

# **Final Report**

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

Prepared for
The City of Cambridge
Community Development Department

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# NORTH MASSACHUSETTS AVENUE URBAN DESIGN/LAND USE STUDY Cambridge, Massachusetts

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Ву

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August 1986

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NORTH MASSACHUSETTS AVENUE URBAN DESIGN/LAND USE STUDY Cambridge, Massachusetts

#### INTRODUCTION

#### Background to Study

Cambridge in recent years has been experiencing both the benefits and strains of a strong development climate. Plans to guide and control this development have been established in several areas, including Lechmere, Alewife, Kendall Square and Harvard Square. In other locations, either the perception or the reality of development pressure has led to concern about the adequacy of existing zoning regulations.

The northern end of Massachusetts Avenue from the Cambridge Common to the Arlington line is one example of an area where rapid development has created concern on the part of neighborhood residents, property owners and city officials. With the completion of the Red Line stations at Porter Square and Davis Square, and the opening of the Linear Park, interest has accelerated. This is best illustrated by the number of proposals for development that have either been formally submitted to the City or informally discussed within the past few months. Concern has been expressed about the type and scale of development, and more broadly about the future character of this segment of Massachusetts Avenue and the impact of expanded economic growth on the abutting residential neighborhoods.

Map 1. North Mass Avenue Study Area

In 1985, a coalition of concerned neighborhood residents filed a petition to comprehensively rezone this segment of Massachusetts Avenue. Known as the "LaRose Petition", its objective was a significant reduction in the permitted density of new development. The LaRose Petition enjoyed strong neighborhood-based support, but was not supported by the business community or by property owners along the Avenue. When it became clear to the proponents of the petition that it would not receive sufficient votes to pass in the Campbridge City Council, a proposal was made to table the recommendation pending the completion of an urban design and re-zoning study. The decision was also made at that time to impose an interim height limitation as a means of limiting further development activity for the duration of the study. Both it and the study had an ending date of March 31, 1986.

This report presents the recommendations of that study and describes the process followed to arrive at its conclusions. The primary goal of the study was to prepare a revised zoning package, but specific zoning recommendations were developed within the context of an overall approach of protecting and enhancing the appearance and quality of life along Massachusetts Avenue. The package of zoning recommendations is contained in this report, and a more detailed description of overall design approach and design guidelines is contained in a companion volume.

In order to incorporate the concerns of both proponents and opponents of the LaRose Petition, the City Manager appointed an Advisory Committee which consisted of five neighborhood representatives and five business representatives. The Advisory Committee met regularly throughout the course of the study. The Committee agreed at the beginning that their goal was to reach a consensus on the desired future for the Avenue, and to produce a plan sensitive to the concerns of both residents and the business community. In addition to the regular meetings of the Committee, three well-advertised public meetings were held at the completion of each of the three phases of the work program.

It should be noted that the results of the study reflect extensive discussions with the Advisory Committee; through further discussions in the Committee and with other concerned parties, additional modifications were made prior to the submission of the final zoning petition to the City Council. Noe of those subsequent changes significantly alter the conclusions of the study.

The remainder of this report includes a brief description of existing conditions, documentation on the sequence of the work and the materials produced along the way, and the recommendations for zoning changes. Included also is an analysis of development potential comparing existing building square footage with the potential new development achievable under alternative zoning concepts.

#### Study Process

The first phase of the work program concentrated on two tasks: first, a field survey was conducted to record information on land use, building form, and edge conditions (the relationship of the business areas to the abutting residential areas); and secondly, a data base was developed which included information on parcel area, built square feet, and recorded use of all of the parcels within the study area. The results of the first phase were presented to the Advisory Committee and then to the public at a Public Meeting. (See Appendix A)

The physical analysis concentrated on identifying typical parcel conditions and judgements about the potential for change. Given the overall concern for unwanted types and amounts of development, it was considered important to identify the locations with the greatest potential for change within the near future.

Based on the response to those initial findings from the Advisory Committee and at the first Public Meeting, an initial set of recommendations for zoning controls in each of the subareas was prepared. To develop these recommendations, each of the typical parcel conditions identified was analyzed in terms of the design and building forms possible under existing zoning, and under new controls responsive to the concerns voiced during the preceding review process. The range of options evaluated for each of the typical parcel conditions is shown in greater detail in Appendix B. The typical parcel conditions are discussed in a subsequent section.

Following discussion and refinement of the initial recommendations with the Advisory Committee, they were presented at the second Public Meeting.

The final segment of the process followed that second meeting. The recommendations were further refined, and the design considerations underlying the recommendations were defined in an initial draft of design guidelines. The results were present at the third Public Meeting. A final version - this report and its companion volume, the design guidelines - was prepared as a basis for the Advisory Committee's final deliberations leading to the formal submission to the City Council. The Cambridge Community Development Department prepared the detailed zoning proposals in the petition, based on the recommendations prepared as a part of this study.

#### EXISTING CONDITIONS

#### Historic Development of Massachusetts Avenue

The development of Massachusetts Avenue north of Harvard Square and the Cambridge Common has reflected the growth and development of that area of the City of Cambridge. Massachusetts Avenue first developed in the Colonial period as a major link between New Hampshire and Boston; at that time it was the only river crossing into Boston from the north. Cambridge grew over time as a prominent residential area, and during the Victorian era many large homes were built along Massachusetts Avenue, some of which remain today. As trolley service expanded up Massachusetts Avenue, land further north was developed, primarily in the common residential pattern of small-lot three story homes. The Porter Square area was initially the commercial hub of the Avenue due to the train station, a major transit hub similar to the new Red Line station at Porter Square. Commercial activity expanded along the street in response to the onset of the automobile. More recent commercial development inloudes the Porter Square Shopping Center which was built in the 1950's on what previously had been a private estate.

#### Real Estate Market

Any changes in zoning controls have a direct impact on property values, and this impact in turn is very much related to the overall climate for development. One of the factors motivating the initial rezoning petition was the sense that north Massachusetts Avenue was on the edge of a development boom that could significantly change the character of the Avenue.

The legacy of historically significant buildings, and the desire to encourage their preservation, was a strong concern throughout the study. Appendix C contains a list of such buildings, prepared by the Cambridge Historical Commission.

The scope of this study included an analysis of the real estate market in two respects. The first was an overall assessment of the market for development now and in the immediate future. The second was a more specific consideration of the economics of development at the project scale. The essential purpose of the first task was to document in general the scale of demand for various uses within the defined study area. The goal of the second component was to assess in general terms the impact of zoning proposals that would reduce the total development potential of individual parcels.

Findings of the first part of the market analysis are presented for residential, retail and office real estate markets.

The demand for residential real estate is very strong along North Massachusetts Avenue, and residential uses are most likely to constitute the majority of new development over the next ten to twenty years. The market for retail uses is more varied along the North Massachusetts Avenue corridor. Property values and rents are highest in the areas closest to Harvard Square and in Porter Square: rents for retail tenants in Porter Square are as much as \$10 higher per square foot than retail rents in other parts of the corridor. Retail activities tend to cluster together to take advantage of the traffic generated by each other; this may impede the community's goal of an active retail base all along the corridor. Still, the retail market appears to be strengthening due to high traffic counts along the Avenue and more favorable rents in comparison with Harvard Square. The demand for office space is not that strong at the present time. This is especially true of rental space, but office condominiums are in demand.

In addition to the initial overview of market conditions summarized above, the emerging recommendations for new zoning changes were examined in financial terms to test the stated goal of bringing predictability to development along the Avenue. This component of the real estate assessment is contained in the subsequent discussion of the impacts of the proposed recommendations.

#### Physical Inventory

The study area, shown on the accompanying map, includes 1,944,000 square feet of building area occupying 2,408,000 square feet of land. There are approximately 283 separately identified parcels, three-fourths of which are smaller than 10,000 square feet (see Table 1). To record existing conditions, sub-areas were delineated along the Massachusetts Avenue corridor based on land use, building types, parcel size and density of development. The current zoning districts were used as the starting point for delineating the sub-areas, but the boundaries between sub-areas were changed where appropriate to reflect existing conditions that were not indicated by the existing zoning districts. A description of each sub-area follows.

