To: Durham Planning Board, Michael Behrendt

From: Gail Kelley, 11 Gerrish Dr., Durham

Date: Oct. 6, 2022

RE: Compliance with court ruling in Kelley v. Durham

The seriousness of the court decision in the Mulhern subdivision case cannot be over-emphasized. Nor can the need for the Planning Board to accord all due seriousness in complying with it.

This case centers on the Planning Board's granting of a conditional use permit to Michael and Marti Mulhern to pursue approval from the New Hampshire Department of Environmental Services to dredge and fill – and, thus, eliminate – three-quarters of the Gerrish Drive stream bed wetland and turn it into the access road to their proposed subdivision. The Planning Board granted the permit after accepting an incomplete application. The application lacked a required and verified High Intensity Soil Survey (HISS) map.

Both the Planning Board and Conservation Commission based their decisions for granting of the permit solely on maps created by Mulhern project engineer Michael Sievert and on his and Durham Town Planner Michael Behrendt's insistence that building a road from the south portion of the Mulhern parcel to the home sites in the north is impossible without *going through* wetland. Members of both boards also refuse to acknowledge the distinction between *going through* and *crossing over* and the difference in the consequences of these two actions.

The HISS map resurrected. Now what?

With the addition of the required HISS map to the Mulhern application, the application is now complete. The advice to the Planning Board and Conservation Commission from Town Attorney Laura Spector-Morgan, according to Town Planner Michael Behrendt, is to limit the court-ordered review of the Mulhern subdivision proposal to "only one issue, a review of the HISS map."

That is a rebuke of the court ruling. What is the Planning Board supposed to review on the map? The HISS map has already been reviewed and verified by the

required authority, Strafford County Conservation District soil scientist Michael Cuomo.

Reviewing the HISS map is NOT WHAT THE COURT ORDERED. On the contrary, the court found that the Board "made unreasonable findings based on an insufficient application." The application was insufficient because it lacked a HISS map that provides information on the location and extent of wetlands and on the capacity of various soils to support development

In other words, it is those "unreasonable findings" that must be reviewed once Planning Board members have sufficient information to do so. The Board must apply the information from the HISS report and map to their decision to grant the permit to turn the Gerrish Drive wetland into a road and examine whether the HISS information supports that decision or some other route. The Board cannot compel an applicant to choose one route over another, but it can deny a permit if the HISS map shows the alternative route (from Bagdad Rd. ROW) would impose less harm on wetland and abutter properties than the wetland route would. There is no greater harm to a wetland than eliminating it.

As for abutter property damage, two spring-fed streams flow west to east into the Gerrish Drive wetland, one on the south side of the wetland and the other on north. Mr. Sievert plans to divert the southside stream into a culvert that will direct it into a larger stream to the east.

The north stream is not drawn on any maps created for the Mulhern project, because it is just outside the northern boundary of the proposed road. It flows eastward across my neighbor's lawn and through a culvert under my driveway before entering the wetland. During heavy rains, this stream is also fed by overflow from a large vernal pool between our houses. Whenever we have prolonged rainfall combined with frozen ground, all the storm water and overflow now gushes through the driveway culvert and spreads over the Gerrish wetland as it flows slowly eastward. If the proposed road is built, that stream will crash into the road's six-foot tall cement retaining wall as it tries to flow through a space reduced from 120 feet wide to about eight. There's no question that water will flood in the direction of both houses.

Mr. Behrendt has trivialized abutter fears of flooding as typical opposition to a new subdivision ... until abutters showed videos of flooding that occurs now, when there's a large, intact wetland to accommodate that water.

Surely, no abutter to the Mulhern property will have to worry about flooding of their property as a result of a road there from the Bagdad Rd. ROW to the subdivision house sites in the north

Since 2018, when the Mulhern subdivision proposal first came to light, the Mulherns, assisted by Mr. Behrendt, the Planning Board, and Mr. Sievert, have refused requests by Gerrish Drive wetland abutters, Conservation Commission members, and others to conduct site walks of the whole Mulhern parcel to assess alternatives to destruction of the wetland.

Conversely, the Planning Board, Mr. Behrendt, and wetland and stormwater management consultants for the Mulherns have rebuffed invitations from abutters to view how their properties will incur serious flood risk if 75% of the wetland is filled.

Mr. Behrendt and Mr. Sievert quashed efforts to field verify and clarify Mr. Sievert's Site Analysis Plan map by barring Conservation Commission and Planning Board site walks of the whole parcel and by dismissing first-hand observations of those who explored the parcel independently, including one Conservation Commission member, who had the temerity to question the depiction of the terrain on Mr. Sievert's map.

