



**TOWN OF DURHAM  
ZONING BOARD OF ADJUSTMENT**

8 NEWMARKET RD  
DURHAM, NH 03824  
PHONE: 603/868-8064  
www.ci.durham.nh.us

RECEIVED  
Town of Durham

OCT 21 2019

Planning, Assessing  
and Zoning

**APPEAL TO BUILDING CODE BOARD OF APPEALS**

\$ 343<sup>00</sup>  
pd. 10/21  
Check #  
9737

RSA 674:34 - The building code board of appeals shall hear and decide appeals of orders, decisions, or determinations made by the building official or fire official relative to the application and interpretation of the state building code or state fire code as defined in RSA 155-A:1. An application for appeal shall be based on a claim that the true intent of the code or the rules adopted thereunder have been incorrectly interpreted, the provisions of the code do not fully apply, or an equally good or better form of construction is proposed. The board shall have no authority to waive requirements of the state building code or the state fire code.

Name of Applicant Jeffrey and Vivian Miller

Address: 297 Durham Point Rd

Phone 603 868-9200 Email: vivtarazimiller@gmail.com

Owner of Property Concerned same  
(If same as above, write "Same")

Address: same  
(If same as above, write "Same")

Location of Property: 297 Durham Point Rd  
(Street & Number)

Tax Map & Lot number Map 20 Lot 12-3

Decision(s) of the enforcement officer to be reviewed:  
FIRE DEPARTMENT : Deputy Chief John Powers

\*Fire Code requires access to every new building where there are 3 or more homes.

\*A fire department access road/fire lane would need to be provided approx 2415 ft in length, 20 feet in width, 11'8" minimum height clearance, and a configuration at the end of the driveway that provides us the capability to turn around a Tank Truck that measures 34'9" in length.

\*The state fire code also has a provision to appeal to the state fire marshal should the owner feel they are aggrieved by the requirements, by filing for a variance.

From: Todd Selig [tselig@ci.durham.nh.us](mailto:tselig@ci.durham.nh.us)  
Subject: FW: 297 Durham Point Road - Driveway Concern Relative to  
Proposed New Construction - Requirements from Durham Fire  
Department  
Date: May 2, 2019 at 3:40:42 PM  
To: Vivian and Jeff Miller [vivtarazimiller@gmail.com](mailto:vivtarazimiller@gmail.com)

Dear Vivian and Jeff,

As a follow up to our meeting last week concerning the Seacoast Reliability Project and impacts to your property, you will find below the requirements the Durham Fire Department has outlined for the new structure you would like to build. This information should give you and Eversource what you need to work through details. As always, I'm happy to host a meeting for you both and Eversource to get together to discuss this and other potential impacts to your private property and potential solutions. I shall forward this information from the Fire Department along to Eversource for their information as well.

All my very best,

Todd

Todd I. Selig, Administrator  
Town of Durham, NH  
t: 603.868.5571 | m: 603.817.0720  
a: 8 Newmarket Rd., Durham, NH 03824 USA  
e: [tselig@ci.durham.nh.us](mailto:tselig@ci.durham.nh.us) | w: [www.ci.durham.nh.us](http://www.ci.durham.nh.us)

***Everyone can tackle climate change. How can you reduce your carbon footprint?***

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**From:** John Powers <[jpowers@ci.durham.nh.us](mailto:jpowers@ci.durham.nh.us)>  
**Date:** Wednesday, May 1, 2019 at 6:27 PM  
**To:** Todd Selig <[tselig@ci.durham.nh.us](mailto:tselig@ci.durham.nh.us)>  
**Cc:** David Emanuel <[demanuel@CI.DURHAM.NH.US](mailto:demanuel@CI.DURHAM.NH.US)>  
**Subject:** 297 Durham Point Road - Driveway Concern Relative to Proposed New Construction

Hi Todd,

I am writing to follow up on your request for information that explains what is needed for the proposed building project at 297 Durham Point Road. Vivian Miller requested an audience from me a couple of weeks ago to discuss her intentions to build a structure on her property that would contain a dwelling unit. This new structure would be the fifth home off of an existing shared driveway. The state fire code required access to every new building erected. Although there are some exceptions to the prescribed requirements, some of those exceptions go away when there are three or more homes

off of one shared driveway.

For the purposes of this property's configuration I would propose using what I've dubbed the "Sievert Approach", which is identifying the segment of the shared driveway what serves three or more homes. This would be the segment of the shared driveway where the code does not have an associated provision to accept reduced road widths without a variance from the state fire marshal's office. The segment would need to be a minimum of twenty feet wide, be designed and maintained to support the imposed loads of fire apparatus, and be made of an all-weather driving surface. The vertical clearance can be adjusted from the prescribed 13'6" if needed, as long as it provides sufficient clearance for our tallest apparatus. The segment runs from Durham Point Road to a point presumed to be where the shared drive only serves two homes, which by out field measurements is about 2,415 feet in length. The remaining portions of the driveway, so long as it provides access to within 50 feet of one exterior door that gives emergency forces interior access to the new building. We would also need to verify that any point near the end of the shared driveway is provided with a design that allows us to turn our apparatus around, whereas it is longer than 150 feet.

We have photos and a sketch available on our server if needed. The files are too big to share via email.

In summary:

- A fire department access road / fire lane would need to be provided approximately 2,415 feet in length, 20 feet in width, 11'8" minimum height clearance, and a configuration at the end of the shared driveway that provides us the capability to turn around our Tank truck that measures 34'9" in length (the longest, not including the tower truck)
- The state fire code allows for alternatives and equivalencies to be considered, if they meet the intent of the prescribed code. Proposals need to be reviewed and approved.
- The state fire code also has a provision to appeal to the state fire marshal should the owner feel they are aggrieved by the requirements, by filing for a variance.

