



CITY OF CAMBRIDGE
COMMUNITY DEVELOPMENT DEPARTMENT

IRAM FAROOQ
Assistant City Manager for
Community Development

To: Planning Board
From: Jeff Roberts, Land Use and Zoning Planner
Date: January 19, 2016
Re: **Continued “MAPOCO” Discussion – North Mass Ave Zoning**

In December, the Planning Board heard a proposal to amend zoning requirements in the section of Massachusetts Avenue from Porter Square to the Cambridge Common (referred to as “MAPOCO”). The proposal is modeled after a set of zoning changes that were adopted for the North Massachusetts Avenue (“North Mass Ave”) area in 2012. At that time, the Board expressed a desire to better understand the North Mass Ave zoning changes before making a recommendation. This memo and the attached material provide some of the background related to that zoning change, and staff will give a brief presentation at the continued hearing on January 26.

North Massachusetts Avenue Study Process

The North Mass Ave zoning changes resulted from a study process conducted by CDD and neighborhood residents in 2010-2011, following recommendations of the North Cambridge Neighborhood Study Update completed in 2009. The study area is shown on Page 1 of the attached materials. The zoning for that area is Business A-2 (BA-2) with the additional Massachusetts Avenue Overlay District (MAOD) requirements. Prior to the North Mass Ave zoning changes, the zoning requirements in North Mass Ave were the same as those currently applicable in the MAPOCO segment.

The North Mass Ave study process revealed that the area has many positive features, including a mix of housing, neighborhood-scaled retail and other uses, good transit access, public parks, a walkable and bikeable environment, and a blend of historic and modern attributes. Therefore, the recommendations were meant to improve the area but not to promote substantial transformation. The key improvements that were identified were to improve the safety, pedestrian character and appearance of the North Mass Ave streetscape, encourage ground-floor retail to serve an evolving neighborhood, and promote the sense of North Mass Ave as a “gateway” to Cambridge.

The images on page 4 of the attached materials provide examples of projects that were built in the last few decades following the BA-2 / MAOD zoning requirements and Northern Massachusetts Avenue Design Guidelines. While study participants were supportive of housing along Mass Ave and felt that the zoning allowed development of an appropriate scale, there was also a sense of “missed opportunity” since these projects did not include retail or otherwise contribute to ground-floor vitality along the streetscape. The images on pages 8-10 illustrate some examples of similar-scaled buildings that study participants felt had a more desirable streetscape character.

Adopted North Mass Ave Zoning Changes

The zoning amendments that were ultimately adopted in 2012 were relatively modest changes that were not meant to drastically change the scale or character of future development, but to encourage development of a form that would better meet the expectations of neighborhood residents.

Required Ground-Floor Non-Residential Use

The most significant change was to require all new buildings fronting Massachusetts Ave to include non-residential space at the ground floor. A wide range of use types were allowed, including retail, office, and public-oriented institutional uses such as galleries and social services, to the extent allowed in the base zoning district (unless a non-conforming use was allowed pursuant to a variance). While the main desire was for retail, participants acknowledged that the priority was to establish the desired space at the ground floor, and not to be so restrictive that the space might not be economically viable.

The zoning specifically requires a ground-floor non-residential space covering at least 75% of the linear frontage of the building, with at least 15 feet of floor-to-ceiling height and at least 40 feet of depth from the front of the building. Also, no single ground-floor non-residential establishment can occupy more than 5,000 square feet of floor area, including space in the basement. These strict dimensional requirements could be modified by special permit from the Planning Board if the Board finds that the modifications remain consistent with the intent of the requirements. The term “Mixed Use Building” is defined in the zoning to mean a residential building with ground-floor non-residential space meeting these requirements (with any modifications approved by the Planning Board).

Modifications to Floor Area Ratio (FAR)

In many districts, including BA-2, the Cambridge Zoning Ordinance provides different development allowances (based on FAR) for residential and non-residential uses. Developing a mixed-use building is challenging because it requires applying a “mixed use formula” to determine the allowed development capacity, which falls somewhere between the limits for residential and non-residential. Page 7 of the attached materials illustrates the reduction in allowed FAR that results under the BA-2 / MAOD requirements when comparing an entirely residential building to a residential building with non-residential use at the ground floor.

