

Fire Department Vehicle Access Review

Project: Parkside Apartments & Condos
383-385 Washington Street
Braintree, Massachusetts

Prepared by: Kevin S. Hastings, P.E., LEED AP

Date: October 15, 2019

The following comments are based on a review of the site plans for the proposed residential development at 383-385 Washington Street in Braintree, including the attached Emergency Vehicle Access Sketch dated October 7, 2019, prepared by DeCelle Burke & Associates. The plans were examined for compliance with the Fire Department Access requirements of 527 CMR: Massachusetts Comprehensive Fire Safety Code. This code adopts the 2015 Edition of NFPA 1 with amendments.

Fire Department Access requirements are contained in NFPA 1 Section 18.2. This section requires access to the building for fire department vehicles via roadways, fire lanes, parking lot lanes, or a combination thereof. The Fire Safety Code does not require vehicle access to all sides, or a specific number of sides of the building, but does include the following requirements to ensure that adequate access is provided for firefighting:

1. The fire department access roads must extend to within 50 ft of at least one exterior door that can be opened from the outside and that provides access to the interior of the building (NFPA 1 Section 18.2.3.2.1).

The proposed plans will provide vehicle access to within 50 feet of multiple entrance doors including the main entrance to the apartment building.

2. Since the apartment building will be fully sprinklered in accordance with NFPA 13, fire department access roads must be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 250 feet from fire department access roads as measured by an approved route around the exterior of the building or facility (MA Amendment to NFPA 1 Section 18.2.3.2.2.1)

As shown in the Emergency Vehicle Access Sketch, the fire department access roads allow fire department vehicles to be positioned so that all portions of the building perimeter are within 250 feet.

3. Access roads must have an unobstructed width of not less than 20 feet and an unobstructed vertical clearance of not less than 13 feet. The roads must be capable of supporting the loads of fire department vehicles and provide an all-weather driving surface (NFPA 1 Section 18.2.3.4.1).

The plans indicate the roads will comply with the minimum width requirement. There are no vertical obstructions along the road. Road surfaces must be designed as required to support the fire department vehicles.

4. The minimum inside turning radius of a fire department access road must be 25 feet. The fire department may increase the minimum inside turning radius to accommodate their apparatus (MA Amendment to NFPA 1 Section 18.2.3.4.3.1).

The Emergency Vehicle Access Sketch indicates that the roads will accommodate turning of the fire departments largest vehicle.

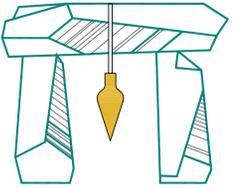
5. Dead-end fire department access roads greater than 150 feet must be provided with approved provisions for fire apparatus to turn around (NFPA 1 Section 18.2.3.4.4).

The plans include two small dead-end areas on either side of the apartment building, with a maximum dead-end distance of approximately 80 feet.

6. The gradient for a fire department access road shall not exceed 10%, unless approved in writing by the fire department (MA Amendment to NFPA 1 Section 18.2.3.4.6.1). The angle of approach and departure for any means of fire department access road shall not exceed 1 ft drop in 20 ft or the design limitations of the fire apparatus of the fire department, and shall be subject to approval by the fire department.

The Proposed Grading plan indicates the slope along the access roads will not exceed 10%. The maximum access road slope on the site appears to be approximately 7%.

Based on my review of the proposed site plans, in my opinion the proposed fire department vehicle access complies with the requirements of the Massachusetts Comprehensive Fire Safety Code.



JAMES W. BURKE, PE DATE

GENERAL NOTES:

ZONING: GENERAL BUSINESS
MINIMUM REQUIREMENTS:
AREA: 15,000 S.F.
FRONT SETBACK: 10'
SIDE SETBACK: 10'
REAR SETBACK: 20'
LOT FRONTAGE/WIDTH: 50'/100'
MAX HEIGHT: 3 STY
BUILDING COVERAGE: 70%
MIN OPEN SPACE: 10%

CURRENT OWNER:
383 WASHINGTON STREET LLC
519 ALBANY STREET, SUITE 200
BOSTON, MA 02122
DEED REFERENCE:
Book 30862 Page 314
Book 14283 Page 545
Book 14283 Page 550

PLAN REFERENCE:
Book 455 Page 272
Book 4284 Page 179
LC PLAN 3751D

ASSESSORS REFERENCE:
MAP 2028 LOT 31

PROJECT TITLE & LOCATION:

PARKSIDE APARTMENTS &
PARKSIDE CONDOMINIUMS
40B RESIDENTIAL PROJECT
383-385 WASHINGTON STREET
BRAINTREE, MA

PLAN TITLE:

EMERGENCY VEHICLE ACCESS SKETCH

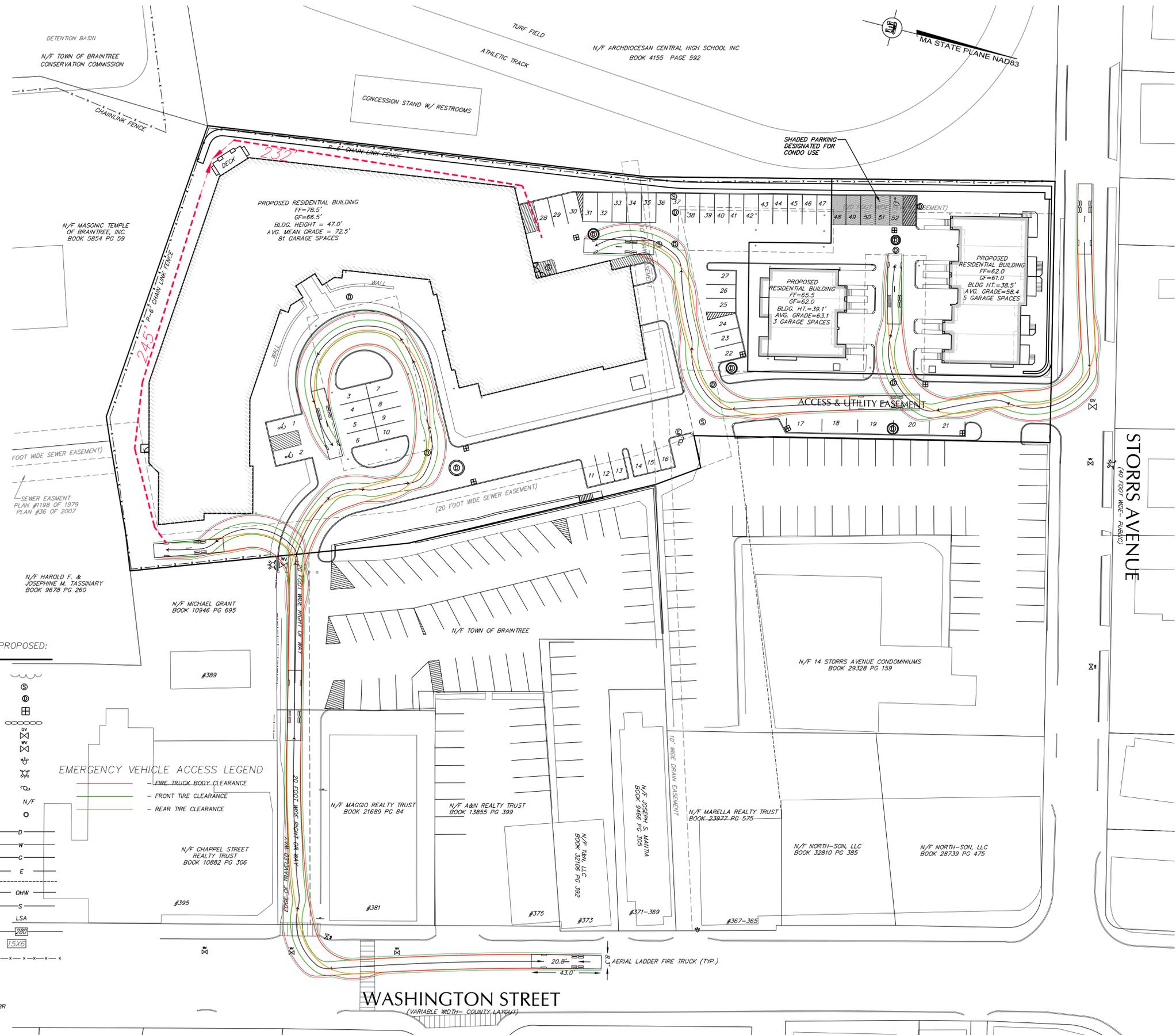
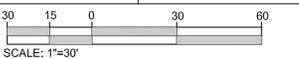
PREPARED FOR:

THE HOLLAND COMPANIES
519 ALBANY STREET
SUITE 200
BOSTON, MA 02118

DATE: FEBRUARY 2, 2017

REVISED: OCTOBER 7, 2019

JOB NUMBER: 185.033 SHEET 1 OF 1



LEGEND

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EMERGENCY VEHICLE ACCESS LEGEND

- FIRE TRUCK BODY CLEARANCE
- FRONT TIRE CLEARANCE
- REAR TIRE CLEARANCE

WASHINGTON STREET
(VARIABLE WIDTH - COUNTY LAYOUT)