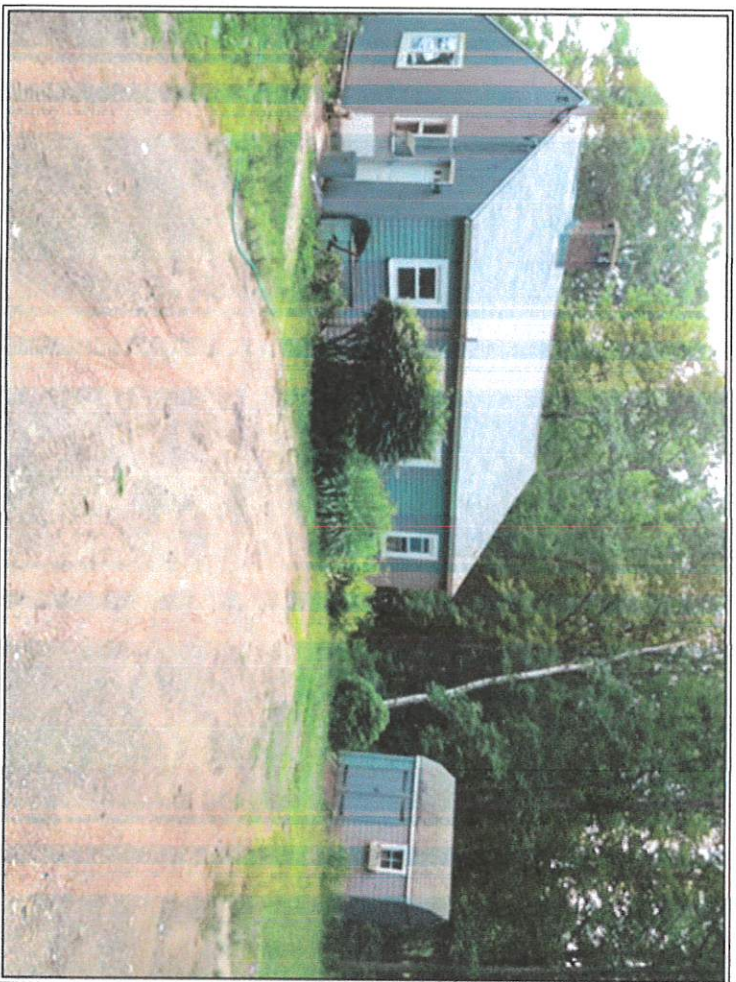
Please let me know if you need further.

Thank you.

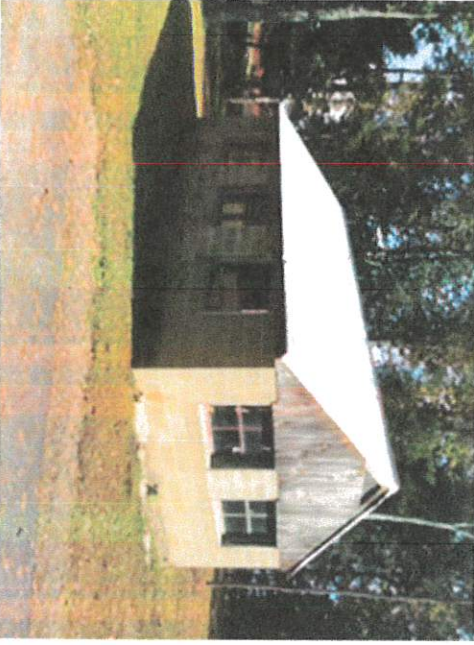
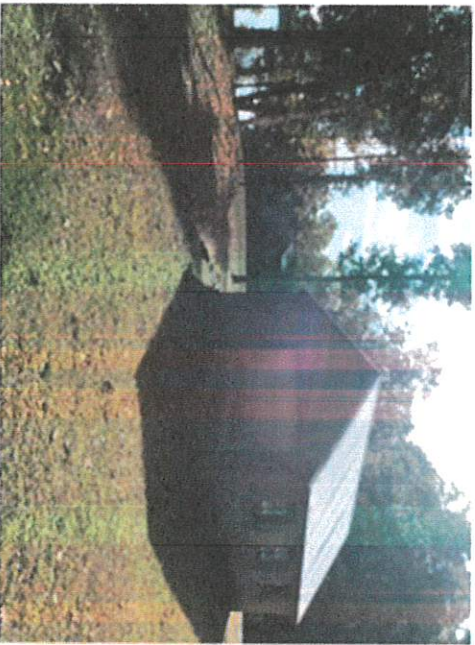
John T. Powers, Deputy Chief  
Durham Fire Department  
(603) 862-1426



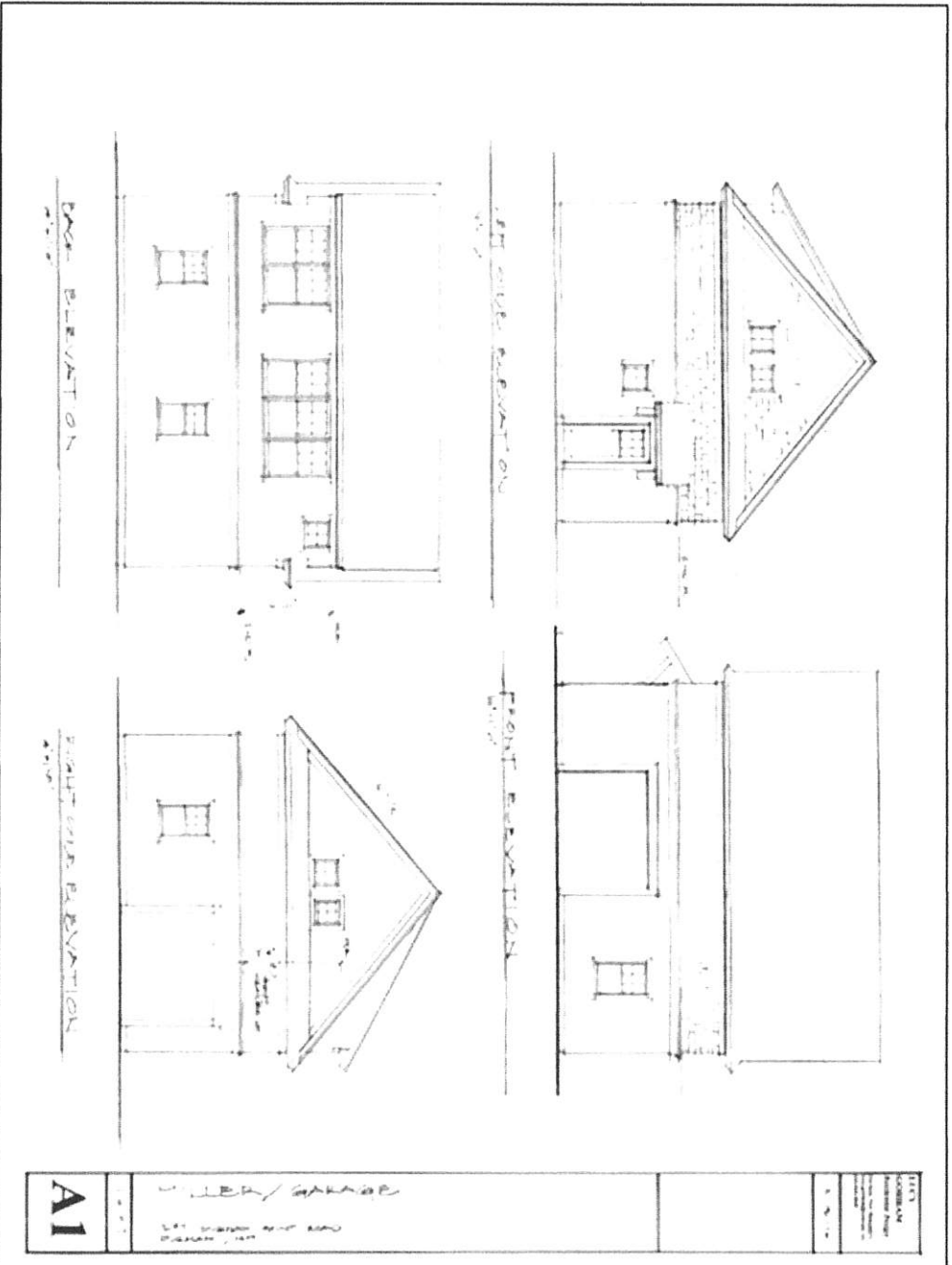
- ## Project Background, New Home built 2014, 1950's Garage remains:
- Replaced 1950's camp and septic with new home, advanced enviro septic EDA system
  - Property is surrounded by Little Bay, Conservation Land and Utility Right of Way
  - Challenges included set backs, shore land protection, location and type of septic system
  - 2012 secured all required variances from ZBA for construction of new home



