



CITY OF CAMBRIDGE
COMMUNITY DEVELOPMENT DEPARTMENT

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To: Planning Board
From: Jeff Roberts, Land Use and Zoning Planner
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Date: April 23, 2015
Re: **Mass and Main Zoning Petition (Continued Discussion)**

Update

The Planning Board opened its hearing on the Mass and Main Zoning Petition (proposed by the Normandy/Twining Partnership) on February 24, 2015. After hearing a presentation from the petitioner and public comment, the Board discussed a number of topics and directed the petitioner and staff to respond to a number of issues.

Board members generally expressed a desire to promote housing development in the proposed "Mass and Main" district, acknowledged that Central Square is an appropriate location to allow denser development, and recognized that affordable housing is a major priority but questioned whether more affordable housing could be created. The Board was also very concerned with how this proposal relates to the recommendations of the most recent Central Square study, not just in terms of specific zoning provisions, but in terms of how the current proposal might advance the study's broader planning goals within the context of the site. The proposed building height was discussed, and its relation to the City's overall urban design objectives as well as the desired character of the district. Another concern was whether it is desirable to maintain structured and surface parking as it currently exists north of Bishop Allen Drive. The Board also reviewed comments from staff on the specifics of the zoning proposal, and asked the petitioner to address those comments in consultation with staff.

Since the February 24 Planning Board hearing, there have been a few additional hearings before the City Council Ordinance Committee as well as continued discussion between the petitioner and staff. At these hearings, the petitioner has discussed proposed modifications to the petition that address several of the comments made by the Planning Board, City Councillors, staff and others in the community. The zoning text revisions submitted by the petitioner reflect these modifications.

This memo covers the following topics, in response to the Planning Board's comments:

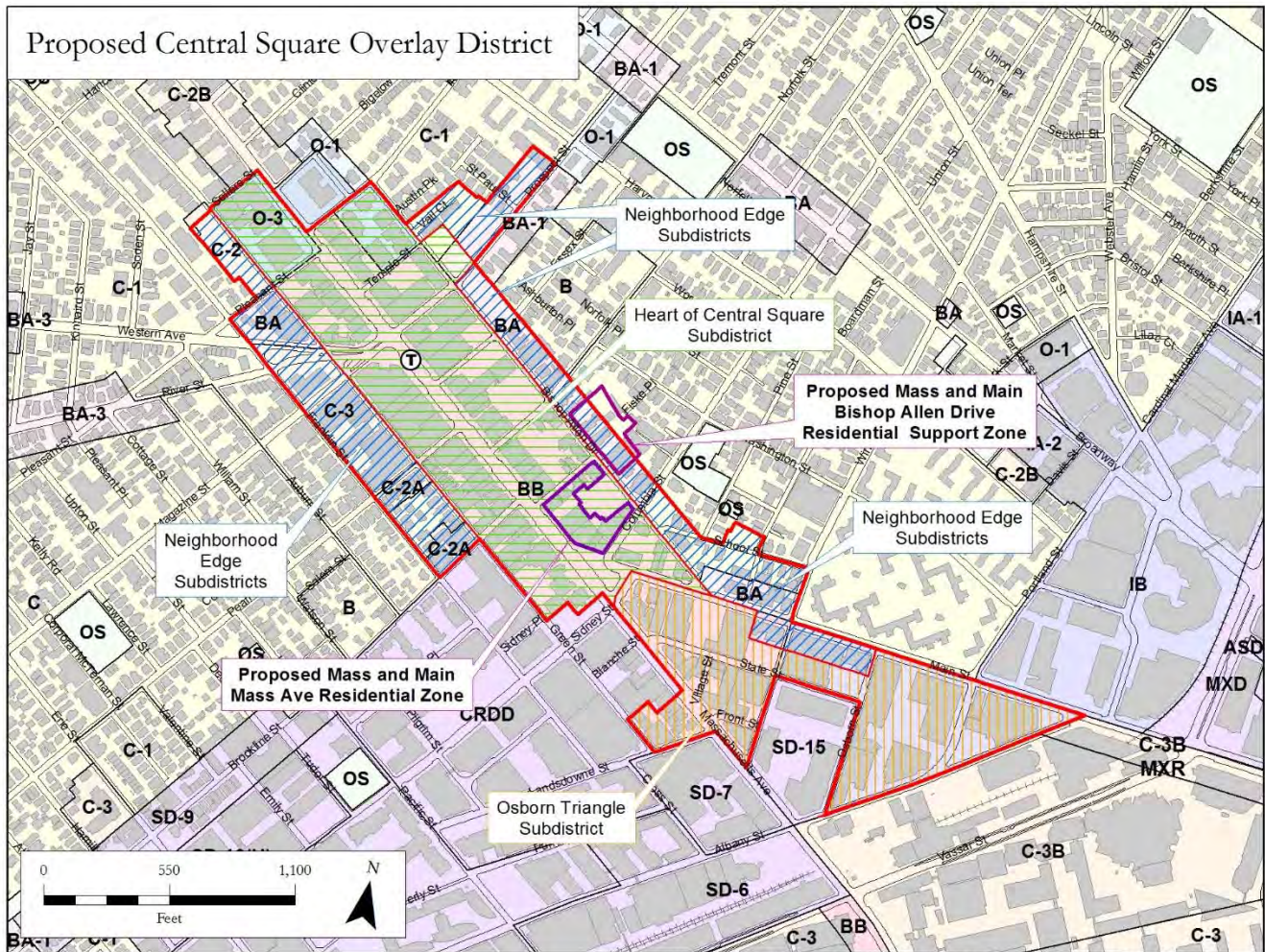
- Overview of Zoning and Design Recommendations from Central Square Study
- Analysis of "Mass and Main" Area
- Comments on Revised Zoning Text
- Additional Urban Design Considerations