The North Mass Ave zoning eliminates the “penalty” for ground-floor non-residential use by establishing a modified framework of FAR allowances. Instead of allowing a residential project at 1.75 FAR, a non-residential project at 1.00 FAR, and a mixed-use project in between those two limits, the North Mass Ave zoning allows a Mixed Use Building (meeting the above ground floor requirements) at 1.75 FAR, and any non-residential building or entirely residential building (if exempted from the ground-floor requirements) at an FAR of 1.00. As noted in the chart, the Inclusionary Housing provisions would still allow an increase in FAR for residential or mixed-use projects that are required to provide affordable units.

An additional change was to exempt from FAR limits any basement space serving a ground-floor non-residential use. This change was meant to encourage provisions for storage or other auxiliary space that would help to make ground-floor retail establishments more viable.

Modifications to Height

Another change meant to facilitate the desired building form was to increase the allowed height for a Mixed Use Building from 45 feet to 50 feet, with the additional 5 feet of height meant to accommodate non-residential use at the ground floor. If the total height of the building were limited to 45 feet and a floor-to-ceiling height of 15 feet were required at the ground floor, it would result in residential story heights less than 10 feet, where a height of 10-11 feet is more typical. The images on page 11 of the attached materials illustrate the intended effects of this change.

The BA-2 / MAOD requirements also impose a step-back where portions of the building above 35 feet must be set behind a 45 degree bulk control plane – i.e., portions of the building that are 10 feet above the 35 foot datum must be set back from the street line at least 10 feet, and portions of the building 5 feet above the 35-foot datum must be set back at least 5 feet, &c. The images on page 4 of the attached materials illustrate how different residential projects have interpreted these requirements. While this approach can have some urban design benefits, it can also make the design of a mixed-use building less efficient because it requires varying the floorplate designs and arranging structural elements of the building to account for the differences in the facade. Study participants felt that it was acceptable to relax this requirement in order to make Mixed Use Buildings more viable.

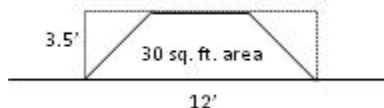
Special Exemptions

The North Mass Ave section (like the MAPOCO section) has a number of wood-frame residential buildings that are representative of the pre-20th century historic character of the area. While many of these buildings have been converted to non-residential use, it would not be desirable to force those buildings to comply with the form-based requirements applicable to new buildings. Therefore, these requirements are waived for a selected set of buildings identified in the zoning and shown on page 12 of the attached materials.

The Planning Board can also grant a special permit exempting a property from the Mixed Use Building requirements, and allowing residential use only, under specific circumstances and only if the Board finds that non-residential space would not be viable in that particular location. In those cases, if an all-residential building is allowed, the FAR is limited to 1.00.

Bay Windows

Projecting bays are an encouraged design element in the Massachusetts Avenue Design Guidelines and there are various zoning provisions meant to incentivize their inclusion in residential buildings; however, projects still tend not to include them for various reasons. The North Mass Ave zoning contains its own special exemption from FAR for space within projecting bays that are each no more than 12 feet wide, project no more than 3.5 feet from the building face and contain no more than 32 square feet of gross floor area (see diagram below), and that in total cover no more than 50% of a building’s façade.



Outdoor Seating

A major goal of the North Mass Ave study process was to enable more sidewalk seating for restaurants and cafes at the ground floor. One of the issues that has constrained outdoor seating are the parking requirements for such uses, which are based on the seating capacity. If a restaurant creates outdoor seating, even if that seating is seasonal, then the overall increase in seating capacity could trigger zoning requirements to create off-street parking, which would be prohibitive in many cases.

The North Mass Ave zoning specifically waives additional parking requirements for seasonal outdoor seating (within reasonable limits). Since the adoption of the zoning, some establishments along North Mass Ave have begun to introduce outdoor seating.

Considerations for MAPOCO Petition

The goals expressed in the “Friends of MAPOCO” zoning petition align with the provisions of the North Mass Ave zoning in that they are intended to strongly promote retail at the ground floors of new residential buildings. However, there are some goals in the Friends of MAPOCO petition that are not addressed in the North Mass Ave zoning or may conflict, as summarized below.