Next Step: Replace existing garage with new garage and apartment above:



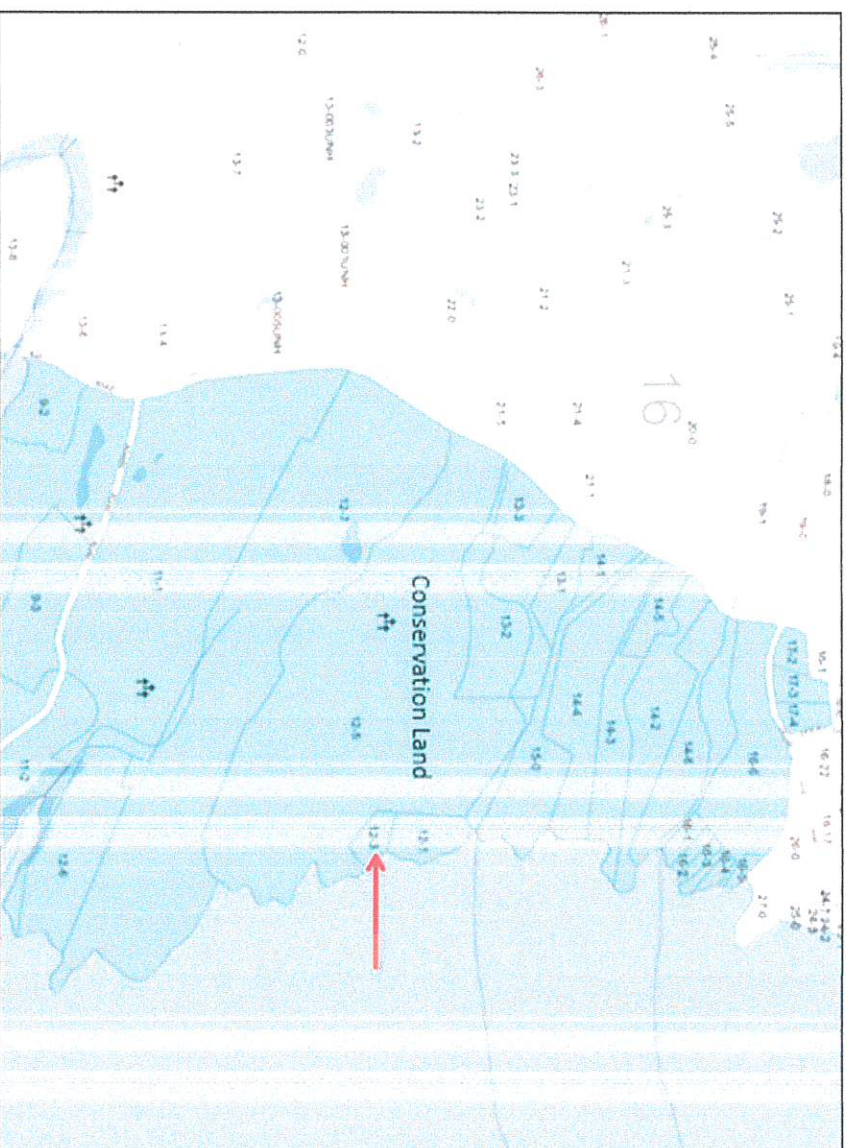
# Proposed new garage and apartment above:



11/12/2019

## Project Background, New Home built 2014, 1950's Garage remains:

- Unique access and configuration of property
- Property is surrounded by Little Bay, Conservation Land and Utility Right of Way
- Challenges included set backs, shore land protection, location and type of septic system