Overview of Zoning and Design Recommendations from Central Square Study

Subdistricts

The C2 recommended zoning would create three subdistricts with different planning objectives. These are shown on the map below, and the proposed “Mass and Main” subdistrict zones are included in that context.

- Neighborhood Edge: To maintain an appropriate transition in scale and character to abutting residential neighborhoods.
- Heart of Central Square: To allow greater density and height for residential uses, and support a strong active streetscape along Massachusetts Ave.
- Osborn Triangle: To support the redevelopment of the former industrial area into a more vibrant mix of uses with commercial, residential and retail.



Parking

New housing would be permitted with a minimum parking ratio of 0.5 space per unit and a maximum of 0.75 space per unit. The notion of a minimum and maximum are meant to ensure that an adequate amount of parking is provided to meet demand without creating excess parking that would encourage growth in automobile use. The proposed ratios are based on evidence of actual parking demand in Central Square, based on Census data, Resident Permit Parking information and case examples of new housing development. In addition, reducing the parking requirement provides economic support for new housing development, since the creation of new parking can be prohibitively costly.

Density and Height for Housing

In the Heart of Central Square subdistrict, the FAR for residential uses would be increased to 4.0 from the current 3.0, subject to special permit approval. Non-residential space (such as ground floor retail or non-profit business) could be counted as part of the 4.0 FAR so long as it does not exceed the base zoning limitations for non-residential use, which would remain unchanged.