Map 2. Subareas

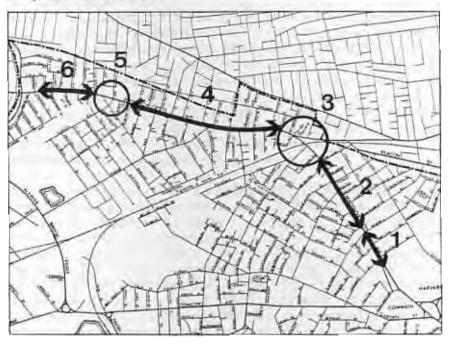


Table I
SUMMARY OF PARCEL SIZES

Parcel Size (Sq. ft.)

SUBAREA	0-5,000	5-10,000	10,000+	Total
1	8	8	7	23
2	15	22	11	48
3	42	26	24	92
4	17	24	13	54
	18	14	9	41
6	15	7	3	25
Total	115	101	67	283

#### 1. Cambridge Common to Wendell/Shepard Streets

This is a primarily residential, fairly built out area, and one of the more homogeneous parts of the Massachusetts Avenue corridor in terms of land use and building typology. Overall, this area is already developed to more than 75% of the total building area permitted by present zoning. The area is characterized by relatively large (7 or more stories) residential buildings with some limited ground floor retail uses. There is a "downtown" sense, with only a few breaks in the streetwall that provide a view into the surrounding neighborhood.

There is relatively little interaction between pedestrian traffic and the ground floor uses in this area, and pedestrian traffic is light. In terms of compatibility with the surrounding neighborhood, the uses along Massachusetts Avenue are similar, but there is a significant difference (more than 2 stories) in scale. Parking is another source of incompatibility between the corrdior and the surrounding neighborhood, with several parking lots of more than 4 cars abutting houses. (Four spaces was chosen as a cut-off between the quantity of parking per parcel likely in a residential area and that associated with commercial use. Because commercial parking has more turn-over and may be lit at night, parking lots of four or more spaces can create an annoyance for abuttors due to noise and night-time glare.)

#### 2. Wendell/Shepard to Porter Square

This area consists of a mixture of residential and commercial uses, especially retail. There are a variety of building types in this area, including detached wood frame structures that were built as houses and often have a mixture of retail, office and residential uses; one-story row commercial structures; and some higher buildings, mostly residential, closer to Porter Square. There are also several large apartment buildings just behind the Massachusetts Avenue corridor which are visible above the smaller commercial structures that line the street.

This area has a high level of pedestrian activity, and the ground floor uses of most buildings are very interactive with pedestrian traffic. This sense of activity gives the area a downtown feel, although there are several breaks in the street wall that allow a view towards the surrounding neighborhood.

Much of this portion of the corridor is compatible with the abutting neighborhood; service ways for commercial uses are small, and in many areas there are walls which screen the abuttors from service activities. However, incompatibilities of scale and parking do occur more often on several parcels nearer Porter Square.

The area as a whole is build up to more than 75% of allowable building area. However, pressure for change can still be anticipated because of rising real estate values closer to Harvard Square and because that high overall build out figure masks some parcels that are significantly under developed.

#### 3. Porter Square

Porter Square is the most active and urban part of the Massachusetts Avenue corridor. Porter Square functions as a node within the Massachusetts Avenue corridor, and the Porter Square transit station connects the corridor to the regional transportation system as well. Land use in this area is pre-dominantly commercial, especially retail and restaurant. East of the street are several large parcels with major developments. A four-story department store building of historic value (the Sears Building) is currently being re-developed for use as a furniture store and an internal mall. There is a shopping center across from the transit station which is anchored by a food chain, and has a parking lot with significant frontage on Massachusetts Avenue. The low (one story) stores and ample parking lot of this shopping center give the development a suburban feel in the midst of the most urban part of the northern Massachusetts Avenue corridor. West of the street are a series of smaller commercial buildings with retail, restaurtant and office uses. Including the Sears building, there are quite a few historic structures in this area.

In keeping with its function as a node, this area has a high level of pedestrian traffic, and a very active street wall. Foot traffic is inconvenienced by the presence of construction and a confusing street pattern, however, and the parking lot of the Porter Square shopping center produces a large gap in the street wall. The large lots east of the street provide a different streetscape than most of the Massachusetts Avenue corridor, with bigger structures on large parcels.

There is some incompatibility in this area with the surrounding neighborhood, part of which is in Somerville. Most of the incompatibility is due to large parking lots abutting low density residential uses. There is also one area of use incompatibility (a large loading dock behind the shopping center which abuts the neighborhood), and some areas of scale incompatibility (differences in height of more than two stories).

Porter Square is presently utilized at about 50% of the density permitted by present zoning; this fact, plus the availability of transit and commuter rail access, suggest the likelihood of continuing development pressure. Current examples are the Sears and Porter Square Dodge development proposals.

Included in analysis of Porter Square was a small section behind Massachusetts Avenue, starting from just below Arlington Street and reaching to mid-way between Mt. Vernon Street and Upland Road. Most of this area is similar to the rest of the neighborhood which surrounds the Massachusetts Avenue corridor, with low-density, detached houses. The exception to this building type is the back portion of several parcels which front on Massachusetts Avenue, and go back into the neighborhood. A residential high-rise building occupies one of these parcels; the other two parcels are now used as parking lots for several commercial establishments on Massachusetts Avenue.

Pedestrian activity in this area is very low, as could be expected since the area does not have frontage on Massachusetts Avenue, and there are few commercial uses to draw foot traffic. The experience in this area is one of a low-density urban neighborhood.

While the area itself blends well with the surrounding neighborhood, within the area are some conflicts between the backs of the deeper parcels and the rest of the neighborhood. The parking lots are sources of glare and noise, and the residential high-rise is out of scale with the abutting houses.

#### 4. Porter Square to Trolley Square

This area starts just above Porter Square at Beech Street and Regent Street, and continues up to Trolley Square at Shea Road. The area is similar in function to the area between Wendell/Shepard streets and Porter Square, with a mixture of commercial and residential uses. The visual experience of this area is one of variety: there are many different building types and building materials, and the density and scale of structures also vary. The commercial uses are retail and office; residential use is primarily in high-rise and townhouse types of buildings. There are many wood frame detached houses, several of which are of historic These tend to be used for a mix of commercial and residential activities. There are also several rows of commercial buildings mostly 35' in height. On the east side of the street are several taller buildings (over 35'). West of the street there is one high-rise over 55'.

While the function and visual variety are similar to Area 2, this area is less densely built and less active. The present level of development is only about half of what is permitted under present zoning, with many gaps in the street wall that allow views to the surrounding neighborhood. Foot traffic is high near Porter Square but falls off with distance from that node. Much of Area 4 has active or potentially active street frontage (especially retail and restaurant uses).

The apparent low volume of pedestrian traffic may have a dampening effect on retailers in this area; parking may be a crucial issue in this area. There are numerous parking lots over four spaces in size in this area, creating incompatibility with the surrounding neighborhood. There are also some development that are incompatibile in terms of scale (defined in this study as differences of more than two stories), especially near Porter Square.

#### 5. Trolley Square

Trolley Square is identified by the trolley yards that are now used to store MBTA buses. The area has a relatively large amount of undeveloped and vacant land, and is the only part of the Massachusetts Avenue corridor that has industrial use. There are some commercial uses, including offices and retail, and a small number of residences. The Linear Park traverses this area, and there are several large parking lots.

North/east of the street the parcels are large in size, and tend to be undeveloped or to have small (one to two story) industrial structures. There is one high-rise residential structure on the largest parcel, as well as the old trolley barn. South/west of the street are several three story "downtown blocks", mostly with commercial uses. The prevalence of vacant space and the variety of scales of buildings (one high rise and various one and two story industrial buildings) give this area a confusing and unwelcoming sense to pedestrians. Many of the industrial buildings appear to be in poor condition.

There is some pedestrian activity and an interactive street wall on the south/west side of the street, while the north/east side street wall is mostly large gaps. Area 6 has a fair amount of incompatibility with the surrounding neighborhood due to parking lots. There are also some instances of incompatibility due to scale differences of more than two stories.

#### 6. Trolley Square to Alewife

This area, from the edge of Trolley Square to the business zone boundary beyond Richard Avenue, consists predominantly of residential structures, some of which are now in commercial use. In scale, this area is related more to the abutting residential neighborhoods than to the commercially developed area along Massachusetts Avenue between Trolley and Porter Squares.

