

Memorandum

To: Sarkis Sarkisian
From: Neil McPherson
Date: November 4, 2019
Re: River's Edge Development

Thank you for the opportunity to provide feedback on the proposed River's Edge development. Representatives from the fire department have met with the State Fire Marshal's Office to review the site plans and develop the following recommendations.

We are providing a list of recommendations, some of which may not be required by the Massachusetts Building Code or fire protection codes. However, we strongly recommend that they be included based upon the size, occupancy, type of construction, and complexities associated with this project.

Access to Property

- 1) The curbing in the main access areas (SE and NE corners) need to be modified (softened) to better accommodate the turning radius of the larger fire department vehicles.
- 2) The designed turnaround area on the NW corner of site by building #2 is inadequate to accommodate larger fire vehicles from being able to turn around using the designed turnaround area. Plan C-105 shows that the ladder truck would need to have the rear of the vehicle virtually touch the building to make the turn. The proposed size will be further reduced in the winter months making it unusable. This turnaround needs to be redesigned or have adjustments made.
- 3) The fire department turnaround on the SW corner of the building has two spurs. The south spur has a width that does not meet the fire code requirement for fire roads which is 20 feet. See (18.2.3.4.1.1).
- 4) The fire department access to the NW corner of building #3 is inadequate, and needs to be expanded. The fire department is willing to consider a non-paved vehicle access road designed for fire apparatus that utilizes alternative road technologies to achieve this access.

Access in Parking Areas

All access roads must have an unobstructed width of not less than 20 feet. See (18.2.3.4.1.1).

Access to Buildings

Fire Hydrants

- 1) Three fire hydrants must be installed on the grounds of this complex. We are requesting that a minimum of three fire hydrants be installed on this property, and at least one hydrant shall be located within 100 feet of each sprinkler system fire department connection. We have specific locations at which we would like to see the hydrants installed.
- 2) In accordance with 527 CMR 16.4.3.1.1, the hydrants will need to be installed when combustible materials are on site.

Fire Department Connections (FDC)

Fire department connections for the sprinkler system shall be provided for the buildings on the property. The locations of these FDCs should be determined in conjunction with the fire department to ensure accessibility. The developer will provide the proper fitting to accommodate the department's four inch Storz supply lines.

Fire Standpipes

Standpipes must be provided in the stairwells on all floors in each of the buildings in accordance with the relevant code. This may require remote hose stations in the garage area, and the maximum distance between hose stations shall not exceed 200 feet. See (NFPA 14).

Manual Ventilation Control for Parking Garage (Buildings #2 and #3)

The garage located in buildings #2 and #3 is a significant size and can't be properly ventilated with fire department fans. We are requesting a manual control that would allow the garage to be vented in the event of a smoke condition.

Dry Sprinkler System in Garage Area

Although the sprinkler code does allow for the installation of a wet sprinkler system in the garage area, we recommend that a dry system be installed. This recommendation is being made to reduce the chance of sprinkler system freeze-ups and broken pipes.

Elevators

Full size elevators should be installed in all three buildings, and these elevators must be capable of accommodating a medical stretcher.

Building Safety While Under Construction

NFPA 241 requires that a plan be developed to safeguard the buildings during construction. This plan should be drafted and submitted to the fire department prior to starting the construction of the buildings.

Third Party Plan Review

The fire department may use a third party vendor to conduct a plan review and site inspections. This cost should be incurred by the developer or other responsible parties.

cc: Louise Miller