondence
- 10. Other Business
- 11. Next Meeting: Date Scheduled (4/11/17), Submission Deadline (3/31/17)

Bill Campbell, Vice-Chair

Exeter Conservation Commission

Amended March 20, 2017 Exeter Town Office, Exeter Public Library, and Town Departments.

TOWN OF EXETER PLANNING DEPARTMENT MEMORANDUM

Date: March 17, 2017

To: Conservation Commission Board Members
From: Kristen Murphy, Natural Resource Planner
Subject: March 21st Conservation Commission Meeting

1. Bunker/Barker Conservation Easement: Request for Agricultural Use

History: Nov 2016, easement inspection revealed violations, D. Sharples issued letter of violation on 12/9/16 with response requested by 1/6/17. 1/16/17 Barker responded. 2/16/17 Sharples requested additional information with response by 3/10/17. 3/9/17 Barker submitted a packet of additional information

In accordance with easement term 2.A.ii. Ms. Barker has submitted the attached information on agricultural uses occurring within the Conservation Easement in request for after-the-fact approval of these activities. The design for all agricultural uses has incorporated recommendations from the Natural Resource Conservation Service (NRCS) and included consideration of the site and soils of the property. The remaining violations include an unpermitted building (hay barn) on the property, no trespassing signage and clean-up of non-agricultural related debris. As submitted, Ms. Barker will be replacing the property signage, and is working through the permitting process for the hay barn. Clean up of the property is scheduled to be completed no later than June 1st. She has offered to contact the Town if this occurs sooner.

Recommendation:

The agricultural uses have been implemented in accordance with NRCS standards. Should you agree that the design is sufficient to meet terms of the easement I recommend the following motion:

Approve the agricultural use request as implemented and indicated on the attached and labeled aerial photograph, on the condition that the applicant obtains an approved building permit for the hay barn, and site inspection on or before June 1st, 2017 indicates all non-agricultural items have been removed and no trespassing signage has been replaced with easement compliant signage.

2. McDonnell Conservation Area Kiosk

Life Scout Caleb Mahoney is proposing to install a kiosk at the McDonnell Conservation Area. Ginny has met with him onsite to discuss needs. He will be presenting a kiosk design and project proposal for signature. It is anticipated that he will draft a sign for the kiosk that the Town will print and he will install. The property owner is aware of the project.

Recommendation:

Approve the project as proposed subject to owner agreement with Kristen and Ginny to work with the landowner and scout on sign development.

3. Jolly Rand or Morrrissette Scout Project Ideas

Life Scout Daniel Stinson requested and opportunity to discuss potential scout projects with the Commission. He suggested trail improvements to Jolly Rand, many of which fall on Riverwoods property. Should he not be able to obtain Riverwoods permission, I suggested a kiosk & trailwork for the Morrissette property.

Recommendation:

Assign a Commission member to work with Daniel and myself to refine a project proposal to be presented at a future date.

4. Comcast Cares Event

Request to host a Comcast Cares event in the Oaklands Town Forest on 4/22/17. Comcast Cares is an opportunity for Comcast Employees to volunteer to support a community activity. This project will entail trail maintenance throughout the Oaklands trail network, replacement of planks along the red trail from the Newfields Road parking lot south to the tunnel, and blaze refreshing if possible. The applicants anticipate 40-80 volunteers, will encourage

carpooling, will supply tools and safety equipment, provide port-o-potties at the trail head, and will work with Kristen Murphy to obtain cones for marking roadside parking along Newfields Road similar to previous event. Request includes approval for up to \$300 for boardwalk materials. Currently \$600 remains in the Trail management subcategory.

Recommendation:

Should you agree the activity supports trail maintenance needs, approve the volunteer event request as proposed including the expenditure of up to \$300 from Conservation Commission's Town account for materials in support of trail management and maintenance.

5. Summer Band @ Raynes Farm – Sunday, May 7, 2017

Ben Anderson requesting to host a jazz infused American roots orchestra at the east door way of the barn with audience sitting outside on the grassy slope. He would be responsible for cost, set up, clean up, etc. and if the field was determined not to be in proper condition, he would park everyone on my property. He anticipates 150-200 people.

Recommendation:

Should you agree the activity would not impact haying the field, approve the event request as proposed. Possible condition: road crossing safety measures be in place to accommodate parking across the street.

6. Application Guidelines

Review draft guidelines for applications coming before the conservation commission with an anticipation of a work session for further discussion next month.

7. By-Laws

Review draft by-laws with an anticipation of a work session for further discussion next month.

8. Community Reports

- a. Property management
 - i. Awarded \$250 barn assessment grant from Preservation Alliance. As discussed, requires \$50 match
 - ii. Received 2 proposals. Forwarded 2nd one to NRCS for contract establishment. Will need to meet to discuss CC management objectives for Elliott Property
 - iii. Ben Anderson proposed to build a sign similar to the Word Barn sign (see his property) for Raynes Farm. Requires approval of funding (\$100) and identify what it should say
- b. Trails
 - i. See trail agenda
- c. Outreach
 - i. Woodcock Walk proposed. ID date and participants.
 - ii. PEA Climate Action Day project Henderson Swasey Landing
 - iii. Spring Tree Program Requires approval of funding (\$252), & ID interested members
 - iv. Morrissette Apple Tree Release Requires approval of funding (\$9) & ID interested members
 - v. Barry Conservation Camp. Discuss how to choose a camper. See David's packet



CELEBRATING OVER 30 YEARS OF SERVICE TO OUR CLIENTS

HAND DELIVERED

March 3, 2017

Carlos Guindon, Chair Exeter Conservation Commission 10 Front Street Exeter, NH 03833

Re: Tax Map 47, Lots 8 & 9/CKT Associates

Preliminary Review

Dear Chair Guindon and Commission Members:

Following up on several meetings with Planning Department Staff and with the assistance and encouragement of the Town's Economic Development Director, as well as a productive design review with the Planning Board, the Applicant hereby submits conceptual plans of the proposed multi-phase development of the above parcels for the Commission's preliminary review and comment.

The Applicant proposes an active adult community on Tax Map 47, Lot 8. The Applicant seeks the Commission's input on the design and layout before going to full engineering. This project would be served by a new public road constructed pursuant to the TIF approved by the Town's voters with the participation of the Applicant.

The Applicant also seeks the Commission's initial input on its more conceptual plan for Tax Map 49, Lots 8 (remaining land) and 9 which would be a multi-use project developed over a period of years. This project would also benefit from the TIF road and is intended to be compatible and integrated with the active adult community project.

After considering the input of the Commission together with that of the Planning Board, we anticipate moving ahead with final

MICHAEL J. DONAHUE CHARLES F. TUCKER ROBERT D. CIANDELLA LIZABETH M. MACDONALD JOHN L RATIGAN DENISE A. POULOS ROBERT M. DEROSIER CHRISTOPHER L. BOLDT SHARON CUDDY SOMERS DOUGLAS M. MANSFIELD KATHERINE B. MILLER CHRISTOPHER T. HILSON JUSTIN L. PASAY HEIDLI, BARRETT-KITCHEN NICOLE L. TIBBETTS ERIC A. MAHER DANIELLE E. FLORY

OF COUNSEL NICHOLAS R. AESCHLIMAN

ROBERT A. BATTLES (1951-2010)

DONAHUE, TUCKER & CIANDELLA, PLLC
225 Water Street, P.O. Box 630, Exeter, NH 03833
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Carlos Guindon, Chair Exeter Conservation Commission March 3, 2017 Page 2

design and formal submission of the appropriate wetland permit applications to NH DES and for the Commission's comment and site plans to the Planning Board. As depicted on the conceptual plans and authorized by Article 9.1.6.C of the Zoning Ordinance, the Applicant anticipates submitting applications for appropriate waivers under Section 9.9 of the Site Review and Subdivision Regulations for limited wetland buffer impacts and any appropriate mitigation.

We have enclosed the conceptual plans. We respectfully request that this matter be placed on the Board's March 14, 2017 agenda.

In the meantime, if you have any questions do not hesitate to contact me.

Very truly yours,

DONAHUE, TUCKER & CIANDELLA, PLLC

Michael J. Donahue

MJD/sac/

Enclosures

cc: Kristen Murphy, Natural Resource Planner

Jonathan Shafmaster

James Gove

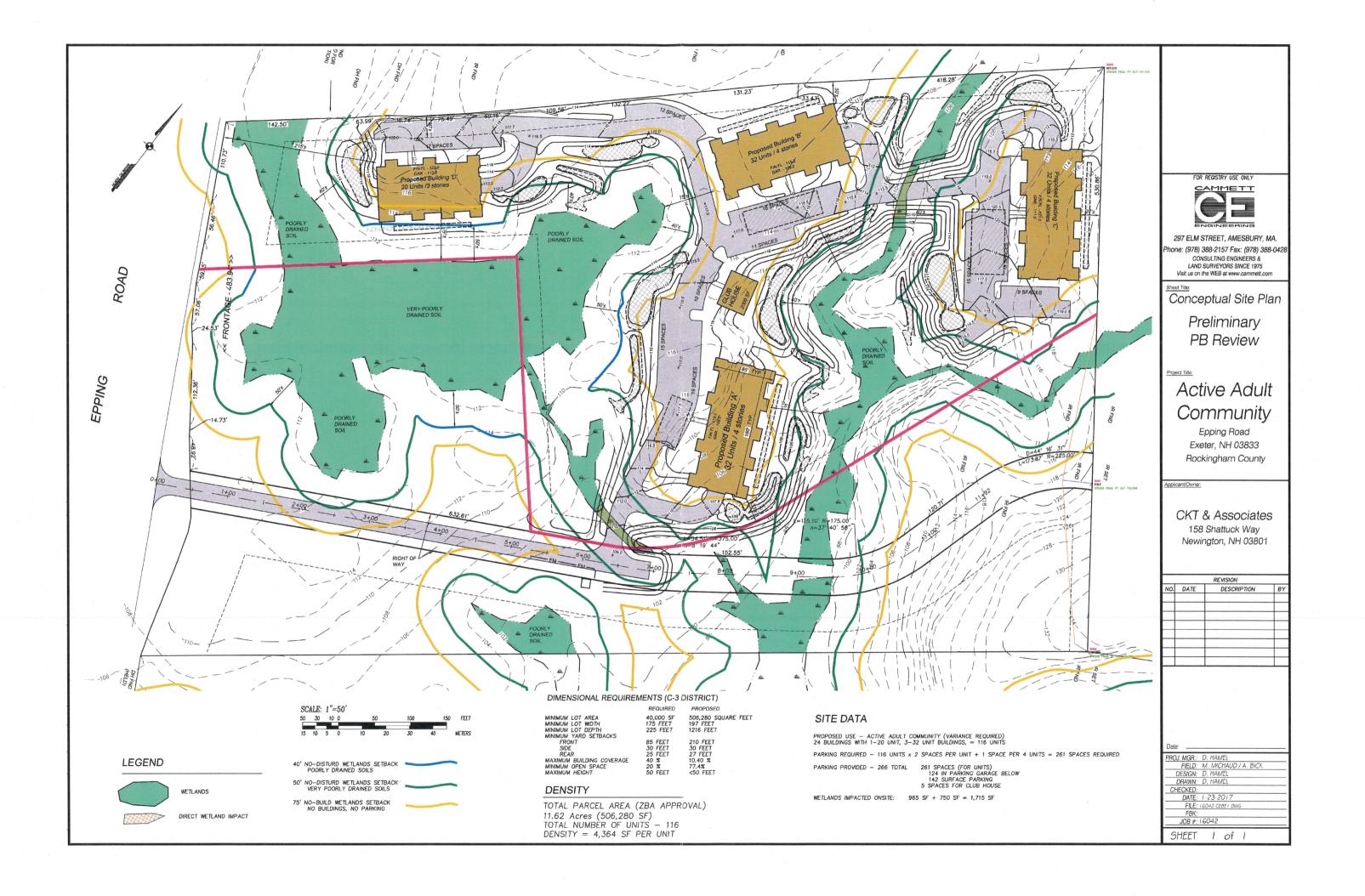
Brendan Quigley

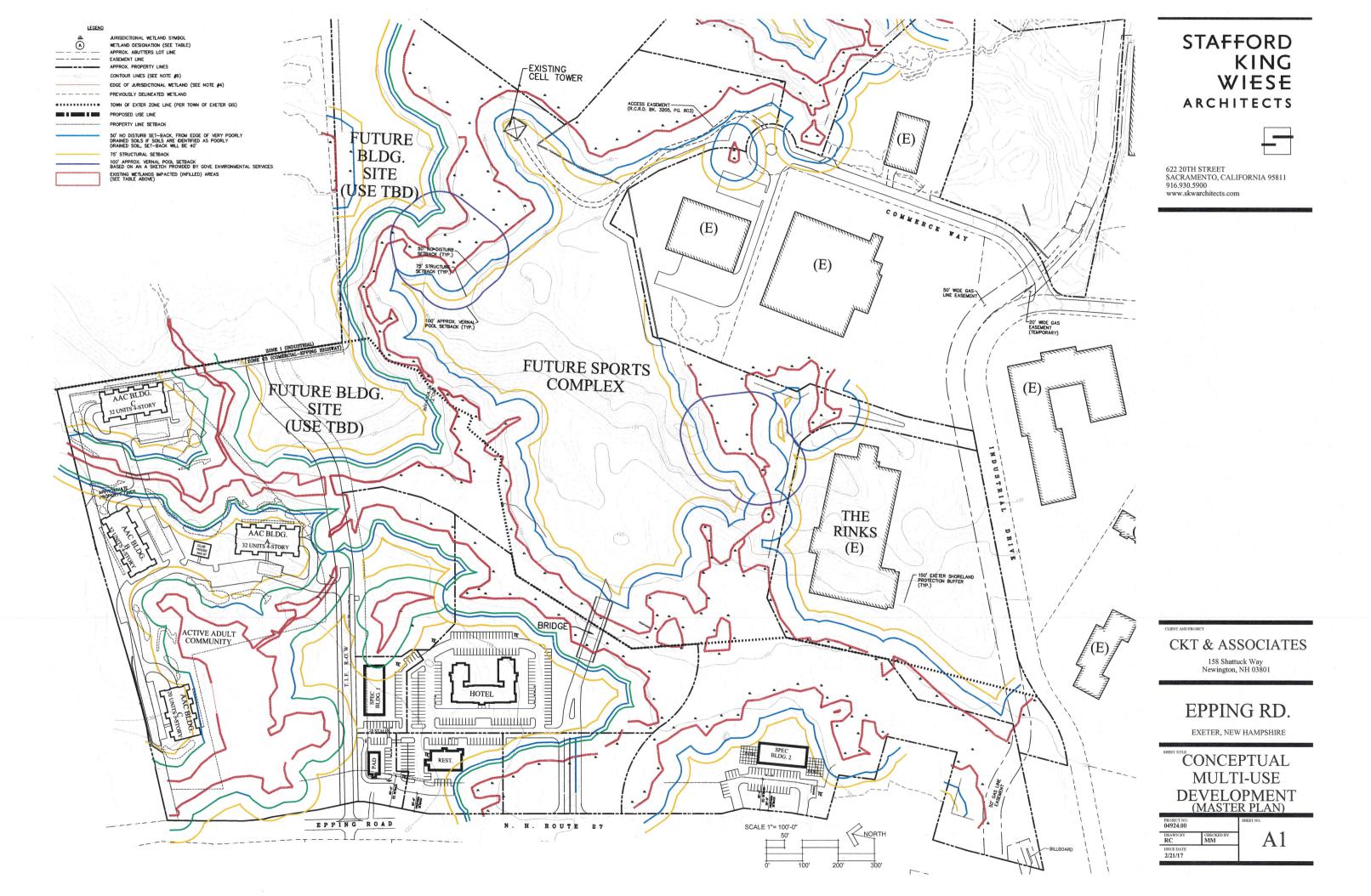
Denis Hamel

Steve Leonard

Justin L. Pasay, Esq.

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Mr Dave Sharples Town of Exeter 10 Front Street Exeter, NH 03833

RECEIVED

MAR 10 2017

RE: 62 -70 Beech Hill Rd response to Sharples letter dated 2/16/2017

EXETER PLANNING OFFICE

Dear Mr Sharples,

I plan on providing a large packet of information, but wanted to address your letter specifically. Again, it seems easiest to go by the numbers on your letter.

- 1. As we knew a building permit for the hay barn was denied, but we needed that to move forward to the ZBA. We are attempting to get on the schedule for April, with May as a backup date. There is a packet going to the Conservation Commission in hopes of gaining approval.
- 2. You are welcome to do the inspection by June, 1 however I expect we will have debris removed long before that date and would be happy to contact you when it is done so you can do your inspection earlier.
- 3. N/A
- 4. Thank you for the maps and to Kristen Murphy for providing a better digital copy. As you will see in the attached documents, there are many diagrams, layouts and specs provided.

As far as the differences you mention, I feel you will see that HUA was built EXACTLY as designed. I believe that when you did you walk through, it may have been covered by vegetation. The HUA has very specific plans and required multiple inspections during its construction. USDA and/or NRCS was involved with each step.

The structures you refer to are temporary structures that are designed to be moved around. I have attached diagrams. You will see their current locations noted on the maps. They are put together with skis on the bottom so they can be moved as needed. Since you MUST (and should) provide shelter to any animal, we used the least intrusive product we could find to protect the animals while keeping portability an option.

The compost facility was built to spec and by design of several county, state and federal agencies. I have attached additional information. Again, several inspections were done during construction to be sure the plans were followed to the letter.

5. The No Trespassing signs of concern are in the process of being removed. Access is not impeded, in fact snowmobiles have been through this winter along the power line corridor. Since this fencing has been there for approx. 10 years, there has never been an access issue. Access is NOT blocked - the gates were installed to help ease access should it be needed - but due to the continued snowmobile traffic, I feel it is safe to say that even when the gates are closed, there is easy access.

Thank you for allowing me to address these additional concerns and I would be happy to answer any questions you might have.

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Initial Summary;

We purchased our house lot in 1999. Around 2002 the surrounding 46 acres went on the market and was purchased by a family member. We leased a portion (approx 15 acres) of the 46 acres from the family member. In 2006 my husband and I purchased the entire property from the family member. Prior to us purchasing the property directly, we stared the process of getting a farming plan together. We worked with several county, state and federal agencies to be sure we were "doing it right".

I have been visited the planning and building departments over the years many times and several town inspections have been done. Until now, we have always had a good relationship with the town and tried to follow the rules while being a good neighbor.

We started our agricultural use small and, as hoped, it grew. We wanted to follow the advice of the professional and improve the property in the most natural way possible. I did not want to use a bunch of chemicals or strip the property of its original feel, but we did want to improve the quality and thereby environmental aspects. For approx 15 years we have had animals on the property and the supporting fences and structures that go along with those animals. Some of the temporary structures have been added more recently, but no permanent structures have been added for more than 10 years. And I should note, we have been paying the taxes on the permanent buildings the whole time and they ARE listed on tax card.

Since we moved onto the property we have allowed snowmobiles. 2 years ago I had a problem with the local snowmobile club president. There were threats made by him, attempts at bullying me into signing forms, property damaged and it was not a positive "relationship" any more. I asked for another representative of the club to be the contact, but the president refused. For the past 2 years I have heard NOTHING from any of the snowmobile club members - no requests, no letters, no calls, no "trail" work, but snowmobiles continue to cross my property. But I will stay away from further discussion on that so we can focus on the most important issues - conservation and the property.

With the included information now available to the committee, I respectfully ask that the Conservation Commission give us written permission to continue to use the property in an agricultural manner as permitted in the easement. The fact that this step was missed years ago was an error, but we believe you will see we went far above the necessary expectations and want to continue to be good stewards to the property.

Overview of the details:

When we purchased the property it was rough bramble and had poor vegetation. In an effort to improve the area and have a positive effect on the environment, we started a long process with MANY state and federal agencies to come up with a good plan. We wanted to avoid using chemicals, avoid loggers and/or clear cutting, allow access for the local wild life while protecting our animals. We wanted to approach it in a more natural way even though it would take much longer and cost more. I have included a list of some of the involved agencies and hired professional to form the plan. In other words, this was not a hap-hazard approach, but rather a detailed, educated, time consuming and professional approach to transform an open space that could be more appealing for all. It would have been much less expensive to take a different approach, but we wanted to be good neighbors and protect the property we were invested in for our future generations.

GPS tracking was done by NRCS and team for proper placement of the following;

Compost facility; Designed and placed by NRCS and team. Designed to follow BMPs and be friendly to all. We pick up manure everyday for the horses, and sheep and goats areas are done about once per week or more frequent in summer. When the compost is "ready" we give some away, sell some, and use to improve the soils and horticulture.

The HUA (heavy use area) was designed and placed by NRCS and team. It was constructed exactly as planned (see attached plan). There is also a buffer that may not have been visible during the Nov walk through due to leaves, tall grass etc., but it does have blocks at the end and is fenced to keep animals out of the vegetation buffer as prescribed in plan. The HUA also has a sled style shelter that can be removed with approx 6 screws - but it is the feeding area for the animals and follows BMPs.

The "summer paddock" was designed by NRCS and team to use rotational grazing as a way to improve the soils, keep the animals happy, minimize the need for the power company to do the chip mowing (which they are quite happy about) and allow the animals to naturally improve the land without chemicals or manufactured fertilizers. A grazing plan was also implemented at the time with the help of UNH Co-op Extension. We built that paddock to be used in the summer and fall during the growing season. Two 16 foot gates were installed at either end (and at great extra expense) to allow snowmobilers to pass during the winter months when the summer paddock in not in use. While there is no trail to block, the gates were kept shut this year and snowmobiles were still able to cross on the sides so the concern raised about pedestrian access is not an issue.

All of the structures that I am calling shelters, are movable and not permanent. They are designed to let the animals have a dry place to rest, follow BMPs for their care, and not require permanent structures. They are easy to pick up and/or drag on their built in skids. 2 of these are placed on the HUA area for the feeding area.

The Hay Barn - This was originally a "bin" system made out of concrete blocks. There was no building permit needed. Since the tarp covers were not working, and quite dangerous during bad weather, a tin roof was put on it. I believe that was the time that it became a "building" and is the primary structure of

issue. It strattles the line into the conservation easement (by Mr Sharples map - it has not been surveyed recently and some pins are missing). We have been taxed accordingly ever since. It has been there for more than 10 years. We are in the process of going before the appropriate committee to rectify the permitting process.

We currently have;

1 horse 1 rescue pony

2 rescue miniatures horses approx 15 goats

2 sheep 8 ducks

3 chickens 2 goats with babies

48' heated & hard sided greenhouse (not on located on conservation land)

In this packet; (Delivered by Laura Barker)

Correspondence

response to Dave Sharples letter dated 12/9/16 from Barkers delivered as requested on 1/6/2017. It was also accompanied with many supportive documents

Letter from Sharples dated 2/16/17 with a response date of 3/10/17

Response to Sharples letter dated 3/9/17 from Barkers

The Plans

Conservation plans from NRCS and USDA. Several maps, diagrams and specs for shelters showing that they are movable structures and designed to be moved as needed with minimal effort

UNH Co-op Extension housing and space guidelines showing the need for shelters for animals.

NRCS Compost specs, diagram, mapping, and size requirements

Invoices

Primarily in there to show that every effort was made to do it right - despite cost. They include NH Soil Consultants, Jones and Beach, NH DES and this is a small sample of the agencies/companies involved

Sustainability

USDA, NRCS and UNH planting specs for proper forage crops to be planted

Additional Information

January 6, 2017

TO: Town Planner Dave Sharples

FROM: Laura Barker

RE: 70 Beech Hill Rd

Thank you for meeting with me yesterday to address some concerns. Not only was it informative, but helpful so we can adequately resolve these concerns. As requested, I am including many papers and documents that I hope will show that great effort and expense was taken to "do it right". Unfortunately, the town conservation was missed despite working with state and federal agencies. I apologize for this step getting missed.