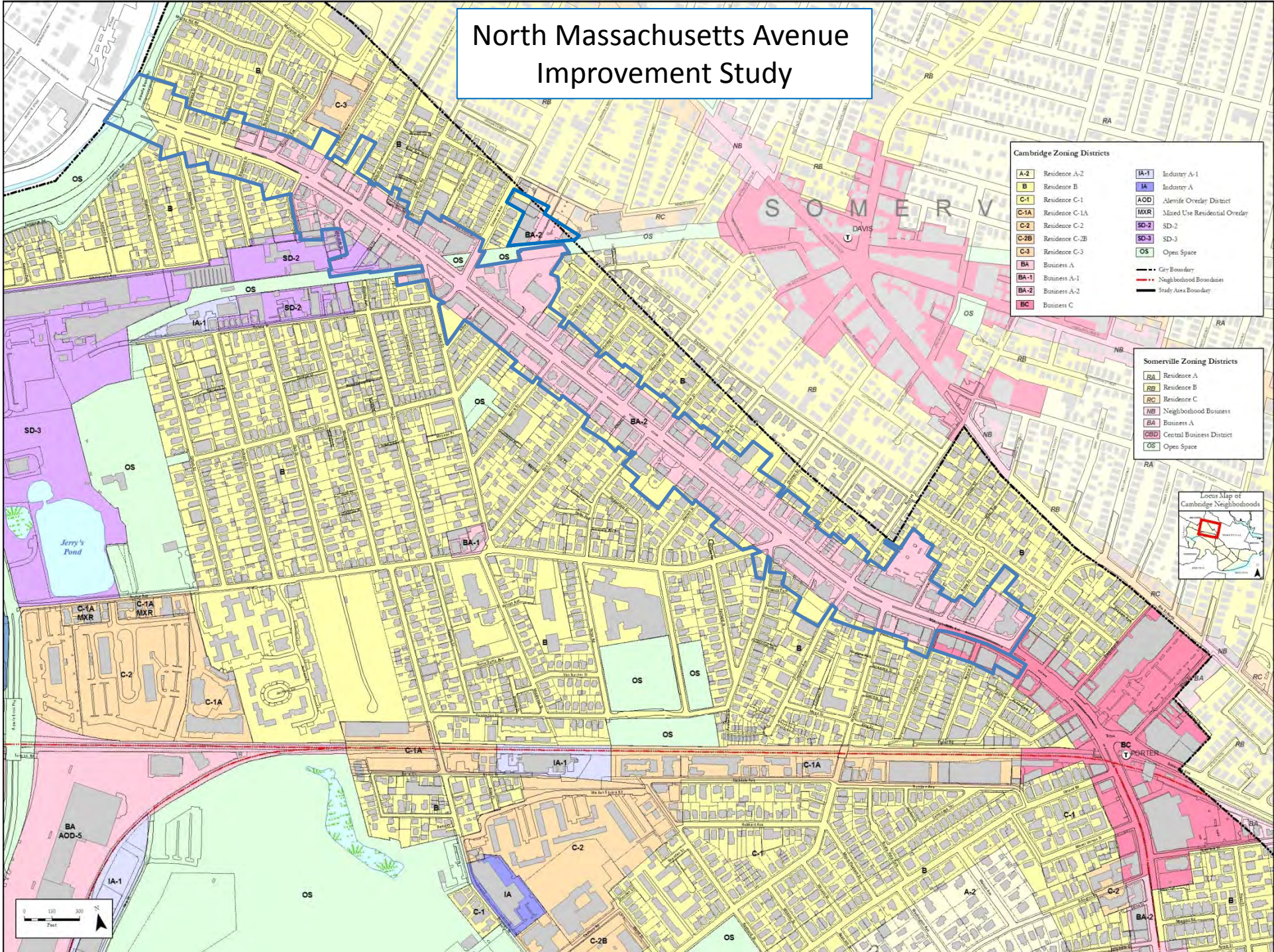
- Height. The MAPOCO petition seeks to maintain the 45-foot height limit with the required bulk control step-back above 35 feet in height. While it is possible to do this and incorporate the 15-foot floor-to-ceiling height requirement at the ground floor, as previously noted, this could create challenging design constraints for upper-floor residential development.
- Establishment Size. The North Mass Ave zoning limits ground-floor establishment sizes at 5,000 square feet (including basements), while the MAPOCO petition suggests setting that limit at 2,000 square feet but excluding basements. Either standard could be applied, but given the constraints of 2,000 square feet, it may be desirable to continue to allow for special permit relief if a proposal meets the intent of supporting locally-oriented retail.
- Historic Structures. The North Mass Ave zoning identifies historic structures that would be relieved of strict zoning requirements, and the same could be done in MAPOCO (in consultation with the Cambridge Historical Commission). However, the North Mass Ave zoning does not impose additional constraints on the form or style of development on lots adjacent to such historic structures, which is suggested in the MAPOCO petition.
- Above-Grade Parking. The North Mass Ave zoning retains the underlying MAOD requirement “specifically excluding Gross Floor Area in structured parking counted as Gross Floor Area” from the ground-floor frontage of buildings (Section 20.106). In limited circumstances, above-grade structured parking for residential uses may not be counted as Gross Floor Area, and so this provision may be interpreted to allow structured or “stilt” parking at the ground level in some cases. This is noted as an issue in the MAPOCO petition and may be worth further consideration if the application of the zoning text is not consistent with the intent.
- Front Setbacks. The current BA-2 zoning requires a 5-foot front setback but allows that requirement to be reduced in order to match an adjacent building that has an existing reduced setback. The

