16 November 2023

Thank you for the opportunity to continue to voice our concerns about the proposed development at 77 Bartlett Road. Again, this letter is a collective effort and expresses the concerns of many residents in the area not only on Bartlett Road, but also Lynch Lane and Miller Road.

As it has been previously established, we have several concerns about stormwater runoff, particularly during construction and as it relates to the protection of Ken's Pond, which is designated a wetland of special significance and is in a Resource Protection overlay zone and in the 100-yr FEMA Floodplain.

Continued areas of concern are specifically:

- 1. Revegetation of the existing driveway once the blacktop has been removed. Can you please define how this area will be revegetated? What types of plants will be used? What method of management will be used to prevent the area from being revegetated with invasive species? Native species need a head start to prevent the growth of invasives.
- 2. Monitoring of stormwater runoff both during and after construction is a major continued concern. How will the town monitor the check dams and other systems that are being put into place to protect the wetlands of special significance from silt and stormwater runoff? Please explain who will check that systems are working both before and after severe wet weather events and winter snow melt. The best systems are useless if they are filled with silt and not functioning properly during severe weather events. Can you please clearly define who will be responsible for measuring the quality of the water running into the pond? Will the water be checked at regular intervals?
- 3. Since much of the water from the proposed development is directed towards the pond, there is concern that the water level of the pond will rise. What is being done in the proposed plan to address the increased water volume entering Ken's Pond? Will the water level rise as a result of the current drainage plan?
- 4. We are asking for a second site walk to specifically review erosion/sediment control/ drainage outlet issues near the pond. We would like to have the CMA engineer and the Town Stormwater Inspector present at the site walk to help clarify any questions about the direction of the water and erosion and sediment control.
- 5. Will there be a pre-construction meeting required before work begins? If so, I am requesting an invite to this meeting.
- 6. There is great concern among the community that there are not enough protections in place to keep the sediment from the pond or address a rise in water level. We hope that the Planning Board will take our request seriously to ensure that this wetland of special significance (including downstream effects) is not damaged as a result of the proposed development.

7. Additional questions:

Has the developer addressed the question of advance treatment systems for wastewater management?

Has the Maine DEP Stormwater Permit-by-Rule been granted?

When will the covenants be available for our review? We had a number of questions related to management of the open land and preservation of the dark sky that we hope will be addressed in these covenants.

- 8. Additional concerns of area residents are increased traffic on Bartlett Road and damage to the road by heavy equipment that will be traveling frequently on Bartlett Road during construction. Is there a proposed timeline and funding to address damage to the roadway from these construction vehicles?
- 9. As expressed during the last meeting, to best protect the wetlands and associated plant and wildlife in the Bartlett Road area, our highest hope for this property is complete conservation. Will the developer consider working with Kittery Land Trust to preserve the entire parcel without further development? Is there a possibility at least of connecting the conservation lands with Kittery Land Trust lands and offer access?

acce 55.	
We hope that you questions.	a will continue to support area residents by helping us with answers to these importa
Thank you.	
Casper Lyons	
Carrie Lyons	
Patrick Lyons	
Michael Landgar	ten
Bob Kimball	
Bill Paarlberg	
Nancy Grace Ho	rton
Katy Black	
Bob Houle	
Cathy Houle	
Christianna Scoc	zek
Richard Mueller	
Melanie Moore	
Jake Frost	
Gretchen May	

Peter Welch
Michael Stone
Adam Baron
Cassie Baron
Kelly OLoughlin

The following comments relate to the revised Stormwater Management Report dated 10/27/23. The Report includes five Study Points (SP-1 though SP-5) as shown on Plans WS-1.0 and WS-2.0. Of particular interest is SP-3 which is located at the culverted outlet of Ken's Pond and receives stormwater runoff from much of the subdivision's roadway and lots. Ken's Pond and adjacent low areas are identified as a wetland of special significance and are within the Resource Protection overlay district as well as the FEMA 100-yr floodplain.

SP-3 is the point selected by the engineer to compare the pre-development flows from subcatchment SC-3 and post-development flows from subcatchments SC-30, SC-31 and SC-32. The largest portions of the proposed lot and road development for the subdivision are within SC-31 and SC-32. The water level of the Ken's Pond at (SP-3) is regulated by the stormwater runoff and by the hydraulics of the culvert under Bartlett Road, however the culvert's size and its inverts are not indicated on the plans have not been accounted for in the HydroCAD analysis.