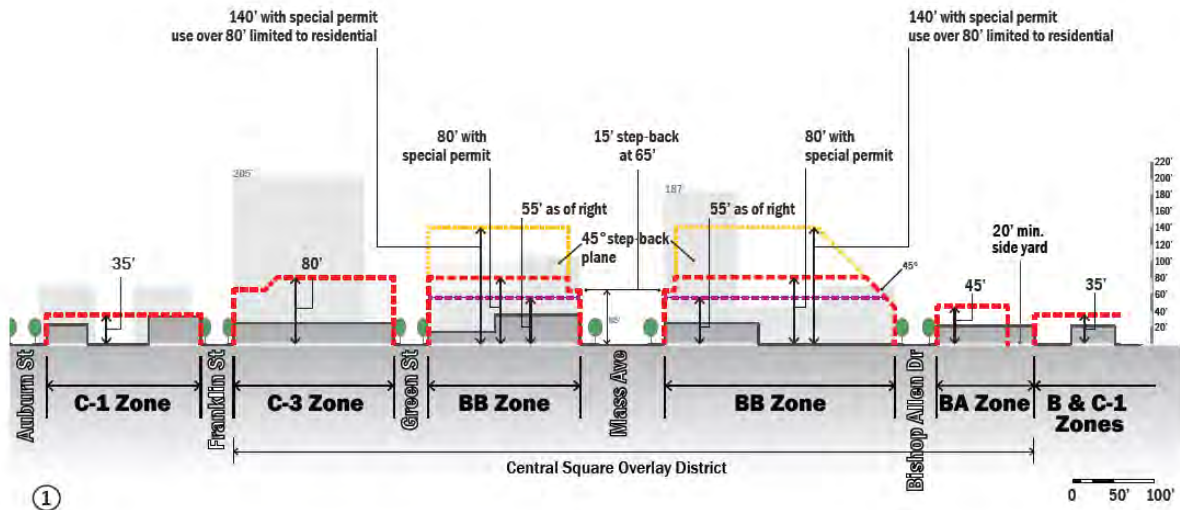


Figure 1: Proposed Built Form Controls – Section through ‘Heart of Central Square’

Allowed heights for residential buildings would also be increased in the Heart of Central Square, subject to approval by the Planning Board, to 140 feet or 160 in the case of project with transferred development rights (see below). Additional provisions would create bulk control planes to direct height away from neighborhoods and toward Mass Ave, step-backs to maintain prevailing cornice heights, and floorplate area limitations of 10,000 square feet at taller height levels. In addition, on sites over 40,000 square feet, heights over 80 feet would be limited to 25% of the site area. The intent of the built form provisions is to create an attractive, pedestrian scaled street wall of between 55 to 65 feet on Massachusetts Avenue with slender tower elements (up to 160 feet) setback from the street. The urban design principle endorsed in this approach is that tall buildings with smaller floorplates are visually slender and elegant, minimize shadows, provide more air and sunlight to streets and open space, and create a more interesting skyline. Projects would also be reviewed in accordance with a set of Central Square Design Guidelines developed for the area.

At least 25% of the increased density (*i.e.*, an FAR of 0.25 if the residential capacity was maximized) would be required to be devoted to middle-income housing units. For the rest of the residential project, normal citywide inclusionary housing requirements would apply, including any applicable density bonuses.

Transfer of Development Rights (TDR)

TDR provisions, which have been used elsewhere in the City, would allow development rights to be shifted from the Neighborhood Edge subdistrict to the Heart of Central Square or Osborn Triangle subdistrict, or among lots within the Heart of Central Square or Osborn Triangle subdistricts, subject to Planning Board review and approval. Transferred development rights would be allowed for the purpose of maintaining a neighborhood scale at the edges of the district, protecting buildings of historic value on donating lots, or providing opportunities for donating lots to be used for a public purpose such as open space or affordable housing.

Active Ground Floor Uses

The zoning recommendations include measures to require active ground-floor retail of diverse sized on major streets (such as Mass Ave), support independent businesses by limiting “formula” retail uses and encourage unique spaces such as public markets and spaces for small community-based businesses.

Urban Design Guidelines

The Central Square Design Guidelines prepared as part of the C2 Study provide comprehensive guidance on the crucial urban design and planning outcomes for Central Square. These guidelines were written to promote the attainment of the following primary goals recommended by the Central Square Advisory Committee:

1. Enrich the Square’s public realm as place that invites community interaction at many levels.
2. Celebrate and maintain the mix of old, new, funky, and locally-based enterprises activating Central Square’s Cultural District.
3. Support community diversity through more varied housing choices.
4. Enrich neighborhood walkability and livability with safe, green streets and improved access choices.