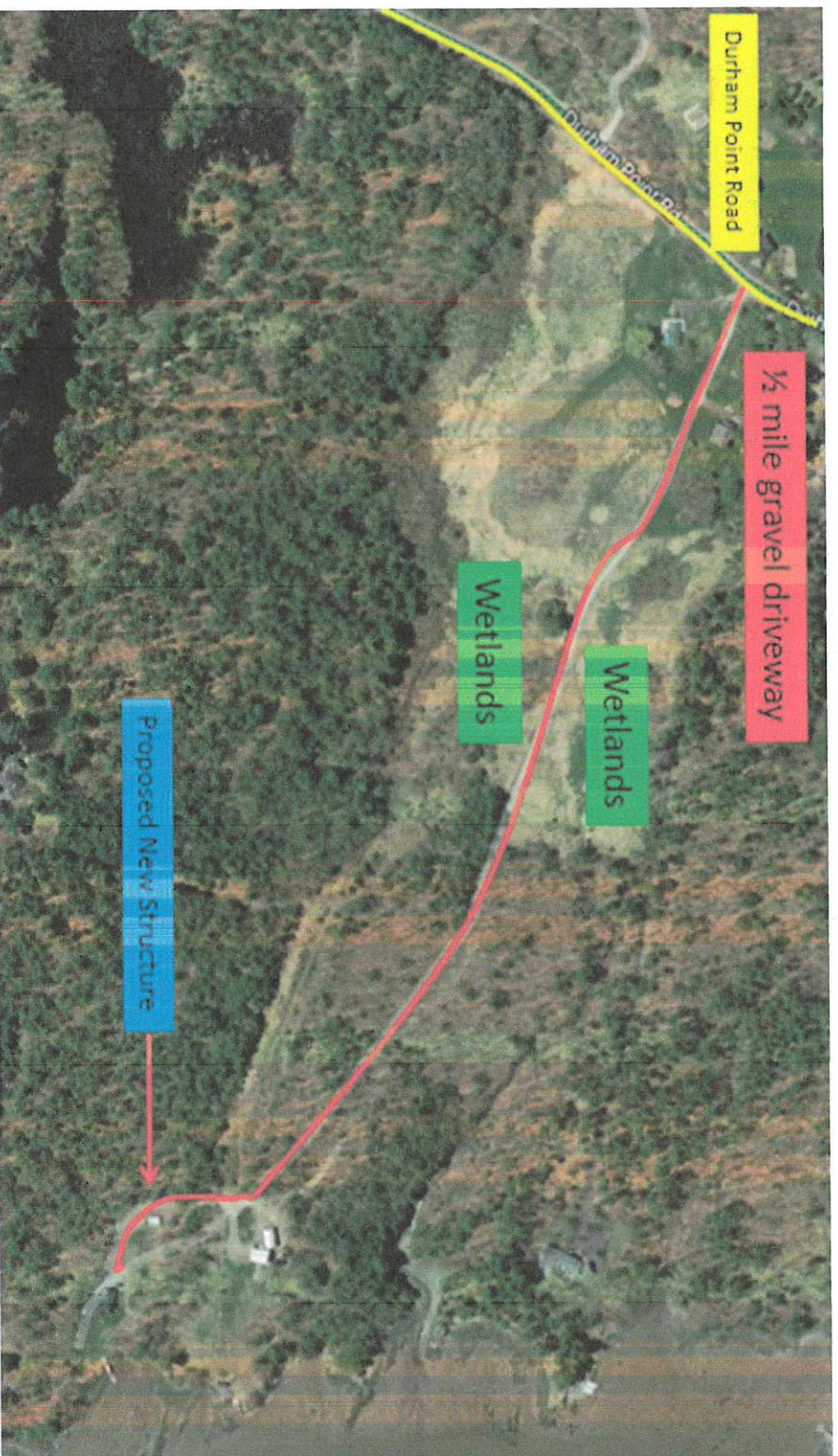


11/12/2019



## Project Background, New Home built 2014, 1950's Garage remains:

- ½ mile deeded access dirt driveway
- Driveway is flanked by wetlands



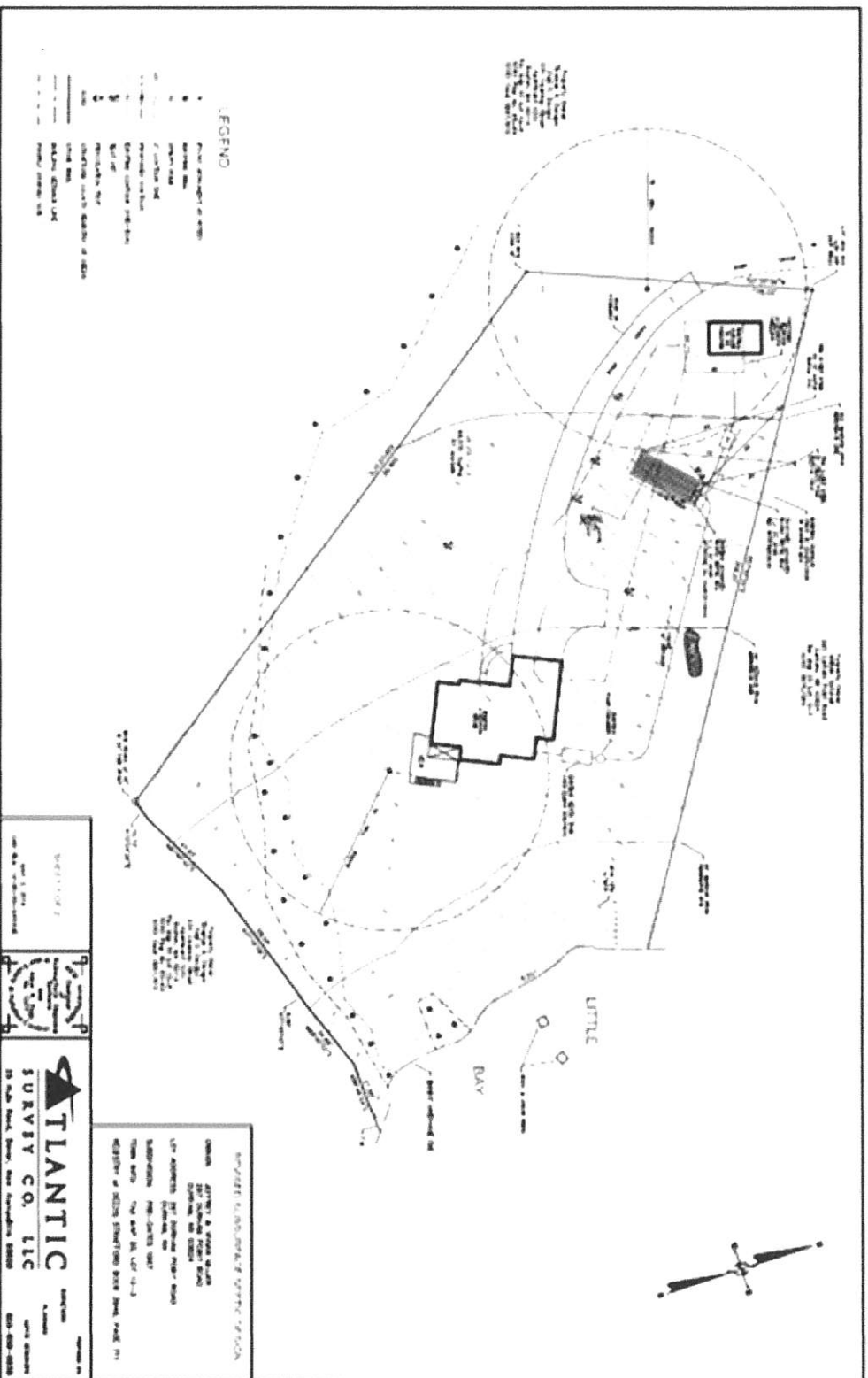
## Project Background, New Home built 2014, 1950's Garage remains:

- Unique access and configuration of property
- Property is surrounded by Little Bay, Conservation Land and Utility Right of Way
- Challenges included set backs, shore land protection, location and type of septic system



11/12/2019

# Project Background, New Home built 2014, 1950's Garage remains:



## Pre-work completed for this project:

- Survey
- Test pits for septic system, Audrey Cline attended
- DES approved septic system plan
- Approved well location
- Garage/Apartment design and construction drawings
- Discussions with Fire Department
- Building permit application submitted



Current Status:

**Durham Fire Dept has conditioned the proposed building of a garage and apartment above with the following:**

1. Categorized the structure as a new building unit with 3 or more dwellings on a shared driveway.
2. Fire lane access road would need to be 2415 ft long, 20 ft wide, 11'8" height clearance, and a configuration at the end of the shared driveway that provides the ability to turn around a truck that measures 34'9" in length.
3. State fire code allows for alternatives and equivalencies to be considered, if they meet the intent of the prescribed code.

