

Brem-350-01.19.2017

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To: travissnell <travissnell@yahoo.com>

Cc: peggywn <peggywn@aol.com>; 'Peter Gambino' <pgambino@delaero.com>; 'Linda Fantasia' <LFantasia@carlisle.mec.edu>

Subject: FW: ZBA Hearing - 100 Long Ridge Road

Date: Thu, Jan 19, 2017 3:35 pm

Travis,

This is to let you know that today I have sent **the e-mail below to Chief Flannery**, in response to his memo of 1/17/17 to your Board regarding the applicant's submission of Exhibit T2 and Exhibit U, the Turning Template and Potential Cistern Location, respectively.

I am urging him to submit further comments to the Board while the hearing is still open, as I think they would carry more weight coming from the Town's top fire safety official, rather than from me. I do believe these are important matters for the Board to address, although they rightly should have a lower priority than the issues surrounding water supply and wastewater treatment. I have also reviewed the **Board of Health's memorandum to you of 1/18/17**, and I find that these crucial issues are clearly stated and responsibly supported with background data therein.

I particularly note the table on page 2 of the BOH memo, comparing the proposed Long Ridge Road development with the densest development currently allowed and existing in Carlisle, the Residence A zoning district in the town center. While the number of homes in the center is almost five times greater than those proposed on Long Ridge Road, the density of the latter is four times that in the center. Since we all know the history of well contamination in the center, it is difficult not to predict that, even with improved treatment technology, there would very likely be instances of such contamination somewhere down the road if the Lifetime Green Homes project were built as now designed.

Urban planners, including myself, have long supported "smart growth," which generally involves directing higher density development to areas of the community that have the best infrastructure to support it. This infrastructure is usually related to transportation and other public services. One of these, often taken for granted, is public sewer and wastewater treatment capacity. Carlisle doesn't have that infrastructure, and the applicant in this case is unable or unwilling to provide it. The hydrogeologists have shown, through lengthy analysis, that the "natural" treatment capacity that Carlisle relies so heavily upon is at best inexact and may be unreliable at the proposed density.

Nevertheless, if your Board chooses to approve the remanded plan, I would suggest you pay particular attention to the "Additional Considerations" on page 4 of the BOH memo. Of those topics addressed, I would add to "Water Supply Reserve Account" that some provisions for adjusting for inflation going forward must be built into such an account, or it will be inadequate in the long range. I would also add to the "Abutting Wells" consideration that it should be determined how utility (water) lines could be extended across private abutting property to serve other lots without an easement in place, which would be the case of a line to serve 55 Suffolk Lane, which must cross 35 Suffolk Lane property. Similarly, water lines to 200 Long Ridge Road or to 68 Garnet Rock Lane, while not crossing private property, would have to cross, or be laid within, public ways. I believe this would require the permission of the Selectmen.

I hope you find these comments useful. I expect to attend tonight's hearing and would be glad to answer any questions.

George

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From: George Mansfield [<mailto:gmansfield@carlisle.mec.edu>]
Sent: Thursday, January 19, 2017 2:24 PM
To: 'Chief Flannery'
Cc: 'Peter Gambino'; 'Linda Fantasia'
Subject: ZBA Hearing - 100 Long Ridge Road

David,

At the Chair's request, I have been monitoring and advising the Zoning Board of Appeals (ZBA) regarding its remand hearing on the application for a comprehensive permit to allow the construction of 20 single-family housing units at 100 Long Ridge Road. At the last two sessions of the hearing, on 12/21/16 and 1/04/17, I commented on the fire protection deficiencies in the current revised plan, as compared to what the Planning Board normally requires consistent with your advice, in the subdivision plans and special permits it approves for development in Carlisle.

Subsequent to these hearing dates, the applicant has submitted a revised turning template plan and a plan showing a potential location for two fire cistern tanks with a minimum capacity of 45,000 gallons, which you subsequently commented on in your letter of 1/17/17. I would like to suggest that you consider some further specifications to those comments that you might wish to introduce at the hearing scheduled for this evening, which is likely to be the last opportunity for the ZBA to receive any new testimony.

Regarding the **turning template**, it has previously been suggested to the ZBA that the peer review engineer should review the revised detail and confirm that it meets the width and depth standards that you recommend. To my knowledge, that has not been done. Also, although beyond the scope of the Fire Department's concerns, the ZBA should determine whether the proposed extension of the turnaround stubs into the Zone 1 protective radius required around a public water supply conforms to the Mass. DEP's regulations contained in 310 CMR 22.02 and 22.21. If it does not, the plan as proposed may not be allowed, even though the stubs are not proposed to be paved.

With regard to the **potential cistern**, I note that the plan submitted does not contain a dedicated well for its water supply. As the Board of Health has pointed out in its memorandum to the ZBA of 1/18/17, the applicant must designate this water source, and if it is a separate well, it should be shown on the plan. If replenishment of the cistern is to rely on a connection to the proposed public water supply, then I suggest that the Fire Department and the Board of Health jointly consider the implications of such a plan that, to my knowledge, has not been implemented in Carlisle previously.

Secondly, the turnout on Long Ridge Road proposed for access of public safety equipment to the cistern, while 50 feet long, is only five (5) feet deep. This is significantly less than at most recently-approved cisterns. The most recent of these, at 570 West Street, is 15 feet deep on the side of a 20-foot wide proposed

roadway, providing vehicle clearance of 35 feet at the cistern location, which is similarly located on a dead end road. Space to increase this width is severely limited on the Long Ridge Road plan, but vehicle travel over the cistern tanks themselves has been employed at both Great Brook Path and on Oak Knoll Road. However, if this solution is acceptable, that installation must be shown on the plans and designed properly to support such access.

Finally, I do not believe the minimum separation between **underground propane tanks** and the residential buildings, which detail is not shown on the remand plan that is before the ZBA, will be met by that plan. Although this concern has been previously been identified by the peer review engineer and me, I expect a statement from the Fire Department would remind the ZBA that this public safety issue should be addressed.

I hope you will consider these suggestions and that you can be present at the hearing tonight to bring them to the Board's attention.

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