



BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 9.10.20.3. of Division B of Regulation 332/12, as amended, (the "Building Code").

AND IN THE MATTER OF an application by Gal Reuveni, for the resolution of a dispute with Will Johnston, Chief Building Official, to determine whether the proposed fire fighting access to a two-storey laneway house, provides sufficiency of compliance with Article 9.10.20.3. of Division B of the Building Code, at 349 Manning Avenue, Toronto, Ontario.

APPLICANT	Gal Reuveni Epico Equities Inc. Toronto, Ontario
RESPONDENT	Will Johnston Chief Building Official City of Toronto Toronto, Ontario
PANEL	Mathew Graham, Chair Designate Leszek Muniak Alexandra Chow
PLACE	City of Toronto, Ontario
DATE OF HEARING	December 12, 2019
DATE OF RULING	December 12, 2019
APPEARANCES	Gal Reuveni Epico Equities Inc. Toronto, Ontario The Applicant David Hine David Hine Engineering Toronto, Ontario Agent for the Applicant

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Counsel for the Applicant

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Sam Sarkosh
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Designate for the Respondent

Yosh Imahori
Fire Protection Engineer
Toronto Fire Services
Toronto, Ontario
Designate for the Respondent

RULING

1. Particulars of Dispute

The Applicant has applied for a building permit to construct a detached, two storey, laneway house at 349 Manning Ave, Toronto, Ontario.

The proposed detached laneway house is a two storey building located at the back of a residential lot that includes a two storey semi-detached detached house at the front of the same lot. The ground floor of the proposed laneway house includes a floor area for vehicle parking and a residential area. The second floor of the subject building contains only a residential area. The laneway house is of combustible construction having a building area of approximately 42 m² and is proposed to be equipped with a sprinkler system.

The construction in dispute involves whether firefighting access to the proposed two-storey laneway house, provides sufficiency of compliance with Article 9.10.20.3. of Division B of the Building Code, at 349 Manning Avenue, Toronto, Ontario.

2. Provisions of the Building Code in Dispute

9.10.20.3. Fire Department Access to Buildings

(1) Access for fire department equipment shall be provided to each building by means of a street, private roadway or yard. (See Appendix A.)

(2) Where access to a building as required in Sentence (1) is provided by means of a roadway or yard, the design and location of such roadway or yard shall take into account connection with public thoroughfares, weight of firefighting equipment, width of roadway, radius of curves, overhead clearance, location of fire hydrants, location of fire department connections and vehicular parking

3. Appendix Note

A-9.10.20.3.(1) Fire Department Access Route Modification.

In addition to other considerations taken into account in the planning of fire department access routes, special variations could be permitted for a house or residential building that is protected with an automatic sprinkler system. The sprinkler system must be designed in accordance with the appropriate NFPA standard and there must be assurance that water supply pressure and quantity are unlikely to fail. These considerations could apply to buildings that are located on the sides of hills and are not conveniently accessible by roads designed for fire fighting equipment and also to infill housing units that are located behind other buildings on a given property.

4. Applicant's Position

The Agent for the Applicant reported that the Toronto Building Department is of the belief that the proposed laneway house does not meet the requirements for fire department access as per Article 9.10.20.3. of Division B of the Building Code.

The Agent submitted that the City's building department is requesting that a fire fighting access route be provided such that:

- a fire department pumper vehicle can be located so that the length of the access route from a hydrant to the vehicle plus the unobstructed path of travel for the firefighter from the vehicle to the building is not more than 90 m and,
- the unobstructed path of travel for the firefighter from the vehicle to the principal entrance of the laneway suite is not more than 45 m.

The Agent maintained that the above two requirements are criteria that are set out in Clauses 3.2.5.5.(2)(b) and 3.2.5.5.(2)(c) of the Building Code which are applicable to Part 3 buildings that are larger buildings, more than 3 storeys in building height and generally with higher occupant loads than Part 9 buildings.

The Agent submitted that the subject laneway house is considered a Part 9 building under the Building Code having 3 storeys or less in building height and less than 600 m² in building area. Therefore, he argued, the laneway house should not be subject to Part 3 requirements of the Code for location of access routes, which typically requires a building to be located within 45 m of a street. The Agent maintained that the laneway house is neither required nor cross referenced in Article 9.10.20.3. to meet the Part 3 requirements of the Building Code and has been designed accordingly.

The Agent submitted that it is his opinion the proposed laneway house is in compliance with the requirements of Part 9 of the Building Code and in compliance with the fire fighting access requirements of Article 9.10.20.3.

The Agent submitted that in consideration of the appendix note and the objectives and functional statements attributed to Article 9.10.20.3. both the following options, which were presented to the City's building department, achieve compliance with the Code:

Option 1

- Provide a sprinkler system for the laneway house in accordance with NFPA 13D, "Standard of the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes", which is not a requirement under Part 9 of the Building Code for this house. Having the principal entrance of the dwelling unit located in the courtyard between the existing building and the new dwelling unit of the laneway house, which is approximately 73 m from the access point on Manning Ave.

