

To: Durham Planning Board, Town Engineer April Talon
From: Gail Kelley
Date: Aug. 8, 2021

Of the three major issues surrounding the proposed Mulhern subdivision road through the Gerrish Drive wetland – environmental impact, cost to a homeowners association for infrastructure maintenance and replacement, and safety -- the matter of safety is paramount.

As part of my comments at the July 21 Planning Board meeting, I stated that the road will not be welcoming to pedestrians or bicyclists because of its narrow gravel shoulders, tall retaining walls, one precipitously steep drop, and only 27-inch-high wooden guardrails for pedestrian and bicyclist protection.

Supporters of the subdivision reacted to these comments by pointing out that there are no sidewalks in the Gerrish-Ambler subdivision, yet plenty of people walking with dogs and children and kids on bikes safely use this subdivision's roads. A resident of another Durham subdivision said it also has no sidewalks, but walkers, along with their kids, pets, and bicycles enjoy the roads there. Pedestrian safety is not a concern because motorists there are mindful and drive slowly.

I do not oppose the Mulhern project. Nor do my neighbors in the Gerrish-Ambler subdivision. I recognize the need for additional housing in Durham. But it is possible to have this subdivision and an access to it without destroying a highly functioning wetland or having adverse impacts on abutters.

What escapes notice in supporter vs. opponent exchanges around this project is that the proposed access road to the Mulhern subdivision is not like roads in other subdivisions. In fact, as Durham DPW Director Rich Reine has told me, the proposed road is "unlike any other road in Durham." With good reason. Up until recent years, Durham Planning Boards have respected and upheld wetland protection measures in the Town Zoning Ordinance.

Apart from portions of Town roads that traverse railroad tracks, rivers, or a highway, **every road in Durham is on ground level**. In contrast, the proposed Mulhern subdivision road will require filling the Gerrish Drive wetland. Water now flowing into and out of it will be redirected through enormously expensive infrastructure, which the Town is – rightfully – unwilling to assume the cost of maintaining and replacing. Vertical concrete retaining walls will hold all the fill in place. The result will be a road ranging from **4 to 14 vertical feet above existing ground level**. The highest section of this road will span a ravine with a rocky stream at its base -- 14 feet below.

To visualize the experience of being on a road 14 feet above ground level, picture standing on the overpass on Bagdad Road over Route 4. This overpass is approximately three feet higher than the road that will cross the ravine.

The current road plan calls for 27-inch-high wood guardrails along the road where it crosses the ravine and on other segments of the road. This guardrail height is about mid-thigh for most adults. The seat on a child's bicycle is about 27 inches high. In other words, a child who loses his or her balance while navigating a bike in the soft and pebbly gravel shoulder of the road, could easily topple over that guardrail and fall 14 vertical feet. The guardrail would be even less protection for an adult riding a bicycle or walking and slipping on a stone in the gravel.

OSHA requires that anyone working six feet or more above a lower level be protected from falling by a "bridge barrier or railing [that] must have a height of 42 inches, plus or minus three inches." The American Association of State Highway and Transportation Officials (AASHTO) guidelines, also stipulate that a "railing on the outside of a bridge with adjacent pedestrian walkway must be 42 inches minimum in height, measured from the top of the walkway."

The Route 4 overpass on Bagdad Road has a raised sidewalk and not only the requisite 42-inch railing but an additional four feet or more of heavy-duty mesh fencing above the railing, providing a protective barrier 9 or 10 feet high.

The portion of the proposed road traversing the ravine will not be a bridge or overpass. It will not have a sidewalk of any kind. Nonetheless, the drop from that road surface to the rocky stream will still be 14 feet. Engineer Mike Sievert's contention that a sidewalk is not needed on this road is reasonable. But the lack of a higher protective barrier at this location is reckless.

A safety issue of a different nature involves the proposed guardrail at what will be the reconfigured entrance to my driveway when it is moved from Gerrish Drive to the elevated new private road. That guardrail will be **five to six feet above** what will be the only remaining portion of the Gerrish Drive wetland – a basin accepting the flow of a perennial stream that runs across the lawn of the Lewis home next door and under my driveway on its way to other streams east of the wetland. Drivers of service vehicles backing into my driveway will have to make a right-angle turn. The 27-inch-high guardrail will be all that shields them and their vehicles from falling six vertical feet into that wetland basin. Operators of such trucks are skilled in maneuvering into challenging driveways. But in the winter, if accumulated snow in the basin from the plowing of the proposed road and my driveway obscures the guardrail, it could get smashed by a truck. One would hope the driver would be unharmed, and the truck could be towed out.

Then comes the question of who pays for the replacement of that broken section of guardrail. Supposedly, that will be the responsibility of the Mulhern subdivision homeowners association. How readily will the members of a 55-and-older homeowners association respond when they are already strapped with a hefty HOA fee for annual maintenance, their share of HOA insurance, and an escrow account to cover the eventual \$1 million dollar-plus cost of road infrastructure replacement, on top of the usual expenses of home ownership? What's to prevent that HOA from ignoring the broken guardrail, especially since it serves the driveway of someone who is not a member of the HOA and doesn't contribute to it? The broken guardrail doesn't affect any of them. Meanwhile, for me, the broken guardrail would not be a mere matter of aesthetics; it's a life and safety issue for anyone using my driveway.

When I raised this question at the July 14, 2021 Planning Board meeting, Chairman Lorne Parnell replied, "Hopefully, the association documents will be written in such a way that they will be responsible for maintenance of all aspects of the road. I don't think we can expect any more than that."

James Bubar reminded the board that the condo association in Surfside, FL, also had the responsibility for maintenance of the condo that collapsed, "but they didn't act."

And Sally Tobias added, "It comes down to the condo association to enforce those rules and just how aggressively it's worded in the legal documents."

The reality is, no matter how robustly the legal documents are written, there's no enforcement power behind them. An aggrieved party's only recourse is to take the HOA to court. How likely is a property owner in a middle-income neighborhood to do that? Not very.

And so, the hypothetical – or maybe real – broken guardrail could remain in place until it rots.

These issues would likely evaporate if the Planning Board did its due diligence and engaged independent analysts to examine the Bagdad Road Right-of-Way access.