To: Durham Planning Board, Durham Town Planner Michael Behrendt From: Gail Kelley, 11 Gerrish Dr., Durham, NH Re: Use of Gerrish Dr. wetland as access to proposed Mulhern subdivision Date: March 24, 2021

The following is the letter/statement I read at the March 24, 2021 meeting of the Durham Planning Board. My reading at that meeting paraphrased the last half of this letter for the sake of keeping my remarks brief.

Dear Vice Chair Lorne Parnell and Members of the Durham Planning Board,

This letter addresses four points:

 the incorrect lot number on recent applications submitted by the Mulherns and on the peer review report of the storm management plan;
recognition of the Planning Board's blamelessness in the Mulherns' attempt to use the approval of their lot line adjustment request to eliminate use of the Bagdad Rd. ROW as an access to their proposed subdivision;

3) clarification of the extent of DES examination of alternative access routes; and

4) the storm management plan "independent analysis" that was neither.

First, I want to bring to the board's attention what I hope is just a clerical error. The Mulherns' applications before the board – the one for conditional use permits and the subdivision application – both filed this past October, state that they are for property designated on Tax Map 10 as Lot 8-6. Also, the report from the engineer who conducted the peer review of the storm water management plans for this project identified the site as Map 10, Lot 8-6, 93 Bagdad Rd. In all three cases, the lot designation is incorrect. The site of the Mulherns' proposed subdivision – the very same lot they own and live on – is Lot 8-8. As recorded in the Strafford County Registry of Deeds, Lot 8-6 is a 1.7-acre lot belonging to Greg Imbrie, obviously a parcel too small to accommodate a subdivision of single-family and duplex housing totaling 15 units. There's been enough confusion about the location of one feature or another of this project without adding this other erroneous element to it. The lot designation on those documents needs to be corrected.

Secondly, this Planning Board SHOULD NOT take the blame for approving a lot line adjustment between Map 10 Lot 8-6 and Lot 8-6 that supposedly eliminated the use of the access point on the Bagdad Rd. ROW from consideration. I have listened – many times over – to the DECAT recording of the July 11, 2018, Planning Board meeting at which that lot line adjustment was approved. I have transcribed that recording and listened to it several times again to ensure the accuracy of my transcription. Although Mr. Behrendt said at that meeting that approving the lot line adjustment would result in the loss of one access option, he never explained how – despite being asked by Mr. Bubar SIX times, and despite Mr. Parnell's comment that the Mulherns would still have access to their 15-acre parcel after the lot line adjustment. At no time during that meeting was the easement road mentioned. Mr. Parnell's motion to approve the lot line adjustment between the two lots made no mention of the road. That motion is on file at the Strafford Country Registry of Deeds, along with a map of those contiguous lots and the resulting square footage of both lots. Of course, the road appears on the map, but it was not part of the boundary adjustment. The Planning Board was in no way involved in the change in ownership of the easement road from joint ownership of all property owners on it to a single owner, Greg Imbrie. That was done by the Mulherns alone. And that, too, did not result in their loss of legal access to Lot 8-8, from the Bagdad Rd. ROW, as stated in their deed with Mr. Imbrie for the sale of their house at 93 Bagdad and as determined by the Durham Town Attorney.

Thirdly, Conservation Commission members and, I suspect, at least some members of the Planning Board are under the impression that DES will evaluate other access points to the proposed Mulhern subdivision. This impression probably derives from Mr. Sievert's assertions – in his March 21 letter to the Planning Board and in statements he made at the February 21 Conservation Commission meeting – that an "alternatives analysis" will be part of the DES review. What he means is that DES will look at his design for a road through the Gerrish Dr. wetland, take his word that his team of professionals has examined alternative accesses, and will restrict its review to ensuring his plan for a road through the Gerrish Dr. wetland complies with all the permit criteria. No DES official will physically examine alternative accesses. The DES has neither time nor personnel to do that. That is the task – indeed, the duty – of local planning boards. And it has not happened in this case.

Lastly, my next-door neighbor John Lewis (Lot 6-11) and I (Lot 6-10) have expressed our fear of the potential for flooding of our properties resulting from the erection of a retaining wall on the north side of the proposed road through the Gerrish Dr. wetland. The purpose of the retaining wall – described by Mr. Sievert on one site walk as ranging from four to six feet high – is to hold the proposed elevated and southward tilting roadbed in place. That retaining wall will create a pie slice-shaped pit or basin between the road and my front lawn. That area accepts the flow of a stream flowing through a culvert under my driveway. That portion of the driveway will form one side of that pie slice-shaped basin. The low embankment of my lawn sloping toward the wetland forms another side. The proposed retaining wall will provide the third side. This triangular basin is the locus of my and Mr. Lewis's concern.

There is a spring-fed, perennial stream just outside the boundary of the town-owned ROW that runs roughly parallel along the north side of it. That stream flows from west of the Lewis property, through a culvert under the Lewis driveway, across their lawn, through the culvert under my driveway, and then into the Gerrish Dr. wetland before finally joining a larger stream on the east side of my property. When a heavy rainstorm coincides with frozen ground, that stream, as well as overflow from a large vernal pool between the Lewis house and mine, gushes through the culvert under my driveway, joining an equal volume of water from two culverts entering the wetland on its south side where Gerrish Dr. and Ambler Way meet at a corner. The resulting flooding can widen the wetland to more than 100 feet from its south side to the culvert under my driveway to the north. This is not an exaggerated scenario. It has happened at least once a year for the past several years. My husband Andrew Merton and I provided the

Planning Board videos of such conditions occurring in December 2019. Another storm caused similar flooding three months later (March 2020).