The HydroCAD modeling calculates increases of impervious area and runoff volume to Ken's Pond and the floodplain as noted in the following table:

Study Point SP-3 (outlet culvert at Ken's Pond)

	Pre-Dev	Post-Dev	Change	Percent Change
Contributing watershed area	19.966 ac	20.995 ac	+1.029 ac	+5%
Impervious %	3.03%	6.47%		
Impervious Area	0.60 ac	1.36 ac	+0.76 ac	+127%
2-yr event volume	1.406 af*	1.503 af	+0.097 af	+7%
10-yr event volume	2.975 af	3.204 af	+0.229 af	+8%

25-yr event	3.975 af	4.266 af	+0.291 af	+7%
volume				

More volume to Ken's Pond means the pond level will likely be increasing above its pre-development levels. A higher water level will impact the abutting property (69 Bartlett Road) where almost all the increased runoff volume will be stored. The HydroCAD analysis in the Report does not model the stage-storage discharge or increase of the water level of Ken's Pond during the storm events. It is notable that there is no stormwater detention pond proposed within the project.

Given the obvious downstream impact to the pond, the floodplain and culvert under Bartlett Road, these features should be assessed with appropriate HydroCAD modeling. Reference is made to 16.7.11.C(4)(c) of the LUDC regarding downstream requirements and 16.7.11.C(4)(b) for upstream considerations. An analysis of the pond outlet hydraulics with HydroCAD will assess water level rise, the addition runoff being stored on the abutter's property, and the adequacy of the existing culvert under Bartlett Road. Since the runoff impacts involve a 100-yr FEMA floodplain, it would be prudent to model and assess the 100-yr event, in addition to the 2, 10 and 25 year events.

Thank you for your consideration of this comments.

Jeff Clifford 27 Miller Road

Letter to the Kittery Planning Board

October 25, 2023

To the Kittery Planning Board and Maxim Zakian. Town Planner, Town of Kittery:

Thank you to the Kittery Planning Board and Town Planner for doing what must be a difficult job. My experience of its work is limited to the 77 Bartlett Road project public hearing held a month ago. It is clear that there are many people who come before the Board and ask it to do things that it can't. "Please stop this development because of the increased traffic or construction noise or loss of habitat..." or any of several quality of life issues that come along with any new development.

My understanding of how the Board works is that almost all of these sorts of quality of life issues are outside its limits of operation. I believe the Board's purview is limited to monitoring a developer's adherance to the official regulations or code involved. This must be very frustrating for many speakers at public hearings, who ask the Board for what it can't provide, and for the Board itself, which has to sit and listen to people make requests that it can not act upon.

^{*}acre-feet

Chapter 16.10 of Kittery's Land Use and Development Code (LUDC), entitled "Conservation Subdivision" is an amendment passed about a year ago. My understanding is that it governs how the Board deals with developments like the one proposed at 77 Bartlett.

This amendment includes language that might offer an opportunity for the Board to address some of the frustrating quality of life issues that are brought before it. The very first sentence of this amendment indicates that part of its purpose is to limit the impact of new development on the existing community: "This chapter will allow new concepts and innovative approaches to housing and environmental design... while limiting the costs and impacts of development on the community..."

How the board might choose to act so as to limit the impact of a development on the community is beyond the scope of this letter, except insofar as it pertains to my own property at 82 Bartlett, and my immediate neighbor, Kevin Niles.

The road for the 77 Bartlett subdivision joins Bartlett Road directly across the street from Mr. Niles' driveway, and is located kitty-corner from my own property. The headlights of all traffic leaving the subdivision will shine into Mr. Niles' garage and house. The headlights of left-turning traffic will glance across my property as well, shining on the windows of my bedrooms, living room, and my art studio in the backyard. I am a watercolor painter by profession. I teach painting classes on Zoom online from my residence. The headlights from the development traffic will impact my ability to work and teach.

At the public hearing a month ago, I asked the board to provide specific relief for this light trespass issue in the form of five (5) light-screening trees to be planted by the developer. The Board immediately responded that this issue was between me and the developer. After the hearing the developer stated to me that he would look into it. I have

not heard from him since.

