MAPC
METROPOLITAN AREA PLANNING COUNCIL

Smart Growth & Regional Collaboration

Memorandum

To:	**City of Woburn**
From:	MAPC
On:	March 25, 2019
Re:	Woburn Mall Smart Growth Overlay District Application Design Standards Review

This memorandum summarizes MAPC's review of the Woburn Village Site Plan Review Application Submission for conformance to the WM-SGOD Design Standards. Overall, MAPC is supportive of the planned development's design, which in most aspects meets or exceeds the established Design Standards.

The Design Standards contain 51 elements, broken down into the following categories:

- Site + block
- Building massing + form
- Façade
- Street design
- Open space
- Lighting

MAPC reviewed the Applicant's plans for each of the 51 elements contained in the Design Standards. For each element, MAPC noted whether it believes the Applicant:

- Fully Complied
- Mostly Complied, i.e., one or two instances where the MAPC believes the standard was not completely met
- Partially Complied, i.e., three or more instances where MAPC believes the standard was not completely met
- Deficient, i.e., the standard was disregarded
- Unclear, i.e., if it was not fully clear whether the Design Standards were met

Overall, MAPC believes the applicant fully complies with 39 out of these 51 elements, although there were a few instances noted in the table below where MAPC added a caveat to its determination. There were two instances where MAPC could not make a determination

(designated Unclear). The balance were Mostly Compliant or Partially Compliant. There were no instances where MAPC found a Deficient rating.

In areas where MAPC believes the applicant does not fully meet the Design Standards, the City Council, as the Permit Granting Authority, must decide a) if it agrees with MAPC's assessment and b) whether to waive the particular design standard. MAPC is assessing whether the applicant meets the standard solely from a design perspective, and there may be other reasons (excessive costs, impact on ability to meet parking requirements, etc.) whereby the City Council may believe the benefits of granting a waiver outweigh the costs.

The following table provides an assessment for each of the Design Standards. Following this is a brief discussion of the Application's incorporation of the advisory guiding principles, followed by commentary on a number of the Standards.

Section	Complies with Standard?	Notes
3.1 Site + Block		
3.1.1 Building placement	Mostly compliant	See memo for discussion of parking bays east of the Cinema and location of Retail E building
3.1.2 Building orientation	Fully compliant	Buildings are oriented according to the standards set forth
3.1.3 Building setbacks	Fully compliant	Buildings are set back according to the standards set forth
3.1.4 Feature active interior uses	Fully compliant	Although the tenant mix is not yet announced, the buildings clearly feature ground-level retail space to activate the pedestrian realm. If banks or offices occupy any of the spaces, to the extent possible they should do so in buildings further away from the primary pedestrian space, such as Retail D or E
3.1.5 Conceal unappealing functions	Mostly compliant	See memo for discussion of trash compactor area and transformers
3.1.6 Connectivity among buildings	Fully compliant	This standard is fully compliant; see memo for potential improvements
3.1.7 Curb cuts	Mostly compliant	See memo for discussion
3.1.8 Parking placement	Mostly compliant	See discussion of Building Placement regarding the parking adjacent to Retail C
3.1.9 Parking orientation	Mostly compliant	Parking is properly buffered with landscaping and other measures, other than area adjacent to Retail C; see discussion of Building Placement.
3.1.10 Parking landscape	Partially compliant	See memo for discussion of parking associated with Market Basket portion of site. If current lease arrangements inhibit modifications, this standard is considered Fully Compliant
3.1.11 Parking areas	Fully compliant	Entrances for structured parking are located away from the pedestrian realm

Section	Complies with Standard?	Notes
3.2 Building Massing + Form		
3.2.1 Building form	Fully compliant	The site contains a variation in building massing, defined street edges, large buildings broken into smaller units, and various treatments to reduce the visual impact of large-scale buildings
3.2.2 Scale	Fully compliant	Various architectural elements, a strong prominent ground-floor, and a canvas of a variety of materials help the scale of buildings relate to the human scale
3.2.3 Modulation of building mass, scale and bulk	Fully compliant	Buildings larger than 100' in length are appropriately modulated through multiple bays or other means to reduce the bulk of large buildings
3.2.4 Height of first stories	Fully compliant	Heights for all buildings comply with this requirement
3.2.5 Upper stories	Fully compliant	At the critical location where the multi-story mixed-use residential building is adjacent to the cinema and associated open space, the building incorporates a deep step-back at the second floor. This greatly reduces the bulk in a primary pedestrian location. In other portions of the multi-story building a change in materials creates a similar effect.
3.2.6 Building roofs	Fully compliant	All roofs are contemporary, flat-roof style
3.2.7 Doorways	Unclear	See memo for discussion of why it is unclear if the standard is fully met
3.2.8 Mechanical equipment	Fully compliant	The Roof Equipment Screening study illustrates that all rooftop mechanical equipment will be screened from view of the adjacent street
3.2.9 Structured parking	Fully compliant	Structured parking is fully contained to the interior of buildings along primary streets
3.3 Façade		
3.3.1 Façade length and articulation	Fully compliant	Facades are articulated at least every 75' as required
3.3.2 Façade design	Partially compliant	See memo for discussion
3.3.3 Windows	Fully compliant	All buildings meet the minimum percentage of ground-floor glazing
3.3.4 Architectural treatments	Fully compliant	The renderings depict various architectural elements, which meet the minimum standard. It is expected that tenants will have the opportunity to customize their spaces with additional features
3.3.5 Placement and treatment of entries	Fully compliant	Entrances are properly located and adjacent to adequate sidewalk space
3.3.6 Ground level articulation	Fully compliant	There is clear distinction between the commercial and residential space, while maintaining harmony through consistent height lines