Now consider the consequences of a storm like the two cited above occurring *after* the Gerrish Dr. wetland is replaced by a road elevated four to six feet above the existing grade. The retaining wall holding that road in place will confine high volumes of water flowing across the Lewis lawn and under my driveway into the newly created triangular basin. The water will still make its way eastward to the larger stream, but its journey will be constricted and slower. The wetland that allowed excess water to disperse over an area 50 feet wide will be gone. So that water will pool in the basin. The location of that basin is in the lowest section of my driveway; indeed, it's the lowest point in the Gerrish-Ambler neighborhood. If the pooling water rises above the culvert, which could easily happen, the water will spread over the Lewis lawn and my driveway. When the rain stops, the standing water over the driveway will not subside quickly, due to the confinement caused by the retaining wall, the flat grade at that point, and the absence of the once-existing wetland. Overnight freezing could cause that standing water to turn to ice, rendering the driveway impassable, especially since the plan for the new road includes rerouting my driveway, sloping it upward by approximately four feet from that low point to intersect with the new road. This reconfiguration will put the driveway's low spot in greater shade due to the shadow cast by the retaining wall and the blocking of sunlight by evergreen trees that will be planted on the south side of the proposed road to provide screening between it and Lot 6-9.

For all of these reasons, the fears John Lewis and I have of the potential for flooding on our properties caused by the proposed road have not been allayed by the so-called independent storm water management analysis conducted on Feb. 25, 2021, by Mark Verostick of the engineering firm VHB of Bedford, NH.

That analysis addresses our concern with these words:

"There is an existing drainage channel to the north of the proposed roadway that allows runoff to flow from an existing driveway culvert on Tax Map 10 lot 6-10 [my lot]. This drainage channel is on the downstream side of the proposed entrance roadway, joins another drainage channel near the downstream end of a proposed roadway culvert, and then continues flowing to the north, downstream and away from the proposed roadway. The proposed roadway does not appear to affect the flow of this channel because the road will be constructed upstream from this channel."

Mr. Verostick later states:

"Therefore, based on my observations in the field and the information reviewed it does not appear that the project as proposed would result in any stormwater impacts on the adjacent upstream lots including Tax Map 10 Lots 6-9 [Lewis], 6-10 [Kelley], 6-11 [White] and 6-16 [Sproul]."

Mr. Verostick's observations in the field did not include even a glance at the stream running through the culvert under my driveway. I was home the day he, accompanied by Mike

Behrendt, Mike Sievert, and Richard Reine did the site walk for this analysis. I saw them gather at the Gerrish-Ambler corner, walk into the woods to the Mulhern property and later emerge to gather again at the corner. At no time did any of them venture down my driveway to look at the area north of the proposed road, the area that the proposed road could cause to flood in storm conditions or as a result of mounded snow accumulating there from the plowing of the new road and my rerouted driveway. Mr. Sievert and wetland scientist Mark West have never looked at this area. Had any of them done so, they could have noticed the flowage through the culvert under my driveway is not a "drainage channel" for "runoff." There is nothing in the surrounding area for water to run off of. Runoff is a sporadic occurrence. This stream's flow is constant except during extreme drought.

To call this stream a "drainage channel" is incorrect terminology. A glacier, pond, canal, wetland, puddle, or storm water on any surface can drain. None of these are the source of the streams entering the Gerrish Dr. wetland. These are spring-fed streams. A spring, by its nature, doesn't drain; it either replenishes itself and continues to flow, or it dries up when its subterranean source is depleted. Water flowing from a spring is not a drainage channel. Yes, Mr. Lewis dug a trench across his front lawn to contain the stream so it wouldn't meander through his lawn the way it does through the wetland on the east side of my driveway, but this trench is not a drainage channel.

Also, to say this stream is on "the downstream side of the proposed entrance roadway" makes no sense. The proposed roadway doesn't have a downstream or upstream side; it has downstream and upstream ends. The stream will flow *beside* the proposed road.

Mr. Verostick's conclusion that "it does not appear that the project as proposed would result in any stormwater impacts on the adjacent upstream lots" is not based on any "observation in the field," since he never looked at the area in question. He also failed to cite any science to back up his conclusion. So this "independent analysis" amounts to nothing more than a rubber stamping of Mike Sievert's statement, made at a Planning Board meeting a few months ago, that he does not "believe" the proposed road will cause any stormwater flooding of properties abutting the wetland.

Science and engineering are not belief systems. The video-documented stormwater impacts adjacent properties have already experienced on the north side of the wetland – without an elevated, retaining wall-supported road to exacerbate those impacts – provide a much firmer basis for critical thinking on this proposal than unsupported conclusions and beliefs subsidized by those intent on pushing this project forward regardless of the consequences.

Sincerely,

Gail Kelley 11 Gerrish Dr., Durham, NH