The following urban design requirements are addressed in the guidelines:

- Streets and Sidewalks
- Integrating Buildings with Public Places
- Ground Floor Design
- Built Form
- Parking and Service Areas

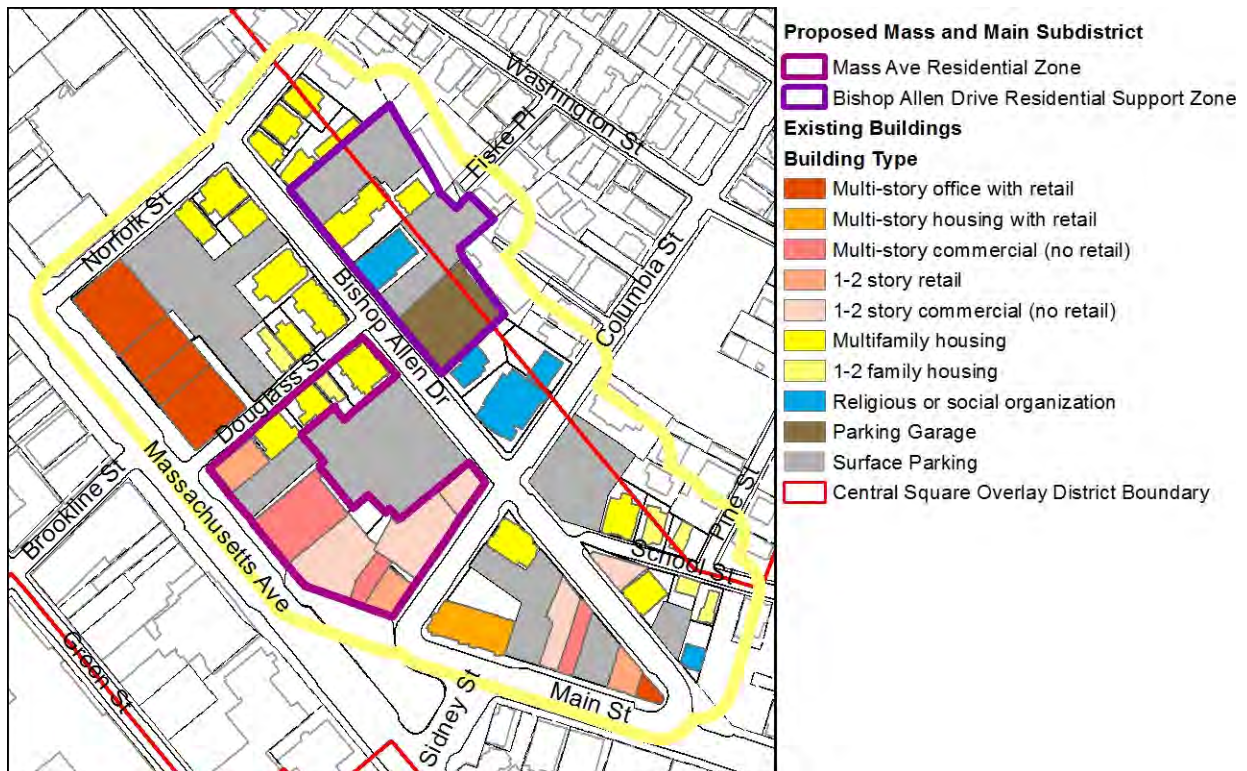
Under the built form guidelines, building height, massing, streetwalls and bulk control, scale and building façade criteria are established. Notably, the Design Guidelines encourage variation in building height and seek to concentrate the greatest height and bulk of buildings on Massachusetts Avenue. The guidelines also recognize that additional height can help buildings serve as attractive landmarks.