Section	Complies with Standard?	Notes
3.3.7 Building materials	Fully compliant	The applicant has provided a palette of suitable building materials its tenants can draw from. MAPC notes that the Standards state that panelized cementitious system, which is of lower aesthetic quality than the other provided options, is allowed when incorporated with other available materials as part of the facade treatment
3.3.8 Awnings	Fully compliant	The submission materials do not include specific awning information but the applicant notes that as spaces are tenanted, the Standards will apply
3.3.9 Signage	Fully compliant	The various renderings indicate adherence to the standards will be met, but details on any proposed signage were not provided
3.3.10 Multi-tenant signage	Fully compliant	See comment above
3.4 Street Design		
3.4.1 Sidewalk locations	Fully compliant	Sidewalks are provided throughout the site
3.4.2 Sidewalk configuration	Fully compliant	All sidewalks meet or exceed the standards for width and configuration
3.4.3 Multi-functional sidewalks	Fully compliant	Sidewalks greater than 5' have allocated space along the roadway for amenities such as trees, trash receptacles, bike racks, etc.
3.4.4 Sidewalk materials	Fully compliant	Durable, high quality materials are proposed for sidewalks
3.4.5 Accessibility	Fully compliant	Sidewalks, ramps, and markings are compliant
3.4.6 Visible and well-marked crosswalks	Mostly compliant	Ladder style crosswalks, which provide greater visibility than other styles, are used throughout the site. Several areas use ornamental sidewalks with pavers. These are allowed, but the Standards state they must be approved by the City. See memo for two instances where the standard is not fully met
3.4.7 Corner radii	Partially compliant	See memo for discussion of corner radii
3.4.8 Landscape	Fully compliant	Street trees are provided in appropriate locations
3.4.9 Street furniture	Fully compliant	Presence of street furniture meets the standards. MAPC recommends bicycle racks in front of Retail C.
3.4.10 Bicycle use	Mostly compliant	See memo for bicycle facilities discussion
3.5 Open Space		
3.5.1 Relation to surrounding open spaces	Fully compliant	The proposed open spaces employ a combination of hardscape and softscape materials and are well-located
3.5.2 Open space details	Unclear	Proposed open spaces are well-designed and use a variety of materials. It is unclear if public art will be incorporated into the site design, as required in the Standards.

Section	Complies with Standard?	Notes
3.5.3 Landscape use and orientation	Fully compliant	Landscape use and orientation meets the requirements
3.5.4 Buffers and screens	Fully compliant	Landscape has been used to screen various potentially negative views
3.5.5 Trees and plantings	Fully compliant	MAPC performed a spot check of the various plants included in the proposal, which were satisfactory
3.6 Lighting		
3.6.1 Lighting placement	Fully compliant	The site lighting layout and lighting calculation sheets show that adequate ambient lighting is provided throughout the site
3.6.2 Site lighting	Fully compliant	A review of the luminaire schedule showed that proper light fixtures were used. The applicant has noted that it wishes to use 12' height fixtures, rather than the 14-17' noted in the Standards. A lower height provides better pedestrian-scale lighting and exceeds the standards set forth. MAPC considers this to meet the standard.
3.6.3 Building lighting	Fully compliant	Specific details were not provided; however, the renderings suggest that the standards will be met. In addition, the applicant notes that as buildings are tenanted, appropriate building lighting will be used.
3.6.4 Signage lighting	Fully compliant	Specific details were not provided; however, the renderings suggest that the standards will be met. In addition, the applicant notes that as buildings are tenanted, appropriate building lighting will be used.
3.6.5 Uplighting	Fully compliant	The applicant has requested a modification to the standard to allow for the uplighting of trees at select locations. MAPC supports this request.
3.6.6 Prohibited light sources	Fully compliant	A review of the luminaire scheduled showed that proper lighting sources are used

Adherence to Principles

Section 2 of the Design Standards sets forth a group of principles intended to guide future development along the Commerce Way Equitable Transit-Oriented Development Corridor, which stretches from the Woburn Mall site to Anderson RTC, between the commuter rail tracks and Commerce Way. While these principles are advisory as they relate to the Design Standards, MAPC notes that the application submission largely incorporates these principles, described briefly below.

Principle 1: Development by Sub-Areas

The E-TOD plan envisions three sub-areas along the mile-long corridor. Sub-Area 1, the Woburn Mall site, envisions a mixed-use environment that reimagines the existing retail space into something that is an asset for new residents, existing residents, and visitors.