A. It appears the main problem revolves around our livestock (sheep and goats) and the fact I did not notify the Exeter Conservation Commission of my intended agricultural use (as permitted) and gain written approval. I have attached a sketch of the area we are using and hope it will clarify the space dedicated to animals. It will also show the temporary and movable shelters the animals require and are part of "best management practices". The "shelters" are provided so the animals have a space to get out of the weather and rest.

It seems easiest to address the items as numbered in your letter dated 12/9/2016.

#1 please see drawings by NRCS. The buildings in question are mostly "run in shelters" as described in A. There is one building we refer to as the "hay barn" that may need proper permitting. We will go before the proper board and/or file proper waiver applications to fix this - at this time it is not clear the best avenue to pursue, but I will work with the town to address this by 6/1/17 (with meeting schedules taken into account).

#2 There is a lot of debris that was pulled out so the recycling roll off could remove it from the property. However, due to a broken foot and my fathers heart attack, that did not happen before your walk thru. All of the debris will be removed from the easement area by 6/1/17. The fencing supplies are critical to have on hand, but the rest of the "trash and/or debris" will be removed by 6/1/17. I would like to note, there are no "anti freeze" or containers of hazardous fluid as implied on the easement property - all precautions have taken to ensure this property is in the best condition possible for my heirs. The containers you referred to are either empty and waiting for recycling or we use them to store/move water around the property. The bagged topsoil and mulch were put there this fall and will be used in the planting season. If you would like them moved, I would request waiting until the mud season is over and they can be moved to the non-easement portion of the property.

#3 As discussed, the dogs were in there so they did not disrupt you, Doug and Kathy. They are actually "maternity pens" for the sheep and goats with babies. The structures referred to are the same as described in A. As agreed, this is a none issue.

#4 Please refer to maps and A

#5 Signs will be replaced by 6/1/2017.

Thank you for the opportunity to address this situation.



TOWN OF EXETER, NEW HAMPSHIRE

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 •FAX 772-4709 www.town.exeter.nh.us

February 16, 2017

Mr. and Mrs. Barker 62 Beech Hill Road Exeter, NH 03833

Re: 62 Beech Hill Road, Exeter, N.H. (Tax Map Parcel #18-2) Conservation Easement Violations

Dear Mr. and Mrs. Barker,

First, thank you for your prompt response to my initial conservation easement violation notice sent on December 9th, 2016. Though your response was informative, some additional details are required in order to bring your use of the conservation easement area into compliance. Those items include the following:

- 1. In order to permit the hay barn, you must file a building permit with our Building Department or provide evidence that one has already been issued as the Town has no record of any permit for this structure. You describe this and the remaining "run-in" buildings as related to agricultural uses. Agricultural activities and ancillary structures require written permission from the Exeter Conservation Commission. In order to obtain this, additional details are needed as indicated under Item #4 below.
- 2. I recognize you have committed to remove all non-agricultural related items mentioned in my December 9th letter by June 1, 2017. I will arrange for a follow-up inspection at that time. Anything that remains within the easement must be agriculturally related and addressed via written permission from the Conservation Commission.
- 3. Thank you for your clarification that the structures I referred to as "kennel areas" are maternity pens for sheep and goats.
- 4. Though you have provided portions of two NRCS conservation plans, the submission to date is segmented and leaves several items unclear. My recommendation is for you to provide a single comprehensive plan showing agricultural uses (fencing, barns, sheds, etc) on the property with respect to easement boundaries with supplemental text to support the use as part of an agricultural plan. I have attached two aerials indicating the easement boundary for the entire property and an enlarged version for the northernmost portion of the easement. If you find it helpful, this could be used to label the structures and outline the fence lines within the easement in your resubmission.

It appears that some of the structures visible in the aerial image differ from the description in the NRCS plans. For example, an item on the plans described as a "concrete HUA (assuming heavy use area) with concrete waste block wall on the end and a vegetative treatment area" seems to correspond with the covered structure in the aerial and what you describe as your maternity pens. Additionally, it appears there are structures within the wooded area north of the area labeled "horse paddock" on the NRCS plans. Please identify the agricultural use and add this to the plans. The same applies to any other agriculturally related structures or improvements you intend to retain within the easement area.

As required in easement term 2.C.i., the supplemental text must include details on how design, placement of structures, and management of the agricultural activity afford protection to conservation values of the property. You must also address how these do not impede the scenic views, recreation, water, and forest and wildlife resources of the land. My recommendation is to include details on how erosion is minimized, manure is managed, and structures were sited to avoid contamination of wetlands/waterways. This should include the

placement of the compost pad indicated on the NRCS plans adjacent to the drainage changel that traverses along the northern boundary of the powerline corridor.

5. I acknowledge that you intend to replace the no trespassing signs by June 1st. Please remove these signs immediately to ensure that the easement remains open to passive pedestrian recreation access to, on and across the property (easement term 4.C) as set forth in the easement. Lastly, please clarify whether the fencing for the paddock area impedes pedestrian access to the trail along the powerline corridor. Based on your description, a gate is present. I am concerned that this access route may now be physically blocked.

Please provide these additional details by March 10th, 2017. The Commission will address the matter at their March 21st monthly meeting. The meeting will be held in the Town Hall at 11 Front Street and begin at 7:00 pm. Should you have questions, I am happy to discuss these items further with you.

Respectfully,

Dave Sharples, Town Planner

Enclosures: Aerial Image of Easement Boundary Overview and Northern Detail

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EPPING SERVICE CENTER TELLY'S PLAZA, 243 CALEF HIGHWAY EPPING, NH 03042-2326 6036791587 ext. 101 Richard Ellsmore
District Conservationist
Kimberly McCabe
Soil Conservation Tech.

Conservation Plan

LAURA BARKER 62 BEECH HILL RD EXETER, NH 03833

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Tract: 1072

Access Road

Build a designated route or constructed travelway to be used by vehicles necessary for management of the operation.

	Planned	AND		Applied	
Field	Amount	Month	Year	Amount	Date
3	1 ft	10	2005		
Total:	1 ft				1

Forest Stand Improvement

Manipulate species composition, stand structure, and stocking by cutting or killing selected trees and understory vegetation according to the Forest Management Plan.

	Planned			Applied	
Field	Amount	Month	Year	Amount	Date
3	13.1 ac	10	2005		
Total:	13.1 ac				

Headquarters

Tract: 1072

Composting Facility

Construct a facility for biological stabilization of organic waste material. Facility will store and compost animal waste, into usable soils for greenhouse use.

		Planned	Applied	3		
	Field	Amount	Month	Year	Amount	Date
.	1	1 no	10	2005		
	Total:	1 no				

Comprehensive Nutrient Management Plan

A Comprehensive Nutrient Management Plan that addresses the handling, storage, and application of animal waste in an environmentally safe manner will be developed and implemented. The implementation of the CNMP is required to remain in compliance of this contract.

Planned					Applied	
	Field	Amount	Month	Year	Amount	Date
	1	1 no	10	2005		1

9/27/2005

Total: 1 no					
Total: 1 no					
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Heavy Use Area Protection

Protect heavily used areas by providing soil protection with vegetation, surfacing material or mechanical structures.

e na chuic	Planned	4	enjalis mi	Applied	
Field	Amount	Month	Year	Amount	Date
1	3.1 ac	- 10	2005		
Total:	3.1 ac				

Water Well

Install a well.

	Planned			Applied	
Field	Amount	Month	Year	Amount	Date
1	1 no	10	2005		
Total:	1 no				

Watering Facility

Install a water drinking facility for livestock.

	Plar	ned				Applied]
Field	Amo	ount		Month	Year	Amount	ij,	Date	
1		1 no	4.1	10	2005		- !	1.1	
Total:	٠.	1 no							

Pasture

Fence

Construct a fence for use as a barrier to livestock. This will create pastures for prescribed grazing.

	Planned			Applied	
Field	Amount	Month	Year	Amount	Date
2	1 ft	10	2005		
Total:	1 ft				

Nutrient Management

Manage the amount, form, placement and timing of plant nutrient application.

		Planned			Applied	
ı	Field	Amount	Month	Year	Amount	Date
	2	3.7 ac	10	2005		
	Total:	3.7 ac				:

Pasture and Hay Planting

Establish forage species for grazing.

Γ		Planned			Applied	
İ	Field	Amount	Month	Year	Amount	Date
r	2	3.7 ac	10	2005		
ſ	Total:	3.7 ac				

Pest Management

Manage infestations of weeds, insects and disease to reduce adverse effects on plant growth, crop production and material resources.

ſ		Planned			Applied	
	Field	Amount	Month	Year	Amount	Date
ſ	2	3.7 ac	10	2005		
	Total:	3.7 ac				

Prescribed Grazing

Grazing will be managed according to a schedule that meets the needs of the soil, water, air, plant and animal resources and the objectives of the resource manager.

a secondario de la compansión de la comp	Planned	a sa ta ga atao ay ay	ari englar at radisage	Applied	i kana a kana ka
Field	Amount	Month	Year	Amount	Date
2	3.7 ac	10	2005		
Total:	3.7 ac				

CERTIFICATION OF PARTICIPANTS	
LAURA BARKER Date	
CERTIFICATION OF:	
District Conservationist Richard Ellsmore Date	Conservation District RCCD Date

NONDISCRIMINATION STATEMENT

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Conservation Plan

Date: 9/26/2005

Customer(s): LAURA BARKER

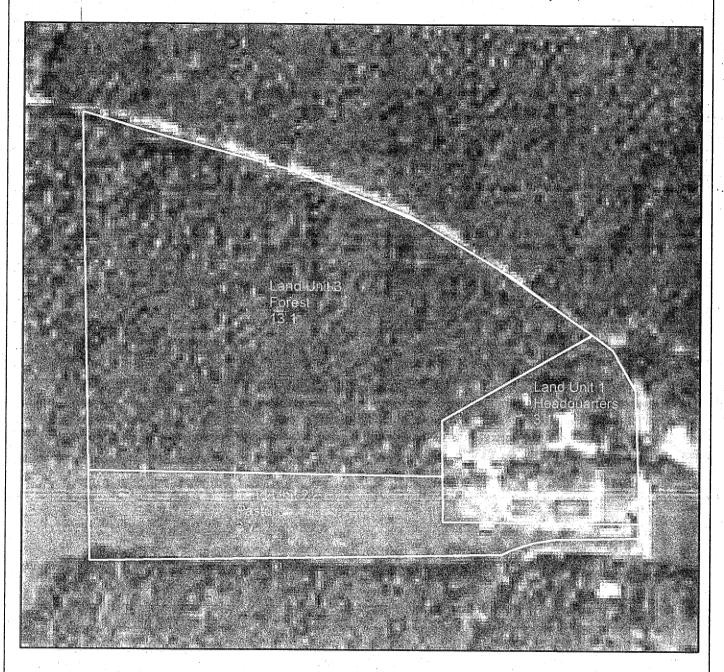
District: Rockingham
Approximate Acres: 19.9

Field Office: EPPING SERVICE CENTER

Agency: NRCS

Assisted By: Kimberly McCabe

State and County: NH, ROCKINGHAM



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OMB No. 0578-0013

REF. 2. Page 1 of 3 34 7. TOTAL ACRES UNDER CONTRACT 23 33 22 32 31 21 COMPLETION SCHEDULE AND ESTIMATED COST-SHARE OR PAYMENT BY YEAR (For Non-Cost Share Items Show Units) 20 30 29 19 2010 28 6. CONTRACT OR AGREEMENT NO. 7414286A102. 2009 27. SCHEDULE OF OPERATIONS 2008 16 26 CONSERVATION PLAN 2007 15 25 2006 14 24 OR PAYMENT COST SHARE 5. STATE New Hampshire RATE 13 COST BASIS 7 ESTIMATED AMOUNT (CINITS) Ξ ROCKINGHAM 4. COUNTY PLANNED CONSERVATION (Record of Decisions) U.S. DEPARTMENT OF AGRICULTURE 10 BARKER LAURA FIELD 6 ITEM NO. ∞

Construct a facility for biological stabilization of organic waste material. Facility will store and compost animal waste, into usable soils for greenhouse use. Resource Concerns: Water Quality: Excessive Suspended Sediment and Turbidity in Surface Water, Soil Condition: Contaminants-Animal Waste and Other Organics - N Livestock: Beef \$8,304 90%AM \$8,304 \$9,226.4000 00 100 COMPOSTING FACILITY(317) COMPOST FACILITY Tract: 1072 Fields: 1;

Protect heavily used areas by providing soil protection with vegetation, surfacing material or mechanical structures. Resource Concerns: Water Quality: Excessive Nutrients and Organics in Surface Water, Water Quality: Excessive Suspended Sediment and Turbidity in Surface Water, Soil Condition: Contaminants-Animal Waste and Other Organics - N Livestock: Beef \$2,520 90%AM \$2,520 \$28,000.000 0 0.1 ac 0.1 ac HEAVY USE AREA PROTECTION HEAVY USE AREA. PROTECTION(561) Tract: 1072 Fields: 1;

nstall a well. Resource Concerns: Water Quality: Excessive Nutrients and Organics in Surface Water, Water Quality: Excessive Suspended Sediment and Turbidity in Surface Water, Soil Condition: Contaminants-Animal Waste and Other Organics - N \$5,400 90%AM \$6,000.0000 ou ou WATER WELL(642) WATER WELL Tract: 1072 ields: 1; ivestock: Beef

Construct a fence for use as a barrier to livestock. This will create pastures for prescribed grazing. Resource Concerns: Water Quality: Excessive Nutrients and Organics in Surface Water, Water Quality: Excessive Suspended Sediment and Turbidity in Surface Water, Soil Condition: Contaminants-Animal Waste and Other Organics - N Livestock: Beef

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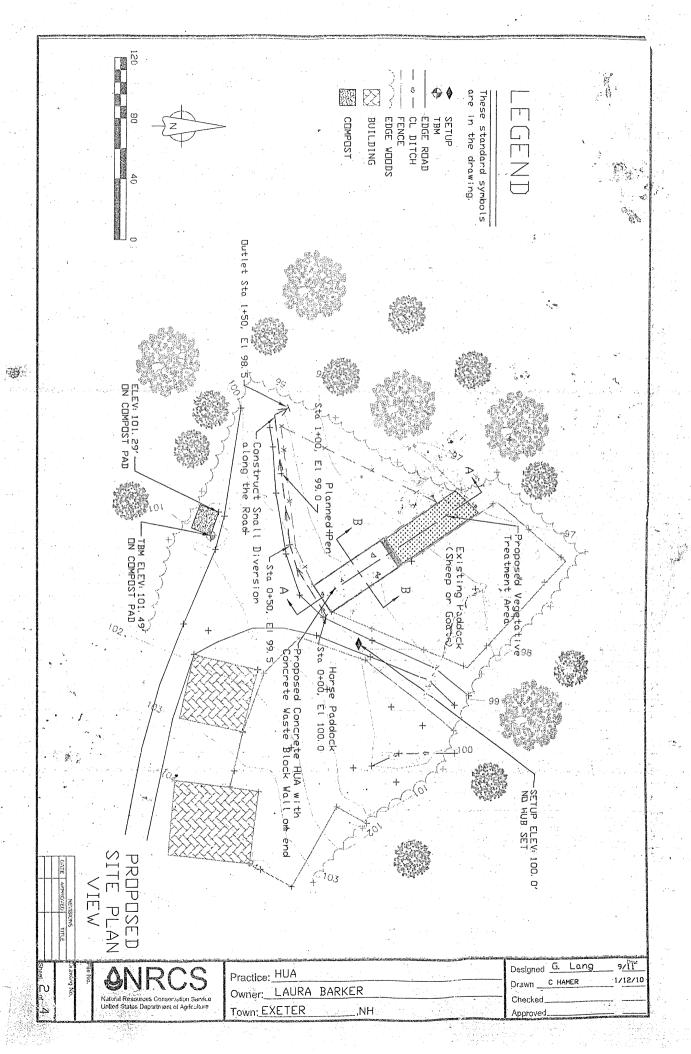
Establish forage species for grazing . Resource Concerns: Water Quality: Excessive Nutrients and Organics in Surface Water, Water Quality: Excessive Suspended Sediment and Turbidity in Surface Water, Soil Condition: Contaminants-Animal Waster and Other Organics - N Livestock; Beef

5	Tract: 1072 Fields: 2:	PASTURE AND HAY PLANTING(512) 3.7 ac		\$1,665				
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		PLANTING						

Grazing will be managed according to a schedule that meets the needs of the soil, water, air, plant and animal resources and the objectives of the resource managed. Resource Concerns: Water Quality: Excessive Suspended Sediment and Turbidity in Surface Water, Soil Condition: Contaminants-Animal Waste and Other Organics - N Livestock: Beef

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Flat rates are the incentive payment amounts determined necessary to encourage adoption of conservation practices and are not based on cost share rates.



CONSTRUCTION NOTES

- Contractor shall call DIGSAFE before any construction
- prior to commencing any earthwork.
 The construction site shall be cleared of all Install Temporary Sediment and Erosion control Devices
- replaced with compacted earth fill to planned grades. Gravel base material and crushed stone under blocks to be compacted to grade before placing concrete blocks vegetation, rocks, and other debris. or concrete slab. suitable for subgrade shall be removed and All materials
- Concrete blocks should be placed against the concrete
- lbs/yd STRUX fiber added. slab with gaps as noted in Concrete for the floor shall the floor shall be 4000 ps; with 8.0 the details.
- ω Concrete shall be placed on compacted or dense
- Contraction/Expansion joints shall be cut before and then surface can be brushed lightly to provide Concrete floor shall be bull floated after screeding roughen surface for travel and animals.
- with an approved sealer, the first 48 hours to allow proper curing or sealed The surface of the concrete shall be kept moist for concrete is set completely as shown in the details.
- 10, and blocks to not damage or move them. Care shall be taken when backfilling around the slab
- Seed and mulch all disturbed areas immediately after shaping is completed.
- ίż on the design layout sheet, Construct and shape the diversion to the grades shown
- Maintain the vegetation below the HUA for treating the runoff off the HUA before it enters the woods use for feeding and resting of the animals on the farm for placement of a building upon it. Please note that this concrete slab is not designed It is only for

4, 000	Sq Ft	Seeding and Mulching
150	Ln Ft	Earthwork, Diversion shaping
ω	Eρ	Concrete Blocks 2', x2', x6', long
	Cu Yds	Crushed Stone under blocks (3 Minus)
128	Sql	STRUX 40/90 Fiber - 8 lbs/cu yd
16	Cu Yds	Concrete, 4000 psi, fiber reinforced
19	Cu Yds	Gravel Base (Pit Run)
160	Cu Yds	Earth Fill
27	Cu Yds	Stripping, excavation
YTD	UNIT.	ITEM
	8	TABLE OF QUANTITIES

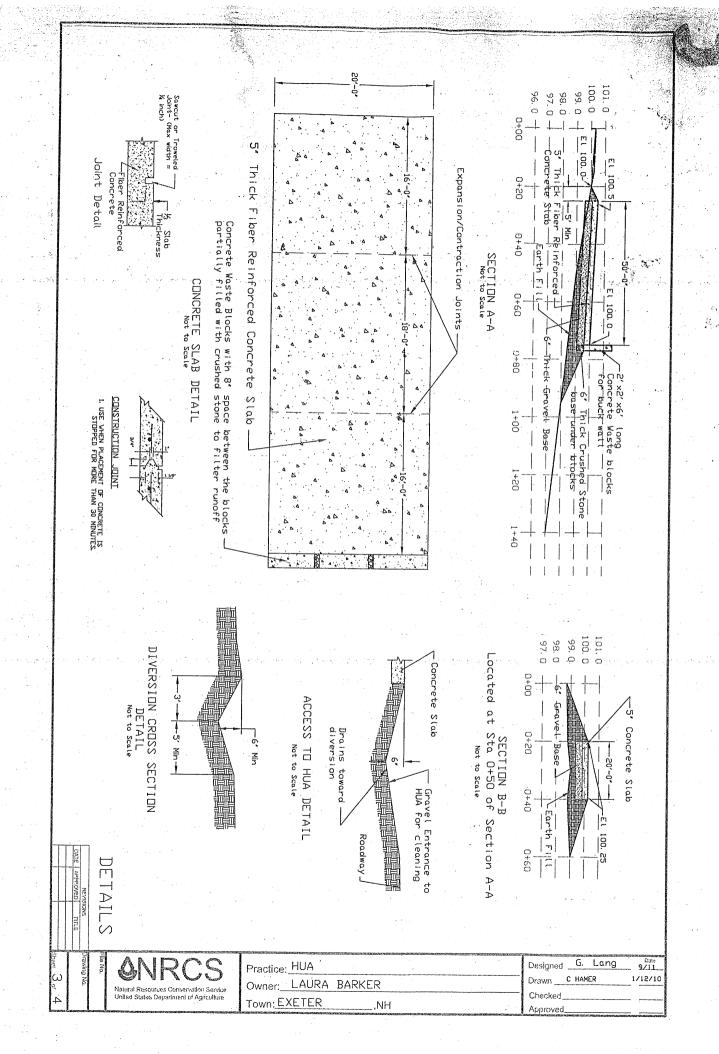
The HUA size is calculated for 30 sheep at 200 lbs each and 30 goats at 100 lbs each. This provides approximately 110 sf per Animal Unit or 17 sf per animal for feeding and resting