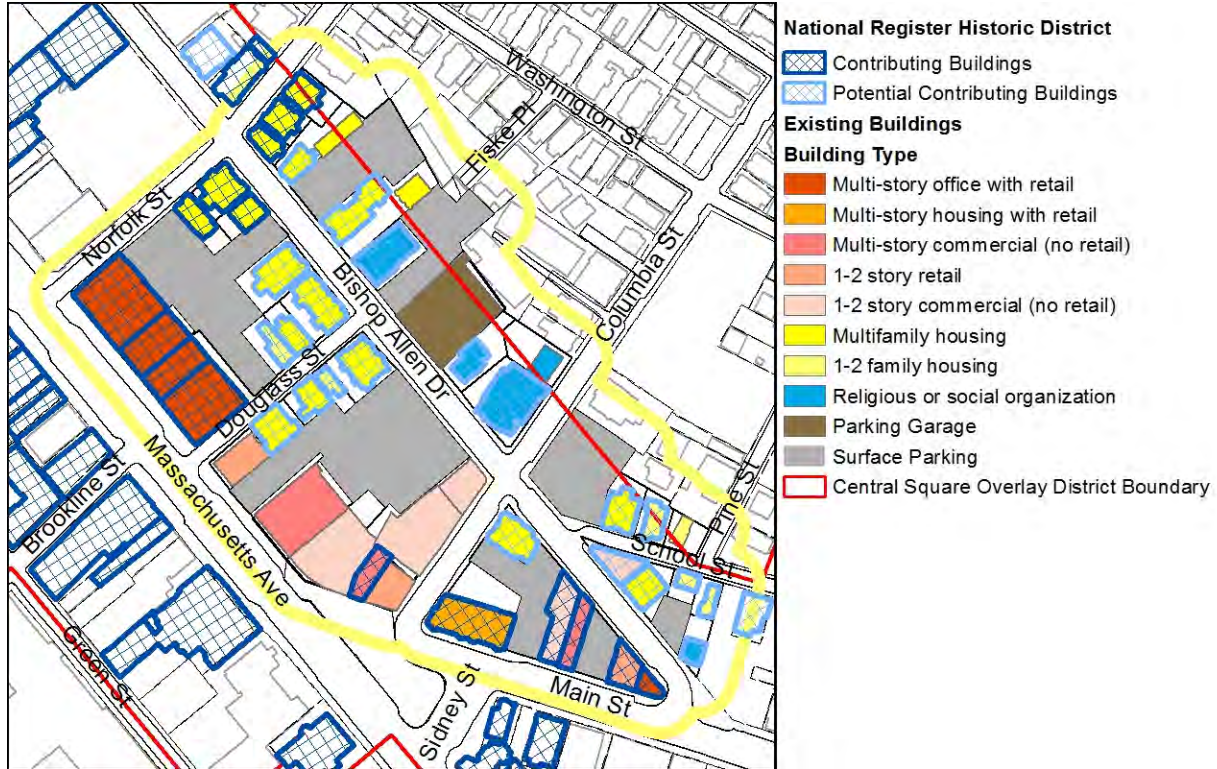
Analysis of “Mass and Main” Area

Existing Building and Use Types

To analyze the Mass and Main proposal in the context of the Central Square Study recommendations, staff has prepared a brief land use summary of a smaller area covering a few blocks on the north side of the Mass and Main intersection, including the petition area and surrounding context. The maps on this and following pages provide a general overview of existing land use conditions in the area, also identifying buildings of historic interest. One of the key issues considered is the likelihood of redevelopment for different types of sites.

- *Multi-story office with retail.* Between Norfolk and Douglass Street is a row of commercial buildings of about 4-5 stories and fairly high density, with retail at the ground floor. Because the buildings have historic, economic and urban design value, they are unlikely to be redeveloped in the foreseeable future except through rehab of existing buildings. If the FAR for residential use were increased as suggested in the C2 study, it might create the possibility for infill housing development on adjacent parking lots, though the parking has economic value as well.
- *Residential uses.* There is one mixed-use building with apartments over retail at Mass Ave and Columbia Street. Other residential buildings exist mostly along Bishop Allen Drive and side streets, ranging from single-family homes to multi-family apartments and some condos. Many of these buildings also have recognized or potential historic value. Due to the high value of housing and dispersed ownership of the lots, these buildings are also less likely to undergo redevelopment in the foreseeable future.





- *Other commercial buildings.* There are various commercial buildings of 1-4 stories whose redevelopment potential depends on a variety of factors including the size and value (economic or historic) of the existing buildings, and the size, shape and ownership patterns of the lots. Many buildings have viable commercial tenants, which would be costly to displace. Also, some lots are very small (less than 5,000 square feet), and redevelopment might not be economically advantageous unless adjacent lots were assembled under common ownership.