Principle 2: Connectivity and Principle 3: External Connections

This principle envisions that the existing "superblock" nature of the corridor, almost a 1/3 of a mile wide, is "broken up" with a new north-south connection. MAPC notes that the applicant largely developed this connection, including construction of a critical pedestrian path from the plaza to the abutting Cummings property to the north. This will greatly enhance the pedestrian connectivity, providing easy walking access to potentially hundreds of employees.

The principles also call for a connection to a future path along the river (outside of the applicant's property). It is not feasible for the applicant to create this connection today, due to uncertainty of where the path will be, but the applicant has noted that should a future path be constructed, the Woburn Village development will have a connection from its property.[1]

Principle 4: Development Orientation

Finally, MAPC notes that the site design integrates the residential and commercial portions of the site in a way that enhances the pedestrian environment. By incorporating retail development into the ground floor of the residential building, combined with the close proximity, short crossing distance, crosswalks, wide sidewalks, and other traffic calming features, this portion of the development creates a strong mixed-use, neighborhood feel.

[1] Woburn Village – Site Plan Review Application, Design Guidelines Narrative (February 11, 2019). Submitted by Reimer & Braunstein LLP.

Compliance with 3.1 Site + Block Standards

These standards are intended to prominently position positive features, conceal negative aspects of the property, and reinforce the creation of a walkable urban fabric.

Streets as Defined in the Design Standards

Section 3.1.1 refers to "streets" as the "primary circulatory network" within the development, which is then referred to multiple times throughout the Design Standards. Figure 1 illustrates what MAPC considers this primary circulatory network.

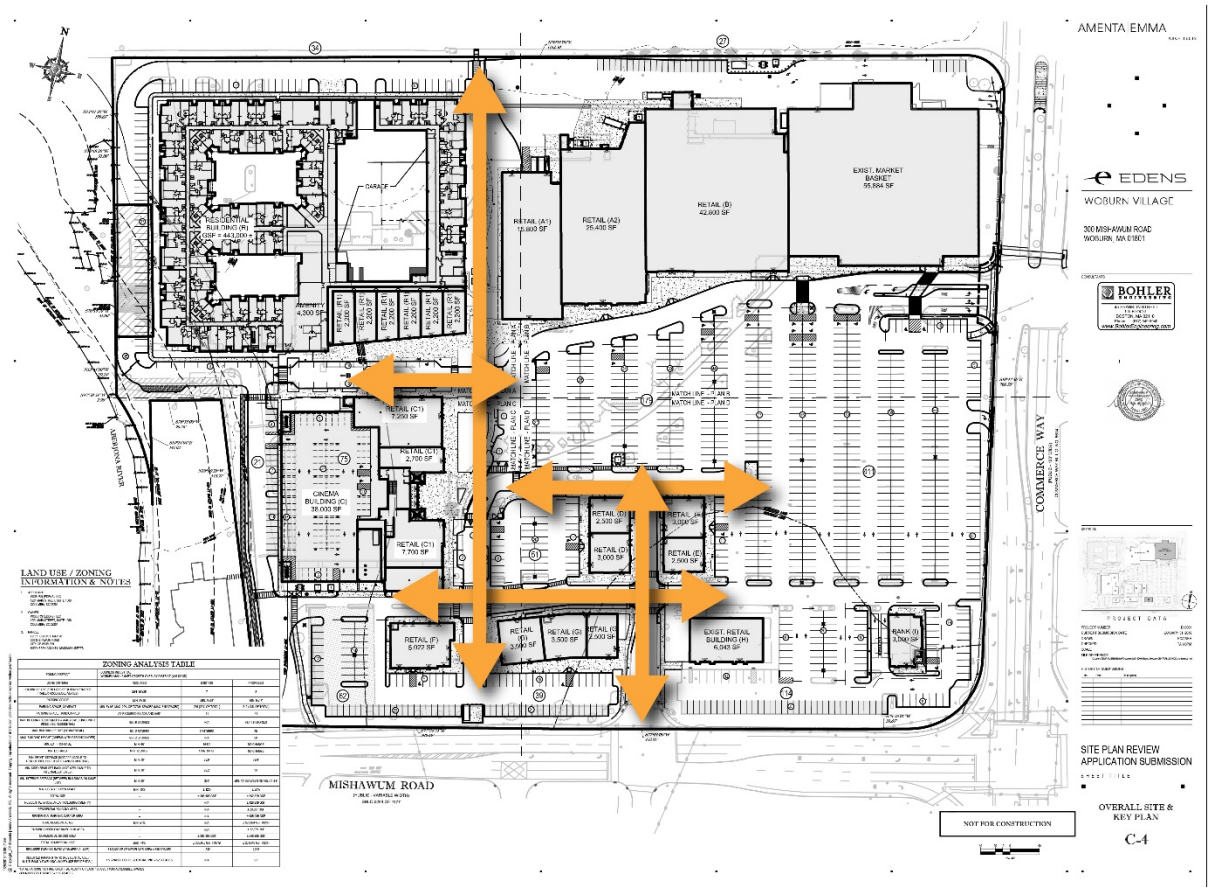

Figure 1: The arrows above indicate "streets" as defined in the Design Standards. Elements such as Building Placement, Building Orientation, etc. are based upon these routes.