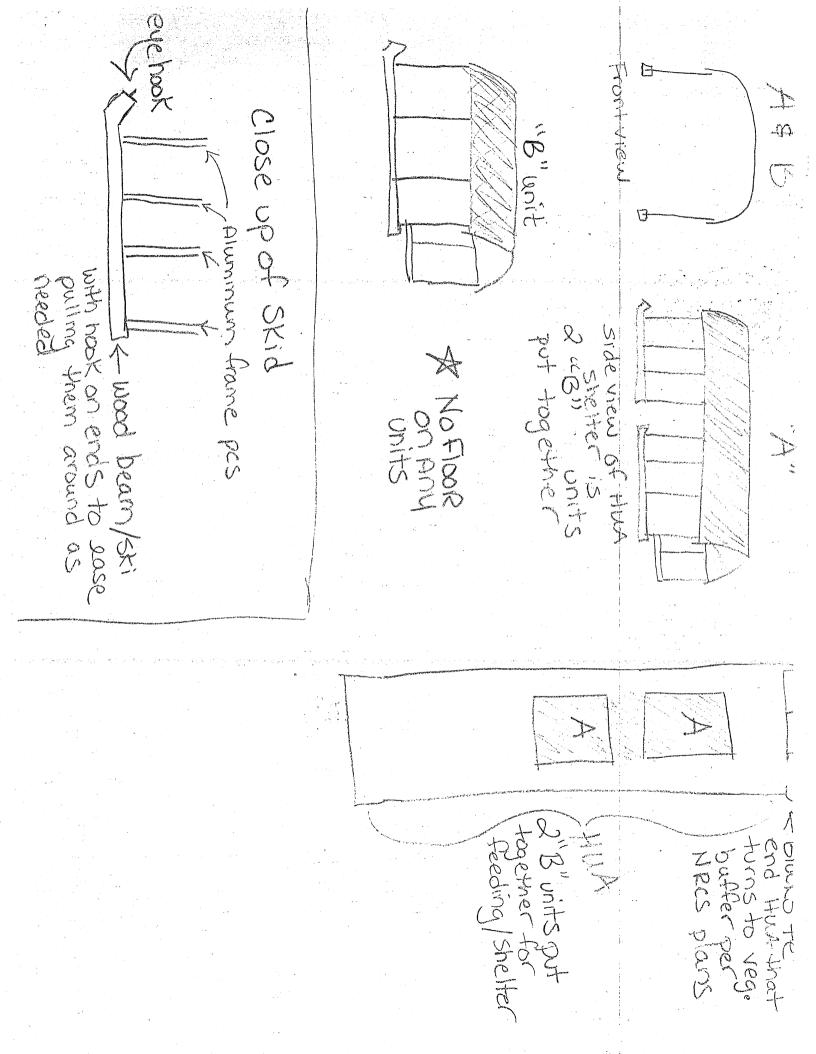
UANTITIE NOTES

Natural Resources Conservation Service United States Department of Agriculture

Practice: HUA LAURA BARKER Owner: Town: EXETER ,NH

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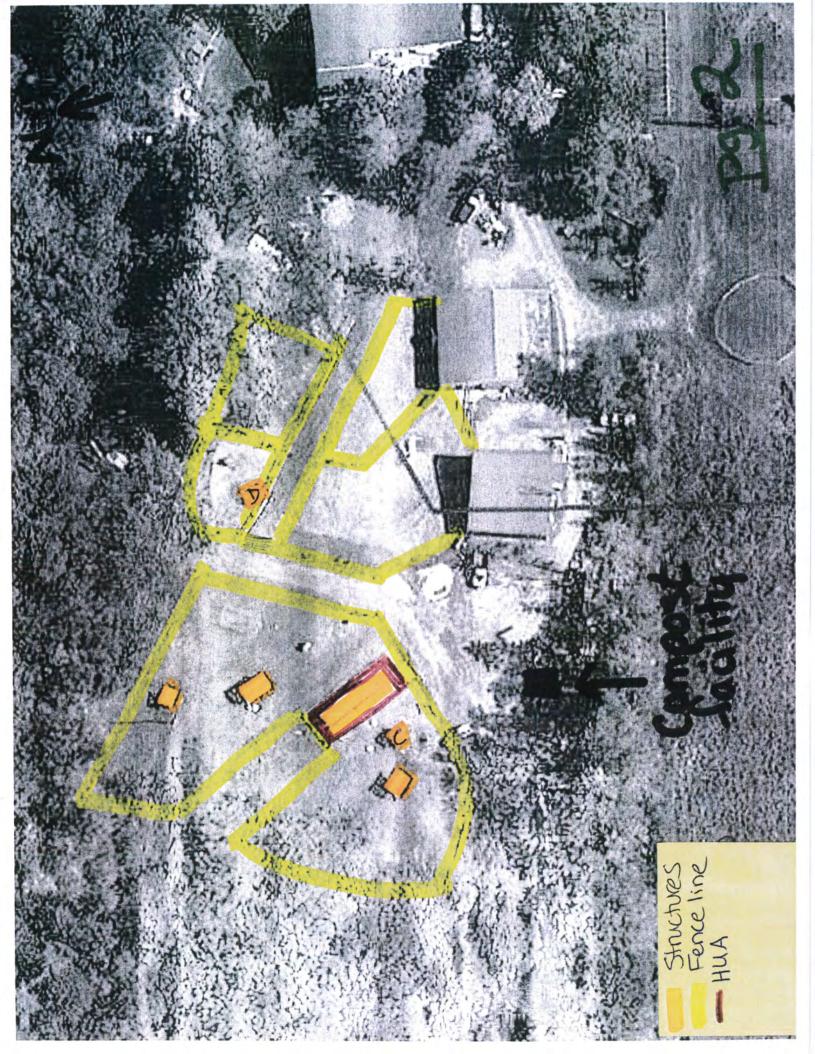


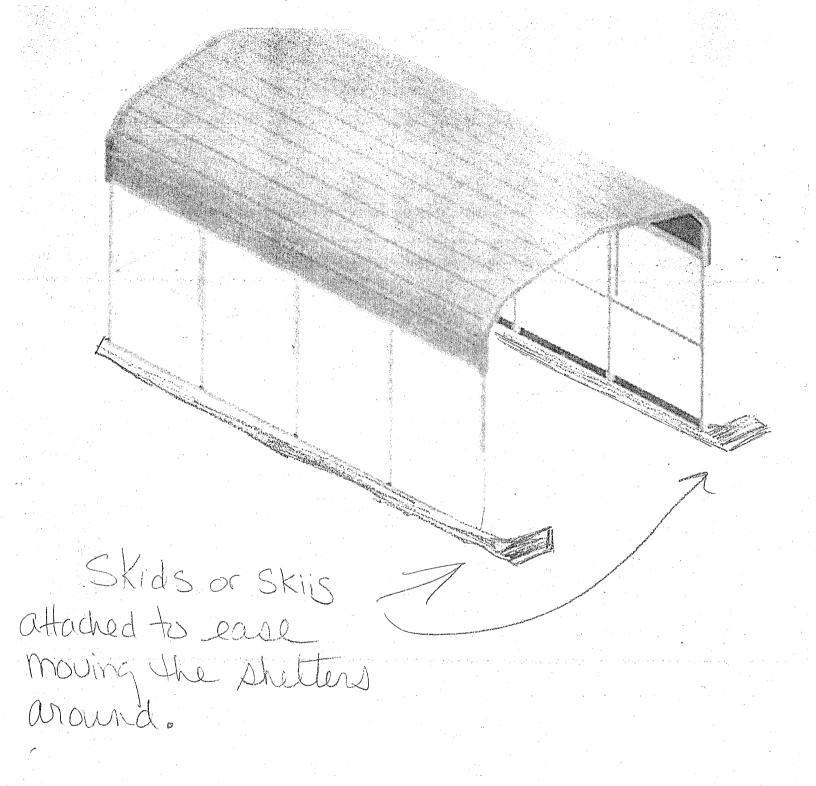


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Aerial Overview of Conservation Easement





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Family, Home & Garden Education Center practical solutions to everyday questions
Toll free Info Line 1-877-398-4769 M-F • 9 AM • 2 PM

Housing and Space Guidelines for Livestock

As New Hampshire becomes more urban, the potential for conflict between the farming and non-farming communities increases. By using best management practices*, farmers can greatly reduce or eliminate problems of odor and fly control, pesticide drift, contamination of surface and ground waters, and damage to neighboring crops. With best management practices in place, farming activities are compatible with other land uses in urban environments.

Farming activities may involve full-time, part-time or backyard farmers. Existing commercial farms are protected by the Right to Farm Law. This allows for properly managed agricultural enterprises to continue operating in residential areas.

Housing

Most farm animals need some shelter in the winter time, but their natural coats allow them to endure much colder temperatures than people can tolerate. When animal housing is designed for human comfort, it can actually be too warm and unhealthy for animals. Buildings with plugged air cracks and windows covered with double plastic are often poorly ventilated. This situation can result in a buildup of moisture and animal odors, creating an unhealthy environment.

A simple, three-sided shelter with an open front will meet the needs of many farm animals and is often the building of choice to raise healthy livestock. When designing a three-sided animal shelter, make sure the open side faces the south away from prevailing wind. Locate the structure on an elevated, well-drained site and make it accessible for feeding and materials handling.

There are several factors to consider when planning adequate livestock shelter in cold weather:

- Air quality: An animal shelter should either be open, with provisions for natural ventilation, or enclosed, using fans and proper air inlets around the ceiling perimeter to provide ventilation.
 Tight buildings result in a buildup of respiration gases and animal odors, which can irritate the animals' lungs and cause pneumonia.
- **Drafts:** Animals can stand cold temperatures, but you should protect them from drafts. Constructing panels in front of an open building can reduce drafts. When animals are allowed to run loose in a pen, instead of being hitched, they will search for the most comfortable spots.
- Dry bedding area: Animals will be comfortable in the cold if they have clean, dry bedding. A
 thick, dry bed provides insulation from the cold ground and decreases the amount of energy the
 animal has to expend to keep warm. Shelter from the snow and rain allows an animal's coat to
 remain dry, to provide maximum insulating value.

- Fresh water: All animals need water to survive. Under cold conditions, provide fresh water often or use freeze-proof watering devices.
- Adequate food: Animals can endure severe cold temperatures if they eat enough food to
 maintain their energy reserves. Animals need food for growth and maintenance. They require
 additional amounts of good quality feed during cold weather to allow for the extra energy
 expended in keeping warm. Hay racks or feed bunks will properly dispense forages to
 reduce waste.

Space

Refer to the table on the next page for estimates on the space needs of various animals for exercise yards and pasture. You will not need a pasture as long as you provide adequate purchased feed, have an exercise yard and develop a sound plan for manure management.

If you do provide pasture, the number of animals it will support per acre depends on soil fertility and environmental considerations. *Rotational grazing* — the practice of sectioning off one section of a pasture with electric fencing and confining animals in that section, then repositioning the fence and moving animals to another section — prevents pastures from being overgrazed and will support more animals than one large unimproved pasture of equal size.

The following table lists the minimum space requirements, housing types and fencing needs of various farm species, along with the number of animals that will meet the food, fiber, recreation and other needs of an average family farmstead. Use it only as a rough guide.

(Note to municipal planners: The minimum space and housing guidelines in the chart apply to both commercial farms and backyard operations. However, you should not apply the numbers of animals suggested in the "Family Needs" category to commercial farms when drafting ordinances regulating agriculture in your community.)

*Refer to the "Manual of Best Management Practices (BMPs) for Agriculture in New Hampshire" for specific guidelines on proper animal waste handling and barnyard management. To request a copy, call the New Hampshire Bureau of Markets at (603) 271-3685.

Fact sheet and table developed by David C. Seavey, Extension Agricultural Resources Educator and John C. Porter, Extension Dairy Specialist. Updated 6/2009, by John C. Porter, Extension Professor and Dairy Specialist, Emeritus.

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United States Department of Agriculture Natural Resources Conservation Service New Hampshire

Operation and Maintenance Worksheet For Your Composting Facility

For:	Landowner/Ope	rator Laura and	Ken Barker	, Wild Spirit	Farm
	Job Location	Exeter, NH	03833		
	County Rockin	\ <u>0 ΜΩM</u> Prepared By_\	Kimberly McCal	02 Date 10/05	

Operation and Maintenance Items

A properly operated and maintained composting facility is an asset to your farm. This composting facility was designed and installed for temporary storage and treatment of animal wastes. The estimated life span of this installation is at least 10 years. The life of this installation can be assured and usually increased by developing and carrying out a good operation and maintenance program.

This practice will require you to perform periodic operation and maintenance to maintain satisfactory performance. A good operation and maintenance plan includes:

Operation

Temperature. For best results, operating temperature of the composting material should be 131°F to 170°F once the process has begun. It should reach operating temperature within about 7 days and remain elevated for up to 14 days to facilitate efficient composting. The material should remain at or above 110°F for the remainder of the designated composting period.

If temperature falls significantly during the composting period and odors develop, or if material does not reach operating temperature, investigate piles for moisture content, porosity, and thoroughness of mixing. Compost managed at the required temperatures will favor destruction of any pathogens, plant diseases and weed seeds.

Aeration. Heat generated by the process causes piles to dehydrate. As the process proceeds, material consolidates, and the volume of voids through which air flows decreases. Materials selected for the composting mix should carefully selected to insure adequate air movement throughout the composting process. Periodically turning the pile and maintaining proper moisture levels for windrows and static piles will normally provide adequate aeration.

Pathogens. Composting of dead animal carcasses and animal parts should include strict temperature monitoring to insure pathogens are destroyed.

When using the in-vessel or static aerated pile type of composting, temperature of the active pile must be maintained at 131°F or higher for 3 consecutive days to achieve pathogen reduction. To achieve pathogen destruction when composting with aerated windrows, the temperature of the active compost pile must be maintained at 131°F or higher for at least 15 consecutive days and the windrow must be turned at least 5 times during the high temperature period.

Vectors. Flies, rats and birds may be attracted to the raw compost feedstocks. Mosquitoes may reproduce where standing water is present. To minimize vector problems:

- ⇒ Reduce the amount of raw feedstocks stored.
- ⇒ Turn piles frequently to promote rapid decomposition.
- ⇒ Eliminate standing water.
- ⇒ Employ good housekeeping to keep the area clean.

Nutrients. Keep compost well aerated to minimize nitrogen loss by denitrification. Keep pH at neutral or slightly lower to avoid nitrogen loss by ammonification. High amounts of available carbon will aid nitrogen immobilization. Phosphorus losses will be minimized when the composting process is managed according to the requirements of this standard. Include compost nutrients in nutrient management plans, determine the effects of use and management of nutrients on the quality of surface water and ground water as related to human and livestock consumption.

Testing Needs. Test compost material for carbon, nitrogen, moisture, and pH if compost fails to reach desired temperature or if odor problems develop. The finished compost material should be periodically tested for constituents that could cause plant phytotoxicity as the result of application to crops. Compost made from dead animals or animal parts should be tested for indicator pathogens such as e coli and salmonella. Composted materials that are prepared for the retail market will require testing for labeling purposes.

MAINTENANCE

- ⇒ Do not allow the operation of any equipment that exceeds the design limit on or within twenty feet of the structure.
- ⇒ Do not allow human entry into any enclosed structure without safety equipment, that includes ladders and breathing apparatus.
- ⇒ Maintain all electrical and mechanical equipment in good operating condition by following the manufacturers recommendations.
- ⇒ Maintain grounding rods and wiring for all electrical equipment in good condition.
- ⇒ All fences, railings, and/or warning signs shall be maintained to provide warning and/or prevent unauthorized human or livestock entry.
- ⇒ Immediately repair any vandalism, vehicular or livestock damage to the structure, earthen areas surrounding the structure, or any appurtenances.

Special Operation and Maintenance Requirement	ts:	
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NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

COMPOSTING FACILITY

(No.) CODE 317

DEFINITION

A facility for the biological stabilization of waste organic material.

PURPOSE

To treat waste organic material biologically by producing a humus-like material that can be recycled as a soil amendment and fertilizer substitute or otherwise utilized in compliance with all laws, rules, and regulations.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies where: (1) waste organic material is generated by agricultural production or processing; (2) composting is needed to manage the waste organic material properly; (3) an overall waste management system has been planned that accounts for the end use of the composted material. Municipal sludge, solid waste and other non-farm type wastes other than leaves and grass clippings are not included in this standard.

CRITERIA

Soils. Locate composting facilities on soils having slow to moderate permeability to minimize seepage of dissolved substances into the soil profile and movement toward groundwater. Evaluate site paving needs in terms of effects of equipment operation on trafficability, soil compaction, and potential for contamination from compost and petrol products. The property limits and distances to resource concerns shall be as shown in Table 1 and 2. A soils investigation shall be made of the proposed facility site. As a minimum the underlying soil shall be investigated to an

adequate depth to determine if the site meets the requirements set forth in Table 1. If conditions of Table 1 and 2 are not met, the site shall be amended or modified to meet these conditions or adequate justification provided for a variance to be allowed.

Table 1 - Property Limits For Compost Facilities

Property	Limits	Units
Maximum Slope	8.0	Percent
Maximum Permeability (Least Permeable Horizon > 12" thick)	2.0	Inches/Hr
Minimum Depth to Bedrock	30.0	Inches
Minimum Depth to High Water Table	18.0	Inches
Minimum Flooding Event	1 Time	Per 25 Yrs.
Maximum Fraction 3" Rock (Percent by Weight)	35.0	Percent

Table 2 - Minimum Distance from Potential Composting Facility to Resource Concerns

Minimum Downslope Dist. to CF	Minimum Upslope Dist. to CF
500 Ft.	500 Ft.
200 Ft.	100 Ft.
300 Ft.	100 Ft.
300 Ft.	100 Ft.
100 Ft.	25 Ft.
100 Ft.	25 Ft.
	Downslope Dist. to CF 500 Ft. 200 Ft. 300 Ft. 100 Ft.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service. NH supplement is underlined.

NRCS, NHFOTG April, 2000 Runoff. Divert surface runoff from outside drainage areas around the compost facility. Collect runoff from the compost facility and utilize or dispose and/or treat it properly. Evaluate the effects of changed infiltration conditions on groundwater recharge, and evaluate changes in volumes and rates of runoff caused by the location of the operation. Properly manage movement of organic material, soluble substances, and substances attached to solids carried by runoff.

Carbon-Nitrogen Ratio. Calculate the amounts of the various ingredients to establish the desired carbon-nitrogen ratio (C:N) of the mix to be composed. The C:N should be between 25:1 and 40:1. Use the higher range of C:N for organic materials that decompose at a high rate (or are highly unstable) with associated high odor production.

Where more than two ingredients are to be blended, the two main ingredients are to be used in the analysis for the desired C:N and mixed accordingly. Adding up to 50 percent by weight of other ingredients to improve workability and air movement is permissible as long as the C:N of the added ingredient does not exceed the target C:N of the compost.

Odor. Select carbonaceous material that, when blended with the nitrogenous material, will result in the desired pH of between 6 and 8. The blended material should have a pH at or slightly below neutral for best odor control. Where odors do not present a problem, pH of 8 to 9 is acceptable, but strong ammonia and amine related odors will be present for up to the first 2 weeks. Adding extra carbon sources may control high pH. Adding lime may increase low pH. At the end of the composting process, pH should be near neutral or 7.0.

Locate composting operations where movement of any odors toward neighbors will be minimized. Buffer areas, vegetative screens, and natural landscape features can help minimize the effects of odors.

Facility Size. Where dead poultry and other small farm animals are composted, establish the size of the composter units on the basis of locally determined animal loss rates. Composting facilities for the purpose of processing animal carcasses are to include a primary composting unit into which alternate

layers of low moisture content manure (unusual poultry manure), carbon source material (straw is common), and dead animal carcasses are placed. A secondary composting unit is often necessary to complete the composing process.

The facility size may also be influenced by pile configuration and row spacing for turning and windowing machinery. A separate area for final compost processing and storage may also be needed.

Moisture. The moisture content of the blended material at start-up of the composting process should be approximately 60 percent (wet weight basis) and maintained between 40 and 60 percent during the composting process. The composting process may become inhibited when moisture falls below approximately 40 percent. Water used for moisture control must be free of deleterious substances. A good source of moisture is the recycled runoff and leachate from the compost pad or milkhouse waste water and contaminated runoff water.

Pile Configuration. Compost piles for windrowed and static piles should be triangular to parabolic in cross-sectional form with a base width to height ratio of about 2 to 1. Increased surface area favorably affects evaporation and natural aeration and increases the area exposed to infiltration from precipitation in uncovered stacks. Aligning piles north to south and maintaining moderate side slopes maximizes solar warming. Windrows should be aligned to avoid accumulation of precipitation. Use of geotextiles specifically designed for covering compost piles shall be encouraged.

Composting Period. The time needed for completion of the process varies with the material and must continue until the material reaches a stability level at which it can be safely stored without creating undesirable odors and poor handling features. Acceptable stability occurs when microbial activity diminishes to a low level. Stability can be obtained in about 21-28 days but can require up to 60 days to produce the desired quality. Visual inspection and temperature measurements will provide needed evaluation of compost status. If compost is to be sold commercially as a plant nutrient, certain testing procedures to determine compost maturity.

soluble salts and ammonium nitrogen may be required to comply with local regulations.

Storage. Provide properly designed <u>pads or other</u> storage facilities sized for the appropriate storage period <u>for both raw materials and finished product</u>. <u>If possible</u>, protect composted material from the weather by roofs or other suitable covers. Structures must meet the requirements of conservation practice standard, "Waste Storage Structure," Code 313.

Location. Planning for the location of the facility shall consider distances from resource concerns to minimize surface and subsurface water pollution and odor problems (minimum distances are shown in Table 2). Greater distances may be required by local, state and federal regulations. Deviation from these distance guidelines requires documented planning rational that locating facilities closer to the resource concerns will not cause surface and subsurface water pollution or odor problems.

Facilities shall not be located in flood plains from a 25-year, 24-hour storm event, unless flood proofing or elevating the facility will satisfy this requirement.

CONSIDERATIONS

Types. Three types of composting operations are covered in this standard—aerated windrows, static piles, and in-vessel. Aerated windrows are more suited to large volumes of organic material that are managed by power equipment used to turn the composting material periodically. Periodic turning reaerates the windrows, promoting the composting process.

Organic material in static piles is initially mixed to a homogeneous condition and not turned again throughout the composting process. Static pile material must have the proper moisture content and bulk density to facilitate air movement throughout the pile. Forced air might be necessary to facilitate the composting process.

In-vessel composting in a totally enclosed structure is carried out on a blended organic material under conditions where temperature and air flow are strictly controlled. In-vessel

composting also includes naturally aerated processes where organic materials are layered in the vessel in a specified sequence. Layered, in-vessel materials are usually turned once to facilitate the process. Vessel dimensions must be consistent with equipment to be used for management of compost.

Process. Composting is accomplished by mixing an energy source (carbonaceous material) with a nutrient source (nitrogenous material) in a prescribed manner to meet aerobic microbial metabolic requirements. The process is carried out under specific moisture and temperature conditions for a specified period of time. The active composting phase typically is accomplished within a period of three to eight weeks. Curing should continue for at least one month after the active phase. Correct proportions of the various compost ingredients are essential to minimize odors and to avoid attracting flies, rodents, and other small animals.

Carbon Source. A dependable source of carbonaceous material must be available. The material should have a high carbon content and high carbon to nitrogen ratio (C:N). Wood chips, sawdust, peanut hulls, straw, corn cobs, bark peat moss, and well bedded horse manure are good sources of carbon. When selecting a carbon source, consider its availability to microbes (i.e., sawdust is more available than bark).

Moisture Control. Large amounts of water evaporate during the composting process because operating temperatures drive off water. A source of water must be available for compost pile moisture control from start-up through completion. Proper moisture facilitates the composting process and helps control odors.

Equipment Needs. Appropriate equipment must be available for initial mixing, turning, and hauling composted material and carbonaceous material. Appropriate long stem thermometers should be available for managing the composting material. A pH kit may be needed on some sites.

Bulking Materials. Bulking materials may be added to enhance air flow within the composting material. Piles that are too compact will inhibit the composting process.

The carbonaceous material can be considered as a bulking agent. Where it is desirable to salvage carbonaceous material, provisions for removing the material, such as screening, must be made. High moisture organic wastes may be blended with absorbent bulking materials such as straw or leaves to attain an overall desirable moisture level. (Rule of Thumb: Materials are too wet if water can be squeezed out by hand and too dry if material does not fee moist to the touch).

Management. Composting operations require close management. Management capabilities of the operator and availability of labor should be assessed as part of the planning and implementing process.

Economics. Benefits associated with the ultimate use of the composed material should be compared to the capital expenditure and operating costs of the composting operations. In addition to cost return, benefits can include environmental protection, improved handling, disposal of dead poultry and other farm animal carcass, odor control, and reduced need for storage volume.

Safety. If the facility poses a health of safety hazard, fencing, meeting Code 382 - Fence, shall be installed. Signs and other safety devices shall also be installed. Considerations also should include respiratory ailments aggravated by the composting process.

Location. Composting site locations shall be selected considering proximity to urban, suburban and rural populations, transportation availability and other infrastructure. Site selections shall also consider groundwater, surface water, soils and geology, topography, landscape screening, wind direction, and other physical conditions.

PLANS AND SPECIFICATIONS

Plans and specifications for organic composting facility shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose. A written operation and maintenance plan shall be developed with full knowledge and input of the owner-operator and included with the documents provided to the owner-operator. A Nutrient Management Plan shall

be developed to show the location, timing, application rates, and incorporation of composted material in an environmentally sound manner, if the material cannot be sold commercially.

OPERATION AND MAINTENANCE:

An operation and maintenance (O&M) plan shall be prepared for the Composting Facility and any other associated conservation practices. The plan should include the periodic mowing of vegetation and the removal of trees, brush and other woody vegetation around the composing facility. The plan should also include the inspection and repair of the facility as needed, including re-vegetating barren and damaged areas.

