Joseph Garruba 28 Winchester Dr. Hollis, NH 03049 June 18, 2019

# Members of the planning board:

Doug Cleveland Jeff Peters Rick Hardy

Matt Hartnett

Cathy Hoffman

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**Dave Petry** 

**Chet Rodgers** 

Dan Turcott

## RE: Ponds on Lot 10-33-1

The planning board is in receipt of a letter from the applicant of project 2019:05 regarding the On-Site Soil / Pond Evaluation conducted on lot 10-33-1. This letter is a key part of the applicant's claim that there are no wetlands to be regulated on the site. I have reviewed the letter and I find several logical errors in the arguments the applicant has put forth. I have included an image of the first page of the letter as a means to eliminate possible confusion regarding which letter I am referring to. Since it is not my intent to take the applicant's language out of context, I suggest that the planning board members review the entire official copy on file at town hall.

Surveying + Engineering Land Planning + Septic Designs

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May 13, 2019

Richard Raisanen Raisanen Leasing Corp. PO Box 748 Nashua NH 03061

RE: On-Site Soil / Pond Evaluation Tax Map 10, Lot 33-1 Old Runnells Bridge Road Hollis, NH 03049

Dear Mr. Raisanen,

Fieldstone Land Consultants, PLLC conducted a wetland and soil evaluation on site including the soil profile logging which included 24 test pits advanced with an excavator to an average depth of 10 to 12 feet below existing grade. Soil testing confirmed the NRCS Soil Conservation Service County Soil Survey of Windsor and Hinckley loamy sands, 3-8% slopes which are excessively drained soils consisting of sands and gravels.

Overall the test pits indicated that the upper 1-2 feet of the soil profile have been manipulated in the past for the apparent purposes of the historical use as a golf course. Surface alterations consisted of areas filled / raised and excavated / lowered to create more challenging terrain for the former golf course. Historical evidence and testimony from the property owner indicates that the property was utilized as a chicken farm prior to conversion to a golf course.

Site characteristics observed and historical aerial photographs also indicated that the existing southerly irrigation pond on site was constructed around 1995-1998 and connected by drainage and irrigation lines to the existing northern irrigation pond. Aerial photos and site characteristics support the evaluation that both ponds have been man-made/altered and manipulated over time including maintenance dredging, expansion and re-grading. To the best of our knowledge the ponds on site were constructed for the purposes of creating an agricultural pond and / or irrigation ponds on the property and have been routinely maintained over the years to maintain their usefulness. Wetland areas around the ponds are limited to the edge of the ponds and there are no adjacent wetland areas. The constructed ponds are fed by intercepting groundwater and the on-site irrigation well and do not intercept and/or affect any adjacent wetland system.

Phone conversations on May 13, 2019 with NHDES Wetland Bureau personnel Jeffrey Blecharczyk, Compliance Supervisor and Jessica R. Bouchard, Wetland Specialist confirmed that there were a number of conditions outlined below that are not considered jurisdictional wetlands and would then be exempt from

1835.00

The applicant states that "aerial photos and site characteristics" support the evaluation that both ponds have been manmade. Although one of the ponds was man-made, this fact is not significant to the determination as to whether they classify as wetland under the Hollis Zoning Ordinance. The applicant is confusing the New Hampshire State determination of a jurisdictional wetland with the definition of a wetland per the Hollis zoning ordinance. As you know the state regulations are a minimum requirement, but our Hollis Zoning Ordinance imposes stricter regulations in many areas. In the case of determination of weather an area of wetland is protected, the Hollis regulation includes its own definitions of surface water and wetland which must be used when considering the language of the ordinance. The applicant has quoted language from RSA 482-A:3 IV(b), this **state** statute simply allows for the maintenance and repair of certain exempt wetland features, it does not provide an exemption from the Hollis Zoning Ordinance. The town has written its definition of wetland clearly and the state RSA quoted by Mr. Guida has no bearing on the definition in our ordinance.