3.1.1 Building Placement

The site plan for the most part meets the standard, which requires buildings to define the edges of streets and locate them to conceal parking. MAPC also acknowledges that the site poses numerous challenges, in particular the need to maintain the legacy portion of the site in a state nearly the same as today. The one area where MAPC believes the standard may not be fully compliant is between the southern Retail C1 building and Retail D building.

From the perspective of a pedestrian, the proposed layout abuts a street and parking lot. (While this is also true of the northern Retail C1 building, it is less of a concern because of the wide sidewalk/plaza area.) MAPC suggests the City and Applicant seeks ways to minimize the impacts of parking located

adjacent to Retail C. One way this could be accomplished could be through increasing the landscaping adjacent to the parking lot to better act as a buffer between it and Retail C.

An alternative way to meet this standard is by relocating one or more buildings so that parking is fully concealed by the main pedestrian area along Retail C. MAPC acknowledges that there would be major design implications to this alternative, but from the perspective of enhancing the pedestrian realm MAPC strongly recommends its consideration. Figure 2 provides an example where Retail E is relocated so the parking is more fully hidden from one of the main focal points on the site.

Figure 2: Relocating Retail E would create a more walkable, village-like environment at the main pedestrian-focused area.

Figure 3 provides perspectives of the conditions under the existing proposal. Figure 4 provides an example of how the pedestrian experience would change by locating the parking behind Retail E.

Figure 3: The diagrams above approximate the experience of the main pedestrian corridor located across the street from parking

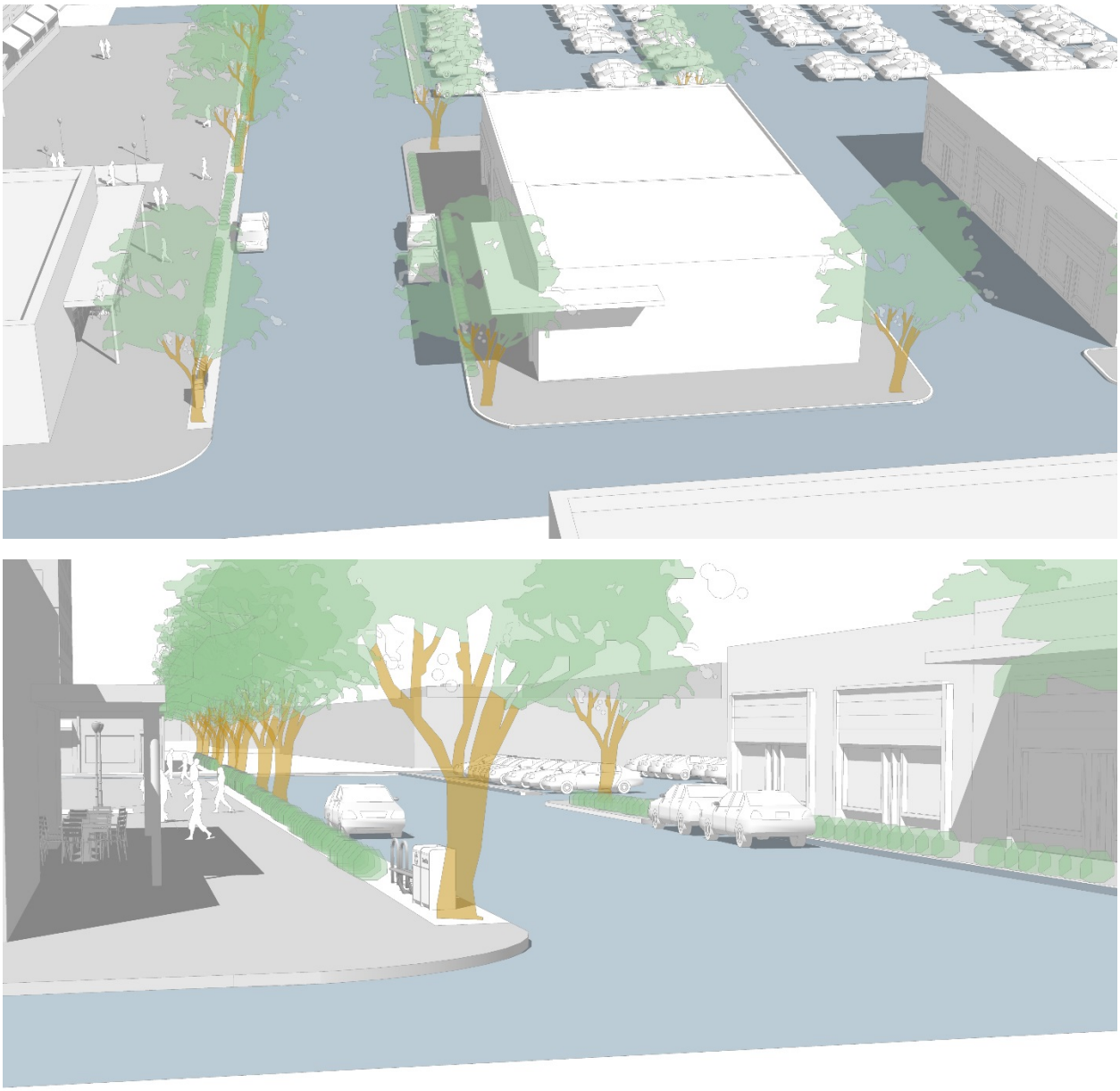

Figure 4: Locating one of the retail buildings across the street from Retail C creates the effect of more of a "village-like" street

3.1.5 Concealing Unappealing Functions

The Applicant has been largely successful in concealing unappealing functions, such as loading docks, dumpsters, and other utilitarian functions of the property. Indeed, the site layout makes it especially challenging to conceal some of these functions from the greatest number of pedestrians as possible. While the trash compactors servicing Retail F and G are away from most of the main pedestrian activity, they remain located in an area that presents high visibility along Mishawum Road.