Temperature. For best results, operating temperature of the composting material should be 130 °F to 170 °F once the process has begun. It should reach operating temperature within about 7 days and remain elevated for up to 14 days to facilitate efficient composting. The material should remain at or above 110 °F for the remainder of the designated composting period.

If temperature falls significantly during the composting period and odors develop, or if material does not reach operating temperature, investigate piles for moisture content, porosity, and thoroughness of mixing. Compost managed at the required temperatures will favor destruction of any pathogens and weed seeds.

Aeration. Heat generated by the process causes piles to dehydrate. As the process proceeds, material consolidates, and the volume of voids through which air flows decreases. Materials selected for the composting mix should provide for adequate air movement throughout the composting process. Periodically turning the pile and maintaining proper moisture levels for windrows and static piles will normally provide adequate aeration.

Nutrients. Keep compost well aerated to minimize nitrogen loss by denitrification. Keep pH at neutral or slightly lower to avoid nitrogen loss by ammonification. High amounts of available carbon will aid nitrogen

NRCS, NHFOTG April, 2000 immobilization. Phosphorus losses will be minimized when the composting process is managed according to the requirements of this standard. Include compost nutrients in nutrient management plans and determine the effects of use and management of nutrients on the quality of surface water and ground water as related to human and livestock consumption.

Testing Needs. Test compost material for carbon, nitrogen, moisture, and pH if compost fails to reach desired temperature or if odor problems develop. The finished compost material should be periodically tested for constituents that could cause plant phytotoxicity as the result of application to crops. Composted materials that are prepared

for the retail market <u>as a plant nutrient</u> will require testing for labeling purposes.

<u>Site.</u> Maintain surface drainage of adjacent areas away from pad surfaces. Re-grade and vegetate as needed.

REFERENCES

- On Farm Composting Handbook, NRAES-54, Northeast Regional Agricultural Engineering Service, Ithaca, NY, by Rynk, Robert et al, June 1992
- 2. Agricultural Waste Management Field Handbook, Rev. 1997, USDA, Natural Resources, Conservation Service

MATERIALS:
40 WASTE BLOCKS (2' x 2' x 6')

44 CUBIC YARDS CONCRETE

10.7 CUBIC YARDS GRAVEL (CLASS I CONPACTED CLEAN SAND/GRAVEL)

PROFILE VIEW:

GREENHOUSE

ROOF FRAME

BA

GRAYEL WARE

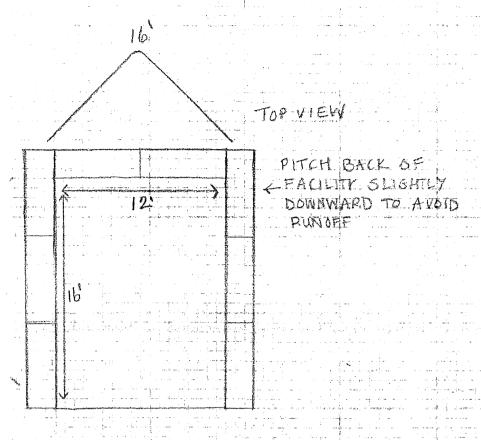
GREENHOUSE

ROOF FRAME

BA

EXPANSION JOINT

18



TO WITHIN

BLOCKS

SCALE: 1 = B.T.E.L.

WILD SPIRIT FARM

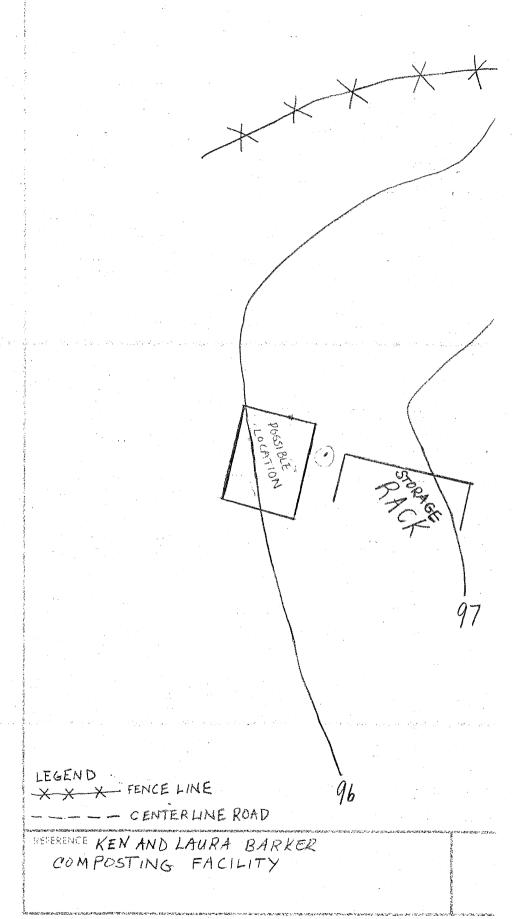
KEN AND LAURA BARKER

COMPOST FACILITY

OU. 5. DEPARTMENT OF SCIENCES FOR

K. McCabe 10/25

KM112005



SCALE: 1"= 20"

U.S. DEPÁSIMENT OF AGRICULTURE

COIL CONSERVATION SERVICE

SOIL CONSERVATION DISTRICT

DRAWING NUMBER

SHEET

10/05

Construction Specifications

Wild Spirit Farm (Ken and Laura Barker) Exeter, NH

COMPOSTING FACILITY

- 1) Remove existing organic material to a stable base. See excavation specifications pages 3 and 4 attached.
- 2) Add a minimum of 6 inches of bank run gravel over entire excavated area. Material should be placed in layers and compacted thoroughly following the earth fill specifications attached to avoid settling and cracking of concrete. See earth fill specifications pages 5-10 attached.
- 3) Add a minimum of 12 inches of bank run gravel under the concrete blocks. Set the concrete blocks on the perimeter of the gravel base according to the attached designs.
- 4) Place water strip gasket along the inside perimeter of the concrete blocks to a height of 6 inches above the gravel surface. See pages 19-21.
- 5) Set form to cover the opening of the composting facility and with approximately a 4 inch pitch to the rear of the pit, add 2.4 cubic yards of concrete reinforced with Fibrillated Polypropylene (4 inches thick). See concrete specifications on pages 11-17 attached.
- 6) Form must remain in place for a minimum of 7 days. The area should be watered regularly so the concrete does not dry too quickly (mulch hay, straw, or sawdust can be added to retain moisture). See concrete specifications on pages 11-17 attached.
- 7) Structure should be back filled to within 1 foot of the top block, with no greater that a 2:1 slope.

CONSTRUCTION SPECIFICATION

21. EXCAVATION

1. SCOPE

The work shall consist of the excavation required by the drawings and specifications and the disposal of the excavated materials.

2. CLASSIFICATION

Unless otherwise specified on the drawings, all excavation shall be unclassified and shall include all materials encountered regardless of their nature or the manner in which they are removed.

3. BLASTING

The transportation, handling, storage, and use of dynamite and other explosives shall be directed and supervised by a person of proven experience and ability in blasting operations.

Blasting shall be done in such a way as to prevent damage to the work or unnecessary fracturing of the foundation and so that the resulting surfaces are reasonably to line and grade.

No blasting shall take place within 100 feet of any concrete structure that has been in place for less than 7 days.

No blasting of bedrock shall be carried out in cutoff and drain trenches associated with earth embankments constructed to impound water. Blasting of boulders in cutoff and drain trenches shall be allowed after the surrounding soil is excavated.

4. USE OF EXCAVATED MATERIALS

To the extent they are needed, all suitable materials from the specified excavations shall be used in the construction of required permanent earthfill or rockfill. The suitability of materials for specific purposes will be determined by the engineer.

DISPOSAL OF WASTE MATERIALS

All surplus or unsuitable material will be designated as waste and shall be disposed of at locations shown on the drawings.

Rock waste shall be covered with a minimum of one foot of soil material.

Waste areas adjacent to embankments shall be neatly graded and finished against them so as to form berms which will continuously direct surface runoff away from the embankment. All waste areas shall be left in a neat and sightly condition and graded to provide positive drainage. Graded surfaces shall have a slope of three horizontal to one vertical or flatter.

6. BRACING AND SHORING

Excavated surfaces too steep to be safe and stable if unsupported shall be supported as necessary to safeguard the work and workman, to prevent sliding or settling of the adjacent ground, and to avoid damaging existing improvements. The width of the excavation shall be increased, if necessary, to provide space for sheeting, bracing, shoring, and other supporting installations. Supporting structural material shall be removed prior to completion of the backfilling operation. All work shall be accomplished in such a manner as to meet OSHA standards.

7. BORROW EXCAVATION

When the quantities of suitable materials obtained from specified excavations are insufficient to construct the specified fills, additional materials shall be obtained from the designated borrow areas. The extent and depth of borrow excavation within the limits of the designated borrow areas shall be as directed by the engineer. All excavated or otherwise disturbed portions within the limits of the designated borrow areas shall be left in a neat and sightly condition and graded to provide positive drainage. Graded surfaces shall have a slope of three horizontal to one vertical or flatter.

8. Excavation in rock beyond the specified lines and grades shall be corrected by filling the resulting voids with portland cement concrete. Concrete that will be exposed to the atmosphere when construction is complete shall contain not less than 6 sacks of cement per cubic yard of concrete. Concrete that will be permanently covered shall contain not less than 4 sacks of cement per cubic yard.

Excavation in earth beyond the specified lines and grades shall be corrected by filling the resulting voids with approved compacted earthfill, except that if the earth is to become the subgrade for riprap, rockfill, sand or gravel bedding, drainfill or drainage fabric, the voids ma be filled with material conforming to the specifications for the riprap, rockfill, bedding, drainfill or drainage fabric.

CONSTUCTION SPECIFICATION

23. EARTH FILL

1. SCOPE

The work shall consist of the construction of earth embankments and other earth fills required by the drawings and specifications.

2. CLASSIFICATION

Earth fill will be classified according to the compaction required. Class I earth fill shall be compacted fill placed in layers and compacted by rolling with a mechanical roller. (See Table 1).

Class II earth fill shall be compacted fill placed in layers and compacted by the action of the hauling and spreading equipment. (See Table 2).

Class III Earthfill shall be uncompacted fill.

3. TYPES OF EARTH FILL

Earth fill shall be of two types: embankment and back fill.

4. MATERIALS

All fill materials shall be obtained from required excavations and designated borrow areas. The selection, blending, routing, and disposition of materials in the various fills shall be as specified or directed by the engineer.

Fill materials shall contain no sod, brush, roots, or other perishable materials.

Unless otherwise specified, fill for embankments shall contain no rock particles greater than shown in Tables 1 and 2. Back fill shall contain no stones greater than 1^{1/2} inches in size.

5. FOUNDATION PREPARATION

Foundations for earth fill shall be cleared and grubbed in accordance with Construction Specification 2, Clearing and Grubbing. Topsoil shall be stripped and other unsuitable material shall be excavated as specified.

Unless otherwise specified, earth foundation surfaces shall be graded to remove surface irregularities and scarified, disked or otherwise acceptably scored and loosened parallel to the axis of the fill to a minimum depth of 3 inches prior to the placement of earth fill. The moisture content of the loosened material shall be within the limits specified in Tables 1 and 2 for

earth fill. The surface materials shall be compacted and bonded with the first layer of fill as specified for subsequent layers of earth fill.

Earth abutment surfaces shall be free of loose uncompacted earth in excess of 3 inches in depth normal to the slope. The moisture content shall be within the limits specified in Tables 1 and 2 so that earth fill can be compacted against them to effect a good bond between the fill and the abutments.

Rock foundation and abutment surfaces shall be cleared of all loose materials by hand of other effective means and shall be free of standing water when fill is placed upon them. Unless otherwise specified, occasional small rock outcrops shall not require special treatment if they do not interfere with compaction of the foundation and initial layers of the fill or the bond between the foundation and the fill.

Foundation and abutment surfaces and sides of previously excavated test pits or other cavities shall be no steeper than 1 horizontal to 1 vertical. Test pits or other cavities shall be filled with compacted earth fill conforming to the specified earth fill to be placed upon the foundation.

Rock surfaces having a slope steeper than 1 horizontal to 1 vertical and a height of more than 1 foot and all rock overhangs shall be treated as specified or as directed by the engineer.

6. REPLACEMENT

Fill shall not be placed until the required excavations and foundation preparation have been completed and the foundation has been inspected and approved be the engineer. Fill shall not be placed upon a frozen surface, nor shall snow, ice, or frozen material be incorporated into the fill.

a. <u>Embankment</u>

Class I and II fill shall be placed in approximately horizontal layers except that a crown or cross-slope of approximately 2 percent shall be maintained to insure effective surface drainage. The thickness of the uncompacted layer shall be as indicated on the drawings or as shown in Tables 1 or 2. Type of compaction equipment, layer thickness, number of passes by the compaction equipment, and the moisture content range shown in Tables 1 and 2 for the various earth fill materials shall not be interchanged during construction.

Each lift or layer shall extend over the entire area of the fill except where openings to facilitate construction or to allow the passage of stream flow during construction are permitted by the engineer. When such openings are allowed, the slope of the bonding surface between fill in place and fill to be placed shall not be steeper than 3 horizontal to 1 vertical. Prior to

placing new fill, the bonding surface of the in-place fill shall be stripped of all loose material, scarified, moistened, and recompacted when new fill is placed against it as needed to insure a good bon and to obtain uniform moisture content and density at the junction of the in-place and the new fill.

Fill shall be essentially uniform and free from lenses, pockets, streaks or layers of material differing substantially in texture, moisture content, or gradation from the surrounding material.

There are no restrictions on the method of placing Class III fill. The finished fill shall be shaped and graded to the lines and grades shown on the drawings.

b. <u>Backfill</u>

Class I and II shall be placed in horizontal layers having a maximum uncompacted thickness of 4 inches and shall be brought up uniformly around the structure.

CONTROL OF MOISTURE CONTENT

During placement and compaction of Class I and II fill, the moisture content of the materials being placed shall be within the ranges specified in tables 1 and 2 for the corresponding materials. Generally, Class I and II fill should contain sufficient moisture to allow it to be formed into a ball between the hands without crumbling. If water or mud oozes from the material being squeezed, it is too wet to compact properly.

Material that is too wet for use as earth fill shall be removed or dried to the specified moisture content before compaction.

When the required moisture content is specified on the drawings, a properly calibrated Carbide Moisture Meter shall be used to determine Class I and II fill moisture content during placement and compaction.

2. COMPACTION

The contractor shall furnish and operate the equipment required to compact the class of fill specified.

a. Embankment

Unless otherwise specified, the type of compaction equipment, the maximum uncompacted layer thickness, and the maximum rock size during the placement and compaction of Class I and II fill shall be as specified in Tables 1 and 2 for the appropriate type of materials. Class III fill shall have no compaction requirements.

b. <u>Backfill</u>

Class I and II fill shall be compacted to the same density as the surrounding fill by hand tamping or manually directed power tampers or plate vibrators. Heavy equipment shall not be operated within 5 feet horizontally of any pipe or structure. Heavy equipment shall not operate over a structure or pipe unless there is a minimum of 2 feet of fill over the pipe or structure.

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TABLE 1

CLASS I EARTH FILL

Earth	TT				
Material	Type of	Max. Layer	Maximu	No. of	Moisture
	Compaction	Thickness	m Rock	Passes by	Content
(Unified Soil	Equipment	Before	Size	Compaction	
Classificati		Compactio		Equipment	
		. n			
on System)					
		(in.)	(in.)		(%)
GW & GP	\ \(\(\) \	40			
GWAGE	Vibratory	18	12	3	10-15
	Rubber Tire	6	4	4	
CM 9 CC	-				
GM & GC	Foot	9 14. 40. 44.	6	4 (1 %), as a social (1 %)	12-17
	Rubber- tired	6	4	4	
	Vibratory	12	8	3	
SW & SP	Vibratory	18	12	3	12-17
	Rubber-	6	4	4	12-17
	tired		•		
SM & SC	Sheeps foot	9	6	4	12-17
	Vibratory	12	8	3	12-17
	Rubber-	6	4	4	
	tired		•	7	
ML & CL	Sheeps foot	9	6	4	15-20
	Vibratory	12	8	3	13-20
	Rubber-	6	4	4	
	tired				The state of the s
MH	Sheeps foot	9.1 2	6	4	20.25
	Rubber-	6	4 .	4	30-35
	tired		7		
•					
CH .	Sheeps foot	9	6	4	25.20
			4	4	25-30
	tired	<u> </u>	7	7	
·		TADI			

TABLE 2

CLASS II EARTH FILL

Earth	*Type of	Max. Layer	Maximum	No. of	I B.A
Material	Compaction	Thickness	Rock		Moisture
(Unified	Equipment	Before		Passes by	Content
Soil	Legapinent		Size	Compaction	
Classificati		Compactio	e i destanti della di la constanti di la const	Equipment	
		n			
on System)					
		(in.)	(in.)		(%)
GW & GP	<u> </u>				1
GVV & GP	Crawler tractor	6	4	2	10-15
<u> </u>	Scraper	9	6	1	
GM & GC					
GIVI & GC	Crawler tractor	6	4	2	12-17
	Scraper	9	6	1	
	Farm tractor	6	4	2	
	or truck			-	
	estato e per collega e accesa	- 1 Suran julian intaka julia			Delicit sur experie secon
SW & SP	Crawler tractor	6: 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4	2	12-17
					12-17
SM & SC	Crawler tractor	6	4	2	12-17
	Scraper	9	6	1	12-11
	Farm tractor	6	4	2	
	or truck			-	
BAL O. O.					
ML & CL	Crawler tractor	6	4	2	15-20
	Scraper	9	6	1	10 20
	Farm tractor	6	4	2	
	or truck				
MH	0				
14111	Crawler tractor	6		2	30-35
	Scraper	9		1	
	Farm tractor	6	4	2	
•	or truck				
СН	Crowler				
	Crawler tractor			2	25-30
	Scraper			1	
	Farm tractor or truck	6	4	2	
	OI II II II I				

^{*}Crawler Tractors to be operated at a minimum speed of 4 MPH.

CONSTRUCTION SPECIFICATION

32. CONCRETE

1. SCOPE

The work shall consist of furnishing, forming, placing, finishing, and curing portland cement concrete as required to build the structures shown on the drawings.

2. MATERIALS

- a. <u>Portland cement</u> shall conform to ASTM Specification C-150, Type I, IA, II, or IIA, except that portland blast furnace slag cement conforming to ASTM Specification C-595 may be used in lieu of Type I portland cement.
- b. Coarse aggregate shall be composed of clean hard durable particles free from clay or dirt particles or organic matter. Gradation shall conform to ASTM Specification C-33, Table 2, Size No.s 467, 67, of 57.
- c. Fine aggregate shall be composed of clean hard durable particles free from clay or dirt particles organic matter. It shall be well graded with 100 percent passing a three-eight inch sieve.
- d. Water shall be clean and free from injurious amounts of oil, salt, acid, alkali, organic matter including sewage, or other deterious substances.
- e. Preformed expansion joint filler shall conform to the requirements of ASTM Specification D-1752, Type I, II or III unless bituminous type is specified. Bituminous type reformed joint filler shall conform to the requirements of ASTM Specification D-994.
- f. Waterstops, if required, shall conform to the material, class and Type shown on the drawing or designated in the specifications.
- g. Air-entraining admixtures shall conform to ASTM Specification C-260. If air-entraining cement is used, any additional admixture shall be of the same type as that used in the cement.
- h. Water-reducing, set-retarding admixtures shall conform to ASTM Specification C-494, Type D.
- i. Curing compound shall conform to ASTM Specification C-309. Type 2, white pigmented.

1. CLASSES OF CONCRETE

The classes of concrete shall be as specified on the drawings and shall be defined according to the required 28-day compressive strength.

Class of Concrete		Minimum 28-day Compressive Strength
	•	(psi)
5000		5000
5001		5000
5002		4000
5003		3000
		2500

When specified, concrete may be classified as follows:

Class of Concrete	Maximum Net Water Content (gallons/bag)*	Minimum Cement Content (bags/cubic yard)*
5000X	5	7
4000X	6	6
3000X	7	5
2500X	8	4 ¹ / ₂

^{*1} bag of cement = 94 pounds

1. AIR CONTENT SLUMP AND CONSISTENCY

The air content of the mixed concrete shall be between 5 and 8 percent of the volume of the concrete. Unless otherwise specified, the slump of the concrete shall be 2 to 4 inches. The consistency of the mix shall be such as to allow it to be worked into place and consolidated without segregation or excessive laitance.

2. DESIGN OF THE CONCRETE MIX

The contractor shall be responsible for the design of the concrete mixtures. At least 5 days prior to any placement of the concrete he shall furnish the engineer a statement of the materials and mix proportion (including admixtures, if any) he intends to use for each specified class of concrete. The statement shall include evidence satisfactory to the engineer that the materials and proportions selected will produce concrete of the quality, consistency, and strength specified.

The use of calcium chloride or other accelerators or antifreeze compounds will not be allowed.

3. FORMS

Forms shall be of wood, plywood, steel or other approved material and shall be mortar tight. The forms and associated false work shall be substantial and

unyielding and shall be constructed so that the finished concrete will conform to the specified dimensions and contours. Form surfaces shall be smooth and free from holes, dents, sags or other irregularities. Forms shall be coated with a nonstaining form oil before being set into place.

Metal ties or anchorages within the forms shall be equipped with cones, she-bolts or other devices that permit their removal to a depth of at least 1 inch without injury to the concrete. Ties designed to break off below the surface of the concrete may be used without cones.

4. PREPARATION OF FORMS AND SUBGRADE

Prior to placement of concrete the forms and subgrade shall be free of chips, sawdust, debris, water, ice, snow, extraneous oil, mortar, or other harmful substances or coatings. Any oil on the reinforcing steel or other surfaces required to be bonded to the concrete shall be removed. Rock surfaces shall be cleaned by wire brush scrubbing and shall be wetted immediately prior to placement of concrete. Earth surfaces shall be firm and damp. Placement of concrete on mud, dried earth or uncompacted fill or frozen subgrade will not be permitted.

Unless otherwise specified, when concrete is to be placed over drain fill, the contact surface of the drain fill shall be covered with a layer of asphalt-impregnated building paper or polyvinyl sheeting prior to placement of the concrete. Forms for weepholes shall extend through this layer into the drain fill.

Items to be embedded in the concrete shall be positioned accurately and anchored firmly.

Weepholes in walls or slabs shall be formed with nonferrous material.

5. CONVEYING

Concrete shall be delivered to the site and discharged into the forms within 1-1/2 hours after the introduction of the cement to the aggregates. In hot weather or under conditions contributing to quick stiffening of the concrete, or when the temperature of the concrete is 85°F or above, the time between the introduction of the cement to the aggregates and discharge shall not exceed 45 minutes.

The engineer may allow a longer time, provided the setting time of the concrete is increased a corresponding amount by the addition of an approved set-retarding admixture. In any case, concrete shall be conveyed from the mixer to the forms as rapidly as practicable, by methods that will prevent segregation of the aggregates or loss of mortar.

6. PLACING

Concrete shall not be placed until the subgrade, forms and steel reinforcement have been inspected and approved by the engineer. Reasonable notice shall be

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given to the engineer prior to the time of concrete placement. Such notice shall be far enough in advance to give the engineer adequate time to inspect the subgrade, forms, steel reinforcement and other preparations for compliance with the specifications before concrete is delivered for placing.

The concrete shall be deposited as closely as possible to its final position in the forms and shall be worked into the corners and angles of the forms and around all reinforcement and embedded items in a manner to prevent segregation of aggregates or excessive laitance.