Option 2

- No sprinkler system provided. Relocating the laneway house entrance to approximately 52 m from the access point on Manning Ave.

The Agent reported that the rear of the subject property is serviced by a 3.63 wide municipal laneway (Ln N Dundas W Euclid) and access to Ln N Dundas Euclid is provided via a 3.63 m wide municipal lane (Paese Lane) to the south of the property that runs from Manning Ave to Euclid Ave. The Agent advised that although the Building Code requires a 6 m width for a fire route, this is based on two-way traffic. He contended that since Paese Lane is more than 3 m wide, a fire department vehicle could use this lane as through-road to Euclid Ave. Further, he submitted, a fire fighting vehicle could stop at the intersection of Paese Lane and Ln N Dundas W Euclid, where there is adequate width to off load equipment for rescue or fire suppression. The Agent reported that the distance from Ln N Dundas W Euclid is within 25 m to the entrance of the proposed building based on Option 1 and within 9 m based on Option 2.

The Agent also submitted that a permanent sign (at least 100 mm high, located so that it is clearly visible, and constructed of permanent and durable material) would be placed on the Manning Ave. address and at the LN N Dundas W/Eucld elevation of the building to facilitate prompt fire department response.

The Agent explained that the existing building located at 349 Manning Ave is a two-storey building. As such, fire suppression with an aerial ladder could reach the proposed new laneway house, as the distance from the street to the building (over the existing dwelling unit) is approximately 30 m. The Agent submitted that an aerial ladder could reach greater distances to suppress the fire.

The Agent further advised that there are many buildings in Ontario which have been constructed in areas that do not comply with the City of Toronto's imposed criteria. He explained that there are many buildings located on islands that are not within 45 m of a street or fire access route, with many having no fire service access at all, yet building permits have been issued for these buildings.

The Agent submitted that condo suites located within buildings which are considered to have adequate fire department access, could require a fire fighter to walk (vertically up the stairs) more than 45 m in a fire emergency if either the elevator is not working, or the fire department personnel chooses to walk up. The Agent argued that in such cases, the vertical distance climbed by a fire fighter can easily exceed 45 m to access the suite of concern.

In response to questions, the Agent clarified that the Applicant's proposal before the Commission was to provide a sprinkler system for the laneway house in accordance with NFPA 13D "Standard for the installation of Sprinkler Systems in One and Two Family Dwellings and Manufactured Homes" and locate the principal entrance of the dwelling unit in the courtyard between the existing building and the proposed new laneway house.

In response to questions, the Agent submitted that in Option 2 an unobstructed path of travel, 1 m wide, measured to the property line with a 2.1 m vertical clearance distance located from the principle entrance of the laneway house to the rear lane is not in dispute and will be provided for firefighting access.

In response to the Commission's questions, the Agent submitted that the exterior walls of the proposed laneway house will have a minimum fire-resistance rating of 45 minutes and be constructed with non-combustible cladding.

The Agent provided several examples that Section 11.5 of Division B of the Building Code accepts existing Part 3 buildings that have non-compliant fire department access, if they are sprinklered. Therefore, he argued, it would seem reasonable to accept the theory that it is safe if sprinklered. In this case, the laneway house, which is a small building and not required to be sprinklered, would be sprinklered as a compensating measure.

In addition, the Agent noted that the Appendix note A-9.10.20.3.(1), related to Article 9.10.20.3. of the Building Code provides further explanatory information regarding this requirement. It states, "special variations could be permitted for a house or residential building that is protected with an automatic sprinkler system... These considerations could apply to buildings that are located on the sides of hills and are not conveniently accessible by roads designed for firefighting equipment and also to infill housing units that are located behind other buildings on a given property". The Agent maintained that the Appendix note suggests a sprinklered laneway house could be considered acceptable.

In summary, the Agent submitted that the proposed laneway house is in compliance with Part 9 of the Building Code, as it is his position that adequate access for firefighting via both laneways

and by overhead fire suppression from Manning Ave is provided. Further, when considering the Appendix note to the Code, the sprinkling of the laneway house along with the signage proposed, provides sufficiency of compliance with Article 9.10.20.3. of the Building Code.

5. Respondent's Position

The Designate for the Respondent submitted that the proposed detached two-storey laneway house is adjacent to a public lane and located in the same lot of an existing two-storey semi-detached house with two dwelling units.

The Designate advised that the laneway house will include a 25 m² floor area for vehicle parking on its first storey and a total of 60.3 m² of residential floor area on its first and second storey. She submitted that the laneway house will also be of combustible construction and will be sprinklered.

The Designate submitted that the provision of the Building Code in dispute is Article 9.10.20.3. of Division B, concerning fire department access to buildings. She maintained, that contrary to the Agent for the Applicant's submission, Toronto Building was not applying Part 3 requirements of the Building Code to a Part 9 building. The Designate explained that Toronto's fire access guidelines were developed in consultation with Toronto Fire Services to determine what the fire department would require to achieve adequate access to a building. Therefore, the Designate explained that the requirement for the unobstructed path of travel for a firefighter from the vehicle to the principal entrance of the laneway suite would be a maximum 45 m. In addition, she advised that a fire department pumper vehicle must be located so that the length of the access route from a hydrant to the vehicle plus the unobstructed path of travel for the firefighter from the vehicle to the building is not more than 90 m.