<u>WETLAND:</u> A wetland is an area that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal conditions, does support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include, but are not limited to, swamps, marshes, bogs, and similar areas. For the purpose of determining buffer zones for site plan and subdivision review, wetland boundaries shall be delineated by either a certified soil scientist or a professional wetland scientist according to the Corps of Engineers Wetlands Delineation Manual, 1987, and the Regional Field Indicators for Identifying Hydric Soils in New England, 1998.

The definition of wetland in the Hollis Zoning Ordinance is any area that is saturated by surface or ground water and supports vegetation adapted for life in saturated soil. The ordinance continues to explain how to delineate the edge of a wetland and determine its buffer.

In consideration of the important agricultural enterprises of Hollis, our ordinance exempts manmade agricultural/**irrigation** ponds from the 100 foot buffer requirements and regulations. This exemption does not change the fact that they are wetlands, it simply removes the 100 foot buffer requirement. This exemption does not redefine such ponds as if they are dry land.

Sec XI,C,3D

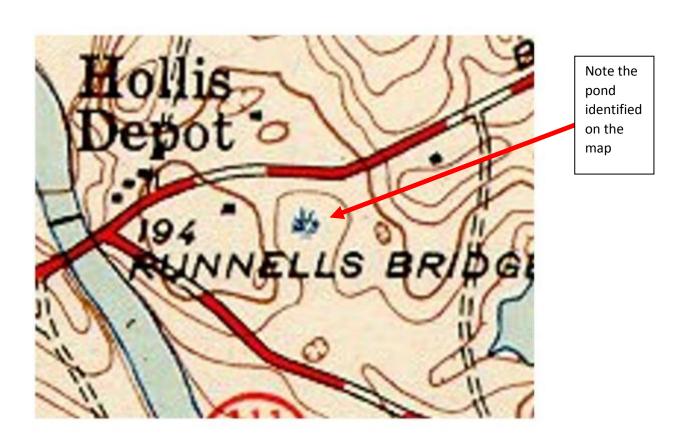
- d. The 100 foot buffer regulations and restrictions set forth in this Ordinance shall not apply to the following wetland areas or their buffer zones:
  - (i) manmade ditches and swales
  - (ii) sedimentation/detention basins or ponds
  - (iii) manmade agricultural/irrigation ponds and swales
  - (iv) fire ponds
  - (v) a septage or manure lagoon
  - (vi) silage pits
  - a wetland or surface water of 3,000 square feet or less not associated with any other wetland, drainage-way, or surface water which does not meet the definition of a bog or vernal pool

Not only is the exemption above limited in its relief to only the 100 foot buffer and its regulations, it specifically exempts only agricultural irrigation ponds. The applicant is proposing a residential development. The pond included in this development is clearly not an agricultural pond. The fact that it may have been used in that manner in the past does not justify an exemption under section XI,C,3D. It is clear that the pond is not being used now as an agricultural/irrigation pond and the proposed future use has no relation to agriculture/irrigation, but even the most recent past use was not related to agriculture since the property was used beginning in the early 2000s as a golf course. It is not clear why the applicant's assertion that the pond had been used for agriculture/irrigation in the distant past would justify it being considered for an exception to the 100 foot buffer requirement. It has been approximately two decades since it could have been used for agricultural purposes.

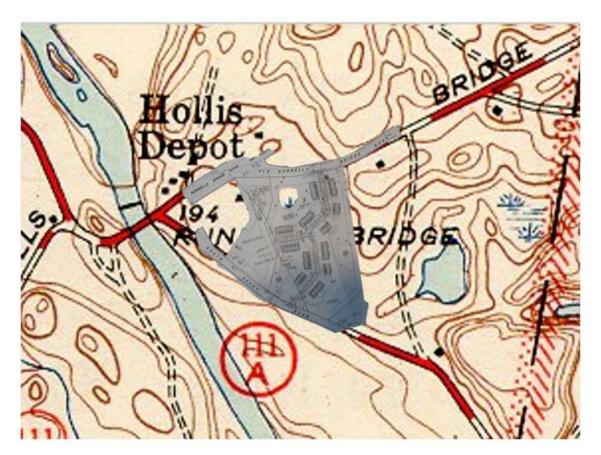
The applicant's arguments have been tied to their assertion that the ponds are manmade. Although I believe that I have shown that weather or not the ponds are manmade is immaterial to the definition of a wetland, I would like to point out that the northerly pond is in fact not manmade wetland, but altered natural wetland. It can be seen on the 1944 and 1950 USGS topographic maps. Mr. Guida's letter indicates that "aerial photos and site characteristics support the evaluation that **both** ponds have been man-made/**altered**..."