Unless otherwise specified, slab concrete shall be placed to design thickness in one continuous layer. Formed concrete shall be placed in horizontal layers not more than 20 inches thick. Hopper chutes, pipes or "elephant trunks" shall be used when vertical drop is in excess of five feet to prevent splashing of mortar on the forms and reinforcing steel above the layer being placed.

Immediately after the concrete is placed in the forms, it shall be consolidated by spading, hand tamping or vibration as necessary to insure smooth surfaces and dens concrete. Each layer shall be consolidated to insure monolithic bond with the preceding layer. If the surface of a layer of concrete in place sets to the degree that it will not flow and merge with the succeeding layer when spaded or vibrated, the placement of concrete will be discontinued and a construction joint will be made.

If placing is discontinued when an incomplete horizontal layer is in place, the unfinished end of the layer shall be formed by a vertical bulkhead.

7. CONSTRUCTION JOINTS

Construction joints shall be made at the locations shown on the drawings. If construction joints are needed which are not shown on the drawings, they shall be placed in locations and in a manner approved by the engineer.

Where a feather edge would be produced at a construction joint, as in the top surface of a sloping wall, an insert form shall be used so that the resulting edge thickness on either side of the joint is not less than 6 inches.

In walls and columns, as each lift is completed, the top surface shall be immediately and carefully protected from any condition that might adversely affect the hardening of the concrete.

Steel tying and form construction adjacent to concrete in place shall not be started until the concrete has cured at least 12 hours. Before new concrete is deposited on or against concrete that has hardened, the forms shall be retightened. New concrete shall not be placed until the hardened concrete has cured at least 12 hours.

Surfaces of construction joints shall be cleaned of all unsatisfactory concrete, laitance, coatings or debris by washing and scrubbing with a wire brush or wire broom or by other means approved by the engineer. The surfaces shall be kept moist for at least 1 hour prior to placement of the new concrete.

8. EXPANSION AND CONTRACTION JOINTS

Expansion and contraction joints shall be made only at locations shown on the drawings.

Exposed concrete edges at expansion and contraction joints shall be carefully tooled or chamfered, and the joints shall be free of mortar and concrete. Joint filler shall be left exposed for its full length with clean true edges.

Preformed expansion joint filler shall be held firmly in the correct position as the concrete is placed.

When open joints are specified, they shall be constructed by the insertion and subsequent removal of a wooden strip, metal plate or other suitable template in such a manner that the corners of the concrete will not be chipped or broken. The edges of open joints shall be finished with an edging tool prior to removal of the joint strips.

9. WATERSTOPS

Waterstops shall be held firmly in the correct position as the concrete is placed. Joints in metal waterstops shall be soldered, brazed or welded. Joints in rubber or plastic waterstops shall be cemented, welded or vulcanized as recommended by the manufacturer.

10. REMOVAL OF FORMS

Forms shall not be removed before the expiration of the following minimum time intervals after placement of concrete, exclusive of days when the minimum temperature of the air adjacent to the concrete is below 50 degrees F.

<u>Item</u>	<u>Time</u>
Beam bottom forms, temporary supports	14 days
Roof or deck slabs	14 days
Columns	7 days
Bearing walls	7 days
Nonbearing walls	24 hours
Sides of beams	24 hours

Forms shall be removed in such a way as to prevent damage to the concrete. Supports shall be removed in a manner that will permit the concrete to take the stresses due to its own weight uniformly and gradually.

11. FINISHING FORMED SURFACES

Immediately after the removal of the forms:

- a. All fins and irregular projections shall be removed from exposed surfaces.
- b. On all surfaces, the holes produced by the removal of form ties, conebolts, and she-bolts shall be cleaned, wetted and filled with dry-pack mortar consisting of one part portland cement, three parts sand that will pass a No. 16 sieve, and water just sufficient to produce a consistency such that the filling is at the point of becoming rubbery when the material is solidly packed.

FINISHED UNFORMED SURFACES

All exposed surfaces of the concrete shall be accurately screeded to grade and then wood float finished.

Excessive floating or trowling of surface while the concrete is soft will not be permitted.

The addition of dry cement or water to the surface of the screeded concrete to expedite finishing will not be allowed.

Joints and edges on unformed surfaces that will be exposed to view shall be chamferred or finished with molding tools.

2. CURING

Concrete shall be prevented from drying for a curing period of at least 7 days after it is placed. Exposed surfaces shall be kept continuously moist for the entire period, or until curing compound is applied as specified below. Moisture shall be maintained by sprinkling, flooding or fog spraying or by covering with continuously moistened canvas, cloth mats, straw, sand or other approved material. Wood forms (except plywood) left in place during the curing period shall be kept wet. Formed surfaces shall be thoroughly wetted immediately after forms are removed and shall be kept wet until patching and repairs are completed. Water or covering shall be applied in such a way that the concrete surface is not eroded or otherwise damaged.

Concrete, except at construction joints, may be coated with an approved curing compound in lieu of continued application of moisture. The compound shall be sprayed on the moist concrete surfaces as soon as free water has disappeared, but shall not be applied to any surface until patching, repairs and finishing of that surface are completed. The compound shall be applied at a uniform rate of not less than one gallon per 150 square feet of surface and shall form a continuous

adherent membrane over the entire surface. Curing compound shall not be applied to surfaces requiring bond to subsequently placed concrete, such as construction joints, shear plates, reinforcing steel and other embedded items. If the membrane is damaged during the curing period, the damaged area shall be resprayed at the rate of application specified above.

3. REMOVAL OR REPAIR

Concrete that is honeycombed, damaged or otherwise defective shall be removed and the structure or structural member replaced, or where feasible, the defective parts repaired. SCS engineer will determine the required extent of removal, replacement or repair. The plan for effecting the repair must be approved by the technician prior to beginning of repair work.

4. CONCRETING IN COLD WEATHER

Concrete shall not be mixed nor placed when the daily minimum atmospheric temperature is less than 50 degrees F unless facilities are provided to prevent the concrete from freezing. The use accelerators or antifreeze compounds will not be allowed. The temperature of the concrete at the time of placing shall not be less than 50 degrees F and shall be maintained at temperatures not less than 50 degrees F for the duration of the curing period.

5. CONCRETING IN HOT WEATHER

The supplier shall apply effective means to maintain the temperature of the concrete below 90 degrees F during mixing and conveying.

MATERIAL SPECIFICATION

536. <u>SEALING COMPOUND FOR JOINTS IN CONCRETE AND CONCRETE PIPE</u>

1, SCOPE

This specification covers the quality of sealing compound for filling joints in concrete pipe and concrete structures.

2. TYPE

The compound shall be a cold-application mastic, single component or multiple component type.

<u>The single component type</u> shall be a ready-mixed nondrying compound furnished in troweling consistency or in preformed rope or strip form.

The multiple component type shall be composed of two or more substances that are to be mixed prior to application.

3. QUALITY

Sealing compound shall conform to the requirements of one of the following specifications:

ASTM Specification D 1850; Concrete Joint Sealer, Cold-Application Type. Penetration, determined as specified in ASTM D 1850, shall be not greater than 120.

Federal Specification SS-S-210A; Sealing Compound, Preformed Plastic, for Expansion Joints and Pipe Joints.

ASTM Specification D-1190 concrete joint sealer, hot poured elastic type.

Federal Specification TT-S-227; Sealing Compound; Rubber Base, Two Component (for caulking, Sealing and Glazing in Building Construction), type II.

The compound shall be capable of being applied at a temperature of 70°F and shall be of such nature that it will adhere to dry, dust free concrete when applied either directly or over a suitable primer. After curing it shall be a resilient, adhesive material that is capable of filling joints and firm enough to prevent the entry of subsequently placed concrete or of earth during the bedding, cradling, or backfilling operations.

4. COMPOSITION AND PROPERTIES

The compound, if used for pipe having rubber gaskets, shall have a composition such that it will not cause deterioration of the rubber gaskets.

MATERIAL SPECIFICATION

535. PREFORMED EXPANSION JOINT FILLER

1. SCOPE

This specification covers the quality of preformed expansion joint fillers for concrete.

2. QUALITY

Preformed expansion joint filler shall conform to the requirements of ASTM Specification D 1752, Type I, Type II or Type III, unless bituminous type is specified. Bituminous type preformed expansion joint filler shall conform to the requirements of ASTM Specification D 994, or D 1751.

blocks I have a minimum of 3st out from block wall terrace may be 1 foot or greater steps, and should meet 2 to 1 slopes ROCK STRAF -1st terrace against Block face must be 594 or within one fact of top Terraced Backfill for Wild Spirit Farm (Lauraand Kent terraces should be seeded to vegetative cover as soon as feasible If terraces are faced with logs they shall be securely achored Composting As per phone conversation with Jeffrey Ferrey 10/19/06 with meets ground Same?

United States Department of Agriculture

Natural Resources Conservation Service

243 Calef Highway, Telly's Plaza, Epping, NH 03042-2326

(603) 679-1587 Fax: (603) 679-4658

www.nh.nrcs.usda.gov

FAX COVER SHEET

Date: 10-19-06

To: WildSpirit Farm

Laura and Ken Barker

From: Natural Resources Conservation Service

Kim McCabe

Time: 10:45 am

Phone: 778-9988

Fax: 778-2380

Phone: (603) 679-1587 ×109

Fax: (603) 679 -4658

Re: Terraced Backfill

Cc:

Number of pages including cover sheet:

Message

Hello,

So here is an illustration of what the minimum requirements are for the terraced Backfill on the composting facility. If you have any Question please give Have a Great Day!

The USDA Natural Resources Conservation Service is an equal opportunity provider and employer.

Invoice:

6884

Project: 05-0451 Bill Group: 005

October 14, 2005

2,022.58

\$1,713.83

2,868.44

-308.75

Page 2 of 2

Billing Group: 005

Wetland Permitting

Contract Maximum	\$1,500.00		**		
Previous Billings Against Maximum:	\$0.00		**	i	
Current Billings Against Maximum:	\$1,500.00	***			
Balance After This Invoice:	\$0.00				
				-	
Professional Services	. • •	A STATE OF THE STA	<u>Hours</u>	Bill Rate	. Charge
Certified Wetland Scientist		en e	1.50	90.00	135.00
Permitting Specialist		A STANK OF THE ACT	6.25	65.00	406.25
Wetland Scientist II			16.25	78.00	1,267.50
		Profess	ional Services	Total !	\$1,808.75
					41,000,70
Reimbursables					Charge
Application/Permits					12.00
Application/Permits					120.00
Mileage					29.37
Postage/Delivery					2.40
Postage/Delivery					48.06
Prints					2.00
		Reimb	ursables Total		\$213.83
				· ·	

Total Invoice Amount:	\$2,199.69
Billing Total:	2,199.69
Fees:	-668.75

Billing Group Subtotal:

Billing Group 005 Total

Project Subtotal:

Billing Adj.--Cost Plus to Max:

Age	ed Receivables:				
	Current	31-60 Days	61-90 Days	91-120 Days	> 120 Days
	\$2,199.69	\$0.00	\$0.00	\$0.00	\$0.00

Payment is due within 10 days from the date of this invoice. Past due amounts will be subject to a finance charge of 18% per annum or 1.5% per month.



Invoice No.

6884

Invoice Date:

October 14, 2005

Project: 05-0451

Beech Hill Road

Exeter, NH

Manager: James Long

Professional Services for the Period: 8/26/2005 to 9/25/2005

Billing Group: 001

Site Assessment

Professional Services	Hours Bill Rate Cha	rge
Certified Wetland Scientist	0.25 90.00 22.	.50
	Professional Services Total \$22.	Principles and
Bil	lling Group 001 Total \$22.	.50
Billing Group: 002 Wetland Delineation		
Contract Maximum \$450.00	A Charle and Keller His residence for the second section of the section	Special street
Previous Billings Against Maximum: \$0.00 Current Billings Against Maximum: \$450.00		
Balance After This Invoice: \$0.00		
Professional Services	Hours Bill Rate Char	rge
Certified Wetland Scientist Principal Wetlands	7.50 90.00 675. 1.50 90.00 135.	
	Professional Services Total \$810.	00
Reimbursables		rge
Mileage	13.	
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D.II.	Billing Group Subtotal: 823. Billing AdjCost Plus to Max: -360.	.00
B11	ling Group 002 Total \$463.	36

Rockingham Economic Development Corporation - REDC

Two Center Street, Exeter, NH ~ Tel. 603 772-2655 ~ Fax 772-0213 Mailing Address: Post Office Box 465, Exeter, NH 03833 A regional non-profit economic development corporation serving the communities of Rockingham County

Warren Henderson

President

Marie Cappello
Executive Director

March 26, 2001

Mr. Ken Barker 62 Beach Hill Road Exeter, NH 03833

Dear Mr. Barker:

Thanks for your interest in REDC programs and services. As promised I am sending you some information on REDC and Business Plan Development.

If you have any questions once you review the materials, please do not hesitate to contact me.

Sincerely,

Marie Cappello

Executive Director

Scot packet of SBA, Project loans etc.

JONES & BEACH ENGINEERS, INC.

85 Portsmouth Avenue PO Box 219 Stratham, NH 03885 Email: jbe@jonesandbeach.com

Tel. 603-772-4746

Fax 603-772-0227

Invoice

Invoice Number:

12508

October 13, 2005

Professional Services for the Period Ending: 10/2/2005

Project: 05169

Exeter, Beech Hill Road Wetland Permit

Professional Services	Bill Hours		
ENGINEERING REVIEW		Ü	
Correspondence	0.25	7.50	
Design & Plan Review	2.00	130.00	
Drainage Design Analysis	4.50	327.50	
Site Walk	2.00	200.00	
	Professional Services Total:	\$665.00	

Total Invoice Amount:

\$665.00

PLEASE INCLUDE OUR INVOICE NUMBER AND PROJECT NUMBER ON YOUR CHECK STUB
A service charge will be applied to all invoices past 30 days. The rate is 1.5% per month based upon an annual percentage rate of 18%.

pd 10-28-05 WEB 8989



State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095 (603) 271-2147 FAX (603) 271-6588



NOTICE OF ADMINISTRATIVE COMPLETENESS MINIMUM IMPACT EXPEDITED APPLICATION

05-02154 ech Hill Rd, Exeter

This letter is to acknowledge that on 09/15/2005 the NH DES Wetlands Bureau received your Minimum Impact Expedited application and materials to request a permit for impacts related to a proposed project on the lot(s) mentioned above. Your name, mailing address and site location are shown above as they have been entered into our database. Please check this information and notify us of any errors.

The application has been accepted as administratively complete. This means that the application has been found to contain the basic items necessary and has been assigned to Eben Lewis, (603) 559-1515. Please note, that while the basic items have been received, we may request additional filing fees or information as necessary to meet the requirements of RSA chapter 482-A and the Wetlands Program Code of Administrative Rules, Wt 100 -800. Please check your materials to ensure that your submittal accurately and completely reflects your project, and refer to your wetlands file number 2005-02154 if you need to contact the Bureau or submit additional information.

Within 30 days of this administrative completeness letter, we will conduct a technical review and either:

- 1. Make a decision on your application,
- 2. Request any outstanding fees or additional information necessary to clarify the application, or
- 3. Notify you, with an explanation, if your project does not qualify for the expedited review process in which case your application will be reviewed as a Standard Dredge and Fill Application. Please note, if the local conservation commission did not sign the application or if your town does not have a conservation commission, your project will not qualify for the expedited process and will be reviewed under the Standard Dredge and Fill Application process.

You may use the Internet to check the status of the permit application review by using the "Wetland Permits Query" on the front page of Wetlands Bureau's website: www.des.nh.gov/wetlands.

We appreciate your commitment to comply with state wetlands laws and rules, and the time you have dedicated to this process. Your continued cooperation will assist us in providing timely attention to your application. Thank you.

Sincerely,

DES Wetlands Bureau

cc:

NH Soil Consultants, Inc. **Exeter Conservation Commission** Exeter Municipal Clerk

approved 10-18-05 EXPIRES 10-18-2010

United States Department of Agriculture



Natural Resources Conservation Service 629 Calef Highway Knightly Plaza Epping, NH 03042-2326

(603) 679-1587 Fax: (603) 679-4658

www.nh.nrcs.usda.dov

June 24, 2008

Laura Barker 62 Beech Hill Road Exeter, NH 03833

Dear Ms. Barker,

I have enclosed a release form, for your signature, that allows NRCS to provide the listed information to Bruce Clement, Technical Service Provider. Mr. Clement will use the information to develop a grazing plan as scheduled in your 2006 EQIP contract. Please fill in the contact information that you would like Mr. Clement to have as he will need to speak with you regarding the development of your grazing plan. Please return the signed release form to this office and we will forward the information to Mr. Clement. If you have any questions, please call me, at 603-679-1587 x 109.

Sincerely,

Vincent Snyder

Natural Resource Specialist

Release of NRCS Case File Information

	I Laura Barker authorize the Natural Resources Conservation Service (NRCS) to release the following information to Bruce Clement for use in developing a prescribed grazing plan for my farm.
	presented grazing plan for my farm.
	Conservation Plan, Including Tract and Field Maps, and Soils Information
	Soil Map, Aerial Map with Farm and Tract boundaries and Topographic Map
	My Contact Information Home - 778-9988 KEN-HUSBAND Cell 603-944-2113
<u></u>	Signature of Producer Date 2/9/08

Any-Copy-Filecopyin NRCS-Thun Hail oris.

FORAGE SEEDING MIXTURES FOR NEW HAMPSHIRE

James R. Mitchell Extension Agronomist University of New Hampshire March, 1976

A forage crop may be established as a pure stand of a grass or a legume or as a combination of one or more grasses and legumes. If a single crop such as alfalfa is highly adapted to a given seeding condition it is not likely that the addition of one or more grasses or legumes will increase the yield of the stand. Usually, however, a mixture of forage species is desirable as it provides a hedge against heaving and winter-killing of legumes, a greater adaptation to the variable soil types in a field, a guarantee of season long production and usually a higher yield than any single forage grass or legume.

At the present time there is considerable interest in growing pure stands of alfalfa. This interest may be traced to the following factors:

- (1) alfalfa is a very vigorous seedling. No other grass or legume displays as much seedling vigor and only red clover challenges alfalfa in this regard.
- (2) weed control materials that are designed to control difficult perennial grass weeds such as quackgrass or nutsedge do not permit the inclusion of a grass in an alfalfa seeding.
- (3) a heavy stand of alfalfa will produce more than 80% of the total production of an alfalfa-grass seeding.

rage seedings are much more likely to be a success when started in the months of ril, May or August. Spring seedings may be made as soon as the soil conditions will allow, usually mid or late April. Birdsfoot trefoil, orchardgrass and reed canarygrass are forage species that will become established best when seeded in the spring. Timothy and bromegrass are two forage crops that are usually more easily established when the seedings are made in August. Legumes such as alfalfa, red or ladino clover will grow equally well when the seedings are made in April, May or August. Although certain forage species will usually develop best when seeded during a specific period, there are several factors that are more important when determining the components of a forage seeding mixture. These factors are the soil on which the crop is to be grown, the manner in which the crop will be harvested, the compatibility of the forage species and any potential weed problem. Harvesting plans should be made in advance to utilize the yield and quality of forages such as alfalfa, orchardgrass and reed canarygrass that grow rapidly in the spring. These forages also have potential for the greatest total yield due to their rapid recovery throughout the growing season.

Forage seedings are often a failure due to the following:

- (1) forage seedings are made on land that has not received adequate lime and/or fertilizer. The first step in establishing a successful seeding is to determine the lack of fertility of the soil. Obtaining soil samples for laboratory analysis will help ensure the application of proper amounts of lime and fertilizer. Lime is slow to react in the soil and is more beneficial when applied six months in advance of a seeding.
- (2) legume seeds are often planted without receiving inoculation. Inoculation should always be practiced when the legume to be planted has not been grown previously on the land or the previous legume crop grew poorly and/or the roots were poorly nodulated.
- (3) the seed is placed too deep in the soil or the seed is planted into a loose seedbed. The grasses and legumes mentioned in this paper will germinate and emerge in greatest numbers when the seed is placed in a firm seedbed to a depth of no more than 1/2 of an inch. A depth of 1/4 inch is ideal unless the soil surface is extremely dry.

			NO DINE KOTATIONAL PASTURES
Soil Drainage		10000000000000000000000000000000000000	
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Brimfield	Hollis		alfalfa
Canaan	Lyman	silage	10 lbs. Iroquois or Saranac
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Clover		*	5 lbs. Pennlate orchardgrass
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(sands and/or	gravel)		
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AND DESCRIPTION OF THE PERSON	77 - 33	Hay or	14 lbs. Iroquois or Saranac
Agawam	Hadley	hay crop	alfalfa
Becket	Hartland	silage	10 lbs. Iroquois or Saranac
Berkshire	Hermon		alfalfa
Bernardston	Marlow		8 1bs. Saratoga bromegrass or
Brookfield	Melrose		5 1bs. Pennlate orchardgrass
Calais	Millis	Rotational	6 lbs. Iroquois alfalfa
Canton	Ondawa	pasture	
Charlton	Paxton	Panerre	
Groveton	Salmon		5 lbs. Pennlate orchardgrass
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Acton	Nicholville	hay crop	3 lbs. Pennscott red clover
Belgrade	Ninigret	silage	6 1bs. Saratoga bromegrass or
Buckland	Peru		5 1bs. Climax timothy
Buxton	Pittstown		8 1bs. Viking trefoil
Croghan	Podunk		6 lbs. Saratoga bromegrass or
Deerfield	Scituate	And the second s	
Duane	Skerry	Rotational	5 lbs. Climax timothy
Elmwood	Sudbury		2 lbs. Ladino clover
Madawaska.	Sutton	pasture	6 lbs. Pennlate orchardgrass
. bAdawapka.			6 lbs. Empire trefoil
	Waumbek		1 lb. Ladino clover
	Winooski		6 lbs. Climax timothy
	Woodbridge	•	
		•	
Poorly drained		Hay or	6 lbs. Pennscott red clover
Au Gres	Saugatuck	hay crop	2 lbs. Alsike clover
Cabot	Scantic	silage	
Leicester	Stissing	PTTGRE	5 lbs. Climax timothy
Limerick	Swanton		8 lbs. Viking trefoil
	·		6 lbs. Climax timothy
Raynham	Walpole		8 lbs Climax timothy
Ridgebury	Wareham	Rotational	2 lbs. Ladino clover
Rumney		pasture	6 lbs. Climax timothy
			8 lbs. Empire trefoil
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^{1/} Artificially drained soils will have drainage equivalent to the next higher drainage class.

^{2/} Use named varieties listed above whenever seed is available.

	Drainage h typical soils)	1/	are stated to the superfuser of the description and superfuser and superfuser and superfuser and superfuser and		Seed Mixtures (1bs. per Acre)		<u>2</u> /
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	Canaan	Lyman			-		
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	Agawam	Hadley			10 lbs. Kentucky 1		
	Becket	Hartland			8 lbs. Empire bird	istoot	
	Berkshire	Hermon			trefoil		Latin
	Bernardston	Marlow			1 lb. Ladino clove		1.35.1
	Brookfield	- 1 Th			6 lbs. Climax time	-	
		Melrose			8 lbs. Empire brid	lsfoot	
	Calais	Millis			trefoil		
	Canton	Ondawa			1 lb. Ladino clove	er	
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	Duane	Sutton			6 lbs. Climax timo	thy	1980,500
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	Leicester	Stissing			8 lbs. Empire tref	oil	
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	Ridgebury	Wareham		14. j			
	Ridgebury Rumney	Wareham					

^{1/} Artificially drained soils will have drainage equivalent to the next higher drainage class.

^{2/} Use named varieties listed above whenever seed is available.

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

CRITICAL AREA PLANTING

(Ac.)

CODE 342

DEFINITION

Establishing permanent vegetation on sites that have or are expected to have high erosion rates, and on sites that have physical, chemical or biological conditions that prevent the establishment of vegetation with normal practices.

