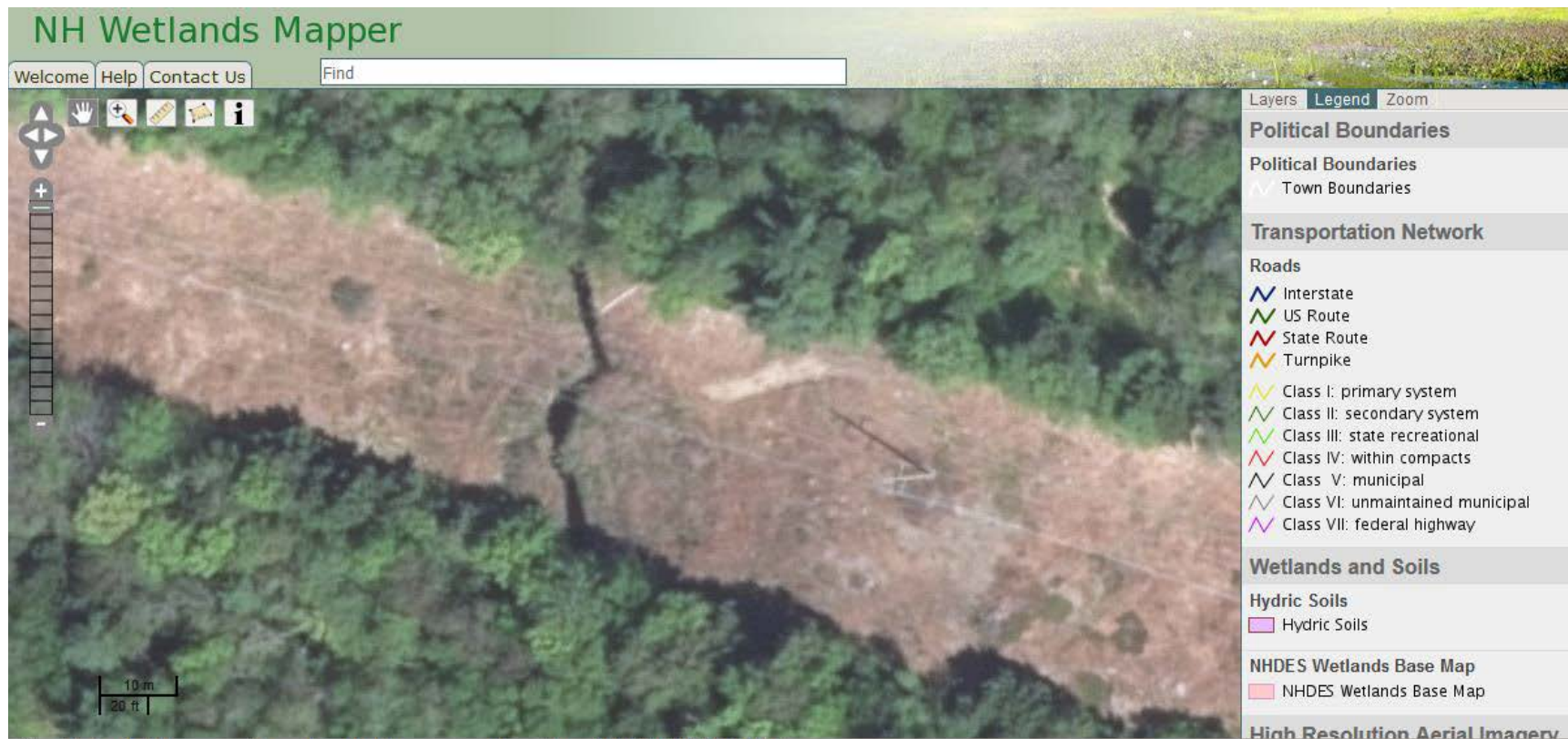


NPT Track 2 Supplemental Q 9, EXHIBIT 10

NWI for NPT ROW Hartford Brook

Map of Hartford Brook crossing the ROW. The eroded area is plainly visible and none of the area shows as hydric soil or NWI in GRANIT, though the wet area can be detected as darker than the area around it.