The “Quest Portfolio” (see next page) is unique in its redevelopment potential because the land ownership is already assembled, most buildings are not of historic value, and the main tenant is vacating the site. However, instead of redeveloping the site, there could be economic value in retaining those buildings in their current lab use, with possible renovations or additions.

- *Religious or social organizations.* There are a few church properties and an Elks Lodge along Bishop Allen Drive, which have potential historic value. Such sites are typically owned by non-taxable entities that are immune from many economic factors, so redevelopment is difficult to predict. If an owner decides to sell its land, it could create an opportunity for redevelopment or reuse.
- *Parking Facilities.* The one parking garage in the area is being vacated by Quest. While it is not necessarily the best use of land from an economic or urban design perspective, there is significant value in the existing facility because new structured parking is very expensive to build. There are also many surface parking lots, most of which serve adjacent commercial uses (including Quest), with one municipal public parking lot on Bishop Allen Drive. Surface lots may present opportunities for redevelopment, but again there is counterbalancing economic value in retaining existing parking because it would be costly to replace in structured facilities.

Relative to the Board's discussion, this analysis reveals that under the recommended C2 zoning, the combined development rights on the "Block B" and "Block D" properties (highlighted in the table) totals about 237,000 square feet, which is very close to the total development rights on "Block B" under the proposed Mass and Main zoning. Development rights from other blocks could easily make up the 3,000 square-foot difference. Therefore, as suggested in the Board's prior discussion, the recommended C2 zoning could achieve a density on Block B that is similar to the proposal.

The objective of TDR is both to direct new development toward "receiving" sites, where higher densities are more appropriate, and to achieve better planning and design outcomes on the "donating" sites, which might include affordable housing at an appropriate scale, preservation of historic buildings, creation of open space, or other publicly beneficial outcomes. Continuing this line of reasoning would suggest that the Board might consider how allowing additional development capacity on Block B might lead to improvements on Block D or elsewhere in the land assemblage.

Comments on Revised Zoning Text

The petitioner has presented a set of proposed modifications to the zoning petition text. These are meant to address concerns raised by CDD staff, the Planning Board, and others since the initial hearings. Staff has advised the petitioner on the revisions in order to help improve the clarity of the text and maintain better consistency with the current Zoning Ordinance. Below is a brief set of comments regarding the substance of the proposed revisions.

Establishment, Scope, Applicability and Review (20.307.1, 20.307.2, 20.307.3, 20.307.4)

One of the main concerns with the petition in its original form was that it was not clear how the proposed new requirements would relate to the requirements of the Central Square Overlay District and underlying base zoning. The revised text helps to clarify that the new Mass and Main Residential Mixed Income Subdistrict is considered a subdistrict of the Central Square Overlay District with a special set of requirements, but also many shared planning objectives.

The strict provisions of the Mass and Main Residential Mixed Income Subdistrict relating to use, building dimensions, open space, parking, loading and inclusionary housing would supersede those set forth in the base zoning or elsewhere in the Central Square Overlay District provisions. However, other provisions would still apply, including the Project Review requirements of Article 19.000 and review by the Central Square Advisory Committee. For a project of the anticipated scale, a Project Review Special Permit would be required, for which the Planning Board would have to find that the project meets the citywide urban design objectives as well as the criteria specific to development in the Central Square Overlay District.

A project that avails itself of some provisions of the new Subdistrict would be required to follow all of the requirements of the Subdistrict. Otherwise, a project within the Subdistrict could still follow the requirements of the base zoning and the current provisions of the Central Square Overlay District. A project built per the proposed Subdistrict requirements is referred to as a "Residential Mixed Income Project," for which the defining characteristics would be increased density and height and a higher affordable housing contribution.

Density and Affordable Housing (20.307.6.1, 20.307.8)

Based on comments by the Planning Board, staff and others, the revised petition takes a simpler approach to regulating density by setting an total maximum FAR of 6.5 for a Residential Mixed Income Project in the area between Massachusetts Ave and Bishop Allen Drive. In other areas, including north of Bishop Allen Drive, the maximum FAR would remain at current zoning levels. To be considered a Residential Mixed Income Project, a project would need to have a total of 17% Affordable Units (for low to moderate income households, as currently served by the Inclusionary Housing provisions) plus 3% units that meet a similar affordability level for middle-income households, resulting in 20% of total units having affordability restrictions. No additional bonus FAR would alter the percentages or increase the FAR beyond 6.5. While this approach departs from the current method of calculating inclusionary housing requirements, it would still exceed the minimum requirements of the current Inclusionary Housing ordinance and allows for a more straightforward application of the requirements.