The overall residential character of this area is interrupted in several ways, all of which contribute to its general image as a mixed use area. While most of the residential buildings remain in residential use, others have been converted to commercial uses, principally offices. Other structures have been converted wholly or partially to commercial use through the addition of smaller extensions between the original building and the Massachusetts Avenue property line. The general building height is 2 1/2 stories, and the lower height of the commercial additions reinforces the sense of transition.

One potential problem associated with the apparently gradual shift to commercial uses in the residential spaces. As pressures for the shift from residential to commercial use are expected to continue, the critical issues for this area are 1) to define the proper boundary separating this area from the more intense development character of Trolley Square, and 2) to assess the appropriate means of dealing with the mixed use buildings on the southwest side of Massachusetts, where the one-story additions on the fronts of the buildings constitute a visual problem.

#### Potential For Change

The initial assessment of existing conditions focused on identifying likely patterns of change in the face of continuing incentives for new developments already formally proposed or under discussion. An immediate concern was to identify the likely pattern of further interest in development, based on existing physical characteristics.

Two factors were used as the basis for deriving a pattern of potential change. The first was the extent of existing development, as measured by FAR (Floor Area Ratio, or the ratio of total building area on a parcel to the area of the parcels). Parcels built out at less than 50% of the FAR allowed under existing zoning were considered likely to undergo pressure for new development due to the opportunity to increase the amount of building area and, in turn, the profitability of the parcel. (See Table II, existing FAR utilization.

Table II

EXISTING FAR UTILIZATION

	FAR	Builtou	t %			
SUBAREAS	0-25	26-50	51-75	76-100	100+	Total Parcels
1	7	5	5	2	4	23
2	12	2	10	9	15	48
3	44	25	6	4	13	92
4	14	15	13	5	7	54
5	31	7	2	0	1	41
6	14	7	2	1	1	25
Total	122	61	38	21	41	283

The second indicator was the size of the parcel. The permitted FAR should be considered a potential maximum allowable figure which can only be achieved within the limitations of other regulations, such as set-backs, parking, etc. The ability to obtain the maximum allowable FAR under present conditions and conforming to all regulations depends on the size of the parcel. For example, the FAR of 1.75 allowed along much of Massachusetts Avenue could not easily be reached without a parcel of approximately 12,000 square feet, assuming adherence to prevailing setback, height and parking requirements. Only about one-fourth of the parcels in these areas exceed that figure.

Clearly, the pattern of lot sizes can be altered by assembly of contiguous parcels, but this is not likely to result in many parcels larger than 12,000, and development would be constrained by the shape of the parcel. With the general limitation of the business zones at 100' in depth, the resulting long and shallow parcels would be difficult to develop, primarily because of parking requirements.

By combining the analysis of parcel size and per cent of built FAR, a picture was developed of where future development activity would be most likely to occur. This is summarized on an area by area basis below.

#### Summary of Potential for Change by Area

Area 1 (Harvard Square to Wendell/Shepard) - Substantially built out at present. Little likelihood of change.

Area 2 (Wendell/Sheperd to Porter Square) - Less built out than Area 1, but still a significant portion of FAR has been built. The prevalence of smaller lots suggests less change in this area with the exception of the few larger parcels, or where rising values support the redevelopment of parcels already substantially built out. It should be noted that none of these summary comments should be construed to mean that there is no possibility of interest in new development. That possibility always exists, depending on the perceptions of prospective developers as to what may be possible. A clear example of this was the proposal for the development of the Georgie's Bar site.

Area 3 (Porter Square) - Development potential exists in this area in part because of the presence of several large parcels. The present FAR limitation of 2.0 was established in 1979 in anticipation of substantial development interest once the Porter Square Transit Station opened. Although initial analysis indicated that Porter Square, with its new transit access, might well be a focus of significant development, it was clear from discussions with both the

Advisory Committee and at the Public Meetings that the present limitation was desired, and should not be raised regardless of what planning or market "wisdom" might suggest.

Area 4 (Porter Square to Trolley Square) - This area is very similar in character to Area 2, but less built out at present and therefore more likely to experience new development. An additional factor in this location was the fact that much of the area is presently zoned residential, with a permitted height of 85'.

Area 5 (Trolley Square) - As indicated by the current number of active development proposals in this location, the combination of several larger parcels, low utilization based on existing FAR's, and existing zoning constitutes the type of environment where significant development activity could be predicted. In contrast to Porter Square the opening of the transit station was not perceived as an issue this far from the station and no action was taken to limit zoning. Prior to 1979, the zoning for the two areas was the same. After that time, Trolley Square remained relatively uncontrolled, setting the stage for the debate that took place during this study.

Area 6 (north of Trolley Square) — Development interest in Trolley Square can be expected to move out further along Massachusetts Avenue into this area which is characterized by some mixed use but is still predominatly residential in character. The central issue for this study was where to draw the boundary deliberating the western edge of the higher density Trolley Square area.

#### Existing and Potential Development

Under existing zoning, total building area could increase by a factor of 2.5, adding almost 3 million square feet the present base of about 2 million square feet (see Table III). This is in no sense a prediction, and, depending on absorption rates, development to the maximum level could stretch over at least 20 years. Moreover, the estimates assume that the incentive to develop or redevelop would be significantly lower where parcels are already built out to 50% of their permitted density — a rule which could be changed if real estate values continued to escalate sharply.

The LaRose petition would have reduced the overall potential increase to about 1.75, a significant reduction and a change that lacks a sufficient base of support to gain City Council approval. Thus the starting point for the study was a setting in which substantial change could be anticipated under the present rules; with divergent opinions as to how best to adjust the "rules".

Table III

POTENTIAL BUILDABLE SQUARE FEET
(in thousands)

	EXISTING	CONDITIONS	MAXIMUM UEXISTING 2		MAXIMUM UN LAROSE PETI	
ARE <b>A</b>	NET PAR- CEL AREA*	EXISTING BUILT SF	MAX. SF BUILDABLE	POTENTIAL NEW SF	MAX. SF BUILDABLE	**POTENTIAL NEW SF
1	182	359	467	116	246	0
2	377	291	377	86	377	86
3	927	711	1,831	1,120	1,589	888
4	395	278	538	260	277	97
5	381	237	1,524	1,286	762	524
6	146	68	146	78	146	78
TOTAL	2,408	1,944	4,883	2,946**	3,397	1,673**

<sup>\*</sup> This excludes parcels owned by public or semi-public entities, such as Churches, VFW.

<sup>\*\*</sup> Residential build-out in BA districts would increase total potential new square feet by about 10%.

#### DEVELOPMENT OF RECOMMENDATIONS

#### Goals

During the initial data collection and field survey, a suggested list of goals was prepared which summarized the principal issues and concerns for the study area. This list was discussed with the Advisory Committee and presented at the first Public Meeting. Based on initial reactions and refinement of work during the second stage, the list was modified to provide a more concise statement of the principal concerns for rezoning proposals.

The initial list of goals included the following:

- Insure predictability in the future life of Massachusetts Avenue;
- 2. Maintain pedestrian activity along the Avenue;
- 3 Maintain openness and sense of diversity;
- 4 Encourage historic preservation;
- 5. Insure compatability between the business corridor and abutting residential neighborhoods;
- 6. Protect neighborhood fabric;
- 7. Allow for sufficient return on investment to maintain Avenue properties;
- 8. Provide appropriate parking

The general response to the initial list was that it was too much of a mix of general purposes and specific objectives which would be difficult to quantify. Also, further refinement of the initial concepts led to the conclusion that all of the concerns expressed by the Advisory Committee and at the first Public Meeting could be more effectively grouped into a shorter statement of purpose. This revised list was presented at the second Public Meeting and formed the reference point for the remainder of the work.

The goals as refined are:

- 1. To encourage the retention of existing buildings and uses as much as possible;
- To provide predictability about future development and reduce the incentive for speculation in the Avenue's real estate base;

- 3. To protect abutting residential areas by assuring sensitive controls along the boundaries between business and residential districts:
- 4. To promote an active "streetscape" by encouraging pedestrian—oriented street level activity in terms of use as well as building and landscape design.