Site characteristics observed and historical aerial photographs also indicated that the existing southerly irrigation pond on site was constructed around 1995-1998 and connected by drainage and irrigation lines to the existing northern irrigation pond. Aerial photos and site characteristics support the evaluation that both ponds have been man-made/altered and manipulated over time including maintenance dredging, expansion and re-grading. To the best of our knowledge the ponds on site were constructed for the purposes of creating an agricultural pond and / or irrigation ponds on the property and have been routinely maintained over the years to maintain their usefulness. Wetland areas around the ponds are limited to the edge of the ponds and there are no adjacent wetland areas. The constructed ponds are fed by intercepting groundwater and the on-site irrigation well and do not intercept and/or affect any adjacent wetland system.

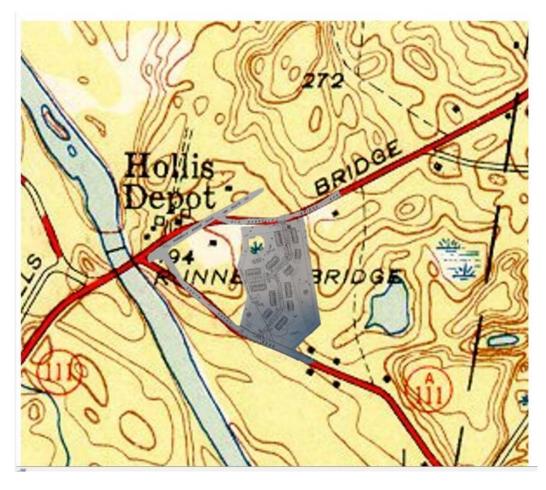
I believe this statement has caused considerable confusion since Mr. Guida chose to describe both ponds in the same sentence. A more precise description would be that aerial photographs support the conclusion that the southerly pond was manmade. The northerly pond was a natural wetland before being deepened. This fact can be seen by observing its location on the USGS survey map of 1944 and 1950 depicted below.



1944 USGS Pepperell Quad above



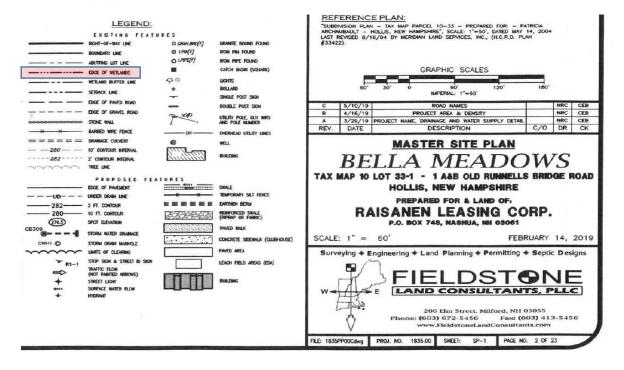
1944 USGS Pepperell Quad with site plan overlaid above