PURPOSE

- Stabilize areas with existing or expected high rates of soil erosion by water.
- Stabilize areas with existing or expected high rates of soil erosion by wind.
- Restore degraded sites that cannot be stabilized through normal methods.

CONDITIONS WHERE PRACTICE APPLIES

On areas with existing or expected high rates of erosion or degraded sites that usually cannot be stabilized by ordinary conservation treatment and/or management, and if left untreated, could be severely damaged by erosion or sedimentation or could cause significant off-site damage.

CRITERIA

General Criteria Applicable To All Purposes

Species selected for seeding or planting shall be suited to current site conditions and intended uses. Selected species will have the capacity to achieve adequate density and vigor within an appropriate time frame to stabilize the site sufficiently to permit suited uses with ordinary management activities.

Species, rates of seeding or planting, minimum quality of planting stock, such as PLS or stem caliper, and method of establishment shall be specified before application. Only viable, high quality seed or planting stock will be used.

Site preparation and seeding or planting shall be done at a time and in a manner that best ensures survival and growth of the selected species. What constitutes successful establishment, e.g. minimum percent ground/canopy cover, percent survival, stand density, etc. shall be specified before application.

Fertilization, mulching, or other facilitating practices for plant growth shall be timed and applied to accelerate establishment of selected species. If the recommended fertilizer rate exceeds the criteria in Conservation Practice Standard (590) Nutrient Management, appropriate mitigating practices will be installed to reduce the risk of nutrient losses from the site.

Comply with all applicable federal, state, and local laws, rules, and regulations.

Additional Criteria To Restore Degraded Sites

If gullies or deep rills are present, they will be treated, if feasible, to allow equipment operation and ensure proper site and seedbed preparation.

Soil amendments will be added as necessary to ameliorate or eliminate physical or chemical conditions that inhibit plant establishment and growth. Required amendments, such as compost or manure to add organic matter and improve soil structure and water holding capacity; agricultural limestone to increase the pH of acid soils; or elemental sulfur to lower the

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service. New Hampshire supplement is <u>underlined</u>.

NRCS, NHFOTG October, 2002 pH of calcareous soils shall be included in the site specification with amounts, timing, and method of application.

Additional Criteria for Temporary Seeding

Temporary seeding of critical areas subject to erosion shall be made if the area will be exposed up to 12 months.

Site preparation shall include the installation of needed surface water control measures prior to planting and grading to permit the use of conventional equipment where possible.

As practical, perform all cultural operations at right angles to the slope and apply soil amendments per soil test recommendations.

In lieu of soil tests:

- Apply agricultural limestone at a rate of 1 ton per acre (50 lbs/1000 sq.ft.) where experience shows it necessary for satisfactory plant growth.
- Apply 10-10-10 analysis fertilizer at a minimum rate of 1000 lbs per acre (23 lbs/1000 sq.ft.) where practical and feasible.
- Incorporate lime and fertilizer into the soil before planting where possible.
- <u>Use Table 1 for plant selection and seeding</u> rates.

Table 1
Seeding for Temporary Cover

	Seeding Rates		Recommended	Remarks	
Seed	Lbs/Ac Lbs/1000 sq.ft.		Seeding Dates		
Winter Rye	112	2.6	8/15 - 9/5 for fall cover	Good for fall seeding. Select a hardy variety	
Oats	80	2	4/1 - 7/1 8/15 - 9/15	Best for spring seeding. Early fall seedings will die when winter weather comes, but the dead material will provide protection.	
Annual Ryegrass	40	1	4/1 - 6/1	Grows quickly but is of short duration. Use where appearance is important.	
Sudangrass	40	0.9	5/15 - 8/15	Good growth during hot summer periods.	
Perennial Ryegrass	30	0.7	4/1 - 6/1 8/15 - 9/15	Good cover, longer lasting than Annual Ryegrass. Mulching will allow seeding throughout growing season.	

<u>Permanent Seeding of Grass and Legume on</u> <u>Sediment Producing Areas</u>

Site preparation shall include the installation of needed surface water control measures prior to planting and grading to permit the use of conventional equipment where possible.

As practical, perform all cultural operations at right angles to the slope and apply soil amendments per soil test recommendations.

In lieu of soil tests:

 Apply agricultural limestone at a rate of 2 ton per acre (100 lbs/1000 sq.ft.) for satisfactory plant growth.

NRCS, NHFOTG October, 2002

- Apply 10-20-20 analysis fertilizer at a minimum rate of 500 lbs per acre (11.5 lbs/1000 sq.ft.).
- Incorporate lime and fertilizer into the soil before planting where possible.
- <u>Use Table 2 for selecting vegetative mixture</u> and Table 3 for seeding rates.
- Mulching is important in establishing vegetation on critical areas. Mulch will help
- hold moisture, protect soil from erosion, hold seed in place, and keep soil temperatures relatively constant. See Mulching Standard 484 for specific mulching recommendations.
- Relative amounts of individual species shown in Table 3 may vary within mixtures somewhat, especially where species are available in commercial mixtures.

Table 2
Seeding for Permanent Cover

Type of Area and Conditions	Seeding Mixtur	e from Table 3
	Mowing Planned	No Mowing Planned
Borrow Areas, Roadsides, Dikes, Levees, Pond		
Banks, and other slopes and banks		
A. Well to excessively drained	1, 2, 3, 4, 5, or 8	3, 4, 5, 6 ,8 ,9, 10, 11, 12, or 13
B. Somewhat poorly drained	2	5 or 6
C. Variable drainage	2	5 or 6
Drainage Ditch and Channel Banks		
A. Well to excessively drained	1, 2, 3, or 4	9, 10, or 11
B. Somewhat poorly drained	2	
C. Variable drainage	2	
Diversions		
A. Well to excessively drained	2, 3, or 4	9, 10, or 11
B. Somewhat poorly drained	·	and the second of the second o
C. Variable drainage	2	ek ig it kalande. Dit bliftet i til filme skjelege bette til det. Historia
Effluent Disposal		5 or 6
Gullied and Eroded Areas		3, 4, 5, 8, 10, or 11
Shorelines (fluctuating water levels)		5 or 6
Sod Waterways and Spillways	1, 2, 3, 4, 6, or 7	1, 2, 3, 4, 6, or 7
General Recreation Seedings, Picnic and Playgrounds, or Driving and Archery Ranges	1, 2, 15, 16, or 18	
Woodland Access Roads, Trails, and Landings		
A. Well to excessively drained		9, 10, or 11
B. Somewhat poorly drained		2, 5 or 6
C. Variable drainage		2, 4, 9, or 10

Table 3
Seed Mixtures for Permanent Seedings

Nentucky Bluegrass	No.	Mixture	Lbs/acre	Lbs/1000 sq.ft.
Perennial Ryegrass 5	1		20	· · · · · · · · · · · · · · · · · · ·
2. Creeping Red Fescue Redtop 2 .05 Tall Fescue 20 .45 3. Creeping Red Fescue Birds foot Trefoil J/ Tall Fescue or Smooth Bromegrass 20 .45 4. Tall Fescue or Smooth Bromegrass 20 .45 Redtop 2 .05 Birds foot Trefoil J/ Birds foot Trefoil J/ 8 .20 5. Reed Canarygrass Redtop 5 .10 6. Reed Canarygrass Redtop 5 .10 6. Reed Canarygrass 15 .35 Redtop 5 .10 Birds foot Trefoil J/ 10 .25 7. Smooth Bromegrass 15 .35 Perennial Ryegrass 5 .10 .25 Birds foot Trefoil J/ 10 .25 .25 9. Creeping Red Fescue 10 .25 .25 9. Creeping Red Fescue 10 .25 .25 0. Creeping Red Fescue 20 .45 .26 10. </td <td></td> <td>Creeping Red Fescue</td> <td>20</td> <td>.45</td>		Creeping Red Fescue	20	.45
Redtop 2		Perennial Ryegrass	5	.10
Tall Fescue	2.	Creeping Red Fescue	20	.45
3. Creeping Red Fescue 20 45 Birdsfoot Trefoil 1/		Redtop	2	.05
Birdsfoot Trefoil 1/		Tall Fescue	20	.45
Birdsfoot Trefoil 1/	3.	Creeping Red Fescue	. 20	.45
A. Tall Fescue 20	the second		8	
Redtop 2 0.05	s sent to the	Tall Fescue or Smooth Bromegrass	20	.45
Birdsfoot Trefoil 1/	4.	Tall Fescue	20	.45
5. Redtop 5 .10 6. Reed Canarygrass 15 .35 Redtop 5 .10 Birdsfoot Trefoil 1/ 10 .25 7. Smooth Bromegrass 15 .35 Perennial Ryegrass 5 .10 Birdsfoot Trefoil 1/ 10 .25 8. Switchgrass (Broadcast) 10 (PLS) 2/ .25 9. Creeping Red Fescue 10 .25 Crownvetch or Flatpea 1/ 15 (30) .35 (70) Tall Fescue or Smooth Bromegrass 15 .35 Redtop 2 .05 10. Creeping Red Fescue 20 .45 Redtop 2 .05 Crownvetch or Flatpea 15 (30) .35 (70) 11. Birdsfoot Trefoil 1/ 8 .20 Crownvetch 1// 15 .35 Creeping Red Fescue or Tall Fescue 20 .45 12. Crownvetch or Flatpea 1// 10 (30) .25 (70) Perennial Ryegrass 5 (PLS) 2///// .10 Bluestern (Big or L		Redtop	2	.05
Redtop		Birdsfoot Trefoil 1/	8	.20
6. Reed Canarygrass 15 .35 Redtop 5 .10 Birdsfoot Trefoil 1/ 10 .25 7. Smooth Bromegrass 15 .35 Perennial Ryegrass 5 .10 Birdsfoot Trefoil 1/ 10 .25 8. Switchgrass (Broadcast) 10 (PLS) 2/ .25 9. Creeping Red Fescue 10 .25 Crownvetch or Flatpea 1/ 15 (30) .38 (70) Tall Fescue or Smooth Bromegrass 15 .35 Redtop 2 .05 10. Creeping Red Fescue 20 .45 Redtop 2 .05 Crownvetch or Flatpea 15 (30) .35 (70) 11. Birdsfoot Trefoil 1/ 8 .20 Crownvetch 1/ 15 .35 Creeping Red Fescue or Tall Fescue 20 .45 12. Crownvetch or Flatpea 1/ 10 (30) .25 (.70) Perennial Ryegrass 5 (PLS) 2/ .10 Bluestem (Big or Little) 5 (PLS) 2/ .10 Perennial Ryegr	5.	Reed Canarygrass	20	.45
Redtop 5 10 10 25		Redtop	5	.10
Birdsfoot Trefoil 1/	6. 2	Reed Canarygrass	15	.35
7. Smooth Bromegrass Perennial Ryegrass 15 .35 Birdsfoot Trefoil 1/ 10 .25 8. Switchgrass (Broadcast) 10 (PLS) 2/ .25 9. Creeping Red Fescue 10 .25 Crownvetch or Flatpea 1/ 15 (30) .35 (70) Tall Fescue or Smooth Bromegrass Redtop 2 .05 10. Creeping Red Fescue 20 .45 Redtop 2 .05 . Crownvetch or Flatpea 15 (30) .35 (70) 11. Birdsfoot Trefoil 1/ 8 .20 Crownvetch or Flatpea 15 (30) .35 (70) 11. Birdsfoot Trefoil 1/ 8 .20 Crownvetch or Flatpea 15 (30) .35 (70) 12. Crownvetch or Flatpea 1/ 10 (30) .25 (70) Perennial Ryegrass 5 (PLS) 2/ .10 Bluestem (Big or Little) 5 (PLS) 2/ .10 Perennial Ryegrass 5 .10 Birdsfoot Trefoil 1/ 5 .10		Redtop	5	.10
Perennial Ryegrass 5 .10 .25		Birdsfoot Trefoil 1/	10	.25
Birdsfoot Trefoil 1/	7.	Smooth Bromegrass	15	.35
Birdsfoot Trefoil 1/		Perennial Ryegrass	5	.10
9. Creeping Red Fescue Crownvetch or Flatpea 1/ Tall Fescue or Smooth Bromegrass Redtop 10. Creeping Red Fescue Redtop 10. Crownvetch or Flatpea 10. Significant of Flatpea 11. Significant of Flatpea 12. Crownvetch 1/ Crownvetch or Flatpea 1/ Perennial Ryegrass 10. Significant of Flatpea 11. Significant of Flatpea 12. Significant of Flatpea 13. Significant of Flatpea 14. Tall Fescue 15. Significant of Flatpea 16. Creeping Red Fescue 16. Creeping Red Fescue 17. Creeping Red Fescue 18. Significant of Flatpea 19. Significant of Flatpea 10. Signifi		Birdsfoot Trefoil 1/	10	
Crownvetch or Flatpea 1/	8.	Switchgrass (Broadcast)	10 (PLS) <u>2</u> /	.25
Tall Fescue or Smooth Bromegrass 15 .35 Redtop 2 .05	· : · - · 9.	Creeping Red Fescue	10	.25
Tall Fescue or Smooth Bromegrass 15 .35 Redtop 2 .05 10. Creeping Red Fescue 20 .45 Redtop 2 .05 . Crownvetch or Flatpea 15 (30) .35 (.70) 11. Birdsfoot Trefoil 1/ 8 .20 Crownvetch 1/ 15 .35 Creeping Red Fescue or Tall Fescue 20 .45 12. Crownvetch or Flatpea 1/ 10 (30) .25 (.70) Perennial Ryegrass 10 .25 13. Switchgrass 5 (PLS) 2/ .10 Bluestem (Big or Little) 5 (PLS) 2/ .10 Perennial Ryegrass 5 .10 Birdsfoot Trefoil 1// 5 .10 14. Tall Fescue 20 .45 Flatpea 30 .70 15. Creeping Red Fescue 50 1.15 Canada Bluegrass or Kentucky Bluegrass 50 1.15 Tall Fescue 30 .70 17. Creeping Red Fescue 20 .45 Flatpea 1/		Crownvetch or Flatpea 1/	15 (30)	.35 (.70)
10. Creeping Red Fescue Redtop Redtop Crownvetch or Flatpea 15 (30) 35 (70) 11. Birdsfoot Trefoil 1/ Crownvetch 1/ Creeping Red Fescue or Tall Fescue 20 45 12. Crownvetch or Flatpea 1/ Perennial Ryegrass 10 Switchgrass 5 (PLS) 2/ Bluestem (Big or Little) Perennial Ryegrass 5 (PLS) 2/ Perennial Ryegrass 5 (PLS) 2/ 10 Perennial		Tall Fescue or Smooth Bromegrass	15	
Redtop 2 .05		Redtop	2	.05
Crownvetch or Flatpea 15 (30) .35 (.70) 11. Birdsfoot Trefoil 1/ Crownvetch 1/ Creeping Red Fescue or Tall Fescue 8 .20 12. Crownvetch or Flatpea 1/ Perennial Ryegrass 10 (30) .25 (.70) 13. Switchgrass Bluestem (Big or Little) 5 (PLS) 2/ Perennial Ryegrass .10 14. Tall Fescue Flatpea 20 .45 15. Creeping Red Fescue Flatpea 20 .45 16. Creeping Red Fescue Tall Fescue 50 1.15 17. Creeping Red Fescue Flatpea 1/ 30 .70 17. Creeping Red Fescue Flatpea 1/ 20 .45 Flatpea 1/ 30 .70	10.	Creeping Red Fescue	20	.45
Birdsfoot Trefoil 1/ Crownvetch 1/ Creeping Red Fescue or Tall Fescue 20 .45 12. Crownvetch or Flatpea 1/ Perennial Ryegrass 10 .25 13. Switchgrass 5 (PLS) 2/ Bluestem (Big or Little) 5 (PLS) 2/ Perennial Ryegrass 5 (PLS) 2/ 10 (PLS) 2/ 10 (PLS) 2/ 11 (PLS) 2/ 12 (PLS) 2/ 13 (PLS) 2/ 14 (PLS) 2/ 15 (PLS) 2/ 16 (PLS) 2/ 17 (Peeping Red Fescue 50 1.15 18 (PLS) 2/ 19 (PLS) 2/ 10 (PLS) 2/ 10 (PLS) 2/ 11 (PLS) 2/ 10 (PLS) 2/ 11 (PLS) 2/ 11 (PLS) 2/ 12 (PLS) 2/ 13 (PLS) 2/ 14 (PLS) 2/ 15 (PLS) 2/ 15 (PLS) 2/ 16 (PLS) 2/ 17 (PLS) 2/ 18 (PLS) 2/ 19 (PLS) 2/ 10 (PLS) 2/		1 '	2	.05
Crownvetch 1/			15 (30)	.35 (.70)
Creeping Red Fescue or Tall Fescue 20 .45 12. Crownvetch or Flatpea 1/ Perennial Ryegrass 10 (30) .25 (.70) 13. Switchgrass 5 (PLS) 2/ .10 .10 Bluestem (Big or Little) 5 (PLS) 2/ .10 .10 Perennial Ryegrass 5 .10 Birdsfoot Trefoil 1/ .14. 5 .10 14. Tall Fescue Flatpea 20 .45 Flatpea 30 .70 15. Creeping Red Fescue Canada Bluegrass or Kentucky Bluegrass 50 1.15 Canada Bluegrass or Kentucky Bluegrass 50 1.15 Tall Fescue 30 .70 17. Creeping Red Fescue Flatpea 1/ 20 .45 Flatpea 1/ 30 .70	11.	1	8	.20
12. Crownvetch or Flatpea 1/ Perennial Ryegrass 10 (30) .25 (.70) 13. Switchgrass Bluestem (Big or Little) 5 (PLS) 2/ .10 .10 Perennial Ryegrass Birdsfoot Trefoil 1/ .20 5 (PLS) 2/ .10 .10 14. Tall Fescue Flatpea 20 .45 Flatpea 30 .70 15. Creeping Red Fescue Canada Bluegrass or Kentucky Bluegrass 50 1.15 16. Creeping Red Fescue Tall Fescue 50 1.15 17. Creeping Red Fescue Flatpea 1/ 30 .70	* * * * * * * * * * * * * * * * * * * *	1	15 .* ;	.35
Perennial Ryegrass 10 .25			20	.45
13. Switchgrass Bluestem (Big or Little) Bluestem (Big or Little) 5 (PLS) 2/	12.	1	10 (30)	.25 (.70)
Bluestem (Big or Little) 5 (PLS) 2/ .10 Perennial Ryegrass 5 .10 Birdsfoot Trefoil 1/ 5 .10 14.	· · · · · · · · · · · · · · · · ·		10	.25
Perennial Ryegrass 5 10	13.	1		.10
Birdsfoot Trefoil 1/		1	5 (PLS) <u>2</u> /	.10
14. Tall Fescue 20 .45 Flatpea 30 .70 15. Creeping Red Fescue 50 1.15 Canada Bluegrass or Kentucky Bluegrass 50 1.15 16. Creeping Red Fescue 50 1.15 Tall Fescue 30 .70 17. Creeping Red Fescue 20 .45 Flatpea 1/ 30 .70		1	5	.10
Flatpea 30 .70 15. Creeping Red Fescue Canada Bluegrass or Kentucky Bluegrass 50 1.15 16. Creeping Red Fescue Tall Fescue 50 1.15 17. Creeping Red Fescue Flatpea 1/ 20 .45 Flatpea 1/ 30 .70	· ·	\$	5	.10
15. Creeping Red Fescue Canada Bluegrass or Kentucky Bluegrass 50 1.15 16. Creeping Red Fescue Tall Fescue 50 1.15 17. Creeping Red Fescue Tall Fescue 20 .45 Flatpea 1/ 30 .70	14.	1 :		
Canada Bluegrass or Kentucky Bluegrass 50 1.15 16. Creeping Red Fescue 50 1.15 Tall Fescue 30 .70 17. Creeping Red Fescue 20 .45 Flatpea 1/ 30 .70			30	.70
16. Creeping Red Fescue 50 1.15 Tall Fescue 30 .70 17. Creeping Red Fescue 20 .45 Flatpea 1/ 30 .70	15.		1	1.15
Tall Fescue 30 .70 17. Creeping Red Fescue 20 .45 Flatpea 1/ 30 .70			50	
17. Creeping Red Fescue 20 .45 Flatpea 1/ 30 .70	16.	, -		
Flatpea <u>1</u> / 30 .70	-		30	.70
	17.			.45
18. Tall Fescue 150 3.5			30	.70
	18.	Tall Fescue	150	3:5

^{1/} Inoculate legume seeds. Use four times recommended rate of inoculant when hydroseeding.

NRCS, NHFOTG

October, 2002

^{2/ (}PLS) Pure Live Seed = (% Germination x % Purity) / 100

<u>Sod Installation on Sediment Producing</u> Areas

Site preparation shall include the installation of needed surface water control measures prior to laying sod.

Grade slopes to 2:1 or flatter and provide adequate subsurface drainage where needed, especially at the toe of slopes.

Provide good soil conditions for placing sod with the surface free of large clods, stones, or other debris. Incorporate lime and fertilizer based on soil test information uniformly into the surface soil before placing sod.

Apply lime and fertilizer according to the following recommendations in lieu of a soil test:

- Apply 2 tons of ground limestone per acre (100 lbs/1000 sq.ft.).
- Apply 500 lbs of 5-20-20 or equivalent fertilizer per acre (11.5 lbs/1000 sq.ft.).
- Incorporate the lime and fertilizer before placing the sod.

Sod Materials

- Sod should be good quality, free of weeds, disease and insects, and should be of good color and density.
- Sod should be machine cut at a uniform soil thickness necessary for plant viability during the Harvest-Transport-Installation cycle.
- Individual pieces of sod should be cut to the supplier's standard width and length and be strong enough to support their own weight and retain their size and shape during normal installation.

Installation

- After all grading is completed, the soil should be irrigated within 12-24 hours prior to placement of sod. Sod should not be laid on dry or powdery soil.
- The first row of sod should be laid in a straight line with subsequent rows placed parallel to and tightly against each other.

 Lateral joints should be staggered to promote more uniform growth and strength.

- On sloping surfaces where erosion may be a problem, sod should be laid with staggered joints and secured by pegging.
- The sod should be immediately watered during and after installation to prevent drying. It should then be thoroughly irrigated to a depth sufficient that the underside of the new sod pad and soil below the sod are thoroughly wet.
- During the first week, water daily or as needed to maintain moist soil to a depth of 4 inches. After that, water as needed to maintain adequate moisture in the upper 4 inches of soil.

Gravel Pit Renovation

<u>Follow recommendations in NH Technical Note</u> <u>PM-NH-24 for seed and installation information.</u>

CONSIDERATIONS

Native species or mixes that are adapted to the site and have multiple values should be considered.

Avoid species that may harbor pests. Species diversity should be considered to avoid loss of function due to species-specific pests.

PLANS AND SPECIFICATIONS

Specifications for applying this practice shall be prepared for each site and recorded and filed using the approved specification sheets or narrative statements in the conservation plan.

OPERATION AND MAINTENANCE

Use of the area shall be managed as long as necessary to stabilize the site and achieve the intended purpose.

Control or exclude pests that will interfere with the timely establishment of vegetation.

Inspections, reseeding or replanting, fertilization, and pest control may be needed to insure that this practice functions as intended throughout its expected life.