Dimensional Standards (20.307.6.2, 20.307.6.3, 20.307.6.4)

The proposed height limits remain at 195 feet for the portion of the district abutting Mass Ave, with a reduction to 70 feet in portions abutting Columbia and Douglass Streets, as in the initial proposal. A new floorplate limitation of 10,000 square feet for portions of a building above 80 feet has been proposed, which is consistent with the C2 recommendations and limits the impact of building bulk at taller heights. No other bulk control requirements are included, such as a 45-degree bulk control plane from Bishop Allen Drive (see description on Page 3). However, since the “Mass Ave Height Area” begins about 170 feet from Bishop Allen Drive, this bulk control plane would only be relevant in the proposed Subdistrict in the “Columbia/Douglass Street Height Area” (where the proposed maximum height is 70 feet) within 25 feet of Bishop Allen Drive.

The provision related to Yard Setbacks is a somewhat roundabout way of exempting a Residential Mixed Income Project from the formula setback requirements that otherwise apply to residential development but do not apply to non-residential development in a Business B district. Normally, residential development in Business B must follow the dimensional standards of the Residence C-3 district. Those formula setbacks would highly constrain the design options for a tall residential building on this site and create additional complications for mixed-use projects with commercial uses at the ground floor. Under current zoning, a waiver of required yard setbacks may be granted by special permit.

In contrast, the provision related to Open Space explicitly states that the open space requirements for a residential project in Business B, which is 10% of the lot area (per the Residence C-3 standards), would apply in this subdistrict. However, the petitioner suggests modifying the requirement so that it can be fulfilled not just with private open space for residents, but with ground-level open spaces that are open to the public as well.

Parking (20.307.7)

The main change from the original petition is that the required residential parking rates have been brought into consistency with the C2 recommendations: a minimum of 0.5 space per dwelling unit and a maximum of 0.75 space per dwelling unit. These rates were recommended after careful consideration

by the participants in the study, including transportation planning staff at CDD and TPT, and are based on actual observed trends in parking demand for areas close to transit. The recommended maximum and minimum rates are intended to provide an adequate amount of parking to satisfy the demand, while preventing an oversupply of parking that might promote an increase in automobile use.

Another significant change is the introduction of requirements for carsharing services, which are known to reduce the need for private ownership and parking of automobiles. While not generally included in zoning, such requirements are often imposed as special permit conditions to mitigate transportation impacts. While the number of carsharing vehicles needed to serve a residential development of this scale is not precisely known, the proposal to require a minimum of one vehicle per 100 units and to allow a reduction of required parking by 5 spaces for every one carsharing vehicle, to up a total of one carsharing vehicle for every 30 units, seems to be a reasonable standard that will encourage carsharing without resulting in significant impacts on parking. For a 240-unit project, the maximum impact would be an addition of up to 8 carsharing vehicles and a corresponding reduction of up to 40 parking spaces.

Furthermore, in the discussion of Innovation Unit provisions, there has been no substantive change to the initial proposal but text has been added to clarify that if tenants are prohibited from seeking Cambridge Resident Parking Permits, enforcement of such provision must be the responsibility of the property owner and not the City. The City may not have the legal ability to deny parking permits to Cambridge residents based on zoning regulations applicable to the building.

Retail and Street Activation (20.307.9)

A couple substantive changes were made in this section that bring the proposal into greater consistency with the C2 study recommendations. A provision is added to limit the non-retail functions along Mass Ave to no more than 30% of the building frontage, which is consistent with the objective to ensure that new development maintains a reasonably continuous retail frontage on Mass Ave. Another change is to exempt from Gross Floor Area calculations any retail spaces where the establishment is 1,500 square feet or less, which incentivizes smaller-scale spaces that tend to be more desirable to local, independent enterprises. This also reflects the C2 study objectives and recommendations, and is similar in its approach to retail incentives provided elsewhere in the City.