Furthermore, the specific location along Mishawum Road is directly where a logical pedestrian connection to the site should occur at the terminus of the site's primary pedestrian flow. The residential area around School Street is less than a half mile away, and the City will be encouraging alternative modes of travel to the site. The location where the trash compactors are is the likely location where pedestrians and cyclists would enter the site, and therefore MAPC recommends a path to enhance the connectivity in this location. See Figure 5.

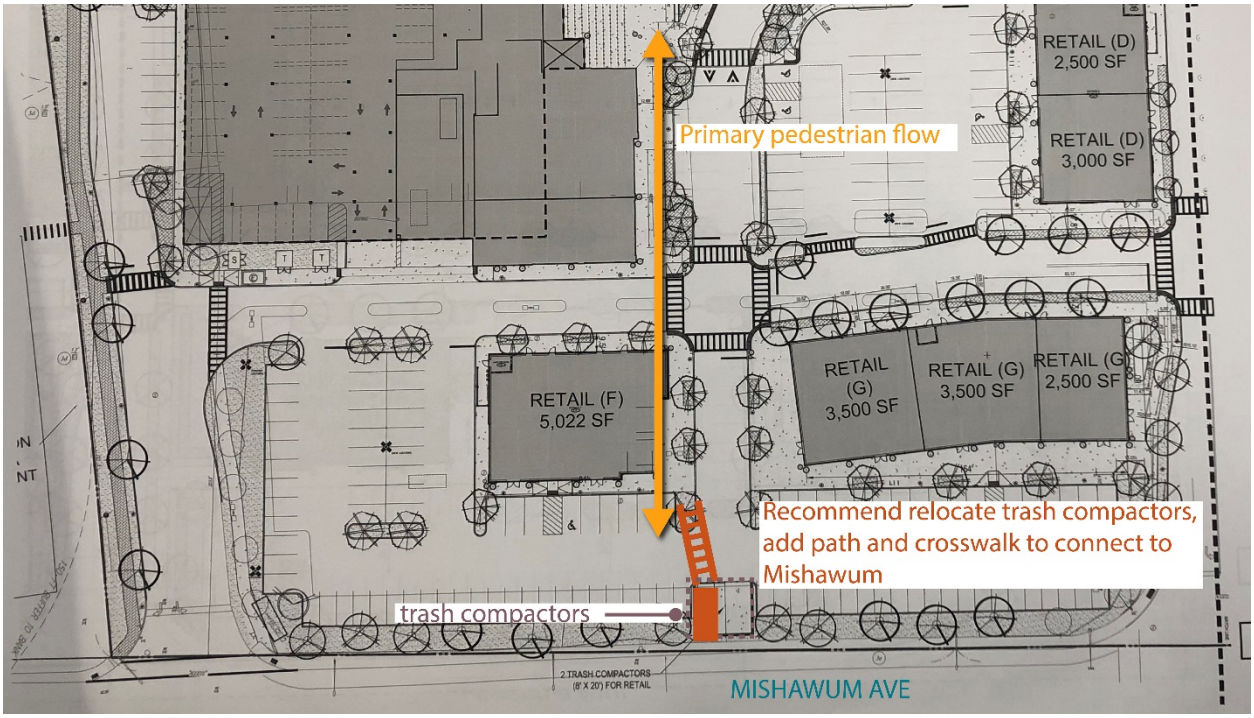

Figure 5: The trash compactors along Mishawum Rd are conspicuously located and located along a strong pedestrian route

A more minor issue is screening of prominent transformers, e.g., the plaza between the Residential and Retail A buildings. Shrubs could be used to better hide this utilitarian element or the transformer box itself could be painted artistically. See Figure 6 for an example.

Figure 6: Example of painted transformer box

3.1.6 Connectivity among Buildings

As the Summary Table notes, the site plan meets the requirement that all buildings have pedestrian connections from at least two directions.

Connectivity among buildings could be further improved by enhancing the pedestrian connection from the Retail D and E areas to the Retail A, B, and Market Basket portion of the site. For example, if someone wanted to visit a store at Retail E and then visit TJ Maxx, he/she would need to travel through the parking lot among traffic (or, more unlikely, take a circuitous route to stay on sidewalks and crosswalks).