Frank Mitchell, Deerfield NH

Background, February 2017

- Emeritus UNH Extension Professor and Specialist, Land and Water Conservation
- Principal Author (1 of 3), *Method for Inventorying and Evaluating Wetlands in New Hampshire*
- Co-creator of the *New Hampshire Wetlands Mapper* (online mapping tool that provides data for use with the *Method for Inventorying and Evaluating Freshwater Wetlands in New Hampshire*)
- Member, Buffers Working Group, which produced the publication, *Buffers for Wetlands and Surface Waters, A Guidebook for New Hampshire Municipalities*
- Author, *Shoreland Buffers: Protecting Water Quality and Biodiversity*, in *Handbook of Water Sensitive Planning and Design*, CRC/Lewis Publishers.
- Co-Author, First edition of *Good Forestry in the Granite State: Recommended Voluntary Forest Management Practices for New Hampshire*.
- Author, *Vegetated Buffers for New Hampshire: Guidance for Municipalities*, in *Wetland Journal*
- Co-Author, first edition of *Best Management Practices for Erosion Control on Timber Harvesting Operations in New Hampshire*

NPT Track 2 Supplemental Q 9, EXHIBIT 12

NH Certified Wetlands Scientist Mark West on Wetland Restoration

From Mark West, NH Certified Wetland Scientist

12 April 2017

Utility Right of Way Wetland Mitigation by Restoration:

The project proposes to restore all of the temporary wetland impacts. While generic best management practices (BMPs) and restoration practices have been approved by NHDES, wetland specific details of the restoration have not been specified.

In my experience, NHDES Wetlands Bureau typically requires more detailed planning that describes:

- Wetland specific needs for restoration
- Sequencing of work
- Planting recommendations
- Monitor duties, timetable, and measures of success
- Required reporting

Baroff & Craven, Professional Association

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ppanciocco@bclawnh.com

October 31, 2016

VIA FIRST CLASS MAIL & EMAIL

Town of Deerfield Planning Board
c/o Gerald Coogan, Town Planner
8 Raymond Road
P.O. Box 159
Deerfield, NH 03037

RE: Open Space Subdivision Brown's Mill Subdivision

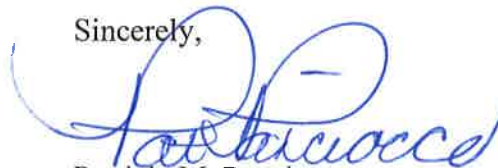
Dear Mr. Coogan:

Enclosed please find a copy of the June 29, 2016 letter from New Hampshire Fish and Game Department ("Fish & Game") to the Deerfield Planning Board ("Board"). You may recall, the first condition imposed by the Board on the plan referenced above was the restoration of proposed Lot 45-13 to the standards of RSA 155-E including plan notes, a restoration plan and a bond for the cost of that work being done, prior to the plan being signed.

In light of the recommendations appearing in the attached Fish & Game letter, and because those recommendations would require revisions to the final plans, this letter is requesting a proposed modification of this condition be placed on the Board's November 9, 2016 agenda for further discussion.

Should there be any questions or concerns regarding this matter, feel free to let me know.

Sincerely,



Patricia M. Panciocco

Cc: Client, George Chadwick, Steve Keach



New Hampshire Fish and Game Department

11 Hazen Drive, Concord, NH 03301-6500
Headquarters: (603) 271-3421
Web site: www.WildNH.com

TDD Access: Relay NH 1-800-735-2964
FAX (603) 271-1438
E-mail: info@wildlife.nh.gov

Glenn Normandeau
Executive Director

June 29, 2016

Pete Schibbelhute, Chair
Town of Deerfield Planning Board
8 Raymond Road
Deerfield, NH 03037

Re: Browns Mill Subdivision – Mt. Delight Road

Dear Mr. Schibblehute,

Recently, the Deerfield Planning Board requested input from NH Fish & Game (NHFG) on the best means to reclaim the gravel pit on BMI Realty property off of Mount Delight Rd. This pit nearly abuts NHFG's 200-acre Corey Wildlife Management Area. Department staff visited the site a few weeks ago. Below are our recommendations.

It is evident that the goal of the owner, site designer, Planning Board, Board of Selectmen, and NHFG is to return the area to an attractive, ecologically healthy area that is an asset to the residents, the Town, and the State. NHFG staff were impressed with the potential to relatively easily manage the area to maintain habitat for several species of conservation concern, as well as other game and non-game species.