This commissioner and others who explored the whole property independently discovered an existing alternative route that GOES OVER, NOT THOUGH ANY WETLAND. This is a woods road over which an excavator travelled to dig the 26 test pits on the property. This roadway crosses over a wetland containing a rivulet approximately 15 inches wide. To enable the excavator to get over the rivulet without disturbing it, a log bridge was laid across it. This rough bridge remains in place. Despite the proximity of the logs to the surface of the rivulet and the movement of an excavator over them, wetlands scientist Mark West judged this waterway the most pristine of any in the wetland system in and

around the Mulhern parcel. The lack of adverse wetland impact by this roadway and bridge indicates how minimal the impact of a road here would be compared to elimination of the Gerrish Drive streambed wetland.

Five Years without a HISS Map? Why? Some Background:

Durham Subdivision Regulation 7.06 requires the following:

7.06 Verification of Soils Data

A High Intensity Soils Survey submitted as part of a pre-application submission or an application shall be prepared by a New Hampshire Certified Soil Scientist and shall be verified by one of the following methods prior to its consideration by the Planning Board in the review of the project:

A. Written evidence provided by the applicant that the Strafford County Conservation District of its designee has reviewed the soils data and mapping and agrees that it accurately represents the soil conditions on the site

From 2017 to 2018, State-Certified Soil Scientist Michael Mariano collected High Intensity Soil Survey (HISS) data from test pits throughout the Mulhern parcel and wrote a report reflecting his findings. He also created the required HISS map, with his signature and seal on it, and submitted the whole package to the Mulherns in May 2018. Mr. Mariano's HISS report remained in the Mulhern application file in the Durham Planning Department. However, by the time the Mulhern application was presented to the Planning Board as complete, the file contained neither Mr. Mariano's HISS map nor any written documentation that it had been verified the by the Strafford County Conservation District.

What happened to Michael Mariano's original HISS map?

As Mr. Sievert explained in the September 19, 2022, Conservation Commission meeting, in preparing his Site Analysis Plan (Map C107) for the Mulhern project, he subsumed the original Mariano HISS map into it. Mr. Sievert used his Site Analysis Plan to misrepresent the reality of the Mulhern property, subvert the integrity of Mr. Mariano's work, and bully Planning Board and Conservation

Commission members and members of the public to further the Mulherns' scheme to avoid building a longer and less environmentally harmful road to save themselves money while raising the specter of severe property damage in the Gerrish Drive neighborhood.

Planning Board and Conservation Commission members must have a readable map

Soil scientist Michael Mariano provided all the soils data for the HISS map we now have. Michael Sievert produced the map from the Mariano data because, he said, soil scientists generally don't have the software to do this sort of imaging The data and mapping were verified by Strafford County Conservation District soil scientist Michael Cuomo.

However, just minutes into the portion of the September 19, 2022, Conservation Commission meeting dealing with the review of the HISS map, one commissioner announced he couldn't read the map because the lettering is so small. Another commissioner suggested he use the magnifier app on his phone. There is no reason for this, and it's no way to review a map.

Those charged with reviewing the map should not have to resort to a magnifying glass to do so.

The HISS map is printed on 11 x 17-inch paper. There is plenty of space in even the smallest segment on that map to fit a number in a large enough font to read. Mr. Sievert chose to use a font too small to read, even with a magnifying glass. Why? Readable numbers reveal the inconvenient truths in the HISS map and the Mulhern property it depicts.

Since no one in the room during the Sept. 19, 2022, ConCom meeting could see the print on the map, Mr. Sievert read the Soil Key for the HISS numbering system aloud – 300-series numbers for moderately well drained soils, 400-series for somewhat poorly drained, 500-series for poorly drained, and 600-series for very poorly drained. He did not mention what uses these categories have, if any. Mr.

Sievert did not refer the commissioners to Mr. Mariano's soil report, which explains what uses and restrictions apply to each of the soil type categories.

After 20 minutes had passed, with the Commissioners unable to read the HISS map, Mr. Sievert switched to his Site Analysis Plan map, which was used by the Planning Board and Conservation Commission in their granting of the permit to the Mulherns to fill the Gerrish Drive wetland. This map was the only frame of reference Planning Board and Conservation Commissioners had in arriving at that decision since site walks of the central and southern portion of the property were verboten. This kind of manipulation of a volunteer board in Durham is very sad to see.

For the rest of the meeting, this was the map that the Commissioners referred to – because they could read it! So, the meeting turned into a rehashing of Mr. Sievert's map, not a discussion of the HISS map, a map that presents a completely different depiction of the Mulhern property from Mr. Sievert's Site Analysis Plan.