MAPC recommends exploring the feasibility of creating a path along one or more of the parking bays between spaces. See Figures 7 and 8. There may be sufficient space to reduce the buffer on the east side of the site along Commerce Way to use to allow for a 3 to 4 foot walkway. Alternatively, MAPC recommends considering a slight modification to the design of the parking bays. Standard parking bay design, to which the applicant has adhered, are 60 feet (24' aisle and two 18' parking spaces). The applicant and the City could explore the feasibility of taking 6 inches to 1 foot from several parking bays to allow for a 3 to 4 foot path along one or more of the parking bays to create a stronger north-south connection for pedestrians.

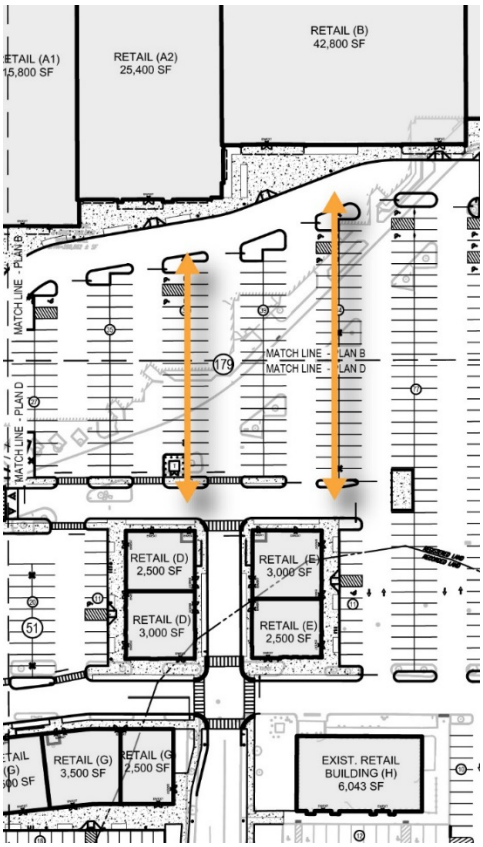

Figure 7: The pedestrian experience of walking from Retail D and E to A, B, and Market Basket could be greatly enhanced with pedestrian path(s)

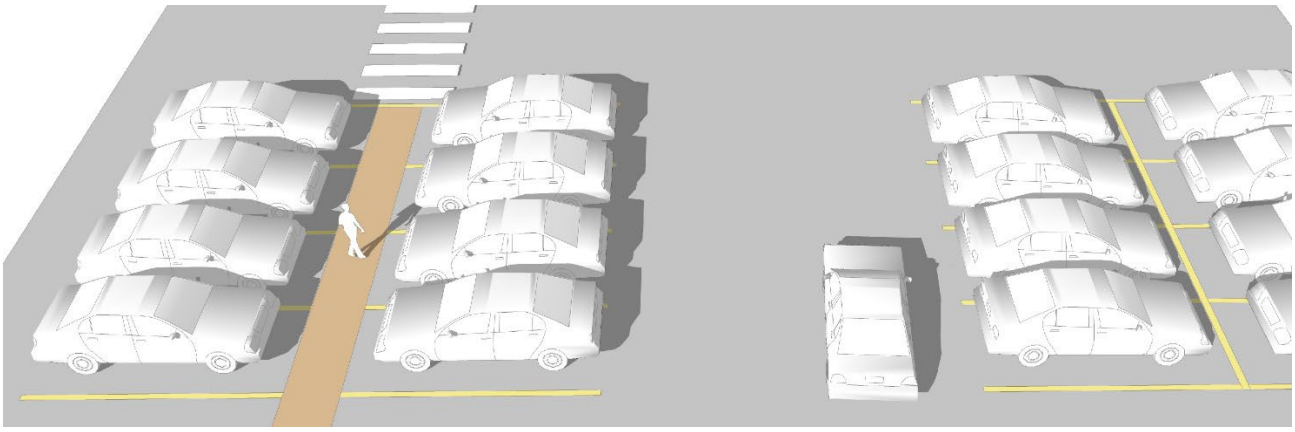

Figure 8: Using excess buffer space on the east of the site or allowing for a slight decrease in the width of the driving lanes (which would still provide adequate space for vehicles) would allow for separate pedestrian path(s)

3.1.7 Curb Cuts

As required, the site provides continuous and uninterrupted pedestrian walks across the site's various curb cuts. Furthermore, the site is enhanced with several "speed tables" that will slow interior traffic and improve pedestrian safety.

The Standards go on to state, "All curb cuts shall be designed so that driveways slope up from the street to the level of the sidewalk. Curb cuts shall not be designed so that the drive is set at the street level." This both improves pedestrian safety by slowing vehicles, as well as prioritizes the pedestrian realm. See Figure 9 for an example at the Bunker Hill Mall in Charlestown. Proposed curb cuts at the Woburn Village site entrances are, instead, flush with the street level. MAPC recognizes that slowing traffic dramatically at site entrances along Mishawum Road and Commerce Way could impact vehicular traffic along these routes, which may be weighed against the pedestrian benefits. At a minimum MAPC recommends highly visible sidewalks at these locations (see discussion under 3.4.6 below).