#### Design Issues

As the overall goals were refined through discussions with the Advisory Committee and at the public meetings, the broadly stated purpose of preserving and enhancing the character of Massachusetts Avenue became more sharply defined in terms of specific design issues, including building height, scale (FAR), and parking. The resolution of these issues became the basis for the specific recommendations contained in the new zoning proposals and in the overall design guidelines. The issues most directly related to the zoning recommendations are summerized below; they are considered in greater detail in the Urban Design Guidelines contained in a separate volume.

#### Building Height

The concern for "too tall" buildings was often stronger than concern for overall density as measured by FAR. This was reinforced by the nature of the business zoning boundaries within the study: the prevalance of the zoning boundary 100' back from Massachusetts Avenue meant that taller buildings allowed in those areas would have direct impacts on abbutting neighborhood areas. Limitations on height in relation to surrounding properties were therefore a basic concern, with the parallel ability to consider greater heights in those areas with larger parcels and consequent greater distance to nearby residential areas.

#### Density (Floor Area Ratio)

As noted, the total amount of building on any given parcel was perhaps of less concern then the overall impact of additional development on the character of Massachusetts Avenue. FAR is a direct measure of the economic value of a property - the greater the amount of building permitted, the greater the potential economic return. The stated desire to establish predictability in development without unfairly reducing development potential centered on questions of what the allowable FAR should be. Again as noted previously, the relationship between parcel size and FAR meant that for smaller parcels, the size of the parcel was the basic limiting factor. FAR of course controls only "how much" square footage can be built. The equally

important issue of "how" that square footage is built - what it looks like - is the concern of other dimension and development controls, and of the overall Urban Design Guidelines.

#### Parking

The parking issue is two sided: the concern for the provision of adequate parking to serve permitted uses is balanced by a desire to minimize additional traffic on an already crowded street. The scarcity of parking along Massachusetts Avenue was one impetus to limit the overall amount of new development to be permitted; this was one of the primary factors behind the recommendations to lower permitted FAR's. From an aesthetic perspective, there were concerns for the location of parking on-site in such a way as to avoid the placement of parking in unattractive locations — either intruding on abutting residential areas or presenting an unwanted apprearance along Massachusetts Avenue.

#### Street Edge

The concerns for the appearance of buildings along the Avenue focused on the character of buildings as they face the street and the degree to which activity oriented to pedestrians is encouraged at street level. These concerns led to consideration of guidelines to prohibit the construction of buildings above open parking — so-called buildings on stilts — and to discourage the design of facades with solid walls or with all glass walls.

#### Parcel Typology

As a bridge to the preparation of specific recommendations for new zoning, the potential for development under present controls was compared to possibile development under altered regulations. This was done by illustrating in very schematic fashion the building forms that would be possible under various zoning constraints. Four types of parcels were identified as a starting point for this work:

- 1. <u>Large Lots</u> (25,000 square feet or more). Most of these parcels are located in Porter and Trolley Squares.
- 2. Deep Lots. Most development along the Avenue is limited by the depth of the zoning district, which is 100'. Where deeper lots exist, that is, lots that project back into abutting residential area, a more flexible development opportunity exists.
- 3. <u>Linear Infill</u>. The most common situation, given predominance of smaller lots.

4. Internal Parcels. The initial study identified certain parcels outside the boundaries of the defined study area which have a potentially strong relationship to the development pattern along Massachusetts Avenue. Examples of these "internal parcels" (so named because they do not front on Massachusetts Avenue) are parcels along the Linear Park adjacent to the study area but outside it, and underutilized industrial areas adjacent to the commuter rail line. Inclusion of these parcels in the study would have led to consideration of possible zoning changes outside the business districts along Massachusetts Avenue, a step beyond the carefully defined limits of this study. These parcels were not carried through the study after initial analysis.

The location of the potential change parcels is shown generally in Map 3, and in greater detail in the map in Appendix B.

The range of options for the development of all of these parcel types were thoroughly examined and the design issues related to them were catalogued as a basis for the initial proposal for new zoning regulations. The examination of what new development could look like under various development rules was the focus of much of the analysis that followed the documentation of existing conditions. Examples of how this work was carried out are shown in Appendix B.

Map 3. Potential Change Area



#### Zoning Boundaries

In addition to changes in zoning regulations, there was also a careful examination of the appropriateness of existing zoning boundaries. The recommended changes are shown on Maps 4 through 9. In some instances the changes are intended to modify the size of districts, in others to correct a smaller irregularity or inconsistency. Specific changes include:

- 1. Move boundary between business and residential areas to elimiate parcel divided by zoning line.
- 2. Move boundary to rear of parcels fronting on Massachusetts Avene, to reduce extension of higher-density development into existing residential neighborhood.
- 3. Move boundary between residential and business districts to include the single business parcel in an otherwise residential blockfront in a business district
- 4. Eliminate significant pocket of existing residential properties from the Porter Square business area.
- 5. Reduce the size of the Porter Square business area by pulling the northwesterly boundary back from Russell Street to Beech Street/Creighton Street.
- 6. Eliminate the existing residential district along Massachusetts Avene between Russell and Hollis Streets, to create a single unified use district between Porter Square and Trolley Square.
- 7. Change the boundary between the Trolley Square district and the abutting business district to the northwest to eliminate a parcel divided by a zoning boundary.

#### Recommendations

The basic recommendations for each subarea are summarized in the charts below. Each chart is preceded by a statement of the basic design objectives for each segment. These recommendations form the basis for the more detailed zoning proposals to be found in the petition, and the background context for them is contained in the companion volume dealing with Design Guidelines.

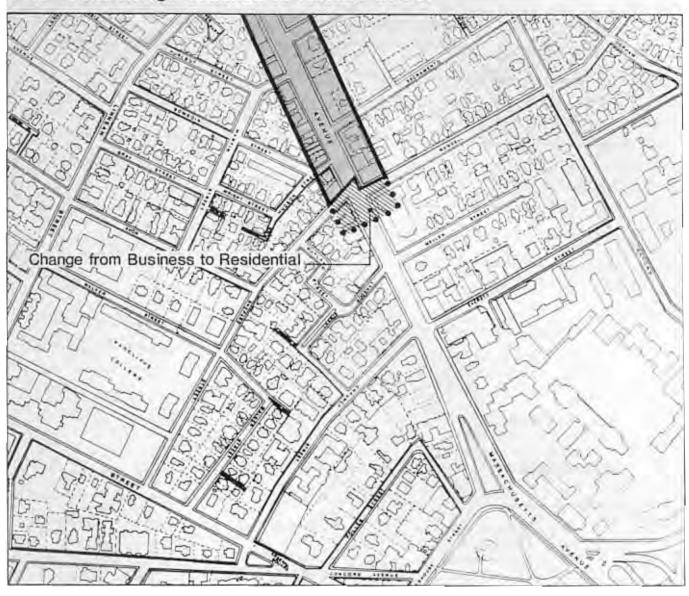
AREA 1

CAMBRIDGE COMMON TO WENDELL STREET

Objective: Acknowledge existing scale.

	EXISTING	PROPOSED
USE	Residential	Residential
Size - FAR	3.0 2.5 1.75	3.0 2.5 1.75
deight	No limit 60' 85'	60' 60' 60'
Setback - Front	5, 10° minimums	5, 10' minimums
Setback - Rear	20' minimum	20' minimum
Setback - Side	Formula	Formula
Parking	1/Dwelling Unit	1/Dwelling Unit
Overlay District	No	Yes