Note that Section 16.10.5,A.(3) of the Conservation Subdivision amendment states, "Buildings must be designed and oriented to protect against light trespass from vehicle headlights and any existing outdoor lighting to the greatest extent possible." Taken together with the first sentence of the amendment, as quoted above, the implication is that the Planning Board could encourage a developer to be responsible for mitigating light trespass to existing neighbors of a planned new development. I understand this is standard practice for new developments in other local towns.

And so I renew and repeat my request to the Board that it ensure that the 77 Bartlett Road developer screen my property, and that of my neighbor Kevin Niles, from light trespass from traffic on the new road at the proposed development.

One more thing. I understand that plans are to have all mailboxes for the nine residences of this new development positioned on Bartlett Road, rather than on the road inside the development. I request that the Board consider moving them off Bartlett Road, for the following reasons:

1. Safety. Bartlett Road now has several similar mailbox-to-development arrangements. A couple hundred yards south of the proposed development are about half a dozen mailboxes lined up on Bartlett Road just outside of both Pinkham Lane and Shaydon Lane.

To my mind, one of the picturesque things about a rural road is a line of mailboxes. In addition, it is nice to be able to pull your car up to your mailbox to get your mail. Even if you have to position your car in

the wrong lane, facing against oncoming traffic. This is not awkward on a rural road, because the traffic is so light.

But Bartlett Road is no longer a rural road with light traffic. While operating a car or bicycle on Bartlett Road it is not uncommon to encounter a car pulled up the wrong way to get their mail. This can be especially dangerous at night or during bad weather, as it can be difficult to understand that a car is facing the wrong way. The wrong way mailbox parking is becoming a safety issue on Bartlett Road.

2. Noise and light trespass. The cars pulled up the wrong way to check the nine mailboxes for the new development will be idling directly across from my neighbor Kevin Niles' house, and kitty-corner from my house at 82 Bartlett. With, again, their headlights shining up the road in my direction.

These issues could be avoided by positioning the new development's mailboxes off of Bartlett Road, either in front of each house, or all together at a location on the new road just off Bartlett Road.

Thank you for your consideration of my letter, and for your hard work on the Planning Board.

Signed, Bill Paarlberg, 82 Bartlett Road, Kittery Point, Maine

Hi Craig,

I live at 11 lynch ln I'm Kittery point and am one of the properties that abuts the build On 77 Bartlett rd.

Unfortunately I was unable to walk the property when everyone met due to work but have since taken the time to do so on my own.

I am really concerned with the closeness the markers are to the wetlands. I spend a lot of time out In the woods around the property the past 10 years we have lived here. The proximity of the build will definitely have an impact on the ecosystem living in the wetlands right there.

I'm sorry for the long winded email. In all honesty I'm not even sure if you are who I am supposed to email about this. I just don't know where to start and who to contact. I also realize change is inevitable and others should be able to live in the beautiful area I live in. I just want to make sure we don't ruin what we have moved here for. Thank you for your time. Any advice or information would be amazing!!!!! Gretchen may

2073516186

28 September 2023

Thank you for this opportunity to voice our concerns. This letter is a collective effort and represents the views of several neighbors in addition to myself. I live at 69 Bartlett Road and abut the proposed development. Bob Kimball, abuts the property at 67 Bartlett, Katy Black, 76 Bartlett directly across the road from me. Bill Paarlberg, directly across from the proposed road, his neighbor Kevin Niles, Michael Landgarten 86 Bartlett, across Bartlett Road from proposed development, Robert and Cathy Houle, 60 Bartlett, Melanie Moore on 26 High Pasture Rd Christianna Skoczek and Rick Mueller 44 Miller Road. Jake Frost 68 Bartlett, Peter Welch and Michael Stone from Lynch Lane. These are just some of the neighbors I was able to connect with. With more time, this list will grow.

My name is Carrie Lyons, I am a relative newcomer, having made a local move to 69 Bartlett Road earlier this year. Although I have been here for a short period, I already have a strong sense of belonging and hope to stay here for many years to come. Kittery, and Bartlett Road in particular is a wonderful community of people who deeply care about where they live. Part of what makes living here so special are the wild places in our own backyard. One of these special places is the pond primarily located on my property, a place I worry will be significantly impacted by the proposed development at 77 Bartlett. People in the neighborhood love this pond – the previous owner loved it so much that he asked to have his ashes scattered there. This pond, which we call Ken's Pond, and the wetlands within the confines of it are important not only to me, but to the neighborhood. They are woven into the fabric of the community and make Kittery the wonderful place that it is.

