



CITY OF CAMBRIDGE
COMMUNITY DEVELOPMENT DEPARTMENT

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To: Richard C. Rossi, City Manager
From: Iram Farooq, Assistant City Manager for Community Development
Owen O'Riordan, Commissioner of Public Works
Date: April 20, 2016
Re: **Barrett, et al. Zoning Amendment – Potential Issues**

Overview

The Barrett, et al., Zoning Amendment (Ordinance #1379) was adopted by the City Council on January 11, 2016 but set to take effect on May 1, 2016, to provide additional time for staff to study the proposal and suggest changes to address some specific concerns.

This report provides some additional information about the anticipated effects of the amendment, identifies and explains some issues raised by staff, and recommends modifications to the petition for the Council to consider before the amendment takes effect. The modifications address the following three specific issues:

1. Flood Risk. Including provisions to consider and mitigate potential risk to housing units or other usable space located below grade as part of the special permit application and review process.
2. Parking for Accessory Apartments. Making clear the parking requirements and how they may be modified by the Board of Zoning Appeal (BZA) when granting a special permit.
3. Clarity in Definition of Gross Floor Area (GFA). Restructuring the amendment so that the definition of GFA remains distinct and does not rely on special permits. Alternative zoning text is provided to create a general special permit waiver of basement GFA from zoning limitations, which would have the same intended result.

The attached document contains specific text modifications that may be referred to as a zoning petition for hearings by the Planning Board and Ordinance Committee.

Amendment Overview

The Barrett Amendment makes two distinct sets of zoning changes, summarized below. In each case, the effect of the change would be citywide.

- **Part A** would allow single-family and two-family homes with at least 1,800 square feet of Gross Floor Area (GFA) and at least 5,000 square feet of lot area to add an accessory apartment by special permit from the Board of Zoning Appeal (BZA). An accessory apartment is a dwelling unit that is located within and under the same ownership as a residential dwelling. Previously, accessory apartments were only allowed within single-family homes in Residence A-1 and A-2 zoning districts.
- **Part B** would exempt basement or cellar space from the definition of Gross Floor Area (GFA) on a lot, either by-right in the case of single-family and two-family residences, or by special permit for all other buildings. Currently, basement or cellar space is only excluded from GFA if it is less than 7 feet in height, or if it is used for parking, or if it is used for building mechanical systems (such as HVAC). The effect of this change is that basement or cellar space could be constructed, expanded, or converted to some other function without exceeding floor area ratio (FAR) or GFA limitations in zoning. Also, some lots with existing cellars or basements may be allowed to enlarge the floor area of above-grade portions of the building while remaining within FAR or GFA limitations.

Lots Affected by Amendment

Part A of the zoning would affect every single-family and two-family residential structure with at least 1,800 square feet of GFA and 5,000 square feet of lot area. Part B, in the by-right condition, would affect every single-family and two-family home in the city. Part B, in the special permit condition, would affect every lot with an existing basement, or with the potential to construct a basement, which is virtually every lot that is not a single-family or two-family home.

Using data from the Assessing Department, the chart below summarizes the affected lots.

Criteria	Number of lots (approx.)	Effects of Zoning Amendment
Single-family and two-family	7,060	Basement space excluded from GFA as-of-right. Lots could construct or enlarge a basement; in some cases could enlarge an above-grade structure after excluding existing basement from FAR.
<i>...with at least 5,000 SF lot area and at least 1,800 SF GFA</i>	<i>1,909</i>	<i>Could add accessory apartment by special permit from BZA.</i>
All other developed or developable lots	About 6,000	Basement space can be excluded from GFA by special permit.

Source: Cambridge Assessing Department

The attached map further illustrates the location of single-family and two-family lots within the city. While the largest concentrations of these lots are in the western and northern parts of the city, there are many single-family and two-family lots distributed throughout all neighborhoods.

Specific Issues in Barrett Amendment

Staff has identified the following issues and recommends that they be addressed in the zoning text before the amendment takes effect:

1. Flood Risk. There are no specific provisions related to flood mitigation in basement spaces. Basement flooding is a significant and recurring issue throughout Cambridge, due to sewer/drainage backups and overland flooding during storm events. The recent Climate Change Vulnerability Assessment (CCVA) has revealed that the likelihood of flooding will increase over time, particularly in low-lying areas. In cases where an accessory apartment is created below-grade, or in other cases where basement space is excluded from GFA (which could incentivize the creation of more usable basement space), we recommend measures, similar to those included in the Basement Housing Overlay District zoning, to mitigate flood risk in all cases and to discourage locating sensitive uses, such as housing units, in basements in higher-flood-risk areas as set forth in Sections 4.22.3 and 5.29 of the attached.
2. Parking for Accessory Apartments. The parking requirements for accessory apartments are left somewhat ambiguous by the Barrett Amendment, because the provisions of the special permit (which existed prior to the Barrett Amendment) state that the BZA may require off-street parking as a condition of a special permit, but the Barrett Amendment provisions state that off-street parking shall not be required. It would be clearer to retain the standard base zoning requirement of one off-street parking space for a dwelling unit, but to allow the BZA to waive that requirement upon issuing a special permit for an accessory apartment, as set forth in the proposed amendments to sections 4.22.1 and 4.22.2.
3. Clarity in Definition of Gross Floor Area. The Barrett Amendment provisions related to GFA are contained within the definition of the term. It is critical that the definition be as clear and consistent as possible, and we believe that it is problematic to have a definition that changes its meaning depending on whether or not a special permit has been granted. The intended effect of the amendment is to allow some flexibility, after special permit review, in the FAR or other GFA limitations in Article 5.000 for multifamily, commercial or other lots aside from single-family and two-family homes. We therefore recommend that a clearer approach would be to add the proposed provision in Article 5.000, Section 5.29 that would allow a special permit to waive FAR or GFA limitations for basement space, subject to a clear set of approval criteria.

The attached document provides modifications to the text of the Barrett Amendment that would address these issues in the manner described.

Barrett, et al., Zoning Amendment (Ordinance #1379)
Modifications Suggested by City Staff

The Barrett, et al. Amendment ordained that the Cambridge Zoning Ordinance be amended in Article 2.000 (“Definitions”) and Article 4.000, section 4.22 (“Accessory Apartments”), with amendments to become effective May 1, 2016. Staff suggests that the City Council consider the following modifications to the amendment (with suggested additions underlined, and suggested deletions in ~~strikeout~~) prior to the amendment becoming effective.

PART A: ACCESSORY APARTMENTS

Barrett Amendment Language for Article 2 (Definitions)

Accessory Apartment. An accessory use with one or more rooms with separate kitchen and bathroom facilities, constituting a dwelling unit, located within and under the same ownership as a single or two-family detached dwelling and designed for the occupancy of a single family.

Barrett Amendment Language for Article 4 (Use Regulations)

4.22 *Accessory Apartments.* The purpose of this Subsection 4.22 is to allow for the creation of accessory apartments in all districts. Many large single and two-family homes are underutilized. Alteration of these homes to provide additional dwelling units would be prohibited in most cases due to the existing floor area ratio and/or lot area per dwelling unit requirements of Subsection 5.31. Given contemporary lifestyles, housing needs, and energy and maintenance costs, it is beneficial to the City to allow greater flexibility in the use of such dwellings without substantially altering the environmental quality of their surrounding neighborhoods. This Subsection 4.22 gives the Board of Zoning appeal authority to relax such requirements in certain instances as enumerated below.

4.22.1 In all districts the Board of Zoning Appeal may grant a special permit for alteration of a single family or two-family, detached dwelling to provide one accessory apartment if the following conditions are met:

1. The dwelling has not been substantially enlarged since built. The addition in the aggregate of two hundred and fifty (250) square feet or more of gross floor area shall be considered a substantial enlargement.
2. Prior to alteration the dwelling contains at least one thousand eight hundred (1800) square feet of gross floor area.

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3. The lot on which such accessory apartment is located contains at least five thousand (5,000) square feet of lot area.
4. Such accessory apartment shall not occupy more than 900 square feet or thirty-five (35) percent of the gross floor area of the principal dwelling, whichever is less, and shall not be located in a garage.
5. The owner(s) of the residence in which the accessory dwelling unit is created must continue to occupy at least one of the dwelling units as their primary residence. Prior to issuance of a building permit, the owner(s) must submit a notarized letter stating that the owner will occupy one of the dwelling units on the premises as the owner's primary residence.
6. Any existing two-family home may be converted to a single family home with accessory unit by right, without need for a Special Permit.

In granting a special permit the Board may impose such conditions, including requirements for off street parking and limitations on other accessory uses of the premises, as it may deem appropriate to avoid undue detriment to the neighborhood or to nearby persons or property. The Board of Zoning Appeal shall evaluate each special permit application which involves exterior changes with the appearance of and character of the neighborhood and may require that there be no change or minimal change to any face of a building oriented toward a public way or visible from a public way.