Area 1. Cambridge Common to Wendell Street

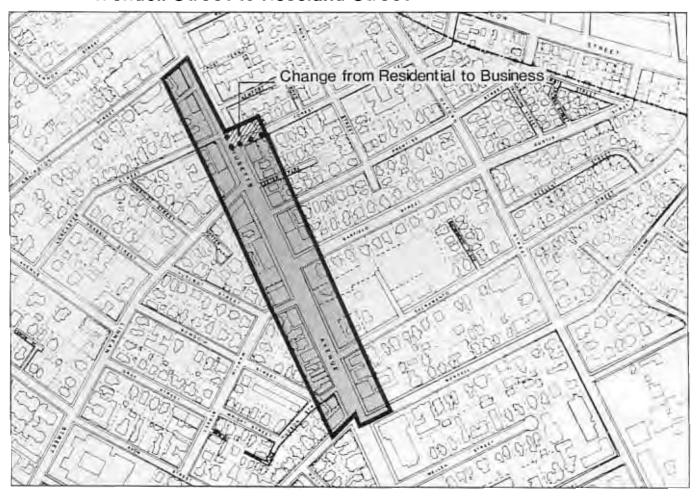


# AREA 2 WENDELL STREET TO ROSELAND STREET

Objective: Strengthen the existing scale and use mix

	EXISTING	PROPOSED
USE	Local Business	Local Business
	with Residential	with Residential
Size - FAR	1.0 Commercial	1.0 Commercial
	1.75 Residential	1.75 Residential
Height	35' Commercial 85' Residential	35/45' Commercial 35/45' Residential
		45° height requires 45° plane from cornice
Setback - Front	No minimum Commercial	5' minimum Commercial,
	10'minimum or	Residential
	Formula	No minimum if
	Residential	adjacent
		structure is on
		the front property line
Setback - Rear	20' minimum or	20' minimum or
	Formula	2/3 height
	Commercial,	Commercial
	Residential	Residential
Setback - Side	No minimum	10° minimum
	Commercial	Commercial,
		Residential
	Formula	No minimum if
	Residential	adjacent structure is
		on the property line
Parking	Residential:	Residential:
	1/Dwelling Unit	1/Dwelling Unit
	Business:	Business:
	As per existing Ordinance	As per existing Ordinance
0		
Overlay District	No	Yes

Area 2. Wendell Street to Roseland Street

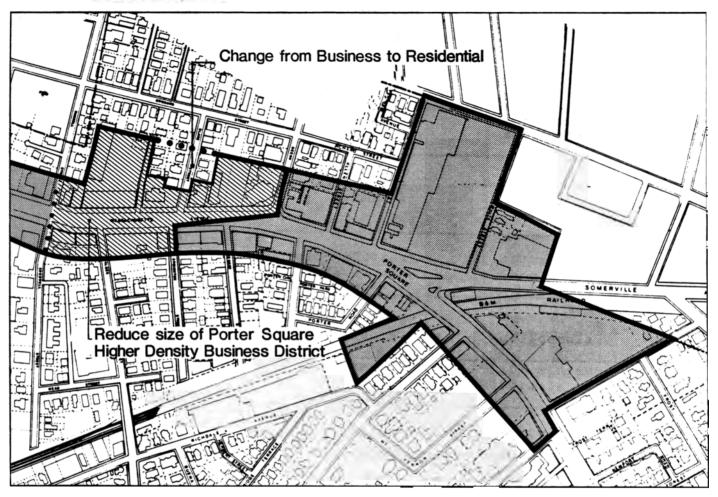


#### AREA 3

#### PORTER SQUARE

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Area 3. Porter Square

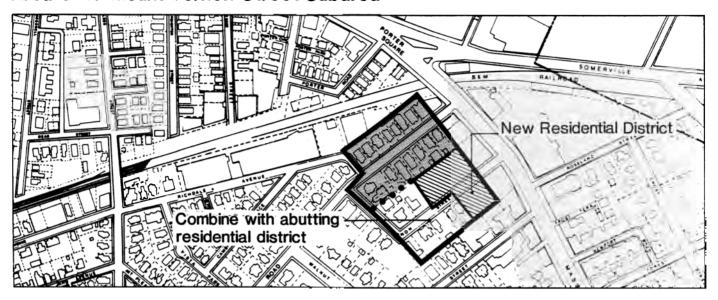


#### ARE

## MOUNT VERNON STREET

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Area 3-1. Mount Vernon Street Subarea

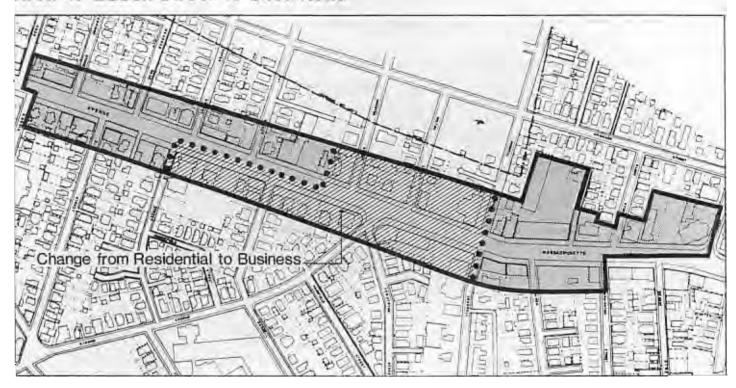


# AREA 4 BEECH STREET TO SHEA ROAD

Objective: Strengthen the existing scale and use mix.

	EXISTING	PROPOSED
USE	Local Business	Local Business
	with Residential	with Residential
Size-FAR	1.0 Commercial	1.0 Commercial
	1.75 Residential	1.75 Residential
Height	35' Commercial	35/45' Commercial
	85' Residential	35/45' Residential
		45' height requires
		45 plane from cornice
Front	No minimum	5' minimum
Setback	Commercial	Commercial,
		Residential
	10' mininum or	
	Formula	No minimum if
	Residential	adjacent structure
		is on front property line.
Rear	201	201 - 4-4
Setback	20' minimum or Formula	20' minimum or
Decrack	Commercial,	2/3 height
	Residential	Commercial, Residential
Side-	No minimum	10' minimum
Setback	Commercial	Commercial,
		Residential
	Formula	No minimum if adjacent
	Residential	structure is on the side
		property lire
Parking	1 per dwelling unit	1 per dwelling unit
	Business	Busin€
	as per e sting	as per isting
	ordinanc	ordina
Overlay	No	Yes
District	20 -	
	7)(1	

Area 4. Beech Street to Shea Road

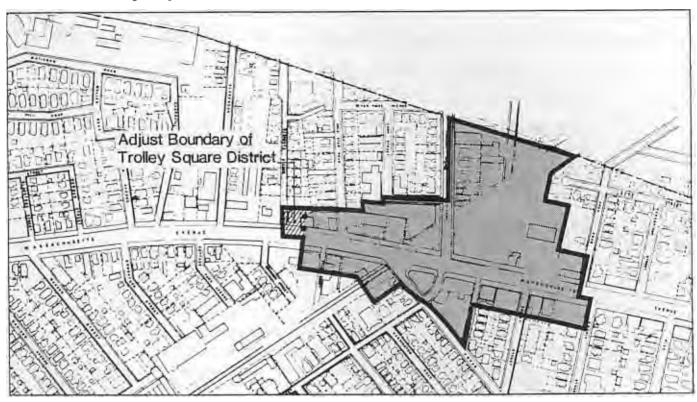


	EXISTING	PROPOSED
	Mixed	Residential with some business
FAR	4.0 Commercial 3.0 Residential	<pre>2.0 Commercial 2.5 Residential or 3.0 Residential by     Special Permit*</pre>
Height	No Limit	50' average (60 limit
		35' height limit within 50' of Residential Zone
Setback - Front	No minimum Commercial	No minimum Commercial, Residential
	5' minimum or Formula Residential	
Setback - Rear	No minimum Commercial	20' minumum or 2/3 height
	20' minimum or Formula Residential	Commercial, Residential
Setback - Side	No minimum Commercial	No minimum Commercial, Residentia
	Formula Residential	
Parking	Residential: 1/Dwelling Unit	Residential: 1/Dwelling Unit
	Busines As per sting Ordinan	Business: As per existing Ordinance
Overlay District	No	Yes
	31_	

# \*SPECIAL PERMIT CONDITIONS

- 1. At least 75% of the gross floor area on the lot is devoted to residential use.
- 2. All parking on the site is covered and enclosed.
- 3. 15% or more of the lot is green area or other open space acceptable to the Planning Board.
- 4. The building shall be subject to mandatory design review.

Area 5. Trolley Square

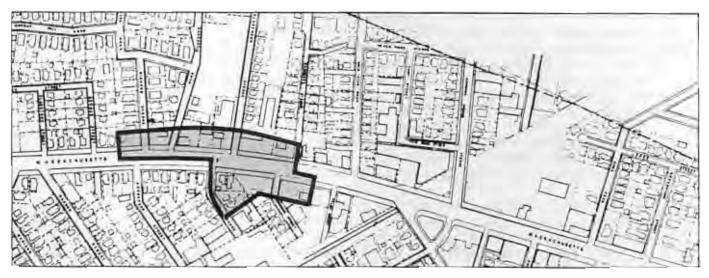


AREA 6
WASHBURN AVENUE TO RICHARD AVENUE

Objective: Encourage small scale change and mix of local uses.