Protecting these sensitive resources is why I am here today.

I am here to speak on behalf of Ken's Pond and the people who love it and live near it – and to advocate for the protection of these ecologically and socially vital features of our community.

We as a collective hope that you will help us with several key concerns which, we feel, the proposed development at 77 Bartlett threatens. These concerns are: the integrity and health of Ken's Pond and the crucial habitat which surrounds it, the wildlife which frequents this habitat, peace and quiet, and the dark sky.

The Kittery Comprehensive Plan advises that future development should be guided to areas where public utilities exist, and growth has already occurred. Growth should be steered away from protected lands, natural resources, and areas that are not currently serviced by water and/or sewer infrastructure. There is no town water or sewer at 77 Bartlett Road and there are an abundance of natural and ecological resources and protected areas in this neighborhood. The proposed development at 77 Bartlett seems in contradiction with this plan, and the proposed "sustainable" aspects of the development seem lacking in the context of the wider environmental degradation associated with this project – particularly considering that the site is mostly comprised of pristine woodlands and vital, and rapidly vanishing, wetland habitat. Therefore, it is important to provide all the required protections from the project and utilize Best

Management Practices that will assure that no harm is done from erosion and sediment during construction and long-term migration of nutrients and pollutants into the wetland of special significance, Ken's Pond. In addition and importantly, this land is adjacent to Kittery Land Trust preserved land. We think the opportunity exists to make an addition to the properties already held by the Kittery Land Trust in the Bartlett Road area.

I also would like to be clear that I did not receive an abutter notification letter. I had to rely on my neighbor to let me know that the proposed development at 77 Bartlett, which directly abuts my property, was happening. I called the Planning Department and had my name added to the list of abutters so I would receive further notices and so was able to attend the site walk last Thursday and be here today. This is largely with thanks to the information initially provided to me by my neighbor.

Before we address specific concerns about the development plan, we would like to see if an opportunity exists still to preserve this entire parcel as part of the Kittery Land Trust's holdings. This, we believe, would serve the neighborhood and larger community best and fit well with the comprehensive plan regarding not developing in areas with no public infrastructure and an abundance of natural resources.

Short of this option, we would like to address specific issues and requests, beginning with Ken's Pond.

Drainage. It has been brought to my attention that a disproportionate amount of stormwater runoff will empty into Ken's Pond, which is designated as a wetland of special significance. We are asking that the drainage plan be redone to direct at least half the water toward natural flow paths on the other side of the property in the direction of Lynch Lane.

We would like to ask that protections be included as notes in the site plans to reduce road runoff and pollutants from entering Ken's Pond which, again, is a wetland of special significance and of crucial importance to the ecology of the area.

It is my understanding that there may be miscalculation in the size of the soil disturbance involved with the construction of the road and related site work. It has been mentioned that the existing driveway will be removed at the same time the road will be under construction. There is also excavation work in the Bartlett Road ditch leading to Ken's Pond that does not appear to be included in calculation of disturbed area. These and other possible areas of disturbance that may occur will likely make an area of soil disturbance over 1 acre, which triggers a Maine DEP Stormwater Permit-by-Rule per 38 M.R.S. §420-D Chapter 420-D. Heavy downpours are much more common and much more severe now than in the past. We feel attention to protection of Ken's Pond during construction is critical. There are no stone check dams or other appropriate Best Management Practices shown on the drawing for this ditch (which is the last line of defense to prevent silt from entering Ken's Pond). I hope the planning board will address our concerns and act in accordance with the values and recommendations of the comprehensive plan.

We would also like to know if pretreatment of waste from septic systems could be utilized to help prevent nutrients from entering and damaging the pond. There will be 9 septic systems and 9 wells, the lots are small and we feel that such densely packed wastewater management systems may put additional pressure on the pond, which will already be affected by construction and changes to runoff flow patterns. Advance treatment systems would also improve groundwater quality for a project that will have 9 closely located drinking water wells.