Mr. Sievert directed the commissioners to compare the shape and size of the wetlands on the HISS map with the depiction of them on his Site Analysis Plan. "Identical," he declared. "No material difference between the two." Unable to read the HISS map and with no time taken to read the Mariano soil report, the commissioners believed him. Then the Conservation Commission voted to reaffirm their decisions of last year regarding the awarding of a permit to the Mulherns to fill the Gerrish Drive wetland for the access to their proposed subdivision, citing the longer length of a road from Bagdad Road versus a shorter route through the wetland, the risks and expense the Mulherns would incur if litigation arose if they tried to use the Bagdad Rd. access point, and the strictures put on the ConCom by Criterion 1 of Article XIII, 175-61B.

Without reading the Mariano Soil Report and without a legible HISS map to study, this vote represented no analysis of the HISS map and how it might affect their decision to recommend the granting of the permit to the Mulherns to fill the Gerrish Drive wetland. map and apply that analysis to the granting of the permit to the Mulherns to fill the Gerrish wetland.

How the Sievert map compares with the HISS map?

Mr. Sievert's Site Analysis Plan was created in four colors:

- 1) Dark pink -- the wetland
- 2) Lighter pink unsuitable areas
- 3) Yellow 50% usable areas
- 4) Stippled green usable areas

The shape, size, and location of the dark pink wetlands have remained unchanged since before Mr. Sievert got involved with the Mulhern project.

Delineated and drawn by soil scientist *and* wetland scientist Michael Mariano, the wetlands were the one fixed feature Mr. Sievert couldn't mess with. But with the HISS numbers and map units gone, he could play with the rest.

Since the members of both boards lacked first-hand knowledge of the terrain, Mr. Sievert could easily shape their perceptions of the property with his Site Analysis Plan by making the parcel appear as though nearly all of it is wet, and a road could not be built from south to north without going through wetland. This would make the access road through the Gerrish Drive wetland the only reasonable route to the house sites in the north.

So, Mr. Sievert rimmed the wetlands with a light pink shadow, wider in areas where he needed to obscure contour lines on the map that would show slopes too steep to be wet and making sure all possible passage through large gaps was blocked by the pink shadow. Readers of the map would automatically think these areas are wet because light pink is in the same color family as the dark pink used to designate wetlands. Just to be safe with this maneuver, he labeled this color "unsuitable." Of course, if an area is wet, it must be unsuitable.

Then, all areas between the light pink "unsuitable areas" and the stippled green "usable" areas became yellow, i.e., "50% usable." Using a percentage makes this labeling sound technical, though the label has no meaning. What half of these areas is usable? What half isn't? What is being halved? The surface area? The top half of the soil between the surface and bedrock? Or is it wet 50% of the time? No matter. Anything that is only half usable must not be something worth spending money on, so not a good place for a road.

In the two years that Mr. Sievert has used this map to convince those involved with the Gerrish Drive wetland issue that wetland destruction for a road is the only sensible way to go, only one commissioner has questioned this map. When that happened, Mr. Sievert said the light pink areas are "somewhat poorly drained." Somewhat poorly drained soils are not wetlands. But soon after that, he went back to calling it all wetland, and Mr. Behrendt followed suit.

Yet, if you really study the Site Analysis Plan, you'll see things that slide into the nonsensical. Around the so-called wetland finger (which really looks more like a mallet with a bent handle), there's a large patch that is both light pink and stippled green, meaning it is unsuitable AND usable. The same odd coloration appears to the east of wetland finger, where a light pink area that looks like a cat's leg extends into stippled green, again unsuitable AND usable.

In the center circle surrounded by wetland, light pink covers the steep slopes of what Mr. Sievert calls the knoll. This is clever wetland; it runs uphill!

The HISS map tells a very different story about the Mulhern property. See below.

(Spoiler alert: Everything – EVERYTHING – outside the delineated wetland is non-wetland AND suitable for building a road. I'm not making this up. It's all in Michael Mariano's Soil Report and on the HISS map.)

How the HISS map proves a road can be built from the south to the north of the Mulhern parcel

First, turn to the **KEY TO SOIL TYPES** page in the Mariano Soil Report (page is numbered 5). At the top of the page, look at the first list, labeled **A. Drainage Class.** These numbers (1-7) appear as the first digit in the three-digit soil designations in each unit on the HISS map and are referred to as the "hundreds series." For example, HISS map number 353 is in the 300 series, 453 is in 400 series, and so on. In this numbering system, the lower the number, the drier the soil. 500- and 600-series numbers are wetland. There are no 100- or 700-series

soils on this parcel. On the Mariano map, all 300- and 400-series map units are non-wetland. The variously shaped map units indicate changes in elevation, not soil types.