4.22.2 ~~The requirement for an off street parking space specified in Article 6.000 shall not apply for the addition of one accessory apartment in a single family or two family, detached dwelling in all districts may be waived by the Board of Zoning Appeal for an accessory apartment upon finding that such waiver will not cause excessive congestion, endanger public safety, substantially reduce parking availability for other uses or otherwise adversely impact the neighborhood.~~

4.22.3 Where an accessory apartment is created in a basement or cellar, the following additional requirements shall apply.

- a. An application for a special permit to create an accessory apartment in a basement or cellar shall include a report on historical occurrences and future likelihood of basement flooding in the area of the property, prepared by a registered professional engineer, with a functional scope determined by the City Engineer to be appropriate to the location of the project. In general, the report shall assess the likelihood of flooding in the basement or cellar by way of sewer system

This change provides more flexibility and clearer guidance to the BZA in determining whether off-street parking should be required given the specifics of the proposal.

These additions are meant to mitigate flood hazard if apartments are proposed in basements.

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backups or overland flooding and identify proposed mitigation to prevent any such flooding. The Applicant shall obtain approval of the report and proposed mitigation, if any, from the City Engineer prior to submitting a special permit application. As a condition of the special permit, the BZA may require preventive measures to safeguard against future flooding of the accessory apartment as recommended by the City Engineer.

b. A special permit shall not be issued for a basement or cellar accessory apartment if the property falls within a special flood hazard area designated as Zone A or AE on the Middlesex County Flood Insurance Rate Maps (FIRMs) issued by the Federal Emergency Management Agency (FEMA) for the administration of the National Flood Insurance Program.

PART B: FLOOR AREA IN BASEMENTS

Barrett Amendment Changes to Article 2 (Definitions)

1) Under the paragraph “Gross Floor Area shall include:”

~~Strike the following line item:~~ Amend line item (f) as follows:

“(f) basement and cellar areas not excluded in (1), (3), ~~and (9)~~, and (15) below;”

2) Under the paragraph “Gross Floor Area shall not include:”

Add the following line items:

“(15) Any basement or cellar living space in any single-family or two-family home.”

~~“(16) Any basement or cellar living space in any other type of structure with the issuance of a special permit. In granting such a special permit, the permit granting authority may approve the exemption of any portion of Gross Floor Area (GFA) located in a basement or cellar from the calculation of GFA, provided the permit granting authority finds that the uses occupying such exempted GFA support the character of the neighborhood or district in which the applicable lot is located.”~~

These changes are meant to achieve the same effect as the Barrett Amendment but in a manner that is clearer and more precise. Zoning definitions should not contain special permit provisions, and therefore adding a section to Article 5.000 is suggested as an alternative.

Staff Suggested Changes to Article 5 (Development Standards)

Create a new Section 5.29 as follows:

5.29 General Exemption for Basement or Cellar GFA. Any Gross Floor Area (GFA), as defined in Article 2.000 of this Zoning Ordinance, that is located within the basement or cellar of a building, and is not otherwise exempt from the GFA or FAR limitations set forth in this Zoning Ordinance, may be excluded from the calculation of GFA and/or FAR requirements and limitations upon issuance of a special permit by the Board of Zoning Appeal (BZA) upon finding that the uses occupying such exempted GFA support the character of the neighborhood or district in which the applicable lot is located, that the proposal meets the general special permit criteria in Section 10.43 and is consistent with established planning goals and objectives for the district, and furthermore that the following requirements are met:

