
From:
Sent: Friday, March 22, 2019 6:00 PM
To: Michael Antonellis
Cc: Michael Hanson - FPD; Courtney Manning - FPD; Debra Dennis
Subject: GBE Fire Safety Concerns

Dear Mr. Antonellis,

In recent weeks, I had the opportunity to discuss fire safety concerns related to the Goodridge Brook Estates (GBE) proposal with both Fire Chief Hanson and DFS Engineer Nunnemacher. They were informative conversations and I appreciated their time and expertise.

I have also had numerous discussions regarding fire safety with other concerned residents. While I don't claim to speak for anyone else, I have gained further insight on these issues from their research and perspective.

While the Chief and the Department of Fire Safety (DFS) Engineer have stated that the development will meet minimum fire code requirements in many cases, I'm concerned that higher public safety standards are not being applied.

Given the scale and density of the project and the large population increase it will produce, any emergency situation at the proposed site could have a dramatic impact on the town as well as on its current and future residents.

96 apartments having a total of 182 bedrooms could add approximately 218 residents. 56 houses having a total of 196 bedrooms could add roughly 235 more. With 378 bedrooms, there could be a total increase of 454 residents or more.

Shouldn't we have higher expectations for new construction of subdivisions and apartment complexes in Lancaster? There appears to be a substantial amount of space available on the 45-acre GBE site.

Shouldn't the Applicant be capable of producing a profitable layout without compromising public safety?

Fire Safety Review Process and Reports

While the Fire Chief has made a couple of informative appearances during several months of public hearings, the fire safety review for GBE would benefit from a more formal process. I believe this is one of the reasons Arthur Johnson has been advocating for application of NFPA 1141, which provides national fire safety standards for the evaluation of new developments in rural areas.

I would request that the Fire Chief continue to provide regular updates at the ZBA meetings. In addition, I would ask Chief Hanson to provide documentation for any decisions, approvals, equivalencies, modifications, or alternatives that have been made pertaining to fire safety and protection for this project per MA 527 CMR Section 1.11.1.

The fire safety review process that is generally followed in town for single-family homes or small businesses may not be appropriate for a project of this scale and potential impact. Due to its size and the considerable public interest, greater transparency should be sought as part of the special permit hearings.

Other aspects of the proposal such as water, traffic, and layout plans have typically been subject to the Applicant's engineering review followed by the town's peer engineering review. Fire safety has not followed this process and that may be one of the reasons residents remain concerned about it.

Accordingly, the ZBA should request a comprehensive fire safety and protection report from the Applicant's fire engineering consultant. A written summary of the project's compliance with applicable fire codes should be provided for review by the Board, the Chief, the DFS Engineer, and the public.

In addition, corresponding reviews performed by the Fire Chief and the DFS Engineer would further address these concerns. Better communication of what issues have been identified and how they are being resolved would be beneficial towards proper assessment of the project and informing the public.

Obstructed Fire Department Access Roads

Both parcels of the proposed development are to be accessed through single, narrow, winding, dead-end roads. This is likely to create additional hazards and obstacles for first-responder's arriving and for residents attempting to evacuate in the event of an emergency.

A significant portion of the Lancaster fire department consists of on-call firefighters who would respond in their own vehicles. In the case of a major fire, mutual aid from neighboring towns would be involved as well. At a time when seconds matter, response could be delayed by increased traffic and obstructed access roads.

Any serious vehicle accident on Sterling Road could block access to and from the development for hours. Because it is a narrow, two-lane road without shoulders, traffic on Sterling Road would quickly back up inhibiting travel in either direction. With no secondary access to the GBE site, even emergency vehicles could be blocked from entry.

This is a bad plan, an accident waiting to happen. However, it is as preventable as it is predictable. There is a profound need for secondary access to this development.

Perhaps that could be accomplished by utilizing existing utility easements to construct fire lanes or by some other means. It should be noted that secondary emergency access was required for Eagle Ridge and that would be a responsible approach for the GBE project as well.

The Fire Chief has the authority to require greater access to the project where necessary per MA 527 CMR Section 18.2.3.3.

The Cumulative Effect of Meeting Minimum Standards

Just meeting the minimum fire or building code standards for each aspect of a building or complex may result in an overall lower level of safety than warranted. Decisions made to allow such conditions will likely have cumulative effects.

While the road widths throughout the development may meet minimum standards for fire access, accepting these narrow roads will require that they be posted and maintained free of vehicle obstructions throughout the year. That may require greater monitoring by the police department and perhaps even towing violators. (MGL Chapter 89, Section 7A).

Those responsible for snow removal will have to be particularly diligent about plowing to maintain the 20 foot minimum width requirement throughout the development.

The lack of overflow and off-street parking throughout the project will exacerbate the situation. The proposed waivers from zoning rules for minimum front, back, and side setbacks as well as lot sizes will produce crowded neighborhoods with little space for visitor parking due to short driveways and frontages for the single-family homes.

Similarly, the lack of overflow parking in the apartment complex will compound accessibility challenges there as well. There is already a lack of space between parking areas and buildings, and the snow storage areas are also located close to the parking lots. There is little room to maneuver in the event of an emergency in this congested layout.

There is no vehicle access to the rear of the apartment buildings. While this meets minimum fire code, it does not facilitate emergency response, limits access/rescue options, and may require additional time and effort to respond effectively. An earlier iteration of the two-building complex included a fire lane through the middle allowing more direct access to the back. Why was that removed?

Waivers from Zoning Rules Reduce Public Safety

While the existence of sprinklers is relied upon in the apartment complex to control and prevent the spread of fires, no such provision is made for the neighborhoods of tightly packed, single-family homes. The national standard would require sprinklers in buildings having less than 30 feet of separation, however, the MA code does not adopt that requirement and relies upon zoning by-laws, in part, to achieve public safety objectives.

Accepting the Applicant's waiver request for 10-foot side setbacks as well as reduced back setbacks would create closely spaced clusters of houses with little separation from nearby trees. This seems likely to promote the spread of any single structure fire to quickly involve multiple homes. If adequate spacing was provided as required by the town's zoning bylaws, this hazard could be greatly reduced.

An alternative would be to require sprinkler systems be installed in every home that does not meet the zoning rule for 20-foot side setbacks. I believe that the Fire Chief has the authority to make this request.

Another consequence of the tight spacing of homes will be the need to meet higher fire ratings for some of the construction materials. This will necessitate greater oversight by fire and building inspectors to ensure those standards are met.

Unfortunately once built, any violations found for a given structure will be more expensive and more difficult to remedy, and possible options for solutions will be more limited. Therefore, It would be in the best interest of the builder to identify and remedy any problems proactively.

The ZBA should ask the Applicant to document that all materials used for construction meet the MA fire code.

It is important to remember that this area of town is zoned for residential, single-family housing. The construction of high-density apartments and crowded neighborhoods requires special permitting be granted by the ZBA, subject to any limitations specified by the Board.

Accepting the variety and number of zoning waivers that the Applicant has requested will have a cumulative effect that will degrade fire safety and protection overall for the proposed development. I would ask the Board of Appeals to carefully weigh each and every one of these decisions, determine whether the increased risk to individual families and their property can be justified, and apply appropriate conditions.

The Applicant should be challenged to provide a more public-safety conscious design for both the single-family and apartment complex portions of their proposed development. Please convey these concerns to the Zoning Board for their consideration.

Thank You,

Greg Jackson
Lancaster, MA