**Appeal to Building Code Board of Appeals:**

**RSA 674:34** The true intent of the code and the rules adopted thereunder have been incorrectly interpreted, the provisions of the code do not fully apply, or an equally good or better form of construction is proposed.

## **Condition 1: Categorized the structure as a new “building” unit with 3 or more dwellings on a shared driveway.**

### **Title XII, Public Safety and Welfare, State Board of Fire Control:**

#### **153:1 Definitions. –**

When appearing in this chapter:

- II. “Building” means any structure, framework or housing, public or private, **excluding single family dwellings** as defined in paragraph X and multi-unit dwellings as defined in paragraph VI, but not including tanks, receptacles and conditions for the storage of commodities or other materials.
- X. “Single family dwelling” means any structure not defined in paragraph II which contains one dwelling unit which is designed to be occupied for living purposes, and which is used by one, 2 or more families exclusively as a home.

### **Our Understanding:**

- Based upon the above definitions our property is a single family dwelling and NFPA 1 does not apply.
- A single family dwelling is permitted to have one accessory dwelling which shall be located on a lot with a single family residence.

**Condition 2: Fire lane access road would need to be 2415 ft. long, 20 ft. wide, 11'8" height clearance, and a configuration at the end of the shared driveway that provides the ability to turn around a truck that measures 34'9" in length.**

### **Fire Department Access and water supply:**

**18.2.3.1.4** When fire department access roads cannot be installed due to location on property, topography, waterways, non-negotiable grades, or other similar conditions, the AHJ (authority having jurisdiction) shall be authorized to require additional fire protection features.

### **Our Understanding:**

- Based upon the unique location of the property and it's characteristics the installation of sprinklers is a safe and reasonable alternative to driveway & water supply issues. We propose to install a sprinkler system in the new apartment. This would be an equally good or better form of construction.
- Based upon NFPA research, the civilian death rate of 1.4 per 1,000 reported fires was 81% lower in homes with sprinklers than in homes without sprinklers.

**Condition 3: State fire code allows for alternatives and equivalencies to be considered, if they meet the intent of the prescribed code.**

**Our Understanding:**

- We have proposed adding a sprinkler system to the apartment to allow more time and a reasonable level of safety, which meets the intent of the fire code.



## **We are requesting the Building Code Board of Appeals permit the construction of the proposed garage/apartment.**

1. We feel the fire departments code does not apply to single family dwellings
2. It is not possible for us to meet the fire department's access road conditions:
  - We have deeded access and do not own the road.
  - The road is flanked by wetlands and cannot encroach into the wetlands.
  - The properties configuration and adjacencies cannot accommodate a turn around area.
3. However, if the board members feel the addition of a sprinkler system provides a reasonable solution we will install one.

2015

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NFPA<sup>®</sup> 1  
FIRE CODE



**NFPA 1**  
**Fire Code**  
**2015 Edition**

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NOTICE: An asterisk (\*) following the number or letter designating a paragraph indicates that explanatory material on the paragraph can be found in Annex A.

A reference in brackets [ ] following a section or paragraph indicates material that has been extracted from another NFPA document. As an aid to the user, the complete title and edition of the source documents for extracts in mandatory sections of the document are given in Chapter 2 and those for extracts in informational sections are given in Annex F. Extracted text may be edited for consistency and style and may include the revision of internal paragraph references and other references as appropriate. Requests for interpretations or revisions of extracted text shall be sent to the technical committee responsible for the source document.

Information on referenced publications can be found in Chapter 2 and Annex F.

## Chapter 1 Administration

### 1.1 Scope.

1.1.1 The scope includes, but is not limited to, the following:

- (1) Inspection of permanent and temporary buildings, processes, equipment, systems, and other fire and related life safety situations
- (2) Investigation of fires, explosions, hazardous materials incidents, and other related emergency incidents
- (3) Review of construction plans, drawings, and specifications for life safety systems, fire protection systems, access, water supplies, processes, hazardous materials, and other fire and life safety issues
- (4) Fire and life safety education of fire brigades, employees, responsible parties, and the general public
- (5) Existing occupancies and conditions, the design and construction of new buildings, remodeling of existing buildings, and additions to existing buildings
- (6) Design, installation, alteration, modification, construction, maintenance, repairs, servicing, and testing of fire protection systems and equipment
- (7) Installation, use, storage, and handling of medical gas systems
- (8) Access requirements for fire department operations
- (9) Hazards from outside fires in vegetation, trash, building debris, and other materials
- (10) Regulation and control of special events including, but not limited to, assemblage of people, exhibits, trade shows, amusement parks, haunted houses, outdoor events, and other similar special temporary and permanent occupancies

- (11) Interior finish, decorations, furnishings, and other combustibles that contribute to fire spread, fire load, and smoke production
- (12) Storage, use, processing, handling, and on-site transportation of flammable and combustible gases, liquids, and solids
- (13) Storage, use, processing, handling, and on-site transportation of hazardous materials
- (14) Control of emergency operations and scenes
- (15) Conditions affecting fire fighter safety
- (16) Arrangement, design, construction, and alteration of new and existing means of egress

1.1.2 **Title.** The title of this *Code* shall be NFPA 1, *Fire Code*, of the National Fire Protection Association (NFPA).

1.2\* **Purpose.** The purpose of this *Code* is to prescribe minimum requirements necessary to establish a reasonable level of fire and life safety and property protection from the hazards created by fire, explosion, and dangerous conditions.

### 1.3 Application.

1.3.1 This *Code* shall apply to both new and existing conditions.

#### 1.3.2\* Referenced Standards.

1.3.2.1 Details regarding processes, methods, specifications, equipment testing and maintenance, design standards, performance, installation, or other pertinent criteria contained in those codes and standards listed in Chapter 2 of this *Code* shall be considered a part of this *Code*.

1.3.2.2 Where no applicable codes, standards, or requirements are set forth in this *Code* or contained within other laws, codes, regulations, ordinances, or bylaws adopted by the authority having jurisdiction (AHJ), compliance with applicable codes and standards of NFPA or other nationally recognized standards as are approved shall be deemed as prima facie evidence of compliance with the intent of this *Code*.

1.3.2.3 Nothing herein shall diminish the authority of the AHJ to determine compliance with codes or standards for those activities or installations within the AHJ's responsibility.