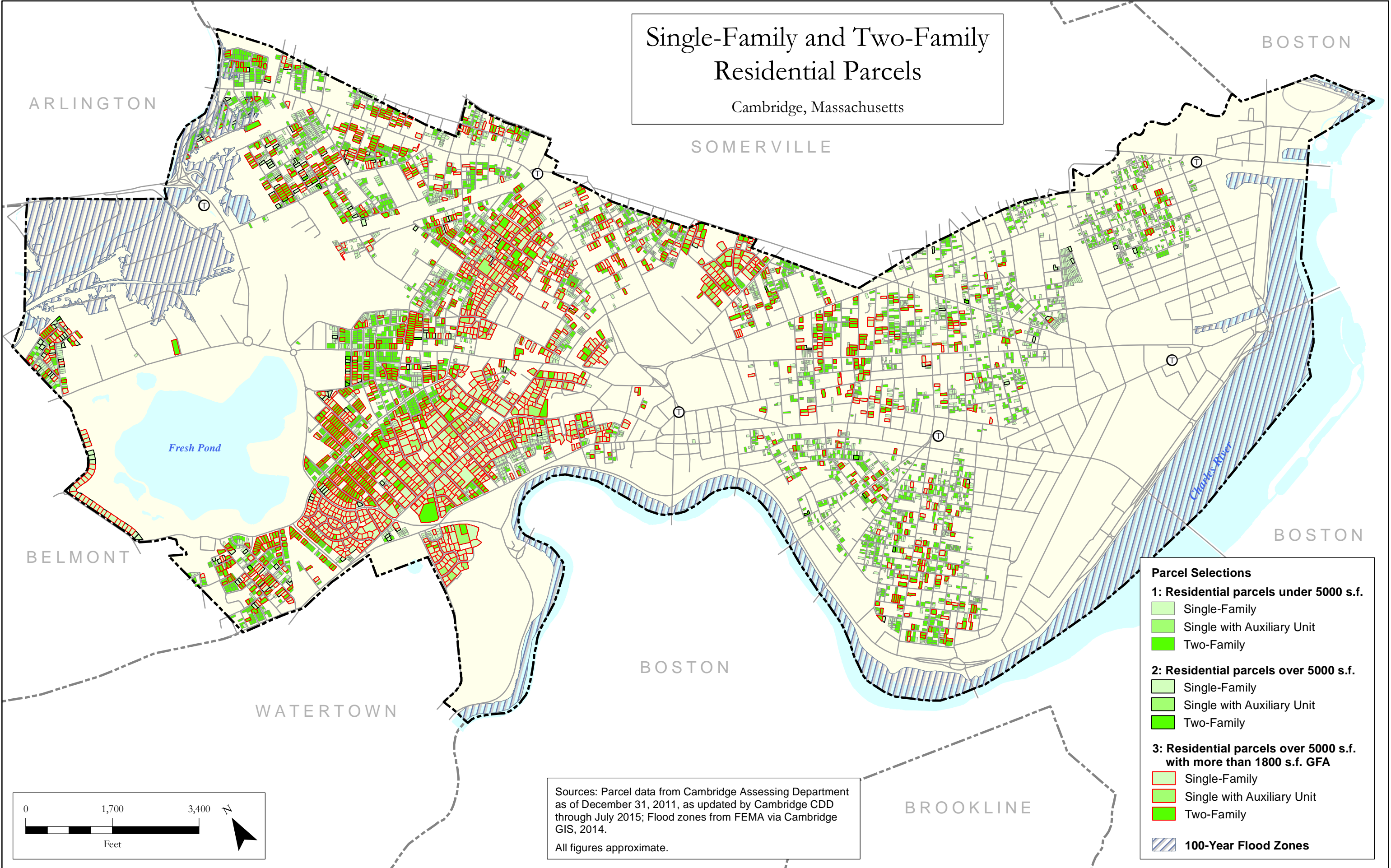
a. A special permit application pursuant to this Section shall include a report on historical occurrences and future likelihood of basement flooding in the area of the property, prepared by a registered professional engineer, with a functional scope determined by the City Engineer to be appropriate to the location of the project. In general, the report shall assess the likelihood of flooding in the basement or cellar by way of sewer system backups or overland flooding and identify proposed mitigation to prevent any such flooding. The Applicant shall obtain approval of the report and proposed mitigation, if any, from the City Engineer prior to submitting a special permit application. As a condition of the special permit, the BZA may require preventive measures to safeguard against future basement or cellar flooding as recommended by the City Engineer.

b. A special permit shall not be issued pursuant to this Section if the building falls within a special flood hazard area designated as Zone A or AE on the Middlesex County Flood Insurance Rate Maps (FIRMs) issued by the Federal Emergency Management Agency (FEMA) for the administration of the National Flood Insurance Program.

Adding this section to Article 5.000 is a cleaner way to exempt basement and cellar space by special permit, rather than creating a variable definition of Gross Floor Area. It also includes provisions to mitigate flood hazard to basements.

Single-Family and Two-Family Residential Parcels

Cambridge, Massachusetts



Parcel Selections

1: Residential parcels under 5000 s.f.

- Single-Family
- Single with Auxiliary Unit
- Two-Family

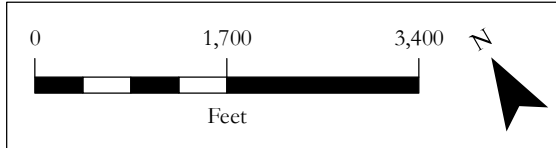
2: Residential parcels over 5000 s.f.

- Single-Family
- Single with Auxiliary Unit
- Two-Family

3: Residential parcels over 5000 s.f. with more than 1800 s.f. GFA

- Single-Family
- Single with Auxiliary Unit
- Two-Family

100-Year Flood Zones



Sources: Parcel data from Cambridge Assessing Department as of December 31, 2011, as updated by Cambridge CDD through July 2015; Flood zones from FEMA via Cambridge GIS, 2014.
All figures approximate.