The survey lines along the property at 69 Bartlett are not clear and there appears to be a discrepancy between the property lines determined by the surveyor for the development and the language in the 1970 deed that created the lot which is now 69 Bartlett from the then Washburn property (77 Bartlett Road). The monumentation used as the point of beginning for the 1970 deed is not shown on the Existing Conditions Plan, but was found last week by the property owners. It is highly important to potential future deed holders that this issue be resolved to avoid problems with the title of 69 Bartlett if and when this property is sold. It is my understanding that it is within the power of the planning board to ask for a 3rd party review of the work of professions hired by the applicant when there is a concern of this magnitude. I would like to ask the planning board for a 3rd party review to resolve the discrepancy, which as currently appears on the survey for the development, draws a line that falls short of where the property line should lie for 69 Bartlett by 35 feet, which, if not corrected, is a substantial encroachment on the property at 69 Bartlett Road.

I would like to speak now about the buffer at the front of the property. We propose that the buffer be made larger than 40 feet and include the open space that is currently delineated on the plan. We ask that it be put in the lot development plan notes that this be a no cut zone to preserve both our privacy and provide an additional buffer to protect the pond and the species which inhabit it.

It would be helpful for all of us to see the covenants in order to clear up a number of the following questions. Will hunting be allowed in the open space? How will the open space be managed? We are concerned about light pollution, will there be restrictions on the type of lighting in order to help maintain a dark sky compliance? Is it possible to arrange for connectivity and access to the Norton Preserve through the open space for the neighborhood to benefit from?

Lastly, I work from home as do many of my neighbors. A major disruption to the peace and quiet of the neighborhood represents a significant disruption to our professional lives. I personally chose to live here because of this. Quiet is crucial to my work life. I am concerned that noise during construction will affect the concentration and productivity of me and my neighbors — disrupting our working lives for an indefinite period of time. I know that health and wellness of residents is part of the Kittery Comprehensive plan, and noise is damaging to physical and mental health.

We are asking for restrictions to be put in the plan notes for hours of operation during construction. We are concerned that the noise from hoe rams, blasting and other heavy

equipment will substantially disrupt our ability to do our jobs. Many of us deliver services via zoom. We need protection against this significant disruption to our lives and productivity. We would like to ask that hours of operation be kept to 8 am to 5 pm and no work on weekends or holidays.

We are also concerned about potential damage to our basements and wells related to construction and blasting. We would like to ask that the developer provide a seismologist to monitor potential damage to these systems during blasting and construction.

The people who live here have a strong sense of community and caring for the surrounding environment. Our aim is to protect and preserve this environment, the wildlife, the pond and our own well-being.

One last point I hope you will consider. I had very little time to think through all of this and connect with neighbors because I did not receive proper notification early on in this process. I rushed to put this letter together with other residents. I believe other neighbors were also missed when notices went out. Because of this we would like more time to study the development and give feedback before any approvals are considered by the board.

In summary, Bartlett Road and surrounding areas are a special place. Hundreds of people bicycle on Bartlett Road every year because of its pristine nature and low traffic. It is surrounded by protected lands – Sawyer Farm preserve, Norton Preserve and the York Land Trust lands off Bartlett Road. We feel the highest and best use for 77 Bartlett is for the land to be preserved and that it is not too late to explore this option. That is our best hope for this property.

We hope the planning board will address each of our concerns and keep the people who live here and whose lives will be seriously affected by this development in the loop by keeping the public hearing part of this process open. We want to keep Kittery a place worth living for all of us, current and future residents.

Thank you.
Carrie Lyons
Michael Landgarten
Bob Kimball
Bill Paarlberg
Nancy Grace Horton
Katy Black
Bob Houle
Cathy Houle
Christianna Scoczek
Richard Mueller
Melanie Moore
Jake Frost
Peter Welch and Michael Stone

Hello,

I am writing to you today given my work schedule prohibits me from attending this evening's Planning Board meeting.

Whereas my name is aptly noted as a cosigner on the thorough letter submitted by Carrie Lyons regarding the proposed development at 77 Bartlett Road, I wish to add the following:

I have lived in Kittery/Kittery Point for over 25 years, initially planning to stay 12 months while I completed a professional internship. My appreciation of the area, especially the peacefulness, cleanliness and wildlife, led me to make this my permanent home.

Much has changed in recent years, including remarkably expansive development. In addition to witnessing it in and around my neighborhood, I have learned that over 300 apartments will soon be opening off Route 95 and Dennett Road, as well as 32 condominiums awaiting sale on Route 1 opposite Lewis Road.