To that end, NHFG respectfully offers the following recommendations for reclamation work:

- **Trash and Debris:** Remove all man made trash and debris on site, including: old tires, plastic fencing, netting, and erosion cloth; old asphalt piles, concrete and stone fence sections and old sonna tubes, etc.
- **Cordwood, Logs, Slash, and Other Woody Debris:** Remove or burn on site.
- **Loam and Boulder Stockpiles:** Leave undisturbed, except for those boulders needed to and line the NHFF right of way. Boulder piles provide excellent wildlife habitat for many species including potential denning areas for fox and black racers, a species of conservation concern. Please DO NOT spread loam on the area. If desired, the one active loam stockpile on the east side near the stone wall debris could be removed for use outside the open space area.
- **Grading and Seeding:** Minimize site disturbance by minimizing grading. Do not disturb the filled area at the northeasterly end of the disturbed open space area (which drops off to natural grade). Sandy and gravelly soils, like those found in the pit, slow plant succession, keeping the area in an open condition much longer. The grass and shrub community that will slowly develop will remain for quite some time, providing excellent nesting opportunities for several species of turtles

including state-endangered Blanding's turtle. Turkeys may use the reclaimed pit as a dusting area. It could also be used as a woodcock singing ground. As shrubs and trees eventually colonize the area, you can expect to see songbirds like prairie warbler and indigo bunting moving in. Some areas of the pit could be seeded with a native mix of big bluestem, little bluestem, Canada wildrye, and indiangrass. Little bluestem is a warm season, drought tolerant grass growing to 3 feet. Big bluestem and indian grass are warm season grasses that grow taller, have deeper roots and will help diversify the plant community. Canada wildrye, growing to 2-3 feet, is a cool season grass used for early establishment of a site before warm season grasses are established. If desired, NHFG can provide additional seeding recommendations.

- Gravel Bank: On the west side of the gravel pit is a bank that could eventually harbor bank swallows (figure 1). Bank swallows are a species of conservation concern because their populations have experienced significant declines in recent decades. As their name suggests, they excavate their nests in sand and gravel banks. These banks are typically associated with rivers, but they will also use man-made banks such as the one in the gravel pit. Banks need to have a vertical face. Their height requirements are variable, but based on the literature it appears that banks should be at least 4.5 feet high (figure 2). From the existing gravel bank we suggest creating at least two terraced banks that are at least 4.5 foot high.



Figure 1. Gravel bank located on the west side of the BMI Realty gravel pit.

a) Vertical face - High probability of being colonised

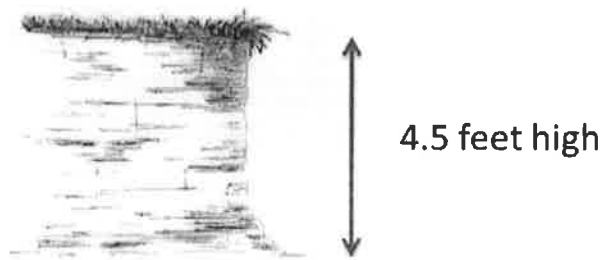


Figure 2. Diagram showing minimum suggested height of gravel or sand banks if to be used by bank swallows.

- Long Term Management Strategy: NHFG understands that BMI Realty and the Planning Board are working on language for the Conservation Easement on the resident owned open space, to be held by the Town. As mentioned above, NHFG staff were impressed with the potential to relatively easily manage the area to maintain habitat for species of conservation concern. To support that goal, NHFG provides the following language for consideration to use in that easement:

Easement Purposes

The protection of important wildlife habitat for upland and wetland species and furtherance of the goals of the New Hampshire Wildlife Action Plan including but not limited to protecting and conserving critical habitats, and threatened and endangered animals or other species at risk identified in the New Hampshire Wildlife Action Plan; and to ensure the protection and sound management of natural resources including the protection of wildlife bio-diversity and habitat preservation.

Affirmative Rights of the Grantee [in this case the town of Deerfield]

The Grantee has the right to perform "wildlife habitat management" which shall include, but not be limited to, alteration of vegetation and soil and the placement of structures to provide habitat for a wide range of wildlife species.

NHFG appreciates the opportunity to contribute this input with the aim of maximizing the potential of the site to provide critical habitat for several species of wildlife. We are ready to provide additional technical assistance, or to attend future meetings if desired. If additional assistance is desired, please feel free to contact Jim Oehler, State Lands Habitat Biologist (james.oehler@wildlife.nh.gov; 603-271-0453) or Betsey McNaughten, Land Agent (Elizabeth.McNaughten@wildlife.nh.gov; 603-271-6640).

Thank you for your time and consideration.