1.3.2.4 **Retroactivity of Referenced Standards to Existing Conditions.** Unless otherwise specified by 1.3.2.4.1 through 1.3.2.4.3, the current provisions of the referenced standards shall not apply to facilities, equipment, structures, or installations that existed or were approved for construction or installation prior to the effective date of this *Code*.

1.3.2.4.1 Where specified by a reference standard for existing occupancies, conditions, or systems, the provisions of the referenced standards shall be retroactive.

1.3.2.4.2 Facilities, equipment, structures, and installations, installed in accordance with a reference standard, shall be maintained in accordance with the edition of the standard in effect at the time of installation.

1.3.2.4.3 In those cases where the AHJ determines that the existing situation constitutes an imminent danger, the AHJ shall be permitted to apply retroactively any portions of the current referenced standards deemed appropriate.

#### 1.3.3 Conflicts.

1.3.3.1 When a requirement differs between this *Code* and a referenced document, the requirement of this *Code* shall apply.

**1.3.3.2** When a conflict between a general requirement and a specific requirement occurs, the specific requirement shall apply.

**1.3.4 Multiple Occupancies.** Where two or more classes of occupancy occur in the same building or structure and are so intermingled that separate safeguards are impractical, means of egress facilities, construction, protection, and other safeguards shall comply with the most restrictive fire safety requirements of the occupancies involved.

**1.3.5 Vehicles and Vessels.** Vehicles, vessels, or other similar conveyances, when in fixed locations and occupied as buildings, as described by Section 11.6 of NFPA 101, *Life Safety Code*, shall be treated as buildings and comply with this *Code*.

#### **1.3.6 Buildings.**

**1.3.6.1** Buildings permitted for construction after the adoption of this *Code* shall comply with the provisions stated herein for new buildings.

**1.3.6.2\*** Buildings in existence or permitted for construction prior to the adoption of this *Code* shall comply with the provisions stated herein or referenced for existing buildings (see 10.3.2).

**1.3.6.3** Repairs, renovations, alterations, reconstruction, change of occupancy, and additions to buildings shall conform to this *Code*, NFPA 101, and the building code.

**1.3.6.4** Newly introduced equipment, materials, and operations regulated by this *Code* shall comply with the requirements for new construction or processes.

**1.3.7 Severability.** If any provision of this *Code* or the application thereof to any person or circumstance is held invalid, the remainder of the *Code* and the application of such provision to other persons or circumstances shall not be affected thereby.

#### **1.4 Equivalencies, Alternatives, and Modifications.**

**1.4.1 Equivalencies.** Nothing in this *Code* is intended to prevent the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety to those prescribed by this *Code*, provided technical documentation is submitted to the AHJ to demonstrate equivalency and the system, method, or device is approved for the intended purpose.

**1.4.2 Alternatives.** The specific requirements of this *Code* shall be permitted to be altered by the AHJ to allow alternative methods that will secure equivalent fire safety, but in no case shall the alternative afford less fire safety than, in the judgment of the AHJ, that which would be provided by compliance with the provisions contained in this *Code*.

**1.4.3 Modifications.** The AHJ is authorized to modify any of the provisions of this *Code* upon application in writing by the owner, a lessee, or a duly authorized representative where there are practical difficulties in the way of carrying out the provisions of the *Code*, provided that the intent of the *Code* shall be complied with, public safety secured, and substantial justice done.

**1.4.4** Buildings with equivalency, alternatives, or modifications approved by the AHJ shall be considered as conforming with this *Code*.

**1.4.5** Each application for an alternative fire protection feature shall be filed with the AHJ and shall be accompanied by such evidence, letters, statements, results of tests, or other supporting information as required to justify the request. The

AHJ shall keep a record of actions on such applications, and a signed copy of the AHJ's decision shall be provided for the applicant.

**1.4.6 Approval.** The AHJ shall approve such alternative construction systems, materials, or methods of design when it is substantiated that the standards of this *Code* are at least equaled. If, in the opinion of the AHJ, the standards of this *Code* shall not be equaled by the alternative requested, approval for permanent work shall be refused. Consideration shall be given to test or prototype installations.

#### **1.4.7 Tests.**

**1.4.7.1** Whenever evidence of compliance with the requirements of this *Code* is insufficient or evidence that any material or method of construction does not conform to the requirements of this *Code*, or to substantiate claims for alternative construction systems, materials, or methods of construction, the AHJ shall be permitted to require tests for proof of compliance to be made by an approved agency at the expense of the owner or his/her agent.

**1.4.7.2** Test methods shall be as specified by this *Code* for the material in question. If appropriate test methods are not specified in this *Code*, the AHJ is authorized to accept an applicable test procedure from another recognized source.

**1.4.7.3** Copies of the results of all such tests shall be retained in accordance with Section 1.11.

#### **1.5 Units.**

**1.5.1 International System of Units.** Metric units of measurement in this *Code* are in accordance with the modernized metric system known as the International System of Units (SI).

**1.5.2 Primary and Equivalent Values.** If a value for a measurement as given in this *Code* is followed by an equivalent value in other units, the first stated value shall be regarded as the requirement. A given equivalent value could be approximate.

**1.6 Enforcement.** This *Code* shall be administered and enforced by the AHJ designated by the governing authority. (See Annex C for sample wording for enabling legislation.)

#### **1.7 Authority.**

**1.7.1 Administration.** The provisions of this *Code* shall apply without restriction, unless specifically exempted.

**1.7.2\* Minimum Qualifications to Enforce this Code.** The AHJ shall establish minimum qualifications for all persons assigned the responsibility of enforcing this *Code*.

#### **1.7.3 Interpretations.**

**1.7.3.1** The AHJ is authorized to render interpretations of this *Code* and to make and enforce rules and supplemental regulations in order to carry out the application and intent of its provisions.

**1.7.3.2** Such interpretations, rules, and regulations shall be in conformance with the intent and purpose of this *Code* and shall be available to the public during normal business hours.

**1.7.4 Enforcement Assistance.** Police and other enforcement agencies shall have authority to render necessary assistance in the enforcement of this *Code* when requested to do so by the AHJ.

**1.7.5 Delegation of Authority.** The AHJ shall be permitted to delegate to other qualified individuals such powers as necessary for the administration and enforcement of this *Code*.