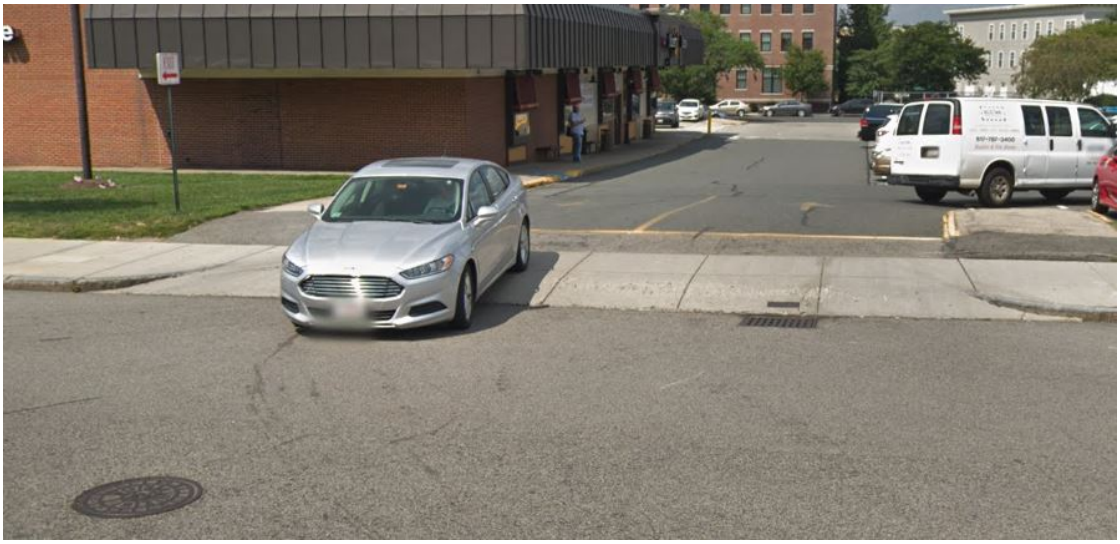

Figure 9: This example shows how a slight slope allows pedestrians to walk at a constant level across curb cuts, whereas vehicles must navigate a slight slope across the curb cut.

3.1.10 Parking Landscape

The Standards require parking bays of greater than 30 consecutive spaces to be broken up with at least one planting per bay. The intended effect of this requirement is to soften the site's appearance, provide shade, and reduce the heat island effect. See Figure 10, which is an early rendering from the applicant visualizing this portion of the site. (Note that this rendering is not part of the official submission.)

Figure 10: Breaking up large parking bays with periodic trees or other landscaping greatly enhances the site's appeal.

The five parking bays on the east side of the site do not meet this standard. The Standards note that existing tenant leases may prevent this standard from being fully met. The proposed amount of commercial parking, however, greatly exceeds the minimum requirement (1,006 proposed versus 945 required spaces). Adding these landscaped areas as noted in Figure 11 would reinforce the east-west pedestrian flows that will occur on site. Figure 12 provides an example of this landscaping.

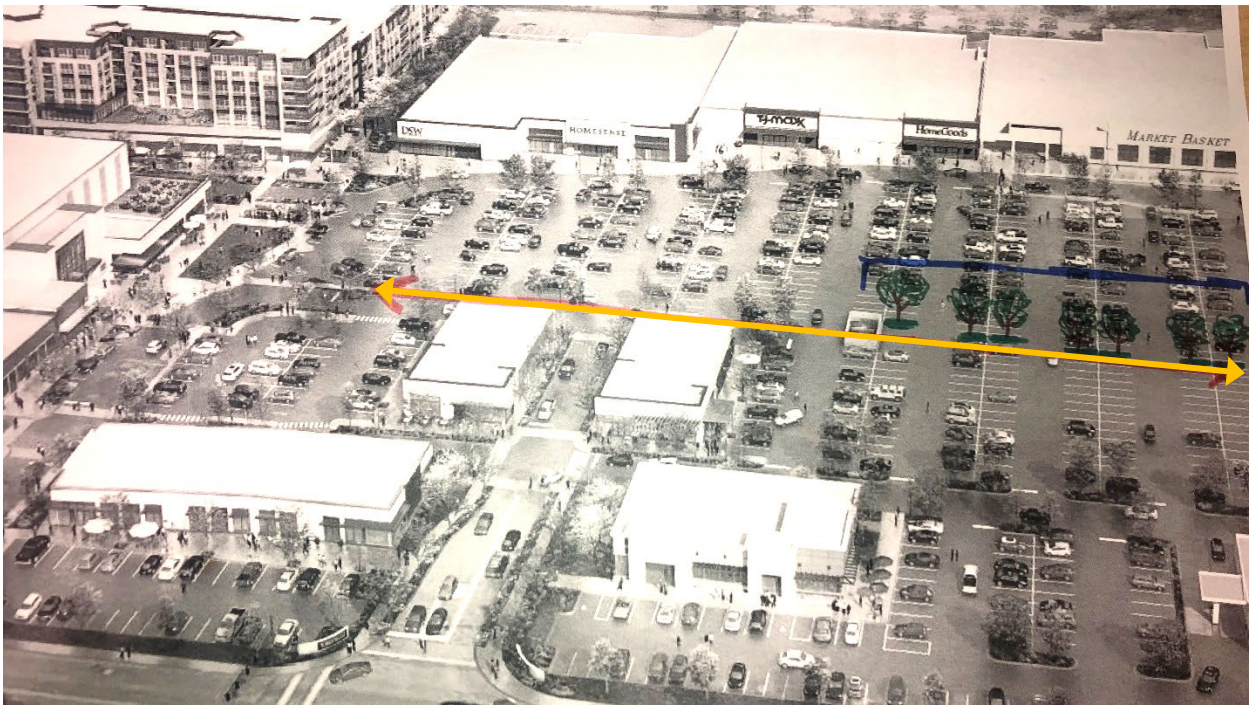

Figure 11: Breaking up the 30+ space bays with landscape areas (right side of figure) would improve the comfort and appearance of the site and bring the proposal in compliance with this standard.