Sincerely,

James D. Oehler
State Lands Habitat Biologist

Cc: Attorney Patricia M. Panciocco, Senior Attorney Baroff P.A.
George Chadwick, Bedford Design Consultants
Chris Aslin, Assistant Attorney General

NPT Track 2 Supplemental Q 12, EXHIBIT 14
DCC Meeting Minute Excerpts re: Browns Mills Reclamation

DCC Minutes 12/5/2016 Brown's Mill:

Kate Hartnett (who is also Vice Chair on the Planning Board) gave an **update on the status of the open space subdivision at the end of Brown's Mill Rd. off Mt. Delight Rd.** Originally slated for multiple house lots, the Planning Board reached an agreement with the owner to create an open space subdivision on the ~43 acres (of which ~29 acres will be conserved and devoted to open space), and to limit the number of lots to five. Previous agreements with *NH Fish and Game* to provide parking for, and access to, the Corey Wildlife Management Area have been renegotiated as well. Parking space will be provided and walk-in access to Corey will initiate at the cul-de-sac. This arrangement is particularly favorable since additionally it will **provide continuous access beyond Corey WMA to the Wells and Boisvert Town Forests.**

Ms. Hartnett is working with Fish and Game and the subdivision owner's attorney on the wording and provisions to be contained in the conservation easement deed for the open space land beyond the cul-de-sac to be conveyed to the Town. Ms. Hartnett asked DCC members for **their input regarding deed provisions** for monitoring of the easement, long term management process, and education/engagement of the future owners of the five lots. Given the possible lack of experience and/or willingness on the part of the future residents, it was concluded that **DCC should coordinate the annual monitoring, but should attempt to involve the eventual owners as much as possible.** Chair Frey wondered if there was a way to **enforce the absolute need for the current subdivision owner to fully communicate the restrictions of the easement to potential buyers, prior to any sale, in order to dispel any misconceptions about the use of the open space land.** Wes Golomb questioned whether there were means by which to protect against poor performance, and Ms. Hartnett explained the **possible requirement of a performance bond.**

Ms. Hartnett talked about plans Fish and Game has for planting warm season grasses and allowing for natural succession, as well as terracing the reclaimed gravel pit bank as habitat for bank swallows. The site had previously been used for dumping, and clean-up of the area is currently underway, including removal of an abandoned truck, tires and debris.

DCC Minutes 2/13/2017 Brown's Mill:

Kate Hartnett reported on the **progress being made in conserving the open space associated with the Brown's Mill subdivision on Mt. Delight Rd.** Ms. Hartnett reported she is working with NH Fish & Game and the developer's attorney, and reported they are close to completing the easement deed, which is an adaptation of DCC's town forest easement template. The developer is paying for the associated legal costs.

The soon-to-be preserved **area is adjacent to the Corey Wildlife Management Area**, and when completed, the land will be managed under a conservation easement held by the Town of Deerfield, as resident-owned open space, including a parking area and boulder-lined access to Corey WMA. One exciting aspect of this project is that **an old gravel pit, consisting of dry, exposed, well drained soils, will be reclaimed in a unique manner that will create a habitat for bank swallows, turtles/reptiles and other small creatures** in keeping with the goals of the NH Wildlife Action Plan. **Easement Purposes** would include "... protecting and conserving critical habitats, and threatened and endangered animals or other at-risk species and to ensure the protection and sound management of natural resources including the protection of wildlife bio-diversity and habitat preservation."

From Letter to Deerfield Planning Board from NH Fish & Game , 29 June 2016

NPT Track 2 Supplemental Q 12, EXHIBIT 15

Considerations for Wetland Permit Application, 93 Coffeetown Rd, Deerfield, NH NHDES #: 2016-01285 Prepared by Dfld Cons Comm (DCC), 16 Jun 16

SUMMARY: DCC has reviewed the site context, aerial photos, wetland and topo maps, and provided an assessment of specific wetland functions and values. DCC members respectfully suggest that there are alternatives to the proposed project that would avoid or minimize any wetland impact. We are available to meet with NHDES staff or the owner to review those options.

- 1) **BACKGROUND:** The DCC received the Minimum Impact Development Application at the 9 May 2016 meeting. Kate Hartnett of the Deerfield Conservation Commission and volunteer Frank Mitchell briefly visited the site on 13 May 2016 but the landowner was unavailable, so they did not visit the wetland itself. When contacted later the owner stated he did not want anyone visiting the wetland relative to the application.
- 2) **WETLAND FUNCTIONS AND VALUES SUMMARY:** In the absence of landowner permission to observe the wetland, the summary of the wetland's functions and values below was prepared by Frank Mitchell, based on GRANIT GIS data as presented by the NH Wetlands Mapper, <http://nhwetlandsmapper.unh.edu>:

Wetland size: Approx. 1 acre or more for this wetland unit (see "Soils and National Wetlands Inventory (NWI)" notes below). However, the hydric soils data indicate the wetland is connected to and therefore part of, to a much larger wetland system (greater than 100 acres). The NWI data does not show this, but NWI can miss areas of forested wetlands.