	EXISTING	PROPOSED
USE	Local Business	Local Business
	with Residential	with Residential
Size - FAR	1.0 Commercial	1.0 Commercial
	1.75 Residential	1.75 Residential
Height	35' Commercial	35/45' Commercial
	85' Residential	35/45' Residential
		45' height requires
		45 plane from cornice
Setback - Front	No minimum	5' minimum
	Commercial	Commercial, Residential
	10' minimum or	No minimum if adjacent
	Formula	structure is on the
	Residential	front property line
Setback - Rear	20' minimum or	20' minimum or
	Formula	2/3 height
	Commercial,	Commercial, Residential
	Residential	
Setback - Side	No minimum	10' minimum
	Commercial	Commercial, Residential
	Formula	No minimum if adjacent
	Residential	structure is on the
		property line
Parking	Residential:	Residential:
	l/Dwelling Unit	<pre>1/Dwelling Unit</pre>
	Business:	Business:
	As per existing	As per existing
	Ordinance	Ordinance
Design Guidelines	No	Yes

Area 6. Washburn Avenue to Richmond Avenue



#### Overlay District

Some of the recommendations evolving from the assessment of design concerns had implications for the study area as a whole. Mechanisms to implement these recommendations were considered throughout the study, including the possible establishment of an overall historic district and the establishment of an Architectural Review Board to review all proposals within the study area. In both cases the judgement was that these mechanisms were not the best solution, especially in light of the considerations that they were not likely to obtain City Council approval and even if passed would be difficult to administer.

The concept of an overlay district was proposed to put forth controls and limitations related to the overall character of the study area. The base zoning controls define the specific characteristics of each subarea, while the Overlay District defines uniformly applicable principals. The following is the proposed overlay district for northern Massachusetts Avenue.

- 11.101 Massachusetts Avenue Overlay District
- Establishment and Scope

  There is hereby
  established the Massachusetts Avenue Overlay
  District which shall be governed by the
  regulations and procedures specified in this
  Section 11.100. It is the intent of this
  section that these regulations will apply to the
  area described generally as Northern
  Massachusetts Avenue and certain abutting
  portions of the neighborhood abutting it.
- 11.102 Purpose It is the purpose of this Section 11.100 to augment base zoning regulations in the District in order to create a more harmonious and consistent image for the development along the Avenue and adjacent areas, to encourage good building amenities along the Avenue, and to ensure that changes along the Avenue are compatible with the scale and character of the abutting neighborhoods.
- 11.103 Applicability The Massachusetts Avenue
  Overlay District shall be an overlay district to the zoning map established by Section 3.20.
- 11.103.1 The buildings and land uses within said district shall be controlled by the pertinent regulations within the base zoning district, except as modified by the requirements of this Section 11.100 which shall apply in addition to regulations imposed by the base zoning map designations. Where the base zoning regulations differ from the requirements of this Section 11.100 the stricter provisions shall apply.
- 11.104 <u>Dimensional Standards in the Massachusetts</u> <u>Avenue Overlay District</u>
- 11.104.1 Maximum Height The maximum height of any structure in the Overlay District shall be 60 feet of the height applicable in the base district, whichever is less.
- 11.104.2 Modifications to the Definition of Gross Floor
  Area Notwithstanding the definition of Gross
  Floor Area contained in Article 2.000 Definitions the following shall not be included as part of the gross floor are of any building in the Overlay District:

- a. Enclosed bays and other small projections from the principal wall plane of a building normally included as gross floor area provided they are 3 feet or less in depth and further provided that the following conditions are met:
  - the maximum width of the projection does not exceed 6 feet in length;
  - 2. no more than 50% of the area of each principal wall plane is covered with such projections.

### 11.105 Restrictions in Required and/or Provided

Setbacks That area between the principal wall plane of a building and a public street or public park whether required or provided shall be devoted to Green Area as defined in Article 2.000 of the ordinance, an expansion of the adjacent public sidewalk, park, or other landscaped or paved area devoted exclusively to pedestrian use and extending along the entire length of the lot facing the street or park. Areas devoted to vehicular use are prohibited from this area with the exception of access drives to parking facilities located elsewhere on the site and which shall be limited to a total 30 feet of width for each 100 feet of lot frontage.

The required green area, landscaping or other paved area devoted to pedestrian use shall be located at the mean grade of the relevant public street or open space at the property line unless an exception is granted under the provisions of Section 11.109 of the Section 11.100.

- 11.106 Use Restrictions The ground (first) floor of that portion of a building facing a public street or public park shall consist of gross floor area devoted to any one or combination of the following uses: Residential (Section 4.31) Office (Section 4.34), Retail Business (Section 4.35), Institutional (Section 4.33) meeting the following conditions:
  - a. At least 80% of the floor elevation of the ground (first) floor shall be no higher than the 4 1/2 feet above the mean grade of the adjacent public sidewalk or public park, at the property line, except that Retail Business uses shall be located at mean grade;

- b. The use shall have a depth of at least 20 feet;
- c. Where a lot fronts on two streets the provisions of this Section 11.106 shall apply only to the principal arterial street frontage provided the remainder of the ground floor of the building facing public street shall be screened with permanent wall in materials equal in quality of those of the rest of the building and having a minimum capacity of 50%;
- d. One parking space for each unit in a Townhouse shall be exempt from the limitations of this Section 11.106.

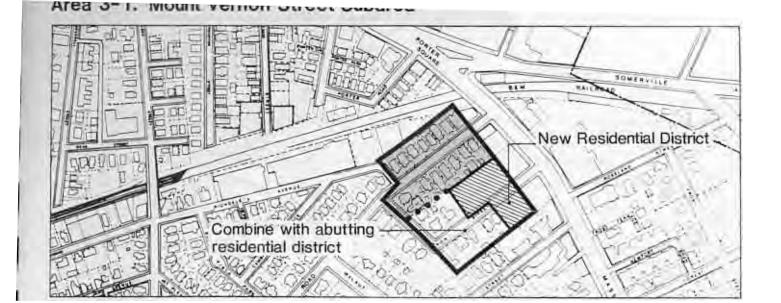
# 11.107 Design Standards

- 11.107.1 Building Facades Building facades shall be designed to enhance the visual quality of the Overlay District, create an environment pleasant and inviting for the pedestrian and compatible with the residential neighborhoods in close proximity to the district. The following standards shall apply:
  - a. Principal building entrances shall face Massachusetts Avenue where a lot abuts the Avenue.
  - b. Where office and/or retail uses are accommodated on the ground floor each separately leased space shall have an individual public entrance onto the abutting street where any portion of the space fronts towards the street.
  - c. Facades facing a public street, a public park, or designated city landmark building, or building in a local historic district or neighborhood conservation district on an abutting lot shall consist of a minimum 25% clear glass in total for the facade, with clear glass increased to 50% on the ground floor where retail and office uses are established. The maximum amount of clear glass permitted shall be 75% of the facade. Reflective and opaque glass shall be prohibited.

- 11.108 In a Residence C-2B base district, within 100 feet of Massachusetts Avenue, the Planning Board may issue a Special Permit for the establishment of any retail or office use permitted in a Business A-2 District provided the following conditions are met:
  - a. The use shall be located in a structure in existence as of July 1, 1986 or an addition to such structure.
  - b The addition of the use will not significantly alter the outward appearance of the building in ways not characteristic of residential use.
  - c. In its operation the use will not negatively impact the residential use of abutting properties.
  - d. The establishment of the use does not require the demolition of a preferably preserved significant building (as determined by the Cambridge Historical Commission under the demolition ordinance) or alter the building so as to terminate its status as a preferably preserved building.
- Divergence from the standards specified in Section 11.105-11.107 may be allowed by issuance of a special permit from the Planning Board. The Board shall grant such permit upon its determination that the development proposed will better serve the objectives of this Section 11.100 than if the standards were followed and that the criteria specified in Section 10.43 will be satisfied.