Agencies, groups and professional involved with this property (not a full list)

- NHDA NH Department of agriculture
- USDA US department of Agriculture
- NRCS -Natural Resource Conservation Service
- Soil Conservationist
- State Conservationist
- District Conservationist
- EQUIP Environmental Quality Incentives Program
- AMA Agricultural Management Assist
- CSP Conservation Security Program
- WHIP Wildlife Habitat Incentives Program
- Archeologist cleared for nothing of interest
- NH Soil Consultants
- Foresters (licensed in the state of NH not a campground)
- DES Department of Environmental Services
- DRED Dept of economic resource and development
- UNH co-op extension
- Forage and biomass plantings design
- Forest management plan design
- Gove
- Jones and Beach

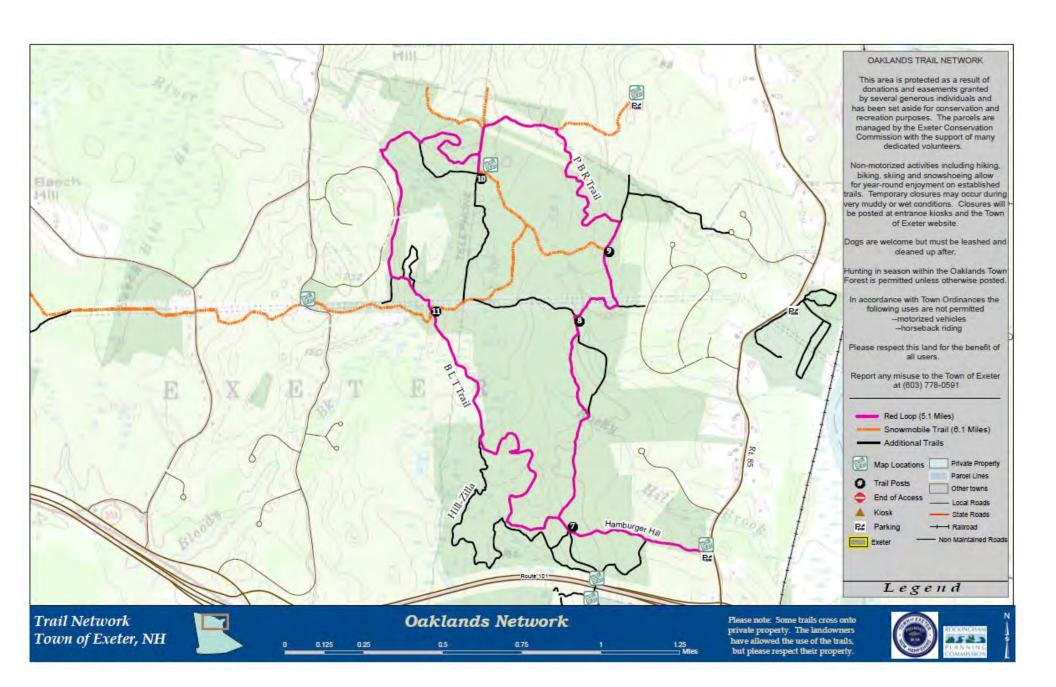
McDonnell Conservation Area Kiosk Eagle Scout Project Plan 2017

The Exeter Conservation Commission has received a request for an Eagle Scout project that would involve portions of the McDonnell easements. Below is a description of the proposed project. If you feel these activities are appropriate for the property and are supportive of the project please return this form to the town office at:

10 Front Street Exeter, NH 03833 Attn: Kristen Murphy

Ac	tivity Description	(Ples	Approval ase initial if OK)
1.	Kiosk Construction Construct a kiosk for the Linden Street parking lot to consol signage, identify use limitations and provide trail information	idate	
2.	Kiosk Installation Kiosk will be installed using cement footings to the right of trail entrance.	the approved	
3.	Interpretive Signs Sign for kiosk would be developed in coordination with Tow Resource Planner Kristen Murphy, Commission member Gi property owner Dianne Arnheim. Sign will be printed using and installed on the kiosk by Caleb Mahoney	nny Raub, and	
	We have reviewed the proposal and am supportive of the proposal and are supportive of	-	ions:
	Dianne Arnheim, Property Owner	Date	
	Conservation Commission Rep., Bill Cambpell	Date	_
	Scout, Caleb Mahoney	Date	





Exeter Conservation Commission Wetland Permit Application Requirements

The Exeter Conservation Commission has developed this checklist to assist applicants with local review of NH Department of Environmental Services (DES) Dredge and Fill permit applications to ensure complete and consistent application submissions and prevent unnecessary delays.

Submission Requirements	
Submission requirements	
NH DES Wetlands Permit Application: In addition to the requirements set forth by the NH Department of Env. Services	
Electronic Submission to Planning Department by meeting deadline (website for deadlines Wetland and conditional use permit applications Colored plans indicating buffers, wetlands, impact areas, etc if available) :
Hardcopies –delivered night of the meeting: 12 copies of 11x17 plans and application delivered by night of meeting (note: color plans are required for the digital submission but are not required for hard copies (be encouraged if resources allow)	
Conditional Use Permit – Wetland and Shoreland Buffer Submission: The Conservation Commission provides recommendations to the Planning Board on Conditional Use Permits. Applications for Conservation Commission review must include:	
Electronic Submission to Planning Department by meeting deadline (weetsate of De	eter
Wetland Application Review Guidelines	
A site walk prior to presenting the project at a Conservation Commission meeting is strong recommended.	ξly
Applications must include: Standard Dredge and Fill Thorough explanations for 20 Questions Sheet are required with clear photos documenting the current conditions of the project area and particularly the area to affected) be

Plan with wetlands delineated by a state certified wetland scientist. If older than 3
years, the accuracy of the boundaries must be re-confirmed in writing.
It is preferable that maps of wetland impacts be in color

Applications will be returned to the applicant for revision if:

• Any of sections #-# are left blank

•

Comment [EA1]: Solicit input from Commission here. Provide blank/example wetlands application to work through?

Attend a meeting

Once the application is submitted, applicants are required to attend the Conservation Commission meeting at which the application is scheduled to be discussed. At the meeting the application will provide an overview of project. The following items should be included in project overview you provide:

- Prior to your explanation of the project details, describe the project type, the review threshold under which it falls (i.e., major, minimum impact expedited), and how the project meets the criteria of the application level.
- How were wetlands delineated (method? What time of year?)
- Describe wetlands being impacted e.g., type, size of impact, hydric soils and hydrophytic vegetation, isolated or part of complex, functions and values
- What alternatives have been considered to reduce wetland impacts

•

Comment [EA2]: I think Commission input is also important here to see what people most want to hear about. I brainstormed a few items to start

BY-LAWS

OF

THE CONSERVATION COMMISSION

OF EXETER, NEW HAMPSHIRE

Article I Name and Location

The name of this (voluntary, non-profit,) organization shall be the Exeter Conservation Commission (hereafter called The Commission). The principal office of The Commission shall be located at The Exeter Town Office Building, 10 Front Street, Exeter, New Hampshire.

Article II Authority

<u>Established in March 1965 by a vote at Exeter Town Meeting, t</u>The Commission derives its authority from State Law RSA 36-A and from the Town of Exeter Ordinances. Nothing in these by-laws is intended to conflict with these.

Article III Purposes

- 1. To ensure the conservation and proper utilization of the natural resources and the protection of watershed resources of the Town of Exeter.
- 2. To advise other Town boards on conservation and natural resource matters.
- 3. To acquire land for fee (full title) or through conservation easement for conservation purposes and to receive gifts of money or property in the name of the Town. This may include water resources. The Commission will then manage these areas[k1].
- 4. To manage duly authorized town forests.
- 5. To conduct research into local land and water natural resources to ascertain their value for conservation purposes.
- 6. To keep the public informed as to actions taken and lands available for public use through maps, signs, charts, plans and pamphlets.
- 7. To intervene when appropriate within 10 days of a dredge and fill of wetlands application, and to investigate and report its findings and recommendations within 40 days to the NH Wetlands Board.(RSA 483A)
- 8. To receive copies of sand and gravel excavation permit applications and make necessary comments and recommendations to the proper board.(RSA 155-E)
- 9. To monitor yearly open space and conservation lands, including easements.
- 10. To sponsor activities which foster conservation education.
- 11. To assist in the Town's Master Plan up-date.
- 12. To attend workshops, informational meetings and conferences so that the Commission is adequately informed about conservation issues.

Article IV Membership

1. Eligibility and Appointment of Members[k2]

- A. The Commission shall consist of not less than seven regular and five alternate members, appointed by the Board of Selectmen.
- B. Terms of the members shall be for three years and be so arranged that approximately one-third of the members' terms expire yearly.
- C. Members may serve no more than two consecutive three-year terms.
- D. The balance of an un-expired term shall be filled by the Selectmen[k3].
- E. Alternate members may take an active part in the meetings, but may vote only to obtain a quorum.
- F. New members shall register with the Town Clerk and sign appropriate papers.

2. Election of Officers

- A. Officers for the Commission shall be elected each May for a term of one year.
- B. Officers may serve consecutive terms.

3. Absenteeism

- A. Members are expected to attend all monthly meetings unless the Chair is notified in advance.
- B. Unexcused absence from four meetings may result in a letter being sent to the regular member or alternate in question. If no reply is forthcoming in a reasonable amount of time (usually one month), the member will be requested to submit his or her resignation, and the Selectmen will be so notified to select a replacement.

Article V Responsibilities of Offices

1. Chairperson

- A. It shall be the duty of the Chair, or his/her designate, to notify in advance all members of the Commission of any scheduled meeting. The Chair is also responsible for preparing agenda for the meeting listing issues to be discussed.
- B. The Chair shall run the meeting and assign the floor to those speakers who request it.

- C. The Chair may take part in any discussions relative to the business at hand and will rule on any disputes that arise during debates.
- D. The Chair will have a vote only in case of a deadlock or in the event that said vote would constitute a quorum necessary to expedite the business at hand.

2. Vice-Chairperson

A. The Vice-Chair shall preside at all meetings of the Commission in the absence of the Chair and shall perform all duties and have all powers of the Chair in case of temporary absence or incapacity of the Chair.

3. Secretary[k4]

- A. <u>In the absence of administrative staff, t</u>The Secretary shall keep an accurate record of the meetings and other proceedings of the Commission
- B. <u>In accordance with RSA 91-A:2, aA</u> typed copy of the minutes shall be made available for public inspection not more than 5 business days after the meeting, and completed within 144 hours of the meeting and a copy brought to the Town <u>Clerk's</u> Office.
- C. <u>In the absence of administrative staff, t</u>The Secretary shall be responsible for correspondence designated by the Commission.

4. Treasurer

- C.A. The Treasurer insures all monies received by the Commission is accounted for and deposited into The Commission's bank account and disbursed from that account only with proper authorization by official vote of The Commission shall keep an accurate record of the finances of the Commission and pay all obligations levied against it when approved by the Commission and ordered by the Chair.
- <u>D.B.</u> The Treasurer shall report on the status of the Commissions monies <u>at</u> meetings of the Commission not less than quarterly at each meeting and file a copy of that report with the <u>Planning DepartmentChair</u>, the <u>Secretary and the Treasurer</u> of the Town of Exeter.
- E. The Treasurer shall also prepare an annual financial report and file a copy of that report with the Chair, the Secretary and the Treasurer of the Town of Exeter.

Article VI Committees

- 1. The Raynes Farm Stewardship Sub-Committee
 - A. Objectives: This committee is advisory to The Commission and shall:
 - (i) Oversee the use of the Raynes Farm and barn, help identify and prioritize preservation and public use objectives for Commission review.
 - (ii) The chair serves as the primary contact person for inquiries regarding the property, particularly in maintaining the Town's relationship with the farmers who lease the farmland and barn.
 - (iii) Review the LCHIP monitoring report, the farmer-Commission lease agreement, and the Raynes Farm Long Range Development Plan. Any suggestions for changes are agreed upon by the Committee and shall be submitted to The Commission for their approval.
 - (iv) Provide recommendations to the Conservation Commission on implementation of projects that have budgetary impacts.
 - B. Membership: This committee shall consist of at least 5 members including representatives from The Commission, a member of the Exeter Heritage Commission, a member of the Public Works Department and private citizens. In addition, any individuals leasing the land will also be a part of the committee but will not vote when decisions concerning their lease are discussed. Other members may be selected from the town at large with the goal of furthering the objectives of the Long Range Development Plan.
 - C. Procedures: The committee shall elect its own chair annually. The committee shall meet at least annually for the purposes of reviewing the LCHIP monitoring report, the Farmer-Commission lease agreement, and the progress with projects identified in the Raynes Farm Long Range Development Plan.
- 2. Trails Sub-Committee
 - A. Objectives: This committee is advisory to The Commission and shall:
 - (i) Oversee the creation and maintenance of trails on Conservation Lands in accordance with the trail management plan and advise The Commission on actions that need to be taken.
 - (ii) Submit a list of recommended trail projects to the Commission each year in order to meet budget planning schedules.
 - (iii) Oversee the site inspections for trail event permits.
 - (iv) Work with the Outreach and Education Committee for trailrelated and public events and publications.

- B. Membership: This committee shall consist of 3?? representatives from The Commission. Other members may be selected from the town at large with the goal of having representation from a diversity of recreational uses and furthering the intent of the trail plan.
- C. Procedures: The committee shall elect its own chair annually. The chair shall be a member of The Commission. The committee shall meet at least 2 times a year to identify and prioritize trail projects needs and as needed to further the objectives of the trail management plan.

3. The Outreach and Education Sub-Committee

- A. Objectives: This committee is advisory to The Commission and shall:
 - (i) Promote conservation news, issues and events to the public.
 - (ii) Sponsor and oversee conservation programs for the schools and local clubs and organizations such as for Arbor Day.
 - (iii) Have responsibility for publications produced by the
 Commission including trail guides and maps (in coordination
 with the Trails Committee above when trails are involved) as
 well as developing content for the town website and social
 media.
- B. Membership: This committee shall consist of at least three people, one of whom shall be a member of The Commission. Other members may be selected from the town at large.
- C. Procedures: The Committee shall elect its own chair annually. The chair shall be a member of the Commission.

4. The Open Space Sub-Committee

- **A.** Objectives: This committee is advisory to The Commission and shall:
 - (i) Provide an open space stewardship role for the Town;
 developing annual monitoring priorities, assisting in
 conservation land audits, inspecting and documenting open
 space land boundaries, and providing feedback as to property
 conditions and recommendations for follow-up to The
 Commission.
 - (ii) Advise The Commission as to proper land management policies, procedures and methods for land acquired by the Town that is preserved as open space.
 - (iii) Assist the Town's Natural Resource Planner in reviewing and inventorying Town land designated as open space including maintenance of this inventory on a continual basis.
 - (iv) Evaluate potential conservation projects making recommendations for the acquisition of open space lands and

- conservation easements to The Commission by considering resources present and the Natural Resource Inventory, Master Plan and other guidance documents;
- (v) Mobilize community groups and develop programs related to the ongoing maintenance of open space land, including stewardship efforts by the public, non-profit, and private sectors;
- (vi) Engage and educate residents of the Town of Exeter about the benefits of open space land, the location and accessibility of Exeter's existing open space, and priorities for future open space acquisition town-wide;
- (vii) Foster partnerships with groups with similar goals to further land conservation and support efforts related to grant applications to federal, state, and private resources for open space acquisition
- (viii) Develop and recommend Capital Improvement Program (CIP) actions relating to the acquisition and protection of open space land:
- B. Membership: This committee shall consist of at least three people, one of whom shall be a member of The Commission. Other members may be selected from the town at large.
- C. Procedures: The Committee shall elect its own chair annually. The chair shall be a member of the Commission.

1.5.

- 2. The Street Tree and Nursery Committee
 - A. This committee shall
 - (i) work with the Planning Department and others to plan and oversee the planting and maintenance of trees on public streets.
 - (ii) maintain the Conservation Commission's portion of the Wilfred Moreau Nursery in conjunction with Public Works and use the plants from this Nursery to enhance the beauty of Exeter.
 - B.—This committee shall consist of at least three people, one of whom shall be a member of the Conservation Commission. Other members may be selected from the town at large. Appointments shall be made by the Chair of the Commission for one year and renewed annually.
 - C.—The Committee shall elect its own chair annually. The chair shall be a member of the Commission.
- 3. The Outreach and Education Committee
 - A. This committee shall
 - (i) promote conservation news, issues and events to the public.

- (ii) sponsor and oversee conservation programs for the schools such as for Arbor Day.
- (iii) have responsibility for publications produced by the Commission including trail guides and maps.
- B. This committee shall consist of at least three people, one of whom shall be a member of the Conservation Commission. Other members may be selected from the town at large. Appointments shall be made by the Chair of the Commission for one year and renewed annually.
- C. The Committee shall elect its own chair annually. The chair shall be a member of the Commission.

4.6. The Land Management Committee

- A. <u>Objectives: This committee is advisory to the Commission and This committee shall</u>
 - (i) oversee the management of the Town lands designated conservation areas.
 - monitor easements <u>and fee owned lands</u> held by the Commission and maintaining the files relating to such monitoring.
 - (ii)
 - (iii) oversee the creation and maintenance of trails on the Conservation lands.
 - (ii) Periodically inspect property boundaries and re-mark surveyor points to retain boundary integrity and install boundary discs along boundary lines.
 - (iv)(iii) promote public stewardship of the lands.
- B. This committee shall consist of at least three people, one of whom shall be a member of the Conservation Commission The Commission. Other members may be selected from the town at large. Appointments shall be made by the Chair of the Commission for one year and renewed annually.
- C. The Committee shall elect its own chair annually. The chair shall be a member of the Commission.

5. The Watershed Committee [k5]

- A. This committee shall
 - (i) monitor the usage of the rivers and streams that are in, or flow through, Exeter.
 - (ii) oversee water quality monitoring programs.
 - (iii) work with the Planning Department on watershed management issues.
- B. This committee shall consist of at least three people, one of whom shall be a member of the Conservation Commission. Other members may be selected from the town at large. Appointments shall be made by the Chair of the Commission for one year and renewed annually.

C. The Committee shall elect its own chair annually. The chair shall be a member of the Commission.

6.7. Ad Hoc Committees

A. Ad Hoc committees may be appointed by the Chair of the Commission as the need arises. At least one member of the Commission shall serve on each committee.

Article VII Operating Procedures

1. Meetings

- A. Public notice of Commission Meetings must be posted in two public places, such as the Town Offices, the Post Officethe Town's website, or the Library, 24 hours prior to the meeting. The notice shall be published according to State law RSA 91, a copy of which is available in the Conservation Commission Handbook.
- B. At the discretion of the Chair The Chair shall direct the calling of there shall be not less than one regular meeting of the Commission each month. Such meetings will be held in the Town Offices on the second Tuesday of each month at 7:00 p.m. unless otherwise specified by the Commission or the Chair prior to the second Tuesday.
- C. Special meetings may be held, if necessary, at the discretion of the Chair. They may also be called by the Commission on a majority vote of the members for a special purpose. At any special meeting, no business other than that specified by the Commission may be considered.
- D. Individual notification of each Commission member by the Chair shall be given not less than five days before the date of any special meeting.
- E. A majority of the members of the Commission then in office shall constitute a quorum for the transaction of any business.
- F. It is the responsibility of the Chair to convey to the appropriate State, County or Town board or commission recommendations passed by the Commission.

2. Public Hearings

- A. A public hearing must be held before any money from Conservation funds are used to acquire "any interest in real property" (RSA 36-A:5 II). A public hearing may be held in conjunction with an investigation of a fill and dredge application or to solicit opinions on other issues deemed important by the Commission.
- B. Notice for such a meeting must be posted in two public places and in a newspaper "of general circulation in the municipality" at least 10 days before the hearing, counting neither the day of posting or the day of the hearing. (RSA 675:7)

- C. Conduct of the meeting should follow the procedure outlined on p. III-4 of the Handbook for Municipal Conservation Commissions in New Hampshire.
- D. Minutes of the meeting should include the members of the commission present, those who testified and a summary of their positions. These minutes should be distributed in the same manner as regular minutes, described in Article V, Section 3B.

3. Dredge and Fill Applications

- A. Upon receipt of a copy of an application to dredge and fill wetlands from the Town clerk, per RSA 482-A:3 (except for agricultural and minimum impact applications as noted in D below), the Chair shall send a letter of intervention to the wetlands board asking for an additional 30 days for review if a regularly scheduled meeting will not meet review deadlines.
- B. The Commission may hold public hearings, public informational meetings and/or conduct site walks as part of its review. The application must be discussed, and a decision made as to its impact, at a regular meeting of the Commission.
- C. A final letter of recommendations shall be sent to the wetlands board.
- D. Upon receipt of agricultural wetlands or minimal impact applications from the Rockingham County Conservation District (RCCD), the Commission shall review the application and prepare a letter to accompany the application or sign the supplied forms in accordance with state procedures.

4. Review of Sand and Gravel Excavations

- A. Upon receipt of a copy of an application for a permit to excavate, per RSA 155-E, the Commission will review the application as to its impact on the natural resources of the area.
- B. The Commission may hold public hearings, public informational meetings and/or conduct site walks as part of its review. The application must be discussed, and a decision made as to its impact, at a regular meeting of the Commission.
- C. A final letter of recommendations shall be sent to the Planning Board.
- 5. Request from Planning Board, Zoning Board or Technical Review Committee for Advice or Review.
 - <u>A.</u> Upon receipt of a request for advice or review by any Town board or committee, the Commission shall review the request and respond appropriately.
 - A.B. For projects that appear before the Commission prior to other land use boards, The Commission may provide recommendations to those boards for consideration.

- 6. By-laws
 - A. These By-laws shall be reviewed annually and revised as needed by a majority vote of the Commission.

B.___

C. Revised, October, 2001

D.A.

COMMENTS FOOTNOTES

K1Ginny suggests adding note "may require stewardship fee".

<u>K2</u> Suggest alternate format modeled after Weare CC.

MEMBERSHIP AND TERMS OF OFFICE

- 1. Regular Members: A full Commission shall consist of seven (7) regular members, appointed by the Board of Selectmen for three-year terms. Terms shall be arranged so that approximately one-third of the members' terms expire yearly. Members may serve no more than two consecutive three-year terms and are eligible for alternate member position after maximum terms are served. The appointment of members shall conform to terms and requirements of RSA 36-A.
- 2. Alternates: The Board of Selectmen may appoint, five (5) alternate members who may serve upon designation by the Chair in place of a regular member in the event of absence or disqualification. The terms for alternates shall be the same as for regular members.
- 3. Ex-Officio: The Board of Selectmen may appoint an ex-officio member to The Commission. Ex-Officio members exercise all the powers of regular members, including voting.
- 4. New members shall file an application with the Town Managers Office and will be contacted for an interview by the Board of Selectmen. All members must be residents of Exeter.
- K3 Unclear what the intent of this is. Consider removal.
- K4 Consider combining the Secretary and Treasurer positions
- K5 Consider keeping this as a way to give some formality to VRAP.



TOWN OF EXETER, NEW HAMPSHIRE

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 •FAX 772-4709 <u>www.exeternh.gov</u>

PUBLIC NOTICE

Exeter Trails Committee Meeting

The Exeter Trails Committee, a subcommittee to the Conservation Commission will meet in the Nowak Room of the Exeter Town offices 10 Front Street, Exeter on Wednesday, March 22nd, 2017 at 7:00 P.M.

Agenda

- 1. Trail Management
 - a. Trail History
 - b. New Trail Approval Process
 - c. Unauthorized Trails
- 2. 2017 Trail Maintenance Needs
 - a. Trail Blazing
 - b. Infrastructure Repair
 - c. Sign Needs
- 3. Maintenance Opportunities
 - a. April 26th PEA Climate Action Day
 - b. Part Time Summer Interns

Jay Gregoire, Chair

Exeter Trail Committee

February 27th, 2017 Exeter Town Office, Exeter Public Library, and Town Departments.



Agenda item for March 2017 ConCom meeting Camp Barry and the Exeter Conservation Commission

1 message

David O'Hearn <dohearn@wtgnh.com>
To: Kristen Murphy <kmurphy@exeternh.gov>

Tue, Feb 21, 2017 at 11:39 AM

Hi Kristen,

Please put the email below and documents attached on the March 2017 agenda. The action item I would like to discuss is how do we pick a camper?