The Designate for the respondent also submitted that an unobstructed path of travel 1 m wide measured to the property line with 2.1 m vertical clearance, must be provided for the firefighting access to the laneway house's principal entrance.

The Designate maintained that Toronto Fire Services does not use laneways for fire access routes, as they are the last roadways to be maintained in the winter and in most cases have an uncontrolled parking issue. As a result, the Designate reported that the proposed laneway house will have its principal entrance located 72.8 m from the closest point in the street, where 45 m is the maximum, and 117.8 m from the fire hydrant, where 90 m is the maximum. Therefore, she maintained that it is the building department's position that the proposed design does not meet the Building Code requirements for fire department access to a building as outlined in Article 9.10.20.3.

The Designate submitted that although the laneway house is proposed to be sprinklered, this would only address fire suppression and confinement. However, sprinklering the house does not address fire department access to the building. She contended, neither Article 9.10.20.3. of the Building Code nor its applicable Appendix Note A-9.10.20.3.(1), permit no fire department access to a building when sprinklers are provided.

In summary the Designate submitted that it is the building department's position that the proposed laneway house, even if sprinklered, does not provide sufficiency of compliance with Article 9.10.20.3. of Division B of the Building Code.

6. Commission Ruling

It is the decision of the Building Code Commission that the proposed firefighting access to a two-storey laneway house, provides sufficiency of compliance with Article 9.10.20.3. of Division B of the Building Code, at 349 Manning Avenue, Toronto, Ontario on condition that:

- a) the proposed laneway house is sprinklered in accordance with NFPA 13D,
- b) the walls of the laneway house are constructed having a fire-resistance rating of 45 minutes, and
- c) the cladding on the exterior walls of the laneway house be non-combustible.

7. Reasons

- i) Article 9.10.20.3. of Division B of the Building Code regarding fire department access to buildings states:
 - (1) Access for fire department equipment shall be provided to each building by means of a street, private roadway or yard. (See Appendix A.)
 - (2) Where access to a building as required in Sentence (1) is provided by means of a roadway or yard, the design and location of such roadway or yard shall take into account connection with public thoroughfares, weight of firefighting equipment, width of roadway, radius of curves, overhead clearance, location of fire hydrants, location of fire department connections and vehicular parking.

The objectives and functional statements associated with Article 9.10.20.3. of Division B of the Building Code regarding fire department access are as follows:

Objective OS1.2 states, "An objective of this Code is to limit the probability that, as a result of the design or construction of a building, a person in or adjacent to the building will be exposed to an unacceptable risk of injury due to fire caused by fire or explosion impacting areas beyond its point of origin".

The Commission heard evidence that the proposed laneway house would be sprinklered in accordance with NFPA 13D. It is the Commission's opinion that persons in or adjacent to the laneway house will be protected by the sprinkler system.

Objective OS1.5 states, "An objective of this Code is to limit the probability that, as a result of the design or construction of a building, a person in or adjacent to the building will be exposed to an unacceptable risk of injury due to fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency".

The Commission received evidence that a safe passage from the building during a fire emergency is provided by a 1 m side yard. Further, in accordance with the above-mentioned conditions, a person in or adjacent to the building will be protected by exterior walls having a fire-resistance rating of 45 minutes and non-combustible cladding. Therefore, it is the Commission's opinion sufficiency of compliance with objective OS1.5 is achieved.

Objective OP1.2 states, "An objective of this Code is to limit the probability that, as a result of its design or construction, a building will be exposed to an unacceptable risk

of damage due to fire caused by fire or explosion impacting areas beyond its point of origin".

It is the Commission's opinion that an unacceptable risk of damage due to fire impacting areas beyond its point of origin will be mitigated by the installation of the sprinkler system and fire-resistance rating of exterior walls.

Functional statement F12 states, "To facilitate emergency response".

The Commission considered the location of the laneway house. It is the Commission's opinion that the entrance into the laneway house is within reasonable proximity from the intersection of Manning Ave and Paese Lane.

Based on the evidence and testimony provided, along with the above conditions applicable to this decision, the Commission is satisfied that sufficiency of compliance with the objectives and functional statement associated with Article 9.10.20.3. for fire department access to buildings have been achieved.

- i) The following testimony provided by the Agent for the Applicant was considered not relevant to this building and therefore, did not form the basis of this decision:
- the fire department could use an aerial ladder to reach the laneway way house to supress a fire
 - buildings located on islands that are not equipped with a fire access route are permitted, and
 - the vertical distance climbable by a fire fighter in a multi-storey building could exceed 45 m
- ii) The Commission notes that this decision is site specific and not precedent setting.

Dated at the City of Toronto this 12th day in the month of December in the year 2019 for application number B-2019-32.

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Matthew Graham, Chair Designate

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Les Muniak

Handwritten signature of Alexandra Chew in cursive script, written above a horizontal line.

Alexandra Chew