MAPOCO petition proposes amending that allowance, which would be accomplished by amending Article 5.000 of the Zoning Ordinance because it is not otherwise addressed in the MAOD or North Mass Ave overlay requirements.

- Rear Setbacks. The MAPOCO petition raises a concern about the application of rear setback requirements where a lot extends from the BA-2 district into the Residence B district. This is not addressed in the North Mass Ave zoning, nor in the MAOD zoning. The most effective way to address this might be as a clarification to the dimensional controls in Article 5.000; however, this could have impacts beyond the scope of the MAPOCO area.
- Fast Order Food. No change is needed to continue to prohibit fast order food establishments. The base BA-2 zoning does not allow fast order food establishments and neither the MAOD nor the North Mass Ave zoning allow uses prohibited in the base district. The North Mass Ave zoning, in listing the qualifying uses that can be at the ground floor of a Mixed Use Building, includes retail uses more generally (such as fast order food) but only if they are otherwise permitted by a variance.
- Required Parking. No change is needed to retain the current requirement of one off-street parking space for each new dwelling unit created. However, when considering zoning changes it is important to acknowledge that parking requirements can be one of the most difficult constraints for a housing development, especially in cases where the location of parking is constrained in order to achieve urban design goals.
- Public Parking. The MAPOCO petition suggests encouraging public parking, or parking that would not be attached to another land use and where anyone with a car could park. In zoning terms this is called “principal use parking,” and it is also regulated as “commercial parking” in the Cambridge municipal code. In the BA-2 zoning, principal use parking is a conditional use requiring a special permit from the BZA. Under the municipal code, commercial parking spaces are even more strictly regulated due to a longstanding “commercial parking freeze,” applicable in Boston and Cambridge, meant to limit traffic congestion in densely populated areas. To allow property owners to create additional commercial parking would require substantial regulatory changes.
- Urban Design Guidelines. The MAPOCO petition correctly notes that the effective Northern Massachusetts Urban Design Guidelines date to 1986 and there may be a benefit in updating them. However, this would require additional time and resources, either as a stand-alone urban design study or as a component of the larger citywide plan.

If the Board were to recommend applying some version of the North Mass Ave zoning as an approach to addressing the goals of the MAPOCO petition, the above issues should also be considered before developing a more specific zoning proposal.

North Massachusetts Avenue Improvement Study



WFA

Final Report
North Massachusetts Avenue
Urban Design/Land Use Study
Cambridge, Massachusetts

Prepared for
The City of Cambridge
Community Development Department

By
Wallace, Floyd, Associates Inc.
Architects/Planners

August 1988



COMPREHENSIVE PLANNING FOR
TROLLEY SQUARE AND SHERIDAN SQUARE



North Cambridge Stabilization Committee
Cambridge Community Development Department
June 1995

NORTH CAMBRIDGE
NEIGHBORHOOD STUDY

Area 3 Strategy

Maintain this area as local link between Forter Square and Trolley Square with a variety of street edge conditions. This includes:

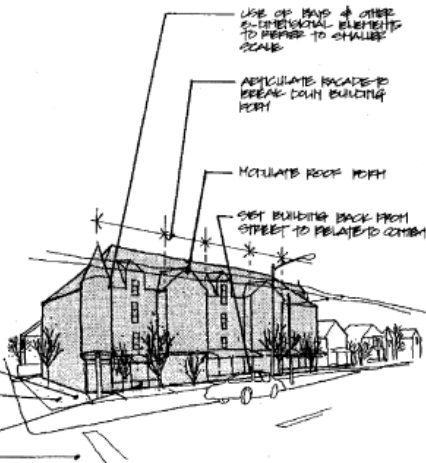
- encouragement of infill development which faces directly on to the Avenue.
- the uses of small scale architectural elements such as balconies, porches and roof forms to maintain compatibility with the neighborhood behind the Avenue.
- the use of some setbacks with room for landscaping or outdoor commercial uses in front of buildings would be appropriate here to maintain the diversity which currently exists along the street front of this part of the Avenue.

DAY STREET

NO PARKING AT CORNER OR IN FRONT OF BUILDING

LANDSCAPING AT SETBACKS

CONTROL GROUND FLOOR USES TO STREET MASSACHUSETTS AVE



A joint report of the North Cambridge

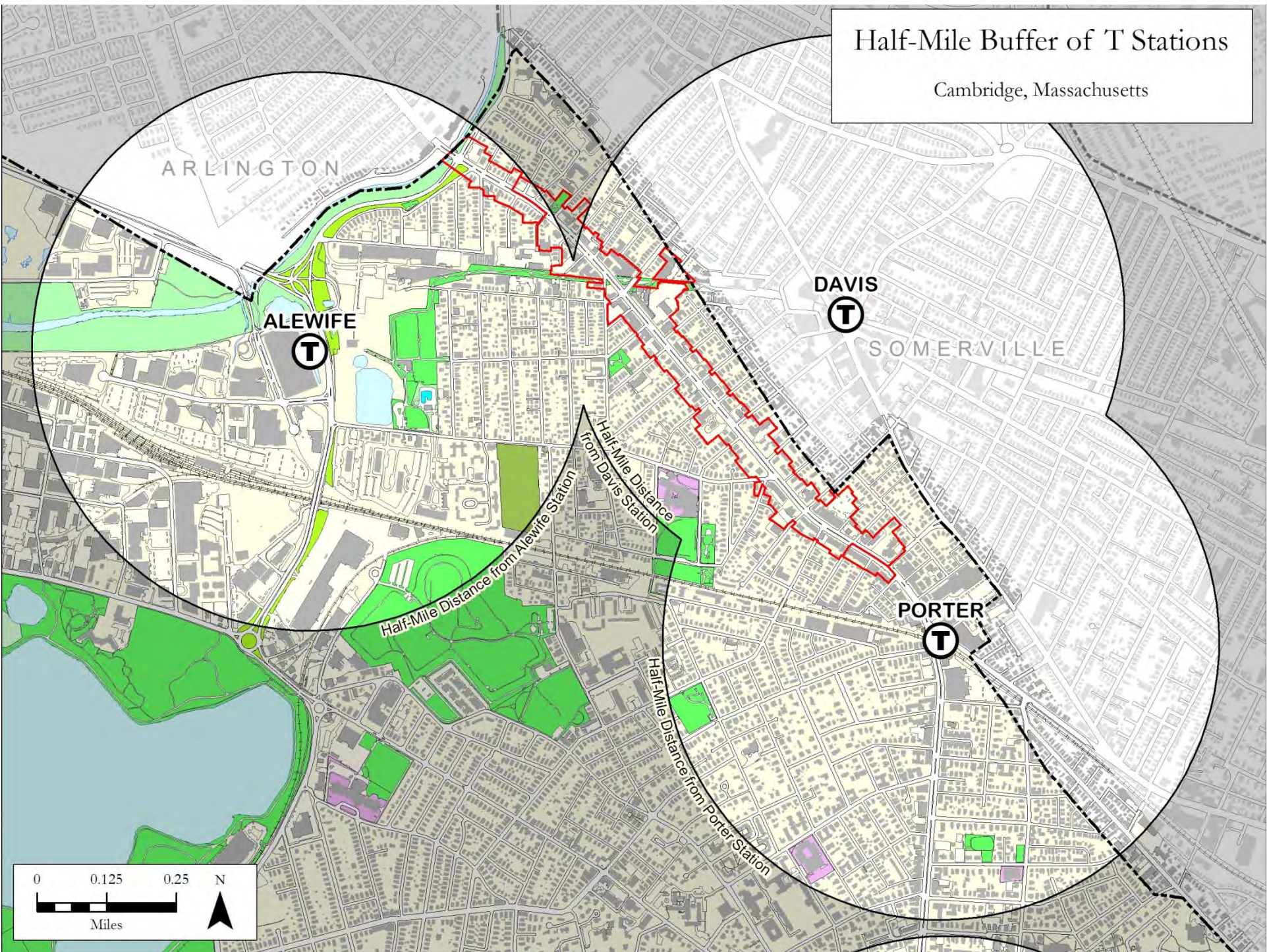
Neighborhood Study Committee

and the Cambridge Community

Development Department

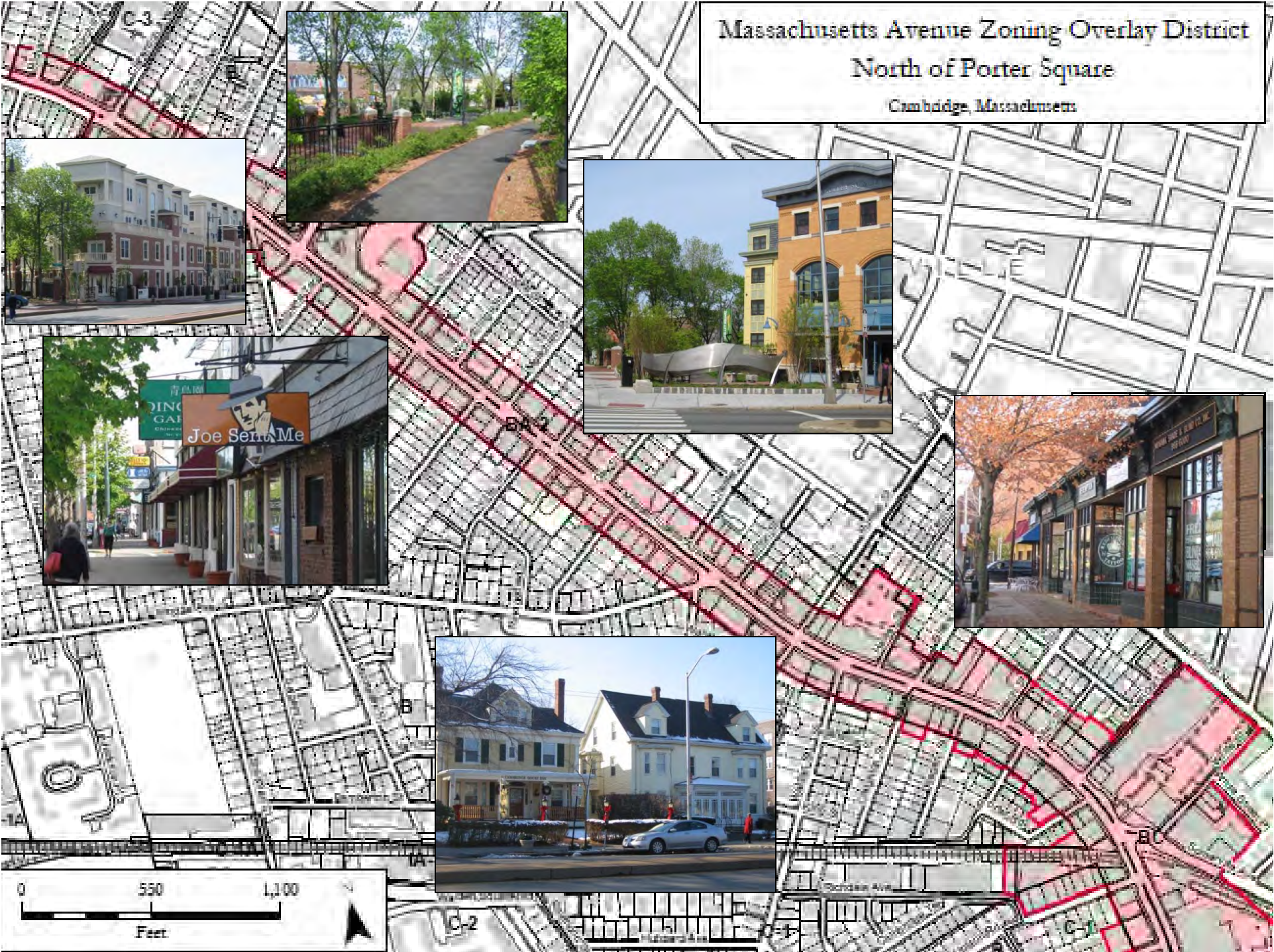
Half-Mile Buffer of T Stations

Cambridge, Massachusetts