Watershed size: Approx. 22 acres (for the 1 acre wetland unit)

Hydric soil: 495 - Ossipee mucky peat, 2.4 acres (connects with additional hydric soil, 97 - Greenwood and Ossipee soils, ponded, in adjacent larger wetland section)

NWI code: Deciduous forested wetland, PFO1E, 0.6 acres (There may be other wetland vegetation classes present but not mapped by NWI due to their smaller size units, forested condition and changes in the wetland in the time since the NWI data were produced.)

Summary of wetland functions and values, based on *the Method for Inventorying and Evaluating Freshwater Wetlands in NH, 2015*:

- a) **SETTING:** As shown in the infrared and wetland maps, the property appears to be in the supporting landscape of the protected Great Brook Corridor. That project runs more than 3 miles, from Perry to Coffeetown Roads, crossing seven landowner properties. The Corridor was created with Land Conservation Investment Program (LCIP) and other funding, 1987-92.
- b) **ECOLOGY:** The ecological integrity of the wetland, or its degree of "naturalness," is presently compromised by Coffeetown Rd, the electric utility line, cleared land and structures on the property of the applicant and adjacent properties (4 residences, driveways, and accessory buildings). It is unclear without visiting the site whether the wetland has been subject to past fill or excavation. The majority of the wetland edge is currently undisturbed and there are no known water quality impairments in the area.

NPT Track 2 Supplemental Q 12, EXHIBIT 15

Considerations for Wetland Permit Application, 93 Coffeetown Rd, Deerfield, NH NHDES #: 2016-01285 Prepared by Dfld Cons Comm (DCC), 16 Jun 16

- c) **WILDLIFE AND CONNECTIVITY:** The wetland's wildlife values include its apparent connectivity to a large (>100 acres) wetland system that drains into two watersheds (HUC 12: Pawtuckaway Pond and Bean River Watersheds). The wetland is in an area that is designated as Highest Ranked Habitat in the Region in the 2015 NH Wildlife Action Plan map data. The wetland has a high degree of connectivity to nearby wetland and upland habitats, with extensive conserved lands nearby. It is also potential habitat for the **Blanding's turtle, which has been documented nearby.**
 - d) **WATER QUALITY:** There are currently no known water quality impairments in the area.
 - e) **AQUATIC HABITAT:** There are no known barriers to aquatic life movement other than possibly those noted above (Coffeetown Rd., driveways, etc.).
 - f) **OTHER:** Other values and functions provided by this wetland include its ability to support floodwater storage, trap sediments and nutrients, and its scenic value to private landowners who abut it.
- 3) **ADDITIONAL PROPOSED PROJECT IMPACT:** The impact of the proposed filling would likely extend beyond the fill itself to affect the separated upstream (easterly) portion of the wetland, approximately 0.1 - 0.15 acres (4,350 – 6,500 sq. ft.) including the fill. A 15" culvert would not substitute for wildlife connectivity that the current wetland width in the range of 100 ft. or more provides. Both sides of a filled crossing would be more vulnerable to sedimentation and invasive plant species than the current condition.
- 4) **PROJECT ALTERNATIVES TO MINIMIZE IMPACTS:** This project proposes to construct another accessory structure (24 ft x 36 ft), in addition to the primary use of the dwelling, and an existing storage structure. It appears that land has been cleared near the edge of the existing wetland in the area of the proposed crossing (visible in the 2015 aerial data, but not 2010). The absence of any vegetated buffer up to the wetland edge poses a sedimentation risk to the wetland.

DCC questions the application statements for ENV-WT 302.01 and 302.03 that the impact is necessary and unavoidable. From maps and aerials, it appears there may be sufficient area toward the front of the property, where it seems there is area sufficient both for the structure and maneuvering room to access that storage. Doing so would eliminate the proposed 3,000 sq. ft of direct and another 5,000 +/- sq. ft of indirect impact, and the filling of approximately 90 LF of wetland, functionally isolating all upstream wetland, adjacent to a major protected conservation corridor.

(DCC recognizes that the utility has an easement that prevents any use, including a gravel access road that would be used only very part time, and only by the property owner. So we are recommending consideration of the alternate location near the front of the property, rather than to pursue use of the existing track to access the rear of the property at this time. If utility permission were available, that clearly would be another viable option that truly would minimize wetland impact.)