Sustainable Design (20.307.11)

The modified text would increase the minimum Green Building standard for a Residential Mixed Income Project from LEED Silver to LEED Gold. Although the C2 study did not recommend requiring LEED Gold for residential projects, this change is consistent with the City's overall policy of encouraging new development to meet the highest achievable level of sustainable design.

Design Guidelines (20.307.12)

The revised text makes reference to the Central Square Design Guidelines developed during the C2 study process and published in 2013. Because a project of the anticipated scale would be subject to urban design review by the Planning Board (as well as advisory review by the Central Square Advisory Committee), it is important to reference guiding documents so that the designers and the reviewers

have a shared set of design principles to work from. However, it is also important to note that guidelines are not strict requirements, and allow flexibility to consider design options during the review process.

It is staff's view that the Central Square Design Guidelines cover many of the issues that will be relevant to the review of a Residential Mixed Income Project, such as the design of streets and sidewalks, building ground floors, parking and service areas and the integration of buildings with public spaces. The guidelines also cover several important topics relating to built form. However, as noted further below, there are some issues related to height that may not be adequately addressed in the current design guidelines, and some additional guidance might be considered.

Parking North of Bishop Allen Drive (20.307.11 and 20.307.14)

The revised zoning text retains a provision that explicitly "grandfathers" the existing parking garage and allows its use to serve the accessory parking needs of a residential project. Despite the City's general policy of discouraging above-grade parking, the petitioner has suggested at prior public hearings that the value of retaining the existing structured parking is critical to enabling the development of a Residential Mixed Income Project as envisioned.

However, the petitioner is considering additional measures (which have not yet been articulated in the requirements) that might encourage an eventual removal of surface parking where it exists along Bishop Allen Drive. The suggestion is that after a period of time (five years is suggested), surface parking would be prohibited within some distance of the Bishop Allen Drive frontage, which would encourage its conversion to housing, open space or some other allowed use. This type of provision is sometimes included through project review as a condition of a special permit. The approach may help to promote the urban design goals of the district, but it is difficult to comment more specifically on the expected outcome until the actual mechanism has been determined.

Additional Urban Design Considerations

The maximum building height of 195 feet proposed for the "Mass Ave Height Area" in the petition is not contemplated in the C2 Study or Central Square Design Guidelines for the "Heart of Central Square" subdistrict, where the maximum attainable height would be 140 feet with an additional 20 feet allowed on a lot that is receiving transferred development rights. Therefore, while it is advantageous to refer to the Central Square Design Guidelines as a whole when reviewing future development, further building height criteria should be considered to assist the Planning Board to evaluate development proposals providing building heights in excess of 160 feet.

It is therefore recommended that the Design Guidelines be expanded to address such matters as tower interfaces with neighboring residential buildings, transitions to lower scale historic buildings that are likely to remain, and how tower forms can be configured to maximize sky views and minimize shadow impacts. Specific design considerations could include the following measures, which aim to enhance C2's urban design principles as they relate to taller buildings:

- Consider the variety of vantage points from which tall buildings will be seen, especially from significant public spaces and nearby low-scale residential neighborhoods, as well as city skyline views.

- Tall buildings should be articulated to avoid a monolithic appearance, and should emphasize slender, vertically-oriented proportions.
- Avoid broad “slab” and “boxy” volumes that make the building appear bulky and visually dominant. Point towers expressing vertical volumes are preferred.
- Locate and shape tower elements to minimize shadows on existing or proposed public open space and streets.
- Configure towers to maximize sky views from public open space and enhance visual connections through sites.
- Consider variation in forms that present different profiles to different vantage points.
- If appropriate, scale down tall buildings where they interface with adjoining historic buildings.
- Minimize impacts on the environmental performance and amenity of adjoining residential buildings.
- Consider legibility of the building top both by day and night, while demonstrating responsible use of lighting and energy consistent with sustainability requirements.
- Design buildings to minimize negative wind impacts on streets and public spaces.