Massachusetts Avenue Zoning Overlay District North of Porter Square Cambridge, Massachusetts



Vision for North Massachusetts Avenue

Safe

Walkable







Mixed Use

Active ground floors

Pedestrian scale

Visually appealing



Examples for comparison based on 10,000sf lot and 4,000sf of ground floor non residential uses			
	Housing	Commercial	Housing with ground floor non residential
<p>CURRENT ZONING: Currently a disincentive for ground floor retail.</p>	 <p>Housing 1.75 FAR ■ With inclusionary bonus 2.28 FAR</p>	 <p>Commercial 1.00 FAR</p>	 <p>Housing and non-residential 1.45 FAR ■ With inclusionary bonus 1.88 FAR</p>
<p>APPROACH: Remove the current disincentive to including non residential uses on the ground floor and; Create a disincentive for developing only residential</p> <ul style="list-style-type: none"> • 1.00 FAR for residential uses and 1.00 FAR commercial uses. • When including ground floor retail height bonus to 50 feet bulk control plane setback waiver. 	 <p>Housing 1.00 FAR (with special permit) ■ With inclusionary bonus 1.30 FAR</p>	 <p>Commercial 1.00 FAR</p>	 <p>Housing and non-residential 1.75 FAR ■ With inclusionary bonus 2.28 FAR</p>

Notes:

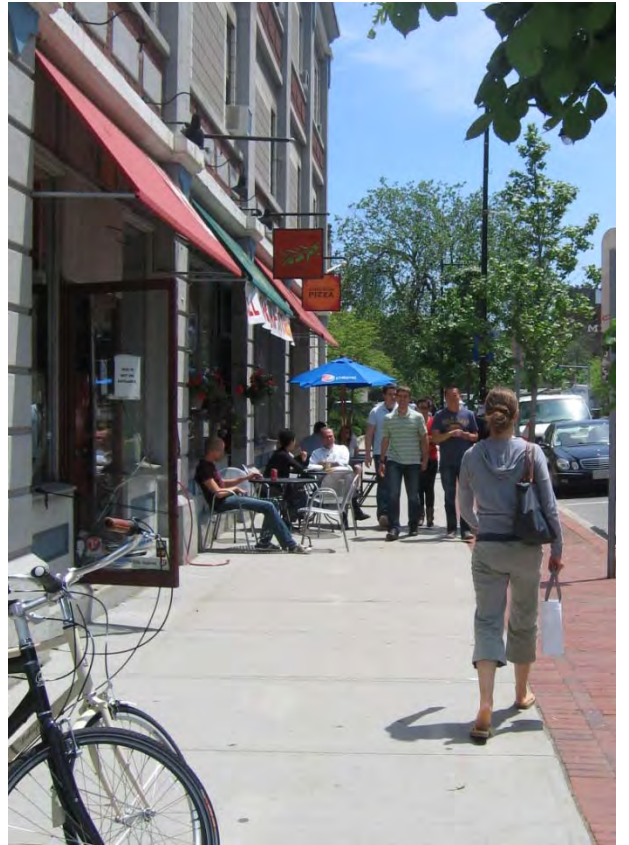
Bulk control plane is not accounted for.

Special Permit would still be required for all projects over 20,000sqft on Mass. Ave.

Diagrams do not represent actual buildings and are intended only to generally compare different FARs based on a 10,000 square foot lot.









Example of a residential development on North Massachusetts Avenue built under current zoning – **Approx. 45 feet**



Residential building with non-residential uses on the ground floor and bay windows – **Approx. 50 feet**

Historic Properties and Existing FAR with Massachusetts Avenue Zoning Overlay District North of Porter Square

Cambridge, Massachusetts