Figure 12: Example of landscaping that breaks up parking bays.

Compliance with 3.2 Building Mass + Form

These standards are intended to ensure new buildings contribute to the vitality, activity, and walkability of new neighborhood.

3.2.7 Doorways

The standards note a preference for recessed doorways, which provide protection from the elements and a generally welcome entry. In cases where a recessed doorway is not provided, which is the case for all entries throughout the proposed development, a canopy, awning, or other feature can be used. Many of the proposed retail spaces have renderings with awnings, while others do not. It is unclear whether the canopies shown are illustrative. If a tenant(s), for example as shown on Retail G, did not incorporate a canopy or similar measure, this would not meet the standard.

Compliance with 3.3 Facades

These standards are intended to ensure building facades enhance the quality of the district through high quality design and visibility of vibrant activity.

3.3.2 Façade Design

Blank walls greater than 20' are prohibited when viewed from streets and other public areas. There are several instances where this occurs throughout the site. See Figure 13. MAPC recognizes the challenge of avoiding blank walls, particularly of Retail D and E. Incorporating mural artwork, ivy or other climbing vine, and architectural articulations could help meet this standard.

If not feasible for the standard to be met on all locations, MAPC recommends the following priority:

1. **Retail B (TJ Maxx/HomeGoods).** There is more than 60' of blank space between the two entrances, which is a prominent location with high visibility. This could be a location for signature artwork for Woburn Village
2. **West side of Retail B (DSW along pedestrian plaza).** Avoiding blank walls is important in this location, as it is intended to be an important pedestrian path and plaza.
3. **North side of Retail D and E.** The blank wall is not as pronounced due to half the façade containing active retail space, but as it provides a visual connection to the adjacent parking lot and Retail A and B buildings, would be improved with incorporating elements to reduce the effect of a blank wall.
4. **East side of Retail D and west side of Retail E.** The route between these buildings is unlikely to have many pedestrians. The proposed street trees will soften the

appearance for vehicles. Therefore, it is the least important for purposes of meeting the standard, but simple design improvements should be considered.

Figure 13: Blank walls > 20', identified by orange bars

The Table titled "Woburn Mall Smart Growth Overlay District Design Standards" (February 11, 2019, submitted by the applicant) states that any blank walls will include "architectural articulations and/or landscaping elements to break up the blank wall surface." The renderings, however, did not include these elements, which resulted in the Partially Compliant ranking.

Compliance with 3.4 Street Design

These standards are intended to prioritize the pedestrian experience and enhance a welcoming and attractive streetscape.

3.4.6 Visible and well-marked crosswalks

Throughout the site, highly visible crosswalks are present. The application also includes striping of a crosswalk at the southwest entrance, which notably lacks one today, despite the presence of sidewalk curb ramps. The application also proposes restriping the existing sidewalk at the main entrance on Mishawum Road. According to the plans, the proposed crosswalks utilize the

"standard" marking, which consists of two parallel bars. The Standards require "ladder" or "continental" marking, which are more highly visible.

3.4.7 Corner Radii

Minimal corner radii improve patient safety by ensuring turning vehicles reduce speeds. Throughout the interior of the site, corner radii are 15' or less, as required. At site access points the Standards require 25' or less, excluding primary truck access points. While trucks may access the site at various points, MAPC considers the primary truck access point the northeast access point on Commerce Way. The plans did not include the curb radii at the main entrances but based on scaled estimates appear to be greater than 25'. If curb radii standards at these access points are waived, MAPC recommends at minimum striping of high visibility crosswalks to improve pedestrian safety (see 3.4.6 above).

3.4.10 Bicycle Use

The standards require a safe and comfortable environment from cyclists. A safe environment means cyclists must feel comfortable riding throughout the district. The standards encourage bicycle facilities, such as striped bicycle lanes, cycle tracks, and/or allocated sidewalk space. Where the above bicycle infrastructure is not provided, the standards require signage, shared lane markings, and/or traffic calming measures. The applicant did not include any bicycle infrastructure. There are elements of traffic calming at portions of the site. MAPC recommends at a minimum of including Share the Road signs and/or shared lane markings (sharrows) to alert motorists to potential bicyclists in the district.

Compliance with 3.5 Open Space

These standards are intended to ensure a multi-functional public realm that adds vitality to the district. All standards were fully compliant.

Compliance with 3.6 Lighting

These standards are intended to enhance the pedestrian experience and the sense of safety. Based on the information provided all standards were met.