Thank you,

David

From: Barker, Larry [mailto:Larry.Barker@unh.edu] Sent: Tuesday, February 21, 2017 11:31 AM

To: David O'Hearn

Subject: RE: Camp Barry and the Exeter Conservation Commission

Greetings David,

Thanks for your past and continued support of Barry Conservation Camp! I am glad to hear that you've convinced the Exeter Conservation Commission to support BCC too. We do have several openings for the Junior Conservation Officer week 2017 and I would be happy to save you a spot if you'd like. I would need to know whether it's for a boy or a girl.

The attached letter explains our process for sponsors. Anticipate a nearly identical timeline and process for 2018. I have added your email address our list of town conservation commissions. The other address we have for Exeter looks like it goes to the town office and my experience with many towns is that the message does not always reach the conservation commissions.

Again, thanks for your support. Holler with any questions.

Regards,

Larry Barker
Larry Barker
Barry Conservation 4-H Camp,
UNH Cooperative Extension
629A Main Street
Lancaster, NH 03584
(603)788-4961
http://extension.unh.edu/4-H-Youth-Family/Barry-Conservation-4-H-Camp

From: David O'Hearn [mailto:dohearn@wtgnh.com] Sent: Tuesday, February 21, 2017 10:45 AM

To: 4hcamps (UNH) <4hcamps@unh.edu>

Subject: Camp Barry and the Exeter Conservation Commission

Hello UNH Extension,

My name is David O'Hearn and I am an Exeter Conservation Commission member. Way back in 1976 I was one of 30 teenagers to spend the summer at the then Youth Conservation Corp, now Barry Conservation Camp.

I came up a few years ago for the first weekend of rehabilitating the structures. I wrote a story NH F&G posted on their website.

I am writing to you to let you know I asked Exeter ConCom to sponsor a camper. The idea was well received. We noted that the classes are mostly full. So we would like to inquire about signing a camper up for 2018.

Can you please give me the timeline for the 2018 camping season so we can plan our recruiting?

Thank you,

David O'Hearn

Exeter, NH ConCom

603-770-3905

dohearn@wtgnh.com

2 attachments



BCC flyer2017 draft2.pdf 177K

COÖS COUNTY

629A Main Street Lancaster, NH 03584 (603)788-4961 FAX: (603)788-3629 http://ceinfo.unh.edu



Barry Conservation 4-H Camp
Where the Learning Lasts a Lifetime

88



November 17, 2016

Barry Conservation 4-H Camp Sponsors

Greetings,

Thank you very much for your previous support of Barry Conservation 4-H Camp! The 2016 season was absolutely tremendous and we're now gearing up for 2017. One of the challenges we're facing is dramatically increasing demand for Barry Camp. Every season, camp fills earlier and earlier. This year, we plan to go live with our registration on January 20, 2017. However, we want to provide an opportunity for sponsors to reserve spots now. Here's the plan:

- Contact us between now and January 15 to save your spot(s). We need to know both the session <u>and</u> the gender of the camper(s) you'll be sponsoring.
- The camper(s) must be named <u>and</u> registered no later than April 1.
- Payment must be received by June 1.

The reason we need both the session and gender is because some sessions will likely fill within days of January 20. Because of housing at camp, we need to know how many cabins will be needed for both girls and boys. We can't leave an entire cabin unreserved on the chance that a sponsor will be sending a girl or a boy - we need to know. If it helps in your planning, the gender ratio at camp is usually about 70% boys and 30% girls.

If you are unable to name your camper April 1, then we will fill the slot from campers on the waiting list.

We're happy to say that the rates will remain unchanged for 2017 - \$495 for a full week, \$200 for Mini Camp and \$305 for Junior CO week. You can learn more about the dates and weekly themes by viewing the attached flyer.

We hope that you'll consider sponsoring a camper(s) this year. Barry Camp is a very special place. There is a little magic there and sending a child to summer camp can - and often does - change lives for the better!

As always, give me a holler it you have any questions.

Thanks for your support,

Larry Barker

Barry Conservation 4-H Camp Administrator

enclosure

Barry Conservation 4-H Camp is great for kids who love the outdoors, enjoy hands-on learning in environmental and conservation programs and can benefit from participating in a small camp. Our staff takes pride in creating a special community where kids can discover their individual strengths. Each week has a theme, but also includes a generous complement of traditional camp activities such as swimming, hiking, campfire, canoeing, skits, fishing, archery, and more. Join us and make new friends as you unplug and enjoy the outdoors!

Barry Conservation Camp is operated by the UNH Cooperative
Extension 4-H Program in cooperation with the N.H. Fish and Game
Department. Located in the scenic White Mountain National Forest,
Barry Conservation Camp provides a small close-knit community for its

40 campers and 11 staff. Small, cozy cabins house 7 campers and a counselor. Campers are grouped by age and gender. There are new and modern central toilets, shower facilities and a beautiful dining hall complete with a great kitchen which produces legendary meals.

Learn more about Barry Conservation 4-H Camp by visiting our website. Be sure to check out the slide shows to get a glimpse of the setting and of the fun and magical atmosphere at camp. We hope that you will consider giving Barry Conservation 4-H Camp a try! http://extension.unh.edu/4-H-Youth-Family/Barry-Conservation-4-H-Camp

4-H Shooting Sports June 25 – 30 Ages 10-16 \$495 Activity Scale 2 Join us for a week centered on the NH 4-H Shooting Sports program. Certified instructors will help youth learn marksmanship, the safe and responsible use of firearms, and the basic principles of hunting. Previous shooting sports experience is preferred, but not essential.

Mini-Camp July 5 – 7 Ages 8-12 \$200 Activity Scale 1 Mini-Camp is perfect for first-timer campers and younger children! This abbreviated session will include 2 nights and 3 days. Campers will enjoy our caring staff who will introduce them to many fun and exciting camp activities. Learn about nature, try your hand at crafts, explore outdoor games, sing around the campfire...this week has it all.

Fish Camp July 9 - 14 Ages 10-16 \$495 Activity Scale 2 Come along and catch the big one! Novice anglers will learn the basic skills and equipment needed to get started fishing while campers with more experience will work on improving their fishing skills and exploring the finer details of the angling world. Campers will also hike, swim, canoe, create campfire skits and enjoy a host of other great activities.

4-H On The Wild SideJuly 16 - 21
Ages 10 – 16 \$495
Activity Scale 3
Experience nature and reunite with the great outdoors. Paddle a canoe, fillet a fish and cook it over an open fire, sleep under the stars, learn how to observe nature, climb a mountain, swim in a pond, create nature crafts and more. Truly experience the great outdoors. Sounds like fun!

Hunter Education July 23 - 28 Ages 12-16 \$495 Activity Scale 2

Join NH Fish and Game Department Hunter Education staff, volunteer instructors and camp counselors to learn and practice safe, responsible and ethical hunting. If a camper wishes to be eligible for hunter education certification at the end of the week, then some homework must be completed prior to coming to camp.

North Country Adventure July 30 - August 4 Ages 12 - 16 \$495 Activity Scale 3+ Get ready for a fantastic week of exciting outdoor adventure. This week will focus on building your woodcraft skills. Campers will track wildlife, go on a canoe or backpacking adventure, learn about trapping, practice survival skills, navigate with compass and GPS, practice hunting skills, and more. There will be plenty of fishing and shooting sports too.

Junior Conservation Officer August 6 – 9 Ages 14 - 17 \$305 Activity Scale 3++ This session is for older campers who are interested in learning about outdoor careers. New Hampshire Conservation Officers will be at camp all week and will be teaching a host of fun, exciting and interesting sessions. In addition to traditional camp activities, topics will include search and rescue, crime scene investigation, firearms safety, tracking, surveillance, night vision technology, wildlife laws, arrest procedures, K-9 techniques, and much, much more.

*The **Activity Scale** estimates the level of challenging physical activity each week. 1= some, 2=moderate, 3=lots

1/5/17

4hcamps@unh.edu

(603)788-4961

http://extension.unh.edu/4H/4HCamps.htm

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CONSERVATION COMMISSION 2/14/17 DRAFT MINUTES

1. Call to Order:

Vice Chair Bill Campbell, Acting Chair, called meeting to order at 7:01 pm. Introduction of Members present: Todd Piskovitz; Ginny Raub, Clerk; Bill Campbell, Vice Chair; Andrew Koff, Treasurer; Anne Surman, Board of Selectmen's Representative; and David O'Hearn.

Staff present were Kristen Murphy, Natural Resources Planner; and David Pancoast, Recording Secretary. Members of public were present as well.

2. Public comment:

Sheila Roberge of 15 Pickpocket Rd said she has lived in Exeter 45 years. She had an after the fact, important request, and gave the background. She has lived at 15 Pickpocket Rd in the old Kimball house that was built around circa 1730's for many years. About 35 years ago it was all woods behind the house. It was nice property, always open to public hunting and walking. In the early 2000's that property was sold to Riverwoods, which then expanded. In 1980's property was deemed to be a very valuable wildlife area and protection for it was sought. Riverwoods built the "Boulders" In 2008, which was fought at a ZBA meeting, but they lost. In April 2008, the CEO of Riverwoods specifically offered (at ZBA) to protect a portion of the property for conservation. Somehow they lost track of that but in January 2017, Ms. Roberge got a meeting notice from Riverwoods for two buildings, parking and improvements on Timber Lane. She called Kristen Murphy and the Southeast Land Trust. She learned that Riverwoods had bought her neighbor's property to the right of hers and was going to use some of it for a conservation land swap. Ms. Murphy found out that no protective easement was held on it by anyone. Apparently Riverwoods had approached this Conservation Commission about taking it, but the land was fragmented by the new road, so the Commission didn't want it. Rockingham Country Conservation was also not interested. Riverwoods then went to the Southeast Land Trust, which was fairly new then, and it was not ready to take it on at that time, so it also didn't want it. The matter languished with no interested land recipients, and the whole thing got lost in the shuffle so to speak.

Later on, Riverwoods changed its mind and decided not to build on Timber Lane but up behind the Boulders area. It wanted the building connected to its existing

campus, which was understandable to her. But doing that doesn't make sense environmentally, there are two wetlands there. She is very concerned about these revelations. This is a unique property, even though badly compromised. The wetlands mitigation already done by Riverwoods is not good. Dugout areas are filled with pipes and rip-rapped along the road. Riverwoods did put in trails and wood duck habitat, but the heron rookery area of the property was lost. UNH wildlife studies have found threatened yellow-spotted salamanders there. The large wetlands empties into Pennell Pond. There are turkeys, deer, etc., so the habitat is a good one. There is a large system of trails on both sides of Timber Lane. Erratic boulders on the left side of the road remain and local kids love to play on them. There are also four original old stone walls in good shape.

She is here to ask the Commission to revisit/reconsider its prior decision from 2008/2009 and ask Riverwoods if it can still get a protective conservation easement over it. People are out there using trails. It's hard to look at it now with all the snow, but in better weather they could look at it and walk the trails. At the ZBA hearing on it, one member of ZBA opposed the road as it would lead to more developable parcels and further development of it should not occur. Pickpocket Road residents have been very concerned about traffic and the imminent loss of the property she is discussing. It would be great to get an easement on it at least. Development of it is a total disregard for the property's natural beauty. [she passed out pictures for Members' information]. She also thinks that the "Split Rock" should be preserved.

Mr. Campbell said he had become aware that the Town Planner is working with them. The Commission needs to wait until it comes to them. Ms. Raub asked if the area is contiguous. Mr. Campbell said the Commission had thought that another entity (Rockingham County Conservation District) was going to protect it, but they didn't, and Riverwoods never came back to tell the Commission that so it could reconsider its prior decision on it. He said the Commission would consider it.

Dave Saffridge of Pickpocket Woods also spoke, as President of its community well association. They support Ms. Roberge in this. There are 10 homes on a community well there. The well head is 50 years old and close to the lot line and to Split Rock. Its radius of protection is 1000 feet, so that goes up to the maintenance shed in Riverwoods. Concerned about blasting for water and sewer lines. He said they were shocked it wasn't in any Conservation Easement. Community wanted it protected back then, in exchange for the original development. He asked if a land swap now could even work officially. Mr. Campbell said it was never officially under a Conservation Easement, so Riverwoods can still do a land swap on it. Mr.

Saffridge asked what the issue was back then with the Commission not taking it. Mr. Campbell said he recalled that back then the Rockingham Conservation District ("RCD") was supposed to take it and the Commission preferred that since it would not have to take on that additional responsibility at that time. But the Commission never knew that RCD didn't pick up the easement. That makes the land swap possible now.

Ms. Murphy then said she had met with Riverwoods, with the Town Planner Dave Sharples and Doug Eastman, Code Enforcement Officer a week ago. At that meeting, they emphasized that protection of 'X' number of acres was an original requirement of that development approval and had to still occur, but it might not be the same area of protection as originally intended. "The Ridge" is also not in third-party protection, it's self-monitored by Riverwoods. She said it will absolutely be protected as a condition of approval. How it happens will be decided.

Mr. Saffridge asked if that there could still be a land swap on it? Ms. Murphy explained the hierarchy of strength of protection. Riverwoods could still swap it out because right now the original parcels weren't protected. [Mr. Saffridge then showed Members his tablet with plans and parcel locations that had been discussed]. He said that everything not in the original development footprint was to become an easement but didn't.

Mr. Campbell thanked both speakers for their input and said the Commission would look into it with input from the Planner and Ms. Murphy. Ms. Raub asked whose "court the ball is in?" Mr. Campbell said it's officially in Riverwoods' court-since they have to come back for approval compliance before they can move forward with any new plans.

There were no other public comments.

3. Action Items:

a. 104 Brentwood Road: Conditional Use Permit ("CUP") Application. Tax Map 61-23. (Chris Burke)

Chris Burke gave an overview-he has 1.5 acres, the majority of it is currently inaccessible. Wants a barn out back. He would like to fill in a portion of his lot just for rear access and cut trees and grind the stumps. Mostly the area is in wetlands buffer zone. He said the buffer zone comes right up to the house. He had done some cutting, not knowing about the buffer zone, and a skidder was used in that timbering operation.

Luke Hurley, Gold Environmental, is Mr. Burke's consultant on this matter. He said he flagged two wetlands: smaller isolated wetlands in front of the lot, and larger to the rear. He did that work before the snow came. They hold water. The buffer zone comes off the larger wetlands to rear. The cutting and skidding operation hasn't caused any damage to wetlands, only buffer area. He added that Mr. Burke is intending to level the area out, not really fill it. It's so rocky it's not usable for anything.

Logging machines tore up the buffer. If it could be leveled out for access, Mr. Burke would do plantings back there to mitigate machine damage. Ms. Raub suggested could reduce it to less filling. If they remove boulders, wouldn't it impact the ground? She suggested they leave the boulders not in the actual accessway. Mr. Hurley said larger erratic boulders could be in the way. Ms. Raub said a 20 ft wide accessway is enough, they could leave the rest natural. Mr. Hurley said it's a boulder field back there. They need to move some of the larger ones for having a usable area.

After some discussion, Mr. Burke said poorly drained soils area there are about 2,000 sq ft. There would be about 10,000 sq ft of impact for proposed buffer work. Commissioner Alyson Eberhardt had emailed Mr. Campbell that this project scope was unclear. There was no comment in the submission on the functions of the two wetlands as to their importance. Mr. Burke said he would use a bobcat only, not an excavator, for boulder removal and leave as many as he could leave. He has a trailer and dump truck for his business that he would put back there. He said he only needs about 13 feet width for the accessway. There are a couple of large boulders near the house that he would want to move. Mr. Koff asked where the barn would be. Mr. Burke said outside the buffer zone as would the new garden area be outside of it. There are no horses going into the barn and no animals planned for it. He would not loam and seed the whole disturbed buffer area-this discussion made that clear.

Mr. Campbell asked Commission how it felt about it. He suggested the Commission recommend the Planning Board approve the CUP to allow a 15 ft wide accessway, loamed and seeded but only if the rest of the area is not loamed or seeded and is left natural. Ms. Surman thought it was a good compromise. Mr. Piskovitz said the submitted plan won't show it that way. Mr. Burke said he'd revise the drawing for the Planning Board Mr. Koff said it would be noted in their decision about the plan revision. It was decided that the accessway will be gravel base with a loamed and seeded surface. Discussion on related terms was held. Grinding stumps to grade was also approved. Recommendation is to allow a 15 ft gravel driveway (with loam and seed

surface) from the existing driveway to access back land. Remaining part of buffer zone to remain natural with allowance for grinding stumps. Driveway to be as close as practical to the brick path. Owner will plant native species in the remaining disturbed buffer zone area. The organic garden should also be approved. Ms. Raub and Ms. Murphy will suggest plantings to Mr. Burke. The new brick walkway as proposed should also be approved.

Ms. Surman moved to recommend/support approval by the Planning Board of the submitted CUP application with the conditions just stated, Ms. Raub seconded, and it was unanimously approved.

b. Snowshoe Hullabaloo application. [Applicant not present].

Mr. Campbell said this event has been approved every year so he excused the applicant from attending. Ms. Murphy said a police detail will be present. Mr. Piskovitz moved approval, Mr. Koff seconded, discussion on the time of the event was held and it was unanimously approved.

c. Barry Conservation Camp Youth Sponsorship.

Mr. O'Hearn reported that the Camp is completely filled this year already. Mr. Campbell said the Commission should factor this into its budget for next year. Mr. O'Hearn gave some background. The original camp went into disuse. It was rebuilt it a few years back. There was discussion on activities and 2018 planning on this including how the Commission chooses which activity(ies) to sponsor and whom to designate to go. Mr. Piskovitz suggested an essay contest. Ms. Raub suggested if they sponsored one person, that person could do something for the Commission in return. Mr. O'Hearn said he had to report to the Commission on his experience there as a youth. Mr. Campbell asked if the Commission was interested in sponsoring this? Discussion on Junior Conservation Officers and business contributions was held. Mr. Campbell suggested that someone who can't otherwise afford it would be a good choice for the Commission to sponsor to attend. Mr. O'Hearn said Big Brother/Big Sister would be good for that too. Ms. Surman said it's a good idea and she supports it and thinks it should go into the budget. This is a good educational purpose. Ask for \$500 in the budget and do an essay contest with the winner tied with financial need. Mr. Koff said it's a good idea-just need to figure out funding. Mr. O'Hearn said the applications for 2017 have to be submitted by 6/1/2017 but it's already been sold out for this year. Discussion was held about some possible way the Commission could reserve a spot for its designee for 2018. Mr. O'Hearn will look into the matter further and report back.

d. Treasurer's End-of-Year Report for 2016:

Mr. Koff reported the Commission used its budget in full. Ms. Murphy reported that was the first time they had used it all. Mr. Koff said they overspent slightly (\$121 total)-and that shortfall needs to be balanced somehow. The same budget will be available next year in total if it is approved at the upcoming Town Meeting.

Ms. Raub moved the Commission accept the year-end report, Ms. Surman seconded and the approval was unanimous.

4. Committee Reports:

a. Property Management:

Ms. Murphy said that Steve Walker from the LCIP from the State walked some Commission properties recently. He may do more and Mr. Campbell would like to be notified to possibly meet him and go out with him.

b. Trails:

Mr. Koff reported they are organizing a Trails Committee meeting but need to discuss the next committee meeting date: it should be after the Town meeting. They can do 3/21 or 3/22, or another date, perhaps earlier. Several Members couldn't do 3/14, the Commission's normal meeting date in March. There was discussion on moving the regular meeting date up or back. Ms. Murphy suggested the Commission could meet on 3/21 in the Wheelwright Room. If too many folks, the Commission may need to move to Library or pick another date. The Trails meeting would then be the next night (3/22). Henderson Swasey trails need to be discussed. Ms. Murphy asked if the Commission could have a subgroup discussion beforehand to get things on track. Mr. O'Hearn, Ms. Surman, and Mr. Koff will discuss an agenda, Mr. Campbell will be kept in the loop of information but there will be no quorum for the subgroup.

Mr. O'Hearn did walk some trails a few weeks ago at Dolloff and Little River. There is an old canoe at headwaters of Little River. Cross mill site and go straight, north toward Rte 101, on other side. Bridge still there and still usable, but no trail to it, just a hunting trail there. Discussion on this area was held.

c. Outreach:

Snowshoe race: Mr. Campbell suggested expand parking from existing area toward barn and park cars there in field. Ms. Raub said explore with DPW. Ms. Murphy said check deed too. Ms. Raub suggested to use land from the parking lot down to trail. Farmer doesn't mow all of it. There's a wetlands near the barn. Should have taken the offer to plow the parking area. Couple of ruts in there, they sunk in a bit. Mr. Anderson said 70 people were ready to go out for that event. Mr. Campbell concerned about night time event, not enough folks to help participants cross the road. The Commission had created a following, need to accommodate the users. Ms. Murphy said that Public Works has worked on that lot since its acquisition and if they felt it was too soft, shouldn't question it. Mr. O'Hearn: If DPW wheels had spun, then would have known. Discussion was held on needing it plowed for this year. Ms. Murphy said can't impact the agricultural use. Need to have a plan for that number of folks. Mr. O'Hearn said there was no snow the Wednesday before the event. Ms. Raub said should plow the parking lot now and get it going. Need enough folks to handle parking and such. Ms. Raub said Saturday 3/4 or daytime Sunday 3/5 would work. Mr. Koff said could get help beyond the Commission. The weekend of 3/11 is not good. Discussion on all this and reservations for spots for attendance was held. Brown Paper tickets were used. Southeast Land Trust event was limited parking. Consensus was for March 4th, Saturday night.

5. Approval of Minutes for 1/10/17:

After discussion on corrections, additions and changes, Ms. Surman moved to approve the minutes of 1/10/17 as amended, Mr. O'Hearn seconded and the vote for approval was unanimous.

6. Correspondence:

Henderson Swasey is part of a tree farm plan and got letter acknowledging the timber project work. Mr. O'Hearn asked about a sign for tree farm. Mr. Campbell said there should be a tree farm sign.

7. Other Business:

Revision of the Bylaws started by Ms. Murphy and Ms. Raub, would like to get a draft for March meeting. Discussion on edits and not a lot of major revision.

8. Next Meeting: is 3/21/17 with submission date of 3/10/17, location to be decided.

9. Adjournment:

There being no further business before the Commission, Mr. Koff moved to adjourn, Ms. Raub seconded and the vote was unanimously approved. Vice Chair Campbell adjourned the session at 8:50 pm.

Respectfully submitted by David Pancoast, Recording Secretary.

These minutes are subject to possible correction/revision at a subsequent Exeter Conservation Commission meeting

Exeter Conservation Commission

February 14, 2017

Site Walk

On Feb 14th, at 9:00 am the Conservation Commission conducted a site walk to review a Wetlands Conservation Overlay District Conditional Use Permit application for 104 Brentwood Road.

Members in attendance included Bill Campbell, Ginny Raub, Anne Surman. Also in attendance was Kristen Murphy (Exeter's Natural Resource Planner) and applicant Chris Burke (owner).

The prior day's heavy snowfall made seeing ground cover conditions difficult, however the owner provided Commission members with an overview of the project, was able to use trees and boulders to indicate the extent of wetlands and buffer, and Commission members had an opportunity to ask questions. Mr. Burke described the intent was the "clean up" the area adjacent to the road by grinding out the stumps, grading to a smoother surface, adding loam and seeding the area. In addition, the main purpose goal of providing periodic access to the upland area behind his house for a garden and a future barn. He clarified that both the barn and garden would be located outside of the buffer area and that he had no intention to fertilize the area within the buffer area.

The walk concluded at 9:25 am.

Kristen Murphy