**Chapter 18 Fire Department Access and Water Supply**

**17.3.5.2.1.10 Vehicle Parking Areas.** Vehicle parking areas within the immediate undeveloped zone shall be maintained free of dry grasses and fine fuels that could be ignited by hot exhaust systems or firebrands. [11445:11]

**18.1 General.** Fire department access and water supplies shall comply with this chapter.

**17.3.5.2.1.11.1 Heat and flame sources** that are unprotected or unshielded shall not be permitted within 30 ft (9 m) of the primary structure. [11445:12.1]

**18.1.1 Application.**

**17.3.5.2.1.11.2 Incinerators, outdoor fireplaces, permanent barbecues, and grills** shall not be built, installed, or maintained in hazardous fire areas without prior approval of the AHJ. [11445:12.2]

**18.1.1.1 This chapter shall apply to public and privately owned fire apparatus access roads.**

**17.3.5.2.1.11.3 Openings in incinerators, outdoor fireplaces, permanent barbecues, and grills** shall be provided with an approved spark arrester, screen, or door. [11445:12.3]

**18.1.1.2 This chapter shall apply to public and privately owned fire hydrant systems.**

**17.3.5.2.1.11.4 Propane tanks and other flammable or combustible liquids storage** shall conform to NFPA 58, *Liquid Petroleum Gas Code*, and the wildland fire hazard mitigation plan required in 17.1.10. [11445:12.4]

**18.1.2 Permits.** Permits, where required, shall comply with Section 1.12.

**17.3.5.2.1.11.5 Other combustible materials** within 30 ft (9 m) of any structure shall be removed or stored in conformance with the wildland fire hazard mitigation plan as approved by the AHJ. [11445:12.5]

**18.1.3 Plans.**

**17.3.5.2.2 Where required by the AHJ because of extra hazardous conditions,** additional areas shall be maintained to include additional defensible space from buildings or structures, trees adjacent to or overhanging a building shall be maintained free of deadwood, and the roof of a structure shall be free of leaves, needles, or other dead vegetative growth.

**18.1.3.1 Fire Apparatus Access.** Plans for fire apparatus access roads shall be submitted to the fire department for review and approval prior to construction.

**17.3.5.3 Roadways.** Areas within 10 ft (3 m) on each side of portions of highways and private streets shall be cleared of combustible vegetation and other combustible growth. Single specimens of trees, shrubbery, or cultivated ground cover such as green grass, ivy, succulents, or similar plants used as ground covers shall be permitted to be exempt provided that they do not form a means of readily transmitting fire.

**18.1.3.2 Fire Hydrant Systems.** Plans and specifications for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction.

**17.3.6 Unusual Circumstances.** The AHJ shall determine that difficult terrain, danger of erosion, or other unusual circumstances could require additional safeguards.

**18.2 Fire Department Access.**

**17.3.7 Fire Roads, Firebreaks, and Emergency Access.**

**18.2.1 Fire department access and fire department access roads** shall be provided and maintained in accordance with Section 18.2.

**17.3.7.1 The provisions of 17.3.7 and Section 18.2 shall be used to determine the design, clearances, and provisions for emergency access (ingress and egress).**

**18.2.2 Access to Structures or Areas.**

**17.3.7.2 Unauthorized vehicles shall not be driven upon fire roads or firebreaks.** Vehicles shall not be parked in a manner that obstructs the entrance to a fire road or firebreak.

**18.2.2.1 Access Box(es).** The AHJ shall have the authority to require an access box(es) to be installed in an accessible location where access to or within a structure or area is difficult because of security. The access box(es) shall be of an approved type listed in accordance with UL 1097.

**17.3.7.3 Radio and television aerials, guy wires, and other obstructions shall not be installed or maintained on fire roads or firebreaks unless the vertical clearance is sufficient to allow the movement of fire and emergency apparatus.**

**18.2.2.2 Access to Gated Subdivisions or Developments.** The AHJ shall have the authority to require fire department access to be provided to gated subdivisions or developments through the use of an approved device or system.

**17.3.7.4 Motorcycles, motor scooters, and motor vehicles shall not be operated within hazardous fire areas, except upon clearly established public or private roads.**

**18.2.2.3 Access Maintenance.** The owner or occupant of a structure or area, with required fire department access as specified in 18.2.2.1 or 18.2.2.2, shall notify the AHJ when the access is modified in a manner that impairs fire department access.

**17.3.8 Tampering with Fire Safety Equipment.** See Section 10.7 for requirements on tampering with fire safety equipment.

**18.2.3 Access Roads.**

**17.3.9 Maintenance.** See 4.5.8 for requirements on maintenance.

**18.2.3.1 Required Access.**

**18.2.3.1.1 Approved fire department access roads shall be provided for every facility, building, or portion of a building hereafter constructed or relocated.**

**18.2.3.1.2 Fire department access roads shall consist of roadways, fire lanes, parking lot lanes, or a combination thereof.**

**18.2.3.1.3 The provisions of 18.2.3.1 through 18.2.3.2.2.1 shall be permitted to be modified by the AHJ where any of the following conditions exist:**

**18.2.3.1.3\* One- and two-family dwellings protected by an approved automatic sprinkler system in accordance with Section 13.1**

**18.2.3.2 Existing one- and two-family dwellings**

**18.2.3.2.1 A fire department access road shall extend to within 50 ft (15 m) of at least one exterior door that can be opened from the outside and that provides access to the interior of the building.**

**18.2.3.2.2 Where a one- or two-family dwelling, or townhouse, is protected with an approved automatic sprinkler system that is installed in accordance with NFPA 13A, NFPA 13D, or NFPA 13R, as applicable, the distance in 18.2.3.2.1 shall be permitted to be increased to 150 ft (46 m).**

**18.2.3.2.2.1 Fire department access roads shall 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 150 ft (46 m) from fire department access roads as measured by an approved route around the exterior of the building or facility.**

**18.2.3.2.3 Multiple Access Roads.** More than one fire department access road shall be provided when it is determined by the AHJ that access by a single road could be impaired by vehicle congestion, condition of terrain, climatic conditions, or other factors that could limit access.

**18.2.3.2.3.1 When buildings are protected throughout with an approved automatic sprinkler system that is installed in accordance with NFPA 13, NFPA 13D, or NFPA 13R, the distance in 18.2.3.2.2 shall be permitted to be increased to 450 ft (137 m).**

**18.2.3.3 Vertical clearances or widths are not adequate to accommodate fire apparatus.**

**18.2.3.3.1 Fire department access roads shall have an unobstructed vertical clearance of not less than 15 ft (6 m).**

**18.2.3.4 Vertical clearances shall be permitted to be reduced, provided such reduction does not impair access by fire apparatus, and approved signs are installed and maintained indicating the established vertical clearance when approved.**

**18.2.3.4.1 Dimensions.**

**18.2.3.4.1.1 Fire department access roads shall be constructed with a width of not less than 20 ft (6.1 m).**

**18.2.3.4.1.2 Vertical clearance shall be permitted to be reduced, provided such reduction does not impair access by fire apparatus, and approved signs are installed and maintained indicating the established vertical clearance when approved.**

**18.2.3.4.2 Surface.** Fire department access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be provided with an all-weather driving surface.