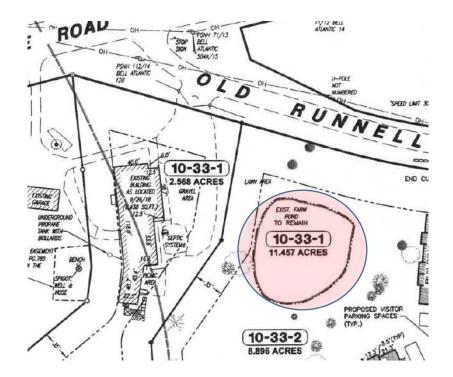


1950 USGS Pepperell Quad with site plan overlaid above
Joseph Garruba letter to Hollis Planning Board Members 5 of 12

Mr Guida's report clearly indicates that there is a wetland area around both ponds. In fact, the applicant's submitted site plan shows the wetland boundary around the northerly pond, and presumably would have shown the boundary around the southerly pond had it been depicted. The wetland area is identified on the site plan with a dash followed by three dots. These references are highlighted in red below

Site characteristics observed and historical aerial photographs also indicated that the existing southerly irrigation pond on site was constructed around 1995-1998 and connected by drainage and irrigation lines to the existing northern irrigation pond. Aerial photos and site characteristics support the evaluation that both ponds have been man-made/altered and manipulated over time including maintenance dredging, expansion and re-grading. To the best of our knowledge the ponds on site were constructed for the purposes of creating an agricultural pond and / or irrigation ponds on the property and have been routinely maintained over the years to maintain their usefulness. Wetland areas around the ponds are limited to the edge of the ponds and there are no adjacent wetland areas. The constructed ponds are fed by intercepting groundwater and the on-site irrigation well and do not intercept and/or affect any adjacent wetland system.





I would like to reiterate that is not my intention to take these citations out of context. I have provided limited citations only in an effort to communicate effectively. Each of these references is available in the planning board file 2019:5 or on the internet at the urls referenced. Please take time to review the source material yourselves, this is an important matter for the town and the information presented by the applicant and other experts is biased in favor of development.

In a separate letter to the town of Hollis Planning Board, submitted by Fieldstone Land Consultants on May 11<sup>th</sup> regarding a wildlife habitat evaluation, the developer claims that there are no jurisdictional wetlands on the site. This claim is based on the contention that the ponds are "not part of a previous natural wetland system". As I have shown, the USGS maps of 1944 and 1950 both show a previous natural wetland at the location of the northerly pond. This is one reason that the conclusion that there are no jurisdictional wetlands is incorrect.

## Jurisdictional Wetlands:

Jurisdictional Wetlands were evaluated / delineated in accordance with US Army Corps of Engineers 1987 wetlands delineation manual Y-87-1 and regional supplements for the northeast and northcentral region and field indicators for hydric soils in New England and associated reference materials. There were no jurisdictional wetlands observed on the subject site; the two irrigation ponds present on the site are man-made and/or man altered via maintenance dredging for irrigation and golf course purposes. There are no other drainage ways or wetland systems entering or exiting the irrigation ponds and they are not part of a previous or natural wetland system. An additional letter documenting the history of the property and pond construction has also been submitted for planning board review. There were also no vernal pools observed nor any characteristics of acting vernal pools observed on or near the subject property, the ponds are man-made / altered, do not dry out and have a variety of fish species present.

The USGS maps and prior soil studies strongly contradict the claim Mr. Guida makes above, invalidating the conclusion that the ponds are not subject to local and state regulations.

## Image of first page of the wildlife habitat evaluation for reference is included below

May 11, 2019

Town of Hollis Planning Board 7 Monument Square Hollis, NH 03049

RE: 2 Lot Subdivision and Multi-family Residential Housing Development

Wildlife Habitat Evaluation Tax Map 10, Lot 33-1 Old Runnells Bridge Road

### **Project Overview:**

As a representative of Raisanen Leasing Corp., Fieldstone Land Consultants [Fieldstone] has been requested to evaluate the potential impacts that the proposed development may have on wildlife habitat on and around the project area and the surrounding community. A wildlife habitat and potential impact assessment was conducted by Christopher A. Guida, CWS, CSS. Mr. Guida has been practicing as a Certified Wetland Scientist and Soil Scientist for over 20 years and has extensive educational background and experience in natural sciences including wildlife biology and management, ecology, dendrology and water resource management.