Next, find the page titled **Boxford Silt Loam.** Just below the title is this subtitle: High Intensity Map Symbol: 353, moderately well drained 453, somewhat poorly drained

This page describes the characteristics of 353 and 453 soils. Take note of this paragraph at the bottom of the page, especially the next to the last sentence:

Use and Management

"With improvements and engineering practices, this soil is fairly well suited to development. Slow permeability and a seasonal high water table are the limiting factors. Position on the landscape allows engineering practices to overcome the limitations. Subsurface wastewater disposal is permitted [Italics added]. See Test Pit 6 for a typical description."

If subsurface wastewater disposal, i.e., septic systems are allowed in 353 and 453 soils, then certainly these soils can support structures *on* the surface, such as, a bridge, culvert, or ROAD.

The areas in the north where the proposed house sites will be located are all 353.

With the exception of a few units of 321 or 324 soils and one 221, which are even drier than 353 because they consist of glacial till, ALL of the map units outside of the delineated wetlands are 353 or 453 soils. And 353, the soil where the house sites will be, is by far the most prevalent soil type throughout the property. So, a road from the south to the north would have only two minimal encounters with wetland and NO DESTRUCTION OF WETLAND. (Attached is a copy of the HISS map with such a road drawn from the Bagdad Rd. access point in the south to the subdivision house sites in the north.)

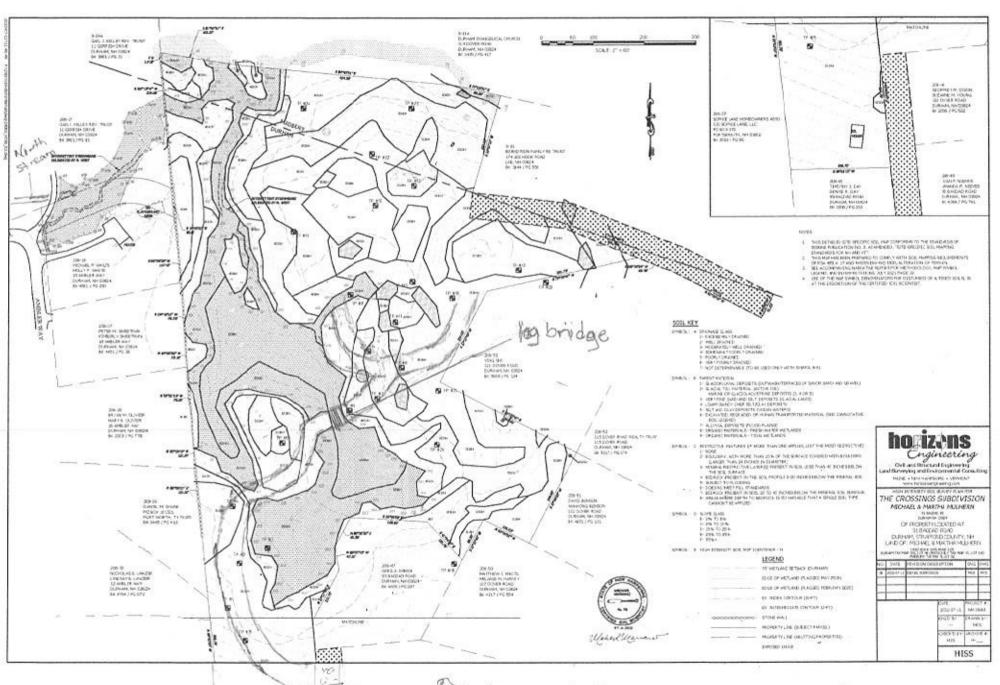
This is what the Mulherns, Mike Sievert, and, yes, Michael Behrendt have tried to keep under wraps all these years:

List of Musts

- 1) Readable copies of the HISS map. The copies with microscopic font should not be accepted. Do not accept the HISS until Mike Sievert produces legible copies and Planning Board members have ample time to study it.
- 2) Official, open-to-the-public site walks -- not just one person at a time-must take place from the Bagdad Rd. ROW to the subdivision home sites in the north. Applicants don't get to tell or they shouldn't be allowed to tell -- a Planning Board how to conduct the review of their proposal. According to the NH Office of Strategic Initiatives 2020 Planning Board in New Hampshire Handbook, if permission to do a site walk is refused, "the board normally would deny an application for failure of the applicant to allow the board to get sufficient information." And "If the applicant refuses access to the non-board public, that also may be a basis for denial (without prejudice)."
- 3) Sadly, none of us has any illusions that the Planning Board will deny the Mulherns application. So, if the Mulherns continue to prohibit official Planning Board and Conservation Commission site walks, we request that Mr. Behrendt obtain an administrative inspection warrant under RSA 595-B
- 4) The Mulhern Subdivision Application needs correction on p. 1 re: what kind of road is proposed. Applicant has checked off Town road *and* private road. If the access road goes through the Gerrish Dr. wetland, that road will be private, not a Town road.

Thank you

Gail Kelley



Possible road-from Bagdad Rd. ROW