I appreciate the appeal of Kittery, yet significant population growth necessarily results in greatly increased traffic and noise/air/light pollution, none of which are physically or psychologically healthy for humans or wildlife. Indeed, in recent years when I walk, run or cycle on Bartlett and Miller Roads, I encounter many more dead animals, almost always the victims of motor vehicles. I frequently witness people driving too fast and aggressively, which creates ambivalence about exercising around home. Trash on the roads has also become much more commonplace, including scores of empty alcohol bottles.

I certainly understand that the issues I raised above are not exclusive to Kittery, however continued population growth and development of open spaces adds multifaceted stress on the present ecosystems and the health of current residents, humans and nonhumans alike. Ironically, the typical statements advertising the bucolic appeal of land and new dwellings in Kittery/Kittery Point promote the diminishment of the very nature that is described!

Please confirm that you received the sentiments herein.

Yours truly,

Christianna Skoczek 44 Miller Road Kittery Point



September 28, 2023

Maxim Zakian, Town Planner Town of Kittery 200 Rogers Road Kittery, Maine

Re: 77 Bartlett Road - Subdivision Application

Tax Map 62, Lot 26 Kittery Point, Maine

Dear Maxim:

Kittery Land Trust (KLT) is writing in regards to the proposed 9-lot conservation subdivision at 77 Bartlett Road. KLT's owns a 10.2 acre property (tax map 68, lot 4A-23) located at the adjacent Lynch Lane subdivision and is within 150 feet of the project site (therefore KLT was notified as an abutter).

KLT representatives have reviewed the subdivision application materials posted on the Planning Board's webpage and attended the September 21st site walk. The proposed project meets several of the objectives of *§16.10 Conservation Subdivision* of the LUDC including preservation of open space, preservation of historic features, minimization of roadway length and creating a compact neighborhood.

Kittery Land Trust's primary concern regarding this project is protection of the natural resources within and adjacent to the site, especially the pond at the southwest corner of 77 Bartlett Road (which is identified as a wetland of special significance). Some neighbors refer to this water body as "Ken's Pond", the majority of which is located on the abutting parcel, 69 Bartlett Road. Ken's Pond drains under Bartlett Road through a culvert that is not shown on the drawings. The outlet stream flows generally to the east, bisects Kittery Land Trust's *Brave Boat Headwater Preserve*, and eventually becomes a tidal creek adjacent to Payne Road. Conservation and preservation of Kittery's natural resources are clearly stated objectives of §16.10, but the current design falls short of providing adequate protection of Ken's Pond from the development's impacts during and after construction. Additional erosion and sediment control measures and stormwater management modifications appropriate to address the sensitivity of the natural resources, at and downstream of the site, should be incorporated into the project.

The September 21st site walk started at the driveway of the existing house on Lot 8. The engineer said the driveway is being removed as part of the roadway construction phase. Much of the driveway and some adjacent lawn areas are with the 100' setback of the wetland of special significance associated with Ken's Pond. The section of the existing driveway near Bartlett Road could be used to create a temporary sedimentation basin to the address erosion and sedimentation during the roadway construction phase until upgradient swales are fully stabilized with vegetation. For long term restoration of the area, and in consideration of §16.19.6.E of the LUDC, plantings should be added south of Lot 8 and Lot 9 where the wetland setback area does not currently contain substantial vegetation.

There are two existing culverts under the driveway. One is shown on the drawings approximately 160 feet from the edge of pavement at Barlett Road. There is also an existing CMP culvert located 12 feet from the edge of Bartlett Road that is filled with silt. This driveway culvert is not shown on the drawings. The downstream end of this culvert is at the edge of the wetland of special significance (Ken's Pond). The buried upstream end of the culvert is apparently at the southwest end of the roadside ditch on the north side of Bartlett Road. The drawings do not say if the driveway culverts are being removed, replaced, or if how the Bartlett Road ditch will be extended and terminated. Given the sensitivity of wetland of special significance, the driveway area should be considered for a vegetated buffer or other appropriate best management practice to filter stormwater before it enters Ken's Pond (see paragraph above). It is notable that the drawings do not call for stone check dams along the north side Bartlett Road ditch even though most of the new road will be draining into this ditch. Installing stone check dams in this ditch is a critical erosion and sediment control practice that needs to be installed and maintained to protect Ken's Pond, not only during the subdivision road construction but during the buildout of the lots, which may take several years. Providing a temporary sedimentation basin as well will provide a more appropriate level of protection from erosion and sediment.