The property consists of about 11.5 acres with an existing commercial building which is part of the former golf course clubhouse / maintenance building. The parcel is entirely open with some landscaping trees, sand traps, 2 irrigation ponds and small portions of forested areas along the southern boundary along south depot road. The property is situated in a residential / commercial developed area which is located at a major roadway intersection bounded by South Depot Road, Old Runnells Bridge Road, NH Route 111 and private residential lots to the east. The subject property is essentially isolated by major roadways and does not abut any conservation land or public facilities.

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The applicant has pointed to Sec XI 3 d of the Hollis Zoning Ordinance which exempts certain water features from the 100 foot buffer as a means of claiming that the ponds can be removed. I will explain the logical errors in this argument. I have included the reference to relief from the 100 foot buffer below.

- d. The 100 foot buffer regulations and restrictions set forth in this Ordinance shall not apply to the following wetland areas or their buffer zones:
  - (i) manmade ditches and swales
  - (ii) sedimentation/detention basins or ponds
  - (iii) manmade agricultural/irrigation ponds and swales
  - (iv) fire ponds
  - (v) a septage or manure lagoon
  - (vi) silage pits
  - (vii) a wetland or surface water of 3,000 square feet or less not associated with any other wetland, drainage-way, or surface water which does not meet the definition of a bog or vernal pool

Work sheet to determine if a water feature is exempt from Hollis Zoning Ordinance 100 foot wetland buffer.

	Criteria for exemption of the 100 foot buffer	Southerly Pond	Northerly Pond
i	manmade ditches and swales	No	No
ii	sedimentation/detention basins or ponds	No	No
iii	manmade agricultural/irrigation ponds and swales	No	No
iv	fire ponds	No	No
٧	a septage or manure lagoon	No	No
vi	silage pits	No	No
vii	a wetland or surface water of 3,000 square feet or less not associated with any other wetland, drainage-way, or surface water which does not meet the definition of a bog or vernal pool	No	No

In Fieldstone Land Consultants letter to the town of Hollis Planning Board, submitted by on May 11<sup>th</sup>, the prior use of the ponds in question is identified as irrigation.

#### **Project Overview:**

As a representative of Raisanen Leasing Corp., Fieldstone Land Consultants [Fieldstone] has been requested to evaluate the potential impacts that the proposed development may have on wildlife habitat on and around the project area and the surrounding community. A wildlife habitat and potential impact assessment was conducted by Christopher A. Guida, CWS, CSS. Mr. Guida has been practicing as a Certified Wetland Scientist and Soil Scientist for over 20 years and has extensive educational background and experience in natural sciences including wildlife biology and management, ecology, dendrology and water resource management.

The property consists of about 11.5 acres with an existing commercial building which is part of the former golf course clubhouse / maintenance building. The parcel is entirely open with some landscaping trees, sand traps, 2 irrigation ponds and small portions of forested areas along the southern boundary along south depot road. The property is situated in a residential / commercial developed area which is located at a major roadway intersection bounded by South Depot Road, Old Runnells Bridge Road, NH Route 111 and private residential lots to the east. The subject property is essentially isolated by major roadways and does not abut any conservation land or public facilities.

Based on the applicant's letter cited above it seems that they consider the water features manmade irrigation ponds. This is not an accurate assessment. The northerly pond is not manmade, but an altered existing wetland. I have shown that it existed as far back as 1944. It may have been modified or altered, but it is not manmade. Secondly, the proposed use is an ornamental pond in a residential subdivision and the most recent prior use was as a golf course water hazard. Neither of those uses are listed as exempt water features.