The Board shall be guided, in its determinant by such guidelines as may be established for this portion of the City. This Section 11.109 is intended for variations from the standards which may be appropriate in specific locations and circumstances and where careful design detail is a controlling factor.

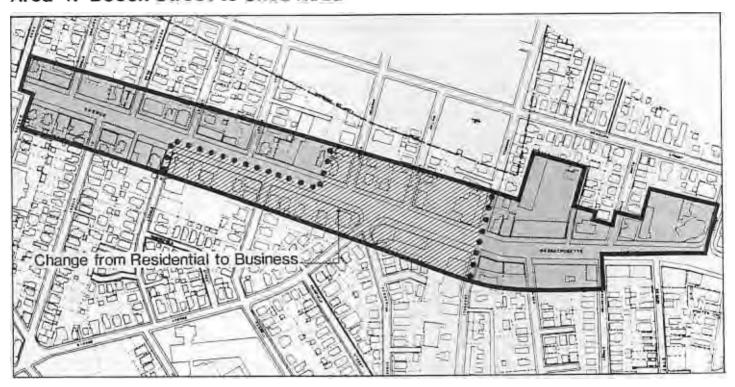
11.110 The Massachusetts Avenue Overlay District shall be considered an area of special planning concern. Development proposals exceeding 2,000 sq. ft in gross floor area shall be subject to the Large Project Procedure (Section 11.44) of Section 11.40.



# AREA 4 BEECH STREET TO SHEA ROAD

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Area 4. Beech Street to Shea Road



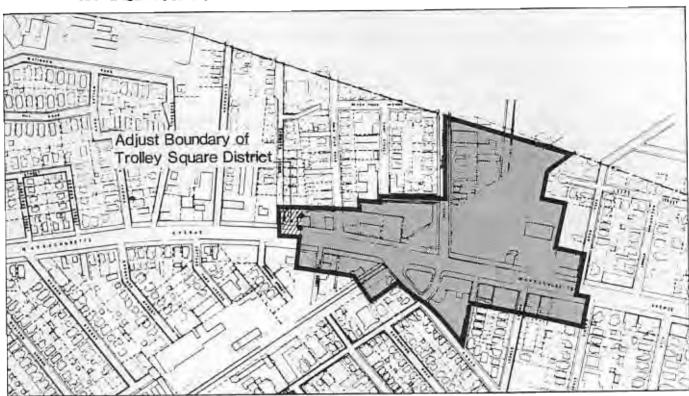
# TROLLEY SQUARE

Objective: Allow mixed use development with emphasis on residential uses.

	EXISTING	PROPOSED	
USE	Mixed	Residential with some business	
Size - FAR	4.0 Commercial 3.0 Residential	2.0 Commercial 2.5 Residential or 3.0 Residential by Special Permit*	
Height	No Limit	50' average (60' limit)	
		35' height limit within 50' of Residential Zone	
Setback - Front	No minimum Commercial	No minimum Commercial, Residential	
	5' minimum or Formula Residential		
Setback - Rear	No minimum Commercial	20' minumum or 2/3 height	
	20° minimum or Formula Residential	Commercial, Residential	
Setback - Side	No minimum Commercial	No minimum Commercial, Residential	
	Formula Residential		
Parking	Residential: 1/Dwelling Unit	Residential: 1/Dwelling Unit	
	Busiress: As per existing Ordinance	Busiress: As per eximing Ordinance	
Overlay District	No	Yes	

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Area 5. Trolley Square

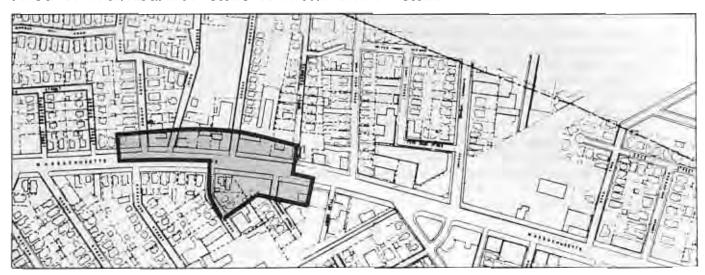


AREA 6
WASHBURN AVENUE TO RICHARD AVENUE

Objective: Encourage small scale change and mix of local uses.

	EXISTING	PROPOSED
USE	Local Business	Local Business
	with Residential	with Residential
Size - FAR	1.0 Commercial	1.0 Commercial
	1.75 Residential	1.75 Residential
Height	35' Commercial	35/45' Commercial
	85' Residential	35/45' Residential
		45° height requires
		45 plane from cornice
Setback - Front	No minimum	5' minimum
	Commercial	Commercial, Residential
	10' minimum or	No minimum if adjacent
	Formula	structure is on the
	Residential	front property line
Setback - Rear	20' minimum or	20' minimum or
	Formula	2/3 height
	Commercial,	Commercial, Residential
	Residential	
Setback - Side	No minimum	10' minimum
	Commercial	Commercial, Residential
	Formula	No minimum if adjacent
	Residential	structure is on the
		property line
Parking	Residential:	Residential:
	l/Dwelling Unit	l/Dwelling Unit
	Busines	Busir ess:
	As per sting	As per existing
	Ordinan	Ordir ance
Design Guidelines	No	Yes

# Area 6. Washburn Avenue to Richmond Avenue



#### Overlay District

Some of the recommendations evolving from the assessment of design concerns had implications for the study area as a whole. Mechanisms to implement these recommendations were considered throughout the study, including the possible establishment of an overall historic district and the establishment of an Architectural Review Board to review all proposals within the study area. In both cases the judgement was that these mechanisms were not the best solution, especially in light of the considerations that they were not likely to obtain City Council approval and even if passed would be difficult to administer.

The concept of an overlay district was proposed to put forth controls and limitations related to the overall character of the study area. The base zoning controls define the specific characteristics of each subarea, while the Overlay District defines uniformly applicable principals. The following is the proposed overlay district for northern Massachusetts Avenue.

- 11.101 Massachusetts Avenue Overlay District
- establishment and Scope There is hereby established the Massachusetts Avenue Overlay District which shall be governed by the regulations and procedures specified in this Section 11.100. It is the intent of this section that these regulations will apply to the area described generally as Northern Massachusetts Avenue and certain abutting portions of the neighborhood abutting it.
- Purpose It is the purpose of this Section
  11.100 to augment base zoning regulations in the
  District in order to create a more harmonious
  and consistent image for the development along
  the Avenue and adjacent areas, to encourage good
  building amenities along the Avenue, and to
  ensure that changes along the Avenue are
  compatible with the scale and character of the
  abutting neighborhoods.
- 11.103 Applicability The Massachusetts Avenue
  Overlay District shall be an overlay district to the zoning map established by Section 3.20.
- 11.103.1 The buildings and land uses within said district shall be controlled by the pertinent regulations within the base zoning district, except as modified by the requirements of this Section 11.100 which shall apply in addition to regulations imposed by the base zoning map designations. Where the base zoning regulations differ from the requirements of this Section 11.100 the stricter provisions shall apply.
- 11.104 <u>Dimensional Standards in the Massachusetts</u> Avenue Overlay District
- 11.104.1 Maximum Height The maximum height of any structure in the Overlay District shall be 60 feet of the height applicable in the base district, whichever is less.
- 11.104.2 Modifications to the Definition of Gross Floor

  Area Notwithstanding the definition of Gross
  Floor Area contained in Article 2.000 Definitions the following shall not be included as part of the gross floor are of any building in the Overlay District:

- a. Enclosed bays and other small projections from the principal wall plane of a building normally included as gross floor area provided they are 3 feet or less in depth and further provided that the following conditions are met:
  - the maximum width of the projection does not exceed 6 feet in length;
  - no more than 50% of the area of each principal wall plane is covered with such projections.

#### 11.105 Restrictions in Required and/or Provided Setbacks That area between the principal wall plane of a building and a public street or public park whether required or provided shall be devoted to Green Area as defined in Article 2.000 of the ordinance, an expansion of the adjacent public sidewalk, park, or other landscaped or paved area devoted exclusively to pedestrian use and extending along the entire length of the lot facing the street or park. Areas devoted to vehicular use are prohibited from this area with the exception of access drives to parking facilities located elsewhere on the site and which shall be limited to a total 30 feet of width for each 100 feet of lot frontage.