The roadside ditch on the north side of Bartlett Road, from Ken's Pond east to the new roadway, currently receives runoff from the north half of the pavement on Bartlett Road and only a small portion of adjacent woodland on the 77 Bartlett Road property. The pre- and post-construction flows in the ditch should be compared as part of the updated drainage study (the impervious area draining to the ditch and resulting runoff will increase significantly because of the new road).

The proposed roadway design on Sheet C-3.1 shows that (except for the cul-de-sac) runoff from the new road is being directed to the ditch on the north side of Bartlett Road be means of new roadside swales and berms. Alternately, a roadside ditch turnout could be installed near Sta 1+50L to allow runoff to flow to a topographic low east of the ditch (see contour 58). This runoff would then drain across woodlands along its natural path to the east toward a culvert under Bartlett Road near the intersection of Lynch Lane, thus creating a second "forested stormwater buffer." Preserving this natural flow path will also off-load drainage that is currently proposed to be directed to Ken's Pond. This will help mitigate some of the transport of sediment and nutrients draining to Ken's Pond.

Another consideration for improving stormwater treatment is that the proposed berm shown at Sta1+60L to Sta 4+50L of the subdivision road prevents runoff in the west ditch from flowing to nature low spots west of the new road. If this berm was removed or shortened, drainage could flow its natural course between Lot 8 and Lot 9 within a underdrained grassed swale (a LID practice).

Based on *Stormwater Management Law M.R.S. Title 38, §420-D* and discussions with MDEP staff over the years, all associated <u>disturbed area</u> (soil disturbance) during the road construction phase are considered for triggering the Permit-by-Rule one-acre threshold. Page 2 of the Stormwater Management Report submitted with the application states that the project does not require a MDEP stormwater permit-by-rule because the new developed area is 0.93 acres. However, KLT questions the applicant's determination. The project includes the road work as well areas outside the new ROW that soil will be disturbed during the road construction phase of this project including:

- all the ditch work in the Bartlett Road ROW
- the level spreader on the north side of the cul-de-sac
- ditch line backslopes and berms for the new road
- removal of the existing driveway to new (relocated) driveway to the existing house
- soil disturbance for the new driveway to the existing house
- construction laydown and staging areas that may be needed

Reviewing the design plans it is difficult to identify the limit-of-work polygon used for the disturbed area calculation. Perhaps using a colored line would clarify. But to get a check on the actual area of disturbance, it is noteworthy that the drainage analysis lists SC 14S as 12,377 sf and SC 31S as 29,090 sf for a total of 41,467 sf (or 0.95 acres), yet there are several areas of soil disturbance (per list above) located beyond the limits of SC 14S and SC31S shown on Sheet WS2. It seems quite clear that the <u>disturbed area</u> for the road work phase exceeds one-acre and a Permitby-Rule is required.

Thank you for consideration of our comments. When the stormwater analysis is updated and the permitting question is addressed, KLT would like the opportunity to provide additional comments.

Sincerely,

KITTERY LAND TRUST

In Lh

Lisa Linehan, KLT Executive Director

Jeff Clifford, KLT Board Member



November 15, 2023

Maxim Zakian, Town Planner Town of Kittery 200 Rogers Road Kittery, Maine

Re: 77 Bartlett Road - Subdivision Application

Tax Map 62, Lot 26 Kittery Point, Maine

Dear Maxim:

The following comments are based on the information shown on the Oct 10, 2023 plan set. Apparently, that is the most current plan set that has been submitted. We understand that an update of the Stormwater Management Report, dated Oct 27, 2023 is now posted. An update of the full plan set is not part of that submission. That Report mainly addresses the stormwater hydraulic analysis of the site, whereas the comments below relate more to stormwater quality and erosion & sediment control measures shown (or are lacking) on the full Oct 10, 2023 plan set