It is not clear how the applicant determined that the pond was used for irrigation, a well house was put in to monitor pesticide application on the golf course. Is it possible that this has been mistaken for an irrigation system? As for the southerly pond, although it is manmade the same concerns apply as to its purpose. It certainly has had no function related to agriculture since it was purpose built as a golf course water hazard. What evidence supports the claim that it was used for irrigation? In order for the pond to be considered an irrigation pond it would have had to be used as the **source** of water to be used for assisting the growth of vegetation. It is unlikely that is the case with the southerly pond. The language of sec XI 3 d only exempts "manmade **agricultural/irrigation** ponds and swales" This language cannot be conveniently interpreted to exempt all manmade ponds or specifically those that were constructed as golf course water hazards.

Based on this flawed reasoning the applicant has claimed that the ponds can be removed without following the requirements set out in the town ordinance. On the contrary, not only are both ponds part of the wetland conservation overlay zone, the wetlands associated with them must be delineated by a certified wetland scientist in accordance with the three criteria set out in the Corps of Engineers Wetlands Delineation Manual and the correct 100 foot buffer zone must be applied. (See Sec VIII below)

<u>WETLAND:</u> A wetland is an area that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal conditions, does support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include, but are not limited to, swamps, marshes, bogs, and similar areas. For the purpose of determining buffer zones for site plan and subdivision review, wetland boundaries shall be delineated by either a certified soil scientist or a professional wetland scientist according to the Corps of Engineers Wetlands Delineation Manual, 1987, and the Regional Field Indicators for Identifying Hydric Soils in New England, 1998.

If the applicant can prove that the southerly pond is manmade and was and will be used for irrigation, the 100 foot buffer around the pond and its wetlands could be omitted, but the pond is still a wetland under the jurisdiction of the town. As such removal of the pond is subject to the requirements of the wetland conservation overlay zone.

The following citations from the Hollis Zoning ordinance outline the requirements related to the wetlands on the property. It can be seen that our ordinance is has specific definitions which include the wetlands in question. Below is a reference to Sec XI C

#### C. WETLAND CONSERVATION OVERLAY ZONE (WCO)

#### 1. PURPOSE

By the authority granted in New Hampshire RSA 674:16-17 and 674:20-21, the purpose of the Wetland Conservation Overlay Zone is to protect the wetlands, surface waters and their buffer zones, to assure the proper use of natural resources and thereby protect the public health, safety and general welfare of the people in the Town of Hollis. Additional purposes of the WCO Zone include, but are not limited to:

- a. Protecting persons and property from flood damage by preserving the natural flood storage area;
- b. Reducing the effects of non-point pollution;
- c. Reducing sedimentation of wetlands and surface waters;
- d. Protecting surface waters, groundwater and aquifers as current or potential drinking water supply sources;
- e. Limiting the development of structures and land uses which contribute to the
- f. Pollution of surface and groundwater by sewage, hazardous substances or siltation;
- g. Protecting and promoting fish and wildlife habitat;
- Conserving natural beauty and open space;
- i. Encouraging those uses that can be appropriately and safely located in the WCO Zone;
- j. Preventing those uses that could harm or degrade the wetland buffer, the wetlands, or surface waters.

# Surface waters is clearly defined in Sec XI C 2 q as cited included below

q. SURFACE WATERS: Those waters which have standing or flowing water at or on the surface of the ground. This includes but is not limited to rivers, streams, lakes, ponds and tidal waters. Sec XI C 3 elaborates on the fact that the town of Hollis holds jurisdiction over the ponds regardless of the state regulations (see below)

#### 3. JURISDICTION

a. The town recognizes that the state and federal governments have regulations, including a permitting process, governing the alteration of wetlands and surface waters. However, the Town of Hollis has jurisdiction over the one hundred (100) foot buffer zone and all Dredge and Fill Applications must first be reviewed by Planning Board Staff and approved by the Planning Board and the Conservation Commission for compliance with this ordinance.

From this it can be seen that both ponds on the property must meet the requirements of Hollis Zoning ordinance regardless of their classification under state RSA or regulations.