**18.2.3.4.2.1 Vertical clearances or widths are not adequate to accommodate fire apparatus.**

**18.2.3.4.3 Turning Radius.**

**18.2.3.4.3.1 The turning radius of a fire department access road shall be as approved by the AHJ.**

**18.2.3.4.4 Dead Ends.** Dead-end fire department access roads in excess of 150 ft (46 m) in length shall be provided with approved provisions for the fire apparatus to turn around.

**18.2.3.4.4.1 Turns in fire department access roads shall maintain the minimum road width.**

**18.2.3.4.5 Bridges.**

**18.2.3.4.5.1 When a bridge is required to be used as part of a fire department access road, it shall be constructed and maintained in accordance with nationally recognized standards.**

**18.2.3.4.5.2 The bridge shall be designed for a live load sufficient to carry the imposed loads of fire apparatus.**

**18.2.3.4.5.3 Vehicle load limits shall be posted at both entrances to bridges where required by the AHJ.**

**18.2.3.4.6 Grade.**

**18.2.3.4.6.1 The gradient for a fire department access road shall not exceed the maximum approved.**

**18.2.3.4.6.2 The angle of approach and departure for any means of fire department access road shall not exceed 1 ft drop in 20 ft (0.5 m drop in 6 m) or the design limitations of the fire apparatus of the fire department, and shall be subject to approval by the AHJ.**

**18.2.3.4.6.3 Fire department access roads connecting to roadways shall be provided with curb cuts extending at least 2 ft (0.61 m) beyond each edge of the fire lane.**

**18.2.3.4.7 Traffic Calming Devices.** The design and use of traffic calming devices shall be approved by the AHJ.

**18.2.3.4.7.1 Where required by the AHJ, approved signs, approved roadway surface markings, or other approved notices shall be provided and maintained to identify fire department access roads or to prohibit the obstruction thereof or both.**

**18.2.3.4.8 Marked fire apparatus access road shall also be known as a fire lane.**

**18.2.3.4.8.1 Obstruction and Control of Fire Department Access Road.**

**18.2.3.4.8.1.1 The required width of a fire department access road shall not be obstructed in any manner, including by the parking of vehicles.**

**18.2.3.4.8.1.2 Minimum required widths and clearances established under 18.2.3.4 shall be maintained at all times.**

**18.2.3.4.8.1.3 Facilities and structures shall be maintained in a manner that does not impair or impede accessibility for fire department operations.**

**18.2.3.4.8.1.4 Entrances to fire department access roads that have been closed with gates and barriers in accordance with 18.2.3.4.2.1 shall not be obstructed by parked vehicles.**

**18.2.3.4.9 Closure of Accessways.**

**18.2.3.4.9.1 The AHJ shall be authorized to require the installation and maintenance of gates or other approved barricades across roads, trails, or other accessways not including public streets, alleys, or highways.**

**18.2.3.4.9.2 Where required, gates and barricades shall be secured in an approved manner.**



## FACT SHEET » RESEARCH

### Sprinklers in Reported U.S. Home Fires During 2010 to 2014

Some type of sprinkler was present in an estimated total of 24,440 (7%) reported home structure fires during 2010 to 2014. These fires caused an average of 35 (1%) civilian deaths, 616 (5%) civilian injuries, and \$198 million (3%) in direct property damage per year. Homes include one- or two-family homes and apartments or other multi-family homes. Properties under construction were excluded from the analysis.

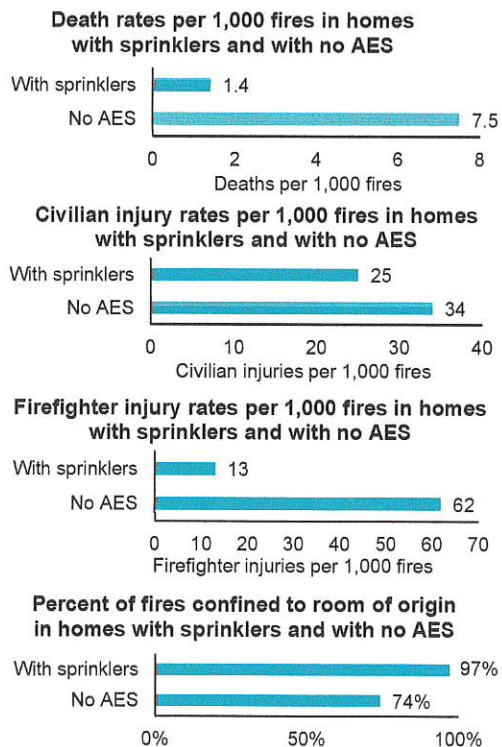
#### Sprinkler Presence

Automatic extinguishing systems (AES) are designed to control fires until the fire department arrives. Sprinklers are a type of AES that uses water to control fires. Other types of AES use something other than water.

According to the 2011 American Housing Survey, 5% of all occupied housing units had sprinklers. Buildings with more housing units were more likely to have sprinklers. Almost one-third (31%) of units in buildings with 50 or more units were sprinklered.

Wet pipe sprinklers accounted for 89% of the sprinklers in reported home fires, dry pipe systems accounted for 9%, and other types of sprinklers accounted for 2%.

#### Impact of Sprinklers



The civilian death rate of 1.4 per 1,000 reported fires was 81% lower in homes with sprinklers than in homes with no AES.

The civilian injury rate of 25 per 1,000 reported fires was 31% lower in homes with sprinklers than in homes with no AES. Many of the injuries occurred in fires that were too small to activate the sprinkler or in the first moments of a fire before the sprinkler operated.

The average firefighter injury rate of 13 per 1,000 reported home fires was 79% lower where sprinklers were present than in fires with no AES.

Where sprinklers were present, flame damage was confined to the room of origin in 97% of fires compared to 74% of fires without AES.



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# TITLE LXIV PLANNING AND ZONING

## CHAPTER 674 LOCAL LAND USE PLANNING AND REGULATORY POWERS

### Zoning Board of Adjustment and Building Code Board of Appeals

#### Section 674:34

**674:34 Powers of Building Code Board of Appeals.** – The building code board of appeals shall hear and decide appeals of orders, decisions, or determinations made by the building official or fire official relative to the application and interpretation of the state building code or state fire code as defined in RSA 155-A:1. An application for appeal shall be based on a claim that the true intent of the code or the rules adopted thereunder have been incorrectly interpreted, the provisions of the code do not fully apply, or an equally good or better form of construction is proposed. The board shall have no authority to waive requirements of the state building code or the state fire code.

**Source.** 1983, 447:1. 2012, 242:17, eff. June 18, 2012.