In consideration that Ken's Pond is designated as a wetland of special significance, that it drains into the brook and wetlands within KLT's Brave Boat Headwaters Preserve, and that the pond's water quality is vulnerable to silt and nutrient pollution from the development, we feel the project's design should provide more robust protective erosion and sediment control measures to address the impacts of stormwater runoff from the development than are currently proposed. We acknowledge that the addition of the of grassed swale between Lots 8 and 9 will be helpful by reducing some of the increased flow to the Bartlett Road ditch. However, most of the runoff from the new road's impervious surfaces and much of the developed house lot area is still draining to Ken's Pond. The Bartlett Road ditch currently has a small drainage area to Ken's Pond, but the peak flow and volume within the ditch will increase dramatically with the addition of runoff from much of the new road and several lots. Also, runoff from portions of pre-development SC-1 and SC-2, which currently drain toward Lynch Lane, will be redirected to the ditch and swales draining to Ken's Pond. The pre-development analysis does not assess the runoff flows specific to the Bartlett Road ditch so the percent increase of flow and volume to the ditch is not documented.

While part of a larger wetland system, Ken's Pond is a small and shallow water body. Because of the relatively low volume of water in the pond, its water quality will be particularly vulnerable to the introduction of silt and nutrients from the proposed development. During the road construction phase and lot development phase, large areas of exposed soil will have silt-laden runoff that must be addressed with appropriate erosion and sediment control measures. Buildout of the house lots could take several years to complete and sediment barriers will need to maintained regularly. It is essential to implement effective stormwater management practices to protect the water quality of Ken's Pond and other downstream water resources from sediment throughout the subdivision buildout.

We understand that a Maine DEP Stormwater Permit-By-Rule will be filed for the project. Based in part on the MDEP and MDOT documents referenced below, KLT's offers the following summary of comments:

- 1. Termination of the Bartlett Road ditch is not well defined on Sheet C 3.1. There are no proposed contours shown where the existing driveway is being removed. A blow-up detail may help to clarify. Is the intent to excavate a ditch to directly to Ken's Pond or to provide an area to disperse the flow across a wider area with a level spreader? Because the existing 12" drain being removed is silted in, it appears that drainage from the Bartlett Road ditch that currently flows along the driveway toward the house to a low spot about 40-50 feet from the edge of Bartlett Road. Installation of a sedimentation basin at this location should be considered.
- 2. At the second existing driveway culvert that is being removed there is a 3'+/- deep ditch leading from the culvert outlet to the pond. This ditch is no longer needed and it should be brought back to its original grade with appropriate fill. Leaving the ditch as it currently is shaped would interfere with the proposed silt fence shown on the drawings.
- 3. Silt barriers near natural resources are recommended to be two rows of silt barriers, see page 21 of Reference 1.
- 4. "Sediment barriers should be designed for a contributing drainage area that is less than 1/4 acre per 100 feet of barrier or with a drainage distance of 100 feet or less" (p. 21 Ref.1). Runoff will accumulate at the low spots of the proposed long run of silt fence adjacent to Ken's Pond. Runoff accumulating at the low spots is likely to exceed the capacity to withstand a large storm event. Also, Sheet C 3.1 shows the Bartlett Road ditch and the proposed grass swale between lots 8 and 9 discharging flow above the silt fence. The volume of runoff from these ditches is likely to overwhelm the silt fences. Temporary sedimentation barriers are more suited at accept the flow from these ditches and adequately address the accumulated silt.
- 5. The existing Bartlett Road ditch is sparsely vegetated. A note on Sheet C 3.1 calls to "Clean & Reshape Existing Ditch, Remove Woody Vegetation." In consideration of the downstream natural resource, the entire ditch should be seeded and protected with erosion control blankets by referencing the "Grassed Swale" detail on Sheet C 4.1.
- 6. The frequency of inspection of the erosion control measures should be stated on the drawings for both the road building phase and the house lot construction phase.

7. Much of the driveway removal area is within the 100-foot buffer of the wetland of special significance and Resource Protection overlay district associated with Ken's Pond and the adjacent wetland. This buffer should be revegetated per LUDC Design Standards Section 16.10.6.E. Per the provisions of this standard, it is recommended that the Planning Board require the applicant to revegetate the buffer area with native or Northeastern native climate-tolerant plantings (not just grass).

References:

- 1) Maine Erosion and Sediment Control Best Management Practices (BMPs)
- 2) Maine Erosion and Sediment Control Practices Field Guide for Contractors
- 3) Maine DOT Best Management Practice for Erosion and Sediment Control.

Thank you for consideration of our comments.

Sincerely,

KITTERY LAND TRUST

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Lisa Linehan, KLT Executive Director

Jeff Clifford, KLT Board Member