The proposed removal of the southerly pond is specifically prohibited by the language in Sec XI C 8 a

## 8. PROHIBITED USES WITHIN THE WETLAND CONSERVATION OVERLAY ZONE

- a. The following uses are specifically prohibited within the WCO Zone:
  - (i) Any project classified as "major wetland impact" as set forth in NH Code of Administrative Rules, Wt 303.02, April 21,1997, as amended, and as defined in Section XI.C.2 of this ordinance.
  - (ii) Location of a primary structure and related improvements, including the associated limits of construction, within the WCO Zone unless the lot legally existed before March 11, 1997, in accordance with Section XI.C.3.c. of this ordinance.
  - (iii) Location of an accessory structure and related improvements, including the associated limits of construction, within the WCO Zone unless the conditions for a special exception in accordance with Section XI.C.7 of this ordinance are met or the lot legally existed before March 11, 1997, in accordance with Section XI.C.3.c of this ordinance
  - (iv) All other construction activity, including but not limited to parking lots, except in cases where the proposed use meets the criteria for a special exception (Section XI.C.7) and such a permit has been issued.
  - (v) Any land use that harms or degrades the wetlands buffer, the wetland or surface waters, including but not limited to:

Filling in the southerly pond as shown on the site plan presented by the applicant at the May planning board meeting is a "minor wetland impact" considering the fact that the small pond is approximately 100 feet in diameter, this provides 7,850 square feet of wetland disturbance which is more than double the 3000 sq foot threshold of a "minimum wetland disturbance". Sec XI 2 k and I are included below for reference.

- k. MINIMUM WETLAND IMPACT PROJECT: A project involving alteration of wetlands and surface waters less than 3,000 square feet. A minimum wetland impact project, by virtue of its size and nature, is likely to have a negligible impact by itself or in the aggregate pursuant to NH Code of Administrative Rules, Wt 303.04, provided adequate measures are employed to protect the environment. Projects altering wetlands and surface waters are under the jurisdiction of the State of New Hampshire and require permitting.
- MINOR WETLAND PROJECT: A project involving alteration of wetlands and surface waters less than 20,000 square feet. A minor wetland project is of such size, scope or nature that it has the potential of having more than a negligible impact upon wetlands or surface waters pursuant to NH Code of Administrative Rules, Wt 303.03, provided adequate measures are employed to protect the environment. Projects altering wetlands and surface waters are under the jurisdiction of the State of New Hampshire and require permitting.

Applications to fill wetlands or surface waters require approval of the planning board and the conservation commission as well as the state. Since both ponds are defined as wetlands in our ordinance regardless of whether the 100 foot buffer applies, the jurisdiction set out in section XI C,3 applies, meaning that the planning board and the conservation commission must both vote to approve the fill application.

## 3. JURISDICTION

a. The town recognizes that the state and federal governments have regulations, including a permitting process, governing the alteration of wetlands and surface waters. However, the Town of Hollis has jurisdiction over the one hundred (100) foot buffer zone and all Dredge and Fill Applications must first be reviewed by Planning Board Staff and approved by the Planning Board and the Conservation Commission for compliance with this ordinance.

Based on the written language of the ordinance and the historical evidence I have presented, it can be seen that not only are both ponds considered wetlands by the definition in the Hollis Zoning Ordinance, both are subject to the 100 foot buffer called out since neither is presently proposed to be used for agriculture/irrigation purpose and the northerly pond is in fact a natural preexisting wetland. More significantly, the proper density calculation for the proposed subdivision must not include the area of the ponds or associated wetlands. Please request that the applicant submit revised plans reducing the site density to match the actual net tract area that is available on the lot.

References

OnSite Soil / Pond Evaluation letter 1944 USGS Topographic Map 1950 USGS Topographic Map Town of Hollis Zoning Ordinance Map 10-33-1 Site plan dated 5/10 Planning Board File 2019:005
http://docs.unh.edu/MA/pepp44ne.jpg
http://docs.unh.edu/MA/pepp50ne.jpg
https://www.hollisnh.org/sites/hollisnh/files/uploads/hzo2019.pdf
Planning Board File 2019:005

Regards,

Joseph Garruba