The required green area, landscaping or other paved area devoted to pedestrian use shall be located at the mean grade of the relevant public street or open space at the property line unless an exception is granted under the provisions of Section 11.109 of the Section 11.100.

- 11.106 Use Restrictions The ground (first) floor of that portion of a building facing a public street or public park shall consist of gross floor area devoted to any one or combination of the following uses: Residential (Section 4.31), Office (Section 4.34), Retail Business (Section 4.35), Institutional (Section 4.33) meeting the following conditions:
  - a. At least 80% of the floor elevation of the ground (first) floor shall be no higher than the 4 1/2 feet above the mean grade of the adjacent public sidewalk or public park, at the property line, except that Retail Business uses shall be located at mean grade;

- b. The use shall have a depth of at least 20 feet:
- c. Where a lot fronts on two streets the provisions of this Section 11.106 shall apply only to the principal arterial street frontage provided the remainder of the ground floor of the building facing public street shall be screened with permanent wall in materials equal in quality of those of the rest of the building and having a minimum capacity of 50%;
- d. One parking space for each unit in a Townhouse shall be exempt from the limitations of this Section 11.106.

# 11.107 Design Standards

- 11.107.1 Building Facades Building facades shall be designed to enhance the visual quality of the Overlay District, create an environment pleasant and inviting for the pedestrian and compatible with the residential neighborhoods in close proximity to the district. The following standards shall apply:
  - a. Principal building entrances shall face Massachusetts Avenue where a lot abuts the Avenue.
  - b. Where office and/or retail uses are accommodated on the ground floor each separately leased space shall have an individual public entrance onto the abutting street where any portion of the space fronts towards the street.
  - c. Facades facing a public street, a public park, or designated city landmark building, or building in a local historic district or neighborhood conservation district on an abutting lot shall consist of a minimum 25% clear glass in total for the facade, with clear glass increased to 50% on the ground floor where retail and office uses are established. The maximum amount of clear glass permitted shall be 75% of the facade. Reflective and opaque glass shall be prohibited.

- 11.108 In a Residence C-2B base district, within 100 feet of Massachusetts Avenue, the Planning Board may issue a Special Permit for the establishment of any retail or office use permitted in a Business A-2 District provided the following conditions are met:
  - a. The use shall be located in a structure in existence as of July 1, 1986 or an addition to such structure.
  - b. The addition of the use will not significantly alter the outward appearance of the building in ways not characteristic of residential use.
  - c. In its operation the use will not negatively impact the residential use of abutting properties.
  - d. The establishment of the use does not require the demolition of a preferably preserved significant building (as determined by the Cambridge Historical Commission under the demolition ordinance) or alter the building so as to terminate its status as a preferably preserved building.
- 11.109 Divergence from the standards specified in Section 11.105-11.107 may be allowed by issuance of a special permit from the Planning Board. The Board shall grant such permit upon its determination that the development proposed will better serve the objectives of this Section 11.100 than if the standards were followed and that the criteria specified in Section 10.43 will be satisfied.

The Board shall be guided, in its determinant by such guidelines as may be established for this portion of the City. This Section 11.109 is intended for variations from the standards which may be appropriate in specific locations and circumstances and where careful design detail is a controlling factor.

11.110 The Massachusetts Avenue Overlay District shall be considered an area of special planning concern. Development proposals exceeding 2,000 sq. ft in gross floor area shall be subject to the Large Project Procedure (Section 11.44) of Section 11.40.

In addition construction within the Massachusetts Avenue Overlay Distric of any new building or building addition containing 80,000 sq. feet or more gross floor area, shall be permitted only upon issuance of a special permit from the Planning Board. In reviewing applications for such special permits, the Planning Board shall consider compliance with the requirements of this Section 11.100 and such guidelines as may be established for this area of the City.

#### Summary of Impacts

#### Total Potential Build-out

The proposed zoning recommendatations would reduce the total amount of potential new development by about 21%, lowering potential total square feet that could be built by about 619,000. This permitted level of development would still accommodate an additional 319,000 square feet of new building space, thus striking a balance between the expectations of property owners and the desires of neighborhood residents to prevent overly intense development on Massachusetts Avenue. The overall impact of the proposed changes can be seen in Table IV.

The reduction in density is accomplished primarily by the following changes:

- o Overall reductions in the maximum permitted height, thus keeping future buildings more compatible in scale with existing structures.
- o Actual reduction in permitted density for commercial development in Trolley Square. This change is consistent with judgements that the residential market is stronger than the demand for commercial space in that location.
- Additional design guidelines, such as the prohibition of raised buildings over surface parking, limit the ability to utilize the full FAR permitted on most parcels less than about 12,000 square feet in size. These changes represent a change in development potential and as a result will affect financial return for developers. However, these design controls serve to promote the development of smaller parcels while allowing the creation of an attractive street front along Massachusetts Avenue.

#### Impacts on Specific Areas

#### 1. Porter Square

Commercial development potential in Porter Square is not affected, since the FAR remains the same. Additional residential development is permitted by raising the FAR from .75 to 2.0; this eliminates the disincentive for residential development in this area and makes both types of development possible. The changes provide for a generally low level of development for a location with transit access, but opportunity for financial gain still exists.

#### 2. Trolley Square

As discussed above, the changes in this location would reduce the potential for commercial development significantly, but this is consistent with the overall assessment of market trends for the Trolley Square area. The change in emphasis encourages residential uses, which are currently in demand.

#### Infill Areas

For the sections of Massachusetts Avenue between those two areas, there was a two-fold concern -- to encourage the retention of older structures and to ensure that future new development would be consistent with the general character of the Avenue and would support an active street front. Each of these conditions was carefully evaluated in the latter stages of the study, from both a design and an economic standpoint. The conclusions are summarized below.

- Reduction in Allowable Building Height. As noted earlier, tall buildings were a major concern to the community. Eliminating the C-2 residential district west of Porter Square and imposing an overall height limit through the district substantially controls the problem of too tall buildings. In addition, regulations affecting height in relation to nearby residential areas limit even the permitted 60' buildings to locations that minimize any negative impact on surrounding neighborhoods.
- Preservation of Older Buildings. signficant collection of older residential structures occurs at a location within the C-2 area identified above. Changing that location to a business zone and permitting greater flexibility in the uses permitted in those four structures provides a greater likelihood that the present structures can be used economically. Elsewhere, the proposed permitted development levels (generally 1.75 in the areas outside the Porter and Trolly Square areas, and a level fully achievable only on parcels larger than about 12,000 square feet) are low enough to encourage owners of existing structures to reuse them rather than going to new construction. That is, the relatively small added square footage available through new construction on smaller parcels is intended to encourage property owners to "think twice" before removing the existing structure.

Reduction in development potential imposed by newer design guidelines. As noted above, any reduction in allowable square footage and enforcement of additional design guidelines raises a question concerning economic feasibility. Regardless of other concerns about how much or how little new development would be described, there was general agreement that the results should still foster a positive development. Quality, appropriately profitable development should be encouraged; overly dense development should not be permitted.

Obviously those words are highly subjective. A detailed assessment of economic impact and development feasibility was beyond the scope of this study. However, the impact of the proposed controls on specific typical cases was examined briefly to assess the likely effect on return to property owners and/or developers. The general conclusions are: 1) that the reduction is a positive result of the imposition of design controls which will create a more attractive environment overall, and 2) that any short-term impact on value should be compensated by the stabilization and predictability of prices over time as the overall impact of the design controls is felt and the desired goal of predictability is achieved.

Table IV

POTENTIAL NEW DEVELOPMENT

(in Square Feet)

AREA	EXISTING SQUARE FEET	EXISTING ZONING	PROPOSED ZONING
Common to Wendell Street	405,000	0	0
Wendell Street to Roseland Street	260,000	384,000	306,000
Mt. Vernon Street	91,00	88,000	75,000
Porter Square	468,000	802,000	695,000
Beech Street to Shea Road	490,000	513,000	387,000
Trolley Square	192,000	919,000	678,000 (3.0)
Washburn Ave. to Richard Avenue	90,000	228,000	174,000
TOTALS	1,996,000	2,934,000	2,315,000
		4,930,000	4,311,000

Total square Feet (Existing plus Potential New Development)

Note: Due to refinements made during the study, the numbers for existing building area and potential area under existing zone are slightly higher than the original numbers in Table I.